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CAPITAL IMPROVEMENTS AT
CHATSWORTH AVENUE SCHOOL
CHATSWORTH AVENUE
LARCHMONT, NY 10538
NYSED #66-07-01-03-0-005-020

Symbols

GRADE LINE
BORDER LINE, OUTLINE
FIRE SEPARATION WALL
SMOKE COMPARTMENT
CENTER LINE
OBJECT LINE
ELEVATION LINE — EL. X'-X" T.O. XXX
MATCH LINE — PROPOSED / EXISTING
HIDDEN LINE
DEMOLITION
BREAK LINE
BREAK LINE
BREAK LINE (PIPE)
FRAMING DESIGNATION — 2x10 F.J. @ 16" O.C.
DIMENSION LINE
COLUMN LINE — C1

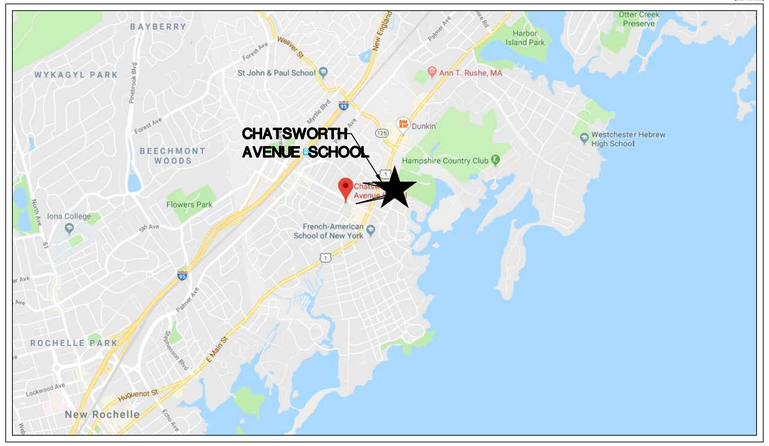
DOOR TAG — D01
WINDOW TAG — W1
CEILING TAG — CT-1
PLUMBING TAG — P-1
EQUIPMENT TAG — E11
WALL TAG — A
DEMOLITION NOTE — 1
CONSTRUCTION NOTE — 1
SLOPE DESIGNATIONS — 12" X, SL ½:12
ADA SYMBOL

REVISION CLOUD W/ TAG — 1
ROOM NAME DESIGNATION — ROOM NAME, 100, 100 SF
BLOW UP PLAN DESIGNATION — A-.--
INTERIOR ELEVATION — 1, 2, A2.01, 3, 4
SECTION MARK — 1, A2.01

Drawing Label — A-.-- -" = 1'-0"

Location Map

NOT TO SCALE



Aerial View

NOT TO SCALE



General Notes

1. ALL WORK SHALL CONFORM TO THE 2015 INTERNATIONAL BUILDING CODE AND ALL OTHER APPLICABLE CODES, ORDINANCES, ETC. FOR NEW YORK STATE AND THE LOCAL AUTHORITY HAVING JURISDICTION.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR VISITING THE SITE AND FAMILIARIZING HIMSELF WITH THE EXISTING CONDITIONS AND SCOPE OF THE WORK PRIOR TO SUBMITTING BIDS AND COMMENCING WORK.
3. THE CONTRACTOR AND ALL SUBCONTRACTORS SHALL REVIEW DRAWINGS AND FIELD VERIFY ALL DIMENSIONS, CONDITIONS AND ELEVATIONS PRIOR TO COMMENCING WORK. THE CONTRACTOR SHALL REPORT ANY DISCREPANCIES AND ADDRESS ALL QUESTIONS TO ARCHITECT PRIOR TO COMMENCING WORK.
4. THE CONTRACTOR SHALL NOT SCALE DRAWINGS FOR DIMENSIONS. ALL NOTES OR DIMENSIONED INFORMATION TAKES PRECEDENCE OVER THE DRAWING.
5. IN ALL CASES WHERE A CONFLICT MAY OCCUR SUCH AS BETWEEN ITEMS COVERED BY SPECIFICATIONS, NOTES ON THE DRAWINGS, OR BETWEEN GENERAL NOTES AND SPECIFIC DETAILS, THE ARCHITECT SHALL BE NOTIFIED AND WILL INTERPRET THE INTENT OF THE CONTRACT DOCUMENTS.
6. DETAILS NOTED AS "TYPICAL" (TYP.) SHALL APPLY IN ALL CASES UNLESS SPECIFICALLY SHOWN OR NOTED OTHERWISE.
7. WHERE NO SPECIFIC DETAIL IS SHOWN, THE FRAMING OR CONSTRUCTION SHALL BE IDENTICAL AND SIMILAR TO THAT INDICATED FOR LIKE CASES OF CONSTRUCTION.
8. CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL SAFE WORKING CONDITIONS AND SHALL OBSERVE ALL SAFETY REQUIREMENTS ESTABLISHED BY JURISDICTIONAL AGENCIES AND THE OWNER. WHERE CONFLICTS EXIST, THE MORE STRINGENT REQUIREMENT SHALL APPLY. CARE SHALL BE EXERCISED TO AVOID ENDANGERING PERSONNEL OR STRUCTURES.
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTION METHODS, PROCEDURES AND JOB SITE CONDITIONS INCLUDING SAFETY. CONSTRUCTION SHALL BE PERFORMED IN SUCH A MANNER TO PROTECT WORKMEN, OCCUPANTS AND THE PUBLIC TO BE PROTECTED FROM INJURY AND ADJOINING PROPERTY SHALL BE PROTECTED FROM DAMAGE BY USE OF SCAFFOLDING, UNDERPINNING OR OTHER APPROVED METHOD. THE CONTRACTOR SHALL REPAIR ANY AND ALL DAMAGE CAUSED DURING OR RESULTING FROM HIS OPERATIONS IN KIND TO THE SATISFACTION OF THE OWNER AT NO ADDITIONAL COST TO THE OWNER.
10. THE CONTRACTOR SHALL MAINTAIN THE JOB SITE IN A CLEAN, DEBRIS FREE CONDITION. THE DUST RESULTING FROM REMOVALS SHALL BE CONTROLLED SO AS TO PREVENT ITS SPREAD TO OCCUPIED PORTIONS OF THE BUILDING AND TO AVOID CREATION OF A NUISANCE IN THE SURROUNDING AREA.
11. CONTRACTOR SHALL REPAIR ANY AND ALL DAMAGE CAUSED DURING OR RESULTING FROM THEIR OPERATIONS IN KIND TO THE SATISFACTION OF THE OWNER AT NO ADDITIONAL COST TO THE OWNER.
12. THE CONTRACTOR SHALL BE RESPONSIBLE TO DISPOSE OF ALL DEMOLISHED MATERIAL OFF SITE IN AN APPROVED MANNER UPON COMPLETION OF WORK. ANY EXTRA BUILDING MATERIALS SHALL BE DISPOSED OF OR TURNED OVER TO THE OWNER AS DIRECTED. THE OWNER SHALL BE CONSULTED PRIOR TO DISPOSAL OF SALVAGED OR EXCESS MATERIALS AT PROJECT COMPLETION. THE WORK AREA SHALL BE LEFT CLEAN TO THE OWNER'S SATISFACTION.
13. , ALL EXCESS MATERIAL, DEBRIS, ETC. SHALL BE REMOVED AND THE WORK AREA SHALL BE LEFT CLEAN TO THE OWNER'S SATISFACTION.
14. CONTRACTOR SHALL COORDINATE SCHEDULING OF WORK WITH THE OWNER'S REQUIREMENTS AND SCHEDULE. CONSTRUCTION ACTIVITIES SHALL COMPLY WITH LOCAL NOISE ORDINANCES REQUIREMENTS.
15. CONTRACTOR SHALL FURNISH ALL EQUIPMENT THAT MAY BE REQUIRED TO PERFORM THE WORK INDICATED IN A SAFE AND ORDERLY MANNER.
16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE RELOCATION AND TEMPORARY SUPPORT OF ANY UTILITIES ENCOUNTERED DURING THE COURSE OF THEIR WORK AND TO ENSURE THE OWNER'S FACILITY TO BE OPERATIONAL. IF REQUIRED, THE CONTRACTOR SHALL MAINTAIN UNOBSTRUCTED ACCESS TO ALL UTILITIES AND PUBLIC FACILITIES INCLUDING FIRE HYDRANTS, FIRE ALARM BOXES, POLICE CALL BOXES, STREET LIGHTS, MANHOLES, AMONG OTHERS DURING DEMOLITION AND CONSTRUCTION.
17. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CUTTING, PATCHING, FILLING AND CLEANING UPON COMPLETION OF WORK.
18. THE CONTRACTOR SHALL SUBMIT WHERE REQUIRED, SHOP DRAWINGS TO THE ARCHITECT FOR APPROVAL PRIOR TO THE START OF FABRICATION OR PURCHASE OF THOSE ITEMS.
19. THE CONTRACTOR SHALL PROVIDE THE OWNER AND ARCHITECT WITH CERTIFICATES OF INSURANCE, AS SPELLED OUT IN THE SPECIFICATIONS, PRIOR TO STARTING THE WORK.
20. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SHORING AND BRACING OF EXISTING STRUCTURES AS NEEDED TO COMPLETE THE NEW WORK.
21. ALL MANUFACTURER'S MATERIALS, COMPONENTS, FASTENERS, ASSEMBLIES, ETC. SHALL BE HANDLED AND INSTALLED IN ACCORDANCE WITH EACH MANUFACTURER'S SPECIFIC INSTRUCTIONS AND RECOMMENDATIONS. WHERE BRAND NAMES AND MANUFACTURED PRODUCTS ARE CALLED FOR, APPROVED EQUALS WHICH MEET APPLICABLE STANDARDS AND SPECIFICATIONS MAY BE SUBSTITUTED WITH WRITTEN PERMISSION OF THE ARCHITECT AND THE OWNER. WHENEVER BRAND NAMES OR SPECIFIC PRODUCT SYSTEMS ARE INDICATED IT SHALL BE CLEARLY UNDERSTOOD THAT SUCH IDENTIFICATION IS FOR THE PURPOSE OF ILLUSTRATING THE TYPE OF PRODUCT AND DEGREE OF QUALITY DESIRED. SUCH IDENTIFICATION IN NO WAY PRECLUDES THE CONTRACTOR FROM USING PRODUCTS OF OTHER MANUFACTURERS WHICH CAN BE SHOWN IN ADVANCE TO BE OF LIKE KIND AND EQUAL QUALITY.
22. ALL CHANGES SHALL BE REQUESTED IN WRITING AND MAY ONLY BE APPROVED IN WRITING BY THE ARCHITECT AND THE OWNER PRIOR TO ANY CHANGES BEING MADE.
23. THE ARCHITECT AND THE OWNER HAVE THE RIGHT TO REJECT ANY PORTION OF WORK THAT IS POORLY INSTALLED, DOES NOT MEET INDUSTRY STANDARD, UNAUTHORIZED OR WORK DONE CONTRARY TO THE THE INTENT OF THE CONTRACT DOCUMENTS. SUCH WORK SHALL BE REPLACED, REPAIRED OR REMOVED AT THE CONTRACTOR'S EXPENSE.
24. THE CONTRACTOR SHALL GUARANTEE ALL OF THEIR WORK AND THE WORK OF THEIR SUBCONTRACTORS FOR A PERIOD TWO YEARS AFTER RECEIVING FINAL ACCEPTANCE AND DO ALL REPAIR WORK AND REPLACEMENT AS NECESSARY DURING THAT PERIOD AT THE CONTRACTOR'S EXPENSE.
25. IN NO EVENT SHALL STRUCTURAL MEMBERS BE CUT OR DRILLED WITHOUT THE WRITTEN APPROVAL OF A LICENSED STRUCTURAL ENGINEER.
26. THE CONTRACTOR SHALL PROVIDE SAFE AND SANITARY CONDITIONS WHERE DEMOLITION AND WRECKING OPERATIONS ARE BEING CARRIED ON. WORK SHALL BE EXECUTED IN SUCH A MANNER THAT HAZARD FROM FIRE, POSSIBILITY OF INJURY, DANGER TO HEALTH AND CONDITIONS WHICH MAY CONSTITUTE A PUBLIC NUISANCE SHALL BE MINIMIZED.
27. THE ARCHITECT WAIVES ANY AND ALL RESPONSIBILITY AND LIABILITY FOR PROBLEMS WHICH ARISE FROM FAILURE TO FOLLOW THESE PLANS AND THE DESIGN INTENT THEY CONVEY, OR FOR PROBLEMS WHICH ARISE FROM OTHERS AS WELL AS FAILURE TO OBTAIN AND/OR FOLLOW THE ARCHITECT'S GUIDANCE WITH RESPECT TO ANY ERRORS, OMISSIONS, INCONSISTENCIES, AMBIGUITIES OR CONFLICTS WHICH ARE ALLEGED.
28. COLOR, FINISHING & TEXTURE OF ALL FINISH MATERIALS, WHERE NOT INDICATED ON THE DRAWINGS, SHALL BE SELECTED BY OWNER.
29. ALL ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE INTERNATIONAL BUILDING CODE AND THE LATEST EDITION OF THE NATIONAL ELECTRIC CODE, AND NFPA 70.
30. CONTRACTORS OR ANY SUBCONTRACTORS PERFORMING WORK UNDER THIS CONTRACT SHALL CARRY LIABILITY AND PROPERTY DAMAGE INSURANCE AGAINST ACCIDENTS OF ALL KINDS AND SHALL FURNISH OWNER WITH CERTIFICATE OF INSURANCE.
31. ALL WORK IN THESE DRAWINGS SHALL BE CONSIDERED NEW WORK WHETHER STATED OR NOT EXCEPT WHERE SPECIFICALLY NOTED AS EXISTING.

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CA0.03	CODE ANALYSIS PLANS
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CA0.11	PROPOSED 2ND FLOOR EGRESS PLAN
CA0.12	PROPOSED 3RD FLOOR EGRESS PLAN
SP.11	EXISTING CONDITIONS AND DEMOLITION PLAN
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Date	1/10/20
Checked	DLF
Drawn	CTB

MICHAEL J. McGOVERN, R.A.
The REGISTERED ARCHITECT License No. 022257-1

Revisions:
1 ISSUE TO BID 11/23/20

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NYSED PROJECT # 66-07-01-03-0-005-020

TITLE SHEET AND GENERAL NOTES
2019 BOND REFERENDUM
CHATSWORTH AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

Job No. 4.1092.72.03
File No. 10927202T001

T0.01

Code Analysis

Design Building Codes

2015 International Existing Building Code (as adopted by New York State)
2015 International Building Code (as adopted by New York State)
2015 International Mechanical Code (as adopted by New York State)
2015 International Plumbing Code (as adopted by New York State)
2015 Energy Conservation Code (as adopted by New York State)
1998 NYSED Manual of Planning Standards
National Electrical Code (NEC)
National Fire Protection Association (NFPA)
ICC/ANSI A117.1 - 2009 American National Standard

2015 International Existing Building Code (as adopted by New York State)

Chapter 5 Classification of Work

Section 504 Alteration-Level 2

504.1 Scope
Level 2 alterations include the reconfiguration of space, the addition or elimination of any door or window, the reconfiguration or extension of any system, or the installation of any additional equipment.

504.2 Application
Level 2 alterations shall comply with the provisions of Chapter 7 for Level 1 alterations as well as the provisions of Chapter 8.

Chapter 7 Alterations - Level 1

Section 701 General

701.1 Scope
Level 1 alterations as described in Section 503 shall comply with the requirements of this chapter. Level 1 alterations to historic buildings shall comply with this chapter, except as modified in Chapter 12.

Section 702 Building Elements and Materials

702.1 Interior Finishes
All newly installed interior wall and ceiling finishes shall comply with Chapter 8 of the International Building Code.

702.2 Interior Floor Finish
New interior floor finish, including new carpeting used as an interior floor finish material, shall comply with Section 804 of the International Building Code.

702.3 Interior Trim
All newly installed interior trim materials shall comply with Section 806 of the International Building Code.

702.6 Materials and Methods
All new work shall comply with the materials and methods requirements in the International Building Code, International Energy Conservation Code, International Mechanical Code, and International Plumbing Code, as applicable, that specify material standards, detail of installation and connection, joints, penetrations, and continuity of any element, component, or system in the building.

Section 703 Fire Protection

703.1 General
Alterations shall be done in a manner that maintains the level of fire protection provided.

Section 704 Means of Egress

704.1 General
Alterations shall be done in a manner that maintains the level of protection provided for the means of egress.

Section 705 Accessibility

705.1 General
A facility that is altered shall comply with the applicable provisions in Sections 705.1.1 through 705.1.14, and Chapter 11 of the International Building Code unless it is technically infeasible. Where compliance with this section is technically infeasible, the alteration shall provide access to the maximum extent that is technically feasible.

Chapter 8 Alterations - Level 2

Section 801 General

801.1 Scope
Level 2 alterations as described in Section 504 shall comply with the requirements of this chapter.

801.2 Alteration Level 1 Compliance
In addition to the requirements of this chapter, all work shall comply with the requirements of Chapter 7.

803.4 Interior Finish
The interior finish of walls and ceilings in exits and corridors in any work area shall comply with the requirements of the International Building Code.

Section 804 Fire Protection

804.1 Scope
The requirements of this section shall be limited to work areas in which Level 2 alterations are being performed, and where specified they shall apply throughout the floor on which the work areas are located or otherwise beyond the work area.

804.1.1 Corridor Ratings
Where an approved automatic sprinkler system is installed throughout the story, the required fire-resistance rating for any corridor located on the story shall be permitted to be reduced in accordance with the International Building Code. In order to be considered for a corridor rating reduction, such system shall provide coverage for the stairway landings serving the floor and the intermediate landings immediately below.

804.2 Automatic Sprinkler Systems
Automatic sprinkler systems shall be provided in accordance with the requirements of Sections 804.2.1 through 804.2.5. Installation requirements shall be in accordance with the International Building Code.

804.2.2 Groups A, B, E, F-1, H, I, M, R-1, R-2, R-4, S-1 and S-2
In buildings with occupancies in Groups A, B, E, F-1, H, I, M, R-1, R-2, R-4, S-1 and S-2, work areas that have exits or corridors shared by more than one tenant or that have exits or corridors serving an occupant load greater than 30 shall be provided with automatic sprinkler protection where all of the following conditions occur:

1. The work area is required to be provided with automatic sprinkler protection in accordance with the International Building Code as applicable to new construction; and
2. The work area exceeds 50 percent of the floor area.

Exception: If the building does not have sufficient municipal water supply for design of a fire sprinkler system available to the floor without installation of a new fire pump, work areas shall be protected by an automatic smoke detection system throughout all occupiable spaces other than sleeping units or individual dwelling units that activates the occupant notification system in accordance with Sections 907.4, 907.5 and 907.6 of the International Building Code.

(Note: The work area does not exceed 50% of the floor area.)

804.4 Fire Alarm and Detection
An approved fire alarm system shall be installed in accordance with Sections 804.4.1 through 804.4.3. Where automatic sprinkler protection is provided in accordance with Section 804.2 and is connected to the building fire alarm system, automatic heat detection shall not be required.

An approved automatic fire detection system shall be installed in accordance with the provisions of this code and NFPA 72. Devices, combinations of devices, appliances, and equipment shall be approved. The automatic fire detectors shall be smoke detectors, except that an approved alternative type of detector shall be installed in spaces such as boiler rooms, where products of combustion are present during normal operation in sufficient quantity to actuate a smoke detector.

804.4.1 Occupancy Requirements
A fire alarm system shall be installed in accordance with Sections 804.4.1.1 through 804.4.1.7. Existing alarm-notification appliances shall be automatically activated throughout the building. Where the building is not equipped with a fire alarm system, alarm-notification appliances within the work area shall be provided and automatically activated.

Exceptions:
1. Occupancies with an existing, previously approved fire alarm system.
2. Where selective notification is permitted, alarm-notification appliances shall be automatically activated in the areas selected.

804.4.1.1 Group E
A fire alarm system shall be installed in work areas of Group E occupancies as required by the International Fire Code for existing Group E occupancies.

Chapter 11 Additions

Section 1101 General

1101.1 Scope
An addition to a building or structure shall comply with the International Codes as adopted for new construction without requiring the existing building or structure to comply with any requirements of those codes or of these provisions, except as required by this chapter. Where an addition impacts the existing building or structure, that portion shall comply with this code.

1101.2 Creation or Extension of Nonconformity
An addition shall not create or extend any nonconformity in the existing building to which the addition is being made with regard to accessibility, structural strength, fire safety, means of egress, or the capacity of mechanical, plumbing, or electrical systems.

1101.3 Other Work
Any repair or alteration work within an existing building to which an addition is being made shall comply with the applicable requirements for the work as classified in Chapter 5.

Section 1102 Heights and Areas

1102.1 Height Limitations
No addition shall increase the height of an existing building beyond that permitted under the applicable provisions of Chapter 5 of the International Building Code for new buildings.

1102.2 Area Limitations
No addition shall increase the area of an existing building beyond that permitted under the applicable provisions of Chapter 5 of the International Building Code for new buildings unless fire separation as required by the International Building Code is provided.

1102.3 Fire Protection Systems
Existing fire areas increased by the addition shall comply with Chapter 9 of the International Building Code.

2015 International Building Code (as adopted by New York State)

Chapter 3 Use and Occupancy Classification

Section 305 Educational Group E

Chapter 5 General Building Heights and Areas

Section 504 Building Height and Number of Stories

Table 504.3 allowable building height in feet above grade plane
(Note: see existing / proposed building information below)
Table 504.4 allowable number of stories above grade plane
(Note: see existing / proposed building information below)

Section 506 Building Area

Table 506.2 allowable area factor in square feet
(Note: see existing / proposed building information below)

Original Building (1902) - Type of Construction: IIIB(SM)
Occupancy Classification: E
Allowable Building Height / Stories: 75', Three-story
Existing Building Height / Stories: 55'-8", Three-story, One Basement
(Note: no proposed modification to height / stories)
Allowable area per floor: 49,712 SF
Total allowable area: 149,136 SF
1st Floor (Basement): 10,766 SF (Existing)
2nd Floor: 10,967 SF (Existing)
3rd Floor: 11,347 SF (Existing)
4th Floor: 10,920 SF (Existing)
Total area: 33,234 SF (Existing); (Note: Basement not included per 506.1.3)

Addition Building (1922) - Type of Construction: IB(NS)
Occupancy Classification: E
Allowable Building Height / Stories: 160', Five-story
Proposed Building Height / Stories: 57'-10", Four-story
Allowable area per floor: Unlimited SF
Total allowable area: Unlimited SF
1st Floor: 21,478 SF (Existing); 604 SF (Proposed Addition); 22,082 SF (Total 1st Floor)
2nd Floor: 20,304 SF (Existing); 614 SF (Proposed Addition); 20,918 SF (Total 2nd Floor)
3rd Floor: 19,389 SF (Existing); 1,342 SF (Proposed Addition); 20,731 SF (Total 3rd Floor)
4th Floor: 678 SF (Proposed Addition)
Total area: 61,171 SF (Existing); 3,238 SF (Proposed Addition) 64,409 SF (Total)

Chapter 6 Types of Construction

Table 601 Fire-resistance Rating Requirements For Building Elements (Hours)

Type of Construction: IIIB(SM)
Primary structural frame: 0
Bearing walls (Exterior): 2
Bearing walls (Interior): 0
Nonbearing walls and partitions (Exterior) (Per Table 602):
Occupancy group: E
X < 5': 1
5' ≤ X < 10': 1
10' ≤ X < 30': 1
X ≥ 30': 0
Nonbearing walls and partitions (Interior): 0
Floor construction and associated secondary members: 0
Roof construction and associated secondary members: 0

Type of Construction: IB(NS)
Primary structural frame: 2 or 1 (where supporting a roof only)
Bearing walls (Exterior): 2
Bearing walls (Interior): 2 or 1 (where supporting a roof only)
Nonbearing walls and partitions (Exterior) (Per Table 602):
Occupancy group: E
X < 5': 1
5' ≤ X < 10': 1
10' ≤ X < 30': 1
X ≥ 30': 0
Nonbearing walls and partitions (Interior): 0
Floor construction and associated secondary members: 2
Roof construction and associated secondary members: 1 or 0 (where every part of the roof construction is 20 feet or more above any floor immediately below)

Chapter 7 Fire and Smoke Protection Features

Section 703 Fire-Resistance Ratings and Fire Tests

703.2 Fire-Resistance Ratings
The fire-resistance rating of building elements, components or assemblies shall be determined in accordance with the test procedures set forth in ASTM E119 or UL 263 or in accordance with Section 703.3. The fire-resistance rating of penetrations and fire-resistant joint systems shall be determined in accordance Sections 714 and 715, respectively.

703.6 Fire-Resistance-Rated Glazing
Fire-resistance-rated glazing, when tested in accordance with ASTM E119 or UL 263 and complying with the requirements of Section 707, shall be permitted.
Fire-resistance-rated glazing shall bear a label marked in accordance with Table 716.3 issued by an agency and shall be permanently identified on the glazing.

Section 705 Exterior Walls

705.5 Fire-Resistance Ratings
Exterior walls shall be fire-resistance-rated in accordance with Tables 601 and 602 and this section. The required fire-resistance rating of exterior walls with a fire separation distance of greater than 10 feet (3048 mm) shall be rated for exposure to fire from the inside. The required fire-resistance rating of exterior walls with a fire separation distance of less than or equal to 10 feet (3048 mm) shall be rated for exposure to fire from both sides.

Table 705.8 Maximum Area of Exterior Wall Openings Based on Fire Separation Distance and Degree of Opening Protection

Fire separation distance (feet): 0 to less than 3
Unprotected, Nonsprinklered: Not Permitted
Unprotected, Sprinklered: Not Permitted
Protected: Not Permitted

Fire separation distance (feet): 3 to less than 5
Unprotected, Nonsprinklered: Not Permitted
Unprotected, Sprinklered: 15%
Protected: 15%

Fire separation distance (feet): 5 to less than 10
Unprotected, Nonsprinklered: 10%
Unprotected, Sprinklered: 25%
Protected: 25%

Fire separation distance (feet): 10 to less than 15
Unprotected, Nonsprinklered: 15%
Unprotected, Sprinklered: 45%
Protected: 45%

Fire separation distance (feet): 15 to less than 20
Unprotected, Nonsprinklered: 25%
Unprotected, Sprinklered: 75%
Protected: 75%

Fire separation distance (feet): 20 to less than 25
Unprotected, Nonsprinklered: 45%
Unprotected, Sprinklered: No Limit
Protected: No Limit

Fire separation distance (feet): 25 to less than 30
Unprotected, Nonsprinklered: 70%
Unprotected, Sprinklered: No Limit
Protected: No Limit

Fire separation distance (feet): 30 or greater
Unprotected, Nonsprinklered: No Limit
Unprotected, Sprinklered: No Limit
Protected: No Limit

Section 706 Fire Walls

706.1 General
Each portion of a building separated by one or more fire walls that comply with the provisions of this section shall be considered a separate building. The extent and location of such fire walls shall provide a complete separation. Where a fire wall separates occupancies that are required to be separated by a fire barrier wall, the most restrictive requirements of each separation shall apply.

706.2 Structural Stability
Fire walls shall be designed and constructed to allow collapse of the structure on either side without collapse of the wall under fire conditions. Fire walls designed and constructed in accordance with NFPA 221 shall be deemed to comply with this section.

Table 706.4 Fire Wall Fire-resistance Ratings
Group: E
Fire-resistance Rating (hours): 3

706.5 Horizontal Continuity
Fire walls shall be continuous from exterior wall to exterior wall and shall extend not less than 18 inches (457 mm) beyond the exterior surface of exterior walls.

Exceptions:
2. Fire walls shall be permitted to terminate at the interior surface of noncombustible exterior sheathing, exterior siding or other noncombustible exterior finishes provided the sheathing, siding or other exterior noncombustible finish extends a horizontal distance of not less than 4 feet on both sides of the fire wall.

706.5.1 Exterior Walls
Where the fire wall intersects exterior walls, the fire-resistance rating and opening protection of the exterior walls shall comply with one of the following:

1. The exterior walls on both sides of the fire wall shall have a 1-hour fire-resistance rating with 3/4-hour protection where opening protection is required by Section 705.8. The fire-resistance rating of the exterior wall shall extend not less than 4 feet (1220 mm) on each side of the intersection of the fire wall to exterior wall. Exterior wall intersections at fire walls that form an angle equal to or greater than 180 degrees (3.14 rad) do not need exterior wall protection.

706.6 Vertical Continuity
Fire walls shall extend from the foundation to a termination point not less than 30 inches (762 mm) above both adjacent roofs.

Exceptions:
3. Walls shall be permitted to terminate at the underside of noncombustible roof sheathing, deck or slabs where both buildings are provided with not less than a Class B roof covering. Openings in the roof shall not be located within 4 feet of the fire wall.

706.8 Openings
Each opening through a fire wall shall be protected in accordance with Section 716.5 and shall not exceed 156 square feet. The aggregate width of openings at any floor level shall not exceed 25 percent of the length of the wall.

Section 707 Fire Barriers

707.3.1 Shaft Enclosures
The fire-resistance rating of the fire barrier separating building areas from a shaft shall comply with Section 713.4.

707.3.4 Exit Passageway
The fire-resistance rating of the fire barrier separating building areas from an exit passageway shall comply with Section 1024.3.

707.3.5 Horizontal Exit
The fire-resistance rating of the separation between building areas connected by a horizontal exit shall comply with Section 1026.1.

707.3.10 Fire Areas
The fire barriers or horizontal assemblies, or both, separating a single occupancy into different fire areas shall have a fire-resistance rating of not less than that indicated in Table 707.3.10. The fire barriers or horizontal assemblies, or both, separating fire areas of mixed occupancies shall have a fire-resistance rating of not less than the highest value indicated in Table 707.3.10 for the occupancies under consideration.

Table 707.3.10 Fire-Resistance Rating Requirements for Fire Barrier Assemblies or Horizontal Assemblies Between Fire Areas
Occupancy Group: E
Fire Resistance Rating (hours): 2

707.5 Continuity
Fire barriers shall extend from the top of the foundation or floor/ceiling assembly below to the underside of the floor or roof sheathing, slab or deck above and shall be securely attached thereto. Such fire barriers shall be continuous through concealed space, such as the space above a suspended ceiling. Joints and voids at intersections shall comply with Sections 707.8 and 707.9

707.6 Openings
Openings in a fire barrier shall be protected in accordance with Section 716.
Openings shall be limited to a maximum aggregate width of 25 percent of the length of the wall, and the maximum area of any single opening shall not exceed 156 square feet (15 m2). Openings in enclosures for exit access stairways and ramps, interior exit stairways and ramps and exit passageways shall also comply with Sections 1019, 1023.4 and 1024.5, respectively.

Exceptions:
1. Openings shall not be limited to 156 square feet (15 m2) where adjoining floor areas are equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1.

707.7 Penetrations
Penetrations of fire barriers shall comply with Section 714.

707.7.1 Prohibited Penetrations
Penetrations into enclosures for exit access stairways and ramps, interior exit stairways and ramps, and exit passageways shall be allowed only where permitted by Sections 1019, 1023.5 and 1024.6, respectively.

707.8 Joints
Joints made in or between fire barriers, and joints made at the intersection of fire barriers with underside of a fire-resistance-rated floor or roof sheathing, slab or deck above, and the exterior vertical wall intersection shall comply with Section 715.

707.10 Ducts and Air Transfer Openings
Penetrations in a fire barrier by ducts and air transfer openings shall comply with Section 717.

Section 708 Fire Partitions

708.1 General
The following wall assemblies shall comply with this section.
3. Corridor walls as required by Section 1020.1.
4. Elevator lobby separation as required by Section 3006.2.

708.4 Continuity
Fire partitions shall extend from the top of the foundation or floor/ceiling assembly below to the underside of the floor or roof sheathing, slab or deck above or to the fire-resistance-rated floor/ceiling or roof/ceiling assembly above, and shall be securely attached thereto. In combustible construction where the fire partitions are not required to be continuous to the sheathing, deck or slab, the space between the ceiling and the sheathing, deck or slab above shall be fireblocked or draftstopped in accordance with Sections 718.2 and 718.3 at the partition line. The supporting construction shall be protected to afford the required fire-resistance rating of the wall supported, except for walls separating tenant spaces in covered and open mall buildings, walls separating dwelling units, walls separating sleeping units and corridor walls, in buildings of Type IIB, IIIB and VB construction.

708.6 Openings
Openings in a fire partition shall be protected in accordance with Section 716.

708.7 Penetrations
Penetrations of fire partitions shall comply with Section 714.

708.8 Joints
Joints made in or between fire partitions shall comply with Section 715.

708.9 Ducts and Air Transfer Openings
Penetrations in a fire partition by ducts and air transfer openings shall comply with Section 717.

Section 713 Shaft Enclosures

713.2 Construction
Shaft enclosures shall be constructed as fire barriers in accordance with Section 707 or horizontal assemblies in accordance with Section 711, or both.

713.4 Fire-Resistance Rating
Shaft enclosures shall have a fire-resistance rating of not less than 2 hours where connecting four stories or more, and not less than 1 hour where connecting less than four stories. The number of stories connected by the shaft enclosure shall include any basements but not any mezzanines. Shaft enclosures shall have a fire-resistance rating not less than the floor assembly penetrated, but need not exceed 2 hours. Shaft enclosures shall meet the requirements of Section 703.2.1.

Section 716 Opening Protectives

716.2 Fire-Resistance-Rated Glazing
Fire-resistance-rated glazing tested as part of a fire-resistance-rated wall or floor/ceiling assembly in accordance with ASTM E119 or UL 263 and labeled in accordance with Section 703.6 shall not otherwise be required to comply with this section where used as part of a wall or floor/ceiling assembly. Fire-resistance-rated glazing shall be permitted in fire door and fire window assemblies where tested and installed in accordance with their listings and where in compliance with the requirements of this section.

716.3 Marking Fire-Rated Glazing Assemblies
Fire Test Standard: ASTM E119 or UL 263; Marking: W; Definition of Marking: Meets wall assembly criteria.

Table 716.5 Opening Fire Protection Assemblies, Ratings and Markings

Type of Assembly:
Fire walls and fire barriers having a required fire-resistance rating > 1 hour
Required Wall Assembly Rating (hours): 3
Minimum Fire Door and Fire Shutter Assembly Rating (hours): 3
Door Vision Panel Size: ASTM E119 (maximum size tested)
Fire Rated Glazing Marking Door Vision Panel: D-H-W-180
Minimum Sidelight/Transom Assembly Rating (hours): Fire-resistance 3
Fire-Rated Glazing Marking Sidelight/Transom Panel: Fire-resistance W-180

Type of Assembly:
Fire walls and fire barriers having a required fire-resistance rating > 1 hour
Required Wall Assembly Rating (hours): 2
Minimum Fire Door and Fire Shutter Assembly Rating (hours): 1-1/2
Door Vision Panel Size: 100 sq. in.
Fire Rated Glazing Marking Door Vision Panel:
≤100 sq. in. = D-H-90; >100 sq. in.= D-H-W-90
Minimum Sidelight/Transom Assembly Rating (hours): Fire-resistance 2
Fire-Rated Glazing Marking Sidelight/Transom Panel: Fire-resistance W-120

Type of Assembly:
Enclosures for shafts, interior exit stairways and interior exit ramps.
Required Wall Assembly Rating (hours): 2
Minimum Fire Door and Fire Shutter Assembly Rating (hours): 1-1/2
Door Vision Panel Size: 100 sq. in.
Fire Rated Glazing Marking Door Vision Panel:
≤100 sq. in. = D-H-90; > 100 sq. in.= D-H-T-W-90
Minimum Sidelight/Transom Assembly Rating (hours): Fire-resistance 2
Fire-Rated Glazing Marking Sidelight/Transom Panel: Fire-resistance W-120

Type of Assembly:
Fire barriers having a required fire-resistance rating of 1 hour: Enclosures for shafts, exit access stairways, exit access ramps, interior exit stairways and interior exit ramps; and exit passageway walls
Required Wall Assembly Rating (hours): 1
Minimum Fire Door and Fire Shutter Assembly Rating (hours): 1
Door Vision Panel Size: 100 sq. in. (except with automatic sprinkler system)
Fire Rated Glazing Marking Door Vision Panel:
≤100 sq. in. = D-H-60; >100 sq. in.= D-H-T-W-60
Minimum Sidelight/Transom Assembly Rating (hours): Fire-resistance 1
Fire-Rated Glazing Marking Sidelight/Transom Panel: Fire-resistance W-60

Type of Assembly: Fire partitions: Corridor walls
Required Wall Assembly Rating (hours): 1
Minimum Fire Door and Fire Shutter Assembly Rating (hours): 1/3
Door Vision Panel Size: Maximum size tested
Fire Rated Glazing Marking Door Vision Panel: D-20
Minimum Sidelight/Transom Assembly Rating (hours):
Fire Protection 3/4 (or ASTM E119 maximum size tested)
Fire-Rated Glazing Marking Sidelight/Transom Panel: D-H-OH-45

Type of Assembly: Exterior walls
Required Wall Assembly Rating (hours): 2
Minimum Fire Door and Fire Shutter Assembly Rating (hours): 1-1/2
Door Vision Panel Size: 100 sq. in. (or ASTM E119 maximum size tested)
Fire Rated Glazing Marking Door Vision Panel:
≤100 sq. in. = D-H-90; >100 sq. in.= D-H-W-90
Minimum Sidelight/Transom Assembly Rating (hours): Fire-resistance 2
Fire-Rated Glazing Marking Sidelight/Transom Panel: Fire-resistance W-120

716.5.8.2 Elevator, Stairway and Ramp Protectives
Approved fire-protection-rated glazing used in fire door assemblies in elevator, stairway and ramp enclosures shall be so located as to furnish clear vision of the passageway or approach to the elevator, stairway or ramp.

Table 716.6 Fire Window Assembly Fire Protection Ratings
Type of Wall Assembly: Exterior walls
Required Wall Assembly Rating (hours): >1
Minimum Fire Window Assembly Rating (hours): 1-1/2
Fire-rated Glazing Marking: OH-90 or W-XXX (Fire rating in minutes equal to wall assembly rating)

Chapter 8 Interior Finishes

801.2 Interior Wall and Ceiling Finish
The provisions of Section 803 shall limit the allowable fire performance and smoke development of interior wall and ceiling finish materials based on occupancy classification.

Section 803 Wall and Ceiling Finishes

Table 803.11 Interior Wall and Ceiling Finish Requirements by Occupancy

Group E (Sprinklered)
Interior exit stairways and ramps and exit passageways: B
Corridors and enclosure for exit access stairways and ramps: C
Rooms and enclosed spaces: C

Group E (Nonsprinklered)
Interior exit stairways and ramps and exit passageways: A
Corridors and enclosure for exit access stairways and ramps: B
Rooms and enclosed spaces: C

Section 805 Combustible Materials in Types I and II Construction

805.1.1 Subfloor Construction
Floor sleepers, bucks and nailing blocks shall not be constructed of combustible materials, unless the space between the fire-resistance rated floor assembly and the flooring is either solidly filled with noncombustible materials or fireblocked in accordance with Section 718, and provided that such open spaces shall not extend under or through permanent partitions or walls.

Chapter 9 Fire Protection Systems

Section 901 General

901.7 Fire Areas
Where buildings, or portions thereof, are divided into fire areas so as not to exceed the limits established for requiring a fire protection system in accordance with this chapter, such fire areas shall be separated by fire barriers constructed in accordance with Section 707 or horizontal assemblies constructed in accordance with Section 711, or both, having a fire-resistance rating of not less than that determined in accordance with Section 707.3.10.

Section 903 Automatic Sprinkler Systems

903.2.3 Group E
An automatic sprinkler system shall be provided for Group E occupancies as follows:
1. Throughout all Group E fire areas greater than 12,000 square feet in area.
2. Throughout every portion of educational buildings below the lowest level of exit discharge serving that portion of the building.

(Note: Original Building 1902 - Fully Sprinklered; Addition Building 1922 - Not Sprinklered - Fire areas of the additions are less than 12,000 SF and do not require an automatic sprinkler system)

Chapter 10 Means of Egress

(Note: See Egress Plans for code analysis of this chapter.)

Chapter 30 Elevators and Conveying Systems

Section 3002 Hoistway Enclosures

3002.1 Hoistway Enclosure Protection
Elevator, dumbwaiter and other hoistway enclosures shall be shaft enclosures complying with Section 713.

3002.3 Emergency Signs
An approved pictorial sign of a standardized design shall be posted adjacent to each elevator call station on all floors instructing occupants to use the exit stairways and not to use the elevators in case of fire. The sign shall read: IN CASE OF FIRE, ELEVATORS ARE OUT OF SERVICE. USE EXIT STAIRS.

3002.4 Elevator Car to Accommodate Ambulance Stretcher
Where elevators are provided in buildings four or more stories above, or four or more stories below, grade plane, not fewer than one elevator shall be provided for fire department emergency access to all floors. The elevator car shall be of such a size and arrangement to accommodate an ambulance stretcher 24 inches by 84 inches (610 mm by 2134 mm) with not less than 5-inch (127 mm) radius corners, in the horizontal, open position and shall be identified by the international symbol for emergency medical services (star of life). The symbol shall be not less than 3 inches (76 mm) in height and shall be placed inside on both sides of the hoistway door frame.

Section 3006 Elevator Lobbies and Hoistway Opening Protection

3006.2 Hoistway Opening Protection Required
Elevator hoistway door openings shall be protected in accordance with Section 3006.3 where an elevator hoistway connects more than three stories, is required to be enclosed within a shaft enclosure in accordance with Section 712.1.1 and any of the following conditions apply:

1. The building is not protected throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2.

3006.3 Hoistway Opening Protection
Where Section 3006.2 requires protection of the elevator hoistway door opening, the protection shall be provided by one of the following:

1. An enclosed elevator lobby shall be provided at each floor to separate the elevator hoistway shaft enclosure doors from each floor by fire partitions in accordance with Section 708. In addition, doors protecting openings in the elevator lobby enclosure walls shall comply with Section 716.5.3 as required for corridor walls. Penetrations of the enclosed elevator lobby by ducts and air transfer openings shall be protected as required for corridors in accordance with Section 717.5.4.1.

3006.4 Means of Egress
Elevator lobbies shall be provided with at least one means of egress complying with Chapter 10 and other provisions in this code. Egress through an elevator lobby shall be permitted in accordance with Item 1 of Section 1016.2.

Chapter 33 Safeguards During Construction

Section 3302 Construction Safeguards

3302.1 Alterations, Repairs and Additions
Required exits, existing structural elements, fire protection devices and sanitary safeguards shall be maintained at all times during alterations, repairs or additions to any building or structure.

Exceptions:
1. Where such required elements or devices are being altered or repaired, adequate substitute provisions shall be made.
2. Maintenance of such elements and devices is not required when the existing building is not occupied.

3302.2 Manner of Removal
Waste materials shall be removed in a manner that prevents injury or damage to persons, adjoining properties and public rights-of-way.

3302.3 Fire Safety During Construction
Fire safety during construction shall comply with the applicable requirements of this code and the applicable provisions of Chapter 33 of the International Fire Code.

2015 Energy Conservation Code (as adopted by New York State)

Chapter 3 [CE] General Requirements

Table C301.1 Climate Zones, Moisture Regimes, and Warm-humid Designations by State, County and Territory

New York - 4A Westchester

Chapter 4 [CE] Commercial Energy Efficiency

C401.2 Application
Commercial buildings shall comply with one of the following compliance paths:

2. Prescriptive Compliance Path: The requirements of Sections C402 through C405. In addition, commercial buildings shall comply with Section C406 and tenant spaces shall comply with Section C406.1.1.

Table C402.1.3 Opaque Thermal Envelope Insulation Component Minimum Requirements, R-value Method

Climate Zone: 4 Except Marine - Group E

Roofs:	Insulation entirely above roof deck	R-30ci
Walls, above grade:	Mass	R-9.5ci
Walls, below grade:	Below-grade wall	R-7.5ci
Slab-on-grade floors:	Unheated slabs	R-10 for 24" below

C402.2.5 Slabs-on-grade perimeter insulation
Where the slab on grade is in contact with the ground, the minimum thermal resistance (R-value) of the insulation around the perimeter of unheated or heated slab-on-grade floors designed in accordance with the R-value method of Section C402.1.3 shall be as specified in Table C402.1.3. The insulation shall be placed on the outside of the foundation or on the inside of the foundation wall. The insulation shall extend downward from the top of the slab for a minimum distance as shown in the table or to the top of the footing, whichever is less, or downward to at least the bottom of the slab and then horizontally to the interior or exterior for the total distance shown in the table. Insulation extending away from the building shall be protected by pavement or by not less than of 10 inches (254 mm) of soil.

Exception: Where the slab-on-grade floor is greater than 24 inches (61 mm) below the finished exterior grade, perimeter insulation is not required.

Table C402.4 Building Envelope Fenestration Maximum U-factor and SHGC Requirements

Climate Zone: 4
Vertical Fenestration - U-factor

Fixed fenestration:	0.38
Operable fenestration:	0.45
Entrance doors:	0.77
Vertical Fenestration - SHGC	
PF < 0.2:	0.40
0.2 ≤ PF < 0.5:	0.48
PF ≥ 0.5:	0.64

Chapter 5 [CE] Existing Buildings

Section C502 Additions

C502.1 General
Additions to an existing building, building system or portion thereof shall conform to the provisions of this code as those provisions relate to new construction without requiring the unaltered portion of the existing building or building system to comply with this code. Additions shall not create an unsafe or hazardous condition or overload existing building systems. An addition shall be deemed to comply with this code if the addition alone complies or if the existing building and addition comply with this code as a single building. Additions shall comply with Section C502.2.

Date	1/10/20
Checked	DLF
Drawn	CTB

MICHAEL J. McGOVERN, R.A.
License No. 022257-1
The REGISTERED ARCHITECT

Revisions:
1 ISSUE TO BID 11/23/20

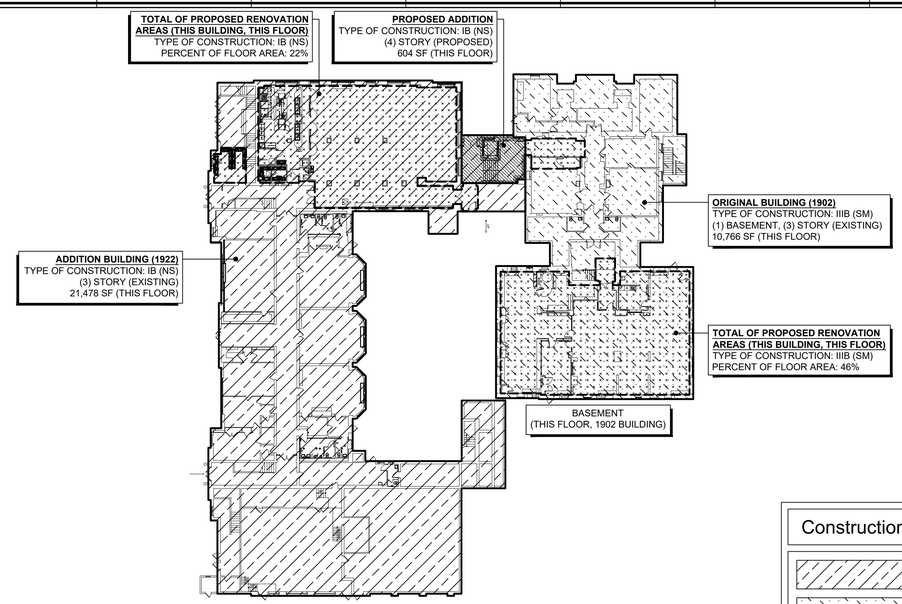
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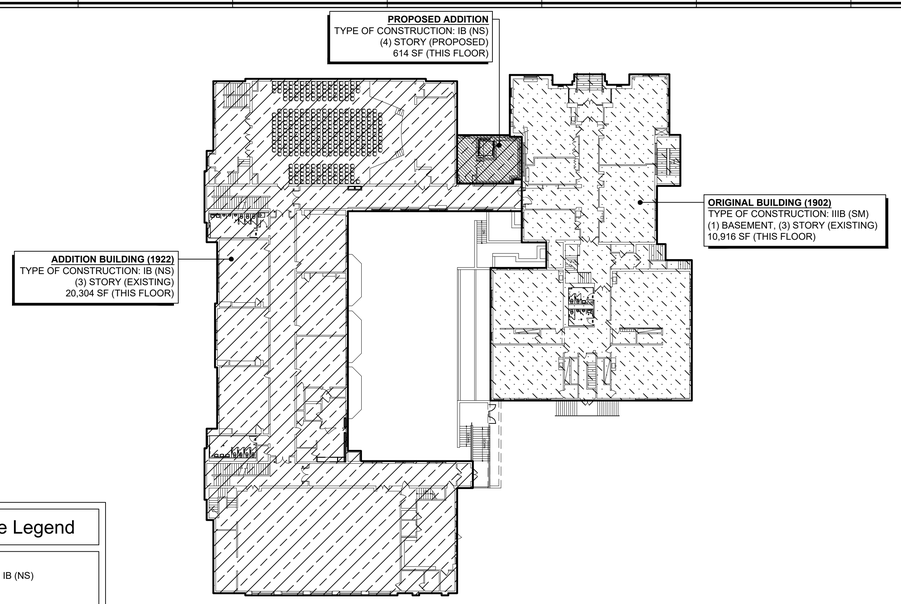
NYSED PROJECT # 66-07-01-03-0-005-020
CODE ANALYSIS
2019 BOND REFERENDUM
CHATSWORTH AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

Job No. 4.1092.72.03
File No. 10927203CA001

CA0.01



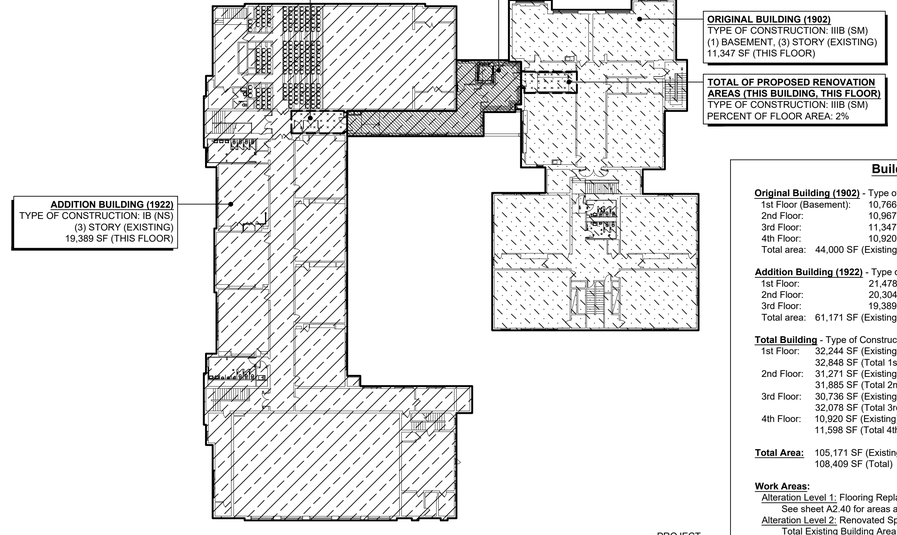
1 CA0.02 — First Floor Key Plan — 1/32" = 1'-0"



2 CA0.02 — Second Floor Key Plan — 1/32" = 1'-0"

Construction Type Legend

- TYPE IB (NS)
- TYPE IIIB (SM)
- ADDITION AREA
- RENOVATION AREA



3 CA0.02 — Third Floor Key Plan — 1/32" = 1'-0"

Building Areas

Original Building (1902) - Type of Construction: IIIB(SM)

1st Floor (Basement):	10,766 SF (Existing)
2nd Floor:	10,967 SF (Existing)
3rd Floor:	11,347 SF (Existing)
4th Floor:	10,920 SF (Existing)
Total area:	44,000 SF (Existing)

Addition Building (1922) - Type of Construction: IB(NS)

1st Floor:	21,478 SF (Existing)
2nd Floor:	20,304 SF (Existing)
3rd Floor:	19,389 SF (Existing)
Total area:	61,171 SF (Existing)

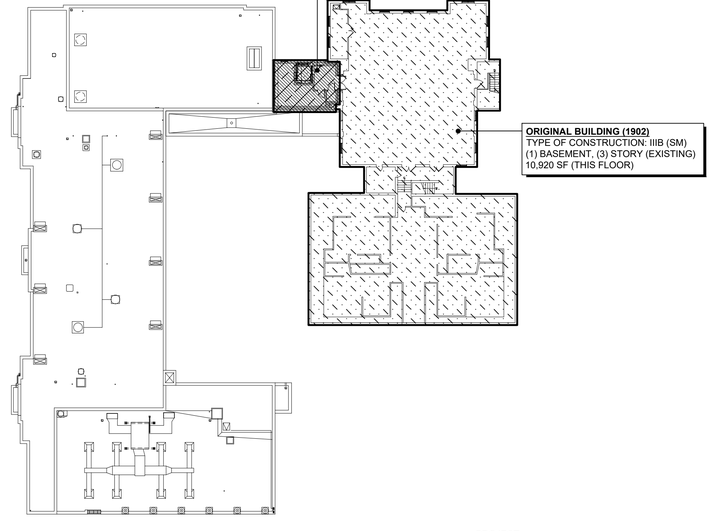
Total Building - Type of Construction: IIIB

1st Floor:	32,244 SF (Existing); 604 SF (Proposed Addition); 32,848 SF (Total 1st Floor)
2nd Floor:	31,271 SF (Existing); 614 SF (Proposed Addition); 31,885 SF (Total 2nd Floor)
3rd Floor:	30,736 SF (Existing); 1,342 SF (Proposed Addition); 32,078 SF (Total 3rd Floor)
4th Floor:	10,920 SF (Existing); 678 SF (Proposed Addition); 11,598 SF (Total 4th Floor)
Total Area:	105,171 SF (Existing); 3,238 SF (Proposed Addition) 108,409 SF (Total)

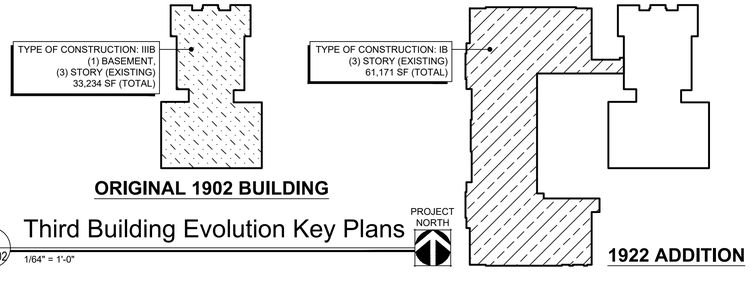
Work Areas:

Alteration Level 1: Flooring Replacement (11,786 SF)
See sheet A2.40 for areas and scope of work

Alteration Level 2: Renovated Spaces
Total Existing Building Area: 105,171 SF
Total Renovation Area: 10,232 SF (9.7% of Floor Area)



4 CA0.02 — Fourth Floor Key Plan — 1/32" = 1'-0"



5 CA0.02 — Third Building Evolution Key Plans — 1/64" = 1'-0"

Date	1/10/20
Checked	DLF
Drawn	CTB

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License No. 022257-1

Revisions:

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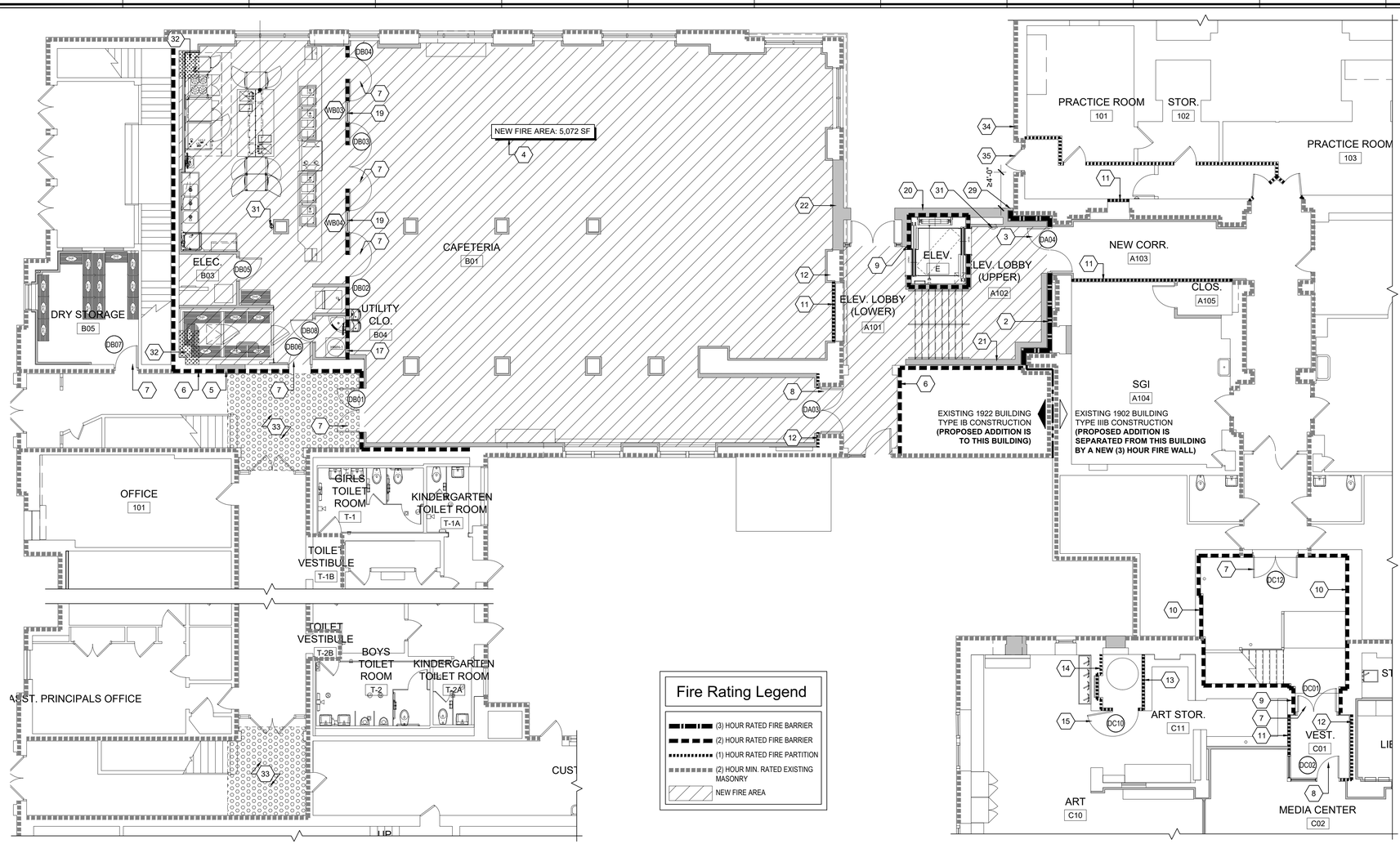
CODE ANALYSIS PLANS

2019 BOND REFERENDUM
CHATSWORTH AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

Job No. 4.1092.72.03

File No. 10927203CA001

CA0.02



Fire Rating Legend

- (3) HOUR RATED FIRE BARRIER
- (2) HOUR RATED FIRE BARRIER
- (1) HOUR RATED FIRE PARTITION
- (2) HOUR MIN. RATED EXISTING MASONRY
- NEW FIRE AREA

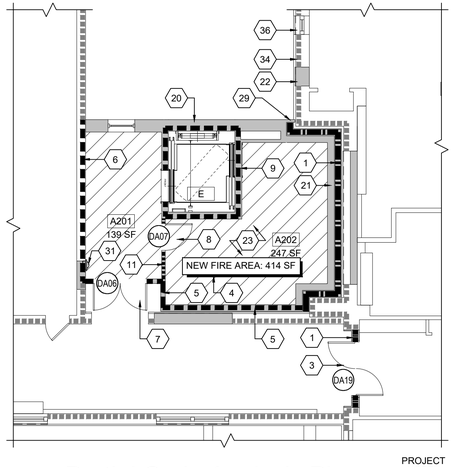
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PROJECT NORTH

Code Analysis Key Notes

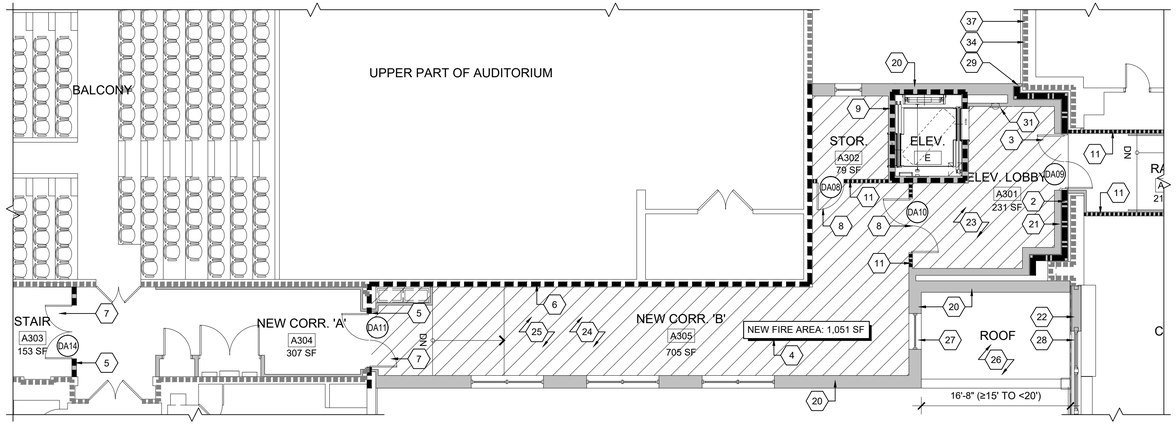
(#) SYMBOL INDICATES CODE ANALYSIS KEY NOTE

1. NEW (3) HOUR FIRE BARRIER
2. NEW (3) HOUR FIRE BARRIER LENGTH THIS FLOOR: 30'-0". OPENINGS THIS FLOOR: 6'-0" (20%). ALLOWED: 25%
3. NEW (180) MINUTE RATED DOOR IN FIRE BARRIER
4. NEW FIRE AREA SEPARATED BY MINIMUM (2) HOUR FIRE BARRIER (PER IBC TABLE 707.3.10)
5. NEW PORTION OF (2) HOUR FIRE BARRIER (PER IBC TABLE 707.3.10)
6. EXISTING PORTION OF (2) HOUR FIRE BARRIER - EXISTING MASONRY, TYP. (PER IBC TABLE 707.3.10)
7. NEW (90) MINUTE RATED DOOR IN FIRE BARRIER (PER IBC TABLE 716.5)
8. NEW (20) MINUTE RATED DOOR IN FIRE PARTITION (PER IBC TABLE 716.5)
9. NEW PORTION OF (2) HOUR RATED SHAFT ENCLOSURE (PER IBC 713.4)
10. EXISTING PORTION OF (2) HOUR RATED SHAFT ENCLOSURE - EXISTING MASONRY, TYP. (PER IBC 713.4)
11. NEW PORTION OF (1) HOUR FIRE PARTITION (PER IBC 708.1)
12. EXISTING PORTION OF (1) HOUR FIRE PARTITION - EXISTING MASONRY, TYP. (PER IBC 708.1)
13. NEW PORTION OF (1) HOUR FIRE BARRIER AT RELOCATED KILN (PER NYSED NEWSLETTER 87)
14. EXISTING PORTION OF (1) HOUR FIRE BARRIER AT RELOCATED GAS FIRED KILN - EXISTING MASONRY (PER NYSED NEWSLETTER 87)
15. NEW (45) MINUTE RATED DOOR IN FIRE BARRIER AT RELOCATED GAS FIRED KILN (PER NYSED NEWSLETTER 87)
16. EXISTING (90) MINUTE RATED DOOR IN FIRE BARRIER (PER IBC TABLE 716.5)
17. NEW PORTION OF (2) HOUR FIRE BARRIER AT KITCHEN (PER NYSED REQUIREMENT)
18. NEW (45) MINUTE RATED DOOR IN FIRE BARRIER (PER IBC TABLE 716.5)
19. NEW (45) MINUTE RATED GLAZING AND FRAME IN FIRE BARRIER (PER IBC TABLE 716.5)
20. NEW BEARING WALLS - EXTERIOR - (2) HOUR FIRE RATED (PER IBC TABLE 601)
21. NEW BEARING WALLS - INTERIOR - (2) HOUR FIRE RATED (PER IBC TABLE 601)
22. NEW PORTION OF EXTERIOR BEARING WALL INFILL TO MATCH EXISTING (2) HOUR FIRE RATING (PER IBC TABLE 601)
23. NEW FLOOR CONSTRUCTION AREA OF ADDITION (2) HOUR FIRE RATED. FIRE RATE ALL STRUCTURAL MEMBERS (PER IBC TABLE 601)
24. EXISTING FLOOR CONSTRUCTION THIS AREA (2) HOUR FIRE RATED (PER IBC TABLE 601)
25. NEW ROOF CONSTRUCTION AREA OF ADDITION (1) HOUR FIRE RATED. FIRE RATE ALL STRUCTURAL MEMBERS (PER IBC TABLE 601)
26. EXISTING FLOOR CONSTRUCTION THIS AREA (2) HOUR FIRE RATED (PER IBC TABLE 601)
27. ALLOWABLE AREA OF WALL OPENINGS BASED ON FIRE SEPARATION DISTANCE: 15' TO LESS THAN 20' - UNPROTECTED, NONSPRINKLERED - ALLOWABLE: 25%. PROPOSED: 18%. (PER IBC TABLE 705.8)
28. ALLOWABLE AREA OF WALL OPENINGS BASED ON FIRE SEPARATION DISTANCE: 15' TO LESS THAN 20' - UNPROTECTED, SPRINKLERED - ALLOWABLE: 75%. PROPOSED: 31%. (PER IBC TABLE 705.8)
29. FIRE BARRIER TO TERMINATE AT THE INTERIOR SURFACE OF NONCOMBUSTIBLE EXTERIOR FINISH (BRICK)
30. FIRE BARRIER TO TERMINATE AT UNDERSIDE OF NEW NONCOMBUSTIBLE ROOF DECK
31. NEW RECESSED FIRE EXTINGUISHER CABINET. MAINTAIN FIRE RATING WHERE APPLICABLE.
32. AREA OF EXISTING (2) HOUR RATED SHAFT ENCLOSURE (ABOVE) - EXISTING MASONRY, TYPICAL. EXISTING OPENINGS AT FLOORS ABOVE TO BE INFILLED WITH NEW (2) HOUR RATED CONSTRUCTION (PER IBC 713.4)
33. NEW (2) HOUR RATED FIRE BARRIER PIPE CHASE AT CEILING AND SIDE WALL OF EXISTING STAIR (PER IBC 713.4)
34. EXISTING MINIMUM (2) HOUR FIRE RATED MASONRY WALL CONSTRUCTION EXTENDING NOT LESS THAN 10'-0" BEYOND NEW CONSTRUCTION (PER IBC TABLE 602)
35. ALLOWABLE AREA OF WALL OPENINGS BASED ON FIRE SEPARATION DISTANCE: 5' TO LESS THAN 10' - UNPROTECTED, SPRINKLERED - ALLOWABLE: 25%. PROPOSED: 17%. (PER IBC TABLE 705.8)
36. ALLOWABLE AREA OF WALL OPENINGS BASED ON FIRE SEPARATION DISTANCE: 5' TO LESS THAN 10' - UNPROTECTED, SPRINKLERED - ALLOWABLE: 25%. PROPOSED: 10%. (PER IBC TABLE 705.8)
37. NO WALL OPENINGS THIS STORY
38. ALLOWABLE AREA OF WALL OPENINGS BASED ON FIRE SEPARATION DISTANCE: 5' TO LESS THAN 10' - UNPROTECTED, SPRINKLERED - ALLOWABLE: 25%. PROPOSED: 19%. (PER IBC TABLE 705.8)



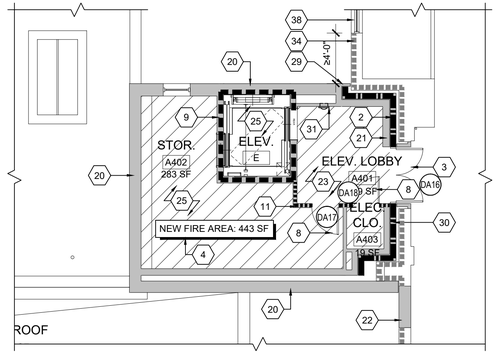
2 CA0.03 — Partial Code Analysis Plan — 1/8" = 1'-0" — SECOND FLOOR

PROJECT NORTH



3 CA0.03 — Partial Code Analysis Plan — 1/8" = 1'-0" — THIRD FLOOR

PROJECT NORTH



4 CA0.03 — Partial Code Analysis Plan — 1/8" = 1'-0" — FOURTH FLOOR

PROJECT NORTH

Date	1/10/20
Checked	DLF
Drawn	CTB

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NYSED PROJECT # 66-07-01-03-0-005-020

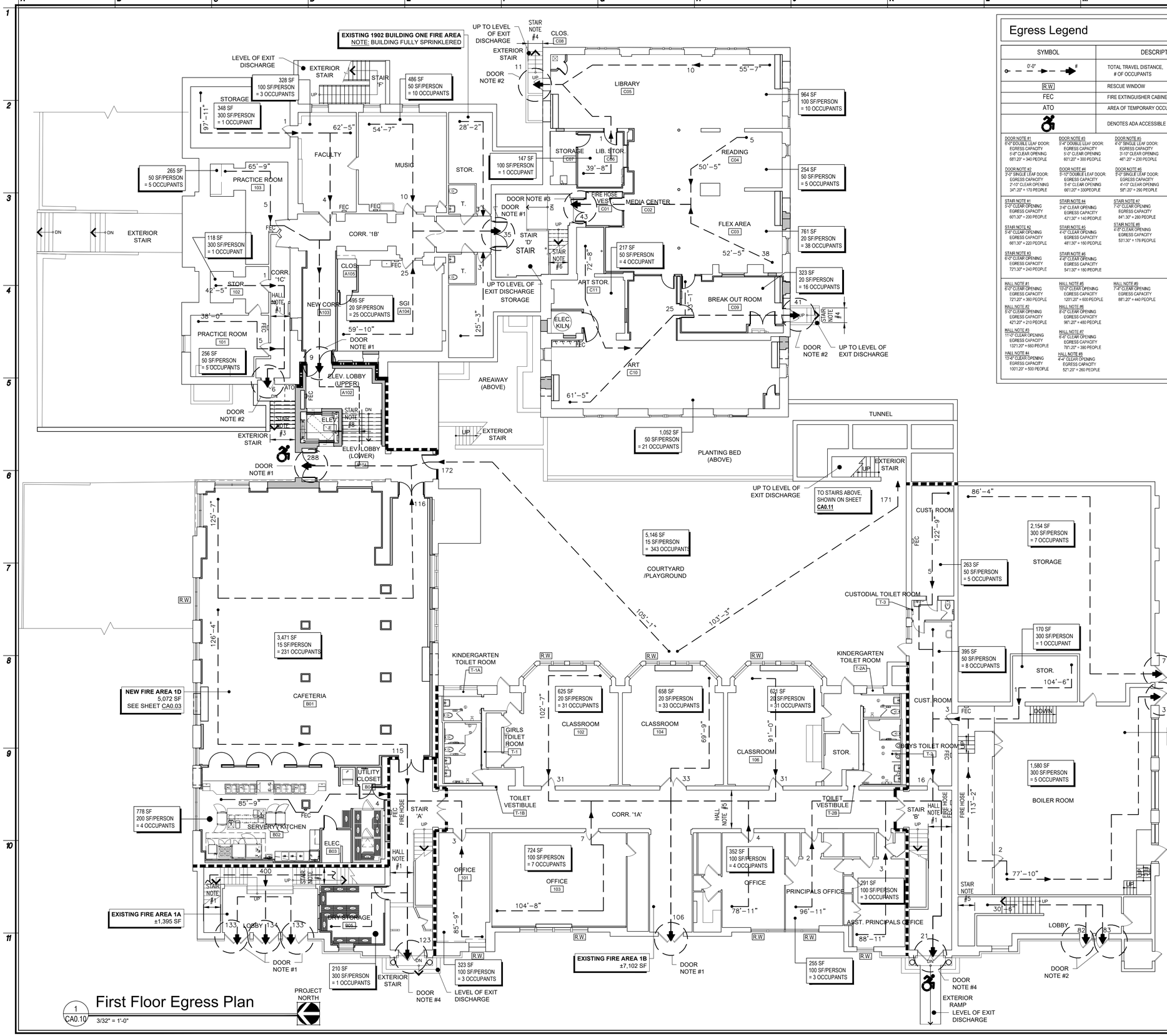
CODE ANALYSIS PLANS

2019 BOND REFERENDUM SCHOOL
CHATSWORTH AVENUE ELEMENTARY SCHOOL DISTRICT
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

Job No. 4.1092.72.03

File No. 10927203CA001

CA0.03



Egress Legend

SYMBOL	DESCRIPTION
0'-0" → #	TOTAL TRAVEL DISTANCE, # OF OCCUPANTS
R.W.	RESCUE WINDOW
FEC	FIRE EXTINGUISHER CABINET
ATO	AREA OF TEMPORARY OCCUPANCY
	DENOTES ADA ACCESSIBLE ENTRANCE

DOOR NOTE #1
6'-0" DOUBLE LEAF DOOR:
EGRESS CAPACITY
5'-8" CLEAR OPENING
68"/.20" = 340 PEOPLE

DOOR NOTE #2
3'-0" SINGLE LEAF DOOR:
EGRESS CAPACITY
2'-10" CLEAR OPENING
34"/.20" = 170 PEOPLE

DOOR NOTE #3
5'-4" DOUBLE LEAF DOOR:
EGRESS CAPACITY
5'-0" CLEAR OPENING
60"/.20" = 300 PEOPLE

DOOR NOTE #4
5'-10" DOUBLE LEAF DOOR:
EGRESS CAPACITY
5'-6" CLEAR OPENING
66"/.20" = 330 PEOPLE

DOOR NOTE #5
4'-0" SINGLE LEAF DOOR:
EGRESS CAPACITY
3'-10" CLEAR OPENING
46"/.20" = 230 PEOPLE

DOOR NOTE #6
5'-0" SINGLE LEAF DOOR:
EGRESS CAPACITY
4'-10" CLEAR OPENING
58"/.20" = 290 PEOPLE

STAIR NOTE #1
6'-0" CLEAR OPENING
EGRESS CAPACITY
60"/.30" = 200 PEOPLE

STAIR NOTE #2
6'-8" CLEAR OPENING
EGRESS CAPACITY
66"/.30" = 220 PEOPLE

STAIR NOTE #3
6'-0" CLEAR OPENING
EGRESS CAPACITY
72"/.30" = 240 PEOPLE

STAIR NOTE #4
3'-6" CLEAR OPENING
EGRESS CAPACITY
42"/.30" = 140 PEOPLE

STAIR NOTE #5
4'-0" CLEAR OPENING
EGRESS CAPACITY
48"/.30" = 160 PEOPLE

STAIR NOTE #6
4'-6" CLEAR OPENING
EGRESS CAPACITY
54"/.30" = 180 PEOPLE

STAIR NOTE #7
7'-0" CLEAR OPENING
EGRESS CAPACITY
84"/.30" = 280 PEOPLE

STAIR NOTE #8
4'-5" CLEAR OPENING
EGRESS CAPACITY
53"/.30" = 176 PEOPLE

HALL NOTE #1
6'-0" CLEAR OPENING
EGRESS CAPACITY
72"/.20" = 360 PEOPLE

HALL NOTE #2
5'-0" CLEAR OPENING
EGRESS CAPACITY
42"/.20" = 210 PEOPLE

HALL NOTE #3
11'-0" CLEAR OPENING
EGRESS CAPACITY
132"/.20" = 660 PEOPLE

HALL NOTE #4
13'-4" CLEAR OPENING
EGRESS CAPACITY
100"/.20" = 500 PEOPLE

HALL NOTE #5
10'-0" CLEAR OPENING
EGRESS CAPACITY
120"/.20" = 600 PEOPLE

HALL NOTE #6
5'-0" CLEAR OPENING
EGRESS CAPACITY
96"/.20" = 480 PEOPLE

HALL NOTE #7
6'-6" CLEAR OPENING
EGRESS CAPACITY
78"/.20" = 390 PEOPLE

HALL NOTE #8
4'-4" CLEAR OPENING
EGRESS CAPACITY
52"/.20" = 260 PEOPLE

HALL NOTE #9
7'-0" CLEAR OPENING
EGRESS CAPACITY
88"/.20" = 440 PEOPLE

Code Analysis

PER THE 2015 INTERNATIONAL BUILDING CODE (IBC) U.N.O.

USE GROUP CLASSIFICATION "E": EDUCATIONAL

OCCUPANT LOAD
SECTION 1004.1.2 - AREAS WITHOUT FIXED SEATING
OCCUPANCY LOADS WERE CALCULATED USING THE MAXIMUM FLOOR AREA ALLOWANCES PER OCCUPANT AS INDICATED IN TABLE 1004.1.2.

MAXIMUM FLOOR AREA ALLOWANCES PER OCCUPANT

STORAGE & MECHANICAL ROOMS	300	GROSS
ASSEMBLY:		
ASSEMBLY WITH FIXED SEATS	SECTION 1004.4	
CONCENTRATED (CHAIRS ONLY)	7	NET
STANDING SPACE	5	NET
UNCONCENTRATED (TABLES & CHAIRS)	15	NET
BUSINESS AREAS (OFFICES)	100	GROSS
EDUCATIONAL:		
CLASSROOMS	20	NET
SHOPS OR VOCATIONAL ROOMS	50	NET
EXERCISE ROOMS	50	GROSS
KITCHENS, COMMERCIAL	200	GROSS
LIBRARY		
READING ROOM	50	NET
STACKS	100	GROSS
LOCKER ROOMS	50	GROSS
STAGES AND PLATFORMS	15	NET

SECTION 1004.4 - FIXED SEATING
FOR AREAS HAVING FIXED SEATS AND AISLES, THE OCCUPANT LOAD SHALL BE DETERMINED BY THE NUMBER OF FIXED SEATS INSTALLED THEREIN.

MEANS OF EGRESS SIZING
SECTION 1005
1005.3 REQUIRED CAPACITY BASED ON OCCUPANT LOAD
1005.3.1 STAIRWAYS
CALCULATED BY MULTIPLYING THE OCCUPANT LOAD SERVED BY SUCH STAIRWAYS BY A MEANS OF EGRESS CAPACITY FACTOR OF 0.3 INCH PER OCCUPANT.

1005.3.2 OTHER EGRESS COMPONENTS
MEANS OF EGRESS COMPONENTS OTHER THAN STAIRWAYS SHALL BE CALCULATED BY MULTIPLYING THE OCCUPANT LOAD SERVED BY EACH COMPONENT BY A MEANS OF EGRESS CAPACITY FACTOR OF 0.2 INCH PER OCCUPANT.

NUMBER OF EXITS AND EXIT ACCESS DOORWAYS
SECTION 1006
1006.2.1 EGRESS BASED ON OCCUPANT LOAD AND COMMON PATH OF EGRESS TRAVEL DISTANCE.
TWO EXITS OR EXIT ACCESS DOORWAYS FROM ANY SPACE SHALL BE PROVIDED WHERE THE DESIGN OCCUPANT LOAD OR THE COMMON PATH OF EGRESS TRAVEL DISTANCE EXCEEDS THE VALUES LISTED IN TABLE 1006.2.1

"E" OCCUPANCY:
49 MAX OCCUPANT LOAD
75' MAX COMMON PATH OF EGRESS TRAVEL DISTANCE

EXIT ACCESS
SECTION 1016
1016.2 EGRESS THROUGH INTERVENING SPACE
EGRESS FROM A ROOM OR SPACE SHALL NOT PASS THROUGH ADJOINING OR INTERVENING ROOMS OR AREAS, EXCEPT WHERE SUCH ADJOINING ROOMS OR AREAS AND THE AREA SERVED ARE ACCESSORY TO ONE OR THE OTHER.

EGRESS SHALL NOT PASS THROUGH KITCHENS, STORAGE ROOMS, CLOSETS OR SPACES USED FOR SIMILAR PURPOSES.

EXIT ACCESS TRAVEL DISTANCE
SECTION 1017
"E" OCCUPANCY:
NOT TO EXCEED 200 FEET WITHOUT SPRINKLER SYSTEM

CORRIDORS
SECTION 1020
1020.1 CORRIDOR FIRE-RESISTANCE RATING:
"E" OCCUPANCY
1 HOUR WITHOUT A SPRINKLER SYSTEM

1020.2 MINIMUM CORRIDOR WIDTH
MINIMUM CORRIDOR WIDTH UNLESS OTHERWISE NOTED: 44"
WITH AN OCCUPANT LOAD OF LESS THAN 50: 36"
GROUP "E" WITH A CORRIDOR SERVING MORE THAN 100: 72"

1020.4 DEAD END CORRIDORS
MAX DEAD END CORRIDOR LENGTH = 20'

PER THE 2015 INTERNATIONAL EXISTING BUILDING CODE (IEBC)
805.6 DEAD END CORRIDORS (ALTERATIONS - LEVEL 2)
MAX DEAD END CORRIDOR LENGTH = 35'

Plumbing Fixture Counts

TOTAL FIXTURES PROVIDED

CLASSIFICATION	WATER CLOSETS	URINALS	LAVATORIES	DRINKING FOUNTAINS
FACULTY/UNISEX	14		14	
GIRLS	15		10	12
BOYS	10	11	8	

Fire Rating Legend

(3) HOUR RATED FIRE BARRIER
(2) HOUR RATED FIRE BARRIER

MICHAEL J. McGOVERN, R.A.
License No. 022257-1
Title REGISTERED ARCHITECT

Revisions:
ISSUE TO BID 11/23/20

Date 1/10/20
Checked DLF
Drawn CTB

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NYSED PROJECT # 66-07-01-03-0-005-020

PROPOSED 1ST FLOOR EGRESS PLAN
2019 BOND REFERENDUM
CHATSWORTH AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

Job No. 4.1092.72.03
File No. 10927203CA010

CA0.10

Second Floor Egress Plan

1 / CA0.11 — 3/32" = 1'-0"

PROJECT NORTH

REFER TO CODE ANALYSIS LEGEND ON CA0.10

EXISTING 1902 BUILDING ONE FIRE AREA
NOTE: BUILDING FULLY SPRINKLERED

NEW FIRE AREA 2D
414 SF
SEE SHEET CA0.03

EXISTING FIRE AREA 2A
±6,904 SF

EXISTING FIRE AREA 2B
±6,717 SF

EXISTING FIRE AREA 2C
±6,677 SF

CLASSROOM 14 — 889 SF, 20 SF/PERSON = 44 OCCUPANTS
CLASSROOM 15 — 834 SF, 20 SF/PERSON = 42 OCCUPANTS
CLASSROOM 16 — 751 SF, 20 SF/PERSON = 38 OCCUPANTS
CLASSROOM 17 — 792 SF, 20 SF/PERSON = 40 OCCUPANTS
CLASSROOM 11 — 940 SF, 20 SF/PERSON = 47 OCCUPANTS
CLASSROOM 12 — 819 SF, 20 SF/PERSON = 41 OCCUPANTS
CLASSROOM 10 — 829 SF, 20 SF/PERSON = 41 OCCUPANTS
240 SQ. FT., 20 SF/PERSON = 12 OCCUPANTS
247 SF, 100 SF/PERSON = 3 OCCUPANTS
317 SF, 20 SF/PERSON = 16 OCCUPANTS
726 SF, 15 SF/PERSON = 48 OCCUPANTS
3,292 SF, 7 SF/PERSON = 470 OCCUPANTS
604 SF, 20 SF/PERSON = 30 OCCUPANTS
607 SF, 20 SF/PERSON = 30 OCCUPANTS
512 SF, 20 SF/PERSON = 26 OCCUPANTS
656 SF, 20 SF/PERSON = 33 OCCUPANTS
585 SF, 20 SF/PERSON = 29 OCCUPANTS
659 SF, 20 SF/PERSON = 33 OCCUPANTS
137 SF, 50 SF/PERSON = 3 OCCUPANTS
299 SF, 50 SF/PERSON = 6 OCCUPANTS
676 SF, 20 SF/PERSON = 34 OCCUPANTS
3313 SF, 15 SF/PERSON = 221 OCCUPANTS
251 SF, 300 SF/PERSON = 1 OCCUPANT

LOBBY, CORR. '2D', CORR. '2E', CORR. '2A', CORR. '2C', AREAWAY, PLANTING BED, COURTYARD, STAGE, AUDITORIUM, EXIST. CORRIDOR '2B', LOBBY, GYMNASIUM, STORAGE, STOR., CL., EXAM, NURSE

STAIR 'D', STAIR 'E', STAIR 'F', STAIR 'A', STAIR 'B', STAIR 'C'

EXTERIOR STAIR, SGI, JC TOILET VESTIBULE, TOILET VESTIBULE, BOYS TOILET ROOM, GIRLS TOILET ROOM, TUNNEL BELOW, FIRE HOSE, FEC, DOOR NOTE #1, DOOR NOTE #6, STAIR NOTE #1, STAIR NOTE #3, STAIR NOTE #4, STAIR NOTE #6, STAIR NOTE #7, HALL NOTE #3, HALL NOTE #4, HALL NOTE #5, HALL NOTE #6, HALL NOTE #7, LEVEL OF EXIT DISCHARGE, DOWN TO LEVEL OF EXIT DISCHARGE, FROM COURTYARD/ PLAYGROUND, SEE SHEET CA0.10

Fire Rating Legend

- (3) HOUR RATED FIRE BARRIER
- (2) HOUR RATED FIRE BARRIER

Date	1/10/20
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Drawn	TH

MICHAEL J. McGOVERN, P.E.
Title REGISTERED ARCHITECT
License No. 022257-1

Revisions:

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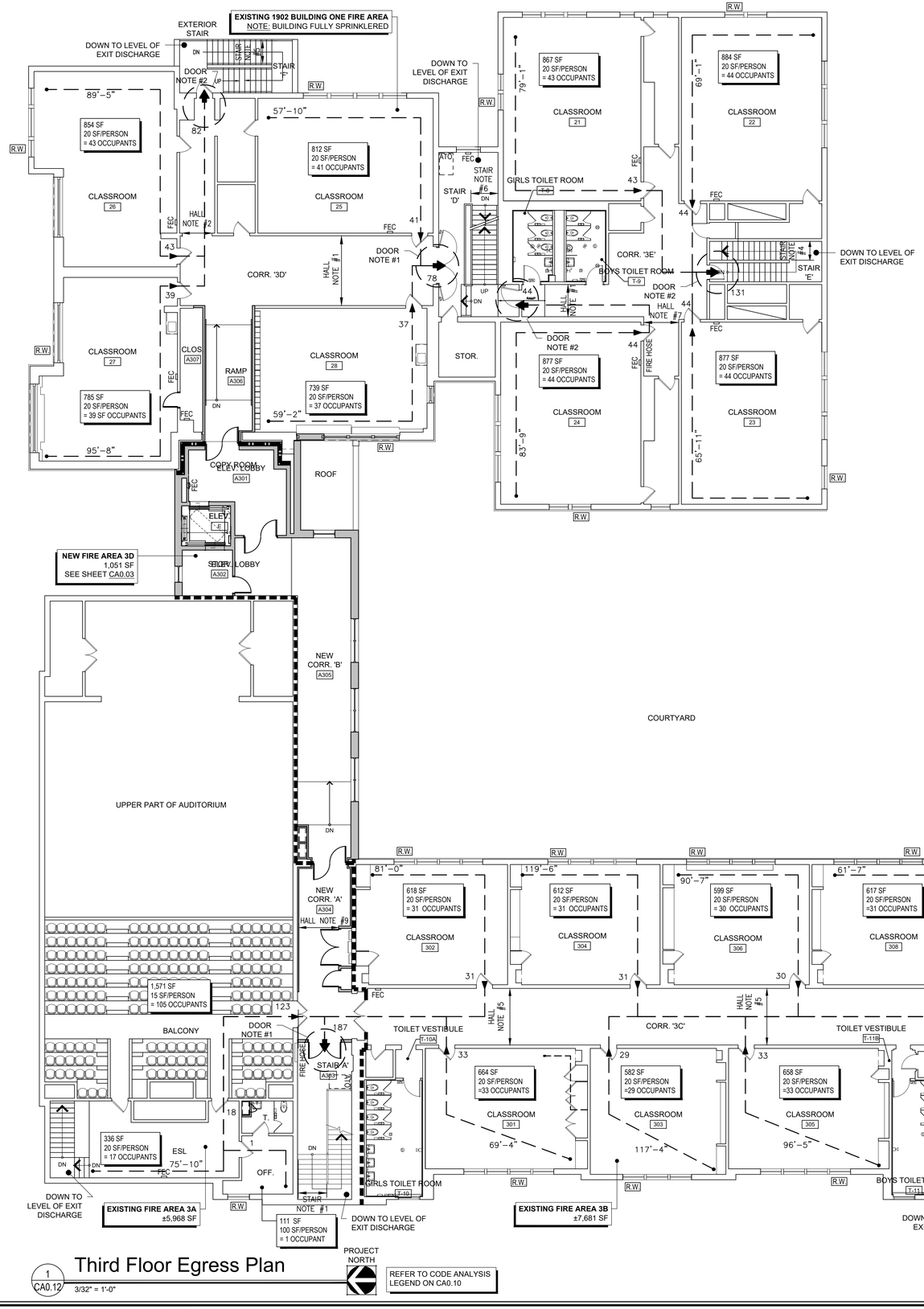
NYSED PROJECT # 66-07-01-03-0-005-020

PROPOSED 2ND FLOOR EGRESS PLAN
2019 BOND REFERENDUM
CHATSWORTH AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

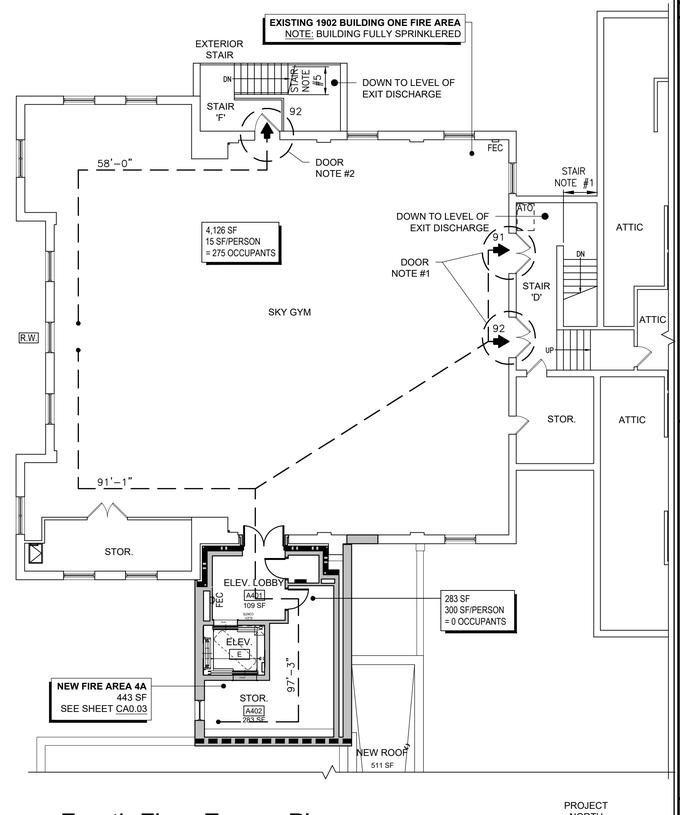
Job No. 4.1092.72.03

File No. 10927203CA010

CA0.11



1 CA0.12 Third Floor Egress Plan
3/32" = 1'-0"



2 CA0.12 Fourth Floor Egress Plan
3/32" = 1'-0"

PROJECT NORTH

Fire Rating Legend

- (3) HOUR RATED FIRE BARRIER
- (2) HOUR RATED FIRE BARRIER

Date	1/10/20
Checked	DLF
Drawn	TH

MICHAEL J. McGOVERN, R.A.
The REGISTERED ARCHITECT License No. 022257-1

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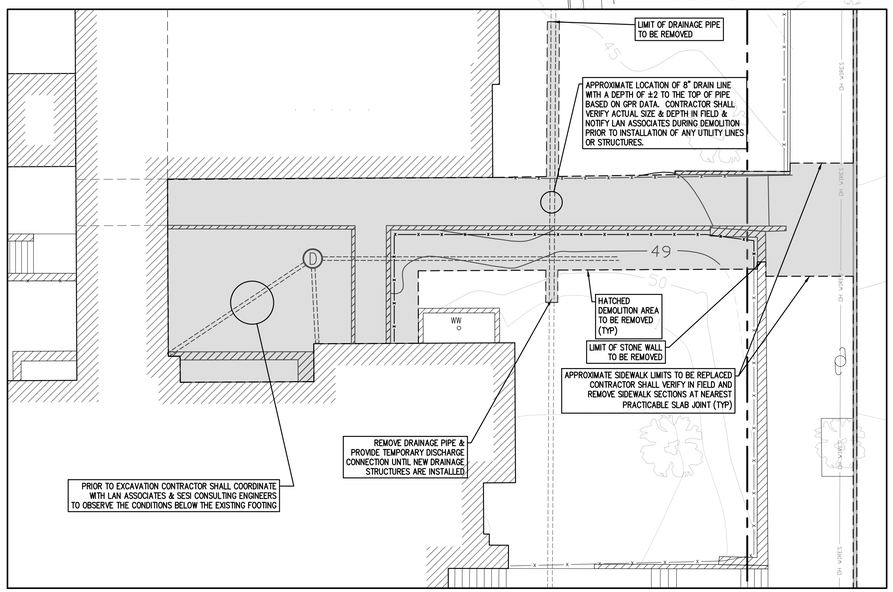
PROPOSED 3RD FLOOR EGRESS PLAN
2019 BOND REFERENDUM
CHATSWORTH AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

Job No. 4.1092.72.03

File No. 10927203CA010

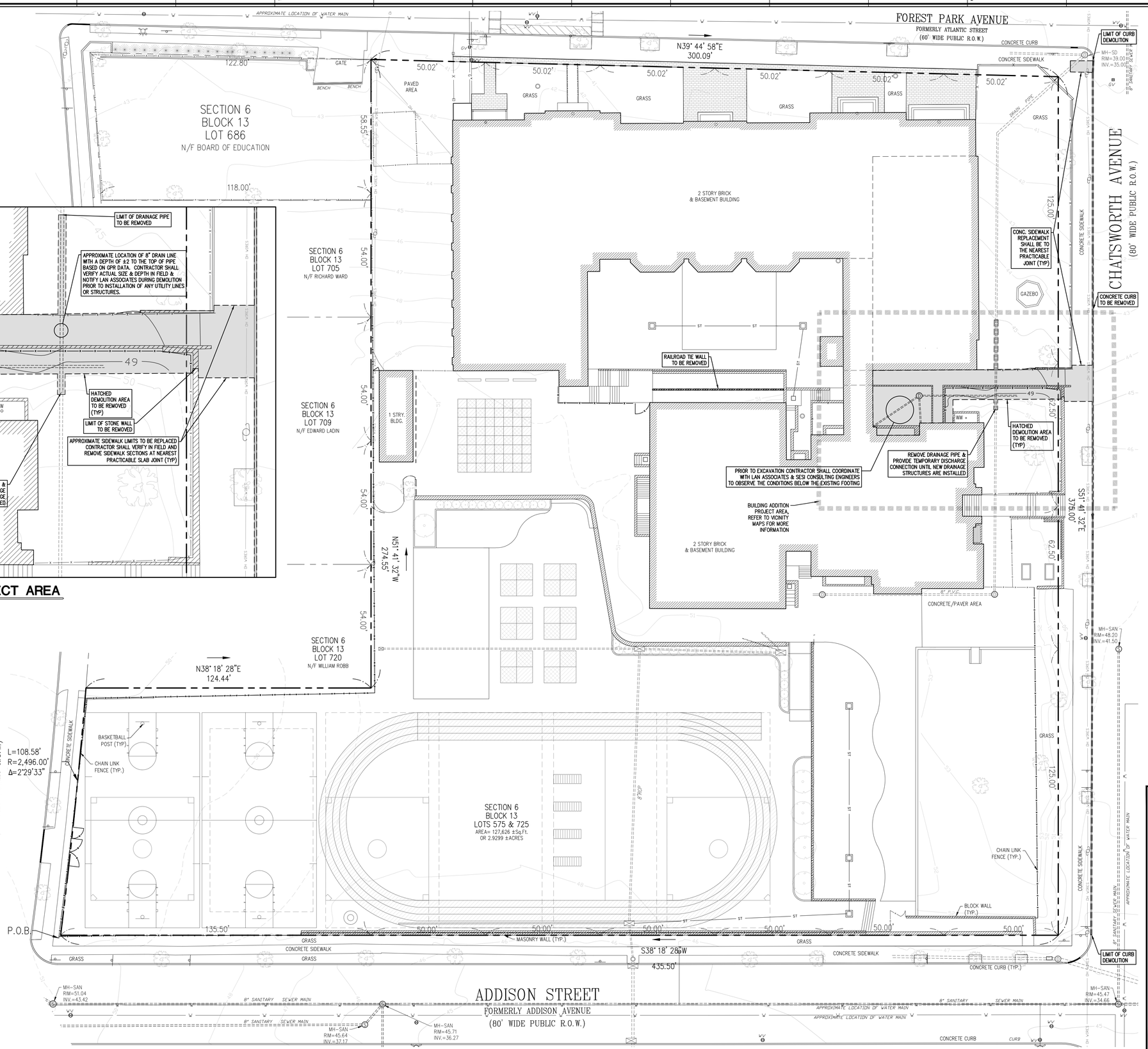
CA0.12

Know what's below. 811 before you dig.



BUILDING ADDITION PROJECT AREA

SCALE: 1"=10'



EXISTING CONDITIONS & DEMOLITION PLAN

CHATSWORTH AVENUE SCHOOL

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)

1 inch = 20 ft.

Date	1/10/20
Checked	EB
Drawn	PRE/HT

ERIK E. BOE, P.E.
License No. 089208
Title PROFESSIONAL ENGINEER

Revisions:

1 ISSUE TO BID 11/23/20

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EXISTING CONDITIONS & DEMOLITION PLAN
2019 BOND REFERENDUM
CHATSWORTH AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

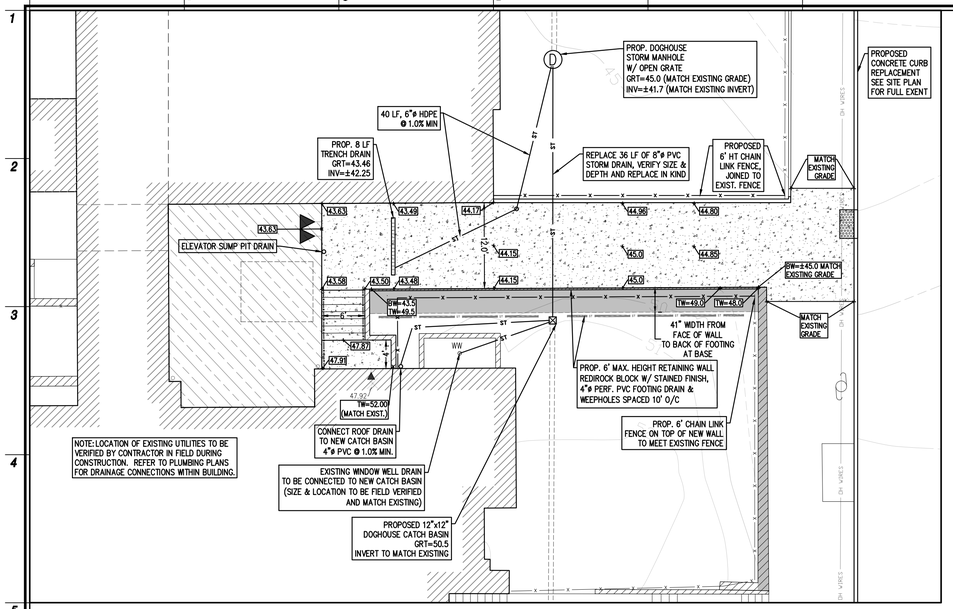
NYSED PROJECT # 66-07-01-03-0-005-020

Job No. 4.1092.72.03

File No. 10927203_C1

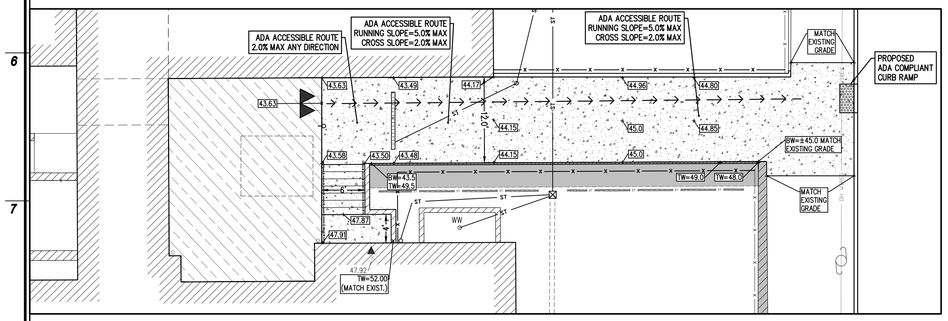
SP.11

P:\100-LAN LLP\1000-1099\1092\1092.72.03\Cad\Dwgs\10927203_C1.dwg 11/16/20



BUILDING ADDITION PROJECT AREA - GRADING & DRAINAGE PLAN

SCALE: 1"=10'



BUILDING ADDITION PROJECT AREA - ADA ACCESSIBLE ROUTE

SCALE: 1"=10'

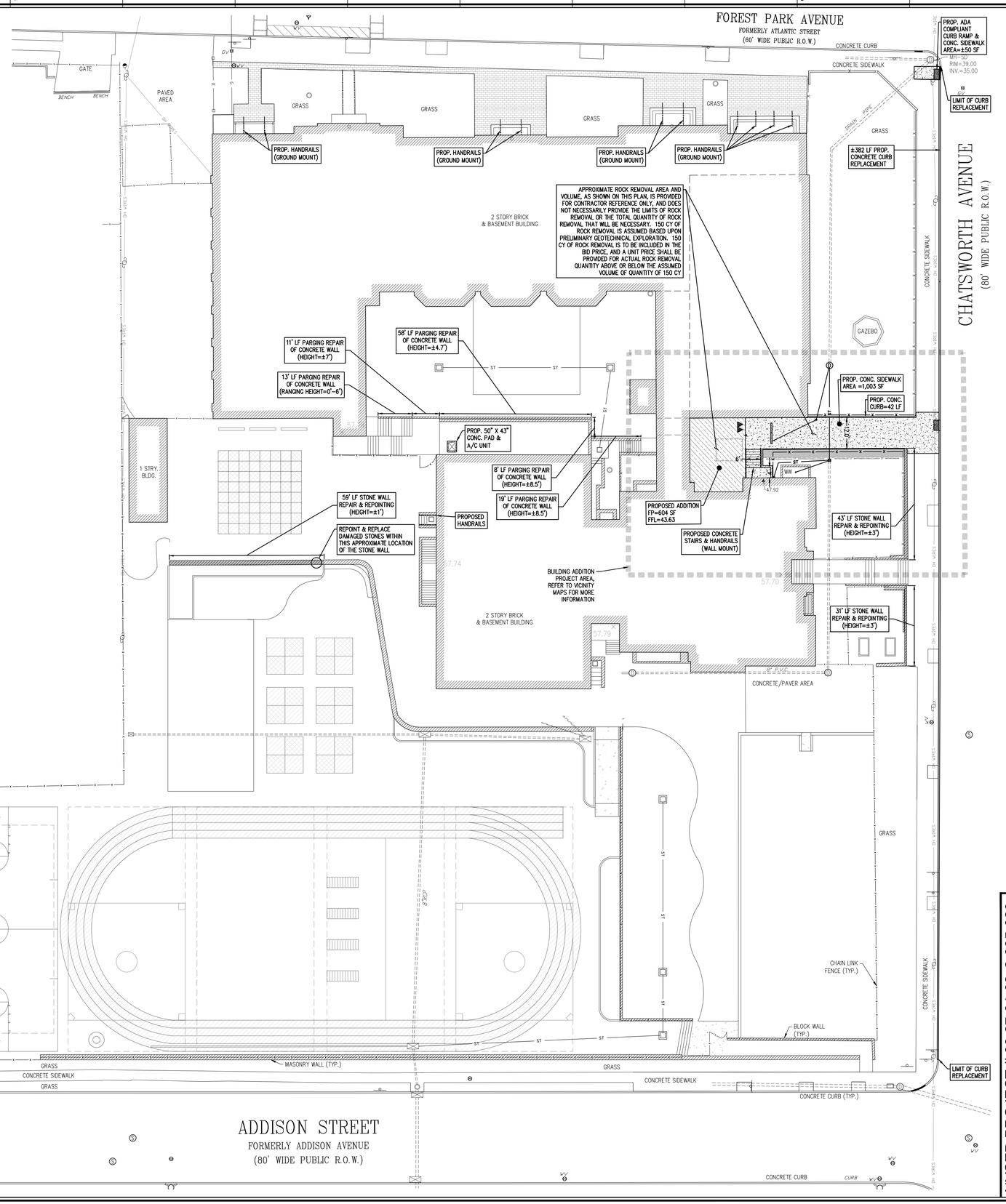
SITE PLAN - PROPOSED BUILDING ADDITION

CHATSWORTH AVENUE SCHOOL

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.



NYSED PROJECT # 66-07-01-03-0-005-020

Date	1/10/20
Checked	EB
Drawn	PRE/HT

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License No. 089208
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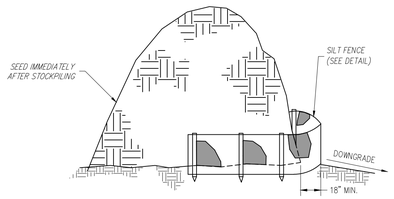
SITE PLAN

2019 BOND REFERENDUM
CHATSWORTH AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

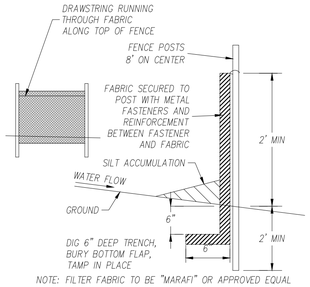
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File No. 10927203_C1

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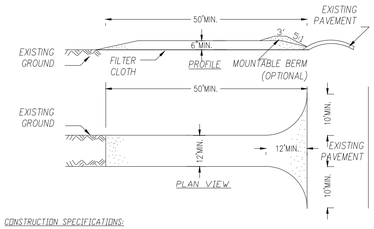


1 SC.01 **TYP. TOPSOIL STOCKPILE DETAIL** N.T.S.



NOTE: FILTER FABRIC TO BE "MARAFI" OR APPROVED EQUAL

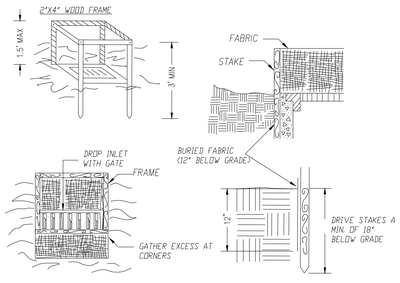
2 SC.01 **TYP. SEDIMENT FENCE DETAIL** N.T.S.



CONSTRUCTION SPECIFICATIONS:

1. STONE SIZE - USE 2" STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
2. LENGTH - NOT LESS THAN 50 FEET (EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 30 FOOT MINIMUM LENGTH WOULD APPLY).
3. THICKNESS - NOT LESS THAN SIX (6) INCHES.
4. WIDTH - TWELVE (12) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS. TWENTY-FOUR (24) FOOT IF SINGLE ENTRANCE TO SITE.
5. FILTER CLOTH - WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
6. SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
7. MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACTED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
8. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON A AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

3 SC.01 **TYP. STABILIZED CONSTRUCTION ENTRANCE DETAIL** N.T.S.



CONSTRUCTION SPECIFICATIONS:

1. FABRIC SHALL HAVE AN EOS OF 40-85. BURLAP MAY BE USED FOR SHORT TERM APPLICATIONS.
2. CUT FABRIC FROM A CONTINUOUS ROLL TO ELIMINATE JOINTS. IF JOINTS ARE NEEDED THEY WILL BE OVERLAPPED TO THE NEXT STAKE.
3. STAKE MATERIALS WILL BE STANDARD 2" x 4" WOOD OR EQUIVALENT. METAL WITH A MINIMUM LENGTH OF 3 FEET.
4. SPACE STAKES EVENLY AROUND INLET 3 FEET APART AND DRIVE A MINIMUM 18 INCHES DEEP. SPANS GREATER THAN 3 FEET MAY BE BRIDGED WITH THE USE OF WIRE MESH BEHIND THE FILTER FABRIC FOR SUPPORT.
5. FABRIC SHALL BE EMBEDDED 1 FOOT MINIMUM BELOW GROUND AND BACKFILLED. IT SHALL BE SECURELY FASTENED TO THE STAKES AND FRAME.
6. A 2" x 4" WOOD FRAME SHALL BE COMPLETED AROUND THE CREST OF THE FABRIC FOR OVER FLOW STABILITY.

MAXIMUM DRAINAGE AREA 1 ACRE

4 SC.01 **TYP. FABRIC DROP INLET PROTECTION DETAIL** N.T.S.

STANDARD EROSION CONTROL NOTES

AN EROSION CONTROL SYSTEM WILL BE UTILIZED BY THE DEVELOPER TO MINIMIZE THE PRODUCTION OF SEDIMENT FROM THE SITE. METHODS TO BE UTILIZED WILL BE THOSE FOUND MOST EFFECTIVE FOR THE SITE AND SHALL INCLUDE ONE OR MORE OF THE FOLLOWING AS APPLICABLE:

1. *ALL SEDIMENT CONTROL PRACTICES AND MEASURES SHALL BE CONSTRUCTED, APPLIED, AND MAINTAINED IN ACCORDANCE WITH THE APPROVED SEDIMENT CONTROL PLAN AND THE "STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL."*
2. *TEMPORARY SEDIMENTATION ENTRAPMENT AREAS SHALL BE PROVIDED AT THE KEY LOCATIONS TO INTERCEPT AND CLARIFY SILT LADEN RUNOFF FROM THE SITE. THESE MAY BE EXCAVATED OR MAY BE CREATED UTILIZING RIP-RAP OR CRUSHED STONE DAMS, HAY BALES, OR OTHER SUITABLE MATERIALS. DIVERSION SWALES, BERMS, OR OTHER CHANNELIZATION SHALL BE CONSTRUCTED TO INSURE THAT ALL SILT LADEN WATERS ARE DIRECTED INTO ENTRAPMENT AREAS, WHICH SHALL NOT BE PERMITTED TO FILL IN, BUT SHALL BE CLEANED PERIODICALLY DURING THE COURSE OF CONSTRUCTION. THE COLLECTION SILT SHALL BE DEPOSITED IN AREAS SAFE FROM FURTHER EROSION.*
3. *ALL DISTURBED AREAS, EXCEPT BROADWAYS, WHICH WILL REMAIN UNFINISHED FOR MORE THAN 30 DAYS SHALL BE TEMPORARILY SEEDED WITH ½ LB. OF RYE GRASS OR MULCHED WITH 100 LBS. OF STRAW OR HAY PER 1,000 SF. ROADWAYS SHALL BE STABILIZED AS RAPIDLY AS PRACTABLE BY THE INSTALLATION OF THE BASE COURSE.*
4. *SILT THAT LEAVES THE SITE IN SPITE OF THE REQUIRED PRECAUTIONS SHALL BE COLLECTED AND REMOVED AS DIRECTED BY THE APPROPRIATE MUNICIPAL AUTHORITIES.*
5. *ALL EROSION AND SEDIMENT CONTROL MEASURES, EXCLUDING CATCH-BASIN MEASURES, SHALL BE IN PLACE PRIOR TO ANY GRADING OPERATIONS AND INSTALLATION OF PROPOSED STRUCTURES AND/OR UTILITIES.*
6. *ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL REMAIN IN PLACE AND BE MAINTAINED UNTIL CONSTRUCTION IS COMPLETED AND/TO STABILIZED.*

LAND GRADING CONSTRUCTION SPECIFICATIONS

1. *ALL GRADED OR DISTURBED AREAS INCLUDING SLOPES SHALL BE PROTECTED DURING CLEARING AND CONSTRUCTION IN ACCORDANCE WITH THE APPROVED SEDIMENT CONTROL PLAN UNTIL THEY ARE PERMANENTLY STABILIZED.*
2. *ALL SEDIMENT CONTROL PRACTICES AND MEASURES SHALL BE CONSTRUCTED, APPLIED AND MAINTAINED IN ACCORDANCE WITH THE APPROVED SEDIMENT CONTROL PLAN AND THE "STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL IN DEVELOPING AREAS".*
3. *TOPSOIL REQUIRED FOR THE ESTABLISHMENT OF VEGETATION SHALL BE STOCKPILED IN AMOUNT NECESSARY TO COMPLETE FINISHED GRADING OF ALL EXPOSED AREAS.*
4. *AREAS TO BE FILLED SHALL BE CLEARED, GRUBBED, AND STRIPPED OF TOPSOIL TO REMOVE TREES, VEGETATION, ROOTS OR OTHER OBJECTIONABLE MATERIAL.*
5. *AREAS WHICH ARE TO BE TOPSOILED SHALL BE SCARIFIED TO A MINIMUM DEPTH OF FOUR INCHES PRIOR TO PLACEMENT OF TOPSOIL.*
6. *ALL FILLS SHALL BE COMPACTED AS REQUIRED TO REDUCE EROSION, SLIPPAGE, SETTLEMENT, SUBSIDENCE OR OTHER RELATED PROBLEMS. FILL INTENDED TO SUPPORT BUILDINGS, STRUCTURES AND CONDUITS, ETC. SHALL BE COMPACTED IN ACCORDANCE WITH LOCAL REQUIREMENTS OR CODES.*
7. *ALL FILL TO BE PLACED AND COMPACTED IN LAYERS NOT TO EXCEED 9 INCHES IN THICKNESS.*
8. *EXCEPT FOR APPROVED LANDFILLS, FILL MATERIAL SHALL BE FREE OF FROZEN PARTICLES, BRUSH, ROOTS, SOD, OR OTHER FOREIGN OR OTHER OBJECTIONABLE MATERIALS THAT WOULD INTERFERE WITH OR PREVENT CONSTRUCTION OF SATISFACTORY FILLS.*
9. *FROZEN MATERIALS OR SOFT, MUCKY OR HIGHLY COMPRESSIBLE MATERIALS SHALL NOT BE INCORPORATED IN FILLS.*
10. *FILL SHALL NOT BE PLACED ON SATURATED OR FROZEN SURFACES.*
11. *ALL BENCHES SHALL BE KEPT FREE OF SEDIMENT DURING ALL PHASES OF DEVELOPMENT.*
12. *SEEPS OR SPRINGS ENCOUNTERED DURING CONSTRUCTION SHALL BE HANDLED IN ACCORDANCE WITH THE STANDARD AND SPECIFICATION FOR SUBSURFACE DRAIN OR OTHER APPROVED METHOD.*
13. *ALL GRADED AREAS SHALL BE PERMANENTLY STABILIZED IMMEDIATELY FOLLOWING FINISHED GRADING.*
14. *STOCKPILES, BORROW AREAS AND SPOIL AREAS SHALL BE SHOWN ON THE PLANS AND SHALL BE SUBJECT TO THE PROVISIONS OF THIS STANDARD AND SPECIFICATION.*
15. *CONTRACTOR SHALL LIMIT ACCESS OF HIGH-IMPACT EARTH MOVING EQUIPMENT.*
16. *CONTRACTOR SHALL NOT OVER-EXCAVATE.*
17. *CONTRACTOR SHALL USE DE-COMPACTION PRACTICES TO RESTORE THE SOILS ORIGINAL INFILTRATION PRACTICES.*
18. *THE CONTRACTOR SHALL CONSTRUCT THE STORMWATER BASINS AND OTHER PERMANENT STORMWATER INFRASTRUCTURE PER THE REQUIREMENTS AND RECOMMENDATIONS WITHIN THE THE NYS DEC STORMWATER DESIGN MANUAL (2015 VERSION).*
19. *ALL SLOPES CONSTRUCTED WITH FILL MATERIAL SHALL BE TOPSOILED, SEEDED, MULCHED, AND STABILIZED.*
20. *ANY AREAS CONSIDERED CRITICAL FOR SEEDING AND STABILIZATION SHALL BE PROTECTED USING EROSION CONTROL MATS.*

SEQUENCE OF CONSTRUCTION

1. *AT LEAST 48 HOURS PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL HOLD A PRE-CONSTRUCTION MEETING TO INCLUDE OWNER, ENGINEER, SCHOOL REPRESENTATIVES & CONTRACTOR.*
2. *PRIOR TO LAND DISTURBANCE, CONTRACTOR SHALL INSTALL SILT FENCE, INLET PROTECTION AND STABILIZED CONSTRUCTION ENTRANCES. (2 WEEKS)*
3. *DEMOLISH SPECIFIED SITE FEATURES, STRIP STOCKPILE TOPSOIL FROM THE PROPOSED DISTURBED AREA IN DESIGNATED STAGING AREAS. (2 WEEKS)*
4. *ROUGH GRADE SITE. AREAS REMAINING UNDISTURBED FOR 14 DAYS SHALL BE TEMPORARILY STABILIZED. (2 WEEKS)*
5. *CONSTRUCT UTILITIES AND BASE COURSE FOR SITE WORK (3 WEEKS)*
6. *CONSTRUCT BUILDING ADDITIONS AND ASSOCIATED IMPROVEMENTS. (6 MONTHS)*
7. *FINISH GRADE & INSTALL PROPOSED LANDSCAPING. (2 WEEKS)*
8. *FINAL STABILIZATION (TOPSOIL, SEEDING, ETC.) REMOVE ALL TEMPORARY SOIL EROSION & SEDIMENT CONTROL MEASURES (SILT FENCE, INLET PROTECTION, ETC.) AFTER FINAL SITE STABILIZATION IS ACHIEVED. (2 WEEKS)*
9. *TOTAL CONSTRUCTION TIME (9 MONTHS)*

LEGEND

- LIMIT OF DISTURBANCE
- SILT FENCE
- STABILIZED CONSTRUCTION ACCESS
- INLET PROTECTION – FABRIC DROP

SOIL EROSION & SEDIMENT CONTROL PLAN

CHATSWORTH AVENUE SCHOOL

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

ERIK E. BOE, P.E.
Title PROFESSIONAL ENGINEER License No. 089208

Date	1/10/20
Checked	EB
Drawn	PRE/HT

Revisions:

#	
1	ISSUE TO BID 11/23/20

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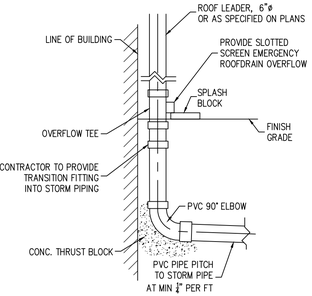
NYSED PROJECT # 66-07-01-03-0-005-020

SOIL EROSION & SEDIMENT CONTROL PLAN
2019 BOND REFERENDUM
CHATSWORTH AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

Job No. 4.1092.72.03
File No. 10927203_C1

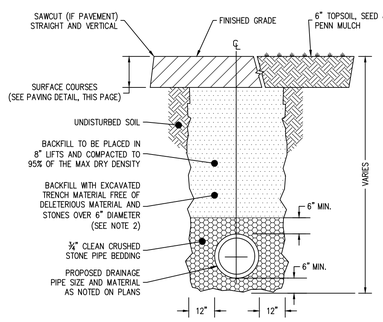
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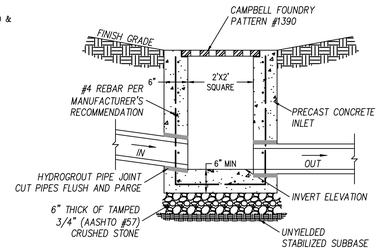
NOTES:
1. SIZE: 6"ø OR AS SPECIFIED ON PLANS. ALL SIZES DOWNSTREAM OF ROOD LEADER SHALL BE EQUAL IN SIZE UNLESS OTHERWISE SPECIFIED ON PLANS OR SPECIFICATIONS.

ROOF LEADER DETAIL
N.T.S.



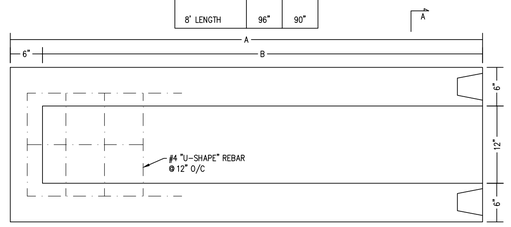
NOTES:
1. ALL FILL TO BE COMPACTED TO 95% MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D1557.
2. ALL DRAINAGE PIPE SHALL BE HDPE WITH A SMOOTH INVERT.
3. ALL EXCAVATION AND TRENCHING TO MEET OSHA REQUIREMENTS.

DRAINAGE PIPE TRENCH DETAIL
N.T.S.

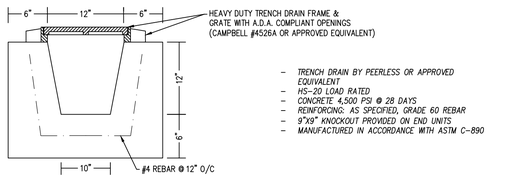


YARD DRAIN DETAIL
N.T.S.

TRENCH DRAIN	A	B
8' LENGTH	96"	90"

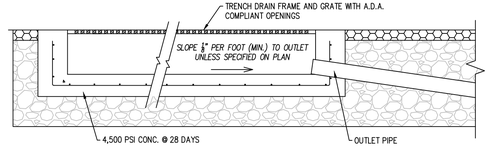


PLAN VIEW



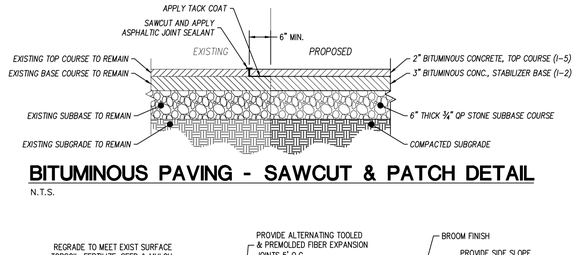
- *TRENCH DRAIN BY PEERLESS OR APPROVED EQUIVALENT*
- *H5-20 LOAD RATED*
- *CONCRETE 4,500 PSI @ 28 DAYS*
- *REINFORCING: AS SPECIFIED, GRADE 60 REBAR*
- *9"x9" KNOCKOUT PROVIDED ON END UNITS*
- *MANUFACTURED IN ACCORDANCE WITH ASTM C-890*

SECTION A–A

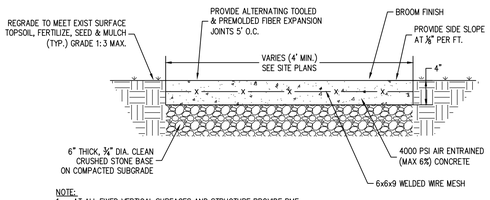


SECTION B–B

TRENCH DRAIN - CATCH BASIN DETAIL
N.T.S.

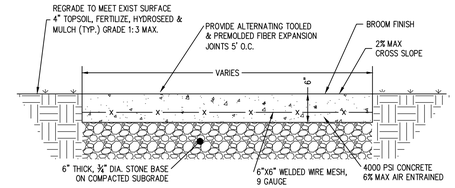


BITUMINOUS PAVING - SAWCUT & PATCH DETAIL
N.T.S.



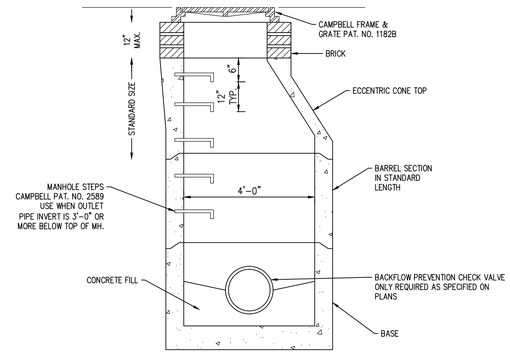
NOTE:
1. AT ALL FIXED VERTICAL SURFACES AND STRUCTURE PROVIDE PMF.
2. ALL EXPOSED SURFACES ARE TO BE COATED WITH A TRANSLUCENT CURING COMPOUND CONFORMING TO AASHTO M 148, TYPE I-D IMMEDIATELY FOLLOWING FINAL FINISHING. COVERAGE SHALL NOT BE LESS THAN ONE GALLON PER 200 SQ. FT.
3. WHERE PROPOSED CONCRETE SIDEWALK ABUTS PROPOSED CONCRETE CURB, REFER TO "MONOLITHIC CURB DETAIL".

CONCRETE SIDEWALK
N.T.S.

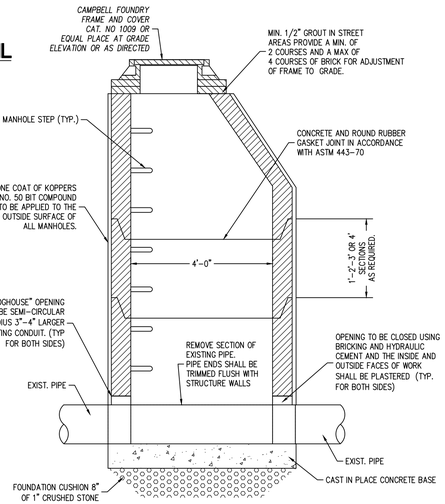


NOTE:
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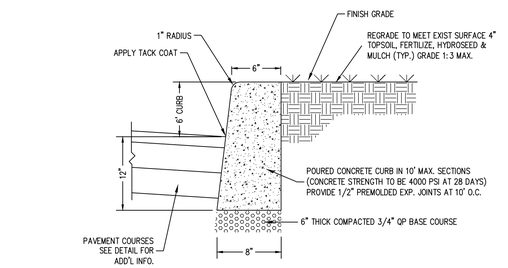
CONCRETE SLAB DETAIL
N.T.S.



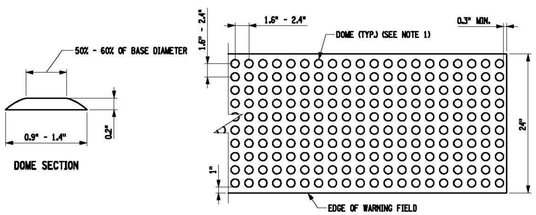
PRECAST CONCRETE STORM MANHOLE
N.T.S.



STORM DOGHOUSE MANHOLE DETAIL
N.T.S.



CONCRETE CURB DETAIL
N.T.S.



DOME SECTION

NOTES:
1. THE DETAILS PROVIDED ARE NOT DRAWN TO SCALE. THE QUANTITY OF DOMES DEPICTED ON THE DETECTABLE WARNING UNIT (THE DOMES AND THE ENTIRE 24" LEVEL SURFACE) IS FOR ILLUSTRATION ONLY.

DETECTABLE WARNING UNIT DIMENSIONS:

2. THE SIZE OF THE DETECTABLE WARNING FIELD SHALL BE 24" IN THE DIRECTION OF TRAVEL AND SHALL EXTEND THE FULL WIDTH OF THE CURB RAMP OR FLUSH SURFACE, EXCLUSIVE OF SIDE FLARES.

DOME ALIGNMENT:

3. THE ROWS OF DOMES SHALL BE ALIGNED TO BE PERPENDICULAR OR RADIAL TO THE GRADE BREAK BETWEEN THE RAMP LANDING OR CURB RAMP AND THE STREET.
4. WHERE DOMES ARE ARRAYED RADIALLY THEY MAY DIFFER IN DOME DIAMETER AND CENTER-TO-CENTER SPACING WITHIN THE RANGES SPECIFIED ON THIS SHEET.

COLOR REQUIREMENTS:

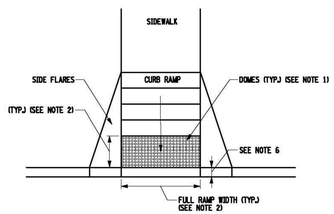
5. THE DETECTABLE WARNING FIELD SHALL BE THE COLOR SPECIFIED IN THE CONTRACT DOCUMENTS OR MEET THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS.

DETECTABLE WARNINGS LOCATIONS:

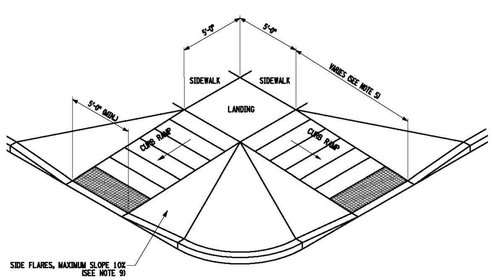
6. DETECTABLE WARNINGS SHALL BE LOCATED SO THAT THE EDGE OR CORNER OF THE WARNING FIELD NEAREST TO THE ROADWAY IS 5" TO 9" FROM THE FRONT OF THE CURB OR THE ROADWAY EDGE (12" WHERE TRAVERSABLE CURB IS USED).
7. THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO A RAILROAD CROSSING SHALL BE 6'-0" MINIMUM AND 15'-0" MAXIMUM FROM THE CENTERLINE OF THE NEAREST RAIL.

NOTES:
1. DETECTABLE WARNINGS SHALL BE INSTALLED ON ALL CURB RAMPS. DETECTABLE WARNINGS SHALL CONSIST OF RAISED TRUNCATED DOMES WITH A DIAMETER OF NOMINAL 0.9 INCHES (23 mm), A HEIGHT OF NOMINAL 0.2 INCHES (5 mm), AND A CENTER-TO-CENTER SPACING OF NOMINAL 2.35 INCHES (60 mm) AND SHALL CONTRACT VISUALLY WITH ADJOINING SURFACES, EITHER LIGHT-ON-DARK OR DARK-ON-LIGHT. DETECTABLE WARNINGS SHALL BE IN ACCORDANCE WITH THE DEPARTMENT OF JUSTICE 28 CFR PART 36 "EXCERPT FROM 28 CFR PART 36: ADA STANDARDS FOR ACCESSIBLE DESIGN" LAST REVISED JULY 1, 1994.
2. DETECTABLE WARNING SYSTEM SHALL BE CAST-IN-PLACE TRUNCATED DOMES PART NUMBER ATS-C-2x5 MANUFACTURED BY ADVANTAGE TACTILE SYSTEMS OR APPROVED EQUAL. THE COLOR OF THE DETECTABLE WARNING SYSTEM SHALL BE BRICK RED (FEDERAL COLOR NO. 22144).
3. DETECTABLE WARNING UNITS SHALL BE PAID UNDER NYSDOT ITEM NO. 608.21.

DETECTABLE WARNING SURFACE DETAIL
N.T.S.

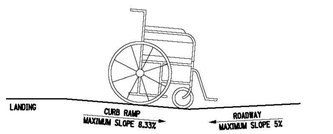


DETECTABLE WARNING AT CURB RAMP



CURB RAMP WITH SIDE FLARES TYPICAL DIMENSIONING

ADA SIDEWALK CURB RAMP DETAILS & NOTES
N.T.S.



NOTE: THE COUNTER SLOPE OF THE GUTTER OR STREET AT THE FOOT OF A CURB RAMP, LANDING, OR BLENDED TRANSITION SHALL BE 5% MAXIMUM

COUNTER SLOPE CONDITIONS

GENERAL NOTES:

1. THE DIMENSIONS AND SLOPES PRESENTED IN THE DETAILS ARE THE MINIMUM NECESSARY TO COMPLY WITH THE ADA AND DOT STANDARDS. ANY DEVIATION LESS THAN THE MINIMUM WIDTH OR GREATER THAN THE MAXIMUM SLOPE FROM THESE STANDARDS MUST BE DOCUMENTED WITH THE STANDARDS BEING MET TO THE GREATEST EXTENT PRACTICABLE AND CONSISTENT WITH THE MOST CURRENT ADAAG.
2. CURB RAMPS, LANDINGS AND BLENDED TRANSITIONS MAY REQUIRE THE USE OF DETECTABLE WARNINGS. DETECTABLE WARNINGS ON THIS SHEET ARE SHOWN FOR ILLUSTRATION ONLY. REFER TO THE DETECTABLE WARNING DETAILS ON SHEET 4 OF 4 FOR DETAILS ON PLACEMENT, ORIENTATION & DIMENSIONS. REFER TO CHAPTER 18 OF THE HIGHWAY DESIGN MANUAL FOR MORE INFORMATION.

CURB RAMP NOTES:

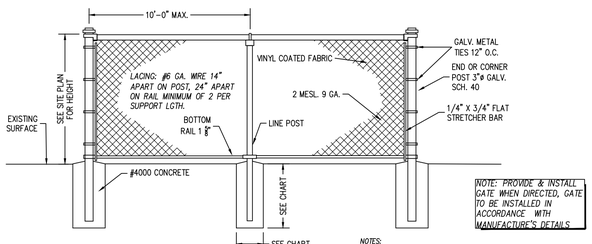
3. THE MINIMUM WIDTH FOR SIDEWALK CURB RAMPS IS 5'-0".
4. THE RUNNING SLOPE OF A CURB RAMP SHALL BE 1:20 (5%) MINIMUM (PREFERRED) AND 1:12 (8.33%) MAXIMUM.
5. WHERE THE SLOPE OF THE ROADWAY EXCEEDS 8.33% THE CURB RAMP LENGTH IS THE LENGTH NECESSARY TO MEET THE EXISTING SIDEWALK. IT IS NOT NECESSARY THAT THE RAMP LENGTH EXCEED 15'-0".
6. THE CROSS SLOPE OF CURB RAMPS SHOULD BE AS FLAT AS POSSIBLE, NOT TO EXCEED 1:50 (2%). THE CROSS SLOPE AT MIDBLOCK CROSSINGS MAY BE WARPED TO MEET STREET OR HIGHWAY GRADE.
7. THE VERTICAL ALIGNMENT OF A CURB RAMP, EXCLUDING THE FLARES, SHALL BE PLANAR. GRADE BREAKS SHALL BE FLUSH AND PERPENDICULAR TO THE DIRECTION OF THE RAMP RUN.
8. RAMP TRANSITIONS BETWEEN WALKS, LANDINGS, GUTTERS, OR STREETS SHALL BE FLUSH AND FREE OF ABRUPT VERTICAL CHANGES (1/4" MAX).
9. WHERE A PEDESTRIAN CIRCULATION PATH CROSSES THE CURB RAMP, FLARED SIDES WITH A SLOPE OF 10% MAXIMUM, MEASURED PARALLEL TO THE CURB LINE, SHALL BE PROVIDED.

LANDING NOTES:

10. LANDINGS SHALL HAVE A MINIMUM CLEAR DIMENSION OF A 5'-0" BY 5'-0" EXCEPT AT THE BOTTOM OF RAMPS TYPE 1 & 2 ON SHEET 2 OF 4.
11. THE RUNNING AND CROSS SLOPES ON LANDINGS AT INTERSECTIONS IS 1:50 (2%) MAXIMUM. THE RUNNING AND CROSS SLOPES AT MIDBLOCK CROSSINGS MAY BE WARPED TO MEET STREET OR HIGHWAY GRADE.

NOTES:

1. FOR DIMENSIONS & GEOMETRIC VALUES REFER TO SHEET 1 OF 4.
2. THE CONFIGURATIONS SHOWN GENERICALLY REPRESENT THE MOST COMMON SITUATIONS ENCOUNTERED ON NYSDOT PROJECTS. THEY ARE INTENDED TO PRESENT CURB RAMP DESIGN CONCEPTS. SITE CONDITIONS AT INDIVIDUAL LOCATIONS REQUIRE SPECIFIC DESIGNS. CURB RAMP DESIGNS MUST BE CONSISTENT WITH THE PROVISIONS OF SHEETS 1, 2, AND 3 OF 4. REFER TO REGIONAL LANDSCAPE ARCHITECT FOR ADDITIONAL DESIGN GUIDANCE.
3. COORDINATE TRAFFIC CONTROL DEVICES, UTILITY LOCATIONS, SIGNS, STREET FURNITURE AND DRAINAGE TO ENSURE A CONTINUOUS PEDESTRIAN ACCESS ROUTE AT ALL CURB RAMP LOCATIONS. GUIDANCE FOR CROSSWALK MARKINGS AND TRAFFIC CONTROL DEVICES IS PROVIDED IN THE MUTCD.
4. DETECTABLE WARNINGS SHOWN ON THIS SHEET ARE FOR ILLUSTRATION ONLY. FOR SPECIFIC PLACEMENT ORIENTATIONS AND DIMENSIONS REFER TO SHEET 4 OF 4. SEE NOTE 10.
5. THE CROSS SLOPE OF RAMPS AND/OR LANDINGS AT MID BLOCK CROSSINGS MAY BE WARPED TO MEET STREET OR HIGHWAY GRADE.
6. USE TYPE B ONLY WHERE OTHER RAMPS ARE UNUSABLE. SINGLE DIAGONAL OR DEPRESSED CORNER CURB RAMPS SERVING TWO STREET CROSSING DIRECTIONS SHOULD BE AVOIDED IN NEW CONSTRUCTION AND SHOULD ONLY BE CONSIDERED WHERE CONDITIONS REQUIRE THEIR USE.
7. GRATES SHALL NOT BE LOCATED ON CURB RAMPS, BLENDED TRANSITIONS OR LANDINGS. ACCESS COVERS OF SIMILAR SURFACES SHALL COMPLY WITH APPLICABLE SURFACE REQUIREMENTS.
8. UTILITIES, SIGNS, AND OTHER FIXED OBJECTS MAY NOT BE PLACED ON A CURB, OR IN A MANNER THAT INTERFERES WITH THE USE OF THE CURB RAMP.
9. THE SURFACE OF ALL CURB RAMPS SHALL BE STABLE, FIRM AND SLIP RESISTANT. A COARSE BROOM FINISH RUNNING PERPENDICULAR TO THE SLOPE IS RECOMMENDED ON CONCRETE RAMP SURFACES, EXCLUSIVE OF THE DETECTABLE WARNING FIELDS.
10. THERE SHALL BE A LANDING AT THE TOP OF EACH PERPENDICULAR CURB RAMP AND A LANDING AT THE BOTTOM OF RAMPS TYPE 1 & 2 ON SHEET 2 OF 4.
11. LANDINGS MAY OVERLAP WITH ADJACENT LANDINGS OR A SINGLE LANDING MAY SERVE MULTIPLE CURB RAMPS.
12. LANDINGS MAY OVERLAP WITH THE CLEAR GROUND SPACE REQUIRED AT PEDESTRIAN SIGNAL PUSH BUTTONS.



NOTE: PROVIDE & INSTALL GATE WHEN DIRECTED, GATE TO BE INSTALLED IN ACCORDANCE WITH MANUFACTURE'S DETAILS

CHAIN LINK FENCE MINIMUM REQUIREMENTS:

FENCE HEIGHT (FT)	TERMINAL POST (DIAMETER, IN)	LINE POST (DIAMETER, IN)	TERMINAL POST FOUNDATION SIZE (DIAMETER, DEPTH)	LINE POST FOUNDATION SIZE (DIAMETER, DEPTH)
UP TO 4'	2-3/8"	1-7/8"	10" x 30"	8" x 24"
4' TO 5'	2-3/8"	1-7/8"	10" X 30"	8" X 24"
5' TO 6'	2-3/8"	1-7/8"	10" X 30"	8" X 24"
6' TO 8'	2-7/8"	2-3/8"	10" X 36"	10" X 36"
8' TO 10'	3-1/2"	2-7/8"	12" X 40"	10" X 40"
10' TO 12'	3-1/2"	2-7/8"	12" X 42"	12" X 42"

NOTES:
1. SIZES SHOWN APPLICABLE ONLY TO FENCE WITH UNRESTRICTED AIRFLOW
2. 10' POST SPACING MAXIMUM.
3. POSTS SHALL BE SCH. 40 STEEL PIPE
4. POSTS SHALL BE EMBEDDED TO WITHIN 6" FROM THE BOTTOM OF EACH FOUNDATION.
5. FENCE FABRIC SHALL BE 9 GAUGE, VINYL COATED (COLOR TO BE SELECTED BY OWNER)
6. POSTS & HARDWARE SHALL BE VINYL-COATED (COLOR TO BE SELECTED BY OWNER)
7. FENCE FABRIC SHALL BE 2"x2" PVC-COATED (FUSED & ADHERED POLY VINYL CHLORIDE) 9 GAUGE CORE.
8. PROVIDE & INSTALL GATE WHEN DIRECTED, GATE TO BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

CHAIN LINK FENCE DETAIL
N.T.S.

Date	1/10/20
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Revisions:
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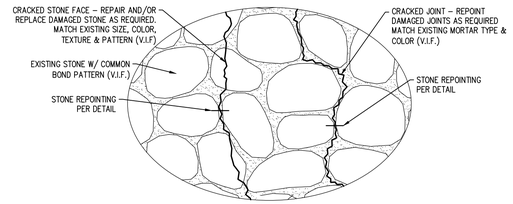
NYSED PROJECT # 66-07-01-03-0-005-020

CONSTRUCTION DETAILS #1
2019 BOND REFERENDUM
CHATSWORTH AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

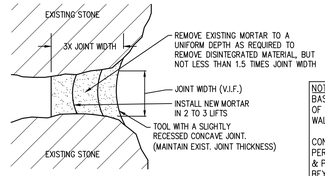
Job No. 4.1092.72.03
File No. 10927203_C1

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WALL FACE



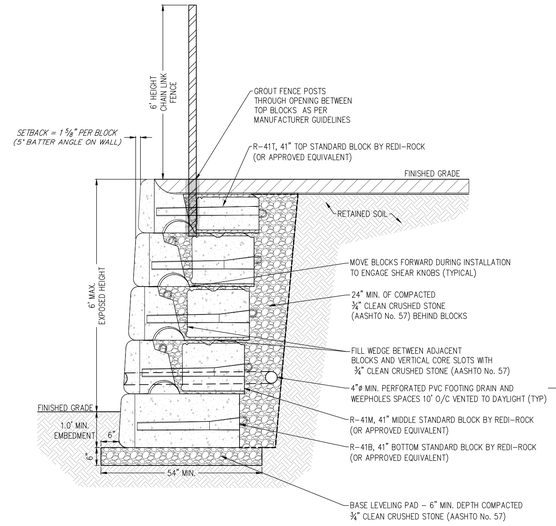
JOINT SECTION - STONE REPOINTING

NOTES:
BASE BID TO INCLUDE 50% REPOINTING OF STONE WALL FACE FOR STONE WALLS SPECIFIED ON PLANS.

CONTRACTOR TO PROVIDE UNIT PRICE PER SF FOR REPOINTING OF THE WALL & PER SF FOR REPLACING STONE BEYOND WHAT IS SPECIFIED AS THE BASE BID ON THE BID FORM.

STONE WALL REPAIR & JOINT REPOINTING DETAIL

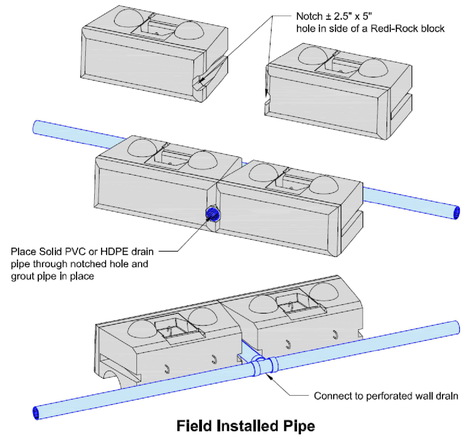
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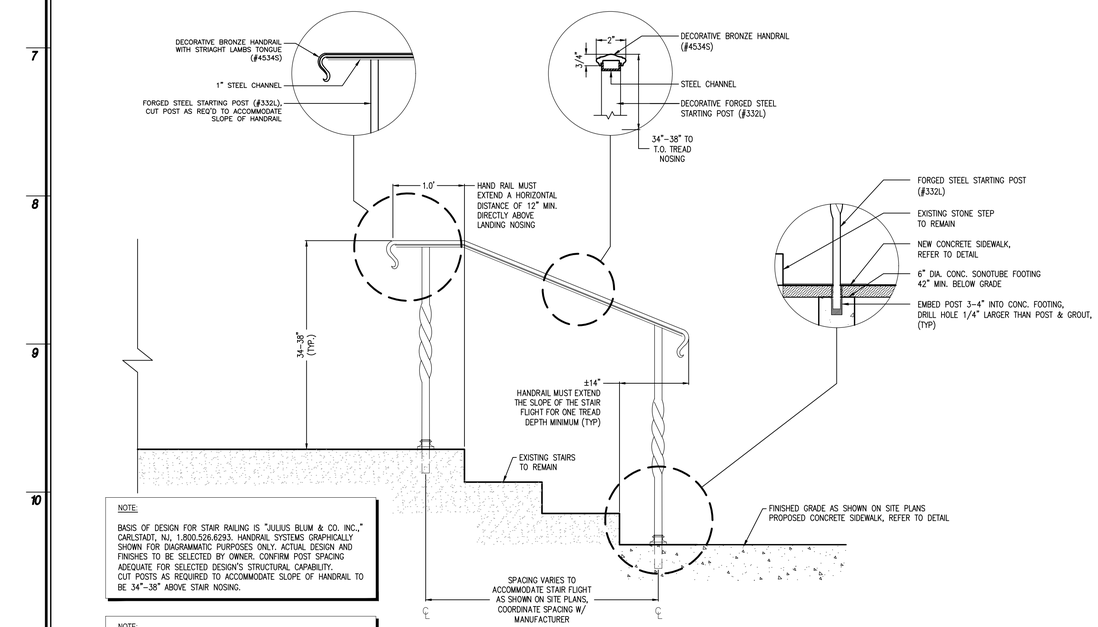
6' MAX HEIGHT RETAINING WALL REDIROCK BLOCK W/ STAINED FINISH

NOT TO SCALE

NOTES:
1. INSTALLATION SHALL FOLLOW THE MANUFACTURERS GUIDELINES.
2. BLOCK TYPE: "STANDARD 41" BLOCKS BY REDI-ROCK OR APPROVED EQUAL.
3. ALL FILL SHALL BE COMPACTED IN 12" MAX. LAYERS TO ACHIEVE 95% MAXIMUM DENSITY PER ASTM-D-698.
4. DRAINAGE LAYER OF BACKFILL SHALL CONSIST OF 3/4" CLEAN CRUSHED STONE (AASHTO No. 57) WRAPPED IN FILTER FABRIC
5. WALL FOOTING DRAINS SHALL BE CONNECTED TO EXISTING STORMWATER CONTROL STRUCTURES AND MAINTAIN POSITIVE DRAINAGE WITH 1% MINIMUM SLOPE.



Field Installed Pipe



NOTE:

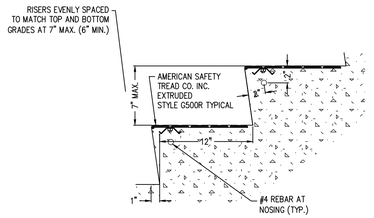
BASIS OF DESIGN FOR STAIR RAILING IS "JULIUS BLUM & CO. INC.," CARLSTADT, NJ, 1.800.526.6293. HANDRAIL SYSTEMS GRAPHICALLY SHOWN FOR DIAGRAMMATIC PURPOSES ONLY. ACTUAL DESIGN AND FINISHES TO BE SELECTED BY OWNER. CONFIRM POST SPACING ADEQUATE FOR SELECTED DESIGN'S STRUCTURAL CAPABILITY. CUT POSTS AS REQUIRED TO ACCOMMODATE SLOPE OF HANDRAIL TO BE 34"-38" ABOVE STAIR NOSING.

NOTE:

CONTRACTOR SHALL COORDINATE POST SPACING WITH MANUFACTURER'S REQUIREMENTS. USE EXISTING CORES WHENEVER POSSIBLE FOR NEW HANDRAIL POSTS. CORE-DRILL NEW HOLES WHERE REQUIRED, USE NON-SHRINK EPOXY GROUT. PATCH AND REPAIR ANY EXISTING UNUSED CORES AT EXISTING POST LOCATIONS TO MATCH STONE.

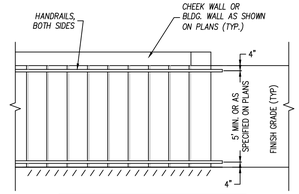
HANDRAIL (GROUND MOUNT) DETAILS

N.T.S.



STAIR TREAD DETAIL

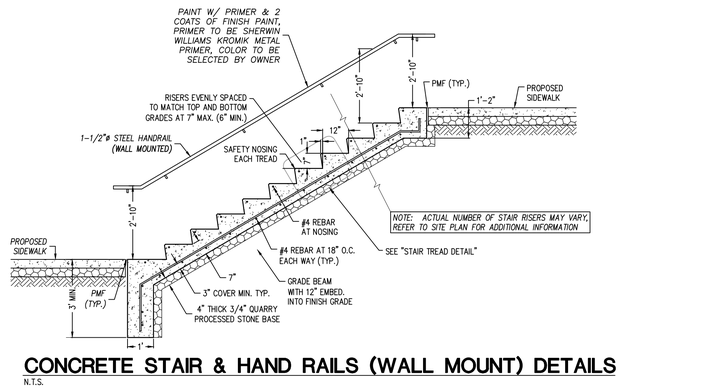
N.T.S.



NOTE: ACTUAL NUMBER OF STAIR RISERS TO VARY BY LOCATION, SEE SITE PLAN FOR ADDITIONAL INFORMATION

STAIR PLAN VIEW

N.T.S.



CONCRETE STAIR & HAND RAILS (WALL MOUNT) DETAILS

N.T.S.

Date	1/10/20
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Revisions:

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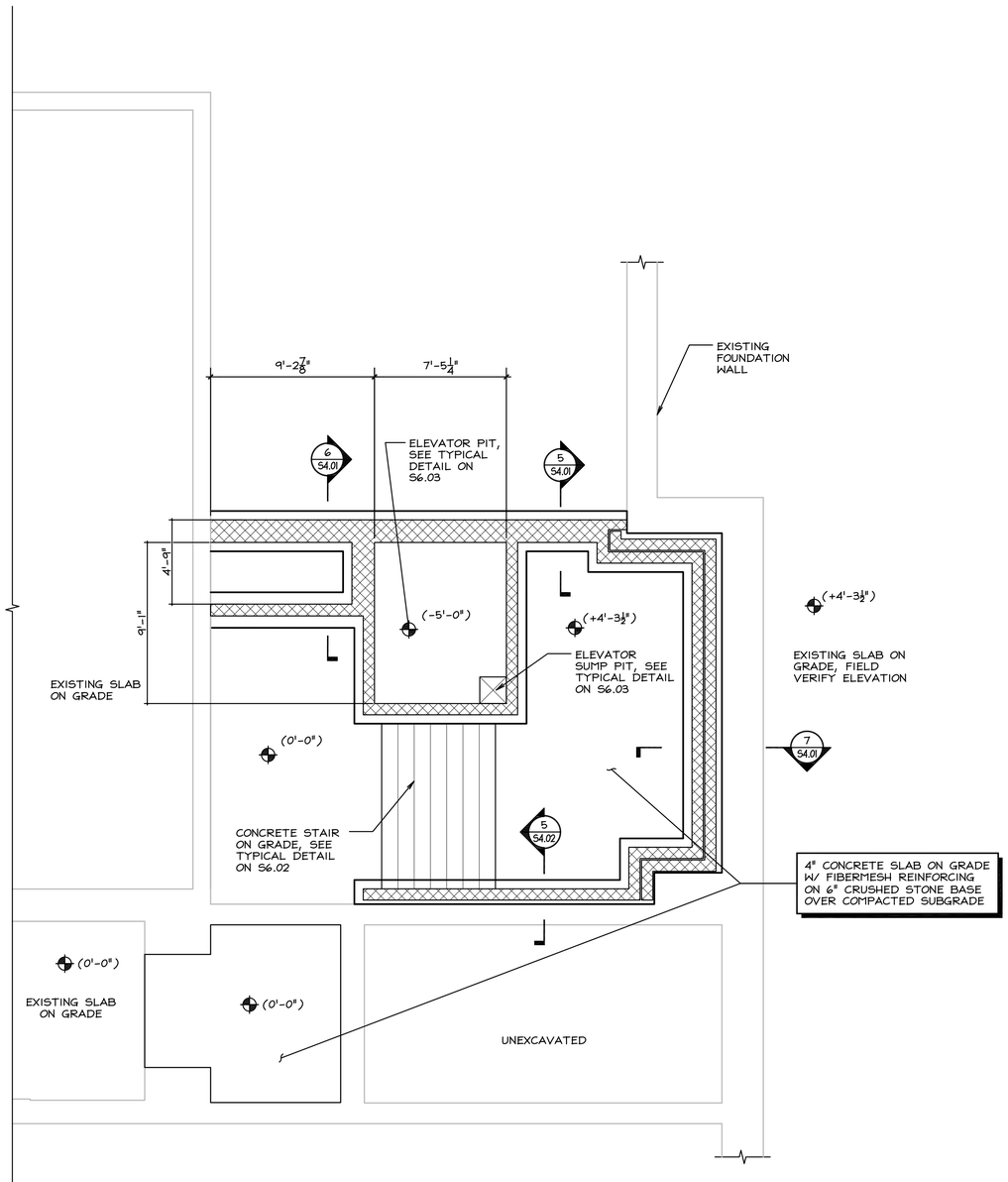
CONSTRUCTION DETAILS #2
2019 BOND REFERENDUM
CHATSWORTH AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

Job No. 4.1092.72.03

File No. 10927203_C1

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PARTIAL FOUNDATION PLAN

SCALE: 1/4" = 1'-0"

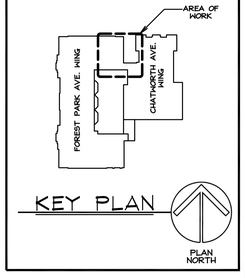
FOUNDATION NOTES

1. BOTTOM OF ALL EXTERIOR FOOTINGS SHALL BE A MINIMUM OF 3'-6" BELOW FINISHED GRADE.
2. BOTTOM OF NEW FOOTINGS INSTALLED ADJACENT TO EXISTING BUILDING FOOTINGS SHALL ALIGN WITH THE BOTTOM OF THE EXISTING BUILDING FOUNDATION.
3. ALL FOOTINGS ARE DESIGNED FOR A MINIMUM BEARING CAPACITY OF 12,000 PSF ON SOUND ROCK. BOTTOM OF FOOTING ELEVATION MAY BE LOWERED TO ACHIEVE THE MINIMUM REQUIRED BEARING CAPACITY. REFER TO GEOTECHNICAL INVESTIGATION REPORT BY SESI CONSULTING ENGINEERS DATED NOVEMBER 22, 2019 FOR SUBSURFACE CONDITIONS AND CONSTRUCTION PROCEDURES.
4. ELEVATIONS ON PLAN ARE REFERENCED FROM 0'-0" AS DATUM, SEE SITE PLAN FOR ACTUAL ELEVATION'.
5. REFER TO DRAWINGS S6.01 THROUGH S6.04 FOR GENERAL NOTES AND TYPICAL DETAILS.

FOUNDATION SCHEDULE

MARK	DESCRIPTION
( )	DENOTES TOP OF FOOTING ELEVATION REFERENCED FROM DATUM
⊕ ( )	ON PLAN INDICATES FINISHED FLOOR ELEVATION REFERENCED FROM 0'-0" AS DATUM.
x 100.00'	DENOTES APPROXIMATE FINISHED GRADE ELEVATION. SEE SITE PLAN FOR FURTHER INFORMATION.

CHATWORTH AVE. SCHOOL



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New City, New York 10956
Phone: (845) 623-9100

Job No.: 19128 Dwg. 1 of 13

EDWARD P. WILKOWSKI, P.E.
N.Y. License No. : 082493

Date	1/10/20
Checked	EW
Drawn	AJ

MICHAEL J. McGOVERN, R.A.
Title REGISTERED ARCHITECT License No. 022257-1

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PARTIAL FOUNDATION PLAN

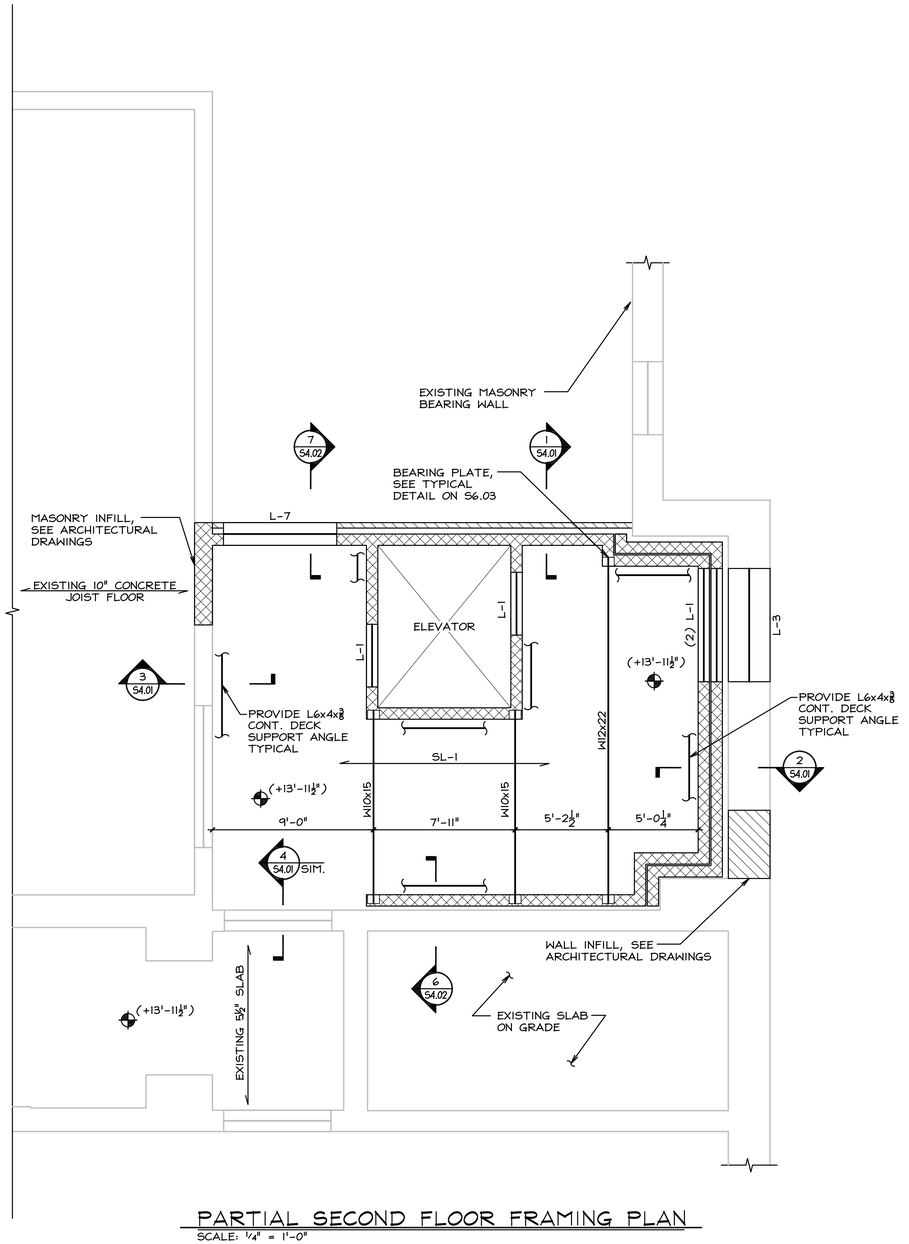
2019 BOND REFERENDUM

CHATSWORTH AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

Job No. 4.1092.72.03

File No. 1912852.01

S2.01



PARTIAL SECOND FLOOR FRAMING PLAN

SCALE: 1/4" = 1'-0"

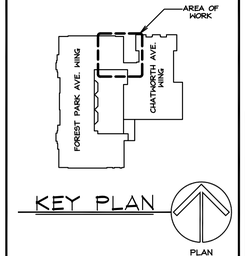
SECOND FLOOR FRAMING NOTES

1. TOP OF SLAB ELEVATION TO BE (+13'-11½") UNLESS NOTED OTHERWISE ON PLAN.
2. TOP OF STEEL BEAM ELEVATION TO BE 7½" BELOW TOP OF SLAB, UNLESS NOTED OTHERWISE.
3. STEEL BEAMS ARE TO BE EQUALLY SPACED WITHIN BAYS, UNLESS NOTED OTHERWISE. THE CONTRACTOR SHALL LOCATE ALL FLOOR PENETRATIONS AND OPENINGS FOR PLUMBING AND MECHANICAL WORK ON THE STEEL SHOP DRAWINGS PRIOR TO SUBMISSION FOR REVIEW.
4. REFER TO ARCHITECTURAL AND MECHANICAL DRAWINGS FOR SLAB OPENING REQUIREMENTS. OPENINGS LARGER THAN 8" SHALL BE REINFORCED, REFER TO TYPICAL DETAIL.
5. ELEVATIONS ON PLAN ARE REFERENCED FROM 0'-0" AS DATUM, SEE SITE PLAN FOR ACTUAL ELEVATION.
6. REFER TO DRAWING S6.04 FOR LINTEL SCHEDULE.
7. REFER TO DRAWINGS S6.01 TO S6.04 FOR GENERAL NOTES AND TYPICAL DETAILS.

SECOND FLOOR FRAMING SCHEDULE

MARK	DESCRIPTION
SL-1	7½" NORMAL WEIGHT CONCRETE SLAB W/ W.W.F. 6"x6" W2.1xW2.1 ON 3" - 20 GA. COMPOSITE METAL FLOOR DECK.
◆( )	ON PLAN INDICATES FINISHED FLOOR ELEVATION REFERENCED FROM 0'-0" AS DATUM.

CHATWORTH AVE. SCHOOL



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New City, New York 10956
Phone: (845) 623-9100

Job No.: 19128 Dwg. 2 of 13

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N.Y. License No. : 082493

Date	1/10/20
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Drawn	AJ

MICHAEL J. McGOVERN, R.A.
Title REGISTERED ARCHITECT License No. 022257-1

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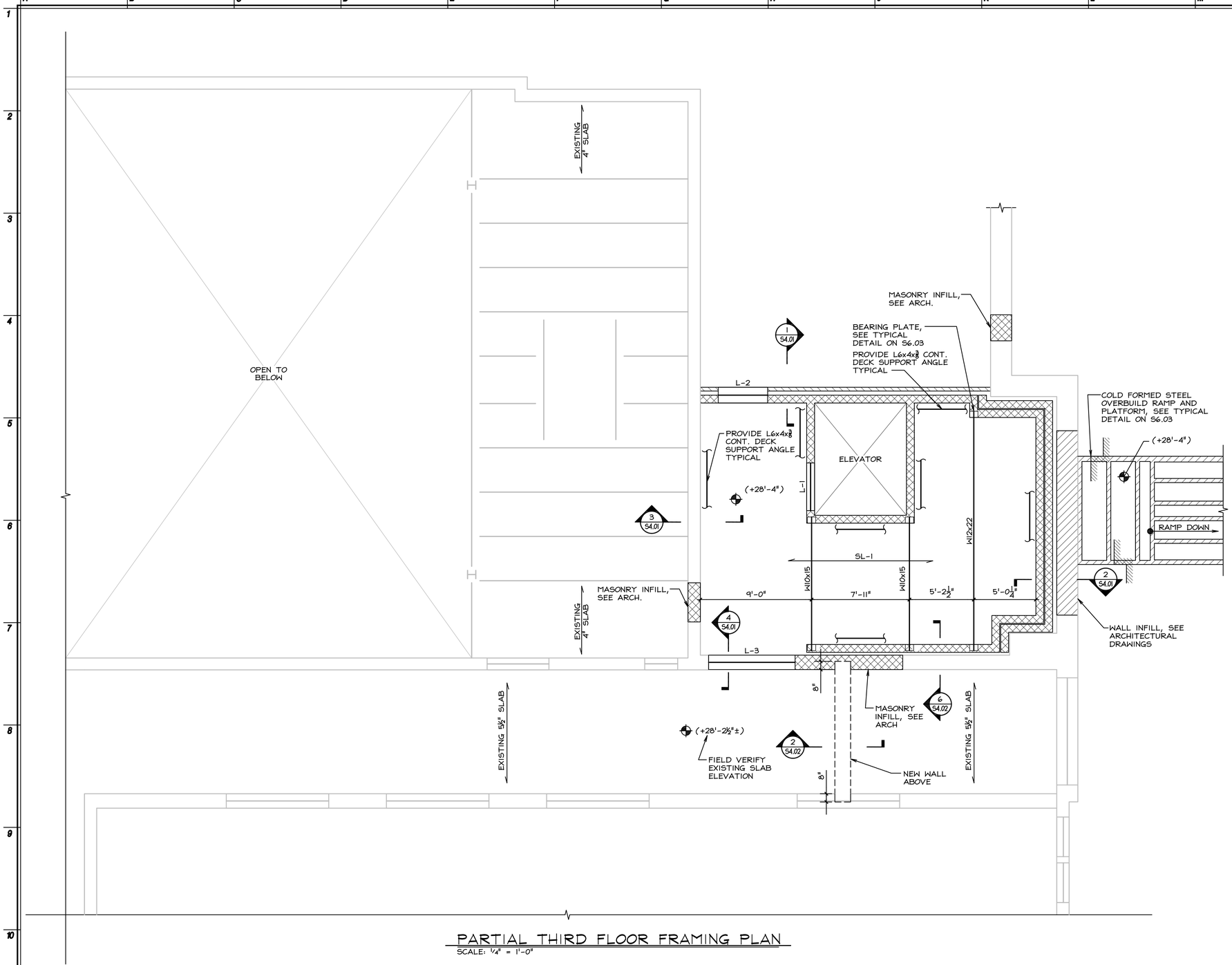
NYSED PROJECT # 66-07-01-03-0-005-020

PARTIAL SECOND FLOOR FRAMING PLAN
2019 BOND REFERENDUM
CHATSWORTH AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

Job No. 4.1092.72.03

File No. 19128S2.01

S2.02



PARTIAL THIRD FLOOR FRAMING PLAN

SCALE: 1/4" = 1'-0"

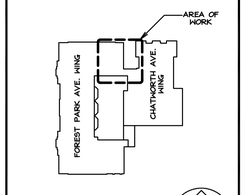
THIRD FLOOR FRAMING NOTES

1. TOP OF SLAB ELEVATION TO BE (+28'-4") UNLESS NOTED OTHERWISE ON PLAN.
2. TOP OF STEEL BEAM ELEVATION TO BE 7½" BELOW TOP OF SLAB, UNLESS NOTED OTHERWISE.
3. STEEL BEAMS ARE TO BE EQUALLY SPACED WITHIN BAYS, UNLESS NOTED OTHERWISE. THE CONTRACTOR SHALL LOCATE ALL FLOOR PENETRATIONS AND OPENINGS FOR PLUMBING AND MECHANICAL WORK ON THE STEEL SHOP DRAWINGS PRIOR TO SUBMISSION FOR REVIEW.
4. REFER TO ARCHITECTURAL AND MECHANICAL DRAWINGS FOR SLAB OPENING REQUIREMENTS. OPENINGS LARGER THAN 8" SHALL BE REINFORCED, REFER TO TYPICAL DETAIL.
5. ELEVATIONS ON PLAN ARE REFERENCED FROM 0'-0" AS DATUM, SEE SITE PLAN FOR ACTUAL ELEVATION.
6. REFER TO DRAWING S6.04 FOR LINTEL SCHEDULE.
7. REFER TO DRAWINGS S6.01 TO S6.04 FOR GENERAL NOTES AND TYPICAL DETAILS.

THIRD FLOOR FRAMING SCHEDULE

MARK	DESCRIPTION
SL-1	7⅞" NORMAL WEIGHT CONCRETE SLAB W/ W.W.F. 6"x6" W2.1xW2.1 ON 3" - 20 GA. COMPOSITE METAL FLOOR DECK.
(+28'-4")	ON PLAN INDICATES FINISHED FLOOR ELEVATION REFERENCED FROM 0'-0" AS DATUM.

CHATWORTH AVE. SCHOOL



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Phone: (845) 623-9100

Job No.: 19128 Dwg. 3 of 13

EDWARD P. WILKOWSKI, P.E.
N.Y. License No. : 082493

NYSED PROJECT # 66-07-01-03-0-005-020

Date	1/10/20
Checked	EW
Drawn	AJ

MICHAEL J. McGOVERN, R.A.
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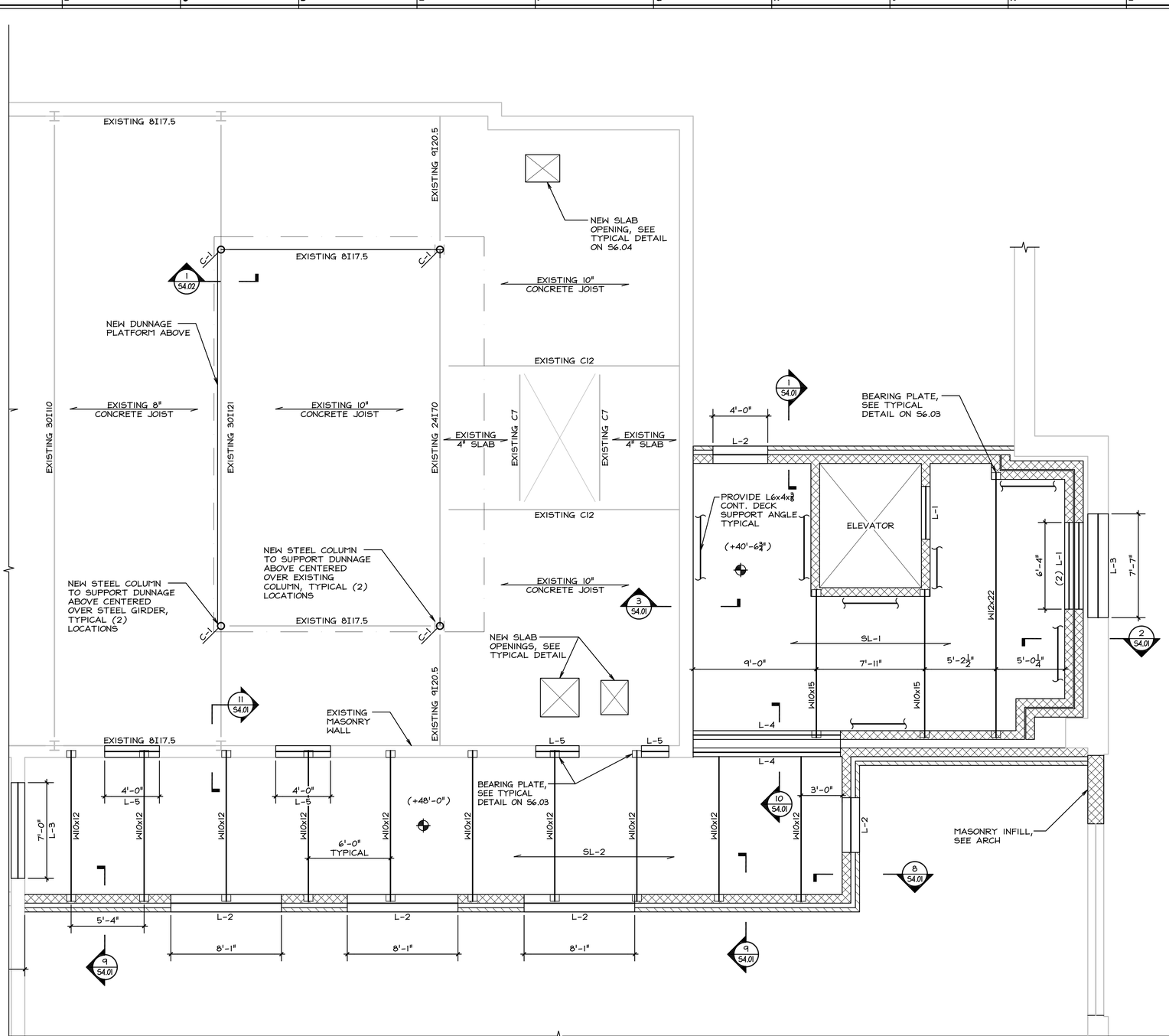
PARTIAL THIRD FLOOR FRAMING PLAN

2019 BOND REFERENDUM
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MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

Job No. 4.1092.72.03

File No. 1912852.01

S2.03



PARTIAL FOURTH FLOOR FRAMING PLAN

SCALE: 1/4" = 1'-0"

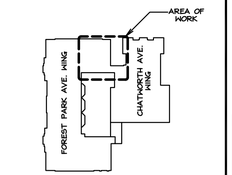
FOURTH FLOOR FRAMING NOTES

1. TOP OF SLAB ELEVATION TO BE (+40'-6¾") UNLESS NOTED OTHERWISE ON PLAN.
2. TOP OF STEEL BEAM ELEVATION TO BE 7½" BELOW TOP OF SLAB AT SL-1 AND 6½" BELOW TOP OF SLAB AT SL-2.
3. STEEL BEAMS ARE TO BE EQUALLY SPACED WITHIN BAYS, UNLESS NOTED OTHERWISE. THE CONTRACTOR SHALL LOCATE ALL FLOOR PENETRATIONS AND OPENINGS FOR PLUMBING AND MECHANICAL WORK ON THE STEEL SHOP DRAWINGS PRIOR TO SUBMISSION FOR REVIEW.
4. REFER TO ARCHITECTURAL AND MECHANICAL DRAWINGS FOR SLAB OPENING REQUIREMENTS. OPENINGS LARGER THAN 8" SHALL BE REINFORCED, REFER TO TYPICAL DETAIL.
5. ELEVATIONS ON PLAN ARE REFERENCED FROM 0'-0" AS DATUM, SEE SITE PLAN FOR ACTUAL ELEVATION.
6. REFER TO DRAWING S6.04 FOR LINTEL SCHEDULE.
7. REFER TO DRAWINGS S6.01 TO S6.04 FOR GENERAL NOTES AND TYPICAL DETAILS.

FOURTH FLOOR FRAMING SCHEDULE

MARK	DESCRIPTION
SL-1	7½" NORMAL WEIGHT CONCRETE SLAB W/ W.W.F. 6"x6" W2.1xW2.1 ON 3" - 20 GA. COMPOSITE METAL FLOOR DECK.
SL-2	6½" NORMAL WEIGHT CONCRETE SLAB W/ W.W.F. 6"x6" W2.1xW2.1 ON 3" - 20 GA. COMPOSITE METAL FLOOR DECK.
C-1	HSS6.00x0.375 ROUND STEEL POST W/ ½" CAP PLATE AND BASE PLATE.
◆( )	ON PLAN INDICATES FINISHED FLOOR ELEVATION REFERENCED FROM 0'-0" AS DATUM.

CHATWORTH AVE. SCHOOL



KEY PLAN

PLAN NORTH

Micucci Engineering, P.C.
Consulting Structural Engineers
265 South Little Tor Road, Suite 207
New City, New York 10956
Phone: (845) 623-9100

Job No.: 19128 Dwg. 4 of 13

EDWARD P. WILKOWSKI, P.E.
N.Y. License No. : 082493

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Drawn	AJ

MICHAEL J. McGOVERN, R.A.
License No. 022257-1
Title REGISTERED ARCHITECT

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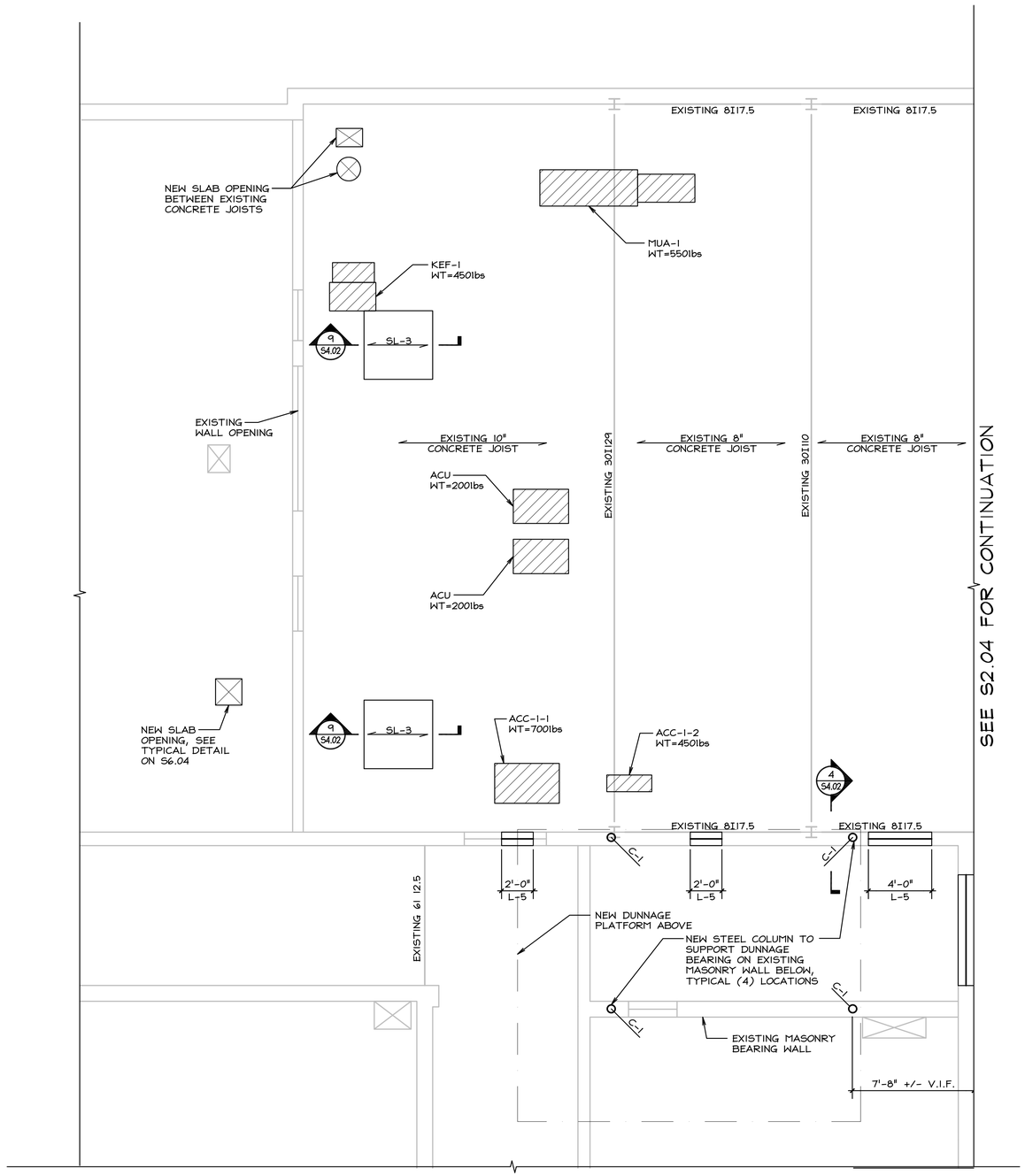
PARTIAL FOURTH FLOOR FRAMING PLAN
2019 BOND REFERENDUM
CHATSWORTH AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

NYSED PROJECT # 66-07-01-03-0-005-020

Job No. 4.1092.72.03

File No. 1912852.01

S2.04



PARTIAL ROOF FRAMING PLAN

SCALE: 1/4" = 1'-0"

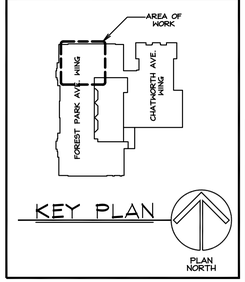
ROOF FRAMING NOTES

1. REFER TO ARCHITECTURAL AND MECHANICAL DRAWINGS FOR SLAB OPENING REQUIREMENTS.
2. ELEVATIONS ON PLAN ARE REFERENCED FROM 0'-0" AS DATUM, SEE SITE PLAN FOR ACTUAL ELEVATION.
3. REFER TO DRAWING S6.04 FOR LINTEL SCHEDULE.
4. REFER TO DRAWINGS S6.01 TO S6.04 FOR GENERAL NOTES AND TYPICAL DETAILS.

