

BID
ADDENDUM NO. 3
TO
CONTRACT DOCUMENTS
AND
TECHNICAL SPECIFICATIONS
FOR
PHYSICAL EDUCATION DEPARTMENT RENOVATIONS
AT
WESTLAKE HIGH SCHOOL
AT
825 WEST LAKE DRIVE
THORNWOOD, NY 10594
NYSED #66-08-01-06-0-005-020

Mount Pleasant Central School District
825 West Lake Drive
Thornwood, NY 10594

Telephone No. 914-769-5500

Contact: Dr. Kurtis Kotes,
Superintendent of Schools

LAN Job #4.1449.08

January 22, 2021

Michael J. McGovern, RA
NYS #022257

1.0 General: The original contract documents dated **July 9, 2020** issued to the New York State Education Department for this project are hereby amended as noted in this addendum which shall become part of said contract documents, as if originally included therein. Bidders must acknowledge receipt of this addendum and all other addenda on the proposal form when submitting proposals. In case any bidder fails to acknowledge receipt of addenda, his proposal will nevertheless be construed as though it has been received, acknowledged, and the submission of his proposal shall constitute acknowledgment by the bidder of the receipt of same.

Note that the bid due date and time shall be **Thursday, January 28, 2021 at 3:00 p.m.**

THIS IS THE FINAL ADDENDUM FOR THIS PROJECT. NO OTHER ADDENDA WILL BE ISSUED.

2.0 Amendment to Application:

N/A

3.0 Amendments to Specifications:

| Section No. | Page No. | Addendum Requirements |
|-------------|----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| TOC | | The Table of Contents has been updated. |
| 011000 | | Section 011000 (Summary of Work) is revised to include section 099656 (Epoxy-Urethane Coating) as part of the General Contractor's scope of work and section 260523 (Control-Voltage Electrical Power Cables) as part of the Electrical Contractor's scope of work. |
| 099656 | | Section 099656 (Epoxy Coating) is revised (to Epoxy-Urethane Coating). The Dura-Wall HPF epoxy wall coating system originally specified is replaced with the Dura-Wall HP epoxy wall coating system (or equivalent). |
| 260523 | | Section 260523 (Control-Voltage Electrical Power Cables) is added to the project manual. |

4.0 Amendments to Drawings:

| Drawing No. | Addendum Requirements |
|----------------------|----------------------------------------------------------------------------------------------------------------------------|
| M2.01, M6.01 & M6.03 | Drawings are revised to indicate all mechanical equipment will be interconnected with the existing ALC Andover BMS system. |

5.0 Requests for Information (RFIs):

| No. | Comment / Response |
|-----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | <p>Comment: The HVAC cover sheet (T0.01M) under "General Notes" Note 24 states to provide a "1 year" guarantee after completion. Drawing M2.01 under "General Notes" Note 3 states to provide a "2 year" guarantee. Which guarantee requirement is correct?"</p> <p>Response: The Mechanical Contractor shall provide a "2-year" guarantee.</p> |

5.0 Requests for Information (RFIs): (continued)

| No. | Comment / Response | |
|-----|--------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2 | Comment: | Note 5 on Drawing M1.01 under "General Demolition Notes" states to remove all existing controls and related wiring which become obsolete. The project manual does not specify who the new controls vendor will be. Is there a particular vendor system being specified to tie into an existing BMS? Can their name and contact info be provided? |
| | Response: | The new mechanical equipment shall be interconnected to the existing ALC Andover BMS system. The point of contact for BMS integration is Preston Bruenn (phone number: 914-769-8880). |
| 3 | Comment: | Drawing E2.01; please advise exact location of telephone/data closet where new jacks are to be wired. |
| | Response: | The Electrical Contractor shall verify CAT6 homerun locations as specified by the Owner or Owner's vendor. This requirement is noted on the Equipment Schedule provided on drawing E7.01. |
| 4 | Comment: | Drawing E2.01; please provide a scaled drawing showing location of existing Public Address head End equipment and the existing Master Clock control. |
| | Response: | Drawings to show locations of existing Public Address head end equipment and Master Clock control will not be provided. The Electrical Contractor shall verify existing equipment and locations in field. |
| 5 | Comment: | Drawing, E2.01; a riser diagram is needed showing wiring details for the new classroom speakers and clocks. No wiring guidelines are given. |
| | Response: | The Electrical Contractor is responsible for coordination with the Owner's vendor and manufacturer's specifications regarding installation of equipment and wiring. The Electrical Contractor is responsible to verify compatibility of new equipment with the building's existing systems. This requirement is noted on the Equipment Schedule provided on drawing E7.01. |
| 6 | Comment: | Drawing A7.01 appears to show some casework in Rooms 128C and 128D, however, elevation 6 & on A7.04 appears to be incomplete. |
| | Response: | There is no casework specified for Rooms 128C & 128D. A furniture layout is depicted on drawing A7.01. The furniture will be provided by the Owner. |
| 7 | Comment: | The general notes provided on P1.01 indicate the existing sub-slab piping should be removed in many areas. This will result in a ton of extra cost to the owner for saw cutting excavation and concrete patch. Please clarify if this is necessary. |
| | Response: | The note is revised as follows: "Remove existing sub-slab piping where required to complete new work. Cut & cap as required. Abandon existing piping in areas that are not affected." A revised P1.01 drawing will not be provided. |

5.0 Requests for Information (RFIs): (continued)

| No. | Comment / Response | |
|-----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| 8 | <p>Comment: Drawing A7.00 equipment schedule notes pedestal mount benches, however, the bid documents do not appear to include a spec for pedestal mounted benches. Please advise.</p> <p>Response: Bidders shall assume the locker benches will be maple wood benches that are 9-1/2" wide x 1-1/4" thick, made from laminated white northern hard wood, and finished with one coat, deep-penetrating hot sealer and two coats of heavy body, high-impact, hot, hydraulically applied lacquer. Bench tops are standard in one-foot increments from 3' through 12'. Bench top lengths over 12' will be supplied in sections. Non-standard lengths are available on special order (pedestal requirement will be for next standard size up). Two pedestals are required for benches that are 3'-8' in length. Three pedestals are required for benches that are 9'-12' in length. Pedestals shall be adjustable steel pedestals with cast aluminum base and concealed anchoring to floor. Color shall be selected from manufacturer's standard colors. The adjustable steel pedestal shall be model #8032 as manufactured by Art Medal Products (or equivalent).</p> | |
| 9 | <p>Comment: How high on the wall should the epoxy wall finish be applied?</p> <p>Response: The epoxy wall finish system shall extend beyond the underside of the ceiling plane.</p> | |
| 10 | <p>Comment: How high on the wall should the epoxy wall finish be applied when the space has no ceiling ("OTA")?</p> <p>Response: The epoxy wall finish system shall be applied to the entire exposed wall to the underside of the roof deck.</p> | |
| 11 | <p>Comment: Prior to epoxy application on floors, is a skim coat required especially after existing flooring removals to smooth out the surface?</p> <p>Response: All flooring areas shall receive a self-leveling underlayment prior to applying the epoxy floor finish.</p> | |
| 12 | <p>Comment: Prior to epoxy application on walls, is wall skim coat required?</p> <p>Response: The General Contractor shall follow the manufacturer's requirements and specifications for application of the epoxy wall coating system.</p> | |
| 13 | <p>Comment: Please confirm the size of Room 128H Mechanical Room.</p> <p>Response: The Mechanical Room 128H is ~160 s.f. in size.</p> | |
| 14 | <p>Comment: Who will install the 3' Diameter custom logos on the floor?</p> <p>Response: The General Contractor is responsible to install the logos in the epoxy flooring.</p> | |

5.0 Requests for Information (RFIs): (continued)

| No. | Comment / Response |
|-----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 15 | <p>Comment: In both locker rooms, the base/curb for the lockers is indicated to be epoxy but we are not sure if the epoxy will cover the top of this curb or not? Also, if not, how high will the epoxy go up on the curb under the lockers?</p> <p>Response: The epoxy does not need to cover the top of the base/curb if the top of the base/curb is concealed by the new lockers. However, if for some reason, the top of the base/curb is exposed, the epoxy shall be applied to conceal the exposed edge, so the appearance is uniform.</p> |
| 16 | <p>Comment: Could you provide the budget for the project.</p> <p>Response: The construction budget for the project is ~\$2.4M. The budgets for each prime are as follows:</p> <ul style="list-style-type: none"> • GC: \$1,365,843 • MC: \$513,696 • EC: \$242,185 • PC: \$295,616 |
| 17 | <p>Comment: Who is responsible for air monitoring?</p> <p>Response: The Owner is responsible for air monitoring.</p> |
| 18 | <p>Comment: Could you clarify who is responsible for removal and storage of construction debris?</p> <p>Response: Each prime contractor is responsible to remove, store and dispose of their own construction debris.</p> |
| 19 | <p>Comment: The Electrical Equipment Schedule on drawing E7.01 depicts the data outlets as a half-shaded triangle along with a verbiage to provide homeruns to the location specified by the owner or owner's vendor. Please advise the location of the where the data cables are run to.</p> <p>Response: As noted on drawing E7.01, Contractor shall provide data homeruns to location specified by owner or owner's vendor. Bidder shall assume installing 295' Cat6 cable runs.</p> |
| 20 | <p>Comment: Specification provided 12 separate specifications sections for the Data System. Due to the size of the project and the actual scope of what is required for the data portion, the number of specifications provided seems to be excessive. There are several discrepancies between all of these sections such as which standards the contractor is to follow, what states codes to follow as well what equipment is really required. Please advise which specifications sections actually apply to this project and which ones can be deleted.</p> <p>Response: Bidders shall ignore Division 27 published with the specification. Specification sections 270000, 270500, 270526, 270528, 271000, 271100, 271300, 271500, 272000, 272100, 272102 & 276600 are not required for this project. These sections were erroneously included with the project manual.</p> |

5.0 Requests for Information (RFIs): (continued)

| No. | Comment / Response |
|-----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 21 | <p>Comment: Drawing A7.01 Fire Alarm riser diagram. Fire Alarm circuiting is indicated to be run back to the existing Fire Alarm Control Panel. Can new devices be tapped locally at existing devices? The existing Fire Alarm Control Panel is approximately 250' from the renovated space. Please advise so all bidders will have to bid circuiting in a similar manner.</p> <p>Response: Bidder shall assume installing the fire alarm wiring back to the existing panel as designed.</p> |
| 22 | <p>Comment: Drawing E7.01. The existing clocks are Primex Wireless Clocks. Clocks specified are 24V clocks. Please clarify if new clocks are to be wireless or 24V and provide wiring details if they are 24V.</p> <p>Response: Primex Wireless Wall Clocks shall be an acceptable alternative to wall clock specified on drawing E7.01. As noted on drawing E7.01, Contractor shall verify all equipment compatibility and wiring with the school district's public address vendor.</p> |
| 23 | <p>Comment: What duct liner thickness is required? On drawing M0.01 under HVAC Materials the Insulation section, it calls for 1" thickness, and in the spec section 230714 Acoustic Duct Insulation, page 2, Part 2 has 3 different notes calling for 1 1/2" thickness. Can we get clarification as to what is required?</p> <p>Response: Contractor shall install 1½" thick insulation.</p> |

6.0 Substitution Requests:

Specification Section No. /
Drawing No.

| | |
|-------|--------------------------------------------------------------------------------------------------------------|
| E7.01 | Primex Wireless Wall Clocks shall be an acceptable alternative to the wall clock specified on drawing E7.01. |
|-------|--------------------------------------------------------------------------------------------------------------|

7.0 Clarifications:

| No. | |
|-----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | <p>"RB-F" specified on the Floor Finish Legend provided on drawing A9.01 shall be American Biltrite Durasport SBR square edge tile 35.68 x 35.68 x 6mm, color MDS-190-ER1 Blue Willow.</p> <p>"RB-B" specified on the Floor Finish Legend provided on drawing A9.01 shall be American Biltrite Durasport SBR square edge tile 35.68 x 35.68 x 6mm, color MDS-191-ER1 Night Sky.</p> <p>The surface texture of the rubber flooring shall be slate finish. The rubber flooring shall be installed and fully adhered as per the manufacturer's instructions using the manufacturers recommended adhesive.</p> |

END OF ADDENDUM NO. 3

Attachments: #1 - Updated Table of Contents
#2 - Revised Specification Sections 011000 & 099656
#3 - New Specification Section 260523
#4 - Revised Drawings M2.01, M6.01 & M6.03

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SECTION 01 10 00 – SUMMARY OF WORK (MULTIPLE PRIME CONTRACTS)

PART 1 - GENERAL

1.1 PROJECT INFORMATION

- A. Project: Mt Pleasant School District – Westlake High School – Physical Education Department Renovation
- B. Project Location: Mt Pleasant, NY
- C. Owner: Mt Pleasant School District
- D. Architect: LAN Associates
- E. Construction Manager: Arris Contracting Company, Inc.
- F. The overall scope of work includes: Abatement, selective demolition, window replacements, locker room renovations, toilet room renovations, doors, ceilings, finishes, etc., plumbing work, HVAC upgrades, fire alarm, electric power, panelboard replacement, lighting, etc.

The contractor shall provide all labor, materials, equipment and services to furnish deliver and install all materials and related work as shown on the drawings, as required by these specifications and/or as directed by the Architect/Construction Manager.

