

BID DOCUMENTS: October 29, 2024

# PROJECT MANUAL

VOLUME 1 OF 2: DIVISIONS 00-03

## City School District of the City of New Rochelle

### 2023 Capital Project – Phase 1

New Rochelle High School	SED #66-11-00-01-0-001-030
Albert Leonard Junior High School	SED #66-11-00-01-0-002-016
Henry Barnard School	SED #66-11-00-01-0-004-015
George M. Davis Elementary School	SED #66-11-00-01-0-006-012
Jefferson Elementary School	SED #66-11-00-01-0-007-016
William B. Ward Elementary School	SED #66-11-00-01-0-013-016

CSArch Project No. 188-2301.01



The design of this project conforms to applicable provisions of the New York State Uniform Fire Prevention and Building Code the New York State Energy Conservation Construction Code and the Manual of Planning Standards of the New York State Education Department, and the New York State Department of Labor Code Rule #56.

CSARCH

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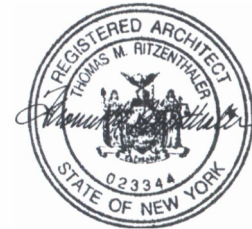
DOCUMENT 000011 - CERTIFICATION PAGE

PROJECT TEAM

PROFESSIONAL SEAL

ARCHITECT:

Collins + Scoville Architect | Engineering | Construction Management,  
D.P.C. dba CSArch  
19 Front Street  
Newburgh, New York 12550  
PH: 845.561.3179  
Thomas M. Ritzenthaler, AIA, Vice President  
Expiration: 02/28/2025



Expiration Date: 02/28/2025

CIVIL ENGINEER:

Passero Associates, Inc.  
6 Front Street  
Newburgh, NY 12550  
PH: 845.328.1808  
Christopher LaPorta, P.E.  
Expiration: 09/30/2025



STRUCTURAL ENGINEER:

Greenman Pedersen, Inc.  
80 Wolf Road, Suite 600  
Albany, New York 12205  
PH: 518.898.9539  
Patrick McFadden, P.E.  
Expiration: 07/31/2025



Expires  
7/31/25

STRUCTURAL ENGINEER:

Passero Associates, Inc.  
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Rochester, New York 14614  
PH: 585.325.1000  
Patrick James Williams, P.E.  
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MECHANICAL / ELECTRICAL / PLUMBING ENGINEER:

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80 Wolf Road, Suite 600  
Albany, New York 12205  
PH: 518.898.9539  
Curtis Benedetto Jr., P.E.  
Expiration: 11/30/2025



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It is a violation of the New York State Education Law for any person, unless he is acting under the direction of a licensed Architect, to alter an item on this document in any way.



## **DOCUMENT 000110 - TABLE OF CONTENTS**

### **Volume 1**

## **DIVISION 00 – PROCUREMENT AND CONTRACTING REQUIREMENTS**

### **Introductory Information**

000014	Certification Page
000110	Table of Contents
000115	Drawing Index

### **Procurement Requirements**

001113	Advertisement for Bids
002113	Instructions to Bidders
003113	Preliminary Schedules

### **Procurement Forms and Supplements**

004116.01	Bid Form – General Construction Work (GC)
004116.02	Bid Form – Mechanical Construction Work (MC)
004116.03	Bid Form – Electrical Construction Work (EC)
004116.04	Bid Form – Plumbing Construction Work (PC)
004116.05	Bid Form – Site Work Construction Work (SC)
004313	A310 Bid Bond
004325	Substitution Request Form
004333	Proposed Equivalent List
004336	Proposed Subcontractors Form
004513	A305 Contractor's Qualification Statement
004519	Non-Collusion Affidavit
004520	Iran Divestment Act Affidavit
004543	Corporate Resolutions

### **Contracting Requirements & Supplements**

005216	A132 Standard Form of Agreement Between Owner and Contractor, Construction Manager as Adviser Edition
006113.13	A312 Payment Bond
006113.14	A312 Performance Bond
006114	C106 Digital Data Licensing Agreement
006273	G732 Schedule of Values
006274	G703 Schedule of Values Continuation Sheet

### **Closeout Forms**

006519.13	G706 Contractor's Affidavit of Payment of Debts and Claims
006519.16	G706A Contractor's Affidavit of Release of Liens
006519.17	G707 Consent of Surety to Final Payment

### **Conditions of the Contract & Supplementary Conditions**

007216	A232 General Conditions of the Contract for Construction, Construction Manager as Adviser Edition
007343	Wage Rates

### **Project Forms**

008300	Project Forms
008310	Submittal Cover Sheet
008320	Request For Information
008325	Change In Condition
008330	Request For Shutdown
008340	Daily Report Cover Sheet
008350	Labor Rate Sheet
008370	Two-Week Look Ahead Schedule
008380	Bi-Weekly Material / Equipment Status Report
008440	Substantial Completion Request For Inspection
008450	Test Report / Inspection Log
008470	Submittal Schedule

### **DIVISION 01 – GENERAL REQUIREMENTS**

011200	Multiple Contract Summary
011400	Work Restrictions
011410	NYSED Regulations

### **Price and Payment Procedures**

012100	Allowances
012200	Unit Prices
012300	Alternates
012500	Substitution Procedures
012600	Contract Modification Procedures
012900	Payment Procedures
012973	Schedule of Values

### **Administrative Requirements**

013100	Project Management and Coordination
013150	Safety and Health
013200	Construction Progress Documentation
013233	Photographic Documentation
013300	Submittal Procedures

### **Quality Requirements**

014000	Quality Requirements
014533	Code-Required Special Inspections and Procedures
014200	References

### **Temporary Facilities**

015000	Temporary Facilities and Controls
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### **Product Requirements**

016000	Product Requirements
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### **Execution and Closeout Requirements**

017300	Execution
017329	Cutting and Patching
017413	Cleaning-Up
017700	Closeout Procedures
017823	Operation and Maintenance Data
017836	Warranties
017839	Project Record Documents
017900	Demonstration and Training
019113	General Commissioning Requirements

### **DIVISION 02 – EXISTING CONDITIONS**

023313	Underground Utility Locator Service
024100	Demolition
028200	Asbestos Abatement
028300	Handling of Lead-Containing Materials

### **Volume 2**

### **DIVISION 03 – CONCRETE**

031000	Concrete Forming and Accessories
032000	Concrete Reinforcing
033000	Cast-In-Place Concrete (Sitework)
033001	Cast-In-Place Concrete
035400	Cementitious Underlayment

### **DIVISION 04 – MASONRY**

042000	Unit Masonry
042613	Masonry Veneer
045020	Cold (Hot) Weather Masonry

### **DIVISION 05 – METALS**

054000	Cold-Formed Metal Framing
055000	Metal Fabrications
055213	Pipe and Tube Railings

### **DIVISION 06 – WOOD and PLASTICS**

061053	Miscellaneous Rough Carpentry
061600	Sheathing
064023	Interior Architectural Woodwork
066400	Plastic Paneling

### **DIVISION 07 – THERMAL AND MOISTURE PROTECTION**

072100	Thermal Insulation
072600	Vapor Retarders
072726	Fluid-Applied Membrane Air Barriers
076200	Sheet Metal Flashing and Trim
078413	Penetration Firestopping
078443	Joint Firestopping
079200	Joint Sealants
079219	Acoustical Joint Sealants
079513.13	Interior Expansion Joint Cover Assemblies
079513.16	Exterior Expansion Joint Cover Assemblies

### **DIVISION 08 – OPENINGS**

081113	Hollow Metal Doors and Frames
081416	Flush Wood Doors
081733	FRP Doors and Frames
083300	Rolling Counter Fire Shutters
083113	Access Doors and Frames
084113	Aluminum-Framed Entrances and Storefronts
085653	Security Windows
087100	Door Hardware
088000	Glazing
088700	Security Glazing Films
088813	Fire-Protective Rated Glazing
088853	Security Glazing
089119	Fixed Louvers

## **DIVISION 09 – FINISHES**

092116.23	Gypsum Board Shaft Wall Assemblies
092216	Non-Structural Metal Framing
092310	Patching Large Holes in Plaster with Plaster
092320	Patching Small Chips and Cracks in Plaster
092900	Gypsum Board
093013	Ceramic Tiling
095113	Acoustical Panel Ceilings
096513	Resilient Base and Accessories
096519	Resilient Tile Flooring
096723	Resinous Flooring
099100	Painting
099735	Field-Applied Dry Erase Coatings

## **DIVISION 10 – SPECIALTIES**

101100	Visual Display Units
101423	Panel Signage
102641	Ballistics Resistant Panels
102800	Toilet, Bath, and Laundry Accessories
104413	Fire Protection Cabinets
104416	Fire Extinguishers

## **DIVISION 11 – EQUIPMENT**

NOT USED

## **DIVISION 12 – FURNISHINGS**

122413	Roller Window Shades
123661.16	Solid Surfacing Countertops
124813	Entrance Floor Mats and Frames

#### **DIVISION 14 – CONVEYING EQUIPMENT**

NOT USED

#### **DIVISION 22 – PLUMBING**

220000	Scope of Work
220015	Cutting and Patching
220413	Penetration Firestopping
220500	Common Work Results for Plumbing
220523	Valves
220529	Hangers and Supports
220553	Plumbing Identification
220719	Pipe Insulation
220800	Commissioning of Plumbing
221113	Water Distribution Piping
221310	Drainage and Vent System
224200	Plumbing Fixtures

#### **DIVISION 23 – HEATING, VENTILATING AND AIR CONDITIONING**

230000	Scope of Work
230500	Common Work Results for HVAC
230505	Cutting and Patching
230506	Penetration Firestopping HVAC
230511	Wiring of Mechanical Equipment
230512	Motor Controls
230523	Valves
230529	Pipe Hangers and Supports
230553	Pipe and Valve Identification
230554	Duct and Equipment Identification
230593	Cleaning and Testing
230594	Balancing of Systems
230713	Duct Insulation
230719	Piping Insulation
230923	Direct Digital Control System for HVAC
230993	Sequence of Operations for HVAC Controls
232000	HVAC Piping

232006	Hydronic Specialties
232201	Steam Specialties
232202	Steam Traps
233113	Metal Ductwork
233300	Ductwork Accessories
233713	Diffusers, Registers, and Grilles
233723	Roof Mounted Air Inlets and Outlets
233730	Louvers
235413	Electric Cabinet Heaters
236000	Refrigeration
237200	Air-to-Air Energy recovery Equipment
238127	Ductless Split Air Conditioning System
238129	Variable Refrigerant Flow System
238237	Finned-Tube Radiation
238239	Unit Heaters
238333	Electric Fin Radiant Heaters

#### **DIVISION 26 – ELECTRICAL**

260010	Basic Electrical Requirements
260050	General Materials and Methods
260501	Electrical Materials and Equipment
260921	Lighting Controls
265001	Lighting Fixture Schedule

#### **DIVISION 27 – COMMUNICATIONS**

270010	Basic Communications Requirements
270050	General Materials and Methods
271001	Telecom Cabling Systems- Pathways
275111	Existing Public Address Systems

#### **DIVISION 28 – ELECTRONIC SAFETY AND SECURITY**

280010	Basic Electronic Safety and Security Requirements
280050	General Materials and Methods
281001	Security Systems – Pathways
284605	Existing Fire Alarm Systems

#### **DIVISION 31 – EARTHWORK**

312000	Excavation and Fill
312319	Dewatering

312513          Erosion and Sediment Control

**DIVISION 32 – SITE IMPROVEMENTS**

NOT USED

**DIVISION 33 – UTILITIES**

334100          Storm Drainage Piping  
334900          Storm Drainage Structures

END OF DOCUMENT 000110



SECTION 000115 - DRAWING INDEX

PART 1 – GENERAL

A. DRAWING PROJECT TITLE:

- City School District of the City of New Rochelle – 2023 Capital Project – Phase 1

- B. This Drawing Index completes the Project Documents. Bidder shall verify receipt of all within the separately bound drawings:

**NEW ROCHELLE HIGH SCHOOL – Volume 1 of 6**

GENERAL DRAWINGS

G000	COVER
G001	SYMBOLS, ABBREVIATIONS, AND MISC
G101	OVERALL FIRST FLOOR PLAN
G121	OVERALL SECOND FLOOR PLAN
G131	OVERALL THIRD FLOOR PLAN

LIFE SAFETY DRAWINGS

LS111	PARTIAL FIRST FLOOR AREAS 'A&B' LIFE SAFETY PLAN
LS121	PARTIAL SECOND FLOOR AREAS 'A&B' LIFE SAFETY PLAN
LS131	AREA 'C' FIRST & SECOND FLOOR LIFE SAFETY PLANS
LS141	AREA 'D' FIRST FLOOR LIFE SAFETY PLAN
LS151	AREA 'E' SECOND AND THIRD FLOOR LIFE SAFETY PLANS
LS161	AREA 'F' SECOND AND THIRD FLOOR LIFE SAFETY PLANS
LS171	AREA 'G' SECOND AND THIRD FLOOR LIFE SAFETY PLANS
LS181	AREA 'H' FIRST AND SECOND FLOOR LIFE SAFETY PLANS
LS191	SMOKE ZONE PLANS

CIVIL DRAWINGS

C100	KEY PLAN
C120	EXISTING CONDITIONS & DEMOLITION PLAN
C130	PROPOSED SITE PLAN
C140	GRADING & DRAINAGE PLAN
C150	EROSION & SEDIMENT CONTROL PLAN

STRUCTURAL DRAWINGS

S001	GENERAL NOTES, SCHEDULES, AND SPECIAL INSPECTIONS
SD101	DEMO FOUNDATION AND FRAMING PLANS
S101	FOUNDATION AND FRAMING PLANS
S102	FOUNDATION AND FRAMING PLANS
S301	SECTIONS & DETAILS
S302	SECTIONS & DETAILS

S501 TYPICAL DETAILS

ARCHITECTURAL DEMOLITION DRAWINGS

AD121	AREA 'A' PARTIAL SECOND FLOOR DEMO PLAN
AD136	AREA 'F' PARTIAL THIRD FLOOR DEMO PLAN
AD601	ENLARGED DEMOLITION PLANS
AD801	ENLARGED DEMOLITION RCPS

ARCHITECTURAL DRAWINGS

A121	AREA 'A' PARTIAL SECOND FLOOR PLAN
A136	AREA 'F' PARTIAL THIRD FLOOR PLAN
A602	ENLARGED VESTIBULE PLANS, ELEVATIONS AND DETAILS
A603	ENLARGED PLANS, ELEVATIONS AND DETAILS
A701	PARTITION TYPES
A821	AREA 'A' PARTIAL SECOND FLOOR RCP
A851	TYPICAL CEILING DETAILS
A900	DOOR SCHEDULE

ARCHITECTURAL FINISH DRAWINGS

AF121	MATERIAL SCHEDULE AND FINISH PLANS
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PLUMBING DRAWINGS

P101	PLUMBING PLANS
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MECHANICAL GENERAL DRAWINGS

M001	MECHANICAL LEGENDS, DETAILS, AND SCHEDULES
M002	MECHANICAL DETAILS

MECHANICAL DEMOLITION DRAWINGS

MD101	MECHANICAL REMOVALS PLAN - VESTIBULE
MD102	MECHANICAL REMOVALS PLAN – THIRD FLOOR CORRIDOR

MECHANICAL DRAWINGS

M101	MECHANICAL NEW WORK PLAN – VESTIBULE
M102	MECHANICAL NEW WORK PLAN – THIRD FLOOR CORRIDOR

ELECTRICAL GENERAL DRAWINGS

E001	ELECTRICAL LEGEND AND ABBREVIATIONS
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ELECTRICAL DEMOLITION DRAWINGS

ED101	2nd FLOOR VESTIBULE - ELECTRICAL REMOVALS PLAN
ED102	3rd FLOOR CORRIDOR - ELECTRICAL REMOVALS PLAN

ELECTRICAL DRAWINGS

E101	2nd FLOOR VESTIBULE - ELECTRICAL NEW WORK PLAN
E102	3rd FLOOR CORRIDOR - ELECTRICAL NEW WORK PLAN

**ALBERT LEONARD JUNIOR HIGH SCHOOL – Volume 2 of 6**

GENERAL DRAWINGS

G000	COVER
G001	SYMBOLS, ABBREVIATIONS, AND MISC
G112	OVERALL FIRST FLOOR PLAN
G121	OVERALL SECOND FLOOR PLAN

LIFE SAFETY DRAWINGS

LS111	AREA 'A' & 'B' - PARTIAL FIRST FLOOR LIFE SAFETY PLAN
LS113	AREA 'C', 'D', 'E', 'F' - PARTIAL FIRST FLOOR LIFE SAFETY PLAN
LS123	SECOND FLOOR LIFE SAFETY PLAN
LS131	SMOKE ZONE PLANS

ARCHITECTURAL DRAWINGS

A112	AREA 'B' - PARTIAL FIRST FLOOR PLAN
A611	ENLARGED SECURED VESTIBULE, ELEVATIONS AND DETAILS
A651	CASEWORK DETAILS AND LINTEL SCHEDULE
A811	ENLARGED NEW WORK AND DEMO REFLECTED CEILING PLANS
A900	DOOR AND WINDOW SCHEDULE, ELEVATIONS, DETAILS
A921	STOREFRONT ELEVATIONS

ARCHITECTURAL FINISH DRAWINGS

AF112	AREA 'B' - PARTIAL FIRST FLOOR FINISH PLAN
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MECHANICAL GENERAL DRAWINGS

M001	MECHANICAL LEGENDS, DETAILS AND SCHEDULES
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MECHANICAL DEMOLITION DRAWINGS

MD101	MECHANICAL REMOVALS PLAN
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MECHANICAL DRAWINGS

M101	MECHANICAL NEW WORK PLAN
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ELECTRICAL GENERAL DRAWINGS

E001	ELECTRICAL LEGEND AND ABBREVIATIONS
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ELECTRICAL DEMOLITION DRAWINGS

ED101	FIRST FLOOR AREA 'B' ELECTRICAL REMOVALS PLAN
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ELECTRICAL DRAWINGS

E101	FIRST FLOOR AREA 'B' ELECTRICAL NEW WORK PLAN
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**JEFFERSON ELEMENTARY SCHOOL – Volume 3 of 6**

GENERAL DRAWINGS

G000	COVER
G001	SYMBOLS, ABBREVIATIONS, AND MISC
G100	OVERALL BASEMENT FLOOR PLAN
G101	OVERALL FIRST FLOOR PAN

LIFE SAFETY DRAWINGS

LS100	GROUND FLOOR OVERALL LIFE SAFETY PLAN
LS110	FIRST FLOOR OVERALL LIFE SAFETY PLAN
LS120	SECOND FLOOR OVERALL LIFE SAFETY PLAN
LS130	SMOKE ZONE

ARCHITECTURAL DEMOLITION DRAWINGS

AD112	AREA 'B' - PARTIAL FIRST FLOOR DEMOLITION PLAN
AD812	AREA 'B' - FIRST FLOOR REFLECTED CEILING DEMOLITION PLAN

ARCHITECTURAL DRAWINGS

A112	AREA 'B' - PARTIAL FIRST FLOOR PLAN
A601	SECURITY VESTIBULE PLANS, ELEVATIONS AND DETAILS
A602	MAIN OFFICE PLANS, ELEVATIONS AND DETAILS
A603	ENLARGED TOILET ROOM PLANS, ELEVATIONS AND DETAILS
A651	CASEWORK DETAILS
A701	PARTITION TYPES
A812	AREA 'B' - PARTIAL FIRST FLOOR REFLECTED CEILING PLAN
A901	DOOR SCHEDULE, ELEVATIONS, AND DETAILS

ARCHITECTURAL FINISH DRAWINGS

AF112	AREA 'B' PARTIAL FIRST FLOOR FINISH PLAN
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PLUMBING GENERAL DRAWINGS

P001	PLUMBING LEGEND & ABBREVIATIONS
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PLUMBING DEMOLITION DRAWINGS

PD101	PLUMBING REMOVAL PLAN
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PLUMBING DRAWINGS

P101	PLUMBING PLAN
P201	PLUMBING RISER DIAGRAMS & DETAILS
P301	PLUMBING SCHEDULES

MECHANICAL GENERAL DRAWINGS

M001	MECHANICAL LEGENDS, DETAILS AND SCHEDULES
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MECHANICAL DEMOLITION DRAWINGS

MD101	MECHANICAL REMOVALS PLAN
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MECHANICAL DRAWINGS

M101	MECHANICAL NEW WORK PLAN
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ELECTRICAL GENERAL DRAWINGS

E001	ELECTRICAL LEGEND AND ABBREVIATIONS
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ELECTRICAL DEMOLITION DRAWINGS

ED101	FIRST FLOOR ELECTRICAL REMOVALS PLAN
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ELECTRICAL DRAWINGS

E100	ELECTRICAL BASEMENT FLOOR PLAN
E101	FIRST FLOOR LIGHTING AND SYSTEMS PLAN
E102	FIRST FLOOR POWER AND TELECOM PLAN

**GEORGE M. DAVIS ELEMENTARY SCHOOL – Volume 4 of 6**

GENERAL DRAWINGS

G000	COVER
G001	SYMBOLS, ABBREV. & MISC
G111	OVERALL FIRST FLOOR PLAN

LIFE SAFETY DRAWINGS

LS101	GROUND FLOOR - LIFE SAFETY PLAN
LS111	AREA 'A' FIRST FLOOR - LIFE SAFETY PLAN
LS112	AREA 'B' & 'C' & 'D' FIRST FLOOR - LIFE SAFETY PLAN
LS122	SECOND FLOOR OVERALL LIFE SAFETY PLAN
LS131	SMOKE ZONE PLANS

ARCHITECTURAL DEMOLITION DRAWINGS

AD112	AREA 'B' PARTIAL FIRST FLOOR DEMO PLAN
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ARCHITECTURAL DRAWINGS

A112	AREA 'B' PARTIAL FIRST FLOOR PLAN
A612	ENLARGED PLANS, ELEVATIONS AND DETAILS
A901	DOOR SCHEDULE, ELEVATIONS, AND DETAILS

ARCHITECTURAL FINISH DRAWINGS

AF112	FINISH PLAN AND SCHEDULE
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MECHANICAL GENERAL DRAWINGS

M001	MECHANICAL LEGENDS, DETAILS AND SCHEDULES
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MECHANICAL DEMOLITION DRAWINGS

MD101	MECHANICAL REMOVALS PLAN
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MECHANICAL DRAWINGS

M101	MECHANICAL NEW WORK PLAN
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ELECTRICAL GENERAL DRAWINGS

E001	ELECTRICAL LEGEND AND ABBREVIATIONS
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ELECTRICAL DEMOLITION DRAWINGS

ED101	FIRST FLOOR AREA B ELECTRICAL REMOVALS PLAN
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ELECTRICAL DRAWINGS

E101	FIRST FLOOR AREA B ELECTRICAL NEW WORK PLAN
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**WILLIAM B. WARD ELEMENTARY SCHOOL – Volume 5 of 6**

GENERAL DRAWINGS

G000	COVER
G001	SYMBOLS, ABBREVIATIONS, AND MISC
G101	OVERALL GROUND FLOOR PLAN
G111	OVERALL LOWER FLOOR PLAN
G121	OVERALL FIRST FLOOR PLAN
G401	OVERALL ROOF PLAN

LIFE SAFETY DRAWINGS

LS101	GROUND FLOOR LIFE SAFETY PLAN
LS111	LOWER-LEVEL LIFE SAFETY PLAN
LS121	FIRST FLOOR LIFE SAFETY PLAN
LS131	SMOKE ZONE FLOOR PLANS

ARCHITECTURAL DEMOLITION DRAWINGS

AD113	AREA 'A' - PARTIAL FIRST FLOOR DEMO PLAN
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STRUCTURAL DRAWINGS

S001	GENERAL NOTES, LEGENDS & ABBREVIATIONS
S002	SPECIAL INSPECTIONS
S101	SECURITY VESTIBULE PLANS & DETAILS
S501	DETAILS

ARCHITECTURAL DRAWINGS

A113	AREA 'A' - PARTIAL FIRST FLOOR PLAN
A200	EXTERIOR ELEVATIONS
A301	WALL SECTIONS & DETAILS
A352	PLAN DETAILS
A401	AREA 'A' PARTIAL ROOF PLAN AND DETAILS
A600	ENLARGED ADDITION PLAN
A901	DOOR SCHEDULE, ELEVATIONS, AND DETAILS

ARCHITECTURAL FINISH DRAWINGS

AF113	FINISH PLAN & MATERIAL SCHEDULE
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MECHANICAL GENERAL DRAWINGS

M001	MECHANICAL LEGENDS, DETAILS AND SCHEDULES
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MECHANICAL DEMOLITION DRAWINGS

MD101	MECHANICAL REMOVALS PLAN
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MECHANICAL DRAWINGS

M101	MECHANICAL NEW WORK PLAN
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ELECTRICAL GENERAL DRAWINGS

E001	ELECTRICAL LEGEND AND ABBREVIATIONS
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ELECTRICAL DEMOLITION DRAWINGS

ED101            FIRST FLOOR AREA A/B ELECTRICAL REMOVALS PLAN

ELECTRICAL DRAWINGS

E101            FIRST FLOOR AREA A/BB ELECTRICAL NEW WORK PLAN

**HENRY BARNARD ELEMENTARY SCHOOL – Volume 6 of 6**

GENERAL DRAWINGS

G000            COVER

G001            SYMBOLS, ABBREVIATIONS, AND MISC

G101            OVERALL GROUND FLOOR PLAN

G111            OVERALL FIRST FLOOR PLAN

G121            OVERALL SECOND FLOOR PLAN

LIFE SAFETY DRAWINGS

LS101           LIFE SAFETY PLAN

ABATEMENT DRAWINGS

AA100           PARTIAL ROOF ABATEMENT PLAN AND DETAILS

ARCHITECTURAL DEMOLITION DRAWINGS

AD401           OVERALL ROOF DEMOLITION PLAN

AD402           ENLARGED DEMOLITION ROOF, PLAN, ELEVATION, AND DETAILS

ARCHITECTURAL DRAWINGS

A401            OVERALL ROOF PLAN

A402            ENLARGED ROOF, PLAN, ELEVATION, AND DETAILS

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DOCUMENT 001113 – ADVERTISEMENT FOR BIDS

Architect

CSArch  
19 Front Street  
Newburgh, NY 12550  
PH: (845) 561-3179

Project Information

City School District of the City of New Rochelle  
515 North Avenue  
New Rochelle, NY 10801  
PH: (914) 576-4222

**2023 Capital Project – Phase 1**

New Rochelle High School	66-11-00-01-0-001-030
Albert Leonard Middle School	66-11-00-01-0-002-016
Henry Barnard School	66-11-00-01-0-004-015
George M. Davis Elem. School	66-11-00-01-0-006-012
Jefferson Elem. School	66-11-00-01-0-007-016
William B. Ward Elem. School	66-11-00-01-0-013-016

The Owner, the City School District of the City of New Rochelle, will receive sealed bids to furnish materials and labor to complete the “2023 Capital Project – Phase 1” which includes construction of secure vestibules, interior renovations, reconstruction of exterior concrete stairwells, masonry chimney reconstruction, and interior building infrastructure modifications. Each bid shall be on a stipulated sum basis for the following contracts:

- Contract No. 01 – General Construction (GC)
- Contract No. 02 – Mechanical Construction (MC)
- Contract No. 03 – Electrical Construction (EC)
- Contract No. 04 – Plumbing Construction (PC)
- Contract No. 05 – Sitework Construction (SC)

Sealed bids will be received until **11:00 AM** Eastern Standard Time, on **Monday, November 25, 2024** at District Facilities, 515 Union Avenue, Floor 2, New Rochelle, NY 10801. Bids received after this time will not be accepted and returned to Bidder unopened. Bids will be opened and read aloud after specified receipt time. An abstract of Bids received will be made available via [www.csarchplanroom.com](http://www.csarchplanroom.com).

Bidding Documents, Drawings, and Specifications may be examined as of Tuesday, October 29, 2024 free of charge by appointment only, at the following locations:

CSArch  
19 Front Street  
Newburgh, New York 12550  
845-561-3179

It is the intention of this Project to be both environmentally and fiscally-conscious of paper use and consumption. Therefore, documents will be distributed as digital sets. Bidding Documents, Drawings, and Specifications may be viewed online free of charge beginning *Tuesday, October*

29, 2024 at [www.csarchplanroom.com](http://www.csarchplanroom.com) under 'Public Projects', or electronically-downloaded for a non-refundable fee of one-hundred dollars (\$100.00).

Complete sets of Bidding Documents, Drawings, and Specifications, on compact disc (CD) or USB flash drive may be obtained from *Rev, 28 Church Street, Unit 7, Warwick, New York 10990* Tel: (877) 272-0216, upon depositing the sum of one hundred dollars (\$100.00). Checks or money orders shall be made payable to the City School District of the City of New Rochelle.

Bidder must provide Bid Security in the amount and form, per the conditions provided in Section 002113 *Instructions to Bidders*. All Bids will remain subject to acceptance for forty-five (45) days following the receipt of Bids. The Owner may, in its sole discretion, release any Bid and return Bid Security prior to that date.

A series of Pre-Bid Conferences will be held on **Tuesday, November 5, 2024** at the following times and locations:

**8:00 AM** Eastern Standard Time at (George M. Davis Elementary School, 80 Iselin Drive, New Rochelle, NY 10804.

**8:45 AM** Eastern Standard Time at William B. Ward Elementary School, 311 Broadfield Road, New Rochelle, NY 10804.

**9:25 AM** Eastern Standard Time at Albert Leonard Middle School, 25 Gerada Lane, New Rochelle, NY 10804.

**10:15 AM** Eastern Standard Time at Henry Barnard School, 129 Barnard Road, New Rochelle, NY 10801.

**10:45 AM** Eastern Standard Time at New Rochelle High School, 265 Clove Road, New Rochelle, NY 10801 (Secure Vestibule, Interior Alterations).

**11:45 AM** Eastern Standard Time at Jefferson Elementary School, 131 Weyman Avenue, New Rochelle, NY 10805.

**12:45 PM** Eastern Standard Time at New Rochelle High School, 265 Clove Road, New Rochelle, NY 10801 (Exterior Sitework).

Attendance of these Conferences is recommended as the Owner, Construction Manager, and Architect will be present to discuss the Project.

Bids shall not include New York State sales and compensating use taxes on materials and supplies incorporated into the Work, as the Owner being exempt therefrom. Bidders must comply with New York State Department of Labor Prevailing Wage Rate Schedule and conditions of employment.

The City School District of the City of New Rochelle reserves the right to waive any informalities or irregularities in the Bids received, or to reject all Bids without explanation.

By Order Of: City School District of the City of New Rochelle

END OF DOCUMENT 001113

DOCUMENT 002113 - INSTRUCTIONS TO BIDDERS

PART 1 – DEFINITIONS

- A. Bidding Documents include the Bidding Requirements and the proposed Contract Documents. The Bidding Requirements consist of the Invitation to Bid, Instruction to Bidders, the Bid Form, Supplementary Bid Forms and other sample bidding and contract forms.
- B. The proposed Contract Documents include the Contract Forms between the Owner and Contractor, Contractor's executed Bid Form and executed Supplementary Bid Forms, Conditions of the Contract (General, supplemental, and other Conditions), Drawings, Specifications and all Addenda issued prior to execution of the Contract.
- C. Definitions set forth in the General Conditions of the Contract of Construction, or in other Contract Documents are applicable to the Bidding Documents.
- D. Addenda are written or graphic instruments issued by the Architect prior to the execution of the Contract which modify or interpret the Bidding Documents by additions, deletions, clarifications or corrections.
- E. A Bid is a complete and properly executed proposal to do the Work for the sums stipulated therein, submitted in accordance with the Bidding Documents.
  - 1. Wherever the word "Bid" occurs in the documents, it refers to the Bidder's Proposal.
- F. The Base Bid is an amount stated in the Bid for which the Bidder offers to perform the Work described in the Bidding Documents.
- G. An Alternate is an amount stated on the Bid Form to be added to or deducted from the amount of the Base Bid if the corresponding change in the Work, as described in the Bidding Documents, is accepted.
- H. A Unit Price is an amount stated on the Bid Form as a price per unit of measurement for materials, equipment for services or a portion of the Work as described in the Bidding Documents.
- I. A Bidder is a person or entity who submits a Bid and who meets the requirements set forth in the Bidding Documents.
  - 1. A Sub-bidder is a person or entity who submits a Bid to a Bidder for materials, equipment, or labor for a portion of the Work.

## PART 2 – BIDDER'S REPRESENTATIONS

- A. The Bidder by making a Bid represents that:
1. The Bidder has read and understands the Bidding Documents, to the extent that such documentation relates to the Work for which the Bid is submitted, and for other portions of the Project, if any, being Bid concurrently or presently under construction.
  2. The Bid is made in compliance with the Bidding Documents.
  3. The Bidder has visited the site, become familiar with local conditions under which the Work is to be performed and has correlated the Bidder's personal observations with the requirements of the proposed Contract Documents.
    - a. Bidders may visit the existing facilities by making prior arrangements with Keith Watkins, City School District of New Rochelle at 914-576-4300.
  4. The Bid is based upon the materials, equipment and systems required by the Bidding Documents without exception.
  5. No official, officer or agent of the Owner is authorized to make any representations as to the materials or workmanship involved or the conditions to be encountered and the Bidder agrees that no such statement or the evidence of any documents or plans, not a part of the Bidding Documents, shall constitute any grounds for claim as to conditions encountered. No verbal agreement or conversation with any officer, agent, or employee of the Owner either before or after the execution of this Contract shall affect or modify any of the terms or obligations herein contained.
- B. Each Bidder is required to form an individual opinion of the quantities and character of construction work by personal examination of the site and all existing facilities where the project work is to be done, and of the plans and specifications relating to it by such means as is preferred. Each Bidder shall inspect accessible concealed areas of existing construction, provided no significant permanent damage is inflicted upon the property. Lack of knowledge about conditions in accessible concealed areas shall not be the basis for additional cost claims at a later time.
- C. The Bidder's attention has been directed to the fact that all applicable state laws, municipal ordinances, and rules and regulations of all authorities having jurisdiction over construction of the Project shall apply to the Contract throughout, and they are deemed to be included in the Contract Documents the same as though herein written out in full. By submitting a Bid, the Bidder acknowledges that if awarded the Contract it shall give all notices and comply with all laws, ordinances, rules, and regulations bearing on the conduct of the

Work as drawn and specified in the Contract Documents. By submitting a Bid, the Bidder acknowledges that if awarded the Contract it shall be required to observe all laws and ordinances including, but not limited to, relating to the obstructing of streets, maintaining signals, keeping open passageways, and protecting them where exposed to danger, and all general ordinances affecting it, its employees, or its work hereunder in its relations to the Owner or any person. By submitting a Bid, the Bidder acknowledges that if awarded the Contract it shall also obey all laws and ordinances controlling or limiting the Contractor while engaged in the prosecution of the Work under the Contract.

- D. The Bidder's attention is directed to the fact that Each Contractor shall pay not less than the minimum hourly wage rates on those contracts as established in accordance with Section 220 of the Labor Law as shown in the schedule included in the Bidding Documents. Article 8, Section 220 of the Labor Law, as amended by Chapter 750 of the Laws of 1956, provides (among other things) that it shall be the duty of the fiscal officer to make a determination of the schedule of wages to be paid to all laborers, workers and mechanics employed on public work projects, including supplements for welfare, pension, vacation, and other benefits. These supplements include hospital, surgical or medical insurance, or benefits; life insurance or death benefits; accidental death or dismemberment insurance; and pension or retirement benefits. If the amount of supplements provided by the employer is less than the total supplements shown on the wage schedule, the difference shall be paid in cash to the employee. Article 8, Section 220 of the Labor Law, as amended by Chapter 750 of the Laws of 1956, also provides that the supplements to be provided to laborers, workers, and mechanics upon public work, "...shall be in accordance with the prevailing practices in the locality...." The amount for supplements listed on the enclosed schedule does not necessarily include all types of prevailing supplements in the locality, and a future determination of the Industrial Commissioner may require the Contractor to provide additional supplements. The original payrolls or transcripts shall be preserved for three (3) years from the completion of the Work on the awarded project by the Contractor. The Owner shall receive such payroll record upon completion of the Project.

## PART 3 – BIDDING DOCUMENTS

### 3.1 COPIES

- A. It is the intention of this Project to be both environmentally and fiscally conscious of paper use and consumption. Therefore, documents will be distributed as digital sets in PDF format. Bidding Documents, Drawings, and Specifications, may be viewed online free of charge beginning on 10/29/2024, at

[www.csarchplanroom.com](http://www.csarchplanroom.com) under Public Projects or electronically downloaded for a non-refundable charge of one-hundred dollars (\$100.00.)

1. Please note, in order to access online documents and information, a log in is required. New users can create a free online account upon visiting site by clicking "Register for an Account."
- B. Complete sets of Bidding Documents, Drawings, and Specifications, in PDF format (not CAD format) on compact disc (CD) may be obtained from Rev, 28 Church Street, Unit #7, Warwick, NY 10990 Tel: (877) 272-0216, upon depositing the sum of one hundred dollars (\$100.00) for each combined set of documents. Checks or money orders shall be made payable to "City School District of the City of New Rochelle".
  1. Deposit is refundable in accordance with the terms in the Instructions to Bidders to all submitting bids. Any Bidder requiring CD(s) to be shipped shall make arrangements with the printer and pay for all packaging and shipping costs.
  2. Any Bidder requiring paper copies of the Bidding Documents, Drawings, and Specifications, shall make arrangements with the printer, and pay for all printing, packaging, and shipping costs. Such costs are non-refundable.
- C. All Bid Addenda will be transmitted to registered plan holders via email in PDF format and will be available at [www.csarchplanroom.com](http://www.csarchplanroom.com). Plan holders who have paid for CDs or hard copies of the Bidding Documents will need to make the determination if hard copies of the Addenda are required for their use, and coordinate directly with the printer for hard copies of Addenda to be issued.
  1. There will be no charge for registered plan holders to obtain hard copies of the Bid Addenda.
- D. Bidders shall use complete sets of Bidding Documents in preparing Bids; neither the Owner nor Architect assumes responsibility for errors or misinterpretations resulting from the use of incomplete sets of Bidding Documents.
- E. The Owner and Architect may make copies of the Bidding Documents available on the above terms for the purpose of obtaining Bids on the Work. No license or grant of use is conferred by issuance of copies of the Bidding Documents.

### 3.2 INTERPRETATION OR CORRECTION OF BIDDING DOCUMENTS

- A. The Bidder shall carefully study and compare the Bidding Documents with each other, and with other work being Bid concurrently or presently under construction to the extent that it relates to the Work for which the Bid is

submitted, shall examine the site and local conditions, and shall at once report to the Architect errors, inconsistencies or ambiguities discovered. All reports to the Architect shall be in writing.

- B. No interpretation of the meaning of the Contract Documents, the existing conditions, or of the scope of Work will be made verbally. Provide every request for such interpretation in writing, addressed to CSArch, attn: Matthew Zyrkowski, 19 Front Street, Newburgh, New York 12550 or by e-mail: [mzyrkowski@csarchpc.com](mailto:mzyrkowski@csarchpc.com), with the subject line to read "New Rochelle Bid Question" and to be given consideration must be received at least ten (10) working days prior to the date of the Bid Opening. The last Bid Addendum will be issued no later than November 13, 2024.
- C. Interpretations, corrections, and changes of the Bidding Documents will be made by Addendum. Interpretations, corrections, and changes of the Bidding Documents made in any other manner will not be binding, and Bidders are not required to rely upon them.
- D. The Bidding Documents for this Project have been prepared using certain existing construction documents furnished by the Owner, which pertain to the construction of the existing conditions, and limited observations obtained by the Architect at the Project site.
  - 1. More extensive investigations of existing conditions, including disassembly, or testing of existing building components, was not undertaken by the Architect.
  - 2. Portrayal of such existing conditions obscured or concealed from the Owner or Architect's view prior to the start of this Project's construction activities, is based on reasonable implications and assumptions. The Owner and Architect do not imply or guarantee to the Bidders, in any way, that such portrayals are accurate or true existing conditions.
- E. In the absence of an interpretation by the Architect, should the Drawings disagree in themselves or with the Specifications, the better quality, the more costly or the greater quantity of work or materials shall be estimated upon, and unless otherwise determined, shall be furnished.

### 3.3 EQUIVALENTS

- A. The materials, products and equipment described in the Bidding Documents establish as standard of required function, dimension, appearance, and quality to be met by any proposed substitution and/or comparable product/equivalent. It is not the intention of the Owner or Architect to eliminate from consideration

products that are equivalent in quality, appearance, and function to those specified.

- B. In the specifications, two or more kinds, types, brands, or manufacturers or materials may be named. They shall be regarded as the required standard of quality, and overall, are judged to be equivalent by the Architect. The Bidder may select one of these named items as the basis for its Bid. If a Bidder proposes to use comparable products/equivalents other than those listed in the Project Manual, submit in accordance with subparagraph C below.
- C. No substitution will be considered prior to receipt of Bids unless written request for approval on a Substitution Request (During the Bidding Phase) Form (Section 004325) has been received by the Architect at least ten (10) days prior to the date for receipt of Bids. Such requests shall include the name of the material or equipment for which it is to be substituted and a complete description of the proposed substitution including drawings, performance and test data, and other information necessary for an evaluation. A statement setting forth changes in other materials, equipment, or other portions of the Work, including changes in the work of other contracts that incorporation of the proposed equivalent would require, shall be included. The burden of proof of the merit of the proposed equivalent is upon the proposer. The Architect's decision of approval or disapproval of a proposed equivalent shall be final.
- D. If the Architect approves a proposed equivalent prior to receipt of Bids, such approval will be set forth in an Addendum. Bidders shall not rely upon approvals made in any other manner.
- E. No substitutions will be considered after the Contract award unless specifically provided for in the Contract Documents.

### 3.4 ADDENDA

- A. Addenda will be transmitted to all that are known to have received a complete set of Bidding Documents. All such addenda shall become part of the Contract Documents and all Bidders shall be bound by such Addenda whether or not received by the Bidders.
  - 1. Provide Bidding Document distributor with full company name, address, telephone and facsimile numbers and contact person's name.
- B. Copies of Addenda will be made available for inspection wherever Bidding Documents are on file for that purpose.



- C. Addenda will not be issued later than five (5) working days prior to the time specified for receipt of Bids, except any Addendum withdrawing the request for Bids or one which includes postponement of the time for receipt of Bids.
- D. Each Bidder shall ascertain upon submitting a Bid that the Bidder has received all Addenda issued, and the Bidder shall acknowledge their receipt on the Bid Form.

### 3.5 TAX LIABILITY

- A. Bidders are exempt from payment of manufacturer's excise taxes for materials purchased for the exclusive use of the Owner, provided that the manufacturer has complied with rules and regulation of the Commissioner of Internal Revenue Service.
- B. New York State Sales Tax does not apply to this Project. Contractors are exempt from payment on purchase of materials for the execution of this Contract and such taxes shall not be included in Bids. Exemption Certificates will be provided upon request.
- C. All other taxes shall be included in the Bid.

### 3.6 PRE-BID CONFERENCE

- A. There will be a Pre-Bid Conference as detailed in the Advertisement for Bids. A lack of representation at the Pre-bid Conference will not be justification for additional costs due to unforeseen conditions during the construction phases of the Contracts.

## PART 4 – BIDDING PROCEDURES

### 4.1 PREPARATION OF BIDS

- A. Bids shall be submitted on forms identical to the Bid Forms contained in this Project Manual, or submitted using unaltered and legible copies thereof.
- B. All blanks on the Bid Form shall be legible executed in a non-erasable medium. No Bid will be considered which does not include bids for all items listed in the proposal sheets.
- C. Sums shall be expressed in both words and figures. In case of discrepancy, the amount written in words shall govern.
- D. Interlineations, alterations, and erasures must be initialed by the signer of the Bid.

- E. Bid all requested alternates. If no change in the Base Bid is required, enter "No Change."
- F. Each copy of the Bid shall state the legal name of the Bidder and the nature of legal form of the Bidder. The Bidder shall provide evidence of legal authority to perform within the jurisdiction of the Work. Each Bid copy shall be signed by the person or persons legally authorized to bind the Bidder to a Contract. A Bid by a corporation shall further give the state of incorporation and have the corporate seal affixed. A Bid submitted by an agent shall have a current power of attorney attached certifying the agent's authority to bind the Bidder.
- G. Where two or more Bids for designated portions of the Work have been requested, the Bidder may, without forfeiture of the bid security, state the Bidder's refusal to accept award of less than the combination of Bids stipulated by the Bidder. The Bidder shall make no additional stipulations on the bid form nor qualify the Bid in any other manner.
- H. The Owner may consider as informal any Bid on which there is an alteration of or departure from or additions to or qualification of the Bid Form or from the any of the other Contract Documents. The Owner may reject a Bid, which in the Owner's sole view, is not adequately filled out, or does not contain the requested information.

#### 4.2 BID SECURITY

- A. Each Bid must be accompanied by a certified bank check of the Bidder, or a Bid Bond prepared by a surety company licensed in New York State.
  - 1. Bid Security shall be provided in the amount of five percent (5%) of the dollar amount of the Base Bid.
  - 2. Bid Security shall be payable to **City School District of the City of New Rochelle**.
  - 3. If certified check is utilized, the Bidder shall provide written confirmation from a licensed New York State Surety company that Performance and Payment Bonds will be available to said Bidder for this Project.
  - 4. The apparent low Bidders, upon failure or refusal to furnish the required Performance and Payment Bonds and execute a Contract within ten (10) calendar days after receipt of notice of the acceptance of Bid, shall forfeit the Bid Security as liquidated damages for such failure or refusal, and not as a penalty.
  - 5. The successful Bidders shall have the Bid Security returned upon execution of an Owner/Contractor Agreement.

6. Unsuccessful Bidders shall have their Bid Security returned following the execution of the Owner/Contractor Agreements or the forty-five (45) day period following the Bid Opening, whichever occurs first.
  7. The Bid Security shall not be forfeited to the Owner in the event the Owner fails to comply with subparagraph 6.2.
- B. Surety Bond shall be written on AIA Document A310, Bid Bond, and the attorney-in-fact that executes the bond on behalf of the surety shall affix to the bond a certified and current copy of the power of attorney.
- C. The Owner will have the right to retain the Bid Security of Bidders to whom an award is being considered until either:
1. The Contract has been executed and bonds, when required, have been furnished, or;
  2. The specified time has elapsed so that Bids may be withdrawn or;
  3. All Bids have been rejected.

#### 4.3 SUBMISSION OF BIDS

- A. All copies of the Bid, the Bid Security, and any other documents required to be submitted with the Bid shall be enclosed in a sealed opaque envelope. The envelope shall be addressed to the party receiving the Bids and shall be identified with the Project name, the Bidder's name, and address and, if applicable, the designated Contract for which the Bid is submitted. If the Bid is sent by mail, the sealed envelope shall be enclosed in a separate mailing envelope with the notation "SEALED BID ENCLOSED" on the face thereof.
1. If Bidder submits for different Contracts, each shall be submitted individually and so labeled for that Contract.
- B. Bids shall be deposited at the designated location prior to the time and date indicated in the Invitation to Bidders for the receipt of Bids. Bids received after the time and date for receipt of Bids will be returned unopened.
1. The Bidder shall assume full responsibility for timely delivery at the location designated for receipt of Bids.
  2. Oral, telephonic, telegraphic, facsimile, or other electronically transmitted Bids will not be considered.
- C. Bids not exhibiting original signatures or seals will not be accepted as a responsive Bid.
- D. Bids shall be submitted in duplicate. Executed forms required for each submitted Bid are as follows to be considered a complete bid:

1. Bid Form – all costs are to be filled out.
2. Unit Prices.
3. Substitution list.
4. Resolution.
5. Non-Collusive Bid Certification.
6. Iran Divestment Act Certification.
7. Bid Security.

#### 4.4 MODIFICATION OR WITHDRAWAL OF BID

- A. A Bid may not be modified, withdrawn, or canceled by the Bidder during the stipulated time period following the time and date designated for the receipt of Bids, and each Bidder so agrees to submit a Bid. No Bidder may withdraw a Bid within the forty-five (45) day period following the time of the Bid Opening or be subject to forfeiture of the bid security, unless agreed-upon with the owner in advance.
- B. Prior to the time and date designated for receipt of Bids, a Bid submitted may be modified or withdrawn by notice to the party receiving Bids at the place designated for receipt of Bids. Such notice shall be in writing over the signature of the Bidder. Written confirmation over the signature of the Bidder shall be received, and date and time-stamped by the receiving party on or before the date and time set for receipt of Bids. A change shall be so worded as not to reveal the amount of the original Bid.
- C. Withdrawn Bids may be resubmitted up to the date and time designated for the receipt of Bids provided that they are then fully in conformance with these Instructions to Bidders.
- D. Negligence on the part of the Bidder in preparing its Bid confers no right for the withdrawal of the Bid after it has been opened. If a Bidder claims to have made a mistake or error in its Bid, it shall deliver to the Architect within three (3) days after the Bid Opening, a written notice describing in detail the nature of the claimed mistake or error with documentary evidence or proof (including, but not limited to, bid worksheets, summary sheets and other bid related data requested of it). Failure to deliver notice and evidence or proof specified above within the specified time shall constitute a waiver of the Bidder's right to claim an error or mistake. Upon receipt of specified notice and evidence or proof within the specified time period, the Architect and Owner shall determine if an excusable error or mistake has been made; and, if so, the Owner may permit the Bid to be withdrawn. The Owner's determination of whether a Bidder made an excusable error or mistake shall be conclusive on the Bidder, its Surety, and all the claim rights under the Bidder.

## PART 5 – CONSIDERATION OF BIDS

### 5.1 OPENING OF BIDS

- A. The properly identified Bids received on time will be publicly-opened and will be read aloud. **Bids will be opened at 11:00 AM on November 25, 2024 at City Hall, Floor 2, Carew Room, 515 North Avenue, New Rochelle, 10801.** An abstract of the Bids will be made available to Bidders at [www.csarchplanroom.com](http://www.csarchplanroom.com). The Owner reserves the right to postpone the date and time of the opening of Bids at any time prior to the date and time listed in the Advertisement or Invitation to Bid.

### 5.2 REJECTION OF BIDS

- A. The Owner shall maintain the right to reject any or all Bids. A Bid not accompanied by the required Bid Security or by other data required by the Bidding Documents, or which is in any way incomplete, or irregular is subject to rejection.
- B. If identical bids are received and these bids are or become the low Bids, the Owner reserves the right to award the Contract on the basis of the relative quality of the product or products as shown by similar work done elsewhere, and it is mutually agreed that the Owner's judgment shall be final.
- C. In order to qualify as a Contractor satisfactory to the Owner, each Bidder shall document to the satisfaction of the Owner that it has the skill and experience as well as the necessary facilities, ample financial resources, and adequate laborers and equipment to do the Work in a satisfactory manner and within the time specified. Bidders may be judged qualified only for the type of work in which they demonstrate competence. Bidders must prove to the satisfaction of the Owner that they are reputable, reliable, and responsible. The Owner may make any investigation it deems necessary to assure itself of the ability of the Bidder to perform the Work, and the Bidder shall furnish the Owner with all such additional information and data for this purpose as may be requested. In addition to the general reservation of rights to reject any and all bids, the Owner specifically reserves the right to reject any Bid of any Bidder if the evidence submitted by, or investigation of such Bidder fails to satisfy the Owner that such Bidder is properly qualified to carry out the obligations of the Contract Documents and to complete the Work contemplated therein.
- D. The Owner reserves unto itself the sole right to determine the lowest qualified and responsible Bidder. The Owner may make any investigation necessary to determine the ability of the Bidder to fulfill the Contract and the Bidder shall furnish the Owner with all such information for this purpose as the Owner may

request. Without limiting the general rights which the Owner has to reject Bids, as herein before set forth, in determining the lowest responsible Bidder, the following considerations in addition to those above mentioned will be taken into account. In determining the responsibility of a Bidder for a public works contract, the Owner shall consider whether the Bidder:

1. Maintains a permanent place of business;
2. Has adequate plant and equipment to do the Work properly and expeditiously;
3. Has the suitable financial ability to meet obligations required by the Work;
4. Has appropriate technical ability and experience in institutional and commercial construction including experience in K-12 public school construction in New York State;
5. Has performed Work of the same general type and the same scale called for under this Contract;
6. Has previously failed to perform contracts properly or complete them on time;
7. Is in a position to perform this Contract;
8. Has habitually and without just cause neglected the payment of bills or otherwise disregarded its obligations to subcontractors, suppliers, or employees;
9. Is eligible for full bonding capacity of its Contract;
10. Has been in business as the corporation, partnership, sole proprietorship or other business entity, in whose name the bid is submitted, continuously, for no less than the previous five (5) years performing or coordinating the Work which they are bidding on;
11. Is not currently involved in bankruptcy proceedings;
12. Is licensed to perform the Work it is bidding on in the jurisdiction the work will take place;
13. Is able to perform the work with manpower available to it;
14. Will employ a field superintendent with at least five (5) years' experience as a working field superintendent and capable of communicating in fluent English;
15. Has committed a willful violation of the New York State Prevailing Wage Laws within the last five years;
16. Has committed violations of safety and/or training standards as evidenced by a pattern of OSHA violations or the existence of willful OSHA violations;
17. Has committed any significant violation of the Worker's Compensation Law, including, but not limited to, the failure of the bidder to provide proof of worker's compensation or disability benefits coverage;

18. Has committed any criminal conduct involving violations of the Environmental Conservation Law or other federal or state environmental statutes or regulations;
19. Has committed any criminal conduct concerning formation of, or any business association with, an allegedly false or fraudulent Women's or Minority Business Enterprise (W/MBE), or any denial, decertification, revocation or forfeiture of W/MBE status by New York State;
20. Has been debarred by any agency of the U.S. Government; and
21. Has engaged in other conduct of so serious or compelling a nature that it raises questions about the responsibility of the bidder, including, but not limited to submission to the Owner of a false or misleading Statement of Bidder's Qualifications, or in some other form, in connection with a bid for or award of a contract.

### 5.3 AWARD OF BID

- A. It is the intent of the Owner to enter into separate Prime Contracts with the lowest responsive and responsible bidder, as those criteria are defined and interpreted under the laws of the State of New York regarding competitive bidding for public improvement projects, for each Prime Contract, provided the Bids are submitted in accordance with the requirements of the Bidding Documents and does not exceed the funds available. The Owner shall have the right to waive informalities and irregularities in a Bid received and to accept the Bid which, in the Owner's judgment, is in the Owner's own best interest.
- B. The Owner shall have the right to accept Alternates in any order or combination, unless otherwise specifically provided in the Bidding Documents, and to determine the low Bidder on the basis of the sum of the Base Bid and Alternates accepted.
- C. The acceptance of a Bid will be a notice in writing signed by a duly authorized representative of the Owner by mail sent within forty-five (45) after the Bids have been opened and no other act of the Owner shall constitute the acceptance of a Bid. The acceptance of a Bid shall bind the successful Bidder to execute the Contract as provided hereinafter. The rights and obligations provided for in the Contract shall become effective and binding upon the parties only with its formal execution by the successful Bidder and the Owner.

## PART 6 – POST-BID INFORMATION

### 6.1 CONTRACTOR'S QUALIFICATION STATEMENT

- A. Bidders to whom an award of a Contract is under consideration shall submit to the Construction Manager, within three (3) calendar days, a properly executed AIA Document A305, Contractor's Qualification Statement, unless such statement has been previously required and submitted as a prerequisite to the issuance of Bidding Documents.
- B. The Owner shall have the right to take such steps as it deems necessary to determine the ability of the Bidder to perform its obligations under the Contract, and the Bidder shall furnish the Owner all such information and data for this purpose as the Owner may request. The right is reserved by the Owner to reject any Bid where an investigation of the available evidence or information does not satisfy the Owner that the Bidder is qualified and capable to carry out properly the terms of the Contract. The issuing of Bid Documents and acceptance of a Bidder's payment by the Owner shall not be construed as pre-qualification of that Bidder. If a Bidder is later discovered to have misrepresented or provided false or incorrect information with regard to any material party of the information submitted to the Owner, including but not limited to information regarding experience, debarment, claims, lawsuits, arbitrations, mediations, finances, license, contract termination, the Owner reserves the right to reject the Bid of such Bidder and, if a Contract has been awarded, it will become automatically voidable at the sole discretion and election of the Owner.

## 6.2 SUBMITTALS

- A. Within three (3) calendar days following the Bid Opening time, the apparent lowest Bidder, shall furnish to the Owner through the Architect the following information:
  - 1. Contractor's Qualification Statement – AIA Document 305, 2020 edition.
  - 2. Labor rate sheet
  - 3. Material and Equipment List.
  - 4. Schedule of Values.
  - 5. Proposed Project Manager.
  - 6. Preliminary Project Schedule.
- B. The Bidder will be required to establish to the satisfaction of the Owner and Construction Manager the reliability and responsibility of the persons or entities proposed to furnish and perform the Work described in the Bidding Documents.
- C. Upon request only, the apparent second and third low Bidders shall be prepared to submit the information of paragraphs 6.1 and 6.2.A.
- D. Prior to the execution of the Contract, the Construction Manager will notify the Bidder in writing if either the Owner, Architect/Engineer, or Construction



Manager, after due investigation, has reasonable objection to a person or entity proposed by the Bidder. If the Owner, Architect or Construction Manager has reasonable objection to a proposed person or entity, the Bidder may, at the Bidder's option, (1) withdraw the Bid or (2) submit an acceptable substitute person or entity. In the event of withdrawal or disqualification, Bid Security will not be forfeited.

- E. Persons and entities proposed by the Bidder and to whom the Owner and Construction Manager have made no reasonable objection must be used on the Work for whom they were proposed and shall not be changed except with the written consent of the Owner and Construction Manager.
- F. Any Bidder, upon failure to submit the information required in subparagraphs 6.1.A, 6.2.A, and 6.2.B in the allowed time, may have the Bid rejected. In that event, the Bidder shall forfeit the Bid Security to the Owner as liquidated damages for such failure or refusal, and not as penalty.

### 6.3 BOND REQUIREMENTS

- A. The Owner requires the apparent successful Bidder to furnish and deliver bonds, covering the faithful performance of the Contract Work and payment of all obligations arising thereunder duly executed by the Bidder and a surety company licensed to do business in New York State rating.
- B. The premiums shall be included in the Bid and paid by the Contractor. The Bidder shall proportionally distribute the costs of such bonds between the Base Bid and any Alternates.

### 6.4 TIME OF DELIVERY AND FORM OF BONDS

- A. The Bidder shall deliver the required bonds to the Owner through the Construction Manager on or before the time of execution of the Owner/Contractor Agreement. Bonds shall be payable to **City School District of the City of New Rochelle**.
- B. Unless otherwise provided, the bonds shall be written on AIA Document A312, Performance Bond and Payment Bond, Version 2010. Both bonds shall be written in the amount of the Contract Sum.
- C. The bonds shall be dated the same as the Owner/Contractor Agreement.

- D. The Bidder shall require the attorney-in-fact who executes the required bonds on behalf of the surety to affix thereto a certified and current copy of the power of attorney.
- E. The surety for the performance and payments bonds shall be a duly authorized surety company, licensed to do business in the State of New York, and listed in the latest issue of U.S. Treasury Circular 570. The sufficiency of the surety and the bonds is subject to the approval of the Owner, and sureties and bonds that are deemed insufficient by the Owner may be rejected.

#### PART 7 – AGREEMENT FORM BETWEEN OWNER AND CONTRACTOR

- A. Standard Form of Agreement Between Owner and Contractor, Construction Manager as Adviser Edition – AIA Document A132-2019 Edition, as modified.

END OF DOCUMENT 002113

DOCUMENT 003113 - PRELIMINARY SCHEDULES

1.1 PROJECT SCHEDULE

- A. This Document is part of the Procurement and Contracting Requirements for Project. They provide Owner's information for Bidders' convenience and are intended to supplement rather than serve in lieu of Bidders' own investigations. They are made available for Bidders' convenience and information, but do not affect Contract Time requirements. This Document and its attachments are not part of the Contract Documents.
- B. This project is scheduling to be completed, including Closeout, within eight (8) months of Contract award and/or Notice-To-Proceed Letter issuance. Refer to Multiple Contract Summary Section 011200 for further information.
- C. Work is to be done within the time frame of December 2024 – July 2025. Work may be done on first shift, during normal school days, as permitted by the District or as stated in Multiple Contract Summary Section 011200.

END OF DOCUMENT 003113

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ID	Task Mode	Task Name	Duration	Start	Finish	Resource Names	N	Half 1, 2023				Half 2, 2023				Half 1, 2024				Half 2, 2024				Half 1, 2025				Half 2, 2025				Half 1, 2026				Half 2, 2026				Half 1, 2027
								J	M	M		J	S	N		J	M	M		J	S	N		J	M	M		J	S	N		J	M	M		J	S	N		
131	✈	Closeout	15 days	Thu 5/8/25	Thu 5/29/25																																			
132	✈	ALMS	114 days	Thu 12/12/24	Tue 5/27/25																																			
133	✈	Insurance certs, Payment/ Performance Bonds	5 days	Thu 12/12/24	Wed 12/18/24																																			
134	✈	Project Site Submittals, Shops, Procurement, Fabrication	30 days	Thu 12/12/24	Tue 1/28/25																																			
135	✈	Contractors Mobilize to the Jobsite	1 day	Thu 12/19/24	Thu 12/19/24																																			
136	✈	CONSTRUCTION DURATION	93 days	Thu 12/19/24	Fri 5/2/25																																			
150	✈	Substantial Completion (district to move in FF&E from this day or	1 day	Fri 5/2/25	Fri 5/2/25																																			
151	✈	Closeout	15 days	Mon 5/5/25	Fri 5/23/25																																			
152	✈	GMD	103 days	Thu 12/12/24	Fri 5/9/25																																			
153	✈	Insurance certs, Payment/ Performance Bonds	5 days	Thu 12/12/24	Wed 12/18/24																																			
154	✈	Project Site Submittals, Shops, Procurement, Fabrication	30 days	Thu 12/12/24	Tue 1/28/25																																			
155	✈	Contractors Mobilize to the Jobsite	1 day	Thu 12/19/24	Thu 12/19/24																																			
156	✈	CONSTRUCTION DURATION	83 days	Thu 12/19/24	Fri 4/18/25																																			
169	✈	Substantial Completion (district to move in FF&E from this day or	1 day	Fri 4/18/25	Fri 4/18/25																																			
170	✈	Closeout	15 days	Mon 4/21/25	Fri 5/9/25																																			
171	✈	JES	132 days?	Thu 12/12/24	Mon 6/23/25																																			
172	✈	Insurance certs, Payment/ Performance Bonds	5 days	Thu 12/12/24	Wed 12/18/24																																			
173	✈	Project Site Submittals, Shops, Procurement, Fabrication	30 days	Thu 12/12/24	Tue 1/28/25																																			
174	✈	Contractors Mobilize to the Jobsite	1 day	Thu 12/19/24	Thu 12/19/24																																			
175	✈	CONSTRUCTION DURATION	108 days	Thu 12/19/24	Fri 5/23/25																																			
187	✈	Substantial Completion (district to move in FF&E from this day or	1 day	Fri 5/23/25	Fri 5/23/25																																			
188	✈	Closeout	20 days	Mon 5/26/25	Mon 6/23/25																																			

Project: 29M Bond Master Sche  
Date: Fri 10/25/24

Task

Split

Milestone

Summary

.....

Project Summary

◆

Inactive Task

Inactive Milestone

Inactive Summary

Manual Task

Duration-only

Manual Summary Rollup

Manual Summary

Start-only

Finish-only

External Tasks

External Milestone

◆

Deadline

Progress

Manual Progress

Page 2





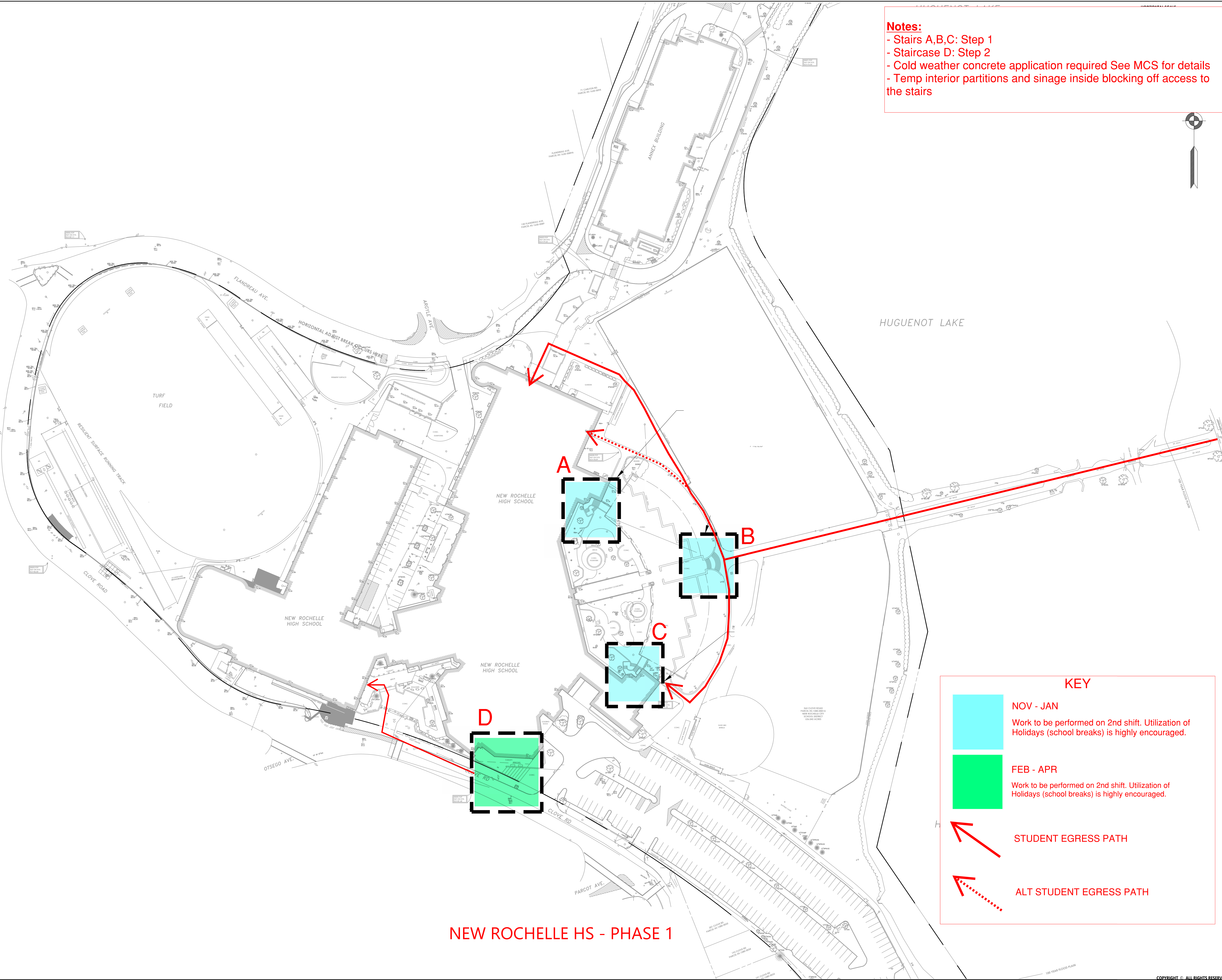
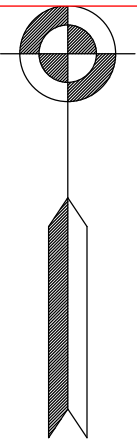




NEW ROCHELLE HS - PHASE 1



- Notes:**
- Stairs A,B,C: Step 1
  - Staircase D: Step 2
  - Cold weather concrete application required See MCS for details
  - Temp interior partitions and sinage inside blocking off access to the stairs



**KEY**

NOV - JAN  
Work to be performed on 2nd shift. Utilization of Holidays (school breaks) is highly encouraged.

FEB - APR  
Work to be performed on 2nd shift. Utilization of Holidays (school breaks) is highly encouraged.

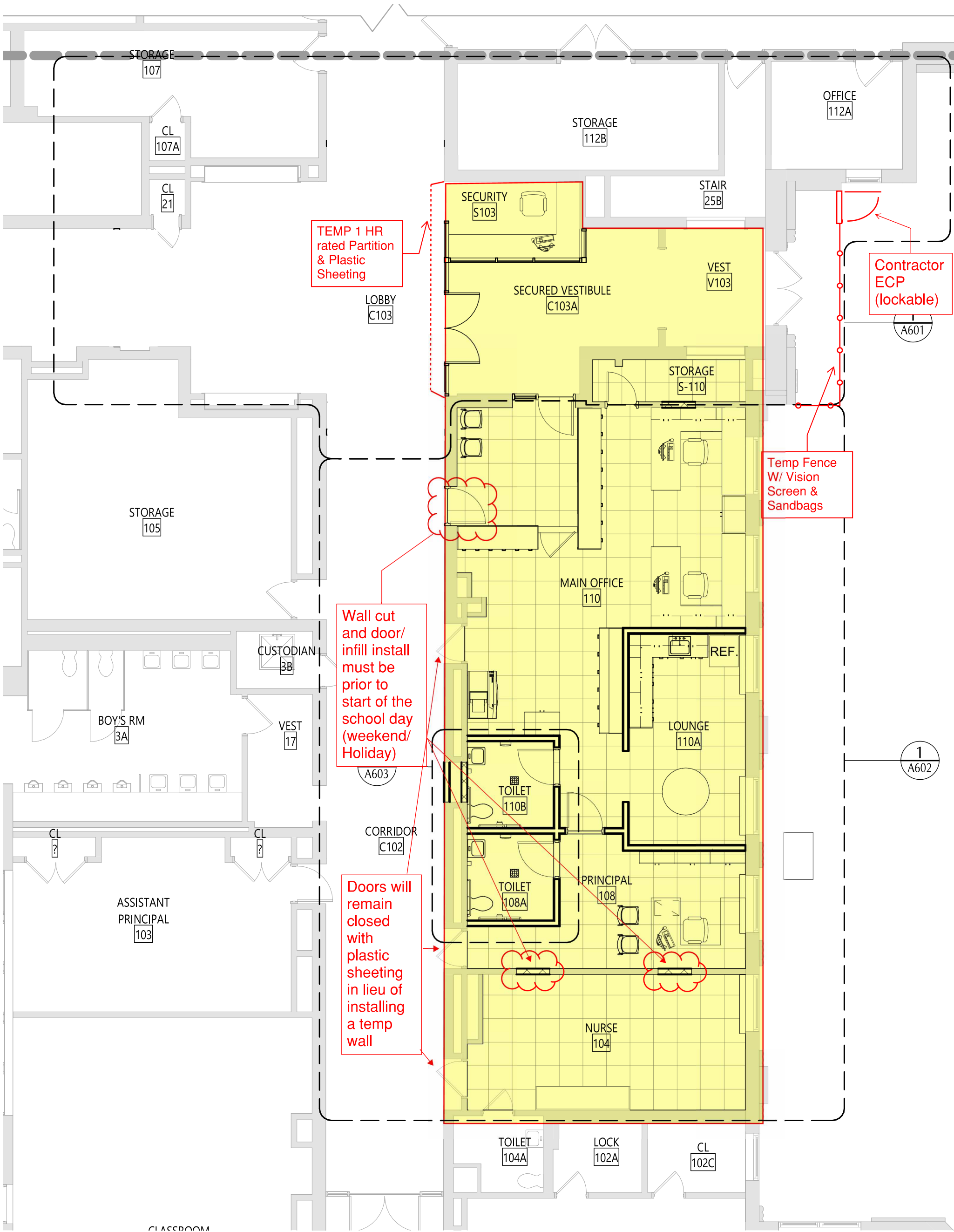
STUDENT EGRESS PATH

ALT STUDENT EGRESS PATH

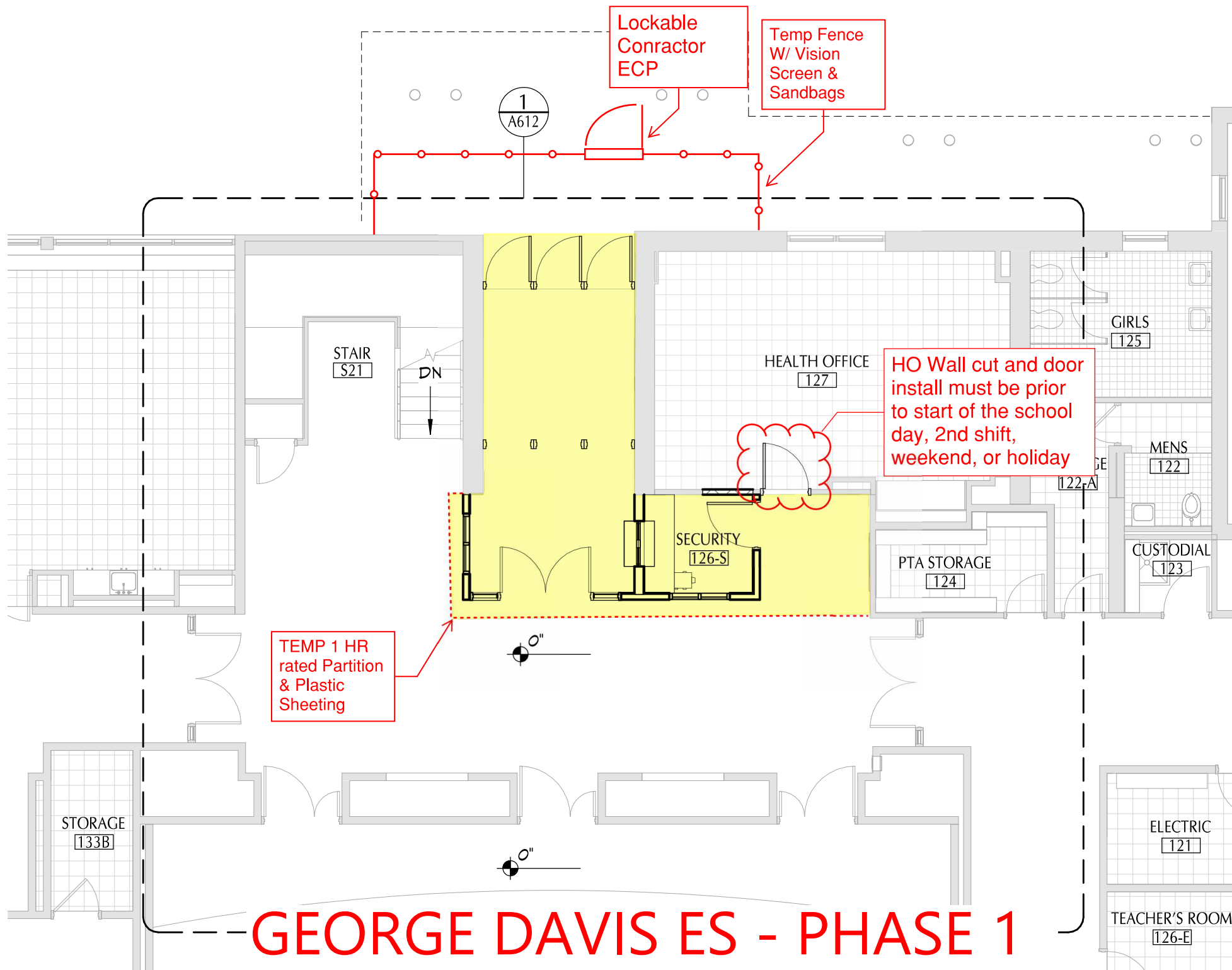
NEW ROCHELLE HS - PHASE 1



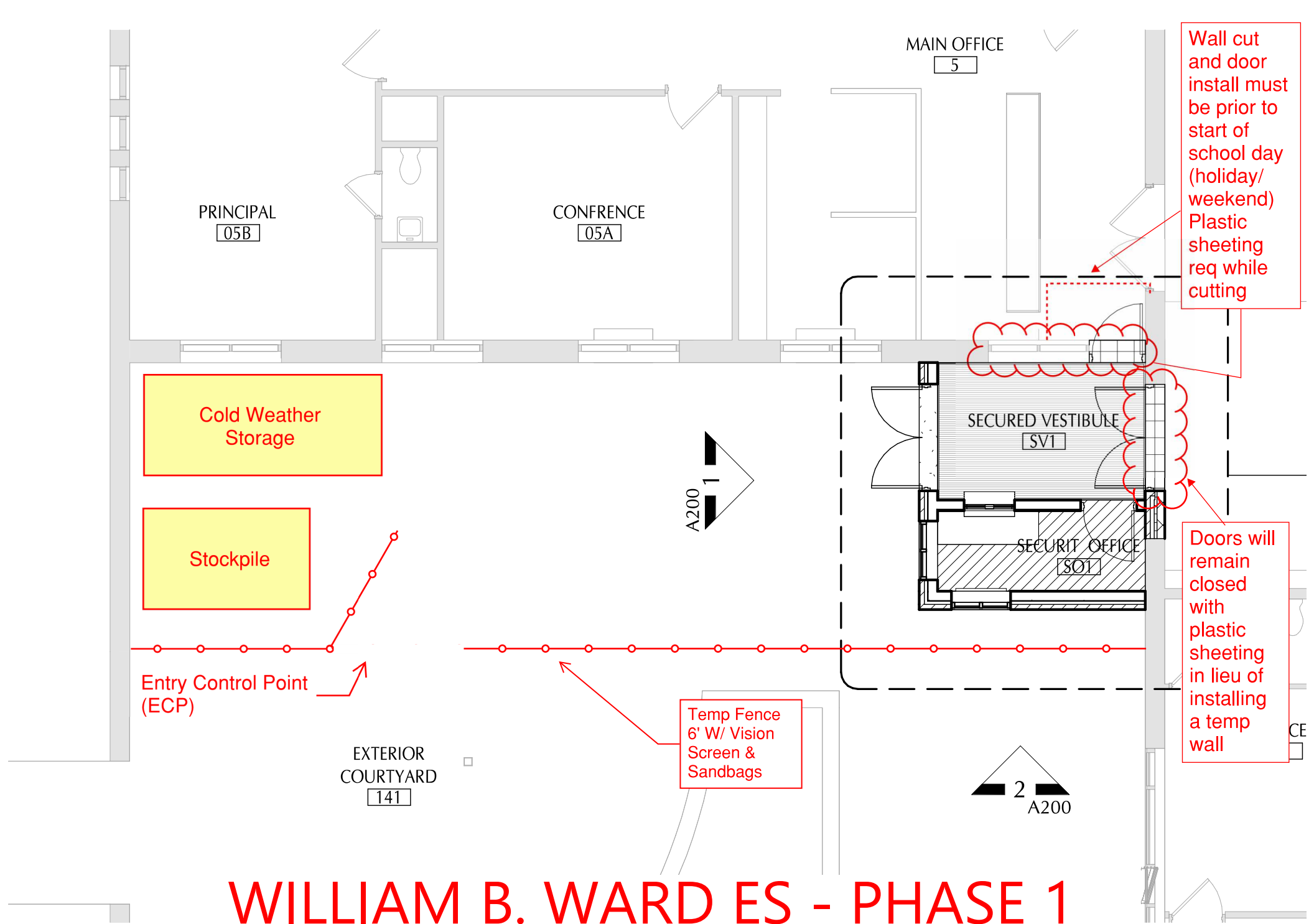




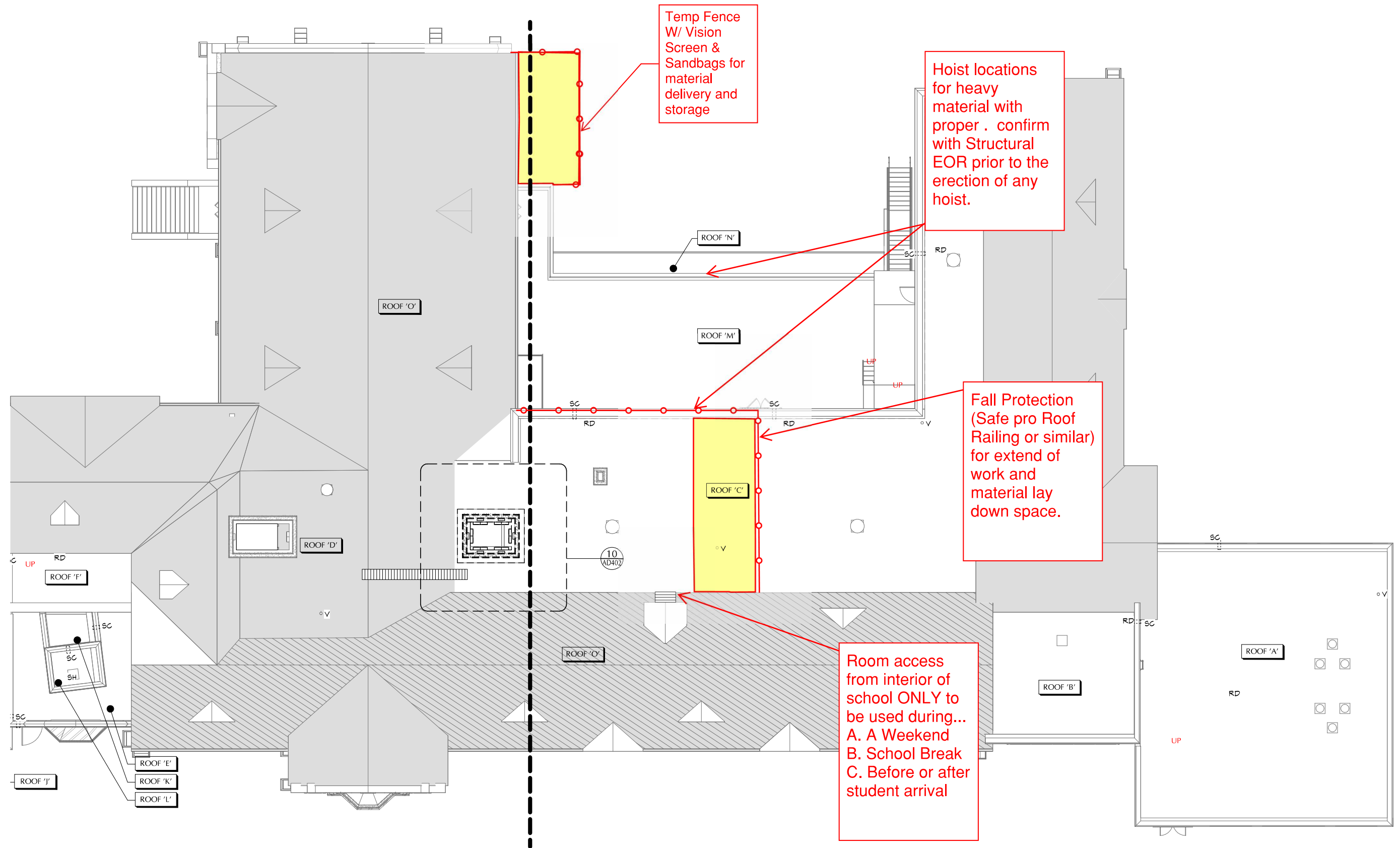
# JEFFERSON ES - PHASE 1



# GEORGE DAVIS ES - PHASE 1



# WILLIAM B. WARD ES - PHASE 1



# HENRY BARNARD SCHOOL - PHASE 1

SECTION 004116.01 - BID FORM CONTRACT NO. 01 – General Construction (GC-01)

BIDDER INFORMATION

CONTACT: \_\_\_\_\_

COMPANY: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

TELEPHONE: (      ) \_\_\_\_\_

FACSIMILE: (      ) \_\_\_\_\_

BID TO (Owner):                      Attention: Purchasing Agent  
City School District of the City of New Rochelle  
515 North Avenue  
New Rochelle, New York 10801

PRIME CONTRACT:                      Contract No. 01 General Construction (GC-01)

PROJECT TITLE:                      City School District of the City of New Rochelle  
2023 Capital Project – Phase 1

**SED Project Control No.      SED #66-11-00-01-0-001-030**  
**SED #66-11-00-01-0-002-016**  
**SED #66-11-00-01-0-004-015**  
**SED #66-11-00-01-0-006-012**  
**SED #66-11-00-01-0-007-016**  
**SED #66-11-00-01-0-013-016**

CSArch PROJECT NO:                      188-2301

1. **Representations:** By making this Bid, the Bidder represents that:  
The Bidder (identified above) hereby certifies that they have examined and fully understands the requirements and intent of the Bidding and Contract Documents, including Drawings, Project Manuals, and Addenda; and proposes to provide all labor, material, and equipment necessary to complete the Work on, or before, the dates specified in the Agreement for the Base Bid of:

2. **Total Base Bid:** \_\_\_\_\_ (\$ \_\_\_\_\_ )  
*New Rochelle High School:* \_\_\_\_\_ (\$ \_\_\_\_\_ )  
*Albert Leonard Middle School:* \_\_\_\_\_ (\$ \_\_\_\_\_ )  
*Jefferson Elementary School:* \_\_\_\_\_ (\$ \_\_\_\_\_ )  
*George M. Davis Elementary School:* \_\_\_\_\_ (\$ \_\_\_\_\_ )  
*William B. Ward Elementary School:* \_\_\_\_\_ (\$ \_\_\_\_\_ )  
*Henry Barnard Elementary School:* \_\_\_\_\_ (\$ \_\_\_\_\_ )
- (Words) (Figures)

In all locations sums shall be expressed in both words and figures. In case of discrepancy, written word governs.

3. **Addenda:** The Bidder acknowledges receipt of the following Addendum:

No. \_\_\_\_\_ Dated: \_\_\_\_\_ No. \_\_\_\_\_ Dated: \_\_\_\_\_

4. **Alternates:** None.

5. **Bid Security:** Attached hereto is Bid Security in the form of (circle correct form) Bid Bond, Certified Check, Cash in the amount of five percent (5%) of the written Base Bid amount.

6. **Allowances:**

- A. **\$30,000** Allowance for unforeseen conditions for General Construction Work at New Rochelle High School
- B. **\$35,000** Allowance for unforeseen conditions for General Construction Work at Albert Leonard Middle School
- C. **\$10,000** Allowance for unforeseen conditions for General Construction Work at George M. Davis Elementary School
- D. **\$20,000** Allowance for unforeseen conditions for General Construction Work at Henry Barnard Elementary School
- E. **\$45,000** Allowance for unforeseen conditions for General Construction Work at Jefferson Elementary School
- F. **\$15,000** Allowance for unforeseen conditions for General Construction Work at William B. Ward Elementary School

7. **Time of Commencement and Completion:** The Bidder agrees to commence Work on the stipulated starting date(s) and will substantially complete the Work in accordance with the project schedule stipulated in Specification Section 011200 Multiple Contract Summary and Section 003113 Preliminary Schedules.



8. **Rejection of Bids:** The Bidder acknowledges that the Owner reserves the right to waive any informality in, or to reject any or all Bids.
9. **Execution of Contract:** If notice of the acceptance of this Bid is mailed, telegraphed, or otherwise delivered to the undersigned within forty-five (45) days after the date of the Bid Opening, or any time thereafter, the undersigned will, within ten (10) working days after the receipt of the form of Agreement, execute and deliver the Contract.

10. **Signature:**

---

(Signature)

---

(Name – Printed)

---

(Title – Printed

(Date)

11. **Attachments:** Obtain and attach the following documents to each individual Bid.
- a. Corporate Resolution
  - b. Non-Collusive Bid Certification
  - c. Iran Divestment Act Affidavit
  - d. Bid Security
  - e. Subcontractor List
  - f. Substitution List
12. **Work Cost Breakdown:** This form shall be filled out and submitted by the Contractor. The grand total must equal the BASE BID under Section I (A) "THE BID". UNIT PRICES are required for the items listed in the Unit Prices section of the work cost breakdown. Unit prices will be provided for use if the required quantities are more or less than the quantities indicated in the plans and specifications. Failure to complete the work cost breakdown may result in the disqualification of the bid. As itemized in the "Instructions to Bidders" for a complete Bid Form include the following which must be filled out completely, failure to comply with any listed below bid will be a rejected bid:
- a. Bid Form, all costs must be shown in each CSI section and totaled, failure to breakdown these costs will be subject to disqualification of bid.
  - b. Unit costs.

### New Rochelle High School

Contract Number: General Construction 01 (GC-01)

Contract Titles: 2023 Capital Project – Phase 1

Bidder:

Date:

\* Refer to Spec Section 012973 Schedule of Values for additional information

Item	Division	Description	QTY	Unit	Total
1	01	General Requirements (Submittals, Punchlist, etc.)			
2	01	012100 Allowances - Unforeseen Conditions	1	N/A	\$30,000
3	01	015000 Temporary Facilities and Controls			
4	01	017700 Closeout			
5	02	024100 Demolition			
6	03	035400 Cementitious Underlayment			
7	04	042000 Unit Masonry			
8	06	061053 Miscellaneous Rough Carpentry			
9	06	061600 Sheathing/ Temp Protection			
10	06	064023 Interior Arch. Woodwork / Millwork			
11	07	072100 Thermal Insulation			
12	07	071416 Moisture and Waterproofing			
13	07	078413 Penetration Firestopping			
14	07	079200 Joint Sealants			
15	08	081113 Hollow Metal Doors and Frames			
16	08	081416 Flush Wood Doors			
17	08	081733 FRP Doors & Aluminum Frames			
18	08	087100 Door Hardware			
19	08	084113 Aluminum-framed entrances & Storefronts			
20	08	088000 Glazing/ Security/ Fire protective			
21	09	092216 Non-Structural Metal Framing			
22	09	092900 Gypsum Board & Shaft wall			
23	09	095113 Acoustic Panel Ceilings			
24	09	096513 Resilient Base & Accessories			
25	09	096519 Resilient Tile Flooring			
26	09	099100 Painting			
27	10	101423 Panel Signage			
28	10	102641 Ballistic Resistant Panels			
29	12	123661.16 Solid Surfacing Countertops			

**Total Base Bid:** \_\_\_\_\_

**Albert Leonard Middle School**

Contract Number: General Construction 01 (GC-01)

Contract Titles: 2023 Capital Project – Phase 1

Bidder:

Date:

\* Refer to Spec Section 012973 Schedule of Values for additional information

Item	Division	Description	QTY	Unit	Total
1	01	General Requirements (Submittals, Punchlist, etc.)			
2	01	012100 Allowances - Unforeseen Conditions	1	N/A	\$35,000
3	01	015000 Temporary Facilities and Controls			
4	01	017700 Closeout			
5	02	024100 Demolition			
6	03	035400 Cementitious Underlayment			
7	04	042000 Unit Masonry			
8	06	061053 Miscellaneous Rough Carpentry			
9	06	061600 Sheathing/ Temp Protection			
10	06	064023 Interior Arch. Woodwork / Millwork			
11	07	072100 Thermal Insulation			
12	07	071416 Moisture and Waterproofing			
13	07	078413 Penetration Firestopping			
14	07	079200 Joint Sealants			
15	08	081113 Hollow Metal Doors and Frames			
16	08	081416 Flush Wood Doors			
17	08	081733 FRP Doors & Aluminum Frames			
18	08	087100 Door Hardware			
19	08	084113 Aluminum-framed entrances & Storefronts			
20	08	088000 Glazing/ Security/ Fire protective			
21	09	092216 Non-Structural Metal Framing			
22	09	092900 Gypsum Board & Shaft wall			
23	09	095113 Acoustic Panel Ceilings			
24	09	096513 Resilient Base & Accessories			
25	09	096519 Resilient Tile Flooring			
26	09	099100 Painting			
27	10	101423 Panel Signage			
28	10	102641 Ballistic Resistant Panels			
29	12	123661.16 Solid Surfacing Countertops			

**Total Base Bid:** \_\_\_\_\_

**George M. Davis Elementary School**

Contract Number: General Construction 01 (GC-01)

Contract Titles: 2023 Capital Project – Phase 1

Bidder:

Date:

\* Refer to Spec Section 012973 Schedule of Values for additional information

Item	Division	Description	QTY	Unit	Total
1	01	General Requirements (Submittals, Punchlist, etc.)			
2	01	012100 Allowances - Unforeseen Conditions	1	N/A	\$10,000
3	01	015000 Temporary Facilities and Controls			
4	01	017700 Closeout			
5	02	024100 Demolition			
7	04	042000 Unit Masonry			
8	06	061053 Miscellaneous Rough Carpentry			
9	06	061600 Sheathing/ Temp Protection			
10	06	064023 Interior Arch. Woodwork / Millwork			
11	07	072100 Thermal Insulation			
12	07	071416 Moisture and Waterproofing			
13	07	078413 Penetration Firestopping			
14	07	079200 Joint Sealants			
15	08	081113 Hollow Metal Doors and Frames			
16	08	081416 Flush Wood Doors			
17	08	081733 FRP Doors & Aluminum Frames			
18	08	087100 Door Hardware			
19	08	084113 Aluminum-framed entrances & Storefronts			
20	08	088000 Glazing/ Security/ Fire protective			
21	09	092216 Non-Structural Metal Framing			
22	09	092900 Gypsum Board & Shaft wall			
23	09	095113 Acoustic Panel Ceilings			
24	09	096513 Resilient Base & Accessories			
25	09	096519 Resilient Tile Flooring			
26	09	099100 Painting			
27	10	101423 Panel Signage			
28	10	102641 Ballistic Resistant Panels			
29	12	123661.16 Solid Surfacing Countertops			

**Total Base Bid:** \_\_\_\_\_

**Henry Barnard Elementary School**

Contract Number: General Construction 01 (GC-01)

Contract Titles: 2023 Capital Project – Phase 1

Bidder: \_\_\_\_\_

Date: \_\_\_\_\_

\* Refer to Spec Section 012973 Schedule of Values for additional information

Item	Division	Description	QTY	Unit	Total
1	01	General Requirements (Submittals, Punchlist, etc.)			
2	01	012600 Allowances - Unforeseen Conditions	1	N/A	\$20,000
3	01	015000 Temporary Facilities and Controls			
4	02	024100 Demolition			
6	02	028200 Abatement			
7	03	033000 Cast-In-Place Concrete			
8	04	042000 Unit Masonry			
9	05	055000 Metal Fabrications			
10	06	061053 Miscellaneous Rough Carpentry			
11	07	071416 Moisture and Waterproofing			
12	07	075323 Roofing EPDM			
13	07	078413 Penetration Firestopping			
14	07	079200 Joint Sealants			
15	09	095113 Acoustic Panel Ceilings			
16	26	260050 General Electrical Requirements			

**Total Base Bid:** \_\_\_\_\_

**Jefferson Elementary School**

Contract Number: General Construction 01 (GC-01)

Contract Titles: 2023 Capital Project – Phase 1

Bidder:

Date:

\* Refer to Spec Section 012973 Schedule of Values for additional information

Item	Division	Description	QTY	Unit	Total
1	01	General Requirements (Submittals, Punchlist, etc.)			
2	01	012100 Allowances - Unforeseen Conditions	1	N/A	\$45,000
3	01	015000 Temporary Facilities and Controls			
4	01	017700 Closeout			
5	02	024100 Demolition			
7	04	042000 Unit Masonry			
8	05	055000 Metal Fabrications			
9	06	061053 Miscellaneous Rough Carpentry			
10	06	061600 Sheathing/ Temp Protection			
11	06	064023 Interior Arch. Woodwork / Millwork			
12	07	072100 Thermal Insulation			
13	07	071416 Moisture and Waterproofing			
14	07	078413 Penetration Firestopping			
15	07	079200 Joint Sealants			
16	08	081113 Hollow Metal Doors and Frames			
17	08	081416 Flush Wood Doors			
18	08	087100 Door Hardware			
19	08	084113 Aluminum-Framed Entrances & Storefronts			
20	08	088000 Glazing / Security / Fire-Protective			
21	09	092216 Non-Structural Metal Framing			
22	09	092900 Gypsum Board & Shaft wall			
23	09	095113 Acoustic Panel Ceilings			
24	09	093013 Ceramic Tile			
25	09	096513 Resilient Base & Accessories			
26	09	096519 Resilient Tile Flooring			
27	09	099100 Painting			
28	10	101423 Panel Signage			
29	10	102641 Ballistic Resistant Panels			
30	10	102800 Toilet, Bath and Laundry Accessories			

**Total Base Bid:** \_\_\_\_\_

**William B. Ward Elementary School**

Contract Number: General Construction 01 (GC-01)

Contract Titles: 2023 Capital Project – Phase 1

Bidder:

Date:

\* Refer to Spec Section 012973 Schedule of Values for additional information

Item	Division	Description	QTY	Unit	Total
1	01	General Requirements (Sub'ls, Punchlist, etc.)			
2	01	012600 Allowances - Unforeseen Conditions	1	N/A	\$15,000
3	01	015000 Temporary Facilities and Controls			
4	02	024100 Demolition			
6	03	003113 Site Logistics – Temp. Site Alterations	1	N/A	
7	03	033000 Cast-In-Place Concrete (Labor)			
8	03	033000 Cast-In-Place Concrete (Material)			
9	04	042000 Unit Masonry			
10	05	055000 Metal Fabrications			
11	06	061053 Miscellaneous Rough Carpentry			
12	07	071416 Moisture and Waterproofing			
13	07	075323 Roofing			
14	07	078413 Penetration Firestopping			
15	07	079200 Joint Sealants			
16	08	081113 Hollow Metal Doors and Frames			
17	08	087100 Door Hardware			
18	08	088000 Glazing / Security / Fire-Protective			
19	09	092216 Non-Structural Metal Framing			
20	09	092900 Gypsum Board			
21	09	095113 Acoustic Panel Ceilings			
22	09	096513 Resilient Base and Accessories			
23	09	096519 Resilient Tile Flooring			
24	09	099100 Painting			
25	10	101423 Panel Signage			
26	10	102641 Ballistics Resistant Panels			
27	12	123661.16 Solid Surfacing Countertops			
28	31	312000 Earth Moving- Excavation/backfill			
29	31	312319 Dewatering			
30	31	312500 Erosion and Sediment Control			
31	32	329200 Topsoil and Seeding			
32	33	334100 Storm Drainage Piping			
33	33	334900 Storm Drainage Structures			

**Total Base Bid:** \_\_\_\_\_

**Unit Prices** (*All Schools*)

Contract Number: General Construction 01 (GC-01)

Contract Titles: 2023 Capital Project – Phase 1

Bidder:

Date:

\* Refer to Section 012200 Unit Prices for additional information

Unit Prices – Addition and Deduct Fee Schedule – All prices are Furnish and install

Item	Description	Unit	Unit Price - ADD	Detail Reference
1	24"x24" Acoustic Panel Ceiling System Grid & Hangers	LF		
2	4500 PSI Concrete	CY		
3	#4 Rebar	LF		

END OF SECTION 004116.01



SECTION 004116.02 - BID FORM CONTRACT NO. 02 – Mechanical Construction (MC-01)

BIDDER INFORMATION

CONTACT: \_\_\_\_\_

COMPANY: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

TELEPHONE: (       ) \_\_\_\_\_

FACSIMILE: (       ) \_\_\_\_\_

BID TO (Owner):                      Attention: Purchasing Agent  
City School District of the City of New Rochelle  
515 North Avenue  
New Rochelle, New York 10801

PRIME CONTRACT:                      Contract No. 02 Mechanical Construction (MC-01)

PROJECT TITLE:                        City School District of the City of New Rochelle  
2023 Capital Project – Phase 1

**SED Project Control No.      SED #66-11-00-01-0-001-030**  
**SED #66-11-00-01-0-002-016**  
**SED #66-11-00-01-0-006-012**  
**SED #66-11-00-01-0-007-016**  
**SED #66-11-00-01-0-013-016**

CSArch PROJECT NO:                      188-2301

1. **Representations:** By making this Bid, the Bidder represents that:

The Bidder (identified above) hereby certifies that they have examined and fully understands the requirements and intent of the Bidding and Contract Documents, including Drawings, Project Manuals, and Addenda; and proposes to provide all labor, material, and equipment necessary to complete the Work on, or before, the dates specified in the Agreement for the Base Bid of:

2. **Total Base Bid:** \_\_\_\_\_ (\$ \_\_\_\_\_)

*New Rochelle High School:* \_\_\_\_\_ (\$ \_\_\_\_\_)

*Albert Leonard Middle School:* \_\_\_\_\_ (\$ \_\_\_\_\_ )

*Jefferson Elementary School:* \_\_\_\_\_ (\$ \_\_\_\_\_ )

*George M. Davis Elementary School:* \_\_\_\_\_ (\$ \_\_\_\_\_ )

*William B. Ward Elementary School:* \_\_\_\_\_ (\$ \_\_\_\_\_ )

(Words)

(Figures)

In all locations sums shall be expressed in both words and figures. In case of discrepancy, written word governs.

3. **Addenda:** The Bidder acknowledges receipt of the following Addendum:

No. \_\_\_\_\_ Dated: \_\_\_\_\_

No. \_\_\_\_\_ Dated: \_\_\_\_\_

4. **Alternates:** None.

5. **Bid Security:** Attached hereto is Bid Security in the form of (circle correct form) Bid Bond, Certified Check, Cash in the amount of five percent (5%) of the written Base Bid amount.

6. **Allowances:**

A. **\$8,000** Allowance for unforeseen conditions for Mechanical Work at New Rochelle High School.

B. **\$2,000** Allowance for unforeseen conditions for Mechanical Work at Albert Leonard Middle School.

C. **\$2,500** Allowance for unforeseen conditions for Mechanical Work at George M. Davis Elementary School.

D. **\$15,000** Allowance for unforeseen conditions for Mechanical Work at Jefferson Elementary School.

E. **\$4,500** Allowance for unforeseen conditions for Mechanical Work at William B. Ward Elementary School.

7. **Time of Commencement and Completion:** The Bidder agrees to commence Work on the stipulated starting date(s) and will substantially complete the Work in accordance with the project schedule stipulated in Specification Section 011200 Multiple Contract Summary and Section 003113 Preliminary Schedules.

8. **Rejection of Bids:** The Bidder acknowledges that the Owner reserves the right to waive any informality in, or to reject any or all Bids.

9. **Execution of Contract:** If notice of the acceptance of this Bid is mailed, telegraphed, or otherwise delivered to the undersigned within forty-five (45) days after the date of the Bid Opening, or any time thereafter, the undersigned will, within ten (10) working days after the

receipt of the form of Agreement, execute and deliver the Contract.

10. **Signature:**

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Name – Printed)

\_\_\_\_\_  
(Title – Printed

\_\_\_\_\_  
(Date)

11. **Attachments:** Obtain and attach the following documents to each individual Bid.

- a. Corporate Resolution
- b. Non-Collusive Bid Certification
- c. Iran Divestment Act Affidavit
- d. Bid Security
- e. Subcontractor List
- f. Substitution List

12. **Work Cost Breakdown:** This form shall be filled out and submitted by the Contractor. The grand total must equal the BASE BID under Section I (A) "THE BID". UNIT PRICES are required for the items listed in the Unit Prices section of the work cost breakdown. Unit prices will be provided for use if the required quantities are more or less than the quantities indicated in the plans and specifications. Failure to complete the work cost breakdown may result in the disqualification of the bid. As itemized in the "Instructions to Bidders" for a complete Bid Form include the following which must be filled out completely, failure to comply with any listed below bid will be a rejected bid:

- a. Bid Form, all costs must be shown in each CSI section and totaled, failure to breakdown these costs will be subject to disqualification of bid.
- b. Unit costs.

**New Rochelle High School**

Contract Number: Mechanical Construction 02 (MC-01)

Contract Titles: 2023 Capital Project – Phase 1

Bidder:

Date:

\* Refer to Section 012973 Schedule of Values for additional information

Item	Division	Description	QTY	Unit	Total
1	1	General Requirements (Sub'ls, Punchlist, etc.)			
2	1	012100 Allowances - Unforeseen Conditions	1	N/A	\$8,000
3	23	230500 General Mechanical Requirements			
4	23	230502 Mechanical Demolition			
5	23	230505 Cutting and Patching			
6	23	230506 Penetration Firestopping HVAC			
7	23	230511 Wiring of Mechanic Equipment			
8	23	230512 Motor Controls			
9	23	230523 Valves			
10	23	230529 Pipe Hangers and Supports			
11	23	230553 Pipe and Valve Identification			
12	23	230554 Duct and Equipment Identification			
13	23	230593 Cleaning and Testing			
14	23	230594 Balancing of Systems			
15	23	230713 Duct Insulation			
16	23	230719 Piping Insulation			
17	23	230923 Direct Digital Control System			
18	23	230993 Sequence of Operations for Controls			
19	23	232000 HVAC Piping			
20	23	232006 Hydronic Specifications			
21	23	233113 Metal Ductwork			
22	23	233300 Ductwork Accessories			
23	23	233713 Diffusers, Registers, and Grilles			
24	23	233723 Roof Mounted Air Inlets and Outlets			
25	23	238127 Ductless Split AC System			
26	23	238129 Variable Refrigerant Flow System			
27	23	238237 Finned Tube Radiation			
28	23	238239 Unit Heaters			

**Total Base Bid: \$** \_\_\_\_\_

**Albert Leonard Middle School**

Contract Number: Mechanical Construction 02 (MC-01)

Contract Titles: 2023 Capital Project – Phase 1

Bidder:

Date:

\* Refer to Section 012973 Schedule of Values for additional information

Item	Division	Description	QTY	Unit	Total
1	1	General Requirements (Submittals, Punchlist, etc.)			
2	1	012100 Allowances - Unforeseen Conditions	1	N/A	\$2,000
3	22	220050 Basic Plumbing Mat'ls & Methods			
4	23	230500 General Mechanical Requirements			
5	23	230502 Mechanical Demolition			
6	23	230505 Cutting and Patching			
7	23	230506 Penetration Firestopping HVAC			
8	23	230511 Wiring of Mechanic Equipment			
9	23	230512 Motor Controls			
10	23	230523 Valves			
11	23	230529 Pipe Hangers and Supports			
12	23	230553 Pipe and Valve Identification			
13	23	230554 Duct and Equipment Identification			
14	23	230593 Cleaning and Testing			
15	23	230594 Balancing of Systems			
16	23	230713 Duct Insulation			
17	23	230719 Piping Insulation			
18	23	230923 Direct Digital Control System			
19	23	230993 Sequence of Operations for Controls			
20	23	232000 HVAC Piping			
21	23	232006 Hydronic Specifications			
22	23	233113 Metal Ductwork			
23	23	233300 Ductwork Accessories			
24	23	233713 Diffusers, Registers, and Grilles			
25	23	233723 Roof Mounted Air Inlets and Outlets			
26	23	23600 Refrigeration			
27	23	238127 Ductless Split AC System			
28	23	238129 Variable Refrigerant Flow System			
29	23	238333 Electric Fin Radiant Heaters			

**Total Base Bid: \$** \_\_\_\_\_

**George M. Davis Elementary School**

Contract Number: Mechanical Construction 02 (MC-01)

Contract Titles: 2023 Capital Project – Phase 1

Bidder:

Date:

\* Refer to Section 012973 Schedule of Values for additional information

Item	Division	Description	QTY	Unit	Total
1	1	General Requirements (Submittals, Punchlist, etc.)			
2	1	012100 Allowances - Unforeseen Conditions	1	N/A	\$2,500
3	22	220050 Basic Plumbing Mat'ls & Methods			
4	23	230500 General Mechanical Requirements			
5	23	230502 Mechanical Demolition			
6	23	230505 Cutting and Patching			
7	23	230506 Penetration Firestopping HVAC			
8	23	230511 Wiring of Mechanic Equipment			
9	23	230512 Motor Controls			
10	23	230523 Valves			
11	23	230529 Pipe Hangers and Supports			
12	23	230553 Pipe and Valve Identification			
13	23	230554 Duct and Equipment Identification			
14	23	230593 Cleaning and Testing			
15	23	230594 Balancing of Systems			
16	23	230713 Duct Insulation			
17	23	230719 Piping Insulation			
18	23	230923 Direct Digital Control System			
19	23	230993 Sequence of Operations for Controls			
20	23	232000 HVAC Piping			
21	23	232006 Hydronic Specifications			
22	23	232201 Steam Specialties			
23	23	232202 Steam Traps			
24	23	233113 Metal Ductwork			
25	23	233300 Ductwork Accessories			
26	23	233713 Diffusers, Registers, and Grilles			
27	23	233723 Roof Mounted Air Inlets and Outlets			
28	23	23600 Refrigeration			
29	23	238127 Ductless Split AC System			
30	23	238129 Variable Refrigerant Flow System			
31	23	238239 Unit Heaters			

**Total Base Bid: \$** \_\_\_\_\_

**Jefferson Elementary School**

Contract Number: Mechanical Construction 02 (MC-01)

Contract Titles: 2023 Capital Project – Phase 1

Bidder:

Date:

\* Refer to Section 012973 Schedule of Values for additional information

Item	Division	Description	QTY	Unit	Total
1	1	General Requirements (Submittals, Punchlist, etc.)			
2	1	012100 Allowances - Unforeseen Conditions	1	N/A	\$15,000
3	23	230500 General Mechanical Requirements			
4	23	230502 Mechanical Demolition			
5	23	230505 Cutting and Patching			
6	23	230506 Penetration Firestopping HVAC			
7	23	230511 Wiring of Mechanic Equipment			
8	23	230512 Motor Controls			
9	23	230523 Valves			
10	23	230529 Pipe Hangers and Supports			
11	23	230553 Pipe and Valve Identification			
12	23	230554 Duct and Equipment Identification			
13	23	230593 Cleaning and Testing			
14	23	230594 Balancing of Systems			
15	23	230713 Duct Insulation			
16	23	230719 Piping Insulation			
17	23	230923 Direct Digital Control System			
18	23	230993 Sequence of Operations for Controls			
19	23	232000 HVAC Piping			
20	23	232006 Hydronic Specifications			
21	23	232201 Steam Specialties			
22	23	232202 Steam Traps			
23	23	233113 Metal Ductwork			
24	23	233300 Ductwork Accessories			
25	23	233713 Diffusers, Registers, and Grilles			
26	23	233723 Roof Mounted Air Inlets and Outlets			
27	23	233730 Louvers			
29	23	23600 Refrigeration			
30	23	237200 Air-to-Air Energy Recovery Equipment			
31	23	238127 Ductless Split AC System			
32	23	238129 Variable Refrigerant Flow System			
33	23	238237 Finned Tube Radiation			
34	23	238239 Unit Heaters			

**Total Base Bid: \$**

**William B. Ward Elementary School**

Contract Number: Mechanical Construction 02 (MC-01)

Contract Titles: 2023 Capital Project – Phase 1

Bidder:

Date:

\* Refer to Section 012973 Schedule of Values for additional information

Item	Division	Description	QTY	Unit	Total
1	1	General Requirements (Sub'ls, Punchlist, etc.)			
2	1	012100 Allowances - Unforeseen Conditions	1	N/A	\$4,500
3	22	220050 Basic Plumbing Mat'ls & Methods			
4	23	230500 General Mechanical Requirements			
5	23	230502 Mechanical Demolition			
6	23	230505 Cutting and Patching			
7	23	230506 Penetration Firestopping HVAC			
8	23	230511 Wiring of Mechanic Equipment			
9	23	230512 Motor Controls			
10	23	230523 Valves			
11	23	230529 Pipe Hangers and Supports			
12	23	230553 Pipe and Valve Identification			
13	23	230554 Duct and Equipment Identification			
14	23	230593 Cleaning and Testing			
15	23	230594 Balancing of Systems			
16	23	230713 Duct Insulation			
17	23	230719 Piping Insulation			
18	23	230923 Direct Digital Control System			
19	23	230993 Sequence of Operations for Controls			
20	23	232000 HVAC Piping			
21	23	232006 Hydronic Specifications			
22	23	233113 Metal Ductwork			
23	23	233300 Ductwork Accessories			
24	23	233713 Diffusers, Registers, and Grilles			
25	23	233723 Roof Mounted Air Inlets and Outlets			
26	23	235413 Electric Cabinet Heaters			
27	23	23600 Refrigeration			
28	23	238127 Ductless Split AC System			
29	23	238129 Variable Refrigerant Flow System			
30	23	238239 Unit Heaters			
31	23	238333 Electric Fin Radiant Heaters			

**Total Base Bid: \$** \_\_\_\_\_

END OF SECTION 004116.02



SECTION 004116.03 - BID FORM CONTRACT NO. 03 – Electrical Construction (EC-01)

BIDDER INFORMATION

CONTACT: \_\_\_\_\_

COMPANY: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

TELEPHONE: (      ) \_\_\_\_\_

FACSIMILE: (      ) \_\_\_\_\_

BID TO (Owner):                      Attention: Purchasing Agent  
City School District of the City of New Rochelle  
515 North Avenue  
New Rochelle, New York 10801

PRIME CONTRACT:                      Contract No. 03 Electric Construction (EC-01)

PROJECT TITLE:                      City School District of the City of New Rochelle  
2023 Capital Project – Phase 1

**SED Project Control No.      SED #66-11-00-01-0-001-030**  
**SED #66-11-00-01-0-002-016**  
**SED #66-11-00-01-0-006-012**  
**SED #66-11-00-01-0-007-016**  
**SED #66-11-00-01-0-013-016**

CSArch PROJECT NO:                      188-2301

1. **Representations:** By making this Bid, the Bidder represents that:  
The Bidder (identified above) hereby certifies that they have examined and fully understands the requirements and intent of the Bidding and Contract Documents, including Drawings, Project Manuals, and Addenda; and proposes to provide all labor, material, and equipment necessary to complete the Work on, or before, the dates specified in the Agreement for the Base Bid of:

2. **Base Bid:** \_\_\_\_\_ (\$ \_\_\_\_\_ )  
*New Rochelle High School:* \_\_\_\_\_ (\$ \_\_\_\_\_ )  
*Albert Leonard Middle School:* \_\_\_\_\_ (\$ \_\_\_\_\_ )  
*Jefferson Elementary School:* \_\_\_\_\_ (\$ \_\_\_\_\_ )  
*George M. Davis Elementary School:* \_\_\_\_\_ (\$ \_\_\_\_\_ )  
*William B. Ward Elementary School:* \_\_\_\_\_ (\$ \_\_\_\_\_ )
- (Words) (Figures)

In all locations sums shall be expressed in both words and figures. In case of discrepancy, written word governs.

3. **Addenda:** The Bidder acknowledges receipt of the following Addendum:

No. \_\_\_\_\_ Dated: \_\_\_\_\_ No. \_\_\_\_\_ Dated: \_\_\_\_\_

4. **Alternates:** None.

5. **Bid Security:** Attached hereto is Bid Security in the form of (circle correct form) Bid Bond, Certified Check, Cash in the amount of five percent (5%) of the written Base Bid amount.

6. **Allowances:**

- A. **\$5,000** Allowance for unforeseen conditions for Electrical Work at New Rochelle High School
- B. **\$1,000** Allowance for unforeseen conditions for Electrical Work at Albert Leonard Middle School
- C. **\$1,500** Allowance for unforeseen conditions for Electrical Work at George M. Davis Elementary School
- D. **\$4,000** Allowance for unforeseen conditions for Electrical Work at Jefferson Elementary School
- E. **\$1,000** Allowance for unforeseen conditions for Electrical Work at William B. Ward Elementary School

7. **Time of Commencement and Completion:** The Bidder agrees to commence Work on the stipulated starting date(s) and will substantially complete the Work in accordance with the project schedule stipulated in Specification Section 011200 Multiple Contract Summary and Section 003113 Preliminary Schedules.
8. **Rejection of Bids:** The Bidder acknowledges that the Owner reserves the right to waive any informality in, or to reject any or all Bids.
9. **Execution of Contract:** If notice of the acceptance of this Bid is mailed, telegraphed, or otherwise delivered to the undersigned within forty-five (45) days after the date of the Bid

Opening, or any time thereafter, the undersigned will, within ten (10) working days after the receipt of the form of Agreement, execute and deliver the Contract.

10. **Signature:**

---

(Signature)

---

(Name – Printed)

---

(Title – Printed)

---

(Date)

11. **Attachments:** Obtain and attach the following documents to each individual Bid.

- a. Corporate Resolution
- b. Non-Collusive Bid Certification
- c. Iran Divestment Act Affidavit
- d. Bid Security
- e. Subcontractor List
- f. Substitution List

12. **Work Cost Breakdown:** This form shall be filled out and submitted by the Contractor. The grand total must equal the BASE BID under Section I (A) "THE BID". UNIT PRICES are required for the items listed in the Unit Prices section of the work cost breakdown. Unit prices will be provided for use if the required quantities are more or less than the quantities indicated in the plans and specifications. Failure to complete the work cost breakdown may result in the disqualification of the bid. As itemized in the "Instructions to Bidders" for a complete Bid Form include the following which must be filled out completely, failure to comply with any listed below bid will be a rejected bid:

- a. Bid Form, all costs must be shown in each CSI section and totaled, failure to breakdown these costs will be subject to disqualification of bid.
- b. Unit costs.

## New Rochelle High School

Contract Number: Electric Construction 03 (EC-01)

Contract Titles: 2023 Capital Project – Phase 1

Bidder:

Date:

\* Refer to Section 012973 Schedule of Values for additional information

Item	Division	Description	QTY	Unit	Total
1	1	General Requirements (Submittals, Punchlist, etc.)			
2	1	012100 Allowances - Unforeseen Conditions	1	NA	\$5,000
3	2	024100 Demolition			
4	7	078413 Penetration Firestopping			
5	23	230511 Wiring of Mechanic Equipment			
6	26	260500 General Electrical Requirements			
7	26	260519 Low-Voltage Electrical Power Conductors and Cables			
8	26	260526 Grounding and Bonding for Electrical Systems			
9	26	260553 Identification for Electrical Systems			
10	26	260533 Raceways and Boxes for Electrical Systems			
11	26	260544 Sleeves and Sleeve Seals for Electrical Raceways and Cabling			
12	26	Remove and Reinstall the Existing Lighting System			
13	26	260921 Lighting Controls			
14	26	262416 Panelboards			
15	26	262816 Enclosed Switched and Circuit Breakers			
16	26	265119 LED Interior Lighting			
17	26	265219 Emergency and Exit Lighting			
18	27	270010 Basic Communication Requirements			
19	27	270050 General Materials and Methods			
20	27	271001 Telecom Cabling Systems – Pathways			
21	27	275111 Existing Public Address Systems			
22	28	283100 Fire Detection and Alarm			

**Total Base Bid:** \_\_\_\_\_

### Albert Leonard Middle School

Contract Number: Electric Construction 03 (EC-01)

Contract Titles: 2023 Capital Project – Phase 1

Bidder:

Date:

\* Refer to Section 012973 Schedule of Values for additional information

Item	Division	Description	QTY	Unit	Total
1	1	General Requirements (Submittals, Punchlist, etc.)			
2	1	012100 Allowances - Unforeseen Conditions	1	NA	\$1,000
3	2	024100 Demolition			
4	7	078413 Penetration Firestopping			
5	23	230511 Wiring of Mechanic Equipment			
6	26	260500 General Electrical Requirements			
7	26	260519 Low-Voltage Electrical Power Conductors and Cables			
8	26	260526 Grounding and Bonding for Electrical Systems			
9	26	260553 Identification for Electrical Systems			
10	26	260533 Raceways and Boxes for Electrical Systems			
11	26	260544 Sleeves and Sleeve Seals for Electrical Raceways and Cabling			
12	26	Remove and Reinstall the Existing Lighting System			
13	26	260921 Lighting Controls			
14	26	262416 Panelboards			
15	26	262816 Enclosed Switched and Circuit Breakers			-
16	26	265119 LED Interior Lighting			
17	26	265219 Emergency and Exit Lighting			
18	27	270010 Basic Communication Requirements			
19	27	270050 General Materials and Methods			
20	27	271001 Telecom Cabling Systems – Pathways			
21	27	275111 Existing Public Address Systems			
22	28	283100 Fire Detection and Alarm			

**Total Base Bid:** \_\_\_\_\_

### George M. Davis Elementary School

Contract Number: Electric Construction 03 (EC-01)

Contract Titles: 2023 Capital Project – Phase 1

Bidder:

Date:

\* Refer to Section 012973 Schedule of Values for additional information

Item	Division	Description	QTY	Unit	Total
1	1	General Requirements (Submittals, Punchlist, etc.)			
2	1	012100 Allowances - Unforeseen Conditions	1	NA	\$1,500
3	2	024100 Demolition			
4	7	078413 Penetration Firestopping			
5	23	230511 Wiring of Mechanic Equipment			
6	26	260500 General Electrical Requirements			
7	26	260519 Low-Voltage Electrical Power Conductors and Cables			
8	26	260526 Grounding and Bonding for Electrical Systems			
9	26	260553 Identification for Electrical Systems			
10	26	260533 Raceways and Boxes for Electrical Systems			
11	26	260544 Sleeves and Sleeve Seals for Electrical Raceways and Cabling			
12	26	Remove and Reinstall the Existing Lighting System			
13	26	260921 Lighting Controls			
14	26	262416 Panelboards			
15	26	262816 Enclosed Switched and Circuit Breakers			
16	26	265119 LED Interior Lighting			
17	26	265219 Emergency and Exit Lighting			
18	27	270010 Basic Communication Requirements			
19	27	270050 General Materials and Methods			
20	27	271001 Telecom Cabling Systems – Pathways			
21	27	275111 Existing Public Address Systems			
22	28	283100 Fire Detection and Alarm			

**Total Base Bid:** \_\_\_\_\_

### Jefferson Elementary School

Contract Number: Electric Construction 03 (EC-01)

Contract Titles: 2023 Capital Project – Phase 1

Bidder:

Date:

\* Refer to Section 012973 Schedule of Values for additional information

Item	Division	Description	QTY	Unit	Total
1	1	General Requirements (Submittals, Punchlist, etc.)			
2	1	012100 Allowances - Unforeseen Conditions	1	NA	\$4,000
3	2	024100 Demolition			
4	7	078413 Penetration Firestopping			
5	23	230511 Wiring of Mechanic Equipment			
6	26	260500 General Electrical Requirements			
7	26	260519 Low-Voltage Electrical Power Conductors and Cables			
8	26	260526 Grounding and Bonding for Electrical Systems			
9	26	260553 Identification for Electrical Systems			
10	26	260533 Raceways and Boxes for Electrical Systems			
11	26	260544 Sleeves and Sleeve Seals for Electrical Raceways and Cabling			
12	26	Remove and Reinstall the Existing Lighting System			
13	26	260921 Lighting Controls			
14	26	262416 Panelboards			
15	26	262816 Enclosed Switched and Circuit Breakers			
16	26	265119 LED Interior Lighting			
17	26	265219 Emergency and Exit Lighting			
18	27	270010 Basic Communication Requirements			
19	27	270050 General Materials and Methods			
20	27	271001 Telecom Cabling Systems – Pathways			
21	27	275111 Existing Public Address Systems			
22	28	283100 Fire Detection and Alarm			

**Total Base Bid:** \_\_\_\_\_

### William B. Ward Elementary School

Contract Number: Electric Construction 03 (EC-01)

Contract Titles: 2023 Capital Project – Phase 1

Bidder:

Date:

\* Refer to Section 012973 Schedule of Values for additional information

Item	Division	Description	QTY	Unit	Total
1	1	General Requirements (Submittals, Punchlist, etc.)			
2	1	012100 Allowances - Unforeseen Conditions	1	NA	\$1,000
3	2	024100 Demolition			
4	7	078413 Penetration Firestopping			
5	23	230511 Wiring of Mechanic Equipment			
6	26	260500 General Electrical Requirements			
7	26	260519 Low-Voltage Electrical Power Conductors and Cables			
8	26	260526 Grounding and Bonding for Electrical Systems			
9	26	260553 Identification for Electrical Systems			
10	26	260533 Raceways and Boxes for Electrical Systems			
11	26	260544 Sleeves and Sleeve Seals for Electrical Raceways and Cabling			
12	26	Remove and Reinstall the Existing Lighting System			
13	26	260921 Lighting Controls			
14	26	262416 Panelboards			
15	26	262816 Enclosed Switched and Circuit Breakers			
16	26	265119 LED Interior Lighting			
17	26	265219 Emergency and Exit Lighting			
18	27	270010 Basic Communication Requirements			
19	27	270050 General Materials and Methods			
20	27	271001 Telecom Cabling Systems – Pathways			
21	27	275111 Existing Public Address Systems			
22	28	283100 Fire Detection and Alarm			

**Total Base Bid:** \_\_\_\_\_



### Unit Prices

Contract Number: Electric Construction 03 (EC-01)

Contract Titles: 2023 Capital Project – Phase 1

Bidder:

Date:

\* Refer to Section 012200 Unit Prices for additional information

Unit Prices – Additional Fee Schedule – All prices are Furnish and install

Item	Description	Unit	Unit Price - ADD
1	New light fixture- Type A1	EA	
2	New light fixture- Type A2	EA	
3	New light fixture- Type A3	EA	
4	New light fixture- Type D1	EA	
5	New light fixture- Type G1	EA	
6	EXIT sign	EA	
7	Fire smoke detector	EA	

END OF SECTION 004116.03

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SECTION 004116.04 - BID FORM CONTRACT NO. 04 – Plumbing Construction (PC-01)

BIDDER INFORMATION

CONTACT: \_\_\_\_\_

COMPANY: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

TELEPHONE: (      ) \_\_\_\_\_

FACSIMILE: (      ) \_\_\_\_\_

BID TO (Owner):                      Attention: Purchasing Agent  
City School District of the City of New Rochelle  
515 North Avenue  
New Rochelle, New York 10801

PRIME CONTRACT:                      Contract No. 04 Plumbing Construction (PC-01)

PROJECT TITLE:                      City School District of the City of New Rochelle  
2023 Capital Project – Phase 1

**SED Project Control No.      SED #66-11-00-01-0-001-030**  
**SED #66-11-00-01-0-007-016**

CSArch PROJECT NO:                      188-2206

1. **Representations:** By making this Bid, the Bidder represents that:

The Bidder (identified above) hereby certifies that they have examined and fully understands the requirements and intent of the Bidding and Contract Documents, including Drawings, Project Manuals, and Addenda; and proposes to provide all labor, material, and equipment necessary to complete the Work on, or before, the dates specified in the Agreement for the Base Bid of:

2. **Base Bid:** \_\_\_\_\_ (\$ \_\_\_\_\_)

*New Rochelle High School:* \_\_\_\_\_ (\$ \_\_\_\_\_)

*Jefferson Elementary School:* \_\_\_\_\_ (\$ \_\_\_\_\_)

(Words)

(Figures)

In all locations sums shall be expressed in both words and figures. In case of discrepancy, written word governs.

3. **Addenda:** The Bidder acknowledges receipt of the following Addendum:

No. \_\_\_\_\_ Dated: \_\_\_\_\_

No. \_\_\_\_\_ Dated: \_\_\_\_\_

4. **Alternates:** None.

5. **Bid Security:** Attached hereto is Bid Security in the form of (circle correct form) Bid Bond, Certified Check, Cash in the amount of five percent (5%) of the written Base Bid amount.

6. **Allowances:**

A. **\$1,500** Allowance for unforeseen conditions for Plumbing Work at New Rochelle HS.

B. **\$3,000** Allowance for unforeseen conditions for Plumbing Work across at Jefferson ES.

7. **Time of Commencement and Completion:** The Bidder agrees to commence Work on the stipulated starting date(s) and will substantially complete the Work in accordance with the project schedule stipulated in Specification Section 011200 Multiple Contract Summary and Section 003113 Preliminary Schedules.

8. **Rejection of Bids:** The Bidder acknowledges that the Owner reserves the right to waive any informality in, or to reject any or all Bids.

9. **Execution of Contract:** If notice of the acceptance of this Bid is mailed, telegraphed, or otherwise delivered to the undersigned within forty-five (45) days after the date of the Bid Opening, or any time thereafter, the undersigned will, within ten (10) working days after the receipt of the form of Agreement, execute and deliver the Contract.

10. **Signature:**

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Name – Printed)

\_\_\_\_\_  
(Title – Printed

\_\_\_\_\_  
(Date)

11. **Attachments:** Obtain and attach the following documents to each individual Bid.
  - a. Corporate Resolution
  - b. Non-Collusive Bid Certification
  - c. Iran Divestment Act Affidavit
  - d. Bid Security
  - e. Subcontractor List
  - f. Substitution List
  
12. **Work Cost Breakdown:** This form shall be filled out and submitted by the Contractor. The grand total must equal the BASE BID under Section I (A) "THE BID". UNIT PRICES are required for the items listed in the Unit Prices section of the work cost breakdown. Unit prices will be provided for use if the required quantities are more or less than the quantities indicated in the plans and specifications. Failure to complete the work cost breakdown may result in the disqualification of the bid. As itemized in the "Instructions to Bidders" for a complete Bid Form include the following which must be filled out completely, failure to comply with any listed below bid will be a rejected bid:
  - a. Bid Form, all costs must be shown in each CSI section and totaled, failure to breakdown these costs will be subject to disqualification of bid.
  - b. Unit costs.

**New Rochelle High School**

Contract Number: Plumbing Construction 01 (PC-01)

Contract Titles: 2023 Capital Project – Phase 1

Bidder: \_\_\_\_\_

Date: \_\_\_\_\_

\* Refer to Spec Section 012973 Schedule of Values for additional information

Item	Division	Description	QTY	Unit	Total
1	1	General Requirements (Submittals, Punchlist, etc.)			
2	1	012100 Allowances - Unforeseen Conditions	1	N/A	\$1,500
3	2	024100 Demolition			
4	7	078413 Penetration Firestopping			
5	7	079200 Joint Sealants			
6	22	220015 Cutting and Patching			
7	22	220500 General Plumbing Requirements			
8	22	220502 Plumbing Demolition			
9	22	220529 Supports and Sleeves			
10	22	220420 Drainage and Vent Systems			
11	22	220553 Plumbing Identification			
12	22	220719 Piping Insulation			

**Total Base Bid:** \_\_\_\_\_

**Jefferson Elementary School**

Contract Number: Plumbing Construction 01 (PC-01)

Contract Titles: 2023 Capital Project – Phase 1

Bidder: \_\_\_\_\_

Date: \_\_\_\_\_

\* Refer to Spec Section 012973 Schedule of Values for additional information

Item	Division	Description	QTY	Unit	Total
1	1	General Requirements (Submittals, Punchlist, etc.)			
2	1	012100 Allowances - Unforeseen Conditions	1	N/A	\$3,000
3	2	024100 Demolition			
4	7	078413 Penetration Firestopping			
5	7	079200 Joint Sealants			
6	22	220015 Cutting and Patching			
7	22	220500 General Plumbing Requirements			
8	22	220502 Plumbing Demolition			
9	22	220529 Supports and Sleeves			
10	22	220100 Valves			
11	22	220420 Drainage and Vent Systems			
12	22	220553 Plumbing Identification			
13	22	220719 Piping Insulation			
14	22	221000 Plumbing Piping			
15	22	221030 Plumbing Specialties			
16	22	224200 Plumbing Fixtures			

**Total Base Bid:** \_\_\_\_\_

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SECTION 004116.05 - BID FORM CONTRACT NO. 05 – Sitework Construction (SC-01)

BIDDER INFORMATION

CONTACT: \_\_\_\_\_

COMPANY: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

TELEPHONE: (      ) \_\_\_\_\_

FACSIMILE: (      ) \_\_\_\_\_

BID TO (Owner):                      Attention: Purchasing Agent  
   City School District of the City of New Rochelle  
   515 North Avenue  
   New Rochelle, New York 10801

PRIME CONTRACT:                      Contract No. 05 Sitework Construction (SC-01)

PROJECT TITLE:                      City School District of the City of New Rochelle  
   2023 Capital Project – Phase 1

**SED Project Control No.      SED #66-11-00-01-0-001-030**

CSArch PROJECT NO:                      188-2301

1. **Representations:** By making this Bid, the Bidder represents that:

The Bidder (identified above) hereby certifies that they have examined and fully understands the requirements and intent of the Bidding and Contract Documents, including Drawings, Project Manuals, and Addenda; and proposes to provide all labor, material, and equipment necessary to complete the Work on, or before, the dates specified in the Agreement for the Base Bid of:

2. **Base Bid:** \_\_\_\_\_ (\$ \_\_\_\_\_)  
(Words) (Figures)

In all locations sums shall be expressed in both words and figures. In case of discrepancy, written word governs.

3. **Addenda:** The Bidder acknowledges receipt of the following Addendum:

No. \_\_\_\_\_ Dated: \_\_\_\_\_ No. \_\_\_\_\_ Dated: \_\_\_\_\_

4. **Alternates:** None.

5. **Bid Security:** Attached hereto is Bid Security in the form of (circle correct form) Bid Bond, Certified Check, Cash in the amount of five percent (5%) of the written Base Bid amount

6. **Allowances:**

A. **\$45,000** Allowance for unforeseen conditions to include rock removal for Site Work Construction at New Rochelle High School.

7. **Time of Commencement and Completion:** The Bidder agrees to commence Work on the stipulated starting date(s) and will substantially complete the Work in accordance with the project schedule stipulated in Specification Section 011200 Multiple Contract Summary and Section 003113 Preliminary Schedules.

8. **Rejection of Bids:** The Bidder acknowledges that the Owner reserves the right to waive any informality in, or to reject any or all Bids.

9. **Execution of Contract:** If notice of the acceptance of this Bid is mailed, telegraphed, or otherwise delivered to the undersigned within forty-five (45) days after the date of the Bid Opening, or any time thereafter, the undersigned will, within ten (10) working days after the receipt of the form of Agreement, execute and deliver the Contract.

10. **Signature:**

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Name – Printed)

\_\_\_\_\_  
(Title – Printed

\_\_\_\_\_  
(Date)

11. **Attachments:** Obtain and attach the following documents to each individual Bid.
  - a. Corporate Resolution
  - b. Non-Collusive Bid Certification
  - c. Iran Divestment Act Affidavit
  - d. Bid Security
  - e. Subcontractor List
  - f. Substitution List
12. **Work Cost Breakdown:** This form shall be filled out and submitted by the Contractor. The grand total must equal the BASE BID under Section I (A) "THE BID". UNIT PRICES are required for the items listed in the Unit Prices section of the work cost breakdown. Unit prices will be provided for use if the required quantities are more or less than the quantities indicated in the plans and specifications. Failure to complete the work cost breakdown may result in the disqualification of the bid. As itemized in the "Instructions to Bidders" for a complete Bid Form include the following which must be filled out completely, failure to comply with any listed below bid will be a rejected bid:
  - a. Bid Form, all costs must be shown in each CSI section and totaled, failure to breakdown these costs will be subject to disqualification of bid.
  - b. Unit costs.

**New Rochelle High School**

Contract Number: Sitework Construction 05 (SC-01)

Contract Titles: 2023 Capital Project – Phase 1

Bidder: \_\_\_\_\_

Date: \_\_\_\_\_

\* Refer to Spec Section 012973 Schedule of Values for additional information

Item	Division	Description	QTY	Unit	Total
1	01	General Requirements (Submittals, Punchlist, etc.)			
2	01	012600 Allowances - Unforeseen Conditions			\$45,000
3	02	024100 Demolition			
4	03	031000 Concrete Forming and Accessories			
5	03	032000 Concrete Reinforcing			
6	03	033000 Cast-In-Place Concrete			
7	04	042000 Unit Masonry			
8	04	042613 Masonry Veneer			
9	04	045020 Cold (Hot) Weather Masonry			
10	05	055213 Pipe and Tube Railing			
11	07	079200 Joint Sealants			
12	31	311000 Site Clearing			
13	31	312000 Excavations and Fill			
14	31	312319 Dewatering			
15	31	312500 Erosion and Sedimentation Controls			
16	33	334100 Storm Drainage Piping & Structures			

**Total Base Bid:** \_\_\_\_\_

### Unit Prices

Contract Number: Sitework Construction (SC-01)

Contract Titles: 2023 Capital Project – Phase 1

Bidder:

Date:

\* Refer to Section 012200 Unit Prices for additional information

Unit Prices – Addition and Deduct Fee Schedule – All prices are Furnish and install

Item	Description	Unit	Unit Price - ADD	Detail Reference
	Excavation & Fill:			
1	Granular Fill (sand, gravel, stone blend)	CY		
2	Crushed Stone	CY		
	Reinforcement:			
5	Welded Wire Mesh	EA		
7	#04 Bar	LF		
	Concrete:			
11	4500 PSI	CY		

END OF SECTION 004116.05

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# **AIA® Document A310™ – 2010**

## **Bid Bond**

**CONTRACTOR:**

*(Name, legal status and address)*

**SURETY:**

*(Name, legal status and principal place of business)*

**OWNER:**

*(Name, legal status and address)*

City School District of the City of New Rochelle  
515 North Avenue  
New Rochelle, New York 10801

**BOND AMOUNT: \$****PROJECT:**

*(Name, location or address, and Project number, if any)*

City School District of New Rochelle - New Rochelle 2023 Capital Project - Phase 1

Henry Barnard Elementary School  
129 Barnard Road  
New Rochelle, New York 10801  
SED # 66-11-00-01-0-004-015

Jefferson Elementary School  
131 Weyman Avenue  
New Rochelle, New York 10805  
SED # 66-11-00-01-0-007-016

William b. Ward Elementary School  
311 Broadfield Road  
New Rochelle, New York 10804  
SED # 66-11-00-01-0-013-016

Albert Leonard Middle School  
25 Gerada Lane  
New Rochelle, New York 10804  
SED # 66-11-00-01-0-002-016

New Rochelle High School  
265 Clove Road  
New Rochelle, New York 10801  
SED # 66-11-00-01-0-001-030  
CSArch Project #188-2301

George M. Davis Elementary School  
80 Iselin Drive  
New Rochelle, New York 10804  
SED # 66-11-00-01-0-006-012

**ADDITIONS AND DELETIONS:**

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Any singular reference to Contractor, Surety, Owner or other party shall be considered plural where applicable.

The Contractor and Surety are bound to the Owner in the amount set forth above, for the payment of which the Contractor and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, as provided herein. The conditions of this Bond are such that if the Owner accepts the bid of the Contractor within the time specified in the bid documents, or within such time period as may be agreed to by the Owner and Contractor, and the Contractor either (1) enters into a contract with the Owner in accordance with the terms of such bid, and gives such bond or bonds as may be specified in the bidding or Contract Documents, with a surety admitted in the jurisdiction of the Project and otherwise acceptable to the Owner, for the faithful performance of such Contract and for the prompt payment of labor and material furnished in the prosecution thereof; or (2) pays to the Owner the difference, not to exceed the amount of this Bond, between the amount specified in said bid and such larger amount for which the Owner may in good faith contract with another party to perform the work covered by said bid, then this obligation shall be null and void, otherwise to remain in full force and effect. The Surety hereby waives any notice of an agreement between the Owner and Contractor to extend the time in which the Owner may accept the bid. Waiver of notice by the Surety shall not apply

Init.

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**User Notes:**

(1464743800)

to any extension exceeding sixty (60) days in the aggregate beyond the time for acceptance of bids specified in the bid documents, and the Owner and Contractor shall obtain the Surety's consent for an extension beyond sixty (60) days.

If this Bond is issued in connection with a subcontractor's bid to a Contractor, the term Contractor in this Bond shall be deemed to be Subcontractor and the term Owner shall be deemed to be Contractor.

When this Bond has been furnished to comply with a statutory or other legal requirement in the location of the Project, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. When so furnished, the intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

Signed and sealed this    day of    ,

\_\_\_\_\_  
(Principal)

\_\_\_\_\_  
(Seal)

\_\_\_\_\_  
(Witness)

\_\_\_\_\_  
(Title)

\_\_\_\_\_  
(Surety)

\_\_\_\_\_  
(Seal)

\_\_\_\_\_  
(Witness)

\_\_\_\_\_  
(Title)



SECTION 004325 - SUBSTITUTION REQUEST FORM

Should any part or portion of the Work be planned for substitute products, list all substitutes that are proposed for products that have been specified by one or more manufacturers in the specifications. Please print in ink or type in the spaces provided. Attach additional sheets if necessary.

This identification of substitutions is required of Bidder(s) as part of the Supplementary Bid Forms and is in partial fulfillment of requirements of the Instructions to Bidders. Substitutions may affect Owner's acceptance of the Bid and decision to award Contract. Additional data on substitutions may be requested from selected Bidder(s) after the Bid Opening in accordance with Division 01 Section "Product Requirements."

CONTRACTOR NAME \_\_\_\_\_

CONTRACT NAME/# \_\_\_\_\_

SPECIFICATION SECTION	SPECIFIED ITEM	SUBSTITUTION

END OF SECTION 004325

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SECTION 004333 – PROPOSED EQUIVALENT LIST

If bidder proposes to use materials and equipment other than those specified, he shall list below any equivalents he/she proposes to use.

Materials and equipment not listed on this sheet and not proposed, as equivalents in the bid may NOT be considered, evaluated, or accepted as equivalents after the bids are received.

This identification of equivalent is required of Bidder(s) as part of the Supplementary Bid Forms and is in partial fulfillment of requirements of the Instructions to Bidders. Equivalents may affect Owner's acceptance of the Bid and decision to award Contract. Additional data on equivalents may be requested from selected Bidder(s) after the Bid Opening in accordance with the Instructions to Bidders.

Additional sheets will be provided on request:

SPECIFICATION SECTION	SPECIFIED ITEM	PROPOSED EQUIVALENT
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

PART 1 – GENERAL (not used)

PART 2 – PRODUCTS (not used)

PART 3 – EXECUTION (not used)

END OF SECTION 004333

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SECTION 004336 - PROPOSED SUBCONTRACTORS FORM

Should any part or portion of the Work be planned for subcontracting, list the name and address of all Subcontractors that Bidder(s) proposes to use on Prime Contract and the assigned Work to each. Please print in ink or type in the spaces provided. Attach additional sheets if necessary.

This identification of subcontractors is required of Bidder(s) as part of the Supplementary Bid Forms and is in partial fulfillment of requirements of the Instructions to Bidders. Additional data on proposed Subcontractors may be requested from selected Bidders after the Bid Opening in accordance with the Instructions to Bidders.

CONTRACTOR NAME \_\_\_\_\_

CONTRACT NAME/# \_\_\_\_\_

SUBCONTRACTOR	ADDRESS	ASSIGNED WORK

END OF SECTION 004336

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## Contractor's Qualification Statement

(Paragraph deleted)

**SUBMITTED BY:**

(Organization name and address.)

**SUBMITTED TO:**

(Organization name and address.)

City School District of the City of  
New Rochelle  
515 North Avenue  
New Rochelle, New York 10801

**NAME OF PROJECT:**

City School District of New Rochelle - New Rochelle 2023 Capital Project - Phase 1

Henry Barnard Elementary School  
129 Barnard Road  
New Rochelle, New York 10801  
SED # 66-11-00-01-0-004-015

William b. Ward Elementary School  
311 Broadfield Road  
New Rochelle, New York 10804  
SED # 66-11-00-01-0-013-016

New Rochelle High School  
265 Clove Road  
New Rochelle, New York 10801  
SED # 66-11-00-01-0-001-030  
CSArch Project #188-2301

Jefferson Elementary School  
131 Weyman Avenue  
New Rochelle, New York 10805  
SED # 66-11-00-01-0-007-016

Albert Leonard Middle School  
25 Gerada Lane  
New Rochelle, New York 10804  
SED # 66-11-00-01-0-002-016

George M. Davis Elementary School  
80 Iselin Drive  
New Rochelle, New York 10804  
SED # 66-11-00-01-0-006-012

**ADDITIONS AND DELETIONS:**

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**TYPE OF WORK TYPICALLY PERFORMED**

(Indicate the type of work your organization typically performs, such as general contracting, construction manager as constructor services, HVAC contracting, electrical contracting, plumbing contracting, or other.)

**THIS CONTRACTOR'S QUALIFICATION STATEMENT INCLUDES THE FOLLOWING:**

(Check all that apply.)

- ☒ Exhibit A – General Information
- ☒ Exhibit B – Financial and Performance Information
- ☒ Exhibit C – Project-Specific Information
- ☒ Exhibit D – Past Project Experience
- ☒ Exhibit E – Past Project Experience (Continued)

**CONTRACTOR CERTIFICATION**

The undersigned certifies under oath that the information provided in this Contractor's Qualification Statement is true and sufficiently complete so as not to be misleading.

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User Notes:

(1497778742)

\_\_\_\_\_  
**Organization's Authorized Representative  
Signature**

\_\_\_\_\_  
**Date**

\_\_\_\_\_  
**Printed Name and Title**

**NOTARY**

State of:

County of:

Signed and sworn to before me this    day of

\_\_\_\_\_  
**Notary Signature**

**My commission expires:**



# **AIA® Document A305® – 2020 Exhibit A**

## **General Information**

This Exhibit is part of the Contractor's Qualification Statement, submitted by \_\_\_\_\_ and dated the \_\_\_\_\_ day of \_\_\_\_\_ in the year \_\_\_\_\_.  
(In words, indicate day, month and year.)

### **§ A.1 ORGANIZATION**

#### **§ A.1.1 Name and Location**

**§ A.1.1.1** Identify the full legal name of your organization.

**§ A.1.1.2** List all other names under which your organization currently does business and, for each name, identify jurisdictions in which it is registered to do business under that trade name.

**§ A.1.1.3** List all prior names under which your organization has operated and, for each name, indicate the date range and jurisdiction in which it was used.

**§ A.1.1.4** Identify the address of your organization's principal place of business and list all office locations out of which your organization conducts business. If your organization has multiple offices, you may attach an exhibit or refer to a website.

#### **§ A.1.2 Legal Status**

**§ A.1.2.1** Identify the legal status under which your organization does business, such as sole proprietorship, partnership, corporation, limited liability corporation, joint venture, or other.

- .1** If your organization is a corporation, identify the state in which it is incorporated, the date of incorporation, and its four highest-ranking corporate officers and their titles, as applicable.
- .2** If your organization is a partnership, identify its partners and its date of organization.
- .3** If your organization is individually owned, identify its owner and date of organization.

#### **ADDITIONS AND DELETIONS:**

The author of this document has added information needed for its completion. The author may also have revised the text of the original AIA standard form. An *Additions and Deletions Report* that notes added information as well as revisions to the standard form text is available from the author and should be reviewed. A vertical line in the left margin of this document indicates where the author has added necessary information and where the author has added to or deleted from the original AIA text.

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

- .4 If the form of your organization is other than those listed above, describe it and identify its individual leaders:

§ A.1.2.2 Does your organization own, in whole or in part, any other construction-related businesses? If so, identify and describe those businesses and specify percentage of ownership.

§ A.1.3 Other Information

§ A.1.3.1 How many years has your organization been in business?

§ A.1.3.2 How many full-time employees work for your organization?

§ A.1.3.3 List your North American Industry Classification System (NAICS) codes and titles. Specify which is your primary NAICS code.

§ A.1.3.4 Indicate whether your organization is certified as a governmentally recognized special business class, such as a minority business enterprise, woman business enterprise, service disabled veteran owned small business, woman owned small business, small business in a HUBZone, or a small disadvantaged business in the 8(a) Business Development Program. For each, identify the certifying authority and indicate jurisdictions to which such certification applies.

§ A.2 EXPERIENCE

§ A.2.1 Complete Exhibit D to describe up to four projects, either completed or in progress, that are representative of your organization's experience and capabilities.

§ A.2.2 State your organization's total dollar value of work currently under contract.

§ A.2.3 Of the amount stated in Section A.2.2, state the dollar value of work that remains to be completed:

§ A.2.4 State your organization's average annual dollar value of construction work performed during the last five years.

§ A.3 CAPABILITIES

§ A.3.1 List the categories of work that your organization typically self-performs.

§ A.3.2 Identify qualities, accreditations, services, skills, or personnel that you believe differentiate your organization from others.

**§ A.3.3** Does your organization provide design collaboration or pre-construction services? If so, describe those services.

**§ A.3.4** Does your organization use building information modeling (BIM)? If so, describe how your organization uses BIM and identify BIM software that your organization regularly uses.

**§ A.3.5** Does your organization use a project management information system? If so, identify that system.

**§ A.4 REFERENCES**

**§ A.4.1** Identify three client references:

*(Insert name, organization, and contact information)*

**§ A.4.2** Identify three architect references:

*(Insert name, organization, and contact information)*

**§ A.4.3** Identify one bank reference:

*(Insert name, organization, and contact information)*

**§ A.4.4** Identify three subcontractor or other trade references:

*(Insert name, organization, and contact information)*

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# AIA® Document A305® – 2020 Exhibit B

## Financial and Performance Information

This Exhibit is part of the Contractor's Qualification Statement, submitted by and dated the day of in the year  
(In words, indicate day, month and year.)

### § B.1 FINANCIAL

#### § B.1.1 Federal tax identification number:

§ B.1.2 Attach financial statements for the last three years prepared in accordance with Generally Accepted Accounting Principles, including your organization's latest balance sheet and income statement. Also, indicate the name and contact information of the firm that prepared each financial statement.

§ B.1.3 Has your organization, its parent, or a subsidiary, affiliate, or other entity having common ownership or management, been the subject of any bankruptcy proceeding within the last ten years?

§ B.1.4 Identify your organization's preferred credit rating agency and identification information.

(Identify rating agency, such as Dun and Bradstreet or Equifax, and insert your organization's identification number or other method of searching your organization's credit rating with such agency.)

### § B.2 DISPUTES AND DISCIPLINARY ACTIONS

§ B.2.1 Are there any pending or outstanding judgments, arbitration proceedings, bond claims, or lawsuits against your organization, its parent, or a subsidiary, affiliate, or other entity having common ownership or management, or any of the individuals listed in Exhibit A, Section 1.2, in which the amount in dispute is more than \$75,000?

(If the answer is yes, provide an explanation.)

§ B.2.2 In the last five years has your organization, its parent, or a subsidiary, affiliate, or other entity having common ownership or management:

(If the answer to any of the questions below is yes, provide an explanation.)

.1 failed to complete work awarded to it?

.2 been terminated for any reason except for an owners' convenience?

### ADDITIONS AND DELETIONS:

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**.3** had any judgments, settlements, or awards pertaining to a construction project in which your organization was responsible for more than \$75,000?

**.4** filed any lawsuits or requested arbitration regarding a construction project?

**§ B.2.3** In the last five years, has your organization, its parent, or a subsidiary, affiliate, or other entity having common ownership or management; or any of the individuals listed in Exhibit A Section 1.2:

*(If the answer to any of the questions below is yes, provide an explanation.)*

**.1** been convicted of, or indicted for, a business-related crime?

**.2** had any business or professional license subjected to disciplinary action?

**.3** been penalized or fined by a state or federal environmental agency?

# AIA® Document A305® – 2020 Exhibit C

## Project Specific Information

This Exhibit is part of the Contractor's Qualification Statement, submitted by \_\_\_\_\_ and dated the \_\_\_\_\_ day of \_\_\_\_\_ in the year \_\_\_\_\_  
(In words, indicate day, month and year.)

### PROJECT:

(Name and location or address.)

City School District of New Rochelle - New Rochelle 2023 Capital Project - Phase 1  
Henry Barnard Elementary School  
129 Barnard Road  
New Rochelle, New York 10801  
SED # 66-11-00-01-0-004-015

Jefferson Elementary School  
131 Weyman Avenue  
New Rochelle, New York 10805  
SED # 66-11-00-01-0-007-016

William b. Ward Elementary School  
311 Broadfield Road  
New Rochelle, New York 10804  
SED # 66-11-00-01-0-013-016

Albert Leonard Middle School  
25 Gerada Lane  
New Rochelle, New York 10804  
SED # 66-11-00-01-0-002-016

New Rochelle High School  
265 Clove Road  
New Rochelle, New York 10801  
SED # 66-11-00-01-0-001-030  
CSArch Project #188-2301

George M. Davis Elementary School  
80 Iselin Drive  
New Rochelle, New York 10804  
SED # 66-11-00-01-0-006-012

### ADDITIONS AND DELETIONS:

The author of this document has added information needed for its completion. The author may also have revised the text of the original AIA standard form. An *Additions and Deletions Report* that notes added information as well as revisions to the standard form text is available from the author and should be reviewed. A vertical line in the left margin of this document indicates where the author has added necessary information and where the author has added to or deleted from the original AIA text.

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

### CONTRACTOR'S PROJECT OFFICE:

(Identify the office out of which the contractor proposes to perform the work for the Project.)

### TYPE OF WORK SOUGHT

(Indicate the type of work you are seeking for this Project, such as general contracting, construction manager as constructor, design-build, HVAC subcontracting, electrical subcontracting, plumbing subcontracting, etc.)

### CONFLICT OF INTEREST

Describe any conflict of interest your organization, its parent, or a subsidiary, affiliate, or other entity having common ownership or management, or any of the individuals listed in Exhibit A Section 1.2, may have regarding this Project.

### § C.1 PERFORMANCE OF THE WORK

§ C.1.1 When was the Contractor's Project Office established?

**§ C.1.2** How many full-time field and office staff are respectively employed at the Contractor's Project Office?

**§ C.1.3** List the business license and contractor license or registration numbers for the Contractor's Project Office that pertain to the Project.

**§ C.1.4** Identify key personnel from your organization who will be meaningfully involved with work on this Project and indicate (1) their position on the Project team, (2) their office location, (3) their expertise and experience, and (4) projects similar to the Project on which they have worked.

**§ C.1.5** Identify portions of work that you intend to self-perform on this Project.

**§ C.1.6** To the extent known, list the subcontractors you intend to use for major portions of work on the Project.

**§ C.2 EXPERIENCE RELATED TO THE PROJECT**

**§ C.2.1** Complete Exhibit D to describe up to four projects performed by the Contractor's Project Office, either completed or in progress, that are relevant to this Project, such as projects in a similar geographic area or of similar project type. If you have already completed Exhibit D, but want to provide further examples of projects that are relevant to this Project, you may complete Exhibit E.

**§ C.2.2** State the total dollar value of work currently under contract at the Contractor's Project Office:

**§ C.2.3** Of the amount stated in Section C.2.2, state the dollar value of work that remains to be completed:

**§ C.2.4** State the average annual dollar value of construction work performed by the Contractor's Project Office during the last five years.

**§ C.2.5** List the total number of projects the Contractor's Project Office has completed in the last five years and state the dollar value of the largest contract the Contractor's Project Office has completed during that time.

**§ C.3 SAFETY PROGRAM AND RECORD**

**§ C.3.1** Does the Contractor's Project Office have a written safety program?

**§ C.3.2** List all safety-related citations and penalties the Contractor's Project Office has received in the last three years.



**§ C.3.3** Attach the Contractor's Project Office's OSHA 300a Summary of Work-Related Injuries and Illnesses form for the last three years.

**§ C.3.4** Attach a copy of your insurance agent's verification letter for your organization's current workers' compensation experience modification rate and rates for the last three years.

**§ C.4 INSURANCE**

**§ C.4.1** Attach current certificates of insurance for your commercial general liability policy, umbrella insurance policy, and professional liability insurance policy, if any. Identify deductibles or self-insured retentions for your commercial general liability policy.

**§ C.4.2** If requested, will your organization be able to provide property insurance for the Project written on a builder's risk "all-risks" completed value or equivalent policy form and sufficient to cover the total value of the entire Project on a replacement cost basis?

**§ C.4.3** Does your commercial general liability policy contain any exclusions or restrictions of coverage that are prohibited in AIA Document A101-2017, Exhibit A, Insurance A.3.2.2.2? If so, identify.