ROOF FRAMING SCHEDULE

MARK	DESCRIPTION
◆( )	ON PLAN INDICATES FINISHED FLOOR ELEVATION REFERENCED FROM 0'-0" AS DATUM.
SL-3	4" NORMAL WEIGHT CONCRETE SLAB ON 1½"-2" COMPOSITE METAL FLOOR DECK W/ WWF 6"x6" W2.1xW2.1
C-1	HSS6.00x0.375 ROUND STEEL POST W/ ½" CAP PLATE AND BASE PLATE.

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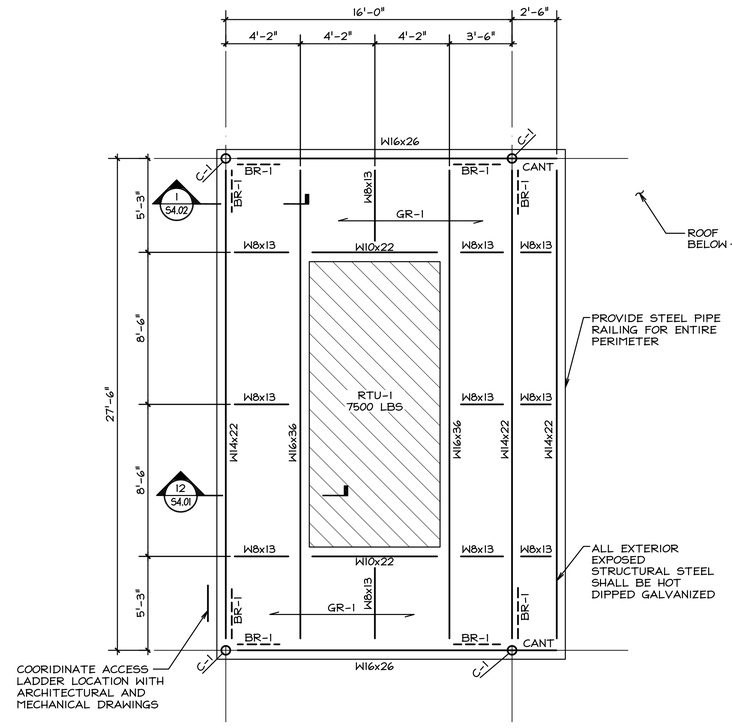
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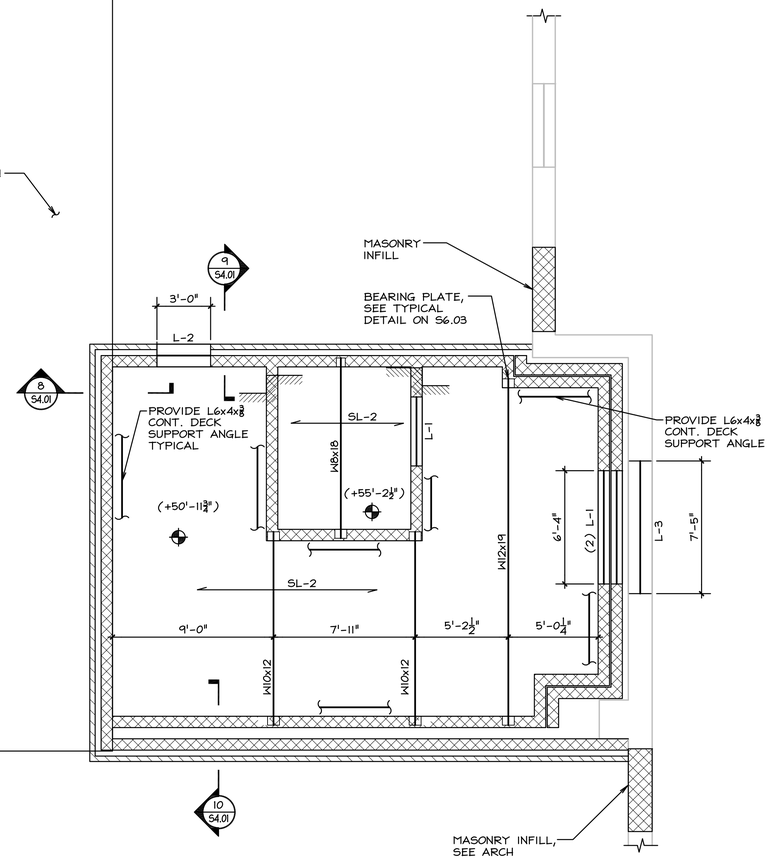
PARTIAL ROOF FRAMING PLAN
2019 BOND REFERENDUM
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File No. 1912852.01

S2.05

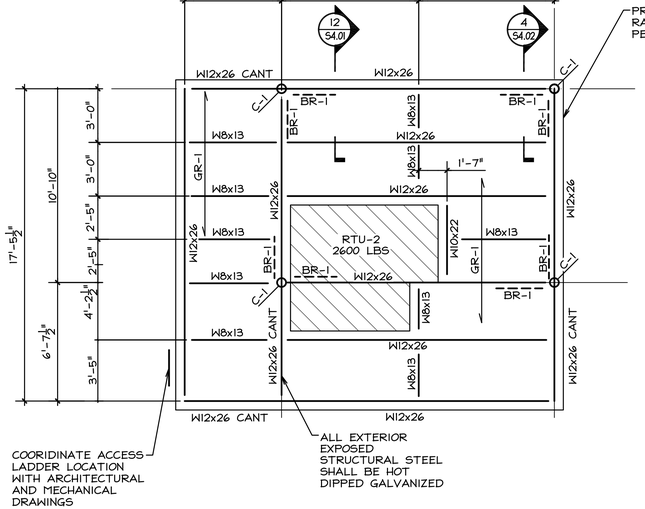


NOTE: TOP OF DUNNAGE STEEL TO BE 6'-4" ABOVE EXISTING ROOF



PARTIAL ROOF AND DUNNAGE FRAMING PLAN

SCALE: ¼" = 1'-0"



NOTE: TOP OF DUNNAGE STEEL TO BE 6'-0" ABOVE EXISTING ROOF

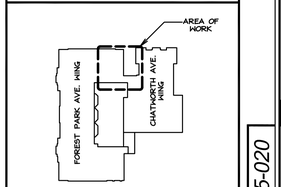
ROOF FRAMING NOTES

1. FINISH FLOOR ELEVATION TO BE (+50'-11¾") UNLESS NOTED OTHERWISE ON PLAN.
2. TOP OF STEEL BEAM ELEVATION TO BE 6½" BELOW TOP OF SLAB, UNLESS NOTED OTHERWISE.
3. STEEL BEAMS ARE TO BE EQUALLY SPACED WITHIN BAYS, UNLESS NOTED OTHERWISE. THE CONTRACTOR SHALL LOCATE ALL FLOOR PENETRATIONS AND OPENINGS FOR PLUMBING AND MECHANICAL WORK ON THE STEEL SHOP DRAWINGS PRIOR TO SUBMISSION FOR REVIEW.
4. REFER TO ARCHITECTURAL AND MECHANICAL DRAWINGS FOR SLAB OPENING REQUIREMENTS. OPENINGS LARGER THAN 8" SHALL BE REINFORCED, REFER TO TYPICAL DETAIL.
5. ELEVATIONS ON PLAN ARE REFERENCED FROM 0'-0" AS DATUM, SEE SITE PLAN FOR ACTUAL ELEVATION.
6. REFER TO DRAWING S6.04 FOR LINTEL SCHEDULE.
7. REFER TO DRAWINGS S6.01 TO S6.04 FOR GENERAL NOTES AND TYPICAL DETAILS.

ROOF FRAMING SCHEDULE

MARK	DESCRIPTION
SL-2	6½" NORMAL WEIGHT CONCRETE SLAB W/ W.W.F. 6"x6" W2.1xW2.1 ON 3" - 20 GA. COMPOSITE METAL FLOOR DECK.
C-1	HSS6.00x0.375 ROUND STEEL POST W/ ½" CAP PLATE.
GR-1	GALVANIZED STEEL GRATING W/ 1"x⅛" MAIN BEARING BARS AT 1⅛" O.C. AND CROSS BARS AT 4" O.C.
BR-1	(2) L3x3x¼ KNEE BRACE
◆( )	ON PLAN INDICATES FINISHED FLOOR ELEVATION REFERENCED FROM 0'-0" AS DATUM.

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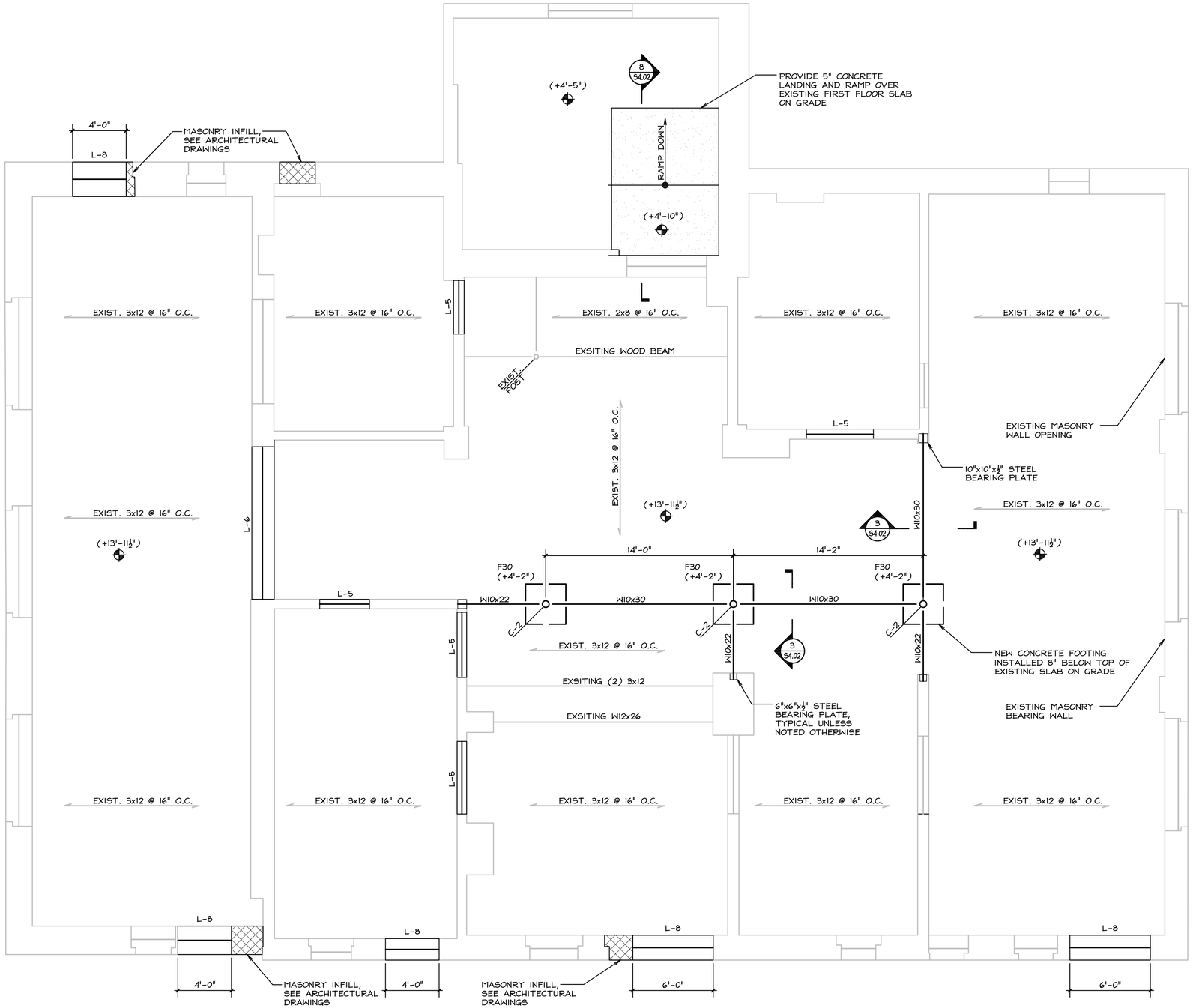
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PARTIAL ROOF FRAMING PLAN
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CHATSWORTH AVENUE, LARCHMONT, NY 10538

NYSED PROJECT # 66-07-01-03-0-005-020

Job No. 4.1092.72.03
File No. 19128S2.01

S2.06



PARTIAL SECOND FLOOR FRAMING PLAN

SCALE: ¼" = 1'-0"

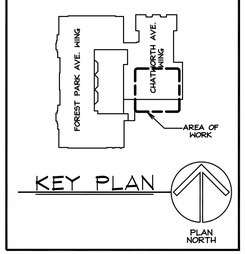
SECOND FLOOR FRAMING NOTES

1. EXISTING FINISH FLOOR ELEVATION TO BE (+13'-11½") UNLESS NOTED OTHERWISE ON PLAN.
2. THE SIZE AND LOCATION OF EXISTING FRAMING IS BASED ON LIMITED SITE OBSERVATION. THE CONTRACTOR SHALL REMOVE EXISTING FINISHES AS REQUIRED TO EXPOSE THE EXISTING FRAMING CONDITIONS FOR REVIEW BY THE ENGINEER PRIOR TO STEEL FABRICATION.
3. ANY DISCREPANCY BETWEEN EXISTING CONDITIONS OR MEASUREMENTS AND THE INFORMATION SHOWN ON THIS DRAWING SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER IMMEDIATELY.
4. ELEVATIONS ON PLAN ARE REFERENCED FROM 0'-0" AS DATUM, SEE SITE PLAN FOR ACTUAL ELEVATION.
5. REFER TO DRAWING S6.04 FOR LINTEL SCHEDULE.
6. REFER TO DRAWINGS S6.01 TO S6.04 FOR GENERAL NOTES AND TYPICAL DETAILS.

SECOND FLOOR FRAMING SCHEDULE

MARK	DESCRIPTION
C-2	HSS6.00x0.375 ROUND STEEL POST W/ ⅜"x12"x1'-0" BASE PLATE W/ (4) ¾" DIAMETER ANCHOR RODS, SEE TYPICAL DETAIL.
F30	3'-0"x3'-0"x1'-4" DEEP CONCRETE COLUMN FOOTING W/ (4)-#5 BOTTOM BARS EACH WAY.
(+)	ON PLAN INDICATES FINISHED FLOOR ELEVATION REFERENCED FROM 0'-0" AS DATUM.
( )	DENOTES TOP OF FOOTING ELEVATION FROM DATUM

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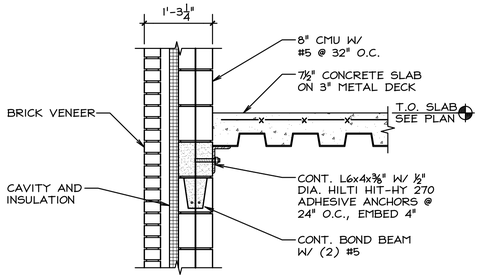
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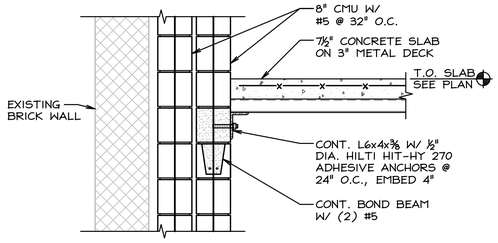
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Job No. 4.1092.72.03
File No. 19128S2.01

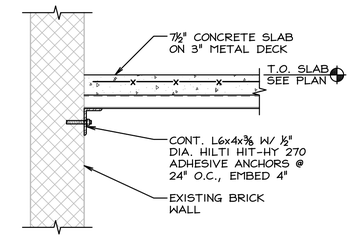
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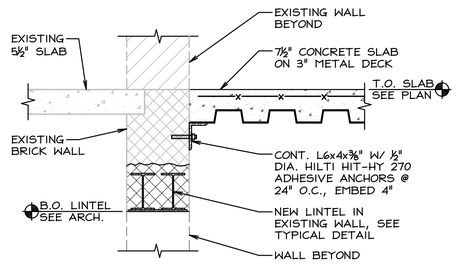
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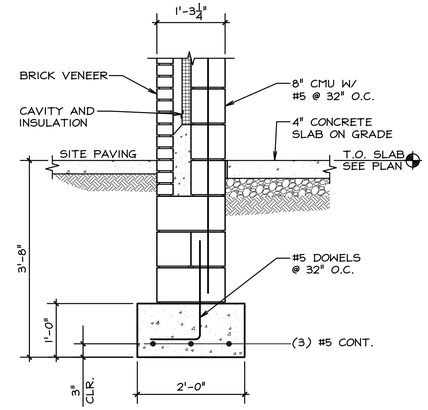
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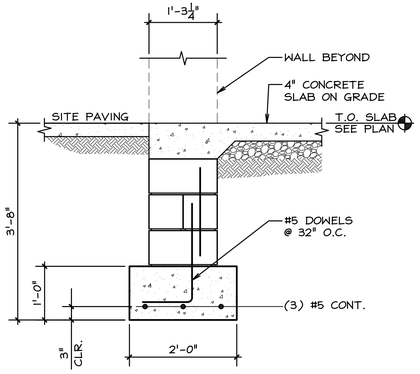
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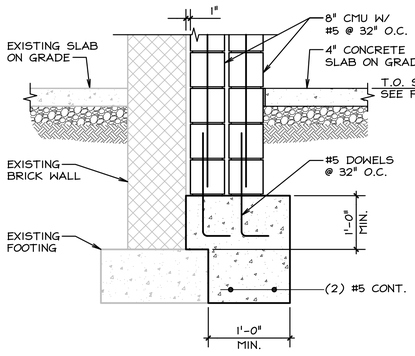
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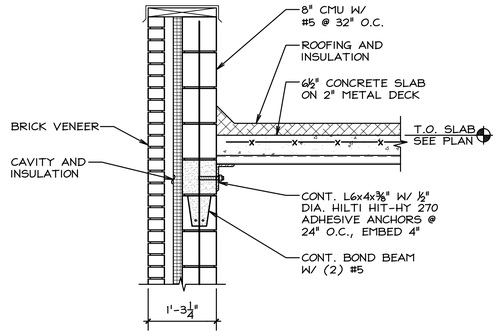
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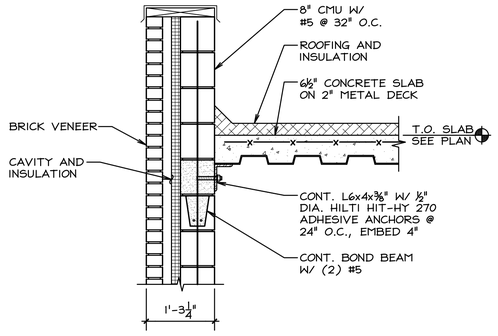
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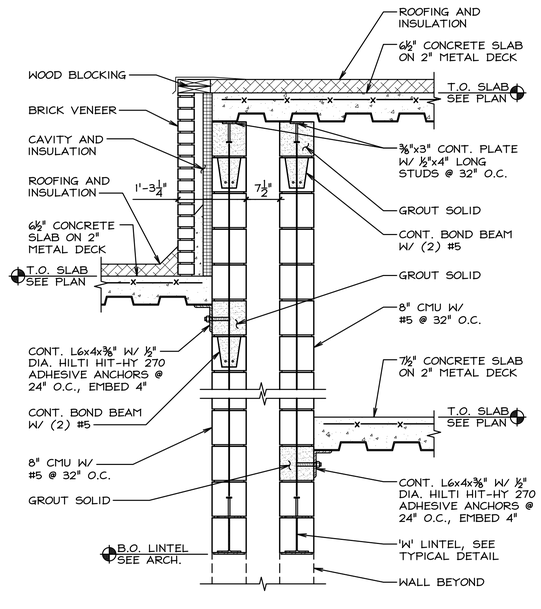
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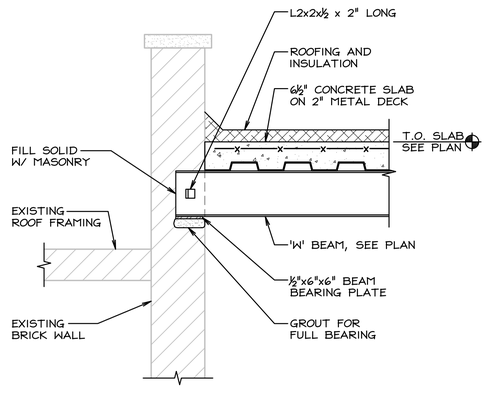
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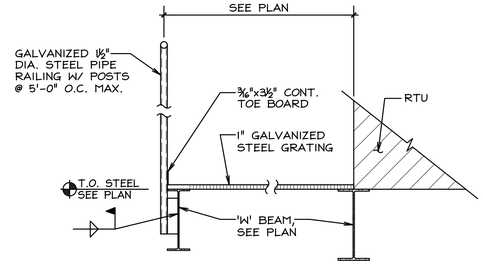
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SECTION 11 54.01
SCALE: ¾" = 1'-0"



SECTION 12 54.01
SCALE: ¾" = 1'-0"

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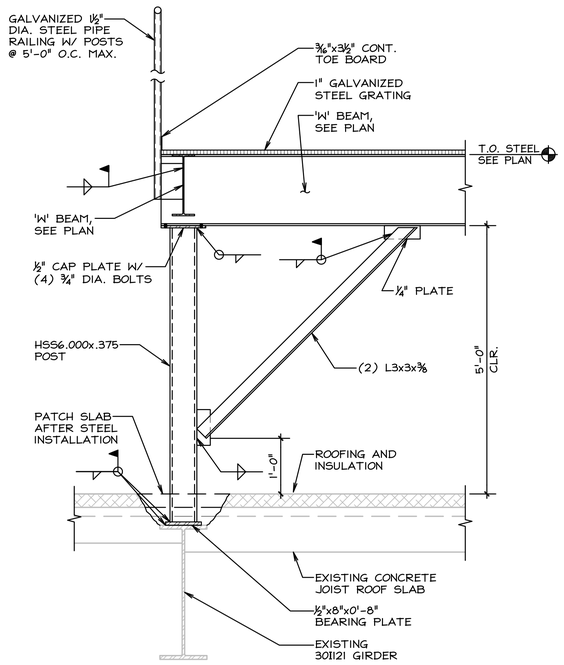
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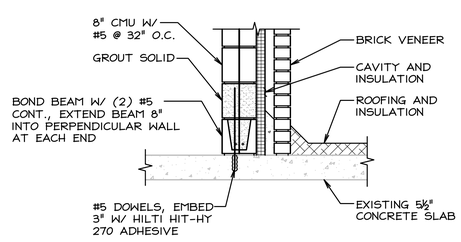
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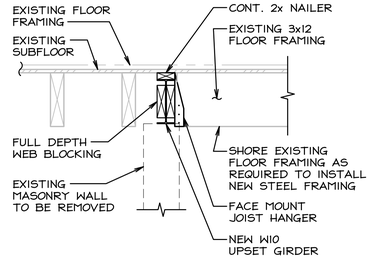
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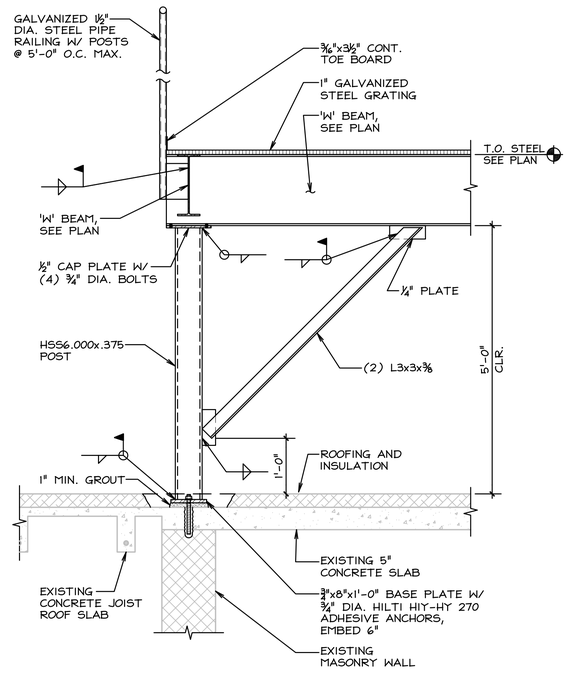
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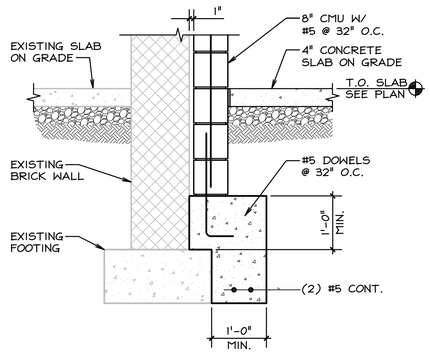
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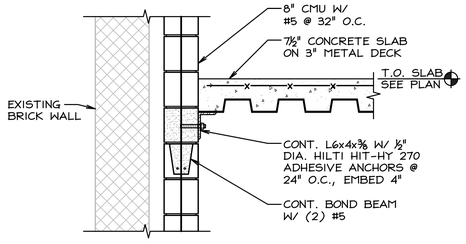
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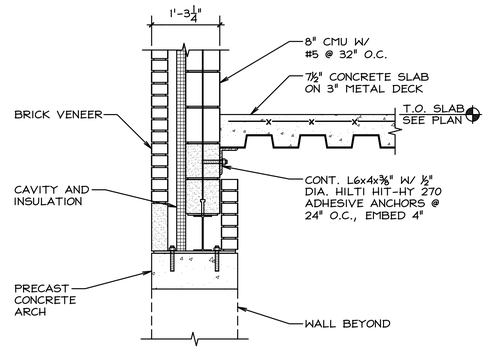
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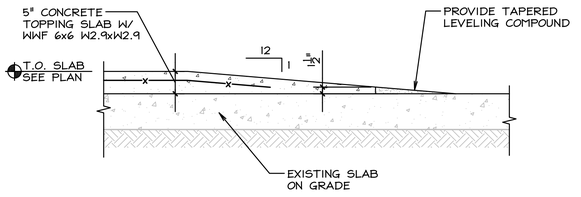
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SECTION 6 54.02
SCALE: 3/4" = 1'-0"



SECTION 7 54.02
SCALE: 3/4" = 1'-0"



SECTION 8 54.02
SCALE: 3/4" = 1'-0"

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File No. 19128S4.01

S4.02

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GENERAL

ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF "THE 2015 INTERNATIONAL BUILDING CODE" AND "THE 2017 NEW YORK STATE UNIFORM CODE SUPPLEMENT."

WORK THESE DRAWING IN CONJUNCTION WITH ARCHITECTURAL AND MECHANICAL DRAWINGS.

THE CONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS IN THE FIELD BEFORE COMMENCING WORK. ANY DISCREPANCY BETWEEN EXISTING CONDITIONS OR MEASUREMENTS AND THE INFORMATION SHOWN ON THE DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE STRUCTURAL ENGINEER IMMEDIATELY. NO WORK SHALL CONTINUE UNTIL THE DISCREPANCY IS RESOLVED.

THE CONTRACTOR SHALL PROVIDE THE NECESSARY COORDINATION BETWEEN ALL TRADES WITH REGARD TO THE DRAWINGS. LOCATE BOLTS, SLEEVES, AND TRENCHES AS REQUIRED FOR MECHANICAL TRADES, AND PROVIDE AND INSTALL VARIOUS ITEMS NOT SHOWN ON THESE DRAWINGS BUT AS REQUIRED FOR VARIOUS TRADES.

DO NOT SCALE THE STRUCTURAL DRAWINGS. IF DIMENSIONS ARE IN QUESTION, THE CONTRACTOR SHALL OBTAIN CLARIFICATION FROM THE STRUCTURAL ENGINEER.

THE STRUCTURAL INTEGRITY OF THE BUILDING IS DEPENDENT ON COMPLETED CONSTRUCTION IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS. THE STRUCTURAL ENGINEER ASSUMES NO LIABILITY FOR THE STABILITY OF THE STRUCTURE DURING CONSTRUCTION. THE CONTRACTOR SHALL SUPPLY ANY TEMPORARY BRACING REQUIRED UNTIL BUILDING CONSTRUCTION IS COMPLETE.

DURING CONSTRUCTION THE CONTRACTOR SHALL KEEP LOADS ON THE STRUCTURE WITHIN THE LIMITS OF THE DESIGN LOADS. CONSTRUCTION MATERIAL PLACED ON FRAMED FLOORS AND ROOFS SHALL BE SPREAD OUT AS REQUIRED.

THE CONTRACTOR IS RESPONSIBLE FOR SAFETY WITHIN THE JOB SITE AND FOR MEETING ALL APPLICABLE OSHA REQUIREMENTS DURING CONSTRUCTION.

THE CONTRACTOR IS RESPONSIBLE FOR ANY REQUIRED EXCAVATION SHORING AND THE EVALUATION AND PROTECTION OF ADJACENT STRUCTURES.

FOUNDATIONS AND SLABS ON GRADE

ALL EXCAVATION, SUBGRADE PREPARATION, AND OTHER EARTHWORK SHALL BE PERFORMED IN ACCORDANCE WITH THE GEOTECHNICAL REPORT.

ALL FOOTINGS ARE DESIGNED FOR A MINIMUM BEARING CAPACITY OF 12 KIPS PER SQUARE FOOT ON ROCK.

ALL FOOTINGS ARE TO BEAR ON UNDISTURBED VIRGIN SOIL OR CONTROLLED COMPACTED FILL.

THE BOTTOM OF ALL EXTERIOR FOOTINGS SHALL EXTEND 3'-6" MINIMUM BELOW FINISHED GRADE.

ALL EXCAVATIONS SHALL BE FREE OF WATER BEFORE POURING CONCRETE.

HAND TRIM SIDES AND BOTTOM OF EARTH FORMS AND REMOVE LOOSE DIRT.

NO SUBSEQUENT EXCAVATION SHALL BE NEARER THAN 2:1 (HORIZONTAL:VERTICAL) TO AN INSTALLED FOOTING OR FOUNDATION.

CONCRETE FOUNDATION WALLS SHALL BE PLACED IN ALTERNATE SECTIONS, NOT MORE THAN 60 FEET IN LENGTH. HORIZONTAL CONSTRUCTION JOINTS ARE NOT PERMITTED EXCEPT WHERE SHOWN.

PLACE SLABS ON GROUND PER THICKNESS SHOWN ON DRAWINGS WITH TOP OF SLAB SET TO ACCOMMODATE ARCHITECTURAL FINISHES.

PROVIDE SAW CUT CONTROL JOINTS AT AN OPTIMUM TIME AFTER FINISHING. CUT SLABS WITH A 3/16 INCH THICK BLADE TO 1 INCH DEPTH. LOCATE CONTROL JOINTS AT A MAXIMUM SPACING OF 36 TIMES THE SLAB DEPTH AND AT EACH CORNER, COLUMN AND PLAN IRREGULARITY.

THE CONTRACTOR SHALL SUBMIT POUR SEQUENCE AND JOINT LAYOUT TO THE ARCHITECT FOR APPROVAL PRIOR TO POURING CONCRETE SLABS.

SEPARATE SLABS ON GRADE FROM VERTICAL SURFACES WITH JOINT FILLER. EXTEND JOINT FILLER FROM BOTTOM OF SLAB TO WITHIN ¼INCH OF FINISHED SLAB SURFACE.

CONSTRUCT SLAB ON GRADE WITH OVERALL SPECIFIED FF30/FL20 IN ACCORDANCE WITH ACI 302.1. DETERMINATION OF FF/FL NUMBERS WILL BE IN ACCORDANCE WITH ASTM E 1155. THE CONTRACTOR WILL TAKE REMEDIAL MEASURES WHEN FLOOR SLABS DO NOT MEET SPECIFIED REQUIREMENTS.

WHERE COMPACTED FILL IS REQUIRED, WELL GRADED GRANULAR MATERIAL SHALL BE PLACED IN LIFTS NOT EXCEEDING 12 INCHES AND COMPACTED TO 95% OF ITS MAXIMUM DRY DENSITY AS PER ASTM D-1557.

VERIFICATION OF BEARING CAPACITY AND INSPECTION OF COMPACTED FILL SHALL BE COMPLETED BY A QUALIFIED PROFESSIONAL ENGINEER LICENSED IN THE STATE OF NEW YORK.

ANY UNEXPECTED SUBGRADE CONDITIONS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE STRUCTURAL ENGINEER AND GEOTECHNICAL ENGINEER.

CONCRETE

ALL CONCRETE MATERIALS AND CONSTRUCTION PROCEDURES SHALL BE IN ACCORDANCE WITH ACI 318. EVALUATION AND ACCEPTANCE OF CONCRETE STRUCTURES SHALL BE IN ACCORDANCE WITH ACI 301.

SPECIFIED COMPRESSIVE STRENGTH F'C AT 28 DAYS:

- FOUNDATIONS AND FOOTINGS: 4000 PSI.
- FLOOR SLABS ON GRADE: 3000 PSI
- CONCRETE FILL ON METAL DECK: 3000 PSI.

SUBMIT PROPOSED MIX DESIGNS AND TEST DATA BEFORE CONCRETE OPERATIONS BEGIN. ESTABLISH THE REQUIRED AVERAGE STRENGTH OF EACH DESIGN MIX ON THE BASIS OF EITHER FIELD EXPERIENCE OR TRIAL MIXTURES AS SPECIFIED IN ACI 301, AND PROPORTION MIXES PER THE RECOMMENDATIONS OF ACI 211.1. EACH MIX SHALL BE IDENTIFIED AS IT WILL APPEAR ON BATCH TICKETS DELIVERED TO PROJECT SITE.

CONCRETE MIX DESIGN SHALL PROVIDE FOR A CONCRETE SLUMP APPROPRIATE FOR PROJECT CONDITIONS. THE CONCRETE SHALL BE SUFFICIENTLY FLUID TO ALLOW FOR EASE OF PLACEMENT AND SUFFICIENTLY STIFF TO PREVENT SEGREGATION.

AGGREGATE SHALL CONFORM TO ASTM C33.

WATER-TO-CEMENT RATIO SHALL NOT EXCEED 0.45 BY WEIGHT. WEIGHT OF WATER SHALL INCLUDE ALL FREE MOISTURE, INCLUDING LIQUID ADMIXTURES.

AIR-ENTRAINING ADMIXTURE SHALL BE ADDED TO ACHIEVE TOTAL AIR CONTENT OF 6 PERCENT FOR EXTERIOR EXPOSED CONCRETE AND 3 PERCENT FOR CONCRETE NOT EXPOSED TO EXTERIOR WITH A TOLERANCE OF 1 PERCENT.

PROVIDE WATER-REDUCING ADMIXTURES CONFORMING TO ASTM C494 AS REQUIRED FOR PLACEMENT AND WORKABILITY AT THE MAXIMUM WATER TO CEMENT RATIO SPECIFIED.

INDICATE TYPE AND QUANTITY OF ADMIXTURES PROPOSED OR REQUIRED. ADMIXTURES CONTAINING MORE THAN 0.1 PERCENT CHLORIDE IONS ARE NOT PERMITTED. WHERE MIX CONTAINS MORE THAN ONE ADMIXTURE, ALL ADMIXTURES SHALL BE SUPPLIED BY ONE MANUFACTURER. MANUFACTURER SHALL CERTIFY THAT ADMIXTURES ARE COMPATIBLE SUCH THAT DESIRABLE EFFECTS OF EACH ADMIXTURE WILL BE REALIZED. LIQUID ADMIXTURES SHALL BE CONSIDERED PART OF THE TOTAL WATER.

WATER SHALL BE CLEAN, POTABLE AND FREE FROM DELETERIOUS MATERIAL.

PROVIDE DATA FOR PROPRIETARY MATERIALS, INCLUDING ADMIXTURES, CURING MATERIALS, AND FINISH MATERIALS.

SUBMIT MATERIAL CERTIFICATIONS FOR CEMENTITIOUS MATERIALS, AGGREGATES AND ADMIXTURES.

PROVIDE DEFORMED REINFORCING BARS COMPLYING WITH ASTM A615, GRADE 60, EXCEPT WHERE OTHERWISE INDICATED. ALL DETAILING OF REINFORCING SHALL BE IN ACCORDANCE WITH ACI STANDARD 315.

WELDED WIRE FABRIC SHALL BE ASTM A1064, COLD-DRAWN STEEL, PLAIN.

SUBMIT BAR PLACEMENT SHOP DRAWINGS SHOWING THE LOCATION OF REINFORCING AND CONSTRUCTION JOINTS. DELIVER REINFORCEMENT TO PROJECT SITE BUNDLED AND TAGGED INDICATING BAR SIZES, LENGTHS, AND OTHER DATA CORRESPONDING TO INFORMATION SHOWN ON PLACEMENT DRAWINGS.

PLACE REINFORCEMENT TO ACHIEVE NOT LESS THAN MINIMUM CONCRETE COVERAGE AS REQUIRED FOR PROTECTION. ACCURATELY POSITION, SUPPORT, AND SECURE REINFORCEMENT TO PREVENT DISPLACEMENT.

CONCRETE PROTECTION FOR REINFORCING STEEL SHALL BE AS FOLLOWS:

- ELEVATED SLABS: 3/4"
- BEAMS AND COLUMNS (PEDESTALS): 1 1/2"
- INSIDE FACE OF WALLS: 1"
- CONCRETE POURED ON GROUND: 3"
- EXTERIOR FACE OF WALLS (AGAINST EARTH): 2"

FIBROUS REINFORCEMENT FOR SLABS SHALL BE FIBRILLATED POLYPROPYLENE FIBERS ENGINEERED AND DESIGNED FOR USE IN CONCRETE COMPLYING WITH ASTM C 1116 TYPE III, 1/2" TO 1 1/2", UNIFORMLY DISPERSE FIBERS IN THE CONCRETE MIX AT THE MANUFACTURER'S RECOMMENDED RATE BUT NOT LESS THAN 1.5 POUNDS PER CUBIC YARD.

PROVIDE CLASS B TENSION LAP SPLICES COMPLYING WITH ACI 318 UNLESS OTHERWISE INDICATED.

SURVEY ANCHOR BOLTS FOR PLACEMENT AND ALIGNMENT PRIOR TO CASTING CONCRETE.

INSTALLATION TOLERANCES FOR ANCHOR BOLTS FOR STRUCTURAL STEEL COLUMNS SHALL COMPLY WITH THE AISC CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES.

GROUT SHALL CONFORM TO ASTM C1107, GRADE B NON-SHRINK, NON-METALLIC, PREPACKAGED GROUT WITH A COMPRESSIVE STRENGTH OF 5000 PSI AT 28 DAYS.

THE CONTRACTOR IS RESPONSIBLE FOR DESIGN, ENGINEERING, AND CONSTRUCTION OF FORMWORK, CAPABLE OF SUPPORTING ALL APPLIED LOADS UNTIL THE CONCRETE IS ADEQUATELY CURED, WITHIN ALLOWABLE TOLERANCES AND DEFLECTION LIMITS.

LOCATE AND INSTALL CONSTRUCTION JOINTS AS INDICATED ON DRAWINGS. IF CONSTRUCTION JOINTS ARE NOT INDICATED, LOCATE IN A MANNER WHICH WILL NOT IMPAIR STRENGTH AND WILL HAVE LEAST IMPACT ON APPEARANCE.

PROVIDE WATERSTOPS AS OTHERWISE INDICATED, SIZED AND CONFIGURED TO SUIT JOINTS. INSTALL TO FORM CONTINUOUS, WATERTIGHT DAM, WITH FIELD JOINTS FABRICATED IN STRICT ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.

CONSTRUCT EXPANSION JOINTS WHERE INDICATED. EXPANSION JOINT FILLER SHALL BE NONEXTRUDING BITUMINOUS TYPE PER ASTM D1751 INSTALL TO FULL DEPTH OF CONCRETE RECESSED TO ACCOMMODATE JOINT SEALANT AND BACKER ROD WHERE NECESSARY.

PREPARE PREVIOUSLY PLACED CONCRETE BY CLEANING AND APPLYING BONDING AGENT IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTION.

IN LOCATIONS WHERE NEW CONCRETE IS DOWELED TO EXISTING WORK, DRILL HOLES IN EXISTING CONCRETE, INSERT STEEL DOWELS AND PACK SOLID WITH EPOXY GROUT.

FOUNDATION SURFACES AGAINST WHICH CONCRETE IS TO BE PLACED MUST BE FREE FROM STANDING WATER, MUD AND DEBRIS. SURFACES SHALL BE CLEAN AND FREE FROM OIL, OBJECTIONABLE COATINGS, AND LOOSE OR UNSOUND MATERIAL.

ALL EXPOSED EDGES OF CONCRETE SHALL HAVE A 3/4" X 3/4" CHAMFER, UNLESS SPECIFICALLY INDICATED OTHERWISE ON THE DRAWINGS.

CONSOLIDATE CONCRETE BY MEANS OF MECHANICAL VIBRATORS TO ACHIEVE CONSISTENT CONSOLIDATION WITHOUT SEGREGATION OF COARSE AGGREGATES.

REPAIR SURFACE DEFECTS, INCLUDING TIE HOLES, IMMEDIATELY AFTER REMOVING FORMWORK.

PROTECT CONCRETE FROM SUN AND RAIN. DO NOT PERMIT CONCRETE TO BECOME DRY DURING CURING PERIOD. CONCRETE SHALL NOT BE SUBJECTED TO ANY LOADS UNTIL CONCRETE IS COMPLETELY CURED, AND UNTIL CONCRETE HAS ATTAINED ITS 28 DAY STRENGTH AND 14 DAYS MINIMUM.

UPON COMPLETION OF FINISHING OPERATION, THE SURFACE OF SLABS SHALL BE SEALED AGAINST MOISTURE LOSS FOR 7 DAYS BY THE APPLICATION OF A CURING MEMBRANE OR BLANKET.

CONCRETE IN FORMS SHALL BE KEPT MOIST UNTIL REMOVAL. IMMEDIATELY UPON REMOVAL OF FORMS, AN APPROVED SPRAYED-ON CURING COMPOUND SHALL BE APPLIED TO THE CONCRETE SURFACES IN STRICT COMPLIANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. CURING SHALL BE MAINTAINED FOR 7 DAYS.

FORMED SURFACES SHALL COMPLY WITH MINIMUM TOLERANCES ESTABLISHED IN ACI 117, UNLESS MORE STRINGENT REQUIREMENTS ARE INDICATED ON THE DRAWINGS.

FINISH EXPOSED CONCRETE TO OFFER SMOOTH, STAIN-FREE FINAL APPEARANCE AND MINIMUM NUMBER OF JOINTS. PROVIDE FORMING MATERIALS WITH SUFFICIENT STRENGTH TO RESIST HYDROSTATIC HEAD WITHOUT BOW OR DEFLECTION IN EXCESS OF ALLOWABLE TOLERANCES.

PROVIDE CONCRETE FILL FOR STEEL PAN STAIR TREADS, LANDINGS, AND ASSOCIATED ITEMS. SCREED, TAMP, AND FINISH CONCRETE SURFACES AS SCHEDULED.

COMPLY FULLY WITH RECOMMENDATIONS OF ACI 306 WHEN AIR TEMPERATURES ARE EXPECTED TO DROP BELOW 40°F EITHER DURING CONCRETE PLACEMENT OPERATIONS OR BEFORE CONCRETE HAS CURED. PROTECTIVE MEASURES INCLUDE BUT ARE NOT LIMITED TO HEATING OF MATERIALS, HEATED ENCLOSURES, AND INSULATING BLANKETS.

COMPLY FULLY WITH RECOMMENDATIONS OF ACI 305 WHEN AMBIENT TEMPERATURE BEFORE, DURING, OR AFTER CONCRETE PLACEMENT IS EXPECTED TO EXCEED 90°F OR WHEN COMBINATIONS OF HIGH AIR TEMPERATURE, LOW RELATIVE HUMIDITY, AND WIND SPEED ARE SUCH THAT THE RATE OF EVAPORATION FROM FRESHLY POURED CONCRETE WOULD OTHERWISE EXCEED 0.2 POUNDS PER SQUARE FOOT PER HOUR. PROTECTIVE MEASURES INCLUDE BUT ARE NOT LIMITED TO COOLING OF MATERIALS BEFORE OR DURING MIXING, PLACEMENT DURING EVENING TO DAWN HOURS, FOGGING DURING FINISHING AND CURING, SHADING, AND WINDBREAKS

SAMPLE CONCRETE AND MAKE SPECIMENS FOR TESTING PER ASTM C172 AND ASTM C31. TAKE SAMPLES AT POINT OF DISCHARGE AND REPORT RESULTS OF ALL TESTS.

TEST SLUMP OF THE FIRST 2 LOADS OF CONCRETE DELIVERED FOR EACH POUR AND ONCE PER STRENGTH TEST PERFORMED PER ASTM C143 WITH ADDITIONAL TESTS IF CONCRETE CONSISTENCY CHANGES.

TEST AIR CONTENT OF THE FIRST 2 LOADS OF CONCRETE DELIVERED FOR EACH POUR AND ONCE FOR EACH STRENGTH TEST PERFORMED PER ASTM C173 OR ASTM C231.

TEST CONCRETE TEMPERATURE FOR EACH STRENGTH TEST PERFORMED AND HOURLY WHEN AIR TEMPERATURE IS BELOW 40°F OR ABOVE 90°F.

PROVIDE ONE COMPRESSIVE STRENGTH TEST PER ASTM C39 FOR EVERY 50 CUBIC YARDS OR FRACTION THEREOF FOR EACH DAY'S POUR OF EACH CONCRETE CLASS.

MOLD AND CURE ONE SET OF 4 STANDARD CYLINDERS FOR EACH COMPRESSIVE STRENGTH TEST REQUIRED. TEST ONE SPECIMEN PER SET AT 7 DAYS FOR INFORMATION AND TEST 2 SPECIMENS PER SET FOR ACCEPTANCE OF STRENGTH POTENTIAL AT 28 DAYS. RETAIN ONE SPECIMEN FROM EACH SET FOR LATER TESTING, IF REQUIRED.

EVALUATE CONSTRUCTION AND CURING PROCEDURES AND IMPLEMENT CORRECTIVE ACTION WHEN STRENGTH RESULTS FOR FIELD-CURED SPECIMENS ARE LESS THAN 85 PERCENT OF TEST VALUES FOR COMPANION LABORATORY-CURED SPECIMENS.

COST OF ADDITIONAL TESTING SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR WHEN UNACCEPTABLE CONCRETE HAS BEEN VERIFIED.

MASONRY

ALL MASONRY CONSTRUCTION, REINFORCED AND UNREINFORCED, SHALL COMPLY WITH THE REQUIREMENTS OF THE "BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES," ACI 530 AND THE "SPECIFICATION FOR MASONRY STRUCTURES," ACI 530.1.

PROVIDE MATERIALS TO ACHIEVE THE NET COMPRESSIVE STRENGTH OF CONCRETE UNIT MASONRY EQUAL TO OR GREATER THAN 2000 PSI F'M

MATERIAL SPECIFICATIONS:

- CONCRETE MASONRY UNITS: ASTM C-90, MEDIUM WEIGHT, TYPE 1
- REINFORCING BARS: ASTM A615, GRADE 60.
- SHEET-METAL ANCHORS AND TIES: ASTM A1008
- WIRE TIES AND ANCHORS: ASTM A82
- JOINT REINFORCEMENT: ASTM A951
  - SIDE ROD DIAMETER: 0.1875 INCH
  - CROSS ROD DIAMETER: 0.1483 INCH
- MORTAR: ASTM C270, TYPE M OR S
- GROUT: ASTM C476, 2500 PSI @ 28 DAYS.
  - MINIMUM SLUMP: 8 INCHES.

PROVIDE MORTAR FOR UNIT MASONRY PER ASTM C 270 PROPORTION SPECIFICATION. PROVIDE TYPE M MORTAR FOR MASONRY BELOW GRADE AND TYPE S MORTAR FOR MASONRY ABOVE GRADE.

PROVIDE GROUT CONSISTENCY REQUIRED AT TIME OF PLACEMENT TO FILL COMPLETELY ALL SPACES INDICATED TO BE GROUTED. GROUT SHALL BE EITHER FINE OR COARSE DEPENDING ON SPACE TO BE GROUTED. MINIMUM GROUT STRENGTH SHALL BE 2500 PSI AT 28 DAYS AS MEASURED BY ASTM C1019.

SUBMIT PUBLISHED DATA FROM MANUFACTURERS OF PRODUCTS AND ACCESSORIES SPECIFIED, INDICATING COMPLIANCE WITH REQUIREMENTS.

PROVIDE MIX DESIGN AND TEST REPORTS FOR PRE-BLENDED MORTAR AND CONVENTIONAL GROUT INDICATING TYPES AND PROPORTIONS OF MATERIALS.

PROVIDE STANDARD UNITS WITH NOMINAL FACE DIMENSIONS OF 16 INCHES LONG AND 8 INCHES HIGH (15-5/8 BY 7-5/8 ACTUAL), WITH NOMINAL THICKNESSES AS INDICATED ON DRAWINGS.

PROVIDE SPECIAL BLOCK TYPES WHERE REQUIRED FOR CORNERS, CONTROL JOINTS, HEADERS, LINTELS, AND OTHER SPECIAL CONDITIONS, WHETHER OR NOT SPECIFICALLY INDICATED ON THE DRAWINGS.

ALL MASONRY WALLS SHALL BE CONSTRUCTED WITH TRUSS TYPE HORIZONTAL JOINT REINFORCEMENT AT 16 INCHES ON CENTER. PROVIDE WELDED WIRE UNITS PREFABRICATED INTO STRAIGHT LENGTHS OF NOT LESS THAN 10 FEET, WITH DEFORMED CONTINUOUS SIDE RODS AND PLAIN CROSS RODS. SIZE REINFORCEMENT APPROXIMATELY TWO INCHES LESS THAN NOMINAL WALL WIDTH, PROVIDING NOT LESS THAN 5/8 INCH MORTAR COVERAGE ON EXTERIOR EXPOSURES AND 1/2 INCH ELSEWHERE.

REINFORCEMENT SHALL BE PLACED ACCURATELY AND SECURED AT INTERVALS NOT TO EXCEED 72 INCHES. MINIMUM SPACING BETWEEN BARS OR MASONRY SURFACES SHALL BE ONE BAR DIAMETER. LAPPED SPLICES SHALL BE A MINIMUM OF 48 BAR DIAMETERS. PROVIDE LAP-JOINT TIE FOR EACH SPLICE.

PROTECT CARBON STEEL JOINT REINFORCEMENT, TIES, AND ANCHORS FROM CORROSION BY GALVANIZING, UNLESS OTHERWISE REQUIRED.

DELIVER, HANDLE, AND STORE MASONRY UNITS, MATERIALS, AND ACCESSORIES BY MEANS WHICH WILL PREVENT MECHANICAL DAMAGE AND DETERIORATION DUE TO MOISTURE, TEMPERATURE AND CONTAMINATION.

PRIOR TO LAYING MASONRY, REMOVE LAITANCE, LOOSE AGGREGATE, AND ANY OTHER MATERIAL THAT WOULD PREVENT MORTAR FROM BONDING TO FOUNDATION.

ALL MASONRY SHALL BE LAID TRUE, LEVEL, PLUMB, AND IN ACCORDANCE WITH THE DRAWINGS. ENSURE ALL VERTICAL CELLS TO BE GROUTED ARE ALIGNED AND UNOBSTRUCTED.

PLACE MASONRY UNITS ON FULL MORTAR BED IN ALL COURSES OF BEARING WALLS, PIERS, FOUNDATION WALLS, COLUMNS, AND PILASTERS.

VERTICAL REINFORCING SHALL EXTEND THROUGH BOND BEAMS WHERE SHOWN. CUT BOTTOM OF MASONRY UNIT TO ACCOMMODATE VERTICAL BAR. GROUT CAVITIES BELOW BOND BEAM PRIOR TO INSTALLATION OF BOND BEAM COURSE.

ALL HEAD AND BED JOINTS SHALL BE A NOMINAL 3/8 IN. THICK, UNLESS OTHERWISE REQUIRED.

MASONRY SHALL BE LAID IN RUNNING BOND UNLESS OTHERWISE INDICATED IN THE DRAWINGS.

BRACE MASONRY DURING CONSTRUCTION TO ASSURE STABILITY. DESIGN, PROVIDE, AND INSTALL BRACING AS REQUIRED.

ALL MORTAR JOINTS ON EXPOSED WALLS SHALL BE STRUCK TO PRODUCE A DENSE, SLIGHTLY CONCAVE SURFACE WELL BONDED TO THE SURFACE OF THE MASONRY UNIT.

UNLESS OTHER CONDITIONS ARE SPECIFICALLY DETAILED, GROUT CAVITIES SOLID FOR AT LEAST 24 INCHES BELOW BEARING PLATES, LINTELS, AND SIMILAR FEATURES AND CONDITIONS.

PROVIDE MASONRY WALL CONTROL JOINTS AT A MAXIMUM SPACING OF 25 FEET ON CENTER AND AT EACH CORNER OR CHANGE IN WALL HEIGHT. CONSTRUCT CONTROL JOINTS WITH PREFORMED CONTROL JOINT GASKETS AS DETAILED IN THE DRAWINGS AS MASONRY PROGRESSES.

PROVIDE ANCHORAGE TO ADJACENT STRUCTURAL STEEL FRAMING AT EACH FLOOR LEVEL AND ALONG EACH COLUMN. PROVIDE HOHMANN & BARNARD #359 AND VBT WALL TIES AT A MAXIMUM OF 24 INCHES ON CENTER HORIZONTALLY AND VERTICALLY.

PROVIDE ONE VERTICAL REINFORCING BAR WITHIN 16 INCHES OF EACH SIDE OF EVERY CORNER AND AT EACH SIDE OF ALL WALL OPENINGS.

CAVITIES CONTAINING REINFORCING OR BELOW BEARING PLATES SHALL BE GROUTED BY MEANS OF LOW-LIFT TECHNIQUES. HIGH-LIFT GROUTING MAY BE USED ONLY WITH PRIOR APPROVAL. FOLLOW ACI SPECIFICATIONS FOR MASONRY GROUTING.

COVER TOPS OF INCOMPLETE MASONRY ELEMENTS WITH WATERPROOF SHEET MATERIAL AT END OF EACH WORK DAY AND WHEN MASONRY WORK IS NOT UNDER WAY.

IMPLEMENT COLD WEATHER CONSTRUCTION PROCEDURES IN ACCORDANCE WITH ACI 530.1 WHEN AMBIENT TEMPERATURE FALLS BELOW 40°F OR THE TEMPERATURE OF MASONRY UNITS IS BELOW 40°F. WET OR FROZEN UNITS SHALL NOT BE LAID.

IMPLEMENT HOT WEATHER CONSTRUCTION PROCEDURES IN ACCORDANCE WITH ACI 530.1 WHEN AMBIENT TEMPERATURE EXCEEDS 100°F, OR EXCEEDS 90°F WITH A WIND VELOCITY GREATER THAN 8 MPH.

INSTALL FLASHING AT ALL CONDITIONS SUCH AS LINTELS AND SHELF ANGLES, WHERE THE DOWNWARD FLOW OF WATER WITHIN THE MASONRY WILL BE INTERRUPTED.

DO NOT APPLY UNIFORM FLOOR OR ROOF LOADS FOR AT LEAST 12 HOURS, OR CONCENTRATED LOADS FOR AT LEAST 3 DAYS, AFTER COMPLETION OF MASONRY ELEMENTS.

AFTER MORTAR IS THOROUGHLY SET AND CURED, CLEAN EXPOSED MASONRY SURFACES OF STAINS, EFFLORESCENCE, MORTAR OR GROUT DROPPINGS, AND DEBRIS.

AT COMPLETION OF MASONRY WORK, REMOVE ALL SCAFFOLDING AND EQUIPMENT USED DURING CONSTRUCTION, AND REMOVE ALL DEBRIS, REFUSE, AND SURPLUS MASONRY MATERIAL FROM THE SITE.

SPRAYED-ON WATER REPELLENT SHALL BE APPLIED AFTER MASONRY UNITS ARE CLEANED AND THOROUGHLY DRY IN STRICT ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.

THE OWNER WILL ENGAGE A QUALIFIED INDEPENDENT TESTING AND INSPECTING AGENCY TO PERFORM FIELD TESTS AND INSPECTIONS AND PREPARE TEST REPORTS.

THE CONTRACTOR WILL REPLACE WORK THAT DOES NOT COMPLY WITH SPECIFIED REQUIREMENTS AND BE RESPONSIBLE FOR ADDITIONAL INSPECTING TO DETERMINE COMPLIANCE OF CORRECTED WORK WITH SPECIFIED REQUIREMENTS.

BRICK VENEER

ALL BRICK VENEER CONSTRUCTION SHALL COMPLY WITH THE REQUIREMENTS OF ACI 530, "BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES," AND THE BRICK INSTITUTE OF AMERICA, "TECHNICAL NOTES ON BRICK CONSTRUCTION".

PROVIDE MORTAR FOR BRICK VENEER PER ASTM C 270 PROPORTION SPECIFICATION. PROVIDE TYPE S MORTAR FOR VENEER BELOW GRADE AND TYPE N MORTAR FOR VENEER ABOVE GRADE.

BRICK VENEER WITH A MAXIMUM UNIT WEIGHT OF 40 POUNDS PER SQUARE FOOT SHALL BE ANCHORED BY GALVANIZED WALL TIES WITH A MINIMUM CLEAR SPACE OF 1 INCH BETWEEN INSIDE FACE VENEER AND OUTSIDE FACE OF SHEATHING OR INSULATION.

BRICK VENEER INSTALLED OVER SOLID SURFACE SHALL BE ANCHORED WITH HOHMANN & BARNARD DW-10HS VENEER ANCHORS OR APPROVED EQUAL. BRICK VENEER INSTALLED OVER RIGID INSULATION SHALL BE ANCHORED WITH HOHMANN & BARNARD X-SEAL VENEER ANCHORS OR APPROVED EQUAL.

EMBED ALL BRICK TIES A MINIMUM OF 1 1/2 INCHES INTO MORTAR JOINTS WITH AT LEAST 5/8 INCH COVER TO OUTSIDE FACE.

SPACE ANCHORS TO PROVIDE AT LEAST ONE ANCHOR FOR 2.67 SQUARE FEET OF WALL AREA WITH A MAXIMUM TIE SPACING NOT TO EXCEED 16 INCHES HORIZONTAL OR 24" VERTICAL.

PROVIDE GALVANIZED STEEL LOOSE LINTEL AT ALL OPENINGS THROUGH BRICK VENEER.

STRUCTURAL STEEL

ALL STEEL SHALL BE DETAILED, FABRICATED AND ERECTED IN ACCORDANCE WITH THE REQUIREMENTS OF AISC "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS," LATEST EDITION.

ALL WELDERS SHALL BE QUALIFIED IN ACCORDANCE WITH AWS D1.1 "STRUCTURAL WELDING CODE - STEEL" FOR EACH PROCESS, POSITION AND JOINT CONFIGURATION.

STRUCTURAL STEEL WIDE FLANGE MEMBERS SHALL CONFORM WITH ASTM A992.

STEEL PLATE, BARS AND CHANNELS SHALL CONFORM WITH ASTM A36 UNLESS OTHERWISE NOTED.

STRUCTURAL STEEL TUBING SHALL CONFORM WITH ASTM A500, GRADE B

STRUCTURAL STEEL PIPE SHALL CONFORM WITH ASTM A53, GRADE B.

BOLTS FOR STRUCTURAL STEEL CONNECTIONS SHALL BE MINIMUM 3/4" DIAMETER ASTM A325-N UNLESS DESIGNATED AS A490 ON THE DRAWINGS. NUTS SHALL BE ASTM A563 GRADE C OR DH. TENSION CONTROL BOLTS SHALL BE ASTM F1852 OR ASTM F2280.

WASHERS SHALL BE FLAT CONFORMING TO ASTM F436 TYPE 1. THE FINISH OF WASHERS IS TO MATCH THE NUT. A325 BOLTS SHALL HAVE WASHERS UNDER THE HEAD AND A490 BOLTS SHALL HAVE HARDENED WASHERS UNDER THE HEAD AND THE NUT.

ANCHOR BOLTS SHALL BE ASTM F1554 36 KSI YIELD STRENGTH, UNLESS OTHERWISE NOTED.

SHEAR STUD CONNECTORS CONFORMING TO ASTM A108 ARE TO BE FIELD INSTALLED. AFTER WELDING, STUDS ARE TO BE THE LENGTH SHOWN ON THE DRAWINGS. SHOP WELDING OF STUDS IS NOT PERMITTED.

ALL WELDS SHALL UTILIZE E70XX ELECTRODES AND SHALL BE A MINIMUM OF 3/16 INCH IN SIZE UNLESS NOTED OTHERWISE.

CONNECTIONS SHALL BE BOLTED OR WELDED WITH A MINIMUM OF TWO BOLTS OR EQUIVALENT WELD.

UNLESS CONNECTIONS ARE DETAILED ON THE DRAWINGS, THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN OF CONNECTIONS. CONNECTION DESIGN SHALL BE UNDER THE DIRECT SUPERVISION OF AN ENGINEER EXPERIENCED IN CONNECTION DESIGN.

BEAM CONNECTIONS SHALL BE IN ACCORDANCE WITH THE AISC MANUAL OF STEEL CONSTRUCTION. STANDARD WEB CONNECTIONS SHALL BE PROVIDED WHERE POSSIBLE.

NON-COMPOSITE BEAM CONNECTIONS ARE TO BE DESIGNED TO RESIST ONE HALF THE ALLOWABLE LOAD FOR THE APPROPRIATE SPAN GIVEN IN THE MAXIMUM TOTAL UNIFORM LOAD TABLE OF THE AISC MANUAL OF STEEL CONSTRUCTION.

COMPOSITE BEAM CONNECTIONS ARE TO BE DESIGNED TO RESIST THREE QUARTERS OF THE ALLOWABLE LOAD FOR THE APPROPRIATE SPAN GIVEN IN THE MAXIMUM TOTAL UNIFORM LOAD TABLE OF THE AISC MANUAL OF STEEL CONSTRUCTION.

THE CONTRACTOR IS RESPONSIBLE FOR THE ADEQUACY OF ANY CONNECTIONS DESIGNED BY THE CONTRACTOR. APPROVAL OF SHOP DRAWINGS DOES NOT RELIEVE THE CONTRACTOR OF THIS RESPONSIBILITY

SHOP DRAWINGS FOR STRUCTURAL STEEL SHALL BE SUBMITTED FOR REVIEW PRIOR

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Job No.: 19128 Dwg. 10 of 13

EDWARD P. WILKOWSKI, P.E.
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NYSED PROJECT # 66-07-01-03-0-005-020

Date	1/10/20
Checked	EW
Drawn	WR

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Title REGISTERED ARCHITECT License No. 022257-1

Revisions:
ISSUE TO BID 11/23/20

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GENERAL NOTES

2019 BOND REFERENDUM
CHATSWORTH AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

Job No. 4.1092.72.03
File No. 19128S6.01

S6.01

STRUCTURAL STEEL (CONT'D)

TO FABRICATION OR ORDERING OF STEEL.

SHOP DRAWINGS SHALL INCLUDE ERECTION PLANS AND PIECE DETAILS INDICATING SIZE, SPACING, LOCATION AND ATTACHMENT OF STRUCTURAL MEMBERS INCLUDING SIZE AND SPACING OF BOLTS AND WELDS. SUBMITTAL MUST ALSO INCLUDE A THREE DIMENSIONAL RENDERING OF THE STEEL FRAMING.

THE CONTRACTOR SHALL SURVEY, REVIEW AND CONFIRM EXISTING CONDITIONS PRIOR TO DEVELOPING SHOP DRAWINGS.

NO PORTION OF THE CONTRACT DRAWINGS SHALL BE REPRODUCED FOR USE AS SHOP DRAWINGS.

SHOP PRIME ALL STRUCTURAL STEEL MEMBERS WITH FAST-CURING, LEAD AND CHROMATE-FREE, VOC-COMPLIANT, UNIVERSAL MODIFIED-ALKYD PRIMER WITH GOOD RESISTANCE TO NORMAL ATMOSPHERIC CORROSION, COMPLYING WITH PERFORMANCE REQUIREMENTS OF FS TT-P-664, OR EQUIVALENT.

DO NOT PRIME SURFACES THAT WILL BE FIREPROOFED, IN CONTACT WITH CONCRETE, WITHIN 3 INCHES OF FIELD WELDS, OR ON THE FAYING SURFACE OF HIGH STRENGTH BOLTED FRICTION CONNECTIONS.

GALVANIZE STRUCTURAL STEEL MEMBERS AS INDICATED ON THE DRAWINGS IN ACCORDANCE WITH ASTM A123 AND A385 AFTER FABRICATION. PREPARE GALVANIZED SURFACES TO BE PAINTED IN ACCORDANCE WITH ASTM D2092 AND SHOP COAT WITH A COMPATIBLE PRIMER. REPAIR DAMAGED GALVANIZING IN ACCORDANCE WITH ASTM A780.

FURNISH AND INSTALL TEMPORARY SUPPORTS AND INTERNAL BRACES NECESSARY TO SUPPORT STRUCTURAL STEEL DURING ERECTION. TEMPORARY SUPPORTS AND BRACES SHALL BE ADEQUATE FOR ANTICIPATED WIND, SEISMIC, EQUIPMENT AND ERECTION LOADS. REMOVE TEMPORARY SHORING AFTER THE STEEL ERECTION IS COMPLETE.

THE OWNER WILL ENGAGE A QUALIFIED INDEPENDENT TESTING AND INSPECTING AGENCY TO PERFORM FIELD TESTS AND INSPECTIONS AND PREPARE TEST REPORTS.

FIELD WELDING AND HIGH STRENGTH BOLTS WILL BE SUBJECT TO INSPECTION.

THE CONTRACTOR WILL REMOVE AND REPLACE WORK THAT DOES NOT COMPLY WITH SPECIFIED REQUIREMENTS AND BE RESPONSIBLE FOR THE COST OF ADDITIONAL INSPECTING TO DETERMINE COMPLIANCE OF CORRECTED WORK WITH SPECIFIED REQUIREMENTS.

STEEL JOISTS

OPEN WEB AND LONG SPAN STEEL JOISTS, JOIST GIRDERS, AND ACCESSORIES SHALL BE DESIGNED, MANUFACTURED AND ERECTED IN ACCORDANCE WITH THE REQUIREMENTS OF THE STEEL JOIST INSTITUTE "STANDARD SPECIFICATION FOR OPEN WEB STEEL JOISTS AND JOIST GIRDERS," LATEST EDITION.

WELDING SHALL COMPLY WITH APPLICABLE PROVISIONS OF AWS D1.1 "STRUCTURAL WELDING CODE - STEEL" AND AWS D1.3 "STRUCTURAL WELDING CODE - SHEET STEEL."

ROOF JOISTS SHALL BE DESIGNED TO WITHSTAND A 5 POUND PER SQUARE FOOT NET UPLIFT FORCE DUE TO WIND LOAD, UNLESS NOTED OTHERWISE ON PLANS.

DESIGN JOISTS TO WITHSTAND DESIGN LOADS WITHOUT VERTICAL DEFLECTIONS GREATER THAN THE FOLLOWING:

FLOOR JOISTS: 1/360 OF THE SPAN.
ROOF JOISTS: 1/240 OF THE SPAN.

SUBMIT PRODUCT DATA FOR EACH TYPE OF JOIST, ACCESSORY, AND PRODUCT SPECIFIED.

PROVIDE SHOP DRAWINGS SHOWING LAYOUT, MARK, NUMBER, TYPE, LOCATION, AND SPACING OF JOISTS. INCLUDE JOINING AND ANCHORAGE DETAILS, BRACING, BRIDGING, ACCESSORIES, SPLICE AND CONNECTION DETAILS, AND ATTACHMENTS TO OTHER UNITS OF WORK.

INDICATE LOCATIONS AND DETAILS OF ANCHORAGE DEVICES AND BEARING PLATES TO BE EMBEDDED IN OTHER CONSTRUCTION.

FOR JOISTS REQUIRED TO COMPLY WITH CERTAIN DESIGN LOADINGS, INCLUDE STRUCTURAL ANALYSIS DATA SIGNED AND SEALED BY THE QUALIFIED PROFESSIONAL ENGINEER RESPONSIBLE FOR THEIR PREPARATION.

EQUIP BEARING ENDS OF JOISTS WITH MANUFACTURER'S STANDARD BEVELED ENDS OR SLOPED SHOES WHEN JOIST SLOPE EXCEEDS 1/4 INCH IN 12 INCHES.

PROVIDE HORIZONTAL OR DIAGONAL BRIDGING OF MATERIAL, SIZE, TYPE, AND QUANTITY REQUIRED BY SJI FOR TYPE OF JOIST, CHORD SIZE, SPACING, AND SPAN.

SUPPLY CEILING EXTENSIONS, EITHER EXTENDED BOTTOM CHORD ELEMENTS OR A SEPARATE EXTENSION UNIT OF SUFFICIENT STRENGTH TO SUPPORT CEILING CONSTRUCTION. EXTEND ENDS TO WITHIN 1/2 INCH OF FINISHED WALL SURFACE, UNLESS OTHERWISE INDICATED.

DELAY RIGIDLY CONNECTING BOTTOM CHORD EXTENSIONS TO COLUMNS OR SUPPORTS UNTIL DEAD LOADS HAVE BEEN APPLIED.

INSTALL AND CONNECT BRIDGING CONCURRENTLY WITH JOIST ERECTION, BEFORE CONSTRUCTION LOADS ARE APPLIED. ANCHOR ENDS OF BRIDGING LINES AT TOP AND BOTTOM CHORDS WHERE TERMINATING AT WALLS OR BEAMS.

ATTACHMENT TO JOISTS FOR SUPPORT OF MECHANICAL COMPONENTS OR ARCHITECTURAL FINISHES SHALL BE MADE TO THE TOP CHORD AT A PANEL POINT LOCATION. LOADS IN EXCESS OF 50 POUNDS MUST BE LOCATED AND SUBMITTED TO THE JOIST MANUFACTURER. ATTACHMENT TO JOISTS NOT LOCATED AT A PANEL POINT SHALL BE REINFORCED WITH A WEB STIFFENER.

SHOP PRIME ALL JOISTS WITH FAST-CURING, LEAD AND CHROMATE-FREE, VOC-COMPLIANT, UNIVERSAL MODIFIED-ALKYD PRIMER WITH GOOD RESISTANCE TO NORMAL ATMOSPHERIC CORROSION, COMPLYING WITH PERFORMANCE REQUIREMENTS OF FS TT-P-664, OR EQUIVALENT. DO NOT PRIME JOISTS TO RECEIVE FIREPROOFING.

INSTALL TEMPORARY BRACING AND BRIDGING, CONNECTIONS, AND ANCHORS TO ENSURE JOISTS ARE STABILIZED DURING CONSTRUCTION.

THE OWNER WILL ENGAGE A QUALIFIED INDEPENDENT TESTING AND INSPECTING AGENCY TO PERFORM FIELD TESTS AND INSPECTIONS AND PREPARE TEST REPORTS.

FIELD WELDING AND HIGH STRENGTH BOLTS WILL BE SUBJECT TO INSPECTION.

THE CONTRACTOR WILL REMOVE AND REPLACE WORK THAT DOES NOT COMPLY WITH SPECIFIED REQUIREMENTS AND BE RESPONSIBLE FOR THE COST OF ADDITIONAL INSPECTING TO DETERMINE COMPLIANCE OF CORRECTED WORK WITH SPECIFIED REQUIREMENTS.

STEEL DECKING

STEEL DECKING AND ACCESSORIES SHALL BE DESIGNED, FABRICATED AND INSTALLED IN ACCORDANCE WITH THE STEEL DECK INSTITUTE "ROOF DECK DESIGN MANUAL" AND "FLOOR DECK DESIGN MANUAL," LATEST EDITION.

WELDING SHALL COMPLY WITH APPLICABLE PROVISIONS OF AWS D1.1 "STRUCTURAL WELDING CODE - SHEET STEEL."

SUBMIT PRODUCT DATA FOR EACH TYPE OF DECK, ACCESSORY, AND PRODUCT INDICATED.

PROVIDE SHOP DRAWINGS SHOWING LAYOUT AND TYPES OF DECK PANELS, ANCHORAGE DETAILS, REINFORCING CHANNELS, PANS, CUT DECK OPENINGS, SPECIAL JOINTING, ACCESSORIES, AND ATTACHMENTS TO OTHER CONSTRUCTION.

METAL DECK SHALL HAVE PROFILE, DEPTH AND THICKNESS SHOWN ON THE DRAWINGS AND MANUFACTURED BY NUCOR CORPORATION; VULCRAFT DIVISION OR APPROVED EQUAL.

METAL ROOF DECK SHALL BE PRIME PAINTED STEEL SHEET IN ACCORDANCE WITH ASTM A1008, GRADE 33 MINIMUM, WITH LAPPED SIDE LAPS.

COMPOSITE STEEL FLOOR DECK SHALL BE GALVANIZED STEEL SHEET IN ACCORDANCE WITH ASTM A653, GRADE 33 MINIMUM AND ASTM A924 G60 ZINC COATING, WITH INTEGRALLY EMBOSSED OR RAISED PATTERN RIBS AND INTERLOCKING SIDE LAPS.

NON-COMPOSITE FORM DECK SHALL BE GALVANIZED STEEL SHEET IN ACCORDANCE WITH ASTM A653, GRADE 33 MINIMUM AND ASTM A924 G60 ZINC COATING, WITH LAPPED SIDE LAPS.

MECHANICAL FASTENERS SHALL BE CORROSION-RESISTANT, LOW-VELOCITY, POWER-ACTUATED OR PNEUMATICALLY DRIVEN CARBON-STEEL FASTENERS; OR SELF-DRILLING, SELF-THREADING SCREWS.

SIDE-LAP FASTENERS SHALL BE CORROSION-RESISTANT, HEXAGONAL WASHER HEAD; SELF-DRILLING, CARBON-STEEL SCREWS, NO. 10 MINIMUM DIAMETER.

MISCELLANEOUS SHEET METAL DECK ACCESSORIES SHALL BE STEEL SHEET, MINIMUM YIELD STRENGTH OF 33,000 PSI, NOT LESS THAN 0.0358 THICKNESS, OF SAME MATERIAL AND FINISH AS DECK.

POUR STOPS AND GIRDER FILLERS SHALL BE STEEL SHEET, MINIMUM YIELD STRENGTH OF 33,000 PSI, OF THICKNESS AND PROFILE AS RECOMMENDED BY SDI FOR OVERHANG AND SLAB DEPTH, 16 GA MINIMUM.

COLUMN CLOSURES, END CLOSURES, Z-CLOSURES, AND COVER PLATES SHALL BE STEEL SHEET, OF SAME THICKNESS, MATERIAL, AND FINISH AS DECK.

LAYOUT SHEETS OVER A MINIMUM OF THREE SPANS WHERE POSSIBLE.

INSTALL TEMPORARY SHORING BEFORE PLACING DECK PANELS, IF REQUIRED TO MEET DEFLECTION LIMITATIONS.

FIT DECK PANELS AND ACCESSORIES AROUND OPENINGS AND PROJECTIONS. PROVIDE ADDITIONAL REINFORCEMENT AND CLOSURE PIECES AT OPENINGS AS REQUIRED FOR STRENGTH AND CONTINUITY OF DECK.

DECK OPENINGS LESS THAN 16 SQUARE FEET IN AREA SHALL BE CUT IN THE FIELD. OPENINGS NOT SHOWN ON THE DRAWINGS SHALL BE CUT AND REINFORCED AS NECESSARY, BY TRADE REQUIRING THE OPENINGS.

FASTEN ROOF DECK PANELS TO STEEL SUPPORTING MEMBERS BY 5/8 INCH DIAMETER ARC SPOT WELDS OR ARC SEAM WELDS WITH AN EQUAL PERIMETER THAT IS NOT LESS THAN 1-1/2 INCHES LONG.

WELD EDGE AND INTERIOR RIBS OF ROOF DECK UNITS WITH A MINIMUM OF TWO WELDS PER DECK UNIT AT EACH SUPPORT. SPACE WELDS 12 INCHES APART IN THE FIELD OF ROOF AND 6 INCHES APART AT ROOF CORNERS AND PERIMETER.

FASTEN FLOOR DECK PANELS TO STEEL SUPPORTING MEMBERS BY 3/4 INCH DIAMETER ARC SPOT WELDS.

WELD EDGE RIBS OF FLOOR DECK PANELS AT EACH SUPPORT. SPACE ADDITIONAL WELDS AN AVERAGE OF 12 INCHES APART, BUT NOT MORE THAN 18 INCHES APART. PROVIDE WELD WASHERS WHEN DECK METAL THICKNESS IS LESS THAN .028 INCHES.

FASTEN SIDE LAPS AND PERIMETER EDGES OF DECK PANELS BETWEEN SUPPORTS WITH SELF-DRILLING, NO. 10 DIAMETER SCREWS OR 1 1/2 INCH WELDS AT INTERVALS NOT EXCEEDING THE LESSER OF 1/2 OF THE SPAN OR 36 INCHES.

MECHANICAL FASTENERS MAY BE USED IN LIEU OF WELDING TO FASTEN DECK. LOCATE MECHANICAL FASTENERS AND INSTALL ACCORDING TO DECK MANUFACTURER'S WRITTEN INSTRUCTIONS.

INSTALL DECK ENDS OVER SUPPORTING FRAME WITH A MINIMUM END BEARING OF 1-1/2 INCHES.

THE OWNER WILL ENGAGE A QUALIFIED INDEPENDENT TESTING AND INSPECTING AGENCY TO PERFORM FIELD TESTS AND INSPECTIONS AND PREPARE TEST REPORTS.

FIELD WELDS WILL BE SUBJECT TO INSPECTION.

THE CONTRACTOR WILL REMOVE AND REPLACE WORK THAT DOES NOT COMPLY WITH SPECIFIED REQUIREMENTS AND BE RESPONSIBLE FOR THE COST OF ADDITIONAL INSPECTING TO DETERMINE COMPLIANCE OF CORRECTED WORK WITH SPECIFIED REQUIREMENTS.

POST-INSTALLED ANCHORS

ALL-POST INSTALLED ANCHORS SHALL BE PROVIDED BY HILTI, INC. AS NOTED BELOW OR APPROVED EQUAL.

ADHESIVE ANCHORS TO CONCRETE SHALL BE HILTI HIT-HY 200 SAFE SET SYSTEM WITH HILTI HAS-E THREADED ROD.

MECHANICAL SCREW ANCHORS TO CONCRETE SHALL BE HILTI HUS EZ SCREW ANCHORS.

MECHANICAL EXPANSION ANCHORS TO CONCRETE SHALL BE HILTI HSL-3 EXPANSION ANCHORS.

REBAR DOWELING TO CONCRETE SHALL BE HILTI HI-HY 200 SAFE SET SYSTEM.

REBAR DOWELING TO ROCK SHALL BE HILTI HIT-RE 500-SD EPOXY ADHESIVE SYSTEM.

ADHESIVE ANCHORS TO MASONRY SHALL BE HILTI HIT-HY 270 ANCHORING SYSTEM WITH HILTI HAS-E THREADED ROD AND SCREEN TUBE.

ANCHORS SHALL BE INSTALLED PER MANUFACTURER INSTRUCTIONS AND RECOMMENDATIONS.

ANCHOR DIAMETER, EMBEDMENT AND SPACING SHALL BE AS NOTED ON THE DRAWINGS.

ANCHOR CAPACITY IS DEPENDENT ON SPACING BETWEEN ADJACENT ANCHORS AND PROXIMITY OF ANCHORS TO EDGE OF CONCRETE. INSTALL ANCHORS IN ACCORDANCE WITH SPACING AND EDGE DISTANCE INDICATED ON THE DRAWINGS AND THE MANUFACTURER RECOMMENDATIONS.

SPECIAL INSPECTIONS

SPECIAL INSPECTIONS SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF "THE 2015 INTERNATIONAL BUILDING CODE" AND "THE 2017 NEW YORK STATE UNIFORM CODE SUPPLEMENT."

THE OWNER SHALL EMPLOY A SPECIAL INSPECTION AGENCY TO PERFORM INSPECTIONS AND TESTING DURING CONSTRUCTION.

SPECIAL INSPECTIONS AND ASSOCIATED TESTING SHALL BE PERFORMED BY AN APPROVED INDEPENDENT AGENCY MEETING THE REQUIREMENTS OF ASTM E329 - MATERIALS, ASTM D3740 - SOILS, ASTM C1077 - CONCRETE, ASTM A880 - STEEL, AND ASTM E543 - NON-DESTRUCTIVE TESTING.

THE SPECIAL INSPECTOR SHALL BE A QUALIFIED PERSON WHO SHALL DEMONSTRATE COMPETENCE, TO THE SATISFACTION OF THE BUILDING CODE OFFICIAL, FOR INSPECTION OF THE PARTICULAR TYPE OF CONSTRUCTION REQUIRING SPECIAL INSPECTION.

THE SPECIAL INSPECTOR SHALL OBSERVE CONSTRUCTION PROGRESS FOR COMPLIANCE WITH THE APPROVED CONSTRUCTION DOCUMENTS. ALL DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE CONTRACTOR FOR CORRECTION. IF NOT CORRECTED DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE STRUCTURAL ENGINEER AND BUILDING OFFICIAL.

THE SPECIAL INSPECTOR SHALL FURNISH INSPECTION REPORTS FOR EACH INSPECTION TO THE BUILDING OFFICIAL, STRUCTURAL ENGINEER, CONTRACTOR, AND OWNER.

THE SPECIAL INSPECTION AGENCY SHALL SUBMIT A FINAL REPORT INDICATING THAT THE WORK REQUIRING SPECIAL INSPECTION WAS INSPECTED AND IS IN CONFORMANCE WITH THE APPROVED CONSTRUCTION DOCUMENTS.

INSPECTIONS SHALL BE CONDUCTED FOR THE MATERIALS AND OPERATIONS LISTED PER THE FOLLOWING STATEMENT OF SPECIAL INSPECTIONS:

GEOTECHNICAL INSPECTIONS:

- BEARING CAPACITY BELOW SHALLOW FOUNDATIONS
- DEPTH OF FOOTING
- CLASSIFICATION AND TESTING OF FILL MATERIALS
- MATERIAL, DENSITY AND LIFT THICKNESS OF COMPACTED FILL

CONCRETE INSPECTIONS:

- PLACEMENT OF REINFORCING STEEL
- ANCHOR BOLT LOCATION
- VERIFY USE OF REQUIRED MIX DESIGN
- SAMPLE CONCRETE FOR STRENGTH TESTS
- MEASURE AIR CONTENT, TEMPERATURE, AND SLUMP
- FORMWORK FOR SIZE, SHAPE AND LOCATION

MASONRY INSPECTIONS:

- TEST MASONRY UNIT STRENGTH
- PROPORTIONING OF MORTAR AND GROUT
- SIZE, GRADE, AND LOCATION OF REINFORCING
- CONSTRUCTION OF MORTAR JOINTS
- GROUTING PROCEDURE

STEEL INSPECTIONS:

- BOLT QUANTITY AND TENSIONING
- WELD SIZE AND TYPE
- MEMBER LOCATIONS AND JOINT DETAILS

DESIGN LOADS

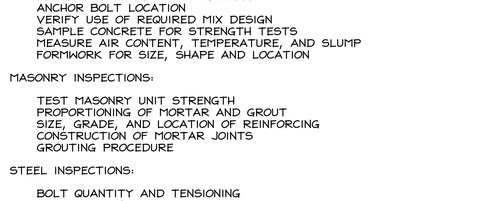
FLOOR
DEAD LOAD : 100 PSF
LIVE LOAD : 100 PSF

ROOF
DEAD LOAD : 78 PSF
LIVE LOAD : 30 PSF - SEE SNOW DRIFT DIAGRAM

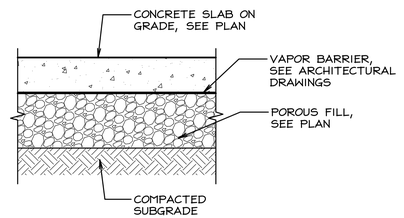
ROOF SNOW LOADS
GROUND SNOW LOAD (Pg): 30 PSF
FLAT ROOF SNOW LOAD (Pf): 23.1 PSF
SNOW EXPOSURE FACTOR (Ce): 1.0
SNOW LOAD IMPORTANCE FACTOR (Is): 1.1
THERMAL FACTOR (Ct): 1.0

WIND LOADS
ULTIMATE DESIGN WIND SPEED (Vult): 125 MPH
NOMINAL DESIGN WIND SPEED (Vasd): 97 MPH
RISK CATEGORY: III
WIND EXPOSURE CATEGORY: B
INTERNAL PRESSURE COEFFICIENT: ± 0.18
ULTIMATE COMPONENTS AND CLADDING PRESSURE:
WALLS: +33/-44 PSF
ROOF: +14/-54 PSF

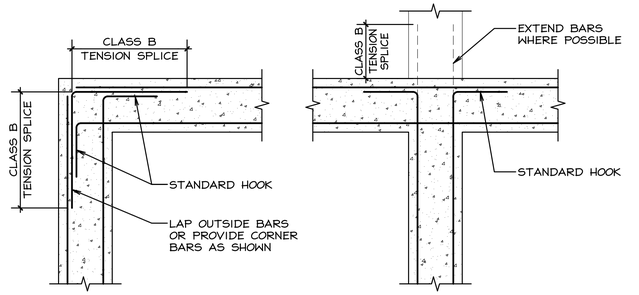
EARTHQUAKE DESIGN DATA
RISK CATEGORY: III
SEISMIC IMPORTANCE FACTOR (Ie): 1.25
MAPPED SPECTRAL RESPONSE ACCELERATIONS:
-Ss : .2722
-S1 : .0715
SITE CLASS: D
SPECTRAL RESPONSE COEFFICIENTS:
- Sds : 0.287
- Sd1 : 0.114
SEISMIC DESIGN CATEGORY: B
SEISMIC FORCE RESISTING SYSTEM:
INTERMEDIATE MASONRY SHEAR WALLS
SEISMIC RESPONSE COEFFICIENT (Cs): 0.100
RESPONSE MODIFICATION FACTOR (R): 3.5
SEISMIC BASE SHEAR (V): 52.7 K
ANALYSIS PROCEDURE: EQUIVALENT LATERAL FORCE



SNOW DRIFT DIAGRAM

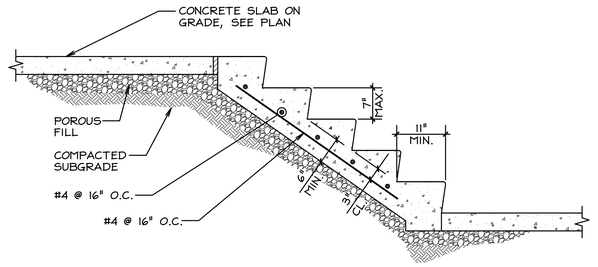


TYPICAL SLAB ON GRADE
NOT TO SCALE

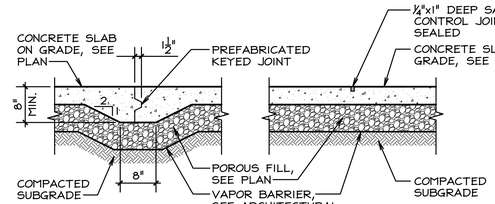


CORNER INTERSECTION

TYPICAL CONCRETE WALL AND FOOTING INTERSECTION
NOT TO SCALE

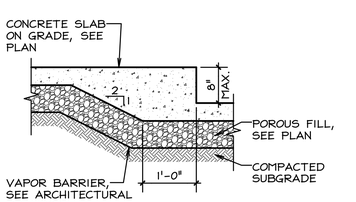


TYPICAL INTERIOR CONCRETE STAIR ON GRADE
NOT TO SCALE



CONSTRUCTION JOINT CONTROL JOINT

TYPICAL CONCRETE SLAB ON GRADE JOINTS
NOT TO SCALE



TYPICAL SLAB ON GRADE DEPRESSION
NOT TO SCALE

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Job No.: 19128 Dwg. 11 of 13

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Revisions:
1 ISSUE TO BID 11/23/20

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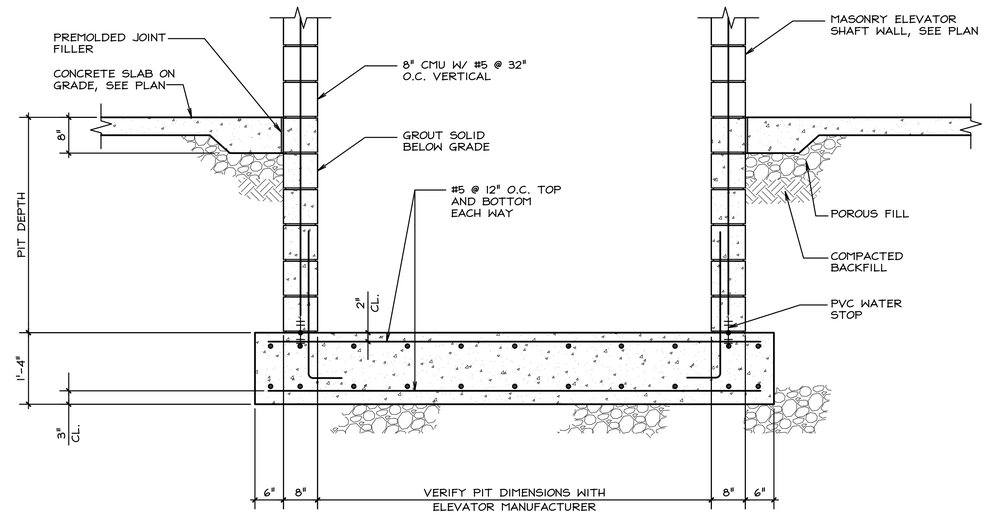
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GENERAL NOTES AND TYPICAL DETAILS
2019 BOND REFERENDUM
CHATSWORTH AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

NYSED PROJECT # 66-07-01-03-0-005-020

Job No. 4.1092.72.03
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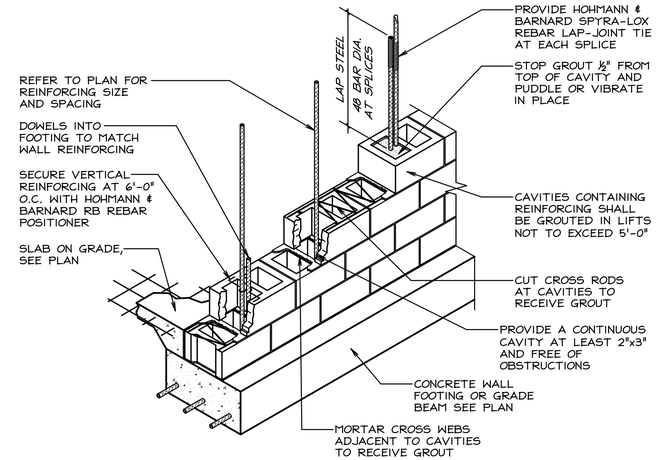
S6.02



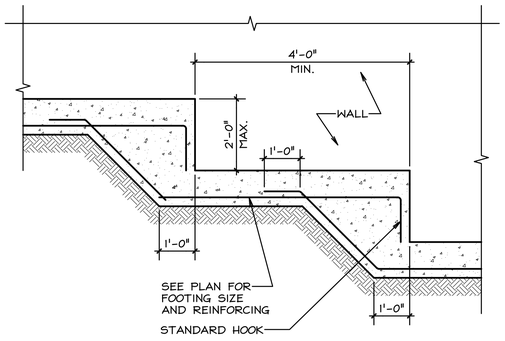
NOTES:

1. VERIFY ELEVATOR PIT DIMENSIONS WITH MANUFACTURER'S REQUIREMENTS.
2. PROVIDE OPENING IN MAT FOR ELEVATOR PLUNGER AS REQUIRED.
3. PROVIDE SUMP PIT PER PLUMBING DRAWINGS. REFER TO TYPICAL DETAIL.

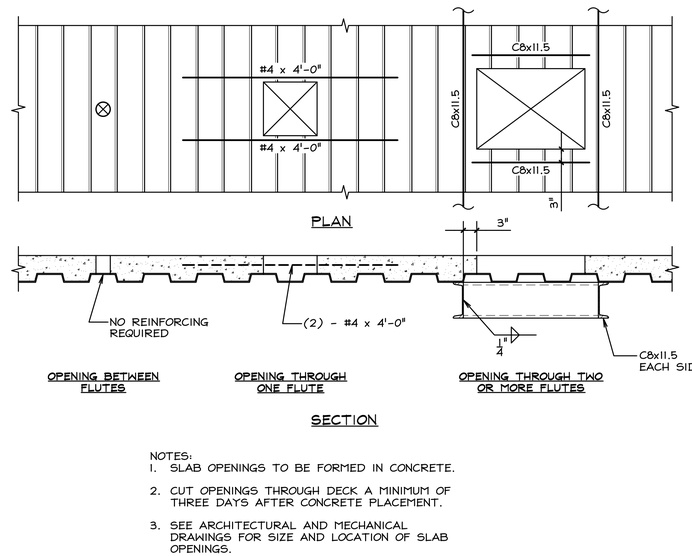
TYPICAL ELEVATOR PIT
NOT TO SCALE



TYPICAL REINFORCED CONCRETE MASONRY CONSTRUCTION
NOT TO SCALE



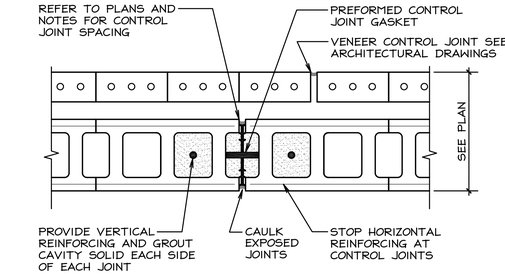
TYPICAL STEPPED FOOTING DETAIL
NOT TO SCALE



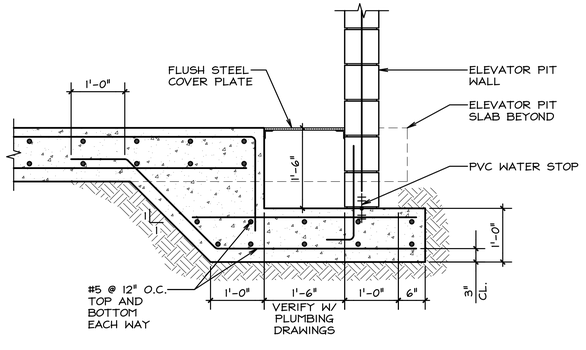
SECTION

NOTES:
1. SLAB OPENINGS TO BE FORMED IN CONCRETE.
2. CUT OPENINGS THROUGH DECK A MINIMUM OF THREE DAYS AFTER CONCRETE PLACEMENT.
3. SEE ARCHITECTURAL AND MECHANICAL DRAWINGS FOR SIZE AND LOCATION OF SLAB OPENINGS.

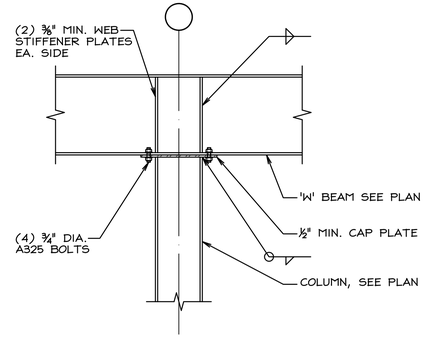
TYPICAL OPENINGS IN COMPOSITE METAL FLOOR DECK
NOT TO SCALE



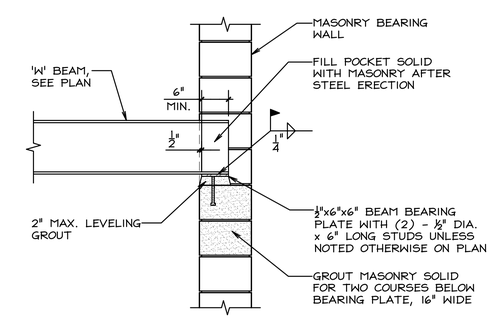
TYPICAL MASONRY WALL CONTROL JOINT
NOT TO SCALE



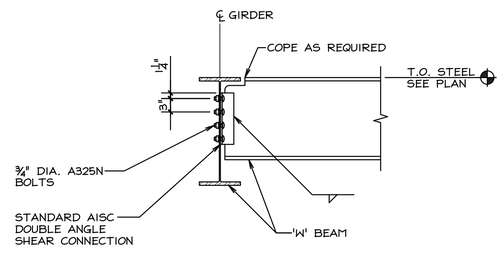
TYPICAL ELEVATOR SUMP PIT
NOT TO SCALE



TYPICAL BEAM CONTINUOUS OVER COLUMN
NOT TO SCALE

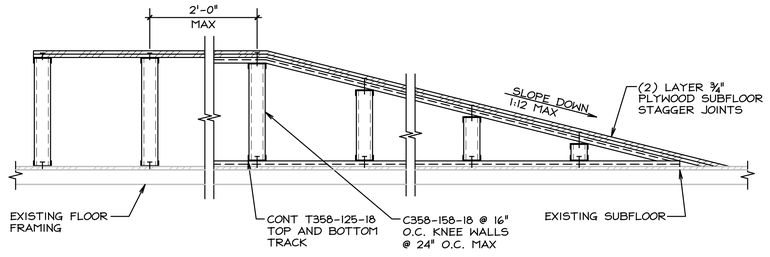


TYPICAL BEAM BEARING ON MASONRY WALL
NOT TO SCALE



TYPICAL BEAM TO BEAM CONNECTION
NOT TO SCALE

CONNECTION SCHEDULE			
BEAM SIZE	BOLT ROWS	WELD SIZE	ANGLE THICKNESS
W8, W10	2	3/16"	¼"
W12, W14	3	3/16"	¼"
W16	4	3/16"	¼"
W18	5	3/16"	¼"
W21	6	¼"	5/16"
W24, W27	7	¼"	5/16"
W30	8	¼"	5/16"



TYPICAL COLD FORMED STEEL OVERBUILD RAMP
NOT TO SCALE

Date	1/10/20
Checked	EW
Drawn	WR

MICHAEL J. McGOVERN, P.A.
Title REGISTERED ARCHITECT License No. 022257-1

Revisions:
1 ISSUE TO BID 11/23/20

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252 MAIN STREET, GOSHEN, NEW YORK 10924 (845)615-0350

TYPICAL DETAILS
2019 BOND REFERENDUM
CHATSWORTH AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

NYSED PROJECT # 66-07-01-03-0-005-020

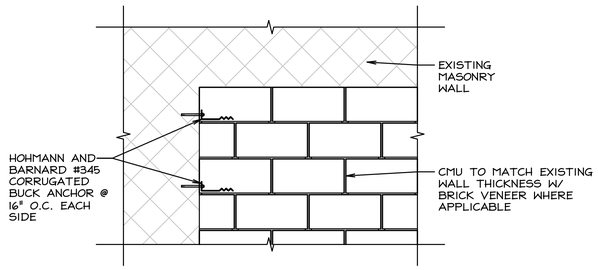
Micucci Engineering, P.C.
Consulting Structural Engineers
265 South Little Tor Road, Suite 207
New City, New York 10956
Phone: (845) 623-9100

Job No.: 19128 Dwg. 12 of 13

EDWARD P. WILKOWSKI, P.E.
N.Y. License No. : 082493

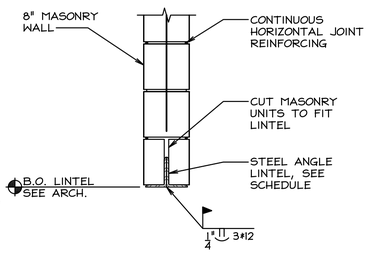
Job No. 4.1092.72.03
File No. 1912856.01

S6.03



TYPICAL MASONRY WALL INFILL AT EXISTING OPENING

NOT TO SCALE

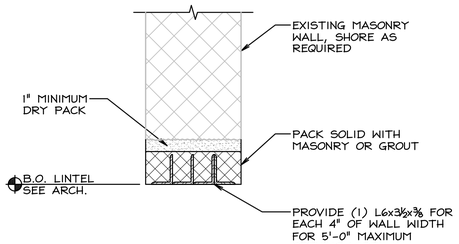


NOTES:

1. BEAR LINTEL 8" MINIMUM BEYOND OPENING. GROUT WALL SOLID UNDER BEARING FOR FULL HEIGHT OF OPENING.
2. REFER TO ARCHITECTURAL DRAWINGS FOR FLASHING DETAILS.

TYPICAL ANGLE LINTEL IN 8" MASONRY WALL

NOT TO SCALE

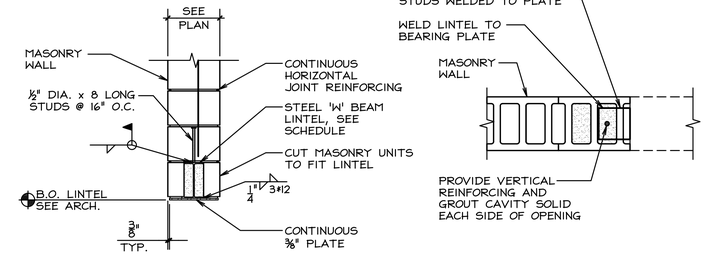


NOTES:

1. BEAR LINTEL 8" MINIMUM BEYOND OPENING. GROUT WALL SOLID UNDER BEARING FOR FULL HEIGHT OF OPENING.
2. REFER TO ARCHITECTURAL DRAWINGS FOR FLASHING DETAILS.

TYPICAL ANGLE LINTEL IN EXISTING MASONRY WALL

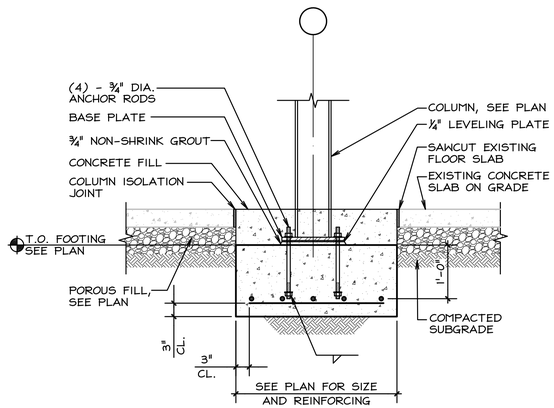
NOT TO SCALE



SECTION PLAN

TYPICAL 'W' LINTEL IN MASONRY WALL

NOT TO SCALE



TYPICAL INTERIOR COLUMN FOOTING AT EXISTING SLAB

NOT TO SCALE

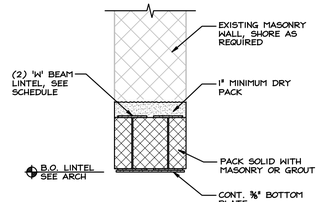
MARK	MASONRY OPENING SIZE	NOTES	WALL TYPE	LINTEL SIZE
	6'-4" MAX.	INTERIOR NON-BEARING	8" BLOCK	(2) - L6 x 3 1/2 x 3/8
L-1	6'-4" MAX.	INTERIOR BEARING	8" BLOCK	(2) - L6 x 3 1/2 x 3/8
L-2	9'-0" MAX.	EXTERIOR BEARING	8" BLOCK 4" VENEER	W8x18 W/ CONT. 3/8" x 15" PLATE
L-3	8'-0" MAX.	EXISTING BEARING	EXIST. MULTI WYTHE BRICK	(2) W8x18 W/ CONT. 3/8" PLATE
L-4	11'-0" MAX.	EXTERIOR BEARING	8" BLOCK	W10x26 W/ CONT. 3/8" x 7" PLATE
L-5	6'-0" MAX.	EXISTING BEARING	EXIST. MULTI WYTHE BRICK	(3) - L6 x 3 1/2 x 3/8
L-6	12'-0" MAX.	EXISTING BEARING	EXIST. MULTI WYTHE BRICK	(2) W10x30 W/ CONT. 3/8" PLATE
L-7	6'-4" MAX.	EXISTING BEARING	8" BLOCK 4" VENEER	W8x18 W/ CONT. 3/8" x 19" PLATE
L-8	6'-0" MAX.	EXISTING BEARING	EXIST. MULTI WYTHE BRICK	(6) - L6 x 3 1/2 x 3/8

NOTES

1. THE CONTRACTOR MUST VERIFY ALL MASONRY OPENING SIZES, LOCATIONS AND ELEVATIONS WITH ARCHITECTURAL DRAWINGS PRIOR TO START OF CONSTRUCTION. NOTIFY ENGINEER OF ANY DISCREPANCY WITH THE INFORMATION SHOWN ON THESE DRAWINGS.
2. SEE ARCHITECTURAL AND MECHANICAL DRAWINGS FOR SIZE, QUANTITY AND LOCATION OF OPENINGS IN 8" NON-BEARING MASONRY WALLS AND OPENINGS FOR MECHANICAL SYSTEMS.
3. PROVIDE BEARING PLATE W/ (2) ½"x8" LONG STUDS AT EACH END OF ALL 'W' LINTELS PER TYPICAL DETAILS. GROUT BLOCK SOLID UNDER BEARING FOR FULL HEIGHT OF OPENING.
4. REFER TO LINTEL DETAILS FOR ADDITIONAL INFORMATION.
5. REFER TO ARCHITECTURAL DRAWINGS FOR FLASHING DETAILS AND REQUIREMENTS.
6. BEAR ALL ANGLE LINTELS 8" MINIMUM EACH END. GROUT BLOCK SOLID UNDER BEARING FOR FULL HEIGHT OF OPENING.

'W' LINTEL INSTALLATION NOTES

1. INSTALL ANY REQUIRED SHORING OF THE EXISTING CONSTRUCTION. VERIFY THAT THE EXISTING WALL IS STRUCTURALLY SOUND.
2. CUT HOLES IN EXISTING WALL FOR INSTALLATION OF NEW BEARING PLATES AT EACH END OF NEW LINTEL BEAMS.
3. CUT HORIZONTAL SLOT ONE-HALF THE WALL THICKNESS INTO THE EXISTING WALL AT THE LINTEL LOCATION. CARE MUST BE TAKEN TO AVOID DAMAGE TO THE PORTIONS OF THE WALL TO REMAIN.
4. INSTALL FIRST LINTEL BEAM ON ONE SIDE AND CONNECT TO BEARING PLATES. PATCH AND DRY-PACK OVER BEAM TO PROVIDE FULL BEARING OVER LINTEL.
5. CUT HORIZONTAL SLOT THROUGH REMAINDER OF WALL FROM OPPOSITE SIDE TO ACCOMMODATE INSTALLATION OF SECOND LINTEL BEAM. PATCH AND DRY-PACK OVER BEAM TO PROVIDE FULL BEARING.
6. INSTALL BOTTOM FLANGE PLATE AND REPAIR MASONRY.
7. SAWCUT AND REMOVE REMAINING PORTION OF EXISTING WALL BELOW NEW LINTEL AND REPOINT AREA AROUND OPENING TO REPAIR DAMAGED MORTAR JOINTS.

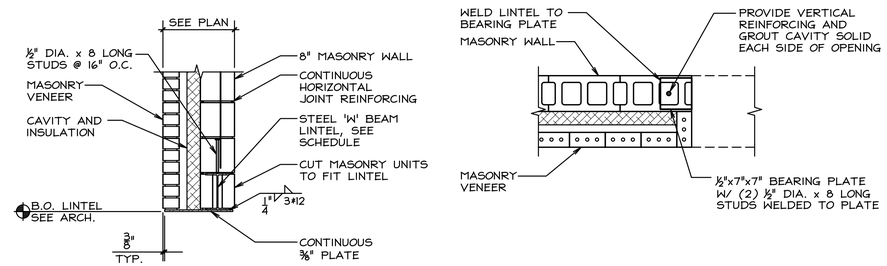


NOTES:

1. BEAR LINTEL 8" MINIMUM BEYOND OPENING. GROUT WALL SOLID UNDER BEARING FOR FULL HEIGHT OF OPENING.
2. REFER TO ARCHITECTURAL DRAWINGS FOR FLASHING DETAILS.

TYPICAL 'W' LINTEL IN EXISTING MASONRY WALL

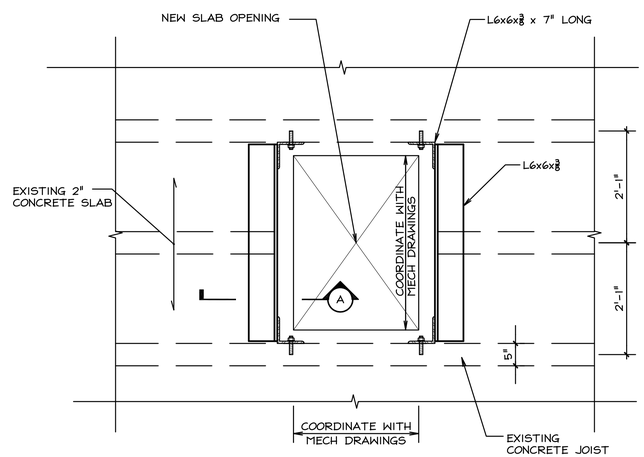
NOT TO SCALE



SECTION PLAN

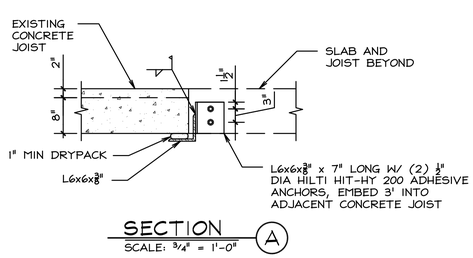
TYPICAL 'W' LINTEL IN 16" MASONRY CAVITY WALL

NOT TO SCALE



PLAN VIEW

NOTE: DO NOT CUT CONSECUTIVE JOISTS.

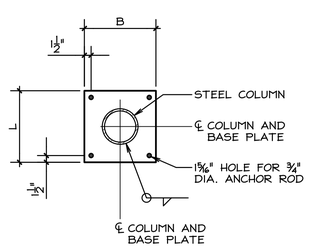


SECTION A

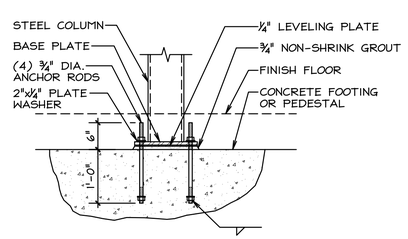
SCALE: ¾" = 1'-0"

TYPICAL OPENING THROUGH EXISTING CONCRETE ROOF JOIST

NOT TO SCALE



TYPICAL PLAN



ELEVATION

TYPICAL PIPE COLUMN BASE DETAIL

NOT TO SCALE

Date	1/10/20
Checked	EW
Drawn	WR

MICHAEL J. McGOVERN, R.A.
Title REGISTERED ARCHITECT License No. 022257-1

Revisions:

#	ISSUE TO BID 11/23/20

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engineering • planning • architecture • surveying
252 MAIN STREET, GOSHEN, NEW YORK 10924 (845)615-0350

TYPICAL DETAILS

2019 BOND REFERENDUM
CHATSWORTH AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

NYSED PROJECT # 66-07-01-03-0-005-020

Micucci Engineering, P.C.
Consulting Structural Engineers
265 South Little Tor Road, Suite 207
New City, New York 10956
Phone: (845) 623-9100

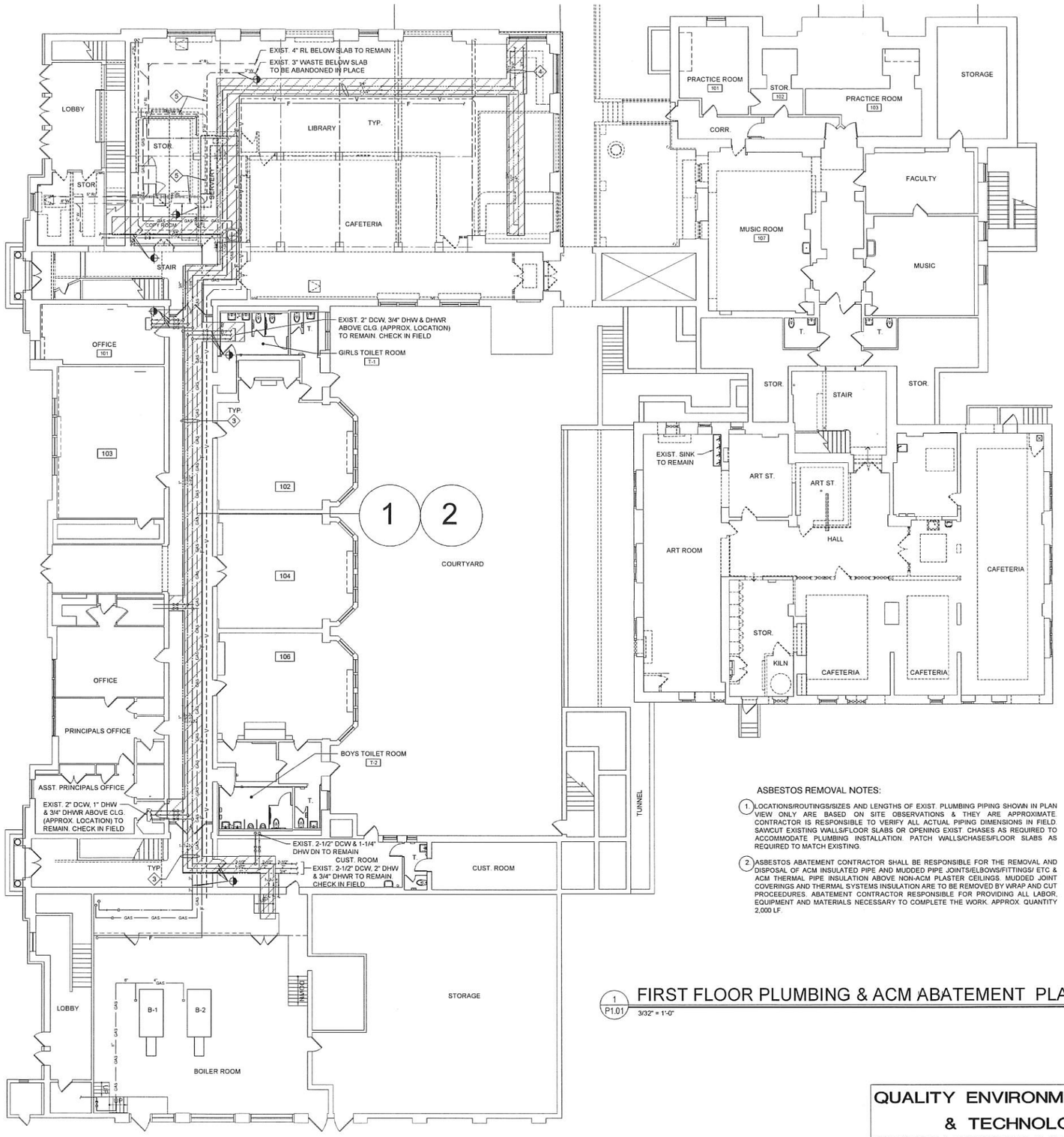
Job No.: 19128 Dwg. 13 of 13

EDWARD P. WILKOWSKI, P.E.
N.Y. License No. : 082493

Job No. 4.1092.72.03

File No. 1912856.01

S6.04



GENERAL DEMOLITION NOTES

1. LOCATIONS/ROUTINGS/SIZES OF EXIST. PLUMBING PIPING SHOWN ARE BASED ON SITE OBSERVATIONS & THEY ARE APPROXIMATE. CONTRACTOR IS RESPONSIBLE TO VERIFY THEM IN FIELD. SAWCUT EXIST. WALLS/FLOOR SLABS OR OPENING EXIST. CHASES AS REQUIRED TO ACCOMMODATE PLUMBING INSTALLATION. PATCH WALLS/CHASES/FLOOR SLABS AS REQUIRED TO MATCH EXISTING.
2. ANY CUTTING, PATCHING, OR FINISH REPAIR WORK REQUIRED FOR PLUMBING INSTALLATION IS THE RESPONSIBILITY OF THE CONTRACTOR.
3. CONTRACTOR IS RESPONSIBLE FOR SHUTDOWN AND/OR TO ISOLATE SECTIONS OF PLUMBING SYSTEM, AND DRAIN WATER FROM THE SYSTEM TO ACCOMMODATE FOR MODIFICATION/INSTALLATION. RESTORE THE SYSTEM AS REQUIRED.
4. ALL EXIST. CONDENSATE DRAIN PIPING THAT IS ASSOCIATED WITH DEMOLISHED HVAC UNITS SHALL BE REMOVED BY MECH. CONTRACTOR. REFER TO MECH. DWGS. FOR LOCATIONS.

ASBESTOS REMOVAL NOTES:

1. LOCATIONS/ROUTINGS/SIZES AND LENGTHS OF EXIST. PLUMBING PIPING SHOWN IN PLAN VIEW ONLY ARE BASED ON SITE OBSERVATIONS & THEY ARE APPROXIMATE. CONTRACTOR IS RESPONSIBLE TO VERIFY ALL ACTUAL PIPING DIMENSIONS IN FIELD. SAWCUT EXISTING WALLS/FLOOR SLABS OR OPENING EXIST. CHASES AS REQUIRED TO ACCOMMODATE PLUMBING INSTALLATION. PATCH WALLS/CHASES/FLOOR SLABS AS REQUIRED TO MATCH EXISTING.
2. ASBESTOS ABATEMENT CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL AND DISPOSAL OF ACM INSULATED PIPE AND MUDDED PIPE JOINTS/ELBOWS/FITTINGS/ ETC & ACM THERMAL PIPE INSULATION ABOVE NON-ACM PLASTER CEILINGS. MUDDED JOINT COVERINGS AND THERMAL SYSTEMS INSULATION ARE TO BE REMOVED BY WRAP AND CUT PROCEEDURES. ABATEMENT CONTRACTOR RESPONSIBLE FOR PROVIDING ALL LABOR, EQUIPMENT AND MATERIALS NECESSARY TO COMPLETE THE WORK. APPROX. QUANTITY 2,000 LF.

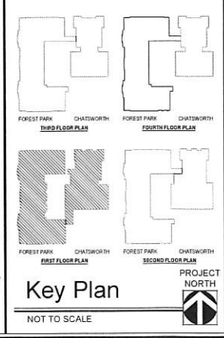
1 / P1.01 FIRST FLOOR PLUMBING & ACM ABATEMENT PLAN

3/32" = 1'-0"

NORTH

QUALITY ENVIRONMENTAL SOLUTIONS & TECHNOLOGIES, INC.
1376 NYS ROUTE 9, WAPPINGERS FALLS, NY 12590 TEL: (845)298-6031 FAX (845)298-1325

CHATSWORTH AVE. SCHOOL



Key Plan

NOT TO SCALE

PROJECT NORTH

Date	1/10/20
Checked	LG
Drawn	AM

MICHAEL J. McGOVERN, R.A.
License No. 022257-1
Title REGISTERED ARCHITECT

Revisions:

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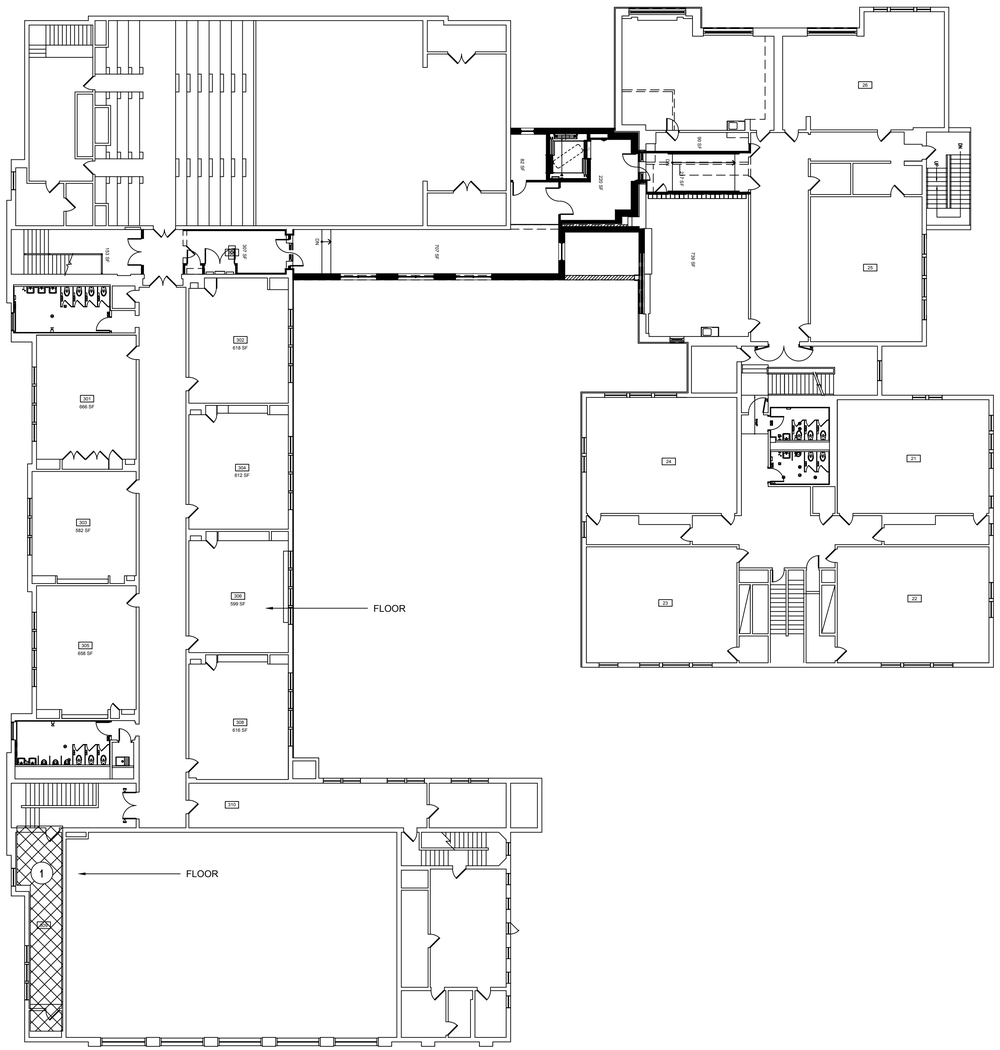
FIRST FLOOR MECHANICAL ABATEMENT PLAN
2019 BOND REFERENDUM
CHATSWORTH AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

NYSED PROJECT # 66-07-01-03-0-005-020

Job No. 4.1092.72.03

File No. 10927203P201

HP1.01



1 A1.02 Third Floor ACM Plan

1/16" = 1'-0"

Drawing Notes:

Chatsworth Avenue Elementary School

Drawing A1.02

Note:

1. Asbestos Abatement Contractor will be responsible for the removal and disposal of ACM Floor Tile & Mastic in Room 309 entirely. Abatement Contractor responsible for providing all labor, equipment, and materials necessary to complete work. Approx. Quantity 400 SF.
2. Asbestos Abatement Contractor will be responsible for the removal and disposal of ACM Built-Up Roofing under Foam Roofing, including all Flashing & Equipment Tars entirely. Abatement Contractor responsible for providing all labor, equipment, and materials necessary to complete work. Approx. Quantity 1,100 SF.

ASBESTOS ABATEMENT WORK LEGEND

(1) 1 - INTERIOR ACM FLOOR TILE AND MASTIC ABATEMENT

Date	1-10-20
Checked	LG
Drawn	AM

MICHAEL J. McGOVERN, R.A.
Title REGISTERED ARCHITECT License No. 022257-1

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NYSED PROJECT # 66-07-01-03-0-005-020

ABATEMENT FLOOR & ROOF PLANS

2019 BOND REFERENDUM
CHATSWORTH AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

Job No.

File No. 10927203A102

H1.02

QUALITY ENVIRONMENTAL SOLUTIONS & TECHNOLOGIES, INC.
1376 NYS ROUTE 9, WAPPINGERS FALLS, NY 12590 TEL: (845)298-6031 FAX (845)298-1325

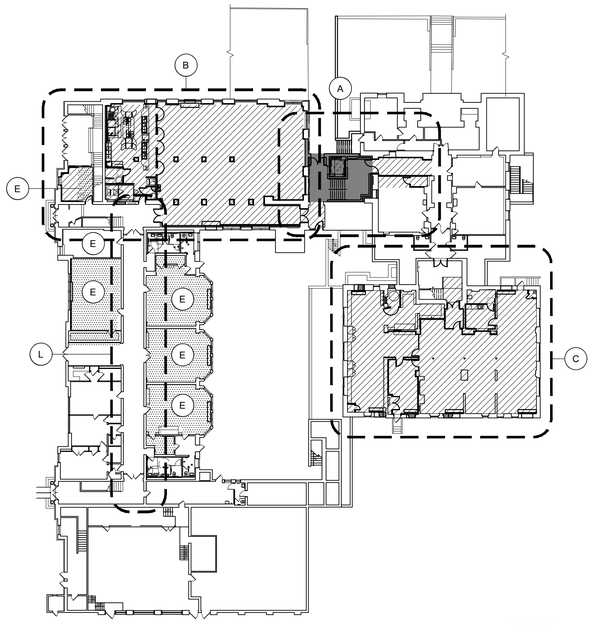
STATE OF NEW YORK ANTHONY NICHOLAS NEUBAND 067057 LICENSED PROFESSIONAL ENGINEER

SCOPE OF WORK ITEMS

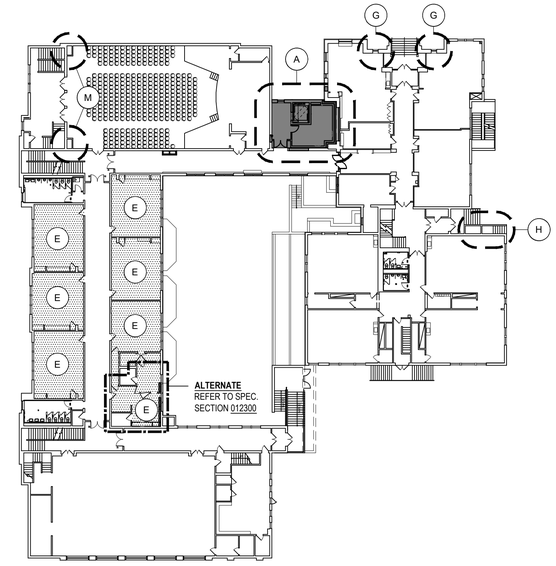
A	ELEVATOR ADDITION AND ASSOCIATED RENOVATION WORK
B	CAFETERIA & KITCHEN RENOVATION
C	MEDIA & ART SUITE RENOVATION
D	SKY GYM INTERIOR RENOVATION
E	WOOD FLOOR REMOVAL AND REPLACE WITH NEW FINISH. REFER TO DEMO DRAWINGS A1.01 - A1.02 AND PROPOSED DRAWINGS A2.01 - A2.02 FOR ADDITIONAL INFORMATION.
F	ASBESTOS TILE REMOVAL AND FLOOR FINISH REPLACEMENT
G	ROSETTE WINDOW REPLACEMENT
H	CONDENSER STAND RESTORATION
J	RESERVED
K	AUDITORIUM AIR HANDLING UNIT ROOF SUPPORT
L	REPLACE DOMESTIC WATER PIPING
M	MISCELLANEOUS WORK AREA

LEGEND:

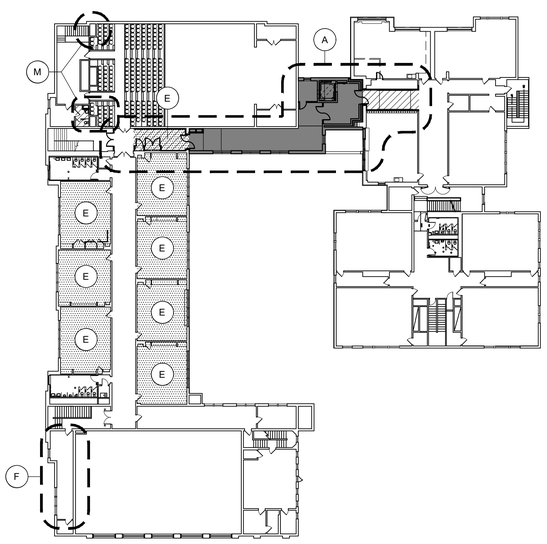
	AREA OF RENOVATION WORK
	AREA OF PROPOSED ADDITIONS
	AREA OF WOOD FLOOR REPLACEMENT
#	AREA OF WORK: REFER TO SCOPE OF WORK DESCRIPTIONS FOR ADDITIONAL INFORMATION



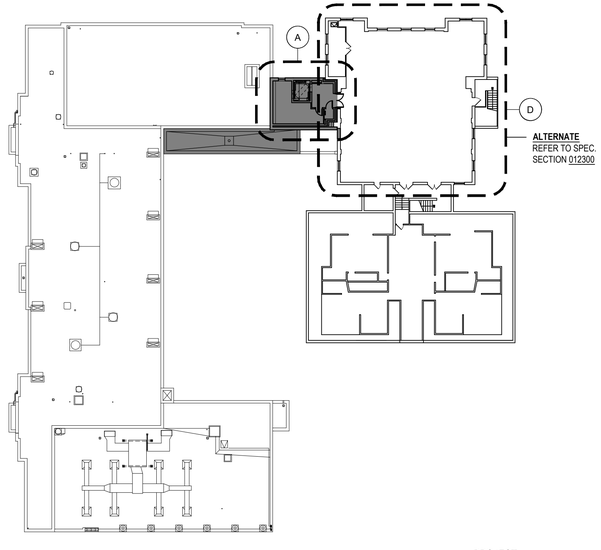
1 A0.01 — First Floor Key Plan
1/32" = 1'-0"
PROJECT NORTH



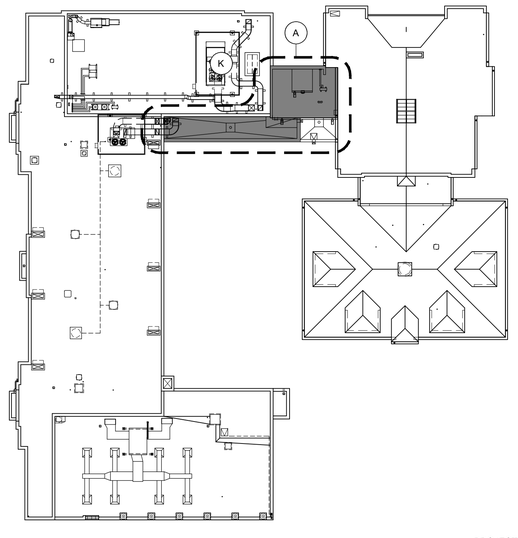
2 A0.01 — Second Floor Key Plan
1/32" = 1'-0"
PROJECT NORTH



3 A0.01 — Third Floor Key Plan
1/32" = 1'-0"
PROJECT NORTH



4 A0.01 — Fourth Floor Key Plan
1/32" = 1'-0"
PROJECT NORTH



5 A0.01 — Roof Key Plan
1/32" = 1'-0"
PROJECT NORTH

Date	1/10/20
Checked	DLF
Drawn	CTB

MICHAEL J. McGOVERN, R.A.
The REGISTERED ARCHITECT License No. 022257-1

Revisions:

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NYSED PROJECT # 66-07-01-03-0-005-020

OVERALL KEY PLANS

2019 BOND REFERENDUM
CHATSWORTH AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

Job No. 4.1092.72.03

File No. 10927203A001

A0.01

Demolition Key Notes

SYMBOL INDICATES DEMOLITION KEY NOTE

1. INTERIOR PARTITION DEMOLITION: GC TO REMOVE A PORTION OF OR ALL OF THE EXISTING INTERIOR PARTITION AS SHOWN, INCLUDING WALL BASE, GWB, STUDS, MASONRY CONSTRUCTION, ELECTRICAL OUTLETS, SWITCHES, ETC. EC TO TERMINATE ALL ELECTRICAL COMPONENTS IN ACCORDANCE WITH NEC REQUIREMENTS. GC TO TEMPORARILY BRACE AND SHORE ALL REMAINING WALLS, FLOORS, AND CEILINGS AS REQUIRED PRIOR TO DEMOLITION.
2. EXTERIOR WALL DEMOLITION: GC TO REMOVE PORTION OF OR ALL OF EXISTING EXTERIOR WALL CONSTRUCTION INCLUDING MASONRY, WALL FRAMING, INTERIOR FINISHES, ETC. EC TO TERMINATE ALL ELECTRICAL COMPONENTS IN ACCORDANCE WITH NEC REQUIREMENTS. GC TO TEMPORARILY BRACE AND SHORE ALL REMAINING WALLS, FLOORS, AND CEILINGS AS REQUIRED PRIOR TO DEMOLITION.
3. DOOR DEMOLITION: GC TO REMOVE EXISTING DOOR, HINGES, FRAME, HARDWARE, CLOSER, SIDELIGHTS AND TRANSOM WHERE APPLICABLE, ETC. CONFER WITH OWNER FOR SALVAGE PRIOR TO DISPOSAL.
4. WINDOW DEMOLITION: GC TO REMOVE EXISTING WINDOWS, JAMBS, SILLS, SASHES, ETC IN THEIR ENTIRETY. EXISTING LINTEL ABOVE SHALL REMAIN UNLESS NOTED OTHERWISE. WHERE WINDOW IS TO BE INFILLED PER PROPOSED PLANS GC TO REMOVE CAST STONE SILL
5. FLOOR FINISH DEMOLITION: GC TO REMOVE EXISTING FLOOR FINISH MATERIAL AND ANY ASSOCIATED ADHESIVES, NAILERS, ETC. DOWN TO EXISTING SUB-FLOOR. PREP SUB-FLOOR AS REQUIRED FOR INSTALLATION OF NEW FINISH FLOOR. SEE PROPOSED PLANS FOR ADDITIONAL INFORMATION.
6. CASEWORK / SHELVING: GC TO REMOVE EXISTING CASEWORK OR BUILT-IN FURNITURE INCLUDING, COUNTERS, SHELVING, DOORS, HINGES, BLOCKING, ETC. CONFER WITH OWNER FOR SALVAGE PRIOR TO DISPOSAL. COORDINATE DEMOLITION OF SINKS AND PLUMBING WITH PC. SEE PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION.
7. SINK DEMOLITION: PC TO REMOVE EXISTING SINK IN ITS ENTIRETY. SEE PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION
8. ACOUSTICAL CEILING TILE & GRID DEMOLITION: GC TO REMOVE AND DISCARD EXISTING SUSPENDED CEILING AND TILE, INCLUDING CEILING GRID, WALL ANGLES, SUPPORT WIRES, CLIPS, TIES, ETC. COORDINATE EXTENT OF DEMOLITION WITH PROPOSED PLANS. SALVAGE AND MODIFY EXISTING GRID TO REMAIN IN PLACE WHERE REQUIRED TO ACCOMMODATE NEW WALLS, TYPICAL. MODIFY EXISTING ACT AS REQUIRED FOR RE-USE IN THESE AREAS.
9. LIGHTING DEMOLITION: EC TO DEMO EXISTING LIGHTING IN ITS ENTIRETY. EC TO TERMINATE ALL ELECTRICAL CONNECTIONS IN PER NEC REQUIREMENTS. SEE ELECTRICAL DEMOLITION DRAWINGS FOR ADDITIONAL INFORMATION. CONFER WITH OWNER FOR SALVAGE PRIOR TO DEMOLITION.
10. HVAC DIFFUSERS & RETURN AIR GRILLES: MC TO REMOVE EXISTING SUPPLY DIFFUSERS AND RETURN AIR GRILLES IN THEIR ENTIRETY. SEE MECHANICAL DEMOLITION DRAWINGS FOR ADDITIONAL INFORMATION.
11. EXISTING FINISHES: UNLESS OTHERWISE INDICATED, EXISTING FINISHES INCLUDING BUT NOT LIMITED TO - FLOORING, WALL BASE, WALL FINISH, DOORS, WINDOWS, AND CEILING TO REMAIN. PROTECT DURING CONSTRUCTION, TYPICAL.
12. GC TO DEMOLISH EXISTING ASPHALT PAVING AT AREA OF COURTYARD VESTIBULE. PREPARE AREA FOR INSTALLATION OF NEW CONCRETE SLAB. PROTECT SURROUNDING BRICK DURING DEMOLITION, TYP.
13. AREA OF EXISTING STONE WATER TABLE TO REMAIN. PROTECT DURING CONSTRUCTION.
14. GC TO CAREFULLY UNINSTALL EXISTING WEATHER STATION. COORDINATE WITH SCHOOL FOR RELOCATION OF DEVICE.
15. GC TO REMOVE EXISTING CASEWORK HOUSING EXISTING I.T. RACK. PROTECT I.T. RACK DURING DEMOLITION. EC TO INSTALL I.T. RACK TO SAME LOCATION IN NEW CLOSET. SEE ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION.
16. EXISTING WALL MOUNTED ELECTRICAL PANELS / FIRE ALARM PANEL TO REMAIN AND BE ENCLOSED IN NEW CLOSET. PROTECT DURING CONSTRUCTION. SEE ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION.
17. GC TO REMOVE EXISTING COPING AND UPPER PORTION OF BRICK COURSING (+/- 3 BC) AT PARAPET. COORDINATE ACTUAL NUMBER OF COURSES TO BE REMOVED WITH SECTIONS AND ELEVATIONS AND ACTUAL COPING DETAIL.
18. GC TO DEMOLISH AND REMOVE EXISTING FOAM ROOF SYSTEM CONSISTING OF TOPPING, ±2½" FOAM, ±2" BUILT UP ROOF, AND ±9½" CINDER FILL OR SIMILAR DOWN TO THE EXISTING CONCRETE SLAB. VERIFY ACTUAL EXISTING ROOF CONSTRUCTION IN THE FIELD. PREPARE EXISTING SLAB SURFACE FOR INSTALLATION OF NEW SELF LEVELER AT AREA OF NEW CORRIDOR. PREPARE EXISTING SLAB FOR INSTALLATION OF NEW LOW SLOPE ROOF SYSTEM AT AREA OF NEW ROOF. PROTECT EXISTING BRICK AND STONE AT AUDITORIUM WALL AND PARAPET WALLS, TYPICAL.
19. GC TO REMOVE EXISTING ROOF DRAIN. PREPARE EXISTING OPENING IN CONCRETE SLAB FOR NEW CONCRETE CLOSURE. SEE STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
20. GC TO REMOVE EXISTING COPING AND BRICK PARAPET WALL DOWN TO TOP OF CONCRETE SLAB THIS AREA. PREPARE AREA FOR INSTALLATION OF NEW SELF LEVELER AT AREA OF NEW CORRIDOR.
21. GC TO REMOVE EXISTING COPING AND ALL ASSOCIATED BLOCKING DOWN TO BRICK THIS AREA. PROTECT BRICK DURING CONSTRUCTION AND PREPARE FOR INSTALLATION OF NEW BLOCKING AND NEW COPING.
22. EXISTING FLOORING TO REMAIN IN THIS AREA UP TO LOCATION OF NEW METAL STUD WALLS. COORDINATE WITH PROPOSED PLANS. PROTECT DURING CONSTRUCTION.
23. GC TO REMOVE EXISTING COPING AND CAST STONE CAP AREA INDICATED DOWN TO NEXT FULL BRICK COURSE AT PARAPET. PREPARE FOR NEW BRICK PARAPET EXTENSION AS SHOWN ON PROPOSED DRAWINGS. COORDINATE ACTUAL NUMBER OF COURSES TO BE REMOVED WITH SECTIONS AND ELEVATIONS.
24. GC TO MODIFY EXISTING METAL GUTTER. CUT BACK AND CAP SIDE OF EXISTING GUTTER TO ACCOMMODATE INSTALLATION OF NEW PARAPET AND STONE PROFILE TRIM. RELOCATE LEADER WITHIN SAME RUN OF GUTTER IF NECESSARY. VERIFY ACTUAL GUTTER/LEADER CONSTRUCTION AND ACTUAL LOCATION OF NEW CONSTRUCTION IN THE FIELD.
25. GC TO REMOVE EXISTING GWB SOFFIT INCLUDING ALL ASSOCIATED FRAMING. COORDINATE EXTENT OF DEMOLITION WITH PROPOSED DRAWINGS.
26. EC TO REMOVE/RELOCATE EXISTING DEVICE. COORDINATE REINSTALLATION IN NEW/EXISTING CEILING WITH GC. SEE ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION.
27. EXISTING PLASTER CEILING TO REMAIN THIS AREA, TYPICAL.
28. PC TO MODIFY EXISTING SPRINKLER HEAD. SEE FIRE PROTECTION PLAN FOR ADDITIONAL INFORMATION.
29. GC TO REMOVE EXISTING FLOOR ACCESS HATCH DOOR (VERIFY ACTUAL SIZE IN FIELD). MODIFY FLOOR OPENING AS REQUIRED TO ACCOMMODATE INSTALLATION OF NEW FLOOR ACCESS HATCH. SEE PROPOSED DRAWINGS FOR ADDITIONAL INFORMATION.
30. MC TO REMOVE EXISTING MECHANICAL FIXTURE. SEE MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION.
31. GC TO REMOVE EXISTING WOOD FLOOR. SEE FLOOR DEMOLITION DETAIL 4/A1.40 FOR ADDITIONAL INFORMATION.
32. GC TO REMOVE EXISTING DOOR. EXISTING WALL CASING AND TRIM TO REMAIN, TYPICAL. MODIFY / REMOVE EXISTING FRAME AS NECESSARY TO INSTALL NEW METAL FRAME. REPLACE DAMAGED / UNUSABLE PORTIONS OF CASING / TRIM WITH NEW LIKE IN KIND, FINISH TO MATCH EXISTING. REPAIR / REFINISH PORTIONS OF EXISTING FRAME AS REQUIRED.
33. EC TO RELOCATE EXISTING I.T. EQUIPMENT TO NEW ELECTRICAL ROOM WITHIN SAME AREA. EC TO CAREFULLY DISCONNECT AND RELOCATE AS REQUIRED. REFER TO ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION.
34. GC TO REMOVE EXISTING I.T. CAGE IN ITS ENTIRETY
35. GC TO PREPARE EXISTING CONCRETE SUBFLOOR FOR INSTALLATION OF NEW FLOOR FINISH. REFER TO PROPOSED DRAWINGS FOR ADDITIONAL INFORMATION.
36. GC TO REMOVE EXISTING QUARRY TILE FLOOR FOR INSTALLATION OF NEW FLOOR FINISH. REFER TO PROPOSED DRAWINGS FOR ADDITIONAL INFORMATION.
37. GC TO PREPARE EXISTING TERRAZZO FLOOR FOR INSTALLATION OF NEW FLOOR FINISH. REFER TO PROPOSED DRAWINGS FOR ADDITIONAL INFORMATION.
38. EXISTING FOOD SERVICE EQUIPMENT TO BE UNINSTALLED AND TURNED OVER TO SCHOOL COORDINATE UN-INSTALLATION WORK AMONGST MULTIPLE PRIMES.
39. GC TO REMOVE EXISTING LIBRARY CASEWORK INCLUDING ALL MOVABLE AND BUILT-IN, TYPICAL.
40. EXISTING COLUMN TO REMAIN. GC TO REMOVE ADJACENT INFILL WALLS AS REQUIRED. MAINTAIN STRUCTURAL INTEGRITY OF COLUMN. MAINTAIN MASONRY ENCASEMENT OF COLUMN SURROUND, REPAIR DAMAGED PORTIONS AS REQUIRED TO MAINTAIN FIRE PROTECTION OF COLUMN ENCLOSURE.
41. EXISTING WALL MOUNTED HEATING UNIT TO BE REMOVED BY MC. COORDINATE DEMOLITION AMONGST MULTIPLE PRIMES. SEE MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION.
42. GC TO PREPARE EXISTING RECESSED QUARRY TILE FLOOR FOR INSTALLATION OF NEW SELF LEVELER TO BRING HEIGHT OF FLOOR FLUSH TO NEW FLOOR FINISH. REFER TO PROPOSED DRAWINGS FOR ADDITIONAL INFORMATION
43. AREA OF EXISTING ACOUSTIC CEILING TILE AND GRID TO BE TEMPORARILY REMOVED DURING INSTALLATION OF MECHANICAL WORK ABOVE CEILING AND REINSTALLED UPON WORK COMPLETION. COORDINATE WORK AMONGST MULTIPLE PRIMES. SEE MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION.
44. GC TO REMOVE EXISTING FENCE POST AND GATE.
45. GC TO REMOVE PORTION OF EXISTING CONCRETE FLOOR FOR INSTALLATION OF NEW FLOOR HATCH. COORDINATE ACTUAL LOCATION OF NEW FLOOR HATCH WITH PIPE TUNNEL BELOW SLAB. CONDUCT EXPLORATORY PROBES IN FLOOR AS REQUIRED TO LOCATE ACTUAL PIPE TRENCH LOCATION. PATCH PROBES AS REQUIRED. COORDINATE ACTUAL FLOOR OPENING SIZE WITH NEW FLOOR ACCESS DOOR REQUIREMENTS. SEE PROPOSED DRAWINGS AND SPEC FOR ADDITIONAL INFORMATION.
46. GC TO REMOVE EXISTING WOOD CASING.
47. GC TO REMOVE EXISTING WOOD WAINSCOTING CAP FROM ALL SIDES OF EXISTING COLUMN, TYPICAL.
48. GC TO REMOVE AREA OF EXISTING WALL FURRING BACK TO EXISTING MASONRY WALL. VERIFY ACTUAL DEPTH OF FURRING IN FIELD. REMOVE WALL BASE, GWB, STUDS, MASONRY CONSTRUCTION, ELECTRICAL OUTLETS, SWITCHES, ETC. EC TO TERMINATE ALL ELECTRICAL COMPONENTS IN ACCORDANCE WITH NEC REQUIREMENTS. GC TO TEMPORARILY BRACE AND SHORE ALL REMAINING WALLS, FLOORS, AND CEILINGS AS REQUIRED PRIOR TO DEMOLITION
49. GC TO REMOVE EXISTING PLASTER CEILING EITHER EXPOSED IN SPACE OR ABOVE EXISTING SUSPENDED CEILING. ASSUME PLASTER TO BE CONTINUOUS ABOVE SUSPENDED CEILING. REMOVE ADHERED SPLINE CEILING WHERE APPLICABLE. REMOVE PLASTER AND BACKUP SYSTEM IN ITS ENTIRETY. EXISTING CONCRETE OR TERRACOTTA STEEL FIRE PROTECTION TO REMAIN ABOVE. PATCH AND REPAIR FIREPROOFING AT CEILING STEEL AS REQUIRED TO MAINTAIN CONTINUOUS FIRE PROTECTION OF FLOOR SLAB AND ASSOCIATED MEMBERS. PREPARE SURFACE OF STRUCTURE ABOVE TO RECEIVE NEW PAINT, TYPICAL.
50. GC TO REMOVE EXISTING WOOD BEAM COVER. EXISTING CONCRETE OR TERRACOTTA STEEL FIRE PROTECTION TO REMAIN ABOVE. PATCH AND REPAIR FIREPROOFING AT CEILING STEEL AS REQUIRED TO MAINTAIN CONTINUOUS FIRE PROTECTION OF FLOOR SLAB AND ASSOCIATED MEMBERS. PREPARE SURFACE OF STRUCTURE ABOVE TO RECEIVE NEW PAINT, TYPICAL
51. GC TO REMOVE EXISTING GWB AND LIGHT GAUGE FRAMING BULKHEAD AT CEILING IN ITS ENTIRETY.
52. EXISTING PLASTER CEILING TO REMAIN THIS AREA.
53. EXISTING PIPING / CONDUIT TO REMAIN UNLESS OTHERWISE NOTED. PROTECT DURING DEMOLITION / CONSTRUCTION. REFER TO MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION.
54. MC TO REMOVE EXISTING EXHAUST HOOD. SEE MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION.
55. MC TO REMOVE EXISTING DUCTWORK. SEE MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION.
56. GC TO REMOVE BOTTOM LANDING OF EXISTING METAL PAN STAIR. MODIFY NEWEL POST, STRINGERS, AND RISERS AS REQUIRED TO ACCOMMODATE NEW RAMP LANDING INSTALLATION. REFER TO PROPOSED DRAWINGS FOR ADDITIONAL INFORMATION.
57. GC TO REMOVE EXISTING CONCRETE RAMP UP TO LANDING.
58. GC TO REMOVE A PORTION OF THE EXISTING INTERIOR PARTITION AS SHOWN TO ACCOMMODATE NEW WINDOW OPENING, INCLUDING GWB, STUDS, MASONRY CONSTRUCTION, ELECTRICAL OUTLETS, SWITCHES, ETC. EC TO TERMINATE ALL ELECTRICAL COMPONENTS IN ACCORDANCE WITH NEC REQUIREMENTS. GC TO TEMPORARILY BRACE AND SHORE ALL REMAINING WALLS, FLOORS, AND CEILINGS AS REQUIRED PRIOR TO DEMOLITION. COORDINATE ACTUAL SIZE AND LOCATION WITH PROPOSED DRAWINGS.
59. GC TO CAREFULLY REMOVE EXISTING KILN AND SAVE FOR REINSTALLATION. REFER TO ELECTRICAL DRAWINGS AND PROPOSED PLANS FOR ADDITIONAL INFORMATION.
60. GC TO REMOVE A PORTION OF EXTERIOR MASONRY WALL FOR INSTALLATION OF NEW LINTEL PROVIDED AND INSTALLED BY GC AND NEW LOUVER TO BE PROVIDED AND INSTALLED BY MC. COORDINATE WITH MC FOR EXACT LOCATION AND SIZE. TEMPORARILY SHORE REMAINING WALL AS REQUIRED AND INSTALL LINTEL PER STRUCTURAL DRAWINGS. DIMENSION SHOWN AT LEVEL OF LOUVER, REMOVE ADDITIONAL MASONRY AT HEAD AS REQUIRED TO ACHIEVE BEARING REQUIRED BY STRUCTURAL DRAWINGS. REFER TO MECHANICAL AND STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION
61. GC TO REMOVE EXISTING RECESSED CONCRETE SLAB FOR INSTALLATION OF NEW SELF LEVELER TO BRING HEIGHT OF FLOOR FLUSH TO INSTALL NEW FLOOR FINISH. REMOVE ALL FLOORING AND PREPARE TO RECEIVE ±2" SELF LEVELER. REFER TO PROPOSED DRAWINGS AND SPECIFICATION FOR ADDITIONAL INFORMATION.
62. PC TO REMOVE EXISTING DRINKING FOUNTAIN. COORDINATE WORK AMONGST MULTIPLE TRADES.
63. EXISTING SINK TO REMAIN. PROTECT DURING DEMOLITION / CONSTRUCTION.
64. EXISTING ELECTRICAL PANELS TO REMAIN. PROTECT DURING DEMOLITION / CONSTRUCTION.
65. EXISTING SUMP PIT TO REMAIN.
66. GC TO COMPLETELY REMOVE EXISTING WINDOW BLINDS / SHADES.
67. GC TO REMOVE CEILING HATCH IN ITS IN ENTIRETY, VERIFY ACTUAL SIZE IN FIELD.
68. EXISTING DOOR TO REMAIN, PROTECT DURING CONSTRUCTION
69. EXISTING WINDOW TO REMAIN, PROTECT DURING CONSTRUCTION
70. EXISTING CAST STONE ARCHWAY TO REMAIN. PROTECT DURING CONSTRUCTION.
71. GC TO REMOVE EXISTING SUSPENDED ACOUSTIC CEILING CANOPIES IN FULL, INCLUDING SUPPORTS, ACCESSORIES, FASTENERS, ETC.
72. PC TO REMOVE / MODIFY EXISTING SPRINKLER PIPING. REFER TO FIRE PROTECTION PLANS FOR ADDITIONAL INFORMATION.
73. GC TO TRENCH EXISTING CONCRETE SLAB FOR NEW FLOOR MOUNTED RECEPTACLE. EC TO MARK OUT LOCATION. GC TO TRENCH. COORDINATE WORK WITH EC. SEE PROPOSED PLANS AND ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION.
74. EC TO DISCONNECT AND REMOVE EXISTING ELECTRICAL PANEL. SEE ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION.
75. EXISTING CEILING ACCESS HATCH TO REMAIN.
76. GC TO REMOVE EXISTING CEILING HATCH IN FULL
77. GC TO REMOVE PORTION OF EXISTING CONCRETE FLOOR SLAB TO A SUFFICIENT DEPTH FOR INSTALLATION OF NEW CONCRETE FOOTING. COORDINATE EXACT SIZE AND LOCATION WITH PROPOSED COLUMN LOCATION. SEE STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION
78. GC TO REMOVE EXISTING FURRED OUT PIPE CHASE. PC TO REMOVE EXISTING PIPES, COORDINATE WORK WITH PC. COORDINATE REMOVAL OF ANY ELECTRICAL OUTLETS OR DEVICES ENCOUNTERED WITH EC. CLEAN UP GWB EDGE CONDITIONS AS REQUIRED FOR A CLEAN INTERSECTION WITH NEW FURRED GWB WALLS. SEE PROPOSED AND PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION
79. GC TO REMOVE PORTION OF EXISTING ROOF SYSTEM AND ROOF STRUCTURE BELOW TO ACCOMMODATE INSTALLATION OF NEW COLUMNS FOR NEW STEEL DUNNAGE. COORDINATE ACTUAL LOCATION WITH EXISTING STRUCTURE, VERIFY IN FIELD. SEE STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION
80. GC TO REMOVE PORTION OF EXISTING ROOF SYSTEM AND ROOF STRUCTURE BELOW TO ACCOMMODATE INSTALLATION OF NEW MECHANICAL PENETRATIONS. MC TO MARK OUT LOCATION OF PENETRATIONS, GC TO PERFORM ROOF DEMOLITION. GC TO MAINTAIN WATERTIGHTNESS AFTER CUTTING. COORDINATE WORK WITH MC. SEE MECHANICAL AND STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION
81. GC TO MODIFY/REMOVE A PORTION OF THE EXISTING CAST STONE WATER TABLE AND BELOW TO CREATE A RECESS TO ALLOW THE INSTALLATION OF NEW ALUMINUM FRAMED STOREFRONT AND DOOR ASSEMBLY. COORDINATE ACTUAL DEPTH AND LOCATION WITH PROPOSED DRAWINGS. SEE DOOR ELEVATIONS FOR ADDITIONAL INFORMATION
82. GC TO REMOVE PORTION OF EXISTING MASONRY WALL AS REQUIRED FOR INSTALLATION OF NEW MECHANICAL LOUVER, DUCT, OR DEVICE. MC TO MARK LOCATION, GC TO REMOVE. PROVIDE TEMPORARY SHORING AS REQUIRED. PROVIDE AND INSTALL LINTEL AS REQUIRED PER STRUCTURAL DRAWINGS. COORDINATE ACTUAL SIZE AND LOCATION WITH MC. SEE MECHANICAL AND STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION
83. GC TO REMOVE FLOORING IN ITS ENTIRETY DOWN TO CONCRETE SUBFLOOR. PREPARE FLOOR FOR INSTALLATION OF NEW CONCRETE RAMP. COORDINATE AREA OF DEMOLITION WITH PROPOSED RAMP. SEE PROPOSED AND STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION
84. GC TO MODIFY EXISTING DOOR FRAME IN EXISTING OPENING AS REQUIRED FOR INSTALLATION OF NEW LINTEL AND NEW DOOR FRAME. SEE PROPOSED DRAWINGS AND STRUCTURAL FOR ADDITIONAL INFORMATION.
85. GC TO REMOVE EXISTING ROOF EXHAUST FAN AND CURB IN ITS ENTIRETY. REMOVE ROOF MATERIAL AROUND CURB AS REQUIRED FOR INFILL OF CONCRETE ROOF DECK PER PROPOSED PLANS. SEE STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION
86. GC TO REMOVE ENTIRE ROOF CONSTRUCTION DOWN TO CONCRETE DECK TO ACCOMMODATE INSTALLATION OF NEW MECHANICAL SUPPORT CURB / RAILS. COORDINATE LOCATION WITH MC, TYPICAL
87. GC TO REMOVE EXISTING ROOF DRAIN
88. GC TO REMOVE EXISTING ROOF DRAIN AND INSTALL NEW IN ADJACENT LOCATION. COORDINATE WITH NEW MECHANICAL DUCT IN THIS AREA. REFER TO PLUMBING AND MECHANICAL DRAWINGS.
89. GC TO SAW CUT AND REMOVE PORTION OF EXISTING CONCRETE FLOOR FOR INSTALLATION OF NEW GREASE TRAP AND AIR CONTROL BOX. PC TO MARK OUT LOCATION. GC TO TRENCH. COORDINATE WORK WITH PC. SEE PROPOSED PLANS AND PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION.
90. GC TO CAREFULLY REMOVE EXISTING VISUAL DISPLAY BOARD AND ASSOCIATED PROJECTOR AND RESERVE FOR REINSTALLATION. REFER TO PROPOSED FLOOR PLAN AND CONSTRUCTION KEY NOTES FOR REINSTALLATION INFORMATION.
91. GC TO REMOVE EXISTING PROJECTOR AND SCREEN INCLUDING ALL SUPPORT BRACKETS AND HARDWARE. COORDINATE REINSTALLATION IN NEW MEDIA CENTER WITH EC. SEE ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION
92. GC TO DEMOLISH PORTION OF EXISTING PARAPET COPING AND WALL CONSTRUCTION TO ACCOMMODATE INSTALLATION OF COLUMN BEARING FOR NEW STEEL DUNNAGE. COORDINATE ACTUAL LOCATIONS WITH EXISTING STRUCTURE, VERIFY IN FIELD. SEE STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION
93. EXISTING COLUMN TO REMAIN. PROTECT DURING CONSTRUCTION
94. GC TO UNINSTALL EXISTING ROOF LADDER AND SAVE FOR REINSTALLATION
95. GC TO REMOVE PORTION OF EXISTING ROOF SYSTEM AND ROOF STRUCTURE BELOW TO ACCOMMODATE INSTALLATION OF RELOCATED ROOF DRAIN. COORDINATE ACTUAL LOCATION AND EXTENT WITH PLUMBING DRAWINGS
96. GC TO REMOVE EXISTING DOOR, HINGES, FRAME, HARDWARE, CLOSER, SIDELIGHTS AND TRANSOM WHERE APPLICABLE, ETC. CONFER WITH OWNER FOR SALVAGE PRIOR TO DISPOSAL. PRIOR TO REMOVAL OF DOOR IN THIS LOCATION TEMPORARY DOORS MUST BE IN PLACE
97. GC TO REMOVE EXISTING DOOR FRAME. PREPARE OPENING FOR INSTALLATION OF NEW DOOR AND FRAME

Legend (REFER TO DEMOLITION FLOOR PLANS)

SYMBOL	DESCRIPTION
	EXISTING PARTITION TO REMAIN
	EXISTING PARTITION TO BE REMOVED/ DEMOLISHED
	REMOVE PORTION OF EXISTING PARTITION TO DIMENSION SHOWN.
	EXISTING DOOR/FRAME TO BE REMOVED
	EXISTING SUSPENDED CEILING TO BE REMOVED
	EXISTING PLASTER CEILING TO BE REMOVED

General Notes

1. DIMENSIONS SHOWN ARE FROM FACE OF FINISH MATERIALS (+/-) UNLESS OTHERWISE NOTED.
2. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING DIMENSIONS.
3. PROVIDE INTERIOR AND EXTERIOR SHORING, BRACING OR SUPPORT TO PREVENT MOVEMENT, SETTLEMENT OR COLLAPSE OF AREAS TO BE DEMOLISHED AND ADJACENT FACILITIES TO REMAIN.
4. THE CONTRACTOR SHALL PERFORM DEMOLITION ACTIVITIES ONLY WITHIN THE ALLOWABLE HOURS OF OPERATION ON WEEKDAYS AND WEEKENDS IN ACCORDANCE WITH THE LOCAL NOISE ORDINANCE. THE CONTRACTOR SHALL CONSULT THE LOCAL MUNICIPALITY FOR ACCEPTABLE HOURS.
5. CONTRACTOR IS REQUIRED TO PATCH (TO MATCH EXISTING), IMMEDIATELY AFTER REMOVAL ALL WALL FLOOR & CEILING OPENINGS WHERE EXISTING PIPE, DUCT, CONVECTORS, ETC. ARE BEING REMOVED. SEAL OPENING WITH 3 HOUR BARRIER CAULK AS PER FIRESTOPPING SPECIFICATIONS. REFER TO FIRESTOPPING DETAILS FOR ADDITIONAL INFORMATION.

MULTIPLE PRIME CONTRACTOR ABBREVIATIONS

ALL REFERENCES TO "CONTRACTOR" IN NOTES SHALL REFER TO THE PRIME CONTRACTOR RESPONSIBLE FOR DRAWING SERIES THE NOTE IS FOUND ON, UNLESS NOTED OTHERWISE. ABBREVIATIONS FOR PRIME CONTRACTORS ARE AS FOLLOWS:

GC - GENERAL CONTRACTOR
MC - MECHANICAL CONTRACTOR
EC - ELECTRICAL CONTRACTOR
PC - PLUMBING CONTRACTOR

MULTIPLE PRIME CONTRACT NOTES:

1. SEE SPECIFICATION SECTION 011200 - SPECIAL PROVISIONS AND 010101 - MULTIPLE CONTRACT SUMMARY FOR INFORMATION REGARDING RESPONSIBILITY OF EACH PRIME CONTRACTOR AND REQUIRED COORDINATION.
2. ALL PRIME CONTRACTORS ARE RESPONSIBLE FOR REVIEWING DEMOLITION NOTES ON A1.00 AS WELL AS ALL ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS AND NOTES.

CORE DRILL LAYOUT NOTES:

1. CORE DRILLING SHALL BE PERFORMED BY EACH INDIVIDUAL PRIME CONTRACT. REFER TO SPECIFICATION SECTION 011200 - SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION.
2. EACH PRIME CONTRACTOR SHALL FIELD VERIFY AND MARK ON PLANS ALL STRUCTURAL MEMBERS BELOW PROPOSED CORE DRILL LOCATIONS AND NOTE ANY INTERFERENCES ON THE DRAWINGS. ANY DISCREPANCIES BETWEEN PROPOSED PLANS AND EXISTING CONDITIONS SHALL BE CLEARLY MARKED AND IDENTIFIED ON THE LAYOUTS AND PRESENTED TO THE ARCHITECT FOR REVIEW.

HAZARDOUS MATERIALS NOTES:

ASBESTOS:
GENERAL CONTRACTOR (GC) SHALL PERFORM ASBESTOS ABATEMENT IN ACCORDANCE WITH CONTRACT DOCUMENTS AND SPECIFICATION SECTION 028200 FOR ASBESTOS ABATEMENT PROCEDURES.

LEAD:
GENERAL CONTRACTOR (GC) SHALL REFER TO SPECIFICATION SECTION 020010 - LEAD ABATEMENT PROCEDURES.

Date	1/10/20
Checked	DLF
Drawn	CTB

MICHAEL J. McGOVERN, R.A.
License No. 022257-1
Title REGISTERED ARCHITECT

Revisions:
1 ISSUE TO BID 11/23/20

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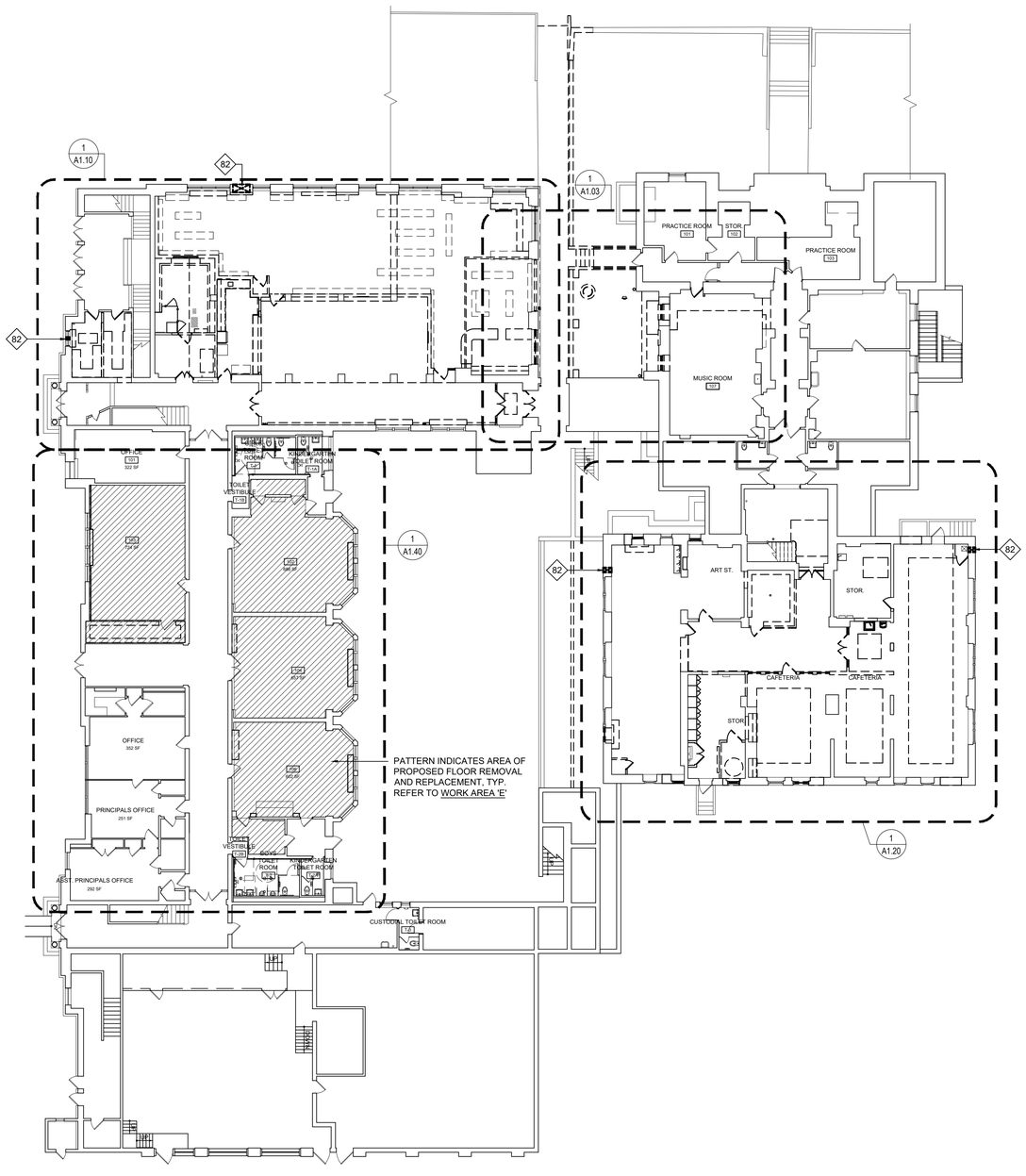
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NYSED PROJECT # 66-07-01-03-0-005-020

DEMOLITION KEY NOTES
2019 BOND REFERENDUM
CHATSWORTH AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

Job No. 4.1092.72.03
File No. 10927203A100

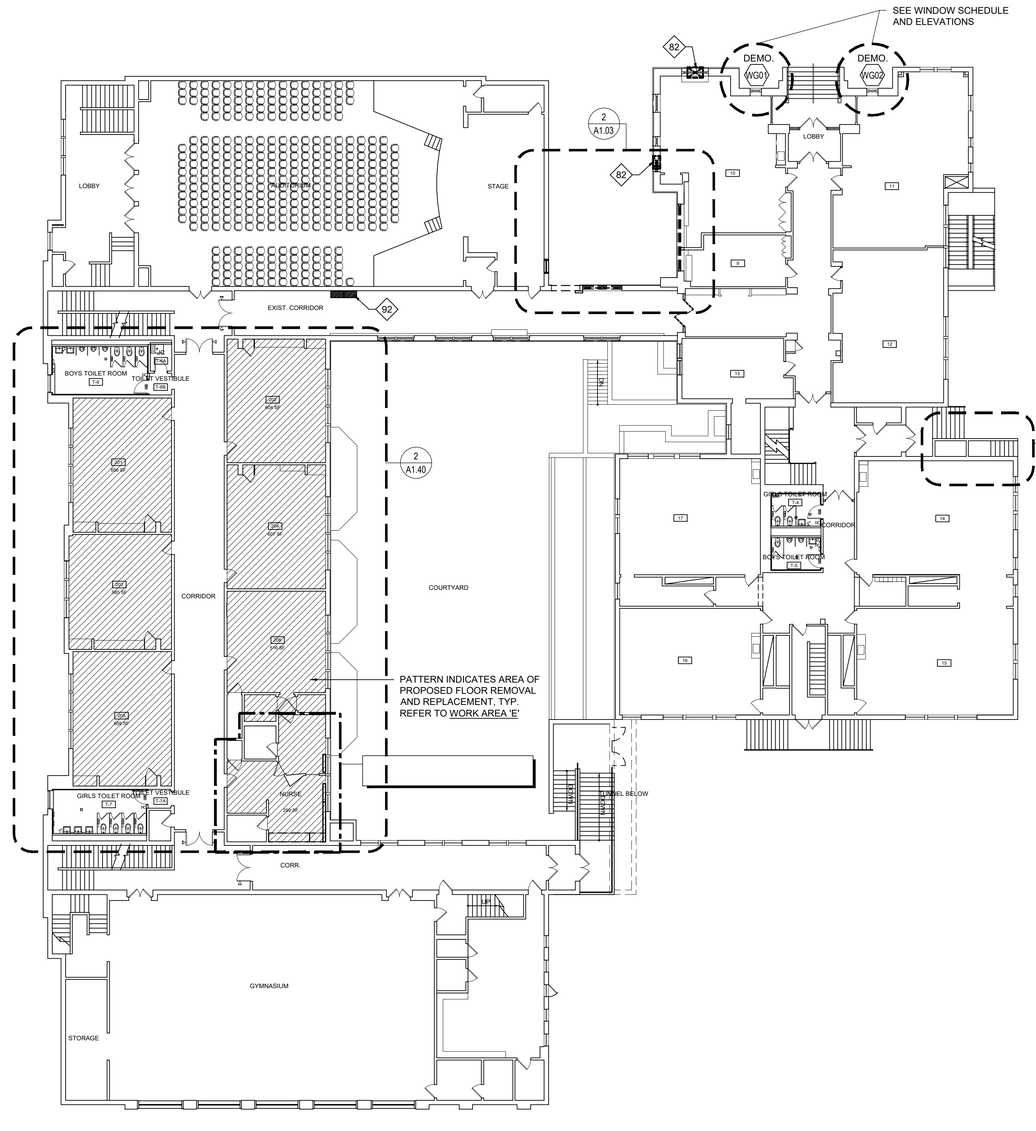
A1.00



1 A1.01 First Floor Demolition Plan

1/16" = 1'-0"

PROJECT NORTH



2 A1.01 Second Floor Demolition Plan

1/16" = 1'-0"

PROJECT NORTH

REFER TO GENERAL NOTES ON SHEET **A1.00**

SYMBOL INDICATES DEMOLITION KEY NOTE.

REFER TO DEMOLITION KEY NOTES ON SHEET **A1.00**

Date	1/10/20
Checked	DLF
Drawn	CTB

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NYSED PROJECT # 66-07-01-03-0-005-020

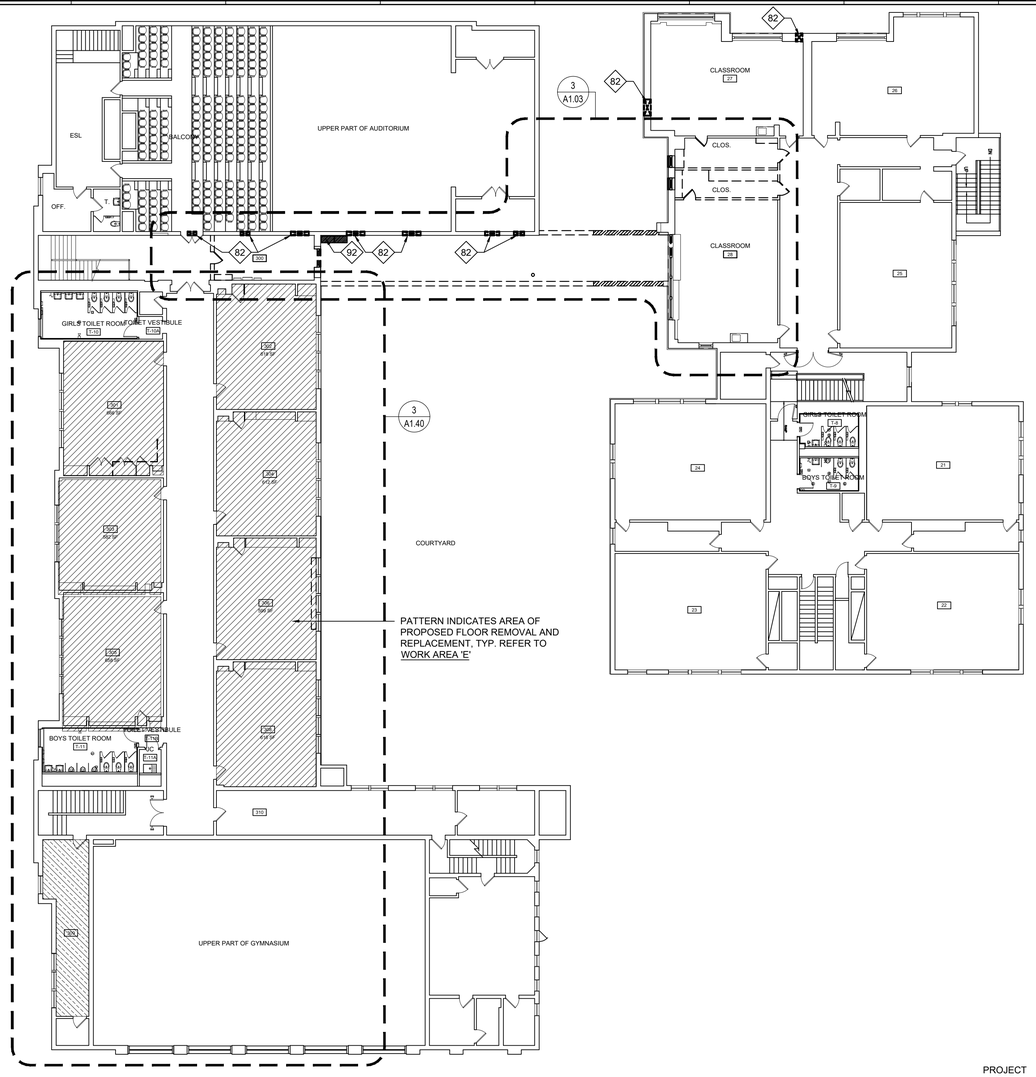
OVERALL DEMOLITION FLOOR PLANS

2019 BOND REFERENDUM
CHATSWORTH AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

Job No. 4.1092.72.03

File No. 10927203A101

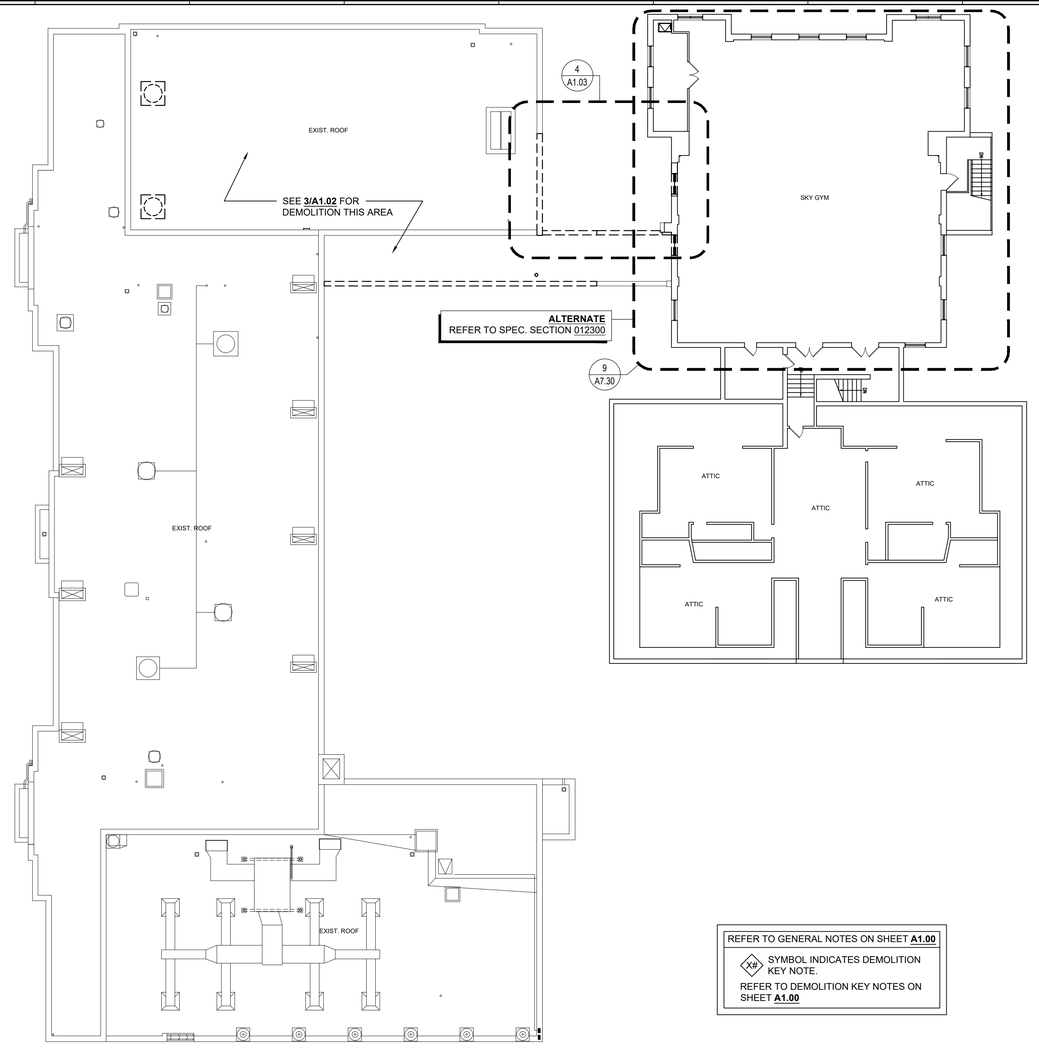
A1.01



1 A1.02 Third Floor Demolition Plan

1/16" = 1'-0"

PROJECT NORTH



2 A1.02 Fourth Floor Demolition Plan

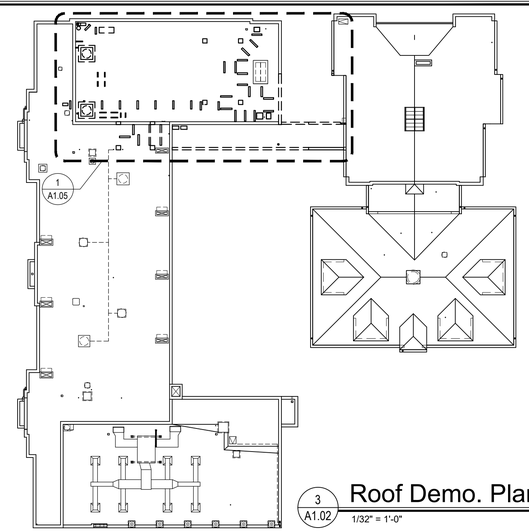
1/16" = 1'-0"

PROJECT NORTH

REFER TO GENERAL NOTES ON SHEET **A1.00**

X## SYMBOL INDICATES DEMOLITION KEY NOTE.