G. Contracts:

- 1. The Project will be constructed under a multiple prime-contracting arrangement.
- 2. Prime Contacts are separate contracts between the Owner and separate contractors, representing significant construction activities. Each prime contact is performed concurrently with and closely coordinated with construction activities performed on the Project under other prime contracts. Prime contracts for this Project include.
 - a. General Work Contract. (GC or GWC)
 - b. Plumbing Contract. (PC)
 - c. HVAC Contract. (MC, HVAC or HC)
 - d. Electrical Contract. (EC)

1.2 DIVISION OF WORK

- A. Each contract shall include all labor materials, plans, tools, equipment and supervision which are required for or incidental to the proper completion of the work as indicated on the drawings and described in the following specification sections:

1.3 GENERAL REQUIREMENTS – ALL CONTRACTS

DIVISION 00 – PROCUREMENT AND CONTRACTING REQUIREMENTS

| | |
|----------|-------------------------------------------------|
| 00 01 07 | Seals |
| 00 01 15 | List of Drawings |
| 00 11 13 | Notice to Bidders |
| 00 21 13 | Instructions to Bidders |
| 00 30 00 | Existing Hazardous Material Information |
| 00 30 01 | Asbestos Report |
| 00 30 02 | Lead Report |
| 00 40 00 | Sexual Harassment Prevention Certification Form |
| 00 40 01 | Insurance Coverage Certification |

SECTION 01 10 00 – SUMMARY OF WORK (MULTIPLE PRIME CONTRACTS)

| | |
|----------|-------------------------------------------------------------------------------------------------------|
| 00 41 01 | Forms to Be Submitted with Bid |
| 00 41 02 | Bid Proposal Form |
| 00 41 16 | Bid Form for Electrical Contractor |
| 00 41 16 | Bid Form for General Contractor |
| 00 41 16 | Bid Form for Mechanical Contractor |
| 00 41 16 | Bid Form for Plumbing Contractor |
| 00 43 90 | Surety's Consent |
| 00 43 91 | Certificate of Bidder |
| 00 43 92 | Qualifications of Bidders |
| 00 43 93 | Statement of Bidders Qualifications |
| 00 43 94 | Bidder's Personnel |
| 00 43 95 | Conflict of Interest Certificate |
| 00 43 96 | Form of Disclosure Certificate |
| 00 43 97 | Non-Collusion Affidavit |
| 00 43 98 | Certification of Compliance with the Iran Divestment Act |
| 00 43 99 | Declaration of Bidder's Inability to Provide Certification of Compliance with the Iran Divestment Act |
| 00 45 03 | Insurance Certification Form |
| 00 45 21 | Hold Harmless Agreement |
| 00 46 43 | Wage Rates |
| 00 50 00 | Owner Contractor Agreement |
| 00 61 00 | Bond Requirements |
| 00 61 01 | Bid Bond Form AIA 310-2010 |
| 00 61 02 | Performance Bond Form AIA 312-2010 |
| 00 61 03 | Payment Bond Form AIA 312-2010 |
| 00 63 00 | Request for Information |
| 00 63 01 | RFI Form AIA G716-2004 |
| 00 70 00 | General Conditions of the Contract for Construction |
| 00 70 01 | Requisition for Partial Waiver of Liens |
| 00 70 02 | Certified Payroll |

DIVISION 01 – GENERAL REQUIREMENTS

| | |
|----------|-------------------------------------|
| 01 10 00 | Summary of Work |
| 01 11 00 | Milestone Schedule |
| 01 21 00 | Allowances |
| 01 22 00 | Unit Prices |
| 01 25 00 | Substitution Procedures |
| 01 26 00 | Contract Modification Procedures |
| 01 29 00 | Payment Procedures |
| 01 31 00 | Project Management and Coordination |
| 01 31 50 | COVID-19 Contractor Procedures |
| 01 32 16 | Construction Progress Schedule |
| 01 32 33 | Photographic Documentation |
| 01 33 00 | Submittal Procedures |
| 01 40 00 | Quality Requirements |

SECTION 01 10 00 – SUMMARY OF WORK (MULTIPLE PRIME CONTRACTS)

01 43 39 Mockup Requirements
01 45 33 Code-Required Special Inspections
01 50 00 Temporary Facilities and Controls
01 60 00 Product Requirements
01 73 00 Execution Requirements
01 73 10 Cutting and Patching
01 74 19 Construction Waste Management and Disposal
01 74 23 Cleaning Up
01 77 00 Close-Out Procedures
01 77 01 Closeout Checklist
01 78 23 Operation and Maintenance Data
01 78 39 Project Record Documents
01 91 13 General Commissioning Requirements

CONTRACT #1 – GENERAL WORK CONTRACTOR

In addition to the General Requirements, Division 1, included in this bid package shall provide for proper completion of work as indicated on all drawings and in accordance with the terms and conditions described in the following specification sections.

DIVISION 2 – EXISTING CONDITIONS

024119 – SELECTIVE DEMOLITION
028200 – ASBESTOS ABATEMENT
028300 – LEAD-BASED PAINT WORK PRACTICES

DIVISION 3 - CONCRETE

033000 – CAST IN PLACE CONCRETE
035400 – CONCRETE UNDERLAYMENT PATCH
035416 – CEMENT-BASED, INTERIOR, SELF-LEVELING UNDERLAYMENT

DIVISION 4 - MASONRY

040121 – UNIT MASONRY REPLACEMENT
042200 – CONCRETE UNIT MASONRY
047200 – CAST STONE MASONRY

DIVISION 6 – WOOD AND PLASTICS

061000 – ROUGH CARPENTRY
061053 – MISCELLANEOUS ROUGH CARPENTRY
062000 – FINISH CARPENTRY
066116 – SOLID SURFACING FABRICATIONS

DIVISION 7 – THERMAL AND MOISTURE PROTECTION

078443 - FIRESTOPPING
079000 – PRE-COMPRESSED EXPANSION JOINTS
079200 – JOINT SEALANTS
079513 – INTERIOR EXPANSION COVER ASSEMBLIES

SECTION 01 10 00 – SUMMARY OF WORK (MULTIPLE PRIME CONTRACTS)

DIVISION 8 - OPENINGS

081113 – HOLLOW METAL DOORS AND FRAMES
081416 – FLUSH WOOD DOORS
081743 – FRP/ALUMINUM HYBRID DOORS
083113 - ACCESS DOORS AND FRAMES
085113 – ALUMINUM WINDOWS
087100 – DOOR HARDWARE
088100 – GLASS AND GLAZING
088117 – FIRE RATED GLASS
088813 – GLASS-FIRE RESISTANT GLAZING
089000 – LOUVERS AND VENTS

DIVISION 9 - FINISHES

090561 – WATER VAPOR EMISSION CONTROL SYSTEM FOR CONCRETE SLABS
092900 – GYPSUM BOARD
095110 – ACOUSTIC CEILINGS
096510 – RUBBER FLOORING
096513 – RESILIENT BASE AND ACCESSORIES
096723 – RESINOUS FLOORING
099123 – INTERIOR PAINTING
099656 – EPOXY-URETHANE COATING

DIVISION 10 - SPECIALTIES

101100 – VISUAL DISPLAY BOARDS
101200 – DISPLAY CASES
101419 – INTERIOR SIGNS
102116 – TOILET PARTITIONS
102800 - WASHROOM ACCESSORIES
104400 – FIRE PROTECTION SPECIALTIES
105113 – METAL ATHLETIC LOCKERS

DIVISION 11 - EQUIPMENT

116623 – GYMNASIUM PROTECTION ACCESSORIES

DIVISION 12 - FURNISHINGS

122124 – MANUAL ROLLER SHADE SYSTEM
123554 – MANUFACTURED CASEWORK
124813 - ENTRANCE FLOOR MATS AND FRAMES

Special Notes: Contract #1 – General Work Contractor:

1. General Work Contractor to carry insurance coverages per Article 10 in the General Conditions of the Contract for Construction which are located in the DIV O specification.
2. Work hours M-F 7:00AM – 4:30PM. Contractor will appropriately man the project to avoid Saturday and Overtime hours which result in Owner, Construction Manager and Architect additional costs.
3. Access doors furnished by trade requiring access; installation by Contract #1 – General Work Contractor.

SECTION 01 10 00 – SUMMARY OF WORK (MULTIPLE PRIME CONTRACTS)

4. **GC and subcontractors will not be allowed to use existing or new plumbing fixtures to wash out mortar pans, grout, adhesives, etc.**
5. GC is specifically notified that ALL floor areas will receive self-leveling underlayment. The thickness will vary due to ceramic tile removals, mud set removals, varying floor slab elevations from room to room, areas where chases removed, grind down high spots, etc. Contractor will review and bid accordingly to achieve a consistent flat and level floor at no additional cost to the owner.
6. General Contractor will chop/grind down existing concrete floor as necessary to install recessed walk-off mat located in the vestibule 130G.
7. GC will utilize lead-safe work practices as per Section 028300 – when impacting/removing/disposing of any lead containing items.
8. GC's abatement contractor will probe walls /investigate above the ceilings and walls to confirm presence or absence of fittings / insulation in concealed locations, prior to abatement.
9. GC is notified that phasing will require multiple mobilizations and multiple crews of various subcontractors.
10. GC will confirm compatibility in writing between his floor self-leveling and patching materials with the resinous and rubber floor manufacturers.
11. All staging area work (signage, parking areas, fence enclosures, etc.) indicated for staging area (located in section 015000) is by GC. Remove all temporary materials and restore all temporary roadways / staging surfaces at conclusion of the project.
12. GC to provide dust protections and a negative air environment to mitigate any dust and exhaust all work areas of any odors, fumes, etc. from the adjacent occupied school areas.
13. GC will install floor protections (utilizing heavy duty "Ram-Board" with taped joints, or equivalent) to protect finished floor surfaces from damage for all room areas and corridor access routes necessary for construction.
14. Contractor is specifically reminded about their responsibilities for clean-up as per section 017423. Maintaining a clean jobsite is considered a safety issue and will be strictly enforced. In addition to daily cleaning, the contractor is required to hire a professional cleaning company to final clean all areas impacted by the construction. This includes completely cleaning any surfaces/equipment/furniture which has been dusted by the construction work. If the contractor does not properly perform this function when directed by the Owner/CM, the owner will perform the work with others and deduct the cost from the contractor.

SECTION 01 10 00 – SUMMARY OF WORK (MULTIPLE PRIME CONTRACTS)

1.4 CONTRACT #2 – PLUMBING CONTRACTOR

In addition to the General Requirements, Division 1, included in this Plumbers bid package shall provide for proper completion of work as indicated on all drawings and in accordance with the terms and conditions described in the following specification sections.

DIVISION 2 – EXISTING CONDITIONS

024119 – SELECTIVE DEMOLITION
028300 – LEAD-BASED PAINT WORK PRACTICES

DIVISION 3 - CONCRETE

033000 – CAST IN PLACE CONCRETE (patching of floor trenches)

DIVISION 6 – WOOD AND PLASTICS

061000 – ROUGH CARPENTRY

DIVISION 7 – THERMAL AND MOISTURE PROTECTION

078443 - FIRESTOPPING
079200 – JOINT SEALANTS

DIVISION 8 - OPENINGS

083113 - ACCESS DOORS AND FRAMES

DIVISION 22 - PLUMBING

220000 – PLUMBING SUMMARY OF WORK
220501 – BASIC PLUMBING MATERIALS AND METHODS
220519 – METERS AND GAGES FOR PLUMBING PIPING
220523 – PLUMBING VALVES
220529 – HANGERS AND SUPPORTS FOR PLUMBING AND PIPING EQUIPMENT
220548 – VIBRATION AND SEISMIC CONTROLS
220553 – IDENTIFICATION FOR PLUMBING PIPING AND EQUIPMENT
220719 – PLUMBING PIPING INSULATION
221116 – DOMESTIC WATER PIPING
221119 – DOMESTIC WATER PIPING SPECIALTIES
221316 – SANITARY WASTE AND VENT PIPING
221319 – SANITARY WASTE AND VENT PIPING SPECIALTIES
224213 – PLUMBING FIXTURES
224716 – WATER COOLERS

Special Notes: Contract #2 – Plumbing Contract.

1. Plumbing Contractor to carry insurance coverages per Article 10 in the General Conditions of the Contract for Construction which are located in the DIV O specification.
2. Work hours M-F 7:00AM – 4:30PM. Contractor will appropriately man the project to avoid Saturday and Overtime hours which result in Owner, Construction Manager and Architect additional costs.

SECTION 01 10 00 – SUMMARY OF WORK (MULTIPLE PRIME CONTRACTS)

3. Access doors for plumbing items by PC; installation by Contract #1 – General Work Contractor.
4. All sanitary piping work (remove and replace) is by Plumbing contract whether located subslab, in crawl spaces or above ceilings.
5. ALL sawcut, excavation/backfill, (3/8 pea gravel, etc.), compaction and concrete infill for sub slab plumbing piping and roof drain relocations as shown on Plumbing drawings, A2.01 & A2.02 is by PC. (finish elevation height as required for floor finishes – coordinate with GC).
6. PC will utilize lead-safe work practices as per Section 028300 –when impacting/ removing/ disposing of any lead containing items.
7. PC provides and installs Flushometers and drills holes for electrical conduit. PC supplies the associated transformer to the EC. All wiring by EC.
8. Any Solenoid valves supplied & installed by PC (wiring and connections by EC)
9. PC is responsible for making their own through wall, through floor/roof piping penetrations and associated patching/fire-stopping.
10. Contractor is specifically reminded about their responsibilities for clean-up as per section 017423. Maintaining a clean jobsite is considered a safety issue and will be strictly enforced. In addition to daily cleaning, the contractor is required to hire a professional cleaning company to final clean all areas impacted by the construction. This includes completely cleaning any surfaces/equipment/furniture which has been dusted by the construction work. If the contractor does not properly perform this function when directed by the Owner/CM, the owner will perform the work with others and deduct the cost from the contractor.

1.5 CONTRACT #3 – MECHANICAL CONTRACTOR

In addition to the General Requirements, Division 1, each Contract included in this bid package shall provide for proper completion of work as indicated on all drawings and in accordance with the terms and conditions described in the following specification sections.

DIVISION 2 – EXISTING CONDITIONS

024119 – SELECTIVE DEMOLITION
028300 – LEAD-BASED PAINT WORK PRACTICES

DIVISION 6 – WOOD AND PLASTICS

061000 – ROUGH CARPENTRY

DIVISION 7 – THERMAL AND MOISTURE PROTECTION

078443 - FIRESTOPPING
079200 – JOINT SEALANTS

SECTION 01 10 00 – SUMMARY OF WORK (MULTIPLE PRIME CONTRACTS)

DIVISION 8 - OPENINGS

083113 - ACCESS DOORS AND FRAMES
089000 – LOUVERS AND VENTS

DIVISION 23 – HEATING, VENTILATING AND AIR CONDITIONING

230000 – MECHANICAL SUMMARY OF WORK
230500 – COMMON WORK RESULTS FOR HVAC
230513 – COMMON MOTOR REQUIREMENTS FOR HVAC EQUIPMENT
230519 – METERS AND GAGES FOR HVAC PIPING
260523 – GENERAL-DUTY VALVES FOR HVAC PIPING
230529 – HANGERS AND SUPPORTS FOR HVAC PIPING AND EQUIPMENT
230548 – MECHANICAL VIBRATION AND SEISMIC CONTROLS
230553 – MECHANICAL IDENTIFICATION
230593 – TESTING, ADJUSTING, AND BALANCING FOR HVAC
230713 – DUCT INSULATION
230714 – ACOUSTIC DUCT INSULATION
230719 – PIPING INSULATION
230993 – SEQUENCE OF OPERATIONS FOR HVAC CONTROLS
232113 - HYDRONIC PIPING
232116 – HYDRONIC PIPING SPECIALTIES
232300 – REFRIGERANT PIPING
233113 – METAL DUCTS
233300 – AIR DUCT ACCESSORIES
233416 – CENTRIFUGAL HVAC FANS
233713 – DIFFUSERS, REGISTERS AND GRILLES
238126 – SPLIT-SYSTEM AIR-CONDITIONERS
238219 – FAN COIL UNITS
238236 – FINNED-TUBE RADIATION HEATERS
238239 – CABINET UNIT HEATERS

DIVISION 26 – ELECTRICAL

260519 - LOW-VOLTAGE ELECTRICAL POWER CABLES (for control wiring)

Special Notes: Contract #3 – Mechanical (MC) Contractor:

1. Mechanical Contractor to carry insurance coverages per Article 10 in the General Conditions of the Contract for Construction which are located in the DIV O specification.
2. Work hours M-F 7:00AM – 4:30PM. Contractor will appropriately man the project to avoid Saturday and Overtime hours which result in Owner, Construction Manager and Architect additional costs.
3. Access doors are furnished by MC Contract #3 and installed by GC Contract #1.
4. All new roof curbs, roof rails, and pipe portals to be supplied and installed by MC Contract #3. This includes “new roof hole cut, wood blocking, install curb, flash in curb and provide temporary watertight/plywood secure of opening until HVAC units are set). MC will use roofing subcontractor who is certified by manufacturer to work on this roof and maintain existing warranty. (See drawing A2.03 – All roofing work by MC).