**§ C.5 SURETY**

**§ C.5.1** If requested, will your organization be able to provide a performance and payment bond for this Project?

**§ C.5.2** Surety company name:

**§ C.5.3** Surety agent name and contact information:

**§ C.5.4** Total bonding capacity:

**§ C.5.5** Available bonding capacity as of the date of this qualification statement:

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# AIA® Document A305® – 2020 Exhibit D

## Contractor's Past Project Experience

	1	2	3	4
PROJECT NAME				
PROJECT LOCATION				
PROJECT TYPE				
OWNER				
ARCHITECT				
CONTRACTOR'S PROJECT EXECUTIVE				
KEY PERSONNEL (include titles)				
PROJECT DETAILS	Contract Amount  Completion Date  % Self-Performed Work	Contract Amount  Completion Date  % Self-Performed Work	Contract Amount  Completion Date  % Self-Performed Work	Contract Amount  Completion Date  % Self-Performed Work
PROJECT DELIVERY METHOD	<input type="checkbox"/> Design-bid-build <input type="checkbox"/> Design-build <input type="checkbox"/> CM constructor <input type="checkbox"/> CM advisor <input type="checkbox"/> Other:	<input type="checkbox"/> Design-bid-build <input type="checkbox"/> Design-build <input type="checkbox"/> CM constructor <input type="checkbox"/> CM advisor <input type="checkbox"/> Other:	<input type="checkbox"/> Design-bid-build <input type="checkbox"/> Design-build <input type="checkbox"/> CM constructor <input type="checkbox"/> CM advisor <input type="checkbox"/> Other:	<input type="checkbox"/> Design-bid-build <input type="checkbox"/> Design-build <input type="checkbox"/> CM constructor <input type="checkbox"/> CM advisor <input type="checkbox"/> Other:
SUSTAINABILITY CERTIFICATIONS				

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# AIA® Document A305® – 2020 Exhibit E

## Contractor's Past Project Experience, Continued

	1	2	3	4
PROJECT NAME				
PROJECT LOCATION				
PROJECT TYPE				
OWNER				
ARCHITECT				
CONTRACTOR'S PROJECT EXECUTIVE				
KEY PERSONNEL (include titles)				
PROJECT DETAILS	Contract Amount  Completion Date  % Self-Performed Work	Contract Amount  Completion Date  % Self-Performed Work	Contract Amount  Completion Date  % Self-Performed Work	Contract Amount  Completion Date  % Self-Performed Work
PROJECT DELIVERY METHOD	<input type="checkbox"/> Design-bid-build <input type="checkbox"/> Design-build <input type="checkbox"/> CM constructor <input type="checkbox"/> CM advisor <input type="checkbox"/> Other:	<input type="checkbox"/> Design-bid-build <input type="checkbox"/> Design-build <input type="checkbox"/> CM constructor <input type="checkbox"/> CM advisor <input type="checkbox"/> Other:	<input type="checkbox"/> Design-bid-build <input type="checkbox"/> Design-build <input type="checkbox"/> CM constructor <input type="checkbox"/> CM advisor <input type="checkbox"/> Other:	<input type="checkbox"/> Design-bid-build <input type="checkbox"/> Design-build <input type="checkbox"/> CM constructor <input type="checkbox"/> CM advisor <input type="checkbox"/> Other:
SUSTAINABILITY CERTIFICATIONS				

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## SECTION 004519 - NON-COLLUSION AFFIDAVIT

The following provisions of the New York State General Municipal Law form a part of the Bidding Requirements:

### NON-COLLUSIVE BIDDING CERTIFICATE

- (a) By submission of this Bid, each Bidder and each person signing on behalf of any Bidder certifies, and in the case of a joint Bid, each party thereto certifies as to its own organization, under penalty of perjury, that, to the best of his or her knowledge and belief:
- (1) The prices in this Bid have been arrived at independently without collusion, consultation, communication, or agreement, for the purpose of restricting competition, as to any matter relating to such prices with any other bidder or with any competitor.
  - (2) Unless otherwise required by law, the prices which have been quoted in this Bid have not been knowingly disclosed by the Bidder and will not knowingly be disclosed by the Bidder prior to opening, directly or indirectly, to any other bidder or to any competitor; and
  - (3) No attempt has been made or will be made by the Bidder to induce any other person, partnership, or corporation to submit or not to submit a bid for the purpose of restricting competition.
- (b) A Bid shall not be considered for award, nor shall any award be made where (a) (1), (2) and (3) above have not been complied with; provided, however, that if in any case the Bidder cannot make the foregoing certification, the Bidder shall so state and shall so furnish with the Bid, a signed statement which sets forth in detail the reasons therefore. Where (a) (1), (2) and (3) above have not been complied with, the Bid shall not be considered for award nor shall any award be made unless the head of the purchasing unit of the political subdivision, public department, agency or official thereof to which the Bid is made, or his designee, determines that such disclosure was not made for the purpose of restricting competition.
- The fact that a bidder (a) has published price lists, rates, or tariffs covering items being procured, (b) has informed prospective customers of proposed or pending publication of new or revised price lists for such items, or (c) has sold the same items to other customers at the same prices being bid, does not constitute, without more, a disclosure within the meaning of subparagraph (a).
- (c) Any bid hereafter made to any political subdivision of the State or any public department, agency or official thereof by a corporate bidder for work or services performed or to be performed or goods sold or to be sold, where competitive bidding is required by statute, rule, regulation, or local law, and where such bid contains the certification referred to in subdivision one of this section, shall be deemed to have been

authorized by the board of directors of the bidder, and such authorization shall be deemed to include the signing and submission of the bid and the inclusion therein of the certificate as to non-collusion as the act and deed of the corporation.

- (d) The person signing this Bid or Proposal certifies that he has fully informed himself regarding the accuracy of the statements contained in this certification, and under the penalties of perjury, affirms the truth thereof, such penalties being applicable to the Bidder as well to the person signing in his behalf.

Signature \_\_\_\_\_

Date \_\_\_\_\_

Title \_\_\_\_\_ Federal ID No: \_\_\_\_\_

Business Address: \_\_\_\_\_

Telephone: \_\_\_\_\_ Facsimile: \_\_\_\_\_

END OF SECTION 004519



## SECTION 004520 - IRAN DIVESTMENT ACT AFFIDAVIT

The following provisions of the New York State General Municipal Law form a part of the Bidding Requirements:

### IRAN DIVESTMENT ACT CERTIFICATE

- (a) By submission of this Bid, each Bidder and each person signing on behalf of any Bidder certifies, and in the case of a joint Bid, each party thereto certifies as to its own organization, under penalty of perjury, that, to the best of his or her knowledge and belief:
  - (1) That the Bidder is not on the list created pursuant to Paragraph (b) of Subdivision 3 of Section 165-a of the New York State finance law.
  - (2) By submitting a bid in response to this solicitation or by assuming the responsibility of a Contract awarded hereunder, Bidder / Contractor (or any assignee) certifies that once the prohibited entities list is posted on the Office of General Services (OGS) website, it will not utilize on such Contract any subcontractor that is identified on the prohibited entities list; and
  - (3) Additionally, Bidder / Contractor is advised that once the list is posted on the OGS website, any Contractor seeking to renew or extend a Contract or assume the responsibility of a contract awarded in response to the solicitation, must certify at the time the Contract is renewed, extended, or assigned that it is not included on the prohibited entities list.
- (b) A bid shall not be considered for award, nor shall any award be made where the condition set forth in paragraph a of this subdivision has not been complied with; provided, however, that if in any case the bidder cannot make the foregoing certification, the bidder shall so state and shall furnish with the bid a signed statement which sets forth in detail the reasons therefor. A political subdivision may award a bid to a bidder who cannot make the certification pursuant to paragraph a of this subdivision on a case-by-case basis if:
  - (1) The investment activities in Iran were made before the effective date of this section, the investment activities in Iran have not been expanded or renewed after the effective date of this section, and the person has adopted, publicized, and is implementing a formal plan to cease the investment activities in Iran and to refrain from engaging in any new investments in Iran; or

- (2) The political subdivision makes a determination that the goods or services are necessary for the political subdivision to perform its functions and that, absent such an exemption, the political subdivision would be unable to obtain the goods or services for which the contract is offered. Such determination shall be made in writing and shall be a public document.
- (c) Any bid hereafter made to any political subdivision of the State or any public department, agency or official thereof by a corporate bidder for work or services performed or to be performed or goods sold or to be sold, where competitive bidding is required by statute, rule, regulation, or local law, and where such bid contains the certification referred to in subdivision one of this section, shall be deemed to have been authorized by the board of directors of the bidder, and such authorization shall be deemed to include the signing and submission of the bid and the inclusion therein of the certificate as to non-engagement in investment activities in Iran as the act and deed of the corporation.
- (d) The person signing this Bid or Proposal certifies that he has fully informed himself regarding the accuracy of the statements contained in this certification, and under the penalties of perjury, affirms the truth thereof, such penalties being applicable to the Bidder as well to the person signing in his behalf.

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Title: \_\_\_\_\_ Federal ID NO: \_\_\_\_\_

Business Address: \_\_\_\_\_

Telephone: \_\_\_\_\_ Email: \_\_\_\_\_

END OF SECTION 004520

SECTION 004543 - CORPORATE RESOLUTIONS

**INCLUDE WITH BID FORM(S) IF BIDDER IS AN INDIVIDUAL:**

By: \_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Print or type individual's name and title)

\_\_\_\_\_  
(Business Address)

\_\_\_\_\_  
Business Phone

**INCLUDE WITH BID FORM(S) IF BIDDER IS A PARTNERSHIP:**

---

(Print or type name of firm)

BY: \_\_\_\_\_  
(Signature of general partner)

---

(Print or type general partner's name and title)

---

(Business Address)

---

Business Phone	Facsimile
----------------	-----------

**INCLUDE WITH BID FORM(S) IF BIDDER IS A CORPORATION:**

---

(Print or type name of corporation)

---

(State of incorporation)

BY: \_\_\_\_\_  
(Signature of president or vice-president)

---

(Print or type individual's name and title)

---

(Business Address)

---

Business Phone

Facsimile

ATTEST:

---

(By corporate secretary or assistant secretary)

---

(Print name and title)

Corporate Seal

END OF SECTION 004543

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# AIA® Document A132® – 2019

## Standard Form of Agreement Between Owner and Contractor, Construction Manager as Adviser Edition

**AGREEMENT** made as of the    day of    in the year Two Thousand Twenty Three  
(In words, indicate day, month, and year.)

**BETWEEN** the Owner:

(Name, legal status, address, and other information)

City School District of the City of New Rochelle  
515 North Avenue  
New Rochelle, New York 10801

and the Contractor:

(Name, legal status, address, and other information)

for the following Project:

(Name, location, and detailed description)

City School District of New Rochelle - New Rochelle 2023 Capital Project - Phase 1

Henry Barnard Elementary School  
129 Barnard Road

New Rochelle, New York 10801

SED # 66-11-00-01-0-004-015

Jefferson Elementary School  
131 Weyman Avenue

New Rochelle, New York 10805

SED # 66-11-00-01-0-007-016

William B. Ward Elementary School  
311 Broadfield Road

New Rochelle, New York 10804

SED # 66-11-00-01-0-013-016

Albert Leonard Middle School  
25 Gerada Lane

New Rochelle, New York 10804

SED # 66-11-00-01-0-002-016

New Rochelle High School  
265 Clove Road

New Rochelle, New York 10801

SED # 66-11-00-01-0-001-030

CSArch Project #188-2301

George M. Davis Elementary School  
80 Iselin Drive

New Rochelle, New York 10804

SED # 66-11-00-01-0-006-012

The Construction Manager:

(Name, legal status, address, and other information)

Jacobs Project Management Co.

500 7<sup>th</sup> Avenue, 17<sup>th</sup> Floor

New York, New York 12550

The Architect:

(Name, legal status, address, and other information)

Collins+Scoville Architecture | Engineering | Construction Management, D.P.C.

dba CSArch

19 Front Street

Newburgh, New York 12550

**ADDITIONS AND DELETIONS:**

The author of this document has added information needed for its completion. The author may also have revised the text of the original AIA standard form. An *Additions and Deletions Report* that notes added information as well as revisions to the standard form text is available from the author and should be reviewed. A vertical line in the left margin of this document indicates where the author has added necessary information and where the author has added to or deleted from the original AIA text.

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

This document is intended to be used in conjunction with AIA Documents A232™–2019, General Conditions of the Contract for Construction, Construction Manager as Adviser Edition; B132™–2019, Standard Form of Agreement Between Owner and Architect, Construction Manager as Adviser Edition; and C132™–2019, Standard Form of Agreement Between Owner and Construction Manager as Adviser. AIA Document A232™–2019 is adopted in this document by reference. Do not use with other general conditions unless this document is modified.

The Owner and Contractor agree as follows.

Init.

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User Notes:

(1715746680)

## TABLE OF ARTICLES

1	THE CONTRACT DOCUMENTS
2	THE WORK OF THIS CONTRACT
3	DATE OF COMMENCEMENT AND DATES OF SUBSTANTIAL COMPLETION
4	CONTRACT SUM
5	PAYMENTS
6	DISPUTE RESOLUTION
7	TERMINATION OR SUSPENSION
8	MISCELLANEOUS PROVISIONS
9	ENUMERATION OF CONTRACT DOCUMENTS

### ARTICLE 1 THE CONTRACT DOCUMENTS

The Contract Documents consist of this Agreement, Conditions of the Contract (General, Supplementary, and other Conditions), Drawings, Specifications, Addenda issued prior to execution of this Agreement, other documents listed in this Agreement, and Modifications issued after execution of this Agreement, all of which form the Contract, and are as fully a part of the Contract as if attached to this Agreement or repeated herein. The Contract represents the entire and integrated agreement between the parties hereto and supersedes prior negotiations, representations, or agreements, either written or oral. An enumeration of the Contract Documents, other than Modifications, appears in Article 9.

### ARTICLE 2 THE WORK OF THIS CONTRACT

The Contractor shall fully execute the Work described in the Contract Documents, except as specifically indicated in the Contract Documents to be the responsibility of others.

### ARTICLE 3 DATE OF COMMENCEMENT AND DATES OF SUBSTANTIAL COMPLETION

§ 3.1 The date of commencement of the Work shall be:

*(Check one of the following boxes.)*

☒ [ X ] The date of this Agreement.

☐ [ ] A date set forth in a notice to proceed issued by the Owner.

☐ [ ] Established as follows:

*(Insert a date or a means to determine the date of commencement of the Work.)*

If a date of commencement of the Work is not selected, then the date of commencement shall be the date of this Agreement.

§ 3.2 The Contract Time shall be measured from the date of commencement of the Work.

#### § 3.3 Substantial Completion of the Project or Portions Thereof

§ 3.3.1 Subject to adjustments of the Contract Time as provided in the Contract Documents, the date of Substantial Completion of the Work of all of the Contractors for the Project will be:

*(Insert the date of Substantial Completion of the Work of all Contractors for the Project.)*



(Paragraph deleted)

(Table deleted)

(Paragraphs deleted)

(Table deleted)

(Paragraph deleted)

#### ARTICLE 4 CONTRACT SUM

§ 4.1 The Owner shall pay the Contractor the Contract Sum in current funds for the Contractor's performance of the Contract. The Contract Sum shall be one of the following:

(Check the appropriate box.)

- ☒ [ X ] Stipulated Sum, in accordance with Section 4.2 below
- ☐ [ ] Cost of the Work plus the Contractor's Fee, in accordance with Section 4.3 below
- ☐ [ ] Cost of the Work plus the Contractor's Fee with a Guaranteed Maximum Price, in accordance with Section 4.4 below

(Based on the selection above, complete Section 4.2, 4.3 or 4.4 below.)

#### § 4.2 Stipulated Sum

§ 4.2.1 The Contract Sum shall be (\$ ), subject to additions and deductions as provided in the Contract Documents.

#### § 4.2.2 Alternates

§ 4.2.2.1 Alternates, if any, included in the Contract Sum:

Item	Price
------	-------

§ 4.2.2.2 Subject to the conditions noted below, the following alternates may be accepted by the Owner following execution of this Agreement. Upon acceptance, the Owner shall issue a Modification to this Agreement.

(Insert below each alternate and the conditions that must be met for the Owner to accept the alternate.)

Item	Price	Conditions for Acceptance
------	-------	---------------------------

§ 4.2.3 Allowances, if any, included in the Contract Sum:

(Identify each allowance.)

Item	Price
------	-------

§ 4.2.4 Unit prices, if any:

(Identify the item and state the unit price, and quantity limitations, if any, to which the unit price will be applicable.)

Item	Units and Limitations	Price per Unit (\$0.00)
------	-----------------------	-------------------------

(Paragraphs deleted)

(Table deleted)

(Paragraphs deleted)

(Table deleted)

(Paragraphs deleted)

(Table deleted)

(Paragraphs deleted)

(Table deleted)

Init.

(Paragraphs deleted)

(Table deleted)

(Paragraphs deleted)

## **ARTICLE 5 PAYMENTS**

### **§ 5.1 Progress Payments**

**§ 5.1.1** Based upon Applications for Payment submitted to the Construction Manager by the Contractor, and Certificates for Payment issued by the Construction Manager and Architect, the Owner shall make progress payments on account of the Contract Sum, to the Contractor, as provided below and elsewhere in the Contract Documents.

**§ 5.1.2** The period covered by each Application for Payment shall be one calendar month ending on the last day of the month, or as follows:

**§ 5.1.3** Provided that an Application for Payment is received by the Construction Manager not later than the day of a month, the Owner shall make payment of the amount certified to the Contractor not later than the day of the month. If an Application for Payment is received by the Construction Manager after the application date fixed above, payment of the amount certified shall be made by the Owner not later than ( ) days after the Construction Manager receives the Application for Payment.

*(Federal, state or local laws may require payment within a certain period of time.)*

### **§ 5.1.4 Progress Payments Where the Contract Sum is Based on a Stipulated Sum**

**§ 5.1.4.1** Each Application for Payment shall be based on the most recent schedule of values submitted by the Contractor in accordance with the Contract Documents. The schedule of values shall allocate the entire Contract Sum among the various portions of the Work. The schedule of values shall be prepared in such form, and supported by such data to substantiate its accuracy, as the Construction Manager and Architect may require. This schedule of values shall be used as a basis for reviewing the Contractor's Applications for Payment.

**§ 5.1.4.2** Applications for Payment shall show the percentage of completion of each portion of the Work as of the end of the period covered by the Application for Payment.

**§ 5.1.4.3** In accordance with AIA Document A232™–2019, General Conditions of the Contract for Construction, Construction Manager as Adviser Edition, and subject to other provisions of the Contract Documents, the amount of each progress payment shall be computed as follows:

**§ 5.1.4.3.1** The amount of each progress payment shall first include:

- .1 That portion of the Contract Sum properly allocable to completed Work;
- .2 That portion of the Contract Sum properly allocable to materials and equipment delivered and suitably stored at the site for subsequent incorporation in the completed construction, or, if approved in advance by the Owner, suitably stored off the site at a location agreed upon in writing; and
- .3 That portion of Construction Change Directives that the Architect determines, in the Architect's professional judgment, to be reasonably justified.

**§ 5.1.4.3.2** The amount of each progress payment shall then be reduced by:

- .1 The aggregate of any amounts previously paid by the Owner;
- .2 The amount, if any, for Work that remains uncorrected and for which the Architect has previously withheld a Certificate for Payment as provided in Article 9 of AIA Document A232–2019;
- .3 Any amount for which the Contractor does not intend to pay a Subcontractor or material supplier, unless the Work has been performed by others the Contractor intends to pay;
- .4 For Work performed or defects discovered since the last payment application, any amount for which the Architect may withhold payment, or nullify a Certificate of Payment in whole or in part, as provided in Article 9 of AIA Document A232–2019; and
- .5 Retainage withheld pursuant to Section 5.1.7.

(Paragraphs deleted)

**§ 5.1.7 Retainage**

**§ 5.1.7.1** For each progress payment made prior to when the Work of this Contract is substantially complete, the Owner may withhold the following amount, as retainage, from the payment otherwise due:

*(Insert a percentage or amount to be withheld as retainage from each Application for Payment. The amount of retainage may be limited by governing law.)*

Five Percent (5%)

**§ 5.1.7.1.1** The following items are not subject to retainage:

*(Insert any items not subject to the withholding of retainage, such as general conditions, insurance, etc.)*

**§ 5.1.7.2** Reduction or limitation of retainage, if any, shall be as follows:

*(If the retainage established in Section 5.1.7.1 is to be modified prior to when the entire Work of this Contract is substantially complete, including modifications for completion of portions of the Work as provided in Section 3.4.2, insert provisions for such modifications.)*

*(Paragraphs deleted)*

**§ 5.2 Final Payment**

**§ 5.2.1 Final Payment Where the Contract Sum is Based on a Stipulated Sum**

**§ 5.2.1.1** Final payment, constituting the entire unpaid balance of the Contract Sum, shall be made by the Owner to the Contractor when

- .1 the Contractor has fully performed the Contract except for the Contractor's responsibility to correct Work as provided in Article 12 of AIA Document A232–2019, and to satisfy other requirements, if any, which extend beyond final payment; and
- .2 a final Certificate for Payment or Project Certificate for Payment has been issued by the Architect.

**§ 5.2.1.2** The Owner's final payment to the Contractor shall be made no later than 30 days after the issuance of the final Certificate for Payment or Project Certificate for Payment, or as follows:

*(Paragraphs deleted)*

**§ 5.3** Payments due and unpaid under the Contract shall bear interest from the date payment is due at the rate stated below, or in the absence thereof, at the legal rate prevailing from time to time at the place where the Project is located.

*(Insert rate of interest agreed upon, if any.)*

Zero % 0

**ARTICLE 6 DISPUTE RESOLUTION**

**§ 6.1 Initial Decision Maker**

The Architect will serve as Initial Decision Maker pursuant to Article 15 of AIA Document A232–2019, unless the parties appoint below another individual, not a party to this Agreement, to serve as Initial Decision Maker.

*(If the parties mutually agree, insert the name, address and other contact information of the Initial Decision Maker, if other than the Architect.)*

## **§ 6.2 Binding Dispute Resolution**

For any Claim subject to, but not resolved by, mediation pursuant to Article 15 of AIA Document A232–2019, the method of binding dispute resolution shall be as follows:

*(Check the appropriate box.)*

☐ Arbitration pursuant to Article 15 of AIA Document A232–2019.

☒ Litigation in a court of competent jurisdiction.

☐ Other: *(Specify)*

If the Owner and Contractor do not select a method of binding dispute resolution, or do not subsequently agree in writing to a binding dispute resolution method other than litigation, Claims will be resolved by litigation in a court of competent jurisdiction.

## **ARTICLE 7 TERMINATION OR SUSPENSION**

### **§ 7.1 Where the Contract Sum is a Stipulated Sum**

**§ 7.1.1** The Contract may be terminated by the Owner or the Contractor as provided in Article 14 of AIA Document A232–2019.

*(Paragraphs deleted)*

## **ARTICLE 8 MISCELLANEOUS PROVISIONS**

**§ 8.1** Where reference is made in this Agreement to a provision of AIA Document A232–2019 or another Contract Document, the reference refers to that provision as amended or supplemented by other provisions of the Contract Documents.

**§ 8.2** The Owner's representative:

*(Name, address, email address, and other information)*

**§ 8.3** The Contractor's representative:

*(Name, address, email address, and other information)*

**§ 8.4** Neither the Owner's nor the Contractor's representative shall be changed without ten days' prior notice to the other party.

### **§ 8.5 Insurance and Bonds**

**§ 8.5.1** The Owner and the Contractor shall purchase and maintain insurance as set forth in AIA Document A232™–2019, General Conditions of the Contract, Construction Manager as Adviser Edition and elsewhere in the Contract Documents.

§ 8.5.2 The Contractor shall provide bonds as set forth in AIA Document A232™–2019, and elsewhere in the Contract Documents.

§ 8.6 Notice in electronic format, pursuant to Article 1 of AIA Document A232–2019, may be given in accordance with AIA Document E203™–2013, Building Information Modeling and Digital Data Exhibit, if completed, or as otherwise set forth below:

*(If other than in accordance with AIA Document E203–2013, insert requirements for delivering notice in electronic format such as name, title, and email address of the recipient and whether and how the system will be required to generate a read receipt for the transmission.)*

### § 8.7 Relationship of the Parties

Where the Contract is based on the Cost of the Work plus the Contractor's Fee, with or without a Guaranteed Maximum Price, the Contractor accepts the relationship of trust and confidence established by this Agreement and covenants with the Owner to cooperate with the Architect and exercise the Contractor's skill and judgment in furthering the interests of the Owner; to furnish efficient business administration and supervision; to furnish at all times an adequate supply of workers and materials; and to perform the Work in an expeditious and economical manner consistent with the Owner's interests. The Owner agrees to furnish and approve, in a timely manner, information required by the Contractor and to make payments to the Contractor in accordance with the requirements of the Contract Documents.

§ 8.8 Other provisions:

## ARTICLE 9 ENUMERATION OF CONTRACT DOCUMENTS

§ 9.1 This Agreement is comprised of the following documents:

- .1 AIA Document A132™–2019, Standard Form of Agreement Between Owner and Contractor, Construction Manager as Adviser Edition
- .2 AIA Document A232™–2019, General Conditions of the Contract for Construction, Construction Manager as Adviser Edition

*(Paragraphs deleted)*

- .5 Drawings

Number	Title	Date
Exhibit B – List of Drawings		

- .6 Specifications

Section	Title	Date	Pages
Exhibit A – Table of Contents			

- .7 Addenda, if any:

Number	Date	Pages
--------	------	-------

Portions of Addenda relating to bidding or proposal requirements are not part of the Contract Documents unless the bidding or proposal requirements are also enumerated in this Article 9.

- .8 Other Exhibits:

*(Check all boxes that apply and include appropriate information identifying the exhibit where required.)*

☐ AIA Document A132™–2019, Exhibit B, Determination of the Cost of the Work

Init.

- [ ] AIA Document E235™–2019, Sustainable Projects Exhibit, Construction Manager as Adviser Edition, dated as indicated below:  
(Insert the date of the E235–2019 incorporated into this Agreement.)

- [ ] The Sustainability Plan:

Title	Date	Pages
-------	------	-------

- [ ] Supplementary and other Conditions of the Contract:

Document	Title	Date	Pages
----------	-------	------	-------

- .9 Other documents, if any, listed below:  
(List here any additional documents that are intended to form part of the Contract Documents. AIA Document A232–2019 provides that the advertisement or invitation to bid, Instructions to Bidders, sample forms, the Contractor's bid or proposal, portions of Addenda relating to bidding or proposal requirements, and other information furnished by the Owner in anticipation of receiving bids or proposals, are not part of the Contract Documents unless enumerated in this Agreement. Any such documents should be listed here only if intended to be part of the Contract Documents.)

Exhibit C – Prevailing Rate of Wages Specification 007343 outlining responsibility and instructions to obtain the Prevailing Wage Schedule and respective updates.

*Execution of the Agreement acknowledges the receipt of these Exhibits and access to this information hereto.*

This Agreement is entered into as of the day and year first written above.

\_\_\_\_\_  
OWNER (Signature)

\_\_\_\_\_  
CONTRACTOR (Signature)

\_\_\_\_\_  
(Printed name and title)

\_\_\_\_\_  
(Printed name and title)

# AIA® Document A312® – 2010

## Payment Bond

**CONTRACTOR:**

(Name, legal status and address)

**SURETY:**

(Name, legal status and principal place of business)

**OWNER:**

(Name, legal status and address)

City School District of the City of New Rochelle  
515 North Avenue  
New Rochelle, New York 10801

**CONSTRUCTION CONTRACT**

Date:

Amount: \$

(Row deleted)

City School District of New Rochelle - New Rochelle 2023 Capital Project - Phase 1

Henry Barnard Elementary School  
129 Barnard Road  
New Rochelle, New York 10801  
SED # 66-11-00-01-0-004-015

Jefferson Elementary School  
131 Weyman Avenue  
New Rochelle, New York 10805  
SED # 66-11-00-01-0-007-016

William b. Ward Elementary School  
311 Broadfield Road  
New Rochelle, New York 10804  
SED # 66-11-00-01-0-013-016

Albert Leonard Middle School  
25 Gerada Lane  
New Rochelle, New York 10804  
SED # 66-11-00-01-0-002-016

New Rochelle High School  
265 Clove Road  
New Rochelle, New York 10801  
SED # 66-11-00-01-0-001-030  
CSArch Project #188-2301

George M. Davis Elementary School  
80 Iselin Drive  
New Rochelle, New York 10804  
SED # 66-11-00-01-0-006-012

**ADDITIONS AND DELETIONS:**

The author of this document has added information needed for its completion. The author may also have revised the text of the original AIA standard form. An *Additions and Deletions Report* that notes added information as well as revisions to the standard form text is available from the author and should be reviewed. A vertical line in the left margin of this document indicates where the author has added necessary information and where the author has added to or deleted from the original AIA text.

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

Any singular reference to Contractor, Surety, Owner or other party shall be considered plural where applicable.

**BOND**

Date:

(Not earlier than Construction Contract Date)

Amount: \$

Modifications to this Bond: ☐ None ☐ See Section 18

**CONTRACTOR AS PRINCIPAL**

Company: (Corporate Seal)

**SURETY**

Company: (Corporate Seal)

Signature: \_\_\_\_\_  
Name and  
Title:

Signature: \_\_\_\_\_  
Name and  
Title:

*(Any additional signatures appear on the last page of this Payment Bond.)*

*(FOR INFORMATION ONLY — Name, address and telephone)*

**AGENT or BROKER:**

**OWNER'S REPRESENTATIVE:**

*(Architect, Engineer or other party:)*

Collins+Scoville Architecture |

Engineering | Construction

Management, D.P.C.

dba CSArch

19 Front Street

Newburgh, New York 12550

*(Row deleted)*

**§ 1** The Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns to the Owner to pay for labor, materials and equipment furnished for use in the performance of the Construction Contract, which is incorporated herein by reference, subject to the following terms.

**§ 2** If the Contractor promptly makes payment of all sums due to Claimants, and defends, indemnifies and holds harmless the Owner from claims, demands, liens or suits by any person or entity seeking payment for labor, materials or equipment furnished for use in the performance of the Construction Contract, then the Surety and the Contractor shall have no obligation under this Bond.

**§ 3** If there is no Owner Default under the Construction Contract, the Surety's obligation to the Owner under this Bond shall arise after the Owner has promptly notified the Contractor and the Surety (at the address described in Section 13) of claims, demands, liens or suits against the Owner or the Owner's property by any person or entity seeking payment for labor, materials or equipment furnished for use in the performance of the Construction Contract and tendered defense of such claims, demands, liens or suits to the Contractor and the Surety.

**§ 4** When the Owner has satisfied the conditions in Section 3, the Surety shall promptly and at the Surety's expense defend, indemnify and hold harmless the Owner against a duly tendered claim, demand, lien or suit.

**§ 5** The Surety's obligations to a Claimant under this Bond shall arise after the following:

**§ 5.1** Claimants, who do not have a direct contract with the Contractor,

- .1 have furnished a written notice of non-payment to the Contractor, stating with substantial accuracy the amount claimed and the name of the party to whom the materials were, or equipment was, furnished or supplied or for whom the labor was done or performed, within ninety (90) days after having last performed labor or last furnished materials or equipment included in the Claim; and
- .2 have sent a Claim to the Surety (at the address described in Section 13).

**§ 5.2** Claimants, who are employed by or have a direct contract with the Contractor, have sent a Claim to the Surety (at the address described in Section 13).

**§ 6** If a notice of non-payment required by Section 5.1.1 is given by the Owner to the Contractor, that is sufficient to satisfy a Claimant's obligation to furnish a written notice of non-payment under Section 5.1.1.

**§ 7** When a Claimant has satisfied the conditions of Sections 5.1 or 5.2, whichever is applicable, the Surety shall promptly and at the Surety's expense take the following actions:

**§ 7.1** Send an answer to the Claimant, with a copy to the Owner, within sixty (60) days after receipt of the Claim, stating the amounts that are undisputed and the basis for challenging any amounts that are disputed; and

**§ 7.2** Pay or arrange for payment of any undisputed amounts.

**§ 7.3** The Surety's failure to discharge its obligations under Section 7.1 or Section 7.2 shall not be deemed to constitute a waiver of defenses the Surety or Contractor may have or acquire as to a Claim, except as to undisputed amounts for which the Surety and Claimant have reached agreement. If, however, the Surety fails to discharge its



obligations under Section 7.1 or Section 7.2, the Surety shall indemnify the Claimant for the reasonable attorney's fees the Claimant incurs thereafter to recover any sums found to be due and owing to the Claimant.

**§ 8** The Surety's total obligation shall not exceed the amount of this Bond, plus the amount of reasonable attorney's fees provided under Section 7.3, and the amount of this Bond shall be credited for any payments made in good faith by the Surety.

**§ 9** Amounts owed by the Owner to the Contractor under the Construction Contract shall be used for the performance of the Construction Contract and to satisfy claims, if any, under any construction performance bond. By the Contractor furnishing and the Owner accepting this Bond, they agree that all funds earned by the Contractor in the performance of the Construction Contract are dedicated to satisfy obligations of the Contractor and Surety under this Bond, subject to the Owner's priority to use the funds for the completion of the work.

**§ 10** The Surety shall not be liable to the Owner, Claimants or others for obligations of the Contractor that are unrelated to the Construction Contract. The Owner shall not be liable for the payment of any costs or expenses of any Claimant under this Bond, and shall have under this Bond no obligation to make payments to, or give notice on behalf of, Claimants or otherwise have any obligations to Claimants under this Bond.

**§ 11** The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders and other obligations.

**§ 12** No suit or action shall be commenced by a Claimant under this Bond other than in a court of competent jurisdiction in the state in which the project that is the subject of the Construction Contract is located or after the expiration of one year from the date (1) on which the Claimant sent a Claim to the Surety pursuant to Section 5.1.2 or 5.2, or (2) on which the last labor or service was performed by anyone or the last materials or equipment were furnished by anyone under the Construction Contract, whichever of (1) or (2) first occurs. If the provisions of this Paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit shall be applicable.

**§ 13** Notice and Claims to the Surety, the Owner or the Contractor shall be mailed or delivered to the address shown on the page on which their signature appears. Actual receipt of notice or Claims, however accomplished, shall be sufficient compliance as of the date received.

**§ 14** When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. When so furnished, the intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

**§ 15** Upon request by any person or entity appearing to be a potential beneficiary of this Bond, the Contractor and Owner shall promptly furnish a copy of this Bond or shall permit a copy to be made.

## **§ 16 Definitions**

**§ 16.1 Claim.** A written statement by the Claimant including at a minimum:

- .1 the name of the Claimant;
- .2 the name of the person for whom the labor was done, or materials or equipment furnished;
- .3 a copy of the agreement or purchase order pursuant to which labor, materials or equipment was furnished for use in the performance of the Construction Contract;
- .4 a brief description of the labor, materials or equipment furnished;
- .5 the date on which the Claimant last performed labor or last furnished materials or equipment for use in the performance of the Construction Contract;
- .6 the total amount earned by the Claimant for labor, materials or equipment furnished as of the date of the Claim;
- .7 the total amount of previous payments received by the Claimant; and
- .8 the total amount due and unpaid to the Claimant for labor, materials or equipment furnished as of the date of the Claim.

**§ 16.2 Claimant.** An individual or entity having a direct contract with the Contractor or with a subcontractor of the Contractor to furnish labor, materials or equipment for use in the performance of the Construction Contract. The term Claimant also includes any individual or entity that has rightfully asserted a claim under an applicable mechanic's lien or similar statute against the real property upon which the Project is located. The intent of this Bond shall be to include without limitation in the terms "labor, materials or equipment" that part of water, gas, power, light, heat, oil, gasoline, telephone service or rental equipment used in the Construction Contract, architectural and engineering services required for performance of the work of the Contractor and the Contractor's subcontractors, and all other items for which a mechanic's lien may be asserted in the jurisdiction where the labor, materials or equipment were furnished.

**§ 16.3 Construction Contract.** The agreement between the Owner and Contractor identified on the cover page, including all Contract Documents and all changes made to the agreement and the Contract Documents.

**§ 16.4 Owner Default.** Failure of the Owner, which has not been remedied or waived, to pay the Contractor as required under the Construction Contract or to perform and complete or comply with the other material terms of the Construction Contract.

**§ 16.5 Contract Documents.** All the documents that comprise the agreement between the Owner and Contractor,

**§ 17** If this Bond is issued for an agreement between a Contractor and subcontractor, the term Contractor in this Bond shall be deemed to be Subcontractor and the term Owner shall be deemed to be Contractor.

**§ 18** Modifications to this bond are as follows:

*(Space is provided below for additional signatures of added parties, other than those appearing on the cover page.)*

**CONTRACTOR AS PRINCIPAL**

**SURETY**

Company:

*(Corporate Seal)*

Company:

*(Corporate Seal)*

Signature: \_\_\_\_\_

Name and Title: \_\_\_\_\_

Address: \_\_\_\_\_

Signature: \_\_\_\_\_

Name and Title: \_\_\_\_\_

Address: \_\_\_\_\_



# AIA® Document A312® – 2010

## Performance Bond

### CONTRACTOR:

(Name, legal status and address)

### SURETY:

(Name, legal status and principal place of business)

### OWNER:

(Name, legal status and address)

City School District of the City of New Rochelle  
515 North Avenue  
New Rochelle, New York 10801

### CONSTRUCTION CONTRACT

Date:

Amount: \$

Description:

(Name and location)

City School District of New Rochelle - New Rochelle 2023 Capital Project - Phase 1

Henry Barnard Elementary School  
129 Barnard Road  
New Rochelle, New York 10801  
SED # 66-11-00-01-0-004-015

Jefferson Elementary School  
131 Weyman Avenue  
New Rochelle, New York 10805  
SED # 66-11-00-01-0-007-016

William b. Ward Elementary School  
311 Broadfield Road  
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SED # 66-11-00-01-0-013-016

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25 Gerada Lane  
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SED # 66-11-00-01-0-002-016

New Rochelle High School  
265 Clove Road  
New Rochelle, New York 10801  
SED # 66-11-00-01-0-001-030  
CSArch Project #188-2301

George M. Davis Elementary School  
80 Iselin Drive  
New Rochelle, New York 10804  
SED # 66-11-00-01-0-006-012

### ADDITIONS AND DELETIONS:

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This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

Any singular reference to Contractor, Surety, Owner or other party shall be considered plural where applicable.

### BOND

Date:

(Not earlier than Construction Contract Date)

Amount: \$

Modifications to this Bond: ☐ None ☐ See Section 16

### CONTRACTOR AS PRINCIPAL

Company: (Corporate Seal)

### SURETY

Company: (Corporate Seal)

Signature: \_\_\_\_\_  
Name and  
Title:

Signature: \_\_\_\_\_  
Name and  
Title:

Init.

AIA Document A312 – 2010 Performance Bond. Copyright © 2010. All rights reserved. "The American Institute of Architects," "American Institute of Architects," "AIA," the AIA Logo, and "AIA Contract Documents" are trademarks of The American Institute of Architects. This document was produced at 14:26:41 ET on 11/28/2023 under Order No.3104238697 which expires on 06/11/2024, is not for resale, is licensed for one-time use only, and may only be used in accordance with the AIA Contract Documents® Terms of Service. To report copyright violations, e-mail docinfo@aiacontracts.com.

User Notes:

(1346909541)

*(Any additional signatures appear on the last page of this Performance Bond.)*

*(FOR INFORMATION ONLY — Name, address and telephone)*

**AGENT or BROKER:**

**OWNER'S REPRESENTATIVE:**

*(Architect, Engineer or other party:)*

Collins+Scoville Architecture |

Engineering | Construction

Management, D.P.C.

dba CSArch

19 Front Street

Newburgh, New York 12550

*(Row deleted)*

**§ 1** The Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns to the Owner for the performance of the Construction Contract, which is incorporated herein by reference.

**§ 2** If the Contractor performs the Construction Contract, the Surety and the Contractor shall have no obligation under this Bond, except when applicable to participate in a conference as provided in Section 3.

**§ 3** If there is no Owner Default under the Construction Contract, the Surety's obligation under this Bond shall arise after

- .1 the Owner first provides notice to the Contractor and the Surety that the Owner is considering declaring a Contractor Default. Such notice shall indicate whether the Owner is requesting a conference among the Owner, Contractor and Surety to discuss the Contractor's performance. If the Owner does not request a conference, the Surety may, within five (5) business days after receipt of the Owner's notice, request such a conference. If the Surety timely requests a conference, the Owner shall attend. Unless the Owner agrees otherwise, any conference requested under this Section 3.1 shall be held within ten (10) business days of the Surety's receipt of the Owner's notice. If the Owner, the Contractor and the Surety agree, the Contractor shall be allowed a reasonable time to perform the Construction Contract, but such an agreement shall not waive the Owner's right, if any, subsequently to declare a Contractor Default;
- .2 the Owner declares a Contractor Default, terminates the Construction Contract and notifies the Surety; and
- .3 the Owner has agreed to pay the Balance of the Contract Price in accordance with the terms of the Construction Contract to the Surety or to a contractor selected to perform the Construction Contract.

**§ 4** Failure on the part of the Owner to comply with the notice requirement in Section 3.1 shall not constitute a failure to comply with a condition precedent to the Surety's obligations, or release the Surety from its obligations, except to the extent the Surety demonstrates actual prejudice.

**§ 5** When the Owner has satisfied the conditions of Section 3, the Surety shall promptly and at the Surety's expense take one of the following actions:

**§ 5.1** Arrange for the Contractor, with the consent of the Owner, to perform and complete the Construction Contract;

**§ 5.2** Undertake to perform and complete the Construction Contract itself, through its agents or independent contractors;

**§ 5.3** Obtain bids or negotiated proposals from qualified contractors acceptable to the Owner for a contract for performance and completion of the Construction Contract, arrange for a contract to be prepared for execution by the Owner and a contractor selected with the Owner's concurrence, to be secured with performance and payment bonds executed by a qualified surety equivalent to the bonds issued on the Construction Contract, and pay to the Owner the amount of damages as described in Section 7 in excess of the Balance of the Contract Price incurred by the Owner as a result of the Contractor Default; or

**§ 5.4** Waive its right to perform and complete, arrange for completion, or obtain a new contractor and with reasonable promptness under the circumstances:

- .1 After investigation, determine the amount for which it may be liable to the Owner and, as soon as practicable after the amount is determined, make payment to the Owner; or
- .2 Deny liability in whole or in part and notify the Owner, citing the reasons for denial.

**§ 6** If the Surety does not proceed as provided in Section 5 with reasonable promptness, the Surety shall be deemed to be in default on this Bond seven days after receipt of an additional written notice from the Owner to the Surety demanding that the Surety perform its obligations under this Bond, and the Owner shall be entitled to enforce any remedy available to the Owner. If the Surety proceeds as provided in Section 5.4, and the Owner refuses the payment or the Surety has denied liability, in whole or in part, without further notice the Owner shall be entitled to enforce any remedy available to the Owner.

**§ 7** If the Surety elects to act under Section 5.1, 5.2 or 5.3, then the responsibilities of the Surety to the Owner shall not be greater than those of the Contractor under the Construction Contract, and the responsibilities of the Owner to the Surety shall not be greater than those of the Owner under the Construction Contract. Subject to the commitment by the Owner to pay the Balance of the Contract Price, the Surety is obligated, without duplication, for

- .1 the responsibilities of the Contractor for correction of defective work and completion of the Construction Contract;
- .2 additional legal, design professional and delay costs resulting from the Contractor's Default, and resulting from the actions or failure to act of the Surety under Section 5; and
- .3 liquidated damages, or if no liquidated damages are specified in the Construction Contract, actual damages caused by delayed performance or non-performance of the Contractor.

**§ 8** If the Surety elects to act under Section 5.1, 5.3 or 5.4, the Surety's liability is limited to the amount of this Bond.

**§ 9** The Surety shall not be liable to the Owner or others for obligations of the Contractor that are unrelated to the Construction Contract, and the Balance of the Contract Price shall not be reduced or set off on account of any such unrelated obligations. No right of action shall accrue on this Bond to any person or entity other than the Owner or its heirs, executors, administrators, successors and assigns.

**§ 10** The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders and other obligations.

**§ 11** Any proceeding, legal or equitable, under this Bond may be instituted in any court of competent jurisdiction in the location in which the work or part of the work is located and shall be instituted within two years after a declaration of Contractor Default or within two years after the Contractor ceased working or within two years after the Surety refuses or fails to perform its obligations under this Bond, whichever occurs first. If the provisions of this Paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit shall be applicable.

**§ 12** Notice to the Surety, the Owner or the Contractor shall be mailed or delivered to the address shown on the page on which their signature appears.

**§ 13** When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. When so furnished, the intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

#### **§ 14 Definitions**

**§ 14.1 Balance of the Contract Price.** The total amount payable by the Owner to the Contractor under the Construction Contract after all proper adjustments have been made, including allowance to the Contractor of any amounts received or to be received by the Owner in settlement of insurance or other claims for damages to which the Contractor is entitled, reduced by all valid and proper payments made to or on behalf of the Contractor under the Construction Contract.

**§ 14.2 Construction Contract.** The agreement between the Owner and Contractor identified on the cover page, including all Contract Documents and changes made to the agreement and the Contract Documents.

**§ 14.3 Contractor Default.** Failure of the Contractor, which has not been remedied or waived, to perform or otherwise to comply with a material term of the Construction Contract.

**§ 14.4 Owner Default.** Failure of the Owner, which has not been remedied or waived, to pay the Contractor as required under the Construction Contract or to perform and complete or comply with the other material terms of the Construction Contract.

**§ 14.5 Contract Documents.** All the documents that comprise the agreement between the Owner and Contractor.

§ 15 If this Bond is issued for an agreement between a Contractor and subcontractor, the term Contractor in this Bond shall be deemed to be Subcontractor and the term Owner shall be deemed to be Contractor.

§ 16 Modifications to this bond are as follows:

*(Space is provided below for additional signatures of added parties, other than those appearing on the cover page.)*

**CONTRACTOR AS PRINCIPAL**

**SURETY**

Company: \_\_\_\_\_  
(Corporate Seal)

Company: \_\_\_\_\_  
(Corporate Seal)

Signature: \_\_\_\_\_

Signature: \_\_\_\_\_

Name and Title: \_\_\_\_\_

Name and Title: \_\_\_\_\_

Address: \_\_\_\_\_

Address: \_\_\_\_\_

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# AIA<sup>®</sup> Document C106™ – 2013

## Digital Data Licensing Agreement

**AGREEMENT** made as of the \_\_\_\_\_ day of \_\_\_\_\_ in the year Two Thousand Twenty-Three  
(In words, indicate day, month and year.)

**BETWEEN** the Party transmitting Digital Data ("Transmitting Party"):  
(Name, address and contact information, including electronic addresses)

Collins+Scoville Architecture | Engineering | Construction Management, D.P.C.  
dba CSArch  
19 Front Street  
Newburgh, New York 12550

and the Party receiving the Digital Data ("Receiving Party"):  
(Name, address and contact information, including electronic addresses)

>

for the following Project:  
(Name and location or address)

City School District of New Rochelle - New Rochelle 2023 Capital Project - Phase 1

Henry Barnard Elementary School  
129 Barnard Road  
New Rochelle, New York 10801  
SED # 66-11-00-01-0-004-015

Jefferson Elementary School  
131 Weyman Avenue  
New Rochelle, New York 10805  
SED # 66-11-00-01-0-007-016

William b. Ward Elementary School  
311 Broadfield Road  
New Rochelle, New York 10804  
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265 Clove Road  
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SED # 66-11-00-01-0-001-030  
CSArch Project #188-2301

George M. Davis Elementary School  
80 Iselin Drive  
New Rochelle, New York 10804  
SED # 66-11-00-01-0-006-012

The Transmitting Party and Receiving Party agree as follows.

### ADDITIONS AND DELETIONS:

The author of this document has added information needed for its completion. The author may also have revised the text of the original AIA standard form. An *Additions and Deletions Report* that notes added information as well as revisions to the standard form text is available from the author and should be reviewed. A vertical line in the left margin of this document indicates where the author has added necessary information and where the author has added to or deleted from the original AIA text.

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## TABLE OF ARTICLES

1	GENERAL PROVISIONS
2	TRANSMISSION OF DIGITAL DATA
3	LICENSE CONDITIONS
4	LICENSING FEE OR OTHER COMPENSATION
5	DIGITAL DATA

### ARTICLE 1 GENERAL PROVISIONS

§ 1.1 The purpose of this Agreement is to grant a license from the Transmitting Party to the Receiving Party for the Receiving Party's use of Digital Data on the Project, and to set forth the license terms.

§ 1.2 This Agreement is the entire and integrated agreement between the parties. Except as specifically set forth herein, this Agreement does not create any other contractual relationship between the parties.

§ 1.3 For purposes of this Agreement, the term Digital Data is defined to include only those items identified in Article 5 below.

§ 1.3.1 Confidential Digital Data is defined as Digital Data containing confidential or business proprietary information that the Transmitting Party designates and clearly marks as "confidential."

### ARTICLE 2 TRANSMISSION OF DIGITAL DATA

§ 2.1 The Transmitting Party grants to the Receiving Party a nonexclusive limited license to use the Digital Data identified in Article 5 solely and exclusively to perform services for, or construction of, the Project in accordance with the terms and conditions set forth in this Agreement.

§ 2.2 The transmission of Digital Data constitutes a warranty by the Transmitting Party to the Receiving Party that the Transmitting Party is the copyright owner of the Digital Data, or otherwise has permission to transmit the Digital Data to the Receiving Party for its use on the Project in accordance with the terms and conditions of this Agreement.

§ 2.3 If the Transmitting Party transmits Confidential Digital Data, the transmission of such Confidential Digital Data constitutes a warranty to the Receiving Party that the Transmitting Party is authorized to transmit the Confidential Digital Data. If the Receiving Party receives Confidential Digital Data, the Receiving Party shall keep the Confidential Digital Data strictly confidential and shall not disclose it to any other person or entity except as set forth in Section 2.3.1.

§ 2.3.1 The Receiving Party may disclose the Confidential Digital Data as required by law or court order, including a subpoena or other form of compulsory legal process issued by a court or governmental entity. The Receiving Party may also disclose the Confidential Digital Data to its employees, consultants or contractors in order to perform services or work solely and exclusively for the Project, provided those employees, consultants and contractors are subject to the restrictions on the disclosure and use of Confidential Digital Data as set forth in this Agreement.

§ 2.4 The Transmitting Party retains its rights in the Digital Data. By transmitting the Digital Data, the Transmitting Party does not grant to the Receiving Party an assignment of those rights; nor does the Transmitting Party convey to the Receiving Party any right in the software used to generate the Digital Data.

§ 2.5 To the fullest extent permitted by law, the Receiving Party shall indemnify and defend the Transmitting Party from and against all claims arising from or related to the Receiving Party's modification to, or unlicensed use of, the Digital Data.

### ARTICLE 3 LICENSE CONDITIONS

The parties agree to the following conditions on the limited license granted in Section 2.1:

*(State below rights or restrictions applicable to the Receiving Party's use of the Digital Data, requirements for data format, transmission method or other conditions on data to be transmitted.)*

Revit and/or AutoCAD files will be provided as an accommodation at your request. Due to the nature of electronic data files, the Transmittal Party does not guarantee that the information in these files is identical to the bidding documents. Bid addenda may not have been incorporated into these files. If there are any discrepancies, the bidding documents and subsequent addenda constitute the contract requirements.

The Receiving Party agrees to transmit to the Transmitting Party at the end of the term of this agreement the Revit model including any information added by the Receiving Party.

#### **ARTICLE 4 LICENSING FEE OR OTHER COMPENSATION**

The Receiving Party agrees to pay the Transmitting Party the following fee or other compensation for the Receiving Party's use of the Digital Data:

*(State the fee, in dollars, or other method by which the Receiving Party will compensate the Transmitting Party for the Receiving Party's use of the Digital Data.)*

N/A

#### **ARTICLE 5 DIGITAL DATA**

The Parties agree that the following items constitute the Digital Data subject to the license granted in Section 2.1: *(Identify below, in detail, the information created or stored in digital form the parties intend to be subject to this Agreement.)*

Revit model  
AutoCAD plans

This Agreement is entered into as of the day and year first written above and will terminate upon Substantial Completion of the Project, as that term is defined in AIA Document A201™-2007, General Conditions of the Contract for Construction, unless otherwise agreed by the parties and set forth below.

*(Indicate when this Agreement will terminate, if other than the date of Substantial Completion.)*

\_\_\_\_\_  
**TRANSMITTING PARTY** *(Signature)*

\_\_\_\_\_  
**RECEIVING PARTY** *(Signature)*

\_\_\_\_\_  
*(Printed name and title)*

\_\_\_\_\_  
*(Printed name and title)*

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Application and Certificate for Payment, Construction Manager as Adviser Edition

TO OWNER:

City School District of the City of New Rochelle  
515 North Avenue  
New Rochelle, New York 10801

PROJECT:

New Rochelle 2023 Cap. Proj. Ph. 1

APPLICATION NO:

001

Distribution to:

FROM CONTRACTOR:

CONTRACT FOR:

VIA CONSTRUCTION MANAGER:

VIA ARCHITECT:

Jacobobs Project Management Co.

CSArch

PERIOD TO:

CONTRACT DATE:

PROJECT NOS:

188 / 2301 /

OWNER: ☒

CONSTRUCTION MANAGER: ☒

ARCHITECT: ☒

CONTRACTOR: ☒

FIELD: ☐

OTHER: ☐

**CONTRACTOR'S APPLICATION FOR PAYMENT**  
Application is made for payment, as shown below, in connection with the Contract. AIA Document G703™, Continuation Sheet, is attached.

1. ORIGINAL CONTRACT SUM

2. NET CHANGES IN THE WORK

3. CONTRACT SUM TO DATE (Line 1 ± 2)

4. TOTAL COMPLETED AND STORED TO DATE (Column G on G703)

5. RETAINAGE:

a. 0 % of Completed Work (Column D + E on G703)

b. 0 % of Stored Material (Column F on G703)

0.00

0.00

0.00 By: 0.00

0.00 State of: County of: Subscribed and sworn to before me this day of Notary Public: My Commission expires:

Date:

**CERTIFICATE FOR PAYMENT**  
Total Retainage (Lines 5a + 5b or Total in Column I of G703) 0.00  
In accordance with the Contract Documents, based on evaluations of the Work and the data comprising this application, the Construction Manager and Architect certify to the Owner that to the best of their knowledge, information and belief the Work has progressed as indicated, the quality of the Work is in accordance with the Contract Documents, and the Contractor is entitled to payment of the AMOUNT CERTIFIED.

6. TOTAL EARNED LESS RETAINAGE (Line 4 minus Line 5 Total)

7. LESS PREVIOUS CERTIFICATES FOR PAYMENT (Line 6 from prior Certificate)

8. CURRENT PAYMENT DUE

9. BALANCE TO FINISH, INCLUDING RETAINAGE (Line 3 minus Line 6)

0.00

0.00

0.00

0.00

AMOUNT CERTIFIED

0.00

(Attach explanation if amount certified differs from the amount applied. Initial all figures on this Application and on the Continuation Sheet that are changed to conform with the amount certified.)

CONSTRUCTION MANAGER:

By: <b>ARCHITECT:</b> (NOTE: If multiple Contractors are responsible for performing portions of the Project, the Architect's Certification is not required.)		Date:
By: This Certificate is not negotiable. The AMOUNT CERTIFIED is payable only to the Contractor named herein. Issuance, payment and acceptance of payment are without prejudice to any rights of the Owner or Contractor under this Contract.		Date:
SUMMARY OF CHANGES IN THE WORK	ADDITIONS	DEDUCTIONS
Total changes approved in previous months by Owner	0.00	0.00
Total approved this month including Construction Change Directives	0.00	0.00
TOTALS	0.00	0.00
NET CHANGES IN THE WORK		0.00

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AIA Document G702®, Application and Certification for Payment, or G732™, Application and Certificate for Payment, Construction Manager as Adviser Edition, containing Contractor's signed certification is attached.

Use Column I on Contracts where variable retainage for line items may apply.

APPLICATION NO:	001
APPLICATION DATE:	
PERIOD TO:	
ARCHITECT'S PROJECT NO:	199 2201

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# AIA® Document G706® – 1994

## Contractor's Affidavit of Payment of Debts and Claims

<b>PROJECT:</b> <i>(Name and address)</i> City School District of New Rochelle - New Rochelle 2023 Capital Project - Phase 1 Henry Barnard Elementary School 129 Barnard Road New Rochelle, New York 10801 SED # 66-11-00-01-0-004-015 Jefferson Elementary School 131 Weyman Avenue New Rochelle, New York 10805 SED # 66-11-00-01-0-007-016 William B. Ward Elementary School 311 Broadfield Road New Rochelle, New York 10804 SED # 66-11-00-01-0-013-016 Albert Leonard Middle School 25 Gerada Lane New Rochelle, New York 10804 SED # 66-11-00-01-0-002-016 New Rochelle High School 265 Clove Road New Rochelle, New York 10801 SED # 66-11-00-01-0-001-030 George M. Davis Elementary School 80 Iselin Drive New Rochelle, New York 10804 SED # 66-11-00-01-0-006-012	<b>ARCHITECT'S PROJECT NUMBER:</b> 188-2301	<b>OWNER:</b> <input checked="" type="checkbox"/> <b>ARCHITECT:</b> <input checked="" type="checkbox"/> <b>CONTRACTOR:</b> <input checked="" type="checkbox"/> <b>SURETY:</b> <input type="checkbox"/> <b>OTHER:</b> <input checked="" type="checkbox"/>
<b>TO OWNER:</b> <i>(Name and address)</i> City School District of the City of New Rochelle 515 North Avenue New Rochelle, New York 10801	<b>CONTRACT FOR:</b>	
	<b>CONTRACT DATED:</b>	

**STATE OF:** New York  
**COUNTY OF:**

The undersigned hereby certifies that, except as listed below, payment has been made in full and all obligations have otherwise been satisfied for all materials and equipment furnished, for all work, labor, and services performed, and for all known indebtedness and claims against the Contractor for damages arising in any manner in connection with the performance of the Contract referenced above for which the Owner or Owner's property might in any way be held responsible or encumbered.

**EXCEPTIONS:**

**SUPPORTING DOCUMENTS ATTACHED HERETO:**

1. Consent of Surety to Final Payment. Whenever Surety is involved, Consent of Surety is required. AIA Document G707, Consent of Surety, may be used for this purpose

Indicate Attachment ☐ Yes ☒ No

*The following supporting documents should be attached hereto if required by the Owner:*

1. Contractor's Release or Waiver of Liens, conditional upon receipt of final payment.
2. Separate Releases or Waivers of Liens from Subcontractors and material and equipment suppliers, to the extent required by the Owner, accompanied by a list thereof.
3. Contractor's Affidavit of Release of Liens (AIA Document G706A).

**CONTRACTOR:** *(Name and address)*

BY:

*(Signature of authorized representative)*

*(Printed name and title)*

Subscribed and sworn to before me on this date:

Notary Public:

My Commission Expires:

# AIA® Document G706®A – 1994

## Contractor's Affidavit of Release of Liens

**PROJECT:** *(Name and address)*  
City School District of New Rochelle -  
New Rochelle 2023 Capital Project -  
Phase 1

Henry Barnard Elementary School  
129 Barnard Road  
New Rochelle, New York 10801  
SED # 66-11-00-01-0-004-015  
Jefferson Elementary School  
131 Weyman Avenue  
New Rochelle, New York 10805  
SED # 66-11-00-01-0-007-016  
William B. Ward Elementary School  
311 Broadfield Road  
New Rochelle, New York 10804  
SED # 66-11-00-01-0-013-016  
Albert Leonard Middle School  
25 Gerada Lane  
New Rochelle, New York 10804  
SED # 66-11-00-01-0-002-016  
New Rochelle High School  
265 Clove Road  
New Rochelle, New York 10801  
SED # 66-11-00-01-0-001-030  
George M. Davis Elementary School  
80 Iselin Drive  
New Rochelle, New York 10804  
SED # 66-11-00-01-0-006-012

**ARCHITECT'S PROJECT NUMBER:**  
188-2301

**CONTRACT FOR:**

**OWNER:** ☒

**ARCHITECT:** ☒

**CONTRACTOR:** ☒

**SURETY:** ☐

**OTHER:** ☒

**TO OWNER:** *(Name and address)*  
City School District of the City of New  
Rochelle  
515 North Avenue  
New Rochelle, New York 10801

**CONTRACT DATED:**

**STATE OF:** New York

**COUNTY OF:**

The undersigned hereby certifies that to the best of the undersigned's knowledge, information and belief, except as listed below, the Releases or Waivers of Lien attached hereto include the Contractor, all Subcontractors, all suppliers of materials and equipment, and all performers of Work, labor or services who have or may have liens or encumbrances or the right to assert liens or encumbrances against any property of the Owner arising in any manner out of the performance of the Contract referenced above.

**EXCEPTIONS:**

**SUPPORTING DOCUMENTS ATTACHED HERETO:**

1. Contractor's Release or Waiver of Liens, conditional upon receipt of final payment.
2. Separate Releases or Waivers of Liens from Subcontractors and material and equipment suppliers, to the extent required by the Owner, accompanied by a list thereof.

**CONTRACTOR:** *(Name and address)*

**BY:**

\_\_\_\_\_  
*(Signature of authorized representative)*

\_\_\_\_\_  
*(Printed name and title)*

Subscribed and sworn to before me on this date:

Notary Public:

My Commission Expires:



# AIA® Document G707™ – 1994

## Consent Of Surety to Final Payment

**PROJECT:** *(Name and address)*

City School District of New Rochelle - New  
Rochelle 2023 Capital Project - Phase 1  
Henry Barnard Elementary School  
129 Barnard Road  
New Rochelle, New York 10801  
SED # 66-11-00-01-0-004-015  
Jefferson Elementary School  
131 Weyman Avenue  
New Rochelle, New York 10805  
SED # 66-11-00-01-0-007-016  
William B. Ward Elementary School  
311 Broadfield Road  
New Rochelle, New York 10804  
SED # 66-11-00-01-0-013-016  
Albert Leonard Middle School  
25 Gerada Lane  
New Rochelle, New York 10804  
SED # 66-11-00-01-0-002-016  
New Rochelle High School  
265 Clove Road  
New Rochelle, New York 10801  
SED # 66-11-00-01-0-001-030  
George M. Davis Elementary School  
80 Iselin Drive  
New Rochelle, New York 10804  
SED # 66-11-00-01-0-006-012

**ARCHITECT'S PROJECT NUMBER:** 188-2301**OWNER:** ☒**ARCHITECT:** ☒**CONTRACTOR:** ☒**SURETY:** ☐**OTHER:** ☒**CONTRACT FOR:****TO OWNER:** *(Name and address)*

City School District of the City of New  
Rochelle  
515 North Avenue  
New Rochelle, New York 10801

**CONTRACT DATED:**

In accordance with the provisions of the Contract between the Owner and the Contractor as indicated above, the  
*(Insert name and address of Surety)*

on bond of  
*(Insert name and address of Contractor)*

, SURETY,

hereby approves of the final payment to the Contractor, and agrees that final payment to the Contractor shall not relieve the Surety of any of  
its obligations to  
*(Insert name and address of Owner)*

, CONTRACTOR,

as set forth in said Surety's bond.

, OWNER,

IN WITNESS WHEREOF, the Surety has hereunto set its hand on this date:  
(Insert in writing the month followed by the numeric date and year.)

---

(Surety)

---

(Signature of authorized representative)

Attest:  
(Seal):

---

(Printed name and title)

# AIA® Document A232® – 2019

## **General Conditions of the Contract for Construction, Construction Manager as Adviser Edition**

### **for the following PROJECT:**

*(Name, and location or address)*

City School District of New Rochelle - New Rochelle 2023 Capital Project - Phase 1

Henry Barnard Elementary School

129 Barnard Road

New Rochelle, New York 10801

SED # 66-11-00-01-0-004-015

Jefferson Elementary School

131 Weyman Avenue

New Rochelle, New York 10805

SED # 66-11-00-01-0-007-016

William b. Ward Elementary School

311 Broadfield Road

New Rochelle, New York 10804

SED # 66-11-00-01-0-013-016

Albert Leonard Middle School

25 Gerada Lane

New Rochelle, New York 10804

SED # 66-11-00-01-0-002-016

New Rochelle High School

265 Clove Road

New Rochelle, New York 10801

SED # 66-11-00-01-0-001-030

CSArch Project #188-2301

George M. Davis Elementary School

80 Iselin Drive

New Rochelle, New York 10804

SED # 66-11-00-01-0-006-012

### **THE CONSTRUCTION MANAGER:**

*(Name, legal status, and address)*

Jacobs Project Management Co.

500 7<sup>th</sup> Avenue, 17<sup>th</sup> Floor

New York, New York 12550

### **THE OWNER:**

*(Name, legal status, and address)*

City School District of the City of New Rochelle

515 North Avenue

New Rochelle, New York 10801

### **THE ARCHITECT:**

*(Name, legal status, and address)*

Collins+Scoville Architecture | Engineering | Construction Management D.P.C.

dba CSArch

19 Front Street

Newburgh, New York 12550

### **ADDITIONS AND DELETIONS:**

The author of this document has added information needed for its completion. The author may also have revised the text of the original AIA standard form. An *Additions and Deletions Report* that notes added information as well as revisions to the standard form text is available from the author and should be reviewed. A vertical line in the left margin of this document indicates where the author has added necessary information and where the author has added to or deleted from the original AIA text.

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

This document is intended to be used in conjunction with AIA Documents A132™–2019, Standard Form of Agreement Between Owner and Contractor, Construction Manager as Adviser Edition; B132™–2019, Standard Form of Agreement Between Owner and Architect, Construction Manager as Adviser Edition; and C132™–2019, Standard Form of Agreement Between Owner and Construction Manager as Adviser.

## TABLE OF ARTICLES

1	GENERAL PROVISIONS
2	OWNER
3	CONTRACTOR
4	ARCHITECT AND CONSTRUCTION MANAGER
5	SUBCONTRACTORS
6	CONSTRUCTION BY OWNER OR BY SEPARATE CONTRACTORS
7	CHANGES IN THE WORK
8	TIME
9	PAYMENTS AND COMPLETION
10	PROTECTION OF PERSONS AND PROPERTY
11	INSURANCE AND BONDS
12	UNCOVERING AND CORRECTION OF WORK
13	MISCELLANEOUS PROVISIONS
14	TERMINATION OR SUSPENSION OF THE CONTRACT
15	CLAIMS AND DISPUTES



## ARTICLE 1 GENERAL PROVISIONS

### § 1.1 Basic Definitions

**§ 1.1.1 The Contract Documents.** The Contract Documents are enumerated in the Agreement between the Owner and Contractor (hereinafter the Agreement) and consist of the Agreement, Conditions of the Contract (General, Supplementary and other Conditions), Drawings, Specifications, Addenda issued prior to execution of the Contract, other documents listed in the Agreement, and Modifications issued after execution of the Contract. A Modification is (1) a written amendment to the Contract signed by both parties, (2) a Change Order, (3) a Construction Change Directive, or (4) a written order for a minor change in the Work issued by the Architect. Unless specifically enumerated in the Agreement, the Contract Documents do not include the advertisement or invitation to bid, Instructions to Bidders, sample forms, other information furnished by the Owner in anticipation of receiving bids or proposals, the Contractor's bid or proposal, or portions of addenda relating to bidding or proposal requirements.

**§ 1.1.2 The Contract.** The Contract Documents form the Contract for Construction. The Contract represents the entire and integrated agreement between the parties hereto and supersedes prior negotiations, representations, or agreements, either written or oral. The Contract may be amended or modified only by a Modification. The Contract Documents shall not be construed to create a contractual relationship of any kind (1) between the Contractor and the Architect or the Architect's consultants, (2) between the Owner and the Construction Manager or the Construction Manager's consultants, (3) between the Owner and the Architect or the Architect's consultants, (4) between the Contractor and the Construction Manager or the Construction Manager's consultants, (5) between the Owner and a Subcontractor or Sub-subcontractor (6) between the Construction Manager and the Architect, or (7) between any persons or entities other than the Owner and Contractor. The Construction Manager and Architect shall, however, be entitled to performance and enforcement of obligations under the Contract intended to facilitate performance of their duties.

**§ 1.1.3 The Work.** The term "Work" means the construction and services required by the Contract Documents, whether completed or partially completed, and includes all other labor, materials, equipment, and services provided or to be provided by the Contractor to fulfill the Contractor's obligations. The Work may constitute the whole or a part of the Project.

**§ 1.1.4 The Project.** The Project is the total construction of which the Work performed under the Contract Documents may be the whole or a part and which may include construction by other Contractors, and by the Owner's own forces and Separate Contractors.

**§ 1.1.5 Contractors.** Contractors are persons or entities, other than the Contractor or Separate Contractors, who perform Work under contracts with the Owner that are administered by the Architect and Construction Manager.

**§ 1.1.6 Separate Contractors.** Separate Contractors are persons or entities who perform construction under separate contracts with the Owner not administered by the Architect and Construction Manager.

**§ 1.1.7 The Drawings.** The Drawings are the graphic and pictorial portions of the Contract Documents showing the design, location and dimensions of the Work, generally including plans, elevations, sections, details, schedules, and diagrams.

**§ 1.1.8 The Specifications.** The Specifications are that portion of the Contract Documents consisting of the written requirements for materials, equipment, systems, standards and workmanship for the Work, and performance of related services.

**§ 1.1.9 Instruments of Service.** Instruments of Service are representations, in any medium of expression now known or later developed, of the tangible and intangible creative work performed by the Architect and the Architect's consultants under their respective professional services agreements. Instruments of Service may include, without limitation, studies, surveys, models, sketches, drawings, specifications, and other similar materials.

**§ 1.1.10 Initial Decision Maker.** The Initial Decision Maker is the person identified in the Agreement to render initial decisions on Claims in accordance with Section 15.2. The Initial Decision Maker shall not show partiality to the Owner or Contractor and shall not be liable for results of interpretations or decisions rendered in good faith.

## **§ 1.2 Correlation and Intent of the Contract Documents**

**§ 1.2.1** The intent of the Contract Documents is to include all items necessary for the proper execution and completion of the Work by the Contractor. If, in the interpretation of Contract Documents, conflicting requirements within the Drawings and Specifications occur, or if it appears that the Drawings and Specifications are not in agreement, the requirement to be followed shall be decided by the Architect. Addenda supersede the provisions they amended. The Contract Documents are complementary, and what is required by one shall be as binding as if required by all; performance by the Contractor shall be required only to the extent consistent with the Contract Documents and reasonably inferable from them as being necessary to produce the indicated results.

1. All dimensions shown on the Drawings are for bidding purposes only. It is the responsibility of the Contractor to verify all dimensions in the field to ensure proper and accurate fit of materials and items to be installed.
2. The lists of equipment, tabulations of data and schedules appearing in the Specifications or Drawings are included for assistance and guidance in arriving at a more complete understanding of the intended installation. They are not intended, or to be construed, as relieving the responsibility of the Contractor or any of the Prime Contractors in making their own takeoffs.
3. It is intended that all mechanical and electrical systems will be complete and in proper operation and that all construction components will be complete and in compliance with accepted construction practice upon completion of the Work. Even if items are missing from the Plans and/or Specifications, but are normally required for proper operation of mechanical and electrical systems, or to complete otherwise incomplete construction or to meet governing code requirements, they shall be included by the Contractor, unless he sought and received contradictory interpretation or clarification from the Architect in writing.

**§ 1.2.1.1** The invalidity of any provision of the Contract Documents shall not invalidate the Contract or its remaining provisions. If it is determined that any provision of the Contract Documents violates any law, or is otherwise invalid or unenforceable, then that provision shall be revised to the extent necessary to make that provision legal and enforceable. In such case the Contract Documents shall be construed, to the fullest extent permitted by law, to give effect to the parties' intentions and purposes in executing the Contract.

**§ 1.2.2** Organization of the Specifications into divisions, sections and articles, and arrangement of Drawings shall not control the Contractor in dividing the Work among Subcontractors or in establishing the extent of Work to be performed by any trade.

1. Sections of the General Requirements, Division 01, govern the execution of all remaining Divisions of the Specifications.
2. It shall be the Contractor's responsibility, when subcontracting any portion of Work, to arrange or group items of work under particular trades to conform with prevailing customs of the trade, regardless of the particular Divisions and Sections of the Specifications in which the work is described.

**§ 1.2.3** Unless otherwise stated in the Contract Documents, words that have well-known technical or construction industry meanings are used in the Contract Documents in accordance with such recognized meanings.

**§ 1.2.4** Within the Contract Documents for which each Prime Contractor is responsible, any Work included by reference in any section to another Specification's Section shall be included as Work under the Contract, whether or not it is called for under the Section referred to. Failure to cross-reference such items shall not relieve the Contractor or any Prime Contractor from the obligations to provide such work.

## **§ 1.3 Capitalization**

Terms capitalized in these General Conditions include those that are (1) specifically defined, (2) the titles of numbered articles, or (3) the titles of other documents published by the American Institute of Architects.

## **§ 1.4 Interpretation**

In the interest of brevity, the Contract Documents frequently omit modifying words such as "all" and "any" and articles such as "the" and "an," but the fact that a modifier or an article is absent from one statement and appears in another is not intended to affect the interpretation of either statement.

## **§ 1.5 Ownership and Use of Drawings, Specifications, and Other Instruments of Service**

**§ 1.5.1** The Architect and the Architect's consultants shall be deemed the authors and owners of their respective Instruments of Service, including the Drawings and Specifications, and retain all common law, statutory, and other reserved rights in their Instruments of Service, including copyrights. The Contractor, Subcontractors, sub-subcontractors, and suppliers shall not own or claim a copyright in the Instruments of Service. Submittal or distribution to meet official regulatory requirements or for other purposes in connection with the Project is not to be construed as publication in derogation of the Architect's or Architect's consultants' reserved rights.

**§ 1.5.2** The Contractor, Subcontractors, Sub-subcontractors, and suppliers are authorized to use and reproduce the Instruments of Service provided to them, subject to any protocols established pursuant to Sections 1.7 and 1.8, solely and exclusively for execution of the Work. All copies made under this authorization shall bear the copyright notice, if any, shown on the Instruments of Service. The Contractor, Subcontractors, Sub-subcontractors, and suppliers may not use the Instruments of Service on other projects or for additions to the Project outside the scope of the Work without the specific written consent of the Owner, Architect, and the Architect's consultants.

## **§ 1.6 Notice**

**§ 1.6.1** Except as otherwise provided in Section 1.6.2, where the Contract Documents require one party to notify or give notice to the other party, such notice shall be provided in writing to the designated representative of the party to whom the notice is addressed and shall be deemed to have been duly served if delivered in person, by mail, by courier, or by electronic transmission if a method for electronic transmission is set forth in the Agreement.

**§ 1.6.2** Notice of Claims as provided in Section 15.1.3 shall be provided in writing and shall be deemed to have been duly served only if delivered to the designated representative of the party to whom the notice is addressed by certified or registered mail, or by courier providing proof of delivery.

## **§ 1.7 Digital Data Use and Transmission**

The parties shall agree upon protocols governing the transmission and use of Instruments of Service or any other information or documentation in digital form. The parties will use AIA Document E203™–2013, Building Information Modeling and Digital Data Exhibit, to establish the protocols for the development, use, transmission, and exchange of digital data.

If the parties intend to transmit Instruments of Service or any other information or documentation in digital form, they shall endeavor to establish necessary protocols governing such transmissions, unless otherwise already provided in the Agreement or the Contract Documents.

### **§ 1.7.2 Contractor's Use of Instruments of Service in Electronic Form**

**§ 1.7.2.1** The Architect may, with the concurrence of the Owner and upon compensation by the Contractor to the Architect, furnish to the Contractor versions of Instruments of Service in digital form. The Instruments of Service executed or identified in accordance with Subparagraph 1.1.7 shall prevail in case of an inconsistency with subsequent versions made through manipulatable electronic means.

**§ 1.7.2.2** The Contractor shall not transfer or reuse Instruments of Service in electronic or machine-readable form without the prior written consent of the Architect.

## **§ 1.8 Building Information Models Use and Reliance**

Any use of, or reliance on, all or a portion of a building information model without agreement to protocols governing the use of, and reliance on, the information contained in the model and without having those protocols set forth in AIA Document E203™–2013, Building Information Modeling and Digital Data Exhibit, and the requisite AIA Document G202™–2013, Project Building Information Modeling Protocol Form, shall be at the using or relying party's sole risk

and without liability to the other party and its contractors or consultants, the authors of, or contributors to, the building information model, and each of their agents and employees.

## **§ 1.9 COMMUNICATION**

**§ 1.9.1** Construction Manager, Contractor and Architect shall meet periodically at mutually agreed upon intervals for the purpose of establishing procedures to facilitate cooperation, communication and timely responses among the participants. By participating in these meetings, the parties do not intend to create additional contractual obligations or modify the legal relationships which may already exist.

## **ARTICLE 2 OWNER**

### **§ 2.1 General**

**§ 2.1.1** The Owner is the person or entity identified as such in the Agreement and is referred to throughout the Contract Documents as if singular in number. The Owner shall designate in writing a representative who shall have express authority to bind the Owner with respect to all matters requiring the Owner's approval or authorization. Except as otherwise provided in Section 4.2.1, the Construction Manager and the Architect do not have such authority. The term "Owner" means the Owner or the Owner's authorized representative.

**§ 2.1.2** The Owner shall furnish to the Contractor, within fifteen days after receipt of a written request, information necessary and relevant for the Contractor to evaluate, give notice of, or enforce mechanic's lien rights.

### **§ 2.2 Evidence of the Owner's Financial Arrangements**

**§ 2.2.1** Prior to commencement of the Work, and upon written request by the Contractor, the Owner shall furnish to the Contractor reasonable evidence that the Owner has made financial arrangements to fulfill the Owner's obligations under the Contract. The Contractor shall have no obligation to commence the Work until the Owner provides such evidence. If commencement of the Work is delayed under this Section 2.2.1, the Contract Time shall be extended appropriately.

**§ 2.2.2** Following commencement of the Work and upon written request by the Contractor, the Owner shall furnish to the Contractor reasonable evidence that the Owner has made financial arrangements to fulfill the Owner's obligations under the Contract only if (1) the Owner fails to make payments to the Contractor as the Contract Documents require; (2) the Contractor identifies in writing a reasonable concern regarding the Owner's ability to make payment when due; or (3) a change in the Work materially changes the Contract Sum. If the Owner fails to provide such evidence, as required, within thirty days of the Contractor's written request, the Contractor may immediately stop the Work and, in that event, shall notify the Owner that the Work has stopped. However, if the request is made because a change in the Work materially changes the Contract Sum under (3) above, the Contractor may immediately stop only that portion of the Work affected by the change until reasonable evidence is provided. If the Work is stopped under this Section 2.2.2, the Contract Time shall be extended appropriately and the Contract Sum shall be increased by the amount of the Contractor's reasonable costs of shutdown, delay and start-up, plus interest as provided in the Contract Documents.

**§ 2.2.3** After the Owner furnishes evidence of financial arrangements under this Section 2.2, the Owner shall not materially vary such financial arrangements without prior notice to the Contractor.

**§ 2.2.4** Where the Owner has designated information furnished under this Section 2.2 as "confidential," the Contractor shall keep the information confidential and shall not disclose it to any other person. However, the Contractor may disclose "confidential" information, after seven (7) days' written notice to the Owner, where disclosure is required by law, including a subpoena or other form of compulsory legal process issued by a court or governmental entity, or by court or arbitrator(s) order. The Contractor may also disclose "confidential" information to its employees, consultants, sureties, Subcontractors and their employees, Sub-subcontractors, and others who need to know the content of such information solely and exclusively for the Project and who agree to maintain the confidentiality of such information.

### **§ 2.3 Information and Services Required of the Owner**

**§ 2.3.1** Except for permits and fees that are the responsibility of the Contractor under the Contract Documents, including those required under Section 3.7.1, the Owner shall secure and pay for necessary approvals, easements, assessments and charges required for construction, use or occupancy of permanent structures or for permanent changes in existing facilities. Unless otherwise provided under the Contract Documents, the Owner, assisted by the Construction Manager, shall secure and pay for the building permit.

**§ 2.3.2** The Owner shall retain an architect lawfully licensed to practice architecture, or an entity lawfully practicing architecture, in the jurisdiction where the Project is located. That person or entity is identified as the Architect in the Agreement and is referred to throughout the Contract Documents as if singular in number.

**§ 2.3.3** The Owner shall retain a construction manager adviser lawfully practicing construction management in the jurisdiction where the Project is located. That person or entity is identified as the Construction Manager in the Agreement and is referred to throughout the Contract Documents as if singular in number.

**§ 2.3.4** If the employment of the Construction Manager or Architect terminates, the Owner shall employ a successor construction manager or architect to whom the Contractor has no reasonable objection and whose status under the Contract Documents shall be that of the Construction Manager or Architect, respectively.

**§ 2.3.5**

The Owner shall furnish, upon written request only and as necessary to complete this work, surveys describing physical characteristics, legal limitations and utility locations for the site of the Project, and a legal description of the site. The Contractor shall be entitled to reasonably rely on the accuracy of information furnished by the Owner but shall exercise proper precautions relating to the safe performance of the Work.

**§ 2.3.6** The Owner shall furnish information or services required of the Owner by the Contract Documents with reasonable promptness. The Owner shall also furnish any other information or services under the Owner's control and relevant to the Contractor's performance of the Work with reasonable promptness after receiving the Contractor's written request for such information or services.

**§ 2.3.7**

The Contractor and/or Prime Contractors will be furnished, free of charge, two sets of the Contract Drawings and Project Manuals. Additional sets will be furnished at cost of reproduction and postage and handling when applicable. Subcontractors and other entities desiring copies of Drawings and Project Manuals shall obtain them via one of the Prime Contracts.

**§ 2.3.8** The Owner shall forward all communications to the Contractor through the Construction Manager. Other communication shall be made as set forth in Section 4.2.6.

**§ 2.4 Owner's Right to Stop the Work**

If the Contractor fails to correct Work that is not in accordance with the requirements of the Contract Documents as required by Section 12.2 or repeatedly fails to carry out Work in accordance with the Contract Documents, the Owner may issue a written order to the Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, the right of the Owner to stop the Work shall not give rise to a duty on the part of the Owner to exercise this right for the benefit of the Contractor or any other person or entity, except to the extent required by Section 6.1.3.

**§ 2.5 Owner's Right to Carry Out the Work**

If the Contractor defaults or neglects to carry out the Work in accordance with the Contract Documents and fails within a ten-day period after receipt of notice from the Owner to commence and continue correction of such default or neglect with diligence and promptness, the Owner may, without prejudice to other remedies the Owner may have, correct such default or neglect. Such action by the Owner and amounts charged to the Contractor are both subject to review by the Construction Manager and prior approval of the Architect, and the Construction Manager or Architect may, pursuant to Section 9.5.1, withhold or nullify a Certificate for Payment in whole or in part, to the extent reasonably necessary to reimburse the Owner for the reasonable cost of correcting such deficiencies, including Owner's expenses and compensation for the Construction Manager's and Architect's and their respective consultants' additional services made necessary by such default, neglect, or failure. If current and future payments are not sufficient to cover such amounts, the Contractor shall pay the difference to the Owner. If the Contractor disagrees with the actions of the Owner or the Architect, or the amounts claimed as costs to the Owner, the Contractor may file a Claim pursuant to Article 15.

**§ 2.6 ACCELERATION CLAUSE**

**§ 2.6.1** The Owner reserves the right to accelerate the work of the Contract. In the event that the Owner directs acceleration, such directive will be only in written form. The Contractor shall keep cost and other project records

related to the written acceleration directive separately from normal project costs and records and shall provide a written record of acceleration cost to the Owner on a daily basis.

**§ 2.6.2** In order to recover additional costs due to a written acceleration directive, the Contractor must document that additional expenses were incurred and paid by the Contractor. Labor costs recoverable will be only overtime or shift premium costs or the cost of additional laborers brought to the site to accomplish the accelerated work effort. Equipment costs recoverable will be only the cost of added equipment mobilized to the site to accomplish the accelerated work effort.

## **ARTICLE 3 CONTRACTOR**

### **§ 3.1 General**

**§ 3.1.1** The Contractor is the person or entity identified as such in the Agreement and is referred to throughout the Contract Documents as if singular in number. The Contractor shall be lawfully licensed, if required in the jurisdiction where the Project is located. The Contractor shall designate in writing a representative who shall have express authority to bind the Contractor with respect to all matters under this Contract. The term "Contractor" means the Contractor or the Contractor's authorized representative.

**§ 3.1.2** The Contractor shall perform the Work in accordance with the Contract Documents.

**§ 3.1.3** The Contractor shall not be relieved of its obligations to perform the Work in accordance with the Contract Documents either by activities or duties of the Construction Manager or Architect in their administration of the Contract, or by tests, inspections or approvals required or performed by persons or entities other than the Contractor. Staging and storage areas for materials shall be as agreed on between the Contractor and the Owner's Project Representative.

### **§ 3.2 Review of Contract Documents and Field Conditions by Contractor**

**§ 3.2.1** Execution of the contract by the Contractor is a representation that the Contractor has carefully examined the Contract Documents and the site, and represents that the Contractor is thoroughly familiar with the nature and location of the Work, the site, the specific conditions under which the Work is to be performed, and all matters which may in any way affect the Work or its performance. The Contractor further represents that as a result of such examinations and investigations, the Contractor thoroughly understands the Contract Documents and their intent and purpose, and is familiar with all applicable codes, ordinances, laws, regulations, and rules as they apply to the Work, and that the Contractor will abide by same. Claims for additional time or additional compensation as a result of the Contractor's failure to follow the foregoing procedure and to familiarize itself with all local conditions and the Contract Documents are waived and will not be permitted.

**§ 3.2.2** Because the Contract Documents are complementary, the Contractor shall, before starting each portion of the Work, carefully study and compare the various Contract Documents relative to that portion of the Work, as well as the information furnished by the Owner pursuant to Section 2.2.3, shall take field measurements of any existing conditions related to that portion of the Work, and shall observe any conditions at the site affecting it. These obligations are for the purpose of facilitating coordination and construction by the Contractor and are not for the purpose of discovering errors, omissions, or inconsistencies in the Contract Documents; however, the Contractor shall promptly report to the Architect any errors, inconsistencies or omissions discovered by or made known to the Contractor as a request for information submitted in writing on such form as the Architect may require. It is recognized that the Contractor's review is made in the Contractor's capacity as a contractor and not as a licensed design professional, unless otherwise specifically provided in the Contract Documents. If the Contractor performs any construction activity which involves an error, inconsistency or omission in the Contract Documents without first providing notice to the Owner, Architect and Construction Manager of such condition and receiving authorization to proceed, the Contractor shall assume responsibility for such performance and shall bear an appropriate amount of the attributable costs for correction.

*(Paragraph deleted)*

**§ 3.2.4** If the Contractor believes that additional cost or time is involved because of clarifications or instructions the Architect issues in response to the Contractor's notices or requests for information pursuant to Sections 3.2.2 or 3.2.3, the Contractor shall submit Claims in writing as provided in Article 15. If the Contractor fails to perform the obligations of Sections 3.2.2 or 3.2.3, the Contractor shall pay such costs and damages to the Owner, subject to section

15.1.7, as would have been avoided if the Contractor had performed such obligations. If the Contractor performs those obligations, the Contractor shall not be liable to the Owner or Architect for damages resulting from errors, inconsistencies or omissions in the Contract Documents, for differences between field measurements or conditions and the Contract Documents, or for nonconformities of the Contract Documents to applicable laws, statutes, ordinances, codes, rules and regulations, and lawful orders of public authorities.

**§ 3.2.5** Where existing conditions are obscured or concealed from the Owner or Architect's view prior to the start of this Project's construction activities, portrayal of such conditions in the documents is based on reasonable implications and assumptions. The Owner and Architect do not imply or guarantee to the Contractor in any way that such portrayals in the Documents are accurate or true.

**§ 3.2.5.1** Physical investigations and testing of existing conditions were not undertaken by the Architect, unless so indicated in the Contract Documents.

**§3.2.5.2** The Contractor may submit written requests for information to the Architect to help facilitate the Contractor's performance of the contract. Prior to submitting each request for information, the Contractor shall first carefully study and compare the Contract Documents, field conditions, other Owner provided information, Contractor prepared Coordination Drawings, and prior Project correspondence and documentation to determine that the information to be requested is not reasonably obtainable from such sources.

**§ 3.2.5.3** Each request for information shall be submitted to the Architect, in writing, with a copy to the Construction Manager. Each request for information shall identify the specific sources which were reviewed by the Contractor in an effort to determine the information requested, and a statement to the effect that the information being requested could not be determined from such sources.

**§ 3.2.5.4** The Contractor shall submit each request for information sufficiently in advance of the date by which such information is requested in order to allow the Architect sufficient time, in the Architect's professional judgment, to permit adequate review and response and to permit Contractor compliance with the latest construction schedule.

**§ 3.2.5.5** The Construction Manager shall maintain a log at the Project site that sequentially numbers and lists each request for information. This log shall contain the Drawings reference or Specification section to which the request pertains, the date of the request, to whom the request was made, by whom the request was made, the nature of the request, and the Architect's resolution thereof. This log shall be reviewed at each Project meeting and the status of the requests for information shall be made part of the minutes of such meetings.

**§ 3.2.5.6** The Contractor shall reimburse the Owner amounts charged to the Owner by the Architect or Construction Manager for responding to Contractor requests for information where such information is available to the Contractor from a careful study and comparison of the Contract Documents, field conditions, other Owner provided information, Contractor prepared Coordination Drawings, or prior Project correspondence or documentation.

### **§ 3.3 Supervision and Construction Procedures**

**§ 3.3.1** The Contractor shall supervise and direct the Work, using the Contractor's best skill and attention. The Contractor shall be solely responsible for, and have control over, construction means, methods, techniques, sequences, and procedures, and for coordinating all portions of the Work under the Contract. If the Contract Documents give specific instructions concerning construction means, methods, techniques, sequences, or procedures, the Contractor shall evaluate the jobsite safety thereof and shall be solely responsible for the jobsite safety of such means, methods, techniques, sequences, or procedures. If the Contractor determines that such means, methods, techniques, sequences or procedures may not be safe, the Contractor shall give timely notice to the Owner, the Construction Manager, and the Architect, and shall propose alternative means, methods, techniques, sequences, or procedures. The Architect shall evaluate the proposed alternative solely for conformance with the design intent for the completed construction. The Construction Manager shall review the proposed alternative for sequencing, constructability, and coordination impacts on the other Contractors. Unless the Architect or the Construction Manager objects to the Contractor's proposed alternative, the Contractor shall perform the Work using its alternative means, methods, techniques, sequences, or procedures. The Contractor shall be responsible for and coordinate any and all inspections required by any governmental body having jurisdiction over the project. Failure to obtain any permits, licenses or other approvals because of the failure of the Contractor to conform to this requirement shall not extend the Contract time, and the

Contractor shall not be entitled to any increase in the contract sum therefor. In addition, any additional costs and/or expenses of any nature incurred by the Owner as a result of the Contractor's failure to conform to this requirement shall constitute a charge against the Contractor's contract. Each contractor shall be responsible for complying with union regulations existing under current labor agreements in performing construction work on the project.

**§ 3.3.2** The Contractor shall be responsible to the Owner for acts and omissions of the Contractor's employees, Subcontractors and their agents and employees, and other persons or entities performing portions of the Work for, or on behalf of, the Contractor or any of its Subcontractors.

**§ 3.3.3** The Contractor shall be responsible for inspection of portions of the Project already performed to determine that such portions are in proper condition to receive subsequent Work.

**§ 3.3.4** During period of active Construction, the Contractor shall consult daily and cooperate with the Construction Manager. On a daily basis, the Contractor shall keep the Construction Manager and Architect notified of when Work will be starting, restarting, suspended and temporarily or permanently concluding.

**§ 3.3.5** Within 15 days of the date of the Notice to Proceed, each Contractor shall submit to the Construction Manager and Architect a list of all Contractor's principal staff assignments, including the Superintendent and other personnel in attendance at the site; identify individuals, their duties and responsibilities.

#### **§ 3.4 Labor and Materials**

**§ 3.4.1** Unless otherwise provided in the Contract Documents, the Contractor shall provide and pay for labor, materials, equipment, tools, construction equipment and machinery, water, heat, utilities, transportation, and other facilities and services necessary for proper execution and completion of the Work, whether temporary or permanent and whether or not incorporated or to be incorporated in the Work.

**§ 3.4.2** After the Contract has been executed, the Architect in conjunction with the Construction Manager, will consider a formal request for the substitution of products in place of those specified only under the conditions set forth in the General Requirements (Division 01 of the Specifications). Substitutions shall satisfy the following conditions:

1. The materials, products and equipment described in the Contract Documents establish the standard of required quality, function, dimension and appearance expected.
2. Requests for substitutions must be submitted at the time that bids are received.
3. Substitution requests will be considered only if standards are met or exceeded as described above and are subsequently approved in writing by the Architect and Owner.
4. Each such request shall include the name of the material, product or equipment item for which substitution is requested and a complete description of the proposed substitute, including drawings, cuts, performance and test data and any other information necessary for a complete evaluation.
5. Each such request shall include a statement setting forth any changes in other materials, product or equipment or other work that incorporation of the substitution would require.
6. The burden of proof of the merit of the proposed substitution is upon the proposer.
7. The Architect's decision of approval or disapproval of a proposed substitution shall be final and will be set forth in writing.
8. Additional substitution requests, during construction, will be considered only if substitution is caused by specific material, product or equipment's subsequent removal from, or unavailability in the market place and only at "no change" or "credit" to Contract amount.
9. Contractor's Responsibilities: If any of the following conditions occur due to substitutions, the contractor making the substitution shall bear the cost of such conditions, including payment for services rendered by the Architect:
  - (a) Redesign required for any of the Work.
  - (b) Material or quantity changes for any of the Work.
  - (c) Delays in any of the Work.
  - (d) Request for information generated due to substitutions."

**§ 3.4.3** The Contractor, as indicated in the Instructions to Bidders, shall furnish in writing to the Owner through the Construction Manager a list showing the name of the manufacturer proposed to be used for equivalents of products



identified in the Specifications, and where applicable, the name of the installing subcontractor. By identifying and submitting a proposed manufacturer and/or installer the Contractor warrants that products furnished and/or installed by them conform to such requirements of the Contract Documents. The Construction Manager, in conjunction with the Architect will reply with reasonable promptness to the Contractor in writing stating whether or not the Owner, Construction Manager or Architect, after due investigation, have reasonable objection to any such proposed manufacturer or installer.

- .1 If adequate data on a proposed equivalent manufacturer or installer is not available, the Architect may state that the action will be deferred until the Contractor provides additional data.
- .2 Failure of the Owner, Construction Manager or Architect to object to a manufacturer or installer shall not constitute a waiver of the requirements of the Contract Documents.
- .3 Products furnished by the listed manufacturer or installed by the listed installer shall conform to such requirements of the Contract Documents.

**§ 3.4.4** The Contractor shall comply with the most current Contract Requirements and Prevailing Wage Rate Schedules as published by the Bureau of Public Works, State of New York, Department of Labor established for this Project.

**§ 3.4.5** No materials or supplies for the Work shall be purchased by the Contractor or by any subcontractor subject to any chattel mortgage or under a conditional sale or other agreement by which an interest is retained by the seller. The Contractor warrants that he has full title to all materials and supplies used by him in the Work, or resold to the Owner, pursuant to this Contract Document, free from all liens, claims or encumbrances.

**§ 3.4.6** All materials used permanently in the Work shall be new unless otherwise specified. The apparent silence of the Specifications as to any detail described concerning any Work to be done and materials to be furnished shall be regarded as meaning that only the best general practice is to prevail and that only material and workmanship of the first quality are to be used, and all interpretations of the Specifications shall be made on this basis. All material incorporated in the Project Work shall be clean and exhibit no appearance of aging, exposure to weather, prior use, handling or damage of any kind.

**§ 3.4.7** Manufacturer's identifications shall be inconspicuous, but where nameplates contain information relative to characteristics or maintenance, they shall be clearly visible and located for easy access.

**§ 3.4.8** Equipment intended for permanent installation shall not be operated for temporary purposes without the written permission of the Architect.

**§ 3.4.9** Materials shall be delivered in manufacturer's original sealed containers, with complete identification of contents and manufacturer, and kept sealed in original containers until used. Labels shall not be removed until materials have been installed and inspected.

**§ 3.4.10** Whenever the Contract Documents require delivery by the Contractor of any materials, equipment or other items, the term delivery shall be deemed to include unloading and storing with proper protection where directed.

**§ 3.4.11** Materials shall be applied or installed under proper climactic conditions, not when they may be affected by temperature, moisture, humidity or dust.

**§ 3.4.12** As defined by Federal and State Laws, no materials incorporated into the Project Work shall contain asbestos. Material shall be "asbestos-free" containing zero percent (0%) asbestos. The Architect reserves the right to request certification from the material manufacturer through the Contractor for certification that materials installed contain zero percent (0%) asbestos.

**§ 3.4.13** The Contractor shall enforce strict discipline and good order among the Contractor's employees and other persons carrying out the Work. The Contractor shall not permit employment of unfit persons or persons not properly skilled in tasks assigned to them.

- .1 A sufficient force of competent experienced workman, foreman and superintendents shall be employed at all times to permit the Work to be pursued with diligence until completion.

### **§ 3.5 Warranty**

**§ 3.5.1** The Contractor warrants to the Owner, Construction Manager, and Architect that materials and equipment furnished under the Contract will be of good quality and new unless the Contract Documents require or permit otherwise. The Contractor further warrants that the Work will conform to the requirements of the Contract Documents and will be free from defects, except for those inherent in the quality of the Work the Contract Documents require or permit. Work, materials, or equipment not conforming to these requirements may be considered defective. The Contractor's warranty excludes remedy for damage or defect caused by abuse, alterations to the Work not executed by the Contractor, improper or insufficient maintenance, improper operation, or normal wear and tear and normal usage. If required by the Construction Manager or Architect, the Contractor shall furnish satisfactory evidence as to the kind and quality of materials and equipment.

**§ 3.5.2** All material, equipment, or other special warranties required by the Contract Documents shall be issued in the name of the Owner, or shall be transferable to the Owner, and shall commence in accordance with Section 9.8.4.

### **§ 3.6 Taxes**

Exempt from Sales Tax: New York State Sales Tax is not applicable to any materials and supplies to be incorporated into Work under the terms of the Contract, the Owner being exempt therefrom. There is no exemption from the sales or use tax on charges to the Contractor or subcontractor for lease of tools, machinery, equipment or other property used in conjunction with the Project. The Contractors and subcontractors shall be solely responsible for and pay any and all applicable taxes, including sales and compensating use taxes, on such leased tools, machinery, equipment or other property, and for materials not incorporated in the Project and the amount of such taxes, if any, shall be deemed included in executed Base Bid.

### **§ 3.7 Permits, Fees, Notices, and Compliance with Laws**

**§ 3.7.1** The Owner, through the Construction Manager, shall secure and pay for the building permit. The Contractor shall secure and pay for other permits, fees, licenses, and inspections by government agencies necessary for proper execution of and completion of the contract, which are legally required.

**§ 3.7.2** The Contractor shall comply with and give notices required by applicable laws, statutes, ordinances, codes, rules and regulations, and lawful orders of public authorities applicable to performance of the Work.

**§ 3.7.3** If the Contractor performs Work which it knows or should have known was contrary to applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of public authorities, the Contractor shall assume appropriate responsibility for such Work and shall bear the costs attributable to correction.

**§ 3.7.4 CONCEALED OR UNKNOWN CONDITIONS.** If the Contractor encounters conditions at the site that are (1) subsurface or otherwise concealed physical conditions that differ materially from those indicated in the Contract Documents or (2) unknown physical conditions of an unusual nature that differ materially from those ordinarily found to exist and generally recognized as inherent in construction activities of the character provided for in the Contract Documents, the Contractor shall promptly provide notice to the Owner, Construction Manager, and the Architect in writing before conditions are disturbed and in no event later than 14 days after first observance of the conditions. The Architect and Construction Manager will investigate such conditions with reasonable promptness and, if the Architect, in consultation with the Construction Manager, determines that they differ materially and cause an increase or decrease in the Contractor's cost of, or time required for, performance of any part of the Work, will recommend that an equitable adjustment be made in the Contract Sum or Contract Time, or both. If the Architect, in consultation with the Construction Manager, determines that the conditions at the site are not materially different from those indicated in the Contract Documents and that no change in the terms of the Contract is justified, the Architect shall promptly notify the Owner, Construction Manager, and Contractor, stating the reasons. If the Owner or Contractor disputes the Architect's determination or recommendation, either party may submit a Claim as provided in Article 15.

**§ 3.7.5** If, in the course of the Work, the Contractor encounters human remains or recognizes the existence of burial markers, archaeological sites or wetlands not indicated in the Contract Documents, the Contractor shall immediately suspend any operations that would affect them and shall notify the Owner, Construction Manager, and Architect. Upon receipt of such notice, the Owner shall promptly take any action necessary to obtain governmental authorization required to resume the operations. The Contractor shall continue to suspend such operations until otherwise instructed by the Owner but shall continue with all other operations that do not affect those remains or features. Requests for

adjustments in the Contract Sum and Contract Time arising from the existence of such remains or features may be made as provided in Article 15.

### **§ 3.8 Allowances**

**§ 3.8.1** The Contractor shall include in the Contract Sum all allowances stated in the Contract Documents

- .1 Contingency Allowances shall cover the direct cost to the Contractor for labor, materials and equipment, including delivery, unloading, storage, handling and installation. They do not include the Contractor's overhead and profit, including the costs of bonds, insurance, administration and supervision, which costs should be carried as part of the Contract Sum.

### **§ 3.8.2**

*(Paragraphs deleted)*

Materials and equipment under an allowance shall be selected by the Owner with reasonable promptness.

*(Paragraph deleted)*

### **§ 3.9 Superintendent**

**§ 3.9.1** The Contractor shall employ a competent superintendent and necessary assistants who shall be in attendance at the Project site full time during performance of the Work. The Superintendent shall be the same individual throughout the duration of the project. The superintendent shall represent the Contractor, and communications given to the superintendent shall be as binding as if given to the Contractor.

**§ 3.9.2** The Contractor, as soon as practicable after award of the Contract, shall notify the Owner and Architect, through the Construction Manager, of the name and qualifications of a proposed superintendent. Within 14 days of receipt of the information, the Construction Manager may notify the Contractor, stating whether the Owner, the Construction Manager, or the Architect (1) has reasonable objection to the proposed superintendent or (2) require additional time for review. Failure of the Construction Manager to provide notice within the 14-day period shall constitute notice of no reasonable objection.

**§ 3.9.3** The Contractor shall not employ a proposed superintendent to whom the Owner, Construction Manager, or Architect has made reasonable and timely objection. The Contractor shall not change the superintendent without the Owner's consent, which shall not unreasonably be withheld or delayed.

### **§ 3.10 Contractor's Construction and Submittal Schedules**

**§ 3.10.1** The Contractor, promptly after being awarded the Contract, shall submit for the Owner's and Architect's information, and the Construction Manager's use in developing the Project schedule, a Contractor's construction schedule for the Work. The schedule shall contain detail appropriate for the Project, including (1) the date of commencement of the Work, interim schedule milestone dates, and the date of Substantial Completion; (2) an apportionment of the Work by construction activity; and (3) the time required for completion of each portion of the Work. The schedule shall provide for the orderly progression of the Work to completion and shall not exceed time limits current under the Contract Documents. The schedule shall be revised at appropriate intervals as required by the conditions of the Work and Project. The Contractor shall cooperate with the Construction Manager in scheduling and performing the Contractor's Work to avoid conflict with, and as to cause no delay in, the work or activities of other Contractors, or the construction or operations of the Owner's own forces or Separate Contractors.

**§ 3.10.2** The Contractor, promptly after being awarded the Contract and thereafter as necessary to maintain a current submittal schedule, shall submit a submittal schedule for the Construction Manager's and Architect's approval. The Architect and Construction Manager's approval shall not be unreasonably delayed or withheld. The submittal schedule shall (1) be coordinated with the Contractor's construction schedule, and (2) allow the Construction Manager and Architect reasonable time in their respective judgments to review submittals. If the Contractor fails to submit a submittal schedule, or fails to provide submittals in accordance with the approved submittal schedule, the Contractor shall not be entitled to any increase in Contract Sum or extension of Contract Time based on the time required for review of submittals.

**§ 3.10.3** The Contractor shall participate with other Contractors, the Construction Manager, and the Owner in reviewing and coordinating all schedules for incorporation into the Project schedule that is prepared by the Construction Manager. The Contractor shall make revisions to the construction schedule and submittal schedule as deemed necessary by the Construction Manager to conform to the Project schedule.

**§ 3.10.4** The Contractor shall perform the Work in general accordance with the most recent schedules submitted to the Owner, Construction Manager, and Architect, and incorporated into the approved Project schedule.

**§ 3.11 Documents and Samples at the Site**

The Contractor shall maintain at the Project site for the Owner two sets of record Drawings and one set of record Specifications, Addenda, Change Orders, Allowance Authorizations, and other Modifications, in good order and marked currently to indicate field changes and selections made during construction, and one copy of approved Shop Drawings, Product Data, Samples, and similar required submittals in good order and condition. . Each Prime Contractor shall mark these documents on a weekly basis to record all approved changes, and to record the dimensional locations of his installed work if it deviates from that shown on the Contract or Shop Drawings. Particular attention shall be given to site utilities, the location of valves, HVAC equipment, and all ductwork and major electrical conduit. These shall be in electronic form or paper copy, available to the Construction Manager, Architect, and Owner, and delivered to the Construction Manager for submittal to the Owner upon completion of the Work as a record of the Work as constructed.

**§ 3.12 Shop Drawings, Product Data, and Samples**

**§ 3.12.1** Shop Drawings are drawings, diagrams, schedules, and other data specially prepared for the Work by the Contractor or a Subcontractor, Sub-subcontractor, manufacturer, supplier, or distributor to illustrate some portion of the Work.

**§ 3.12.2** Product Data are illustrations, standard schedules, performance charts, instructions, brochures, diagrams, and other information furnished by the Contractor to illustrate materials or equipment for some portion of the Work.

**§ 3.12.3** Samples are physical examples that illustrate materials, equipment, or workmanship, and establish standards by which the Work will be judged.

**§ 3.12.4** Shop Drawings, Product Data, Samples, and similar submittals are not Contract Documents. Their purpose is to demonstrate how the Contractor proposes to conform to the information given and the design concept expressed in the Contract Documents for those portions of the Work for which the Contract Documents require submittals. Review by the Architect and Construction Manager is subject to the limitations of Sections 4.2.10 through 4.2.12. Informational submittals upon which the Construction Manager and Architect are not expected to take responsive action may be so identified in the Contract Documents. Submittals that are not required by the Contract Documents may be returned by the Construction Manager or Architect without action.

**§ 3.12.5** The Contractor shall review for compliance with the Contract Documents, approve, and submit to the Construction Manager, Shop Drawings, Product Data, Samples, and similar submittals required by the Contract Documents, in accordance with the Project submittal schedule approved by the Construction Manager and Architect or, in the absence of an approved Project submittal schedule, with reasonable promptness and in such sequence as to cause no delay in the Work or in the activities of other Contractors, Separate Contractors, or the Owner's own forces. The Contractor shall cooperate with the Construction Manager in the coordination of the Contractor's Shop Drawings, Product Data, Samples, and similar submittals with related documents submitted by other Contractors.

**§ 3.12.6** By submitting Shop Drawings, Product Data, Samples, and similar submittals, the Contractor represents to the Owner, Construction Manager, and Architect, that the Contractor has (1) reviewed and approved them, (2) determined and verified materials, field measurements and field construction criteria related thereto, or will do so, and (3) checked and coordinated the information contained within such submittals with the requirements of the Work and of the Contract Documents.

**§ 3.12.7** Work performed without approved shop drawings, product data, samples or similar submittals as required by the Specifications is subject to all comments and conditions of approval regardless of Work progress. Completed work must be in accordance with all comments and conditions of approval regardless of Work progress. Completed work must be in accordance with all comments on approved submittals. Any portion of the Work performed prior to review and approval by the Construction Manager and Architect of required Shop Drawings, Product Data, Samples, or other Submittals, is performed at Contractor's risk. No Contract adjustments will be made to correct or modify Work installed without prior written approval of the Construction Manager and Architect.

**§ 3.12.8** The Work shall be in accordance with approved submittals except that the Contractor shall not be relieved of responsibility for deviations from the requirements of the Contract Documents by the Architect's approval of Shop Drawings, Product Data, Samples, or similar submittals, unless the Contractor has specifically notified the Construction Manager and Architect in writing of such deviation at the time of submittal and (1) the Architect has given written approval to the specific deviation as a minor change in the Work, or (2) a Change Order or Construction Change Directive has been issued authorizing the deviation. The Contractor shall not be relieved of responsibility for errors or omissions in Shop Drawings, Product Data, Samples, or similar submittals, by the Architect's approval thereof.

**§ 3.12.9** The Contractor shall direct specific attention, in writing or on resubmitted Shop Drawings, Product Data, Samples, or similar submittals, to revisions other than those requested by the Construction Manager and Architect on previous submittals. In the absence of such notice, the Architect's approval of a resubmission shall not apply to such revisions.

**§ 3.12.10** The Contractor shall not be required to provide professional services that constitute the practice of architecture or engineering unless such services are specifically required by the Contract Documents for a portion of the Work or unless the Contractor needs to provide such services in order to carry out the Contractor's responsibilities for construction means, methods, techniques, sequences, and procedures. The Contractor shall not be required to provide professional services in violation of applicable law.

**§ 3.12.10.1** If professional design services or certifications by a design professional related to systems, materials, or equipment are specifically required of the Contractor by the Contract Documents, the Owner and the Architect will specify all performance and design criteria that such services must satisfy. The Contractor shall be entitled to rely upon the adequacy and accuracy of the performance and design criteria provided in the Contract Documents. The Contractor shall cause such services or certifications to be provided by an appropriately licensed design professional, whose signature and seal shall appear on all drawings, calculations, specifications, certifications, Shop Drawings, and other submittals prepared by such professional. Shop Drawings, and other submittals related to the Work, designed or certified by such professional, if prepared by others, shall bear such professional's written approval when submitted to the Architect. The Owner, the Architect, and the Construction Manager shall be entitled to rely upon the adequacy and accuracy of the services, certifications, and approvals performed or provided by such design professionals, provided the Owner and Architect have specified to the Contractor the performance and design criteria that such services must satisfy. Pursuant to this Section 3.12.10, the Architect will review and approve or take other appropriate action on submittals only for the limited purpose of checking for conformance with information given and the design concept expressed in the Contract Documents. The Construction Manager shall review submittals for sequencing, constructability, and coordination impacts on other Contractors.

**§ 3.12.10.2** If the Contract Documents require the Contractor's design professional to certify that the Work has been performed in accordance with the design criteria, the Contractor shall furnish such certifications to the Construction Manager and Architect at the time and in the form specified by the Architect.

### **§ 3.13 Use of Site**

**§ 3.13.1** The Contractor shall confine operations at the site to areas permitted by applicable laws, statutes, ordinances, codes, rules and regulations, lawful orders of public authorities, and the Contract Documents and shall not unreasonably encumber the site with materials or equipment.

**§ 3.13.2** The Contractor shall coordinate the Contractor's operations with, and secure the approval of, the Construction Manager before using any portion of the site.

### **§ 3.14 Cutting and Patching**

**§ 3.14.1** The Contractor shall be responsible for cutting, fitting, or patching required to complete the Work or to make its parts fit together properly. All areas requiring cutting, fitting, or patching shall be restored to the condition existing prior to the cutting, fitting, or patching, unless otherwise required by the Contract Documents.

**§ 3.14.2** The Contractor shall not damage or endanger a portion of the Work or fully or partially completed construction of the Owner, Separate Contractors, or of other Contractors by cutting, patching, or otherwise altering such construction, or by excavation. The Contractor shall not cut or otherwise alter construction by the Owner, Separate Contractors, or by other Contractors except with written consent of the Construction Manager, Owner, and such other Contractors or Separate Contractors. Consent shall not be unreasonably withheld. The Contractor shall not

unreasonably withhold, from the Separate Contractors, other Contractors, or the Owner, its consent to cutting or otherwise altering the Work.

### **§ 3.15 Cleaning Up**

**§ 3.15.1** The Contractor shall keep the premises and surrounding area free from accumulation of waste materials and rubbish caused by operations under the Contract. At completion of the Work, the Contractor shall remove waste materials, rubbish, the Contractor's tools, construction equipment, machinery, and surplus materials from and about the Project.

**§ 3.15.2** If the Contractor fails to clean up as provided in the Contract Documents, the Owner, or Construction Manager with the Owner's approval, may do so and the Owner shall be entitled to reimbursement from the Contractor.

### **§ 3.16 Access to Work**

The Contractor shall provide the Owner, Construction Manager, and Architect with access to the Work in preparation and progress wherever located.

### **§ 3.17 Royalties, Patents and Copyrights**

The Contractor shall pay all royalties and license fees. The Contractor shall defend suits or claims for infringement of copyrights and patent rights and shall hold the Owner, Construction Manager, and Architect harmless from loss on account thereof, but shall not be responsible for defense or loss when a particular design, process, or product of a particular manufacturer or manufacturers is required by the Contract Documents, or where the copyright violations are contained in Drawings, Specifications, or other documents prepared by the Owner, Architect, or Construction Manager. However, if an infringement of a copyright or patent is discovered by, or made known to, the Contractor, the Contractor shall be responsible for the loss unless the information is promptly furnished to the Architect through the Construction Manager.

### **§ 3.18 Indemnification**

**§ 3.18.1** To the fullest extent permitted by law, the Contractor shall defend, indemnify and hold harmless the Owner, Construction Manager, Architect, each of their consultant's, officers, board members, agents, and employees from and against any suits, claims, damages, losses, or expenses, including but not limited to attorneys' fees and litigation costs, arising out of or resulting from performance of the Work, provided that such suit, claim, damage, loss or expense is attributable to any bodily injury, sickness, disease, or death, or injury to or destruction of any tangible property, including loss of use resulting therefrom, but only to the extent caused in whole or in part by the act, omission, fault, breach of contract, breach of warranty or statutory violation of the Contractor, a subcontractor, or any person or entity directly or indirectly employed by them, or any person or entity for whose acts they may be liable or arises out of operation of law as a consequence of any act or omission of the Contractor, any Subcontractor, anyone directly or indirectly employed by any of them, or anyone for whose acts any of the above may be liable, regardless of whether any of them has been negligent. This provision shall not be construed to require the Contractor to indemnify the Owner, Construction Manager, or Architect for the negligence of the Owner, Construction Manager, or Architect to the extent such negligence, in whole or in part, proximately caused the damages resulting in the suit, claim, damage, loss or expense."

**§ 3.18.2** In claims against any person or entity indemnified under this Section 3.18 by an employee of the Contractor, a Subcontractor, anyone directly or indirectly employed by them, or anyone for whose acts they may be liable, the indemnification obligation under Section 3.18.1 shall not be limited by a limitation on amount or type of damages, compensation, or benefits payable by or for the Contractor or a Subcontractor under workers' compensation acts, disability benefit acts, or other employee benefit acts.

### **§ 3.19 DAILY RECORDS CLAUSE**

**§3.19.1** The Contractor shall prepare and maintain Daily Inspection Records to document the progress of the work on a daily basis. Such daily records shall include a detailed daily accounting of all labor and all equipment on the site for the Contractor and all subcontractors, at any tier. Such daily records will make a clear distinction between work being performed under Change Order, base scope work and/or disputed work.

**3.19.2** In the event that any labor or equipment is idled, solely as a result of Owner actions or inactions, the daily records shall record which laborers and equipment were idled and for how long. In the event that specific work activities were stopped, solely as a result of Owner actions or inactions, and labor and equipment was reassigned to

perform work on other activities, the daily records will make a clear record of which activities were stopped and where labor and equipment was redirected to.

**§3.19.3** Such daily records shall be copied and provided to the Owner at the end of every week.

#### **ARTICLE 4 ARCHITECT AND CONSTRUCTION MANAGER**

##### **§ 4.1 General**

**§ 4.1.1** The Architect is the person or entity retained by the Owner pursuant to Section 2.3.2 and identified as such in the Agreement.

**§ 4.1.2** Duties, responsibilities and limitations of authority of the Architect as set forth in the Contract Documents shall not be restricted, modified or extended without written consent of the Owner and Architect.

*(Paragraph deleted)*

##### **§ 4.2 Administration of the Contract**

**§ 4.2.1** The Construction Manager and Architect will provide administration of the Contract as described in the Contract Documents and will be an Owner's Representative (1) during construction, (2) until 90 days after issuance of the State Education Department's Certificate of Substantial Completion or issuance of the Final Project Certificate for Payment, whichever is later, and (3) with the Owner's concurrence, from time to time during the one-year period for correction of Work described in Section 12.2. The Construction Manager and Architect will have authority to act on behalf of the Owner only to the extent provided in the Contract Documents, unless otherwise modified in writing in accordance with other provisions of the Contract.

**§ 4.2.2** The Architect will visit the site at intervals appropriate to the stage of construction, or as otherwise agreed with the Owner, to become generally familiar with the progress and quality of the portion of the Work completed, and to determine in general if, in its professional judgment, the Work observed is being performed in a manner indicating that the Work, when fully completed, will be in accordance with the Contract Documents. However, the Architect will not be required to make exhaustive or continuous on-site inspections to check the quality or quantity of the Work. On the basis of the site visits, the Architect will keep the Owner and the Construction Manager reasonably informed about the progress and quality of the portion of the Work completed, and promptly report to the Owner and Construction Manager known deviations from the Contract Documents and defects and deficiencies observed in the Work.

**§ 4.2.2.1** The Contractor shall reimburse the Owner for compensation paid to the Architect for additional site visits made necessary by the fault, neglect or request of the Contractor.

**§ 4.2.3** The Construction Manager shall provide one or more representatives who shall be in attendance at the Project site whenever the Work is being performed. The Construction Manager will determine in general if the Work observed is being performed in accordance with the Contract Documents, will keep the Owner and Architect reasonably informed of the progress of the Work, and will promptly report to the Owner and Architect known deviations from the Contract Documents and the most recent Project schedule, and defects and deficiencies observed in the Work.

**§ 4.2.4** The Construction Manager will schedule and coordinate the activities of the Contractor and other Contractors in accordance with the latest approved Project schedule.

**§ 4.2.5** The Construction Manager, except to the extent required by Section 4.2.4, and Architect will not have control over, charge of, or responsibility for, the construction means, methods, techniques, sequences or procedures, or for the safety precautions and programs in connection with the Work, since these are solely the Contractor's rights and responsibilities under the Contract Documents, and neither will be responsible for the Contractor's failure to perform the Work in accordance with the requirements of the Contract Documents. Neither the Construction Manager nor the Architect will have control over or charge of, or be responsible for acts or omissions of, the Contractor, Subcontractors, or their agents or employees, or of any other persons or entities performing portions of the Work.

**§ 4.2.6 Communications.** The Owner shall communicate with the Contractor and the Construction Manager's consultants through the Construction Manager about matters arising out of or relating to the Contract Documents. The Owner and Construction Manager shall include the Architect in all communications that relate to or affect the Architect's services or professional responsibilities. The Owner shall promptly notify the Architect of the substance of any direct communications between the Owner and the Construction Manager otherwise relating to the Project.

Communications by and with the Architect's consultants shall be through the Architect. Communications by and with Subcontractors and suppliers shall be through the Contractor. Communications by and with other Contractors shall be through the Construction Manager. Communications by and with the Owner's own forces and Separate Contractors shall be through the Owner. The Contract Documents may specify other communication protocols.

**§ 4.2.7** The Construction Manager and Architect will review and certify all Applications for Payment by the Contractor, in accordance with the provisions of Article 9.

**§ 4.2.8** The Architect and Construction Manager have authority to reject Work that does not conform to the Contract Documents, and will notify each other about the rejection. Whenever the Construction Manager considers it necessary or advisable, the Construction Manager will have authority to require inspection or testing of the Work in accordance with Sections 13.4.2 and 13.4.3, upon written authorization of the Owner, whether or not the Work is fabricated, installed or completed. The foregoing authority of the Construction Manager will be subject to the provisions of Sections 4.2.18 through 4.2.20 inclusive, with respect to interpretations and decisions of the Architect. However, neither the Architect's nor the Construction Manager's authority to act under this Section 4.2.8 nor a decision made by either of them in good faith either to exercise or not to exercise such authority shall give rise to a duty or responsibility of the Architect or the Construction Manager to the Contractor, Subcontractors, suppliers, their agents or employees, or other persons performing any of the Work.

**§ 4.2.9** Utilizing the submittal schedule provided by the Contractor, the Construction Manager shall prepare, and revise as necessary, a Project submittal schedule incorporating information from other Contractors, the Owner, Owner's consultants, Owner's Separate Contractors and vendors, governmental agencies, and participants in the Project under the management of the Construction Manager. The Project submittal schedule and any revisions shall be submitted to the Architect for approval.

**§ 4.2.10** The Construction Manager will receive and promptly review for conformance with the submittal requirements of the Contract Documents, all submittals from the Contractor such as Shop Drawings, Product Data, and Samples. Where there are other Contractors, the Construction Manager will also check and coordinate the information contained within each submittal received from the Contractor and other Contractors, and transmit to the Architect those recommended for approval. By submitting Shop Drawings, Product Data, Samples, and similar submittals, the Construction Manager represents to the Owner and Architect that the Construction Manager has reviewed and recommended them for approval. The Construction Manager's actions will be taken in accordance with the Project submittal schedule approved by the Architect or, in the absence of an approved Project submittal schedule, with reasonable promptness while allowing sufficient time to permit adequate review by the Architect.

**§ 4.2.11** The Architect will review and approve, or take other appropriate action upon, the Contractor's submittals such as Shop Drawings, Product Data, and Samples, but only for the limited purpose of checking for conformance with information given and the design concept expressed in the Contract Documents. The Architect's action will be taken in accordance with the submittal schedule approved by the Architect or, in the absence of an approved submittal schedule, with reasonable promptness while allowing sufficient time in the Architect's professional judgment to permit adequate review. Upon the Architect's completed review, the Architect shall transmit its submittal review to the Construction Manager.

**§ 4.2.12** Review of the Contractor's submittals by the Construction Manager and Architect is not conducted for the purpose of determining the accuracy and completeness of other details such as dimensions and quantities, or for substantiating instructions for installation or performance of equipment or systems, all of which remain the responsibility of the Contractor as required by the Contract Documents. The Construction Manager and Architect's review of the Contractor's submittals shall not relieve the Contractor of the obligations under Sections 3.3, 3.5, and 3.12. The Construction Manager and Architect's review shall not constitute approval of safety precautions or of any construction means, methods, techniques, sequences, or procedures. The Architect's approval of a specific item shall not indicate approval of an assembly of which the item is a component.

**§ 4.2.13** The Construction Manager will prepare Change Orders and Construction Change Directives.

**§ 4.2.14** The Construction Manager and the Architect will take appropriate action on Change Orders or Construction Change Directives in accordance with Article 7, and the Architect will have authority to order minor changes in the Work as provided in Section 7.4. The Architect, in consultation with the Construction Manager, will investigate and



make determinations and recommendations regarding concealed and unknown conditions as provided in Section 3.7.4.

**§ 4.2.15** Utilizing the documents provided by the Contractor, the Construction Manager will maintain at the site for the Owner one copy of all Contract Documents, approved Shop Drawings, Product Data, Samples, and similar required submittals, in good order and marked currently to record all changes and selections made during construction. These will be available to the Architect and the Contractor, and will be delivered to the Owner upon completion of the Project.

**§ 4.2.16** The Construction Manager will assist the Architect in conducting inspections to determine the date or dates of Substantial Completion and the date of final completion; issue Certificates of Substantial Completion in conjunction with the Architect pursuant to Section 9.8; and receive and forward to the Owner written warranties and related documents required by the Contract and assembled by the Contractor pursuant to Section 9.10. The Construction Manager will forward to the Architect a final Application and Certificate for Payment or final Project Application and Project Certificate for Payment upon the Contractor's compliance with the requirements of the Contract Documents.

**§ 4.2.17** The Owner shall notify the Construction Manager of any change in the duties, responsibilities and limitations of authority of the Project representatives.

**§ 4.2.18** The Architect will interpret and decide matters concerning performance of the Contractor under, and requirements of, the Contract Documents on written request of the Construction Manager, Owner, or Contractor through the Construction Manager. The Architect's response to such requests will be made in writing within any time limits agreed upon or otherwise with reasonable promptness.

**§ 4.2.19** Interpretations and decisions of the Architect will be consistent with the intent of, and reasonably inferable from, the Contract Documents and will be in writing or in the form of drawings. The Architect will not be liable for the results of any such interpretations or decisions rendered in good faith and in accordance with its professional judgment.

*(Paragraph deleted)*

**§ 4.2.21** The Construction Manager will receive and review requests for information from the Contractor, and forward each request for information to the Architect, with the Construction Manager's recommendation. The Architect will review and respond in writing, through the Construction Manager, to requests for information about the Contract Documents. The Construction Manager's recommendation and the Architect's response to each request will be made in writing within any time limits agreed upon or otherwise with reasonable promptness but, in any event, allowing the Architect sufficient time in its professional judgment to properly review the request. If appropriate, the Architect will prepare and issue supplemental Drawings and Specifications in response to the requests for information.

## **ARTICLE 5 SUBCONTRACTORS**

### **§ 5.1 Definitions**

**§ 5.1.1** A Subcontractor is a person or entity who has a direct contract with the Contractor to perform a portion of the Work at the site. The term "Subcontractor" is referred to throughout the Contract Documents as if singular in number and means a Subcontractor or an authorized representative of the Subcontractor. The term "Subcontractor" does not include other Contractors or Separate Contractors or the subcontractors of other Contractors or Separate Contractors.

**§ 5.1.2** A Sub-subcontractor is a person or entity who has a direct or indirect contract with a Subcontractor to perform a portion of the Work at the site. The term "Sub-subcontractor" is referred to throughout the Contract Documents as if singular in number and means a Sub-subcontractor or an authorized representative of the Sub-subcontractor.

### **§ 5.2 Award of Subcontracts and Other Contracts for Portions of the Work**

**§ 5.2.1** As stated in the bidding requirements, the Contractor, as soon as practicable after award of the Contract, shall notify in writing for review by the Construction Manager and Architect, of the persons or entities proposed for each principal portion of the Work, including those who are to furnish materials or equipment fabricated to a special design. Within 14 days of receipt of the information, the Construction Manager may notify the Contractor whether the Owner, the Construction Manager or the Architect (1) has reasonable objection to any such proposed person or entity or, (2) requires additional time for review.

§ 5.2.2 The Contractor shall not contract with a proposed person or entity to whom the Owner, Construction Manager or Architect has made reasonable and timely objection. The Contractor shall not be required to contract with anyone to whom the Contractor has made reasonable objection.

§ 5.2.3 If the Owner, Construction Manager or Architect has reasonable objection to a person or entity proposed by the Contractor, the Contractor shall propose another to whom the Owner, Construction Manager or Architect has no reasonable objection. If the proposed but rejected Subcontractor was reasonably capable of performing the Work, the Contract Sum and Contract Time shall be increased or decreased by the difference, if any, occasioned by such change, and an appropriate Change Order shall be issued before commencement of the substitute Subcontractor's Work. However, no increase in the Contract Sum or Contract Time shall be allowed for such change unless the Contractor has acted promptly and responsively in submitting names as required.

§ 5.2.4 The Contractor shall not substitute a Subcontractor, person, or entity for one previously selected if the Owner, Construction Manager or Architect makes reasonable objection to such substitution.

### § 5.3 Subcontractual Relations

By appropriate written agreement, the Contractor shall require each Subcontractor, to the extent of the Work to be performed by the Subcontractor, to be bound to the Contractor by terms of the Contract Documents, and to assume toward the Contractor all the obligations and responsibilities, including, but not limited to, the responsibility for safety of the Subcontractor's Work and obligations to defend and indemnify, that the Contractor, by these Contract Documents, assumes toward the Owner, Construction Manager and Architect. Each subcontract agreement shall preserve and protect the rights of the Owner, Construction Manager and Architect under the Contract Documents with respect to the Work to be performed by the Subcontractor so that subcontracting thereof will not prejudice such rights, and shall allow to the Subcontractor, unless specifically provided otherwise in the subcontract agreement, the benefit of all rights, remedies, and redress against the Contractor that the Contractor, by the Contract Documents, has against the Owner. Where appropriate, the Contractor shall require each Subcontractor to enter into similar agreements with Sub-subcontractors. The Contractor shall make available to each proposed Subcontractor, prior to the execution of the subcontract agreement, copies of the Contract Documents to which the Subcontractor will be bound, and, upon written request of the Subcontractor, identify to the Subcontractor terms and conditions of the proposed subcontract agreement that may be at variance with the Contract Documents. Subcontractors will similarly make copies of applicable portions of such documents available to their respective proposed Sub-subcontractors.

### § 5.4 Contingent Assignment of Subcontracts

§ 5.4.1 Each subcontract agreement for a portion of the Work is assigned by the Contractor to the Owner, provided that

- .1 assignment is effective only after termination of the Contract by the Owner for cause pursuant to Section 14.2 and only for those subcontract agreements that the Owner accepts by notifying the Subcontractor and Contractor; and
- .2 assignment is subject to the prior rights of the surety, if any, obligated under bond relating to the Contract.

When the Owner accepts the assignment of a subcontract agreement, the Owner assumes the Contractor's rights and obligations under the subcontract.

§ 5.4.2 Upon such assignment, if the Work has been suspended for more than 30 days, the Subcontractor's compensation shall be equitably adjusted for increases in cost resulting from the suspension.

§ 5.4.3 Upon assignment to the Owner under this Section 5.4, the Owner may further assign the subcontract to a successor Contractor or other entity. If the Owner assigns the subcontract to a successor Contractor or other entity, the Owner shall nevertheless remain legally responsible for all of the successor Contractor's obligations under the subcontract.

## ARTICLE 6 CONSTRUCTION BY OWNER OR BY SEPARATE CONTRACTORS

### § 6.1 Owner's Right to Perform Construction with Own Forces and to Award Other Contracts

§ 6.1.1 The Owner reserves the right to perform construction or operations related to the Project with the Owner's own forces, and with Separate Contractors retained under Conditions of the Contract substantially similar to those of this Contract, including those provisions of the Conditions of the Contract related to insurance and waiver of subrogation.

§ 6.1.2 When the Owner performs construction or operations with the Owner's own forces or Separate Contractors, the Owner shall provide for coordination of such forces and Separate Contractors with the Work of the Contractor, who shall cooperate with them.

§ 6.1.3 Unless otherwise provided in the Contract Documents, when the Owner performs construction or operations related to the Project with the Owner's own forces or with Separate Contractors, the Owner or its Separate Contractors shall have the same obligations and rights that the Contractor has under the Conditions of the Contract, including, without excluding others, those stated in Article 3, this Article 6, and Articles 10, 11, and 12.

## § 6.2 Mutual Responsibility

§ 6.2.1 The Contractor shall afford the Owner's own forces, Separate Contractors, Construction Manager and other Contractors reasonable opportunity for introduction and storage of their materials and equipment and performance of their activities, and shall connect and coordinate the Contractor's construction and operations with theirs as required by the Contract Documents.

§ 6.2.2 If part of the Contractor's Work depends for proper execution or results upon construction or operations by the Owner's own forces, Separate Contractors or other Contractors, the Contractor shall, prior to proceeding with that portion of the Work, promptly notify the Construction Manager and Architect in writing and in detail of apparent discrepancies or defects in the construction or operations by the Owner or Separate Contractor or other Contractors that would render it unsuitable for proper execution and results of the Contractor's Work. Failure of the Contractor to notify the Construction Manager and the Architect of apparent discrepancies or defects prior to proceeding with the Work shall constitute an acknowledgment that the Owner's or Separate Contractor's or other Contractors' completed or partially completed construction is fit and proper to receive the Contractor's Work. The Contractor shall not be responsible for discrepancies or defects in the construction or operations by the Owner or Separate Contractors or other Contractors that are not apparent.

§ 6.2.3 The Contractor shall reimburse the Owner for costs the Owner incurs, including costs that are payable to a Separate Contractors or to other Contractors, because of the Contractor's delays, improperly timed activities or defective construction

§ 6.2.4 The Contractor shall promptly remedy damage that the Contractor wrongfully causes to completed or partially completed construction, or to property of the Owner, Separate Contractors, or other Contractors as provided in Section 10.2.5.

§ 6.2.5 The Owner, Separate Contractors, and other Contractors shall have the same responsibilities for cutting and patching as are described for the Contractor in Section 3.14.

## § 6.3 Owner's Right to Clean Up

If a dispute arises among the Contractor, Separate Contractors, other Contractors, and the Owner as to the responsibility under their respective contracts for maintaining the premises and surrounding area free from waste materials and rubbish, the Owner may clean up and the Construction Manager, with notice to the Architect, will allocate the cost among those responsible.

## ARTICLE 7 CHANGES IN THE WORK

### § 7.1 General

§ 7.1.1 Changes in the Work may be accomplished after execution of the Contract, and without invalidating the Contract, by Change Order, Construction Change Directive or order for a minor change in the Work, subject to the limitations stated in this Article 7 and elsewhere in the Contract Documents.

§ 7.1.2 A Change Order shall be based upon agreement among the Owner, Construction Manager, Architect and Contractor. A Construction Change Directive requires agreement by the Owner, Construction Manager and Architect and may or may not be agreed to by the Contractor. An order for a minor change in the Work may be issued by the Architect alone.

**§ 7.1.3** Changes in the Work shall be performed under applicable provisions of the Contract Documents. The Contractor shall proceed promptly with changes in the Work, unless otherwise provided in the Change Order, Construction Change Directive, or order for a minor change in the Work.

## **§ 7.2 Change Orders**

A Change Order is a written instrument prepared by the Construction Manager and signed by the Owner, Construction Manager, Architect, and Contractor, stating their agreement upon all of the following:

- .1 The change in the Work;
- .2 The amount of the adjustment, if any, in the Contract Sum; and
- .3 The extent of the adjustment, if any, in the Contract Time.

## **§ 7.3 Construction Change Directives**

**§ 7.3.1** A Construction Change Directive is a written order prepared by the Construction Manager and signed by the Owner, Construction Manager and Architect, directing a change in the Work prior to agreement on adjustment, if any, in the Contract Sum or Contract Time, or both. The Owner may by Construction Change Directive, without invalidating the Contract, order changes in the Work within the general scope of the Contract consisting of additions, deletions, or other revisions, the Contract Sum and Contract Time being adjusted accordingly.

**§ 7.3.2** A Construction Change Directive shall be used in the absence of total agreement on the terms of a Change Order.

**§ 7.3.3** If the Construction Change Directive provides for an adjustment to the Contract Sum, the adjustment shall be based on one of the following methods:

- .1 Mutual acceptance of a lump sum properly itemized and supported by sufficient substantiating data to permit evaluation;
- .2 Unit prices stated in the Contract Documents or subsequently agreed upon;
- .3 Cost to be determined in a manner agreed upon by the parties and a mutually acceptable fixed or percentage fee; or
- .4 As provided in Section 7.3.4.

**§ 7.3.4** If the Contractor does not respond promptly or disagrees with the method for adjustment in the Contract Sum, the Construction Manager shall determine the adjustment on the basis of reasonable expenditures and savings of those performing the Work attributable to the change, including, in case of an increase in the Contract Sum, an amount for overhead and profit as set forth in the Contract Documents, or if no such amount is set forth in the Contract Documents, a reasonable amount. In such case, and also under Section 7.3.3.3, the Contractor shall keep and present, in such form as the Construction Manager may prescribe, an itemized accounting together with appropriate supporting data. Unless otherwise provided in the Contract Documents, costs for the purposes of this Section 7.3.4 shall be limited to the following:

- .1 Costs of labor, including applicable payroll taxes, fringe benefits required by agreement or custom, workers' compensation insurance directly related to the work, and other employee costs approved by the Construction Manager and Architect;
- .2 Costs of materials, supplies, and equipment, including cost of transportation, whether incorporated or consumed;
- .3 Rental costs of machinery and equipment, exclusive of hand tools and equipment normally encumbered to perform the work, whether rented from the Contractor or others;
- .4 Costs of premiums for all bonds and insurance, permit fees, directly related to the work; and
- .5 Costs of supervision by the Site Superintendent directly attributable to the change, if the change requires an extension of time beyond that time indicated in the Contract.

**§ 7.3.5** If the Contractor disagrees with the adjustment in the Contract Time, the Contractor may make a Claim in accordance with applicable provisions of Article 15.

**§ 7.3.6** Upon receipt of a Construction Change Directive, the Contractor shall promptly proceed with the change in the Work involved and advise the Construction Manager of the Contractor's agreement or disagreement with the method, if any, provided in the Construction Change Directive for determining the proposed adjustment in the Contract Sum or Contract Time.

**§ 7.3.7** A Construction Change Directive signed by the Contractor indicates the Contractor's agreement therewith, including adjustment in Contract Sum and Contract Time or the method for determining them. Such agreement shall be effective immediately and shall be recorded as a Change Order.

**§ 7.3.8** The amount of credit to be allowed by the Contractor to the Owner for a deletion or change that results in a net decrease in the Contract Sum shall be actual net cost as confirmed by the Construction Manager and Architect. When both additions and credits covering related Work or substitutions are involved in a change, the allowance for overhead and profit shall be figured on the basis of net increase, if any, with respect to that change.

**§ 7.3.9** Pending final determination of the total cost of a Construction Change Directive to the Owner, the Contractor may request payment for Work completed under the Construction Change Directive in Applications for Payment. The Construction Manager and Architect will make an interim determination for purposes of monthly certification for payment for those costs and certify for payment the amount that the Construction Manager and Architect determine to be reasonably justified. The interim determination of cost shall adjust the Contract Sum on the same basis as a Change Order, subject to the right of either party to disagree and assert a Claim in accordance with Article 15.

**§ 7.3.10** When the Owner and Contractor agree with a determination made by the Construction Manager and Architect concerning the adjustments in the Contract Sum and Contract Time, or otherwise reach agreement upon the adjustments, such agreement shall be effective immediately and the Construction Manager shall prepare a Change Order. Change Orders may be issued for all or any part of a Construction Change Directive.

#### **§ 7.4 Minor Changes in the Work**

The Architect may order minor changes in the Work that are consistent with the intent of the Contract Documents and do not involve an adjustment in the Contract Sum or an extension of the Contract Time. The Architect's order for minor changes shall be in writing. If the Contractor believes that the proposed minor change in the Work will affect the Contract Sum or Contract Time, the Contractor shall notify the Construction Manager and shall not proceed to implement the change in the Work. If the Contractor performs the Work set forth in the Architect's order for a minor change without prior notice to the Construction Manager that such change will affect the Contract Sum or Contract Time, the Contractor waives any adjustment to the Contract Sum or extension of the Contract Time.

#### **§ 7.5 OVERHEAD AND PROFIT**

**§ 7.5.1** The combined overhead and profit included in the total cost to the Owner shall be based on the following schedule:

**§ 7.5.1.a** Prime Contractor: For Work performed by the Prime Contractor's own forces, markup shall not exceed a total of fifteen percent (15%), of the value of labor and materials (L+M).

.1 Example: Total Prime Contractor Amount = (L+M) + 15% O&P

**§ 7.5.1.b** Prime Contractor's Subcontractor: For Work performed by the Subcontractor's own forces, markup shall not exceed a total of ten percent (10%), of the value of labor and material (L+M). For the Prime Contractor, for work performed by that Prime Contractor's Subcontractor, markup shall not exceed five percent (5%) for the value of the Subcontractor amount.

.1 Example: Total Subcontractor Amount = (L+M) + 10% O&P

.2 Example: Total Prime Contractor Amount = Total Subcontract Amount + 5% O&P

**§ 7.5.1.c** Sub-Subcontractor: For Work performed by the Subcontractor's own forces, markup shall not exceed a total of five percent (5%) of the value of labor and materials (L+M). For the Subcontractor, for work performed by the Subcontractor's Sub-subcontract, markup shall not exceed 5% of the Subcontractor Amount. For the Prime Contractor, for Work performed by the Subcontractor's Sub-subcontractor, markup shall not exceed 5% of the Subcontractor Amount.

.1 Example: Total Sub-subcontractor Amount = (L+M) + 5% O&P

.2 Example: Total Subcontractor Amount = Sub-subcontractor Amount + 5% O&P

.3 Example: Total Prime Contractor Amount = Subcontractor Amount + 5% O&P

§ 7.5.2 Performance and Payment Bond Adjustments: Do not itemize increases for bond premiums for each individual Change Order per General Conditions of the Contract, Paragraph 11.4.

## ARTICLE 8 TIME

### § 8.1 Definitions

§ 8.1.1 Unless otherwise provided, Contract Time is the period of time, including authorized adjustments, allotted in the Contract Documents for Substantial Completion of the Work.

§ 8.1.2 The date of commencement of the Work is the date established in the Agreement.

§ 8.1.3 The date of Substantial Completion is the date certified by the Architect in accordance with Section 9.8. The Work of this Project shall be substantially complete on or before the dates indicated in Milestone Construction Schedule for those portions of the Work so stipulated. Actual damages may be assessed by the Owner if specified completion dates are not adhered to by the Contractor.

§ 8.1.4 The term "day" as used in the Contract Documents shall mean calendar day unless otherwise specifically defined.

### § 8.2 Progress and Completion

§ 8.2.1 Time limits stated in the Contract Documents are of the essence of the Contract. By executing the Agreement, the Contractor confirms that the Contract Time is a reasonable period for performing the Work.

§ 8.2.2 The Contractor shall not knowingly, except by agreement or instruction of the Owner in writing, commence the Work prior to the effective date of insurance required to be furnished by the Contractor and Owner.

§ 8.2.3 The Contractor shall proceed expeditiously with adequate forces and shall achieve Substantial Completion within the Contract Time.

### § 8.3 Delays and Extensions of Time

§ 8.3.1 If the Contractor is delayed at any time in the commencement or progress of the Work by (1) an act or neglect of the Owner, Architect, Construction Manager, or an employee of any of them, or of the Owner's own forces, Separate Contractors, or other Contractors; (2) by changes ordered in the Work; (3) by labor disputes, fire, unusual delay in deliveries, unavoidable casualties, adverse weather conditions documented in accordance with Section 15.1.6.2, or other causes beyond the Contractor's control; (4) by delay authorized by the Owner pending mediation and binding dispute resolution; or (5) by other causes that the Contractor asserts and the Architect, based on the recommendation of the Construction Manager, determines justify delay, then the Contract Time shall be extended for such reasonable time as the Architect may determine.

§ 8.3.2 Claims relating to time shall be made in accordance with applicable provisions of Article 15.

§ 8.3.3 The Owner shall not be liable to the Contractor and/or any subcontractor for claims or damages of any nature caused by or arising out of delays. The sole remedy against the Owner for delays shall be the allowance of additional time for completion of the Work, the amount of which shall be subject to the claims procedure set forth herein. Except to the extent, if any, expressly prohibited by law, the Contractor expressly agrees not to make and hereby waives any claim for damages for delay, including, but not limited to, those resulting from increased labor or material costs; directions given or not given by the Owner, Construction Manager or Architect, including scheduling and coordination of the Work; the Architect's preparation of drawings and specifications or review of shop drawings and requests for instruction(s); or, on account of any delay, obstruction or hindrance for any cause whatsoever by the Owner, Construction Manager, Architect, or any other contractor on the project, whether or not foreseeable or anticipated. The Contractor agrees that its sole right and remedy therefor shall be an extension of time, if appropriate. **IT IS EMPHASIZED THAT NO MONETARY RECOVERY MAY BE OBTAINED BY THE CONTRACTOR FOR DELAY AGAINST THE OWNER, CONSTRUCTION MANAGER, OR ARCHITECT BASED ON ANY REASON AND THAT THE CONTRACTOR'S SOLE REMEDY, IF APPROPRIATE, IS ADDITIONAL TIME."**

## **ARTICLE 9 PAYMENTS AND COMPLETION**

### **§ 9.1 Contract Sum**

**§ 9.1.1** The Contract Sum is stated in the Agreement and, including authorized adjustments, is the total amount payable by the Owner to the Contractor for performance of the Work under the Contract Documents.

**§ 9.1.2** If unit prices are stated in the Contract Documents or subsequently agreed upon, and if quantities originally contemplated are materially changed so that application of such unit prices to the actual quantities causes substantial inequity to the Owner or Contractor, the applicable unit prices shall be equitably adjusted.

### **§ 9.2 Schedule of Values**

As indicated in the Contract Documents, the Contractor shall submit a schedule of values to the Construction Manager, before the first Application for Payment, allocating the entire Contract Sum to the various portions of the Work. The schedule of values shall be prepared in the form, and supported by the data to substantiate its accuracy, required by the Construction Manager and the Architect. This schedule, unless objected to by the Construction Manager or Architect, shall be used as a basis for reviewing the Contractor's Applications for Payment. The Construction Manager shall forward to the Architect the Contractor's schedule of values. Any changes to the schedule of values shall be submitted to the Construction Manager and supported by such data to substantiate its accuracy as the Construction Manager and the Architect may require, and unless objected to by the Construction Manager or the Architect, shall be used as a basis for reviewing the Contractor's subsequent Applications for Payment.

### **§ 9.3 Applications for Payment**

**§ 9.3.1** The Contractor shall submit applications for payment in accordance with Specification Section "Payment Procedures."

**§ 9.3.1.1** As provided in Section 7.3.9, such applications may include requests for payment on account of changes in the Work that have been properly authorized by Construction Change Directives, or by interim determinations of the Construction Manager and Architect, but not yet included in Change Orders.

**§ 9.3.1.2** Applications for Payment shall not include requests for payment for portions of the Work for which the Contractor does not intend to pay a Subcontractor or supplier, unless such Work has been performed by others whom the Contractor intends to pay.

**§ 9.3.1.3** Until Substantial Completion, the Owner shall pay ninety-five percent (95%) of the amount due to the Contractor on account of progress payments.

**§ 9.3.1.4** When the work or major portions thereof as contemplated by the terms of the Contract are substantially complete, the Contractor shall submit to the Construction Manager and Architect a requisition for payment of the remaining amount of the Contract balance. Upon receipt of such requisition, the Owner shall approve and promptly pay the remaining amount of the Contract less two times the value of any remaining items to be completed and an amount necessary to satisfy any claims, liens or judgments against the Contractor, which have not been suitably discharged, as determined by the Architect in conjunction with the Construction Manager. Any claims, liens or judgments referred to in this clause shall pertain to the Project and shall be filed in accordance with the terms of the Contract, and applicable laws.

**§ 9.3.2** Unless otherwise provided in the Contract Documents, payments shall be made on account of materials and equipment delivered and suitably stored at the site for subsequent incorporation in the Work. If approved in advance by the Owner, payment may similarly be made for materials and equipment suitably stored off the site at a location agreed upon in writing. Payment for materials and equipment stored on or off the site shall be conditioned upon compliance by the Contractor with procedures satisfactory to the Owner to establish the Owner's title to such materials and equipment or otherwise protect the Owner's interest, and shall include the costs of applicable insurance, storage, and transportation to the site, for such materials and equipment stored off the site. The Owner shall have the right, at any time on reasonable notice to inspect materials and equipment which have been stored off the site in accordance with this paragraph.

**§ 9.3.2.1** Proof of insurance for items stored off site and copies of invoices are to be provided with Applications for Payment requesting payment for stored materials.

**§ 9.3.3** The Contractor warrants that title to all Work covered by an Application for Payment will pass to the Owner no later than the time of payment. The Contractor further warrants that upon submittal of an Application for Payment all Work for which Certificates for Payment have been previously issued and payments received from the Owner shall, to the best of the Contractor's knowledge, information, and belief, be free and clear of liens, claims, security interests, or encumbrances, in favor of the Contractor, Subcontractors, suppliers, or other persons or entities that provided labor, materials and equipment relating to the Work.

#### **§ 9.4 Certificates for Payment**

**§ 9.4.1** Where there is only one Contractor, the Construction Manager will, within seven days after the Construction Manager's receipt of the Contractor's Application for Payment, review the Application, certify the amount the Construction Manager determines is due the Contractor, and forward the Contractor's Application and Certificate for Payment to the Architect. Within seven days after the Architect receives the Contractor's Application for Payment from the Construction Manager, the Architect will either (1) issue to the Owner a Certificate for Payment, in the full amount of the Application for Payment, with a copy to the Construction Manager; or (2) issue to the Owner a Certificate for Payment for such amount as the Architect determines is properly due, and notify the Construction Manager and Owner of the Architect's reasons for withholding certification in part as provided in Section 9.5.1; or (3) withhold certification of the entire Application for Payment, and notify the Construction Manager and Owner of the Architect's reason for withholding certification in whole as provided in Section 9.5.1. The Construction Manager will promptly forward to the Contractor the Architect's notice of withholding certification.

**§ 9.4.2** Where there is more than one Contractor performing portions of the Project, the Construction Manager will, within seven days after the Construction Manager receives all of the Contractors' Applications for Payment: (1) review the Applications and certify the amount the Construction Manager determines is due each of the Contractors; (2) prepare a Summary of Contractors' Applications for Payment by combining information from each Contractor's application with information from similar applications for progress payments from the other Contractors; (3) prepare a Project Application and Certificate for Payment; (4) certify the amount the Construction Manager determines is due all Contractors; and (5) forward the Summary of Contractors' Applications for Payment and Project Application and Certificate for Payment to the Architect.

**§ 9.4.2.1** Within seven days after the Architect receives the Project Application and Project Certificate for Payment and the Summary of Contractors' Applications for Payment from the Construction Manager, the Architect will either (1) issue to the Owner a Project Certificate for Payment, with a copy to the Construction Manager; or (2) issue to the Owner a Project Certificate for Payment for such amount as the Architect determines is properly due, and notify the Construction Manager and Owner of the Architect's reasons for withholding certification in part as provided in Section 9.5.1; or (3) withhold certification of the entire Project Application for Payment, and notify the Construction Manager and Owner of the Architect's reason for withholding certification in whole as provided in Section 9.5.1. The Construction Manager will promptly forward the Architect's notice of withholding certification to the Contractors.

**§ 9.4.3** The Construction Manager's certification of an Application for Payment or, in the case of more than one Contractor, a Project Application and Certificate for Payment, shall be based upon the Construction Manager's evaluation of the Work and the data in the Application or Applications for Payment. The Construction Manager's certification will constitute a representation that, to the best of the Construction Manager's knowledge, information, and belief, the Work has progressed to the point indicated, the quality of the Work is in accordance with the Contract Documents, and that the Contractor is, or Contractors are, entitled to payment in the amount certified.

**§ 9.4.4** The Architect's issuance of a Certificate for Payment or, in the case of more than one Contractor, Project Application and Certificate for Payment, shall be based upon the Architect's evaluation of the Work, the recommendation of the Construction Manager, and data in the Application for Payment or Project Application for Payment. The Architect's certification will constitute a representation that, to the best of the Architect's judgment, knowledge, information, and belief, the Work has progressed to the point indicated, the quality of the Work is in accordance with the Contract Documents, and that the Contractor is, or Contractors are, entitled to payment in the amount certified.

**§ 9.4.5** The representations made pursuant to Sections 9.4.3 and 9.4.4 are subject to an evaluation of the Work for conformance with the Contract Documents upon Substantial Completion, to results of subsequent tests and inspections, to correction of minor deviations from the Contract Documents prior to completion, and to specific qualifications expressed by the Construction Manager or Architect.



**§ 9.4.6** The issuance of a Certificate for Payment or a Project Certificate for Payment will not be a representation that the Construction Manager or Architect has (1) made exhaustive or continuous on-site inspections to check the quality or quantity of the Work; (2) reviewed construction means, methods, techniques, sequences, or procedures; (3) reviewed copies of requisitions received from Subcontractors and suppliers and other data requested by the Owner to substantiate the Contractor's right to payment; or (4) made examination to ascertain how or for what purpose the Contractor has used money previously paid on account of the Contract Sum.

#### **§ 9.5 Decisions to Withhold Certification**

**§ 9.5.1** The Construction Manager or Architect may withhold a Certificate for Payment or Project Certificate for Payment in whole or in part, to the extent reasonably necessary to protect the Owner, if in the Construction Manager's or Architect's opinion the representations to the Owner required by Section 9.4.3 and 9.4.4 cannot be made. If the Construction Manager or Architect is unable to certify payment in the amount of the Application, the Construction Manager will notify the Contractor and Owner as provided in Section 9.4.1 and 9.4.2. If the Contractor, Construction Manager and Architect cannot agree on a revised amount, the Architect will promptly issue a Certificate for Payment or a Project Certificate for Payment for the amount for which the Architect is able to make such representations to the Owner. The Construction Manager or Architect may also withhold a Certificate for Payment or, because of subsequently discovered evidence, may nullify the whole or a part of a Certificate for Payment or Project Certificate for Payment previously issued, to such extent as may be necessary in the Construction Manager's or Architect's opinion to protect the Owner from loss for which the Contractor is responsible, including loss resulting from the acts and omissions described in Section 3.3.2 because of

- .1 defective Work not remedied;
- .2 third party claims filed or reasonable evidence indicating probable filing of such claims, unless security acceptable to the Owner is provided by the Contractor;
- .3 failure of the Contractor to make payments properly to Subcontractors or suppliers for labor, materials or equipment;
- .4 reasonable evidence that the Work cannot be completed for the unpaid balance of the Contract Sum;
- .5 damage to the Owner or a Separate Contractor or other Contractor;
- .6 reasonable evidence that the Work will not be completed within the Contract Time, and that the unpaid balance would not be adequate to cover actual or liquidated damages for the anticipated delay; or
- .7 repeated failure to carry out the Work in accordance with the Contract Documents.
- .8 failure of Contractor to provide executed supplementary bid forms, performance and payment bonds or a current Certificate of Insurance.

**§ 9.5.2** When either party disputes the Architect's decision regarding a Certificate for Payment under Section 9.5.1, in whole or in part, that party may submit a Claim in accordance with Article 15.

**§ 9.5.3** When the reasons for withholding certification are removed, certification will be made for amounts previously withheld.

**§ 9.5.4** If the Architect or Construction Manager withholds certification for payment under Section 9.5.1, the Owner may, at its sole option, issue joint checks to the Contractor and to any Subcontractor or supplier to whom the Contractor failed to make payment for Work properly performed or material or equipment suitably delivered. If the Owner makes payments by joint check, the Owner shall notify the Architect and the Construction Manager, and both will reflect such payment on the next Certificate for Payment.

#### **§ 9.6 Progress Payments**

**§ 9.6.1** After the Architect has issued a Certificate for Payment or Project Certificate for Payment, the Owner shall make payment in the manner and within the time provided in the Contract Documents, and shall so notify the Construction Manager and Architect.

**§ 9.6.2** The Contractor shall pay each Subcontractor, no later than seven days after receipt of payment from the Owner, the amount to which the Subcontractor is entitled, reflecting percentages actually retained from payments to the Contractor on account of the Subcontractor's portion of the Work. The Contractor shall, by appropriate agreement with each Subcontractor, require each Subcontractor to make payments to Sub-subcontractors in a similar manner.