REFER TO DEMOLITION KEY NOTES ON SHEET **A1.00**



3 A1.02 Roof Demo. Plan

1/32" = 1'-0"

PROJECT NORTH

Date	1/10/20
Checked	DLF
Drawn	CTB

MICHAEL J. McGOVERN, R.A.
The REGISTERED ARCHITECT License No. 022257-1

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NYSED PROJECT # 66-07-01-03-0-005-020

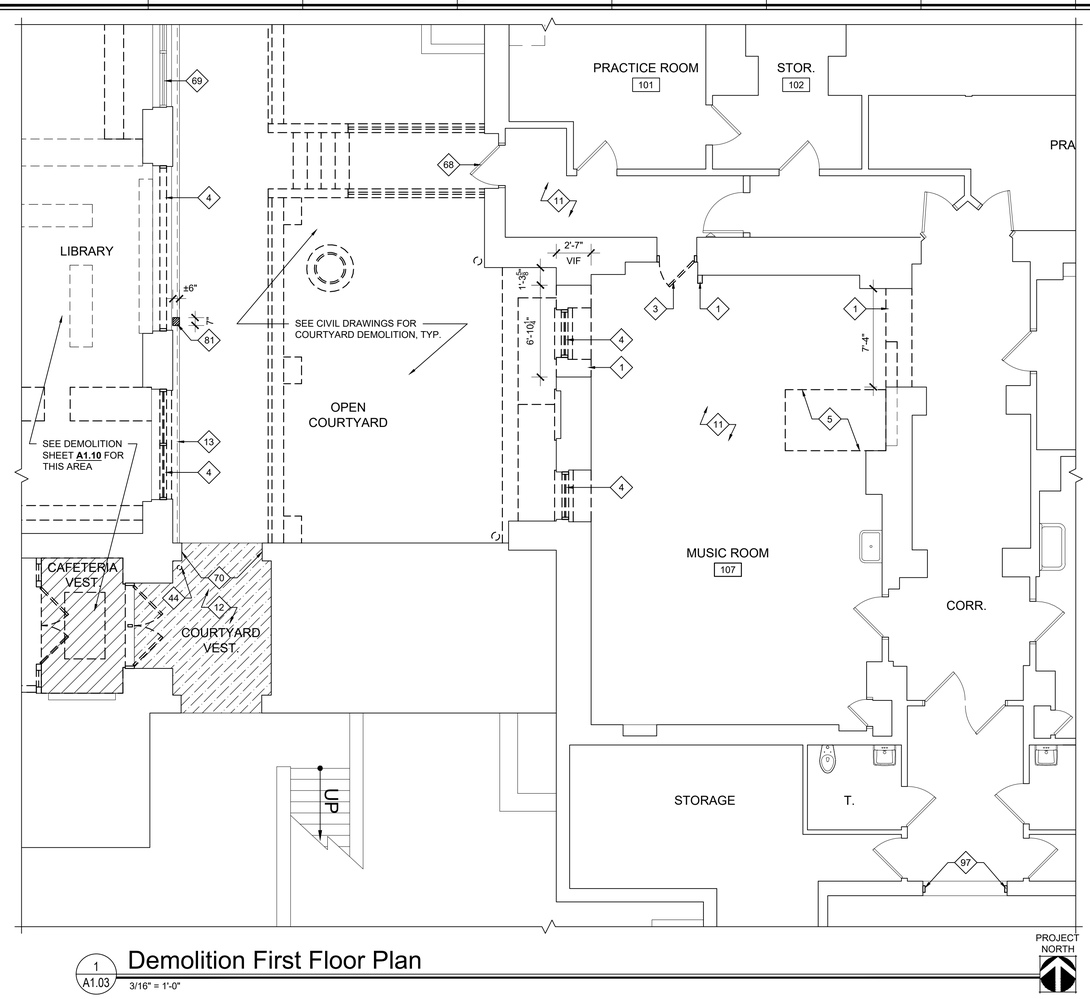
OVERALL DEMOLITION FLOOR PLANS

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CHATSWORTH AVENUE, LARCHMONT, NY 10538

Job No. 4.1092.72.03

File No. 10927203A101

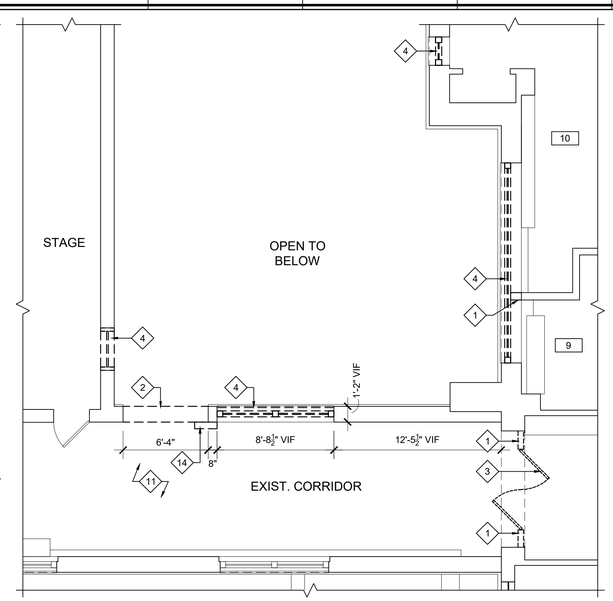
A1.02



1 A1.03 Demolition First Floor Plan

3/16" = 1'-0"

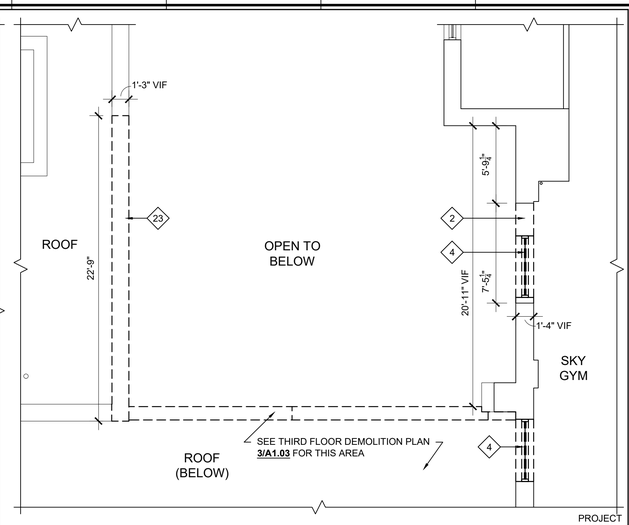
PROJECT NORTH



2 A1.03 Demolition Second Floor Plan

3/16" = 1'-0"

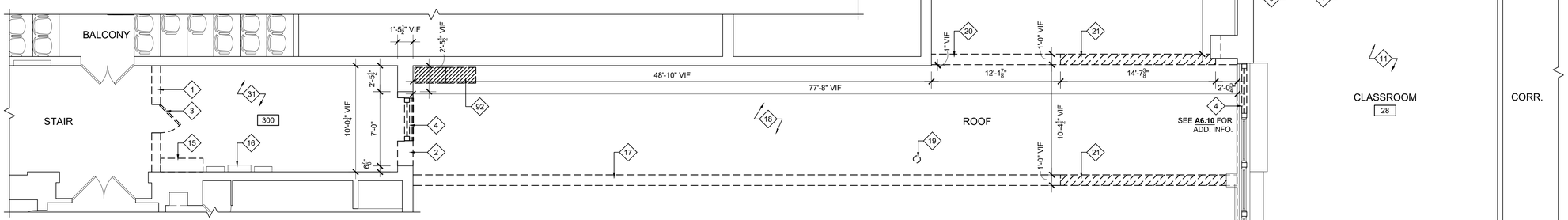
PROJECT NORTH



4 A1.03 Demolition Fourth Floor Plan

3/16" = 1'-0"

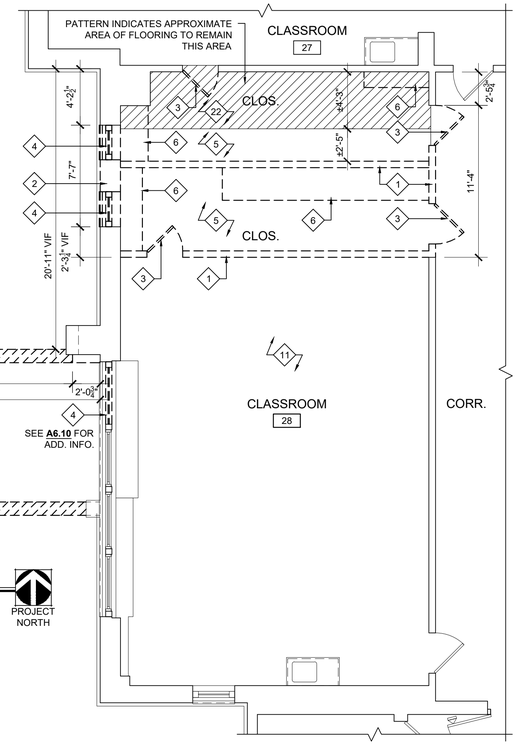
PROJECT NORTH



3 A1.03 Demolition Third Floor Plan

3/16" = 1'-0"

PROJECT NORTH

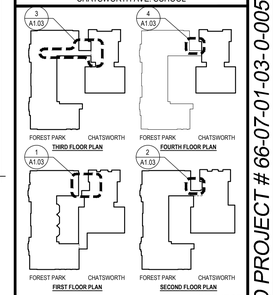


REFER TO GENERAL NOTES ON SHEET **A1.00**

X# SYMBOL INDICATES DEMOLITION KEY NOTE.

REFER TO DEMOLITION KEY NOTES ON SHEET **A1.00**

CHATSWORTH AVE. SCHOOL



Key Plan

NOT TO SCALE

PROJECT NORTH

Date	1/10/20
Checked	DLF
Drawn	CTB

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PARTIAL ELEVATOR DEMOLITION PLANS

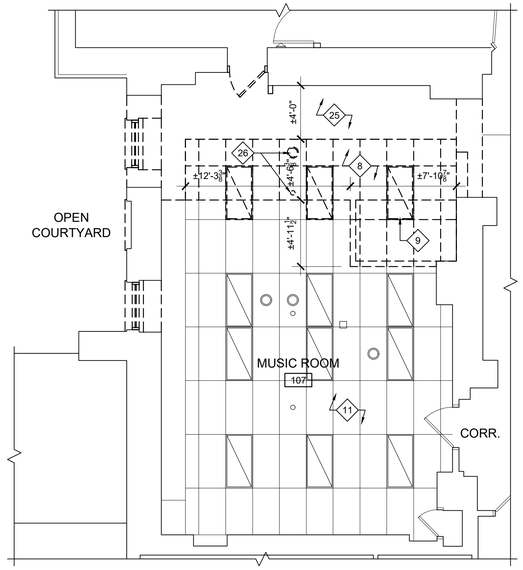
2019 BOND REFERENDUM
CHATSWORTH AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

NYSED PROJECT # 66-07-01-03-0-005-020

Job No. 4.1092.72.03

File No. 10927203A103

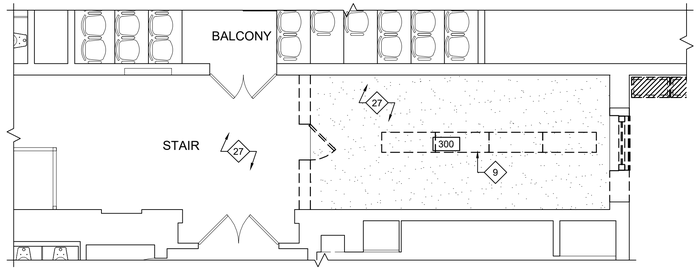
A1.03



1 A1.04 Demolition First Floor RCP

3/16" = 1'-0"

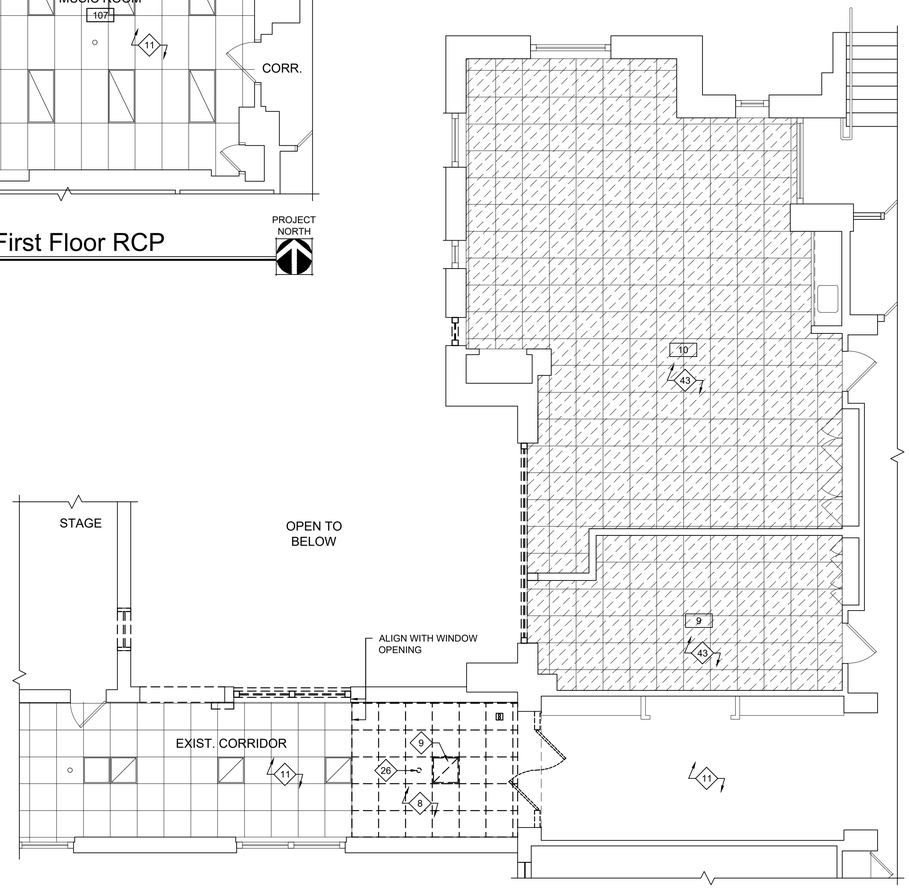
PROJECT NORTH



3 A1.04 Demolition Third Floor RCP

3/16" = 1'-0"

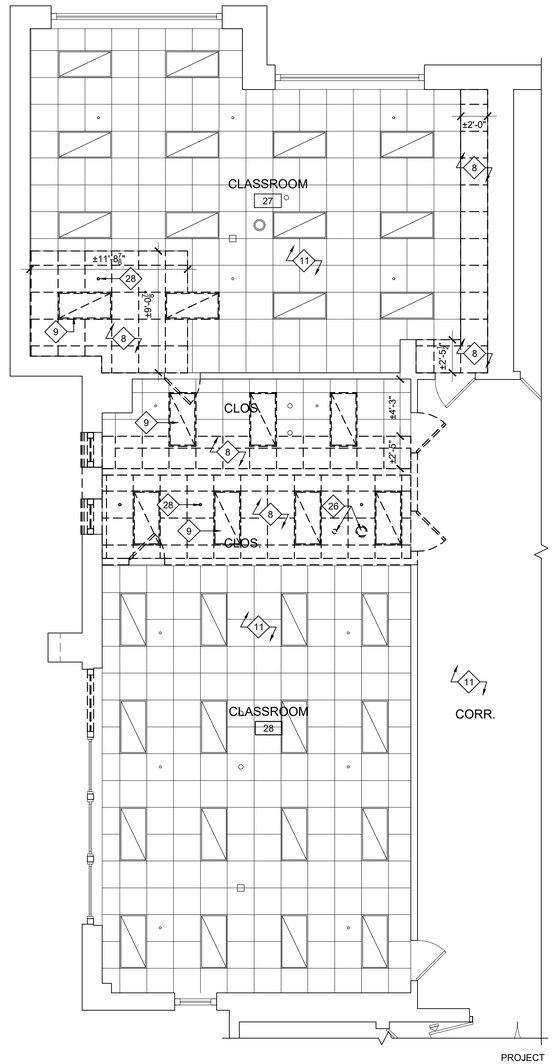
PROJECT NORTH



2 A1.04 Demolition Second Floor RCP

3/16" = 1'-0"

PROJECT NORTH



4 A1.04 Demolition Third Floor RCP

3/16" = 1'-0"

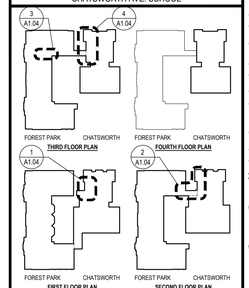
PROJECT NORTH

REFER TO GENERAL NOTES ON SHEET **A1.00**

X# SYMBOL INDICATES DEMOLITION KEY NOTE.

REFER TO DEMOLITION KEY NOTES ON SHEET **A1.00**

CHATSWORTH AVE. SCHOOL



Key Plan

NOT TO SCALE

PROJECT NORTH

NYSED PROJECT # 66-07-01-03-0-005-020

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PARTIAL ELEVATOR DEMOLITION RCP

2019 BOND REFERENDUM
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MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

Job No. 4.1092.72.03

File No. 10927203A104

A1.04

1 / A1.05 Partial Roof Demo. Plan

1/4" = 1'-0"

PROJECT NORTH

TEMPORARY ROOFING NOTE:
GC TO PROVIDE TEMPORARY ROOF WHILE IN TRANSITION FROM ROOF DEMOLITION TO INSTALLATION OF NEW ENCLOSED FLOOR

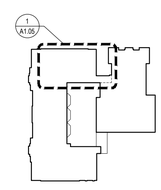
MECHANICAL/STRUCTURAL DEMOLITION AREAS SHOWN FOR REFERENCE ONLY. SEE MECHANICAL AND STRUCTURAL DRAWINGS FOR LOCATIONS AND ADDITIONAL INFORMATION.

REFER TO GENERAL NOTES ON SHEET **A1.00**

X# SYMBOL INDICATES DEMOLITION KEY NOTE.

REFER TO DEMOLITION KEY NOTES ON SHEET **A1.00**

CHATSWORTH AVE. SCHOOL



Key Plan

NOT TO SCALE

PROJECT NORTH

NYSED PROJECT # 66-07-01-03-0-005-020

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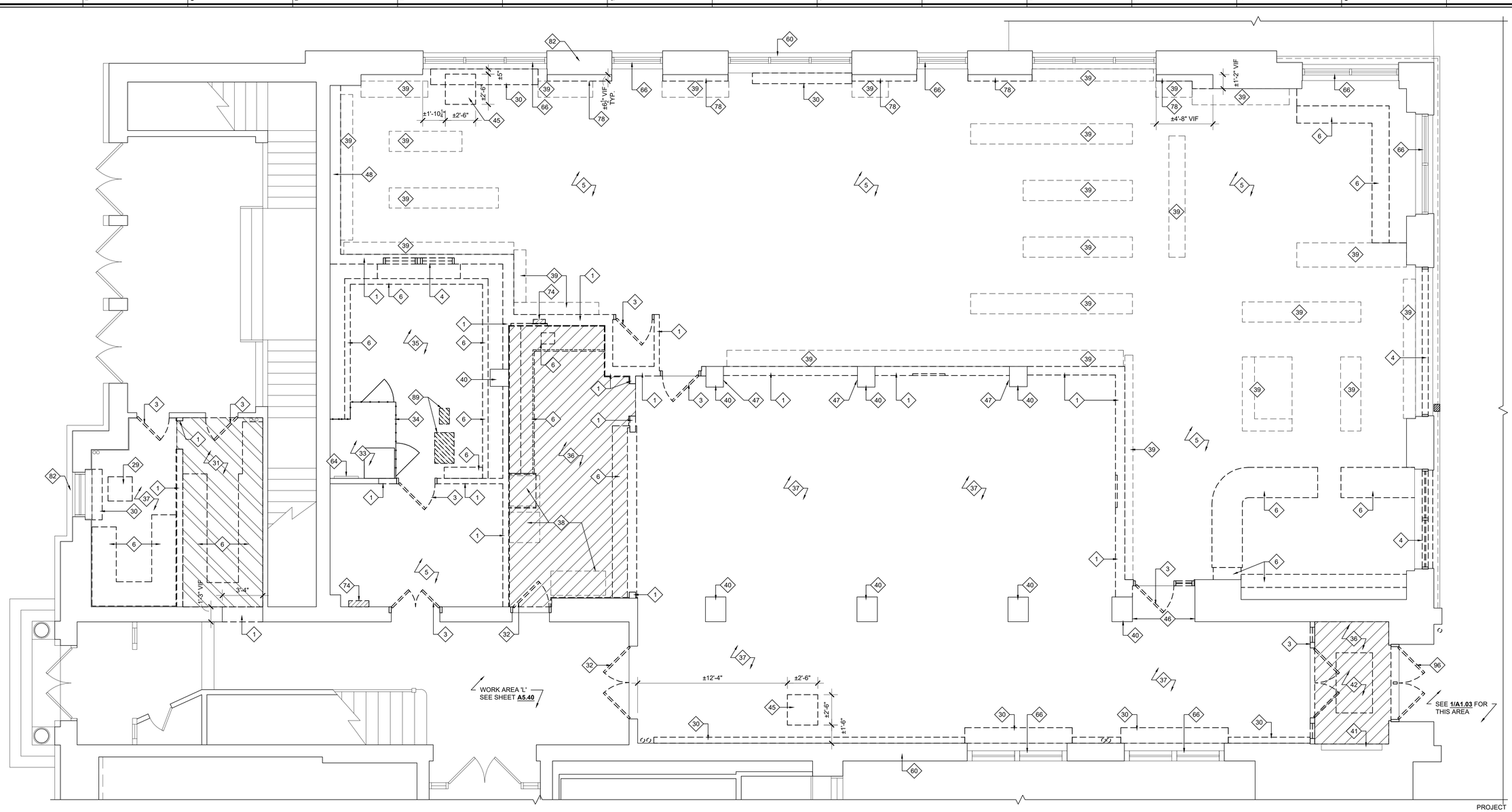
DEMOLITION ROOF PLAN

2019 BOND REFERENDUM
CHATSWORTH AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

Job No. 4.1092.72.03

File No. 10927203A105

A1.05



1 A1.10 Partial First Floor Demolition Plan

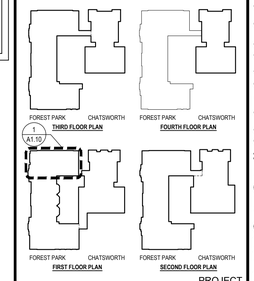
1/4" = 1'-0"

REFER TO GENERAL NOTES ON SHEET **A1.00**

X# SYMBOL INDICATES DEMOLITION KEY NOTE.

REFER TO DEMOLITION KEY NOTES ON SHEET **A1.00**

CHATSWORTH AVE. SCHOOL



Key Plan

NOT TO SCALE

PROJECT NORTH

NYSED PROJECT # 66-07-01-03-0-005-020

Date	1/10/20
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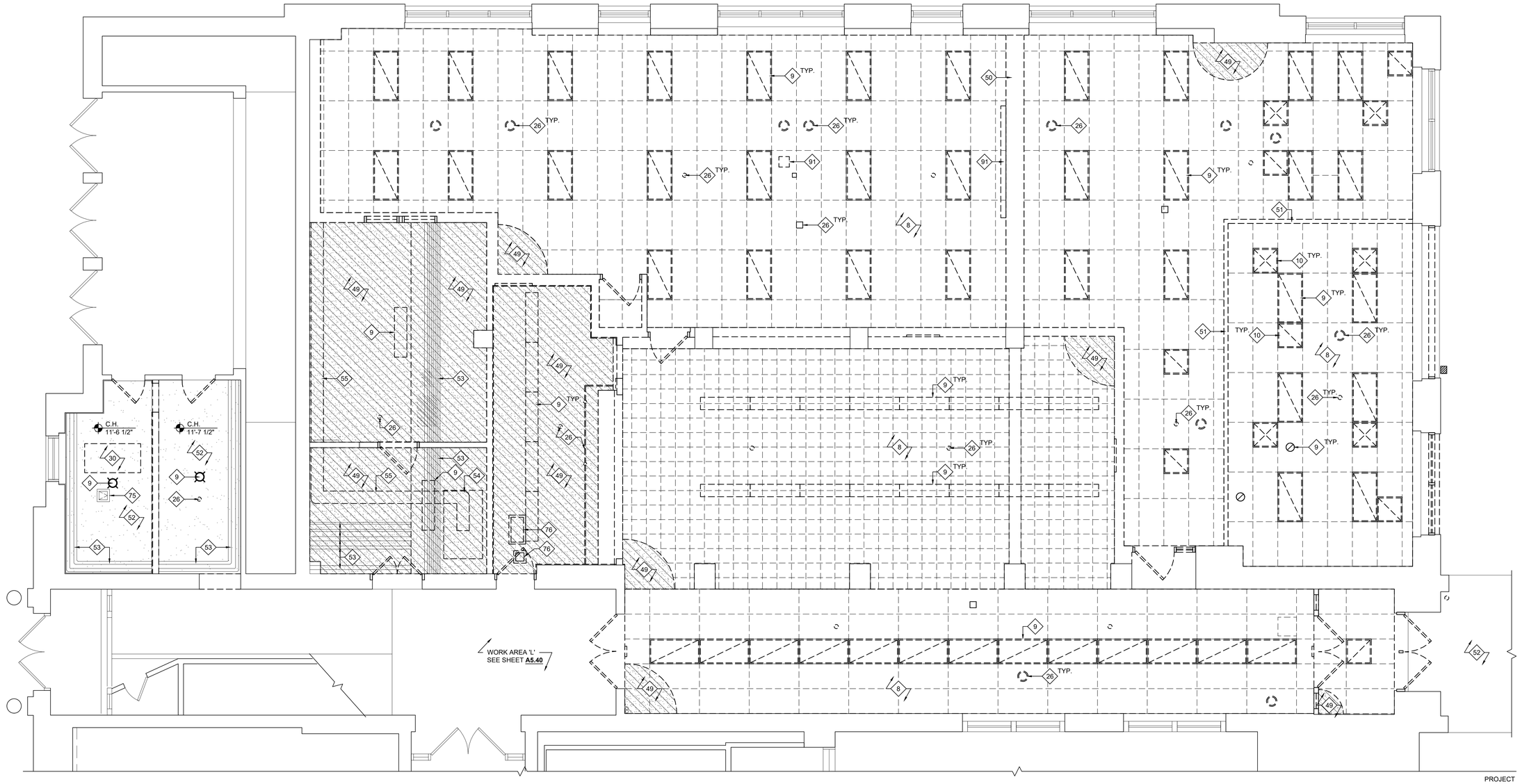
PARTIAL FIRST FLOOR DEMOLITION PLAN

2019 BOND REFERENDUM
CHATSWORTH AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

Job No. 4.1092.72.03

File No. 10927203A110

A1.10



1 A1.11 Partial First Floor Demolition RCP

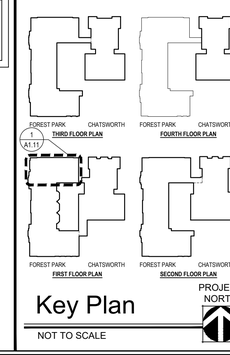
1/4" = 1'-0"

REFER TO GENERAL NOTES ON SHEET **A1.00**

X# SYMBOL INDICATES DEMOLITION KEY NOTE.

REFER TO DEMOLITION KEY NOTES ON SHEET **A1.00**

CHATSWORTH AVE. SCHOOL



Key Plan

NOT TO SCALE

Date	1/10/20
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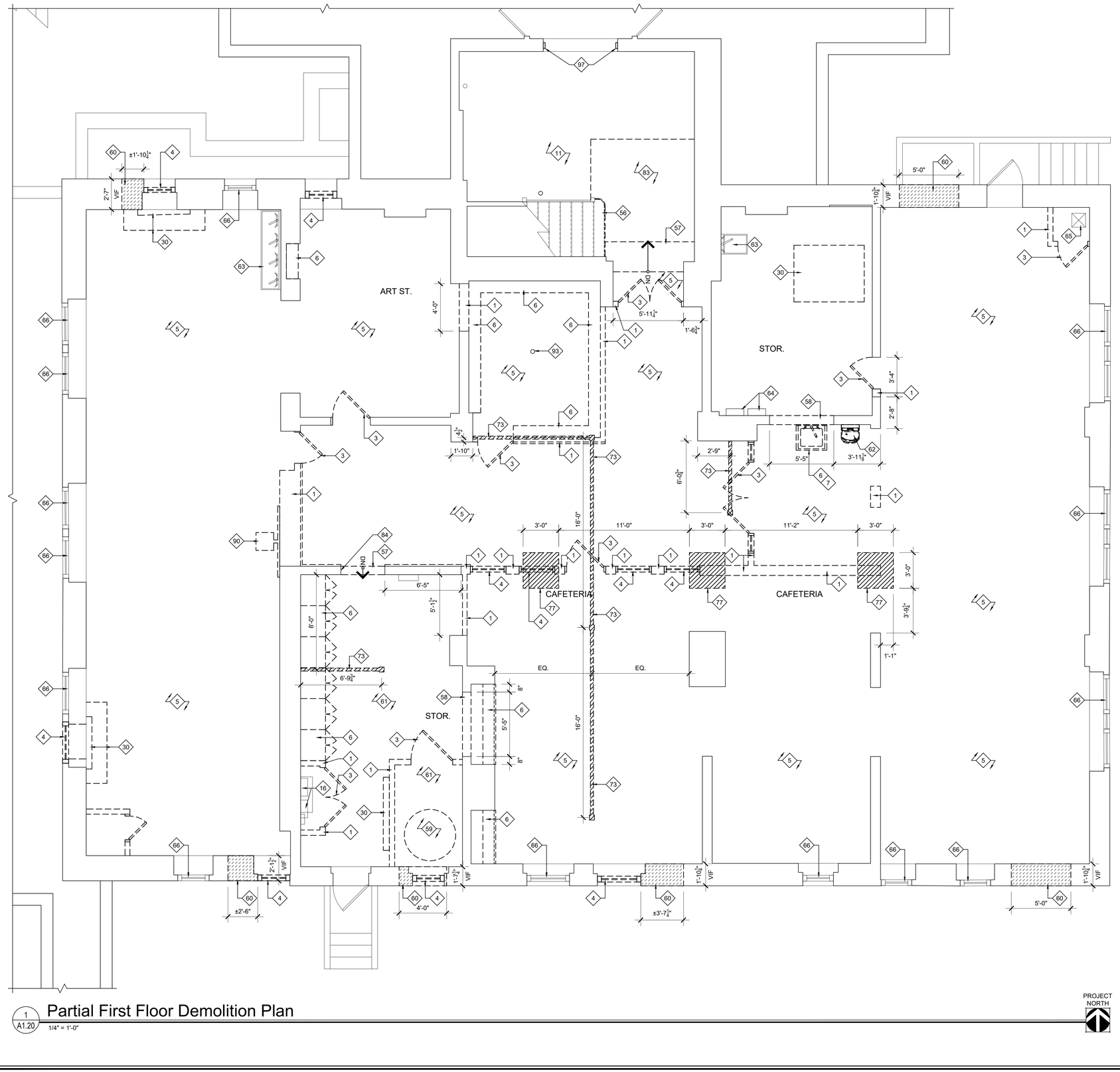
PARTIAL FIRST FLOOR DEMOLITION RCP

2019 BOND REFERENDUM
CHATSWORTH AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

Job No. 4.1092.72.03

File No. 10927203A111

A1.11



1 A1.20 Partial First Floor Demolition Plan

1/4" = 1'-0"

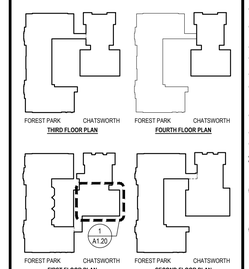
PROJECT NORTH

REFER TO GENERAL NOTES ON SHEET **A1.00**

X# SYMBOL INDICATES DEMOLITION KEY NOTE.

REFER TO DEMOLITION KEY NOTES ON SHEET **A1.00**

CHATSWORTH AVE. SCHOOL



Key Plan

NOT TO SCALE

PROJECT NORTH

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PARTIAL FIRST FLOOR DEMOLITION PLAN

2019 BOND REFERENDUM

CHATSWORTH AVENUE ELEMENTARY SCHOOL

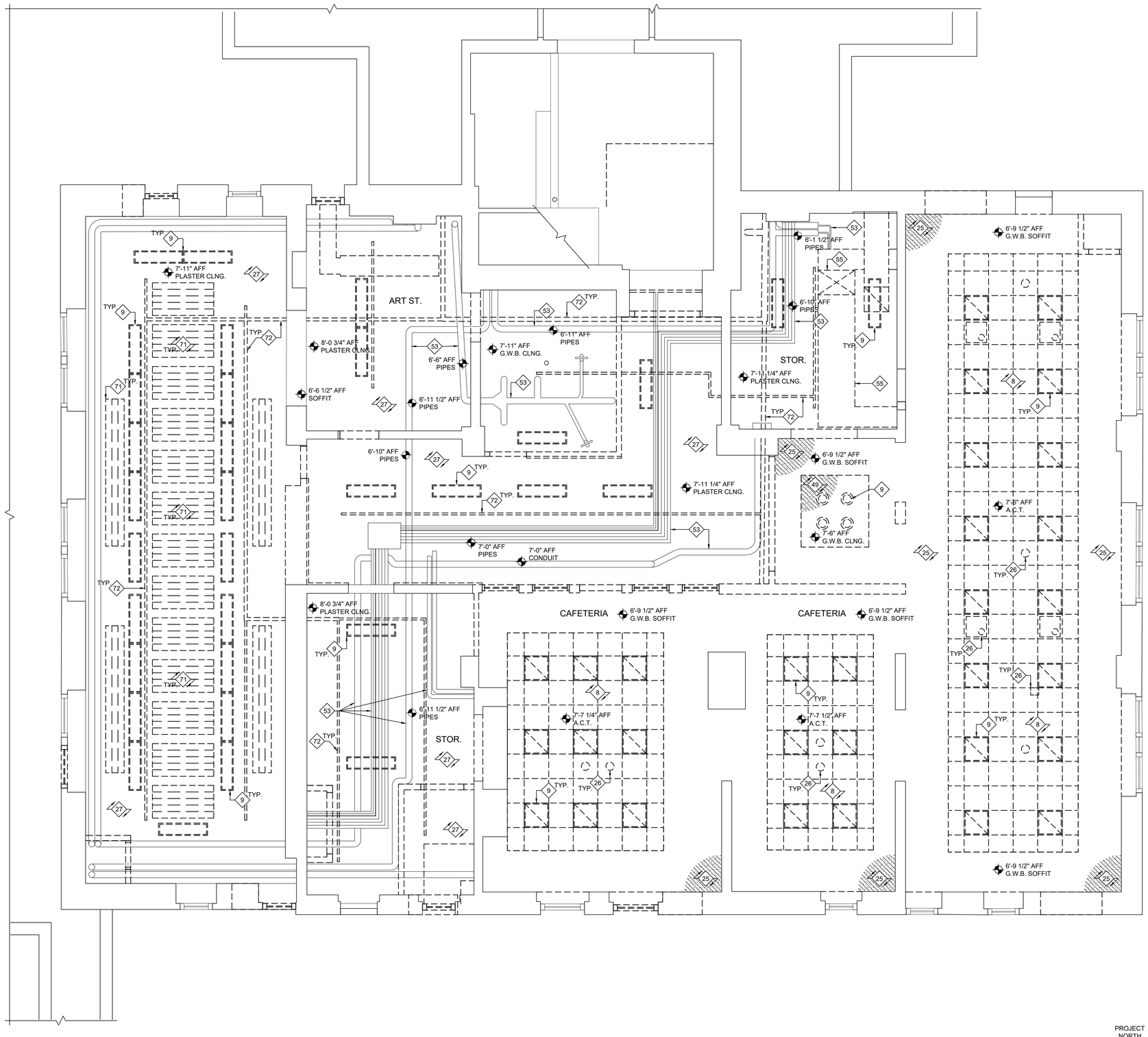
MAMARONECK UNION FREE SCHOOL DISTRICT

CHATSWORTH AVENUE, LARCHMONT, NY 10538

Job No. 4.1092.72.03

File No. 10927203A120

A1.20



1 A1.21 Partial First Floor Demolition RCP

1/4" = 1'-0"

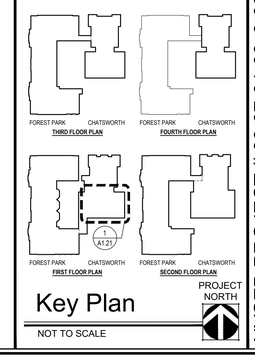
PROJECT NORTH

REFER TO GENERAL NOTES ON SHEET **A1.00**

X# SYMBOL INDICATES DEMOLITION KEY NOTE.

REFER TO DEMOLITION KEY NOTES ON SHEET **A1.00**

CHATSWORTH AVE. SCHOOL



Key Plan

NOT TO SCALE

PROJECT NORTH

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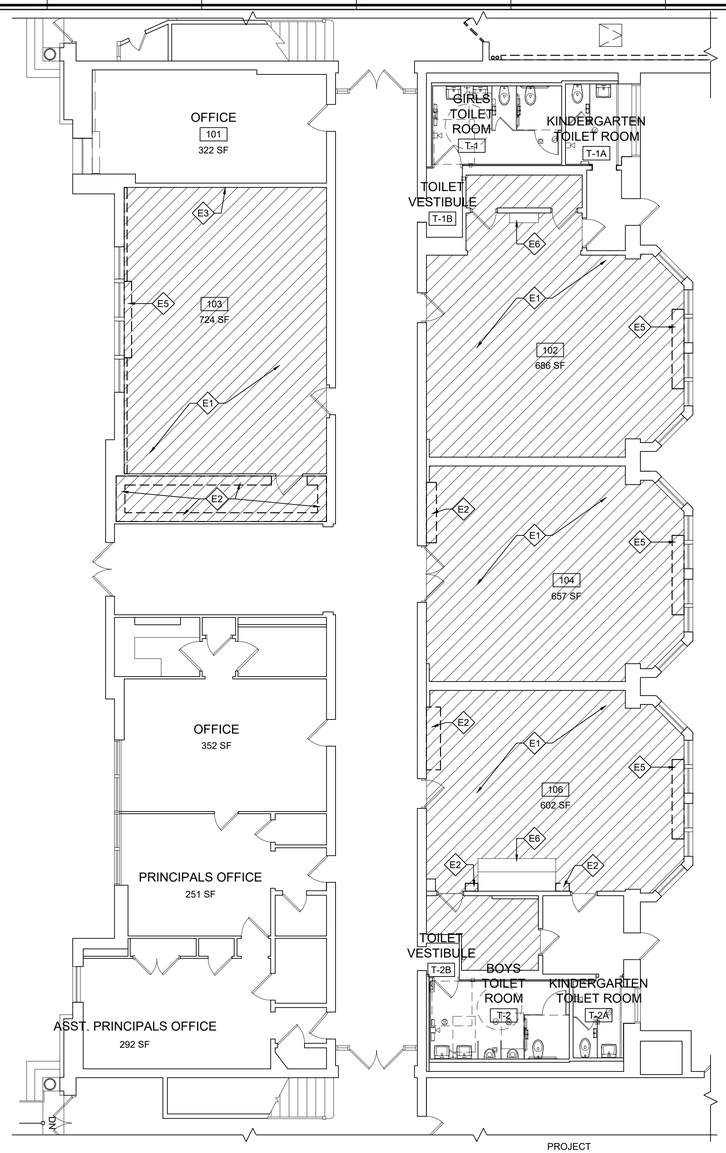
PARTIAL FIRST FLOOR DEMOLITION RCP

2019 BOND REFERENDUM
CHATSWORTH AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

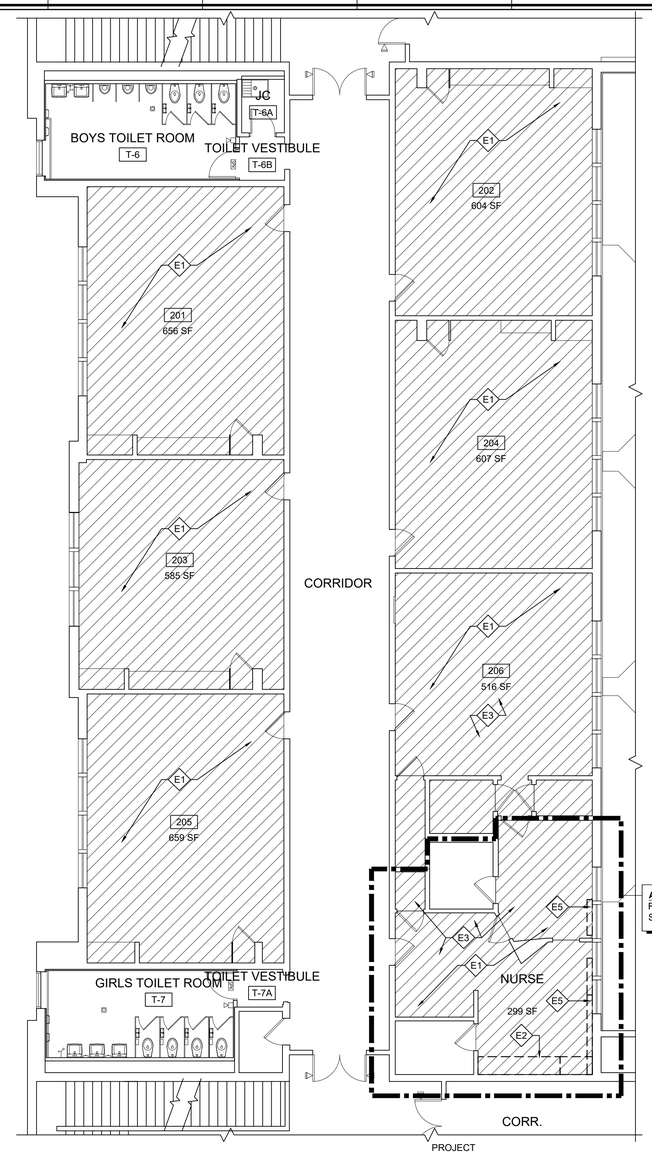
Job No. 4.1092.72.03

File No. 10927203A121

A1.21

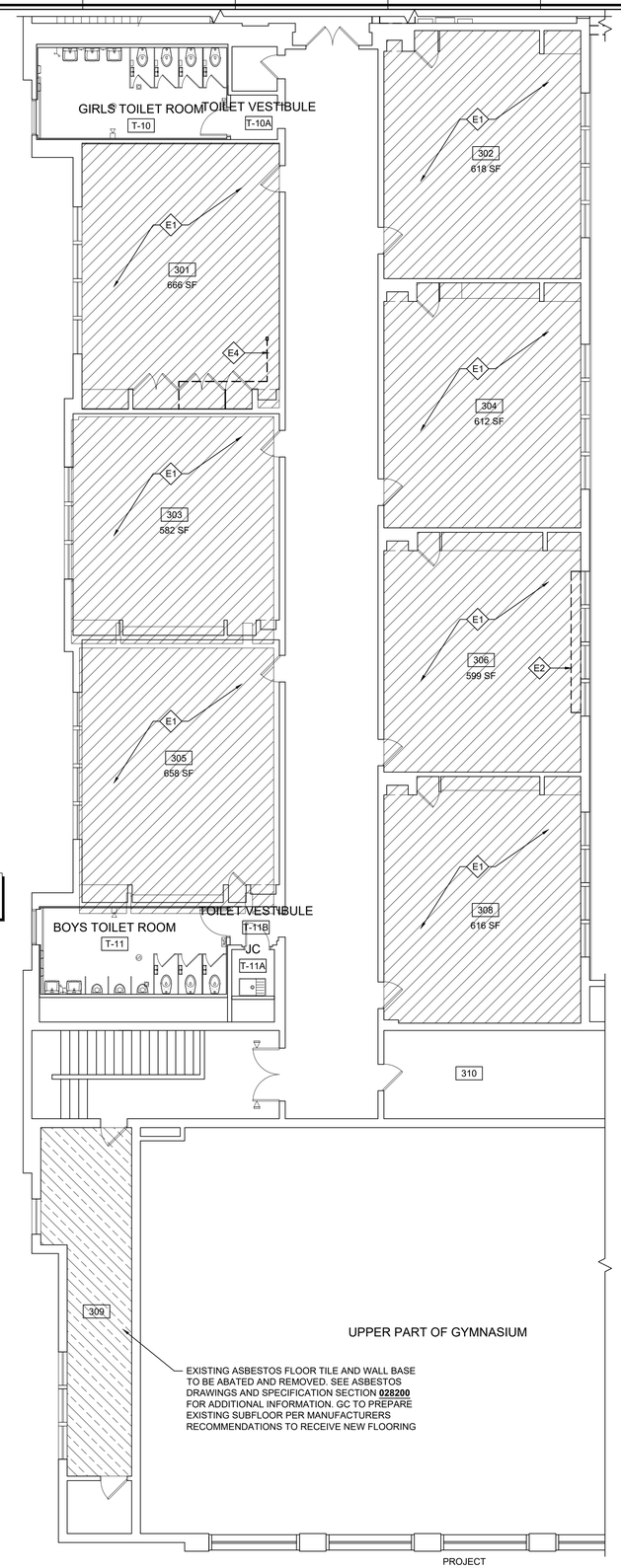


1 A1.40 **First Floor Demo**
1/8" = 1'-0"
PROJECT NORTH
WORK AREA 'E'



ALTERNATE
REFER TO SPEC. SECTION 012300

2 A1.40 **Second Floor Demo**
1/8" = 1'-0"
PROJECT NORTH
WORK AREA 'E'



3 A1.40 **Third Floor Demo**
1/8" = 1'-0"
PROJECT NORTH
WORK AREA 'E'

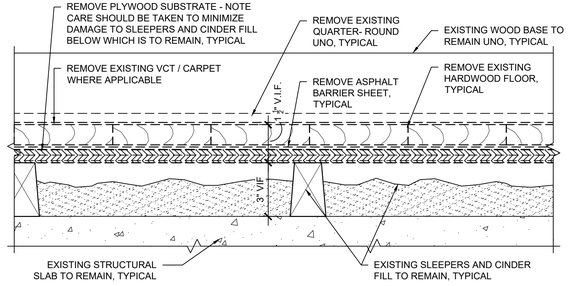
Demolition Key Notes - Work Area 'E'

◇ # SYMBOL INDICATES DEMOLITION KEY NOTE

1. **FLOOR FINISH DEMOLITION:** GC TO DEMO WOOD FLOORING SYSTEM (AND VCT/CARPET WHERE APPLICABLE). REMOVE ASPHALT BARRIER (IF APPLICABLE) BETWEEN WOOD AND PLYWOOD SUBSTRATE. REMOVE EXISTING WOOD QUARTER ROUND AT PERIMETER WITH EXISTING WOOD WALL BASE TO REMAIN. CONTRACTOR IS NOT TO DISTURB THE EXISTING 2"X3" WOOD SLEEPERS AND ADJACENT CINDER FILL, TYPICAL U.O.N. REFER TO DETAIL **4/A1.40**. SEE PROPOSED PLANS FOR ADDITIONAL INFORMATION. DISPOSE OF ALL MATERIALS IN AN APPROVED MANNER. GC TO CAREFULLY UNINSTALL ALL FLOOR MOUNTED HARDWARE AND SAVE FOR REINSTALLATION IN ORIGINAL LOCATION, TYPICAL
2. GC TO CAREFULLY UNINSTALL EXISTING CASEWORK AND SAVE FOR REINSTALLATION
3. GC TO REMOVE EXISTING VINYL / RUBBER BASE IN THIS AREA
4. EC TO REMOVE EXISTING CONDUIT AND FLOOR MOUNTED OUTLET. TERMINATE IN AN APPROVED MANNER
5. MC TO CAREFULLY UNINSTALL EXISTING UNIT VENTILATOR AND SAVE FOR REINSTALLATION TO ORIGINAL LOCATION. MC TO TEMPORARILY CAP EXISTING HOT WATER PIPING. MC TO TEMPORARILY COVER EXISTING FRESH AIR INTAKE OPENING DURING TEMPORARY REMOVAL UNTIL REINSTALLATION OF UNIT VENTILATOR
6. EXISTING FIREPLACE AND HEARTH TO REMAIN. PROTECT DURING CONSTRUCTION.

NOTE:
GC TO CAREFULLY UNINSTALL ALL CLOSET DOORS WITH FLOOR MOUNTED HARDWARE WITHIN AREAS OF WORK AND SAVE FOR REINSTALLATION TO ORIGINAL LOCATION

NOTE:
MC IS RESPONSIBLE FOR ALL MODIFICATIONS TO HOT WATER HEATING AND REFRIGERANT PIPING
PC IS RESPONSIBLE FOR ALL MODIFICATIONS TO DOMESTIC HOT AND COLD WATER, WASTE, GAS, AND CONDENSATE DRAIN PIPING



4 A1.40 **Classroom Floor Detail - Demo**
3" = 1'-0"
WORK AREA 'E'

Date	1/10/20
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Drawn	CTB

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NYSED PROJECT # 66-07-01-03-0-005-020

PARTIAL FLOORING DEMOLITION PLANS
2019 BOND REFERENDUM
CHATSWORTH AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

Job No. 4.1092.72.03
File No. 10927203A140

A1.40

Construction Key Notes - Work Area 'A'

(#) SYMBOL INDICATES CONSTRUCTION KEY NOTE

1. GC TO CLEAN EXISTING BRICK AND CAST STONE. SEE SPECIFICATION SECTION **040110 - MASONRY CLEANING**
2. GC TO CLEAN EXISTING CAST STONE BASE INCLUDING PORTION EXPOSED BY EXCAVATION AND REGRADING IN WORK AREA. SEE SPECIFICATION SECTION **040110 - MASONRY CLEANING**
3. SEE CIVIL DRAWINGS FOR INFORMATION REGARDING NEW RETAINING WALL
4. SEE CIVIL DRAWINGS FOR INFORMATION REGARDING NEW STAIR AND LANDING
5. SEE CIVIL DRAWINGS FOR INFORMATION REGARDING NEW EXTERIOR RAMP AND SITE DRAINAGE
6. GC TO PROVIDE AND INSTALL NEW CAST STONE ARCHWAY. ARCHWAY SIZE, COURSING, AND STONE PROFILES TO MATCH EXISTING CAST STONE ARCHWAY AT EXISTING CAFETERIA ENTRY / COURTYARD ENTRY VESTIBULE. VERIFY ALL SIZES IN FIELD. ARCHWAY DEPTH TO ACCOMMODATE NEW MASONRY WALL. SEE SPECIFICATION SECTION **047200 - CAST STONE MASONRY**
7. GC TO CLEAN EXISTING CAST STONE ARCHWAY TO BE EXPOSED WITHIN NEW INTERIOR SPACE. SEE SPECIFICATION SECTION **040110 - MASONRY CLEANING**
8. GC TO PROVIDE AND INSTALL NEW PREMANUFACTURED RECESSED DISPLAY CASE WITH PRE-INSTALLED LED LIGHTING TO FIT WITHIN EXISTING WINDOW OPENING, 8'-1" WIDE BY 6'-8" TALL, CUSTOM DEPTH TO BE ±14". VERIFY ALL SIZES IN FIELD. INTERIOR AND EXTERIOR FINISH TO BE SELECTED BY ARCHITECT FROM MANUFACTURER'S FULL RANGE. EC TO PROVIDE POWER AND JUNCTION BOX TO LOCATION. SEE SPECIFICATION SECTION **101200 - DISPLAY CASES**
9. GC TO PROVIDE AND INSTALL NEW PREMANUFACTURED RECESSED DISPLAY CASE WITH PRE-INSTALLED LED LIGHTING TO FIT WITHIN EXISTING WINDOW OPENING, 8'-8½" WIDE BY 3'-6" TALL, CUSTOM DEPTH TO BE ±14". VERIFY ALL SIZES IN FIELD. SILL HEIGHT TO MATCH EXISTING WINDOW SILL, ±42" AFF, FIELD VERIFY. INTERIOR AND EXTERIOR FINISH TO BE SELECTED BY ARCHITECT FROM MANUFACTURER'S FULL RANGE. EC TO PROVIDE POWER AND JUNCTION BOX TO LOCATION. SEE SPECIFICATION SECTION **101200 - DISPLAY CASES**
10. GC TO INSTALL NEW CONCRETE STAIR WITH METAL HANDRAILS. HANDRAIL FINISH TO BE SELECTED BY ARCHITECT. SEE STRUCTURAL DRAWINGS, INTERIOR ELEVATIONS, AND FLOOR FINISH PLANS FOR ADDITIONAL INFORMATION
11. GC TO PROVIDE AND INSTALL NEW SEMI-RECESSED FIRE EXTINGUISHER CABINET AND FIRE EXTINGUISHER. MAINTAIN FIRE RATING OF WALL THROUGHOUT WHERE APPLICABLE. INSTALL 48" AFF TO TOP OF EXTINGUISHER. SEE SPECIFICATION SECTION **104400 - FIRE PROTECTION SPECIALTIES**
12. GC TO PROVIDE AND INSTALL NEW INTERIOR EXPANSION JOINT COVERS AT HEAD, JAMB, AND SILL OF DOOR, BOTH SIDES OF FIRE WALL, TYPICAL. SEE SPECIFICATION SECTION **079513 - EXPANSION JOINT COVER ASSEMBLIES**
13. GC TO PROVIDE AND INSTALL NEW INTERIOR EXPANSION JOINT COVERS AT NEW FLOOR SLAB INTERSECTION AND AT ADJOINING WALL, TYPICAL. SEE SPECIFICATION SECTION **079513 - EXPANSION JOINT COVER ASSEMBLIES**
14. GC TO PROVIDE AND INSTALL NEW EXPANSION JOINT. STEP JOINT AS REQUIRED TO FOLLOW PROFILE OF ADJACENT WALL, TYPICAL. SEE SPECIFICATION SECTION **079000 PRE-COMPRESSED EXPANSION JOINTS**
15. AREA OF NEW WALK-OFF SURFACE. GC TO RECESS NEW FLOOR SLAB AS REQUIRED FOR INSTALLATION OF NEW WALK OFF SURFACE TO PROVIDE A FLUSH TRANSITION WITH NEW ADJACENT FINISH FLOOR. SEE FLOOR FINISH PLAN AND STRUCTURAL PLANS FOR ADDITIONAL INFORMATION. SEE SPECIFICATION SECTION **124800 - ENTRANCE MATS AND GRATES**
16. GC TO PRESERVE EXISTING FINISHES THIS AREA. PAINT NEW / INFILL WALLS THIS AREA TO MATCH ADJACENT, TYPICAL. NEW WALL BASE OF NEW WALLS TO MATCH EXISTING BASE. MODIFY EXISTING CEILING TILES / GRID TO ACCOMMODATE NEW WALLS. PROVIDE NEW ACT / GRID TO MATCH EXISTING WHERE NECESSARY. SEE DEMOLITION PLANS, FLOOR FINISH PLANS, AND REFLECTED CEILING PLANS FOR ADDITIONAL INFORMATION
17. NEW LINTEL OR MODIFIED EXISTING LINTEL IN EXISTING MASONRY WALL. REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION
18. GC TO INSTALL NEW '**ROOF SYSTEM 1**' INSTALLED OVER NEW /EXISTING CONCRETE ROOF DECK. MINIMUM R-30. SEE TYPICAL DETAIL **1/A8.10** FOR ADDITIONAL INFORMATION
19. GC TO PROVIDE AND INSTALL NEW BATT INSULATION, MINIMUM R-38. SEE SPECIFICATION **072100 - BUILDING INSULATION**
20. GC TO GRIND EXISTING CUT MASONRY SMOOTH FOR A FINISHED APPEARANCE. PATCH AND REPAIR WITH LIKE IN KIND AS REQUIRED
21. FURNITURE / EQUIPMENT BY OWNER, NIC. SHOWN FOR REFERENCE
22. GC TO INSTALL NEW BUILT-UP PLYWOOD SUBFLOOR. HEIGHT TO ACCOMMODATE A FLUSH TRANSITION OF NEW FINISH FLOOR THIS AREA WITH ADJACENT FINISH FLOORS. VERIFY ALL HEIGHTS IN FIELD. PREPARE NEW SUBFLOOR FOR INSTALLATION OF NEW FLOOR FINISH. SEE FLOOR FINISH PLAN FOR ADDITIONAL INFORMATION
23. GC TO INFILL EXISTING CONCRETE ROOF SLAB WITH NEW SELF LEVELER. NEW FINISH FLOOR TO MATCH FINISH FLOOR OF ADJACENT SPACES, APPROXIMATE DEPTH: 1½", VERIFY IN FIELD. PREPARE EXISTING FLOOR SURFACE PER MANUFACTURERS INSTRUCTIONS. SEE SPECIFICATION SECTION **035416 - CEMENT-BASED, INTERIOR, SELF LEVELING UNDERLAYMENT.**
24. AREA OF NEW RAISED CEMENT-BASED UNDERLAYMENT RAMP LANDING. FINISH FLOOR TO MATCH ADJACENT. PREPARE SURFACE FOR INSTALLATION OF NEW FLOOR FINISH. SEE FLOOR FINISH PLAN FOR ADDITIONAL INFORMATION. SEE SPECIFICATION SECTION **035416 - CEMENT-BASED, INTERIOR, SELF LEVELING UNDERLAYMENT**
25. AREA OF NEW CEMENT-BASED UNDERLAYMENT RAMP. PREPARE SURFACE FOR INSTALLATION OF NEW FLOOR FINISH. SEE FLOOR FINISH PLAN FOR ADDITIONAL INFORMATION. SEE SPECIFICATION SECTION **035416 - CEMENT-BASED, INTERIOR, SELF LEVELING UNDERLAYMENT**
26. EXISTING CAST STONE CORNICE AND BRICK WALL BELOW. GC TO CLEAN EXISTING BRICK AND CAST STONE. SEE SPECIFICATION SECTION **040110 - MASONRY CLEANING**
27. EXISTING ELECTRICAL PANELS AND FIRE ALARM PANEL TO BE ENCLOSED IN NEW CLOSET. PROTECT DURING CONSTRUCTION. SEE ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION
28. GC TO PROVIDE AND INSTALL NEW METAL FRAMED RAMP LANDING. PREPARE SURFACE FOR INSTALLATION OF NEW FLOOR FINISH. SEE STRUCTURAL DRAWINGS AND NEW FLOOR FINISH PLAN FOR ADDITIONAL INFORMATION
29. GC TO PROVIDE AND INSTALL NEW WOOD AND PLASTIC LAMINATE BUILT-IN OPEN STUDENT LOCKERS BY 'CASE SYSTEMS' (BASIS OF DESIGN) MODEL 'Y8230' 48" WIDTH WITH COAT HOOKS. MOUNT ON WALL 5' AFF TO TOP. PROVIDE WALL BLOCKING AS REQUIRED AND ALL NECESSARY HARDWARE FOR A COMPLETE INSTALLATION. ALL FINISHES TO BE SELECTED BY ARCHITECT. SEE SPECIFICATION SECTION **123554 - MANUFACTURED CASEWORK**
30. GC TO PROVIDE AND INSTALL NEW METAL FRAMED RAMP WITH METAL HANDRAILS. HANDRAIL FINISH TO BE SELECTED BY ARCHITECT. PREPARE SURFACE FOR INSTALLATION OF NEW FLOOR FINISH. SEE STRUCTURAL DRAWINGS AND NEW FLOOR FINISH PLAN FOR ADDITIONAL INFORMATION
31. NEW ELECTRICAL EQUIPMENT. COORDINATE WORK WITH EC. SEE ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION
32. AREA OF EXISTING LOW SLOPE FOAM ROOF TO REMAIN
33. AREA OF EXISTING SLOPED SHINGLED ROOF TO REMAIN
34. EXISTING GUTTER AND LEADER TO REMAIN UNLESS NOTED OTHERWISE
35. GC TO PROVIDE AND INSTALL NEW 8"x8" .040" METAL BOX GUTTER WITH MATCHING 6"x6" .040" LEADERS AS SHOWN TO DRAIN ONTO NEW SPLASH BLOCKS AT ROOF BELOW
36. GC TO PROVIDE AND INSTALL NEW 8" HIGH BY 16" WIDE EMERGENCY OVERFLOW THROUGH WALL SCUPPER WITH 12"x12" .040" CONDUCTOR HEAD AND 6"x6" .040" LEADERS AS SHOWN. SUMP TO SCUPPER AS SHOWN. REFER TO DETAILS 9&10/A8.10.
37. PC TO PROVIDE AND INSTALL NEW ROOF DRAIN. GC TO PROVIDE FLASHING. REFER TO DETAIL 8/A8.10.
38. GC TO PROVIDE AND INSTALL NEW METAL COPING. HEIGHT TO MATCH EXISTING FOREST PARK AVE. BUILDING. FINISH TO BE SELECTED BY ARCHITECT
39. EXISTING COPING TO REMAIN
40. GC TO PROVIDE AND INSTALL NEW OSHA COMPLIANT ROOF LADDER WITH HANDRAIL EXTENSION WALK-THROUGH WITH PLATFORM AND WALL STANDOFFS AT A DISTANCE ADEQUATE TO PROVIDE CLEARANCE AT GUTTER. VERIFY REQUIRED HEIGHTS. FASTEN SECURELY TO WALL STRUCTURE, TYPICAL. PROVIDE BLOCKING AS REQUIRED. FLASH ALL ATTACHMENTS PER ROOF SYSTEM MANUFACTURERS RECOMMENDATIONS
41. GC TO PROVIDE AND INSTALL EXPANSION JOINT AT ROOF / WALL INTERSECTION. REFER TO DETAIL 8/A8.10.
42. GC TO PROVIDE AND INSTALL NEW 'TOTALFLASH' BY 'MORTAR-NET' FLASHING SYSTEM (BASIS OF DESIGN) WITH INTEGRAL 24 GA COPPER DRIP. INSTALL PER MANUFACTURER RECOMMENDATIONS. SEE TYPICAL FLASHING DETAIL **3/A4.02**. SEE SPECIFICATION SECTION **042113 - BRICK MASONRY**
43. GC TO PROVIDE AND INSTALL NEW BRICK FACADE. BRICK BOND TO BE FLEMISH BOND THROUGHOUT. BRICK AND MORTAR TO MATCH FOREST PARK AVE. PORTION OF BUILDING. MATCH COURSING WITH FOREST PARK AVE. WING, TYPICAL. SEE SPECIFICATION SECTION **042113 - BRICK MASONRY**
44. GC TO PROVIDE AND INSTALL NEW FULL BED VENEER CAST STONE. COLOR AND MORTAR TO MATCH FOREST PARK AVE. PORTION OF BUILDING. MATCH COURSING WITH FOREST PARK AVE. WING, TYPICAL. SEE SPECIFICATION SECTION **047200 - CAST STONE MASONRY**
45. GC TO PROVIDE AND INSTALL NEW FULL BED VENEER CAST STONE DECORATIVE CORNICE. NEW STONE CORNICE TO MATCH PROFILE OF EXISTING STONE CORNICE INDICATED ON DRAWING **1/A3.01**. VERIFY ALL DIMENSIONS IN FIELD. COLOR AND MORTAR TO MATCH FOREST PARK AVE. PORTION OF BUILDING. SEE SPECIFICATION SECTION **047200 - CAST STONE MASONRY**
46. GC TO PROVIDE AND INSTALL NEW WALL MOUNTED METAL HANDRAIL. SEE CIVIL DRAWINGS FOR ADDITIONAL INFORMATION
47. GC TO PROVIDE AND INSTALL NEW FULL BED VENEER CAST STONE WINDOW SURROUND AND SILL. SILL TO PROJECT MINIMUM 1½" FROM WALL. PROVIDE CONTINUOUS DRIP. COLOR AND MORTAR TO MATCH FOREST PARK AVE. PORTION OF BUILDING. SEE SPECIFICATION SECTION **047200 - CAST STONE MASONRY**
48. GC TO PROVIDE AND INSTALL NEW CAST STONE SILL. SILL TO PROJECT MINIMUM 1½" FROM WALL. PROVIDE CONTINUOUS DRIP. COLOR AND MORTAR TO MATCH FOREST PARK AVE. PORTION OF BUILDING. SEE SPECIFICATION SECTION **047200 - CAST STONE MASONRY**
49. NEW BRICK QUOIN / BUMP OUT AS SHOWN. BRICK TO PROJECT 1" TYPICAL. ALIGN BRICK COURSING, TYPICAL. SEE SPECIFICATION SECTION **042113 - BRICK MASONRY**
50. LINE OF NEW BRICK ABOVE. SEE SECTIONS
51. NEW LOUVER BY MC. GC TO PROVIDE OPENING. MC TO PROVIDE AND INSTALL NEW LOUVER. COORDINATE WORK WITH MC. SEE MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION
52. GC TO PROVIDE AND INSTALL NEW OSHA COMPLIANT LADDER WITH HANDRAIL EXTENSION WALK-THROUGH. VERIFY REQUIRED HEIGHTS. FASTEN SECURELY TO NEW DUNNAGE, TYPICAL
53. GC TO PROVIDE AND INSTALL NEW STEEL DUNNAGE FOR NEW MECHANICAL EQUIPMENT. SEE MECHANICAL AND STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION
54. NEW MECHANICAL UNIT AND DUCTWORK BY MC. COORDINATE WORK WITH MC. SEE MECHANICAL AND STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
55. NEW MECHANICAL UNIT BY MC. COORDINATE WORK WITH MC. SEE MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION
56. NEW MECHANICAL ROOF UNITS AND DUCTWORK ON NEW RAIL CURBS. RAIL CURBS PROVIDED BY MC, GC TO INSTALL. MECHANICAL UNIT AND DUCTWORK BY MC. SEE MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION. REFER TO DETAILS **3&4/A8.10**.
57. GC TO PROVIDE AND INSTALL NEW FLOOR SYSTEM, FINISH FLOOR ON CONCRETE SLAB OVER 15 MIL. VAPOR BARRIER OVER COMPACTED CRUSHED STONE. PREPARE SUBFLOOR TO RECEIVE NEW FLOOR FINISH PER MANUFACTURERS RECOMMENDATIONS. SEE STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION
58. NEW ELEVATOR FOUNDATION AND SUMP PIT. SEE STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION
59. GC TO PROVIDE AND INSTALL RIGID INSULATION PER TYPICAL DETAIL **4/A4.02** VERTICALLY UP FOUNDATION WALL AND HORIZONTALLY UNDER SLAB AS SHOWN. TYPICAL ALL FOUR SIDES AT ENTRY AREA
60. GC TO PROVIDE NEW CONCRETE FLOOR / ROOF SYSTEM. SEE STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION
61. NEW STEEL STRUCTURE. GC TO FIRE PROTECT ENTIRE LOAD BEARING STEEL STRUCTURE INCLUDING SUPPORT ANGLES WITH NEW SPRAY APPLIED FIREPROOFING. SEE FIRE RATING REQUIREMENTS ON CODE ANALYSIS SHEET **CA0.03**. SEE SPECIFICATION SECTION **078100 - APPLIED FIREPROOFING**
62. GC TO PROVIDE AND INSTALL NEW ALUMINUM STOREFRONT ASSEMBLY INTO NOTCHED AREA OF EXISTING CAST STONE WATER TABLE. SEALANT AT ALL JOINTS, TYPICAL. SEE DEMOLITION PLANS AND DOOR ELEVATIONS AND DETAILS FOR ADDITIONAL INFORMATION
63. GC TO PROVIDE AND INSTALL NEW FIRESTOPPING ALL SIDES, TYPICAL. SEE FIRESTOPPING DETAILS ON SHEET **A8.05**
64. GC TO FILL ALL VOIDS SOLID WITH SPF INSULATION AREA SHOWN
65. GC TO PROVIDE AND INSTALL WEEPS AT BASE OF EXPANSION JOINT
66. GC TO MODIFY / REMOVE PORTION OF EXISTING STONE CORNICE / WATER TABLE AS REQUIRED FOR INSTALLATION OF NEW STRUCTURAL COMPONENTS AND CEILING ATTACHMENT. VERIFY ACTUAL CONDITION IN FIELD. SEE STRUCTURAL DRAWINGS
67. PC REINSTALL EXISTING ROOF DRAIN IN ADJACENT LOCATION. GC TO MODIFY ROOF INSULATION IN THE AREA AS REQUIRED TO PROVIDE ADEQUATE SUMP TO DRAIN. COORDINATE WITH NEW MECHANICAL DUCT IN THIS AREA. REFER TO PLUMBING AND MECHANICAL DRAWINGS FOR EXACT LOCATION. GC TO PATCH EXISTING CONCRETE ROOF SLAB AND ROOF SYSTEM. SEE STRUCTURAL DRAWINGS AND ROOF DETAILS
68. GC TO INSTALL NEW CURB FOR MECHANICAL ROOFTOP UNIT. CURBS PROVIDED BY MC, GC TO INSTALL. MECHANICAL UNIT BY MC. SEE MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION. REFER TO DETAIL **5/A8.10**
69. GC TO INSTALL NEW CURB AT NEW DUCT PENETRATION. CURBS PROVIDED BY MC, GC TO INSTALL. SEE MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION. REFER TO DETAIL **6/A8.10**
70. GC TO INSTALL NEW PENETRATION FOR COLUMNS AT NEW DUNNAGE. SEE STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION. INFILL INSULATION AND INSTALL NEW ROOF SYSTEM. FLASH SIM. TO **2/A8.10**. INSTALL FLASHING AT COLUMN PER DETAIL **7/A8.10**
71. GC TO INFILL THE ROOF OPENING LEFT AFTER THE EXHAUST FAN REMOVAL. REFER TO DETAIL **2/A8.10**.
72. GC TO INSTALL NEW VENT AND DUCTWORK FLASHING. REFER TO DETAIL **7/A8.10** FOR ADDITIONAL INFORMATION.
73. GC TO INSTALL NEW MASONRY AND GYP. INFILL AT WINDOW REMOVAL PER WALL TYPE. WRAP GYP INTO EXISTING WINDOW JAMB AND PATCH AND PAINT TO MATCH.
74. GC TO PROVIDE AND INSTALL NEW FLOOR FINISH. REFER TO FINISH SCHEDULE FOR FINISH MATERIAL AND SPECIFICATION FOR SURFACE PREPARATION AND INSTALLATION REQUIREMENTS
75. GC TO PROVIDE AND INSTALL NEW WALL BASE, REFER TO FINISH SCHEDULE
76. GC TO PROVIDE AND INSTALL AREA OF NEW PAINTED GWB, REFER TO FINISH SCHEDULE FOR ADDITIONAL INFORMATION
77. GC TO PROVIDE AND INSTALL NEW PORCELAIN WALL TILE. SEE WALL FINISH PLAN ON **A7.00** FOR PATTERN AND ADDITIONAL INFORMATION. SEE SPECIFICATION SECTION **093019 - PORCELAIN WALL TILE**
78. GC TO PROVIDE AND INSTALL FINISHED CEILING, REFER TO FINISH SCHEDULE AND REFLECTED CEILING PLAN
79. GC TO PROVIDE AND INSTALL NEW LADDER IN ELEVATOR PIT.
80. NEW DUCTWORK BY MC. GC TO COORDINATE EXACT LOCATION WITH MC. GC TO PROVIDE AND INSTALL FIRESTOPPING AS REQUIRED. MAINTAIN FIRE RATING THROUGHOUT. SEE MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION
81. GC TO LOCATE CONTINUOUS CONTROL JOINT IN BRICK AND CAST STONE FLUSH TO OUTSIDE OF WINDOW AS SHOWN
82. GC TO PROVIDE AND INSTALL NEW 18"x18" CEILING ACCESS DOOR MODEL 'FWC-5015' BY 'ACUDOR'. COORDINATE LOCATION WITH MC. FINISH AND PAINT INTEGRAL GWB TO MATCH ADJACENT. SEE SPECIFICATION SECTION **083113 - ACCESS DOORS AND FRAMES**
83. PROVIDE MIN. ½" THERMAL BREAK IN CONCRETE SLAB UNDER DOOR
84. GC TO PROVIDE AND INSTALL NEW 5/8" GWB SOFFIT OVER 3⅝" LIGHT GAUGE METAL STUD FRAMING @ 16" O.C. TYP. BRACE AS REQUIRED. COORDINATE BRACING WITH LOCATION OF NEW FLUSH CEILING MOUNTED HEATING UNIT. SEE REFLECTED CEILING PLANS AND MECHANICAL DRAWINGS
85. GC TO REINSTALL EXISTING ROOF LADDER TO NEW LOCATION. PROVIDE ALL HARDWARE REQUIRED FOR A COMPLETE INSTALLATION. SEAL CONNECTION TO WALL WITH FLUID APPLIED FLASHING
86. GC TO INSTALL COLUMNS FOR NEW DUNNAGE AT PARAPET PER STRUCTURAL DRAWINGS. INFILL AREA WITH PT WOOD BLOCKING AS REQUIRED. WRAP NEW LIQUID ROOFING SYSTEM OVER PARAPET AND FLASH COLUMN INTERSECTION PER **7/A8.10**. GC TO PROVIDE AND INSTALL NEW COPING TO MATCH EXISTING ADJACENT COPING. SEAL ALL JOINTS AT COLUMN INTERSECTION WITH FLUID APPLIED FLASHING, TYP.

Construction Key Notes - Work Area 'B'

(#) SYMBOL INDICATES CONSTRUCTION KEY NOTE

1. GC TO PROVIDE AND INSTALL NEW WINDOW SHADE AT EXISTING WINDOW. SEE WINDOW SCHEDULE FOR SHADE REQUIREMENTS AND DETAILS. GC TO VERIFY SIZE OF WINDOW IN FIELD
2. GC TO INSTALL NEW BUILT-UP PLYWOOD SUBFLOOR. HEIGHT TO ACCOMMODATE A FLUSH TRANSITION OF NEW FINISH FLOOR THIS AREA WITH ADJACENT FINISH FLOORS. VERIFY ALL HEIGHTS IN FIELD. PREPARE NEW SUBFLOOR FOR INSTALLATION OF NEW FLOOR FINISH. SEE FLOOR FINISH PLAN FOR ADDITIONAL INFORMATION
3. NEW ELECTRICAL EQUIPMENT. COORDINATE WORK WITH EC. SEE ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION
4. GC TO PROVIDE AND INSTALL NEW (2) HOUR FIRE RATED FLOOR ACCESS DOOR WITH COVER ACCEPTING NEW FLOOR FINISH. COORDINATE ACTUAL LOCATION WITH LOCATION OF EXISTING ACCESS DOOR TO BE REPLACED, VERIFY IN FIELD. INSTALL TO ADEQUATE HEIGHT TO ACCOMMODATE A FLUSH TRANSITION WITH ADJACENT FINISH FLOORS. SEE DEMOLITION AND FLOOR FINISH PLANS FOR ADDITIONAL INFORMATION. SEE SPECIFICATION SECTION **083100 - FLOOR ACCESS DOORS**
5. RESERVED
6. GC TO PROVIDE AND INSTALL NEW WALK-IN COOLER AND FREEZER AS PART OF NEW KITCHEN EQUIPMENT PACKAGE. COORDINATE WORK WITH MC, PC, AND EC AS REQUIRED. SEE FOOD SERVICE DRAWINGS FOR ADDITIONAL INFORMATION. SEE SPECIFICATION SECTION **114000 – FOOD SERVICE EQUIPMENT**
7. GC TO PROVIDE AND INSTALL NEW FOOD SERVICE EQUIPMENT AS PART OF NEW KITCHEN EQUIPMENT PACKAGE. COORDINATE WORK WITH MC, PC, AND EC AS REQUIRED. SEE FOOD SERVICE DRAWINGS FOR ADDITIONAL INFORMATION. SEE SPECIFICATION SECTION **114000 – FOOD SERVICE EQUIPMENT**
8. EXISTING STANDPIPE TO REMAIN
9. GC TO PROVIDE AND INSTALL NEW FIRE EXTINGUISHER AS PART OF NEW KITCHEN EQUIPMENT PACKAGE. SEE FOOD SERVICE DRAWINGS FOR ADDITIONAL INFORMATION. SEE SPECIFICATION SECTION **114000 – FOOD SERVICE EQUIPMENT**
10. NEW MOP SINK BY PC. SEE PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION
11. NEW PLUMBING EQUIPMENT BY PC. SEE PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION
12. GC TO PROVIDE AND INSTALL NEW (2) HOUR FIRE RATED FLOOR ACCESS DOOR WITH COVER ACCEPTING NEW FLOOR FINISH. COORDINATE ACTUAL LOCATION WITH LOCATION OF FLOOR CHASE, VERIFY IN FIELD. INSTALL TO ADEQUATE HEIGHT TO ACCOMMODATE A FLUSH TRANSITION WITH ADJACENT FINISH FLOORS. SEE DEMOLITION AND FLOOR FINISH PLANS FOR ADDITIONAL INFORMATION. SEE SPECIFICATION SECTION **083100 - FLOOR ACCESS DOORS**
13. PORTIONS OF EXISTING WALL AND EXISTING ELECTRICAL DEVICES TO REMAIN, PROTECT DURING CONSTRUCTION
14. RELOCATED EXISTING I.T. EQUIPMENT BY EC. SEE ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION
15. NEW ELECTRICAL PANELS BY EC. SEE ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION
16. NEW WALL MOUNTED DRINKING FOUNTAINS BY PC. GC TO INSTALL BLOCKING AS REQUIRED WITHIN WALL. COORDINATE WORK WITH PC. REFER TO PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION
17. GC TO PROVIDE AND INSTALL NEW SOFFIT ABOVE. SEE REFLECTED CEILING PLANS AND INTERIOR ELEVATIONS FOR ADDITIONAL INFORMATION
18. NEW MECHANICAL UNITS BY MC. NEW LOUVER OPENING IN NEW PORTION OF WALL BY GC. SEE STRUCTURAL DRAWINGS FOR NEW LINTEL REQUIREMENTS. NEW LOUVER TO BE PROVIDED AND INSTALLED BY MC. COORDINATE WORK WITH MC. SEE MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION
19. CAFETERIA FURNITURE BY OWNER, NIC. SHOWN FOR REFERENCE
20. GC TO PROVIDE AND INSTALL NEW INTERIOR EXPANSION JOINT COVER AT NEW FLOOR SLAB INTERSECTION. SEE SPECIFICATION SECTION **079513 - EXPANSION JOINT COVER ASSEMBLIES**
21. GC TO PATCH AND REPAIR EXISTING EXPOSED GWB TO REMAIN, ALL LOCATIONS WITHIN SPACE. PREPARE SURFACE FOR NEW PAINTED FINISH, COLORS TO BE SELECTED BY ARCHITECT. SEE INTERIOR ELEVATIONS FOR ADDITIONAL INFORMATION
22. PC TO INSTALL NEW GREASE TRAP AND AIR CONTROL BOX AND ASSOCIATED PIPING. REFER TO PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION.
23. GC TO PROVIDE AND INSTALL NEW FLOOR FINISH. REFER TO FINISH SCHEDULE FOR FINISH MATERIAL AND SPECIFICATION FOR SURFACE PREPARATION AND INSTALLATION REQUIREMENTS
24. GC TO PROVIDE AND INSTALL NEW WALL BASE, REFER TO FINISH SCHEDULE
25. GC TO PROVIDE AND INSTALL AREA OF NEW PAINTED GWB, REFER TO FINISH SCHEDULE FOR ADDITIONAL INFORMATION
26. GC TO PROVIDE AND INSTALL NEW PORCELAIN WALL TILE. SEE WALL FINISH PLAN ON **A7.00** FOR PATTERN AND ADDITIONAL INFORMATION. SEE SPECIFICATION SECTION **093019 - PORCELAIN WALL TILE**
27. GC TO PROVIDE AND INSTALL FINISHED CEILING, REFER TO FINISH SCHEDULE AND REFLECTED CEILING PLAN.
28. GC TO PROVIDE AND INSTALL NEW SUSPENDED ACOUSTICAL CANOPIES, REFER TO CEILING TYPES FOR ADDITIONAL INFORMATION
29. NEW LIGHT FIXTURES BY EC. SEE ELECTRICAL DRAWINGS
30. GC TO INFILL AREA OF REMOVED QUARRY TILE WITH NEW SELF LEVELER. NEW FINISH FLOOR TO MATCH FINISH FLOOR OF ADJACENT SPACES. PREPARE EXISTING FLOOR SURFACE PER MANUFACTURERS INSTRUCTIONS. SEE SPECIFICATION SECTION **035416 - CEMENT-BASED, INTERIOR, SELF LEVELING UNDERLAYMENT**

Construction Key Notes - Work Area 'C'

(#) SYMBOL INDICATES CONSTRUCTION KEY NOTE

1. GC TO PROVIDE AND INSTALL NEW WINDOW SHADE AT EXISTING WINDOW. SEE WINDOW SCHEDULE FOR SHADE REQUIREMENTS AND DETAILS. GC TO VERIFY SIZE OF WINDOW IN FIELD
2. GC TO INFILL NEW ELECTRICAL TRENCH IN CONCRETE SLAB WITH NEW CONCRETE TO BE FLUSH WITH ADJACENT. PREPARE SURFACE TO RECEIVE NEW FLOORING, TYPICAL. COORDINATE WORK WITH EC. SEE DEMOLITION AND ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION
3. GC TO INFILL EXISTING RECESSED SLAB WITH NEW SELF LEVELER. NEW FINISH FLOOR TO MATCH FINISH FLOOR OF ADJACENT SPACES, APPROXIMATE DEPTH: 1½", VERIFY IN FIELD. PREPARE EXISTING FLOOR SURFACE PER MANUFACTURERS INSTRUCTIONS. SEE SPECIFICATION SECTION **035416 - CEMENT-BASED, INTERIOR, SELF LEVELING UNDERLAYMENT**
4. GC TO INSTALL NEW CONCRETE FOOTING FOR NEW COLUMN PER STRUCTURAL DRAWINGS. PREPARE SURFACE TO RECEIVE NEW FLOORING, TYPICAL. SEE STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION
5. GC TO INSTALL NEW ROUND METAL COLUMN PER STRUCTURAL DRAWINGS. PREPARE SURFACE PER MANUFACTURER RECOMMENDATIONS AND PAINT. COLOR TO BE SELECTED BY ARCHITECT
6. LIBRARY / ART ROOM FURNISHINGS BY OWNER, NIC. UNO
7. LIBRARY CASEWORK BY OWNER, NIC. UNO
8. EXISTING SUMP PIT TO REMAIN
9. EXISTING ELECTRICAL PANELS TO REMAIN. PROTECT DURING CONSTRUCTION. GC TO INSTALL FURRING AND GWB AROUND EXISTING PANELS AND SEAL ALL JOINTS FOR A FINISHED APPEARANCE. SEE ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION
10. FURNITURE / EQUIPMENT BY OWNER, NIC. SHOWN FOR REFERENCE
11. GC TO PROVIDE AND INSTALL NEW PREMANUFACTURED WOOD AND PLASTIC LAMINATE BASE AND UPPER CABINETRY AS MANUFACTURED BY 'CASE SYSTEMS' (BASIS OF DESIGN) PROVIDE 1½" THICK BEVELED PLASTIC LAMINATE COUNTER TOP WITH 4" BACK-SPLASH. ALL FINISHES AND HARDWARE TO BE SELECTED BY ARCHITECT FROM MANUFACTURERS FULL RANGE. SINK TO BE PROVIDED AND INSTALLED BY PC. COORDINATE WORK WITH PC. SEE PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION. SEE SPECIFICATION SECTION **123554 - MANUFACTURED CASEWORK**
12. EXISTING SINK TO REMAIN. PROTECT DURING CONSTRUCTION
13. NEW ELECTRICAL EQUIPMENT. COORDINATE WORK WITH EC. SEE ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION
14. GC TO PROVIDE AND INSTALL NEW SOFFIT / CEILING CLOUD ABOVE. SEE REFLECTED CEILING PLANS AND INTERIOR ELEVATIONS FOR ADDITIONAL INFORMATION
15. EC TO RELOCATE EXISTING KILN. GC TO COORDINATE WORK WITH EC AND MC. SEE ELECTRICAL AND MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION
16. GC TO SCRAPE, PRIME, AND PAINT EXISTING COLUMN. COLOR TO BE SELECTED BY ARCHITECT
17. GC TO PROVIDE AND INSTALL NEW PREMANUFACTURED WOOD AND PLASTIC LAMINATE BASE CABINETRY AS MANUFACTURED BY 'CASE SYSTEMS' (BASIS OF DESIGN) PROVIDE 1½" THICK BEVELED PLASTIC LAMINATE COUNTER TOP WITH 4" BACK-SPLASH. ALL FINISHES AND HARDWARE TO BE SELECTED BY ARCHITECT FROM MANUFACTURERS FULL RANGE. SEE SPECIFICATION SECTION **123554 - MANUFACTURED CASEWORK**
18. GC TO PROVIDE AND INSTALL NEW PREMANUFACTURED WOOD AND PLASTIC LAMINATE TALL WARDROBE STYLE CABINETRY AS MANUFACTURED BY 'CASE SYSTEMS' (BASIS OF DESIGN). ALL FINISHES AND HARDWARE TO BE SELECTED BY ARCHITECT FROM MANUFACTURERS FULL RANGE. SEE SPECIFICATION SECTION **123554 - MANUFACTURED CASEWORK**
19. GC TO PROVIDE AND INSTALL NEW PREMANUFACTURED WOOD AND PLASTIC LAMINATE HORIZONTAL FOLIO STORAGE STYLE BASE CABINETRY AS MANUFACTURED BY 'CASE SYSTEMS' (BASIS OF DESIGN) PROVIDE 1½" THICK BEVELED PLASTIC LAMINATE COUNTER TOP WITH 4" BACK-SPLASH. ALL FINISHES AND HARDWARE TO BE SELECTED BY ARCHITECT FROM MANUFACTURERS FULL RANGE. SEE SPECIFICATION SECTION **123554 - MANUFACTURED CASEWORK**
20. GC TO PROVIDE AND INSTALL NEW PREMANUFACTURED WOOD AND PLASTIC LAMINATE 72" TALL OPEN SHELVING STYLE CABINETRY AS MANUFACTURED BY 'CASE SYSTEMS' (BASIS OF DESIGN). INSTALL SECURELY TO WALL, PROVIDE BLOCKING WITHIN WALL AS REQUIRED. ALL FINISHES AND HARDWARE TO BE SELECTED BY ARCHITECT FROM MANUFACTURERS FULL RANGE. SEE SPECIFICATION SECTION **123554 - MANUFACTURED CASEWORK**
21. GC TO PROVIDE AND INSTALL NEW CUSTOM OPEN SHELVING IN CONFIGURATION SHOWN. PROVIDE (6) SHELVES TOTAL, SPACING TO BE CONFIRMED WITH OWNER, TO A HEIGHT OF 72" AFF. CONSTRUCTION TO BE OF MINIMUM ¾" THICK SOLID PLYWOOD WITH WOOD VENEER AND MATCHING HARDWOOD EDGING. FLAME SPREAD TO BE CLASS 'C' OR BETTER. INSTALL SECURELY TO WALL, PROVIDE ALL BLOCKING, UPRIGHT SUPPORT, AND ALL HARDWARE AS REQUIRED FOR A COMPLETE INSTALLATION. ALL COLORS AND FINISHES TO BE SELECTED BY ARCHITECT
22. NEW MECHANICAL UNIT BY MC. NEW LOUVER OPENING IN NEW PORTION OF WALL BY GC. SEE STRUCTURAL DRAWINGS FOR NEW LINTEL REQUIREMENTS. NEW LOUVER TO BE PROVIDED AND INSTALLED BY MC. COORDINATE WORK WITH MC. SEE MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION
23. GC TO PATCH AND REPAIR EXISTING EXPOSED GWB / MASONRY TO REMAIN, ALL LOCATIONS WITHIN SPACE. PREPARE SURFACE FOR NEW PAINTED FINISH, COLORS TO BE SELECTED BY ARCHITECT. SEE INTERIOR ELEVATIONS FOR ADDITIONAL INFORMATION
24. EXISTING ELECTRICAL PANELS AND FIRE ALARM PANEL TO BE ENCLOSED IN NEW CLOSET. PROTECT DURING CONSTRUCTION. SEE ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION
25. GC TO PROVIDE AND INSTALL AREA OF NEW RAISED CONCRETE RAMP LANDING. FINISH FLOOR TO MATCH ADJACENT. PREPARE SURFACE FOR INSTALLATION OF NEW FLOOR FINISH. SEE STRUCTURAL DRAWINGS AND NEW FLOOR FINISH PLAN FOR ADDITIONAL INFORMATION
26. GC TO PROVIDE AND INSTALL AREA OF NEW CONCRETE RAMP. PREPARE SURFACE FOR INSTALLATION OF NEW FLOOR FINISH. SEE STRUCTURAL DRAWINGS AND NEW FLOOR FINISH PLAN FOR ADDITIONAL INFORMATION
27. GC TO PROVIDE AND INSTALL NEW METAL GUARD RAIL TO MATCH EXISTING STAIR GUARD RAIL. HEIGHT TO MATCH EXISTING NEWEL POST. BALUSTER SIZE AND SPACING TO MATCH EXISTING STAIR. VERIFY ALL SIZES IN FIELD
28. GC TO PROVIDE AND INSTALL NEW SUSPENDED ACOUSTICAL CANOPIES, REFER TO CEILING TYPES FOR ADDITIONAL INFORMATION
29. GC TO REINSTALL EXISTING WHITEBOARD AND PROJECTOR. EC TO INSTALL POWER OUTLET AND DATA CONNECTIONS. REFER TO ELECTRICAL DRAWINGS.
30. GC TO PROVIDE AND INSTALL NEW MARKER BOARD PAINT SYSTEM
31. GC TO PROVIDE AND INSTALL NEW GREEN SCREEN WALL PAINT SYSTEM
32. GC TO PROVIDE AND INSTALL NEW FLOOR FINISH. REFER TO FINISH SCHEDULE FOR FINISH MATERIAL AND SPECIFICATION FOR SURFACE PREPARATION AND INSTALLATION REQUIREMENTS
33. GC TO PROVIDE AND INSTALL NEW WALL BASE, REFER TO FINISH SCHEDULE
34. GC TO PROVIDE AND INSTALL AREA OF NEW PAINTED GWB, REFER TO FINISH SCHEDULE FOR ADDITIONAL INFORMATION
35. GC TO PROVIDE AND INSTALL NEW PORCELAIN WALL TILE. SEE WALL FINISH PLAN ON **A7.00** FOR PATTERN AND ADDITIONAL INFORMATION. SEE SPECIFICATION SECTION **093019 - PORCELAIN WALL TILE**
36. GC TO PROVIDE AND INSTALL FINISHED CEILING, REFER TO FINISH SCHEDULE AND REFLECTED CEILING PLAN
37. GC TO PAINT PIPING IN CEILING AREA
38. GC TO INSTALL RELOCATED PROJECTOR AND RELOCATED SCREEN. RE-USE EXISTING MOUNTING BRACKET AND HARDWARE. PROVIDE ANY ADDITIONAL ITEMS REQUIRED FOR A COMPLETE INSTALLATION. COORDINATE WORK WITH ELECTRICAL. SEE ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION

Construction Key Notes - Work Area 'D'

(#) SYMBOL INDICATES CONSTRUCTION KEY NOTE

SEE CONSTRUCTION KEYNOTES FOR THIS WORK AREA ON SHEET A7.30

Construction Key Notes - Work Area 'E'

(#) SYMBOL INDICATES CONSTRUCTION KEY NOTE

SEE CONSTRUCTION KEYNOTES FOR THIS WORK AREA ON SHEET A2.40

Construction Key Notes - Work Area 'H'

(#) SYMBOL INDICATES CONSTRUCTION KEY NOTE

SEE CONSTRUCTION KEYNOTES FOR THIS WORK AREA ON SHEET A8.30

Construction Key Notes - Work Area 'L'

(#) SYMBOL INDICATES CONSTRUCTION KEY NOTE

SEE CONSTRUCTION KEYNOTES FOR THIS WORK AREA ON SHEET A5.40

Construction Key Notes - Work Area 'M'

(#) SYMBOL INDICATES CONSTRUCTION KEY NOTE

1. GC TO INFILL OPENING AT REMOVED MECHANICAL LOUVER OR OTHER DEVICE WITH NEW MASONRY CONSTRUCTION. STITCH IN NEW BRICK AND MORTAR TO MATCH EXISTING WHERE APPLICABLE AT EXTERIOR. MATCH AREAS OF ADJACENT CAST STONE WITH NEW CAST STONE AND MORTAR TO MATCH EXISTING WHERE APPLICABLE AT EXTERIOR. MATCH EXISTING FINISH AT INTERIOR. PAINT TO MATCH ADJACENT, TYPICAL. MAINTAIN FIRE RATINGS THROUGHOUT. COORDINATE WORK WITH MC, TYPICAL. SEE MECHANICAL DRAWINGS FOR SIZE AND LOCATION
2. GC TO PROVIDE AND INSTALL NEW FLOOR MOUNTED DOOR STOP AT EXISTING DOOR TO PREVENT DOOR LEAF INDICATED FROM OPENING BEYOND NINETY DEGREES TO AVOID INTERFERENCE WITH AREA OF TEMPORARY OCCUPANCY. SEE CODE ANALYSIS SHEETS FOR ADDITIONAL INFORMATION
3. GC TO PROVIDE AND INSTALL INTUMESCENT PAINT FIRE PROTECTION AT WOOD CONSTRUCTION CEILING THIS AREA TO PROVIDE (2) HOUR FIRE RATING FOR ENTIRE FLOOR CONSTRUCTION INCLUDING ALL SUPPORTING MEMBERS THROUGHOUT THE AREA INDICATED. INSTALL PER MANUFACTURERS RECOMMENDATIONS, TYPICAL

CONSTRUCTION KEYNOTES OMITTED FOR WORK AREAS: 'F', 'G', 'J', AND 'K'

Construction General Notes

1. **DIMENSIONS SHOWN ARE FROM FACE OF FINISH MATERIALS UNLESS NOTED OTHERWISE.**
2. CONTRACTOR SHALL INSTALL THROUGH-PENETRATION FIRESTOPS, DRAFT-STOPS, FIRE CAULKING, ETC. AS REQUIRED AT ALL CEILING/WALL PENETRATIONS TO ENSURE THE STRUCTURAL INTEGRITY AND CONT. FIRE RATING OF THE ASSEMBLY. (COORDINATE WITH PARTITION TYPES AS REQUIRED.) REFER TO PARTITION TYPES AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.
3. SEAL TOP OF ALL PARTITIONS. FILL ALL VOIDS WITH ACOUSTIC SEALANT CONTINUOUS. (COORDINATE WITH PARTITION TYPES AS REQUIRED.)
4. CONTRACTOR SHALL PROVIDE WOOD BLOCKING AS REQUIRED FOR INSTALLATION OF ALL WALL MOUNTED EQUIPMENT AND CASEWORK, ETC. PROVIDE P.T. WOOD BLOCKING IN TOILET ROOMS, TYP. BLOCKING SHALL BE PROVIDED AS PER SPECIFICATION SECTION 061000 - ROUGH CARPENTRY.

Legend

(REFER TO DEMOLITION & PROPOSED FLOOR PLANS)

PROPOSED	
SYMBOL	DESCRIPTION
(symbol)	NEW CONSTRUCTION (FRAMING)
(symbol)	EXISTING WALLS TO REMAIN
(symbol)	NEW DOORS

DUCTWORK REMOVAL PATCH NOTE:

GC TO PATCH HOLES LEFT DUE TO REMOVAL OF DUCTWORK ETC. IN MASONRY AND OTHER WALL/FLOOR/CEILING CONSTRUCTION WITH NEW MATERIAL TO MATCH EXISTING. PAINT TO MATCH ADJACENT SURFACES WHERE APPLICABLE. GC TO COORDINATE WITH MC FOR EXACT LOCATION AND EXTENT OF REPAIR WORK.

MULTIPLE PRIME CONTRACTOR ABBREVIATIONS:

GC - GENERAL CONTRACTOR
MC - MECHANICAL CONTRACTOR
EC - ELECTRICAL CONTRACTOR
PC - PLUMBING CONTRACTOR

MULTIPLE PRIME CONTRACTOR NOTES:

REFER TO SHEET **A1.00** FOR NOTES REGARDING COORDINATION OF WORK AMONGST MULTIPLE PRIME CONTRACTORS

Date	1/10/20
Checked	DLF
Drawn	CTB

MICHAEL J. McGOVERN, R.A.
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Title REGISTERED ARCHITECT

Revisions:

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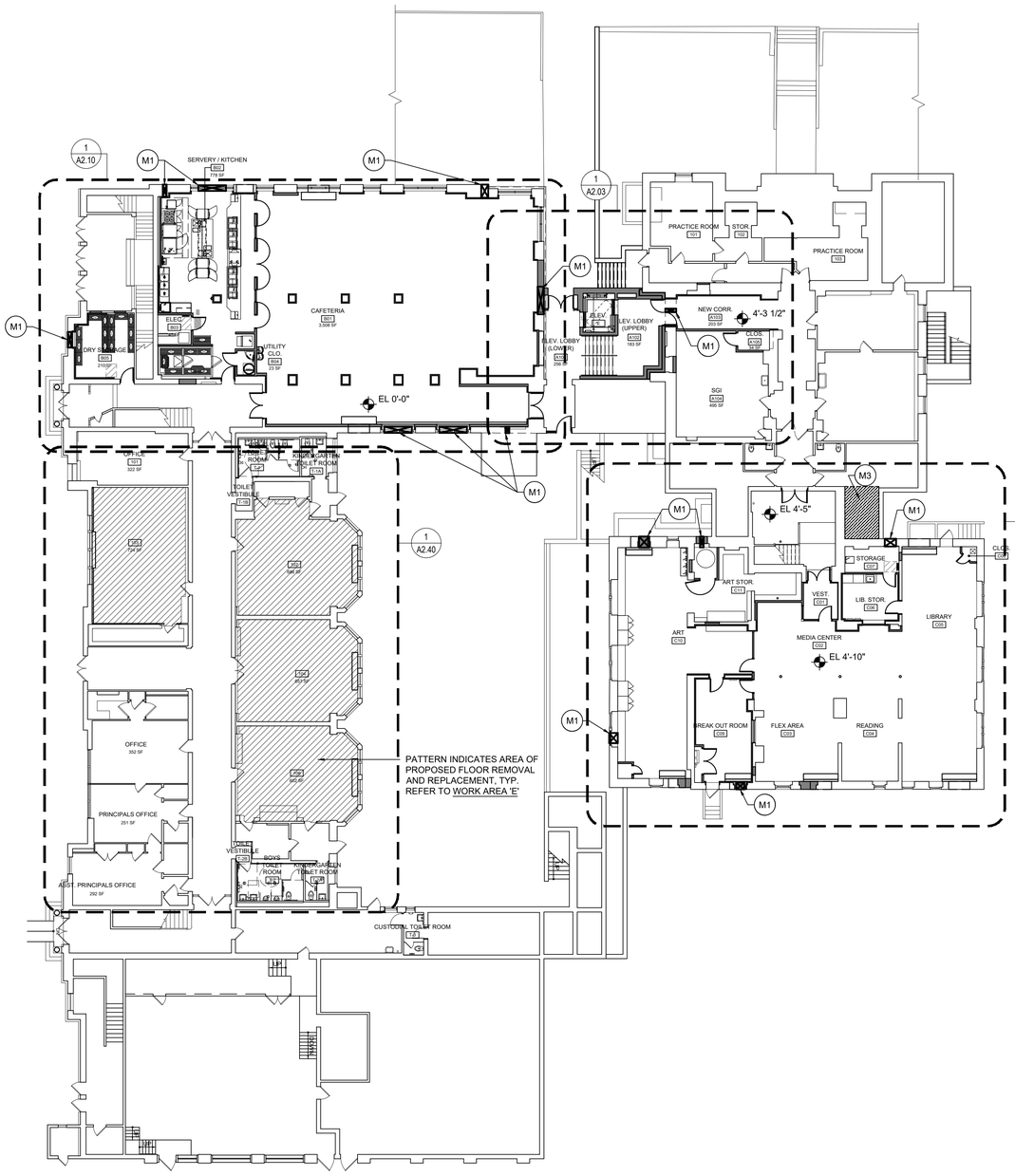
CONSTRUCTION KEY NOTES

2019 BOND REFERENDUM
CHATSWORTH AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

NYSED PROJECT # 66-07-01-03-0-005-020

Job No. 4.1092.72.03
File No. 10927203A200

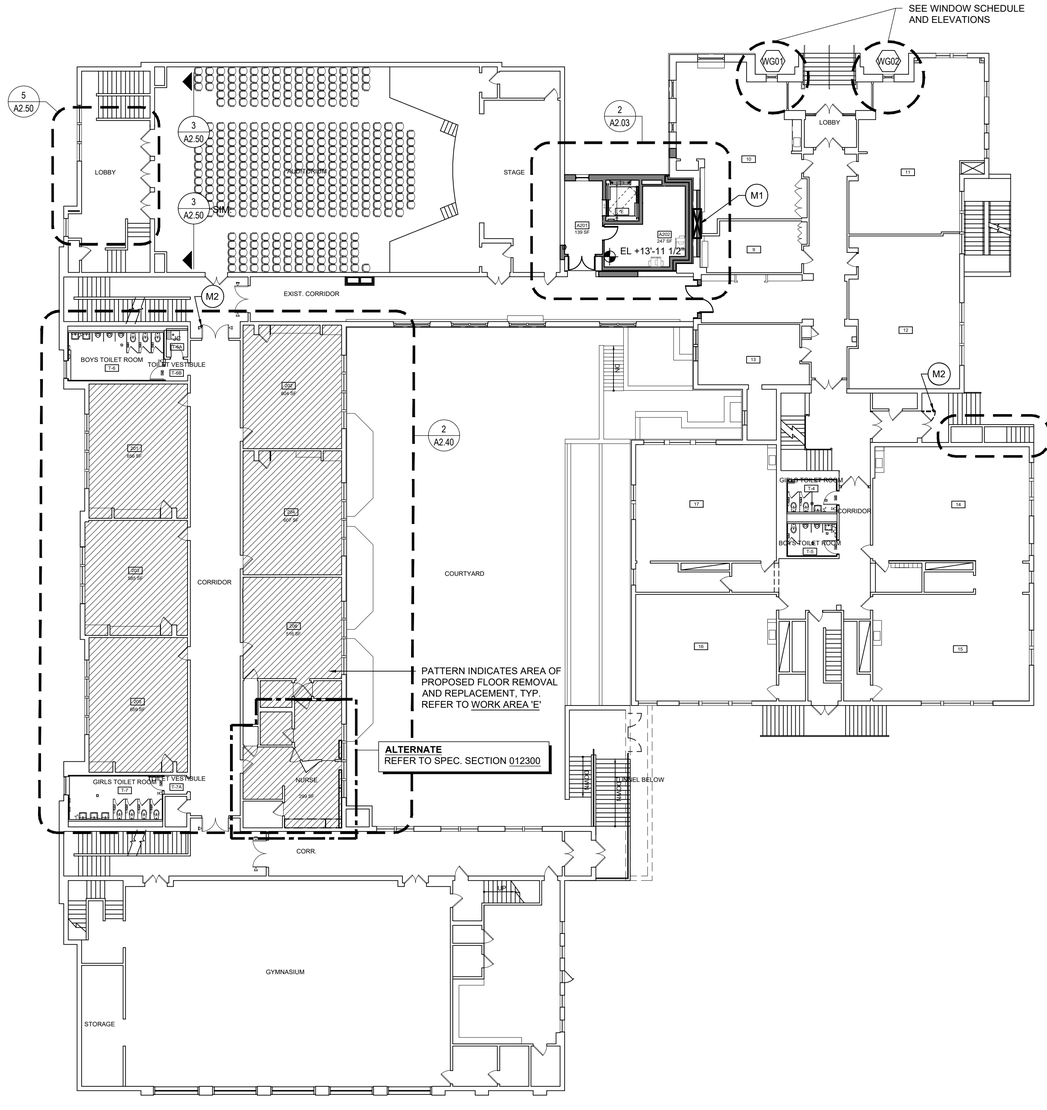
A2.00



1 A2.01 First Floor Proposed Plan

1/16" = 1'-0"

PROJECT NORTH



2 A2.01 Second Floor Proposed Plan

1/16" = 1'-0"

PROJECT NORTH

ELEVATIONS INDICATED ARE TO THE TOP OF FINISH FLOOR. VERIFY ALL FLOOR ELEVATIONS IN THE FIELD. NOTIFY ARCHITECT IMMEDIATELY OF ANY VARIATION FROM ELEVATIONS SHOWN.

REFER TO GENERAL NOTES ON SHEET **A2.00**

(#) SYMBOL DENOTES WALL TYPES, REFER TO PARTITION TYPE SHEET **A8.01**

(X#) SYMBOL INDICATES CONSTRUCTION KEY NOTE

REFER TO CONSTRUCTION KEY NOTES ON SHEET **A2.00**

Date	1/10/20
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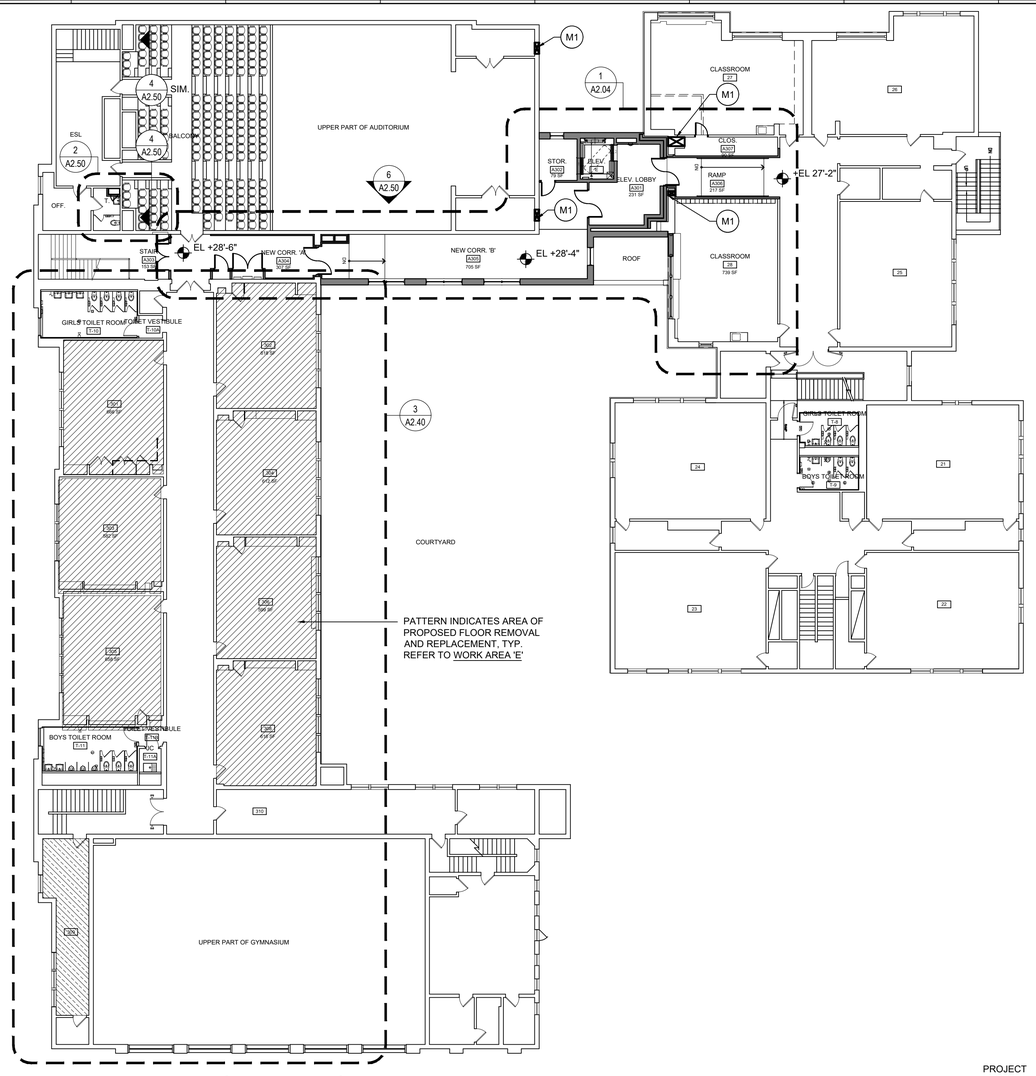
OVERALL PROPOSED FLOOR PLANS

2019 BOND REFERENDUM
CHATSWORTH AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

Job No. 4.1092.72.03

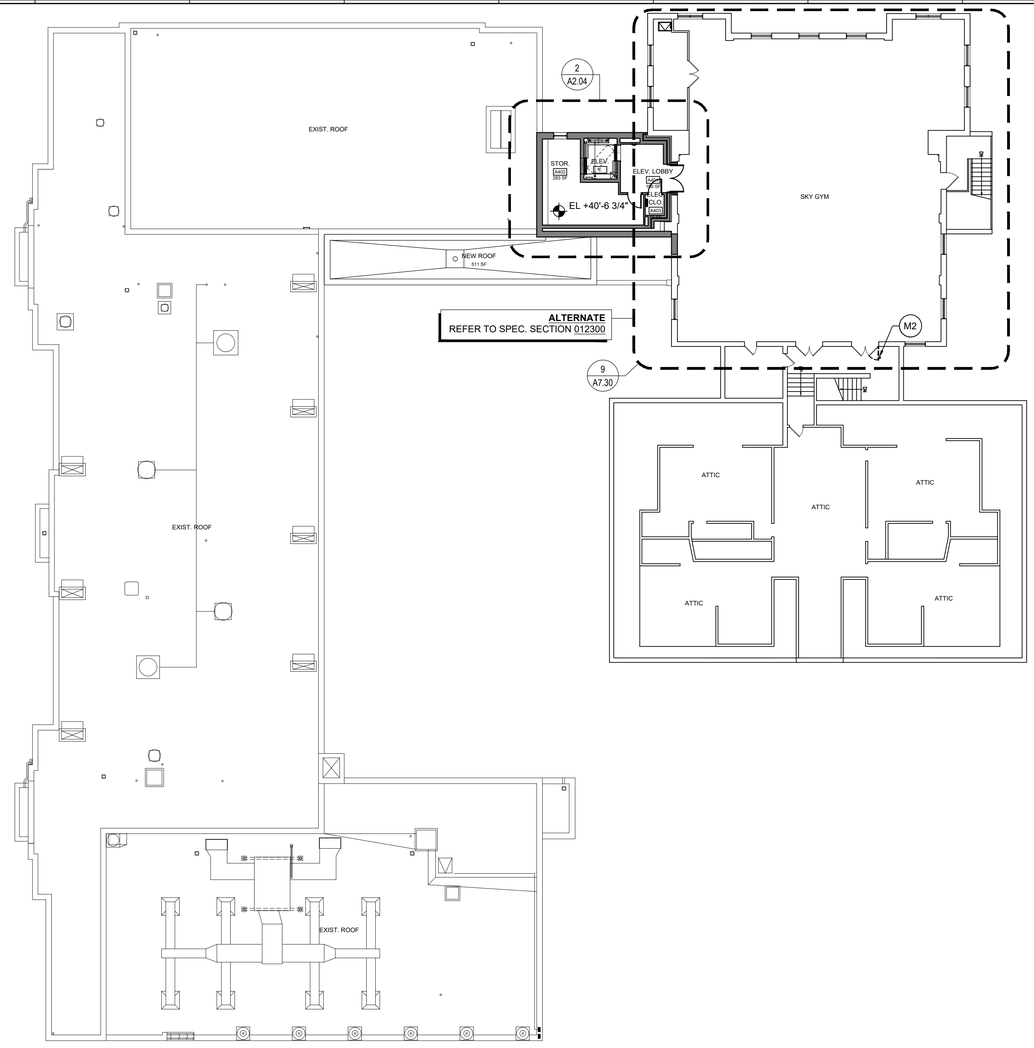
File No. 10927203A201

A2.01



1 A2.02 Third Floor Proposed Plan

1/16" = 1'-0"

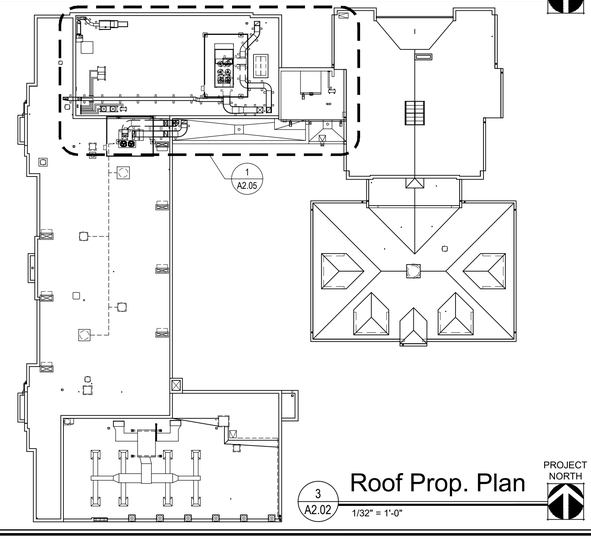


2 A2.02 Fourth Floor Proposed Plan

1/16" = 1'-0"

ELEVATIONS INDICATED ARE TO THE TOP OF FINISH FLOOR. VERIFY ALL FLOOR ELEVATIONS IN THE FIELD. NOTIFY ARCHITECT IMMEDIATELY OF ANY VARIATION FROM ELEVATIONS SHOWN.

REFER TO GENERAL NOTES ON SHEET **A2.00**	
#	SYMBOL DENOTES WALL TYPES, REFER TO PARTITION TYPE SHEET **A8.01**
X#	SYMBOL INDICATES CONSTRUCTION KEY NOTE
REFER TO CONSTRUCTION KEY NOTES ON SHEET **A2.00**	



3 A2.02 Roof Prop. Plan

1/32" = 1'-0"

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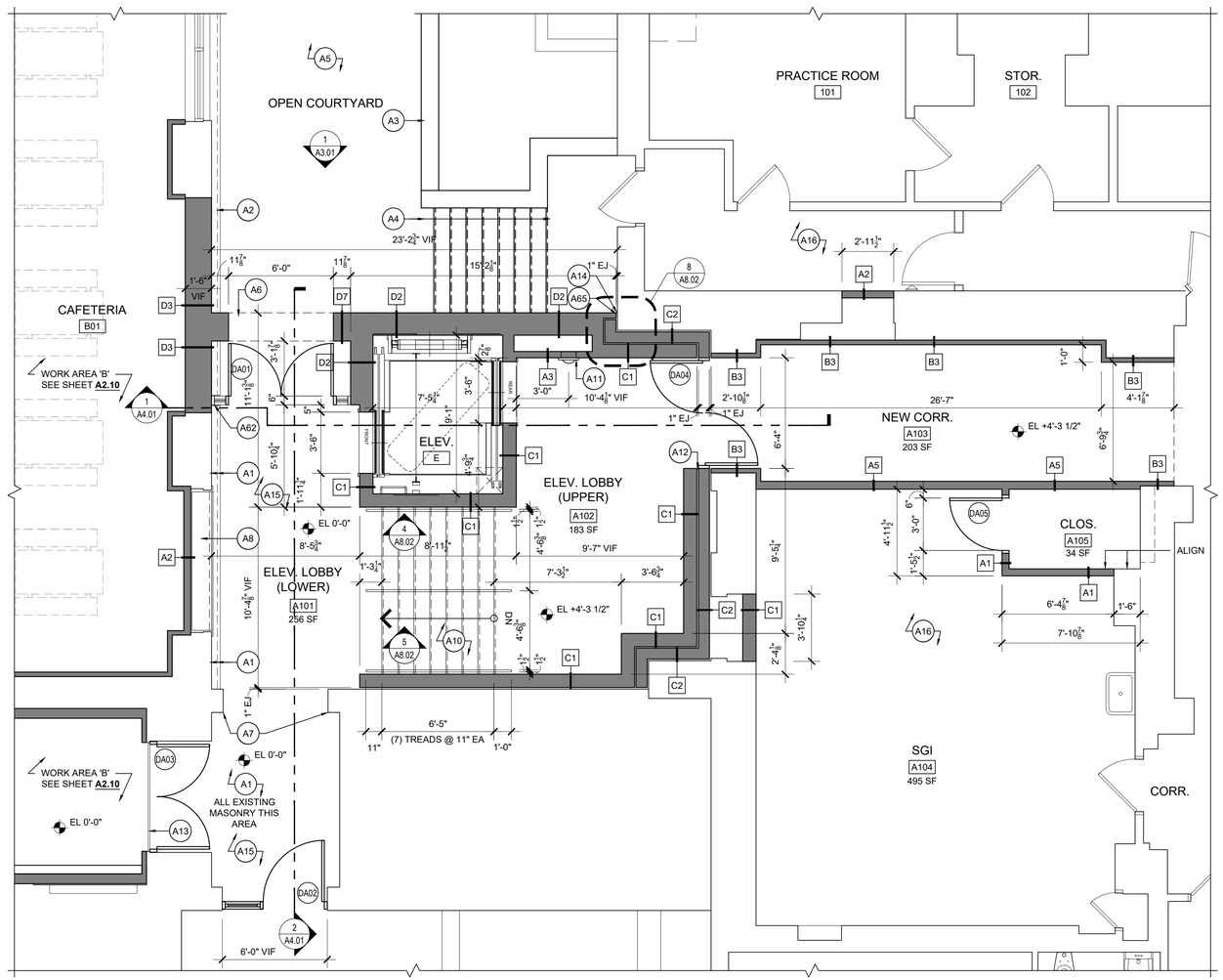
OVERALL PROPOSED FLOOR PLANS

2019 BOND REFERENDUM
CHATSWORTH AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

Job No. 4.1092.72.03

File No. 10927203A201

A2.02

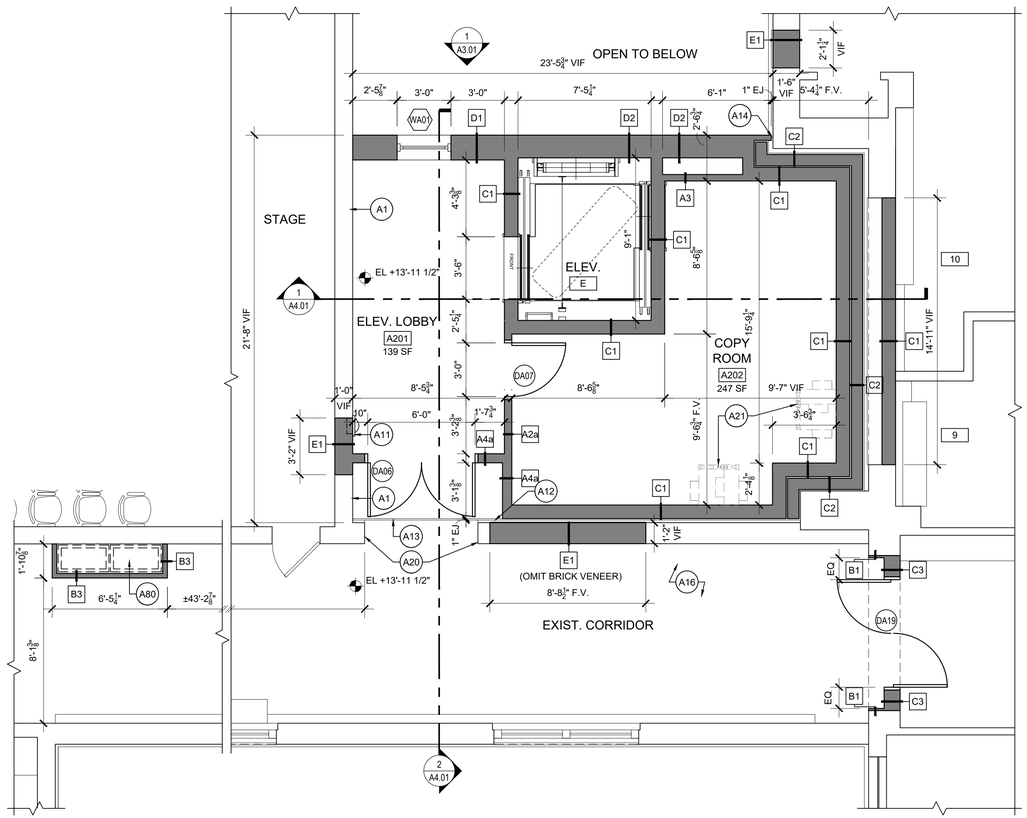


1 A2.03 Proposed First Floor Plan

1/4" = 1'-0"

PROJECT NORTH

WORK AREA 'A'



2 A2.03 Proposed Second Floor Plan

1/4" = 1'-0"

PROJECT NORTH

WORK AREA 'A'

Elevator Job Site Requirements

THE FOLLOWING NOTES ARE DESIGNATED FOR THE 'OTIS' GEN2 MACHINE-ROOM LESS ELEVATOR SYSTEM. SEE SPECIFICATION SECTION 142100 FOR ADDITIONAL INFORMATION.

HOISTWAY:

1. HOISTWAY MUST BE CONSTRUCTED PER FINAL LAYOUT DRAWINGS.
2. THE LOCATION OF ATTACHMENT SUPPORT FOR THE TOP RAIL BRACKET IS AT A CRITICAL ELEVATION CALLED OUT ON THE HOISTWAY LAYOUT.
3. AN OVERHEAD BEAM MUST BE PROVIDED AT THE LOCATION CALLED OUT ON THE HOISTWAY LAYOUT AND DESIGNED TO SUPPORT 7,500 LBS PER ELEVATOR.
4. PROVIDE A CLEAR PLUMB HOISTWAY WITH VARIATIONS FROM THE SIZE SHOWN ON THE OTIS LAYOUT NOT TO EXCEED -0"/+1" (25MM) AND NOT LESS THAN THE CLEAR DIMENSIONS SHOWN ON THE OTIS LAYOUT.
5. PRIOR TO THE START OF INSTALLATION, PROVIDE A DRY, PROPERLY FRAMED, ENCLOSED AND VENTED HOISTWAY IN ACCORDANCE WITH ALL APPLICABLE CODES.
6. • FRONT ENTRANCE WALL AT MAIN AND TOP LANDING, OR LANDING BELOW TOP LANDING IF THE CONTROLLER IS LOCATED THERE, IS NOT TO BE CONSTRUCTED UNTIL OR AFTER ALL ELEVATOR EQUIPMENT IS INSTALLED IN THE HOISTWAY.

SMOKE DETECTORS:

1. PROVIDE SMOKE DETECTORS, LOCATED AS REQUIRED, WITH WIRING FROM THE SENSING DEVICES TO THE CONTROLLERS DESIGNATED BY OTIS.
2. IF SPRINKLERS ARE INSTALLED IN THE HOISTWAY OR MACHINE SPACE, A MEANS TO AUTOMATICALLY DISCONNECT THE MAIN LINE POWER SUPPLY UPON OR PRIOR TO THE APPLICATION OF WATER IS REQUIRED (UNLESS PROHIBITED BY LOCAL CODE).

PIT:

1. PIT FLOOR DESIGNED TO SUSTAIN VERTICAL FORCES ON CAR AND COUNTERWEIGHT RAILS AND IMPACT LOADS ON CAR AND COUNTERWEIGHT BUFFERS AS SHOWN ON OTIS LAYOUT.
2. PIT MUST BE CLEAN AND DRY PRIOR TO START OF INSTALLATION.
3. LIGHT MUST HAVE AN EXTERNAL GUARD AND BE LOCATED AT A POINT WHERE ILLUMINATION ON THE PIT LADDER BASE IS NO LESS THAN 10 FOOT CANDLES.

ELECTRICAL:

1. PROVIDE PERMANENT THREE PHASE ELECTRICAL FEEDER WITH SEPARATE GROUNDING CONDUCTOR TERMINATING IN CONTROLLER EITHER AT THE TOP LANDING OR LANDING BELOW BEFORE THE START OF THE INSTALLATION.
2. PROVIDE A TEMPORARY 220 VOLT, 30 AMP SINGLE PHASE, 4 WIRE ELECTRICAL SUPPLY FOR PLATFORM OPERATION DURING CONSTRUCTION AND AVAILABLE AT THE START OF ELEVATOR INSTALLATION.
3. PROVIDE A 125 VOLT, 15 AMP SINGLE PHASE BRANCH CIRCUIT FOR THE ELEVATOR CAR/LIGHT CIRCUITS AT THE START OF THE INSTALLATION OF THE TOP LANDING.
4. PROVIDE A TEMPORARY 220 VOLT, 30 AMP SINGLE PHASE, 4 WIRE ELECTRICAL SUPPLY FOR PLATFORM OPERATION DURING CONSTRUCTION AND AVAILABLE AT THE START OF ELEVATOR INSTALLATION.
5. PROVIDE A PERMANENT LIGHT FIXTURE AT THE TOP OF THE HOISTWAY. ILLUMINATION SPECIFICATIONS AND LOCATION OF THE LIGHT SWITCH ARE PROVIDED IN THE OTIS LAYOUT.
6. INSTALL A PERMANENT LIGHT FIXTURE AT THE TOP LANDING ENTRANCE IN THE HALL. ILLUMINATION SPECIFICATIONS AND LOCATION OF THE LIGHT SWITCH ARE PROVIDED IN THE OTIS LAYOUT.
7. PROVIDE ELECTRIC POWER FOR LIGHTS TOOLS, WELDING, HOISTING, ETC.
8. PROVIDE ONE DEDICATED OUTSIDE TELEPHONE LINE, PER ELEVATOR, AND TERMINATED AT THE CONTROLLER.

BARRICADES (MUST MEET MINIMUM OSHA REQUIREMENTS):

1. GC SHALL PROVIDE GUARDING AND PROTECTION OF THE HOISTWAY DURING CONSTRUCTION.
2. HOISTWAY BARRICADES SHALL BE CONSTRUCTED, MAINTAINED, AND REMOVED BY THE GC.
3. GC SHALL PROVIDE A FREESTANDING REMOVABLE BARRICADE AT EACH HOISTWAY OPENING AT EACH FLOOR.
4. BARRICADES SHALL BE 42" HIGH, HAVE CENTERBOARD AND KICK BOARD AND WITHSTAND 200 LBS. OF LATERAL FORCE.
5. GC SHALL PROVIDE FULL ENTRANCE SCREENING/MESH IN FRONT OF ALL HOISTWAY ENTRANCES.

GENERAL NOTES:

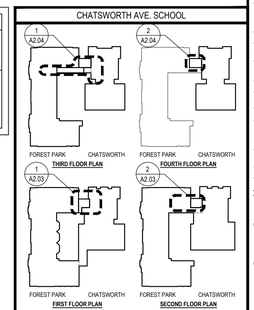
1. THE GC IS RESPONSIBLE FOR ALL ITEMS LISTED ABOVE, ON THE OTIS LAYOUT PAGE, THE CONFIRMATION OF POWER SUPPLY DOCUMENT AND ALL CODE REQUIREMENTS. WHERE CONFLICTS BETWEEN DIFFERENT BUILDING CODES OCCUR, THE MORE STRINGENT CODE SHALL TAKE PRECEDENCE.
2. THESE NOTES ARE SPECIFIC TO THE ELEVATOR LISTED AS BASIS OF DESIGN. IF THE CONTRACTOR PROVIDES A SUBSTITUTION FOR THE ELEVATOR, THE CONTRACTOR SHALL BE RESPONSIBLE FOR FOLLOWING ALL JOBSITE REQUIREMENTS SET FORTH BY THE SUBSTITUTED MANUFACTURER. (SEE SPECIFICATION FOR SUBSTITUTION PROCEDURES)

REFER TO GENERAL NOTES ON SHEET **A2.00**

- (#) SYMBOL DENOTES WALL TYPES, REFER TO PARTITION TYPE SHEET **A8.01**
- (X#) SYMBOL INDICATES CONSTRUCTION KEY NOTE

REFER TO CONSTRUCTION KEY NOTES ON SHEET **A2.00**

CHATSWORTH AVE. SCHOOL



Key Plan

NOT TO SCALE

PROJECT NORTH

Date	1/10/20
Checked	DLF
Drawn	CTB

MICHAEL J. McGOVERN, R.A.
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Revisions:

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1	ISSUE TO BID 11/23/20

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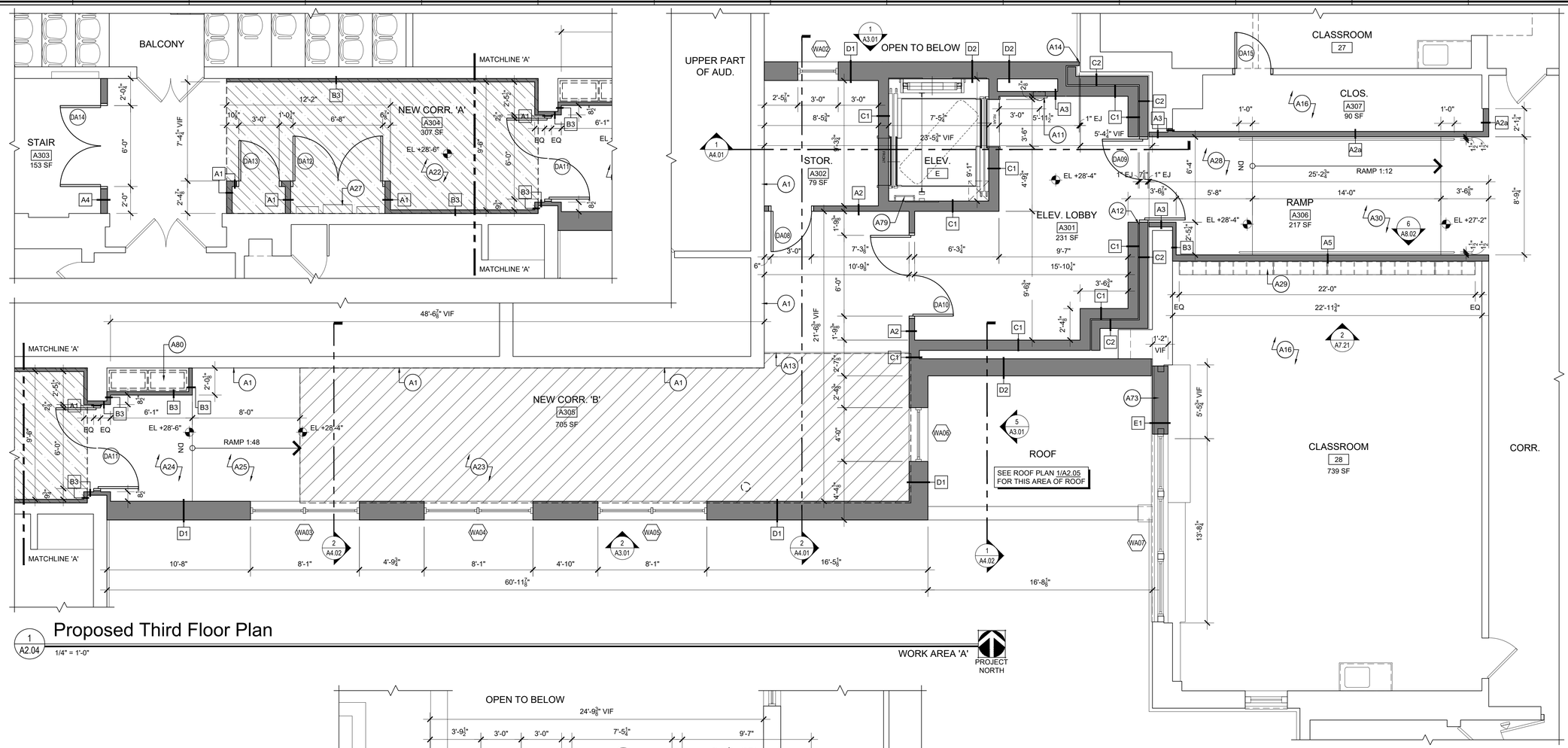
PARTIAL ELEVATOR PROPOSED PLANS

2019 BOND REFERENDUM
CHATSWORTH AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

Job No. 4.1092.72.03

File No. 10927203A203

A2.03

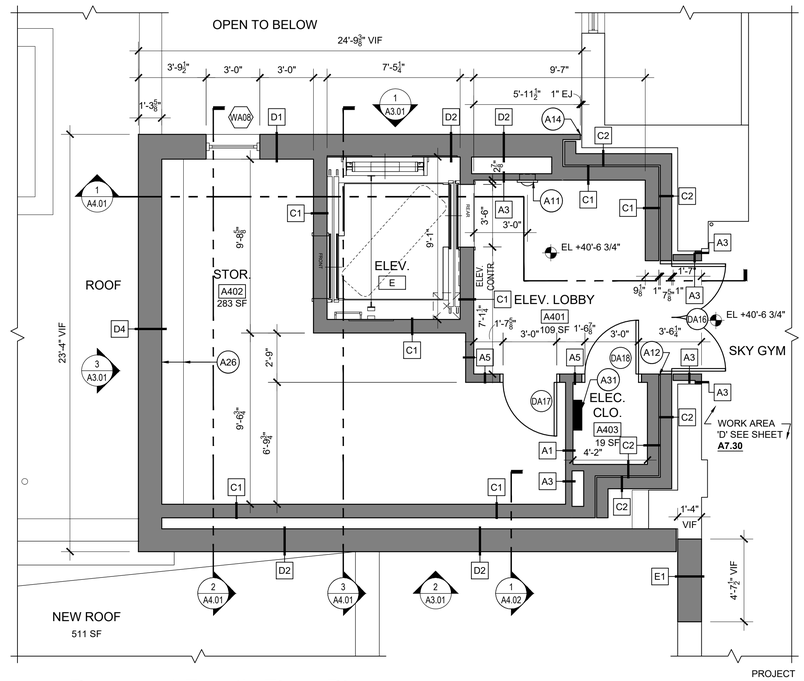


1 A2.04 Proposed Third Floor Plan

1/4" = 1'-0"

WORK AREA 'A'

PROJECT NORTH



2 A2.04 Proposed Fourth Floor Plan

1/4" = 1'-0"

WORK AREA 'A'

PROJECT NORTH

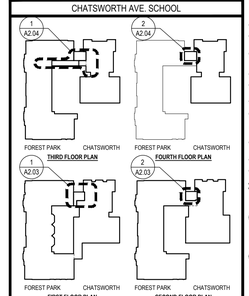
REFER TO GENERAL NOTES ON SHEET **A2.00**

(#) SYMBOL DENOTES WALL TYPES, REFER TO PARTITION TYPE SHEET **A8.01**

(X#) SYMBOL INDICATES CONSTRUCTION KEY NOTE

REFER TO CONSTRUCTION KEY NOTES ON SHEET **A2.00**

CHATSWORTH AVE. SCHOOL



Key Plan

NOT TO SCALE

PROJECT NORTH

Date	1/10/20
Checked	DLF
Drawn	CTB

MICHAEL J. McGOVERN, R.A.
License No. 022257-1
The REGISTERED ARCHITECT

Revisions:

(1) ISSUE TO BID 11/23/20

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PARTIAL ELEVATOR PROPOSED PLANS

2019 BOND REFERENDUM
CHATSWORTH AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

NYSED PROJECT # 66-07-01-03-0-005-020

Job No. 4.1092.72.03

File No. 109272O3A203

A2.04

Proposed Roof Plan

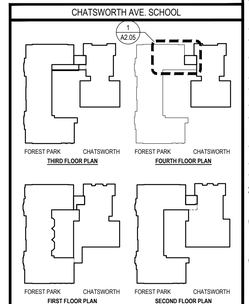
1 A2.05 — 1/4" = 1'-0"

PROJECT NORTH

WORK AREA 'A'

REFER TO GENERAL NOTES ON SHEET **A2.00**	
#	SYMBOL DENOTES WALL TYPES, REFER TO PARTITION TYPE SHEET **A8.01**
X#	SYMBOL INDICATES CONSTRUCTION KEY NOTE
REFER TO CONSTRUCTION KEY NOTES ON SHEET **A2.00**	

CHATSWORTH AVE. SCHOOL



Key Plan — NOT TO SCALE

PROJECT NORTH

Date	1/10/20
Checked	DLF
Drawn	CTB

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NYSED PROJECT # 66-07-01-03-0-005-020

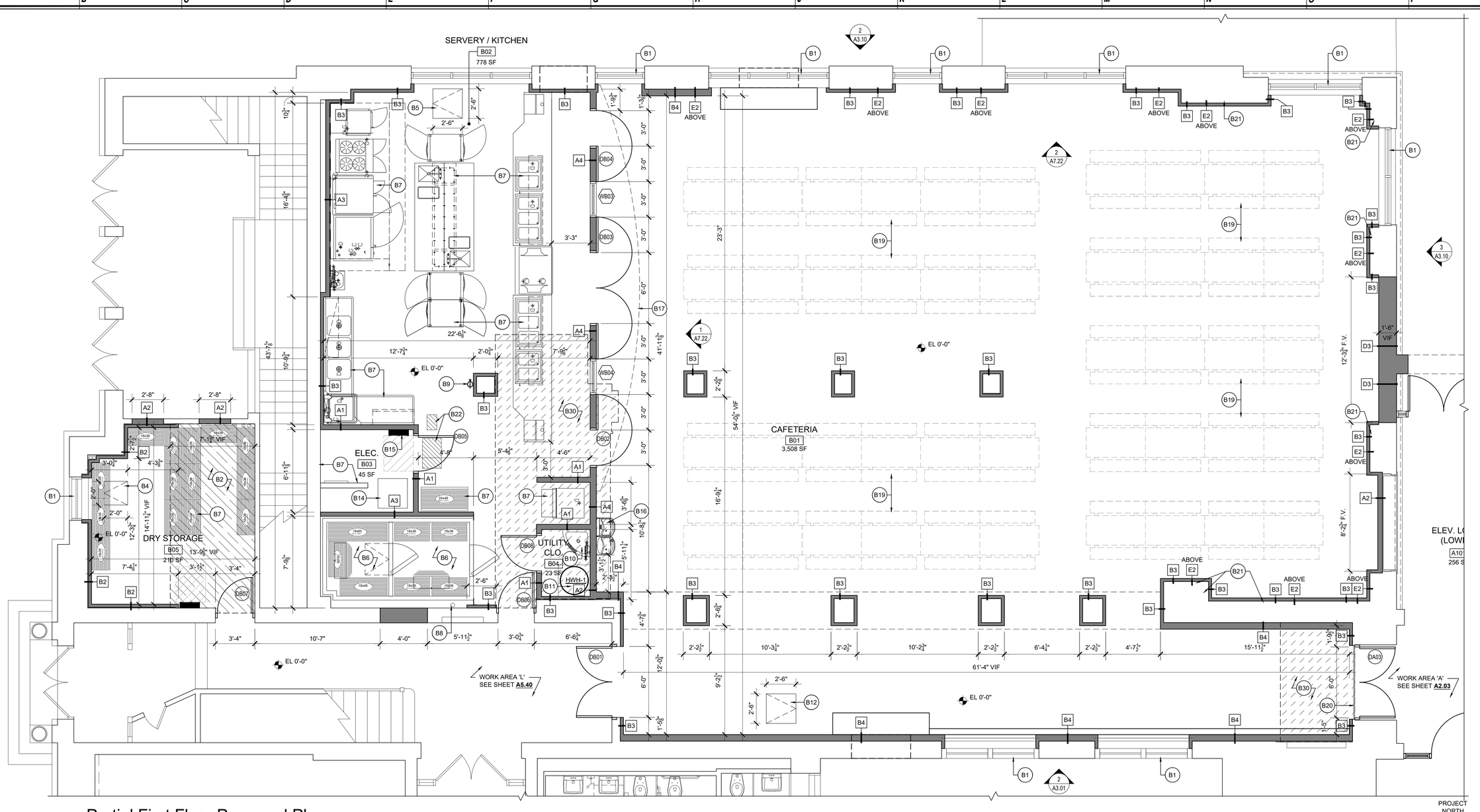
PROPOSED ROOF PLAN

2019 BOND REFERENDUM
CHATSWORTH AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

Job No. 4.1092.72.03

File No. 10927203A203

A2.05



1 A2.10 — Partial First Floor Proposed Plan

1/4" = 1'-0"

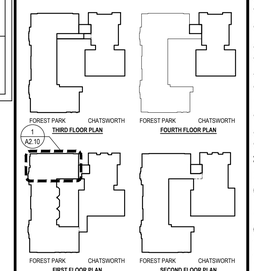
REFER TO GENERAL NOTES ON SHEET **A2.00**

(#) SYMBOL DENOTES WALL TYPES, REFER TO PARTITION TYPE SHEET **A8.01**

(X#) SYMBOL INDICATES CONSTRUCTION KEY NOTE

REFER TO CONSTRUCTION KEY NOTES ON SHEET **A2.00**

CHATSWORTH AVE. SCHOOL



Key Plan

NOT TO SCALE

PROJECT NORTH

NYSED PROJECT # 66-07-01-03-0-005-020

Date	1/10/20
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PARTIAL FIRST FLOOR PROPOSED PLAN

2019 BOND REFERENDUM SCHOOL
CHATSWORTH AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

Job No. 4.1092.72.03

File No. 10927203A210

A2.10

1 A2.20 Partial First Floor Proposed Plan

1/4" = 1'-0"

REFER TO GENERAL NOTES ON SHEET **A2.00**

SYMBOL DENOTES WALL TYPES, REFER TO PARTITION TYPE SHEET **A8.01**

X# SYMBOL INDICATES CONSTRUCTION KEY NOTE

REFER TO CONSTRUCTION KEY NOTES ON SHEET **A2.00**

CHATSWORTH AVE. SCHOOL

Key Plan

NOT TO SCALE

PROJECT NORTH

NYSED PROJECT # 66-07-01-03-0-005-020

Date	1/10/20
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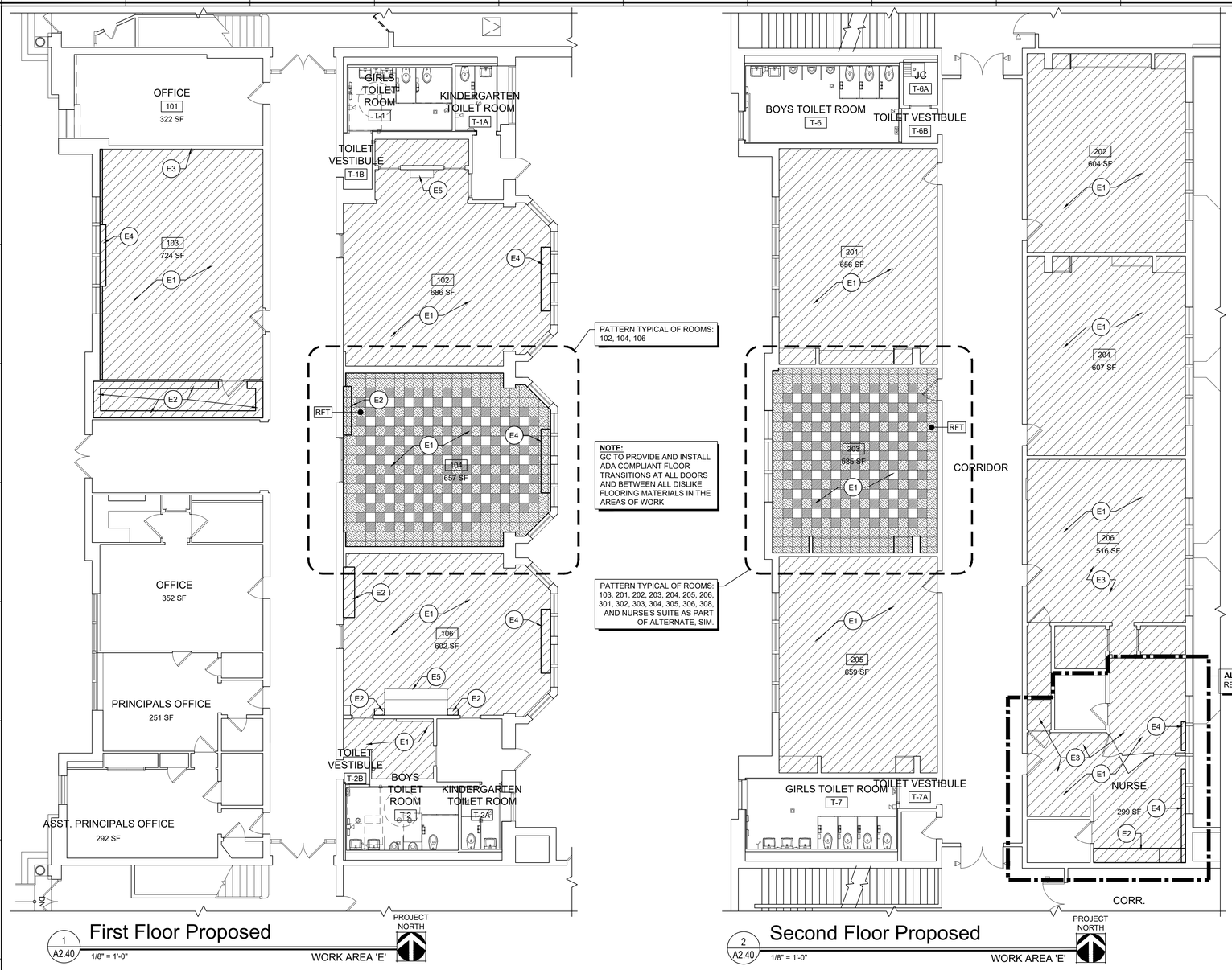
PARTIAL FIRST FLOOR PROPOSED PLAN

2019 BOND REFERENDUM
CHATSWORTH AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

Job No. 4.1092.72.03

File No. 109272O3A220

A2.20



1 A2.40 First Floor Proposed
1/8" = 1'-0"

2 A2.40 Second Floor Proposed
1/8" = 1'-0"

3 A2.40 Third Floor Proposed
1/8" = 1'-0"

Floor Finish Legend

SYMBOL	ABBREVIATIONS	DESCRIPTIONS
(COLOR 1) / (COLOR 2) / (COLOR 3)	RFT	NEW RESILIENT FLOOR TILE SOLID VINYL FLOOR TILE BY 'TARKETT' MODEL: 'CORTINA GRANDE' COLOR TO BE SELECTED BY ARCHITECT /OWNER FROM MANUFACTURER'S FULL RANGE 16"x16" TILE, 0.125" THICK

SURFACE PREPARATION NOTE:

FOR ALL WORK AREAS: WHERE REQUIRED, NEW FLOOR TO BE INSTALLED OVER SELF LEVELING MATERIAL. BASIS OF DESIGN TO BE 'CMP LEVEL 1' SELF-LEVELING WITH 'CMP LOCKDOWN' VAPOR SUPPRESSION SYSTEM.

REFER TO FLOOR PATTERN PLANS OF INDIVIDUAL AREAS AND SPECIFICATION SECTION 035416 FOR ADDITIONAL INFORMATION. CONSULT INDIVIDUAL FLOORING MANUFACTURER TO VERIFY SURFACE PREPARATION REQUIREMENTS AND COMPATIBILITY.

NOTE:
GC TO REINSTALL ALL CLOSET DOORS AND FLOOR MOUNTED HARDWARE WITHIN AREAS OF WORK. PROVIDE ALL HARDWARE REQUIRED FOR A COMPLETE INSTALLATION, TYP.

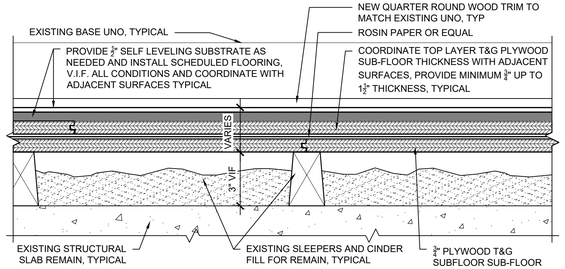
Construction Key Notes - Work Area 'E'

(#) SYMBOL INDICATES DEMOLITION KEY NOTE

1. **FLOOR SYSTEM:** GC TO INSTALL T&G PLYWOOD SUB FLOOR SYSTEM OVER EXISTING SLEEPERS; SELF LEVELING PRODUCT AS NEEDED TO LEVEL AND ALIGN FLOOR TO ADJACENT SURFACES; SCHEDULED FLOORING AND CORRESPONDING BASE - REFER TO DETAIL 4/A2.40
2. GC TO REINSTALL EXISTING CASEWORK TO ORIGINAL LOCATION. PROVIDE ALL HARDWARE REQUIRED FOR A COMPLETE INSTALLATION, TYP.
3. GC TO PROVIDE AND INSTALL NEW 4" TALL VINYL COVE BASE IN THIS AREA, TYP.
4. MC TO REINSTALL EXISTING UNIT VENTILATOR TO ORIGINAL LOCATION. PROVIDE ALL HARDWARE REQUIRED FOR A COMPLETE INSTALLATION, TYP.
5. GC TO PROVIDE AN INSTALL NEW FLUSH FLOOR TRANSITION STRIP AT EXISTING HEARTH, TYPICAL

Flooring Notes

1. COORDINATE THICKNESS OF T&G PLYWOOD SUB-FLOOR WITH ADJACENT SURFACES, PROVIDE MINIMUM $\frac{3}{4}$" UP TO $1\frac{1}{2}$" THICKNESS ONE LAYER OR TWO, TYPICAL
2. SCREW T&G PLYWOOD TO EXISTING SUBSTRATE 12" O.C. BOTH WAYS USE MINIMUM 2" LONG STRONG-DRIVE WSNTL SUBFLOOR SCREW BY SIMPSON STRONG-TIE OR EQUAL, COORDINATE SCREW LENGTH IN THE FIELD / INSTALL PLYWOOD SHEETS IN A STAGGERED PATTERN, SCREWS ARE TO BE COORDINATED WITH DETERMINED PLYWOOD THICKNESS, TYPICAL
3. INSTALL ROSIN PAPER OR EQUAL UNDER THE SCHEDULED PLYWOOD SUBSTRATE, TYPICAL
4. GC TO REINSTALL ALL TEMPORARILY UNINSTALLED FLOOR HARDWARE TO ORIGINAL LOCATION, TYP.



4 A2.40 Classroom Floor Detail
3" = 1'-0"

Date	1/10/20
Checked	DLF
Drawn	CTB

MICHAEL J. McGOVERN, R.A.
Title REGISTERED ARCHITECT License No. 022257-1

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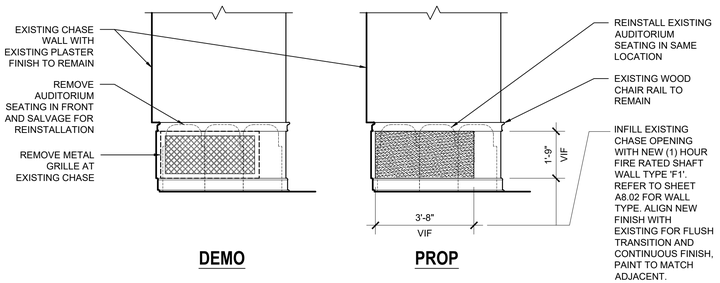
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NYSED PROJECT # 66-07-01-03-0-005-020

PARTIAL PROPOSED FLOORING PLANS
2019 BOND REFERENDUM
CHATSWORTH AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

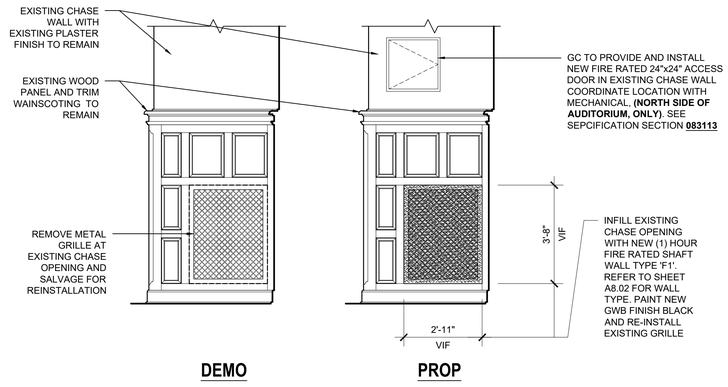
Job No. 4.1092.72.03
File No. 10927203A240

A2.40



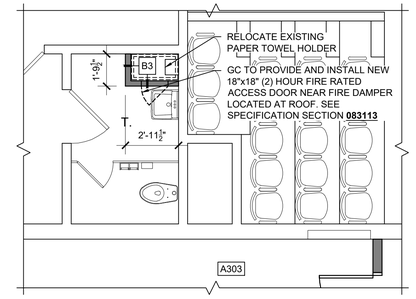
4 A2.50 Proposed Partial Elevation

3/8" = 1'-0" AUDITORIUM - BALCONY



3 A2.50 Typical Infill Detail

3/8" = 1'-0" AUDITORIUM - LOWER

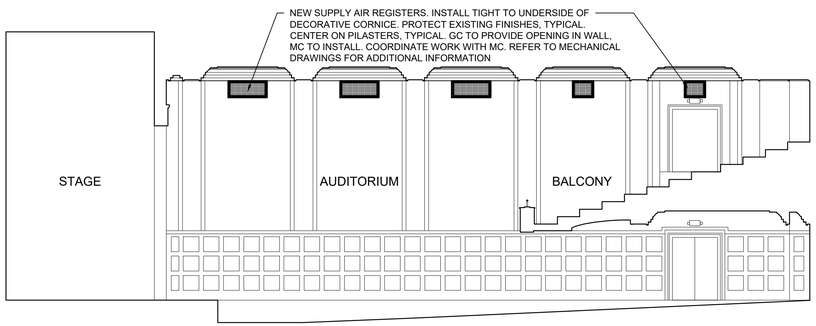


2 A2.50 Partial Third Floor Proposed Plan

1/4" = 1'-0" WORK AREA 'M'

PROJECT NORTH

1 A2.50 RESERVED



6 A2.50 Auditorium North Elevation

1/8" = 1'-0"

5 A2.50 Partial Second Floor Lobby RCP

1/4" = 1'-0"

PROJECT NORTH

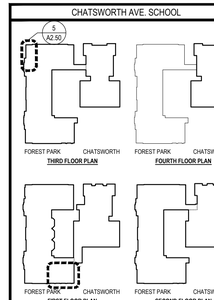
REFER TO GENERAL NOTES ON SHEET **A2.00**

SYMBOL DENOTES WALL TYPES, REFER TO PARTITION TYPE SHEET **A8.01**

X# SYMBOL INDICATES CONSTRUCTION KEY NOTE

REFER TO CONSTRUCTION KEY NOTES ON SHEET **A2.00**

CHATSWORTH AVE. SCHOOL



Key Plan

NOT TO SCALE

PROJECT NORTH

NYSED PROJECT # 66-07-01-03-0-005-020

Date	1/10/20
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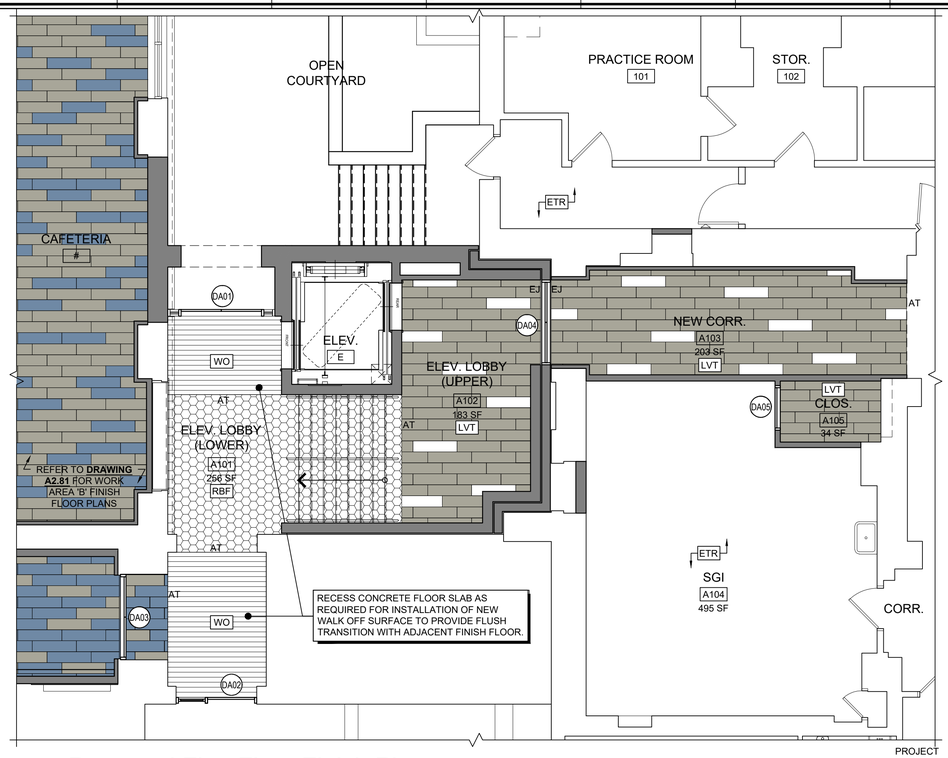
PARTIAL FLOOR PLANS

2019 BOND REFERENDUM
CHATSWORTH AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

Job No. 4.1092.72.03

File No. 10927203A250

A2.50

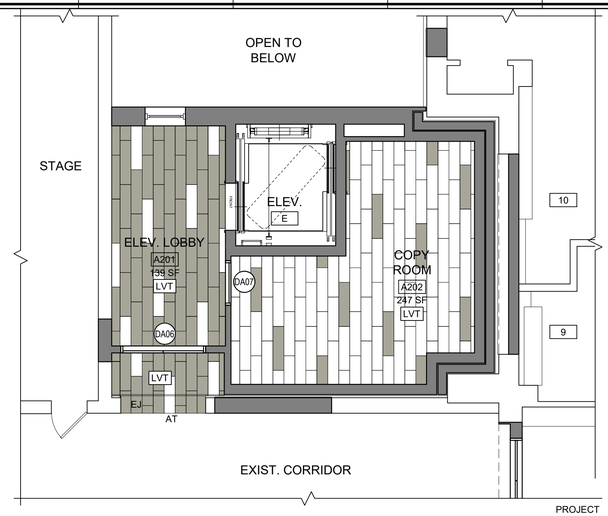


1 A2.80 Proposed First Floor Finish Plan

3/16" = 1'-0"

PROJECT NORTH

WORK AREA 'A'

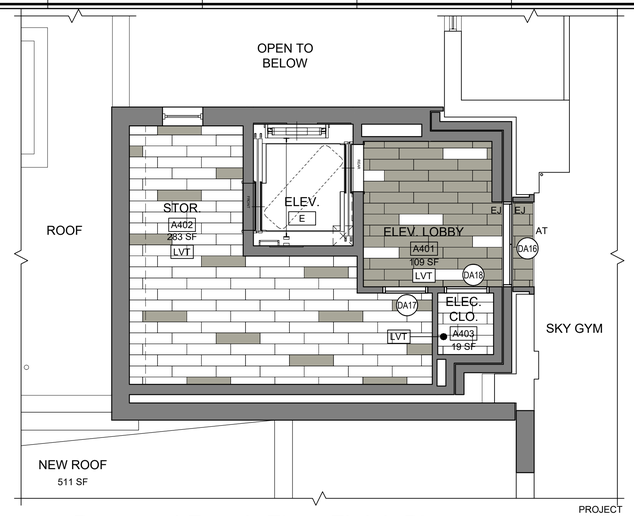


2 A2.80 Proposed Second Floor Finish Plan

3/16" = 1'-0"

PROJECT NORTH

WORK AREA 'A'

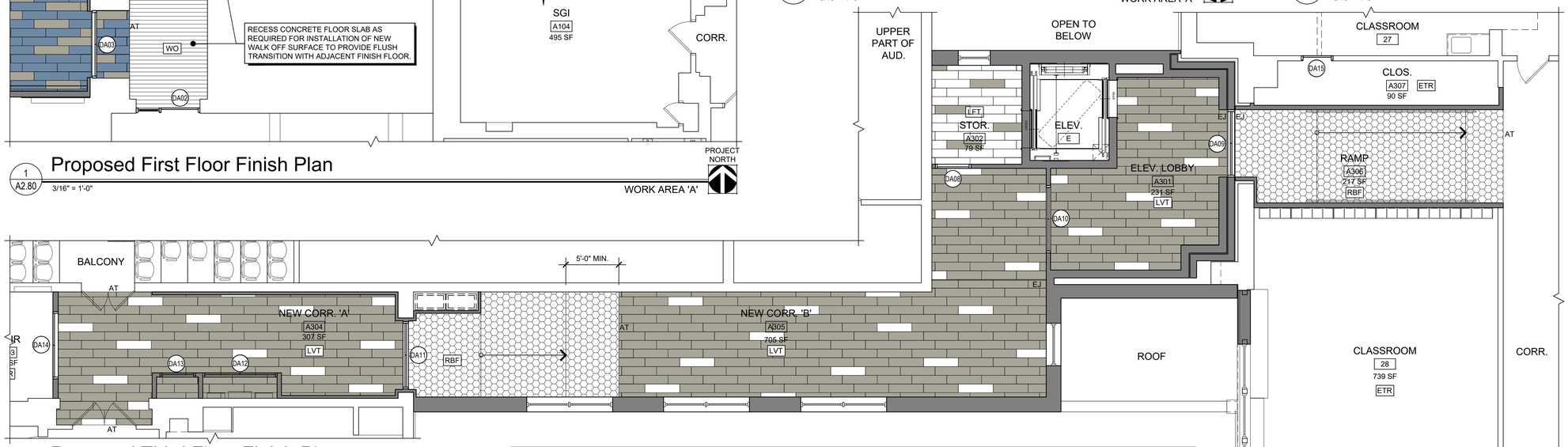


4 A2.80 Proposed Fourth Floor Finish Plan

3/16" = 1'-0"

PROJECT NORTH

WORK AREA 'A'



3 A2.80 Proposed Third Floor Finish Plan

3/16" = 1'-0"

PROJECT NORTH

WORK AREA 'A'

Floor Finish Legend

SYMBOL	ABBREVIATIONS	DESCRIPTIONS
(COLOR 1) (COLOR 2)	CPT	NEW CARPET TILE BY 'SHAW CONTRACT' (BASIS OF DESIGN) REFER TO SPEC SECTION **096813** FOR BASIS OF DESIGN MODELS. COLORS AND PATTERNS TO BE SELECTED BY ARCHITECT /OWNER FROM MANUFACTURER'S FULL RANGE 9"x36" TILE
(COLOR 1) (COLOR 2) (COLOR 3)	RFT	NEW RESILIENT FLOOR TILE SOLID VINYL FLOOR TILE BY 'TARKETT' MODEL: 'CORTINA GRANDE' COLOR TO BE SELECTED BY ARCHITECT /OWNER FROM MANUFACTURER'S FULL RANGE 16"x16" TILE, 0.125" THICK
(COLOR 1) (COLOR 2) (COLOR 3) (COLOR 4)	LVT	NEW SOLID VINYL TILE BY 'AVA' MODEL: 'VRSE' COLOR TO BE SELECTED BY ARCHITECT /OWNER FROM MANUFACTURER'S FULL RANGE 9.84" x 39.37" TILE, 5MM THICK
	RBF	NEW RUBBER FLOORING BY 'AMERICAN BILTRITE' MODEL: 'AB PURE'. COLOR AND STYLE TO BE SELECTED BY ARCHITECT /OWNER FROM MANUFACTURER'S FULL RANGE. STAIR TREADS TO BE ONE PIECE TREAD AND RISER WITH CARBORUNDUM STRIP.
	EPXF	NEW POURED EPOXY FLOOR WITH INTEGRAL COVE BASE
	WO	NEW METAL WALK OFF SURFACE

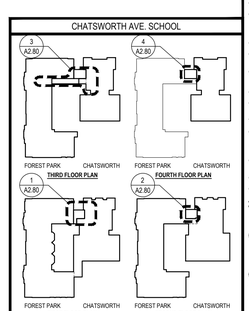
ABBREVIATIONS	DESCRIPTIONS
PTC	PAINTED CONCRETE - COLOR SELECTED BY OWNER
ETR	EXISTING TO REMAIN. PROTECT FROM DAMAGE DURING CONSTRUCTION.
AS	ADA ALUMINUM SADDLE
MS	ADA MARBLE SADDLE
PS	ADA PORCELAIN TILE SADDLE
VS	ADA VINYL SADDLE TRANSITION STRIP
EX	EXISTING SADDLE
EJ	EXPANSION JOINT
AT	NEW ADA ALUMINUM LEVEL TRANSITION STRIP, REDUCER, OR RAMPED REDUCER

SURFACE PREPARATION NOTE:

FOR ALL WORK AREAS: WHERE REQUIRED, NEW FLOOR TO BE INSTALLED OVER SELF LEVELING MATERIAL. BASIS OF DESIGN TO BE 'CMP LEVEL 1' SELF-LEVELING WITH 'CMP LOCKDOWN' VAPOR SUPPRESSION SYSTEM.

REFER TO FLOOR PATTERN PLANS OF INDIVIDUAL AREAS AND SPECIFICATION SECTION 035416 FOR ADDITIONAL INFORMATION. CONSULT INDIVIDUAL FLOORING MANUFACTURER TO VERIFY SURFACE PREPARATION REQUIREMENTS AND COMPATIBILITY.

NOTE: SEE DOOR DETAILS FOR FLOOR TRANSITIONS AT DOOR SILLS, TYPICAL.



Key Plan

NOT TO SCALE

PROJECT NORTH

Date	1/10/20
Checked	DLF
Drawn	CTB

MICHAEL J. McGOVERN, R.A.
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Revisions:

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PARTIAL ELEVATOR FLOOR FINISH PLANS

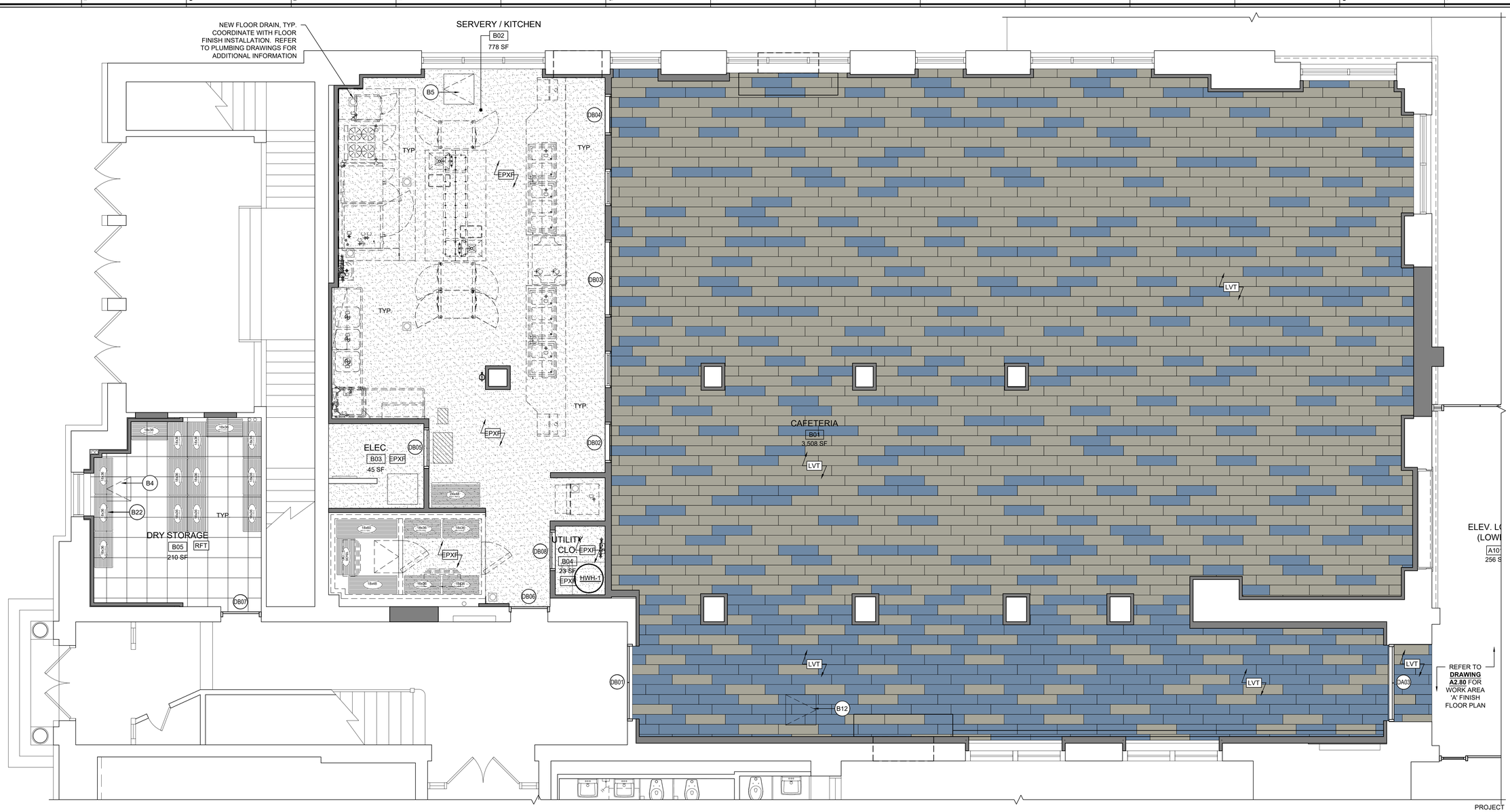
2019 BOND REFERENDUM
CHATSWORTH AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

NYSED PROJECT # 66-07-01-03-0-005-020

Job No. 4.1092.72.03

File No. 10927203A280

A2.80



1 A2.81 Partial First Floor Finish Plan

1/4" = 1'-0"

REFER TO **DRAWING A2.80** FOR FLOOR FINISH LEGEND

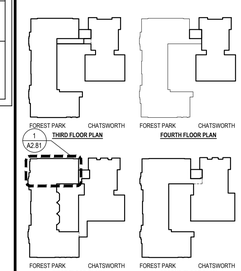
NOTE: SEE DOOR DETAILS FOR FLOOR TRANSITIONS AT DOOR SILLS, TYPICAL.

REFER TO GENERAL NOTES ON SHEET **A2.00**

- # SYMBOL DENOTES WALL TYPES, REFER TO PARTITION TYPE SHEET **A8.01**
- X# SYMBOL INDICATES CONSTRUCTION KEY NOTE

REFER TO CONSTRUCTION KEY NOTES ON SHEET **A2.00**

CHATSWORTH AVE. SCHOOL



Key Plan

NOT TO SCALE

PROJECT NORTH

Date	1/10/20
Checked	DLF
Drawn	CTB

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PARTIAL FIRST FLOOR FINISH PLAN

2019 BOND REFERENDUM
CHATSWORTH AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

NYSED PROJECT # 66-07-01-03-0-005-020

Job No. 4.1092.72.03

File No. 10927203A281

A2.81



NOTE: PROVIDE ADA VINYL TRANSITION STRIPS AT ALL LOCATIONS OF FLOOR MATERIAL CHANGE UNLESS NOTED OTHERWISE, TYPICAL

NOTE: SEE DOOR DETAILS FOR FLOOR TRANSITIONS AT DOOR SILLS, TYPICAL.