SECTION 01 10 00 – SUMMARY OF WORK (MULTIPLE PRIME CONTRACTS)

5. Any wood blocking for MC items by Contract #3 MC.
6. Any reinforcing associated with Mechanical work is by MC Contract # 3. This includes any steel angle supports beneath rooftop HVAC units, detail 14/M6.03, 1/M6.02, etc.
7. VFD's, disconnects, starters, etc. supplied by MC will be installed by EC, unless noted otherwise.
8. MC will utilize lead-safe work practices as per Section 028300 – if impacting/ removing/ disposing of any lead containing items.
9. Removal of existing roof mounted HVAC items is by MC Contract #3. This includes infill decking and roof patch where applicable.
10. MC Contract #3 is responsible for making their own through wall and through floor duct/piping penetrations and associated patching/fire-stopping.
11. If any new mechanical units are too large to fit through existing openings the Mechanical contractor will either disassemble equipment into sections or remove existing construction to enlarge opening and reconstruct to match (at no additional cost).
12. Duct detectors supplied and wired by EC (MC installs the duct detector)
13. MC specifically notified construction is phased which necessitates that utilities/services will need to be temporarily connected and maintained as necessary to ensure that all occupied areas have the required services.
14. The MC is responsible for their own cutting / patching to match. This includes patch to match any voids left behind by HVAC removals. (Gym louver infills) MC will hire a skilled tradesman (asbestos worker, mason, carpenter, etc.) to perform this work.
15. Contractor is specifically reminded about their responsibilities for clean-up as per section 017423. Maintaining a clean jobsite is considered a safety issue and will be strictly enforced. In addition to daily cleaning, the contractor is required to hire a professional cleaning company to final clean all areas impacted by the construction. This includes completely cleaning any surfaces/equipment/furniture which has been dusted by the construction work. If the contractor does not properly perform this function when directed by the Owner/CM, the owner will perform the work with others and deduct the cost from the contractor.

1.6 CONTRACT #4 – ELECTRICAL

In addition to the General Requirements, Division 1, each Contract included in this bid package shall provide for proper completion of work as indicated on all drawings and in accordance with the terms and conditions described in the following specification sections.

DIVISION 2 – EXISTING CONDITIONS

024119 – SELECTIVE DEMOLITION

028300 – LEAD-BASED PAINT WORK PRACTICES

SECTION 01 10 00 – SUMMARY OF WORK (MULTIPLE PRIME CONTRACTS)

DIVISION 7 – THERMAL AND MOISTURE PROTECTION

078443 - FIRESTOPPING

DIVISION 8 - OPENINGS

083113 - ACCESS DOORS AND FRAMES

DIVISION 26 - ELECTRICAL

260519 – LOW-VOLTAGE ELECTRICAL POWER CONDUCTORS AND CABLES

260523 – CONTROL-VOLTAGE ELECTRICAL POWER CABLES

260526 – GROUNDING AND BONDING FOR ELECTRICAL SYSTEMS

260529 – HANGERS AND SUPPORTS FOR ELECTRICAL SYSTEMS

260533 – RACEWAY AND BOXES FOR ELECTRICAL SYSTEMS

260553 – IDENTIFICATION FOR ELECTRICAL SYSTEMS

260923 – LIGHTING CONTROL DEVICES

262726 – WIRING DEVICES

262816 – ENCLOSED SWITCHES AND CIRCUIT BREAKERS

265100 – INTERIOR LIGHTING

DIVISION 27 - COMMUNICATIONS

270000 – COMMUNICATION

270500 – COMMON WORK RESULTS FOR COMMUNICATIONS

270526 – GROUNDING AND BONDING FOR COMMUNICATIONS

270528 – PATHWAYS FOR COMMUNICATIONS SYSTEMS

271000 – STRUCTURED CABLING

271100 – COMMUNICATIONS EQUIPMENT ROOM FITTINGS

271300 – COMMUNICATIONS BACKBONE CABLING

271500 – COMMUNICATIONS HORIZONTAL CABLING

272000 – DATA COMMUNICATIONS

272100 – DATA COMMUNICATIONS NETWORK EQUIPMENT

272102 – DATA SYSTEMS

276600 – COMMUNICATIONS EQUIPMENT ROOMS AND FITTINGS

DIVISION 28 – ELECTRONIC SAFETY AND SECURITY

280513 – CONDUCTORS AND CABLES FOR ELECTRONIC SAFETY AND SECURITY

283111 – DIGITAL, ADDRESSABLE FIRE ALARM SYSTEM

Special Notes: Contract #4 – Electrical Contract

1. Electrical Contractor to carry insurance coverages per Article 10 in the General Conditions of the Contract for Construction which are located in the DIV O specification.
2. Work hours M-F 7:00AM – 4:30PM. Contractor will appropriately man the project to avoid Saturday and Overtime hours which result in Owner, Construction Manager and Architect additional costs.
3. Access doors are furnished by Electrical Contract #4 and installed by GC Contract #1.
4. Any existing ceiling removal/replacements necessary to install new electrical work to be done by Electric Contract #4. (e.g. – new conduits for feeders through existing ceilings, etc.)

SECTION 01 10 00 – SUMMARY OF WORK (MULTIPLE PRIME CONTRACTS)

5. VFD's, disconnects, motor starters, etc. which are supplied by MC will be installed by EC, unless noted otherwise.
6. Any wood blocking or panel backboards for electrical items by EC contract #4
7. The EC will remove any ceiling mounted electrical items, Light Fixtures, FA devices, Speakers, WAP, exit signs, cameras, etc. EC to reinstall after new ceilings are completed.
8. After GC ceiling removals for areas scheduled to receive new acoustic grid/tile, the EC will properly tie up any existing sagging wires scheduled to remain at 6' O.C. to be supported above the ceiling grid in accordance with code.
9. For Plumbers flushometers: the EC will install the PC provided transformer above the ceiling and install the wire to in-wall box. The EC then makes the wire connection from the electrical in -wall box to the flushometer.
10. EC will utilize lead-safe work practices as per Section 028300 – if impacting/ removing/ disposing of any lead containing items.
11. Any Solenoid valves supplied & installed by PC – wiring and connections by EC
12. EC to provide and wire duct detectors (MC install the duct detector)
13. EC specifically notified construction is phased which necessitates that utilities & services will need to be temporarily connected and maintained as necessary to ensure that all occupied areas have the required services. (power, fire alarm/ PA)
14. Contractor is specifically reminded about their responsibilities for clean-up as per section 017423. Maintaining a clean jobsite is considered a safety issue and will be strictly enforced. In addition to daily cleaning, the contractor is required to hire a professional cleaning company to final clean all areas impacted by the construction. This includes completely cleaning any surfaces/equipment/furniture which has been dusted by the construction work. If the contractor does not properly perform this function when directed by the Owner/CM, the owner will perform the work with others and deduct the cost from the contractor.

1.7 PRIME CONTRACTOR'S USE OF PREMISES

Use of the Site: Limit use of the premises to work in areas indicated. Confine operations areas within contract limits indicated. Do not disturb portions of the site beyond the areas in which the work is indicated.

Owner Occupancy: Allow for Owner occupancy, work by other owner contractors and use by the public.

Driveways and Entrances: Keep driveways and entrances serving the premises clear and available to the Owner, the Owner's employees, and emergency vehicles at all times. Do not use these areas for parking or storage of materials. Schedule deliveries to minimize space and time requirements for storage of materials and equipment on site.

Delivery blackout times – No contractor trucks / deliveries are allowed during school bus times 8:00AM – 9:30AM or 2:00PM – 3:30PM.

SECTION 01 10 00 – SUMMARY OF WORK (MULTIPLE PRIME CONTRACTS)

Existing building spaces may not be used for storage unless approved by the CM and Owner.

Time Restrictions: Working hours M-F 7:00AM – 4:30PM.

Owner's representative(s) will cover the project for the standard 8-hour Monday-Friday shift. If contractor requests additional hours to make up schedule time or weekends, he will need to reimburse owner for any additional coverage or costs (e.g. – Architect, Construction Manager, Custodian, and Security) at their contractual rate.

No contractor work will be allowed during testing / ELA/ regents time periods. No additional costs to owner for not working during these testing times. Exact dates are not known at this time, contractor shall figure 8 days.

Contractors shall comply with Local Noise Ordinance. Work disrupting the community must be performed with the following hours:

General: Limitations on site usage as well as specific requirements that impact utilization are indicated on the drawings and by other contract documents. In addition to these limitations and requirements, the Contractor shall administer allocation of available space equitably among the separate sub contractors and other entities needing access and space, so as to produce the best overall efficiency in performance of the total work of the project. The Contractor shall schedule deliveries so as to minimize space and time requirements for storage of materials and equipment on site.

Only materials and equipment, which are to be used directly in the work, shall be brought to and stored on the project site by the Contractor. After equipment is no longer required for the work, it shall be promptly removed from the project site. Protection of construction materials and equipment stored at the project site from weather, theft, damage and all other adversity is solely the responsibility of the Contractors.

Do not unreasonably encumber the site with materials or equipment. Confine stockpiling of materials and location of storage sheds to the areas indicated. If additional storage is necessary, obtain and pay for such storage off-site.

The Contractor(s) and any entity for which the Contractor is responsible shall not erect any sign of the Project site without the prior written consent of the Owner, which may be withheld in the sole discretion of the Owner.

Contractor shall ensure that the work, at all times, is performed in a manner that affords reasonable access, both vehicular and pedestrian, to the site of the work and all adjacent areas. The work shall be performed, to the fullest extent reasonably possible, in such a manner that public areas adjacent to the site of the work shall be free from all debris, building materials and equipment likely to cause hazardous conditions. Without limitation of any other provision of the Contract Documents, contractor shall use its best efforts to minimize any interference with the occupancy or beneficial use of: Any areas and buildings adjacent to the site of the work or; The Building in the event of partial occupancy.

Without prior approval of the Owner, the Contractor shall not permit any workers to use any existing facilities at the Project site, including, without limitations, lavatories, toilets, entrances and parking areas other than those designated by the Owner. Without limitation of any other provision of the Contract Documents, the Contractor shall use its best efforts to comply with the rules and regulations promulgated by the Owner in connection with the use and occupancy of the Project Site, and the Building, as amended from time to time. The Contractor shall immediately notify the Owner in writing if during the performance of the Work, the Contractor

SECTION 01 10 00 – SUMMARY OF WORK (MULTIPLE PRIME CONTRACTS)

finds compliance with any portion of such rules and regulations to be impracticable, setting forth the problems of such compliance and suggesting alternatives through which the same results intended by such portions of the rules and regulations can be achieved. The Owner may, in the Owner's sole discretion, adopt such suggestions, develop new alternatives or require compliance with the existing requirements of the rules and regulations. The Contractor shall also comply with all insurance requirements, applicable to use, and occupancy of the Project Site and the Building.

Maintain the existing building in a safe and weathertight condition throughout the construction period. Repair damage caused by construction operations. Take all precautions necessary to protect the building and its occupants during the construction period. When work is scheduled after hours clean and remove all temporary barriers and protection so that the building can be occupied the following day when normal building occupancy will occur.

Each Prime contractor is responsible for maintaining a safe jobsite. This include actively reviewing their work areas to ensure that they are in compliance with all required OSHA regulations. It is a contract requirement that each contractor conducts weekly tool-box safety meetings to insure that their employees are properly educated and utilizing safe work practices. (Copies of these weekly meetings and a list of the attendees will be forwarded to the CM site superintendent on a weekly basis). Contractors will comply with all requirements outlined in Article 7 of the General Conditions including providing their employees with PPE (personal protective equipment), such as hard hats, proper work boots, safety harness, safety glasses, etc.

Keep public areas such as hallways, stairs, elevator lobbies and toilet rooms free from accumulation of waste material, rubbish or construction debris.

Smoking, drinking of alcoholic beverages or open fires will not be permitted on the project site.

Utility Outages and Shutdown:

- a. Limit disruption of utility services to hours the building is unoccupied, weekends or holidays at no additional cost.
- b. Do not disrupt or shut down life safety systems, including but not limited to fire sprinklers and fire alarm system, without 7 days notice to Mt Pleasant Central School District and authorities having jurisdiction.
- c. Prevent accidental disruption of utility services to other facilities.
- d. All costs for manning of temporary shutdowns and utility crossovers, including 24-hour fire watch if necessary, is included in the contractor's bid regardless of weekend, holiday, etc.

1.8 OCCUPANCY REQUIREMENTS

Full Owner Occupancy: The Owner will occupy the site and existing building during the entire construction period. Cooperate with the Owner during construction operations to minimize conflicts and facilitate Owner usage. Perform the Work so as not to interfere with the Owner's operations.

Partial owner Occupancy: The Owner reserves the right to occupy the place and install equipment in completed areas of the work prior to Substantial Completion, provided such occupancy does not interfere with completion of the Work, Such placing of equipment and partial occupancy shall not constitute acceptance of the total Work.

The Architect will prepare a Certificate of Substantial Completion for each specific portion of the

SECTION 01 10 00 – SUMMARY OF WORK (MULTIPLE PRIME CONTRACTS)

Work to be occupied prior to Owner occupancy.

Obtain a Certificate of Occupancy from local building officials prior to Owner occupancy.

Prior to partial Owner occupancy, mechanical and electrical systems shall be fully operational. Required inspections and tests shall have been successfully completed. Upon occupancy, the Owner will operate and maintain mechanical and electrical systems serving occupied portions of the building.

Upon occupancy, the Owner will assume responsibility for maintenance and custodial service for occupied portions of the building.

1.9 PRODUCTS ORDERED IN ADVANCE

None

1.10 DEFINITIONS

Definitions as applied to “Contractors” involved with the work of this Project:

“The Contractor” or “Contractor” meaning that Respective Prime Contractor normally responsible for that work referenced;

“Respective Prime Contractor” meaning either the – General Contractor, Plumbing, HVAC or Electrical Contractors normally responsible for the referenced work;

“Trade Contractor” meaning that Respective Prime Contractor as above; and such other terms relating to Contractors to be taken in context with respect to referenced work.

Further, wherein said Division 0 and 1 and respective Sections therein, any reference is made to “General Contractor”, same shall be construed to mean “Contractor for the General Construction, or General Work Contractor”.

The Architect cannot guarantee the correctness of the existing conditions shown and assumes no responsibility therefore, it shall be the responsibility of the Contractor to visit the site and verify all existing conditions prior to bid.

The Owner will purchase certain items required for the overall operation of this facility.

The Contractor(s) will cooperate with said vendors as may be necessary to permit the work to be accomplished.

- a. The cooperation may extend to the receiving, unloading and placement of said equipment if directed by the Owner.
- b. Terms of payment, if any, shall be in accordance with the General Conditions as amended or modified.
- c. Each Contractor is advised that the Owner may enter into separate contracts as may be in their best interest.
- d. Each Contractor is further advised that there will be a full on-site Project Representative / Construction Manager, whose duties will be defined at the pre-construction meeting.

ADDITIONAL SECURITY PROVISIONS.

1. All Contractors’ employees shall use a single means of access and egress, except in the

SECTION 01 10 00 – SUMMARY OF WORK (MULTIPLE PRIME CONTRACTS)

- case of emergency, to be designated by the Construction Manager.
2. Each Contractor and each Subcontractor shall require his employees, while on the job site, to wear, in a conspicuous location, a photo I.D. button bearing the name of the employee and the Contractor. The buttons of each Contractor shall be numbered consecutively. An up-to-date list of all I.D. buttons, indicating the name and number for each employee, shall be furnished to the Construction Manager.

1.12 ASBESTOS AND LEAD PAINT AWARENESS REQUIREMENTS

Contractor agrees not to use or permit the use of any asbestos containing material in or on any property belonging to the Owner.