**§ 9.6.3** The Construction Manager will, on request, furnish to a Subcontractor, if practicable, information regarding percentages of completion or amounts applied for by the Contractor and action taken thereon by the Owner, Construction Manager and Architect on account of portions of the Work done by such Subcontractor.

**§ 9.6.4** The Owner has the right to request written evidence from the Contractor that the Contractor has properly paid Subcontractors and suppliers amounts paid by the Owner to the Contractor for subcontracted Work. If the Contractor fails to furnish such evidence within seven days, the Owner shall have the right to contact Subcontractors and suppliers to ascertain whether they have been properly paid. Neither the Owner, Construction Manager nor Architect shall have an obligation to pay, or to see to the payment of money to, a Subcontractor or supplier, except as may otherwise be required by law.

**§ 9.6.5** The Contractor's payments to suppliers shall be treated in a manner similar to that provided in Sections 9.6.2, 9.6.3 and 9.6.4.

**§ 9.6.6** A Certificate for Payment, a progress payment, or partial or entire use or occupancy of the Project by the Owner shall not constitute acceptance of Work not in accordance with the Contract Documents.

**§ 9.6.7** Unless the Contractor provides the Owner with a payment bond in the full penal sum of the Contract Sum, payments received by the Contractor for Work properly performed by Subcontractors or provided by suppliers shall be held by the Contractor for those Subcontractors or suppliers who performed Work or furnished materials, or both, under contract with the Contractor for which payment was made by the Owner. Nothing contained herein shall require money to be placed in a separate account and not commingled with money of the Contractor, create any fiduciary liability or tort liability on the part of the Contractor for breach of trust, or entitle any person or entity to an award of punitive damages against the Contractor for breach of the requirements of this provision.

**§ 9.6.8** Provided the Owner has fulfilled its payment obligations under the Contract Documents, the Contractor shall defend and indemnify the Owner from all loss, liability, damage or expense, including reasonable attorney's fees and litigation expenses, arising out of any lien claim or other claim for payment by any Subcontractor or supplier of any tier. Upon receipt of notice of a lien claim or other claim for payment, the Owner shall notify the Contractor. If approved by the applicable court, when required, the Contractor may substitute a surety bond for the property against which the lien or other claim for payment has been asserted.

*(Paragraphs deleted)*

## **§ 9.8 Substantial Completion**

**§ 9.8.1** Substantial Completion is the stage in the progress of the Work when the Work or designated portion thereof is sufficiently complete in accordance with the Contract Documents so the Owner can occupy or utilize the Work for its intended use.

**§ 9.8.2** When the Contractor considers that the Work, or a portion thereof which the Owner agrees to accept separately, is substantially complete, the Contractor shall notify the Construction Manager, and the Contractor and Construction Manager shall jointly prepare and submit to the Architect a comprehensive written list of items to be completed or corrected prior to Architect's first (1<sup>st</sup>) inspection. Failure to include an item on such list does not alter the responsibility of the Contractor to complete all Work in accordance with the Contract Documents.

**§ 9.8.3** Upon receipt of the Contractor's punchlist, the Architect, assisted by the Construction Manager, will make an inspection to determine whether the Work or designated portion thereof is substantially complete. If the Architect's inspection discloses any item, whether or not included on the Contractor's punchlist, which is not sufficiently complete in accordance with the Contract Documents so that the Owner can occupy or utilize the Work or designated portion thereof for its intended use, the Contractor shall, before issuance of the Certificate of Substantial Completion, complete or correct such item upon notification by the Architect. In such case, the Contractor shall then submit a request for another inspection by the Architect, assisted by the Construction Manager, to determine Substantial Completion.

**§ 9.8.3.1** Except with the consent of the Owner, the Architect in conjunction with the Construction Manager will perform no more than three (3) inspections to determine whether the Work or a designated portion thereof has attained Substantial Completion in accordance with the Contract Documents. The three (3) inspections will include not only determining if the area is substantially complete, but will also include any follow-up inspection to confirm *all* open

punchlist items have been completed for that specific item. The Owner may deduct from the Contract Sum amounts paid to the Architect for any additional inspections necessitated by the Contractor's misrepresentation of conditions.

**§ 9.8.4** When the Architect, assisted by the Construction Manager, determines that the Work of all of the Contractors, or designated portion thereof, is substantially complete, the Construction Manager will prepare, and the Construction Manager and Architect shall execute, a Certificate of Substantial Completion that shall establish the date of Substantial Completion; establish responsibilities of the Owner and Contractor for security, maintenance, heat, utilities, damage to the Work and insurance; and fix the time within which the Contractor shall finish all items on the list accompanying the Certificate. Warranties required by the Contract Documents shall commence on the date of Substantial Completion of the Work or designated portion thereof unless otherwise provided in the Certificate of Substantial Completion.

**§ 9.8.5** The Certificate of Substantial Completion shall be submitted to the Owner and Contractor for their written acceptance of responsibilities assigned to them in the Certificate. Upon such acceptance, and consent of surety if any, the Owner shall make payment of retainage applying to the Work or designated portion thereof. Such payment shall be adjusted for Work that is incomplete or not in accordance with the requirements of the Contract Documents. The payment shall be sufficient to increase the total payments to one-hundred percent (100%) of the Contract Sum, less two times the value of any remaining items to be completed and any amount necessary to satisfy claims, liens or judgments against the Contractor which have not been suitably discharged, as determined by the Architect assisted by the Construction Manager.

**§ 9.8.6** In the event the Contractor does not achieve final completion within ninety (90) days after the date of Substantial Completion, allowing for any approved extensions of the Contract time, Contractor shall not be entitled to any further payment and Contractor agrees that such failure to complete the work within the time set forth above shall constitute a waiver of all claims by the Contractor to any money that may be due. This provision shall not operate as a waiver by the Owner of any claims or remedies of any nature against the Contractor arising out of the Contract.

## **§ 9.9 Partial Occupancy or Use**

**§ 9.9.1** The Owner may occupy or use any completed or partially completed portion of the Work at any stage when such portion is designated by separate agreement with the Contractor, provided such occupancy or use is consented to by the insurer and authorized by public authorities having jurisdiction over the Project. Such partial occupancy or use may commence whether or not the portion is substantially complete, provided the Owner and Contractor have accepted in writing the responsibilities assigned to each of them for payments, retainage if any, security, maintenance, heat, utilities, damage to the Work and insurance, and have agreed in writing concerning the period for correction of the Work and commencement of warranties required by the Contract Documents. When the Contractor considers a portion substantially complete, the Contractor and Construction Manager shall jointly prepare and submit a list to the Architect as provided under Section 9.8.2. Consent of the Contractor to partial occupancy or use shall not be unreasonably withheld. The stage of the progress of the Work shall be determined by written agreement between the Owner and Contractor or, if no agreement is reached, by decision of the Architect after consultation with the Construction Manager.

**§ 9.9.2** Immediately prior to such partial occupancy or use, the Owner, Construction Manager, Contractor, and Architect shall jointly inspect the area to be occupied or portion of the Work to be used in order to determine and record the condition of the Work.

**§ 9.9.3** Unless otherwise agreed upon, partial occupancy or use of a portion or portions of the Work shall not constitute acceptance of Work not complying with the requirements of the Contract Documents.

## **§ 9.10 Final Completion and Final Payment**

**§ 9.10.1** Upon completion of the Work, the Contractor shall forward to the Construction Manager a notice that the Work is ready for final inspection and acceptance, and shall also forward to the Construction Manager a final Contractor's Application for Payment. Upon receipt, the Construction Manager shall perform an inspection to confirm the completion of Work of the Contractor. The Construction Manager shall make recommendations to the Architect when the Work of all of the Contractors is ready for final inspection, and shall then forward the Contractors' notices and Application for Payment or Project Application for Payment, to the Architect, who will promptly make such inspection. When the Architect finds the Work acceptable under the Contract Documents and the Contract fully performed, the Construction Manager and Architect will promptly issue a final Certificate for Payment or Project

Certificate for Payment stating that to the best of their knowledge, information and belief, and on the basis of their on-site visits and inspections, the Work has been completed in accordance with the Contract Documents and that the entire balance found to be due the Contractor and noted in the final Certificate is due and payable. The Construction Manager's and Architect's final Certificate for Payment or Project Certificate for Payment will constitute a further representation that conditions listed in Section 9.10.2 as precedent to the Contractor's being entitled to final payment have been fulfilled.

**§ 9.10.1.1** Except with the consent of the Owner, the Architect in conjunction with the Construction Manager will perform no more than two (2) inspections to determine whether the Work or a designated portion thereof has attained Final Completion in accordance with the Contract Documents. The Owner may deduct from the Contract Sum amounts paid to the Architect for any additional inspections necessitated by the Contractor's misrepresentation of final completion.

**§ 9.10.2** Neither final payment nor any remaining retained percentage shall become due until the Contractor submits to the Architect through the Construction Manager (1) an affidavit that payrolls, bills for materials and equipment, and other indebtedness connected with the Work for which the Owner or the Owner's property might be responsible or encumbered (less amounts withheld by Owner) have been paid or otherwise satisfied, (2) a certificate evidencing that insurance required by the Contract Documents to remain in force after final payment is currently in effect, (3) a written statement that the Contractor knows of no reason that the insurance will not be renewable to cover the period required by the Contract Documents, (4) consent of surety, if any, to final payment (5) documentation of any special warranties, such as manufacturers' warranties or specific Subcontractor warranties, and (6), if required by the Owner, other data establishing payment or satisfaction of obligations, such as receipts and releases and waivers of liens, claims, security interests, or encumbrances arising out of the Contract, to the extent and in such form as may be designated by the Owner and (7) all Project closeout documents per the General Conditions of the Contract. If a Subcontractor refuses to furnish a release or waiver required by the Owner, the Contractor may furnish a bond satisfactory to the Owner to indemnify the Owner against such lien, claim, security interest, or encumbrance. If a lien, claim, security interest, or encumbrance remains unsatisfied after payments are made, the Contractor shall refund to the Owner all money that the Owner may be compelled to pay in discharging the lien, claim, security interest, or encumbrance, including all costs and reasonable attorneys' fees.

**§ 9.10.3** If, after Substantial Completion of the Work, final completion thereof is materially delayed through no fault of the Contractor or by issuance of Change Orders affecting final completion, and the Construction Manager and Architect so confirm, the Owner shall, upon application by the Contractor and certification by the Construction Manager and Architect, and without terminating the Contract, make payment of the balance due for that portion of the Work fully completed, corrected, and accepted. If the remaining balance for Work not fully completed or corrected is less than retainage stipulated in the Contract Documents, and if bonds have been furnished, the written consent of the surety to payment of the balance due for that portion of the Work fully completed and accepted shall be submitted by the Contractor to the Architect through the Construction Manager prior to certification of such payment. Such payment shall be made under terms and conditions governing final payment, except that it shall not constitute a waiver of Claims.

**§ 9.10.3.1** Exception is made for the Contractor expressly retained for the removal of lead, asbestos or polychlorinated (PCB) from the site. In this condition, all Contract Specifications and Drawings shall govern the handling of this material.

**§ 9.10.4** The making of final payment shall constitute a waiver of Claims by the Owner except those arising from

- .1 liens, Claims, security interests, or encumbrances arising out of the Contract and unsettled;
- .2 failure of the Work to comply with the requirements of the Contract Documents;
- .3 terms of special warranties required by the Contract Documents; or
- .4 audits performed by the Owner, if permitted by the Contract Documents, after final payment.

**§ 9.10.5** Acceptance of final payment by the Contractor, a Subcontractor, or a supplier, shall constitute a waiver of claims by that payee except those previously made in writing and identified by that payee as unsettled at the time of final Application for Payment.

**§ 9.10.6** In the event the Contractor does not achieve final completion within thirty (30) days after the date of substantial completion, allowing for any approved extensions of the contract time, Contractor shall not be entitled to any further payment and Contractor hereby agrees that such failure to complete the work within the time set forth

above shall constitute a waiver of all claims by the Contractor to any money that may be due. This provision shall not operate as a waiver by the Owner of any claims or remedies of any nature against the Contractor arising out of the contract.

## **ARTICLE 10 PROTECTION OF PERSONS AND PROPERTY**

### **§ 10.1 Safety Precautions and Programs**

The Contractor shall be responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the performance of the Contract. The Contractor shall submit the Contractor's safety program to the Construction Manager for review and coordination with the safety programs of other Contractors. The Construction Manager's responsibilities for review and coordination of safety programs shall not extend to direct control over or charge of the acts or omissions of the Contractors, Subcontractors, agents or employees of the Contractors or Subcontractors, or any other persons performing portions of the Work and not directly employed by the Construction Manager.

### **§ 10.2 Safety of Persons and Property**

**§ 10.2.1** The Contractor shall take reasonable precautions for safety of, and shall provide reasonable protection to prevent damage, injury, or loss to

- .1 employees on the Work and other persons who may be affected thereby;
- .2 the Work and materials and equipment to be incorporated therein, whether in storage on or off the site, under care, custody, or control of the Contractor, a Subcontractor, or a Sub-subcontractor;
- .3 other property at the site or adjacent thereto, such as trees, shrubs, lawns, walks, pavements, roadways, structures, and utilities not designated for removal, relocation, or replacement in the course of construction; and
- .4 construction or operations by the Owner, Separate Contractors, or other Contractors.

**§ 10.2.2** The Contractor shall comply with, and give notices required by applicable laws, statutes, ordinances, codes, rules and regulations, and lawful orders of public authorities, bearing on safety of persons or property or their protection from damage, injury, or loss.

**§ 10.2.3** The Contractor shall implement, erect, and maintain, as required by existing conditions and performance of the Contract, reasonable safeguards for safety and protection, including posting danger signs and other warnings against hazards; promulgating safety regulations; and notifying the owners and users of adjacent sites and utilities of the safeguards.

**§ 10.2.4** When use or storage of explosives or other hazardous materials or equipment or unusual methods are necessary for execution of the Work, the Contractor shall exercise utmost care and carry on such activities under supervision of properly qualified personnel.

**§ 10.2.5** The Contractor shall promptly remedy damage and loss (other than damage or loss insured under property insurance required by the Contract Documents) to property referred to in Sections 10.2.1.2, 10.2.1.3 and 10.2.1.4 caused in whole or in part by the Contractor, a Subcontractor, a Sub-subcontractor, or anyone directly or indirectly employed by any of them, or by anyone for whose acts they may be liable and for which the Contractor is responsible under Sections 10.2.1.2, 10.2.1.3 and 10.2.1.4. The Contractor may make a Claim for the cost to remedy the damage or loss to the extent such damage or loss is attributable to acts or omissions of the Owner, Construction Manager or Architect or anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable, and not attributable to the fault or negligence of the Contractor. The foregoing obligations of the Contractor are in addition to the Contractor's obligations under Section 3.18.

**§ 10.2.6** The Contractor shall designate a responsible member of the Contractor's organization at the site whose duty shall be the prevention of accidents. This person shall be the Contractor's superintendent unless otherwise designated by the Contractor in writing to the Owner, Construction Manager and Architect.

**§ 10.2.7** The Contractor shall not permit any part of the construction or site to be loaded so as to cause damage or create an unsafe condition.

### **§ 10.2.8 Injury or Damage to Person or Property**

If either party suffers injury or damage to person or property because of an act or omission of the other party, or of others for whose acts such party is legally responsible, notice of the injury or damage, whether or not insured, shall be given to the other party within a reasonable time not exceeding 21 days after discovery. The notice shall provide sufficient detail to enable the other party to investigate the matter.

### **§ 10.3 Hazardous Materials**

**§ 10.3.1** The Contractor is responsible for compliance with any requirements included in the Contract Documents regarding hazardous materials or substances. If the Contractor encounters a hazardous material or substance not addressed in the Contract Documents and if reasonable precautions will be inadequate to prevent foreseeable bodily injury or death to persons resulting from a material or substance, including but not limited to asbestos or polychlorinated biphenyl (PCB), encountered on the site by the Contractor, the Contractor shall, upon recognizing the condition, immediately stop Work in the affected area and notify the Owner, Construction Manager and Architect of the condition.

**§ 10.3.2** Upon receipt of the Contractor's notice, the Owner shall obtain the services of a licensed laboratory to verify the presence or absence of the material or substance reported by the Contractor and, in the event such material or substance is found to be present, to cause it to be rendered harmless. Unless otherwise required by the Contract Documents, the Owner shall furnish in writing to the Contractor, Construction Manager and Architect the names and qualifications of persons or entities who are to perform tests verifying the presence or absence of the material or substance or who are to perform the task of removal or safe containment of the material or substance. The Contractor, the Construction Manager and the Architect will promptly reply to the Owner in writing stating whether or not any of them has reasonable objection to the persons or entities proposed by the Owner. If the Contractor, Construction Manager or Architect has an objection to a person or entity proposed by the Owner, the Owner shall propose another to whom the Contractor, the Construction Manager and the Architect have no reasonable objection. When the material or substance has been rendered harmless, Work in the affected area shall resume upon written agreement of the Owner and Contractor. By Change Order, the Contract Time shall be extended appropriately and the Contract Sum shall be increased by the amount of the Contractor's reasonable additional costs of shutdown, delay, and start-up.

*(Paragraph deleted)*

**§ 10.3.2.1** Exception is made for the Contractor expressly retained for the removal of lead, asbestos or polychlorinated (PCB) from the site. In this condition, all Contract Specifications and Drawings shall govern the handling of this material.

**§ 10.3.4** The Owner shall not be responsible under this Section 10.3 for hazardous materials or substances the Contractor brings to the site unless such materials or substances are required by the Contract Documents. The Owner shall be responsible for hazardous materials or substances required by the Contract Documents, except to the extent of the Contractor's fault or negligence in the use and handling of such materials or substances.

**§ 10.3.5** The Contractor shall reimburse the Owner for the cost and expense the Owner incurs (1) for remediation of hazardous materials or substances the Contractor brings to the site and negligently handles, or (2) where the Contractor fails to perform its obligations under Section 10.3.1, except to the extent that the cost and expense are due to the Owner's fault or negligence.

*(Paragraph deleted)*

### **§ 10.4 Emergencies**

In an emergency affecting safety of persons or property, the Contractor shall act, at the Contractor's discretion, to prevent threatened damage, injury, or loss. Additional compensation or extension of time claimed by the Contractor on account of an emergency shall be determined as provided in Article 15 and Article 7.

## **ARTICLE 11 INSURANCE AND BONDS**

### **§ 11.1 Contractor's Insurance and Bonds**

**§ 11.1.1** The Contractor shall purchase and maintain insurance of the types and limits of liability, containing the endorsements, and subject to the terms and conditions, as described in the Agreement or elsewhere in the Contract Documents. The Contractor shall purchase and maintain the required insurance from an insurance company or insurance companies lawfully authorized to issue insurance in the jurisdiction where the Project is located. The Owner, Construction Manager and Construction Manager's consultants, and the Architect and Architect's consultants,

shall be named as additional insureds under the Contractor's commercial general liability policy or as otherwise described in the Contract Documents. Notwithstanding any terms, conditions or provisions, in any other writing between the parties, the contractor hereby agrees to effectuate the naming of the District/BOCES as an Additional Insured on the contractor's insurance policies, except for workers' compensation and N.Y. State Disability insurance

- .1 Claims under workers' compensation, disability benefit and other similar employee benefit acts that are applicable to the Work to be performed, including private entities performing Work at the site and exempt from the coverage on account of the number of employees or occupation, such entities shall maintain voluntary compensation coverage at the same limits specified for mandatory coverage for the duration of the Project;
- .2 Claims for damages because of bodily injury, occupational sickness or disease, or death of the Contractor's employees or persons or entities excluded by statute from the requirements of Clause 11.1.1.1, but required by the Clause;
- .3 Claims for damages because of bodily injury, occupational sickness or disease, or death of any person other than the Contractor's employees;
- .4 Claims for damages insured by usual personal injury liability coverage; which are sustained (1) by a person as a result of an offense directly or indirectly related to employment of such person by the Contractor, or (2) by another person;
- .5 Claims for damages, other than to the Work itself, because of injury to or destruction of tangible property, including loss of use resulting therefrom;
- .6 Claims for damages because of bodily injury, death of a person or property damage arising out of ownership, maintenance or use of a motor vehicle;
- .7 Claims for bodily injury or property damage arising out of completed operations;
- .8 Claims involving contractual liability insurance applicable to the Contractor's obligations under Section 3.18.

**§ 11.1.2** The policy naming the District as an Additional Insured shall:

- .1 Be an insurance policy from an A.M. Best A- rated or better insurer, licensed and admitted to conduct business in New York State. A New York licensed and admitted insurer is required.
- .2 State that the organization's coverage shall be primary and non-contributory coverage for the District/BOCES, its Board, employees and volunteers including a waiver of subrogation in favor of the District/BOCES for all coverages including Workers Compensation.
- .3 Additional insured status for General Liability coverage shall be provided by standard or other endorsements that extend coverage to the District/BOCES for on-going operations (CG 20 38 or equivalent) and products and completed operations (CG 20 37 or equivalent). The decision to accept an endorsement rest solely with the District/BOCES. A completed copy of the endorsements must be attached to the Certificate of Insurance to include General Liability, Auto Liability and Umbrella/Excess coverages.
- .4 The certificate of insurance must describe all services provided by the contractor (e.g., roofing, carpentry or plumbing) that are covered by the liability policies.
  - a. At the District's/BOCES' request, the contractor shall provide a copy of the declaration page of the liability and umbrella/excess policies with a list of endorsements and forms. If requested, the contractor will provide a copy of the policy endorsements and forms.
  - b. There will be no coverage restrictions and/or exclusions involving New York State Labor Law statutes or gravity related injuries.
  - c. No policies containing escape clauses or exclusions contrary to the Owner's interests will be accepted.
  - d. A fully completed New York Construction Certificate of Liability Insurance Addendum (ACORD 855 2014/15) must be included with the certificates of insurance. For any "Yes" answers on Items G through L on this Form— additional details must be provided in writing. Policy exclusions may not be accepted.
- .5 The contractor agrees to indemnify the District/BOCES for applicable deductibles and self-insured retentions.

§ 11.1.3 The Contractor shall provide surety bonds of the types, for such penal sums, and subject to such terms and conditions as required by the Contract Documents. The Contractor shall purchase and maintain the required bonds from a company or companies lawfully authorized to issue surety bonds in the jurisdiction where the Project is located.

§ 11.1.4 Upon the request of any person or entity appearing to be a potential beneficiary of bonds covering payment of obligations arising under the Contract, the Contractor shall promptly furnish a copy of the bonds or shall authorize a copy to be furnished.

§ 11.1.4.1 The Contractor acknowledges that failure to obtain such insurance on behalf of the District/BOCES constitutes a material breach of contract and subjects it to liability for damages, indemnification and all other legal remedies available to the District/BOCES. The contractor is to provide the District/BOCES with a certificate of insurance, evidencing the above requirements have been met, prior to the commencement of work. The failure of the District/BOCES to object to the contents of the certificate or the absence of same shall not be deemed a waiver of any rights held by the District/BOCES.

- .1 Subcontractors are subject to the same terms and conditions stated in this section and must submit the same to the District/BOCES for approval prior to the start of any work.
- .2 In the event the General Contractor fails to obtain the required certificates of insurance from the Subcontractor and a claim is made or suffered, the General Contractor shall indemnify, defend, and hold harmless the District/BOCES, its Board, employees and volunteers from any and all claims for which the required insurance would have provided coverage. This indemnity obligation is in addition to any other indemnity obligation provided in the Contract.

§ 11.1.5 The limits of liability of the insurance required above shall be as follows:

- .1 Commercial General Liability (CGL)  
Limits of Insurance not less than:  
\$1,000,000 Each Occurrence  
\$1,000,000 Personal & Advertising Injury  
\$2,000,000 General Aggregate per project/location  
\$2,000,000 Products/Completed Operations Aggregate  
\$100,000 Fire Damage Legal Liability  
\$10,000 Medical Expense
  - a. The CGL coverage shall contain a General Aggregate Limit, such General Aggregate shall apply on a per-project basis.
  - b. CGL coverage shall be written on ISO Occurrence form CG 00 01 1093 or a substitute form providing equivalent coverage and shall cover liability arising from premises, operations, independent contractors, products-completed operations, and personal and advertising injury.
  - c. Owner, Architect and their consultants, Owner's Representative, and all other parties required by Owner, shall be included as additional insureds on the Commercial General Liability, using ISO Additional Insureds Endorsement CG 20 10 11 85 or CG 2010 (10/93) and CG 20 3 7 (10/01) or CG2033 (10/01) and CG2037 (10/01) or an endorsement providing equivalent coverage to the additional insureds. This insurance for the additional insureds shall be as broad as the coverage provided for the named insured subcontractor. It shall apply as Primary and non-contributing Insurance before any other insurance or self-insurance, including any deductible, maintained by, or provided to, the additional insured.
  - d. Attached to each certificate of insurance shall be a copy of the additional Insured Endorsement address in c.) above.
  - e. Contractor shall maintain Commercial General Liability coverage for itself and all additional insureds for the duration of the project and maintain Completed Operations coverage for itself and each additional insured for least 3 years after completion of the Work.
- .2 Automotive Liability
  - a. Business Auto Liability with combined single limit of at least \$1,000,000 each accident for bodily injury and/or property damage.
  - b. Business Auto coverage must include coverage for liability arising out of all owned,



- leased, hired, borrowed and non-owned automobiles.
  - c. Owner and other parties required by the Owner, shall be included as additional insured on the auto policy on a primary and non-contributing basis.
- .3 Commercial Umbrella
  - a. Umbrella limits must be at least a minimum of \$5,000,000 each occurrence and aggregate for general construction and no work at elevation (1 story or 10 feet) and project values less than or equal to \$1,000,000 or available policy limits if policy limits are higher. Umbrella limits must be at least a minimum of \$10,000,000 each Occurrence and Aggregate for high-risk construction, work at elevation (>1 story or 10 feet) and project values greater than \$1,000,00.
  - b. Umbrella coverage shall be on a follow-form basis or provide broader coverage over the General Liability and Auto Liability coverages and must include as additional insureds all entities that are additional insureds all entities that are additional insureds on the Commercial General Liability Policy.
  - c. Umbrella coverage for such additional insureds shall apply as primary and non-contributing before any other insurance or self-insurance, including other than the Commercial General Liability, Auto Liability and Employers Liability coverages maintained by the Contractor.
  - d. Attached to each certificate of insurance shall be a copy of the Additional Insured Endorsement addressed in b.) and c.) above.
- .4 Workers Compensation and Employers Liability
  - a. Employers Liability Insurance limits of at least \$500,000, each accident, \$500,000 for bodily injury by accident and \$500,000 each employee for injury by disease.
  - b. Where applicable, U.S. Longshore and Harborworkers Compensation Act Endorsement shall be attached to the policy.
  - c. Where applicable, the Maritime Coverage Endorsement shall be attached to the policy.
  - d. Statutory Workers' Compensation (C-105.2 or U-26.3); and NYS Disability Insurance (DB-120.1) for all employees. Proof of coverage must be on the approved specific form, as required by the New York State Workers' Compensation Board. ACORD certificates are not acceptable. A person seeking an exemption must file a CE-200 Form with the state. The form can be completed and submitted directly to the WC Board online.
- .5 Environmental Impairment Liability (Pollution Liability Insurance) (EIL)
  - a. Contractors involved with the removal and/or abatement of pollutants (including but not limited to asbestos abatement contractors, lead abatement contractors, roofing contractors, tank removal contractors) are required to maintain a minimum of \$2,000,000 EIL coverage per occurrence and \$2,000,000 aggregate including products and completed operations. Such insurance shall include coverage for the Contractor's operations including, but not limited to, removal, replacement, enclosure, encapsulation and/or disposal of asbestos, or any other hazardous material, along with any related pollution events, including coverage for third-party liability claims for bodily injury, property damage and clean-up costs. If a retroactive date is used, it shall pre-date the inception of the Contract. If the Contractor is using motor vehicles for transporting hazardous materials, the Contractor shall maintain pollution liability broadened coverage (ISO Endorsement CA 9948 or CA 01 12), as well as proof of MCS 90. Coverage shall fulfill all requirements of these specifications and shall extend for a period of three (3) years following acceptance by the District/BOCES of the Certificate of Completion.
  - b. Owner and all other parties required by the Owner, shall be included as additional insured on the EIL policy on a primary and non-contributing basis.
  - c. Testing Company Errors and Omission Insurance: \$1,000,000 per occurrence/\$2,000,000 aggregate for the testing and other professional acts of the Contractor performed under the Contract with the District/BOCES.
- .6 Owner's Protective Liability Insurance: A separate policy of insurance which must be with a New York State licensed and admitted carrier and will list the District/BOCES as the Named Insured. There will be no Additional Insureds on any OCP Policies. The original policy shall be submitted for retention by Owner. A copy shall be sent to the Architect through the Owner's Representative. For projects less than or equal to \$1,000,000 and/or work on 1 story (10 feet), said separate policy shall be in the amounts of One Million Dollars (\$1,000,000) per occurrence, and in the aggregate of

two million dollars (\$2,000,000) for bodily injury and property damage and shall provide coverage for the Owner, Architect and Owner's Representative, their agents, officers and employees, with respect to said work. For projects greater than \$1,000,000 and/or work over 1 story (10 feet), said separate policy shall be in the amounts of One Million Dollars (\$2,000,000) per occurrence, and in the aggregate of two million dollars (\$4,000,000) for bodily injury and property damage and shall provide coverage for the Owner, Architect and Owner's Representative, their agents, officers and employees, with respect to said work. Said policy shall provide that the coverage afforded thereby shall be primary coverage to the full limits of liability stated in the declarations, and if said Owner, Architect or Owner's Representative, their officers and employees have other insurance against the loss covered by said policy, that other insurance shall be excess insurance only. This coverage shall last for the duration of the contract.

- .7 Prior to commencing the Work, the Owner shall supply the Contractor and Owner's Representative with a certificate of insurance providing evidence of insurance coverage for the Contractor for Builder's Risk/Installation Floater "All Risk" insurance shall protect the Contractor, the Contractor's Subcontractors, sub subcontractors, the Architect and the Owner's Representative from losses resulting from, but not limited to, natural disasters, fire, extended coverage perils, lightning, explosion, windstorm, hail/flood, vandalism, malicious mischief or collapse during the course of construction. The amount of such insurance shall be not less at any time than the total value of the Work in place, on site, in transit or in storage off site and the loss under such policies shall be made payable to the Owner and/or the Contractor or other insured's, as their respective interest may appear. The policy shall cover all property to be used in, or incidental to, the fabrication and/or erection and/or completion of the project. It shall include all materials, machinery, equipment and supplies intended to become part of such property and false work, temporary trestles and similar structures. It shall not include tools, Contractor's equipment and any other property not a part or destined to become part of the project. The Owner should be advised of the amount, if any, of a deductible amount exceed \$5,000,000. The Contractor shall provide the Owner upon request with copies of any of the insurance policies required to be maintained pursuant to this Article. Coverage will remain in effect until the Owner is the only entity that has an insurable interest in the property
- .8 The amount of insurance contained in the aforementioned insurance coverage's shall not be construed to be a limitation of the liability on the part of the Contractor or any of its subcontractors.

**§ 11.1.6 Notice of Cancellation or Expiration of Contractor's Required Insurance.** Within three (3) business days of the date the Contractor becomes aware of an impending or actual cancellation or expiration of any insurance required by the Contract Documents, the Contractor shall provide notice directly to the Owner, and separately to the Construction Manager, of such impending or actual cancellation or expiration. Upon receipt of notice from the Contractor, the Owner shall, unless the lapse in coverage arises from an act or omission of the Owner, have the right to stop the Work until the lapse in coverage has been cured by the procurement of replacement coverage by the Contractor. The furnishing of notice by the Contractor shall not relieve the Contractor of any contractual obligation to provide any required coverage.

#### **§ 11.1.7 MISCELLANEOUS PROVISIONS**

**§ 11.1.7.2** In addition to the above, Contractor will also satisfy any insurance required by any governmental authority.

**§ 11.1.7.3** Each insurance certificate will have the following entities listed as "named insured" or "additional insured": Contractor, Owner (full name), Collins+Scoville Architecture | Engineering | Construction Management, D.P.C. (dba CSArch Architecture | Engineering | Construction Management), and all of their employees and CSArch's consultants and all of their employees. Listing the above entities as "certificate holder" is NOT acceptable.

**§ 11.1.7.4** Two (2) certificates of insurance shall be submitted to, and reviewed by, the Owner prior to start of construction. If the Owner is damaged or subject to loss due to failure of the Contractor to obtain and maintain such insurance, then the Contractor shall bear all cost and responsibilities attributable thereto.

**§ 11.1.7.5** Certificates shall be accompanied by a statement of any deductibles, self-insured retentions and exclusion in the policy, including endorsements affecting the coverage for additional insureds.

§ 11.1.7.6 The Contractor shall exhibit any and all policies within three (3) days if demanded by the Owner, Construction Manager or Architect.

§ 11.1.7.7 This insurance must be purchased from a New York State licensed, A.M. Best Rated "A-", "A", or "A+" carrier.

§ 11.1.7.8 A copy of the requirements for insurance set forth herein shall be forwarded by the Contractor to the Contractor's insurance carrier to ensure that required coverage is provided.

## § 11.2 Owner's Insurance

§ 11.2.1 The Owner shall purchase and maintain insurance of the types and limits of liability, containing the endorsements, and subject to the terms and conditions, as described in the Agreement or elsewhere in the Contract Documents. The Owner shall purchase and maintain the required insurance from an insurance company or insurance companies lawfully authorized to issue insurance in the jurisdiction where the Project is located.

§ 11.2.2 **Failure to Purchase Required Property Insurance.** If the Owner fails to purchase and maintain the required property insurance, with all of the coverages and in the amounts described in the Agreement or elsewhere in the Contract Documents, the Owner shall inform both the Contractor and the Construction Manager, separately and in writing, prior to commencement of the Work. Upon receipt of notice from the Owner, the Contractor may delay commencement of the Work and may obtain insurance that will protect the interests of the Contractor, Subcontractors, and Sub-Subcontractors in the Work. When the failure to provide coverage has been cured or resolved, the Contract Sum and Contract Time shall be equitably adjusted. In the event the Owner fails to procure coverage, the Owner waives all rights against the Contractor, Subcontractors, and Sub-subcontractors to the extent the loss to the Owner would have been covered by the insurance to have been procured by the Owner. The cost of the insurance shall be charged to the Owner by a Change Order. If the Owner does not provide written notice, and the Contractor is damaged by the failure or neglect of the Owner to purchase or maintain the required insurance, the Owner shall reimburse the Contractor for all reasonable costs and damages attributable thereto.

§ 11.2.3 **Notice of Cancellation or Expiration of Owner's Required Property Insurance.** Within three (3) business days of the date the Owner becomes aware of an impending or actual cancellation or expiration of any property insurance required by the Contract Documents, the Owner shall provide notice directly to the Contractor, and separately to the Construction Manager, of such impending or actual cancellation or expiration. Unless the lapse in coverage arises from an act or omission of the Contractor: (1) the Contractor, upon receipt of notice from the Owner, shall have the right to stop the Work until the lapse in coverage has been cured by the procurement of replacement coverage by either the Owner or the Contractor; (2) the Contract Time and Contract Sum shall be equitably adjusted; and (3) the Owner waives all rights against the Contractor, Subcontractors, and Sub-subcontractors to the extent any loss to the Owner would have been covered by the insurance had it not expired or been cancelled. If the Contractor purchases replacement coverage, the cost of the insurance shall be charged to the Owner by an appropriate Change Order. The furnishing of notice by the Owner shall not relieve the Owner of any contractual obligation to provide required insurance.

## § 11.3 Waivers of Subrogation

§ 11.3.1 The Owner and Contractor waive all rights against (1) each other and any of their subcontractors, sub-subcontractors, agents, and employees, each of the other; (2) the Construction Manager and Construction Manager's consultants; (3) the Architect and Architect's consultants; (4) other Contractors and any of their subcontractors, sub-subcontractors, agents, and employees; and (5) Separate Contractors, if any, and any of their subcontractors, sub-subcontractors, agents, and employees, for damages caused by fire, or other causes of loss, to the extent those losses are covered by property insurance required by the Agreement or other property insurance applicable to the Project, except such rights as they have to proceeds of such insurance. The Owner or Contractor, as appropriate, shall require similar written waivers in favor of the individuals and entities identified above from the Construction Manager, Construction Manager's consultants, Architect, Architect's consultants, other Contractors, Separate Contractors, subcontractors, and sub-subcontractors. The policies of insurance purchased and maintained by each person or entity agreeing to waive claims pursuant to this Section 11.3.1 shall not prohibit this waiver of subrogation. This waiver of subrogation shall be effective as to a person or entity (1) even though that person or entity would otherwise have a duty of indemnification, contractual or otherwise, (2) even though that person or entity did not

pay the insurance premium directly or indirectly, or (3) whether or not the person or entity had an insurable interest in the damaged property.

**§ 11.3.1.1** Owner and Contractor intend that any policies provided in response to the insurance provisions shall protect all of the parties insured and provide primary coverage for losses and damages caused by perils covered thereby. Accordingly, all such policies shall contain provisions to the effect that in the event of payment for loss or damage, the insurer will have no right of recovery against any of the parties named as insureds or additional insureds.

**§ 11.3.2** If during the Project construction period the Owner insures properties, real or personal or both, at or adjacent to the site by property insurance under policies separate from those insuring the Project, or if after final payment property insurance is to be provided on the completed Project through a policy or policies other than those insuring the Project during the construction period, to the extent permissible by such policies, the Owner waives all rights in accordance with the terms of Section 11.3.1 for damages caused by fire or other causes of loss covered by this separate property insurance.

**§ 11.4 Loss of Use, Business Interruption, and Delay in Completion Insurance**

The Owner, at the Owner's option, may purchase and maintain insurance that will protect the Owner against loss of use of the Owner's property, or the inability to conduct normal operations, due to fire or other causes of loss. The Owner waives all rights of action against the Contractor, Architect, and Construction Manager for loss of use of the Owner's property, due to fire or other hazards however caused.

**§ 11.5 Adjustment and Settlement of Insured Loss**

**§ 11.5.1** A loss insured under the property insurance required by the Agreement shall be adjusted by the Owner as fiduciary and made payable to the Owner as fiduciary for the insureds, as their interests may appear, subject to requirements of any applicable mortgagee clause and of Section 11.5.2. The Owner shall pay the Construction Manager, Architect and Contractor their just shares of insurance proceeds received by the Owner, and by appropriate agreements the Construction Manager, Architect and Contractor shall make payments to their consultants and Subcontractors in similar manner.

**§ 11.5.2** Prior to settlement of an insured loss, the Owner shall notify the Contractor of the terms of the proposed settlement as well as the proposed allocation of the insurance proceeds. The Contractor shall have 14 days from receipt of notice to object to the proposed settlement or allocation of the proceeds. If the Contractor does not object, the Owner shall settle the loss and the Contractor shall be bound by the settlement and allocation. Upon receipt, the Owner shall deposit the insurance proceeds in a separate account and make the appropriate distributions. Thereafter, if no other agreement is made or the Owner does not terminate the Contract for convenience, the Owner and Contractor shall execute a Change Order for reconstruction of the damaged or destroyed Work in the amount allocated for that purpose. If the Contractor timely objects to either the terms of the proposed settlement or the allocation of the proceeds, the Owner may proceed to settle the insured loss, and any dispute between the Owner and Contractor arising out of the settlement or allocation of the proceeds shall be resolved pursuant to Article 15. Pending resolution of any dispute, the Owner may issue a Construction Change Directive for the reconstruction of the damaged or destroyed Work.

**§ 11.4 PERFORMANCE BOND AND PAYMENT BOND**

**§ 11.4.1** The Owner shall have the right to require the Contractor to furnish bonds covering faithful performance of the Contract and payment of obligations arising thereunder as stipulated in bidding requirements or specifically required in the Contract Documents on the date of execution of the Contract.

**§ 11.4.1.1** The Contractor shall furnish bonds covering faithful performance of the contract and payment of obligations arising thereunder. The value of each bond shall be for one-hundred percent (100%) of the Contract Sum and shall be adjusted during the Project construction period to reflect changes in the Contract Sum. Bonds shall be issued by a bonding company licensed in the State of New York, on AIA Document A312, Performance and Payment Bond.

**§ 11.4.1.2** Contractor shall deliver bonds in conjunction with executed Agreement and they shall be dated the same date as Agreement.

§ 11.4.1.3 The attorney in fact who executes the required bonds on behalf of the surety, shall affix thereto a certified and current copy of the power of attorney.

§ 11.4.1.4 Status Reports issued by a Bonding Company shall be sent to and completed by the Owner and then returned to the Bonding Company by the Owner.

§ 11.4.1.5 Any additional cost for bonding premium shall not be itemized within individual Change Orders. Adjustments for Contractor's bonding cost shall be adjusted at the end of the Project based on approved executed changes in the Work and the Bonding Company's final adjusted premium at project closeout.

§ 11.4.2 Upon the request of any person or entity appearing to be a potential beneficiary of bonds covering payment of obligations arising under the Contract, the Contractor shall promptly furnish a copy of the bonds or shall authorize a copy to be furnished.

## **ARTICLE 12 UNCOVERING AND CORRECTION OF WORK**

### **§ 12.1 Uncovering of Work**

§ 12.1.1 If a portion of the Work is covered contrary to the Construction Manager's or Architect's request or to requirements specifically expressed in the Contract Documents, it must, if requested in writing by either, be uncovered for their examination and be replaced at the Contractor's expense without change in the Contract Time.

§ 12.1.2 If a portion of the Work has been covered that the Construction Manager or Architect has not specifically requested to examine prior to its being covered, the Construction Manager or Architect may request to see such Work and it shall be uncovered by the Contractor. If such Work is in accordance with the Contract Documents, the Contractor shall be entitled to an equitable adjustment to the Contract Sum and Contract Time as may be appropriate. If such Work is not in accordance with the Contract Documents, the costs of uncovering the Work, and the cost of correction, shall be at the Contractor's expense.

### **§ 12.2 Correction of Work**

#### **§ 12.2.1 Before Substantial Completion**

The Contractor shall promptly correct Work rejected by the Construction Manager or Architect or failing to conform to the requirements of the Contract Documents, discovered before Substantial Completion, and whether or not fabricated, installed or completed. Costs of correcting such rejected Work, including additional testing and inspections, the cost of uncovering and replacement, and compensation for the Construction Manager's and Architect's services and expenses made necessary thereby, shall be at the Contractor's expense.

#### **§ 12.2.2 After Substantial Completion**

§ 12.2.2.1 In addition to the Contractor's obligations under Section 3.5, if, within one year after the date of Substantial Completion of the Work or designated portion thereof, or after the date for commencement of warranties established under Section 9.9.1, or by terms of any applicable special warranty required by the Contract Documents, any of the Work is found to be not in accordance with the requirements of the Contract Documents, the Contractor shall correct it promptly after receipt of notice from the Owner to do so, unless the Owner has previously given the Contractor a written acceptance of such condition. The Owner shall give such notice promptly after discovery of the condition. If the Contractor fails to correct nonconforming Work within a reasonable time during that period after receipt of notice from the Owner, Construction Manager or Architect, the Owner may correct it in accordance with Section 2.5.

§ 12.2.2.2 The one-year period for correction of Work shall be extended with respect to portions of Work first performed after Substantial Completion by the period of time between Substantial Completion and the actual completion of that portion of the Work.

§ 12.2.2.3 The one-year period for correction of Work shall not be extended by corrective Work performed by the Contractor pursuant to this Section 12.2.

§ 12.2.3 The Contractor shall remove from the site portions of the Work that are not in accordance with the requirements of the Contract Documents and are neither corrected by the Contractor nor accepted by the Owner.

§ 12.2.3.1 Upon request by the Owner and prior to expiration of one year from the date of Substantial Completion, the Construction Manager and the Architect will conduct and the Contractor shall attend a meeting with the Owner to review the facility operations and performance.

§ 12.2.4 The Contractor shall bear the cost of correcting destroyed or damaged construction of the Owner, Separate Contractors, or other Contractors, whether completed or partially completed, caused by the Contractor's correction or removal of Work that is not in accordance with the requirements of the Contract Documents.

§ 12.2.5 Nothing contained in this Section 12.2 shall be construed to establish a period of limitation with respect to other obligations the Contractor has under the Contract Documents. Establishment of the one-year period for correction of Work as described in Section 12.2.2 relates only to the specific obligation of the Contractor to correct the Work, and has no relationship to the time within which the obligation to comply with the Contract Documents may be sought to be enforced, nor to the time within which proceedings may be commenced to establish the Contractor's liability with respect to the Contractor's obligations other than specifically to correct the Work.

### § 12.3 Acceptance of Nonconforming Work

If the Owner prefers to accept Work that is not in accordance with the requirements of the Contract Documents, the Owner may do so instead of requiring its removal and correction, in which case the Contract Sum will be reduced as appropriate and equitable. Such adjustment shall be effected whether or not final payment has been made.

## ARTICLE 13 MISCELLANEOUS PROVISIONS

### § 13.1 Governing Law

The Contract shall be governed by the law of the place where the Project is located. The parties expressly agree that any claim, dispute or other controversy of any nature arising out of the Contract or performance of the Work shall be commenced and maintained in New York State Supreme Court located in County.

§ 13.1.2 The Contractor shall at all times observe and comply with all Federal and State Laws, and all Laws, Ordinances and Regulations of the Owner, in any manner affecting the work, and all such orders decreed as exist at present and those which may be enacted later, by bodies or tribunals having jurisdiction or authority over the Work, and the Contractor shall defend, indemnify and save harmless the Owner, Construction Manager and Architect and all their officers, agents or servants against any claim or liability arising from, or based on, a violation of any such law, ordinances, regulation or order, whether by himself or by his employee or agents.

§ 13.1.3 The Contractor specifically agrees as required by Labor Law, Sections 220 and 220-d, as amended that:

1. No laborer, workman or mechanic in the employ of the Contractor, subcontractor or other person doing contracting or contracting to do the whole or any part of the work contemplated by the Contract, shall be permitted or required to work more than eight hours in one calendar day or more than five days in one week, except in the emergencies set forth in the Labor Law.
2. The wages paid for a legal day's work shall not be less than the prevailing rate of wages as defined by law, and
3. The minimum hourly rate of wages to be paid shall not be less than that stated in the Specifications, and any re-determination of the prevailing rate of wages after the Contract is approved shall be deemed to be incorporated herein by reference as of the effective date of re-determination and shall form a part of this Contract. The Labor Law provides that the Contract may be forfeited and no sum paid for any work done thereunder on a second conviction of willfully paying less than:
  - a. the stipulated wage scale as provided in Labor Law, Section 220, Sub-division 3, as amended; or
  - b. the stipulated minimum hourly wage scale as provided in Labor Law, 220-d, as amended.

§ 13.1.4 The Contractor specifically agrees as required by the provisions of Labor Law, Section 220-e, as amended that:

1. In hiring of employees for the performance of work under this Contract or any subcontract hereunder or for the manufacture, sale, or distribution of materials, equipment or supplies, hereunder, no Contractor or Subcontractor nor any person acting on behalf of such Contractor or Subcontractor, shall by reason of race, creed, color, disability, sex, or national origin discriminate against any citizen of the

- State of New York who is qualified and available to perform the work to which the employment relates.
2. No Contractor, Subcontractor, nor any person on his behalf shall, in any manner, discriminate against or intimidate any employee under this Contract on account of race, creed, color, disability, sex, or national origin.
  3. There may be deducted from the amount payable to the Contractor by the Owner under this Contract, a penalty of fifty dollars (\$50) for each person for each calendar day during which such a person was discriminated against or intimidated in violation of the provisions of the Contract, and
  4. The provisions of this section covering every Contract for or on behalf of the Owner, the State or a municipality for the manufacture or sale or distribution of materials, equipment or supplies shall be limited to operations performed within the territorial limits of the State of New York.

**§ 13.1.5** During the performance of this Contract, the Contractor agrees as follows:

1. The Contractor will not discriminate against any employee or applicant for employment because of age, race, creed, color, national origin, sexual orientation, military status, sex, disability, predisposing genetic characteristics, marital status, or domestic violence victim status.
2. If directed to do so by the Owner or the State Commissioner of Human Rights, the Contractor will send to each labor union or representative of workers which with the Contractor has or is bound by a collective bargaining or other agreement or understanding, a notice, to be provided by the State Commissioner of Human Rights, advising such labor union or representative of the Contractor's agreement under clauses (1) through (6) (hereinafter called "non-discrimination clauses"). If the Contractor was directed to do so by the Owner as part of the bid or negotiation of this Contract, the Contractor shall request such labor union or representative to furnish a written statement that such a labor union representative will not discriminate because of age, race, creed, color, national origin, sexual orientation, military status, sex, disability, predisposing genetic characteristics, or marital status, and that such labor union or representative will cooperate, within the limits of its legal contractual authority, in the implementation of the policy and provisions of these non-discrimination clauses and that it consents and agrees that the recruitment, employment and the terms and conditions of employment under this Contract shall be in accordance with the purposes and provision of these non-discrimination clauses. If such labor union or representative fails or refuses to comply with such a request that it furnish such a statement, the Contractor shall promptly notify the Owner and the State Commissioner of Human Rights of such failure or refusal.
3. If directed to do so by the Owner or the Commissioner of Human Rights, the Contractor will post and keep posted in conspicuous places, available to employees and applicants for employment, notices to be provided by the State Commissioner of Human Rights setting forth the substance of provisions of clauses (1) and (2) and such provision of the State's law against discrimination as the State Commissioner of Human Rights shall determine.
4. The Contractor will state in all solicitations or advertisements for employees placed by or on behalf of the Contractor, that all qualified applicants will be afforded equal employment opportunities without discrimination because of age, race, creed, color, national origin, sexual orientation, military status, sex, disability, predisposing genetic characteristics, marital status, or domestic violence victim status.
5. The Contractor will comply with the provisions of Sections 290-299 of the Executive Law, and with the Civil Rights Law, will furnish all information and reports deemed necessary by the State Commissioner of Human Rights under these non-discrimination clauses and such section of the Executive Law, and will permit access to the Contractor's books, records, and accounts by the Owner, the State Commissioner of Human Rights, the Attorney General and the Industrial Commissioner for the purposes of investigation to ascertain compliance with the non-discrimination clauses and such sections of the Executive Law Civil Rights Law.
6. This Contract may be forthwith cancelled, terminated or suspended, in whole or in part, by the Owner upon the basis of a finding made by the State Commissioner of Human Rights that the Contractor has not complied with the non-discrimination clauses, and that the Contractor may be declared ineligible for future contracts made by or on behalf of the Owner, the State or a public authority or agency of the State, until the Contractor satisfies the State Commissioner of Human Rights that the Contractor has established and is carrying out a program in conformity with the provisions of these non-discrimination clauses. Such findings may be made by the State Commissioner of the Human Rights after conciliation efforts by the Commissioner have failed to achieve compliance with these



non-discrimination clauses and after a verified complaint has been filed with the Commissioner, notice thereof has been given to the Contractor to be heard publicly in accordance with the Executive Law. Such sanctions may be imposed and remedies invoked independently of or in addition to sanctions and remedies otherwise provided by law, and

7. The Contractor will include the provisions of clauses .1 through .6 in every subcontract or purchase order in such a manner that such provisions will be binding upon each subcontractor or vendor as to operations to be performed within the State of New York. The Contractor will take action in enforcing such provisions of such subcontract or purchase order as the State Commissioner of Human Rights or the Owner may direct, including sanctions or remedies for non-compliance. If the Contractor becomes involved or is threatened with litigation with a subcontractor or vendor as a result of such directions by the State Commissioner of Human Rights or the Owner, the Contractor shall promptly so notify the Owner and the Attorney General requesting the Attorney General to intervene and protect the interests of the State of New York.

### **§ 13.2 Successors and Assigns**

**§ 13.2.1** The Owner and Contractor respectively bind themselves, their partners, successors, assigns, and legal representatives to covenants, agreements, and obligations contained in the Contract Documents. Except as provided in Section 13.2.2, neither party to the Contract shall assign the Contract as a whole without written consent of the other. If either party attempts to make an assignment without such consent, that party shall nevertheless remain legally responsible for all obligations under the Contract.

**§ 13.2.2** The Owner may, without consent of the Contractor, assign the Contract to a lender providing construction financing for the Project, if the lender assumes the Owner's rights and obligations under the Contract Documents. The Contractor shall execute all consents reasonably required to facilitate the assignment.

### **§ 13.3 Rights and Remedies**

**§ 13.3.1** Duties and obligations imposed by the Contract Documents and rights and remedies available thereunder shall be in addition to and not a limitation of duties, obligations, rights, and remedies otherwise imposed or available by law.

**§ 13.3.2** No action or failure to act by the Owner, Construction Manager, Architect, or Contractor shall constitute a waiver of a right or duty afforded them under the Contract, nor shall such action or failure to act constitute approval or acquiescence in a breach thereunder, except as may be specifically agreed upon in writing.

### **§ 13.4 Tests and Inspections**

**§ 13.4.1** Tests, inspections, and approvals of portions of the Work shall be made as required by the Contract Documents and by applicable laws, statutes, ordinances, codes, rules, and regulations or lawful orders of public authorities. Unless otherwise provided, the Contractor shall make arrangements for such tests, inspections, and approvals with an independent testing laboratory and shall bear all related costs of tests, inspections, and approvals. The Contractor shall give the Construction Manager timely notice of when and where tests and inspections are to be made so that the Construction Manager may be present for such procedures. The Owner shall bear costs of tests, inspections, or approvals that do not become requirements until after bids are received or negotiations concluded. The Owner shall directly arrange and pay for tests, inspections, or approvals where building codes or applicable laws or regulations so require.

**§ 13.4.2** If the Construction Manager, Architect, Owner, or public authorities having jurisdiction determine that portions of the Work require additional testing, inspection, or approval not included under Section 13.4.1, the Construction Manager and Architect will, upon written authorization from the Owner, instruct the Contractor to make arrangements for such additional testing, inspection, or approval, by an entity acceptable to the Owner, and the Contractor shall give timely notice to the Construction Manager and Architect of when and where tests and inspections are to be made so that the Construction Manager and Architect may be present for such procedures. Such costs, except as provided in Section 13.4.3, shall be at the Owner's expense.

**§ 13.4.3** If procedures for testing, inspection, or approval under Sections 13.4.1 and 13.4.2 reveal failure of the portions of the Work to comply with requirements established by the Contract Documents, all costs made necessary by such failure, including those of repeated procedures and compensation for the Construction Manager's and Architect's services and expenses, shall be at the Contractor's expense.



§ 13.4.4 Required certificates of testing, inspection, or approval shall, unless otherwise required by the Contract Documents, be secured by the Contractor and promptly delivered to the Construction Manager for transmittal to the Architect.

§ 13.4.5 If the Construction Manager or Architect is to observe tests, inspections, or approvals required by the Contract Documents, the Construction Manager or Architect will do so promptly and, where practicable, at the normal place of testing.

§ 13.4.6 Tests or inspections conducted pursuant to the Contract Documents shall be made promptly to avoid unreasonable delay in the Work.

#### § 13.5 Interest

Payments to Contractor, including any interest, shall be consistent with this Agreement and in accordance with New York State General Municipal Law Section 106-b.

#### § 13.6 TIME LIMITS ON CLAIMS

The Owner and the Contractor shall commence all claims and causes of action, whether in contract, tort, breach of warranty or otherwise, against the other arising out of or related to the Contract in accordance with the requirements of the final dispute resolution method selected in the Agreement and within the time period specified by applicable law, but in any case not more than 10 years after the date of Substantial Completion of the Work. The Owner and the Contractor waive all claims and causes of action not commenced in accordance with this Section 13.7.

#### §13.7 EQUAL OPPORTUNITY

§13.7.1 The Contractor shall maintain policies of employment as follows:

1. he Contractor and the Contractor's Subcontractors shall not discriminate against any employee or applicant for employment because of race, religion, color, sex or national origin. The Contractor shall take affirmative action to insure that applicants are employed and that employees are treated during employment without regard to their race, religion, color, sex and national origin. Such action shall include, but not limited to the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection of training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth the policies of non-discrimination, and
2. the Contractor and the Contractor's Subcontractors shall, in all solicitations or advertisements for employees placed by them or on their behalf, state all qualified applicants will receive consideration for employment without regard to race, religion, color, sex or national origin.

### ARTICLE 14 TERMINATION OR SUSPENSION OF THE CONTRACT

#### § 14.1 Termination by the Contractor

§ 14.1.1 The Contractor may terminate the Contract if the Work is stopped for a period of 30 consecutive days through no act or fault of the Contractor, a Subcontractor, a Sub-subcontractor, their agents or employees, or any other persons or entities performing portions of the Work, for any of the following reasons:

- .1 Issuance of an order of a court or other public authority having jurisdiction that requires all Work to be stopped;
- .2 An act of government, such as a declaration of national emergency, that requires all Work to be stopped;
- .3 Because the Construction Manager has not certified or the Architect has not issued a Certificate for Payment and, after the Contractor has provided written notice of the lack of certification with a reasonable opportunity to cure, has not notified the Contractor of the reason for withholding certification as provided in Section 9.4, or because the Owner, after the Contractor has provided written notice of the lack of payment with a reasonable opportunity to cure, has not made payment on a Certificate for Payment within the time stated in the Contract Documents; or

§ 14.1.2 The Contractor may terminate the Contract if, through no act or fault of the Contractor, a Subcontractor, a Sub-subcontractor, their agents or employees, or any other persons or entities performing portions of the Work,

repeated suspensions, delays, or interruptions of the entire Work by the Owner as described in Section 14.3, constitute in the aggregate more than 100 percent of the total number of days scheduled for completion, or 120 days in any 365-day period, whichever is less.

**§ 14.1.3** If one of the reasons described in Section 14.1.1 or 14.1.2 exists, the Contractor may, upon thirty days' notice to the Owner with a reasonable opportunity to cure, Construction Manager and Architect, terminate the Contract and recover from the Owner payment for Work properly executed.

**§ 14.1.4** If the Work is stopped for a period of 60 consecutive days through no act or fault of the Contractor, a Subcontractor, a Sub-subcontractor, or their agents or employees, or any other persons performing portions of the Work because the Owner has repeatedly failed to fulfill the Owner's obligations under the Contract Documents with respect to matters important to the progress of the Work, the Contractor may, upon thirty additional days' notice to the Owner, Construction Manager and Architect, terminate the Contract and recover from the Owner as provided in Section 14.1.3.

## **§ 14.2 Termination by the Owner for Cause**

**§ 14.2.1** The Owner may terminate the Contract if the Contractor

- .1 refuses or fails to supply enough properly skilled workers or proper materials;
- .2 fails to make payment to Subcontractors or suppliers in accordance with the respective agreements between the Contractor and the Subcontractors or suppliers;
- .3 disregards applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of a public authority; or
- .4 otherwise is guilty of substantial breach of a provision of the Contract Documents.
- .5 breaches any warranty made by the Contractor under or pursuant to the Contract Documents.
- .6 fails to furnish the Owner with assurances satisfactory to the Owner evidencing the Contractor's ability to complete the Work in compliance with all of the requirements of the Contract Documents."

**§ 14.2.2** When any of the reasons described in Section 14.2.1 exist the Owner may, without prejudice to any other rights or remedies of the Owner and after giving the Contractor and the Contractor's surety, if any, seven days' notice, terminate employment of the Contractor and may, subject to any prior rights of the surety:

- .1 Exclude the Contractor from the site and take possession of all materials, equipment, tools, and construction equipment and machinery thereon owned by the Contractor;
- .2 Accept assignment of subcontracts pursuant to Section 5.4; and
- .3 Finish the Work by whatever reasonable method the Owner may deem expedient. Upon written request of the Contractor, the Owner shall furnish to the Contractor a detailed accounting of the costs incurred by the Owner in finishing the Work. The costs of finishing the Work include, without limitations, all reasonable attorney's fees, additional Architect/Engineering and Construction Manager costs, insurance, additional interest because of any delay in completing the Work, and all other direct and indirect and consequential damages incurred by the Owner by reason of the termination of the Contractors stated herein.

**§ 14.2.3** When the Owner terminates the Contract for one of the reasons stated in Section 14.2.1, the Contractor shall not be entitled to receive further payment until the Work is finished.

**§ 14.2.4** If the unpaid balance of the Contract Sum exceeds costs of finishing the Work, including compensation for the Construction Manager's and Architect's services and expenses made necessary thereby, and other damages incurred by the Owner and not expressly waived, such excess shall be paid to the Contractor. If such costs and damages exceed the unpaid balance, the Contractor shall pay the difference to the Owner.

## **§ 14.3 Suspension by the Owner for Convenience**

**§ 14.3.1** The Owner may, without cause, order the Contractor in writing to suspend, delay or interrupt the Work, in whole or in part for such period of time as the Owner may determine.

**§ 14.3.2** The Contract Sum and the Contract Time may be adjusted for increases in the cost and time caused by suspension, delay, or interruption under Section 14.3.1. No adjustment shall be made to the extent:

- .1 that performance is, was, or would have been, so suspended, delayed, or interrupted, by another cause for which the Contractor is responsible; or
- .2 that an equitable adjustment is made or denied under another provision of this Contract.

#### **§ 14.4 Termination by the Owner for Convenience**

**§ 14.4.1** Notwithstanding any other provision to the contrary in this Agreement, the Owner reserves the right at any time and in its absolute discretion to terminate the services of the Contractor and/or the Work for the Owner's convenience and without cause by giving written notice to the Contractor. This termination for the convenience of the Owner provision allows and authorizes the Owner to terminate this Agreement at any time and for any reason whatsoever. This right may be exercised by the Owner in its complete discretion.

**§ 14.4.2** Upon receipt of notice from the Owner of such termination for the Owner's convenience, the Contractor shall

- .1 cease operations as directed by the Owner in the notice;
- .2 take actions necessary, or that the Owner may direct, for the protection and preservation of the Work; and
- .3 except for Work directed to be performed prior to the effective date of termination stated in the notice, terminate all existing subcontracts and purchase orders and enter into no further subcontracts and purchase orders.

**§ 14.4.3** In the case of such termination for the Owner's convenience, the Contractor shall be entitled to, and the Owner shall reimburse the Contractor for, an equitable portion of the Contractor's fee based on the portion of the Work properly completed before the effective date of termination. Contractor's entitlement to payment for all such work shall be predicated on its performance of such work in accordance with the Contract Documents as certified by the Architect and Construction Manager. Contractor shall be entitled to no other payment and waives any claim for damages.

### **ARTICLE 15 CLAIMS AND DISPUTES**

#### **§ 15.1 Claims**

**§ 15.1.1 Definition.** A Claim is a demand or assertion by one of the parties seeking, as a matter of right, payment of money, a change in the Contract Time, or other relief with respect to the terms of the Contract. The term "Claim" also includes other disputes and matters in question between the Owner and Contractor arising out of or relating to the Contract. The responsibility to substantiate Claims shall rest with the party making the Claim. This Section 15.1.1 does not require the Owner to file a Claim in order to impose liquidated damages in accordance with the Contract Documents. The Owner may refer a claim to the Construction Manager and or the Architect for their review and assistance; however, such is not required by this Agreement.

#### **§ 15.1.2 Time Limits on Claims**

The Owner and Contractor shall commence all Claims and causes of action against the other and arising out of or related to the Contract, whether in contract, tort, breach of warranty or otherwise, in accordance with the requirements of the binding dispute resolution method selected in the Agreement and within the period specified by applicable law, but in any case not more than 10 years after the date of Substantial Completion of the Work. The Owner and Contractor waive all Claims and causes of action not commenced in accordance with this Section 15.1.2.

#### **§ 15.1.3 Notice of Claims**

**§ 15.1.3.1** Claims by either the Owner or Contractor, where the condition giving rise to the Claim is first discovered prior to expiration of the period for correction of the Work set forth in Section 12.2.2, shall be initiated by notice to the other party and to the Initial Decision Maker with a copy sent to the Construction Manager and Architect, if the Architect is not serving as the Initial Decision Maker. Claims by either party under this Section 15.1.3.1 shall be initiated within 21 days after occurrence of the event giving rise to such Claim or within 21 days after the claimant first recognizes the condition giving rise to the Claim, whichever is later.

**§ 15.1.3.2** Claims by either the Owner or Contractor, where the condition giving rise to the Claim is first discovered after expiration of the period for correction of the Work set forth in Section 12.2.2, shall be initiated by notice to the other party. In such event, no decision by the Initial Decision Maker is required.

**§ 15.1.3.3** Claims by the Contractor must be made by written notice in accordance with the following procedures.

- .1 the Contractor may submit a claim concerning a matter properly noticed in accordance with the time requirements of this Contract set forth in paragraph 15.1.3 and elsewhere;
- .2 failure by the Contractor to furnish the required claim documentation within the time set forth above shall constitute waiver of the Contractor's right to compensation for such claim.
- .3 Contractor shall furnish three (3) certified copies of the required claim documentation. The claim documentation shall be complete when furnished. The evaluation of the Contractor's claim will be based, among other things, upon the Owner's Project Records and the Contractor's furnished claim documentation
- .4 claim documentation shall conform to Generally Accepted Accounting Principles and shall be in the following format:
  - a. general introduction;
  - b. general background discussion
  - c. issues
    - i. index of issues (listed numerically);
    - ii. for each issue:
      - (1) background
      - (2) chronology
      - (3) Contractor's position (reason for Owner's potential liability)
      - (4) supporting documentation of merit or entitlement
      - (5) supporting documentation of damages
      - (6) begin each issue on a new page
  - d. all critical path method schedules (as-planned, monthly updates, schedule revisions and as-built, along with computer disks of all schedules related to the claim;
  - e. productivity exhibits (if appropriate); and
  - f. summary of issues and damages.
- .5 supporting documentation of merit for each issue shall be cited by reference, photocopies or explanation. Supporting documentation may include, but shall not be limited to General Conditions, General Requirements, technical specifications, drawings, correspondence, conference notes, shop drawings and submittals, shop drawing logs, survey books, inspection reports, delivery schedules, test reports, daily reports, subcontracts, fragmentary CPM schedules or time impact analyses, photographs, technical reports, requests for information, field instructions and all other related records necessary to support the Contractor's claim.
- .6 supporting documentation of damages for each issue shall be cited, photocopied or explained. Supporting documentation may include, but shall not be limited to, any or all documents related to the preparation and submission of the bid; certified, detailed labor records including labor distribution reports; material and equipment procurement records; construction equipment ownership, cost records or rental records; subcontractor or vendor files and cost records; service cost records; purchase orders; invoices; Project as-planned and as-built cost records; general ledger records; variance reports; accounting adjustment records, and any other accounting material necessary to support the Contractor's claims.
- .7 each copy of the claim documentation shall be certified by a responsible officer of the Contractor in accordance with the requirements of these Contract Documents.

#### **§ 15.1.4 Continuing Contract Performance**

**§ 15.1.4.1** Pending final resolution of a Claim, except as otherwise agreed in writing or as provided in Article 14, the Contractor shall proceed diligently with performance of the Contract and the Owner shall continue to make payments in accordance with the Contract Documents.

**§ 15.1.4.2** The Contract Sum and Contract Time shall be adjusted in accordance with the Initial Decision Maker's decision, subject to the right of either party to proceed in accordance with this Article 15. The Architect will issue Certificates for Payment in accordance with the decision of the Initial Decision Maker.

**§ 15.1.5 Claims for Additional Cost.** If the Contractor wishes to make a Claim for an increase in the Contract Sum, notice as provided in Section 15.1.3 shall be given before proceeding to execute the portion of the Work that is the subject of the Claim. Prior notice is not required for Claims relating to an emergency endangering life or property arising under Section 10.4.

#### **§ 15.1.6 Claims for Additional Time**

**§ 15.1.6.1** If the Contractor wishes to make a Claim for an increase in the Contract Time, notice as provided in Section 15.1.3 shall be given. The Contractor's Claim shall include an estimate of cost and of probable effect of delay on progress of the Work. In the case of a continuing delay only one Claim is necessary.

**§ 15.1.6.2** If adverse weather conditions are the basis for a Claim for additional time, such Claim shall be documented by data substantiating that weather conditions were abnormal for the period of time, could not have been reasonably anticipated and had an adverse effect on the scheduled construction.

**§ 15.1.6.3** Claims for increase in the Contract time shall set forth in detail the circumstances that form the basis for the Claim, the date upon which each cause of delay began to affect the progress of Work, the date upon which each cause of delay ceased to affect the progress of the Work and the number of days increased in the Contract time claimed as a consequence of each such cause of delay. The Contractor shall provide such supporting documentation as the Owner may require including, where appropriate, a revised construction schedule indicating all the activities affected by the circumstances forming the basis of the Claim.

**§ 15.1.6.4** The Contractor shall not be entitled to a separate increase in the Contract time for each one of the number of causes of delay which may have concurrent or interrelated effects on the progress of the Work, or for concurrent delays due to the fault of the Contractor.

**§ 15.1.7 Waiver of Claims for Consequential Damages.** The Contractor and Owner waive Claims against each other for consequential damages arising out of or relating to this Contract. This mutual waiver includes

- .1 damages incurred by the Owner for rental expenses, for losses of use, income, profit, financing, business and reputation, and for loss of management or employee productivity or of the services of such persons; and
- .2 damages incurred by the Contractor for principal office expenses including the compensation of personnel stationed there, for losses of financing, business and reputation, and for loss of profit except anticipated profit arising directly from the Work.

**§15.1.8.1 Claims and Actions Thereon.** No claim against the Owner for damages for breach of contract or compensation for extra work shall be made or asserted in any action or proceeding at law, or in equity, unless the Contractor shall have strictly complied with all the requirements relating to the giving of notice and of information with respect to such claims all as provided in this Agreement.

**§15.1.8.2 No Estoppel.** Neither the Owner nor any department officer, agent or employees thereof, shall be bound, precluded or estopped by any determination, decision, approval, order, letter, payment or certificate made or given under or in connection with this Contract by the Owner, or any officer, agent or employee of the Owner, either before or after the final completion and acceptance of the Work and payment therefor: (1) from showing the true and correct classification, amount, quality or character of the Work actually done; or that any such termination, decision, order, letter, payment or certificate was untrue, incorrect or improperly made in any particular matter, or that the Work or any part thereof does not in fact conform to the requirements of this Contract; or (2) from demanding and recovering from the Contractor any overpayments made to him, or such damages as it may sustain by reason of his failure to perform each and every part of this Contract in strict accordance with its terms; or (3) both (1) and (2) hereto."

#### **§ 15.2 Initial Decision**

**§ 15.2.1** Claims, by the Contractor, excluding those where the condition giving rise to the Claim is first discovered after expiration of the period for correction of the Work set forth in Section 12.2.2 or arising under Sections 10.3, 10.4, and 11.5, shall be referred to the Initial Decision Maker for initial decision. The Architect will serve as the Initial Decision Maker, unless otherwise indicated in the Agreement. Except for those Claims excluded by this Section 15.2.1, an initial decision shall be required as a condition precedent to mediation of any Claim by the Contractor against the Owner. If an initial decision has not been rendered within 30 days after the Claim has been referred to the Initial Decision Maker, the party asserting the Claim may demand mediation and binding dispute resolution without a decision having been rendered. Unless the Initial Decision Maker and all affected parties agree, the Initial Decision Maker will not decide disputes between the Contractor and persons or entities other than the Owner.

§ 15.2.2 The Initial Decision Maker will review Claims and within twenty one days of the receipt of a Claim take one or more of the following actions: (1) request additional supporting data from the claimant or a response with supporting data from the other party, (2) reject the Claim in whole or in part, (3) approve the Claim, (4) suggest a compromise, or (5) advise the parties that the Initial Decision Maker is unable to resolve the Claim if the Initial Decision Maker lacks sufficient information to evaluate the merits of the Claim or if the Initial Decision Maker concludes that, in the Initial Decision Maker's sole discretion, it would be inappropriate for the Initial Decision Maker to resolve the Claim.

§ 15.2.3 In evaluating Claims, the Initial Decision Maker may, but shall not be obligated to, consult with or seek information from either party or from persons with special knowledge or expertise who may assist the Initial Decision Maker in rendering a decision. The Initial Decision Maker may request the Owner to authorize retention of such persons at the Owner's expense.

§ 15.2.4 If the Initial Decision Maker requests a Contractor to furnish additional supporting data, the Contractor shall respond, within ten days after receipt of the request, and shall either (1) provide a response on the requested supporting data, (2) advise the Initial Decision Maker when the response or supporting data will be furnished, or (3) advise the Initial Decision Maker that no supporting data will be furnished. Upon receipt of the response or supporting data, if any, the Initial Decision Maker will either reject or approve the Claim in whole or in part.

§ 15.2.5 If a Claim has not been resolved after consideration of the foregoing and of further evidence presented by the parties or requested by the Architect, the Architect will render to the parties the Architect's written recommendation relative to the Claim, including any recommended change in the Contract Sum or Contract Time or both. If there is a surety and there appears to be a possibility of a Contractor's default, the Architect may, but is not obligated to, notify the surety and request the surety's assistance in resolving the controversy.

§ 15.2.6 Either party may file for mediation of an initial decision at any time, subject to the terms of Section 15.2.6.1.

§ 15.2.6.1 Either party may, within 30 days from the date of receipt of an initial decision, demand in writing that the other party file for mediation. If such a demand is made and the party receiving the demand fails to file for mediation within 30 days of receipt thereof, then both parties waive their rights to mediate.

§ 15.2.7 In the event of a Claim against the Contractor, the Owner may, but is not obligated to, notify the surety, if any, of the nature and amount of the Claim. If the Claim relates to a possibility of a Contractor's default, the Owner may, but is not obligated to, notify the surety and request the surety's assistance in resolving the controversy.

§ 15.2.8 If a Claim relates to or is the subject of a mechanic's lien, the party asserting such Claim may proceed in accordance with applicable law to comply with the lien notice or filing deadlines.

§ 15.2.9 Nothing contained in this Agreement is intended to alter or replace any provisions of the laws of the state of New York relating to claims made against the Owner or to relieve Contractor from any obligations thereunder.

### § 15.3 Mediation

§ 15.3.1 Claims, disputes, or other matters in controversy arising out of or related to the Contract, except those waived as provided for in Sections 9.10.4, 9.10.5, and 15.1.7, shall be subject to mediation as a condition precedent to binding dispute resolution.

§ 15.3.2 The parties shall endeavor to resolve their Claims by mediation which, unless the parties mutually agree otherwise, shall be administered by the American Arbitration Association in accordance with its Construction Industry Mediation Procedures in effect on the date of the Agreement. A request for mediation shall be made in writing, delivered to the other party to the Contract, and filed with the person or entity administering the mediation. Mediation shall proceed in advance of binding dispute resolution proceedings.

*(Paragraph deleted)*

§ 15.3.4 The parties shall share the mediator's fee and any filing fees equally. The mediation shall be held in the place where the Project is located, unless another location is mutually agreed upon. Agreements reached in mediation shall be enforceable as settlement agreements in any court having jurisdiction thereof.

**§ 15.4 Arbitration**

**§ 15.4.1** The parties expressly agree to **delete** the requirement that any and all controversies and claims arising out of the contract be referred to arbitration. By so agreeing, the parties express their mutual intent that there is **no agreement** to arbitrate such disputes, notwithstanding the use and reference to arbitration elsewhere in the contract documents."

*(Paragraphs deleted)*

**§ 15.5** The parties expressly agree that any claim, dispute, or other controversy of any nature arising out of the contract or performance of the work shall be commenced and maintained in New York State Supreme Court located in [REDACTED] County.

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DOCUMENT 007343 - WAGE RATES

PART 1 – GENERAL

- A. New York State minimum wage rate schedules are bound herewith.
- B. The labor on this contract shall be performed in all respects in full accordance with the Labor Law of the State of New York. In accordance with Section 220, Subdivision 3, and Section 220-D, of the Labor Law, the Industrial Commissioner has designated as the minimum hourly rates to be paid to employees on the work the rates shown on the attached schedules which shall be posted in a prominent and convenient place for the inspection of the Contractor's employees. Article 8, Section 220 of the Labor Law, as amended by Chapter 750 of the Laws of 1956, provides, among other things, that it shall be the duty of the fiscal officer to make a determination of the schedule of wages and supplementals to be paid to all laborers, workmen and mechanics employed on public works projects. The amount of supplementals listed on the enclosed schedule does not necessarily include all types of prevailing supplements.
- C. The Contractor shall make provision for disability benefits, workman's compensation, unemployment insurance and social security, as required by law.
- D. Per the New York State Education Department's directive in its Office of Facilities Planning, the Contractor is responsible for obtaining copies of the prevailing wage schedule and all updates thereto, as well as the list of employers ineligible to bid on or be awarded public work contracts, directly from the Department of Labor's Bureau of Public Work's web site at:
  - 1. <http://www.labor.ny.gov/workerprotection/publicwork/PWContents.shtml>
    - a. Scroll down to Prevailing Wage Schedule.
    - b. Select the third link, "View of Previously Requested Prevailing Wage Schedule using PRC#
    - c. **Enter the PRC number: 2023013874**
    - d. Select Submit.
    - e. Select the first link "Wage Schedule" at the top right.
  - 2. In the event that the Contractor does not have internet access or is unable to access the Department's website, please fax a written request for a printed copy of the schedule to the Central Office of the Bureau of Public Works at (518) 485-1870.

PART 2 – PRODUCTS (Not Used)

PART 3 – EXECUTION (Not Used)

END OF SECTION 007343

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## SECTION 008300 - PROJECT FORMS

### PART 1 – GENERAL

#### 1.1 SUMMARY

- A. This Section lists the project forms to be used for administration and coordination of the project.

#### 1.2 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specifications Sections, apply to this Section.

#### 1.3 FORMS

- A. The following forms are as follows and appear subsequent to this Section:

1. 008310 Submittal Cover Sheet
2. 008320 Request For Information
3. 008325 Change In Condition Sheet
4. 008330 Request For Shutdown
5. 008340 Daily Report Cover
6. 008350 Labor Rate Sheet
7. 008370 Two-Week Look Ahead Schedule
8. 008380 Bi-Weekly Material / Equipment Status Report
9. 008440 Substantial Completion Report
10. 008450 Test Report / Inspection Log
11. 008470 Submittal Schedule

### PART 2 – PRODUCTS (Not Used)

### PART 3 – EXECUTION

- A. Review Forms listed and submit appropriate form(s) to the Architect and/or Owners Representative as required. Forms shall be used for documentation, and coordination purposes. It is the responsibility of each Prime Contractor to coordinate their installations with other Prime Contracts; respective Forms listed above shall be used to document coordination.

END OF SECTION 008300

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## Submittal Cover

### CSArch Submittal No.

PROJECT: City School District of the City of New Rochelle – 2023 Capital Project	CONTRACT No.
	CONTRACT FOR:
CSARCH PROJECT No. 188-2301.01	CONTRACTOR:
	SUBCONTRACTOR:

SUBMITTAL INFORMATION					
<input type="checkbox"/> 1 <sup>ST</sup> Submission	Date:	<input type="checkbox"/> 1 <sup>ST</sup> Resubmittal	Date:	<input type="checkbox"/> 2 <sup>ND</sup> Resubmittal	Date:
Description:					
Shop Drawing Title:					
Shop Drawing No.					
Contents:	<input type="checkbox"/> Product Data	<input type="checkbox"/> Samples	<input type="checkbox"/> Tests	<input type="checkbox"/> Schedules	
Manufacturer:					
SPEC SECTION:		Paragraph(s): Enter text.		Drawing Number:	

CONTRACTOR'S APPROVAL		CSARCH REMARKS
Date:	By:	
<input type="checkbox"/> Submitted product has been reviewed for release to Architect/Engineer		
<input type="checkbox"/> Submitted product is as specified		
<input type="checkbox"/> Submitted product is equal to specific product		
Upon Approval, delivery lead time    days		
ARCHITECT'S ACTION:		
Date:	By:	
<input type="checkbox"/> No Exception Taken	<input type="checkbox"/> Make Corrections Needed	
<input type="checkbox"/> Rejected	<input type="checkbox"/> Revise & Resubmit	
<p>Reviewing is only for conformance with the Project's design concept and compliance with the information in the Contract Documents. The Contractor is responsible for quantities and dimensions to be confirmed and correlated at the site; for information that pertains solely to the fabrication processes or to the mean, methods, techniques, sequences &amp; procedures of construction; and for coordination of the Work of all trades. Any corrections on the submittal shall not be deemed an order for extra work.</p>		

## Request for Information

### CSArch RFI No.

PROJECT: City School District of the City of New Rochelle – 2023 Capital Project	DATE:
CSARCH PROJECT No. 188-2301.01	CONTRACT No.
	CONTRACT FOR:
REVIEWED BY (Prior to presenting this RFI to the Project Architect)	
<input type="checkbox"/> Contractor:	<input type="checkbox"/> CSArch Construction Site Coordinator:
Date:	Date:
Contractor RFI No.	

REQUEST			
Subject/Title:			
Date Response Needed:			
Attachment:		Diagram No.	
Reference Drawing No.	Spec No.	Detail(s)/Paragraph(s):	
Question:			
By:		Date:	

RESPONSE	
Reference Attached	Sketch No.
Response:	
By:	Date:



## Change in Condition

PROJECT: City School District of the City of New Rochelle – 2023 Capital Project			Page:
CSARCH PROJECT No. 188-2301.01			Date:
TITLE:			
TO:			CIC Date:
Phone:		Email:	Required: <input type="checkbox"/> Scope Change - Owner <input type="checkbox"/> Scope Change - Architect <input type="checkbox"/> Field Condition <input type="checkbox"/> T and M Work <input type="checkbox"/> Back Charge
<input type="checkbox"/> <b>Clarification</b> This serves as the Architect's Supplemental Instructions. Contractor to proceed with this work.	<input type="checkbox"/> <b>For Pricing</b> Contractor to proceed with this work only after receiving the direction to proceed from the CM.	<input type="checkbox"/> <b>Proceed Order</b> Contractor to proceed with this work immediately. Upon approval of cost, an Allowance Disbursement or Change Order will be Issued.	
<b>Note to Contractors:</b> Unless this is a Clarification, Contractors to submit an itemized proposal for changes in the contract sum and contract time for proposed modifications to the Contract Documents described herein. THE PROPOSAL MUST BE SUBMITTED WITHIN TEN (10) DAYS. All proposals (including Subcontractor's and Supplier's) MUST include a breakdown for Labor, Material and Equipment. If this information is not on Contractor's Proposals, they will be rejected, causing backcharges for CM and Architect time to review. If T and M box is checked above, work will be done on a T and M basis. Tickets to be signed by the Site Coordinator daily. Contractors to provide a "not to exceed" estimate for this work. Within ten (10) days after completion of this work, Contractor to send copies of ALL signed tickets to CSArch Office for Change Order to be processed. This Work will be a Backcharge to this Contractor at no additional cost to the Owner if the Contractors do not come to an agreement on corrective action. This Backcharge will be processed via Credit Change Orders.			
REMARKS:			
Reported by CSArch			
Signed:			Date Processed:

## Request for Shutdown

PROJECT: City School District of the City of New Rochelle – 2023 Capital Project	DATE:
	CONTRACT No.
CSARCH Project No. 188-2301.01	CONTRACT FOR:

CONTRACTOR REQUEST		
Contractor Name:		
Foreman:	Emergency Phone:	
Type:		
Area Affected:		
Reason for Shutdown:		
1. Date Requested:	From Time:	To Time:
2. Date Requested:	From Time:	To Time:
3. Date Requested:	From Time:	To Time:
4. Date Requested:	From Time:	To Time:
Send to: CSArch, ATTN:		
OWNER'S REMARKS		
Owner's Remarks:		
Owner's Signature of Approval:		Date:



## Daily Report Cover

PROJECT:	City School District of the City of New Rochelle – 2023 Capital Project	DATE:
		CONTRACT NO.
CSARCH PROJECT NO. 188-2301.01		CONTRACT FOR:

	7:00 a.m.	Noon	3:30 p.m.
Temperature			
Weather			

PERSONNEL (list by trade or attach daily time sheet)

SUBCONTRACTORS / PERSONNEL

EQUIPMENT

Send to: CSArch



## Labor Rate Sheet

PROJECT:	City School District of the City of New Rochelle – 2023 Capital Project	DATE:
		CONTRACT No.
CSARCH PROJ. NO. 188-2301.01		CONTRACTOR:

### LABOR RATES

#### DIRECTIONS

All contractors are requested to submit a schedule of labor rates to be used for the duration of this project. Please provide a separate rate for each trade classification for the work of this contract. These rates will be used to determine labor charges on any additional work of this contract. (Submit a separate sheet for each wage period).

WAGE PERIOD:

LABOR CLASSIFICATION:

Base Rate	\$	
Benefits	\$	
Subtotal	\$	
All Payroll Taxes % of Base Rate	\$	
Total Straight Time (Rate/Hour)	\$	



Two Week Look-Ahead Schedule

PROJECT: City School District of the City of New Rochelle – 2023 Capital Project	DATE:
	CONTRACT No.
CSARCH Project No. 188-2301.01	WORK AREA:

DATES	Enter Day of Week	Enter Day of Week	Enter Day of Week	Enter Day of Week	Enter Day of Week	Enter Day of Week	Enter Day of Week	Enter Day of Week	COMMENTS/NOTES:

Send to: CSArch



Bi-Weekly Material/Equipment Status Report

PROJECT	City School District of the City of New Rochelle – 2023 Capital Project	DATE:
PROJECT No.	188-2301.01	CONTRACT No.

Material/Equipment (List by priority, highest to lowest)	Related Specification Section	Date Needed on Site	Submitted Date	Approved Date	Mtl/Eqpt. Released Date	Lead Time	Expected Delivery Date	Remarks:

Send to: CSArch, ATTN:



## Substantial Completion Request for Inspection

PROJECT: City School District of the City of New Rochelle – 2023 Capital Project	DATE:
CSARCH PROJECT No. 188-2301.01	CONTRACTOR:
	CONTRACT No.
	AREA:

### DIRECTIONS:

- The Contractor has verified that installations and finishes are complete and installed per the Contract, and that the items listed below are outstanding and will be completed as agreed upon with the Architect and Owner.
- Upon verification of report by the Construction Site Representative, the Architect shall inspect and issue a Punch List.

Contract Supervisor's Signature:	Date:
Construction Site Representative Signature:	Date:

## Test Report/Inspection Log

PROJECT	City School District of the City of New Rochelle – 2023 Capital Project	DATE:
		CONTRACTOR:
		CONTRACT No.
CSARCH PROJECT No. 188-2301.01		AREA:

### DIRECTIONS:

The Contractor shall attach any applicable reports, inspection documentation, pictures and/or materials that verify installation has been tested per the documents. The Site Coordinator will be notified 24 hours in advance of test.

<b>TEST/INSPECTION TYPE</b>	
SPEC SECTION:	
BRIEF DESCRIPTION:	
<b>TESTING AGENCY</b>	
NAME:	
<b>AGENCY EMPLOYEE NAME</b>	
<b>SITE CONDITIONS</b>	
PLEASE DESCRIBE:	
<b>FURTHER DATA TO BE FORWARDED</b>	
<input type="checkbox"/> No	<input type="checkbox"/> Yes    If Yes, please list:

Send To: CSArch

# Submittal Schedule

**PROJECT** City School District of the City of New Rochelle – 2023 Capital Project

**CSArch PROJ. #** 188-2301.01

SECTION	SUBMITTAL TYPE												DATE SUBMIT	DATE RETURN	ACTION	COMMENT
	Product Data	Shop Drawings	Samples	Certificates	Qualification Data	Test Reports	Pre-Install conference	Maintenance Data	Warranty	Inspection Report	O&M Data	Demo & Training				

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## SECTION 011200 – MULTIPLE CONTRACT SUMMARY

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. This Section includes a summary of each Prime Contract, including responsibilities for coordination and temporary facilities and controls. One set of Construction Documents is issued covering the Work of multiple Prime Contracts. Each Prime Contract is responsible to review all drawings and specifications for specific requirements indicated and for a general understanding and knowledge of the work of other Prime Contracts. All Prime Contracts are responsible for all Work of their Contract no matter what drawing on which the Work appears. All Prime Contracts are responsible for their coordination of their work related to the complete set of drawings and specifications, not limited to each Prime Contractor scope. **All Bidders should acknowledge that for each Contract listed below, each Prime Contractor is their own General Contractor and subject to all General Contractor requirements.**

- B. PRIME CONTRACT SCOPES OF WORK

- 1. General Construction Work (GC-01)**

- The General Construction Contractor shall be selected based on the bid procedure as described in the Bid Documents. Contract Bidders are responsible for a) trade work coordination, b) the scope contained in drawings listed below, and (c) all additional scope specifically identified to be performed by the General Contractor in other Bid Packages in the Contract.

- a. Bid Package Contract GC-01 – General Construction Work: All work related to General Construction includes removal and reinstallation. Work includes, but is not limited to, the following items. Refer to the Contract Documents for full scope of work.
      - i. All demolition as noted on the contract drawings, waterproofing, fire-rated partition install / repair, new suspended ceiling system grid and tiles, gypsum wallboard partitions and ceilings, CMU walls, painting, patching, door demolition and replacement, partition wall demolition, steel lintels, masonry work, non-structural metal framing and blocking,

structural concrete repair, reinforcing steel, concrete slabs, flooring including demolition and installation, tiling, access panels, pitch pockets, epoxy flooring, and concreting related to finish plans (AF plans), and temporary fire-rated partitions.

- ii. Work related to drawings; *(In addition to these drawings, the Prime Contractor is required to review all specifications included in the overall Contract that may contain related scope or detail for this specific Contract.)*

1. New Rochelle High School - Phase 1
  - a. NRHS SET (Dated 10/14/24, CSA Project #188-2301.01)
2. Albert Leonard Middle School – Phase 1
  - a. ALMS SET (Dated 10/14/24, CSA Project #188-2301.01)
3. Jefferson Elementary School – Phase 1
  - a. JES SET (Dated 10/14/24, CSA Project #188-2301.01)
4. George M. Davis Elementary School – Phase 1
  - a. GMD SET (Dated 10/14/24, CSA Project #188-2301.01)
5. William B. Ward Elementary School – Phase 1
  - a. WBW SET (Dated 10/14/24, CSA Project #188-2301.01)
6. Henry Barnard Elementary School (HBE) – Phase 1
  - a. HBE SET (Dated 10/14/24, CSA Project #188-2301.01)

## **2. Mechanical Construction Work (MC-01)**

The Mechanical Contractor shall be selected based on the bid procedure as described in the Bid Documents. Contract Bidders are responsible for a) trade work coordination, b) the scope contained in drawings listed below, and c) all additional scope specifically identified to be performed by the Mechanical Contractor in other Bid Packages in the Contract.

- a. Bid Package Contract MC-01 - Mechanical Work: All work related to Mechanical construction includes, but is not limited to, the following items. Refer to the Contract Documents for full scope of work.
  - i. Provide fire rating/firestopping, new or reuse of existing mechanical work, commissioning/decommissioning of all equipment, fans, ventilation, furnish and installation of cabinet heaters, heat pumps, condensing units, air grilles, metal ductwork, watertight protection of open duct and mechanicals, mechanical system demolition, including pneumatic systems, control wiring and BMS integration, access panels, testing and balancing, patching and painting related to the installation of all scope, all city and Department of Health required filings and permits.

- ii. All work related to drawings; *(In addition to these drawings, the Prime Contractor is required to review all specifications included in the overall Contract that may contain related scope or detail for this specific Contract.)*
  - 1. New Rochelle High School - Phase 1
    - a. NRHS SET (Dated 10/14/24, CSA Project #188-2301.01)
  - 2. Albert Leonard Middle School – Phase 1
    - ALMS SET (Dated 10/14/24, CSA Project #188-2301.01)
  - 3. Jefferson Elementary School – Phase 1
    - a. JES SET (Dated 10/14/24, CSA Project #188-2301.01)
  - 4. George M. Davis Elementary School – Phase 1
    - a. GMD SET (Dated 10/14/24, CSA Project #188-2301.01)
  - 5. William B. Ward Elementary School – Phase 1
    - b. WBW SET (Dated 10/14/24, CSA Project #188-2301.01)

### **3. Electrical Construction Work (EC-01)**

The Electrical Contractor shall be selected based on the bid procedure as described in the Bid Documents. Contract Bidders are responsible for a) trade work coordination, b) the scope contained in drawings listed below, and c) all additional scope specifically identified to be performed by the Electrical Contractor in other Bid Packages in the Contract.

- a. Bid Package Contract EC-03 - Electrical Work: All work related to Electrical Contractor which includes, but is not limited to, the following items. Refer to the Contract Documents for full scope of work.
  - i. Provide all electrical demolition, all electrical work including but not limited to lighting fixtures (new install, temporary, removal and replacement), electrical panels and disconnects, conduits, feeders, switches and cover plates, all ceiling devices, fire alarm equipment and wiring including shutdown relays for mechanical equipment, wiring for all security systems, all patching, firestopping and painting related to the installation of this scope, electrical work related to mechanical and plumbing equipment, temporary lighting and power and all city filings and permits for any reason and as required throughout the District).
  - ii. Work related to drawings; *(In addition to these drawings, the Prime Contractor is required to review all specifications included in the overall Contract that may contain related scope or detail for this specific Contract.)*
    - 1. New Rochelle High School - Phase 1
      - a. NRHS SET (Dated 10/14/24, CSA Project #188-2301.01)
    - 2. Albert Leonard Middle School – Phase 1
      - ALMS SET (Dated 10/14/24, CSA Project #188-2301.01)

3. Jefferson Elementary School – Phase 1
  - a. JES SET (Dated 10/14/24, CSA Project #188-2301.01)
4. George M. Davis Elementary School – Phase 1
  - a. GMD SET (Dated 10/14/24, CSA Project #188-2301.01)
5. William B. Ward Elementary School – Phase 1
  - a. WBW SET (Dated 10/14/24, CSA Project #188-2301.01)

#### **4. Plumbing Construction Work (PC-01)**

The Plumbing Contractor shall be selected based on the bid procedure as described in the Bid Documents. Contract Bidders are responsible for a) trade work coordination, b) the scope contained in drawings listed below, and c) all additional scope specifically identified to be performed by the Plumbing Contractor in other Bid Packages in the Contract.

- a. Bid Package Contract No. PC-01 - Plumbing Work: All work related to plumbing construction includes, but is not limited to, the following items. Refer to the Contract Documents for the full scope of work.
  - i. Provide access panels, fire rating/fire stopping, all demo and proper disposal, of plumbing piping including storm water and sanitary, storm leaders demolition and installation, insulation and fittings, fresh water and sanitary line rerouting, vent lines, floor drain and cleanout installation, bathroom appliance demo and installation, mechanical condensate lines, furnish and install high-temperature sump and basin, all patching and painting related to the installation of this scope, all city filings and permits for any reason and as required, adhering to the Westchester County Department of Health, throughout the District).
  - ii. All work related to drawings; *(In addition to these drawings, the contractor is required to review all specifications included in the overall contract that may contain related scope or detail for this specific contract.)*
    1. Jefferson Elementary School – Phase 1
      - a. JES SET (Dated 10/14/24, CSA Project #188-2301.01)
    2. New Rochelle High School - Phase 1
      - a. NRHS SET (Dated 10/14/24, CSA Project #188-2301.01)

#### **5. Site Construction Work (SC-01)**

The Site Work Contractor shall be selected based on the bid procedure as described in the Bid Documents. Contract Bidders are responsible for trade work coordination and are limited to the drawings listed below.

- a. Bid Package Contract No. SC-01 - Site Work: All work related to site construction includes, but is not limited to, the following items. Refer to the Contract Documents for the full scope of work.

- i. Permits (as required by the City of New Rochelle), temporary protection and barriers, foundations, concrete curbs and sidewalk, asphalt, excavation, drainage, catch basin install, miscellaneous steel, handrails, structural steel; masonry work, including but not limited to veneer, brick pointing, stitching, scrape and paint existing lintels, coping stone removal and installation, stone repair and joint sealing, patch and repair opening, grade beams, louvers, and foundation wall, demolition of existing grade beams, walls, footings, foundation, structural slab, fencing/ silt fencing, handrails/ temp handrails, cold weather concrete applications and all other demolition as noted on the drawings and in the specifications.
  - ii. All work related to drawings; *(In addition to these drawings, the Prime Contractor is required to review all specifications included in the overall Contract that may contain related scope or detail for this specific Contract.)*
    1. New Rochelle High School - Phase 1
      - a. NRHS SET (Dated 10/14/24, CSA Project #188-2301.01)
- 1) Related Sections include, but are not limited to, the following:
1. Division 01 Section "Work Restrictions" for use of the Project site and for requirements for continued Owner occupancy of premises.
  2. Division 01 Section "Project Management and Coordination" for general coordination requirements.
  3. Division 00 Section "Project Forms" for documents required for Testing and Coordination.
  4. Division 01 Section "Temporary Facilities and Controls" for specific requirements for temporary facilities and controls.

### 1.3 DEFINITIONS

- A. Building Site: The Building Site shall be defined in the Construction Documents, as the building footprint, and all related construction within a five-foot (5'-0") distance of the building's exterior face, unless noted or assigned otherwise. Coordinate with specific exceptions to the 5'-0" limit indicated within each Scope of Work outline.
- B. Permanent Enclosure: As determined by the Architect: permanent or temporary roofing is complete, insulated, and weathertight; and all openings are closed with permanent construction or substantial temporary closures. All cost associated with failure to maintain described installations that result in any damage or contamination to the Owner's property, shall be borne by the Prime Contract responsible for the installation.
- C. Project Identification: The project consists of all labor, materials, equipment, appliances, services, and incidentals necessary for layout, installing, and performing Additions and

Alterations at the City School District of New Rochelle as shown on the Contract Drawings and described in the Specifications.

- D. The work will be constructed under multiple prime contracts. **The GC is responsible for communicating, coordinating, and scheduling work with all awarded listed Contracts below.** One (1) set of contract documents is issued covering multiple Contracts. Each Prime Contract is defined as:
1. CONTRACT 01 GC-01 – GENERAL CONSTRUCTION WORK.
  2. CONTRACT 02 MC-01 – MECHANICAL CONSTRUCTION WORK.
  3. CONTRACT 03 EC-01 – ELECTRICAL CONSTRUCTION WORK.
  4. CONTRACT 04 PC-01 - PLUMBING CONSTRUCTION WORK.
  5. CONTRACT 05 SC-01 – SITE WORK CONSTRUCTION WORK.
  6. Day Automation – Access Controls.
- E. GC Scope includes the following but not limited to:
1. **Full abatement scope shown for HBE on sheet “HBE AA100” and Division 02 specification Sections.**
  2. GC is responsible for furnishing and installing all steel lintels related to any other Prime Contracts work.
  3. Roofing work and pitch pockets will be covered in the General Construction Scope and contract.
  4. Collaborating with other Prime Contracts and creating one (1) master schedule per project per school, i.e. a schedule should be created for each below project to include MEP scope of work. SC Contractor is responsible to create their own SC Schedule. All Schedules are to be based off a 2<sup>nd</sup> shift 3:30 PM- 11:30PM during the start of school. In the event the contractor falls behind schedule they must work a 3<sup>rd</sup> shift 11:30 PM – 7:30 AM, at no additional cost to the Owner.
    - a. Henry Barnard School (HBE) Chimney Reconstruction.
    - b. Jefferson Elementary School (JES) Secure Vestibule / Main Office.
    - c. William B. Ward Elementary School (WBW) Secure Vestibule/ Main Office.
    - d. George M. Davis Elementary School (GMD) Secure Vestibule.
    - e. Albert Leonard Middle School (ALMS) Secure Vestibule.
    - f. New Rochelle High School (NRHS) Third Floor Dead-end Corridor.
    - g. New Rochelle High School (NRHS) Secure Vestibule.

#### 1.4 MANAGEMENT AND COORDINATION

- A. The Owner shall provide a Construction Manager.
1. The Construction Manager shall provide a full-time construction site representative recognized as the Construction Manager.

## 1.5 CONSTRUCTION MANAGER

- A. The construction manager shall provide on-site administration of the Contracts for Construction in cooperation with the Architect as set in AIA Document A232<sup>TM</sup> – 2019, General Conditions of the Contract for Construction, Construction Manager as Adviser Edition, as modified.
- B. The Construction Manager shall provide administrative, management and related services to coordinate scheduled activities and responsibilities of the Multiple Prime Contractors with each other and with those of the Construction Manager, the Owner, and the Architect. The Construction Manager shall coordinate the activities of the Multiple Prime Contractors in accordance with the latest approved Project Schedule and the Contract Documents.
- C. Utilizing the construction schedules provided by the Multiple Prime Contractors, the General Contractor shall create one (1) Level 5 project schedule per school that captures all MEP work. The MEP contractors will need to create a detailed Level 5 schedule per school incorporating the activities of the Owner, Architect, and Multiple Prime Contractors on the Projects, including activity sequences and durations, allocation of labor and materials, processing of Shop Drawings, Product Data and Samples, and delivery and procurement of products, including those that must be ordered will in advance of construction. The Project schedule shall include the Owner's occupancy requirements showing portions of the Project having occupancy priority.
- D. Utilizing information from the Multiple Prime Contractors, the GC will create one (1) project schedule per school capturing all trades work. The Construction Manager shall approve of the schedule and coordinate the sequence of construction and assignment of space in areas where the Multiple Prime Contractors are performing Work, in accordance with the Contract Documents and the latest approved Project Schedule.

## 1.6 GENERAL REQUIREMENTS OF PRIME CONTRACTS

- A. Prime Contracts: The context used in this Section are separate Prime Contracts that represent significant elements of work that is to be performed concurrently and in close coordination with the work of other Prime Contracts for the benefits of the Owner. Each Prime Contract is recognized to be a major part of the Work.
- B. Assignment of Work: Should a conflict be indicated; Section 011200 shall take precedence over all scope of work assignments that may be indicated elsewhere within the Construction Documents.
- C. Seismic Requirements: Prime Contracts are to be aware that the building(s) is located within the Seismic Zone indicated in the documents and shall provide installations in compliance with all related code requirements.

- D. Layout and Installation: Each Prime Contractor shall schedule, layout and install their Work in such manner as not to delay or interfere with, but to complement the execution of the work of other Prime Contracts, utility companies and Owner's operations. All primes shall create a **Detailed** schedule for each project at each school, then coordinate with the GC who will create a master schedule per project per school to submit to the CM for review and approval.
- E. Extent of Contract: The Contract Documents, drawings, and specifications each contain more specific descriptions of the Work facilitating which Prime Contract includes specific elements of the Project.
1. Work provided by each Prime Contract shall mean complete and operable systems and assemblies, including products, components, accessories and installations required by the Construction Documents or indicated otherwise.
  2. Prime Contractors shall exercise good judgment and perform all work according to related industry standards.
  3. The Owner is exempt from payment of Federal, State and local taxes, including sales and compensating use taxes on all materials and supplies incorporated in completing the Work; these taxes are not to be included in the Bid. This exemption does not apply to tools, machinery, equipment or other property leased by, or to, the Contractor or sub-contractor, or to supplies and materials, which even though consumed are not incorporated into the completed work. Prime Contractors, and their sub-contractors, shall be responsible for paying any and all applicable taxes on said tools, machinery, equipment or property, and upon all said unincorporated supplies and materials, whether purchased or leased.
  4. Prime Contracts shall understand that time is of the essence, and will adequately staff the Project by employing the appropriate tradespeople to perform the Work; these people shall be experienced in their respective trades. Prime Contractors understand that at no time shall one project be unstaffed, i.e. all Primes shall have adequate staff to mobilize and start work at each building simultaneously. A shortage of labor in the industry shall not be accepted as an excuse for not properly staffing the Project; all efforts shall be made to meet or exceed the schedule, including additional staff and/or labor hours necessary. All cost associated with this item shall be included within the Bid.
  5. Local custom and trade union jurisdictional settlements will not control the scope of the Work of each Prime Contract.
    - a. When a potential jurisdictional dispute or similar interruption of Work is first identified, or threatened, the affected Prime Contracts shall promptly negotiate a reasonable settlement to avoid or minimize the pending interruption and delays.
    - b. Contractor's trade-related issues shall not be grounds for modification or extension of scheduled completion date(s).
  6. The Work of all Prime Contracts requires close coordination with other Prime Contracts and construction personnel. Maintain flexibility and cooperation through



the Project. "Out of Sequence" and "Delay" claims will only be considered when requirements of Division 01 "Administrative Requirements" have been adhered to. Delay claims must be in writing and forwarded to the Architect, per the requirements of the General Conditions of the Contract. Claims not submitted per these requirements will be rejected and/or denied. Suppose a Prime has a delay or shortage in material that delays the project schedule or hinders another prime from completing their work. In that case, this does not qualify for a change order or additional cost to the Owner.

7. The intention of the Work is to follow a logical sequence, however, a Prime Contractor may be required by the Architect or Construction Manager, to temporarily install, omit or leave out a section(s) of Work, out of sequence. All such out of sequence work, and come back time, at these areas shall be performed at no additional cost to the Owner.
- F. Substitutions: Per Division 01 Section "Substitution Procedures", each Prime Contractor shall cooperate with the other Prime Contractors involved, to coordinate approved substitutions with remainder of the Work. Contractors shall submit all "Substitutions" at least ten (10) days prior to the date for receipt of Bids as specified in the Instructions to Bidders 002113 Section 3.3 Equivalents or bid will be considered per "basis of design".
  - G. Construction Schedules: Refer to Divisions 01 Section "Construction Progress Documentation", "Milestone and Phasing Schedule" and "Project Management and Coordination" for requirements related to meetings and schedules.
  - H. Construction Sequencing and Phasing: Prime Contractor shall understand that Sequencing and/or Phasing Plans are contingent upon the work areas being complete/occupied, prior to the next area of Work beginning. Should an area of construction not be complete per the Milestone and Phasing Schedule, the Project Master Construction Schedule/Sequencing Plans will be adjusted accordingly. The Owner will not be responsible for delay claims due to adjustments being no fault of their own.
    1. Prime Contracts may be required to re-sequence the phasing of the project as a result of changes to the schedule. Prime Contracts shall provide these adjustments at no additional cost to the Owner.
  - I. Prime Contract shall verify existing conditions in the field and conduct pre-construction photographs within five (5) business days of Bid Award prior to work commencing in that area and immediately report conditions to the Architect that are not represented correctly by the Construction Documents.
    1. Each Prime Contract is responsible for familiarizing himself with Project Site Logistics and provide a "site logistics plan locating storage area, scaffolds, rubbish areas, stock piles and egress related to all work, included phased construction within fifteen (15) days of award.

2. Each Prime Contract has been given ample opportunity to review Existing Conditions related to the Project. Existing Conditions not noted in the Construction Documents that could be easily recognized during pre-bid review that interfere with the respective Prime Contract's work, shall be the responsibility of the respective Prime Contract. This includes all costs associated with removal, patching, relocation or re-fabrication of installations.
- J. Hazardous Materials: Each Prime Contract shall familiarize themselves with the Hazardous Materials Sections / Drawings of the Construction Documents and follow DOL / OSHA / EPA / SED regulations while performing their respective Work in these areas. Discovery of non-identified or concealed hazardous materials shall be reported to the Construction Manager immediately and followed up with written documentation of the event.
- K. Protection of Installations: Each Prime Contract is responsible for always protecting their installations (unless in the event of #06 below). All costs incurred to repair, replace or clean insufficiently protected materials / installations shall be the responsibility of the installing Prime Contract.
1. Architect shall be notified, in writing, immediately upon material/installation being damaged; notification shall indicate responsible party.
  2. Owner will not be liable for damaged materials and/or installations by "others", when "others" cannot be identified.
  3. Repair damaged work, clean exposed surfaces or replace construction installations that cannot be repaired.
  4. Each Prime Contract shall be responsible for removing all labels not required to remain from their installations.
  5. Installations shall be wiped clean and protected properly to not delay or obstruct the performance of other's work.
  6. Each Prime Contract is responsible to protect another primes work in the event that prime has to work over or on top of that other primes work being complete. The prime working over the completed work takes full responsibility of that other Prime's completed work - both in condition and operation.
- L. Protection of Previous Warranties: It is the responsibility of each Prime Contractor to inquire on the warranty status of all items adjacent to the contract scope and prevent the voidance of active warranties.
- M. Daily Cleaning: All Prime Contracts are responsible for any and all debris caused by their Work, including the Work of their subcontractors. A daily clean up and disposal is required by each Prime Contract for the periods which that Prime Contract, or its sub-contractors, are performing Work on site.

1. Assign at least one (1) person for a daily clean and sweep of the work area(s). Prime Contractor shall allot sufficient manpower and time for this to be completed by the end of each shift. Submit name of this person(s) to Construction Manager.
  - a. Construction Manager shall have the authority to give direction to person(s) on the Project Site identified by the Prime Contract as designated for cleanup tasks. This shall include the safety review/securing of the site-work zone after each shift.
  - b. This person must check that no construction debris was dumped in any district dumpsters during this end of shift site review; if found the contractor must remove immediately the next morning to avoid back charge costs of \$1,500.00 per day not removed.
2. Any Prime Contract not providing personnel for Daily Cleaning will be Back Charged for labor provided by the Owner to complete this task.
3. Contractor working solely in an area shall be responsible for clean/sweep of that area.
4. Daily cleaning will not mean any one Prime Contract is responsible for assisting another Prime Contract with removing major quantities of debris created by a particular Prime Contract's Work.
5. Daily cleaning will be mandated to remove from the building any debris created by day-to-day activities. All Prime shall assist in sweeping shared work areas and shared corridors while working on site. Each Prime shall assist in mopping of shared corridors while working on site or as required by the Owner.
6. All prime contractors and subcontractors are required to provide sweeping compound for daily cleaning in their respective exterior and interior work areas. Each Prime Contract shall provide a sufficient number of brooms or other necessary tools, for use by their personnel to adequately fulfill their obligations.
7. All prime contractors shall provide and maintain garbage cans / refuse containers with liners for each construction area of their respective contracts as directed by the Construction Manager and shall be responsible for disposing of these materials to a dumpster.
8. All prime contractors provide the necessary equipment/containers (lull / skip-box) to move daily clean/sweep debris from the building to a dumpster daily, for each construction area of their respective contracts. Skip-box shall be emptied to a dumpster by 9:00 AM the following day.
9. Cleaning shall be deemed a Safety & Health issue, with Prime Contracts being held accountable for fulfilling their contractual obligations.
10. Final Cleaning: At Substantial Completion of each area of construction, each Prime Contract shall wipe/vacuum clean all of their respective installations; All interior contracts performing work inside or outside the buildings shall remove all construction debris, boxes, wrappers, etc. The GC shall mop clean all building surrounding areas and finish flooring and remove all marks/blemishes to the finish, for each construction area of their respective contracts. Each area of construction

shall be wiped clean of all construction dust and debris prior to turnover to the Owner.

- N. Cutting and Patching: All Primes are responsible for cutting and patching required to complete their Work. All repair of existing finish Work (including finish floors) shall be performed by contract requiring work, meeting, or exceeding minimum contract requirements for that particular section, specification, or type of work. All concealed openings (piping, ductwork, conduit, etc.) must be repaired to comply with specified wall or deck conditions as well as required fire and sound ratings. All corridor penetrations require fire-safing. If Contractor elects to install their new work in an existing unrated wall or floor opening, whereas the wall/floor is a fire rated condition, that contractor is responsible to fire rate that opening to match the wall/floor fire rating with new and all other existing wire, piping, ducts etc. Other areas are noted in drawings and specifications.

- 1.7 PROJECT SCHEDULE. The nature of this project is to complete all the work listed in the schedule by **the Project Closeout Dates specific to each Prime Contract as listed below**. Each Prime Contractor shall include in their bid proper allowances for foul weather.

- A. Bids Received: November 25, 2024.
- B. Award of Contract: December 10, 2024.
- C. Notice-To-Proceed: December 11, 2024.
- D. Submittals: The following items are to be submitted within fifteen (15) calendar days after Notice-to-Proceed:
  - a. Submittal List and Submission Schedule.
  - b. Project Schedule / Two-Week Look Ahead.
  - c. Field Investigations.
  - d. Shop Drawings.
  - e. Long Lead Items.
  - f. Schedule of Values and Key Submittal List.
- E. Mobilization:
  - a. NRHS – December 19, 2024.
  - b. ALMS - December 19, 2024.
  - c. GMD – December 19, 2024.
  - d. HBE – December 19, 2024.
  - e. JES – December 19, 2024.
  - f. WBW – December 19, 2024.
- F. Start of Construction Work:

- a. NRHS – December 19, 2024.
  - b. ALMS – December 19, 2024.
  - c. GMD – December 19, 2024.
  - d. HBE – December 19, 2024.
  - e. JES – December 19, 2024.
  - f. WBW – December 19, 2024.
- G. Substantial Completion:
- a. NRHS
    - 1) Dead-end Corridor – April 11, 2025.
    - 2) Security Vestibule – July 10, 2025.
  - b. ALMS – May 2, 2025.
  - c. GMD – April 18, 2025.
  - d. HBE – March 31, 2025.
  - e. JES – May 23, 2025.
  - f. WBW – May 7, 2025.
- H. Project Closeout: July 30, 2025.

#### 1.7 TEMPORARY FACILITIES AND CONTROLS OF PRIME CONTRACTS

- A. Conditions of Use: Keep temporary services or conditions clean and neat in appearance. Operate in a safe and efficient manner. Relocate temporary facilities as required as work progresses; do not overload facilities or permit them to interfere with progress. Take necessary fire prevention measures; do not allow hazardous, dangerous, or unsanitary conditions to develop or persist on the Project site.
- 1. Installation, operation, maintenance, and removal of each temporary service or condition are considered part of the respective Prime Contract's own construction activity, as are costs and use charges associated with each facility.
  - 2. Locate service or condition where they will serve the Project adequately and with minimum interference of the Work, coordinate with the Construction Manager and the other Prime Contracts prior to installation.
- B. Temporary Use of Permanent Facilities: Prime Contract, as installer of each permanent service or condition, shall assume responsibility for its operation, maintenance, and protection during use as a construction facility prior to the Owner's acceptance, regardless of previously assigned temporary facilities and controls responsibility.
- C. Owner's Facilities: Contractors are not allowed to use the Owner's facilities (toilets, telephones, food service, etc.) for their own benefit or convenience. Prime Contract Superintendents shall enforce this policy with their respective work forces.

1. Construction personnel parking will be restricted to area as directed and agreed to by the Owner, and to facilitate the completion of the work. Owner reserves the right to remove from their property, unauthorized vehicles occupying unauthorized areas, at respective vehicle owner's expense.
- D. Storage on the Project Site: Each Prime Contract shall provide sufficient secure weather-tight storage facilities for their materials and equipment. These storage containers are required to be located on the "site logistics plan" The Owner's facilities and the Project's building areas shall not be used for storage unless agreed upon, in writing, with the Owner via the Construction Manager.
1. Until permanently incorporated into the Work, all materials on the Project site are considered to be the Prime Contract's responsibility for security and protection.
  2. Prime contractor is required to check on their onsite stored material periodically to ensure that all material continues to be located in the stored location and that it remains protected from all damage, theft, and endangerment to others and ready to be used on notice for coordination with other contractors. Failure to arrange for materials to be on site to complete coordinated work with other Prime Contractors will result in back charges for delays resulting therefrom.
  3. Temporary long-term storage facilities are not available to Prime Contracts by the Owner.
  4. Prime Contractors and their subcontractors, shall coordinate deliveries with the Construction Manager to ensure that disruptions and Owner inconvenience are avoided.
- E. Tools and Equipment: Each Prime Contractor shall provide all tools and equipment necessary for its own activities; this includes secure lock-up and storage for all items on the Project Site.
1. Provide all construction aids and miscellaneous services and facilities necessary exclusively for its own construction activities; this shall include any additional supplementary power (Generators), ventilation, lighting requirements and weather protection.
- F. Project Site Communication: Each Prime Contractor shall provide their Project a full time on site at all times Superintendent with a mobile phone for the duration of the Project, as indicated in their Scope of Work. The Construction Manager shall be furnished with contact numbers associated with each phone. A contact directory shall be issued to the Construction Manager within five (5) business days of Bid Award.
- G. Safety: Prime Contractors, not the Architect nor Construction Manager, are responsible for Project Site Safety, as related to their operations.

1. Each Prime Contract shall correct safety hazards and violations immediately. If safety issues are not immediately rectified, the Owner shall secure outside sources to correct the deficiency and back charge the responsible Prime Contract.
  2. Maintain unobstructed access/egress to fire extinguishers, fire hydrants, stairways, corridors, ladders and other safety routes/devices.
  3. The GC is responsible for the installation and removal of all temporary fire-rated partitions needed to divide construction work with pedestrians. Refer to proposed Logistics Plans as part of Section 003113 and reference documents for partition-type construction. GC shall patch back any flooring that may be disturbed.
- H. Fire Extinguishers: All Prime Contracts provide and maintain "general use" fire extinguishers for each construction area of their respective contracts; comply with applicable codes for quantities required. Use of the Owner's fire extinguishers to meet this requirement is not permitted. Comply with NFPA for recommended classes for exposure; extinguishers shall be inspected and appropriately tagged prior to being brought on site. Provide stands, painted bright orange, sturdy enough to carry the extinguisher, and built as not to create a tripping hazard.
1. Each Prime Contract shall supplement this requirement by providing additional fire extinguishers specifically related to their work activity (e.g., welding, soldering, abrasive cutting, etc.).
  2. Each Prime Contract shall provide and maintain proper fire extinguishers at/in their respective on site office and storage facilities.
  3. Store combustible materials in approved containers in fire-safe locations.
- I. Welding: Any Prime Contract performing welding, cutting or other activities with open flames or producing sparks shall at a minimum:
1. Coordinate interruption/shutdown of detection system(s) to avoid creating false alarms.
  2. Protect the area and surrounding areas from fire and damage.
  3. Maintain fire extinguishers, compatible with activity, at the location of the activity.
  4. Provide a continuous Fire Watch during the activity and one-half hour beyond the completion of the activity.
  5. Provide all necessary fans and ventilation required for the activity.
  6. Any welding, burning, and or use of flame the Contractor is required to provide all required "hot work permits" to use such equipment prior to start of work. It is mandatory that no "hot work" shall start without these permits issued to the CM and Owner. Failure to this requirement will result in the removal of the project superintendent of that company from all district projects.
- J. Remove each temporary facility when it can be replaced by the authorized permanent facility no later than Substantial Completion, or as directed by the Architect and/or Construction Manager. Complete or restore permanent facilities that may have been delayed due to interim use of a temporary barrier or condition.

- K. Temporary Power: Each Prime Contractor shall provide for their own temporary power needs for any scheduled electrical utility shutdowns. Each Prime Contractor shall provide for their own temporary generators, power cords and temporary lighting as needed during these periods to continue to perform their work and maintain adherence to the Milestone Phasing Schedule and approved Project Master Schedules. All temporary power equipment shall comply with all applicable codes and regulations.
- L. Waste Disposal Facilities:
1. General debris/refuse/construction waste containers (dumpsters) shall be provided by each prime contractor and secured as specified herein this contract. The location of the dumpsters must be approved by the Owner through the CM. The GC shall illustrate the location of the waste containers on the logistic plans.
  2. It shall be the responsibility/requirement of each Prime Contract to bring their waste to the dumpsters, including but not limited to all equipment, demolition debris, discarded materials with further identification including the following; construction and demolition debris refers to discarded materials generally considered non-hazardous in nature, including but not limited to steel, glass, brick, concrete, asphalt material, pipe, gypsum wallboard, and lumber, from the construction or destruction of a structure as part of a construction or demolition project or from the renovation of a structure, including such debris from construction of structures at a site remote from the construction or demolition project site.
  3. It shall be the responsibility and requirement of each Prime Contract to recycle metals generated by its Work, and the Work of its subcontracts.
  4. Joint-effort recycling by all Prime Contracts is encouraged.
- M. Temporary Sanitary Facilities: Provide temporary self-contained toilets units for duration of the project.
- a. Temporary Sanitary Facilities:
    - 1) Each prime contractor is required to provide their own Temporary Sanitary Facilities and secured behind fencing and/or locked after work hours and weekends.
  - b. Comply with regulations and health codes for type, number, location, operation, and maintenance of fixtures and facilities.
  - c. Provide separate facilities (minimum of one ea.) for male and female personnel in proportion required by OSHA.
  - d. Shield toilets to ensure privacy.
  - e. Coordinate mobilization and demobilization of units with Construction Manager.
  - f. Toilets shall be cleaned at least once per week, with additional facilities or cleanings provided if requested by Construction Manager.
  - g. Provide and maintain adequate supply of toilet tissue and hand sanitizer for each facility.



## 1.8 WORK HOURS & SEQUENCE

- A. All work related to these projects will be performed from:
- B. Start of Construction Work:
  - a. NRHS – December 12, 2024.
  - b. ALMS – December 12, 2024.
  - c. GMD – December 12, 2024.
  - d. HBE – December 12, 2024.
  - e. JES – December 12, 2024.
  - f. WBW – December 12, 2024.
- C. Substantial Completion:
  - a. NRHS
    - 1) Exterior Staircases – July 10, 2025.
    - 2) Dead-end Corridor – April 11, 2025.
    - 3) Secure Vestibule / Office – April 2, 2025.
  - b. ALMS – May 2, 2025.
  - c. GMD – April 18, 2025.
  - d. HBE – March 31, 2025.
  - e. JES – May 23, 2025.
  - f. WBW – May 7, 2025.
- A. Work Hours will be referred to as 1<sup>st</sup> (7:00 AM – 3:30 PM), 2<sup>nd</sup> (3:30 PM – 11:30 PM), or 3<sup>rd</sup> (11:30 PM – 7:30 AM) shifts. The work should be planned to commence during the 2<sup>nd</sup> shift hours (3:30 PM – 11:30 PM). There shall be no additional cost to the Owner for working weekends. **Any Work done during the school year MUST REMAIN WITHIN THE APPROVED CONSTRUCTION AREA, AND BE COMPLETED, CLEANED, AND TESTED AS NECESSARY FOR STUDENT/STAFF OCCUPANCY BEFORE THE START OF THE NEXT SCHOOL DAY. Prime Contractors are required to schedule work during school breaks, school days off, and school holidays** with the CM to be approved by the District.
- 1. **New Rochelle High School Staircases Scope (SC-01)** - This work is to occur in two (2) Phases - refer to Logistics Plan contained within Section 003113. Staircases (labeled on the Logistic Plan) "A", "B", and "C" also known as Phase 1, will commence first. Upon completion of these three (3) staircases, construction on staircase "D", or Phase 2, can commence. At no time shall all four (4) staircases be under construction or out of use at one time. Associated with this work is a required substantial completion date of April 25, 2025 for Phase 1 and July 10, 2025 for Phase 2. The work is to commence during the hours of 3:30 PM to 11:30 PM on weekdays and Saturdays and Sundays from 7:00 AM to 3:30 PM with 24-hour notice and District approval. During School breaks, work is to be performed from 7:00 AM to 10:00 PM. There is no additional cost to the owner for working

the hours of 3:30 PM through 11:30 PM, or weekend work during the school year. The work of 2<sup>nd</sup> shift shall be captured in the Prime Contractor's Bid.

2. **New Rochelle High School Secure Vestibule / Office and Dead-End Corridor (GC-01, MC-01, EC-01, and PC-01)** - This work has a required substantial completion date of April 11, 2025. Refer to section 1.9 parts A and B in this Multiple Contract Summary for work hours and time constraints. All weekend / holiday work must be approved by the Owner through the CM.
  3. **Albert Leonard Middle School Secure Vestibule (GC-01, MC-01, and EC-01)** - This work has a required substantial completion date of May 2, 2025. Refer to section 1.9 parts A and B in this Multiple Contract Summary for work hours and time constraints. All weekend / holiday work must be approved by the Owner through the CM.
  4. **George M. Davis Elementary School Secure Vestibule (GC-01, MC-01, and EC-01)** - This work has a required substantial completion date of April 18, 2025. Refer to section 1.9 parts A and B in this Multiple Contract Summary for work hours and time constraints. All weekend / holiday work must be approved by the Owner through the CM.
  5. **Henry Barnard School Chimney Reconstruction (GC-01)** - This work has a required substantial completion date of March 31, 2025. Refer to section 1.9 parts A and B in this Multiple Contract Summary for work hours and time constraints. All weekend / holiday work must be approved by the Owner through the CM.
  6. **Jefferson Elementary School Secure Vestibule / Main Office (GC-01, MC-01, EC-01, and PC-01)** - This work has a required substantial completion date of May 23, 2025. Refer to section 1.9 parts A and B in this Multiple Contract Summary for work hours and time constraints. All weekend / holiday work must be approved by the Owner through the CM.
  7. **William B. Ward Elementary School Secure Vestibule (GC-01, MC-01, and EC-01)** - This work has a required substantial completion date of May 7, 2025. Refer to section 1.9 parts A and B in this Multiple Contract Summary for work hours and time constraints. All weekend / holiday work must be approved by the Owner through the CM.
- B. All weekday work is to be conducted during the hours of 3:30 PM to 11:30 PM. Should a Contractor's progress fall behind schedule and require 3<sup>rd</sup> shift work (11:30 PM to 7:30 AM) to meet the established substantial completion date, this work is to be scheduled through the CM at no additional cost to the owner. Adjustments to the original 2<sup>nd</sup> shift and weekend work schedule are subject to charges as stated in section 1.10 E for lack of maintaining schedule.

- C. Contractors are required to start working upon receipt of the Notice-to-Proceed. Contractors are required to coordinate and perform work simultaneously with other Contractors. Contractors are required to complete their contract work by the designated Substantial Completion and Final Completion end dates as indicated on the Invitation to Bid. **All insurance documents and bonds must be submitted within five (5) business days upon bid award. At no time shall the Contractor start physical work without approved insurance documents. However, the Contractor shall start the submission of required documents on Project Sight upon notification of bid award.**
- D. Mandatory clean-up period will occur:
1. NRHS Staircases - From December 19, 2024 to July 3, 2025.
  2. NRHS Dead-End Corridor – From December 19, 2024 to April 11, 2025.
  3. NRHS Secure Vestibule – From December 19, 2024 to April 2, 2025.
  4. ALMS Secure Vestibule – From December 19, 2024 to May 2, 2025.
  5. GMD Secure Vestibule – From December 19, 2024 to April 18, 2025.
  6. HBE Chimney Reconstruction – From December 19, 2024 to March 31, 2025.
  7. JES Secure Vestibule / Main Office – From December 19, 2024 to May 23, 2025.
  8. WBW Secure Vestibule – From December 19, 2024 to May 7, 2025.

Contractors shall clean up all interior and exterior areas in preparation for school building use. General Contractor to use this window for preparation of site including all necessary partition walls and temporary protection to establish a construction area separate from school's daily operations.

- E. Contractors are required per contract to fully staff the project during the work shifts stated above with the required manpower to complete their work within the allowed scheduled time frame. Contractors are required to provide a 72-hour advanced request to the Owner via the Construction Manager for any Saturday and Sunday work. If a project schedule delay has been caused by the fault of the contractor, the contractor is required to provide 3<sup>rd</sup> shift work from 9:00 PM to 6:00 AM to make up the project schedule. All costs for CM, Architect, and District personnel related to this 3<sup>rd</sup> shift request will be charged to the Contractor at a combined rate for all at \$3,000 per 8-hour shift.
- F. In the event of an unforeseen condition resulting in a project delay, so long as the owner allows the contractor to store the existing equipment onsite, the contractor is precluded from levying any additional mobilization or demobilization fees upon the owner.

- G. The shifts noted above are not considered overtime or premium time hours.
- H. Contract summaries will provide start and end dates for each contractor.
- I. Additional requirements:
  - 1. Multiple Crews: Each Prime Contract shall provide multiple crews, supervision, cranes, scaffold, and other means necessary to perform the Work, and maintain the Project Master Schedules.
  - 2. Interruption of any utility and/or power must be coordinated with the Owner, via the Construction Manager. At no time shall overhead work near utility lines take place without 24-hour notice to the CM for approval.
  - 3. All overtime, weekend and/or holiday work required to meet the Project Master Schedules shall be incorporated in the respective Prime Contract's bid.
  - 4. Should a Contractor's progress fall behind, as to schedule, Prime Contractor shall employ additional – 3<sup>rd</sup> shift and/or overtime and/or weekend workforce until situation is rectified, to the satisfaction of the Architect and Construction Manager, at no additional cost to the Owner, however subject to charges as stated in section 1.10 E for lack of maintaining schedule.
  - 5. The Architect and Construction Manager shall not be overburdened as to overtime cost, to monitor the work, due to no cause of his or her own. Owner will compensate the Architect and Construction Manager for all additional cost related to the issue of a Prime Contractor's failing to execute the Contract by fully staffing per the work hours and days noted herein. The Owner reserves the right to back charge the Prime Contract responsible for these fees if incurred.
  - 6. All Asbestos and/or Lead Abatement shall take place to meet the requirements of the Milestone Phasing Schedule and Project Master Schedules and shall be coordinated with the other Prime Contractors prior to commencement.
- J. The Work shall be conducted to provide the least possible interference to the activities of the Owner's personnel and the surrounding property owners (neighbors).
  - 1. Prime Contracts are hereby notified that: All Prime Contractors and their subcontractors shall limit excessive noise during 2nd shift known as work extending to 11:00 PM weekdays upon approval by owner and city work hour restrictions. These operations shall not create a disturbance to neighboring properties.
- K. Construction access to the site shall be limited to personnel, equipment, and deliveries by suppliers relative to the Work of Prime Contractors and their subcontractors. Prime Contracts shall keep the Construction Manager advised of persons accessing the site and shall seek assistance with coordinating parking and storage facility locations for all Prime Contracts.
  - 1. Where applicable, Contractors shall provide Building Site perimeter barricades as

described herein the project and all temporary exit doors/lockable gates on the Project, securing these doors, fencing and/or gates at the end of each work shift.

2. When a Prime Contract engages in overtime, weekend or 2<sup>nd</sup> shift work, during the summer months and or during the normal school year, the respective Prime Contract shall notify Construction Manager of such and be responsible for securing the Project Site at the end of that work shift and perform site walk around the outside of construction area/work zone ensuring all debris is pickup up and there are no construction related hazards of any kind present once the responsible person leaves the site for the evening or weekend. This includes that all materials and equipment are fenced in and keys are removed. All interior projects have the same requirement to ensure that outside the work zone is clean from dust-dirt and that no materials are left outside the work area at any time.

#### 1.10 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

#### 1.11 DRAWINGS AND SPECIFICATIONS

- A. Construction Documents indicate the sum total of the Contract that make up the complete work for the Project. Through this Section "Summary of Work", the intent of the Contractor's scope of Work and responsibility is generally described. Related requirements and conditions that are indicated in the Contract Documents include but are not limited to the following:
  1. General Conditions and Requirements.
  2. Referenced and applicable Codes, Regulations and Standards.
  3. Scheduling and phasing requirements.
  4. Existing conditions and restrictions on use of the site and facilities.
- B. Drawings and Specifications are cooperative and supplementary. Portions of the Work, which can best be illustrated by Drawings, are not included in the Specifications and portions best described by Specifications are not depicted on Drawings.
  1. All items necessary to complete the work shall be furnished whether written or illustrated.
  2. All primes shall exercise good judgment and perform all work according to related industry standards.

#### PART 2 - SCOPE OF WORK

## 2.1 PRIME CONTRACTS

A. Scope of Work: Work includes but is not limited to, the following:

1. Provide all work identified in the Contract Documents.
2. All Specification Sections provided.
3. All abatement drawings provided for reference.
4. All temporary partitions and protection plans.

## PART 3 - EXECUTION

### 3.1 WORK SEQUENCE

- A. The Work shall be conducted to provide the least possible interference to the activities of the Owner's personnel, per the Project Milestone Phasing Schedule.
- B. Work required during overtime, extended shifts, or holidays due to failure of contractor to maintain schedule, will be monitored by Architect/Construction Site representative, and may be monitored by Owners' personnel. Additional costs for Architect/Construction Site Representative and/or Owner personnel will be borne by the Contractor.
- C. Coordination of any utility and power interruption must be done with approval of the Architect/Construction Site Representative. Shutdowns must occur during non-occupied timeframes only.
- D. Construction access to the site shall be limited to those designated for personnel, equipment, and deliveries by the Owner. All contractor staging, parking and storage shall be coordinated with the Construction Site Representative and subject to change.
- E. Payments: Each bid that covers more than one (1) school (i.e., one SED project) shall provide completed AIA G702 & G703 by building (for each SED project).
- F. No work shall be installed without approved shop drawings. Any work in place without approved shop drawings will be rejected and removed by that contractor at their expense and backed charge all other costs related to.
- G. Any work deemed by CM, Architect and District not properly installed by a contractor per the contract drawings and specifications shall be removed immediately and corrected, with all associated costs to be borne solely by that contractor.
- H. All prime contractors shall coordinate their contract work with other primes to meet the project schedule and for a complete operational system or area or work.

- I. All contractors are to provide within fourteen (14) calendar days of award a "baseline" construction schedule for their work from commencement to completion including all phasing. This schedule is to be updated monthly to show percentage progress of each item listed. This schedule shall be revised to provide a recovery schedule in the event of a delay for any reason. The recovery schedule shall include the "base line" item and the recovery to show how the delay is affecting the overall project schedule. This schedule is to be provided in MS Project or Primavera. Excel schedules are not accepted. These schedules shall be updated within the GC's master schedule. The GC shall upload the master schedule no later than three (3) weeks after award.
- J. Prime contractor "baseline" schedules are to be reviewed by each prime contractor and coordinated where work is related and that each prime's work shall be included in each "base line" contractor's schedule as necessary for coordination.
- K. All contractors are to provide two-week look-ahead (TWLA) schedules showing work related to the base line and shall be coordinated with other prime two-week look-ahead schedules. These schedules will be Excel format. Format will be provided by the CM. These will be reuploaded to ProjectSight at the end of every two (2) weeks.
- L. Contractors to provide a full-time supervisor on site 100% of the time. This is not a working foreman. Supervisors are not working with tools they are supervising their workers and coordinating with other contractors and district/ CM. Failure to provide will be default of your contract and subject costs related to and termination.
- M. All prime contractors are to provide a project manpower structure showing names and telephone numbers of each responsible person on the project. This shall be updated as needed if personal changes are made.
- N. All site equipment and dumpsters are to be behind temporary chain link fence (in the CM-approved locations, shown on the Logistics Plan each prime will submit) when stored on site and or within the construction work zone where temporary chain link fence has been providing and installed by the prime. Each prime contractor is responsible to provide and install temporary chain link fence around their own stored equipment and dumpsters on site.
- O. No equipment, panels or any services shall be turned off for any reason without written request and approval by the district. Project form shall be used for all shutdowns and required a 3-day notice. Other shutdowns may require more time.
- P. The Owner may in its sole discretion deduct and or reduce the scope of the contractor's contract with or without any specific reasons. The unit prices and schedule of values will be used to factor the value of the credit back to the owner.

**3.2 CONTRACT NO. GC-01 GENERAL CONSTRUCTION WORK — GENERAL CONSTRUCTION (GC) IN THE CITY SCHOOL DISTRICT OF NEW ROCHELLE.**

- A. The General Contractor (GC-01) is responsible for the following schools as associated project within:
1. New Rochelle High School:
    - a. Dead-end Corridor.
    - b. Secure Vestibule.
  2. Albert Leonard Middle School.
  3. George M. Davis Elementary School.
  4. Henry Barnard School.
  5. Jefferson Elementary School.
  6. William B. Ward Elementary School.
- B. Project Site Superintendent: GC shall provide one (1) full time Project Site Superintendent while any work related to this Contract is being performed on site. Superintendent may be a working Foreman as long as the daily requirements of this Contract are maintained, as they relate to the Construction Documents and the Project Schedule. Construction Manager reserves the right, in their opinion, to revoke this privilege if these requirements are not maintained. Superintendent shall work closely with the Construction Manager, and the other Prime Contract Superintendents and Foremen, in a manner that best promotes the Project Master Schedules and the objectives of the Project.
1. Superintendent shall be on site while Prime Contractor's own forces, and/or their sub-contractors forces, are on site; also while other Prime Contracts are installing work, or require coordination of work, related to this Contract, and/or as requested by the Construction Manager.
  2. Superintendent shall be the same individual throughout the Project.
  3. Project Site Superintendent shall be an individual with minimum of five (5) years' experience in this field of work.
  4. Superintendent shall always keep up to date drawing sets and approved shop drawings for confirmation of work and installations performed in the field.
  5. Refer to Section 013100 "Project Management and Coordination" for further requirements.
- C. Project Foreman: GC shall provide at least one (1) full time Project Foreman during each shift of Work at each school; Foreman shall be able to make binding decisions, as they relate to the daily activities of their crew, as related to achieving the goals of the Project.
- D. Site Communications: GC shall provide Project Superintendent with a mobile phone, all costs and service charges paid for by GC; provide Construction Manager with contact number(s).



- E. Project Site Field Office: Provide site office facilities for this Contract's Project Superintendent. Site Office shall be equipped with telephone w/answering machine, fax, and e-mail. Contact information shall be provided to the Construction Manager.
  - 1. The Owner reserves the right to seek reimbursement for temporary facilities not provided by this Prime Contract.
- F. Scope of Work: Work of the GC Contractor includes, but is not limited to, the following:
  - 1. Coordination with other Prime Contracts, Owner and Construction Manager as required to adhere to and maintain approved Project Master Schedules. Prior to first payment, this includes developing and submitting the Project Master Schedule broken down per project per school as indicated on the construction drawings. It is the GC's responsibility to coordinate with the awarded MEP prime contractors to receive their Level 5 project schedule per school. The GC understands they are responsible for combining all MEP schedules inclusive of their own to create 1 full Level 5 project schedule per school shown under section 3.2, part A of the Multiple Contract Summary.
  - 2. All demolition and new scope indicated in Contract Documents, including removal and legal disposal off site.
  - 3. **All asbestos and lead-based paint abatement scope (demolition, removal, and disposal) detailed within the contract documents provided by Adelaide, including, but not limited to:**
    - a. **Henry Barnard School scope. Louver and Flashing Caulk, Chimney Flue Clay and Mortar, Roofing Material.**
  - 4. **All abatement activities are scheduled exclusively during weekend, 2<sup>nd</sup> shift, or holiday breaks.**
  - 5. All necessary general construction scope to accommodate the work of others related to the completion of the general construction scope.
  - 6. All interior concrete demolition, repair and install included in the base contract as indicated in Contract Documents.
  - 7. The GC Contractor shall provide and install adequate protection to adjacent areas of construction work.
  - 8. The GC shall incorporate cold-weather concrete applications into their bid.
  - 9. The GC shall provide all temporary fall protection, guardrails / guard locks / Yodok barriers, handrails, temporary stairs, and ramps as required. Include maintaining these items throughout the project as well as removal when no longer needed.
  - 10. GC Contractor shall conform to phasing and sequencing of site work as shown on phasing drawings. Any deviation shall be clearly indicated and defined in the bid proposal. See the preliminary milestone schedule. coordinated with the Construction Manager. See Milestone Schedule.
  - 11. Work delineation between building and site is indicated on the Contract Drawings.

12. Prime Contract shall understand that General Contract Work may require work to proceed while school will be session; all cost associated with this sequence shall be incorporated into the Bid.
13. Environmental Protection: Provide protection, and conduct construction in ways and by methods that comply with environmental regulations and that minimize possible air, waterway, and subsoil contamination or pollution or other undesirable effects.
  - a. Restrict use of noisemaking tools and equipment to hours that will minimize complaints from persons or firms on or near the Project site.
14. Provide dust control / temporary fencing with vision mesh while the Work of this Contract is being performed as directed by the CM and shown on the provided logistics plans. Limit situations that may create dust contamination while Work of this Contract is idle. Provide all demolition as indicated in the Construction Documents, or required for Work of this Prime Contract:
  - a. Coordinate all demolition with Hazardous Materials documents. Coordinate with all other Prime Contracts regarding removals required for the Project. Demolition of a system shall mean any and all components removed in their entirety, to the point of origin, source, or substrate.
  - b. The GC is responsible for the installation and removal of all fire-rated temporary partitions for separation of construction from occupied areas.
    - 1) The GC takes full responsibility for the installation and maintenance of the temporary partitions. These partitions must adhere strictly to the specifications outlined in the project manual and drawings. (See attached Logistic plans
  - c. Provide all dust protection including but not limited to air filters for adjacent louvers and air intakes within forty feet of the exterior work area. Include protection of fire alarm devices, smoke detectors, duct detectors, louver intakes and mechanical unit returns. GC contractor to provide air scrubbers for all areas of work in this Project
15. Provide cut and patch work related to that of this Prime Contract, and at those areas specifically identified in the Construction Documents, regardless of trade creating the area to be patched
  - a. Each Prime Contract is responsible for all other respective cutting and patching required of their installations (refer to Section 017329 for further information).
16. Provide all miscellaneous supports for items or equipment installed under this Prime Contract, and as coordinated with other Prime Contracts for metal strapping and/or wood blocking for installation of EC and PC Work related to site work.
17. All enlarged openings and associated structural lintels for MEP penetrations (duct, piping, etc.) are by GC Contract. Refer to drawings for lintel schedule and coordinate sizes with Mechanical Drawings and shop drawings.

18. Provide surveyor to layout new addition (WBW) and submit to Architect for approval.
19. The GC Shall include all roofing scope in this contract including associated accessories like downspouts, crickets, and MEP openings, setting and roofing in MEP curbs.
20. The GC is responsible for coordinating with the roofing manufacturer at Henry Barnard Elementary School to assure that any work pertaining to chimney reconstruction and new flashing will not affect the current warranty.
21. The GC shall supply and install all casework as shown on the contract drawings. Field measuring and shop drawings for architect approval will be the responsibility of this trade. In the event the GC does not have accurate field measurements all additional cost shall be born of the GC.
22. The GC understands the flooring at Albert Leonard Middle School must be completed during a weekend or holiday break, in the event this cannot be completed the GC must prepare temporary measures to mitigate any trip hazards during the school's operation at no addition cost to the owner. The GC may scarify and self-level one weekend and install a finished floor the following so long as no trip hazards exist.
23. The GC is responsible for completing a checklist with photographic documentation prior to any partition closeups.
24. The GC is responsible for the dewatering of construction sites.
25. Final connection of utilities to equipment provided by this Prime Contract, are by EC, MC, and/or PC, unless noted or assigned otherwise.
26. The MC, EC, and PC shall supply the access doors and marked locations for the GC to install. The MC, EC, and PC shall mark CMU wall penetrations larger than 5-inches for the GC to perform.
27. GC Contractor shall coordinate with general work MEP and shall provide all necessary work required to complete the MEP general contract work. The work includes but not limited to concreting, backfilling, etc.
28. The GC is responsible for communicating, coordinating, and scheduling work with all awarded prime contractors (MC-01, EC-01, and PC-01).
29. The GC shall lead, compile, and provide a detailed master schedule for all areas of work which includes all schedules provided by awarded MEP trades (MC-01, EC-01, and PC-01).
  - a) Each trade will participate in producing coordination drawings. The General Contractor shall lead the coordination by means of producing a Master Construction Schedule for each Area of Work (individual master schedule per school). The General Contractor shall coordinate with each Prime Contractor, their own work with each Prime Contractor by means of BIM and/or 2D Overlay shop drawings. The efforts of all Prime Contractors to coordinate both new addition and interior renovations is to coordinate locations, heights, routes, etc. to eliminate clashes

- between trades and/or obstructions from existing or new work. Coordination Period will consist of each trade meeting once a week to coordinate their drawings. Once the Coordination Period is complete with all Prime Contractors, they will be required to sign off on the Coordination Set.
- b) Coordination and submission of the Schedule shall be completed within **three (3) weeks** of award.
  - c) All Awarded Contracts shall identify long lead items to show on the Master Construction Schedule.
  - d) Within **twenty-one (21) days** of award, the General Contractor is to provide a complete coordinated schedule including all trades, tasks, and durations for each Area and Phase as shown in the Contract Documents (individual master schedule per school). GC shall update the Master Project Schedule, as needed, during the life of the Project.
  - e) GC shall provide a Recovery Schedule if required and directed by the CM.
30. Substantial Completion: Clean all GC Contractor installations and provided equipment at the time of Substantial Completion or as directed by Construction Manager.
31. Refer to Division 00 Section "Project Forms" and make use of these forms for the installation and coordination of the Work. These forms are included to assist this Prime Contract with coordinating the installation of Work by others prior to enclosing and/or finishing work. Owner will not compensate Prime Contract for work improperly coordinated that result in added work, or removal of work. Secure the proper signatures or acknowledgements, as indicated, prior to installing/completing the Work.
32. Coordinate all the preceding requirements, accordingly, with all applicable Alternates indicated in Section 012300 "Alternates".
33. Contractor shall do the following:
- a. At the start of each workday, GC Contractor shall utilize the temporary entry point to the construction site and notify the CM of arrival. Coordinate with the Construction Manager for any changes to building access due to site work.
  - b. All personnel must sign-in once they appear on site using a Construction Manager provided sign-in binder.
  - c. Maintain clear and debris free access to the building. Remove any tripping hazards.
  - d. All onsite personnel must sign-in with school security and Construction Manager when arriving to site.
34. Unless delays in product availability, the contractor shall staff the project and complete all punch-list items within **twenty-one (21) days** of issuance.

35. Submission of all required closeout documentation and final application for payment no later than July 30, 2025. Closeout documents include the following:

AIA G706 (017700)  
AIA G706A (017700)  
AIA G707 (017700)  
Final Statement of Accounting (017700)  
Labor Warranty (017700)  
Product Warranties (017700)  
Non-ACM Letter (005216)  
Record Drawings (017836, 017839)  
Record Specifications (017836, 017839)  
Record Submittals (017700)  
G734 / Signed-off Request for Subst Completion (017700)  
O&M Manuals (013100, 017823)  
Test Reports / TAB (017700)  
Training video (017900)  
Attic Stock / signed Transmittal (017700)

Applicable Specification Sections: All specification Sections itemized below are to be provided complete by this Prime Contract, unless noted otherwise. In addition to these specifications, the contractor is required to review all specifications included in the overall Contract that may contain related scope or detail for this specific Contract.

1. All Division 00 – Procurement and Contracting Requirements
2. All Division 01 – General Requirements
3. Division 02 – Existing Conditions
4. Division 03 – Concrete
5. Division 04 – Masonry
6. Division 05 – Metals
7. Division 06 – Wood and Plastics
8. Division 07 – Thermal and Moisture Protection
9. Division 08 – Openings
10. Division 09 – Finishes
11. Division 10 – Specialties
12. Division 12 – Furnishings
13. Division 31 – Earthwork
14. Division 32 – Exterior Improvements
15. Division 33 – Utilities

- A. Supplemental Temporary Facilities and Controls by GC Contractor include, but are not limited to:

1. Waste Disposal Facilities: See Subparagraph 1.8.L of this Section.

2. Snow and Ice Removal: Provide removal of snow and ice until Substantial Completion of the Project, or as required to avoid delays in the Schedule.
  - a. Removal includes temporary roadways, Owner provided contractor parking areas, staging areas, remote staging areas, sidewalks, exterior temporary ramps and stairs within the construction and staging area.
  - b. Removal shall include open areas of the Project building under construction, including, but not limited to: SOG, SOD, and roof deck areas.
3. Temporary Heat: The existing heating system and ventilation system in the building area are not to be used for temporary heat or ventilation in construction areas. The contractor for General Construction must provide temporary heat in construction in construction areas. Provide submittal for temporary heat strategy that states what equipment will be used and where fuel will be stored. Fuel sources cannot be located in the building. Heaters with self-contained fuel sources are not allowed to be placed in the building. Heaters, powered by Electrical load are to be connected and disconnected by the awarded prime EC.
4. This contract includes cold weather and 2nd shift concrete / self-level applications (William B Ward and Albert Leonard Middle School). Cold temperatures will be no excuse to not proceed with any concrete / self-level work. It is the responsibility of the GC to capture ground thawing/ heating, insulation blankets, heaters, and tents as needed.
5. Temporary Doors, Frames & Wall Assemblies: Provide, maintain and eventually remove all temporary installations where required per OSHA Regulations, Industry Standards, or as indicated in the Construction Documents. Provide fire-rated assemblies as required. Provide exit (panic bar / crash bar) devices at locations of egress. Coordinate locations with Construction Exiting Plan, Sequencing / Phasing Plans, and the Construction Manager. Temporary doors shall be constructed using ½-inch plywood and 2x construction, equipped with hasps, locks, handle and latch mechanism, and spring or counter weight installed to allow door to close after opening. Permanent doors will not be used in temporary conditions.
6. Temporary Window Openings: Window openings shall be enclosed using 2x construction, ½-inch plywood, and reinforced polyethylene. Where window opening start at or near the floor, plywood shall be installed from finish floor to minimum of 42-inches A.F.F.; reinforced poly may be installed from this point up. Should contractor choose to install plywood across the entire opening, sufficient area will be installed with reinforced poly to allow emergency escape, if required, and to allow natural light into the work area.
  - a. Installation shall be insulated if temporary heat or cooling is being employed.
7. Temporary Exterior Wall Enclosure: Provide and maintain temporary enclosures for weather protection and security of the construction in progress, where needed, up until completion of permanent installation specified. Enclosures shall protect the building from exposure, foul weather, other construction operations, and similar activities. Provide temporary weather tight enclosure for building exterior.

- a. Where heating and cooling is needed and permanent enclosure is not complete, provide insulated temporary enclosures. Coordinate enclosure with venting and material drying or curing requirements to avoid dangerous conditions and effects.
  - b. Install tarpaulins securely; install fire retardant materials only.
  - c. Where temporary wood enclosures exceed 100 SF in area, use fire-retardant-treated materials for framing and sheathing.
  - d. All costs incurred to repair and/or replace materials damaged, due to the failure of GC to provide and maintain weather tight enclosure shall be borne by this Prime Contract. This includes any contamination of materials that may lead to the introduction of mold and mildew.
8. Immediately notify the Construction Manager, in writing, as to damage to temporary enclosures by "others"; identify responsible party in the submission. Owner shall not be liable for damages caused by "others" if Prime Contract cannot identify responsible party.
9. Temporary Barricades: Provide, maintain and eventually remove all temporary barricades per OSHA Regulations, Industry Standards, or as indicated in the Construction Documents. These include, but are not limited to, the following areas:
  - a. To isolate site renovation areas.
10. Temporary Sanitary Facilities: See Subparagraph 1.8.M of this Section.
11. Provide all shoring required for Work of this Prime Contract, including but not limited to;
  - a. Cutting or altering of existing construction.
  - b. Provide protection of all new and existing surfaces during the Work. Do not stand, walk, or work off of any unprotected finished surface above the floor.
12. Maintain temporary chain link fencing with driven posts in the ground and Yodock or approved equal barricading to keep unauthorized persons away from excavations and hazardous areas for which this Prime Contract is responsible. In the event the fence becomes dismantled or falls over, it is the Prime Contractor's responsibility to correct this issue within one-hour notice.
13. Traffic Controls: Provide flagman while any operations of this Prime Contract interfere with traffic flow on adjacent roadways, active parking lots and while any pedestrian traffic is entering the area or parking lots.
14. Refer to Section 013150 Safety & Health for further detailed information.

**3.3 CONTRACT NO. EC-01 ELECTRICAL WORK (EC-01) – ELECTRICAL PRIME CONTRACT IN THE CITY SCHOOL DISTRICT OF NEW ROCHELLE**

- A. The Electrical Contractor (EC01) is responsible for the following schools as associated project within:
  1. New Rochelle High School:
    - a. Dead-end Corridor.
    - b. Secure Vestibule .

2. Albert Leonard Middle School.
  3. George M. Davis Elementary School.
  4. Jefferson Elementary School.
  5. William B. Ward Elementary School.
- B. Project Site Superintendent: EC shall provide one (1) full-time Project Site Superintendent while any work related to this Contract is being performed on site. Superintendent may be a working Foreman as long as the daily requirements of this Contract are maintained, as they relate to the Construction Documents and the Project Schedule. Construction Manager reserves the right, in their opinion, to revoke this privilege if these requirements are not maintained. Superintendent shall work closely with the Construction Manager, and the other Prime Contract Superintendent(s), in a manner that best promotes the Master Construction Schedule and the objectives of the Project.
1. Superintendent shall be on site while Prime Contractor's own forces, and/or their sub-contractors' forces, are on site; also, while other Prime Contracts are installing work, or require coordination of work, related to this Prime Contract, and/or as requested by the Construction Manager.
  2. Superintendent shall be the same individual throughout the Project.
  3. Project Site Superintendent shall be an individual with minimum of five (5) years' experience in this field of work.
  4. Superintendent shall always keep up to date drawing sets and approved shop drawings for confirmation of work and installations performed in the field.
  5. Refer to Section 013100 "Project Management and Coordination" for further requirements.
- C. Project Foreman: EC shall provide at least one (1) full-time Project Foreman during each shift of work for each school; Foreman shall be able to make binding decisions, as they relate to the daily activities of their crew as related to achieving the goals of the Project.
- D. Site Communications: EC shall provide Project Superintendent with a mobile phone, all costs and service charges paid for by EC; provide Construction Manager with contact number(s).
- E. Project Site Field Office: Provide site office facilities for this Contract's Project Superintendent. Site Office shall be equipped with telephone w/answering machine, and e-mail. Contact information shall be provided to the Construction Manager.
1. The Owner reserves the right to seek reimbursement for temporary facilities not provided by this Prime Contract.
- F. Scope of Work: In addition to Divisions 26 and 28, Work of the EC includes, but is not limited to, the following:



1. Coordination with other Prime Contracts, Owner, and Construction Manager as required to adhere to and maintain approved Project Master Schedules. Prior to first payment, this includes submitting the Contractor's Construction Schedule to the Construction Manager of the Project Master Schedule. Within **fourteen (14) days** of the Award, the EC is responsible for providing a CM-approved Level 5 schedule to the GC (one Schedule per School). The GC will collect all M/E/P Prime Contract schedules to create one (1) project master schedule per school.
2. Electrical scope is identified on the Contract Documents for removal, installation and replacement of all electrical interior and exterior components shown on the Contract Documents for all schools. Including but not limited to coordination and installation of exterior lighting, conduits, panels, and switchgear. Provide all removals of existing Electrical Devices, Fixtures & Systems indicated, or required, for Work of this Prime Contract.
  - a. Coordinate all removals with Hazardous Materials documents.
3. This contract includes furnishing access doors for walls and ceiling as required, which may include fire rated conditions, and coordinate with General Contractor (GC) for installation.
4. Provide all reinstallation of existing Electrical Devices, Fixtures & Systems, replacement or new Electrical Devices, Fixtures & Systems associated with Roof Repairs, Roof Replacement, Façade Restoration, Site, interior and exterior work.
5. EC shall conform to phasing and sequencing of roof repairs, roof replacement, façade repairs and site work as coordinated with the Owner. See Milestone Schedule for all work as shown on the phasing plans.
6. The Electrical Contractor shall review the Contract Documents in its entirety for complete electrical scope of work in this contract.
  - a. EC shall install work in accordance with the National Electrical Code requirements. No additional compensation will be made for extra offsets in conduit or retro-fit work due to improper component location, or lack of Prime Contractor's coordination.
  - b. EC Shall, within **fourteen (14) days** of bid award, NTP, or LOI (whichever comes first), complete a Level 5 project schedule for each school (NRHS, ALMS, JES, GMD, and WBW). The EC shall coordinate with and provide said schedule to the GC.
7. Prime Contract shall understand that renovation work may require work to proceed while existing systems are required to be maintained; all cost associated with this sequence shall be anticipated, and incorporated into the Bid.
8. Prime Contractor shall read and familiarized themselves with the Lead Sections of the Construction Documents. Lead-based paint has been identified to exist on specific areas/surfaces of the work located within the building(s), and when encountered the Prime Contractor shall follow all applicable regulations while working with this material.
9. Prime Contractor shall read and familiarized themselves with the Asbestos Sections of the Construction Documents. Asbestos Containing Material is

scheduled to be abated throughout specific areas of the building(s). Should ACM be encountered (after Abatement is completed), that may interfere with an installation; Prime Contractor shall cease work, and notify Construction Manager immediately.

