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March 19, 2025

### **BID ADDENDUM No. 4**

Re: Bedford UFSD

Phase 2 – Bond Improvements at Fox Lane High School, Fox Lane Middle

School, Administration Building

BBS File No. 23-131a-c

This addendum contains changes to the requirements of the contract drawings and/or project manual. Such changes shall be incorporated into the contract documents and shall apply to the work with the same meaning and force as if they had been included in the original documents. Wherever this addendum modifies a portion of a paragraph of project manual or any portion of the drawing, the remainder of the paragraph or drawing affected shall remain in force.

The conditions of the basic project manual shall govern all work described in this addendum. Wherever the conditions of work and the quality or quantity of materials or workmanship are not fully described in this addendum, the conditions of work, etc. included in the basic project manual for similar items of work shall apply to the work described in this addendum.

The "Conditions of the Contract" apply to all work described in this addendum.

The following changes shall be and are hereby made:

### PROJECT MANUAL MODIFICATIONS

- 1. Specification Section 011000 Summary of Work
  - a. The specification section shall be deleted and replaced with the attached.
- 2. Specification Section 011100 Milestone Schedule
  - a. The specification section shall be deleted and replaced with the attached.
- 3. Specification Section 077233 Roof Hatches
  - a. The specification section attached shall be added to the Project Manual.
- 4. Specification Section 084123 Fire Rated Aluminum Entrances and Storefronts
  - a. The specification section attached shall be added to the Project Manual.

- 5. Specification Section 081210 Demountable Panel Partition (Genius Architectural Wall)
  - a. The specification section attached shall be added to the Project Manual.
- 6. Specification Section 097700 Special Wall Surfaces
  - a. The specification section attached shall be added to the Project Manual.

### CONSTRUCTION DOCUMENT MODIFICATIONS

- 1. 23-131a Drawing CIP0.01 Contractor Access and Temporary Facilities
  - a. Construction drawing shall be deleted and replaced with the attached.
- 2. 23-131a Drawing A8.01 Door Schedule
  - a. Construction drawing shall be deleted and replaced with the attached.
  - b. All TGP fire-rated assemblies shall use 'Pyrostop' glazing as per manufacturer's recommendations. All other references to 'Pyrostop' glazing in fire rated assemblies shall be Fire-Lite Plus glazing.
- 3. 23-131a Drawing S0.02 General Notes, Schedules and Details
  - a. Construction drawing is deleted and replaced with the attached.
- 4. 23-131a Drawing E5.01 Proposed Special Systems Plan Area 'A'
  - a. Construction drawing is deleted and replaced with the attached.
- 5. 23-131a Drawing E5.02 Proposed Special Systems Plan Area 'B'
  - a. Construction drawing is deleted and replaced with the attached.
- 6. 23-131a Drawing E5.03 Proposed Special Systems Plan Area 'C'
  - a. Construction drawing is deleted and replaced with the attached.
- 7. 23-131b Drawing CS3.01 Enlargement Plans New Addition and North Side Security Fencing
  - a. Construction drawing shall be deleted and replaced with the attached.
- 8. 23-131b Drawing CS3.03 Grading, Drainage and Sewer Enlargement Plans New Addition
  - a. Construction drawing shall be deleted and replaced with the attached.
- 9. 23-131b Drawing CS3.04 Grading and Drainage Enlargement Plans Courtyard and Canopy
  - a. Construction drawing shall be deleted and replaced with the attached.
- 10. 23-131b Drawing A0.01 Lower-Level Code Compliance Key Plan
  - a. At Main Lobby / Security Vestibule addition, provide 1-hour spray-applied fireproofing on bottom of roof deck within 10 ft. from the firewall and all new structural supporting members in their entirety.
- 11. 23-131b Drawing A1.01 Demolition Floor Plans
  - a. Construction drawing shall be deleted and replaced with the attached.
- 12. 23-131b Drawing A2.02 Enlarged Addition Proposed Floro Plan and Plan Details
  - a. Construction drawing shall be deleted and replaced with the attached.
- 13. 23-131b Drawing A8.01 Door Schedule and Elevations
  - a. Construction drawing shall be deleted and replaced with the attached.

b. All TGP fire-rated assemblies shall use 'Pyrostop' glazing as per manufacturer's recommendations. All other references to 'Pyrostop' glazing in fire rated assemblies shall be Fire-Lite Plus glazing.