For purposes of this requirement, asbestos free shall mean free from all forms of asbestos, including - actinolite, amosite, anthrophyllite, chrysotile, cricidolite and tremolite, both in friable and non-friable states and without regard to the purposes for which such material is used.

Reference Abatement Sections of these documents for procedures and protocols to be followed in the event of discovery of any suspect asbestos, lead or hazardous materials.

Contractors will investigate / verify then carefully demolish existing ceiling and/or wall items so as not to disturb any asbestos containing fittings and / or insulation which may be located above existing ceilings or inside walls.

1.13 CONSTRUCTION TIME AND PHASING REQUIREMENTS

Each Contractor is advised the “time is of the essence” of the Contract as defined in Article 13 of the “General Conditions” for the completion of the construction of the facility.
It is understood that the work is to be carried through to completion with the utmost speed consistent with good workmanship.

Time of Completion shall be as established in the Milestone Schedules (Section 011100).

Further, safe and legal ingress and egress shall be maintained at all times to and through the occupied portions of the construction site.

Work shall proceed in such a manner as to cause the least amount of disruption to the ongoing operations as possible.

COORDINATE CLOSELY WITH SCHOOL OPERATING PERSONNEL.

All work and storage areas shall be completely enclosed by a fence or barricade at all times so that no student or the public can approach the area or the equipment.

The Contractor shall maintain fences and barricades at all times and shall repair/ restore and/ or pay for any temporary fencing damaged by their work.

Maintain at all times, all exits and walkways.

Where the barricade is removed for work, the Contractor performing such work shall provide adequate safety personnel to prevent unauthorized persons from approaching the work area.

SECTION 01 10 00 – SUMMARY OF WORK (MULTIPLE PRIME CONTRACTS)

Construction Phasing

The phasing and/ or milestone schedule contained in Section 011100 has been established for the overall construction of the project.

Each Contractor is advised that areas of the existing buildings which are to be added to and / or altered under this Contract will remain in use during construction, coordinate with Section 015000 for temporary facilities.

Electrical and mechanical services to the functioning spaces shall be maintained at all times.

Swing-overs to new facilities shall be made so as to cause the least interruption to the facilities' operations.

The Contractor shall provide and maintain all required separations between old and new construction to prevent: Unauthorized entrance to construction areas by others than Architect, Construction Manager or Owner , heat loss from existing building , water (rain or ground) infiltration into existing building.

Exterior alteration and restoration, as required, may proceed outside of phasing schedule at the Contractor's option with concurrence from the Architect, Construction Manager and Owner.

Site development work shall proceed in such a manner to cause the least amount of disruption to the ongoing operations as possible.

1.14 PROOF OF ORDERS AND DELIVERY DATES - Coordinate with Sections 013300 and 013216.

Within 2 weeks after the approval of shop drawings, samples, product data and the like, the Contractor shall provide copies of purchase orders for all equipment and materials which are not available in local stock. The Contractor shall submit written statements from suppliers confirming the orders and stating promised delivery dates. Failure to provide this critical information will result in Owner holding monthly requisition payments until received.

Due to COVID-19 and it's potential to disrupt material supply-chains, the contractors are required to obtain all materials for the project and store them onsite in their individual Conex boxes. This includes general material items typically readily available (piping, conduits, wire, metal studs, ceiling, etc.). The owner will pay for these stored items delivered to the jobsite in accordance Section 012900.

This information shall be incorporated within the progress schedules so required as part of Section 013216 and 013300 and shall be monitored so as to ensure compliance with promised dates.

INTENT OF DOCUMENTS – See General Conditions for resolution of conflicts between drawings and specifications.

In the event of conflict, ambiguity and/or unclear circumstances between any of the requirements of the Contract Documents, the requirement that is most inclusive and of highest quality, quantity, and/or cost shall govern. The Contractor shall (1) provide the better quality or greater quantity of Work and/or (2) comply with the more stringent requirement; either or both in

SECTION 01 10 00 – SUMMARY OF WORK (MULTIPLE PRIME CONTRACTS)

accordance with the Architect's interpretation. The Contractor herewith agrees that no extra compensation shall be awarded to him based upon a claim of conflict, ambiguity or unclear circumstances in the Contract Documents. See the General Conditions for greater detail.

1.15 FIELD MEASUREMENTS

Each Respective Contractor shall take all necessary field measurements prior to fabrication and installation of work and shall assume complete responsibility for accuracy of same.

This project is an ALTERATION and therefore necessitates additional attention to existing conditions receiving newly fabricated and installed equipment, i.e., note the requirements for field dimensioning of shop fabricated items whether or not so required by each technical section.

1.16 INITIAL SUBMITTAL REQUIREMENTS

As outlined in Division 01, each Contractor shall provide items noted including - bonds, insurance, emergency telephone numbers, progress scheduling, schedules of submittals, subcontractor listings and the like prior to the start of any work. The owner will not issue contracts until all bonds and insurance information is received by the contractor and verified correct.

1.17 SCHEDULES

The milestone schedule presented in the documents is for bidding and general purposes. Due to the nature of the work, it is the intention of the Construction Manager to negotiate actual work periods for the project among the various Prime Contractors involved with this bidding process, as well as separate contractors involved with other phases of the work solicited under separate proposals. Each Contractor shall, under terms of the General Conditions, mutually cooperate in the rescheduling of work to permit an uninterrupted use of the facilities by the Owner, without additional cost to the Owner.

General:

1. The objective of this project is to complete the overall work in the shortest period of time and to protect the building and occupants from damages caused by weather and construction activity during the progress of the work.
2. To meet these objectives, the Contractor shall plan the work, obtain materials, and execute the construction in the most expeditious manner possible in accordance with the requirements listed below.
3. If the Contractor fails to expedite and pursue any part of the work, the Owner may terminate the contract as per Article 17 or may carry out the work with others per the General Conditions.
4. The Contractor shall work in coordination with work of other Contractors and with school activities with special attention to noise, dust, safety and other contract requirements for work in and around the occupied buildings.

SECTION 01 10 00 – SUMMARY OF WORK (MULTIPLE PRIME CONTRACTS)

5. All contractors are required to comply with proper sequencing of work and provide other prime contractors sufficient time to install their work (e/g/-metal stud walls get fully framed; MEP contractors perform roughing/testing/inspections; then walls are sheathed with gypsum – no sheetrocking one side unless CM approved). If contractor “boxes out” another prime contractor, he will be directed to stop work and open if necessary, to enable other trades to complete their work. No compensation for lost time due to stop-work will be provided.

Milestone Schedule (See Section 01 11 00).

1.18 ADDITIONAL REQUIREMENTS

The following are additional general and special requirements which will govern the work of the projects covered by these Documents.

1. If it appears that some of the work cannot be completed by the scheduled date, the Contractor shall increase the work force or increase the hours of work, including evenings and weekends as necessary, and cover any additional costs to the Owner, architect and Construction Manager.
2. If the work is complete but the area is not cleaned and debris or equipment is not removed, the Owner shall have the right to prepare the area for occupancy with his own forces and deduct the costs from the Contract Amount. (If Contractor does not respond within 4 hours' notice).
3. If the Contractor fails to staff the job adequately to meet the completion date, the Owner reserves the right to assume possession of the material and complete installation with the Owner's forces or other Contractors or to require the Contractor to work evenings and weekends at no additional cost.
4. The school can be made available on weekends and evenings to allow the Contractor adequate time to complete the work before final completion date. Any custodial or Construction Manager costs resulting in this after-hours scheduling will be the Contractor's responsibility as their contractual hourly rate.
5. In addition to the above-stated requirements for phasing of the work, the Contractors shall not do any noisy work in the areas where examinations will be conducted as per the published school calendar.
6. Work in each work period shall progress at least at a pace in proportion to the Contract time available.
7. The Contractor is responsible for temporary protection of all work until acceptance.
8. The school will be closed on Saturdays, Sundays, regularly scheduled district holidays, and at night after cleaning crews have finished.
9. If any contractor wishes to work at any time when the school is normally closed, that Contractor shall arrange and pay for custodial services for the building at the applicable district pay rates.
10. All existing conditions must be verified in the field. The Owner takes no responsibility for actual conditions found deviating from the drawings. If existing condition interferes with contract work, contractor is responsible to eliminate this condition.
11. Contractor must plan, provide and maintain his own access, ramping, and egress as required into and out of the site, staging of trailer(s), materials, machinery, and equipment in agreement with the Construction Manager's Superintendent. Maintain free and safe access on the jobsite for other related project personnel. Maintain safe pedestrian or vehicular traffic

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must be regulated by a flagman. Trucking and delivery operation should be coordinated with Construction Manager's Superintendent and all other trades.

12. Contractor is responsible for all work shown on Contract Documents, including drawings of other trade disciplines. For example, the HVAC Contractor will be responsible for HVAC work shown on Architectural Drawings.
13. Contractor is responsible to maintain existing site fencing in its existing condition. Modifications to the fence to better accommodate the contract work can be discussed with the Construction Manager. These changes shall then be handled by this contractor at his expense and in accordance with the Construction Manager's Superintendent's direction. Any cost incurred as a result of damages shall be charged to this contractor.
14. Contractor's personnel will not be permitted to use Mt Pleasant Central School District's facilities (including toilet, telephone, food services, etc.) for their own benefit. Contractors' Superintendent must explain this to all their field forces.
15. Time is of the essence. Contractors' proposed schedule must be approved by the Construction Manager. Contractor shall indicate significant events such as submittals, shop drawings, material ordering, fabrication, delivery, coordination precedents, installation, testing and turnover by area or system as agreed with Construction Manager. A revised progress status shall be required on a weekly basis.
16. Decisions required from the Construction Manager, Architect and/or Engineer, shall be anticipated by the Contractor to provide ample time for inspection, investigation or detailed drawings.
17. Contractor shall limit his operations including storage of materials and prefabrication to areas within the Contract Limit Lines unless otherwise permitted by the Construction Manager at the Owner's option.
18. Contractor shall coordinate the use of premises with the Owner and Construction Manager and shall move at his own expense any stored products under Contractor's control, including excavated material, which interfere with operations of the Owner or separate contractors.
19. Contractor shall obtain and pay for the use of additional storage of work areas needed for operations.
20. Contractor shall assume full responsibility for the protection and safekeeping of products under this Contract stored on the site and shall cooperate with the Construction Manager to insure security for the Owner's Property.
21. The intention of the work is to follow a logical sequence; however, the Contractor may be required by Construction Manager to temporarily omit or leave out any section of his work or perform his work out of sequence. All such out of sequence work and come back time to these areas shall be performed at no additional cost.
22. Contractor shall submit a three-week schedule (man-loaded by work activity and area) to Construction Manager each week. Contractor's representative shall attend a weekly meeting with all contractors, chaired by Construction Manager, for the purpose of job coordination and sequencing. Contractor is responsible to coordinate the job with other trades and Construction Manager, and to cooperate with other trades in pursuit of the overall project's shop drawings and actively participate in resolving discrepancies, conflicts, interferences, etc.
23. Each Prime Contractor shall prepare an overall job schedule for his portion of work upon award of Contract, as per section 013216 - Construction Schedules.

SECTION 01 10 00 – SUMMARY OF WORK (MULTIPLE PRIME CONTRACTS)

24. Sufficient manpower shall be provided at all times to maintain progress of the job. A shortage of labor in the industry shall not be accepted as an excuse for not properly manning the job.
25. The contractor shall take special care in verifying that his equipment matches the characteristics of the power being supplied.
26. Any contractor personnel including project managers, supervisors, etc., who engage in any personal attacks, belligerent or threatening speech/texts, etc., to the owner, or any of its agents, will be removed from working on the project.
27. Insubordination, unsafe practices, horseplay, abusive behavior or language, wanton destruction of property, use of drugs or alcohol, possession of firearms, and solicitation shall not be tolerated. There will be no warnings, and Contractor shall designate a responsible on-site supervisor to handle any situations that may arise, including termination.
28. Each contractor is responsible to supply and install all wood blocking/bracing necessary to properly secure their work. This responsibility includes coordinating the installation in concealed areas without delaying other trades.
29. Union business shall not be conducted on site. Any Union representatives that visit the site must declare what Contractor's personnel they represent and must be escorted by that Contractor's Union steward at all times. No visitors, sales representative or non-working personnel shall be permitted on site without prior consent of the Construction Manager. No photographs shall be taken without the Construction Manager's prior approval.
30. Organize daily clean ups as well as participating in a weekly joint clean up involving all prime contractors onsite. Clean up shall be considered a safety issue. If any contractor fails to keep the site safe and brook clean within 4 hours of being notified by the Construction Manager, either verbally or in writing, the Construction Manager will have the cleanup work performed by others and will back charge accordingly.
31. Contractor shall provide protection from damage to adjacent and adjoining work and/or structures. Contractor shall clean, repair and/or replace any damage for which this contractor is responsible.
32. Contractor shall submit hourly rate sheets that would apply to time and material work for all pertinent trades upon Award of Contract.
33. Contractor shall examine surfaces and conditions prior to start of work. Report unacceptable conditions to the Construction Manager. Do not proceed until unacceptable conditions are corrected and acceptable. Starting of work implies acceptance.
34. Upon removal of exterior walls and window units, the building security and weather protection is the responsibility of the prime contractor performing the removals.
35. Each Prime Contractor shall include general housekeeping of light debris. All debris from each Prime Contractor will be collected daily and disposed of into their dumpsters. **In addition to daily general housekeeping, the General Work Contractor (Contract #1) shall provide a weekly broom sweep and damp mop of all areas for the entire duration of the project.** The broom sweep shall include debris from all trades working on site.
36. It is the responsibilities of all Prime Contractors to review the entire summary of work and remaining documents for additional work items.
37. SLEEVES AND SLEEVE LAYOUT - It is the responsibility of the Prime Contractor requiring a sleeve to provide the sleeve and a layout sketch to the Prime Contractor performing the construction activity that the sleeve goes in.
38. Each contractor is responsible to review and become familiar with the scope of work included in all Contracts.

SECTION 01 10 00 – SUMMARY OF WORK (MULTIPLE PRIME CONTRACTS)

39. Limited site space is available in areas as designated by the Construction Manager. Construction trade parking is not permitted in Owner's employee parking lot.
40. Each contractor shall provide the engineering layout required to properly complete his work from an established working point. Contractor shall employ only competent engineering personnel skilled in performing layout tasks of similar complexity.
41. Prior to commencing the work, each Contractor shall provide written acceptance of grades, structures, substrates, and/or systems installed by other Contractors as suitable for installation of his work. Failure to provide this verification prior to commencing work shall constitute acceptance of the existing conditions.
42. Each Contractor shall coordinate with the Construction Manager for lay down areas, staging areas, and overall use of project site.
43. All contractors and their employees, subcontractors and supplier are expressly prohibited from entering the occupied areas of the school buildings during school hours without prior written permission of the Construction Manager and for using any of its facilities (i.e., restrooms, cafeteria, etc.).
44. Each contractor is responsible for the timely provision of the information required by other Contractors for the progress of other Contractors' work.
45. All contractor foremen must have working cell phone and number provided to CM.
46. No recycled import fill materials are permitted.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION 011000

SECTION 09 96 56- EPOXY - URETHANE COATING
DUR-A-WALL HP PLUS COATING (16 mils)

PART 1 – GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This section includes the following:
 - 1. Epoxy - urethane wall coating system as shown on the drawings and in schedules.
- B. Related sections include the following:
 - 1. Unit Masonry, section 040121
 - 2. Plaster and Gypsum Board, section 092900

1.3 SYSTEM DESCRIPTION

- A. The work shall consist of preparation of the substrate, the furnishing and application of a pigmented epoxy and urethane-based wall coating system. The system shall have the color and texture as specified by the Owner with a nominal thickness of 19 mils. It shall be applied to the prepared area(s) as defined in the plans strictly in accordance with the Manufacturer's recommendations.