- a. Penetrations not coordinated with GC, prior to abatement of these spaces, shall become the responsibility of the respective Prime Contract requiring the penetration.
10. The EC will layer drawings in coordination with all other trades to avoid any clashes or hits. The EC will, within two (2) weeks of bid award, NTP, or LOI (whichever comes first), field-survey the existing conditions on 2<sup>nd</sup> shift (3:30 PM – 11:00 PM) or an alternative time if approved by the Owner.
11. EC shall provide all Work associated with creating structural openings or penetrations requiring lintels whether for their own work (i.e., conduit penetrations). This applies to all openings / penetrations less than 5-inches in diameter, through masonry or concrete walls. Any opening greater than 5-inches shall be communicated to the GC for removal.
  - a. Non-structural openings / penetrations, including those for convenience, shall be self-provided by the EC.
  - b. This assignment applies to new and existing construction areas.
  - c. Refer to Structural documents for lintel type / size requirements and Architectural drawings for partition types. Partitions not specifically identified in the documents are to be assumed as masonry construction.
  - d. All openings / penetrations are to be identified on Record Drawings by the Prime Contract requiring the opening.
12. Provide cut and patch work related to that of this Prime Contract, related to that of their Prime Contract, and at those areas specifically identified on the Construction Documents, regardless of trade creating the area to be patched.
  - a. Each Prime Contract is responsible for all other respective Cutting & Patching required of their installations (refer to Section 017329 for further information).
13. Provide complete electrical requirements, materials and methods including, but not limited to:
  - a. Service and distribution including bus-way, switchgear, panel boards, and disconnect switches.
  - b. Provide grounding protection for all circuits and outlets and as required by applicable codes and authorities having jurisdiction. Properly-ground building equipment provided by this project.
  - c. Coordinate any electrical switchover as to least impact the Project Schedule. This scope is considered "critical path" and is required to be addressed submitted and shop drawing submitted within two weeks upon Board of Education (BOE) approval.
  - d. Provide all power, controls, and standby generator requirements for temporary power that might be required during the renovation (for all

- awarded trades) upgrade for all other prime contractors working during the shutdown.
- e. Immediately after installation, provide and maintain temporary ID of all circuit breakers and at all shut offs/disconnects until permanent ID is in place.
  - f. Exterior lighting and lighting control equipment; provide occupancy sensors and/or timing devices as indicated.
  - g. Provide raceways, boxes, cabinets, and sleeves through existing and new construction as part of the complete electrical installation.
  - h. Provide wire, cable, conduit, boxes, and wiring devices as part of the complete electrical installation.
  - i. Provide permanent electrical identification. Provide type written panel board schedules. Clearly label all panel boards, disconnects, relays, junction boxes, and other electrical devices and equipment.
  - j. Provide breakers as needed.
- 14. Final connections of utilities are by EC unless noted or assigned otherwise.
  - 15. Final connection of installations or equipment that are provided by others.
    - a. Provide final connections to all scheduled equipment furnished by the Owner.
  - 16. Provide Fire Alarm system as indicated in the Construction Documents.
    - a. EC shall provide Fire Alarm and/ or coordinate as indicated on drawings.
  - 17. Coordinate with Owner and provide confirmation to Construction Manager of low voltage systems, including but not limited to telephone, building access, security, PA/intercom, data and CCTV systems, as indicated in the Construction Documents.
    - a. EC shall confirm full operational status of existing low voltage systems following reinstallation of existing devices. Replace and commission all devices and components damaged by construction work.
    - b. EC shall collaborate with the awarded state contract vendor (Day Automation) to confirm the exact junction box location per building.
    - c. Provide all components, and their installations required for a complete system.
    - d. Provide, terminate, test, and label all point-to-point field wiring.
    - e. Provide all associated power circuits and requirements that support these systems, including but not limited to, final connections.
  - 18. Provide sleeves & link seals required for piping penetrating walls, slabs and/or decks.
  - 19. Provide through-penetration fire stop systems at all penetrations made by EC. Maintain listed ratings of indicated assemblies. Provide repair of existing through-penetration fire stopping damaged by work of this Prime Contract.
    - a. Sleeves with fire stopping are to be installed in sequence with fire-rated construction. This Prime Contract shall be responsible for installing fire stopping material at intersection of sleeve and constructed materials.

20. Provide all testing and adjusting, instruction and guarantees for materials and equipment of this Prime Contract. Refer to Division 00 Section "Project Forms" for applicable documents.
  - a. Substantial Completion: Clean all light fixtures and electrical equipment at the time of installation or at Substantial Completion, whichever is later, or as directed by the Construction Manager.
21. Coordinate all the preceding requirements, accordingly, with all applicable Alternates indicated in Section 012300 "Alternates."
22. Contractor shall do the following:
  - a. At the start of each workday, EC Contractor shall utilize the temporary entry point to the construction site and notify the CM of arrival. Coordinate with Construction Manager for any changes to building utilities due to active work.
  - b. All personnel must sign-in once they appear on site using a Construction Manager provided sign-in binder.
  - c. Maintain clear and debris free access to the building. Remove any tripping hazards.
  - d. All on site personnel must sign-in with school security and Construction Manager when arriving to the site.
23. Submission of all required closeout documentation and final application for payment no later than July 30, 2025. Closeout documents include the following:
  - AIA G706 (017700)
  - AIA G706A (017700)
  - AIA G707 (017700)
  - Final Statement of Accounting (017700)
  - Labor Warranty (017700)
  - Product Warranties (017700)
  - Non-ACM Letter (005216)
  - Record Drawings (017836, 017839)
  - Record Specifications (017836, 017839)
  - Record Submittals (017700)
  - G734 / Signed-off Request for Subst Completion (017700)
  - O&M Manuals (013100, 017823)
  - Test Reports / TAB (017700)
  - Training video (017900)
  - Attic Stock / signed Transmittal (017700)
- G. Applicable Specification Sections: All specification Sections itemized below are to be provided complete by this Prime Contract, unless noted otherwise. In addition to these specifications, the contractor is required to review all specifications included in the overall contract that may contain related scope or detail for this specific contract.
  1. Division 00 – Procurement and Contracting Requirements
  2. Division 01 – General Requirements

3. Division 07 – Thermal and Moisture Protection
  4. Division 08 – Openings
  5. Division 22 – Plumbing
  6. Division 23 – HVAC
  7. Division 26 – Electrical
  8. Division 28 – Electronic Safety and Security
- H. Supplemental Temporary Facilities and Controls by the EC include, but are not limited to:
1. Waste Disposal Facilities: See Subparagraph 1.8.L of this Section.
  2. Temporary Interior Barricades: Provide, maintain and eventually remove all temporary barricades per OSHA Regulations, Industry Standards, or as indicated in the Construction Documents. These include, but are not limited to, the following areas:
    - a. Roof openings/penetrations.
    - b. To isolate Abatement areas.
    - c. To isolate renovation areas.
    - d. Floor openings/penetrations, including stairwells.
      - 1) Horizontal Openings: close openings in floors, roof decks, and horizontal surfaces with load bearing, wood and/or steel framed construction per applicable regulations.
  3. Temporary Heat: The existing heating system and ventilation system in the building area are not to be used for temporary heat or ventilation in construction areas. The contractor for General Construction must provide temporary heat in construction in construction areas. Provide submittal for temporary heat strategy that states what equipment will be used and where fuel will be stored. Fuel source cannot be located in the building. Heaters with self-contained fuel sources are not allowed to be placed in the building. Heaters, powered by Electrical load, are to be connected and disconnected by the awarded prime EC.
  4. Temporary Sanitary Facilities: See Subparagraph 1.8.M of this Section.
  5. Existing Stair Usage: Use of Owner's existing stairs in unoccupied areas will be permitted, provided that at Substantial Completion, stairs are restored to conditions existing before initial use.
    - a. Provide photo documentation of existing staircase conditions prior to use by all Prime Contracts. Document during use, and at completion of the Renovation Project in order to document any and all damage to the Owner's property.
    - b. Provide protective coverings, barriers, devices, signs, or other procedures to protect stairs and to maintain means of egress. If, despite such protection, stairs become damaged, restore damaged areas so no evidence remains of correction work.
  6. Provide all shoring required for Work of this Prime Contract, including but not limited to;

- a. Cutting or altering of existing construction.
- b. Provide protection of all new and existing surfaces during the Work. Do not stand, walk, or work off any unprotected finished surface above the floor.
7. Maintain temporary fencing and barricading to keep unauthorized persons away from hazardous areas for which this Prime Contract is responsible.
8. Traffic Controls: Provide flagman while any operations of this Prime Contract interfere with traffic flow on adjacent roadways.

**3.4 CONTRACT NO. MC-01 – MECHANICAL WORK (MC-01) – MECHANICAL PRIME CONTRACT IN THE CITY SCHOOL DISTRICT OF NEW ROCHELLE.**

- A. The Mechanical Contractor (MC-01) is responsible for the following schools as associated project within:
  1. New Rochelle High School:
    - a. Dead-end Corridor.
    - b. Secure Vestibule.
  2. Albert Leonard Middle School.
  3. George M. Davis Elementary School.
  4. Jefferson Elementary School.
  5. William B. Ward Elementary School.
- B. Project Site Superintendent: MC shall provide one (1) full-time Project Site Superintendent while any work related to this Contract is being performed on site. Superintendent may be a working Foreman as long as the daily requirements of this Contract are maintained, as they relate to the Construction Documents and the Project Schedule. The Construction Manager reserves the right, in their opinion, to revoke this privilege if these requirements are not maintained. Superintendent shall work closely with the Construction Manager, and the other Prime Contract Superintendents and Foremen, in a manner that best promotes the Project Master Schedules and the objectives of the Project.
  1. Superintendent shall be on site while Prime Contractor's own forces, and/or their sub-contractors forces, are on site; also while other Prime Contracts are installing work, or require coordination of work, related to this Contract, and/or as requested by the Construction Manager.
  2. Superintendent shall be the same individual throughout the Project.
  3. Project Site Superintendent shall be an individual with minimum of five (5) years' experience in this field of work.
  4. Superintendent shall always keep up to date drawing sets and approved shop drawings for confirmation of work and installations performed in the field.
  5. Refer to Section 013100 "Project Management and Coordination" for further requirements.

- C. Project Foreman: MC shall provide at least one (1) full-time Project Foreman during each shift of work at each school; Foreman shall be able to make binding decisions, as they relate to the daily activities of their crew, as related to achieving the goals of the Project.
- D. Site Communications: MC shall provide Project Superintendent with a mobile phone, all costs and service charges paid for by MC; provide Construction Manager with contact number(s).
- E. Project Site Field Office: Provide site office facilities for this Contract's Project Superintendent. Site Office shall be equipped with telephone w/answering machine, fax, and e-mail. Contact information shall be provided to the Construction Manager.
  - 1. The Owner reserves the right to seek reimbursement for temporary facilities not provided by this Prime Contract.
- F. Scope of Work: In addition to Divisions 22 & 23, Work of the MC includes, but is not limited to, the following:
  - 1. Coordination with other Prime Contracts, Owner and Construction Manager as required to adhere to and maintain approved Project Master Schedules. Prior to first payment, this includes submitting the Contractor's Construction Schedule to the Construction Manager of the Project Master Schedule. Within **fourteen (14) days** of the Award, the MC is responsible for providing a CM-approved level 5 schedule to the GC (1 Schedule per School). The GC will collect all M/E/P Prime contract schedules to create one (1) project master schedule per school.
  - 2. All Mechanical demolition and new construction as indicated in the Contract Documents.
  - 3. Mechanical scope is identified in the Contract Documents which include but is not limited to ALL drawings, specifications, this multiple contract summary, etc. This contract includes furnishing access doors for walls and ceiling as required, which may include fire-rated conditions, and coordinate with General Contractor (GC) for installation.
  - 4. Prior to the submission of shop drawings for mechanical curbs, survey all existing curbs for accurate measurements. Determination of new curb height shall be made in coordination with Contract Documentation.
  - 5. Removal, safe storage off roof (or outside of work area, as coordinated with GC Contractor), and reinstallation of all existing mechanical roof top equipment as indicated in the Contract Documents. Demolish existing curbs (following asbestos abatement by GC) and provide and install new equipment curbs.
  - 6. Reinstallation mechanical scope includes all miscellaneous piping, ductwork extension, low voltage wiring (controls & communication), equipment, hardware and insulation required for a complete and functional reinstallation of existing rooftop equipment. Coordinate any new roof penetrations, if required, with GC Contractor.

7. Reinstallation mechanical scope includes start-up, testing & balancing and recommissioning services for reinstalled mechanical equipment. Submit testing & balancing and commissioning reports to Architect and Construction Manager.
8. Prime Contract shall understand that renovation work may require work to proceed while existing systems are required to be maintained; all cost associated with this sequence shall be anticipated, and incorporated into the Bid.
  - a. MC shall be cognizant of phasing and sequencing conditions, that may require MC to make temporary connections or installations of heating system components to maintain operation of existing/new system configuration(s). It shall be the Prime Contract's responsibility to employ its own means and methods of accomplishing any such temporary conditions, at no additional cost to the owner.
9. All new heating system components must be protected, from potential contamination, by any existing components that are still employed during system operation, should a partial existing/new configuration exist during the required heating period, September 15<sup>th</sup> – May 31<sup>st</sup>.
10. Prime Contractor shall read and familiarized themselves with the Lead Sections of the Construction Documents. Lead-based paint has been identified to exist on specific areas/surfaces of the work located within the building(s), and when encountered the Prime Contractor shall follow all applicable regulations while working with this material.
11. Prime Contractor shall read and familiarized themselves with the Asbestos Sections of the Construction Documents. Asbestos Containing Material is scheduled to be abated throughout specific areas of the building(s). Should ACM be encountered (after Abatement is completed), that may interfere with an installation; Prime Contractor shall cease work, and notify Construction Manager immediately.
  - a. Penetrations not coordinated with the Prime Contractor responsible for asbestos abatement, prior to abatement of these spaces, shall become the responsibility of the respective Prime Contract requiring the penetration.
12. Environmental Protection: Provide protection, and conduct construction in ways and by methods that comply with environmental regulations and that minimize possible air, waterway, and subsoil contamination or pollution or other undesirable effects.
  - a. Restrict use of noisemaking tools and equipment to hours that will minimize complaints from persons or firms on or near the Project site.
13. The HVAC are schematic in nature, and the MC will make adequate provisions to accommodate the actual field conditions without additional cost to the Owner. The MC will layer drawings in coordination with all other trades to avoid any clashes or hits. The MC, within two (2) weeks of Award, NTP, or LOI (whichever comes first), will field-survey the existing conditions on 2<sup>nd</sup> shift (3:30 PM – 10:00 PM) or an alternative time if approved by the Owner.
14. Document on the Record Drawings all ductwork openings and penetrations larger than 2-inches in diameter.
15. The installation of all FD, F/SD, and fire-stopping and angles as needed.



16. Fire stopping is in this Contract.
17. Provide all demolition of Mechanical Systems indicated in the Construction Documents, and/or required for Work of this Prime Contract.
  - a. Coordinate all demolition with Hazardous Materials documents.
  - b. Coordinate with all other Prime Contracts regarding all removals required for the Project.
  - c. Demolition of a system shall mean all components, removed in their entirety, to the point of origin or source.
18. Provide valves, whether permanent or temporary, to permit shutoff and/or capping of systems to achieve the Work of this Prime Contract.
19. All concrete/masonry demolition shall be completed using wet saw methods.
20. MC Contractor shall provide all Work associated with creating structural openings or penetrations requiring lintels, whether for their own work or work of the MC or EC (i.e. ductwork and pipe or conduit penetrations). This applies to all openings/penetrations less than 5-inches through masonry or concrete walls. Any opening greater than 5-inches shall be communicated to the GC for removal.
  - a. MC shall indicate all required openings/penetrations requiring lintels on their Shop Drawings. Mechanical contractor is required to provide openings/penetrations on the coordination drawings that will require structural openings in accordance with the contract documents at no additional cost. Non-structural openings/penetrations, including those for convenience, shall be self-provided by the respective Prime Contractor.
  - b. This assignment applies to new and existing construction areas.
  - c. Refer to Structural documents for lintel type/size requirements and Architectural drawings for wall types. Walls not specifically identified in the documents are to be assumed as masonry construction.
  - d. All openings/penetrations are to be identified on Record Drawings by the Prime Contract requiring the opening.
  - e. All scheduled exterior wall louver openings indicated on Architectural and/or Structural documents are to be created by this MC Contractor. MC shall supply and install louver.
  - f. Exact physical locations shall be laid-out by MC for coordinated sequencing with other respective Prime Contractors.
21. Provide cut and patch work related to that of this Prime Contract,, related to that of their Prime Contract, and at those areas specifically identified on the Construction Documents, regardless of trade creating the area to be patched.
  - a. Each Prime Contract is responsible for all other respective Cutting & Patching required of their installations. Refer to Section 017329 "Cutting and Patching" for further information.
  - b. Provide cut and patch for all affected materials at building interiors as required to provide access for relocation of existing or installation of new roof drains and rood drain leaders, to point of connection to existing piping or to building exterior, as indicated in Contract Documents.

22. Provide new HVAC system(s), or modifications of existing system(s) as indicated in the Construction Documents, complete and fully operational.
  - a. Furnish all disconnects and motor starters (including related "heaters, fuses, and phase protection relays") for all equipment provided under this contract, for coordinated installation by EC.
  - b. Provide Instrumentation and Controls (Energy Management System) complete as indicated on the drawings or specifications:
    - 1) Electrical Contractor shall provide line voltage power wiring to the control panels as indicated in the Contract Documents.
    - 2) EMS installer shall provide all low voltage wiring of controls, transformers, actuated dampers, motors, etc., as required for a complete operational system.
  - c. Provide thermal insulation and jacketing of all HVAC components provided by this Prime Contract.
23. Final connections of utilities are by MC or EC, unless noted or assigned otherwise.
24. Provide sleeves required for piping penetrating walls, slabs and/or decks.
25. Provide through-penetration fire stop systems at all penetrations made by MC. MC Contractor shall maintain listed ratings of indicated assemblies. Provide repair of existing through-penetration fire stopping damaged by work of this Prime Contract.
  - a. Sleeves with fire stopping are to be installed in sequence with fire-rated construction. This Prime Contract shall be responsible for installing fire stopping material at intersection of sleeve and constructed materials.
26. Provide coordination with, and notification to, the Construction Manager for all specified testing, training, commissioning, etc., of the Work of this Prime Contract. Refer to Division 00 Section "Project Forms" for applicable documentation documents.
27. Substantial Completion: Clean all mechanical and plumbing installations and provided equipment at the time of Substantial Completion or as directed by Construction Manager.
28. Coordinate all the preceding requirements, accordingly, with all applicable Alternates indicated in Section 012300 "Alternates".
29. Contractor shall do the following:
  - a. At the start of each workday, MC Contractor shall utilize the temporary entry point to the construction site and notify the CM of arrival. Coordinate with Construction Manager for any changes to building utilities due to active work.
  - b. All personnel must sign-in once they appear on site using a Construction Manager provided sign-in binder.
  - c. Maintain clear and debris free access to the building. Remove any tripping hazards.
  - d. All onsite personnel must sign-in with school security and Construction Manager when arriving to the site.
30. Unless delays in product availability, the contractor shall staff the project and complete all punch-list items within thirty (30) days of issuance. In the event of

material delay the prime shall notify the CM in writing immediately with supporting back up.

31. Submission of all required closeout documentation and final application for payment no later than July 30, 2025.

AIA G706 (017700)

AIA G706A (017700)

AIA G707 (017700)

Final Statement of Accounting (017700)

Labor Warranty (017700)

Product Warranties (017700)

Non-ACM Letter (005216)

Record Drawings (017836, 017839)

Record Specifications (017836, 017839)

Record Submittals (017700)

G734 / Signed-off Request for Subst Completion (017700)

O&M Manuals (013100, 017823)

Test Reports / TAB (017700)

Training video (017900)

Attic Stock / signed Transmittal (017700)

- G. Applicable Specification Sections: All specification Sections itemized below are to be provided complete by this Prime Contract, unless noted otherwise. In addition to these specifications, the contractor is required to review all specifications included in the overall contract that may contain related scope or detail for this specific contract.

1. All Division 00 – Procurement and Contracting Requirements
2. All Division 01 – General Requirements
3. Division 03 – Concrete
4. Division 05 – Metals
5. Division 07 – Thermal and Moisture Protection
6. Division 09 – Finishes
7. Division 22 – Plumbing
8. Division 23 – HVAC
9. Division 26 – Electrical

- H. Supplemental Temporary Facilities and Controls by MC include, but are not limited to, the following:

1. Waste Disposal Facilities: See Subparagraph 1.8.L of this Section.
2. Provide all shoring required for Work of this Contract, including but not limited to;
  - a. Cutting or altering of existing construction.
  - b. Provide protection of all new and existing surfaces during the Work. Do not stand, walk, or work off any unprotected finished surface above the floor.

3. Maintain temporary fencing and barricading to keep unauthorized persons away from excavations and hazardous areas for which this Prime Contract is responsible.
4. Traffic Controls: Provide flagman while any operation of this Prime Contract interferes with traffic flow on adjacent roadways.

**3.5 CONTRACT NO. PC-01 PLUMBING WORK (PC-01) – PLUMBING PRIME CONTRACT IN THE CITY SCHOOL DISTRICT OF NEW ROCHELLE.**

- A. The Plumbing Contractor (PC-01) is responsible for the following schools as associated project within:
  1. New Rochelle High School (NRHS)
  2. Jefferson Elementary School
- B. Project Site Superintendent: PC shall provide one (1) full-time Project Site Superintendent while any work related to this Contract is being performed on site. Superintendent may be a working Foreman as long as the daily requirements of this Contract are maintained, as they relate to the Construction Documents and the Project Schedule. Construction Manager reserves the right, in their opinion, to revoke this privilege if these requirements are not maintained. Superintendent shall work closely with the Construction Manager, and the other Prime Contract Superintendents and Foremen, in a manner that best promotes the Project Master Schedules and the objectives of the Project.
  1. Superintendent shall be on site while Prime Contractor's own forces, and/or their sub-contractors forces, are on site; also while other Prime Contracts are installing work, or require coordination of work, related to this Contract, and/or as requested by the Construction Manager.
  2. Superintendent shall be the same individual throughout the Project.
  3. Project Site Superintendent shall be an individual with a minimum of five (5) years' experience in this field of work.
  4. Refer to Section 013100 "Project Management and Coordination" for further requirements.
- I. Project Foreman: PC shall provide at least one (1) full-time Project Foreman during each shift of Work at each school; Foreman shall be able to make binding decisions, as they relate to the daily activities of their crew, as related to achieving the goals of the Project.
- J. Site Communications: PC shall provide Project Superintendent with a mobile phone, all costs and service charges paid for by PC; provide Construction Manager with contact number(s).
- K. Project Site Field Office: Provide site office facilities for this Contract's Project Superintendent. Site Office shall be equipped with telephone w/answering machine, fax, and e-mail. Contact information shall be provided to the Construction Manager.

1. The Owner reserves the right to seek reimbursement for temporary facilities not provided by this Prime Contract.
- L. Scope of Work: In addition to Divisions 22 & 33, Work of the PC includes, but is not limited to, the following:
  1. Coordination with other Prime Contracts, Owner and Construction Manager as required to adhere to and maintain approved Project Master Schedules. Prior to first payment, this includes submitting the Contractor's Construction Schedule to the Lead Contractors for preparation of the Project Master Schedules for all work related noted in the Contract Documents. All Plumbing demolition and new construction as indicated in the Contract Documents.
  2. All Plumbing scope is identified on the drawings as noted on the Contract Documents. Prior to the submission of shop drawings for work related to this contract and as shown on the Contract Documents.
  3. This contract includes furnishing access doors for walls and ceiling as required, which may include fire-rated conditions, and coordinate with General Contractor (GC) for installation.
  4. Removal, safe storage off roof (or outside of work area, as coordinated with GC), and reinstallation of all existing roof mounted piping as indicated in the Contract Documents. Seal all penetrations upon removal of piping to protect building from weather. New supports for piping will be supplied by PC, coordinate with GC for installation of supports.
  5. All new roof drains as shown on the Construction Documents are to be coordinated with GC Contractor.
  6. Work delineation between building and site is at five feet (5'-0") outside of the face of building, existing and new, unless noted or assigned otherwise. The final connection to existing underground and above ground storm drainage structures completed by PC contractor and coordinated with the GC contractor.
  7. This prime contract is responsible for all necessary hangers and supports, related to the plumbing scope.
  8. Contractor is required to verify exact location and size of existing storm piping, remove existing piping from underslab storm main to an accessible location near where the riser drops below the slab, and temporarily cap and maintain riser for reconnection to new main.
  9. PC to field verify exact location & routing; disconnect, remove & properly dispose of all piping; protect & maintain risers for reconnection to new main. Coordinate with GC for trenching and demolition related to storm main.
  10. Contractor is required to locate and confirm the integrity of all storm, sanitary, radiant, and freshwater piping located below the demolition of flooring at ALMS.
  11. PC is required to coordinate with MC for the installation of all necessary piping for the operation of mechanical equipment (condensate lines, etc.).
  12. Provide sanitary piping, cleanouts, and floor drains as required.

13. Prime Contract shall understand that renovation work may require work to proceed while existing systems are required to be maintained; all cost associated with this sequence shall be anticipated, and incorporated into the Bid.
  - a. PC shall be cognizant of phasing and sequencing conditions, that may require PC to make temporary connections or installations of plumbing components, in order to maintain operation of existing/new system configuration(s). It shall be the Prime Contract's responsibility to employ its own means and methods of accomplishing any such temporary conditions, at no additional cost to the owner.
14. Prime Contractor shall read and familiarize themselves with the Lead Sections of the Construction Documents. Lead-based paint has been identified to exist on specific areas/surfaces of the work located within the building(s), and when encountered the Prime Contractor shall follow all applicable regulations while working with this material.
15. Prime Contractor shall read and familiarize themselves with the Asbestos Sections of the Construction Documents. Asbestos Containing Material (ACM) is scheduled to be abated throughout specific areas of the building(s) (by the GC). Should ACM be encountered (after Abatement is completed), that may interfere with an installation; Prime Contractor shall cease work, and notify Construction Manager immediately.
  - a. Penetrations not coordinated with the Prime Contractor responsible for asbestos abatement, prior to abatement of these spaces, shall become the responsibility of the respective Prime Contract requiring the penetration.
16. Environmental Protection: Provide protection, and conduct construction in ways and by methods that comply with environmental regulations and that minimize possible air, waterway, and subsoil contamination or pollution or other undesirable effects.
  - a. Restrict use of noisemaking tools and equipment to hours that will minimize complaints from persons or firms on or near the Project site.
17. The Plumbing Drawings are schematic in nature, and the PC will make adequate provisions to accommodate the actual field conditions without additional cost to the Owner. The PC will layer drawings in coordination with all other trades to avoid any clashes or hits. The PC within two (2) weeks of Award, NTP, or LOI (whichever comes first), will field-survey the existing conditions on 2<sup>nd</sup> shift (3:30 PM – 11:00 PM) or an alternative time if approved by the Owner.
18. Document on the Record Drawings all openings and penetrations larger than 2-inches in diameter.
19. Provide all demolition of Plumbing Systems indicated in the Construction Documents, and/or required for Work of this Prime Contract.
  - a. Coordinate all demolition with Hazardous Materials documents.
  - b. Coordinate with all other Prime Contracts regarding all removals required for the Project.
  - c. Demolition of a system shall mean all components, removed in their entirety, to the point of origin or source.

20. Provide valves, whether permanent, chlorination, or temporary, to permit shutoff and/or capping of systems to achieve the Work of this Prime Contract.
21. All concrete/masonry demolition shall be completed using wet saw methods.
22. PC shall coordinate housekeeping pads for new equipment with General Contractor for installation by the GC. PC shall provide all shop drawings and information of new equipment.
23. PC shall provide all Work associated with creating structural openings or penetrations requiring lintels for their own work (i.e., ductwork and pipe penetrations). This applies to all openings/penetrations greater than 5-inches through masonry or concrete walls.
  - a. GC and PC shall indicate all required openings/penetrations requiring lintels on Coordination Drawings. Failure to note required openings/penetrations on the coordination drawings will require that the respective, GC and PC provide their own structural openings in accordance with the contract documents at no additional cost.
  - b. Non-structural openings/penetrations, including those for convenience, shall be self-provided by the respective GC and PC.
  - c. This assignment applies to new and existing construction areas.
  - d. Refer to Structural documents for lintel type/size requirements and Architectural drawings for partition types. Partitions not specifically identified in the documents are to be assumed as masonry construction.
  - e. All openings/penetrations are to be identified on Record Drawings by the Prime Contract requiring the opening.
  - f. Exact physical locations shall be laid-out by PC for coordinated sequencing with all other prime contracts.
24. Provide cut and patch work related to that of this Prime Contract, and at those areas specifically identified on the Construction Documents, regardless of trade creating the area to be patched.
  - a. Each Prime Contract is responsible for all other respective Cutting & Patching required of their installations. Refer to Section 017329 "Cutting and Patching" for further information.
  - b. Provide cut and patch for all affected materials at building interiors as required to provide access for relocation of existing or installation of new roof drains and roof drain leaders, to point of connection to existing piping or to building exterior, as indicated in Contract Documents.
25. Provide new Plumbing system(s), or modifications of existing system(s) as indicated in the Construction Documents, complete and fully operational.
26. Final connections of utilities are by, GC or PC unless noted or assigned otherwise.
27. Provide sleeves required for piping penetrating walls, slabs and/or decks.
28. Provide through-penetration fire stop systems at all penetrations made by PC. This Prime Contract shall maintain listed ratings of indicated assemblies. Provide repair of existing through-penetration fire stopping damaged by work of this Prime Contract.

- a. Sleeves with fire-stopping are to be installed in sequence with fire-rated construction. This Prime Contract shall be responsible for installing fire stopping material at intersection of sleeve and constructed materials.
- 29. Provide coordination with, and notification to, the Construction Manager for all specified testing, training, commissioning, etc., of the Work of this Prime Contract. Refer to Division 00 Section "Project Forms" for applicable documentation documents.
- 30. Substantial Completion: Clean all mechanical and plumbing installations and provided equipment at the time of Substantial Completion or as directed by Construction Manager.
- 31. Coordinate all the preceding requirements, accordingly, with all applicable Alternates indicated in Section 012300 "Alternates".
- 32. Contractor shall do the following:
  - a. At the start of each workday, PC Contractor shall utilize the temporary entry point to the construction site and notify the CM of arrival. Coordinate with the Construction Manager for any changes to building utilities due to active work.
  - b. All personnel must sign-in once they appear on site using a Construction Manager provided sign-in binder.
  - c. Maintain clear and debris free access to the building. Remove any tripping hazards.
  - d. All on site personnel must sign-in with school security and Construction Manager when arriving to site.
- 33. Submission of all required closeout documentation and final application for payment no later than July 30, 2025.

AIA G706 (017700)  
AIA G706A (017700)  
AIA G707 (017700)  
Final Statement of Accounting (017700)  
Labor Warranty (017700)  
Product Warranties (017700)  
Non-ACM Letter (005216)  
Record Drawings (017836, 017839)  
Record Specifications (017836, 017839)  
Record Submittals (017700)  
G734 / Signed-off Request for Subst Completion (017700)  
O&M Manuals (013100, 017823)  
Test Reports / TAB (017700)  
Training video (017900)  
Attic Stock / signed Transmittal (017700)

- M. Applicable Specification Sections: All specification Sections itemized below are to be provided complete by this Prime Contract, unless noted otherwise. In addition to these



specifications, the contractor is required to review all specifications included in the overall contract that may contain related scope or detail for this specific contract.

1. All Division 00 – Procurement and Contracting Requirements
2. All Division 01 – General Requirements
3. Division 02 – Existing Conditions
4. Division 03 – Concrete
5. Division 07 – Thermal and Moisture Protection
6. Division 08 – Openings
7. Division 09 – Finishes
8. Division 22 – Plumbing
9. Division 33 – Utilities

N. Supplemental Temporary Facilities and Controls by PC include, but are not limited to, the following:

1. Waste Disposal Facilities: See Subparagraph 1.8.L of this Section.
2. Provide all shoring required for Work of this Contract, including but not limited to;
  - a. Cutting or altering of existing construction.
  - b. Provide protection of all new and existing surfaces during the Work. Do not stand, walk, or work off any unprotected finished surface above the floor.
3. Maintain temporary fencing and barricading to keep unauthorized persons away from excavations and hazardous areas for which this Prime Contract is responsible.
4. Traffic Controls: Provide flagman while any operations of this Prime Contract interfere with traffic flow on adjacent roadways.
5. Furnishing and installation of temporary flood mitigation pumps. PC to coordinate with EC for electrical connection. Install of discharge line and connection to existing sanitary line should be mapped out and planned with Construction Manager.

### **3.6 CONTRACT NO. SC-01 – SITE WORK (SC) – SITE WORK PRIME CONTRACT IN THE CITY SCHOOL DISTRICT OF NEW ROCHELLE**

A. The Site Work Contractor (SC-01) is responsible for the following schools as associated project within:

1. New Rochelle High School Staircases.

**B.** Project Site Superintendent: SC shall provide one (1) full-time Project Site Superintendent while any work related to this Contract is being performed on site. Superintendent may be a working Foreman as long as the daily requirements of this Contract are maintained, as they relate to the Construction Documents and the Project Schedule. The Construction Manager reserves the right, in their opinion, to revoke this privilege if these requirements are not maintained. Superintendent shall work closely with the Construction Manager, and the other Prime Contract Superintendents and

Foremen, in a manner that best promotes the Project Master Schedules and the objectives of the Project.

1. Superintendent shall be on site while Prime Contractor's own forces, and/or their sub-contractors forces, are on site; also while other Prime Contracts are installing work, or require coordination of work, related to this Contract, and/or as requested by the Construction Manager.
  2. Superintendent shall be the same individual throughout the Project.
  3. Project Site Superintendent shall be an individual with minimum of five (5) years' experience in this field of work.
  4. Superintendent shall always keep up to date drawing sets and approved shop drawings for confirmation of work and installations performed in the field.
  5. Refer to Section 013100 "Project Management and Coordination" for further requirements.
- G. Project Foreman: SC shall provide at least one (1) full-time Project Foreman during each shift of Work at each school; Foreman shall be able to make binding decisions, as they relate to the daily activities of their crew, as related to achieving the goals of the Project.
- H. Site Communications: SC shall provide Project Superintendent with a mobile phone, all costs and service charges paid for by SC; provide Construction Manager with contact number(s).
- I. Project Site Field Office: Provide site office facilities for this Contract's Project Superintendent. Site Office shall be equipped with telephone w/answering machine, fax, and e-mail. Contact information shall be provided to the Construction Manager.
1. The Owner reserves the right to seek reimbursement for temporary facilities not provided by this Prime Contract.
- J. Scope of Work: Work of the SC Contractor includes, but is not limited to, the following:
1. Coordination with other Prime Contracts, Owner and Construction Manager as required to adhere to and maintain approved Project Master Schedules. Prior to first payment, this includes developing and submitting the Project Master Schedule as indicated on the construction drawings.
  2. This Site Work Contractor is required to set and install catch basins, manholes tops and any other tops for all structure tops/grates to be set to the existing or indicated asphalt elevations. This SC Contractor is responsible for all positive drainage to these structures set at the existing asphalt elevations. The following construction phasing will include the removal and replacement of all asphalt and at that time all tops/grates will be reset to the new asphalt elevations.
  3. All demolition and new site work scope indicated in Contract Documents, including removal and legal disposal off site. Including but not limited to all trees, shrubbery, rocks, unsuitable soil, pavement/asphalt, concrete curb and sidewalk, waterproofing, CMU, grade beams, foundations, stairs, coping stones,

- railings, backfill, grading, drainage structures, and accessories as indicated on construction drawings.
4. All necessary site work scope to accommodate the work of others related to the completion of the site work scope.
  5. All site concrete repair included in the base contract as indicated in Contract Documents.
  6. SC contractor agrees to install temporary handrails in the event there are delays in furnishing the final product.
  7. The SC Contractor shall provide and install adequate protection to adjacent areas of construction work. During demolition, the Site Work Contractor is responsible for preserving and protecting all surrounding items not intended to be disturbed or damaged during construction.
  8. SC Contractor shall conform to phasing and sequencing of site work as shown on phasing drawings. Any deviation shall be clearly indicated and defined in the bid proposal. See the preliminary milestone schedule. coordinated with the Construction Manager. See Milestone Schedule.
  9. Work delineation between building and site is indicated on the Contract Drawings.
  10. Prime Contract shall understand that Site Work may require work to proceed while school will be session; all cost associated with this sequence shall be incorporated into the Bid.
  11. SC Contractor is responsible to furnish and install all floor drains, slot drains, foundation drains, perforated drainage pipe, cleanouts, and any other water drainage systems shown within the set or specifications.
  12. All concrete pours will be communicated with and approved by the CM in order to properly-schedule inspections. In the event the SC fails to provide 72-hour notice of an inspection, all costs shall be carried by the SC.
  13. **This contract included cold weather and 2<sup>nd</sup> shift concrete applications. The SC is responsible for all ground thawing, insulation blankets, heaters, and tents as needed.**
  14. The SC has a full understanding that the stairs are to be phased and only three (3) (Stair A, B, and C) may be under construction at the same time. Once Stair A, B, and C are complete and fully-operable, the demolition of Stair D may commence.  
**Refer to Section 003113 for summary logistics plan.**
  15. Environmental Protection: Provide protection, and conduct construction in ways and by methods that comply with environmental regulations and that minimize possible air, waterway, and subsoil contamination or pollution or other undesirable effects.
    - a. Restrict use of noisemaking tools and equipment to hours that will minimize complaints from persons or firms on or near the Project site.
  16. Provide dust control while the Work of this Contract is being performed. Limit situations that may create dust contamination while Work of this Contract is idle. Provide all demolition as indicated in the Construction Documents, or required for Work of this Prime Contract:

- a. Coordinate all demolition with Hazardous Materials documents. Coordinate with all other Prime Contracts regarding removals required for the Project. Demolition of a system shall mean all components removed in their entirety, to the point of origin, source or substrate
17. Provide cut and patch work related to that of this Prime Contract, and at those areas specifically identified in the Construction Documents, regardless of trade creating the area to be patched
  - a. Each Prime Contract is responsible for all other respective cutting and patching required of their installations (refer to Section 017329 for further information).
18. Provide all miscellaneous supports for items or equipment installed under this Prime Contract.
19. Substantial Completion: Clean all SW Contractor installations and provided equipment at the time of Substantial Completion or as directed by Construction Manager.
20. Refer to Division 00 Section "Project Forms" and make use of these forms for the installation and coordination of the Work. These forms are included to assist this Prime Contract with coordinating the installation of Work by others prior to enclosing and/or finishing work. Owner will not compensate Prime Contract for work not properly coordinated that result in added work, or removal of work. Secure the proper signatures or acknowledgements, as indicated, prior to installing/completing the Work.
21. Coordinate all the preceding requirements, accordingly, with all applicable Alternates indicated in Section 012300 "Alternates".
22. Contractor shall do the following:
  - a. At the start of each workday, SC Contractor shall utilize the temporary entry point to the construction site and notify the CM of arrival. Coordinate with Construction Manager for any changes to building access due to site work.
  - b. All personnel must sign-in once they appear on site using a Construction Manager provided sign-in binder.
  - c. Maintain clear and debris free access to the building. Remove any tripping hazards.
  - d. All on site personnel must sign-in with school security and Construction Manager when arriving to the site.
23. Unless delays in product availability, the contractor shall staff the project and complete all punch-list items within thirty (30) days of issuance.
24. Submission of all required closeout documentation and final application for payment no later than July 30, 2025.
  - AIA G706 (017700)
  - AIA G706A (017700)
  - AIA G707 (017700)
  - Final Statement of Accounting (017700)
  - Labor Warranty (017700)

Product Warranties (017700)  
Non-ACM Letter (005216)  
Record Drawings (017836, 017839)  
Record Specifications (017836, 017839)  
Record Submittals (017700)  
G734 / Signed-off Request for Subst Completion (017700)  
O&M Manuals (013100, 017823)  
Test Reports / TAB (017700)  
Training video (017900)  
Attic Stock / signed Transmittal (017700)

K. Applicable Specification Sections: All specification Sections itemized below are to be provided complete by this Prime Contract, unless noted otherwise. In addition to these specifications, the contractor is required to review all specifications included in the overall contract that may contain related scope or detail for this specific contract.

1. All Division 00 – Procurement and Contracting Requirements
2. All Division 01 – General Requirements
3. Division 02 – Existing Conditions
4. Division 03 – Concrete
5. Division 04 – Masonry
6. Division 05 – Metals
7. Division 06 – Wood and Plastics
8. Division 07 – Thermal and Moisture Protection
9. Division 08 – Openings
10. Division 09 – Finishes
11. Division 10 – Specialties
12. Division 11 – Equipment
13. Division 12 – Furnishings
14. Division 31 – Earthwork
15. Division 32 – Exterior Improvements

O. Supplemental Temporary Facilities and Controls by SC Contractor include, but are not limited to:

1. Waste Disposal Facilities: See Subparagraph 1.7.L of this Section
2. Snow and Ice Removal: Provide removal of snow and ice until Substantial Completion of the Project, or as required to avoid delays in the Schedule.
  - a. Removal includes temporary roadways, Owner provided contractor parking areas, staging areas, remote staging areas, sidewalks, exterior temporary ramps and stairs within the construction and staging area.
  - b. Removal shall include open areas of the Project building that is under construction, including, but not limited to: SOG, SOD, and roof deck areas.

3. Temporary Barricades: Provide, maintain and eventually remove all temporary barricades per OSHA Regulations, Industry Standards, or as indicated in the Construction Documents. These include, but are not limited to, the following areas:
  - a. To isolate site renovation areas.
4. Temporary Sanitary Facilities: See Subparagraph 1.7.M of this Section.
5. Provide all shoring required for Work of this Prime Contract, including but not limited to:
  - a. Cutting or altering of existing construction.
  - b. Provide protection of all new and existing surfaces during the Work. Do not stand, walk, or work off any unprotected finished surface above the floor. The installation of temporary ground protection mats (Dura Deck or equivalent ) is required for all areas machinery will be traveling.
6. Maintain temporary chain link fencing with driven posts in the ground and Yodock or approved equal barricading to keep unauthorized persons away from excavations and hazardous areas for which this Prime Contract is responsible.
7. Traffic Controls: Provide flagman while any operations of this Prime Contract interfere with traffic flow on adjacent roadways, active parking lots and while any pedestrian traffic is entering the area or parking lots.
8. Provide temporary measures for stair operability and code compliance (railings, weather protection, partitions, etc.).
9. See Specification 013150 Safety & Health for further detailed information.

END OF SECTION 011200

## SECTION 011400 – WORK RESTRICTIONS

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. This Section includes administrative provisions for Project site work restrictions including, but not limited to, the following:
  - 1. Occupancy requirements.
  - 2. Use of premises.
  - 3. Area available for use.
  - 4. Travel not obstructed.
  - 5. Phasing.
  - 6. Identification badges.
  - 7. Smoking policy.
  - 8. Product delivery, storage, and handling.

#### 1.3 OCCUPANCY REQUIREMENTS

- A. Owner Occupancy: Building occupancy is established in the multiple contract summary, work hours and sequence section, coordinate as necessary. Perform the Work so as not to interfere with surrounding properties.
  - 1. Architect will prepare a Certificate of Substantial Completion prior to occupancy by the Owner.
  - 2. Obtain a Certificate of Occupancy from authorities having jurisdiction before Owner occupancy.
  - 3. On occupancy, Owner will assume responsibility for maintenance and custodial service for occupied portions of building.

#### 1.4 USE OF PREMISES

- A. Use of Site: Limit use of premises to work in areas indicated. Confine operations to areas within Contract limits indicated. Do not disturb portions of site beyond areas in which the Work is indicated. No signs or advertising are allowed except as approved by

Architect or as required by laws, regulations or the Site Contractor's protection as persons and property.

1. Limits: Site Contractor shall comply with Owner occupancy, and phasing requirements, if any.
    - a. Site Contractor shall limit operations including storage of materials and prefabrication to areas within the Contract Limit Lines unless otherwise permitted by the Architect at the Owner's option.
      - 1) All construction material shall be stored in a safe and secure manner.
    - b. Site Contractor shall limit use of the premises for Work and for storage, to allow for:
      - 1) Owner occupancy.
      - 2) Work by other Site Contractors.
  2. Lock automotive-type vehicles such as passenger cars and trucks and other types of mechanized and motorized construction equipment when parked and unattended, to prevent unauthorized use. Do not leave such vehicles unattended, with engine running or ignition key in place.
- B. Use of Existing Building: Maintain existing building in a weathertight condition throughout construction period. Repair damage caused by construction operations. Protect building and its occupants during construction period.
1. Keep all areas free from accumulation of waste material, rubbish, or construction debris on daily basis.
  2. Site Contractors shall provide temporary closures at all openings in outside walls to maintain weather protection and security as directed by Architect or Construction Manager.
  3. Open fires are not permitted.
  4. Site Contractors shall be responsible for control of chemical fumes, gases, and other contaminants produced by welding, gasoline or diesel engines, roofing, paving, painting, etc. to ensure they do not enter occupied portions of the building or air intakes.
  5. Site Contractors shall be responsible to ensure that activities and materials which result in off-gassing of volatile organic compounds such as glues, paints, furniture, carpeting, wall covering, drapery, etc., are scheduled, cured, or ventilated in accordance with manufacturers recommendations before a space can be occupied.
  6. Large and small asbestos abatement projects as defined by 12NYCRR56 shall not be performed while that area of the building is occupied.
  7. Construction and maintenance operations shall not produce noise in excess of 60 dba in occupied spaces or shall be scheduled for times when the building or affected building spaces are not occupied or acoustical abatement measures shall be taken.



- C. Site Contractors shall coordinate the use of premises with the Owner and shall move any stored products under Site Contractor's control, including excavated material, which interfere with operations of the Owner or separate contractors, at no expense to Owner.
- D. Site Contractor shall assume full responsibility for the protection and safekeeping of products under Contract, stored on the site and shall cooperate with the Owner to guarantee security for the Owner's property.
  - 1. Fencing with lockable gates shall surround construction supplies or debris of construction activities.
    - a. Gates shall always be locked unless a worker is in attendance to prevent unauthorized entry.
- E. Protection of Equipment Material: Site Contractor shall assume full and complete responsibility for protection and safekeeping of products and equipment stored and install at Project.
- F. Site Contractor shall obtain and pay for the use of additional storage or work areas needed for operations.

#### 1.5 AREA AVAILABLE FOR USE

- A. Contractors shall confine operations to those portions of the Owner's property, and to the right-of-ways or easements, temporary or permanent, acquired or designated for the work of the Contract as shown on the Drawings. Private property adjacent the Site shall not be entered upon or used by the Contractors for any purpose without the written consent of the Owner thereof. A copy of such consent shall be filed with the Construction Site Coordinator.
- B. Separation of Construction Areas from Occupied Space: Construction areas which are under the control of a contractor and therefor not occupied by Owner shall be separated from occupied areas. Provisions shall be made to prevent the passage of dust and contaminants into occupied parts of the building. Periodic inspection and repairs of the containment barriers must be made to prevent exposure to dust or contaminants. Gypsum board must be used in exit ways or other areas that require fire rated separation. Heavy-duty plastic sheeting may be used only for a vapor, fine dust, or air infiltration barrier, and shall not be used to separate occupied spaces from construction areas.
  - 1. Assign a specific stairwell or elevator for construction worker use during hours of Owner operation. Do not use corridors, stairs or elevators being occupied by Owner.
  - 2. Use enclosed chutes to remove large amounts of debris.

3. Do not move debris through occupied spaces of the building.
  4. Do not drop or throw material outside walls of building.
- C. Clean all occupied parts of the building at the close of each workday. Maintain required health, safety, and educational capabilities always during construction operations in cooperation with the Owner's requirements.

#### 1.6 TRAVEL NOT OBSTRUCTED

- A. Driveways and Entrances: Keep driveways and entrances serving premises clear and available to Owner, Owner's employees, and emergency vehicles always. Do not use these areas for parking or storage of materials.
1. Schedule deliveries to minimize use of driveways and entrances.
  2. Schedule deliveries to minimize space and time requirements for storage of materials and equipment on-site.
- B. Site Contractor shall not needlessly hinder or inconvenience travel on any public or private way, nor wholly obstruct a traveled way, and shall provide plain, appropriately worded signs, adequate barricades and lighting announcing such obstruction at the nearest cross streets, and at each end of the obstructed portion, directing traffic to and along an approved detour.

#### 1.7 PHASING

- A. Site Contractor shall assume full responsibility for Project Phasing requirements. Coordinate with Construction Manager the following:
1. Deliveries.
  2. Testing and inspection agency requirements.
- B. Notify Architect and Construction Manager of Construction Schedule modifications in writing at each progress meeting per Division 01 Section "Project Management and Coordination."

#### 1.8 IDENTIFICATION BADGES

- A. General: All construction personnel of the Site shall wear identification badges. Securely attach badge to outer clothing for easy recognition of Site personnel name and company.

- B. Site Contractor shall supply to its employees and other retained construction personnel, an identification badge. Include company name, Owner's name and provide a number on each badge.
  - 1. Site Contractor shall maintain a listing of the badge numbers and the associated employee's name to which the corresponding badge number is assigned.
  - 2. Copy of list shall be submitted to the CM, Architect, and District security. This list is to be updated when employees are no longer working on site, or new employees arrive. The CM and district shall be notified of such employee change two (2) weeks prior to this action.
- C. Submit a copy of list to Architect and Construction Manager.

#### 1.9 SMOKING POLICY

- A. Use of tobacco at all Work sites, job office, and parking lots and of Owner's property is prohibited by law. Use of tobacco may result in removal from Owner's property and termination of employment on this project.
- B. This policy shall apply to all individuals entering a Work site or Owner's property including, but not limited to, part-time personnel, consultants, and employees of other companies or Site Contractor's employees, sub-consultants, installers, etc., working on Project site.

### PART 2 – PRODUCTS

#### 2.1 PRODUCT DELIVERY STORAGE AND HANDLING

- A. Deliver, store and handle products using means and methods that will prevent damage, deterioration, and loss, including theft. Comply with manufacturers written instructions.
  - 1. Schedule delivery to minimize long-term storage at Project site and to prevent over crowding of construction spaces.
  - 2. Coordinate delivery with installation time to ensure minimum holding time for items that are, flammable, hazardous, easily damaged, or sensitive to deterioration, theft, and other losses.
  - 3. Deliver products to Project site in an undamaged condition in manufacturer's original sealed container or other packaging system, complete with labels and instruction for handling, storing, unpacking, protecting, and installing.
  - 4. Site Contractor to inspect products on delivery to ensure correct products have been delivered and follow the Contract Documents and to ensure that products are undamaged and properly protected.

5. Store materials in a manner that will not endanger Project structure.
6. Store products to allow for inspection and measurement of quantity or counting of units.
7. Store products that are subject to damage by the elements, under cover in a weather tight enclosure above ground, with ventilation adequate to prevent condensation.
8. Comply with product manufacturer's written instruction for temperature, humidity, ventilation, and weather-protection requirements for storage.
9. Protect stored products from damage.

PART 3 – EXECUTION (Not Used)

END OF SECTION 011400

SECTION 011410 - NYSED 155.5 UNIFORM SAFETY STANDARDS FOR SCHOOL CONSTRUCTION  
AND MAINTENANCE PROJECTS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section specifies requirements of 8NYCRR155.5, Uniform Safety Standards for School Construction and Maintenance Projects that are required in construction documents. The Contractor shall comply with these requirements in addition to any and all similar requirements in the Contract Documents.
  - 1. Occupied portions of the building.
  - 2. General safety and security standards.
  - 3. Separation of construction areas from occupied spaces.
  - 4. Control of noise.
  - 5. Control of contaminants.
  - 6. Control of volatile organic compounds.
  - 7. Asbestos abatement projects.
  - 8. Lead remediation projects
  - 9. Temporary heat of occupied spaces
- B. These are requirements of Section 155.5 of the Commissioner of Education's regulations to protect the health and safety of occupants of the building during construction. This is not the text of the regulations.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION

3.1 OCCUPIED PORTIONS OF THE BUILDING

- A. The occupied portion of any school building shall always comply with the minimum requirements necessary to maintain a certificate of occupancy. In addition, the following shall be strictly enforced and cooperated with:
  - 1. No smoking is allowed on public school property, including construction areas.

2. During construction, daily inspections of district occupied areas shall be conducted by school district personnel to assure that construction materials, equipment or debris do not block fire exits or emergency egress windows.
3. Proper operation of fire extinguishers, fire alarm, and smoke/fire detection systems shall be maintained throughout the project.

### 3.2 GENERAL SAFETY AND SECURITY STANDARDS FOR CONSTRUCTION PROJECTS

- A. All construction materials shall be stored in a safe and secure manner.
- B. Fences around construction supplies or debris shall be maintained.
- C. Gates shall always be locked unless a worker is in attendance to prevent unauthorized entry.
- D. During exterior renovation work, overhead protection shall be provided for any sidewalks or areas immediately beneath the work site or such areas shall be fenced off and provided with warning signs to prevent entry.
- E. Workers shall be required to wear photo-identification badges at all times for identification and security purposes while working at occupied sites."

### 3.3 SEPARATION OF CONSTRUCTION AREAS FROM OCCUPIED SPACES

- A. Separation of construction areas from occupied spaces. Construction areas which are under the control of a contractor and therefore not occupied by district staff or students shall be separated from occupied areas. Provisions shall be made to prevent the passage of dust and contaminants into occupied parts of the building. Periodic inspection and repairs of the containment barriers must be made to prevent exposure to dust or contaminants. Gypsum board must be used in exit ways or other areas that require fire rated separation. Heavy duty plastic sheeting may be used only for a vapor, fine dust, or air infiltration barrier, and shall not be used to separate occupied spaces from construction areas.
  1. A specific stairwell and/or elevator should be assigned for construction worker use during work hours. In general, workers may not use corridors, stairs or elevators designated for students or school staff.
  2. Large amounts of debris must be removed by using enclosed chutes or a similar sealed system. There shall be no movement of debris through halls of occupied spaces of the building. No material shall be dropped or thrown outside the walls of the building.
  3. All occupied parts of the building affected by renovation activity shall be cleaned at the close of each workday. School buildings occupied during a construction project

shall maintain required health, safety, and educational capabilities at all times that classes are in session.

- B. Temporary partitions for the separation of construction areas from occupied spaces are shown on the Construction Phasing drawings.

### 3.4 CONTROL OF NOISE

- A. Construction and maintenance operations shall not produce noise in excess of 60 dba in occupied spaces or shall be scheduled for times when the building or affected building spaces are not occupied or acoustical abatement measures shall be taken.

### 3.5 CONTROL OF CONTAMINATES

- A. The contractor shall be responsible for the control of chemical fumes, gases, and other contaminants produced by welding, gasoline or diesel engines, roofing, paving, painting, etc. to ensure they do not enter occupied portions of the building or air intakes.

### 3.6 CONTROL OF VOLATILE ORGANIC COMPOUNDS

- A. The contractor shall be responsible to ensure that activities and materials which result in "off-gassing" of volatile organic compounds such as glues, paints, furniture, carpeting, wall covering, drapery, etc. are scheduled, cured, or ventilated in accordance with manufacturers recommendations before a space can be occupied.

### 3.7 HAZARDOUS MATERIALS

- A. Verify that all school areas to be disturbed during renovation or demolition have been or will be tested for lead and for asbestos. For any project work that disturbs surfaces that contain lead or asbestos, follow the plans and specifications prepared by a certified Lead Risk Assessor or Supervisor which details provisions for occupant protection, worksite preparation, work methods, cleaning, and clearance testing; which are in general accordance with HUD Guidelines.
  - 1. All asbestos abatement projects shall comply with all applicable federal and State laws including but not limited to the New York State Department of Labor industrial code rule 56(12NYCRR56), and the federal Asbestos Hazard Emergency Response Act (AHERA), 40 CFR Part 763 (Code of Federal Regulations, 1998 Edition); available at the Office of Facilities Planning, Education Building Annex, Room 1060, State Education Department, Albany, NY 12234.
  - 2. Any construction or maintenance operations which will disturb lead-based paint will require abatement of those areas pursuant to protocols detailed in the "Guidelines

for the Evaluation and Control of Lead-Based Paint Hazards in Housing", June 1995; U.S. Department of Housing and Urban Development (HUD), Washington, D.C. 20410; available at the Office of Facilities Planning, Education Building Annex, Room 1060, State Education Department, Albany, NY 12234.

B. Asbestos abatement projects

1. All school areas to be disturbed during renovation or demolition have been or will be tested for lead and asbestos.
2. Large and small asbestos abatement projects as defined by 12NYCRR56 shall not be performed while the building is occupied". Note: It is our interpretation that the term "building", as referenced in this section, means a wing or major section of a building that can be completely isolated from the rest of the building with sealed non-combustible construction. The isolated portion of the building must contain exits that do not pass through the occupied portion and ventilation systems must be physically separated and sealed at the isolation barrier.
3. Exterior work such as roofing, flashing, siding, or soffit work may be performed on occupied buildings provided proper variances are in place as required and complete isolation of ventilation systems and at windows is provided. Care must be taken to schedule work so that classes are not disrupted by noise or visual distraction.

C. Lead Remediation projects

1. Surfaces that will be disturbed by reconstruction must have a determination made as to the presence of lead. Projects which disturb surfaces that contain lead shall have in the specifications a plan prepared by a certified Lead Risk Assessor or Supervisor which details provisions for occupant protection, worksite preparation, work methods, cleaning and clearance testing which are in general accordance with the HUD Guidelines.

3.8 EXITING

- A. All contractors shall prepare and maintain a plan detailing how exiting, required by the applicable building code, shall be maintained during construction.
1. The plan shall indicate temporary construction required to isolate construction equipment, materials, people, dust, fumes, odors, and noise during the construction period.
  2. Temporary construction details shall meet code-required fire ratings for separation and corridor enclosure.
  3. At a minimum, required exits, temporary stairs, ramps, exit signs, and door hardware shall be provided at all times.
  4. The fire exiting plan shall be reviewed and approved by the Architect.



### 3.9 VENTILATION

- A. Prepare a plan detailing how adequate ventilation will be maintained during construction.
  - 1. The plan shall indicate ductwork which must be rerouted, disconnected, or capped in order to prevent contaminants from the construction area from entering the occupied areas of the building.
  - 2. The plan shall also indicate how required ventilation to occupied spaces affected by construction will be maintained during the project.

### 3.10 HEAT

- A. The contractor shall maintain a minimum temperature of 65 degrees Fahrenheit in all occupied interior spaces from September 15th to May 31st. Direct fired fuel-burning heating units shall not be used in any space of pupil occupancy.

### 3.11 PESTICIDE

- A. Pesticide applications may only be performed by individuals currently certified by the State Department of Environmental Conservation (DEC) per DEC Part 325.7 as a pesticide applicator or by a certified pesticide technician or an apprentice working under the direct on-site supervision of a certified applicator. It is illegal for any individual other than those noted above to apply any pesticide products in a school building or on school grounds.

END OF SECTION 011410

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## SECTION 012100 - ALLOWANCES

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. Section includes administrative and procedural requirements governing allowances.
  - 1. Certain items are specified in the Contract Documents by allowances. Allowances have been established in lieu of additional requirements and to defer selection of actual materials and equipment to a later date when direction will be provided to Contractor. If necessary, additional requirements will be issued by Change Order.
  - 2. Certain unforeseen items may arise during the construction and/or the requirements for items that could not be accurately detailed in advance may become apparent during the construction, which will require work to be added to one or more Prime Contract's Scope(s). Actual work, if and where necessary, shall be defined at a later date when additional information is available for evaluation.
- B. Types of allowances include the following:
  - 1. Contingency Allowances.
- C. Related Requirements:
  - 1. Division 01 Section "Contract Modification Procedures" for procedures for submitting and handling Change Orders and Allowance Use Authorizations.
  - 2. Division 01 Section "Payment Procedures" for procedures governing the Schedule of Values for Allowances.

#### 1.3 SELECTION AND PURCHASE

- A. At the earliest practical date, advise Architect of the date when final selection and purchase of each product or system described by an Allowance Use must be completed to avoid delaying the Work.
- B. At Architect's request, obtain proposals for each Allowance Use for use in making final selections. Include recommendations that are relevant to performing the Work.
- C. Purchase products and systems selected by Architect from the designated supplier.

#### 1.4 ACTION SUBMITTALS

- A. Submit proposals for purchase of products or systems included in Allowance Uses, in the form specified for Change Orders.

#### 1.5 INFORMATIONAL SUBMITTALS

- A. Submit invoices or delivery slips to show actual quantities of materials delivered to the site for use in fulfillment of each allowance.
- B. Submit time sheets and other documentation to show labor time and cost for installation of allowance items that include installation as part of the allowance.
- C. Coordinate and process submittals for Allowance Use items with other portions of the Work.

#### 1.6 COORDINATION

- A. Coordinate Allowance Use items with other portions of the Work. Furnish templates as required to coordinate installation.

#### 1.7 CONTINGENCY ALLOWANCES

- A. Use the contingency allowance only as directed by Architect for Owner's purposes and only by Field Orders/Directives from the Architect and/or Construction Manager that indicate amounts to be charged to the allowance. Overhead, profit, and Bond Premium are not an allowable cost for work completed under the allowance.
- B. Prime Contractor's related costs for products and equipment ordered by Owner under the contingency allowance are included in the allowance and are not part of the Contract Sum. These costs include delivery, installation, taxes, insurance, equipment rental, and similar costs.
- C. Field Orders authorizing use of funds from the contingency allowance shall include all Prime Contract related costs other than overhead, profit, and corresponding bond premium adjustment. One or more of the following methods, which will be specified in the written directive, shall determine the value of the Work directed under this allowance.
  - 1. By applying the applicable price or prices set forth in the Contract Documents or by applying a Unit Price agreed to by both parties.
  - 2. By estimating the fair and reasonable cost of:
    - a. Labor including all wages, required wage supplements and insurance required by law (workers' compensation, social security, disability,

- unemployment, etc.) paid to or on behalf of foremen, workers, and other employees below the rank of Prime Contract designated representative directly employed at the site.
- b. Materials.
  - c. Equipment, excluding hand tools.
- 3. Time and Materials
  - 4. The Owner reserves the right to utilize these methods provided it notifies the Prime Contract of its intent to do so prior to the time the Prime Contract is properly authorized to commence performance of such work.
- D. At Project closeout, credit unused amounts remaining in the contingency allowance to Owner by Change Order.
- E. Unused Materials:
- 1. Return unused materials purchased under an allowance to manufacturer or supplier for credit to Owner, after installation has been completed and accepted.
  - 2. If requested by Architect and/or Construction Manager, prepare unused material for storage by Owner when it is not economically practical to return the material for credit. If directed by Architect, deliver unused material to Owner's storage space. Otherwise, disposal of unused material is Contractor's responsibility.

## PART 2 - PRODUCTS (Not Used)

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Examine products covered by an allowance promptly on delivery for damage or defects. Return damaged or defective products to manufacturer for replacement.

### 3.2 PREPARATION

- A. Coordinate materials and their installation for each allowance with related materials and installations to ensure that each allowance item is completely integrated and interfaced with related work

### 3.3 SCHEDULE OF ALLOWANCES

- A. Include in the base bid allowances in the amount/area listed below for all scope pertaining to New Rochelle High School Pool Renovation and Addition:

1. \$155,000 Allowance for unforeseen conditions pertaining to General Construction Work.
  - a. \$30,000 Allowance for unforeseen conditions for General Construction Work at New Rochelle High School
  - b. \$35,000 Allowance for unforeseen conditions for General Construction Work at Albert Leonard Middle School
  - c. \$10,000 Allowance for unforeseen conditions for General Construction Work at George M. Davis Elementary School
  - d. \$20,000 Allowance for unforeseen conditions for General Construction Work at Henry Barnard Elementary School
  - e. \$45,000 Allowance for unforeseen conditions for General Construction Work at Jefferson Elementary School
  - f. \$15,000 Allowance for unforeseen conditions for General Construction Work at William B. Ward Elementary School
2. \$32,000 Allowance for unforeseen conditions pertaining to Mechanical Construction Work.
  - a. \$8,000 Allowance for unforeseen conditions for Mechanical Work at New Rochelle High School
  - b. \$2,000 Allowance for unforeseen conditions for Mechanical Work at Albert Leonard Middle School
  - c. \$2,500 Allowance for unforeseen conditions for Mechanical Work at George M. Davis Elementary School
  - d. \$15,000 Allowance for unforeseen conditions for Mechanical Work at Jefferson Elementary School
  - e. \$4,500 Allowance for unforeseen conditions for Mechanical Work at William B. Ward Elementary School
3. \$12,500 Allowance for unforeseen conditions pertaining to Electrical Construction Work.
  - a. \$5,000 Allowance for unforeseen conditions for Mechanical Work at New Rochelle High School
  - b. \$1,000 Allowance for unforeseen conditions for Mechanical Work at Albert Leonard Middle School
  - c. \$1,500 Allowance for unforeseen conditions for Mechanical Work at George M. Davis Elementary School
  - d. \$4,000 Allowance for unforeseen conditions for Mechanical Work at Jefferson Elementary School
  - e. \$1,000 Allowance for unforeseen conditions for Mechanical Work at William B. Ward Elementary School
4. \$4,500 Allowance for unforeseen conditions pertaining to Plumbing Construction Work.
  - a. \$1,500 Allowance for unforeseen conditions for Plumbing Work at NRHS.
  - b. \$3,000 Allowance for unforeseen conditions for Plumbing Work across at JES

5. \$45,000 Allowance for unforeseen conditions pertaining to Site Work Construction Work.
  - a. \$45,000 Allowance for unforeseen conditions for Site Work at NRHS.

END OF SECTION 012100

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## SECTION 012200 - UNIT PRICES

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for unit prices.

#### 1.3 DEFINITIONS

- A. Unit price is an amount proposed by bidders, stated on the Bid Form, as a price per unit of measurement for materials or services added to or deducted from the Contract Sum by appropriate modification, if estimated quantities of Work required by the Contract Documents are increased or decreased.

#### 1.4 PROCEDURES

- A. Unit price shall be used when and if required by Owner through Architect for all additions and deletions to the Contract quantities and shall be inclusive of furnishing and installing all necessary material, plus costs for delivery, insurance, labor, overhead, profit, equipment, hoisting, scaffolding, trucking, handling, submissions, layout, permits, coordination, hangers, inserts, couplings, testing, delivery, supervision, etc. as per change orders, and shall remain installed in quantities and locations as approved by the Architect/Construction Manager.
- B. Owner reserves the right to reject Contractor's measurement of work-in-place that involves use of established unit prices and to have this work measured, at Owner's expense, by an independent surveyor acceptable to Contractor.
- C. List of Unit Prices: A list of unit prices is included in the Bid Form. Specification Sections contain requirements for materials described under each unit price.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 LIST OF UNIT PRICES

1. Refer to Bid Form for list of Unit Prices.

END OF SECTION 012200

## SECTION 012300 - ALTERNATES

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for alternates.

#### 1.3 DEFINITIONS

- A. Alternate: An amount proposed by bidders and stated on the Bid Form for certain work defined in the Bidding Requirements that may be added to or deducted from the Base Bid amount if Owner decides to accept a corresponding change either in the amount of construction to be completed or in the products, materials, equipment, systems, or installation methods described in the Contract Documents.
  - 1. The cost or credit for each alternate is the net addition to or deduction from the Contract Sum to incorporate alternate into the Work. No other adjustments are made to the Contract Sum.

#### 1.4 PROCEDURES

- A. Coordination: Modify or adjust affected adjacent work as necessary to completely integrate work of the alternate into Project.
  - 1. Include as part of each alternate, miscellaneous devices, accessory objects, and similar items incidental to or required for a complete installation whether or not indicated as part of alternate.
- B. Notification: Immediately following award of the Contract, notify each party involved, in writing, of the status of each alternate. Indicate if alternates have been accepted, rejected, or deferred for later consideration. Include a complete description of negotiated modifications to alternates.
- C. Execute accepted alternates under the same conditions as other work of the Contract.
- D. Schedule: A Schedule of Alternates is included at the end of this Section identifying each Alternate by number and describes basic changes to be incorporated into the Work only

when that Alternate is made part of the Work by specific provision in the Owner/Contractor Agreement. Specification Sections referenced in schedule contain requirements for materials necessary to achieve the work described under each alternate.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 SCHEDULE OF ALTERNATES:

- A. Contract No. GC-01 – General Construction Work: None.
- B. Contract No. MC-01 – Mechanical Construction Work: None.
- C. Contract No. EC-01 – Electrical Construction Work: None.
- D. Contract No. PC-01 – Plumbing Construction Work: None.
- E. Contract No. SC-01 – Site Work Construction Work: None.

END OF SECTION 012300

## SECTION 012500 - SUBSTITUTION PROCEDURES

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. Section includes administrative and procedural requirements for substitutions.

#### 1.3 DEFINITIONS

- A. Substitutions: Changes in products, materials, equipment, and methods of construction from those required by the Contract Documents and proposed by Contractor.
  - 1. Substitutions for Cause: Changes proposed by Contractor that are required due to changed Project conditions, such as unavailability of product, regulatory changes, or unavailability of required warranty terms.
  - 2. Substitutions for Convenience: Changes proposed by Contractor or Owner that are not required to meet other Project requirements but may offer advantage to Contractor or Owner.

#### 1.4 ACTION SUBMITTALS

- A. Substitution Requests: Submit three (3) copies of each request for consideration. Identify product or fabrication or installation method to be replaced. Include Specification Section number and title and Drawing numbers and titles.
  - 1. Substitution Request Form: Use copy of form provided in Project Manual.
  - 2. Documentation: Show compliance with requirements for substitutions and the following, as applicable:
    - a. Statement indicating why specified product or fabrication, or installation cannot be provided, if applicable.
    - b. Coordination information, including a list of changes or revisions needed to other parts of the Work and to construction performed by Owner and separate contractors, that will be necessary to accommodate proposed substitution.

- c. Detailed comparison of significant qualities of proposed substitution with those of the Work specified. Include annotated copy of applicable Specification Section. Significant qualities may include attributes such as performance, weight, size, durability, visual effect, sustainable design characteristics, warranties, and specific features and requirements indicated. Indicate deviations, if any, from the Work specified.
  - d. Product Data, including drawings and descriptions of products and fabrication and installation procedures.
  - e. Samples, where applicable or requested.
  - f. Certificates and qualification data, where applicable or requested.
  - g. List of similar installations for completed projects with project names and addresses and names and addresses of architects and owners.
  - h. Material test reports from a qualified testing agency indicating and interpreting test results for compliance with requirements indicated.
  - i. Detailed comparison of Contractor's construction schedule using proposed substitution with products specified for the Work, including effect on the overall Contract Time. If specified product or method of construction cannot be provided within the Contract Time, include letter from manufacturer, on manufacturer's letterhead, stating date of receipt of purchase order, lack of availability, or delays in delivery.
  - j. Cost information, including a proposal of change, if any, in the Contract Sum.
  - k. Contractor's certification that proposed substitution complies with requirements in the Contract Documents except as indicated in substitution request, is compatible with related materials, and is appropriate for applications indicated.
  - l. Contractor's waiver of rights to additional payment or time that may subsequently become necessary because of failure of proposed substitution to produce indicated results.
3. Architect's Action: If necessary, Architect will request additional information or documentation for evaluation within seven days of receipt of a request for substitution. Architect will notify Contractor through Construction Manager of acceptance or rejection of proposed substitution within fifteen (15) days of receipt of request, or seven (7) days of receipt of additional information or documentation, whichever is later.
- a. Forms of Acceptance: Change Order, Construction Change Directive, or Architect's Supplemental Instructions for minor changes in the Work.
  - b. Use product specified if Architect does not issue a decision on use of a proposed substitution within time allocated.

## 1.5 QUALITY ASSURANCE

- A. Compatibility of Substitutions: Investigate and document compatibility of proposed substitution with related products and materials. Engage a qualified testing agency to perform compatibility tests recommended by manufacturers.

## 1.6 PROCEDURES

- A. Coordination: Revise or adjust affected work as necessary to integrate work of the approved substitutions.

## PART 2 - PRODUCTS

### 2.1 SUBSTITUTIONS

- A. Substitutions for Cause: Submit requests for substitution immediately on discovery of need for change, but not later than fifteen (15) days prior to time required for preparation and review of related submittals.
  - 1. Conditions: Architect will consider Contractor's request for substitution when the following conditions are satisfied. If the following conditions are not satisfied, Architect will return requests without action, except to record noncompliance with these requirements:
    - a. Requested substitution is consistent with the Contract Documents and will produce indicated results.
    - b. Substitution request is fully-documented and properly-submitted.
    - c. Requested substitution will not adversely affect Contractor's construction schedule.
    - d. Requested substitution has received necessary approvals of authorities having jurisdiction.
    - e. Requested substitution is compatible with other portions of the Work.
    - f. Requested substitution has been coordinated with other portions of the Work.
    - g. Requested substitution provides specified warranty.
    - h. If requested substitution involves more than one contractor, requested substitution has been coordinated with other portions of the Work, is uniform and consistent, is compatible with other products, and is acceptable to all contractors involved.
- B. Substitutions for Convenience: Not permitted.

PART 3 - EXECUTION (Not Used)

END OF SECTION 012500



## SECTION 012600 - CONTRACT MODIFICATION PROCEDURES

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. This Section specifies administrative and procedural requirements for handling and processing Contract modifications.
  - 1. Provisions of this Section apply to each Prime Contract.

#### 1.3 MINOR CHANGES IN THE WORK

- A. Architect will issue supplemental instructions authorizing Minor Changes in the Work, not involving adjustment to the Contract Sum or the Contract Time, on AIA Document G710, "Architect's Supplemental Instructions" or CSArch Standard Change in Condition (CIC) form.

#### 1.4 PROPOSAL REQUESTS

- A. Owner-Initiated Proposal Requests: Architect will issue a detailed description of proposed changes in the Work that may require adjustment to the Contract Sum or the Contract Time. If necessary, the description will include supplemental or revised Drawings and Specifications.
  - 1. Proposal Requests issued by Architect are for information only. Do not consider them instructions either to stop work in progress or to execute the proposed change.
  - 2. Within ten (10) days after receipt of Proposal Request, submit a quotation estimating cost adjustments to the Contract Sum and the Contract Time necessary to execute the change.
    - a. Include a list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits to be made. If requested, furnish survey data to substantiate quantities.
    - b. Include subcontractor proposals that include a complete itemization of the costs associated with performing its work including labor, materials, and any rental cost with agreements.

- c. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
  - d. Include costs of labor and supervision directly attributable to the change.
  - e. Include an updated Contractor's Construction Schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and finish times, and activity relationship. Use available total float before requesting an extension of the Contract Time.
- B. Contractor-Initiated Proposals: If latent or unforeseen conditions require modifications to the Contract, Contractor may propose changes by submitting a request for a change to Architect.
  - 1. Include a statement outlining reasons for the change and the effect of the change on the Work. Provide a complete description of the proposed change. Indicate the effect of the proposed change on the Contract Sum and the Contract Time.
  - 2. Include a list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits to be made. If requested, furnish survey data to substantiate quantities.
  - 3. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
  - 4. Include costs of labor and supervision directly attributable to the change.
  - 5. Include an updated Contractor's Construction Schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and finish times, and activity relationship. Use available total float before requesting an extension of the Contract Time.
  - 6. Comply with requirements in Division 01 Section "Product Requirements" if the proposed change requires substitution of one product or system for product or system specified.
- C. Proposal Request Form: Use AIA Document G709 for Proposal Requests or CSArch standard "Change in Condition" (CIC) form clearly identifying the change in condition.

## 1.5 ALLOWANCES

- A. Allowance Adjustment: To adjust allowance amounts, base each proposal on the difference between purchase amount and the allowance, multiplied by final measurement of work-in-place. If applicable, include reasonable allowances for cutting losses, tolerances, mixing wastes, normal product imperfections, and similar margins.
  - 1. Include installation costs in purchase amount only where indicated as part of the allowance.
  - 2. If requested, prepare explanation and documentation to substantiate distribution of overhead costs and other margins claimed.

3. Owner reserves the right to establish the quantity of work-in-place by independent quantity survey, measure, or count.
- B. Submit claims for increased costs because of a change in scope or nature of the allowance described in the Contract Documents, whether for the Purchase Order amount or Contractor's handling, labor, and installation. Submit claims within ten (10) days of receipt of the G170 or Change in Condition (CIC) or Construction Change Directive authorizing work to proceed. Owner will reject claims submitted later than thirty (30) days after such authorization.
  1. Do not include Contractor's or subcontractor's indirect expense in the Proposal cost amount unless it is clearly shown that the nature or extent of work has changed from what could have been foreseen from information in the Contract Documents.
  2. No change to Contractor's indirect expense is permitted for selection of higher or lower priced materials or systems of the same scope and nature as originally indicated.

#### 1.6 CHANGE ORDER PROCEDURES

- A. On Owner's approval of a Proposal Request or Change in Condition, Architect will issue a Change Order for signatures of Owner and Contractor on AIA Document G731 or Expedition form "Change Order." Reference Article 7 of the General Conditions of the Contract for Construction for Change Order requirements.

#### 1.7 CONSTRUCTION CHANGE DIRECTIVE

- A. Construction Change Directive: Architect or Construction Site Coordinator may issue a Construction Change Directive on CSArch standard Change in Condition (CIC) form. Construction Change Directive instructs Contractor to proceed with a change in the Work, for subsequent inclusion in a Change Order.
  1. Construction Change Directive contains a complete description of change in the Work. It also designates method to be followed to determine change in the Contract Sum or the Contract Time.
- B. Documentation: Maintain detailed records on a time and material basis of work required by the Construction Change Directive.
  1. After completion of change, submit an itemized account and supporting data necessary to substantiate cost and time adjustments to the Contract.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 012600

## SECTION 012900 – PAYMENT PROCEDURES

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General Conditions and other Division 01 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. This Section specifies administrative and procedural requirements necessary to prepare and process Applications for Payment.
- B. Related Sections include the following:
  - 1. Division 01 Section "Allowances" for procedural requirements governing handling and processing of allowances.
  - 2. Division 01 Section "Contract Modification Procedures" for administrative procedures for handling changes to the Contract.
  - 3. Division 01 Section "Unit Prices" for administrative requirements governing use of unit prices.
  - 4. Division 01 Section "Construction Progress Documentation" for administrative requirements governing preparation and submittal of Contractor's Construction Schedule and Submittals Schedule.
  - 5. Division 01 Section "Schedule of Values."

#### 1.3 DEFINITIONS

- A. Delete this Article if AIA Document A201 or EJCDC Document 1910-8 is used for Project. Retain only if the Schedule of Values is not mentioned in the Conditions of the Contract.
- B. Schedule of Values: A statement furnished by Contractor allocating portions of the Contract Sum to various portions of the Work and used as the basis for reviewing Contractor's Applications for Payment.

#### 1.4 SCHEDULE OF VALUES

- A. Use the approved Schedule of Values form for each Application for Payment.

## 1.5 APPLICATIONS FOR PAYMENT

- A. Submit Applications for Payment only after Schedule of Values have been approved.
- B. Payment numbering:
  - 1. AIA Requisition numbering system shall be as follows:  
Example: AIA Req # 01- School Name.
- C. Initial Application for Payment: Administrative actions and submittals that must precede or coincide with submittal of first Application for Payment include the following:
  - 1. List of subcontractors.
  - 2. Schedule of Values.
  - 3. Contractor's 60-Day Construction Schedule.
  - 4. Products list.
  - 5. Schedule of unit prices. Submittals Schedule (preliminary if not final), or data input into web-based submittal software.
  - 6. List of Contractor's staff assignments and contact information.
  - 7. List of Contractor's principal consultants.
  - 8. Copies of authorizations and licenses from authorities having jurisdiction for performance of the Work.
  - 9. Initial progress report.
  - 10. Report of preconstruction conference.
  - 11. Certificates of insurance and insurance policies.
  - 12. Performance and payment bonds.
  - 13. Initial settlement survey and damage report if required.
- D. Unless otherwise directed or authorized, in writing, by the Owner, all Applications for Payment shall be in electronic format and shall be submitted to Owner using the AIA online software system. The Contractor shall be responsible for the fees and costs associated with its use of the AIA online software system. Proof of AIA Requisition online software licensure is to be issued to the Architect and Construction Manager along with the Contractor's Schedule of Values submittal. The Owner will not process Applications for Payment that are not submitted using the AIA online software.
- E. Each Application for Payment shall be consistent with previous applications and payments as certified by Architect as to the actual value of the Work, which will be completed by the end of the month and paid for by Owner.
  - 1. Initial Application for Payment, Application for Payment at time of Substantial Completion, and final Application for Payment involve additional requirements.
- F. Payment Application Times: The date for each progress payment is the 30<sup>th</sup> day of each month.

1. This date is a basis of cycle time, and shall be confirmed at the Pre-Construction Conference, based on the owner's requirements for processing Applications for Payment. The owner reserves the right to adjust this cycle, if necessary, with payments executed "net 30 days."
- G. Draft copies (pencil copies) shall be electronically submitted to the Construction Manager and Architect, on the 25<sup>th</sup> of each month or the prior business day if this falls on the weekend for the duration of the Project. Payment Applications must be produced on AIA Requisition utilizing the online software - any others will be rejected. This day shall be established at the Pre-Construction Conference, based on the Owner's requirements for processing Applications for Payment. This day may be modified from time to time to accommodate the Owner's schedule. The Architect and the CM will have five (5) business days to review initial pencil requisition submission.
1. Reflect an accurate accounting of the Work completed and material stored at the time of the pencil copy submission. Projections of work anticipated to be completed or stored is not allowed.
  2. Final copies, including review adjustments, shall be submitted to Architect by the 10<sup>th</sup> day of the following month.
    - a. Provided that a fully executed and complete Application for Payment is submitted on the 10<sup>th</sup> day of each month, the Owner will receive requisitions within ten (10) business days of receipt of the final requisition submission. Payment by the owner will be made "net 30 days" from receiving the payment application, after review and approval by the District Representatives.
- H. Payment Application Forms: Use approved Schedule of Values form for Application for Payment.
1. Provide itemized data on the Continuation Sheet. Format, schedules, line items, and values shall be those of the approved Schedule of Values.
- I. Application Preparation: Complete every entry on form. Notarize and execute by a person authorized to sign legal documents on behalf of Contractor. Architect will return incomplete applications without action.
1. Entries shall match data of the approved Schedule of Values.
  2. Provide updated Prime Contractor Construction Schedule with each application, or as otherwise required per the Construction Documents.
  3. Include only amounts of fully executed Change Orders approved at City School District of New Rochelle (CSDNR) Board of Education monthly resolution meeting, issued before last day of construction period covered by application.J.  
Transmittal: Submit four (4) signed and notarized original copies of each Application for Payment to Architect by a method ensuring receipt within 24 hours

with trackable receipt. One (1) copy shall include waivers of lien and similar attachments as required.

1. Transmit Application for Payment with a transmittal form, listing attachments and recording appropriate information related to the application in acceptable manner discussed with Architect.
- K. Certified Payrolls: With each Application for Payment, submit certified payrolls, from the Prime Contractor's own forces and subcontractors for the construction period covered by the previous application.
- L. All substantiating data and attachments required by the Contract Documents shall accompany each Application for Payment upon submission in the form required by the Architect
- M. Waivers of Mechanic's Lien: With each Application for Payment, submit waivers of mechanic's lien from every entity who is lawfully entitled to file a mechanic's lien arising out of the Contract and related to the Work covered by the payment.
  1. Submit partial waivers on each item for amount requested in previous application, after deduction for retainage, on each item.
  2. When an application shows completion of an item, submit final or full waivers.
  3. Owner via the Architect reserves the right to designate which entities involved in the Work must submit waivers.
  4. Waiver Forms: Submit waivers of lien on forms, executed in a manner acceptable to Owner.
  5. An Affidavit of Payments to Subcontractors and major Suppliers on a form approved by Architect.
    - a. Forms are for previous month's application and are to be submitted with every application through and including the latest pay period prior to the date of submittal of the application.
  6. When Architect requires additional substantiating data, Prime Contractor shall promptly submit suitable information with a cover letter.
- N. Monthly Application for Payment: Administrative actions and submittals for each monthly application for payment include the following:
  1. Change Orders: Contractor may only include Change Orders in a monthly application for payment if such Change Orders are already approved by CSDNR Board of Education. On a monthly basis the contractor is to review the CSDNR Board of Education Monthly Meeting Minutes on <https://www.boarddocs.com/ny/nred/Board.nsf/Public#> for approved Change Orders and must provide a copy of the specific minutes which approved a Change Order included in its application for payment, along with a completed change order form, the template of which will be provided by the Construction Manager.



2. All checks are to be received by CM located at New Rochelle High School construction trailer. At no time shall the Prime Contractor request a check to be mailed to them.
- O. Application for Payment at Substantial Completion: After issuing the Certificate of Substantial Completion, submit an Application for Payment showing one-hundred percent (100%) completion for portion of the Work claimed as substantially complete.
1. Include documentation supporting claim that the Work is substantially complete and a statement showing an accounting of changes to the Contract Sum.
  2. This application shall reflect Certificates of Partial Substantial Completion issued previously for Owner occupancy of designated portions of the Work.
  3. Contractor to provide a list of all incomplete work for final completion.
- P. Final Payment Application: Submit final Application for Payment with executed releases and supporting documentation not previously submitted and accepted, including, but not limited, to the following:
1. Evidence of completion of Project closeout requirements.
  2. Insurance certificates for products and completed operations where required and proof that taxes, fees, and similar obligations were paid.
  3. Updated final statement, accounting for final changes to the Contract Sum.
  4. AIA Document G706, "Contractor's Affidavit of Payment of Debts and Claims."
  5. AIA Document G706A, "Contractor's Affidavit of Release of Liens."
  6. AIA Document G707, "Consent of Surety to Final Payment."
  7. Evidence that claims have been settled.
- Q. Full and Final Payment will not be made until the following have been supplied, approved, and accepted by the Owner and Architect.
1. The required number of copies of all written guarantees, warranties, bonds, operating and maintenance manuals, and test results.
  2. Documentation that all verbal and written instructions and training sessions required by the Contract have been completed.
  3. The required number of copies of all Project Record Documents ("as-built" drawings) have been administered and/or received.
  4. All materials and equipment required as stock is delivered.
  5. Any other requirement of the Contract Documents which remains outstanding.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 012900

## SECTION 012973 – SCHEDULE OF VALUES

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for the Schedule of Values.
- B. Provide summary for all scheduled values as approved by the Architect.

#### 1.3 DEFINITIONS

- A. Schedule of Values: A statement furnished by Contractor allocating portions of the Contract Sum to various portions of the Work and used as the basis for reviewing Contractor's Applications for Payment.

#### 1.4 FORMS

- A. Use the following form:
  - 1. Schedule of Values: Provide an AIA Document G703 – Continuation Sheet, 1992 edition.

### PART 2 - PRODUCTS (Not Used)

### PART 3 - EXECUTION

#### 3.1 SCHEDULE OF VALUES

- A. Coordination: Each Prime Contract shall coordinate preparation of its Schedule of Values for its portion of the Construction Schedule and the Work.
  - 1. Correlate line items in the Schedule of Value with other required administrative forms and schedules, including the following:
    - a. Application for Payment forms with Continuation Sheets.

- b. Submittals Schedule.
  - c. Material/Equipment status report.
  - d. Contractor's Construction Schedule.
- B. Format and Content: The bid form shall be used as a guide to establish line items for the Schedule of Values and broken down further into labor and material per specification section.
- C. Schedule of values format is as follows: All bid line items are to be broken down in material and labor per the "bid form" CSI sections.
  - 1. Example: 220440-Plumbing fixtures (this heading is to remain on the AIA requisition which is the bid value on this line item)
    - a) Labor \$ 25,000
    - b) Material \$ 25,000
    - c) Any subcontractor work shall be broken down in the same format.
  - 2. Include and complete all header information on the Schedule of Values forms.
  - 3. Provide a breakdown of the Contract Sum in enough detail and as follows to facilitate continued evaluation of Applications for Payment and progress reports. Provide several line items for principal subcontract amounts, where appropriate and as indicated.
  - 4. Provide breakdowns for each phase of construction, addition, and building.
  - 5. Provide itemized Schedule of Value line items for Renovation work and New Construction. Assign these scope items to the specific SED project number(s). The cost for Items 1 thru 14 below, unless otherwise noted on the bid form, shall be included in the General Conditions line item in the bid form. This line item will be further broken down to these categories when SOV are developed.
    - a. Schedule a separate line item in the Schedule of Values for each part of the work related to General Requirements as follows:
      - 1) Performance and Payment Bonds.
      - 2) Project Insurance.
      - 3) Mobilization & Demobilization.
      - 4) Field supervision and layout.
      - 5) Temporary facilities.
      - 6) Submittals: Schedule 2% of total Contract amount for line item.
      - 7) Meeting Attendance: Schedule 1% of total Contract amount for line item.
      - 8) Project Closeout: 1% of total contract amount for line item.
      - 9) Record Drawings and Construction Progress Documentation.
      - 10) Punch list: Schedule 1.5% of total Contract amount for line item
      - 11) Clean-up: Schedule 1% of total Contract amount for line item.
      - 12) Testing or Balancing (if applicable).
      - 13) System Commissioning (if applicable).
      - 14) Allowances: Provide a separate line item for each Allowance (if applicable).

- 15) Alternates: Provide a separate line item for each Alternate (if applicable).
- 16) Unit Prices: Itemize each unit price for the Prime Contract (if applicable).
- 17) Change Orders: On separate G703 sheet, add each Change Order for the Prime Contract, as cumulatively issued/approved through duration of project.
  - b. Itemize separate line item cost for work required by each basic activity or operation by specification Section numbers.
    - 1) Take each line item cost and breakout into separate labor and material for work required by each basic activity or operation by specification Section numbers.
6. Round amounts to nearest whole dollar; total shall equal the Contract Sum.
  - a. Show total costs including overhead and profit.
  - b. Percentage of total Contract Sum adjusted to equal 100 percent.
7. Provide a separate line item in the Schedule of Values for each part of the Work where Applications for Payment may include progress payments for materials or equipment purchased or fabricated and stored, but not yet installed.
  - a. Differentiate between items stored on-site and items stored off-site. Include evidence of insurance or bonded warehousing.
8. Provide separate line items in the Schedule of Values for initial cost of materials, for each subsequent stage of completion, and for total installed value of that part of the Work.
9. Provide additional separate line items for Specification Sections that have construction that can be identified as a separate system, like structural steel, that will have separate lines items for;
  - a. Anchor Bolts.
  - b. Columns & Beams.
10. After review by the Architect, revise and resubmit Schedule of Values if required by the Architect as many times as required until approval by the Architect is received.

D. Schedule of Value Times:

1. Within ten (10) days of Notice to Proceed, submit to the Architect, a fully outlined draft Schedule of Values on AIA Documents G732 and G703.
2. Based on the Architect's approval, revise and resubmit the final approved Schedule of Values on AIA Documents G732 and G703 at least ten (10) days prior to the first application for payment.
3. First Application for Payment will not be approved until the Architect approves Schedule of Value format.
4. Update and resubmit the Schedule of Values before the next Applications for Payment when Change Orders or Construction Change Directives result in a change in the Contract Sum.

END OF SECTION 012973

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## SECTION 013100 - PROJECT MANAGEMENT AND COORDINATION

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. This Section includes administrative provisions for coordinating construction operations on Project including, but not limited to, the following:
  - 1. Coordination Drawings.
  - 2. Administrative and supervisory personnel.
  - 3. Project meetings.
  - 4. Requests for Interpretation (RFIs.)
  - 5. Special Reports.
  - 6. General Coordination Provision.
- B. Each Prime Contractor shall participate in coordination requirements. Certain areas of responsibility will be assigned to a specific Prime Contractor.

#### 1.3 DEFINITIONS

- A. RFI: Request from Prime Contractor seeking interpretation or clarification of the Contract Documents.
- B. Coordination Drawings show the relationship and integration of different construction elements that require careful coordination during fabrication or installation to fit in the space provided or to function as intended.
  - 1. Coordination Drawings may include components previously shown in detail on Shop Drawings or Product Data.

#### 1.4 COORDINATION

- A. Coordination: Each Prime Contractor shall coordinate its construction operations with those of other Prime Contractors and entities to ensure efficient and orderly installation of each part of the Work. Each Prime Contractor shall coordinate its operations with operations, included in different Sections that depend on each other for proper installation, connection, and operation.

1. Project meeting attendance shall facilitate open communications.
  2. Schedule construction operations in sequence required to obtain the best results where installation of one part of the Work depends on installation of other components, before or after its own installation.
  3. Coordinate installation of different components with other Prime Contractors to ensure maximum accessibility for required maintenance, service, and repair.
  4. Make adequate provisions to accommodate items scheduled for later installation.
  5. Where availability of space is limited, each Prime Contractor shall coordinate installation of different components to ensure maximum performance and accessibility for required maintenance, service, and repair of all components, including mechanical and electrical.
- B. Prepare memoranda for distribution to each party involved, outlining special procedures required for coordination. Include such items as required notices, reports, and list of attendees at meetings.
1. Prepare similar memoranda for Owner and separate Prime Contractors if coordination of their Work is required.
- C. Administrative Procedures: Each Prime Contractor shall coordinate scheduling and timing of required administrative procedures with other construction activities and activities of other Prime contractors to avoid conflicts and to ensure orderly progress of the Work. Such administrative activities include, but are not limited to, the following:
1. Preparation of Prime Contractor's Construction Schedule.
  2. Preparation of the Schedule of Values.
  3. Installation and removal of temporary facilities and controls.
  4. Submittal List and Submittal Schedule based on construction schedule.
  5. Delivery and processing of submittals.
  6. Progress meetings.
  7. Pre-installation conferences.
  8. Project closeout activities.
  9. Startup and adjustment of systems.
  10. Processing of coordination drawings.
  11. Daily cleaning and protection.
- D. Conservation: Each Prime Contractor shall coordinate construction activities to ensure that operations are carried out with consideration given to conservation of energy, water, and materials. Provide for material and waste recycling methods.
1. Salvage materials and equipment involved in performance of, but not actually incorporated into, the Work. Refer to other Sections for disposition of salvaged materials that are designated as Owner's property.



## 1.5 SPECIAL REPORTS

- A. General: Submit special reports to Owner within one day of an occurrence. Submit a copy of report to Architect and other entities affected by the occurrence.
- B. Reporting Unusual Events: When an event of an unusual or significant nature occurs at Site, Prime Contractor shall prepare and submit a special report. The report shall list data, observations of chain of events, persons affected, and participating response by Prime Contractor's personnel and similar pertinent information.
  - 1. Advise the Owner in advance when such events are known or predictable.

## 1.6 SUBMITTALS

- A. Coordination Drawings: Prepare Coordination Drawings if limited space availability necessitates maximum utilization of space for efficient installation of different components or if coordination is required for installation of products and materials fabricated by separate entities.
  - 1. Content: Project-specific information, drawn accurately to scale. Do not base Coordination Drawings on reproductions of the Contract Documents or standard printed data. Include the following information, as applicable:
    - a. Indicate functional and spatial relationships of components of architectural, structural, civil, mechanical, and electrical systems.
    - b. Indicate required installation sequences.
    - c. Indicate dimensions shown on the Contract Drawings and make specific note of dimensions that appear to be in conflict with submitted equipment and minimum clearance requirements. Provide alternate sketches to Architect for resolution of such conflicts. Minor dimension changes and difficult installations will not be considered changes to the Contract.
  - 2. Sheet Size: Coordination Drawings shall be generated on sheets 30 by 42 inches.
  - 3. Number of Copies: Submit two opaque copies of each submittal. Architect will return one copy.
    - a. Submit five copies where Coordination Drawings are required for operation and maintenance manuals. Architect will retain two copies; remainder will be returned. Mark up and retain one returned copy as a Project Record Drawing.
  - 4. Refer to individual Sections for Coordination Drawing requirements for Work in those Sections.
    - a. All Prime Contracts shall install Work in accordance with approved Coordination Drawings at no additional cost to the Owner. No additional compensation will be made for extra offsets and conduit or retrofit work due to improper component location, or lack of Prime Contractor(s)' coordination.

- B. Key Personnel Names: Within 15 days of starting construction operations, submit a list of key personnel assignments, including superintendent and other personnel in attendance at Project site. Identify individuals and their duties and responsibilities; list addresses and telephone numbers, including home and office telephone numbers. Provide names, addresses, and telephone numbers of individuals assigned as standbys in the absence of individuals assigned to Project.
  - 1. Post copies of list in Project meeting room, in temporary field office, and by each temporary telephone. Keep list current at all times.
  - 2. Submit list to Construction Site Coordinator.

#### 1.7 ADMINISTRATIVE AND SUPERVISORY PERSONNEL

- A. General: In addition to Project superintendent, provide other administrative and supervisory personnel as required for proper performance of the Work.
  - 1. Include special personnel required for coordination of operations with other Prime Contractors.
- B. Supervision: Each Prime Contractor's project manager and field superintendent throughout project duration shall have five years' experience minimum in the proposed position.
  - 1. Two (2) years minimum of the five years' experience for position shall be with Prime Contractor's firm.
  - 2. Asbestos Abatement: Additionally, field superintendent shall meet requirements of OSHA 1926.1101 "Competent Person," have one year of on-the-job training minimum, and hold certification as an Asbestos Project Supervisor.
- C. Should the project managers or superintendents prove unqualified for the position at any point in the project, the Architect and or CM shall issue a letter stating that the person is to be removed from involvement in the project.
  - 1. Action must be made by Prime Contractor within seven working days of receipt of such letter.
- D. Staff Names: At Preconstruction Conference each Prime Contractor shall submit a list of principal staff assignments, including superintendent and other personnel in attendance at Project site. Identify individuals and their duties and responsibilities. List businesses addresses and telephone numbers, including business office, field office, cellular, and facsimile.

1. Post copies in Project meeting room, each temporary field office and at each temporary telephone.
- E. Provide corresponding photo identification badge with employee number and company name for each staff listed.

## 1.8 PROJECT MEETINGS

- A. General: Architect shall schedule and conduct meetings and conferences at Project site, unless otherwise indicated.
  1. Attendees: Inform participants and others involved, and individuals whose presence is required, of date and time of each meeting. Notify Owner and Architect of scheduled meeting dates and times.
  2. Agenda: Prepare the meeting agenda. Distribute the agenda to all invited attendees.
  3. Minutes: Record significant discussions and agreements achieved. Distribute the meeting minutes to everyone concerned, including Owner and Architect, within three days of the meeting.
- B. Preconstruction Conference: Schedule a preconstruction conference before starting construction, at a time convenient to Owner and Architect, but no later than 15 days after execution of the Agreement. Hold the conference at Project site or another convenient location. Architect will conduct the meeting to review responsibilities and personnel assignments.
  1. Attendees: Authorized representatives of Owner, Architect, and their consultants; each Prime Contractor and its superintendent; major subcontractors; manufacturer's suppliers; and other concerned parties shall attend the conference. All participants at the conference shall be familiar with Project and authorized to conclude matters relating to the Work.
  2. Agenda: Discuss items of significance that could affect progress, including the following:
    - a. Introduction and sign in of attendees.
    - b. Each Prime Contractor shall submit the:
      - 1) Tentative construction schedule.
      - 2) Staff names.
      - 3) Preliminary submittal schedule.
      - 4) Labor rate sheets; provide for each trade classification of Prime Contract workforce on form per Division 00 Section, "Project Forms."
    - c. Critical work sequencing and long-lead items.
    - d. Designation of key personnel and their duties.
    - e. Procedures for processing field decisions and Change Orders.

- f. Procedures for RFIs.
    - g. Procedures for testing and inspecting.
    - h. Procedures for processing Applications for Payment.
    - i. Distribution of the Contract Documents.
    - j. Submittal procedures.
    - k. Architect and CM to provide overview of projected construction milestone schedule, phasing requirements and schedules.
    - l. Labor Wage Rates
    - m. Preparation of Record Documents.
    - n. Use of the premises and existing building.
    - o. Work restrictions.
    - p. Identification badges.
    - q. Daily Cleaning Procedures.
    - r. Owner's occupancy requirements.
    - s. Responsibility for temporary facilities and controls.
    - t. Construction waste management and recycling.
    - u. Parking availability.
    - v. Field office, work, and storage areas.
    - w. Equipment deliveries and priorities.
    - x. First aid.
    - y. Security.
    - z. Progress cleaning.
    - aa. Working hours.
    - bb. Telephone use.
  - 3. Minutes: Architect and CM will record and distribute meeting minutes.
- C. Pre-installation Conferences: Conduct a pre-installation conference at Project site before each construction activity that requires coordination with other construction.
- 1. Attendees: Prime Contractor, Installer and representatives of manufacturers and fabricators involved in or affected by the installation and its coordination or integration with other materials and installations that have preceded or will follow, shall attend the meeting. Advise Architect of scheduled meeting dates.
  - 2. Agenda: Review progress of other construction activities and preparations for the particular activity under consideration, including requirements for the following:
    - a. The Contract Documents.
    - b. Options.
    - c. Related RFIs.
    - d. Related Change Orders.
    - e. Purchases.
    - f. Deliveries.
    - g. Submittals.
    - h. Review of mockups.

- i. Possible conflicts.
  - j. Compatibility problems.
  - k. Conformance with Architect's project schedule.
  - l. Weather limitations.
  - m. Manufacturer's written recommendations.
  - n. Warranty requirements and manufacturer's inspection notification.
  - o. Compatibility of materials.
  - p. Acceptability of substrates.
  - q. Temporary facilities and controls.
  - r. Space and access limitations.
  - s. Regulations of authorities having jurisdiction.
  - t. Testing and inspecting requirements.
  - u. Installation procedures.
  - v. Coordination with other work.
  - w. Required performance results.
  - x. Protection of adjacent work.
  - y. Protection of construction and personnel.
- 3. Architect to record significant conference discussions, agreements, and disagreements, including required corrective measures and actions.
  - 4. Reporting: Distribute minutes of the meeting to each party present and to parties who should have been present.
  - 5. Do not proceed with installation if the conference cannot be successfully concluded. Architect shall initiate whatever actions are necessary to resolve impediments to performance of the Work and reconvene the conference at earliest feasible date.
- D. Progress Meetings: Conduct progress meetings at biweekly intervals. Coordinate dates of meetings with preparation of payment requests. Meetings will be held weekly, or as determined by the Architect and CM if, construction sequencing is critical or if construction fall behind schedule. All prime contractors who are working on the project are required to attend, if in event they miss a meeting the responsible project manager and or field super is required to review the project meeting minutes they missed since it may have information they are required to respond to or act upon. Contractor to provide written response to all items within contractor purview within two days of meeting date. Failure to do so would result into back charges to that contractor resulting from another prime or owner who relied on said contractor's lack of coordination on items noted in the project meeting minutes.
- 1. Attendees: In addition to representatives of Owner and Architect, each Prime Contractor, subcontractor, supplier, and other entity concerned with current progress or involved in planning, coordination, or performance of future activities shall be represented at these meetings. All participants at the conference shall be familiar with Project and authorized to conclude matters relating to the Work.

2. Agenda: Review and correct or approve minutes of previous progress meeting. Review other items of significance that could affect progress. Include topics for discussion as appropriate to status of Project.
  - a. Prime Contractor's Construction Schedule: Each prime contractor shall issue a 2 week look ahead. Review progress since the last meeting. Determine whether each activity is on time, ahead of schedule, or behind schedule, in relation to Prime Contractor's Construction Schedule. Determine how construction behind schedule will be expedited; secure commitments from parties involved to do so. Discuss whether schedule revisions are required to ensure that current and subsequent activities will be completed within the Contract Time.
    - 1) Construction Schedule Updating: Prime Contractors to revise their master baseline construction schedule after each meeting when revisions have been recognized or made. Forward the updated construction schedule to Architect and CM within 2 working days of the progress meeting.
      - a) Conflicts: Each Prime Contractor is to review the approved schedules of other Prime Contractors and attempt to resolve together, any conflicts.
      - b) Delay of Work Claims: Document in updated construction schedules overdue milestone or event dates due to other Prime Contractors non-compliance with Architect's project schedule.
      - c) Reporting: Provide in writing any unresolved conflicts with other Prime Contractors that may affect or delay overall project goals within 24 hours of occurrence to Architect.
  - b. Review present and future needs of each entity present, including the following:
    - Architect
      - 1) Identify present problems and necessary resolutions.
      - 2) Status of submittals.
      - 3) Field observations.
      - 4) RFIs.
      - 5) Status of proposal requests.
      - 6) Pending changes.
      - 7) Status of Change Orders.
      - 8) Pending claims and disputes.
      - 9) Documentation of information for payment requests.
    - Prime Contractor
      - 1) Interface requirements and compatible product issues of products and construction methods within place products of other Prime Contractors.
      - 2) Sequence of operations.
      - 3) Status of submittals.

- 4) Off-site fabrication.
    - 5) Temporary facilities and controls.
    - 6) Hazards, risks, and safety reports.
    - 7) Status of correction of deficient items.
  3. Minutes: Architect and CM will Record the meeting minutes.
  4. Reporting: Distribute minutes of the meeting to each party present and to parties who should have been present.
    - a. Schedule Updating: Revise Contractor's Construction Schedule monthly where revisions to the schedule have been made or recognized. Issue revised schedule concurrently with the report of each meeting.
- E. Coordination Meetings: Conduct Project coordination meetings at weekly intervals. Project coordination meetings are in addition to specific meetings held for other purposes, such as progress meetings and preinstallation conferences.
  1. Attendees: In addition to representatives of Owner and Architect, each Prime Contractor, subcontractor, supplier, and other entity concerned with current progress or involved in planning, coordination, or performance of future activities shall be represented at these meetings. All participants at the conference shall be familiar with Project and authorized to conclude matters relating to the Work.
  2. Agenda: Review and correct or approve minutes of the previous coordination meeting. Review other items of significance that could affect progress. Include topics for discussion as appropriate to status of Project.
    - a. Combined Prime Contractor's Construction Schedule: Review progress since the last coordination meeting. Determine whether each contract is on time, ahead of schedule, or behind schedule, in relation to Combined Prime Contractor's Construction Schedule. Determine how construction behind schedule will be expedited; secure commitments from parties involved to do so. Discuss whether schedule revisions are required to ensure that current and subsequent activities will be completed within the Contract Time.
    - b. Schedule Updating: Revise Combined Prime Contractor's Construction Schedule after each coordination meeting where revisions to the schedule have been made or recognized. Issue revised schedule concurrently with report of each meeting.
    - c. Review present and future needs of each Prime Contractor present, including the following:
      - 1) Interface requirements.
      - 2) Sequence of operations.
      - 3) Status of submittals.
      - 4) Deliveries.
      - 5) Off-site fabrication.
      - 6) Access.
      - 7) Site utilization.

- 8) Temporary facilities and controls.
  - 9) Work hours.
  - 10) Hazards and risks.
  - 11) Progress cleaning.
  - 12) Quality and work standards.
  - 13) Change Orders.
3. Reporting: Record meeting results and distribute copies to everyone in attendance and to others affected by decisions or actions resulting from each meeting.

#### 1.9 REQUESTS FOR INTERPRETATION (RFIs)

- A. Procedure: Immediately on discovery of the need for interpretation of the Contract Documents, and if not possible to request interpretation at Project meeting, prepare and submit an RFI in the form specified.
  1. RFIs shall originate with the Prime Contractor. RFIs submitted by entities other than Prime Contractor will be returned with no response.
  2. Coordinate and submit RFIs in a prompt manner so as to avoid delays in Prime Contractor's work or work of subcontractors.
- B. Content of the RFI: Include a detailed, legible description of item needing interpretation and the following on this projects form:
  1. Project name.
  2. Date.
  3. Name of Prime Contractor.
  4. Name of Architect.
  5. RFI number, numbered sequentially.
  6. Specification Section number and title and related paragraphs, as appropriate.
  7. Drawing number and detail references, as appropriate.
  8. Field dimensions and conditions, as appropriate.
  9. Prime Contractor's suggested solution(s). If Prime Contractor's solution(s) impact the Contract Time or the Contract Sum, Prime Contractor shall state impact in the RFI.
  10. Prime Contractor's signature.
  11. Attachments: Include drawings, descriptions, measurements, photos, Product Data, Shop Drawings, and other information necessary to fully describe items needing interpretation.
    - a. Supplementary drawings prepared by Prime Contractor shall include dimensions, thicknesses, structural grid references, and details of affected materials, assemblies, and attachments.
- C. Hard-Copy RFIs: 000832-1.



1. Identify each page of attachments with the RFI number system below with sequential page numbering.

RFI numbering system shall be as follows:

Examples: Bid Package Abbreviation - School Abbreviation - RFI-Number - Short Description

SW - ALMS-RFI-001 – "Relocate EP - 1 panel per CCD # 101."

BE - ALMS - RFI-010 – "Remove brick per CCD # 220."

- D. Software-Generated RFIs: Provide software-generated form with the same content and layout as indicated above.
  1. Attachments shall be electronic files in Adobe Acrobat PDF format.
- E. Architect's Action: Architect will review each RFI, determine action required, and return it. Allow seven working days for Architect's response for each RFI. RFIs received after 1:00 p.m. will be considered as received the following working day.
  1. The following RFIs will be returned without action:
    - a. Requests for approval of submittals.
    - b. Requests for approval of substitutions.
    - c. Requests for coordination information already indicated in the Contract Documents.
    - d. Requests for adjustments in the Contract Time or the Contract Sum.
    - e. Requests for interpretation of Architect's actions on submittals.
    - f. Incomplete RFIs or RFIs with numerous errors.
  2. Architect's action may include a request for additional information, in which case Architect's time for response will start again.
  3. Architect's action on RFIs that may result in a change to the Contract Time or the Contract Sum may be eligible for Prime Contractor to submit Change Proposal according to Division 01 Section "Contract Modification Procedures."
    - a. If Prime Contractor believes the RFI response warrants change in the Contract Time or the Contract Sum, notify Architect and Construction Site Coordinator in writing within 10 days of receipt of the RFI response.
- F. On receipt of Architect's action, update the RFI log and immediately distribute the RFI response to affected parties. Review response and notify Architect within seven days if Prime Contractor disagrees with response.

## PART 2 - PRODUCTS (Not Used)

## PART 3 - EXECUTION

### 3.1 GENERAL COORDINATION PROVISIONS

- A. Inspection of Conditions: Require Installer of each major component to inspect both substrate and conditions under which Work is to be performed. Correct unsatisfactory conditions prior to proceeding.
- B. Coordinate temporary enclosures with required inspection and tests to minimize the necessity of uncovering completed construction for that purpose.

### 3.2 EXAMINATION

- A. Existing Conditions: The existence and location of site improvements, utilities, and other construction indicated as existing are not guaranteed. Before beginning work, investigate and verify the existence and location of mechanical and electrical systems and other construction affecting the Work.
  - 1. Before construction, verify the location and points of connection of utility services.
  - 2. Before construction, verify the location and invert elevation at points of connection of sanitary sewer, storm sewer, and water-service piping; and underground electrical services.
  - 3. Furnish location data for work related to Project that must be performed by public utilities serving Project site.
- B. Acceptance of Conditions: Prime Contractor shall examine substrates, areas, and conditions, with Installer or Applicator present where indicated, for compliance with requirements for installation tolerances and other conditions affecting performance. Record observations and submit to Architect.
  - 1. Written Report: Where a written report listing conditions detrimental to performance of the Work is required by other Sections, include the following:
    - a. Date of examination.
    - b. Description of the Work.
    - c. List of detrimental conditions, including substrates.
    - d. List of unacceptable installation tolerances.
      - 1) Verify Specification Section for responsibility of corrective measures.
    - e. Recommended correction of those not part of Work as detailed in Specification Section.
  - 2. Verify compatibility with and suitability of substrates, including compatibility with existing finishes or primers.

3. Examine roughing-in for mechanical and electrical systems to verify actual location of connection before equipment and fixture installation.

### 3.3 PREPARATION

- A. Existing Utility Information: Furnish information to local utility that is necessary to adjust, move, or relocate existing utility structures, utility poles, lines, services, or other utility appurtenances located in or affected by construction. Coordinate with Architect and authorities having jurisdiction.
- B. Existing Utility Interruptions: Do not interrupt utilities serving facilities occupied by Owner or others unless permitted under the following conditions and then only after arranging to provide temporary utility services according to requirements indicated:
  1. Notify Architect and Owner in advance of proposed utility interruptions.
    - a. Submit shutdown request form to Construction Site Coordinator for written permission and authorization.
  2. Do not proceed with utility interruptions without written permission and authorization.
- C. Field Measurements: Take field measurements as required to fit the Work properly. Recheck measurements before installing each product. Where portions of the Work are indicated to fit to other construction, verify dimensions of other construction by field measurements before fabrication. Prime Contractor to verify fabrication schedule coincides with Architect's construction schedule to avoid delaying the Work.
- D. Space Requirements: Verify space requirements and dimensions of items shown diagrammatically on Drawings.
- E. Review of Contract Documents and Field Conditions: Immediately on discovery of the need for clarification of the Contract Documents, submit a request for information to Architect. Include a detailed description of problem encountered, together with recommendations for changing the Contract Documents.

### 3.4 CONSTRUCTION LAYOUT

- A. Verification: Before proceeding to layout the Work, verify layout information shown on Drawings, in relation to the property survey and existing benchmarks provided by Owner. If discrepancies are discovered, immediately notify Architect. Site Improvements: Locate and lay out site improvements, including pavements, grading, fill and topsoil placement, utility slopes, and invert elevations.
- B. Building Lines and Levels: Locate and lay out control lines and levels for structures, building foundations, column grids, and floor levels, including those required for

mechanical and electrical work. Transfer survey markings and elevations for use with control lines and levels. Level foundations and piers from two or more locations.

- C. Record Log: Maintain a log of layout control work. Record deviations from required lines and levels. Include beginning and ending dates and times of surveys, weather conditions, name and duty of each survey part member and types of instruments and tapes used. Make the log available for reference by Architect.

END OF SECTION 013100

## SECTION 013150 - SAFETY AND HEALTH

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

#### 1.2 PROJECT SITE SAFETY

- A. The Prime Contractor, not the Architect, is responsible for Project site safety.

#### 1.3 SAFETY AND HEALTH REGULATIONS

- A. The Prime Contractor, and any entity working for the Prime Contractor, shall comply with the U.S. Department of Labor Safety and Health Regulations for construction promulgated under the Occupational Safety and Health Act of 1970 (PL 91-54), latest revisions and with the latest requirements of the "Right to Know" laws and the New York State Labor Law.
- B. In order to protect the general public and the lives and health of his/her employees under the Contract, the Prime Contractor shall comply with all pertinent provisions of the latest issues of the Federal Register, Bureau of Labor Standards, Safety and Health Regulations; New York State Industrial Code Rule 30 pertaining to Tunneling Operations; New York State Industrial Code Rule 23 pertaining to Trenching Operations; and the "Manual of Accident Prevention in Construction" issued by the Associated General Contractors of America, Inc., and shall maintain an accurate record of all cases of death, occupational disease, and injury requiring medical attention or causing loss of time from work under this Contract. In case of a conflict between the above noted authorities the most stringent shall prevail.
- C. The Prime Contractor shall have on the project site at all times, while work is in progress, at least one person skilled in safety and health procedures and familiar with State and Federal safety and health regulations whose responsibility shall be to observe methods and procedures. He shall have the duty and authority to stop and correct all unsafe and unhealthy conditions.
- D. Toxic, noxious or otherwise hazardous fumes, gases or dusts, etc. from welding, cadwelding, painting, grinding, sawing, sweeping or any other operations shall be kept to the absolute minimum and shall be vented directly to the outside by the Contractor, and only used when authorized by the Architect.

- E. The Prime Contractor to submit to the Architect, prior to first payment application approval, 2 copies of Material Safety and Data Sheets (MSDS) for all material used on site. The Prime Contractor shall also keep one (1) complete set of Material Safety and Data Sheets (MSDS) onsite at all times.
  - 1. These reference materials shall be updated continuously throughout the Project, as additional materials are added to/brought to the Project site.

#### 1.4 SAFETY AND FIRST AID

- A. The Prime Contractor shall at all times exercise caution of his/her operations and shall be responsible for the safety and protection of all persons on or about the site arising out of or relating to his/her Work. All hazards shall be avoided or guarded in accordance with the provisions of the Manual of Accident Prevention in Construction of the AGCA, unless such provisions contravene local law. The safety provisions of all applicable laws, codes and ordinances shall be observed.
- B. The Prime Contractor shall provide and maintain at the Site, at each location where work is in progress, as part of his/her plant, an approved first aid kit. Ready access thereto shall be provided at all times when persons are employed on the work site.
- C. The Prime Contractor shall take due precautions against infectious diseases and shall arrange for the immediate isolation and removal from the Site of any employee who becomes ill or is injured while engaged on the work site.
- D. The Prime Contractor shall, upon request of the Architect, immediately correct all conditions that constitute a clear and present danger to persons as interpreted by the Architect. If such danger is not so corrected, the Owner or the Architect will employ other persons to do such work and the expense thereof shall be deducted from any monies due or to become due to the Prime Contractor.
- E. Clean up of the Prime Contractor's, and/or their subcontractor's, materials and/or debris shall be deemed a safety and health issue.

#### 1.5 ACCIDENTS AND ACCIDENT REPORTS

- A. Notify Architect immediately of any accidents involving Prime Contractor, subcontractor, or supplier personnel on site.
- B. Within 24 hours of the occurrence, the Prime Contractor shall submit a written accident report, to the Architect, fully detailing the occurrence.

#### 1.6 TOOL BOX SAFETY MEETINGS

- A. The Prime Contractor shall hold weekly toolbox safety meetings with his/her own workers. Records of these meetings shall be forwarded to the Owner, through the Construction Site Coordinator's office, each week.
  - 1. Failure to comply with this requirement shall result in Applications for Payment not being reviewed and processed.

#### 1.7 OTHER SAFETY REQUIREMENTS

- A. All prime contractors are required to perform the following safety measures on all project sites and construction zones/areas.
  - 1. Hard hats, safety goggles/glasses, and safety vests are mandatory and shall be worn at all times by all persons on the project.
  - 2. All construction workers shall wear photo ID at all times and be visible on the person, failure to do so will result to that employee being asked to leave until such ID has been worn visible.
  - 3. All visitors are required to check in with the CM for any reason and not allowed on site without proper PPE.
  - 4. Any workers not wearing PPE will be asked to stop working until PPE is appropriately-donned. All second offense of said worker, he /she will be removed from site and all district work. All contractors are required to keep the work areas clean and safe from all hazards at all times.
  - 5. Site contractor is to review provided phasing/logistics plan and assume at a minimum quantities of site fencing/protections indicated in those plans be provided in their contract.
  - 6. All fencing shall have construction sign at every fifty (50) feet stating "CONSTRUCTION AREA; NO UNAUTHORIZED PERSONAL; NO TRESPASSING. and continuous scrim.
  - 7. All site contractors are required to clean up outside of their chain link and gated fenced in work zone(s) where construction debris may have fallen on a non-work zone area. Sandbags are not considered anchoring.
  - 8. Where driven anchoring of fencing is not feasible due to protection of installed finishes and existing conditions, contractor shall provide YODOCK barriers around construction sites with integral fence panels above.
  - 9. Prime Contractor shall ensure that all chain link construction fence/barriers around the work zone is closed off to any adjacent structure, building, etc. ending the fence perimeter work zone at all times. These areas are to be checked three (3) times daily; once before the start of work, mid shift and before the contractor leaves at the end of shift.
  - 10. All site contractors are to have a 24-hour available emergency contact person available to fix and correct areas that have been compromised after hours,

weekends and holidays. Upon notification of such incident the contractor is required to deploy workers as necessary within 1-2 hours maximum to be on site to correct such matters reported.

11. All gas-powered equipment shall have the spark plugs removed at the end of each day so that these cannot be started in any way.
12. All LULLS, man lifts, and all equipment shall not have keys left inside and all booms shall be lowered when not in use.
13. All site contractors shall have a dedicated site safety experienced (Manager) person responsible for the site safety with a minimum of thirty (30) hours OSHA training certificate. This person shall be responsible to ensure that the perimeter work zones are free from any fallen construction and trip hazards at the minimum of the three (3) field surveys as stated in Item 9 above and as noted elsewhere in contract. Site walk logs are to be submitted daily to the CM including safety status and any items found and corrected.
14. All dumpsters are to be fully surrounded with chain link fence if stored outside other fenced/barricaded work areas.
15. All safety observation reports issued to contractors shall be corrected immediately. If the contractor fails to respond and/or correct the condition(s) included in the safety observation report, that contractor will be subject to termination and charged by the District with all costs related to correcting the reported condition(s) and any other items related thereto.
16. All contractors are to conform to 155.5 SED Code.
17. All contractors are to submit their "Toolbox Talks" weekly to the CM.
18. All contractors are to submit daily reports of their activities related to work performed, manpower, equipment onsite and all safety measures put in place that day and any maintenance/monitoring thereof.
19. All contractors are required to provide "egress plans" for both interior and exterior work for locations where work will close off any exits, corridors, pathways, roads, and any access way. These plans are to be provided in advance at least two (2) months before work commences in that area, no work shall be started in any manner without approval of such plan. The failure to provide such plan for coordinating and scheduling will result into back charges to the prime(s) involved. These plans must include all locations and details where scaffolding, fencing and all temporary construction barriers are required.
20. All contractors are to provide their corporate safety manuals to the CM prior to commencement of any work. Under no circumstances could any field work start without receipt of such manual. This shall be provided in a 3-ring binder in PDF format. Prime Contractors shall maintain a copy onsite.
21. All personnel who fail to wear the required PPE while onsite will be warned and directed to stop work until PPE is properly worn. In the event that an employee is warned a second time for failure to comply with PPE requirements, said employee will be removed from all New Rochelle School projects. If the company continues to fail with their employees not abiding by the safety contract requirements, that



contractor will be subject to termination for such endangerment of other workers and others.

22. All contractors are required to have a full-time flagman(men) as needed at all times escorting construction vehicles into entrances and out of exits to the property/work zone. Flagman are required to escort construction vehicles to and from work areas to property lines and public streets. At every gate, the Prime Contractor shall post signage indicating contractor name and contact information including 24-hour emergency telephone number.
23. All contractors storing any materials and equipment on site shall be surrounded with chain link fencing.

END OF SECTION 013150

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## SECTION 013200 - CONSTRUCTION PROGRESS DOCUMENTATION

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for documenting the progress of construction during performance of the Work, including the following:
  - 1. Preliminary Construction Schedule.
  - 2. Contractor's Construction Schedule.
  - 3. Submittal Schedule.
  - 4. Daily Construction Reports.
  - 5. Material/Equipment Status Reports.
  - 6. Field Condition Reports.
  - 7. Special Reports.

#### 1.3 DEFINITIONS

- A. Activity: A discrete part of a project that can be identified for planning, scheduling, monitoring, and controlling the construction project. Activities included in a construction schedule consume time and resources.
  - 1. Critical activities are activities on the critical path. They must start and finish on the planned early start and finish times.
  - 2. Predecessor Activity: An activity that precedes another activity in the network.
  - 3. Successor Activity: An activity that follows another activity in the network.
- B. Cost Loading: The allocation of the Schedule of Values for the completion of an activity as scheduled. The sum of costs for all activities must equal the total Contract Sum, unless otherwise approved by Architect.
- C. Critical Path: The longest connected chain of interdependent activities through the network schedule that establishes the minimum overall Project duration and contains no float.
- D. Event: The starting or ending point of an activity.

- E. Float: The measure of leeway in starting and completing an activity.
  - 1. Float time is not for the exclusive use or benefit of either Owner or Contractor, but is a jointly owned, expiring Project resource available to both parties as needed to meet schedule milestones and Contract completion date.
  - 2. Free float is the amount of time an activity can be delayed without adversely affecting the early start of the successor activity.
  - 3. Total float is the measure of leeway in starting or completing an activity without adversely affecting the planned Project completion date.
- F. Major Area: A story of construction, a separate building, or a similar significant construction element.
- G. Milestone: A key or critical point in time for reference or measurement.
- H. Network Diagram: A graphic diagram of a network schedule, showing activities and activity relationships.
- I. Resource Loading: The allocation of manpower and equipment necessary for the completion of an activity as scheduled.

#### 1.4 SUBMITTALS

- A. Qualification Data: For scheduling consultant.
- B. Submittals Schedule: Submit four (4) copies of schedule. Arrange the following information in a tabular format:
  - 1. Scheduled date for first submittal.
  - 2. Specification Section number and title.
  - 3. Submittal category (action or informational).
  - 4. Name of subcontractor.
  - 5. Description of the Work covered.
  - 6. Scheduled date for Architect's Construction Site Coordinator's final release or approval.
- C. Preliminary Construction Schedule: Submit three (3) opaque copies.
  - 1. Approval of cost-loaded preliminary construction schedule will not constitute approval of Schedule of Values for cost-loaded activities.
- D. Contractor's Construction Schedule: Submit three opaque copies of initial schedule, large enough to show entire schedule for entire construction period.

1. Submit an electronic copy of schedule, using software indicated, on CD-R, and labeled to comply with requirements for submittals. Include type of schedule (Initial or Updated) and date on label.
- E. Daily Construction Reports: Submit one (1) copy at no less than weekly intervals.
- F. Material/Equipment Status Reports: Submit two (2) copies at bi-weekly intervals.
- G. Field Condition Reports: Submit two (2) copies at time of discovery of differing conditions.
- H. Special Reports: Submit two (2) copies at time of unusual event.

#### 1.5 QUALITY ASSURANCE

- A. Pre-scheduling Conference: Conduct conference at Project site to comply with requirements in Division 01 Section "Project Management and Coordination." Review methods and procedures related to the Preliminary Construction Schedule and Contractor's Construction Schedule, including, but not limited to, the following:
  1. Review software limitations and content and format for reports.
  2. Verify availability of qualified personnel needed to develop and update schedule.
  3. Discuss constraints, including phasing work stages area separations interim milestones and partial Owner occupancy.
  4. Review delivery dates for Owner-furnished products.
  5. Review schedule for work of Owner's separate contracts.
  6. Review time required for review of submittals and re-submittals.
  7. Review requirements for tests and inspections by independent testing and inspecting agencies.
  8. Review time required for completion and startup procedures.
  9. Review and finalize list of construction activities to be included in schedule.
  10. Review submittal requirements and procedures.
  11. Review procedures for updating schedule.

#### 1.6 COORDINATION

- A. Coordinate preparation and processing of schedules and reports with performance of construction activities and with scheduling and reporting of separate contractors.
- B. Coordinate Contractor's Construction Schedule with the Schedule of Values, list of subcontracts, Submittals Schedule, progress reports, payment requests, and other required schedules and reports.

1. Secure time commitments for performing critical elements of the Work from parties involved.
2. Coordinate each construction activity in the network with other activities and schedule them in proper sequence.

## PART 2 - PRODUCTS

### 2.1 SUBMITTALS SCHEDULE

- A. Preparation: Submit a schedule of submittals, arranged in chronological order by dates required by construction schedule. Include time required for review, re-submittal, ordering, manufacturing, fabrication, and delivery when establishing dates.
  1. Coordinate Submittals Schedule with list of subcontracts, the Schedule of Values, and Contractor's Construction Schedule.
  2. Initial Submittal: Submit concurrently with preliminary bar-chart schedule. Include submittals required during the first sixty (60) days of construction. List those required to maintain orderly progress of the Work and those required early because of long lead time for manufacture or fabrication.
    - a. At Contractor's option, show submittals on the Preliminary Construction Schedule, instead of tabulating them separately.
  3. Final Submittal: Submit concurrently with the first complete submittal of Contractor's Construction Schedule.

### 2.2 CONTRACTOR'S CONSTRUCTION SCHEDULE, GENERAL

- A. Procedures: Comply with procedures contained in AGC's "Construction Planning & Scheduling."
- B. Time Frame: Extend schedule from date established for the Notice of Award to date of Final Completion.
  1. Contract completion date shall not be changed by submission of a schedule that shows an early completion date, unless specifically authorized by Change Order.
- C. Activities: Treat each story or separate area as a separate numbered activity for each principal element of the Work. Comply with the following:
  1. Activity Duration: Define activities so no activity is longer than thirty (30) days, unless specifically allowed by Architect.
  2. Procurement Activities: Include procurement process activities for the following long lead items and major items, requiring a cycle of more than sixty (60) days, as separate activities in schedule. Procurement cycle activities include, but are not limited to, submittals, approvals, purchasing, fabrication, and delivery.

3. Submittal Review Time: Include review and re-submittal times indicated in Division 01 Section "Submittal Procedures" in schedule. Coordinate submittal review times in Contractor's Construction Schedule with Submittals Schedule.
  4. Startup and Testing Time: Include not less than ten (10) days for startup and testing.
  5. Substantial Completion: Indicate completion in advance of date established for Substantial Completion and allow time for Architect's and Construction Site Coordinator's administrative procedures necessary for certification of Substantial Completion.
- D. Constraints: Include constraints and work restrictions indicated in the Contract Documents and as follows in schedule and show how the sequence of the Work is affected.
1. Phasing: Arrange list of activities on schedule by phase.
  2. Work under More Than One Contract: Include a separate activity for each contract.
  3. Work by Owner: Include a separate activity for each portion of the Work performed by Owner.
  4. Products Ordered in Advance: Include a separate activity for each product. Include delivery date indicated in Division 01 Section "Summary." Delivery dates indicated stipulate the earliest possible delivery date.
  5. Owner-Furnished Products: Include a separate activity for each product. Include delivery date indicated in Division 01 Section "Summary." Delivery dates indicated stipulate the earliest possible delivery date.
  6. Work Restrictions: Show the effect of the following items on the schedule:
    - a. Coordination with existing construction.
    - b. Limitations of continued occupancies.
    - c. Uninterruptible services.
    - d. Partial occupancy before Substantial Completion.
    - e. Use of premises restrictions.
    - f. Provisions for future construction.
    - g. Seasonal variations.
    - h. Environmental control.
  7. Work Stages: Indicate important stages of construction for each major portion of the Work, including, but not limited to, the following:
    - a. Subcontract awards.
    - b. Submittals.
    - c. Purchases.
    - d. Mockups.
    - e. Fabrication.
    - f. Sample testing.
    - g. Deliveries.
    - h. Installation.

- i. Tests and inspections.
  - j. Adjusting.
  - k. Curing.
  - l. Startup and placement into final use and operation.
8. Area Separations: Identify each major area of construction for each major portion of the Work. Indicate where each construction activity within a major area must be sequenced or integrated with other construction activities to provide for the following:
  - a. Structural completion.
  - b. Permanent space enclosure.
  - c. Completion of mechanical installation.
  - d. Completion of electrical installation.
  - e. Substantial Completion.
- E. Milestones: Include milestones indicated in the Contract Documents in schedule, including, but not limited to, the Notice to Proceed, Substantial Completion, and Final Completion.
- F. Cost Correlation: At the head of schedule, provide a cost correlation line, indicating planned and actual costs. On the line, show dollar volume of the Work performed as of dates used for preparation of payment requests.
  1. Refer to Division 01 Section "Payment Procedures" for cost reporting and payment procedures.
  2. Contractor shall assign cost to construction activities on the Construction Schedule. Costs shall not be assigned to submittal activities unless specified otherwise but may, with Architect's approval, be assigned to fabrication and delivery activities. Costs shall be under required principal subcontracts for testing and commissioning activities, operation and maintenance manuals, punch list activities, Project Record Documents, and demonstration and training (if applicable), in the amount of 5 percent (5%) of the Contract Sum.
  3. Each activity cost shall reflect an accurate value subject to approval by Architect.
  4. Total cost assigned to activities shall equal the total Contract Sum.
- G. Contract Modifications: For each proposed contract modification and concurrent with its submission, prepare a time-impact analysis using a network fragment to demonstrate the effect of the proposed change on the overall project schedule.
- H. Computer Software: Prepare schedules using a program that has been developed specifically to manage construction schedules.
  1. Microsoft Project, Version 2000 or newer for Windows 2000 or newer operating system.



## 2.3 PRELIMINARY CONSTRUCTION SCHEDULE

- A. Bar-Chart Schedule: Submit preliminary horizontal bar-chart-type construction schedule within seven days of date established for the Notice of Award. This will be reviewed by the Architect, Owner and CM. Once reviewed, prime contractor shall incorporate this into the "base line" construction schedule.
- B. All prime contractors are to provide within two (2) weeks of this reviewed schedule a "base line" construction schedule for their work from commencement to completion including all phasing. This schedule is to be updated monthly to show percentage progress of each item listed. This schedule shall be revised to provide a recovery schedule in the event delays occur for any reason. The recovery schedule shall include the "base line" item and the recovery to show how the delay is affecting the overall project schedule. This schedule is to be provided in MS project or Primavera. Excel schedules are not accepted.
- C. Prime contractor "base line" schedules are to be reviewed/shared with each prime contractor and coordinated where work is related and that each prime's work shall be included in each "base line" contractor's schedule or phase as necessary for coordination. Other prime contractors' work is to be noted on your schedule if considered critical or required for your work to be completed per the scheduled completion date.
- D. Preparation: Indicate each significant construction activity separately. Identify first workday of each week with a continuous vertical line. Outline significant construction activities for first ninety (90) days of construction. Include skeleton diagram for the remainder of the Work and a cash requirement prediction based on indicated activities.

## 2.4 CONTRACTOR'S CONSTRUCTION SCHEDULE (GANTT CHART)

- A. Gantt-Chart Schedule: Submit a comprehensive, fully developed, horizontal Gantt-chart-type, Contractor's "base line" Construction Schedule within thirty (30) days of date established for the Notice of Award. Base schedule on the Preliminary Construction Schedule and whatever updating and feedback was received since the start of Project.
- B. Base line schedules are to be updated per any changes or delays mentioned at project meetings and shall be submitted to the Architect, Owner and CM at the next scheduled meeting or within two (2) weeks of date of meeting or notice.
- C. Preparation: Indicate each significant construction activity separately. Identify first workday of each week with a continuous vertical line.
  - 1. For construction activities that require three (3) months or longer to complete, indicate an estimated completion percentage in 10 percent (10%) increments within time bar.

## 2.5 REPORTS

- A. Daily Construction Reports: Prepare a daily construction report recording the following information concerning events at Project site:
1. List of subcontractors at Project site.
  2. List of separate contractors at Project site.
  3. Approximate count of personnel at Project site.
  4. Equipment at Project site.
  5. Material deliveries.
  6. High and low temperatures and general weather conditions.
  7. Accidents.
  8. Meetings and significant decisions.
  9. Unusual events (refer to special reports).
  10. Stoppages, delays, shortages, and losses.
  11. Meter readings and similar recordings.
  12. Emergency procedures.
  13. Orders and requests of authorities having jurisdiction.
  14. Change Orders received and implemented.
  15. Construction Change Directives received and implemented.
  16. Services connected and disconnected.
  17. Equipment or system tests and startups.
  18. Partial Completions and occupancies.
  19. Substantial Completions authorized.
- B. Material Location Reports: At bi-weekly intervals, prepare and submit a comprehensive list of materials delivered to and stored at Project site. List shall be cumulative, showing materials previously reported plus items recently delivered. Include with list a statement of progress on and delivery dates for materials or items of equipment fabricated or stored away from Project site.
- C. Field Condition Reports: Immediately on discovery of a difference between field conditions and the Contract Documents, prepare and submit a detailed report. Submit with a request for interpretation on CSI Form 13.2A. Include a detailed description of the differing conditions, together with recommendations for changing the Contract Documents.

## 2.6 SPECIAL REPORTS

- A. General: Submit special reports directly to Owner within one day(s) of an occurrence. Distribute copies of report to parties affected by the occurrence.

- B. Reporting Unusual Events: When an event of an unusual and significant nature occurs at Project site, whether or not related directly to the Work, prepare and submit a special report. List chain of events, persons participating and response by Contractor's personnel, evaluation of results or effects, and similar pertinent information. Advise Owner in advance when these events are known or predictable.

## PART 3 - EXECUTION

### 3.1 CONTRACTOR'S CONSTRUCTION SCHEDULE

- A. Contractor's Construction Schedule Updating: At bi-weekly intervals, update schedule to reflect actual construction progress and activities. Issue schedule one week before each regularly scheduled progress meeting.
- B. All contractors are to provide 2-week look ahead schedules showing work related to the base line schedule and shall be coordinated with other prime's 2-week look ahead schedules. Schedules are to be reviewed at each project meeting. Contractors are required to provide copies to all attendees. These schedules will be in Excel format. Format will be provided by the CM.
  - 1. Revise 2-week schedule immediately after each meeting or other activity where revisions have been recognized or made. Issue updated schedule concurrently with the report of each such meeting.
  - 2. Include a report with updated schedule that indicates every change, including, but not limited to, changes in logic, durations, actual starts and finishes, and activity durations.
  - 3. As the Work progresses, indicate Actual Completion percentage for each activity.
- C. Distribution: Distribute copies of approved schedule to Architect, Construction Site Coordinator, Owner, separate contractors, testing and inspecting agencies, and other parties identified by Contractor with a need-to-know schedule responsibility.
  - 1. Post copies in Project meeting rooms and temporary field offices.
  - 2. When revisions are made, distribute updated schedules to the same parties and post in the same locations. Delete parties from distribution when they have completed their assigned portion of the Work and are no longer involved in performance of construction activities.

END OF SECTION 013200

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## SECTION 013300 – SUBMITTAL PROCEDURES

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General Conditions and other Division 01 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. Section includes requirements for the submittal schedule and administrative and procedural requirements for submitting Shop Drawings, Product Data, Samples, and other submittals.
  - 1. The submittal process will be administered through an online web service provided through Prolog. This service is provided at no charge to the contractor. Each contractor will require internet access. Web-based training will be provided by *Jacobs* at no cost.

#### 1.3 DEFINITIONS

- A. Action Submittals: Written and graphic information and physical samples that require Architect's responsive action. Action submittals are those submittals indicated in individual Specification Sections as "action submittals."
- B. Informational Submittals: Written and graphic information and physical samples that do not require Architect's responsive action. Submittals may be rejected for not complying with requirements. Informational submittals are those submittals indicated in individual Specification Sections as "informational submittals."
- C. File Transfer Protocol (FTP): Communications protocol that enables transfer of files to and from another computer over a network and that serves as the basis for standard Internet protocols. An FTP site is a portion of a network located outside of network firewalls within which internal and external users can access files.
- D. Portable Document Format (PDF): An open standard file format licensed by *Adobe Systems* used for representing documents in a device-independent and display resolution-independent fixed-layout document format.

## PART 2 - PRODUCTS

### 2.1 SUBMITTAL SCHEDULE

- A. List of submittals: Contractor to provide complete list of submittals required as per contract for Architect review within fourteen (14) days upon Bid Award. Approved submittal list will be provided on *Prolog* website for this Project.
- B. Submittal Schedule: Each Contractor shall input the date that each submittal will be received by the Architect on the Prolog website established for this Project. Include time required for review, ordering, manufacturing, fabrication, and delivery when establishing dates. Include additional time required for making corrections or revisions to submittals noted by Architect and additional time for handling and reviewing submittals required by those corrections.
  - 1. Coordinate submittal schedule with list of subcontracts, the schedule of values, and Contractor's construction schedule.
  - 2. Initial Submittal Schedule: Submit concurrently with startup construction schedule. Include submittals required during the first thirty (30) days of construction. List those submittals required to maintain orderly progress of the Work and those required early because of long lead time for manufacture or fabrication. Items submitted out of sequence with orderly progress of the work as documented in the Submittal Schedule and will be returned unreviewed.
  - 3. Final Submittal Schedule: Submit concurrently with the first complete submittal of Contractor's construction schedule.
    - a. Submit revised submittal schedule to reflect changes in current status and timing for submittals.
    - b. Final Submittal Schedule must be approved by the Architect before the second Application for Payment will be approved.
  - 4. Format: Arrange the following information in a tabular format:
    - a. Scheduled date for first submittal.
    - b. Specification Section number and title.
    - c. Submittal category: Action; informational.
    - d. Name of subcontractor.
    - e. Description of the Work covered.
    - f. Scheduled date for Architect's final release or approval.
    - g. Scheduled date of fabrication.
    - h. Scheduled dates for purchasing.
    - i. Scheduled dates for installation.
    - j. Activity or event number.
  - 5. The submittal schedule will be available to be viewed on the *Prolog* website by all Project team members.

6. The submittal schedule shall indicate that all action submittals are to be sent to the Architect within sixty (60) days after the execution of the Owner/Contractor Agreement.
  - a. If a submittal cannot be sent to the Architect within the specified time period, then the Contractor shall provide an explanation for the additional time.

## 2.2 SUBMITTAL ADMINISTRATIVE REQUIREMENTS

- A. Architect's Digital Data Files: Electronic digital data files of the Contract Drawings will not be provided by Architect for Contractor's use in preparing submittals.
- B. Electronic Submittal Requirement: All action and informational submittals shall be submitted as PDF formatted files through Prolog
  1. Use the submittal number assigned by the Architect or Construction Manager through Prolog.
  2. All submittals will be returned to the prime contractors electronically through Prolog. No printed copies will be provided by the Architect to the contractors.
  3. Internet Service and Equipment Requirements:
    - a. Email address and Internet access at Contractor's main office.
    - b. Adobe Acrobat ([www.adobe.com](http://www.adobe.com)), Bluebeam PDF Revu ([www.bluebeam.com](http://www.bluebeam.com)), or other similar PDF review software for applying electronic stamps and comments.
- C. Submittal package: Assemble each submittal and re-submittal individually and appropriately for transmittal and handling.
  1. Provide a completed "Submittal Cover" form with each submittal. This form may be found in Section 008300 – "Project Forms." The Submittal Cover shall be the first page of every submittal.
    - a. Every submittal shall be accompanied by a fully executed copy of the Submittal Cover sheet. Ensure the following information for each submittal is completed on each submittal form:
      - 1) Contract number.
      - 2) Contract for: i.e. General Construction Contract.
      - 3) Contractors' name.
      - 4) Sub-contractor and suppliers name.
      - 5) Submission number and the date for each initial submittal and re-submittal.
      - 6) Shop drawings name and number.
      - 7) Contents.
      - 8) Name of manufacturer.

- 9) Specification section paragraph number(s) showing product being submitted on.
  - 10) Signature of contractor indicating approval of the submittal with date of approval and all applicable check boxes marked.
- D. Coordination: Coordinate preparation and processing of submittals with performance of construction activities.
1. Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals, and related activities that require sequential activity.
  2. Submit all submittal items required for each Specification Section concurrently unless partial submittals for portions of the Work are indicated on approved submittal schedule.
  3. Submit action submittals and informational submittals required by the same Specification Section as separate packages under separate transmittals.
  4. Coordinate transmittal of different types of submittals for related parts of the Work so processing will not be delayed because of need to review submittals concurrently for coordination.
    - a. Architect reserves the right to withhold action on a submittal requiring coordination with other submittals until related submittals are received.
- E. Processing Time: Allow time for submittal review, including time for re-submittals, as follows. Time for review shall commence upon Architect's receipt of submittal. No extension of the Contract Time will be authorized because of failure to transmit submittals enough in advance of the Work to permit processing, including re-submittals.
1. It is the Contractor's responsibility to provide required submittals complete with enough information to show conformance with the construction documents in a time frame that will not affect the construction schedule. The construction schedule will not be extended due to the Architects' "RETURNED WITHOUT ACTION", "REJECTED" or "REVISE AND RESUBMIT" action on a submittal when the submittal is found to be lacking adequate information showing conformance with the contract documents and/or does not conform to the contract document requirements.
  2. The Architect will review a maximum of two submittals for any single item requiring a submission at no cost to the Contractor. Upon request by the Architect, the Contractor will compensate the Owner, via back charge for all further submissions to the Architect and/or Owner due to submissions that do not provide enough data to prove compliance with the specifications, or that in the opinion of the Architect do not meet the project specifications. Compensation will be computed by the additional hours needed to perform the review and correspondence multiplied by the Architect's normal billing rate.



3. Initial Review: Allow ten (10) working days for initial review of each submittal. Allow additional time if coordination with subsequent submittals is required. Architect will advise Contractor when a submittal being processed must be delayed for coordination.
  4. Re-submittal Review: Allow seven (7) working days for review of each re-submittal.
- F. Options: Identify options requiring selection by Architect.
- G. Deviations and Additional Information: On an attached separate sheet, prepared on Contractor's letterhead, record relevant information, requests for data, revisions other than those requested by Architect on previous submittals, and deviations from requirements in the Contract Documents, including minor variations and limitations. Include same identification information as related submittal.
- H. Re-submittals: Make re-submittals in same form and number of copies as initial submittal.
1. Note date and content of previous submittal.
  2. Note date and content of revision in label or title block and clearly indicate extent of revision.
  3. Resubmit submittals until they are marked with approval notation from Architect's action stamp that indicates "NO EXCEPTION TAKEN", or "MAKE CORRECTIONS NOTED."
- I. Distribution: Furnish copies of final submittals to manufacturers, subcontractors, suppliers, fabricators, installers, authorities having jurisdiction, and others as necessary for performance of construction activities. Show distribution on transmittal forms.
- J. Use for Construction: Retain complete printed copies of all approved action submittals on Project site. Use only final action submittals that are marked with approval notation from Architect's action stamp.
- K. Inspection of Documents: Construction progress drawings (as-builts), approved submittals, updated construction schedule.

## PART 3 - EXECUTION

### 3.1 SUBMITTAL PROCEDURES

- A. General Submittal Procedure Requirements: Prepare and submit submittals required by individual Specification Sections. Types of submittals are indicated in individual Specification Sections.

1. Post electronic submittals as PDF electronic files directly to Prolog Project Web site specifically established for Project.
    - a. After their review, the Architect will post the annotated file to the Project's website. The Contractor will then be notified via e-mail that the submittal has been reviewed and may download the submittal file.
    - b. The Contractor is responsible for printing hard copies of electronic submittals for their own use.
  2. Certificates and Certifications Submittals: Provide a statement that includes signature of entity responsible for preparing certification. Certificates and certifications shall be signed by an officer or other individual authorized to sign documents on behalf of that entity.
    - a. Provide a digital signature with digital certificate on electronically submitted certificates and certifications where indicated.
    - b. Provide a notarized statement on original paper copy certificates and certifications where indicated.
- B. Product Data: Collect information into a single submittal for each element of construction and type of product or equipment.
1. Clearly mark each copy of each submittal in bold marking of contrasting color to show which products and options are applicable.
  2. Include the following information, as applicable:
    - a. Manufacturer's catalog cuts.
    - b. Manufacturer's product specifications.
    - c. Color charts.
    - d. Statement of compliance with specified referenced standards.
    - e. Testing by recognized testing agency.
    - f. Application of testing agency labels and seals.
    - g. Notation of coordination requirements.
    - h. Availability and delivery time information.
  3. For equipment, include the following in addition to the above, as applicable:
    - a. Wiring diagrams showing factory-installed wiring.
    - b. Printed performance curves.
    - c. Operational range diagrams.
    - d. Clearances required to other construction, if not indicated on accompanying Shop Drawings.
  4. Submit Product Data before or concurrent with Samples.
  5. Submit Product Data in the following format:
    - a. PDF electronic file.
- C. Shop Drawings: Prepare Project-specific information, drawn accurately to scale. Do not base Shop Drawings on reproductions of the Contract Documents or standard printed data.

1. Preparation: Fully illustrate requirements in the Contract Documents. Include the following information, as applicable:
    - a. Identification of products.
    - b. Schedules.
    - c. Compliance with specified standards.
    - d. Notation of coordination requirements.
    - e. Notation of dimensions established by field measurement.
    - f. Relationship and attachment to adjoining construction clearly indicated.
    - g. Seal and signature of professional engineer if specified.
  2. Sheet Size: Except for templates, patterns, and similar full-size drawings, submit Shop Drawings on sheets at least 8-1/2 by 11 inches (215 by 280 mm), but no larger than 30 by 42 inches (750 by 1067 mm.)
  3. Submit Shop Drawings in the following format:
    - a. PDF electronic file.
- D. Samples: Submit Samples for review of kind, color, pattern, and texture for a check of these characteristics with other elements and for a comparison of these characteristics between submittal and actual component as delivered and installed.
1. Transmit Samples that contain multiple, related components such as accessories together in one submittal package.
    - a. Transmit samples via hand delivery, courier, or mail service to the Architect's Office.
    - b. Forward a copy of the transmittal to the Construction Manager.
  2. Identification: Attach label on unexposed side of Samples that includes the following:
    - a. Project name and site name, if Project involves multiple site locations.
    - b. Submittal number assigned per submittal schedule.
    - c. Generic description of Sample.
    - d. Product name and name of manufacturer.
    - e. Sample source.
    - f. Number and title of applicable Specification Section.
    - g. Specification paragraph number and generic name of each item.
  3. For projects where electronic submittals are required, also provide corresponding electronic submittal of the completed Submittal Cover, a digital image file illustrating the Sample's characteristics, and identification information for record.
    - a. Transmit printed copies of the above along with the physical Sample in the same quantity as required for the Samples.
  4. Disposition: Sample sets may be used to determine final acceptance of construction associated with each set.
    - a. Samples that may be incorporated into the Work are indicated in individual Specification Sections. Such Samples must be in an undamaged condition at time of use.

- b. Samples not incorporated into the Work, or otherwise designated as Owner's property, are the property of Contractor.
- 5. Samples for Initial Selection: Submit manufacturer's color charts consisting of units or sections of units showing the full range of colors, textures, and patterns available.
  - a. Number of Samples: Submit three (3) full set(s) of available choices where color, pattern, texture, or similar characteristics are required to be selected from manufacturer's product line. Architect, through Construction Manager, will return one (1) submittal with options selected.
- 6. Samples for Verification: Submit full-size units or Samples of size indicated, prepared from same material to be used for the Work, cured and finished in manner specified, and physically identical with material or product proposed for use, and that show full range of color and texture variations expected. Samples include, but are not limited to, the following: partial sections of manufactured or fabricated components; small cuts or containers of materials; complete units of repetitively used materials; swatches showing color, texture, and pattern; color range sets; and components used for independent testing and inspection.
  - a. Number of Samples: Submit minimum four (4) sets of Samples. Architect and Construction Manager will retain three (3) Sample sets; remainder will be returned.
    - 1) Submit a single Sample where assembly details, workmanship, fabrication techniques, connections, operation, and other similar characteristics are to be demonstrated.
    - 2) If variation in color, pattern, texture, or other characteristic is inherent in material or product represented by a Sample, submit at least three (3) sets of paired units that show approximate limits of variations.
- E. Product Schedule: As required in individual Specification Sections, prepare a written summary indicating types of products required for the Work and their intended location. Include the following information in tabular form:
  - 1. Type of product. Include unique identifier for each product indicated in the Contract Documents or assigned by Contractor if none is indicated.
  - 2. Manufacturer and product name, and model number if applicable.
  - 3. Number and name of room or space.
  - 4. Location within room or space.
  - 5. Submit product schedule in the following format:
    - a. PDF electronic file.
- F. Coordination Drawing Submittals: Comply with requirements specified in Division 01 Section "Project Management and Coordination."
- G. Contractor's Construction Schedule: Comply with requirements specified in Division 01 Section "Construction Progress Documentation."

- H. Application for Payment and Schedule of Values: Comply with requirements specified in the General Conditions of the Contract.
- I. Test and Inspection Reports and Schedule of Tests and Inspections Submittals: Comply with requirements specified in Division 01 Section "Quality Requirements."
- J. Closeout Submittals and Maintenance Material Submittals: Comply with requirements specified in Division 01 Section "Closeout Procedures."
- K. Maintenance Data: Comply with requirements specified in Division 01 Section "Operation and Maintenance Data."
- L. Qualification Data: Prepare written information that demonstrates capabilities and experience of firm or person. Include lists of completed projects with project names and addresses, contact information of architects and owners, and other information specified.
- M. Welding Certificates: Prepare written certification that welding procedures and personnel comply with requirements in the Contract Documents. Submit record of Welding Procedure Specification and Procedure Qualification Record on AWS forms. Include names of firms and personnel certified.
- N. Installer Certificates: Submit written statements on manufacturer's letterhead certifying that Installer complies with requirements in the Contract Documents and, where required, is authorized by manufacturer for this specific Project.
- O. Manufacturer Certificates: Submit written statements on manufacturer's letterhead certifying that manufacturer complies with requirements in the Contract Documents. Include evidence of manufacturing experience where required.
- P. Product Certificates: Submit written statements on manufacturer's letterhead certifying that product complies with requirements in the Contract Documents.
- Q. Material Certificates: Submit written statements on manufacturer's letterhead certifying that material complies with requirements in the Contract Documents.
- R. Material Test Reports: Submit reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting test results of material for compliance with requirements in the Contract Documents.
- S. Product Test Reports: Submit written reports indicating that current product produced by manufacturer complies with requirements in the Contract Documents. Base reports on evaluation of tests performed by manufacturer and witnessed by a qualified testing agency, or on comprehensive tests performed by a qualified testing agency.

- T. Research Reports: Submit written evidence, from a model code organization acceptable to authorities having jurisdiction, that product complies with building code in effect for Project. Include the following information:
  - 1. Name of evaluation organization.
  - 2. Date of evaluation.
  - 3. Time period when report is in effect.
  - 4. Product and manufacturers' names.
  - 5. Description of product.
  - 6. Test procedures and results.
  - 7. Limitations of use.
- U. Preconstruction Test Reports: Submit reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of tests performed before installation of product, for compliance with performance requirements in the Contract Documents.
- V. Compatibility Test Reports: Submit reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of compatibility tests performed before installation of product. Include written recommendations for primers and substrate preparation needed for adhesion.
- W. Field Test Reports: Submit written reports indicating and interpreting results of field tests performed either during installation of product or after product is installed in its final location, for compliance with requirements in the Contract Documents.
- X. Design Data: Prepare and submit written and graphic information, including, but not limited to, performance and design criteria, list of applicable codes and regulations, and calculations. Include list of assumptions and other performance and design criteria and a summary of loads. Include load diagrams if applicable. Provide name and version of software, if any, used for calculations. Include page numbers.
- Y. Construction Photographs: Comply with requirements specified in Division 01 Section "Photographic Documentation."
- Z. Material Safety Data Sheets (MSDSs): Contractor shall provide and maintain a hard copy of all MSDS sheets at each Project Site as per OSHA requirements. Do not submit MSDS sheets to the Architect or Construction Manager.