WORK AREA 'C'

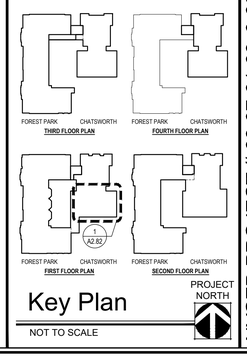
PROJECT NORTH

1 / A2.82 Partial First Floor Finish Plan

1/4" = 1'-0"

REFER TO **DRAWING A2.80** FOR FLOOR FINISH LEGEND

CHATSWORTH AVE. SCHOOL



Key Plan

NOT TO SCALE

PROJECT NORTH

NYSED PROJECT # 66-07-01-03-0-005-020

Date	1/10/20
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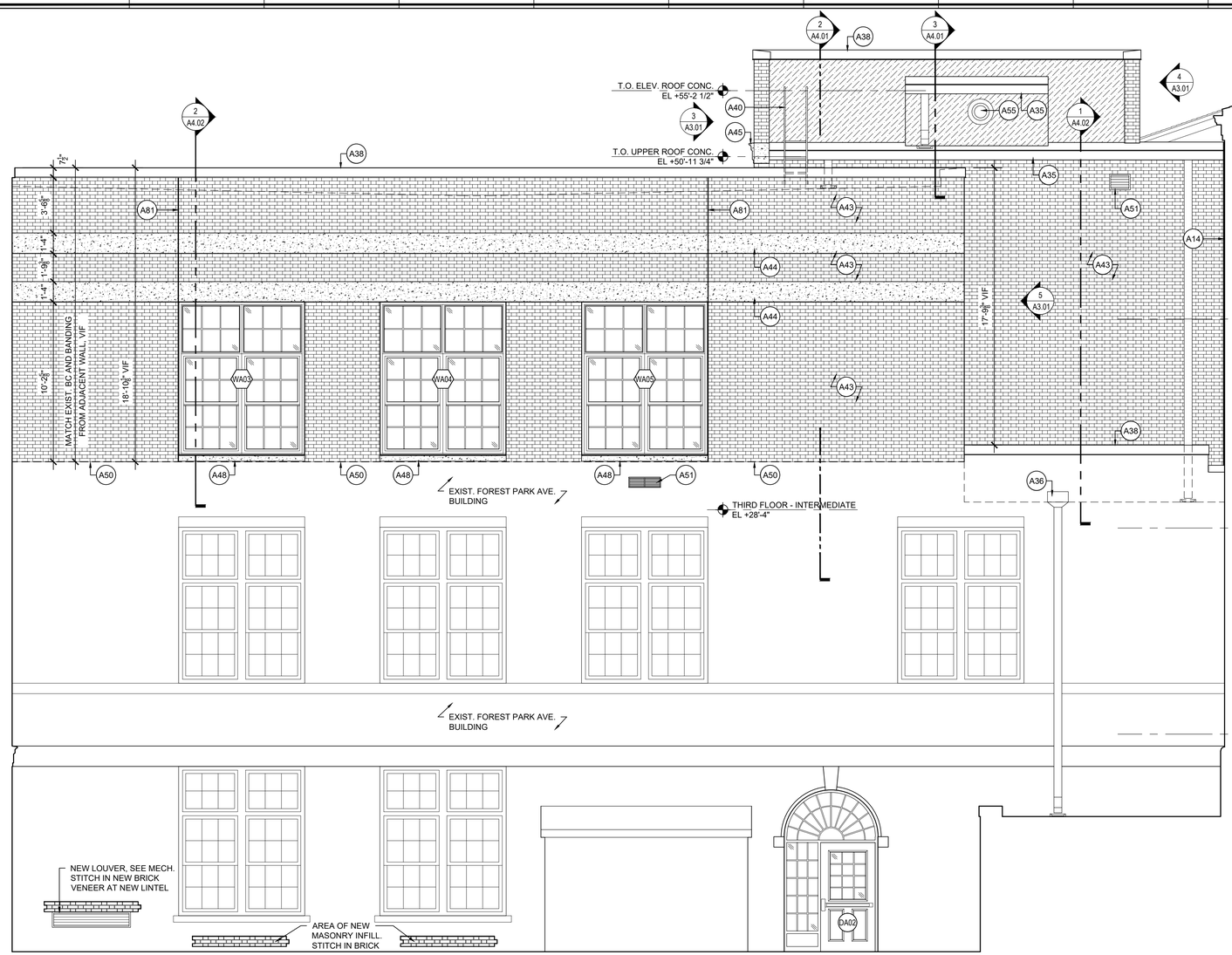
PARTIAL FIRST FLOOR FINISH PLAN

2019 BOND REFERENDUM
CHATSWORTH AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

Job No. 4.1092.72.03

File No. 10927203A282

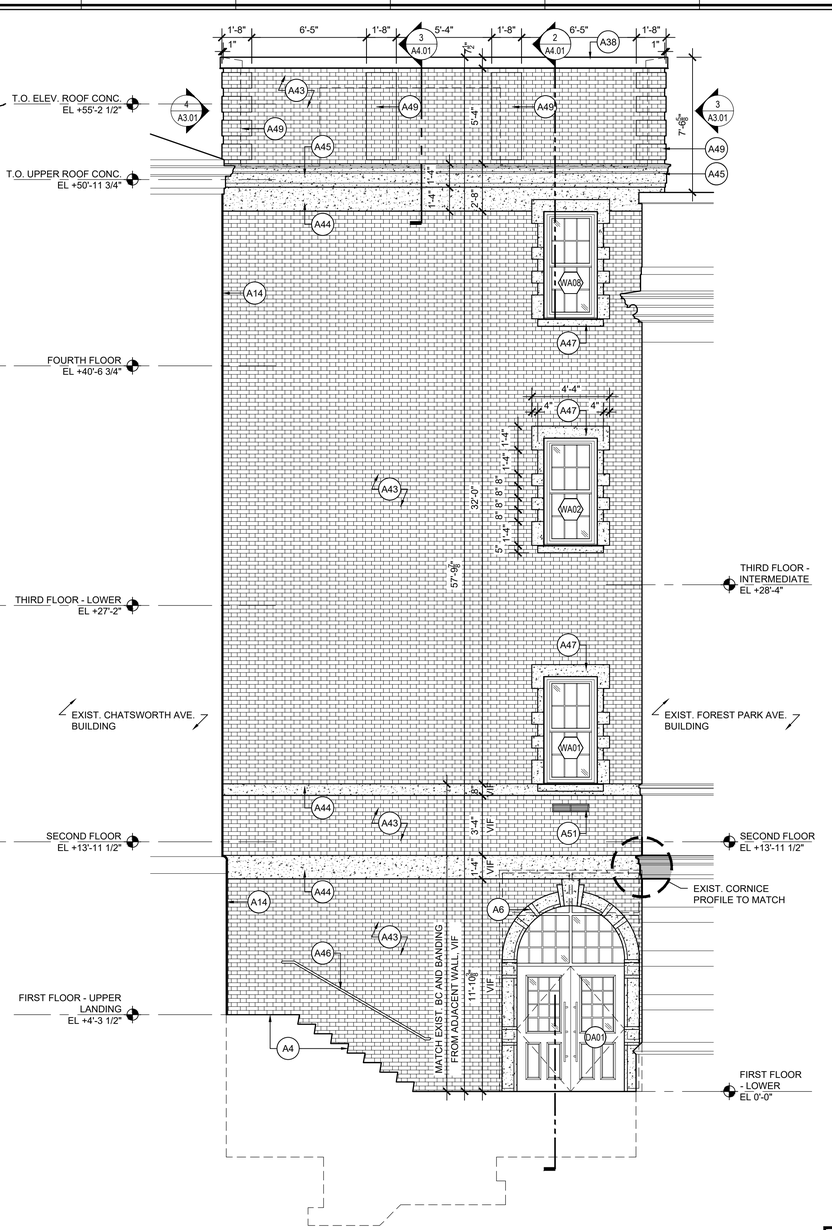
A2.82



2 A3.01 Proposed Elevation

1/4" = 1'-0"

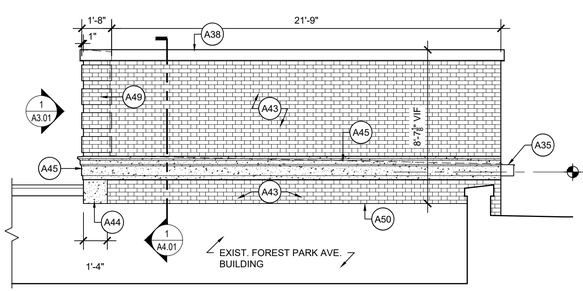
WORK AREA 'A'



1 A3.01 Proposed Elevation

1/4" = 1'-0"

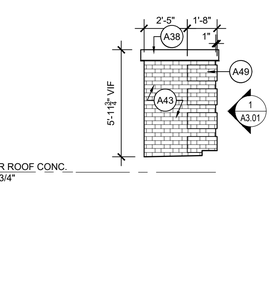
WORK AREA 'A'



3 A3.01 Proposed Elevation

1/4" = 1'-0"

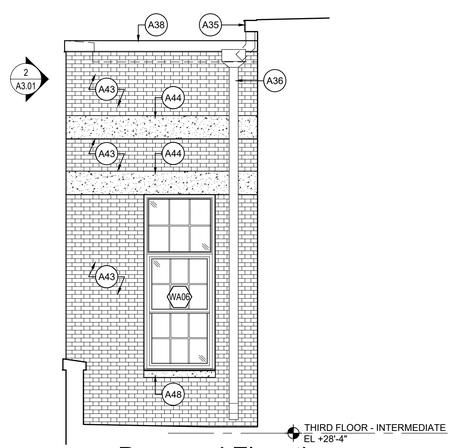
WORK AREA 'A'



4 A3.01 Proposed Elevation

1/4" = 1'-0"

WORK AREA 'A'



5 A3.01 Proposed Elevation

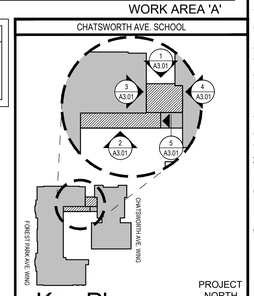
1/4" = 1'-0"

WORK AREA 'A'

REFER TO GENERAL NOTES ON SHEET **A2.00**

X# SYMBOL INDICATES CONSTRUCTION KEY NOTE

REFER TO CONSTRUCTION KEY NOTES ON SHEET **A2.00**



Date	1/10/20
Checked	DLF
Drawn	CTB

MICHAEL J. McGOVERN, R.A.
Title REGISTERED ARCHITECT License No. 022257-1

Revisions:

ISSUE TO BID 11/23/20

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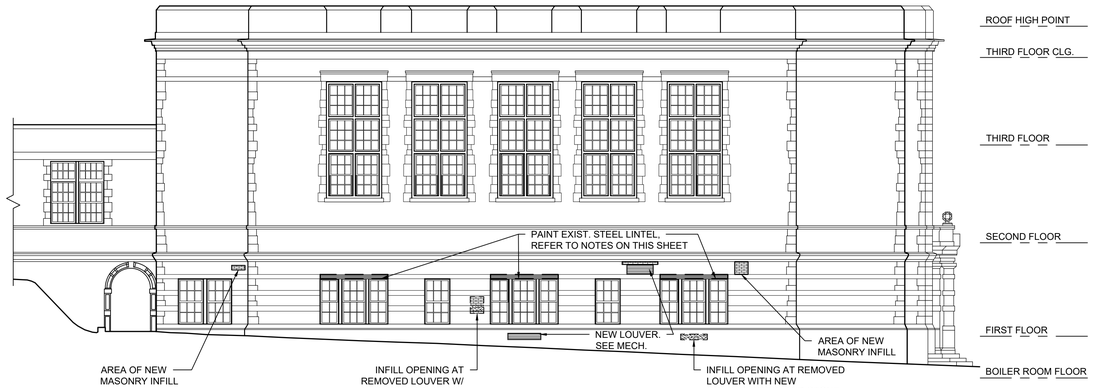
PROPOSED ELEVATIONS
2019 BOND REFERENDUM
CHATSWORTH AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

NYSED PROJECT # 66-07-01-03-0-005-020

Job No. 4.1092.72.03

File No. 10927203A301

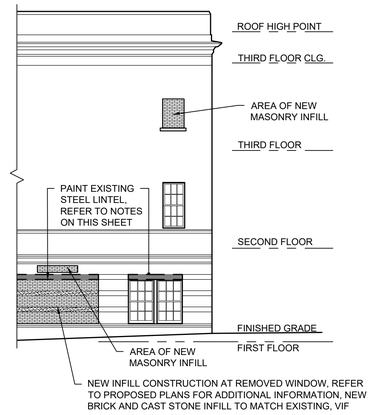
A3.01



2 A3.10 **Partial Existing Elevation**

3/32" = 1'-0"

NORTH ELEVATION - WORK AREA 'B'



3 A3.10 **Partial Existing Elevation**

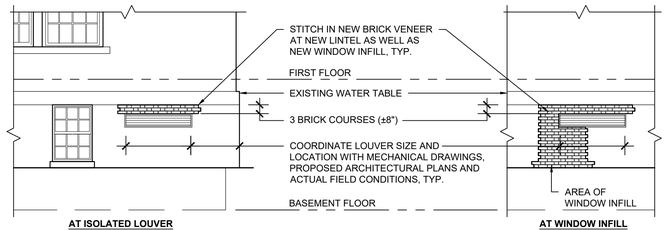
3/32" = 1'-0"

EAST ELEVATION - WORK AREA 'B'

NOTE: STITCH-IN NEW BRICK AT ALL AREAS OF MASONRY INFILL

1 A3.10 **Reserved**

5 A3.10 **Reserved**



4 A3.10 **Typ. Proposed Louver Elevation**

3/16" = 1'-0"

WORK AREA 'C'

ALL EXISTING ELEVATIONS ON THIS SHEET ARE FOR REFERENCE PURPOSES ONLY.

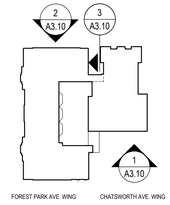
STEEL LINTEL PAINTING NOTES:

CONTRACTOR SHALL PROPERLY PREPARE SUBSTRATE PER MANUFACTURER'S RECOMMENDATIONS, TYPICAL.

PRIMER:
(1) COAT PRO INDUSTRIAL PRO CRYL PRIMER (B66W01310) BY 'SHERWIN WILLIAMS'

FINISH:
(2) COATS PRO INDUSTRIAL WATER BASED CATALYZED EPOXY, B73-360 SERIES BY 'SHERWIN WILLIAMS'

CHATSWORTH AVE. SCHOOL



Key Plan

NOT TO SCALE

PROJECT NORTH

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NYSED PROJECT # 66-07-01-03-0-005-020

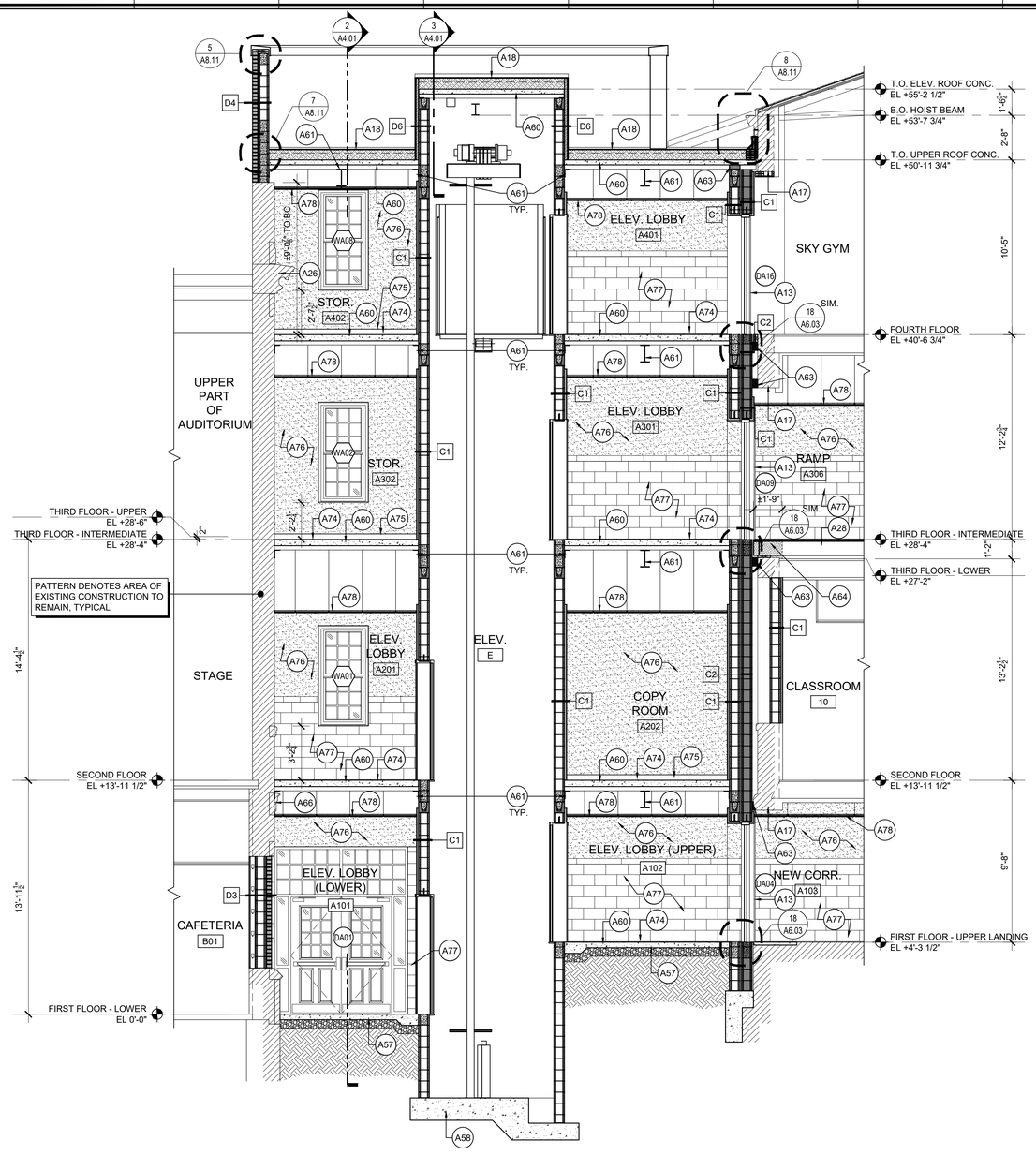
LINTEL AND INFILL ELEVATIONS

2019 BOND REFERENDUM
CHATSWORTH AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

Job No. 4.1092.72.03

File No. 109272030310

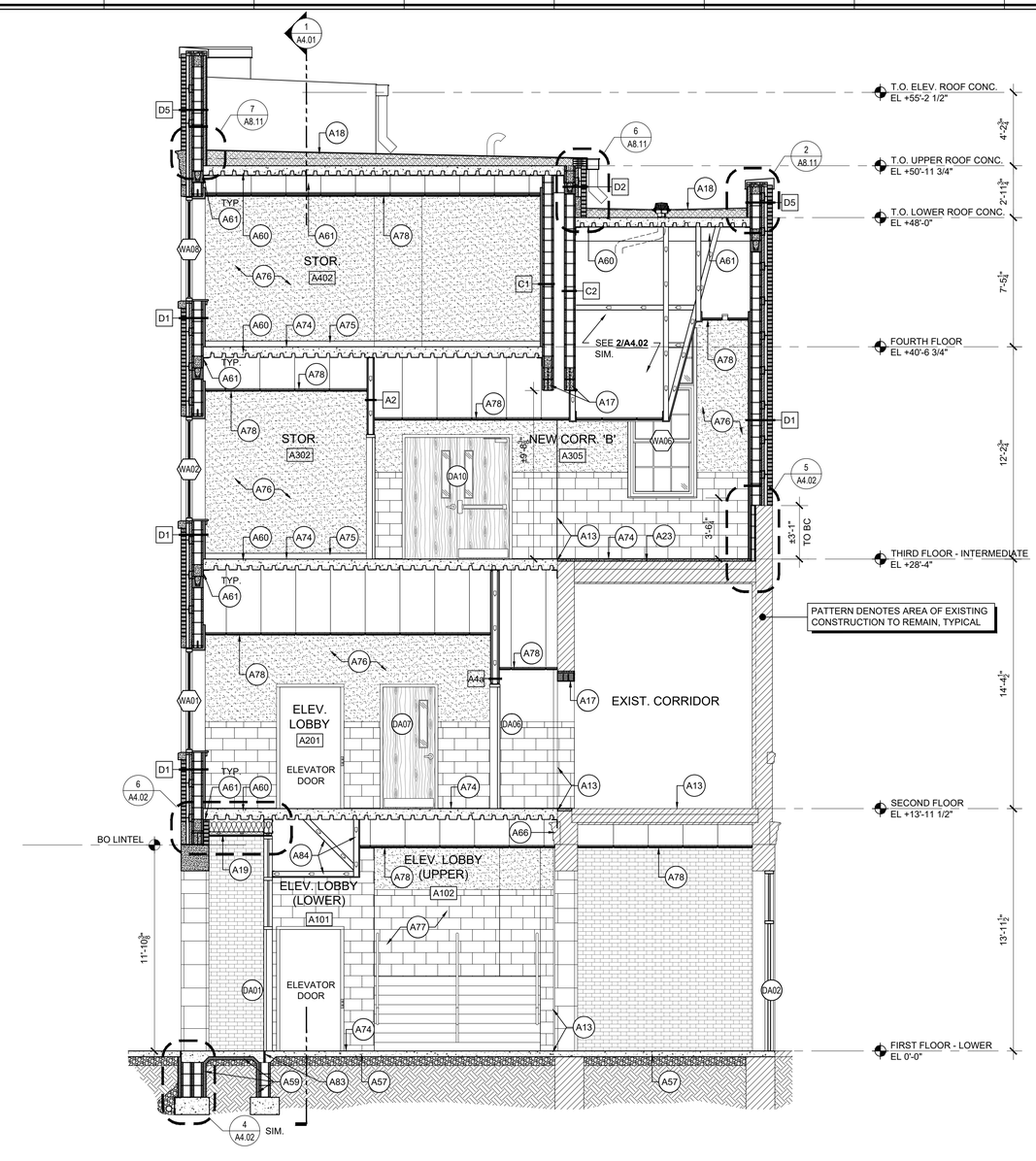
A3.10



1 A4.01 **Addition Building Section at Elevator**

1/4" = 1'-0"

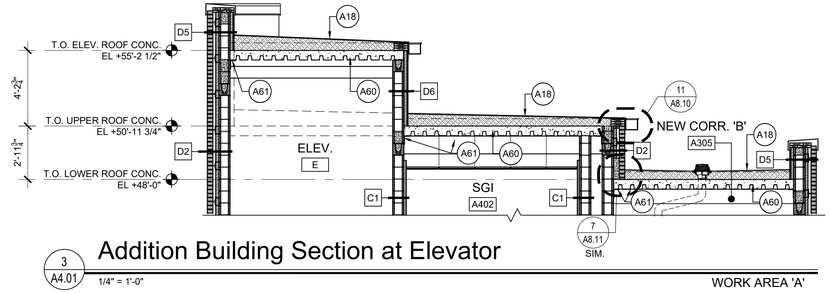
WORK AREA 'A'



2 A4.01 **Addition Building Section**

1/4" = 1'-0"

WORK AREA 'A'



3 A4.01 **Addition Building Section at Elevator**

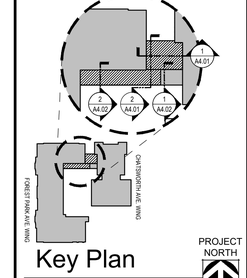
1/4" = 1'-0"

WORK AREA 'A'

REFER TO GENERAL NOTES ON SHEET **A2.00**

- # — SYMBOL DENOTES WALL TYPES, REFER TO PARTITION TYPE SHEET **A8.01**
- X# — SYMBOL INDICATES CONSTRUCTION KEY NOTE

REFER TO CONSTRUCTION KEY NOTES ON SHEET **A2.00**



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NYSED PROJECT # 66-07-01-03-0-005-020

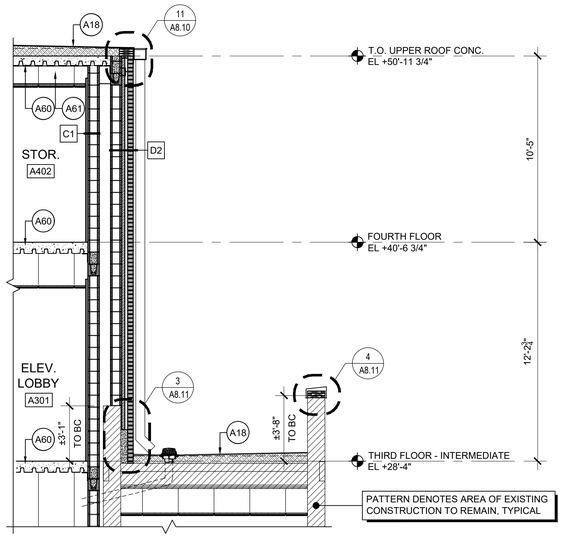
PROPOSED BUILDING SECTIONS

2019 BOND REFERENDUM SCHOOL
CHATSWORTH AVENUE ELEMENTARY
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

Job No. 4.1092.72.03

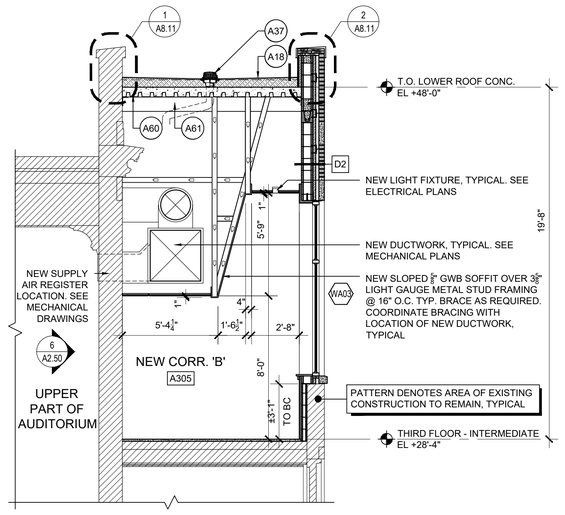
File No. 10927203A401

A4.01



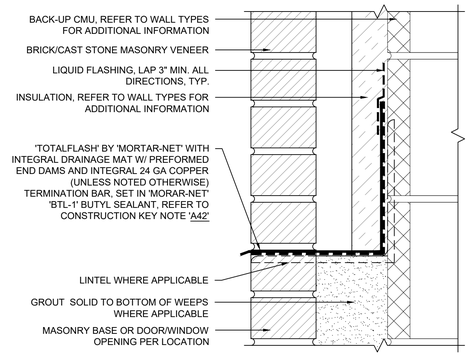
1 A4.02 — Section at New Roof

1/4" = 1'-0" — WORK AREA 'A'



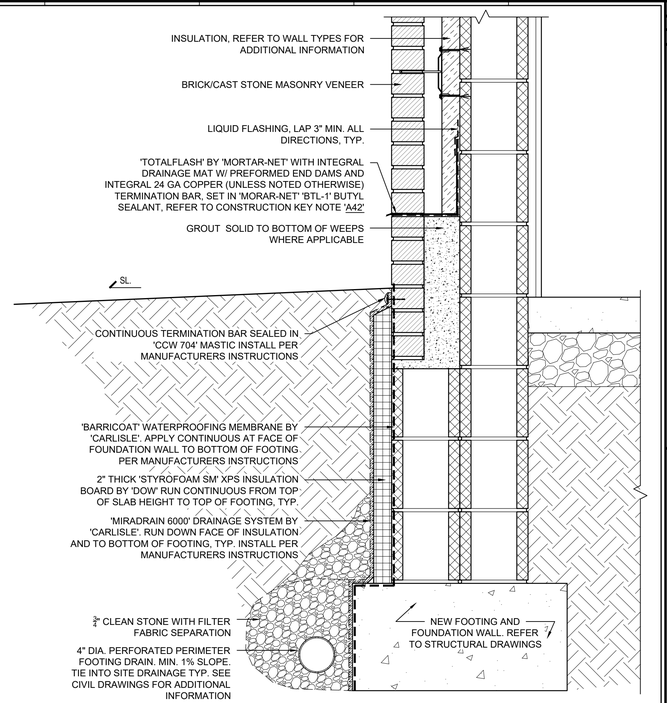
2 A4.02 — Section at New Corridor

1/4" = 1'-0" — WORK AREA 'A'



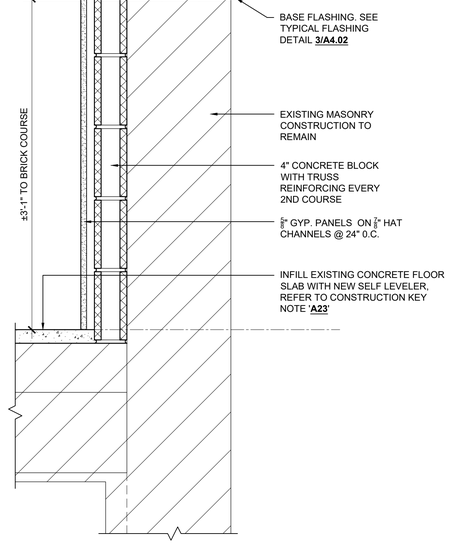
3 A4.02 — Typical Flashing Detail

3" = 1'-0"



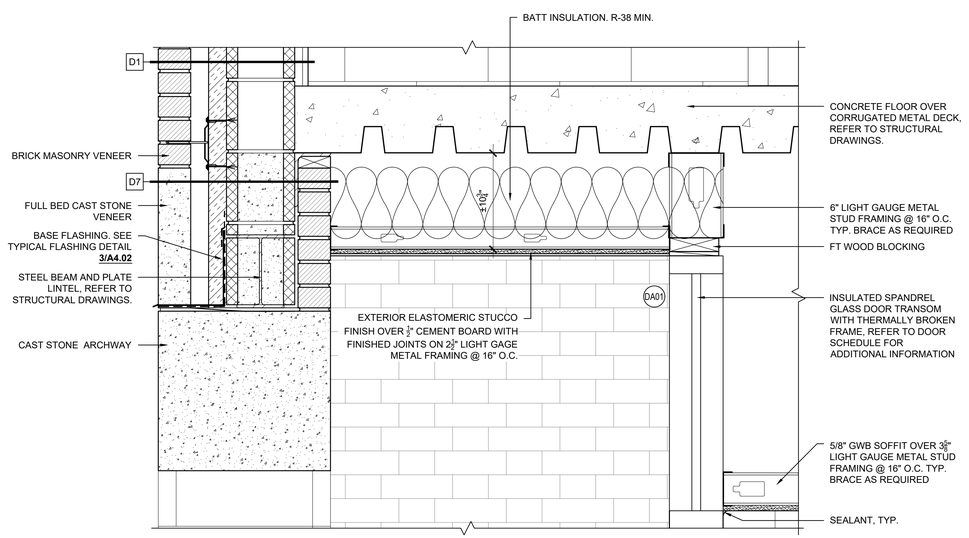
4 A4.02 — Typical Foundation Detail

1-1/2" = 1'-0" — WORK AREA 'A'



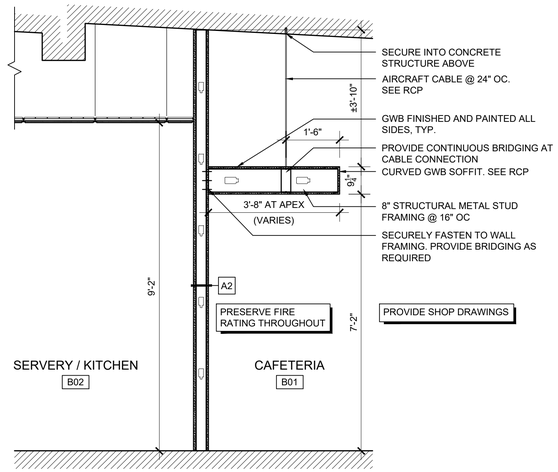
5 A4.02 — Typical Partial Wall Section

1-1/2" = 1'-0" — WORK AREA 'A'



6 A4.02 — Entry Ceiling Detail

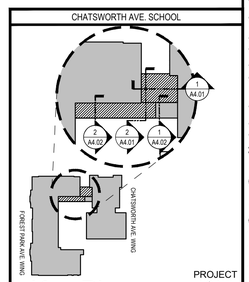
1-1/2" = 1'-0" — WORK AREA 'A'



7 A4.02 — Soffit Framing Detail

1/2" = 1'-0" — WORK AREA 'B'

REFER TO GENERAL NOTES ON SHEET A2.00
— SYMBOL DENOTES WALL TYPES, REFER TO PARTITION TYPE SHEET A8.01
X# — SYMBOL INDICATES CONSTRUCTION KEY NOTE
REFER TO CONSTRUCTION KEY NOTES ON SHEET A2.00



Key Plan

NOT TO SCALE

PROJECT NORTH

Date	1/10/20
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Drawn	CTB

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NYSED PROJECT # 66-07-01-03-0-005-020

PROPOSED BUILDING SECTIONS

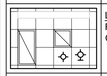
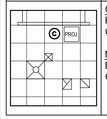
2019 BOND REFERENDUM
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MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

Job No. 4.1092.72.03

File No. 10927203A401

A4.02

Symbol Legend

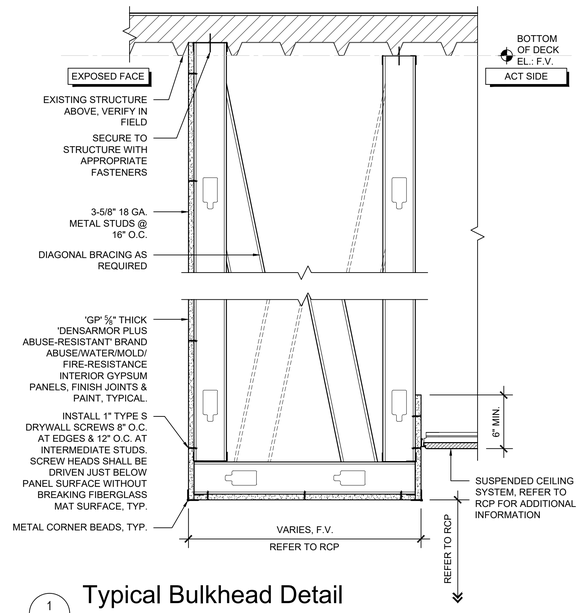
SYMBOL	DESCRIPTION
0'-0"	DATUM: FINISH CEILING HEIGHT ABOVE FINISH FLOOR
CT-#	CEILING TYPE (REFER TO CEILING TYPES SCHEDULE)
	LIGHTING FIXTURES - REFER TO ELECTRICAL PLANS FOR EXACT LIGHTING FIXTURE LOCATIONS. CONTRACTOR TO COORDINATE WITH MECHANICAL CONTRACTOR FOR CEILING DIFFUSER LOCATIONS.
	CEILING MOUNTED EQUIPMENT - REFER TO ELECTRICAL PLANS FOR EXACT FIXTURE LOCATIONS. CONTRACTOR TO COORDINATE WITH MECHANICAL CONTRACTOR FOR CEILING DIFFUSER LOCATIONS. MECHANICAL DIFFUSERS - REFER TO MECHANICAL PLANS FOR EXACT CEILING DIFFUSER LOCATIONS. CONTRACTOR TO COORDINATE WITH ELECTRICAL CONTRACTOR FOR LIGHT FIXTURE LOCATIONS.

Typical Ceiling Notes

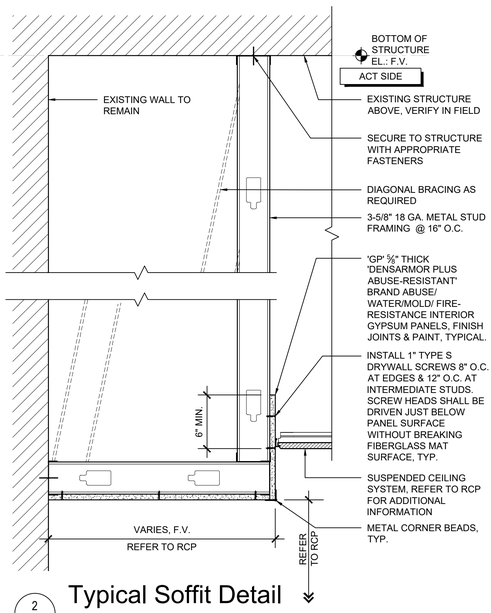
1. PENETRATIONS THROUGH CEILINGS ARE TO BE PROTECTED PER RATED DESCRIPTIONS. REFER TO FIRE RESISTANT RATED ASSEMBLIES WALL AND CEILING TYPES.
2. ALL ACCESS PANELS, HATCHES/LADDERS, GYPSUM BOARD SOFFITS, BULKHEAD, HVAC GRILLES AND REGISTERS, SHALL BE PAINTED TO MATCH CEILING FINISHES.
3. SUSPENDED ACOUSTIC TILE CEILINGS SHALL BE CENTERED IN SPACE IN BOTH DIRECTIONS TO MINIMIZE WASTE AS REQUIRED, UNLESS OTHERWISE INDICATED. FIELD VERIFY.
4. TENT ALL LIGHT FIXTURES IN RATED FLOOR/CEILING, ROOF/CEILING ASSEMBLIES AS REQUIRED. REFER TO FIRE RESISTANT RATED ASSEMBLIES DRAWING FOR ADDITIONAL INFORMATION.
5. ALL CONTRACTORS (I.E. MECHANICAL, ELECTRICAL, PLUMBING) ARE REQUIRED TO COORDINATE THEIR WORK WITH INDIVIDUAL CEILING FINISHES. ALL DISTURBED AREAS RESULTING FROM CONTRACTORS OPERATIONS SHALL BE PATCHED AND DAMAGED AREAS AS A RESULT OF CONTRACTORS OPERATIONS SHALL BE PATCHED AND REPAIRED TO MATCH.
6. FIELD VERIFY ALL DIMENSIONS AND CLEARANCES. COORDINATE INSTALLATION OF LIGHTING, EQUIPMENT, MECHANICAL DUCTWORK, ETC. TO ENSURE PROPER INSTALLATION.
7. ALL COLORS AND PATTERNS TO BE SELECTED BY OWNER/ ARCHITECT, TYPICAL.
8. CONTRACTOR SHALL FURNISH AND INSTALL ALL NECESSARY ACCESSORIES INCLUDING PERIMETER MOLDINGS, FASTENERS, SUPPORT WIRES, TRIM, ETC. FOR A COMPLETE INSTALLATION.
9. ALL LIGHTING FIXTURES SHOWN ON REFLECTED CEILING PLAN ARE SHOWN FOR DIAGRAMMATIC PURPOSES ONLY, REFER TO ELECTRICAL LIGHTING PLAN FOR ACTUAL LOCATIONS.
10. AT LOCATIONS WHERE NEW CEILING ADJOINS, ABUTS, OR EXTENDS AN EXISTING CEILING, NEW CEILING GRID SHALL MATCH THAT OF EXISTING.

Ceiling Types

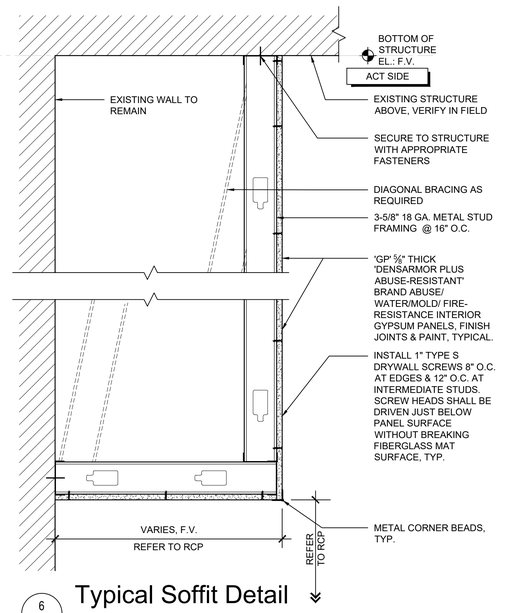
MARK	DESCRIPTION	SYMBOL
CT-1	'ARMSTRONG' 2'x2'x¾" "ULTIMA" BEVELED TEGULAR ACOUSTIC CEILING TILE W/ "SUPRAFINE" 9/16" EXPOSED TEE GRID	
CT-2	'ARMSTRONG' 2'x4'x1" "CALLA" TEGULAR ACOUSTIC CEILING TILE WITH "SUPRAFINE" 15/16" EXPOSED TEE GRID. OFFSET GRID PATTERN AS SHOWN ON PLAN, TYP. REFER TO RCPs FOR COLOR PATTERN, GRID AND TRIM COLOR TO BE SELECTED FROM MANUFACTURER'S FULL RANGE. **ALLOW FOR (2) CUSTOM TILE COLORS TO BE SELECTED BY ARCHITECT**	(COLOR 1) (COLOR 2)
CT-3	'GP' ⅝" THICK 'DENSARMOR PLUS ABUSE-RESISTANT' BRAND ABUSE/WATER/MOLD/FIRE-RESISTANCE INTERIOR PANELS. FINISH JOINTS AND PAINT, TYP. USE DRYWALL SUSPENSION GRID UNO	
CT-4	ELASTOMERIC STUCCO COATING OVER CEMENT BOARD WITH FINISHED JOINTS, REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION. COLOR TO BE SELECTED BY ARCHITECT /OWNER.	
CT-5	'ARMSTRONG' 2'x4'x1" "CALLA" TEGULAR ACOUSTIC CEILING TILE WITH "SUPRAFINE" 15/16" EXPOSED TEE GRID AND 4" PERIMTER AXIOM TRIM. OFFSET GRID PATTERN AS SHOWN ON PLAN, TYP. REFER TO RCPs FOR COLOR PATTERN, GRID AND TRIM COLOR TO BE SELECTED FROM MANUFACTURER'S FULL RANGE. **ALLOW FOR (4) CUSTOM TILE COLORS TO BE SELECTED BY ARCHITECT**	(COLOR 1 & 3) (COLOR 2 & 4)
CT-6	'ARMSTRONG' "CALLA" SQUARE LAY-IN ACOUSTIC CEILING TILE WITH "PRELUDE" 15/16" EXPOSED TEE GRID AND 4" PERIMETER AXIOM TRIM. GRID AND TRIM COLOR TO BE SELECTED FROM MANUFACTURER'S FULL RANGE. ALLOW FOR A MIXTURE OF 2'x2', 2'x4', 2'x6', AND 4'x4' TILES IN PATTERN SHOWN ON RCPs. PROVIDE SHOP DRAWINGS. **ALLOW FOR (4) CUSTOM TILE COLORS TO BE SELECTED BY ARCHITECT**	
CT-7	'ARMSTRONG' SOUNDSCAPES SHAPES "5443" 4' DIA. x 7/8" THK CIRCLE ACOUSTICAL CLOUD WITH SUSPENSION KIT. **ALLOW FOR (2) CUSTOM COLORS TO BE SELECTED BY ARCHITECT**	
CT-8	'ARMSTRONG' SOUNDSCAPES "6258" AND "6259" 46½"x 75"x 1½" THK ACOUSTICAL CANOPIES WITH SUSPENSION KIT. REFER TO RCPs FOR HILL AND VALLEY CANOPY LOCATIONS. **CUSTOM COLOR TO BE SELECTED BY ARCHITECT**	
CT-9	PAINT EXISTING PLASTER CEILING TO REMAIN, PATCH AND REPAIR AS REQUIRED.	
CT-10	PAINT EXISTING GYPSUM BOARD CEILING TO REMAIN, PATCH AND REPAIR AS REQUIRED.	
PT	PAINT EXISTING CEILING TO REMAIN	
OTA	OPEN TO ABOVE, PAINT ALL EXPOSED CEILING STRUCTURE, TYP.	
ETR	EXISTING CEILING TO REMAIN	
CT-11	'ARMSTRONG' 2'x4'x¾" "ULTIMA" BEVELED TEGULAR ACOUSTIC CEILING TILE W/ "SUPRAFINE" 9/16" EXPOSED TEE GRID	



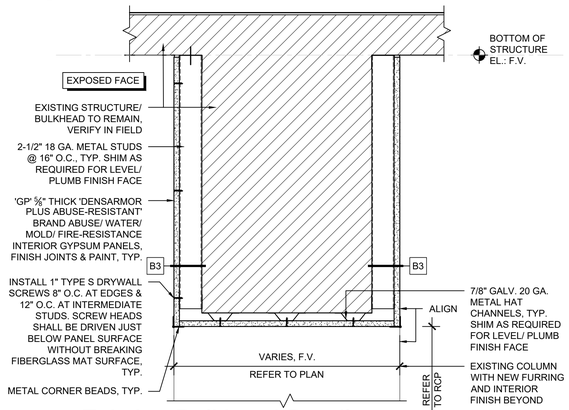
1 A5.00 — 1-1/2" = 1'-0" — **Typical Bulkhead Detail** — SUSPENSION CEILING SYSTEM



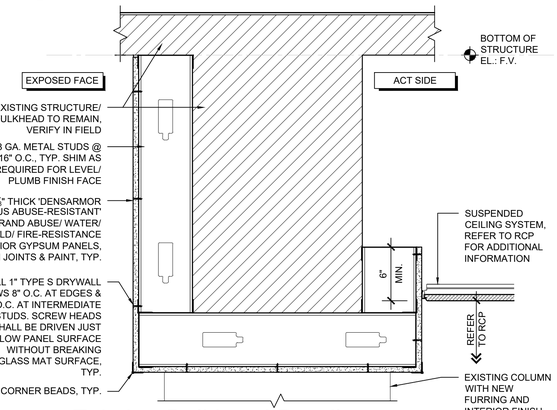
2 A5.00 — 1-1/2" = 1'-0" — **Typical Soffit Detail** — SUSPENSION CEILING SYSTEM



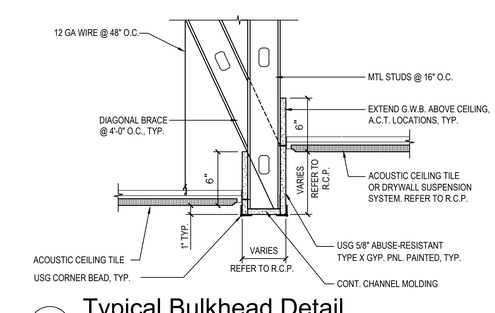
6 A5.00 — 1-1/2" = 1'-0" — **Typical Soffit Detail**



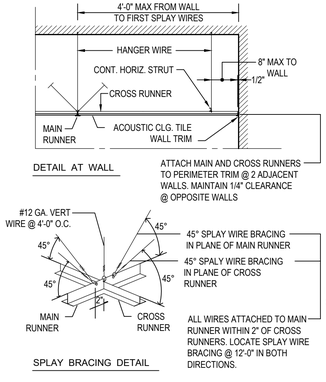
3 A5.00 — 1-1/2" = 1'-0" — **Existing Bulkhead Detail**



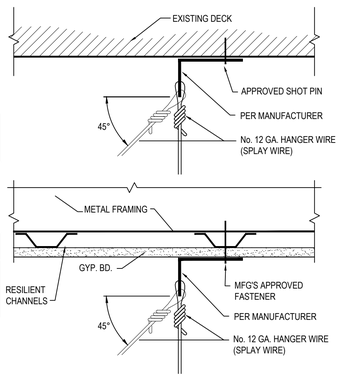
5 A5.00 — 1-1/2" = 1'-0" — **Existing Bulkhead Detail**



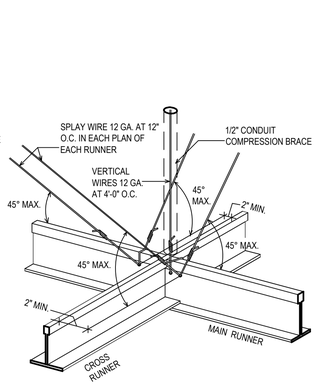
4 A5.00 — 1-1/2" = 1'-0" — **Typical Bulkhead Detail** — SUSPENSION CEILING SYSTEM



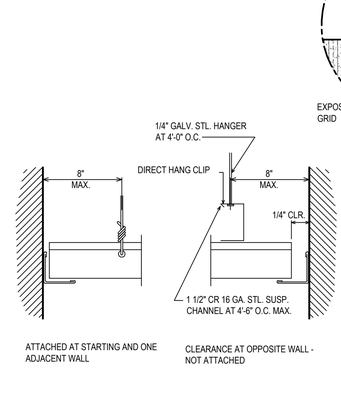
A A5.00 — 3/8" = 1'-0" — **Typ. Seismic Bracing** — SUSPENSION CEILING SYSTEM



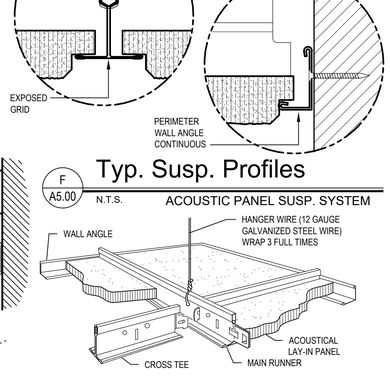
B A5.00 — 1-1/2" = 1'-0" — **Typ. Hanger Wire Detail** — SUSPENSION CEILING SYSTEM



C A5.00 — 1-1/2" = 1'-0" — **Typ. Susp. Ceiling Detail** — SUSPENSION CEILING SYSTEM



D A5.00 — 1-1/2" = 1'-0" — **Typ. Clng. Edge Detail** — SUSPENSION CEILING SYSTEM



F A5.00 — N.T.S. — **Typ. Susp. Profiles** — ACOUSTIC PANEL SUSP. SYSTEM

E A5.00 — N.T.S. — **Typ. Susp. Ceiling** — ACOUSTIC PANEL SUSP. SYSTEM

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CEILING LEGEND, NOTES AND DETAILS

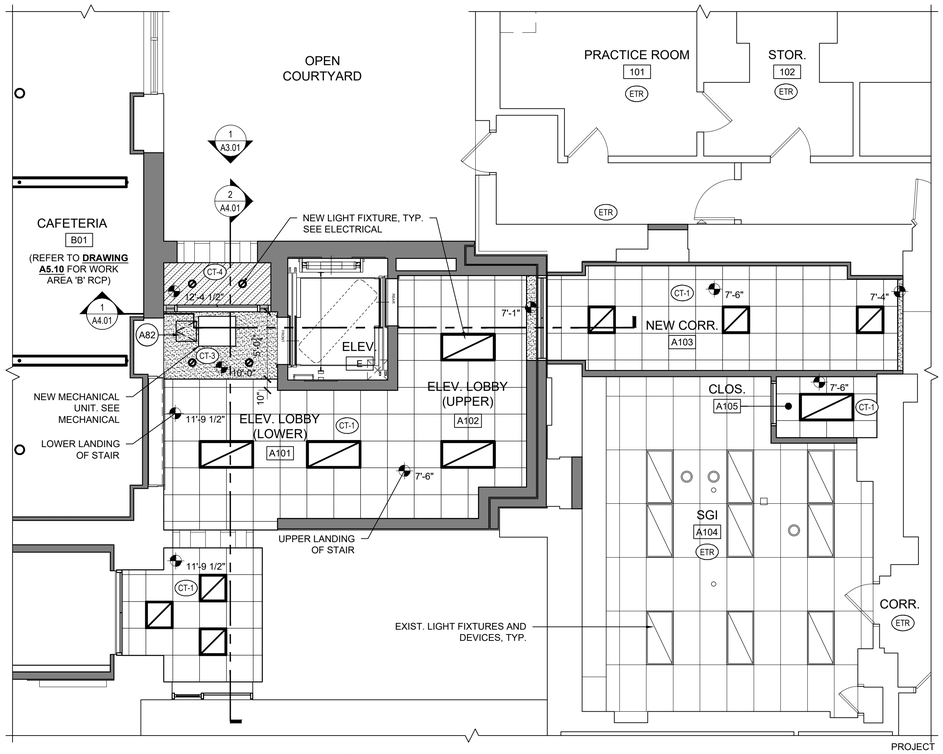
2019 BOND REFERENDUM
CHATSWORTH AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

NYSED PROJECT # 66-07-01-03-0-005-020

Job No. 4.1092.72.03

File No. 10927203A500

A5.00

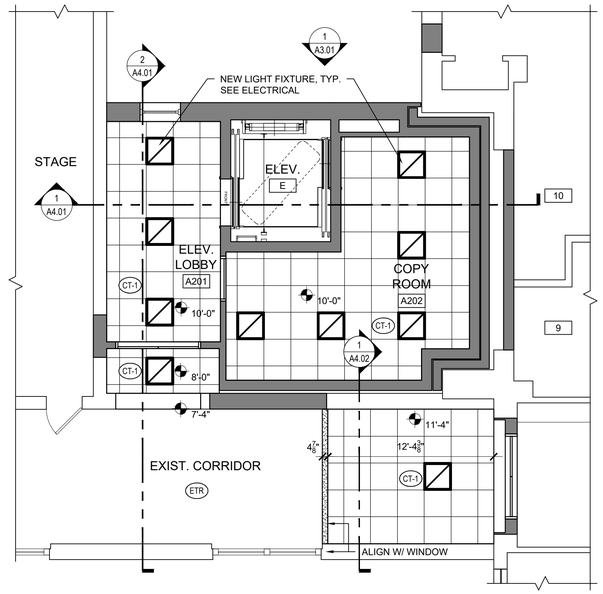


1 A5.03 Proposed First Floor RCP

3/16" = 1'-0"

PROJECT NORTH

WORK AREA 'A'

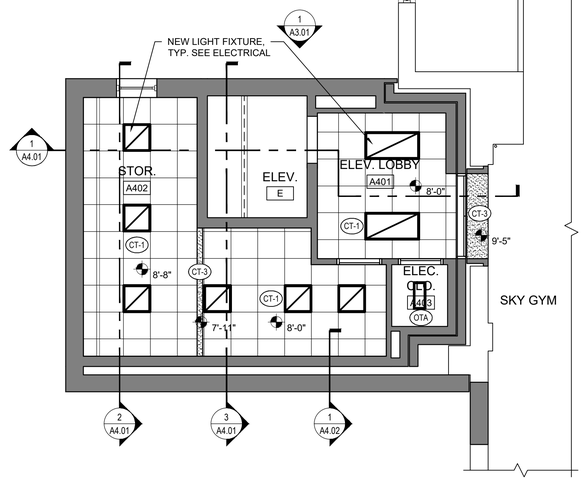


2 A5.03 Proposed Second Floor RCP

3/16" = 1'-0"

PROJECT NORTH

WORK AREA 'A'

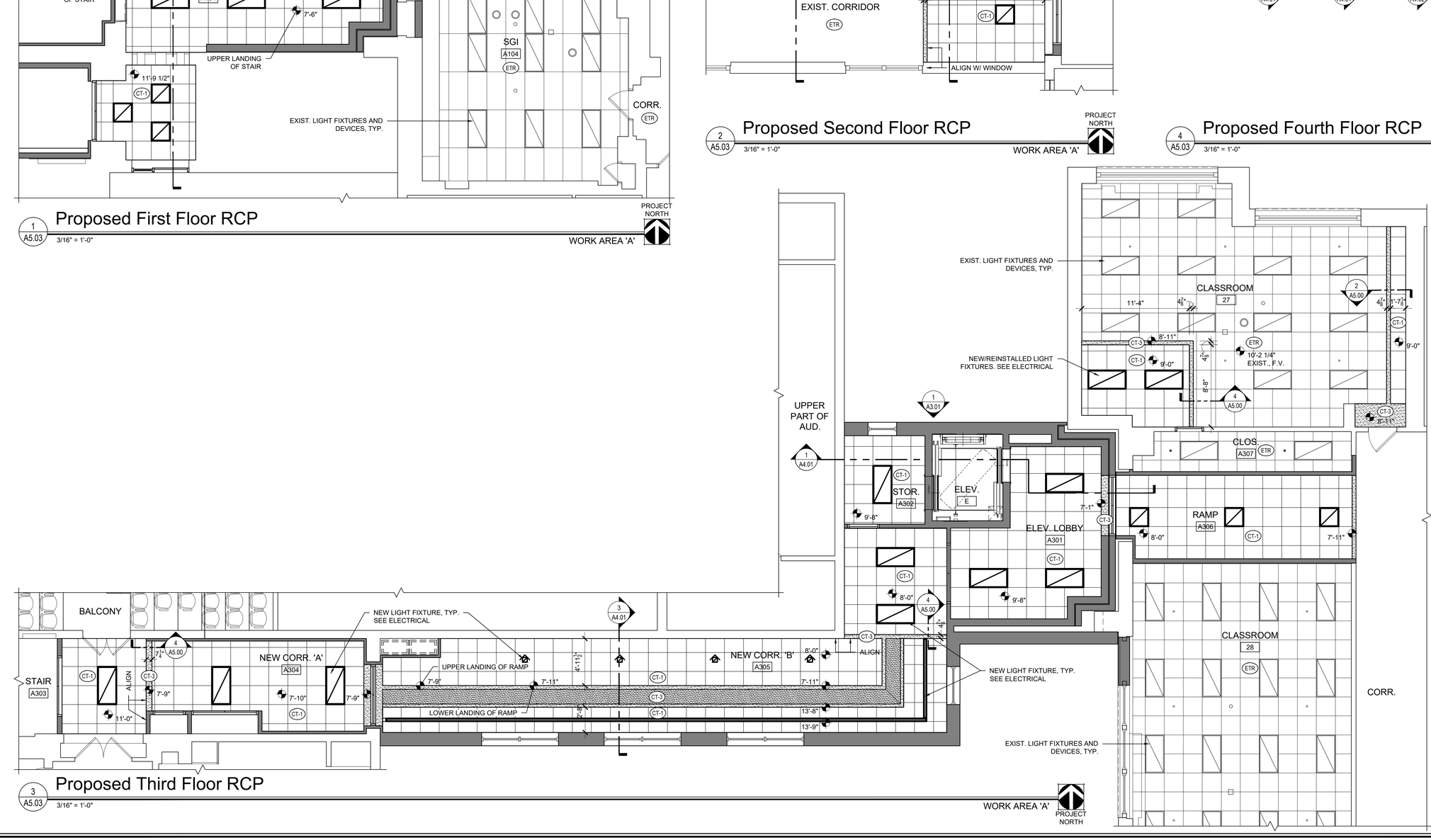


4 A5.03 Proposed Fourth Floor RCP

3/16" = 1'-0"

PROJECT NORTH

WORK AREA 'A'



3 A5.03 Proposed Third Floor RCP

3/16" = 1'-0"

WORK AREA 'A'

PROJECT NORTH

NOTE:
REFER TO **DRAWING A5.00** FOR CEILING LEGENDS, NOTES AND ADDITIONAL INFORMATION.

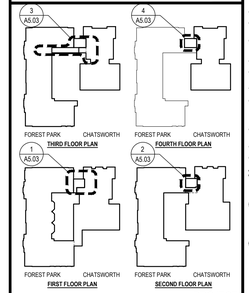
REFER TO GENERAL NOTES ON SHEET **A2.00**

SYMBOL DENOTES WALL TYPES, REFER TO PARTITION TYPE SHEET **A8.01**

X# SYMBOL INDICATES CONSTRUCTION KEY NOTE

REFER TO CONSTRUCTION KEY NOTES ON SHEET **A2.00**

CHATSWORTH AVE. SCHOOL



Key Plan

NOT TO SCALE

PROJECT NORTH

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PARTIAL ELEVATOR RCP

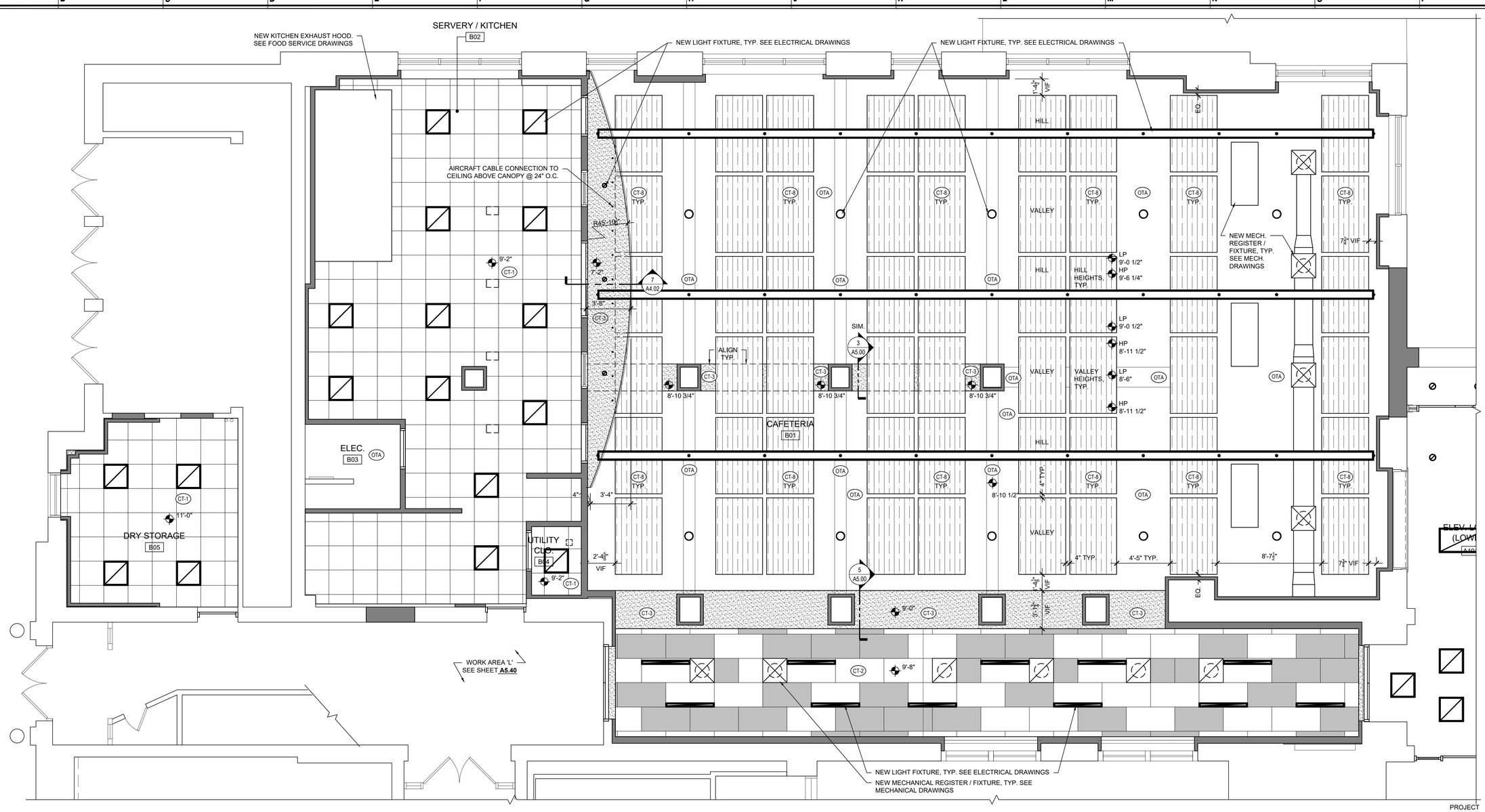
2019 BOND REFERENDUM
CHATSWORTH AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

NYSED PROJECT # 66-07-01-03-0-005-020

Job No. 4.1092.72.03

File No. 10927203A503

A5.03



1 / A5.10 Partial First Floor Reflected Ceiling Plan

1/4" = 1'-0"

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PARTIAL FIRST FLOOR RCP

2019 BOND REFERENDUM
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MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

NYSED PROJECT # 66-07-01-03-0-005-020

Job No. 4.1092.72.03

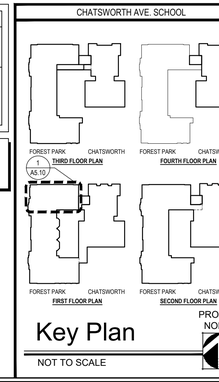
File No. 10927203A510

A5.10

REFER TO GENERAL NOTES ON SHEET **A2.00**
SYMBOL DENOTES WALL TYPES, REFER TO PARTITION TYPE SHEET **A8.01**
X# SYMBOL INDICATES CONSTRUCTION KEY NOTE
REFER TO CONSTRUCTION KEY NOTES ON SHEET **A2.00**

NOTE:
REFER TO **DRAWING A5.00** FOR CEILING LEGENDS, NOTES AND ADDITIONAL INFORMATION.

CHATSWORTH AVE. SCHOOL



Key Plan

NOT TO SCALE

PROJECT NORTH

REFER TO UPPER FIRST FLOOR RCP **DRAWING 2/A5.20** FOR SUSPENDED PANEL LAYOUT, TYP. REFERENCE ACT GRID LAYOUT ABOVE AND SUSPENSION ANCHOR POINTS TO COORDINATE PANEL LOCATIONS.

REFER TO UPPER FIRST FLOOR RCP **DRAWING 2/A5.20** FOR CEILING INFORMATION ABOVE SUSPENDED PANELS

ART STOR. C11 · VEST. C01 · STORAGE C07 · LIB. STOR. C06 · CLOS. C08 · ART C10 · MEDIA CENTER C02 · LIBRARY C05 · BREAK OUT ROOM C09 · FLEX AREA C03 · READING C04

NEW LIGHT FIXTURE, TYP. SEE ELEC. DRAWINGS

1 Partial First Floor Reflected Ceiling Plan

A5.20 · 1/4" = 1'-0"

PROJECT NORTH

WORK AREA 'C'

PANEL SUSPENSION ANCHOR POINT, TYPICAL. COORDINATE WITH NEW ACT GRID LAYOUT AND ACTUAL FIELD CONDITIONS

NEW LIGHT FIXTURE, TYP. SEE ELEC. DRAWINGS

2 Partial First Floor RCP - Upper

A5.20 · 1/8" = 1'-0"

PROJECT NORTH

WORK AREA 'C'

REFER TO GENERAL NOTES ON SHEET **A2.00**
SYMBOL DENOTES WALL TYPES, REFER TO PARTITION TYPE SHEET **A8.01**
X# SYMBOL INDICATES CONSTRUCTION KEY NOTE
REFER TO CONSTRUCTION KEY NOTES ON SHEET **A2.00**

NOTE:
REFER TO **DRAWING A5.00** FOR CEILING LEGENDS, NOTES AND ADDITIONAL INFORMATION.

CHATSWORTH AVE. SCHOOL

FOREST PARK CHATSWORTH — **THIRD FLOOR PLAN**
FOREST PARK CHATSWORTH — **FOURTH FLOOR PLAN**
FOREST PARK CHATSWORTH — **FIRST FLOOR PLAN**
FOREST PARK CHATSWORTH — **SECOND FLOOR PLAN**

Key Plan

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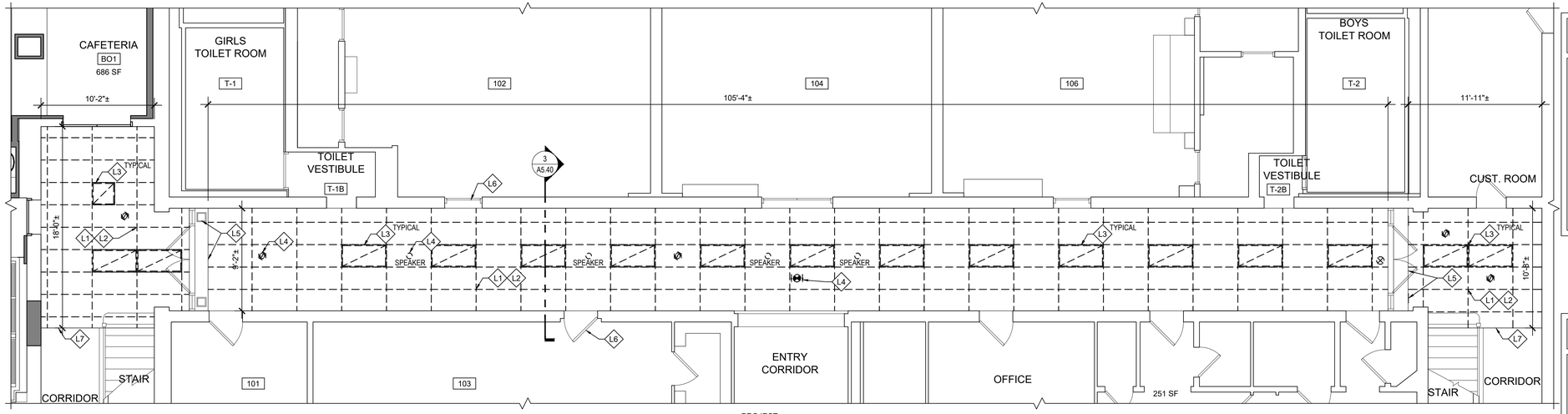
PARTIAL FIRST FLOOR RCP

2019 BOND REFERENDUM
CHATSWORTH AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

Job No. 4.1092.72.03

File No. 109272O3A520

A5.20



1 A5.40 — Partial Demolition First Floor RCP

3/16" = 1'-0"

PROJECT NORTH

Forest Park Addition / Work Area 'L'

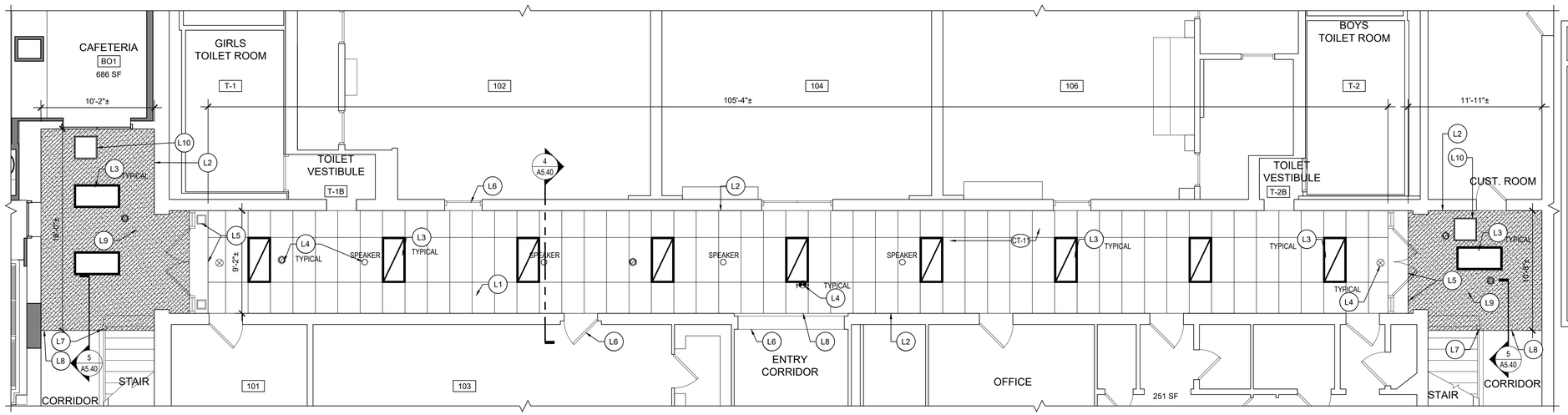
Demolition Key Notes Work Area - L

SYMBOL INDICATES CONSTRUCTION KEY NOTE

1. REMOVE EXISTING SUSPENDED 2x4 CEILING SYSTEM AND ALL ASSOCIATED ACCESSORIES, TYPICAL
2. REMOVED PLASTER AND LATH CEILING SYSTEM AND ADJACENT ADHERED CEILING TILE SYSTEM AND ALL ACCESSORIES, TYPICAL
3. REMOVE EXISTING LIGHT FIXTURES - NOTE CONCEALED POWER AND CONDUIT ARE TO BE VERIFIED IN FIELD AND TEMPORALLY SUPPORTED, TYPICAL
4. FIRE, EMERGENCY AND MISCELLANEOUS CEILING DEVICES ARE TO BE SAFED OFF AND COORDINATED FOR REINSTALLATION INTO THE PROPOSED CEILING SYSTEM, TYPICAL
5. COORDINATE WORK WITH EXISTING TO REMAIN GYPSUM SOFFITS AND ACCESS PANELS, TYPICAL
6. EXISTING DOOR, FRAMED OPENING AND OR WALL TO REMAIN, COORDINATE IN FIELD ALL EXISTING CONDITIONS PRIOR TO STARTING WORK
7. REMOVE EXISTING CEILING FASICA AT STAIR COORDINATE REMOVAL WITH EXISTING ADJACENT STAIR, RAILNG AND WALLS TO REMAIN

General Notes

1. EXISTING CONCEALED ELECTRICAL ROUTING SHALL BE CONFIRMED, LABELED AND COORDINATED PRIOR TO REMOVAL OF ANY DEVICES OR LIGHTING. CONTRACTOR SHALL RUN NEW WIRE AND CONDUIT WHERE NEED TO REINSTALL DEVICES AND LIGHTS FORM NEAREST JUNCTION BOX OR TERMINATION, TYPICAL
2. EXISTING CONCEALED PIPING AND BUILDING INFRASTRUCTURE SHALL BE REVIEWED IN THE FIELD AFTER CEILING REMOVAL IS COMPLETED BY AOR OR EOR PRIOR TO INSTALLATION OF PROPOSED WORK, TYPICAL



2 A5.40 — Partial Proposed First Floor RCP

3/16" = 1'-0"

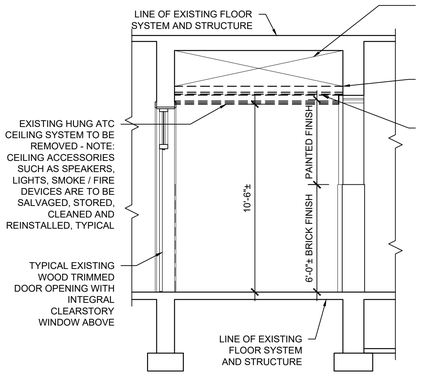
PROJECT NORTH

Forest Park Addition / Work Area 'L'

Construction Key Notes Work Area - L

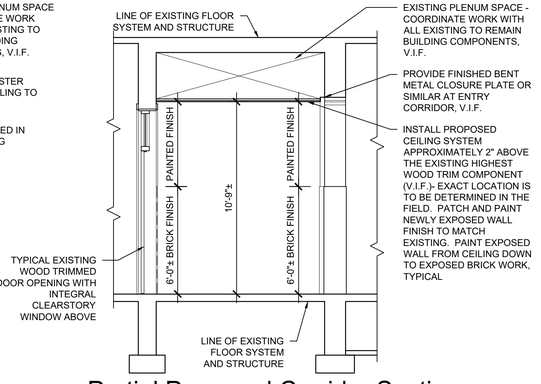
SYMBOL INDICATES CONSTRUCTION KEY NOTE

1. INSTALL SUSPENDED 2x4 CEILING SYSTEM AND ALL ASSOCIATED ACCESSORIES, TYPICAL
2. PATCH WALL IN AREA OF CEILING REMOVAL. PRIME AND PAINT WALL FROM MASONRY WAINSCOT TO CEILING, TYPICAL
3. INSTALL SCHEDULED LIGHT FIXTURES - NOTE CONCEALED POWER AND CONDUIT ARE TO BE VERIFIED IN IF REQUIRED EXTEND WIRE AND CONDUIT FROM NEAREST JUNCTION BOX, V.I.F.
4. REINSTALL TEMPORARILY SUPPORTED FIRE, EMERGENCY AND MISCELLANEOUS CEILING DEVICES COORDINATED WITH THE PROPOSED CEILING SYSTEM, TYPICAL
5. COORDINATE WORK WITH EXISTING TO REMAIN GYPSUM SOFFITS AND ACCESS PANELS, TYPICAL
6. EXISTING DOOR, FRAMED OPENING AND OR WALL TO REMAIN, COORDINATE IN FIELD ALL CONDITIONS PRIOR TO STARTING WORK
7. INSTALL 2 HOUR FIRE RATED FASCIA AT STAIR - VERIFY AND COORDINATE INSTALLATION WITH ALL SUBSTRATE CONDITIONS IN THE FIELD TO CREATE A COMPLETE AND FINISHED INSTALLATION; PROVIDE TRIM AND CLOSURE PIECES AS NECESSARY TO COORDINATE WITH ADJACENT WALLS, STAIR FRAMING AND RAILING SYSTEM PAINT FASCIA CLOSURE, TYPICAL
8. PROVIDE FINISHED BENT METAL CLOSURE PLATE OR SIMILAR AT ENTRY CORRIDOR, V.I.F.
9. INSTALL PAINTED 2 HOUR FIRE RATED CEILING SYSTEM AND ALL ASSOCIATED ACCESSORIES, TYPICAL
10. PROVIDE, INSTALL 24"X24" 2 HOUR FIRE RATED CEILING ACCESS DOOR. SEE SPECIFICATION **083113**.



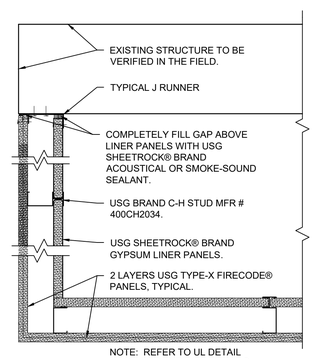
3 A5.40 — Partial Demo Corridor Section

1/4" = 1'-0"



4 A5.40 — Partial Proposed Corridor Section

1/4" = 1'-0"



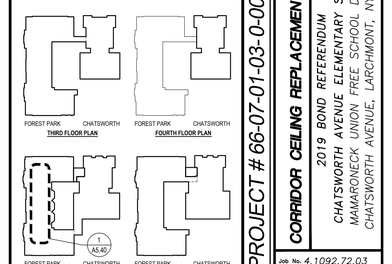
NOTE: REFER TO UL DETAIL #U415 FOR FURTHER DETAILS.

5 A5.40 — Partial Ceiling / Fascia Section

1 1/2" = 1'-0"

2 HOUR RATED

CHATSWORTH AVE. SCHOOL



Key Plan

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PROJECT NORTH

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CORRIDOR CEILING REPLACEMENT PLANS
2019 BOND REFERENDUM
CHATSWORTH AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

NYSED PROJECT # 66-07-01-03-0-005-020

Job No. 4.1092.72.03

File No. 109272O3A540

A5.40

Door & Door Hardware Notes

1. DOOR ELEVATIONS & DOOR HARDWARE ARE PROVIDED TO DEMONSTRATE THE "TYPICAL" CONDITION. REFER TO DOOR SCHEDULE AND DOOR HARDWARE SPECIFICATION FOR ACTUAL DOOR HARDWARE REQUIREMENTS. REFER TO FINISH HARDWARE SPECIFICATION AND SCHEDULE FOR HARDWARE SET INFORMATION.
2. CONTRACTOR TO FIELD VERIFY ALL MASONRY OPENING SIZES, DOOR SIZES, HINGE LOCATIONS, DOOR SWING ETC. AND PROVIDE SHOP DRAWINGS FOR REVIEW AND APPROVAL PRIOR TO ORDERING DOORS.
3. WHENEVER BRAND NAMES OR SPECIFIC PRODUCT SYSTEMS ARE INDICATED IT SHALL BE CLEARLY UNDERSTOOD THAT SUCH IDENTIFICATION IS FOR THE PURPOSE OF ILLUSTRATING THE TYPE OF PRODUCT AND DEGREE OF QUALITY DESIRED. SUCH IDENTIFICATION IN NO WAY PRECLUDES THE CONTRACTOR FROM USING PRODUCTS OF OTHER MANUFACTURERS WHICH CAN BE SHOWN PRIOR TO THE BID TO BE OF LIKE KIND AND OF EQUAL QUALITY.
4. ALL DOOR FINISHES ARE SPECIFIED ON THE DOOR SCHEDULE AND NOTED IN THE SPECIFICATIONS. COLOR SHALL BE SELECTED BY OWNER FROM MANUFACTURER'S FULL RANGE.
5. CONTRACTOR TO PATCH AND REPAIR ALL DISTURBED INTERIOR AND EXTERIOR FINISHES AS REQUIRED.
6. WHERE SECURITY FILM IS USED, SECURITY FILM SHALL BE INSTALLED BY MANUFACTURER TO ENSURE FILM EXTENDS BEYOND GLAZING STOPS.
7. CONTRACTOR SHALL VERIFY AND COORDINATE ALL HARDWARE WITH OWNER PRIOR TO ORDERING OR INSTALLING. COORDINATE WITH ACTUAL FIELD CONDITIONS FOR A COMPLETE INSTALLATION.
8. CONTRACTOR SHALL COORDINATE WITH OWNER TO KEY ALL CYLINDERS TO MATCH EXISTING MASTER KEYING SYSTEM FOR COMPANY STANDARDS.
9. CONTRACTOR SHALL PROVIDE & INSTALL WEATHER STRIPPING FOR ALL EXTERIOR DOORS.
10. CONTRACTOR SHALL PROVIDE FIRE RATED GLAZING IN FIRE RATED DOOR AND FRAME ASSEMBLIES AS REQUIRED TO ACHIEVE THE MINIMUM FIRE RATING. REFER TO DOOR ELEVATIONS.
11. ALL INTERIOR FIRE RATED GLAZING IN DOORS, SIDELITES AND WINDOWS SHALL BE FIRELITE PLUS 1/4" THICK CLEAR GLASS OR PILKINGTON PYROSTOP CLEAR GLASS AS INDICATED ON DOOR SCHEDULE / DOOR ELEVATIONS. CONTRACTOR SHALL PROVIDE FIRE RATED DOOR ASSEMBLY INCLUDING FRAMES AND GLAZING TO COMPLY WITH BUILDING CODE. SEE DOOR SCHEDULE FOR ASSEMBLY FIRE RATINGS.
12. ALL DOOR HARDWARE, CARD ACCESS READER AND SECURITY HARDWARE SHALL BE COORDINATED WITH OWNER REQUIREMENTS. PROVIDE POWER AS REQUIRED.
13. CONTRACTOR SHALL COORDINATE WITH OWNERS REQUIREMENTS FOR OVERHEAD DOOR OPTIONS AND CONTROLS
14. GC TO PROVIDE AND INSTALL ALL REQUIRED BLOCKING, SHIMS, AND SEALANT FOR A COMPLETE INSTALLATION. WOOD TO BE PRESSURE TREATED WHERE APPLICABLE.

Energy Code Requirements

IECC 2015 - Table C402.4

Climate ZONE - 4

Vertical Fenestration:
U-Factor
Fixed Fenestration: 0.38
Operable Fenestration: 0.45
Entrance Doors: 0.77

SHGC
N-0.53, SEW-0.40

NOTE: ALL EXTERIOR DOORS AND WINDOWS SHALL MEET OR EXCEED THE ENERGY CODE MINIMUM REQUIREMENTS.

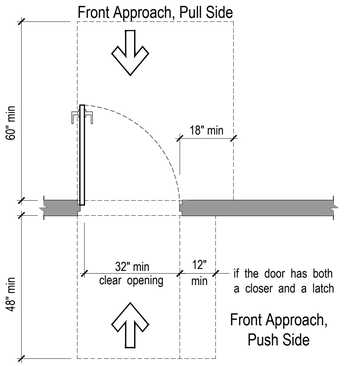
Table 716.3 - Marking Fire Rated Glazing Assemblies

FIRE TEST STANDARD	MARKING	DEFINITION OF MARKING
ASTM E119 OR UL 263	W	MEETS WALL ASSEMBLY CRITERIA
NFPA 257 OR UL 9	OH	MEETS FIRE WINDOW ASSEMBLY CRITERIA INCLUDING THE HOSE STREAM TEST.
NFPA 252 OR UL 10B OR UL 10C	D	MEETS FIRE DOOR ASSEMBLY CRITERIA.
	H	MEETS FIRE DOOR ASSEMBLY HOSE STREAM TEST.
	T	MEETS 450°F TEMPERATURE RISE CRITERIA FOR 30 MINUTES.
	XXX	THE TIME IN MINUTES OF FIRE-RESISTANCE OR FIRE PROTECTION RATING OF THE GLAZING ASSEMBLY.

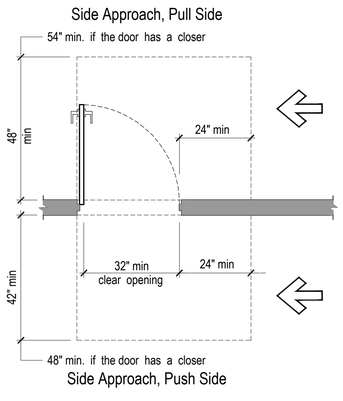
SEE SPECIFICATIONS **SECTION 088100 - GLASS AND GLAZING** AND **SECTION 088117 - FIRE-RATED GLASS**, FOR GLAZING TYPES MEETING THE ABOVE LISTED TEST CRITERIA

DOOR SCHEDULE

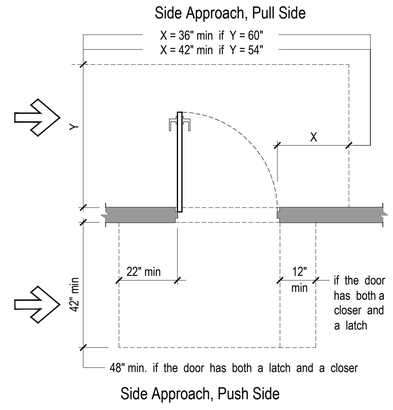
DOOR NO.	DOOR TYPE	ROOM NAME/ NUMBER	DOOR							FRAME			SILL	HARDWARE (SEE SPECIFICATIONS)			NOTES
			ACTION	MATERIAL	FIRE RATING	DOOR FINISH	DOOR SIZE WIDTH	DOOR SIZE HEIGHT	VISION PANEL	DETAIL NO. MAT.	DETAIL NO. HEAD	DETAIL NO. JAMB	DETAIL NO.	HARDWARE SET	CLOSER	PANIC	
FIRST FLOOR																	
DA01	A	ELEV. LOBBY LOWER A101	SINGLE SWING	FRP/ ALUM.	-	AMP	6'-0"	7'-0"	■	MTL	6&7 /A6.03	8&9 /A6.03	10 /A6.03	01	■	■	
DA02	B	ELEV. LOBBY LOWER A101	SINGLE SWING	FRP/ ALUM.	-	AMP	3'-6"	7'-0"	■	MTL	7&11 /A6.03	9&12 /A6.03	10 /A6.03	02	■	■	
DA03	C	ELEV. LOBBY LOWER A101	SINGLE SWING	WOOD	20 MIN.	STAIN/POLY	6'-0"	7'-0"	■	MTL	13 /A6.03	14 /A6.03	4 /A6.03	03	■	■	NEW DOOR AND NEW FRAME IN EXISTING OPENING. VERIFY SIZE IN FIELD. MODIFY EXISTING OPENING AS REQUIRED TO ACCOMMODATE NEW DOOR AND FRAME. AUTOMATIC HOLD OPEN TIE INTO FIRE ALARM. **FIRE RATED VISION PANEL: D-20. FIRE RATED TRANSOM: D-H-OH-45**
DA04	R	ELEV. LOBBY UPPER A102	OPPOSING SWING	METAL	180 MIN.	STAIN/POLY	6'-0"	7'-0"	■	MTL	16 /A6.03	17 /A6.03	18 /A6.03	04	■	■	AUTOMATIC HOLD OPEN TIE INTO FIRE ALARM. **FIRE RATED VISION PANEL: D-H-W-180**
DA05	E	CLOSET A105	SINGLE SWING	WOOD	-	STAIN/POLY	3'-0"	7'-0"	-	MTL	1 /A6.03	2 /A6.03	3 /A6.03	05	-	-	
DB01	C	CAFETERIA B01	SINGLE SWING	WOOD	90 MIN.	STAIN/POLY	6'-0"	7'-0"	■	MTL	1&6 /A6.04	2&7 /A6.04	25 /A6.03	03	■	■	NEW DOOR AND NEW FRAME IN EXISTING OPENING. VERIFY SIZE IN FIELD. MODIFY EXISTING OPENING AS REQUIRED TO ACCOMMODATE NEW DOOR AND FRAME. AUTOMATIC HOLD OPEN TIE INTO FIRE ALARM. **FIRE RATED VISION PANEL: D-H-W-90. FIRE RATED TRANSOM: W-120**
DB02	G	SERVERY / KITCHEN B02	SINGLE SWING	WOOD	90 MIN.	STAIN/POLY	3'-0"	7'-0"	■	MTL	20 /A6.03	21 /A6.03	26 /A6.03	12	■	-	FULL 180 DEGREE OPENING DOOR WITH HOLD-OPEN TIE INTO FIRE ALARM. **FIRE RATED VISION PANEL: D-H-W-90**
DB03	F	SERVERY / KITCHEN B02	SINGLE SWING	WOOD	90 MIN.	STAIN/POLY	6'-0"	7'-0"	■	MTL	20 /A6.03	21 /A6.03	26 /A6.03	13	■	-	FULL 180 DEGREE OPENING DOOR WITH HOLD-OPEN TIE INTO FIRE ALARM. **FIRE RATED VISION PANEL: D-H-W-90**
DB04	G	SERVERY / KITCHEN B02	SINGLE SWING	WOOD	90 MIN.	STAIN/POLY	3'-0"	7'-0"	■	MTL	20 /A6.03	21 /A6.03	26 /A6.03	12	■	-	FULL 180 DEGREE OPENING DOOR WITH HOLD-OPEN TIE INTO FIRE ALARM. **FIRE RATED VISION PANEL: D-H-W-90**
DB05	E	ELECTRICAL B03	SINGLE SWING	WOOD	-	STAIN/POLY	3'-0"	7'-0"	-	MTL	1/A6.03	2/A6.03	22 /A6.03	14	■	-	
DB06	Q	SERVERY / KITCHEN B02	SINGLE SWING	WOOD	90 MIN.	STAIN/POLY	3'-0"	7'-0"	■	MTL	3 & 8 /A6.04	4 & 9 /A6.04	27 /A6.03	15	■	-	NEW DOOR AND NEW FRAME IN EXISTING OPENING. VERIFY SIZE IN FIELD. MODIFY EXISTING OPENING AS REQUIRED TO ACCOMMODATE NEW DOOR AND FRAME. **FIRE RATED VISION PANEL: D-H-W-90**
DB07	G	DRY STORAGE B05	SINGLE SWING	WOOD	90 MIN.	STAIN/POLY	3'-0"	7'-0"	■	MTL	11 & 13 /A6.04	12 & 14 /A6.04	25 /A6.03	06	■	-	
DB08	E	UTILITY CLOSET B04	SINGLE SWING	WOOD	-	STAIN/POLY	3'-0"	7'-0"	-	MTL	1/A6.03	2/A6.03	22 /A6.03	16	■	-	
DC01	J	VESTIBULE C01	SINGLE SWING	WOOD	90 MIN.	STAIN/POLY	5'-4"	6'-8"	■	MTL	19 /A6.03	20 /A6.03	4/A6.03	17	■	■	UNEQUAL LEAF DOOR, SEE DOOR TYPE. AUTOMATIC HOLD OPEN TIE INTO FIRE ALARM. **FIRE RATED VISION PANEL: D-H-W-90**
DC02	K	MEDIA CENTER C02	SINGLE SWING	WOOD	20 MIN.	STAIN/POLY	3'-0"	6'-8"	■	MTL	1/A6.03	2/A6.03	4/A6.03	18	■	■	**FIRE RATED VISION PANEL: D-20. FIRE RATED SIDELIGHTS: D-H-OH-45**
DC03	L	ART C10	SINGLE SWING	WOOD	-	STAIN/POLY	3'-0"	6'-8"	■	MTL	1/A6.03	2/A6.03	4/A6.03	19	-	-	
DC04	M	BREAK OUT ROOM C09	SINGLE SWING	WOOD	-	STAIN/POLY	3'-0"	6'-8"	■	MTL	1/A6.03	2/A6.03	4/A6.03	19	-	-	
DC05	E	CLOSET C08	SINGLE SWING	WOOD	-	STAIN/POLY	2-0"	6-8"	-	MTL	1/A6.03	2/A6.03	4/A6.03	20	-	-	
DC06	E	LIBRARY STOR. C06	SINGLE SWING	WOOD	-	STAIN/POLY	3'-0"	6'-8"	-	MTL	15 & 19 /A6.04	16 & 20 /A6.04	4/A6.03	21	■	-	
DC07	E	STORAGE C07	SINGLE SWING	WOOD	-	STAIN/POLY	3'-0"	6'-8"	-	MTL	1/A6.03	2/A6.03	22 /A6.03	22	-	-	
DC08	N	BREAK OUT ROOM C09	SINGLE SWING	WOOD	-	STAIN/POLY	3'-0"	6'-8"	■	MTL	21 /A6.04	22 /A6.04	22 /A6.03	23	-	-	
DC09	E	ART C10	SINGLE SWING	WOOD	-	STAIN/POLY	2-0"	6-8"	-	MTL	1/A6.03	2/A6.03	4/A6.03	20	-	-	
DC10	P	ART STOR. C11	SINGLE SWING	METAL	20 MIN	PAINTED	3'-6"	6'-8"	-	MTL	1/A6.03	2/A6.03	25 /A6.03	20	■	-	
DC11	H	BREAK OUT ROOM C09	SINGLE SWING	WOOD	-	STAIN/POLY	6'-0"	6'-8"	-	MTL	1/A6.03	2/A6.03	22 /A6.03	09	-	-	
DC12	F	STAIR 'D'	SINGLE SWING	WOOD	90 MIN.	STAIN/POLY	6'-0"	7'-0"	■	MTL	13 /A6.03	14 /A6.03	3 /A6.03	13	■	-	NEW DOOR AND FRAME IN EXISTING OPENING. FULL 180 DEGREE OPENING DOOR WITH HOLD-OPEN TIE INTO FIRE ALARM. **FIRE RATED VISION PANEL: D-H-T-W-90**
SECOND FLOOR																	
DA06	F	ELEV. LOBBY A201	SINGLE SWING	WOOD	90 MIN.	STAIN/POLY	6'-0"	7'-0"	■	MTL	20 /A6.03	21 /A6.03	22 /A6.03	24	■	■	AUTOMATIC HOLD OPEN TIE INTO FIRE ALARM. **FIRE RATED VISION PANEL: D-H-W-90**
DA07	G	COPY ROOM A202	SINGLE SWING	WOOD	20 MIN.	STAIN/POLY	3'-0"	7'-0"	■	MTL	1 /A6.03	2 /A6.03	4 /A6.03	06	■	-	**FIRE RATED VISION PANEL: D-20**
DA19	R	EXISTING CORRIDOR	OPPOSING SWING	METAL	180 MIN.	STAIN/POLY	6'-0"	7'-0"	■	MTL	23 /A6.04	24 /A6.04	3 /A6.03	04	■	■	AUTOMATIC HOLD OPEN TIE INTO FIRE ALARM. **FIRE RATED VISION PANEL: D-H-W-180**
THIRD FLOOR																	
DA08	G	STORAGE A302	SINGLE SWING	WOOD	20 MIN.	STAIN/POLY	3'-0"	7'-0"	-	MTL	1 /A6.03	2 /A6.03	4 /A6.03	07	■	-	**FIRE RATED VISION PANEL: D-20**
DA09	R	ELEV. LOBBY UPPER A301	OPPOSING SWING	METAL	180 MIN.	STAIN/POLY	6'-0"	7'-0"	■	MTL	16 /A6.03 SIM.	17 /A6.03 SIM.	18 /A6.03 SIM.	08	■	■	AUTOMATIC HOLD OPEN TIE INTO FIRE ALARM. **FIRE RATED VISION PANEL: D-H-W-180**
DA10	D	ELEV. LOBBY UPPER A301	OPPOSING SWING	WOOD	20 MIN.	STAIN/POLY	6'-0"	7'-0"	■	MTL	1 /A6.03	2 /A6.03	22 /A6.03	08	■	■	AUTOMATIC HOLD OPEN TIE INTO FIRE ALARM. **FIRE RATED VISION PANEL: D-20**
DA11	D	NEW CORR. 'B' A305	OPPOSING SWING	WOOD	90 MIN.	STAIN/POLY	6'-0"	7'-0"	■	MTL	1 /A6.03	2 /A6.03	4 /A6.03	08	■	■	AUTOMATIC HOLD OPEN TIE INTO FIRE ALARM. **FIRE RATED VISION PANEL: D-H-W-90**
DA12	H	NEW CORR. 'A' A304	SINGLE SWING	WOOD	20 MIN.	STAIN/POLY	6'-8"	7'-0"	-	MTL	1 /A6.03	2 /A6.03	22 /A6.03	09	■	-	
DA13	E	NEW CORR. 'A' A304	SINGLE SWING	WOOD	20 MIN.	STAIN/POLY	3'-0"	7'-0"	-	MTL	1 /A6.03	2 /A6.03	22 /A6.03	10	■	-	
DA14	F	STAIR A303	SINGLE SWING	WOOD	90 MIN.	STAIN/POLY	6'-0"	7'-0"	■	MTL	20 /A6.03	21 /A6.03	25 /A6.03	11	■	■	AUTOMATIC HOLD OPEN TIE INTO FIRE ALARM. **FIRE RATED VISION PANEL: D-H-W-90**
DA15	-	CLOSET A307	EXISTING SINGLE SWING	EXIST. WOOD	-	EXISTING, REPAIR & FINISH	2'-8"	7'-0"	-	EXIST. WOOD	-	-	-	-	-	-	MODIFY EXISTING DOOR TO REVERSE SWING
FOURTH FLOOR																	
DA16	S	ELEV. LOBBY A401	SINGLE SWING	METAL	180 MIN.	STAIN/POLY	6'-0"	7'-0"	■	MTL	16 /A6.03 SIM.	17 /A6.03 SIM.	18 /A6.03 SIM.	11	■	■	AUTOMATIC HOLD OPEN TIE INTO FIRE ALARM. **FIRE RATED VISION PANEL: D-H-W-180**
DA17	G	STOR. A402	SINGLE SWING	WOOD	20 MIN.	STAIN/POLY	3'-0"	7'-0"	■	MTL	23 /A6.03	24 /A6.03	4/A6.03	06	■	-	**FIRE RATED VISION PANEL: D-20**
DA18	E	ELEC. CLO. A403	SINGLE SWING	WOOD	20 MIN.	STAIN/POLY	3'-0"	7'-0"	■	MTL	23 /A6.03	24 /A6.03	4/A6.03	10	■	-	



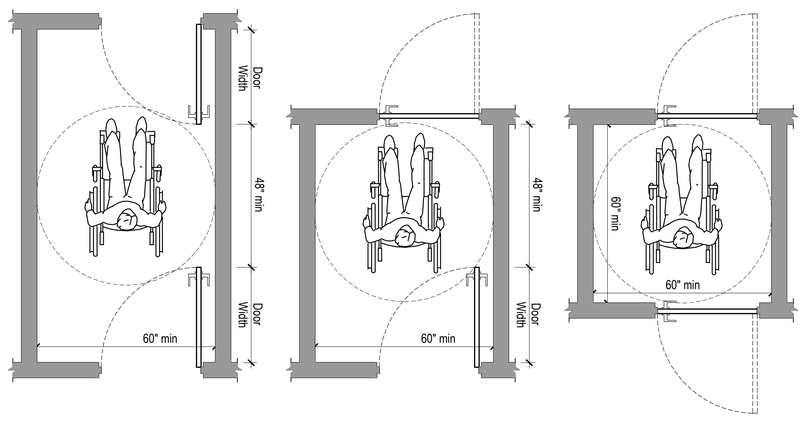
A Door Maneuv. Clearances
N.T.S.



B Door Maneuv. Clearances
N.T.S.



C Door Maneuv. Clearances
N.T.S.



D Door Maneuv. Clearances - Two Hinged Doors In Series
N.T.S.

Date	1/10/20
Checked	DLF
Drawn	CTB

MICHAEL J. McGOVERN, R.A.
The REGISTERED ARCHITECT License No. 022257-1

Revisions:
1 ISSUE TO BID 11/23/20

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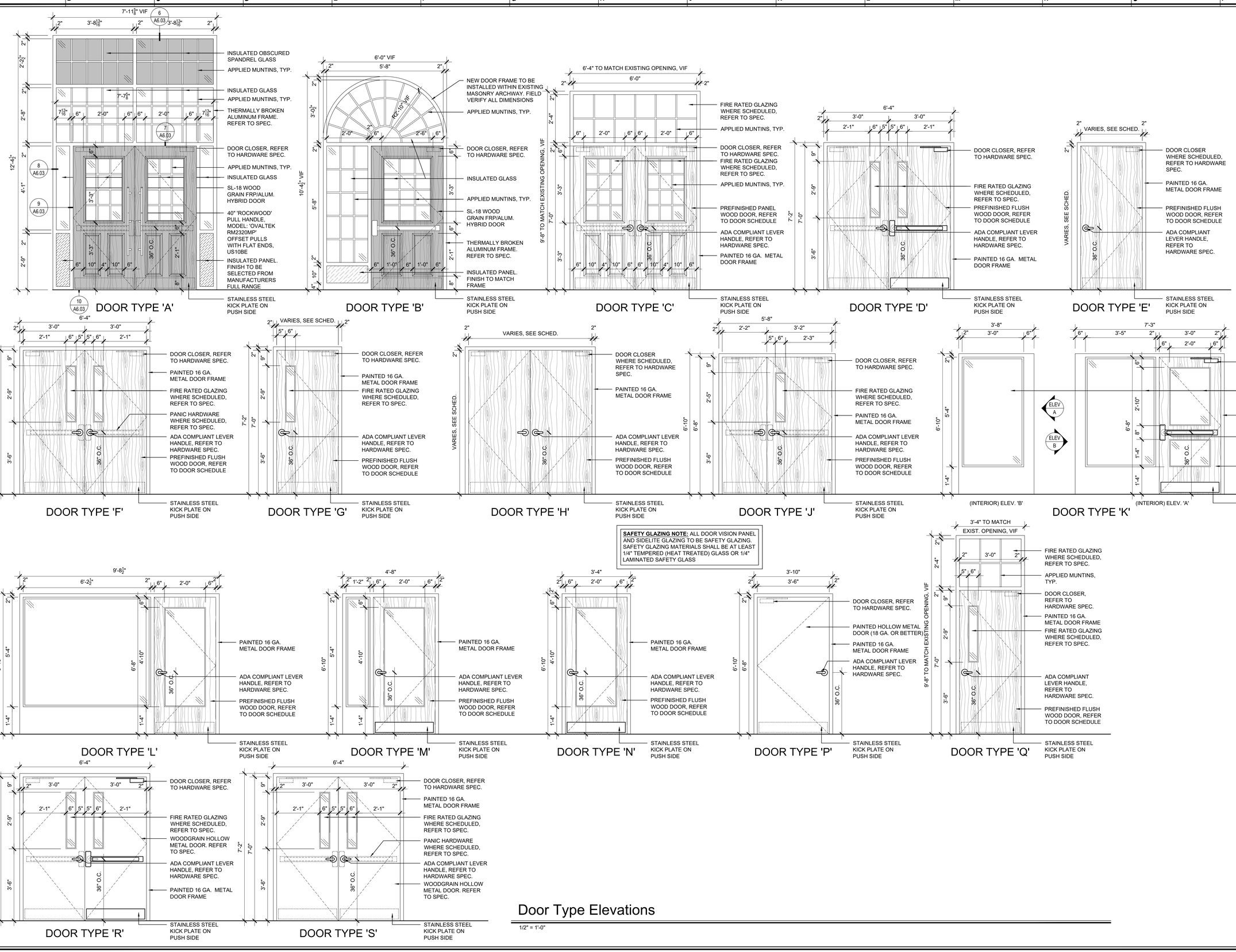
NYSED PROJECT # 66-07-01-03-0-005-020

DOOR SCHEDULE
2019 BOND REFERENDUM ELEMENTARY SCHOOL
CHATSWORTH AVENUE ELEMENTARY SCHOOL DISTRICT
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

Job No. 4.1092.72.03

File No. 10927203A601

A6.01



Date	1/10/20
Checked	DLF
Drawn	CTB

MICHAEL J. McGOVERN, R.A.
Title REGISTERED ARCHITECT License No. 022257-1

Revisions:

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1	ISSUE TO BID 11/23/20

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NYSED PROJECT # 66-07-01-03-0-005-020

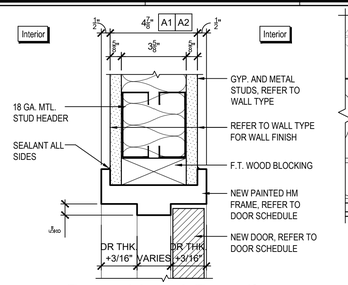
DOOR TYPES

2019 BOND REFERENDUM
CHATSWORTH AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

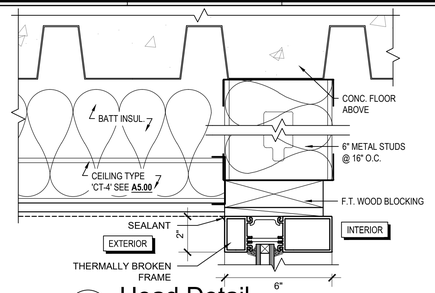
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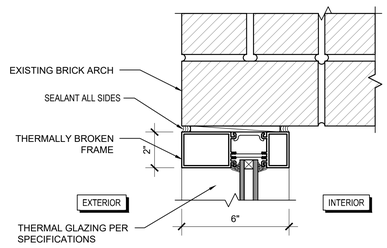
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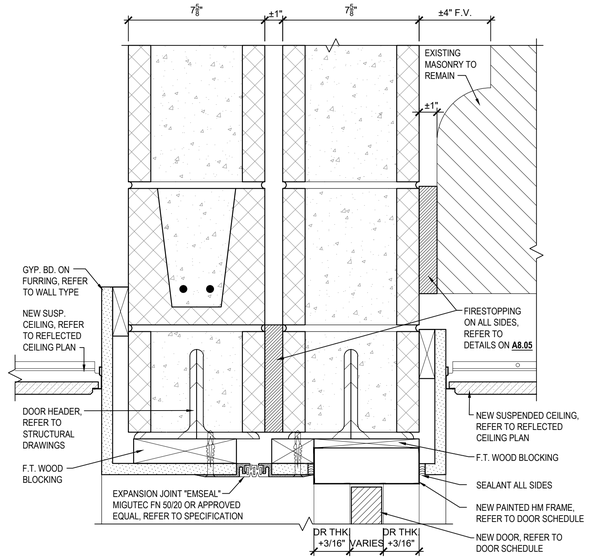
1 A6.03 **Door Head Detail**
3"= 1'-0"



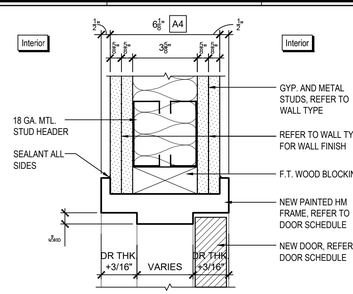
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3" = 1'-0"



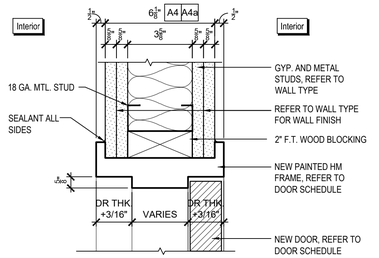
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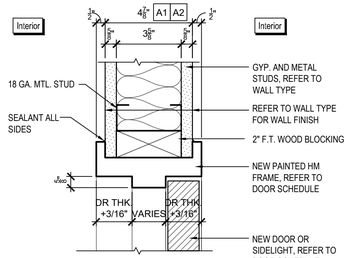
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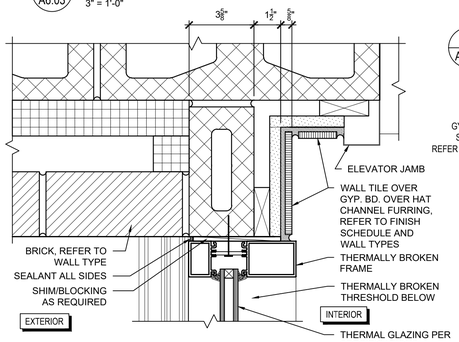
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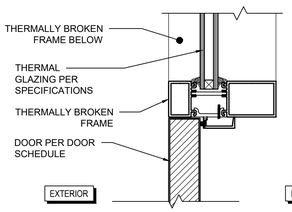
21 A6.03 **Door Jamb Detail**
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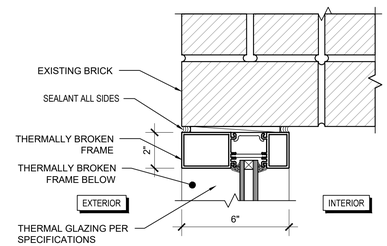
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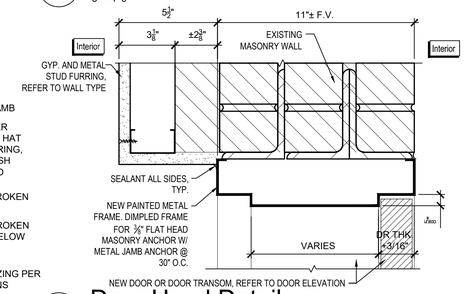
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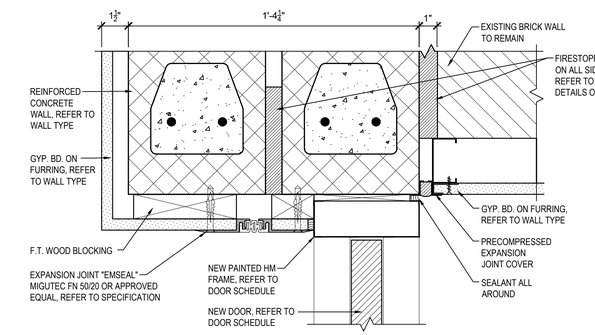
8 A6.03 **Jamb Detail**
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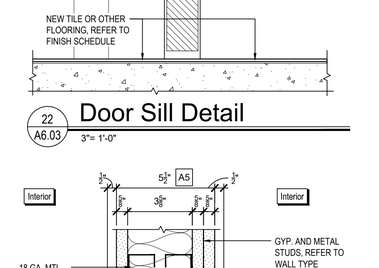
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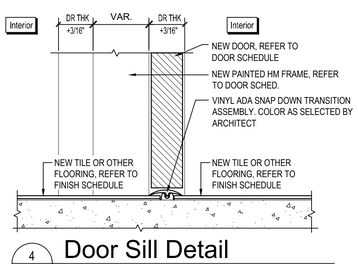
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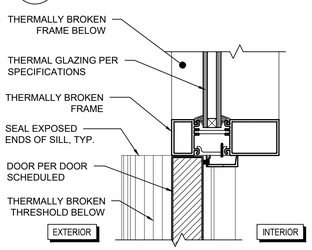
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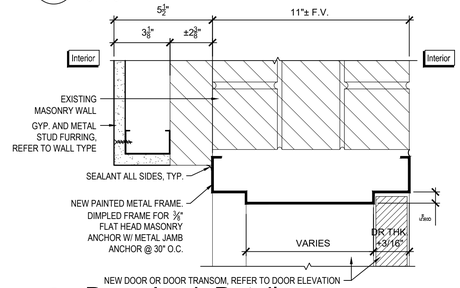
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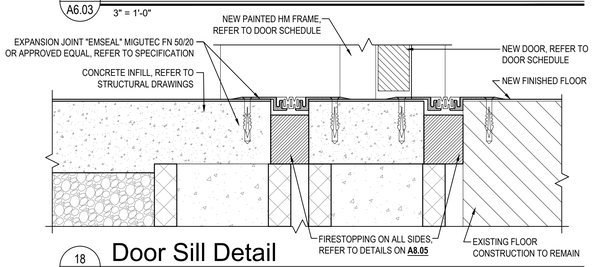
4 A6.03 **Door Sill Detail**
3"= 1'-0"



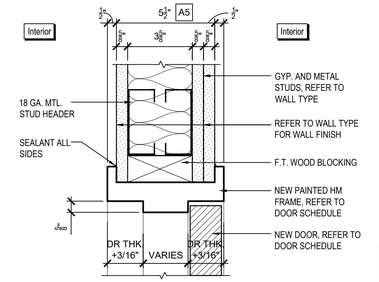
9 A6.03 **Jamb Detail**
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14 A6.03 **Door Jamb Detail**
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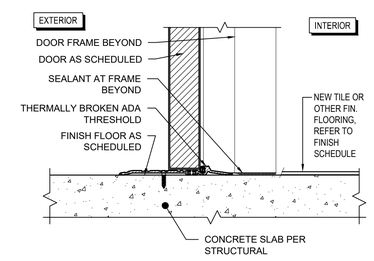


18 A6.03 **Door Sill Detail**
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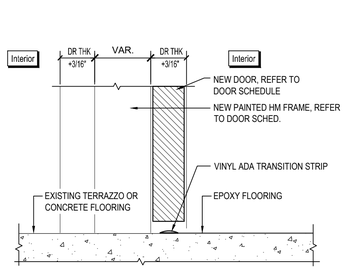


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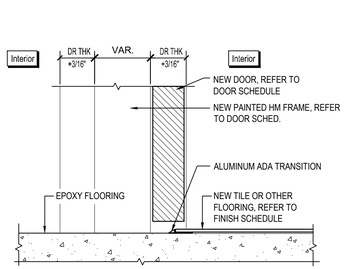
4 A6.03 **Door Sill Detail**
3"= 1'-0"



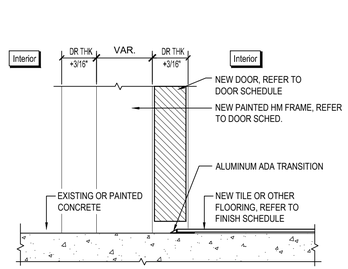
10 A6.03 **Proposed Threshold Detail**
3" = 1'-0"



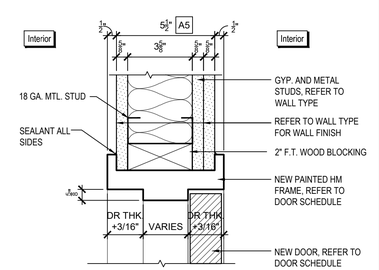
27 A6.03 **Door Sill Detail**
3"= 1'-0"



26 A6.03 **Door Sill Detail**
3"= 1'-0"



25 A6.03 **Door Sill Detail**
3"= 1'-0"



24 A6.03 **Door Jamb Detail**
3"= 1'-0"

Date	1/10/20
Checked	DLF
Drawn	CTB

MICHAEL J. McGOVERN, R.A.
License No. 022257-1
The REGISTERED ARCHITECT

Revisions:

#	
1	ISSUE TO BID 11/23/20

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NYSED PROJECT # 66-07-01-03-0-005-020

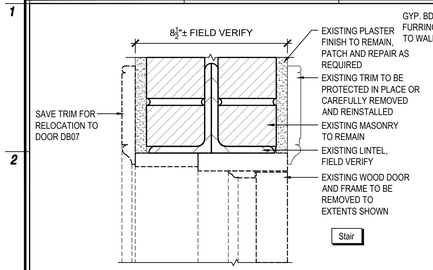
DOOR DETAILS

2019 BOND REFERENDUM
CHATSWORTH AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

Job No. 4.1092.72.03

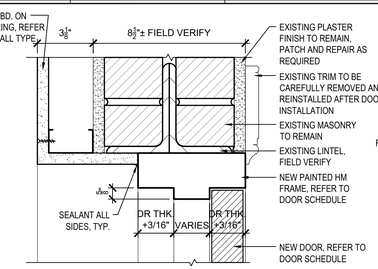
File No. 10927203A601

A6.03



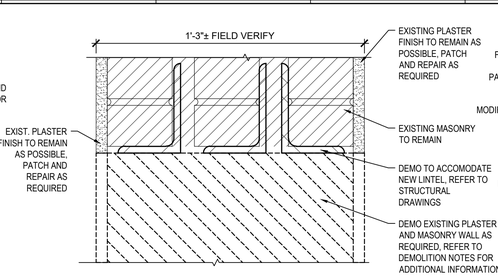
1 A6.04 — Demo. Door Head Detail

3"= 1'-0"



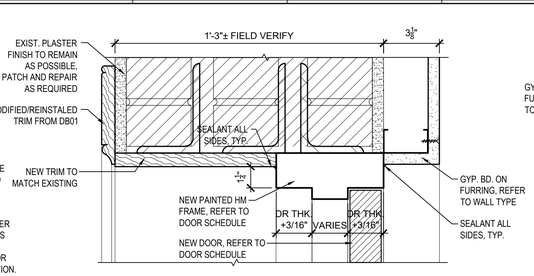
6 A6.04 — Prop. Door Head Detail

3"= 1'-0"



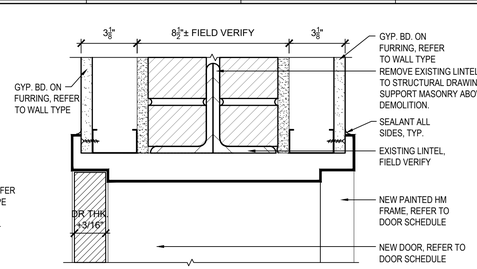
11 A6.04 — Demo. Door Head Detail

3"= 1'-0"



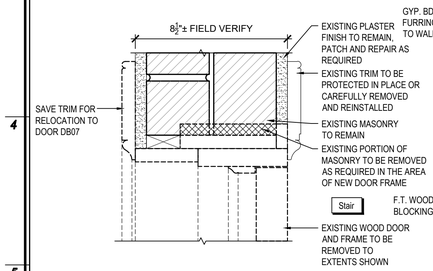
13 A6.04 — Prop. Door Head Detail

3"= 1'-0"



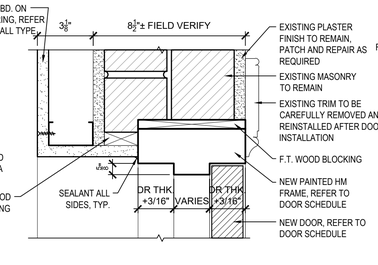
21 A6.04 — Prop. Door Head Detail

3"= 1'-0"



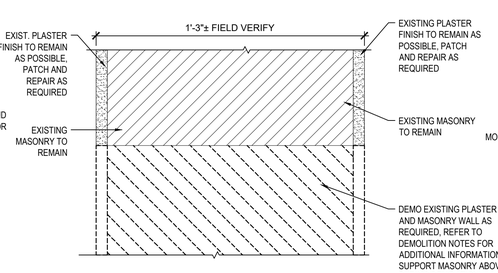
2 A6.04 — Demo. Door Jamb Detail

3"= 1'-0"



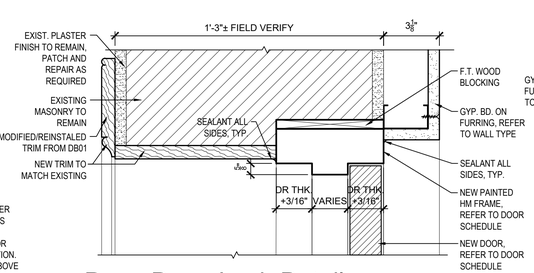
7 A6.04 — Prop. Door Jamb Detail

3"= 1'-0"



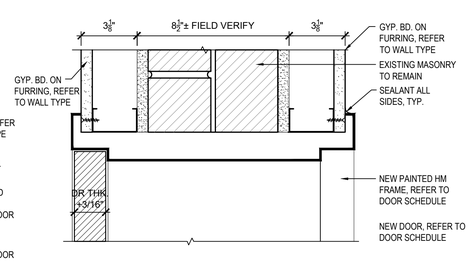
12 A6.04 — Demo. Door Jamb Detail

3"= 1'-0"



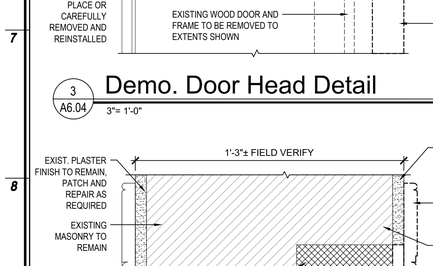
14 A6.04 — Prop. Door Jamb Detail

3"= 1'-0"



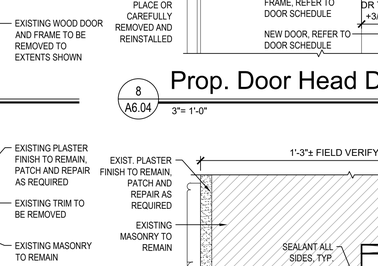
22 A6.04 — Prop. Door Jamb Detail

3"= 1'-0"



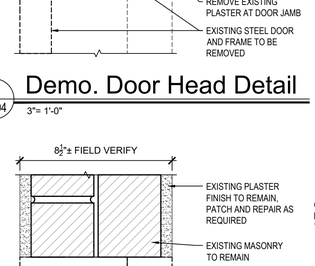
3 A6.04 — Demo. Door Head Detail

3"= 1'-0"



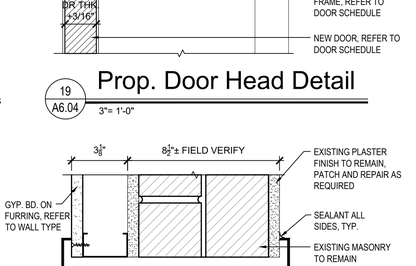
8 A6.04 — Prop. Door Head Detail

3"= 1'-0"



15 A6.04 — Demo. Door Head Detail

3"= 1'-0"



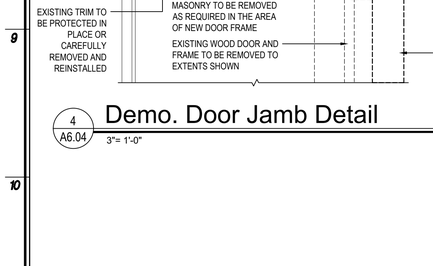
19 A6.04 — Prop. Door Head Detail

3"= 1'-0"



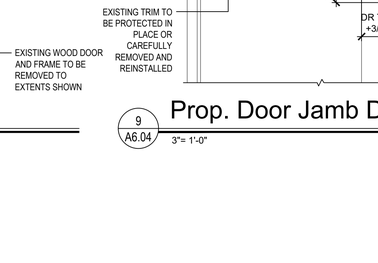
23 A6.04 — Prop. Door Head Detail

3"= 1'-0"



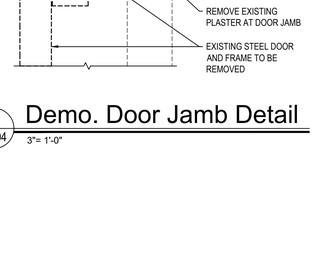
4 A6.04 — Demo. Door Jamb Detail

3"= 1'-0"



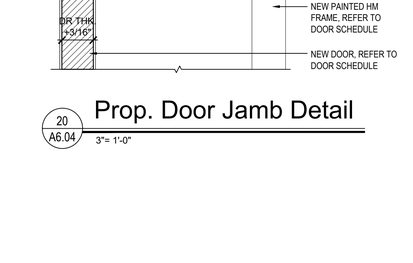
9 A6.04 — Prop. Door Jamb Detail

3"= 1'-0"



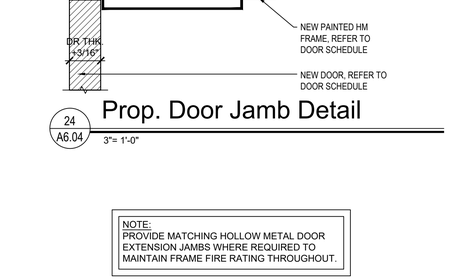
16 A6.04 — Demo. Door Jamb Detail

3"= 1'-0"



20 A6.04 — Prop. Door Jamb Detail

3"= 1'-0"



24 A6.04 — Prop. Door Jamb Detail

3"= 1'-0"

NOTE:
PROVIDE MATCHING HOLLOW METAL DOOR EXTENSION JAMBS WHERE REQUIRED TO MAINTAIN FRAME FIRE RATING THROUGHOUT.

Date	1/10/20
Checked	DLF
Drawn	CTB

MICHAEL J. McGOVERN, R.A.
The REGISTERED ARCHITECT License No. 022257-1

Revisions:

ISSUE TO BID 11/23/20

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NYSED PROJECT # 66-07-01-03-0-005-020

DOOR DETAILS

2019 BOND REFERENDUM SCHOOL
CHATSWORTH AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

Job No. 4.1092.72.03

File No. 10927203A601

A6.04

Energy Code Requirements

IECC 2015 - Table C402.4

Climate ZONE - 4

Vertical Fenestration:
U-Factor
Fixed Fenestration: 0.38
Operable Fenestration: 0.45
Entrance Doors: 0.77

SHGC
N-0.53, SEW-0.40

NOTE: ALL EXTERIOR DOORS AND WINDOWS SHALL MEET OR EXCEED THE ENERGY CODE MINIMUM REQUIREMENTS.

WINDOW SHADE NOTE: GC TO FURNISH AND INSTALL NEW WINDOW SHADES AT ALL NEW WINDOW OPENINGS. SHADE SHALL BE 'MECHOSHADE' (BASIS OF DESIGN) WITH 'SNAPLOC' FASCIA, COLOR TO MATCH NEW WINDOWS, TYP. WINDOW SHADE FABRIC TO BE SELECTED BY OWNER FROM MANUFACTURER'S FULL RANGE. SEE TYPICAL WINDOW HEAD DETAIL 3/A6.11 FOR MOUNTING LOCATION AND ADDITIONAL INFORMATION

Rescue Windows

NYSED MANUAL OF PLANNING STANDARDS:

S106-4 RESCUE WINDOWS

A. EMERGENCY RESCUE WINDOWS, AS REQUIRED IN S106-2, SHALL BE WINDOWS OF SUCH SIZE AND DESIGN THAT WILL PERMIT AND FACILITATE EMERGENCY EGRESS THROUGH THEM. WINDOW HARDWARE SHALL BE A MAXIMUM OF 54 INCHES ABOVE THE FLOOR. IT IS RECOMMENDED THAT ALL CLASSROOM WINDOWS PERMIT EMERGENCY EGRESS. DOUBLE HUNG, CASEMENT, AND SLIDING WINDOWS ARE SATISFACTORY WINDOW TYPES. CASEMENT WINDOWS MUST HAVE HARDWARE THAT PERMITS THE WINDOW TO OPEN AT LEAST 90 DEGREES.

B. THE MINIMUM CLEAR OPENING AREA FOR RESCUE WINDOWS SHALL BE AT LEAST 6 SQUARE FEET AND THE MINIMUM DIMENSION SHALL BE 24 INCHES UNLESS OTHERWISE APPROVED.

C. SCREENS, IF PROVIDED AT RESCUE WINDOWS, SHALL BE HINGED OR SLIDING AND SHALL BE OPERABLE FROM THE INSIDE WITH ONE HAND, AND WITHOUT THE USE OF A KEY, SPECIAL TOOL OR SPECIAL KNOWLEDGE.

D. WHEN A RESCUE WINDOW IS REQUIRED, SCHOOL AUTHORITIES SHALL CAUSE AT LEAST ONE SUCH WINDOW PER CLASSROOM, TO BE MARKED BY AN APPROPRIATE SIGN IDENTIFYING THE RESCUE WINDOW. ANY WINDOW COVERINGS THAT MAY COVER THE WINDOW MUST ALSO HAVE A LABEL.

E. RESCUE WINDOW LABELS SHALL BE:
1. COLOR: BRIGHT YELLOW BACKGROUND WITH BLACK LETTERS
2. SIZE: 3 INCHES BY 5 INCHES
3. TEXT: **RESCUE WINDOW** READABLE FROM EACH SIDE OF THE WINDOW

F. INTERIOR RESCUE WINDOW ACCESS: RESCUE WINDOWSILL HEIGHT SHALL BE AT THE RECOMMENDED SILL HEIGHT FOR THE GRADE LEVEL HOUSED IN THE ROOM (SEE TABLE S303-1). CASEWORK/CABINETS THAT SUPPORT BODY WEIGHT, PERMANENT PLATFORMS, OR 60 DEGREE SHIPS LADDERS MAY BE CONSIDERED TO ACCESS EXISTING WINDOWSILL HEIGHTS ON AN INDIVIDUAL BASIS.

G. EXTERIOR RESCUE WINDOW ACCESS: GROUND LEVEL ACCESS AND LEVEL WORKING AREAS MUST BE PROVIDED FOR THE USE OF EMERGENCY PERSONNEL. LOCAL CONDITIONS AND EQUIPMENT MAY ALLOW VARYING SOLUTIONS TO THIS REQUIREMENT. APPROVAL OF THE RESPONDING EMERGENCY AGENCY(S) MAY BE REQUIRED IN SITUATIONS THAT ARE DIFFICULT.

H. RESCUE WINDOWS THAT OPEN ONTO A ROOF FROM NEW CONSTRUCTION MAY BE APPROVED ON AN INDIVIDUAL BASIS PROVIDING THE ROOF IS READILY ACCESSIBLE TO EMERGENCY PERSONNEL AND THE ROOF STRUCTURE IS ONE-HOUR MINIMUM FIRE PROTECTED. IT IS RECOMMENDED THAT EXISTING RESCUE WINDOWS MEET THESE REQUIREMENTS FOR THE SAFETY OF EMERGENCY PERSONNEL, STUDENTS AND STAFF. RENOVATIONS OF AREAS UNDER SUCH WINDOWS MUST ADDRESS THIS ISSUE.

Window Symbol Legend and Notes

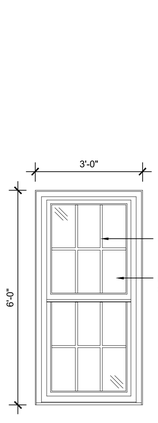
RW SYMBOL INDICATES RESCUE WINDOW. PROVIDE LABELING AS REQUIRED. REFER TO RESCUE WINDOW NOTES ON A6.10 FOR WINDOW LABELING REQUIREMENTS.

1. WINDOW TYPE OUTSIDE DIMENSIONS REPRESENT WINDOW R.O. OR M.O. TYP. ACTUAL WINDOW UNIT SIZE TO BE DETERMINED BY WINDOW MANUFACTURER BASED ON ACTUAL FIELD CONDITIONS UNLESS NOTED OTHERWISE.
2. WINDOWS SHALL BE THERMALLY BROKEN ALUMINUM BY "ARCHITECTURAL WINDOW MANUFACTURING CORPORATION" OR APPROVED EQUAL.
3. ALL WINDOW WORK IS TO BE PREFORMED BY THE GENERAL CONTRACTOR.
4. GC TO INCLUDE WINDOW SHADES FOR ALL WINDOWS. REFER TO "WINDOW SHADE NOTE " ON SHEET A6.10.
5. CONTRACTOR SHALL FIELD VERIFY ALL WINDOW DIMENSIONS.
6. DRAWINGS ARE BASED ON SPECIFIC TYPE & MODEL ALUMINUM WINDOW BY A SINGLE MANUFACTURER. EQUIVALENT TYPE WINDOWS BY OTHER MANUFACTURERS MAY BE ACCEPTED (IF THEY CAN BE SHOWN IN ADVANCE TO BE OF LIKE KIND AND OF EQUAL QUALITY), PROVIDED DEVIATIONS IN DIMENSIONS AND PROFILE ARE MINOR AND DO NOT MATERIALLY DETRACT FROM DESIGN CONCEPT OR INTENDED PERFORMANCE, AS JUDGED SOLELY BY THE ARCHITECT. REFER TO SPECIFICATIONS FOR SPECIFIC SUBSTITUTION REQUIREMENTS.
7. CONTRACTOR RESPONSIBLE TO CHECK & VERIFY ACTUAL WINDOW OPENINGS BY ACCURATE FIELD MEASUREMENTS BEFORE FABRICATION, AND SHOW RECORDED MEASUREMENTS ON FINAL SHOP DRAWINGS.
8. CAULK EXTERIOR PERIMETER OF ALL WINDOWS. COLOR OF CAULK TO MATCH WINDOWS.
9. SET WINDOWS PLUMB, LEVEL, AND TRUE TO LINE WITHOUT WARP OR RACK OF FRAMES OR SASH. ANCHOR SECURELY IN PLACE. SEPARATE ALUMINUM AND OTHER CORRODIBLE SURFACES FROM SOURCES OF CORROSION OR ELECTROLYTIC ACTION.
10. ADJUST OPERATING SASH AND HARDWARE TO PROVIDE TIGHT FIT AT CONTACT POINTS AND AT WEATHERSTRIPPING, AND TO ENSURE SMOOTH OPERATION AND WEATHERTIGHT CLOSURE.
11. CLEAN ALUMINUM SURFACES PROMPTLY AFTER INSTALLATION OF WINDOWS, EXERCISING CARE TO AVOID DAMAGE TO PROTECTIVE COATINGS AND FINISHES. REMOVE EXCESS SEALANT COMPOUNDS, DIRT AND OTHER SUBSTANCES.
12. CLEAN GLASS OF PRE GLAZED UNITS PROMPTLY AFTER INSTALLATION OF WINDOW. COMPLY WITH REQUIREMENTS OF MANUFACTURER.
13. INITIATE & MAINTAIN PROTECTIONS AND OTHER PRECAUTIONS REQUIRED TO ENSURE THAT WINDOW UNITS WILL BE WITHOUT DETERIORATION AT TIME OF ACCEPTANCE.
14. PROVIDE AND INSTALL WINDOW SCREENS AT ALL OPERABLE EXTERIOR WINDOWS EXCLUDING RESCUE WINDOWS.
15. CONTRACTOR SHALL PRIME AND PAINT ALL EXPOSED SURFACES OF STEEL LINTELS, STEEL PLATES AND STEEL DOOR AND WINDOW FRAMES, TYPICAL. PAINT COLOR AS SELECTED BY OWNER.
16. GC TO PROVIDE AND INSTALL ALL REQUIRED BLOCKING, SHIMS, AND SEALANT FOR A COMPLETE INSTALLATION. WOOD TO BE PRESSURE TREATED WHERE APPLICABLE.

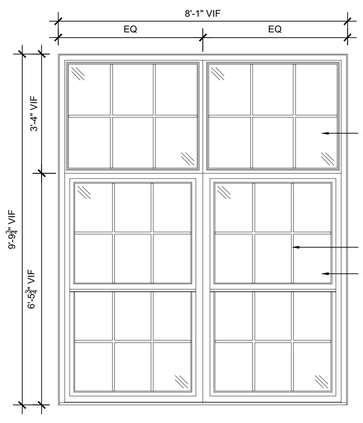
WINDOW SCHEDULE

WINDOW NO.	WINDOW TYPE	ROOM NAME/ NUMBER	OPERATION	INTERIOR/EXTERIOR	MATERIAL	GLAZING	M.O. / R.O. WIDTH	M.O. / R.O. HEIGHT	WINDOW DETAILS HEAD	WINDOW DETAILS JAMB	WINDOW DETAILS SILL	NOTES
FIRST FLOOR												
WB01												**WINDOW OMITTED**
WB02												**WINDOW OMITTED**
WB03	G	SERVERY / KITCHEN B02	FIXED	INTERIOR	HMF	FIRE RESIST	3'-0"	7'-2"	10/A6.12	11/A6.12	12/A6.12	INTERIOR. **FIRE RATED GLAZING AND FRAME: W-120**
WB04	G	SERVERY / KITCHEN B02	FIXED	INTERIOR	HMF	FIRE RESIST	3'-0"	7'-2"	10/A6.12	11/A6.12	12/A6.12	INTERIOR. **FIRE RATED GLAZING AND FRAME: W-120**
WC01	F	ART C10	DOUBLE HUNG	EXTERIOR	ALUM.	DOUBLE	3'-6"	4'-2"	--	--	--	NEW WINDOW IN EXISTING OPENING, G.C. TO VERIFY EXISTING OPENING SIZE.
WC02	H	LIBRARY STORAGE C06	FIXED	INTERIOR	HMF	TEMP	5'-5"	3'-10"	7/A6.12	8/A6.12	8/A6.12 SIM.	INTERIOR WINDOW
WC03	H	BREAK OUT ROOM C09	FIXED	INTERIOR	HMF	TEMP	5'-5"	3'-10"	7/A6.12	8/A6.12	8/A6.12 SIM.	INTERIOR WINDOW
SECOND FLOOR												
WA01	A	ELEVATOR LOBBY A201	DOUBLE HUNG	EXTERIOR	ALUM.	DOUBLE	3'-0"	6'-0"	3/A6.11	4/A6.11	5/A6.11	"ARCHITECTURAL WINDOW" 4000i SERIES DOUBLE HUNG ALUMINUM INSULATED WINDOW
WG01	J	CLASSROOM 10	FIXED	EXTERIOR	WOOD	DOUBLE	3'-0 1/2"	3'-0 1/2"		2/A6.11		GC TO PROVIDE AND INSTALL NEW CUSTOM MANUFACTURED WOOD WINDOWS AS MANUFACTURED BY "TRIMLINE WINDOWS INCORPORATED" (BASIS OF DESIGN) OR ARCHITECT APPROVED EQUAL. MATCH ALL EXISTING PROFILES, VIF. PROVIDE SHOP DRAWINGS
WG02	J	CLASSROOM 11	FIXED	EXTERIOR	WOOD	DOUBLE	3'-0 1/2"	3'-0 1/2"		2/A6.11		
THIRD FLOOR												
WA02	A	STORAGE A302	DOUBLE HUNG	EXTERIOR	ALUM.	DOUBLE	3'-0"	6'-0"	3/A6.11	4/A6.11	5/A6.11	"ARCHITECTURAL WINDOW" 4000i SERIES DOUBLE HUNG ALUMINUM INSULATED WINDOW
WA03	B	NEW CORR. 'B' A305	DOUBLE HUNG/ FIXED	EXTERIOR	ALUM.	DOUBLE	8'-1"	9'-9 3/4"	3/A6.11	4/A6.11	5/A6.11	"ARCHITECTURAL WINDOW" 4000i SERIES DOUBLE HUNG AND 7090i SERIES FIXED ALUMINUM INSULATED WINDOW. WINDOW AND TRANSOM HEIGHT TO MATCH EXISTING ADJACENT WALL. WINDOW WIDTH TO ALIGN WITH AND MATCH WIDTHS WITH EXISTING WINDOWS BELOW. VERIFY ALL DIMENSIONS IN FIELD
WA04	B	NEW CORR. 'B' A305	DOUBLE HUNG/ FIXED	EXTERIOR	ALUM.	DOUBLE	8'-1"	9'-9 3/4"	3/A6.11	4/A6.11	5/A6.11	
WA05	B	NEW CORR. 'B' A305	DOUBLE HUNG/ FIXED	EXTERIOR	ALUM.	DOUBLE	8'-1"	9'-9 3/4"	3/A6.11	4/A6.11	5/A6.11	
WA06	C	NEW CORR. 'B' A305	DOUBLE HUNG/ FIXED	EXTERIOR	ALUM.	DOUBLE	4'-0"	9'-9 3/4"	3/A6.11	4/A6.11	5/A6.11	"ARCHITECTURAL WINDOW" 4000i SERIES DOUBLE HUNG AND 7090i SERIES FIXED ALUMINUM INSULATED WINDOW. WINDOW AND TRANSOM HEIGHT TO MATCH WINDOW TYPE 'B'
WA07	D	CLASSROOM 28	(3) EXIST. DOUBLE HUNGS TO REMAIN, DEMO (1)	EXTERIOR	-	-	14'-1" VIF	7'-8 3/8" VIF	--	6&7/A6.11	--	REMOVE 1 WINDOW (3 TO REMAIN) INFILL OPENING WITH MASONRY PER WALL TYPE, REFER TO MULLION DETAILS 6&7/A6.11
FOURTH FLOOR												
WA08	A	STOR A402	DOUBLE HUNG	EXTERIOR	ALUM.	DOUBLE	3'-0"	6'-0"	3/A6.11	4/A6.11	5/A6.11	"ARCHITECTURAL WINDOW" 4000i SERIES DOUBLE HUNG ALUMINUM INSULATED WINDOW

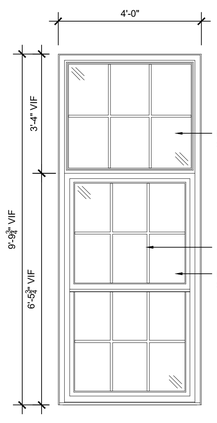
EXISTING WINDOW NOTE: GC TO PROVIDE AND INSTALL NEW WINDOW SHADES AT ALL EXISTING WINDOWS WITHIN THE FOLLOWING SPACES: CAFETERIA B01, COPY ROOM B03, FLEX AREA C03, READING C04, LIBRARY C05, BREAK OUT ROOM C09, AND ART C10. GC TO VERIFY SIZE OF EXISTING WINDOWS IN FIELD. REFER TO PLANS AND KEYNOTES 'B1' AND 'C1' FOR ADDITIONAL INFORMATION.



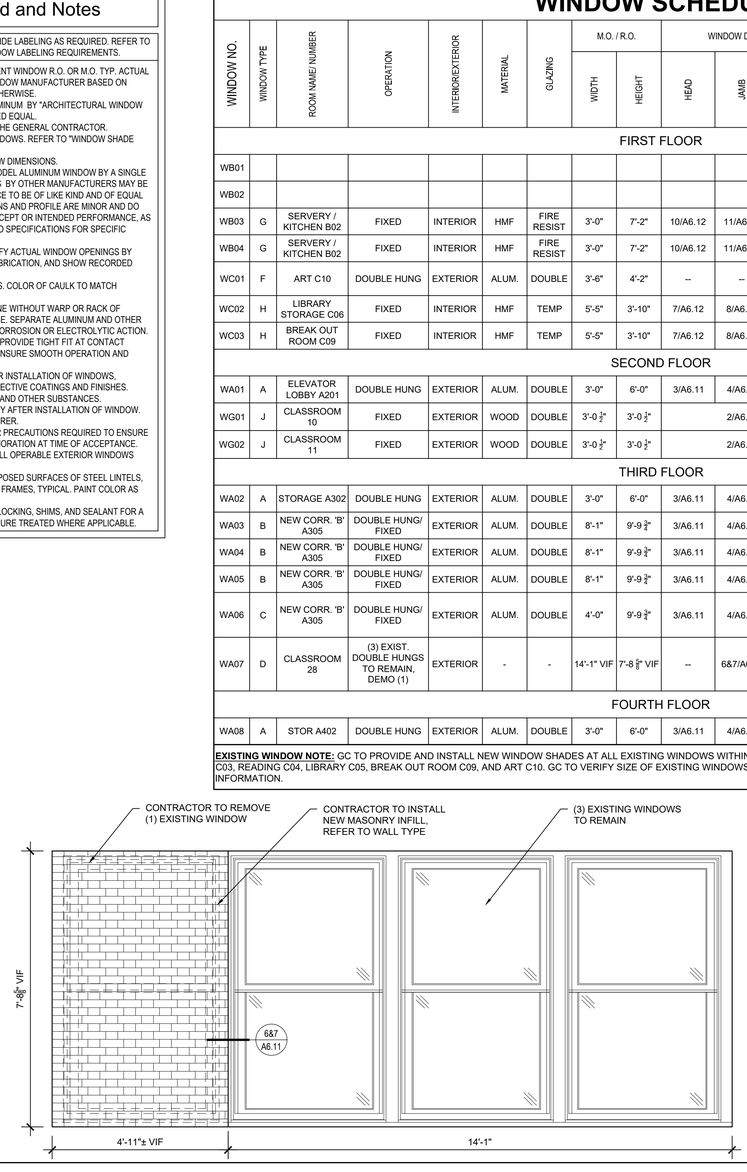
WINDOW TYPE 'A'



WINDOW TYPE 'B'



WINDOW TYPE 'C'



WINDOW TYPE 'D'

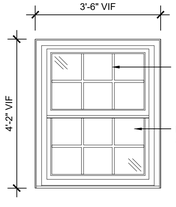
WINDOW GLAZING NOTE: PLEASE REFER TO **"MARKING FIRE RATED GLAZING ASSEMBLIES"** NOTES ON A6.01 FOR FIRE RATED GLAZING CLASSIFICATIONS.

ALL INTERIOR GLAZING TO BE TEMPERED FLOAT GLASS OR LAMINATED SAFETY GLASS AS INDICATED IN SPECIFICATION **SECTION 088100 - GLASS AND GLAZING**

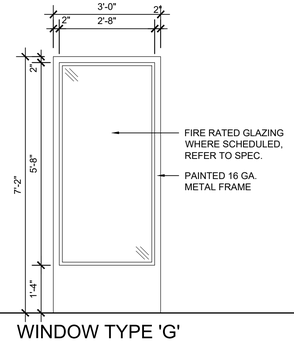
FOR INFORMATION REGARDING GLAZING ASSEMBLIES FOR EXTERIOR WINDOWS SEE SPECIFICATION **SECTION 085113 - ALUMINUM WINDOWS**

WINDOW TYPE 'E' OMITTED

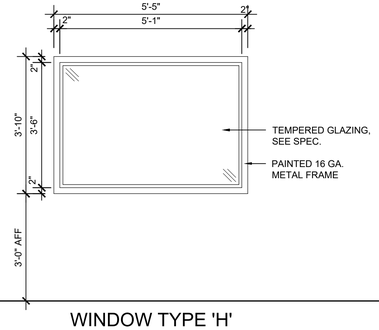
WINDOW TYPE 'E'



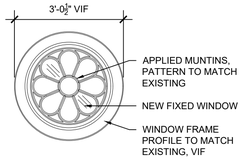
WINDOW TYPE 'F'



WINDOW TYPE 'G'



WINDOW TYPE 'H'



WINDOW TYPE 'J'

Window Type Elevations

1/2" = 1'-0"

Date	1/10/20
Checked	DLF
Drawn	CTB

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Title REGISTERED ARCHITECT

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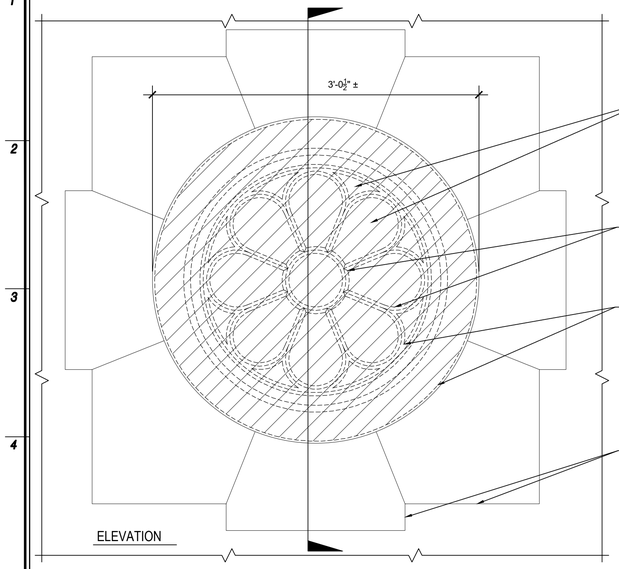
NYSED PROJECT # 66-07-01-03-0-005-020

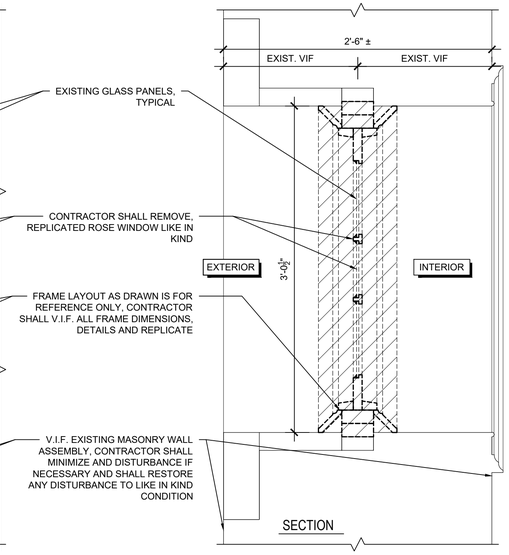
WINDOW SCHEDULE AND TYPES
2019 BOND REFERENDUM
ELEMENTARY SCHOOL
CHATSWORTH AVENUE UNION FREE SCHOOL DISTRICT
MAMARONECK CHATSWORTH AVENUE, LARCHMONT, NY 10538

Job No. 4.1092.72.03

File No. 10927203A610

A6.10





EXISTING GLASS PANELS, TYPICAL

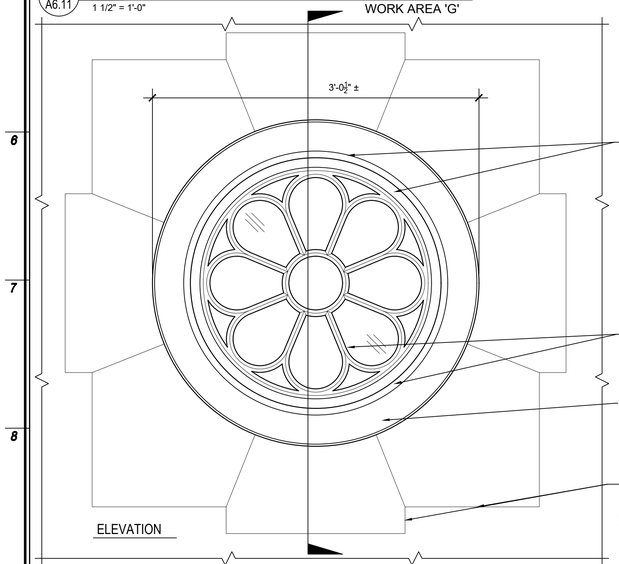
CONTRACTOR SHALL REMOVE, REPLICATED ROSE WINDOW LIKE IN KIND

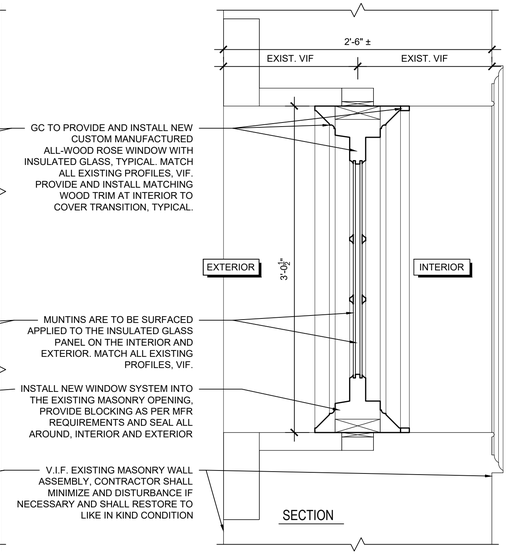
FRAME LAYOUT AS DRAWN IS FOR REFERENCE ONLY, CONTRACTOR SHALL V.I.F. ALL FRAME DIMENSIONS, DETAILS AND REPLICATE

V.I.F. EXISTING MASONRY WALL ASSEMBLY, CONTRACTOR SHALL MINIMIZE AND DISTURBANCE IF NECESSARY AND SHALL RESTORE ANY DISTURBANCE TO LIKE IN KIND CONDITION

Demolition Elevation - Section

1 / A6.11 — 1 1/2" = 1'-0"





GC TO PROVIDE AND INSTALL NEW CUSTOM MANUFACTURED ALL-WOOD ROSE WINDOW WITH INSULATED GLASS, TYPICAL. MATCH ALL EXISTING PROFILES, VIF. PROVIDE AND INSTALL MATCHING WOOD TRIM AT INTERIOR TO COVER TRANSITION, TYPICAL.

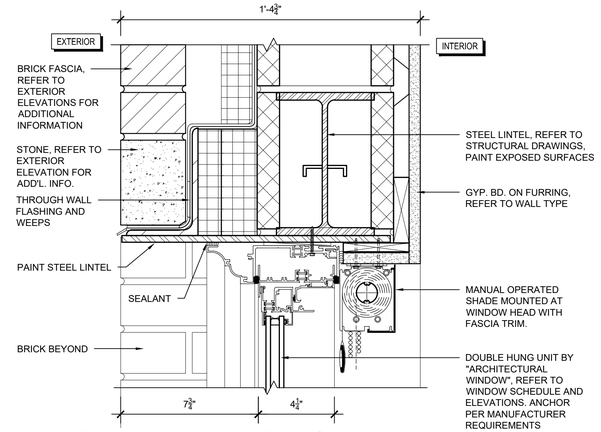
MUNTINS ARE TO BE SURFACED APPLIED TO THE INSULATED GLASS PANEL ON THE INTERIOR AND EXTERIOR. MATCH ALL EXISTING PROFILES, VIF.

INSTALL NEW WINDOW SYSTEM INTO THE EXISTING MASONRY OPENING, PROVIDE BLOCKING AS PER MFR REQUIREMENTS AND SEAL ALL AROUND, INTERIOR AND EXTERIOR

V.I.F. EXISTING MASONRY WALL ASSEMBLY, CONTRACTOR SHALL MINIMIZE AND DISTURBANCE IF NECESSARY AND SHALL RESTORE TO LIKE IN KIND CONDITION

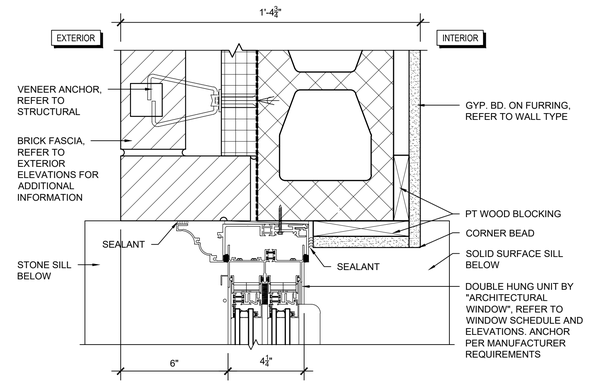
Proposed Elevation - Section

2 / A6.11 — 1 1/2" = 1'-0" — WORK AREA 'G'



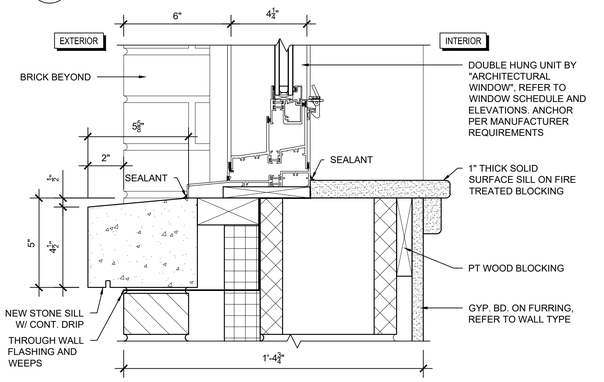
Proposed Head Detail

3 / A6.11 — 3" = 1'-0"



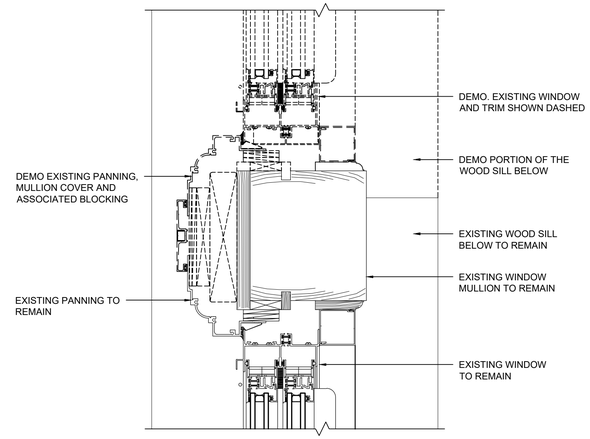
Proposed Jamb Detail

4 / A6.11 — 3" = 1'-0"



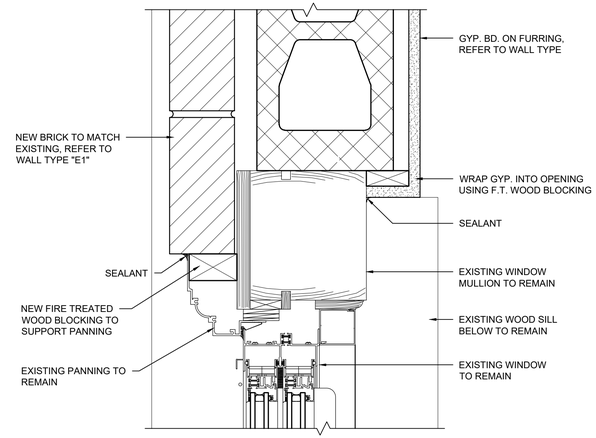
Proposed Sill Detail

5 / A6.11 — 3" = 1'-0"



Demolition Mullion Detail

6 / A6.11 — 3" = 1'-0"



Proposed Mullion Detail

7 / A6.11 — 3" = 1'-0"

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Drawn	CTB

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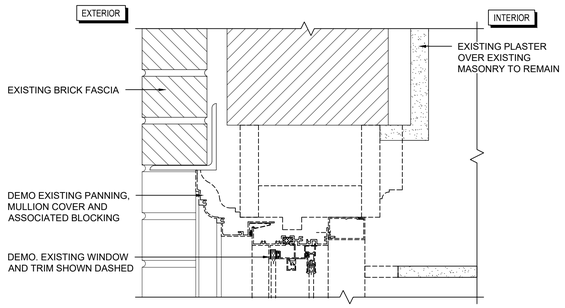
WINDOW DETAILS

2019 BOND REFERENDUM
CHATSWORTH AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

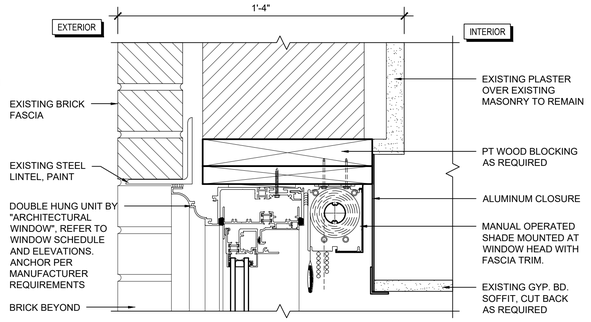
Job No. 4.1092.72.03

File No. 10927203A610

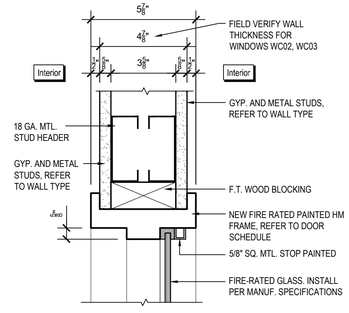
A6.11



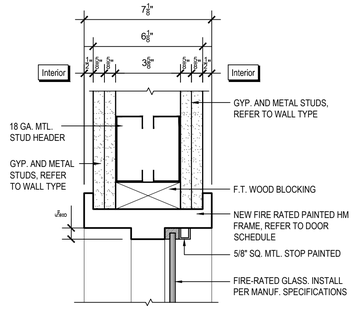
1 A6.12 **Demolition Head Detail**
3" = 1'-0"



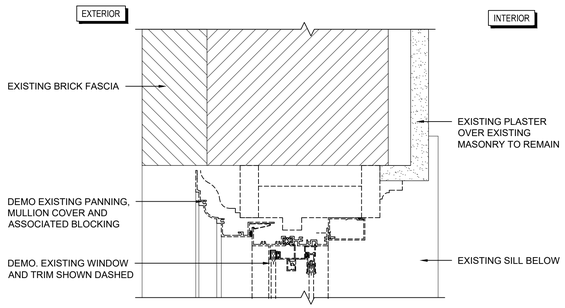
4 A6.12 **Proposed Head Detail**
3" = 1'-0"



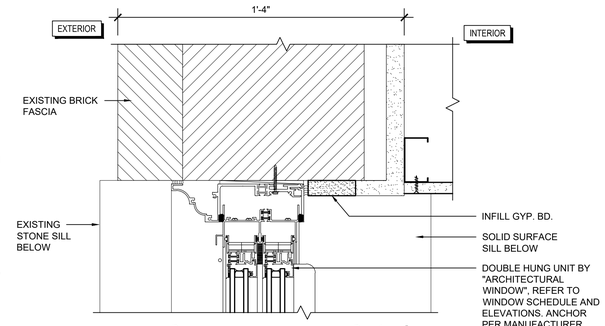
7 A6.12 **Proposed Head Detail**
3" = 1'-0"



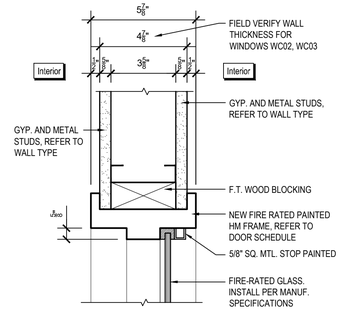
10 A6.12 **Proposed Head Detail**
3" = 1'-0"



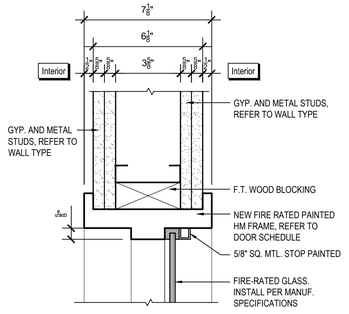
2 A6.12 **Demolition Jamb Detail**
3" = 1'-0"



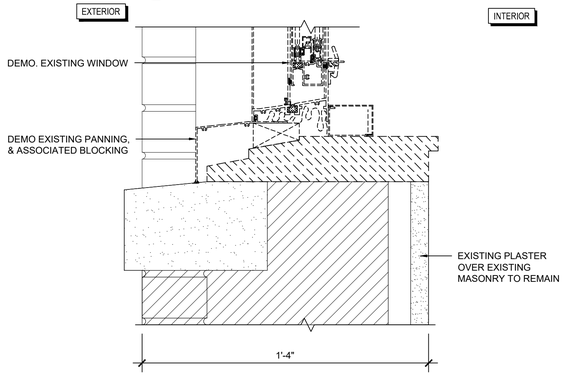
5 A6.12 **Proposed Jamb Detail**
3" = 1'-0"



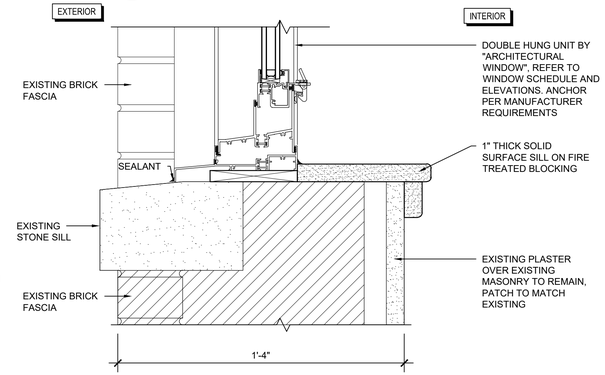
8 A6.12 **Proposed Jamb Detail**
3" = 1'-0"



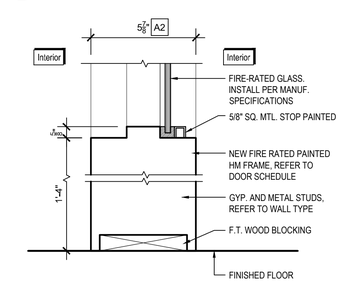
11 A6.12 **Proposed Jamb Detail**
3" = 1'-0"



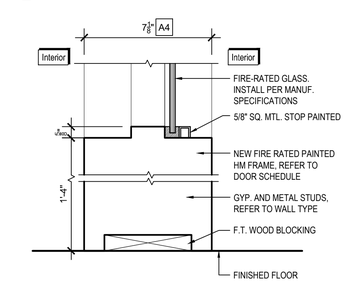
3 A6.12 **Demolition Sill Detail**
3" = 1'-0"



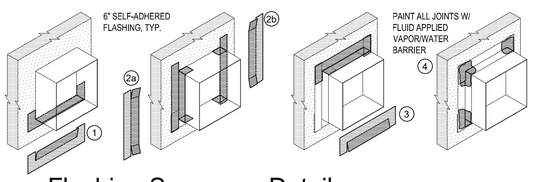
6 A6.12 **Proposed Sill Detail**
3" = 1'-0"



9 A6.12 **Proposed Sill Detail**
3" = 1'-0"

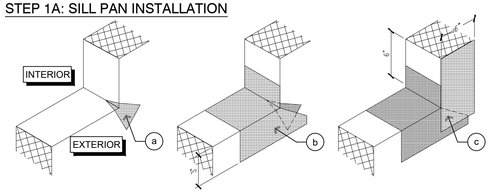


12 A6.12 **Proposed Sill Detail**
3" = 1'-0"



11 A6.12 **Flashing Sequence Detail**
N.T.S.

STEP 1A: SILL PAN INSTALLATION



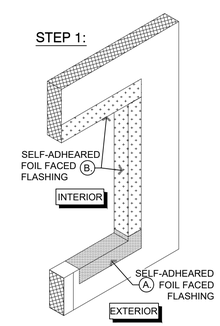
(a) INSTALL GUSSETS TO PREVENT PIN HOLES.

(b) APPLY SELF-ADHEARED FOIL FACED FLASHING ON SILL AND EXTEND 3" ONTO FACE

(c) EXTEND SELF-ADHEARED FOIL FACED FLASHING 6" UP JAMB OVER SELF-ADHEARED FLASHING STRIP AT CORNER TO CREATE SILL PAN

10 A6.12 **Flashing Sequence Detail**
N.T.S.

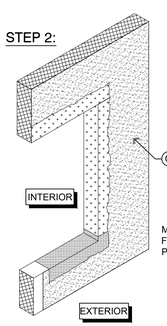
STEP 1:



(A) INSTALL SELF-ADHEARED FOIL FACED FLASHING OVER SILL AND ONTO FACE OF CMU. SEE STEP 1A ABOVE.

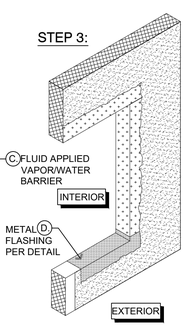
(B) INSTALL SELF-ADHEARED FOIL FACED FLASHING AT ROUGH OPENING AT THE HEAD AND JAMBS

STEP 2:



(C) APPLY SELF-ADHEARED FOIL FACED FLASHING ONTO FACE, LAPPING ONTO SELF-ADHEARED FOIL FACED FLASHING AT ROUGH OPENING AND PANEL JOINTS.

STEP 3:



(D) INSTALL METAL FLASHING AT SILL AND EXTEND THROUGH WALL. REFER TO DETAIL FOR ADDITIONAL INFORMATION

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WINDOW DETAILS
2019 BOND REFERENDUM
CHATSWORTH AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

Job No. 4.1092.72.03

File No. 10927203A610

A6.12

Finish Legend

ABBREVIATIONS	DESCRIPTIONS
ACT	ACOUSTIC CEILING TILE: REFER TO REFLECTED CEILING PLAN FOR CEILING TYPES (CT-#)
BK	EXISTING EXPOSED BRICK / STONE VENEER
CAN	ACOUSTIC CEILING CANOPIES: 'SOUNDSCAPES ACOUSTICAL CANOPIES' BY 'ARMSTRONG' (BASIS OF DESIGN) REFER TO REFLECTED CEILING PLAN FOR CEILING TYPES (CT-#)
CLD	ACOUSTIC CEILING CLOUDS: 'SOUNDSCAPES SHAPES' BY 'ARMSTRONG' (BASIS OF DESIGN) REFER TO REFLECTED CEILING PLAN FOR CEILING TYPES (CT-#)
CONC	CONCRETE
CPT	CARPET: REFER TO FLOOR FINISH LEGEND AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.
EPXF (FLOOR)	POURED EPOXY FLOORING: EPOXY/ALIPHATIC URETHANE TOPCOAT SEAMLESS FLOORING SYSTEM REFER TO FLOOR FINISH LEGEND AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.
EPXC (COVE)	4" INTEGRAL EPOXY COVE BASE. PROVIDE MANUFACTURERS METAL TRANSITION BETWEEN WALL AND COVE BASE.
EPXW (WALL)	EPOXY WALL SYSTEM. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION. FULL HEIGHT OF WALL UNLESS NOTED OTHERWISE, TYPICAL.
ETR	EXISTING TO REMAIN
GWB	GYPSUM WALL BOARD: REPAIR EXISTING (SPACKLE, SAND, PRIME) GYP. BD. OR INSTALL NEW. PAINT, TYP. REFER TO PLANS AND WALL TYPE FOR ADDITIONAL INFORMATION
GWBC	GYPSUM WALL BOARD CEILING: REFER TO CEILING TYPES ON REFLECTED CEILING PLANS.
OTA	OPEN TO STRUCTURE ABOVE
PLAS	EXISTING PLASTER CEILING TO REMAIN. REPAIR AS REQUIRED. PREPARE AND PAINT. SEE RCP FOR ADDITIONAL INFORMATION
PSF	NEW PLYWOOD SUBFLOOR. REFER TO STRUCTURAL DRAWINGS
PNT	PAINT (INTERIOR): PREPARE AND PAINT EXISTING MASONRY WALLS. REFER TO INTERIOR ELEVATIONS AND/OR SPECIFICATIONS FOR ADDITIONAL INFORMATION.
PTC	PAINT (INTERIOR): PREPARE AND PAINT EXISTING CONCRETE FLOORS
PWT	PORCELAIN WALL TILE, SEE SECTIONS AND INTERIOR ELEVATIONS FOR ADDITIONAL INFORMATION
RBB	RUBBER FLOOR BASE
RBF	RUBBER FLOOR TILE
RFT	RESILIENT FLOOR TILE: REFER TO FLOOR FINISH LEGEND AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.
LVT	LUXURY VINYL FLOOR TILE: REFER TO FLOOR FINISH LEGEND AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.
VB	VINYL BASE: 'JOHNSONITE' (BASIS OF DESIGN) VINYL COVE BASE
WSF	EXISTING WOOD SUBFLOOR
WO	METAL WALK OFF SURFACE, SEE FLOOR FINISH PLAN AX.XX FOR ADDITIONAL INFORMATION.

SURFACE PREPARATION NOTE:

FOR ALL WORK AREAS: WHERE REQUIRED, NEW FLOOR TO BE INSTALLED OVER SELF LEVELING MATERIAL. BASIS OF DESIGN TO BE 'CMP LEVEL 1' SELF-LEVELING WITH 'CMP LOCKDOWN' VAPOR SUPPRESSION SYSTEM. REFER TO FLOOR PATTERN PLANS OF INDIVIDUAL AREAS AND SPECIFICATION SECTION **035416** FOR ADDITIONAL INFORMATION. CONSULT INDIVIDUAL FLOORING MANUFACTURER TO VERIFY SURFACE PREPARATION REQUIREMENTS AND COMPATIBILITY.

Interior Finish General Notes

1. REFER TO FINISH LEGEND FOR FINISH DESCRIPTIONS.
2. REFER TO FLOOR FINISH LEGEND ON SHEET **A2.80** FOR FLOOR PATTERNS
3. WHERE NEW WALLS / FINISHES INTERSECT EXISTING, CONTRACTOR SHALL FINISH / SEAL INTERSECTION OR GAPS TO ACHIEVE A FINISHED APPEARANCE THROUGHOUT.
4. UNLESS NOTED OTHERWISE ALL EXPOSED CMU WALLS SHALL BE PAINTED. PAINT PER SPEC, COLOR SELECTED BY OWNER.
5. ALL DISTURBED SURFACES SHALL BE PATCHED AND REPAIRED TO MATCH EXISTING. ANY DAMAGE RESULTING FROM THE CONTRACTOR(S) ACTIONS SHALL BE REPAIRED IN LIKE AND KIND AT NO ADDITIONAL COST TO THE OWNER.
6. CONTRACTOR SHALL COORDINATE FINISHES WITH INSTALLATION OF TOILET ACCESSORIES, PLUMBING FIXTURES, DOOR BUCKS, THRESHOLDS, LIGHTING FIXTURES, HVAC GRILLES, CASEWORK, FURNITURE, ETC.
7. CONTRACTOR SHALL COORDINATE FLOOR TRANSITIONS BETWEEN FINISH MATERIALS AND CHANGES IN ELEVATION TO BE BARRIER-FREE ADA COMPLIANT.
8. CONTRACTOR SHALL FURNISH AND INSTALL TRANSITION STRIP AT ALL CHANGES BETWEEN FLOOR FINISH MATERIALS AS REQUIRED TO BE BARRIER-FREE ADA COMPLIANT.
9. CONTRACTOR SHALL FURNISH AND INSTALL ADA COMPLIANT MARBLE THRESHOLD AT ALL TOILET ROOMS AS REQUIRED TO ACCOMMODATE FINISH FLOOR MATERIAL CHANGES. REFER TO INTERIOR FINISH SCHEDULE AND DETAILS FOR ROOM FINISH LOCATIONS.
10. CONTRACTOR SHALL COORDINATE INSTALLATION OF FINISHES WITH RESPECTIVE TRADES TO ACCOMMODATE THE INSTALLATION OF PLUMBING, MECHANICAL, LIGHTING, ETC. REFER TO REFLECTED CEILING PLAN, CEILING TYPE SCHEDULE AND DETAILS.
11. ALL FLOOR FINISH MATERIALS SHALL BE OF SLIP-RESISTANT SURFACE.
12. COLORS, PATTERNS AND TEXTURES OF ALL FINISH MATERIALS SHALL BE SELECTED BY OWNER. PROVIDE SAMPLES AS REQUIRED.
13. ALL ACCESS PANELS, HATCHES, GYPSUM BOARD SOFFITS, BULKHEADS, HVAC GRILLES AND REGISTERS SHALL BE PAINTED TO MATCH CEILING FINISHES UNLESS INDICATED OTHERWISE.
14. ALL FLOOR FINISHES SHALL BE CONTINUOUS UNDERNEATH BUILT-IN FURNITURE AND CASEWORK. INFORMATION SHOWN ON PLANS IS FOR DIAGRAMMATIC PURPOSES ONLY AND FLOOR FINISHES UNDER CASEWORK MAY NOT BE SHOWN FOR CLARITY.
15. ALL FLOOR PENETRATIONS ARE REQUIRED TO BE SEALED WITH LISTED/RATED MATERIAL TO MAINTAIN **2-HOUR** FIRE RATING OF THE FLOOR SLAB.
16. INSTALL PVC MOLDED CORNER GUARDS AT ALL EXTERIOR CORNERS OF METAL STUD AND GWB WALLS, COLOR TO MATCH WALL.
17. ALL DOOR FRAMES WITHIN AREAS OF WORK TO BE PAINTED, COLOR SELECTED BY OWNER.
18. CONTRACTOR SHALL PREP ALL SUBFLOORS AS REQUIRED TO ACCEPT NEW FLOOR FINISHES.
19. AT AREAS WHERE EXISTING FLOOR FINISHES ARE TO REMAIN, DEMO ONLY AS MUCH AS REQUIRED TO ACCOMODATE NEW WORK. PROVIDE AND INSTALL NEW WALL BASE AT THESE LOCATIONS TO MATCH EXISTING ADJACENT WALL BASE.

FINISH CLASSIFICATION NOTES:

ALL FINISHES IN REQUIRED VERTICAL EXITS AND PASSAGEWAYS SHALL BE OF CLASS A MATERIALS.

ALL FINISHES IN PASSAGEWAYS WHICH ARE NOT PART OF AN EXIT, INTERIOR FINISHES SHALL BE CLASS A or B.

ALL FINISHES IN OFFICES OR ENCLOSED SPACES SHALL BE OF CLASS C MATERIALS. CLASS D MATERIALS NOT PERMITTED.

WHEN AN APPROVED SPRINKLER SYSTEM IS PROVIDED THROUGH OUT THE BUILDING, CLASS B INTERIOR FINISH MAY BE USED IN LOCATIONS WHERE CLASS A IS REQUIRED, AND CLASS C MAY BE USED IN LOCATIONS WHERE CLASS B IS REQUIRED.

GLAZING NOTES:

ALL GLAZING SHALL BE SIZED, CONSTRUCTED, AND TREATED OR COMBINED WITH OTHER MATERIALS AS TO MINIMIZE PERSONAL INJURY. TEMPERED SAFETY GLAZING SHALL BE INSTALLED IN ALL LOCATIONS WITHIN 18" OR LESS FROM FINISH FLOOR, SIDE LITES ADJACENT TO SWING DOORS AND WINDOW WALL ASSEMBLIES, TYPICAL.

NOTE:

WHENEVER BRAND NAMES OR SPECIFIC PRODUCT SYSTEMS ARE INDICATED IT SHALL BE CLEARLY UNDERSTOOD THAT SUCH IDENTIFICATION IS FOR THE PURPOSE OF ILLUSTRATING THE TYPE OF PRODUCT AND DEGREE OF QUALITY DESIRED. SUCH IDENTIFICATION IN NO WAY PRECLUDES THE CONTRACTOR FROM USING PRODUCTS OF OTHER MANUFACTURERS WHICH CAN BE SHOWN IN ADVANCE TO BE OF LIKE KIND AND OF EQUAL QUALITY.

PAINTING NOTES:

1. ALL EXPOSED ROOF DECK, STRUCTURE, AND DUCTWORK WITHIN AREA OF WORK, SHALL BE PAINTED AS PART OF THE BASE BID.

SIGNAGE NOTE:

NEW SIGNAGE TO BE PROVIDED AND INSTALLED BY GC FOR ALL NEW AND REPURPOSED SPACES. REFER TO SPECIFICATION SECTION 101419 AND 'ADA ROOM SIGNAGE' INFORMATION ON THIS SHEET. COORDINATE ALL SIGNAGE REQUIREMENTS WITH OWNER.

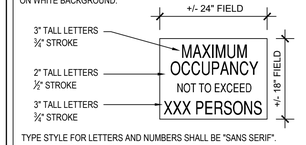
NOTE: REFER TO SPECIFICATION SELECTION 012300 FOR SPACES LISTED AS ALTERNATES.

INTERIOR FINISH SCHEDULE

ROOM NO.		SUB-FLOOR	FLOOR FINISH	BASE	BASE HEIGHT	NORTH WALL	EAST WALL	SOUTH WALL	WEST WALL	SIGNAGE SET	NOTES	CEILING	CEILING HEIGHT	ROOM NO.
E	ELEVATOR									1				E
FIRST FLOOR														
A101	ELEVATOR LOBBY (LOWER)	CONC	WO/RBF	BK/PWT	-	PWT/ GWB	PWT/ GWB/BK	PWT/ GWB/BK	BK	1		ACT	11'-8 ½"	A101
A102	ELEVATOR LOBBY (UPPER)	CONC	LVT	PWT	-	PWT/ GWB	PWT/ GWB	PWT/ GWB	PWT/ GWB	1		ACT	7'-5"	A102
A103	NEW CORRIDOR	CONC	LVT	PWT	-	PWT/ GWB	-	PWT/ GWB	PWT/ GWB	-		ACT	7'-5"	A103
A104	SGI	CONC	ETR	VB	4"	GWB	GWB	GWB	GWB	4		ETR	ETR	A104
A105	CLOSET	CONC	RFT	VB	4"	GWB	GWB	GWB	GWB	-		ACT	7'-5"	A105
B01	CAFETERIA	CONC	LVT	PWT	-	PWT/ GWB	PWT/ GWB	PWT/ GWB	PWT/ GWB	5	ALLOW FOR (2) PAINT COLOR SCHEME AT WALLS. COLORS TO BE SELECTED BY ARCHITECT	CAN/ OTA/ ACT/ GWBC	VARIES	B01
B02	SERVERY / KITCHEN	CONC	EPXF	EPXC	4"	EPXW	EPXW	EPXW	EPXW	1	ALLOW FOR (2) COLOR SCHEME AT WALLS. COLORS TO BE SELECTED BY ARCHITECT	ACT	9'-2"	B02
B03	ELECTRICAL ROOM	CONC	EPXF	EPXC	4"	GWB	GWB	GWB	GWB	1		OTA	ETR	B03
B04	UTILITY CLOSET	CONC	EPXF	EPXC	4"	GWB	GWB	GWB	GWB	1		ACT	9'-2"	B04
B05	DRY STORAGE	CONC	RFT	RBB	4"	EPXW	EPXW	EPXW	EPXW	1	PATCH AND REPAIR EXISTING PLASTER ON WALLS, PAINT TO MATCH ADJACENT. CLEAN/PREP EXISTING TERRAZZO FLOOR TO REMAIN AND PORTION OF REMOVED WOOD FLOORING AS REQUIRED FOR NEW CONTINUOUS FINISH FLOOR AND FLUSH TRANSITION.	ACT	11'-0"	B05
C01	VESTIBULE	CONC	LVT	VB	4"	GWB	GWB	GWB	GWB	-		PLAS/ CLD	VARIES	C01
C02	MEDIA CENTER	CONC	LVT/CPT	VB	4"	GWB	GWB	GWB	GWB	1	ALLOW FOR (2) PAINT COLOR SCHEME AT WALLS. COLORS TO BE SELECTED BY ARCHITECT	PLAS/ CLD/ ACT/ GWBC	VARIES	C02
C03	FLEX AREA	CONC	LVT/CPT	VB	4"	GWB	GWB	GWB	GWB	-	ALLOW FOR (2) PAINT COLOR SCHEME AT WALLS. COLORS TO BE SELECTED BY ARCHITECT	ACT	VARIES	C03
C04	READING	CONC	LVT/CPT	VB	4"	GWB	GWB	GWB	GWB	-	ALLOW FOR (2) PAINT COLOR SCHEME AT WALLS. COLORS TO BE SELECTED BY ARCHITECT	ACT/ CLD	VARIES	C04
C05	LIBRARY	CONC	LVT/CPT	VB	4"	GWB	GWB	GWB	GWB	-	ALLOW FOR (2) PAINT COLOR SCHEME AT WALLS. COLORS TO BE SELECTED BY ARCHITECT	ACT/ CLD	VARIES	C05
C06	LIBRARY STORAGE	CONC	RFT	VB	4"	GWB	GWB	GWB	GWB	1		PLAS	7'-11"	C06
C07	STORAGE	CONC	RFT	VB	4"	PNT	PNT	GWB	PNT	1		ETR	7'-11"	C07
C08	CLOSET	CONC	RFT	VB	4"	GWB	GWB	GWB	GWB	-		OTA	ETR	C08
C09	BREAK OUT ROOM	CONC	LVT	VB	4"	GWB	GWB	GWB	GWB	4		PLAS/ CLD/ ACT	VARIES	C09
C10	ART	CONC	LVT	VB	4"	GWB	GWB	GWB	GWB	4	ALLOW FOR (2) PAINT COLOR SCHEME AT WALLS. COLORS TO BE SELECTED BY ARCHITECT	PLAS/ CLD/ ACT	VARIES	C10
C11	ART STORAGE	CONC	RFT	VB	4"	GWB	GWB	GWB	GWB	1		PLAS	8'-0 ¾"	C11
STAIR	EXISTING STAIR - WORK AREA 'C'	CONC	RBF	RBB	4"	ETR	ETR	ETR/ GWB	ETR	-	RUBBER FLOORING AND BASE AT NEW RAMP AND LANDING ONLY. EXIST. FINISHES TO REMAIN THIS AREA	ETR	ETR	STAIR
SECOND FLOOR														
A201	ELEVATOR LOBBY	CONC	LVT	PWT	-	PWT/ GWB	PWT/ GWB	PWT/ GWB	BK	1		ACT	10'-0"	A201
A202	COPY ROOM	CONC	RFT	VB	4"	GWB	GWB	GWB	GWB	1		ACT	10'-0"	A202
THIRD FLOOR														
A301	ELEVATOR LOBBY	CONC	LVT	PWT	-	PWT/ GWB	PWT/ GWB	PWT/ GWB	PWT/ GWB	1		ACT	9'-8"	A301
A302	STORAGE	CONC	RFT	VB	4"	GWB	GWB	GWB	GWB	1		ACT	9'-8"	A302
A303	STAIR	CONC	ETR	PWT	-	ETR	PWT/ GWB	ETR	ETR	3		ETR	ETR	A303
A304	NEW CORRIDOR 'A'	CONC	LVT	PWT/ BK	-	PWT/ GWB/ BK	PWT/ GWB	PWT/ GWB/ BK	PWT/ GWB	-		ACT	VARIES	A304
A305	NEW CORRIDOR 'B'	CONC	LVT/RBF	PWT/ BK	-	BK	PWT/ GWB	PWT/ GWB	PWT/ GWB/ BK	-		ACT/ GWBC	VARIES	A305
A306	RAMP	PSF	RBF	PWT	-	PWT/ GWB	-	PWT/ GWB	PWT/ GWB	-		ACT	8'-0"	A306
A307	CLOSET	WSF	ETR	VB	4"	ETR	ETR	GWB	ETR	-		ETR	ETR	A307
28	CLASSROOM	WSF	ETR	VB	4"	GWB	ETR	ETR	ETR	4		ETR	ETR	28
FOURTH FLOOR														
A401	ELEVATOR LOBBY	CONC	LVT	PWT	-	PWT/ GWB	PWT/ GWB	PWT/ GWB	PWT/ GWB	1		ACT	8'-0"	A401
A402	STORAGE	CONC	RFT	VB	4"	GWB	GWB	GWB	GWB	4		ACT	8'-8"	A402
A403	ELECTRICAL CLOSET	CONC	RFT	VB	4"	GWB	GWB	GWB	GWB	1		OTA	-	A403

MAX. OCCUPANCY SIGNAGE

MAXIMUM OCCUPANCY SIGNAGE SHALL BE PROVIDED FOR PLACES OF ASSEMBLY. THE SIGNS SHALL RESTRICT THE NUMBER OF OCCUPANTS BASED ON EGRESS CALCULATIONS. SIGNS SHALL READ IN RED LETTERS ON WHITE BACKGROUND:

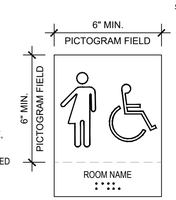


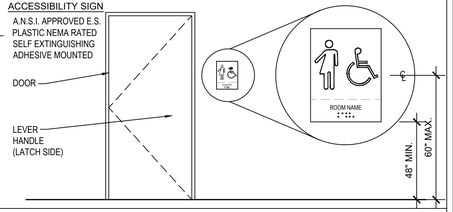
TYPE STYLE FOR LETTERS AND NUMBERS SHALL BE "SANS SERIF". CHARACTERS SHALL NOT BE ITALIC, OBLIQUE, SCRIPT, HIGHLY DECORATIVE, OR OF OTHER UNUSUAL FORMS.