1.4 SUBMITTALS

- A. Product Data: Latest edition of Manufacturer's literature including performance data and installation procedures.
- B. Manufacturer's Safety Data Sheet (SDS) for each product being used.
- C. Samples: A 3 x 3 inch square sample of the proposed system. Color, texture, and thickness shall be representative of overall appearance of finished system subject to normal tolerances.

1.5 QUALITY ASSURANCE

- A. The Manufacturer shall have a minimum of 10 years experience in the production, sales, and technical support of urethane industrial flooring and wall coatings and related materials.
- B. The Applicator shall have experience in installation of the wall system as confirmed by the manufacturer in all phases of surface preparation and application of the product specified.
- C. No requests for substitutions shall be considered that would change the generic type of the specified System.
- D. A pre-installation conference shall be held between Applicator, General Contractor and the Owner to review and clarification of this specification, application procedure, quality control, inspection and acceptance criteria and production schedule.
- E. The system must be capable of withstanding aggressive cleaning/disinfecting including vaporized hydrogen peroxide (VHP).
- F. System shall be in compliance with the Indoor Air Quality requirements of California section 01350 as verified by a qualified independent testing laboratory.

1.6 PRODUCT DELIVERY, STORAGE, AND HANDLING

A. Packing and Shipping

1. All components of the system shall be delivered to the site in the Manufacturer's packaging, clearly identified with the product type and batch number.

B. Storage and Protection

1. The Applicator shall be provided with a storage area for all components. The area shall be between 60 F and 90 F, dry, out of direct sunlight and in accordance with the Manufacturer's recommendations and relevant health and safety regulations.
2. Copies of Safety Data Sheets (SDS) for all components shall be kept on site for review by the Engineer or other personnel.

C. Waste Disposal

1. The Applicator shall be provided with adequate disposal facilities for non-hazardous waste generated during installation of the system.

1.7 PROJECT CONDITIONS

A. Site Requirements

1. Application may proceed while air, material and substrate temperatures are between 60 F and 90 F providing the substrate temperature is above the dew point. Outside of this range, the Manufacturer shall be consulted.
2. The relative humidity in the specific location of the application shall be less than 80 % and the surface temperature shall be at least 5 F above the dew point.
3. The Applicator shall ensure that adequate ventilation is available for the work area.
4. The Applicator shall be supplied with adequate lighting equal to the final lighting level during the preparation and installation of the system.

B. Conditions of substrate to be coated with urethane material.

1. Concrete shall be cured for a minimum of twenty-eight days prior to the application of the coating system.
2. Block wall mortar joints must have cured no less than 7 days under good conditions.
3. Sealers and curing agents should not be used.
4. Drywall shall be completely clean and free of any oils, soap residue, and gypsum dust and prepared to a #4 to #5 finish.

C. Safety Requirements

1. All open flames and spark-producing equipment shall be removed from the work area prior to commencement of application.
2. "No Smoking" signs shall be posted at the entrances to the work area.
3. The Owner shall be responsible for the removal of foodstuffs from the work area.
4. Non-related personnel in the work area shall be kept to a minimum.

1.8 WARRANTY

- A. Dur-A-Flex, Inc. warrants that material shipped to buyers at the time of shipment substantially free from material defects and will perform substantially to Dur-A-Flex, Inc. published literature if used in accordance with the latest prescribed procedures and prior to the expiration date.
- B. Dur-A-Flex, Inc. liability with respect to this warranty is strictly limited to the value of the material purchase.

PART 2 – PRODUCTS

2.1 COATING

- A. Dur-A-Flex, Inc., Dur-A-Wall HP Plus, Epoxy – Urethane seamless wall system
 - 1. System Materials:
 - a. Base Coat: Dur-A-Flex, Inc, Dur-A-Gard No-Sag resin and hardener
 - b. Topcoats: Dur-A-Flex, Inc, Dur-A-Wall HP Topcoat resin and hardener.
 - 2. Patch Materials
 - a. Shallow Fill and Patching: Use Dur-A-Flex, Inc. Dur-A-Glaze # 4 Cove-Rez.

2.2 MANUFACTURER

- A. Dur-A-Flex, Inc., 95 Goodwin Street, East Hartford, CT 06108, Phone: (973) 349-2022, Email: nedc@dur-a-flex.com
- B. Manufacturer of Approved System shall be single source and made in the USA.

2.3 PRODUCT REQUIREMENTS

| A. Base Coat | Dur-A-Gard No-Sag |
|-----------------------------------------|------------------------|
| 1. Percent Solids | 100 % |
| 2. VOC | 0 g/L |
| 3. Compressive Strength, ASTM D 695 | 16,000 psi |
| 4. Tensile Strength, ASTM D 638 | 3,800 psi |
| 5. Flexural Strength, ASTM D 790 | 4,000 psi |
| 6. Abrasion Resistance, ASTM D 4060 | |
| C-10 Wheel, 1,000 gm load, 1,000 cycles | 35 mg loss |
| 7. Flame Spread/NFPA-101, ASTM E 84 | Class A |
| 8. Flammability, ASTM D 635 | Self Extinguishing |
| 9. Impact Resistance MIL D-3134 | 0.025 inch Max |
| 10. Water Absorption. MIL D-3134 | 0.04 % |
| 11. Potlife @ 70 F | 20-25 minutes |
| B. Top Coats | Dur-A-Wall HP Topcoat |
| 1. VOC | 0 g/L |
| 2. Impact resistance, ASTM D 2794 | 140 in. lbs. |
| 3. Abrasion resistance, ASTM D4060 | 84 mg loss (matte) |
| CS 17 wheel (1,000 g load) 1,000 cycles | 68 mg loss (eggshell) |
| | 74 mg loss (satin) |
| 4. MEK Rubs | >2,000 no gloss change |

| | |
|-----------------------------------|----------------------|
| 5. Flame spread ASTM E84/NFPA-101 | Class A |
| 6. Pot life @ 70° F 50% RH | >2 hours |
| 7. Dry properties, 70°F, 50% R.H. | 16 - 24 hours |
| 8. Full chemical resistance | 7 days (VHP 14 days) |

PART 3 – EXECUTION

3.1 EXAMINATION

- A. Examine substrates, areas and conditions, with Applicator present, for compliance with requirements for maximum moisture content, installation tolerances and other conditions affecting coating performance.
 1. Verify that substrates and conditions are satisfactory for installation and comply with requirements specified.

3.2 PREPARATION

A. General

1. New and existing concrete surfaces shall be free of oil, grease, curing compounds, loose particles, moss, algae growth, laitance, friable matter, and dirt.
2. There shall be no visible moisture present on the surface at the time of application of the system.
3. Remove loose mortar spatter, joint compounds, etc.
4. Create a surface profile on concrete with sandblasting apparatus and/or dust-free diamond grinders.
5. Masonry block shall be clean, dry and coated with Dur-A-Flex, Dur-A-Wall HP Block Filler.
6. Drywall shall be completely clean and free of any oils, soap residue, gypsum dust, etc. and primed with Dur-A-Flex, Dur-A-Wall HP Gripper Primer.

3.3 APPLICATION

A. General

1. The system shall be applied in four distinct steps as listed below:
 - a. Substrate preparation
 - b. Priming
 - c. Base coat application
 - d. Topcoat applications
2. The handling, mixing and addition of components shall be performed in a safe manner to achieve the desired results in accordance with the Manufacturer's recommendations.
3. The system shall follow the contour of the substrate.
4. A neat finish with well-defined boundaries and straight edges shall be provided by the Applicator.

B. Priming

Dur-A-Wall HP Block Filler is recommended to fill any pores in the substrate when applying over concrete or block walls. When applying over drywall, use Dur-A-Wall HP Gripper Primer.

C. Base Coat

1. The base coat shall be comprised Dur-A-Gard No-Sag resin, and hardener as supplied by the Manufacturer.
2. The resin shall be added to the hardener and thoroughly mixed by suitably approved mechanical means.
3. The base coat shall be applied by a roller at the rate of 200 sf/gal to yield a dry film thickness of 8 mils.

D. Topcoats

1. The top coats shall be comprised of two components: a resin and hardener as supplied by the Manufacturer.
2. The hardener shall be added to the resin and thoroughly mixed by suitably approved mechanical means.
3. The top coat shall be applied by roller or brush at the rate of 400 sf/gal to yield a dry film thickness of 4 mils.
4. Repeat steps 1 through 3.

3.4 FIELD QUALITY CONTROL

A. Tests, Inspection

1. The following tests shall be conducted by the Applicator:
 - a. Temperature
 1. Air, substrate temperatures and, if applicable, dew point.
 - b. Coverage Rates
 1. Rates for all layers shall be monitored by checking quantity of material used against the area covered.

3.5 CLEANING AND PROTECTION

- A. Cure material in compliance with manufacturer's directions, taking care to prevent their contamination during stages of application and prior to completion of the curing process.
- B. Remove masking. Perform detail cleaning to leave cleanable surface for subsequent work of other sections.

END OF SECTION 099656

SECTION 260523 - CONTROL-VOLTAGE ELECTRICAL POWER CABLES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:
 - 1. UTP cabling.
 - 2. Identification products.

1.3 DEFINITIONS

- A. EMI: Electromagnetic interference.
- B. IDC: Insulation displacement connector.
- C. Low Voltage: As defined in NFPA 70 for circuits and equipment operating at less than 50 V or for remote-control and signaling power-limited circuits.
- D. Open Cabling: Passing telecommunications cabling through open space (e.g., between the studs of a wall cavity).
- E. RCDD: Registered Communications Distribution Designer.
- F. UTP: Unshielded twisted pair.

1.4 SUBMITTALS

- A. Product Data: For each type of product indicated.
- B. Qualification Data: For qualified layout technician, installation supervisor, and field inspector.
- C. Source quality-control reports.
- D. Field quality-control reports.
- E. Maintenance Data: For wire and cable to include in maintenance manuals.

1.5 PROJECT CONDITIONS

- A. Environmental Limitations: Do not deliver or install UTP and optical fiber cables and connecting materials until wet work in spaces is complete and dry, and temporary HVAC system is operating and maintaining ambient temperature and humidity conditions at occupancy levels during the remainder of the construction period.

PART 2 - PRODUCTS

2.1 PATHWAYS

- A. Support of Open Cabling: NRTL labeled for support of Category 6 cabling, designed to prevent degradation of cable performance and pinch points that could damage cable.
 - 1. Support brackets with cable tie slots for fastening cable ties to brackets.
 - 2. Lacing bars, spools, J-hooks, and D-rings.
 - 3. Straps and other devices.
- B. Conduit and Boxes: Comply with requirements in Division 26 Section "Raceway and Boxes for Electrical Systems."
 - 1. Outlet boxes shall be no smaller than 2 inches (50 mm) wide, 3 inches (75 mm) high, and 2-1/2 inches (64 mm) deep.

2.2 UTP CABLE

- A. Description: 100-ohm, four-pair UTP.
 - 1. Comply with ICEA S-90-661 for mechanical properties.
 - 2. Comply with TIA/EIA-568-B.1 for performance specifications.
 - 3. Comply with TIA/EIA-568-B.2, Category 6.
 - 4. Listed and labeled by an NRTL acceptable to authorities having jurisdiction as complying with UL 444 and NFPA 70 for the following types:
 - a. Communications, General Purpose: Type CM or Type CMG.
 - b. Communications, Plenum Rated: Type CMP, complying with NFPA 262.
 - c. Multipurpose: Type MP or Type MPG.
 - d. Multipurpose, Plenum Rated: Type MPP, complying with NFPA 262.

2.3 UTP CABLE HARDWARE

- A. UTP Cable Connecting Hardware: IDC type, using modules designed for punch-down caps or tools. Cables shall be terminated with connecting hardware of the same category or higher.

2.4 IDENTIFICATION PRODUCTS

- A. Comply with UL 969 for a system of labeling materials, including label stocks, laminating adhesives, and inks used by label printers.
- B. Comply with requirements in Division 26 Section "Identification for Electrical Systems."

2.5 SOURCE QUALITY CONTROL

- A. Testing Agency: Engage a qualified testing agency to evaluate cables.

- B. Factory test UTP cables on reels according to TIA/EIA-568-B.1.
- C. Factory test UTP cables according to TIA/EIA-568-B.2.
- D. Cable will be considered defective if it does not pass tests and inspections.
- E. Prepare test and inspection reports.

PART 3 - EXECUTION

3.1 INSTALLATION OF PATHWAYS

- A. Comply with TIA/EIA-569-A for pull-box sizing and length of conduit and number of bends between pull points.
- B. Comply with requirements in Division 26 Section "Raceway and Boxes for Electrical Systems" for installation of conduits and wireways.
- C. Install manufactured conduit sweeps and long-radius elbows if possible.
- D. Pathway Installation in Equipment Rooms:
 - 1. Position conduit ends adjacent to a corner on backboard if a single piece of plywood is installed or in the corner of room if multiple sheets of plywood are installed around perimeter walls of room.
 - 2. Install cable trays to route cables if conduits cannot be located in these positions.
 - 3. Secure conduits to backboard if entering room from overhead.
 - 4. Install metal conduits with grounding bushings and connect with grounding conductor to grounding system.

3.2 INSTALLATION OF CONDUCTORS AND CABLES

- A. Comply with NECA 1.
- B. UTP Cable Installation:
 - 1. Comply with TIA/EIA-568-B.2.
 - 2. Do not untwist UTP cables more than 1/2 inch (12 mm) from the point of termination to maintain cable geometry.
- C. Open-Cable Installation:
 - 1. Install cabling with horizontal and vertical cable guides in telecommunications spaces with terminating hardware and interconnection equipment.
 - 2. Cable shall not be run through structural members or in contact with pipes, ducts, or other potentially damaging items.
- D. Separation from EMI Sources:

1. Comply with BICSI TDMM and TIA/EIA-569-A recommendations for separating unshielded copper voice and data communication cable from potential EMI sources, including electrical power lines and equipment.
2. Separation between communications cables in grounded metallic raceways and unshielded power lines or electrical equipment shall be as follows:
 - a. Electrical Equipment Rating Less Than 2 kVA: A minimum of 2-1/2 inches (64 mm).
 - b. Electrical Equipment Rating between 2 and 5 kVA: A minimum of 6 inches (150 mm).
 - c. Electrical Equipment Rating More Than 5 kVA: A minimum of 12 inches (305 mm).
3. Separation between Cables and Electrical Motors and Transformers, 5 kVA or HP and Larger: A minimum of 48 inches (1200 mm).

3.3 REMOVAL OF CONDUCTORS AND CABLES

- A. Remove abandoned conductors and cables.

3.4 FIRESTOPPING

- A. Comply with requirements in Division 07 Section "Penetration Firestopping."
- B. Comply with TIA/EIA-569-A, Annex A, "Firestopping."
- C. Comply with BICSI TDMM, "Firestopping Systems" Article.

3.5 GROUNDING

- A. For data communication wiring, comply with ANSI-J-STD-607-A and with BICSI TDMM, "Grounding, Bonding, and Electrical Protection" Chapter.
- B. For low-voltage wiring and cabling, comply with requirements in Division 26 Section "Grounding and Bonding for Electrical Systems."