### 3.2 DELEGATED-DESIGN SERVICES

- A. Performance and Design Criteria: Where professional design services or certifications by a design professional are specifically required of Contractor by the Contract

Documents, provide products and systems complying with specific performance and design criteria indicated.

1. If criteria indicated are not sufficient to perform services or certification required, submit a written request for additional information to Architect.

- B. Delegated-Design Services Certification: In addition to Shop Drawings, Product Data, and other required submittals, submit digitally signed PDF electronic file and three (3) paper copies of certificate, signed and sealed by the responsible design professional, for each product and system specifically assigned to Contractor to be designed or certified by a design professional.

1. Indicate that products and systems comply with performance and design criteria in the Contract Documents. Include list of codes, loads, and other factors used in performing these services.

### 3.3 CONTRACTOR'S REVIEW

- A. Action and Informational Submittals: Review each submittal and check for coordination with other Work of the Contract and for compliance with the Contract Documents. Note corrections and field dimensions. Mark with approval stamp before submitting to Architect.
- B. Approval Stamp: Stamp each submittal with a uniform, approval stamp. Include Project name and location, submittal number, Specification Section title and number, name of reviewer, date of Contractor's approval, and statement certifying that submittal has been reviewed, checked, and approved for compliance with the Contract Documents.

### 3.4 ARCHITECT'S ACTION

- A. Action Submittals: Architect will review each submittal, make marks to indicate corrections or revisions required, and return it. Architect will stamp each submittal with an action stamp and will mark stamp appropriately to indicate action, as follows:
  1. No Exception Taken – Submittal is approved and released for fabrication and can be incorporated into the work.
  2. Make Corrections Noted - Submittal is approved and released for fabrication and can be incorporated into the work with the modifications as noted.
  3. Revise & Resubmit – Submittal is not approved and resubmission is required per the Architect's comments. Such products cannot be purchased nor incorporated into the work.

4. Rejected – Submittal is not approved and submission does not meet requirements of the Project. Resubmit products that conform to the Contract Documents.
- B. Informational Submittals: Architect will review each submittal and will not return it, or will return it if it does not comply with requirements. Architect will forward each submittal to appropriate party.
- C. Partial submittals prepared for a portion of the Work will be reviewed when use of partial submittals has received prior approval from Architect.
- D. Submittals not required by the Contract Documents may be returned by the Architect without action.
- E. Submittals that do not follow the protocol that is outlined in the applicable Specification Section, or this Section, of the Project Manual may be returned to the Contractor without action by the Architect.
- F. Submittal packages received from sources other than the Contractor, or other than from the Contractor via the Construction Manager, will be discarded by the Architect.

END OF SECTION 013300



## SECTION 014000 - QUALITY REQUIREMENTS

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General Conditions and other Division 01 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. Section includes administrative and procedural requirements for quality assurance and quality control.
- B. Testing and inspecting services are required to verify compliance with requirements specified or indicated. These services do not relieve Contractor of responsibility for compliance with the Contract Document requirements.
  - 1. Specific quality-assurance and control requirements for individual construction activities are specified in the Sections that specify those activities. Requirements in those Sections may also cover production of standard products.
  - 2. Specified tests, inspections, and related actions do not limit Contractor's other quality-assurance and control procedures that facilitate compliance with the Contract Document requirements.
  - 3. Requirements for Contractor to provide quality-assurance and control services required by Architect, Owner and Construction Manager or authorities having jurisdiction are not limited by provisions of this Section.
    - a. All Prime Contracts: Verify all Specification Sections for testing requirements in addition to the following:
      - 1) Testing done for the convenience of the Prime Contractor or their Sub-Contractors.
      - 2) Testing related to remedial operations or possible defects.

#### 1.3 DEFINITIONS

- A. Quality-Assurance Services: Activities, actions, and procedures performed before and during execution of the Work to guard against defects and deficiencies and substantiate that proposed construction will comply with requirements.
- B. Quality Control Services: Tests, inspections, procedures, and related actions during and after execution of the Work to evaluate that actual products incorporated into the Work and completed construction comply with requirements. Services do not include contract enforcement activities performed by Architect or Construction Manager.

- C. Mockups: Full-size physical assemblies that are constructed on-site. Mockups are constructed to verify selections made under Sample submittals; to demonstrate aesthetic effects and, where indicated, qualities of materials and execution; to review coordination, testing, or operation; to show interface between dissimilar materials; and to demonstrate compliance with specified installation tolerances. Mockups are not Samples. Unless otherwise indicated, approved mockups establish the standard by which the Work will be judged.
  - 1. Laboratory Mockups: Full-size physical assemblies constructed at testing facility to verify performance characteristics.
  - 2. Integrated Exterior Mockups: Mockups of the exterior envelope erected separately from the building but on Project site, consisting of multiple products, assemblies, and subassemblies.
  - 3. Room Mockups: Mockups of typical interior spaces complete with wall, floor, and ceiling finishes, doors, windows, millwork, casework, specialties, furnishings and equipment, and lighting.
- D. Preconstruction Testing: Tests and inspections performed specifically for Project before products and materials are incorporated into the Work, to verify performance or compliance with specified criteria.
- E. Product Testing: Tests and inspections that are performed by an NRTL, an NVLAP, or a testing agency qualified to conduct product testing and acceptable to authorities having jurisdiction, to establish product performance and compliance with specified requirements.
- F. Source Quality Control Testing: Tests and inspections that are performed at the source, e.g., plant, mill, factory, or shop.
- G. Field Quality Control Testing: Tests and inspections that are performed on-site for installation of the Work and for completed Work.
- H. Testing Agency: An entity engaged to perform specific tests, inspections, or both. Testing laboratory shall mean the same as testing agency.
- I. Installer/Applicator/Erector: Contractor or another entity engaged by Contractor as an employee, Subcontractor, or Sub-subcontractor, to perform a particular construction operation, including installation, erection, application, and similar operations.
  - 1. Use of trade-specific terminology in referring to a trade or entity does not require that certain construction activities be performed by accredited or unionized individuals, or that requirements specified apply exclusively to specific trade(s).
- J. Experienced: When used with an entity or individual, "experienced" means having successfully completed a minimum of five (5) previous projects similar in nature, size,

and extent to this Project; being familiar with special requirements indicated; and having complied with requirements of authorities having jurisdiction.

#### 1.4 CONSTRUCTION TESTING

- A. Prime Contractor Responsibilities: Unless otherwise indicated as the responsibility of another identified entity, each Prime Contractor shall provide inspections, tests, and other quality control services specified elsewhere in the Contract Documents and required by authorities having jurisdiction. Costs for these services are to be included in the Contract Sum.
  - 1. Where individual Sections specifically indicate that certain inspections, tests, and other quality control services are Prime Contractor's responsibility, Prime Contractor shall employ and pay a qualified independent testing agency to perform quality control services.
  - 2. Where individual Sections specifically indicate that certain inspections, tests, and other quality control services are the Owner's responsibility, the Owner will employ and pay a qualified independent testing agency to perform those services.
    - a. Where the Owner has engaged a testing agency and Prime Contractor is also required to engage an entity for the same or related element, the Prime Contractor shall not employ the entity engaged by the Owner, unless agreed to in writing by the Owner.
- B. Retesting: Prime Contractor is responsible for retesting where results of inspections, tests, or other quality control services prove unsatisfactory and indicate noncompliance with Contract Document requirements, regardless of whether the original test was Prime Contractor's responsibility.
  - 1. Cost of retesting construction, revised or replaced by Prime Contractor, is Prime Contractor's responsibility where required tests performed on original construction indicated noncompliance with Contract Document requirements.
- C. Associated Services: Cooperate with agencies performing required inspections, tests, and similar services, and provide reasonable auxiliary services as requested. Notify the agency sufficiently in advance of operations to permit assignment of personnel. Auxiliary services required include, but are not limited to, the following:
  - 1. Provide access to the Work.
  - 2. Furnish incidental labor and facilities necessary to facilitate inspections and tests.
  - 3. Ladders.
  - 4. Provide facilities for storage and curing of test samples.
  - 5. Delivery of samples to testing laboratories.

6. Provide design mix documentation.
  7. Provide security and protection of samples and test equipment at the Project Site.
- D. Duties of the Testing Agency: The independent agency engaged to perform inspections, sampling, and testing of materials and construction specified in individual Sections shall cooperate with the Construction Manager and Prime Contractor in performance of the agency's duties. The testing agency shall provide qualified personnel to perform required inspections and tests.
1. The agency shall notify the Architect, Construction Manager and Prime Contractor promptly of irregularities or deficiencies observed in the Work during performance of its services.
  2. The agency is not authorized to release, revoke, alter, or enlarge requirements of the Contract Documents or approve or accept any portion of the Work.
  3. The agency shall not perform any duties of Prime Contractor.
- E. Coordination: Coordinate the sequence of activities to accommodate required services with a minimum of delay. Coordinate activities to avoid the necessity of removing and replacing construction to accommodate inspections and tests.
1. Each Prime Contractor is responsible for scheduling times for inspections, tests, taking samples, and similar activities through the Construction Manager.

#### 1.5 CONFLICTING REQUIREMENTS

- A. Referenced Standards: If compliance with two or more standards is specified and the standards establish different or conflicting requirements for minimum quantities or quality levels, comply with the most stringent requirement. Refer conflicting requirements that are different, but apparently equal, to Architect for a decision before proceeding.
- B. Minimum Quantity or Quality Levels: The quantity or quality level shown or specified shall be the minimum provided or performed. The actual installation may comply exactly with the minimum quantity or quality specified, or it may exceed the minimum within reasonable limits. To comply with these requirements, indicated numeric values are minimum or maximum, as appropriate, for the context of requirements. Refer uncertainties to Architect for a decision before proceeding.

#### 1.6 ACTION SUBMITTALS

- A. Shop Drawings: For integrated exterior mockups, provide plans, sections, and elevations, indicating materials and size of mockup construction.
1. Indicate manufacturer and model number of individual components.

2. Provide axonometric drawings for conditions difficult to illustrate in two dimensions.

## 1.7 INFORMATIONAL SUBMITTALS

- A. Contractor's Statement of Responsibility: When required by authorities having jurisdiction, submit copy of written statement of responsibility sent to authorities having jurisdiction before starting work on the following systems:
  1. Seismic-force-resisting system, designated seismic system, or component listed in the designated seismic system quality-assurance plan prepared by Architect.
  2. Main wind-force-resisting system or a wind-resisting component listed in the wind-force-resisting system quality-assurance plan prepared by Architect.
- B. Testing Agency Qualifications: For testing agencies specified in "Quality Assurance" Article to demonstrate their capabilities and experience. Include proof of qualifications in the form of a recent report on the inspection of the testing agency by a recognized authority.
- C. Schedule of Tests and Inspections: Prepare in tabular form and include the following:
  1. Specification Section number and title.
  2. Entity responsible for performing tests and inspections.
  3. Description of test and inspection.
  4. Identification of applicable standards.
  5. Identification of test and inspection methods.
  6. Number of tests and inspections required.
  7. Time schedule or time span for tests and inspections.
  8. Requirements for obtaining samples.
  9. Unique characteristics of each quality control service.

## 1.8 REPORTS AND DOCUMENTS

- A. Test and Inspection Reports: Prepare and submit certified written reports specified in other Sections. Include the following:
  1. Date of issue.
  2. Project title and number.
  3. Name, address, and telephone number of testing agency or inspecting agency.
  4. Dates and locations of samples and tests or inspections.
  5. Names of individuals making tests and inspections.
  6. Description of the Work and test and inspection methods, citing ASTM reference standard used.
  7. Identification of product and Specification Section.

8. Complete test or inspection data.
  9. Test and inspection results and an interpretation of test results.
  10. Record of temperature and weather conditions at time of sample taking and testing and inspecting.
  11. Comments or professional opinion on whether tested or inspected Work complies with the Contract Document requirements.
  12. Name and signature of laboratory inspector.
  13. Recommendations on retesting and reinspecting.
- B. Manufacturer's Technical Representative's Field Reports: Prepare written information documenting manufacturer's technical representative's tests and inspections specified in other Sections. Include the following:
1. Name, address, and telephone number of technical representative making report.
  2. Statement on condition of substrates and their acceptability for installation of product.
  3. Statement that products at Project site comply with requirements.
  4. Summary of installation procedures being followed, whether they comply with requirements and, if not, what corrective action was taken.
  5. Results of operational and other tests and a statement of whether observed performance complies with requirements.
  6. Statement weather conditions, products, and installation will affect warranty.
  7. Other required items indicated in individual Specification Sections.
- C. Factory-Authorized Service Representative's Reports: Prepare written information documenting manufacturer's factory-authorized service representative's tests and inspections specified in other Sections. Include the following:
1. Name, address, and telephone number of factory-authorized service representative making report.
  2. Statement that equipment complies with requirements.
  3. Results of operational and other tests and a statement of whether observed performance complies with requirements.
  4. Statement weather conditions, products, and installation will affect warranty.
  5. Other required items indicated in individual Specification Sections.
- D. Permits, Licenses, and Certificates: For Owner's records, submit copies of permits, licenses, certifications, inspection reports, releases, jurisdictional settlements, notices, receipts for fee payments, judgments, correspondence, records, and similar documents, established for compliance with standards and regulations bearing on performance of the Work.

## 1.9 QUALITY ASSURANCE

- A. General: Qualifications paragraphs in this article establish the minimum qualification levels required; individual Specification Sections specify additional requirements.
- B. Manufacturer Qualifications: A firm experienced in manufacturing products or systems similar to those indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce the required units.
- C. Fabricator Qualifications: A firm experienced in producing products similar to those indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce the required units.
- D. Installer Qualifications: A firm or individual experienced in installing, erecting, or assembling work similar in material, design, and extent to that indicated for this Project, whose work has resulted in construction with a record of successful in-service performance.
- E. Professional Engineer Qualifications: A professional engineer who is legally qualified to practice in jurisdiction where Project is located and who is experienced in providing engineering services of the kind indicated. Engineering services are defined as those performed for installations of the system, assembly, or products that are similar in material, design, and extent to those indicated for this Project.
- F. Specialists: Certain Specification Sections require that specific construction activities shall be performed by entities who are recognized experts in those operations. Specialists shall satisfy qualification requirements indicated and shall be engaged for the activities indicated.
  - 1. Requirements of authorities having jurisdiction shall supersede requirements for specialists.
- G. Testing Agency Qualifications: An NRTL, an NVLAP, or an independent agency with the experience and capability to conduct testing and inspecting indicated, as documented according to ASTM E 329; and with additional qualifications specified in individual Sections; and, where required by authorities having jurisdiction, that is acceptable to authorities.
  - 1. Each independent inspection and testing agency engaged shall be authorized by jurisdiction to operate in the state where the Project is located.
  - 2. NRTL: A nationally recognized testing laboratory according to 29 CFR 1910.7.
  - 3. NVLAP: A testing agency accredited according to NIST's National Voluntary Laboratory Accreditation Program.
  - 4. Testing agency qualifications must be approved by the Architect prior to proceeding with work.

- H. Manufacturer's Technical Representative Qualifications: An authorized representative of manufacturer who is trained and approved by manufacturer to observe and inspect installation of manufacturer's products that are similar in material, design, and extent to those indicated for this Project.
- I. Factory-Authorized Service Representative Qualifications: An authorized representative of manufacturer who is trained and approved by manufacturer to inspect installation of manufacturer's products that are similar in material, design, and extent to those indicated for this Project.
- J. Preconstruction Testing: Where testing agency is indicated to perform preconstruction testing for compliance with specified requirements for performance and test methods, comply with the following:
  - 1. Contractor responsibilities include the following:
    - a. Provide test specimens representative of proposed products and construction.
    - b. Submit specimens in a timely manner with sufficient time for testing and analyzing results to prevent delaying the Work.
    - c. Provide sizes and configurations of test assemblies, mockups, and laboratory mockups to adequately demonstrate capability of products to comply with performance requirements.
    - d. Build site-assembled test assemblies and mockups using installers who will perform the same tasks for Project.
    - e. Build laboratory mockups at testing facility using personnel, products, and methods of construction indicated for the completed Work.
    - f. When testing is complete, remove test specimens, assemblies, mockups, and laboratory mockups; do not reuse products on Project.
- K. Testing Agency Responsibilities: Submit a certified written report of each test, inspection, and similar quality assurance service to Architect through Construction Manager, with copy to Contractor. Interpret tests and inspections and state in each report whether tested and inspected work complies with or deviates from the Contract Documents.
- L. Mockups: Before installing portions of the Work requiring mockups, build mockups for each form of construction and finish required to comply with the following requirements, using materials indicated for the completed Work:
  - 1. Build mockups in location and of size indicated or, if not indicated, as directed by Architect.
    - a. Construct mockups complete, including work of all trades required in finished Project.



2. Notify Architect and Construction Manager seven (7) calendar days in advance of dates and times when mockups will be constructed.
  3. Employ supervisory personnel who will oversee mockup construction. Employ workers that will be employed during the construction of the Project.
  4. Demonstrate the proposed range of aesthetic effects and workmanship.
  5. Obtain Architect's approval of mockups before starting work, fabrication, or construction.
    - a. Allow seven (7) calendar days for initial review and each re-review of each mockup.
  6. Maintain mockups during construction in an undisturbed condition as a standard for judging the completed Work.
  7. Demolish and remove mockups when directed unless otherwise indicated.
- M. Integrated Exterior Mockups: Construct integrated exterior mockup as indicated on Drawings. Coordinate installation of exterior envelope materials and products for which mockups are required in individual Specification Sections, along with supporting materials.
- N. Laboratory Mockups: Comply with requirements of preconstruction testing and those specified in individual Specification Sections in Divisions 02 through 33.

#### 1.10 QUALITY CONTROL

- A. Owner Responsibilities: Where quality control services are indicated as the Owner's responsibility, Owner will engage a qualified testing agency to perform these services.
1. Owner will furnish Contractor with names, addresses, and telephone numbers of testing agencies engaged and a description of types of testing and inspecting they are engaged to perform.
  2. Costs for retesting and reinspecting construction that replaces or is necessitated by work that failed to comply with the Contract Documents will be charged to Contractor, and the Contract Sum will be adjusted by Change Order.
- B. Contractor Responsibilities: Tests and inspections not explicitly assigned to Owner are Contractor's responsibility. Perform additional quality control activities required to verify that the Work complies with requirements, whether specified or not.
1. Unless otherwise indicated, provide quality control services specified.
  2. Where services are indicated as the Contractor's responsibility, engage a qualified testing agency to perform these quality control services.
    - a. Contractor shall not employ same entity engaged by Owner, unless agreed to in writing by Owner.
  3. Notify testing agencies at least twenty-four (24) hours in advance of time when Work that requires testing or inspecting will be performed.

4. Where quality control services are indicated as Contractor's responsibility, submit a certified written report, in triplicate, of each quality control service.
  5. Contractor shall furnish to the Laboratory such samples of materials as may be necessary for testing purposes.
  6. Testing and inspecting requested by Contractor and not required by the Contract Documents are Contractor's responsibility.
  7. Submit additional copies of each written report directly to authorities having jurisdiction when they so direct.
- C. Manufacturer's Field Services: Where indicated, engage a factory-authorized service representative to inspect field-assembled components and equipment installation, including service connections. Report results in writing as specified in Division 01 Section "Submittal Procedures."
- D. Manufacturer's Technical Services: Where indicated, engage a manufacturer's technical representative to observe and inspect the Work. Manufacturer's technical representative's services include participation in preinstallation conferences, examination of substrates and conditions, verification of materials, observation of Installer activities, inspection of completed portions of the Work, and submittal of written reports.
- E. Retesting/Re-inspecting: Regardless of whether original tests or inspections were Contractor's responsibility, provide quality control services, including retesting and reinspecting, for construction that replaced Work that failed to comply with the Contract Documents.
- F. Testing Agency and Special Inspector Responsibilities: Cooperate with Architect, Construction Manager and Contractor in performance of duties. Provide qualified personnel to perform required tests and inspections.
1. Notify Architect, Construction Manager and Contractor promptly of irregularities or deficiencies observed in the Work during performance of its services.
  2. Determine the location from which test samples will be taken and in which in-situ tests are conducted.
  3. Conduct and interpret tests and inspections and state in each report whether tested and inspected work complies with or deviates from requirements.
  4. Submit a certified written report, in duplicate, of each test, inspection, and similar quality control service through Contractor.
  5. Do not release, revoke, alter, or increase the Contract Document requirements or approve or accept any portion of the Work.
  6. Do not perform any duties of the Contractor.
  7. Submit reports to the Architect, Construction Manager and Contractor within seven (7) calendar days of the test.

- G. Associated Services: Cooperate with agencies performing required tests, inspections, and similar quality control services, and provide reasonable auxiliary services as requested. Notify agency sufficiently in advance of operations to permit assignment of personnel. Provide the following:
  - 1. Provide safe access to items to be tested. This includes sheeting and ladders for deep excavation; scaffolding and ladders for inspection and testing of superstructure items. Incidental labor and facilities necessary to facilitate tests and inspections.
  - 2. Adequate quantities of representative samples of materials that require testing and inspecting. Assist agency in obtaining samples.
  - 3. Facilities for storage and field curing of test samples.
  - 4. Delivery of samples to testing agencies.
  - 5. Preliminary design mix proposed for use for material mixes that require control by testing agency.
  - 6. Security and protection for samples and for testing and inspecting equipment at Project site.
- H. Coordination: Coordinate sequence of activities to accommodate required quality-assurance and control services with a minimum of delay and to avoid necessity of removing and replacing construction to accommodate testing and inspecting.
  - 1. Schedule times for tests, inspections, obtaining samples, and similar activities.
- I. Schedule of Tests and Inspections: Prepare a schedule of tests, inspections, and similar quality control services required by the Contract Documents. Coordinate and submit concurrently with Contractor's construction schedule. Update as the Work progresses.
  - 1. Distribution: Distribute schedule to Owner, Architect, Construction Manager, testing agencies, and each party involved in performance of portions of the Work where tests and inspections are required.
  - 2. Provide and maintain, for the sole use of the Testing Agency, adequate facilities for safe storage and proper curing of concrete test cylinders on the project site for the first 24 hours as required by ASTM C31-69.

#### 1.11 SPECIAL TESTS AND INSPECTIONS

- A. General: Special Inspections and Structural Testing shall be in accordance with Chapter 17 of the Building Code of New York State (BC-NYS).
- B. Special Tests and Inspections: Owner will engage a qualified special inspector to conduct special tests and inspections required by authorities having jurisdiction as the responsibility of Owner, as indicated in Statement of Special Inspections attached to this Section, and as follows:

1. Verifying that manufacturer maintains detailed fabrication and quality control procedures and reviews the completeness and adequacy of those procedures to perform the Work.
  2. Notifying Architect, Construction Manager and Contractor promptly of irregularities and deficiencies observed in the Work during performance of its services.
  3. Submitting a certified written report of each test, inspection, and similar quality control service to Architect through Construction Manager with copy to Contractor and to authorities having jurisdiction.
  4. Submitting a final report of special tests and inspections at Substantial Completion which shall include a list of unresolved deficiencies.
  5. Interpreting tests and inspections and stating in each report whether tested and inspected work complies with or deviates from the Contract Documents.
  6. Retesting and reinspecting corrected work.
- C. Qualifications: The Special Inspector shall be a Professional Engineer licensed in the State that the project is located who is acceptable to the Architect and the Authorities Having Jurisdiction (AHJ).
1. The Testing Agency shall meet all the qualifications stated elsewhere in this Section and shall be approved by the Architect.
  2. Inspectors: Special Inspections shall be performed by inspectors who are either Professional Engineers licensed to practice in the State that the project is located, or Engineers-In-Training (EIT) with an education and background in structural engineering except as indicated below:
    - a. Special Inspection of soils and foundations may be conducted by Professional Engineers or EIT's with an education and background in geotechnical engineering.
    - b. Technicians conducting tests of concrete shall be an ACI certified Concrete Field Technician – Grade 1 or higher.
    - c. Personnel conducting inspections of concrete work may be an ACI certified Concrete Construction Inspector or other qualified individuals designated and supervised by the Special Inspector, with experience inspecting concrete work.
    - d. Personnel conducting inspections of other work including but not limited to masonry, wood framing, and steel framing, may be individuals with experience inspecting such work, and designated and supervised by the Special Inspector.
    - e. Technicians conducting tests or inspections of welds shall be AWS Certified Welding Inspectors. Technicians conducting ultrasonic testing shall also be certified as an ASNT-TC Level II or Level III technician.
    - f. Technicians performing standard tests described by specific ASTM Standards shall have training in the performance of such tests and must be

- able to demonstrate either by oral or written examination competence for the test being conducted. Such Technicians shall not evaluate test results.
- g. Technicians of Testing/Inspecting Agencies for smoke control shall have experience in fire-protection engineering, mechanical engineering, and shall have certification as air balancers.
- 3. Submittals: The Special Inspector and Testing/Inspecting Agency shall submit to the Architect for review, a copy of their qualifications which shall include the names and qualifications of each of the individual inspectors and technicians who will be performing same.
  - 4. Conflicts of Interest: The Special Inspector and Testing/Inspecting Agency shall disclose any past or present business relationship or potential conflict of interest with the Contractors or Sub-contractors whose work will be inspected or tested.
- D. Owner Responsibilities: The Owner will Contract with and pay for the services of the Special Inspector.
- 1. Contract Documents: The Owner will provide the Special Inspector with a complete set of Contract Documents, sealed by the Architect and approved by the Authorities Having Jurisdiction (AHJ).
- E. Contractor's Responsibilities for Special Inspections: The Contractor will cooperate with the Special Inspector and their agents so that the Special Inspections and Testing may be performed without hindrance.
- 1. Notification: The Contractor shall notify the Special Inspector and Testing agency at least forty-eight (48) hours in advance of a required inspection or test as indicated in the Schedule of Special Inspections.
  - 2. Access: The Contractor shall provide incidental labor and facilities to provide safe access for the Special Inspector or their agents to the work to be inspected or tested;
    - a. To obtain and handle samples at the site or at the source of products to be tested,
    - b. To facilitate tests and inspections,
    - c. To storage and curing of test samples on site.
  - 3. Distant Fabricators: If any material(s) or fabricator(s) that require Special Inspections are fabricated in a plant over 200 miles away from the Project Site and the Special Inspector is required to visit the plant, then the Contractor shall be responsible for reimbursing the Special Inspector for mileage and travel expenses incurred beyond that distance limitation.
  - 4. Retesting/Reinspection: The Contractor will be responsible for the cost of any retesting or reinspection of work which fails to comply with the requirements of the Contract Documents.
  - 5. The Contractor shall allow the Special Inspectors or their agent's use of current, updated Construction Documents showing changes to the Work, including but

not limited to submittals and shop drawings that have been approved by the Architect.

- F. Limitations of Special Inspector's Authority: The Special Inspector shall not:
1. ...release, revoke, alter, or enlarge on the requirements of the Contract Documents.
  2. ...have control over the Contractor's means and methods of construction.
  3. ...be responsible for construction site safety.
  4. ...have the authority to stop work.
- G. Testing/Inspecting Agency Responsibilities to the Special Inspector: After the work requiring special inspections is complete, each testing/inspecting agency shall provide an "Agent's Final Report of Special Inspections" to the Special Inspector, stating that testing was completed in substantial conformance with the Contract Documents.

## PART 2 - PRODUCTS (Not Used)

## PART 3 - EXECUTION

### 3.1 TEST AND INSPECTION LOG

- A. Test and Inspection Log: Prepare a record of tests and inspections. Include the following:
1. Date test or inspection was conducted.
  2. Description of the Work tested or inspected.
  3. Date test or inspection results were transmitted to Architect.
  4. Identification of testing agency or special inspector conducting test or inspection.
- B. Maintain log at Project site. Post changes and revisions as they occur. Provide access to test and inspection log for Architect's and Construction Manager's reference during normal working hours.

### 3.2 REPAIR AND PROTECTION

- A. General: On completion of testing, inspecting, sample taking, and similar services, repair damaged construction and restore substrates and finishes.
1. Provide materials and comply with installation requirements specified in other Specification Sections or matching existing substrates and finishes. Restore patched areas and extend restoration into adjoining areas with durable seams

that are as invisible as possible. Comply with the Contract Document requirements for cutting and patching in Division 01 Section "Execution."

- B. Protect construction exposed by or for quality control service activities.
- C. Repair and protection are Contractor's responsibility, regardless of the assignment of responsibility for quality control services.

### 3.3 FINAL REPORT OF SPECIAL INSPECTIONS

- A. The Final Report of Special Inspections shall be completed by the Special Inspector and submitted to the Architect and Owner prior to issuance of a Certificate of Occupancy.
- B. Use Form 102-2001 published by the Council of American Structural Engineers, or other similar form.
  - 1. The Final Report of Special Inspections shall state that required inspections have been performed and shall itemize any discrepancies which were not corrected nor resolved.

END OF SECTION 014000

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## SECTION 014200 - REFERENCES

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General Conditions and other Division 01 Specification Sections, apply to this Section.

#### 1.2 DEFINITIONS

- A. General: Basic Contract definitions are included in the Conditions of the Contract.
- B. "Approved": When used to convey Architect's action on Contractor's submittals, applications, and requests, "approved" is limited to Architect's duties and responsibilities as stated in the Conditions of the Contract.
- C. "Directed": Terms such as "directed," "accepted," "deleted," "permitted," "requested," "required," and "selected" mean, unless otherwise explained, 'accepted by the Architect,' 'directed by the Architect,' "permitted by the Architect", "requested by the Architect", "required by the Architect", and "selected by the Architect". However, no such implied meaning will be interpreted to extend the Architect's responsibility into the Contractor's area of construction supervision.
- D. "Indicated": The term "indicated" refers to graphic representations, notes, or schedules on Drawings; or to other paragraphs or schedules in Specifications and similar requirements in the Contract Documents. Terms such as "shown," "noted," "scheduled," and "specified" are used to help the user locate the reference.
- E. "Regulations": The term "regulations" includes laws, ordinances, statutes, and lawful orders issued by authorities having jurisdiction, as well as rules, conventions, and agreements within the construction industry that control performance of the Work form of incorporation into the Project and maintained ready for use. Supply and deliver products requiring additional or supplemental fitting, assembly, fabrication, or incorporation into other elements of the Project directly to the fabricator, installer or manufacturer as required.
- F. "Furnish": The term "furnish" means to supply and deliver to Project site, or other designated location ready for unloading, unpacking, storing assembly, installation, application, erection, or other form of incorporation into the Project, and maintained ready for use. Supply and deliver products requiring additional or supplemental fitting, assembly, fabrication, or incorporation into other elements of the Project directly to the fabricator, installer, or manufacturer as required.

- G. "Install": Operations at Project site including unloading, temporarily storing, unpacking, assembling, erecting, placing, anchoring, applying, working to dimension, finishing, curing, protecting, cleaning, and similar operations required to properly incorporate work into the project.
- H. "Provide": Furnish and install, complete and ready for the intended use. Note: the lack of a modifier in any technical note is to have the inferred meaning of "provide".
- I. "Project Site": is the space available for performing construction activities, either exclusively or in conjunction with others performing other work as part of Project. The extent of Project site is shown on the Drawings and may or may not be identical with the description of the land on which Project is to be built.
- J. "Installer": An installer is Contractor, or another entity engaged by Contractor, as an employee, subcontractor, or contractor of lower tier, to perform a particular construction operation, including installation, erection, application, and similar operations.
- K. The term "experienced," when used with the term "installer," means having successfully completed a minimum of five previous projects similar in size and scope to this Project; being familiar with the special requirements indicated; and having complied with requirements of authorities having jurisdiction.
  - 1. Using a term such as "carpentry" does not imply that certain construction activities must be performed by accredited or unionized individuals of a corresponding generic name, such as "carpenter." It also does not imply that requirements specified apply exclusively to tradespeople of the corresponding generic name.
- L. The term "replace" means remove designated, damaged, rejected, defective, unacceptable, or nonconforming work from the Project and provide new work meeting the requirements of the Contract Documents in place thereof.
- M. "Include": The words "include", in any form other than inclusive, is non-limiting and is not intended to mean all-inclusive."
- N. The terms "Specifications" and "Project Manual" are interchangeable.
- O. "Custom Color" is a special color that is not available from the manufacturer's standard colors and will require a once in a lifetime color match as selected by the Architect.
- P. "Standard Color" is a minimum of 8 standard colors that the manufacture commonly offers for their product.

- Q. "Match existing" is to match the existing material system including but not limited to: color, texture, size, and edge treatment (including the systems grout/mortar color, texture, size, shape and reveal.)
- R. "Concealed" where used in connection with insulation, painting of piping, piping, conduit, ducts, and accessories shall mean that they are hidden from sight as in trenches, chases, shafts, furred spaces, walls, slabs, or hung ceilings; also where they are not hidden from sight in the following locations: in partly excavated spaces or crawl spaces, or in service tunnels and used solely for repairs or maintenance.
- S. "Exposed" where used in connection with insulation, painting of piping, piping, conduit, ducts, accessories shall mean that they are not "concealed" as defined herein above.
- T. "Piping" includes in addition to pipe, also fittings, valves, hangers, and other accessories that comprise system.
- U. "Below Grade" includes all areas below the finished grade line and below the finished floor, where the finished floor system is supported on earth and gravel systems.
- V. Remove: Detach items from existing construction and legally dispose of them off-site, unless indicated to be removed and salvaged or removed and reinstalled.
- W. Salvage: Detach items from existing construction and deliver them to Owner ready for reuse or safely store in a controlled environment and reinstall where indicated.
- X. Reinstall: Prepare for reuse, clean, replace missing or damaged accessories, and reinstall them where indicated.
- Y. Existing: Existing items of construction that are not to be removed and that are not otherwise indicated to be removed, salvaged, or removed and reinstalled.

### 1.3 INDUSTRY STANDARDS

- A. Applicability of Standards: Unless the Contract Documents include more stringent requirements, applicable construction industry standards have the same force and effect as if bound or copied directly into the Contract Documents to the extent referenced. Such standards are made a part of the Contract Documents by reference.
- B. Publication Dates: Comply with standards in effect as of date of the Contract Documents unless otherwise indicated.
- C. Copies of Standards: Each entity engaged in construction on Project should be familiar with industry standards applicable to its construction activity. Copies of applicable standards are not bound with the Contract Documents.

1. Where copies of standards are needed to perform a required construction activity, obtain copies directly from the publication source.

#### 1.4 ABBREVIATIONS AND ACRONYMS

- A. Industry Organizations: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities in the following list. Names, telephone numbers, and Web sites are subject to change and are believed to be accurate and up-to-date as of the date of the Contract Documents.

AA	Aluminum Association, Inc. (The) <a href="http://www.aluminum.org">www.aluminum.org</a>	(703) 358-2960
AAADM	American Association of Automatic Door Manufacturers <a href="http://www.aaadm.com">www.aaadm.com</a>	(216) 241-7333
AABC	Associated Air Balance Council <a href="http://www.aabc.com">www.aabc.com</a>	(202) 737-0202
AAMA	American Architectural Manufacturers Association <a href="http://www.aamanet.org">www.aamanet.org</a>	(847) 303-5664
AASHTO	American Association of State Highway and Transportation Officials <a href="http://www.transportation.org">www.transportation.org</a>	(202) 624-5800
AATCC	American Association of Textile Chemists and Colorists (The) <a href="http://www.aatcc.org">www.aatcc.org</a>	(919) 549-8141
ABAA	Air Barrier Association of America <a href="http://www.airbarrier.org">www.airbarrier.org</a>	(866) 956-5888
ABMA	American Bearing Manufacturers Association <a href="http://www.abma-dc.org">www.abma-dc.org</a>	(202) 367-1155
ACI	American Concrete Institute <a href="http://www.concrete.org">www.concrete.org</a>	(248) 848-3700
ACPA	American Concrete Pipe Association <a href="http://www.concrete-pipe.org">www.concrete-pipe.org</a>	(972) 506-7216

AEIC	Association of Edison Illuminating Companies, Inc. (The) <a href="http://www.aeic.org">www.aeic.org</a>	(205) 257-2530
AF&PA	American Forest & Paper Association <a href="http://www.afandpa.org">www.afandpa.org</a>	(800) 878-8878 (202) 463-2700
AGA	American Gas Association <a href="http://www.aga.org">www.aga.org</a>	(202) 824-7000
AGC	Associated General Contractors of America (The) <a href="http://www.agc.org">www.agc.org</a>	(703) 548-3118
AHA	American Hardboard Association <a href="http://www.domensino.com/AHA">www.domensino.com/AHA</a>	(847) 934-8800
AHAM	Association of Home Appliance Manufacturers <a href="http://www.aham.org">www.aham.org</a>	(202) 872-5955
AI	Asphalt Institute <a href="http://www.asphaltinstitute.org">www.asphaltinstitute.org</a>	(859) 288-4960
AIA	American Institute of Architects (The) <a href="http://www.aia.org">www.aia.org</a>	(800) 242-3837 (202) 626-7300
AISC	American Institute of Steel Construction <a href="http://www.aisc.org">www.aisc.org</a>	(800) 644-2400 (312) 670-2400
AISI	American Iron and Steel Institute <a href="http://www.steel.org">www.steel.org</a>	(202) 452-7100
AITC	American Institute of Timber Construction <a href="http://www.aitc-glulam.org">www.aitc-glulam.org</a>	(303) 792-9559
ALCA	Associated Landscape Contractors of America (Now PLANET - Professional Landcare Network)	
ALSC	American Lumber Standard Committee, Incorporated <a href="http://www.alsc.org">www.alsc.org</a>	(301) 972-1700
AMCA	Air Movement and Control Association International, Inc. <a href="http://www.amca.org">www.amca.org</a>	(847) 394-0150
ANSI	American National Standards Institute <a href="http://www.ansi.org">www.ansi.org</a>	(202) 293-8020

AOSA	Association of Official Seed Analysts, Inc. <a href="http://www.aosaseed.com">www.aosaseed.com</a>	(607) 256-3313
APA	Architectural Precast Association <a href="http://www.archprecast.org">www.archprecast.org</a>	(239) 454-6989
APA	APA - The Engineered Wood Association <a href="http://www.apawood.org">www.apawood.org</a>	(253) 565-6600
APA EWS	APA - The Engineered Wood Association; Engineered Wood Systems (See APA - The Engineered Wood Association)	
API	American Petroleum Institute <a href="http://www.api.org">www.api.org</a>	(202) 682-8000
ARHI	Air-Conditioning, Heating & Refrigeration Institute <a href="http://www.arhinet.org">www.arhinet.org</a>	(703) 524-8800
ARMA	Asphalt Roofing Manufacturers Association <a href="http://www.asphaltroofing.org">www.asphaltroofing.org</a>	(202) 207-0917
ASCE	American Society of Civil Engineers <a href="http://www.asce.org">www.asce.org</a>	(800) 548-2723 (703) 295-6300
ASCE/SEI	American Society of Civil Engineers/Structural Engineering Institute (See ASCE)	
ASHRAE	American Society of Heating, Refrigerating and Air-Conditioning Engineers <a href="http://www.ashrae.org">www.ashrae.org</a>	(800) 527-4723 (404) 636-8400
ASME	ASME International (The American Society of Mechanical Engineers International) <a href="http://www.asme.org">www.asme.org</a>	(800) 843-2763 (973) 882-1170
ASSE	American Society of Sanitary Engineering <a href="http://www.asse-plumbing.org">www.asse-plumbing.org</a>	(440) 835-3040
ASTM	ASTM International (American Society for Testing and Materials International)	(610) 832-9500

[www.astm.org](http://www.astm.org)

AWCI	AWCI International (Association of the Wall and Ceiling Industry International) <a href="http://www.awci.org">www.awci.org</a>	(703) 538-1600
AWCMA	American Window Covering Manufacturers Association (Now WCSC)	
AWI	Architectural Woodwork Institute <a href="http://www.awinet.org">www.awinet.org</a>	(571) 323-3636
AWPA	American Wood Protection Association <a href="http://www.awpa.com">www.awpa.com</a>	(205) 733-4077
AWS	American Welding Society <a href="http://www.aws.org">www.aws.org</a>	(800) 443-9353 (305) 443-9353
AWWA	American Water Works Association <a href="http://www.awwa.org">www.awwa.org</a>	(800) 926-7337 (303) 794-7711
BHMA	Builders Hardware Manufacturers Association <a href="http://www.buildershardware.com">www.buildershardware.com</a>	(212) 297-2122
BIA	Brick Industry Association (The) <a href="http://www.bia.org">www.bia.org</a>	(703) 620-0010
BICSI	Building Industry Consulting Service International <a href="http://www.bicsi.org">www.bicsi.org</a>	(800) 242-7405 (813) 979-1991
BIFMA	BIFMA International (Business and Institutional Furniture Manufacturer's Association International) <a href="http://www.bifma.org">www.bifma.org</a>	(616) 285-3963
BISSC	Baking Industry Sanitation Standards Committee <a href="http://www.bissc.org">www.bissc.org</a>	(866) 342-4772
CCC	Carpet Cushion Council <a href="http://www.carpetcushion.org">www.carpetcushion.org</a>	(610) 527-3880

CDA	Copper Development Association <a href="http://www.copper.org">www.copper.org</a>	(800) 232-3282 (212) 251-7200
CFFA	Chemical Fabrics & Film Association, Inc. <a href="http://www.chemicalfabricsandfilm.com">www.chemicalfabricsandfilm.com</a>	(216) 241-7333
CGA	Compressed Gas Association <a href="http://www.cganet.com">www.cganet.com</a>	(703) 788-2700
CIMA	Cellulose Insulation Manufacturers Association <a href="http://www.cellulose.org">www.cellulose.org</a>	(888) 881-2462 (937) 222-2462
CISCA	Ceilings & Interior Systems Construction Association <a href="http://www.cisca.org">www.cisca.org</a>	(630) 584-1919
CISPI	Cast Iron Soil Pipe Institute <a href="http://www.cispi.org">www.cispi.org</a>	(423) 892-0137
CLFMI	Chain Link Fence Manufacturers Institute <a href="http://www.chainlinkinfo.org">www.chainlinkinfo.org</a>	(301) 596-2583
CRRC	Cool Roof Rating Council <a href="http://www.coolroofs.org">www.coolroofs.org</a>	(866) 465-2523 (510) 485-7175
CPA	Composite Panel Association <a href="http://www.pbmdf.com">www.pbmdf.com</a>	(866) 426-6767 (703) 724-1128
CPPA	Corrugated Polyethylene Pipe Association (See PPI – Plastics Pipe Institute)	
CRI	Carpet & Rug Institute (The) <a href="http://www.carpet-rug.com">www.carpet-rug.com</a>	(800) 882-8846 (706) 278-3176
CRSI	Concrete Reinforcing Steel Institute <a href="http://www.crsi.org">www.crsi.org</a>	(847) 517-1200
CSA	Canadian Standards Association <a href="http://www.csa.ca">www.csa.ca</a>	(800) 463-6727 (416) 747-4000
CSA	CSA International (Formerly: IAS - International Approval Services) <a href="http://www.csa-international.org">www.csa-international.org</a>	(866) 797-4272 (416) 747-2661



CSI	Cast Stone Institute <a href="http://www.caststone.org">www.caststone.org</a>	(717) 272-3744
CSI	Construction Specifications Institute (The) <a href="http://www.csinet.org">www.csinet.org</a>	(800) 689-2900 (703) 684-0300
CSSB	Cedar Shake & Shingle Bureau <a href="http://www.cedarbureau.org">www.cedarbureau.org</a>	(604) 820-7700
CTI	Cooling Technology Institute (Formerly: Cooling Tower Institute) <a href="http://www.cti.org">www.cti.org</a>	(281) 583-4087
DHI	Door and Hardware Institute <a href="http://www.dhi.org">www.dhi.org</a>	(703) 222-2010
EIA	Electronic Industries Alliance <a href="http://www.eia.org">www.eia.org</a>	(703) 907-7500
EIMA	EIFS Industry Members Association <a href="http://www.eima.com">www.eima.com</a>	(800) 294-3462
EJCDC	Engineers Joint Contract Documents Committee <a href="http://www.ejcdc.org">www.ejcdc.org</a>	
EJMA	Expansion Joint Manufacturers Association, Inc. <a href="http://www.ejma.org">www.ejma.org</a>	(914) 332-0040
ESD	Electrostatic Discharge Association <a href="http://www.esda.org">www.esda.org</a>	(315) 339-6937
FIBA	Federation Internationale de Basketball (The International Basketball Federation) <a href="http://www.fiba.com">www.fiba.com</a>	41 22 545 00 00
FM Approvals	FM Approvals <a href="http://www.fmglobal.com">www.fmglobal.com</a>	(781) 762-4300
FM Global	FM Global (Formerly: FMG - FM Global) <a href="http://www.fmglobal.com">www.fmglobal.com</a>	(401) 275-3000

FMRC	Factory Mutual Research (Now FM Global)	
FRSA	Florida Roofing, Sheet Metal & Air Conditioning Contractors Association, Inc. <a href="http://www.floridarooft.com">www.floridarooft.com</a>	(407) 671-3772
FSA	Fluid Sealing Association <a href="http://www.fluidsealing.com">www.fluidsealing.com</a>	(610) 971-4850
FSC	Forest Stewardship Council <a href="http://www.fsc.org">www.fsc.org</a>	49 228 367 66 0
GA	Gypsum Association <a href="http://www.gypsum.org">www.gypsum.org</a>	(301) 277-8686
GANA	Glass Association of North America <a href="http://www.glasswebsite.com">www.glasswebsite.com</a>	(785) 271-0208
GRI	(Now GSI)	
GS	Green Seal <a href="http://www.greenseal.org">www.greenseal.org</a>	(202) 872-6400
GSI	Geosynthetic Institute <a href="http://www.geosynthetic-institute.org">www.geosynthetic-institute.org</a>	(610) 522-8440
HI	Hydraulic Institute <a href="http://www.pumps.org">www.pumps.org</a>	(888) 786-7744 (973) 267-9700
HI	Hydronics Institute (Now Part of AHRI)	
HMMA	Hollow Metal Manufacturers Association (Part of NAAMM)	
HPVA	Hardwood Plywood & Veneer Association <a href="http://www.hpva.org">www.hpva.org</a>	(703) 435-2900
HPW	H. P. White Laboratory, Inc. <a href="http://www.hpwhite.com">www.hpwhite.com</a>	(410) 838-6550

IAS	International Approval Services (Now CSA International)	
IBF	International Badminton Federation <a href="http://www.internationalbadminton.org">www.internationalbadminton.org</a>	(603) 9283-7155
ICEA	Insulated Cable Engineers Association, Inc. <a href="http://www.icea.net">www.icea.net</a>	(770) 830-0369
ICRI	International Concrete Repair Institute, Inc. <a href="http://www.icri.org">www.icri.org</a>	(847) 827-0830
IEC	International Electrical Congress <a href="http://www.iec.ch">www.iec.ch</a>	41 22 919 02 11
IEEE	Institute of Electrical and Electronics Engineers, Inc. (The) <a href="http://www.ieee.org">www.ieee.org</a>	(212) 419-7900
IESNA	Illuminating Engineering Society of North America <a href="http://www.iesna.org">www.iesna.org</a>	(212) 248-5000
IENT	Institute of Environmental Sciences and Technology <a href="http://www.ient.org">www.ient.org</a>	(847) 981-0100
IGCC	Insulating Glass Certification Council <a href="http://www.igcc.org">www.igcc.org</a>	(315) 646-2234
IGMA	Insulating Glass Manufacturers Alliance <a href="http://www.igmaonline.org">www.igmaonline.org</a>	(613) 233-1510
ILI	Indiana Limestone Institute of America, Inc. <a href="http://www.iliai.com">www.iliai.com</a>	(812) 275-4426
ISO	International Organization for Standardization <a href="http://www.iso.ch">www.iso.ch</a>	41 22 749 01 11
ISFA	International Surface Fabricators Association <a href="http://www.isfanow.org">www.isfanow.org</a>	(877) 464-7732 (801) 341-7360
ITS	Intertek Testing Service NA <a href="http://www.intertek.com">www.intertek.com</a>	(800) 967-5352

ITU	International Telecommunication Union <a href="http://www.itu.int/home">www.itu.int/home</a>	41 22 730 51 11
KCMA	Kitchen Cabinet Manufacturers Association <a href="http://www.kcma.org">www.kcma.org</a>	(703) 264-1690
LMA	Laminating Materials Association (Now part of CPA)	
LPI	Lightning Protection Institute <a href="http://www.lightning.org">www.lightning.org</a>	(800) 488-6864
MBMA	Metal Building Manufacturers Association <a href="http://www.mbma.com">www.mbma.com</a>	(216) 241-7333
MFMA	Maple Flooring Manufacturers Association, Inc. <a href="http://www.maplefloor.org">www.maplefloor.org</a>	(847) 480-9138
MFMA	Metal Framing Manufacturers Association, Inc. <a href="http://www.metalframingmfg.org">www.metalframingmfg.org</a>	(312) 644-6610
MH	Material Handling (Now MHIA)	
MHIA	Material Handling Industry of America <a href="http://www.mhia.org">www.mhia.org</a>	(800) 345-1815 (704) 676-1190
MIA	Marble Institute of America <a href="http://www.marble-institute.com">www.marble-institute.com</a>	(440) 250-9222
MPI	Master Painters Institute <a href="http://www.paintinfo.com">www.paintinfo.com</a>	(888) 674-8937 (604) 298-7578
MSS	Manufacturers Standardization Society of The Valve and Fittings Industry Inc. <a href="http://www.mss-hq.com">www.mss-hq.com</a>	(703) 281-6613
NAAMM	National Association of Architectural Metal Manufacturers <a href="http://www.naamm.org">www.naamm.org</a>	(630) 942-6591
NACE	NACE International (National Association of Corrosion Engineers International) <a href="http://www.nace.org">www.nace.org</a>	(800) 797-6623 (281) 228-6200

NADCA	National Air Duct Cleaners Association <a href="http://www.nadca.com">www.nadca.com</a>	(202) 737-2926
NAGWS	National Association for Girls and Women in Sport <a href="http://www.aahperd.org/nagws/">www.aahperd.org/nagws/</a>	(703) 476-3452
NAIMA	North American Insulation Manufacturers Association <a href="http://www.naima.org">www.naima.org</a>	(703) 684-0084
NBGQA	National Building Granite Quarries Association, Inc. <a href="http://www.nbgqa.com">www.nbgqa.com</a>	(800) 557-2848
NCAA	National Collegiate Athletic Association (The) <a href="http://www.ncaa.org">www.ncaa.org</a>	(317) 917-6222
NCMA	National Concrete Masonry Association <a href="http://www.ncma.org">www.ncma.org</a>	(703) 713-1900
NCPI	National Clay Pipe Institute <a href="http://www.ncpi.org">www.ncpi.org</a>	(262) 248-9094
NCTA	National Cable & Telecommunications Association <a href="http://www.ncta.com">www.ncta.com</a>	(202) 222-2300
NEBB	National Environmental Balancing Bureau <a href="http://www.nebb.org">www.nebb.org</a>	(301) 977-3698
NECA	National Electrical Contractors Association <a href="http://www.necanet.org">www.necanet.org</a>	(301) 657-3110
NELMA	Northeastern Lumber Manufacturers' Association <a href="http://www.nelma.org">www.nelma.org</a>	(207) 829-6901
NEMA	National Electrical Manufacturers Association <a href="http://www.nema.org">www.nema.org</a>	(703) 841-3200
NETA	InterNational Electrical Testing Association <a href="http://www.netaworld.org">www.netaworld.org</a>	(888) 300-6382 (269) 488-6382
NFHS	National Federation of State High School Associations <a href="http://www.nfhs.org">www.nfhs.org</a>	(317) 972-6900

NFPA	National Fire Protection Association <a href="http://www.nfpa.org">www.nfpa.org</a>	(800) 344-3555 (617) 770-3000
NFRC	National Fenestration Rating Council <a href="http://www.nfrc.org">www.nfrc.org</a>	(301) 589-1776
NGA	National Glass Association <a href="http://www.glass.org">www.glass.org</a>	(866) 342-5642 (703) 442-4890
NHLA	National Hardwood Lumber Association <a href="http://www.natlhardwood.org">www.natlhardwood.org</a>	(800) 933-0318 (901) 377-1818
NLGA	National Lumber Grades Authority <a href="http://www.nlga.org">www.nlga.org</a>	(604) 524-2393
NOFMA	National Oak Flooring Manufacturers Association (Now NWFA)	
NRCA	National Roofing Contractors Association <a href="http://www.nrca.net">www.nrca.net</a>	(800) 323-9545 (847) 299-9070
NRMCA	National Ready Mixed Concrete Association <a href="http://www.nrmca.org">www.nrmca.org</a>	(888) 846-7622 (301) 587-1400
NSF	National Sanitation Foundation International <a href="http://www.nsf.org">www.nsf.org</a>	(800) 673-6275 (734) 769-8010
NSSGA	National Stone, Sand & Gravel Association <a href="http://www.nssga.org">www.nssga.org</a>	(800) 342-1415 (703) 525-8788
NTMA	National Terrazzo & Mosaic Association, Inc. (The) <a href="http://www.ntma.com">www.ntma.com</a>	(800) 323-9736 (540) 751-0930
NTRMA	National Tile Roofing Manufacturers Association (Now TRI)	
NWFA	National Wood Flooring Association <a href="http://www.nwfa.org">www.nwfa.org</a>	(800) 422-4556 (636) 519-9663
NWWDA	National Wood Window and Door Association (Now WDMA)	

OPL	Omega Point Laboratories, Inc. (Now ITS)	
PCI	Precast/Prestressed Concrete Institute <a href="http://www.pci.org">www.pci.org</a>	(312) 786-0300
PDCA	Painting & Decorating Contractors of America <a href="http://www.pdca.com">www.pdca.com</a>	(800) 332-7322 (314) 514-7322
PDI	Plumbing & Drainage Institute <a href="http://www.pdionline.org">www.pdionline.org</a>	(800) 589-8956 (978) 557-0720
PGI	PVC Geomembrane Institute <a href="http://pgi-tp.cee.uiuc.edu">http://pgi-tp.cee.uiuc.edu</a>	(217) 333-3929
PLANET	Professional Landcare Network (Formerly: ACLA - Associated Landscape Contractors of America) <a href="http://www.landcarenetwork.org">www.landcarenetwork.org</a>	(800) 395-2522 (703) 736-9666
PTI	Post-Tensioning Institute <a href="http://www.post-tensioning.org">www.post-tensioning.org</a>	(248) 848-3180
RCSC	Research Council on Structural Connections <a href="http://www.boltcouncil.org">www.boltcouncil.org</a>	
RFCI	Resilient Floor Covering Institute <a href="http://www.rfci.com">www.rfci.com</a>	(706) 882-3833
RIS	Redwood Inspection Service <a href="http://www.calredwood.org">www.calredwood.org</a>	(888) 225-7339 (415) 382-0662
SAE	SAE International <a href="http://www.sae.org">www.sae.org</a>	(877) 606-7323 (724) 776-4841
SDI	Steel Deck Institute <a href="http://www.sdi.org">www.sdi.org</a>	(847) 458-4647
SDI	Steel Door Institute <a href="http://www.steeldoor.org">www.steeldoor.org</a>	(440) 899-0010
SEFA	Scientific Equipment and Furniture Association <a href="http://www.sefalabs.com">www.sefalabs.com</a>	(877) 294-5424 (516) 294-5424

SEI/ASCE	Structural Engineering Institute/American Society of Civil Engineers (See ASCE)	
SGCC	Safety Glazing Certification Council <a href="http://www.sgcc.org">www.sgcc.org</a>	(315) 646-2234
SIA	Security Industry Association <a href="http://www.siaonline.org">www.siaonline.org</a>	(866) 817-8888 (703) 683-2075
SIGMA	Sealed Insulating Glass Manufacturers Association (Now IGMA)	
SJI	Steel Joist Institute <a href="http://www.steeljoist.org">www.steeljoist.org</a>	(843) 293-1995
SMA	Screen Manufacturers Association <a href="http://www.smainfo.org">www.smainfo.org</a>	(561) 533-0991
SMACNA	Sheet Metal and Air Conditioning Contractors' National Association <a href="http://www.smacna.org">www.smacna.org</a>	(703) 803-2980
SPFA	Spray Polyurethane Foam Alliance (Formerly: SPI/SPFD - The Society of the Plastics Industry, Inc.; Spray Polyurethane Foam Division) <a href="http://www.sprayfoam.org">www.sprayfoam.org</a>	(800) 523-6154
SPIB	Southern Pine Inspection Bureau (The) <a href="http://www.spib.org">www.spib.org</a>	(850) 434-2611
SPRI	Single Ply Roofing Industry <a href="http://www.spri.org">www.spri.org</a>	(781) 647-7026
SSINA	Specialty Steel Industry of North America <a href="http://www.ssina.com">www.ssina.com</a>	(800) 982-0355 (202) 342-8630
SSPC	SSPC: The Society for Protective Coatings <a href="http://www.sspc.org">www.sspc.org</a>	(877) 281-7772 (412) 281-2331
STI/SPFA	Steel Tank Institute/Steel Plate Fabricators Association <a href="http://www.steeltank.com">www.steeltank.com</a>	(847) 438-8265



SWRI	Sealant, Waterproofing, & Restoration Institute <a href="http://www.swrionline.org">www.swrionline.org</a>	(816) 472-7974
TCA	Tile Council of America, Inc. <a href="http://www.tileusa.com">www.tileusa.com</a>	(864) 646-8453
TIA/EIA	Telecommunications Industry Association/Electronic Industries Alliance <a href="http://www.tiaonline.org">www.tiaonline.org</a>	(703) 907-7700
TMS	The Masonry Society <a href="http://www.masonrysociety.org">www.masonrysociety.org</a>	(303) 939-9700
TPI	Truss Plate Institute, Inc. <a href="http://www.tpinst.org">www.tpinst.org</a>	(703) 683-1010
TPI	Turfgrass Producers International <a href="http://www.turfgrasssod.org">www.turfgrasssod.org</a>	(800) 405-8873 (847) 649-5555
TRI	Tile Roofing Institute <a href="http://www.tilerroofing.org">www.tilerroofing.org</a>	(312) 670-4177
UL	Underwriters Laboratories Inc. <a href="http://www.ul.com">www.ul.com</a>	(877) 854-3577 (847) 272-8800
UNI	Uni-Bell PVC Pipe Association <a href="http://www.uni-bell.org">www.uni-bell.org</a>	(972) 243-3902
USGBC	U.S. Green Building Council <a href="http://www.usgbc.org">www.usgbc.org</a>	(800) 795-1747 (202) 742-3792
USITT	United States Institute for Theatre Technology, Inc. <a href="http://www.usitt.org">www.usitt.org</a>	(800) 938-7488 (315) 463-6463
WASTEC	Waste Equipment Technology Association <a href="http://www.wastec.org">www.wastec.org</a>	(800) 424-2869 (202) 244-4700
WCLIB	West Coast Lumber Inspection Bureau <a href="http://www.wclib.org">www.wclib.org</a>	(800) 283-1486 (503) 639-0651

WCMA	Window Covering Manufacturers Association (Now WCSC)	
WCSC	Window Covering Safety Council (Formerly: WCMA) <a href="http://www.windowcoverings.org">www.windowcoverings.org</a>	(800) 506-4636 (212) 297-2100
WDMA	Window & Door Manufacturers Association (Formerly: NWWDA) <a href="http://www.wdma.com">www.wdma.com</a>	(800) 223-2301 (312) 321-6802
WMMPA	Wood Moulding & Millwork Producers Association <a href="http://www.wmmpa.com">www.wmmpa.com</a>	(800) 550-7889 (530) 661-9591
WWPA	Western Wood Products Association <a href="http://www.wwpa.org">www.wwpa.org</a>	(503) 224-3930

- B. Code Agencies: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities in the following list. Names, telephone numbers, and Web sites are subject to change and are believed to be accurate and up-to-date as of the date of the Contract Documents.

IAPMO	International Association of Plumbing and Mechanical Officials <a href="http://www.iapmo.org">www.iapmo.org</a>	(909) 472-4100
ICC	International Code Council <a href="http://www.iccsafe.org">www.iccsafe.org</a>	(888) 422-7233 (703) 931-4533
ICC-ES	ICC Evaluation Service, Inc. <a href="http://www.icc-es.org">www.icc-es.org</a>	(800) 423-6587 (562) 699-0543
NEC	National Electric Code <a href="http://www.nec.com">www.nec.com</a>	

- C. Federal Government Agencies: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities in the following list. Names, telephone numbers, and Web sites are subject to change and are believed to be accurate and up-to-date as of the date of the Contract Documents.

CE	Army Corps of Engineers <a href="http://www.usace.army.mil">www.usace.army.mil</a>	(202) 761-0011
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CPSC	Consumer Product Safety Commission <a href="http://www.cpsc.gov">www.cpsc.gov</a>	(800) 638-2772 (301) 504-7923
DOC	US Department of Commerce <a href="http://www.commerce.gov">www.commerce.gov</a>	(202) 482-2000
DOD	US Department of Defense <a href="http://www.defense.gov">www.defense.gov</a>	(703) 571-5131
DOE	US Department of Energy <a href="http://www.energy.gov">www.energy.gov</a>	(202) 586-5000
EPA	US Environmental Protection Agency <a href="http://www.epa.gov">www.epa.gov</a>	(202) 272-0167
FAA	Federal Aviation Administration <a href="http://www.faa.gov">www.faa.gov</a>	(866) 835-5322
FCC	Federal Communications Commission <a href="http://www.fcc.gov">www.fcc.gov</a>	(888) 225-5322
FDA	US Food and Drug Administration <a href="http://www.fda.gov">www.fda.gov</a>	(888) 463-6332
GSA	US General Services Administration <a href="http://www.gsa.gov">www.gsa.gov</a>	(800) 488-3111
HUD	Department of Housing and Urban Development <a href="http://www.hud.gov">www.hud.gov</a>	(202) 708-1112
LBL	Lawrence Berkeley National Laboratory <a href="http://www.lbl.gov">www.lbl.gov</a>	(510) 486-4000
NCHRP	National Cooperative Highway Research Program (See TRB)	
NIST	National Institute of Standards and Technology <a href="http://www.nist.gov">www.nist.gov</a>	(301) 975-6478
OSHA	US Department of Labor; Occupational Safety & Health Administration <a href="http://www.osha.gov">www.osha.gov</a>	(800) 321-6742 (202) 693-1999

PBS	Public Building Service (See GSA)	
PHS	US Department of Health & Human Services; Office of Public Health and Science <a href="http://www.hhs.gov/ophs/">www.hhs.gov/ophs/</a>	(202) 690-7694
RUS	Rural Utilities Service (See USDA)	(202) 720-9540
SD	US Department of State <a href="http://www.state.gov">www.state.gov</a>	(202) 647-4000
TRB	Transportation Research Board <a href="http://gulliver.trb.org">http://gulliver.trb.org</a>	(202) 334-2934
USDA	US Department of Agriculture <a href="http://www.usda.gov">www.usda.gov</a>	(202) 720-2791
USPS	US Postal Service <a href="http://www.usps.com">www.usps.com</a>	(800) 275-8777 (202) 268-2000

D. Standards and Regulations: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the standards and regulations in the following list. Names, telephone numbers, and Web sites are subject to change and are believed to be accurate and up-to-date as of the date of the Contract Documents.

ADAAG	Americans with Disabilities Act (ADA) Architectural Barriers Act (ABA) Accessibility Guidelines for Buildings and Facilities Available from United States Access Board <a href="http://www.access-board.gov">www.access-board.gov</a>	(800) 872-2253 (202) 272-0080
CFR	Code of Federal Regulations Available from Government Printing Office <a href="http://www.gpoaccess.gov/cfr/index.html">www.gpoaccess.gov/cfr/index.html</a>	(866) 512-1800 (202) 512-1800
FED-STD	Federal Standard (See FS)	
FS	Federal Specification Available from Department of Defense Single Stock Point	(215) 697-2664

<http://dodssp.daps.dla.mil>

Available from Defense Standardization Program  
[www.dsp.dla.mil](http://www.dsp.dla.mil)

Available from General Services Administration (202) 619-8925  
[www.gsa.gov](http://www.gsa.gov)

Available from National Institute of Building Sciences (202) 289-7800  
[www.wbdg.org/ccb](http://www.wbdg.org/ccb)

FTMS Federal Test Method Standard  
(See FS)

UFAS Uniform Federal Accessibility Standards (800) 872-2253  
Available from Access Board (202) 272-0080  
[www.access-board.gov](http://www.access-board.gov)

E. State Government Agencies: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities in the following list. Names, telephone numbers, and Web sites are subject to change and are believed to be accurate and up-to-date as of the date of the Contract Documents.

NYBFU New York Board of Fire Underwriters (212) 227-3700  
[www.nybfuinstitute.org](http://www.nybfuinstitute.org) 1-800-227-2761

NYSDEC New York State Department of Environmental Conservation (518) 402-8651  
[www.dec.ny.gov](http://www.dec.ny.gov)

SPDES NYSDEC – State Pollution Discharge Elimination System (518) 402-8109  
<http://www.dec.ny.gov/permits/6054.html>

NYSDOL New York State Department of Labor (518) 457-9000  
[www.labor.state.ny.us](http://www.labor.state.ny.us)

NYSDOS New York Department of State (518) 474-4073  
Division of Code Enforcement and Administration  
[www.dos.state.ny.us](http://www.dos.state.ny.us)

NYSDOT New York State Department of Transportation (518) 457-6195  
[www.nysdot.gov](http://www.nysdot.gov)

NYSDOH      New York State Department of Health  
[www.health.state.ny.us](http://www.health.state.ny.us)

NYSED      New York State Education Department      (518) 474-3906  
Office of Facilities Planning  
<http://www.emsc.nysed.gov/facplan/>

NYSUFPBC      New York State Uniform Fire Protection and Building Code  
1. BCNYS – Building Code of New York State  
2. ECNYS – Energy Conservation Construction Code of New York  
State  
3. FCNYS – Fire Code of New York State  
4. FGNYS – Fuel Gas Code of New York State  
5. MCNYS – Mechanical Code of New York State  
6. PCNYS – Plumbing Code of NEW York State  
7. PMCNYS – Property Maintenance Code of New York State  
8. RCNYS – Residential Code of New York State

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 014200

## SECTION 014533 - CODE-REQUIRED SPECIAL INSPECTIONS AND PROCEDURES

### PART 1 - GENERAL

#### 1.1 SECTION INCLUDES

- A. Code-required special inspections.
- B. Testing services incidental to special inspections.
- C. Submittals.
- D. Manufacturers' field services.
- E. Fabricators' field services.

#### 1.2 RELATED REQUIREMENTS

- A. Document 003100 - Available Project Information
- B. Document 00 7200 - General Conditions: Inspections and approvals required by public authorities.
- C. Section 014000 - Quality Requirements.
- D. Section 014219 - Reference Standards.
- E. Section 016000 - Product Requirements: Requirements for material and product quality.

#### 1.3 ABBREVIATIONS AND ACRONYMS

- A. AHJ: Authority having jurisdiction.
- B. IAS: International Accreditation Service, Inc.
- C. NIST: National Institute of Standards and Technology.

#### 1.4 DEFINITIONS

- A. Code or Building Code: ICC (IBC)-2018, Edition of the International Building Code and specifically, Chapter 17 - Special Inspections and Tests.
- B. Authority Having Jurisdiction (AHJ): Agency or individual officially empowered to enforce the building, fire and life safety code requirements of the permitting jurisdiction in which the Project is located.
- C. Special Inspection:
  - 1. Special inspections are inspections and testing of materials, installation, fabrication, erection or placement of components and connections mandated by the AHJ that also require special expertise to ensure compliance with the approved Contract Documents and the referenced standards.
  - 2. Special inspections are separate from and independent of tests and inspections conducted by Owner or Contractor for the purposes of quality assurance and contract administration.

#### 1.5 REFERENCE STANDARDS

- A. ASTM E329 - Standard Specification for Agencies Engaged in Construction Inspection, Testing, or Special Inspection 2020.
- B. ASTM E543 - Standard Specification for Agencies Performing Nondestructive Testing 2021.
- C. IAS AC89 - Accreditation Criteria for Testing Laboratories 2018.
- D. IAS AC291 - Accreditation Criteria for Special Inspection Agencies 2017.
- E. ICC (IBC)-2018 - International Building Code 2018.

#### 1.6 SUBMITTALS

- A. See Section 013000 - Administrative Requirements, for submittal procedures.
- B. Special Inspection Agency Qualifications: Prior to the start of work, the Special Inspection Agency is required to:
  - 1. Submit agency name, address, and telephone number, names of full-time registered Engineer and responsible officer.



2. Submit copy of report of laboratory facilities inspection made by NIST Construction Materials Reference Laboratory during most recent inspection, with memorandum of remedies of any deficiencies reported by the inspection.
  3. Submit certification that Special Inspection Agency is acceptable to AHJ.
- C. Testing Agency Qualifications: Prior to the start of work, the Testing Agency is required to:
1. Submit agency name, address, and telephone number, and names of full-time registered Engineer and responsible officer.
  2. Submit copy of report of laboratory facilities inspection made by NIST Construction Materials Reference Laboratory during most recent inspection, with memorandum of remedies of any deficiencies reported by the inspection.
  3. Submit certification that Testing Agency is acceptable to AHJ.
- D. Smoke Control Testing Agency Qualifications: Prior to the start of work, the Testing Agency is required to:
1. Submit agency name, address, and telephone number, and names of full-time registered Engineer and responsible officer.
  2. Submit documentary evidence that agency has appropriate credentials and documented experience in fire protection engineering, mechanical engineering and HVAC air balancing.
  3. Submit certification that Testing Agency is acceptable to AHJ.
- E. Manufacturer's Qualification Statement: Manufacturer is required to submit documentation of manufacturing capability and quality control procedures. Include documentation of AHJ approval.
- F. Fabricator's Qualification Statement: Fabricator is required to submit documentation of fabrication facilities and methods as well as quality control procedures. Include documentation of AHJ approval.
- G. Special Inspection Reports: After each special inspection, Special Inspector is required to promptly submit at least two copies of report; one to Structural Engineer of Record and one to the AHJ.
1. Include:
    - a. Date issued.
    - b. Project title and number.

- c. Name of Special Inspector.
    - d. Date and time of special inspection.
    - e. Identification of product and specifications section.
    - f. Location in the Project.
    - g. Type of special inspection.
    - h. Date of special inspection.
    - i. Results of special inspection.
    - j. Compliance with Contract Documents.
  - 2. Final Special Inspection Report: Document special inspections and correction of discrepancies prior to the start of the work.
- H. Fabricator Special Inspection Reports: After each special inspection of fabricated items at the Fabricator's facility, Special Inspector is required to promptly submit at least two (2) copies of report; one (1) to Structural Engineer of Record and one (1) to the AHJ.
- 1. Include:
    - a. Date issued.
    - b. Project title and number.
    - c. Name of Special Inspector.
    - d. Date and time of special inspection.
    - e. Identification of fabricated item and specification section.
    - f. Location in the Project.
    - g. Results of special inspection.
    - h. Verification of fabrication and quality control procedures.
    - i. Compliance with Contract Documents.
    - j. Compliance with referenced standard(s).
- I. Test Reports: After each test or inspection, promptly submit at least two (2) copies of report; one (1) to the Structural Engineer of Record, and one (1) to the AHJ.
- 1. Include:
    - a. Date issued.
    - b. Project title and number.
    - c. Name of inspector.
    - d. Date and time of sampling or inspection.
    - e. Identification of product and specifications section.
    - f. Location in the Project.
    - g. Type of test or inspection.
    - h. Date of test or inspection.

- i. Results of test or inspection.
  - j. Compliance with Contract Documents.
- J. Certificates: When specified in individual special inspection requirements, Special Inspector shall submit certification by the manufacturer, fabricator, and installation subcontractor to Architect and AHJ, in quantities specified for Product Data.
  - 1. Indicate material or product complies with or exceeds specified requirements. Submit supporting reference data, affidavits, and certifications as appropriate.
- K. Manufacturer's Field Reports: Submit reports to Architect and AHJ.
  - 1. Submit report in duplicate within thirty (30) days of observation to Architect for information.
  - 2. Submit for information for the limited purpose of assessing compliance with information given and the design concept expressed in Contract Documents.
- L. Fabricator's Field Reports: Submit reports to Architect and AHJ.
  - 1. Submit report in duplicate within thirty (30) days of observation to Architect for information.
  - 2. Submit for information for the limited purpose of assessing compliance with information given and the design concept expressed in Contract Documents.

#### 1.7 SPECIAL INSPECTION AGENCY

- A. Owner or Architect, serving as Owner's Representative, will employ services of a Special Inspection Agency to perform inspections and associated testing and sampling in accordance with ASTM E329 and required by the building code.
- B. The Special Inspection Agency may employ and pay for services of an independent testing agency to perform testing and sampling associated with special inspections and required by the building code.
- C. Employment of agency in no way relieves Contractor of obligation to perform work in accordance with requirements of Contract Documents.

#### 1.8 TESTING AND INSPECTION AGENCIES

- A. Owner or Architect may employ services of an independent testing agency to perform additional testing and sampling associated with special inspections but not required by the building code.
- B. Employment of agency in no way relieves Contractor of obligation to perform work in accordance with requirements of Contract Documents.

## 1.9 QUALITY ASSURANCE

- A. Special Inspection Agency Qualifications:
  - 1. Independent firm specializing in performing testing and inspections of the type specified in this section.
  - 2. Accredited by IAS according to IAS AC291.
- B. Testing Agency Qualifications:
  - 1. Independent firm specializing in performing testing and inspections of the type specified in this section.
  - 2. Accredited by IAS according to IAS AC89.
- C. Copies of Documents at Project Site: Maintain at the project site a copy of each referenced document.

## PART 2 – PRODUCTS - NOT USED

## PART 3 – EXECUTION

### 3.1 STATEMENT AND SCHEDULE OF SPECIAL INSPECTIONS

- A. See Contract Drawings for Statement of Special Inspections.
- B. Special inspections shall be performed in accordance with schedule of special inspections indicated on Contract Drawings.
- C. Material testing shall be performed in accordance with schedule of special inspections indicated on Contract Drawings. See specific material-based specifications for additional material testing requirements.

END OF SECTION 014533

## SECTION 015000 – TEMPORARY FACILITIES AND CONTROLS

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. This Section includes requirements for temporary utilities, support facilities, and security and protection facilities.
- B. Related Sections include the following:
  - 1. Division 01 Section "Summary of Work" for limitations on utility interruptions and other work restrictions.
  - 2. Division 01 Section "Submittal Procedures" for procedures for submitting copies of implementation and termination schedule and utility reports.
  - 3. Division 01 Section "Execution" for progress cleaning requirements.

#### 1.3 DEFINITIONS

- A. Permanent Enclosure: As determined by Architect, exterior walls are insulated and weathertight; and all openings are closed with permanent construction or substantial temporary closures.

#### 1.4 USE CHARGES

- A. General: Cost or use charges for temporary facilities shall be included in the Contract Sum. Allow other entities to use temporary services and facilities without cost, including, but not limited to, Owner's construction forces, Architect, occupants of Project, testing agencies, and authorities having jurisdiction.
- B. Water Service: Water from Owner's existing water system is available for use without metering and without payment of use charges. Provide connections and extensions of services as required for construction operations.
- C. Electric Power: Owner shall supply single-phase electric power from existing building distribution systems for use by all Prime Contracts, for each Phased building area.
  - 1. EC shall install temporary facilities as outlined in their Scope of Work and related Division 01.

2. Owner shall not be responsible for supplying temporary three-phase power.
  3. Staging Area Power: The Owner shall be responsible for all power use charges associated with this facility; the Prime Contract shall enforce power conservation measures with their facilities and those of their sub-contractors.
- D. Telephone/Internet: Each Prime Contract shall be responsible for use charges associated with their respective telephone and internet access requirements.

#### 1.5 SUBMITTALS

- A. Site Plan: Show temporary facilities, egress plans, utility hookups, staging areas, and parking areas for construction personnel.
1. All contractors are required to provide "egress plans" for both interior and exterior work for locations where work will close off any exits, corridors, pathways, roads, and any access way. These plans are to be provided in advance at least two (2) months before work commences in that area, no work shall be started in any manner without approval of such plan. The failure to provide such plan for coordinating and scheduling will result into back charges to the prime(s) involved. These plans must include all locations and details where scaffolding, fencing and all temporary construction barriers are required.

#### 1.6 QUALITY ASSURANCE

- A. Electric Service: Comply with NECA, NEMA, and UL standards and regulations for temporary electric service. Install service to comply with NFPA 70.
- B. Tests and Inspections: Arrange for authorities having jurisdiction to test and inspect each temporary utility before use. Obtain required certifications and permits.

#### 1.7 PROJECT CONDITIONS

- A. A. Temporary Use of Permanent Facilities: Prime Contract, as installer of each permanent service shall assume responsibility for its operation, maintenance, and protection during use as a construction facility prior to the Owner's acceptance, regardless of previously assigned temporary facilities and controls responsibility.
- B. Owner's Facilities: Contractors are not allowed to use the Owner's facilities (toilets, telephone, food service, etc.) for their own benefit. Prime Contract Superintendents shall enforce this policy with their respective work forces.
1. Parking will be restricted to an area determined by the Owner. Owner reserves the right to remove from their property, unauthorized vehicles occupying unauthorized areas, at respective Contractors' expense.

## PART 2 - PRODUCTS

### 2.1 MATERIALS

- A. Chain-Link Fencing: Minimum 2-inch, 0.148-inch thick, galvanized steel, chain-link fabric fencing; minimum 6 feet high with galvanized steel pipe posts; minimum 2-3/8-inch O.D. line posts and 2-7/8-inch O.D. corner and pull posts.
  - 1. Provide gate openings to accommodate vehicle delivery traffic or as noted. Install gateposts in sizes required for support gates.
- B. Gypsum Board: Minimum 5/8-inch thick by 48-inch wide by maximum available lengths; regular-type panels with tapered edges. Comply with ASTM C 36/C 36M.

### 2.2 TEMPORARY FACILITIES

- A. Storage and Fabrication Sheds: Provide sheds sized, furnished, and equipped to accommodate materials and equipment for construction operations.
  - 1. Store combustible materials apart from building.

### 2.3 EQUIPMENT

- A. Fire Extinguishers: Portable, UL rated; with class and extinguishing agent as required by locations and classes of fire exposures. Comply with applicable codes for quantities required. Comply with NFPA for recommended classes for exposure; extinguishers shall be inspected and appropriately tagged prior to being brought on site. Provide stands, painted bright orange, sturdy enough to carry the extinguisher, and built as not to create a tipping hazard.

## PART 3 - EXECUTION

### 3.1 INSTALLATION, GENERAL

- A. Locate facilities where directed by site coordinator and where they will serve Project adequately and result in minimum interference with performance of the Work. Relocate and modify facilities as required by progress of the Work and when directed by the Construction Site Coordinator at no additional cost to the owner.
  - 1. Locate facilities to limit site disturbance as specified in Division 01 Section "Summary of Work."

- B. Provide each facility ready for use when needed to avoid delay. Do not remove until facilities are no longer needed or are replaced by authorized use of completed permanent facilities.

### 3.2 TEMPORARY UTILITY INSTALLATION

- A. General: Install temporary service or connect to existing service.
  - 1. Arrange with utility company, Owner, and existing users for time when service can be interrupted, if necessary, to make connections for temporary services.
- B. Sewers and Drainage: Provide temporary utilities to remove effluent lawfully.
  - 1. Connect temporary sewers to municipal system as directed by authorities having jurisdiction.
- C. Water Service: Use of Owner's existing water service facilities will be permitted, as long as facilities are cleaned and maintained in a condition acceptable to Owner. At Substantial Completion, restore these facilities to condition existing before initial use.
  - 1. Where installations below an outlet might be damaged by spillage or leakage, provide a drip pan of suitable size to minimize water damage. Drain accumulated water promptly from pans.
- D. Heating: Provide temporary heating required by construction activities for curing or drying of completed installations or for protecting installed construction from adverse effects of low temperatures or high humidity. Select equipment that will not have a harmful effect on completed installations or elements being installed.
- E. Ventilation and Humidity Control: Provide temporary ventilation required by construction activities for curing or drying of completed installations or for protecting installed construction from adverse effects of high humidity. Select equipment that will not have a harmful effect on completed installations or elements being installed. Coordinate ventilation requirements to produce ambient condition required and minimize energy consumption.
- F. Electric Power Service: Use of Owner's existing single phase electric power service will be permitted, as long as equipment is maintained in a condition acceptable to Owner.
  - 1. Refer to Section 0112000 for additional requirements.
- G. Lighting: Provide temporary lighting with local switching that provides adequate illumination for construction operations, observations, inspections, and traffic conditions.
  - 1. Install and operate temporary lighting that fulfills security and protection requirements without operating entire system.



2. Refer to Section 011200 for additional requirements.

### 3.3 SUPPORT FACILITIES INSTALLATION

A. General: Comply with the following:

1. Provide incombustible construction for offices, shops, and sheds located within construction area or within thirty (30) feet of building lines. Comply with NFPA 241.
2. Maintain support facilities until near Substantial Completion. Remove before Substantial Completion. Personnel remaining after Substantial Completion will be permitted to use permanent facilities, under conditions acceptable to Owner.

B. Traffic Controls: Comply with requirements of authorities having jurisdiction.

1. Protect existing site improvements to remain including curbs, pavement, and utilities.
2. Maintain access for fire-fighting equipment and access to fire hydrants.

C. Parking: Parking will be restricted to an area determined by the Owner. Owner reserves the right to remove from their property, unauthorized vehicles occupying unauthorized areas, at respective Contractors' expense.

D. Project Identification and Temporary Signs: Provide Project identification and other signs. Install signs where indicated to inform public and individuals seeking entrance to Project. Unauthorized signs are not permitted.

1. Provide temporary, directional signs for construction personnel and visitors.
2. Maintain and touchup signs so they are legible at all times.

E. Waste Disposal Facilities: Comply with requirements specified in Division 01 Section "Construction Waste Management and Disposal" and Section 011200, "Summary of Work."

F. Waste Disposal Facilities: Provide waste-collection containers in sizes adequate to handle waste from construction operations. Comply with requirements of authorities having jurisdiction. Comply with Division 01 Section "Execution" for progress cleaning requirements.

G. Lifts and Hoists: Provide facilities necessary for hoisting materials and personnel.

1. Truck cranes and similar devices used for hoisting materials are considered "tools and equipment" and not temporary facilities.

H. Existing Stair Usage: Use of Owner's existing stairs will be permitted, as long as stairs are protected, cleaned, and maintained in a condition acceptable to Owner. At

Substantial Completion, restore stairs to no less than condition existing before initial use.

1. Provide protective coverings, barriers, devices, signs, or other procedures to protect stairs and to maintain means of egress. If, despite such protection, stairs become damaged, restore damaged areas so no evidence remains of correction work.

### 3.4 SECURITY AND PROTECTION FACILITIES INSTALLATION

- A. Environmental Protection: Provide protection, operate temporary facilities, and conduct construction in ways and by methods that comply with environmental regulations and that minimize possible air, waterway, and subsoil contamination or pollution or other undesirable effects.
  1. Comply with work restrictions specified in Division 01 Section "Multiple Contract Summary."
- B. Pest Control: Engage pest-control service to recommend practices to minimize attraction and harboring of rodents, roaches, and other pests and to perform extermination and control procedures at regular intervals so Project will be free of pests and their residues at Substantial Completion. Obtain extended warranty for Owner. Perform control operations lawfully, using environmentally safe materials.
- C. Security Enclosure and Lockup: Install substantial temporary enclosure around partially completed areas of construction. Provide lockable entrances to prevent unauthorized entrance, vandalism, theft, and similar violations of security.
  1. Refer to Section 011200, "Multiple Contract Summary" for additional information. All site contractors are to have a 24-hour available emergency contact person available to fix and correct areas that have been compromised after hours, weekends and holidays. Upon notification of such incident, the contractor is required to deploy workers as necessary within 1-2 hours maximum to be on site to correct such matter reported. Emergency personnel contact information shall be submitted within two (2) weeks of Notice to Proceed.
- D. Barricades, Warning Signs, and Lights: Comply with requirements of authorities having jurisdiction for erecting structurally adequate barricades, including warning signs and lighting.
  1. Yodock barriers are to be furnished and installed around all site construction zones with chain link fencing panels, posts, and signage. All entries to sites are to have lockable gates.
  2. Contractor shall ensure that all chain link safety fenceings around the work zone are closed off to any adjacent structure, building, etc. at all times.

3. All contractors storing any materials and/or equipment on site shall be fenced in with secured chain link fencing.
- E. Temporary Partitions: Provide floor-to-ceiling dustproof partitions to limit dust and dirt migration and to separate areas occupied by Owner from fumes and noise.
  1. Construct dustproof partitions with gypsum wallboard with joints taped on occupied side, and fire-retardant plywood on construction operations side.
  2. Construct dustproof partitions with two (2) layers of 3 mil polyethylene sheet on each side. Cover floor with two (2) layers of 3 mil polyethylene sheet, extending sheets 18 inches up the sidewalls. Overlap and tape full length of joints. Cover floor with fire-retardant plywood.
    - a. Construct vestibule and airlock at each entrance through temporary partition with not less than 48 inches between doors. Maintain water-dampened foot mats in vestibule.
  3. Insulate partitions to provide noise protection to occupied areas.
  4. Seal joints and perimeter. Equip partitions with dustproof doors with exit device, closer and security locks.
  5. Protect air-handling equipment.
  6. Weather strip openings.
  7. Provide walk-off mats at each entrance through temporary partition.
- F. Temporary Fire Protection: Install and maintain temporary fire-protection facilities of types needed to protect against reasonably predictable and controllable fire losses. Comply with NFPA 241.
  1. Prohibit smoking within fifty (50) feet of all school property.
  2. Supervise welding operations, combustion-type temporary heating units, and similar sources of fire ignition according to requirements of authorities having jurisdiction.
  3. Develop and supervise an overall fire-prevention and protection program for personnel at Project site. Review needs with local fire department and establish procedures to be followed. Instruct personnel in methods and procedures. Post warnings and information.
  4. Provide temporary standpipes and hoses for fire protection. Hang hoses with a warning sign stating that hoses are for fire-protection purposes only and are not to be removed. Match hose size with outlet size and equip with suitable nozzles.

### 3.5 OPERATION, TERMINATION, AND REMOVAL

- A. Supervision: Enforce strict discipline in use of temporary facilities. To minimize waste and abuse, limit availability of temporary facilities to essential and intended uses.
- B. Maintenance: Maintain facilities in good operating condition until removal.

1. Maintain operation of temporary enclosures, heating, cooling, humidity control, ventilation, and similar facilities on a 24-hour basis where required to achieve indicated results and to avoid possibility of damage.
- C. Temporary Facility Changeover: Do not change over from using temporary security and protection facilities to permanent facilities until Substantial Completion.
- D. Termination and Removal: Remove each temporary facility when need for its service has ended, when it has been replaced by authorized use of a permanent facility, or no later than Substantial Completion. Complete or, if necessary, restore permanent construction that may have been delayed because of interference with temporary facility. Repair damaged Work, clean exposed surfaces, and replace construction that cannot be satisfactorily repaired.
1. Materials and facilities that constitute temporary facilities are property of Contractor. Owner reserves right to take possession of Project identification signs.
  2. Remove temporary paving not intended for or acceptable for integration into permanent paving. Where area is intended for landscape development, remove soil and aggregate fill that do not comply with requirements for fill or subsoil. Remove materials contaminated with road oil, asphalt and other petrochemical compounds, and other substances that might impair growth of plant materials or lawns. Repair or replace street paving, curbs, and sidewalks at temporary entrances, as required by authorities having jurisdiction.
  3. At Substantial Completion, clean and renovate permanent facilities used during construction period. Comply with final cleaning requirements specified in Division 01 Section "Closeout Procedures."

END OF SECTION 015000

## SECTION 016000 - PRODUCT REQUIREMENTS

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for selection of products for use in Project; product delivery, storage, and handling; manufacturers' standard warranties on products; special warranties; product substitutions; and comparable products.

#### 1.3 DEFINITIONS

- A. Products: Items purchased for incorporating into the Work, whether purchased for Project or taken from previously purchased stock. The term "product" includes the terms "material," "equipment," "system," and terms of similar intent.
  - 1. Named Products: Items identified by manufacturer's product name, including make or model number or other designation shown or listed in manufacturer's published product literature that is current as of date of the Contract Documents.
  - 2. New Products: Items that have not previously been incorporated into another project or facility, except that products consisting of recycled-content materials are allowed, unless explicitly stated otherwise. Products salvaged or recycled from other projects are not considered new products.
  - 3. Comparable Product and "Or Equivalent": Product that is demonstrated and approved through submittal process, or where indicated as a product substitution, to have the indicated qualities related to type, function, dimension, in-service performance, physical properties, appearance, and other characteristics that are equivalent or exceed those of specified product. To be considered acceptable by Architect they shall perform the functions imposed by the general design and meet the standards of named items and are submitted as herein indicated.
- B. Substitutions: Changes in products, materials, equipment, and methods of construction from those required by the Contract Documents and proposed by Contractor.
- C. Basis-of-Design Product Specification: Where a specific manufacturer's product is named and accompanied by the words "basis of design", including make or model

number or other designation, to establish the significant qualities related to type, function, dimension, in-service performance, physical properties, appearance, and other characteristics for purposes of evaluating comparable products of other named manufacturers.

#### 1.4 SUBMITTALS

- A. Product List: Submit a list, in tabular form, showing specified products. Include generic names of products required. Include manufacturer's name and proprietary product names for each product.
1. Coordinate product list with Contractor's Construction Schedule and the Submittals Schedule.
  2. Form: Tabulate information for each product under the following column headings:
    - a. Specification Section number and title.
    - b. Generic name used in the Contract Documents.
    - c. Proprietary name, model number, and similar designations.
    - d. Manufacturer's name and address.
    - e. Supplier's name and address.
    - f. Installer's name and address.
    - g. Projected delivery date or time span of delivery period.
    - h. Identification of items that require early submittal approval for scheduled delivery date.
  3. Initial Submittal: Before Execution of the Agreement, submit four (4) copies of initial product list. Include a written explanation for omissions of data and for variations from Contract requirements.
    - a. Furnish within three (3) calendar days following the bid opening.
    - b. At Contractor's option, initial submittal may be limited to product selections and designations that must be established early in Contract period.
  4. Completed List: Within ten (10) days after the openings of the bid, submit four (4) copies of completed product list. Include a written explanation for omissions of data and for variations from Contract requirements.
  5. Architect's Action: Architect will respond in writing to Contractor within fifteen (15) days of receipt of completed product list. Architect's response will include a list of unacceptable product selections and a brief explanation of reasons for this action. Architect's response, or lack of response, does not constitute a waiver of requirement to comply with the Contract Documents.
- B. Substitution Requests: After Execution of Agreement: Submit substitution requests no later than within thirty (30) calendar days. Requests received later, may be considered or rejected at the discretion of Architect and shall be submitted as follows. Submit four copies of each request for consideration to the Architect. Identify product or

fabrication or installation method to be replaced. Include Specification Section number and title and Drawing numbers and titles.

1. Substitution Request Form: Use CSArch standard form included in the Project Manual.
2. Identify specification Section including the date of request and all Prime Contracts involved.
3. Identify the product, or the fabrication or installation method to be replaced in each request.
4. Documentation: Show compliance with requirements for substitutions and the following, as applicable:
  - a. Statement indicating why specified material or product cannot be provided.
  - b. Coordination information, including a list of changes or modifications needed to other parts of the Work and to construction performed by Owner and separate contractors that will be necessary to accommodate proposed substitution.
  - c. Detailed comparison of significant qualities of proposed substitution with those of the Work specified. Significant qualities may include attributes such as performance, weight, size, durability, visual effect, and specific features and requirements indicated.
  - d. Product Data, including drawings and descriptions of products and fabrication and installation procedures.
  - e. Samples, where applicable or requested.
  - f. List of similar installations for completed projects with project names and addresses and names and addresses of architects and owners.
  - g. Material test reports from a qualified testing agency indicating and interpreting test results for compliance with requirements indicated.
  - h. Research/evaluation reports evidencing compliance with building code in effect for Project, from a model code organization acceptable to authorities having jurisdiction.
  - i. Detailed comparison of Prime Contractor's Construction Schedule using proposed substitution with products specified for the Work, including effect on the overall Contract Time. If specified product or method of construction cannot be provided within the Contract Time, include letter from manufacturer, on manufacturer's letterhead, stating lack of availability or delays in delivery.
  - j. Cost information, including a proposal of change, if any, in the Contract Sum.
  - k. Prime Contractor's certification that proposed substitution complies with requirements in the Contract Documents and is appropriate for applications indicated.

- I. Prime Contractor's waiver of rights to additional payment or time that may subsequently become necessary because of failure of proposed substitution to produce indicated results.
  5. Architect's Action: If necessary, Architect will request additional information or documentation for evaluation within seven (7) days of receipt of a request for substitution. Architect will notify Contractor of acceptance or rejection of proposed substitution within fifteen (15) days of receipt of request, or seven (7) days of receipt of additional information or documentation, whichever is later.
    - a. Form of Acceptance: Change in Condition (CIC).
    - b. Use product specified if Architect cannot decide on use of a proposed substitution within time allocated.
- C. Comparable Product Requests: Submit three copies of each request for consideration. Identify product or fabrication or installation method to be replaced. Include Specification Section number and title and Drawing numbers and titles.
  1. Architect's Action: If necessary, Architect will request additional information or documentation for evaluation within one week of receipt of a comparable product request. Architect will notify Contractor of approval or rejection of proposed comparable product request within fifteen (15) days of receipt of request, or seven (7) days of receipt of additional information or documentation, whichever is later.
    - a. Form of Approval: As specified in Division 01 Section "Submittal Procedures."
    - b. Use product specified if Architect cannot make a decision on use of a comparable product request within time allocated.
- D. Basis-of-Design Product Specification Submittal: Comply with requirements in Division 01 Section "Submittal Procedures." Show compliance with requirements.
- E. Processing Time: Time for review shall commence on Architect's receipt of request. Allow enough time for request review, including time for evaluation of requested additional information or documentation, as follows:
  1. Initial Review: Allow ten (10) working days minimum, for initial review of each request. Allow additional time if processing must be delayed to permit coordination of concurrent review.
    - a. Architect will request of Prime Contractor additional information or documentation for evaluation within five (5) working days of receipt of a request for Initial Review.
  2. Concurrent Review: Where concurrent review of requests by Architect's consultants, Owner or other Parties is required, allow fifteen (15) working days minimum for Initial Review of each request.



- a. Architect will advise Prime Contractor when a request being processed must be delayed for concurrent review.
  - b. Architect will request of Prime Contractor additional for evaluation within seven (7) working days of a request requiring Concurrent Review.
3. Architect will notify Prime Contractor of acceptance or rejection of proposed substitution within fifteen (15) working days minimum of receipt of additional information or documentation, whichever is later.
4. Use product specified if Architect cannot make a decision on use of a requested substitution within time indicated.
5. Form of Acceptance: Change Order.
  - a. Follow Division 01 Section "Contract Modification Procedures" for handling and processing Change Order.

#### 1.5 QUALITY ASSURANCE

- A. Compatibility of Options: If Contractor is given option of selecting between two or more products for use on Project, product selected shall be compatible with products previously selected, even if previously selected products were also options.
  1. Each Prime Contractor is responsible for providing products and construction methods compatible with products and construction methods of other Prime Contractors.
  2. If a dispute arises between contractors over concurrently selectable but incompatible products, Architect will determine which products shall be used.
    - a. Coordinate with other Prime Contractor's compatible product issues at Project's progress meetings.

#### 1.6 PRODUCT DELIVERY, STORAGE, AND HANDLING

- A. Deliver, store, and handle products using means and methods that will prevent damage, deterioration, and loss, including theft. Comply with manufacturer's written instructions.
- B. Delivery and Handling:
  1. Schedule delivery to minimize long-term storage at Project site and to prevent overcrowding of construction spaces.
  2. Coordinate delivery with installation time to ensure minimum holding time for items that are flammable, hazardous, easily damaged, or sensitive to deterioration, theft, and other losses.
  3. Deliver products to Project site in an undamaged condition in manufacturer's original sealed container or other packaging system, complete with labels and instructions for handling, storing, unpacking, protecting, and installing.

4. Inspect products on delivery to ensure compliance with the Contract Documents and to ensure that products are undamaged and properly protected.

C. Storage:

1. Store products to allow for inspection and measurement of quantity or counting of units.
2. Store materials in a manner that will not endanger Project structure.
3. Store products that are subject to damage by the elements, under cover in a weathertight enclosure above ground, with ventilation adequate to prevent condensation.
4. Store cementitious products and materials on elevated platforms.
5. Store foam plastic from exposure to sunlight, except to extent necessary for period of installation and concealment.
6. Comply with product manufacturer's written instructions for temperature, humidity, ventilation, and weather-protection requirements for storage.
7. Protect stored products from damage and liquids from freezing.
8. Provide a secure location and enclosure at Project site for storage of materials and equipment by Owner's construction forces. Coordinate location with Owner.

1.7 PRODUCT WARRANTIES

- A. Warranties specified in other Sections shall be in addition to, and run concurrent with, other warranties required by the Contract Documents. Manufacturer's disclaimers and limitations on product warranties do not relieve Contractor of obligations under requirements of the Contract Documents.

1. Manufacturer's Warranty: Preprinted written warranty published by individual manufacturer for a particular product and specifically endorsed by manufacturer to Owner.
2. Special Warranty: Written warranty required by or incorporated into the Contract Documents, either to extend time limit provided by manufacturer's warranty or to provide more rights for Owner.

- B. Special Warranties: Prepare a written document that contains appropriate terms and identification, ready for execution. Submit a draft for approval before final execution.

1. Manufacturer's Standard Form: Modified to include Project-specific information and properly executed.
2. Specified Form: When specified forms are included with the Specifications, prepare a written document using appropriate form properly executed.
3. Refer to Divisions 02 through 33 Sections for specific content requirements and particular requirements for submitting special warranties.

- C. Submittal Time: Comply with requirements in Division 01 Section "Closeout Procedures."

## PART 2 - PRODUCTS

### 2.1 PRODUCT SELECTION PROCEDURES

- A. General Product Requirements: Provide products that comply with the Contract Documents, that are undamaged and, unless otherwise indicated, that are new at time of installation.
1. Provide products complete with accessories, trim, finish, fasteners, and other items needed for a complete installation and indicated use and effect.
  2. Standard Products: If available, and unless custom products or nonstandard options are specified, provide standard products of types that have been produced and used successfully in similar situations on other projects.
  3. Owner reserves the right to limit selection to products with warranties not in conflict with requirements of the Contract Documents.
  4. Where products are accompanied by the term "as selected," Architect will make selection.
  5. Where products are accompanied by the term "match sample," sample to be matched is Architect's.
  6. Descriptive, performance, and reference standard requirements in the Specifications establish "salient characteristics" of products.
  7. Or Equal: Where products are specified by name and accompanied by the term "or equal" or "or approved equal" or "or approved", comply with provisions in Part 2 "Comparable Products" Article to obtain approval for use of an unnamed product.
- B. Product Selection Procedures:
1. Available Products: Where Specifications include a list of names of both products and manufacturers, provide one of the products listed, or an unnamed product, that complies with requirements. Comply with provisions in Part 2 "Comparable Products" Article for consideration of an unnamed product.
  2. Available Manufacturers: Where Specifications include a list of manufacturers, provide a product by one of the manufacturers listed, or an unnamed manufacturer, that complies with requirements. Comply with provisions in Part 2 "Comparable Products" Article for consideration of an unnamed product.
  3. Product Options: Where Specifications indicate that sizes, profiles, and dimensional requirements on Drawings are based on a specific product or system, provide the specified product or system. Comply with provisions in

Part 2 "Product Substitutions" Article for consideration of an unnamed product or system.

4. Basis-of-Design Product: Where Specifications name a product and include a list of manufacturers, provide the specified product or a comparable product by one of the other named or un-named manufacturers. Drawings and Specifications indicate sizes, profiles, dimensions, and other characteristics that are based on the product named. Comply with provisions in Part 2 "Comparable Products" Article for consideration of an unnamed product by the other named manufacturers.
5. Visual Matching Specification: Where Specifications require matching an established Sample, select a product that complies with requirements and matches Architect's sample. Architect's decision will be final on whether a proposed product matches.
  - a. If no product available within specified category matches and complies with other specified requirements, comply with provisions in Part 2 "Product Substitutions" Article for proposal of product.
6. Visual Selection Specification: Where Specifications include the phrase "as selected from manufacturer's colors, patterns, textures" or a similar phrase, select a product that complies with other specified requirements.
  - a. Standard Range: Where Specifications include the phrase "standard range of colors, patterns, textures" or similar phrase, Architect will select color, pattern, density, or texture from manufacturer's product line that does not include premium items.
  - b. Full Range: Where Specifications include the phrase "full range of colors, patterns, textures" or similar phrase, Architect will select color, pattern, density, or texture from manufacturer's product line that includes both standard and premium items.
  - c. Custom: Where Specifications include the phrase "Custom colors, patterns, textures" or similar phrase, Architect will direct color, pattern, density, or texture that is not necessarily available from the manufacturer's standard product line.

## 2.2 PRODUCT SUBSTITUTIONS

- A. Timing: Architect will consider requests for substitution if received within thirty (30) days after the Notice of Award. Requests received after that time may be considered or rejected at discretion of Architect.
- B. Conditions: Architect will consider Contractor's request for substitution when the following conditions are satisfied. If the following conditions are not satisfied, Architect will return requests without action, except to record noncompliance with these requirements:

1. Requested substitution offers Owner a substantial advantage in cost, time, energy conservation, or other considerations, after deducting additional responsibilities Owner must assume. Owner's additional responsibilities may include compensation to Architect for redesign and evaluation services, increased cost of other construction by Owner, and similar considerations.
2. Requested substitution does not require extensive revisions to the Contract Documents.
3. Requested substitution is consistent with the Contract Documents and will produce indicated results.
4. Substitution request is fully documented and properly submitted.
5. Requested substitution will not adversely affect Prime Contractor's Construction Schedule.
6. Requested substitution has received necessary approvals of authorities having jurisdiction.
7. Requested substitution is compatible with other portions of the Work.
8. Requested substitution has been coordinated with other portions of the Work by Prime Contractor.
9. Requested substitution provides specified warranty.
10. If requested substitution involves more than one Prime Contractor, requested substitution has been coordinated with other portions of the Work, is uniform and consistent, is compatible with other products, and is acceptable to all Prime Contractors involved.
11. The request is directly related to "or an approved substitution" clause or similar language in the Contract Documents.
12. The equipment or material must fit the space available for it in the building. No item will be considered if alteration of building structure or space is made necessary by a substitution request.
13. If a substitution of material or any equipment item is accepted, the Prime Contractor is required to make all necessary corrections to details, clearances, etc., add to, furnish, and install all additional materials or items required by the substitution, as determined by the Architect, at no additional cost to the Owner.

C. In making request for substitution, Prime Contractor represents:

1. That the Prime Contractor has personally investigated the proposed substitute product and determined that it is equivalent to or superior in all respects to the specified product;
2. That the Contractor will provide the same warranty for the substitution that is required for the specified product;
3. Certifies that the substitution will not result in a cost disadvantage to the Owner; that all cost data presented is complete and that the Prime Contractor waives all claims for additional costs related to the substitution which subsequently may become apparent; and

4. Will coordinate the installation of the substitution, if accepted, making such changes as may be required to make the Work complete in all respects.
  5. Prime Contractor requesting substitution shall bear additional costs to all parties due to substitution including Architect redesigns and costs; associated but under separate contract.
- D. Prime Contractor's submittal and Architect's acceptance of Shop Drawings, Product Data or Samples that relate to construction activities not complying with the Contract Documents, does not constitute an acceptable or valid request for substitution, nor does it constitute approval.

### 2.3 COMPARABLE PRODUCTS

- A. Conditions: Architect will consider Contractor's request for comparable product when the following conditions are satisfied. If the following conditions are not satisfied, Architect will return requests without action, except to record noncompliance with these requirements:
1. Evidence that the proposed product does not require extensive revisions to the Contract Documents that it is consistent with the Contract Documents, and will produce the indicated results, and that it is compatible with other portions of the Work.
  2. Detailed comparison of significant qualities of proposed product with those named in the Specifications. Significant qualities include attributes such as performance, weight, size, durability, visual effect, and specific features and requirements indicated.
  3. Evidence that proposed product provides specified warranty.
  4. List of similar installations for completed projects with project names and addresses and names and addresses of architects and owners, if requested.
  5. Samples, if requested.

### PART 3 - EXECUTION (Not Used)

END OF SECTION 016000

## SECTION 017300 - EXECUTION

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. This Section includes general procedural requirements governing execution of the Work including, but not limited to, the following:
  - 1. Construction layout.
  - 2. Field engineering and surveying.
  - 3. General installation of products.
  - 4. Coordination of Owner-installed products.
  - 5. Progress cleaning and protection during construction.
  - 6. Starting and adjusting.
  - 7. Protection of installed construction.
  - 8. Correction of the Work.

#### 1.3 SUBMITTALS

- A. Qualification Data: For land surveyor.
- B. Certificates: Submit certificate signed by land surveyor certifying that location and elevation of improvements comply with requirements.
- C. Landfill Receipts: Submit copy of receipts issued by a landfill facility, licensed to accept hazardous materials, for hazardous waste disposal.

#### 1.4 QUALITY ASSURANCE

- A. Land Surveyor Qualifications: A professional land surveyor who is legally qualified to practice in jurisdiction where Project is located and who is experienced in providing land-surveying services of the kind indicated.

## PART 2 - PRODUCTS (Not Used)

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Existing Conditions: The existence and location of site improvements, utilities, and other construction indicated as existing are not guaranteed. Before beginning work, investigate and verify the existence and location of mechanical and electrical systems and other construction affecting the Work.
  - 1. Before construction, verify the location and points of connection of utility services.
- B. Existing Utilities: The existence and location of underground and other utilities and construction indicated as existing are not guaranteed. Before beginning sitework, investigate and verify the existence and location of underground utilities and other construction affecting the Work.
  - 1. Before construction, verify the location and invert elevation at points of connection of sanitary sewer, storm sewer, and water-service piping; and underground electrical services.
  - 2. Furnish location data for work related to Project that must be performed by public utilities serving Project site.
- C. Acceptance of Conditions: Examine substrates, areas, and conditions, with Installer or Applicator present where indicated, for compliance with requirements for installation tolerances and other conditions affecting performance. Record observations.
  - 1. Written Report: Where a written report listing conditions detrimental to performance of the Work is required by other Sections, include the following:
    - a. Description of the Work.
    - b. List of detrimental conditions, including substrates.
    - c. List of unacceptable installation tolerances.
    - d. Recommended corrections.
  - 2. Verify compatibility with and suitability of substrates, including compatibility with existing finishes or primers.
  - 3. Examine roughing-in for mechanical and electrical systems to verify actual locations of connections before equipment and fixture installation.
  - 4. Examine walls, floors, and roofs for suitable conditions where products and systems are to be installed.



5. Proceed with installation only after unsatisfactory conditions have been corrected. Proceeding with the Work indicates acceptance of surfaces and conditions.

### 3.2 PREPARATION

- A. Existing Utility Information: Furnish information to local utility, Owner that is necessary to adjust, move, or relocate existing utility structures, utility poles, lines, services, or other utility appurtenances located in or affected by construction. Coordinate with authorities having jurisdiction.
- B. Field Measurements: Take field measurements as required to fit the Work properly. Recheck measurements before installing each product. Where portions of the Work are indicated to fit to other construction, verify dimensions of other construction by field measurements before fabrication. Coordinate fabrication schedule with construction progress to avoid delaying the Work.
- C. Space Requirements: Verify space requirements and dimensions of items shown diagrammatically on Drawings.
- D. Review of Contract Documents and Field Conditions: Immediately on discovery of the need for clarification of the Contract Documents, submit a request for information to Architect. Include a detailed description of problem encountered, together with recommendations for changing the Contract Documents. Submit requests for information (RFI) on standard form included in this Project Manual.

### 3.3 CONSTRUCTION LAYOUT

- A. Verification: Before proceeding to lay out the Work, verify layout information shown on Drawings, in relation to the property survey and existing benchmarks. If discrepancies are discovered, notify Architect and Construction Site Coordinator promptly.
- B. General: Engage a land surveyor to lay out the Work using accepted surveying practices.
  1. Establish benchmarks and control points to set lines and levels at each story of construction and elsewhere as needed to locate each element of Project.
  2. Establish dimensions within tolerances indicated. Do not scale Drawings to obtain required dimensions.
  3. Inform installers of lines and levels to which they must comply.
  4. Check the location, level and plumb, of every major element as the Work progresses.
  5. Notify Architect and Construction Site Coordinator when deviations from required lines and levels exceed allowable tolerances.

6. Close site surveys with an error of closure equal to or less than the standard established by authorities having jurisdiction.
- C. Site Improvements: Locate and lay out site improvements, including pavements, grading, fill and topsoil placement, utility slopes, and invert elevations.
- D. Building Lines and Levels: Locate and lay out control lines and levels for structures, building foundations, column grids, and floor levels, including those required for mechanical and electrical work. Transfer survey markings and elevations for use with control lines and levels. Level foundations and piers from two or more locations.
- E. Record Log: Maintain a log of layout control work. Record deviations from required lines and levels. Include beginning and ending dates and times of surveys, weather conditions, name and duty of each survey party member, and types of instruments and tapes used. Make the log available for reference by Architect and Construction Site Coordinator.

#### 3.4 FIELD ENGINEERING

- A. Identification: Owner will identify existing benchmarks, control points, and property corners.
- B. Reference Points: Locate existing permanent benchmarks, control points, and similar reference points before beginning the Work. Preserve and protect permanent benchmarks and control points during construction operations.
  1. Do not change or relocate existing benchmarks or control points without prior written approval of Architect and Construction Site Coordinator. Report lost or destroyed permanent benchmarks or control points promptly. Report the need to relocate permanent benchmarks or control points to Architect and Construction Site Coordinator before proceeding.
  2. Replace lost or destroyed permanent benchmarks and control points promptly. Base replacements on the original survey control points.
- C. Benchmarks: Establish and maintain a minimum of two permanent benchmarks on Project site, referenced to data established by survey control points. Comply with authorities having jurisdiction for type and size of benchmark.
  1. Record benchmark locations, with horizontal and vertical data, on Project Record Documents.
  2. Where the actual location or elevation of layout points cannot be marked, provide temporary reference points sufficient to locate the Work.
  3. Remove temporary reference points when no longer needed. Restore marked construction to its original condition.

- D. Certified Survey: On completion of foundation walls, major site improvements, and other work requiring field-engineering services, prepare a certified survey showing dimensions, locations, angles, and elevations of construction and site work.

### 3.5 INSTALLATION

- A. General: Locate the Work and components of the Work accurately, in correct alignment and elevation, as indicated.
  - 1. Make vertical work plumb and make horizontal work level.
  - 2. Where space is limited, install components to maximize space available for maintenance and ease of removal for replacement.
  - 3. Conceal pipes, ducts, and wiring in finished areas, unless otherwise indicated.
  - 4. Maintain minimum headroom clearance of 8 feet Insert dimension in spaces without a suspended ceiling.
- B. Comply with manufacturer's written instructions and recommendations for installing products in applications indicated.
- C. Install products at the time and under conditions that will ensure the best possible results. Maintain conditions required for product performance until Substantial Completion.
- D. Conduct construction operations so no part of the Work is subjected to damaging operations or loading in excess of that expected during normal conditions of occupancy.
- E. Tools and Equipment: Do not use tools or equipment that produce harmful noise levels.
- F. Templates: Obtain and distribute to the parties involved templates for work specified to be factory prepared and field installed. Check Shop Drawings of other work to confirm that adequate provisions are made for locating and installing products to comply with indicated requirements.
- G. Anchors and Fasteners: Provide anchors and fasteners as required to anchor each component securely in place, accurately located and aligned with other portions of the Work.
  - 1. Mounting Heights: Where mounting heights are not indicated, mount components at heights directed by Architect.
  - 2. Allow for building movement, including thermal expansion and contraction.
  - 3. Coordinate installation of anchorages. Furnish setting drawings, templates, and directions for installing anchorages, including sleeves, concrete inserts, anchor

bolts, and items with integral anchors, that are to be embedded in concrete or masonry. Deliver such items to Project site in time for installation.

- H. Joints: Make joints of uniform width. Where joint locations in exposed work are not indicated, arrange joints for the best visual effect. Fit exposed connections together to form hairline joints.
- I. Hazardous Materials
- J. Use products, cleaners, and installation materials that are not considered hazardous.

### 3.6 OWNER-INSTALLED PRODUCTS

- A. Site Access: Provide access to Project site for Owner's construction forces.
- B. Coordination: Coordinate construction and operations of the Work with work performed by Owner's construction forces.
  - 1. Construction Schedule: Inform Owner of Contractor's preferred construction schedule for Owner's portion of the Work. Adjust construction schedule based on a mutually agreeable timetable. Notify Owner if changes to schedule are required due to differences in actual construction progress.
  - 2. Pre-installation Conferences: Include Owner's construction forces at pre-installation conferences covering portions of the Work that are to receive Owner's work. Attend pre-installation conferences conducted by Owner's construction forces if portions of the Work depend on Owner's construction.

### 3.7 PROGRESS CLEANING AND PROTECTION DURING CONSTRUCTION

- A. General: Each Subcontractor shall clean Project site and work areas daily, including common areas. Coordinate progress cleaning for joint-use areas where more than one installer has worked. Enforce requirements strictly among Subcontractor's employees. This includes sweeping floors clean as may be deemed necessary by Construction Site Coordinator. Dispose of material lawfully.
  - 1. Comply with requirements in NFPA 241 for removal of combustible waste materials and debris.
  - 2. Do not hold materials more than seven (7) days during normal weather or three (3) days if the temperature is expected to rise above 80 deg F.
  - 3. Containerize hazardous and unsanitary waste materials separately from other waste. Mark containers appropriately and dispose of legally, according to regulations.
- B. Site: Maintain Project site free of waste materials and debris.

- C. Work Areas: Each Prime Contractor shall clean areas where work is in progress to the level of cleanliness necessary for proper execution of the Work.
  - 1. Remove liquid spills promptly.
  - 2. Where dust would impair proper execution of the Work, broom-clean or vacuum the entire work area, as appropriate and when directed by Construction Site Coordinator.
- D. Installed Work: Prime Contractor shall keep all installed work clean for subcontractors retained who are no longer required to be present on site. Clean installed surfaces according to written instructions of manufacturer or fabricator of product installed, using only cleaning materials specifically recommended. If specific cleaning materials are not recommended, use cleaning materials that are not hazardous to health or property and that will not damage exposed surfaces.
  - 1. Provide cleaning products compliant with VOC requirements.
- E. Concealed Spaces: Remove debris from concealed spaces before enclosing the space.
- F. Exposed Surfaces in Finished Areas: Clean exposed surfaces and protect as necessary to ensure freedom from damage and deterioration at time of Substantial Completion.
- G. Waste Disposal: Burying or burning waste materials on-site will not be permitted. Washing waste materials down sewers or into waterways will not be permitted.
- H. During handling and installation, clean and protect construction in progress and adjoining materials already in place. Apply protective covering where required to ensure protection from damage or deterioration at Substantial Completion.
- I. Clean and provide maintenance on completed construction as frequently as necessary through the remainder of the construction period. Adjust and lubricate operable components to ensure operability without damaging effects.
- J. Limiting Exposures: Supervise construction operations to assure that no part of the construction completed or in progress, is subject to harmful, dangerous, damaging, or otherwise deleterious exposure during the construction period.
- K. Each day Prime Contractor shall affect the following:
  - 1. Areas of intense activity, such as cutting and sawing must be swept clean and reorganized at the end of each day.
  - 2. Areas of moderate activity such as installation of plumbing, ductwork, electrical work must be returned to good order at the end of each day.

3. Debris below scaffolds (and shoring/reshoring) must at all times, be kept sufficiently consolidated to keep walkways free of tripping hazards. These work areas must also be swept clean immediately upon removal of scaffolds.
  4. All swept up debris, waste materials, and packing must be removed and placed in the dumpster by noon of the following workday.
  5. All stored materials must be kept in good order.
  6. As portions of the work are completed, all used and excess materials must be removed promptly.
  7. Daily clean-up and good housekeeping is the responsibility of each Prime Contractor individually and will be monitored by the Construction Site Coordinator.
  8. Prime Contractors and their retained subcontractors, Installers or manufacturers shall promptly comply with requests of Construction Site Coordinator to organize scattered materials.
- L. Vacuum clean interior building areas when ready to receive finish painting, and continue vacuum cleaning on an as-needed basis or as directed by Construction Site Coordinator until building is ready for Substantial Completion or occupancy.
- M. Schedule cleaning operations so that dust and other contaminants resulting from cleaning process will not fall on wet, newly painted surfaces.

### 3.8 STARTING AND ADJUSTING

- A. Start equipment and operating components to confirm proper operation. Remove malfunctioning units, replace with new units, and retest.
- B. Adjust operating components for proper operation without binding. Adjust equipment for proper operation.
- C. Test each piece of equipment to verify proper operation. Test and adjust controls and safeties. Replace damaged and malfunctioning controls and equipment.
- D. Manufacturer's Field Service: If a factory-authorized service representative is required to inspect field-assembled components and equipment installation, comply with qualification requirements in Division 01 Section "Quality Requirements."

### 3.9 PROTECTION OF INSTALLED CONSTRUCTION

- A. Provide final protection and maintain conditions that ensure installed Work is without damage or deterioration at time of Substantial Completion.
- B. Comply with manufacturer's written instructions for temperature and relative humidity.

- C. Clean and protect construction in progress and adjoining materials in place, during handling and installation. Apply protective covering where required to assure protection from damage or deterioration at Substantial Completion.
- D. Clean and provide maintenance on completed construction as frequently as necessary or as requested by Construction Site Coordinator, through the remainder of the construction period. Adjust and lubricate operable components to assure operability without damaging effects.
- E. Limiting Exposure: Each Prime Contractor shall supervise construction operations to assure that no part of the construction, complete or in progress, is subject to harmful, dangerous, damaging, or otherwise deleterious exposure during the construction period. Where applicable, such exposures include, but are not limited to, the following:
  - 1. Excessive static or dynamic loading.
  - 2. Excessive internal or external pressures.
  - 3. Excessive high or low temperatures.
  - 4. Thermal shock.
  - 5. Excessive high or low humidity.
  - 6. Air contamination or pollution.
  - 7. Ice or water.
  - 8. Solvents or chemicals.
  - 9. Light.
  - 10. Radiation.
  - 11. Puncture.
  - 12. Abrasion.
  - 13. Heavy traffic.
  - 14. Soiling, staining and corrosion.
  - 15. Bacteria.
  - 16. Rodent and insect infestation.
  - 17. Combustion.
  - 18. Electrical current.
  - 19. High-speed operation.
  - 20. Improper lubrication.
  - 21. Unusual wear or misuse.
  - 22. Contact between incompatible materials.
  - 23. Destructive testing.
  - 24. Misalignment.
  - 25. Excessive weathering.
  - 26. Unprotected storage.
  - 27. Improper shipping and handling.
  - 28. Vandalism or theft.

- F. Each Prime Contractor for its Work shall provide final protection and maintain conditions that ensure installed Work is without damage or deterioration at time of Substantial Completion.
- G. Comply with manufacturer's written instructions for temperature and relative humidity.

### 3.10 CORRECTION OF THE WORK

- A. Repair or remove and replace defective construction. Restore damaged substrates and finishes. Comply with requirements in Division 01 Section "Cutting and Patching."
  - 1. Repairing includes replacing defective parts, refinishing damaged surfaces, touching up with matching materials, and properly adjusting operating equipment.
- B. Restore permanent facilities used during construction to their specified condition.
- C. Remove and replace damaged surfaces that are exposed to view if surfaces cannot be repaired without visible evidence of repair.
- D. Repair components that do not operate properly. Remove and replace operating components that cannot be repaired.
- E. Remove and replace chipped, scratched, and broken glass or reflective surfaces.

END OF SECTION 017300



## SECTION 017329 - CUTTING AND PATCHING

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. This Section includes procedural requirements for cutting and patching.
- B. When demolition leaves a construction surface unfinished, and the documents do not specify a finish, patch the remaining surface to match the existing adjacent surface.
- C. All prime contractors and subcontractors are required to perform their own cutting and patching for the installation and performance of their work.

#### 1.3 DEFINITIONS

- A. Cutting: Removal of in-place construction necessary to permit installation or performance of other Work.
- B. Patching: Fitting and repair work required to restore surfaces to original conditions after installation of other Work.
- C. Demolition: Removal, Cutting.

#### 1.4 SUBMITTALS

- A. Cutting and Patching Proposal: Submit a proposal describing procedures at least ten (10) days before the time cutting and patching will be performed, requesting approval to proceed. Include the following information:
  - 1. Extent: Describe cutting and patching, show how they will be performed, and indicate why they cannot be avoided.
  - 2. Changes to In-Place Construction: Describe anticipated results. Include changes to structural elements and operating components as well as changes in building's appearance and other significant visual elements.
  - 3. Products: List products to be used and firms or entities that will perform the Work.

4. Dates: Indicate when cutting and patching will be performed.
5. Utility Services and Mechanical/Electrical Systems: List services/systems that cutting and patching procedures will disturb or affect. List services/systems that will be relocated and those that will be temporarily out of service. Indicate how long services/systems will be disrupted.
6. Structural Elements: Where cutting and patching involve adding reinforcement to structural elements, submit details and engineering calculations showing integration of reinforcement with original structure.
7. Architect's Approval: Obtain approval of cutting and patching proposal before cutting and patching. Approval does not waive right to later require removal and replacement of unsatisfactory work.

#### 1.5 QUALITY ASSURANCE

- A. Maintain existing interior nonstructural elements (interior walls, doors, floor coverings, and ceiling systems) not indicated to be removed; do not cut such existing construction beyond indicated limits.
- B. Maintain existing non-shell, non-structural components (walls, flooring, and ceilings) not indicated to be removed; do not cut such existing construction beyond indicated limits.
- C. Structural Elements: Do not cut and patch structural elements in a manner that could change their load-carrying capacity or load-deflection ratio.
- D. Operational Elements: Do not cut and patch operating elements and related components in a manner that results in reducing their capacity to perform as intended or that results in increased maintenance or decreased operational life or safety. Operating elements include the following:
  1. Primary operational systems and equipment.
  2. Air or smoke barriers.
  3. Fire-suppression systems.
  4. Mechanical systems piping and ducts.
  5. Control systems.
  6. Communication systems.
  7. Conveying systems.
  8. Electrical wiring systems.
  9. Operating systems of special construction in Division 13 Sections.
- E. Miscellaneous Elements: Do not cut and patch miscellaneous elements or related components in a manner that could change their load-carrying capacity, that results in reducing their capacity to perform as intended, or that results in increased maintenance or decreased operational life or safety. Miscellaneous elements include the following:

1. Water, moisture, or vapor barriers.
2. Membranes and flashings.
3. Exterior curtain-wall construction.
4. Equipment supports.
5. Piping, ductwork, vessels, and equipment.
6. Noise and vibration-control elements and systems.

- F. Visual Requirements: Do not cut and patch construction in a manner that results in visual evidence of cutting and patching. Do not cut and patch construction exposed on the exterior or in occupied spaces in a manner that would, in Architect's opinion, reduce the building's aesthetic qualities. Remove and replace construction that has been cut and patched in a visually unsatisfactory manner.
- G. Cutting and Patching Conference: Before proceeding, meet at Project site with parties involved in cutting and patching, including mechanical and electrical trades. Review areas of potential interference and conflict. Coordinate procedures and resolve potential conflicts before proceeding.

## 1.6 WARRANTY

- A. Existing Warranties: Remove, replace, patch, and repair materials and surfaces cut or damaged during cutting and patching operations, by methods and with materials so as not to void existing warranties.

## PART 2 - PRODUCTS

### 2.1 MATERIALS

- A. General: Comply with requirements specified in other Sections.
- B. In-Place Materials: Use materials identical to in-place materials. For exposed surfaces, use materials that visually match in-place adjacent surfaces to the fullest extent possible.
1. If identical materials are unavailable or cannot be used, use materials that, when installed, will match the visual and functional performance of in-place materials.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Examine surfaces to be cut and patched and conditions under which cutting and patching are to be performed.
  - 1. Compatibility: Before patching, verify compatibility with and suitability of substrates, including compatibility with in-place finishes or primers.
  - 2. Proceed with installation only after unsafe or unsatisfactory conditions have been corrected.

### 3.2 PREPARATION

- A. Temporary Support: Provide temporary support of Work to be cut.
- B. Protection: Protect in-place construction during cutting and patching to prevent damage. Provide protection from adverse weather conditions for portions of Project that might be exposed during cutting and patching operations.
- C. Adjoining Areas: Avoid interference with use of adjoining areas or interruption of free passage to adjoining areas.
- D. Existing Utility Services and Mechanical/Electrical Systems: Where existing services/systems are required to be removed, relocated, or abandoned, bypass such services/systems before cutting to minimize and prevent interruption to occupied areas.

### 3.3 PERFORMANCE

- A. General: Employ skilled workers to perform cutting and patching. Proceed with cutting and patching at the earliest feasible time, and complete without delay.
  - 1. Cut in-place construction to provide for installation of other components or performance of other construction, and subsequently patch as required to restore surfaces to their original condition.
- B. Cutting: Cut in-place construction by sawing, drilling, breaking, chipping, grinding, and similar operations, including excavation, using methods least likely to damage elements retained or adjoining construction. If possible, review proposed procedures with original Installer; comply with original Installer's written recommendations.
  - 1. In general, use hand or small power tools designed for sawing and grinding, not hammering, and chopping. Cut holes and slots as small as possible, neatly to size required, and with minimum disturbance of adjacent surfaces. Temporarily cover openings when not in use.
  - 2. Finished Surfaces: Cut or drill from the exposed or finished side into concealed surfaces.

3. Concrete and Masonry: Cut using a cutting machine, such as an abrasive saw or a diamond-core drill.
  4. Excavating and Backfilling: Comply with requirements in applicable Division 31 Sections where required by cutting and patching operations.
  5. Mechanical and Electrical Services: Cut off pipe or conduit in walls or partitions to be removed. Cap, valve, or plug and seal remaining portion of pipe or conduit to prevent entrance of moisture or other foreign matter after cutting.
  6. Proceed with patching after construction operations requiring cutting are complete.
- C. Patching: Patch construction by filling, repairing, refinishing, closing-up, and similar operations following performance of other Work. Patch with durable seams that are as invisible as possible. Provide materials and comply with installation requirements specified in other Sections.
1. Inspection: Where feasible, test and inspect patched areas after completion to demonstrate integrity of installation.
  2. Exposed Finishes: Restore exposed finishes of patched areas and extend finish restoration into retained adjoining construction in a manner that will eliminate evidence of patching and refinishing.
    - a. Clean piping, conduit, and similar features before applying paint or other finishing materials.
    - b. Restore damaged pipe covering to its original condition.
  3. Floors and Walls: Where walls or partitions that are removed extend one finished area into another, patch and repair floor and wall surfaces in the new space. Provide an even surface of uniform finish, color, texture, and appearance. Remove in-place floor and wall coverings and replace with new materials, if necessary, to achieve uniform color and appearance.
    - a. Where patching occurs in a painted surface, apply primer and intermediate paint coats over the patch and apply final paint coat over entire unbroken surface containing the patch. Provide additional coats until patch blends with adjacent surfaces.
    - b. Where demolition of a wall leaves a remaining perpendicular wall unfinished, restore the wall finish with similar materials blending the finishes into each other flush and seamlessly.
    - c. At masonry walls, cut any protruding reinforcing back below the finished surface. Remove enough masonry material to provide finished masonry faces within the existing coursing.
    - d. At masonry walls cut any protruding reinforcing back below the finished surface. Remove enough masonry material to provide finished masonry faces within the existing coursing.
    - e. Where demolition of a wall leaves a remaining end of the wall unfinished, restore the wall finish with similar materials blending the finishes into each other flush and seamlessly.

- f. Where demolition of a wall leaves a remaining column exposed, provide 18-gauge aluminum column enclosure.
  - g. Where demolition of a wall leaves a remaining perpendicular window system unfinished, provide 18-gauge aluminum enclosure at the window and extend the sill material across the void.
  - h. Where the removal of a wall, equipment and/or furnishing leaves an unfinished condition at the floor, patch the floor, and extend the finished floor system across the demolition area.
  - i. Where the removal of a wall, equipment and/or furnishing leaves an unfinished condition at the ceiling, patch the floor, and extend the finished ceiling system across the demolition area.
  - j. Where the removal of a louver, grill, ductwork, or other construction in a finished space or elsewhere, fill the opening with material that matches the existing adjacent materials and finishes.
  - k. Where the removal leaves a raised painted edge, remove raised edge and feather paint finish to the extent that the raised painted edge is not detected.
- 4. Ceilings: Patch, repair, or rehang in-place ceilings as necessary to provide an even-plane surface of uniform appearance.
  - 5. Exterior Building Enclosure: Patch components in a manner that restores enclosure to a weathertight condition.
- D. Cleaning: Clean areas and spaces where cutting and patching are performed. Completely remove paint, mortar, oils, putty, and similar materials.

END OF SECTION 017329

## SECTION 017413 - CLEANING UP

### PART 1 - GENERAL

#### 1.1 DESCRIPTION

The Contractor must always employ during the progress of his work adequate cleanup measures and safety precautions to prevent injuries to persons or damage to property. The Contractor shall immediately, upon request by the Architect provide adequate material, equipment and labor to cleanup and make safe all areas deemed necessary by the Architect.

### PART 2 - Not applicable

### PART 3 - EXECUTION

#### 3.1 DAILY CLEANUP

- A. The Contractor shall clean up, at least daily, all refuse, rubbish, scrap and surplus material, debris and unneeded construction equipment resulting from the construction operations and sweep the area. The site of the work and the adjacent areas affected thereby shall always present neat, orderly and workmanlike appearance.
- B. Upon written notification by the Architect, the Contractor shall within 24 hours clean up those areas, which in the Architect's opinion, are in violation of this section and the above referenced sections of the specifications.
- C. If in the opinion of the Architect, the referenced areas are not satisfactorily cleaned up, all other work on the project shall stop until the cleanup is satisfactory.

#### 3.2 MATERIAL OR DEBRIS IN DRAINAGE FACILITIES

- A. Where material or debris has washed or flowed into or has been placed in existing watercourses, ditches, gutters, drains, pipes, structures, such material, or debris shall be entirely removed and satisfactorily disposed of during progress of the work, and the

ditches, channels, drains, pipes, structures, and work shall, upon completion of the work, be left in a clean and neat condition.

### 3.3 REMOVAL OF TEMPORARY BUILDINGS, STRUCTURES AND EQUIPMENT

- A. On or before completion of the work, the Contractor shall, unless otherwise specifically directed or permitted in writing, tear down and remove all temporary buildings and structures built by him; shall remove all temporary works, tools and machinery or other construction equipment furnished by him; shall remove all rubbish from any grounds which he has occupied; shall remove silt fences and hay bales used for trapping sediment; and shall leave the roads and all parts of the property and adjacent property affected by his operations in a neat and satisfactory condition.

### 3.4 RESTORATION OF DAMAGED PROPERTY

- A. The Contractor shall restore or replace, when and as directed, any property damaged by his work, equipment, or employees, to a condition at least equal to that existing immediately prior to the beginning of operations. To this end the Contractor shall do as required all necessary highway or driveway, walk and landscaping work. Materials, equipment, and methods for such restoration shall be as approved by the Architect.

### 3.5 FINAL CLEANUP

- A. Before acceptance by the Owner, the Contractor shall perform a final cleanup to bring the construction site to its original or specified condition. This cleanup shall include removing all trash and debris off the premises. Before acceptance, the Architect shall approve the condition of the site.
- B. Before acceptance by the Owner, the Contractor shall perform a final cleanup to bring the building to a "like new" condition. This cleanup shall include removing all trash and debris from the premises; sweeping and mopping of all floors; washing of all walls, windows, and doors; cleaning and polishing of all finish metal surfaces; cleaning of all equipment, utilizing proper solvents for removal of oil and grease; cleaning of dirt and debris out of all mechanical and electrical cabinets; and all other related work required to render the building suitable for use. Before acceptance, the Architect shall approve the condition of the building.

END OF SECTION 017413



## SECTION 017700 - CLOSEOUT PROCEDURES

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for contract closeout, including, but not limited to, the following:
  - 1. Inspection procedures.
  - 2. Warranties.
  - 3. Final cleaning.
- B. Disclaimers and Limitations: Manufacturer's disclaimers and limitations on product warranties do not relieve the Contractor of the warranty on the Work that incorporates the products, nor does it relieve suppliers, manufacturers, and subcontractors required to countersign special warranties with the Contractor.
- C. Multiple Prime Contracts: Each Prime Contract is responsible for warranties related to provided Work.
  - 1. Specific requirements for warranties for the Work and products and installation that are specified to be warranted are included in the individual Sections of Divisions 02-33.
- D. Related Sections include the following:
  - 1. Division 01 Section "Closeout Procedures" for general closeout requirements.
  - 2. Division 01 Section "Operation and Maintenance Data" for copies of warranties included in manuals.

#### 1.3 DEFINITIONS

- A. Standard Product Warranties are preprinted written warranties published by individual manufacturers for particular products and are specifically endorsed by the manufacturer to the Owner.

- B. Special Warranties are written warranties required by or incorporated in the Contract Documents, either to extend time limits provided by standard warranties or to provide greater rights for the Owner.

#### 1.4 SUBSTANTIAL COMPLETION

- A. Preliminary Procedures: Before requesting inspection for determining date of Substantial Completion, complete the following:
  - 1. In Application for Payment that coincides with, or first follows, the date of Substantial Completion is claimed, show one-hundred percent (100%) completion got portion of Work claimed on substantially complete.
    - a. Include supporting documentation for completion as indicated and a statement showing accounting of changes to the Contract Sum.
    - b. If one-hundred percent (100%) completion cannot be shown, include a list of the value of incomplete Work.
    - c. Application shall reflect Certificates of Partial Completion issued previously for Owner occupancy of designated portions of Work. Administrative actions and submittals that shall precede or coincide with this application include, but are not limited to, the following:
    - d. Prepare a list of items to be completed and corrected (punch list), the value of items on the list, and reasons why the Work is not complete.
    - e. Advise Owner of pending insurance changeover requirements.
    - f. Submit specific warranties, workmanship bonds, maintenance service agreements, final certifications, and similar documents.
    - g. Obtain and submit releases permitting Owner unrestricted use of the Work and access to services and utilities. Include occupancy permits, operating certificates, and similar releases.
    - h. Prepare and submit Project Record Documents, operation and maintenance manuals, Final Completion construction photographs, damage or settlement surveys, property surveys, and similar final record information.
    - i. Deliver tools, spare parts, extra materials, and similar items to location designated by Owner. Label with manufacturer's name and model number where applicable.
    - j. Make final changeover of permanent locks and deliver keys to Owner. Advise Owner's personnel of changeover in security provisions.
    - k. Complete startup testing of systems.
    - l. Submit test/adjust/balance records.
    - m. Terminate and remove temporary facilities from Project site, along with mockups, construction tools, and similar elements.
    - n. Advise Owner of changeover in heat and other utilities.
    - o. Submit changeover information related to Owner's occupancy, use, operation, and maintenance.

- p. Complete final cleaning requirements, including touchup painting.
  - q. Touch up and otherwise repair and restore marred exposed finishes to eliminate visual defects.
  - r. Maintenance instructions.
  - s. Submit specific warranties, workmanship bonds, maintenance service agreements, final certifications, and similar documents to be turned over to Owner.
  - t. Obtain and submit releases permitting Owner unrestricted use of the Work and access to services and utilities. Include occupancy permits, operating certificates, and similar release.
  - u. Prepare and submit Project Record Documents, operation, and maintenance manuals.
  - v. Deliver tools, spare parts, extra materials, and similar items to location designated by Owner. Label with manufacturer's name and model number where applicable.
  - w. Make final changeover of permanent locks and deliver keys to Owner. Advise Owner's personnel of changeover in security provisions.
  - x. Terminate and remove temporary facilities from Project site, along with mockups, construction tools, and similar elements.
  - y. Remove surplus materials rubbish and similar elements as directed by Architect, Construction Manager & Owner.
- B. Inspection: Submit a written request for inspection for Substantial Completion. On receipt of request, Architect will either proceed with inspection or notify Prime Contractor of unfulfilled requirements. Architect will prepare the Certificate of Substantial Completion after inspection or will notify Prime Contractor of items, either on Contractor's list or additional items identified by Architect, that must be completed or corrected before certificate will be issued. Architect will prepare and issue a Certificate of Substantial Completion, AIA G704, complete with signatures of Owner and Prime Contractor.
- 1. Reinspection: When Architect is required to perform second and additional inspections because of failure of Work to comply with certifications of Prime Contractor, Owner will compensate Architect for additional services and deduct amount paid from Final Payment to Prime Contractor.
  - 2. Results of completed inspection will form the basis of requirements for Final Completion.
- C. Should Architect consider that Work is finally complete in accordance with the requirements of the Contract Documents, he shall request Prime Contractor to make Project Closeout submittals.
- D. Should Architect consider that Work is not finally complete:
- 1. Punchlist: Architect shall notify Prime Contractor, in writing, stating reasons.

2. Prime Contractor shall take immediate steps to remedy the stated deficiencies and send second written notice to Architect certifying that Work is complete.
3. Architect will reinspect Work per "Reinspection" paragraph upon receipt of receiving Contractor's punch list written responses, complete with photographs reflecting completeness of each claim.
4. Punch list shall be responded to with Prime Contractor sign-off dates and photographic support, then uploaded to the ePM software the CM has in place.

## 1.5 FINAL COMPLETION

- A. Preliminary Procedures: Before requesting final inspection for determining date of Final Completion, complete the following:
  1. Submit the final payment request with releases and supporting documentation not previously submitted and accepted. Include insurance certificates for products and complete operations where required according to Division 01 Section "Payment Procedures."
  2. Submit certified copy of Architect's Substantial Completion inspection list of items to be completed or corrected (punch list), endorsed and dated by Architect. The certified copy of the list shall state that each item has been completed or otherwise resolved for acceptance and the punch list has been endorsed and dated by the Prime Contractor.
  3. Submit pest-control final inspection report and warranty.
  4. Instruct Owner's personnel in operation, adjustment, and maintenance of products, equipment, and systems. Submit demonstration and training videotapes.
  5. Specified warranties, workmanship bonds, maintenance agreements, final certifications, and similar documents in required formats.
  6. Insurance certificates for products and completed operation in effect for twelve (12) months from date of final Application for Payment.
- B. Request: Submit in writing to Architect listing incomplete items of preliminary procedures.
  1. Re-inspection: Request re-inspection when the Work identified in previous inspections as incomplete is completed or corrected.
- C. Evidence of Payments and Release of Liens: Submittals shall be duly executed before delivery to Construction Site Coordinator.
  1. Contractor's Affidavit of Payment of Debts and Claims: AIA G706.
  2. Contractor's Affidavit of Release of Liens: AIA G706A, with the following:
    - a. Consent of Surety to Final Payment: AIA G707.
    - b. Prime Contractor's release of waiver of liens.

- c. Separate releases of waivers of liens for subcontractors, suppliers, and others with lien rights against property of Owner, together with list of these parties.
  - D. Final Adjustment of Accounts: Architect will prepare final Change Order, reflecting approved adjustments to Contract Sum not previously made by Change Orders.
    - 1. Submit final statement of accounting to Architect.
    - 2. Statement shall reflect all adjustments.
      - a. Original Contract Sum.
      - b. Additional and deductions resulting from:
        - 1) Previous Change Orders.
        - 2) Contingency Allowances: Credit unused remaining balance back to Owner by Change Order.
          - a) Do not include overhead and profit credit included in Base Bid as part of Change Order adjustment.
        - 3) Other Adjustments.
        - 4) Deductions for Uncorrected Work.
        - 5) Deductions for Reinspection Payments.
      - c. Total Contract Sum, as adjusted.
      - d. Previous Payments.
      - e. Sum remaining due.
  - E. Final Application for Payment: Construction Site Coordinator shall notify Architect when all required closeout submittals are received and acceptable for Final Payment.
  - F. Final Certification for Payment: Architect will issue final Certificate in accordance with provisions of General and Supplementary Conditions.
  - G. Miscellaneous Record Submittals: Assemble miscellaneous records required by other Specification Sections for miscellaneous record keeping and submittal in connection with actual performance of the Work. Bind or file miscellaneous records and identify each, ready for continued use and reference.
  - H. Provide copies of each warranty to include in operation and maintenance manuals.
- 1.6 LIST OF INCOMPLETE ITEMS (PUNCH LIST)
- A. Preparation: Submit one (1) copy of list. Include name and identification of each space and area affected by construction operations for incomplete items and items needing correction including, if necessary, areas disturbed by Contractor that are outside the limits of construction.
    - 1. Organize list of spaces in sequential order, starting with exterior areas first and proceeding from lowest floor to highest floor.

2. Organize items applying to each space by major element, including categories for ceiling, individual walls, floors, equipment, and building systems.
3. Include the following information at the top of each page:
  - a. Project Name.
  - b. Date.
  - c. Name of Architect.
  - d. Name of Contractor.
  - e. Page Number.

#### 1.7 WARRANTIES

- A. Submittal Time: Submit written warranties on request of Architect for designated portions of the Work where commencement of warranties other than date of Substantial Completion is indicated.
  1. Submit written warranties to the Architect prior to the date certified for Substantial Completion. If the Architect Certificate of Substantial Completion designates a commencement date for warranties other than the date of Substantial Completion for the Work, or a designated portion of the Work, submit written warranties upon request of the Architect.
    - a. When a designated portion of the Work is completed and occupied or used by the Owner, by separate agreement with the Prime Contractor during the construction period, submit properly executed warranties to the Architect within fifteen (15) days of completion of that designated portion of the Work.
  2. Prepare a written document utilizing the appropriate form, ready for execution by the Prime Contractor, or the Contractor and subcontractor, supplier, or manufacturer.
  3. Form of Submittal: At Final Completion compile two copies of each required warranty and bond properly executed by the Prime Contractor, or by the Prime Contractor's, subcontractor, supplier, or manufacturer. Organize the warranty documents into an orderly sequence based on the table of contents of the Project Manual.
  4. Bind warranties and bonds in heavy-duty, commercial quality, durable 3-ring vinyl covered loose-leaf binders, thickness as necessary to accommodate contents, and sized to receive 8-1/2 by 11-inch paper. Provide two (2) copies.
    - a. Provide heavy paper dividers with celluloid covered tabs for each separate warranty. Mark the tab to identify the product or installation. Provide a typed description of the product or installation, including the name of the product, and the name, address, and telephone number of the installer.
    - b. Identify each binder on the front and the spine with the typed or printed title "WARRANTIES", the Project title or name, and the name of the Contractor.

5. When operating and maintenance manuals are required for warranted construction, provide warranty, for inclusion in that required manual.
- B. Related Damages and Losses: When correcting warranted Work that has failed, remove and replace other Work that has been damaged as a result of such failure or that must be removed and replaced to provide access for correction of warranted Work.
- C. Reinstatement of Warranty: When Work covered by a warranty has failed and been corrected by replacement or rebuilding, reinstate the warranty by written endorsement. The reinstated warranty shall be equal to the original warranty with an equitable adjustment for depreciation.
- D. Replacement Cost: Upon determination that Work covered by a warranty has failed, replace or rebuild the Work to an acceptable condition complying with requirements of Contract Documents. The Prime Contractor providing Work is responsible for the cost of replacing or rebuilding defective Work regardless of whether the Owner has benefited from use of the Work through a portion of its anticipated useful service life.
- E. Owner's Recourse: Written warranties made to the Owner are in addition to implied warranties, and shall not limit the duties, obligations, right and remedies otherwise available under the law, nor shall warranty periods be interpreted as limitations on time in which the Owner can enforce such other duties, obligations, rights, or remedies.
  1. Rejection of Warranties: The Owner reserves the right to reject warranties and to limit selections to products with warranties not in conflict with requirements of the Contract Documents.
- F. The Owner reserves the right to refuse to accept Work for the Project where a special warranty, certification, or similar commitment is required on such Work or part of the Work, until evidence is presented that entities required to countersign such commitments are willing to do so.

## PART 2 - PRODUCTS

### 2.1 MATERIALS

- A. Cleaning Agents: Use cleaning materials and agents recommended by manufacturer or fabricator of the surface to be cleaned. Do not use cleaning agents that are potentially hazardous to health or property or that might damage finished surfaces.

## PART 3 - EXECUTION

### 3.1 FINAL CLEANING

- A. General: Provide final cleaning. Conduct cleaning and waste-removal operations to comply with local laws and ordinances and Federal and local environmental and antipollution regulations.
- B. Cleaning: Employ experienced workers or professional cleaners for final cleaning. Clean each surface or unit to condition expected in an average commercial building cleaning and maintenance program. Comply with manufacturer's written instructions.
  - 1. Complete the following cleaning operations before requesting inspection for certification of Substantial Completion for entire Project or for a portion of Project:
    - a. Clean Project site, yard, and grounds, in areas disturbed by construction activities, including landscape development areas, of rubbish, waste material, litter, and other foreign substances.
    - b. Sweep paved areas broom clean. Remove petrochemical spills, stains, and other foreign deposits.
    - c. Rake grounds that are neither planted nor paved to a smooth, even-textured surface.
    - d. Remove tools, construction equipment, machinery, and surplus material from Project site.
    - e. Remove snow and ice to provide safe access to building.
    - f. Clean exposed exterior and interior hard-surfaced finishes to a dirt-free condition, free of stains, films, and similar foreign substances. Avoid disturbing natural weathering of exterior surfaces. Restore reflective surfaces to their original condition.
    - g. Remove debris and surface dust from limited access spaces, including roofs, plenums, shafts, trenches, equipment vaults, manholes, attics, and similar spaces.
    - h. Sweep concrete floors broom clean in unoccupied spaces.
    - i. Vacuum carpet and similar soft surfaces, removing debris and excess nap; shampoo if visible soil or stains remain.
    - j. Clean transparent materials, including mirrors and glass in doors and windows. Remove glazing compounds and other noticeable, vision-obscuring materials. Replace chipped or broken glass and other damaged transparent materials. Polish mirrors and glass, taking care not to scratch surfaces.
    - k. Remove labels that are not permanent.



- l. Touch up and otherwise repair and restore marred, exposed finishes and surfaces. Replace finishes and surfaces that cannot be satisfactorily repaired or restored or that already show evidence of repair or restoration.
    - 1) Do not paint over "UL" and similar labels, including mechanical and electrical nameplates.
  - m. Wipe surfaces of mechanical and electrical equipment, elevator equipment, and similar equipment. Remove excess lubrication, paint and mortar droppings, and other foreign substances.
  - n. Replace parts subject to unusual operating conditions.
  - o. Clean plumbing fixtures to a sanitary condition, free of stains, including stains resulting from water exposure.
  - p. Replace disposable air filters and clean permanent air filters. Clean exposed surfaces of diffusers, registers, and grills.
  - q. Clean ducts, blowers, and coils if units were operated without filters during construction.
  - r. Clean light fixtures, lamps, globes, and reflectors to function with full efficiency. Replace burned-out bulbs, and those noticeably dimmed by hours of use, and defective and noisy starters in fluorescent and mercury vapor fixtures to comply with requirements for new fixtures.
  - s. Leave Project clean and ready for occupancy.
- C. Pest Control: Engage an experienced, licensed exterminator to make a final inspection and rid Project of rodents, insects, and other pests. Prepare a report.
- D. Comply with safety standards for cleaning. Do not burn waste materials. Do not bury debris or excess materials on Owner's property. Do not discharge volatile, harmful, or dangerous materials into drainage systems. Remove waste materials from Project site and dispose of lawfully.

END OF SECTION 017700

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## SECTION 017823 - OPERATION AND MAINTENANCE DATA

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for preparing operation and maintenance manuals, including the following:
  - 1. Operation and maintenance documentation directory.
  - 2. Emergency manuals.
  - 3. Operation manuals for systems, subsystems, and equipment.
  - 4. Maintenance manuals for the care and maintenance of products, materials, and finishes and systems and equipment.

#### 1.3 DEFINITIONS

- A. System: An organized collection of parts, equipment, or subsystems united by regular interaction.
- B. Subsystem: A portion of a system with characteristics similar to a system.

#### 1.4 SUBMITTALS

- A. Initial Submittal: Submit two (2) draft copies of each manual at least fifteen (15) days before requesting inspection for Substantial Completion. Include a complete operation and maintenance directory. Architect will return one (1) copy of draft and mark whether general scope and content of manual are acceptable.
- B. Final Submittal: Submit four (4) of each manual in final form at least fifteen (15) days before final inspection. Architect will return copy with comments within fifteen (15) days after final inspection.

#### 1.5 COORDINATION

- A. Where operation and maintenance documentation includes information on installations by more than one factory-authorized service representative, assemble and coordinate information furnished by representatives and prepare manuals.

## PART 2 - PRODUCTS

### 2.1 OPERATION AND MAINTENANCE DOCUMENTATION DIRECTORY

- A. Organization: Include a section in the directory for each of the following:
  - 1. List of documents.
  - 2. List of systems.
  - 3. List of equipment.
  - 4. Table of contents.
- B. List of Systems and Subsystems: List systems alphabetically. Include references to operation and maintenance manuals that contain information about each system.
- C. List of Equipment: List equipment for each system, organized alphabetically by system. For pieces of equipment not part of system, list alphabetically in separate list.
- D. Tables of Contents: Include a table of contents for each emergency, operation, and maintenance manual.
- E. Identification: In the documentation directory and in each operation and maintenance manual, identify each system, subsystem, and piece of equipment with same designation used in the Contract Documents. If no designation exists, assign a designation according to ASHRAE Guideline 4, "Preparation of Operating and Maintenance Documentation for Building Systems."

### 2.2 MANUALS, GENERAL

- A. Organization: Unless otherwise indicated, organize each manual into a separate section for each system and subsystem, and a separate section for each piece of equipment not part of a system. Each manual shall contain the following materials, in the order listed:
  - 1. Title page.
  - 2. Table of contents.
  - 3. Manual contents.
- B. Title Page: Enclose title page in transparent plastic sleeve. Include the following information:
  - 1. Subject matter included in manual.
  - 2. Name and address of Project.
  - 3. Name and address of Owner.
  - 4. Date of submittal.
  - 5. Name, address, and telephone number of Contractor.
  - 6. Name and address of Architect.

7. Cross-reference to related systems in other operation and maintenance manuals.
- C. Table of Contents: List each product included in manual, identified by product name, indexed to the content of the volume, and cross-referenced to Specification Section number in Project Manual.
1. If operation or maintenance documentation requires more than one (1) volume to accommodate data, include comprehensive table of contents for all volumes in each volume of the set.
- D. Manual Contents: Organize into sets of manageable size. Arrange contents alphabetically by system, subsystem, and equipment. If possible, assemble instructions for subsystems, equipment, and components of one system into a single binder.
1. Binders: Heavy-duty, 3-ring, vinyl-covered, loose-leaf binders, in thickness necessary to accommodate contents, sized to hold 8-1/2 by 11-inch paper; with clear plastic sleeve on spine to hold label describing contents and with pockets inside covers to hold folded oversize sheets.
    - a. If two or more binders are necessary to accommodate data of a system, organize data in each binder into groupings by subsystem and related components. Cross-reference other binders if necessary to provide essential information for proper operation or maintenance of equipment or system.
    - b. Identify each binder on front and spine, with printed title "OPERATION AND MAINTENANCE MANUAL," Project title or name, and subject matter of contents. Indicate volume number for multiple-volume sets.
  2. Dividers: Heavy-paper dividers with plastic-covered tabs for each section. Mark each tab to indicate contents. Include typed list of products and major components of equipment included in the section on each divider, cross-referenced to Specification Section number and title of Project Manual.
  3. Protective Plastic Sleeves: Transparent plastic sleeves designed to enclose diagnostic software diskettes for computerized electronic equipment.
  4. Supplementary Text: Prepared on 8-1/2 by 11-inch white bond paper.
  5. Drawings: Attach reinforced, punched binder tabs on drawings and bind with text.
    - a. If oversize drawings are necessary, fold drawings to same size as text pages and use as foldouts.
    - b. If drawings are too large to be used as foldouts, fold, and place drawings in labeled envelopes and bind envelopes in rear of manual. At appropriate locations in manual, insert typewritten pages indicating drawing titles, descriptions of contents, and drawing locations.

## 2.3 EMERGENCY MANUALS

- A. Content: Organize manual into a separate section for each of the following:
1. Type of emergency.

2. Emergency instructions.
  3. Emergency procedures.
- B. Type of Emergency: Where applicable for each type of emergency indicated below, include instructions and procedures for each system, subsystem, piece of equipment, and component:
1. Fire.
  2. Flood.
  3. Gas leak.
  4. Water leak.
  5. Power failure.
  6. Water outage.
  7. System, subsystem, or equipment failure.
  8. Chemical release or spill.
- C. Emergency Instructions: Describe and explain warnings, trouble indications, error messages, and similar codes and signals. Include responsibilities of Owner's operating personnel for notification of Installer, supplier, and manufacturer to maintain warranties.
- D. Emergency Procedures: Include the following, as applicable:
1. Instructions on stopping.
  2. Shutdown instructions for each type of emergency.
  3. Operating instructions for conditions outside normal operating limits.
  4. Required sequences for electric or electronic systems.
  5. Special operating instructions and procedures.

## 2.4 OPERATION MANUALS

- A. Content: In addition to requirements in this Section, include operation data required in individual Specification Sections and the following information:
1. System, subsystem, and equipment descriptions.
  2. Performance and design criteria if Contractor is delegated design responsibility.
  3. Operating standards.
  4. Operating procedures.
  5. Operating logs.
  6. Wiring diagrams.
  7. Control diagrams.
  8. Piped system diagrams.
  9. Precautions against improper use.
  10. License requirements including inspection and renewal dates.
- B. Descriptions: Include the following:

1. Product name and model number.
2. Manufacturer's name.
3. Equipment identification with serial number of each component.
4. Equipment function.
5. Operating characteristics.
6. Limiting conditions.
7. Performance curves.
8. Engineering data and tests.
9. Complete nomenclature and number of replacement parts.

C. Operating Procedures: Include the following, as applicable:

1. Startup procedures.
2. Equipment or system break-in procedures.
3. Routine and normal operating instructions.
4. Regulation and control procedures.
5. Instructions on stopping.
6. Normal shutdown instructions.
7. Seasonal and weekend operating instructions.
8. Required sequences for electric or electronic systems.
9. Special operating instructions and procedures.