SIGNAGE NOTES:
1. SIGNAGE SHALL CONFORM WITH LOCAL AND STATE CODES.
2. CONTRACTOR SHALL FURNISH AND INSTALL ALL REQUIRED SIGNAGE.
3. OCCUPANCY NUMBERS TO BE PROVIDED DURING SHOP DRAWING PHASE.

ADA ROOM SIGNAGE

1. LETTERS AND NUMERALS MUST BE RAISED 1/32" FROM SIGN SURFACE.
2. CHARACTER HEIGHT MUST BE AT LEAST 5/8" BUT NOT EXCEED 2".
3. TYPE STYLE FOR LETTERS AND NUMBERS SHALL BE "SANS SERIF". CHARACTERS SHALL NOT BE ITALIC, OBLIQUE, SCRIPT, HIGHLY DECORATIVE. OR OF OTHER UNUSUAL FORMS.
4. WORDS AND NUMBERS MUST BE CONVERTED INTO GRADE 2 BRAILLE, AND BE APPLIED TO SIGN.
5. PICTOGRAMS SHALL BE ACCOMPANIED BY THE EQUIVALENT VERBAL DESCRIPTION PLACED DIRECTLY BELOW PICTOGRAM.





SIGNAGE NOTES:
1. ALL SIGNAGE SHALL CONFORM WITH THE ACCESSIBLE AND USABLE BUILDINGS AND FACILITIES GUIDELINES IN ACCORDANCE WITH ICC/ANSI A117.1-2009.
2. CONTRACTOR SHALL FURNISH AND INSTALL ALL REQUIRED SIGNAGE. COORDINATE ROOM NAMES AND NUMBERS WITH OWNER'S REQUIREMENTS, TYPICAL.
3. SEE SPECIFICATION SECTION 101419 FOR SIGNAGE SCHEDULE AND ADDITIONAL INFORMATION.

Date	1/10/20
Checked	DLF
Drawn	CTB

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Revisions:

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1	ISSUE TO BID 11/23/20

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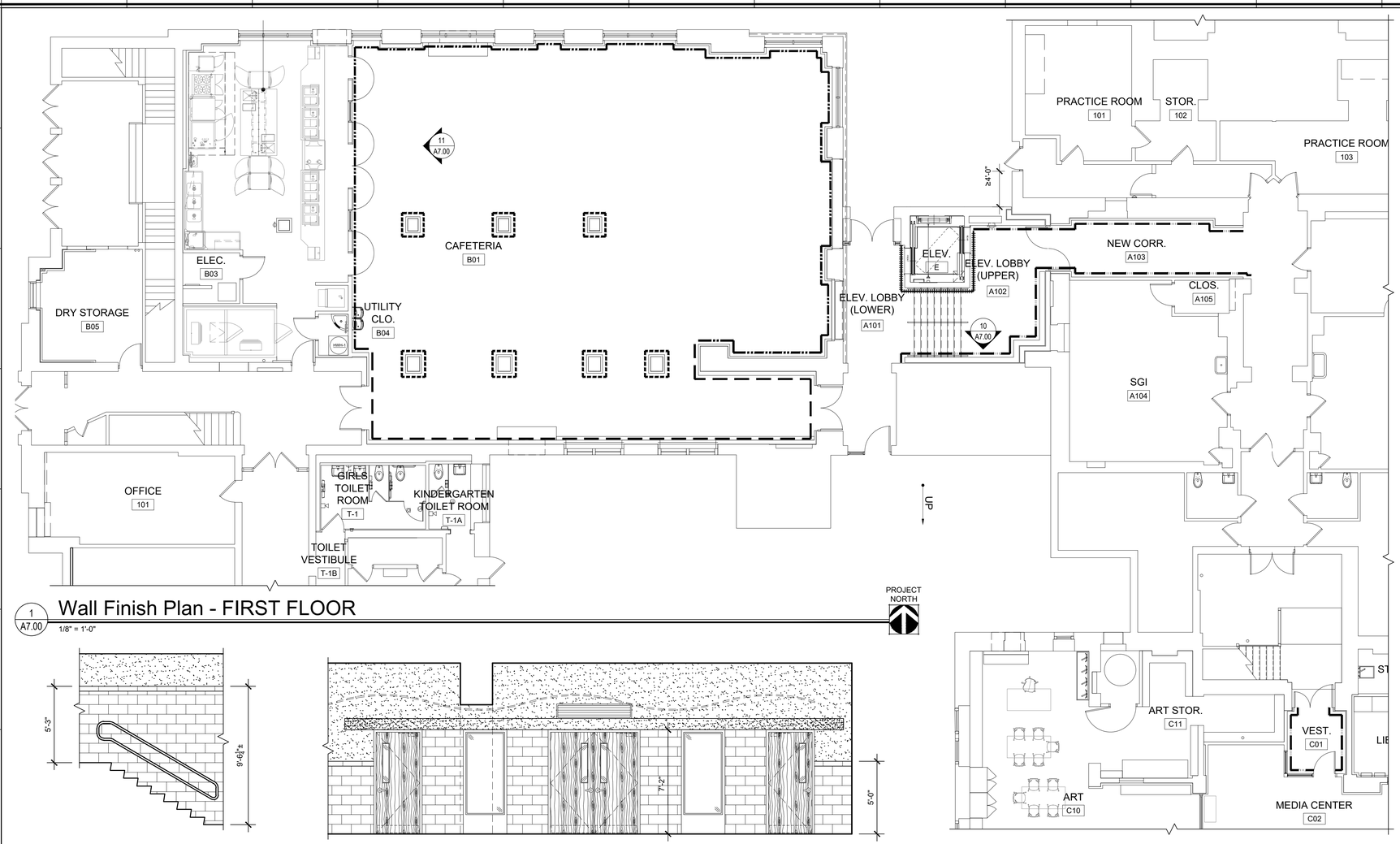
NYSED PROJECT # 66-07-01-03-0-005-020

INTERIOR FINISH SCHEDULE
2019 BOND REFERENDUM
CHATSWORTH AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

Job No. 4.1092.72.03

File No. 10927203A620

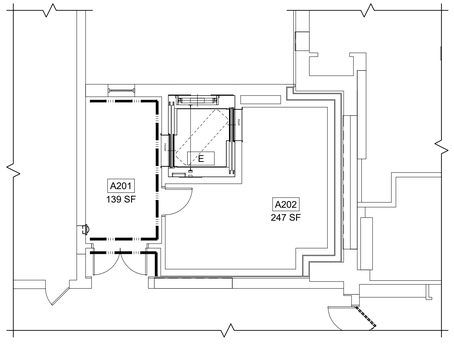
A6.20



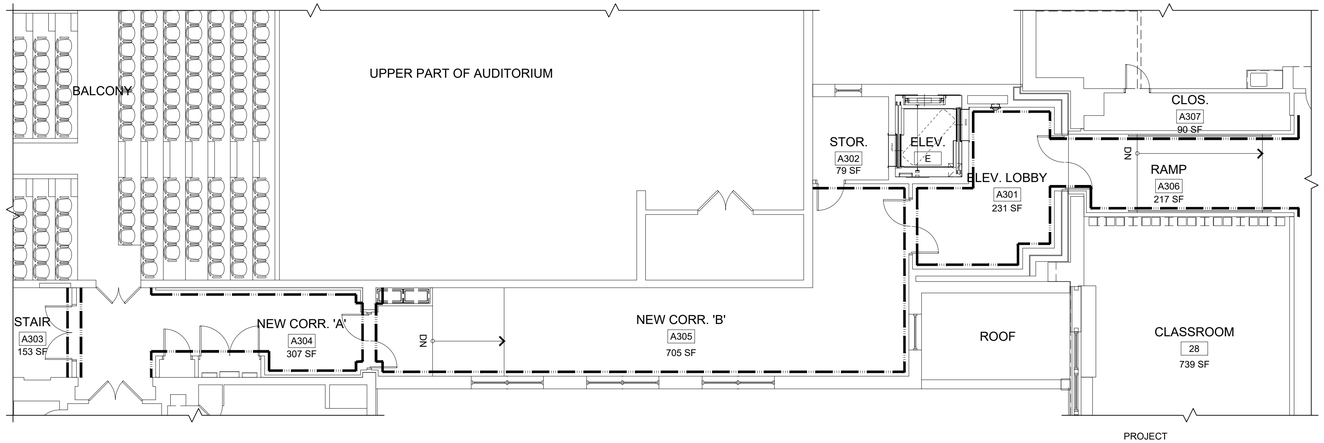
1 A7.00 **Wall Finish Plan - FIRST FLOOR**
1/8" = 1'-0"

10 A7.00 **Wall Title Detail**
1/4" = 1'-0"

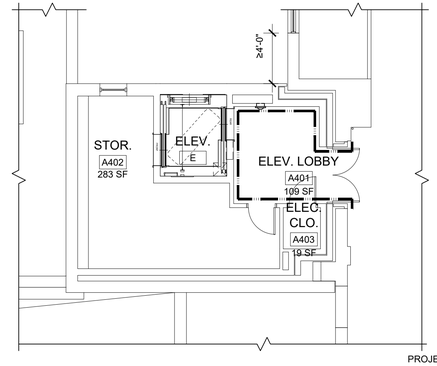
11 A7.00 **Wall Title Elevation**
1/4" = 1'-0"



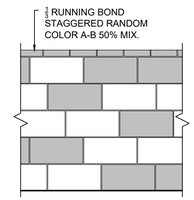
2 A7.00 **Wall Finish Plan - SECOND FL.**
1/8" = 1'-0"
PROJECT NORTH



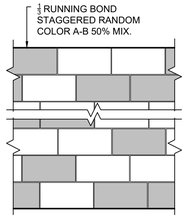
3 A7.00 **Wall Finish Plan - THIRD FLOOR**
1/8" = 1'-0"
PROJECT NORTH



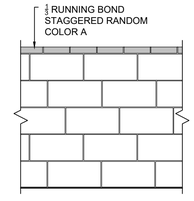
4 A7.00 **Wall Finish Plan - FOURTH FL.**
1/8" = 1'-0"
PROJECT NORTH


RUNNING BOND
STAGGERED RANDOM
COLOR A-B 50% MIX.

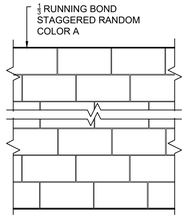
5 A7.00 **Wall Tile**
3/8" = 1'-0"
WALL FINISH LEGEND TYPE


RUNNING BOND
STAGGERED RANDOM
COLOR A-B 50% MIX.

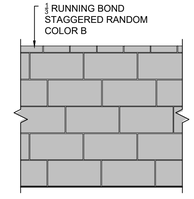
6 A7.00 **Wall Tile**
3/8" = 1'-0"
WALL FINISH LEGEND TYPE


RUNNING BOND
STAGGERED RANDOM
COLOR A

7 A7.00 **Wall Tile**
3/8" = 1'-0"
WALL FINISH LEGEND TYPE


RUNNING BOND
STAGGERED RANDOM
COLOR A

8 A7.00 **Wall Tile**
3/8" = 1'-0"
WALL FINISH LEGEND TYPE


RUNNING BOND
STAGGERED RANDOM
COLOR B

9 A7.00 **Wall Tile**
3/8" = 1'-0"
WALL FINISH LEGEND TYPE

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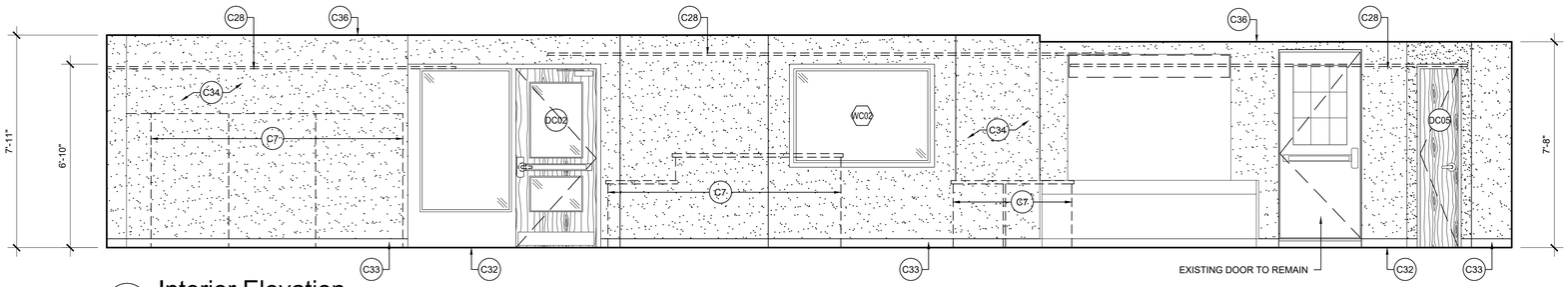
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NYSED PROJECT # 66-07-01-03-0-005-020

WALL FINISH PLAN
2019 BOND REFERENDUM
CHATSWORTH AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

Job No. 4.1092.72.03
File No. 10927203A700

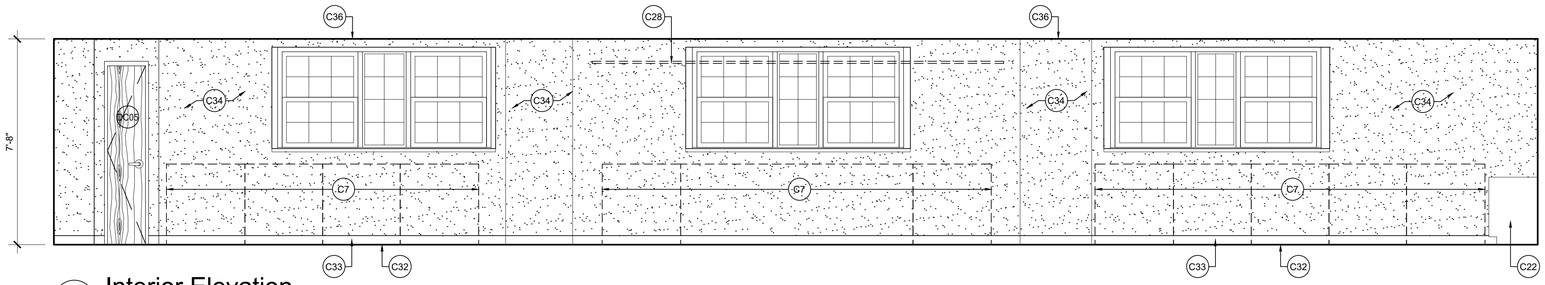
A7.00



1 A7.20 **Interior Elevation**

3/8" = 1'-0"

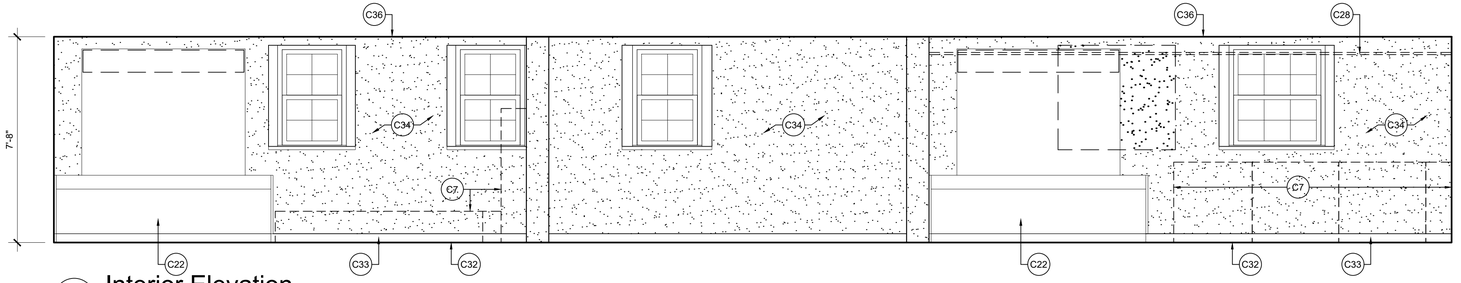
MEDIA CENTER C02



2 A7.20 **Interior Elevation**

3/8" = 1'-0"

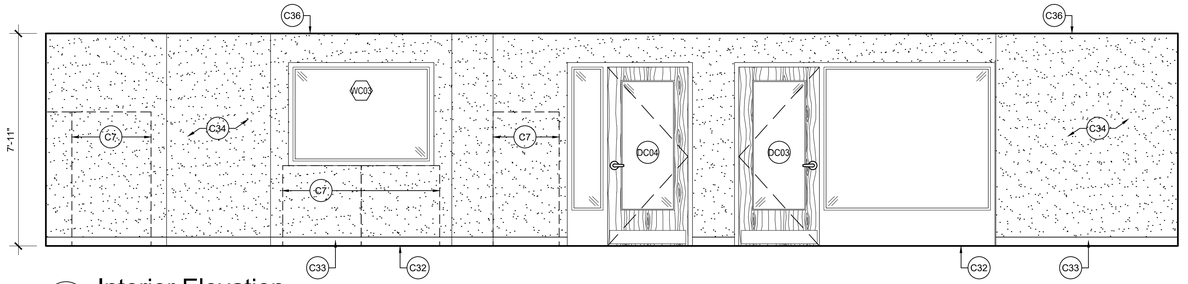
MEDIA CENTER C02



3 A7.20 **Interior Elevation**

3/8" = 1'-0"

MEDIA CENTER C02



4 A7.20 **Interior Elevation**

3/8" = 1'-0"

MEDIA CENTER C02

REFER TO GENERAL NOTES ON SHEET **A2.00**

(X#) SYMBOL INDICATES CONSTRUCTION KEY NOTE

REFER TO CONSTRUCTION KEY NOTES ON SHEET **A2.00**

Date	1/10/20
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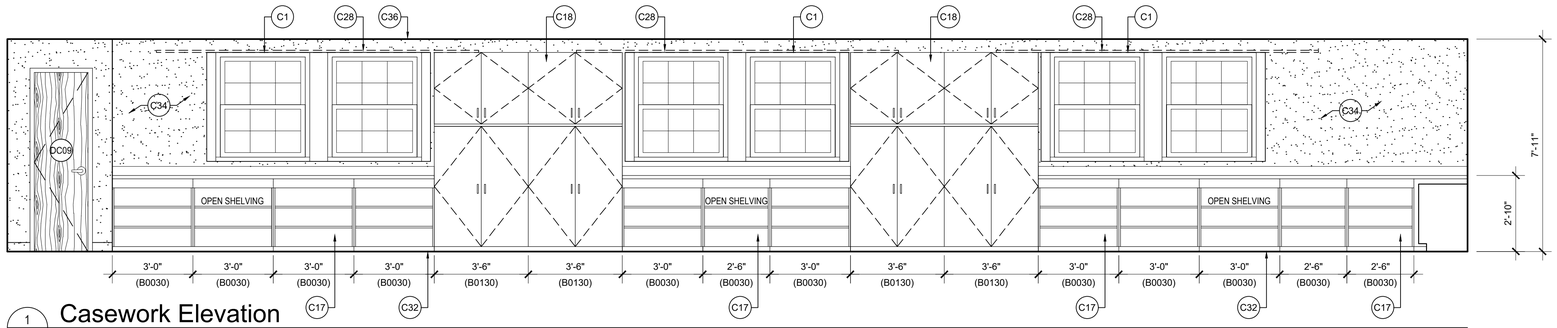
INTERIOR ELEVATIONS

2019 BOND REFERENDUM
CHATSWORTH AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

Job No. 4.1092.72.03

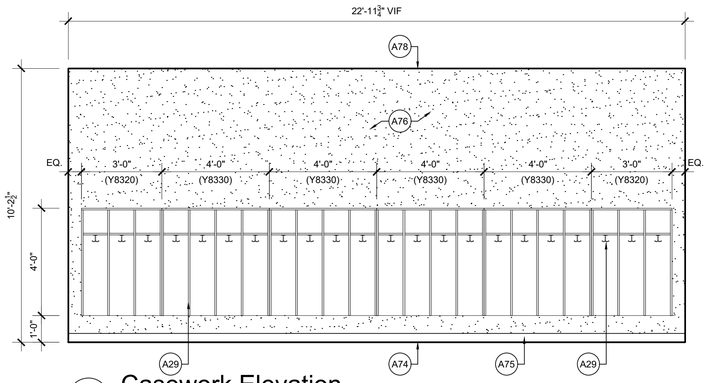
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A7.20



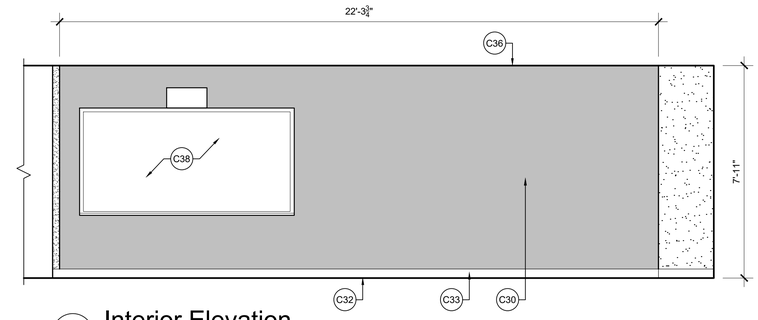
1 A7.21 **Casework Elevation**
3/8" = 1'-0"

ART ROOM C10



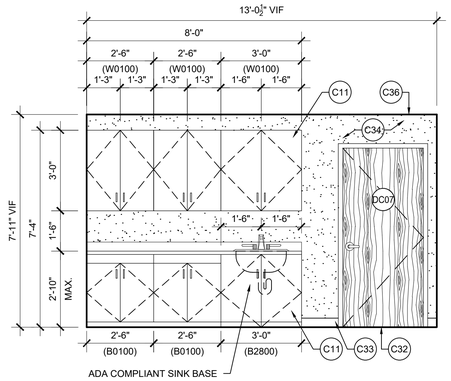
2 A7.21 **Casework Elevation**
3/8" = 1'-0"

CLASSROOM 28



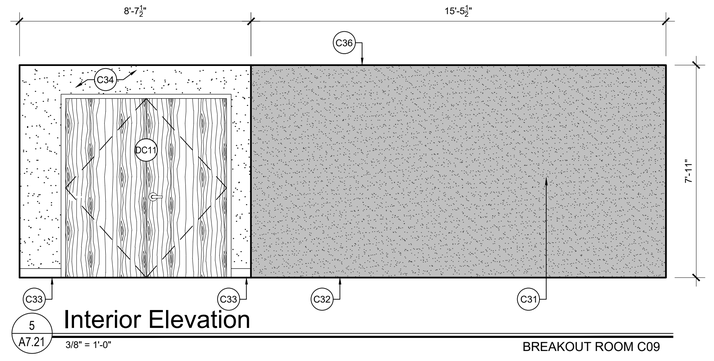
4 A7.21 **Interior Elevation**
3/8" = 1'-0"

ART ROOM C10



3 A7.21 **Casework Elevation**
3/8" = 1'-0"

LIBRARY STORAGE C06



5 A7.21 **Interior Elevation**
3/8" = 1'-0"

BREAKOUT ROOM C09

REFER TO GENERAL NOTES ON SHEET **A2.00**

X# SYMBOL INDICATES CONSTRUCTION KEY NOTE

REFER TO CONSTRUCTION KEY NOTES ON SHEET **A2.00**

NYSED PROJECT # 66-07-01-03-0-005-020

Date	1/10/20
Checked	CTB
Drawn	KM

MICHAEL J. McGOVERN, R.A.
Title REGISTERED ARCHITECT
License No. 022257-1

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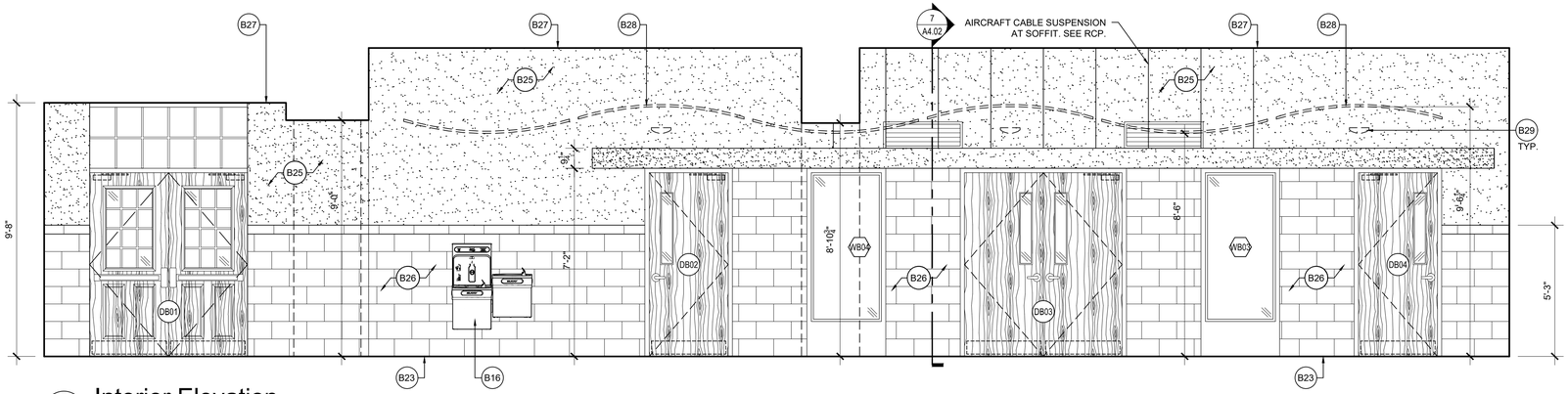
INTERIOR ELEVATIONS

2019 BOND REFERENDUM
CHATSWORTH AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

Job No. 4.1092.72.03

File No. 10927203A720

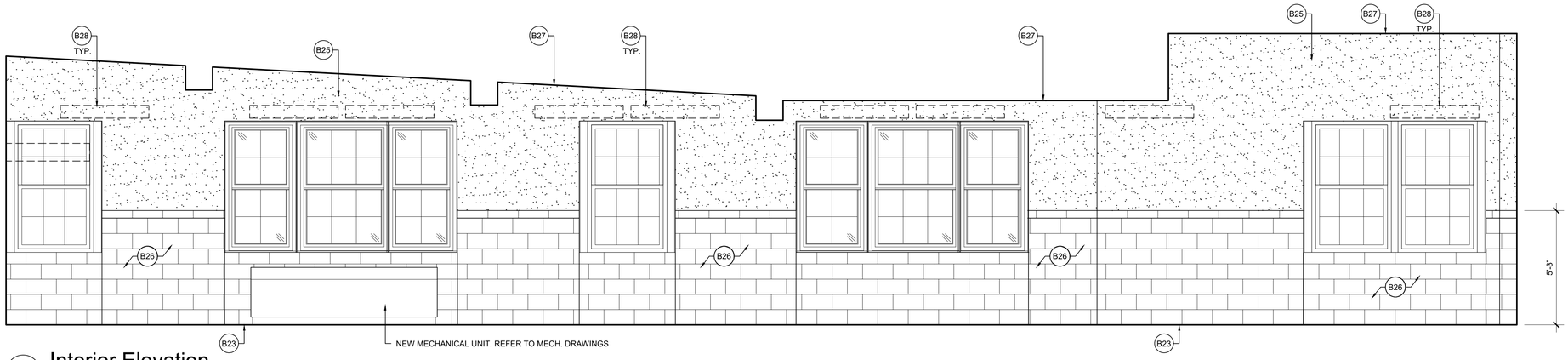
A7.21



1 A7.22 **Interior Elevation**

3/8" = 1'-0"

CAFETERIA B01



2 A7.22 **Interior Elevation**

3/8" = 1'-0"

CAFETERIA B01

REFER TO GENERAL NOTES ON SHEET **A2.00**

(X#) SYMBOL INDICATES CONSTRUCTION KEY NOTE

REFER TO CONSTRUCTION KEY NOTES ON SHEET **A2.00**

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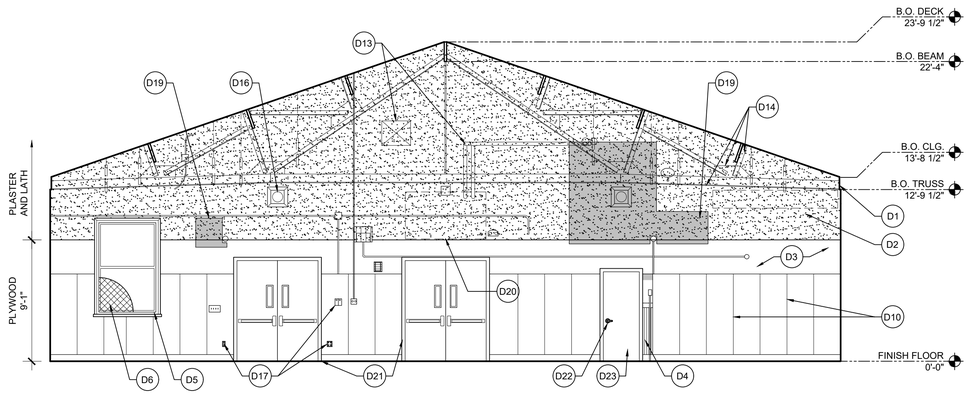
INTERIOR ELEVATIONS

2019 BOND REFERENDUM
CHATSWORTH AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

Job No. 4.1092.72.03

File No. 10927203A720

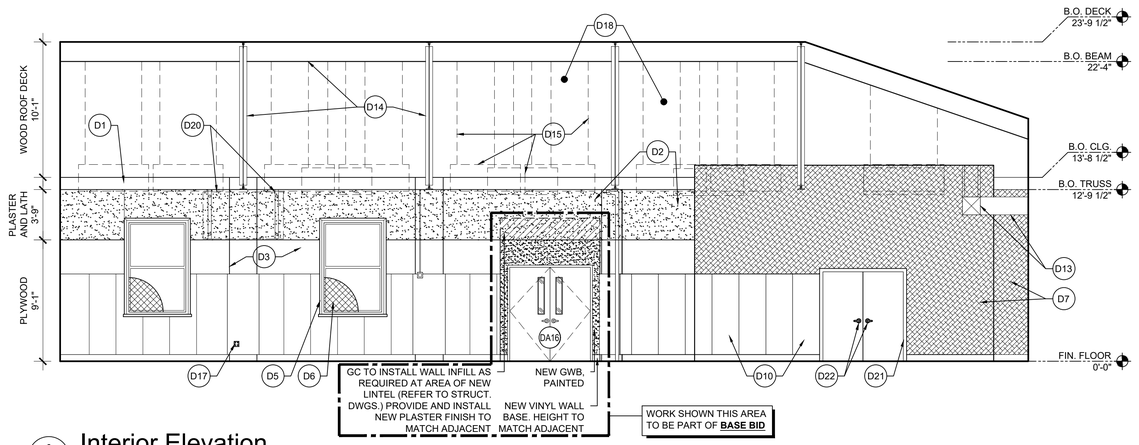
A7.22



1 A7.30 **Interior Elevation**

3/16" = 1'-0"

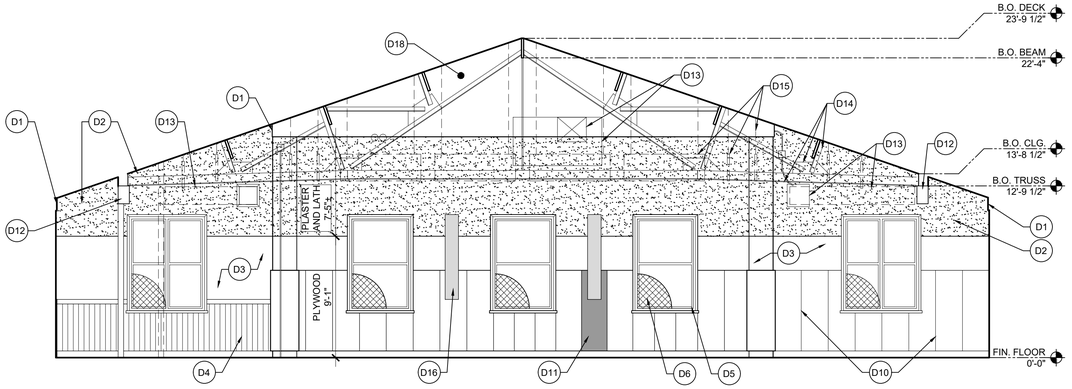
WORK AREA 'D'



2 A7.30 **Interior Elevation**

3/16" = 1'-0"

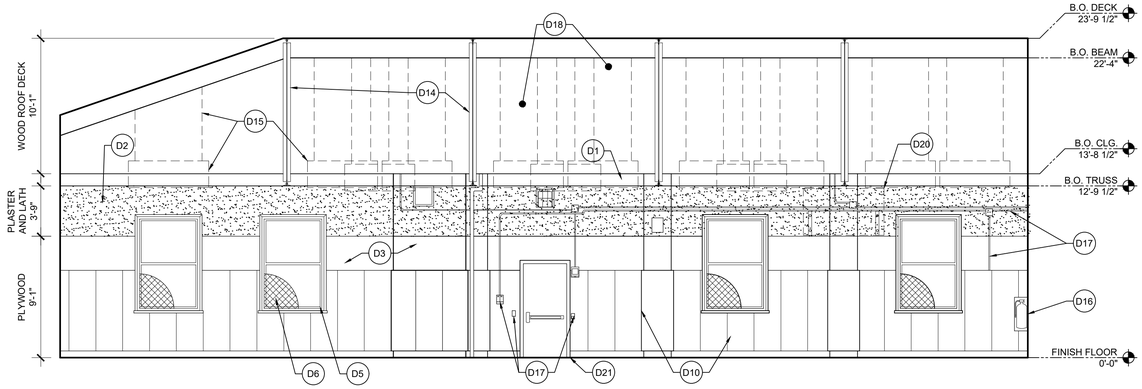
WORK AREA 'D'



3 A7.30 **Interior Elevation**

3/16" = 1'-0"

WORK AREA 'D'



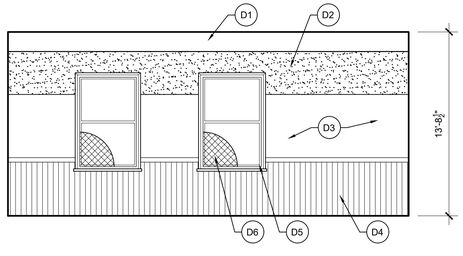
4 A7.30 **Interior Elevation**

3/16" = 1'-0"

WORK AREA 'D'

ALTERNATE
ALL WORK ASSOCIATED WITH WORK AREA 'D'. REFER TO SPECIFICATION SECTION 012300

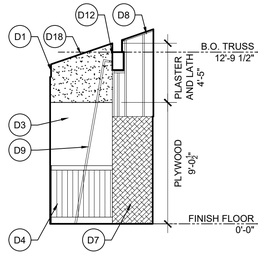
NOTE: GC TO ALLOW FOR A (4) COLOR PAINT SCHEME WITHIN WORK AREA 'D'. COLORS AND LOCATIONS TO BE SELECTED BY OWNER / ARCHITECT



5 A7.30 **Interior Elevation**

3/16" = 1'-0"

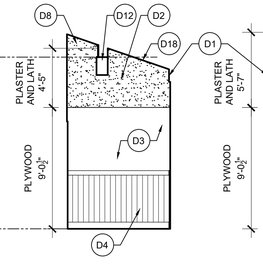
WORK AREA 'D'



6 A7.30 **Interior Elevation**

3/16" = 1'-0"

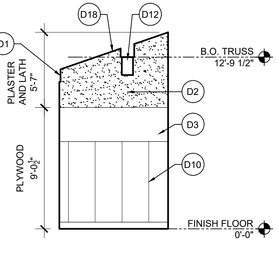
WORK AREA 'D'



7 A7.30 **Interior Elevation**

3/16" = 1'-0"

WORK AREA 'D'



8 A7.30 **Interior Elevation**

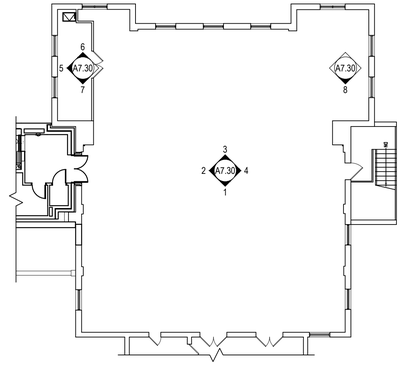
3/16" = 1'-0"

WORK AREA 'D'

Work Area 'D' Key Notes

(#) SYMBOL INDICATES CONSTRUCTION KEY NOTE

1. EXISTING WOOD TRIM TO BE PREPARED AND PAINTED, TYP.
2. EXISTING PLASTER AND LATHE. GC TO CLEAN AND REMOVE ALL LOOSE OR UNSTABLE MATERIAL AND THEN TO REPAIR THE AREA TO MATCH EXISTING USING A TYPICAL THREE COAT PLASTER PROCESS. IN ADDITION TO AREAS SHOWN THE GC SHALL INCLUDE IN BASE BID AN ADDITIONAL 25% OF ENTIRE PLASTER AREA TO BE REMOVED AND BUILT BACK UP FROM THE LATHE SUBSTRATE. PREPARE AND PAINT ALL PLASTER, TYP.
3. EXISTING PLYWOOD OR EQUAL PROTECTION BOARD TO REMAIN, CG TO PREPARE AND PAINT, TYP.
4. EXISTING WOOD WAINSCOT TO BE PREPARED AND PAINTED, TYP.
5. EXISTING WOOD WINDOW TRIM SYSTEM TO BE PREPARED AND PAINTED, TYP.
6. EXISTING WIRE WINDOW GUARD TO BE REMOVED, PREPARED, PAINTED AND REINSTALLED, TYP.
7. EXISTING HOMOSOTE OR EQUAL WALL SHEATHING TO BE PREPARED AND PAINTED, TYP.
8. EXISTING EXPOSED METAL STUDS TO BE PREPARED AND PAINTED, TYP.
9. EXISTING METAL LADDER TO REMAIN. PROTECT DURING CONSTRUCTION
10. EXISTING PADDED WALL PROTECTION SYSTEM TO REMAIN. PROTECT DURING CONSTRUCTION
11. EXISTING PADDED WALL PROTECTION BOARD TO BE REINSTALLED, ANCHOR METHOD SHALL BE SIMILAR TO ADJACENT EXISTING PROTECTION BOARDS, V.I.F.
12. EXISTING PLASTER WRAPPED BEAM TO BE REPAIRED TO LIKE NEW AND PAINTED, TYP.
13. EXISTING MECHANICAL DUCTWORK AND ACCESSORIES. CONTRACTOR SHALL COORDINATE ALL WORK AND PROTECT MECHANICAL EQUIPMENT. GC TO PREPARE AND PAINT ALL EXPOSED DUCTWORK, TYP.
14. EXISTING STEEL FRAMED ROOF STRUCTURE TO BE PREPARED AND PAINTED, V.I.F. LAYOUT. ADJACENT EQUIPMENT TO BE PROTECTED
15. ALL EXISTING SOUND BATTENS INCLUDING THE HANGING DEVICE ARE TO BE REMOVED, CLEANED AND REINSTALLED, TYP.
16. EXISTING MISCELLANEOUS MOUNTED OR SECURED CONDUIT, DEVICE, OR EQUIPMENT IS TO REMAIN AND BE PROTECTED WHILE SCHEDULED WORK IS BEING COMPLETED, U.O.N., TYP. PREPARE AND PAINT ALL CONDUIT AND PIPES WITHIN WORK AREA, TYP.
17. EXISTING CONDUIT, JUNCTION BOXES, RECEPTACLES, SWITCHES AND ACCESSORIES ARE TO BE CLEANED AND PAINTED ACCORDINGLY, FACE PLATES THAT ARE BROKEN ARE TO BE REPLACED WITH A STAINLESS STEEL EQUIVALENT, TYP.
18. EXISTING BEAD BOARD WOOD CEILING TO BE PREPARED AND PAINTED, TYP.
19. EXISTING PLYWOOD PROTECTION BOARD IS TO BE REMOVED, THE PLASTER SURFACE UNDERNEATH IS TO BE COMPLETELY RESTORED FROM THE BASE SCRATCH COAT TO THE FINISH COAT TO MATCH ADJACENT FINISH AND PAINTED, TYP.
20. EXISTING BASKETBALL STOP AND HOOP TO REMAIN. COORDINATE REPAIR AND PAINTING WITH EXISTING EQUIPMENT AND ACCESSORIES IN FIELD, V.I.F., UNLESS OTHERWISE NOTED.
21. BOTH SIDES OF EXISTING DOOR FRAMES ARE TO BE PREPARED AND PAINTED, U.O.N., TYP.
22. GC TO PROVIDE AND INSTALL NEW ADA COMPLIANT LEVER HARDWARE AT EXISTING DOORS. GC TO REMOVE EXISTING DOOR HARDWARE AS REQUIRED AND MODIFY DOOR PANEL AND FRAME AS REQUIRED. VERIFY DOOR HARDWARE INSTALLATION REQUIREMENTS IN THE FIELD. COORDINATE OPERATION AND LOCKING REQUIREMENTS WITH OWNER PRIOR TO PLACING ORDER. HARDWARE STYLE AND FINISH TO BE SELECTED BY OWNER FROM MANUFACTURERS FULL RANGE
23. EXISTING WOODEN DOOR TO BE PREPARED AND PAINTED



9 A7.30 **Key Plan**

1/16" = 1'-0"

WORK AREA 'D'

PROJECT NORTH

Date	1/10/20
Checked	CTB
Drawn	KM

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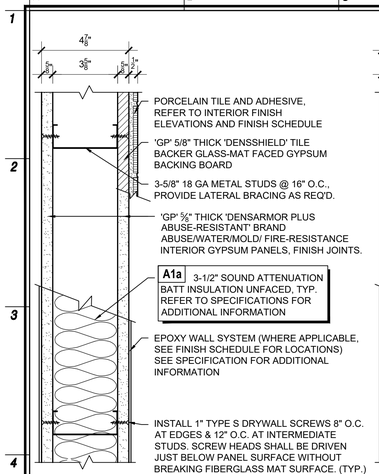
INTERIOR ELEVATIONS - SKY GYM

2019 BOND REFERENDUM
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MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

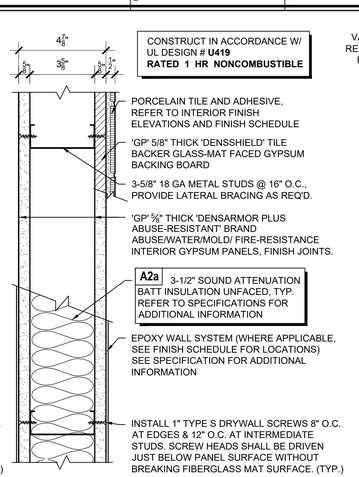
Job No. 4.1092.72.03

File No. 10927203A730

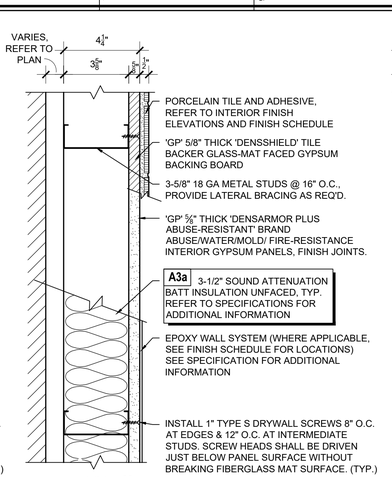
A7.30



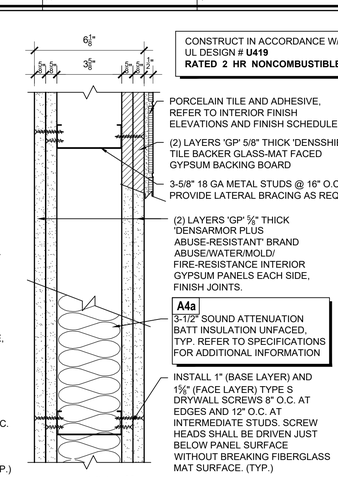
A1 Wall Type — 3" = 1'-0" — INTERIOR PARTITION



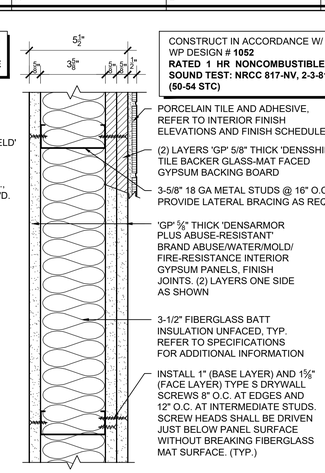
A2 Wall Type — 3" = 1'-0" — INTERIOR PARTITION



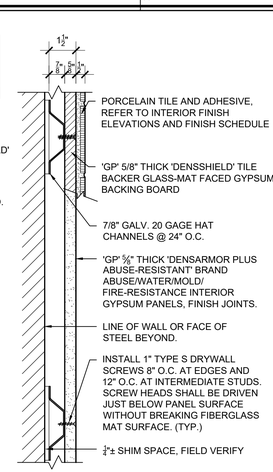
A3 Wall Type — 3" = 1'-0" — INTERIOR PARTITION



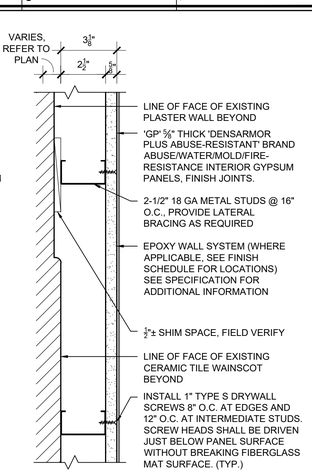
A4 Wall Type — 3" = 1'-0" — INTERIOR PARTITION



A5 Wall Type — 3" = 1'-0" — INTERIOR PARTITION



B1 Wall Type — 3" = 1'-0" — INTERIOR PARTITION



B2 Wall Type — 3" = 1'-0" — INTERIOR PARTITION

B3 Wall Type — 3" = 1'-0" — INTERIOR PARTITION

B4 Wall Type — 3" = 1'-0" — INTERIOR PARTITION

C1 Wall Type — 3" = 1'-0" — INTERIOR PARTITION

C2 Wall Type — 3" = 1'-0" — INTERIOR PARTITION

C3 Wall Type — 3" = 1'-0" — INTERIOR PARTITION

D1 Wall Type — 3" = 1'-0" — EXTERIOR PARTITION

D2 Wall Type — 3" = 1'-0" — EXTERIOR PARTITION

D3 Wall Type — 3" = 1'-0" — EXTERIOR PARTITION

D4 Wall Type — 3" = 1'-0" — EXTERIOR PARTITION

NOTE: STITCH-IN NEW BRICK AT ALL AREAS OF MASONRY INFILL

FINISHED SIDES OF PARTITIONS ARE SHOWN DIAGRAMMATICALLY FOR REFERENCE. SEE INTERIOR ELEVATIONS AND FINISH SCHEDULE FOR ADDITIONAL INFORMATION

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MICHAEL J. McGOVERN, R.A.
License No. 022257-1
The REGISTERED ARCHITECT

Revisions:
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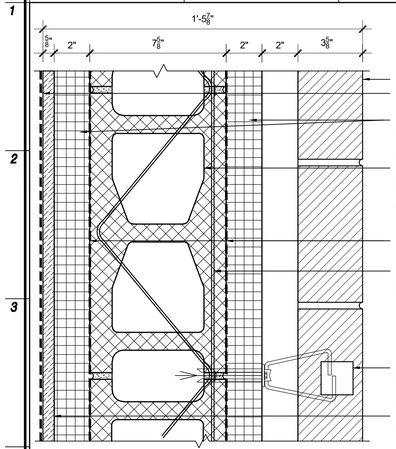
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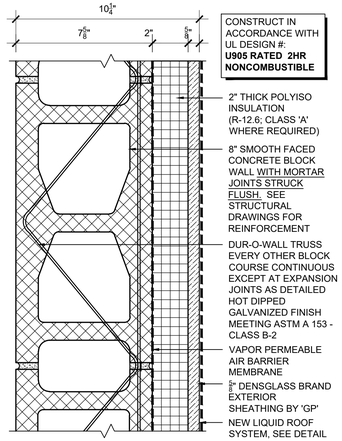
WALL PARTITION TYPES
2019 BOND REFERENDUM
CHATSWORTH AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

Job No. 4.1092.72.03
File No. 10927203A801

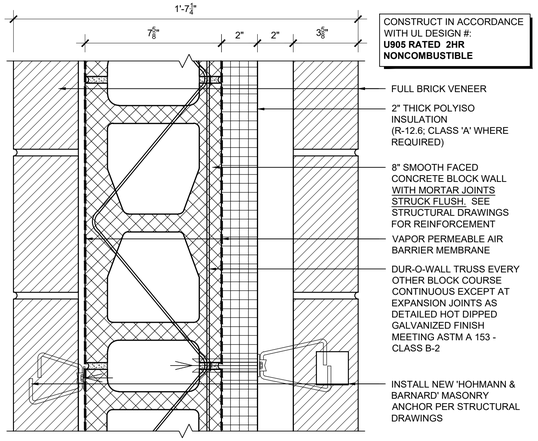
A8.01



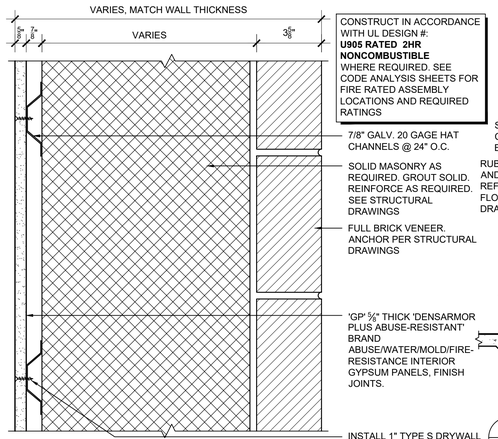
D5 Wall Type
3" = 1'-0" EXTERIOR PARTITION



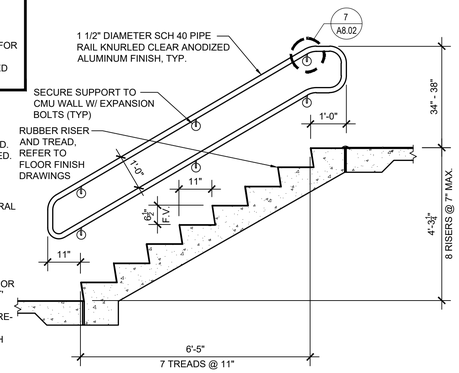
D6 Wall Type
3" = 1'-0" EXTERIOR PARTITION



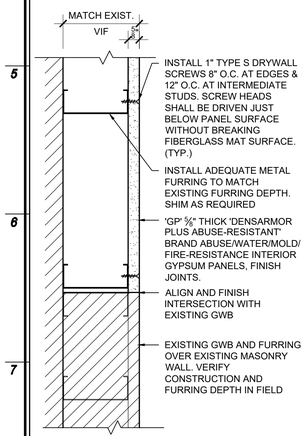
D7 Wall Type
3" = 1'-0" EXTERIOR PARTITION



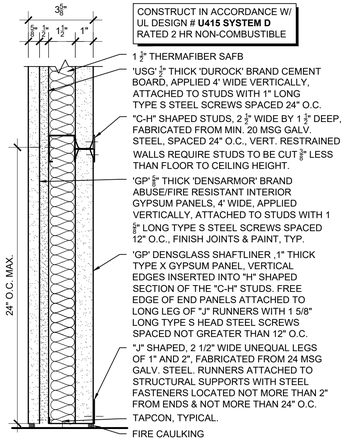
E1 Wall Type
3" = 1'-0" EXTERIOR / INTERIOR PARTITION



4 A8.02 Stair Detail
1/2" = 1'-0" Railing Wall Mounted

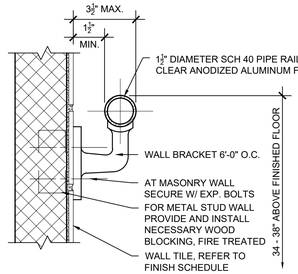


E2 Wall Type
3" = 1'-0" INTERIOR PARTITION

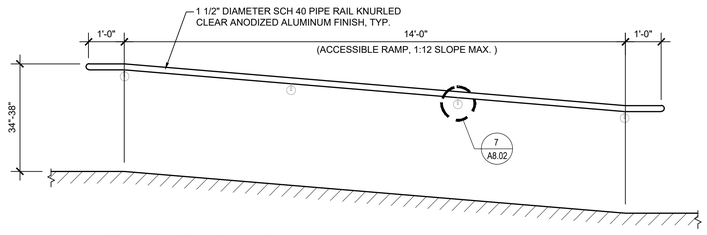


F1 Wall Type
3" = 1'-0" SHAFT WALL

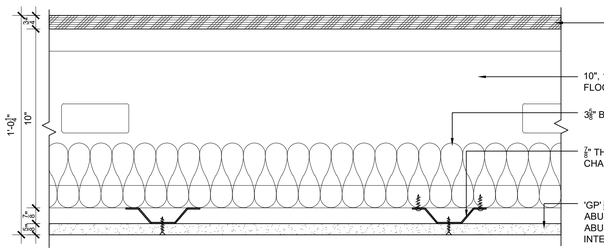
NOTE: STITCH-IN NEW BRICK AT ALL AREAS OF MASONRY INFILL



7 A8.02 Pipe Railing at Wall
3" = 1'-0"

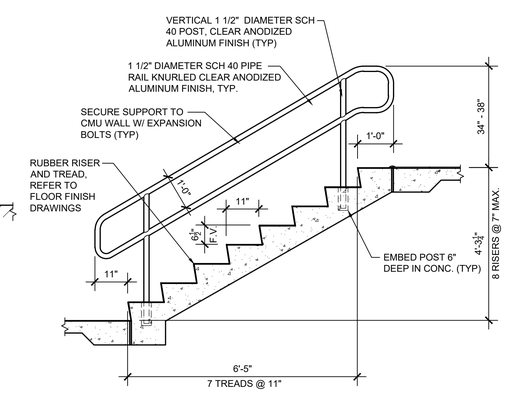


6 A8.02 Ramp Railing Detail
1/2" = 1'-0" Railing Wall Mounted



G1 Ceiling Type
3" = 1'-0" INTERIOR CEILING

CONSTRUCT IN ACCORDANCE W/ UL DESIGN # G556 RATED 1 HR NONCOMBUSTIBLE



5 A8.02 Stair Detail
1/2" = 1'-0" Railing Post Mounted

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FINISHED SIDES OF PARTITIONS ARE SHOWN DIAGRAMMATICALLY FOR REFERENCE. SEE INTERIOR ELEVATIONS AND FINISH SCHEDULE FOR ADDITIONAL INFORMATION

General Notes

1. CONTRACTOR SHALL INSTALL THROUGH-PENETRATION FIRESTOPS, DRAFT-STOPS, FIRE CAULKING, ETC. AS REQUIRED AT ALL ROOF/WALL PENETRATIONS TO ENSURE THE STRUCTURAL INTEGRITY AND CONT. FIRE RATING OF THE ASSEMBLY.

2. ALL DIMENSIONS ARE FROM FACE OF FINISH MATERIALS.

3. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING AND PROPOSED DIMENSIONS PRIOR TO INSTALLATION/ CONSTRUCTION.

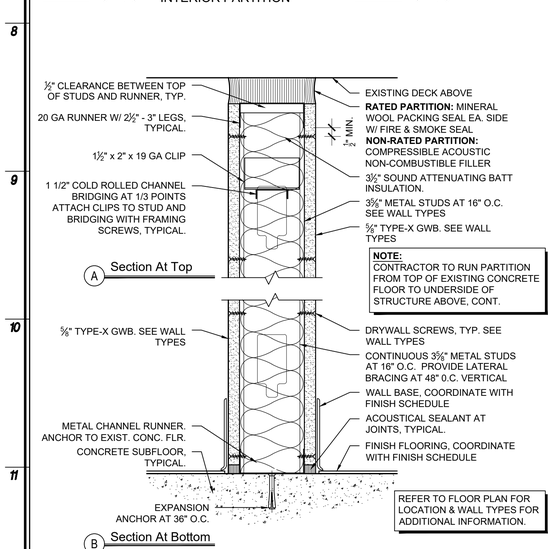
4. COORDINATE FINISHES WITH INTERIOR FINISH SCHEDULE.

5. ALL WALL TYPES SHALL HAVE STUDS AND GWB EXTEND ALL THE WAY UP TO THE UNDERSIDE OF THE DECK U.N.O. PROVIDE FIRESTOPPING AT THE TOP OF THE WALL AS REQUIRED.

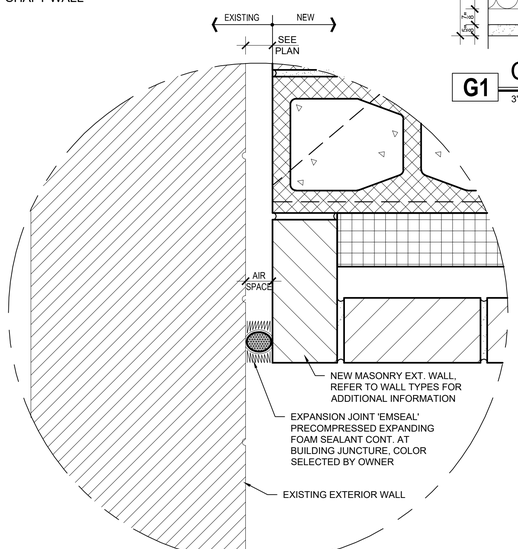
6. REFER TO PLANS AND FINISH SCHEDULE FOR LOCATIONS OF WALL FINISHES, TYP.

Key Notes

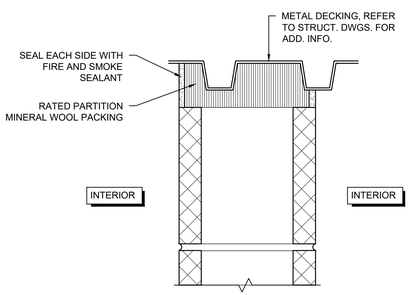
#	DENOTES WALL TYPES INDICATED ON PROPOSED PLANS, INTERIOR ELEVATION AND SECTION DRAWINGS.



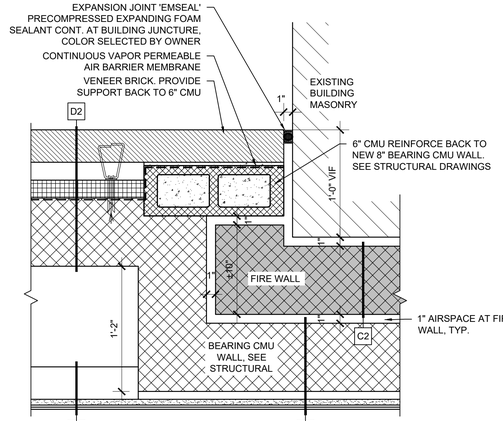
1 A8.02 Framing Details @ L.G. Partition
3"= 1'-0"



2 A8.02 Typical Expansion Joint Sealant Detail
3"= 1'-0"



3 A8.02 Detail at Top of CMU Partition
3"= 1'-0"



8 A8.02 Plan Detail
_"= 1'-0"

Revisions:

#	
1	ISSUE TO BID 11/23/20

Date	1/10/20
Checked	DLF
Drawn	CTB

MICHAEL J. McGOVERN, R.A.
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252 MAIN STREET, GOSHEN, NEW YORK 10924 (845)615-0350

NYSED PROJECT # 66-07-01-03-0-005-020

WALL PARTITION TYPES
2019 BOND REFERENDUM
CHATSWORTH AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

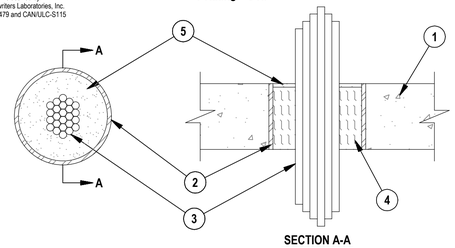
Job No. 4.1092.72.03
File No. 10927203A801

A8.02

System No. C-AJ-3180

F Rating - 3 Hr
T Rating = 0 Hr

Classified by Underwriters Laboratories, Inc. to UL 1479 and CAN/ULC-S115



SECTION A-A

1. Floor or Wall Assembly — Min 4-1/2 in. (114 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600 2400 kg/m3) concrete floor or min 4-3/4 in. (121 mm) thick reinforced lightweight or normal weight concrete wall. Wall may also be constructed of any UL Classified Concrete Blocks*. Max diam of opening is 6 in.(152 mm).
   See Concrete Blocks (CAZT) category in the Fire Resistance Directory for names of manufacturers.
2. Steel Sleeve — (Optional) — Nom 6 in. (152 mm) diam (or smaller) Schedule 40 (or heavier) steel pipe cast or grouted into floor or wall assembly, flush with floor or wall surfaces.
3. Cables — Aggregate cross-sectional area of cables in opening to be max 45 percent of the aggregate cross-sectional area of the opening. Cables to be rigidly supported on both sides of floor or wall assembly. Any combination of the following types and sizes of metallic conductor or fiber optic cable may be used:
   A. Max 500 kcmil single copper connector power cable with thermoplastic insulation and polyvinyl chloride (PVC) jacket.
   B. Max 300 pair No. 24 AWG copper conductor telecommunication cables with polyvinyl chloride (PVC) insulation and jacket material.
   C. Max 7/C copper conductor No. 12 AWG multiconductor power and control cables with polyvinyl chloride (PVC) or cross-linked polyethylene (XLPE) insulation and PVC jacket.
   D. Multiple fiber optical communication cables jacketed with PVC and having a max outside diam of 1/2 in. (13 mm).
   E. Max 3/C copper conductor No. 12 AWG with bare aluminum ground, polyvinyl chloride (PVC) insulated steel, Metal-clad cable.
   F. Max 3/C with ground 2/0 AWG copper conductor SER cable with cross-linked polyethylene (XLPE) insulation and polyvinyl chloride (PVC) jacket.
   G. RG/U coaxial cable with polyethylene (PE) insulation and polyvinyl chloride (PVC) jacket having a max outside diameter of ½ in. (13 mm)
   H. Fire Resistive Cables* - Max 1-1/4 in. (32 mm) diam single conductor or multi conductor Type MI cable. A min 1/8 in. (3 mm) separation shall be maintained between MI cables and any other types of cable.
4. Packing Material — Min 4-1/4 in. (108 mm) thickness of min 4 pcf (64 kg/m3) mineral wool batt insulation firmly packed into opening as a permanent form. Packing material to be recessed from top surface of floor to accommodate the required thickness of fill material.
5. Fill, Void or Cavity Material* — Sealant — Min 1/4 in. (6.4 mm) thickness of fill material applied within the annulus, flush with top surface of floor or with both surfaces of wall.
   HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — FS-One Sealant.

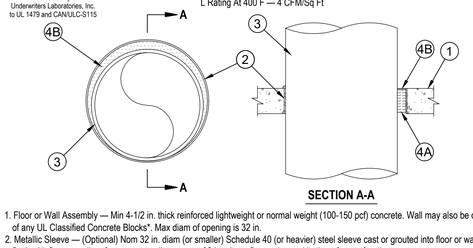
*Bearing the UL Classification Mark

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System No. C-AJ-1226

F Rating — 3 Hr T Rating — 0 Hr
L Rating At Ambient — Less Than 1 CFM/Sq Ft
L Rating At 400 F — 4 CFM/Sq Ft

Classified by Underwriters Laboratories, Inc. to UL 1479 and CAN/ULC-S115



SECTION A-A

1. Floor or Wall Assembly — Min 4-1/2 in. thick reinforced lightweight or normal weight (100-150 pcf) concrete. Wall may also be constructed of any UL Classified Concrete Blocks*. Max diam of opening is 32 in.
2. Metallic Sleeve — (Optional) Nom 32 in. diam (or smaller) Schedule 40 (or heavier) steel sleeve cast or grouted into floor or wall assembly, flush with floor or wall surfaces or extending a max of 3 in. above floor or beyond both surfaces of wall.

2A. Sheet Metal Sleeve — (Optional) Max 6 in. diam, min 26 ga galv steel provided with a 26 ga galv steel square flange spot welded to the sleeve at approx mid-height, or flush with bottom of sleeve in floors, and sized to be a min of 2 in. larger than the sleeve diam. The sleeve is to be cast in place and may extend a max of 4 in. below the bottom of the deck and a max of 1 in. above the top surface of the concrete floor.

2B. Sheet Metal Sleeve — (Optional) - Max 12 in. diam, min 24 ga galv steel provided with a 24 ga galv steel square flange spot welded to the sleeve at approx mid-height, or flush with bottom of sleeve in floors, and sized to be a min of 2 in. larger than the sleeve diam. The sleeve is to be cast in place and may extend a max of 4 in. below the bottom of the deck and a max of 1 in. above the top surface of the concrete floor.

3. Through-Penetrant — One metallic pipe, tube or conduit to be installed either concentrically or eccentrically within the firestop system. The annular space between penetrant and periphery of opening shall be min 0 in. (point contact) to max 1-7/8 in. Penetrant may be installed with continuous point contact. Penetrant to be rigidly supported on both sides of floor or wall assembly. The following types and sizes of metallic penetrants may be used:
   A. Steel Pipe — Nom 30 in. diam (or smaller) Schedule 10 (or heavier) steel pipe.
   B. Iron Pipe — Nom 30 in. diam (or smaller) cast or ductile iron pipe.
   C. Copper Pipe — Nom 6 in. diam (or smaller) Regular (or heavier) copper pipe.
   D. Copper Tubing — Nom 6 in. diam (or smaller) Type L (or heavier) copper tubing.
   E. Conduit — Nom 6 in. diam (or smaller) steel conduit.
   F. Conduit — Nom 4 in. diam (or smaller) steel electrical metallic tubing (EMT).
4. Firestop System — The firestop system shall consist of the following:
   A. Packing Material — Min 4 in. thickness of min 4 pcf mineral wool batt insulation firmly packed into opening as a permanent form. Packing material to be recessed from top surface of floor or sleeve or from both surfaces of wall or sleeve as required to accommodate the required thickness of fill material.
   B. Fill, Void or Cavity Material* — Sealant — Min 1/4 in. thickness of fill material applied within the annulus, flush with top surface of floor or sleeve or with both surfaces of wall or sleeve. At the point or continuous contact locations between penetrant and concrete or sleeve, a min 1/4 in. diam bead of fill material shall be applied at the concrete or sleeve/ pipe penetrant interface on the top surface of floor and on both surfaces of wall.
   HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — FS-One Sealant

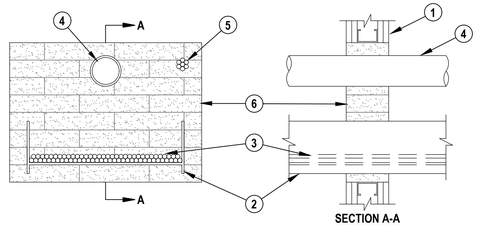
*Bearing the UL Classification Mark

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System No. W-L-8013

Classified by Underwriters Laboratories, Inc. to UL 1479 and CAN/ULC-S115

ANSI/UL1479 (ASTM E814)	CAN/ULC S115
F Ratings — 1 and 2 Hr (See Item 1)	F Ratings — 1 and 2 Hr (See Item 1)
T Rating — 0 Hr	FT Rating — 0 Hr
L Rating At Ambient — 5 CFM/sq ft	FH Ratings — 1 and 2 Hr (See Item 1)
L Rating At 400 F — 2 CFM/sq ft	FTH Rating — 0 Hr
	L Rating At Ambient — 5 CFM/sq ft
	L Rating At 400 F — 2 CFM/sq ft



SECTION A-A

System tested with a pressure differential of 2.5 Pa between the exposed and the unexposed surfaces with the higher pressure on the exposed side.

1. Wall Assembly — The 1 or 2 hr fire-rated gypsum board/stud wall assembly shall be constructed of the materials and in the manner specified in the individual U300, U400, V400 or W400 Series Wall and Partition Designs in the UL Fire Resistance Directory and shall include the following construction features:
   A. Studs — Wall framing may consist of either wood studs or steel channel studs. Wood studs to consist of nom 2 in. (51 mm) by 4 in. (102 mm) lumber spaced 16 in. (406 mm) OC. Steel studs to be min 2-1/2 in. (64 mm) wide and spaced max 24 in. (610 mm) OC. Additional studs installed to completely frame the opening.
   B. Gypsum Board* — 5/8 in. (16 mm) thick, 4 ft (1219 mm) wide with square or tapered edges. The gypsum board type, thickness, number of layers, fastener type and sheet orientation shall be as specified in the individual Wall and Partition Design. Max area of opening is 352 sq in. (2271 sq cm) with max dimension of 22 in. (559 mm) wide.
   The hourly F and FH Ratings of the firestop system are equal to the hourly fire rating of the wall assembly in which it is installed.
2. Cable Tray* — Max 18 in. (457 mm) wide by max 6 in. (152 mm) deep open-ladder or solid-back cable tray with channel-shaped side rails formed of 0.065 in. (1.65 mm) thick aluminum or 0.060 in. (1.52 mm) thick steel and with 1-1/2 in. (38 mm) wide by 1 in. (25 mm) channel shape rungs spaced 9 in. (229 mm) OC or a 0.029 in. (0.74 mm) thick steel solid back, respectively. One cable tray to be installed in the opening. The max annular space between the cable tray and the periphery of the opening shall be min 1 in. (25 mm) to max 7 in. (178 mm) Cable tray to be rigidly supported on both sides of floor or wall assembly.
3. Cables — Aggregate cross-sectional area of cables in cable tray to be max 30 percent of the cross-sectional area of the cable tray. Any combination of the following types and sizes of copper conductor cables may be used:
   A. 7/C No. 12 AWG with polyvinyl chloride (PVC) insulation and PVC jacket.
   B. 100 pair - No. 24 AWG cable with PVC insulation and jacket.
   C. 1/C, 750 kcmil (or smaller) with PVC insulation and jacket.
4. Through-Penetrants — One or more pipe or tube to be installed within the opening. The total number of through-penetrants is dependent on the size of the opening and types and sizes of the penetrants. Any combination of the penetrants described below may be used provided that the following parameters relative to the annular spaces and the spacings between the pipes are maintained. The space between the pipe or tube and the periphery of the opening shall be min 1-1/2 in. (38 mm) to max 9-1/4 in. (235 mm). Pipe or tube to be rigidly supported on both sides of floor or wall assembly. The following types and sizes of non-metallic or metallic pipes, or tubes may be used:
   A. Polyvinyl Chloride (PVC) Pipe — Max 3 in. (76 mm) diam Schedule 40 solid core PVC pipe (or smaller) for use in closed (process or supply) or vented (drain, waste or vent) piping system.
   B. Steel Pipe — Nom 6 in. (152 mm) diam (or smaller) Schedule 40 (or heavier) steel pipe.
   C. Conduit — Nom 4 in. (102 mm) diam (or smaller) steel electrical metallic tubing or 6 in. (152 mm) diam steel conduit.
   D. Copper Pipe — Nom 4 in. (102 mm) diam (or smaller) Regular (or heavier) copper pipe.
   E. Copper Tube — Nom 4 in. (102 mm) diam (or smaller) Type L (or heavier) copper tube.

4A. Pipe Covering — (Not Shown) Nom 1-1/2 in. (38 mm) thick hollow cylindrical heavy density (min 3.5 pcf) (56kg/m3) glass fiber units jacketed on the outside with an all service jacket. Longitudinal joints sealed with metal fasteners or factory applied self-sealing lap tape. Transverse joints secured with metal fasteners or with butt tape supplied with the product.
   See Pipe and Equipment Covering and Materials (BRGU) category in the Building Materials Directory for names of manufacturers. Any pipe covering material meeting the above specifications and bearing the UL Classification Marking with a Flame Spread Index of 25 or less and a Smoke Developed Index of 50 may be used.

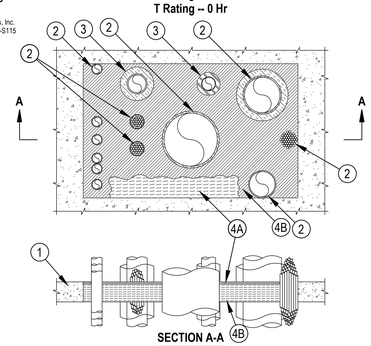
5. Cables — Max 1-1/2 in. (38 mm) diam tight bundle of cables installed within the opening and rigidly supported on both surfaces of wall. The space between the cables and periphery of the opening shall range from 1-3/16 in. (30.2 mm) min to a max of 1-1/2 in. (38 mm). Any combination of the following types and sizes of cables may be used:
   A. 7/C No. 12 AWG with polyvinyl chloride (PVC) insulation and jacket.
   B. 25 pair — No. 24 AWG cable with PVC insulation and jacket.
   C. Type RG/U/59 coaxial cable with PVC outer jacket.
   D. 24 fiber optic cable with PVC sub unit and outer jacket.
6. Firestop System — The firestop system shall consist of the following:
   A. Fill, Void or Cavity Material* — Fire Blocks For walls incorporating max 3-5/8 in. (92 mm) steel studs or max 2 (51 mm) by 4 in. (102 mm) wood studs, fire block installed with 5 in. (127 mm) dimension projecting through and centered in opening. For walls constructed of larger steel or wood studs, fire block installed with long dimension passing through and centered in opening. Blocks may or may not be cut flush with both surfaces of wall. When multiple layers of gypsum board are used, blocks may be recessed 1/2 in. (13 mm) from surface of wall. Blocks to be firmly packed in opening. Either one or a combination of the block types specified below may be used.
   HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — FS 657 Fire Block or CFS-BL Firestop Block
   B. Fill, Void or Cavity Material* — Sealant or Putty - Fill material to be forced into interstices of cables, between cables and cable trays, around each penetrant and where obvious voids are observed to max extent possible on both surfaces of the penetration.
   HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — FS-One Sealant, FS-ONE MAX Intumescent Sealant, CP 618 Putty Stick or CP620 Fire Foam

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System No. C-AJ-8143

F Rating – 2 Hr
T Rating – 0 Hr

Classified by Underwriters Laboratories, Inc. to UL 1479 and CAN/ULC-S115



SECTION A-A

1. Floor or Wall Assembly — Min 4-1/2 in. (114 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m³) concrete floor. Min 5 in. (127 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m³) concrete wall. Wall may also be constructed of any UL Classified Concrete Blocks*. Max size of opening is 1440 in.2 (9,290 cm2) with a max dimension of 48 in. (1219 mm).
   See Concrete Blocks (CAZT) category in the Fire Resistance Directory for names of manufacturers.
2. Through-Penetrant — One cable tray and one or more pipes, tubes or cable bundles may be installed within the opening. The total number of through-penetrants is dependent on the size of the opening and the types and sizes of the penetrants. Any combination of the penetrants described below may be used provided that the following parameters relative to the annular spaces are maintained. The annular space between cable tray and all other penetrants shall be min 3 in. (76 mm). The annular space between individual cables and cable bundles shall be a min 1/2 in. (13 mm). The annular space between individual cables and cable bundles and other penetrants shall be a min 1/2 in. (13 mm) except that a min 2 in. (51 mm) shall be maintained between the cables and copper pipes and tubes greater than a nom 3 in. (76 mm) diam and steel and iron pipes and conduits greater than a nom 4 in. (102 mm) diam. The annular space between metallic pipes, conduit and tubes and insulated pipes and tubes shall be a min 2 in. (51 mm). The annular space between nom 3 in (76mm) diam (and smaller) copper pipes and tubes and between nom 4 in (102mm) diam (and smaller) steel and iron pipes and conduits shall be min 1/2 in. (13 mm). The annular space between nom 2 in. (51 mm) diam (and smaller) metallic pipes and conduits shall be min 0 in. (point contact). The annular space between insulated penetrants or the cable tray and the periphery of opening shall be min 1/2 in. (13 mm). The annular space between all other penetrants and the periphery of opening shall be min 0 in. (point contact). A max annular space in the system shall be 12 in. (305 mm). Penetrants to be rigidly supported on both sides of floor or wall assembly. The following types and sizes of penetrants may be used.
   A. Metallic Pipes — The following types of metallic pipes, tubes or conduits may be used:
      1. Copper Tubing — Nom 6 in. (152 mm) diam (or smaller) Type L (or heavier) copper tube.
      2. Copper Pipe — Nom 6 in. (152 mm) diam (or smaller) Regular (or heavier) copper pipe.
      3. Steel Pipe — Nom 24 in. (610 mm) diam (or smaller) Schedule 40 (or heavier) steel pipe.
      4. Iron Pipe — Nom 24 in. (610 mm) diam (or smaller) cast or ductile iron pipe.
      5. Conduit — Nom 4 in. (102 mm) diam (or smaller) electric metallic tubing (EMT) or nom 6 in. (152 mm) diam (or smaller) rigid steel conduit.
   B. Cables Bundles — Max 4 in. (102 mm) diam tightly bundled cables. Any combination of the following types and sizes of cables may be used:
      1. Max 500 kcmil single copper or aluminum conductor power cable with thermoplastic insulation and polyvinyl chloride (PVC) jacket.
      2. Max 300 pair No. 24 AWG copper conductor telecommunication cables with PVC insulation and jacket material.
      3. Max 7/C copper conductor No. 12 AWG multi-conductor power and control cables with PVC or cross-linked polyethylene (XLPE) insulation and PVC jacket.
      4. Multiple fiber optical communication cables jacketed with PVC and having a max outside diam of 1/2 in.
      5. Max 3/C No. 12 AWG steel clad cable with copper conductors and PVC insulation material.
   C. Individual Cables — Any of the following types and sizes of individual (non-bundled) cables may be used:
      1. Max 3/C No. 2/0 AWG (or smaller) copper conductor PVC jacketed aluminum clad or steel clad TECK 90 cable.
      2. Through Penetrating Product* — Any cables, Armored Cable+ or Metal Clad Cable+ currently Classified under the Through Penetrating Product category.
      See Through Penetrating Product (XHLY) category in the Fire Resistance Directory for names of manufacturers.
      3. Max 500 kcmil single copper or aluminum conductor power cable with thermoplastic insulation and polyvinyl chloride (PVC) jacket.
      4. Max 300 pair No. 24 AWG copper conductor telecommunication cables with PVC insulation and jacket material.
      5. Max 7/C copper conductor No. 12 AWG multi-conductor power and control cables with PVC or cross-linked polyethylene (XLPE) insulation and PVC jacket.
      6. Multiple fiber optical communication cables jacketed with PVC and having a max outside diam of 1/2 in.
      7. Max 3/C No. 12 AWG steel clad cable with copper conductors and PVC insulation material.
      8. Max 4C/750 kcmil (or smaller) aluminum or copper conductor metal clad cable with aluminum or steel armor, with or without PVC jacket.
   D. Cable Tray* — (Not Shown) — Max 24 in. (610 mm) wide by 6 in. (152 mm) deep open-ladder steel or aluminum cable tray. Aggregate cross-sectional area of cable tray to be max 40 percent of the cross-sectional area of the cable tray based on a max 3 in. cable loading depth. Any combination of the types and sizes of cables described in Item 2B may be used. Cable tray to be rigidly supported on both sides of floor or wall assembly.
3. Pipe Insulation — (Optional) - Pipes and tubes of the sizes noted below may be provided with one of the following types of pipe insulations::
   A. Pipe Covering* — Nom 1-1/2 in. (38 mm) thick (or thinner) hollow cylindrical heavy density glass fiber units jacketed on the outside with an all service jacket for pipes with a nom diam of 8 in. (203 mm) (or smaller) or tubes with a nom diam of 4 in. (102 mm) (or smaller). Longitudinal joints sealed with metal fasteners or factory-applied self-sealing lap tape. Transverse joints secured with metal fasteners or with butt tape supplied with the product.
   See Pipe and Equipment Covering - Materials (BRGU) category in the Building Materials Directory for names of manufacturers. Any pipe covering material meeting the above specifications and bearing the UL Classification Marking with a Flame Spread Index of 25 or less and a Smoke Developed Index of 50 or less may be used.
   B. Pipe Covering* — Nom 2 in. (51 mm) thick (or thinner) hollow cylindrical heavy density glass fiber units jacketed on the outside with an all service jacket for pipes or tubes with a nom diam of 2 in. (51 mm) (or smaller). Longitudinal joints sealed with metal fasteners or factory-applied self-sealing lap tape. Transverse joints secured with metal fasteners or with butt tape supplied with the product.
   See Pipe and Equipment Covering - Materials (BRGU) category in the Building Materials Directory for names of manufacturers. Any pipe covering material meeting the above specifications and bearing the UL Classification Marking with a Flame Spread Index of 25 or less and a Smoke Developed Index of 50 or less may be used.
   C. Tube Insulation-Plastics+ — Nom 1 in. (25 mm) thick (or thinner) acrylonitrile butadiene/polyvinyl chloride (AB/PVC) flexible foam furnished in the form of tubing for pipes or tubes with a nom diam of 2 in. (51 mm) (or smaller).
   See Plastics (QMFZ2) category in the Plastics Recognized Component Directory for names of manufacturers. Any Recognized Component tube insulation material meeting the above specifications and having a UL 94 Flammability Classification of 94-5VA may be used.
4. Firestop System — The firestop system shall consist of the following:
   A. Packing Material — Min 4 in. (102 mm) thickness of 4 pcf (64 kg/m³) mineral wool batt insulation tightly packed into the opening as a permanent form. Packing material to be recessed from top surface of floor or both surfaces of wall to accommodate the required thickness of fill material.
   B. Fill, Void or Cavity Material - Sealant* — Nom 1/2 in. (13 mm) thickness of fill material applied within the annulus flush with the top surface of the floor or both surfaces of the wall.
   HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — FS-ONE Sealant

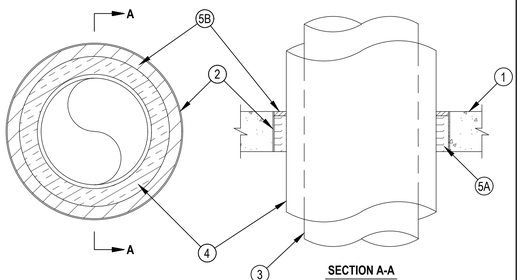
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System No. C-AJ-5091

F Rating — 2 Hr
T Ratings — 0 and 1 Hr (See Items 2 and 4)
L Rating At Ambient — 4 CFM/Sq Ft
L Rating At 400 F — Less Than 1 CFM/Sq Ft

Classified by Underwriters Laboratories, Inc. to UL 1479 and CAN/ULC-S115



SECTION A-A

1. Floor or Wall Assembly — Min 4-1/2 in. (114 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m3) concrete. Wall may also be constructed of any UL Classified Concrete Blocks*. Max diam of opening is 29 in. (737 mm).
   See Concrete Blocks (CAZT) category in the Fire Resistance Directory for names of manufacturers.
2. Metallic Sleeve — (Optional) — Nom 30 in. (762 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe sleeve cast or grouted into floor or wall assembly, flush with floor or wall surfaces or extending a max of 3 in. (76 mm) above floor or beyond both surfaces of wall. If the steel sleeve extends beyond the top surface of the floor or both surfaces of the wall, the T Rating of the firestop system is 0 hr.

2A. Sheet Metal Sleeve — (Optional) - Max 6 in. (152 mm) diam, min 26 ga galv steel provided with a 26 ga galv steel square flange spot welded to the sleeve at approximately mid- height, or flush with bottom of sleeve in floors, and sized to be a min of 2 in. (51 mm) larger than the sleeve diam. The sleeve is to be cast in place flush with bottom surface of floor and may extend a max of 1 in. (25 mm) above the top surface of the floor.

2B. Sheet Metal Sleeve — (Optional) - Max 12 in. (305 mm) diam, min 24 ga galv steel provided with a 24 ga galv steel square flange spot welded to the sleeve at approximately mid- height, or flush with bottom of sleeve in floors, and sized to be a min of 2 in. (51 mm) larger than the sleeve diam. The sleeve is to be cast in place flush with bottom surface of floor and may extend a max of 1 in. (25 mm) above the top surface of the floor.

3. Through Penetrants — One metallic pipe or tubing to be installed either concentrically or eccentrically within the firestop system. Pipe or tubing to be rigidly supported on both sides of floor or wall assembly. The following types and sizes of metallic pipes or tubing may be used:
   A. Steel Pipe — Nom 12 in. (305 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe.
   B. Iron Pipe — Nom 12 in. (305 mm) diam (or smaller) cast or ductile iron pipe.
   C. Copper Pipe — Nom 6 in. (152 mm) diam (or smaller) Regular (or heavier) copper pipe.
   D. Copper Tubing — Nom 6 in. (152 mm) diam (or smaller) Type L (or heavier) copper tubing.
4. Pipe Covering — Min 1/2 in. (13 mm) to max 2 in. (51 mm) thick hollow cylindrical heavy density (min 3.5 pcf or 56 kg/m³) glass fiber units jacketed on the outside with an all-service jacket. Longitudinal joints sealed with metal fasteners or factory-applied, self-sealing lap tape. Transverse joints secured with metal fasteners or with butt tape supplied with the product. The annular space between the insulated pipe and the edge of the periphery of the opening shall be min 1/2 in. (13 mm) to max 12 in. (305 mm). When thickness of pipe covering is less than 2 in. (51 mm), the T Rating for the firestop system is 0 hr.
   See Pipe Equipment Covering — Materials — (BRGU) category in the Building Materials Directory for names of manufacturers. Any pipe covering material meeting the above specifications and bearing the UL Classification Marking with a Flame Spread Index of 25 or less and a Smoke Developed Index of 50 or less may be used.

4A. Pipe Covering — (Not Shown) — As an alternate to Item 4, max 2 in. (51 mm) thick cylindrical calcium silicate (min 14 pcf or 224 kg/m³) units sized to the outside diam of the pipe or tube may be used. Pipe insulation secured with stainless steel bands or min 18 AWG stainless steel wire spaced max 12 in. (305 mm) OC. The annular space shall be min 1/2 in. (13 mm) to max 12 in. (305 mm).

5. Firestop System — The firestop system shall consist of the following:
   A. Packing Material — Min 4 in. (102 mm) thickness of min 4 pcf (64 kg/m³) mineral wool batt insulation firmly packed into opening as a permanent form. Packing material to be recessed from top surface of floor or from both surfaces of wall as required to accommodate the required thickness of fill material.
   B. Fill, Void or Cavity Material* — Sealant — Min 1/2 in. (13 mm) thickness of fill material applied within the annulus, flush with top surface of floor or with both surfaces of wall.
   HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — FS-One Sealant

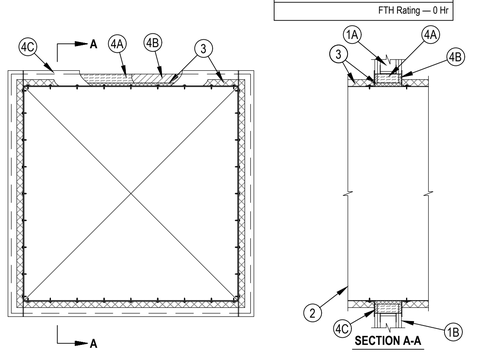
*Bearing the UL Classification Mark

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System No. W-L-7156

Classified by Underwriters Laboratories, Inc. to UL 1479 and CAN/ULC-S115

ANSI/UL1479 (ASTM E814)	CAN/ULC S115
F Ratings — 1 and 2 Hr (See Item 1)	F Ratings — 1 and 2 Hr (See Item 1)
T Rating — 0 Hr	FT Rating — 0 Hr
	FH Ratings — 1 and 2 Hr (See Item 1)
	FTH Rating — 0 Hr



SECTION A-A

1. Wall Assembly — The 1 or 2 hr fire-rated gypsum board/stud wall assembly shall be constructed of the materials and in the manner specified in the individual U300, U400 or V400 Series Wall and Partition Designs in the UL Fire Resistance Directory and shall include the following construction features:
   A. Studs — Wall framing shall consist of either wood studs or steel channel studs. Wood studs to consist of nom 2 by 4 in. (51 by 102 mm) lumber spaced max 16 in. (406 mm) OC. Steel studs to be min 3-1/2 in. (89 mm) wide and spaced max 24 in. (610 mm) OC. Additional framing members shall be used to completely frame around opening.
   B. Gypsum Board* — Min 5/8 in. (16 mm) thick, 4 ft (1.2 m) wide with square or tapered edges. The gypsum board type, thickness, number of layers and orientation shall be as specified in the individual U300, U400 or V400 Wall and Partition Design. Max size of opening is 210 sq in. (1355 cm²) with a max width of 14-1/2 in. (368 mm) for wood studs. Max size of opening is 76.2 sq ft. (7 m²) with a max width of 105-1/2 in. (2.7 m) for steel studs.
   The hourly F Rating of the firestop system is equal to the hourly fire rating of the wall in which it is installed.
2. Steel Duct — Max 100 by 100 in. (2.5 by 2.5 m) steel duct to be installed within the framed opening. The duct shall be constructed and reinforced in accordance with SMACNA construction standards. Steel duct to be rigidly supported on both sides of wall assembly.
3. Batts and Blankets* — Nom 1-1/2 or 2 in. (38 or 51 mm) thick glass fiber batt or blanket (min 3/4 pcf or 12 kg/m³) jacketed on the outside with a foil-scrim-kraft facing. Longitudinal and transverse joints sealed with aluminum foil tape. During the installation of the fill material, the batt or blanket shall be compressed minimum 50% such that the annular space within the firestop system shall be min 1/2 in. (13 mm) to max 2 in. (51 mm).
   See Batts and Blankets (BKNV) category in the Building Materials Directory for names of manufacturers. Any batt or blanket meeting the above specifications and bearing the UL Classification Marking with a Flame Spread Index of 25 or less and a Smoke Developed Index 50 or less may be used.
4. Firestop System — The firestop system shall consist of the following:
   A. Packing Material — Min 3-5/8 (92 mm) or 4-7/8 in. (124 mm) thickness of min 4 pcf (64 kg/m³) mineral wool batt insulation firmly packed into opening as a permanent form for 1 or 2 hr fire-rated walls, respectively. Packing material to be recessed from both surfaces of wall to accommodate the required thickness of fill material.
   B. Fill, Void or Cavity Material* — Sealant — Min 5/8 in. (16 mm) thickness of fill material applied within annulus, flush with both surfaces of wall.
   HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — FS-ONE Sealant
   C. Steel Retaining Angles — Min No. 16 gauge (0.059 in. or 1.5 mm) galv steel angles sized to lap steel duct a min of 2 in. 51 mm) and lap wall surfaces a min of 1 in. (25 mm). Angles attached to steel duct on both sides of wall with min No. 10 steel sheet metal screws spaced a max of 1 in. (25 mm) from each end of steel duct and spaced a max of 6 in. (152 mm) OC. When max duct dimension does not exceed 48 in. (122 cm) and duct area does not exceed 1300 in² (8387 cm²), angles may be min No. 18 gauge galv steel. Angles attached to steel duct on both sides of wall with min No. 10 by 1/2 in. (13 mm) long steel sheet metal screws located a max of 1 in. (25 mm) from each end of steel duct and spaced a max of 6 in. (152 mm) OC. When max 1-1/2 in. (38 mm) thick insulation is used, steel angles are optional for those sides of duct that do not exceed the dimension specified in Table below, dependent on packing material and annular space as specified.

*Bearing the UL Classification Mark

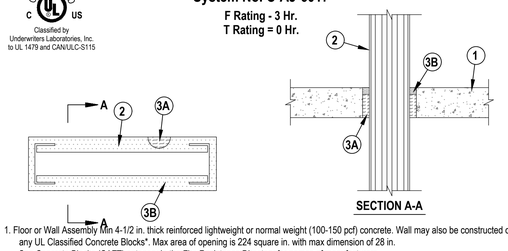
Max Duct Dimension	Duct Thickness	Annular Space	Packing Material	Angle (Item 3C) Required
24 in. (610 mm)	24 ga or heavier	1/2 in. min to 1 in. max (13 to 25 mm)	Item 3A1	No

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System No. C-AJ-6017

F Rating - 3 Hr.
T Rating = 0 Hr.

Classified by Underwriters Laboratories, Inc. to UL 1479 and CAN/ULC-S115



SECTION A-A

1. Floor or Wall Assembly Min 4-1/2 in. thick reinforced lightweight or normal weight (100-150 pcf) concrete. Wall may also be constructed of any UL Classified Concrete Blocks*. Max area of opening is 224 square in. with max dimension of 28 in.
   See Concrete Blocks (CAZT) category in the Fire Resistance Directory for names of manufacturers.
2. Busway+ Nominal 26 in. wide (or smaller) by 6 in. deep "I" shaped steel enclosure containing factory mounted aluminum bars rated for 600 V, 4000 A. One busway to be installed within the opening. the annular space between the flange tip of the busway and the periphery of the opening shall be 1 in. The annular space between the web of the busway and the periphery of the opening shall be 2 in. Busway to be ridged supported on both sides of floor and wall assembly. The busway shall bear the UL Listing Mark and shall be installed in accordance with all provisions of Article 364 of the National Electrical Code, NFPA No. 70.
3. Firestop System The firestop system shall consist of the following:
   A. Packing Material Min 3-1/2 in. thickness of min 4 pcf mineral wool batt insulation firmly packed into opening as a permanent form. Packing material to be recessed from top surface of floor or from both surfaces of wall as required to accommodate the required thickness of fill material.
   B. Fill, Void or Cavity Material* -- Sealant Min 1 in. thickness of fill material applied within the annulus, flush with top surface of floor or with both surfaces of wall.
   HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC – FS-ONE Sealant

+Bearing the UL Listing Mark *Bearing UL Classification Mark

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FIRESTOPPING NOTES:

1. FIRESTOPPING ASSEMBLIES SHOWN ON THIS SHEET REPRESENT VARIOUS RATED ASSEMBLIES THAT MAY BE REQUIRED FOR THIS PROJECT. ADDITIONAL CONDITIONS AND ASSEMBLIES MAY EXIST AND THE CONTRACTOR SHALL REFER TO SPECIFICATION SECTION **078443 - FIRESTOPPING** FOR ADDITIONAL INFORMATION AND THE SELECTED MANUFACTURER FOR ADDITIONAL ASSEMBLY TYPES.
2. FIRESTOPPING DETAILS WERE OBTAINED FROM AND REPRODUCED BY HILTI, INC. COURTESY OF UNDERWRITERS LABORATORIES, INC. (UL) AND ARE SHOW AS THE BASIS OF DESIGN. USE OF THESE DETAILS AND REFERENCE TO HILTI, INC. PRODUCTS OR SYSTEMS DOES NOT PRECLUDE THE USE OF OTHER PRODUCTS THAT ARE SUBMITTED AND APPROVED AS EQUAL.
3. REFER TO CODE REVIEW PLANS CA0.01 - CA0.03 FOR REQUIRED FIRE RATINGS. PROVIDE APPROPRIATE FIRESTOPPING FOR FIRE RATING AS PER FIRESTOPPING DETAILS AND SPECIFICATIONS.

Date	1/10/20
Checked	DLF
Drawn	CTB

MICHAEL J. McGOVERN, R.A.
License No. 022257-1
Title REGISTERED ARCHITECT

Revisions:

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1	ISSUE TO BID 11/23/20

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NYSED PROJECT # 66-07-01-03-0-005-020

FIRESTOPPING DETAILS
2019 BOND REFFENDUM ELEMENTARY SCHOOL
CHATSWORTH AVENUE UNION FREE SCHOOL DISTRICT
MAMARONECK AVENUE, LARCHMONT, NY 10538

Job No. 4.1092.72.03

File No. 10927203A805

A8.05

ROOF SYSTEM:
LIQUID APPLIED ROOF OVER NEW CONCRETE & METAL DECK
(System: 96 Dry Mils)

LIQUID POLYURETHANE TOP COAT
POLYESTER FABRIC LAYER
LIQUID POLYURETHANE BASE COAT
TRILAMINATE REINFORCED BASE LAYER
ADHESIVE LAYER
1/2" COVER BOARD

NOTE:
CONTRACTOR SHALL FOLLOW MANUFACTURER'S STRICT INSTALLATION INSTRUCTIONS.

LIQUID APPLIED ROOF SYSTEM
1/2" COVER BOARD
R-30 (MIN.) POLYISO INSULATION, SLOPED
WATER-BASED PRIMER ON CONCRETE
NEW CONC. AND METAL DECK -SEE STRUCTURAL FOR ADDITIONAL INFORMATION

Roof System at New Metal Deck

EXISTING SPF ROOFING WITH LIQUID APPLIED TOP COAT
SEAL /FLASH NEW INFILL PLY TO SPF PLY WITH 3-COURSE OF LIQUID APPLIED ROOF & MESH, LAPPED
LIQUID APPLIED ROOF SYSTEM, REFER TO DETAIL 1/A8.10
1/2" COVER BOARD
INFILL WITH POLY ISO INSULATION TO MATCH EXISTING ROOF HEIGHT AND SLOPE.
4" CONCRETE REINF. SLAB ON CORRUGATED METAL DECK, REFER TO STRUCTURAL DRAWINGS
EDGE OF OPENING IN EXISTING ROOF DECK
6" ALL AROUND
EXISTING CONCRETE ROOF DECK TO REMAIN, F.V.
NEW CORRUGATED METAL DECK INFILL, SECURED TO EXISTING CONCRETE DECK, REFER TO STRUCTURAL DRAWINGS

SPF Roofing Infill Detail

EQUIP. SUPPORT, TYP.
NEOPRENE PAD
WOOD NAILER
PROPERLY PROVIDE CRICKET IN ROOF TO DIVERT WATER AROUND CURBS.
METAL CAP FLASHING/WITH .040 ALUMINUM MILL FINISH COUNTER FLASHING FASTENED 12" O.C. TYP.
NEW 'PATE' EQUIPMENT SUPPORT. INSTALL AS PER MANUFACTURER'S SPECIFIC INSTRUCTIONS.
FASTENERS, 8" O.C., STAGGERED. PENETRATE INTO EXISTING ROOF DECK.
FLUID APPLIED FLASHING, REFER TO "LIQUID/FLUID APPLIED FLASHING NOTE" BELOW.
EXISTING SPF ROOFING WITH LIQUID APPLIED TOP COAT
EXISTING CONCRETE ROOF DECK TO REMAIN, F.V.

Equipment Curb Detail

EQUIP. SUPPORT, TYP.
NEOPRENE PAD
WOOD NAILER
PROPERLY PROVIDE CRICKET IN ROOF TO DIVERT WATER AROUND CURBS.
METAL CAP FLASHING/WITH .040 ALUMINUM MILL FINISH COUNTER FLASHING FASTENED 12" O.C. TYP.
NEW 'PATE' EQUIPMENT SUPPORT. INSTALL AS PER MANUFACTURER'S SPECIFIC INSTRUCTIONS.
FASTENERS, 8" O.C., STAGGERED. PENETRATE INTO NEW CONCRETE ROOF DECK.
FLUID APPLIED FLASHING, REFER TO "LIQUID/FLUID APPLIED FLASHING NOTE" BELOW.
NEW INSULATION AND COVERBOARD, REFER TO DETAIL 1/A8.10
NEW CONCRETE ROOF DECK

Equipment Curb Detail

NEW MECHANICAL EQUIPMENT, REFER TO MECHANICAL PLANS FOR ADDITIONAL INFORMATION
CURB WITH INTEGRAL COUNTER FLASHING, FLANGE FASTENED TO WOOD BLOCKING
NEW .040 ALUMINUM, MILL FINISH, COUNTER FLASHING TO COVER INTEGRAL FLASHING TERMINATION.
FLUID APPLIED FLASHING
10" MIN.
6" MIN. OVERLAP
NEW BUILT UP P.T. WOOD BLOCKING
EXISTING LIQUID APPLIED TOP COAT
EXISTING SPF ROOFING
CUT OPENING IN EXISTING CONCRETE ROOF DECK, REFER TO STRUCTURAL DRAWINGS FOR REINFORCING
EXISTING CONCRETE ROOF DECK TO REMAIN, F.V.

Mechanical Curb at Existing Roof

DUCT, REFER TO MECHANICAL DRAWINGS
SEALANT
DRAW BAND OR WELD UMBRELLA TO DUCT
SHEET METAL UMBRELLA
CURB WITH INTEGRAL COUNTER FLASHING, FLANGE FASTENED TO WOOD BLOCKING
NEW .040 ALUMINUM, MILL FINISH, COUNTER FLASHING TO COVER INTEGRAL FLASHING TERMINATION.
FLUID APPLIED FLASHING
6" MIN. OVERLAP
NEW BUILT UP P.T. WOOD BLOCKING
EXISTING LIQUID APPLIED TOP COAT
EXISTING SPF ROOFING
CUT OPENING IN EXISTING CONCRETE ROOF DECK, REFER TO STRUCTURAL DRAWINGS FOR REINFORCING
EXISTING CONCRETE ROOF DECK TO REMAIN, F.V.

Duct Penetration Curb at Existing Roof

EXISTING ROOF
NEW ROOF
NEW RETROFIT PIPE STORM COLLAR, FIELD VERIFY EXIST. PIPE DIAMETER, "JACK-RETRO-702237"
SEALANT
REINFORCED FLUID-APPLIED FLASHING TO EXTEND 4" ONTO ADHERED BASE PLY
SEAL ADHERED BASE PLY TO VERTICAL TRANSITION WITH 3-COURSE OF ELASTOMETRIC MASTIC & MESH
NEW OR EXISTING METAL PIPE, REFER TO STRUCTURAL DRAWINGS
FLUID APPLIED FULLY REINFORCED ALIPHATIC ROOF SYSTEM, REFER TO DETAIL 1/A8.10
NEW INSULATION AND COVERBOARD OR EXISTING SPF ROOFING WITH LIQUID APPLIED TOP COAT TO REMAIN, FIELD VERIFY, REMOVE IN AREA OF NEW ROOF PENETRATION
NEW OR EXISTING CONCRETE ROOF DECK

Column, Pipe & Round Duct Penetration Detail

FLUID-APPLIED ROOFING (PRIMER + BASE COAT + TOP COAT)
24" MINIMUM SUMP
NEW ROOF DRAIN WITH NEW CLAMPING RING AND DRAIN BASKET, SEE PLUMBING DRAWINGS.
REINFORCED FLUID-APPLIED FLASHINGS OVER PRIMED LEAD & EXTENDED 4" ONTO ADHERED BASE PLY
SUMP 24" FROM ALL SIDES OF DRAIN
SERVICE CONNECTION

Roof Drain Detail

PROVIDE SEALANT AT FLANGE TO WALL JOINT
.040" ANODIZED ALUMINUM SCUPPER SEAMED AND SEALED
4" MIN.
4" MIN.
4" MIN.
SET IN PLASTIC ROOF CEMENT
SCUPPER FLANGE SEAMED AND SEALED TO SCUPPER
LAP SEALANT AT JOINT BETWEEN ROOF MEMBRANE AND SCUPPER
LIQUID APPLIED ROOF SYSTEM, REFER TO DETAIL 1/A8.10

EXTERIOR WALL-REFER TO PLAN AND WALL DETAILS FOR ADDITIONAL INFO.
CLOSURE FLANGE-LOCK TO SCUPPER AND SEAL (SEE DTL.)
PROVIDE SEALANT AT FLANGE TO WALL JOINT
.040 ALUM. CLOSURE FLANGE
SEAL AT JOINT
4"
LIQUID APPLIED ROOF SYSTEM, REFER TO DETAIL 1/A8.10
.040" ANODIZED SCUPPER ALUMINUM
CONCRETE AND CORRUGATED METAL DECK
NEW ANODIZED ALUMINUM CONDUCTOR HEAD. SEE 10/A8.10
NEW ALUMINUM LEADER
ROOF SUPPORT STRUCTURE NOT SHOWN FOR CLARITY, F.V.

Through-Wall Scupper/Conductor Head Detail

PROVIDE SECURED CONDUCTOR SCREEN (TYP.)
RIVET
GUTTER BOTTOM
VENT
EXPANSION
3" (76mm) MIN.
DOWNSPOUT SUPPORT STRAP
FUNNEL
DOWNSPOUT
.050 ALUMINUM CONDUCTOR HEAD, DEPTH OF HEAD OPENING SHALL BE 2/3 OF ITS DEPTH OUTLET. TUBE SHALL BE A MINIMUM OF 4" IN LENGTH SET CONDUCTOR HEAD 1" BELOW ROOF EDGE TO PERMIT OVERFLOW
OUTLET (DROP)
NEW 4" X 5" 100% .040 ALUM. LEADER, COLOR TO MATCH COPING
STRAPS @ TOP & BOTTOM OF DOWNSPOUT AND @ JOINTS IN DOWNSPOUT 10' o.c. MAX. SPACING
ELBOW
TIE INTO EXISTING STORM WATER DRAINAGE SYSTEM AND PROVIDE NEW PRECAST CONCRETE SPLASH BLOCK AT ROOFTOP

Downspout/Scupper Connection

N.T.S.

MECHANICALLY FASTEN HANGER TO WALL SCREWS, BOLTS TYPICAL
DOWNSPOUT HANGERS 10 FEET OR LESS SHALL HAVE TWO STRAPS FOR SUPPORT LONGER DOWNSPOUTS SHALL BE SUPPORTED AT 10 FEET INTERVALS MAX. TYPICAL
TO REDUCE CLOGGING USE FASTENERS WITH MINIMAL PENETRATION LENGTH
RECTANGULAR GUTTER WITH SNAP LOCK SEAM FABRICATE TO SIZE INDICATED ON DWGS. TYPICAL

Downspout Hanger Design

FLUID APPLIED FULLY REINFORCED ALIPHATIC ROOF SYSTEM, REFER TO DETAIL 1/A8.10
NEW TAPERED POLYISO ROOF INSULATION. (R-30 MIN.)
4"
LAP FLUID APPLIED TOP COAT OVER METAL FLASHING, TYPICAL.
METAL FLASHING. LAP INTO GUTTER, TYP. SEAL ALL JOINTS
LAP FLUID APPLIED ROOFING CONTINUOUS OVER ROOF EDGE.
P.T. WOOD BLOCKING AT ROOF EDGE AS REQUIRED.
8"x8" .040" THICK METAL BOX GUTTER, KYNAR FINISH, COLOR TO BE SELECTED BY OWNER. PROVIDE COLOR SAMPLES FOR OWNER/ARCHITECT APPROVAL.
8"
8"
3"
BRAKE METAL TRIM WITH HEMMED EDGE. COLOR TO MATCH GUTTER
FLUID APPLIED ROOFING SYSTEM CONTINUED UP VERTICAL FACE. SEE DETAIL 1/A8.10 FOR ADDITIONAL INFO.

Roof Edge Gutter Detail

LIQUID/FLUID APPLIED FLASHING NOTE:
WHERE LIQUID/FLUID APPLIED FLASHING APPEARS/IS NOTED ON THE ROOF DRAWINGS IT IS TO BE FLUID APPLIED FULLY REINFORCED ALIPHATIC FLASHING, (3) COURSE OF LIQUID APPLIED ROOF AND MESH FLASHING, LAPPED, INSTALLED OVER EXISTING SPF MEMBRANE. INSTALL STRICTLY PER MANUFACTURER'S SPECIFICATIONS, TYPICAL. LAP 6" MINIMUM ALL DIRECTIONS UNLESS NOTED OTHERWISE.

NOTE:
ALL LIQUID APPLIED ROOFING SHALL HAVE SILICA SAND BROADCAST AS A NON-SKID SURFACE. SEE SPECIFICATION FOR ADDITIONAL INFORMATION

Date 1/10/20
Checked DLF
Drawn JG

MICHAEL J. McGOVERN, R.A.
The REGISTERED ARCHITECT License No. 022257-1

Revisions:
1 ISSUE TO BID 11/23/20

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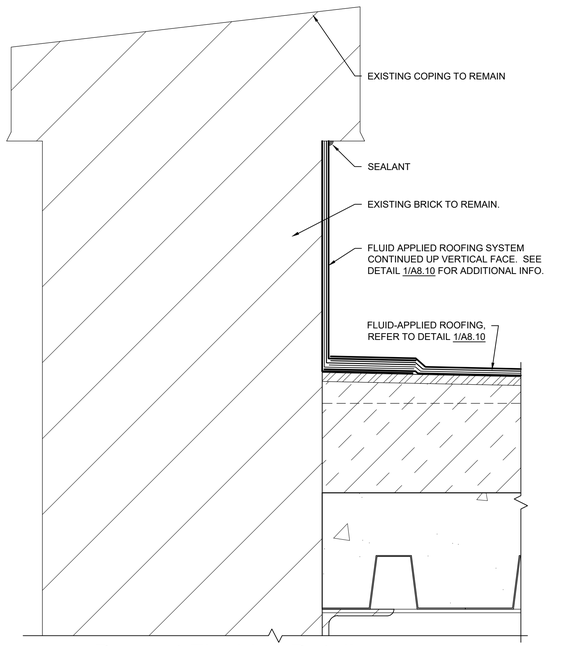
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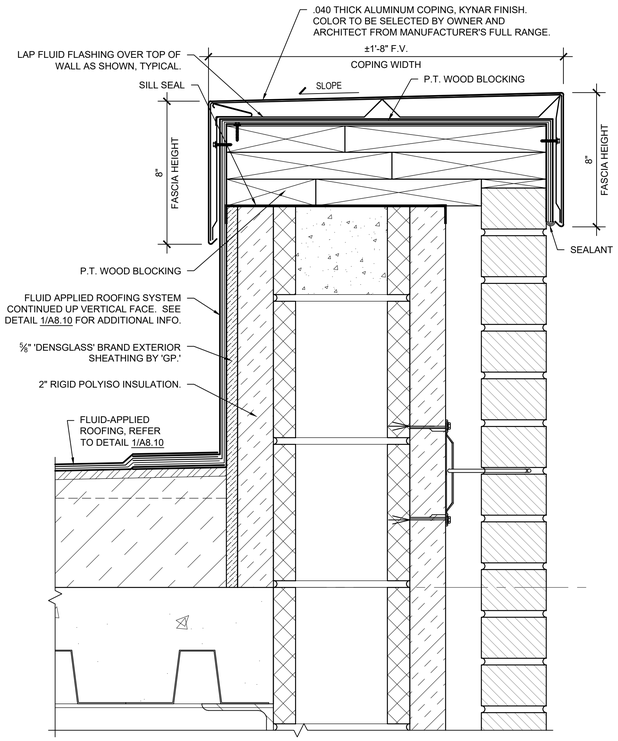
ROOF DETAILS
2019 BOND REFERENDUM ELEMENTARY SCHOOL
CHATSWORTH AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

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File No. 10927203A810

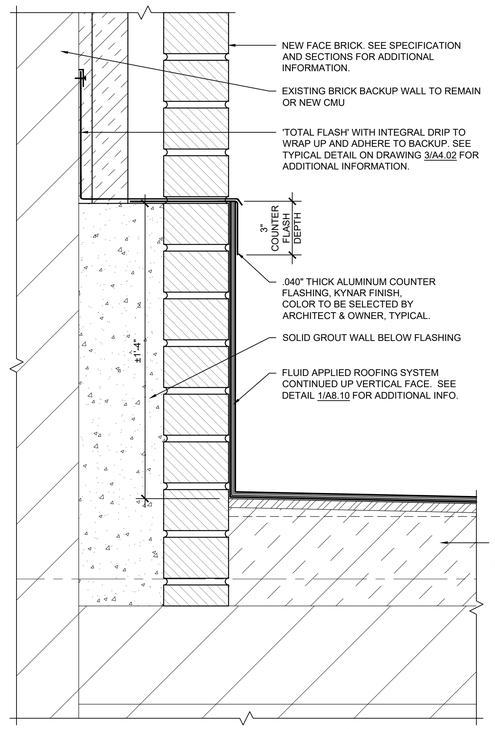
A8.10



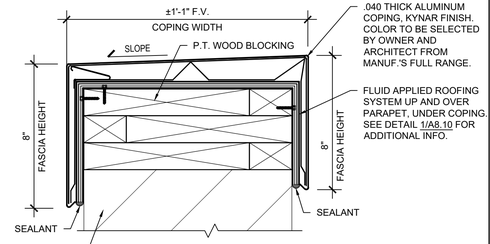
1 A8.11 — Parapet Flashing Detail
3" = 1'-0"



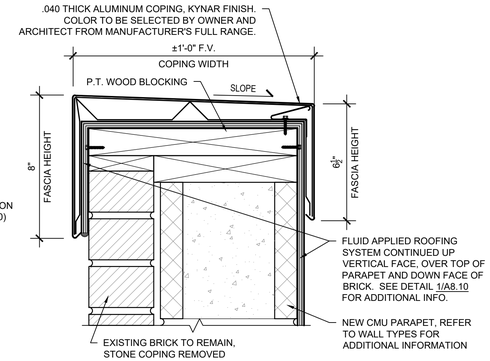
2 A8.11 — Parapet Flashing Detail
3" = 1'-0"



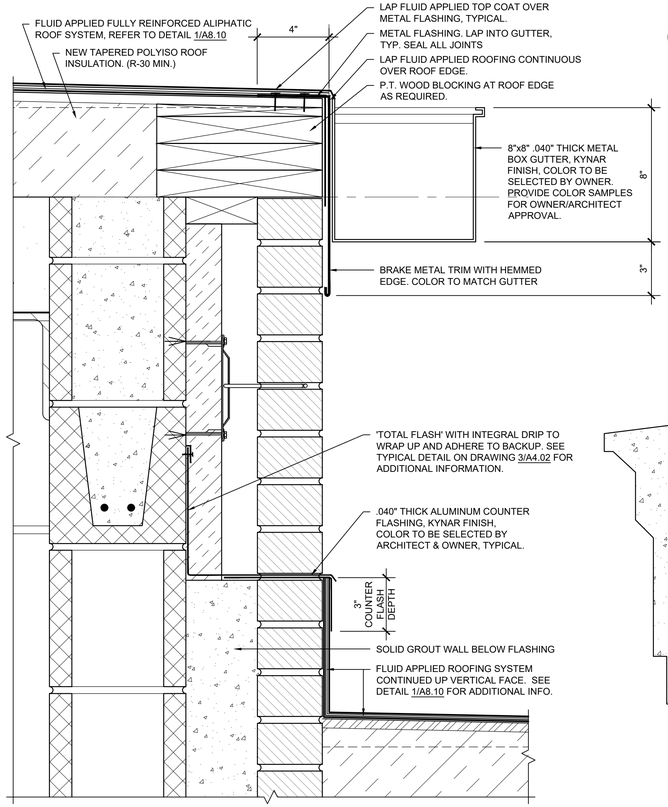
3 A8.11 — Base Wall Flashing Detail
3" = 1'-0"



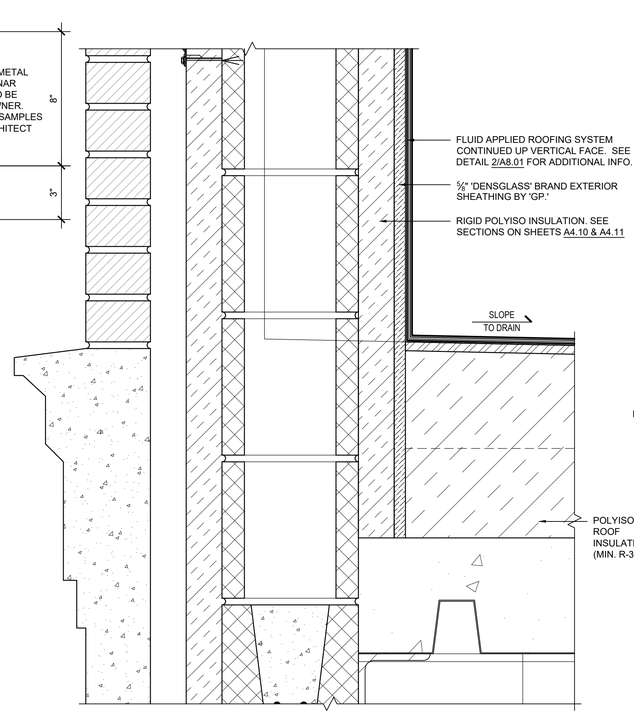
4 A8.11 — Coping Detail
3" = 1'-0"



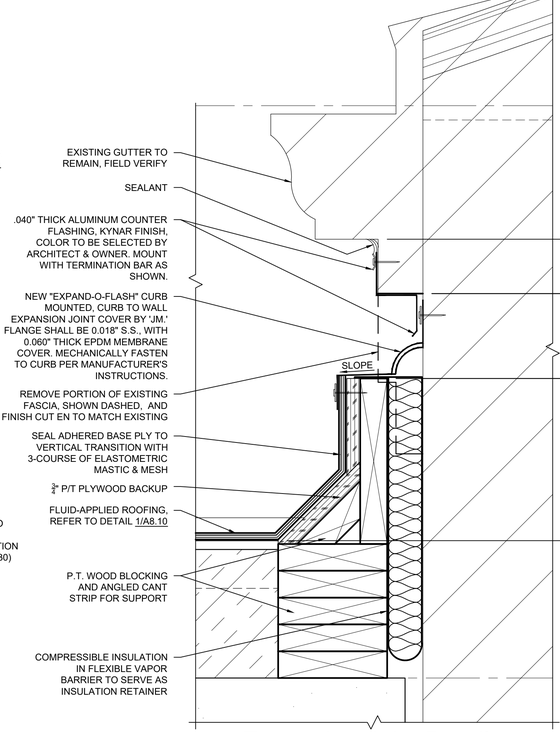
5 A8.11 — Coping Detail
3" = 1'-0"



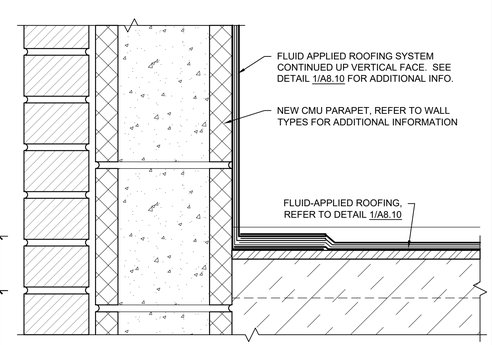
6 A8.11 — Roof Edge Gutter Detail
3" = 1'-0"



7 A8.11 — Parapet Base Detail
3" = 1'-0"



8 A8.11 — Expansion Joint Detail
3" = 1'-0"



9 A8.11 — Parapet Base Detail
3" = 1'-0"

LIQUID/FLUID APPLIED FLASHING NOTE:
WHERE LIQUID/FLUID APPLIED FLASHING APPEARS/IS NOTED ON THE ROOF DRAWINGS IT IS TO BE FLUID APPLIED FULLY REINFORCED ALIPHATIC FLASHING, (3) COURSE OF LIQUID APPLIED ROOF AND MESH FLASHING, LAPPED, INSTALLED OVER EXISTING SPF MEMBRANE. INSTALL STRICTLY PER MANUFACTURER'S SPECIFICATIONS, TYPICAL. LAP 6" MINIMUM ALL DIRECTIONS UNLESS NOTED OTHERWISE.

NOTE:
ALL LIQUID APPLIED ROOFING SHALL HAVE SILICA SAND BROADCAST AS A NON-SKID SURFACE. SEE SPECIFICATION FOR ADDITIONAL INFORMATION

Date	1/10/20
Checked	DLF
Drawn	JG

MICHAEL J. McGOVERN, R.A.
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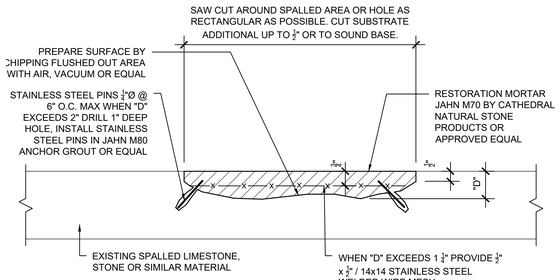
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ROOF DETAILS
2019 BOND REFERENDUM
CHATSWORTH AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

Job No. 4.1092.72.03
File No. 10927203A810

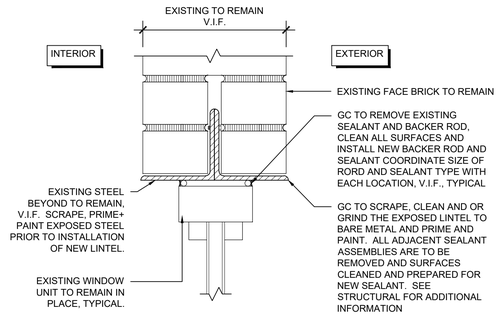
A8.11



NOTES:
1. REPAIRS ARE TO MATCH EXISTING STONE IN COLOR, SHAPE AND TEXTURE.
2. APPLY THE MASONRY REPAIR MORTAR USING A TROWEL TO A MAXIMUM THICKNESS OF 3".
3. BUILD UP PATCHING MATERIAL SLIGHTLY ABOVE ADJACENT MASONRY SURFACE BEFORE STRIKING FLUSH.
4. FOLLOW REPAIR MORTAR MANUFACTURER'S INSTRUCTIONS AND RECOMMENDATIONS.

4 / A8.30 Spall Repair Detail - Masonry or Stone

1" = 1'-0"



5 / A8.30 Lintel Replacement Detail

3" = 1'-0"

Construction Key Notes - Work Area 'H'

(#) SYMBOL INDICATES CONSTRUCTION KEY NOTE

1. EXISTING METAL POSTS, FRAMING, METAL GRATE EQUIPMENT FLOOR, METAL RAILING / FENCE/GATE, METAL HANDRAIL AND ADJACENT ASSOCIATED SUPPORT SYSTEM IS TO BE SCRAPED, CLEANED, PRIMED, AND PAINTED BY GC. COLOR TO BE SELECTED BY OWNER
2. EXISTING ADJACENT MASONRY WALL
3. EXISTING METAL BEARING PLATES AND ANCHORS TO BE SCRAPED, CLEANED, PRIMED, AND PAINTED BY GC. PROTECT STONE SUPPORT
4. EXISTING DOOR, V.I.F.
5. EXISTING STONE SUPPORT AND STAIR SYSTEM TO BE PROTECTED.
6. LINE OF GRADE
7. EXISTING CONDENSER EQUIPMENT TO BE REMOVED BY MC. SEE MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION.

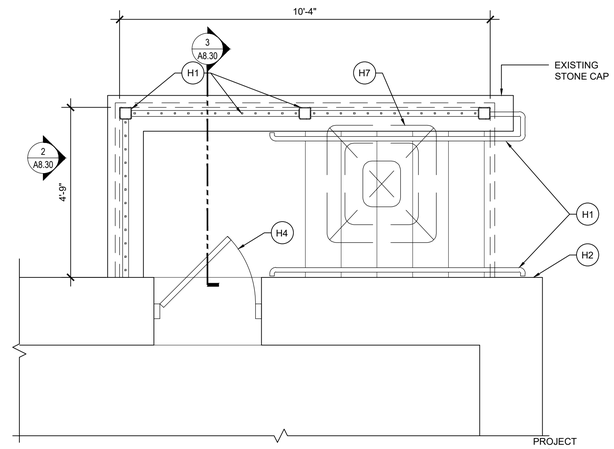
NOTE: ALL DIMENSIONS SHOWN ARE EXISTING FOR REFERENCE ONLY. VERIFY ALL DIMENSIONS IN FIELD

STEEL LINTEL PAINTING NOTES:
PRIMER:
(1) COAT PRO INDUSTRIAL PRO CRYL PRIMER (B66W01310) BY 'SHERWIN WILLIAMS'

FINISH:
(2) COATS PRO INDUSTRIAL WATER BASED CATALYZED EPOXY, B73-360 SERIES BY 'SHERWIN WILLIAMS'

NOTE:
CONTRACTOR SHALL PROPERLY PREPARE SUBSTRATE AS PER MANUFACTURER'S RECOMMENDATIONS, TYPICAL.

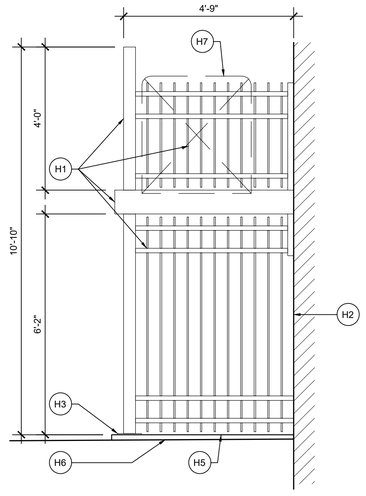
ADJACENT SEALANT PROCEDURES:
1. INSERT BACKUP MATERIAL INTO JOINT- COORDINATE WITH EACH SPECIFIC LOCATION.
2. APPLY SEALANT.
3. THE SEALANT SHALL MEET FEDERAL SPEC. TT-S-00230C TYPE II, CLASS A. THE SEALANT SHALL BE APPLICABLE IN VERTICAL JOINTS. COLOR OF THE SEALANT SHALL MATCH ADJACENT DOOR AND OR WINDOW TRIM UNLESS OTHERWISE NOTED OR DIRECTED, TYPICAL



1 / A8.30 Stair Structure Plan View

1/2" = 1'-0"

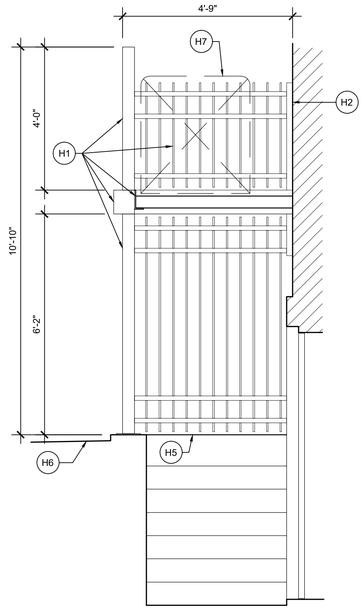
WORK AREA 'H'



2 / A8.30 Elevation

1/2" = 1'-0"

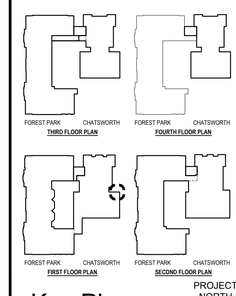
WORK AREA 'H'



3 / A8.30 Section

1/2" = 1'-0"

WORK AREA 'H'



Key Plan

NOT TO SCALE

NYSED PROJECT # 66-07-01-03-0-005-020

Date	1/10/20
Checked	DLF
Drawn	TH

MICHAEL J. McGOVERN, R.A.
Title REGISTERED ARCHITECT License No. 022257-1

Revisions:

(#) ISSUE TO BID 11/23/20

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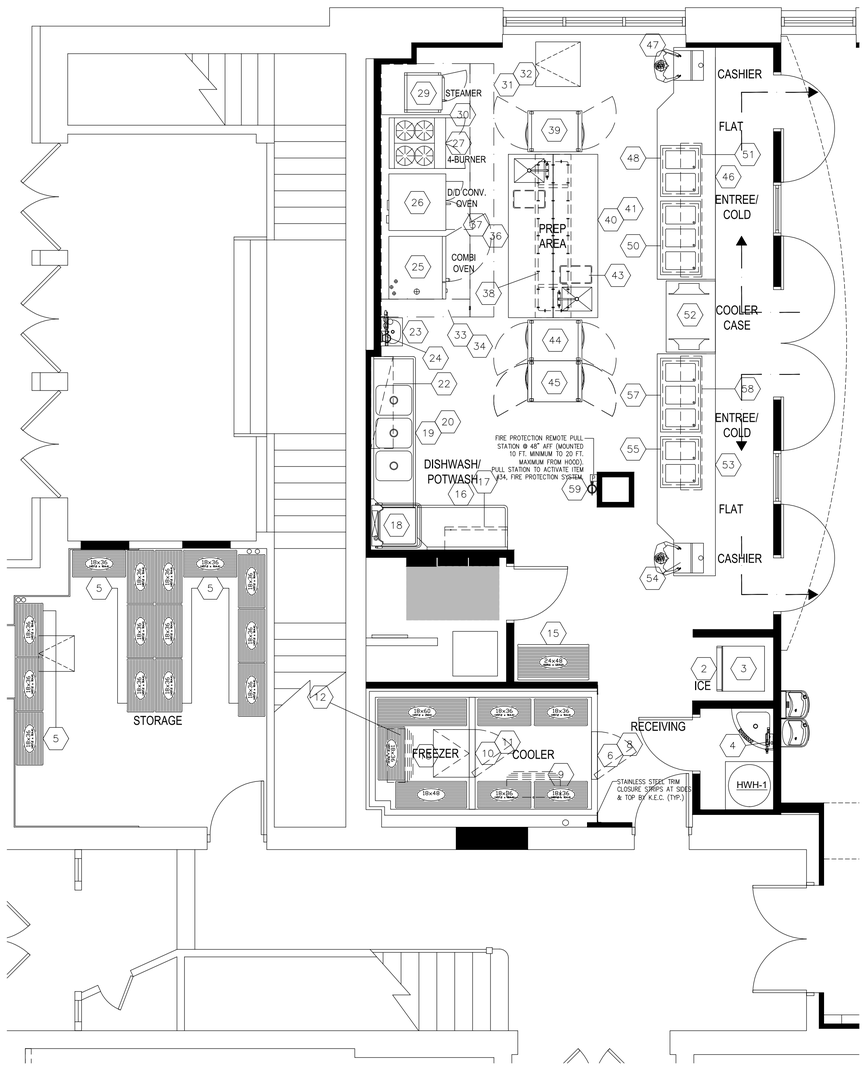
CONDENSER STAND DETAILS

2019 BOND REFERENDUM
CHATSWORTH AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

Job No. 4.1092.72.03

File No. 10927203A830

A8.30



FOOD SERVICE EQUIPMENT PLAN
SCALE: 1/4"=1'-0"

EQUIPMENT SCHEDULE

ITEM NO	EQUIPMENT CATEGORY	QTY	HOT WATER SIZE (IN)	COLD WATER SIZE (IN)	DIRECT DRAIN SIZE (IN)	INDIR DRAIN SIZE (IN)	GAS SIZE (IN)	MBTUH	HP	KW	AMPS	PLUG	DIRECT	VOLTS	PHASE	NEMA	MANUFACTURER	MODEL NUMBER	EQUIPMENT REMARKS
1	SPARE NUMBER	–																	
2	BIN, ICE	1				1											ITV ICE MAKERS	BIN S–500	
3	ICE CUBE MACHINE, AIR COOLED	1		3/4		1					15.0		X	120	1		ITV ICE MAKERS	SPIKA MS 500 A1F	C.W. PIPED FROM ITEM #4
4	FILTER SYSTEM FOR ITEM #3	1		3/4													ITV ICE MAKERS	CS–102–K	
5	STORAGE SHELVING, PORTABLE	14															EAGLE GROUP/ METAL MASTERS	QPF–1848E–GL	
6	WALK–IN COOLER	1									15.0		X	120	1		NOR–LAKE	CUSTOM	
7	SPARE NUMBER	–																	
8	REFRIGERATION TO ITEM #6	1				3/4			1.0		8.1		X	208	3		NOR–LAKE	NASJ105RL3	
											1.6		X	120	1		NOR–LAKE	WL6A094SDAS	
9	STORAGE SHELVING, PORTABLE	4															EAGLE GROUP/ METAL MASTERS	QPF–1836E–GL	
10	WALK–IN FREEZER	1									15.0		X	120	1		NOR–LAKE	CUSTOM	
11	REFRIGERATION TO ITEM #10	1							1.0		10.9		X	208	3		NOR–LAKE	LASJ105RL3	
						3/4					6.6		X	208	1		NOR–LAKE	WL6E049DDAS	
12	SAFETY FLOORING, FULLY WELDED	LOT															HIGH PERFORMANCE FLOORS	PROTECT–ALL	
13	STORAGE SHELVING, PORTABLE	3															EAGLE GROUP/ METAL MASTERS	QPF–1860E–GL	
14	SPARE NUMBER	–																	
15	DRYING RACK, PORTABLE	1															EAGLE GROUP/ METAL MASTERS	QDR–2448E–GL	
16	DISHTABLE, STRAIGHT	1															EMI NEW JERSEY	CUSTOM	
17	RACK SHELF, WALL MNTD.	1															EMI NEW JERSEY	CUSTOM	
18	WAREWASHER, DOOR TYPE, VENTLESS	1	1/2	1/2		1–1/2			1.0	14.6	51.8		X	208	3		JACKSON WWS	TEMPSTAR HH–E	
19	3–COMPARTMENT SINK, POTWASH	1	1/2	1/2		(2)2											EMI NEW JERSEY	CUSTOM	
			1/2	1/2		2													
20	S.S. RACK GUIDE, REMOVABLE	1															EMI NEW JERSEY	CUSTOM	
21	SPARE NUMBER	–																	
22	STORAGE SYSTEM, WALL MNTD.	1															EAGLE GROUP/ METAL MASTERS	WAL–STOR	
23	SINK, HAND WITH SOAP DISPENSER	1	1/2	1/2	1–1/2												EAGLE GROUP/METAL MASTERS	HSA–10–FDPS	
24	FILTER SYSTEM FOR ITEM #25	1		3/4													RATIONAL USA	1900.1150US	
25	OVEN–STEAMER, COMBI, GAS.	1		3/4		2	1	152			3.9	X		208	1	6–15P	RATIONAL USA	B128206.19E	C.W. PIPED FROM ITEM #24
				3/4															
26	OVEN, CONVECTION, GAS	1					1	120	0.8		9.4	X		120	1	5–15P	GARLAND	MCO–GS–20–S	
									0.8		9.4	X		120	1	5–15P			
27	RANGE, HEAVY DUTY, GAS	1					3/4	180			0.1	X		120	1	5–15P	GARLAND	MST44R–E	
28	SPARE NUMBER	–																	
29	STEAMER, ATMOSPHERIC	1		3/4		3/4	1/2	120			1.0	X		120	1	5–15P	ACCUTEMP PRODUCTS	N612016060 DBL	
				3/4		3/4					1.0	X		120	1	5–15P			
30	S.S. WALL PANEL(S), 216"L	LOT															CAPTIVE AIRE	CUSTOM	
31	EXHAUST HOOD, TYPE I	1	ALL DATA ON FANS, DUCTS, POWER, SWITCHES, ETC... BY M.E.P. 2,600 C.F.M.														CAPTIVE AIRE	CUSTOM	
32	SUPPLY PLENUM, MAKE–UP AIR	1	ALL DATA ON FANS, DUCTS, POWER, SWITCHES, ETC... BY M.E.P. 2,150 C.F.M.														CAPTIVE AIRE	CUSTOM	
33	EXHAUST HOOD, CONTROL PANEL	1									15.0		X	120	1		CAPTIVE AIRE	CUSTOM	
34	FIRE PROTECTION SYSTEM, BUILT–IN	1									15.0		X	120	1		CAPTIVE AIRE	UL–300 (R–102)	
35	SPARE NUMBER	–																	
36	WORK TABLE W/ SINK	1	1/2	1/2		2					15.0	X		120	1	5–15R	EMI NEW JERSEY	CUSTOM	
37	OVERSHELF, SPLASH MNTD.	1															EMI NEW JERSEY	CUSTOM	
38	POT RACK, CEILING MNTD.	1															EMI NEW JERSEY	CUSTOM	
39	CABINET, HEATED, PASS–THRU	1								1.5	7.2	X		208	1	6–15P	TRUE MANUFACTURING CO., INC.	STR1HPT–2HS–2HS	
40	WORK COUNTER W/ SINK	1	1/2	1/2		2					15.0	X		120	1	5–15R	EMI NEW JERSEY	CUSTOM	
41	OVERSHELF, SPLASH MNTD.	1															EMI NEW JERSEY	CUSTOM	
42	SPARE NUMBER	–																	
43	TRASH RECEPTACLE, SLIM JIM	3															RUBBERMAID	1971258	
44	REFRIGERATOR, PASS–THRU	1							0.2	0.4	3.8	X		120	1	5–15P	TRUE MANUFACTURING CO., INC.	STR1RPT–2HS–2HS–HC	
45	CABINET, HEATED, PASS–THRU	1								1.5	7.2	X		208	1	6–15P	TRUE MANUFACTURING CO., INC.	STR1HPT–2HS–2HS	
46	SERVING COUNTER	1															EMI NEW JERSEY	CUSTOM	
47	CASHIER SECTION, BUILT–IN	1															EMI NEW JERSEY	CUSTOM	
48	DROP–IN, HOT/COLD UNIT	1				3/4					12.7	X		120	1	5–20P	LTI	QSCHP–2–H	
49	SPARE NUMBER	–																	
50	DROP–IN, HOT/COLD UNIT	1				3/4					12.0	X		120/208	1	14–20P	LTI	DI–QSCHP–3–H	
51	FOOD PROTECTOR(S), ADJUSTABLE	1									1.0		X	120	1		PREMIER METAL & GLASS	TM2N–A	
52	REFRIGERATED SELF–SERVICE CASE	1									16.0	X		120	1	5–20P	STRUCTURAL CONCEPTS	NR4847RSSV	
53	SERVING COUNTER	1															EMI NEW JERSEY	CUSTOM	
54	CASHIER SECTION, BUILT–IN	1															EMI NEW JERSEY	CUSTOM	
55	DROP–IN, HOT/COLD UNIT	1				3/4					12.7	X		120	1	5–20P	LTI	QSCHP–2–H	
56	SPARE NUMBER	–																	
57	DROP–IN, HOT/COLD UNIT	1				3/4					12.0	X		120/208	1	14–20P	LTI	DI–QSCHP–3–H	
58	FOOD PROTECTOR(S), ADJUSTABLE	1									1.0		X	120	1		PREMIER METAL & GLASS	TM2N–A	
59	FIRE EXTINGUISHER, WALL MNTD.	1															ANSUL	K–CLASS	

-FOOD SERVICE EQUIPMENT IS BEING PURCHASED AND INSTALLED UNDER A SEPARATE CONTRACT DIRECTLY WITH THE OWNER. THE EQUIPMENT IS NOT PART OF THE GENERAL CONSTRUCTION (GC) SCOPE OF WORK AND IS PROVIDED FOR REFERENCE ONLY AND FOR COORDINATION PURPOSES.

-ALL PRIME CONTRACTORS SHALL REVIEW THE FOOD SERVICE DRAWINGS, FS.1 THRU FS.7, AND ARE RESPONSIBLE FOR ALL WORK ITEMS CALLED OUT AS BEING BY THEIR SPECIFIC TRADE (IE: ELECTRICAL, PLUMBING, MECHANICAL, GENERAL, ETC.) & AS ADDITIONALLY NOTED IN THE 114000 SECTION OF THE CONTRACT SPECIFICATIONS. THE OWNER'S EQUIPMENT INSTALLER WILL NOT BE MAKING FINAL CONNECTIONS, ALL FINAL CONNECTIONS OF EQUIPMENT SHALL BE BY THE PRIME CONTRACTS UNDER THIS PROJECT. ALL PRIME CONTRACTORS ARE RESPONSIBLE FOR COORDINATION WITH ONE ANOTHER AND WITH THE OWNERS KITCHEN INSTALLER.

Date 1/10/20
Checked
Drawn

MICHAEL J. McGOVERN, R.A.
License No. 022257-1
Title REGISTERED ARCHITECT

Revisions:
1 ISSUE TO BID 11/23/20

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NYSED PROJECT # 66-07-01-03-0-005-020

FOOD SERVICE EQUIPMENT PLAN & SCHEDULE

2019 BOND REFERENDUM
CHATSWORTH AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

Job No. 4.1092.72.03
File No.

FS.1

HOOD INFORMATION – Job#4089852

HOOD NO.	TAG	MODEL	LENGTH	MAX. COOKING TEMP.	APPLIANCE DUTY	DESIGN CFM/ft	TOTAL EXH. CFM	EXHAUST PLENUM RISER(S) WIDTH	LENG.	HEIGHT	DIA.	CFM	VEL.	S.P.	TOTAL SUPPLY CFM	HOOD CONSTRUCTION	HOOD CONFIG. END TO END	ROW
1	31, 32 L	6024 ND-2-PSP-F	6' 6"	450 Deg.	Medium	200	1300			4"	12"	1300	1655	-0.591"	1100	304 SS 100%	LEFT	ALONE
2	31, 32 R	6024 ND-2-PSP-F	6' 8"	450 Deg.	Medium	195	1300			4"	12"	1300	1655	-0.591"	1050	304 SS 100%	RIGHT	ALONE

HOOD INFORMATION

HOOD NO.	TAG	FILTER(S) TYPE	QTY.	HEIGHT	LENGTH	EFFICIENCY @ 7 MICRONS	LIGHT(S) QTY.	TYPE	WIRE GUARD	UTILITY CABINET(S) LOCATION	SIZE	FIRE SYSTEM TYPE	FIRE SYSTEM SIZE	ELECTRICAL MODEL #	SWITCHES QUANTITY	FIRE SYSTEM PIPING	HOOD HANGING WGHT
1	31, 32 L	Captrate Solo Filter	4	20"	16"	85% See Filter Spec.	3	Recessed	ND	Left	12"x60"x24"	Ansul R102	3.0	DCV-1111	1 Light 1 Fan	YES	613 LBS
2	31, 32 R	Captrate Solo Filter	4	20"	16"	85% See Filter Spec.	3	Recessed	ND							YES	414 LBS

HOOD OPTIONS

HOOD NO.	TAG	OPTION
1	31, 32 L	FIELD WRAPPER 18.00" High Front, Left
		BACKSPLASH 120.00" High X 216.00" Long 304 SS Vertical
		BALANCE DAMPERS
		STRUCTURAL FRONT PANEL
		RISER SENSOR INSTALL 6IN PLEN
		LEFT VERTICAL END PANEL 27" Top Width, 21" Bottom Width, 80" High Insulated 304 SS
2	31, 32 R	FIELD WRAPPER 18.00" High Front, Right
		RIGHT SIDESPLASH 80.00" High X 23.00" Long 304 SS Vertical
		RIGHT END STANDOFF (FINISHED) 1" Wide 60" Long Insulated
		BALANCE DAMPERS
		STRUCTURAL FRONT PANEL
		RISER SENSOR INSTALL 6IN PLEN

PERFORATED SUPPLY PLENUM(S)

HOOD NO.	TAG	POS.	LENGTH	WIDTH	HEIGHT	TYPE	RISER(S) WIDTH	LENG.	DIA.	CFM	S.P.
1	31, 32 L	Front	90"	18"	6"	MUA	12"	20"		550	0.165"
						MUA	12"	20"		550	0.165"
2	31, 32 R	Front	81"	18"	6"	MUA	12"	20"		525	0.151"
						MUA	12"	20"		525	0.151"

Fire System Information – Job#4089852

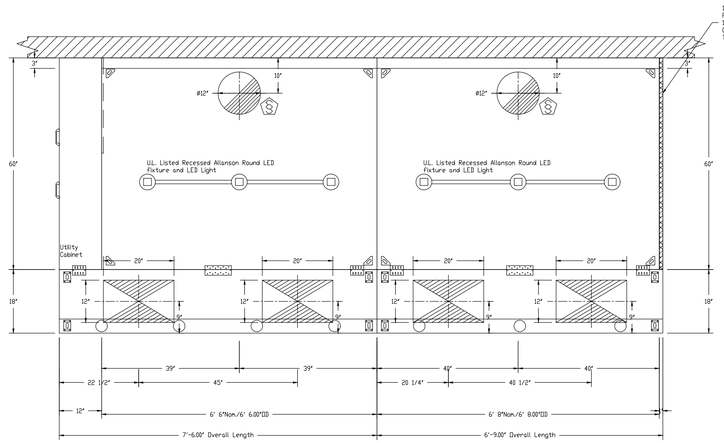
FIRE SYSTEM NO.	Tag	TYPE	SIZE	FLOW POINTS	INSTALLATION SYSTEM	INSTALLATION LOCATION ON HOOD
1	34	Ansul R102	3.0	4	Fire Cabinet Left	Left

ETL LISTING DESCRIPTION BLOCK
THE CAPTIVE AIRE MODEL
ND-2 HAS BEEN E.T.L.
TESTED, LISTED, AND
APPROVED TO EXHAUST
A MINIMUM OF 150 CFM PER
LINEAR FOOT OVER 450
DEGREE COOKING EQUIPMENT

CAPTIVE-AIRE HOODS ARE
BUILT IN COMPLIANCE WITH

NFPA #96
NSF
UL 710 & ULC710 STANDARDS
E.T.L. LISTED 3054804-001

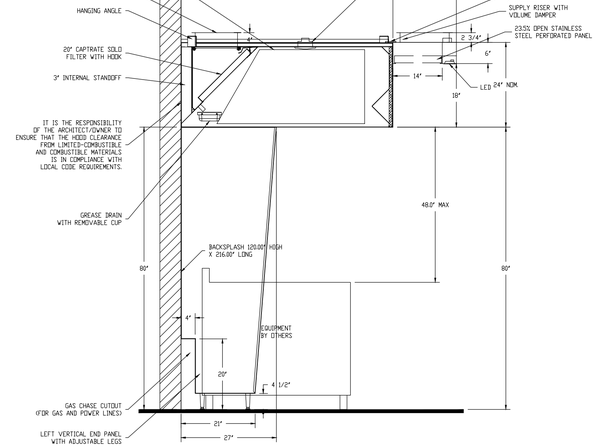
IMC 2015
SECTIONS 506, 507, & 508



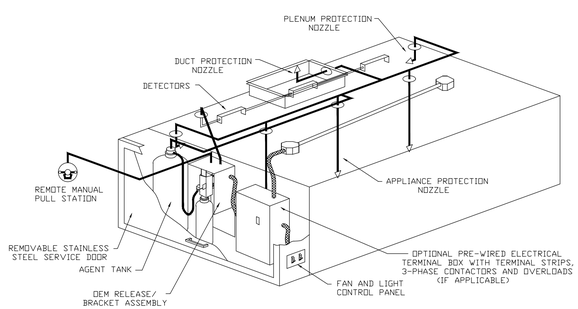
PLAN VIEW – Hood #1 (31, 32 L)
6' 6.00" LONG 6024ND-2-PSP-F

PLAN VIEW – Hood #2 (31, 32 R)
6' 8.00" LONG 6024ND-2-PSP-F

Continuous Capture	
Hood No.	Location
1	Right
2	Left



SECTION VIEW – MODEL 6024ND-2-PSP-F
HOOD – #1 (31, 32 L)
HOOD – #2 (31, 32 R)



TYPICAL ANSUL R-102 SYSTEM LAYOUT

SPECIFICATIONS

THE RESTAURANT FIRE SUPPRESSION SYSTEM SHALL BE THE PRE-ENGINEERED TYPE WITH A FIXED NOZZLE AGENT DISTRIBUTION NETWORK. IT SHALL BE LISTED WITH UNDERWRITERS LABORATORIES, INC. (UL)

THE SYSTEM SHALL BE CAPABLE OF AUTOMATIC DETECTION AND ACTUATION WITH LOCAL OR REMOTE MANUAL ACTUATION. ACCESSORIES SHALL BE AVAILABLE FOR MECHANICAL OR ELECTRICAL GAS LINE SHUT-OFF APPLICATIONS.

THE EXTINGUISHING AGENT SHALL BE A POTASSIUM CARBONATE, POTASSIUM ACETATE-BASED FORMULATION DESIGNED FOR FLAME KNOCKDOWN AND SECUREMENT OF GREASE RELATED FIRES. IT SHALL BE AVAILABLE IN PLASTIC CONTAINERS WITH INSTRUCTIONS FOR LIQUID AGENT HANDLING AND USAGE.

THE REGULATED RELEASE MECHANISM SHALL BE COMPATIBLE WITH A FUSIBLE LINK DETECTION SYSTEM. THE FUSIBLE LINK SHALL BE SELECTED AND INSTALLED ACCORDING TO THE OPERATING TEMPERATURE IN THE VENTILATING SYSTEM. THE FUSIBLE LINK SHALL BE SUPPORTED BY A DETECTOR BRACKET/ LINKAGE ASSEMBLY.

SPECIFICATION: CAPTRATE® GREASE-STOP® SOLID FILTER

THE CAPTRATE GREASE-STOP SOLID FILTER IS A SINGLE-STAGE FILTER FEATURING A UNIQUE S-BAFFLE DESIGN IN CONJUNCTION WITH A SLOTTED REAR BAFFLE DESIGN, TO DELIVER EXCEPTIONAL FILTRATION EFFICIENCY.

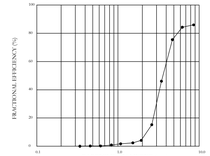
FILTER IS STAINLESS STEEL CONSTRUCTION, AND SIZED TO FIT INTO STANDARD 2-INCH DEEP HOOD CHANNEL(S).

UNITS SHALL INCLUDE STAINLESS STEEL HANDLES AND A FASTENING DEVICE TO SECURE THE TWO COMPONENTS WHEN ASSEMBLED.

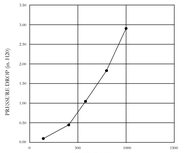
GREASE EXTRACTION EFFICIENCY PERFORMANCE SHALL REMOVE AT LEAST 75% OF GREASE PARTICLES FIVE MICRONS IN SIZE, AND 95% GREASE PARTICLES SEVEN MICRONS IN SIZE AND LARGER, WITH A CORRESPONDING PRESSURE DROP NOT TO EXCEED 1.0 INCHES OF WATER GAUGE.

THE CAPTRATE GREASE-STOP SOLID WAS TESTED TO ASTM STANDARD ASTM F2519-05. MANUFACTURER APPROVED FOR USE IN SOLID FUEL APPLICATIONS AS A SPARK ARRESTER.

EFFICIENCY VS. PARTICLE DIAMETER



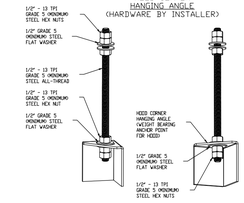
PRESSURE DROP VS. FLOW RATE



CAPTRATE FILTERS ARE BUILT IN COMPLIANCE WITH:
NFPA #96
NSF STANDARD #2
UL STANDARD #1046
INT. MECH. CODE (IMC)
ULC-S649

VERIFY CEILING HEIGHT
_____' _____"
Height required to verify hood will fit and to size the enclosure panels (wrappers)

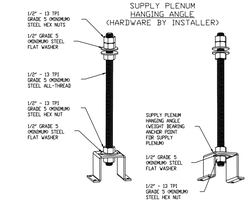
HOOD CORNER HANGING ANGLE (HARDWARE BY INSTALLER)



ASSEMBLY INSTRUCTIONS

HANGING ANGLE MUST BE SUPPORTED WITH 1/2" - 13 TPI GRADE 5 (MINIMUM) ALL-THREAD. SANDWICH HANGING ANGLES AND CEILING ANCHOR POINTS WITH 1/2" GRADE 5 (MINIMUM) STEEL FLAT WASHERS AND 1/2" - 13 TPI GRADE 5 (MINIMUM) HEX NUTS AS SHOWN. MUST USE DOUBLED HEX NUT CONFIGURATION BENEATH HOOD HANGING ANGLES AND ABOVE CEILING ANCHORS. MAINTAIN 1/4" OF EXPOSED THREADS BENEATH BOTTOM HEX NUT. TORQUE ALL HEX NUTS TO 57 FT-LBS.

SUPPLY PLENUM HANGING ANGLE (HARDWARE BY INSTALLER)



ASSEMBLY INSTRUCTIONS

HANGING ANGLE MUST BE SUPPORTED WITH 1/2" - 13 TPI GRADE 5 (MINIMUM) ALL-THREAD. SANDWICH HANGING ANGLES AND CEILING ANCHOR POINTS WITH 1/2" GRADE 5 (MINIMUM) STEEL FLAT WASHERS AND 1/2" - 13 TPI GRADE 5 (MINIMUM) HEX NUTS AS SHOWN. MUST USE DOUBLED HEX NUT CONFIGURATION ABOVE CEILING ANCHORS. SINGLE HEX NUT BENEATH HANGING ANGLE IS ACCEPTABLE FOR PSP HANGING ANGLES. MAINTAIN 1/4" OF EXPOSED THREADS BENEATH BOTTOM HEX NUT. TORQUE ALL HEX NUTS TO 57 FT-LBS.

Date	1/10/20
Checked	
Drawn	

MICHAEL J. McGOVERN, R.A.
License No. 022257-1
Title REGISTERED ARCHITECT

Revisions:
ISSUE TO BID 11/23/20

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NYSED PROJECT # 66-07-01-03-0-005-020

FOOD SERVICE EXHAUST HOOD SCHEDULE, DETAILS, & NOTES

2019 BOND REFERENDUM
CHATSWORTH AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

Job No. 4.1092.72.03

File No.

FS.2

ELECTRICAL PACKAGE – Job#4089852

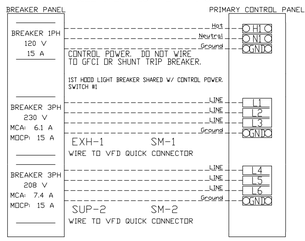
NO.	TAG	PACKAGE #	LOCATION	SWITCHES		OPTION	FANS CONTROLLED				
				LOCATION	QUANTITY		TYPE	Φ	H.P.	VOLT	FLA
1	33	DCV-1111	Utility Cabinet Left	03 - Utility Cabinet Left	1 Light	Smart Controls DCV	Exhaust	3			
				Hood # 1	1 Fan		Supply	3			

FAN MOTOR INFORMATION TO BE DETERMINED. INVERTER DUTY 3-PHASE MOTORS REQUIRED. FANS TO BE RUN OFF VFD'S PROVIDED BY & LOCATED INSIDE HOOD CONTROL PACKAGE.

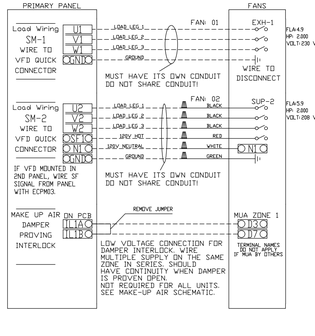
JOB NO 4089852 | MODEL NUMBER DCV-1111 | JOB NAME Chatsworth ES | DRAWN BY | DATE 11/26/2019 | SCHEMATIC TYPE INSTALL | DWG NO ECP #1-1

DESCRIPTION OF OPERATION:
Demand Control Ventilation, w control for 1 Exhaust Fan, 1 Supply Fan, Exhaust on in Fire, Lights out in Fire, Fans modulate based on duct temperature. INVERTER DUTY 3 PHASE MOTOR REQUIRED FOR USE WITH VFD. Room temperature sensor shipped loose for field installation.Verify distance between VFD and Motor; additional cost could apply if distance exceeds 50 Feet.

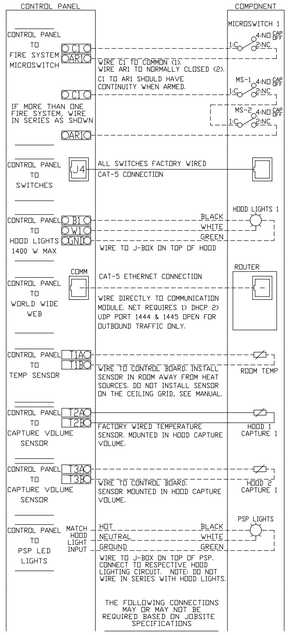
BREAKER PANEL TO PRIMARY CONTROL PANEL
Responsibility: Electrician
BREAKER SIZE SHOWN IS THE MAXIMUM ALLOWED

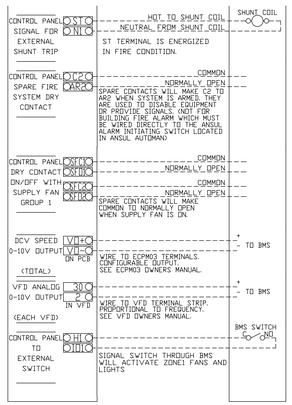


CONTROL PANEL TO FANS
Responsibility: Electrician



CONTROL PANEL TO ACCESSORY ITEMS
Responsibility: Electrician





FOR QUESTIONS, CONTACT
SCOTT ADAMS OR ERNESTO ARMSTRONG
N. NJ & S. NY REGIONAL OFFICE
PHONE: (201) 669-4982, (887) 668-4982
REG69@CAPTIVEAIRE.COM

Sequence of Operations:

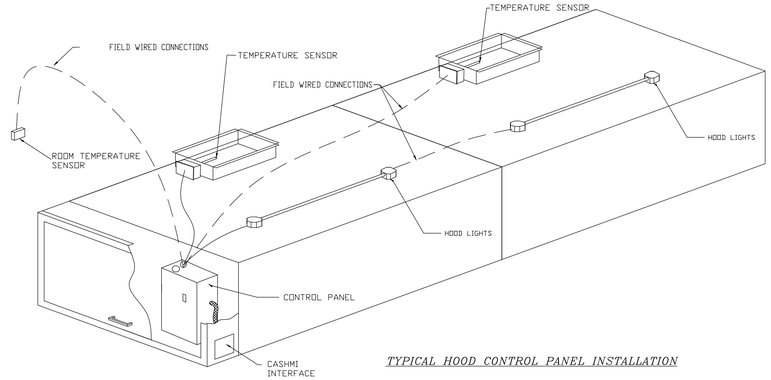
The hood control panel is capable of operating in one or more of the following states at any given time:

- Automatic: The system operates based on the differential between room temperature and the temperature at the hood cavity or exhaust duct collar. Fans activate at a configurable temperature differential threshold. Depending on the job configuration each fan zone can be configured as static or dynamic. These terms refer to whether a variable motor (such as EC Motors or VFD driven motors) modulate with temperature. If the panel is equipped with variable speed fans and the zone is defined as "dynamic", these will modulate within a user-defined range based on the temperature differential. Panels equipped with variable speed fans and a fan zone defined as "static", fans will run at a set speed calculated for the drive. Demand control ventilation systems are capable of modulating exhaust and make up air fan speeds per the requirements outlined in IECC 403.2.8.

- Manual: The system operates based on human input from an HMI.

- Schedule: A weekly schedule can be set to run fans for a specified period throughout the day. There are three occupied times per day to allow for the user to set up a time that is suitable to their needs. Any time that is within the defined occupied time, the system will run at modulation mode and follow the fan procedure algorithm based on temperature during this time. During unoccupied time, the system will have an extra offset to prevent unintended activation of the system during a time where the system is not being occupied.

- Other: The system operates based on the input from an external source (DDC, BMS or hard-wired interlock)



TYPICAL HOOD CONTROL PANEL INSTALLATION

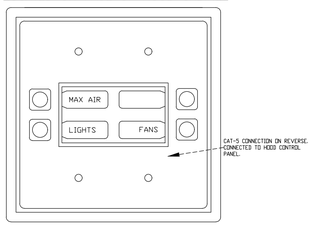
DEMAND CONTROL VENTILATION SYSTEM

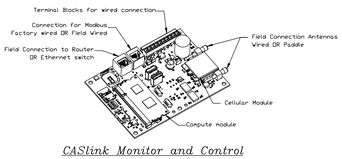
Controls shall be capable of reducing exhaust and supply airflow quantities by using a modulating speed control system. High and Low speeds shall be adjustable by variable frequency drives. A temperature switch in the exhaust duct shall control airflow set point. A MAX airflow override button shall be supplied with an adjustable timer.

Control shall be used in kitchen exhaust applications to reduce exhaust and supply air volumes while cooking appliances are idling.

The Demand Control Ventilation System complies with IMC 507.1.1 by interlocking with cooking appliances through means of a heat sensor to automatically activate exhaust fans during cooking operations.

HOOD CONTROL PACKAGE INTERFACE
with LCD Screen
LOCATED ON FACE OF HOOD CABINET





CASlink Monitor and Control

- *Hood control panel to support communications to cloud-based Building Management System.*
- *Hood Control Panel to allow cloud-based Building Management System to monitor real time parameters outlined as MONITOR in the points list.*
- *Hood Control Panel to allow cloud-based Building Management System to control parameters outlined as CONTROL in the points list.*
- *Hood Control Panel to allow cloud-based Building Management System to implement SYSTEM ECONOMIZER control strategies for fully integrated Building Management.*

MONITORING AND CONTROL POINTS LIST

DCV Packages	Function
Room Temperature	MONITOR
Duct Temperature(s)	MONITOR
MUA Discharge Temperature	MONITOR
Kitchen RTU Discharge Temperature	MONITOR
Fan Speed	MONITOR
Fan Amperage	MONITOR
Fan Power	MONITOR
VFD Faults	MONITOR
Controller Faults	MONITOR
Fan Faults	MONITOR
Fan Status	MONITOR
PCU Faults	MONITOR
PCU Filter Clog Percentages	MONITOR
Fire Condition	MONITOR
CORE Fire System	MONITOR
Building Pressures	MONITOR
Prep Time Button	MONITOR & CONTROL
Fans Button	MONITOR & CONTROL
Lights Button	MONITOR & CONTROL
Wash Button	MONITOR & CONTROL

Date 1/10/20
Checked
Drawn

MICHAEL J. McGOVERN, R.A. — License No. 022257-1 — Title REGISTERED ARCHITECT

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NYSED PROJECT # 66-07-01-03-0-005-020

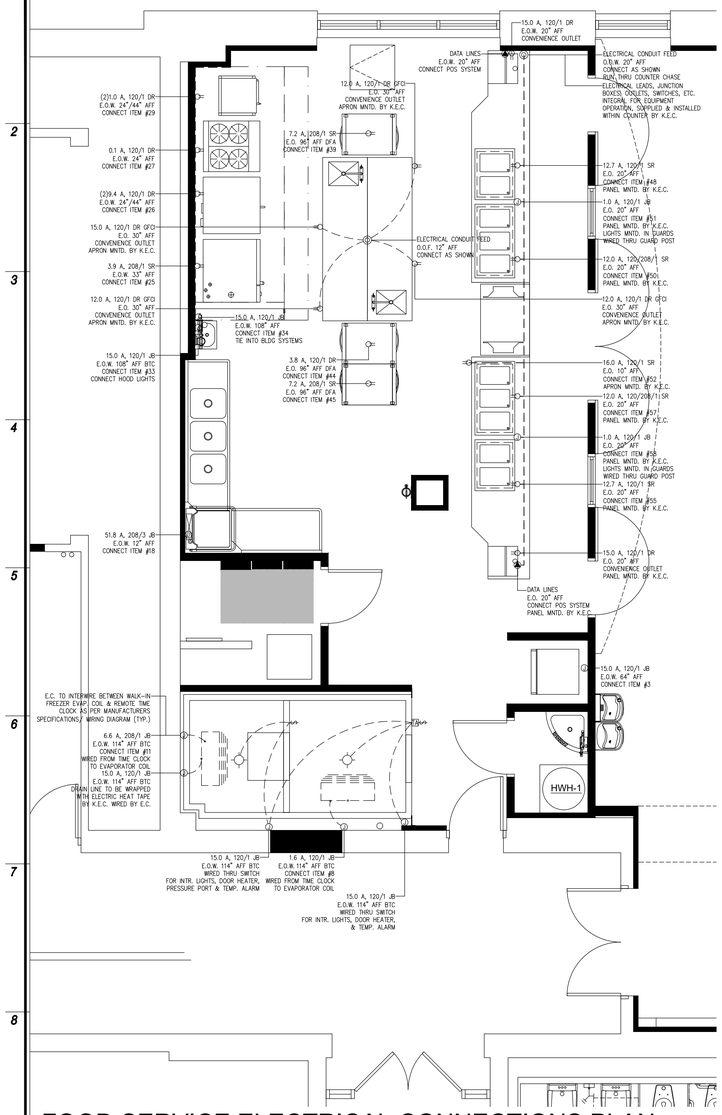
FOOD SERVICE EXHAUST HOOD SCHEDULE, DETAILS, & NOTES(CONT'ND)

2019 BOND REFERENDUM
CHATSWORTH AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

Job No. 4.1092.72.03

File No.

FS.3



FOOD SERVICE ELECTRICAL CONNECTIONS PLAN
SCALE: 1/4"=1'-0"

ELECTRICAL LEGEND	
JB	JUNCTION BOX
DR	DUPLEX RECEPTACLE
SR	SIMPLEX RECEPTACLE
E.O.W.	ELECTRICAL OUT OF WALL
E.O.F.	ELECTRICAL OUT OF FLOOR
D.F.A.	DOWN FROM ABOVE
AFF	ABOVE FINISHED FLOOR
BTC	BRANCH TO CONNECTION
A	AMPS
HP	HORSEPOWER
kW	KILOWATT
E.C.	ELECTRICAL CONTRACTOR

ELECTRICAL NOTES:

1) ALL WALL OUTLETS ARE FROM AFF TO BOTTOM OF BOX.

2) E.C. TO CHECK ALL CONDITIONS AND VERIFY ALL DIMENSIONS PRIOR TO WORK.

ELECTRICAL CONTRACTOR NOTES:

1. ELECTRICAL CONTRACTOR TO PROVIDE REQUIRED CONVENIENCE RECEPTACLES AS PER LOCAL CODE HAVING JURISDICTION AND PER OWNERS REQUESTS/ NEEDS.
2. ELECTRICAL CONTRACTOR TO VERIFY IF CONVENIENCE RECEPTACLES ARE TO BE GFCI PER LOCAL CODE HAVING JURISDICTION.
3. MOUNTING HEIGHTS GIVEN ARE TO CENTERLINE OF DEVICE UNLESS OTHERWISE NOTED.
4. FLOOR MOUNTED DEVICES ARE TO BE MOUNTED WITH A 5 3/4" MAXIMUM HEIGHT TO TOP OF BOX.
5. ALL RECEPTACLES, J-BOXES, SWITCHES, INTER-WIRING, DISCONNECT SWITCHES, MOTOR STARTERS AND/OR TRANSFORMERS OR ANY OTHER ELECTRICAL DEVICE REQUIRED TO MAKE EQUIPMENT OPERATIONAL IS TO BE SUPPLIED BY ELECTRICAL CONTRACTOR AND IS NOT PART OF THE KITCHEN EQUIPMENT CONTRACTORS SCOPE OF WORK UNLESS OTHERWISE SPECIFIED.
6. ALL POWER CONNECTION POINTS UNDER EXHAUST HOODS ARE TO BE SHUT DOWN UPON FIRE SUPPRESSION SYSTEM ACTIVATION PER NFPA 96. ELECTRICAL CONTRACTOR TO FURNISH AND INSTALL SHUNT-TRIP BREAKERS FOR THESE CIRCUITS.
7. ELECTRICAL CONTRACTOR TO VERIFY, FURNISH AND INSTALL REQUIRED ELECTRICAL ROUGH-INS FOR ALL EQUIPMENT BEING SUPPLIED.

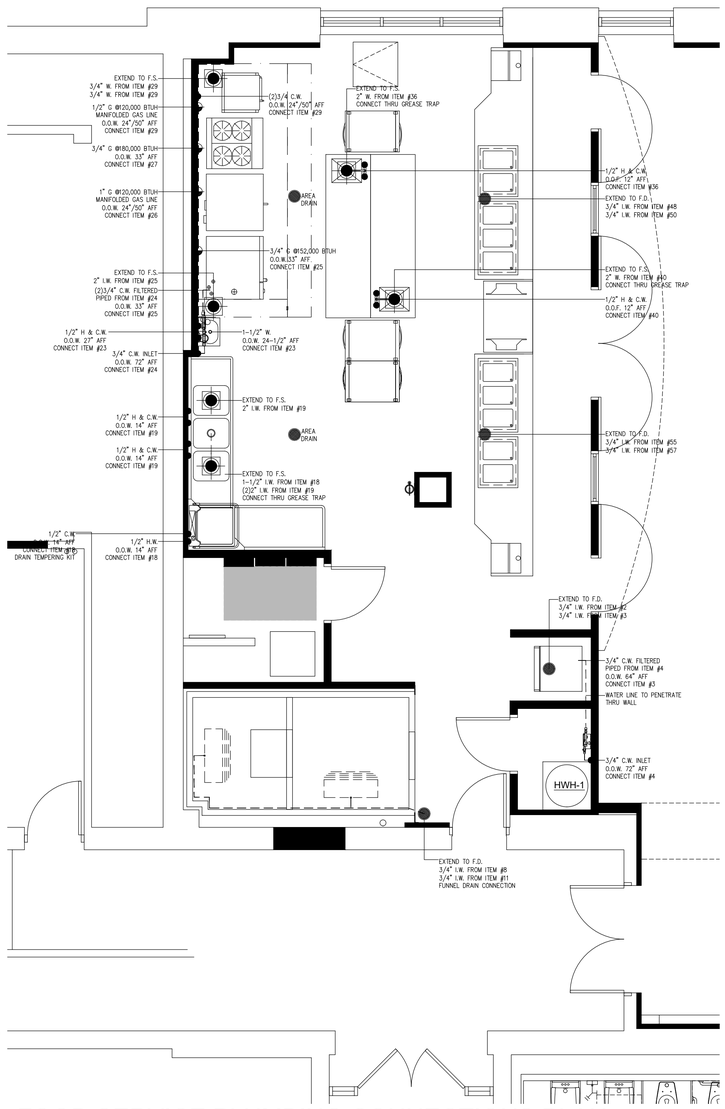
ELECTRICAL CONTRACTOR (E.C.) NOTE:
ELECTRICAL CONTRACTOR TO PROVIDE AND INSTALL FUSED DISCONNECT SWITCH WHERE REQUIRED, AS WELL AS CONDUIT AND WIRING FROM SAME TO TERMINALS IN CONDENSING UNITS CONNECTION POINT.

EXTEND (5) WIRES & GROUND THRU TIME CLOCK TO FREEZER UNIT EVAPORATOR COIL (FANS, DEFROST & CONSTANT "HOT" FOR DRAIN LINE HEATER). IF APPLICABLE, SIMILAR APPLIES TO COOLER UNIT, K.E.C. TO COORDINATE.

COMPRESSOR UNITS MNTD. ON BLDG. ROOF.
REFER TO ARCH./ENG. DWGS. FOR LOCATION.
COMPRESSOR UNITS AS SHOWN TO BE MOUNTED ON APPROVED DUNNAGE/CURBING PROVIDED BY K.E.C., INSTALLED BY G.C.
ARCHITECT TO SPECIFY CURBING DETAILS IF REQUIRED.

ITEM #8	ITEM #11
(35"L X 27"W X 19"H)	(35"L X 27"W X 19"H)
175 LBS.	161 LBS.
1.0 HP, 208/3 JB (8.1 AMPS) E.O. 6" ABOVE ROOF	1.0 HP, 208/3 JB (10.9 AMPS) E.O. 6" ABOVE ROOF

*PLEASE NOTE THAT REFRIGERATION SIZING & ITS REFRIGERANT LINE RUNS ARE BASED ON A MAXIMUM HORIZONTAL LINE RUN OF 65'-0" (65 FEET) AND A VERTICAL LINE RUN OF 35'-0" (35 FEET).



FOOD SERVICE PLUMBING CONNECTIONS PLAN
SCALE: 1/4"=1'-0"

PLUMBING LEGEND	
H.W.	HOT WATER
C.W.	COLD WATER
W	DIRECT WASTE
I.W.	INDIRECT WASTE
F.D.	FLOOR DRAIN
F.S.	FLOOR SINK
G	GAS
O.O.W.	OUT OF WALL
O.O.F.	OUT OF FLOOR
AFF	ABOVE FINISHED FLOOR
BTC	BRANCH TO CONNECTION
P.C.	PLUMBING CONTRACTOR

PLUMBING NOTES:

1) P.C. TO PROVIDE HUB DRAINS FOR ALL INDIRECT WASTE LINES AND RETAIN AIR GAPS AS REQUIRED.

2) P.C. TO CHECK ALL CONDITIONS AND VERIFY ALL DIMENSIONS PRIOR TO WORK.

PLUMBING CONTRACTOR NOTES:

1. SHUT-OFF VALVES ON THE INLET SIDE OF THE COLD AND HOT WATER LINES SERVING EACH PIECE OF EQUIPMENT ARE TO BE FURNISHED AND INSTALLED BY THE PLUMBING CONTRACTOR.
2. IF WATER PRESSURE AT THE EQUIPMENT AREA EXCEEDS 50 POUNDS FLOW PRESSURE OWNER OR HIS CONTRACTOR MUST INSTALL A PRESSURE REDUCING VALVE ON BOTH THE MAIN HOT WATER AND COLD WATER SUPPLY LINES SERVICING THE AREA.
3. FLOW PRESSURE TO DISHWASHER (OR ITS AUXILIARY HOT WATER BOOSTER HEATER IF ONE IS USED) MUST NOT EXCEED 25 POUNDS.
4. OWNER OR HIS CONTRACTOR MUST PROVIDE AN ADEQUATE SUPPLY OF 110° F HOT WATER, MINIMUM, TO ALL COOKING EQUIPMENT, DISHWASHER, BOOSTER HEATER, WORK SINKS, HAND SINKS, ETC...
5. USING PVC PIPING FOR DRAIN LINES FROM EQUIPMENT THAT DISCHARGES HOT WATER SUCH AS STEAMERS & DISHWASHERS MAY CAUSE THE P.V.C. PIPING TO SOFTEN OR CRACK. IT IS RECOMMENDED THAT METAL (COPPER OR GALVANIZED) PIPING BE USED.
6. CHECK WITH LOCAL CODES TO DETERMINE WHAT EQUIPMENT IS TO BE PIPED THROUGH A GREASE TRAP. EQUIPMENT NOTED ON FOOD SERVICE CONTRACT DRAWINGS ARE REQUIRED/ RECOMMENDED AND SHOULD BE VERIFIED FOR COMPLIANCE BY THE PLUMBING CONTRACTOR (GREASE TRAP(S) TO BE PROVIDED BY PLUMBING CONTRACTOR).
7. PLUMBING CONTRACTOR TO INSTALL MECHANICAL GAS SHUT-OFF VALVE IN GAS MAIN FEEDING ALL COOKING EQUIPMENT PRIOR TO ANY TEES OR GAS LOOP FEEDING COOKING EQUIPMENT. MECHANICAL SHUT-OFF VALVE IS RECOMMENDED TO BE INSTALLED IN ACCESSIBLE CEILING SPACE OR BELOW FLOOR WITH ACCESS TO VALVE.
8. PLUMBING CONTRACTOR TO PROVIDE FLOOR DRAINS AND/OR FLOOR SINKS AS PER LOCAL CODE HAVING JURISDICTION AND OWNERS REQUEST.
9. PLUMBING CONTRACTOR IS TO REVIEW ALL CATALOG DATA PROVIDED AS PART OF THE FOOD SERVICE CONTRACT DOCUMENTS TO ESTABLISH THE NECESSARY GAS PRESSURE TO THE KITCHEN EQUIPMENT. IF GAS PRESSURE TO KITCHEN EQUIPMENT IS HIGHER THAN REQUIRED, A PRESSURE REGULATOR IS TO BE PROVIDED BY THE PLUMBING CONTRACTOR OR BY THE GAS COMPANY. THE GAS PRESSURE REGULATOR MUST BE INSTALLED PRIOR TO THE GAS FEEDING ANY KITCHEN EQUIPMENT. EXCESSIVE GAS PRESSURE TO THE EQUIPMENT CAN DAMAGE THE EQUIPMENT AND CAUSE PERSONAL INJURY.
10. PLUMBING CONTRACTOR TO VERIFY, FURNISH AND INSTALL REQUIRED PLUMBING ROUGH-INS FOR ALL EQUIPMENT BEING SUPPLIED.

Date	1/10/20
Checked	
Drawn	

MICHAEL J. McGOVERN, R.A.
License No. 022257-1
Title REGISTERED ARCHITECT

Revisions:
ISSUE TO BID 11/23/20

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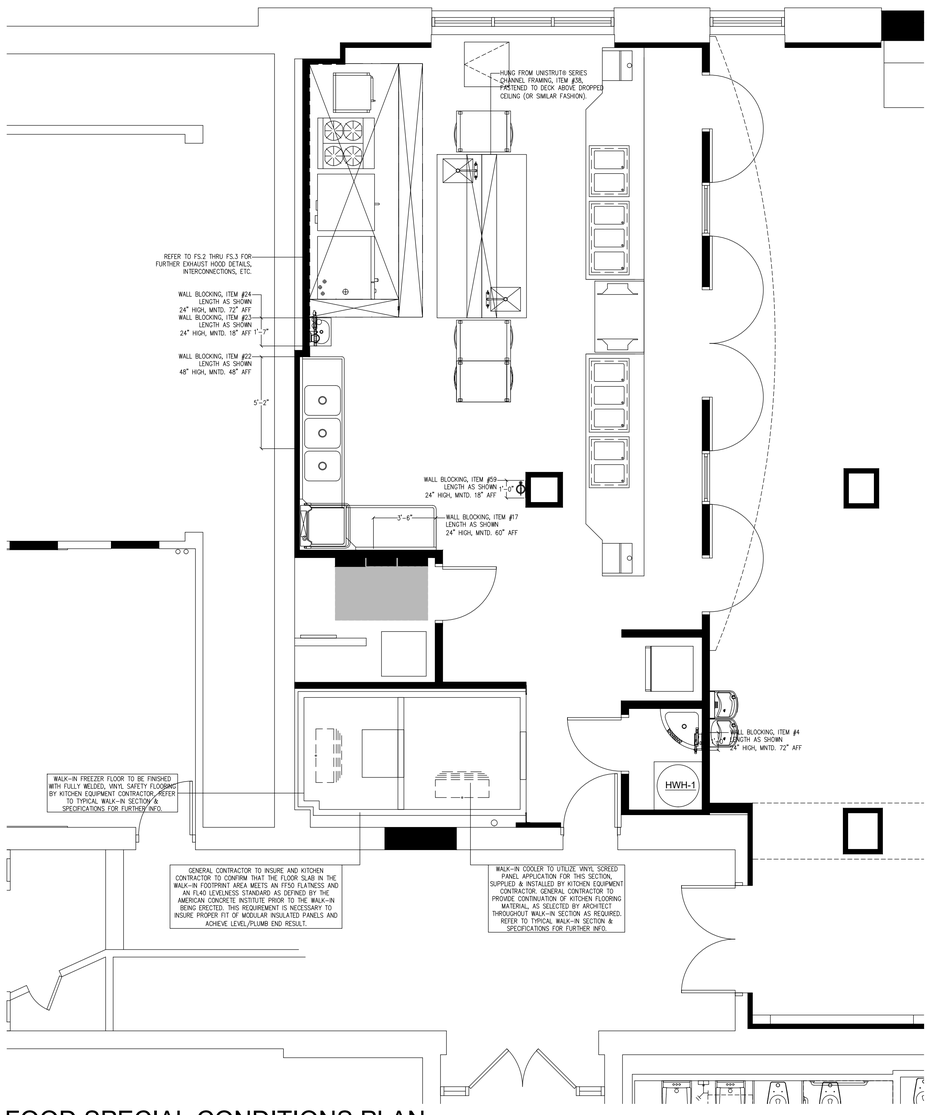
NYSED PROJECT # 66-07-01-03-0-005-020

FOOD SERVICE UTILITY CONNECTION
PLANS & NOTES
2019 BOND REFERENDUM
CHATSWORTH AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

Job No. 4.1092.72.03

File No.