3.6 IDENTIFICATION

- A. Identify system components, wiring, and cabling according to TIA/EIA-606-A. Comply with requirements for identification specified in Division 26 Section "Identification for Electrical Systems."

3.7 FIELD QUALITY CONTROL

- A. Perform tests and inspections.
- B. Tests and Inspections:
 1. Visually inspect UTP and optical fiber cable jacket materials for UL or third-party certification markings. Inspect cabling terminations to confirm color-coding for pin assignments, and inspect cabling connections to confirm compliance with TIA/EIA-568-B.1.

2. Visually inspect cable placement, cable termination, grounding and bonding, equipment and patch cords, and labeling of all components.
3. Test UTP cabling for DC loop resistance, shorts, opens, intermittent faults, and polarity between conductors. Test operation of shorting bars in connection blocks. Test cables after termination but not after cross connection.
 - a. Test instruments shall meet or exceed applicable requirements in TIA/EIA-568-B.2. Perform tests with a tester that complies with performance requirements in "Test Instruments (Normative)" Annex, complying with measurement accuracy specified in "Measurement Accuracy (Informative)" Annex. Use only test cords and adapters that are qualified by test equipment manufacturer for channel or link test configuration.
- C. Document data for each measurement. Print data for submittals in a summary report that is formatted using Table 10.1 in BICSI TDMM as a guide, or transfer the data from the instrument to the computer, save as text files, print, and submit.
- D. End-to-end cabling will be considered defective if it does not pass tests and inspections.
- E. Prepare test and inspection reports.

END OF SECTION 260523

| | | | | | | | | | | | | | | | | | | | | |
|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|--------------------------|------------------------------------|------------------------------------|---------------------------------|-------------------------------|----------------------|-----------------------------------|----------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|------------|-----|
| | B | C | D | E | F | G | H | J | K | L | M | N | O | P | | | | | | |
| 1 | EXHAUST FAN SCHEDULE (GREENHECK AS STANDARD) | | | | | | | | | | | | | | | | | | | |
| 2 | TAG No. | QTY | CFM | ESP (IN.) | HP | RPM | ELECTRICAL DATA VOLT-PH-HZ | | MODEL & MANUFACTURER | | REMARKS | | | | | | | | | |
| | EF-1 | 1 | 1760 | 1.0 | 3/4 | 1725 | 208-3-60 | | GB-141-7 | GREENHECK | BELT DRIVE CENTRIFUGAL ROOF MOUNTED, STANDARD MOTOR, NEMA-1 DISCONNECT SWITCH, BIRD SCREEN, 18" ROOF CURB & BACK DRAFT DAMPER, INTERLOCK W/ FCU-1. FAN TO BE CONNECTED TO (E) ALC ANDOVER BMS SYSTEM. | | | | | | | | | |
| | EF-2 | 1 | 400 | 0.75 | 1/4 | 1725 | 120-1-60 | | GB-101-4 | GREENHECK | BELT DRIVE CENTRIFUGAL ROOF MOUNTED, STANDARD MOTOR, NEMA-1 DISCONNECT SWITCH, BIRD SCREEN, 18" ROOF CURB & BACK DRAFT DAMPER, INTERLOCK W/ FCU-2. FAN TO BE CONNECTED TO (E) ALC ANDOVER BMS SYSTEM. | | | | | | | | | |
| 3 | DUCTLESS SPLIT-DX INDOOR AC/HEAT PUMP UNIT SCHEDULE (DAIKIN AS STANDARD) | | | | | | | | | | | | | | | | | | | |
| | TAG No. | AREA SERVED | AIR FLOW L-H (CFM) | OUTDOOR AIR (CFM) | COOLING | | HEATING | MODEL & MANUFACTURER | ELECTRICAL DATA | | | DIMENSIONS LxWxH (IN) | APPROX. WEIGHT (LBS) | REFRIGERANT TYPE | REMARKS | | | | | |
| | | | | | TBMH | SBMH | MBH | | VOLT/PH/HZ | MCA | MOP | | | | | | | | | |
| | AC-1 | TRAINER'S ROOM 130F | 180-290 | - | 11.0 | 8.3 | 13 | FXAQ12PVJU | DAIKIN | 208/1/60 | 0.4 | 15 | 31 x 12 x 9 | 30 | R-410A | WALL-MOUNTED HEAT PUMP AC UNIT. | | | | |
| | AC-2 | OFFICE 130M | 180-290 | - | 11.0 | 8.3 | 13 | FXAQ12PVJU | DAIKIN | 208/1/60 | 0.4 | 15 | 31 x 12 x 9 | 30 | R-410A | WALL-MOUNTED HEAT PUMP AC UNIT. | | | | |
| | AC-3 | OFFICE 130L | 175-280 | - | 8.0 | 7.0 | 8 | FXAQ09PVJU | DAIKIN | 208/1/60 | 0.4 | 15 | 31 x 12 x 9 | 30 | R-410A | WALL-MOUNTED HEAT PUMP AC UNIT. | | | | |
| 4 | AC-4 | EXISTING OFFICE 130B | 160-260 | - | 7.0 | 5.9 | 7 | FXAQ07PVJU | DAIKIN | 208/1/60 | 0.4 | 15 | 31 x 12 x 9 | 30 | R-410A | WALL-MOUNTED HEAT PUMP AC UNIT. | | | | |
| | AC-5 | SGI 130N | 470-635 | - | 22.0 | 17.9 | 22.0 | FXFQ24PVJU | DAIKIN | 208/1/60 | 0.5 | 15 | 33 x 33 x 9 | 60 | R-410A | CEILING-MOUNTED HEAT PUMP AC UNIT. | | | | |
| | AC-6 | OFFICE 128D | 160-260 | - | 7.0 | 7.0 | 7 | CTXS07LVJU | DAIKIN | 208/1/60 | 0.4 | 15 | 31 x 12 x 9 | 30 | R-410A | WALL-MOUNTED HEAT PUMP AC UNIT. | | | | |
| | AC-7 | OFFICE 128C | 160-260 | - | 7.0 | 7.0 | 7 | CTXS07LVJU | DAIKIN | 208/1/60 | 0.4 | 15 | 31 x 12 x 9 | 30 | R-410A | WALL-MOUNTED HEAT PUMP AC UNIT. | | | | |
| 5 | NOTES: 1. FOR AC-1,2,3,4,6 & 7, PROVIDE WALL-MOUNTING PLATES, CONDENSATE PUMP W/ RESERVOIR SENSOR & ALARM CONTACT. PUMP TO BE POWERED BY AC UNIT). | | | | | | | | | | | | | | 2. PROVIDE PROPER REFRIGERANT FOR ALL UNITS. 3. INTERLOCK W/ RESPECTIVE ACCUS. 4. PROVIDE ONE (1) EXTRA SET OF WASHABLE FILTERS FOR EACH UNIT. 5. UNITS TO BE CONNECTED TO (E) ALC ANDOVER BMS SYSTEM. | | | | | |
| 6 | OUTDOOR AIR-COOLED CONDENSING UNIT SCHEDULE (DAIKIN AS STANDARD) | | | | | | | | | | | | | | | | | | | |
| | TAG No. | LOCATION | UNIT SERVED | COOLING OPERATING TEMP. (°F) | HEATING OPERATING TEMP. (°F) | NOMINAL COOLING (MBH) | NOMINAL HEATING (MBH) | MODEL & MANUFACTURER | ELECTRICAL DATA VOLT/PH/HZ | COMPRESSOR NO. | COND. FAN NO. | MCA | MOP | REFRIGERANT TYPE | UNIT DIMENSIONS WxHxD (IN) | APPROX. WEIGHT (LBS) | SEER | REMARKS | | |
| | ACCU-1 | ROOF | AC-1 THU 5 | 14 TO 115 | -4 TO 75 | 59.0 | 63.0 | RXTQ60TAVJU | DAIKIN | 208/1/60 | 1 | 1 | 29.1 | 35 | R-410A | 36 x 53 x 13 | 225 | 18.0 | SEE NOTES. | |
| | ACCU-2 | ROOF | AC-6,7 | 14 TO 115 | -4 TO 75 | 18 | 18.9 | 2MXS18NMVJU | DAIKIN | 208/1/60 | 1 | 1 | 15.8 | 20 | R-410A | 34 x 28 x 12 | 125 | 18.9 | SEE NOTES. | |
| 7 | NOTES: 1. PROVIDE 24" HIGH, "PATE" MAKE (OR APPROVED EQUAL) EQUIPMENT ROOF SUPPORT CURBS FOR EACH UNIT. 2. PROVIDE W/ LOW AMBIENT CONTROL FOR ACCU-1 & 2. 3. INTERLOCK W/ RESPECTIVE AC UNITS FOR OPERATION. | | | | | | | | | | | | | | 5. ELECTRICAL CONTRACTOR SHALL FURNISH & INSTALL NEMA 3R DISCONNECT SWITCH & GFI CONVENIENCE OUTLET. REFER TO ELECTRICAL DRAWINGS. 6. UNIT TO BE CONNECTED TO (E) ALC ANDOVER BMS SYSTEM. | | | | | |
| 8 | FAN COIL UNIT SCHEDULE (GREENHECK AS STANDARD) | | | | | | | | | | | | | | | | | | | |
| | MARK No. | UNIT LOCATION | UNIT SIZE W x L x H | ELECTRICAL DATA VOLT-PH-HZ | HP | CFM | ESP IN | MIN OA CFM | COIL ROWS | HEATING | | | | MODEL & MANUFACTURER | | REMARKS | | | | |
| | | | | | | | | | | MBH | EWTL/LWT | LAT F° | GPM | | | | | | | WPD |
| | FC-1 | WEST SIDE | 40 x 44 x 21 | 208 - 3 - 60 | 180 | 1,650 | 1.0 | 1,650 | 2 | 137.4 | 180/160 | 85 | 14.2 | 3.3 | TBH-16 | GREENHECK | W/ WALL BOX, DUCT COLLAR, ASHARE CYCLE II CONTROL, 3-WAY CONTROL VALVE PIPING PACKAGE, REMOTE ROOM THERMOSTAT. UNIT TO BE CONNECTED TO (E) ALC ANDOVER BMS SYSTEM. | | | |
| | FC-2 | EAST SIDE | 30 x 40 x 21 | 208 - 3 - 60 | 120 | 610 | 0.75 | 610 | 2 | 52.4 | 180/160 | 87.4 | 5.4 | 7.2 | TBH-08 | GREENHECK | W/ WALL BOX, DUCT COLLAR, ASHARE CYCLE II CONTROL, 3-WAY CONTROL VALVE PIPING PACKAGE, REMOTE ROOM THERMOSTAT. UNIT TO BE CONNECTED TO (E) ALC ANDOVER BMS SYSTEM. | | | |
| 9 | HOT WATER FINNED TUBE RADIATION SCHEDULE (STERLING AS STANDARD) | | | | | | | | | | | | | | | | | | | |
| | TAG NO. | LOCATION | TUBE SIZE | FIN PER FT. | ACTIVE ELEMENT LENGTH | BTU/ HR-FT | TIERS | HOT WATER HEATING | | | | MODEL & MANUFACTURER | | REMARKS | | | | | | |
| | | | | | | | | MBH | EWTL (°F) | LWT (°F) | GPM | | | | | | | | | |
| | FTR-1 | TRAINER'S RM130F | 3/4" | 50 | 5'-0" | 1,110 | 1 | 5.5 | 180 | 160 | 0.5 | JVB-F | STERLING | PROVIDE W/ WATER BRACKETS W/ HANGERS. 1,2,4,5. | | | | | | |
| | FTR-2 | WOMAN'S TOILET 130H | 3/4" | 50 | 2'-0" | 1,110 | 1 | 2.2 | 180 | 160 | 0.5 | JVB-F | STERLING | PROVIDE W/ WATER BRACKETS W/ HANGERS. 1,2,3,5. | | | | | | |
| | FTR-3 | MEN'S BATHROOM 130K | 3/4" | 50 | 2'-0" | 1,110 | 1 | 2.2 | 180 | 160 | 0.5 | JVB-F | STERLING | PROVIDE W/ WATER BRACKETS W/ HANGERS. 1,2,3,5. | | | | | | |
| | FTR-4 | OFFICE 130L | 3/4" | 50 | 5'-0" | 1,110 | 1 | 5.5 | 180 | 160 | 0.5 | JBV-F | STERLING | PROVIDE W/ WATER BRACKETS W/ HANGERS. 1,2,4,5. | | | | | | |
| | FTR-5 | OFFICE 130M | 3/4" | 50 | 6'-0" | 1,110 | 1 | 6.6 | 180 | 160 | 0.6 | JBV-F | STERLING | PROVIDE W/ WATER BRACKETS W/ HANGERS. 1,2,4,5. | | | | | | |
| | FTR-6,7 | SGI 130N | 3/4" | 50 | 6'-0" | 1,110 | 1 | 6.6 | 180 | 160 | 0.6 | JBV-F | STERLING | PROVIDE W/ WATER BRACKETS W/ HANGERS. 1,2,4,5. | | | | | | |
| | FTR-8 | EXIST. TOILET | 3/4" | 50 | 2'-0" | 1,110 | 1 | 2.2 | 180 | 160 | 0.5 | JVB-F | STERLING | PROVIDE W/ WATER BRACKETS W/ HANGERS. 1,2,3,5. | | | | | | |
| | FTR-9 | EXIST. OFFICE | 3/4" | 50 | 1'-6" | 1,110 | 1 | 1.6 | 180 | 160 | 0.5 | JVB-F | STERLING | PROVIDE W/ WATER BRACKETS W/ HANGERS. 1,2,4,5. | | | | | | |
| | FTR-10,11 | GIRL'S/BOY'S BATHROOMS | 3/4" | 50 | 2'-6" | 1,110 | 1 | 2.7 | 180 | 160 | 0.5 | JVB-F | STERLING | PROVIDE W/ WATER BRACKETS W/ HANGERS. 1,2,3,5. | | | | | | |
| | FTR-12,13 | OFFICE 129C/128D | 3/4" | 50 | 2'-6" | 1,110 | 1 | 2.7 | 180 | 160 | 0.5 | JVB-F | STERLING | PROVIDE W/ WATER BRACKETS W/ HANGERS. 1,2,4,5. | | | | | | |
| | FTR-14 | BATHROOM 128E | 3/4" | 50 | 2'-0" | 1,110 | 1 | 2.6 | 180 | 160 | 0.5 | JVB-F | STERLING | PROVIDE W/ WATER BRACKETS W/ HANGERS. 1,2,3,5. | | | | | | |
| 10 | NOTES: 1. ALL FTRs SHALL BE 14" H x 5-5/16" 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 COVERS, WALL TO WALL COVER WATER BRACKETS & WATER RESISTANT DAMPERS. ENCLOSURE SAME GAUGE AND FINISH AS COVERS WHERE INDICATED. 3. PROVIDE DANFOSS CONTROL VALVE W/ UNIT MOUNTED DIAL-CONTROL. 4. PROVIDE 2-WAY CONTROL VALVE W/ WALL MOUNTED THERMOSTAT. 5. FTR TO BE CONNECTED TO (E) ALC ANDOVER BMS SYSTEM. | | | | | | | | | | | | | | | | | | | |
| 11 | 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 (L x W x H) (IN) | APPROX. UNIT WEIGHT (LBS) | REMARKS | | | | |
| | | | | | MBH | EWT (°F) | LWT (°F) | GPM | | | | | | | | | | | | |
| | CH-1,2 | VESTIBULES | 220 | - | 5.0 | 180 | 160 | 0.5 | 0.22 | 208 - 1 - 60 | 1.8 | 15 | FF MODEL E | TRANE | 34 x 25 x 10 | 100 | SEE NOTES. | | | |
| | CH-3 | CORRIDOR 130 | 350 | 50 | 5.3 | 180 | 160 | 0.5 | 0.22 | 208 - 1 - 60 | 1.9 | 15 | FF MODEL C | TRANE | 26 x 27 x 10 | 100 | 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. UNIT COLOR TO BE SELECTED BY OWNER. PROVIDE SPOOL CHART. 5. ALL UNITS TO BE CONNECTED TO (E) ALC ANDOVER BMS SYSTEM. | | | | | | | | | | | | | | | | | | | |
| | HOT WATER UNIT HEATER SCHEDULE (REZNOR AS STANDARD) | | | | | | | | | | | | | | | | | | | |
| | TAG NO. | LOCATION | CFM | HP | HOT WATER HEATING | | | | ELECTRICAL DATA V - PH - HZ | MODEL & MANUFACTURER | REMARKS | | | | | | | | | |
| | | | | | MBH | EWT (°F) | LWT (°F) | GPM | | | | | | | | | WPD | | | |
| | UH-1,2 | STORAGE 130E/130E | 270 | 0.04 | 13 | 180 | 160 | 1.3 | 0.06 | 115 - 1 - 60 | WS-18/24 | REZNOR | PROVIDE W/ 4-WAY DIFFUSER, OSHA FAN GUARD, DISCONNECT SWITCH, TRANSFORMER, 2-WAY CONTROL VALVE & HEAVY DUTY THERMOSTAT. CONNECT TO (E) ALC ANDOVER BMS SYSTEM. | | | | | | | |
| | PUMP SCHEDULE | | | | | | | | | | | | | | | | | | | |
| | MARK No. | GPM | FT. HD. | HP | RPM | ELECTRIC DATA VOLT - PH - HZ | | MODEL & MANUFACTURER | | REMARKS | | | | | | | | | | |
| | P - 1 | 14.2 | 15 | 1/6 | 3300 | 115-1-60 | | SERIES PL PL-45 | BELL & GOSSETT | W/ FITTINGS PER SPECIFICATION. CONNECT PUMPS TO (E) ALC ANDOVER BMS SYSTEM | | | | | | | | | | |
| | P - 2 | 5.4 | 12 | 1/6 | 3300 | 115-1-60 | | SERIES PL PL-36 | BELL & GOSSETT | W/ FITTINGS PER SPECIFICATION. CONNECT PUMPS TO (E) ALC ANDOVER BMS SYSTEM | | | | | | | | | | |