D. Systems and Equipment Controls: Describe the sequence of operation, and diagram controls as installed.

E. Piped Systems: Diagram piping as installed, and identify color-coding where required for identification.

## 2.5 PRODUCT MAINTENANCE MANUAL

- A. Content: Organize manual into a separate section for each product, material, and finish. Include source information, product information, maintenance procedures, repair materials and sources, and warranties and bonds, as described below.
- B. Source Information: List each product included in manual, identified by product name, and arranged to match manual's table of contents. For each product, list name, address, and telephone number of Installer or supplier and maintenance service agent, and cross-reference Specification Section number and title in Project Manual.
- C. Product Information: Include the following, as applicable:
  1. Product name and model number.
  2. Manufacturer's name.
  3. Color, pattern, and texture.

4. Material and chemical composition.
  5. Reordering information for specially manufactured products.
- D. Maintenance Procedures: Include manufacturer's written recommendations and the following:
1. Inspection procedures.
  2. Types of cleaning agents to be used and methods of cleaning.
  3. List of cleaning agents and methods of cleaning detrimental to product.
  4. Schedule for routine cleaning and maintenance.
  5. Repair instructions.
- E. Repair Materials and Sources: Include lists of materials and local sources of materials and related services.
- F. Warranties and Bonds: Include copies of warranties and bonds and lists of circumstances and conditions that would affect validity of warranties or bonds.
1. Include procedures to follow and required notifications for warranty claims.

## 2.6 SYSTEMS AND EQUIPMENT MAINTENANCE MANUAL

- A. Content: For each system, subsystem, and piece of equipment not part of a system, include source information, manufacturers' maintenance documentation, maintenance procedures, maintenance and service schedules, spare parts list and source information, maintenance service contracts, and warranty and bond information, as described below.
- B. Source Information: List each system, subsystem, and piece of equipment included in manual, identified by product name, and arranged to match manual's table of contents. For each product, list name, address, and telephone number of Installer or supplier and maintenance service agent, and cross-reference Specification Section number and title in Project Manual.
- C. Manufacturers' Maintenance Documentation: Manufacturers' maintenance documentation including the following information for each component part or piece of equipment:
1. Standard printed maintenance instructions and bulletins.
  2. Drawings, diagrams, and instructions required for maintenance, including disassembly and component removal, replacement, and assembly.
  3. Identification and nomenclature of parts and components.
  4. List of items recommended to be stocked as spare parts.



- D. Maintenance Procedures: Include the following information and items that detail essential maintenance procedures:
  - 1. Test and inspection instructions.
  - 2. Troubleshooting guide.
  - 3. Precautions against improper maintenance.
  - 4. Disassembly; component removal, repair, and replacement; and reassembly instructions.
  - 5. Aligning, adjusting, and checking instructions.
  - 6. Demonstration and training videotape, if available.
- E. Maintenance and Service Schedules: Include service and lubrication requirements, list of required lubricants for equipment, and separate schedules for preventive and routine maintenance and service with standard time allotment.
  - 1. Scheduled Maintenance and Service: Tabulate actions for daily, weekly, monthly, quarterly, semiannual, and annual frequencies.
  - 2. Maintenance and Service Record: Include manufacturers' forms for recording maintenance.
- F. Spare Parts List and Source Information: Include lists of replacement and repair parts, with parts identified and cross-referenced to manufacturers' maintenance documentation and local sources of maintenance materials and related services.
- G. Maintenance Service Contracts: Include copies of maintenance agreements with name and telephone number of service agent.
- H. Warranties and Bonds: Include copies of warranties and bonds and lists of circumstances and conditions that would affect validity of warranties or bonds.
  - 1. Include procedures to follow and required notifications for warranty claims.

## PART 3 - EXECUTION

### 3.1 MANUAL PREPARATION

- A. Operation and Maintenance Documentation Directory: Prepare a separate manual that provides an organized reference to emergency, operation, and maintenance manuals.
- B. Emergency Manual: Assemble a complete set of emergency information indicating procedures for use by emergency personnel and by Owner's operating personnel for types of emergencies indicated.

- C. Product Maintenance Manual: Assemble a complete set of maintenance data indicating care and maintenance of each product, material, and finish incorporated into the Work.
- D. Operation and Maintenance Manuals: Assemble a complete set of operation and maintenance data indicating operation and maintenance of each system, subsystem, and piece of equipment not part of a system.
  - 1. Engage a factory-authorized service representative to assemble and prepare information for each system, subsystem, and piece of equipment not part of a system.
  - 2. Prepare a separate manual for each system and subsystem, in the form of an instructional manual for use by Owner's operating personnel.
- E. Manufacturers' Data: Where manuals contain manufacturers' standard printed data, include only sheets pertinent to product or component installed. Mark each sheet to identify each product or component incorporated into the Work. If data include more than one item in a tabular format, identify each item using appropriate references from the Contract Documents. Identify data applicable to the Work and delete references to information not applicable.
  - 1. Prepare supplementary text if manufacturers' standard printed data are not available and where the information is necessary for proper operation and maintenance of equipment or systems.
- F. Drawings: Prepare drawings supplementing manufacturers' printed data to illustrate the relationship of component parts of equipment and systems and to illustrate control sequence and flow diagrams. Coordinate these drawings with information contained in Record Drawings to ensure correct illustration of completed installation.
  - 1. Do not use original Project Record Documents as part of operation and maintenance manuals.
  - 2. Comply with requirements of newly prepared Record Drawings in Division 01 Section "Project Record Documents."
- G. Comply with Division 01 Section "Closeout Procedures" for schedule for submitting operation and maintenance documentation.

END OF SECTION 017823

## SECTION 017836 - WARRANTIES

### PART 1 – GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. This Section specifies general administrative and procedural requirements for warranties and bonds required by the Contract Documents, including manufacturers' standard warranties on products and special warranties.
  - 1. Refer to the General Conditions for terms of the Contractor's special warranty of workmanship and materials.
  - 2. General closeout requirements are included in Section "Project Closeout."
  - 3. Certifications and other commitments and agreements for continuing services to Owner are specified elsewhere in the Contract Documents.
- B. Disclaimers and Limitations: Manufacturer's disclaimers and limitations on product warranties do not relieve the Contractor of the warranty on the Work that incorporates the products, nor does it relieve suppliers, manufacturers, and subcontractors required to countersign special warranties with the Contractor.
- C. Multiple Prime Contracts: Each Prime Contract is responsible for warranties related to provided Work
  - 1. Specific requirements for warranties for the Work and products and installation that are specified to be warranted are included in the individual Sections of Divisions 02, 03, 04, 05, 09, 10, 31, 32, and 33.

#### 1.3 DEFINITIONS

- A. Standard Product Warranties are preprinted written warranties published by individual manufacturers for particular products and are specifically endorsed by the manufacturer to the Owner.

- B. Special Warranties are written warranties required by or incorporated in the Contract Documents, either to extend time limits provided by standard warranties or to provide greater rights for the Owner.

#### 1.4 WARRANTY REQUIREMENTS

- A. Related Damages and Losses: When correcting warranted Work that has failed, remove and replace other Work that has been damaged as a result of such failure or that must be removed and replaced to provide access for correction of warranted Work.
- B. Reinstatement of Warranty: When Work covered by a warranty has failed and been corrected by replacement or rebuilding; reinstate the warranty by written endorsement. The reinstated warranty shall be equal to the original warranty with an equitable adjustment for depreciation.
- C. Replacement Cost: Upon determination that Work covered by a warranty has failed, replace or rebuild the Work to an acceptable condition complying with requirements of Contract Documents. The Prime Contractor providing Work is responsible for the cost of replacing or rebuilding defective Work regardless of whether the Owner has benefited from use of the Work through a portion of its anticipated useful service life.
- D. Owner's Recourse: Written warranties made to the Owner are in addition to implied warranties, and shall not limit the duties, obligations, right and remedies otherwise available under the law, nor shall warranty periods be interpreted as limitations on time in which the Owner can enforce such other duties, obligations, rights, or remedies.
  - 1. Rejection of Warranties: The Owner reserves the right to reject warranties and to limit selections to products with warranties not in conflict with requirements of the Contract Documents.
- E. The Owner reserves the right to refuse to accept Work for the Project where a special warranty, certification, or similar commitment is required on such Work or part of the Work, until evidence is presented that entities required to countersign such commitments are willing to do so.

#### 1.5 SUBMITTALS

- A. Submit written warranties to the Architect prior to the date certified for Substantial Completion. If the Architect Certificate of Substantial Completion designates a commencement date for warranties other than the date of Substantial Completion for the Work, or a designated portion of the Work, submit written warranties upon request of the Architect.

1. When a designated portion of the Work is completed and occupied or used by the Owner, by separate agreement with the Prime Contractor during the construction period, submit properly executed warranties to the Architect within fifteen (15) days of completion of that designated portion of the Work.
- B. Prepare a written document utilizing the appropriate form, ready for execution by the Prime Contractor, or the Contractor and subcontractor, supplier, or manufacturer.
- C. Form of Submittal: At Final Completion compile two copies of each required warranty and bond properly executed by the Prime Contractor, or by the Prime Contractor's, subcontractor, supplier, or manufacturer. Organize the warranty documents into an orderly sequence based on the table of contents of the Project Manual.
- D. Bind warranties and bonds in heavy-duty, commercial quality, durable 3-ring vinyl covered loose-leaf binders, thickness as necessary to accommodate contents, and sized to receive 8-1/2 by 11-inch paper.
  1. Provide heavy paper dividers with celluloid covered tabs for each separate warranty. Mark the tab to identify the product or installation. Provide a type description of the product or installation, including the name of the product, and the name, address and telephone number of the installer.
  2. Identify each binder on the front and the spine with the typed or printed title "WARRANTIES", the Project title or name, and the name of the Contractor.
- E. When operating and maintenance manuals are required for warranted construction, provide warranty, for inclusion in that required manual.

PART 2 – PRODUCTS (Not Used)

PART 3 – EXECUTION (Not Used)

END OF SECTION 017836

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## SECTION 017839 - PROJECT RECORD DOCUMENTS

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for Project Record Documents, including the following:
  - 1. Record Drawings.
  - 2. Record Specifications.
  - 3. Record Product Data.

#### 1.3 SUBMITTALS

- A. Record Drawings & Specifications: Comply with the following:
  - 1. Number of Copies: Administer two (2) sets of marked-up Record Documents.
- B. Record Product Data: Submit two (2) copies of each Product Data submittal.
  - 1. Where Record Product Data is required as part of operation and maintenance manuals, submit marked-up Product Data as an insert in manual instead of submittal as Record Product Data.

### PART 2 - PRODUCTS

#### 2.1 RECORD DRAWINGS

- A. General: Do not use Project Record Documents for construction purposes. Project Record Documents shall be available for reference, use, and maintenance during normal working hours.
- B. Record Drawings: Maintain one (1) set of black-line prints of the Construction Drawings and Shop Drawings.
  - 1. Preparation: Mark Record Drawings to show the actual installation where installation varies from that originally shown. Require individual or entity who

- obtained record data, whether individual or entity is installer, subcontractor, or similar entity, to prepare the marked-up Record Drawings.
2. Prior to submitting final Application for Payment, Prime Contractor shall confirm that all changes and deviations have been recorded on the drawings and indicate such by adding signature and date to each drawing and/or log as required by Construction Site Representative.
    - a. Include as submission, revised shop drawings which reflect any change or deviation in the installed Work.
    - b. Deliver to Architect in written form, verification by way of the Construction Site Representative's signature, that complete Record Drawings and record shop drawings have been administered prior to Application for Final Payment.
  3. Mark Record Drawings to show the actual installation where installation varies from that shown originally. Require individual or entity who obtained record data, whether individual or entity is installer, subcontractor, or similar entity, to prepare the marked-up Record Drawings.
    - a. Give attention to information on concealed elements that cannot be readily identified and recorded later.
    - b. Accurately record information in an understandable drawing technique. Provide felt marking pen for marks conforming to following color code:
      - 1) General Construction & Civil: Red.
      - 2) HVAC: Green.
      - 3) Electrical: Purple.
      - 4) Plumbing: Blue.
      - 5) Structural: Orange.
      - 6) Other Notations: Brown.
    - c. Record data as soon as possible after obtaining it. Record and check the markup before enclosing concealed installations.
    - d. Mark Contract Drawings or Shop Drawings, whichever is most capable of showing actual physical conditions, completely and accurately. Where Shop Drawings are marked, show cross-reference on Contract Drawings.
  4. Content: Types of items requiring marking include, but are not limited to, the following:
    - a. Dimensional changes to Drawings.
    - b. Revisions to details shown on Drawings.
    - c. Depths of foundations below first floor.
    - d. Locations and depths of underground utilities.
    - e. Revisions to routing of piping and conduits.
    - f. Revisions to electrical circuitry.
    - g. Actual equipment locations.
    - h. Duct size and routing.
    - i. Locations of concealed internal utilities.
    - j. Changes made by Change Order or Construction Change Directive.



- k. Changes made following Architect's written orders.
  - l. Details not on the original Contract Drawings.
  - m. Field records for variable and concealed conditions.
  - n. Record information on the Work that is shown only schematically.
  - o. Label each document "Project Record" in two-inch printed letters.
- 5. Mark important additional information that was either shown schematically or omitted from original Drawings.
  - 6. Note Construction Change Directive numbers, Alternate numbers, Change in Condition numbers, RFI's and similar identification, where applicable.

## 2.2 RECORD SPECIFICATIONS

- A. Preparation: Mark Specifications to indicate the actual product installation where installation varies from that indicated in Specifications, addenda, and contract modifications.
  - 1. Give attention to information on concealed products and installations that cannot be readily identified and recorded later.
  - 2. Mark copy with the proprietary name and model number of products, materials, and equipment furnished, including substitutions and product options selected.
  - 3. Record the name of manufacturer, supplier, Installer, and other information necessary to provide a record of selections made.
  - 4. For each principal product, indicate whether Record Product Data has been submitted in operation and maintenance manuals instead of submitted as Record Product Data.
  - 5. Note related Change Orders, Record Product Data, and Record Drawings where applicable.

## 2.3 RECORD PRODUCT DATA

- A. Preparation: Mark Product Data to indicate the actual product installation where installation varies substantially from that indicated in Product Data submittal.
  - 1. Give attention to information on concealed products and installations that cannot be readily identified and recorded later.
  - 2. Include significant changes in the product delivered to Project site and changes in manufacturer's written instructions for installation.
  - 3. Note related Change Orders, Record Specifications, and Record Drawings where applicable.

## 2.4 MISCELLANEOUS RECORD SUBMITTALS

- A. Assemble miscellaneous records required by other Specification Sections for miscellaneous record keeping and submittal in connection with actual performance of

the Work. Bind or file miscellaneous records and identify each, ready for continued use and reference.

### PART 3 - EXECUTION

#### 3.1 RECORDING AND MAINTENANCE

- A. Recording: Maintain one (1) copy of each submittal during the construction period for Project Record Document purposes. Post changes and modifications to Project Record Documents as they occur; do not wait until the end of Project.
  - 1. Update Record Documents no less than once per month, as a requirement of the Contract. Construction Site Representative shall delay review of Applications for Payment (pencil copies) until the appropriate information is documented.
- B. Maintenance of Record Documents and Samples: Stored Record Documents and Samples shall be maintained in the Construction Site Representative's field office apart from the Construction Documents used for construction.
  - 1. Access shall be provided to Project Record Documents for Prime Contractor's reference during normal working hours.

END OF SECTION 017839

## SECTION 017900 - DEMONSTRATION AND TRAINING

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for instructing Owner's personnel, including the following:
  - 1. Demonstration of operation of systems, subsystems, and equipment.
  - 2. Training in operation and maintenance of systems, subsystems, and equipment.
  - 3. Demonstration and training DVD.

#### 1.3 SUBMITTALS

- A. Instruction Program: Submit four (4) copies of outline of instructional program for demonstration and training, including a schedule of proposed dates, times, length of instruction time, and instructors' names for each training module. Include learning objective and outline for each training module.
  - 1. At completion of training, submit four (4) complete training manual(s) for Owner's use.
- B. Qualification Data: For instructor.
- C. Attendance Record: For each training module, submit a list of participants and length of instruction time.
- D. Demonstration and Training Video: Submit two (2) copies within seven (7) days of the end of each training module.
  - 1. Identification: On each copy, provide an applied label with the following information:
    - a. Name of Project.
    - b. Name of Architect.
    - c. Name of Contractor.
    - d. Date video was recorded.

- e. Description of vantage point, indicating location, direction (by compass point), and elevation or story of construction.
2. Transcript: Prepared on 8-1/2 by 11inch paper, punched and bound in heavy-duty, 3-ring, vinyl-covered binders. Mark appropriate identification on front and spine of each binder. Include a cover sheet with the same label information as the corresponding videotape. Include name of Project and date of videotape on each page.

#### 1.4 QUALITY ASSURANCE

- A. Instructor Qualifications: A factory-authorized service representative, complying with requirements in Division 01 Section "Quality Requirements," experienced in operation and maintenance procedures and training.
- B. Pre-instruction Conference: Conduct conference at Project site to comply with requirements in Division 01 Section "Project Management and Coordination." Review methods and procedures related to demonstration and training including, but not limited to, the following:
  1. Inspect and discuss locations and other facilities required for instruction.
  2. Review and finalize instruction schedule and verify availability of educational materials, instructors' personnel, audiovisual equipment, and facilities needed to avoid delays.
  3. Review required content of instruction.
  4. For instruction that must occur outside, review weather and forecasted weather conditions and procedures to follow if conditions are unfavorable.

#### 1.5 COORDINATION

- A. Coordinate instruction schedule with Owner's operations. Adjust schedule as required to minimize disrupting Owner's operations.
- B. Coordinate instructors, including providing notification of dates, times, length of instruction time, and course content.
- C. Coordinate content of training modules with content of approved emergency, operation, and maintenance manuals. Do not submit instruction program until operation and maintenance data has been reviewed and approved by Architect.

## PART 2 - PRODUCTS

### 2.1 INSTRUCTION PROGRAM

- A. Program Structure: Develop an instruction program that includes individual training modules for each system and equipment not part of a system, as required by individual Specification Sections, and as follows:
1. Equipment, including food service equipment and residential appliances.
  2. Fire-protection systems, including fire alarm and fire-extinguishing systems.
  3. Intrusion detection systems.
  4. Conveying systems, including elevators and wheelchair lifts.
  5. Heat generation, including boilers, feedwater equipment, pumps, and water distribution piping.
  6. Refrigeration systems, including condensers, pumps, and distribution piping.
  7. HVAC systems, including air-handling equipment, air distribution systems and terminal equipment and devices.
  8. HVAC instrumentation and controls.
  9. Electrical service and distribution, including transformers, switchboards, panelboards, and motor controls.
  10. Packaged engine generators, including transfer switches.
  11. Lighting equipment and controls.
  12. Communication systems, including intercommunication, surveillance, clocks and programming, voice and data and television equipment.
- B. Training Modules: Develop a learning objective and teaching outline for each module. Include a description of specific skills and knowledge that participant is expected to master. For each module, include instruction for the following:
1. Basis of System Design, Operational Requirements, and Criteria: Include the following:
    - a. System, subsystem, and equipment descriptions.
    - b. Performance and design criteria if Contractor is delegated design responsibility.
    - c. Operating standards.
    - d. Regulatory requirements.
    - e. Equipment function.
    - f. Operating characteristics.
    - g. Limiting conditions.
    - h. Performance curves.
  2. Documentation: Review the following items in detail:
    - a. Emergency manuals.
    - b. Operations manuals.

- c. Maintenance manuals.
- d. Project Record Documents.
- e. Identification systems.
- f. Warranties and bonds.
- g. Maintenance service agreements and similar continuing commitments.
- 3. Emergencies: Include the following, as applicable:
  - a. Instructions on meaning of warnings, trouble indications, and error messages.
  - b. Instructions on stopping.
  - c. Shutdown instructions for each type of emergency.
  - d. Operating instructions for conditions outside of normal operating limits.
  - e. Sequences for electric or electronic systems.
  - f. Special operating instructions and procedures.
- 4. Operations: Include the following, as applicable:
  - a. Startup procedures.
  - b. Equipment or system break-in procedures.
  - c. Routine and normal operating instructions.
  - d. Regulation and control procedures.
  - e. Control sequences.
  - f. Safety procedures.
  - g. Instructions on stopping.
  - h. Normal shutdown instructions.
  - i. Operating procedures for emergencies.
  - j. Operating procedures for system, subsystem, or equipment failure.
  - k. Seasonal and weekend operating instructions.
  - l. Required sequences for electric or electronic systems.
  - m. Special operating instructions and procedures.
- 5. Adjustments: Include the following:
  - a. Alignments.
  - b. Checking adjustments.
  - c. Noise and vibration adjustments.
  - d. Economy and efficiency adjustments.
- 6. Troubleshooting: Include the following:
  - a. Diagnostic instructions.
  - b. Test and inspection procedures.
- 7. Maintenance: Include the following:
  - a. Inspection procedures.
  - b. Types of cleaning agents to be used and methods of cleaning.
  - c. List of cleaning agents and methods of cleaning detrimental to product.
  - d. Procedures for routine cleaning
  - e. Procedures for preventive maintenance.
  - f. Procedures for routine maintenance.
  - g. Instruction on use of special tools.

8. Repairs: Include the following:
  - a. Diagnosis instructions.
  - b. Repair instructions.
  - c. Disassembly; component removal, repair, and replacement; and reassembly instructions.
  - d. Instructions for identifying parts and components.
  - e. Review of spare parts needed for operation and maintenance.

## PART 3 - EXECUTION

### 3.1 PREPARATION

- A. Assemble educational materials necessary for instruction, including documentation and training module. Assemble training modules into a combined training manual.
- B. Set up instructional equipment at the instructional location.

### 3.2 INSTRUCTION

- A. Facilitator: Engage a qualified facilitator to prepare instruction program and training modules, to coordinate instructors, and to coordinate between Contractor and Owner for number of participants, instruction times, and location.
- B. Engage qualified instructors to instruct Owner's personnel to adjust, operate, and maintain systems, subsystems, and equipment not part of a system.
  1. Owner will furnish Contractor with names and positions of participants.
- C. Scheduling: Provide instruction at mutually agreed on times. For equipment that requires seasonal operation, provide similar instruction at the start of each season.
  1. Schedule training with Owner, through Construction Site Representative, with at least seven days' notice.
- D. Evaluation: At conclusion of each training module, assess and document each participant's mastery of module by use of a written performance-based test.
- E. Cleanup: Collect used and leftover educational materials and give to Owner. Remove instructional equipment. Restore systems and equipment to condition existing before initial training use.

### 3.3 DEMONSTRATION AND TRAINING VIDEOTAPES

- A. Video Format: Provide DVD.
- B. Recording: Mount camera on tripod before starting recording, unless otherwise necessary to show area of demonstration and training. Display continuous running time.
- C. Transcript: Provide a typewritten transcript of the narration. Display images and running time captured from videotape opposite the corresponding narration segment.

END OF SECTION 017900



## SECTION 019113 - GENERAL COMMISSIONING REQUIREMENTS

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. Section includes general requirements that apply to implementation of commissioning without regard to specific systems, assemblies, or components.
- B. Commissioning is a systematic process of verifying that building systems perform interactively according with the owner's operational needs, the design documents, manufacturer's recommendations, good engineering, and workmanship practices.
- C. The commissioning process shall encompass and coordinate the functions of system documentation, equipment startup, control system calibration, testing and balancing, performance testing and training.
- D. Commissioning during the construction phase is intended to achieve the following specific objectives according to the Contract Documents:
  - 1. Verify that applicable equipment and systems are installed according to the contract documents, manufacturer's recommendations and to industry accepted minimum standards and that they receive adequate operational checkout by installing contractors.
  - 2. Verify and document proper performance of equipment and systems.
  - 3. Verify that O&M documentation provided for the project is complete, accurate and represents the actual installed equipment.
  - 4. Verify that the Owner's operating personnel are adequately trained.

#### 1.3 ABBREVIATIONS:

- A. The following are common abbreviations used in the Specifications.
  - 1. A/E: Architect/Engineer.
  - 2. CTR: Prime Contractor.
  - 3. Cx: Commissioning.

4. CxA: Commissioning Authority.
5. Cx Plan: Commissioning Plan Document
6. CM: Construction Manager.
7. EC: Electrical Contractor.
8. FT: Functional Performance Test.
9. MC: Mechanical Contractor.
10. PC: Plumbing Contractor.
11. PFC: Pre-Functional Check List
12. PFI: Pre-Functional Inspection.
13. TAB: Test and Balance Contractor.

#### 1.4 DEFINITIONS

- A. Acceptance Phase: Phase of construction after startup and initial checkout when functional performance tests, O&M documentation review and training occurs.
- B. Acceptance Criteria: The criteria established by the Owner and design team which defines the specified requirements that a component or system must meet under all ranges of actual loads. The CxA's prefunctional inspections and functional testing determine if the acceptance criteria have been met.
- C. Approval: Acceptance that a piece of equipment or system has been properly installed and is functioning in the tested modes according to the Contract Documents.
- D. Architect/Engineer (A/E): The prime consultant (architect) and subconsultants who comprise the design team, generally the HVAC mechanical designer/engineer and the electrical designer/engineer.
- E. Building Systems: The architectural, mechanical, and electrical and control systems along with their respective subsystems, equipment, and components.
- F. Commissioning: A quality control process that is to verify that specified components and building systems have been installed and properly started up and then functionally tested to verify and document proper operation through all specified modes of operation and conditions, all of which shall perform in conformity with the owner's requirements. In addition, training of operations and maintenance personnel, identified by the owner, is verified, and final project operations and maintenance documents are reviewed for completeness.
- G. Commissioning Authority: The owner's representative that verifies the commissioning process is properly carried out. The Commissioning Authority that is hired by the owner leads the commissioning process, carries out the detailed planning and implementation

of the commissioning process and makes final recommendations to the owner regarding the performance of the commissioned building systems.

- H. Commissioning Plan: An overall plan, which provides the structure, schedule, and coordination planning for the commissioning process.
- I. Construction Manager (CM): The contracting and managing authority for the owner over the design and/or construction of the project. The CM is responsible for working with the various parties involved in the project to plan and schedule work, facilitate communication, and coordinate activities between members of the construction and commissioning teams.
- J. Contract Documents: The documents binding on parties involved in the construction of the project (drawings, specifications, change orders, amendments, contracts, Cx Plan, etc.) L. Control System – The central building energy management control system.
- K. Datalogging: Monitoring flows, currents, status, pressures, etc., of equipment using stand along dataloggers separate from the control system.
- L. Deferred Functional Tests: FTs that are performed later, after substantial completion, due to partial occupancy, equipment, season requirements, design or other site conditions that disallow the test from being performed.
- M. Deficiency: A condition in the installation or function of a component, piece of equipment or system that is not in compliance with the Contract Documents (that is, does not perform properly or is not complying with the design intent).
- N. Factory Testing: testing of equipment on site or at the factory by factory personnel with or without an Owner's representative present. The CTR furnishing the equipment is responsible for providing all testing documentation as per the contact documents.
- O. Functional Performance Test (FT): Test of the dynamic function and operation of equipment and systems using manual (direct observation) or monitoring methods. Functional testing is the dynamic testing of systems (rather than just components) under full operation. Systems are tested under various modes, such as during low cooling or heating loads, high loads, component failures, unoccupied, varying outside air temperatures, fire alarm, power failure, etc. The systems are run through all the control system's sequences of operation and components are verified to be responding as the sequences state. Traditional air or water test and balancing (TAB) is not functional testing, in the commissioning sense of the word. TAB's primary work is setting up the system flows and pressures as specified, while functional testing is verifying that which has already been set up. The Commissioning Authority develops the functional test procedures in a sequential written form, coordinates, oversees and documents the actual

testing, which is usually performed by the installing contractor or vendor. FTs are performed after prefunctional inspections and startup is complete.

- P. Functional Testing Procedures: The step-by-step process that must be executed to fulfill the functional testing requirements. The test procedures are developed by the CxA.
- Q. Indirect Indicators: Indicators of a response or condition, such as a reading from a controls system screen reporting a damper to be 100% closed.
- R. Contractors (CTR): The company(s) engaged by the Owner to provide and/or install equipment and building systems in accordance with the contract specifications, drawings, manufacturer's recommendations and good engineering and workmanship practices. The term CTR may refer to one or more of the Mechanical Contractor, Electrical Contractor, or Plumbing Contractor responsible for all or part of the contract work for a given system or process.
- S. Manual Test: Using hand-held instruments, immediate control system readouts, or direct observation to verify performance (contrasted to analyzing monitored data taken over time to make the "observation.")
- T. Monitoring: The recording of parameters (flow, current, status, pressure, etc.) of equipment operation using dataloggers or the trending capabilities of control systems.
- U. Non-Compliance: See Deficiency.
- V. Non-Conformance: See Deficiency.
- W. Over-written Value: Writing over a sensor value in the control system to see the response of a system (e.g., changing the outside air temperature value from 50F to 75F to verify economizer operation.) See also Simulated Signal.
- X. Operations and Maintenance (O&M) Manual: The document that records the information pertinent to the operations and maintenance of the components, equipment, subsystems, and systems for the building.
- Y. Pre-functional Inspections (PFI): A list of the items to inspect and elementary component tests to conduct to verify proper installation of equipment. Lists are developed and provided by the CxA and are completed and returned by the appropriate CTRs. Pre-functional inspections are primarily static inspections and procedures to prepare the equipment or system for initial operation. However, some pre-functional inspection items entail simple testing of the functionality of a component, a piece of equipment or system. The word pre-functional refers to before functional testing. Pre-functional inspections augment and are combined with the manufacturer's startup checklists. Even without a commissioning process, installers typically perform some, if not many, of the

pre-functional inspection items a Commissioning Authority will recommend. However, few installers document in writing the execution or results of these inspected items.

- Z. Project Manager (PM): The contracting and managing authority for the owner over the design and/or construction of the project. See Construction Manager.
- AA. Sampling: Performing PFIs or functionally testing only a fraction of the total number of identical or near identical pieces of equipment.
- BB. Seasonal Performance Tests: FTs that are deferred until the system(s) will experience conditions closer to their design conditions.
- CC. Simulated Condition: Condition that is created for the purpose of testing the response of a system .
- DD. Simulated Signal: Disconnecting a sensor and using a signal generator to send an amperage, resistance, or pressure to the transducer and DDC system to simulate a sensor value.
- EE. Specifications: The construction specifications of the Contract Documents.
- FF. Staged Commissioning: Commissioning that is completed in phases in order to identify issues early and incorporate commissioning throughout the construction process. Generally, this applies to pre-functional inspection and it is phased in the following manner: Stage 1 - substantial installation completion (equipment substantially installed without power or controls complete; Stage 2 – power completed, equipment start-up completed and controls completed (Stage 2 will generally precede functional testing); Stage 3 – final inspection.
- GG. Startup: The initial starting or activating of dynamic equipment, including executing prefunctional inspections. Startup of complex systems is typically performed by an authorized manufacturer’s representative only after the installing contractor has completed all installation work and pre-functional inspections.
- HH. Subs: The sub-contractors to the prime contractors who provide and install building components and systems.
- II. Trending: Monitoring using the building control system.
- JJ. Vendor: Supplier of equipment.
- KK. Warranty Period: Warranty period for specific equipment and components. Warranties are defined in the appropriate sections of these specifications.

## 1.5 COORDINATION

- A. Commissioning Team: The members of the commissioning team consist of the Owner, Design Architect/Engineer (A/E), Commissioning Authority (CxA), Construction Manager (CM), and the Installers (CTR), which includes: the Mechanical Contractor (MC), the Electrical Contractor (EC), the TAB Contractor, the Controls Contractor (CC), any other installers or suppliers of equipment.
- B. Management: The CxA has been hired directly by the Owner. The CxA directs and coordinates the commissioning activities and reports to the Owner and the CM. All members work together to fulfill their contracted responsibilities and meet the objectives of the Contract Documents.
- C. Scheduling: The CxA shall work with the CM and each Contractor according to established protocols to schedule the commissioning activities. The CM will integrate all commissioning activities into the master schedule based on review of the Cx Plan and input from the CxA. All parties will address scheduling problems and make necessary notifications in a timely manner to expedite the commissioning process.

## 1.6 COMPENSATION

- A. If A/E, CM, CxA, or Owner's staff perform additional services or incur additional expenses due to actions of Contractor listed below, compensate Owner for such additional services and expenses.
  - 1. Failure to provide timely notice of commissioning activities schedule changes.
  - 2. Failure to meet acceptance criteria for re-testing of any FPT deficiencies.
- B. Contractor shall compensate Owner for such additional services and expenses at the rate of \$150 per labor hour, plus travel expenses.

## 1.7 COMMISSIONING PROCESS

- A. Commissioning Plan: The Commissioning Plan will be provided by the CxA subsequent to contractor selection and will be binding on the Contractor. The Commissioning Plan is a dynamic document that will provide direction throughout the commissioning process. The plan puts a significant emphasis on defining roles and responsibilities and establishing communication protocols. The plan will be amended as the construction progresses to include updated schedules, pre-functional inspection items and functional testing procedures. The Specifications will take precedence over the Commissioning Plan.

- B. Commissioning Process: The following narrative provides a brief overview of the typical commissioning tasks performed during construction and the general order in which they occur:
1. Commissioning during construction begins with a scoping meeting conducted by the CxA where the commissioning process is reviewed with the commissioning team members.
  2. Additional meetings will be required throughout the construction, scheduled by the CxA with necessary parties attending, to plan, scope, coordinate, schedule future activities and resolve any problems.
  3. Equipment documentation is submitted to the CxA during the normal submittals process and is performed concurrently with the A/E's submittal review process, including detailed start-up procedures.
  4. The CxA works with the MC and the other installers in reviewing and incorporating their startup plans and startup documentation into the pre-functional inspections and functional testing procedures.
  5. In general, the checkout and performance verification proceed from simple to complex; from component level to equipment to system and intersystem levels with prefunctional inspections being completed before functional testing.
  6. The CTRs, under their own direction, execute and document the initial checkout, equipment start-up and certification the equipment is ready for pre-functional inspections and functional testing. If required by the CxA, this certification will be accomplished in a phased approach under the direction of the CxA. The CxA may witness the start-up of selected equipment.
  7. The prefunctional checklists prepared by the CxA shall be filled out by the MC, EC, PC, and CC and returned to the CM following the procedure agreed upon at the commissioning scoping meeting. Once all checklist items are documented to be complete for a given system the CM shall be notified and shall, in turn, notify the CxA that the system is ready for a final prefunctional inspection.
  8. Prefunctional inspections and documentation shall be completed before proceeding with scheduled functional tests.
  9. The CxA develops specific equipment and system functional performance test procedures. The CTRs review and, if necessary, recommend modifications to the procedures.
  10. The procedures are executed by the CTRs, under the direction of, and documented by the CxA.
  11. Items of non-compliance in material, installation or setup are corrected at the CTRs expense and the system retested.
  12. The CxA records the deficiencies and maintains a log detailing and tracking the correction of deficiencies identified during the Cx process and distributes these reports to the CM, CTRs, Owner and A/E.
  13. The CxA reviews the O&M documentation for completeness.
  14. Commissioning is completed before acceptance.

15. The CxA reviews, pre-approves and observes training provided by the CTRs and the manufacturer's services representatives and verifies that it was completed.
16. The CxA performs a warranty phase review and conducts deferred testing as specified or required.

## 1.8 RESPONSIBILITIES

- A. The responsibilities of various parties in the commissioning process are provided in this section. Further specific responsibilities, when required, of the Mechanical Contractor, TAB Contractor, Controls Contractor and Electrical Contractor are described in their particular contract documents.
- B. All Parties:
  1. Follow the Commissioning Plan.
  2. Attend the commissioning scoping meeting and additional meetings as necessary.
  3. Provide timely responses to requests made by other members of the commissioning team as they related to the requirements of this section.
- C. Architect/Engineer (A/E):
  1. Attend the commissioning scoping meeting and selected commissioning team meetings.
  2. Understand and follow the Commissioning Plan.
  3. Perform normal submittal review, construction observation, as-built drawing preparation, O&M manual preparation, etc., as contracted. Onsite observation should be completed just prior to system startup.
  - 4.
  5. Coordinate and participate in resolution of design non-conformance and design deficiencies identified during commissioning and during the warranty period.
  6. Participate in the resolution of system installation deficiencies identified during commissioning, as requested by the CxA.
  - 7.
  8. Coordinate resolution of design non-conformance and design deficiencies identified during warranty-period commissioning.
- D. Commissioning Authority (CxA)
  1. The CxA is not responsible for design concept, design criteria, compliance with codes, design or construction scheduling, cost estimating, or construction management. The CxA may assist with problem solving non-conformance or deficiencies, but ultimately that responsibility resides with the A/E and CM according to their respective contracts with the Owner. The primary role of the CxA is to develop and coordinate the execution of the Commissioning Plan,



observe, and document system performance, and identify deficiencies requiring correction. Specifically, the goal of commissioning is to ensure that systems are functioning in accordance with the documented design intent and in accordance with the Contract Documents. The CTR and/or vendor's representative will provide all tools or the use of tools to start, check-out and functionally test equipment and systems, except for specified testing with portable data-loggers, which shall be supplied and installed by the CxA.

2. Coordinate and direct the commissioning activities in a logical, sequential, and efficient manner using consistent protocols and forms, centralized documentation, clear and regular communications and consultations with all necessary parties, frequently updated timelines and schedules and technical expertise.
3. Coordinate the commissioning work and verify that commissioning activities are being incorporated into the master schedule.
4. Revise the Commissioning Plan as necessary.
5. Plan and conduct a commissioning scoping meeting.
6. Request and review additional information required to perform commissioning tasks, including O&M materials, contractor start-up and checkout procedures.
7. Before startup, gather and review the current control sequences and interlocks and work with installers and design engineers until sufficient clarity has been obtained, in writing, to be able to write detailed testing procedures.
8. Review equipment submittals applicable to systems being commissioned for compliance with commissioning needs, concurrent with the A/E reviews.
9. Write and distribute prefunctional inspection checklists. The CxA shall provide a list of the required information submittals.
10. Receive notice that prefunctional checklists have been completed and systems are ready for final prefunctional inspection. Complete inspections and verify that systems are ready for startup.
11. Perform site visits, as necessary, to observe components, and system installations. Attend selected planning and job-site meetings to obtain information on construction progress. Review construction meeting minutes for revisions/substitutions relating to the commissioning process. Assist in resolving any discrepancies.
12. Witness all or part of the HVAC piping test and flushing procedure, sufficient to be confident that proper procedures were followed. Document this testing and include the documentation in the commissioning record to be provided with the final Cx Report. Notify CM of any deficiencies in results or procedures.
13. Witness all or part of any ductwork testing and cleaning procedures, sufficient to be confident that proper procedures were followed. Document this testing and include the documentation in the commissioning record to be provided with the final Cx Report. Notify CM of any deficiencies in results or procedures.
14. With necessary assistance and review from the Contractor and installers, write the functional performance test procedures for equipment and systems. This may

include energy management control system trending, stand-alone datalogger monitoring or manual functional testing, as appropriate to document compliance with the specified sequences of operation.

15. Evaluate systems startup procedures by reviewing start-up reports and by selected site observation.
16. Review TAB execution plan.
17. Coordinate and observe functional testing of the control systems. Coordinate retesting as necessary until satisfactory performance is achieved.
18. Review air and water systems TAB by spot testing, by reviewing completed reports and by selected site observation after receiving the final TAB report.
19. Analyze any functional performance trend logs and monitoring data to verify system functional performance following completion of TAB.
20. Maintain a master deficiency and resolution log and a separate functional testing record. Provide written progress reports and test results with recommended actions.
21. Review equipment warranties to verify that the Owner's responsibilities are clearly defined.
22. Oversee and approve the training of the Owner's operating personnel.
23. Compile and maintain a commissioning record.
24. Review and approve the preparation of O&M manuals.
25. Provide draft and final commissioning reports.
26. Coordinate and supervise required seasonal or deferred testing and deficiency corrections. Seasonal tests will be identified in the Cx Plan.
27. Return to the site at approximately 10 months into the 12-month warranty period and review with facility staff the current building operation and the condition of outstanding issues related to the original and seasonal commissioning. Also interview facility staff and identify problems or concerns they have operating the building as originally intended. Make suggestions for improvements and for recording these changes in the systems manual. Identify areas that may come under warranty or under the original construction contract. Assist facility staff in developing reports, documents, and requests for services to remedy outstanding problems.
28. Identify any warranty phase deficiencies and provide detailed documentation to the Owner and CM.

E. Construction Manager (CM)

1. Manage the contracts of each Prime Contractor.
2. Attend a commissioning scoping meeting and other commissioning team meetings.
3. Oversee completion of PFCs and organize completed checklists in a field binder for review by the CxA. Maintain the active checklist binder, ensuring all CTRs return

partially or fully completed checklists. Assist the CxA in reviewing checklist progress throughout construction.

4. Review commissioning progress and deficiency reports and facilitate the communication of formal responses from the CTRs to the CxA.
5. Coordinate the resolution of scheduling conflicts, including those identified by the CxA with respect to commissioning tasks. Where inadequate time allotments are provided for commissioning inspections or tests, work with the CxA to revise schedule dates accordingly.
6. Provide final approval for the completion of the commissioning work.
7. Address any seasonal or deferred testing and any deficiency issues.

F. Prime Contractors (CTRs)

1. Include the cost of supporting commissioning in the contract price.
2. Attend a commissioning scoping meeting and other commissioning team meetings.
3. Furnish a copy of all construction documents, addenda, change orders and submittals and shop drawings related to commissioned equipment to the CxA.
4. Provide the requisite readiness notification to the CxA for equipment prefunctional inspections, startup, and functional testing.
5. Participate in pre-functional inspections, startup, and functional testing of all equipment, as directed by the CxA.
6. At least one qualified individual shall be available on-site, as requested by the CxA.
7. Oversee completion of PFCs and organize completed checklists in a field binder for review by the CM and CxA. Assist the CxA in reviewing checklist progress throughout construction.
8. Review the functional performance test procedures submitted by the CxA, prior to testing.
9. Provide the necessary passwords and system access to the control systems to allow the CxA to adjust set points and other systems parameters. The access level should be at the highest level possible with the exception of allowing the CxA to modify the programming sequences.
10. Review commissioning progress and deficiency reports and issue written responses to the CxA as needed.
11. Coordinate the resolution of deficiencies identified by the CxA.
12. Document the completion and/or action taken for the resolution of deficiencies as directed by the CxA and described in the Cx Plan.
13. Coordinate and perform the training of owner personnel as specified. Direct the scheduling of training by CTRs in accordance with their contract requirements.
14. Ensure that all installers execute their commissioning responsibilities according to the Contract Documents and schedule.

15. Prepare O&M manuals, according to the Contract documents, including clarifying and updating the original sequences of operation to as-built conditions. Provide copies to the CxA for review and comment.
16. Coordinate the resolution of scheduling conflicts, including those identified by the CxA with respect to commissioning tasks. Where inadequate time allotments are provided for commissioning inspections or tests, work with the CxA to revise schedule dates accordingly.
17. Assist the CxA as necessary in the seasonal or deferred testing and deficiency corrections required by the specifications and the Commissioning Plan.
18. Ensure that installers execute seasonal or deferred functional performance testing, witnessed by the CxA, according to the specifications and the Commissioning Plan.
19. Ensure that installers correct deficiencies and make necessary adjustments to O&M manuals and as-built drawings for applicable issues identified in any seasonal testing.

#### 1.9 SYSTEMS TO BE COMMISSIONED

- A. The following systems shall be commissioned:
  1. HVAC systems and equipment.
  2. Building automation and temperature control systems.
  3. Lighting control systems.
  4. Domestic hot water system.

#### PART 2 - PRODUCTS (NOT APPLICABLE)

#### PART 3 - EXECUTION

##### 3.1 MEETINGS

- A. Scoping Meeting: The CxA will schedule, plan, and conduct a commissioning scoping meeting with the entire commissioning team in attendance. Meeting minutes will be distributed to all parties by the CxA. Information gathered from this meeting will allow the CxA to revise the Commissioning Plan, which will also be distributed to all parties.
- B. Functional Performance Testing Meeting: The CxA will schedule, plan, and conduct a functional performance test meeting with the entire commissioning team in attendance to kick-off the FT phase. Required attendees will be identified in advance of the meeting based on the scope of testing required.

- C. Miscellaneous Meetings: Progress meetings will be scheduled and conducted by the CxA, as necessary. Other meetings will be planned and conducted by the CxA as the construction progresses. These meetings will cover coordination, deficiency resolution and planning issues with particular CTRs. The CxA will plan these meetings and will minimize unnecessary time being spent by CTRs.

### 3.2 REPORTING

- A. The CxA will provide regular reports with increasing frequency as construction and commissioning progresses. Reports will be developed and issued on an as-needed basis according to the activities being performed at any given point during the project.
- B. The CxA will regularly communicate with all members of the commissioning team, keeping them apprised for commissioning progress, and scheduling changes through memos, progress reports, etc.
- C. Two copies of a final summary report will be provided to the engineer of record and owner by the CxA and will include:
  - 1. A brief summary report that includes a list of participants and roles, brief building description, overview of commissioning and testing scope, and a general description of testing and verification methods. For each commissioned system, the report should contain the opinion of the CxA on the adequacy of the following:
    - a. Equipment installation in accordance with contract drawings & specifications
    - b. Functional performance and efficiency
    - c. Equipment documentation
    - d. Operator Training
  - 2. All outstanding non-compliance items shall be specifically listed. Recommendations for improvement to equipment and operations, future actions, recommended commissioning process changes, etc. shall also be listed. Each non-compliance issue shall be referenced to the specific functional test, inspection, trend log, etc., where the deficiency is documented.
  - 3. Also included in the Commissioning Record shall be the issues log, commissioning plan, progress reports, submittal and O&M manual review comments, training record, and functional testing results. Copies of construction checklists and startup reports will typically be provided under separate cover.
- D. The CxA will compile a Systems Manual that consists of the following:
  - 1. Space and use descriptions.
  - 2. Single line drawings and schematics for major systems (to be provided by the design engineer and/or CTRs, as specified).

3. As-built control drawings and sequences of control (to be provided by the controls contractor).
4. Important schedules and setpoints.
5. Instructions for operation of each piece of equipment for emergencies, seasonal adjustment, startup and shutdown.
6. Instructions for energy savings operations and descriptions of the energy savings strategies in the facility.
7. Recommendation for re-commissioning and regular maintenance of the facility.

### 3.3 SUBMITTALS

- A. The CxA will review submittals for commissioned equipment for conformance to the Contract Documents as they relate to the commissioning process, to the functional performance of the equipment and adequacy for developing test procedures. This review is intended primarily to aid in the development of functional testing procedures and only secondarily to verify compliance with equipment specifications. The CxA will notify the Owner, CM, or A/E as requested, of items missing or areas that are not in conformance with Contract Documents and which require resubmission.
- B. The CxA may request additional design narratives depending on the completeness of the design intent documentation and sequences for control equipment provided with the Specifications.
- C. These submittals to the CxA do not constitute compliance for O&M manual documentation.

### 3.4 SYSTEM START-UP AND TESTING

- A. All systems and system components shall be tested by the CTRs and in the presence of the Owner and Design Consultants if desired by the Owner and Design Consultants to demonstrate compliance with specified requirements. To minimize the time of commissioning, contracting, and Design Consultant team members, testing shall be done in seasonal single blocks of time insofar as possible.
- B. The Contractor shall notify the CxA fourteen (14) days prior to scheduled functional performance tests, of the scheduled completion date of the installation verification and prefunctional inspections.
- C. All testing shall be conducted under specified design operating conditions as approved by the CxA and Design Consultants. Where project conditions do not allow for completing functional tests within the allotted schedule, the CxA may elect to defer

certain performance tests for a later date. The need for deferred tests will be reviewed by the CxA, CM, A/E, and Owner.

- D. All elements of systems shall be tested to demonstrate that total systems satisfy all requirements of these Specifications. Testing shall be accomplished on a hierarchical basis. Each piece of equipment shall be tested for proper operation, and functionality of safety devices, followed by each system's subsystem, followed by the entire system, followed by any interlocks to other major systems.
- E. All special testing materials and equipment shall be provided by the CTR. This includes, but is not limited to, proprietary equipment, hand-held control parameter/setpoint adjustment tools, water/air flow balancing readout and adjustment tools.
- F. One copy of all factory test reports and records as well as all start-up documentation shall be provided to the CxA promptly following the completion of the report. Reports shall be completed in a timely fashion and shall not be withheld from review by the CxA.
- G. Test Procedure Development and Test Documentation:
  - 1. At least fourteen (14) days prior to startup of the mechanical system, the CTR shall inform the CxA, the Owner's representative and Design Consultants of the intention to start up the systems.
  - 2. Where phased startup of equipment is required based on project conditions, the proposed startup schedule for each sub-system shall be provided (14) days in advance of commencing startup activities.
- H. Installation Verification Requirements:
  - 1. All systems and system components shall be checked and verified by the CTR that they have been installed according to the drawings, specifications, and manufacturer's written instructions, and that all connections have been made correctly. Discrepancies shall be corrected and resolved to the satisfaction of the engineer and CxA prior to proceeding any further with pre-functional inspections.
  - 2. Each system of interlocked system components shall be observed and verified by the CTR that it is ready to function as specified. This verification shall occur before formal startup is attempted.
  - 3. Verification of complete and proper installation shall be completed prior to the CxA authorizing functional performance testing.
  - 4. The installation verification shall be documented by the CTR in a written format for each system/piece of equipment as designated by the CxA. Each certificate of readiness shall be dated and initialed by the Contractor and clearly stating any items that are deficient or have not been completed. The protocols for this will be further clarified in the Commissioning Plan.
- I. Pre-functional Inspection Requirements:

1. The CxA will provide the inspection forms for each system and equipment.
2. Completion of the pre-functional checklists is the responsibility of the CTR providing the system/equipment.
3. Where work by multiple different CTRs is required for a given system, each CTR will be required to complete the portion of the associated prefunctional checklists for which their contract is responsible. For example, verification that power wiring is complete for mechanical equipment provided by the MC shall be documented by the EC on the appropriate mechanical equipment checklist. Checks by multiple parties shall be documented within a single, comprehensive checklist record.
4. Following completion of prefunctional checklists, completed checklists shall be submitted to the CM for review with the CxA.
5. Prior to the CxA performing the final pre-functional inspection, the CTRs shall check the equipment for proper installation, adjustments, and shall be calibrate the equipment to verify that it is ready to perform as specified.
6. Verification of complete and proper installation shall be completed prior to performing functional performance tests.
7. Deficiencies identified by the CxA shall be corrected fully and completely before requests for re-inspection by the CxA are made. Functional performance testing shall not be scheduled until all non-conformance issues are satisfactorily resolved and documentation of resolution is complete. Refer to the section on Non-Conformance below for further discussion.

J. Functional Performance Testing Requirements:

1. A functional performance test shall be directed on each complete system. Each function shall be demonstrated to the satisfaction of the CxA based on the written test procedure developed by the CxA to demonstrate conformance to the requirements of the Contract Documents.
2. Each functional performance test shall be performed, witnessed, and signed off by the CxA. The CxA and the CTRs will perform the functional testing together. Any exceptions to this will be made clear to the Owner as to the reason and justification.
3. The functional performance testing shall be conducted in accordance with prior approved procedures and documented as required.
4. The Contractor shall notify the contracting team, the CxA, and Design Consultants, at least two weeks prior to the date of schedule functional performance tests. The seasonal functional performance test periods shall be scheduled over a single block of days. The schedule of functional performance tests shall be based on the construction completion schedule.

### 3.5 DOCUMENTATION, NON-CONFORMANCE, AND APPROVAL OF TESTS

- A. Documentation: The CxA shall witness and document the results of all functional performance tests using the specific forms developed by the CxA for that purpose.



B. Non-Conformance:

1. The CxA will sign-off on the results of the PFIs and functional tests utilizing the appropriate documentation. All deficiencies or non-conformance issues shall be noted and reported to the Owner, CM, and CTRs.
2. Reports of the deficiencies identified will be provided to the project team by the CxA. A log identifying deficiencies for each trade will be provided and periodically updated by the CxA. This log and any accompanying reports or documentation are utilized for the contractor to inform the CxA of the action taken to address the deficiency items and these forms must be returned in a timely manner to the CxA.
3. Corrections of minor deficiencies identified may be made during the tests at the discretion of the CxA. In such cases, the deficiency and resolution will be documented by the CxA. The need for any retesting shall be at the discretion of the CxA.
4. Every effort will be made to expedite the testing process and minimize unnecessary delays, while not compromising the integrity of the procedures. However, the CxA will not be pressured into overlooking deficient work or compromising acceptance criteria to satisfy scheduling or cost issues, unless there is an overriding reason to do so at the request of the Owner.
5. Cost of Retesting
  - a. The CTRs shall bear all costs to repeat a pre-functional inspection or functional test.
  - b. There shall be no limit on the time required of the CTR to correct items of non-conformance so long as the intent of the contract documents has not been met.
  - c. The time for the CxA to direct any retesting required because a specific prefunctional inspection of start-up test item, reported to have been successfully completed, but determined during functional testing to be faulty, will be back-charged to the appropriate CTR.
  - d. The cost for the CxA to direct or execute a single round of retesting following identification of deficiencies during functional performance testing shall belong to the CxA. Following one round of re-testing, if it is found that the deficiencies previously identified have still not been successfully corrected by the CTR, the time for the CxA to direct any additional re-testing shall be back-charged to the appropriate CTR.
6. The CTR shall respond in writing to the CxA at least as often as commissioning meetings are scheduled concerning the status of each apparent outstanding discrepancy identified during commissioning. Discussion shall cover explanations of any disagreements and proposals for their resolution.

C. Failure Due to Manufacturer Defect or Improper Installation: If 10% of, or three, whichever is greater, of identical pieces of equipment (size alone does not constitute a

difference) fail to perform to the Contract Documents (either mechanically or substantively) due to manufacturing defect or improper installation, not allowing it to meet its submitted performance spec, all identical units may be considered unacceptable by the CxA, CM, A/E or Owner. In such case, the Contractor shall provide the Owner with the following:

1. Within one week of notification from the A/E (via the CxA), the installer or manufacturer's representative shall examine all other identical units making a record of the findings. The findings shall be provided to the CxA or CM within two weeks of the original notice.
2. Within two weeks of the original notification, the installer or manufacturer shall provide a signed and dated written explanation of the problem, cause of failures, etc., and all proposed solutions, which shall include full equipment submittals. The proposed solutions shall not significantly exceed the specification requirements of the original installation.
3. The CxA, CM and A/E will determine whether a replacement of all identical units or a repair is acceptable.
4. Two examples of the proposed solution will be installed by the Contractor and the CxA will be allowed to test the installations for up to one week, upon which the CxA or CM will decide whether to accept the solution.
5. Upon acceptance, the installer and/or manufacturer shall replace or repair all identical items, at their expense, and extend warranty accordingly, if the original equipment warranty had begun. The replacement/repair work shall proceed with reasonable speed beginning within one week from when parts can be obtained.

D. Approval: The CxA documents each satisfactorily demonstrated functional test.

### 3.6 OPERATION AND MAINTENANCE MANUALS

#### A. Standard O&M Manuals

1. The specific content and format requirements for the standard O&M manuals are detailed in the contract documents. Special requirements for the controls contractor and TAB contractor are detailed in the contract documents.
2. Prior to substantial completion, the CxA shall review the O&M manuals, documentation and as-builts for systems that were commissioned to verify compliance with the specifications. The CxA will communicate deficiencies in the manuals to the CTRs, CM, A/E or Owner as requested. Upon successful review of the corrections, the CxA recommends approval and acceptance of these sections of the O&M manuals to the CM, A/E and Owner. The CxA also reviews each commissioned equipment's warranty and verifies that all requirements to keep the warranty valid are clearly stated. This work does not supersede the A/E's review of the O&M manuals according to the A/E contract.

### 3.7 TRAINING OF OWNER PERSONNEL

- A. The CTRs shall be responsible for training coordination, scheduling training sessions with the CM, and for ultimately ensuring that training is completed.
- B. The CxA shall be responsible for overseeing and approving the content and adequacy of the training of the Owner personnel for commissioned equipment. Training sessions shall be attended by the CxA on an as-needed basis.
- C. The CxA shall attend a meeting with the facility manager and lead design engineer to determine the special needs and areas where training would be most valuable. The Owner and CxA shall decide how rigorous the training should be for each piece of commissioned equipment.
- D. In addition to these general requirements, the specific training requirements of Owner's personnel by CTRs, as detailed in the specifications, shall be provided.
- E. Each CTR and vendor responsible for training will submit a written training plan to the CxA, for review and approval prior to training. The plan will cover the following elements:
  - 1. Equipment (included in training).
  - 2. Intended audience.
  - 3. Location of training.
  - 4. Objectives.
  - 5. Subjects covered (description, duration of discussion, special methods, etc.).
  - 6. Duration of training on each subject.
  - 7. Instructor for each subject and qualifications.
  - 8. Methods (classroom lecture, video, site walk-thru, actual demonstrations, etc.).
- F. The CxA will assist the CM, and CTRs in developing an overall training plan and coordinating the schedules with the CM and Owner. The CxA develops criteria for determining that the training was satisfactorily completed, including attending some of the training.

### 3.8 DEFERRED TESTING

- A. Unforeseen Deferred Tests: If any inspection or test cannot be completed due to the building structure, required occupancy condition or other deficiency, execution of inspections and functional testing may be delayed upon approval of the CM or Owner. These tests will be conducted in the same manner as the seasonal test as soon as possible. Services of necessary parties shall be negotiated.
- B. Seasonal Testing: During the warranty period, seasonal testing (tests delayed until weather conditions are closer to the system's design) shall be completed as part of this

contract. The CxA shall coordinate this activity. Tests will be executed, documented and deficiencies corrected by the appropriate CTRs, with facilities staff and the CxA witnessing. Any final adjustments to the O&M manuals and as-builts due to the testing will be made. Systems for which seasonal testing is anticipated will be identified in the Commissioning Plan.

### 3.9 WRITTEN WORK PRODUCTS

- A. The commissioning process generates a number of written work products described in various parts of the specifications. The Commissioning Plan lists all the formal written work products, describes briefly their contents, who is responsible to create them, their due dates, who receives and approves them and the location of the specification to create them. In summary the written products are:

	Product	Developed By
1.	Final Commissioning Plan	CxA
2.	Commissioning Schedules	CxA, CM and CTRs
3.	Equipment Documentation Submittals	CTRs
4.	Sequence Clarifications	A/E and CTRs as needed
5.	Pre-Functional Inspection Forms	CxA
6.	Pre-Functional Inspections	CxA and CTRs
7.	Startup and Initial Checkout Plans	CTRs
8.	Startup and Factory Test Reports	CTRs
9.	Final TAB Report	MC
10.	Commissioning Progress Record	CxA
11.	Deficiency Reports	CxA
12.	Functional Test Procedures	CxA
13.	O&M Manuals	CTRs
14.	Commissioning Record	CxA
15.	Overall Training Plans	CxA, CM and CTRs
16.	Final Commissioning Report	CxA

### 3.10 SUBSTANTIAL COMPLETION

- A. CTRs shall prepare and submit a list of completed and open commissioning activities including schedules for completion of open items to CxA prior to requesting approval for Substantial Completion.
1. CxA shall review and provide comments to CM and A/E.

3.11 FINAL ACCEPTANCE

- A. CTRs shall obtain and submit certification from CxA that commissioning process is complete.
- B. When Contractor considers that construction-phase commissioning process, or a portion thereof which Owner agrees to accept separately, is complete, Contractor shall prepare and submit to Owner and Commissioning Authority through Architect a comprehensive list of items to be completed or corrected. Failure to include an item on such list does not alter Contractor's responsibility to complete commissioning process.

END OF SECTION 019113

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## SECTION 023313 – UNDERGROUND UTILITY LOCATOR SERVICE

### PART 1 – GENERAL

#### 1.1 SUMMARY

- A. This Section includes:
  - 1. Requirements and standards for underground utility location services to be completed prior to commencement of construction.

#### 1.2 RELATED WORK SPECIFIED ELSEWHERE

- A. Contract Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

#### 1.3 REFERENCES

- A. American Society of Civil Engineers, CI/ASCE 38-02, "Standard Guideline for the Collection and Depiction of Existing Subsurface Utility Data."
- B. American Public Works Association, Uniform Color Code."

#### 1.4 DEFINITIONS

- A. Utility Quality Levels:
  - 1. Level A: Precise horizontal and vertical location of utilities obtained by the actual exposure (or verification of previously exposed and surveyed utilities) and subsequent measurement of subsurface utilities, usually at a specific point. Minimally intrusive excavation equipment is typically used to minimize the potential for utility damage. A precise horizontal and vertical location, as well as other utility attributes, is shown on plan documents. Accuracy is typically set to 15-mm vertical and to applicable horizontal survey and mapping accuracy as defined or expected by the project owner.
  - 2. Level B: Information obtained through the application of appropriate surface geophysical methods to determine the existence and approximate horizontal position of subsurface utilities. Quality level B data should be reproducible by surface geophysics at any point of their depiction. This information is

surveyed to applicable tolerances defined by the project and reduced onto plan documents.

## 1.5 DESCRIPTION

- A. Retain an independent utility locator service company with a minimum of five (5) years experience to field locate, mark, and stakeout existing underground utilities and service connections.
  - 1. Level B locator service shall be performed in all project areas where excavations, regrading of the ground surface, and penetrations of the ground surface are to be performed.
    - a. Contractor shall include a minimum of 16 hours of Level A locator service to locate underground utilities as identified on the contract drawings or as identified during the Level B investigation that require more specific location, invert elevation, size, etc. Level A investigation shall only be performed at locations where shown or as directed.
    - b. In heavy metal areas, such as near perimeter fences, ground penetrating radar shall be used to determine the location of underground utilities. The use of equipment that induce a tracing signal along the utility path (such as a Metrotech unit) can cause false readings, shall not be used within five feet of fences.
  - 2. The Level A investigation shall be performed as follows:
    - a. Hand excavation may be performed for depths of three feet or less.
    - b. Vacuum excavation shall be performed at depths greater than three feet.
    - c. All excavation test pits shall be backfilled by close of business that day.
  - 3. Support and protect all utilities and service connections to remain in place.
  - 4. The locator service shall field locate and mark underground utilities and service connections prior to excavation.
  - 5. The contractor shall be responsible for coordinating the extent of the areas of subsurface investigation required to locate all underground utilities and service connections in the areas of excavation.
  - 6. All costs associated with the repair of underground utilities and service connections hit/damaged during the investigative work shall be the responsibility of the contractor.



7. Utility location services shall be in accordance with the provisions of CIASCE 38-02, "Standard Guideline for the Collection and Depiction of Existing Subsurface Utility Data."

#### 1.6 SUBMITTALS

- A. Submit detailed experience and qualifications description of underground utility locator service. Experience and qualifications package should include a description of the types of utility locator equipment and experience that can be provided.
- B. Investigative Report:
  1. Submit detailed written report and scaled drawings of the subsurface investigation, documenting all underground utilities and service connections located and identified.
    - a. All documentation shall be referenced to existing data (horizontal and vertical) previously established.
    - b. Provide three (3) paper copies and one (1) electronic copy of detailed written report and drawings.
    - c. Submit Investigative Report at least two weeks prior to advancing construction within the scheduled areas of excavation within the project site.

#### 1.4 COORDINATION AND SCHEDULE

- A. Coordinate the Work to determine the extent of the areas of subsurface investigation required to locate all underground utilities and service connections in the areas of excavation.
- B. Coordinate the Work with the Director's Representative to minimize utility disruptions and facility operations. Provide a schedule for the Work required to the Director's Representative for approval. Upon approval of the schedule, notify the Director's Representative a minimum of three (3) working days prior to performing the Work.
- C. Within the areas of excavation, all underground utilities and service connections shall be field located and their locations marked at least two (2) weeks prior to the performance of the required excavation work.

#### PART 2 – PRODUCTS (NOT USED)

## PART 3 – EXECUTION

### 3.1 WORK AREAS AND PERFORMANCE

- A. If any underground utilities and service connections are hit or damaged during the work, immediately inform the Owner and Engineer for directions on how to proceed.
- B. The utility locator service investigative work, field location and marking of underground utilities and service connections and submission of the investigative report must be completed before any excavation work can begin.
- C. Provide subsurface investigation information, detailed written report and drawings of the subsurface investigation, documenting all underground utilities and service connections located and identified, prior to the performance of the required excavation work.
- D. If during the Level B investigations, unknown underground utilities are discovered, the Engineer shall be notified as soon as possible or before the close of that business day.
- E. Field Marking of underground utilities shall follow the American Public Works Association (APWA) uniform color code:
  - 1. White: Proposed Excavation.
  - 2. Pink: Temporary Survey Markings.
  - 3. Red: Electric power lines, cables, conduit, and lighting cables.
  - 4. Yellow: Gas, oil, steam, petroleum, and gaseous material.
  - 5. Orange: Communications, alarm, signal lines, cables, or conduit.
  - 6. Blue: Potable water.
  - 7. Purple: Reclaimed water, irrigation, and slurry lines.
  - 8. Green: Sewer and drain lines.
- F. The Owner or Engineer may limit or restrict scheduling of the utility locator service based upon project progress.

END OF SECTION 023313

## SECTION 024100 – DEMOLITION

### PART 1 - GENERAL

#### 1.1 SECTION INCLUDES

- A. Selective demolition of building elements for alteration purposes.
- B. Selective demolition of site elements for proposed improvements.
- C. Salvage of existing items to be reused or recycled.

#### 1.2 RELATED REQUIREMENTS

- A. Section 015000 Temporary Facilities and Controls: Site fences, security, protective barriers, and waste removal.
- B. Section 016000 Product Requirements: Handling and storage of items removed for salvage and relocation.
- C. Sections 017300 Execution and 017700 Closeout Requirements: Project conditions; protection of benchmarks, survey control points and existing construction to remain; reinstallation of removed products; temporary bracing and shoring.
- D. Divisions 02-33 – Technical Specifications.

#### 1.3 REFERENCE STANDARDS

- A. NFPA 241 – Standard for Safeguarding Construction, Alteration and Demolition Operations; 2013.

#### 1.4 DEFINITIONS

- A. Remove: Detach items from existing construction and legally dispose of them off-site unless indicated to be removed and salvaged or removed and reinstalled.
- B. Remove and Salvage: Carefully detach from existing construction, in a manner to prevent damage, and deliver to Owner ready for reuse.
- C. Remove and Reinstall: Detach items from existing construction, prepare for reuse, and reinstall where indicated.

- D. Existing to Remain: Existing items of construction that are not to be permanently removed and that are not otherwise indicated to be removed, removed, and salvaged, or removed and reinstalled.

## PART 2 - PRODUCTS (NOT USED)

## PART 3 - EXECUTION

### 3.1 SCOPE

- A. Excavate / remove portions of existing foundation systems, SAN and STM drainage piping, fieldstone masonry veneer, architectural louvers, select mechanical/electrical/plumbing building systems, aluminum-framed storefront systems, FRP door panels, access control devices, gypsum/acoustical panel ceiling systems and accessories; interior fire-rated partitions, hollow metal doors/frames/hardware, and associated Work as indicated on Drawings.
- B. Remove other items indicated for salvage, relocation, and recycling.

### 3.2 GENERAL PROCEDURES AND PROJECT CONDITIONS

- A. Comply with applicable codes and regulations for demolition operations and safety of adjacent structures and the public.
  - 1. Obtain required permits.
  - 2. Comply with applicable requirements of NFPA 241.
  - 3. Use of explosives is not permitted.
  - 4. Take precautions to prevent catastrophic or uncontrolled collapse of structures to be removed; do not allow worker or public access within range of potential collapse of unstable structures.
  - 5. Provide, erect, and maintain temporary barriers and security devices.
  - 6. Conduct operations to minimize effects on and interference with adjacent structures and occupants.
  - 7. Conduct operations to minimize obstruction of public and private entrances and exits; do not obstruct required exits at any time; protect persons using entrances and exits from removal operations.
  - 8. Obtain written permission from Owners of adjacent properties when demolition equipment will traverse, infringe upon or limit access to their property.
- B. Do not begin removal until receipt of notification to proceed from Owner.
- C. Protect existing structures and other elements that are not to be removed.

### 3.3 SELECTIVE DEMOLITION FOR ALTERATIONS

- A. Drawings showing existing construction and utilities are based on casual field observation and existing record documents only.
  - 1. Verify that construction and utility arrangements are as shown.
  - 2. Report discrepancies to Architect before disturbing existing installation.
  - 3. Beginning of demolition work constitutes acceptance of existing conditions that would be apparent upon examination prior to starting demolition.
- B. Separate areas in which demolition is being conducted from other areas that are still occupied.
  - 1. Provide, erect, and maintain temporary dustproof partitions of construction specified in Section 015000 in locations indicated on drawings.
- C. Maintain weatherproof exterior building enclosure except for interruptions required for replacement or modifications; take care to prevent water and humidity damage.
- D. Remove existing work as indicated and as required to accomplish new work.
- E. Protect existing work to remain.
  - 1. Perform cutting to accomplish removals neatly and as specified for cutting new work.
  - 2. Repair adjacent construction and finishes damaged during removal work.
  - 3. Patch as specified for patching new work.

### 3.4 DEBRIS AND WASTE REMOVAL

- A. Remove debris, junk, and trash from site.
- B. Leave site in clean condition, ready for subsequent work.
- C. Clean up spillage and wind-blown debris from public and private lands.

END OF SECTION 024100

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## SECTION 028200 - ASBESTOS REMOVAL

### PART 1 – GENERAL

#### 1.1 SCOPE OF WORK

- A. This asbestos abatement Project will consist of the removal and disposal of asbestos containing materials (ACM) and presumed asbestos containing materials (PACM) at:
  - 1. Henry Barnard School, 129 Barnard Road, New Rochelle, NY 10801.
- B. The work shall include but not be limited to the removal of the following materials:  
Henry Barnard School
  - 1. Remove and dispose of roofing, caulking and base/counter flashings between roof and chimney. Typical for: 96 SF of roofing / flashing and 48 LF of caulking.
  - 2. Remove and dispose of caulking at copper louvers. Louvers are to be removed, decontaminated of all acm and turned over to the owner. Do not damage louvers during abatement process. Typical for 48 LF caulking.
  - 3. Remove existing chimney, including cast stone, down to roof deck below. Carefully remove, decontaminate of ACM, and remove existing chimney stone and cast stone. Remove and dispose of all existing masonry backup systems, flues and the like in its entirety as asbestos containing material. Coordinate removal with architectural drawings. Typ. for 1,120 SF of stone removal / decontamination and 1,120 SF of masonry backup / flue removal.
  - 4. Remove and dispose of light fixtures w/PACM light wiring. Typ. for 2 fixtures.

All as indicated on the drawings and as contained within the Renovation Surveys for Asbestos Containing Materials attached as Appendix 'A' to the end of this Section.

- C. The Contractor shall be aware of all conditions of the Project and is responsible for verifying quantities and locations of all Work to be performed. Failure to do so shall not relieve the Contractor of its obligation to furnish all labor and materials necessary to perform the Work.
- D. All Work shall be performed in strict accordance with the Project Documents and all governing codes, rules, and regulations. Where conflicts occur between the Project Documents and applicable codes, rules, and regulations, the more stringent shall apply.
- E. Working hours shall be as required and approved by the Owner. Asbestos abatement activities including, but not limited to, work area preparation, gross removal activities, cleaning activities, waste removal, etc. may need to be performed during 'off-hours' (including nights and weekends). In addition, multiple mobilizations may be required

to perform the work identified in this project. The Contractor shall coordinate and schedule all Work with the facility and Owner's representative.

## 1.2 SPECIAL JOB CONDITIONS

- A. All final air clearances associated with this project must be run by TEM, as described in 40 CFR Part 763 Asbestos, Subpart E, 763.90 and as per New York State Education Department Requirements.

## 1.3 PERMITS AND COMPLIANCE

- A. The Contractor shall assume full responsibility and liability for compliance with all applicable Federal, State, and local laws, rules, and regulations pertaining to Work practices, protection of Workers, authorized visitors to the site, persons, and property adjacent to the Work.
- B. Perform asbestos related Work in accordance with New York State Industrial Code Rule 56 (herein referred to as Code Rule 56), 40 CFR 61, and 29 CFR 1926. Where more stringent requirements are specified, adhere to the more stringent requirements.
- C. The Contractor must maintain current licenses, permits and certifications pursuant to New York State Department of Labor and Department of Environmental Conservation for all Work related to this Project, including the removal, handling, transport, and disposal of asbestos containing materials.
- D. The Contractor must have and submit proof upon request that any persons employed by the Contractor to engage in or supervise Work on any asbestos Project have a valid NYS asbestos handling certificate pursuant to Code Rule 56.
- E. The Contractor shall comply fully with any Variance secured from regulatory agencies by the Owner in the performance of the Work. Any Variance applications previously submitted are included as an appendix of this specification.
- F. The Contractor shall be responsible for obtaining all Variances as may be required for the Project or as requested by the Owner. Approval of the Owner is required prior to submission of a Variance application to any regulatory agency. Failure to obtain Owner approval may result in Owner not permitting variance to be used on the project.
- G. The Contractor shall be responsible for compliance with The New York State Uniform Fire Prevention and Building Code, or its successor during all Work at the site.
- H. Failure to adhere to the Project Documents shall constitute a breach of the Contract and the Owner shall have the right to and may terminate the Contract provided,



however, the failure of the Owner to so terminate shall not relieve the Contractor from future compliance.

#### 1.4 SUBMITTALS

- A. Pre-Work Submittals: Within 7 days prior to the pre-construction conference, the Contractor shall submit 3 copies of the documents listed below, with 1 copy going directly to the Owner for review and approval prior to the commencement of asbestos abatement activities:
1. Contractor license issued by New York State Department of Labor.
  2. A list of Projects performed within the past two (2) years including the dollar value of all Projects. Provide Project references to include Owner, consultant, and air monitoring firm's name, contact persons, address, and phone number.
  3. Progress Schedule:
    - a. Show the complete sequence of abatement activities and the sequencing of Work within each building or building section.
    - b. Show the dates for the beginning and completion of each major element of Work including substantial completion dates for each Work Area, building, or phase.
  4. Project Notifications: As required by Federal and State regulatory agencies together with proof of transmittal (i.e. certified mail return receipt).
  5. Building Occupant Notification: As required by regulatory agencies.
  6. Abatement Work Plan: Provide plans that clearly indicate the following:
    - a. All Work Areas/containments numbered sequentially.
    - b. Locations and types of all decontamination enclosures.
    - c. Entrances and exits to the Work Areas/containments.
    - d. Type of abatement activity/technique for each Work Area/containment.
    - e. Number and location of negative air units and exhaust. Also provide calculations for determining number of negative air pressure units.
    - f. Location of water and electrical connections to building services.
    - g. Waste transport routes through the building to the waste storage container.
  7. Disposal Site/Landfill Permit from applicable regulatory agency.
  8. NYS Department of Environmental Conservation Waste Transporter Permit.
- B. On-Site Submittals: Refer to Part 3.1.C & D for all submittals, documentation, and postings required to be maintained onsite during abatement activities.
- C. Project Close-out Submittals: Within thirty (30) days of the completion of each abatement phase, the Contractor shall submit one (1) copy of the documents listed below to Owner and one copy to the environmental consultant for review and approval prior to Contractor's final payment. Once Owner approves the close-out

submittal, the Contractor shall provide three sets of the approved close-out documents (double-sided and bound) to Owner Project Management, including one set to be distributed to the facility.

1. All waste disposal manifests and disposal logs
2. OSHA compliance air monitoring records conducted during the Work.
3. Daily progress log, including the entry/exit log.
4. Provide the Contractor's Acknowledgement Statement that lists all Workers used in the performance of the Project, including name and NYS DOL certification number. The Statement shall be notarized (Original notarized statement shall be sent to Owner).
5. Disposal Site/Landfill Permit from applicable regulatory agency.
6. Project notifications, amended notifications, Variances.

#### 1.5 PRE-CONSTRUCTION CONFERENCE

- A. Prior to start of preparatory Work under this Contract, the Contractor shall attend a pre-construction conference attended by Owner, Facility Personnel, and Environmental Consultant.
- B. Agenda for this conference shall include but not necessarily be limited to:
  1. Contractor's scope of Work, Work plan, and schedule to include number of workers and shifts.
  2. Contractor's safety and health precautions including protective clothing and equipment and decontamination procedures.
  3. Environmental Consultant's duties, functions, and authority.
  4. Contractor's Work procedures including:
    - a. Methods of job site preparation and removal methods.
    - b. Respiratory protection.
    - c. Disposal procedures.
    - d. Cleanup procedures.
    - e. Fire exits and emergency procedures.
  5. Contractor's required pre-work and on-site submittals, documentation, and postings.
  6. Contractor's plan for twenty-four (24) hour Project security both for prevention of theft and for barring entry of unauthorized personnel into Work Areas.
  7. Temporary utilities.
  8. Handling of furniture and other moveable objects.
  9. Storage of removed asbestos containing materials.
  10. Waste disposal requirements and procedures, including use of the Owner supplied waste manifest.

- C. In conjunction with the conference the Contractor shall accompany the Owner and Environmental Consultant on a pre-construction walk-through documenting existing condition of finishes and furnishings, reviewing overall Work plan, location of fire exits, fire protection equipment, water supply and temporary electric tie-in.

## 1.6 APPLICABLE STANDARDS AND REGULATIONS

- A. The Contractor shall comply with the following codes and standards, except where more stringent requirements are shown or specified:
- B. Federal Regulations:
  - 1. 29 CFR 1910.1001, "Asbestos" (OSHA)
  - 2. 29 CFR 1910.1200, "Hazard Communication" (OSHA)
  - 3. 29 CFR 1910.134, "Respiratory Protection" (OSHA)
  - 4. 29 CFR 1910.145, "Specification for Accident Prevention Signs and Tags" (OSHA)
  - 5. 29 CFR 1926, "Construction Industry" (OSHA)
  - 6. 29 CFR 1926.1101, "Asbestos, Tremolite, Anthophyllite, and Actinolite" (OSHA)
  - 7. 29 CFR 1926.500 "Guardrails, Handrails and Covers" (OSHA)
  - 8. 40 CFR 61, Subpart A, "General Provisions" (EPA)
  - 9. 40 CFR 61, Subpart M, "National Emission Standard for Asbestos" (EPA)
  - 10. 49 CFR 171-172, Transportation Standards (DOT)
- C. New York State Regulations:
  - 1. 12 NYCRR, Part 56, "Asbestos", Industrial Code Rule 56 (DOL)
  - 2. 6 NYCRR, Parts 360, 364, Disposal and Transportation (DEC)
  - 3. 10 NYCRR, Part 73, "Asbestos Safety Program Requirements" (DOH)
  - 4. "New York State Uniform Fire Prevention and Building Code"
  - 5. New York State Education Department – Manual of Planning Standards
- D. Standards and Guidance Documents:
  - 1. American National Standard Institute (ANSI) Z88.2-80, Practices for Respiratory Protection
  - 2. ANSI Z9.2-79, Fundamentals Governing the Design and Operation of Local Exhaust Systems
  - 3. EPA 560/585-024, Guidance for Controlling Asbestos Containing Materials in Buildings (Purple Book)
  - 4. EPA 530-SW-85-007, Asbestos Waste Management Guidance
  - 5. ASTM Standard E1368 "Standard Practice for Visual Inspection of Asbestos Abatement Projects"

## 1.7 NOTICES

- A. The Contractor shall provide notification of intent to commence asbestos abatement activities as indicated below.
  - 1. At least ten (10) Working days prior to beginning abatement activities, send written notification to:

U.S. Environmental Protection Agency  
National Emissions Standards for Hazardous Air Pollutants (NESHAPS)  
Coordinator  
26 Federal Plaza  
New York, NY 10007
  - 2. At least ten (10) days prior to beginning abatement activities send written notification to:

New York State Department of Labor  
Division of Safety and Health, Asbestos Control Program.  
State Office Campus  
Building 12 - Room 161B  
Albany, NY 12240
- B. The Contractor is required to send notifications to regulatory agencies via electronic, mail, or package delivery service that will provide proof of delivery and receipt.
- C. The Contractor shall be responsible for maintaining current project filings with regulatory agencies for the duration of the project.
- D. The Contractor shall post and/or provide Building Occupant Notification at least 10 days prior to beginning abatement activities as required by Code Rule 56.

#### 1.8 PROJECT MONITORING AND AIR SAMPLING

- A. The Owner shall engage the services of an Environmental Consultant (the Consultant) who shall serve as the Owner's Representative in regard to the performance of the asbestos abatement Project and provide direction as required throughout the entire abatement Project period. The consultant and all subconsultants shall not have any contractual relationship with the Contractor for the duration of the asbestos project.
- B. The Contractor is required to ensure cooperation of its personnel with the Consultant for the air sampling and Project monitoring functions described in this section. The Contractor shall comply with all direction given by the Consultant during the course of the Project.
- C. The Consultant shall provide the following administrative services:

1. Review and approve or disapprove all submittals, shop drawings, schedules, and samples.
  2. Assure that all notifications to governmental agencies by the Contractor are submitted in a timely manner and are correct in content.
- D. The Consultant shall staff the Project with a trained and certified person(s) to act on the Owner's behalf at the job site. This individual shall be designated as the Abatement Project Monitor (APM).
1. The APM shall be on-site at all times the Contractor is on-site. The Contractor shall not be permitted to conduct any Work unless the APM is on-site (except for inspection of barriers and negative air system during non-working days).
  2. The APM shall have the authority to direct the actions of the Contractor verbally and in writing to ensure compliance with the Project documents and all regulations. The APM shall have the authority to Stop Work when gross Work practice deficiencies or unsafe practices are observed, or when ambient fiber concentrations outside the removal area exceed .01 f/cc or background level.
    - a. Such Stop Work order shall be effective immediately and remain in effect until corrective measures have been taken and the situation has been corrected.
    - b. Standby time and air sample collection and analysis required to resolve the situation shall be at the Contractor's expense.
  3. The APM shall provide the following services:
    - a. Inspection of the Contractor's Work, practices, and procedures, including temporary protection requirements, for compliance with all regulations and Project specifications.
    - b. Provide abatement Project air sampling as required by applicable regulations (NYS, AHERA) and the Owner. Sampling will include, but not be limited to background, work area preparation, asbestos handling, final cleaning, and clearance air sampling.
    - c. Verify daily that all Workers used in the performance of the Project are certified by the appropriate regulatory agency.
    - d. Monitor the progress of the Contractor's Work, and report any deviations from the schedule to the Owner.
    - e. Monitor, verify, and document all waste load-out operations including placement of generator and location labels on each waste container, as required by federal regulations.
    - f. Verify that the Contractor is performing personal air monitoring daily, and that results are being returned and posted at the site as required.
    - g. The APM shall maintain a log on site that documents all project related and Consultant and Contractor actions, activities, and occurrences.
    - h. Verify landfill to be used for waste disposal with waste transporter(driver) and Contractor prior to waste trailer/dumpster leaving site. Confirm the

- waste transporter firm and landfill are listed on the regulatory notifications for the project and the waste transport vehicle license number is listed on the current NYS DEC Waste Transporter permit.
4. The following minimum inspections shall be conducted by the APM, accompanied by the Contractor's supervisor. Additional inspections shall be conducted as required by Project conditions and/or the Owner's direction. Progression from one phase of Work to the next by the Contractor is only permitted with the written approval of the APM.
    - a. Pre-Construction Inspection: The purpose of this inspection is to verify the existing conditions of the Work Areas and to document these conditions.
    - b. Pre-Commencement Inspection: The purpose of this inspection is to verify the integrity of each containment system prior to disturbance of any asbestos containing material. This inspection shall take place only after the Work Area is fully prepped for removal.
    - c. Work Inspections: The purpose of this inspection is to monitor the Work practices and procedures employed on the Project and to monitor the continued integrity of the containment system. Inspections within the removal areas shall be conducted by the APM during all preparation, removal, and cleaning activities at least twice every Work shift. Additional inspections shall be conducted as warranted.
    - d. Pre-Encapsulation Inspection: The purpose of this inspection is to ensure the complete removal of Asbestos Containing Material (ACM), from all surfaces in the Work Area prior to encapsulation.
    - e. Visual Clearance Inspection: The purpose of this inspection is to verify that: all materials in the scope of work have been properly removed; no visible asbestos debris/residue remains; no pools of liquid or condensation remains; and all required cleanings are complete. This inspection shall be conducted before final air clearance testing.
    - f. Post-Clearance Inspection: The purpose of this inspection is to ensure the complete removal of ACM, including debris, from the Work Area after satisfactory final clearance sampling and removal of all isolation and critical barriers and equipment from the Work Area.
    - g. Punch List Inspection: The purpose of this inspection is to verify the Contractor's certification that all Work has been completed as contracted and the existing condition of the area prior to its release to the Owner.
  - E. The Consultant shall provide abatement Project air sampling and analysis as required by applicable regulations (New York State and/or AHERA). Sampling will include but is not limited to, background, work area preparation, asbestos handling, and final cleaning and clearance air sampling.

1. Unless otherwise required by applicable regulations, the Consultant shall have samples analyzed by Phase Contrast Microscopy (PCM). Results shall be available within 24 hours of completion of sampling.
2. Samples shall be collected as required by applicable regulations (New York State and/or AHERA) and these specifications. If Transmission Electron Microscopy (TEM) clearance air sampling is utilized by the owner, the clearance criteria and sampling protocols must be in compliance with AHERA. If PCM air sample analysis results exceed the satisfactory clearance criteria, then TEM analysis of the entire set of clearance air samples may be used, provided that a standard NIOSH/ELAP accepted laboratory analysis method is utilized that shall report each air sample result in fibers per cubic centimeter.
3. If the air sampling during any phase of the abatement project reveals airborne fiber levels at or above .01 fibers/cc or the established background level, whichever is greater, outside the regulated Work Area, Work shall stop immediately and corrective measures required by Code Rule 56 shall be initiated. Notify all employers and occupants in adjacent areas. The Contractor shall bear the burden of any and all costs incurred by this delay.
4. The Environmental Consultant shall submit copies of all elevated air sampling results collected during abatement and all final air clearance results to the Commissioner of Labor, as required by regulation.
5. All final air clearances associated with this project must be run by TEM, as described in 40 CFR Part 763 Asbestos, Subpart E, 763.90 and as per New York State Education Department Requirements.

#### 1.9 CONTRACTOR AIR SAMPLING

- A. In addition to the requirements of OSHA 1926.1101, the Contractor shall be required to perform personal air monitoring every Work shift in each Work Area during which abatement activities occur in order to determine that appropriate respiratory protection is being worn and utilized.
- B. The Contractor shall conduct air sampling that is representative of both the 8-hour time weighted average and 30-minute short-term exposures to indicate compliance with the permissible exposure and excursion limits.
- C. The Contractor's laboratory analysis of air samples shall be conducted by an NYS DOH ELAP approved laboratory. The consultant shall not collect or analyze the Contractor's air samples.
- D. Results of personnel air sample analyses shall be available, verbally, within twenty-four (24) hours of sampling and shall be posted upon receipt. Written laboratory reports shall be delivered and posted at the Work site within five (5) days. Failure to comply

with these requirements may result in all work being stopped until compliance is achieved.

#### 1.10 PROJECT SUPERVISOR

- A. The Contractor shall designate a full-time Project Supervisor who shall meet the following qualifications:
  - 1. The Project Supervisor shall hold New York State certification as an Asbestos Supervisor.
  - 2. The Project Supervisor shall meet the requirements of a "Competent Person" as defined by OSHA 1926.1101 and shall have a minimum of one year experience as a supervisor.
  - 3. The Project Supervisor must be able to speak, read, and write English fluently, as well as communicate in the primary language of the Workers.
- B. If the Project Supervisor is not on-site at any time whatsoever, all Work shall be stopped. The Project Supervisor shall remain on-site until the Project is complete. The Contractor may not remove the Project Supervisor from the Project without the written consent of the Owner and the Environmental Consultant; however the Project Supervisor shall be removed from the Project if so requested by the Owner.
- C. The Project Supervisor shall maintain the bound Daily Project Log and the entry/exit logs as required by New York State Department of Labor and section 2.3 of the specifications and the Waste Disposal Log (Appendix B) required by section 4.3 of the specifications.
- D. The Project Supervisor shall be responsible for the performance of the Work and shall represent the Contractor in all respects at the Project site. The Supervisor shall be the primary point of contact for the Asbestos Project Monitor.

#### 1.11 MEDICAL REQUIREMENTS

- A. Before exposure to airborne asbestos fibers, provide Workers with a comprehensive medical examination as required by 29 CFR 1910.1001, and 29 CFR 1926.1101.
  - 1. This examination is not required if adequate records show the employee has been examined as required by 29 CFR 1910.1001, and 29 CFR 1926.1101 within the past year.
  - 2. The same medical examination shall be given on an annual basis to employees engaged in an occupation involving potential disturbance of asbestos fibers.

#### 1.12 TRAINING



- A. As required by applicable regulations, prior to assignment to asbestos Work instruct each employee with regard to the hazards of asbestos, safety and health precautions, and the use and requirements of protective clothing and equipment.
- B. Establish a respirator program as required by ANSI Z88.2 and 29 CFR 1910.134, and 29 CFR 1926.1101. Provide respirator training and fit testing.

#### 1.13 RESPIRATORY PROTECTION

- A. Select respirators from those approved by the National Institute for Occupational Safety and Health (NIOSH).
- B. Respirators shall be individually fit-tested to personnel under the direction of an Industrial Hygienist on a yearly basis. Fit-tested respirators shall be permanently marked to identify the individual fitted, and use shall be limited to that individual.
- C. Where fiber levels permit, and in compliance with regulatory requirements, Powered Air Purifying Respirators (PAPR) are the minimum allowable respiratory protection permitted to be utilized during gross removal operations of OSHA Class I or OSHA Class II friable ACM.
- D. No respirators shall be issued to personnel without such personnel participating in a respirator training program.
- E. High Efficiency Particulate Air (HEPA) respirator filters shall be approved by NIOSH and shall conform to the OSHA requirements in 29 CFR 1910.134 and 29 CFR 1926.1101.
- F. A storage area for respirators shall be provided by the Contractor in the clean room side of the personnel decontamination enclosure where they will be kept in a clean environment.
- G. The Contractor shall provide and make available a sufficient quantity of respirator filters so that filter changes can be made as necessary during the work day.
- H. Filters used with negative pressure air purifying respirators shall not be used any longer than one eight (8) hour work day. Any loose respirator filters found within the regulated area, must be disposed of as asbestos waste.
- I. Any authorized visitor, Worker, or supervisor found in the Work Area not wearing the required respiratory protection shall be removed from the Project site and not be permitted to return.

- J. The Contractor shall have at least two (2) Powered Air Purifying Respirators stored on site designated for authorized visitors use. Appropriate respirator filters for authorized visitors shall be made available by the Contractor.

#### 1.14 DELIVERY AND STORAGE

- A. Deliver all materials to the job site in original packages with containers bearing manufacturer's name and label.
- B. Store all materials at the job site in a suitable and designated area.
  - 1. Store materials subject to deterioration or damage away from wet or damp surfaces and under cover.
  - 2. Protect materials from unintended contamination and theft.
  - 3. Storage areas shall be kept clean and organized.
- C. Remove damaged or deteriorated materials from the job site. Materials contaminated with asbestos shall be disposed of as asbestos debris as herein specified. This includes unused Contractor supplies located in the regulated work area.

#### 1.15 TEMPORARY UTILITIES

- A. Shut down and lock out all electrical power to the asbestos Work Areas, including lighting circuits. Any electrical power passing through the Work Areas that can't be shut down due to health and safety reasons, shall be protected as per the requirements of Industrial Code Rule 56.
- B. Provide temporary 120-240 volt, single phase, three wire, 100 amp electric service with Ground Fault Circuit Interrupters (GFCI) for all electric requirements within the asbestos Work Area.
  - 1. Where available, obtain from Owner's existing system. Otherwise provide power from other sources (i.e. generator).
  - 2. Provide temporary wiring and "weatherproof" receptacles in sufficient quantity and location to serve all HEPA equipment and tools.
  - 3. Provide wiring and receptacles as required by the Environmental Consultant for project monitoring and air sampling equipment (pumps, fans, leaf blowers, etc.).
  - 4. All power to the Work Area shall be brought in from outside the area through GFCI's at the source.
- C. Provide temporary lighting with "weatherproof" fixtures for all Work Areas including decontamination chambers.
  - 1. The entire Work Area shall be kept illuminated at all times.

2. Provide lighting as required by the Environmental Consultant for the purposes of performing required inspections.
- D. All temporary devices and wiring used in the Work Area shall be capable of decontamination procedures including HEPA vacuuming and wet-wiping.
- E. Utilize domestic water service, if available, from Owner's existing system. Provide hot water heaters with sufficient capacity to meet Project demands.

## PART 2 – PRODUCTS

### 2.1 PROTECTIVE CLOTHING

- A. Provide personnel utilized during the Project with disposable protective whole body clothing, head coverings, gloves and foot coverings. Provide disposable plastic or rubber gloves to protect hands. Cloth gloves may be worn inside the plastic or rubber for comfort, but shall not be used alone. Make sleeves secure at the wrists and make foot coverings secure at the ankles by the use of tape, or provide disposable coverings with elastic wrists or tops.
- B. Provide sufficient quantities of protective clothing to assure a minimum of four (4) complete disposable outfits per day for each individual performing abatement Work.
- C. Eye protection and hard hats shall be provided and made available for all personnel entering any Work Area.
- D. Authorized visitors shall be provided with suitable protective clothing, headgear, eye protection, and footwear whenever they enter the Work Area.

### 2.2 SIGNS AND LABELS

- A. Provide warning signs and barrier tapes at all approaches to asbestos Work Areas. Locate signs at such distance that personnel may read the sign and take the necessary protective steps required before entering the area.
  1. Provide danger signs in vertical format conforming to 29 CFR 1926.1101, minimum 20" x 14" displaying the following legend.

DANGER  
ASBESTOS CANCER AND LUNG DISEASE  
HAZARD  
AUTHORIZED PERSONNEL ONLY  
RESPIRATORS AND PROTECTIVE CLOTHING

ARE REQUIRED IN THIS AREA

2. Provide 3" wide yellow barrier tape printed with black lettered, "DANGER ASBESTOS REMOVAL". Locate barrier tape across all corridors, entrances and access routes to asbestos Work Area. Install tape 3' to 4' AFF.
- B. Provide asbestos danger labels affixed to all asbestos materials, scrap, waste, debris and other products contaminated with asbestos.
  1. Provide asbestos danger labels of sufficient size to be clearly legible, displaying the following legend:

DANGER  
CONTAINS ASBESTOS FIBERS  
AVOID CREATING DUST  
CANCER AND LUNG DISEASE HAZARD
  2. Provide the following asbestos labels, of sufficient size to be clearly legible, for display on waste containers (bags or drums) which will be used to transport asbestos contaminated material in accordance with United States Department of Transportation 49 CFR Parts 171 and 172: (Note: Include "RQ" for friable asbestos waste only.)

RQ, NA2212, (WASTE) ASBESTOS, 9, PGIII
  3. Generator identification information shall be affixed to each waste container or any packaging used to containerize asbestos waste indicating the following printed in indelible ink:

Generator Name  
Facility Name  
Facility Address  
Date

2.3 DAILY PROJECT LOG & WORK AREA ENTRY/EXIT LOG

- A. Provide a bound Daily Project Log. The log shall contain on title page the Project name; name, address and phone number of Owner; name, address and phone number of Environmental Consultant; name, address and phone number of Abatement Contractor; emergency numbers including, but not limited to local Fire/Rescue department and all other New York State Department of Labor requirements.
- B. All entries into the log shall be made in non-washable, permanent ink and such pen shall be strung to or otherwise attached to the log to prevent removal from the log-in area. Under no circumstances shall pencil entries be permitted.

- C. All persons entering and exiting the Work Area shall sign the entry/exit log and include name, certification number, and time.
- D. The Project Supervisor shall document all Work performed daily and note all inspections required by Code Rule 56, i.e. testing and inspection of barriers and enclosures.

## 2.4 SCAFFOLDING AND LADDERS

- A. Provide all scaffolding and/or staging as necessary to accomplish the Work of this Contract. Scaffolding may be of suspension type or standing type such as metal tube and coupler, tubular welded frame, pole or outrigger type or cantilever type. The type, erection and use of all scaffolding and ladders shall comply with all applicable OSHA construction industry standards.
- B. Provide scaffolding and ladders as required by the Environmental Consultant for the purposes of performing required inspections.

## 2.5 SURFACTANT (AMENDED WATER)

- A. Wet all asbestos-containing materials prior to removal with surfactant mixed and applied in accordance with manufacturer's printed instructions.

## 2.6 ENCAPSULANT

- A. Encapsulant shall be tinted or pigmented so that application when dry is readily discernible.
- B. The encapsulant solvent or vehicle shall not contain a volatile hydrocarbon.

## 2.7 WASTE DISPOSAL BAGS, DRUMS, AND CONTAINERS

- A. Provide 6 mil polyethylene disposal bags printed with asbestos caution labels. Bags shall also be imprinted with U.S. Department of Transportation required markings.
- B. Provide 30 or 55 gallon capacity fiber, plastic, or metal drums capable of being sealed air and water tight if asbestos waste has the potential to damage or puncture disposal bags. Affix asbestos caution labels on lids and at one-third points around drum circumference to assure ready identification.
- C. Containers and bags must be labeled accordance with 40 CFR Part 61 NESHAPS and Code Rule 56. When the bags/containers are moved to the holding area, lockable trailer, or lockable hardtop dumpster from the waste decontamination system

washroom, each bag/container must also be appropriately labeled with the date moved in waterproof markings.

- D. Labeled ACM waste containers or bags shall not be used for non-ACM waste or trash. Any material placed in labeled containers or bags, whether turned inside out or not shall be handled and disposed of as ACM waste.

## 2.8 HEPA VACUUM EQUIPMENT

- A. All vacuuming performed under this contract shall be performed with High Efficiency Particulate Air (HEPA) filter equipped industrial vacuums conforming to ANSI Z9.2.

## 2.9 POWER TOOLS

- A. Any power tools used to drill, cut into, or otherwise disturb asbestos material shall be manufacturer equipped with HEPA filtered local exhaust ventilation.

## 2.10 FIRE RETARDANT PLASTIC SHEETING

- A. All polyethylene (plastic) sheeting used on the Project (including but not limited to sheeting used for critical and isolation barriers, fixed objects, walls, floors, ceilings, waste container) shall be at least 6 mil fire retardant sheeting.
- B. Decontamination enclosure systems shall utilize at least 6 mil opaque fire retardant plastic sheeting. At least 2 layers of 6 mil reinforced fire retardant plastic sheeting shall be used for the flooring.

# PART 3 – EXECUTION

## 3.1 GENERAL REQUIREMENTS

- A. Should visible emissions or water leaks be observed outside the Work Area, immediately stop Work and institute emergency procedures per Code Rule 56. Should there be elevated fiber levels outside the Work Area, immediately stop Work, institute emergency procedures per Code Rule 56, and notify all employers and occupants in adjacent areas. All costs incurred in decontaminating such non-Work Areas and the contents thereof shall be borne by the Contractor, at no additional cost to the Owner.
- B. Valid NYS DOL Asbestos Handler certification cards shall be on site prior to admittance of any Contractor's employees to the asbestos Work Area.

- C. The following submittals, documentation, and postings shall be maintained on-site by the Contractor during abatement activities at a location approved by the Abatement Project Monitor:
1. Valid Contractor handling license issued by New York State Department of Labor.
  2. NYS DOL Asbestos Handler certification cards for each person employed in the removal, handling, or disturbance of asbestos.
  3. Daily OSHA personal air monitoring results.
  4. NYS Department of Health ELAP certification for the laboratory that will be analyzing the OSHA personnel air samples.
  5. NYS Department of Environmental Conservation Waste Transporter Permit.
  6. Project documents (specifications and drawings.)
  7. Notifications, Variances, Approved Work Plan. Ensure that the most up-to-date notifications and Variances are on-site.
  8. Applicable regulations.
  9. Material Safety Data Sheets of supplies/chemicals used on the Project.
  10. Disposal Site/Landfill Permit from applicable regulatory agency.
  11. List of emergency telephone numbers.
  12. Magnahelic manometer semi-annual calibration certification.
  13. Waste Disposal Log.
  14. Daily Project Log.
  15. Entry/Exit Logs.
- D. The following documentation shall be maintained on-site by the Abatement Project Monitor during abatement activities:
1. Valid Contractor handling license issued by New York State Department of Labor.
  2. Air Sample Log.
  3. Air sample results.
  4. Project Monitor Daily Log
  5. Asbestos Survey Report.
  6. A copy of ASTM Standard E1368 "Standard Practice for Visual Inspection of Asbestos Abatement Projects."
  7. Calibration chart for rotometer(s) used on-site.
- E. The Work Area must be vacated by building occupants prior to decontamination enclosure construction and Work Area preparation.
- F. All demolition necessary to access asbestos containing materials for removal must be conducted within negative pressure enclosures by licensed asbestos handlers. Demolition debris may be disposed of as construction and demolition debris provided the Abatement Project Monitor determines that it is not contaminated with asbestos and there has been no disturbance of ACM within the enclosure. If the demolition

debris is determined to be contaminated or ACM has been disturbed, it must be disposed of as asbestos waste.

### 3.2 PERSONNEL DECONTAMINATION ENCLOSURE

- A. Provide personnel decontamination enclosure contiguous to the Work Area or as per Variance. The decontamination enclosure shall be attached to the Work Area and not located within it unless isolation barriers are installed. If the decontamination chamber is accessible to the public it shall be fully framed, sheathed, and lockable to prevent unauthorized entry.
- B. Access to the Work Area will be from the clean room through an air-lock to the shower and through an air lock to the equipment room. Each airlock shall be a minimum of three feet from door to door. Additional air locks shall be provided as required by Code Rule 56 for remote decontamination enclosures.
- C. The decontamination enclosure ceiling and walls shall be covered with one layer of opaque 6 mil fire retardant plastic sheeting. Two layers of reinforced fire retardant plastic sheeting shall be used to cover the floor.
- D. The entrance to the clean room shall have a lockable door with adequate small openings for Work Area make-up air. Provide suitable lockers for storage of Worker's street clothes. Storage for respirators along with replacement filters and disposable towels shall also be provided.
- E. Provide a temporary shower with individual hot and cold water supplies and faucets. Provide a sufficient supply of soap and shampoo. There shall be one shower for every six (6) workers. The shower room shall be constructed in such a way so that travel through the shower chamber shall be through the shower. The shower shall not be able to be bypassed.
- F. Shower water shall be drained, collected and filtered through a system with at least a 5.0 micron particle size collection capability containing a series of several filters with progressively smaller pore sizes to avoid rapid clogging of the system. The filtered waste water shall then be discharged in accordance with applicable codes and the contaminated filters disposed of as asbestos waste.
- G. The equipment room shall be used for the storage of tools and equipment. A walk-off pan filled with water shall be located in the Work Area outside the equipment room for Workers to clean foot coverings when leaving the Work Area. A labeled 6 mil plastic ACM waste bag for collection of contaminated clothing shall be located in this room.



- H. The personal decontamination enclosure shall be cleaned and disinfected minimally at the end of each Work shift and as otherwise directed by the Asbestos Project Monitor.

### 3.3 WASTE DECONTAMINATION ENCLOSURE

- A. Provide a waste decontamination enclosure contiguous to the Work area. The decontamination enclosure shall be attached to the Work Area and not located within it unless isolation barriers are installed. If the decontamination chamber is accessible to the public it shall be fully framed, sheathed, and lockable to prevent unauthorized entry.
- B. The waste decontamination enclosure system shall consist of a holding area, air lock and washroom. The airlock shall be a minimum of three feet from door to door. The entrance to the holding area shall have a lockable door.
- C. The decontamination enclosure ceiling and walls shall be covered with one layer of opaque 6 mil fire retardant plastic sheeting on walls and ceiling. Two layers of reinforced fire retardant plastic sheeting shall be used to cover the floor.
- D. Where there is only one egress from the Work Area, the holding area of the waste decontamination enclosure system may branch off from the personnel decontamination enclosure equipment room, which then serves as the waste wash room.
- E. The waste wash room water shall be drained, collected, and filtered through a system with at least a 5.0 micron particle size collection capability containing a series of several filters with progressively smaller pore sizes to avoid rapid clogging of the system. The filtered waste water shall then be discharged in accordance with applicable codes and the contaminated filters disposed of as asbestos waste.
- F. In small asbestos Projects where only one egress from the Work Area exists, the shower room may be used as a waste washroom. In this instance, the clean room shall not be used for waste storage, but shall be used for waste transfer to carts, which shall immediately be removed from this enclosure.

### 3.4 WORK AREA ENTRY AND EXIT PROCEDURES

- A. Access to and from the asbestos Work Area is permitted only through the personnel decontamination enclosure unless otherwise stipulated in a Site Specific Variance.
- B. Workers shall sign the entry/exit log upon every entry and exit.
- C. The following procedures shall be followed when entering the Work Area:

1. Before entering the Work Area, Workers shall proceed to the clean room, remove all street clothes, and don protective clothing, equipment, and respirators.
  2. Workers shall proceed from the clean room through the shower room and the equipment room and into the Work Area.
- D. The following procedures shall be followed when exiting the Work Area:
1. Before leaving the Work Area, gross asbestos contamination will be removed by brushing, wet cleaning and/or HEPA vacuuming, followed by use of the walk-off pan.
  2. In the equipment room, Workers shall remove disposable clothing, but not respirators, and shall place clothing in plastic disposal bags for disposal as contaminated debris prior to entering the shower room. Reusable equipment shall be removed and stored in the equipment room (e.g, work boots).
  3. Workers shall shower thoroughly while wearing respirators, then wash respirator with soap and water prior to removal.
  4. Upon exiting the shower, Workers shall enter the clean room and don new disposable clothing if the Work shift is to continue or street clothes to exit area. Under no circumstances shall Workers enter public non-Work Areas in disposable protective clothing.
- E. If remote decontamination enclosures are permitted by Code Rule 56 or a Site Specific Variance, workers shall wear two disposable suits for all phases of Work. Workers exiting the work area shall HEPA vacuum the outer suit, enter the airlock, remove the outer suit and then place it back into the Work Area. A clean second suit shall be donned before exiting the airlock and proceeding to the decontamination enclosure or another work area via the designated pathway required by Code Rule 56.

### 3.5 WORK AREA PREPARATION

- A. Asbestos danger signs shall be posted at all approaches to the asbestos Work Area. Post all emergency exits as emergency exits only on the Work Area side, post with asbestos caution signs on the non-Work Area side. Provide all non-Work Area stairs and corridors accessible to the asbestos Work Area with warning tapes at the base of stairs and beginning of corridors. Warning tapes shall be in addition to caution signs.
- B. Shut down and lock out the building heating, ventilating, and air conditioning systems. Electrical systems and circuits shall also be shut down unless permitted to remain active per Code Rule 56 and appropriately protected and labeled. Existing lighting sources shall not be utilized. Provide temporary electric power and lighting as specified herein.

- C. All non-ACM surfaces and objects within the Work Area shall be pre-cleaned using HEPA vacuuming and/or wet-wiping methods. Dry sweeping and any other methods that raise dust shall be prohibited. ACM shall not be disturbed during pre-cleaning.
- D. Movable objects within the Work Area shall be HEPA vacuumed and/or wet-wiped and removed from the Work Area.
- E. All non-movable equipment in the Work Area shall be completely covered with two (2) layers of fire retardant plastic sheeting, at least 6 mil in thickness, and secured in place with duct tape and/or spray adhesive. Active Fire Protection System components in the Work Area shall not be covered with fire retardant plastic sheeting or any other obstruction.
- F. Provide enclosure of the asbestos Work Area necessary to isolate it from unsealed areas of the building in accordance with the approved asbestos Work plan and as specified herein.
- G. Provide critical barriers by sealing off all openings including but not limited to operable windows and skylights, doorways, diffusers, grills, electrical outlets and boxes, doors, floor drains, and any other penetrations to surfaces in the Work Area enclosure, using two (2) layers of at least 6 mil fire retardant plastic sheeting.
- H. Provide isolation barriers by installing temporary framing and sheathing at openings larger than 32 square feet forming the limits of the asbestos Work Area. Sheathing thickness must be a minimum of 3/8 inch and all sheathing shall be caulked and the Work Area side sealed with two layers of 6 mil fire retardant plastic sheeting. Isolation barriers in stairwells and at work area egress locations shall not be covered with sheathing, only two (2) layers of 6 mil fire retardant plastic sheeting.
- I. Isolation barriers shall be installed at all elevator openings in the Work Area. Elevators running through the regulated abatement work area shall be shut down or isolated as per Code Rule 56. Elevator controls shall be modified so that elevators bypass the Work Area.
- J. Provide two independent layers of 6 mil fire retardant plastic sheeting over all floor, wall, and ceiling surfaces. Isolation barriers shall also be covered with two independent layers (for a total of four layers). Sheeting shall be secured with duct tape. All joints in fire retardant plastic sheeting shall overlap 12" minimum. Carpeting left in place shall be covered with 3/8 inch plywood sheathing prior to plasticizing.
- K. Unless otherwise specified for removal, the Contractor shall either protect all fiberglass insulation on piping, ductwork, tanks, etc. in the Work Area using two layers of six mil fire retardant plastic sheeting or remove the insulation as asbestos containing waste. If the Contractor elects to remove the fiberglass insulation as asbestos-contaminated,

he/she shall be responsible for reinsulation if reinsulation of removed insulations is part of the Contract or Project.

- L. Frame out emergency exits from Work Area. Provide double layer 6 mil fire retardant plastic sheeting and tape seal opening. Post as emergency exits only and tape utility knife to the Work Area side of each exit. Within the Work Area, mark the locations and directions of emergency exits throughout the Work Area using exit signs and/or duct tape.
- M. Remove all items attached to or in contact with ACM only after the Work Area enclosure is in place. HEPA vacuum and wet wipe with amended water all items prior to their removal from the Work Area and before the start of asbestos removal operations.
- N. Suspended ceiling tiles shall only be removed after Work Area preparation is complete. If possible, non-contaminated ceiling tiles shall be HEPA vacuumed and removed from the Work Area before asbestos removals begin. Contaminated ceiling tiles shall be disposed of as asbestos waste.

### 3.6 NEGATIVE AIR PRESSURE FILTRATION SYSTEM

- A. Provide a portable asbestos filtration system that develops a minimum pressure differential of negative 0.02 in. of water column within all full enclosure areas relative to adjacent unsealed areas and that provides a minimum of 4 air changes per hour in the Work Area during abatement and 6 air changes for non-friable flooring and/or mastic removal.
- B. Such filtration systems must be made operational after critical and isolation barriers are installed but before wall, floor, and ceilings are plasticized and shall be operated 24 hours per day during the entire Project until the final cleanup is completed and satisfactory results of the final air samples are received from the laboratory.
- C. The system shall include a series of pre-filters and filters to provide High Efficiency Particulate Air (HEPA) filtration of particles down to 0.3 microns at 100% efficiency and below 0.3 microns at 99.9% efficiency. Provide sufficient replacement filters to replace pre-filters every 2 hours, secondary pre-filters every 24 hours, and primary HEPA filters every 600 hours (25 continuous days) of operation. HEPA filter sides shall be marked with installation date during all new HEPA filter installations on project.
- D. A minimum of one additional filtration unit of at least the same capacity as the primary unit(s) shall be installed and fully functional to be used during primary unit (s) filter changing and in case of primary failure.

- E. At no time will the unit exhaust indoors, within 15 feet of a receptor, including but not limited to windows and doors, or adversely affect the air intake of the building. Exhaust ducting shall not exceed 25-feet in length, except as allowed by Industrial Code Rule 56. Provide construction fencing at ground level exhaust termination locations per Code Rule 56.
- F. Upon electric power failure or shut-down of any filtration unit, all abatement activities shall stop immediately and only resume after power is restored and all filtration units are fully operating. For shut-downs longer than one hour, all openings into the Work Area, including the decontamination enclosures, shall be sealed.
- G. For all OSHA Class I removal Work Areas, the Contractor shall provide a manometer to verify negative air pressure. Manometers shall be read twice daily and recorded within the Daily Project Log.
- H. There shall be at least a 4 hour settling period after the Work Area is fully prepared and the negative filtration units have been started to ensure integrity of the barriers.
- I. Once installed and operational, the Contractor's Supervisor shall conduct daily inspections of the Work Area to insure the airtight integrity of the enclosure and operation of the negative air system. Findings shall be recorded within the Daily Project Log. Inspections shall also be conducted on days when no abatement activities are in progress per Code Rule 56 (i.e. weekends).

### 3.7 REMOVAL OF ASBESTOS CONTAINING MATERIALS

- A. Asbestos-containing materials shall be removed in accordance with the Contract Documents and the approved Asbestos Work Plan. Only one type of ACM shall be abated at a time within a Work Area. Where there are multiple types of ACM requiring abatement, Code Rule 56 procedures for sequential abatement shall be followed.
- B. Sufficiently wet asbestos materials with a low pressure, airless fine spray of surfactant to ensure full penetration prior to material removal. Re-wet material that does not display evidence of saturation.
- C. One (2) worker shall continuously apply amended water while ACM is being removed.
- D. Perform cutting, drilling, abrading, or any penetration or disturbance of asbestos containing material in a manner to minimize the dispersal of asbestos fibers into the air. Use equipment and methods specifically designed to limit generation of airborne asbestos particles. All power operated tools used shall be provided with manufacturer HEPA equipped filtered local exhaust ventilation, as required by regulation.

- E. Upon removal of ACM from the substrate, the newly exposed surfaces shall be HEPA vacuumed and/or wet cleaned. Surfaces must be thoroughly cleaned using necessary methods and any required solvents to completely remove any adhesive, mastic, etc.
- F. All removed material shall be placed into 6 mil plastic disposal bags or other suitable container upon detachment from the substrate. Cleanup of accumulations of loose debris or waste shall be performed whenever there is enough accumulation to fill a single bag or container and minimally at the end of each workshift.
- G. Large components shall be wrapped in two layers of 6 mil fire retardant plastic sheeting. Sharp components likely to tear disposal bags shall be placed in fiber drums or boxes and then wrapped with sheeting.
- H. Power or pressure washers are not permitted for asbestos removal or clean-up procedures unless approved in a Site Specific Variance and allowed by owner.
- I. All open ends of pipe and duct insulation not scheduled for removal shall be encapsulated using lag cloth.
- J. All construction and demolition debris determined by the Environmental Consultant to be contaminated with asbestos shall be handled and disposed of as asbestos waste.
- K. The use of metal shovels, metal dust pans, etc. are not permitted inside the work area.

### 3.8 EQUIPMENT AND WASTE CONTAINER DECONTAMINATION AND REMOVAL PROCEDURES

- A. External surfaces of contaminated containers and equipment shall be cleaned by wet cleaning and/or HEPA vacuuming in the Work Area before moving such items into the waste decontamination enclosure system airlock by persons assigned to this duty. The persons in the Work Area shall not enter the airlock. No gross removal operations are permitted when waste transfer is in progress.
- B. The containers and equipment shall be removed from the airlock by persons stationed in the washroom during waste removal operations. The external surfaces of containers and equipment shall be cleaned a second time by wet cleaning.
- C. The cleaned containers of asbestos material and equipment are to be dried of any excessive pooled or beaded liquid, placed in uncontaminated 6 mil plastic bags or sheeting, as the item's physical characteristics demand, and sealed airtight.
- D. The clean recontainerized items shall be moved into the airlock that leads to the holding area. Workers in the washroom shall not enter this airlock.

- E. Containers and equipment shall be moved from the airlock and into the holding area by persons dressed in clean personal protective equipment, who have entered from the holding area.
- F. The cleaned containers of asbestos material and equipment shall be placed in water tight carts with doors or tops that shall be closed and secured. These carts shall be held in the holding until transfer to the waste container. The carts shall be wet cleaned and/or HEPA vacuumed at least once each day.
- G. The exit from the decontamination enclosure system shall be secured to prevent unauthorized entry.
- H. Where the waste removal enclosure is part of the personnel decontamination enclosure, waste removal shall not occur during shift changes or when otherwise occupied. Precautions shall be taken to prevent short circuiting and cycling of air outward through the shower and clean room.

### 3.9 WORK AREA DECONTAMINATION, CLEANING, AND CLEARANCE PROCEDURES

- A. Following completion of gross abatement and after all accumulations of asbestos waste materials have been containerized, the following decontamination procedures shall be followed unless modified by a Site Specific Variance.
- B. First Cleaning:
  - 1. All bagged asbestos waste and unnecessary equipment shall be decontaminated and removed from the Work Area.
  - 2. All surfaces in the Work Area shall be wet cleaned, except active fire protection system components that may be damaged by water. A wet-purpose shop vacuum may be used to pick up excess liquid, and may either be decontaminated prior to removal from the Work Area or disposed of as asbestos waste.
  - 3. The Abatement Project Monitor (APM) shall conduct a visual inspection of the Work Area for cleanliness and completion of abatement.
  - 4. The Contractor shall then apply a thin coat of encapsulant to all surfaces in the Work Area that were not the subject of removal. In no event shall encapsulant be applied to any surface that was the subject of removal prior to obtaining satisfactory air monitoring results. Encapsulants shall be pigmented or tinted to provide an indication for completeness of coverage. The APM shall determine adequacy of coverage.
  - 5. After the encapsulant has been applied and the required waiting/settling / drying time has elapsed, the first layer of fire retardant plastic sheeting shall then be removed and bagged as asbestos waste.

C. Second Cleaning

1. All surfaces in the Work Area shall be HEPA vacuumed and then wet cleaned. Wet cleaning of active fire protection system components is not necessary if damage may occur.
2. The APM shall conduct a second visual inspection of the Work Area for cleanliness.
3. After the required waiting/settling/drying time has elapsed, the second layer of fire retardant plastic sheeting shall be removed and bagged as asbestos waste.

D. Third Cleaning

1. All surfaces in the Work Area shall be HEPA vacuumed and then wet cleaned. Wet cleaning of active fire protection system components is not necessary if damage may occur.
2. After the required waiting/settling/drying time has elapsed, the APM shall conduct a third visual inspection of the Work Area for completeness of abatement and cleanliness. The APM shall document the results of the visual inspection in the Project Monitor Log and Contractor's Daily Project Log.
3. After satisfactory APM visual inspection, aggressive final clearance air sampling shall then be conducted by the Environmental Consultant provided no visible asbestos debris/residue; pools of liquid, or condensation remains. NOTE: TEM samples should be used vs. PCM if demolition or other dust-generating evolutions are taking place in adjacent areas, as evident from excessive loading.
4. Upon receipt of satisfactory final clearance air sampling results, the negative air pressure equipment can then be shut down, and the isolation and critical barriers removed and bagged as asbestos waste. Following this and satisfactory inspections by the project supervisor and the APM for cleanliness, the decontamination enclosures shall be removed.

- E. As a result of any visual inspection by the APM or should air sampling results indicate high fiber levels, the Contractor will reclean the affected areas at no additional expense to the Owner.

3.10 TENT ENCLOSURES

- A. Tent enclosures may only be used where specifically permitted by Code Rule 56 or a Site Specific Variance issued by the NYS Department of Labor.
- B. The Contractor shall restrict access to the immediate area where tent removal procedures are taking place using barrier tape and/or construction barriers. Caution signs shall be posted.



- C. Remote personnel decontamination enclosures shall be constructed. Configuration shall be as required by Project size and a washroom with attached airlock shall be constructed contiguous to the tent enclosure for small and large size tent enclosure work areas. For tent enclosures with gross abatement of friable materials, a contiguous decontamination system shall be constructed, maintained and utilized, except for minor size tent enclosure work areas where an adjacent decontamination room or area is permitted by Code Rule 56.
- D. The Work Area shall be precleaned. All objects and equipment that will remain in the restricted area during abatement shall be sealed with two layers of six mil polyethylene and tape.
- E. The tent shall be a single use barrier constructed with a rigid frame and at least two layers of six mil polyethylene unless one layer of six mil polyethylene is otherwise permitted by Code Rule 56. Tents with twenty (20) square feet or less of floor space or no gross removal of friable ACM shall be constructed of one (1) layer of six mil polyethylene and shall include walls, ceilings and a floor (except portions of walls, floors and ceilings that are the removal surface) with double folded seams. All seams shall be sealed airtight using duct tape and/or spray adhesive.
- F. The tent shall be constructed with at least one (1) airlock for worker/waste egress.
- G. A manometer shall be used for all OSHA Class I abatement.
- H. Negative air shall be maintained at four (4) air changes per hour for non-friable and glovebag abatement tent enclosure work areas. Eight (8) air changes shall be maintained for friable gross removal tent enclosure work areas. In a Minor size abatement tent enclosure work area a HEPA vacuum may be used to maintain the required air changes.
- I. OSHA compliance air monitoring is required per section 1.9.
- J. ACM removal shall follow procedures defined in section 3.7.
- K. Waste material shall be placed in properly labeled 6 mil plastic bags or other appropriate containers. The outside of the bags or containers shall be wet wiped and/or HEPA vacuumed in the washroom and shall then be placed in a second bag/container before being transferred to the waste storage container. All transportation of waste bags and containers outside the Work Area shall be in watertight carts. These carts shall be held in the holding area until transfer to the waste container. The carts shall be wet cleaned and/or HEPA vacuumed at least once each day.

- L. Following completion of gross abatement and after all accumulations of asbestos waste materials have been containerized, the following decontamination procedures shall be followed.
  - 1. All bagged asbestos waste and unnecessary equipment shall be decontaminated and removed from the Work Area.
  - 2. All surfaces in the Work Area shall be wet cleaned. A wet-purpose shop vacuum may be used to pick up excess liquid, and shall be decontaminated prior to removal from the Work Area.
  - 3. The Contractor shall then apply a thin coat of encapsulant to all non-removal surfaces covered with plastic in the Work Area. In no event shall encapsulant be applied to any surface that was the subject of removal prior to obtaining satisfactory air monitoring results. Encapsulants shall be pigmented or tinted to provide an indication for completeness of coverage. The APM shall determine adequacy of coverage.
  - 3. After the waiting/settling/drying time requirements have elapsed, the Asbestos Project Monitor shall conduct a visual inspection of the Work Area for cleanliness and completion of abatement. The APM shall document the results of the visual inspection in the Project Monitor Log and Contractor's Daily Project Log.
  - 4. After satisfactory APM visual inspection, aggressive final clearance air sampling shall then be conducted by the Environmental Consultant.
  - 5. Upon receipt of satisfactory final clearance air sampling results, the tent shall be collapsed into itself, placed in suitable disposal bags, and transferred through the washroom to the waste decontamination enclosure. Isolation and critical barriers shall then be removed and bagged as asbestos waste followed by satisfactory visual inspections by the project supervisor and the APM for cleanliness.

### 3.11 GLOVEBAG REMOVAL

- A. Glovebag removals may only be used as specifically permitted by Code Rule 56 or a Site Specific Variance issued by the NYS Department of Labor. Glovebags may only be used on pipe or duct insulation.
- B. In addition to conformance with applicable regulations and variances, glovebag removals are only permitted to be conducted within tent enclosures complying with these specifications.
- C. The Contractor shall restrict access to the immediate area where tent/glovebag removal procedures are taking place using barrier tape and/or construction barriers. Caution signs shall be posted.

- D. Remote personnel decontamination enclosures shall be constructed. Configuration shall be as required by Project size and a washroom with attached airlock shall be constructed contiguous to the tent enclosure.
- E. Glovebag removals shall utilize commercially available glovebags of at least six mil thickness. Use shall be in accordance with the manufacturer's instructions and the following minimum requirements:
  - 1. The sides of the glovebag shall be cut to fit the size pipe being removed. Tools shall be inserted into the attached tool pocket.
  - 2. The glovebag shall be placed around the pipe and the open edges shall be folded and sealed with staples and duct tape. The glovebag shall also be sealed at the pipe to form a tight seal.
  - 3. Openings shall be made in the glovebag for the wetting tube and HEPA vacuum hose. The opening shall be sealed to form a tight seal.
  - 4. All glovebags shall be smoke tested by the Asbestos Project Monitor under negative pressure using the HEPA vacuum before removal operations commence. Glovebags that do not pass the smoke test shall be resealed and then retested.
  - 5. After first wetting the materials to be removed, removal may commence. ACM shall be continuously wetted. After removal of the ACM, the piping shall be scrubbed or brushed so that no visible ACM remains. Open ends of pipe insulation shall be encapsulated.
  - 6. After the piping is cleaned, the inside of the glovebag shall be washed down and the wetting tube removed. Using the HEPA vacuum, the glovebag shall be collapsed and then twisted and sealed with tape with the ACM at the bottom of the bag.
  - 7. A disposal bag shall be placed around the glovebag that is then detached from the pipe. The disposal bag is then sealed and transferred through the washroom to the waste storage container.
- F. After glovebag removals are complete, tent decontamination procedures shall be followed.

### 3.12 REMOVALS OF EXTERIOR NON-FRIABLE ACM

- A. Except as modified by this section, removal of exterior non-friable ACM (i.e. roof flashings, built-up roofing, siding, caulking, glazing compound, transite, tars, sealers, coatings, and other NOB ACM) shall conform to all provisions of this specification.
- B. Unless Site Specific Variances have been otherwise obtained, removals shall be conducted in accordance with the provisions of Code Rule 56.

- C. The Work Area shall be the area from which ACM materials are being removed and shall extend 25 feet from the perimeter of the removal area.
- D. Non-certified Workers are not allowed in the Work Area until the Work Area is cleared by the Asbestos Project Monitor (APM).
- E. Remote personnel decontamination enclosures shall be constructed at a location in accordance with the approved Work Plan. Unless located outside the Work Area, decontamination enclosures are not permitted to be constructed on the roof. Decontamination enclosures shall be constructed as close to the regulated abatement work area as physically possible, but no greater than 50 feet from the building. It shall be cordoned off at a distance of 25 feet to separate it from public areas.
- F. All openings (including but not limited to operable windows, doors, hatches, vents, ducts, and grilles) one story above, one story below, and within 25 feet of the work area shall be sealed with two layers of six mil polyethylene. Alternately, a polyethylene drape may be used instead of sealing windows individually where permitted by Code Rule 56.
- G. The removal of the ACM may require the use of scrapers, solvents, mastic removal chemicals, or other methods/procedures to ensure complete removal.
- H. The Contractor is required to provide temporary protection of the building (i.e. roof, window openings, construction joints, etc.) at the end of each Work shift so as to maintain the building in a watertight condition.
- I. Dumpsters used for waste storage shall be lined with two layers of six mil polyethylene and shall have a hard top. Where open-top dumpsters are permitted by ICR 56 or a Site Specific Variance, the top shall be closed with polyethylene flaps that are sealed at the end of each work shift.
- J. Personal protective equipment, including respirators, shall be utilized and worn during all removal operations until the Work Area is cleared by the APM.
- K. The Owner may, at his discretion, choose to conduct air sampling. If air samples collected during abatement indicate any airborne asbestos fiber concentration(s) at or above 0.01 f/cc, Work shall be stopped immediately and Work methods shall be altered to reduce the airborne asbestos fiber concentration(s).
- L. Following completion of gross abatement and after all accumulations of asbestos waste materials have been containerized, the following decontamination procedures shall be followed:
  - 1. All surfaces in the Work Area shall be HEPA vacuumed and then wet cleaned.

2. The APM shall conduct a visual inspection of the Work Area for cleanliness and completeness of abatement. The APM shall document the results of the visual inspection in the Project Monitor Log and Contractor's Daily Project Log.
3. Upon satisfactory visual inspection results, the isolation and critical barriers shall be removed and bagged as asbestos waste. Following this, the decontamination enclosures shall be removed.

### 3.13 NON-FRIABLE FLOORING AND/OR MASTIC REMOVALS

- A. The following procedures may only be used for the removal of non-friable flooring and/or mastic materials using manual and chemical methods. These procedures shall not apply to beadblaster use or other abrasive abatement methods.
- B. The Contractor shall restrict access to the immediate Work Area where non-friable ACM removal procedures are taking place using barrier tape and/or construction barriers. Caution signs shall be posted.
- C. Remote personnel decontamination enclosures may be utilized and shall be constructed at a location in accordance with the approved Work Plan. A washroom with attached airlock shall be constructed contiguous to each Work area enclosure.
- D. The Work Area shall be prepared per section 3.5, except that ceilings, walls, and floors need not be fully plasticized. However, a four-foot high single layer of 6-mil fire retardant plastic sheeting shall be installed as a splashguard at all walls adjoining mastic removal portions of the work area, to prevent damage to the existing walls.
- E. Negative air shall be maintained at six (6) air changes per hour.
- F. OSHA compliance air monitoring is required per section 1.9.
- G. ACM removal shall follow procedures defined in section 3.7.
- H. Waste material shall be placed in properly labeled 6 mil plastic bags or other appropriate containers. The outside of the bags or containers shall be wet wiped and/or HEPA vacuumed in the washroom and double-bagged before being passed into the airlock. The bags or containers shall then be transported to the waste storage container. All transportation of waste bags and containers outside the Work Area shall be in watertight carts.
- I. Following completion of gross abatement and after all accumulations of asbestos waste materials have been containerized, the following decontamination procedures shall be followed.

1. All bagged asbestos waste and unnecessary equipment shall be decontaminated and removed from the Work Area.
2. All plastic sheeting splashguards shall be removed and containerized, followed by all surfaces in the Work Area being wet cleaned. A wet-purpose shop vacuum may be used to pick up excess liquid, and shall be decontaminated prior to removal from the Work Area.
3. The Contractor shall then apply a thin coat of encapsulant to all non-removal surfaces in the Work Area. In no event shall encapsulant be applied to any surface that was the subject of removal prior to obtaining satisfactory air monitoring results. Encapsulants shall be pigmented or tinted to provide an indication for completeness of coverage. The APM shall determine adequacy of coverage.
4. After the waiting/settling/drying time requirements have elapsed, the Asbestos Project Monitor (APM) shall conduct a visual inspection of the Work Area for cleanliness and completion of abatement. The APM shall document the results of the visual inspection in the Project Monitor Log and Contractor's Daily Project Log.
5. After satisfactory APM visual inspection, aggressive final clearance air sampling shall then be conducted by the Environmental Consultant.
6. Upon receipt of satisfactory final clearance air sampling results, the isolation and critical barriers shall be removed and bagged as asbestos waste. Following this and satisfactory inspections by the project supervisor and the APM for cleanliness the decontamination enclosures shall be removed.

### 3.14 RESTORATION OF UTILITIES, FIRESTOPPING, AND FINISHES

- A. After final clearance, remove locks and restore electrical and HVAC systems. All temporary power shall be disconnected, power lockouts removed and power restored. All temporary plumbing shall be removed.
- B. Finishes damaged by asbestos abatement activities including, but not limited to, plaster/paint damage due to duct tape, staples, and spray adhesives, and floor tile lifted due to wet or humid conditions, shall be restored prior to final payment.
  1. Finishes unable to be restored shall be replaced under this Contract at the Contractor's expense.
  2. All foam and expandable foam products and materials used to seal Work Area openings shall be completely removed upon completion of abatement activities.
- C. All penetrations (including, but not limited to, pipes, ducts, etc.) through fire rated construction shall be firestopped using materials and systems tested in accordance with ASTM E814 on Projects where reinsulation is part of the required work.

## PART 4 – DISPOSAL OF ASBESTOS WASTE

### 4.1 TRANSPORTATION AND DISPOSAL SITE

- A. The Contractor's Hauler and Disposal Site shall be approved by the Owner. All waste generated during the asbestos project shall be disposed of as RACM asbestos waste.
- B. The Contractor shall give twenty-four (24) hour notification prior to removing any waste from the site. Waste shall be removed from the site only during normal working hours unless otherwise specified. No waste may be taken from the site unless the Contractor and Environmental Consultant are present and the Environmental Consultant authorizes the release of the waste as described herein.
- C. All waste generated as part of the asbestos project shall be removed from the site within ten (10) calendar days after successful completion of all asbestos abatement work.
- D. Upon arrival at the Project Site, the Hauler must possess and present to the Environmental Consultant a valid New York State Department of Environmental Conservation Part 364 Asbestos Hauler's Permit. The Environmental Consultant may verify the authenticity of the hauler's permit with the proper authority.
- E. The Hauler, with the Contractor and the Environmental Consultant, shall inspect all material in the transport container prior to taking possession and signing the Asbestos Waste Manifests.

### 4.2 WASTE STORAGE CONTAINERS

- A. All waste containers shall be fully enclosed and lockable (i.e. enclosed dumpster, trailer, etc.). No open containers will be permitted on-site (i.e. open dumpster with canvas cover, etc.) unless specifically permitted by applicable regulation or a Site Specific Variance. When asbestos contaminated waste must be kept on the work site overnight or longer, it shall be double bagged and stored in accordance with Federal, State, and local laws.
- B. The Environmental Consultant shall verify that the waste storage container and/or truck tags (license plates) match that listed on the New York State Department of Environmental Conservation Part 364 permit. Any container not listed on the permit shall be removed from the site immediately.
- C. The container shall be plasticized and sealed with two (2) layers of 6 mil polyethylene. Once on site, it shall be kept locked at all times, except during load out. The waste container shall not be used for storage of equipment or contractor supplies.

- D. While on-site, the container shall be labeled with EPA Danger signage:

DANGER  
CONTAINS ASBESTOS FIBERS  
AVOID CREATING DUST  
CANCER AND LUNG DISEASE HAZARD

- E. The New York State Department of Environmental Conservation Asbestos Hauler's Permit number shall be stenciled on both sides and back of the container.
- F. The container is not permitted to be loaded unless it is properly plasticized, has the appropriate danger signage affixed, and has the permit number appropriately stenciled on the container.
- G. Waste generated off-site is not permitted to be brought onto the Project site and loaded into the waste container.
- H. All asbestos waste removed from the project site shall be transported directly to the disposal site without any additional waste being added to the container during transport.

#### 4.3 OWNER'S AND HAULER'S ASBESTOS WASTE MANIFESTS

- A. An Asbestos Waste Manifest shall be provided to the Owner and shall be utilized in conjunction with the Asbestos Hauler's Manifest.
- B. The Owner's Manifest and the Hauler's Manifest shall be completed by the Contractor and verified by the Environmental Consultant that all the information and amounts are accurate and the proper signatures are in place.
- C. The Manifests shall have the appropriate signatures of the Environmental Consultant, the Contractor, and the Hauler representatives prior to any waste being removed from the site.
- D. Copies of the completed Owner's Manifest and the Hauler's Manifest shall be retained by the Environmental Consultant and the Contractor and shall remain on site for inspection.
- E. Upon arrival at the Disposal Site, the Owner's Manifest and the Hauler's Manifest shall be signed by the Disposal Facility operator to certify receipt of ACM covered by the manifest.
- F. The Disposal Facility operator shall return the original Owner's Manifest and the Hauler's Manifest to the Contractor.



- G. The Contractor shall forward copies of the Owner's Manifest and the Hauler's Manifest to the Environmental Consultant within 14 days of the waste container being removed from the site. Failure to do so may result in payment being withheld from the Contractor.
- H. The Contractor shall utilize the Waste Disposal Log. This log shall be maintained by the Project Supervisor and shall be kept on site at all times.
- I. All waste disposal manifests and disposal logs shall be submitted by the Contractor to the Owner with the final close-out documentation.

Appendix 'A' – Inspection Report

LIMITED RENOVATION SURVEY  
FOR  
ASBESTOS-CONTAINING MATERIALS, LEAD-BASED PAINT & PCBs  
PERFORMED AT:

Henry Barnard Early Childhood Center  
Adelaide Project# CSA:23324.00-IN

PREPARED BY:  
Adelaide Environmental Health Associates  
1511 Route 22 – Suite C-24  
Brewster, NY 10509  
845-278-7710

Appendix 'B'

Project Designer Certification

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## LIMITED RENOVATION SURVEY FOR ASBESTOS-CONTAINING MATERIALS, LEAD-BASED PAINT & PCBs

### PERFORMED AT:

Jefferson Elementary School  
William B Ward Elementary School  
George M Davis Jr. Elementary School  
**Henry Barnard Early Childhood Center**  
Albert Leonard Middle School  
New Rochelle High School  
Adelaide Project# CSA:23324.00-IN

### PREPARED FOR:

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### PREPARED BY:

David Seddon  
July 11, 2024 Amended

### REVIEWED BY:



Stephanie A. Soter  
President

Version	Date	Prepared by
1	12/28/23	David Seddon
2	07/11/24	David Seddon

## **TABLE OF CONTENTS**

<b>1.0</b>	<b>Introduction</b>	<b>1</b>
1.1	Scope of Work / Project Personnel	1
1.2	Executive Summary	2
1.3	<b>Conclusions and Recommendations</b>	5
1.4	Asbestos-containing Materials (ACM)	5
1.5	Lead-based Paint (LBP)	6
1.6	PolyChlorinated Biphenyls (PCB)	6
<b>2.0</b>	<b>Summary of Hazardous Materials</b>	<b>6</b>
2.1	Summary of Identified ACM/PACM	6
2.2	Summary of Identified Non-ACM	9
2.3	Summary of Identified LBP	21
2.4	Summary of Identified PCB-containing Materials	23
2.5	Observations	25
<b>3.0</b>	<b>Asbestos-containing Materials (ACM)</b>	<b>32</b>
3.1	Field Procedures and Analysis Methodology	32
3.2	Regulatory Guidelines and Requirements of ACM	33
3.3	Regulatory Guidelines and Requirements of ACM Contamination	34
<b>4.0</b>	<b>Lead-based Paint (LBP)</b>	<b>35</b>
4.1	Applicable Standards/Guidelines for LBP	35
4.2	XRF Information	36
<b>5.0</b>	<b>PolyChlorinated Biphenyls (PCB)</b>	<b>36</b>
5.1	Background and Protocol for PCBs	36
<b>6.0</b>	<b>General Discussion</b>	<b>38</b>
<b>7.0</b>	<b>Disclaimers</b>	<b>38</b>

### **APPENDICES**

ACM Location Map(s)	A
Sample Location Map(s)	B
Previous Reports Sample Location Map(S)	C
ACM Photo(s)	D
Asbestos Analytical Results	E
Previous Reports Asbestos Analytical Results	F
XRF Readings	G
PCB Location Map(s)	H
PCB Analytical Results	I
Previous Reports PCB Analytical Results	J
Personnel and Laboratory Certifications	K

## 1.0 Introduction

### 1.1 Scope of Work / Project Personnel

Adelaide Environmental Health Associates, Inc. (**Adelaide**) performed an Asbestos, Lead and PCB Survey for Building/Structure Demolition, Renovation, Remodeling and/or Repair, in conformance with ALL Federal, State and Local regulations for CSArch:

<b>SURVEY LOCATION(S):</b>	<b>Jefferson Elementary School</b> 131 Weyman Avenue, New Rochelle, New York 10805 <b>William B Ward Elementary School</b> 311 Broadfield Road, New Rochelle, New York 10804 <b>George M Davis Jr. Elementary School</b> 80 Iselin Drive, New Rochelle, New York 10804 <b>Henry Barnard Early Childhood Center</b> 129 Barnard Road, New Rochelle, New York 10801 <b>Albert Leonard Middle School</b> 25 Gerada Lane, New Rochelle, New York 10804 <b>New Rochelle High School</b> 265 Clove Road, New Rochelle, New York 10801
<b>SURVEY DATE(S):</b>	November 28 <sup>th</sup> – December 2 <sup>nd</sup> , 2023, and July 8 <sup>th</sup> – July 9 <sup>th</sup> , 2024
<b>SCOPE OF WORK:</b>	<b>2023 Capital Bond Project Phase 1</b> <b>Jefferson ES</b> - Secure Vestibule and Main Office <b>William B Ward ES</b> - Secure Vestibule (Addition to Building) <b>George M Davis Jr. ES</b> - Secure Vestibule <b>Henry Barnard Early Childhood Center</b> - Chimney replacement <b>Albert Leonard MS</b> - Secure Vestibules (Main Area) Replacement of Auditorium Vestibule Doors <b>New Rochelle HS</b> - Exterior Stairs [Flared Library Toward Lakes, Library courtyard (x2), Whitney along Clove] – 2022 BCS Unsatisfactory, 3rd Floor Dead-End Corridor – 2022 BCS Unsatisfactory, Secure Vestibule
<b>SCOPE OF WORK BUILDING/STRUCTURE PLANS UTILIZED:</b>	Prepared by: CSArch Dated: November 20, 2023
<b>CERTIFIED ADELAIDE PERSONNEL:</b>	David Seddon (NYS Asbestos Inspector/Cert. #23-6LI1V-SHAB and EPA Lead-based Paint Inspector/Cert. #LBP-I-101120-3) and Jimmie Downes (NYS Asbestos Inspector/Cert. #13-14154 and EPA Lead-based Paint Inspector/Cert. #LBP-I-1165891-3)
<b>SITE CONTACT(S):</b>	<b>Gary</b> (Custodian) for Jefferson Elementary School, <b>Ray</b> (Custodian) for William B Ward Elementary School, <b>Anthony</b> (Custodian) for George M Davis Jr. Elementary School, <b>Hector</b> (Custodian) for <b>Barnard Early Childhood Center</b> , <b>Sebastian</b> (Custodian) for Albert Leonard Middle School and <b>Mackenzie</b> (Custodian) for New Rochelle High School.

The following previous inspection(s) were utilized to support inspection findings in reference to the above-mentioned scope of work (refer to Section 2.0 & Appendices for applicable data):

<b>Project(s)</b>	<b>Survey Date(s)</b>
Adelaide Project# 16243.00-IN – Jefferson Elementary School	April 19, 2017
Adelaide Project# 17216.00-IN – Jefferson Elementary School	September 14, 2018
Adelaide Project# 18149.00-IN – William B. Ward Elementary School	July 1, 2020
Adelaide Project# 18148.00-IN – George M Davis Jr. Elementary School	September 08, 2020
Adelaide Project# 16107.00-IN – Henry Barnard Early Childhood Center	May 16, 2016
Adelaide Project# 17165.00-IN – Henry Barnard Early Childhood Center	April 14, 2017
Adelaide Project# 18147.00-IN – Henry Barnard Early Childhood Center	July 14, 2021
Adelaide Project# 17214.00-IN – Albert Leonard Middle School	July 17, 2021
Adelaide Project# 16241.00-IN – New Rochelle High School	March 2, 2022

## 1.2 Executive Summary

On November 28<sup>th</sup> and 30<sup>th</sup>, 2023, **Adelaide** inspected **Jefferson Elementary School** located at 131 Weyman Avenue, New Rochelle, New York 10805. **Adelaide** inspected the First Floor – Hallways (Northeast, Southeast and Northwest), Lobby, Principals (Office, Closet, Passageway and Bathroom), Main Office, Storage Room, Copy Room, Staff Bathroom, Office 106 and Basement Crawlspace area under the Main Office that will be affected by the 2023 Capitol Project, Phase 1 for suspect ACM, LBP and PCBs.

<b>SUSPECT HAZARDOUS MATERIAL</b>	<b>SAMPLE(S)/LAYER(S)/ READING(S) COLLECTED</b>	<b>SAMPLE(S) / HOMOGENEOUS AREA(S) IDENTIFIED POSITIVE</b>
Asbestos-containing Materials (ACM):	70	1
Lead-based Paint (LBP):	73 (plus calibrations)	14
PolyChlorinated Biphenyls (PCB):	1	0

On July 9<sup>th</sup>, 2024, **Adelaide** inspected **Jefferson Elementary School** located at 131 Weyman Avenue, New Rochelle, New York 10805. **Adelaide** inspected the assumed materials from the November 28<sup>th</sup> and 30<sup>th</sup>, 2023 inspection that will be affected by the 2023 Capitol Project, Phase 1 for suspect ACM, LBP and PCBs.

<b>SUSPECT HAZARDOUS MATERIAL</b>	<b>SAMPLE(S)/LAYER(S)/ READING(S) COLLECTED</b>	<b>SAMPLE(S) / HOMOGENEOUS AREA(S) IDENTIFIED POSITIVE</b>
Asbestos-containing Materials (ACM):	10	0
Lead-based Paint (LBP):	0 (plus calibrations)	N/A
PolyChlorinated Biphenyls (PCB):	0	N/A

There are **asbestos materials that will be impacted** by this scope of work as described in section 1.1. These materials are listed in section 2.1.

On November 29, 2023, **Adelaide** inspected **William B Ward Elementary School** located at 311 Broadfield Road New Rochelle, New York 10804. **Adelaide** inspected the Main Office, Main Office Storage Room, Hallway and Portions of the Exterior that will be affected by the 2023 Capitol Project for suspect ACM, LBP and PCBs.

SUSPECT HAZARDOUS MATERIAL	SAMPLE(S)/LAYER(S)/ READING(S) COLLECTED	SAMPLE(S) / HOMOGENEOUS AREA(S) IDENTIFIED POSITIVE
Asbestos-containing Materials (ACM):	20	1
Lead-based Paint (LBP):	4 (plus calibrations)	0
PolyChlorinated Biphenyls (PCB):	0	N/A

On July 8th, 2024, **Adelaide** inspected **William B Ward Elementary School** located at 311 Broadfield Road New Rochelle, New York 10804. **Adelaide** inspected the assumed materials from the November 29<sup>th</sup>, 2023 inspection that will be affected by the 2023 Capitol Project, Phase 1 for suspect ACM, LBP and PCBs.

SUSPECT HAZARDOUS MATERIAL	SAMPLE(S)/LAYER(S)/ READING(S) COLLECTED	SAMPLE(S) / HOMOGENEOUS AREA(S) IDENTIFIED POSITIVE
Asbestos-containing Materials (ACM):	8	1
Lead-based Paint (LBP):	0 (plus calibrations)	N/A
PolyChlorinated Biphenyls (PCB):	0	N/A

There are **asbestos materials that will be impacted** by this scope of work as described in section 1.1. These materials are listed in section 2.1.

On November 29, 2023, **Adelaide** inspected **George M Davis Jr. Elementary School** located at 80 Iselin Drive, New Rochelle, New York 10804. **Adelaide** inspected the Lobby and Main Vestibule, Nurses Office and Hallway that will be affected by the 2023 Capitol Project for suspect ACM, LBP and PCBs.

SUSPECT HAZARDOUS MATERIAL	SAMPLE(S)/LAYER(S)/ READING(S) COLLECTED	SAMPLE(S) / HOMOGENEOUS AREA(S) IDENTIFIED POSITIVE
Asbestos-containing Materials (ACM):	51	1
Lead-based Paint (LBP):	8 (plus calibrations)	1
PolyChlorinated Biphenyls (PCB):	3	0

On July 8th, 2024, **Adelaide** inspected **George M Davis Jr. Elementary School** located at 80 Iselin Drive, New Rochelle, New York 10804. **Adelaide** inspected the assumed materials from the November 29<sup>th</sup>, 2023 inspection that will be affected by the 2023 Capitol Project, Phase 1 for suspect ACM, LBP and PCBs.

SUSPECT HAZARDOUS MATERIAL	SAMPLE(S)/LAYER(S)/ READING(S) COLLECTED	SAMPLE(S) / HOMOGENEOUS AREA(S) IDENTIFIED POSITIVE
Asbestos-containing Materials (ACM):	10	1
Lead-based Paint (LBP):	0 (plus calibrations)	N/A
PolyChlorinated Biphenyls (PCB):	0	N/A

There are **asbestos materials that will be impacted** by this scope of work as described in section 1.1. These materials are listed in section 2.1.



On November 30, 2023, **Adelaide** inspected **Henry Barnard Early Childhood Center** located at 129 Barnard Rd New Rochelle, New York 10801. **Adelaide** inspected the Second Floor – Hallway under the chimney area and Roof Area - Chimney that will be affected by the 2023 Capitol Project, Phase 1 for suspect ACM, LBP and PCBs.

SUSPECT HAZARDOUS MATERIAL	SAMPLE(S)/LAYER(S)/ READING(S) COLLECTED	SAMPLE(S) / HOMOGENEOUS AREA(S) IDENTIFIED POSITIVE
Asbestos-containing Materials (ACM):	16	0
Lead-based Paint (LBP):	3 (plus calibrations)	0
PolyChlorinated Biphenyls (PCB):	0	N/A

**NOTE:** The chimney was wrapped with a tarp system. **Adelaide** was not able to open tarp system at the time of the inspection as it would hurt the integrity of the water tightness of the wrap.

On July 9th, 2024, **Adelaide** inspected **Henry Barnard Early Childhood Center** located at 129 Barnard Rd New Rochelle, New York 10801. **Adelaide** inspected the Roof Area - Chimney that will be affected by the 2023 Capitol Project, Phase 1 for suspect ACM, LBP and PCBs.

SUSPECT HAZARDOUS MATERIAL	SAMPLE(S)/LAYER(S)/ READING(S) COLLECTED	SAMPLE(S) / HOMOGENEOUS AREA(S) IDENTIFIED POSITIVE
Asbestos-containing Materials (ACM):	6	0
Lead-based Paint (LBP):	0 (plus calibrations)	N/A
PolyChlorinated Biphenyls (PCB):	0	N/A

**NOTE:** The chimney was wrapped with a tarp system. **Adelaide** was able to access a portion of the chimney façade. There was a question of the roof being under warranty, the roof was installed in 2016 and could still be under warranty. The client and construction manager are checking into the roof system.

The following indicates assumed materials due to inaccessibility (chimney wrapped/weathertight with tarp system) at the time of the inspection.

- PACM Caulking at Chimney Flashing
- PACM Roofing Materials
- Assumed PCBs located at the Chimney Flashing

There are **asbestos materials that will be impacted** by this scope of work as described in section 1.1. These materials are listed in section 2.1.

On November 30<sup>th</sup> and December 1<sup>st</sup>, 2023, **Adelaide** inspected **Albert Leonard Middle School** located at 25 Gerada Lane, New Rochelle, New York 10804. **Adelaide** inspected the Main Double Vestibules, Lobby Area, Main Office and Storage Room, Hallway, Auditorium Vestibules and Portions of the Exterior that will be affected by the 2023 Capitol Project for suspect ACM, LBP and PCBs.

SUSPECT HAZARDOUS MATERIAL	SAMPLE(S)/LAYER(S)/ READING(S) COLLECTED	SAMPLE(S) / HOMOGENEOUS AREA(S) IDENTIFIED POSITIVE
Asbestos-containing Materials (ACM):	38	1
Lead-based Paint (LBP):	13 (plus calibrations)	0
PolyChlorinated Biphenyls (PCB):	4	0

On July 8th, 2024, **Adelaide** inspected **Albert Leonard Middle School** located at 25 Gerada Lane, New Rochelle, New York 10804. **Adelaide** inspected the assumed materials from the November 30<sup>th</sup>, 2023 inspection that will be affected by the 2023 Capitol Project, Phase 1 for suspect ACM, LBP and PCBs.

SUSPECT HAZARDOUS MATERIAL	SAMPLE(S)/LAYER(S)/ READING(S) COLLECTED	SAMPLE(S) / HOMOGENEOUS AREA(S) IDENTIFIED POSITIVE
Asbestos-containing Materials (ACM):	10	0
Lead-based Paint (LBP):	0 (plus calibrations)	N/A
PolyChlorinated Biphenyls (PCB):	0	N/A

There are **asbestos materials that will be impacted** by this scope of work as described in section 1.1. These materials are listed in section 2.1.

On December 1<sup>st</sup>, and December 2<sup>nd</sup>, 2023, **Adelaide** inspected **New Rochelle High School** located at 265 Clove Road, New Rochelle, New York 10801. **Adelaide** inspected the Third Floor – 360F, 360G, 360H, 361A, 361B, 361C, 361D, 361F, 361I, and Hallway, Second Floor – Vestibule 2220 and Corridors C2000, and Exterior Stairs that will be affected by the 2023 Capitol Project for suspect ACM, LBP and PCBs.

SUSPECT HAZARDOUS MATERIAL	SAMPLE(S)/LAYER(S)/ READING(S) COLLECTED	SAMPLE(S) / HOMOGENEOUS AREA(S) IDENTIFIED POSITIVE
Asbestos-containing Materials (ACM):	64	1
Lead-based Paint (LBP):	69 (plus calibrations)	1
PolyChlorinated Biphenyls (PCB):	4	0

There are **asbestos materials that will be impacted** by this scope of work as described in section 1.1. These materials are listed in section 2.1.

### 1.3 Conclusions and Recommendations

The following conclusions and recommendations are prepared by **Adelaide** as per the provided scope of work for Building/Structure Demolition, Renovation, Remodeling and/or Repair. Should the scope of work change, it is recommended that the findings be revisited to determine if additional sampling will be required to satisfy ALL Federal, State and Local regulations.

The materials sampled, as part of this survey, were limited to building materials potential affected by the provided scope of work only. All building materials outside the scope of work that have the potential to be disturbed, impacted, or if the scope of work is to change, are to be presumed asbestos-containing materials (PACM). Identified PACM **must** either be sampled by a licensed NYS Asbestos Inspector and/or abated/removed and disposed of by a licensed NYS Asbestos Abatement Contractor.

### 1.4 Asbestos-containing Materials (ACM)

- This survey concluded that the materials listed in Section 2.1 either tested and/or are assumed **positive for asbestos**.
- There are asbestos materials that will be impacted by this scope of work. These materials are listed in section 2.1. Refer to Appendix A for the approximate location of the above materials in the affected scope of work.

- Subpart 56-5(h) of 12 NYCRR Part 56 requires that no demolition, renovation, remodeling, or repair work be commenced by any owner or the owner's agent prior to the completion of asbestos abatement. Asbestos abatement must be performed by an asbestos abatement contractor that maintains a current asbestos handling license and employs NYSDOL/NYCDEP certified asbestos handlers and supervisors. It is recommended that a 12 NYCRR 56 certified Project Monitor oversee abatement activities.
- Subpart 56-5(g) of 12 NYCRR Part 56 specifies requirements for transmittal of asbestos survey information by the owner or owner's agent. (1) One copy of the asbestos survey report shall be sent to the local government entity charged with issuing a permit for such demolition, renovation, remodeling, or repair work under applicable State or local laws. (2) If controlled demolition or pre-demolition activities will be performed, one copy of the asbestos survey report shall be submitted to the appropriate Asbestos Control Bureau district office. (3) One copy of the asbestos survey report must be kept on the construction site throughout the duration of the asbestos project and any associated demolition, renovation, remodeling, or repair project.

### 1.5 Lead-based Paint (LBP)

- This survey concluded that the readings summarized in Section 2.3 and Appendix E tested ***positive for lead-based paint***.
- These areas must be either abated or Lead safe work practices must be implemented during the demolition, renovation, remodeling, or repair activities if these areas are to be disturbed.

### 1.6 PolyChlorinated Biphenyls (PCB)

- This survey concluded that the materials listed in Section 2.4 are assumed ***positive for PCBs***.
- These materials must be removed and disposed of in accordance with ALL Federal, State and Local regulations.

## 2.0 Summary of Hazardous Materials

### 2.1 Summary of Identified ACM/PACM

**KEY:** **ACM** = Materials containing greater than 1% of asbestos; **HA** = Homogeneous Area; **LF** = Linear Feet; **SF** = Square Feet; **PACM** = Presumed Asbestos-containing Materials; **Friable** = ACM capable of being released into air, and which can be crumbled, pulverized, powdered, crushed or exposed by hand-pressure; <sup>A</sup> = Material is considered non-friable solely in an intact and undisturbed state, however, may be rendered friable if pulverized or crumbled while in dry state.