FS.4



FOOD SPECIAL CONDITIONS PLAN
SCALE: 1/4"=1'-0"

GENERAL CONTRACTOR NOTES:

1. GENERAL CONTRACTOR TO COORDINATE FINAL LOCATION OF CONDENSING UNITS WITH KITCHEN EQUIPMENT CONTRACTOR, ARCHITECT AND OWNER.
2. GENERAL CONTRACTOR TO VERIFY WITH ARCHITECT AND STRUCTURAL ENGINEER THAT THE ROOF WILL SUPPORT THE CONDENSING UNITS IN THE FINAL LOCATIONS.
3. REFRIGERATION SIZING & ITS REFRIGERANT LINE RUNS ARE BASED ON A MAXIMUM HORIZONTAL LINE RUN OF 65'-0" (65 FEET) AND A VERTICAL LINE RUN OF 35'-0" (35 FEET).
4. IF THE CONDENSING UNITS ARE LOCATED MORE THAN 100'-0" AWAY FROM THE WALK-IN BOX, GENERAL CONTRACTOR TO NOTIFY KITCHEN EQUIPMENT CONTRACTOR PRIOR TO INSTALLATION OF ROOF CURBS, PITCH POCKETS AND CONDENSING UNITS.
5. IF WALLS ARE FIRE RATED, GENERAL CONTRACTOR TO USE METAL STUDS FOR WALL BLOCKING IN PLACE OF PLYWOOD.

GENERAL MECHANICAL NOTES:

1. ROUGH-INS SHOWN ON THE ROUGH-IN DRAWINGS ARE FOR EQUIPMENT BEING SUPPLIED BY KITCHEN EQUIPMENT CONTRACTOR ONLY. ADDITIONAL ROUGH-INS SHOWN OR NOT SHOWN ON THESE DRAWINGS FOR EQUIPMENT BEING RELOCATED, RE-USED OR SUPPLIED BY OTHERS WILL HAVE TO BE VERIFIED BY GENERAL CONTRACTOR PRIOR TO ROUGH-INS BEING INSTALLED.
2. THE MECHANICAL PLANS, IF APPLICABLE, ARE PREPARED AS AN ACCOMMODATION AND GUIDE ONLY, TO INDICATE MECHANICAL REQUIREMENTS NECESSARY TO OPERATE THE EQUIPMENT. DEVIATIONS FROM THE MECHANICAL WORK SHOWN ON THESE PLANS AND EXECUTION OF SUCH WORK IS WITHOUT RESPONSIBILITY OF RAYMOND/ RAYMOND ASSOCIATES. DATA ON THIS SHEET IS TO BE REVIEWED BY OWNER AND/OR ARCHITECT AND IS TO BE INCORPORATED INTO THE BUILDING MECHANICAL PLANS IN ACCORDANCE WITH LOCAL CODES AT THE SITE.
3. OWNER AND/OR ARCHITECT IS TO SUBMIT THIS PLAN SET TO LOCAL HEALTH DEPARTMENT FOR APPROVAL UNLESS OTHERWISE SPECIFIED.
4. ALL EQUIPMENT DESIGNED AND SPECIFIED, PER THIS SET OF PLANS, BY RAYMOND/ RAYMOND ASSOCIATES, HAS THE UNDERWRITERS' LABORATORIES AND NATIONAL SANITATION FOUNDATION SEALS OF APPROVAL. AND IS TO BE FURNISHED AS SUCH BY THE KITCHEN EQUIPMENT CONTRACTOR.
5. KITCHEN EQUIPMENT CONTRACTOR TO SET IN PLACE, EQUIPMENT AT THE SITE IN ACCORDANCE WITH THESE PLANS AND TERMS OF CONTRACT WITH OWNER.
6. ALL PLUMBING, ELECTRICAL AND VENTILATION WORK, INCLUDING "ROUGH-INS, INTERCONNECTIONS BETWEEN COUNTERS, CONTROLS, SWITCHES, ETC..." AND "FINAL CONNECTIONS" TO THE EQUIPMENT, IS TO BE PERFORMED BY APPROPRIATE TRADES. IT IS NOT PART OF THE KITCHEN EQUIPMENT CONTRACTORS SCOPE OF WORK UNLESS OTHERWISE SPECIFIED.
7. TO EXPEDITE AND INSURE PROPER INSTALLATION OF COOKING EQUIPMENT, IT IS RECOMMENDED THAT "ALL FINAL CONNECTIONS" ARE TO BE PERFORMED BY APPROPRIATE TRADES AT THE SAME TIME THE KITCHEN EQUIPMENT CONTRACTOR IS SETTING THE EQUIPMENT IN PLACE.

Date	1/10/20
Checked	
Drawn	

MICHAEL J. McGOVERN, R.A.
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Title REGISTERED ARCHITECT

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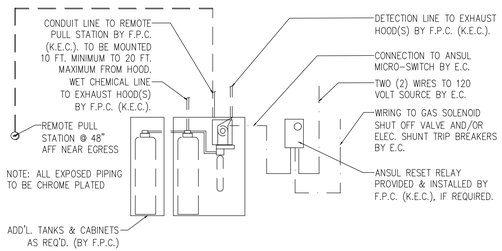
FOOD SERVICE SPECIAL CONDITIONS PLAN & NOTES

2019 BOND REFERENDUM
ELEMENTARY SCHOOL
CHATSWORTH AVENUE
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

Job No. 4.1092.72.03

File No.

FS.5

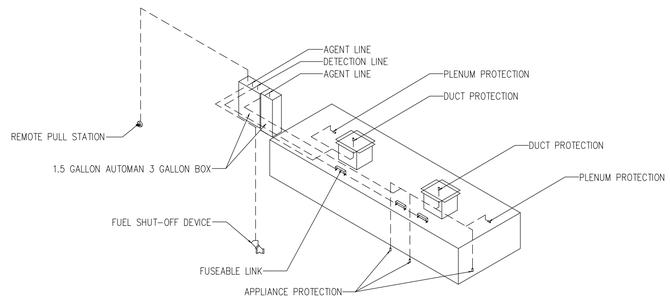


- F.P.C. (FIRE PROTECTION CONTRACTOR) IS A SUB FOR THE K.E.C. (KITCHEN EQUIPMENT CONTRACTOR).
- GAS SOLENOID VALVE PROVIDED BY F.P.C. (K.E.C.). ELECTRICAL SHUNT TRIP BREAKERS PROVIDED BY E.C.
- IN ACCORDANCE WITH NFPA 17A & NFPA 96.
- ANSUL MODEL UL-300 (R-102)

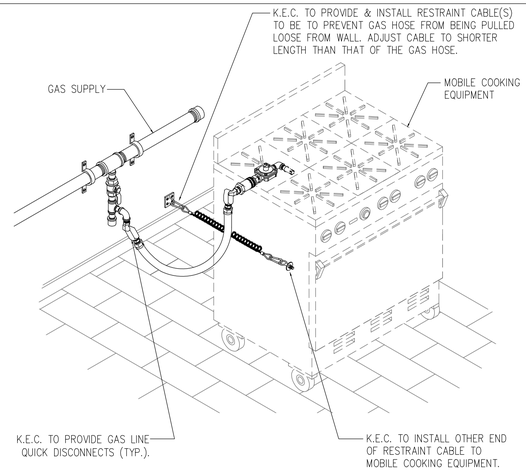
FIRE PROTECTION SYSTEM SEQUENCE OF OPERATION

- SYSTEM IS ENGAGED BY FUSIBLE LINK OR MANUAL OPERATION OF REMOTE PULL STATION
- SYSTEM DISCHARGES CHEMICAL THROUGHOUT INSTALLED AREA
- ALL SHARED DUCTWORK TO THE HAZARD AREA MUST DISCHARGE SIMULTANEOUSLY ALONG WITH ANY POLLUTION CONTROL DEVICE PROTECTION
- ALL GAS SUPPLY BENEATH THE HOOD AREA SHALL BE SHUT OFF
- ALL ELECTRIC SUPPLY BENEATH THE HOOD AREA SHALL BE SHUT OFF- EXCEPTION: EXHAUST FAN ONLY SHALL REMAIN OPERATIONAL
- FIRE ALARM AND/OR BUILDING MONITORING SYSTEM SHALL BE NOTIFIED
- AFTER AUTOMATIC SHUTDOWN, MANUAL OR AUTOMATIC RESET IS REQUIRED

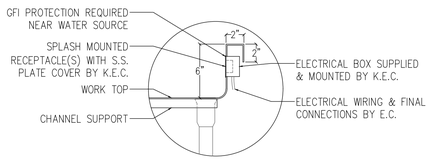
TYPICAL DETAIL | FIRE PROTECTION SYSTEM | SCALE: N.T.S.



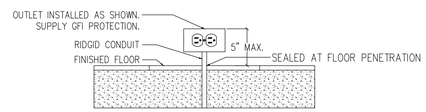
TYPICAL DETAIL | FIRE PROTECTION SYSTEM INSTALL | SCALE: N.T.S.



TYPICAL DETAIL | QUICK DISCONNECT GAS ASSEMBLY | SCALE: N.T.S.

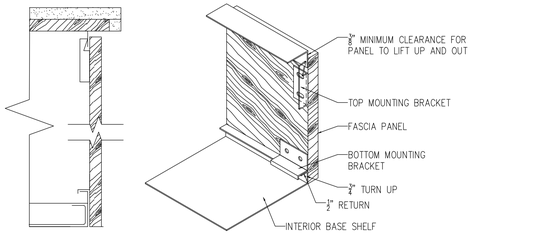


SPLASH MOUNTED

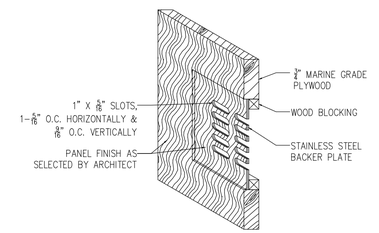


FLOOR MOUNTED

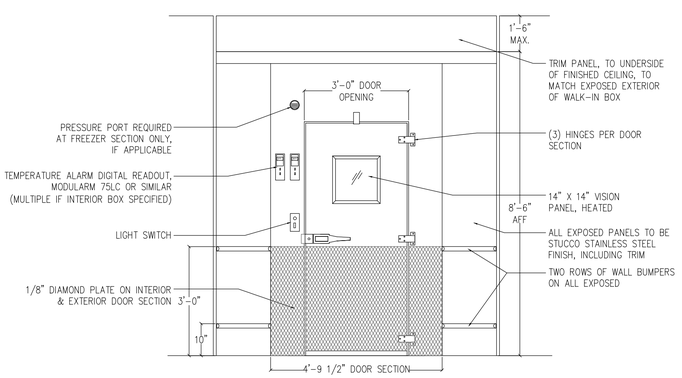
TYPICAL DETAIL | ELECTRICAL OUTLETS | SCALE: N.T.S.



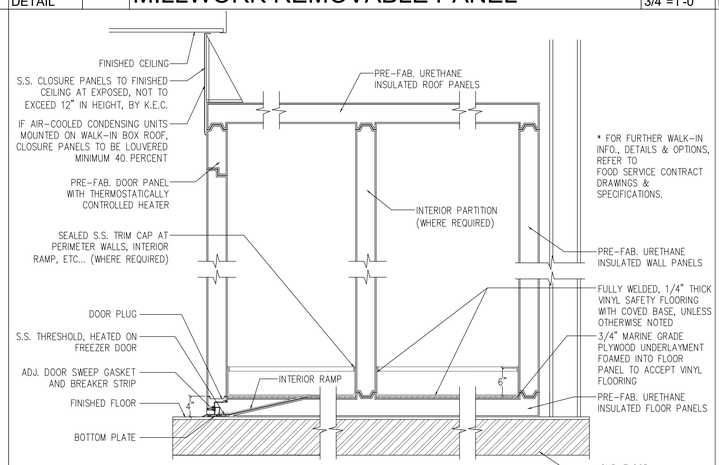
TYPICAL DETAIL | MILLWORK REMOVABLE PANEL | SCALE: 3/4"=1'-0"



TYPICAL DETAIL | MILLWORK LOUVERED PANEL | SCALE: 3/4"=1'-0"

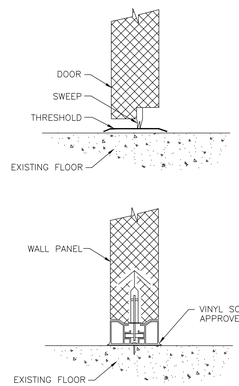


TYPICAL DETAIL | WALK-IN DOOR SECTION | SCALE: N.T.S.



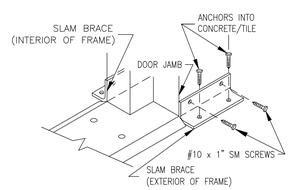
* FOR FURTHER WALK-IN INFO., DETAILS & OPTIONS, REFER TO FOOD SERVICE CONTRACT DRAWINGS & SPECIFICATIONS.

TYPICAL DETAIL | SECTION THRU WALK-IN WITH RAMP | SCALE: 3/4"=1'-0"



TYP. SCREED APPLICATION WALK-IN COOLER

SCALE: NOT TO SCALE



SLAM BRACE
COMPARTMENT W/SCREED

Date	1/10/20
Checked	
Drawn	

MICHAEL J. McGOVERN, R.A.
Title REGISTERED ARCHITECT License No. 022257-1

Revisions:

#	
1	ISSUE TO BID 11/23/20

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NYSED PROJECT # 66-07-01-03-0-005-020

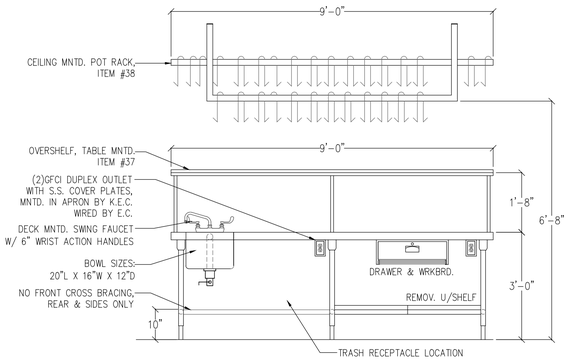
FOOD SERVICE TYPICAL DETAILS

2019 BOND REFERENDUM
CHATSWORTH AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

Job No. 4.1092.72.03

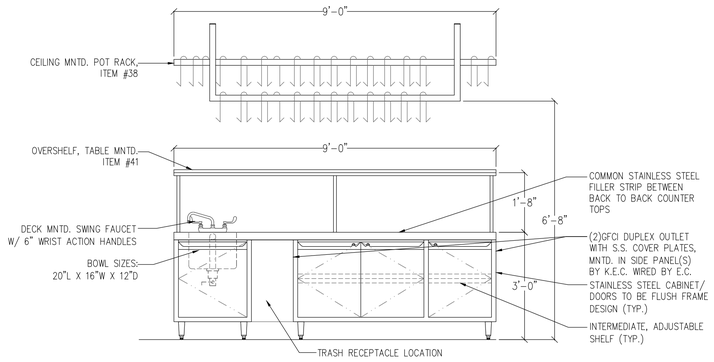
File No.

FS.6



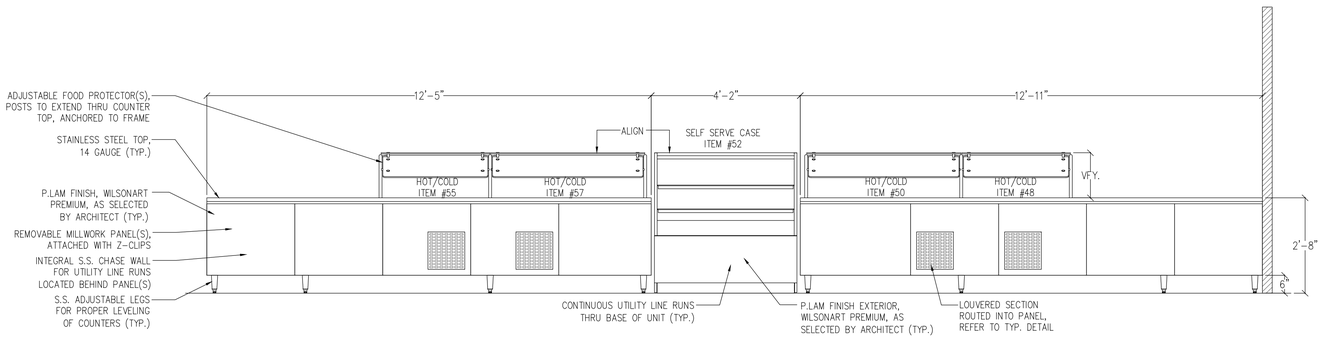
ELEVATION OF ITEM #36

SCALE: 1/2"=1'-0"



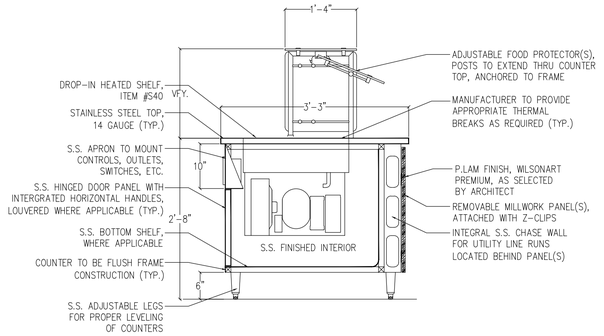
ELEVATION OF ITEM #40

SCALE: 1/2"=1'-0"



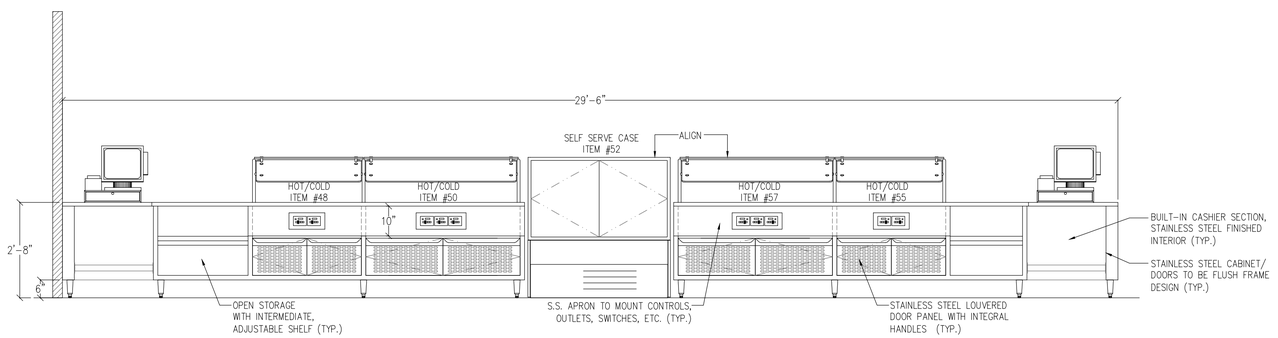
ELEVATION OF SERVING COUNTER

SCALE: 1/2"=1'-0" CUSTOMER SIDE



TYP. SECTION AT SERVING COUNTER

SCALE: 3/4"=1'-0"



ELEVATION OF SERVING COUNTER

SCALE: 1/2"=1'-0" WORKING SIDE

Date	1/10/20
Checked	
Drawn	

MICHAEL J. McGOVERN, R.A.
Title REGISTERED ARCHITECT
License No. 022257-1

Revisions:

1 ISSUE TO BID 11/23/20

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NYSED PROJECT # 66-07-01-03-0-005-020

FOOD SERVICE ELEVATIONS, SECTIONS & DETAILS

2019 BOND REFERENDUM
CHATSWORTH AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

Job No. 4.1092.72.03

File No.

FS.7

LEGEND

$\bigcirc_N$	–	K5.6 UPRIGHT SPRINKLER
$\odot_N$	–	K5.6 FACTOR PENDENT SPRINKLER.
$\not\bigcirc_R$	–	REMOVE SPRINKLER. EXTEND PIPING TO NEW SPRINKLER ⊢ CAP BRANCHLINE WHERE OUTLET WILL NOT BE REUSED.
$\bigcirc_E$	–	ETR SPRINKLER HEAD
–x–x–	–	REMOVE SPRINKLER PIPING
— — —	–	ETR SPRINKLER PIPING
———	–	NEW SPRINKLER PIPING
⊠	–	CONNECT TO EXISTING.
ETR	–	EXISTING TO REMAIN.
CAP	–	CAP PIPING AT THE LIMIT OF REMOVAL
NIC	–	WORK NOT IN CONTRACT
(AS)	–	ETR SPRINKLERED SPACE

HYDRAULIC DESIGN CRITERIA

NOTE: PIPE SIZING SHOWN IS BASED ON ASSUMED FLOWS AND PRESSURES. THE SPRINKLER CONTRACTOR SHALL PERFORM AND WITNESS A HYDRANT FLOW TEST WHICH SHALL BE USED FOR CONTRACTOR'S HYDRAULIC CALCULATIONS. PRESSURE AND FLOW READINGS SHALL BE TAKEN FROM WATER MAIN WHICH FEEDS THE BUILDING.

PIPE HANGERS AND SUPPORTS

1. ACCEPTABLE PRODUCTS: ALL SUPPORT SYSTEMS ARE TO BE UL LISTED AND FM APPROVED AND INSTALLED IN ACCORDANCE WITH NFPA–13.
2. PROVIDE COMBINATION CLEVIS TYPE HANGERS UNLESS NOTED OTHERWISE.
3. PIPE HANGERS: HEIGHT ADJUSTABLE STANDARD DUTY CLEVIS TYPE, WITH CROSS BOLT AND NUT.
4. SWIVEL RING TYPE HANGERS WILL BE ALLOWED FOR SPRINKLER PIPING UP TO A MAXIMUM OF 2 INCHES IN SIZE.
5. HANGER RODS: MILD, LOW CARBON STEEL, FULLY THREADED OR THREADED AT EACH END, WITH TWO NUTS AT EACH END FOR POSITIONING ROD AND HANGER, AND LOCKING EACH IN PLACE.

5.1. PROVIDE HANGER ROD SIZED ACCORDING TO THE FOLLOWING SCHEDULE:

PIPE SIZE:	MINIMUM ROD DIAMETER:
4" AND SMALLER	⅜"
6" OR 8"	½"

6. RISER CLAMPS: MALLEABLE IRON OR STEEL.
7. PIPE HANGERS OR OTHER SUPPORTS SHALL NOT BE ATTACHED TO DUCTWORK, CONDUITS, PIPES OR OTHER CONSTRUCTURAL ELEMENTS OF THE BUILDING.

TESTING

1. AFTER COMPLETING THE BRANCH PIPING SYSTEM, THE CONTRACTOR SHALL HYDROSTATICALLY TEST THE FIRE SPRINKLER PIPING FOR A PERIOD OF TWO HOURS AT NOT LESS THAN 200 PSI, OR AT 50 PSI IN EXCESS OF THE MAXIMUM OPERATING STATIC PRESSURE WHEN THE STATIC PRESSURE IS IN EXCESS OF 150 PSI. THE CONTRACTOR SHALL CHECK THE SYSTEM FOR LEAKS AND MEASURE THE HYDROSTATIC PRESSURE AT THE LOW POINT OF EACH SYSTEM OR ZONE BEING TESTED.
2. THE CONTRACTOR SHALL REPAIR OR REPLACE PIPING AND FITTINGS AS REQUIRED TO ELIMINATE LEAKS IN ACCORDANCE WITH ANSI/NFPA STANDARDS FOR "LITTLE OR NO LEAKS" AND RETEST AS SPECIFIED TO DEMONSTRATE COMPLIANCE.
3. UPON SATISFACTORY COMPLETION AND TESTING OF THE BRANCH PIPING SYSTEM, THE CONTRACTOR SHALL PROVIDE THE OWNER WITH A LETTER CERTIFYING THAT THE BRANCH PIPING SYSTEM HAS BEEN COMPLETED IN ACCORDANCE WITH ANSI/NFPA 13 STANDARDS AND IS OPERATIONAL, COMPLETE AND WITHOUT DEFECTS.

SCOPE OF WORK

1. PROVIDE SPRINKLERS AND SPRINKLER PIPING AS INDICATED ON DRAWINGS F1.01 AND F1.02.
   1.1. REMOVE EXISTING SPRINKLERS IN CLASSROOM #27 AND CLOSET IN CLASSROOM #28 ON THE THIRD FLOOR TO ACCOMODATE THE NEW CORRIDOR AND SOFFIT. PROVIDE NEW SPRINKLER HEAD LOCATIONS AND COVERAGE AREA PER NFPA–13 REQUIREMENTS. REFER TO DRAWING A1.04 FOR DETAILS.
2. PROVIDE PRODUCT SUBMITTALS, SHOP DRAWINGS AND HYDRAULIC CALCULATIONS FOR REVIEW AND APPROVAL IN ACCORDANCE WITH NFPA–13. REFER TO THE HYDRAULIC CALCULATIONS NOTES FOR ADDITIONAL INFORMATION. CONTRACTOR'S SHOP DRAWINGS SHALL SHOW FULLY COORDINATED REFLECTIVE CEILING PLAN.
3. PROVIDE HANGING AND BRACING IN ACCORDANCE WITH NFPA–13.
4. PROVIDE SPARE SPRINKLER CABINET, SPARE SPRINKLERS, SPRINKLER WRENCH(S) AND A LIST OF INSTALLED SPRINKLERS IN ACCORDANCE WITH NFPA–13.
5. CONTRACTOR SHALL CONDUCT A THOROUGH EXAMINATION OF THE PREMISES PRIOR TO PREPARING A PROPOSAL. ANY CHANGES TO THE DESIGN MADE NECESSARY BY FIELD CONDITIONS SHALL BE CONVEYED TO THE ENGINEER PRIOR TO PREPARING A PROPOSAL. NO ADDITIONAL COSTS BEYOND THE PROPOSAL PRICE WILL BE ACCEPTED FOR FIELD CONDITIONS THAT COULD HAVE BEEN DETERMINED BY AN INSPECTION OF THE PREMISES.
6. UPON REQUEST, CONTRACTOR SHALL PROVIDE RED–LINE DRAWINGS AND/OR AS–BUILT DRAWINGS. DRAWINGS SHALL BE AVAILABLE IN PDF AND AUTOCAD FORMATS. CONTRACTOR SHALL PROVIDE FINAL AS–BUILT DRAWINGS AND AS–BUILT HYDRAULIC CALCULATIONS IN THE O+M MANUAL.
7. UPON REQUEST OF LOCAL CODE ENFORCEMENT OFFICIALS OR PERMITTING AGENCY, CONTRACTOR SHALL PROVIDE SHOP DRAWINGS AND HYDRAULIC CALCULATIONS WHICH HAVE BEEN REVIEWED BY, AND SIGNED AND SEALED BY A THIRD PARTY LICENSED PROFESSIONAL ENGINEER. CONTRACTOR SHALL BEAR ALL COSTS ASSOCIATED WITH THE THIRD PARTY PROFESSIONAL ENGINEER REVIEW AND SIGNING/SEALING OF SHOP DRAWINGS/HYDRAULIC CALCULATIONS.

HYDRAULIC CALCULATIONS

1. CONTRACTOR SHALL SUBMIT HYDRAULIC CALCULATIONS FOR REVIEW AND APPROVAL AS DESCRIBED IN THIS SECTION.
2. CONTRACTOR SHALL PERFORM AND WITNESS A HYDRANT FLOW TEST WHICH WILL BE USED FOR CONTRACTOR'S HYDRAULIC CALCULATIONS.
3. SPRINKLER CLASSIFICATION FOR WORK AREA SHALL BE "LIGHT HAZARD". SPRINKLER CLASSIFICATION FOR ALL STORAGE AND MECHANICAL ROOMS, AND KITCHENS SHALL BE "ORDINARY HAZARD GROUP 1". SPRINKLER CLASSIFICATION FOR BOILER ROOM SHALL BE "ORDINARY HAZARD GROUP 2".
4. PERFORM HYDRAULIC CALCULATIONS IN ACCORDANCE WITH NFPA–13 REQUIREMENTS FOR HYDRAULICALLY DESIGNED (DENSITY/AREA METHOD) SPRINKLER SYSTEMS.

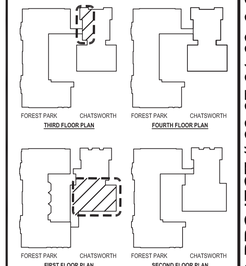
	DESIGN DENSITY [GPM/SF]	DESIGN AREA [SF]	HOSE ALLOWANCE [GPM]
LIGHT HAZARD	0.10	1,500	100
ORDINARY HAZARD 1	0.15	1,500	250
ORDINARY HAZARD 2	0.20	1,500	250

5. CONSTRUCTION OF THE SPRINKLER SYSTEM SHALL NOT COMMENCE UNTIL CONTRACTOR'S SHOP DRAWINGS AND HYDRAULIC CALCULATIONS HAVE BEEN APPROVED BY THE ENGINEER IN ACCORDANCE WITH NFPA–13.
6. CONTRACTOR IS RESPONSIBLE TO PROVIDE ADDITIONAL HYDRAULIC CALCULATIONS, AS REQUESTED, DURING THE SUBMITTAL, REVIEW AND INSTALLATION PROCESS.
7. THE "SOURCE" NODE POINT IN CONTRACTOR'S HYDRAULIC CALCULATIONS SHALL BE LOCATED AT THE LOCATION OF THE PRESSURE GAUGE HYDRANT FROM THE CONTRACTOR'S HYDRANT FLOW TEST. ALL PIPING AND FITTINGS BETWEEN THE BUILDING AND THE PRESSURE GAUGE HYDRANT SHALL BE INCLUDED IN THE CONTRACTOR'S HYDRAULIC CALCULATIONS.
8. OUTDOOR HOSE ALLOWANCES SHALL BE INCLUDED IN HYDRAULIC CALCULATIONS AT THE POINT OF CONNECTION OF THE BUILDING SPRINKLER WATER SERVICE ENTRANCE MAIN TO THE CITY WATER SUPPLY, OR AT THE LOCATION OF THE NEAREST HYDRANT, WHICHEVER IS CLOSER TO THE SPRINKLER SYSTEM RISER.

SPRINKLER NOTES

1. INSTALLATION WORK SHALL NOT PROCEED UNTIL SUBMITTALS HAVE BEEN RECIEVED, PROCESSED AND APPROVED IN ACCORDANCE WITH THE REQUIREMENTS OF THE CONTRACT DRAWINGS AND THE PROJECTS SPECIFICATIONS.
2. ALL NEW VALVES ON THE FIRE PROTECTION SYSTEM TO BE ELECTRICALLY SUPERVISED. TYPE AND EXACT LOCATION OF FLOW, PRESSURE AND SUPERVISORY SWITCHES SHALL BE ACCOMPLISHED BETWEEN THE DIFFERENT RESPONSIBLE TRADES.
3. ALL NEW SPRINKLERS SHALL BE AS FOLLOWS UNLESS NOTED OTHERWISE:
   K–FACTOR: 5.6
   ORIFICE DIAMETER: ½"
   TEMPERATURE RATING: ORDINARY (FOR CONDITIONED AREAS)
4. COVER PLATES AND/OR ESCUTCHEON PLATES FOR PENDENT SPRINKLERS SHALL BE FACTORY PAINTED TO MATCH THE CEILING COLOR IN WHICH THEY ARE INSTALLED. CONTRACTOR SHALL REFER TO ARCHITECTURAL DRAWINGS FOR CEILING COLORS AND COORDINATE WITH THE ARCHITECT TO DETERMINE THE NUMBER OF COLORS REQUIRED PRIOR TO PREPARING A PROPOSAL.
5. LOCATION OF SPRINKLERS IN CEILING TILES (UNLESS SHOWN OTHERWISE ON PLANS):
   5.1. REFER TO ARCHITECTURAL REFLECTED CEILING PLANS AND ROOM FINISH SCHEDULES FOR CEILING TILE TYPES.
   5.2. IN STANDARD 2 BY 4 CEILING TILES, LOCATE SPRINKLERS IN THE CENTER OF TILES.
   5.3. IN STANDARD 2 BY 4 CEILING TILES WHICH SIMULATE 2 BY 2 CEILING TILES, LOCATE SPRINKLERS IN THE CENTER OF THE 2 BY 2 AREA.
6. MATERIALS:
   6.1. ALL PIPING 1"– 2" SHALL BE SCHEDULE 40 BLACK STEEL PIPING WITH THREADED CAST IRON FITTINGS. (SCHEDULE 10 PIPE WILL NOT BE ALLOWED).
   6.2. ALL PIPING 2–1/2" OR LARGER SHALL BE SCHEDULE 10 BLACK STEEL PIPING WITH GROOVED TYPE FITTINGS AND MECHANICAL COUPLINGS.
7. ALL SPRINKLER WORK SHALL BE IN STRICT CONFORMANCE WITH NFPA–13 "STANDARD FOR INSTALLATION OF SPRINKLER SYSTEMS", STATE BUILDING CODE, AND THE OWNER'S INSURANCE COMPANY.
8. CONTRACTOR SHALL COORDINATE DRAINING OF EXISTING SYSTEM WITH BUILDING MANAGEMENT.
9. THE BASE BUILDING "CONTRACT DRAWINGS" AND "SPECIFICATIONS" INCLUDING ALL RESPECTIVE ADDENDA AND BULLETINS SHALL FORM A PART OF THIS WORK AND ALL WORK SHALL BE SUBJECT TO RESPECTIVE PROVISIONS THEREOF.
10. REFER TO ARCHITECTURAL DRAWINGS FOR HUNG CEILING HEIGHTS AND CONSTRUCTION. WHERE WORK BETWEEN THIS DRAWING AND ARCHITECTURAL PLANS ARE IN CONFLICT, ADVISE PRIOR TO INSTALLATION OF PIPING.
11. WORK SHALL BE COORDINATED WITH ALL OTHER TRADES, NOTIFY ENGINEER TO AVOID CONFLICTS.
12. SPRINKLER CONTRACTOR SHALL ADJUST AND/OR ADD SPRINKLERS AS REQUIRED UTILIZING ARCHITECT'S REFLECTED CEILING PLAN FOR LOCATION OF LIGHTS, DIFFUSERS, CABLE TRAYS, ETC...
13. ALL EQUIPMENT SHALL BE APPROVED BY OWNER'S INSURANCE COMPANY.
14. LAYOUT OF SPRINKLERS AND HYDRAULICS CALCULATIONS ARE FOR AUTHORITY HAVING JURISDICTION USE ONLY. SPRINKLER CONTRACTOR SHALL PREPARE FINAL SPRINKLER HEAD LAYOUT AND SHOP DRAWINGS INCLUDING HYDRAULIC CALCULATIONS AND OBTAIN ALL APPROVALS AS REQUIRED. CONTRACTOR SHALL PERFORM AND WITNESS A HYDRANT FLOW TEST WHICH WILL BE USED FOR CONTRACTOR'S HYDRAULIC CALCULATIONS.
15. CONTRACTOR SHALL NOT INSTALL ANY SPRINKLER PIPING THAT WILL INTERFERE WITH THE MAINTENANCE/REMOVAL OF HVAC EQUIPMENT.
16. SPRINKLER CONTRACTOR MUST FILE APPLICATION FOR AND SUBMIT EVIDENCE OF A VALID SPRINKLER SYSTEM IMPAIRMENT PERMIT TO BUILDING MANAGEMENT WHEN SCHEDULING ALL SPRINKLER SYSTEM MODIFICATIONS. ALL SHUTDOWNS WILL BE PERFORMED BY BUILDING ENGINEERING PERSONNEL EXCLUSIVELY, UNLESS OTHERWISE PERMITTED BY BUILDING MANAGEMENT.
17. CONTRACTOR SHALL DETERMINE BEST LOCATION FOR ROUTING/RE–ROUTING ALL ASSOCIATED SPRINKLER LINES. PIPE ROUTING SHOWN SHALL BE USED AND ANY ADDITIONAL OFFSETS OR FITTINGS REQUIRED FOR PROPER INSTALLATION, COORDINATION WITH OTHER TRADES, AND/OR TO MAINTAIN PROPER CLEARANCES SHALL BE PROVIDED. VERIFY EXISTING STRUCTURAL, MECHANICAL, ELECTRICAL INSTALLATIONS AND AVOID ANY/ALL OBSTRUCTIONS OR INTERFERENCES WITH FIRE PROTECTION PIPE ROUTING.
18. ALL SPRINKLERS MOUNTED IN CEILING SHALL BE LOCATED A MINIMUM OF 4" AWAY FROM ANY WALLS, CEILING HEIGHT CHANGES OR ANY OTHER VERTICAL INTERSECTING SURFACE.
19. PROVIDE SPRINKLERS ABOVE AND BELOW EXPOSED DUCTWORK 4 FEET OR WIDER. FOR DUCTWORK LOCATED AGAINST WALLS, PROVIDE ADDITIONAL SPRINKLERS AS NEEDED IN ACCORDANCE WITH NFPA–13 REQUIREMENTS FOR OBSTRUCTIONS AGAINST WALLS. PROVIDE HEAD GUARDS WITH WATER SHIELDS FOR ALL SPRINKLERS INSTALLED BELOW EXPOSED DUCTWORK.
20. PROVIDE HEAD GUARDS ON SPRINKLERS IN ELECTRIC, TELEPHONE AND STORAGE ROOMS.
21. CUTTING OF STRUCTURAL AND/OR ARCHITECTURAL MEMBERS TO BE DONE ONLY WITH THE WRITTEN APPROVAL OF THE ARCHITECT.
22. FIRE STOP ALL PENETRATIONS OF SMOKE/FIRE WALLS, CEILINGS, FLOORS, ROOFS, ETC.
23. PROVIDE ACCESS PANELS TO ALL VALVES ABOVE NON–ACCESSIBLE CEILINGS AND CHASES.
24. METHODS OF HANGING PIPES, HEADERS AND BRANCHES SHALL BE IN ACCORDANCE WITH NFPA–13.
25. ALL VALVES FOR FIRE SERVICE SHALL BE LISTED BY THE UNDERWRITER'S LABORATORIES, INC. AND THE FACTORY MUTUAL LABORATORIES. VALVES SHALL BE FACTORY MARKED "UL" AND "FM", 175 PSI WORKING PRESSURE.
26. ALL POWER WIRING SHALL BE ACCOMPLISHED UNDER THE ELECTRICAL DIVISION. ALL CONTROL AND INTERLOCK WIRING SHALL BE ACCOMPLISHED UNDER THIS SECTION OF THE SPECIFICATIONS IN ACCORDANCE WITH THE REQUIREMENTS IN THE ELECTRICAL DIVISION. COORDINATE ALL ELECTRICAL ITEMS WITH ELECTRICAL CONTRACTOR.
27. SPRINKLERS SHALL COVER THE ENTIRE AREA OF THE ROOM INCLUDING ALCOVES. SPRAY SHALL NOT BE BLOCKED BY WALLS OR PARTITIONS.
28. MAINTAIN A MINIMUM OF 18 INCHES FROM THE BOTTOM OF THE SPRINKLER DEFLECTOR TO THE TOP OF STORAGE/FILE STORAGE.
29. CONTRACTOR SHALL CONDUCT A THOROUGH EXAMINATION OF THE PREMISES PRIOR TO PREPARING A PROPOSAL. ANY CHANGES TO THE DESIGN MADE NECESSARY BY FIELD CONDITIONS SHALL BE CONVEYED TO THE ENGINEER PRIOR TO PREPARATION OF A PROPOSAL. NO ADDITIONAL COSTS BEYOND THE PROPOSAL PRICE WILL BE ACCEPTED FOR FIELD CONDITIONS THAT COULD HAVE BEEN DETERMINED BY AN INSPECTION OF THE PREMISES.
30. ALL FIRE PROTECTION SYSTEMS ARE SHOWN SCHEMATICALLY. IT IS NOT THE INTENT OF THESE PLANS TO SHOW ALL LISTED COMPONENTS, SUCH AS PIPING, FITTINGS, VALVES, ETC. CONTRACTOR IS RESPONSIBLE FOR INSTALLING SYSTEM PER APPLICABLE CODES.
31. PROVIDE A PERMANENTLY ATTACHED HYDRAULIC DESIGN INFORMATION SIGN STATING THE REQUIRED DESIGN CRITERIA FOR EACH HYDRAULICALLY DESIGNED SYSTEM.
32. INSPECTOR'S TEST VALVE SHALL NOT EXCEED 7 FEET ABOVE THE FINISHED FLOOR.
33. CONTRACTOR SHALL PROVIDE SPRINKLER COVERAGE IN ALL COMBUSTIBLE CONCEALED SPACES.
34. THE SPRINKLER PIPING LAYOUT AND PIPE SIZES SHOWN ON THE CONTRACT DOCUMENTS ARE TO DEFINE THE DESIGN INTENT FOR COMPETITIVE BIDDING AND FOR PRELIMINARY SUBMISSION TO THE AUTHORITIES HAVING JURISDICTION. THE WORK OF THE CONTRACT INCLUDES HYDRAULIC CALCULATIONS AND FABRICATION SHOP DRAWINGS FOR THE ACTUAL INSTALLATION CONDITIONS.

CHATSWORTH AVE. SCHOOL



Key Plan

NOT TO SCALE

PROJECT NORTH

STATE OF NEW YORK
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RAN FIRE PROTECTION ENGINEERING

MICHAEL J. McGOVERN, R.A.
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Date	1/10/20
Checked	DRN
Drawn	CRG

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FIRE PROTECTION NOTES AND DETAILS

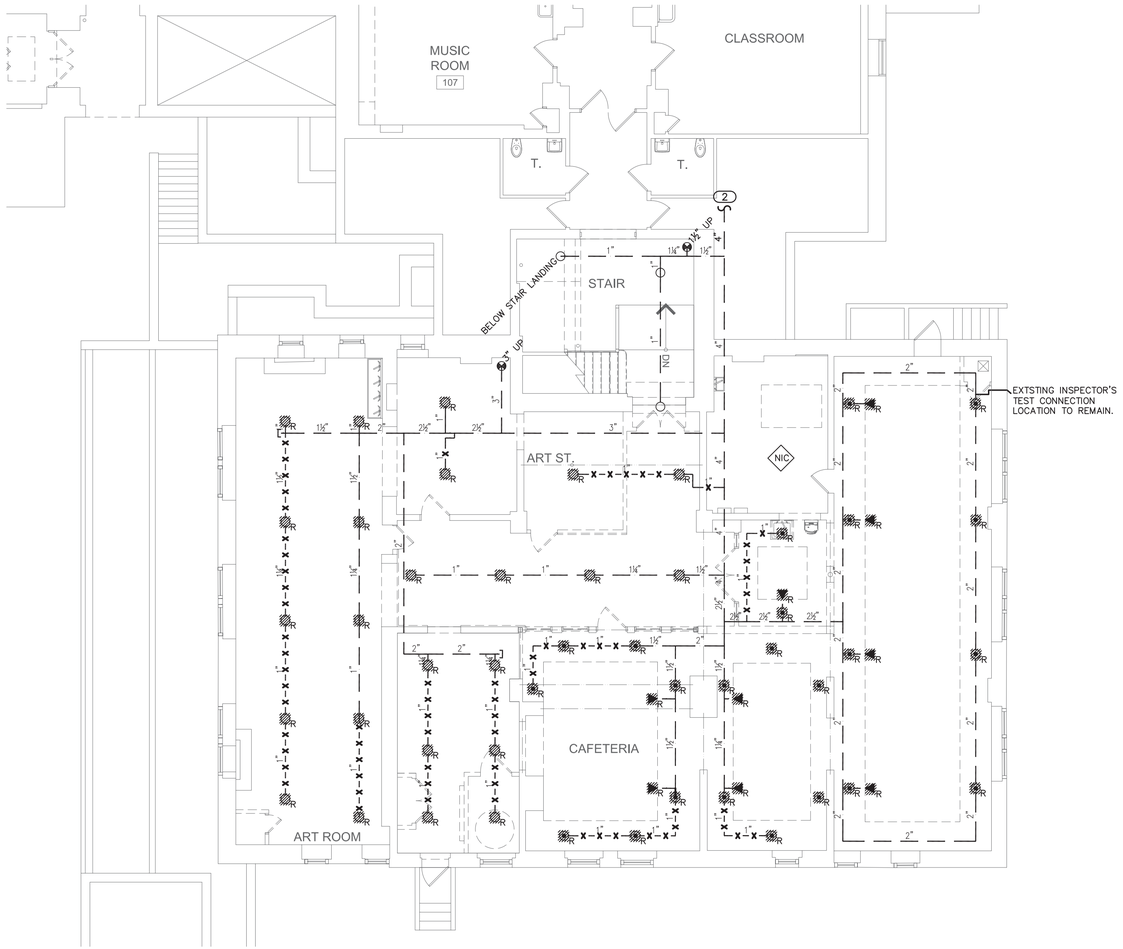
2019 BOND REFERENDUM
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NYSED PROJECT # 66-07-01-03-0-005-020

Job No. 4.1092.72.03

File No. —

F0.01



1 / F1.01 PARTIAL FIRST FLOOR FIRE PROTECTION REMOVALS PLAN
1/8" = 1'-0"

GENERAL NOTES

1. REMOVE SPRINKLERS AND SPRINKLER PIPING AS INDICATED. CAP WHERE PIPING WILL NOT BE REUSED.
2. PROVIDE ADDITIONAL SPRINKLER PROTECTION BELOW EXPOSED DUCTWORK, AS NEEDED, TO AVOID OBSTRUCTIONS IN ACCORDANCE WITH NFPA-13.

KEYED NOTES

(1) REFER TO DETAIL A1.04 FOR WORK IN THIS AREA.

(2) 4" WET PIPE SYSTEM FROM ETR FIRE PROTECTION RISER IN STORAGE ROOM

RAN FIRE PROTECTION ENGINEERING
1062 CENTRAL AVENUE
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Date	1/10/20
Checked	DRN
Drawn	CRG

Revisions:

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NYSED PROJECT # 66-07-01-03-0-005-020

FIRE PROTECTION REMOVAL PLAN

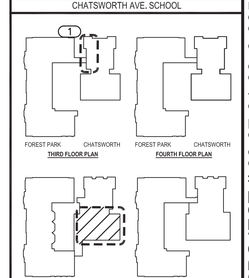
2019 BOND REFERENDUM
CHATSWORTH AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

Job No. 4.1092.72.03

File No.

F1.01

CHATSWORTH AVE. SCHOOL



Key Plan
NOT TO SCALE

PROJECT NORTH

STATE OF NEW YORK
DOUGLAS RAYMOND HADLEY
079487
LICENSED PROFESSIONAL ENGINEER

GENERAL NOTES

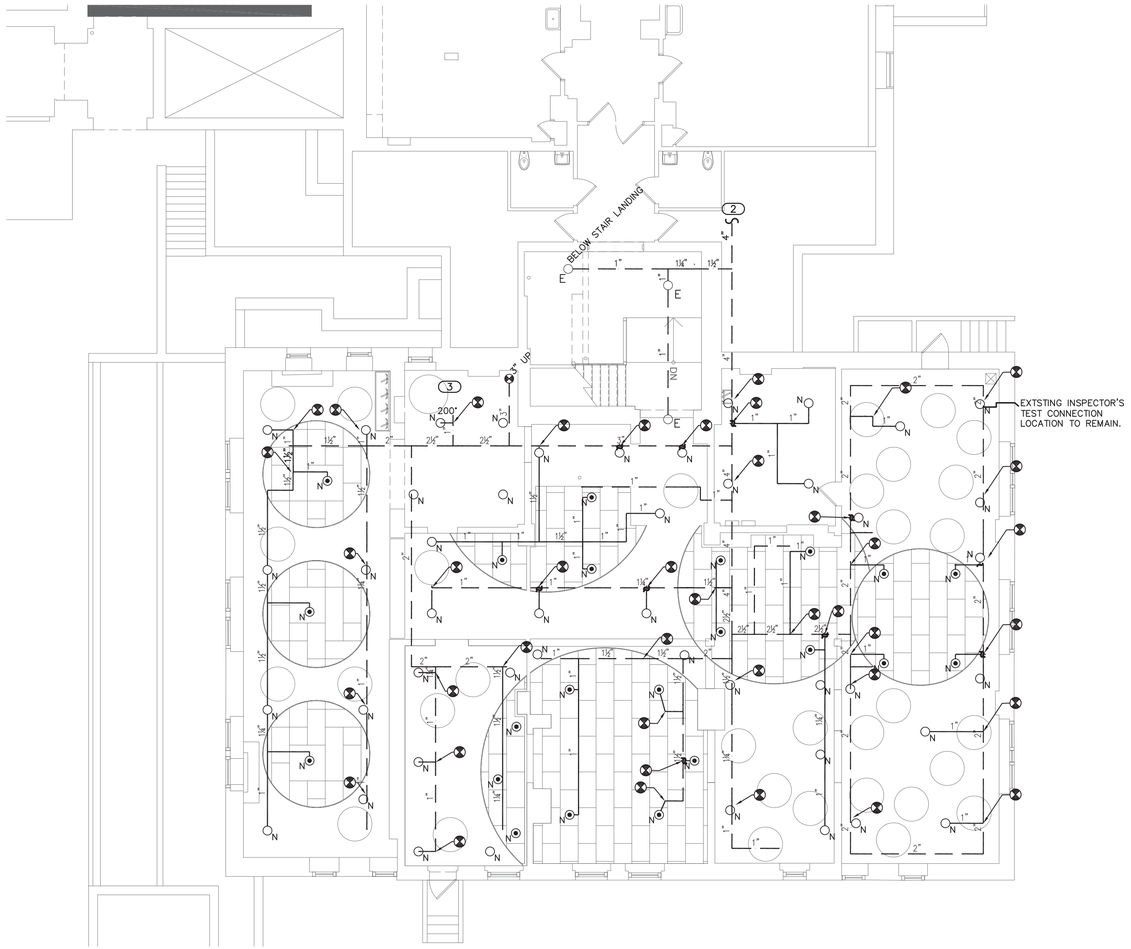
1. REFER TO ARCHITECTURAL DRAWINGS FOR CEILING HEIGHTS AND CONSTRUCTION TYPE.
2. SPRINKLER LAYOUT WITHIN ROOMS IS BASED ON THE INSTALLATION OF SUSPENDED LIGHTS. CONTRACTOR SHALL ENSURE A MINIMUM OF 18" OF CLEARANCE IS MAINTAINED BETWEEN THE TOP OF SUSPENDED LIGHTS AND THE SPRINKLER DEFLECTORS.

KEYED NOTES

(1) REFER TO DETAIL A1.04 FOR WORK IN THIS AREA.

(2) 4" WET PIPE SYSTEM FROM ETR FIRE PROTECTION RISER IN STORAGE ROOM

(3) PROVIDE INTERMEDIATE TEMPERATURE SPRINKLER BY KILN PER NFPA-13 REQUIREMENTS.



1 F1.02 PARTIAL FIRST FLOOR FIRE PROTECTION PLAN
1/8" = 1'-0"

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Date	1/10/20
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NYSED PROJECT # 66-07-01-03-0-005-020

FIRE PROTECTION PLAN

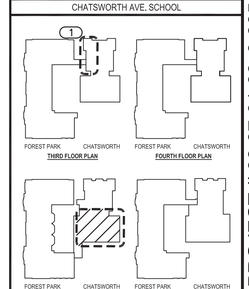
2019 BOND REFERENDUM
CHATSWORTH AVENUE ELEMENTARY SCHOOL
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CHATSWORTH AVENUE, LARCHMONT, NY 10538

Job No. 4.1092.72.03

File No.

F1.02

CHATSWORTH AVE. SCHOOL



Key Plan
NOT TO SCALE

PROJECT NORTH

STATE OF NEW YORK
DOUGLAS RAYMOND RADFORD
079497
LICENSED PROFESSIONAL ENGINEER

GENERAL NOTES

1. ALL WORK SHALL CONFORM TO THE LATEST EDITIONS OF THE NEW YORK STATE ENERGY CODE, INTERNATIONAL MECHANICAL CODE, ASHRAE GUIDELINES, SMACNA, COUNTY GUIDELINES, NEC, NATIONAL STANDARD PLUMBING CODE, AND ALL OTHER APPLICABLE CODES, ORDINANCES, ETC. FOR NEW YORK STATE AND THE LOCAL AUTHORITY HAVING JURISDICTION.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR VISITING THE SITE AND FAMILIARIZING HIMSELF WITH THE EXISTING CONDITIONS AND SCOPE OF THE WORK PRIOR TO SUBMITTING BIDS AND COMMENCING WORK, AND INCLUDE ALL SUCH NECESSARY WORK BASED ON THIS SITE FAMILIARIZATION IN THIS BID.
3. CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL SAFE WORKING CONDITIONS AND SHALL OBSERVE ALL SAFETY REQUIREMENTS ESTABLISHED BY JURISDICTIONAL AGENCIES AND THE OWNER. WHERE CONFLICTS EXIST, THE MORE STRINGENT REQUIREMENT SHALL APPLY. CARE SHALL BE EXERCISED TO AVOID ENDANGERING PERSONNEL OR STRUCTURES.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTION METHODS, PROCEDURES AND JOB SITE CONDITIONS INCLUDING SAFETY. CONSTRUCTION SHALL BE PERFORMED IN SUCH A MANNER TO PROTECT WORKMEN, OCCUPANTS AND THE PUBLIC FROM INJURY AND ADJOINING PROPERTY SHALL BE PROTECTED FROM DAMAGE BY USE OF SCAFFOLDING, UNDERPINNING OR OTHER APPROVED METHOD. THE CONTRACTOR SHALL REPAIR ANY AND ALL DAMAGE CAUSED DURING OR RESULTING FROM HIS OPERATIONS IN KIND TO THE SATISFACTION OF THE OWNER AT NO ADDITIONAL COST TO THE OWNER.
5. CONTRACTOR SHALL MAINTAIN THE JOB SITE IN A CLEAN, DEBRIS FREE CONDITION. THE DUST RESULTING FROM REMOVALS SHALL BE CONTROLLED SO AS TO PREVENT ITS SPREAD TO OCCUPIED PORTIONS OF THE BUILDING AND TO AVOID CREATION OF A NUISANCE IN THE SURROUNDING AREA.
6. CONTRACTOR SHALL SECURE AND PAY FOR ALL REQUIRED PERMITS, FEES, APPROVALS, ETC. PRIOR TO COMMENCING WORK AND SHALL SECURE CERTIFICATE OF OCCUPANCY UPON COMPLETION OF WORK.
7. CONTRACTOR SHALL BE RESPONSIBLE TO DISPOSE OF ALL DEMOLISHED MATERIAL OFF SITE IN AN APPROVED MANNER. THE OWNER SHALL BE CONSULTED PRIOR TO DISPOSAL OF ANY SALVAGED OR EXCESS MATERIALS AT THE COMPLETION OF THE PROJECT.
8. UPON COMPLETION OF WORK, ALL EXCESS MATERIAL, DEBRIS, ETC. SHALL BE REMOVED AND THE WORK AREA SHALL BE LEFT CLEAN TO THE OWNER'S SATISFACTION.
9. ALL WORK SHALL BE SCHEDULED IN COMPLIANCE WITH THE OWNER'S REQUIREMENTS FOR THE USE OF THE EXISTING FACILITY.
10. CONTRACTOR SHALL FURNISH ALL EQUIPMENT THAT MAY BE REQUIRED TO PERFORM THE WORK INDICATED IN A SAFE AND ORDERLY MANNER, AND AS NECESSARY FOR A PROPER OPERATIONAL SYSTEM.
11. CONTRACTOR SHALL BE RESPONSIBLE FOR THE RELOCATION AND TEMPORARY SUPPORT OF ANY UTILITIES ENCOUNTERED DURING THE COURSE OF HIS WORK AND TO ENSURE THE OWNER'S FACILITY TO BE OPERATIONAL.
12. CONTRACTOR SHALL REVIEW DRAWINGS AND FIELD VERIFY ALL DIMENSIONS, CONDITIONS AND ELEVATIONS PRIOR TO COMMENCING WORK. THE CONTRACTOR SHALL REPORT ANY DISCREPANCIES AND ADDRESS ALL QUESTIONS TO ENGINEER PRIOR TO COMMENCING WORK.
13. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR CUTTING, PATCHING, FILLING AND CLEANING UPON COMPLETION OF WORK AS PER DRAWING A1.00.
14. CONTRACTOR SHALL NOT SCALE DRAWINGS FOR DIMENSIONS. ALL WRITTEN OR DIMENSIONED INFORMATION TAKES PRECEDENCE OVER THE DRAWING.
15. CONTRACTOR SHALL SUBMIT, WHERE REQUIRED BY THE ARCH/ENGR, SHOP DRAWINGS AND SUBMITTALS FOR APPROVAL PRIOR TO THE START OF FABRICATION OF THOSE ITEMS. THIS INCLUDES ALL EQUIPMENT, SCHEMATIC DUCTWORK AND PIPING LAYOUT, ETC. CONTRACTOR IS RESPONSIBLE FOR ENSURING ALL EQUIPMENT ETC WILL FIT (WITH PROPER MAINTENANCE CLEARANCES) AT ALL LOCATIONS. REVIEW OF SHOP DRAWINGS/SUBMITTALS BY THE ARCH/ENGR DOES NOT RELIEVE THE CONTRACTOR FROM PROVIDING THE CURRENT MODEL NUMBERS, TYPE, & FEATURES OF ALL EQUIPMENT'S & MATERIALS.
16. THE CONTRACTOR SHALL PROVIDE THE OWNER AND ENGINEER WITH CERTIFICATES OF INSURANCE PRIOR TO STARTING THE WORK.
17. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SHORING AND BRACING OF EXISTING STRUCTURES AS NEEDED TO COMPLETE THE NEW WORK.
18. ALL MANUFACTURER'S MATERIALS, COMPONENTS, FASTENERS, ASSEMBLIES, ETC. SHALL BE HANDLED AND INSTALLED IN ACCORDANCE TO WITH MANUFACTURERS INSTRUCTIONS AND RECOMMENDATIONS. WHERE BRAND NAMES AND MANUFACTURED PRODUCTS ARE CALLED FOR, APPROVED EQUALS WHICH MEET APPLICABLE STANDARDS AND SPECIFICATIONS MAY BE SUBSTITUTED WITH WRITTEN PERMISSION OF THE ENGINEER AND THE OWNER. WHENEVER BRAND NAMES OR SPECIFIC PRODUCT SYSTEMS ARE INDICATED IT SHALL BE CLEARLY UNDERSTOOD THAT SUCH IDENTIFICATION IS FOR THE PURPOSE OF ILLUSTRATING THE TYPE OF PRODUCT AND DEGREE OF QUALITY DESIRED. SUCH IDENTIFICATION IN NO WAY PRECLUDES THE CONTRACTOR FROM USING PRODUCTS OF OTHER MANUFACTURERS WHICH CAN BE SHOWN IN ADVANCE TO BE OF LIKE AND OF EQUAL OR BETTER QUALITY.
19. ALL CHANGES SHALL BE REQUESTED IN WRITING AND MAY ONLY BE APPROVED IN WRITING BY THE ARCHITECT AND THE OWNER PRIOR TO ANY CHANGES BEING MADE.
20. THE ARCHITECT/ENGINEER HAS THE RIGHT TO REJECT ANY PORTION OF WORK THAT IS POORLY INSTALLED, DOES NOT MEET INDUSTRY STANDARD, UNAUTHORIZED, OR WORK DONE CONTRARY TO THE THE INTENT OF THE CONTRACT DOCUMENTS. SUCH WORK SHALL BE REPLACED, REPAIRED OR REMOVED AT THE CONTRACTOR'S EXPENSE.
21. MECHANICAL CONTRACTOR SHALL GUARANTEE ALL MECHANICAL WORK AND THE WORK OF HIS SUBCONTRACTORS FOR A PERIOD OF TWO (2) YEARS AFTER RECEIVING FINAL ACCEPTANCE AND IS RESPONSIBLE FOR ALL REPAIR WORK INCLUDING PARTS AND LABOR AS NECESSARY DURING THAT PERIOD AT THE CONTRACTOR'S EXPENSE.
22. IN NO EVENT SHALL STRUCTURAL MEMBERS BE CUT OR DRILLED WITHOUT THE WRITTEN APPROVAL OF A LICENSED STRUCTURAL ENGINEER.
23. CONTRACTOR SHALL PROVIDE SAFE AND SANITARY CONDITIONS WHERE DEMOLITION AND WRECKING OPERATIONS ARE BEING CARRIED ON. WORK SHALL BE EXECUTED IN SUCH A MANNER THAT HAZARD FROM FIRE, POSSIBILITY OF INJURY, DANGER TO HEALTH AND CONDITIONS WHICH MAY CONSTITUTE A PUBLIC NUISANCE SHALL BE MINIMIZED.
24. ENGINEER/OWNER MAY ASK THE CONTRACTOR TO PROVIDE DETAILED SHOP DRAWINGS & SUBMITTALS OF ANY/ALL PARTS OF THIS PROJECT WHICH THE ENGINEER/OWNER DEEMS NECESSARY FOR.

HVAC GENERAL NOTES

1. PROCURE AND PAY ALL NECESSARY PERMITS AND LICENSES REQUIRED TO CARRY OUT THE WORK SHOWN. OBTAIN AND PAY FOR ALL FEES.
2. COMPLY WITH ALL FEDERAL, STATE AND MUNICIPAL LAWS AND CODES, ORDINANCES, RULES AND REGULATIONS OF HEALTH, PUBLIC OR OTHER AUTHORITIES CONTROLLING OR LIMITING THE METHODS, MATERIALS TO BE USED OR ACTIONS OF THOSE EMPLOYED.
3. GUARANTEE HVAC SYSTEM FOR A PERIOD OF TWO (2) YEARS FROM OWNER'S ACCEPTANCE TO BE FREE FROM DEFECTS AND REPAIR OR REPLACE, AT NO COST TO OWNER, FAILURES OR DEFECTS.
4. MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING ALL HIS DEBRIS.
5. BALANCE HVAC SYSTEM TO QUANTITIES INDICATED. CONTRACTOR TO SUBMIT FOUR (4) SETS OF AIR, WATER AND UNIT BALANCING REPORT TO ENGINEER/OWNER PRIOR TO FINAL ACCEPTANCE OF THE SYSTEM.
6. BIDDERS FOR THIS WORK SHALL VISIT THE PREMISES AND CAREFULLY EXAMINE ALL EXISTING CONDITIONS BEFORE SUBMITTING BIDS. NOT ALL EXISTING CONDITIONS HAVE BEEN IDENTIFIED ON DRAWINGS. CONTRACTOR SHALL NOTIFY ENGINEER. OF ALL DISCREPANCIES PRIOR TO SUBMITTING BID.
7. ALL BIDDERS SHALL ALSO FAMILIARIZE THEMSELVES WITH THE MEANS OF ENTRANCE AND EXIT AT THE PROPERTY AND ALL OTHER INFORMATION NECESSARY TO PROPERLY CARRY OUT THE WORK.
8. THE CONTRACTOR SHALL, WITH THE APPROVAL OF THE ENGINEER AND WITHOUT ADDITIONAL COST TO THE OWNER, MAKE ALL NECESSARY CHANGES OR MODIFICATIONS TO LOCATIONS AS MAY BE NECESSARY TO SUIT REQUIREMENTS AND CONDITIONS FOR THE PROPER AND CONVENIENTLY ACCESSIBLE LOCATIONS OF ALL PARTS OF EACH SYSTEM.
9. SMALL DETAILS ARE NOT USUALLY SHOWN OR SPECIFIED BUT NECESSARY FOR THE PROPER INSTALLATION AND OPERATION OR WORK SHALL BE FURNISHED AND INSTALLED AT NO ADDITIONAL COST.
10. THE CONTRACTOR SHALL NOTE THAT ALL SERVICE CONNECTIONS MAY NOT BE SHOWN IN TRUE POSITIONS. EACH BIDDER IS CAUTIONED, THEREFORE, TO VERIFY SAME WITH FIELD CONDITIONS.
11. CONTRACTOR SHALL CHECK FOR INTERFERENCE AND VERIFY ALL DIMENSIONS PRIOR TO FABRICATION OR INSTALLATION OF PIPING AND DUCTWORK.
12. IF AN ITEM OF EQUIPMENT OTHER THAN THE ITEM(S) SPECIFIED IS APPROVED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ADDITIONAL COST ARISING OUT OF ADDITIONAL OR CHANGED GENERAL CONSTRUCTION AND MECHANICAL WORK REQUIRED TO ACCOMMODATE THE SUBSTITUTED EQUIPMENT.
13. ALL EQUIPMENT INSTALLATION SHALL BE IN ACCORDANCE WITH MANUFACTURERS DIRECTIONS AND RECOMMENDATIONS.
14. PROVIDE TWO (2) SETS OF SPARE FILTERS FOR THE INSTALLED RTUs, AC UNITS, & OTHER EQUIPMENT.
15. MECHANICAL CONTRACTOR IS RESPONSIBLE TO PROVIDE TWO-YEAR PREVENTIVE & REGULAR MAINTENANCE SERVICE FOR ALL INSTALLED HVAC/MECHANICAL SYSTEM. THIS INCLUDES A MINIMUM OF TWO (2) PERIODIC SERVICE VISITS ANNUALLY TO INSPECT, TEST & CHECK ALL COMPONENTS OF HVAC UNITS AND ANY ADDITIONAL VISITS REQUIRED IF ANY HVAC UNIT FAILS. ALL NECESSARY BELT ALIGNMENTS, PROPER REFRIGERANT CHARGE, PROPER OPERATIONS OF ALL DAMPERS, DDC CONTROLS, ETC. IS INCLUDED IN THIS SCOPE OF WORK. PROVIDE SERVICE REPORT FOR EACH VISIT.
16. PROVIDE FIRE DAMPERS/ACCESS DOORS AT ALL DUCT PENETRATIONS THROUGH CORRIDORS, SLABS AND OTHER RATED PARTITIONS, IRRESPECTIVE OF WHETHER IT IS INDICATED ON THE DRAWINGS OR NOT.
17. PROVIDE FIRE STOPPING AROUND ALL OPENINGS FOR DUCT, PIPING, CONDUIT, ETC. PENETRATIONS THROUGH CORRIDORS, SLABS AND OTHER RATED PARTITIONS.
18. MECHANICAL CONTRACTOR IS RESPONSIBLE FOR ALL DEMOLITION AND RESTORATION OF AREAS OF MECHANICAL REMOVALS.
19. CONTRACTOR IS RESPONSIBLE FOR PROVIDING DUMPSTER/CONTAINER SERVICES AND LABOR TO KEEP THE BUILDING FREE OF DEBRIS.
20. CONTRACTOR TO PROVIDE TWO (2) SEPARATE TRAINING SESSIONS (FOUR WEEKS APART) ON PROPER OPERATION & TROUBLESHOOTING OF NEW HVAC SYSTEM & CONTROLS.
21. CONTRACTOR TO NOTE THAT BOTH DWGS. & SPECS. ARE COLLECTIVELY A PART OF BID REQUIREMENTS. IN CASE OF ANY DIFFERENCES BETWEEN VARIOUS DWGS. OR BETWEEN DWGS. & SPECS, THE MOST STRINGENT REQUIREMENT WILL PREVAIL.
22. CONTRACTOR TO SUBMIT FOUR (4) SETS OF OPERATION & MAINTENANCE MANUALS, INCLUDING A SUMMARY SHEET OF ALL EQUIPMENT MANUFACTURERS/MODEL'S/SERIAL #'S, SHOP DRAWING SUBMITTALS, WARRANTY INFORMATION, O&M MANUALS, PROJECT INFORMATION, CONTACT DETAILS & AS-BUILT DRAWINGS.
23. CONTRACTOR TO PROVIDE FOUR (4) SETS AND AN ELECTRONIC COPY OF AS-BUILT DRAWINGS OF THE ENTIRE SYSTEM.

GENERAL CONSTRUCTION NOTES

1. REFER TO "MULTIPLE PRIME CONTRACT NOTES" ON DWG. A1.00 & SPECIFICATIONS FOR CONTRACTORS' RESPONSIBILITIES.
2. GC IS RESPONSIBLE TO CORE DRILL ALL WALLS, FLOORS, CEILING, ROOF ETC. FOR ALL PIPE & DUCT PENETRATIONS. SEAL OPENING WITH 2-HOUR FIRE BARRIER CAULK. SEE DRAWINGS FOR APPROXIMATE LOCATIONS OF PIPES, DUCT, ETC.
3. GC TO REFER TO MECHANICAL DRAWINGS FOR PAINTING, FURNISHING AND INSTALLING ACCESS PANELS, CUTOUT LOCATIONS, ETC.
4. EC SHALL BE RESPONSIBLE FOR REMOVING & RELOCATING EXISTING ELECTRICAL, FIRE ALARM DEVICES, ETC. TO ACCOMMODATE INSTALLATION OF NEW HVAC EQUIPMENT, PIPING & DUCTWORK. CHECK IN FIELD.
5. GC SHALL REMOVE EXISTING CEILING TILES AND CEILING GRID TO ACCOMMODATE THE INSTALLATION OF NEW UNITS, PIPING & DUCTWORK. RE-INSTALL ALL CEILING TILES BACK TO MATCH EXISTING. REMOVE & REPLACE ALL DAMAGED TILES & CEILING GRID. CHECK IN FIELD.

HVAC MATERIALS

EQUIPMENT:

- REFER TO SCHEDULES FOR UNIT MANUFACTURER, SIZE, AND CAPACITY DATA.

DUCTWORK:

- INDOOR AIR DUCTWORK, EXCEPT AS INDICATED BELOW, SHALL BE GALVANIZED STEEL CONSTRUCTION. WEIGHTS AND CONSTRUCTION DETAIL SHALL BE IN ACCORDANCE WITH THE LATEST ASHRAE GUIDE AND/OR SMACNA STANDARDS. MIN. 24 GAUGE DUCTWORK SHALL BE USED FOR THE PROJECT.
- OUTDOOR AIR INTAKE DUCTWORK SHALL BE ALUMINUM CONSTRUCTION CLASS "A" SEALED.
- KITCHEN GENERAL EXHAUST DUCTWORK SHALL BE ALUMINUM CONSTRUCTION, CLASS "A" SEALED.
- KITCHEN HOOD GREASE DUCTWORK SHALL BE DOUBLE WALL, FACTORY BUILT GREASE DUCT, "CAPTIVE AIRE" MODEL DW-3Z OR APPROVED EQUAL.
- ALL ROUND DUCTWORK SHALL BE DOUBLE-WALL SPIRAL DUCTWORK (SOLID W/ 1" THICK 3-LBS DENSITY INSULATION).
- FLEXIBLE DUCTWORK: SHALL NOT EXCEED FOUR (4) FEET IN LENGTH. FOR ANY HORIZONTAL FLEX DUCT BRANCH TO A CEILING DIFFUSER, FURNISH A 90° BRACE TO MAINTAIN A LONG RADIUS ELBOW TO THE DIFFUSER (TITUS MAKE, MODEL "FLEXRIGHT" OR APPROVAL EQUAL MANUFACTURERS).
- FIRE DAMPER: GREENHECK MAKE, MODEL FD-150 TYPE B (BLADE OUT OF AIRSTREAM), 1-1/2 HR RATED (UNLESS OTHERWISE NOTED) UL-555 LABELED DAMPER W/ STANDARD FRAME (OR APPROVED EQUAL). PROVIDE WW/ A RETAINING ANGLE & ACCESS DOOR.

AIR DEVICES:

- CD - TITUS MAKE, MODEL TMS (12"x12" OR 24"x24" MODULE W/ ROUND NECK, STEEL CONSTRUCTION).
- RG - TITUS MAKE, MODEL TMS (12"x12" OR 24"x24" MODULE W/ ROUND NECK, STEEL CONSTRUCTION).
- SR - TITUS MAKE, MODEL 300RS, STEEL CONSTRUCTION.
- SG - TITUS MAKE, MODEL 350RL, STEEL CONSTRUCTION.
- EAR - TITUS MAKE, MODEL 355-R, STEEL CONSTRUCTION.
- EAR1 - TITUS MAKE, MODEL 355-F, ALUM. CONSTRUCTION.

NOTES:
1. ALL CEILING DIFFUSERS LOCATED IN GYPSUM BOARD AND/OR CONCEALED SPLINE CEILINGS SHALL BE PROVIDED WITH FRAME TYPE FOR SURFACE MOUNTING.
2. PROVIDE FACTORY INSTALLED 90° BLANK-OFF PLATE(S) IN ALL 2 AND 3 WAY DIFFUSERS.
3. COLOR OF NEW AIR INLETS & OUTLETS SHALL MATCH THE CEILING COLOR.
4. NC RATING OF ALL CDs SHALL NOT EXCEED 20. NC RATING OF ALL RARs/EARs SHALL NOT EXCEED 22.

PIPING:

- HOT WATER PIPING SHALL BE HARD COPPER TYPE "L" W/ SOLDERED FITTINGS. PROVIDE DIELECTRIC FITTINGS FOR CONNECTION OF DISSIMILAR PIPING.
- REFRIGERANT PIPING SHALL BE HARD COPPER TYPE "K" WITH BRAZED FITTINGS.
- CONDENSATE DRAIN PIPING SHALL BE HARD COPPER TYPE "L" WITH WROUGHT COPPER SOLDERED FITTINGS. REFER TO PLUMBING DRAWINGS.

INSULATION:

- ALL DUCTWORK (SA, RA, OA, ETC.) SHALL BE INSULATED W/ EXTERNAL DUCT INSULATION, UNLESS OTHERWISE NOTED ON DRAWINGS.
- EXTERNAL DUCTWORK INSULATION: NEW DUCTWORK SHALL BE INSULATED WITH A MINIMUM OF R-6 (2" THICK, MIN. 1LB. DENSITY) FIBERGLASS DUCT INSULATION PER THE REQUIREMENTS OF IECC 2015, WITH REINFORCED FOIL FACED FLAME RESISTANT VAPOR BARRIER, ADHERE TO DUCT W/ SEALED LAPS AND TAPED JOINTS.
- INTERNALLY LINED DUCT: 1" THICK, MIN. 2 LB. DENSITY RIGID INSULATION ADHERED TO DUCT. DUCTS WIDER THAN 12" TO HAVE WELDED PINS AND WASHERS. DUCT DIMENSIONS AS INDICATED ARE CLEAR INSIDE DUCT DIMENSIONS.

  NOTE:
  ALL SUPPLY & RETURN AIR DUCTWORK SHALL BE INTERNALLY LINED FOR A MIN. OF 25' TO AND FROM ANY RTU.
- DUCT INSULATION NOTE: PROVIDE A MINIMUM 6" OVERLAP WHERE INTERNAL INSULATION ENDS AND EXTERNAL INSULATION BEGINS.
- FRESH AIR INTAKE AND EXPOSED DUCT: 1" THICK, MIN. 2 LB. DENSITY RIGID FIBERGLASS DUCT INSULATION WITH FOIL FACING VAPOR BARRIER FASTENED WITH WELDED CLIPS, CEMENTED JOINTS WITH ALUMINUM TAPE.
- ALL EXTERIOR INSTALLED DUCTWORK SHALL BE MIN. 18 GAUGE ALUMINUM CONSTRUCTION AND PROVIDE WITH BOTH 2" THICK, 8LB DENSITY ACOUSTICAL LINING. MIN R8.7 WITH IAQ LINER AS WELL AS EXTERNAL INSULATION (MIN. 1.5" THICK AND 8 LB DENSITY). MIN. R-6.5 EXTERNAL INSULATION SHALL BE SLOPED (MIN. 1/4" PER FOOT) ON ALL UPWARD FACING HORIZONTAL SURFACES TO EFFECTIVELY DRAIN WATER OFF THE DUCTWORK. ALL DUCT CONNECTION JOINTS ETC. SHALL BE ALUMINUM. DUCTWORK SHALL BE CLASS "A" SEALED AS PER SMACNA. PROVIDE SOLVENT BASED OUTDOOR DUCT SEALANT, RESISTANT TO UV LIGHT, UL 734 LISTED, WATER RESISTANCE AS PER SMACNA. PROVIDE 2MM THICK ALUMINIZED FACED LOADED LIMP VINYL SHEET LAGGING WRAPPED AROUND THE DUCT AND FASTED WITH ADHESIVE TAPED AND BANDS FOR A WEATHER TIGHT CONSTRUCTION WHICH MEETS CLASS 1 REQUIREMENTS FOR SMOKE DEVELOPMENT AND FLAME SPREAD RATING. (TYPICAL FOR ALL OUTDOOR DUCTWORK ON THIS PROJECT)
- HEATING PIPING INSULATION: REFER TO SPEC. SECTION FOR PIPE INSULATION REQUIREMENTS.
- INTERIOR REFRIGERANT SUCTION & HOT GAS BYPASS PIPING SHALL BE INSULATED WITH 1" THICK FLEXIBLE ELASTOMERIC INSULATION (AP ARMAFLEX BLACK LAPSEAL OR APPROVED EQUAL).
- EXTERIOR REFRIGERANT SUCTION, LIQUID & HOT GAS BYPASS PIPING SHALL BE INSULATED WITH 1" THICK FLEXIBLE ELASTOMERIC INSULATION (AP ARMAFLEX BLACK LAPSEAL OR APPROVED EQUAL) & BE PROVIDED WITH MIN. 30 MIL PVC FIELD APPLIED JACKETS.
- CONDENSATE DRAIN PIPING SHALL BE INSULATED WITH 1" THICK FLEXIBLE ELASTOMERIC INSULATION (AP ARMAFLEX BLACK LAPSEAL OR APPROVED EQUAL). REFER TO PLUMBING DRAWINGS.

SYMBOLS

NOT TO SCALE

	=	ROUND SUPPLY AIR CEILING DIFFUSER (CD) WITH NECK SIZE AND AND CFM INDICATED ON PLANS.
	=	4-WAY SUPPLY AIR CEILING DIFFUSER (SAD) WITH NECK SIZE AND AND CFM INDICATED ON PLANS.
	=	RETURN AIR REGISTER (RAR) WITH NECK SIZE AND CFM INDICATED ON PLANS.
	=	EXHAUST AIR REGISTER (EAR) WITH NECK SIZE AND CFM INDICATED ON PLANS.
	=	SUPPLY AIR CEILING REGISTER/GRILLE (SAR) WITH NECK SIZE AND CFM INDICATED ON PLANS.
	=	RETURN AIR REGISTER (RAR) WITH NECK SIZE AND CFM INDICATED ON PLAN
	=	POINT OF CONNECTION OF NEW PIPING/DUCTWORK TO EXISTING
	=	POINT OF DISCONNECTION OF NEW PIPING/DUCTWORK TO EXISTING
W" x D"	=	INDICATES HARD DUCT WITH INTERNAL LINING (DIMENSIONS ARE INSIDE CLEAR WIDTH & DEPTH).
W" x D"	=	INDICATES HARD DUCT (DIMENSIONS ARE INSIDE CLEAR WIDTH & DEPTH).
	=	DUCT TURN UP (SUPPLY, RETURN, EXHAUST)
	=	DUCT TURN DOWN (SUPPLY, RETURN, EXHAUST)
DSD/AD	=	DUCT SMOKE DETECTOR WITH ACCESS DOOR
FD/AD	=	FIRE/DAMPER WITH ACCESS DOOR
FD/SD	=	COMBINATION FIRE & SMOKE DAMPER
VD	=	VOLUME DAMPER
BDD	=	BACK DRAFT DAMPER
	=	UNDERCUT DOOR
T	=	INDICATES NEW ROOM THERMOSTAT
CLASSROOM 201	=	ROOM NAME ROOM NUMBER
1	=	REVISION
	=	PIPE TURN UP
	=	PIPE TURN DOWN
OR	=	BALL VALVE
	=	CHECK VALVE
	=	UNION
	=	PRESSURE GAUGE
	=	TEMPERATURE GAUGE
	=	STRAINER
	=	CONTROL VALVE
	=	OS&Y VALVE

ABBREVIATIONS

&	=	AND	IAQ	=	INDOOR AIR QUALITY
@	=	AT	ID	=	INSIDE DIAMETER (DIM)
ø	=	DIAMETER OR ROUND	IN	=	INCH
(E)	=	EXISTING	INFO	=	INFORMATION
(N)	=	NEW	KC	=	KITCHEN CONTRACTOR
AC	=	AIR CONDITIONING UNIT	KMA	=	KITCHEN MAKEUP AIR
ACC	=	AIR COOLED CONDENSING UNIT	KX	=	KITCHEN EXHAUST
AD	=	ACCESS DOOR	LAT	=	LEAVING AIR TEMPERATURE
ADD'L	=	ADDITIONAL	LDB	=	LEAVING DRY BULB
AFF	=	ABOVE FINISHED FLOOR	LSD	=	LINEAR SLOT DIFFUSER
ALC	=	AUTOMATED LOGIC CONTROL	LWB	=	LEAVING WET BULB
ALT	=	ALTERNATE	LWT	=	LEAVING WATER TEMPERATURE
ALUM	=	ALUMINUM	MAX	=	MAXIMUM
AS	=	AIR SEPARATOR	MC	=	MECHANICAL CONTRACTOR
BDD	=	BACK DRAFT DAMPER	MECH	=	MECHANICAL
BLDG	=	BUILDING	MFR	=	MANUFACTURER
BMS	=	BUILDING MANAGEMENT SYSTEM	MIN	=	MINIMUM
CD	=	CEILING DIFFUSER	NK	=	NECK SIZE
CFM	=	CUBIC FEET PER MINUTE	NTS	=	NOT TO SCALE
CLG	=	CEILING	OA	=	OUTSIDE AIR
CO	=	CLEANOUT	OD	=	OUTSIDE DIAMETER
CP	=	CONDENSATE DRAIN PUMP	PC	=	PLUMBING CONTRACTOR
CV	=	CONVECTOR	RA	=	RETURN AIR
DDC	=	DIRECT DIGITAL CONTROL	RAG	=	RETURN AIR GRILLE
DIA	=	DIAMETER	RAR	=	RETURN AIR REGISTER
DN	=	DOWN	RG	=	RETURN GRILLE
DSD	=	DUCT SMOKE DETECTOR	RM	=	ROOM
DWG	=	DRAWING	RTU	=	ROOFTOP HVAC UNIT
EA	=	EXHAUST AIR	RV	=	ROOF VENT
EAR	=	EXHAUST AIR REGISTER	SA	=	SUPPLY AIR
EAT	=	ENTERING AIR TEMPERATURE	SAD	=	SUPPLY AIR DIFFUSER
EC	=	ELECTRICAL CONTRACTOR	SAR	=	SUPPLY AIR REGISTER
EF	=	EXHAUST FAN	SD	=	SMOKE DAMPER
ET	=	EXPANSION TANK	SPEC	=	SPECIFICATION
EXIST	=	EXISTING	SR	=	SUPPLY AIR SIDE REGISTER
EWT	=	ENTERING WATER TEMPERATURE	SS	=	STAINLESS STEEL
FAI	=	FRESH AIR INTAKE	TG	=	TRANSFER AIR GRILLE
FC	=	FLEXIBLE CONNECTION	TYP	=	TYPICAL
FCU	=	FAN COIL UNIT	UH	=	UNIT HEATER
FD	=	FIRE DAMPER	UV	=	UNIT VENTILATOR
FLR	=	FLOOR	VD	=	VOLUME DAMPER
FTR	=	FIN TUBE RADIATION/BASEBOARD	VFD	=	VARIABLE FREQUENCY DRIVE
GC	=	GENERAL CONTRACTOR	VIF	=	VERIFY IN FIELD
HTP	=	HEAT TRANSFER PACKAGE	VRF	=	VARIABLE REFRIGERANT FLOW
HVAC	=	HEAT/VENTILATION/AIR CONDITIONING	W/	=	WITH
HWH	=	HOT WATER HEATER	WMS	=	WIRE MESH SCREEN

Date	1/10/20
Checked	MAM
Drawn	IM

MICHAEL J. McGOVERN, R.A.
License No. 022257-1
Title REGISTERED ARCHITECT

Revisions:

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1	ISSUE TO BID 11/23/20

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252 MAIN STREET, GOSHEN, NEW YORK 10924 (845)615-0350

MECHANICAL NOTES

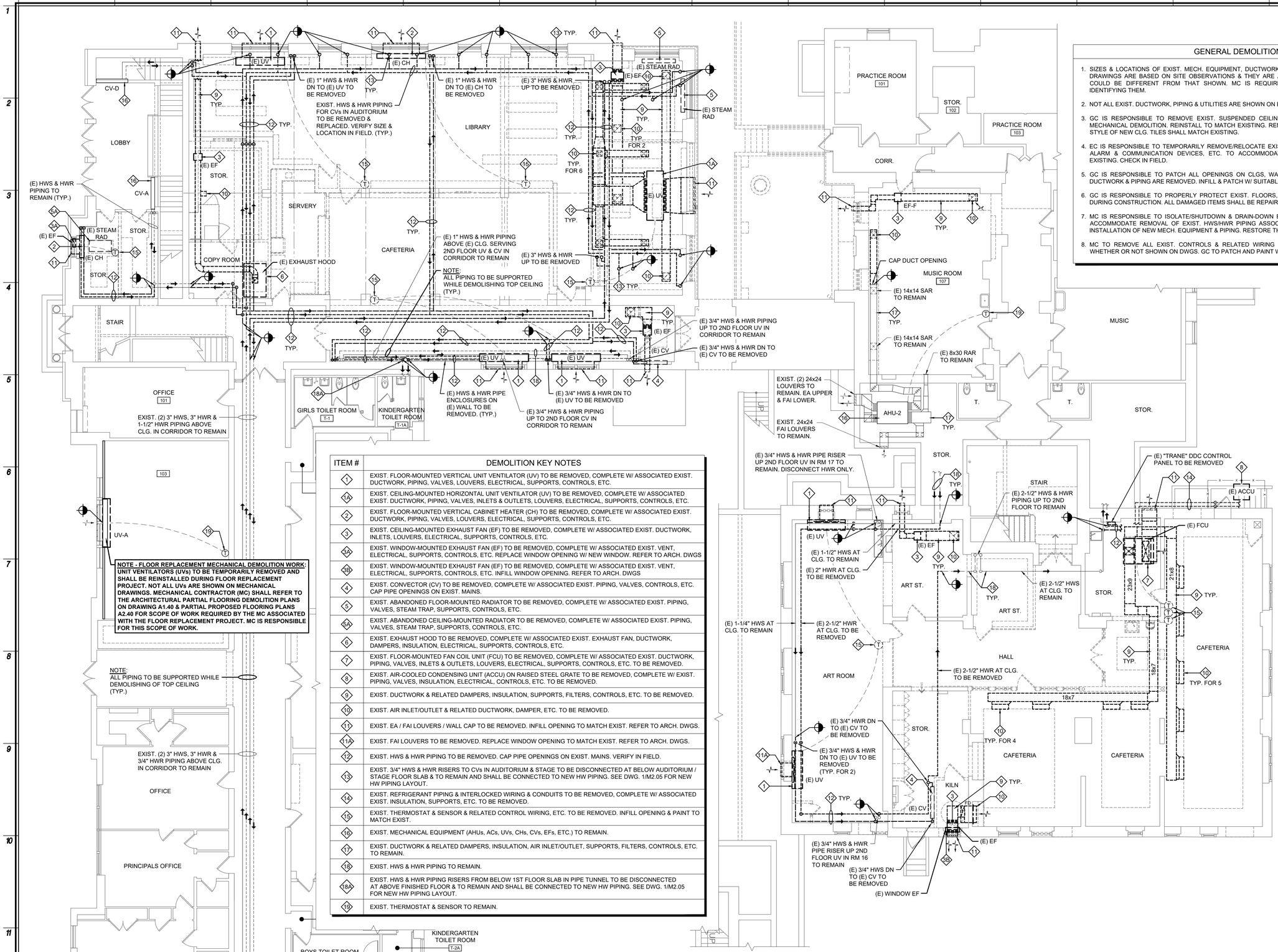
2019 BOND REFERENDUM
CHATSWORTH AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

NYSED PROJECT # 66-07-01-03-0-005-020

Job No. 4.1092.72.03

File No. 10927203M201

M0.01



GENERAL DEMOLITION NOTES

1. SIZES & LOCATIONS OF EXIST. MECH. EQUIPMENT, DUCTWORK, AIR INLETS/OUTLETS, PIPING, ETC. SHOWN ON DRAWINGS ARE BASED ON SITE OBSERVATIONS & THEY ARE APPROXIMATE. SOME OF DUCT & PIPE ROUTING COULD BE DIFFERENT FROM THAT SHOWN. MC IS REQUIRED TO PROVIDE DUCTWORK SHOP DRAWINGS IDENTIFYING THEM.
2. NOT ALL EXIST. DUCTWORK, PIPING & UTILITIES ARE SHOWN ON DRAWINGS. VERIFY IN FIELD.
3. GC IS RESPONSIBLE TO REMOVE EXIST. SUSPENDED CEILING SYSTEM, GRIDS & TILES TO ACCOMMODATE MECHANICAL DEMOLITION. REINSTALL TO MATCH EXISTING. REMOVE & REPLACE ALL DAMAGED TILES. MODEL & STYLE OF NEW CLG. TILES SHALL MATCH EXISTING.
4. EC IS RESPONSIBLE TO TEMPORARILY REMOVE/RELOCATE EXIST. LIGHT FIXTURES, ELECTRICAL DEVICES, FIRE ALARM & COMMUNICATION DEVICES, ETC. TO ACCOMMODATE MECH. DEMOLITION. REINSTALL TO MATCH EXISTING. CHECK IN FIELD.
5. GC IS RESPONSIBLE TO PATCH ALL OPENINGS ON CLGS, WALLS & ROOF WHERE EXIST. MECH. EQUIPMENT, DUCTWORK & PIPING ARE REMOVED. INFILL & PATCH W/ SUITABLE MATERIALS & PAINT TO MATCH EXISTING.
6. GC IS RESPONSIBLE TO PROPERLY PROTECT EXIST. FLOORS, WALLS, CEILING, FURNITURE, EQUIPMENT, ETC. DURING CONSTRUCTION. ALL DAMAGED ITEMS SHALL BE REPAIRED / REPLACED AT EXPENSE OF THE GC.
7. MC IS RESPONSIBLE TO ISOLATE/SHUTDOWN & DRAIN-DOWN EXIST. HOT WATER HEATING PIPING SYSTEM TO ACCOMMODATE REMOVAL OF EXIST. HWS/HWR PIPING ASSOCIATED W/ DEMOLISHED MECH. EQUIPMENT AND INSTALLATION OF NEW MECH. EQUIPMENT & PIPING. RESTORE THE SYSTEM AFTER ALL WORK IS COMPLETE.
8. MC TO REMOVE ALL EXIST. CONTROLS & RELATED WIRING & CONDUITS, ETC. WHICH BECOME OBSOLETE, WHETHER OR NOT SHOWN ON DWGS. GC TO PATCH AND PAINT WALLS TO MATCH EXISTING.

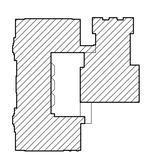
DEMOLITION KEY NOTES

ITEM #	
1	EXIST. FLOOR-MOUNTED VERTICAL UNIT VENTILATOR (UV) TO BE REMOVED, COMPLETE W/ ASSOCIATED EXIST. DUCTWORK, PIPING, VALVES, LOUVERS, ELECTRICAL, SUPPORTS, CONTROLS, ETC.
1A	EXIST. CEILING-MOUNTED HORIZONTAL UNIT VENTILATOR (UV) TO BE REMOVED, COMPLETE W/ ASSOCIATED EXIST. DUCTWORK, PIPING, VALVES, INLETS & OUTLETS, LOUVERS, ELECTRICAL, SUPPORTS, CONTROLS, ETC.
2	EXIST. FLOOR-MOUNTED VERTICAL CABINET HEATER (CH) TO BE REMOVED, COMPLETE W/ ASSOCIATED EXIST. DUCTWORK, PIPING, VALVES, LOUVERS, ELECTRICAL, SUPPORTS, CONTROLS, ETC.
3	EXIST. CEILING-MOUNTED EXHAUST FAN (EF) TO BE REMOVED, COMPLETE W/ ASSOCIATED EXIST. DUCTWORK, INLETS, LOUVERS, ELECTRICAL, SUPPORTS, CONTROLS, ETC.
3A	EXIST. WINDOW-MOUNTED EXHAUST FAN (EF) TO BE REMOVED, COMPLETE W/ ASSOCIATED EXIST. VENT, ELECTRICAL, SUPPORTS, CONTROLS, ETC. REPLACE WINDOW OPENING W/ NEW WINDOW. REFER TO ARCH. DWGS
3B	EXIST. WINDOW-MOUNTED EXHAUST FAN (EF) TO BE REMOVED, COMPLETE W/ ASSOCIATED EXIST. VENT, ELECTRICAL, SUPPORTS, CONTROLS, ETC. INFILL WINDOW OPENING. REFER TO ARCH. DWGS
4	EXIST. CONVECTOR (CV) TO BE REMOVED, COMPLETE W/ ASSOCIATED EXIST. PIPING, VALVES, CONTROLS, ETC. CAP PIPE OPENINGS ON EXIST. MAINS.
5	EXIST. ABANDONED FLOOR-MOUNTED RADIATOR TO BE REMOVED, COMPLETE W/ ASSOCIATED EXIST. PIPING, VALVES, STEAM TRAP, SUPPORTS, CONTROLS, ETC.
5A	EXIST. ABANDONED CEILING-MOUNTED RADIATOR TO BE REMOVED, COMPLETE W/ ASSOCIATED EXIST. PIPING, VALVES, STEAM TRAP, SUPPORTS, CONTROLS, ETC.
6	EXIST. EXHAUST HOOD TO BE REMOVED, COMPLETE W/ ASSOCIATED EXIST. EXHAUST FAN, DUCTWORK, DAMPERS, INSULATION, ELECTRICAL, SUPPORTS, CONTROLS, ETC.
7	EXIST. FLOOR-MOUNTED FAN COIL UNIT (FCU) TO BE REMOVED, COMPLETE W/ ASSOCIATED EXIST. DUCTWORK, PIPING, VALVES, INLETS & OUTLETS, LOUVERS, ELECTRICAL, SUPPORTS, CONTROLS, ETC. TO BE REMOVED.
8	EXIST. AIR-COOLED CONDENSING UNIT (ACCU) ON RAISED STEEL GRATE TO BE REMOVED, COMPLETE W/ EXIST. PIPING, VALVES, INSULATION, ELECTRICAL, CONTROLS, ETC. TO BE REMOVED.
9	EXIST. DUCTWORK & RELATED DAMPERS, INSULATION, SUPPORTS, FILTERS, CONTROLS, ETC. TO BE REMOVED.
10	EXIST. AIR INLET/OUTLET & RELATED DUCTWORK, DAMPER, ETC. TO BE REMOVED.
11	EXIST. EA / FAI LOUVERS / WALL CAP TO BE REMOVED. INFILL OPENING TO MATCH EXIST. REFER TO ARCH. DWGS.
11A	EXIST. FAI LOUVERS TO BE REMOVED. REPLACE WINDOW OPENING TO MATCH EXIST. REFER TO ARCH. DWGS.
12	EXIST. HWS & HWR PIPING TO BE REMOVED. CAP PIPE OPENINGS ON EXIST. MAINS. VERIFY IN FIELD.
13	EXIST. 3/4" HWS & HWR RISERS TO CVs IN AUDITORIUM & STAGE TO BE DISCONNECTED AT BELOW AUDITORIUM / STAGE FLOOR SLAB & TO REMAIN AND SHALL BE CONNECTED TO NEW HW PIPING. SEE DWG. 1/M2.05 FOR NEW HW PIPING LAYOUT.
14	EXIST. REFRIGERANT PIPING & INTERLOCKED WIRING & CONDUITS TO BE REMOVED, COMPLETE W/ ASSOCIATED EXIST. INSULATION, SUPPORTS, ETC. TO BE REMOVED.
15	EXIST. THERMOSTAT & SENSOR & RELATED CONTROL WIRING, ETC. TO BE REMOVED. INFILL OPENING & PAINT TO MATCH EXIST.
16	EXIST. MECHANICAL EQUIPMENT (AHUs, ACs, UVs, CHs, CVs, EFs, ETC.) TO REMAIN.
17	EXIST. DUCTWORK & RELATED DAMPERS, INSULATION, AIR INLET/OUTLET, SUPPORTS, FILTERS, CONTROLS, ETC. TO REMAIN.
18	EXIST. HWS & HWR PIPING TO REMAIN.
18A	EXIST. HWS & HWR PIPING RISERS FROM BELOW 1ST FLOOR SLAB IN PIPE TUNNEL TO BE DISCONNECTED AT ABOVE FINISHED FLOOR & TO REMAIN AND SHALL BE CONNECTED TO NEW HW PIPING. SEE DWG. 1/M2.05 FOR NEW HW PIPING LAYOUT.
19	EXIST. THERMOSTAT & SENSOR TO REMAIN.

1 M1.01 Partial First Floor Mechanical Demolition Plan
1/8" = 1'-0"

NORTH

CHATSWORTH AVE. SCHOOL



Key Plan
NOT TO SCALE

PROJECT NORTH

Date	1/10/20
Checked	MAM
Drawn	IM

MICHAEL J. McGOVERN, R.A.
License No. 022257-1
Title REGISTERED ARCHITECT

Revisions:

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NYSED PROJECT # 66-07-01-03-0-005-020

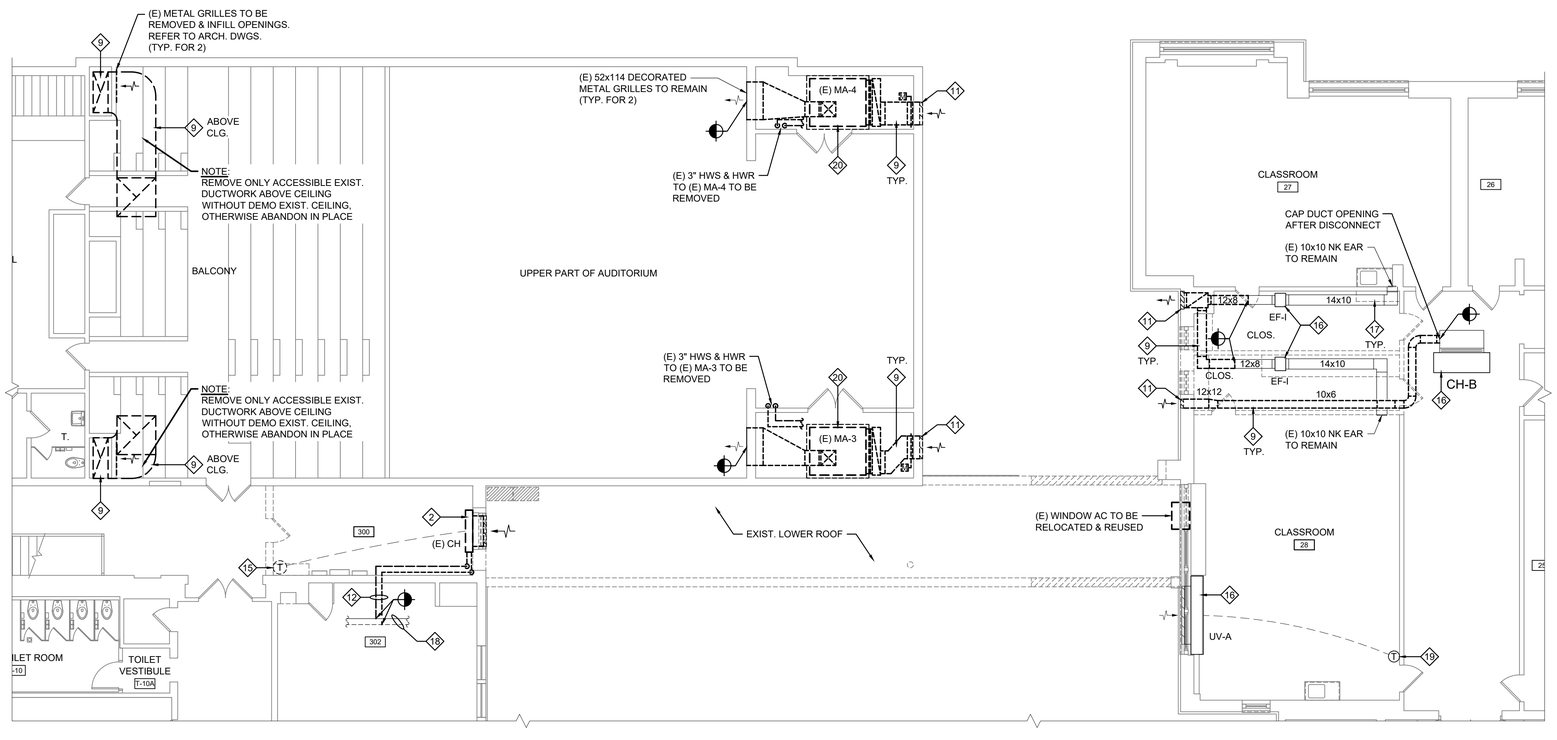
FIRST FLOOR MECHANICAL DEMOLITION PLAN

2019 BOND REFERENDUM
CHATSWORTH AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

Job No. 4.1092.72.03

File No. 10927203M201

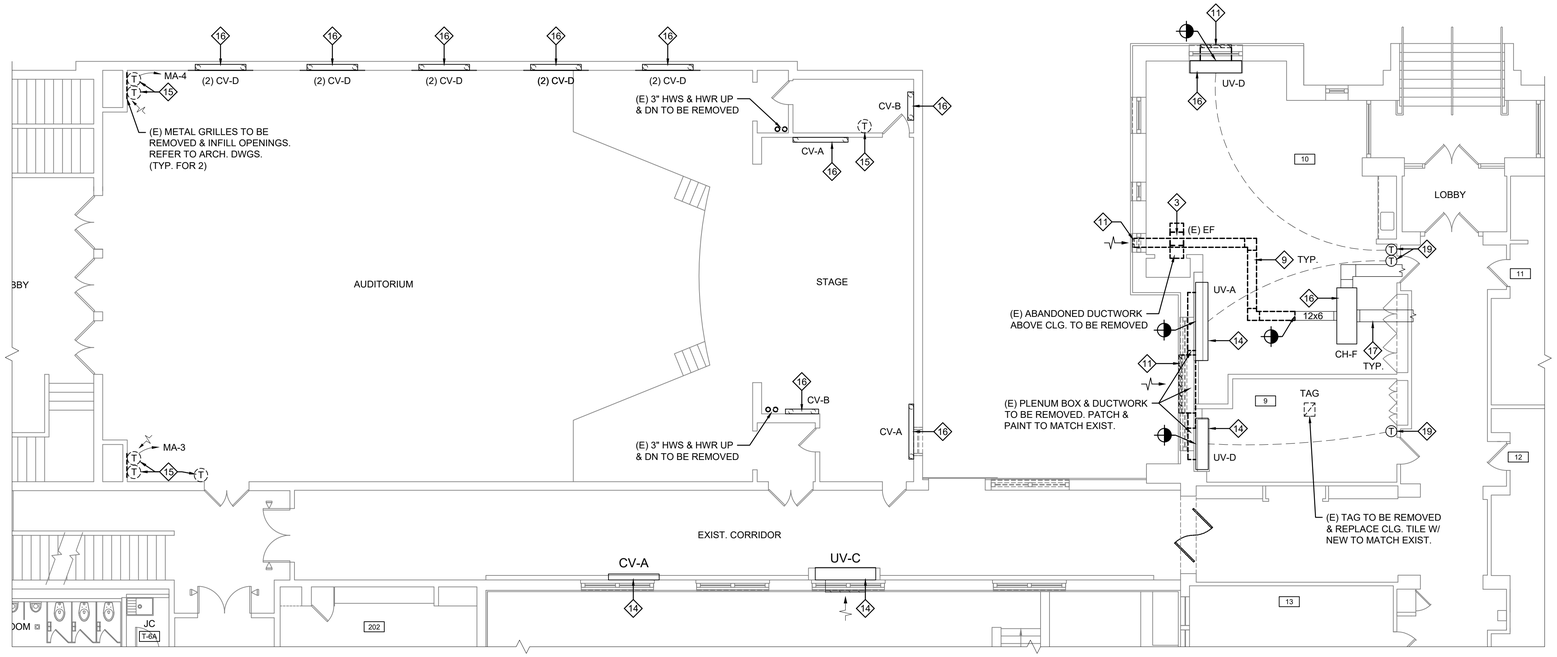
M1.01



2 M1.02 **Partial Third Floor Mechanical Demolition Plan**

1/8" = 1'-0"

NORTH



1 M1.02 **Parietal Second Floor Mechanical Demolition Plan**

1/8" = 1'-0"

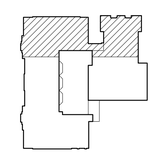
NORTH

ITEM #	DEMOLITION KEY NOTES
2	EXIST. FLOOR-MOUNTED VERTICAL CABINET HEATER (CH) TO BE REMOVED, COMPLETE W/ ASSOCIATED EXIST. DUCTWORK, PIPING, VALVES, LOUVERS, ELECTRICAL, SUPPORTS, CONTROLS, ETC.
3	EXIST. CEILING-MOUNTED EXHAUST FAN (EF) TO BE REMOVED, COMPLETE W/ ASSOCIATED EXIST. DUCTWORK, INLETS, LOUVERS, ELECTRICAL, SUPPORTS, CONTROLS, ETC.
9	EXIST. DUCTWORK & RELATED DAMPERS, INSULATION, SUPPORTS, FILTERS, CONTROLS, ETC. TO BE REMOVED.
11	EXIST. EA / FAI LOUVERS / WALL CAP TO BE REMOVED. INFILL OPENING TO MATCH EXIST. REFER TO ARCH. DWGS.
12	EXIST. HWS & HWR PIPING TO BE REMOVED. CAP PIPE OPENINGS ON EXIST. MAINS. VERIFY IN FIELD.
15	EXIST. THERMOSTAT & SENSOR & RELATED CONTROL WIRING, ETC. TO BE REMOVED. INFILL OPENING & PAINT TO MATCH EXIST.
16	EXIST. MECHANICAL EQUIPMENT (AHUs, ACs, UVs, CHs, CVs, EFs, ETC.) TO REMAIN.
17	EXIST. DUCTWORK & RELATED DAMPERS, INSULATION, AIR INLET/OUTLET, SUPPORTS, FILTERS, CONTROLS, ETC. TO REMAIN.
18	EXIST. HWS & HWR PIPING TO REMAIN.
18A	EXIST. HWS & HWR PIPING RISER UP ABOVE 1ST FLOOR CLG., IN PIPE ENCLOSURE AND PIPING RISER DN BELOW 1ST FLOOR SLAB TO REMAIN.
19	EXIST. THERMOSTAT & SENSOR TO REMAIN.
20	EXIST. FLOOR-MOUNTED MAKEUP AIR (MA) UNIT TO BE REMOVED, COMPLETE W/ ASSOCIATED EXIST. DUCTWORK, PIPING, VALVES, LOUVERS, CONCRETE PAD, ELECTRICAL, SUPPORTS, CONTROLS, ETC.

GENERAL DEMOLITION NOTES

1. SIZES & LOCATIONS OF EXIST. MECH. EQUIPMENT, DUCTWORK, AIR INLETS/OUTLETS, PIPING, ETC. SHOWN ON DRAWINGS ARE BASED ON SITE OBSERVATIONS & THEY ARE APPROXIMATE. SOME OF DUCT & PIPE ROUTING COULD BE DIFFERENT FROM THAT SHOWN. MC IS REQUIRED TO PROVIDE DUCTWORK SHOP DRAWINGS IDENTIFYING THEM.
2. NOT ALL EXIST. DUCTWORK, PIPING & UTILITIES ARE SHOWN ON DRAWINGS. VERIFY IN FIELD.
3. GC IS RESPONSIBLE TO REMOVE EXIST. SUSPENDED CEILING SYSTEM, GRIDS & TILES TO ACCOMMODATE MECHANICAL DEMOLITION. REINSTALL TO MATCH EXISTING. REMOVE & REPLACE ALL DAMAGED TILES. MODEL & STYLE OF NEW CLG. TILES SHALL MATCH EXISTING.
4. EC IS RESPONSIBLE TO TEMPORARILY REMOVE/RELOCATE EXIST. LIGHT FIXTURES, ELECTRICAL DEVICES, FIRE ALARM & COMMUNICATION DEVICES, ETC. TO ACCOMMODATE MECH. DEMOLITION. REINSTALL TO MATCH EXISTING. CHECK IN FIELD.
5. GC IS RESPONSIBLE TO PATCH ALL OPENINGS ON CLGS, WALLS & ROOF WHERE EXIST. MECH. EQUIPMENT, DUCTWORK & PIPING ARE REMOVED. INFILL & PATCH W/ SUITABLE MATERIALS & PAINT TO MATCH EXISTING.
6. GC IS RESPONSIBLE TO PROPERLY PROTECT EXIST. FLOORS, WALLS, CEILING, FURNITURE, EQUIPMENT, ETC. DURING CONSTRUCTION. ALL DAMAGED ITEMS SHALL BE REPAIRED / REPLACED AT EXPENSE OF THE GC.
7. MC IS RESPONSIBLE TO ISOLATE/SHUTDOWN & DRAIN-DOWN EXIST. HOT WATER HEATING PIPING SYSTEM TO ACCOMMODATE REMOVAL OF EXIST. HWS/HWR PIPING ASSOCIATED W/ DEMOLISHED MECH. EQUIPMENT AND INSTALLATION OF NEW MECH. EQUIPMENT & PIPING. RESTORE THE SYSTEM AFTER ALL WORK IS COMPLETE.
8. MC TO REMOVE ALL EXIST. CONTROLS & RELATED WIRING & CONDUITS, ETC. WHICH BECOME OBSOLETE, WHETHER OR NOT SHOWN ON DWGS. GC TO PATCH AND PAINT WALLS TO MATCH EXISTING.

CHATSWORTH AVE. SCHOOL



Key Plan

NOT TO SCALE

PROJECT NORTH

Date	1/10/20
Checked	MAM
Drawn	IM

MICHAEL J. McGOVERN, R.A.
License No. 022257-1
Title REGISTERED ARCHITECT

Revisions:

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1	ISSUE TO BID 11/23/20

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NYSED PROJECT # 66-07-01-03-0-005-020

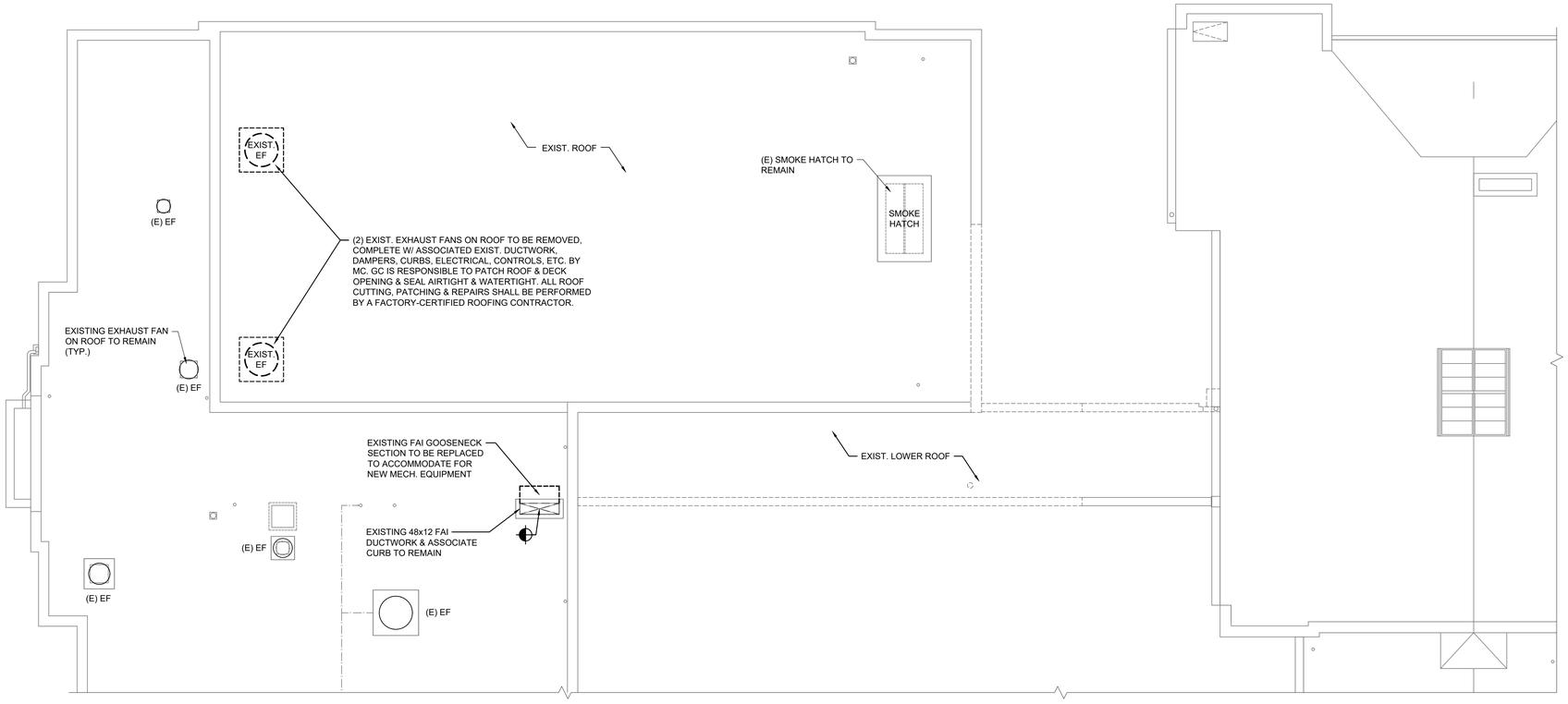
MECHANICAL DEMOLITION PLANS

2019 BOND REFERENDUM
CHATSWORTH AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

Job No. 4.1092.72.03

File No. 10927203M201

M1.02



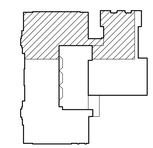
1 M1.03 Partial Roof Mechanical Demolition Plan

1/8" = 1'-0"

GENERAL DEMOLITION NOTES

1. LOCATIONS OF EXIST. ROOFTOP MECHANICAL EQUIPMENT & DUCTWORK SHOWN ON THIS DRAWING ARE BASED ON EXIST. DRAWINGS & SITE OBSERVATIONS, & THEY ARE APPROXIMATE. CONTRACTOR IS RESPONSIBLE TO VERIFY EXACT LOCATIONS IN FIELD.
2. NOT ALL EXIST. ROOFTOP EQUIPMENT ARE SHOWN ON THIS DRAWING. VERIFY IN FIELD.
3. ANY CUTTING, PATCHING, OR FINISH REPAIR WORK REQUIRED FOR MECHANICAL DEMOLITION IS THE RESPONSIBILITY OF CONTRACTOR.
4. ALL EXIST. CONTROLS & RELATED WIRING & CONDUITS, ETC. WHICH BECOME OBSOLETE, WHETHER OR NOT SHOWN ON DRAWINGS SHALL BE REMOVED. PATCH WALLS & PAINT TO MATCH EXISTING.

CHATSWORTH AVE. SCHOOL



Key Plan

NOT TO SCALE

PROJECT NORTH

NYSED PROJECT # 66-07-01-03-0-005-020

Date	1/10/20
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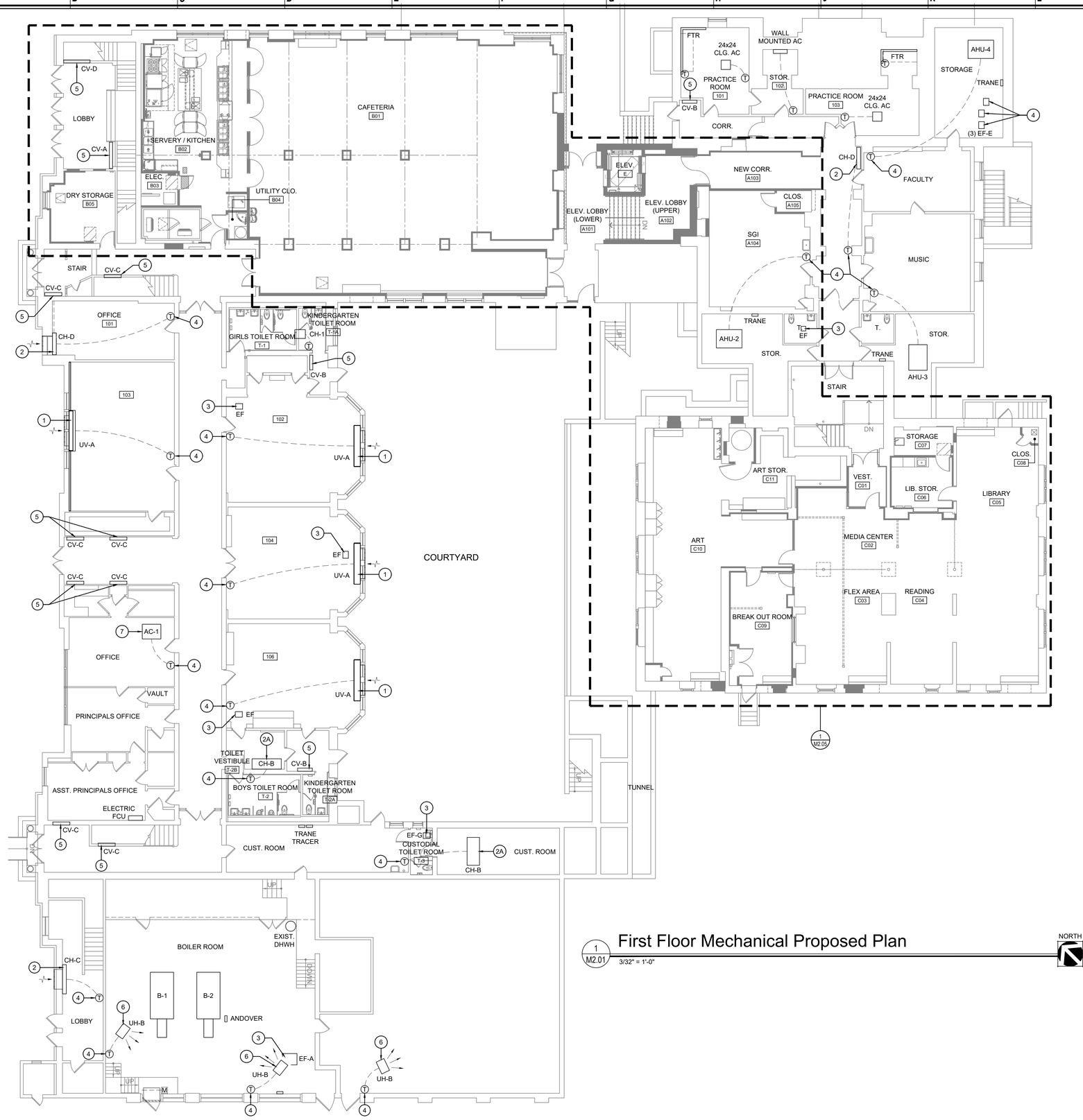
MECHANICAL ROOF DEMOLITION PLAN

2019 BOND REFERENDUM
CHATSWORTH AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

Job No. 4.1092.72.03

File No. 10927203M201

M1.03



1 M2.01 First Floor Mechanical Proposed Plan

3/32" = 1'-0"

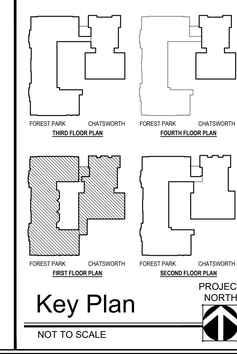
NORTH

ITEM #	CONSTRUCTION KEY NOTES
1	EXISTING FLOOR-MOUNTED VERTICAL UNIT VENTILATOR (UV) TO REMAIN. REPLACE EXISTING CONTROLS & 3-WAY VALVE WITH NEW 3-WAY VALVE & "ANDOVER" DDC CONTROL. FURNISH & INSTALL NEW DDC CONTROLS & TIE INTO EXISTING BMS.
2	EXISTING FLOOR-MOUNTED VERTICAL CABINET HEATER (CH) TO REMAIN. REPLACE EXISTING CONTROLS & 3-WAY VALVE WITH NEW 3-WAY VALVE & "ANDOVER" DDC CONTROL. FURNISH & INSTALL NEW DDC CONTROLS & TIE INTO EXISTING BMS.
2A	EXISTING CEILING-MOUNTED HORIZONTAL CABINET HEATER (CH) TO REMAIN. REPLACE EXISTING CONTROLS & 3-WAY VALVE WITH NEW 3-WAY VALVE & "ANDOVER" DDC CONTROL. FURNISH & INSTALL NEW DDC CONTROLS & TIE INTO EXISTING BMS.
3	EXISTING CEILING-MOUNTED EXHAUST FAN (EF) TO REMAIN. REPLACE EXISTING CONTROLS WITH NEW "ANDOVER" DDC CONTROLS & TIE INTO EXISTING BMS. INTERLOCK WITH RESPECTIVE UNIT(S) FOR OPERATION.
4	REPLACE EXISTING THERMOSTAT WITH NEW "ANDOVER" DDC THERMOSTAT. TIE NEW THERMOSTAT TO RESPECTIVE UNIT(S) FOR OPERATION. TIE INTO EXISTING BMS.
5	EXISTING CONVECTOR (CV) TO REMAIN. REPLACE EXISTING CONTROL VALVE WITH NEW "ANDOVER" DDC CONTROL VALVE & TIE INTO EXISTING BMS. PROVIDE NEW "ANDOVER" DDC CONTROL VALVE TO EXISTING CV WITHOUT CONTROL VALVE & TIE INTO EXISTING BMS.
6	EXISTING CEILING-MOUNTED UNIT HEATER (UH) TO REMAIN. REPLACE EXISTING CONTROLS WITH NEW "ANDOVER" DDC CONTROLS & TIE INTO EXISTING BMS.
7	EXISTING CEILING-MOUNTED MECHANICAL EQUIPMENT ABOVE CEILING TO REMAIN. REPLACE EXISTING CONTROLS WITH NEW "ANDOVER" DDC CONTROL. FURNISH & INSTALL NEW DDC CONTROLS & TIE INTO EXISTING BMS.

GENERAL INSTALLATION NOTES

1. LOCATIONS OF EXISTING MECHANICAL EQUIPMENT, ETC. SHOWN ON DRAWINGS ARE BASED ON EXISTING DRAWINGS AND SITE OBSERVATIONS AND THEY ARE APPROXIMATE. NOT ALL EXISTING EQUIPMENT, ETC. ARE SHOWN ON DRAWINGS. CONTRACTOR IS RESPONSIBLE TO VERIFY EXACT LOCATIONS IN FIELD.
2. GENERAL CONTRACTOR IS RESPONSIBLE TO REMOVE EXISTING CEILING TILES, LIGHTING, FIRE ALARM DEVICES, ETC. TO ACCOMMODATE INSTALLATION OF NEW CONTROLS AND WIRING ABOVE CEILING REINSTALL TO MATCH EXISTING. ALL DAMAGED ITEMS SHALL BE REMOVED AND REPLACED.
3. TO ACCESS EXISTING CONTROL VALVE AND ACTUATORS INSIDE OF EXISTING UNIT VENTILATORS, CONTRACTOR IS REQUIRED TO REMOVE EXISTING PIPING, VALVES, COMPONENTS, ETC. AND REINSTALL THEM AFTER NEW WORK IS COMPLETE.
4. MECHANICAL CONTRACTOR IS RESPONSIBLE TO DRAIN-DOWN EXISTING HEATING HOT WATER SYSTEM TO ACCOMMODATE REPLACEMENT OF EXISTING CONTROL VALVES, ETC. RESTORE THE SYSTEMS AFTER ALL WORK IS COMPLETE.
5. PROVIDE NEW INSULATION ON ALL DISTURBED PIPING/INSULATION AND NEW PIPING/VALVES.
6. ALL EXISTING ABANDONED PNEUMATIC THERMOSTATS (NOT ALL SHOWN) AND AIR TUBING THAT ARE ACCESSIBLE (ABOVE CEILING, EXPOSED IN SPACES, NEAR EXISTING MECHANICAL EQUIPMENT, TO/FROM EXISTING PNEUMATIC CONTROL PANELS, ETC.) SHALL BE REMOVED IN ENTIRETY. EXISTING PNEUMATIC AIR TUBING THAT ARE NOT ACCESSIBLE (IN WALLS/CHASES, ABOVE HARD CEILING, ETC.) SHALL BE ABANDONED IN PLACE. GENERAL CONTRACTOR TO PATCH AND PAINT OPENINGS TO MATCH EXISTING WHERE THERMOSTATS AND ACCESSIBLE AIR TUBING ARE REMOVED. CHECK IN FIELD.
7. IF NEW DDC THERMOSTATS DO NOT COVER EXISTING WALL OPENINGS. PROVIDE S.S. PLATE TO COVER EACH OPENING. CHECK IN FIELD
8. ALL NEW CONTROL VALVES, DAMPER ACTUATORS, THERMOSTATS, SPACE SENSORS, ETC. CALLED OUT ON CONSTRUCTION KEY NOTES SHALL BE DDC TYPE. ALL NEW CONTROL VALVES SHALL BE MODULATING TYPE. REFER TO DDC DIAGRAMS ON DWG. M6.04 AND SPEC. FOR DETAILED DDC WORK REQUIREMENTS.
9. PROVIDE LOCKABLE TAMPER-PROOF ENCLOSURES FOR ALL NEW DDC THERMOSTATS IN AREAS ACCESSED BY STUDENTS (CLASSROOMS, CORRIDORS, LOBBIES, STUDENT TOILETS, AUDITORIUM, CAFETERIA, GYM, MEDIA CENTER, ETC.). VERIFY IN FIELD AND CONFIRM LOCATIONS WITH OWNER.
10. ALL NEW WIRING SHALL BE RUN CONCEALED ABOVE EXISTING SUSPENDED CEILING. ALL NEW EXPOSED WIRING SHALL BE RUN CONCEALED IN WIREMOLD (COLOR TO BE SELECTED BY OWNER).
11. ALL LOW VOLTAGE CABLES SHALL BE PLENUM RATED.
12. ROOM NAMES/NUMBERS SHOWN ON DRAWINGS ARE FOR REFERENCE ONLY AND THEY MAY VARY IN FIELD.

CHATSWORTH AVE. SCHOOL



Key Plan

NOT TO SCALE

PROJECT NORTH

NYSED PROJECT # 66-07-01-03-0-005-020

Date	1/10/20
Checked	MAM
Drawn	IM

MICHAEL J. McGOVERN, R.A.
License No. 022257-1
Title REGISTERED ARCHITECT

Revisions:

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1	ISSUE TO BID 11/23/20

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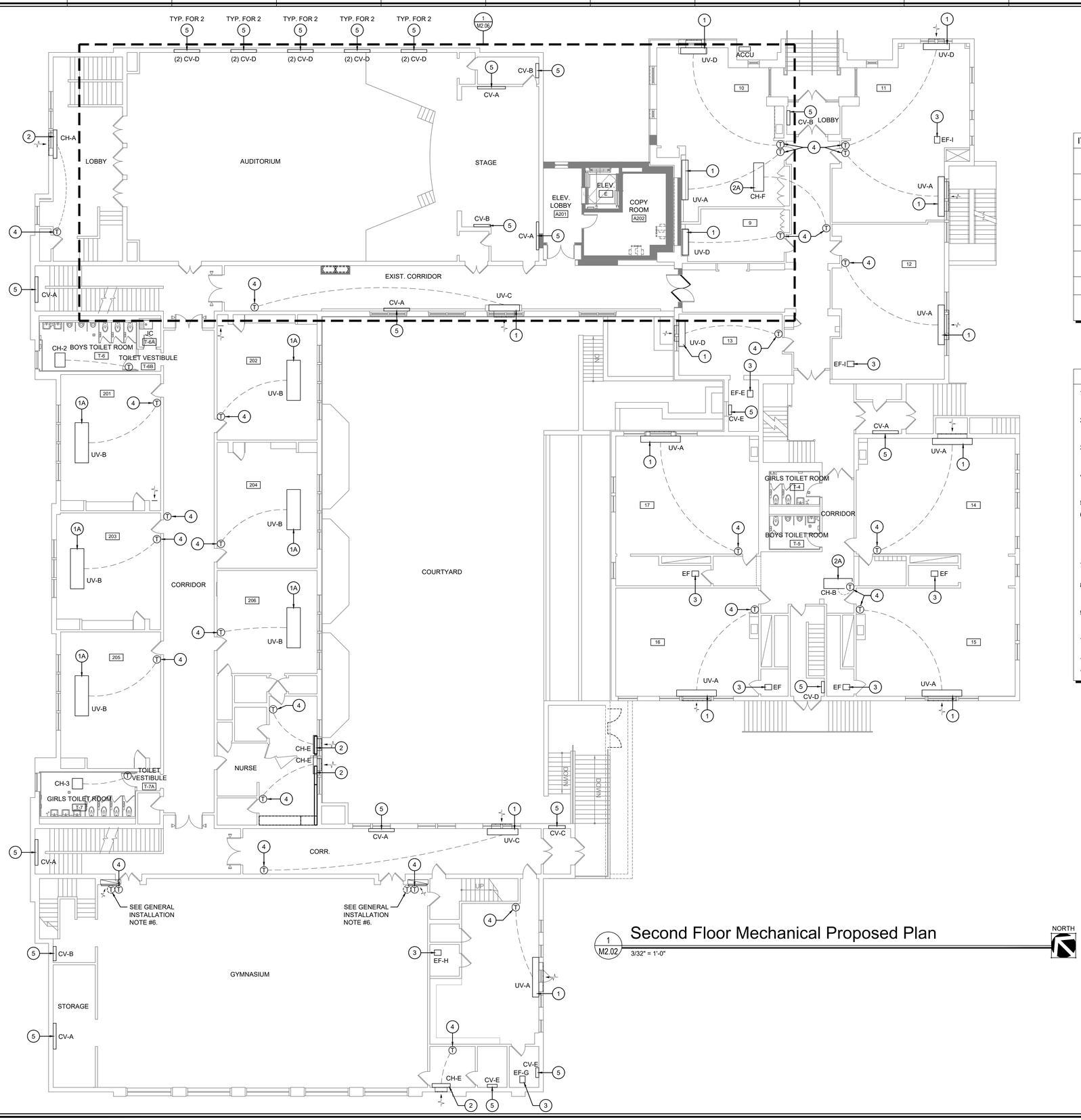
FIRST FLOOR MECHANICAL PLAN

2019 BOND REFERENDUM
CHATSWORTH AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

Job No. 4.1092.72.03

File No. 10927203M201

M2.01



1 M2.02 Second Floor Mechanical Proposed Plan

3/32" = 1'-0"

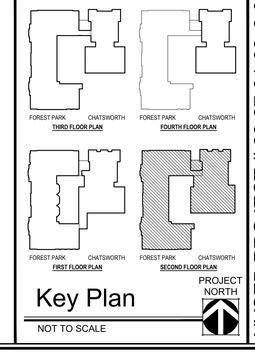
NORTH

ITEM #	CONSTRUCTION KEY NOTES
1	EXISTING FLOOR-MOUNTED VERTICAL UNIT VENTILATOR (UV) TO REMAIN. REPLACE EXISTING CONTROLS & 3-WAY VALVE WITH NEW 3-WAY VALVE & "ANDOVER" DDC CONTROL. FURNISH & INSTALL NEW DDC CONTROLS & TIE INTO EXISTING BMS.
1A	EXISTING CEILING-MOUNTED HORIZONTAL UNIT VENTILATOR (UV) TO REMAIN. REPLACE EXISTING CONTROLS & 3-WAY VALVE WITH NEW 3-WAY VALVE & "ANDOVER" DDC CONTROL. FURNISH & INSTALL NEW DDC CONTROLS & TIE INTO EXISTING BMS..
2	EXISTING FLOOR-MOUNTED VERTICAL CABINET HEATER (CH) TO REMAIN. REPLACE EXISTING CONTROLS & 3-WAY VALVE WITH NEW 3-WAY VALVE & "ANDOVER" DDC CONTROL. FURNISH & INSTALL NEW DDC CONTROLS & TIE INTO EXISTING BMS.
2A	EXISTING CEILING-MOUNTED HORIZONTAL CABINET HEATER (CH) TO REMAIN. REPLACE EXISTING CONTROLS & 3-WAY VALVE WITH NEW 3-WAY VALVE & "ANDOVER" DDC CONTROL. FURNISH & INSTALL NEW DDC CONTROLS & TIE INTO EXISTING BMS.
3	EXISTING CEILING-MOUNTED EXHAUST FAN (EF) TO REMAIN. REPLACE EXISTING CONTROLS WITH NEW "ANDOVER" DDC CONTROLS & TIE INTO EXISTING BMS. INTERLOCK WITH RESPECTIVE UNIT(S) FOR OPERATION.
4	REPLACE EXISTING THERMOSTAT WITH NEW "ANDOVER" DDC THERMOSTAT. TIE NEW THERMOSTAT TO RESPECTIVE UNIT(S) FOR OPERATION. TIE INTO EXISTING BMS.
5	EXISTING CONVECTOR (CV) TO REMAIN. REPLACE EXISTING CONTROL VALVE WITH NEW "ANDOVER" DDC CONTROL VALVE & TIE INTO EXISTING BMS. PROVIDE NEW "ANDOVER" DDC CONTROL VALVE TO EXISTING CV WITHOUT CONTROL VALVE & TIE INTO EXISTING BMS.

GENERAL INSTALLATION NOTES

1. LOCATIONS OF EXISTING MECHANICAL EQUIPMENT, ETC. SHOWN ON DRAWINGS ARE BASED ON EXISTING DRAWINGS AND SITE OBSERVATIONS AND THEY ARE APPROXIMATE. NOT ALL EXISTING EQUIPMENT, ETC. ARE SHOWN ON DRAWINGS. CONTRACTOR IS RESPONSIBLE TO VERIFY EXACT LOCATIONS IN FIELD.
2. GENERAL CONTRACTOR IS RESPONSIBLE TO REMOVE EXISTING CEILING TILES, LIGHTING, FIRE ALARM DEVICES, ETC. TO ACCOMMODATE INSTALLATION OF NEW CONTROLS AND WIRING ABOVE CEILING REINSTALL TO MATCH EXISTING. ALL DAMAGED ITEMS SHALL BE REMOVED AND REPLACED.
3. TO ACCESS EXISTING CONTROL VALVE AND ACTUATORS INSIDE OF EXISTING UNIT VENTILATORS, CONTRACTOR IS REQUIRED TO REMOVE EXISTING PIPING, VALVES, COMPONENTS, ETC. AND REINSTALL THEM AFTER NEW WORK IS COMPLETE.
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5. PROVIDE NEW INSULATION ON ALL DISTURBED PIPING/INSULATION AND NEW PIPING/VALVES.
6. ALL EXISTING ABANDONED PNEUMATIC THERMOSTATS (NOT ALL SHOWN) AND AIR TUBING THAT ARE ACCESSIBLE (ABOVE CEILING, EXPOSED IN SPACES, NEAR EXISTING MECHANICAL EQUIPMENT, TO/FROM EXISTING PNEUMATIC CONTROL PANELS, ETC.) SHALL BE REMOVED IN ENTIRETY. EXISTING PNEUMATIC AIR TUBING THAT ARE NOT ACCESSIBLE (IN WALLS/CHASES, ABOVE HARD CEILING, ETC.) SHALL BE ABANDONED IN PLACE. GENERAL CONTRACTOR TO PATCH AND PAINT OPENINGS TO MATCH EXISTING WHERE THERMOSTATS AND ACCESSIBLE AIR TUBING ARE REMOVED. CHECK IN FIELD.
7. IF NEW DDC THERMOSTATS DO NOT COVER EXISTING WALL OPENINGS. PROVIDE S.S. PLATE TO COVER EACH OPENING. CHECK IN FIELD
8. ALL NEW CONTROL VALVES, DAMPER ACTUATORS, THERMOSTATS, SPACE SENSORS, ETC. CALLED OUT ON CONSTRUCTION KEY NOTES SHALL BE DDC TYPE. ALL NEW CONTROL VALVES SHALL BE MODULATING TYPE. REFER TO DDC DIAGRAMS ON DWG. M6.04 AND SPEC. FOR DETAILED DDC WORK REQUIREMENTS.
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10. ALL NEW WIRING SHALL BE RUN CONCEALED ABOVE EXISTING SUSPENDED CEILING. ALL NEW EXPOSED WIRING SHALL BE RUN CONCEALED IN WIREMOLD (COLOR TO BE SELECTED BY OWNER).
11. ALL LOW VOLTAGE CABLES SHALL BE PLENUM RATED.
12. ROOM NAMES/NUMBERS SHOWN ON DRAWINGS ARE FOR REFERENCE ONLY AND THEY MAY VARY IN FIELD.

CHATSWORTH AVE. SCHOOL



Key Plan

NOT TO SCALE

PROJECT NORTH

Date	1/10/20
Checked	MAM
Drawn	IM

MICHAEL J. McGOVERN, R.A.
License No. 022257-1
Title REGISTERED ARCHITECT

Revisions:

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SECOND FLOOR MECHANICAL PLAN

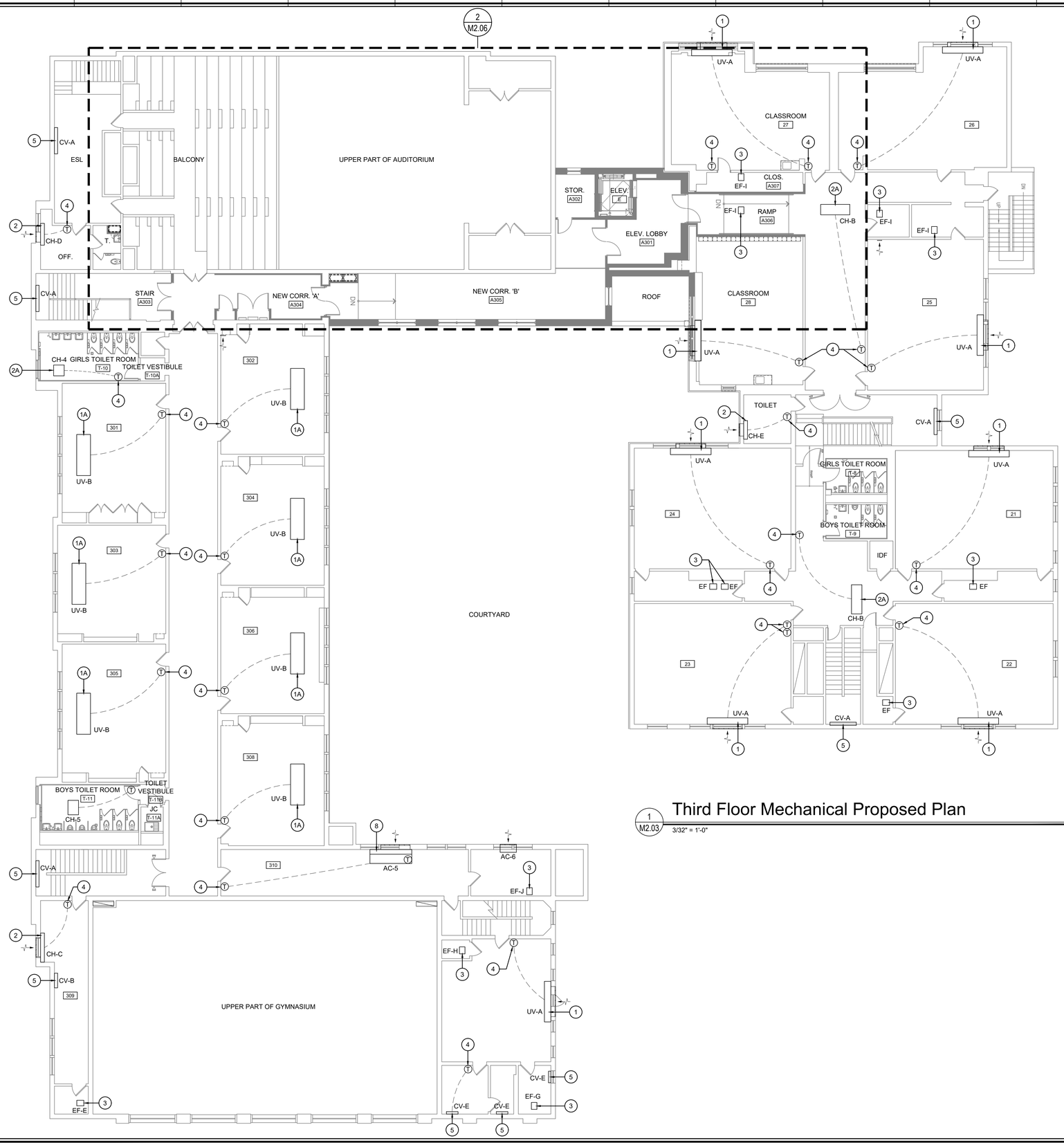
2019 BOND REFERENDUM
CHATSWORTH AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

NYSED PROJECT # 66-07-01-03-0-005-020

Job No. 4.1092.72.03

File No. 10927203M201

M2.02



1 M2.03 Third Floor Mechanical Proposed Plan

3/32" = 1'-0"

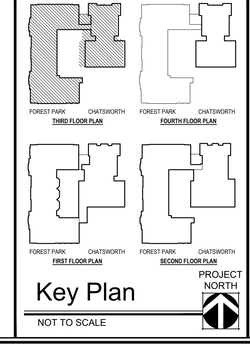
NORTH

ITEM #	CONSTRUCTION KEY NOTES
1	EXISTING FLOOR-MOUNTED VERTICAL UNIT VENTILATOR (UV) TO REMAIN. REPLACE EXISTING CONTROLS & 3-WAY VALVE WITH NEW 3-WAY VALVE & "ANDOVER" DDC CONTROL. FURNISH & INSTALL NEW DDC CONTROLS & TIE INTO EXISTING BMS.
1A	EXISTING CEILING-MOUNTED HORIZONTAL UNIT VENTILATOR (UV) TO REMAIN. REPLACE EXISTING CONTROLS & 3-WAY VALVE WITH NEW 3-WAY VALVE & "ANDOVER" DDC CONTROL. FURNISH & INSTALL NEW DDC CONTROLS & TIE INTO EXISTING BMS..
2	EXISTING FLOOR-MOUNTED VERTICAL CABINET HEATER (CH) TO REMAIN. REPLACE EXISTING CONTROLS & 3-WAY VALVE WITH NEW 3-WAY VALVE & "ANDOVER" DDC CONTROL. FURNISH & INSTALL NEW DDC CONTROLS & TIE INTO EXISTING BMS.
2A	EXISTING CEILING-MOUNTED HORIZONTAL CABINET HEATER (CH) TO REMAIN. REPLACE EXISTING CONTROLS & 3-WAY VALVE WITH NEW 3-WAY VALVE & "ANDOVER" DDC CONTROL. FURNISH & INSTALL NEW DDC CONTROLS & TIE INTO EXISTING BMS.
3	EXISTING CEILING-MOUNTED EXHAUST FAN (EF) TO REMAIN. REPLACE EXISTING CONTROLS WITH NEW "ANDOVER" DDC CONTROLS & TIE INTO EXISTING BMS. INTERLOCK WITH RESPECTIVE UNIT(S) FOR OPERATION.
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8	EXISTING FLOOR-MOUNTED SELF-CONTAINED HVAC MECHANICAL EQUIPMENT TO REMAIN. REPLACE EXISTING CONTROLS WITH NEW "ANDOVER" DDC CONTROLS. FURNISH & INSTALL NEW DDC CONTROLS & TIE INTO EXISTING BMS.

GENERAL INSTALLATION NOTES

1. LOCATIONS OF EXISTING MECHANICAL EQUIPMENT, ETC. SHOWN ON DRAWINGS ARE BASED ON EXISTING DRAWINGS AND SITE OBSERVATIONS AND THEY ARE APPROXIMATE. NOT ALL EXISTING EQUIPMENT, ETC. ARE SHOWN ON DRAWINGS. CONTRACTOR IS RESPONSIBLE TO VERIFY EXACT LOCATIONS IN FIELD.
2. GENERAL CONTRACTOR IS RESPONSIBLE TO REMOVE EXISTING CEILING TILES, LIGHTING, FIRE ALARM DEVICES, ETC. TO ACCOMMODATE INSTALLATION OF NEW CONTROLS AND WIRING ABOVE CEILING REINSTALL TO MATCH EXISTING. ALL DAMAGED ITEMS SHALL BE REMOVED AND REPLACED.
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9. PROVIDE LOCKABLE TAMPER-PROOF ENCLOSURES FOR ALL NEW DDC THERMOSTATS IN AREAS ACCESSED BY STUDENTS (CLASSROOMS, CORRIDORS, LOBBIES, STUDENT TOILETS, AUDITORIUM, CAFETERIA, GYM, MEDIA CENTER, ETC.). VERIFY IN FIELD AND CONFIRM LOCATIONS WITH OWNER.
10. ALL NEW WIRING SHALL BE RUN CONCEALED ABOVE EXISTING SUSPENDED CEILING. ALL NEW EXPOSED WIRING SHALL BE RUN CONCEALED IN WIREMOLD (COLOR TO BE SELECTED BY OWNER).
11. ALL LOW VOLTAGE CABLES SHALL BE PLENUM RATED.
12. ROOM NAMES/NUMBERS SHOWN ON DRAWINGS ARE FOR REFERENCE ONLY AND THEY MAY VARY IN FIELD.

CHATSWORTH AVE. SCHOOL



Key Plan

NOT TO SCALE

PROJECT NORTH

NYSED PROJECT # 66-07-01-03- 0-005-020

Date	1/10/20
Checked	MAM
Drawn	IM

MICHAEL J. McGOVERN, R.A.
Title REGISTERED ARCHITECT License No. 022257-1

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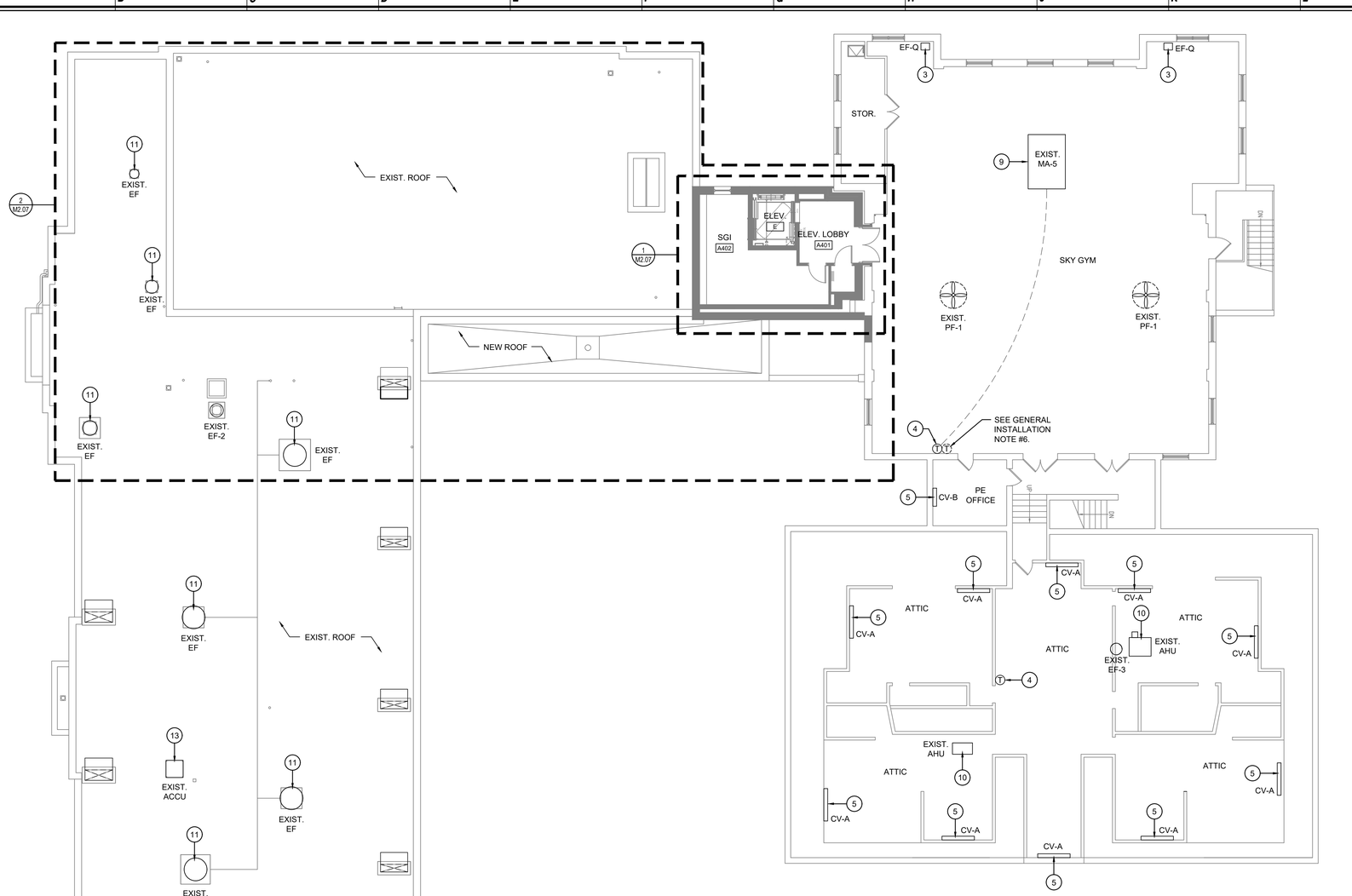
THIRD FLOOR MECHANICAL PLAN

2019 BOND REFERENDUM
CHATSWORTH AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

Job No. 4.1092.72.03

File No. 10927203M201

M2.03



1 M2.04 Fourth Floor & Roof Mechanical Proposed Plan

3/32" = 1'-0"

NORTH

ITEM #	CONSTRUCTION KEY NOTES
1	EXISTING FLOOR-MOUNTED VERTICAL UNIT VENTILATOR (UV) TO REMAIN. REPLACE EXISTING CONTROLS & 3-WAY VALVE WITH NEW 3-WAY VALVE & "ANDOVER" DDC CONTROL. FURNISH & INSTALL NEW DDC CONTROLS & TIE INTO EXISTING BMS.
1A	EXISTING CEILING-MOUNTED HORIZONTAL UNIT VENTILATOR (UV) TO REMAIN. REPLACE EXISTING CONTROLS & 3-WAY VALVE WITH NEW 3-WAY VALVE & "ANDOVER" DDC CONTROL. FURNISH & INSTALL NEW DDC CONTROLS & TIE INTO EXISTING BMS..
2	EXISTING FLOOR-MOUNTED VERTICAL CABINET HEATER (CH) TO REMAIN. REPLACE EXISTING CONTROLS & 3-WAY VALVE WITH NEW 3-WAY VALVE & "ANDOVER" DDC CONTROL. FURNISH & INSTALL NEW DDC CONTROLS & TIE INTO EXISTING BMS.
2A	EXISTING CEILING-MOUNTED HORIZONTAL CABINET HEATER (CH) TO REMAIN. REPLACE EXISTING CONTROLS & 3-WAY VALVE WITH NEW 3-WAY VALVE & "ANDOVER" DDC CONTROL. FURNISH & INSTALL NEW DDC CONTROLS & TIE INTO EXISTING BMS.
3	EXISTING CEILING-MOUNTED EXHAUST FAN (EF) TO REMAIN. REPLACE EXISTING CONTROLS WITH NEW "ANDOVER" DDC CONTROLS & TIE INTO EXISTING BMS. INTERLOCK WITH RESPECTIVE UNIT(S) FOR OPERATION.
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9	EXISTING CEILING-MOUNTED MECHANICAL EQUIPMENT TO REMAIN. REPLACE EXISTING CONTROLS WITH NEW "ANDOVER" DDC CONTROLS. FURNISH & INSTALL NEW DDC CONTROLS & TIE INTO EXISTING BMS.
10	EXISTING FLOOR-MOUNTED MECHANICAL EQUIPMENT IN ATTIC TO REMAIN. PROVIDE NEW "ANDOVER" DDC CONTROLS. FURNISH & INSTALL NEW DDC CONTROLS & TIE INTO EXISTING BMS.
11	EXISTING EXHAUST FAN (EF) ON ROOF TO REMAIN. REPLACE EXISTING CONTROLS WITH NEW "ANDOVER" DDC CONTROL. FURNISH & INSTALL NEW DDC CONTROLS & TIE INTO EXISTING BMS.
12	EXISTING ROOF INTAKE/RELIEF VENT (RV) TO REMAIN. REPLACE EXISTING CONTROLS WITH NEW "ANDOVER" DDC CONTROLS. FURNISH & INSTALL NEW DDC CONTROLS & TIE INTO EXISTING BMS.
13	EXISTING AIR-COOLED CONDENSING UNIT (ACCU) TO REMAIN. PROVIDE NEW "ANDOVER" DDC CONTROLS. FURNISH & INSTALL NEW DDC CONTROLS & TIE INTO EXISTING BMS.

GENERAL INSTALLATION NOTES

1. LOCATIONS OF EXISTING MECHANICAL EQUIPMENT, ETC. SHOWN ON DRAWINGS ARE BASED ON EXISTING DRAWINGS AND SITE OBSERVATIONS AND THEY ARE APPROXIMATE. NOT ALL EXISTING EQUIPMENT, ETC. ARE SHOWN ON DRAWINGS. CONTRACTOR IS RESPONSIBLE TO VERIFY EXACT LOCATIONS IN FIELD.
2. GENERAL CONTRACTOR IS RESPONSIBLE TO REMOVE EXISTING CEILING TILES, LIGHTING, FIRE ALARM DEVICES, ETC. TO ACCOMMODATE INSTALLATION OF NEW CONTROLS AND WIRING ABOVE CEILING REINSTALL TO MATCH EXISTING. ALL DAMAGED ITEMS SHALL BE REMOVED AND REPLACED.
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NYSED PROJECT # 66-07-01-03-0-005-020

FOURTH FLOOR & ROOF MECH. PLAN

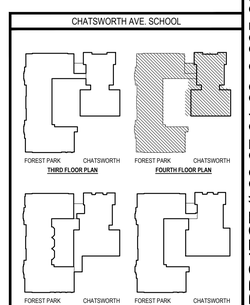
2019 BOND REFERENDUM
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MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

Job No. 4.1092.72.03

File No. 10927203M201

M2.04

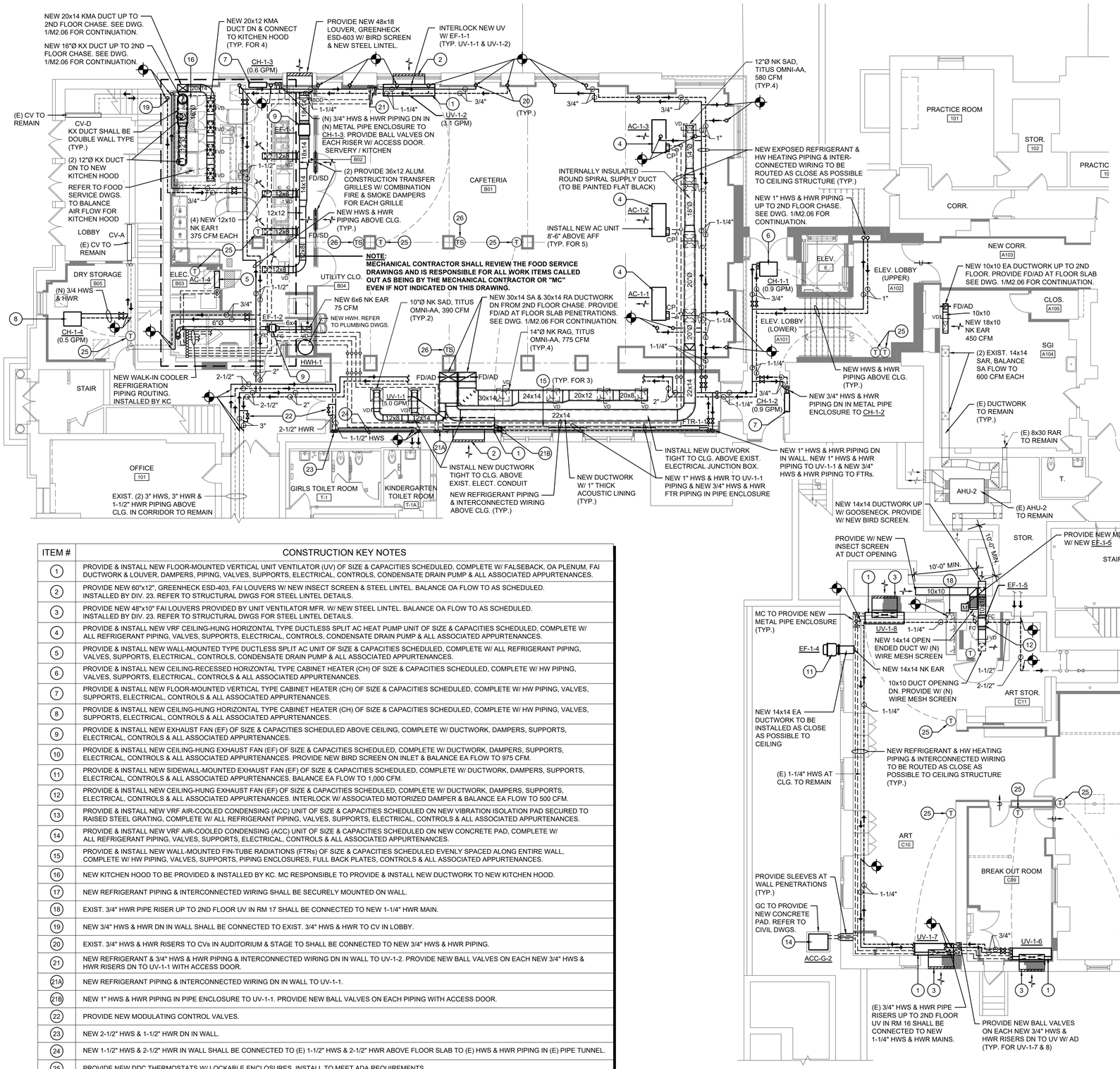
CHATSWORTH AVE. SCHOOL



Key Plan

NOT TO SCALE

PROJECT NORTH



GENERAL CONSTRUCTION NOTES

1. SIZES & LOCATIONS OF EXIST. MECH. EQUIPMENT, DUCTWORK, PIPING, AIR INLETS/OUTLETS, ETC. SHOWN ON DRAWINGS ARE BASED ON EXIST. DRAWINGS & SITE OBSERVATIONS, & THEY ARE APPROXIMATE. CONTRACTOR IS RESPONSIBLE TO VERIFY EXACT LOCATIONS IN FIELD.
2. NOT ALL EXIST. DUCTWORK, PIPING & UTILITIES ARE SHOWN ON DRAWINGS. VERIFY IN FIELD
3. GC IS RESPONSIBLE TO REMOVE EXIST. SUSPENDED CEILING GRIDS, CEILING TILES, LIGHT FIXTURES, FIRE ALARM DEVICES, ETC. TO ACCOMMODATE DEMOLITION OF EXIST. HVAC/HV EQUIPMENT, DUCTWORK, PIPING, ETC. REINSTALL TO MATCH EXIST.
4. GC IS RESPONSIBLE TO SAWCUT & CORE DRILL EXIST. WALLS / FLOORS / CLG. FOR NEW DUCTWORK / PIPING / CONDUIT PENETRATIONS. PATCH & CAULK W/ 2-HR RATED FIRESTOPPING MATERIALS.
5. ANY CUTTING, PATCHING, OR FINISH REPAIR WORK REQUIRED FOR MECHANICAL INSTALLATION IS THE RESPONSIBILITY OF THE GC.
6. MC IS RESPONSIBLE TO ISOLATE / SHUT-DOWN & DRAIN-DOWN EXIST. HEATING PIPING SYSTEMS TO ACCOMMODATE MECHANICAL DEMOLITION & NEW INSTALLATION. RESTORE THE SYSTEMS AFTER ALL WORK IS COMPLETE.
7. ALL NEW DDC WIRING SHALL BE INSTALLED CONCEALED ABOUT EXIST. / NEW SUSPENDED CLG. WHEREVER NEW THERMOSTAT ARE INSTALLED ON NEW WALLS, ALL NEW DDC WIRING FROM MECH. EQUIPMENT TO NEW THERMOSTATS SHALL BE INSTALLED CONCEALED IN WALLS. WHEREVER NEW THERMOSTATS ARE INSTALLED ON EXIST. MASONRY WALL, ALL NEW DDC WIRING FROM HVAC EQUIPMENT TO NEW THERMOSTATS SHALL BE INSTALLED IN WIREMOLD (COLOR TO BE SELECTED BY OWNER).
8. GC IS RESPONSIBLE TO PROPERLY PROTECT EXIST. FLOORS, WALLS, CEILING, FURNITURE, EQUIPMENT, ETC. DURING CONSTRUCTION. ALL DAMAGED ITEMS SHALL BE REPAIRED/REPLACED AT EXPENSE OF THE GC.
9. ALL EXIST. DUCTWORK & AIR INLETS/OUTLETS THAT ARE SHOWN TO REMAIN & BE REUSED SHALL BE VACUUM-CLEANED THOROUGHLY TO BE FREE OF DUST & DEBRIS. PROVIDE PHOTO DOCUMENTATION BEFORE & AFTER CLEANING.

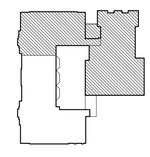
NOTE - FLOOR REPLACEMENT MECHANICAL PROPOSED WORK:
UNIT VENTILATORS TO BE TEMPORARILY REMOVED AND SHALL BE REINSTALLED DURING FLOOR REPLACEMENT PROJECT ARE NOT SHOWN ON MECHANICAL DRAWINGS. MECHANICAL CONTRACTOR (MC) SHALL REFER TO THE ARCHITECTURAL PARTIAL FLOORING DEMOLITION PLANS ON DRAWING A1.40 & PARTIAL PROPOSED FLOORING PLANS A2.40 FOR SCOPE OF WORK REQUIRED BY THE MC ASSOCIATED WITH THE FLOOR REPLACEMENT PROJECT. MC IS RESPONSIBLE FOR THIS SCOPE OF WORK.

CONSTRUCTION KEY NOTES

ITEM #	
1	PROVIDE & INSTALL NEW FLOOR-MOUNTED VERTICAL UNIT VENTILATOR (UV) OF SIZE & CAPACITIES SCHEDULED, COMPLETE W/ FALSEBACK, OA PLENUM, FAI DUCTWORK & LOUVER, DAMPERS, PIPING, VALVES, SUPPORTS, ELECTRICAL, CONTROLS, CONDENSATE DRAIN PUMP & ALL ASSOCIATED APPURTENANCES.
2	PROVIDE NEW 60"x12", GREENHECK ESD-403, FAI LOUVERS W/ NEW INSECT SCREEN & STEEL LINTEL. BALANCE OA FLOW TO AS SCHEDULED. INSTALLED BY DIV. 23. REFER TO STRUCTURAL DWGS FOR STEEL LINTEL DETAILS.
3	PROVIDE NEW 48"x10" FAI LOUVERS PROVIDED BY UNIT VENTILATOR MFR. W/ NEW STEEL LINTEL. BALANCE OA FLOW TO AS SCHEDULED. INSTALLED BY DIV. 23. REFER TO STRUCTURAL DWGS FOR STEEL LINTEL DETAILS.
4	PROVIDE & INSTALL NEW VRF CEILING-HUNG HORIZONTAL TYPE DUCTLESS SPLIT AC HEAT PUMP UNIT OF SIZE & CAPACITIES SCHEDULED, COMPLETE W/ ALL REFRIGERANT PIPING, VALVES, SUPPORTS, ELECTRICAL, CONTROLS, CONDENSATE DRAIN PUMP & ALL ASSOCIATED APPURTENANCES.
5	PROVIDE & INSTALL NEW WALL-MOUNTED TYPE DUCTLESS SPLIT AC UNIT OF SIZE & CAPACITIES SCHEDULED, COMPLETE W/ ALL REFRIGERANT PIPING, VALVES, SUPPORTS, ELECTRICAL, CONTROLS, CONDENSATE DRAIN PUMP & ALL ASSOCIATED APPURTENANCES.
6	PROVIDE & INSTALL NEW CEILING-RECESSED HORIZONTAL TYPE CABINET HEATER (CH) OF SIZE & CAPACITIES SCHEDULED, COMPLETE W/ HW PIPING, VALVES, SUPPORTS, ELECTRICAL, CONTROLS & ALL ASSOCIATED APPURTENANCES.
7	PROVIDE & INSTALL NEW FLOOR-MOUNTED VERTICAL TYPE CABINET HEATER (CH) OF SIZE & CAPACITIES SCHEDULED, COMPLETE W/ HW PIPING, VALVES, SUPPORTS, ELECTRICAL, CONTROLS & ALL ASSOCIATED APPURTENANCES.
8	PROVIDE & INSTALL NEW CEILING-HUNG HORIZONTAL TYPE CABINET HEATER (CH) OF SIZE & CAPACITIES SCHEDULED, COMPLETE W/ HW PIPING, VALVES, SUPPORTS, ELECTRICAL, CONTROLS & ALL ASSOCIATED APPURTENANCES.
9	PROVIDE & INSTALL NEW EXHAUST FAN (EF) OF SIZE & CAPACITIES SCHEDULED ABOVE CEILING, COMPLETE W/ DUCTWORK, DAMPERS, SUPPORTS, ELECTRICAL, CONTROLS & ALL ASSOCIATED APPURTENANCES.
10	PROVIDE & INSTALL NEW CEILING-HUNG EXHAUST FAN (EF) OF SIZE & CAPACITIES SCHEDULED, COMPLETE W/ DUCTWORK, DAMPERS, SUPPORTS, ELECTRICAL, CONTROLS & ALL ASSOCIATED APPURTENANCES. PROVIDE NEW BIRD SCREEN ON INLET & BALANCE EA FLOW TO 975 CFM.
11	PROVIDE & INSTALL NEW SIDEWALL-MOUNTED EXHAUST FAN (EF) OF SIZE & CAPACITIES SCHEDULED, COMPLETE W/ DUCTWORK, DAMPERS, SUPPORTS, ELECTRICAL, CONTROLS & ALL ASSOCIATED APPURTENANCES. BALANCE EA FLOW TO 1,000 CFM.
12	PROVIDE & INSTALL NEW CEILING-HUNG EXHAUST FAN (EF) OF SIZE & CAPACITIES SCHEDULED, COMPLETE W/ DUCTWORK, DAMPERS, SUPPORTS, ELECTRICAL, CONTROLS & ALL ASSOCIATED APPURTENANCES. INTERLOCK W/ ASSOCIATED MOTORIZED DAMPER & BALANCE EA FLOW TO 500 CFM.
13	PROVIDE & INSTALL NEW VRF AIR-COOLED CONDENSING (ACC) UNIT OF SIZE & CAPACITIES SCHEDULED ON NEW VIBRATION ISOLATION PAD SECURED TO RAISED STEEL GRATING, COMPLETE W/ ALL REFRIGERANT PIPING, VALVES, SUPPORTS, ELECTRICAL, CONTROLS & ALL ASSOCIATED APPURTENANCES.
14	PROVIDE & INSTALL NEW VRF AIR-COOLED CONDENSING (ACC) UNIT OF SIZE & CAPACITIES SCHEDULED ON NEW CONCRETE PAD, COMPLETE W/ ALL REFRIGERANT PIPING, VALVES, SUPPORTS, ELECTRICAL, CONTROLS & ALL ASSOCIATED APPURTENANCES.
15	PROVIDE & INSTALL NEW WALL-MOUNTED FIN-TUBE RADIATIONS (FTRs) OF SIZE & CAPACITIES SCHEDULED EVENLY SPACED ALONG ENTIRE WALL, COMPLETE W/ HW PIPING, VALVES, SUPPORTS, PIPING ENCLOSURES, FULL BACK PLATES, CONTROLS & ALL ASSOCIATED APPURTENANCES.
16	NEW KITCHEN HOOD TO BE PROVIDED & INSTALLED BY KC. MC RESPONSIBLE TO PROVIDE & INSTALL NEW DUCTWORK TO NEW KITCHEN HOOD.
17	NEW REFRIGERANT PIPING & INTERCONNECTED WIRING SHALL BE SECURELY MOUNTED ON WALL.
18	EXIST. 3/4" HWR PIPE RISER UP TO 2ND FLOOR UV IN RM 17 SHALL BE CONNECTED TO NEW 1-1/4" HWR MAIN.
19	NEW 3/4" HWS & HWR DN IN WALL SHALL BE CONNECTED TO EXIST. 3/4" HWS & HWR TO CV IN LOBBY.
20	EXIST. 3/4" HWS & HWR RISERS TO CVs IN AUDITORIUM & STAGE TO SHALL BE CONNECTED TO NEW 3/4" HWS & HWR PIPING.
21	NEW REFRIGERANT & 3/4" HWS & HWR PIPING & INTERCONNECTED WIRING DN IN WALL TO UV-1-2. PROVIDE NEW BALL VALVES ON EACH NEW 3/4" HWS & HWR RISERS DN TO UV-1-1 WITH ACCESS DOOR.
21A	NEW REFRIGERANT PIPING & INTERCONNECTED WIRING DN IN WALL TO UV-1-1.
21B	NEW 1" HWS & HWR PIPING IN PIPE ENCLOSURE TO UV-1-1. PROVIDE NEW BALL VALVES ON EACH PIPING WITH ACCESS DOOR.
22	PROVIDE NEW MODULATING CONTROL VALVES.
23	NEW 2-1/2" HWS & 1-1/2" HWR DN IN WALL.
24	NEW 1-1/2" HWS & 2-1/2" HWR IN WALL SHALL BE CONNECTED TO (E) 1-1/2" HWS & 2-1/2" HWR ABOVE FLOOR SLAB TO (E) HWS & HWR PIPING IN (E) PIPE TUNNEL.
25	PROVIDE NEW DDC THERMOSTATS W/ LOCKABLE ENCLOSURES. INSTALL TO MEET ADA REQUIREMENTS.
26	PROVIDE NEW HONEYWELL TR21 ROOM AVERAGING TEMPERATURE SENSOR. SENSORS TO BE INTERLOCKED WITH AC-1-1 THRU AC-1-3 (TYP. FOR 3).

1 M2.05 — Partial First Floor Mechanical Proposed Plan
1/8" = 1'-0"

CHATSWORTH AVE. SCHOOL



Key Plan
NOT TO SCALE
PROJECT NORTH

Date	1/10/20
Checked	MAM
Drawn	IM

MICHAEL J. McGOVERN, P.E.
Title REGISTERED ARCHITECT License No. 022257-1

Revisions:
1 ISSUE TO BID 11/23/20

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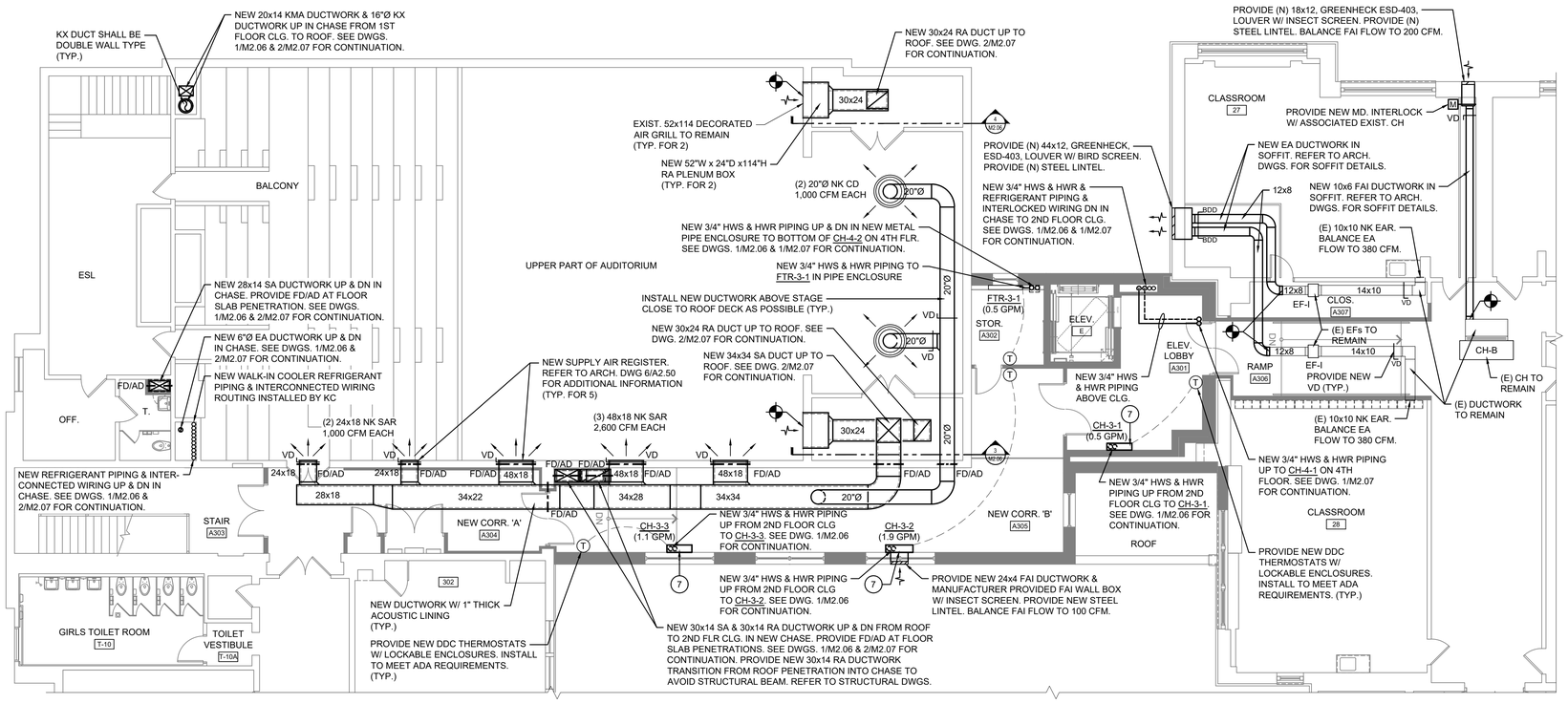
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NYSED PROJECT # 66-07-01-03-0-005-020

FIRST FLOOR MECHANICAL PROPOSED PLAN
2019 BOND REFERENDUM
CHATSWORTH AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

Job No. 4.1092.72.03
File No. 10927203M201

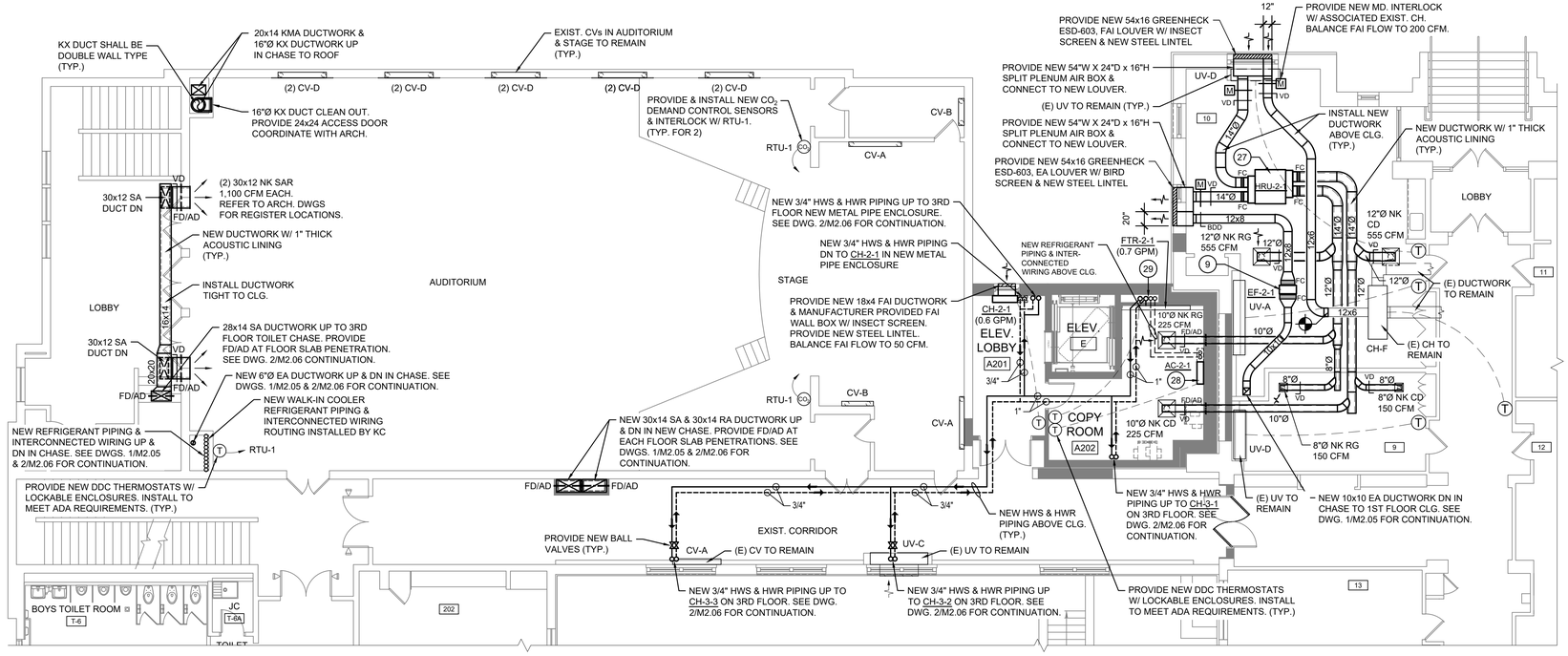
M2.05



Partial Third Floor Mechanical Proposed Plan

2 / M2.06 — 1/8" = 1'-0"

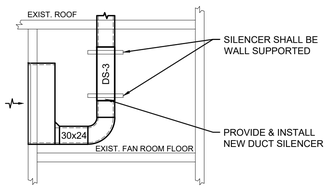
NORTH



Partial Second Floor Mechanical Proposed Plan

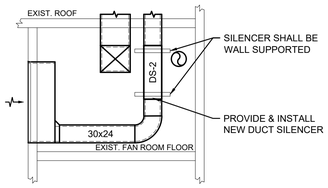
1 / M2.06 — 1/8" = 1'-0"

NORTH



4 / M2.06 SECTION AT NORTH FAN ROOM

1/8" = 1'-0"



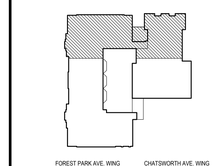
3 / M2.06 SECTION AT SOUTH FAN ROOM

1/8" = 1'-0"

GENERAL CONSTRUCTION NOTES

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2. NOT ALL EXIST. DUCTWORK, PIPING & UTILITIES ARE SHOWN ON DRAWINGS. VERIFY IN FIELD
3. GC IS RESPONSIBLE TO REMOVE EXIST. SUSPENDED CEILING GRIDS, CEILING TILES, LIGHT FIXTURES, FIRE ALARM DEVICES, ETC. TO ACCOMMODATE DEMOLITION OF EXIST. HVAC/HV EQUIPMENT, DUCTWORK, PIPING, ETC. REINSTALL TO MATCH EXIST.
4. GC IS RESPONSIBLE TO SAWCUT & CORE DRILL EXIST. WALLS / FLOORS / CLG. FOR NEW DUCTWORK / PIPING / CONDUIT PENETRATIONS. PATCH & CAULK W/ 2-HR RATED FIRESTOPPING MATERIALS.
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8. GC IS RESPONSIBLE TO PROPERLY PROTECT EXIST. FLOORS, WALLS, CEILING, FURNITURE, EQUIPMENT, ETC. DURING CONSTRUCTION. ALL DAMAGED ITEMS SHALL BE REPAIRED/REPLACED AT EXPENSE OF THE GC.
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ITEM #	CONSTRUCTION KEY NOTES
7	PROVIDE & INSTALL NEW FLOOR-MOUNTED VERTICAL TYPE CABINET HEATER (CH) OF SIZE & CAPACITIES SCHEDULED, COMPLETE W/ HW PIPING, VALVES, SUPPORTS, ELECTRICAL, CONTROLS & ALL ASSOCIATED APPURTENANCES. PROVIDE CH-3-2 W/ NEW FAI DUCTWORK & LOUVER.
9	PROVIDE & INSTALL NEW EXHAUST FAN (EF) OF SIZE & CAPACITIES SCHEDULED ABOVE CEILING, COMPLETE W/ DUCTWORK, DAMPERS, SUPPORTS, ELECTRICAL, CONTROLS & ALL ASSOCIATED APPURTENANCES.
27	PROVIDE & INSTALL NEW HEAT RECOVER UNIT (HRU) OF SIZE & CAPACITIES SCHEDULED ABOVE CEILING, COMPLETE W/ ALL DUCTWORK, DAMPERS, LOUVERS, SUPPORTS, ELECTRICAL, CONTROLS & ALL ASSOCIATED APPURTENANCES.
28	PROVIDE & INSTALL NEW VRF WALL-MOUNTED TYPE DUCTLESS SPLIT AC HEAT PUMP UNIT OF SIZE & CAPACITIES SCHEDULED, COMPLETE W/ ALL REFRIGERANT PIPING, VALVES, SUPPORTS, ELECTRICAL, CONTROLS, CONDENSATE DRAIN PUMP & ALL ASSOCIATED APPURTENANCES.
29	NEW 1" HWS & HWR PIPING UP FROM 1ST FLOOR CLG. TO 2ND FLR CLG. IN CHASE & NEW 3/4" HWS & HWR & REFRIGERANT PIPING & INTERCONNECTED WIRING UP TO 3RD FLR CHASE. SEE DWGS. 1/M2.05 & 2/M2.06 FOR CONTINUATION. NEW 3/4" HWS & HWR PIPING FROM NEW 1" HWS & HWR PIPE RISERS TO FTR-2-1.