REGISTERED ARCHITECT
MICHAEL J. MCGOVERN
STATE OF N.Y.
022257-1
MICHAEL J. MCGOVERN, P.A.
REGISTERED ARCHITECT

Revisions:
BID CONFORMANCE SET
11/20/20
BID ADDENDUM #3
1/22/21

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

MECHANICAL SCHEDULES
RENOVATIONS TO THE PHYSICAL ED. DEPARTMENT
WESTLAKE HIGH SCHOOL
825 WEST LAKE DRIVE
THORWOOD, NY 10594

SED PROJECT #66-08-01-06-0-005-020

Job No. 4.1449.08
File No. 4.144908M101

M6.01

9/25/20

Value

Value

Value

REGISTERED ARCHITECT

MICHAEL J. MCGOVERN, R.A.

022257-1

11th

Revisions:

BD CONFORMANCE SET
11/20/20

BD ADDENDUM #3
1/22/21

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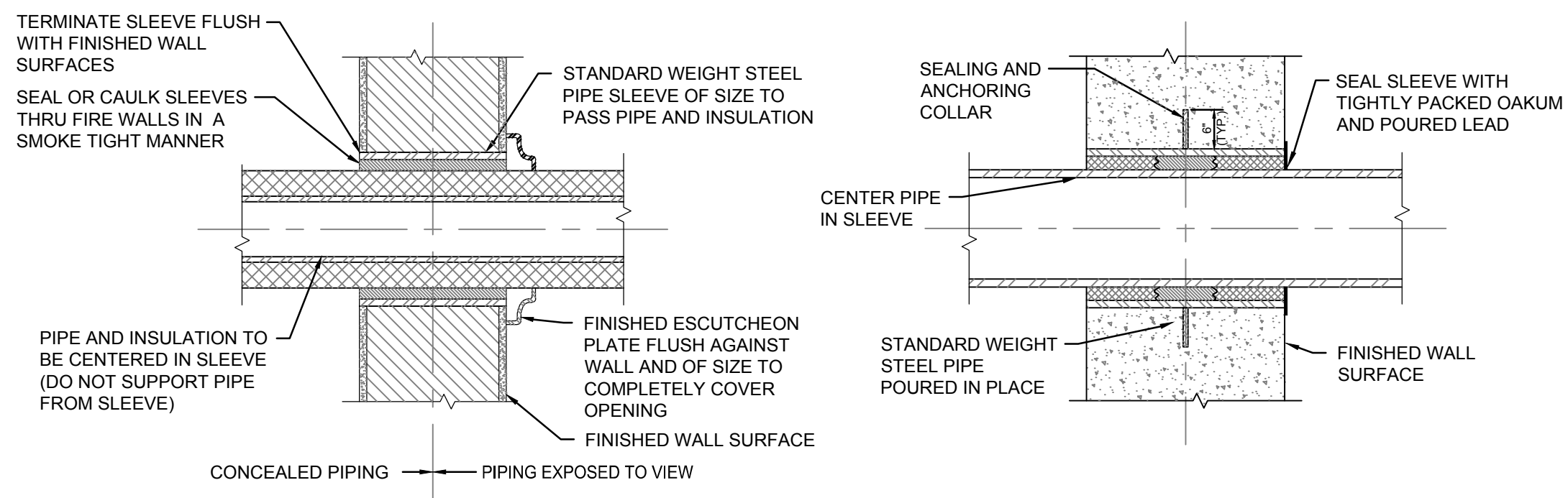
SED PROJECT #66-08-01-06-0-005-020

MECHANICAL SCHEDULES

RENOVATIONS TO THE PHYSICAL ED. DEPARTMENT
WESTLAKE HIGH SCHOOL
825 WEST LAKE DRIVE
THORNWOOD, NY 10594

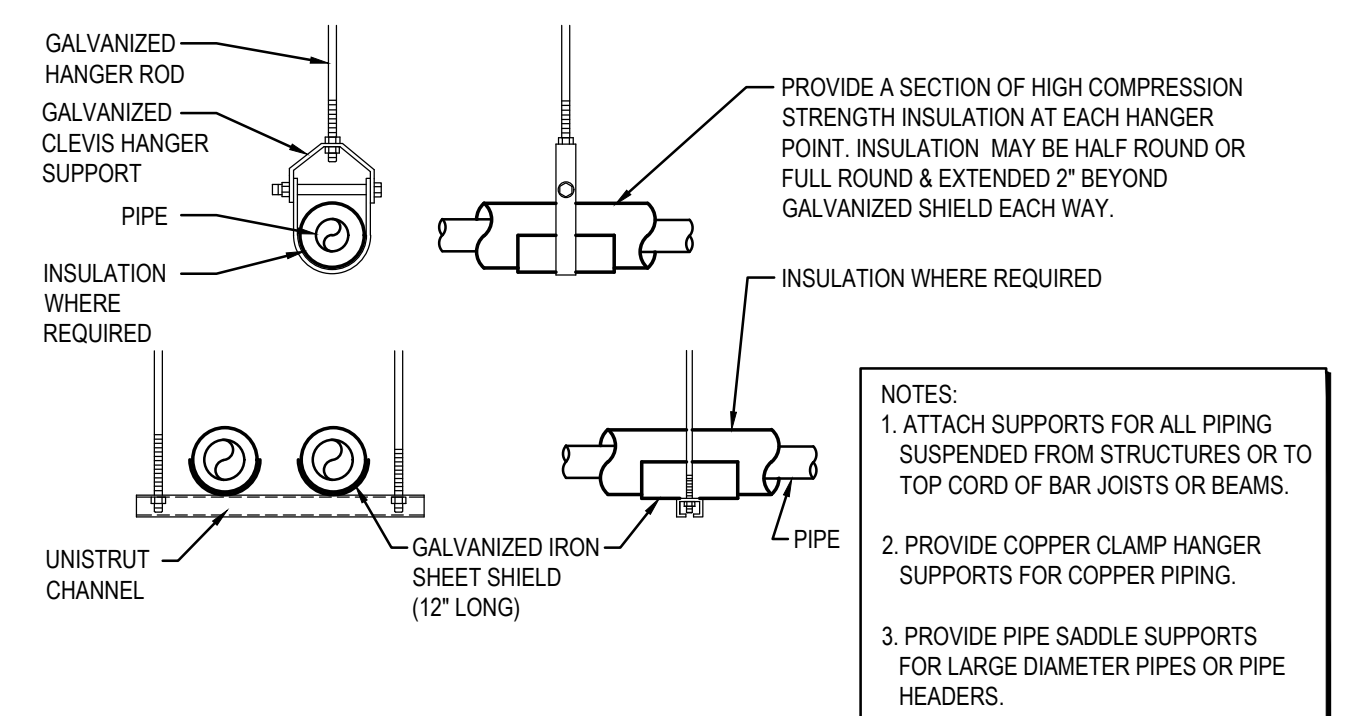
Job No. 4.1449.08
File No. 4144908M101

M6.01



9 PIPE SLEEVES THRU WALL DETAILS

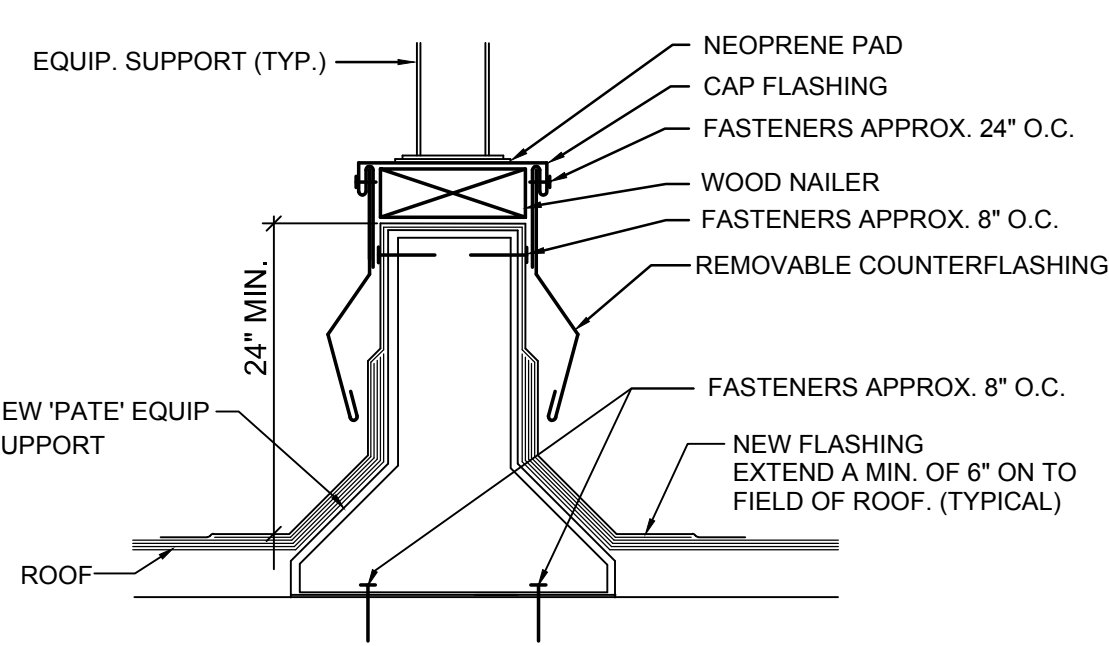
NOT TO SCALE



10 PIPE SUPPORT HANGERS

NOT TO SCALE

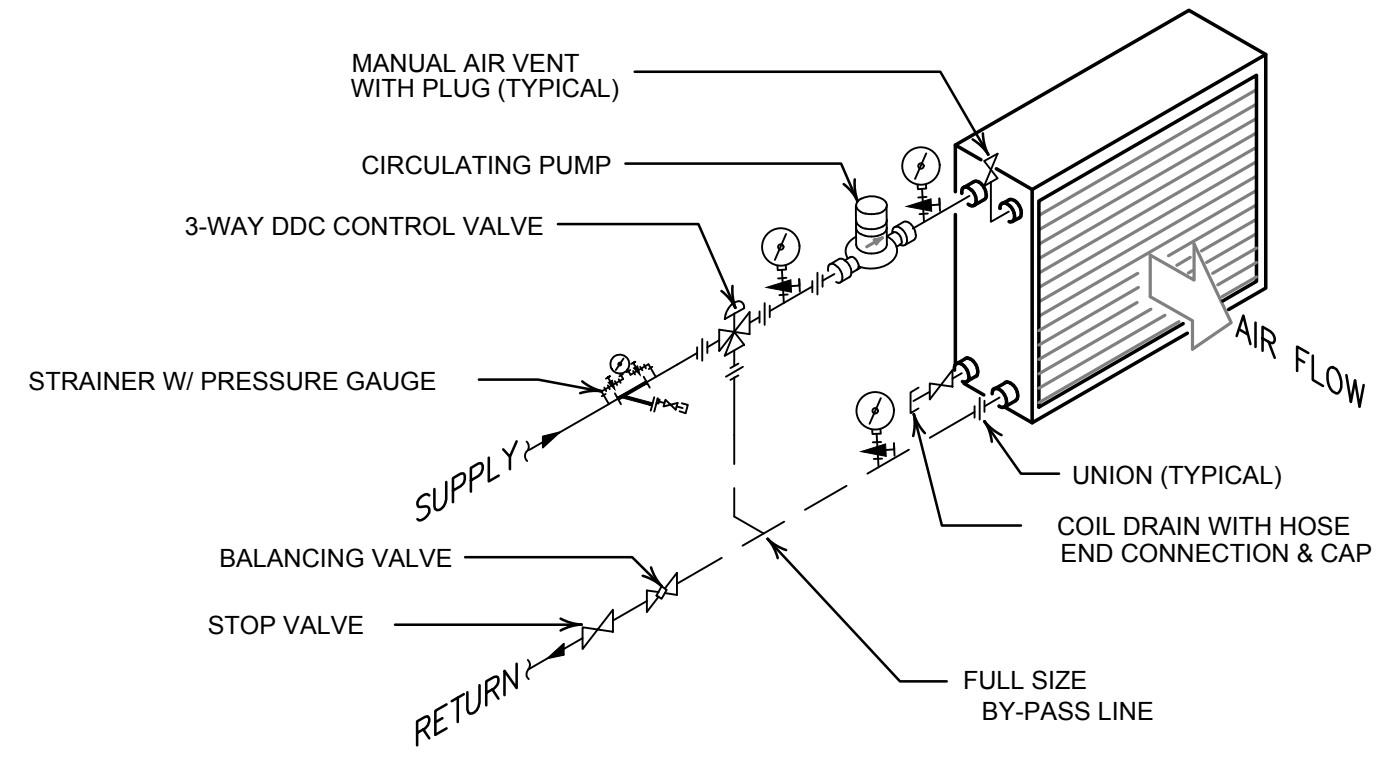
INSTALL NEW CURB PERPENDICULAR TO STEEL PLATES OF ROOF DECK. PROVIDE CRICKET IN ROOF TO DIVERT ROOF WATER AROUND CURBS.