### Jefferson Elementary School

Samples collected by **Adelaide** July 9th, 2024

HA	Identified ACM	ACM Location(s)	Approx. Qty.	Condition	Friable? (Yes or No)
NO Asbestos-containing Materials (ACM) identified upon PLM, PLM-NOB, QTEM and/or PLM-SM-V analysis, by a laboratory approved under the NYSDOH ELAP, of samples collected/analyzed in reference to the above-mentioned scope of work.					

Samples collected by **Adelaide** November 28, 2023

HA	Identified ACM	ACM Location(s)	Approx. Qty.	Condition	Friable? (Yes or No)
027	Older Ceiling Tile – Squiggles with Holes	First Floor – Hallways (Northeast, Southeast and Northwest)	240 SF	Good	Yes

### **William B Ward Elementary School**

Samples collected by **Adelaide** July 8th, 2024

HA	Identified ACM	ACM Location(s)	Approx. Qty.	Condition	Friable? (Yes or No)
014	Tar Coated Lighting Wire	Exterior Round Lights	2 Lights 4 LF	Good	No

Samples collected by **Adelaide** November 29, 2023

HA	Identified ACM	ACM Location(s)	Approx. Qty.	Condition	Friable? (Yes or No)
006	Older Joint Compound	Main Office – Above Ceiling Tile	160 SF	Good	Yes
		Main Office Storage Room – Above Ceiling Tile	40 SF	Good	Yes
		Hallway – Above Ceiling Tile	40 SF	Good	Yes
PACM	Roofing	Roof Over Main Office	100 SF	Unknown	Unknown

### **George M Davis Jr. Elementary School**

Samples collected by **Adelaide** July 8th, 2024

HA	Identified ACM	ACM Location(s)	Approx. Qty.	Condition	Friable? (Yes or No)
021	Tar Coated Lighting Wire	Exterior Canopy	3 Lights 9 LF	Good	No

Samples collected by **Adelaide** November 29, 2023

HA	Identified ACM	ACM Location(s)	Approx. Qty.	Condition	Friable? (Yes or No)
001	Textured Plaster Ceiling – Top Layer	1 <sup>st</sup> Floor - Lobby	600 SF	Good	Yes
001	Textured Plaster Ceiling – Top Layer	1 <sup>st</sup> Floor – Vestibule	300 SF	Good	Yes

### **Henry Barnard Early Childhood Center**

Samples collected by **Adelaide** July 9th, 2024

HA	Identified ACM	ACM Location(s)	Approx. Qty.	Condition	Friable? (Yes or No)
NO Asbestos-containing Materials (ACM) identified upon PLM, PLM-NOB, QTEM and/or PLM-SM-V analysis, by a laboratory approved under the NYSDOH ELAP, of samples collected/analyzed in reference to the above-mentioned scope of work.					

Samples collected by **Adelaide** November 30, 2023

HA	Identified ACM	ACM Location(s)	Approx. Qty.	Condition	Friable? (Yes or No)
PACM	Caulking at Flashing	Roof C – Chimney	48 LF	Unknown	No
	Roofing Materials		96 SF	Unknown	No

Samples collected by **Adelaide** March 19, 2019

HA	Identified ACM	ACM Location(s)	Approx. Qty.	Condition	Friable? (Yes or No)
036	Louver Caulk	Roof C Exterior, Chimney	48 LF	Damaged	No

### **Albert Leonard Middle School**

Samples collected by **Adelaide** July 8th, 2024

HA	Identified ACM	ACM Location(s)	Approx. Qty.	Condition	Friable? (Yes or No)
NO Asbestos-containing Materials (ACM) identified upon PLM, PLM-NOB, QTEM and/or PLM-SM-V analysis, by a laboratory approved under the NYSDOH ELAP, of samples collected/analyzed in reference to the above-mentioned scope of work.					

Samples collected by **Adelaide** December 1, 2023

HA	Identified ACM	ACM Location(s)	Approx. Qty.	Condition	Friable? (Yes or No)
016	Tan Caulking for Stone and Storefront	Main Lobby Vestibules SV1 and V02	44 LF	Good	No

### **New Rochelle High School**

Samples collected by **Adelaide** December 2, 2023

HA	Identified ACM	ACM Location(s)	Approx. Qty.	Condition	Friable? (Yes or No)
022	Debris above Ceiling on Brick Wall	Vestibule 2221	2 SF	Significantly Damaged	No
The ceiling space needs to be <b>isolated and vacated</b> to non-certified Asbestos workers, and an asbestos contractor must be hired for appropriate cleanup of affected space above the ceiling. (Refer to Section 3.3)					

Samples collected by Adelaide October 10<sup>th</sup> through 12<sup>th</sup>, 2016, November 2, 2016, December 29, 2016, January 5, 2017, April 12, 2017 and February 24, 2022.

Sample #	Material Sampled	Approximate Quantity	Condition	Areas Affected
137L1	9x9 Floor Tile	1,433 SF	Good	2 <sup>nd</sup> Floor – Rooms 361, 361A, 361B, 361C, 361D
	9x9 Floor Tile under Carpet	1,101 SF	Good	2 <sup>nd</sup> Floor – Rooms 360H, 360G
	9x9 Floor Tile under 12x12 Floor Tile	235 SF	Good	2 <sup>nd</sup> Floor – Room 361F
137L2	9x9 Floor Tile Mastic	SF	Good	2 <sup>nd</sup> Floor – Rooms 360G, 360H, 361, 361A, 361B, 361C, 361D, 361F

## 2.2 Summary of Identified Non-ACM

### Jefferson Elementary School

Samples collected by Adelaide July 9th, 2024

Identified Non-ACM	Sample Location(s) & HA's
Electrical Wire – Braided Wire	First Floor – Hallways (Northeast, Southeast and Northwest), Lobby, Principals (Office, Closet, Passageway and Bathroom), Main Office, Storage Room, Copy Room, Staff Bathroom, Office 106, Janitors Closet
Electrical Wire – Vinyl	
Low Voltage Wire – Vinyl	
Lighting Wire – Vinyl	
Electrical Wire – Braided/Tar	

Samples collected by **Adelaide** November 28, 2023

<b>Identified Non-ACM</b>	<b>Sample Location(s) &amp; HA's</b>
Plaster Ceiling – Top and Base Coats	First Floor – Hallways (Northeast, Southeast and Northwest), Principals (Office, Passageway, Closet and Bathroom), Main Office, Storage Room S-1-1, Copy Room, Staff Bathroom, Storage Room, Office 106
Plaster Wall – Top and Base Coats	First Floor – Hallways (Northeast, Southeast and Northwest), Principals (Office, Passageway, Closet and Bathroom), Main Office, Storage Room S-1-1, Copy Room, Staff Bathroom, Storage Room, Office 106
12x12 Floor Tile – White with Gray – Top Layer	First Floor – Main Office and Copy Room
Yellow Mastic for 12x12 Floor Tile – 2 <sup>nd</sup> Layer	
Floor Tile – Yellow with Brown – 2 <sup>nd</sup> Layer Tile	First Floor – Main Office and Copy Room
Black Mastic on Wood – 2 <sup>nd</sup> Layer Mastic	
Vapor Barrier under Wood Floor	First Floor – Principals (Office, Passageway and Closet), Main Office, Storage Room S-1-1, Copy Room, Storage Room, Office 106
24x24 Vinyl Flooring	First Floor – Principals Office and Passageway
Leveling Compound under 24x24 Flooring	
12x12 Dark Gray Floor Tile	First Floor – Storage Room S-1-1
Green Terrazzo Flooring	First Floor – Staff Bathroom and Principals Office Bathroom
Ceramic Wall Tile – Grout and Mudset	
Black with Tan Terrazzo Flooring	First Floor – Hallways (Northeast, Southeast and Northwest)
Pink with White Terrazzo Flooring	
Sink Caulking	First Floor – Staff and Principals Bathrooms
Brick Mortar for Light Type Brick	First Floor – Hallways (Northeast, Southeast and Northwest)
Brick Mortar for Dark Type Brick	
4" Covebase – Black	First Floor – Principals (Office and Passageway), Main Office, Storage Room S-1-1
Covebase Adhesive	
Ceiling Tile – Holes	First Floor – Principals Office, Main Office, Storage Room S-1-1, Copy Room, Staff Bathroom, Storage Room, Office 106
Ceiling Tile – Newer Squiggles with Holes	First Floor – Hallways (Northeast, Southeast and Northwest)
Ceiling Tile – Craters with Holes	First Floor – Hallways (Northeast, Southeast and Northwest), Storage Room
Ceiling Tile – Newer Squiggles with Many Holes	First Floor – Hallways (Northeast, Southeast and Northwest)
1x1 Ceiling Tile	First Floor – Northeast Hallway

Samples collected by **Adelaide** October 11, 2016, December 29, 2016, January 5, 2017, April 12 & 17, 2017

<b>Identified Non-ACM</b>	<b>Sample Location(s) &amp; HA's</b>
Beige Coping Stone Caulk	Roof Level
Brick Mortar	
Dark Gray Door Caulk	Ground Level Exterior
Red Window Caulk	
Older Gray Window Caulk	
Slate Steps Mortar	
Concrete Steps	
Expansion Joint Caulk on Steps	
Vertical Black Repair Caulk	Ground Level Exterior
Plaster Wall Top Coat	First Floor – Classroom 30
Plaster Wall Base Coat	
Brown Covebase and Mastic	
12x12 Tan Mottled Floor Tile	
Yellow Floor Mastic	
Tan Floor Tile under Wood	
Black Mastic for Tan Floor Tile	
12x12 Tan with Brown and White Floor Tile	First Floor – Classroom 28
Skylight Window Glazing	Roof
2x4 Textured Dotted Ceiling Tile	First Floor – Classroom 28
Glue Daubs on Plaster Ceiling	First Floor – Classroom 30 and Hallways (Northeast, Northwest and Southeast)
Vestibule Roofs	Vestibule 53 Roof
Built-up Roofing, Felt, Fiberboard, Tar Vapor Barrier, Rolled Roofing, Seam Tar, Roof Drain Tar, Counter-flashing Caulk	
White Interior Door Caulk	First Floor – Cafeteria
Exterior Older Door Caulk	First Floor – Auditorium Doors
Exterior Red Door Caulk	First Floor – Cafeteria
Plaster Wall – Top Coat	First Floor – Back Stairwell and Room 4
Plaster Wall – Base Coat	
CMU	First Floor – Cafeteria
CMU Mortar	
2x2 Ceiling Tile with Holes	First Floor – Stairwell
2x2 Ceiling Tile with Craters and Holes	

Samples collected by **Adelaide** January 27, 30-31, 2018, and August 16, 2018

<b>Identified Non-ACM</b>	<b>Sample Location(s) &amp; HA's</b>
Attic – Debris on Floor	Access to Attic
Plaster Wall Top Coat	
Plaster Wall Base Coat	
Auditorium Ceiling Top Coat	First Floor – Auditorium
Brown Hair Type Insulation	Attic



<b>Identified Non-ACM</b>	<b>Sample Location(s) &amp; HA's</b>
Batt Insulation	Attic
Concrete	First Floor – Auditorium
Door Fill	First Floor – Cafeteria
Brown Covebase	First Floor – Cafeteria and Room 4B (RM5)
Covebase Adhesive	
12x12 White Stone Like Tile	First Floor – Cafeteria
12x12 Stone Mastic Beige	
CMU Block	
CMU Mortar	
Tar Paper Mastic for 9x9	First Floor – Cafeteria and Room 4B (RM5)
2x4 Ceiling Tiles	First Floor – Near Cafeteria
2x2 Ceiling Tile – Pin Holes	First Floor – Rooms 4 and 5
2x4 Ceiling Tile – Fissures	First Floor – Hallway Second Floor – Hallway
Glue Daubs above Ceiling Tile	First Floor – Room 5
EPDM Material on Wall	Roof
Lap Sealant	
Caulk at Louver – White	
Caulk at Louver – Brown	
Brick Mortar	
Auditorium Roof - Stone Ballast Roof	Auditorium Roof
Auditorium Roof – BUR with Pitch	
Auditorium Roof – Perlite with Tar	
Auditorium Roof – ISO Paper on Wood Deck	
Auditorium Roof – Asphalt Type Roofing at HVAC Curb	
Auditorium Roof and Upper Roof – Tar on HAVA Duct Curb and Roof Hatch	Upper Roof
Upper Roof – Tar on Deck	
Upper Roof – Concrete Deck	
Braided Wire	Basement – Boiler Room
Fiberglass Pipe Wrap	Basement – Boiler Corridor and Crawlspace under Main Office Area
Mudded Fitting	
Fiberglass Wrap with Tar	
Red Sealant on Duct	Auditorium Mechanical Room
Vibration Cloth	
Silver HVAC Duct Wrap	
Plaster Ceiling at Window – Top and Base Coats	Second Floor – Classroom 33
2x4 Ceiling Tile – Mountains with Holes	First Floor – Principals (Office, Bathroom and Passageway), Staff Bathroom, Main Office, Office 106, Copy Room, Second Floor – Classroom 33
2x4 Ceiling Tile – Craters with Holes	Second Floor – Classroom 33

Identified Non-ACM	Sample Location(s) & HA's
2x4 Ceiling Tile – Fissures with Holes	Second Floor – Classroom 33
Perlite Board	

### **William B Ward Elementary School**

Samples collected by **Adelaide** July 8<sup>th</sup>, 2024

Identified Non-ACM	Sample Location(s) & HA's
Lighting Wire – Vinyl	Main Office, Main Office Storage Room, Hallway and Exterior
Electrical Wire – Vinyl	
Low Voltage Wire – Vinyl	

Samples collected by **Adelaide** November 29, 2023

Identified Non-ACM	Sample Location(s) & HA's
Adhesive for Metal Canopy Roof	Exterior Canopy
Concrete	Exterior Wall Foundation
Tar on Brick	Exterior Wall
Older Sheetrock	First Floor – Main Office
Newer Sheetrock and Joint Compound	
12x12 Floor Tile – Cream with Gray Specks	
Floor Tile on Terrazzo Floor	
2x2 Ceiling Tile	

Samples collected by **Adelaide** March 21, 2019, March 28, 2019

Identified Non-ACM	Sample Location(s) & HA's
4" cove base and adhesive	HA'S 003/ Through Out
12"x12" Spline Ceiling Tiles	HA 004/ Through Out
2'x2' Ceiling Tiles	HA 005/ Through Out
12x12 Self- Stick Floor Tile on Positive Mastic	HA 008/ Room 11
CMU Block and Mortar	HA's 013, 014/ Through Out
Interior Brick Mortar	HA 015/ Through Out
12 x12 Floor Tile Cream w/ Black Specks on Positive Mastic	HA 018/ Rooms 31, 33, 35, 104, 105, 106, 107, 124, 126, 128, 131 and 133
4" Cove Base Brown and Adhesive	HA's 020, 021/ Through Out
Door Frame Caulk White	HA 022/ Connecting corridor Lower Level Near Gymnasium
12x12 Floor Tile Beige w/ Brown and White on Positive Mastic	HA 025/ Room 108
Door Fill	HA 027/ Ground Floor Area A
Wrap on Fiberglass Pipe insulation	HA 028/ Though Out MER's
Wrap on Duct "Tar Paper Like"	HA 029/ Through Out MER's
Terrazzo	HA030/ Throughout First Floor – Hallway and Main Office
Self Stick Carpet Nosing	HA031/ Music Room

Identified Non-ACM	Sample Location(s) & HA's
Concrete	HA's 034, 035 Through Out
Roofing All	HA's 036-044 & 057-061/ Through Out 1958 Roof
Roofing All	HA's 045-056 Through Out 1993 Roof
Exterior Brick Mortar	HA 062/ Through Out
Store Front Window Glaze	HA 064, 065/ Exterior store fronts
Window Caulk Soft Gray	HA 066/ Under Rescue Windows
Window Glaze Hard Black	HA 067/ Store Front Windows
Window Frame Caulk Soft Gray	HA 068/ Courtyard Windows First Floor – Windows for Main Office
Window Frame Caulk Medium Soft Gray	HA 069/ Courtyard Small Windows
Ceramic Tile Grout and Adhesive	HA's 070,071/ Bottom of Exterior windows
Expansion Caulk Beige	HA072/ West Elevation "B"

Samples collected by **Adelaide** April 16, 2019

Identified Non-ACM	Sample Location(s) & HA's
Red Cloth Wire	HA 001/ Ground Floor Boiler Room
White Cloth Wire	HA 002/ Room S-115
Black Cloth Wire	HA 003/ Room S-115

### **George M Davis Jr. Elementary School**

Samples collected by **Adelaide** July 8th, 2024

Identified Non-ACM	Sample Location(s) & HA's
Low Voltage Wire – Vinyl	1st Floor – Lobby, Hallway and Vestibule
Lighting Wire – Vinyl	
Electrical Wire – Vinyl	
Electrical Wire – Braided	

Samples collected by **Adelaide** November 29, 2023

Identified Non-ACM	Sample Location(s) & HA's
Textured Plaster Ceiling – Base Coat	First Floor – Lobby and Vestibule
Dark Green Terrazzo Flooring	
Light Green Terrazzo Flooring	
Brick Mortar	
Door Caulking	First Floor – Vestibule
Door Windowpane Sealant – Gray	
Glazed Block Mortar	First Floor – Lobby
CMU	First Floor – Hallway
12x12 Gray Floor Tile	First Floor – Nurses Office
Mastic for 12x12 Floor Tile	
Green Covebase and Adhesive	
Smooth Wall Plaster – Top and Base Coats	
Smooth Ceiling Plaster – Top and Base Coats	
Door Windowpane Sealant – Black	

Identified Non-ACM	Sample Location(s) & HA's
Ceiling Plaster – Single Coat	First Floor – Exterior Canopy
Patch Material at Door Frame	First Floor – Lobby

Samples collected by **Adelaide** March 20, 2019

Identified Non-ACM	Sample Location(s) & HA's
2x4 Vertical Fissures Ceiling Tile	Throughout
2x4 Dot Speck Ceiling Tile	
2x4 Dot Pebble Ceiling Tile	
2x4 Textured Dotted Ceiling Tile	
2x4 Dot Canyon Ceiling Tile	
2x4 Skinny Fissures Ceiling Tile	
Ceramic Tile System (grout & mudset)	Bathrooms Throughout
Cloth Vibration Damper	Ductwork Throughout
Canvas Wrap (over cork)	Ground Floor (Area A), MER First Floor – Vestibule Radiator
Cork	
Mudded Fittings	
Brick Mortar	Exterior, Façade
Asphalt	Exterior, Old Tennis Court
Concrete	Exterior, Throughout, Vestibule, Lobby, Hallway and Nurses Office

Samples collected by **Adelaide** March 28, 2019

Identified Non-ACM	Sample Location(s) & HA's
Top Tar w/ Stone	Roofs A,C & D
2 <sup>nd</sup> Built-up Roofing (BUR)	
3 <sup>rd</sup> Perlite	
4 <sup>th</sup> Iso Foam Insulation Paper	
Bottom Vapor Barrier on Deck	Roofs A & C
Cementitious Deck	
Tar on Seams	Roofs A & D, Curb Flashing
Flashing Tar	HA 9B – Roofs A & D, Curb Flashing
Vent Pipe Tar	Roofs A & C
Pitch Pocket Tar	Roofs A & D
Roof Drain Tar	Roofs A & C
Expansion Joint Caulk (Gray)	Roof D
Brick Mortar	Roofs C & D
Concrete	East Elevation A & C
Caulk on Beige Brick	North & East Elevation
Expansion Joint (Beige)	West Courtyard Elevation
Glass Block Mortar	West Elevation B

Samples collected by **Adelaide** April 17, 2019

Identified Non-ACM	Sample Location(s) & HA's
Small White Cloth Jacket Wiring	Throughout, Hallway Electrical Panel

Identified Non-ACM	Sample Location(s) & HA's
Thick White Cloth Jacket Wiring	Throughout, Hallway Electrical Panel
Medium Red Cloth Jacket Wiring	
Medium Black Cloth Jacket Wiring	
Large Black Cloth Jacket Wiring (feeder)	

Samples collected by **Adelaide** June 18, 2020

Identified Non-ACM	Sample Location(s) & HA's
Concrete	HA R9/at top of skylights deck at rebar
CMU Mortar	HA R10/ Sky Light below deck, First Floor Hallway

### **Henry Barnard Early Childhood Center**

Samples collected by **Adelaide** July 9th, 2024

Identified Non-ACM	Sample Location(s) & HA's
Stone Mortar (Original, Repair – Gray, Repair – Tan)	Roof C – Chimney

Samples collected by **Adelaide** November 30, 2023

Identified Non-ACM	Sample Location(s) & HA's
Ceiling Tile – Holes	Second Floor – Hallway
Ceiling Tile – Craters	
Plaster Ceiling – Top and Base Coats	
Plaster Wall – Top and Base Coats	

Samples collected by **Adelaide** March 19, 2019

Identified Non-ACM	Sample Location(s) & HA's
Cloth Vibration Damper	Ground Floor, MER
Mudded Fittings	Ground Floor, MER
1x1 Textured Ceiling Tile & Glue Daubs	Ground Floor, Classroom 3
	Ground Floor, Classroom 4
1x1 Dotted Ceiling Tile & Glue Daubs	Ground Floor, Classroom 3
	Ground Floor, Classroom 4
Epoxy Flooring	Ground Floor, Boiler Room
1x1 Dot Canyon Ceiling Tile	1 <sup>st</sup> Floor, Lobby
2x4 Dotted Ceiling Tile	1 <sup>st</sup> Floor, Classroom 108
	2 <sup>nd</sup> Floor, Classroom 211
2x4 Skinny Fissure Ceiling Tile	1 <sup>st</sup> Floor, Stairwell by Elevator
	2 <sup>nd</sup> Floor, Classroom 202
2x4 Dot Speck Ceiling Tile	1 <sup>st</sup> Floor, Classroom 107
	2 <sup>nd</sup> Floor, Classroom 210
2x4 Dot Canyon Ceiling Tile	2 <sup>nd</sup> Floor, Classroom 202
	2 <sup>nd</sup> Floor, Classroom 210
2x4 Deep Fissure Ceiling Tile	2 <sup>nd</sup> Floor, Classroom 202
2x4 Textured Dotted Ceiling Tile	2 <sup>nd</sup> Floor, Classroom 210

Identified Non-ACM	Sample Location(s) & HA's
	2 <sup>nd</sup> Floor, Classroom 211
Wall Cove Base & Adhesive	Throughout Inspection Areas
1x1 Beige Floor Tile	Ground Floor, Classroom 4
	2 <sup>nd</sup> Floor, Room 209D
Carpet Mastic (top layer)	
9x9 Pink Floor Tile & Mastic (bottom layer)	1 <sup>st</sup> Floor, Kindergarten 110
Wall Ceramic Tile System (grout & mudset)	
Terrazzo Flooring	1 <sup>st</sup> Floor/2 <sup>nd</sup> Floor – Bathrooms
Pre-Cast Mortar	
Brick Façade Mortar	Exterior, 1951 Addition
Concrete	
Stone Mortar	
Cap Mortar	Exterior
Playground Surface	
Playground Lot Asphalt	

### **Albert Leonard Middle School**

Samples collected by **Adelaide** July 8, 2024

Identified Non-ACM	Sample Location(s) & HA's
Lighting Wire – Vinyl	Hallway, Main Office Server Room, Lobby, Vestibules
Low Voltage Wire – Vinyl	
Electrical Wire – Vinyl	
Electrical Wire – Braided (type 1)	
Electrical Wire – Braided (type 2)	

Samples collected by **Adelaide** December 1, 2023

Identified Non-ACM	Sample Location(s) & HA's
Textured Ceiling Coating on Cementitious Board	First Floor – Lobby
Cementitious Board	
Stone Floor – Grout and Mudset/Concrete	
Stone Wall – Grout	
Brick Mortar	
Terrazzo Flooring	First Floor – Lobby
Carpet Mastic	
Pink Firestop	Exterior of Vest
Stucco	
Door Windowpane Glazing – Hard Type	Vestibules – 3 and 4
Plaster Ceiling – Top and Base Coats	
Door Windowpane Glazing – Soft Type	
Door Caulking	

Samples collected by **Adelaide** June 14, 2017, and January 20<sup>th</sup> and 27<sup>th</sup>, 2018

<b>Identified Non-ACM</b>	<b>Sample Location(s) &amp; HA's</b>
Top Layer – Pitch and Gravel	Roofs J and D3
2 <sup>nd</sup> Layer – Built-up Roofing	
3 <sup>rd</sup> Layer – Perlite	
4 <sup>th</sup> Layer – Tar/Vapor Barrier	
5 <sup>th</sup> Layer – ISO Paper	
6 <sup>th</sup> Layer – Tar/Vapor Barrier	
7 <sup>th</sup> Layer – Rosin Paper	
Bottom Layer – Tar/Vapor Barrier	
Cement Tapper	Roof J
Tectum Deck	Roof C and J
Rolled Roofing	Roof J
Pitch Pocket Tar	Roof D1
Termination Bar Tar	Roofs A and C
Section Seam Caulk	Roof Top Unit
Brick Mortar	Throughout
Green Carpet Tile Adhesive	Room 110
Stone Pattern Floor Tile	Room 95
Tile/Leveling Compound under 9x9 Gray with White	Room 119
CMU	Throughout
CMU Mortar	
Single Coat Plaster	Boys Locker Room Shower
Ceiling Tile – Craters with Holes	Room 170A
Ceiling Tile – Fissures with Holes	Rooms 170A and 170B
Ceiling Tile – Holes	Room 86
Ceiling Tile – Rough Textured	Room 93
Black Mastic for 9x9 Floor Tile	Rooms 85C and 93
Light Wire – Braided – Type 1	Room 174
Light Wire – Braided – Type 2	Room 93
4" Black Cove Base	
4" Cove Base Adhesive – Brown	Room 93 and 110
4" Cove Base Adhesive – Cream	
4" Black/Brown Cove Base	Room 217
Replacement Floor Tile – 9x9 Peach	Room 173
Replacement Floor Tile – Beige with White and Brown Specks	Room 119
Replacement Floor Tile – 9x9 Gray with White Specks	Room 93
Replacement Floor Tile – Maroon Mottled	Room 218
Replacement Floor Tile – Blue	Room 219
Replacement Floor Tile – Tan with Rust	Room 217
Replacement Floor Tile – Yellow with Red and Blue	Room 215
Replacement Floor Tile – Beige Mottled	Room 216

Identified Non-ACM	Sample Location(s) & HA's
Replacement Floor Tile – Light Gray with Gray Streaks	Room 119A
Replacement Floor Tile – Gray with Black Specks	Room 119
Replacement Floor Tile – Cream with Red and Light Blue	
Caulking at Interior Door	
Drywall	Hallway
Joint Compound	
12x12 Tan Mottled Floor Tile	Room 230
Brown Mastic for Replacement Floor Tile	Rooms 119 and 230
Replacement Floor Tile – Beige with White Swirl	Room 160
Replacement Floor Tile – White with Red and Blue	
Replacement Floor Tile – White with Tan	
Green Caulking at Windows	Exterior
Plaster Wall - Top and Base Coats	Hallway
Fiberglass Pipe Insulation Wrap with Tar Layer	
Black Membrane Between Sections of HVAC Unit	Roof A
White Caulk on Membrane Edges	
Felt Like Seal on HVAC Vents	Roofs A and B
Tar Wire Wrap for HVAC Unit	Roofs A and F
Vibration Cloth – Older	Fan Room 1 and 2
Vibration Cloth – Newer	
Cloth Wrap on Tar Paper Insulation	
Tar Paper Bedded Insulation Material	
Tar Wrap Wire Insulation	
Duct Sealant Green	
Interior Louver Caulk	
Exterior Louver Caulk	
Red Fire Stop	Fan Room 1 and 2
Tar on Units for Roofs B and F	

### **New Rochelle High School**

Samples collected by **Adelaide** December 2, 2023

Identified Non-ACM	Sample Location(s) & HA's
Plaster Wall – Top and Base Coats	3 <sup>rd</sup> Floor – Hallway (361)
Terrazzo Flooring	3 <sup>rd</sup> Floor – Main Hallway
Main Electrical Wire – Vinyl	Electrical Panels
Light Wire – Vinyl	2 <sup>nd</sup> Floor – Lobby and Vestibule
Low Voltage Wire – Vinyl	3 <sup>rd</sup> Floor – Hallway (361), Rooms 360H, 361A, 361B, 361C, 361D, 361F
Wallpaper	3 <sup>rd</sup> Floor – Room 360G
Joint compound and Sheetrock	3 <sup>rd</sup> Floor – Room 360G and Hallway (361)
12x12 Floor Tile – Peach with Specks	3 <sup>rd</sup> Floor – Room
12x12 Floor Tile – White with Gray	3 <sup>rd</sup> Floor – Hallway (361)



<b>Identified Non-ACM</b>	<b>Sample Location(s) &amp; HA's</b>
Black Mastic for 12x12	3 <sup>rd</sup> Floor – Hallway (361)
Carpet Mastic on 9x9 Floor Tile	3 <sup>rd</sup> Floor – Room 360H – Computer Room
12x12 Dark Gray Floor Tile	2 <sup>nd</sup> Floor – Lobby and Corridors
12x12 Medium Gray Floor Tile	
12x12 Light Gray Floor Tile	
Leveler for 12x12 Dark Gray Floor Tile	
Yellow Mastic for 12x12 Floor Tile	
Brown Mastic for 12x12 Floor Tile	
Carpet Tile Mastic	2 <sup>nd</sup> Floor – Vestibule
Windowpane Glazing – Soft	3 <sup>rd</sup> Floor – Hallway (361)
Caulking at Capstone	Exterior Stairs – Front Stairs
Gray Caulking at Stairs	Exterior Stairs – Northwest and Southwest
Black Caulking at Stairwell	
Repair Material at Stairwell	
Tar at Top of Stairs	
Tar (Waterproofing) at Stair Wall and Ground	
Parge Coating on Stairwell	
Concrete	Exterior Stairs

Samples collected by **Adelaide** November 2, 2016

<b>Identified Non-ACM</b>	<b>Sample Location(s) &amp; HA's</b>
Deep Dot Canyon Ceiling Tile	2 <sup>nd</sup> Floor – Office 2216A 3 <sup>rd</sup> Floor – Faculty Storage Room
Textured Dotted Ceiling Tile	1 <sup>st</sup> Floor – Stairwell D
Bump with Holes Ceiling Tile	3 <sup>rd</sup> Floor – Room 332
Sheetrock Ceiling Tile	1 <sup>st</sup> Floor – Kitchen 3 <sup>rd</sup> Floor – Room 361C
Plaster Wall – Top Coat	1 <sup>st</sup> Floor – Stairwell D
Plaster Wall – Base Coat	2 <sup>nd</sup> Floor – Stairwell D
Ceramic Wall Tile Grout and Adhesive	3 <sup>rd</sup> Floor – Men's Bathroom
Quarry Floor Tile Grout and Mudset	1 <sup>st</sup> Floor – Kitchen
Roof Drain Mudded Bowl	Roofs A and G
Canvas Wrap for Fiberglass Pipe Insulation	Basement – Pool MER Room
Fiberglass Pipe Insulation Tar Wrap under Paper	

Samples collected by **Adelaide** October 12, 2016

<b>Identified Non-ACM</b>	<b>Sample Location(s) &amp; HA's</b>
Textured Dotted Ceiling Tile	2 <sup>nd</sup> Floor – Main Vestibule
Dot Canyon Ceiling Tile	2 <sup>nd</sup> Floor – Men's Staff Bathroom 3 <sup>rd</sup> Floor – Hallway 361
Dot Speck Ceiling Tile	2 <sup>nd</sup> Floor – Women's Staff Bathroom
Deep Crater Ceiling Tile	2 <sup>nd</sup> Floor – Main Vestibule and Lobby 3 <sup>rd</sup> Floor – Main Hallway, 360G

Identified Non-ACM	Sample Location(s) & HA's
Squiggles with Holes Ceiling Tile	3 <sup>rd</sup> Floor – Room 360H, Hallway 361, 361A, 361B, 361C, 361D, 361F, 366
Holes with Craters Ceiling Tile	3 <sup>rd</sup> Floor – Room 360G, 366
Drywall and Joint Compound	2 <sup>nd</sup> Floor – Main Vestibule and Lobby
Carpet Adhesive Yellow	1 <sup>st</sup> Floor – Library 2 <sup>nd</sup> Floor – Room 207
Carpet Adhesive Yellow/Green	2 <sup>nd</sup> Floor – Main Vestibule
12x12 Black Floor Tile and Mastic	2 <sup>nd</sup> Floor – Main Lobby
Insulation above Metal Pan Ceiling	2 <sup>nd</sup> Floor – Men's Staff Bathroom
Ceramic Floor Tile Grout and Mudset	3 <sup>rd</sup> Floor – Men's Bathroom
12x12 White with Gray Speck Floor Tile and Mastic	2 <sup>nd</sup> Floor – Room 221
12x12 Tan Speck Floor Tile and Mastic	1 <sup>st</sup> Floor – Library
8"x8"(Older) CMU and Mortar	2 <sup>nd</sup> Floor – Men's Staff Bathroom 3 <sup>rd</sup> Floor – Room 366
8"x16"(Newer) CMU and Mortar	2 <sup>nd</sup> Floor – Lobby
4" Brown Cove Base	3 <sup>rd</sup> Floor – Outside Room 366 and Room 366
4" Black Covebase	3 <sup>rd</sup> Floor – Outside Room 366
4" Gray Covebase	3 <sup>rd</sup> Floor – Outside Room 366
Covebase Mastic	3 <sup>rd</sup> Floor – Outside Room 366
12x12 Tan with Brown Swirls Floor Tile and Mastic	3 <sup>rd</sup> Floor – Room 366
HVAC Silver Duct Wrap on Fiberglass	3 <sup>rd</sup> Floor – Room 366
Heat Shield Board for Radiator	3 <sup>rd</sup> Floor – Room 366
12x12 Stone Floor Tile and Mastic	3 <sup>rd</sup> Floor – Outside Room 366
12x12 Gray Stone Floor Tile and Mastic	1 <sup>st</sup> Floor – Corridor by Electrical Room
12x12 Small Tone Floor Tile and Mastic	
Wall Epoxy	Exterior – Men's Bathroom
Small Window Glazing Compound	
Ramp Bottom Layer Flooring	2 <sup>nd</sup> Floor – House II Office Area

## 2.3 Summary of Identified LBP

Based on review of the data generated by the Viken Pb200e X-Ray Fluorescence (XRF) Analyzer(s), the following surfaces tested were identified as lead-based, as defined by HUD/EPA (equal to or in excess of 1.0 milligram per square centimeter):

### Jefferson Elementary School

Readings collected by **Adelaide** July 9th, 2024

Location of LBP	LBP Component	Substrate	Color	Condition	Readings (mg/cm <sup>2</sup> )
<i>NO painted surfaces were observed to be impacted by the above-mentioned scope of work.</i>					

Readings collected by **Adelaide** November 28, 2023

Location of LBP	LBP Component	Substrate	Color	Condition	Readings (mg/cm2)
Northeast Hallway	Wall	Metal	Red	Intact	3
Principal bathroom	Wall Lower	Ceramic	White	Intact	3.3
Staff bathroom	Door	Wood	White	Intact	1
Staff bathroom	Exterior Door	Wood	White	Intact	1.9
Staff bathroom	Door Case	Wood	White	Intact	1
Staff bathroom	Wall Upper	Plaster	White	Intact	2.2
Staff bathroom	Wall Upper	Plaster	White	Intact	2.3
Staff bathroom	Wall Upper	Plaster	White	Intact	2.2
Staff bathroom	Wall Upper	Plaster	White	Intact	2.3
Staff bathroom	Wall Lower	Ceramic	White	Intact	2.2
Staff bathroom	Window Case	Wood	White	Intact	1.1
Staff bathroom	Wall Upper	Plaster	Light Green	Intact	2.3
Copy room	Wall	Plaster	Off White	Intact	2.1
Copy room	Radiator	Metal	Off White	Intact	1.2

### **William B Ward Elementary School**

Readings collected by **Adelaide** July 8th, 2024

Location of LBP	LBP Component	Substrate	Color	Condition	Readings (mg/cm2)
<i>NO painted surfaces were observed to be impacted by the above-mentioned scope of work.</i>					

Readings collected by **Adelaide** November 29, 2023

Location of LBP	LBP Component	Substrate	Color	Condition	Readings (mg/cm2)
<i>NO Lead-based Paints identified above HUD/EPA standards of readings collected in reference to the above-mentioned scope of work.</i>					

### **George M Davis Jr. Elementary School**

Readings collected by **Adelaide** July 8th, 2024

Location of LBP	LBP Component	Substrate	Color	Condition	Readings (mg/cm2)
<i>NO painted surfaces were observed to be impacted by the above-mentioned scope of work.</i>					

Readings collected by **Adelaide** November 29, 2023

Location of LBP	LBP Component	Substrate	Color	Condition	Readings (mg/cm2)
1 <sup>st</sup> Floor – Lobby	Lower Wall	Block	Beige	Fair	2.8

### Henry Barnard Early Childhood Center

Readings collected by **Adelaide** July 9th, 2024

Location of LBP	LBP Component	Substrate	Color	Condition	Readings (mg/cm2)
NO painted surfaces were observed to be impacted by the above-mentioned scope of work.					

Readings collected by **Adelaide** November 30, 2023

Location of LBP	LBP Component	Substrate	Color	Condition	Readings (mg/cm2)
NO Lead-based Paints identified above HUD/EPA standards of readings collected in reference to the above-mentioned scope of work.					

### Albert Leonard Middle School

Readings collected by **Adelaide** July 8th, 2024

Location of LBP	LBP Component	Substrate	Color	Condition	Readings (mg/cm2)
NO painted surfaces were observed to be impacted by the above-mentioned scope of work.					

Readings collected by **Adelaide** December 1, 2023

Location of LBP	LBP Component	Substrate	Color	Condition	Readings (mg/cm2)
NO Lead-based Paints identified above HUD/EPA standards of readings collected in reference to the above-mentioned scope of work.					

### New Rochelle High School

Readings collected by **Adelaide** December 2, 2023

Location of LBP	LBP Component	Substrate	Color	Condition	Readings (mg/cm2)
3 <sup>rd</sup> Floor – Hallway	Structural Beam	Metal	Brown	Intact	4.0
1 <sup>st</sup> Floor – Hallway 2000C	Bleacher Beam	Metal	Green	Intact	4.6

## 2.4 Summary of Identified PCB-containing Materials

### Jefferson Elementary School

Samples collected by **Adelaide** July 9th, 2024

Sample #	Location / Description	Material Matrix	Substrate	Approx. Qty.	Analytical Result
NO suspect PCB-containing materials were observed to be impacted by the above-mentioned scope of work.					

Samples collected by **Adelaide** November 28, 2023

Sample #	Location / Description	Material Matrix	Color	Substrate	Analytical Result
<i>NO PCB-containing materials were identified above the USEPA 40 CFR 761 threshold of 50 ppm(mg/kg) of samples collected/analyzed in reference to the above-mentioned scope of work.</i>					

### **William B Ward Elementary School**

Samples collected by **Adelaide** July 8th, 2024

Sample #	Location / Description	Material Matrix	Substrate	Approx. Qty.	Analytical Result
<i>NO suspect PCB-containing materials were observed to be impacted by the above-mentioned scope of work.</i>					

Samples collected by **Adelaide** November 29, 2023

Sample #	Location / Description	Material Matrix	Color	Substrate	Analytical Result
<i>NO PCB-containing materials were identified above the USEPA 40 CFR 761 threshold of 50 ppm(mg/kg) of samples collected/analyzed in reference to the above-mentioned scope of work.</i>					

Samples collected by **Adelaide** March 21 & 28, 2019

Sample #	Location / Description	Material Matrix	Color	Substrate	Analytical Result
<i>NO PCB-containing materials were identified above the USEPA 40 CFR 761 threshold of 50 ppm(mg/kg) of samples collected/analyzed in reference to the above-mentioned scope of work.</i>					

### **George M Davis Jr. Elementary School**

Samples collected by **Adelaide** July 8th, 2024

Sample #	Location / Description	Material Matrix	Substrate	Approx. Qty.	Analytical Result
<i>NO suspect PCB-containing materials were observed to be impacted by the above-mentioned scope of work.</i>					

Samples collected by **Adelaide** November 29, 2023

Sample #	Location / Description	Material Matrix	Color	Substrate	Analytical Result
<i>NO PCB-containing materials were identified above the USEPA 40 CFR 761 threshold of 50 ppm(mg/kg) of samples collected/analyzed in reference to the above-mentioned scope of work.</i>					

### **Henry Barnard Early Childhood Center**

Samples collected by **Adelaide** July 9th, 2024

Sample #	Location / Description	Material Matrix	Substrate	Approx. Qty.	Analytical Result
<i>NO suspect PCB-containing materials were observed to be impacted by the above-mentioned scope of work.</i>					

Samples collected by **Adelaide** November 30, 2023

Sample #	Location / Description	Material Matrix	Color	Substrate	Analytical Result
Assumed	Roof – Chimney Flashing	Caulking	Unknown	Metal/Stone	Assumed
	Roof – Chimney Louver	Caulking	Unknown	Metal/Brick	Assumed

### **Albert Leonard Middle School**

Samples collected by **Adelaide** July 8th, 2024

Sample #	Location / Description	Material Matrix	Substrate	Approx. Qty.	Analytical Result
<i>NO suspect PCB-containing materials were observed to be impacted by the above-mentioned scope of work.</i>					

Samples collected by **Adelaide** December 1, 2023

Sample #	Location / Description	Material Matrix	Color	Substrate	Analytical Result
<i>NO PCB-containing materials were identified above the USEPA 40 CFR 761 threshold of 50 ppm(mg/kg) of samples collected/analyzed in reference to the above-mentioned scope of work.</i>					

### **New Rochelle High School**

Samples collected by **Adelaide** December 2, 2023

Sample #	Location / Description	Material Matrix	Color	Substrate	Analytical Result
<i>NO PCB-containing materials were identified above the USEPA 40 CFR 761 threshold of 50 ppm(mg/kg) of samples collected/analyzed in reference to the above-mentioned scope of work.</i>					

## **2.5 Observations**

### **ASBESTOS-CONTAINING MATERIALS (ACM)**

A visual inspection was performed, and homogeneous material types were established based on appearance, color and texture. The findings presented in this report are based upon reasonably available information and observed site conditions at the time the assessment was performed. The findings and conclusions of this report are not meant to be indicative of future conditions at the site and does not warrant against conditions that were not evident from visual observations or historical information obtained from others.

### **Jefferson Elementary School**

On July 9th, 2024, representative bulk sampling was performed on suspect building materials for laboratory analysis and the following is a summary of installed building materials sampled as per the scope of work provided:

- Miscellaneous Materials – Electrical Wire (multiple types and colors), Lighting Wire (multiple types and colors), Low Voltage Wire (multiple types and colors).

On November 28, 2023, representative bulk sampling was performed on suspect building materials for laboratory analysis and the following is a summary of installed building materials sampled as per the scope of work provided:

- Ceiling Materials – Plaster, Ceiling Tile (multiple types).
- Wall Materials – Plaster, Ceramic Grout and Mudset, Brick Mortar (multiple types), Cove Base Molding & Adhesive.
- Flooring Materials – Floor Tile (multiple types), Floor Tile Mastic (multiple types), Vapor Barrier, Leveling Compound, Terrazzo (multiple types).
- Miscellaneous Materials – Sink Caulk.
- Non-suspect Materials (not sampled) – Fiberglass Insulation, Wood, Glass, Metal.

On October 11, 2016, December 29, 2016, January 5, 2017, April 12 & 17, 2017, January 27, 30-31, 2018, and August 16, 2018, representative bulk sampling was performed on suspect building materials for laboratory analysis and the following is a summary of installed building materials sampled as per the scope of work provided:

- Ceiling Materials – Ceiling Tile (multiple types), Glue Daubs.
- Wall Materials – Brick Mortar, Plaster, Cove Base Molding & Adhesive (multiple types), Skylight Glazing, CMU and Mortar.
- Flooring Materials – Slate Mortar, Concrete, Floor Tile (multiple types), Floor Tile Mastic (multiple types).
- Roofing Materials – Built-up Roofing, Felt, Fiberboard, Tar Vapor Barrier, Rolled Roofing, Seam Tar, Roof Drain Tar, Counter-flashing Caulk, EPDM Material, Lap Sealant, Auditorium Roof - Stone Ballast Roof, BUR with Pitch, Perlite with Tar, ISO Paper on Wood Deck, Asphalt Type Roofing at HVAC Curb, Tar on HAVA Duct Curb and Roof Hatch, Upper Roof – Tar on Deck, Concrete Deck, Perlite Board.
- Thermal System Insulation – Fiberglass Pipe Wrap (multiple types), Mudded Fittings, Duct Wrap.
- Miscellaneous Materials – Coping Stone Caulk, Door Caulk (multiple types), Window Caulk (multiple types), Expansion Caulk, Repair Caulk, Debris, Batt Insulation, Door Fill, Louver Caulk, Braided Wire, Duct Sealant, Vibration Cloth.
- Non-suspect Materials (not sampled) – Fiberglass Insulation, Wood, Glass, Metal.

## **William B Ward Elementary School**

On July 8th, 2024, representative bulk sampling was performed on suspect building materials for laboratory analysis and the following is a summary of installed building materials sampled as per the scope of work provided:

- Miscellaneous Materials – Electrical Wire (multiple types and colors), Lighting Wire (multiple types and colors), Low Voltage Wire (multiple types and colors).

On November 29, 2023, representative bulk sampling was performed on suspect building materials for laboratory analysis and the following is a summary of installed building materials sampled as per the scope of work provided:

- Ceiling Materials – Canopy Adhesive, Ceiling Tile.
- Wall Materials – Tar, Sheetrock (multiple types), Joint Compound (multiple types).
- Flooring Materials – Concrete, Floor Tile and Mastic.
- Non-suspect Materials (not sampled) – Wood, Glass, Metal.

On March 21 and 28, 2019 and April 16, 2019, representative bulk sampling was performed on suspect building materials for laboratory analysis and the following is a summary of installed building materials sampled as per the scope of work provided:

- Ceiling Materials – Ceiling Tiles (multiple types).
- Wall Materials – CMU and Mortar, Brick Mortar (multiple types), Ceramic Grout and Adhesive, Cove Base Molding & Adhesive (multiple types).
- Flooring Materials – Floor Tile (multiple types), Floor Tile Mastic (multiple types), Terrazzo, Carpet Nosing, Concrete.
- Roofing Materials – Roofing All.
- Thermal System Insulation – Fiberglass Pipe Wrap, Duct Wrap.
- Miscellaneous Materials – Door Caulk, Door Fill, Window Glazing, Window Caulk (multiple types), Expansion Caulk.
- Non-suspect Materials (not sampled) – Fiberglass Insulation, Wood, Glass, Metal.



## **George M Davis Jr. Elementary School**

On July 8th, 2024, representative bulk sampling was performed on suspect building materials for laboratory analysis and the following is a summary of installed building materials sampled as per the scope of work provided:

- Miscellaneous Materials – Electrical Wire (multiple types and colors), Lighting Wire (multiple types and colors), Low Voltage Wire (multiple types and colors).

On March 24, 2023, representative bulk sampling was performed on suspect building materials for laboratory analysis and the following is a summary of installed building materials sampled as per the scope of work provided:

- Ceiling Materials – Textured Plaster, Smooth Plaster, Single Coat Plaster.
- Wall Materials – Brick Mortar, Glazed Block Mortar, CMU, Cove Base Molding & Adhesive, Patch Material.
- Flooring Materials – Terrazzo (multiple types), Floor Tile and Mastic.
- Miscellaneous Materials – Door Caulk, Door Window Sealant (multiple types).
- Non-suspect Materials (not sampled) – Wood, Glass, Metal.

On March 20 and 28, 2019, April 17, 2019 and June 18, 2020, representative bulk sampling was performed on suspect building materials for laboratory analysis and the following is a summary of installed building materials sampled as per the scope of work provided:

- Ceiling Materials – Ceiling Tiles (multiple types), Plaster top and base coats.
- Wall Materials – Plaster top and base coat, Ceramic Tile System (ie. grout, mudset, etc.) 4" cove base and adhesive.
- Flooring Materials – 9x9 Floor Tiles & Mastic (multiple types), Ceramic Tile System (ie. grout, mudset, etc.), 12x12 Hard Surface Flooring.
- Thermal System Insulation – Mudded Fittings (associated w/ Fiberglass Pipe Insulation), Canvas Wrap (over cork), Cork Seam Tar, Cork.
- Miscellaneous Materials – Mortar (multiple types/systems), Concrete (multiple systems), Tennis Court Surface, Asphalt, Caulk (multiple types), Fire Door Insulation, Cloth Jacket Wiring.
- Roofing Materials – Tar w/ Stone (top layer), Built-up Roofing (2nd layer), Perlite (3rd layer), Iso Foam Insulation Paper (4th layer), Vapor Barrier (bottom layer), Cementitious Deck, Tar (multiple types).
- Non-suspect Materials (not sampled) – Fiberglass Insulation, Silicone, Wood, Glass, Metal.

### **Henry Barnard Early Childhood Center**

On July 9th, 2024, representative bulk sampling was performed on suspect building materials for laboratory analysis and the following is a summary of installed building materials sampled as per the scope of work provided:

- **Miscellaneous Materials** – Electrical Wire (multiple types and colors), Lighting Wire (multiple types and colors), Low Voltage Wire (multiple types and colors).

On November 30, 2023, representative bulk sampling was performed on suspect building materials for laboratory analysis and the following is a summary of installed building materials sampled as per the scope of work provided:

- **Ceiling Materials** – Plaster, Ceiling Tile (multiple types).
- **Wall Materials** – Plaster.
- **Non-suspect Materials (not sampled)** – Wood, Glass, Metal.

On March 19, 2019, representative bulk sampling was performed on suspect building materials for laboratory analysis and the following is a summary of installed building materials sampled as per the scope of work provided:

- **Ceiling Materials** – Plaster, Ceiling Tiles (multiple types), Glue Daubs (multiple types).
- **Wall Materials** – Cove Base Molding & Adhesive, Ceramic Tile System (ie. grout, mudset, etc.).
- **Flooring Materials** – Floor Tile Debris, 9x9 Floor Tiles & Mastic (multiple colors), 1x1 Beige Floor Tile & Mastic, Carpet Mastic, Terrazzo Flooring, Epoxy Flooring.
- **Thermal System Insulation** – Mudded Fittings (associated w/ Fiberglass Pipe Insulation).
- **Miscellaneous Materials** – Mortar (multiple types/systems), Concrete, Playground Surface, Asphalt, Louver Caulk.
- **Non-suspect Materials (not sampled)** – Fiberglass Insulation, Silicone, Wood, Glass, Metal, Fire Doors, EPDM (rubber roofing).

### **Albert Leonard Middle School**

On July 8th, 2024, representative bulk sampling was performed on suspect building materials for laboratory analysis and the following is a summary of installed building materials sampled as per the scope of work provided:

- Miscellaneous Materials – Electrical Wire (multiple types and colors), Lighting Wire (multiple types and colors), Low Voltage Wire (multiple types and colors).

On December 1, 2023, representative bulk sampling was performed on suspect building materials for laboratory analysis and the following is a summary of installed building materials sampled as per the scope of work provided:

- Ceiling Materials – Textured Plaster, Cementous Board, Plaster.
- Wall Materials – Stone Mortar, Brick Mortar.
- Flooring Materials – Stone Floor Grout and Mudset/Fill, Terrazzo, Carpet Mastic.
- Miscellaneous Materials – Firestop, Door Windowpane Glazing (multiple types), Door Caulk.
- Non-suspect Materials (not sampled) – Wood, Glass, Metal.

On June 14, 2017, and January 20 and 27, 2018, representative bulk sampling was performed on suspect building materials for laboratory analysis and the following is a summary of installed building materials sampled as per the scope of work provided:

- Ceiling Materials – Plaster, Sheetrock, Joint Compound, Ceiling Tile (multiple types).
- Wall Materials – CMU and Mortar, Plaster, Sheetrock, Joint Compound, Cove Base Molding & Adhesive (multiple types), Brick & Mortar.
- Flooring Materials – Floor Tile (multiple types), Floor Tile Mastic (multiple types), Carpet Adhesive, Leveling Compound.
- Roofing Materials – Pitch and Gravel, Built-up Roofing, Perlite, Tar/Vapor Barrier, ISO Paper, Rosin Paper, Cement Tapper, Tectum Deck, Rolled Roofing, Pitch Pocket Tar, Termination Bar Tar, Section Seam Caulk.
- Thermal System Insulation – Fiberglass Pipe Insulation Wrap, Cloth Pipe Insulation Wrap, Tar Insulation Pipe Wrap.
- Miscellaneous Materials – Braided Light Wire (multiple types), Door Caulk (multiple types), Window Caulk, Black HVAC Membrane, Felt Sealant, Tar Wire Wrap, Vibration Cloth (multiple types), Duct Sealant, Louver Calk (multiple types), Firestop.
- Non-suspect Materials (not sampled) – Wood, Glass, Metal.

## **New Rochelle High School**

On December 2, 2023, representative bulk sampling was performed on suspect building materials for laboratory analysis and the following is a summary of installed building materials sampled as per the scope of work provided:

- Ceiling Materials – Sheetrock, Joint Compound, Concrete.
- Wall Materials – Plaster, Wallpaper, Sheetrock, Joint Compound, Parge Coating, Concrete.
- Flooring Materials – Terrazzo, Floor Tile (multiple types), Floor tile Mastic (multiple types), Carpet Mastic (multiple types), Leveler, Concrete.
- Miscellaneous Materials – Vinyl Electrical Wire (main, lighting, low voltage), Windowpane Glazing, Capstone Caulk, Stair Caulk (multiple types), Stair Repair Material, Tar/Waterproofing.
- Non-suspect Materials (not sampled) – Wood, Glass, Metal.

On October 12, 2016 and November 2, 2016, representative bulk sampling was performed on suspect building materials for laboratory analysis and the following is a summary of installed building materials sampled as per the scope of work provided:

- Ceiling Materials – Ceiling Tile (multiple types), Sheetrock, Joint Compound.
- Wall Materials – Plaster, Ceramic Wall Tile Grout and Adhesive, Sheetrock, Joint Compound, CMU and Mortar (multiple types), Cove Base Molding & Adhesive (multiple types), Epoxy.
- Flooring Materials – Floor Tile (multiple types), Floor Tile Mastic (multiple types), Quarry Tile Grout and Mudset, Carpet Mastic/Adhesive (multiple types), Ceramic Tile Grout and Mudset, Layered Flooring.
- Roofing Materials – Roof Drain Bowl.
- Thermal System Insulation – Cloth Pipe Insulation Wrap, Insulation, HVAC Wrap.
- Miscellaneous Materials – Heat Shield, Window Glazing.
- Non-suspect Materials (not sampled) – Fiberglass Insulation, Wood, Glass, Metal.

### 3.0 Asbestos-containing Materials (ACM)

#### 3.1 Field Procedures and Analysis Methodology

Guidelines used for the inspection were established by the U.S. Environmental Protection Agency (EPA) in the Guidance for Controlling Asbestos Containing Materials in Buildings, Office of Pesticides and Toxic Substances, DOC# 560/5-85-024 and 40 CFR Part 763, Asbestos Hazard Emergency Response Act (AHERA) and Title 12 NYCRR Part 56-5.1. Field information was organized as per the AHERA concept of a homogeneous area (HA); that is, suspect Asbestos-containing Materials (ACM) with similar age, appearance, and texture were grouped together, sampled and assessed for condition.

For the purposes of this inspection, suspect ACM has been placed in three material categories: thermal, surfacing, and miscellaneous. 1) Surfacing materials are those that are sprayed on, troweled on or otherwise applied to surfaces for fireproofing, acoustical, or decorative purposes (e.g., wall and ceiling plaster). 2) Thermal materials are those applied to heat pipes or other structural components to prevent heat loss or gain or prevent water condensation (e.g., pipe and fitting insulation, duct insulation, boiler flue). 3) Miscellaneous materials are interior building materials on structural components, structural members or fixtures, such as floor and ceiling tiles, etc. and do not include surfacing material or thermal system insulation.

#### SURFACING MATERIALS

Surfacing materials were grouped into homogeneous sampling areas. A homogeneous area contains material that is uniform in color and texture and appears identical in every other respect. Materials installed at different times belong to different sampling areas. Homogeneous areas were determined on per floor basis.

The following protocol was used for determining the number of samples to be collected:

- At least three bulk samples were collected from each homogeneous area that is 1,000 square feet or less.
- At least five bulk samples were collected from each homogeneous area that is greater than 1,000 square feet but less than or equal to 5,000 square feet.
- At least seven bulk samples were collected from each homogeneous area that is greater than 5,000 square feet.

#### THERMAL SYSTEM INSULATION (TSI)

The concept of homogeneous sampling areas applies equally well to thermal insulation as to surfacing material. A "typical" building may contain multiple insulated pipe runs from any combination of the following categories:

- Hot water supply and/or return
- Cold water supply
- Chilled water supply
- Steam supply and/or return
- Roof or system drain

The following protocol was used for determining the number of samples to be collected.

- Collect at least three bulk samples from each homogeneous area of thermal system insulation.
- Collect at least one bulk sample from each homogeneous area of patched thermal system insulation if the patched section is less than 6 linear or square feet.
- In a manner sufficient to determine whether the material is ACM or not ACM, collect a minimum of three bulk samples from each homogeneous insulated mechanical system tee, elbow, and valve.

Bulk samples are not collected from any homogeneous area where the certified inspector has determined that the thermal system insulation is fiberglass, foam glass, or rubber.

#### MISCELLANEOUS MATERIALS

Miscellaneous materials are grouped into different homogeneous areas and at least two bulk samples are collected from each homogeneous area as per the clarification letter from the EPA and the Professional Abatement Contractors of New York, Inc in November of 2007.

Samples collected were analyzed by a laboratory approved under the New York State Department of Health Environmental Laboratory Approval Program (NYSDOH ELAP). Samples were analyzed in the laboratory by Polarized Light Microscopy (PLM), Polarized Light Microscopy-NOB (PLM-NOB) and/or Quantitative Transmission Electron Microscopy (QTEM), as required. Sample collection and laboratory analysis were conducted in compliance with the requirements of Title 12 NYCRR Part 56-5.1, 29 CFR 1926.1101 and standard EPA & OSHA accepted methods. Samples consisting of multiple layers were separated and analyzed independently in the laboratory.

### **3.2 Regulatory Guidelines and Requirements for ACM**

#### FEDERAL

In accordance with the Clean Air Act (CAA), the U.S. Environmental Protection Agency (EPA) established National Emission Standards for hazardous Air Pollutants (NESHAP) to protect the public from exposure to airborne pollutants. Asbestos was one of the air pollutants, which was addressed under the NESHAP 40 CFR Part 61. The purpose of asbestos NESHAP regulations is to protect the public health by minimizing the release of asbestos when facilities, which contain ACM, are being renovated or demolished. EPA is responsible for enforcing regulations related to asbestos during renovations and demolition, however, the CAA allows the EPA to delegate this authority to State and Local Agencies. Even after EPA delegate's responsibility to a state or Local agency, EPA retains the authority to oversee agency performance and to enforce NESHAP regulations as appropriate.

#### NEW YORK STATE

Asbestos in New York State is regulated under the Labor Law Section 906, Part 56 of Title 12 of the Official Compilation of Codes, Rules, and Regulations. Within the department and for the purpose of the Department of Labor, this part (rule) is known as Industrial Code Rule No. 56 (ICR 56) relating to hazards to the public safety and health, during the removal, encapsulation, or disturbance of friable asbestos, or any handling of ACM that may result in the release of asbestos fiber.

As specified in Title 12 NYCRR Part 56-5.1 (h) and (i), "If the building/structure asbestos survey finds that the portion of the building/structure to be demolished, renovated, remodeled, or have repair work contains ACM, PACM, suspect miscellaneous ACM assumed to be ACM, or asbestos material, which is

impacted by the work, the owner or the owner's agent shall conduct, or cause to have conducted, asbestos removal performed by a licensed asbestos abatement contractor in conformance with all standards set forth in this Part. All ACM, PACM, suspect miscellaneous ACM assumed to be ACM, or asbestos material impacted by the demolition, renovation, remodeling or repair project shall be removed as per this Part, prior to access or disturbance by other uncertified trades or personnel. No demolition, renovation, remodeling or repair work shall be commenced by any owner or the owner's agent prior to the completion of the asbestos abatement in accordance with the notification requirements of this Part...All building/structure owners and asbestos abatement contractors on a demolition, renovation, remodeling, or repair project, which includes work covered by this part, shall inform all trades on the work site about PACM, ACM, asbestos material and suspect miscellaneous ACM...Bids may be advertised and contracts awarded for demolition, remodeling, renovation, or repair work, but no work on the current intermediate portion of the project shall commence on the demolition, renovation, remodeling or repair work by any owner or agent prior to completion of all necessary asbestos abatement work for the current intermediate portion of the entire project, in conformance with all standards set forth in this Part." All work conducted should be in accordance with all legal requirements, including but not limited to U.S. Environmental Protection Agency (EPA) National Emissions Standards for Hazardous Air Pollutants (NESHAP) [40 CFR Part 61], New York State Industrial Code Rule 56 Asbestos Regulations (ICR 56) and Chapter 1 of Title 15 of the Rules of the City of New York Regulations, as applicable. Advance notification of the asbestos project to the USEPA, NYSDOL, and NYCDEP may be required.

#### CONCEALED ACM

In addition to the ACMs identified at the site, there is a possibility that concealed suspect ACM may exist at the building/structure. As such, if any concealed suspect ACM is encountered during future construction related activities, the work should immediately stop. Prior to resuming the work, the suspect ACM should either be 1) Sampled by an appropriately-certified asbestos professional and submitted to an Approved NYSDOH ELAP laboratory for asbestos analysis or 2) Presumed to be ACM (PACM) and removed by a licensed asbestos abatement contractor for disposal in accordance with all

### **3.3 Regulatory Guidelines and Requirements for ACM Contamination**

#### **(NYS DOL ICR-56)**

**56-1.5 Responsibility for Cleanup of Uncontrolled Disturbance.** If there is an incidental disturbance or other disturbance (not as part of a controlled asbestos project) of ACM, PACM, asbestos material, or suspect miscellaneous ACM assumed to be ACM at a building or structure, upon discovery of the disturbance, the property owner shall be responsible for contracting with a licensed asbestos contractor for immediate isolation of the disturbance and cleanup in accordance with all provisions of this Part.

#### **DOL Guidance Document**

56-1.5 Question: Responsibility for Cleanup of Uncontrolled Disturbance. Are property owners subject to a potential violation of ICR 56 if ACM or PACM is disturbed by a trade's contractor or other entity unbeknownst to the owner and the damaged material or debris fallout is subsequently discovered by an Asbestos Control Bureau inspector? Is the party who disturbed the ACM or PACM required to notify the property owner, to aid the owner in complying with this requirement?

Answer/Guidance: Similar to US OSHA, any contractor performing a general supervisory role on any renovation, remodeling, demolition, or repair project is responsible for informing all contractors under their direct general supervision and control that any disturbance to ACM, PACM and asbestos material (known or assumed) at the site is prohibited by any contractor other than the asbestos contractor.

Also, the contractor performing the general supervisory role shall require all asbestos contractors under their direct general supervision and control to be in compliance with Code Rule 56. (This requirement does not include entering asbestos project work areas to check on the asbestos contractor.)

In addition, Section 1.4 includes contractor notification requirements to the building/structure owner or their representative for newly discovered materials and any disturbances to ACM, PACM or suspect miscellaneous materials.

Once a disturbance is discovered, it must be cleaned up as soon as possible. For all disturbances, the room/space/area must be vacated and isolated immediately, and an asbestos contractor must be hired for appropriate cleanup of affected room/area/space. A site-specific variance is necessary for cleanup of any disturbance other than a Minor size incidental disturbance.

## **4.0 Lead-based Paint (LBP)**

### **4.1 Applicable Standards/Guidelines for LBP**

The U.S Department of Housing and Urban Development (HUD) defines the action level for lead-based paint as a lead content equal to or greater than 1.0 milligrams of lead per square centimeter of painted surface ( $\geq 1.0 \text{ mg Pb/cm}^2$ ) when measured with an XRF analyzer or 0.5 percent by weight when chemically tested. This definition is described in the HUD “Lead-Based Paint: Interim Guidelines for Hazard Identification and Abatement in Public and Indian Housing, September 1990”. The state of New York’s definition of the action level for lead-based paint is consistent with the level established by HUD.

Please note that although the HUD defines lead-based paint as paint having lead concentrations equal or greater than 1.0 mg/cm<sup>2</sup>, the Occupational Safety and Health Administration (OSHA) considers any concentration of lead in paint to be lead-containing paint. Regardless of the lead concentrations in paint, the contractor shall comply with 29 CFR 1926.62, OSHA regulations, and take precautionary measures for dust control and limit employee exposure to lead dust during the renovations.

Painted surfaces that would be impacted by planned activities such as drilling, cutting, scrapping, etc. and create dust should be properly addressed by following safe work practices, good housekeeping procedures and/or following proper abatement procedures. Grinding and sanding of paint without HEPA filter exhaust, open flame gas fired torch, unconfined abrasive blasting, and chemical strippers containing methylene chloride or other human carcinogenic chemicals are not recommended.

The Federal Resource Conservation and Recovery Act (RCRA) regulation governs the handling, transportation, and disposal of hazardous materials. Every demolition/renovation debris generator has the responsibility to determine whether the debris exhibits one or more of the characteristic wastes listed in subpart C of 40 CFR Part 261. In the case of demolition debris, lead in LBP is a characteristic waste, and therefore, it is the responsibility of the renovation/demolition debris generator to characterize the waste prior to its disposal and, if found to be hazardous waste as defined by Federal Statutes, to be properly handled and disposed.



Metal objects painted with LBP are exempt from disposal regulations applicable to lead, provided they are properly recycled. All metal objects that are painted with LBP should be sent to a certified recycling facility.

This report is not Lead-based Paint abatement specification and should not be used for specifying removal methods or techniques.

## **4.2 XRF Information**

Viken Pb200e X-Ray Fluorescence (XRF) Analyzer(s) were used to survey the building/structure or portion thereof identified to be demolished, renovated, remodeled or repaired for the presence of LBP. The Viken Pb200e XRF Analyzer(s) are using a sealed source of Co-57 with 6mCi sources, meeting HUD requirements for the analysis of paint films. During the analysis, the intensity of the x-rays is converted by the instrument's internal software into an estimate of the concentration of lead in the substance being analyzed. The results are interpreted as concentrations of lead in milligrams per square centimeter. This device is a field-screening tool, used to collect multiple readings in a short period of time. The method of measurement is based on spectrometric analysis of lead x-ray fluorescence within a controlled depth of interrogation. The reading is an estimate of lead content in all layers of paint. The results are displayed in milligrams per square centimeter (mg/cm<sup>2</sup>). The device(s) used for this inspection were the Viken Pb200e X-Ray Fluorescence (XRF) Analyzer(s) Serial Number 2104, Source date 4/1/23, Serial number 2231, Source date 5/15/22, Serial number 2595, Source date 2/15/23 and/or Serial number 2901, Source date 2/15/23.

## **5.0 PolyChlorinated Biphenyls (PCB)**

### **5.1 Background and Protocol for PCBs**

PolyChlorinated Biphenyls (PCB) are a group of manmade chemicals. PCBs were widely used in building materials and electrical products in the past. The U.S. Environmental Protection Agency banned the manufacturing and certain uses of PCBs in 1978, but buildings constructed or renovated between 1950 and 1978 may still have building materials and electrical products that contain PCBs. Examples of products that may contain PCBs include caulk, paint, glues, plastics, fluorescent lighting ballasts, transformers and capacitors.

PCBs are currently prohibited from being used in caulk and other commodities (U.S. EPA, 40 CFR 761). However, prior to 1977, PCBs were present in some caulking materials used in the construction of schools and other buildings. Studies have shown that concentrations of PCB can exceed 1% (10,000 ppm) by weight in some caulk materials. An investigation of 24 buildings in the Greater Boston Area revealed that one-third of the buildings tested (8 of 24) contained caulking materials with polychlorinated biphenyl (PCB) content exceeding 50 ppm by weight with an average concentration of 15,600 ppm or 1.5% (Herrick et al., 2004). These buildings included schools and other public buildings.

The U.S. EPA regulates the disposal of caulk, as well as soil and other materials contaminated with PCBs from caulk, if the concentration of PCBs exceeds 50 ppm. Such materials must be disposed at an appropriate approved or permitted facility.

U.S. EPA regulation 40 CFR 761 defines "PCB remediation waste" to include contaminated soil, and specifies a clean-up level of <1ppm without further conditions for unrestricted use in "high occupancy areas" (i.e., areas where individuals may be present for 335 hours or more per year). PCB caulk is defined as a PCB bulk product waste, and its disposal is subject to U.S. EPA regulations under the Toxic Substances Control Act (40 CFR761.62).

This protocol has been developed in consultation with the New York State Department of Health, Division of Environmental Health Assessment, Bureau of Toxic Substance Assessment to address concerns about properly managing caulk containing PCBs that will be disturbed during building renovation and maintenance.

#### CAULK SAMPLE COLLECTION

Buildings constructed or renovated between 1950 and 1977 have a potential to contain PCBs in existing caulk. Representative samples of caulking materials from these buildings prior to renovation or demolition work should be tested to determine whether the caulk is contaminated with PCBs. Professional judgement should be used to design the sampling plan for characterizing caulk throughout the building. The consultant should pay particular attention to construction and maintenance records and to the appearance of caulking materials (likenesses and differences). Samples should be taken from window frames or expansion joints that have not been repaired or replaced since 1977. Depending on specific information provided in the workplan developed by the project manager, such as window placement, compositing of some caulk samples might be appropriate. Caulk from different time periods or that have a different appearance should not be composited together.

It is important to note that caulk used during the time period of interest may also contain asbestos or lead. Therefore, the work plan should include testing, handling and disposal requirements appropriate for such regulated materials.

#### SOIL SAMPLE COLLECTION

Buildings constructed or renovated between 1950 and 1977, which have undergone further renovation after 1977, may have residual PCB contamination in adjacent soils. An adequate representation of surface soils should be tested to assess the potential for residual PCB contamination.

When designing a representative soil sampling plan, the likelihood of soil contamination from deteriorated or deteriorating caulk should be considered. Caulk that has in the past dried out and fallen to the ground is the most important source of soil contamination. Thus, sampling should include soil beneath windows where caulk has obviously deteriorated or been replaced because of previous deterioration. Areas subject to the stress of sun and prevailing weather (typically the southern and western side of each structure) should be included for sampling. These samples would provide a conservative evaluation of soil conditions due to an increased potential for material failure, possibly resulting in contamination of soil. Also, if earlier renovation or demolition work may have stockpiled potentially contaminated caulk in other school areas, the school should consider having soils in those areas tested as well.

Soil sampling should focus on areas of the building where "banks" or "gangs" of windows exist/were replaced and areas of the structure where large expansion joints are located. This would provide a conservative evaluation of potential soil contamination and permit efficient sampling.

Any obvious pieces of caulk encountered during the collection of soil samples should be removed from the soil, categorized (with respect to location and depth) and treated as a separate potential sample.

Depth – At each soil sample location, soil should be collected in depth intervals of 0-2 inches, 2-6 inches and 6-12 inches. The surface soil sample (0-2 inches) should be collected from below the vegetative surface layer, if present.

Distance from Structure – Samples should be collected within 1 foot of the building and 5 feet from the building.

Samples should be collected in a manner that prevents cross-contamination. Augers or driven core samplers should be avoided, as any caulk caught on the edge of this type of tool could be driven to lower intervals. Using a designated trowel for each sample location and each interval of depth is encouraged. If the sampling tool is field cleaned between samples, do so in a manner that does not add solvent contamination to the environment.

#### NOTE

Sampling was performed by **Adelaide** in compliance with protocols outlined by New York State Education Department (NYSED) and USEPA 40 CFR 761, as described above. Only one sample per homogeneous area was required for analysis of suspect PCB-containing materials. Bulk sample(s) were properly packaged and forwarded, with associated Chain of Custody (COC), to a laboratory approved under the New York State Department of Health Environmental Laboratory Approval Program (NYSDOH ELAP), for analysis using method SW846-3550B/8082. The analysis will determine if the suspect material will be classified as PCB-containing at or above 50 ppm or mg/kg as per the EPA regulations. Copies of the analytical results are contained within attached appendices for review.

## **6.0 General Discussion**

All construction personnel as well as individuals who have access to locations where asbestos-containing materials (ACM), lead-based paints (LBP) and/or polychlorinated biphenyls (PCB) exists should be informed of its presence and the proper work practices in these areas. Conspicuous labeling of all ACM is suggested to ensure personnel is adequately informed. Personnel should be informed not to rest, lean or store material or equipment on or near these surfaces and not to cut, saw, drill, sand or disturb ACM. All removal, disturbance, and repair of ACM should be performed in compliance with Title 12 NYCRR Part 56 by persons properly trained to handle ACM. Facility custodial and maintenance personnel should receive training commensurate with their work activities; as defined in 29 CFR 1910.1001.

## **7.0 Disclaimers**

**Adelaide** certifies that the information contained within this report is based solely upon site observations and the results of laboratory analysis for samples collected during this survey/assessment. These observations and results are time dependent, subject to changing site conditions and revisions to Federal, State and Local regulations. **Adelaide** warrants that these findings have been promulgated after being prepared in general accordance with generally accepted practices in the abatement industries. **Adelaide** also recognizes that inspection laboratory data is not usually sufficient to make all abatement and management decisions. No other warranties are expressed or implied.

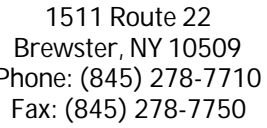
The materials sampled, as part of this survey, were limited to building materials potential affected by the provided scope of work only. All building materials outside the scope of work that have the potential to be disturbed, impacted, or if the scope of work is to change, are to be presumed asbestos-containing materials (PACM). Identified PACM **must** either be sampled by a licensed NYS Asbestos Inspector and/or abated/removed and disposed of by a licensed NYS Asbestos Abatement Contractor.

Due to the potential for concealed Asbestos-containing Materials (ACM) and/or other regulated materials, this report should not be construed to represent all ACM and/or regulated materials within the site(s). All quantities of ACM and/or other regulated materials identified, and all dimensions listed within this report are approximate and should be verified On-site.

This report is generated for the exclusive use of the client and is not designed to serve as a specification for abatement. The owner is strongly encouraged to contract with a consultant having a current Asbestos Project Designer Certificate as issued by New York State Department of Labor for the preparation of contract specifications, work plans, and/or drawings prior to requesting bids for the abatement or removal of the materials identified in this report.

NYSDOH issued an Interim Guidance Letter, on July 9, 2013, which outlined the approved testing alternative for materials containing vermiculite. Specifically, "...Where TSI, surfacing materials, or other PACM or miscellaneous suspect ACM contain greater than 10% vermiculite, Item 198.6 may be used to evaluate the asbestos content of the material; provided, however, that any test results using this method must be reported with the following conspicuous disclaimer: *"This method does not remove vermiculite and may underestimate the level of asbestos present in a sample containing greater than 10% vermiculite."* On July 22, 2014, NYSDOH issued a Regulatory Guidance Letter outlining the new approved analytical methods for testing sprayed-on fireproofing (SOF) that contains vermiculite. NYSDOH authorized the use of **two** analytical methods to evaluate the asbestos content of SOF that contains vermiculite. As per NYSDOH Guidelines, *"After October 31, 2014, one of the new methods **must** be used to test SOF-V, regardless of the percent of vermiculite."* On May 6, 2016, NYSDOH issued a Regulatory Guidance Letter outlining the new protocol for analytical procedure for surfacing materials (ie. plaster, stucco, etc.) that contain vermiculite. As per NYSDOH Guidelines, *"The original July 2013 and July 2014 letters addressed SOF-V only. Both NYS DOH's Item 198.8 and RJ Lee Group Method 055 shall now be applied to test for vermiculite in other Surfacing Material (SM) as defined in 12 NYCRR Part 56 (NYS Industrial Code Rule 56)."*

**APPENDIX A**  
**ACM LOCATION MAP(S)**



**CLIENT:**  
**CSArch**  
19 Front Street  
Newburgh, New York 12550

**(Client) Project #**

**SURVEY LOCATION:**  
**Henry Barnard Early**  
**Childhood Center**  
129 Barnard Road  
New Rochelle, New York 10801

ROOF 'C'

'D'

**DATE: 07/11/2024**

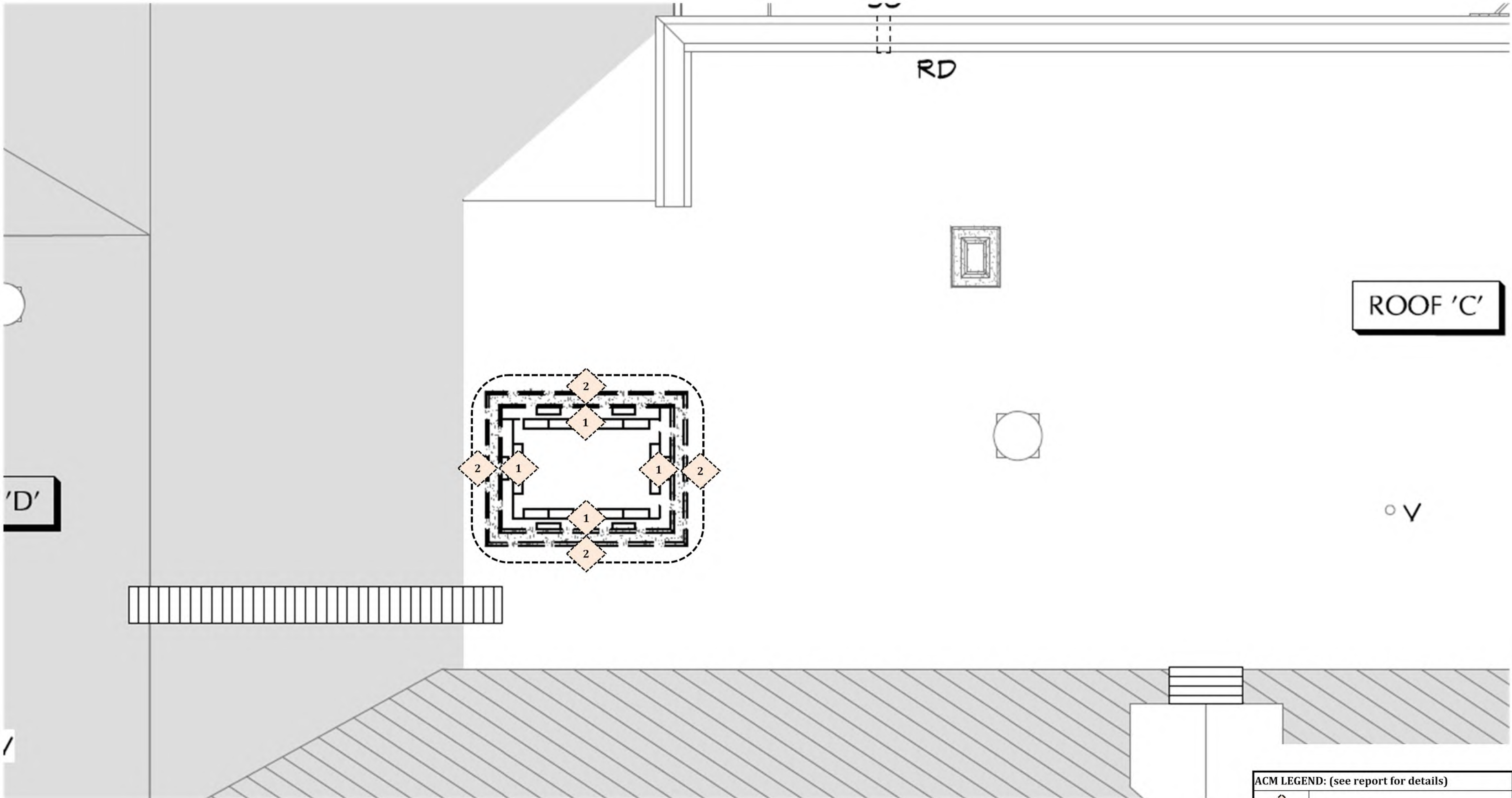
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**ISSUED FOR:**  
Limited HazMat Survey

ADELAIDE PROJECT NO.:  
CSA:23324.00-IN

**DRAWING PREPARED BY:**  
**DWS**

**HBE\_ASB-02**

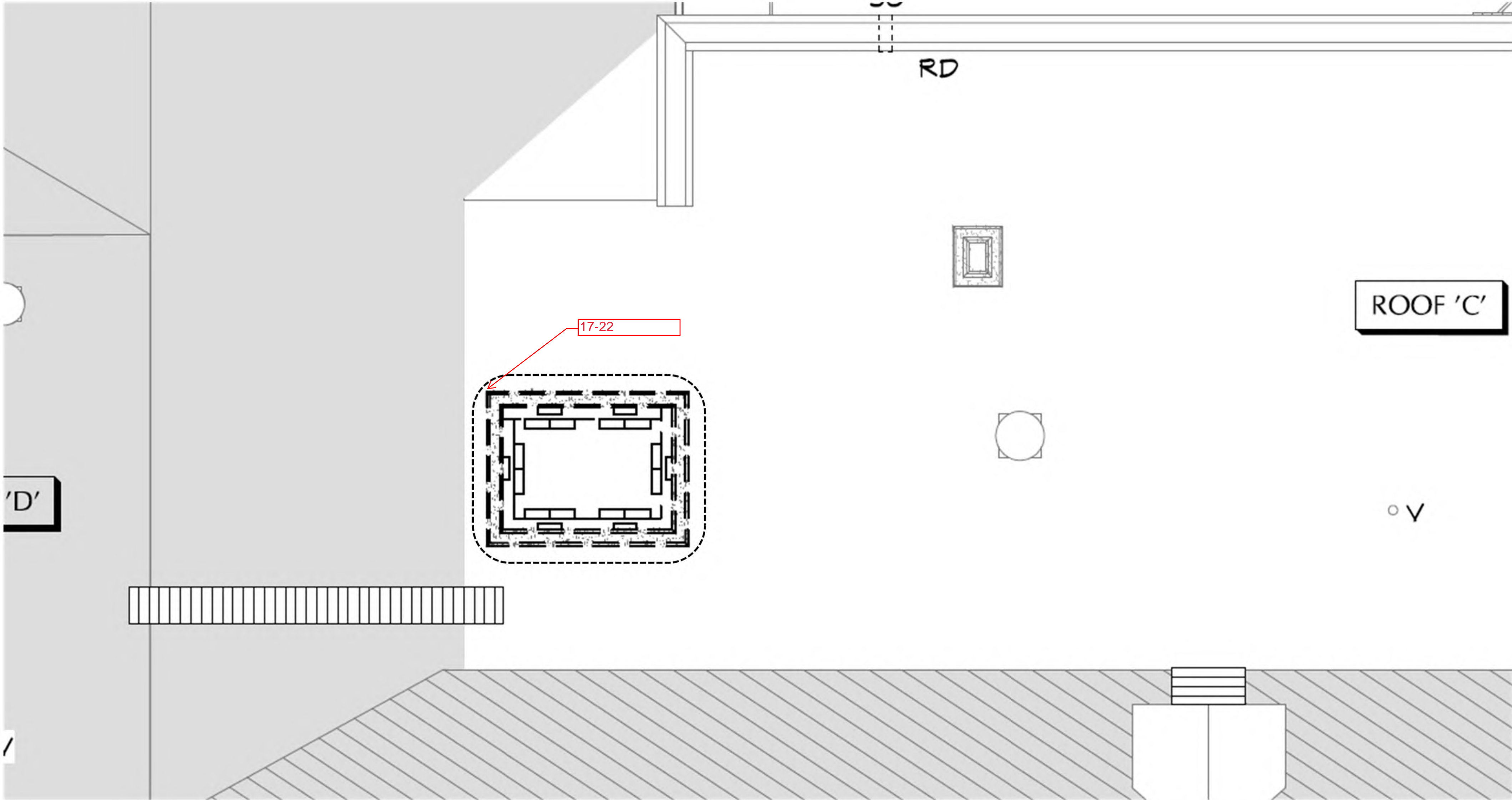


### Partial Roof Plan - Limited ACM Locations

\*ACM locations identified on this drawing are ONLY limited to the dates of the inspection that was conducted\*

**APPENDIX B**  
**SAMPLE LOCATION MAP(S)**





**CLIENT:**  
**CSArch**  
19 Front Street  
Newburgh, New York 12550

**(Client) Project #**

**SURVEY LOCATION:**  
**Henry Barnard Early  
Childhood Center**  
129 Barnard Road  
New Rochelle, New York 10801

**DATE:** 07/12/2024

**DRAWING VERSION:** No. 1

**ISSUED FOR:**  
Limited HazMat Survey

**ADELAIDE PROJECT NO.:**  
CSA:23324.00-IN

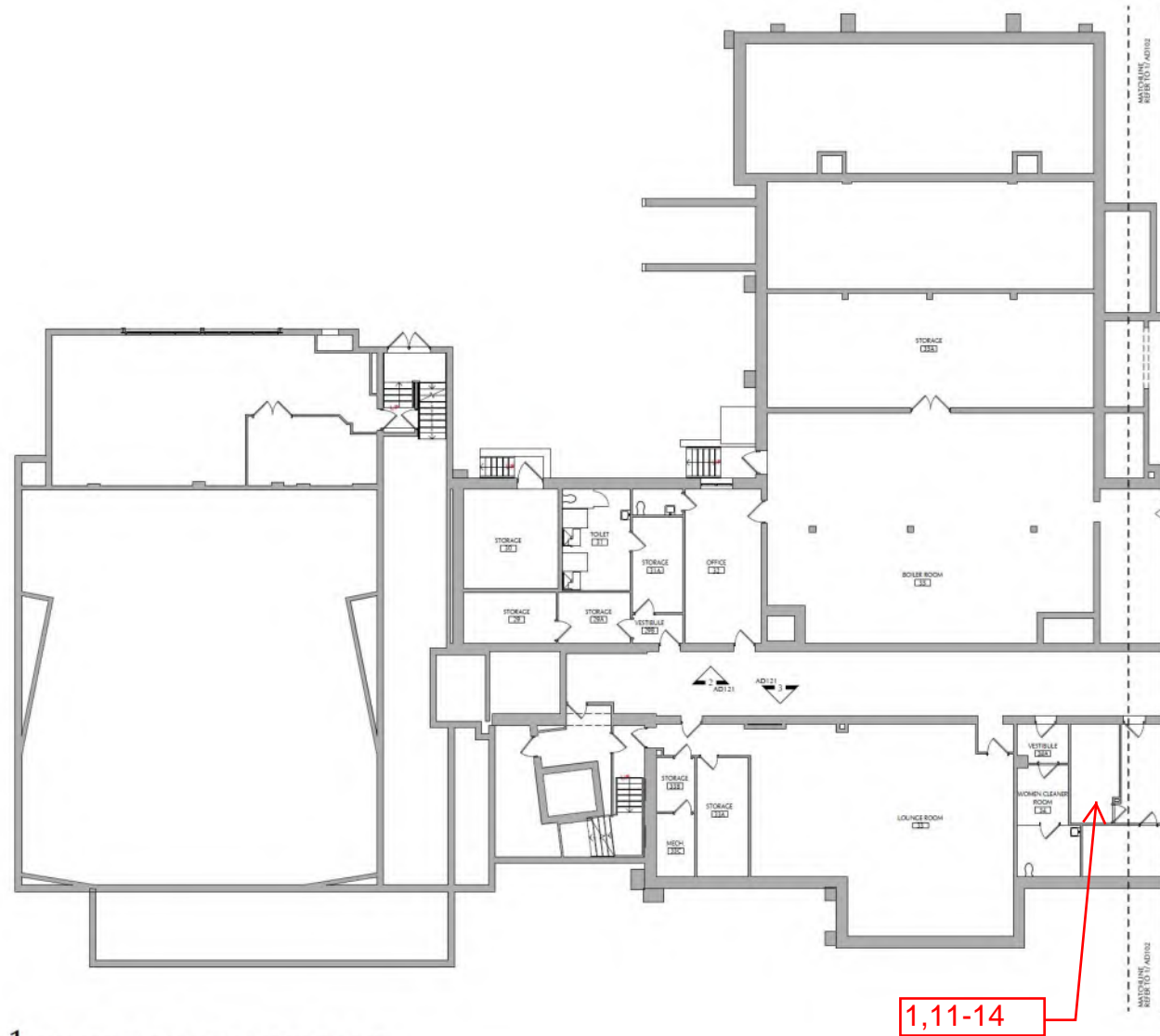
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DWS

**HBE\_SL-02**

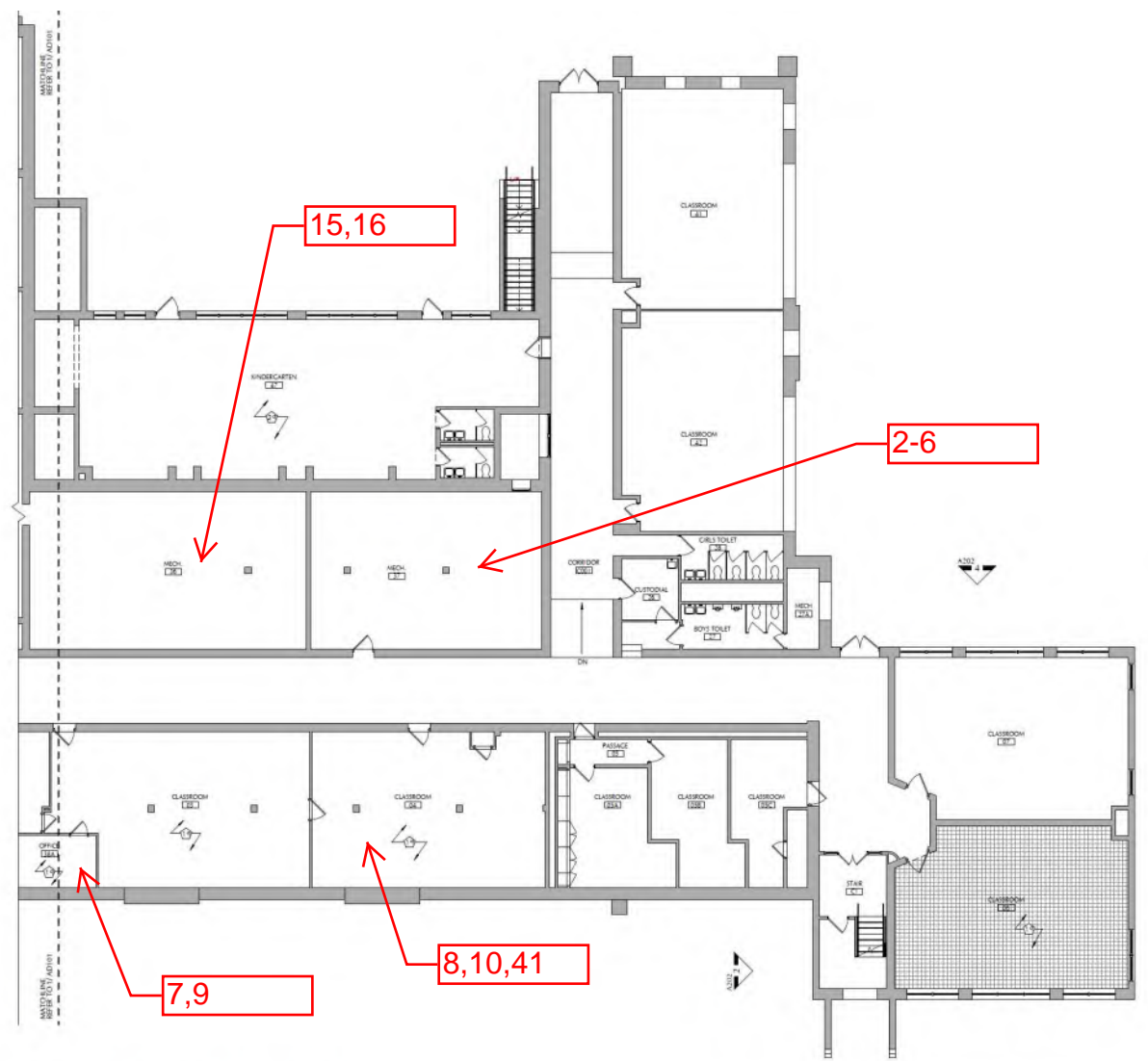


**APPENDIX C**  
**PREVIOUS REPORTS SAMPLE LOCATION MAP(S)**

**HENRY  
BARNARD  
EARLY  
CHILDHOOD  
CENTER**



**1** AREA 'A' GROUND FLOOR DEMOLITION PLAN  
AD101 1/8" = 1'-0"



**1** AREA 'B' GROUND FLOOR DEMOLITION PLAN  
AD102 1/8" = 1'-0"

Ground Floor Key Plan - Sample Locations  
\*\*Drawing Not to Scale\*\*

**Henry Barnard Elementary School**  
129 Barnard Road  
New Rochelle, New York 10801

**CSArch**  
19 Front Street  
Newburgh, New York 12550

**SED Project #**  
66-11-00-01-0-004-012

**Adelaide**  
ENVIRONMENTAL HEALTH  
1511 Route 22  
Brewster, NY 10509  
Phone: (845) 278-7710  
Fax: (845) 278-7750

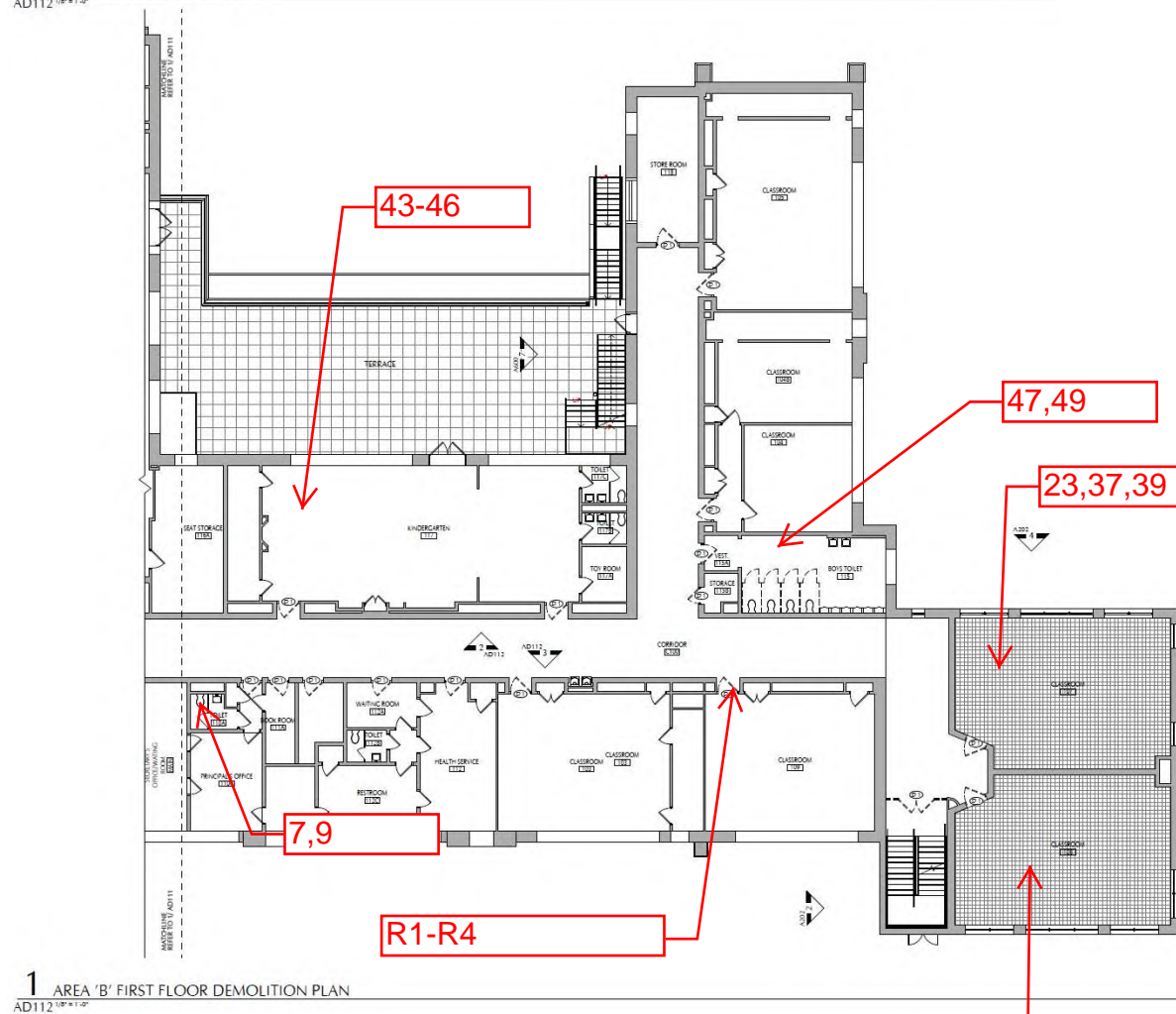
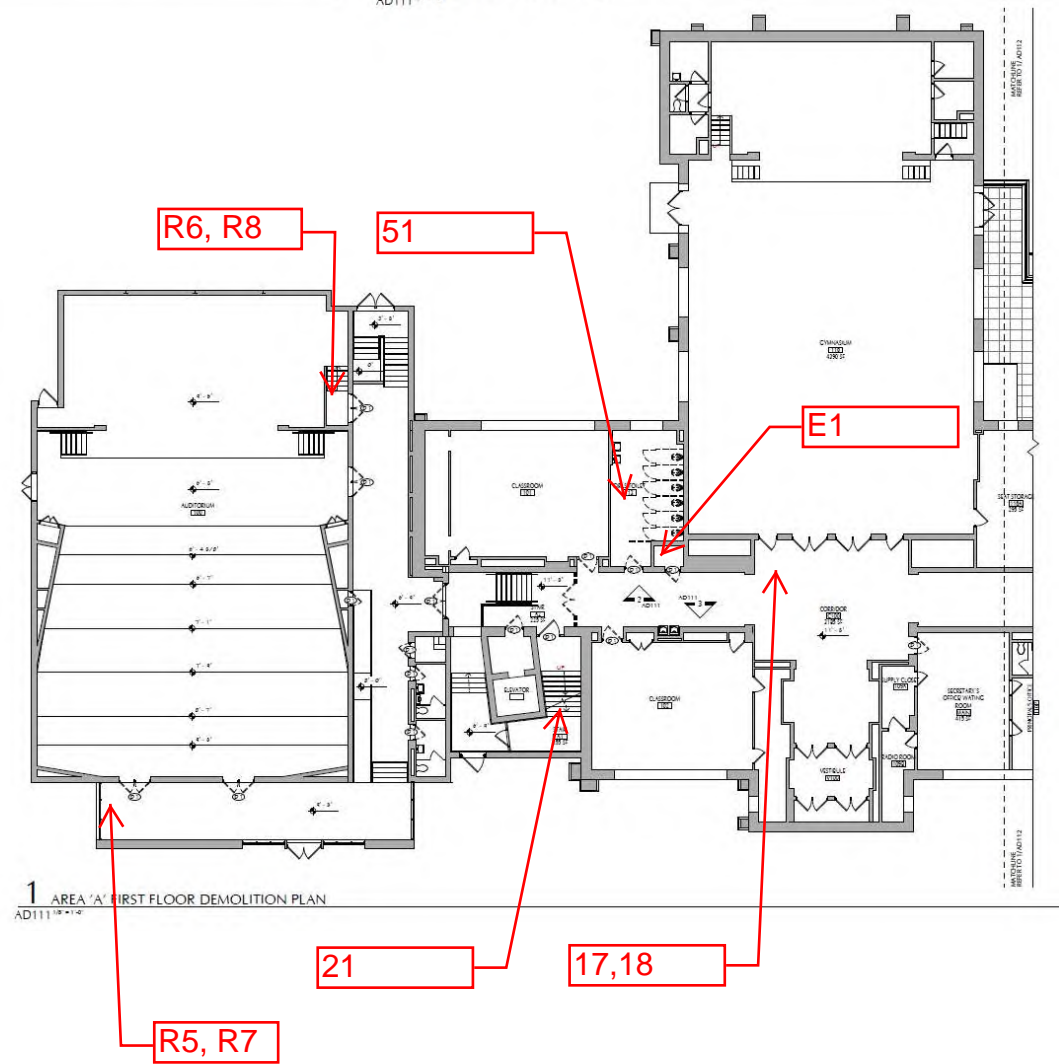
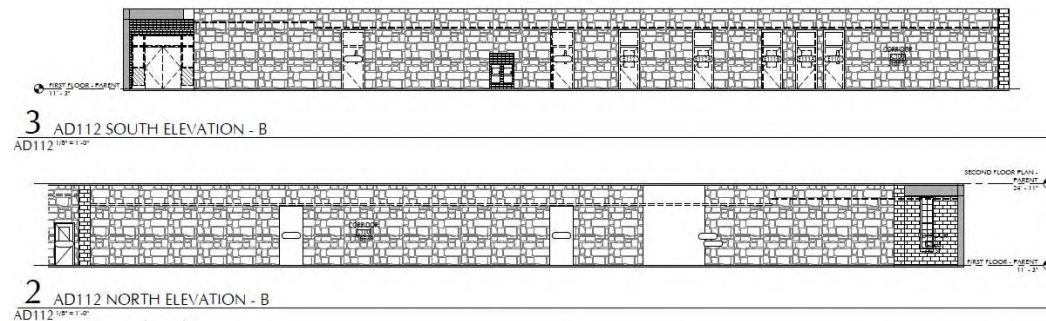
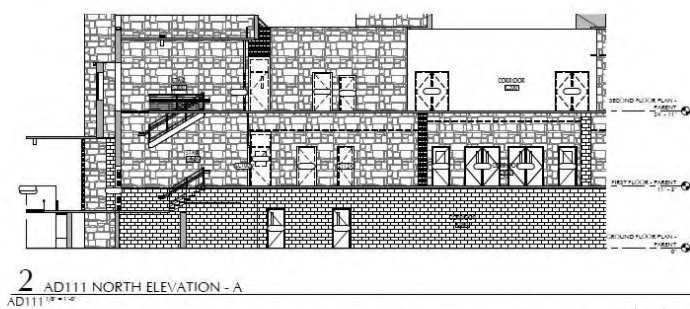
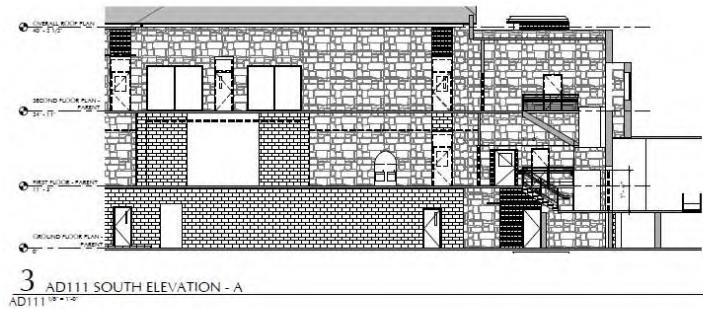
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**Version #** 1

**Issued For:**  
Limited Renovation Asbestos Survey

**Adelaide Project NO.**  
CSA:18147-00-IN

**Drawing Prepared By:**  
PJP

**SL-01**



First Floor Key Plan - Sample Locations  
 \*\*Drawing Not to Scale\*\*

**Henry Barnard Elementary School**  
 129 Barnard Road  
 New Rochelle, New York 10801

**CSArch**  
 19 Front Street  
 Newburgh, New York 12550

**SED Project #**  
 66-11-00-01-0-004-012



1511 Route 22  
 Brewster, NY 10509  
 Phone: (845) 278-7710  
 Fax: (845) 278-7750

**Date:** 09/12/2019  
**Version #** 2

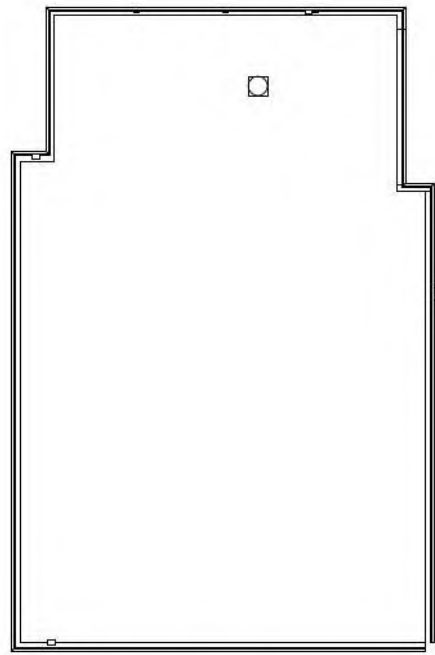
**Issued For:**  
 Limited Renovation Asbestos Survey

**Adelaide Project NO.**  
 CSA:18147-00-IN

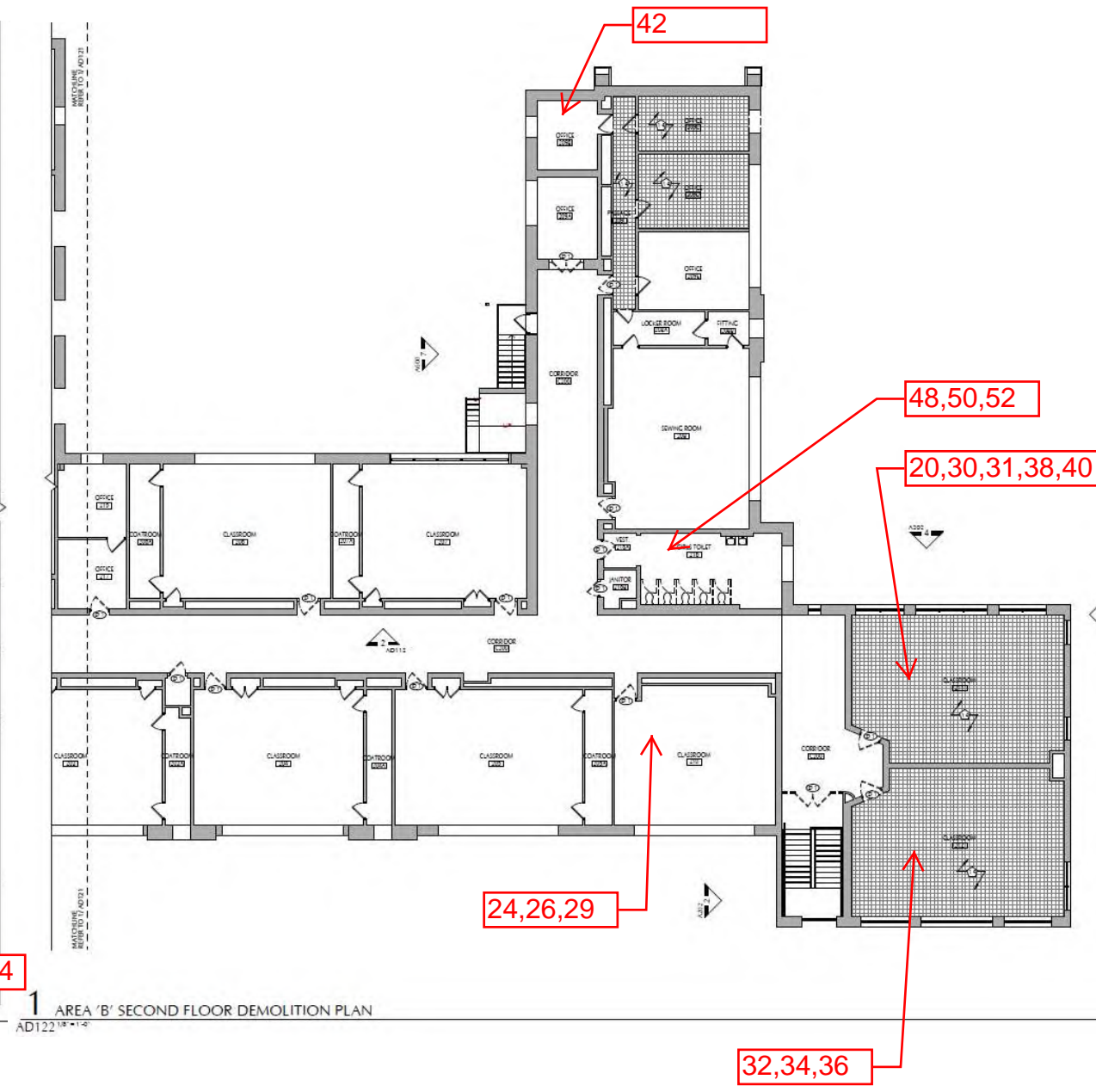
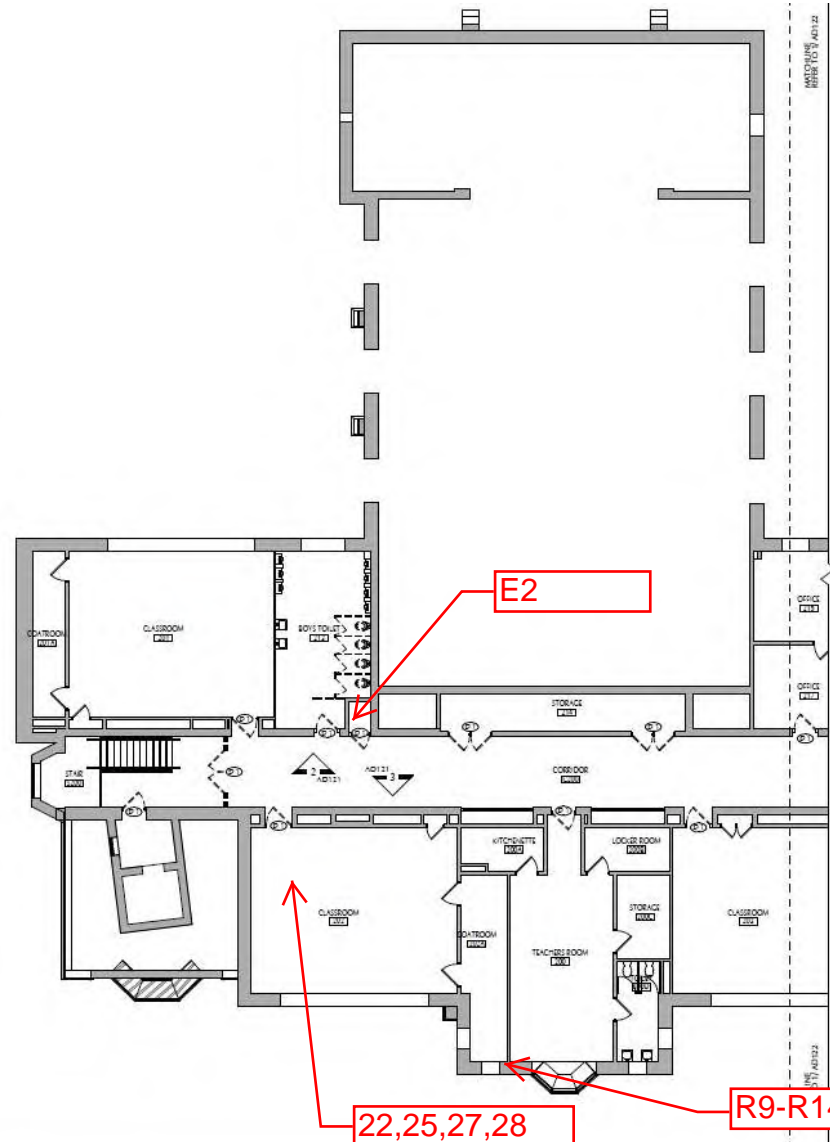
**Drawing Prepared By:**  
 PJP & RS

**SL-02**





1 AREA 'A' SECOND FLOOR DEMOLITION PLAN  
AD121 1/8" = 1'-0"



1 AREA 'B' SECOND FLOOR DEMOLITION PLAN  
AD122 1/8" = 1'-0"

Second Floor Key Plan - Sample Locations  
\*\*Drawing Not to Scale\*\*

Henry Barnard Elementary School  
129 Barnard Road  
New Rochelle, New York 10801

CSArch  
19 Front Street  
Newburgh, New York 12550

SED Project #  
66-11-00-01-0-004-012

**Adelaide**  
ENVIRONMENTAL HEALTH  
1511 Route 22  
Brewster, NY 10509  
Phone: (845) 278-7710  
Fax: (845) 278-7750

Date: 09/12/2019  
Version # 2

Issued For:  
Limited Renovation Asbestos Survey

Adelaide Project NO.  
CSA:18147-00-IN

Drawing Prepared By:  
PJP & RS

SL-03





Exterior Key Plan - Sample Locations  
\*\*Drawing Not to Scale\*\*

<b>Henry Barnard Elementary School</b> 129 Barnard Road New Rochelle, New York 10801		<b>CSArch</b> 19 Front Street Newburgh, New York 12550	
<b>SED Project #</b> 66-11-00-01-0-004-012			
 <b>Adelaide</b> ENVIRONMENTAL HEALTH 1511 Route 22 Brewster, NY 10509 Phone: (845) 278-7710 Fax: (845) 278-7750			
<b>Date:</b> 04-25-2019	<b>Version #</b> 1	<b>Issued For:</b> Limited Renovation Asbestos Survey	
		<b>Adelaide Project NO.</b> CSA:18147.00-IN	<b>Drawing Prepared By:</b> PIP
<b>SL-04</b>			





1511 Route 22  
Brewster, NY 10509  
Phone: (845) 278-7710  
Fax: (845) 278-7750

**CLIENT:**  
**Joseph Arnow**  
**CSArch**  
19 Front Street  
Newburgh, New York 12550

**(Client) Project #**  
SED Project#  
66-11-00-01-0-004-012

**SURVEY LOCATION:**  
**Henry Barnard**  
**Elementary School**  
**"Capital Projects Phase 4"**  
129 Barnard Road  
New Rochelle, New York 10801

DATE: 07/07/2020

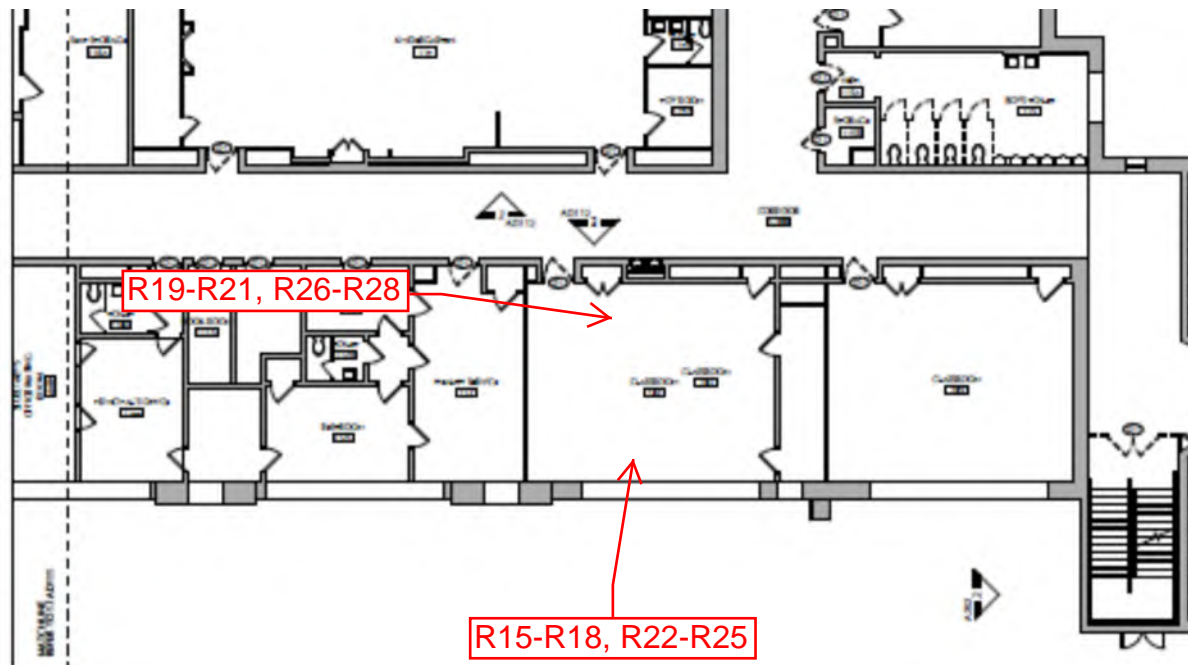
DRAWING VERSION: No. 1

**ISSUED FOR:**  
Limited HazMat Survey

**ADELAIDE PROJECT NO.:**  
CSA:18147.00-IN

**DRAWING PREPARED BY:**  
Robert See

**SL-05**



First Floor Partial Key Plan - Sample Locations

**\*\*Drawing Not to Scale\*\***



1511 Route 22  
Brewster, NY 10509  
Phone: (845) 278-7710  
Fax: (845) 278-7750

**CLIENT:**  
CSArch  
19 Front Street  
Newburgh, New York 12550

**(Client) Project #**  
66-11-00-01-0-004-012

**SURVEY LOCATION:**  
Henry Barnard Elementary School  
129 Barnard Road  
New Rochelle, New York 10801

**DATE:** 07/14/2021

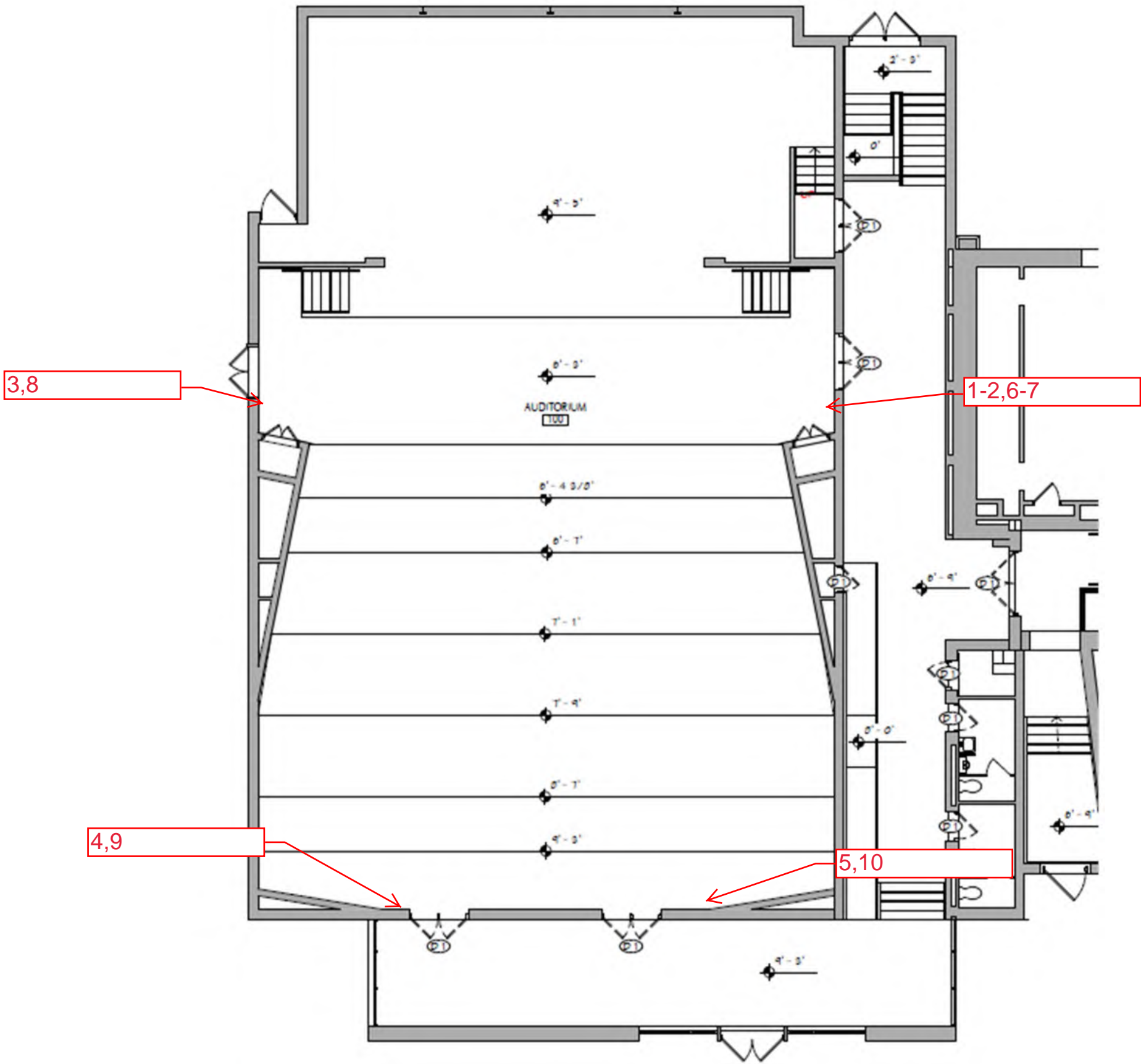
**DRAWING VERSION:** No. 1

**ISSUED FOR:**  
Limited HazMat Survey

**ADELAIDE PROJECT NO.:**  
CSA: 18147.00-IN

**DRAWING PREPARED BY:**  
DWS

**SL-06**



**1** AREA 'A' FIRST FLOOR DEMOLITION PLAN  
AD111 1/8" = 1'-0"

Partial First Floor Key Plan - Sample Locations  
\*\*Drawing Not to Scale\*\*



**APPENDIX D**  
**ACM PHOTO(S)**

**HENRY  
BARNARD  
EARLY  
CHILDHOOD  
CENTER**

**AmeriSci New York**

117 EAST 30TH ST.  
NEW YORK, NY 10016  
TEL: (212) 679-8600 • FAX: (212) 679-3114

## PLM Bulk Asbestos Report

Adelaide Environmental Health  
Attn: John Soter  
1511 Rte. 22 Suite C24  
  
Brewster, NY 10509

**Date Received** 07/10/24 **AmeriSci Job #** 224071913  
**Date Examined** 07/11/24 **P.O. #**  
**ELAP #** 11480 **Page** 1 of 2  
**RE:** CSANR:23324.00-IN; Henry Barnard; 129 Barnard Rd., New Rochelle, NY 10801

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
17 7  <b>Analyst Description:</b> Gray, Homogeneous, Non-Fibrous, Cementitious, Bulk Material <b>Asbestos Types:</b> <b>Other Material:</b> Non-fibrous 100%	224071913-01  <b>Location:</b> Fl. R, Chimney - Stone Mortar (Older, Original)	<b>No</b>	NAD  (by NYS ELAP 198.1) by Kensen Caro on 07/11/24
18 7  <b>Analyst Description:</b> Gray, Homogeneous, Non-Fibrous, Cementitious, Bulk Material <b>Asbestos Types:</b> <b>Other Material:</b> Non-fibrous 100%	224071913-02  <b>Location:</b> Fl. R, Chimney - Stone Mortar (Older, Original)	<b>No</b>	NAD  (by NYS ELAP 198.1) by Kensen Caro on 07/11/24
19 8  <b>Analyst Description:</b> Gray, Homogeneous, Non-Fibrous, Cementitious, Bulk Material <b>Asbestos Types:</b> <b>Other Material:</b> Non-fibrous 100%	224071913-03  <b>Location:</b> Fl. R, Chimney - Stone Mortar (Repair, Gray)	<b>No</b>	NAD  (by NYS ELAP 198.1) by Kensen Caro on 07/11/24
20 8  <b>Analyst Description:</b> Gray, Homogeneous, Non-Fibrous, Cementitious, Bulk Material <b>Asbestos Types:</b> <b>Other Material:</b> Non-fibrous 100%	224071913-04  <b>Location:</b> Fl. R, Chimney - Stone Mortar (Repair, Gray)	<b>No</b>	NAD  (by NYS ELAP 198.1) by Kensen Caro on 07/11/24
21 9  <b>Analyst Description:</b> Beige, Homogeneous, Non-Fibrous, Cementitious, Bulk Material <b>Asbestos Types:</b> <b>Other Material:</b> Non-fibrous 100%	224071913-05  <b>Location:</b> Fl. R, Chimney - Stone Mortar (Repair, Beige / Tan)	<b>No</b>	NAD  (by NYS ELAP 198.1) by Kensen Caro on 07/11/24

Client Name: Adelaide Environmental Health

## PLM Bulk Asbestos Report

CSANR:23324.00-IN; Henry Barnard; 129 Barnard Rd., New Rochelle, NY 10801

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
22 9	224071913-06	No	NAD
Location: Fl. R, Chimney - Stone Mortar (Repair, Beige / Tan)			(by NYS ELAP 198.1) by Kensen Caro on 07/11/24
Analyst Description: Beige, Homogeneous, Non-Fibrous, Cementitious, Bulk Material			
Asbestos Types:			
Other Material: Non-fibrous 100%			

### Reporting Notes:

Analyzed by: Kensen Caro  
Date: 7/11/2024

Reviewed by: Kensen Caro



\*NAD/NSD =no asbestos detected; NA =not analyzed; NA/PS=not analyzed/positive stop, (SOF-V) = Sprayed On Fireproofing containing Vermiculite; (SM-V) = Surfacing Material containing Vermiculite; PLM Bulk Asbestos Analysis using Olympus, Model BH-2 Pol Scope, Microscope, Serial #: 229003, by Appd E to Subpt E, 40 CFR 763 quantified by either CVES or 400 pt ct as noted for each analysis (NVLAP 200546-0), ELAP PLM Method 198.1 for NY friable samples, which includes the identification and quantitation of vermiculite, or ELAP 198.6 for NOB samples, or EPA 400 pt ct by EPA 600-M4-82-020 (NY ELAP Lab 11480); Note:PLM is not consistently reliable in detecting asbestos in floor coverings and similar non-friable organically bound materials. NAD or Trace results by PLM are inconclusive, TEM is currently the only method that can be used to determine if this material can be considered or treated as non asbestos-containing in NY State (also see EPA Advisory for floor tile, FR 59,146,38970,8/1/94) National Institute of Standards and Technology Accreditation requirements mandate that this report must not be reproduced except in full without the approval of the lab.This PLM report relates ONLY to the items tested. RI Cert AAL-094, CT Cert PH-0186, Mass Cert AA000054, NJ Lab ID #NY031.

\_\_\_\_\_END OF REPORT\_\_\_\_\_

1454 Rte. 22, Suite B202  
Brewster, NY 10509  
845-278-7710  
845-278-7750 - fax

**Stop at 1st Positive per Homogenous Area**  
**Fax Results to 845-278-7750**  
**E-Mail results to AdelaideLabResults@Adelaidellc.com**

Client Name: Adelaide Environmental Health

**Table I**  
**Summary of Bulk Asbestos Analysis Results**

CSA: 23324.00-IN; Henry Barnard Early Childhood; 129 Barnard Road, New Rochelle, NY 10801

AmeriSci Sample #	Client Sample#	HG Area	Sample Weight (gram)	Heat Sensitive Organic %	Acid Soluble Inorganic %	Insoluble Non-Asbestos Inorganic %	** Asbestos % by PLM/DS	** Asbestos % by TEM
01	1	1	0.251	19.6	24.5	56.0	NAD	NAD
Location: Floor 2 - 2nd Floor Hallway - 2 x 4 Ceiling Tile With Holes								
02	2	1	0.270	19.6	29.8	50.6	NAD	NAD
Location: Floor 2 - 2nd Floor Hallway - 2 x 4 Ceiling Tile With Holes								
03	3	2	0.195	23.1	19.3	57.7	NAD	NAD
Location: Floor 2 - 2nd Floor Hallway - 2 x 4 Ceiling Tile With Craters								
04	4	2	0.162	23.8	19.7	56.4	NAD	NAD
Location: Floor 2 - 2nd Floor Hallway - 2 x 4 Ceiling Tile With Craters								
05	5	3	----	----	----	----	NAD	NA
Location: Floor 2 - 2nd Floor Hallway - Plaster Ceiling Top Coat								
06	6	3	----	----	----	----	NAD	NA
Location: Floor 2 - 2nd Floor Hallway - Plaster Ceiling Top Coat								
07	7	3	----	----	----	----	NAD	NA
Location: Floor 2 - 2nd Floor Hallway - Plaster Ceiling Top Coat								
08	8	4	----	----	----	----	NAD	NA
Location: Floor 2 - 2nd Floor Hallway - Plaster Ceiling Base Coat								
09	9	4	----	----	----	----	NAD	NA
Location: Floor 2 - 2nd Floor Hallway - Plaster Ceiling Base Coat								
10	10	4	----	----	----	----	NAD	NA
Location: Floor 2 - 2nd Floor Hallway - Plaster Ceiling Base Coat								
11	11	5	----	----	----	----	NAD	NA
Location: Floor 2 - 2nd Floor Hallway - Plaster Wall Top Coat								
12	12	5	----	----	----	----	NAD	NA
Location: Floor 2 - 2nd Floor Hallway - Plaster Wall Top Coat								
13	13	5	----	----	----	----	NAD	NA
Location: Floor 2 - 2nd Floor Hallway - Plaster Wall Top Coat								
14	14	6	----	----	----	----	NAD	NA
Location: Floor 2 - 2nd Floor Hallway - Plaster Wall Base Coat								
15	15	6	----	----	----	----	NAD	NA
Location: Floor 2 - 2nd Floor Hallway - Plaster Wall Base Coat								
16	16	6	----	----	----	----	NAD	NA
Location: Floor 2 - 2nd Floor Hallway - Plaster Wall Base Coat								

Client Name: Adelaide Environmental Health

**Table I**  
**Summary of Bulk Asbestos Analysis Results**

CSA: 23324.00-IN; Henry Barnard Early Childhood; 129 Barnard Road, New Rochelle, NY 10801

AmeriSci Sample #	Client Sample#	HG Area	Sample Weight (gram)	Heat Sensitive Organic %	Acid Soluble Inorganic %	Insoluble Non-Asbestos Inorganic %	** Asbestos % by PLM/DS	** Asbestos % by TEM
----------------------	----------------	------------	----------------------------	--------------------------------	--------------------------------	--	----------------------------	-------------------------

Analyzed by: Khaalid W. Perine  
Date: 12/6/2023



Reviewed by: Khaalid W. Perine



\*\*Quantitative Analysis (Semi/Full); Bulk Asbestos Analysis - PLM by Appd E to Subpt E, 40 CFR 763 or NYSDOH ELAP 198.1 for New York friable samples or NYSDOH ELAP 198.6 for New York NOB samples; TEM (Semi/Full) by EPA 600/R-93/116 (or NYSDOH ELAP 198.4; for New York samples). Analysis using Hitachi, Model H600-Noran 7 System, Microscope, Serial #: 600-27-6. NAD = no asbestos detected during a quantitative analysis; NA = not analyzed; Trace = <1%; (SOF-V) = Sprayed On Fireproofing containing Vermiculite; (SM-V) = Surfacing Material containing Vermiculite; Quantitation for beginning weights of <0.1 grams should be considered as qualitative only; Qualitative Analysis: Asbestos analysis results of "Present" or "NVA = No Visible Asbestos" represents results for Qualitative PLM or TEM Analysis only (no accreditation coverage available from any regulatory agency for qualitative analyses): NVLAP (PLM) 200546-0, NYSDOH ELAP Lab 11480, NJ Lab ID #NY031.

Warning Note: PLM limitation, only TEM will resolve fibers <0.25 micrometers in diameter. TEM bulk analysis is representative of the fine grained matrix material and may not be representative of non-uniformly dispersed debris for which PLM evaluation is recommended (i.e. soils and other heterogenous materials).

**AmeriSci New York**

117 EAST 30TH ST.

NEW YORK, NY 10016

TEL: (212) 679-8600 • FAX: (212) 679-3114

## PLM Bulk Asbestos Report

Adelaide Environmental Health

Attn: John Soter

1511 Rte. 22 Suite C24

Brewster, NY 10509

**Date Received** 12/05/23**Date Examined** 12/06/23**ELAP #** 11480**RE:** CSA: 23324.00-IN; Henry Barnard Early Childhood; 129 Barnard Road, New Rochelle, NY 10801**AmeriSci Job #** 223121240**P.O. #****Page** 1 **of** 4

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
1	223121240-01	No	NAD
1	Location: Floor 2 - 2nd Floor Hallway - 2 x 4 Ceiling Tile With Holes		(by NYS ELAP 198.6) by Kensen Caro on 12/06/23
<b>Analyst Description:</b> White, Homogeneous, Non-Fibrous, Bulk Material			
<b>Asbestos Types:</b>			
<b>Other Material:</b> Non-fibrous 56%			
2	223121240-02	No	NAD
1	Location: Floor 2 - 2nd Floor Hallway - 2 x 4 Ceiling Tile With Holes		(by NYS ELAP 198.6) by Kensen Caro on 12/06/23
<b>Analyst Description:</b> White, Homogeneous, Non-Fibrous, Bulk Material			
<b>Asbestos Types:</b>			
<b>Other Material:</b> Non-fibrous 50.6%			
3	223121240-03	No	NAD
2	Location: Floor 2 - 2nd Floor Hallway - 2 x 4 Ceiling Tile With Craters		(by NYS ELAP 198.6) by Kensen Caro on 12/06/23
<b>Analyst Description:</b> White, Homogeneous, Non-Fibrous, Bulk Material			
<b>Asbestos Types:</b>			
<b>Other Material:</b> Non-fibrous 57.7%			
4	223121240-04	No	NAD
2	Location: Floor 2 - 2nd Floor Hallway - 2 x 4 Ceiling Tile With Craters		(by NYS ELAP 198.6) by Kensen Caro on 12/06/23
<b>Analyst Description:</b> White, Homogeneous, Non-Fibrous, Bulk Material			
<b>Asbestos Types:</b>			
<b>Other Material:</b> Non-fibrous 56.4%			
5	223121240-05	No	NAD
3	Location: Floor 2 - 2nd Floor Hallway - Plaster Ceiling Top Coat		(by NYS ELAP 198.1) by Kensen Caro on 12/06/23
<b>Analyst Description:</b> White, Homogeneous, Non-Fibrous, Bulk Material			
<b>Asbestos Types:</b>			
<b>Other Material:</b> Non-fibrous 100%			



Client Name: Adelaide Environmental Health

# PLM Bulk Asbestos Report

CSA: 23324.00-IN; Henry Barnard Early Childhood; 129  
Barnard Road, New Rochelle, NY 10801

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
6 3	223121240-06 <b>Location:</b> Floor 2 - 2nd Floor Hallway - Plaster Ceiling Top Coat	<b>No</b>	NAD (by NYS ELAP 198.1) by Kensen Caro on 12/06/23
<b>Analyst Description:</b> White, Homogeneous, Non-Fibrous, Bulk Material <b>Asbestos Types:</b> <b>Other Material:</b> Non-fibrous 100%			
7 3	223121240-07 <b>Location:</b> Floor 2 - 2nd Floor Hallway - Plaster Ceiling Top Coat	<b>No</b>	NAD (by NYS ELAP 198.1) by Kensen Caro on 12/06/23
<b>Analyst Description:</b> White, Homogeneous, Non-Fibrous, Bulk Material <b>Asbestos Types:</b> <b>Other Material:</b> Non-fibrous 100%			
8 4	223121240-08 <b>Location:</b> Floor 2 - 2nd Floor Hallway - Plaster Ceiling Base Coat	<b>No</b>	NAD (by NYS ELAP 198.1) by Kensen Caro on 12/06/23
<b>Analyst Description:</b> Brown, Homogeneous, Non-Fibrous, Cementitious, Bulk Material <b>Asbestos Types:</b> <b>Other Material:</b> Non-fibrous 100%			
9 4	223121240-09 <b>Location:</b> Floor 2 - 2nd Floor Hallway - Plaster Ceiling Base Coat	<b>No</b>	NAD (by NYS ELAP 198.1) by Kensen Caro on 12/06/23
<b>Analyst Description:</b> Brown, Homogeneous, Non-Fibrous, Cementitious, Bulk Material <b>Asbestos Types:</b> <b>Other Material:</b> Non-fibrous 100%			
10 4	223121240-10 <b>Location:</b> Floor 2 - 2nd Floor Hallway - Plaster Ceiling Base Coat	<b>No</b>	NAD (by NYS ELAP 198.1) by Kensen Caro on 12/06/23
<b>Analyst Description:</b> Brown, Homogeneous, Non-Fibrous, Cementitious, Bulk Material <b>Asbestos Types:</b> <b>Other Material:</b> Non-fibrous 100%			
11 5	223121240-11 <b>Location:</b> Floor 2 - 2nd Floor Hallway - Plaster Wall Top Coat	<b>No</b>	NAD (by NYS ELAP 198.1) by Kensen Caro on 12/06/23
<b>Analyst Description:</b> White, Homogeneous, Non-Fibrous, Bulk Material <b>Asbestos Types:</b> <b>Other Material:</b> Non-fibrous 100%			

Client Name: Adelaide Environmental Health

## PLM Bulk Asbestos Report

CSA: 23324.00-IN; Henry Barnard Early Childhood; 129  
Barnard Road, New Rochelle, NY 10801

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
12 5	223121240-12 <b>Location:</b> Floor 2 - 2nd Floor Hallway - Plaster Wall Top Coat	<b>No</b>	NAD (by NYS ELAP 198.1) by Kensen Caro on 12/06/23
<b>Analyst Description:</b> White, Homogeneous, Non-Fibrous, Bulk Material <b>Asbestos Types:</b> <b>Other Material:</b> Non-fibrous 100%			
13 5	223121240-13 <b>Location:</b> Floor 2 - 2nd Floor Hallway - Plaster Wall Top Coat	<b>No</b>	NAD (by NYS ELAP 198.1) by Kensen Caro on 12/06/23
<b>Analyst Description:</b> White, Homogeneous, Non-Fibrous, Bulk Material <b>Asbestos Types:</b> <b>Other Material:</b> Non-fibrous 100%			
14 6	223121240-14 <b>Location:</b> Floor 2 - 2nd Floor Hallway - Plaster Wall Base Coat	<b>No</b>	NAD (by NYS ELAP 198.1) by Kensen Caro on 12/06/23
<b>Analyst Description:</b> Gray, Homogeneous, Non-Fibrous, Cementitious, Bulk Material <b>Asbestos Types:</b> <b>Other Material:</b> Non-fibrous 100%			
15 6	223121240-15 <b>Location:</b> Floor 2 - 2nd Floor Hallway - Plaster Wall Base Coat	<b>No</b>	NAD (by NYS ELAP 198.1) by Kensen Caro on 12/06/23
<b>Analyst Description:</b> Gray, Homogeneous, Non-Fibrous, Cementitious, Bulk Material <b>Asbestos Types:</b> <b>Other Material:</b> Non-fibrous 100%			
16 6	223121240-16 <b>Location:</b> Floor 2 - 2nd Floor Hallway - Plaster Wall Base Coat	<b>No</b>	NAD (by NYS ELAP 198.1) by Kensen Caro on 12/06/23
<b>Analyst Description:</b> Gray, Homogeneous, Non-Fibrous, Cementitious, Bulk Material <b>Asbestos Types:</b> <b>Other Material:</b> Non-fibrous 100%			

Client Name: Adelaide Environmental Health

## PLM Bulk Asbestos Report

CSA: 23324.00-IN; Henry Barnard Early Childhood; 129  
Barnard Road, New Rochelle, NY 10801

---

### Reporting Notes:

Analyzed by: Kensen Caro  
Date: 12/6/2023



Reviewed by: Khaalid W. Perine



\*NAD/NSD =no asbestos detected; NA =not analyzed; NA/PS=not analyzed/positive stop, (SOF-V) = Sprayed On Fireproofing containing Vermiculite; (SM-V) = Surfacing Material containing Vermiculite; PLM Bulk Asbestos Analysis using Olympus, Model BH-2 Pol Scope, Microscope, Serial #: 229003, by Appd E to Subpt E, 40 CFR 763 quantified by either CVES or 400 pt ct as noted for each analysis (NVLAP 200546-0), ELAP PLM Method 198.1 for NY friable samples, which includes the identification and quantitation of vermiculite, or ELAP 198.6 for NOB samples, or EPA 400 pt ct by EPA 600-M4-82-020 (NY ELAP Lab 11480); Note:PLM is not consistently reliable in detecting asbestos in floor coverings and similar non-friable organically bound materials. NAD or Trace results by PLM are inconclusive, TEM is currently the only method that can be used to determine if this material can be considered or treated as non asbestos-containing in NY State (also see EPA Advisory for floor tile, FR 59,146,38970,8/1/94) National Institute of Standards and Technology Accreditation requirements mandate that this report must not be reproduced except in full without the approval of the lab.This PLM report relates ONLY to the items tested. RI Cert AAL-094, CT Cert PH-0186, Mass Cert AA000054, NJ Lab ID #NY031.

\_\_\_\_\_END OF REPORT\_\_\_\_\_

# Adelaide Environmental Health Associates, Inc

1454 Rte. 22, Suite B202

Brewster, NY 10509

845-278-7710

845-278-7750 - fax

Site Address: <b>HENRY BARNARD Early childhood</b>			Date: <b>11-30-23</b>	Inspector: <b>David Seddon</b>		
129 BARNARD ROAD			Client Project #	<b>Jinnie Downes</b>		
New Rochelle NY 10801			Project #:	<b>CSA: 23324.00-IN</b>		
Sample ID #	Homogeneous Area	Floor Level	Sample Location/Description	Quantity (In Feet)	Friable Non Friable	Condition g, d, sd
1	1	2	<sup>Hallway</sup> 2ND FLOOR - 2x4 ceiling Tile with Holes			
2	1	↓	" " " " " "			
3	2	2	2ND FLOOR Hallway - 2x4 ceiling Tile with cracks			
4	2	↓	" " " " " "			
5	3	2	2ND FLOOR Hallway - Plaster Ceiling TOP coat			
6	3	↓	" " " " " "			
7	3	↓	" " " " " "			
8	4	2	2ND FLOOR Hallway Plaster ceiling BASE coat			
9	4	↓	" " " " " "			
10	4	↓	" " " " " "			
11	5	2	2ND FLOOR Hallway Plaster wall TOP coat			
12	5	↓	" " " " " "			
13	5	↓	" " " " " "			
14	6	2	2ND FLOOR Hallway Plaster wall BASE coat			
Special Instructions/ Turnaround Time:			Relinquished by:			
24 HR			Received by: <i>J. Veretich</i>			
TAT			Relinquished by: <i>J. Veretich</i> 12/5/23 1045			
Stop at 1st Positive per Homogenous Area			Received by:			
Fax Results to 845-278-7750						
E-Mail results to AdelaideLabResults@Adelaidellc.com						

223121240



1454 Rte. 22, Suite B202  
Brewster, NY 10509  
845-278-7710  
845-278-7750 - fax

[illegible]

**APPENDIX F**  
**PREVIOUS REPORTS ASBESTOS ANALYTICAL RESULTS**

**HENRY  
BARNARD  
EARLY  
CHILDHOOD  
CENTER**

Client Name: Adelaide Environmental Health

**Table I**  
**Summary of Bulk Asbestos Analysis Results**

CSA:18147.00-IN; Henry Barnard ES; 129 Barnard Road, New Rochelle, NY 10801

AmeriSci Sample #	Client Sample#	HG Area	Sample Weight (gram)	Heat Sensitive Organic %	Acid Soluble Inorganic %	Insoluble Non-Asbestos Inorganic %	** Asbestos % by PLM/DS	** Asbestos % by TEM
01	1	1	0.217	33.2	31.3	30.2	Chrysotile 5.3	NA
Location: Grd. Fl. - Room 3 / Storage - Floor Tile Debris								
02	2	2	----	----	----	----	NAD	NA
Location: Grd. Fl. - MER - AHU - Cloth Vibration Damper								
03	3	2	----	----	----	----	NAD	NA
Location: Grd. Fl. - MER - AHU - Cloth Vibration Damper								
04	4	3	----	----	----	----	NAD	NA
Location: Grd. Fl. - MER - Fiberglass Piping Mudded Fitting								
05	5	3	----	----	----	----	NAD	NA
Location: Grd. Fl. - MER - Fiberglass Piping Mudded Fitting								
06	6	3	----	----	----	----	NAD	NA
Location: Grd. Fl. - MER - Fiberglass Piping Mudded Fitting								
07	7	4	0.195	16.9	73.8	9.2	NAD	NAD
Location: Grd. Fl. - Room 3 - Ceiling - 1 x 1 Textured Ceiling Tile								
08	8	4	0.300	22.0	55.3	22.7	NAD	NAD
Location: Grd. Fl. - Room 4 - Ceiling - 1 x 1 Textured Ceiling Tile								
09	9	5	0.207	44.9	5.8	49.3	NAD	NAD
Location: Grd. Fl. - Room 3 - Ceiling - 1 x 1 Textured CT Glue Daub								
10	10	5	0.162	44.4	8.0	47.5	NAD	NAD
Location: Grd. Fl. - Room 4 - Ceiling - 1 x 1 Textured CT Glue Daub								
11	11	6	0.098	85.7	5.1	9.2	NAD	NAD
Location: Grd. Fl. - Room 3 / Storage - Ceiling - 1 x 1 Dotted Ceiling Tile								
12	12	6	0.185	85.9	2.7	11.4	NAD	NAD
Location: Grd. Fl. - Room 3 / Storage - Ceiling - 1 x 1 Dotted Ceiling Tile								
13	13	7	0.259	53.3	5.4	41.3	NAD	NAD
Location: Grd. Fl. - Room 3 / Storage - Ceiling - 1 x 1 Dotted CT Glue Daub								
14	14	7	0.169	55.6	4.1	40.2	NAD	NAD
Location: Grd. Fl. - Room 3 / Storage - Ceiling - 1 x 1 Dotted CT Glue Daub								
15	15	8	0.292	58.9	24.3	16.8	NAD	NAD
Location: Grd. Fl. - Boiler Room - Floor - Epoxy								
16	16	8	0.228	60.5	24.1	15.4	NAD	NAD
Location: Grd. Fl. - Boiler Room - Floor - Epoxy								

See Reporting notes on last page



Client Name: Adelaide Environmental Health

**Table I**  
**Summary of Bulk Asbestos Analysis Results**

CSA:18147.00-IN; Henry Barnard ES; 129 Barnard Road, New Rochelle, NY 10801

AmeriSci Sample #	Client Sample#	HG Area	Sample Weight (gram)	Heat Sensitive Organic %	Acid Soluble Inorganic %	Insoluble Non-Asbestos Inorganic %	** Asbestos % by PLM/DS	** Asbestos % by TEM
17	17	9	0.206	11.2	71.8	17.0	NAD	NAD
Location: 1st Fl. - Lobby - Ceiling - 1 x 1 Dot Canyon Ceiling Tile								
18	18	9	0.227	11.0	71.4	17.6	NAD	NAD
Location: 1st Fl. - Lobby - Ceiling - 1 x 1 Dot Canyon Ceiling Tile								
19	19	10	0.262	14.9	45.0	40.1	NAD	NAD
Location: 1st Fl. - Room 108 - Drop Ceiling - 2 x 4 Dotted Ceiling Tile								
20	20	10	0.274	16.4	38.3	45.3	NAD	NAD
Location: 2nd Fl. - Room 211 - Drop Ceiling - 2 x 4 Dotted Ceiling Tile								
21	21	11	0.236	16.1	49.2	34.7	NAD	NAD
Location: 1st Fl. - Stairwell By Elevator - Drop Ceiling - 2 x 4 Skinny Fissure Ceiling Tile								
22	22	11	0.172	17.4	46.5	36.0	NAD	NAD
Location: 2nd Fl. - Room 202 - Drop Ceiling - 2 x 4 Skinny Fissure Ceiling Tile								
23	23	12	0.157	26.8	37.6	35.7	NAD	NAD
Location: 1st Fl. - Room 107 - Drop Ceiling - 2 x 4 Dot Speck Ceiling Tile								
24	24	12	0.112	27.7	32.1	40.2	NAD	NAD
Location: 2nd Fl. - Room 210 - Drop Ceiling - 2 x 4 Dot Speck Ceiling Tile								
25	25	13	0.122	25.4	22.1	52.5	NAD	NAD
Location: 2nd Fl. - Room 202 - Drop Ceiling - 2 x 4 Dot Canyon Ceiling Tile								
26	26	13	0.160	25.6	23.8	50.6	NAD	NAD
Location: 2nd Fl. - Room 210 - Drop Ceiling - 2 x 4 Dot Canyon Ceiling Tile								
27	27	14	0.190	13.7	57.4	28.9	NAD	NAD
Location: 2nd Fl. - Room 202 - Drop Ceiling - 2 x 4 Deep Fissure Ceiling Tile								
28	28	14	0.240	15.0	55.4	29.6	NAD	NAD
Location: 2nd Fl. - Room 202 - Drop Ceiling - 2 x 4 Deep Fissure Ceiling Tile								
29	29	15	0.145	32.4	22.8	44.8	NAD	NAD
Location: 2nd Fl. - Room 210 - Drop Ceiling - 2 x 4 Textured Dotted Ceiling Tile								
30	30	15	0.096	30.2	22.9	46.9	NAD	NAD
Location: 2nd Fl. - Room 211 - Drop Ceiling - 2 x 4 Textured Dotted Ceiling Tile								
31L1	31	16	0.259	53.3	6.2	40.5	NAD	NAD
Location: 2nd Fl. - Room 211 - Wall - Cove Base								
31L2	31	16	0.300	56.0	13.7	30.3	NAD	NAD
Location: 2nd Fl. - Room 211 - Wall - Cove Base (Adhesive)								

Client Name: Adelaide Environmental Health

**Table I**  
**Summary of Bulk Asbestos Analysis Results**

CSA:18147.00-IN; Henry Barnard ES; 129 Barnard Road, New Rochelle, NY 10801

AmeriSci Sample #	Client Sample#	HG Area	Sample Weight (gram)	Heat Sensitive Organic %	Acid Soluble Inorganic %	Insoluble Non-Asbestos Inorganic %	** Asbestos % by PLM/DS	** Asbestos % by TEM
32L1	32	16	0.167	56.9	4.2	38.9	NAD	NAD
Location: 2nd Fl. - Room 212 - Wall - Cove Base								
32L2	32	16	0.268	54.1	6.3	39.6	NAD	NAD
Location: 2nd Fl. - Room 212 - Wall - Cove Base (Adhesive)								
33L1	33	17	0.130	22.3	27.7	41.3	Chrysotile 8.7	NA
Location: 1st Fl. - Room 108 - Floor - 9 x 9 Beige Floor Tile								
33L2	33	17	0.271	34.3	22.9	37.3	Chrysotile 5.5	NA
Location: 1st Fl. - Room 108 - Floor - 9 x 9 Beige Floor Tile (Mastic)								
34L1	34	17	0.230	23.0	29.1	47.8	NA/PS	NA
Location: 2nd Fl. - Room 212 - Floor - 9 x 9 Beige Floor Tile								
34L2	34	17	0.227	40.5	23.3	36.1	NA/PS	NA
Location: 2nd Fl. - Room 212 - Floor - 9 x 9 Beige Floor Tile (Mastic)								
35	35	18	0.169	24.3	28.4	39.4	Chrysotile 7.9	NA
Location: 1st Fl. - Room 108 - Floor - 9 x 9 Green Accent Floor Tile								
36	36	18	0.190	23.2	30.5	46.3	NA/PS	NA
Location: 2nd Fl. - Room 212 - Floor - 9 x 9 Green Accent Floor Tile								
37	37	19	0.183	26.2	23.0	42.0	Chrysotile 8.8	NA
Location: 1st Fl. - Room 107 - Floor - 9 x 9 Lt. Brown Floor Tile								
38	38	19	0.237	26.2	25.3	48.5	NA/PS	NA
Location: 2nd Fl. - Room 211 - Floor - 9 x 9 Lt. Brown Floor Tile								
39	39	20	0.223	26.0	26.0	39.7	Chrysotile 8.3	NA
Location: 1st Fl. - Room 107 - Floor - 9 x 9 Brown Accent Floor Tile								
40	40	20	0.232	25.9	26.3	47.8	NA/PS	NA
Location: 2nd Fl. - Room 211 - Floor - 9 x 9 Brown Accent Floor Tile								
41L1	41	21	0.254	21.7	56.3	21.8	NAD	Anthophyllite <1.0
Location: Grd. Fl. - Room 4 - Floor - 1 x 1 Beige Floor Tile								
41L2	41	21	0.229	53.7	20.1	23.3	Chrysotile 2.9	NA
Location: Grd. Fl. - Room 4 - Floor - 1 x 1 Beige Floor Tile (Mastic)								
42L1	42	21	0.208	23.1	53.4	23.4	NAD	Anthophyllite <1.0
Location: 2nd Fl. - Room 209D - Floor - 1 x 1 Beige Floor Tile								
42L2	42	21	0.288	60.4	17.7	21.9	NA/PS	NA
Location: 2nd Fl. - Room 209D - Floor - 1 x 1 Beige Floor Tile (Mastic)								

Client Name: Adelaide Environmental Health

**Table I**  
**Summary of Bulk Asbestos Analysis Results**

CSA:18147.00-IN; Henry Barnard ES; 129 Barnard Road, New Rochelle, NY 10801

AmeriSci Sample #	Client Sample#	HG Area	Sample Weight (gram)	Heat Sensitive Organic %	Acid Soluble Inorganic %	Insoluble Non-Asbestos Inorganic %	** Asbestos % by PLM/DS	** Asbestos % by TEM
43	43	22	0.202	54.0	7.9	38.1	NAD	NAD
Location: 1st Fl. - Kindergarten 110 - Floor - Top Layer - Carpet Mastic								
44	44	22	0.238	55.9	9.2	34.9	NAD	NAD
Location: 1st Fl. - Kindergarten 110 - Floor - Top Layer - Carpet Mastic								
45L1	45	23	0.325	13.8	85.5	0.6	NAD	NAD
Location: 1st Fl. - Kindergarten 110 - Floor - Bottom Layer - 9 x 9 Pink Floor Tile								
45L2	45	23	0.239	28.0	23.0	49.0	NAD	NAD
Location: 1st Fl. - Kindergarten 110 - Floor - Bottom Layer - 9 x 9 Pink Floor Tile (Mastic)								
46L1	46	23	0.203	12.8	86.7	0.5	NAD	NAD
Location: 1st Fl. - Kindergarten 110 - Floor - Bottom Layer - 9 x 9 Pink Floor Tile								
46L2	46	23	0.237	70.0	11.8	18.1	NAD	NAD
Location: 1st Fl. - Kindergarten 110 - Floor - Bottom Layer - 9 x 9 Pink Floor Tile (Mastic)								
47	47	24	----	----	----	----	NAD	NA
Location: 1st Fl. - Area C / Boy's BR - Wall - Ceramic Tile Grout								
48	48	24	----	----	----	----	NAD	NA
Location: 2nd Fl. - 213 / Girl's BR - Wall - Ceramic Tile Grout								
49	49	25	----	----	----	----	NAD	NA
Location: 1st Fl. - Area C / Boy's BR - Wall - Ceramic Tile Mudset								
50	50	25	----	----	----	----	NAD	NA
Location: 2nd Fl. - 213 / Girl's BR - Wall - Ceramic Tile Mudset								
51	51	26	----	----	----	----	NAD	NA
Location: 1st Fl. - Area A / Girl's BR - Floor - Terrazzo								
52	52	26	----	----	----	----	NAD	NA
Location: 2nd Fl. - 213 / Girl's BR - Floor - Terrazzo								
53	53	27	----	----	----	----	NAD	NA
Location: Ext. - '51 Addition - Pre-Cast Mortar								
54	54	27	----	----	----	----	NAD	NA
Location: Ext. - '51 Addition - Pre-Cast Mortar								
55	55	28	----	----	----	----	NAD	NA
Location: Ext. - '51 Addition - Brick Mortar								
56	56	28	----	----	----	----	NAD	NA
Location: Ext. - '51 Addition - Brick Mortar								

Client Name: Adelaide Environmental Health

**Table I**  
**Summary of Bulk Asbestos Analysis Results**

CSA:18147.00-IN; Henry Barnard ES; 129 Barnard Road, New Rochelle, NY 10801

AmeriSci Sample #	Client Sample#	HG Area	Sample Weight (gram)	Heat Sensitive Organic %	Acid Soluble Inorganic %	Insoluble Non-Asbestos Inorganic %	** Asbestos % by PLM/DS	** Asbestos % by TEM
57	57	29	----	----	----	----	NAD	NA
Location: Ext. - Front ADA Ramp - Concrete								
58	58	29	----	----	----	----	NAD	NA
Location: Ext. - Rear Stairs - Concrete								
59	59	30	----	----	----	----	NAD	NA
Location: Ext. - Proposed Parapet Wall Location - Brick Mortar								
60	60	30	----	----	----	----	NAD	NA
Location: Ext. - Proposed Parapet Wall Location - Brick Mortar								
61	61	31	----	----	----	----	NAD	NA
Location: Ext. - Proposed Parapet Wall Location - Stone Mortar								
62	62	31	----	----	----	----	NAD	NA
Location: Ext. - Proposed Parapet Wall Location - Stone Mortar								
63	63	32	----	----	----	----	NAD	NA
Location: Ext. - Rear Side Entrance Stairs - Stone Mortar								
64	64	32	----	----	----	----	NAD	NA
Location: Ext. - Rear Side Entrance Stairs - Stone Mortar								
65	65	33	----	----	----	----	NAD	NA
Location: Ext. - Rear Side Entrance Stairs - Cap Mortar								
66	66	33	----	----	----	----	NAD	NA
Location: Ext. - Rear Side Entrance Stairs - Cap Mortar								
67	67	34	0.420	66.2	25.7	8.1	NAD	NAD
Location: Ext. - Playground Surface								
68	68	34	0.342	60.5	30.4	9.1	NAD	NAD
Location: Ext. - Playground Surface								
69	69	35	0.357	4.5	42.6	52.9	NAD	NAD
Location: Ext. - Playground Lot - Asphalt								
70	70	35	0.625	9.0	30.2	60.8	NAD	NAD
Location: Ext. - Playground Lot - Asphalt								
71	71	36	0.170	17.6	8.8	65.3	Chrysotile 8.2	NA
Location: Ext. - Chimney - Louver Caulk								
72	72	36	0.272	14.0	7.4	78.7	NA/PS	NA
Location: Ext. - Chimney - Louver Caulk								

Client Name: Adelaide Environmental Health

**Table I**  
**Summary of Bulk Asbestos Analysis Results**


CSA:18147.00-IN; Henry Barnard ES; 129 Barnard Road, New Rochelle, NY 10801

AmeriSci Sample #	Client Sample#	HG Area	Sample Weight (gram)	Heat Sensitive Organic %	Acid Soluble Inorganic %	Insoluble Non-Asbestos Inorganic %	** Asbestos % by PLM/DS	** Asbestos % by TEM
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Analyzed by: John P. Koubiadis  Date Analyzed 3/22/2019

\*\*Quantitative Analysis (Semi/Full): Bulk Asbestos Analysis - PLM by Appd E to Subpt E, 40 CFR 763 or ELAP 198.1 for New York friable samples or ELAP 198.6 for New York NOB samples; TEM (Semi/Full) by EPA 600/R-93/116 (or ELAP 198.4; for New York samples; NAD = no asbestos detected during a quantitative analysis; NA = not analyzed; Trace = <1%; (SOF-V) = Sprayed On Fireproofing containing Vermiculite; (SM-V) = Surfacing Material containing Vermiculite; Quantitation for beginning weights of <0.1 grams should be considered as qualitative only; Qualitative Analysis: Asbestos analysis results of "Present" or "NVA = No Visible Asbestos" represents results for Qualitative PLM or TEM Analysis only (no accreditation coverage available from any regulatory agency for qualitative analyses); NVLAP (PLM) 200546-0, NYSDOH ELAP Lab 11480, AIHA-LAP, LLC (PLM) Lab ID 102843.