Key Plan

NOT TO SCALE

PROJECT NORTH

Date	1/10/20
Checked	MAM
Drawn	IM

MICHAEL J. McGOVERN, R.A.
License No. 022257-1
Title REGISTERED ARCHITECT

Revisions:

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1	ISSUE TO BID 11/23/20

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NYSED PROJECT # 66-07-01-03-0-005-020

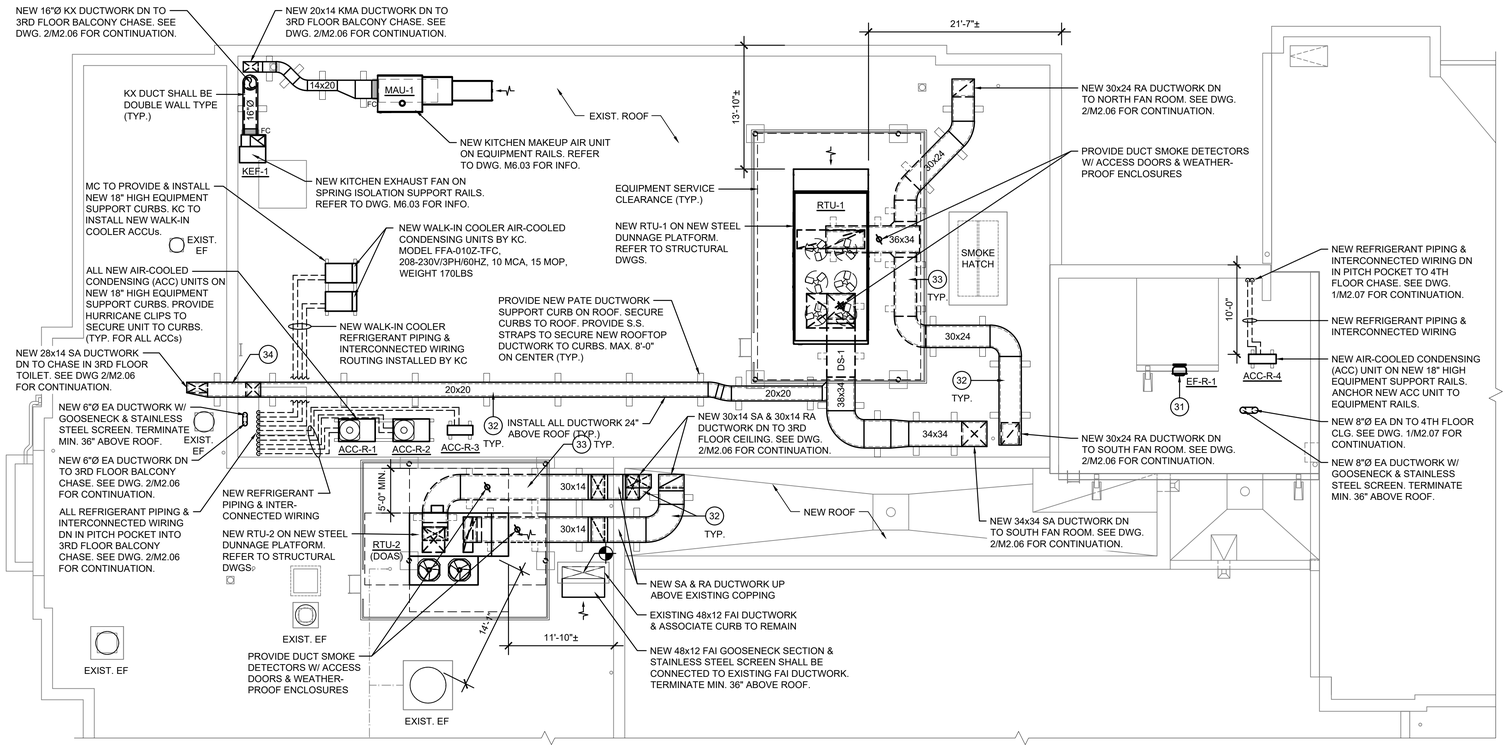
MECHANICAL PROPOSED PLANS

2019 BOND REFERENDUM ELEMENTARY SCHOOL
CHATSWORTH AVENUE ELEMENTARY SCHOOL DISTRICT
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

Job No. 4.1092.72.03

File No. 10927203M201

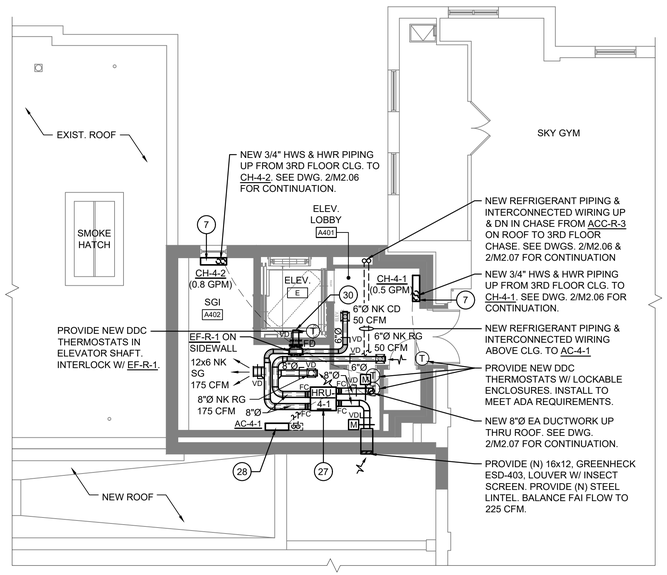
M2.06



2 M2.07 — Partial Roof Mechanical Proposed Plan

1/8" = 1'-0"

NORTH



1 M2.07 — Partial Fourth Floor Mechanical Proposed Plan

1/8" = 1'-0"

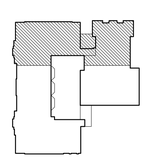
NORTH

GENERAL CONSTRUCTION NOTES

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4. GC IS RESPONSIBLE TO SAWCUT & CORE DRILL EXIST. WALLS / FLOORS / CLG. FOR NEW DUCTWORK / PIPING / CONDUIT PENETRATIONS. PATCH & CAULK W/ 2-HR RATED FIRESTOPPING MATERIALS.
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ITEM #	CONSTRUCTION KEY NOTES
7	PROVIDE & INSTALL NEW FLOOR-MOUNTED VERTICAL TYPE CABINET HEATER (CH) OF SIZE & CAPACITIES SCHEDULED, COMPLETE W/ HW PIPING, VALVES, SUPPORTS, ELECTRICAL, CONTROLS & ALL ASSOCIATED APPURTENANCES.
27	PROVIDE & INSTALL NEW HEAT RECOVER UNIT (HRU) OF SIZE & CAPACITIES SCHEDULED ABOVE CEILING, COMPLETE W/ ALL DUCTWORK, DAMPERS, LOUVERS, SUPPORTS, ELECTRICAL, CONTROLS & ALL ASSOCIATED APPURTENANCES.
28	PROVIDE & INSTALL NEW VRF WALL-MOUNTED TYPE DUCTLESS SPLIT AC HEAT PUMP UNIT OF SIZE & CAPACITIES SCHEDULED, COMPLETE W/ ALL REFRIGERANT PIPING, VALVES, SUPPORTS, ELECTRICAL, CONTROLS, CONDENSATE DRAIN PUMP & ALL ASSOCIATED APPURTENANCES.
30	NEW 8x8 OPEN ENDED EA DUCTWORK IN ELEVATOR SHAFT. BALANCE EA FLOW TO 300 CFM.
31	PROVIDE & INSTALL NEW SIDEWALL-MOUNTED EXHAUST FAN (EF) OF SIZE & CAPACITIES SCHEDULED, COMPLETE W/ DUCTWORK, DAMPERS, SUPPORTS, ELECTRICAL, CONTROLS & ALL ASSOCIATED APPURTENANCES. BALANCE EA FLOW TO 300 CFM. SEE DWG. 1/M2.07 FOR DUCT CONTINUATION.
32	ALL EXTERIOR INSTALLED DUCTWORK SHALL BE ALUMINUM CONSTRUCTION AND PROVIDED WITH BOTH 2" THICK, 8LB. DENSITY ACOUSTIC LINING MIN. R-8.7 WITH IAQ LINER AS WELL AS EXTERNAL INSULATION (MIN. 1.5" THICK AND 8 LB DENSITY). MIN. R-6.5 EXTERNAL INSULATION SHALL BE SLOPED (MIN. 1/4" PER FOOT) ON ALL UPWARD FACING HORIZONTAL SURFACES TO EFFECTIVELY DRAIN WATER OFF OF THE DUCTWORK. ALL DUCT CONNECTION JOINTS ETC SHALL BE ALUMINUM. DUCTWORK SHALL BE CLASS "A" SEALED AS PER SMACNA. PROVIDE SOLVENT BASED OUTDOOR DUCT SEALANT, RESISTANT TO UV LIGHT, UL 734 LISTED, WATER RESISTANT AS PER SMACNA. PROVIDE 2MM THICK ALUMINIZED FACED LOADED LIMP VINYL SHEET LAGGING WRAPPED AROUND THE DUCT AND FASTENED WITH ADHESIVE TAPE AND BANDS FOR A WATER TIGHT CONSTRUCTION WHICH MEETS CLASS 1 REQUIREMENTS FOR SMOKE DEVELOPMENT AND FLAME SPREAD RATINGS. OUTDOOR DUCTWORK ON THIS PROJECT. (TYPICAL FOR ALL)
33	NEW DUCTWORK BELOW NEW STEEL DUNNAGE PLATFORM.
34	NEW SA DUCTWORK UP ABOVE EXISTING COPPING

CHATSWORTH AVE. SCHOOL



Key Plan

NOT TO SCALE

PROJECT NORTH

Date	1/10/20
Checked	MAM
Drawn	IM

MICHAEL J. McGOVERN, R.A.
Title REGISTERED ARCHITECT License No. 022257-1

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NYSED PROJECT # 66-07-01-03-0-005-020

MECHANICAL PROPOSED PLANS

2019 BOND REFERENDUM
CHATSWORTH AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

Job No. 4.1092.72.03

File No. 10927203M201

M2.07

PACKAGED ROOFTOP GAS FIRED HV/HVAC W/ HEAT RECOVERY WHEEL UNIT SCHEDULE

(AAON AS STANDARD)

TAG NO.	AREAS SERVED	MANUFACTURER	MODEL NO.	SUPPLY (CFM)	MIN. O.A. (CFM)	MAX. O.A. (CFM)	SUPPLY FAN DATA					EXHAUST FAN DATA					DX COOLING					GAS HEATING			ENERGY RECOVERY WHEEL								MIN. GAS PRESSURE	COMPRESSOR	CONDENSER		APPROX. UNIT DIMENSIONS (L x W x H) (IN)	APPROX. UNIT WT. (LBS)	ELECTRICAL DATA			EFFICIENCY		REFRIGERANT TYPE	REMARKS
																									COOLING				HEATING															
							EXT. SP (IN)	QTY	BHP	MHP	VFD	EXT. SP (IN)	QTY	BHP	MHP	VFD	COOLING (TMBH)	COOLING (SMBH)	EADB (°F)	EAWB (°F)	LADB (°F)	LAWB (°F)	INPUT (MBH)	OUTPUT (MBH)	EAT (°F)	LAT (°F)	EADB (°F)	EAWB (°F)	LADB (°F)	LAWB (°F)	EADB (°F)	LADB (°F)	LAWB (°F)							V/PH/HZ	MCA	MOP				
RTU-1	EXIST. AUDITORIUM & STAGE	AAON	RN-050-8-0-EA09-DB	14,000	1,200	6,000	2.75	2.0	7.4	10.0	**YES**	2.0	0.75	3.0	**5.0**	YES	575.9	534.8	78.0	65.1	50.6	50.4	810.0	648.0	60.1	103.0	95.0	75.0	78.0	65.0	0.0	47.0	44.4	6"-10.5" WC.	4	48.1 EA.	6	3/4 EA.	203 x 100 x 102	7,500	208/3/60	321	350	11.0	12.7	R-410A	SEE NOTES.
RTU-2 (DOAS)	CAFETERIA B01	DAIKIN	DPS007A	3,100	3,100	3,100	1.50	1.0	2.0	4.0	NO	1.5	1	2.0	4.0	NO	95.8	76.7	80.0	67.0	57.4	57.3	320.0	256.0	14.0	109.1	95.0	75.0	75.0	62.0	0.0	70.0	50.0	7"-14" WC.	2	11.9/8.6	2	(4 EA.)	111 x 96.5 x 56.8	2,600	208/3/60	42.7	50	12.1	--	R-410A	SEE NOTES

NOTES:
1. ALL UNITS SHALL BE PROVIDED W/ MODULATING GAS HEAT CONTROL.
2. ALL MOTORS SHALL BE PREMIUM EFFICIENCY TYPE
3. ALL UNITS SHALL BE PROVIDED W/ SINGLE POINT POWER CONNECTION.
4. PROVIDE CONDENSER FAN COIL GUARDS, NON-FUSED DISCONNECT SWITCH, & GFI CONVENIENCE OUTLET FOR EACH UNIT.
5. ALL UNITS SHALL BE PROVIDE W/ SPRING VIBRATION ISOLATION RAILS.
6. PROVIDE PROGRAMMABLE THERMOSTATS W/ LCD SCREEN & DDC CONTROLS FOR ALL UNITS. CONNECT UNIT TO A NEW BMS WITH WEB-BASED ACCESS.
7. RTU-1 & 2 SHALL BE PROVIDED W/ DUAL ENTHALPY 100% MODULATING POWER EXHAUST ECONOMIZER FANS, CONTROLS & DAMPERS .
8. RTU-1 & 2 SHALL BE PROVIDED W/ 2" MERV 13 FILTERS & (2) SETS OF SPARE FILTERS OF ALL TYPES.
9. PROVIDE SPARE SET OF INSTALLED ENERGY RECOVERY WHEEL MEDIA FOR EACH UNIT.
10. PROVIDE W/ S.S. FLUE VENT EXTENSIONS FOR EACH UNIT.
11. ELECTRICAL SUBCONTRACTOR TO PROVIDE A DUCT SMOKE DETECTOR IN MAIN RETURN AND SUPPLY AIR DUCT FOR RTU. INTERLOCK RTU WITH FIRE ALARM SYSTEM. RTU SHALL BE SHUT DOWN UPON ACTIVATION OF FIRE ALARM SYSTEM.
12. PROVIDE TWO-YEARS PART & LABOR WARRANTY FROM THE MANUFACTURER.
13. RTU-1 SHALL HAVE A POWER EXHAUST FAN. MODULATE BOTH SUPPLY AND RETURN AIRFLOW PROPORTIONATELY TO MAINTAIN CONSTANT DIFFERENCE BETWEEN S.A. & R.A.
14. UNIT TO BE TIED INTO (N) ANDOVER BUILDING MANAGEMENT SYSTEM (BMS).

UNIT VENTILATOR WITH HOT WATER HEATING / DX COOLING SCHEDULE

(DAIKIN AS STANDARD)

TAG NO.	AREA SERVED	SUPPLY CFM	OUTSIDE AIR (CFM)	DX COOLING						HOT WATER HEATING						ELECTRICAL DATA				MODEL & MANUFACTURER	DIMENSIONS (W x D x H) (IN.)	REFRIGERANT	REMARKS
				TOTAL (MBH)	SENS. (MBH)	EADB (°F)	EAWB (°F)	LADB (°F)	LAWB (°F)	INPUT (MBH)	EAT (°F)	LAT (°F)	EWT (°F)	LWT (°F)	FLOW RATE (GPM)	WPD (FT)	V/PH/HZ	MCA	MOP				
UV-1-1	CAFETERIA B01	1,500	450	53.7	40.3	80.0	67.0	54.3	54.3	50.0	70	110	180	160	5.0	6.4	208/1/60	3.9	15	UAVV9S15 DAIKIN	98 x 21.88 x 30.13	R-410A	SEE NOTES BELOW.
UV-1-2	CAFETERIA B01	1,500	450	53.7	40.3	80.0	67.0	54.3	54.3	31.0	70	110	180	160	3.1	6.4	208/1/60	3.9	15	UAVV9S15 DAIKIN	98 x 21.88 x 30.13	R-410A	SEE NOTES BELOW.
UV-1-3 THRU 5	MEDIA CENTER C02 / LIBRARY C05	1,500	325	53.7	40.3	79.3	66.2	54.3	54.3	31.0	70	110	180	160	3.1	6.4	208/1/60	3.9	15	UAVV9S15 DAIKIN	98 x 21.88 x 30.13	R-410A	SEE NOTES BELOW.
UV-1-6	BREAK OUT ROOM C09	500	180	14.1	10.5	82.2	68.7	56.0	56.0	23.0	70	110	180	160	2.3	5.2	208/1/60	3.9	15	UAVV9S10 DAIKIN	74 x 21.88 x 30.13	R-410A	SEE NOTES BELOW.
UV-1-7 & 8	ART ROOM C10	1,000	370	33.1	24.8	82.4	68.7	56.0	56.0	23.0	70	110	180	160	2.3	5.2	208/1/60	3.9	15	UAVV9S10 DAIKIN	74 x 21.88 x 30.13	R-410A	SEE NOTES BELOW.

NOTES:
1. PROVIDE WITH HOT WATER HEATING COIL, 4-5/8" FALSEBACK **(DAIKIN ARRANGEMENT AK WITH INSULATED OA PLENUM)**, 3-WAY MODULATING CONTROL VALVE PACKAGE & REMOTE THERMOSTAT W/ LOCKABLE COVER, ASHRAE CYCLE II CONTROLS, COLOR TO BE SELECTED BY OWNER. PROVIDE DRAFTSTOP WINDOW DOWNDRAFT PROTECTIONS FROM UV TO WALL ON BOTH SIDES OF UV.
2. INTERLOCK WITH SPLIT AIR COOLED CONDENSING UNIT.
3. INTERLOCK UV-1-1 & UV-1-2 WITH EF-1-1.
4. CONTRACTOR TO BALANCE OUTSIDE AIR FLOW & SUPPLY AIR FLOW TO QUANTITIES INDICATED ABOVE. PROVIDE BALANCING REPORT FOR REVIEW.
5. CONTRACTOR TO REPLACE FILTERS AFTER COMPLETION OF PROJECT AND PRIOR TO OCCUPANCY. IN ADDITION, CONTRACTOR TO PROVIDE AN ADDITIONAL SET OF FILTERS FOR ALL UNITS.
6. ALL THERMOSTATS SHALL BE INSTALLED IN A TAMPER PROOF ENCLOSURE.
7. INTERNAL AUTOMATIC TEMPERATURE CONTROLS SHALL BE PROVIDED BY ATC CONTRACTOR. THE ATC CONTRACTOR SHALL SHIP THE DDC CONTROLS FOR ALL UNITS TO THE UNIT MANUFACTURER FOR FACTORY MOUNTING. THE ATC CONTRACTOR SHALL PROVIDE, MOUNT AND WIRE ALL EXTERNAL COMPONENTS. UNIT SHALL BE TIED INTO NEW ANDOVER BUILDING MANAGEMENT SYSTEM (BMS). REFER TO ATC DIAGRAMS AND SPECIFICATIONS.
8. UV-1-6, 1-7, & 1-8 SHALL BE PROVIDED WITH 48"x10" FACTORY FAI LOUVERS. UV-1-1 THRU UV-1-5 WILL BE INSTALLED WITH 60"x12" GREENHECK ESD-403 LOUVERS.

OUTDOOR AIR COOLED CONDENSING UNIT SCHEDULE

(DAIKIN AS STANDARD)

TAG NO.	LOCATION	AREA SERVED	UNIT SERVED	COOLING (TMBH)	HEATING (TMBH)	AMBIENT TEMP (°F)	ELECTRICAL DATA V/PH/HZ	MCA	MOP	IEER	EER	MODEL & MANUFACTURER	DIMENSIONS (W x H x D) (IN)	APPROX. WEIGHT (LBS)	REMARKS
ACC-G-1	GRADE	MEDIA CENTER C02 / LIBRARY C05	UV-1-3 THRU 5	144	-	95	208/3/60	55.1	60	24.8	11.5	RXYQ144TATAJU DAIKIN	48.9 x 66.7 x 30.2	700	2-STAGE CONDENSING UNIT, PROVIDE "PATE" EQUIPMENT SUPPORTS, DISCONNECT SWITCH, GFI CONVENIENCE OUTLET.
ACC-G-2	GRADE	ART ROOM C10	UV-1-6 THRU 8	90	-	95	208/3/60	27.6	35	25.9	12.7	RXYQ72TATJU DAIKIN	36.7 x 66.7 x 30.2	450	2-STAGE CONDENSING UNIT, PROVIDE "PATE" EQUIPMENT SUPPORTS, DISCONNECT SWITCH, GFI CONVENIENCE OUTLET.
ACC-R-1	ROOF	CAFETERIA B01	AC-1-1 THRU 3	108.8	102.0	95	208/3/60	36.3	45	25.4	12.4	RXYQ120TATJU DAIKIN	48.9 x 66.7 x 30.2	530	SEE NOTE(S) BELOW
ACC-R-2	ROOF	CAFETERIA B01	UV-1-1 & UV-1-2	95.6	92.5	95	208/3/60	36.3	45	27.3	14.3	RXYQ96TATJU DAIKIN	48.9 x 66.7 x 30.2	530	SEE NOTE(S) BELOW
ACC-R-3	ROOF	ELEC. B03	AC-1-4	31.4	-	95	208/1/60	17	20	17.5	10	FTX30NVJU DAIKIN	34.2 x 28.9 x 12.6	40	SEE NOTE(S) BELOW
ACC-R-4	ROOF	COPY ROOM A202 & SGI A402	AC-2-1 & AC-4-1	36	39.8	95	208/1/60	16.5	25	18	12	RXTQ36TAVJ9 DAIKIN	37.0 x 39.0 x 12.6	175	SEE NOTE(S) BELOW

NOTES:
PROVIDE WITH LOW AMBIENT CONTROL TO 0°F, INTERLOCK WITH RESPECTIVE AC UNITS. ELECTRICAL SUBCONTRACTOR SHALL FURNISH & INSTALL NEMA 3R DISCONNECT SWITCH & GFI CONVENIENCE OUTLET FOR EACH UNIT. REFER TO ELECTRICAL DRAWINGS. PROVIDE VIBRATION ISOLATION PADS FOR ACC-G-1 AND SECURE UNIT TO STEEL GRADING.

VENTILATION INDEX

UNIT SERVED	ROOM NAME & NUMBER	OCCUPANCY CLASSIFICATION	FLOOR AREA (SQ. FT.)	REQ'D O.A. PER SQ. FT.	REQ'D O.A. FOR SPACE	OCCUPANCY DENSITY PER 1,000 FT²	OCCUPANCY BASED ON DENSITY	VENTILATION OCCUPANCY	REQ'D O.A. PER PERSON	REQ'D O.A. FOR OCCUPANCY	TOTAL REQ'D O.A. (CFM)	ZONE AIR DISTRIBUTION EFFECTIVENESS	ZONE MIN. O.A. REQ'D (CFM)	ACTUAL O.A. (CFM)	EXHAUST AIR E.A. (CFM)	REMARKS
FIRST FLOOR																
	ELEV. LOBBY (LOWER) A101	CORRIDORS	256	0.06	15	-	-	-	-	-	15	1.0	15	-		SEE NOTE #1.
	ELEV. LOBBY (UPPER) A102	CORRIDORS	183	0.06	11	-	-	-	-	-	11	1.0	11	-		SEE NOTE #1.
EXIST. CH	NEW CORR. A103 & EXIST. CORRIDOR	CORRIDORS	505	0.06	30	-	-	-	-	-	30	1.0	30	200		SEE NOTE #2.
RTU-2	CAFETERIA B01	CAFETERIA, FAST FOOD	3,508	0.18	631	100	351	351	7.5	2,633	2,464	0.8	3,080	3,100		SEE NOTE #3.
UV-1-1 & UV-1-2											800	0.9	889	900		
MAU-1	SERVERY / KITCHEN B02	KITCHENS (COOKING)	778	0.7	545	-	-	-	-	-	545	1.0	545	-	600	SEE NOTE #4.
	DRY STORAGE B05	STORAGE ROOMS	206	0.12	33	-	-	-	-	-	33	1.0	33	-		SEE NOTE #5.
UV-1-3 THRU 5	MEDIA CENTER C02, FLEX AREA C03, READING C04 & LIBRARY C05	MEDIA CENTER	2,271	0.12	273	25	57	57	10	570	843	0.9	936	975		
UV-1-6	BREAK OUT ROOM C09	CLASSROOMS (AGE 9 PLUS)	324	0.12	39	35	11	11	10	110	149	0.9	165	180		
UV-1-7 & UV-1-8	ART C10	ART CLASSROOM	1,052	0.18	189	20	21	21	10	210	399	0.9	444	740	740	
UV-1-7 & UV-1-8	ART STOR. C11	STORAGE ROOMS	272	0.12	33	-	-	-	-	-	33	1.0	33	35		SEE NOTE #5.
SECOND FLOOR																
RTU-1	EXIST. AUDITORIUM & STAGE	AUDITORIUMS	5,589	0.06	335	150	839	839	5	4,195	4,530	0.8	5,663	6,000		
HRU-2-1	EXIST. ROOM 9	CLASSROOMS (AGE 9 PLUS)	240	0.12	29	35	8	8	10	80	109	0.8	136	150		
HRU-2-1	EXIST. ROOM 10	CLASSROOMS (AGE 9 PLUS)	829	0.12	99	35	29	29	10	290	389	0.8	487	555		
CH-2-1	ELEV. LOBBY A201	CORRIDORS	139	0.06	8	-	-	-	-	-	8	0.9	9	50		
HRU-2-1	COPY ROOM A202	COPY, PRINTING ROOMS	247	0.06	14	4	1	1	5	5	19	0.8	25	225	225	SEE NOTE #6.
THIRD FLOOR																
CH-3-2	ELEV. LOBBY A301	CORRIDORS	231	0.06	14	-	-	-	-	-	14	1.0	14	25		SEE NOTE #7.
	STOR. A302	STORAGE ROOMS	79	0.12	9	-	-	-	-	-	9	1.0	9	-		SEE NOTE #5.
CH-3-2	NEW CORR. 'A' A304	CORRIDORS	307	0.06	18	-	-	-	-	-	18	1.0	18	25		SEE NOTE #7.
CH-3-2	NEW CORR. 'B' A305	CORRIDORS	718	0.06	43	-	-	-	-	-	43	1.0	43	50		
FOURTH FLOOR																
HRU-4-1	ELEV. LOBBY A401	CORRIDORS	109	0.06	7	-	-	-	-	-	7	0.8	9	50		
HRU-4-1	SGI A402	CLASSROOMS (AGE 9 PLUS)	283	0.12	34	35	10	10	10	100	134	0.8	167	175		

NOTES:
1. BASED ON 2015 IMC CHAPTER 4, SECTIONS 402.1 & 402.2, NATURAL VENTILATION SHALL BE THROUGH DOORS TO THE OUTDOORS.
2. ACTUAL OUTDOOR AIR FROM EXISTING FLOOR-MOUNTED CABINET HEATER (CH) IN EXISTING CORRIDOR.
3. TOTAL REQUIRED OUTDOOR AIR OF 3,264 CFM FOR THE CAFETERIA IS SERVED BY 2,464 OA CFM FROM RTU-2 (3,100 OA CFM ACCOUNTING FOR ZONE AIR DISTRIBUTION EFFECTIVENESS OF 0.8) AND 800 OA CFM FROM UV-1-1 & UV-1-2 (400 OA CFM EACH WITH 450 OA CFM EACH ACCOUNTING FOR ZONE AIR DISTRIBUTION EFFECTIVENESS OF 0.9).
4. MAKEUP AIR FOR EXHAUST FROM CAFETERIA THROUGH TRANSFER GRILLE. SPACE TO BE NEGATIVELY-PRESSURIZED.
5. BASED ON 2015 IMC CHAPTER 2, SECTION 202, DEFINITION OF "OCCUPIABLE SPACE" & CHAPTER 4, SECTION 401.2, STORAGE ROOMS ARE EXCLUDED FROM OCCUPIABLE SPACE AND DO NOT REQUIRE VENTILATION AIR.
6. 100% RETURN AIR THROUGH HRU-2-1 IS EXHAUST AIR.
7. VENTILATION AIR THROUGH OPERABLE DOORS FROM ADJACENT NEW CORRI. 'A' A304 WITH NEW CH WITH MIN. 100 O.A. CFM.

HEAT RECOVERY UNIT VENTILATOR SCHEDULE

(DAIKIN AS STANDARD)

TAG NO.	AREA SERVED	SUPPLY AIR (CFM)	EXHAUST AIR (CFM)	ELECTRICAL DATA V - PH - HZ	MCA	MOP	MODEL & MANUFACTURER	DIMENSIONS (L x W x H) (IN.)	APPROX. WEIGHT (LBS.)	REMARKS
HRU-2-1	EXIST. CLASSROOMS 9 &10 & COPY ROOM A202	930	930	208 - 1 - 60	8.1	15	VAM1200GVJU DAIKIN	64 x 48 x 30	350	SEE NOTES.
HRU-4-1	SGI A402	225	225	208 - 1 - 60	1.6	15	VAM300GVJU DAIKIN	35 x 32 x 12	75	SEE NOTES.

NOTES:
1. PROVIDE FUSED DISCONNECT SWITCH.
2. ALL MOTORS SHALL BE PREMIUM EFFICIENCY TYPE.
3. BAROMETRIC OUTDOOR AIR DAMPER
4. UNIT TO BE TIED INTO NEW ANDOVER BUILDING MANAGEMENT SYSTEM (BMS).

HOT WATER CABINET HEATER SCHEDULE

(TRANE AS STANDARD)

TAG NO.	AREA SERVED	S.A. CFM	O.A. CFM	HOT WATER HEATING				HP	ELECTRICAL DATA V - PH - HZ	FLA	MOP	MODEL & MANUFACTURER	DIMENSIONS (W x H x D) (IN.)	APPROX. UNIT WEIGHT (LBS.)	REMARKS
				MBH	EWT (°F)	LWT (°F)	GPM								
CH-1-1	ELEV. LOBBY (LOWER) A101	240	-	9.4	180	160	0.9	0.22	208 - 1 - 60	3.1	15	FFEB-020 TRANE	30 x 36 x 10	97	HORIZONTAL RECESSED CH. SEE NOTES.
CH-1-2	ELEV. LOBBY (LOWER) A101	220	-	9.4	180	160	0.9	0.22	208 - 1 - 60	3.1	15	FFBB-020 TRANE	34 x 10 x 25	97	SEE NOTES.
CH-1-3	SERVERY / KITCHEN B02	220	-	6.2	180	160	0.6	0.22	208 - 1 - 60	3.1	15	FFBB-020 TRANE	34 x 10 x 25	97	SEE NOTES.
CH-1-4	DRY STORAGE B05	220	-	5.0	180	160	0.5	0.22	208 - 1 - 60	3.1	15	FFJB-020 TRANE	34 x 25 x 10	97	SEE NOTES.
CH-2-1	ELEV. LOBBY A201	220	50	5.6	180	160	0.6	0.22	208 - 1 - 60	3.1	15	FFBB-020 TRANE	34 x 10 x 25	97	SEE NOTES.
CH-3-1	ELEV. LOBBY A301	220	-	5.0	180	160	0.5	0.22	208 - 1 - 60	3.1	15	FFBB-020 TRANE	34 x 10 x 25	97	SEE NOTES.
CH-3-2	NEW CORR. 'B' A305	280	100	18.7	180	160	1.9	0.22	208 - 1 - 60	3.1	15	FFBB-040 TRANE	34 x 10 x 25	125	SEE NOTES.
CH-3-3	NEW CORR. 'B' A305	280	-	10.6	180	160	1.1	0.22	208 - 1 - 60	3.1	15	FFBB-030 TRANE	34 x 10 x 25	97	SEE NOTES.
CH-4-1	ELEV. LOBBY A401	220	-	5.0	180	160	0.5	0.22	208 - 1 - 60	3.1	15	FFBB-020 TRANE	34 x 10 x 25	97	SEE NOTES.
CH-4-2	SGI A402	220	-	7.7	180	160	0.8	0.22	208 - 1 - 60	3.1	15	FFBB-020 TRANE	34 x 10 x 25	97	SEE NOTES.

NOTES:
1. PROVIDE W/ HW HEATING COIL, FACTORY INSTALLED DELUXE PIPING PACKAGE OPTION #F W/ 2-WAY MODULATING CONTROL VALVE FOR EACH UNIT.
2. PROVIDE W/ ECM MOTOR, FILTERS, KEYLOCK PANEL & ACCESS DOOR, & DISCONNECT SWITCH FOR EACH UNIT.
3. PROVIDE W/ BOTTOM STAMPED INLET & OUTLET LOUVERS FOR CEILING-HUNG HORIZONTAL UNITS.
4. PROVIDE W/ FRONT BAR GRILLE INLET & TOP BAR GRILLE OUTLET FOR FLOOR-MOUNTED VERTICAL UNITS.
5. PROVIDE W/ MANUFACTURER PROVIDED FAI WALL BOX W/ INSECT SCREEN FOR CH-2-1 & CH-3-2.
6. UNIT COLOR TO BE SELECTED BY OWNER. PROVIDE COLOR CHART.
7. EACH UNIT TO BE TIED INTO NEW ANDOVER BUILDING MANAGEMENT SYSTEM (BMS).

DUCT SILENCER SCHEDULE

(NVLAP AS STANDARD)

TAG NO.	LOCATION	UNIT SERVED	AIR SYSTEM	CFM	VELOCITY (FPM)	PD (IN. WG.)	DYNAMIC INSERTION LOSS (dB)								SELF GENERATED NOISE (dB)								MODEL & MANUFACTURER	DIMENSIONS (W x H x L) (IN.)	APPROX. WEIGHT (LBS.)	REMARKS
							63	125	250	500	1K	2K	4K	8K	63	125	250	500	1K	2K	4K	8K				
DS-1	ROOF	RTU-1	SUPPLY AIR	+14,000	+1,560	0.21	9	9	17	22	18	13	12	12	68	60	53	47	47	45	39	35	RFN 36D NVLAP	38 x 34 x 72	172	SEE NOTES.
DS-2 & 3	MECH ROOMS ABOVE STAGE	RTU-1	RETURN AIR	-6,300	-1,010	0.17	10	11	21	28	27	19	15	14	65	55	46	41	41	39	33	30	RFN 30F NVLAP	30 x 24 x 72	127	SEE NOTES.

NOTES:
1. OUTER CASING TO BE GALVANIZED 22 GAUGE W/ PERFORATED GALVANIZED 26 GAUGE & FIBER GLASS FILL MATERIAL.

INDOOR DUCTLESS AIR-CONDITIONING / HEAT PUMP UNIT SCHEDULE

(DAIKIN AS STANDARD)

TAG NO.	LOCATION	COOLING (TMBH)	HEATING (TMBH)	ENT. TEMP DB / WB(°F)	SUCTION TEMP (°F)	ELECTRICAL DATA V - PH - HZ	MCA	MOP	MODEL & MANUFACTURER	DIMENSIONS (W x H x D) (IN.)	APPROX. WEIGHT (LBS.)	REMARKS
AC-1-1 THRU 3	CAFETERIA B01	36	42	80 / 67	-	208 - 1 - 60	1.4	15	FXHQ36MVJU DAIKIN	62-5/8 x 7-11/16 x 26-3/4	90	SEE NOTES.
AC-1-4	ELEC. B03	31.4	-	79 / 66	42.8	208 - 1 - 60	0.3	15	FTX30NVJU DAIKIN	47 x 13 x 10	40	COOLING ONLY. SEE NOTES.
AC-2-1	COPY ROOM A202	12	13.4	79 / 66	42.8	208 - 1 - 60	0.4	15	FXAQ12PVJU DAIKIN	31.3 x 11.4 x 9.3	26.5	SEE NOTES.
AC-4-1	SGI A402	24	26.4	79 / 66	42.8	208 - 1 - 60	0.6	15	FXAQ24PVJU DAIKIN	41.4 x 11.4 x 9.3	30.9	SEE NOTES.

NOTES:
PROVIDE "DAIKIN" REMOTE CONTROLLER, WALL MOUNTING BRACKET, PROPER REFRIGERANT CHARGE. INTERLOCK WITH RESPECTIVE CONDENSING UNIT. PROVIDE WITH MINI "DAIKIN" CONDENSATE PUMP (MODEL # DACA-CP1-1. PROVIDE WITH CONDENSATE DRAIN WATER-LEVEL DETECTOR SWITCH TO PREVENT ANY DAMAGE TO ANY BUILDING COMPONENT AS A RESULT OF OVERFLOW FROM THE EQUIPMENT PRIMARY DRAIN. EACH UNIT TO BE TIED INTO NEW ANDOVER BUILDING MANAGEMENT SYSTEM (BMS).

Date 1/10/20
Checked
Drawn IM/MAM

MICHAEL J. McGOVERN, R.A.
License No. 022257-1
The REGISTERED ARCHITECT

Revisions:
1 ISSUE TO BID 11/23/20

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NYSED PROJECT # 66-07-01-03-0-005-020

MECHANICAL SCHEDULES

2019 BOND REFERENDUM
CHATSWORTH AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

Job No. 4.1092.72.03
File No. 10927203M601

M6.01

EXHAUST FAN SCHEDULE

(GREENHECK AS STANDARD)

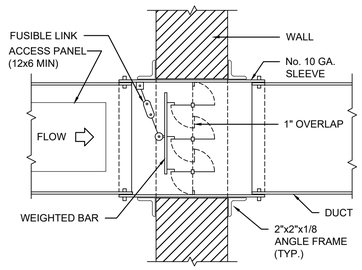
TAG NO.	AREA SERVED	CFM	SP. (IN)	BHP	MHP	RPM	ELECTRICAL DATA V/PH/HZ	DIMENSIONS (L x W x H) (IN)	APPROX. WT. (LBS)	MODEL & MANUFACTURER	SONES	REMARKS
EF-1-1	SERVERY / KITCHEN B02	600/ 1,500	0.5	0.30	3/4	1,349	120/1/60	21 x 21 x 21	59	SQ-130-VG GREENHECK	9.2	W/ VIBRATION ISOLATORS, VARI-GREEN EC MOTOR, DISCONNECT SWITCH, VARI-GREEN TRANSFORMER 84-277VAC TO 24 VDC, VARI-GREEN TWO-SPEED CONTROL & BACK DRAFT DAMPER. UNIT TO BE TIED INTO NEW ANDOVER BUILDING MANAGEMENT SYSTEM (BMS). FOR CONTROLS REFER TO SEQUENCE OF OPERATIONS 230993 SECTION 1.13.
EF-1-2	UTILITY CLO. B04	75	0.5	0.03	49 WATTS	900	120/1/60	14 x 12 x 11	23	CSP-A200 GREENHECK	2.2	W/ VIBRATION ISOLATORS, VARI-GREEN EC MOTOR, DISCONNECT SWITCH, VARI-GREEN TRANSFORMER & BACK DRAFT DAMPER.
EF-1-3	MEDIA CENTER C02 & LIBRARY C05	975	0.25	0.29	1/3	1,120	120/1/60	14 x 24 x 15	49	CSP-A1050-VG GREENHECK	1.3	W/ VIBRATION ISOLATORS, VARI-GREEN EC MOTOR, DISCONNECT SWITCH, VARI-GREEN TRANSFORMER & BACK DRAFT DAMPER.
EF-1-4	ART 06	1000	0.125	0.1	0.25	1250	120/1/60	25"Ø x 30	44	CUE-101-VG GREENHECK	8.0	WALL MOUNTED VARI-GREEN EC MOTOR, DISCONNECT SWITCH, VARI-GREEN TRANSFORMER & BACK DRAFT DAMPER.
EF-1-5	KILN ROOM / ART STORAGE C11	500	0.5	0.11	1/6	1,586	120/1/60	16 x 15 x 15	47	SQ-095-VG GREENHECK	8.3	W/ VIBRATION ISOLATORS, VARI-GREEN EC MOTOR, DISCONNECT SWITCH, VARI-GREEN TRANSFORMER & BACK DRAFT DAMPER.
EF-2-1	SGI A104	450	0.5	0.12	1/3	1,284	120/1/60	24 x 12 x 12	39	CSP-A700-VG GREENHECK	1.3	W/ VIBRATION ISOLATORS, VARI-GREEN EC MOTOR, DISCONNECT SWITCH, VARI-GREEN TRANSFORMER & BACK DRAFT DAMPER.
EF-R-1	ROOF SIDEWALL	300	0.25	0.04	0.07	1,644	120/1/60	20"Ø x 15	22	CUE-070-VG GREENHECK	5.6	WALL MOUNTED, VARI-GREEN EC MOTOR, DISCONNECT SWITCH, VARI-GREEN TRANSFORMER 84-277VAC TO 24 VDC & BACK DRAFT DAMPER, PROVIDE THERMOSTAT IN ELEVATOR SHAFT AND SET FOR 80°F ADJUSTABLE. FAN TO BE TIED INTO NEW ANDOVER BUILDING MANAGEMENT SYSTEM (BMS).

HOT WATER FINNED TUBE RADIATION SCHEDULE

(STERLING AS STANDARD)

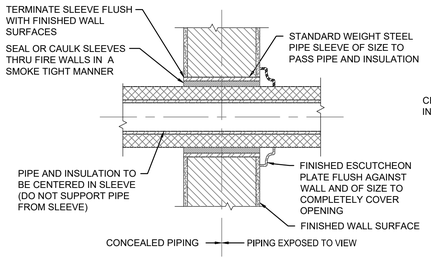
TAG NO.	LOCATION	TUBE SIZE	FIN PER FT.	ACTIVE ELEMENT LENGTH	BTU/ HR-FT	HOT WATER HEATING				MODEL & MANUFACTURER	REMARKS
						MBH	EWT (°F)	LWT (°F)	GPM		
FTR-1-1	CAFETERIA B01	3/4"	50	(3) 7'-0"	1,200	8.4 EA.	180	160	0.8 EA.	JVB-T24 STERLING	PROVIDE W/ WATER BRACKETS W/ HANGERS. SEE NOTES BELOW.
FTR-2-1	COPY ROOM A202	3/4"	50	6'-0"	1,200	7.2	180	160	0.7	JVB-T24 STERLING	PROVIDE W/ WATER BRACKETS W/ HANGERS. SEE NOTES BELOW.
FTR-3-1	STOR. A302	3/4"	50	4'-0"	1,200	4.8	180	160	0.5	JVB-T24 STERLING	PROVIDE W/ WATER BRACKETS W/ HANGERS. SEE NOTES BELOW.

NOTES:
1. ALL FTRs SHALL BE 24" H x 5-5/15" D. THE LENGTH INDICATED IN ABOVE SCHEDULE IS ACTIVE FINNED TUBE LENGTH. THE OVERALL LENGTH OF COVERS (ENCLOSURES) SHALL BE WALL TO WALL OR AS INDICATED ON FLOOR PLANS.
2. PROVIDE W/ MIN. 14 GAUGE GALVANIZED STEEL FRONT COVER, 18 GA. FULL HEIGHT BACK PANEL, AIR VENT, CORNER PIECES, SPLICE PLATES, END CAPS, VALVE ENCLOSURE COVER & WALL TO WALL COVER, WATER BRACKETS & TAMPER RESISTANT DAMPERS.
3. DDC CONTRACTOR SHALL PROVIDE CONTROL VALVES & FIELD-WIRE INTERLOCKS WITH RESPECTIVE AC UNIT. CONNECT TO NEW ANDOVER BMS.
4. PROVIDE DANFOSS CONTROL VALVE W/ UNIT MOUNTED DIAL-CONTROL FOR EACH FTR FOR FTR-3-1 AND 2-1.
5. UNIT COLOR SHALL BE SELECTED BY OWNER & PROVIDE A COLOR CHART.

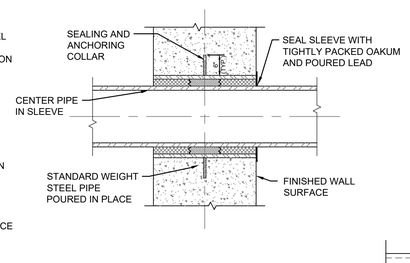


FIRE DAMPER IN WALL

NOT TO SCALE



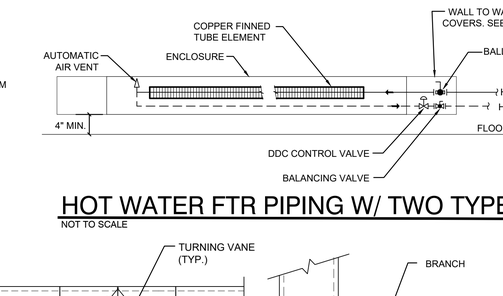
INTERIOR WALLS

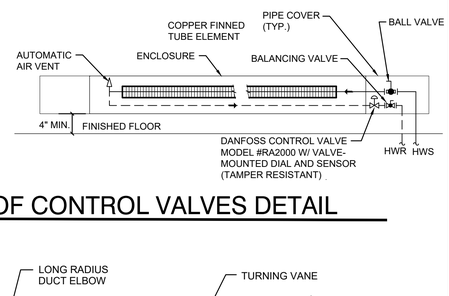


EXTERIOR WALLS

PIPE SLEEVES THRU WALL DETAILS

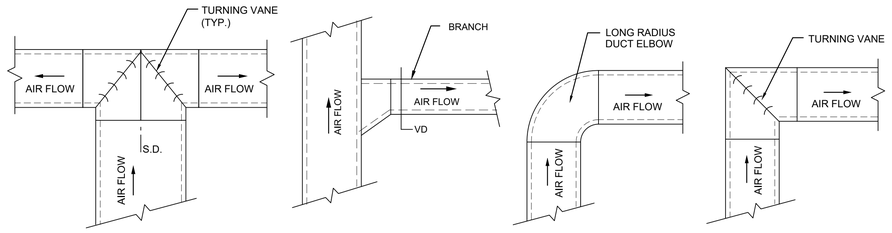
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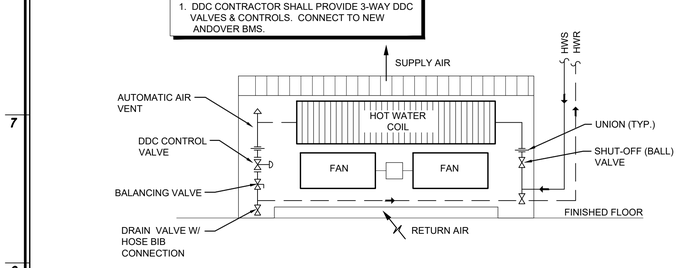
HOT WATER FTR PIPING W/ TWO TYPES OF CONTROL VALVES DETAIL

NOT TO SCALE



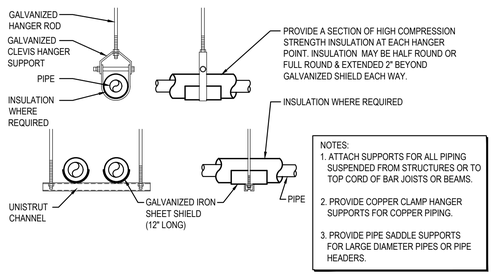
DUCT TAKE-OFF & TURN DETAIL

NOT TO SCALE



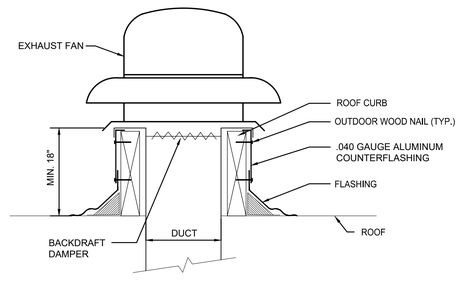
HOT WATER CABINET HEATER PIPING DETAIL

NOT TO SCALE



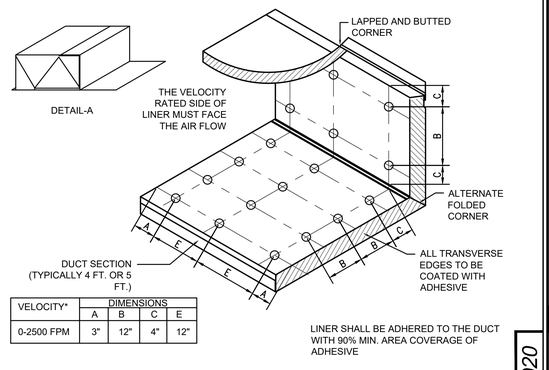
PIPE SUPPORT HANGERS

NOT TO SCALE



ROOF EXHAUST FAN DETAIL

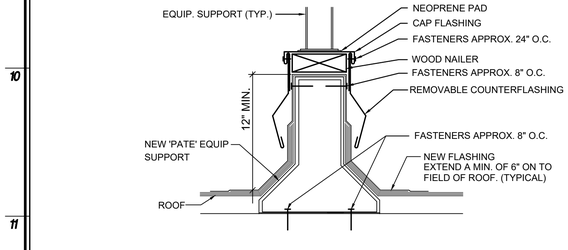
NOT TO SCALE



VELOCITY*	DIMENSIONS			
	A	B	C	E
0-2500 FPM	3"	12"	4"	12"

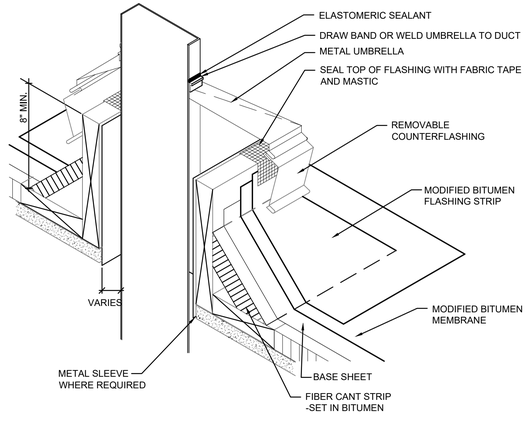
DUCT LINER INSULATION DETAIL

NOT TO SCALE



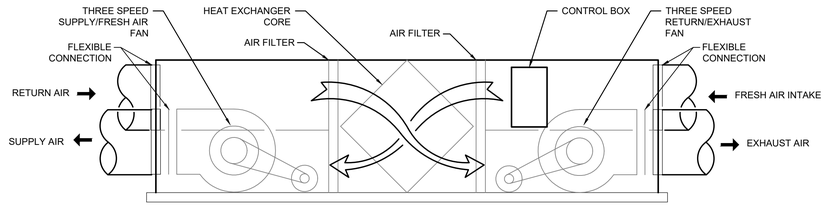
EQUIPMENT SUPPORT DETAIL

NOT TO SCALE



DUCT PENETRATION ROOF CURB DETAIL

NOT TO SCALE



LOW PROFILE HEAT RECOVERY UNIT DETAIL

NOT TO SCALE

Date	1/10/20
Checked	
Drawn	IM/MAM

MICHAEL J. McGOVERN, R.A.
License No. 022257-1
Title REGISTERED ARCHITECT

Revisions:

#	
1	ISSUE TO BID 11/23/20

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NYSED PROJECT # 66-07-01-03-0-005-020

MECHANICAL DETAILS

2019 BOND REFERENDUM
CHATSWORTH AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

Job No. 4.1092.72.03

File No. 10927203M601

M6.02

EXHAUST FAN INFORMATION – Job#4110057

FAN UNIT NO.	TAG	FAN UNIT MODEL #	MIN/MAX CFM/LF	MIN CFM	MAX CFM	ESP.	RPM	H.P.	B.H.P.	Ø	VOLT	FLA	DISCHARGE VELOCITY	WEIGHT (LBS.)	SONES
1	KEF-1	USBI18DD-RM	150/200	1988	2600	1.750	1285	1.500	1.2170	3	208	6.6	1333 FPM	395	18.5

MAU FAN INFORMATION – Job#4110057

FAN UNIT NO.	TAG	FAN UNIT MODEL #	BLOWER	HOUSING	MIN CFM	MAX CFM	ESP.	RPM	H.P.	B.H.P.	Ø	VOLT	FLA	MCA	MOCP	WEIGHT (LBS.)	SONES
2	MAU-1	A2-IBT-200-20D	20MF-2-MOD	A2-IBT-200	1540	2150	0.750	1153	2.000	0.9400	3	208	8.3	10.4A	15A	1025	9.6

GAS FIRED MAKE-UP AIR UNIT(S)

FAN UNIT NO.	TAG	INPUT BTUs	OUTPUT BTUs	TEMP. RISE	REQUIRED INPUT GAS PRESSURE	GAS TYPE	BURNER EFFICIENCY(%)
2	MAU-1	200000	160000	69 deg F	7 in. w.c. - 14 in. w.c.	Natural	80

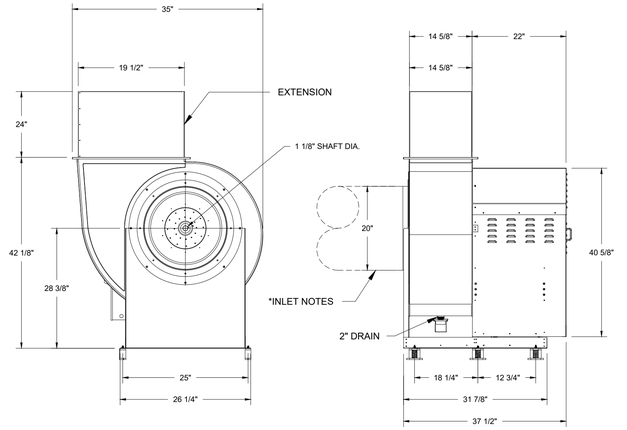
FAN OPTIONS

FAN UNIT NO.	TAG	OPTION (Qty. - Descr.)
1	KEF-1	1 - Utility Set Grease Cup
		1 - BI18 - 24" Discharge Extension.
		1 - BI - Discharge Orientation Vertical Upper Left - CW Inlet Side.
		1 - BI18 - Inlet Connection Standard 20" Flanged Grease Duct.
		1 - Utility Set - Spring Vibration Isolators - BI18 / Equivalent Sized Utility Set - Indoor/Outdoor use.
2	MAU-1	1 - Motorized Backdraft Damper for A2-I Housing
		1 - Inlet Pressure Gauge, 0-35"
		1 - Manifold Pressure Gauge, 0 to 10" wc, 1 Furnace
		1 - Freezestat
		1 - Standard Electrical Connection (main and control panel) for Standing Power - Single Module. If a Non-DCV Prewire is used on the IBT Heater, the #28, #47, "NS", "MA", or "E2" Option Prewire must be selected. Do not provide supply starter in prewire.
		1 - IBT Size 1 & 2 Side Discharge
		1 - Separate 120V Wiring Package (Required and used only for DCV or Prewire with VFD) - Three Phase Only

CURB ASSEMBLIES

NO.	ON FAN	TAG	WEIGHT	ITEM	SIZE
1	# 1	KEF-1	25 LBS	Rail	4.000"W x 48.000"L x 10.000"H Comes as a set of 2.
2	# 2	MAU-1	107 LBS	Curb	31.000"W x 79.000"L x 20.000"H Insulated
	# 2			Rail	6.000"W x 31.000"L x 20.000"H

FAN #1 USBI18DD-RM - EXHAUST FAN (KEF-1)



FEATURES:

- ROOF MOUNTED FANS
- UL705
- UL762 AND ULC-S645 (RESTAURANT MODEL)
- HIGH HEAT OPERATION DIRECT DRIVE 350°F (176°C)
- HIGH HEAT OPERATION BELT DRIVE 350°F (176°C)
- HEAT SLINGER
- WEATHERPROOF DISCONNECT
- GREASE CLASSIFICATION TESTING
- 2" DRAIN
- MOTOR WEATHER COVER
- FULLY SEALED SCROLL HOUSING
- SCROLL ACCESS DOOR
- FLANGE 1 1/4" - 11 THRU 20.
- FLANGE 2" - 24 THRU 36.

OPTIONS

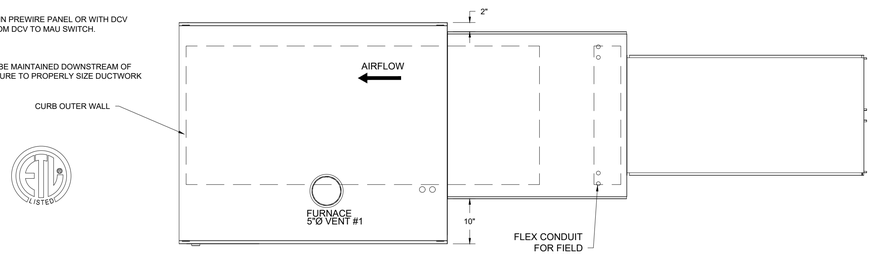
UTILITY SET GREASE CUP.
BI18 - 24" DISCHARGE EXTENSION.
BI - DISCHARGE ORIENTATION VERTICAL UPPER LEFT - CW INLET SIDE.
BI18 - INLET CONNECTION STANDARD 20" FLANGED GREASE DUCT.
UTILITY SET - SPRING VIBRATION ISOLATORS - BI18 / EQUIVALENT SIZED UTILITY SET - INDOOR/OUTDOOR USE.

NORMAL TEMPERATURE TEST DIRECT DRIVE
EXHAUST FAN MUST OPERATE CONTINUOUSLY WHILE EXHAUSTING AIR AT 350°F (176°C) UNTIL ALL FAN PARTS HAVE REACHED THERMAL EQUILIBRIUM, AND WITHOUT ANY DETERIORATING EFFECTS TO THE FAN WHICH WOULD CAUSE UNSAFE OPERATION.

* INLET NOTES:
LENGTH OF THE STRAIGHT DUCT ON THE INLET TO BE 3 TIMES THE EQUIVALENT DUCT DIAMETER BEFORE CONNECTING TO ANY FITTINGS SUCH AS ELBOWS TO AVOID SYSTEM EFFECT.

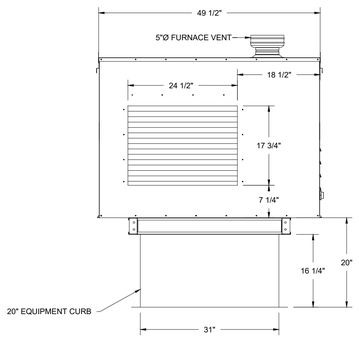
FAN #2 A2-IBT-200-20D - MAKEUP AIR UNIT WITH HEATER (MAU-1)
1. INDIRECT BENT TUBE GAS FIRED HEATER WITH 20" DIRECT DRIVE FAN, 1 FURNACE, ELECTRONIC FULL MODULATION, CONSTANT 80% EFFICIENCY, AND 6:1 MAX TURNDOWN FOR NG, (5:1 MAX TURNDOWN FOR LP). STAINLESS STEEL BURNER AND HEAT EXCHANGER.
2. INTAKE HOOD WITH EZ FILTERS
3. SIDE DISCHARGE - AIR FLOW RIGHT -> LEFT
4. MOTORIZED BACK DRAFT DAMPER 22.75" X 24" FOR SIZE 2 STANDARD & MODULAR HEATER UNITS W/EXTENDED SHAFT, STANDARD GALVANIZED CONSTRUCTION, 3/4" REAR FLANGE, LOW LEAKAGE, LF120S ACTUATOR INCLUDED
5. GAS PRESSURE GAUGE, 0-35", 2.5" DIAMETER, 1/4" THREAD SIZE
6. GAS PRESSURE GAUGE, 0 TO +10 INCHES WC., 2.5" DIAMETER, 1/8" THREAD SIZE, REAR THREAD
7. FREEZESTAT FACTORY SET AT 35°F AND 10 MINUTES.
8. SEPARATE 120V ELECTRICAL CONNECTION FOR ALL IBT HEATERS WITH 1 MODULE FOR STANDING POWER. 120V MUST BE RUN BY ELECTRICIAN FROM BUILDING PANEL TO MAU SWITCH.
9. USED WITH SIZE 1 AND SIZE 2 SIDE DISCHARGE IBT MODULES.
10. SEPARATE 120VAC WIRING PACKAGE FOR MAKE-UP AIR UNITS. OPTION MUST BE SELECTED WHEN MOUNTING VFD IN PREWIRE PANEL OR WITH DCV PACKAGE. PROVIDES SEPARATE 120VAC INPUT TO SUPPLY FAN. THIS 120V SIGNAL MUST BE RUN BY ELECTRICIAN FROM DCV TO MAU SWITCH.
11. HINGED DOUBLE WALL INSULATED DOOR ASSEMBLY (BURNER/BLOWER SECTION)
IBT - US Patent 877119 B2

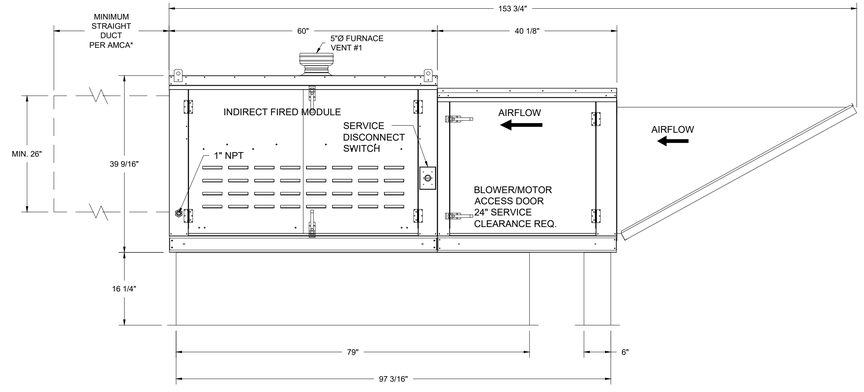
*NOTE: SUPPLY DUCT MUST BE INSTALLED TO MEET SMACNA STANDARDS. A MINIMUM STRAIGHT DUCT LENGTH MUST BE MAINTAINED DOWNSTREAM OF UNIT DISCHARGE AS OUTLINED IN AMCA PUBLICATION 201. DO NOT RELY ON UNIT TO SUPPORT DUCT IN ANY WAY. FAILURE TO PROPERLY SIZE DUCTWORK MAY CAUSE SYSTEM EFFECTS AND REDUCE PERFORMANCE OF THE EQUIPMENT.
SUGGESTED STRAIGHT DUCT SIZE IS 26" x 26"



SUPPLY SIDE HEATER INFORMATION:

WINTER TEMPERATURE = 5°F. TEMP. RISE = 69°F.
BTUs CALCULATED OFF STANDARD AIR DENSITY
OUTPUT BTUs AT ALTITUDE OF 0.0 ft. = 160218
INPUT BTUs AT ALTITUDE OF 0.0 ft. = 200272





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Date 1/10/20
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MICHAEL J. McGOVERN, R.A.
License No. 022257-1
Title REGISTERED ARCHITECT

Revisions:
1 ISSUE TO BID 11/23/20

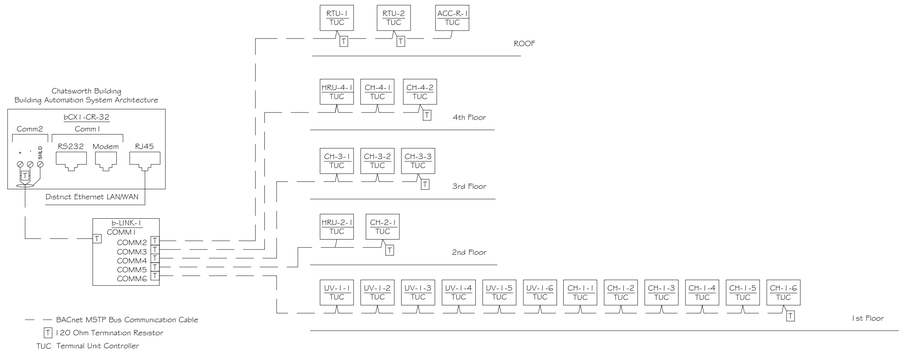
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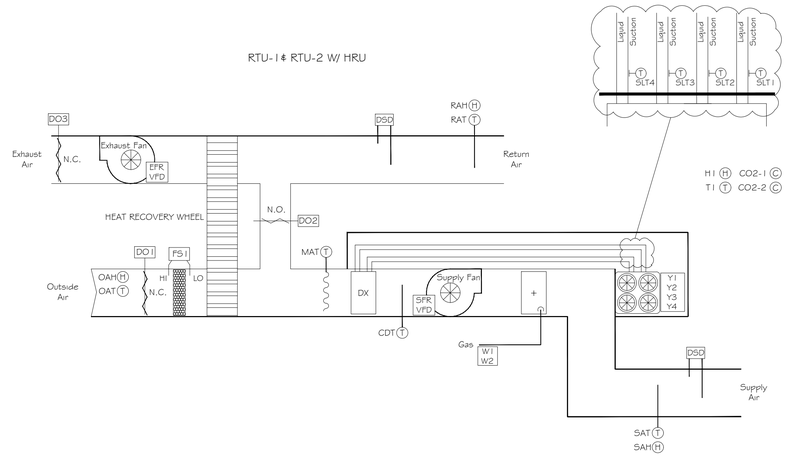
KITCHEN HOOD EXHAUST FAN & MAKEUP AIR UNIT SCHEDULES & DETAILS
2019 BOND REFERENDUM
CHATSWORTH AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

Job No. 4.1092.72.03
File No. 10927203M601

M6.03

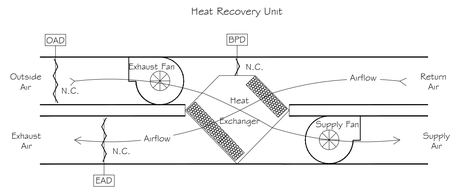


1 BAS SYSTEM ARCHITECTURE - CHATSWORTH BUILDING
NOT TO SCALE



2 ROOFTOP UNIT FLOW DIAGRAM
NOT TO SCALE

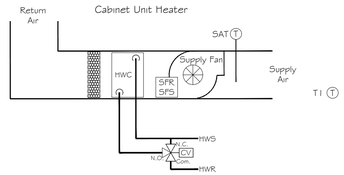
Legend		
Sym	Point Description	Point Type
CDT	DX Coil discharge air temp sensor	AI
CO2-1	Room CO2 transmitter 1	AI
CO2-2	Room CO2 transmitter 2	AI
DO1	Outside air damper actuator	AO
DO2	Return air damper actuator	AO
DO3	Exhaust air damper actuator	AO
DSDR	Duct smoke detector return	DI
DSDS	Duct smoke detector supply	DI
EFR	Power exh. fan start/stop control relay	DO
EFS	Power exh. fan run status	DI
FS1	Filter DP switch	DI
H1	Space humidity transmitter	AI
MAT	Mixed air temperature sensor	AI
OAH	Outside air humidity transmitter	AI
OAT	Outside air temperature sensor	AI
RAH	Return air humidity transmitter	AI
RAT	Return air temperature sensor	AI
SAH	Supply air humidity transmitter	AI
SAT	Supply air temperature sensor	AI
SFR	Supply fan start/stop control relay	DO
SFS	Supply fan run status	DI
SLT1	DX CLG suction line temp sensor stage 1	AI
SLT2	DX CLG suction line temp sensor stage 2	AI
SLT3	DX CLG suction line temp sensor stage 3	AI
SLT4	DX CLG suction line temp sensor stage 4	AI
T1	Space temperature sensor	AI
W1	Gas fired heating coil stage 1	DO
W2	Gas fired heating coil stage 2	DO
Y1	DX cooling control relay stage 1	DO
Y2	DX cooling control relay stage 2	DO
Y3	DX cooling control relay stage 3	DO
Y4	DX cooling control relay stage 4	DO



Legend		
Sym	Point Description	Point Type
BPD	HX Bypass damper	AO
EAD	Exhaust air damper	DO
EAT	Exhaust air temperature sensor	AI
OAD	Outside air damper	DO
OAT	Outside air temperature sensor	AI
RAT	Return air temperature sensor	AI
SAT	Supply air temperature sensor	AI
SFR	Supply fan start/stop control relay	DO
SFS	Supply fan run status	DI
T1	Space temperature sensor	AI

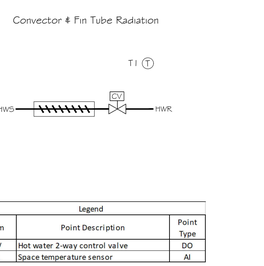
Typical for HRU-2-1 and HRU-4-1

3 HRU FLOW DIAGRAM
NOT TO SCALE



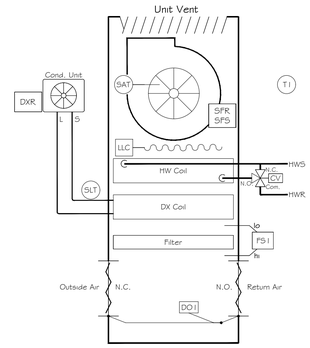
Legend		
Sym	Point Description	Point Type
CV	Hot water 3-way control valve	AO
SAT	Supply air temperature sensor	AI
SFR	Supply fan start/stop control relay	DO
SFS	Supply fan run status	DI
T1	Space temperature sensor	AI

4 CUH FLOW DIAGRAM
NOT TO SCALE



Legend		
Sym	Point Description	Point Type
CV	Hot water 2-way control valve	DO
T1	Space temperature sensor	AI

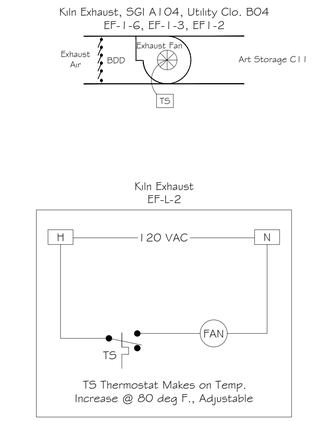
5 FTR FLOW DIAGRAM
NOT TO SCALE



Legend		
Sym	Point Description	Point Type
CV	Hot water 3-way control valve	AO
DO1	Outside/Return air damper cntrl signal	AO
DXR	DX cooling start/stop control relay	DO
FS1	Filter DP switch	DI
LLC	Low-limit thermostat	DI
SAT	Supply air temperature sensor	AI
SFR	Supply fan start/stop control relay	DO
SFS	Supply fan run status	DI
SLT	Suction line termperature sensor	AI
T1	Space temperature sensor	AI

Typical for UV-1-1 thru UV-1-6

6 UV FLOW DIAGRAM
NOT TO SCALE



Legend		
Sym	Point Description	Point Type
EFR	Exhaust fan start/stop control relay	DO
EFS	Exhaust fan run status current sensor	DI
T1	Space temperature sensor	AI

Legend		
Sym	Point Description	Point Type
EFR	Exhaust fan start/stop control relay	DO
EFS	Exhaust fan run status current sensor	DI
T1	Space temperature sensor	AI

7 EXHAUST FAN FLOW DIAGRAMS
NOT TO SCALE

8 VRF SYSTEM PIPING SCHEMATIC DIAGRAM
NOT TO SCALE

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Date 1/10/20
Checked
Drawn IM/MAM

Revisions:

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1	ISSUE TO BID 11/23/20

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NYSED PROJECT # 66-07-01-03-0-005-020

DDC CONTROL & PIPING DIAGRAMS

2019 BOND REFERENDUM
CHATSWORTH AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

Job No. 4.1092.72.03
File No. 10927202M601

M6.04

ABBREVIATIONS

&	=	AND
ø	=	DIAMETER OR ROUND
ADD'L	=	ADDITIONAL
AFF	=	ABOVE FINISHED FLOOR
ALT	=	ALTERNATE
ARCH.	=	ARCHITECTURAL
BLDG	=	BUILDING
CD	=	CONDENSATE DRAIN
CDP	=	CONDENSATE DRAIN PUMP
CLG	=	CEILING
CO	=	CLEANOUT
CODP	=	CLEANOUT DECK PLATE
COWP	=	CLEANOUT WALL PLATE
DCW	=	DOMESTIC COLD WATER
DDC	=	DIRECT DIGITAL CONTROL
DHW	=	DOMESTIC HOT WATER
DHWR	=	DOMESTIC HOT WATER RETURN
DN	=	DOWN
DWG	=	DRAWING
EA	=	EACH
ESP	=	ELEVATOR SUMP PUMP
EXIST	=	EXISTING
FD	=	FLOOR DRAIN
GC	=	GENERAL CONTRACTOR
GPH	=	GALLON PER HOUR
GPM	=	GALLON PER MINUTE
HWH	=	DOMESTIC HOT WATER HEATER
ID	=	INSIDE DIAMETER (DIM)
IN	=	INCH
INFO	=	INFORMATION
JAN	=	JANITOR
MAX	=	MAXIMUM
MC	=	MECHANICAL CONTRACTOR
MECH	=	MECHANICAL
MIN	=	MINIMUM
NTS	=	NOT TO SCALE
PC	=	PLUMBING CONTRACTOR
PV	=	PLUMBING VENT
RD	=	ROOF DRAIN
RL	=	ROOF LEADER
SPEC	=	SPECIFICATION
SP	=	SUMP PUMP
SS	=	STAINLESS STEEL
STD	=	STANDARD
T&P	=	TEMPERATURE & PRESSURE
TMV	=	THERMOSTATIC MIXING VALVE
TYP	=	TYPICAL
VTR	=	VENT THROUGH ROOF
W/	=	WITH

PIPING LEGEND & SYMBOLS

NOT TO SCALE

- SANITARY WASTE/ROOF LEADER PIPING ABOVE GRADE
- SANITARY WASTE/STORM PIPING BELOW SLAB
- SANITARY VENT PIPING
- DOMESTIC COLD WATER (DCW) PIPING
- DOMESTIC HOT WATER (DHW) PIPING
- DOMESTIC HOT WATER RETURN (DHWR) PIPING
- GAS GAS GAS GAS — GAS PIPING
- CONDENSATE DRAIN PIPING
- F — FIRE PROTECTION PIPING
- V — VACUUM PIPING
- PIPE TURN UP
- PIPE TURN DOWN
- PIPE TOP CONNECTION
- PIPE BOTTOM CONNECTION
- OR — SHUTOFF BALL VALVE
- POINT OF CONNECTION OF NEW PIPING TO EXISTING
- POINT OF DISCONNECTION OF DEMOLISHED PIPING FROM EXISTING

GENERAL CONSTRUCTION NOTES

1. REFER TO "MULTIPLE PRIME CONTRACT NOTES" ON DWG. A1.00 & SPECIFICATIONS FOR CONTRACTORS' RESPONSIBILITIES.
2. GC IS RESPONSIBLE FOR CUTTING OF ALL WALLS, FLOORS, CEILING, ROOF, ETC. FOR ALL PLUMBING PIPE WALL & FLOOR & ROOF PENETRATIONS. PC TO COORDINATE LOCATIONS & SIZES W/ GC.
3. GC IS REQUIRED TO PATCH (TO MATCH EXISTING), IMMEDIATELY AFTER REMOVAL, ALL WALL, FLOOR, CLG. & ROOF OPENINGS WHERE EXISTING EQUIPMENT, PIPES, ETC. ARE BEING REMOVED. SEAL OPENING WITH 2 HOUR FIRE BARRIER CAULK. SEE GENERAL LOCATIONS ON PLUMBING DEMOLITION PLANS. PC TO COORDINATE W/ GC.
4. WHERE A FIREPROOFING MATERIAL THAT IS INTEGRAL TO THE RATING OF AN EXISTING FIRE-RATED ASSEMBLY IS REMOVED OR DISTURBED, CONTRACTOR IS REQUIRED TO REPLACE THE MATERIAL TO PRESERVE THE RATING.

PLUMBING SYSTEM MATERIALS

PIPING:

WASTE & VENT PIPING BELOW GRADE SHALL BE SERVICE WEIGHT CAST IRON PIPE WITH GASKETS, ABOVE GRADE SHALL BE NO-HUB SERVICE WEIGHT CAST IRON PIPE WITH STAINLESS STEEL SHIELDED COUPLINGS.

ROOF LEADER & STORM PIPING BELOW GRADE SHALL BE SERVICE WEIGHT CAST IRON PIPE WITH GASKETS, ABOVE GRADE SHALL BE NO-HUB SERVICE WEIGHT CAST IRON PIPE WITH STAINLESS STEEL SHIELDED COUPLINGS.

DOMESTIC HOT AND COLD WATER PIPING SHALL BE TYPE "L" COPPER PIPE WITH WROUGHT COPPER SOLDER FITTINGS (LEAD-FREE SOLDER). BELOW GRADE SHALL BE TYPE "K" COPPER WITHOUT FITTINGS.

GAS PIPING SHALL BE SCHEDULE 40 BLACK STEEL PIPE WITH MALLEABLE IRON THREADED FITTINGS (PIPE SIZES 2-1/2" & SMALLER) AND WELDED FITTINGS (PIPE SIZES 3" & LARGER). PRIME & PAINT W/ TWO (2) FINISH COATS OF YELLOW COLOR PAINT.

CONDENSATE DRAIN PIPING SHALL BE TYPE "L" COPPER PIPE WITH WROUGHT COPPER SOLDER FITTINGS.

GAS VENT PIPING SHALL BE SCH. 40 BLACK STEEL PIPE W/ THREADED FITTINGS.

INSULATION:

ALL DOMESTIC HOT AND COLD WATER PIPING SHALL BE INSULATED WITH FIBERGLASS PIPE INSULATION WITH ASJ JACKET. REFER TO SPECIFICATIONS FOR INSULATION THICKNESS.

ALL ROOF LEADER & STORM PIPING ABOVE GRADE SHALL BE INSULATED WITH FIBERGLASS PIPE INSULATION WITH ASJ JACKET. REFER TO SPECIFICATIONS FOR INSULATION THICKNESS.

ALL CONDENSATE DRAIN PIPING SHALL BE INSULATED WITH 1" THICK FLEXIBLE ELASTOMERIC INSULATION (AP ARMAFLEX BLACK LAPSEAL OR APPROVED EQUAL).

CLEANOUTS:

FLOOR: J.R. SMITH #4023S W/ ROUND NICKEL-BRONZE TOP.

WALL: J.R. SMITH #4532S W/ ROUND STAINLESS STEEL TOP.

PIPE INSULATION/COVERS:

FOR ALL LAVATORIES, INSTALL PROTECTIVE ENCLOSURE "LAV SHIELD" W/ TAMPER-RESISTANT SCREWS BY TRUEBRO OR APPROVED EQUAL.

VALVES & FITTINGS:

ALL VALVES & FITTINGS FOR DOMESTIC WATER SYSTEM SHALL BE LEAD FREE TYPE IN COMPLIANCE W/ REQUIREMENTS OF NSF/ANSI STANDARD 61. ALL BALL VALVES SHALL BE FULL-PORT TYPE.

PENETRATION FIRESTOPPING:

ALL PIPE PENETRATIONS (AT WALL, FLOOR, CHASE, ETC.) SHALL BE SEALED & CAULKED W/ 2 HR RATED FIRESTOPPING MATERIALS.

PLUMBING GENERAL NOTES

1. ALL WORK SHALL CONFORM TO LATEST EDITION OF NEW YORK STATE ENERGY CODE & PLUMBING CODE, AND ALL OTHER APPLICABLE CODES, ORDINANCES, AND LOCAL AUTHORITY HAVING JURISDICTION.
2. CONTRACTOR SHALL VISIT JOB SITE AND NOTE ALL EXISTING CONDITIONS TO BE MET BEFORE SUBMITTING BID. THE DRAWINGS ARE GENERALLY DIAGRAMMATIC AND SHOW THE INTENT OF WORK.
3. CONTRACTOR SHALL FAMILIARIZE THEMSELVES WITH THE EXTENT AND SCOPE OF THE WORK PRIOR TO SUBMITTING BIDS OR COMMENCING WORK.
4. CONTRACTOR TO PROCURE AND PAY FOR ALL NECESSARY PERMITS AND LICENSES REQUIRED TO CARRY OUT WORK, OBTAIN AND PAY FOR ALL NECESSARY CERTIFICATES OF APPROVAL FOR WORK, AND PAY FOR ANY LEGAL FEES.
5. INSTALLATION TO COMPLY WITH ALL FEDERAL, STATE, MUNICIPAL LAWS, AND ALL CODES, RULES, ORDINANCES, AND REGULATIONS OF HEALTH, PUBLIC OR OTHER AUTHORITIES CONTROLLING OR LIMITING THE METHODS, MATERIALS TO BE USED OR ACTIONS OF THOSE EMPLOYED IN THE WORK.
6. CONTRACTOR SHALL REVIEW DRAWINGS AND FIELD VERIFY ALL DIMENSIONS AND CONDITIONS PRIOR TO COMMENCING WORK. CONTRACTOR SHALL REPORT ANY DISCREPANCIES, AND ADDRESS ALL QUESTIONS TO ARCHITECT/ENGINEER PRIOR TO COMMENCING WORK.
7. PIPE INSTALLATION AS FOLLOWS:
   a) RUN ALL PIPING CONCEALED IN CEILINGS, WALLS AND PARTITIONS.
   b) ALL PIPING TO BE PITCHED TO LOW POINTS WITH DRAIN VALVES. STORM AND WASTE PIPING SHALL BE SLOPED PER LATEST PLUMBING CODE.
   c) SLEEVE PIPING THAT PASSES THROUGH WALLS.
   d) INSTALL PITCH POCKETS & FLASH ALL PIPING THAT PASSES THROUGH ROOF.
   e) PROVIDE ROD HANGERS WITH CLEVIS PIPE SUPPORT PER SPECIFICATION.
   f) PROVIDE VALVES REQUIRED FOR COMPLETE CONTROL OF ALL SYSTEMS. STOP VALVES FOR SUPPLY TO ALL FIXTURES TO BE CHROME PLATED WHERE EXPOSED.
   g) PROVIDE ACCESS DOORS FOR ALL CONCEALED VALVES AND CLEANOUTS.
   h) CORE-DRILL FLOOR SLABS & PROVIDE 2-HR RATED FIRE STOPPING MATERIALS FOR ALL PIPE PENETRATION THROUGH FLOOR SLABS.
8. CONTRACTOR TO PERFORM ALL TESTING OF THE PLUMBING WORK IN THE PRESENCE OF THE OWNER. PROVIDE ALL APPARATUS, TEMPORARY CONNECTIONS, AND OTHER REQUIREMENTS TO DO SUCH TESTS. ANY DEFECTS, LEAKS, ETC. WILL BE REPLACED AND TEST REPEATED UNTIL TEST REQUIREMENTS ARE MET.
9. SUBMIT SHOP DRAWINGS OF ALL WORK TO BE DONE, EQUIPMENT, AND FIXTURES FURNISHED.
10. PLUMBING CONTRACTOR TO CARRY OUT PERIODIC CLEANING TO REMOVE RUBBISH ETC., TO LEAVE PREMISES FREE FROM DEBRIS, AND DISCARDED MATERIALS. AFTER INSTALLATION, CLEAN FIXTURES, FITTINGS, ETC. AND LEAVE READY FOR USE.
11. CONTRACTOR SHALL BE RESPONSIBLE TO DISPOSE OF ALL DEMOLISHED MATERIAL OF SITE IN AN APPROVED MANNER.
12. CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANING UP WORK AREAS UPON COMPLETION OF WORK.

Date	1/10/20
Checked	AL
Drawn	AL/IM

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NYSED PROJECT # 66-07-01-03-0-005-020

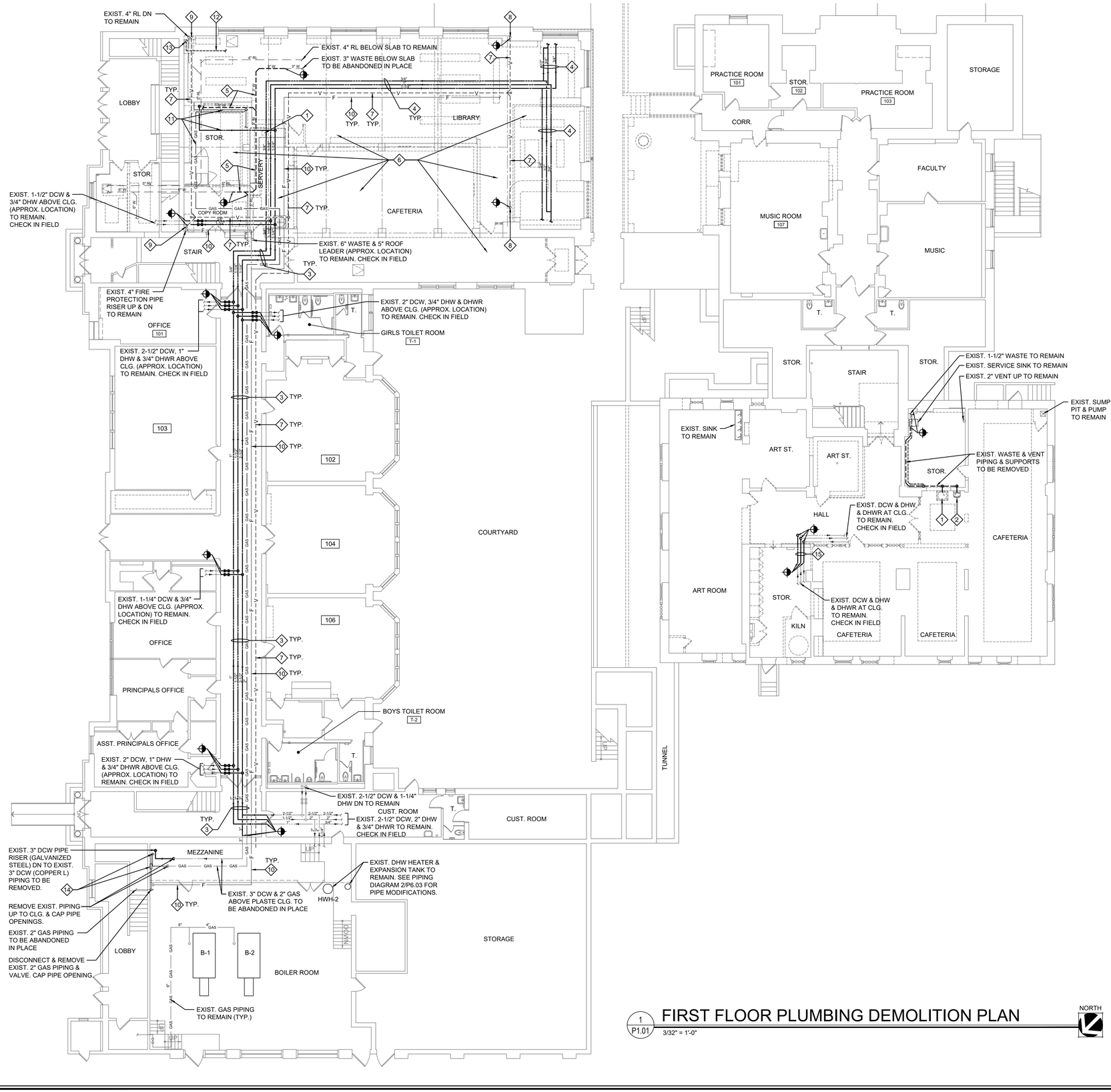
PLUMBING NOTES

2019 BOND REFERENDUM
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MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

Job No. 4.1092.72.03

File No. 10927203P201

P0.01



GENERAL DEMOLITION NOTES

1. LOCATIONS/ROUTINGS/SIZES OF EXIST. PLUMBING PIPING SHOWN ARE BASED ON SITE OBSERVATIONS & THEY ARE APPROXIMATE. PC IS RESPONSIBLE TO VERIFY THEM IN FIELD. GC TO SAWCUT EXIST. WALLS/FLOOR SLABS OR OPENING EXIST. CHASES AS REQUIRED TO ACCOMMODATE PLUMBING INSTALLATION. GC TO PATCH WALLS/CHASES/FLOOR SLABS AS REQUIRED TO MATCH EXISTING.
2. ANY CUTTING, PATCHING, OR FINISH REPAIR WORK REQUIRED FOR PLUMBING INSTALLATION IS THE RESPONSIBILITY OF GC.
3. PC IS RESPONSIBLE FOR SHUTDOWN AND/OR TO ISOLATE SECTIONS OF PLUMBING SYSTEM, AND DRAIN WATER FROM THE SYSTEM TO ACCOMMODATE FOR MODIFICATION/INSTALLATION. RESTORE THE SYSTEM AS REQUIRED.
4. ALL EXIST. CONDENSATE DRAIN PIPING THAT IS ASSOCIATED WITH DEMOLISHED HVAC UNITS SHALL BE REMOVED BY MC. REFER TO MECH. DWGS. FOR LOCATIONS.
5. REFER TO DWGS. P2.01 THRU P2.03 FOR ADDITIONAL PLUMBING DEMOLITION.
6. ALL EXIST. ABANDONED VACUUM PIPING ABOVE CORRIDOR CEILING SHALL BE REMOVED IN ENTIRETY. ALL VACUUM PIPING IN CHASES/WALLS & VACUUM OUTLETS SHALL BE ABANDONED IN PLACE. CAP PIPE OPENINGS ON CHASE/WALLS. CHECK IN FIELD

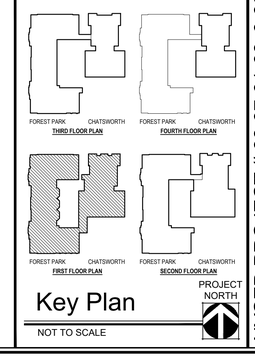
ITEM #	DEMOLITION KEY NOTES
1	EXIST. SINK TO BE REMOVED, COMPLETE W/ FAUCET, PLUMBING PIPING, VALVES, ETC. CAP WASTE PIPE OPENING AT MAIN BELOW SLAB.
2	EXIST. DRINKING FOUNTAIN TO BE CAREFULLY REMOVED, COMPLETE W/ PLUMBING PIPING, VALVES, ETC. CAP WASTE PIPE OPENING AT MAIN BELOW SLAB. TURN DRINKING FOUNTAIN OVER TO OWNER.
3	EXIST. DOMESTIC WATER & GAS PIPING ABOVE PLASTER CLG. TO BE REMOVED, COMPLETE W/ EXIST. VALVES, INSULATION, SUPPORTS, ETC. CHECK IN FIELD FOR EXACT LOCATIONS.
4	EXIST. DOMESTIC WATER ABOVE PLASTER CLG. TO BE REMOVED, COMPLETE W/ EXIST. VALVES, INSULATION, SUPPORTS, ETC. CHECK IN FIELD FOR EXACT LOCATIONS.
5	EXIST. WASTE PIPING BELOW SLAB TO BE REMOVED. CHECK IN FIELD FOR EXACT LOCATION.
6	ALL ABANDONED UTILITY PIPING (WASTE/VENT, DCW/DHW/DHWR, GAS, SPRINKLER, VACUUM, ETC.) ABOVE PLASTER CLG. TO BE REMOVED, COMPLETE W/ EXIST. VALVES, INSULATION, SUPPORTS, ETC. CHECK IN FIELD
7	EXIST. ABANDONED VACUUM PIPING ABOVE PLASTER CLG. TO BE REMOVED, COMPLETE W/ EXIST. SUPPORTS, ETC. CHECK IN FIELD FOR EXACT LOCATION.
8	EXIST. ABANDONED VACUUM PIPE RISER UP TO REMAIN. REMOVE EXIST. PIPING UP TO FLOOR SLAB & CAP PIPE OPENING. CHECK IN FIELD FOR EXACT LOCATION.
9	EXIST. ABANDONED VACUUM PIPE RISER UP TO BE REMOVED. CHECK IN FIELD FOR EXACT LOCATION.
10	EXIST. 4" FIRE PROTECTION PIPING FOR STANDPIPE SYSTEM ABOVE PLASTER CLG. TO REMAIN. CHECK IN FIELD FOR EXACT LOCATION.
11	EXIST. GAS & DOMESTIC WATER PIPING TO BE REMOVED, COMPLETE W/ EXIST. VALVES, SUPPORTS, ETC. CHECK IN FIELD
12	ALL EXIST. SANITARY VENT ABOVE CLG. TO BE REMOVED, COMPLETE W/ SUPPORTS, ETC. CHECK IN FIELD FOR EXACT LOCATION.
13	EXIST. SANITARY VENT RISER UP TO ROOF TO BE REMOVED. CHECK IN FIELD FOR EXACT LOCATION.
14	EXIST. 2" GAS RISER DN & RELATED PIPING, GAS METER (IN STORAGE ROOM BELOW), VALVES, SUPPORTS, ETC. TO BE REMOVED.
15	EXIST. DOMESTIC WATER PIPING & RELATED DRAIN VALVES, ELBOWS, FITTINGS, INSULATION, ETC. TO BE REMOVED.

1 P1.01 FIRST FLOOR PLUMBING DEMOLITION PLAN

3/32" = 1'-0"

NORTH

CHATSWORTH AVE. SCHOOL



Key Plan

NOT TO SCALE

PROJECT NORTH

Date	1/10/20
Checked	AL
Drawn	AL/IM

MICHAEL J. McGOVERN, R.A.
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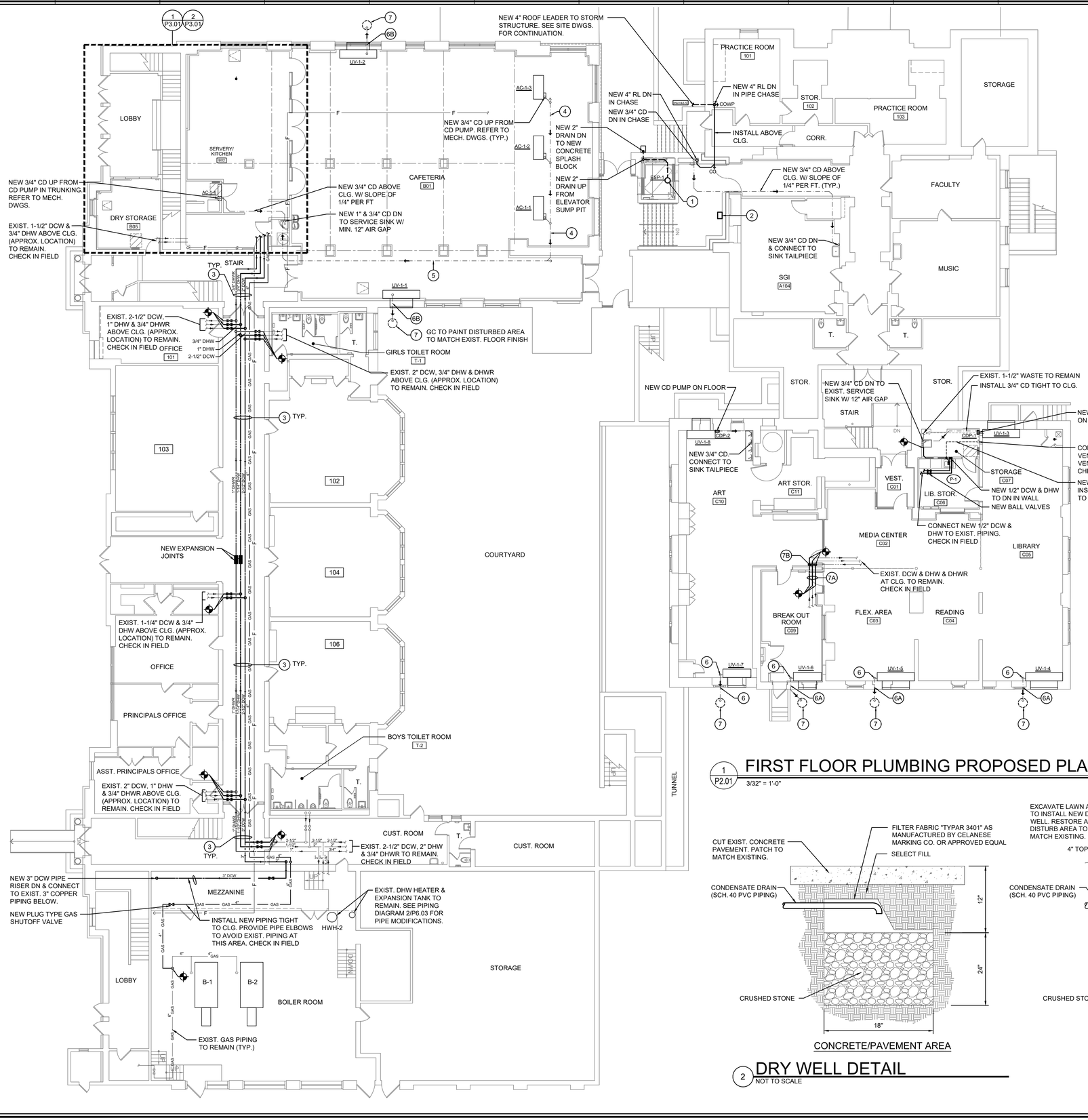
FIRST FLOOR PLUMBING DEMOLITION PLAN

2019 BOND REFERENDUM
CHATSWORTH AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

Job No. 4.1092.72.03

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P1.01



GENERAL CONSTRUCTION NOTES

1. LOCATIONS/ROUTINGS/SIZES OF EXIST. PLUMBING PIPING SHOWN ARE BASED ON SITE OBSERVATIONS & THEY ARE APPROXIMATE. PC IS RESPONSIBLE TO VERIFY THEM IN FIELD. GC TO SAWCUT EXIST. WALLS/FLOOR SLABS OR OPENING EXIST. CHASES AS REQUIRED TO ACCOMMODATE PLUMBING INSTALLATION. GC TO PATCH WALLS/CHASES/FLOOR SLABS AS REQUIRED TO MATCH EXISTING.
2. ALL NEW PLUMBING PIPING SHALL BE INSTALL CONCEALED IN NEW WALLS/CHASES/ABOVE CEILING/BELOW SLABS, UNLESS OTHERWISE NOTED.
3. PC SHALL CHECK IN FIELD FOR EXACT ROUTING OF NEW PLUMBING PIPING. REUSE EXISTING WALL/FLOOR PENETRATIONS WHERE POSSIBLE.
4. PC TO CORE-DRILL FOR NEW PIPE PENETRATIONS AS REQUIRED & CAULK W/ 2HR RATED FIRESTOPPING MATERIALS. GC TO SAW-CUT EXIST. WALLS/FLOORS/CLG. AS REQUIRED & PATCH & PAINT TO MATCH EXIST. FINISH. PC TO PROVIDE PIPE ELBOWS, FITTINGS, ETC. REQUIRED FOR THE PROJECT.
5. ANY CUTTING, PATCHING, OR FINISH REPAIR WORK REQUIRED FOR PLUMBING WORK IS THE RESPONSIBILITY OF GC.
6. ALL NEW ROOF LEADER PIPING SHALL BE INSULATED WITH 1" THICK FIBERGLASS PIPE INSULATION WITH ASJ JACKETS. ALL NEW CONDENSATE PIPING SHALL BE INSULATED WITH 1" THICK FLEXIBLE ELASTOMERIC INSULATION (AP ARMAFLEX BLACK LAPSEAL OR APPROVED EQUAL). PROVIDE PIPE IDENTIFICATIONS WITH FLOW ARROWS ON PIPE INSULATION.
7. PC IS RESPONSIBLE FOR SHUTDOWN AND/OR TO ISOLATE SECTIONS OF PLUMBING & FIRE PROTECTION SYSTEMS, AND DRAIN WATER FROM THE SYSTEMS TO ACCOMMODATE FOR MODIFICATION/INSTALLATION. RESTORE THE SYSTEMS AS REQUIRED.
8. GC IS RESPONSIBLE TO REMOVE EXIST. CEILING/GRIDS & RELOCATE EXIST. LIGHT FIXTURES, FIRE & COMMUNICATION DEVICES, ETC. TO ACCOMMODATE PLUMBING INSTALLATION. REINSTALL TO MATCH EXISTING. REPLACE ALL DAMAGED TILES. MODEL & TYPE OF NEW CEILING TILES SHALL MATCH EXISTING.

ITEM #	PLUMBING KEY NOTES (PROPOSED)
1	NEW SUMP PUMP IN ELEVATOR SUMP PIT. SEE DETAIL 4/P6.01.
2	NEW SUMP PUMP CONTROL PANEL. COORDINATE IN FIELD & W/ OWNER FOR EXACT MOUNTING LOCATION.
3	NEW DOMESTIC WATER & GAS PIPING ABOVE NEW CLG. SEE PLAN FOR PIPE SIZES.
4	NEW 1" CD ABOVE CLG. W/ SLOPE OF 1/8" PER FT. INSTALL TIGHT TO FLOOR STRUCTURE. PAINT TO MATCH CLG. FINISH.
5	NEW 1" CD ABOVE NEW CLG. W/ SLOPE OF 1/4" PER FT.
6	NEW 3/4" CD UP FROM CD PUMP. REFER TO MECH. DWG. FOR CD PUMP INFORMATION.
6A	CORE DRILL EXIST. MASONRY WALL TO INSTALL NEW 3/4" CD BELOW SLAB. PATCH & CAULK WATER-TIGHT.
6B	CORE DRILL EXIST. FLOOR SLAB & FOUNDATION WALL TO INSTALL NEW 1" CD BELOW SLAB. PATCH & CAULK WATER-TIGHT.
7	GC TO SAWCUT EXIST. CONCRETE PAVEMENT TO INSTALL NEW DRYWELL. PATCH SIDEWALL TO MATCH EXIST. SEE DRYWELL DETAIL 2/P2.01. PC TO INSTALL NEW PIPING.
7A	INSTALL NEW 1-1/2" DCW & DHW & 1" DHWR TIGHT TO CLG. SIZES OF NEW PIPING TO MATCH EXIST. CHECK IN FIELD.
7B	INSTALL NEW PIPING ABOVE EXIST. ELECTRICAL CONDUIT. PROVIDE DRAIN VALVE ON EACH PIPING. CORE DRILL EXIST. WALL FOR NEW PIPE PENETRATIONS. CHECK IN FIELD

1 P2.01 FIRST FLOOR PLUMBING PROPOSED PLAN

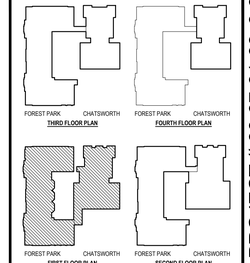
3/32" = 1'-0"

NORTH

2 DRY WELL DETAIL

NOT TO SCALE

CHATSWORTH AVE. SCHOOL



Key Plan

NOT TO SCALE

PROJECT NORTH

Date 1/10/20
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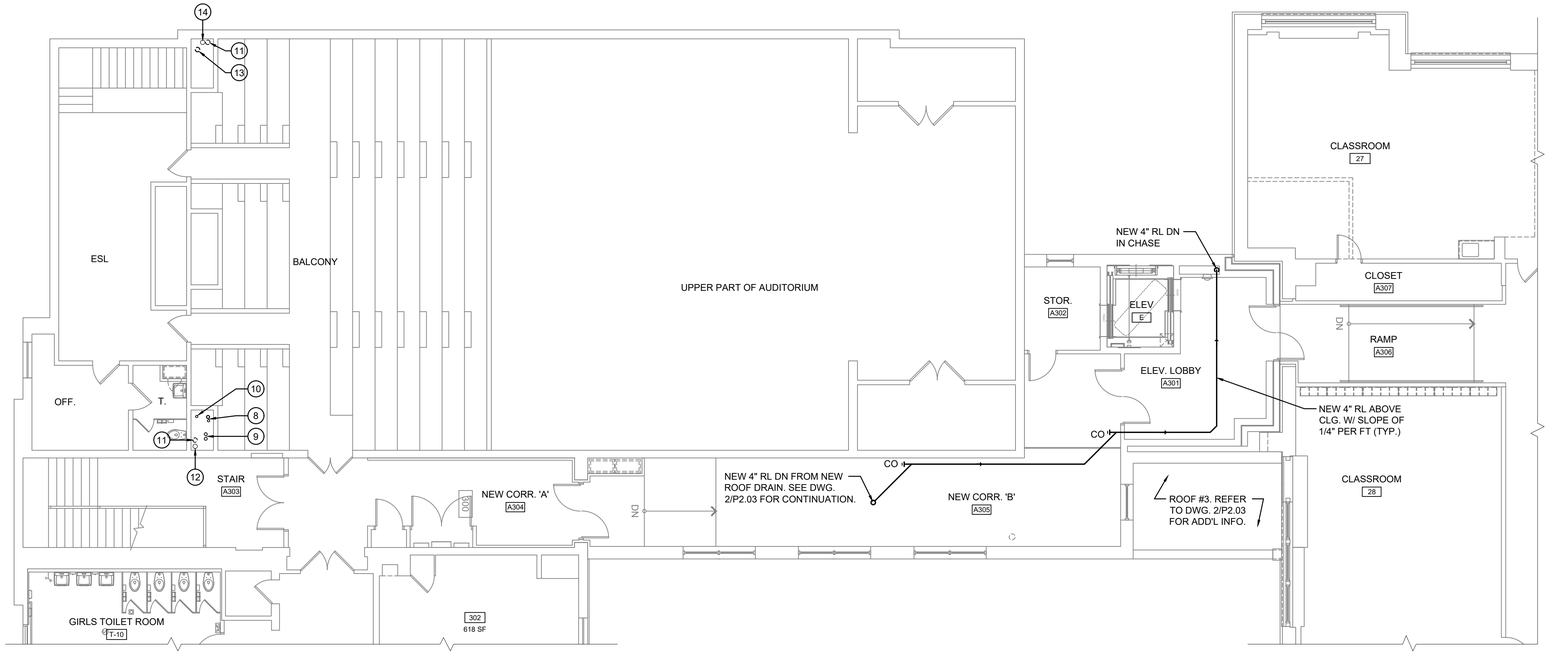
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Job No. 4.1092.72.03

File No. 10927203P201

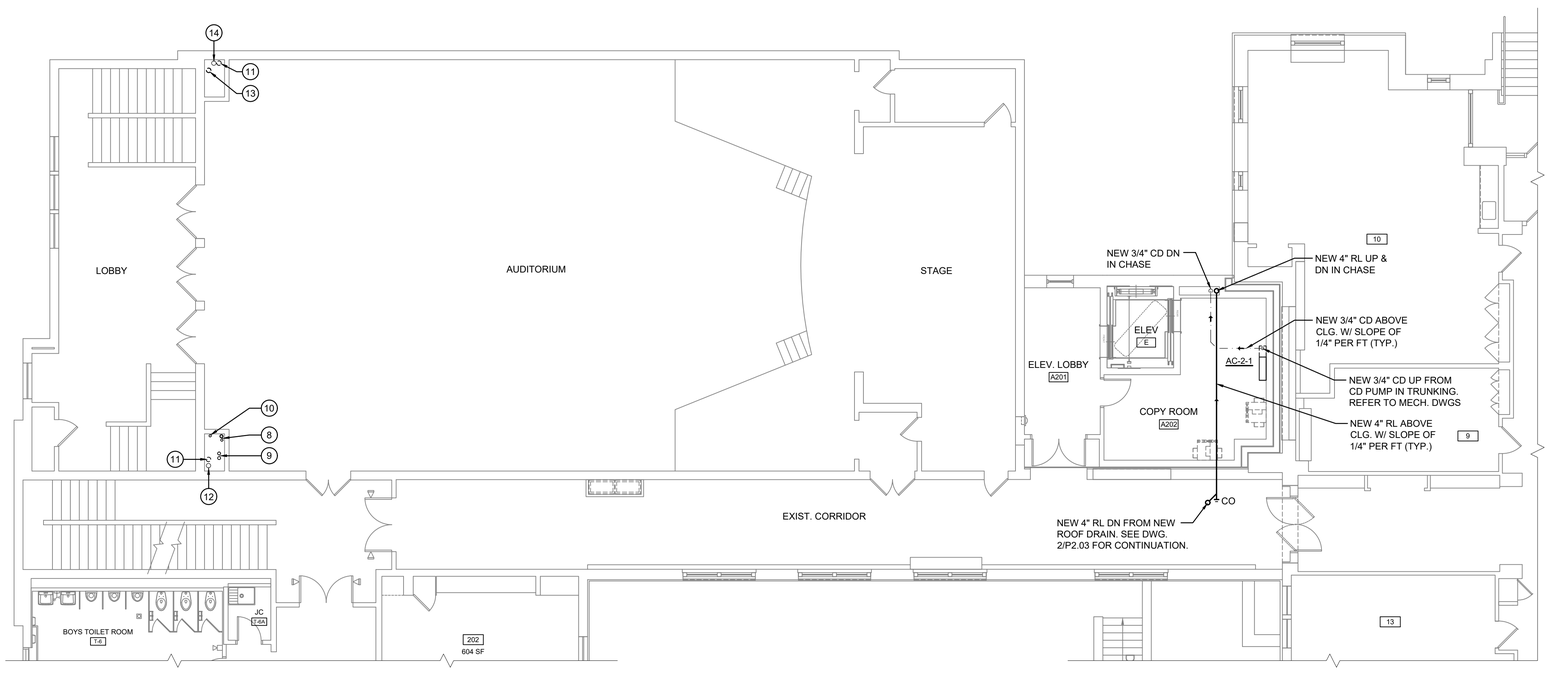
P2.01



2 P2.02 PARTIAL THIRD FLOOR PLUMBING PROPOSED PLAN

1/8" = 1'-0"

NORTH



1 P2.02 PARTIAL SECOND FLOOR PLUMBING PROPOSED PLAN

1/8" = 1'-0"

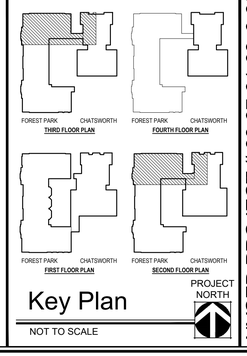
NORTH

GENERAL CONSTRUCTION NOTES

1. LOCATIONS/ROUTINGS/SIZES OF EXIST. PLUMBING PIPING SHOWN ARE BASED ON SITE OBSERVATIONS & THEY ARE APPROXIMATE. PC IS RESPONSIBLE TO VERIFY THEM IN FIELD. GC TO SAWCUT EXIST. WALLS/FLOOR SLABS OR OPENING EXIST. CHASES AS REQUIRED TO ACCOMMODATE PLUMBING INSTALLATION. GC TO PATCH WALLS/CHASES/FLOOR SLABS AS REQUIRED TO MATCH EXISTING.
2. ALL NEW PLUMBING PIPING SHALL BE INSTALL CONCEALED IN NEW WALLS/CHASES/ABOVE CEILING/BELOW SLABS, UNLESS OTHERWISE NOTED.
3. PC SHALL CHECK IN FIELD FOR EXACT ROUTING OF NEW PLUMBING PIPING. REUSE EXISTING WALL/FLOOR PENETRATIONS WHERE POSSIBLE.
4. PC TO CORE-DRILL FOR NEW PIPE PENETRATIONS AS REQUIRED & CAULK W/ 2HR RATED FIRESTOPPING MATERIALS. GC TO SAW-CUT EXIST. WALLS/FLOORS/CLG. AS REQUIRED & PATCH & PAINT TO MATCH EXIST. FINISH. PC TO PROVIDE PIPE ELBOWS, FITTINGS, ETC. REQUIRED FOR THE PROJECT.
5. ANY CUTTING, PATCHING, OR FINISH REPAIR WORK REQUIRED FOR PLUMBING INSTALLATION IS THE RESPONSIBILITY OF GC.
6. ALL NEW ROOF LEADER PIPING SHALL BE INSULATED WITH 1" THICK FIBERGLASS PIPE INSULATION WITH ASJ JACKETS. ALL NEW CONDENSATE PIPING SHALL BE INSULATED WITH 1" THICK FLEXIBLE ELASTOMERIC INSULATION (AP ARMAFLEX BLACK LAPSEAL OR APPROVED EQUAL). PROVIDE PIPE IDENTIFICATIONS WITH FLOW ARROWS ON PIPE INSULATION.
7. PC IS RESPONSIBLE FOR SHUTDOWN AND/OR TO ISOLATE SECTIONS OF PLUMBING & FIRE PROTECTION SYSTEMS, AND DRAIN WATER FROM THE SYSTEMS TO ACCOMMODATE FOR MODIFICATION/INSTALLATION. RESTORE THE SYSTEMS AS REQUIRED.
8. GC IS RESPONSIBLE TO REMOVE EXIST. CEILING/GRIDS & RELOCATE EXIST. LIGHT FIXTURES, FIRE & COMMUNICATION DEVICES, ETC. TO ACCOMMODATE PLUMBING INSTALLATION. REINSTALL TO MATCH EXISTING. REPLACE ALL DAMAGED TILES. MODEL & TYPE OF NEW CEILING TILES SHALL MATCH EXISTING.

ITEM #	PLUMBING KEY NOTES
8	NEW 4" GAS & 1" GAS VENT UP & DN IN EXIST. CHASE. SUPPORT OFF EXIST. CHASE WALL AT 6'-0" O.C. W/ SUPPORT BRACKETS.
9	NEW 4"Ø AIR INTAKE PIPE & 4"Ø FLUE VENT UP & DN IN EXIST. CHASE. SUPPORT OFF EXIST. CHASE WALL AT 6'-0" O.C. W/ SUPPORT BRACKETS.
10	NEW 2" SANITARY VENT UP & DN IN EXIST. CHASE. SUPPORT OFF EXIST. CHASE WALL AT 6'-0" O.C. W/ SUPPORT BRACKETS.
11	EXIST. ABANDONED VACUUM PIPE RISER & SUPPORTS TO BE REMOVED. DISCONNECT ALL BRANCH PIPING TO VACUUM PORT & CAP PIPE OPENING. CHECK IN FIELD FOR EXACT LOCATION.
12	EXIST. 4" FIRE PROTECTION PIPE RISER TO REMAIN. CHECK IN FIELD FOR EXACT LOCATION.
13	EXIST. 2" SANITARY VENT RISER & SUPPORTS TO BE REMOVED. CHECK IN FIELD FOR EXACT LOCATION.
14	EXIST. 4" ROOF LEADER PIPE RISER TO REMAIN. CHECK IN FIELD FOR EXACT LOCATION.

CHATSWORTH AVE. SCHOOL



Key Plan

NOT TO SCALE

PROJECT NORTH

NYSED PROJECT # 66-07-01-03-0-005-020

Date	1/10/20
Checked	YS
Drawn	AL/1M

MICHAEL J. McGOVERN, R.A.
License No. 022257-1
Title REGISTERED ARCHITECT

Revisions:

#	
1	ISSUE TO BID 11/23/20

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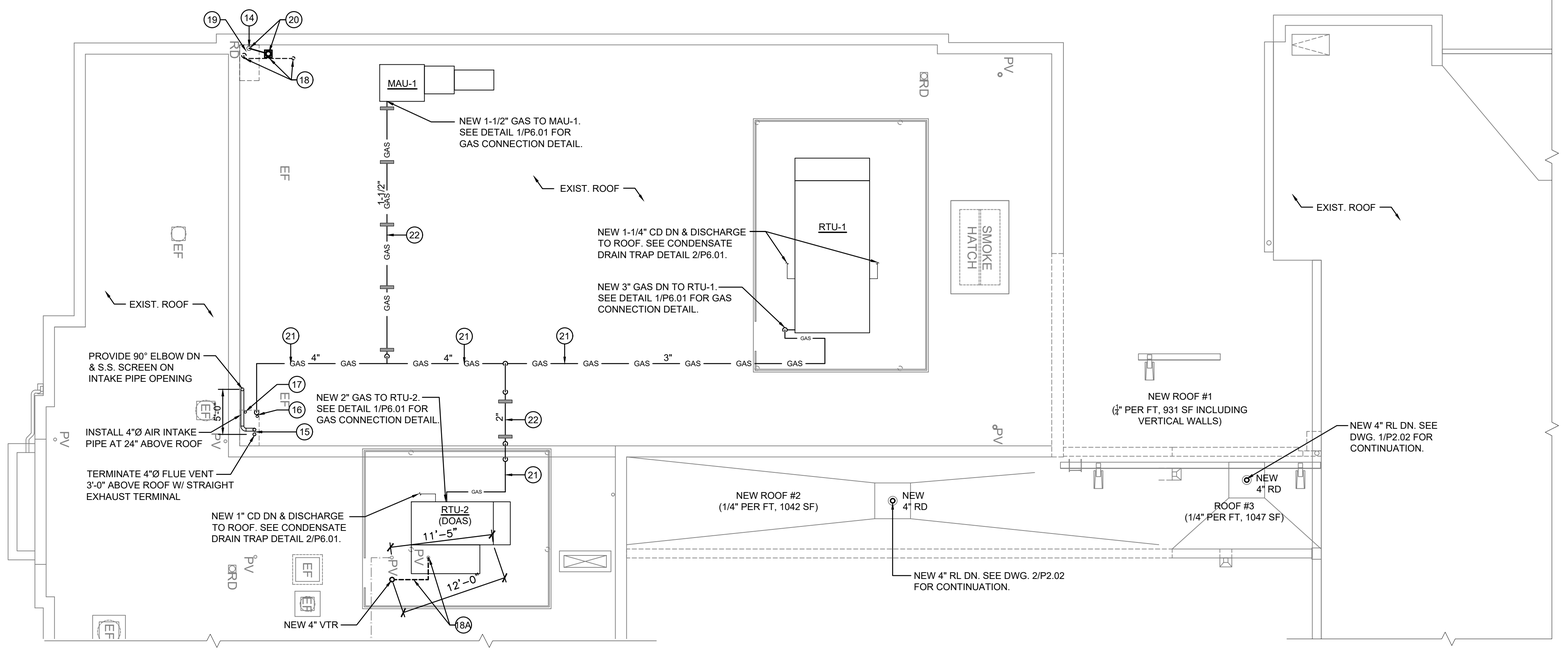
PLUMBING PROPOSED PLANS

2019 BOND REFERENDUM
CHATSWORTH AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

Job No. 4.1092.72.03

File No. 10927203P201

P2.02



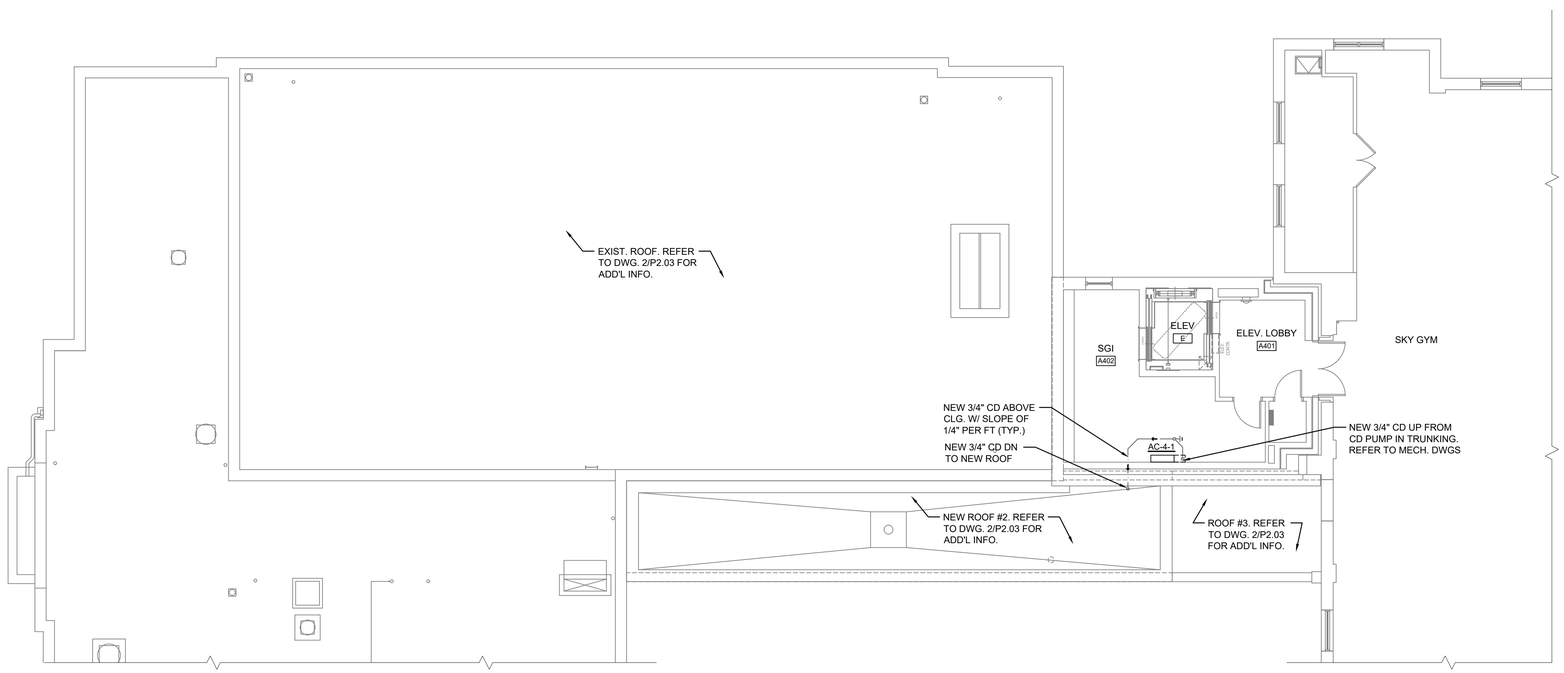
2 P2.03 — PARTIAL ROOF PLUMBING PROPOSED PLAN

1/8" = 1'-0"

GENERAL CONSTRUCTION NOTES

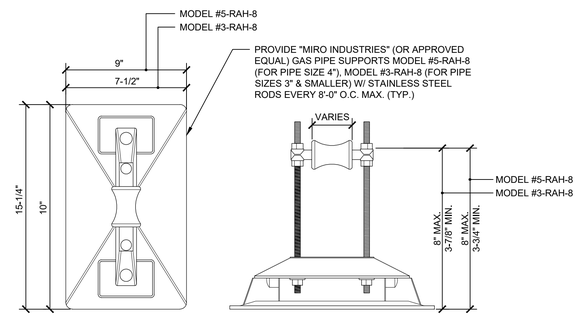
1. LOCATIONS/ROUTINGS/SIZES OF EXIST. PLUMBING PIPING SHOWN ARE BASED ON SITE OBSERVATIONS & THEY ARE APPROXIMATE. PC IS RESPONSIBLE TO VERIFY THEM IN FIELD. GC TO SAWCUT EXIST. WALLS/FLOOR SLABS OR OPENING EXIST. CHASES AS REQUIRED TO ACCOMMODATE PLUMBING INSTALLATION. GC TO PATCH WALLS/CHASES/FLOOR SLABS AS REQUIRED TO MATCH EXISTING.
2. ALL NEW PLUMBING PIPING SHALL BE INSTALL CONCEALED IN NEW WALLS/CHASES/ABOVE CEILING/BELOW SLABS, UNLESS OTHERWISE NOTED.
3. PC SHALL CHECK IN FIELD FOR EXACT ROUTING OF NEW PLUMBING PIPING. REUSE EXISTING WALL/FLOOR PENETRATIONS WHERE POSSIBLE.
4. PC TO CORE-DRILL FOR NEW PIPE PENETRATIONS AS REQUIRED & CAULK W/ 2HR RATED FIRESTOPPING MATERIALS. GC TO SAW-CUT EXIST. WALLS/FLOORS/CLG. AS REQUIRED & PATCH & PAINT TO MATCH EXIST. FINISH. PC TO PROVIDE PIPE ELBOWS, FITTINGS, ETC. REQUIRED FOR THE PROJECT.
5. ANY CUTTING, PATCHING, OR FINISH REPAIR WORK REQUIRED FOR PLUMBING INSTALLATION IS THE RESPONSIBILITY OF GC.
6. ALL NEW ROOF LEADER PIPING SHALL BE INSULATED WITH 1" THICK FIBERGLASS PIPE INSULATION WITH ASJ JACKETS. ALL NEW CONDENSATE PIPING SHALL BE INSULATED WITH 1" THICK FLEXIBLE ELASTOMERIC INSULATION (AP ARMAFLEX BLACK LAPSEAL OR APPROVED EQUAL). PROVIDE PIPE IDENTIFICATIONS WITH FLOW ARROWS ON PIPE INSULATION.
7. PC IS RESPONSIBLE FOR SHUTDOWN AND/OR TO ISOLATE SECTIONS OF PLUMBING & FIRE PROTECTION SYSTEMS, AND DRAIN WATER FROM THE SYSTEMS TO ACCOMMODATE FOR MODIFICATION/INSTALLATION. RESTORE THE SYSTEMS AS REQUIRED.
8. GC IS RESPONSIBLE TO REMOVE EXIST. CEILING/GRIDS & RELOCATE EXIST. LIGHT FIXTURES, FIRE & COMMUNICATION DEVICES, ETC. TO ACCOMMODATE PLUMBING INSTALLATION. REINSTALL TO MATCH EXISTING. REPLACE ALL DAMAGED TILES. MODEL & TYPE OF NEW CEILING TILES SHALL MATCH EXISTING.

ITEM #	PLUMBING KEY NOTES
14	EXIST. 4" ROOF LEADER PIPE RISER TO REMAIN. CHECK IN FIELD FOR EXACT LOCATION.
15	NEW 4"Ø AIR INTAKE PIPE & 4"Ø FLUE VENT UP IN NEW PITCH POCKET. TERMINATE 4"Ø FLUE VENT 3'-0" ABOVE ROOF W/ STRAIGHT EXHAUST TERMINAL.
16	NEW 4" GAS & 1" GAS VENT UP IN NEW PITCH POCKET. TERMINATE 1" GAS VENT 3'-0" ABOVE ROOF W/ RAIN CAP.
17	NEW 2" SANITARY VENT UP IN NEW PITCH POCKET. TERMINATE 12" ABOVE ROOF.
18	EXIST. 2" SANITARY VENT RISER, PIPING & VTR ON ROOF TO BE REMOVED. GC TO SAWCUT EXIST. ROOF AS REQUIRED & PATCH TO MATCH EXIST. CHECK IN FIELD FOR EXACT LOCATION.
18A	PC TO REMOVE EXIST. 4" VTR ON ROOF TO ACCOMMODATED INSTALLATION OF NEW RTU-2. PC TO INSTALL NEW 4" SANITARY VENT ABOVE CLG. OF CLASSROOM & CONNECT TO EXIST. PLUMBING VENT RISER & NEW 4" VTR ON ROOF. GC TO SAWCUT EXIST. CHASE & CORE DRILL EXIST. ROOF AS REQUIRED & PATCH ALL OPENINGS & PAINT TO MATCH EXIST.
19	EXIST. 4" ROOF DRAIN & RELATED PIPING TO BE REMOVED.
20	NEW 4" ROOF DRAIN & 4" ROOF LEADER. CONNECT NEW 4" ROOF LEADER TO EXIST. RISER. GC TO SAWCUT EXIST. ROOF AS REQUIRED & PATCH TO MATCH EXIST. CHECK IN FIELD FOR EXACT LOCATION.
21	NEW GAS PIPING. SUPPORT OFF NEW DUCT SUPPORTS. REFER TO MECH. DWGS. FOR LOCATIONS. PRIME ALL ROOFTOP GAS PIPING & PAINT W/ TWO (2) FINISH COATS OF YELLOW COLOR.
22	NEW GAS PIPING ON NEW ROOFTOP SUPPORTS AT MAX. 8'-0" O.C. PRIME ALL ROOFTOP GAS PIPING & PAINT W/ 2 FINISH COATS OF YELLOW COLOR PAINT (TYP.). SEE SUPPORT DETAIL 3/P2.03.



1 P2.03 — PARTIAL FOURTH FLOOR PLUMBING PROPOSED PLAN

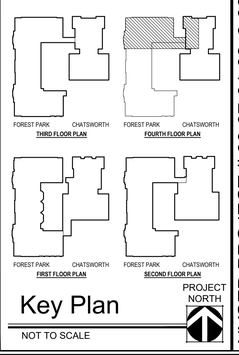
1/8" = 1'-0"



3 — ROOFTOP GAS PIPE SUPPORT DETAIL

NOT TO SCALE

CHATSWORTH AVE. SCHOOL



Key Plan

NOT TO SCALE

PROJECT NORTH

NYSED PROJECT # 66-07-01-03-0-005-020

Date	1/10/20
Checked	AL
Drawn	AL/IM

MICHAEL J. McGOVERN, R.A.
License No. 022257-1
Title REGISTERED ARCHITECT

Revisions:

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1	ISSUE TO BID 11/23/20

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PLUMBING PROPOSED PLANS

2019 BOND REFERENDUM
CHATSWORTH AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

Job No. 4.1092.72.03

File No. 10927203P201

P2.03

KITCHEN EQUIPMENT PLUMBING REQUIREMENTS

ITEM NO.	EQUIPMENT DESCRIPTION	QTY	DCW SIZE (IN)	DHW SIZE (IN)	DIRECT WASTE SIZE (IN)	INDIRECT WASTE SIZE (IN)	GAS CONNECTION SIZE (IN)	GAS LOAD (CFH)
2	BIN, ICE	1				1		
3	ICE CUBE MACHINE, AIR COOLED	1	3/4			1		
4	FILTER SYSTEM FOR ITEM #3	1	3/4					
6	WALK-IN COOLER	1						
8	REFRIGERATION TO ITEM #6	1				3/4		
10	WALK-IN FREEZER	1						
11	REFRIGERATION TO ITEM #10	1				3/4		
18	WAREWASHER, DOOR TYPE, VENTLESS	1	1/2	1/2		1-1/2		
19	3-COMPARTMENT SINK, POTWASH	1	(2) 1/2	(2) 1/2		(3) 2		
23	SINK, HAND WITH SOAP DISPENSER	1	1/2	1/2	1-1/2			
24	FILTER SYSTEM FOR ITEM #25	1	3/4					
25	OVEN-STEAMER, COMBI, GAS	1	(2) 3/4			2	1	152
26	OVEN, CONVECTION, GAS						1	120
27	RANGE, HEAVY DUTY, GAS	1					3/4	180
29	STEAMER, ATMOSPHERIC	1	(2) 3/4			(2) 3/4	1	120
36	WORK TABLE W/ SINK	1	1/2	1/2		2		
40	WORK COUNTER W/ SINK	1	1/2	1/2		2		
48	DROP-IN, HOT/COLD UNIT	1				3/4		
50	DROP-IN, HOT/COLD UNIT	1				3/4		
55	DROP-IN, HOT/COLD UNIT	1				3/4		
57	DROP-IN, HOT/COLD UNIT	1				3/4		

NOTES:
1. REFER TO FOOD SERVICE DETAILS AND SCHEDULES ON ALL FS DWGS. FOR ADD'L INFO. PLUMBING SUBCONTRACTOR IS RESPONSIBLE TO INSTALL ALL PLUMBING PIPING, VALVES, ETC.

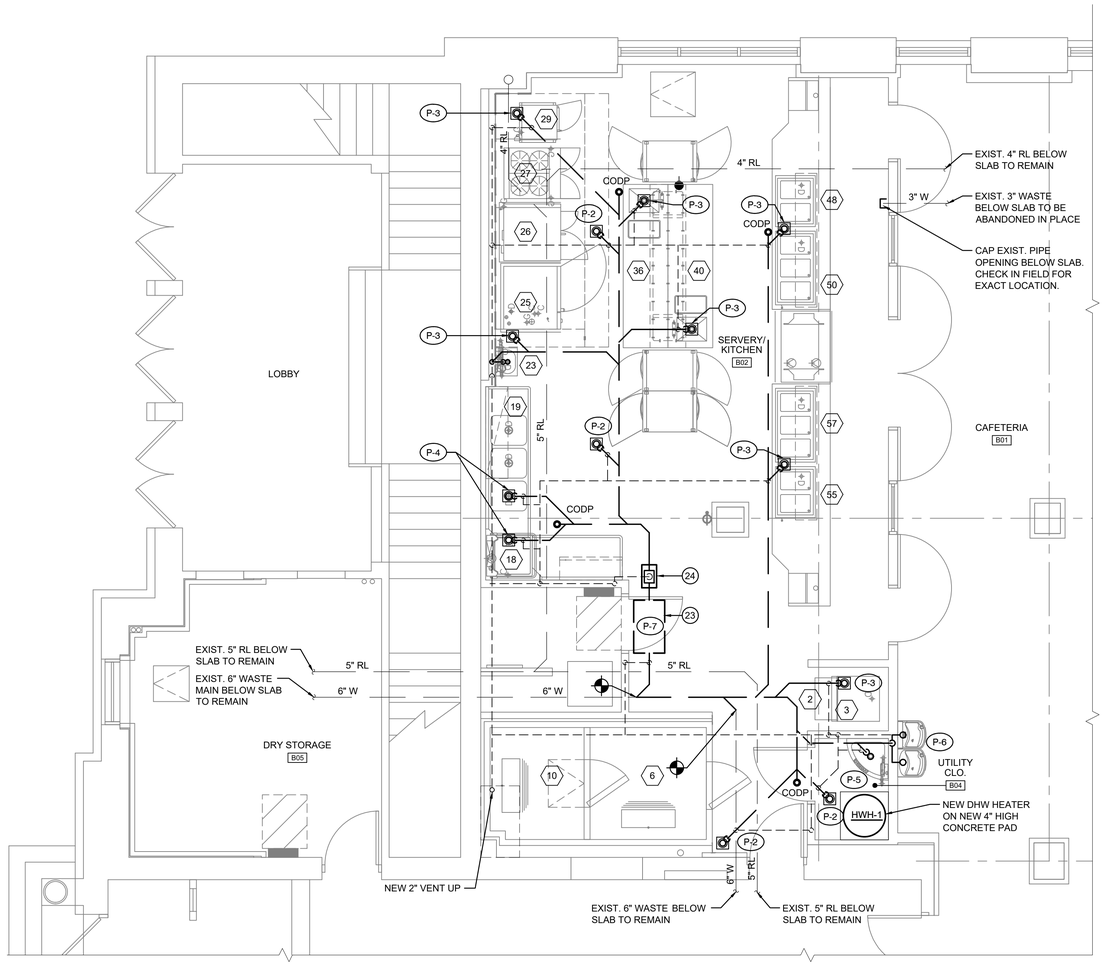
2. FAUCETS PROVIDED BY FOOD SERVICE CONTRACTOR WILL MEET THE LEAD-FREE REQUIREMENTS OF NSF 61.

PLUMBING KEY NOTES (PROPOSED)

ITEM #	
23	NEW GREASE INTERCEPTOR. GC TO SAWCUT EXIST. FLOOR SLAB & PC TO INSTALL NEW INTERCEPTOR FLUSH TO FINISHED FLOOR. GC TO PATCH FLOOR AS REQUIRED.
24	PROVIDE NEW 18"x18" S.S. BOX W/ COVER FOR NEW AIR CONTROL FITTING. DEPTH OF NEW BOX SHALL BE DETERMINED IN FIELD. GC TO SAW CUT EXIST. FLOOR SLAB & PC TO INSTALL NEW BOX FLUSH TO FINISHED FLOOR.
25	NEW MECHANICAL GAS CONTROL VALVE. INTERLOCK W/ NEW KITCHEN HOOD FIRE SUPPRESSION SYSTEM. INSTALL GAS VALVE AT UPSTREAM OF GAS PIPING TO GAS APPLIANCES, TO SHUT OFF GAS SUPPLY ON ACTIVATION OF FIRE SUPPRESSION SYSTEM. THE GAS SUPPLY SHALL REMAIN OFF UNTIL IT IS MANUALLY RESET. SEE FS DWGS. FOR ADD'L INFO.
26	NEW 2" GAS PIPE HEADER BEHIND APPLIANCES. CONNECT TO EACH APPLIANCE W/ A FLEXIBLE APPLIANCE-RATED GAS CONNECTOR & SHUTOFF BALL VALVE. SEE FS DWGS. FOR GAS CONNECTION DETAIL.
27	NEW GAS-FIRED DHW HEATER W/ DHW MIXING VALVE ON WALL. SEE PIPING DIAGRAM 1/P6.03.
28	NEW 4"Ø FLUE VENT (SCH. 40 CPVC) ABOVE CLG
29	NEW 4"Ø AIR INTAKE PIPE (SCH. 40 PVC) ABOVE CLG.
30	NEW 3/4" DCW & DHW UP FROM UNDERGROUND. NEW 1/2" DCW & DHW TO SINK.
31	NEW 3/4" DCW & DHW BELOW SLAB.
32	NEW 3/4" DHWR BALANCING VALVE ASSEMBLY. SEE DETAIL 3/P6.03. BALANCE TO 0.5 GPM.

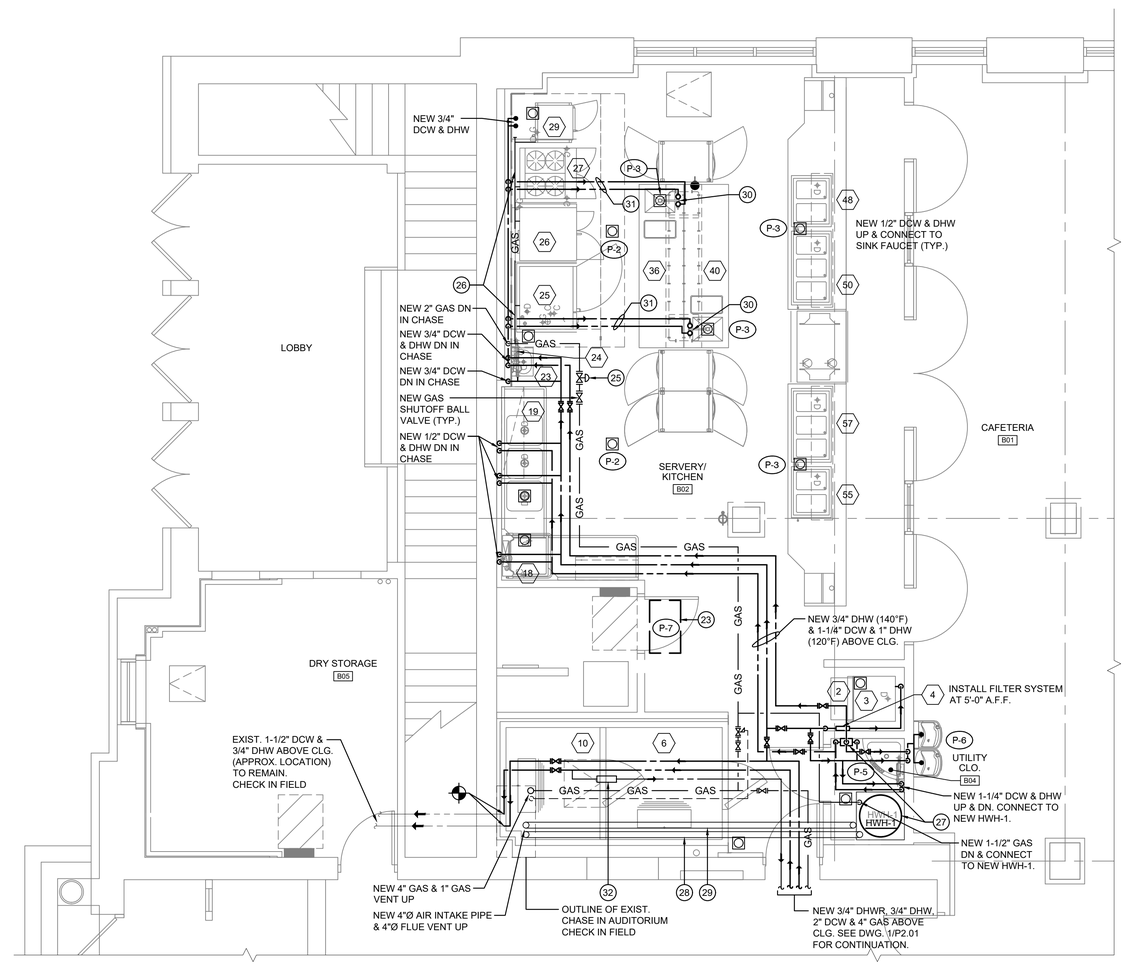
GENERAL CONSTRUCTION NOTES

1. LOCATIONS/ROUTINGS/SIZES OF EXIST. PLUMBING PIPING SHOWN ARE BASED ON EXIST. DRAWINGS & SITE OBSERVATIONS & THEY ARE APPROXIMATE. PC IS RESPONSIBLE TO VERIFY IN FIELD. GC TO SAWCUT EXIST. WALLS/FLOOR SLABS AS REQUIRED TO ACCOMMODATE PLUMBING INSTALLATION & PATCH AS REQUIRED.
2. ALL NEW WATER PIPING & VENT PIPING SHALL BE INSTALL CONCEALED IN NEW WALLS/CHASES/ABOVE CEILING, UNLESS OTHERWISE NOTED.
3. PC SHALL CHECK IN FIELD FOR EXACT ROUTING OF NEW PLUMBING PIPING. REUSE EXIST. WALL/FLOOR PENETRATIONS WHERE POSSIBLE.
4. PC TO CORE-DRILL FOR NEW PIPE PENETRATIONS AS REQUIRED & CAULK W/ 2HR RATED FIRESTOPPING MATERIALS. GC TO SAW-CUT EXIST. WALLS/FLOORS AS REQUIRED & PATCH & PAINT TO MATCH EXIST. FINISH. PC TO PROVIDE PIPE ELBOWS, FITTINGS, ETC. REQUIRED FOR THE PROJECT.
5. ANY CUTTING, PATCHING, OR FINISH REPAIR WORK REQUIRED FOR PLUMBING INSTALLATION IS THE RESPONSIBILITY OF GC.
6. ALL NEW WATER PIPING SHALL BE INSULATED WITH FIBERGLASS PIPE INSULATION WITH ASJ JACKETS. PROVIDE PIPE IDENTIFICATIONS WITH FLOW ARROWS ON PIPE INSULATION.
7. PC IS RESPONSIBLE FOR SHUTDOWN AND/OR TO ISOLATE SECTIONS OF PLUMBING SYSTEM, AND DRAIN WATER FROM THE SYSTEM TO ACCOMMODATE FOR MODIFICATION/INSTALLATION. RESTORE THE SYSTEM AS REQUIRED.
8. NOT ALL NEW PIPING, VALVES, ETC. FOR KITCHEN EQUIPMENT ARE SHOWN ON PLANS. PC IS REQUIRED TO INSTALL REQUIRED PIPING, VALVES, FITTING, ETC. FOR A COMPLETE & OPERATIONAL PLUMBING SYSTEM.
9. GC TO OPEN FLOOR SLABS & PC TO VERIFY INVERTS OF EXIST. SANITARY WASTE PIPING BELOW SLAB IN FIELD PRIOR TO CONNECTIONS OF NEW PIPING TO EXIST. PC TO COORDINATE LOCATIONS WITH GC. GC TO PATCH FLOOR SLABS TO MATCH EXIST.



1 P3.01 KITCHEN WASTE PIPING PROPOSED PLAN
1/4" = 1'-0"

NORTH



2 P3.01 KITCHEN DOMESTIC WATER & GAS PIPING PROPOSED PLAN
1/4" = 1'-0"

NORTH

Date	1/10/20
Checked	AL
Drawn	AL/IM

MICHAEL J. McGOVERN, R.A.
Title REGISTERED ARCHITECT License No. 022257-1

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NYSED PROJECT # 66-07-01-03-0-005-020

KITCHEN PLUMBING PROPOSED PLANS
2019 BOND REFERENDUM
CHATSWORTH AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

Job No. 4.1092.72.03

File No. 10927203P201

P3.01

PLUMBING FIXTURE SCHEDULE

NUMBER	FIXTURE	MANUFACTURER	TYPE & MODEL NO.	TRIM NO.	SUPPLY PIPE NO.	TRAP NO.	SUPPORT NO.	PIPE SIZES					DFU	WSFU	DESCRIPTION
								TRAP	WASTE	VENT	DCW	DHW			
P-1	SINK	ELKAY	LRAD252265	ELKAY LK810GN08T4	McGUIRE LF158	McGUIRE 8902C	COUNTER-TOP	1-1/2" x 1-1/2"	1-1/2"	1-1/2"	1/2"	1/2"	2	1	25"x22" TOP MOUNTED SINK W/ 3 HOLE 18 GAUGE 304 STAINLESS STEEL. PROVIDE W/ EXPOSED DECK FAUCET W/ 8" GOOSENECK SPOUT 4" WRIST-BLADE HANDLES, ELKAY GRID DRAIN & TAILPIECE #LK18B & WATTS TMV #LFUSG-N-M2. INSTALL TO MEET ADA REQUIREMENTS.
P-2	3" FLOOR DRAIN	J.R. SMITH	#2110Y	-	-	P-TRAP	-	3"	3"	2"	-	-	5	-	FLOOR DRAIN W/ HINGED GRATE, SEDIMENT BUCKET, NICKEL BRONZE ROUND TOP & J.R. SMITH QUAD CLOSE TRAP SEAL.
P-3	3" INDIRECT FLOOR DRAIN	J.R. SMITH	#3041	-	-	P-TRAP	-	3"	3"	2"	-	-	-	-	INDIRECT WASTE DRAIN W/ ALUMINUM RECESSED GRATE, SEDIMENT BUCKET & NICKEL BRONZE TOP.
P-4	4" INDIRECT FLOOR DRAIN	J.R. SMITH	#3041	-	-	P-TRAP	-	4"	4"	2"	-	-	-	-	INDIRECT WASTE DRAIN W/ ALUMINUM RECESSED GRATE, SEDIMENT BUCKET & NICKEL BRONZE TOP.
P-5	SERVICE SINK	FLORESTONE	99	-	-	P-TRAP	FLOOR MOUNTED	3"	3"	2"	3/4"	3/4"	3	3	HALF ROUND TERRAZZO MOP RECEPTOR. PROVIDE W/ MR-371 SPEAKMAN FAUCET W/ VACUUM BREAKER, DOUBLE STOPS AND BUCKET HOOK W/ BRACE, MR-370 5/8" HOSE & 5' LONG W/ CLAMP, MR-372 MOP HANGER W/ 3 CLAMPS, MR-374 WEDGE-LOK 3" DRAIN SEAL, MR-375 FLAT STRAINER, & MR-377 TWO (2) 32" PANELS.
P-6	BOTTLE FILLER STATION W/ BI-LEVEL WATER COOLERS	ELKAY	LZSTL8WSSP	-	McGUIRE LFST07	McGUIRE 201C	WALL-MOUNTED	1-1/4" x 1-1/2"	1-1/2"	1-1/2"	1/2"	-	0.5	0.5	EZH2O BOTTLE FILLING STATION W/ FILTERED BI-LEVEL LZ COOLERS, S.S. BASIN W/ INTEGRAL DRAIN, S.S. COOLER CABINET, VANDAL-RESISTANT BUBBLER, WALL MOUNTING PLATE & WATERSENTRY PLUS FILTER. PROVIDE W/ SPARE FILTERS #51300C-3PK. INSTALL TO MEET ADA REQUIREMENTS.
P-7	GREASE INTERCEPTOR	J.R. SMITH	#8050	-	-	-	-	-	-	-	-	-	-	-	STEEL INTERCEPTOR W/ FLOW RATE OF 50 GPM & GREASE CAPACITY OF 100 LB. PROVIDE W/ PDI CERTIFICATION SEAL, FLOW CONTROL FITTING, ANCHOR FLANGE, EXTENSION (VERIFY HEIGHT IN FIELD) & NON-SKID ALUMINUM COVER.
	ROOF DRAIN	J.R. SMITH	#1015Y	-	-	-	-	-	-	-	-	-	-	-	PROVIDE W/ UNDERDECK CLAMP & CAST IRON DOME. REFER TO DWGS. FOR SIZES.

DOMESTIC HOT WATER HEATER SCHEDULE

(LAARS AS STANDARD)

TAG No.	SERVICE	INPUT RATING (MBH)	RECOVERY RATE @ 100°F RISE (GPH)	STORAGE CAPACITY (GAL.)	THERMAL EFFICIENCY (%)	FLUE SIZE & TYPE	ELECTRIC DATA VOLT/PH/HZ	MODEL & MANUFACTURER	DIMENSION DIA. x H (IN.)	APPROX. WEIGHT (LB.)	REMARKS
HWH-1	KITCHEN DHW SYSTEM	199	309	100	98.5	4"Ø PVC	115/1/60	UHE-100T-199E-3NA LAARS	28 x 78	900	SEE NOTES

NOTES:
1. ASME RATED HEATER W/ STANDARD 150 PSI TEMPERATURE & PRESSURE RELIEF VALVE.
2. PROVIDE W/ PVC CONCENTRIC VENT KIT FOR EACH HEATER.
3. PROVIDE A CONDENSATE DRAIN (SCH.40 PVC) ON BOTTOM OF EXHAUST FLUE VENT & CONDENSATE ACID NEUTRALIZATION TUBE MODEL #JM-3 FOR EACH HEATER. PIPE TO NEAREST FLOOR DRAIN W/ A PROPER PITCH.

ELEVATOR SUMP PUMP SCHEDULE

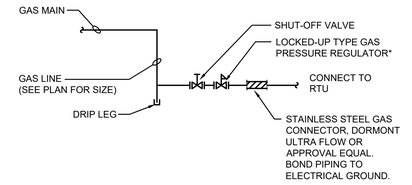
(GOULDS PUMP AS STANDARD)

TAG No.	LOCATION	GPM	HD (FT)	HP	RPM	ELECTRICAL DATA VOLT/PH/HZ	MODEL & MANUFACTURER	REMARKS
ESP-1	ELEVATOR SUMP PIT	50	15	1/3	3,450	115/1/60	ELKTWE0511H GOULDS PUMP	ELEVATOR SUMP PUMP. PROVIDE W/ CONTROL PANEL (ITT CENTRIPRO MODEL #A1SEE1) WITH LIQUID SMART SWITCH & HIGH ALARM CONTROLS, OIL SMART SWITCH (ITT CENTRIPRO MODEL #A1SEEWAWTER), & CHECK & SHUTOFF VALVES.

CONDENSATE DRAIN PUMP SCHEDULE

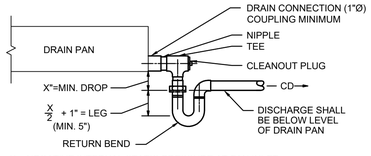
(LITTLE GIANT AS STANDARD)

TAG No.	UNIT SERVED	LOCATION	PERFORMANCE (GPH @ HEAD)	SHUT OFF	ELECTRICAL DATA				MODEL & MANUFACTURER	UNIT DIMENSIONS (L x W x H) (IN)	APPROX. WEIGHT (LBS.)	REMARKS
			10'	FEET	HP	VOLT/PH/HZ	AMPS	WATTS				
CDP-1, 2	NEW UVs	STORAGE C07 & ART C10	48	20	1/30	115/1/60	1.5	93	VCMA-20UL LITTLE GIANT	10-1/2 x 5-1/8 x 7-1/8	5.0	



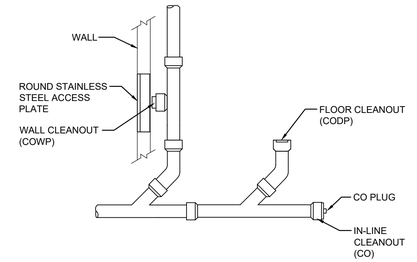
1 GAS CONNECTION DETAIL
NOT TO SCALE

NOTES:
1. ALLOW SUFFICIENT SPACE BELOW DRAIN PAN FOR TRAP.
2. PITCH DRAIN FOR PROPER RUN-OFF.
3. MANUALLY, PRIME FILL TRAP BEFORE START-UP TO FORM INITIAL DRAIN SEAL.
4. SUPPORT LENGTHY DRAIN LINES TO PREVENT SAG AND CONDENSATE OVERFLOW.

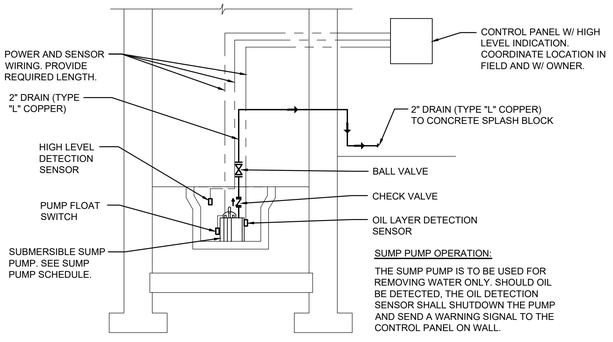


X = NEGATIVE INTERNAL STATIC PRESSURE AT FAN INLET.

2 CONDENSATE DRAIN TRAP DETAIL
NOT TO SCALE



3 CLEANOUT DETAIL
NOT TO SCALE



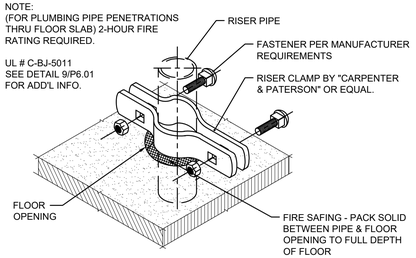
SUMP PUMP OPERATION:

THE SUMP PUMP IS TO BE USED FOR REMOVING WATER ONLY. SHOULD OIL BE DETECTED, THE OIL DETECTION SENSOR SHALL SHUTDOWN THE PUMP AND SEND A WARNING SIGNAL TO THE CONTROL PANEL ON WALL.

4 ELEVATOR SUMP PUMP PIPING DETAIL
NOT TO SCALE

NOTE:
(FOR PLUMBING PIPE PENETRATIONS THRU FLOOR SLAB) 2-HOUR FIRE RATING REQUIRED.

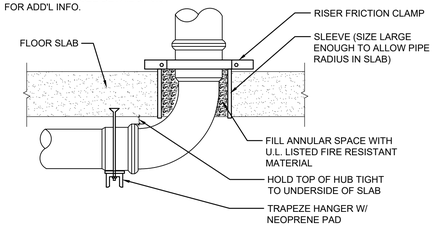
UL # C-BJ-5011
SEE DETAIL 9/P6.01
FOR ADD'L INFO.



5 PIPE RISER CLAMP
NOT TO SCALE

NOTE:
(FOR PLUMBING PIPE PENETRATIONS THRU FLOOR SLAB) 2-HOUR FIRE RATING REQUIRED.

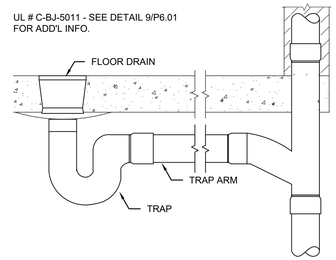
UL # C-BJ-5011 - SEE DETAIL 9/P6.01
FOR ADD'L INFO.



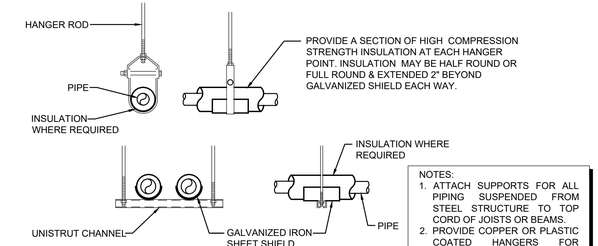
6 BASE OF STACK DETAIL
NOT TO SCALE

NOTE:
(FOR PLUMBING PIPE PENETRATIONS THRU FLOOR SLAB) 2-HOUR FIRE RATING REQUIRED.

UL # C-BJ-5011 - SEE DETAIL 9/P6.01
FOR ADD'L INFO.



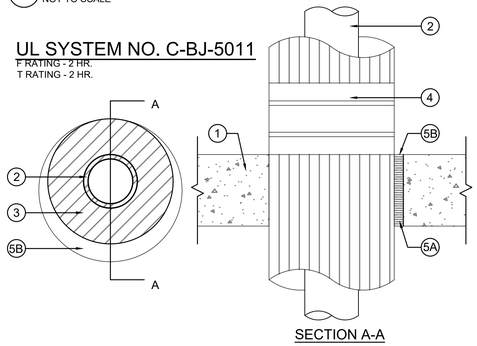
7 FLOOR DRAIN DETAIL
NOT TO SCALE



NOTES:
1. ATTACH SUPPORTS FOR ALL PIPING SUSPENDED FROM STEEL STRUCTURE TO TOP CORD OF JOISTS OR BEAMS.
2. PROVIDE COPPER OR PLASTIC COATED HANGERS FOR NON-INSULATED COPPER PIPE.
3. ALL SUPPORTS SHALL HAVE GALVANIZED FINISH.

8 PIPE SUPPORT HANGERS
NOT TO SCALE

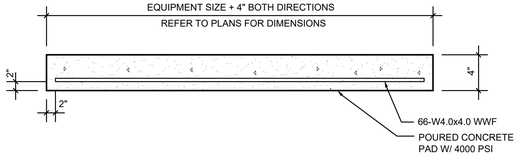
UL SYSTEM NO. C-BJ-5011
F RATING - 2 HR.
T RATING - 2 HR.



1. Floor or Wall Assembly - Min 5-½ in. thick reinforced lightweight or normal weight (100-150 pcf) concrete. Wall may also be constructed of any UL Classified Concrete Blocks*. Max daim. of opening is 14 in. See Concrete Blocks (CAZT) category in the Fire Resistance Directory for names of manufacturers.
2. Through Penetrants - One metallic pipe or tubing to be installed either concentrically or eccentrecally within the firestop system. Pipe or tubing to be rigidly supported on both sides of floor or wall assembly.
3. Pipe Covering* - Cellular Glass Insulation - Max 3 in. thick cellular glass units sized to the outside diam. of the steel pipe and supplied in nom 24 in. long half sections or nom 18 in. long segments. The annular space shall be min 0 in. (point contact) to max 2 in. Pipe insulation installed on pipe in accordance with the manufacturer's instructions.
PITTSBURGH CORING CORP - FOAMGLAS
4. Metal Jacket - Min. 12 in. long jacket formed on min. 0.010 in. thick steel or aluminum sheet cut to wrap tightly around the pipe insulation with a min. 2 in. lap. Jacket secured with min. ½ in. wide stainless steel hose clamps or bands located within 2 in. of each end of the jacket and spaced a max. of 10 in. O.C.
Jacket to be installed with edges abutting surface of caulk fill material (Item 5) on both surfaces of wall. Metal jacket to be used in addition to any other jacketing material which may be required to or desired on the pipe insulation.
5. Firestop System - The firestop system shall consist of the following:
A Packaging Material - Min 5 in. thickness of min. 4 pcf mineral woll batt insulation firmly packed into opening as a permanent form. Packing material to be recessed from top surface of floor or from both surfaces of wall as required to accommodate the required thickness of fill material.
B Fill, Void or Cavity Material* - Sealant - Min. ½ in. thickness of fill material applied within the annulus, flush with top surface of floor or with both surfaces of wall. At point contact location between penetrant and periphery of opening, a min. ½ in. diam. bead of fill material shall be applied at the periphery of opening/pipe covering interface on top surface of floor assembly or both surfaces of wall assembly.
JOHNS MANVILLE INTERNATIONAL INC - Firetemp

*Bearing the UL Classification Mark

9 TYPICAL PIPE PENETRATION (ALL LOCATIONS) 2-HOUR RATED
NOT TO SCALE



10 CONCRETE PAD DETAIL
NOT TO SCALE

Date	1/10/20
Checked	AL
Drawn	AL/IM

MICHAEL J. McGOVERN, R.A.
Title REGISTERED ARCHITECT License No. 022257-1

Revisions:
ISSUE TO BID 11/23/20

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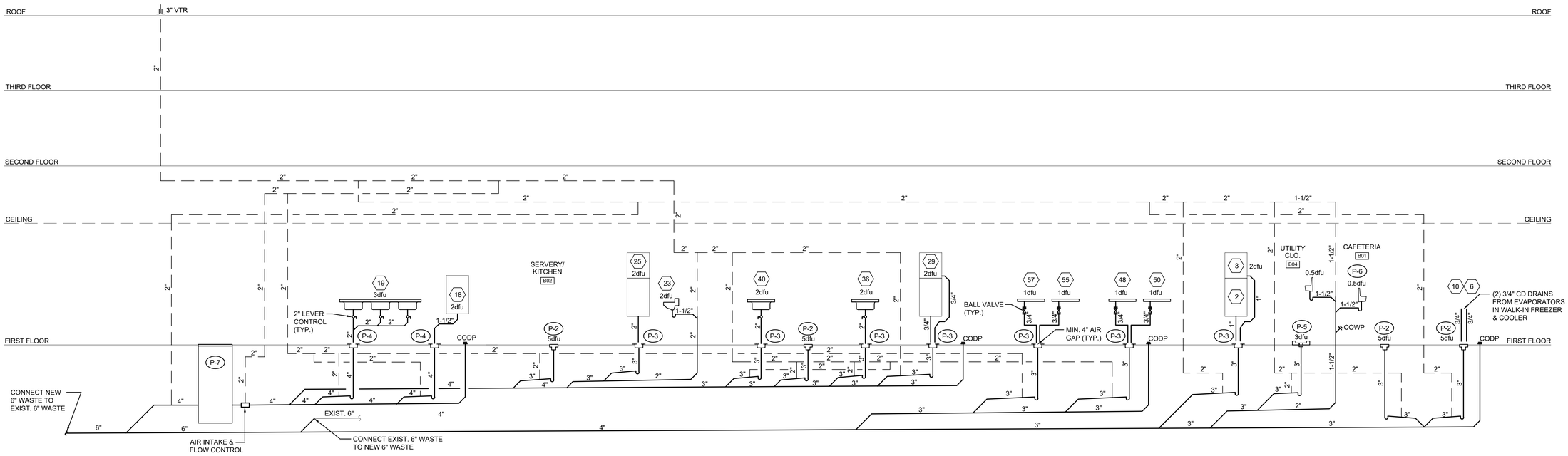
NYSED PROJECT # 66-07-01-03-0-005-020

PLUMBING SCHEDULES & DETAILS

2019 BOND REFERENDUM
CHATSWORTH AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

Job No. 4,1092.72.03
File No. 10927203P201

P6.01



1 SANITARY PIPING RISER DIAGRAM
NOT TO SCALE

2 DOMESTIC WATER PIPING RISER DIAGRAM
NOT TO SCALE

3 DOMESTIC WATER PIPING RISER DIAGRAM
NOT TO SCALE

KITCHEN EQUIPMENT PLUMBING REQUIREMENTS

ITEM NO.	EQUIPMENT DESCRIPTION	QTY	DCW SIZE (IN)	DHW SIZE (IN)	DIRECT WASTE SIZE (IN)	INDIRECT WASTE SIZE (IN)	GAS CONNECTION SIZE (IN)	GAS LOAD (CFH)
2	BIN, ICE	1				1		
3	ICE CUBE MACHINE, AIR COOLED	1	3/4			1		
4	FILTER SYSTEM FOR ITEM #3	1	3/4					
6	WALK-IN COOLER	1						
8	REFRIGERATION TO ITEM #6	1				3/4		
10	WALK-IN FREEZER	1						
11	REFRIGERATION TO ITEM #10	1				3/4		
18	WAREWASHER, DOOR TYPE, VENTLESS	1	1/2	1/2		1-1/2		
19	3-COMPARTMENT SINK, POTWASH	1	(2) 1/2	(2) 1/2		(3) 2		
23	SINK, HAND WITH SOAP DISPENSER	1	1/2	1/2	1-1/2			
24	FILTER SYSTEM FOR ITEM #25	1	3/4					
25	OVEN-STEAMER, COMBI, GAS	1	(2) 3/4			2	1	152
26	OVEN, CONVECTION, GAS						1	120
27	RANGE, HEAVY DUTY, GAS	1					3/4	180
29	STEAMER, ATMOSPHERIC	1	(2) 3/4			(2) 3/4	1	120
36	WORK TABLE W/ SINK	1	1/2	1/2		2		
40	WORK COUNTER W/ SINK	1	1/2	1/2		2		
48	DROP-IN, HOT/COLD UNIT	1				3/4		
50	DROP-IN, HOT/COLD UNIT	1				3/4		
55	DROP-IN, HOT/COLD UNIT	1				3/4		
57	DROP-IN, HOT/COLD UNIT	1				3/4		

NOTES:
1. REFER TO FOOD SERVICE DETAILS AND SCHEDULES ON ALL FS DWGS. FOR ADD'L INFO. PLUMBING SUBCONTRACTOR IS RESPONSIBLE TO INSTALL ALL PLUMBING PIPING, VALVES, ETC.

2. FAUCETS PROVIDED BY FOOD SERVICE CONTRACTOR WILL MEET THE LEAD-FREE REQUIREMENTS OF NSF 61.

Date	1/10/20
Checked	AL
Drawn	AL/IM

MICHAEL J. McGOVERN, R.A.
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License No. 022257-1

Revisions:

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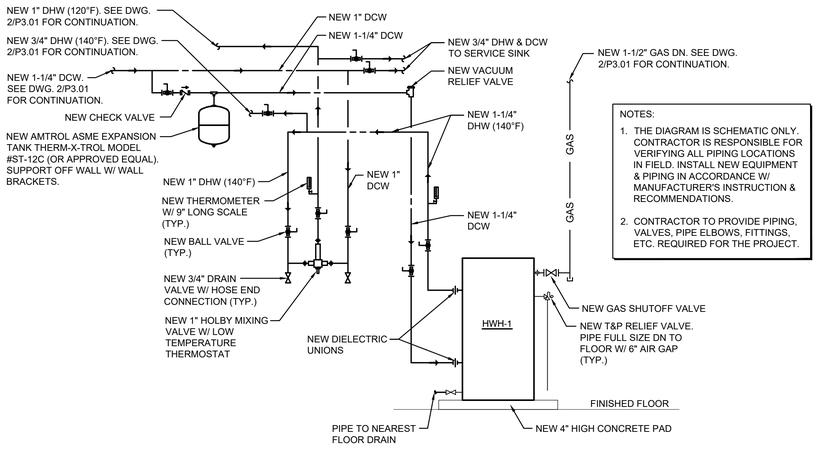
NYSED PROJECT # 66-07-01-03-0-005-020

PLUMBING RISER DIAGRAMS
2019 BOND REFERENDUM
CHATSWORTH AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

Job No. 4.1092.72.03

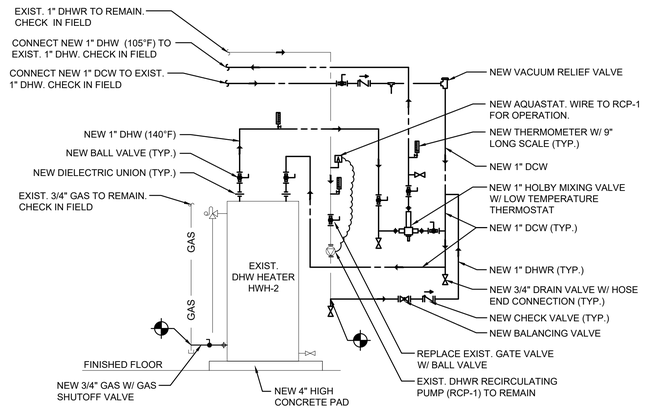
File No. 10927203P201

P6.02

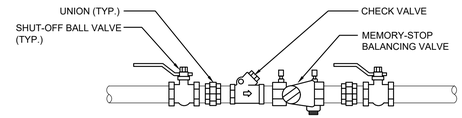


NOTES:
1. THE DIAGRAM IS SCHEMATIC ONLY. CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL PIPING LOCATIONS IN FIELD. INSTALL NEW EQUIPMENT & PIPING IN ACCORDANCE W/ MANUFACTURER'S INSTRUCTION & RECOMMENDATIONS.
2. CONTRACTOR TO PROVIDE PIPING, VALVES, PIPE ELBOWS, FITTINGS, ETC. REQUIRED FOR THE PROJECT.

1 KITCHEN DHW SYSTEM PIPING DIAGRAM
NOT TO SCALE



2 EXIST. DHW SYSTEM PIPING DIAGRAM
NOT TO SCALE



NOTES
1. ALL THREADED PIPING BETWEEN UNIONS SHALL BE BRASS.
2. INSTALL DI-ELECTRIC UNIONS FOR PIPING CONNECTIONS OF DISSIMILAR METALS.

3 DHWR BALANCING ASSEMBLY DETAIL
NOT TO SCALE

NOTES:
1. ALL GAS PRESSURE REGULATORS SHALL BE LOCKUP TYPE.
2. PROVIDE GAS SHUTOFF BALL VALVES (FULL PORT) FOR PIPE SIZES 3" & SMALLER. PROVIDE PLUG TYPE SHUTOFF VALVES FOR PIPE SIZES 4" & LARGER.
3. ALL NEW INDOOR GAS PIPING SHALL BE PAINTED YELLOW (1 PRIMER & 2 FINISH COATS).
4. ALL NEW GAS VENTS SHALL BE PAINTED BLACK (1 PRIMER & 2 FINISH COATS).

ITEM NO.	EQUIPMENT DESCRIPTION
25	OVEN-STEAMER, COMBI, GAS
26	OVEN, CONVECTION, GAS
27	RANGE, HEAVY DUTY, GAS
28	STEAMER, ATMOSPHERIC

4 GAS PIPING RISER DIAGRAM
NOT TO SCALE

Date	1/10/20
Checked	AL
Drawn	AL/IM

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NYSED PROJECT # 66-07-01-03-0-005-020

PLUMBING DIAGRAMS & DETAILS

2019 BOND REFERENDUM
CHATSWORTH AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

Job No. 4.1092.72.03

File No. 10927203P201

P6.03

Electrical General Notes

Project Information:

1. Unless specifically noted otherwise, it shall be understood that when the words "Owner" or "Client" are used in these drawings they are interchangeable an all refer to Mamaroneck UFSD.
2. Unless specifically noted otherwise, it shall be understood that when the words "Architect", "Engineer", or "A/E" are used in these drawings they are interchangeable an all refer to LAN Associates, Engineering, Planning, Architecture Surveying ("LAN").
3. Unless specifically noted otherwise, it shall be understood that when the word "Contractor" is used in the Electrical (E#.##) drawings and/or Electrical Specification sections it refers to the Electrical Contractor.
4. Where any device or part of equipment is referred to in these drawings in the singular number (e.g., "the switch", "the receptacle"), this reference shall be deemed to apply to as many such devices as are required to complete the installation as shown on the drawings.
5. Health, safety and critical operating equipment shall not be compromised without owner's authorization. Schedule shutdown during off hours and implement and maintain a temporary operational plan.

Code & Standards Compliance:

6. Code compliance is mandatory. Nothing in these Drawings and Specifications permits work not conforming to these codes. Where work is shown to exceed minimum code requirements, comply with drawings and specifications. When differences in utility specifications in standards, governmental ordinances or codes occur, the more stringent requirements shall govern the installation.
7. The electric installation shall be in accordance with the currently enforced edition of the National Electrical Code (NEC), National Electrical Safety Code (NESC), American Electricians' Handbook, International Building Code (IBC), Americans with Disabilities Act (ADA), NFPA 55 & 99 ASHRAE 90.1 and NEC Standard of installation. Wherever in the documents the word "code" is stated, the more stringent of the above referenced codes is implied.
8. All contractor supplied materials/equipment shall be new and UL Listed or approved by another Nationally Recognized Testing Laboratory (NRTL).
9. The contractor shall pay for and obtain all permits and inspections required by the building and safety codes and ordinances, and the rules and regulations of any legal body having jurisdiction. Permit and inspections shall be include in the base bid and shall not be cause for an extra.
10. Contractor shall confirm to all safety rules and other regulations, etc. pertaining to construction work on the client's premises. Contractor shall be responsible to ensure that all rules and regulations have been met and coordinate this work with responsible client's personnel.
11. All electrical equipment and raceways permanently attached to structures, including supporting structures and attachments to non-building structures, shall be anchored for seismic loading to resist a horizontal force action in any direction. Contractor shall provide seismic restraints for all conduits larger than 2½" trade diameter. Provide sway braces for conduit and equipment suspended from the overhead. Provide anchor bolts for floor and wall mounted equipment. The installation shall meet the requirements of International Building Code (IBC) as it applies to electrical equipment for Earthquake Loads.
12. Contractor shall review code compliance drawings and identify all penetrations through fire/smoke partitions, floor and roofs. Patch compromised partitions to match fire/smoke resistance rating as stated on code compliance drawings.

General Procedures:

13. All equipment shall be as indicated by the Engineer/Architect.
14. The cost incurred by the acceptance of substitutions shall be borne by the contractor. Proof for the equality of the substitutions shall be by the contractor and differences shall be enumerated with the submittal. Submission without the differences noted can be grounds for rejection without review.
15. Electrical components, including but not limited to, conductor size, overcurrent protection device and disconnect switches are based on the power requirements of the equipment shown on the contract documents. All costs (including additional design fees if required) associated with changes to these power requirements shall be the responsibility of the contractor making the change.
16. Obtain shop drawings and wiring diagrams for the proper installation of related electrical work.
17. The contractor shall remove and reinstall ceiling systems as required for the installation of new electrical work and replace in kind, any components damaged by personnel or equipment during performance of the work.
18. Electrical Contractor shall be responsible for the removal of debris generated by his work and workers at the end of each working day and for general good housekeeping by his workers. Electrical Contractor shall provide required refuse containers.
19. Unless otherwise indicated on the mechanical schedules/drawings, the electrical contractor shall provide and install all disconnect switches for all mechanical equipment (i.e., roof top HVAC units, exhaust fans, variable air volume devices, etc.)

Site Conditions/Drawing Coordination:

20. These drawings and specifications illustrate the work to be performed. The Engineer is not responsible for the means, methods, techniques, sequences, and procedures used to do the work, or the safety aspects of construction, and nothing on these drawings expressed or implied changes this condition. Prior to bidding and/or starting work the contractor shall visit the project site to determine the conditions under which the work is to be performed and shall be responsible for knowing how they affect the work. Schedule site visit with client's representatives. Additionally, the contractor shall field verify all site dimensions and room layouts. Submission of a bid to perform this work is an acknowledgement of these responsibilities, and that they have been fully considered in planning of the work, and the bid price. No claims or extra charges due to these conditions will be forthcoming.
21. The client will occupy the site and existing building during the entire construction period. Cooperate with the client during construction operations to avoid any conflicts. Perform the work so as not to interfere with the client's operations. Schedule all power outages with client's approval for overtime on Sundays and Holidays at no additional cost to the client.
22. Existing project conditions indicated are based on field observations; existing design/construction documents and existing record documents and are intended to indicate the scope of the work affected by this project.
23. Drawings shall not be scaled. Drawings indicate the general arrangement of systems and requirements of the work. Although size and location of equipment is drawn to scale wherever possible, contractor shall make use of all data in all of the contract documents and verify information at the project site.
24. The electrical contractor shall make his own takeoff on all quantities. It shall be his responsibility, at his cost, to include all equipment and material in order to comply with the intent of the drawings.
25. The circuit numbers are for identification only. The contractor shall be responsible for correctly phasing the circuits in panels.
26. Existing Circuit Designations:
    a. All reference to existing circuit designations is based on previous project documentation. The contractor shall consult the engineer in the event that actual conditions do not coincide with the indicated re-distribution or other use of existing circuits as herein indicated.
    b. The total connected load for any general purpose (protected at 20A) branch circuit which is re-distributed as a part of this project shall not exceed 13A.
    c. Any deviation, as may be directed by the engineer, from the indicated circuit structure specified in this drawing set will require both verification by the contractor that the total connected load on the associated supply conductors is within the above specified limit and documentation in the project record (as-built) drawings.
27. The electrical installation shown is represented diagrammatically and indicates the general arrangement of systems and work. The locations and arrangements of equipment, devices, switchboards, panelboards, partitions, openings, etc. are designed to show preferred configurations to suit known conditions but are approximate and are subject to modifications caused by structural conditions and other existing or proposed equipment. The locations are subject to such modifications as may be required by necessary or desirable at the time of installation in the intent of the drawings in "laying out" the work and coordinate the work with other trades to verify spacing conditions. Contractor shall determine required effect to effect such coordination. The electrical contractor shall coordinate all work and shall make such changes without extra charge.
28. The contract drawings depict the approximate location of all required equipment and if shown, the diagrammatic arrangement of piping, raceways, conduits, feeders, cables, etc. herein after referred to as "conduit." Conduit runs, if shown, have been depicted with the intent of most clearly indicating the proposed routing. Actual runs may differ if kept within the requirements and provisions of these specifications, and providing that all modifications have been shown in the shop drawings. Contractor responsible to determine conduit runs and "clear" piping, ductwork, access doors, and other obstructions as applicable. Contractor shall coordinate conduit with work of other trades and alter where necessary to avoid interference. Submit for approval, prior to scaled installation drawings showing the location of all new equipment/devices to be installed and indicating circuitry. Shop drawings shall include all wiring, pull boxes, junction boxes, fittings, wiring devices and dimensioned clearances from the structure and equipment. Coordinate shop drawings with other trades prior to submission.
29. Before the relevant work proceeds, the Contractor shall prepare and submit five (5) copies of shop drawings depicting the proposed conduit routing diagram and equipment layout. Specifically detailed shall be a layout of the switchboard and related equipment in each electric room or electric closet. All equipment layouts shall be drawn to scale and dimensioned. Shop drawings shall be a minimum of 1/8" = 1'-0" and preferably 1/4"=1'-0", dimensioned, showing construction, sizes, weights, arrangements, operating clearances, performance characteristics and the necessary coordinating trades involved. Shop drawings will not be accepted unless a complete list of deviations from architect's/engineer's proposed plans is included. Exact location of all equipment will be determined in the field and the contractor must secure exact dimensional data before the layout of any work.
30. Routing for feeders, instrumentation and control circuits is not shown on the plan drawings. If indicated on the floor plans, they express the intent of routing. Final location and routing shall be suited for the construction of the building and established by the contractor based on the installation conditions and shall be verified in the field. All feeder information, conduit types and installation requirements shall be in accordance with the specifications, electrical riser diagram and appropriate panel schedules.
31. Any cutting, patching, or finish repair work required for the electrical installation is the responsibility of the contractor.
32. Where mounting heights are not detailed or dimensioned, install electrical services and overhead equipment to provide maximum headroom possible. Connect equipment for ease of disconnecting with minimum interference with other installations.
33. Provide temporary power and lighting as required during the entire duration of demolition and construction utilizing the existing electrical system as a source. The Electrical Contractor shall remove all temporary power and lighting upon the completion of the project.
34. Unless otherwise noted, refer to architectural drawings for elevations and relative positions of equipment, wall, ceiling and floor information and minor architectural dimensions in each room.
35. Where conflicts exist, provide in the bid proposal the more costly alternative.