11 EQUIPMENT SUPPORT DETAIL

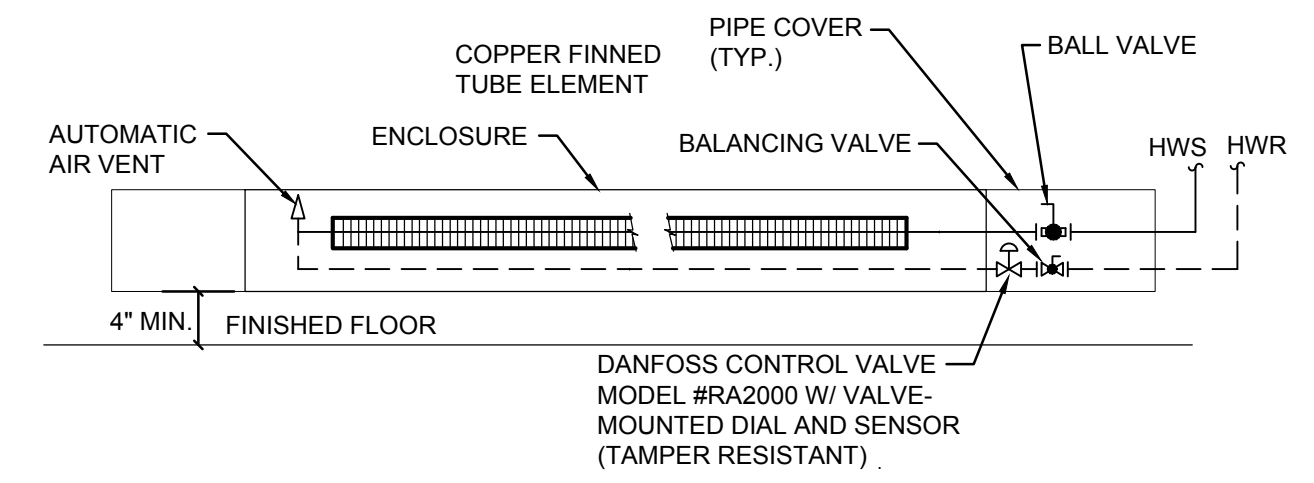
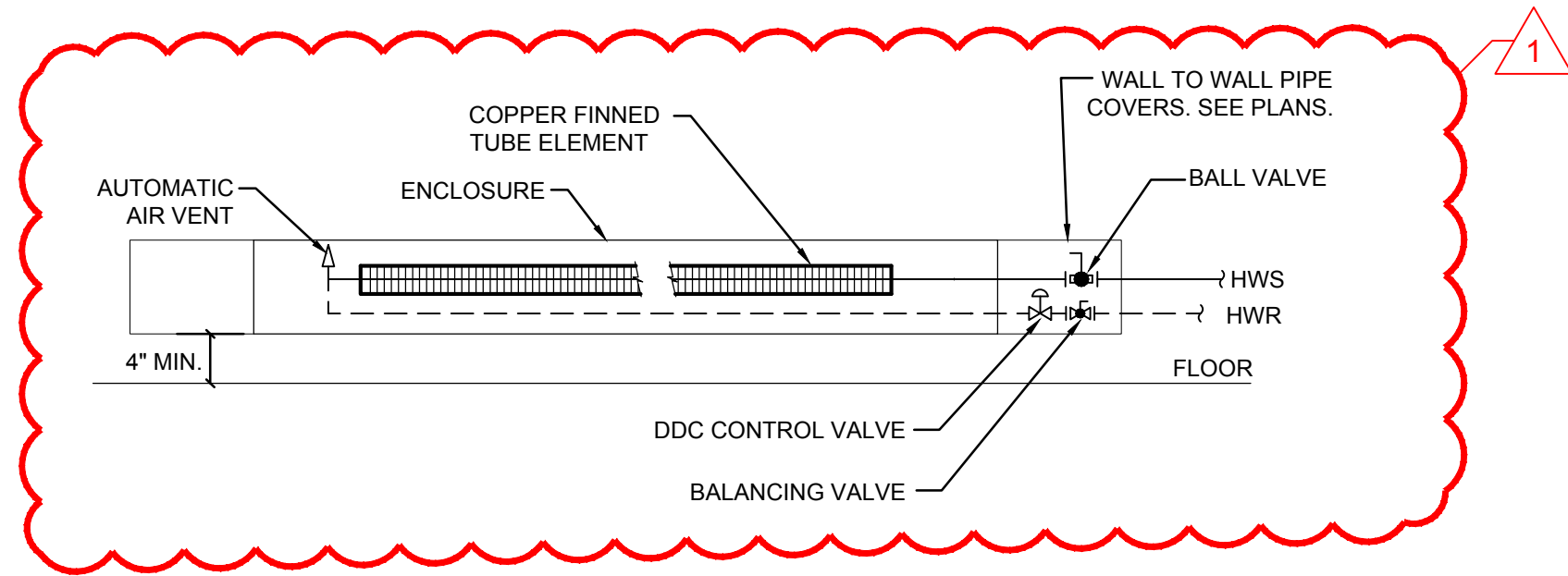
NOT TO SCALE

- NOTES:
- 1. INSULATE ALL PIPING, VALVES, FITTINGS AND ACCESSORIES. RE: SPECIFICATIONS
 - 2. INSTALL TEST PLUGS IN EASILY ACCESSIBLE LOCATIONS WITH MINIMUM OF 12" CLEARANCE IN FRONT.



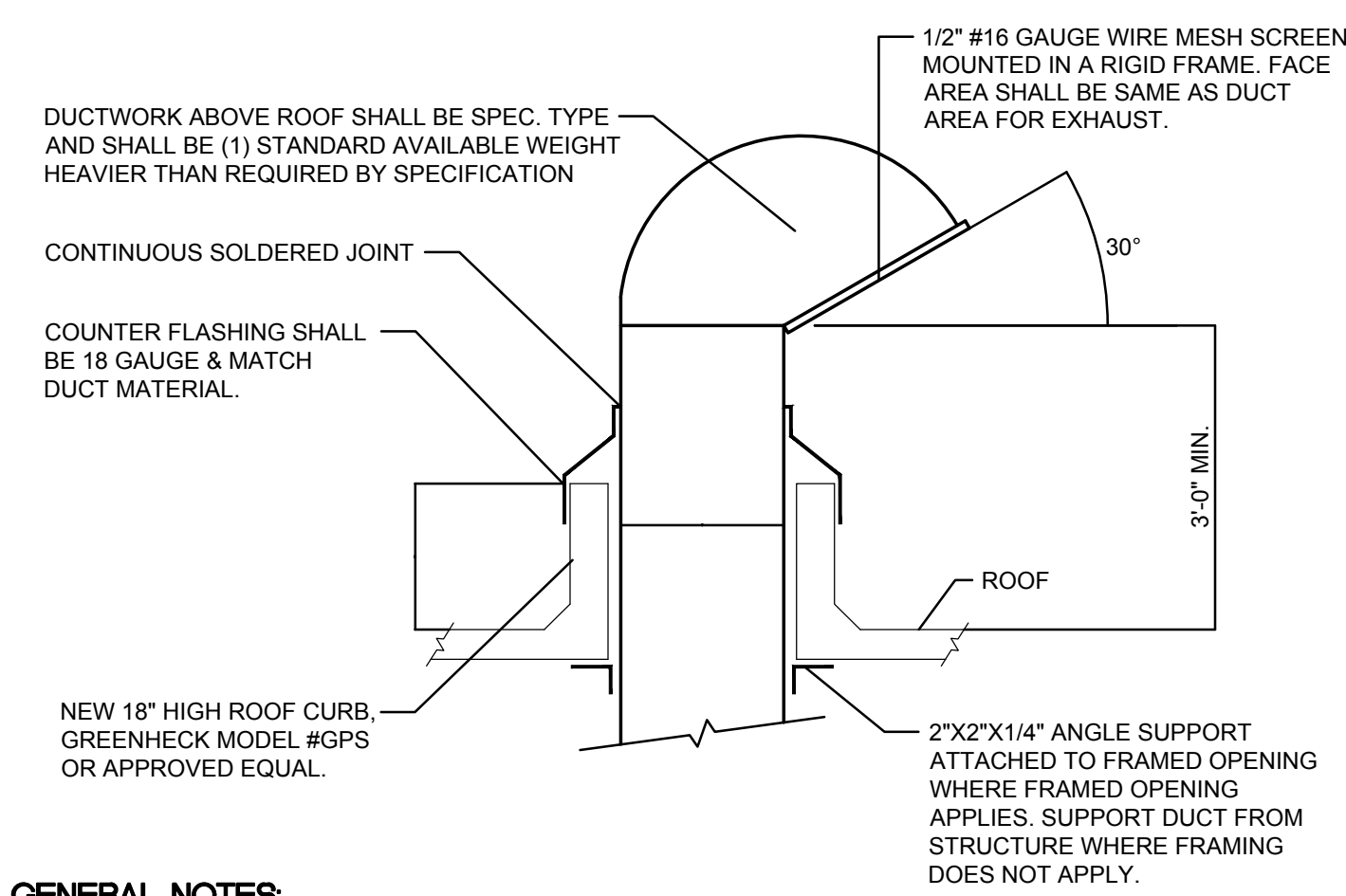
12 SECONDARY LOOP PIPING DETAIL

NOT TO SCALE



13 HOT WATER FTR PIPING W/ CONTROL VALVES DETAIL

NOT TO SCALE



GENERAL NOTES:

- 1. ALL ROOFING ASSOCIATED WITH MECHANICAL WORK IS TO BE BY MECHANICAL CONTRACTOR. THIS INCLUDES CUTTING OF DECK, BLOCKING, CURBS, SUPPORTS ANGLES AND ROOFING PATCH BACK, FLASHING, ETC. (SEE DRAWING A2.03)
- 2. MECHANICAL CONTRACTOR WILL HIRE A ROOFING SUBCONTRACTOR WHO IS CERTIFIED WITH THE EXISTING ROOF MANUFACTURER IN ORDER TO MAINTAIN THE EXISTING WARRANTY.

14 GOSSENECK VENT DETAIL

NOT TO SCALE

VENTILATION SCHEDULE

| Room Name | Floor Area (Sq. Ft.) | Required O.A. per Sq. Ft. | Required O.A. For Space | No. of People | Required O.A. per Person | Required OA For Occupants | Total Min. O.A. Required (CFM) | Zone Air Distribution Effectiveness | Zone Min. O.A. Required (CFM) | Design | | Remarks |
|-------------------------|----------------------|---------------------------|-------------------------|---------------|--------------------------|---------------------------|--------------------------------|-------------------------------------|-------------------------------|------------|------------|---------------|
| | | | | | | | | | | O.A. (CFM) | E.A. (CFM) | |
| WEST SIDE LOCKER ROOM | | | | | | | | | | | | |
| GIRL'S LOCKER ROOM 128A | 697 | - | - | - | - | - | - | - | - | 750 | 555 | 0.25/SF |
| BATHROOM 128F | 190 | - | - | - | - | - | - | - | - | | 250 | 50CFM/FIXT. |
| LOBBY | 43 | 0.06 | 3 | - | - | - | 3 | 0.8 | 3 | 20 | | |
| OFFICE 128D | 115 | 0.06 | 7 | 1 | 5 | 5 | 12 | 0.8 | 15 | 20 | | |
| BATHROOM 128G | 200 | - | - | - | - | - | - | - | - | | 250 | 50CFM/FIXT. |
| BOY'S LOCKER ROOM 128B | 677 | 0.06 | 41 | - | - | - | 41 | 0.8 | 51 | 750 | 555 | 0.25/SF. |
| OFFICE BATHROOM 128E | 127 | - | - | - | - | - | - | - | - | | 100 | 50CFM/FIXT. |
| OFFICE 128C | 115 | 0.06 | 7 | 1 | 5 | 5 | 13 | 0.8 | 16 | 20 | - | |
| CORRIDOR TO LOCKER | 60 | 0.06 | 4 | - | - | - | - | - | 4 | 20 | - | DOOR TRANSFER |
| JANITOR'S CLOSET 128I | 15 | - | - | - | - | - | - | - | - | - | 50 | |
| MECHANICAL ROOM 128H | 247 | 0.12 | 30 | - | 10 | - | 30 | 0.8 | 37 | 70 | - | 50CFM/FIXT. |
| EAST SIDE | | | | | | | | | | | | |
| TRAINER'S ROOM 130F | 200 | 0.06 | 12 | 2 | 5 | 10 | 22 | 0.8 | 28 | 30 | - | |
| STORAGE 130E | 224 | 0.12 | 27 | - | - | - | 27 | 0.8 | 34 | 40 | 50 | |
| STORAGE 130D | 224 | 0.12 | 27 | - | - | - | - | 0.8 | 34 | 40 | 50 | |
| BATHROOM 130C | 66 | - | - | - | - | - | - | 0.8 | - | 85 | 100 | 50CFM/SF/ |
| OFFICE 130B | 102 | 0.06 | 6 | 1 | 5 | 5 | 11 | 0.8 | 14 | 20 | - | |
| CORRIDOR | 105 | 0.06 | 6 | - | - | - | 6 | 0.8 | 8 | 20 | - | |
| MECHANICAL ROOM 130A | 125 | 0.12 | 15 | - | - | - | - | - | 15 | 20 | - | |
| CORRIDOR 130 | 477 | 0.06 | 29 | - | - | - | 29 | 0.8 | 36 | 50 | - | |
| VESTIVULE 130G | 45 | 0.06 | 3 | - | - | - | 3 | 0.8 | 3 | - | - | DOOR TRANSFER |
| WOME'S TOILET 130H | 53 | - | - | - | - | - | - | - | - | - | 50 | 50CFM/FIXT. |
| JANITO'S CLOSET 130J | 16 | 0.06 | - | - | - | - | - | - | - | - | 50 | 50CFM/FIXT. |
| VESTIVULE 130I | 108 | 0.06 | 6 | - | - | - | 6 | 0.8 | 8 | 40 | - | |
| MEN'S BATHROOM 130K | 99 | - | - | - | - | - | - | - | - | 85 | 100 | 50CFM/FIXT. |
| OFFICE 130L | 150 | 0.06 | 9 | 1 | 5 | 5 | 14 | 0.8 | 18 | 20 | - | |
| OFFICE 130M | 167 | 0.06 | 10 | 5 | 5 | 25 | 35 | 0.8 | 44 | 45 | - | |
| SGI ROOM 130N | 343 | 0.12 | 41 | 10 | 5 | 50 | 91 | 0.8 | 114 | 115 | - | |
| TOTAL | 4,990 | | 281 | 21 | | 105 | 342 | | | | | |

Professional seal and signature of Michael J. McGovern, R.A., Registered Architect, State of New York, License No. 022257-1.

Revisions table and disclaimer text regarding unauthorized alterations and the engineer's responsibility.

LAN ASSOCIATES logo and contact information: engineering • planning • architecture • surveying, 252 MAIN STREET, GOSHEN, NEW YORK 10924 (845)818-0350.

Project information: SED PROJECT #66-08-01-06-0-005-020, Mechanical Details & Vent. SCD, Renovations to the Physical Ed. Department, Westlake High School, 825 West Lake Drive, Thornwood, NY 10594. Job No. 4.1449.08, File No. 4144908M101.