Warning Note: PLM limitation, only TEM will resolve fibers <0.25 micrometers in diameter. TEM bulk analysis is representative of the fine grained matrix material and may not be representative of non-uniformly dispersed debris for which PLM evaluation is recommended (i.e. soils and other heterogenous materials).

Reviewed By: 

**AmeriSci New York**

117 EAST 30TH ST.  
NEW YORK, NY 10016  
TEL: (212) 679-8600 • FAX: (212) 679-3114

## PLM Bulk Asbestos Report

Adelaide Environmental Health  
Attn: John Soter  
1511 Rte. 22 Suite C24  
Brewster, NY 10509

**Date Received** 03/21/19    **AmeriSci Job #** 219033303  
**Date Examined** 03/21/19    **P.O. #**  
**ELAP #** 11480    **Page** 1 **of** 14  
**RE:** CSA:18147.00-IN; Henry Barnard ES; 129 Barnard Road,  
New Rochelle, NY 10801

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
1 1 Location: Grd. Fl. - Room 3 / Storage - Floor Tile Debris	219033303-01	Yes	5.3 % <sup>1</sup> (by NYS ELAP 198.6) by Kensen Caro on 03/21/19  <b>Analyst Description:</b> Brown/Black, Homogeneous, Non-Fibrous, Bulk Material <b>Asbestos Types:</b> Chrysotile 5.3 % <b>Other Material:</b> Non-fibrous 30.2 %
2 2 Location: Grd. Fl. - MER - AHU - Cloth Vibration Damper	219033303-02	No	NAD (by NYS ELAP 198.1) by Kensen Caro on 03/21/19  <b>Analyst Description:</b> White, Homogeneous, Fibrous, Bulk Material <b>Asbestos Types:</b> <b>Other Material:</b> Synthetic fibers 99 %, Non-fibrous 1 %
3 2 Location: Grd. Fl. - MER - AHU - Cloth Vibration Damper	219033303-03	No	NAD (by NYS ELAP 198.1) by Kensen Caro on 03/21/19  <b>Analyst Description:</b> White, Homogeneous, Fibrous, Bulk Material <b>Asbestos Types:</b> <b>Other Material:</b> Synthetic fibers 99 %, Non-fibrous 1 %
4 3 Location: Grd. Fl. - MER - Fiberglass Piping Mudded Fitting	219033303-04	No	NAD (by NYS ELAP 198.1) by Kensen Caro on 03/21/19  <b>Analyst Description:</b> Light Grey, Homogeneous, Fibrous, Bulk Material <b>Asbestos Types:</b> <b>Other Material:</b> Fibrous glass 5 %, Non-fibrous 95 %
5 3 Location: Grd. Fl. - MER - Fiberglass Piping Mudded Fitting	219033303-05	No	NAD (by NYS ELAP 198.1) by Kensen Caro on 03/21/19  <b>Analyst Description:</b> Light Grey, Homogeneous, Fibrous, Bulk Material <b>Asbestos Types:</b> <b>Other Material:</b> Fibrous glass 5 %, Non-fibrous 95 %

Client Name: Adelaide Environmental Health

**PLM Bulk Asbestos Report**

CSA:18147.00-IN; Henry Barnard ES; 129 Barnard Road, New Rochelle, NY 10801

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
6 3	219033303-06 <b>Location:</b> Grd. Fl. - MER - Fiberglass Piping Mudded Fitting	<b>No</b>	NAD (by NYS ELAP 198.1) by Kensen Caro on 03/21/19
<b>Analyst Description:</b> Light Grey, Homogeneous, Fibrous, Bulk Material <b>Asbestos Types:</b> <b>Other Material:</b> Fibrous glass 5 %, Non-fibrous 95 %			
7 4	219033303-07 <b>Location:</b> Grd. Fl. - Room 3 - Ceiling - 1 x 1 Textured Ceiling Tile	<b>No</b>	NAD (by NYS ELAP 198.6) by Kensen Caro on 03/21/19
<b>Analyst Description:</b> White, Homogeneous, Non-Fibrous, Bulk Material <b>Asbestos Types:</b> <b>Other Material:</b> Non-fibrous 9.2 %			
8 4	219033303-08 <b>Location:</b> Grd. Fl. - Room 4 - Ceiling - 1 x 1 Textured Ceiling Tile	<b>No</b>	NAD (by NYS ELAP 198.6) by Kensen Caro on 03/21/19
<b>Analyst Description:</b> White, Homogeneous, Non-Fibrous, Bulk Material <b>Asbestos Types:</b> <b>Other Material:</b> Non-fibrous 22.7 %			
9 5	219033303-09 <b>Location:</b> Grd. Fl. - Room 3 - Ceiling - 1 x 1 Textured CT Glue Daub	<b>No</b>	NAD (by NYS ELAP 198.6) by Kensen Caro on 03/21/19
<b>Analyst Description:</b> Dark Brown, Homogeneous, Non-Fibrous, Bulk Material <b>Asbestos Types:</b> <b>Other Material:</b> Non-fibrous 49.3 %			
10 5	219033303-10 <b>Location:</b> Grd. Fl. - Room 4 - Ceiling - 1 x 1 Textured CT Glue Daub	<b>No</b>	NAD (by NYS ELAP 198.6) by Kensen Caro on 03/21/19
<b>Analyst Description:</b> Dark Brown, Homogeneous, Non-Fibrous, Bulk Material <b>Asbestos Types:</b> <b>Other Material:</b> Non-fibrous 47.5 %			
11 6	219033303-11 <b>Location:</b> Grd. Fl. - Room 3 / Storage - Ceiling - 1 x 1 Dotted Ceiling Tile	<b>No</b>	NAD (by NYS ELAP 198.6) by Kensen Caro on 03/21/19
<b>Analyst Description:</b> Brown, Homogeneous, Non-Fibrous, Bulk Material <b>Asbestos Types:</b> <b>Other Material:</b> Non-fibrous 9.2 %			

Client Name: Adelaide Environmental Health

**PLM Bulk Asbestos Report**

CSA:18147.00-IN; Henry Barnard ES; 129 Barnard Road, New Rochelle, NY 10801

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
12 6	219033303-12 <b>Location:</b> Grd. Fl. - Room 3 / Storage - Ceiling - 1 x 1 Dotted Ceiling Tile	<b>No</b>	NAD (by NYS ELAP 198.6) by Kensen Caro on 03/21/19
<b>Analyst Description:</b> Brown, Homogeneous, Non-Fibrous, Bulk Material <b>Asbestos Types:</b> <b>Other Material:</b> Non-fibrous 11.4 %			
13 7	219033303-13 <b>Location:</b> Grd. Fl. - Room 3 / Storage - Ceiling - 1 x 1 Dotted CT Glue Daub	<b>No</b>	NAD (by NYS ELAP 198.6) by Kensen Caro on 03/21/19
<b>Analyst Description:</b> Dark Brown, Homogeneous, Non-Fibrous, Bulk Material <b>Asbestos Types:</b> <b>Other Material:</b> Non-fibrous 41.3 %			
14 7	219033303-14 <b>Location:</b> Grd. Fl. - Room 3 / Storage - Ceiling - 1 x 1 Dotted CT Glue Daub	<b>No</b>	NAD (by NYS ELAP 198.6) by Kensen Caro on 03/21/19
<b>Analyst Description:</b> Dark Brown, Homogeneous, Non-Fibrous, Bulk Material <b>Asbestos Types:</b> <b>Other Material:</b> Non-fibrous 40.2 %			
15 8	219033303-15 <b>Location:</b> Grd. Fl. - Boiler Room - Floor - Epoxy	<b>No</b>	NAD (by NYS ELAP 198.6) by Kensen Caro on 03/21/19
<b>Analyst Description:</b> Grey, Homogeneous, Non-Fibrous, Bulk Material <b>Asbestos Types:</b> <b>Other Material:</b> Non-fibrous 16.8 %			
16 8	219033303-16 <b>Location:</b> Grd. Fl. - Boiler Room - Floor - Epoxy	<b>No</b>	NAD (by NYS ELAP 198.6) by Kensen Caro on 03/21/19
<b>Analyst Description:</b> Grey, Homogeneous, Non-Fibrous, Bulk Material <b>Asbestos Types:</b> <b>Other Material:</b> Non-fibrous 15.4 %			
17 9	219033303-17 <b>Location:</b> 1st Fl. - Lobby - Ceiling - 1 x 1 Dot Canyon Ceiling Tile	<b>No</b>	NAD (by NYS ELAP 198.6) by Kensen Caro on 03/21/19
<b>Analyst Description:</b> Grey, Homogeneous, Non-Fibrous, Bulk Material <b>Asbestos Types:</b> <b>Other Material:</b> Non-fibrous 17 %			



Client Name: Adelaide Environmental Health

**PLM Bulk Asbestos Report**

CSA:18147.00-IN; Henry Barnard ES; 129 Barnard Road, New Rochelle, NY 10801

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
18 9	219033303-18 <b>Location:</b> 1st Fl. - Lobby - Ceiling - 1 x 1 Dot Canyon Ceiling Tile	<b>No</b>	NAD (by NYS ELAP 198.6) by Kensen Caro on 03/21/19
<b>Analyst Description:</b> Grey, Homogeneous, Non-Fibrous, Bulk Material <b>Asbestos Types:</b> <b>Other Material:</b> Non-fibrous 17.6 %			
19 10	219033303-19 <b>Location:</b> 1st Fl. - Room 108 - Drop Ceiling - 2 x 4 Dotted Ceiling Tile	<b>No</b>	NAD (by NYS ELAP 198.6) by Kensen Caro on 03/21/19
<b>Analyst Description:</b> Grey, Homogeneous, Non-Fibrous, Bulk Material <b>Asbestos Types:</b> <b>Other Material:</b> Non-fibrous 40.1 %			
20 10	219033303-20 <b>Location:</b> 2nd Fl. - Room 211 - Drop Ceiling - 2 x 4 Dotted Ceiling Tile	<b>No</b>	NAD (by NYS ELAP 198.6) by Kensen Caro on 03/21/19
<b>Analyst Description:</b> Grey, Homogeneous, Non-Fibrous, Bulk Material <b>Asbestos Types:</b> <b>Other Material:</b> Non-fibrous 45.3 %			
21 11	219033303-21 <b>Location:</b> 1st Fl. - Stairwell By Elevator - Drop Ceiling - 2 x 4 Skinny Fissure Ceiling Tile	<b>No</b>	NAD (by NYS ELAP 198.6) by Kensen Caro on 03/21/19
<b>Analyst Description:</b> Grey, Homogeneous, Non-Fibrous, Bulk Material <b>Asbestos Types:</b> <b>Other Material:</b> Non-fibrous 34.7 %			
22 11	219033303-22 <b>Location:</b> 2nd Fl. - Room 202 - Drop Ceiling - 2 x 4 Skinny Fissure Ceiling Tile	<b>No</b>	NAD (by NYS ELAP 198.6) by Kensen Caro on 03/21/19
<b>Analyst Description:</b> Grey, Homogeneous, Non-Fibrous, Bulk Material <b>Asbestos Types:</b> <b>Other Material:</b> Non-fibrous 36 %			
23 12	219033303-23 <b>Location:</b> 1st Fl. - Room 107 - Drop Ceiling - 2 x 4 Dot Speck Ceiling Tile	<b>No</b>	NAD (by NYS ELAP 198.6) by Kensen Caro on 03/21/19
<b>Analyst Description:</b> Grey, Homogeneous, Non-Fibrous, Bulk Material <b>Asbestos Types:</b> <b>Other Material:</b> Non-fibrous 35.7 %			

Client Name: Adelaide Environmental Health

**PLM Bulk Asbestos Report**

CSA:18147.00-IN; Henry Barnard ES; 129 Barnard Road, New Rochelle, NY 10801

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
24 12	219033303-24 Location: 2nd Fl. - Room 210 - Drop Ceiling - 2 x 4 Dot Speck Ceiling Tile	No	NAD (by NYS ELAP 198.6) by Kensen Caro on 03/21/19
<b>Analyst Description:</b> Grey, Homogeneous, Non-Fibrous, Bulk Material <b>Asbestos Types:</b> <b>Other Material:</b> Non-fibrous 40.2 %			
25 13	219033303-25 Location: 2nd Fl. - Room 202 - Drop Ceiling - 2 x 4 Dot Canyon Ceiling Tile	No	NAD (by NYS ELAP 198.6) by Kensen Caro on 03/21/19
<b>Analyst Description:</b> Grey, Homogeneous, Non-Fibrous, Bulk Material <b>Asbestos Types:</b> <b>Other Material:</b> Non-fibrous 52.5 %			
26 13	219033303-26 Location: 2nd Fl. - Room 210 - Drop Ceiling - 2 x 4 Dot Canyon Ceiling Tile	No	NAD (by NYS ELAP 198.6) by Kensen Caro on 03/21/19
<b>Analyst Description:</b> Grey, Homogeneous, Non-Fibrous, Bulk Material <b>Asbestos Types:</b> <b>Other Material:</b> Non-fibrous 50.6 %			
27 14	219033303-27 Location: 2nd Fl. - Room 202 - Drop Ceiling - 2 x 4 Deep Fissure Ceiling Tile	No	NAD (by NYS ELAP 198.6) by Kensen Caro on 03/21/19
<b>Analyst Description:</b> Grey, Homogeneous, Non-Fibrous, Bulk Material <b>Asbestos Types:</b> <b>Other Material:</b> Non-fibrous 28.9 %			
28 14	219033303-28 Location: 2nd Fl. - Room 202 - Drop Ceiling - 2 x 4 Deep Fissure Ceiling Tile	No	NAD (by NYS ELAP 198.6) by Kensen Caro on 03/21/19
<b>Analyst Description:</b> Grey, Homogeneous, Non-Fibrous, Bulk Material <b>Asbestos Types:</b> <b>Other Material:</b> Non-fibrous 29.6 %			
29 15	219033303-29 Location: 2nd Fl. - Room 210 - Drop Ceiling - 2 x 4 Textured Dotted Ceiling Tile	No	NAD (by NYS ELAP 198.6) by Kensen Caro on 03/21/19
<b>Analyst Description:</b> Grey, Homogeneous, Non-Fibrous, Bulk Material <b>Asbestos Types:</b> <b>Other Material:</b> Non-fibrous 44.8 %			

Client Name: Adelaide Environmental Health

**PLM Bulk Asbestos Report**

CSA:18147.00-IN; Henry Barnard ES; 129 Barnard Road, New Rochelle, NY 10801

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
30 15	219033303-30 <b>Location:</b> 2nd Fl. - Room 211 - Drop Ceiling - 2 x 4 Textured Dotted Ceiling Tile	<b>No</b>	NAD (by NYS ELAP 198.6) by Kensen Caro on 03/21/19
<b>Analyst Description:</b> Grey, Homogeneous, Non-Fibrous, Bulk Material <b>Asbestos Types:</b> <b>Other Material:</b> Non-fibrous 46.9 %			
31 16	219033303-31L1 <b>Location:</b> 2nd Fl. - Room 211 - Wall - Cove Base	<b>No</b>	NAD (by NYS ELAP 198.6) by Kensen Caro on 03/21/19
<b>Analyst Description:</b> Dark Brown, Homogeneous, Non-Fibrous, Bulk Material <b>Asbestos Types:</b> <b>Other Material:</b> Non-fibrous 40.5 %			
31 16	219033303-31L2 <b>Location:</b> 2nd Fl. - Room 211 - Wall - Cove Base (Adhesive)	<b>No</b>	NAD (by NYS ELAP 198.6) by Kensen Caro on 03/21/19
<b>Analyst Description:</b> Brown, Homogeneous, Non-Fibrous, Bulk Material <b>Asbestos Types:</b> <b>Other Material:</b> Non-fibrous 30.3 %			
32 16	219033303-32L1 <b>Location:</b> 2nd Fl. - Room 212 - Wall - Cove Base	<b>No</b>	NAD (by NYS ELAP 198.6) by Kensen Caro on 03/21/19
<b>Analyst Description:</b> Dark Brown, Homogeneous, Non-Fibrous, Bulk Material <b>Asbestos Types:</b> <b>Other Material:</b> Non-fibrous 38.9 %			
32 16	219033303-32L2 <b>Location:</b> 2nd Fl. - Room 212 - Wall - Cove Base (Adhesive)	<b>No</b>	NAD (by NYS ELAP 198.6) by Kensen Caro on 03/21/19
<b>Analyst Description:</b> Brown, Homogeneous, Non-Fibrous, Bulk Material <b>Asbestos Types:</b> <b>Other Material:</b> Non-fibrous 39.6 %			
33 17	219033303-33L1 <b>Location:</b> 1st Fl. - Room 108 - Floor - 9 x 9 Beige Floor Tile	<b>Yes</b>	8.7 % (by NYS ELAP 198.6) by Kensen Caro on 03/21/19
<b>Analyst Description:</b> Grey, Homogeneous, Non-Fibrous, Bulk Material <b>Asbestos Types:</b> Chrysotile 8.7 % <b>Other Material:</b> Non-fibrous 41.3 %			

Client Name: Adelaide Environmental Health

**PLM Bulk Asbestos Report**

CSA:18147.00-IN; Henry Barnard ES; 129 Barnard Road, New Rochelle, NY 10801

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
33 17	219033303-33L2 Location: 1st Fl. - Room 108 - Floor - 9 x 9 Beige Floor Tile (Mastic)	Yes	5.5 % (by NYS ELAP 198.6) by Kensen Caro on 03/21/19
<b>Analyst Description:</b> Black, Homogeneous, Non-Fibrous, Bulk Material <b>Asbestos Types:</b> Chrysotile 5.5 % <b>Other Material:</b> Non-fibrous 37.3 %			
34 17	219033303-34L1 Location: 2nd Fl. - Room 212 - Floor - 9 x 9 Beige Floor Tile		NA/PS
<b>Analyst Description:</b> Bulk Material <b>Asbestos Types:</b> <b>Other Material:</b>			
34 17	219033303-34L2 Location: 2nd Fl. - Room 212 - Floor - 9 x 9 Beige Floor Tile (Mastic)		NA/PS
<b>Analyst Description:</b> Bulk Material <b>Asbestos Types:</b> <b>Other Material:</b>			
35 18	219033303-35 Location: 1st Fl. - Room 108 - Floor - 9 x 9 Green Accent Floor Tile	Yes	7.9 % (by NYS ELAP 198.6) by Kensen Caro on 03/21/19
<b>Analyst Description:</b> Dark Green, Homogeneous, Non-Fibrous, Bulk Material <b>Asbestos Types:</b> Chrysotile 7.9 % <b>Other Material:</b> Non-fibrous 39.4 %			
36 18	219033303-36 Location: 2nd Fl. - Room 212 - Floor - 9 x 9 Green Accent Floor Tile		NA/PS
<b>Analyst Description:</b> Bulk Material <b>Asbestos Types:</b> <b>Other Material:</b>			
37 19	219033303-37 Location: 1st Fl. - Room 107 - Floor - 9 x 9 Lt. Brown Floor Tile	Yes	8.8 % (by NYS ELAP 198.6) by Kensen Caro on 03/21/19
<b>Analyst Description:</b> Tan, Homogeneous, Non-Fibrous, Bulk Material <b>Asbestos Types:</b> Chrysotile 8.8 % <b>Other Material:</b> Non-fibrous 42 %			

Client Name: Adelaide Environmental Health

**PLM Bulk Asbestos Report**

CSA:18147.00-IN; Henry Barnard ES; 129 Barnard Road, New Rochelle, NY 10801

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
38 19	219033303-38 Location: 2nd Fl. - Room 211 - Floor - 9 x 9 Lt. Brown Floor Tile		NA/PS
<b>Analyst Description:</b> Bulk Material <b>Asbestos Types:</b> <b>Other Material:</b>			
39 20	219033303-39 Location: 1st Fl. - Room 107 - Floor - 9 x 9 Brown Accent Floor Tile	Yes	8.3 % (by NYS ELAP 198.6) by Kensen Caro on 03/21/19
<b>Analyst Description:</b> Brown, Homogeneous, Non-Fibrous, Bulk Material <b>Asbestos Types:</b> Chrysotile 8.3 % <b>Other Material:</b> Non-fibrous 39.7 %			
40 20	219033303-40 Location: 2nd Fl. - Room 211 - Floor - 9 x 9 Brown Accent Floor Tile		NA/PS
<b>Analyst Description:</b> Bulk Material <b>Asbestos Types:</b> <b>Other Material:</b>			
41 21	219033303-41L1 Location: Grd. Fl. - Room 4 - Floor - 1 x 1 Beige Floor Tile	No	NAD (by NYS ELAP 198.6) by Kensen Caro on 03/21/19
<b>Analyst Description:</b> Beige, Homogeneous, Non-Fibrous, Bulk Material <b>Asbestos Types:</b> <b>Other Material:</b> Non-fibrous 22 %			
41 21	219033303-41L2 Location: Grd. Fl. - Room 4 - Floor - 1 x 1 Beige Floor Tile (Mastic)	Yes	2.9 % (by NYS ELAP 198.6) by Kensen Caro on 03/21/19
<b>Analyst Description:</b> Black, Homogeneous, Non-Fibrous, Bulk Material <b>Asbestos Types:</b> Chrysotile 2.9 % <b>Other Material:</b> Non-fibrous 23.3 %			
42 21	219033303-42L1 Location: 2nd Fl. - Room 209D - Floor - 1 x 1 Beige Floor Tile	No	NAD (by NYS ELAP 198.6) by Kensen Caro on 03/21/19
<b>Analyst Description:</b> Beige, Homogeneous, Non-Fibrous, Bulk Material <b>Asbestos Types:</b> <b>Other Material:</b> Non-fibrous 23.6 %			

Client Name: Adelaide Environmental Health

**PLM Bulk Asbestos Report**

CSA:18147.00-IN; Henry Barnard ES; 129 Barnard Road, New Rochelle, NY 10801

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
42 21	219033303-42L2 Location: 2nd Fl. - Room 209D - Floor - 1 x 1 Beige Floor Tile (Mastic)		NA/PS
<b>Analyst Description:</b> Bulk Material <b>Asbestos Types:</b> <b>Other Material:</b>			
43 22	219033303-43 Location: 1st Fl. - Kindergarten 110 - Floor - Top Layer - Carpet Mastic	No	NAD (by NYS ELAP 198.6) by Kensen Caro on 03/21/19
<b>Analyst Description:</b> Yellow, Homogeneous, Non-Fibrous, Bulk Material <b>Asbestos Types:</b> <b>Other Material:</b> Non-fibrous 38.1 %			
44 22	219033303-44 Location: 1st Fl. - Kindergarten 110 - Floor - Top Layer - Carpet Mastic	No	NAD (by NYS ELAP 198.6) by Kensen Caro on 03/21/19
<b>Analyst Description:</b> Yellow, Homogeneous, Non-Fibrous, Bulk Material <b>Asbestos Types:</b> <b>Other Material:</b> Non-fibrous 34.9 %			
45 23	219033303-45L1 Location: 1st Fl. - Kindergarten 110 - Floor - Bottom Layer - 9 x 9 Pink Floor Tile	No	NAD (by NYS ELAP 198.6) by Kensen Caro on 03/21/19
<b>Analyst Description:</b> Pink, Homogeneous, Non-Fibrous, Bulk Material <b>Asbestos Types:</b> <b>Other Material:</b> Non-fibrous 0.6 %			
45 23	219033303-45L2 Location: 1st Fl. - Kindergarten 110 - Floor - Bottom Layer - 9 x 9 Pink Floor Tile (Mastic)	No	NAD (by NYS ELAP 198.6) by Kensen Caro on 03/21/19
<b>Analyst Description:</b> Black, Homogeneous, Non-Fibrous, Bulk Material <b>Asbestos Types:</b> <b>Other Material:</b> Non-fibrous 49 %			
46 23	219033303-46L1 Location: 1st Fl. - Kindergarten 110 - Floor - Bottom Layer - 9 x 9 Pink Floor Tile	No	NAD (by NYS ELAP 198.6) by Kensen Caro on 03/21/19
<b>Analyst Description:</b> Pink, Homogeneous, Non-Fibrous, Bulk Material <b>Asbestos Types:</b> <b>Other Material:</b> Non-fibrous 0.5 %			

Client Name: Adelaide Environmental Health

**PLM Bulk Asbestos Report**

CSA:18147.00-IN; Henry Barnard ES; 129 Barnard Road, New Rochelle, NY 10801

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
46	219033303-46L2	No	NAD
23	Location: 1st Fl. - Kindergarten 110 - Floor - Bottom Layer - 9 x 9 Pink Floor Tile (Mastic)		(by NYS ELAP 198.6) by Kensen Caro on 03/21/19
<b>Analyst Description:</b> Black, Homogeneous, Non-Fibrous, Bulk Material <b>Asbestos Types:</b> <b>Other Material:</b> Non-fibrous 18.1 %			
47	219033303-47	No	NAD
24	Location: 1st Fl. - Area C / Boy's BR - Wall - Ceramic Tile Grout		(by NYS ELAP 198.1) by Kensen Caro on 03/21/19
<b>Analyst Description:</b> Beige, Homogeneous, Non-Fibrous, Cementitious, Bulk Material <b>Asbestos Types:</b> <b>Other Material:</b> Non-fibrous 100 %			
48	219033303-48	No	NAD
24	Location: 2nd Fl. - 213 / Girl's BR - Wall - Ceramic Tile Grout		(by NYS ELAP 198.1) by Kensen Caro on 03/21/19
<b>Analyst Description:</b> Beige, Homogeneous, Non-Fibrous, Cementitious, Bulk Material <b>Asbestos Types:</b> <b>Other Material:</b> Non-fibrous 100 %			
49	219033303-49	No	NAD
25	Location: 1st Fl. - Area C / Boy's BR - Wall - Ceramic Tile Mudset		(by NYS ELAP 198.1) by Kensen Caro on 03/21/19
<b>Analyst Description:</b> Beige, Homogeneous, Non-Fibrous, Cementitious, Bulk Material <b>Asbestos Types:</b> <b>Other Material:</b> Non-fibrous 100 %			
50	219033303-50	No	NAD
25	Location: 2nd Fl. - 213 / Girl's BR - Wall - Ceramic Tile Mudset		(by NYS ELAP 198.1) by Kensen Caro on 03/21/19
<b>Analyst Description:</b> Beige, Homogeneous, Non-Fibrous, Cementitious, Bulk Material <b>Asbestos Types:</b> <b>Other Material:</b> Non-fibrous 100 %			
51	219033303-51	No	NAD
26	Location: 1st Fl. - Area A / Girl's BR - Floor - Terrazzo		(by NYS ELAP 198.1) by Kensen Caro on 03/21/19
<b>Analyst Description:</b> Grey, Homogeneous, Non-Fibrous, Cementitious, Bulk Material <b>Asbestos Types:</b> <b>Other Material:</b> Non-fibrous 100 %			

Client Name: Adelaide Environmental Health

**PLM Bulk Asbestos Report**

CSA:18147.00-IN; Henry Barnard ES; 129 Barnard Road, New Rochelle, NY 10801

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
52 26	219033303-52 Location: 2nd Fl. - 213 / Girl's BR - Floor - Terrazzo	No	NAD (by NYS ELAP 198.1) by Kensen Caro on 03/21/19
<b>Analyst Description:</b> Grey, Homogeneous, Non-Fibrous, Cementitious, Bulk Material <b>Asbestos Types:</b> <b>Other Material:</b> Non-fibrous 100 %			
53 27	219033303-53 Location: Ext. - '51 Addition - Pre-Cast Mortar	No	NAD (by NYS ELAP 198.1) by Kensen Caro on 03/21/19
<b>Analyst Description:</b> Light Grey, Homogeneous, Non-Fibrous, Cementitious, Bulk Material <b>Asbestos Types:</b> <b>Other Material:</b> Non-fibrous 100 %			
54 27	219033303-54 Location: Ext. - '51 Addition - Pre-Cast Mortar	No	NAD (by NYS ELAP 198.1) by Kensen Caro on 03/21/19
<b>Analyst Description:</b> Light Grey, Homogeneous, Non-Fibrous, Cementitious, Bulk Material <b>Asbestos Types:</b> <b>Other Material:</b> Non-fibrous 100 %			
55 28	219033303-55 Location: Ext. - '51 Addition - Brick Mortar	No	NAD (by NYS ELAP 198.1) by Kensen Caro on 03/21/19
<b>Analyst Description:</b> Grey, Homogeneous, Non-Fibrous, Cementitious, Bulk Material <b>Asbestos Types:</b> <b>Other Material:</b> Non-fibrous 100 %			
56 28	219033303-56 Location: Ext. - '51 Addition - Brick Mortar	No	NAD (by NYS ELAP 198.1) by Kensen Caro on 03/21/19
<b>Analyst Description:</b> Grey, Homogeneous, Non-Fibrous, Cementitious, Bulk Material <b>Asbestos Types:</b> <b>Other Material:</b> Non-fibrous 100 %			
57 29	219033303-57 Location: Ext. - Front ADA Ramp - Concrete	No	NAD (by NYS ELAP 198.1) by Kensen Caro on 03/21/19
<b>Analyst Description:</b> Grey, Homogeneous, Non-Fibrous, Cementitious, Bulk Material <b>Asbestos Types:</b> <b>Other Material:</b> Non-fibrous 100 %			



Client Name: Adelaide Environmental Health

**PLM Bulk Asbestos Report**

CSA:18147.00-IN; Henry Barnard ES; 129 Barnard Road, New Rochelle, NY 10801

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
58 29	219033303-58 Location: Ext. - Rear Stairs - Concrete	No	NAD (by NYS ELAP 198.1) by Kensen Caro on 03/21/19
<b>Analyst Description:</b> Grey, Homogeneous, Non-Fibrous, Cementitious, Bulk Material <b>Asbestos Types:</b> <b>Other Material:</b> Non-fibrous 100 %			
59 30	219033303-59 Location: Ext. - Proposed Parapet Wall Location - Brick Mortar	No	NAD (by NYS ELAP 198.1) by Kensen Caro on 03/21/19
<b>Analyst Description:</b> Grey, Homogeneous, Non-Fibrous, Cementitious, Bulk Material <b>Asbestos Types:</b> <b>Other Material:</b> Non-fibrous 100 %			
60 30	219033303-60 Location: Ext. - Proposed Parapet Wall Location - Brick Mortar	No	NAD (by NYS ELAP 198.1) by Kensen Caro on 03/21/19
<b>Analyst Description:</b> Grey, Homogeneous, Non-Fibrous, Cementitious, Bulk Material <b>Asbestos Types:</b> <b>Other Material:</b> Non-fibrous 100 %			
61 31	219033303-61 Location: Ext. - Proposed Parapet Wall Location - Stone Mortar	No	NAD (by NYS ELAP 198.1) by Kensen Caro on 03/21/19
<b>Analyst Description:</b> Grey, Homogeneous, Non-Fibrous, Cementitious, Bulk Material <b>Asbestos Types:</b> <b>Other Material:</b> Non-fibrous 100 %			
62 31	219033303-62 Location: Ext. - Proposed Parapet Wall Location - Stone Mortar	No	NAD (by NYS ELAP 198.1) by Kensen Caro on 03/21/19
<b>Analyst Description:</b> Grey, Homogeneous, Non-Fibrous, Cementitious, Bulk Material <b>Asbestos Types:</b> <b>Other Material:</b> Non-fibrous 100 %			
63 32	219033303-63 Location: Ext. - Rear Side Entrance Stairs - Stone Mortar	No	NAD (by NYS ELAP 198.1) by Kensen Caro on 03/21/19
<b>Analyst Description:</b> Beige, Homogeneous, Non-Fibrous, Cementitious, Bulk Material <b>Asbestos Types:</b> <b>Other Material:</b> Non-fibrous 100 %			

Client Name: Adelaide Environmental Health

**PLM Bulk Asbestos Report**

CSA:18147.00-IN; Henry Barnard ES; 129 Barnard Road, New Rochelle, NY 10801

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
64 32	219033303-64 Location: Ext. - Rear Side Entrance Stairs - Stone Mortar	No	NAD (by NYS ELAP 198.1) by Kensen Caro on 03/21/19
<b>Analyst Description:</b> Beige, Homogeneous, Non-Fibrous, Cementitious, Bulk Material <b>Asbestos Types:</b> <b>Other Material:</b> Non-fibrous 100 %			
65 33	219033303-65 Location: Ext. - Rear Side Entrance Stairs - Cap Mortar	No	NAD (by NYS ELAP 198.1) by Kensen Caro on 03/21/19
<b>Analyst Description:</b> Light Grey, Homogeneous, Non-Fibrous, Cementitious, Bulk Material <b>Asbestos Types:</b> <b>Other Material:</b> Non-fibrous 100 %			
66 33	219033303-66 Location: Ext. - Rear Side Entrance Stairs - Cap Mortar	No	NAD (by NYS ELAP 198.1) by Kensen Caro on 03/21/19
<b>Analyst Description:</b> Light Grey, Homogeneous, Non-Fibrous, Cementitious, Bulk Material <b>Asbestos Types:</b> <b>Other Material:</b> Non-fibrous 100 %			
67 34	219033303-67 Location: Ext. - Playground Surface	No	NAD (by NYS ELAP 198.6) by Kensen Caro on 03/21/19
<b>Analyst Description:</b> Green/Black, Homogeneous, Non-Fibrous, Bulk Material <b>Asbestos Types:</b> <b>Other Material:</b> Non-fibrous 8.1 %			
68 34	219033303-68 Location: Ext. - Playground Surface	No	NAD (by NYS ELAP 198.6) by Kensen Caro on 03/21/19
<b>Analyst Description:</b> Green/Black, Homogeneous, Non-Fibrous, Bulk Material <b>Asbestos Types:</b> <b>Other Material:</b> Non-fibrous 9.1 %			
69 35	219033303-69 Location: Ext. - Playground Lot - Asphalt	No	NAD (by NYS ELAP 198.6) by Kensen Caro on 03/21/19
<b>Analyst Description:</b> Black, Homogeneous, Non-Fibrous, Bulk Material <b>Asbestos Types:</b> <b>Other Material:</b> Non-fibrous 52.9 %			

Client Name: Adelaide Environmental Health

**PLM Bulk Asbestos Report**

CSA:18147.00-IN; Henry Barnard ES; 129 Barnard Road, New Rochelle, NY 10801

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
70 35	219033303-70 Location: Ext. - Playground Lot - Asphalt	No	NAD (by NYS ELAP 198.6) by Kensen Caro on 03/21/19
<b>Analyst Description:</b> Black, Homogeneous, Non-Fibrous, Bulk Material <b>Asbestos Types:</b> <b>Other Material:</b> Non-fibrous 60.8 %			
71 36	219033303-71 Location: Ext. - Chimney - Louver Caulk	Yes	8.2 % (by NYS ELAP 198.6) by Kensen Caro on 03/21/19
<b>Analyst Description:</b> Grey, Homogeneous, Non-Fibrous, Bulk Material <b>Asbestos Types:</b> Chrysotile 8.2 % <b>Other Material:</b> Non-fibrous 65.3 %			
72 36	219033303-72 Location: Ext. - Chimney - Louver Caulk		NA/PS
<b>Analyst Description:</b> Bulk Material <b>Asbestos Types:</b> <b>Other Material:</b>			

**Reporting Notes:**

(1) This job was - Analyzed using Mettler BA310 Pol Scope S/N 1190000538

Analyzed by: Kensen Caro

\*NAD/NSD =no asbestos detected; NA =not analyzed; NA/PS=not analyzed/positive stop, (SOF-V) = Sprayed On Fireproofing containing Vermiculite; (SM-V) = Surfacing Material containing Vermiculite; PLM Bulk Asbestos Analysis by Appd E to Subpt E, 40 CFR 763 (NVLAP 200546-0), ELAP PLM Method 198.1 for NY friable samples, which includes the identification and quantitation of vermiculite or 198.6 for NOB samples or EPA 400 pt ct by Appd E to Subpt E, 40 CFR 763 (NY ELAP Lab 11480); Note:PLM is not consistently reliable in detecting asbestos in floor coverings and similar non-friable organically bound materials. NAD or Trace results by PLM are inconclusive, TEM is currently the only method that can be used to determine if this material can be considered or treated as non asbestos-containing in NY State (also see EPA Advisory for floor tile, FR 59,146,38970,8/1/94) National Institute of Standards and Technology Accreditation requirements mandate that this report must not be reproduced except in full without the approval of the lab.This PLM report relates ONLY to the items tested. AIHA-LAP, LLC Lab ID 102843, RI Cert AAL-094, CT Cert PH-0186, Mass Cert AA000054.

Reviewed By:  END OF REPORT

# Adelaide Environmental Health Associates, Inc

1511 Route 22, Suite C24  
Brewster, NY 10509  
845-278-7710  
845-278-7750 - fax

1 of 6


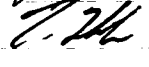
Site Address: <b>Henry Barnard ES</b>			Date: <b>03/19/19</b>		Inspector(s) <b>Philip J. Page</b>		
<b>129 Barnard Road</b>							
<b>New Rochelle, NY 10801</b>			Project #: <b>CSA:18147.00-IN</b>		Quantity (In Feet)	Friable NonFriable	Condition g, d, sd
Sample ID #	Homogeneous Area	Floor Level	Sample Location/Description				
1	1	GRD	Room 3 STORAGE - FLOOR TILE DEBRIS			9 SF	SD
2	2		MER, AHU - CLOTH VIBRATION DAMPER				
3	↓		↓ ↓ ↓				
4	3		FIBERGLASS PIPING - MUDDIED FITTING				
5	↓		↓ ↓ ↓				
6	↓		↓ ↓ ↓				
7	4		Room 3, CEILING, 1x1 TEXTURED - CEILING TILE				
8	↓		↓ 4 ↓ ↓ ↓				
9	5		↓ 3 ↓ ↓ ↓ CT - GLUE DAUB				
10	↓		↓ 4 ↓ ↓ ↓ ↓ ↓				
11	6		Room 3 STORAGE, CEILING, 1x1 DOTTED - CEILING TILE				
12	↓		↓ ↓ ↓ ↓ ↓				
13	7		↓ ↓ ↓ ↓ ↓ CT - GLUE DAUB				
14	↓		↓ ↓ ↓ ↓ ↓ ↓ ↓				
Special Instructions/ Turnaround Time:					Relinquished by:		
Stop at 1st Positive per Homogenous Area					Received by:		
E-Mail Results to AdelaideLabResults@adelaidellc.com					Relinquished by:		
24 HR TAT					Received by:		

#219033303

# Adelaide Environmental Health Associates, Inc

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Brewster, NY 10509  
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2 of 6

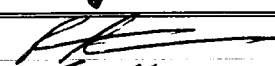

Site Address: <b>Henry Barnard ES</b>			Date: <b>03/19/19</b>		Inspector(s) <b>Philip J. Page</b>			
<b>129 Barnard Road</b>								
<b>New Rochelle, NY 10801</b>			Project #: <b>CSA:18147.00-IN</b>					
Sample ID #	Homogeneous Area	Floor Level	Sample Location/Description			Quantity (In Feet)	Friable NonFriable	Condition g, d, sd
15	8	Geo	BOILER ROOM, FLOOR - EPOXY					
16	↓	↓	↓ ↓ ↓					
17	9	1ST	LOBBY, CEILING, 1x1 DOT CANYON - CEILING TILE					
18	↓	↓	↓ ↓ ↓ ↓					
19	10	↓	ROOM 108, DROP CEILING, 2x4 DOTTED - CEILING TILE					
20	↓	2ND	↓ 211, ↓ ↓ ↓					
21	11	1ST	STAIRWELL BY ELEVATOR, DROP CEILING, 2x4 SKINNY FISSURE - CEILING TILE					
22	↓	2ND	ROOM 202, ↓ ↓ ↓					
23	12	1ST	107, DROP CEILING, 2x4 DOT SPECK - CEILING TILE					
24	↓	2ND	210, ↓					
25	13	↓	202, 2x4 DOT CANYON -					
26	↓	↓	210, ↓					
27	14	↓	202, 2x4 DEEP FISSURE -					
28	↓	↓	↓ ↓ ↓ ↓ ↓					
Special Instructions/ Turnaround Time:					Relinquished by: 			
Stop at 1st Positive per Homogenous Area					Received by:  3/21/19 11:46			
E-Mail Results to AdelaideLabResults@adelaideinc.com					Relinquished by:			
					Received by:			
24 HR TAT								

#219033303

# Adelaide Environmental Health Associates, Inc

1511 Route 22, Suite C24  
Brewster, NY 10509  
845-278-7710  
845-278-7750 - fax

3 of 6

Site Address: <b>Henry Barnard ES</b>			Date: <b>03/19/19</b>		Inspector(s) <b>Philip J. Page</b>			
<b>129 Barnard Road</b>								
<b>New Rochelle, NY 10801</b>			Project #: <b>CSA:18147.00-IN</b>					
Sample ID #	Homogeneous Area	Floor Level	Sample Location/Description			Quantity (In Feet)	Friable NonFriable	Condition g, d, sd
29	15	2 <sup>ND</sup>	Room 210, DROP CEILING, 2x4 TEXTURED DOTTED - CEILING TILE					
30	↓	↓	211, ↓ ↓ ↓ ↓					
31	16	↓	↓, WALL - COVE BASE + ADHESIVE					
32	↓	↓	212, ↓ ↓					
33	17	1 <sup>ST</sup>	108, FLOOR, 9x9 BEIGE - FLOOR TILE + MASTIC					
34	↓	2 <sup>ND</sup>	212, ↓ ↓					
35	18	1 <sup>ST</sup>	108, 9x9 GREEN ACCENT - FLOOR TILE					
36	↓	2 <sup>ND</sup>	212, ↓ ↓					
37	19	1 <sup>ST</sup>	107, 9x9 LIGHT BROWN -					
38	↓	2 <sup>ND</sup>	211, ↓ ↓					
39	20	1 <sup>ST</sup>	107, 9x9 BROWN ACCENT -					
40	↓	2 <sup>ND</sup>	211, ↓ ↓					
41	21	GRD	4, 1x1 BEIGE - FLOOR TILE + MASTIC					
42	↓	2 <sup>ND</sup>	209D, ↓ ↓ ↓ ↓					
Special Instructions/ Turnaround Time:					Relinquished by: 			
Stop at 1st Positive per Homogenous Area					Received by:  3/24/19 11:46			
E-Mail Results to AdelaideLabResults@adelaidellc.com					Relinquished by:			
					Received by:			
24 HR TAT								

#219033303

# Adelaide Environmental Health Associates, Inc

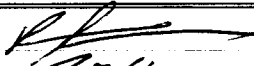
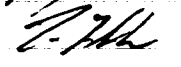
1511 Route 22, Suite C24

Brewster, NY 10509

845-278-7710

845-278-7750 - fax

4 of 6

Site Address: <b>Henry Barnard ES</b>			Date: <b>03/19/19</b>		Inspector(s) <b>Philip J. Page</b>		
<b>129 Barnard Road</b>							
<b>New Rochelle, NY 10801</b>			Project #: <b>CSA:18147.00-IN</b>				
Sample ID #	Homogeneous Area	Floor Level	Sample Location/Description	Quantity (In Feet)	Friable NonFriable	Condition g, d, sd	
43	22	1 <sup>ST</sup>	KINDERGARTEN 110, FLOOR, TOP LAYER - CARPET MASTIC				
44	↓	↓	↓				
45	23	↓	↓, BOTTOM, 9x9 PINK - FLOOR TILE + MASTIC				
46	↓	↓	↓				
47	24	↓	AREA C BOYS BR, WALL CERAMIC TILE - GROUT				
48	↓	2 <sup>ND</sup>	213 GIRLS BR, ↓				
49	25	1 <sup>ST</sup>	AREA C BOYS BR, - MUDSET				
50	↓	2 <sup>ND</sup>	213 GIRLS BR, ↓				
51	26	1 <sup>ST</sup>	AREA A GIRLS BR, FLOOR - TERRAZZO				
52	↓	2 <sup>ND</sup>	213 GIRLS BR, ↓				
53	27	EXT	'51 ADDITION, PRE-CAST - MORTAR				
54	↓	↓	↓				
55	28	↓	BRICK -				
56	↓	↓	↓				
Special Instructions/ Turnaround Time:				Relinquished by: 			
Stop at 1st Positive per Homogenous Area				Received by:  3/21/19 11:46			
E-Mail Results to AdelaideLabResults@adelaidellc.com				Relinquished by:			
				Received by:			

#219033303

# Adelaide Environmental Health Associates, Inc

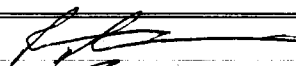

1511 Route 22, Suite C24

Brewster, NY 10509

845-278-7710

845-278-7750 - fax

5 of 6

Site Address: <b>Henry Barnard ES</b>			Date: <b>03/19/19</b>		Inspector(s) <b>Philip J. Page</b>		
<b>129 Barnard Road</b>							
<b>New Rochelle, NY 10801</b>			Project #: <b>CSA:18147.00-IN</b>				
Sample ID #	Homogeneous Area	Floor Level	Sample Location/Description	Quantity (In Feet)	Friable NonFriable	Condition g, d, sd	
57	29	EXT	FRONT ADA RAMP - CONCRETE				
58	↓		↓				
59	30		REAR STAIRS -				
60	↓		↓				
61	31		PROPOSED PARAPET WALL LOCATION, BRICK - MORTAR				
62	↓		↓				
63	32		STONE -				
64	↓		↓				
65	33		REAR SIDE ENTRANCE STAIRS, STONE - MORTAR				
66	↓		↓				
67	34		CAP -				
68	↓		↓				
69	35		PLAYGROUND SURFACE				
70	↓		↓				
			PLAYGROUND LOT - ASPHALT				
Special Instructions/ Turnaround Time:			Relinquished by: 				
Stop at 1st Positive per Homogenous Area			Received by:  3/21/19 11:46				
E-Mail Results to AdelaideLabResults@adelaidellc.com			Relinquished by:				
			Received by:				

#219033303



1511 Route 22, Suite C24  
Brewster, NY 10509  
845-278-7710  
845-278-7750 - fax

6 of 6

# 2 1 9 0 3 3 3 0 3

**APPENDIX G**  
**XRF READINGS**

**HENRY  
BARNARD  
EARLY  
CHILDHOOD  
CENTER**

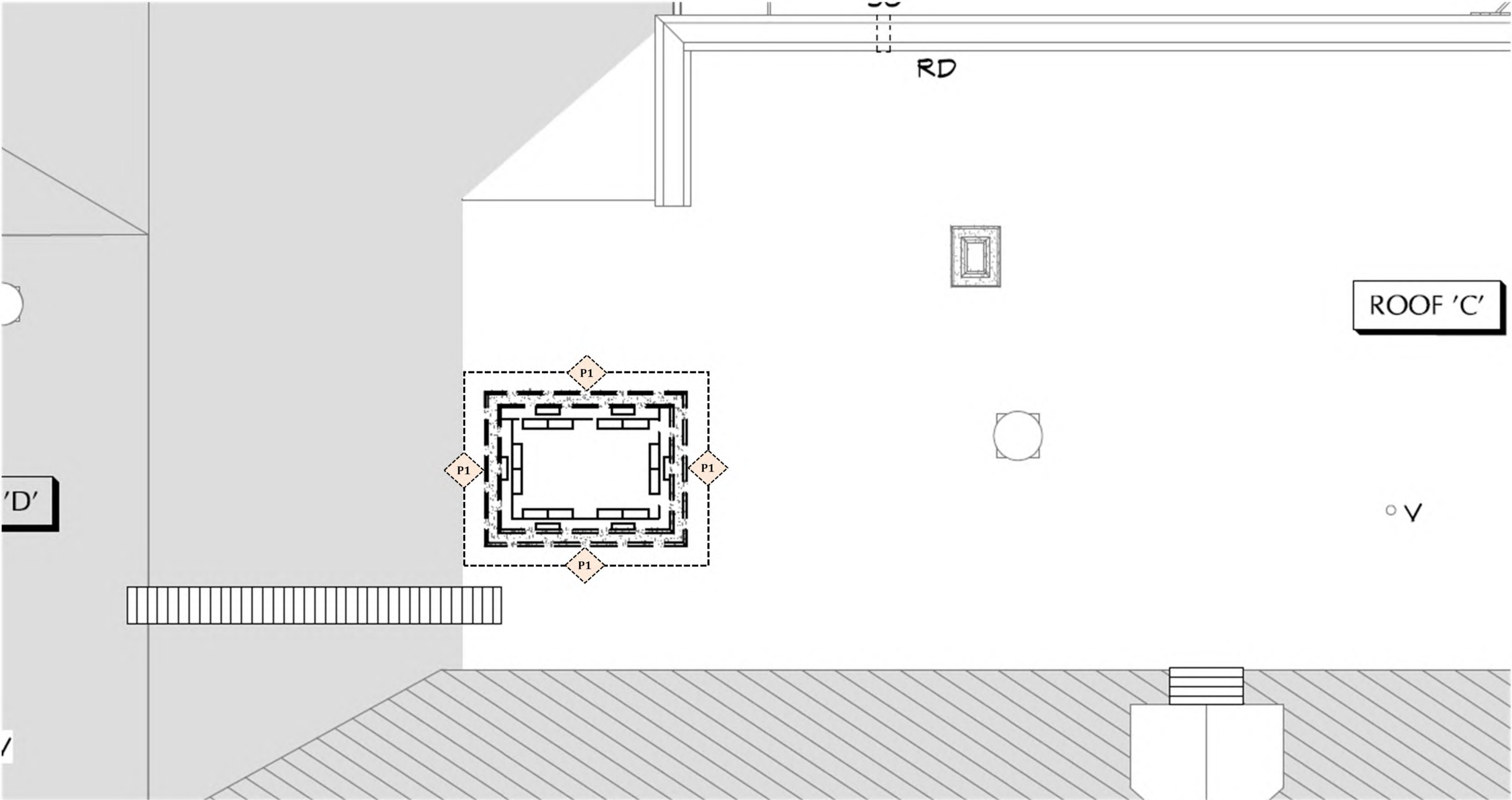


Adelaide Environmental Heath Associates Inc.  
1511 Route 22, Suite C-24  
Brewster, New York 10509  
Adelaide Project# CSA:23324.00-IN  
Project Name: Henry Barnard Elementary School  
Inspector: Jimmie Downes

Reading #	Date	Time	Space Type	Floor	Room	Component	Side	Substrate	Color	Condition	Lead Concentration (mg/cm2)	Result
1	11/30/2023	20:50:46	School		Calibration						0.9	Negative
2	11/30/2023	20:51:02	School		Calibration						0.8	Negative
3	11/30/2023	20:51:29	School		Calibration						0.8	Negative
4	11/30/2023	20:53:17	School	2nd Floor	Hallway	Ceiling	Ceiling	Plaster	Off White	Intact	0.1	Negative
5	11/30/2023	20:53:52	School	2nd Floor	Hallway	Wall	B	Plaster	Brown	Intact	0.6	Negative
6	11/30/2023	20:54:21	School	2nd Floor	Hallway	Wall	B	Plaster	Off White	Intact	0.6	Negative
7	11/30/2023	20:56:13	School		Calibration						1	Positive
8	11/30/2023	20:56:30	School		Calibration						1	Positive
9	11/30/2023	20:56:46	School		Calibration						1	Positive

**APPENDIX H**  
**PCB LOCATION MAP(S)**

**HENRY  
BARNARD  
EARLY  
CHILDHOOD  
CENTER**



**CLIENT:**  
**CSArch**  
19 Front Street  
Newburgh, New York 12550

**(Client) Project #**

**SURVEY LOCATION:**  
**Henry Barnard Early Childhood Center**  
129 Barnard Road  
New Rochelle, New York 10801

**DATE:** 12/08/2023

**DRAWING VERSION:** No. 1

**ISSUED FOR:**  
Limited HazMat Survey


**ADELAIDE PROJECT NO.:**  
CSA:23324.00-IN

**DRAWING PREPARED BY:**  
DWS

**HBE\_PCB-01**

**Roof Plan - Limited PCB Locations**  
\*PCB locations identified on this drawing are ONLY limited to the dates of the inspection that was conducted\*  
\*\*Drawing Not to Scale\*\*

**PCB LEGEND: (see report for details)**

**P1**

Assumed: Flashing Caulking

**APPENDIX J**  
**PREVIOUS REPORTS PCB ANALYTICAL RESULTS**



**WILLIAM B.**  
**WARD**  
**ELEMENTARY**  
**SCHOOL**



# Technical Report

prepared for:

**Adelaide Environmental Health Associates, Inc.**

1511 Route 22, Suite C24

Brewster NY, 10509

**Attention: Mr. John Soter**

Report Date: 04/08/2019

**Client Project ID: CSA: 18149.00-IN**

York Project (SDG) No.: 19D0001

CT Cert. No. PH-0723

New Jersey Cert. No. CT005 and NY037



New York Cert. Nos. 10854 and 12058

PA Cert. No. 68-04440

120 RESEARCH DRIVE  
www.YORKLAB.com

STRATFORD, CT 06615  
(203) 325-1371

132-02 89th AVENUE  
FAX (203) 357-0166

RICHMOND HILL, NY 11418  
ClientServices@yorklab.com

Report Date: 04/08/2019  
Client Project ID: CSA: 18149.00-IN  
York Project (SDG) No.: 19D0001

**Adelaide Environmental Health Associates, Inc.**  
1511 Route 22, Suite C24  
Brewster NY, 10509  
Attention: Mr. John Soter

---

## Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on April 01, 2019 with a temperature of 5.0 C. The project was identified as your project: **CSA: 18149.00-IN**.

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables.

All samples were received in proper condition meeting the customary acceptance requirements for environmental samples except those indicated under the Sample and Analysis Qualifiers section of this report.

All analyses met the method and laboratory standard operating procedure requirements except as indicated by any data flags, the meaning of which are explained in the Sample and Data Qualifiers Relating to This Work Order section of this report and case narrative if applicable.

The results of the analyses, which are all reported on dry weight basis (soils) unless otherwise noted, are detailed in the following pages.

Please contact Client Services at 203.325.1371 with any questions regarding this report.

<u>York Sample ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Collected</u>	<u>Date Received</u>
19D0001-01	PCB-1	Caulk	03/28/2019	04/01/2019
19D0001-02	PCB-2	Caulk	03/28/2019	04/01/2019
19D0001-03	PCB-3	Caulk	03/28/2019	04/01/2019
19D0001-04	PCB-4	Caulk	03/28/2019	04/01/2019
19D0001-05	PCB-5	Caulk	03/28/2019	04/01/2019

## **General Notes for York Project (SDG) No.: 19D0001**

1. The RLs and MDLs (Reporting Limit and Method Detection Limit respectively) reported are adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference. The RL(REPORTING LIMIT) is based upon the lowest standard utilized for the calibration where applicable.
2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
5. All analyses conducted met method or Laboratory SOP requirements. See the Sample and Data Qualifiers Section for further information.
6. It is noted that no analyses reported herein were subcontracted to another laboratory, unless noted in the report.
7. This report reflects results that relate only to the samples submitted on the attached chain-of-custody form(s) received by York.
8. Analyses conducted at York Analytical Laboratories, Inc. Stratford, CT are indicated by NY Cert. No. 10854; those conducted at York Analytical Laboratories, Inc., Richmond Hill, NY are indicated by NY Cert. No. 12058.

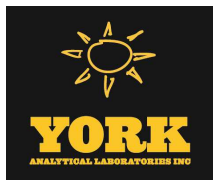
**Approved By:**



**Benjamin Gulizia**  
Laboratory Director

**Date:** 04/08/2019





## Sample Information

**Client Sample ID:** PCB-1

**York Sample ID:** 19D0001-01

York Project (SDG) No.

19D0001

Client Project ID

CSA: 18149.00-IN

Matrix

Caulk

Collection Date/Time

March 28, 2019 3:00 pm

Date Received

04/01/2019

### Polychlorinated Biphenyls (PCB)

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
12674-11-2	Aroclor 1016	ND		mg/kg	0.758	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP	04/04/2019 16:25	04/06/2019 03:15	TJD
11104-28-2	Aroclor 1221	ND		mg/kg	0.758	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP	04/04/2019 16:25	04/06/2019 03:15	TJD
11141-16-5	Aroclor 1232	ND		mg/kg	0.758	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP	04/04/2019 16:25	04/06/2019 03:15	TJD
53469-21-9	Aroclor 1242	ND		mg/kg	0.758	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP	04/04/2019 16:25	04/06/2019 03:15	TJD
12672-29-6	Aroclor 1248	ND		mg/kg	0.758	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP	04/04/2019 16:25	04/06/2019 03:15	TJD
11097-69-1	Aroclor 1254	ND		mg/kg	0.758	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP	04/04/2019 16:25	04/06/2019 03:15	TJD
11096-82-5	Aroclor 1260	ND		mg/kg	0.758	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP	04/04/2019 16:25	04/06/2019 03:15	TJD
1336-36-3	* Total PCBs	ND		mg/kg	0.758	1	EPA 8082A Certifications:	04/04/2019 16:25	04/06/2019 03:15	TJD
Surrogate Recoveries		Result	Acceptance Range							
877-09-8	Surrogate: Tetrachloro-m-xylene	108 %	30-140							
2051-24-3	Surrogate: Decachlorobiphenyl	128 %	30-140							

## Sample Information

**Client Sample ID:** PCB-2

**York Sample ID:** 19D0001-02

York Project (SDG) No.

19D0001

Client Project ID

CSA: 18149.00-IN

Matrix

Caulk

Collection Date/Time

March 28, 2019 3:00 pm

Date Received

04/01/2019

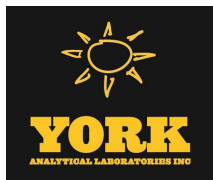
### Polychlorinated Biphenyls (PCB)

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
12674-11-2	Aroclor 1016	ND		mg/kg	0.746	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP	04/04/2019 16:25	04/06/2019 03:39	TJD
11104-28-2	Aroclor 1221	ND		mg/kg	0.746	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP	04/04/2019 16:25	04/06/2019 03:39	TJD
11141-16-5	Aroclor 1232	ND		mg/kg	0.746	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP	04/04/2019 16:25	04/06/2019 03:39	TJD
53469-21-9	Aroclor 1242	ND		mg/kg	0.746	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP	04/04/2019 16:25	04/06/2019 03:39	TJD



## Sample Information

**Client Sample ID:** PCB-2

**York Sample ID:** 19D0001-02

York Project (SDG) No.  
19D0001

Client Project ID  
CSA: 18149.00-IN

Matrix  
Caulk

Collection Date/Time  
March 28, 2019 3:00 pm

Date Received  
04/01/2019

### Polychlorinated Biphenyls (PCB)

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
12672-29-6	Aroclor 1248	ND		mg/kg	0.746	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP	04/04/2019 16:25	04/06/2019 03:39	TJD
11097-69-1	Aroclor 1254	ND		mg/kg	0.746	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP	04/04/2019 16:25	04/06/2019 03:39	TJD
11096-82-5	Aroclor 1260	ND		mg/kg	0.746	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP	04/04/2019 16:25	04/06/2019 03:39	TJD
1336-36-3	* Total PCBs	ND		mg/kg	0.746	1	EPA 8082A Certifications:	04/04/2019 16:25	04/06/2019 03:39	TJD
<b>Surrogate Recoveries</b>		<b>Result</b>	<b>Acceptance Range</b>							
877-09-8	Surrogate: Tetrachloro-m-xylene	90.0 %	30-140							
2051-24-3	Surrogate: Decachlorobiphenyl	132 %	30-140							

## Sample Information

**Client Sample ID:** PCB-3

**York Sample ID:** 19D0001-03

York Project (SDG) No.  
19D0001

Client Project ID  
CSA: 18149.00-IN

Matrix  
Caulk

Collection Date/Time  
March 28, 2019 3:00 pm

Date Received  
04/01/2019

### Polychlorinated Biphenyls (PCB)

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
12674-11-2	Aroclor 1016	ND		mg/kg	0.342	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP	04/04/2019 16:25	04/06/2019 04:03	TJD
11104-28-2	Aroclor 1221	ND		mg/kg	0.342	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP	04/04/2019 16:25	04/06/2019 04:03	TJD
11141-16-5	Aroclor 1232	ND		mg/kg	0.342	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP	04/04/2019 16:25	04/06/2019 04:03	TJD
53469-21-9	Aroclor 1242	ND		mg/kg	0.342	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP	04/04/2019 16:25	04/06/2019 04:03	TJD
12672-29-6	Aroclor 1248	ND		mg/kg	0.342	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP	04/04/2019 16:25	04/06/2019 04:03	TJD
11097-69-1	Aroclor 1254	ND		mg/kg	0.342	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP	04/04/2019 16:25	04/06/2019 04:03	TJD
11096-82-5	Aroclor 1260	ND		mg/kg	0.342	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP	04/04/2019 16:25	04/06/2019 04:03	TJD
1336-36-3	* Total PCBs	ND		mg/kg	0.342	1	EPA 8082A Certifications:	04/04/2019 16:25	04/06/2019 04:03	TJD
<b>Surrogate Recoveries</b>		<b>Result</b>	<b>Acceptance Range</b>							
877-09-8	Surrogate: Tetrachloro-m-xylene	94.0 %	30-140							



## Sample Information

**Client Sample ID:** PCB-3

**York Sample ID:** 19D0001-03

York Project (SDG) No.  
19D0001

Client Project ID  
CSA: 18149.00-IN

Matrix  
Caulk

Collection Date/Time  
March 28, 2019 3:00 pm

Date Received  
04/01/2019

### Polychlorinated Biphenyls (PCB)

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
2051-24-3	Surrogate: Decachlorobiphenyl	132 %			30-140					

## Sample Information

**Client Sample ID:** PCB-4

**York Sample ID:** 19D0001-04

York Project (SDG) No.  
19D0001

Client Project ID  
CSA: 18149.00-IN

Matrix  
Caulk

Collection Date/Time  
March 28, 2019 3:00 pm

Date Received  
04/01/2019

### Polychlorinated Biphenyls (PCB)

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
12674-11-2	Aroclor 1016	ND		mg/kg	0.847	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP	04/04/2019 16:25	04/06/2019 04:51	TJD
11104-28-2	Aroclor 1221	ND		mg/kg	0.847	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP	04/04/2019 16:25	04/06/2019 04:51	TJD
11141-16-5	Aroclor 1232	ND		mg/kg	0.847	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP	04/04/2019 16:25	04/06/2019 04:51	TJD
53469-21-9	Aroclor 1242	ND		mg/kg	0.847	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP	04/04/2019 16:25	04/06/2019 04:51	TJD
12672-29-6	Aroclor 1248	ND		mg/kg	0.847	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP	04/04/2019 16:25	04/06/2019 04:51	TJD
11097-69-1	Aroclor 1254	ND		mg/kg	0.847	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP	04/04/2019 16:25	04/06/2019 04:51	TJD
11096-82-5	Aroclor 1260	ND		mg/kg	0.847	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP	04/04/2019 16:25	04/06/2019 04:51	TJD
1336-36-3	* Total PCBs	ND		mg/kg	0.847	1	EPA 8082A Certifications:	04/04/2019 16:25	04/06/2019 04:51	TJD
Surrogate Recoveries		Result		Acceptance Range						
877-09-8	Surrogate: Tetrachloro-m-xylene	106 %		30-140						
2051-24-3	Surrogate: Decachlorobiphenyl	139 %		30-140						

## Sample Information

**Client Sample ID:** PCB-5

**York Sample ID:** 19D0001-05

York Project (SDG) No.  
19D0001

Client Project ID  
CSA: 18149.00-IN

Matrix  
Caulk

Collection Date/Time  
March 28, 2019 3:00 pm

Date Received  
04/01/2019



## Sample Information

**Client Sample ID:** PCB-5

**York Sample ID:** 19D0001-05

York Project (SDG) No.  
19D0001

Client Project ID  
CSA: 18149.00-IN

Matrix  
Caulk

Collection Date/Time  
March 28, 2019 3:00 pm

Date Received  
04/01/2019

### Polychlorinated Biphenyls (PCB)

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
12674-11-2	Aroclor 1016	ND		mg/kg	0.926	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP	04/04/2019 16:25	04/06/2019 05:15	TJD
11104-28-2	Aroclor 1221	ND		mg/kg	0.926	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP	04/04/2019 16:25	04/06/2019 05:15	TJD
11141-16-5	Aroclor 1232	ND		mg/kg	0.926	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP	04/04/2019 16:25	04/06/2019 05:15	TJD
53469-21-9	Aroclor 1242	ND		mg/kg	0.926	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP	04/04/2019 16:25	04/06/2019 05:15	TJD
12672-29-6	Aroclor 1248	ND		mg/kg	0.926	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP	04/04/2019 16:25	04/06/2019 05:15	TJD
11097-69-1	Aroclor 1254	ND		mg/kg	0.926	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP	04/04/2019 16:25	04/06/2019 05:15	TJD
11096-82-5	Aroclor 1260	ND		mg/kg	0.926	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP	04/04/2019 16:25	04/06/2019 05:15	TJD
1336-36-3	* Total PCBs	ND		mg/kg	0.926	1	EPA 8082A Certifications:	04/04/2019 16:25	04/06/2019 05:15	TJD
<b>Surrogate Recoveries</b>		<b>Result</b>	<b>Acceptance Range</b>							
877-09-8	Surrogate: Tetrachloro-m-xylene	103 %	30-140							
2051-24-3	Surrogate: Decachlorobiphenyl	138 %	30-140							





## Sample and Data Qualifiers Relating to This Work Order

### Definitions and Other Explanations

*	Analyte is not certified or the state of the samples origination does not offer certification for the Analyte.
ND	NOT DETECTED - the analyte is not detected at the Reported to level (LOQ/RL or LOD/MDL)
RL	REPORTING LIMIT - the minimum reportable value based upon the lowest point in the analyte calibration curve.
LOQ	LIMIT OF QUANTITATION - the minimum concentration of a target analyte that can be reported within a specified degree of confidence. This is the lowest point in an analyte calibration curve that has been subjected to all steps of the processing/analysis and verified to meet defined criteria. This is based upon NELAC 2009 Standards and applies to all analyses.
LOD	LIMIT OF DETECTION - a verified estimate of the minimum concentration of a substance in a given matrix that an analytical process can reliably detect. This is based upon NELAC 2009 Standards and applies to all analyses conducted under the auspices of EPA SW-846.
MDL	METHOD DETECTION LIMIT - a statistically derived estimate of the minimum amount of a substance an analytical system can reliably detect with a 99% confidence that the concentration of the substance is greater than zero. This is based upon 40 CFR Part 136 Appendix B and applies only to EPA 600 and 200 series methods.
Reported to	This indicates that the data for a particular analysis is reported to either the LOD/MDL, or the LOQ/RL. In cases where the "Reported to" is located above the LOD/MDL, any value between this and the LOQ represents an estimated value which is "J" flagged accordingly. This applies to volatile and semi-volatile target compounds only.
NR	Not reported
RPD	Relative Percent Difference
Wet	The data has been reported on an as-received (wet weight) basis
Low Bias	Low Bias flag indicates that the recovery of the flagged analyte is below the laboratory or regulatory lower control limit. The data user should take note that this analyte may be biased low but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
High Bias	High Bias flag indicates that the recovery of the flagged analyte is above the laboratory or regulatory upper control limit. The data user should take note that this analyte may be biased high but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
Non-Dir.	Non-dir. flag (Non-Directional Bias) indicates that the Relative Percent Difference (RPD) (a measure of precision) among the MS and MSD data is outside the laboratory or regulatory control limit. This alerts the data user where the MS and MSD are from site-specific samples that the RPD is high due to either non-homogeneous distribution of target analyte between the MS/MSD or indicates poor reproducibility for other reasons.

If EPA SW-846 method 8270 is included herein it is noted that the target compound N-nitrosodiphenylamine (NDPA) decomposes in the gas chromatographic inlet and cannot be separated from diphenylamine (DPA). These results could actually represent 100% DPA, 100% NDPA or some combination of the two. For this reason, York reports the combined result for n-nitrosodiphenylamine and diphenylamine for either of these compounds as a combined concentration as Diphenylamine.

If Total PCBs are detected and the target aroclors reported are "Not detected", the Total PCB value is reported due to the presence of either or both Aroclors 1262 and 1268 which are non-target aroclors for some regulatory lists.

2-chloroethylvinyl ether readily breaks down under acidic conditions. Samples that are acid preserved, including standards will exhibit breakdown. The data user should take note.

Certification for pH is no longer offered by NYDOH ELAP.

Semi-Volatile and Volatile analyses are reported down to the LOD/MDL, with values between the LOD/MDL and the LOQ being "J" flagged as estimated results.

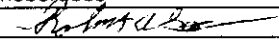
For analyses by EPA SW-846-8270D, the Limit of Quantitation (LOQ) reported for benzidine is based upon the lowest standard used for calibration and is not a verified LOQ due to this compound's propensity for oxidative losses during extraction/concentration procedures and non-reproducible chromatographic performance.

**York Analytical Laboratories, Inc.**

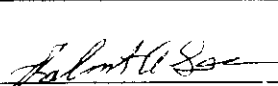
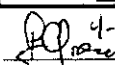
120 Research Drive  
Stratford, CT 06615  
ph. (203) 325-1371  
fx. (203) 357-0166

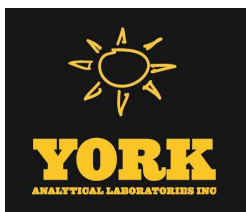
**Field Chain-of-Custody Record**YORK Project No. 19D0001Analysis Turnaround: 5-7 DaysCompany: Adelaide Environmental1511 Route 22, Suite C24Brewster, NY 10509Invoice to: Stephanie SoterResults Send Via: AdelaideLabResults@adelaidelc.com

Cc Results:

Sampled By (Print): Robert SeeSampled By (Sign): Project #: CSA: 18149.00-INProject ID: William Ward ES

SAMPLE #	LOCATION	SAMPLE DATE	MATRIX	ANALYSIS REQUESTED	CONTAINER
PCB-1	West Elevation Expansion Joint Beige	3/28/2019	Caulk	PCB	Bag
PCB-2	Court yard Window Frame Soft Gray	3/28/2019	Caulk	PCB	Bag
PCB-3	East Elevation Store Front Window Frame Hard Gray	3/28/2019	Caulk	PCB	Bag
PCB-4	East Elevation under rescue window shiny gray	3/28/2019	Caulk	PCB	Bag
PCB-5	Court yard small windows frame medium soft gray	3/28/2019	Caulk	PCB	Bag
Comments					

Cool 4°C <input type="checkbox"/> HNO3 <input type="checkbox"/> H2SO4 <input type="checkbox"/> NaOH <input type="checkbox"/> NONE <input type="checkbox"/> FROZEN <input type="checkbox"/>		Temperature on Receipt ____ °C
Samples Relinquished By <u></u> 3/28/19 Date/Time	Samples Received By Lab <u> 4-1-19 08:50</u> Date/Time	



# Technical Report

prepared for:

**Adelaide Environmental Health Associates, Inc.**

1511 Route 22, Suite C24

Brewster NY, 10509

**Attention: Mr. John Soter**

Report Date: 04/04/2019

**Client Project ID: CSA:18149.00-IN**

York Project (SDG) No.: 19C1059

CT Cert. No. PH-0723

New Jersey Cert. No. CT005 and NY037



New York Cert. Nos. 10854 and 12058

PA Cert. No. 68-04440

120 RESEARCH DRIVE  
www.YORKLAB.com

STRATFORD, CT 06615  
(203) 325-1371

132-02 89th AVENUE  
FAX (203) 357-0166

RICHMOND HILL, NY 11418  
ClientServices@yorklab.com

Report Date: 04/04/2019  
Client Project ID: CSA:18149.00-IN  
York Project (SDG) No.: 19C1059

**Adelaide Environmental Health Associates, Inc.**  
1511 Route 22, Suite C24  
Brewster NY, 10509  
Attention: Mr. John Soter

---

## Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on March 26, 2019 with a temperature of 5.0 C. The project was identified as your project: **CSA:18149.00-IN**.

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables.

All samples were received in proper condition meeting the customary acceptance requirements for environmental samples except those indicated under the Sample and Analysis Qualifiers section of this report.

All analyses met the method and laboratory standard operating procedure requirements except as indicated by any data flags, the meaning of which are explained in the Sample and Data Qualifiers Relating to This Work Order section of this report and case narrative if applicable.

The results of the analyses, which are all reported on dry weight basis (soils) unless otherwise noted, are detailed in the following pages.

Please contact Client Services at 203.325.1371 with any questions regarding this report.

<u>York Sample ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Collected</u>	<u>Date Received</u>
19C1059-01	PCB-1	Caulk	03/21/2019	03/26/2019

## **General Notes for York Project (SDG) No.: 19C1059**

1. The RLs and MDLs (Reporting Limit and Method Detection Limit respectively) reported are adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference. The RL(REPORTING LIMIT) is based upon the lowest standard utilized for the calibration where applicable.
2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
5. All analyses conducted met method or Laboratory SOP requirements. See the Sample and Data Qualifiers Section for further information.
6. It is noted that no analyses reported herein were subcontracted to another laboratory, unless noted in the report.
7. This report reflects results that relate only to the samples submitted on the attached chain-of-custody form(s) received by York.
8. Analyses conducted at York Analytical Laboratories, Inc. Stratford, CT are indicated by NY Cert. No. 10854; those conducted at York Analytical Laboratories, Inc., Richmond Hill, NY are indicated by NY Cert. No. 12058.

**Approved By:**



**Benjamin Gulizia**  
Laboratory Director

**Date:** 04/04/2019





## Sample Information

**Client Sample ID:** PCB-1

**York Sample ID:** 19C1059-01

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19C1059

CSA:18149.00-IN

Caulk

March 21, 2019 12:00 am

03/26/2019

### Polychlorinated Biphenyls (PCB)

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
12674-11-2	Aroclor 1016	ND		mg/kg	1.14	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP	04/02/2019 14:45	04/04/2019 01:37	SR
11104-28-2	Aroclor 1221	ND		mg/kg	1.14	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP	04/02/2019 14:45	04/04/2019 01:37	SR
11141-16-5	Aroclor 1232	ND		mg/kg	1.14	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP	04/02/2019 14:45	04/04/2019 01:37	SR
53469-21-9	Aroclor 1242	ND		mg/kg	1.14	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP	04/02/2019 14:45	04/04/2019 01:37	SR
12672-29-6	Aroclor 1248	ND		mg/kg	1.14	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP	04/02/2019 14:45	04/04/2019 01:37	SR
11097-69-1	Aroclor 1254	ND		mg/kg	1.14	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP	04/02/2019 14:45	04/04/2019 01:37	SR
11096-82-5	Aroclor 1260	ND		mg/kg	1.14	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP	04/02/2019 14:45	04/04/2019 01:37	SR
1336-36-3	* Total PCBs	ND		mg/kg	1.14	1	EPA 8082A Certifications:	04/02/2019 14:45	04/04/2019 01:37	SR
<b>Surrogate Recoveries</b>		<b>Result</b>	<b>Acceptance Range</b>							
877-09-8	Surrogate: Tetrachloro-m-xylene	82.0 %	30-140							
2051-24-3	Surrogate: Decachlorobiphenyl	100 %	30-140							



## Sample and Data Qualifiers Relating to This Work Order

### Definitions and Other Explanations

*	Analyte is not certified or the state of the samples origination does not offer certification for the Analyte.
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If EPA SW-846 method 8270 is included herein it is noted that the target compound N-nitrosodiphenylamine (NDPA) decomposes in the gas chromatographic inlet and cannot be separated from diphenylamine (DPA). These results could actually represent 100% DPA, 100% NDPA or some combination of the two. For this reason, York reports the combined result for n-nitrosodiphenylamine and diphenylamine for either of these compounds as a combined concentration as Diphenylamine.

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2-chloroethylvinyl ether readily breaks down under acidic conditions. Samples that are acid preserved, including standards will exhibit breakdown. The data user should take note.

Certification for pH is no longer offered by NYDOH ELAP.

Semi-Volatile and Volatile analyses are reported down to the LOD/MDL, with values between the LOD/MDL and the LOQ being "J" flagged as estimated results.

For analyses by EPA SW-846-8270D, the Limit of Quantitation (LOQ) reported for benzidine is based upon the lowest standard used for calibration and is not a verified LOQ due to this compound's propensity for oxidative losses during extraction/concentration procedures and non-reproducible chromatographic performance.





**APPENDIX K**  
**PERSONNEL AND LABORATORY CERTIFICATIONS**

**WE ARE YOUR DOL**



**Department  
of Labor**

DIVISION OF SAFETY & HEALTH LICENSE AND CERTIFICATE UNIT, STATE OFFICE CAMPUS, BLDG. 12, ALBANY, NY 12226

# ASBESTOS HANDLING LICENSE

Adelaide Environmental Health Associates, Inc.  
1511 Route 22, Suite C24, Brewster, NY, 10509

License Number: 29305

License Class: RESTRICTED

Date of Issue: 06/03/2024

Expiration Date: 07/31/2025

Duly Authorized Representative: John Soter

This license has been issued in accordance with applicable provisions of Article 30 of the Labor Law of New York State and of the New York State Codes, Rules and Regulations (12 NYCRR Part 56). It is subject to suspension or revocation for a (1) serious violation of state, federal or local laws with regard to the conduct of an asbestos project, or (2) demonstrated lack of responsibility in the conduct of any job involving asbestos or asbestos material.

This license is valid only for the contractor named above and this license or a photocopy must be prominently displayed at the asbestos project worksite. This license verifies that all persons employed by the licensee on an asbestos project in New York State have been issued an Asbestos Certificate, appropriate for the type of work they perform, by the New York State Department of Labor.

Amy Phillips, Director  
For the Commissioner of Labor

EXCELSIOR

# United States Environmental Protection Agency

This is to certify that

ADELAIDE ENVIRONMENTAL HEALTH ASSOCIATES  
INC

has fulfilled the requirements of the Toxic Substances Control Act (TSCA) Section 402, and has  
received certification to conduct lead-based paint activities pursuant to 40 CFR Part 745.226

In the Jurisdiction of:

All EPA Administered Lead-based Paint Activities Program States, Tribes and Territories

This certification is valid from the date of issuance and expires September 08, 2025

LBP-15081-2

Certification #

August 25, 2022

Issued On



A handwritten signature in black ink, which appears to read "Michelle Price", is positioned above the official title.

Michelle Price, Chief

Lead, Heavy Metals, and Inorganics Branch

# United States Environmental Protection Agency

This is to certify that



Adelaide Environmental Health Associates, Inc

has fulfilled the requirements of the Toxic Substances Control Act (TSCA) Section 402, and has received certification to conduct lead-based paint renovation, repair, and painting activities pursuant to 40 CFR Part 745.89

In the Jurisdiction of:

All EPA Administered States, Tribes, and Territories

This certification is valid from the date of issuance and expires December 05, 2027

NAT-15081-3

Certification #

August 03, 2022

Issued On



A handwritten signature in black ink that reads "Michelle Price".

Michelle Price, Chief

Lead, Heavy Metals, and Inorganics Branch

STATE OF NEW YORK - DEPARTMENT OF LABOR  
ASBESTOS CERTIFICATE



**DAVID SEDDON**

CLASS(EXPIRES)

C ATEC (12/24) D INSP (12/24)

E MGPL (12/24) H PM (12/24)

CERT# 23-6LJ1V-SHAB  
DMV# 879533539

**MUST BE CARRIED ON ASBESTOS PROJECTS**





# United States Environmental Protection Agency

This is to certify that



David W Seddon

has fulfilled the requirements of the Toxic Substances Control Act (TSCA) Section 402, and has received certification to conduct lead-based paint activities pursuant to 40 CFR Part 745.226 as:

Inspector

In the Jurisdiction of:

All EPA Administered Lead-based Paint Activities Program States, Tribes and Territories

This certification is valid from the date of issuance and expires September 19, 2026

LBP-I-101120-3

Certification #

August 14, 2023

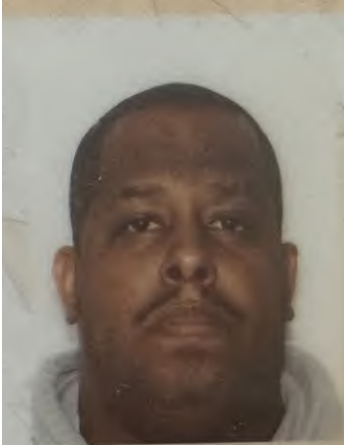
Issued On



Ben Conetta, Chief

Chemicals and Multimedia Programs Branch

STATE OF NEW YORK - DEPARTMENT OF LABOR  
ASBESTOS CERTIFICATE



**JIMMIE DOWNES**

CLASS(EXPIRES)

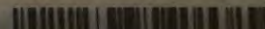
C ATEC (06/25) D INSP (06/25)

H PM (06/25)

CERT# 24-6ARJD-SHAB

DMV# 299097123

**MUST BE CARRIED ON ASBESTOS PROJECTS**



# United States Environmental Protection Agency

This is to certify that

Jimmie Downes

has fulfilled the requirements of the Toxic Substances Control Act (TSCA) Section 402, and has received certification to conduct lead-based paint activities pursuant to 40 CFR Part 745.226 as:

Inspector

In the Jurisdiction of:

All EPA Administered Lead-based Paint Activities Program States, Tribes and Territories

This certification is valid from the date of issuance and expires June 27, 2025

LBP-I-165891-3

Certification #

May 27, 2022

Issued On



Ben Conetta, Chief

Chemicals and Multimedia Programs Branch



NEW YORK STATE DEPARTMENT OF HEALTH  
WADSWORTH CENTER



Expires 12:01 AM April 01, 2025  
Issued April 01, 2024

**CERTIFICATE OF APPROVAL FOR LABORATORY SERVICE**

*Issued in accordance with and pursuant to section 502 Public Health Law of New York State*

**MS. KAROL H. LU**  
**AMERICA SCIENCE TEAM NEW YORK, INC**  
**117 EAST 30TH ST**  
**NEW YORK, NY 10016**

**NY Lab Id No: 11480**

*is hereby APPROVED as an Environmental Laboratory for the category*  
**ENVIRONMENTAL ANALYSES SOLID AND HAZARDOUS WASTE**  
*All approved subcategories and/or analytes are listed below:*

**Miscellaneous**

Asbestos in Friable Material	Item 198.1 of Manual EPA 600/M4/82/020
Asbestos in Non-Friable Material-PLM	Item 198.6 of Manual (NOB by PLM)
Asbestos in Non-Friable Material-TEM	Item 198.4 of Manual

**Serial No.: 68795**

Property of the New York State Department of Health. Certificates are valid only at the address shown and must be conspicuously posted by the laboratory. Continued accreditation depends on the laboratory's successful ongoing participation in the Program. Consumers may verify a laboratory's accreditation status online at <https://apps.health.ny.gov/pubdoh/applinks/wc/elappublicweb/>, by phone (518) 485-5570 or by email to [elap@health.ny.gov](mailto:elap@health.ny.gov).

NEW YORK STATE DEPARTMENT OF HEALTH  
WADSWORTH CENTER



Expires 12:01 AM April 01, 2025  
Issued April 01, 2024

**CERTIFICATE OF APPROVAL FOR LABORATORY SERVICE**

*Issued in accordance with and pursuant to section 502 Public Health Law of New York State*

**MS. PHYLLIS SHILLER**  
**PHOENIX ENVIRONMENTAL LABS**  
**587 EAST MIDDLE TURNPIKE**  
**MANCHESTER, CT 06040**

**NY Lab Id No: 11301**

*is hereby APPROVED as an Environmental Laboratory in conformance with the  
National Environmental Laboratory Accreditation Conference Standards (2016) for the category  
ENVIRONMENTAL ANALYSES SOLID AND HAZARDOUS WASTE  
All approved analytes are listed below:*

**Polychlorinated Biphenyls**

Aroclor 1262 (PCB-1262)	EPA 8082A
Aroclor 1262 (PCB-1262) in Oil	EPA 8082A
Aroclor 1268 (PCB-1268)	EPA 8082A
Aroclor 1268 (PCB-1268) in Oil	EPA 8082A
PCB 101	EPA 8082A
PCB 105	EPA 8082A
PCB 118	EPA 8082A
PCB 128	EPA 8082A
PCB 138	EPA 8082A
PCB 153	EPA 8082A
PCB 170	EPA 8082A
PCB 18	EPA 8082A
PCB 180	EPA 8082A
PCB 183	EPA 8082A
PCB 184	EPA 8082A
PCB 187	EPA 8082A
PCB 195	EPA 8082A
PCB 206	EPA 8082A
PCB 209	EPA 8082A
PCB 28	EPA 8082A
PCB 44	EPA 8082A
PCB 49	EPA 8082A
PCB 52	EPA 8082A
PCB 66	EPA 8082A
PCB 8	EPA 8082A
PCB 87	EPA 8082A
PCB Congeners, Total	EPA 8082A

**Serial No.: 68722**

Property of the New York State Department of Health. Certificates are valid only at the address shown and must be conspicuously posted by the laboratory. Continued accreditation depends on the laboratory's successful ongoing participation in the Program. Consumers may verify a laboratory's accreditation status online at <https://apps.health.ny.gov/pubdoh/applinks/wc/elappublicweb/>, by phone (518) 485-5570 or by email to [elap@health.ny.gov](mailto:elap@health.ny.gov).



NEW YORK STATE DEPARTMENT OF HEALTH  
WADSWORTH CENTER



Expires 12:01 AM April 01, 2020  
Issued April 01, 2019

**CERTIFICATE OF APPROVAL FOR LABORATORY SERVICE**

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MR. ROBERT Q. BRADLEY  
YORK ANALYTICAL LABORATORIES INC  
120 RESEARCH DRIVE  
STRATFORD, CT 06615

NY Lab Id No: 10854

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National Environmental Laboratory Accreditation Conference Standards (2003) for the category  
**ENVIRONMENTAL ANALYSES SOLID AND HAZARDOUS WASTE**  
All approved analytes are listed below:

**Acrylates**

Acrolein (Propenal)	EPA 8260C
Acrylonitrile	EPA 8260C
Methyl methacrylate	EPA 8260C

**Amines**

1,2-Diphenylhydrazine	EPA 8270D
2-Nitroaniline	EPA 8270D
3-Nitroaniline	EPA 8270D
4-Chloroaniline	EPA 8270D
4-Nitroaniline	EPA 8270D
Aniline	EPA 8270D
Carbazole	EPA 8270D
Diphenylamine	EPA 8270D

**Benzidines**

3,3'-Dichlorobenzidine	EPA 8270D
Benzidine	EPA 8270D

**Characteristic Testing**

Corrosivity	EPA 9045D
Free Liquids	EPA 9095B
Ignitability	EPA 1010A
Synthetic Precipitation Leaching Proc.	EPA 1312
TCLP	EPA 1311

**Chlorinated Hydrocarbon Pesticides**

4,4'-DDD	EPA 8081B
4,4'-DDE	EPA 8081B

**Chlorinated Hydrocarbon Pesticides**

4,4'-DDT	EPA 8081B
Aldrin	EPA 8081B
alpha-BHC	EPA 8081B
alpha-Chlordane	EPA 8081B
Atrazine	EPA 8270D
beta-BHC	EPA 8081B
Chlordane Total	EPA 8081B
delta-BHC	EPA 8081B
Dieldrin	EPA 8081B
Endosulfan I	EPA 8081B
Endosulfan II	EPA 8081B
Endosulfan sulfate	EPA 8081B
Endrin	EPA 8081B
Endrin aldehyde	EPA 8081B
Endrin Ketone	EPA 8081B
gamma-Chlordane	EPA 8081B
Heptachlor	EPA 8081B
Heptachlor epoxide	EPA 8081B
Lindane	EPA 8081B
Methoxychlor	EPA 8081B
Mirex	EPA 8081B
Toxaphene	EPA 8081B

**Chlorinated Hydrocarbons**

1,2,3-Trichlorobenzene	EPA 8260C
1,2,4,5-Tetrachlorobenzene	EPA 8270D

Serial No.: 59449

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**Chlorinated Hydrocarbons**

1,2,4-Trichlorobenzene	EPA 8270D
2-Chloronaphthalene	EPA 8270D
Hexachlorobenzene	EPA 8270D
Hexachlorobutadiene	EPA 8270D
Hexachlorocyclopentadiene	EPA 8270D
Hexachloroethane	EPA 8270D

**Chlorophenoxy Acid Pesticides**

2,4,5-T	EPA 8151A
2,4,5-TP (Silvex)	EPA 8151A
2,4-D	EPA 8151A
Dicamba	EPA 8151A

**Haloethers**

2,2'-Oxybis(1-chloropropane)	EPA 8270D
4-Bromophenylphenyl ether	EPA 8270D
4-Chlorophenylphenyl ether	EPA 8270D
Bis(2-chloroethoxy)methane	EPA 8270D
Bis(2-chloroethyl)ether	EPA 8270D

**Metals I**

Barium, Total	EPA 6010C EPA 6010D EPA 6020A EPA 6020B
Cadmium, Total	EPA 6010C EPA 6010D

**Metals I**

Cadmium, Total	EPA 6020A EPA 6020B
Calcium, Total	EPA 6010C EPA 6010D
Chromium, Total	EPA 6010C EPA 6010D
Copper, Total	EPA 6020A EPA 6020B EPA 6010C EPA 6010D EPA 6020A EPA 6020B EPA 6010C EPA 6010D
Iron, Total	EPA 6010C EPA 6010D EPA 6010C EPA 6010D EPA 6020A EPA 6020B EPA 6010C EPA 6010D EPA 6010C EPA 6010D EPA 6020A EPA 6020B EPA 6010C EPA 6010D
Lead, Total	EPA 6010C EPA 6010D EPA 6020A EPA 6020B
Magnesium, Total	EPA 6010C EPA 6010D
Manganese, Total	EPA 6010C EPA 6010D EPA 6020A EPA 6020B EPA 6010C EPA 6010D
Nickel, Total	EPA 6010C EPA 6010D

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**Metals I**

Nickel, Total	EPA 6020A
	EPA 6020B
Potassium, Total	EPA 6010C
	EPA 6010D
Silver, Total	EPA 6010C
	EPA 6010D
Sodium, Total	EPA 6010C
	EPA 6010D

**Metals II**

Aluminum, Total	EPA 6010C
	EPA 6010D
	EPA 6020A
	EPA 6020B
Antimony, Total	EPA 6010C
	EPA 6010D
	EPA 6020A
	EPA 6020B
Arsenic, Total	EPA 6010C
	EPA 6010D
	EPA 6020A
	EPA 6020B
Beryllium, Total	EPA 6010C
	EPA 6010D
	EPA 6020A
	EPA 6020B

**Metals II**

Chromium VI	EPA 7196A
Mercury, Total	EPA 7471B
	EPA 7473
Selenium, Total	EPA 6010C
	EPA 6010D
	EPA 6020A
	EPA 6020B
	EPA 6010C
	EPA 6010D
Vanadium, Total	EPA 6020A
	EPA 6020B

**Zinc, Total**

EPA 6010C  
EPA 6010D  
EPA 6020A  
EPA 6020B

**Metals III**

Cobalt, Total	EPA 6010C
	EPA 6010D
	EPA 6020A
	EPA 6020B
Molybdenum, Total	EPA 6010D
	EPA 6020A
Thallium, Total	EPA 6010C
	EPA 6010D
	EPA 6020A

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**Metals III**

Thallium, Total	EPA 6020B
Tin, Total	EPA 6020A EPA 6020B
Titanium, Total	EPA 6020A

**Miscellaneous**

Boron, Total	EPA 6020A EPA 6020B
Cyanide, Total	EPA 9014
Extractable Organic Halides	EPA 9023
Lead in Dust Wipes	EPA 6010C
Lead in Paint	EPA 6010C

**Nitroaromatics and Isophorone**

2,4-Dinitrotoluene	EPA 8270D
2,6-Dinitrotoluene	EPA 8270D
Isophorone	EPA 8270D
Nitrobenzene	EPA 8270D
Pyridine	EPA 8270D

**Nitrosoamines**

N-Nitrosodimethylamine	EPA 8270D
N-Nitrosodi-n-propylamine	EPA 8270D
N-Nitrosodiphenylamine	EPA 8270D

**Organophosphate Pesticides**

Parathion ethyl	EPA 8270D
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**Petroleum Hydrocarbons**

Diesel Range Organics	EPA 8015D
Gasoline Range Organics	EPA 8015D

**Phthalate Esters**

Benzyl butyl phthalate	EPA 8270D
Bis(2-ethylhexyl) phthalate	EPA 8270D
Diethyl phthalate	EPA 8270D
Dimethyl phthalate	EPA 8270D
Di-n-butyl phthalate	EPA 8270D
Di-n-octyl phthalate	EPA 8270D

**Polychlorinated Biphenyls**

Aroclor 1016 (PCB-1016)	EPA 8082A
Aroclor 1016 (PCB-1016) in Oil	EPA 8082A
Aroclor 1221 (PCB-1221)	EPA 8082A
Aroclor 1221 (PCB-1221) in Oil	EPA 8082A
Aroclor 1232 (PCB-1232)	EPA 8082A
Aroclor 1232 (PCB-1232) in Oil	EPA 8082A
Aroclor 1242 (PCB-1242)	EPA 8082A
Aroclor 1242 (PCB-1242) in Oil	EPA 8082A
Aroclor 1248 (PCB-1248)	EPA 8082A
Aroclor 1248 (PCB-1248) in Oil	EPA 8082A
Aroclor 1254 (PCB-1254)	EPA 8082A
Aroclor 1254 (PCB-1254) in Oil	EPA 8082A
Aroclor 1260 (PCB-1260)	EPA 8082A
Aroclor 1260 (PCB-1260) in Oil	EPA 8082A
Aroclor 1262 (PCB-1262)	EPA 8082A

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**Polychlorinated Biphenyls**

Aroclor 1262 (PCB-1262) in Oil	EPA 8082A
Aroclor 1268 (PCB-1268)	EPA 8082A
Aroclor 1268 (PCB-1268) in Oil	EPA 8082A

**Polynuclear Aromatic Hydrocarbons**

Acenaphthene	EPA 8270D
Acenaphthylene	EPA 8270D
Anthracene	EPA 8270D
Benzo(a)anthracene	EPA 8270D
Benzo(a)pyrene	EPA 8270D
Benzo(b)fluoranthene	EPA 8270D
Benzo(g,h,i)perylene	EPA 8270D
Benzo(k)fluoranthene	EPA 8270D
Chrysene	EPA 8270D
Dibenzo(a,h)anthracene	EPA 8270D
Fluoranthene	EPA 8270D
Fluorene	EPA 8270D
Indeno(1,2,3-cd)pyrene	EPA 8270D
Naphthalene	EPA 8270D
Phenanthrene	EPA 8270D
Pyrene	EPA 8270D

**Priority Pollutant Phenols**

2,3,4,6 Tetrachlorophenol	EPA 8270D
2,4,5-Trichlorophenol	EPA 8270D
2,4,6-Trichlorophenol	EPA 8270D
2,4-Dichlorophenol	EPA 8270D

**Priority Pollutant Phenols**

2,4-Dimethylphenol	EPA 8270D
2,4-Dinitrophenol	EPA 8270D
2-Chlorophenol	EPA 8270D
2-Methyl-4,6-dinitrophenol	EPA 8270D
2-Methylphenol	EPA 8270D
2-Nitrophenol	EPA 8270D
4-Chloro-3-methylphenol	EPA 8270D
4-Methylphenol	EPA 8270D
4-Nitrophenol	EPA 8270D
Pentachlorophenol	EPA 8270D
Phenol	EPA 8270D

**Semi-Volatile Organics**

1,1'-Biphenyl	EPA 8270D
1,2-Dichlorobenzene, Semi-volatile	EPA 8270D
1,3-Dichlorobenzene, Semi-volatile	EPA 8270D
1,4-Dichlorobenzene, Semi-volatile	EPA 8270D
2-Methylnaphthalene	EPA 8270D
Acetophenone	EPA 8270D
Benzaldehyde	EPA 8270D
Benzoic Acid	EPA 8270D
Benzyl alcohol	EPA 8270D
Caprolactam	EPA 8270D
Dibenzofuran	EPA 8270D

**Volatile Aromatics**

1,2,4-Trichlorobenzene, Volatile	EPA 8260C
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**Volatile Aromatics**

1,2,4-Trimethylbenzene	EPA 8260C
1,2-Dichlorobenzene	EPA 8260C
1,3,5-Trimethylbenzene	EPA 8260C
1,3-Dichlorobenzene	EPA 8260C
1,4-Dichlorobenzene	EPA 8260C
2-Chlorotoluene	EPA 8260C
4-Chlorotoluene	EPA 8260C
Benzene	EPA 8260C
Bromobenzene	EPA 8260C
Chlorobenzene	EPA 8260C
Ethyl benzene	EPA 8260C
Isopropylbenzene	EPA 8260C
m/p-Xylenes	EPA 8260C
Naphthalene, Volatile	EPA 8260C
n-Butylbenzene	EPA 8260C
n-Propylbenzene	EPA 8260C
o-Xylene	EPA 8260C
p-Isopropyltoluene (P-Cymene)	EPA 8260C
sec-Butylbenzene	EPA 8260C
Styrene	EPA 8260C
tert-Butylbenzene	EPA 8260C
Toluene	EPA 8260C
Total Xylenes	EPA 8260C

**Volatile Halocarbons**

1,1,1,2-Tetrachloroethane	EPA 8260C
---------------------------	-----------

**Volatile Halocarbons**

1,1,1-Trichloroethane	EPA 8260C
1,1,2,2-Tetrachloroethane	EPA 8260C
1,1,2-Trichloro-1,2,2-Trifluoroethane	EPA 8260C
1,1,2-Trichloroethane	EPA 8260C
1,1-Dichloroethane	EPA 8260C
1,1-Dichloroethene	EPA 8260C
1,1-Dichloropropene	EPA 8260C
1,2,3-Trichloropropane	EPA 8260C
1,2-Dibromo-3-chloropropane	EPA 8260C
1,2-Dibromoethane	EPA 8260C
1,2-Dichloroethane	EPA 8260C
1,2-Dichloropropane	EPA 8260C
1,3-Dichloropropane	EPA 8260C
2,2-Dichloropropane	EPA 8260C
2-Chloroethylvinyl ether	EPA 8260C
Bromochloromethane	EPA 8260C
Bromodichloromethane	EPA 8260C
Bromoform	EPA 8260C
Bromomethane	EPA 8260C
Carbon tetrachloride	EPA 8260C
Chloroethane	EPA 8260C
Chloroform	EPA 8260C
Chloromethane	EPA 8260C
cis-1,2-Dichloroethene	EPA 8260C
cis-1,3-Dichloropropene	EPA 8260C
Dibromochloromethane	EPA 8260C

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**Volatile Halocarbons**

Dibromomethane	EPA 8260C
Dichlorodifluoromethane	EPA 8260C
Hexachlorobutadiene, Volatile	EPA 8260C
Methylene chloride	EPA 8260C
Tetrachloroethene	EPA 8260C
trans-1,2-Dichloroethene	EPA 8260C
trans-1,3-Dichloropropene	EPA 8260C
Trichloroethene	EPA 8260C
Trichlorofluoromethane	EPA 8260C
Vinyl chloride	EPA 8260C

**Sample Preparation Methods**

EPA 5035A-H  
EPA 3580A  
EPA 3010A  
EPA 3050B  
EPA 3550C  
EPA 3546  
EPA 3545A  
EPA 3060A  
EPA 9010C

**Volatile Organics**

1,4-Dioxane	EPA 8260C
2-Butanone (Methylethyl ketone)	EPA 8260C
2-Hexanone	EPA 8260C
4-Methyl-2-Pentanone	EPA 8260C
Acetone	EPA 8260C
Carbon Disulfide	EPA 8260C
Cyclohexane	EPA 8260C
Methyl acetate	EPA 8260C
Methyl cyclohexane	EPA 8260C
Methyl tert-butyl ether	EPA 8260C
tert-butyl alcohol	EPA 8260C
Vinyl acetate	EPA 8260C

**Sample Preparation Methods**

EPA 5035A-L

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Appendix 'B'

Project Designer Certification

STATE OF NEW YORK - DEPARTMENT OF LABOR  
ASBESTOS CERTIFICATE



**PAUL CHECCO**  
CLASS(EXPIRES)  
I PD (09/25)

CERT# 24-61KFG-SHAB  
DMV# 748856015

**MUST BE CARRIED ON ASBESTOS PROJECTS**

REPRODUCED BY THE STATE OF NEW YORK



01213 007309657 02

IF FOUND, RETURN TO:  
NYS DOL - L&C UNIT  
ROOM 161A BUILDING 12  
STATE OFFICE CAMPUS  
ALBANY NY 12226

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## SECTION 028300 - HANDLING OF LEAD-CONTAINING MATERIALS

### PART 1 – GENERAL

#### 1.1 SCOPE OF WORK

- A. This Section specifies the requirements for protection of workers; prevention of contamination of adjacent areas; performing removals, pre-disposal testing of removed materials; and appropriate disposal of removed materials.

- B. Lead-Based Paint

The requirements of this specification apply to the management of lead-based paint (LBP) materials at the:

1. Jefferson Elementary School, 131 Weyman Avenue, New Rochelle, New York 10805.
2. George M. Davis Elementary School, 80 Iselin Drive, New Rochelle, NY 10804.
3. New Rochelle High School, 265 Clove Road, New Rochelle, New York 10801.

According to the New York Renovation Surveys for Asbestos, Lead & PCB's (Attachment 'A' at the end of Section 028200) lead based paint was found on painted and/or glazed surfaces at concentrations reported on said attachment.

Housing and Urban Development (HUD) Guidelines indicate a concentration of 5,000 ppm (or 1.0 mg/cm<sup>2</sup>) is the maximum allowable lead concentration for dry paint surfaces scheduled for disturbance. Work activities in LBP areas that exceed the limit for dry paint on surfaces shall be performed in accordance with Occupational Safety and Health Act (OSHA) regulations as identified or inferred herein, and as indicated below.

#### 1.2 RELATED WORK SPECIFIED ELSEWHERE - Entire project specification with specific attention to:

- A. New York Renovation Surveys for Asbestos, Lead Based Paint & PCB's: Attached to end of Section 028200.
- B. Section 028200 – Asbestos Abatement.

#### 1.3 REFERENCES

- A. New York State Department of Environmental Conservation (DEC) 6NYCRR:
  - 1. Part 360 Solid Waste Management Facilities.
  - 2. Part 364 Waste Transporter Permits.
  - 3. Part 370 Hazardous Waste Management System-General.
  - 4. Part 371 Identification and Listing of Hazardous Wastes.
  - 5. Part 372 Hazardous Waste Manifest System and Related Standards for Generators, Transporters and Facilities.
  - 6. Part 373 Hazardous Waste Management Facilities.
- B. Occupational Safety and Health Administration (OSHA): Lead Exposure in Construction: Interim Final Rule 29 CFR 1926.62.
- C. U.S. Environmental Protection Agency (EPA): Resource Conservation and Recovery Act (RCRA) Section 3004 Hazardous and Solid Waste Amendments.
- D. U.S. Environmental Protection Agency (EPA): Toxicity Characteristics Leaching Procedure EPA Method 1311.
- E. NYS DOH NYCRR 10 Part 67 Sub-part 67-2 Environmental Assessment and Abatement
- F. HUD Technical Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing
- G. U.S. Environmental Protection Agency (EPA): 40 CFR Part 745 Lead - Fees for Accreditation of Training Programs and Certification of Lead-based Paint Activities

#### 1.4 DEFINITIONS

- A. Lead Control Area: An enclosed area or structure with containment to prevent the spread of lead dust, paint chips, or debris from lead-containing paint abatement operations.
- B. The term "Trim" means all base, wall trim systems, standing and or running trim systems and the like.
- C. The term "Encapsulation" - A method of abatement that makes lead paint inaccessible by covering or sealing surfaces with durable coatings specifically formulated to be elastomeric, long lasting, and resistant to cracking, peeling, algae, and fungus.
- D. The term "Lead Paint" - Paint, plaster or other surface coating material containing more than one half of one percent of metallic lead based on the total weight of

the contained solids or dried film of the paint or plaster or other similar surface coating material. - NYS DOH NYCRR 10 Section 67-2.2

## 1.5 SUBMITTALS

### A. Quality Control Submittals:

1. Worker's Qualifications Data:
  - a. Name of each person who will be performing the Work and their employer's name, business address and telephone number.
  - b. Names and addresses of three (3) similar projects that each person has worked on during the past three (3) years.
2. Work Plan: Submit one (1) copy of the work plan required under Quality Assurance Article.
3. Waste Transporter Permit: One (1) copy of transporter's current waste transporter permit.
4. U.S. Environmental Protection Agency (EPA) Notification of Lead Based Paint Activities.
5. U.S. Environmental Protection Agency (EPA) - Lead Based Paint Activities - Training Notification.
6. U.S. Environmental Protection Agency (EPA) - Lead Based Paint Activities – Post Training Notification.

## 1.6 QUALITY ASSURANCE

- A. Worker Exposure to LBP: Contractor shall inform workers of the presence of LBP Contractor shall assure that workers employed in LBP-areas are trained and certified as required in USEPA-approved state-of-the-art LBP abatement practices, prior to the start of work.  
Worker exposure to LBP shall be minimized through complete compliance with procedures and respirator protection described herein, and by following precautionary measures described in the HUD document "Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing", OSHA 29 CFR 1910.1025, "Lead Standard for General Industry, and OSHA 29 CFR 1926.62, "Lead Construction Standard," and other applicable Federal, State and Local regulations, whichever is more stringent and as applicable.
- B. Regulatory Requirements: Comply with the referenced standards.
- C. All laborers, workers and mechanics working on the site must be certified as having successfully completed the OSHA 10-hour construction safety and health course.

## 1.7 PROJECT CONDITIONS

- A. Shut-down of Air Handling System: Complete the Work of this Section within the time limitation allowed for shut-down of the air handling system serving the work area. The air handling system will not be restarted until approval following the final cleaning.

## PART 2 – PRODUCTS (NOT USED)

## PART 3 – EXECUTION

### 3.1 INSPECTION AND ACCEPTANCE

- A. Examine all surfaces and contiguous elements to receive work of this section and correct, as part of the Work of this Contract, any defects affecting installation.

Commencement of work will be construed as complete acceptability of surfaces and contiguous elements.

### 3.2 PRE-ABATEMENT TESTING AND NOTIFICATION

- A. Notify the Owner's representative a minimum of five (5) working days prior to the start of any removal work.

### 3.3 PREPARATION OF EXISTING SURFACES

- A. Protection:
  - 1. Prior to removals, cover or otherwise protect finished Work of other trades and surfaces not being removed or not to be coated.

### 3.4 EMPLOYEE PROTECTION

- A. Comply with all applicable Occupational Safety and Health Administration (OSHA) Requirements.

### 3.5 PROTECTION

- A. Lead Control Area Requirements: Provide a lead control area where lead-containing paint removal operations will be performed in accordance with the approved Work Plan.



- B. Protection of Existing Work to Remain: Perform removal work without damage or contamination of adjacent areas.

### 3.6 LEAD-CONTAINING MATERIAL REMOVAL

- A. All air vents in the work area shall be closed and covered with plastic. All mechanical systems shall be powered off prior to removal work and shall not be powered on until removal and cleaning work has been completed.
- B. Loose and peeling paint or plaster shall be removed wet, using water misting to reduce dust caused by the removal. Lead paint shall not be scraped or sanded when dry.
- C. When renovation work is completed, adjacent surfaces shall be washed with detergent.

### 3.7 PRE-DISPOSAL TESTING

- A. Prior to disposal, test the removed materials for toxicity in accordance with EPA Method 1311, Toxicity Characteristic Leaching Procedure (TCLP).
  - 1. Test results indicating a value greater than 5 ppm lead classifies the removed material as Hazardous Waste.

### 3.8 DISPOSAL OF LEAD-CONTAINING MATERIAL AND RELATED DEBRIS

- A. Transport and dispose of lead-containing material classified as Hazardous Waste in accordance with the standards referenced in Part 1 of this Section.
- B. Transport and dispose of lead-containing material classified as Non-Hazardous Waste in accordance with standards referenced in Part 1 of this Section.

### 3.9 RESTORATION

- A. Where existing work is damaged or contaminated, restore work to its original condition or better.

END OF SECTION 028300

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## SECTION 031000 – CONCRETE FORMING AND ACCESSORIES

### PART 1 – GENERAL

#### 1.1 SECTION INCLUDES

- A. Formwork for cast-in place concrete, with shoring, bracing and anchorage.
- B. Openings for other work.
- C. Form accessories.
- D. Form stripping.

#### 1.2 RELATED REQUIREMENTS

- A. Section 032000 - Concrete Reinforcing.
- B. Section 033000 - Cast-in-Place Concrete.

#### 1.3 REFERENCE STANDARDS

- A. ACI 117 - Specification for Tolerances for Concrete Construction and Materials 2010 (Reapproved 2015).
- B. ACI 301 - Specifications for Concrete Construction 2020.
- C. ACI 318 - Building Code Requirements for Structural Concrete and Commentary 2014 (Errata 2018).
- D. ACI 347R - Guide to Formwork for Concrete 2014 (Reapproved 2021).
- E. PS 1 - Structural Plywood 2019.

#### 1.4 SUBMITTALS

- A. See Section 013000 - Administrative Requirements, for submittal procedures.
- B. Product Data: Provide data on void form materials and installation requirements.

- C. Shop Drawings: Indicate pertinent dimensions, materials, bracing, and arrangement of joints and ties.

## 1.5 DELIVERY, STORAGE, AND HANDLING

- A. Deliver prefabricated forms and installation instructions in manufacturer's packaging.
- B. Store prefabricated forms off ground in ventilated and protected manner to prevent deterioration from moisture.
- C. Protect plastic foam products from damage and exposure to sunlight.

## PART 2 – PRODUCTS

### 2.1 FORMWORK - GENERAL

- A. Provide concrete forms, accessories, shoring, and bracing as required to accomplish cast-in-place concrete work.
- B. Design and construct concrete that complies with design with respect to shape, lines, and dimensions.
- C. Chamfer outside corners of beams, joists, columns, and walls.
- D. Comply with applicable state and local codes with respect to design, fabrication, erection, and removal of formwork.
- E. Comply with relevant portions of ACI 347R, ACI 301, and ACI 318.

### 2.2 WOOD FORM MATERIALS

- A. Softwood Plywood: PS 1, B-B High Density Concrete Form Overlay, Class I.

### 2.3 FORMWORK ACCESSORIES

- A. Form Ties: Removable type, galvanized metal, fixed length, cone type, with waterproofing washer, 3-inch back break dimension, free of defects that could leave holes larger than 1-inch in concrete surface.

- B. Form Release Agent: Capable of releasing forms from hardened concrete without staining or discoloring concrete or forming bugholes, and other surface defects, compatible with concrete and form materials, and not requiring removal for satisfactory bonding of coatings to be applied.
  - 1. Composition: Colorless, reactive, water-based or solvent-based compound.
  - 2. Do not use materials containing diesel oil or petroleum-based compounds.
- C. Filler Strips for Chamfered Corners: Rigid plastic type; 3/4 x 3/4-inch size; maximum possible lengths.
- D. Embedded Anchor Shapes, Plates, Angles and Bars: As specified in Section 051200.
- E. Waterstops: Rubber, minimum 1,750 psi tensile strength, minimum 50 degrees Fahrenheit to plus 175 degrees Fahrenheit working temperature range, 1/2-inch-wide, maximum possible lengths, ribbed profile, preformed corner sections, heat welded jointing.
  - 1. Configuration: As indicated on drawings.

## PART 3 – EXECUTION

### 3.1 EXAMINATION

- A. Verify lines, levels, and centers before proceeding with formwork. Ensure that dimensions agree with drawings.

### 3.2 EARTH FORMS

- A. Hand trim sides and bottom of earth forms. Remove loose soil prior to placing concrete.

### 3.3 ERECTION - FORMWORK

- A. Erect formwork, shoring and bracing to achieve design requirements, in accordance with requirements of ACI 301.
- B. Provide bracing to ensure stability of formwork. Shore or strengthen formwork subject to overstressing by construction loads.

- C. Arrange and assemble formwork to permit dismantling and stripping. Do not damage concrete during stripping. Permit removal of remaining principal shores.
- D. Align joints and make watertight. Keep form joints to a minimum.
- E. Coordinate this section with other sections of work that require attachment of components to formwork.
- F. If formwork is placed after reinforcement, resulting in insufficient concrete cover over reinforcement, request instructions from Architect before proceeding.

### 3.4 APPLICATION - FORM RELEASE AGENT

- A. Apply form release agent on formwork in accordance with manufacturer's recommendations.
- B. Apply prior to placement of reinforcing steel, anchoring devices, and embedded items.
- C. Do not apply form release agent where concrete surfaces will receive special finishes or applied coverings that are affected by agent. Soak inside surfaces of untreated forms with clean water. Keep surfaces coated prior to placement of concrete.

### 3.5 INSERTS, EMBEDDED PARTS, AND OPENINGS

- A. Provide formed openings where required for items to be embedded in passing through concrete work.
- B. Locate and set in place items that will be cast directly into concrete.
- C. Coordinate with work of other sections in forming and placing openings, slots, reglets, recesses, sleeves, bolts, anchors, other inserts, and components of other work.
- D. Position recessed anchor slots for brick veneer masonry anchors to spacing and intervals specified in Section 04 26 13.
- E. Install accessories in accordance with manufacturer's instructions, so they are straight, level, and plumb. Ensure items are not disturbed during concrete placement.
- F. Install waterstops in accordance with manufacturer's instructions, so they are continuous without displacing reinforcement. Heat seal joints so they are watertight.

- G. Provide temporary ports or openings in formwork where required to facilitate cleaning and inspection. Locate openings at bottom of forms to allow flushing water to drain.

### 3.6 FORM CLEANING

- A. Clean forms as erection proceeds, to remove foreign matter within forms.
- B. Clean formed cavities of debris prior to placing concrete.

### 3.7 FORMWORK TOLERANCES

- A. Construct formwork to maintain tolerances required by ACI 117, unless otherwise indicated.

### 3.8 FIELD QUALITY CONTROL

- A. An independent testing agency will perform field quality control tests, as specified in Section 014000 - Quality Requirements.

### 3.9 FORM REMOVAL

- A. Do not remove forms or bracing until concrete has gained sufficient strength to carry its own weight and imposed loads.
- B. Loosen forms carefully. Do not wedge pry bars, hammers, or tools against finish concrete surfaces scheduled for exposure to view.
- C. Store removed forms to prevent damage to form materials or to fresh concrete. Discard damaged forms.

END OF SECTION 031000

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## SECTION 032000 - CONCRETE REINFORCING

### PART 1 - GENERAL

#### 1.1 SECTION INCLUDES

- A. Reinforcing steel for cast-in-place concrete.
- B. Supports and accessories for steel reinforcement.

#### 1.2 RELATED REQUIREMENTS

- A. Section 031000 - Concrete Forming and Accessories.
- B. Section 033000 - Cast-in-Place Concrete.

#### 1.3 REFERENCE STANDARDS

- A. ACI 301 - Specifications for Concrete Construction 2020.
- B. ACI 318 - Building Code Requirements for Structural Concrete and Commentary 2014 (Errata 2018).
- C. ACI SP-66 - ACI Detailing Manual 2004.
- D. ASTM A615/A615M - Standard Specification for Deformed and Plain Carbon-Steel Bars for Concrete Reinforcement 2020.
- E. ASTM A706/A706M - Standard Specification for Deformed and Plain Low-Alloy Steel Bars for Concrete Reinforcement 2016.
- F. ASTM A1064/A1064M - Standard Specification for Carbon-Steel Wire and Welded Wire Reinforcement, Plain and Deformed, for Concrete 2022.
- G. AWS B2.1/B2.1M - Specification for Welding Procedure and Performance Qualification 2021.
- H. AWS D1.4/D1.4M - Structural Welding Code - Reinforcing Steel 2018.
- I. CRSI (DA4) - Manual of Standard Practice 2018, with Errata (2019).

- J. CRSI (P1) - Placing Reinforcing Bars, 10th Edition 2019.

#### 1.4 SUBMITTALS

- A. See Section 013000 - Administrative Requirements, for submittal procedures.
- B. Shop Drawings: Comply with requirements of ACI SP-66. Include bar schedules, shapes of bent bars, spacing of bars, and location of splices.
- C. Manufacturer's Certificate: Certify that reinforcing steel and accessories supplied for this project meet or exceed specified requirements.

#### 1.5 QUALITY ASSURANCE

- A. Perform work of this section in accordance with ACI 301.
  - 1. Maintain one copy of each document on project site.

### PART 2 – PRODUCTS

#### 2.1 REINFORCEMENT

- A. Reinforcing Steel: ASTM A615/A615M, Grade 60 (60,000 psi), deformed steel bars.
  - 1. Plain billet-steel bars.
- B. Steel Welded Wire Reinforcement (WWR): Galvanized, deformed type; ASTM A1064/A1064M.
- C. Reinforcement Accessories:
  - 1. Tie Wire: Annealed, minimum 16-gauge, 0.0508 inch.
  - 2. Chairs, Bolsters, Bar Supports, Spacers: Sized and shaped for adequate support of reinforcement during concrete placement.
  - 3. Provide stainless steel components for placement within 1-1/2 inches of weathering surfaces.

#### 2.2 FABRICATION

- A. Fabricate concrete reinforcing in accordance with CRSI (DA4) - Manual of Standard Practice.

- B. Welding of reinforcement is permitted only as indicated on the contract drawings. Perform welding in accordance with AWS D1.4/D1.4M.

### PART 3 - EXECUTION

#### 3.1 PLACEMENT

- A. Place, support and secure reinforcement against displacement. Do not deviate from required position.
- B. Do not displace or damage vapor barrier.
- C. Accommodate placement of formed openings.
- D. Maintain concrete cover around reinforcing as indicated on the contract drawings.

#### 3.2 FIELD QUALITY CONTROL

- A. An independent testing agency, as specified in Section 014533 - Code-Required Special Inspections, will inspect installed reinforcement for compliance with contract documents before concrete placement.

END OF SECTION 032000

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## SECTION 033000 – CAST-IN-PLACE CONCRETE (SITEWORK)

### PART 1 – GENERAL

#### 1.1 SECTION INCLUDES

- A. Slabs on grade.
- B. Concrete Monolith.
- C. Concrete curing.

#### 1.2 RELATED REQUIREMENTS

- A. Section 031000 - Concrete Forming and Accessories: Forms and accessories for formwork.
- B. Section 032000 - Concrete Reinforcing.

#### 1.3 REFERENCE STANDARDS

- A. ACI 211.1 - Selecting Proportions for Normal-Density and High Density-Concrete - Guide 2022.
- B. ACI 211.2 - Standard Practice for Selecting Proportions for Structural Lightweight Concrete 1998 (Reapproved 2004).
- C. ACI 301 - Specifications for Concrete Construction 2020.
- D. ACI 302.1R - Guide to Concrete Floor and Slab Construction 2015.
- E. ACI 304R - Guide for Measuring, Mixing, Transporting, and Placing Concrete 2000 (Reapproved 2009).
- F. ACI 305R - Guide to Hot Weather Concreting 2020.
- G. ACI 306R - Guide to Cold Weather Concreting 2016.
- H. ACI 308R - Guide to External Curing of Concrete 2016.

- I. ACI 318 - Building Code Requirements for Structural Concrete and Commentary 2014 (Errata 2018).
- J. ASTM C33/C33M - Standard Specification for Concrete Aggregates 2023.
- K. ASTM C39/C39M - Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens 2021.
- L. ASTM C94/C94M - Standard Specification for Ready-Mixed Concrete 2023.
- M. ASTM C143/C143M - Standard Test Method for Slump of Hydraulic-Cement Concrete 2020.
- N. ASTM C150/C150M - Standard Specification for Portland Cement 2022.
- O. ASTM C171 - Standard Specification for Sheet Materials for Curing Concrete 2020.
- P. ASTM C173/C173M - Standard Test Method for Air Content of Freshly Mixed Concrete by the Volumetric Method 2023.
- Q. ASTM C260/C260M - Standard Specification for Air-Entraining Admixtures for Concrete 2010a (Reapproved 2016).
- R. ASTM C330/C330M - Standard Specification for Lightweight Aggregates for Structural Concrete 2023.
- S. ASTM C494/C494M - Standard Specification for Chemical Admixtures for Concrete 2019, with Editorial Revision (2022).
- T. ASTM C618 - Standard Specification for Coal Ash and Raw or Calcined Natural Pozzolan for Use in Concrete 2023, with Editorial Revision.
- U. ASTM C881/C881M - Standard Specification for Epoxy-Resin-Base Bonding Systems for Concrete 2020a.
- V. ASTM C1107/C1107M - Standard Specification for Packaged Dry, Hydraulic-Cement Grout (Nonshrink) 2020.
- W. ASTM C1602/C1602M - Standard Specification for Mixing Water Used in the Production of Hydraulic Cement Concrete 2018.

- X. ASTM D1751 - Standard Specification for Preformed Expansion Joint Filler for Concrete Paving and Structural Construction (Nonextruding and Resilient Bituminous Types) 2018.
- Y. ASTM E1745 - Standard Specification for Plastic Water Vapor Retarders Used in Contact with Soil or Granular Fill under Concrete Slabs 2017 (Reapproved 2023).

#### 1.4 SUBMITTALS

- A. See Section 013000 - Administrative Requirements, for submittal procedures.
- B. Product Data: Submit manufacturers' data on manufactured products showing compliance with specified requirements and installation instructions.
  - 1. For curing compounds, provide data on method of removal in the event of incompatibility with floor covering adhesives.
- C. Mix Design: Submit proposed concrete mix design.
  - 1. Indicate proposed mix design complies with requirements of ACI 301, Section 4 - Concrete Mixtures.
- D. Test Reports: Submit report for each test or series of tests specified.
- E. Project Record Documents: Accurately record actual locations of embedded utilities and components that will be concealed from view upon completion of concrete work.

#### 1.5 QUALITY ASSURANCE

- A. Installer Qualifications: A qualified installer who employs Project personnel qualified as ACI-certified Flatwork Technician and Finisher and a supervisor who is an ACI-certified Concrete Flatwork Technician.
- B. Manufacturer Qualifications: A firm experienced in manufacturing ready-mixed concrete products and that complies with ASTM C 94/C 94M requirements for production facilities and equipment.
  - 1. Manufacturer certified according to NRMCA's "Certification of Ready Mixed Concrete Production Facilities."
- C. Perform work of this section in accordance with ACI 301 and ACI 318.

- D. Follow recommendations of ACI 305R when concreting during hot weather.
- E. Follow recommendations of ACI 306R when concreting during cold weather.

## 1.6 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at Project site.
  - 1. Before submitting design mixtures, review concrete design mixture and examine procedures for ensuring quality of concrete materials. Require representatives of each entity directly concerned with cast-in-place concrete to attend, including the following:
    - a. Contractor's superintendent.
    - b. Independent testing agency responsible for concrete design mixtures.
    - c. Ready-mix concrete manufacturer.
    - d. Concrete Subcontractor.
    - e. Special Inspection and Testing Agency
    - f. Special concrete finish Subcontractor.
  - 2. Review special inspection and testing and inspecting agency procedures for field quality control, concrete finishes and finishing, cold- and hot-weather concreting procedures, curing procedures, construction contraction and isolation joints, and joint-filler strips, semirigid joint fillers, forms and form removal limitations, vapor-retarder installation, anchor rod and anchorage device installation tolerances, steel reinforcement installation, methods for achieving specified floor and slab flatness and levelness concrete repair procedures, and concrete protection.

## PART 2 – PRODUCTS

### 2.1 CONCRETE MATERIALS

- A. Cement: ASTM C150/C150M, Type I - Normal Portland type.
  - 1. Acquire cement for entire project from same source.
- B. Fine and Coarse Normal-Weight Aggregates: ASTM C33/C33M.
  - 1. Acquire aggregates for entire project from same source.
  - 2. Maximum Coarse-Aggregate Size: 3/4-inch nominal.
  - 3. Fine Aggregate: Free of materials with deleterious reactivity to alkali in cement.



- C. Lightweight Aggregate: ASTM C330/C330M.
- D. Fly Ash: ASTM C618, Class F.
- E. Water: ASTM C1602/C1602M; clean, potable, and not detrimental to concrete.

## 2.2 ADMIXTURES

- A. Do not use chemicals that will result in soluble chloride ions in excess of 0.1 percent by weight of cement.
- B. Air Entrainment Admixture: ASTM C260/C260M.
- C. High Range Water Reducing and Retarding Admixture: ASTM C494/C494M Type G.
- D. High Range Water Reducing Admixture: ASTM C494/C494M Type F.
- E. Water Reducing and Accelerating Admixture: ASTM C494/C494M Type E.
- F. Water Reducing and Retarding Admixture: ASTM C494/C494M Type D.
- G. Accelerating Admixture: ASTM C494/C494M Type C.
- H. Retarding Admixture: ASTM C494/C494M Type B.
- I. Water Reducing Admixture: ASTM C494/C494M Type A.
- J. Waterproofing Admixture: Admixture formulated to reduce permeability to liquid water, with no adverse effect on concrete properties.
  - 1. Admixture Composition: Crystalline, functioning by growth of crystals in capillary pores.

## 2.3 ACCESSORY MATERIALS

- A. Underslab Vapor Retarder: Multi-layer, fabric-, cord-, grid-, or aluminum-reinforced polyethylene or equivalent, ASTM E1745 Class A; stated by manufacturer as suitable for installation in contact with soil or granular fill under concrete slabs. The use of single-ply polyethylene is prohibited.
  - 1. Installation: Comply with ASTM E1643.
    - a. Single layer, 15 mil minimum.

2. Accessory Products: Vapor retarder manufacturer's recommended tape, adhesive, mastic, prefabricated boots, etc., for sealing seams and penetrations.
- B. Non-Shrink Cementitious Grout: Premixed compound consisting of non-metallic aggregate, cement, water reducing and plasticizing agents.
  1. Grout: Comply with ASTM C1107/C1107M.

## 2.4 BONDING AND JOINTING PRODUCTS

- A. Epoxy Bonding System:
  1. Complying with ASTM C881/C881M and of Type required for specific application.
- B. Waterstops: Self-expanding rubber strip or butyl strip; swells to 1000 percent of original size in clean water. Size 3/4 by 1 inch, minimum.
- C. Slab Isolation Joint Filler: 1/2-inch-thick, height equal to slab thickness, with removable top section that will form 1/2-inch-deep sealant pocket after removal.
  1. Material: ASTM D1751, cellulose fiber.
- D. Slab Construction Joint Devices: Combination keyed joint form and screed, galvanized steel, with rectangular or round knockout holes for conduit or rebar to pass through joint form at 6 inches on center; ribbed steel stakes for setting.

## 2.5 CURING MATERIALS

- A. Absorptive Cover: AASHTO M 182, Class 2, burlap cloth made from jute or kenaf, weighing approximately 9 oz./sq. yd. when dry.
- B. Moisture-Retaining Sheet: ASTM C171.
  1. Polyethylene film, white opaque, minimum nominal thickness of 4 mil, 0.004-inch.
  2. White-burlap-polyethylene sheet, weighing not less than 3.8 ounces per square yard.

## 2.6 CONCRETE MIX DESIGN

- A. Proportioning Normal Weight Concrete: Comply with ACI 211.1 recommendations.

- B. Proportioning Structural Lightweight Concrete: Comply with ACI 211.2 recommendations.
- C. Admixtures: Add acceptable admixtures as recommended in ACI 211.1 and at rates recommended or required by manufacturer.
- D. Normal Weight Concrete:
  - 1. Exterior Slab-on-Grade, Foundations Walls, and Footings:
    - a. Minimum Compressive Strength: 4500 psi at 28 days.
    - b. Maximum W/C Ratio: 0.45.
    - c. Total Air Content: 6 percent, plus or minus 1.5 percent. Do not allow air content of trowel-finished floors to exceed 3 percent.
    - d. Slump Limit: 4 inches, 8 inches for concrete with verified slump of 2 to 4 inches before adding high-range water-reducing admixture or plasticizing admixture, plus or minus 1 inch.
  - 2. Fly Ash Content: Maximum 25 percent of cementitious materials by weight.
  - 3. Maximum Aggregate Size: 3/4 inch.
- E. Structural Lightweight Concrete:
  - 1. Lightweight Concrete Topping
    - a. Minimum Compressive Strength, when tested in accordance with ASTM C39/C39M at 28 days: 4,500 pounds per square inch.
    - b. Water-Cement Ratio: Maximum 50 percent by weight.
    - c. Total Air Content: Five percent (5%),  $\pm$  one percent (1%), determined in accordance with ASTM C173/C173M.
    - d. Maximum Slump: 4 inches.
    - e. Maximum Aggregate Size: 3/4-inch.
    - f. Maximum dry unit weight: 115 pound per cubic foot.

## 2.7 MIXING

- A. Transit Mixers: Comply with ASTM C94/C94M.
- B. Adding Water: If concrete arrives on-site with slump less than suitable for placement, do not add water that exceeds the maximum water-cement ratio or exceeds the maximum permissible slump.

## PART 3 – EXECUTION

### 3.1 EXAMINATION

- A. Verify lines, levels, and dimensions before proceeding with work of this section.

### 3.2 PREPARATION

- A. Formwork: Comply with requirements of ACI 301. Design and fabricate forms to support all applied loads until concrete is cured, and for easy removal without damage to concrete.
- B. Verify that forms are clean and free of rust before applying release agent.
- C. Coordinate placement of embedded items with erection of concrete formwork and placement of form accessories.
- D. Where new concrete is to be bonded to previously placed concrete, prepare existing surface by cleaning and applying bonding agent in according to bonding agent manufacturer's instructions.
  - 1. Use epoxy bonding system for bonding to damp surfaces, for structural load-bearing applications, and where curing under humid conditions is required.
- E. Where new concrete with integral waterproofing is to be bonded to previously placed concrete, prepare surfaces to be treated in accordance with waterproofing manufacturer's instructions. Saturate cold joint surface with clean water, and remove excess water before application of coat of waterproofing admixture slurry. Apply slurry coat uniformly with semi-stiff bristle brush at rate recommended by waterproofing manufacturer.
- F. In locations where new concrete is doveled to existing work, drill holes in existing concrete, insert steel dowels and pack solid with non-shrink grout.

### 3.3 INSTALLING REINFORCEMENT AND OTHER EMBEDDED ITEMS

- A. Comply with requirements of ACI 301. Clean reinforcement of loose rust and mill scale, and accurately position, support, and secure in place to achieve not less than minimum concrete coverage required for protection.
- B. Install welded wire reinforcement in maximum possible lengths, and offset end laps in both directions. Splice laps with tie wire.

- C. Verify that anchors, seats, plates, reinforcement, and other items to be cast into concrete are accurately placed, positioned securely, and will not interfere with concrete placement.

### 3.4 PLACING CONCRETE

- A. Place concrete in accordance with ACI 304R.
- B. Place concrete for floor slabs in accordance with ACI 302.1R.
- C. Maintain records of concrete placement. Record date, location, quantity, air temperature, and test samples taken.
- D. Ensure reinforcement, inserts, waterstops, embedded parts, and formed construction joint devices will not be disturbed during concrete placement.
- E. Place concrete continuously without construction (cold) joints wherever possible; where construction joints are necessary, before next placement prepare joint surface by removing laitance and exposing the sand and sound surface mortar, by sandblasting or high-pressure water jetting.
- F. Finish floors level and flat, unless otherwise indicated, within the tolerances specified below.

### 3.5 SLAB JOINTING

- A. Locate joints as indicated on drawings.
- B. Anchor joint fillers and devices to prevent movement during concrete placement.
- C. Isolation Joints: Use preformed joint filler with removable top section for joint sealant, total height equal to thickness of slab, set flush with top of slab.
  - 1. Install wherever necessary to separate slab from other building members, including columns, walls, equipment foundations, footings, stairs, manholes, sumps, and drains.
- D. Saw Cut Contraction/Control Joints: Saw cut joints before concrete begins to cool, within 4 to 12 hours after placing; use 3/16-inch-thick blade and cut at least 1-inch-deep, but not less than one quarter (1/4) the depth of the slab.

- E. Construction Joints: Where not otherwise indicated, use metal combination screed and key form, with removable top section for joint sealant.

### 3.6 FLOOR FLATNESS AND LEVELNESS TOLERANCES

- A. An independent testing agency, as specified in Section 014000, will inspect finished slabs for compliance with specified tolerances.
- B. Correct defects by grinding or by removal and replacement of the defective work. Areas requiring corrective work will be identified. Re-measure corrected areas by the same process.

### 3.7 CONCRETE FINISHING

- A. Repair surface defects, including tie holes, immediately after removing formwork.
- B. Unexposed Form Finish: Rub down or chip off fins or other raised areas 1/4 inch or more in height.
- C. Concrete Slabs: Finish to requirements of ACI 302.1R, and as follows:
  - 1. Other Surfaces to Be Left Exposed: Broom Finish as described in ACI 302.1R
- D. In areas with floor drains, maintain floor elevation at walls; pitch surfaces uniformly to drains as indicated on drawings.

### 3.8 CURING AND PROTECTION

- A. Comply with requirements of ACI 308R. Immediately after placement, protect concrete from premature drying, excessively hot or cold temperatures, and mechanical injury.
- B. Maintain concrete with minimal moisture loss at relatively constant temperature for period necessary for hydration of cement and hardening of concrete.
  - 1. Normal concrete: Not less than seven (7) days.
  - 2. High early strength concrete: Not less than four (4) days.
- C. Formed Surfaces: Cure by moist curing with forms in place for full curing period.
- D. Surfaces Not in Contact with Forms:

1. Initial Curing: Start as soon as free water has disappeared and before surface is dry. Keep continuously moist for not less than three days by water ponding, water-saturated sand, water-fog spray, or saturated burlap.
  - a. Saturated Burlap: Saturate burlap-polyethylene and place burlap-side down over floor slab areas, lapping ends and sides; maintain in place.
2. Final Curing: Begin after initial curing but before surface is dry.
  - a. Moisture-Retaining Sheet: Lap strips not less than 3 inches and seal with waterproof tape or adhesive; secure at edges.

### 3.9 FIELD QUALITY CONTROL

- A. An independent testing agency will perform field quality control tests, as specified in Section 014000 - Quality Requirements.
- B. Provide free access to concrete operations at project site and cooperate with appointed firm.
- C. Submit proposed mix design of each class of concrete to inspection and testing firm for review prior to commencement of concrete operations.
- D. Tests of concrete and concrete materials may be performed at any time to ensure compliance with specified requirements.
- E. Compressive Strength Tests: ASTM C39/C39M, for each test, mold, and cure four (4) concrete test cylinders. Obtain test samples for every 100 cubic yards or less of each class of concrete placed.
- F. Take one additional test cylinder during cold weather concreting, cured on job site under same conditions as concrete it represents.
- G. Perform one slump test for each set of test cylinders taken, following procedures of ASTM C143/C143M.

### 3.10 DEFECTIVE CONCRETE

- A. Test Results: The testing agency shall report test results in writing to Architect and Contractor within 24 hours of test.
- B. Defective Concrete: Concrete not complying with required lines, details, dimensions, tolerances, or specified requirements.

- C. Repair or replacement of defective concrete will be determined by the Architect. The cost of additional testing shall be borne by Contractor when defective concrete is identified.
- D. Do not patch, fill, touch-up, repair, or replace exposed concrete except upon express direction of Architect for each individual area.

### 3.11 PROTECTION

- A. Do not permit traffic over unprotected concrete floor surface until fully cured.

END OF SECTION 033000



## SECTION 033001 - CAST-IN-PLACE CONCRETE

### PART 1 - GENERAL

#### 1.1 RELATED WORK SPECIFIED ELSEWHERE

- A. Vapor Retarder Under Slabs on Grade: Section 072600.

#### 1.2 REFERENCES

- A. Except as shown or specified otherwise, the Work of this Section shall conform to the requirements of Specifications for Structural Concrete for Buildings ACI 301-16 of the American Concrete Institute.

#### 1.3 DEFINITIONS (Amendments to ACI 301, Section 1.2):

- A. Exposed Construction: Exposed to view.

#### 1.4 SUBMITTALS

- A. Submittals Package: Submit product data for design mix(es) and materials for concrete specified below at the same time as a package.
- B. Shop Drawings: Placing drawings for bar reinforcement.
- C. Product Data:
  - 1. Concrete design mix(es) with name and location of batching plant.
  - 2. Portland Cement: Brand and manufacturer's name.
  - 3. Fly Ash: Name and location of source, and DOT test numbers.
  - 4. Air-entraining Admixture: Brand and manufacturer's name.
  - 5. Water-reducing Admixture: Brand and manufacturer's name.
  - 6. Aggregates: Name and location of source, and DOT test numbers.
  - 7. Chemical Hardener (Dustproofing): Brand and manufacturer's name, and application instructions.
  - 8. Chemical Curing and Anti-Spalling Compound: Brand and manufacturer's name, and application instructions.
  - 9. Expansion Joint Filler: Brand and manufacturer's name.
- D. Quality Control Submittals:
  - 1. Certificates: Affidavit required under Quality Assurance Article.

## 1.5 QUALITY ASSURANCE

- A. Concrete batching plant shall be currently approved as a concrete supplier by the New York State Department of Transportation.
- B. Fly ash supplier shall be currently approved as a fly ash supplier by the New York State Department of Transportation.
- C. Certifications: Affidavit by the bar reinforcement manufacturer certifying that bar material meets the contract requirements.
  - 1. Submit evidence consisting of certification of source of material, copies of purchase orders and manufacturer's certifications. For stock material, submit copies of latest mill or purchase orders for material replacement.
  - 2. Fabricator's and Erector's Qualifications Data: Name and experience of fabricator and erector.
- E. Source Quality Control: The Director reserves the right to inspect and approve the following items, at his own discretion, either with his own forces or with a designated inspection agency:
  - 1. Batching and mixing facilities and equipment.
  - 2. Sources of materials.

## 1.6 STORAGE

- A. Store materials so as to ensure the preservation of their quality and fitness for the Work. Materials, even though accepted prior to storage, are subject to inspection and shall meet the requirements of the Contract before their use in the Work.

## PART 2 - PRODUCTS

### 2.1 MATERIALS (Amendments to ACI 301, Section 4, for Normal Weight Concrete and Section 7, for Lightweight Concrete):

- A. Water-reducing Admixture: ASTM C 494, Type A, and on the New York State Department of Transportation's current "Approved List".
- B. Fly Ash (Pozzolans): ASTM C 618, including Table 1A (except for footnote A), Class F except that loss on ignition shall not exceed 4.0 percent.
- C. Chemical Curing and Anti-Spalling Compound: ASTM C-309, Type 1D, Class B, with a minimum 18 percent total solids content. No thinning of material allowed.
  - 1. SureCure Emulsion, Kaufman Products, Inc. 3811 Curtis Avenue, Baltimore, MD 21226, (800) 637-6372.

2. Cure & Seal 25 percent (J-22UV) by Dayton Superior Corp., 1125 Byers Rd., Miamisburg, OH 45342, (800) 745-3700.
  3. MasterKure CC 200 WB by Master Builders/ BASF Building Systems, 23700 Chagrin Blvd., Cleveland, OH 44122, (800) 628-9990.
- D. Chemical Hardener (Dustproofing): Colorless aqueous solution of magnesium-zinc fluosilicate. Approved products include:
1. MasterKure HD 300WB by Master Builders/ BASF Building Systems, 23700 Chagrin Blvd., Cleveland, OH 44122, (800) 628-9990.
  2. Surfhard by The Euclid Chemical Co., 19218 Redwood Rd., Cleveland, OH 44110, (216) 531-9222.
  3. Liqui-Hard by W.R. Meadows, Inc., PO Box 543, Elgin, IL 60121, (847) 683-4500.
  4. FluoHard by L & M Construction Chemicals, Inc., 14851 Calhoun Rd., Omaha, NE 68152, (402) 453-6600.
  5. Armortop by Anti Hydro International, Inc., 265 Badger Ave., Newark, NJ 07108, (800) 777-1773.
  6. Diamond by Kaufman Products, Inc., 3811 Curtis Avenue, Baltimore, MD 21226, (800) 637-6372.
- E. Type 2 Expansion Joint Filler: Preformed, resilient, non-extruding, self-expanding cork units; ASTM D 1752, Type III.
- 2.2 PROPORTIONING (Amendments to ACI 301, Sections 4 & 7):
- A. Compressive Strength: As required by ACI 318-14 Table 19.3.2.1. "Requirements for concrete by exposure class".
  - B. Weight: Normal.
  - D. Slump: Maximum 4 inches; minimum 1 inch before the addition of any water-reducing admixtures or high-range water-reducing admixtures (superplasticizers) at the Site.
  - E. Admixtures: Do not use admixtures in concrete unless specified or approved in writing by the Director.
  - F. Selection of Proportions: Concrete proportions shall be established on the basis of previous field experience or laboratory trial batches, unless otherwise approved in writing by the Director.
    1. Optional Material: Fly ash may be substituted for (Portland) cement in normal weight concrete up to a maximum of 15 percent by weight of the required minimum (Portland) cement. If fly ash is incorporated in a

concrete design mix, make necessary adjustments to the design mix to compensate for the use of fly ash as a partial replacement for (Portland) cement.

- a. Adjustments shall include the required increase in air-entraining admixture to provide the specified air content.
- b. Lower early strength of the concrete shall be considered in deciding when to remove formwork.

## 2.3 REINFORCEMENT (Amendments to ACI 301, Section 3):

- A. Bar Reinforcement: ASTM A 615, Grade 60, deformed steel bars.
- B. Fabric Reinforcement: ASTM A 185, welded wire fabric, fabricated into flat sheets unless otherwise indicated.
- C. Bar Supports: Galvanized steel or AISI Type 430 stainless steel, and without plastic tips.
- D. Tie Wire: Black annealed wire, 16-1/2 gage or heavier.

## 2.4 PRODUCTION (Amendments to ACI 301, Section 5):

- A. Provide ready-mixed concrete, either central-mixed or truck-mixed.

# PART 3 - EXECUTION

## 3.1 EXAMINATION AND PREPARATION

- A. Do not use items of aluminum for mixing, chuting, conveying, forming or finishing concrete, except magnesium alloy tools may be used for finishing.
- B. Keep excavations free of water. Do not deposit concrete in water.
- C. Hardened concrete, reinforcement, forms, and earth which will be in contact with fresh concrete shall be free from frost at the time of concrete placement.
- D. Prior to placement of concrete, remove all hardened concrete spillage and foreign materials from the space to be occupied by the concrete.

## 3.2 FORMWORK (Amendments to ACI 301, Section 2):

- A. The formwork shall be designed for loads, lateral pressure, and allowable stresses outlined in Chapter 4 - Design of "Guide to Formwork for Concrete" (ACI 347-14).

- B. All formwork shall be removed after the concrete has sufficiently hardened, except in inaccessible spaces where approved.
- C. After the ends or end fasteners of form ties have been removed, the embedded portion of the ties shall terminate not less than 3/4 inch from the formed surfaces of concrete.

3.3 PLACING REINFORCEMENT (Amendments to ACI 301, Section 3):

- A. At the time concrete is placed, reinforcement shall be free of mud, oil, loose rust, loose mill scale, and other materials or coatings that may adversely affect or reduce the bond.

3.4 PLACING CONCRETE (Amendments to ACI 301, Section 5):

- A. Operation of truck mixers and agitators and discharge limitations shall conform to the requirements of ASTM C 94.
- B. Do not allow concrete to free fall more than 4 feet.

3.5 FINISHING SLABS (Amendments to ACI 301, Section 5.3.4):

- A. Finish Schedule: Except where indicated otherwise on the Drawings, provide the finishes below:
  - 1. Floated Finish for:
    - a. Treads and platforms of exterior steps and stairs.
    - b. Slabs and fill over which waterproofing, roofing, vapor barrier, insulation, terrazzo, or resin bound flooring is required.
  - 2. Troweled Finish for:
    - a. Interior slabs that are to be exposed to view.
    - b. Slabs and fill over which resilient wood flooring, resilient tile or sheet flooring, carpet, or thin-film coating system is required.
    - c. Slabs and fill over which thin-set ceramic tile is required, except fine-broom finished surface.
    - d. Treads and platforms of interior steps and stairs.
- B. Finishing, General: Provide monolithic finishes on concrete floors and slabs without the addition of mortar or other filler material. Finish surfaces in true planes, true to line, with particular care taken during screeding to maintain an excess of concrete in front of the screed so as to prevent low spots. Screed and darby concrete to true planes while plastic and before free water rises to the surface. Do not perform finishing operations during the time free water (bleeding) is on the surface.

3.6 CURING AND PROTECTION (Amendments to ACI 301, Section 5.3.6):

- A. Maintain concrete surfaces in a moist condition for at least 7 days after placing, except where otherwise indicated. Do not use curing compound.
  - 1. For surfaces of exterior slabs (on grade), apply chemical curing and anti-spalling compound in accordance with the recommendations of the manufacturer.

3.7 CHEMICAL HARDENER (DUSTPROOFING)

- A. Apply chemical hardener to all troweled finished interior floors which are to be left exposed.
- B. Do not apply chemical hardener until concrete has cured the number of days recommended in manufacturer's instructions.
- C. Prepare surfaces and apply chemical hardener in accordance with manufacturer's printed instructions and recommendations.

3.8 FIELD QUALITY CONTROL (Amendments to ACI 301, Section 1):

- A. Make available to the Architects whatever test samples are required to make tests. Furnish shipping boxes for compression test cylinders.

END OF SECTION 033001

## SECTION 035400 – CEMENTITIOUS UNDERLAYMENT

### PART 1 - GENERAL

#### 1.1 SUMMARY

- A. This section specifies self-leveling underlayment applied to interior concrete surfaces.

#### 1.2 RELATED SECTIONS

- A. Section 096519 – Resilient Tile Flooring.

#### 1.3 REFERENCES

- A. American Society for Testing and Materials:
  - 1. ASTM C-230 – Standard Specification for Flow Table for Use in Tests of Hydraulic Cement.
  - 2. ASTM C-1583 – Standard Test Method for Tensile Strength of Concrete Surfaces and the Bond Strength or Tensile Strength of Concrete Repair and Overlay Materials by Direct Tension (Pull-off Method)
  - 3. ASTM C-1708 – Standard Test Methods for Self-leveling Mortars Containing Hydraulic Cements
  - 4. ASTM F-2873 – Standard Practice for the Installation of Self-Leveling Underlayment and the Preparation of Surface to Receive Resilient Flooring
- B. Other Test Methods:
  - 1. TDS 235 – Self-Leveling Flow Test.

#### 1.4 SUBMITTALS

- A. Submit under provisions of Section 013300 – Submittal Procedures
  - 1. Product Data: Manufacturer's literature to include surface preparation, application instructions, recommendations and storage and handling requirements.
  - 2. Test Data: Confirm compliance and performance with specified requirements.

#### 1.5 QUALITY ASSURANCE

- A. Applicator Qualifications: Applicator must have prior experience applying specified product or similar products or have manufacturer's representative on site ensuring that preparation and application are performed correctly.

B. Mockup:

1. Architect will select area for mockup.
2. Prior notice will be given to architect four (4) business days before mockups will be applied.
3. Architect must approve mockup before final product is applied.
4. At the architect's discretion, approved mockups may become incorporated into the final work.

1.6 DELIVERY, STORAGE & HANDLING

- A. Materials must be delivered in original, unopened containers with the manufacturer's labels including product name and batch numbers.
- B. Store material in a dry area, above ground. Protect cement from moisture and humidity.

1.7 ENVIRONMENTAL REQUIREMENTS

- A. Environmental Conditions: Do not apply material when temperature is below 45°F or when temperature is expected to fall below 45°F within 48 hours.
- B. Protection: Precautions should be taken to avoid damage to any surface near the work zone.

PART 2 - PRODUCTS

2.1 MANUFACTURER

- A. Acceptable Manufacturer:
1. Laticrete, 1 Laticrete Park North, Bethany, CT 06524, 800-243-4788, <https://www.laticrete.com>.
  2. Or approved equal.

2.2 MATERIALS

- A. Self-Leveling Underlayment:
1. NXT® LEVEL Plus Lite Self Leveling Underlayment
    - a. Description: Cement-based, fiber reinforced, self-leveling product that can be applied in uniform thicknesses from 1/8 inch to 4 inches and can be feathered at edges to match adjacent floor elevations.
  2. Or approved equal.



## 2.3 MATERIAL PROPERTIES

- A. 28-Day Compressive Strength (ASTM C-1708): 4,400 psi minimum.
- B. 28-Day Flexural Strength (ASTM C-1708): 950 psi minimum.
- C. 28-Day Tensile Bond Strength (ASTM C-1583): 350 psi minimum.
- D. Time to Foot Traffic: 3-4 Hours.
- E. VOC Content: 0.00 g/L.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Examine areas to be repaired. Notify Architect if surfaces are unacceptable. Do not begin surface preparation or application until unacceptable conditions are corrected.

### 3.2 SURFACE PREPARATION

- A. General: Prepare and clean substrate according to manufacturer's recommendations for substrate indicated. Provide clean, dry substrate for underlayment application.
  - 1. Treat non-moving substrate cracks to prevent cracks from telegraphing (reflecting) through underlayment according to manufacturer's recommendations.
- B. Concrete Substrates: Mechanically profile existing concrete floor to 1/8" depth, as shown by the International Concrete Repair Institute CSP tile #4. Ensure that all laitance, glaze, efflorescence, curing compounds, form-release agents, dust, dirt, grease, oil, and all materials that may inhibit bond of underlayment to substrate have been removed.
- C. Priming Substrate: Prime concrete substrate using floor primer specified. Priming instructions may vary according to the porosity of the concrete. Multiple coats may be necessary.

### 3.3 MIXING

- A. Proportion product and water in accordance with manufacturer's written instructions.
- B. A flow test should always be performed to ensure that the mix is homogeneous and free from separation. Perform flow test in accordance with manufacturer's written instructions.

### 3.4 APPLICATION

- A. Substrate temperature must be between 45 – 90°F during application and air temperature maintained between 50 – 90°F. Protect areas from direct sunlight. Do not use damp curing methods, curing compounds or sealers. If required to meet level tolerances, survey surface using a digital or electronic leveling device and apply level pegs as required. Adequate ventilation should be provided to ensure uniform drying. Pump or pour blended material onto substrate at an average thickness ranging between 1/8 inch to 4 inches.
- B. Immediately following placement, lightly smooth the surface and pour lines. Do not expose self-leveling underlayments to rolling dynamic loads, such as forklifts or scissor lifts, for at least 72 hours after installation at 70°F.

### 3.5 FINISHING

- A. Immediately before installation of flooring, as recommended by flooring and adhesive manufacturer and in accordance ASTM F2873 - Installation of Self-Leveling Underlayment & Preparation of Surface to Receive Resilient Flooring, the self-leveling surface may require preparation including cleaned of all loose material by scraping, sanding, vacuuming, and primer application or a combination thereof.

### 3.6 PROTECTION

- A. Protect horizontal surfaces from traffic until underlayment has cured.

END OF SECTION 035400