Work/Trade Coordination

36. Refer to all other trades' drawings for additional work requirements called out to be performed by the Electrical Contractor. The Electrical Contractor is responsible for all work items pertaining to electric (120V or low voltage), regardless of the drawing location.
37. Coordinate work with other trades to avoid conflict and to provide correct rough in and connection for equipment furnished under trades that require electrical connections. Inform Contractors of other trades of the required access to and clearances around electrical equipment to maintain serviceability and code compliance.
38. The electrical contractor shall verify the size and rating of all approved mechanical equipment prior to the installation of feeder and branch circuit conductors and overcurrent protection devices.
39. AC and Refrigeration Equipment Nameplate Rating: Short circuit and ground fault protection device rating shall not exceed the manufacturer's values marked on the equipment.
40. Sequence, coordinate and integrate installations of electrical materials and equipment for efficient flow of work. Give particular attention to large equipment requiring positioning prior to closing in the building. Coordinate the cutting and patching of building components to accommodated installation of the electrical equipment and materials.
41. Provide coordination drawings for all required access panel locations in gypsum ceiling to architect/engineer for coordination.
42. The Electrical Contractor shall coordinate work with the other trades to ensure the minimum safe working clearances around electrical equipment and to ensure access to equipment requiring calibration or maintenance (including motors, controls, instruments, panels, lights, valves, filters, and VAV boxes). Working space and access shall be sufficient for an adult to perform maintenance safely without straddling or removing obstructions and shall conform to NEC requirements (i.e., 110.26 & 110.34). Work that encroaches on working space or that impedes maintenance shall be relocated at the Contractor's expense.

Installation:

43. Grounding shall be installed in accordance with the NEC in accordance with electrode, grounding and bonding requirements for service, equipment and enclosures. Install an insulated equipment ground conductor in each raceway or conduit. Size equipment ground conductors in accordance with NEC Table 250.122. Bond raceways and the frames and enclosures of motors, breakers, switches, and other electrical equipment to the building grounding system. Precaution shall be taken to ensure adequate ground continuity along the conduit or raceway.
44. Provide a separate neutral conductor for each circuit. Install neutral conductors and ground conductors into all switch boxes. Multiple circuits shall not share a common neutral. Neutral shall be sized as large as the phase conductors. Neutral conductors shall not be reduced in size.
45. Arrange connections for single phase circuits to achieve three phase load balance within 20% of the average phase load current. Ungrounded conductors using a common neutral must originate from different phases.
46. The electrical contractor is responsible for maintaining proper phase rotation with all existing three (3) phase electric loads.
47. Phase rotation check: on multi-phase equipment, perform a phase rotation check prior to energizing the equipment. Use Knopp K-3 or equivalent device with red or "A" lead connected to phase A, white or "B" lead connected to phase B, and blue or "C" lead connected to phase C. Note the phase rotation and annotate test documentation with device used, manner connected, rotation observed, date of test, and name of craftsman. Do not energize equipment unless observed rotation matches the requirements of the equipment.
48. Contractor shall supply all labor, power cables, conduit boxes, fittings, wiring materials, hardware, supports, and miscellaneous items for a complete electrical installation and connection of the electrical work required, except that the provision for owner supplied equipment shall be only be completed to the point indicated elsewhere on the drawings.
49. The Contractor/Installer shall use a calibrated torque tool to achieve the indicated torque value when the tightening torque numeric values specified on the electrical equipment or in the installation instructions. In the absence of connector or the equipment manufacturer's recommended torque values, the tables in Informative Annex I may be used to correctly tighten screw-type connections for power and lighting circuits. Informative Annex I represents the "Recommended Tightening Torque Tables from UL Standard 486A-B."
50. All cables, not within conduit (ex., MC type, fire alarm, PA), routed within the ceiling cavity must be secured using Bridle rings, J-hooks, or other approved means. The cables must not lay on dropped ceiling panels, be fastened to existing electrical conduits, steam pipes, sprinkler pipes, insulated pipes, or be routed in such a fashion as to obstruct access hatches, doors, utility access panels, mechanical service work areas or fittings and shall not be routed through fire doors, ventilation shafts, or grates.
    a. Unless otherwise provided, MC cables shall be secured at intervals not exceeding 6'. Cables containing four or fewer conductors sized no larger than 10 AWG shall be secured within 12" of every box, cabinet, fitting, or other cable termination.
    b. Type MC cable shall be permitted to be unsupported where the cable: (a) Is fished between access points through concealed spaces in finished buildings or structures and supporting is impractical; or (b) Is not more than 6' in length from the last point of cable support to the point of connection to luminaires or other electrical equipment and the cable and point of connection are within an accessible ceiling. Type MC cable fittings shall be permitted as a means of cable support.
51. All cable trays and electrical conduits shall be independently supported and braced independently of the ceiling.
52. All new wiring is to be run concealed wherever possible. All conductors shall be in a surface mounted metallic raceway in public spaces or metallic conduit in utility locations when not routed concealed in the ceiling/wall cavities. Any locations that do not have accessible or dropped ceilings will require the use of surface mounted metallic raceways. Provide pull-boxes (size per code) and locate in conduit runs as required. No exposed cable may be installed.
53. Surface mounted metallic raceway shall meet the following criteria:
    a. Install in accordance with manufacturer's instructions for system components and approved shop drawings. Coordinate installation with adjacent work to ensure proper clearances and to prevent electrical hazards.
    b. Install in accordance with complete system instruction sheets.
    c. Install enclosures to be mechanically continuous and connected to all electrical outlets, boxes, device mounting brackets, and cabinets, in accordance with manufacturer's installation sheets.
    d. Install enclosures to be electrically continuous and bonded in accordance with the National Electric Code for proper grounding.
    e. Mechanical Security: Raceway systems shall be mechanically continuous and connected to all electrical outlets, boxes, device mounting brackets, and cabinets, in accordance with manufacturer's installation sheets.
    f. Electrical Security: Metal raceway shall be electrically continuous and bonded in accordance with the National Electric Code for proper grounding.
    g. Raceway Support: Raceway shall be supported by 2-hole straps at intervals not exceeding 5 feet or in accordance with manufacturer's installation sheets.
    h. Accessories: Provide accessories as required for a complete installation, including insulated bushings and inserts where required by manufacturer.
    i. Unused Openings: Close unused raceway openings using manufacturer's recommended accessories.
54. Where PVC raceway is indicated to be installed exposed in an external environment, expansion fittings shall be installed to meet the requirements of NEC 352.44.
55. All openings and penetrations shall be sealed upon completion of the electrical installation to prevent the spread of smoke and fire through openings. Seal around conduit and raceway penetrations through interior walls and floor separating areas to restore original fire rating; use a UL classified fire sealant. Seal penetrations through roof and exterior walls to make waterproof. Request inspection of fire seals by electrical inspector from authority having jurisdiction before and after placement of fire seal materials. All openings shall be coordinated with the other trades to limit interference and obstruction.
56. Limit the use of electrical metallic tubing (EMT) to where it will not be subject to physical damage or corrosion. Use intermediate metal conduit (IMC) or rigid galvanized steel conduit (RGS) where raceways are embedded in concrete or exposed to physical damage. Use minimum 3/4" conduit except as follows: 1/2" conduit may be used for 20 amp general light and power circuits and for control circuits; 3/8" flexible metal conduit may be used to connect light fixtures in suspended ceilings. Use liquid tight flexible metal conduit for flexible connection to equipment in mechanical rooms or outdoors.
57. Where raceways contain insulated conductors 4 AWG and larger that enter an enclosure, the conductors must be protected from abrasion during and after installation by a fitting that provides a smooth, rounded insulating surface, such as an insulating bushing as per NEC 300.4(G).
58. Install outdoor equipment to be weatherproof (NEMA 3R).
59. Wherever the length of the secondary conductors of any transformer exceeds ten feet, and enclosed circuit breaker or fused disconnect is required to be provided within ten feet of the transformer secondary terminals in accordance with NEC Article 2401-2(C)(2). This overcurrent device shall have an ampacity rating equal to the ampacity of the panel being served. If this occurs and the panel is in the same room, the panel being fed may be changed to main lug only.
60. All penetrations through exterior walls shall be sealed watertight. Furnish and install seals for conduit and raceways to seal the annular space between the raceway and the building penetration. Furnish and install conduit sealing bushings as manufactured by OZ/Gendy type CSMI or CSMC or approved equal Furnish and install conduit sealing bushings as manufactured by OZ/Gendy type CSBG or approved equal to seal the conductors inside the raceway. Coordinate submittal submission with conductor size, quantity and insulation type.
61. Underground conduits shall be pitched to drain away for them building in manholes.
62. As per 1022.4 of the IBC, no conduit, piping, raceway etc. serving other areas may pass through the stair enclosure. Conduit, piping, raceway etc. must terminate at the stair enclosure.

Wire Information:

63. All wiring shall be copper conductor, 600 volts in EMT raceway with approved fittings unless otherwise indicated. Feeder and branch circuit wiring shall be minimum #12 AWG unless otherwise indicated. Feeder and branch circuit wiring larger than #10 AWG shall be stranded conductor: #10 AWG and smaller, shall be solid conductor. Control wiring shall be #18 AWG THWN. Type of insulation as follows unless noted otherwise:
    a. THHN/THWN insulation for #4 AWG and smaller
    b. THW or THHN/THWN insulation for #2 AWG and larger
    c. THW used for all panel feeder and service conductors
    d. XHHW-2 insulation type shall be used where conductors are installed in conduits exposed to the weather.
64. Use the following conductor color codes:

	208Y/120V	480Y/277V
Phase A	Black	Brown
Phase B	Red	Orange
Phase C	Blue	Yellow
Neutral	White	Gray
Equip. Ground	Green	Green

Circuit Breakers:

65. Use 600 VAC circuit breakers in 480V and 480Y/277V switchboards, panelboards and motor control centers.
66. Provide circuit breakers with UL listed interrupting rating (RMS symmetrical amperes) greater than the available fault current shown on the electrical one-line diagram. "Series rated" equipment shall not be accepted.
67. Install UL Listed circuit breaker padlocking devices for service and maintenance personnel on all over current protection devices at the main building panel (MDP or equivalent). The device must have provisions for placement of a lock on it to secure the device in the off position. The lock-out device must be part of the disconnect assembly and must remain in place after the padlock is removed, whether it is a fused disconnect switch, a single circuit breaker, or a circuit breaker in a panelboard. A device that is attached to the circuit breaker handle by a set screw is not an acceptable means to serve as a safe method of locking the device in the off position.
68. Unless noted otherwise, all circuit breakers shall be molded case, thermal magnetic and rated for available short circuit current.
69. Circuit breakers used as switches shall be UL listed for switching duty and marked "SWD" per NEC 240-83(D).

Receptacles:

70. Receptacles and communications outlets shown on drawings shall be mounted 8" apart on center horizontally. Contractor shall coordinate exact location of all boxes in two hour or less rated assemblies such that area of box per wall area and outlets on opposite side wall horizontally spacing comply with state building code regarding fire resistant construction.
71. All receptacles shall be listed tamper-resistant receptacles.
72. All outdoor receptacles shall be mounted 42" above the finished grade, unless noted otherwise. The outdoor receptacles shall be GFCI type with a weatherproof enclosure. The weatherproof enclosure shall have a gasketed hinged outlet cover/enclosure which is suitable for wet locations while in use and UL listed as manufactured by TayMac or approved equal.

Labeling:

73. All switchboards, panelboards, industrial control panels and motor control centers that are in other than dwelling occupancies and are likely to require examination, adjustment, servicing or maintenance while energized shall be field marked to warn qualified persons of potential electric arc flash hazards. The marking shall be located so as to be clearly visible to qualified persons before examination, adjustment, servicing or maintenance of the equipment. Marking shall be self adhesive, commercial label conforming to NEC 110.16 and ANSI Z535.4. Arc Flash Label shall be Brady (bradyid.com) catalog No. 102308 or equal.
74. Provide identification tags for all new wiring and install at each end and in all intermediate pull/junction boxes, cabinets, housings, etc. Indicate on tags, legibly minimum ¼" high letters, the points of origin and termination of each conduit and conduit run. Label all receptacles and switch covers with panelboard and circuit number. For indoor equipment, use Brother P-touch 3 label maker with TC-10 label cartridge or equal. For exterior equipment, use aluminum dymo half-inch tape label with embossed lettering. Abbreviate lettering to provide necessary information with minimum label size (i.e., Panelboard PP1, Circuit 23 should read PP1-23).
75. Label all switchgear, panelboards, and separately-mounted equipment with feeder source and circuit number. For interior equipment, provide white Micarta plate with quarter-inch black lettering. For exterior equipment, provide anodized aluminum plate with quarter-inch embossed block lettering. Attach to equipment using contact cement in a clear space on the upper portion of the equipment cover approximately 66" AFF. Abbreviate lettering or adjust letter size to provide necessary information with minimum label size, (i.e., 227/480V PANEL PP1 FROM MDP CKT 3 or P-1 20 HP PUMP FROM PP1 CKT 3).
76. All panels shall have typed, completed directories indicating equipment served and room number (as indicated on the final building signage) of equipment location, or spare, or space. Identify the purpose of individual circuit breakers, safety switches and motor starters by means of nameplates as indicated. Update directories as panels are altered. Circuit changes shall be reflected on "as-built" drawings.
77. All circuits and circuit modifications must be legibly identified as to their clear, evident, and specific purpose. The identification must include sufficient detail to allow each circuit to be distinguished from all others, and the identification must be on a circuit directory located on the face or inside of the door of a panelboard. Circuit directories containing multiple entries with only "lights" or "outlets" do not provide the sufficient detail required by the NEC.

Lighting:

78. Support for light fixtures in or on grid-type suspended ceilings: A Seismic Fixture Clamp (SFC) shall be installed as a metal clip to attach recessed fluorescent light fixtures (luminaires) to framing members of metal suspension systems for acoustical and lay-in panel ceilings. One clamp is required at each of the four corners.
79. In mechanical areas, the contractor shall verify locations and make adjustments necessary to clear obstructions and required to suit field conditions.
80. "Wiring" to battery operated exit or emergency luminaries shall be as per the Manufacturer's instructions and in conformance with the UL Listing of the equipment. As per NEC 700-12(F), connect the emergency battery to the line side, ahead of the switch of the area lighting and clearly identify the circuit feeding the unit at the distribution panel.
81. Provide neutral for all lighting circuits.
82. Gang switches together under one faceplate.
83. For installation of light fixtures in areas without a ceiling, contractor shall determine method of support using hanger fittings, threaded rod, and "Unistrut" as applicable. These costs shall be included with the base bid.
84. Lighting controls factory startup:
    a. The contractor, with the assistance of the lighting control system manufacturer or representative, and lighting designer shall program and verify the system performs per the manufacturer's instructions and the lighting designer's intent, sequences of operations, plans, and specifications. This includes properly locating the daylight sensor in the room(s), setting the dimming curves, setting occupancy sensor shut-off delays, setting dimming levels, and addressing all of the components in the lighting control system.

Inspections/Warranty:

85. No work shall be concealed until after inspection and approval by proper authorities. If work is concealed without inspection and approval, the Contractor shall be responsible for all work required to both open and restore the concealed areas in addition to any required modifications.
86. The contractor shall make a final inspection of all electrical equipment to ensure that there are no loose electrical connections or electrical circuits subject to electrical break down due to the presence of foreign material. This shall include inspection of all connections made under this contract.
87. The contractor shall contract with an electrical underwriter to provide third-party electrical inspection services (both "rough" and "final") for issuance of a "Certificate of Completion". All fees and costs shall be the responsibility of the contractor.
88. The contractor shall deliver certificates of electrical and other inspections or copies thereof, to the client at the completion of the project with copies to the Engineer/architect.
89. The contractor shall guarantee all work in writing to the client against any and all defects in material and workmanship for a period of one year, or as indicated in the specification, from date of acceptance and perform all corrective work at no cost to the client.

Electrical Demolition General Notes

THE ELECTRICAL CONTRACTOR SHALL REFER TO THE A1.XX SERIES, A5.40, M1.XX SERIES, AND P1.XX SERIES OF DRAWINGS FOR ADDITIONAL SCOPE. ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR ALL ELECTRICAL DEMOLITION REQUIREMENTS ON THOSE PLANS.

General Project Info:

1. The demolition drawings are diagrammatic and indicated the general intent and scope. Plans do not attempt to show all electrical demolition items. Unless otherwise noted, devices shown are for information purposes. Field verify all demolition items and the extent of demolition work, conditions under which demolition is to be accomplished along with kind and amount of materials being removed and provide for removal of all devices accordingly prior to bid.
2. Contractor shall include all labor and materials in the base bid including all temporary connections, conduit and wire in order to accommodate construction and provide continuous service to devices. Systems that are to remain temporary or remain in service shall be maintained. Temporary building power shall be performed during overtime and shall be included in the base bid.
3. The contractor is responsible for the sequence of all work and shall include in the base bid all labor and materials required for the extensions, re-routing and relocation of existing system components, equipment, wiring, conduits and cabling to maintain operation of all systems throughout the building during demolition and construction phases.
4. The contractor shall report to the client any and/or all conditions that may interfere with or otherwise affect or prevent the proper execution and completion of the work of this contract.
5. The contractor shall execute all work within the regulations of the building for demolition and removal of debris. Overtime work required will be at no extra cost to the client.
6. All equipment shall be disconnected and removed back to its power source of origination unless otherwise noted ("U.O.N.") by Existing to Remain ("E"). All disconnected and removed items that are not being reused shall be returned to the owner or disposed off site in an approved method.
7. The contractor shall at all times protect the property of the client and the building owner, including but not limited to windows, finishes, public toilets, elevators, doors, bus ducts, electrical and air conditioning equipment, convector enclosures, etc.
8. Unless noted otherwise, all of the existing electrical equipment currently located in the areas of demolition, either specifically indicated on this drawing or not, shall be disconnected and removed from service. The owner has first right of refusal on all removed items. All items not wanted by the owner shall be properly disposed of offsite by the contractor in accordance with the law. Care shall be taken to maintain circuit continuity to all existing electrical devices to remain. Refer to architectural drawings for exact areas of demolition.
9. Relocate or remove all electrical devices in accordance with the applicable codes.
10. Do not disable or disrupt building fire or life safety systems without written permission from the Owner. In all cases, permission shall have been granted not less than ten (10) working days prior to the intended interruption.
11. Before the start of work, the electrical contractor shall check all existing devices, light fixtures, equipment, etc. that is noted or required to be reused to satisfy himself that they are operating properly. Should any of the items not be operating properly, contractor shall report same to the engineer and await his directions. Contractor not comply with the above will be responsible for providing operational items at his expense.
12. Field investigate the existing electrical & low voltage systems installations. All existing installations in the renovation areas that are to remain but are not currently in compliance with current codes shall be corrected, including but not limited to the following: Un-supported wire, conduit and junction boxes laying on top of ceiling tiles, wire, conduit and/or junction boxes supported only by tie-wire. Raise and support conduit with strap per specs. Raise and support wire with bridle rings, J-hooks, or other appropriate means. Provide new conduit/wire as required. Fixtures improperly supported or inadequately supported by device boxes - provide proper support per N.E.C.

Work/Trade Coordination:

13. Electrical Contractor shall coordinate the mechanical equipment demolition with the Mechanical Contractor and mechanical demolition plans and general construction demolition with the General Contractor and architectural demolition plans for all equipment to be demolished and schedule time for electrical demolition.
14. The contractor shall remove all electrical equipment left after wall demolition, including conduit, switch boxes, plates, bridges or any other telephone or electric wiring and equipment. Disconnect all wiring at panels and remove old wiring from plenum.
15. Temporarily relocate electrical equipment as required to accommodate the construction schedule. All areas not under construction must be kept operational during construction. To accomplish this, provide the necessary temporary electrical services. Remove temporary devices upon completion of the project.
16. As part of the base bid, the Electrical Contractor shall provide temporary electric power required for construction activities of all project divisions. All temporary branch circuits shall be supplied by circuits protected by ground fault circuit breakers. All temporary branch circuits shall be in accordance with NEC Article 590.
    a. Complaints concerning power distribution or devices available in a specific area or areas of the project will be reviewed by the AE. If directed by the AE, the Contractor shall provide additional power distribution or connection devices required under this section at no additional cost.
17. As part of the base bid, the Electrical Contractor shall provide temporary lighting with local switch for general illumination and task illumination for the General Contractor, other prime contractors, and for all sub-contractors for the duration of the construction. Lighting levels provided are to be in compliance with applicable workplace standards. All temporary lighting shall be supplied by circuits protected by ground fault circuit breakers. All temporary lighting shall be in accordance with NEC Article 590.
    a. Complaints concerning lighting levels and/or lighting quality in a specific area or areas of the project will be reviewed by the AE. If directed by the AE, the Contractor shall provide additional luminaries and/or additional distribution required at no additional cost.
18. At the conclusion of the construction activities remove all wiring, both exposed and concealed, used for temporary lighting and power distribution.

Demolition Requirements:

19. Remove abandoned electrical equipment, devices and wiring (i.e., distribution equipment, receptacles, data ports, raceway systems) back to the source panelboard, switchboard, switchgear, communications closet, or cabinet. Abandoned wiring and raceways can result from actions that include the following:
    a. Equipment is removed or relocated.
    b. Fixtures are removed or relocated.
    c. System is no longer used.
    d. There is no demonstrable near term future use for the existing circuit or raceway system.
20. Unused electrical equipment and material should only be left in place if one or more of the following conditions exist:
    a. The removal requires the demolition of other structures or equipment that is still in use. An example is conduit embedded in walls or ductbanks.
    b. The cost of removal is excessive due to hazards, construction methods, or restricted access. A final determination for this condition shall be made by the engineer.
    c. If either of the above two cases exist, remove the conduits, including those above accessible ceilings, to the point that building construction, earth, or paving covers them. Cut conduit beneath or flush with building construction or paving. Plug, cap, or seal the remaining unused conduits. Install blank covers for abandoned boxes and enclosures not removed.
21. Inventory each panelboard where circuits are indicated to be reused. Sequentially consolidate existing circuits within each panelboard with regard to area served. Maximize capacity for service to the project area by including existing spares with the group of circuits breakers to be disconnected as a result of this selective demolition. Prepare a current directory, post demolition, for each panelboard as the base upon which the final directories will be compiled.

Extension/Continuity:

22. All thermostats should remain connected until such time that they are relocated. If they are in a wall to be removed, leave them connected and either tuck them into the ceiling or attach to adjacent structure remaining.
23. Extend existing equipment connections using materials and methods compatible with the existing electrical installation and identified in the Electrical Specifications.
24. When relocation or removal of an electrical device interrupts the continuity of a downstream circuit or device to remain, reroute/modify the circuit as required to maintain circuit continuity. Provide new junction boxes, pullboxes, raceways, wiring, etc., as required.
25. When circuits are interrupted by the removal of a panelboard, the Electrical Contractor shall rewire devices to the nearest panelboard of same voltage requirements with available space. Furnish and install new circuit breakers or utilize spare circuit breakers as required.
26. Where an existing device is removed but the raceway and box remains for circuit Continuity, provide an appropriate blank cover plate of material and finish to match the cover plates of the devices in that room.
27. If the continuity of the neutral conductor of a multiwire circuit is interrupted (open), the resultant over or under voltage can cause a fire and/or destruction of electrical equipment. Contractor shall take necessary precautions to preclude the interruption of neutral conductor on a multiwire circuit.
28. Non-demolition areas: Demolition works shall not affect areas not included in demolition. Contractor shall be responsible for the continuity of all services in non-demolition areas. All services shall be maintained at all times. Maintain service by extending, re-routing and/or reconnecting any circuits affected by demolition. Provide additional conduit/wire as required to maintain service. Circuits in non-demolition areas that are connected to demolished panels and/or circuits shall be re-circuited to the existing panels. Provide temporary power as required during change-over to maintain continuous service. Provide temporary power for all relocated circuits as required to maintain continuous service.
29. Where existing outlets are shown to remain, but are indicated with new circuitry perform the following:
    a. Remove existing circuitry. Provide additional conduit, wiring, etc., necessary to maintain circuit continuity to existing devices on the same circuit that are not to be recircuited.
    b. Provide new wiring device and faceplate.
    c. Recircuit devices as indicated.

Patching/Repairing:

30. Restore the original fire rating of floors, walls, and ceilings after electrical demolition using a UL classified fire sealant.
31. Except for areas where partitions or ceilings are to be demolished or where new air conditioning or electric is to be installed, contractor shall replace to the existing condition in area of disturbed ceiling. Any water damaged or broken ceiling tiles as the result of contractor's demolition shall also be replaced.
32. Upon completion of the demolition work, the contractor shall provide that all areas be left broom clean.
33. Furnish and install knockout plugs on all existing panels, equipment, and outlet box openings created by the removal or relocation of existing raceways.
34. Where an existing electrical device, equipment, etc., is being removed from an existing wall and that wall is to remain contractor shall patch existing wall to architects satisfaction.

Hazardous Material Disposal:

35. Disconnect and remove all ballasts from fluorescent light fixtures that do not have a labels stating "BALLAST DOES NOT CONTAIN PCBs" or similar label (BALLAST MAY CONTAIN PCBs). Place PCB ballasts in D.O.T. approved containers. Properly dispose of containers with a federally approved disposal contractor. Disposal shall involve segregation of components for recycling and incineration of PCB contents. All disposal documentation shall be provided to the owner upon completion of the project. Contractor shall maintain an owner approved log sheet for each run.
36. Remove all mercury-containing lamps, do not break or crush. Retain services of a state approved lamp recycling facility able to accept waste D009. Coordinate packaging required and package, secure, and deliver lamps as required by the selected recycling facility to insure minimum lamp breakage. Minimum of 95% of lamp material must be shipped intact. Contractor must comply with all reporting and paperwork requirements of state laws regarding the handling, transportation, and disposal of hazardous waste including but not limited to filing the required paperwork and manifest with the state and owners as required by law. All disposal documentation shall be provided to the owner upon completion of the project.
37. Remove all sealed lead-acid batteries from the site. Return to the battery manufacturer or to a similarly qualified battery processing facility for proper disposal. Obtain a receipt for submission with the close out documents.

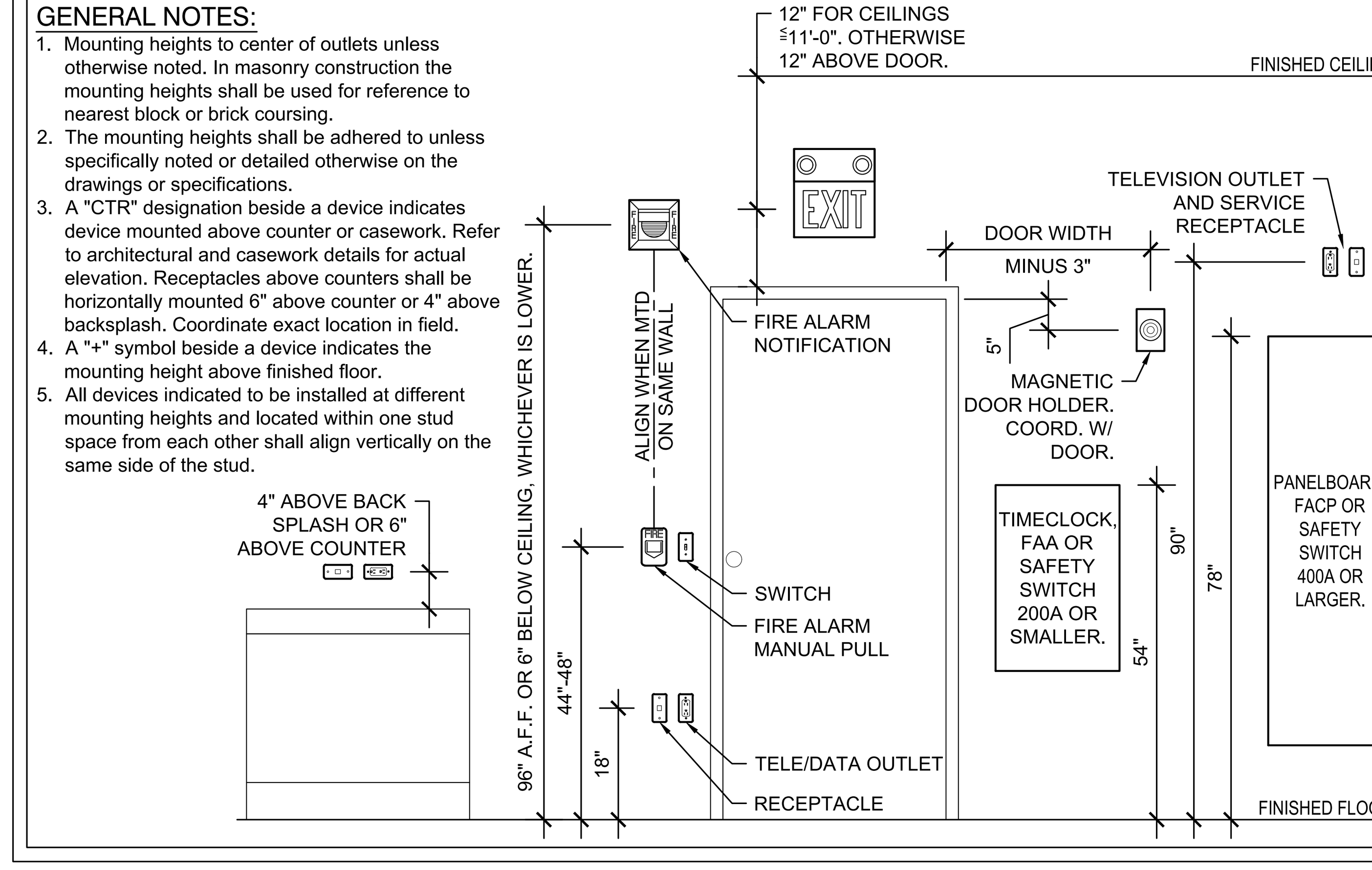
Application of Raceways

RACEWAY TYPE	APPLICATION
Rigid Steel Conduit	Where exposed to mechanical injury, where specifically required, indoors where exposed to moisture, where required by codes and for all circuits in excess of 600 volts.
I.M.C.	Where exposed to mechanical injury, where specifically required, indoors where exposed to moisture, where required by codes and for all circuits in excess of 600 volts.
E.M.T	Use in every instance except where another material is not specified.
Flexible Metal Clad Cables	Lighting and receptacle branch circuits concealed in hollow spaces of building. May not be used in corridors, places of assembly, or where prohibited by Code.
Type MC Flexible Steel	Use in dry areas for connections to lighting fixtures in hung ceilings, connections to equipment installed in removable panels of hung ceilings. At all transformer or equipment raceway connections where sound and vibration isolation is required.
Liquid-Tight Flexible Conduit	Use in areas subject to moisture where flexible steel is unacceptable, at connections to all motors, and all raised floor areas.
Non-Metallic Conduit	1. Schedule 40 - Where raceways are in slab in below grade levels, for raceway duct banks. 2. Schedule 80 - For underground raceways outside of building which are not encased in concrete. Also for secondary conductors of cold cathode lighting systems.
Wireways and Aux Gutters	Where indicated on the Drawings and as otherwise specifically required.

Device Mounting Heights

GENERAL NOTES:

1. Mounting heights to center of outlets unless otherwise noted. In masonry construction the mounting heights shall be used for reference to nearest block or brick coursing.
2. The mounting heights shall be adhered to unless specifically noted or detailed otherwise on the drawings or specifications.
3. A "CTR" designation beside a device indicates device mounted above counter or casework. Refer to architectural and casework details for actual elevation. Receptacles above counters shall be horizontally mounted 6" above counter or 4" above backsplash. Coordinate exact location in field.
4. A "+" symbol beside a device indicates the mounting height above finished floor.
5. All devices indicated to be installed at different mounting heights and located within one stud space from each other shall align vertically on the same side of the stud.



Electrical Grounding Req.

THE CONTRACTOR SHALL PROVIDE A GROUNDING CONDUCTOR FOR ALL BRANCH FEEDERS AND CIRCUITS IN ACCORDANCE WITH THE FOLLOWING CHART:

OCPD	GND CDTR SIZE (AWG)		OCPD	GND CDTR SIZE (AWG)	
AMPS	COPPER	AL OR CU CLAD AL	AMPS	COPPER	AL OR CU CLAD AL
15	14	12	60	10	8
20	12	10	100	8	6
30	10	8	200	6	4
40	10	8			

NOTE: WHERE NECESSARY TO COMPLY WITH NEC 250.4(A)(5) OR (B)(4), THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE SIZED LARGER THAN GIVEN IN THIS TABLE. WHERE UNGROUNDED CONDUCTORS ARE INCREASED IN SIZE, EQUIPMENT GROUNDING CONDUCTORS, WHERE INSTALLED, SHALL BE INCREASED IN SIZE PROPORTIONATELY ACCORDING TO THE CIRCULAR MIL AREA OF THE UNGROUNDED CONDUCTORS.
*SEE INSTALLATION RESTRICTIONS IN NEC 250.120

Date	1/10/20
Checked	BH
Drawn	MH

MICHAEL J. McGOVERN, R.A.
Title REGISTERED ARCHITECT
License No. 022257-1

Revisions:

1 ISSUE TO BID 11/23/20

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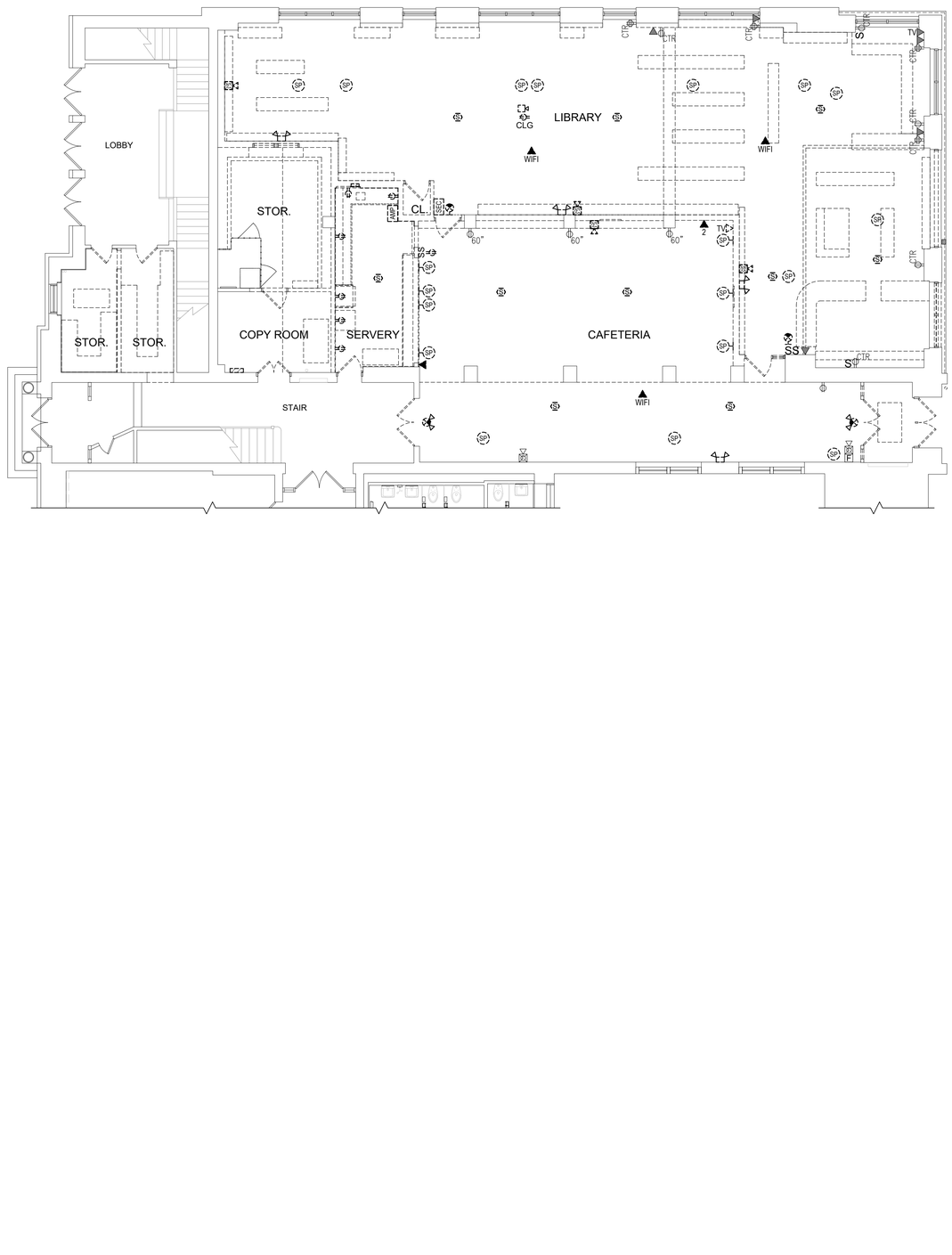
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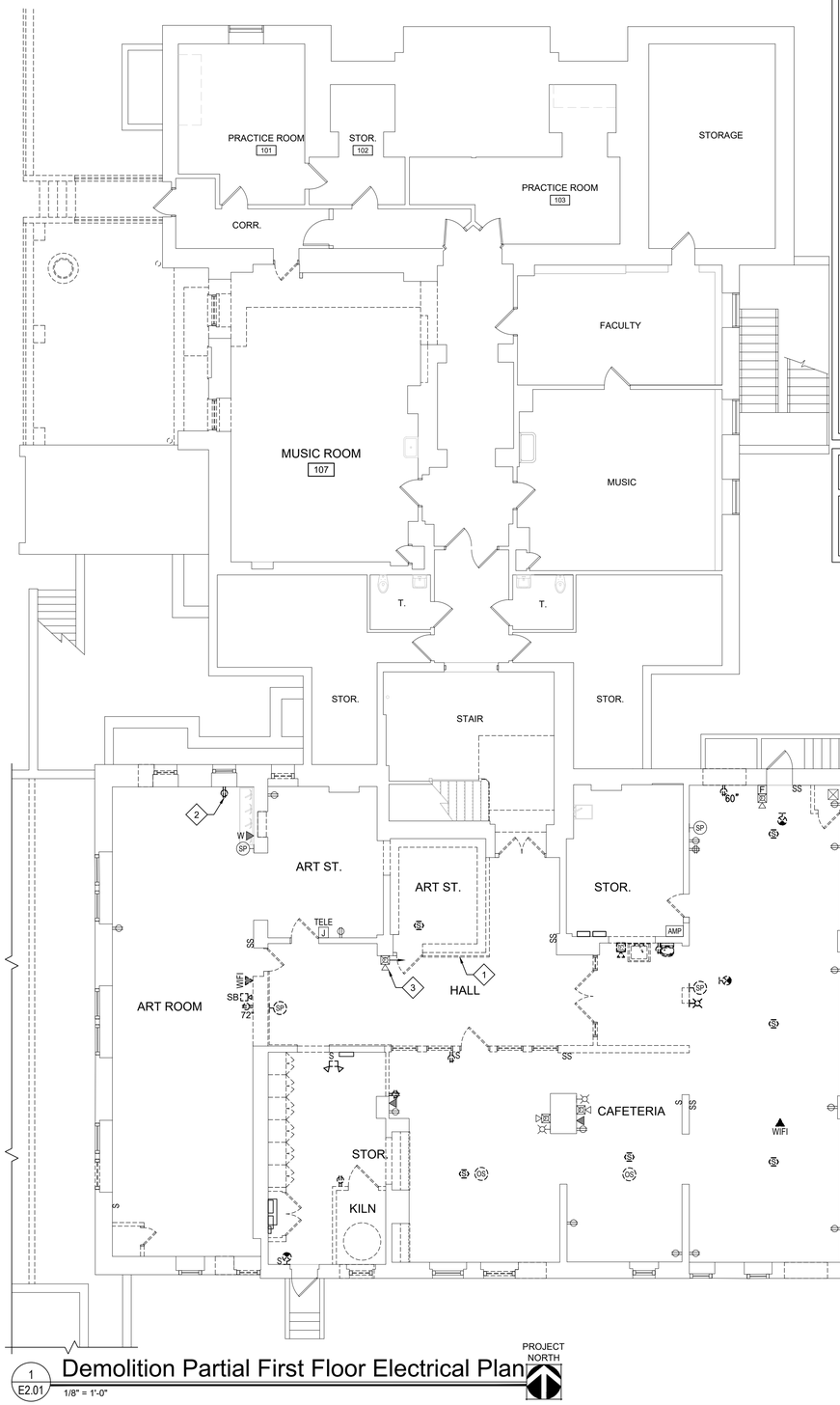
NYSED PROJECT # 66-07-01-03-0-005-020

ELECTRICAL COVER SHEET
2019 BOND REFERENDUM
CHATSWORTH AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

Job No. 4.1092.72.03
File No. 10927203E001

E0.01





1 E2.01 Demolition Partial First Floor Electrical Plan
1/8" = 1'-0"

PROJECT NORTH

Existing/Demolition Symbol Legend

- EXISTING PANEL TO REMAIN.
- EXISTING RECEPTACLE TO REMAIN. WHEN SHOWN ON A WALL RECEIVING NEW FURRING, THE CONTRACTOR SHALL ADD AN EXTENSION BOX AND RESET THE DEVICE AT THE NEW FINISHED SURFACE.
- EXISTING RECEPTACLE TO BE REMOVED. REFER TO THE GENERAL ELECTRICAL DEMOLITION NOTES FOR CIRCUIT CONTINUITY REQUIREMENTS.
- WIFI WIRELESS ROUTER FOR WIFI. CONTRACTOR SHALL REINSTALL AT NEW SURFACE. REFER TO PROPOSED PLANS FOR ADDITIONAL INFORMATION.
- EXISTING DATA PORT TO REMAIN. WHEN SHOWN ON A WALL RECEIVING NEW FURRING, THE CONTRACTOR SHALL ADD AN EXTENSION BOX AND RESET THE DEVICE AT THE NEW FINISHED SURFACE.
- SP EXISTING SPEAKER TO BE REMOVED.
- SB EXISTING SMART BOARD TO BE REMOVED, STORED, AND REINSTALLED AT NEW LOCATION. REFER TO PROPOSED PLAN FOR ADDITIONAL INFORMATION.
- EXISTING CEILING MOUNTED PROJECTOR TO BE REMOVED, STORED, AND REINSTALLED AT NEW LOCATION. REFER TO PROPOSED PLAN FOR ADDITIONAL INFORMATION.
- EXISTING EXIT SIGN TO BE REMOVED. DISPOSE OF THE BATTERY IN AN APPROVED MANNER.
- EXISTING DUAL HEAD EMERGENCY LIGHT TO BE REMOVED. DISPOSE OF THE BATTERY IN AN APPROVED MANNER.
- S EXISTING SWITCH TO BE REMOVED. WHERE NEW LOW VOLTAGE SWITCH(ES) A INDICATED, RETAIN THE EXISTING CONDUIT AND BACK BOX FOR REUSE.
- SD EXISTING SMOKE DETECTOR TO BE TEMPORARILY SUPPORTED AND PROTECTED DURING CONSTRUCTION. REINSTALL AT NEW CEILING AS PER THE PROPOSED PLANS. EXTEND SLC CIRCUITING AS REQUIRED.
- EXISTING FIRE ALARM & CO ALARM SYSTEM NOTIFICATION DEVICE TO BE TEMPORARILY SUPPORTED AND PROTECTED DURING CONSTRUCTION. REINSTALL AT NEW WALL AS PER THE PROPOSED PLANS. EXTEND NAC CIRCUITING AS REQUIRED.
- OS EXISTING OCCUPANCY SENSOR TO BE REMOVED
- EXISTING FIRE ALARM & CO ALARM SYSTEM NOTIFICATION DEVICES TO REMAIN. WHEN SHOWN ON A WALL RECEIVING NEW FURRING, THE CONTRACTOR SHALL ADD AN EXTENSION BOX AND RESET THE DEVICE AT THE NEW FINISHED SURFACE.

Electrical Key Notes

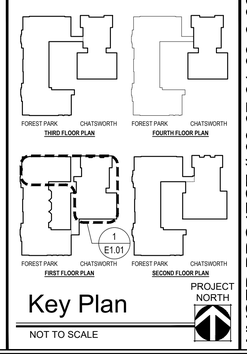
◇ SYMBOL INDICATES DEMO. KEY NOTE

1. ATTACH EXISTING WALL MOUNTED CONDUITS TO THE CEILING.
2. REPLACE EXISTING RECEPTACLE WITH A GFCI RECEPTACLE.
3. RELOCATE FIRE ALARM NOTIFICATION DEVICE AS REQUIRED TO ACCOMMODATE CONSTRUCTION OF THE NEW WALL.

FLOOR REPLACEMENT ELECTRICAL DEMOLITION WORK

THE ELECTRICAL CONTRACTOR (EC) SHALL REFER TO THE ARCHITECTURAL PARTIAL FLOORING DEMOLITION PLANS ON DRAWING A1.40 FOR SCOPE OF WORK REQUIRED BY THE EC ASSOCIATED WITH THE FLOOR REPLACEMENT PROJECT. EC IS RESPONSIBLE FOR THIS SCOPE OF WORK.

CHATSWORTH AVE. SCHOOL



Key Plan
NOT TO SCALE
PROJECT NORTH

NYSED PROJECT # 66-07-01-03-0-005-020

Date	1/10/20
Checked	BH
Drawn	MH

MICHAEL J. McGOVERN, R.A.
License No. 022257-1
Title REGISTERED ARCHITECT

Revisions:

#	
1	ISSUE TO BID 11/23/20

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1ST FLOOR DEMOLITION ELEC. PLAN

2019 BOND REFERENDUM
CHATSWORTH AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

Job No. 4.1092.72.03

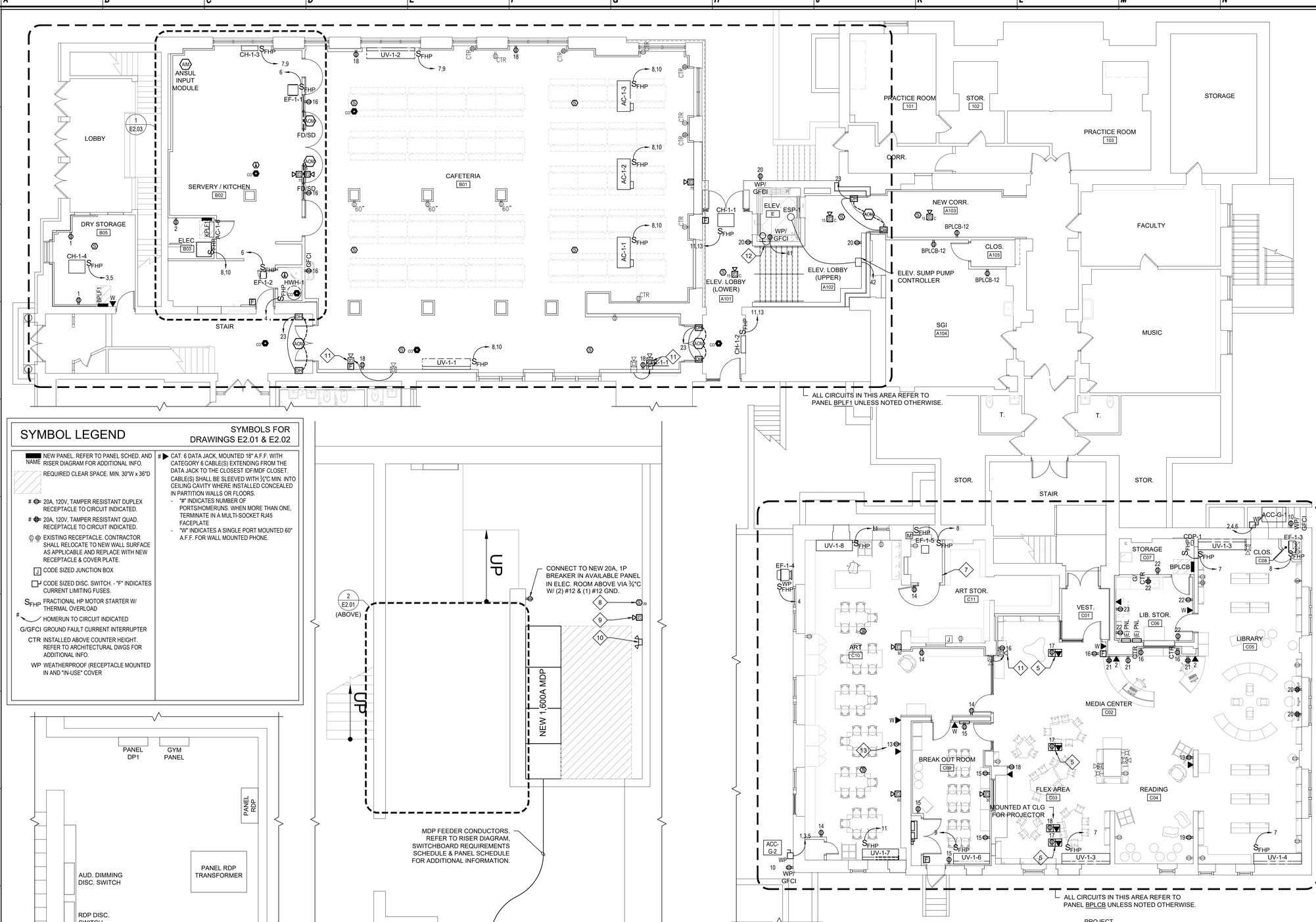
File No. 10927203E101

E1.01

SYMBOL LEGEND

SYMBOLS FOR DRAWINGS E2.01 & E2.02

- NAME — NEW PANEL. REFER TO PANEL SCHED. AND RISER DIAGRAM FOR ADDITIONAL INFO.
- REQUIRED CLEAR SPACE. MIN. 30"W x 36"D
- # — 20A, 120V, TAMPER RESISTANT DUPLEX RECEPTACLE TO CIRCUIT INDICATED.
- # — 20A, 120V, TAMPER RESISTANT QUAD. RECEPTACLE TO CIRCUIT INDICATED.
- EXISTING RECEPTACLE. CONTRACTOR SHALL RELOCATE TO NEW WALL SURFACE AS APPLICABLE AND REPLACE WITH NEW RECEPTACLE & COVER PLATE.
- J — CODE SIZED JUNCTION BOX
- CODE SIZED DISC. SWITCH - "F" INDICATES CURRENT LIMITING FUSES.
- S_{FHP} — FRACTIONAL HP MOTOR STARTER W/ THERMAL OVERLOAD
- # — HOMERUN TO CIRCUIT INDICATED
- G/GFCI — GROUND FAULT CURRENT INTERRUPTER
- CTR — INSTALLED ABOVE COUNTER HEIGHT. REFER TO ARCHITECTURAL DWGS FOR ADDITIONAL INFO.
- WP — WEATHERPROOF (RECEPTACLE MOUNTED IN AND "IN-USE" COVER
- # — CAT. 6 DATA JACK, MOUNTED 18" A.F.F. WITH CATEGORY 6 CABLE(S) EXTENDING FROM THE DATA JACK TO THE CLOSEST IDF/MDF CLOSET. CABLE(S) SHALL BE SLEEVED WITH ¾"C MIN. INTO CEILING CAVITY WHERE INSTALLED CONCEALED IN PARTITION WALLS OR FLOORS.
  - "#" INDICATES NUMBER OF PORTS/HOMERUNS. WHEN MORE THAN ONE, TERMINATE IN A MULTI-SOCKET RJ45 FACEPLATE
  - "W" INDICATES A SINGLE PORT MOUNTED 60" A.F.F. FOR WALL MOUNTED PHONE.



1 E2.01 — Proposed Partial First Floor Electrical Plan
1/8" = 1'-0"
PROJECT NORTH

2 E2.01 — Enlarged Exist. Elec. Room
3/8" = 1'-0"
PROJECT NORTH

3 E2.01 — Enlarged New Electric Room
1/4" = 1'-0"
PROJECT NORTH

Key Notes

SYMBOL INDICATES PROPOSED KEY NOTE

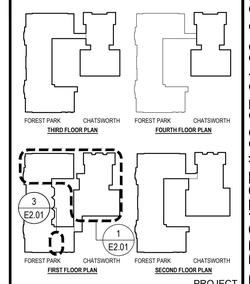
KEY NOTES FOR DRAWINGS E2.01 & E2.02

1. RECEPTACLE & DATA PORT MOUNTED AT SMARTBOARD/PROJECTOR HEIGHT. COORDINATE EXACT HEIGHT IN FIELD WITH EQUIPMENT SUPPLIED.
2. COORDINATE EXACT LOCATION OF ELEVATOR CONTROLLER IN FIELD.
3. PROVIDE FEEDER TERMINATING IN THE ELEVATOR CONTROLLER LOCATED AT THE TOP LANDING. FEEDER TO BE TERMINATED AT THE ELEVATOR CONTROLLER AT THE START OF INSTALLATION OF THE TOP LANDING ELEVATOR ENTRANCE AND THE TIMING OF CONNECTION TO CONTROLLER SHALL BE COORDINATED WITH THE ELEVATOR INSTALLER. PROVIDE AN ENCLOSED, FUSED DISCONNECT SWITCH CAPABLE OF BEING LOCKED IN THE OPEN POSITION. FUSES TO BE CURRENT LIMITING CLASS J OR EQUIVALENT. FUSES ARE TO BE TIME DELAY TO COVER THE FULL LOAD UP ACCELERATING CURRENT. ACCELERATING CURRENT TYPICALLY IS A PEAK OF 55A, AND LASTS FOR DURATION NOT TO EXCEED 7 SECONDS.
4. PROVIDE AND INSTALL ONE (1) DEDICATED OUTSIDE TELEPHONE LINE TERMINATED AT THE CONTROLLER. COORDINATE WITH THE ELEVATOR CONTRACTOR.
5. COORDINATE EXACT LOCATION OF FLOOR MOUNTED RECEPTACLE & DATA PORT IN FIELD. **EC** TO MARK OUT TRENCHING REQUIREMENTS FOR **GC** TO PERFORM.
6. PANEL CONTAINING THE BREAKER FOR THE DEDICATED 120 VOLT, 20A SINGLE-PHASE BRANCH CIRCUIT FOR THE CAR LIGHTS, CAR TOP RECEPTACLE, AUXILIARY LIGHTING POWER SOURCE AND VENTILATION. THE BREAKER SHALL BE CAPABLE OF BEING LOCKED IN THE OPEN POSITION. TERMINATION OF THIS BRANCH CIRCUIT SHALL BE IN THE ELEVATOR CONTROLLER LOCATED AT THE TOP LANDING AND SHALL BE CONNECTED AT THE SAME TIME AS THE FEEDER REFERENCED IN KEY NOTE 3.
7. RELOCATE EXISTING KILN DISCONNECT SWITCH TO THIS ROOM. EXTEND CONDUCTORS TO NEW LOCATION WITH _"C W/ (_) #__ & (1) #__GND. RECONNECT POWER TO RELOCATED KILN.
8. WALL MOUNTED SMOKE DETECTOR. REFER TO DRAWING E5.01 FOR ADDITIONAL FIRE ALARM INFORMATION.
9. WALL MOUNTED HORN/STROBE. REFER TO DRAWING E5.01 FOR ADDITIONAL FIRE ALARM INFORMATION.
10. DUAL HEAD EMERGENCY LIGHT WITH BATTERY BACKUP. REFER TO LIGHT FIXTURE SCHEDULE ON DRAWING E5.03 FOR ADDITIONAL INFORMATION.
11. EXISTING FIRE ALARM DEVICES RELOCATED TO NEW LOCATION AND MOUNTED ON NEW WALL SURFACE. EXTEND WIRING AS REQUIRED.
12. RECEPTACLE & LIGHT IN ELEVATOR SHAFT. PROVIDE SWITCH AT INTERIOR OF DOOR OPENING. FIXTURE SHALL BE LUMINAIRE LED MODEL No. "VPF42 15W 5000K CC 120-277 OP BLK WET TX/SD"
13. RECEPTACLE & DATA PORT MOUNTED AT SMARTBOARD/PROJECTOR HEIGHT. COORDINATE EXACT HEIGHT IN FIELD.

FLOOR REPLACEMENT ELECTRICAL PROPOSED WORK

THE ELECTRICAL CONTRACTOR (EC) SHALL REFER TO THE ARCHITECTURAL PARTIAL PROPOSED FLOORING PLANS ON DRAWING A2.40 FOR SCOPE OF WORK REQUIRED BY THE EC ASSOCIATED WITH THE FLOOR REPLACEMENT PROJECT. EC IS RESPONSIBLE FOR THIS SCOPE OF WORK.

CHATSWORTH AVE. SCHOOL



Key Plan
NOT TO SCALE
PROJECT NORTH

Date	1/10/20
Checked	BH
Drawn	MH

MICHAEL J. McGOVERN, R.A.
License No. 022257-1
Title REGISTERED ARCHITECT

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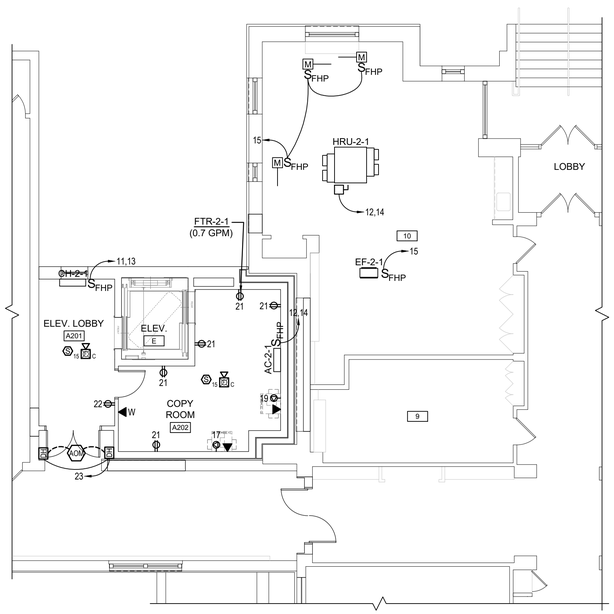
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NYSED PROJECT # 66-07-01-03-0-005-020

1ST FLOOR PROPOSED POWER PLAN
2019 BOND REFERENDUM
CHATSWORTH AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

Job No. 4.1092.72.03
File No. 10927203E201

E2.01



Prop. Partial 2nd Floor Power Plan

1 / E2.02 — 1/8" = 1'-0"

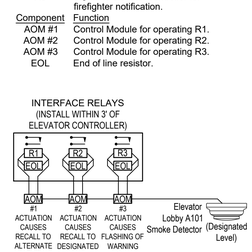
ALL CIRCUITS IN THIS AREA REFER TO PANEL BPLF1 UNLESS NOTED OTHERWISE.

PROJECT NORTH

NOTE:
PROGRAMMING SHALL BE SUCH THAT IF THE DETECTOR IN EITHER A101 OR A102 IS IN ALARM, THE ELEVATOR SHALL GO TO THE ALTERNATE LEVEL.

Component	Function
R1	Signal to elevator controller for recall to designated level.
R2	Signal to elevator controller for recall to alternate level.
R3	Signal to elevator controller for firefighter notification.

Component	Function
AOM #1	Control Module for operating R1.
AOM #2	Control Module for operating R2.
AOM #3	Control Module for operating R3.
EOL	End of line resistor.



Fire Alarm/Elevator Interface

6 / E2.02 — N.T.S.

NOTE:
THE FIRE ALARM CONTRACTOR SHALL COORDINATE WITH ELEVATOR INSTALLER FOR FINAL CONNECTIONS AS PART OF THE BASE BID.

Fire Alarm Interface Summary:
There will be three supervised control circuits from the fire alarm system that will interface with the elevator system. They are as follows:

a. Input to elevator controller for Phase I recall to the designated level from actuation of smoke detectors other than at the designated level lobby.
b. Input to elevator controller for Phase I recall to the alternate level from actuation of a smoke detector at the designated level lobby or Elevator Machine Room.
c. Input to elevator controller to flash the firefighter helmet signal when recall is initiated by a smoke detector in the elevator machine room or hoistway.

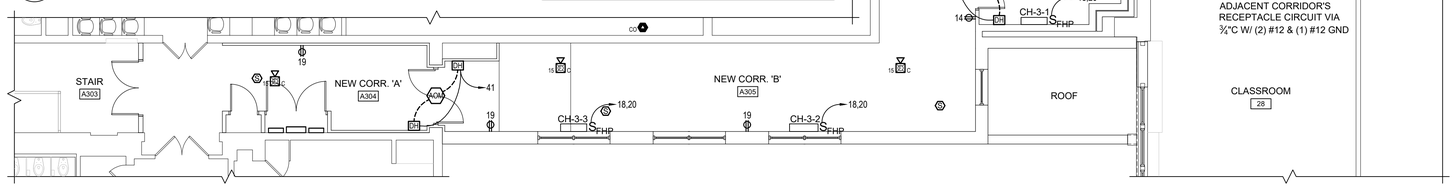
Fire Alarm Symbol Legend

SYMBOLS FOR DWGS E2.01 & E2.02

NOTE:
LIGHT LINES INDICATE EXISTING TO REMAIN.
DARK LINES INDICATE NEW WORK.

- COMBINATION HORN/STROBE
  "CD" - MINIMUM CANDELA RATING
  "C" - CEILING MOUNTED (WALL MOUNTED IF NOT INDICATED)
- CEILING MOUNTED STROBE
  "CD" - MINIMUM CANDELA RATING
- PHOTOELECTRIC SMOKE DETECTOR
- HEAT DETECTOR - COMBO ROR/FIXED TEMPERATURE
- CARBON MONOXIDE DETECTOR WITH SOUNDER BASE. DETECTOR SHALL INITIATE A SUPERVISORY CONDITION ONLY. INTERCONNECT DEVICES SUCH THAT THE SOUNDER BASES WILL SOUND IN THE ADJACENT SPACES IN AN ALARM CONDITION.
- DUCT SMOKE DETECTOR. LOCATE IN DUCT WITHIN AFTER PENETRATION INTO CONDITIONED SPACE. COORDINATE INSTALLATION WITH MC. PROVIDE A REMOTE TEST STATION IN AN ACCESSIBLE LOCATION. DETECTOR SHALL SHUT DOWN THE ASSOCIATED UNIT UPON ACTIVATION OF THE FIRE ALARM SYSTEM. ACTIVATION OF A DUCT DETECTOR SHALL PUT THE SYSTEM IN A SUPERVISORY CONDITION ONLY.
- MANUAL PULL STATION WITH LEXAN GUARD WITH AN INTEGRAL HORN. MOUNT PULL STATION ON MANUF.'S SURFACE MOUNT RED BACKBOX WHEN SURFACE MTD.
- DH 120V MAGNETIC DOOR HOLDER. COORDINATE WITH DOOR CONTRACTOR. DOORS SHALL SHUT UPON ACTIVATION OF THE FIRE ALARM SYSTEM.
- A,M ADDRESSABLE MODULE
  "I" - INPUT
  "O" - OUTPUT

ALL DEVICES SHALL BE UL LISTED FOR USE WITH THE EXISTING NOTIFIER FACP. THE CONTRACTOR SHALL CONNECT TO EXISTING SLC/NAC LOOPS AS REQUIRED AND AS PER MANUFACTURER'S INSTRUCTIONS USING PLENUM RATED CABLE.

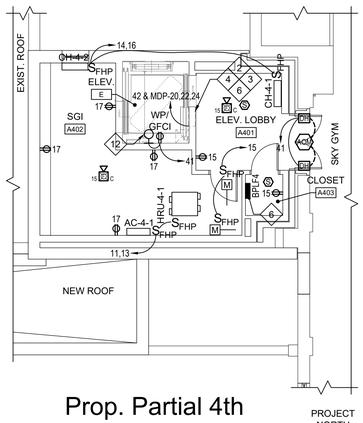


Proposed Partial 3rd Floor Power Plan

2 / E2.02 — 1/8" = 1'-0"

ALL CIRCUITS IN THIS AREA REFER TO PANEL BPLF4 UNLESS NOTED OTHERWISE.

PROJECT NORTH

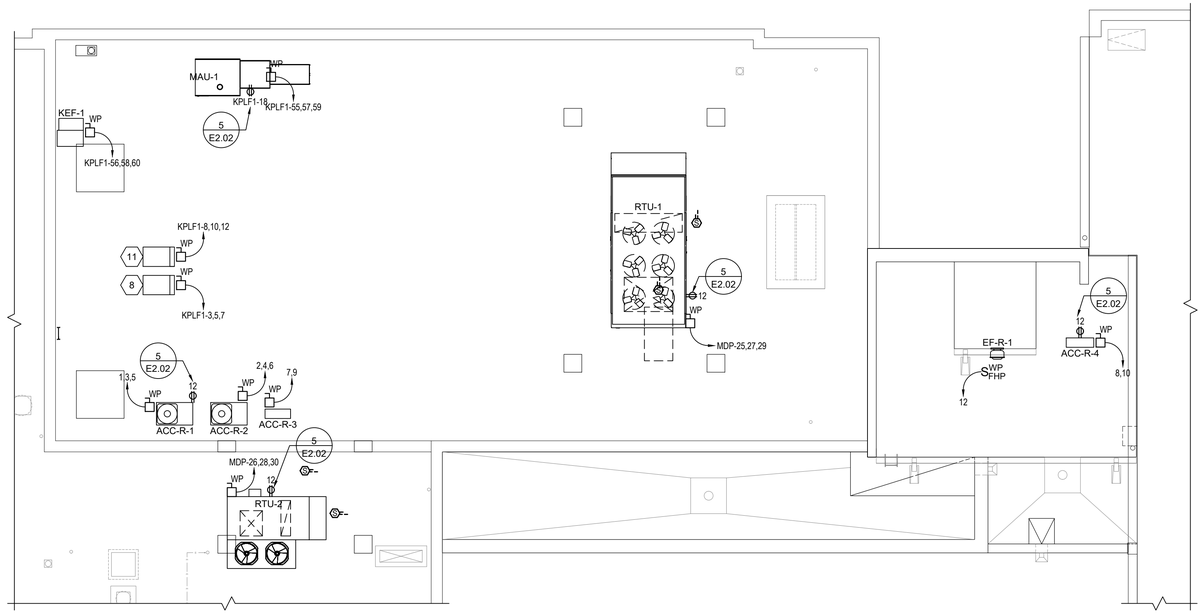


Prop. Partial 4th Floor Power Plan

3 / E2.02 — 1/8" = 1'-0"

ALL CIRCUITS IN THIS AREA REFER TO PANEL BPLF4 UNO

PROJECT NORTH

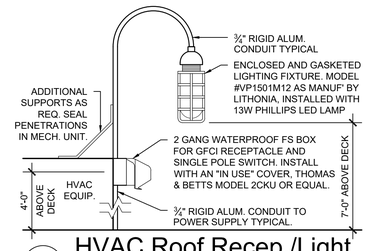


Prop. Partial Roof Power Plan

4 / E2.02 — 1/8" = 1'-0"

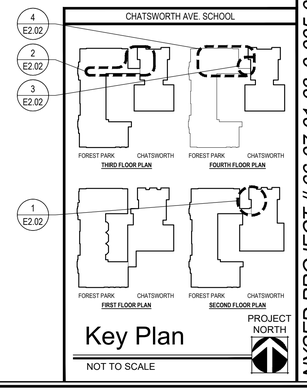
ALL CIRCUITS IN THIS AREA REFER TO PANEL BPLF4 UNLESS NOTED OTHERWISE.

PROJECT NORTH



HVAC Roof Recep./Light

5 / E2.02 — 1/8" = 1'-0"



Key Plan

NOT TO SCALE

PROJECT NORTH

Date	1/10/20
Checked	BH
Drawn	MH

MICHAEL J. McGOVERN, R.A.
Title REGISTERED ARCHITECT
License No. 022257-1

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NYSED PROJECT # 66-07-01-03-0-005-020

2nd FL.-ROOF PROPOSED POWER PLANS

2019 BOND REFERENDUM
CHATSWORTH AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

Job No. 4.1092.72.03

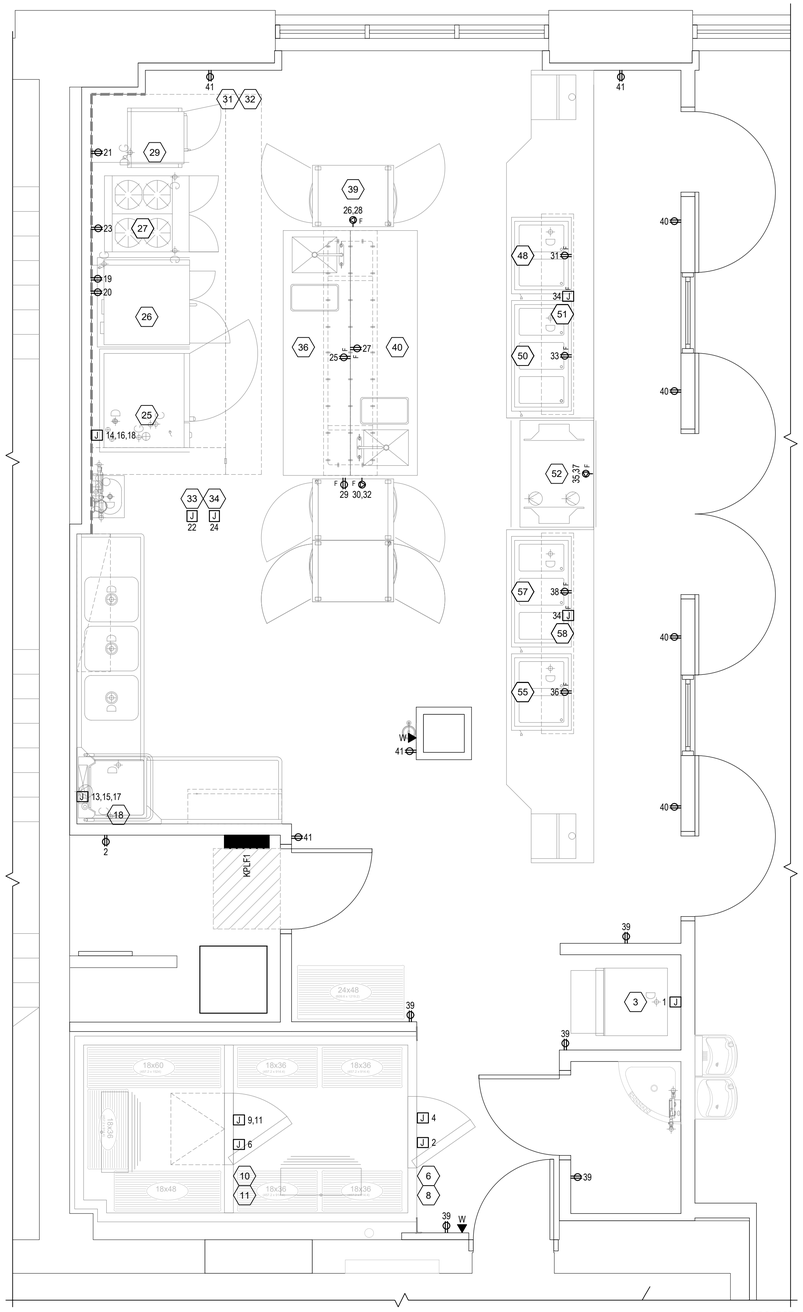
File No. 10927203E201

E2.02

NOTE:
ELECTRICAL CONTRACTOR SHALL REVIEW THE FOOD SERVICE DRAWINGS AND IS RESPONSIBLE FOR ALL WORK ITEMS CALLED OUT AS BEING BY THE ELECTRICAL CONTRACTOR OR "EC" EVEN IF NOT INDICATED ON THIS DRAWING.

Kitchen Area Symbol Legend

#	20A, DUPLEX RECEPTACLE "#" - INDICATES CIRCUIT NUMBER
## F	SPECIAL RECEPTACLE. REFER "KITCHEN EQUIPMENT POWER REQ. SCHEDULE" FOR REQUIREMENTS. "#,#" - INDICATES CIRCUIT NUMBER
# J	CODE SIZED JUNCTION BOX "#" - INDICATES CIRCUIT NUMBER
F	FLOOR MOUNTED. REFER TO DETAIL ON FOOD SERVICE DRAWINGS FOR INSTALLATION REQ.



1 E2.03

Proposed Kitchen Power Plan

3/8" = 1'-0"

PROJECT NORTH

ALL CIRCUITS IN THIS AREA REFER TO PANEL KPLF1 UNLESS NOTED OTHERWISE

Kitchen Electric General Notes

1. All 15- and 20-Ampere, 120-Volt receptacles in non-dwelling-type kitchens (kitchen areas, bar, etc.) to be GFCI protected.
2. Electrical system is designed for 208V, 3ϕ, 4W and 60Hz.
3. Electrical connections and outlets have been located as accurately as possible and are intended to suit equipment to be supplied. The electrical plans are schematic and are subject to field conditions, coordination requirements among tradesmen, changes necessary by local building codes or ordinances, or by substitutions, or changes shown on this plan. Contractor shall make allowances for the required final connections and supply all necessary fittings, starters, etc. except where specifically noted on the drawings or specifications. Refer to Food Service Drawings for additional information
4. Final connections to all equipment, including materials shall be made by the electrical contractor.
5. Height of outlet is given from finished floor to centerline of outlet.
6. All convenience outlets to be set horizontally. All 120 Volt outlets not designated with specific loads to be rated 15 Amps. All 208/230 Volt outlets not designated to be rated at 3/4 hp.
7. All electrical power not otherwise noted to be single phase.
8. Electrician to "size" all electrical junction boxes. Electrician to provide all junction boxes. Electrical convenience outlets shall be located in walls. Fixture fabricator to locate all convenience outlets and switches where part of fixture, but internal wiring for such boxes to be installed and supplied by the electrical contractor. All convenience outlets in walls to be flush with finished wall unless noted otherwise. Electrical contractor to provide and field mount all junction boxes located in access areas of fixtures. Electrical contractor to supply and install all conduit and fixtures. Conduit where stubbing up out of floor to extend minimum of 2" above floor or curb.
9. Drawings depict the location of outlets, type of connection for equipment and electrical load. Electrical contractor must comply with all codes related to the installation, wiring and final connections of equipment.
10. Electrical contractor shall connect all equipment and fixtures and perform internal wiring within kitchen equipment fixtures. Electrician shall coordinate with kitchen equipment fixture fabricator on progress of fabrication and shall be responsible for any required inspection of inaccessible areas before such areas are permanently closed or sealed.
11. Electrical contractor to provide connection for exhaust fans and make-up air fans and locate switches, and for pilot lights where shown on plans. Disconnect switches to be mounted convenient to hoods. Exhaust and make-up air fans to be switched on one switch.
12. Electrical contractor shall provide and install lockout devices on all breakers for clocks, refrigeration, control wiring and fire exhaust system controls.
13. Where symbols are indicated for a direct connection, a 4'-0" section of liquidtight flexible nonmetallic conduit type LFNC shall be stubbed out at the proper location and shall be connected to "J" boxes located in a convenient position on equipment after equipment has been placed in position.
14. Electrical contractor shall furnish and install the following:
    a. All junction-boxes, electrical outlets, cover plates, switches, etc. Not built into fixtures or equipment. All outlets, junction-boxes, cover plates, etc. In dishwashing areas, or as indicated on schedules, must be vapor-proof.
    b. All plugs and cords as noted on schedule. All cords shall be NEMA rated and UL approved for manufactured and/or fabricated equipment.
    c. All components, with the exception of the gas solenoid valve, for the automatic gas fuel shut-off, electrical releases for food service equipment below hoods/ventilators as required by NFPA and local codes.
    d. Disconnects or other devices as required by code.

PANEL SCHEDULE - PANEL KPLF1

FED FROM MDP | 208/120V

		OCPD			Conductors					Load	Load per Phase(A)			Voltage
CT#	Load Description	Type	Poles	Rated	Current	Neutral	Ground	Raceway	Voltage	kVA	Phase A	Phase B	Phase C	Drop %
1	3 - ICE CUBE MACHINE	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	1.71	15			3.83%
2	6 - WALK-IN COOLER	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	1.71	15			3.83%
3/5/2007	8 - WALK-IN REFRIGERATION A	Std	3	20A	(3) 12 ga.	none	(1) 12 ga.	3/4 in. EMT	208	2.77	8.1	8.1		1.87%
4	8 - WALK-IN REFRIGERATION B	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	0.18		1.6		1.35%
6	10 - WALK-IN FREEZER	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	1.71			15	3.83%
8/10/2012	11 - WALK-IN REFRIGERATION A	Std	3	20A	(3) 12 ga.	none	(1) 12 ga.	3/4 in. EMT	208	3.73	10.9	10.9	10.9	2.13%
11-Sep	11 - WALK-IN REFRIGERATION B	Std	2	20A	(2) 12 ga.	none	(1) 12 ga.	3/4 in. EMT	208	1.3		6.6	6.6	1.83%
13/15/17	18 - WAREWASHER	Std	3	60A	(3) 6 ga.	none	(1) 10 ga.	3/4 in. EMT	208	17.73	51.8	51.8	51.8	2.48%
14/16	25 - OVEN-STEAMER	Std	2	20A	(2) 12 ga.	none	(1) 12 ga.	3/4 in. EMT	208	0.69	3.5	3.5		1.50%
18	ROOFTOP RECEPTACLE	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	0.18			1.58	1.42%
19	26 - OVEN A	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	1.07	9.4			2.79%
20	26 - OVEN B	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	1.07	9.4			2.79%
21	29 - STEAMER	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	0.23		2		1.42%
22	33 - EXHAUST HOOD CONTROL	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	1.71		15		3.83%
23	27 - RANGE	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	0.01			0.1	1.07%
24	34 - FIRE PROTECTION SYSTEM	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	1.71			15	3.83%
25	36 - WORK TABLE	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	1.71	15			3.83%
26/28	39 - HEATED CABINET	Std	2	20A	(2) 12 ga.	none	(1) 12 ga.	3/4 in. EMT	208	1.42	7.2	7.2		1.89%
27	40 - WORK COUNTER	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	1.71		15		3.83%
29	44 - REFRIGERATOR - PASS-THRU	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	0.43			3.8	1.75%
30/32	45 - CABINET - HEATED PASS-THRU	Std	2	20A	(2) 12 ga.	none	(1) 12 ga.	3/4 in. EMT	208	1.42	7.2		7.2	1.89%
31	48 - DROP-IN HOT/COLD UNIT	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	1.45	12.7			3.40%
33	50 - DROP-IN HOT/COLD UNIT	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	1.37		12		3.27%
34	51/58 - FOOD PROTECTOR	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	0.23		2		1.42%
35/37	52 - SELF SERVICE CASE	Std	2	20A	(2) 12 ga.	none	(1) 12 ga.	3/4 in. EMT	208	2.31	11.7		11.7	2.37%
36	55 - DROP-IN HOT/COLD UNIT	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	1.45			12.7	3.40%
38	57 - DROP-IN HOT/COLD UNIT	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	1.37	12			3.27%
39	GENERAL RECEPT. A	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	Free Air	120	0.72		6.32		2.50%
40	GENERAL RECEPT. B	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	Free Air	120	0.72		6.32		2.50%
41	GENERAL RECEPT. C	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	Free Air	120	0.72			6.32	2.50%
42	KITCHEN & DRY STOR. LIGHTING	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	0.79			6.96	2.66%
43-54														
55/57/59	MAU-1	Std	3	20A	(3) 12 ga.	none	(1) 12 ga.	3/4 in. EMT	208	2.66	8.7	8.7	8.7	1.93%
56/58/60	KEF-1	Std	3	20A	(3) 12 ga.	none	(1) 12 ga.	3/4 in. EMT	208	1.6	5.22	5.22	5.22	1.61%
	Total Circuits	48									202.1 A	162 A	171.1 A	
											143.5 A	115 A	121.5 A	

Connected Loads: 59,710 VA
Demand Loads: 42,394 VA
Demand Factor: 71 %

Voltage: 120 / 208
Circuits: 48 / 60
Neutral Buss: No
Ground Buss: Yes
Buss Capacity: 400 A
NEMA: Type 1

Main Connection: breaker
Load kVA: 42
OCPD Size: 225A
OCPD Type: Std
Location:
Remarks: 22kAIC SCCR

3-Phase Connection			
Voltage Drop % for 100 Feet is 1.13%	Current	Neutral	Ground
Raceway: 2-1/2 in. dia. EMT	(3) 4/0 ga. THHN	(1) 4/0 ga. THHN	(1) 4 ga. THHN

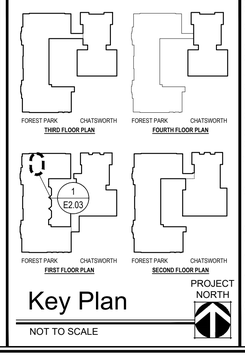
Kitchen Equipment Power Requirements Schedule

SYMBOL INDICATES EQUIPMENT ITEM No.

GENERAL INFORMATION			ELECTRICAL DATA								
ITEM No.	EQUIPMENT TYPE	QTY	HP	KW	AMP	PLUG	HW	VOLTS	PHASE	NEMA RATING	REMARKS
3	ICE CUBE MACHINE, AIR COOLED	1			15		X	120			
6	WALK- IN COOLER	1			15		X	120			
8	REFRIGERATION TO ITEM #6	1	1		8.1		X	208	3		
					1.6		X	120			
10	WALK- IN FREEZER	1			15		X	120			
11	REFRIGERATION TO ITEM #10	1	1		10.9		X	208	3		
					6.6		X	208			
18	WAREWASHER, DOOR TYPE, VENTLESS	1	1	14.6	51.8		X	208	3		
25	OVEN-STEAMER, COMBI, ELEC.	1		37	102.7		X	208	3		
26	OVEN, CONVECTION, GAS	1	0.8		9.4	X		120	1	5-15P	
			0.8		9.4	X		120		5-15P	
27	RANGE, HEAVY DUTY, GAS	1			0.1	X		120		5-15P	
29	STEAMER, ATMOSPHERIC	1			1	X		120	1	5-15P	
					1	X		120		5-15P	
31	EXHAUST HOOD, TYPE I	1	REFER TO MECH. DRAWINGS								
32	SUPPLY PLENUM, MAKE- UP AIR	1	REFER TO MECH. DRAWINGS								
33	EXHAUST HOOD, CONTROL PANEL	1			15		X	120			
34	FIRE PROTECTION SYSTEM, BUILT- IN	1			15		X	120			
36	WORK TABLE W/ SINK	1			15	X		120	1	5-15R	
39	CABINET, HEATED, PASS- THRU	1		1.5	7.2	X		208		6-15P	
40	WORK COUNTER W/ SINK	1			15	X		120	1	5-15R	
44	REFRIGERATOR , PASS-THRU	1	0.2	0.4	3.8	X		120	1	5-15P	
45	CABINET, HEATED, PASS-THRU	1		1.5	7.2	X		208		6-15P	
48	DROP-IN, HOT/COLD UNIT	1			12.7	X		120	1	5-20P	
50	DROP-IN, HOT/COLD UNIT	1			12	X		120/208		14-20P	
51	FOOD PROTECTOR(S), ADJUSTABLE	1			1		X	120			
52	REFRIGERATED SELF- SERVICE CASE	1		1.9	11.7	X		208		6-20P	
55	DROP-IN, HOT/COLD UNIT	1			12.7	X		120	1	5-20P	
57	DROP-IN, HOT/COLD UNIT	1			12	X		120/208		14-20P	
58	FOOD PROTECTOR(S) , ADJUSTABLE	1			1		X	120			

GENERAL NOTE:
INFORMATION INDICATED ON THIS SCHEDULE FOR REFERENCE ONLY. REFER TO FOOD SERVICE DRAWINGS FOR ADDITIONAL INFORMATION. WHERE A CONFLICT ARISES, THE FOOD SERVICE DRAWINGS SHALL TAKE PRECEDENCE.

CHATSWORTH AVE. SCHOOL



Key Plan

NOT TO SCALE

PROJECT NORTH

NYSED PROJECT # 66-07-01-03-0-005-020

Date	1/10/20
Checked	BH
Drawn	MH

MICHAEL J. McGOVERN, R.A.
License No. 022257-1
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KITCHEN POWER PLAN

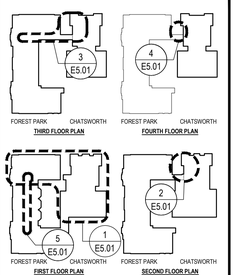
2019 BOND REFERENDUM
ELEMENTARY SCHOOL
CHATSWORTH AVENUE
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

Job No. 4.1092.72.03

File No. 10927203E201

E2.03

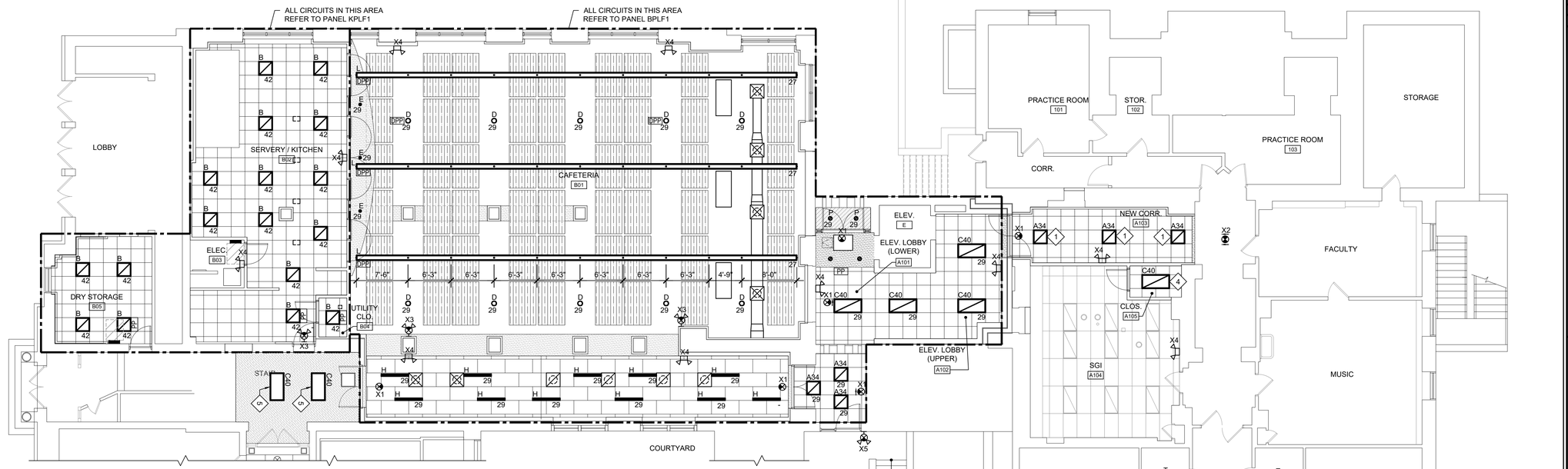
CHATSWORTH AVE. SCHOOL



Key Plan

NOT TO SCALE

PROJECT NORTH



Proposed Partial First Floor Lighting Plan

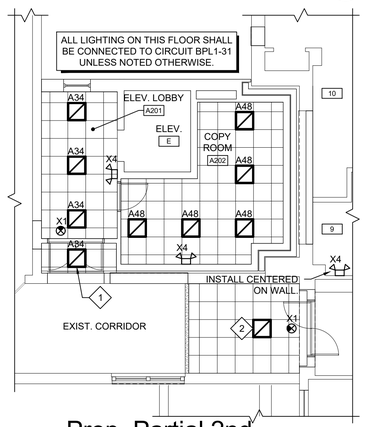
1 / E5.01 — 1/8" = 1'-0"

PROJECT NORTH

Key Notes

SYMBOL INDICATES KEY NOTE

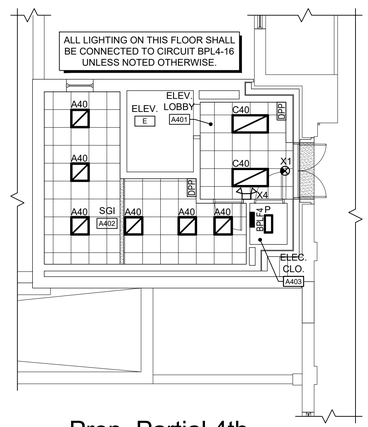
1. TIE INTO EXISTING AREA LIGHTING CIRCUIT & SWITCHING WITH (2) #12 & (1) #12 GND MC CABLE.
2. REINSTALL EXISTING LIGHTING FIXTURES AT NEW CEILING. EXTEND WIRING AS REQUIRED.
3. RECIRCUIT EXISTING FIXTURES IN THIS SPACE TO A NEW 20A TOGGLE SWITCH.
4. CONNECT TO EXISTING CLASSROOM LIGHTING CIRCUIT WITH (2) #12 & (1) #12 GND MC CABLE.
5. INSTALL SURFACE MOUNTED WITH SMKSH SURFACE MOUNT KIT. ALL ELECTRIC FOR THIS FIXTURE SHALL BE RUN AS TO MAINTAIN THE 2 HOUR RATING OF THE CEILING.



Prop. Partial 2nd Floor Lighting Plan

2 / E5.01 — 1/8" = 1'-0"

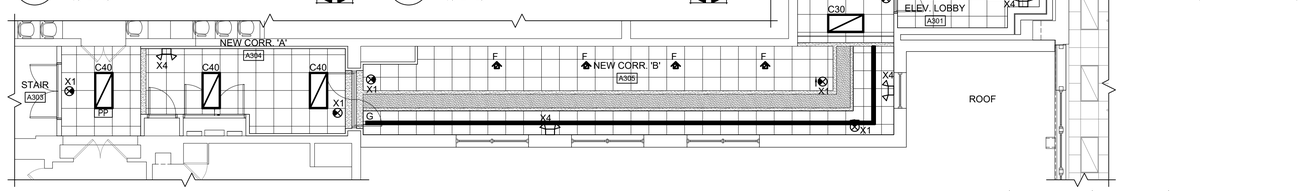
PROJECT NORTH



Prop. Partial 4th Floor Lighting Plan

4 / E5.01 — 1/8" = 1'-0"

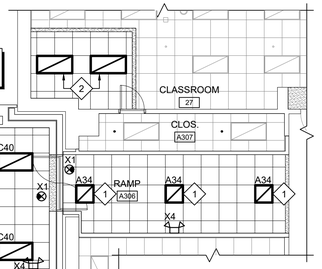
PROJECT NORTH

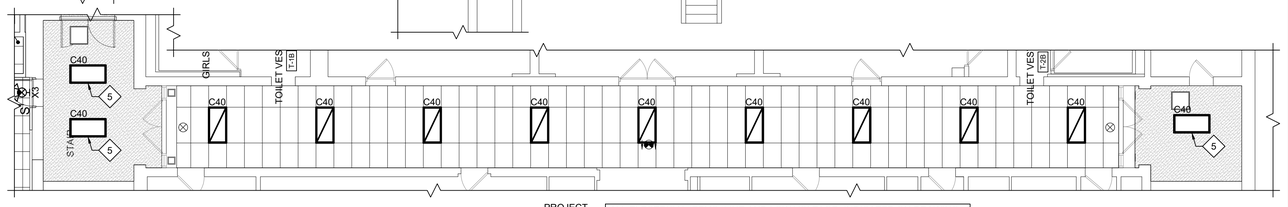


Proposed Partial 3rd Floor Lighting Plan

3 / E5.01 — 1/8" = 1'-0"

PROJECT NORTH





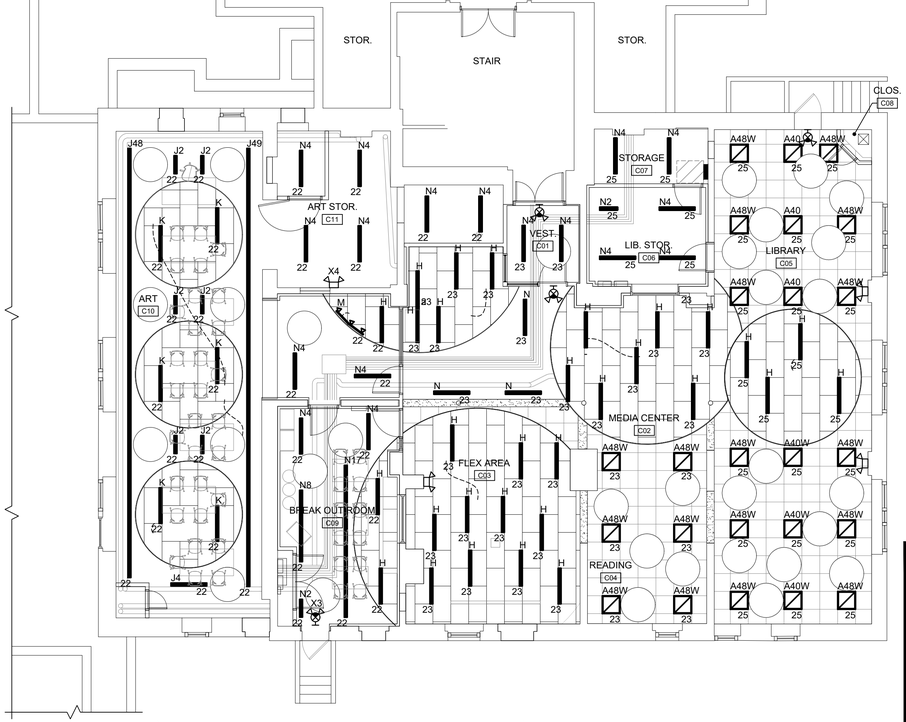
Proposed Partial First Floor Lighting Plan

5 / E5.01 — 1/8" = 1'-0"

PROJECT NORTH

ALL FIXTURES IN THIS AREA SHALL BE RECONNECTED TO THEIR EXISTING CIRCUIT AND SWITCHING VIA (2) #12 & (1) #12 GND

ALL ELECTRICAL ITEMS (LINE AND LOW VOLTAGE) INDICATED ON DRAWING AS 40 TO BE REINSTALLED AT NEW CEILING LEVEL ARE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR. EXTENDING WIRING AS REQUIRED.



Date	1/10/20
Checked	BH
Drawn	MH

MICHAEL J. McGOVERN, R.A.
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Revisions:

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NYSED PROJECT # 66-07-01-03-0-005-020

PROPOSED LIGHTING PLAN

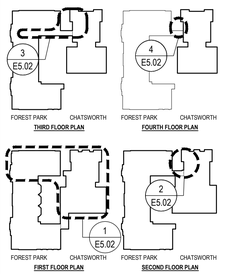
2019 BOND REFERENDUM
CHATSWORTH AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

Job No. 4.1092.72.03

File No. 10927203E201

E5.01

CHATSWORTH AVE. SCHOOL



Key Plan

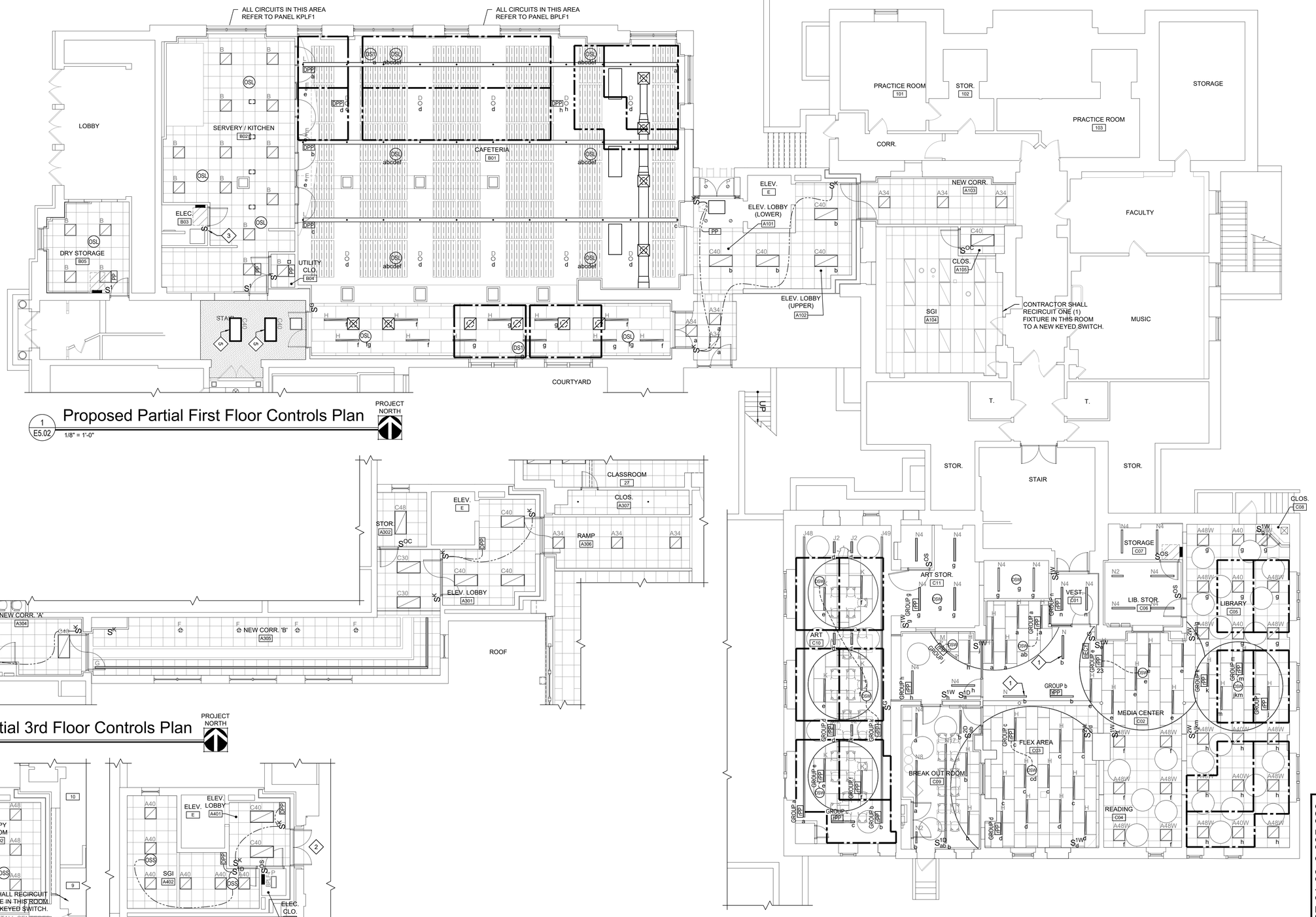
PROJECT NORTH

NOT TO SCALE

Key Notes

SYMBOL INDICATES KEY NOTE

1. WHEN ZONE IS TURNED OFF, FIXTURE SHALL DIM TO 50%, BUT REMAIN ON 24/7.
2. RECIRCUIT THE THREE FIXTURES CLOSEST TO THE DOORS OF THIS AREA TO REMAIN ON 24/7. COORDINATE IN FIELD.



1 E5.02 — Proposed Partial First Floor Controls Plan

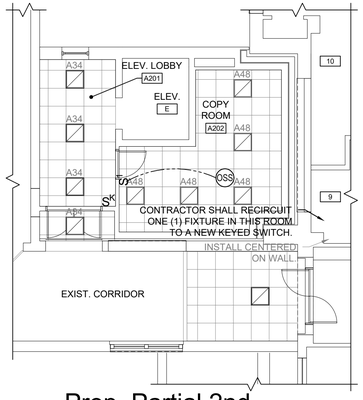
1/8" = 1'-0"

PROJECT NORTH

3 E5.02 — Proposed Partial 3rd Floor Controls Plan

1/8" = 1'-0"

PROJECT NORTH



2 E5.02 — Prop. Partial 2nd Floor Controls Plan

1/8" = 1'-0"

PROJECT NORTH

4 E5.02 — Prop. Partial 4th Floor Controls Plan

1/8" = 1'-0"

PROJECT NORTH

Date	1/10/20
Checked	BH
Drawn	MH

MICHAEL J. McGOVERN, R.A.
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NYSED PROJECT # 66-07-01-03-0-005-020

LIGHTING CONTROLS PLAN

2019 BOND REFERENDUM
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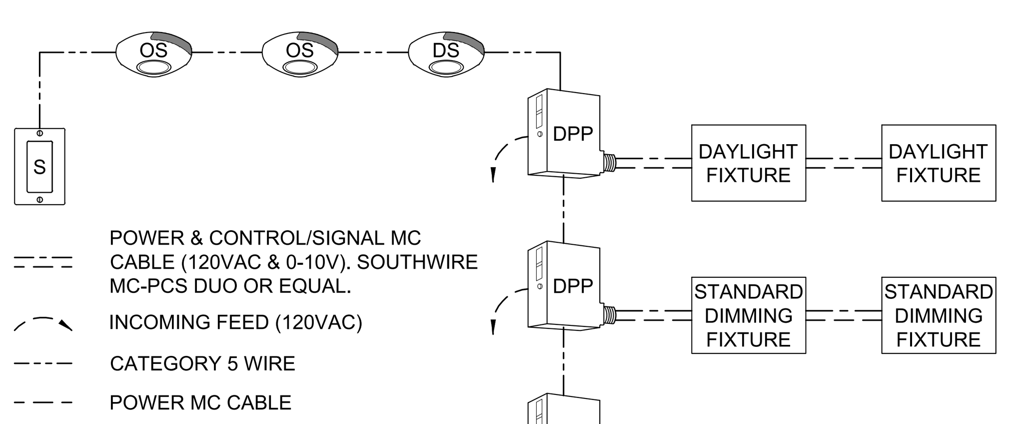
Job No. 4.1092.72.03

File No. 10927203E201

E5.02

Controls Sequence of Operation Matrix

SPACE/ROOM	ASHRAE 90.1 SPACE TYPE	CONTROLS NARRATIVE No. (REFER TO CONTROLS MARRATIVE SCHED.)	OCCUPANCY SENSOR: VACANCY MODE (MANUAL ON)	OCCUPANCY SENSOR: OCCUPANCY MODE (AUTO ON)	OCCUPANCY SENSOR: SENSOR TIME OUT PERIOD (FULL OFF) IN MINUTES	WALL SWITCH: ON/OFF ONLY	WALL SWITCH: ON/OFF & DIMMER SWITCH	WALL SWITCH: KEY SWITCH	WALL SWITCH: GRAPHICAL WALL STATION	PHOTOCELL: INDOOR - ON/OFF ONLY	PHOTOCELL: INDOOR - DIMMING	PHOTOCELL: AVE. LIGHT LEVEL MAINTAINED (FC @ 30" A.F.F.)	PHOTOCELL: EXTERIOR PHOTOCELL - ON/OFF
A101 ELEV. LOBBY (LOWER)	CORRIDOR - ALL OTHER	3				✓		✓					
A102 ELEV. LOBBY (UPPER)	CORRIDOR - ALL OTHER	3				✓		✓					
A103 NEW CORR.	CORRIDOR - ALL OTHER	CONNECTED TO EXISTING CONTROLS											
A104 SGI	CLASSROOM - ALL OTHER	NO LIGHTING WORK											
A105 CLOS.	STORAGE <50ft²	2	✓		10	✓							
A201 ELEV. LOBBY	CORRIDOR - ALL OTHER	3				✓		✓					
A202 COPY ROOM	COPY/PRINT ROOM	2	✓		20		✓						
A301 ELEV. LOBBY	CORRIDOR - ALL OTHER	3				✓		✓					
A302 STOR.	STORAGE <50ft²	2	✓		10	✓							
A304 NEW CORR. 'A'	CORRIDOR - ALL OTHER	3				✓		✓					
A305 NEW CORR. 'B'	CORRIDOR - ALL OTHER	3				✓		✓					
A306 RAMP	CORRIDOR - ALL OTHER	CONNECTED TO EXISTING CONTROLS											
A307 CLOS.	STORAGE <50ft²	NO LIGHTING WORK											
A401 ELEV. LOBBY	CORRIDOR - ALL OTHER	3				✓		✓					
A402 SGI	CLASSROOM - ALL OTHER	4	✓		20		✓						
A403 ELEC. CLO.	ELEC/MECH ROOM	NO LIGHTING WORK											
B01 CAFETERIA	DINING AREA - IN CAFETERIA	1	✓		20		✓				✓	50	
B02 SERVERY / KITCHEN	FOOD PREPARATION AREA	2	✓		20	✓							
B03 ELEC.	ELEC/MECH ROOM	3				✓							
B04 UTILITY CLO.	STORAGE <50ft²	2	✓		10	✓							
B05 DRY STORAGE	STORAGE ≥50ft² AND ≤1000ft²	2	✓		20	✓							
C01 VEST.	CORRIDOR - ALL OTHER	3				✓		✓					
C02 - C05 MEDIA CENTER	LIBRARY	5	✓		20				✓		✓	50	
C06 LIB. STOR.	STORAGE ≥50ft² AND ≤1000ft²	2	✓		10	✓							
C07 STORAGE	STORAGE <50ft²	2	✓		10	✓							
C09 BREAK OUT ROOM	CLASSROOM - ALL OTHER	4	✓		20		✓						
C10 ART	CLASSROOM - ALL OTHER	7	✓		20		✓				✓	50	
C11 ART STOR.	STORAGE ≥50ft² AND ≤1000ft²	7	✓		10	✓							

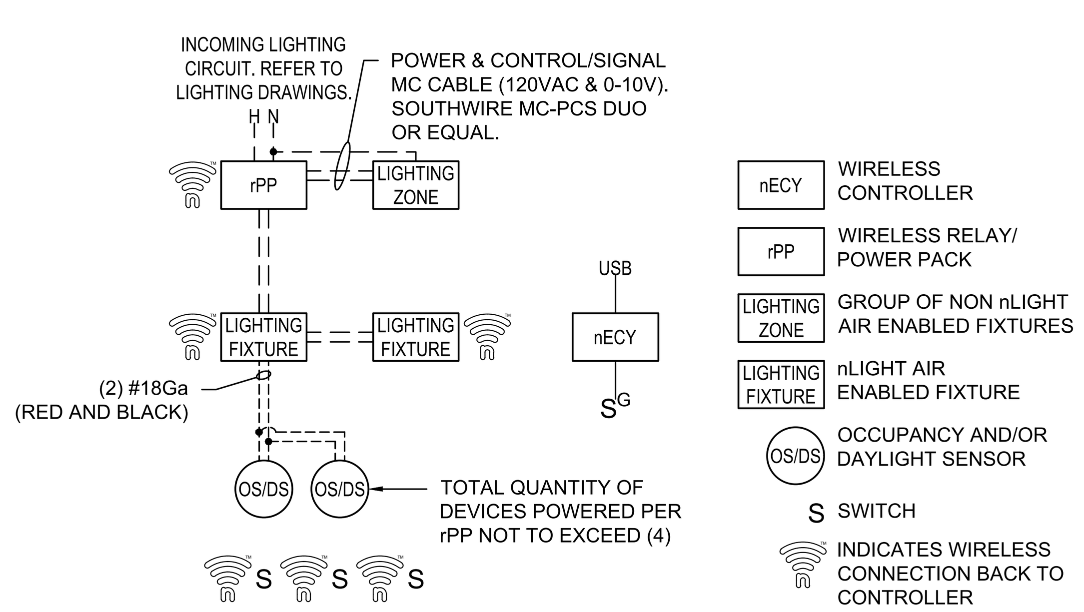


GENERAL NOTES:

1. REFER TO PLAN FOR ACTUAL ARRANGEMENT OF FIXTURES/ SWITCHES/SENSORS.
2. REFER TO MANUFACTURER'S DETAILS FOR EXACT WIRING REQUIREMENTS.

1 E5.03 Schematic Lighting Controls Wiring

N.T.S. SIMILAR THROUGHOUT BUILDING



2 E5.03 Typical Wireless Controls Diagram

N.T.S. REFER TO PLANS FOR DEVICE QUANTITIES AND LOCATIONS

Light Fixture Schedule

SYMBOL	TYPE	MANUF.	MODEL	DESCRIPTION	VOLT	WATT	MOUNTING	HEIGHT	LUMENS	LPW	CLR	KEY NOTES
	A34	LITHONIA	EPANL 2X2 3400LM 80CRI 35K MIN10 ZT MVOLT R56	"EPANEL" LED FLAT PANEL 2x2 - 3400 NOMINAL LUMENS	UNIV.	32	CLG. RECESSED	N/A	3225	101	80CRI, 35K	
	A40	LITHONIA	EPANL 2X2 4000LM 80CRI 35K MIN10 ZT MVOLT R56	"EPANEL" LED FLAT PANEL 2x2 - 4000 NOMINAL LUMENS	UNIV.	32	CLG. RECESSED	N/A	4025	126	80CRI, 35K	
	A40W	MARK	WHSPR 2X2 4000LM 35K 80CRI MIN1 NLTAIR2 120 APD YBC	"WHSPR" LED SLOPED PANEL 2x2 - 4000 NOMINAL LUMENS WITH WIRELESS CONTROL	UNIV.	37	CLG. RECESSED	N/A	4222	113	80CRI, 35K	
	A48	LITHONIA	EPANL 2X2 4000LM 80CRI 35K MIN10 ZT MVOLT R56	"EPANEL" LED FLAT PANEL 2x2 - 4800 NOMINAL LUMENS	UNIV.	36	CLG. RECESSED	N/A	4446	124	80CRI, 35K	
	A48W	LITHONIA	WHSPR 2X2 4800LM 35K 80CRI MIN1 NLTAIR2 120 APD YBC	"WHSPR" LED SLOPED PANEL 2x2 - 4800 NOMINAL LUMENS WITH WIRELESS CONTROL	UNIV.	45	CLG. RECESSED	N/A	4964	109	80CRI, 35K	
	B	LITHONIA	2WRTL G L24 5000LM IAW AFL MVOLT GZ1 35K 80CRI FPA R56	"WRTL" LED RECESSED WET LOCATION 2x2 TROFFER - 5000 NOMINAL LUMENS	UNIV.	42	CLG. RECESSED	N/A	4627	110	80CRI, 35K	
	C30	LITHONIA	EPANL 2X4 3000LM 80CRI 35K MIN10 ZT MVOLT R56	"EPANEL" LED FLAT PANEL 2x4 - 3000 NOMINAL LUMENS	UNIV.	27	CLG. RECESSED	N/A	2993	111	80CRI, 35K	
	C40	LITHONIA	EPANL 2X4 4000LM 80CRI 35K MIN10 ZT MVOLT R56	"EPANEL" LED FLAT PANEL 2x4 - 4000 NOMINAL LUMENS	UNIV.	39	CLG. RECESSED	N/A	3914	100	80CRI, 35K	
	C48	LITHONIA	EPANL 2X4 4000LM 80CRI 35K MIN10 ZT MVOLT R56	"EPANEL" LED FLAT PANEL 2x4 - 4800 NOMINAL LUMENS	UNIV.	47	CLG. RECESSED	N/A	4771	102	80CRI, 35K	
	D	LUMENPULSE	LACYL A PMD CC ACC100 D 120 13 DL10 35K CR80 WFR DA1 NA CC B CC R56	"LACYL" LED LARGE PENDANT CYLINDER - 1000 NOMINAL LUMENS	120	8	CLG. PENDANT	8'-6" TO BOTT. OF FIXTURE	921	115	80CRI, 35K	1
	E	GOTHAM	EVO 35/10 4AR WD LSS MVOLT GZ10 R56	"EVO" 4" LED DOWNLIGHT - 1000 NOMINAL LUMENS	UNIV.	13	CLG. RECESSED	N/A	1189	91	85CRI, 35K	
	F	GOTHAM	EVO4SQLW 35/10 AR LSS MVOLT GZ10 R56	"EVO" 4" SQ. LED WALLWASH DOWNLIGHT - 1000 NOMINAL LUMENS	UNIV.	9	CLG. RECESSED	N/A	805	89	85CRI, 35K	
	G	FINELITE	HP-4 R - LENGTH - B - 835 - F - 120 - SC - C2T - R56	"HP-4" 4" RECESSED LINEAR LED WITH 90 DEG CORNER	120	299 (4.6 W/LF)	CLG. RECESSED	N/A	31135	104	80CRI, 35K	2,3
	H	FINELITE	HP-4 R - 4' - B - 835 - F - 120 - SC - C2T - R56	"HP-4" 4" RECESSED LINEAR LED	120	19	CLG. RECESSED	N/A	1917	101	80CRI, 35K	3
	J2	FINELITE	HP-4 SM - 2' - B - 8TW - F - 120V - C4 - FE - SC - R56	"HP-4" 4" SURFACE MOUNTED LINEAR LED WITH TUNABLE WHITE	120	10	CLG. SURFACE	N/A	954	94	80CRI, TW	
	J4	FINELITE	HP-4 SM - 4' - B - 8TW - F - 120V - C4 - FE - SC - R56	"HP-4" 4" SURFACE MOUNTED LINEAR LED WITH TUNABLE WHITE	120	20	CLG. SURFACE	N/A	1908	94	80CRI, TW	
	J48	FINELITE	HP-4 SM - 48' - B - 8TW - F - 120V - C4 - FE - SC - R56	"HP-4" 4" SURFACE MOUNTED LINEAR LED WITH TUNABLE WHITE	120	245	CLG. SURFACE	N/A	22896	94	80CRI, TW	
	J49	FINELITE	HP-4 SM - 49' - B - 8TW - F - 120V - C4 - FE - SC - R56	"HP-4" 4" SURFACE MOUNTED LINEAR LED WITH TUNABLE WHITE	120	245	CLG. SURFACE	N/A	22896	94	80CRI, TW	
	K	FINELITE	HP-4 R - 4' - B - 8TW - F - 120V - C4 - FE - SC - C1T - R56	"HP-4" 4" RECESSED LINEAR LED WITH TUNABLE WHITE	120	18	CLG. RECESSED	N/A	1917	104	80CRI, TW	
	L	FINELITE	S12 LED ID - WCB - 64' - 3E - S/H - 835 - FTO - 120V - SC - FA - CE - C4 - R56	"SERIES 12" LED INDIRECT/DIRECT LINEAR PENDANT	120	480	CLG. RECESSED	8'-6" TO BOTT. OF FIXTURE	58240	121	80CRI, 35K	4
	M	TBD										
	N#	FINELITE	HP-4 SM - #' - V - 835 - F - 120V - C4 - FE - SC - R56	"HP-4" 4" SURFACE MOUNTED LINEAR LED	120	9.3/LF	CLG. SURFACE	N/A	926/LF	100	80CRI, 35K	9
	P	GOTHAM	EVO6VR 35/05 AR CGL 120 GZ10 NLT ELR R56	"EVO" 6" LED VANDAL RESISTANT DOWNLIGHT WITH BATTERY BACKUP	120	7	CLG. RECESSED	N/A	430	61	80CRI, 35K	6
	Q	LITHONIA	ZL1N L24 SMR 1500LM FST MVOLT 35K 80CRI WH R56 - HC36 ZLR L24 SYM UPL WH	"ZL1N" LED STRIPLIGHT WITH REFLECTOR & FROSTED LENS - 1500 NOMINAL LUMENS	UNIV.	15	CLG. PENDANT	3' CHAIN	1777	118	80CRI, 35K	
	X1	LITHONIA	EDG 1 R EL	SURFACE MOUNT LED EDGE-LIT EXIT SIGN - SINGLE FACE - UNIVERSAL MOUNT	120	3	CLG./WALL SURFACE	REFER TO DETAIL	N/A			5,7
	X2	LITHONIA	EDG 2 RMR EL	SURFACE MOUNT LED EDGE-LIT EXIT SIGN - DOUBLE FACE - UNIVERSAL MOUNT	120	3	CLG./WALL SURFACE	REFER TO DETAIL	N/A			7
	X3	LITHONIA	LHQM LED R	WALL MOUNT COMBO EXIT SIGN & EMERGENCY LIGHT	120	1	WALL SURFACE	REFER TO DETAIL	N/A			7
	X4	LITHONIA	ELM4L	DUAL HEAD EMERGENCY LIGHT	UNIV.	1	WALL SURFACE	SEE DETL	N/A			7

Key Notes
1. "CC" REFERS TO CUSTOM RAL COLOR AS SELECTED AT TIME OF SUBMITTAL
2. "LENGTH" - COORDINATE REQUIRED LENGTH AND MITERED CORNER(S) WITH PLANS
3. CONFIRM CEILING TYPE BEFORE SUBMISSION
4. SUPPORT/FEED WIRES SHALL BE SPACED AS INDICATED ON PLANS. CEILING PANELS CANNOT BE FIELD CUT OR MODIFIED.
5. PROVIDE RMR OPTION WHEN INSTALLED WALL MOUNTED
6. PROVIDE & INSTALL WITH nLIGHT nIO PC KIT FOR DUSK TO DAWN OPERATION. PROVIDE UNSWITCHED SOURCE TO BATTERY AS REQUIRED.
7. CONNECT BATTERY TO LINE SIDE OF AREA LIGHTING SWITCH/POWER PACK.
8. CONNECT TO INTERIOR EXIT SIGN BATTERY AS PER MANUF.'S INSTRUCTIONS.
9. # INDICATES FIXTURE LENGTH

Lighting Controls Narrative Schedule

TYPICAL FOR ALL SPACES

LIGHTS
- ALL LIGHTS ARE CAPABLE OF BEING DIMMED
- EACH ZONE MODULE OR nLIGHT ENABLED FIXTURE CAN BE EITHER CONTROLLED INDEPENDENTLY, AS AN ENTIRE SPACE, OR IN ANY COMBINATION AS PROGRAMMED ON THE APP IN THE FIELD.
- MAXIMUM LIGHT OUTPUT CAN BE ASSIGNED IN THE FIELD.

DAYLIGHTING CONTROL (WHEN INDICATED ON THE PLAN)
- SMOOTH CONTINUOUS AUTOMATIC DIMMING OF LIGHTING CONTROL ZONES WITHIN THE DAYLIGHTING ZONE TO MAINTAIN THE LIGHT LEVEL DEFINED IN THE CONTROLS SCHEDULE.
- PRIMARY AND SECONDARY DAYLIGHTING ZONES SHALL BE CONTROLLED INDEPENDENTLY BY THEIR RESPECTIVE PHOTOCELL.

GENERAL INFORMATION
- WHERE "100%" IS INDICATED IN THE NARRATIVES, IT REFERS TO 100% OF MAXIMUM PRESET VALUE SET IN THE FIELD.

CONTROLS NARRATIVE 1

CAFETERIA B01

OCCUPANCY CONTROL
- LIGHTS MUST BE TURNED ON MANUALLY.
- LIGHTS AUTOMATICALLY TURN OFF WHEN ROOM IS VACANT FOR 20 MINUTES.

ZONES
- ZONE 1 - PRIMARY DAYLIGHT ROW DOWNLIGHT
- ZONE 2 - PRIMARY DAYLIGHT ROW UPLIGHT
- ZONE 3 - SECONDARY DAYLIGHT ROW DOWNLIGHT
- ZONE 4 - SECONDARY DAYLIGHT ROW UPLIGHT
- ZONE 5 - WALKWAY ROW DOWNLIGHT
- ZONE 6 - WALKWAY ROW UPLIGHT
- ZONE 7 - PRIMARY DAYLIGHT AREA DOWNLIGHTS
- ZONE 8 - REMAINDER OF DOWNLIGHTS
- ZONE 9 - "WALKWAY" LIGHTS
- ZONE 10 - "TYPE E" LIGHT FIXTURES

MANUAL CONTROL
- "GRAPHIC WALL SWITCH" SHALL HAVE THE FOLLOWING PRESETS:
  1. "ON" - ALL ZONES ON TO 100% OF MAXIMUM PRESET VALUE.
  2. "OFF" - ALL ZONES OFF
  3. "QUIET TIME" - ALL ZONES ON TO 100% WITH DAYLIGHTING & OCCUPANCY SENSORS DISABLED FOR 1 HOUR.
  4. "DOWNLIGHT ONLY" - ZONES 1, 3, 5, 7, 8, 9 & 10 ON TO 100%, ZONES 2, 4, & 6 OFF.
  5. "UPLIGHT ONLY" -ZONES 1, 3, 5, 7, 8, & 10 OFF, ZONES 2, 4, 6, & 9 ON TO 100%.
- EACH ZONE SHALL HAVE AN ON/OFF & "SLIDER" DIMMING CONTROL.

CONTROLS NARRATIVE 2

MANUAL ON/AUTOMATIC OFF ONLY

OCCUPANCY CONTROL
- LIGHTS MUST BE TURNED ON MANUALLY.
- LIGHTS AUTOMATICALLY TURN OFF WHEN ROOM IS VACANT FOR 20 MINUTES.

MANUAL CONTROL
- MANUAL SWITCH SHALL HAVE THE FOLLOWING BUTTONS:
  1. "ON" - ALL FIXTURES ON TO 100% OF MAXIMUM PRESET VALUE.
  2. "OFF" - ALL FIXTURES OFF

CONTROLS NARRATIVE 3

MANUAL ON/MANUAL OFF ONLY

OCCUPANCY CONTROL
- NO OCCUPANCY CONTROL

MANUAL CONTROL
- MANUAL SWITCH SHALL HAVE THE FOLLOWING CONTROLS:
  1. "ON" - ALL FIXTURES ON TO 100% OF MAXIMUM PRESET VALUE.
  2. "OFF" - ALL FIXTURES OFF

CONTROLS NARRATIVE 4

CLASSROOM

OCCUPANCY CONTROL
- LIGHTS MUST BE TURNED ON MANUALLY.
- LIGHTS AUTOMATICALLY TURN OFF WHEN ROOM IS VACANT FOR 20 MINUTES.

MANUAL CONTROL
- MANUAL SWITCH SHALL HAVE THE FOLLOWING CONTROLS:
  1. "ON" - ALL FIXTURES ON TO 100% OF MAXIMUM PRESET VALUE.
  2. "OFF" - ALL FIXTURES OFF
  3. "▲" - ALL FIXTURES LIGHT LEVEL RAISES
  4. "▼" - ALL FIXTURES LIGHT LEVEL LOWERS

CONTROLS NARRATIVE 5

MEDIA CENTER

OCCUPANCY CONTROL
- LIGHTS MUST BE TURNED ON MANUALLY.
- LIGHTS AUTOMATICALLY TURN OFF WHEN ROOM IS VACANT FOR 20 MINUTES.

MANUAL CONTROL
- "GRAPHIC WALL SWITCH" SHALL HAVE THE FOLLOWING BUTTONS ON THE MAIN SCREEN. REFER TO DETAIL 2/E5.03:
  1. "ON" - ALL GROUPS ON TO 80%
  2. "OFF" - ALL GROUPS OFF
  3. "QUIET TIME" - SENSORS DISABLED FOR 1 HOUR
- "GRAPHIC WALL SWITCH" SHALL HAVE ON & OFF BUTTONS AND DIMMING SLIDERS FOR THE FOLLOWING AREAS.
  1. "MEDIA CENTER" - ALL GROUPS
  2. "ENTRY" - GROUP n
  3. "CIRCULATION DESK" - GROUPS b & e
  4. "PRESENTATION AREA" - GROUP c
  5. "FLEX AREA" - GROUPS a & b
  6. "READING" - GROUPS f
  7. "STACKS" - GROUPS g, & h
  8. "STACK READING" - GROUPS j, k, & m
- "DIMMING SWITCH(ES)" SHALL HAVE THE FOLLOWING CONTROLS (FOR EACH POLE AS REQUIRED):
  1. "ON" - ALL RELAY PACKS/FIXTURES ASSOCIATED WITH THE SWITCH ON TO 100% OF THE MAXIMUM PRESET VALUE.
  2. "OFF" - ALL RELAY PACKS/FIXTURES ASSOCIATED WITH THE SWITCH OFF.
  3. "▲" - ALL RELAY PACKS/FIXTURES ASSOCIATED WITH THE SWITCH LUMEN OUTPUT RAISES.
  4. "▼" - ALL RELAY PACKS/FIXTURES ASSOCIATED WITH THE SWITCH LUMEN OUTPUT LOWERS.

ADDITIONAL CONTROLS
- NON-nLIGHTAIR ENABLED FIXTURES IN DAYLIGHTING ZONES SHALL BE CONTROLLED BY THE SENSORS OF nLIGHTAIR ENABLED FIXTURES WITHIN THE SAME DAYLIGHTING ZONE.

CONTROLS NARRATIVE 6

BREAKOUT ROOM

OCCUPANCY CONTROL
- LIGHTS MUST BE TURNED ON MANUALLY.
- LIGHTS AUTOMATICALLY TURN OFF WHEN ROOM IS VACANT FOR 20 MINUTES.

MANUAL CONTROL
- MANUAL SWITCH SHALL HAVE THE FOLLOWING CONTROLS:
  1. "ON" - ALL FIXTURES ON TO 100% OF MAXIMUM PRESET VALUE.
  2. "OFF" - ALL FIXTURES OFF
  3. "UP" - ALL FIXTURES LIGHT LEVEL RAISES
  4. "DOWN" - ALL FIXTURES LIGHT LEVEL LOWERS
- SWITCHING TYPE "a" SHALL BE ABLE TO BE INDEPENDENTLY TURNED OFF FROM SWITCHING TYPE "b".

CONTROLS NARRATIVE 7

ART ROOM

OCCUPANCY CONTROL
- LIGHTS MUST BE TURNED ON MANUALLY.
- LIGHTS AUTOMATICALLY TURN OFF WHEN ROOM IS VACANT FOR 20 MINUTES.

MANUAL CONTROL
- "GRAPHIC WALL SWITCH" SHALL HAVE THE FOLLOWING BUTTONS ON THE MAIN SCREEN. REFER TO DETAIL 2/E5.03:
  1. "ON" - ALL GROUPS ON TO 80%
  2. "OFF" - ALL GROUPS OFF
  3. "QUIET TIME" - SENSORS DISABLED FOR 1 HOUR
- "GRAPHIC WALL SWITCH" SHALL HAVE ON & OFF BUTTONS AND DIMMING SLIDERS FOR THE FOLLOWING AREAS.
  1. "ART ROOM" - ALL GROUPS EXCEPT g
  2. "ENTRY" - GROUP h
  3. "DISPLAY" - GROUP j
  4. "CLOUDS" - GROUPS e & f
  5. "CEILING LIGHTS" - GROUPS a, b, c, & d
- "DIMMING SWITCH(ES)" SHALL HAVE THE FOLLOWING CONTROLS (FOR EACH POLE AS REQUIRED):
  1. "ON" - ALL RELAY PACKS/FIXTURES ASSOCIATED WITH THE SWITCH ON TO 100% OF THE MAXIMUM PRESET VALUE.
  2. "OFF" - ALL RELAY PACKS/FIXTURES ASSOCIATED WITH THE SWITCH OFF.
  3. "▲" - ALL RELAY PACKS/FIXTURES ASSOCIATED WITH THE SWITCH LUMEN OUTPUT RAISES.
  4. "▼" - ALL RELAY PACKS/FIXTURES ASSOCIATED WITH THE SWITCH LUMEN OUTPUT LOWERS.

ADDITIONAL CONTROLS
- FIXTURES IN DAYLIGHTING ZONES SHALL BE CONTROLLED BY THE DAYLIGHT SENSOR WITHIN THEIR ZONE (PRIMARY OR SECONDARY).

Lighting Controls System General Notes

THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL WIRING (POWER, CAT 5, 0-10V DIMMING), POWER PACKS, MODULES, ETC., WHETHER INDICATED OR NOT, FOR A COMPLETE AND OPERATION SYSTEM TO MEET THE INTENT OF THE CONTROLS MATRIX. THE CONTROLS, WIRING, AND MODULES INDICATED ON THE DRAWING ARE TO SHOW THE DESIGN INTENT AND ARE NOT MEANT TO BE "ALL INCLUSIVE".

Design Notes
1. System is based on Acuity Brands nLight Controls.
2. One relay is needed per fixture group/zone to be controlled and can reside within sensors, wall switches, or relay packs. Power Pack placement on drawings is for schematic purposes only to indicate the design intent; final quantity shall be determined by the contractor and/or the manufacturer's design rep. during the shop drawing stage. Confirm all quantities to verify the number of relays needed to switch all desired loads.
3. Sensors and wall switches are indicated to show design intent. The contractor shall allow to provide and install an additional 5 (five) occupancy sensors to accomodate building changes, final partition height/placement, furniture placement, equipment height/placement and shelving height/placement.
4. All devices have RJ-45 Female ports. Making CAT-5(e) cables with T568B Male terminations is required. It is imperative that all CAT-5 cables be tested with a LAN Cable Tester to verify proper terminations.

PRE-INSTALLATION LIGHTING NOTES:
1. The electrical contractor shall coordinate a pre-installation conference, prior to construction activities, to review the exact lighting control requirements.
   a. Pre-installation conference shall be attended by:
      - Owner's authorized representative
      - Contractor
      - Engineer
      - Lighting controls factory representative
2. All nLight devices come with a self adhesive identification label. The contractor shall supply a drawing with the nLight identification labels place at their applicable device/fixture. The drawing shall be updated to reflect the as-built conditions. Failure to do this will require the contractor to manually determine the address of every device.

IECC-2015 Contractor Requirements

CODE SECTION	CONTRACTOR'S RESPONSIBILITY
C408.3.1.1	Test each unique combination of occupancy sensor type and space geometry. • For occupant sensor controls to be tested, verify the following: 1. Where occupant sensor controls include status indicators, verify correct operation. 2. The controlled lights turn off or down to the permitted level within the required time. 3. For auto-on occupant sensor controls, the lights turn on to the permitted level when an occupant enters the space. 4. For manual-on occupant sensor controls, the lights turn on only when manually activated. 5. The lights are not incorrectly turned on by movement in adjacent areas or by HVAC operation.
C408.3.1.3	Where daylight responsive controls are indicated the following shall be verified/tested: • Control devices have been properly located, field calibrated and set for accurate setpoints and threshold light levels. • Daylight controlled lighting loads adjust to light level set points in response to available daylight. • The locations of calibration adjustment equipment are readily accessible only to authorized personnel.
C408.3.2	Submit documentation certifying that the installed lighting controls meet the documented performance criteria of Section C405 to the builing owner within 90 days of the receipt of the certificate of occupancy.
Additional	Within 90 days, of the date of system acceptance, as-built drawings shall be provided. Include the luminaire locations, luminaire and/or power pack identifier, control, and circuiting. Within 90 days, of the date of system acceptance, an operating and maintenance ("O&M") manual shall be provided as part of the close-out documents. The O&M manual shall include: • Submittal data for each piece of equipment. (Both luminaires and controls). • O&M manuals for each piece of equipment. Identify the recommended schedule for cleaning the luminaires, and inspecting and recalibrating all lighting controls. • A complete narrative of how each lighting control system is intended to operate including recommended settings.

Lighting Controls Symbol Legend

WIRELESS DEVICES

- S_a^{1W} SINGLE POLE, WIRELESS, ON/OFF & DIM CONTROL MANUAL WALL SWITCH. REFER TO CONTROLS SEQUENCE OF OPERATIONS MATRIX FOR CONTROLS REQUIREMENTS. "a" INDICATES RELAY PACK/FIXTURE GROUP CONTROLLED. nLIGHT MODEL No. "RPODB DX COLOR G2"
- $S_{a/b}^{2W}$ TWO POLE, WIRELESS, ON/OFF & DIM CONTROL MANUAL WALL SWITCH. REFER TO CONTROLS SEQUENCE OF OPERATIONS MATRIX FOR CONTROLS REQUIREMENTS. "a/b" INDICATES RELAY PACK/FIXTURE GROUPS CONTROLLED. nLIGHT MODEL No. "RPODB 2P DX COLOR G2"
- OSW a — WIRELESS DUAL TECHNOLOGY OCCUPANCY SENSOR. SMALL MOTION, STANDARD RANGE, 360° LENS. "a" INDICATES RELAY PACK/FIXTURE GROUP CONTROLLED. MODEL "RCMS PDT 9 G2"
- GROUP a rPP — WIRELESS RELAY/POWER PACK WITH 0-10V DIMMING OUTPUT. "GROUP" INDICATES ZONE FOR WIRING/PROGRAMMING PURPOSES. MODEL "RPP20 DS24V EFP G2"

WIRED DEVICES

- S_a^{1D} SINGLE POLE, LOW VOLTAGE, ON/OFF & DIM CONTROL MANUAL WALL SWITCH. REFER TO CONTROLS SEQUENCE OF OPERATIONS MATRIX FOR SWITCH REQUIREMENTS. "a" INDICATES FIXTURES CONTROLLED. nLIGHT nPODM DX WH OR EQUAL
- $S_{a/b}^{2D}$ SINGLE POLE, LOW VOLTAGE, ON/OFF & DIM CONTROL MANUAL WALL SWITCH. REFER TO CONTROLS SEQUENCE OF OPERATIONS MATRIX FOR SWITCH REQUIREMENTS. "a/b" INDICATES FIXTURE GROUPS CONTROLLED. nLIGHT nPODM DX WH OR EQUAL
- S_a^1 SINGLE POLE, LOW VOLTAGE, ON/OFF MANUAL WALL SWITCH. REFER TO CONTROLS SEQUENCE OF OPERATIONS MATRIX FOR SWITCH REQUIREMENTS. "a" INDICATES FIXTURES CONTROLLED. nLIGHT nPODM WH OR EQUAL
- $S_{a/b}^2$ TWO POLE, LOW VOLTAGE, ON/OFF MANUAL WALL SWITCH. REFER TO CONTROLS SEQUENCE OF OPERATIONS MATRIX FOR SWITCH REQUIREMENTS. "a/b" INDICATES FIXTURES GROUPS CONTROLLED. nLIGHT nPODM 2P WH OR EQUAL
- S_a^K LOW VOLTAGE, KEY OPERATED, ON/OFF MANUAL WALL SWITCH. REFER TO CONTROLS SEQUENCE OF OPERATIONS MATRIX FOR SWITCH REQUIREMENTS. "a" INDICATES FIXTURES CONTROLLED. nLIGHT nPOD KEY MNTN WH OR EQUAL
- S^G GRAPHIC WALL SWITCH. MODEL "FCS 7TSN COLOR*". PROVIDE POWER PACK, ABOVE CEILING, CONNECTED TO LIGHTING CIRCUIT. RUN (2) 18Ga CONTROL CONDUCTORS TO SWITCH. CONNECT SWITCH nECY CONTROLLER. SWITCH SHALL CONTROL ALL FIXTURES IN THE SPACE AS SPECIFIED IN THE CONTROLS NARRATIVE.
- S_a^3 LINE VOLTAGE, ON/OFF MANUAL WALL SWITCH. REFER TO CONTROLS SEQUENCE OF OPERATIONS MATRIX FOR SWITCH REQUIREMENTS. "3" INDICATES 3-WAY WIRING "a" INDICATES FIXTURES CONTROLLED.
- S^{OS} LINE VOLTAGE, WALL MOUNTED, ON/OFF OCCUPANCY SENSOR.
- OSS a — DUAL TECHNOLOGY CEILING MOUNTED OCCUPANCY SENSOR. SMALL MOTION, STANDARD RANGE, 360° LENS. nLIGHT MODEL nCM PDT 9 OR EQUAL "a" INDICATES FIXTURES CONTROLLED.
- OSL a — CEILING MOUNTED OCCUPANCY SENSOR. LARGE MOTION, EXTENDED RANGE, 360° LENS. nLIGHT MODEL nCM PDT 10 OR EQUAL "a" INDICATES FIXTURES CONTROLLED.
- DS a — CEILING MOUNTED DAYLIGHT HARVESTING PHOTOCELL W/ AUTO DIMMING CONTROL. nLIGHT MODEL nCM ADCX RJB OR EQUAL "a" INDICATES FIXTURES CONTROLLED.
- DPP a — DIMMING POWER/RELAY PACK. nLIGHT MODEL "nPP16D EFP" OR EQUAL. CONNECT VIOLET & GRAY, 0-10V CONTROL CDTRS (600V INSULATED CONDUCTORS) TO FIXTURES TO BE CONTROLLED TO THIS PACK.
- PP a — NON-DIMMING POWER/RELAY PACK. nLIGHT MODEL "nPP16 EFP" OR EQUAL.
- PRIMARY DAYLIGHTING ZONE. PHOTOCELL SHALL CONTROL FIXTURES PARTIALLY OR FULLY IN THIS AREA. WHERE A PORTION OF A LINEAR FIXTURE FALLS IN THIS AREA, CONTRACTOR SHALL PROVIDE FOR DUAL CIRCUITING OPTION WITHIN THE FIXTURE TO ALLOW FOR THE PORTION WITHIN THE DAYLIGHTING ZONE TO BE CONTROLLED INDEPENDENTLY.
- SECONDARY DAYLIGHTING ZONE. PHOTOCELL SHALL CONTROL FIXTURES PARTIALLY OR FULLY IN THIS AREA. WHERE A PORTION OF A LINEAR FIXTURE FALLS IN THIS AREA, CONTRACTOR SHALL PROVIDE FOR DUAL CIRCUITING OPTION WITHIN THE FIXTURE TO ALLOW FOR THE PORTION WITHIN THE DAYLIGHTING ZONE TO BE CONTROLLED INDEPENDENTLY.

CONTRACTOR'S OPTION:
IN LIEU OF PROVIDING A POWER PACK IN SMALL ROOMS, THE FIXTURES CAN BE PROVIDED WITH THE INTEGRAL nLIGHT MODULE.

Date 1/10/20
Checked BH
Drawn MH

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Title REGISTERED ARCHITECT
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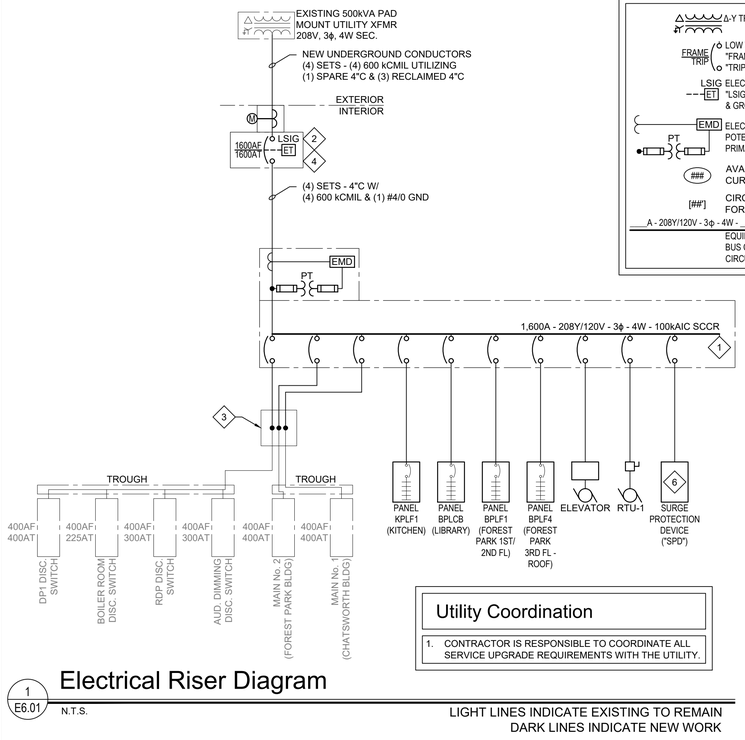
NYSED PROJECT # 66-07-01-03-0-005-020

LIGHTING SCHEDULES AND NOTES

2019 BOND REFERENDUM
CHATSWORTH AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

Job No. 4.1092.72.03
File No. 10927203E201

E5.03



Electrical Riser Diagram

1 / E6.01 — N.T.S.

LIGHT LINES INDICATE EXISTING TO REMAIN
DARK LINES INDICATE NEW WORK

Riser Diagram Symbol Legend

- Δ-Y TRANSFORMER
- LOW VOLTAGE CIRCUIT BREAKER
  - FRAME: "FRAME" INDICATES FRAME SIZE
  - TRIP: "TRIP" INDICATES DRIP AMPERAGE RATING
- LSIG: ELECTRONIC TRIP DEVICE
  - ET: "LSIG" INDICATES LONG/SHORT TIME/INSTANTANEOUS & GROUND FAULT FUNCTIONS
- EMD: ELECTRONIC METERING DEVICE & POTENTIAL TRANSFORMER WITH PRIMARY AND SECONDARY FUSES
- PT
- ###: AVAILABLE 3ϕ, FAULT CURRENT (RMS, SYM AMPS)
- [##']: CIRCUIT LENGTH IN FEET. (USED FOR SCA CALCULATIONS ONLY).
- __A - 208Y/120V - 3ϕ - 4W - __kAIC: EQUIPMENT BUS & RATING DATA, INCLUDING: BUS CONTINUOUS CURRENT RATING - VOLTAGE(S) - No. OF PHASES - No. OF WIRES - SHORT CIRCUIT INTERRUPTING CURRENT RATING CAPACITY IN THOUSANDS OF AMPERES (kAIC)

Utility Coordination

1. CONTRACTOR IS RESPONSIBLE TO COORDINATE ALL SERVICE UPGRADE REQUIREMENTS WITH THE UTILITY.

MDP Requirements

Phase & Neutral		System	Bus Bar Material Heat Rise (Std.)	Short Circuit Current Rating	Bus Bar Material Heat Rise (Std.)	Incoming Cable Feed Direction
Al or Cu	Cu					
☐ 600	☐ 2500	■ 208Y/120V, 3P, 4W	☐ Standard Al/Cu	☐ 5k ☐ 35k	☐ Standard Al/Cu	☐ Bottom
☐ 800	☐ 3000	☐ 240/120V, 3P, 4W	■ Copper Only	☐ 10k ☐ 42k	■ Copper Only	☐ Bottom Left
☐ 1000	☐ 4000	☐ 480Y/277V, 3P, 4W	Current Density	☐ 14k ☐ 50k	Current Density	☐ Bottom Right
☐ 1200		☐ 240V, 3Ph, 4W	☐ 1000 A/in² Cu	☐ 18k ☐ 65k	☐ 1000 A/in^2 Cu	☐ Bottom Center
■ 1600		☐ Ungrounded		☐ 20k ■ 100k		☐ Top
☐ 2000		☐ Grounded		☐ 22k ☐ 125k		■ Top Left
		☐ 240V, 3Ph, 4W		☐ 25k ☐ 150k		☐ Top Right
		☐ Ungrounded		☐ 30k ☐ 200k		☐ Top Center
		☐ Grounded Wye				
		☐ Grounded Delta				

Accessibility	Through Bus	Enclosure Type	
■ Front Only	■ Yes	■ NEMA Type 1	
Front and:	☐ No	☐ NEMA Type 3	
☐ Left	☐ Single Section	Non-Walk-In	
☐ Right	☐ Lugs Load-Side		
☐ Rear			
☐ Suitable For Use As Service Equipment		☐ Series Rated	■ Incoming Mechanical Lugs or,
■ Has locks to lock the OCPD's in the "OFF" position.			☐ Incoming Compression Lugs

RISER DIAGRAM KEY NOTES

◇ # — SYMBOL INDICATES KEY NOTE

1. PROVIDE A MINIMUM OF SIX (6) SPARE 3P/400AF & SIX (6) 3P/100AF POSITIONS.
2. CT CABINET AND SERVICE ENTRANCE RATED DISCONNECT SWITCH W/ CURRENT LIMITING BREAKER.
3. RECONNECT EXISTING CIRCUITS AS REQUIRED. COORDINATE WITH EXISTING FIELD CONDITIONS. USE MIN. CODE SIZED CONDUCTORS & RACEWAYS, OR MATCH EXISTING SIZES IF THEY ARE LARGER THAN CODE. UTILIZE EXISTING SERVICE BOX AS A SPLICE BOX.
4. REFER TO DETAIL 2/E6.01 FOR GROUNDING AND BONDING REQUIREMENTS.
5. MAIN FEEDER DISCONNECT. WHERE THE HIGHEST CONTINUOUS CURRENT TRIP SETTING FOR WHICH THE ACTUAL OVERCURRENT DEVICE INSTALLED IN A CIRCUIT BREAKER IS RATED OR CAN BE ADJUSTED IS 1200A OR HIGHER, FURNISH AND INSTALL AN ARCFLASH REDUCTION MAINTENANCE SWITCH "ARMS" BY WHICH THE INTENTIONAL DELAY IN THE OPENING OF A CIRCUIT BREAKER CAN BE OVERRIDDEN WHILE MAINTENANCE, SERVICE, OR DIAGNOSTIC TASKS ARE BEING PERFORMED. EQUIPMENT SHALL BE COMPLIANT TO NEC ARTICLE 240.87(A) AND (B) AND SHALL INCLUDE A LOCAL STATUS INDICATOR.
6. SURGE PROTECTION DEVICE ("SPD")REFER TO SPD REQUIREMENTS FOR ADDITIONAL INFORMATION.
7. RESERVED

Riser Diagram General Notes

1. All short circuit interrupting ratings shown, whether AIC or MVA IC are calculated 3ϕ symmetrical values at the line terminals of the equipment, with the exception of 10,000 AIC values. The withstand short circuit current ratings of protective devices, transfer switches and bus bracings shall be equal to or greater than the values indicated.
2. Unless otherwise noted all circuit breakers, and/or switches are three (3) pole unless noted otherwise.
3. Refer to Grounding System Diagram (Detail 2/E6.01) for system and grounding requirements.
4. Refer to panelboard schedules for additional information.
5. Junction and pull boxes are not necessarily shown on this drawing and shall be provided where necessary and sized in accordance with the National Electrical Code and installed where required.
6. Bond all sections of switchboard together using an equipment grounding conductor sized per NEC Table 250-95.
7. Install UL Listed circuit breaker padlocking devices for service and maintenance personnel on all over current protection devices. The device must have provisions for placement of a lock on it to secure the device in the off position. The lock-out device must be part of the disconnect assembly and must remain in place after the padlock is removed, whether it is a fused disconnect switch, a single circuit breaker, or a circuit breaker in a panelboard. A device that is attached to the circuit breaker handle by a set screw is not an acceptable means to serve as a safe method of locking the device in the off position.
8. The main feeder disconnect must be labeled as the "Main Disconnect". The label shall be constructed from 1/16" thick plastic laminated material. Engrave through the colored material to contrasting color sub-layer.
9. Per NEC 110.24(A) the maximum available fault current and the date the fault current calculation was performed shall be legibly marked on the service equipment. The label shall be constructed from 1/16" thick plastic laminated material. Engrave through the colored material to contrasting color sub-layer. Example: Maximum available fault current: 34,000 Symmetrical RMS Amperes Date 12/1/17.
10. Per NEC 110.16, "Flash Protection. Switchboards, panelboards, industrial control panels, meter socket enclosures, and motor control centers in other than dwelling occupancies, which are likely to require examination, adjustment, servicing, or maintenance while energized, shall be field marked to warn qualified persons of potential electric arc flash hazards". The marking shall be located so as to be clearly visible to qualified persons before examination, adjustment, servicing, or maintenance of the equipment." The NEC labeling requirements apply to any electrical equipment installed or modified after 2002. The warning label shall comply with ANSI Z535.4, which specifies colors and signal words to be used.
11. Per NEC 408.4(A), every circuit and circuit identification shall be legibly identified as to its clear, evident, and specific purpose of use.
12. Where raceways contain conductors 4 AWG and larger and enter an enclosure, the conductors must be protected from abrasion during and after installation by a fitting that provides a smooth, rounded insulating surface, such as an insulating bushing [300.4(F)]. For IMC and RMC, a metal or plastic bushing must be installed on conduit threads at terminations in accordance with 300.4(F), unless the design of the box, fitting, or enclosure is such as to afford equivalent protection [344.46 and 342.46].

Parallel Conductor Notes

1. Ungrounded and grounded neutral conductors sized 1/0 AWG and larger can be connected in parallel (i.e., electrically joined at both ends).
2. When conductors are run in parallel, the current must be evenly distributed between the individual parallel conductors. This is accomplished by ensuring that all ungrounded and grounded neutral conductors within a parallel set are identical. Each conductor of a parallel set must:
   a. Be the same length.
   b. Be made of the same conductor material (copper/aluminum).
   c. Be the same size in circular mil area (minimum 1/0 AWG).
   d. Use the same insulation material (like THHN).
   e. Terminate in the same method (set screw versus compression).
3. In addition, raceways or cables containing parallel conductors must have the same physical characteristics and the same number of conductors in each raceway or cable. Conductors for one phase (ungrounded conductor) or the grounded neutral conductor, aren't required to have the same physical characteristics as those of another phase or grounded neutral conductor to achieve balance.
4. The equipment grounding (bonding) conductors for circuits in parallel must be identical to each other in length, material, size, insulation, and termination. In addition, each raceway (where required) must have an equipment grounding (bonding) conductor sized in accordance with 250.122. The minimum 1/0 AWG rule of 310.4 doesn't apply to equipment grounding (bonding) conductors [250.122(F)(1)].
5. When more than three current-carrying conductors are run together in a raceway longer than 24 inches, the ampacity adjustment factors of Table 310.15(B)(2)(a) must be applied. See 310.10 and 310.15 for details and examples.

PANEL SCHEDULE - MDP

FED FROM SERVICE ENTRANCE RATED DISCONNECT SWITCH | 208/120V

CT#	Load Description	OCPD Type	OCPD Poles	OCPD Rated	Conductors Current	Conductors Neutral	Conductors Ground	Raceway	Voltage	Load kVA	Load per Phase(A) Phase A	Phase B	Phase C	Voltage Drop %
1/3/5	FOUR (4) TAP TROUGH	Std	3	400A	(3) 500 ga.	none	(1) 3 ga.	4 in. EMT	208	12 MONTH HISTORICAL LOAD DATA				0.33%
2/4/6	FOREST PARK	Std	3	400A	(3) 500 ga.	none	(1) 3 ga.	4 in. EMT	208	PEAK kW - 157.1				0.33%
7/9/11	CHATSWORTH	Std	3	400A	(3) 500 ga.	none	(1) 3 ga.	4 in. EMT	208	PEAK kVA - 196.4				0.33%
8/10/12	PANEL KPLF1 - KITCHEN PANEL	Std	3	225A	(3) 4/0 ga.	none	(1) 4 ga.	2-1/2 in. EMT	208	42.39	202.82	162.26	171.68	1.13%
13/15/17	BPLCB - CHATSWORTH BASEMENT	Std	3	200A	(3) 3/0 ga.	(1) 3/0 ga.	(1) 6 ga.	2 in. EMT	208	39.97	115.86	111.76	125.93	1.10%
14/16/18	BPLF1 - FOREST PARK 1ST FL	Std	3	200A	(3) 3/0 ga.	(1) 3/0 ga.	(1) 6 ga.	2 in. EMT	208	19.31	65.58	51.32	66.04	0.71%
19/21/23	BPLF4 - FOREST PARK 4TH FL	Std	3	200A	(3) 3/0 ga.	(1) 3/0 ga.	(1) 6 ga.	2 in. EMT	208	34.55	115.1	128.12	94.11	1.11%
20/22/24	ELEVATOR	Std	3	60A	(3) 10 ga.	none	(1) 10 ga.	3/4 in. EMT	208	7.35	24	24	24	1.69%
25/27/29	AUDITORIUM RTU-1	Std	3	350A	(3) 500 ga.	none	(1) 3 ga.	2-1/2 in. EMT	208	116.37	323	323	323	2.51%
26/28/30	CAFETERIA RTU-2	Std	3	50A	(3) 6 ga.	none	(1) 10 ga.	3/4 in. EMT	208	13.85	42.7	42.7	42.7	4.19%
31/33/35	SURGE PROTECTION DEVICE ("SPD")	Std	3	30A	(3) 10 ga.	(1) 10 ga.	(1) 10 ga.	3/4 in. EMT	208	0.36				0.36%
32/34/36	SPARE 400A FRAME	Std	3	20A	(3) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	208	0.36				0.40%
37-48	SPARE 400A FRAME													
49/51/53	SPARE 400A FRAME													
50/52/54	SPARE 100A FRAME													
55-71	SPARE 100A FRAME													
									Connected Loads: 457,780 VA		1399.1 A	1353.1 A	1358 A	

Voltage: 120 / 208
Circuits:
Neutral Buss: Yes
Ground Buss: Yes
Buss Capacity: 1600 A
NEMA Type 1

Main Connection: breaker
Load kVA: 458
OCPD Size: 1600A
OCPD Type: Std
Location:
Remarks:

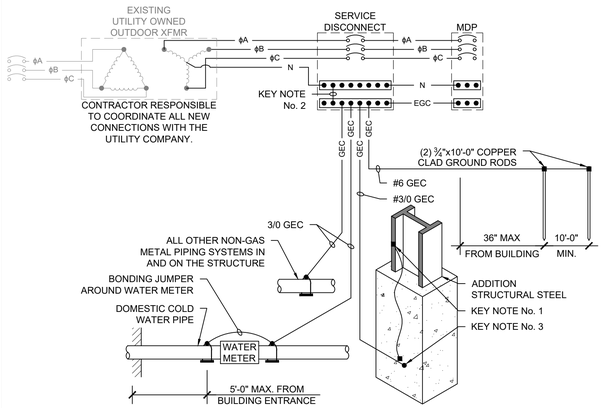
3-Phase Connection

Voltage Drop % for 50 Feet is 0.28%	Current	Neutral	Ground
Raceway: (4 sets) - 4 in. dia. EMT	(12) 600 kcmils THHN	(4) 600 kcmils THHN	(1) 4/0 ga. THHN

Surge Protection Device ("SPD") Requirements

WHERE A SURGE PROTECTION DEVICE ("SPD") IS INDICATED ON A PANEL SCHEDULE THE CONTRACTOR SHALL SUPPLY AND INSTALL AN SPD MEETING THE FOLLOWING CHARACTERISTICS.

1. SWITCHBOARDS: WHERE INDICATED, THE SURGE PROTECTION DEVICES (SPD) SHALL BE RATED 208Y/120V, 180 kA PER PHASE FOR SWITCHBOARDS RATED <1600A, 240 kA PER PHASE FOR SWITCHBOARDS RATED 1600A AND 300 kA PER PHASE FOR SWITCHBOARDS RATED 2000A AND ABOVE. THE SPD PROTECTING SWITCHBOARDS SHALL PROVIDE THRESHOLD RESPONSE CIRCUITRY (NON SINE-WAVE TRACKING).
2. PANELBOARDS: WHERE INDICATED, THE SURGE PROTECTION DEVICES (SPD) SHALL BE RATED 208Y/120V, 120 kA PER PHASE FOR PANELBOARDS 400A OR LESS AND 180 kA PER PHASE FOR PANELBOARDS RATED ABOVE 400A .
3. THE SPD SHALL INCLUDE DISCRETE 10-MODES OF PROTECTION (L-L, L-G, L-N, AND N-G). SEVEN MODE PRODUCTS THAT ACHIEVE LINE TO LINE PROTECTION BY COMBINING THE LINE TO GROUND OR NEUTRAL PATHS ARE NOT ACCEPTABLE.
4. THE UNIT SHALL INCLUDE PHASE LOSS/PROTECTION LOSS LED'S AND FORM C DRY CONTACTS. ALL SPDS SHALL BE TYPE 2 RATED WITH A NOMINAL DISCHARGE CURRENT OF 20 kA. LESSER RATED VALUES ARE NOT ACCEPTABLE. IF THE SPD IS MOUNTED ON THE LINE SIDE OF A SERVICE DISCONNECT, IT SHALL BE TYPE 1 RATED.
5. THE SPD MANUFACTURER SHALL OFFER A FULL REPLACEMENT WARRANTY FOR THE PRODUCT FOR 25 YEARS. PRORATED WARRANTIES ARE NOT ACCEPTABLE.
6. A DEDICATED 30A/3P CIRCUIT BREAKER OR FUSED DISCONNECT SHALL BE MOUNTED IN THE PANELBOARD OR SWITCHBOARD TO FEED THE SPD. THE SPD SHALL BE INSTALLED ADJACENT TO THE PANELBOARD OR SWITCHBOARD AND CONNECTED WITH LEADS AS SHORT AS POSSIBLE AND NOT TO EXCEED 18 INCHES. IF A DEDICATED 30A/3P BREAKER OR DISCONNECT IS NOT AVAILABLE THEN THE SPD SHALL BE PROVIDED WITH AN INTEGRAL DISCONNECT SWITCH.
7. THE SPD(S) SHALL BE MANUFACTURED BY SURGE SUPPRESSION INC., MODEL No. LSEB3Y1C-87 FOR THE MDP AND SDKB3Y1C-87 FOR THE PANELBOARDS. (FACTORY REPRESENTATIVE, SDM METRO, ANDREW YETMAN, 732-995-2415). EQUIVALENT SYSTEMS THAT COMPLY WITH THE SPECIFICATION FROM LIEBERT OR CURRENT TECHNOLOGY ARE ACCEPTABLE. NO OTHER SUBSTITUTIONS WILL BE CONSIDERED.



DETAIL KEY NOTES:

1. BOND EACH PERIMETER STRUCTURAL STEEL COLUMN TO THE CONCRETE ENCASED MAIN GROUNDING ELECTRODE. USE COMPRESSION CONNECTIONS THAT MEET IEEE 837 REQUIREMENTS OR USE EXOTHERMIC WELDS.
2. INSTALL A MAIN BONDING JUMPER
3. INSTALL A CONCRETE ENCASED ELECTRODE IN THE BUILDING FOUNDATION. LOCATE ELECTRODE IN THE BOTTOM ONE-THIRD OF THE FOUNDATION WITH AT LEAST 3" OF CONCRETE COVER. USE BARE OR GALVANIZED REBAR THAT ARE MADE ELECTRICALLY CONTINUOUS USING COPPER JUMPERS NOT SMALLER THAN THE REQUIRED GROUNDING ELECTRODE CONDUCTOR. USE REINFORCING BARS NOT SMALLER THAN THE FOLLOWING BASED ON TOTAL LENGTH OF THE INTERCONNECTED AND PARALLEL REBARS.

TOTAL LENGTH	MIN. REBAR SIZE
112 FT	1⅛, #11 BAR
150 FT	1", #8 BAR
192 FT	¾", #6 BAR
223 FT	⅝", #5 BAR
268 FT	½", #4 BAR

DETAIL GENERAL NOTES:

1. INSTALL GROUNDING CONNECTIONS TO BUILDING STRUCTURE AND WATER PIPES AT LOCATIONS THAT ARE VISIBLE AND ACCESSIBLE FOR INSPECTION, MAINTENANCE, AND TESTING.
2. BOND HOT AND COLD WATER PIPING SYSTEMS.
3. TWO WEEKS PRIOR TO THE FINAL INSPECTION, SUBMIT GROUND RESISTANCE FIELD TEST REPORTS TO THE ENGINEER OF RECORD. FIELD TEST REPORTS SHALL INCLUDE A CERTIFICATION BY THE CONTRACTOR THAT THE GROUNDING EQUIPMENT HAS BEEN PROPERLY INSTALLED AND TESTED.
4. PUBLICATIONS LISTED BELOW (INCLUDING AMENDMENTS, ADDENDA, REVISIONS, SUPPLEMENTS, AND ERRATA) FORM A PART OF THE CONTRACT DOCUMENTS TO THE EXTENT REFERENCED.
   a. INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS, INC. (IEEE): 81 IEEE GUIDE FOR MEASURING EARTH RESISTIVITY, GROUND IMPEDANCE, AND EARTH SURFACE POTENTIALS OF A GROUND SYSTEM PART 1: NORMAL MEASUREMENTS.

CONDUCTOR LEGEND:

N - NEUTRAL ϕA - PHASE A EGC - EQUIPMENT GROUNDING CONDUCTOR
ϕB - PHASE B ϕC - PHASE C GEC - GROUNDING ELECTRODE CONDUCTOR

Grounding and Bonding Detail

2 / E6.01 — N.T.S.

NOTES:

1. ONLY COMPONENTS SERVING EQUIPMENT WILL HAVE NAMEPLATES.
2. SPARE UNITS SHOULD BE IDENTIFIED AS "SPARE".
3. SPACES DO NOT REQUIRE ANY NAMEPLATES.

W AF M	EN W AF	EN W AF	EN W AF
	FN FEEDER	FN FEEDER	FN FEEDER
EN MAIN	FN FEEDER	FN FEEDER	FN FEEDER
	FN FEEDER	FN FEEDER	FN FEEDER
	FN FEEDER	FN FEEDER	FN FEEDER

LABELS:

- W — WARNING SIGNS (TYPICAL) ON EACH SECTION FRONT AND REAR
- AF — ARC FLASH WARNING LABEL (TYPICAL) ON EACH SECTION FRONT AND REAR
- M — MANUFACTURER'S NAMEPLATE
- EN — EQUIPMENT NAMEPLATE (REFER TO DETAIL)
- FN — FEEDER NAMEPLATE

Switchboard Electrical Identification

4 / E6.01 — N.T.S.

Date	1/10/20
Checked	BH
Drawn	MH

Revisions:

#	
1	ISSUE TO BID 11/23/20

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NYSED PROJECT # 66-07-01-03-0-005-020

ELECTRICAL RISER DIAG. AND NOTES
2019 BOND REFERENDUM
CHATSWORTH AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

Job No. 4.1092.72.03
File No. 10927203E601

E6.01

PANEL SCHEDULE - BPLCB

FED FROM MDP | 208/120V

CT#	Load Description	OCPD Type	OCPD Poles	OCPD Rated	Conductors Current	Conductors Neutral	Conductors Ground	Raceway	Voltage	Load kVA	Load per Phase(A) Phase A	Load per Phase(A) Phase B	Load per Phase(A) Phase C	Voltage Drop %
1/3/2005	ACC-G-2	Std	3	35A	(3) 10 ga.	none	(1) 10 ga.	3/4 in. EMT	208	9.35	27.6	27.6	27.6	3.04%
2/4/2006	ACC-G-1	Std	3	60A	(3) 6 ga.	none	(1) 10 ga.	3/4 in. EMT	208	18.63	55	55	55	2.75%
7	UV-1-1 -2 -3	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	1.32	11.7			3.62%
8	EF-1-3 THRU -1-5	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	0.62	5.76			2.35%
9	UV-1-4	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	0.44		3.9		1.89%
10	ACC EXTERIOR RECEPTS	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	0.36		3.16		1.75%
11	UV-1-5 -6	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	0.88			7.8	2.75%
12	A104 & A103 RECEPT	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	0.54			4.74	2.12%
13	C10 RECEPT - SMART BOARD	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	0.18	1.58			1.39%
14	C10 RECEPTACLES - GEN	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	0.36	3.16			1.75%
15	C09 RECEPTACLES	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	0.9		7.89		2.84%
16	C02 RECEPTACLES	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	0.72		6.32		2.48%
17	MEDIA CTR FLOOR RECEPT.	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	0.54			4.74	2.12%
18	C03 RECEPTACLES	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	0.36			3.16	1.75%
19	C04 RECEPTACLES	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	0.54	4.74			2.12%
20	C05 RECEPT - COMPUTERS	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	0.72	6.32			2.48%
21	C02 RECEPT - DESK	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	0.9		7.89		2.84%
22-40														
41	C06 RECEPTACLES	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	0.9			7.89	2.84%
42	C06 COPIER	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	1.71			15	4.49%
	Total Circuits 23							Connected Loads: 39,970 VA			115.1 A	111.1 A	125.1 A	

Voltage: 120 / 208
Circuits: 23 / 42
Neutral Buss: Yes
Ground Buss: Yes
Buss Capacity: 200 A
NEMA: Type 1

Main Connection: breaker
Load kVA: 40
OCPD Size: 200A
OCPD Type: Std
Location:
Remarks: 22kAIC SCCR

3-Phase Connection	Current	Neutral	Ground
Voltage Drop % for 100 Feet is 1.10%			
Raceway: 2 in. dia. EMT	(3) 3/0 ga. THHN	(1) 3/0 ga. THHN	(1) 6 ga. THHN

PANEL SCHEDULE - BPLF1

FED FROM MDP | 208/120V

CT#	Load Description	OCPD Type	OCPD Poles	OCPD Rated	Conductors Current	Conductors Neutral	Conductors Ground	Raceway	Voltage	Load kVA	Load per Phase(A) Phase A	Load per Phase(A) Phase B	Load per Phase(A) Phase C	Voltage Drop %
1	B05 RECEPTACLES	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	0.36	3.16			1.36%
2	B03 RECEPTACLE	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	0.36	3.16			1.36%
3/5	CH-1-6	Std	2	20A	(2) 12 ga.	none	(1) 12 ga.	3/4 in. EMT	208	0.58		3.1	3.1	1.04%
4	HWH-1	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	0.11		0.97		0.86%
6	EF-1-1 & -1-2	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	0.47			4.37	1.64%
7/9	CH-1-3 -4 -5	Std	2	20A	(2) 12 ga.	none	(1) 12 ga.	3/4 in. EMT	208	1.74	9.3	9.3		1.70%
8/10	AC-1-1 THRU AC-1-6	Std	2	20A	(2) 12 ga.	none	(1) 12 ga.	3/4 in. EMT	208	1.37	7.3	7.3		1.68%
11/13	CH-1-1 -2 & -2-1	Std	2	20A	(2) 12 ga.	none	(1) 12 ga.	3/4 in. EMT	208	1.74	9.3		9.3	1.70%
12/14	AC-2-1 & HRU-2-1	Std	2	20A	(2) 12 ga.	none	(1) 12 ga.	3/4 in. EMT	208	1.59	8.47		8.47	1.61%
15	EF-2-1 & MD's	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	0.27		2.53		1.22%
16	B01 CAFETERIA RECEPTACLES	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	0.72		6.32		2.09%
17	A202 COPIER 1	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	1.82			16	4.33%
18	B01 CAFETERIA RECEPTACLES	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	0.54			4.74	1.73%
19	A202 COPIER 2	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	1.82	16			4.33%
20	A101 A102 & EXT. RECEPTS	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	0.72	6.32			2.09%
21	A202 COPY RM RECEPT	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	0.9		7.89		2.45%
22	A201 LOBBY RECEPT	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	0.18		1.58		1.00%
23	MAGNETIC DOOR HOLDERS	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	0.32			2.8	1.28%
24	SMOKE DAMPERS	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	0.57			5	1.79%
25-26														
27	B01 LIGHTING - LINEAR	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	1.48		12.33		3.72%
28														
29	B01/CORRIDOR LIGHTING	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	0.63			5.28	1.96%
30														
31	2nd FL ELEV AREA LIGHTING	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	0.31	2.57			1.28%
32-40														
41	ELEV. PIT RECEPT & LIGHT	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	0.36			3.53	1.29%
42	ELEV. SUMP PUMP ESP-1	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	0.35			3.45	1.27%
	Total Circuits 29							Connected Loads: 19,310 VA			65.1 A	51 A	66 A	

Voltage: 120 / 208
Circuits: 29 / 42
Neutral Buss: Yes
Ground Buss: Yes
Buss Capacity: 200 A
NEMA: Type 1

Main Connection: breaker
Load kVA: 19
OCPD Size: 200A
OCPD Type: Std
Location:
Remarks: 22kAIC SCCR

3-Phase Connection	Current	Neutral	Ground
Voltage Drop % for 100 Feet is 0.71%			
Raceway: 2 in. dia. EMT	(3) 3/0 ga. THHN	(1) 3/0 ga. THHN	(1) 6 ga. THHN

PANEL SCHEDULE - BPLF4

FED FROM MDP | 208/120V

CT#	Load Description	OCPD Type	OCPD Poles	OCPD Rated	Conductors Current	Conductors Neutral	Conductors Ground	Raceway	Voltage	Load kVA	Load per Phase(A) Phase A	Load per Phase(A) Phase B	Load per Phase(A) Phase C	Voltage Drop %
1/3/5	ACC-R-1 - A	Std	3	45A	(3) 8 ga.	none	(1) 10 ga.	3/4 in. EMT	208	11.12	36.3	36.3	36.3	2.52%
2/4/6	ACC-R-1 - B	Std	3	35A	(3) 10 ga.	none	(1) 10 ga.	3/4 in. EMT	208	8.95	27.6	27.6	27.6	2.74%
7/9	ACC-R-2	Std	2	20A	(2) 10 ga.	none	(1) 12 ga.	3/4 in. EMT	208	3.01	17	17		2.27%
8/10	ACC-R-3	Std	2	25A	(2) 10 ga.	none	(1) 10 ga.	3/4 in. EMT	208	3.09	16.5	16.5		2.24%
11/13	HRU-4-1 & AC-4-1	Std	2	20A	(2) 12 ga.	none	(1) 12 ga.	3/4 in. EMT	208	0.41	2.2		2.2	1.35%
12	EF-R-1 & ROOF RECEPT.	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	0.58			5.11	2.21%
14/16	CH-4-1 -2	Std	2	20A	(2) 12 ga.	none	(1) 12 ga.	3/4 in. EMT	208	1.16	6.2	6.2		1.77%
15	A403 RECEPT & MD's	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	0.54		4.5		2.17%
17	A402 RECEPT.	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	0.72		6.32		2.50%
18/20	CH-3-1 -2 -3	Std	2	20A	(2) 12 ga.	none	(1) 12 ga.	3/4 in. EMT	208	1.74	9.3		9.3	2.10%
19	3RD FLOOR GEN RECEPT.	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	0.72		6.32		2.50%
21	3RD FLOOR LIGHTING	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	Free Air	120	0.68		5.66		2.46%
22	4TH FLOOR LIGHTING	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	Free Air	120	0.21		1.72		1.47%
23-40														
41	MAGNETIC DOOR HOLDERS	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	0.18			1.6	1.41%
42	ELEVATOR 120VAC LOADS	Std	1	20A	(1) 12 ga.	(1) 12 ga.	(1) 12 ga.	3/4 in. EMT	120	1.44			12	4.04%
	Total Circuits 24							Connected Loads: 34,550 VA			115 A	128 A	94 A	

Voltage: 120 / 208
Circuits: 24 / 42
Neutral Buss: Yes
Ground Buss: Yes
Buss Capacity: 200 A
NEMA: Type 1

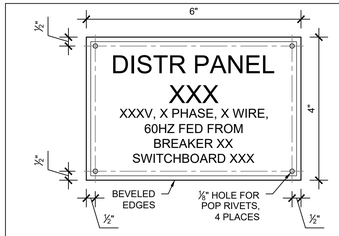
Main Connection: breaker
Load kVA: 35
OCPD Size: 200A
OCPD Type: Std
Location:
Remarks: 22kAIC SCCR

3-Phase Connection	Current	Neutral	Ground
Voltage Drop % for 100 Feet is 1.11%			
Raceway: 2 in. dia. EMT	(3) 3/0 ga. THHN	(1) 3/0 ga. THHN	(1) 6 ga. THHN

Panelboard General Requirements

1. Breakers for Devices 400 Amps or Less: Protective devices in branch circuit and distribution panels that are rated 400 amperes or less shall be circuit breakers with appropriate short circuit ratings to maintain building coordination. Circuit breakers shall have bolt or screw mounting to bus.
2. Provide panelboard interrupting ratings as noted on the drawings. All panelboards shall be FULLY RATED. No Series-Rating is allowed.
3. Panel Capacity: All new distribution and branch circuit panels shall have 42 spaces. Panel boards with 84 circuits in one panel are not allowed. Panel boards with 42 circuits and feed-thru lugs to a panel board next to it for a total of 84 circuits are allowed.
4. Lockable: All distribution and branch circuit panels shall be lockable. Panel boards shall be door-in-door type.
5. Schedule: Each panel shall contain a typewritten schedule. Schedules shall reflect final load descriptions, room numbers, and room names connected to each circuit breaker. Schedules shall be printed on the panelboard directory cards and be installed in the appropriate panelboards. The schedule shall contain complete and detailed information for loads on each circuit. Any changes, additions, or modifications to Panel boards shall require in a new typed directory.
6. Buss Material: All panelboard Phase, Neutral, and Equipment Ground buss shall be tinned copper.
7. Furnish panelboards with surge protective devices as noted on the drawings.
8. UL Compliance: Comply with applicable UL safety standards pertaining to panelboards, accessories, and enclosures. Provide units which have been UL listed and labeled. UL standards are as follows:
9. Panelboards - UL67
10. Enclosures for Electrical Equipment - UL50
11. NEC Compliance: Comply with the NEC as applicable to the installation of panelboards, cabinets, and cutout boxes.
12. NEMA Compliance: Comply with NEMA Stds. Pub. No. 250 "Enclosures for Electrical Equipment (1000-volt maximum)", Pub. No. 1 "Panelboards" and Pub. No. PB1.1, "Instruction for Safe Installation, Operation, and Maintenance of Panelboards Rates 600 Volts and Less".
13. NECA Compliance: Comply with NECA's "Standard of Installation".
14. Panelboards shall be constructed for top or bottom feeder service, as required by actual project conditions. Contractor to coordinate with field conditions.

Nameplate/Labeling Requirements



REQUIRED DATA

FIRST LINE: EQUIPMENT DESIGNATION
SECOND LINE: VOLTAGE, PHASE, No. OF WIRE, FREQUENCY
THIRD AND FOURTH LINES: POWER SOURCE AND BREAKER
"XXX": BASED ON FINAL SHOP DRAWING AND INSTALLED EQUIPMENT CIRCUIT NUMBER
TRANSFORMERS: INCLUDE LINE INDICATING "FEEDS TO"

LETTER SIZE & SPACING

TOP ROW: 1" LETTERS
OTHER ROWS: ½" LETTERS
BETWEEN ROWS: ¼" BETWEEN 1st & 2nd, ⅛" FOR OTHER ROWS

NOTES

LETTERING SHALL BE WHITE ON A BLACK BACKGROUND
FOR TRANSFORMERS, INCLUDE PRI & SEC VOLTAGES, PRI AND SEC CONNECTIONS (E.G., DELTA, WYE, ETC.) AND EQUIPMENT SERVING.

GENERAL LABELING REQ.:

Engraved Plastic Nameplates and Signs: Engraving stock, melamine plastic laminate, minimum 1/16" thick for signs up to 20 sq. in. and ⅛" thick for larger sizes. Engraved legend with white letters on black face for normal power, white letters on red face for emergency power. Punched or drilled for mechanical fasteners. Text at ½" high lettering.

Nameplates shall adequately describe the function of the particular equipment involved. Where nameplates are detailed on the drawings, inscription and size of letters shall be as shown and shop drawing submitted for approval. Nameplates for panelboards and switchboards shall include the panel designation, voltage, phase and wire. The next item shall be panel name. In addition, describe where the panel is fed from. For example,
PANEL 1LA, 120/208V, 3PH, 4W
PP1 PANEL
FED FROM MDP

The service disconnect shall be labeled as the "Service Disconnect," per NEC 230.70(B).

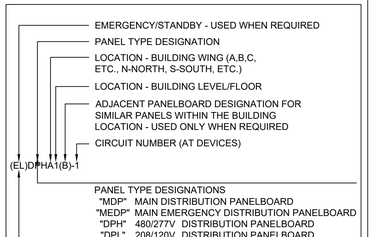
Per NEC 110.24(A) the maximum available fault current and the date the fault current calculation was performed shall be legibly marked on the service equipment. Example: Maximum available fault current: 33,800 Symmetrical RMS Amperes Date 09/12/18.

Per NEC 110.16, "Flash Protection, Switchboards, panel boards, industrial control panels, meter socket enclosures, transfer switches and motor control centers in other than dwelling occupancies, which are likely to require examination, adjustment, servicing, or maintenance while energized, shall be field marked to warn qualified persons of potential electric arc flash hazards. The marking shall be located so as to be clearly visible to qualified persons before examination, adjustment, servicing, or maintenance of the equipment." The NEC labeling requirements apply to any electrical equipment installed or modified after 2002. Warning label shall comply with ANSI Z535.4, which specifies colors and signal words to be used.

Per NEC 408.4(A), every circuit and circuit identification shall be legibly identified as to its clear, evident, and specific purpose of use.

Per NEC 700.7(B) and NEC 701.7, furnish and install warning label that warns of a shock hazard if the grounding electrode conductor or bonding jumper connection in this type of equipment is removed while alternate energy sources are energized.

Panelboard Naming Convention



PANEL TYPE DESIGNATIONS

"MDP"	MAIN DISTRIBUTION PANELBOARD
"MEDP"	MAIN EMERGENCY DISTRIBUTION PANELBOARD
"DPH"	480/277V DISTRIBUTION PANELBOARD
"DPL"	208/120V DISTRIBUTION PANELBOARD
"BPH"	480/277V BRANCH CIRCUIT PANELBOARD
"BPL"	208/120V BRANCH CIRCUIT PANELBOARD
"MPH"	480/277V MECHANICAL LOAD PANELBOARD
"MPL"	208/120V MECHANICAL LOAD PANELBOARD
"LPH"	480/277V LIGHTING PANELBOARD
"LPL"	208/120V LIGHTING PANELBOARD
"KPH"	480/277V KITCHEN EQUIPMENT PANELBOARD
"KPL"	208/120V KITCHEN EQUIPMENT PANELBOARD
"SPH"	480/277V SERVER ROOM EQUIP. PANELBOARD
"SPL"	208/120V SERVER ROOM EQUIP. PANELBOARD

EMERGENCY/STANDBY SYSTEM DESIGNATIONS

"EL"	LIFE SAFETY BRANCH
"EC"	CRITICAL BRANCH
"ES"	LIFE SUPPORT BRANCH
"EE"	ESSENTIAL EQUIPMENT POWER BRANCH
"EO"	OPTIONAL EQUIPMENT POWER BRANCH
"SB"	STANDBY BRANCH

Date	1/10/20
Checked	BH
Drawn	MH

MICHAEL J. McGOVERN, R.A.
Title REGISTERED ARCHITECT License No. 022257-1

Revisions:
1 ISSUE TO BID 11/23/20

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NYSED PROJECT # 66-07-01-03-0-005-020

PANEL SCHEDULES & DETAILS
2019 BOND REFERENDUM
CHATSWORTH AVENUE ELEMENTARY SCHOOL
MAMARONECK UNION FREE SCHOOL DISTRICT
CHATSWORTH AVENUE, LARCHMONT, NY 10538

Job No. 4.1092.72.03
File No. 10927203E601

E6.02