## 14. 23-131a Drawing P1.01 – Demolition Plans

a. Construction drawing is deleted and replaced with the attached.

### 15. 23-131a Drawing P2.01 - Proposed Plan

a. Construction drawing is deleted and replaced with the attached.

### 16. 23-131a Drawing P2.02 – Spart Roof Plans – New Entry and Gym Canopy

a. Construction drawing is deleted and replaced with the attached.

# 17. 23-131a Drawing P6.01 - Schedules and Details

a. Construction drawing is deleted and replaced with the attached.

# **RESPONSE to CONTRACTOR'S WRITTEN RFI's**

#### Pierotti Corp., dated 3/12/25:

- 1. At the High School, interior storefronts type VL-1, VL-2, VL-3, VL-4 all shown to be curved. Is this to be a true radius or are frames / glass segmented along curve?
- 2. There are various elevation tags found on sheet A2.01 that do not seem to coincide with the elevations shown on the respective sheets; this occurs at Large Cafeteria #144, Small Cafeteria #158, Library #113. Student Commons Area.
- 3. Door Schedule on sheet A8.01 shows several aluminum door/frame openings as fire rated; this occurs at doors 140, 148, 149, 152, 153, 155, 156 and 158. Aluminum is not a fire rated material please clarify how these openings should be bid as Kawneer does not offer fire rated doors/frames; TGP does not offer half-lite / narrow-lite / flush doors.
- 4. Specification 084113 Aluminum Entrances and Storefronts calls for doors and frames by Kawneer (section 2.01); however notes on the door schedule sheet A8.01 call out 'Genius Door and Frame by KI Wall' and vision-lite elevations on sheet A8.05 again call for KI Wall Systems; however the storefront specification does not mention KI Wall.
  - a. Please keep in mind that Kawneer does not offer fire rated doors / frames and though TGP offers rated doors and frames they do not offer half-lite / narrow-lite / flush doors; KI wWall does not show any fire rated systems on their website.
  - b. Please clarify how we should price these fire rated aluminum openings as listed on the door schedule.
- 5. Floor plan on sheet A2.01 as Serving Line entrances door frames #148 (SF-11), #149 (SF-11), SF-12, #152 (SF-11) and #153 (SF-11); these openings are listed with 45 min rating on door schedule and notes on frame elevations state to provide fire rated glazing; the floor plans show these systems in partition type I which is not shown as a rated partition on sheet A2.00. Please clarify if these openings are required to be rated.
- 6. <u>Middle School:</u> Storefront type SF-11 as shown on sheet A8.02 calls for '1-hour rated aluminum storefront system with pyrostop glazing'. However, the door schedule (same sheet) calls for frame SF-11 to be hollow metal at doors #302 and #304. Please clarify if this frame is to be a fire rated assembly (1-hour rated aluminum) or hollow metal.
- 7. Middle School: No specification was found for fire rated aluminum systems.
- 8. <u>Middle School:</u> Fire rated assembly manufacturer (TGP) does not offer half-lite doors as shown on sheet A8.02 for door type 'C'; they provide full height glass stile and rail doors only.
- 9. Specification section 085659; section 1.01 B.1 refers to spec section 083453 Aluminum Security Entrances and Storefronts; this spec was not found within the bid documents.

#### **BBS** Response:

- 1. The intent is to segment the frames and glazing within the curved wall.
- 2. All vision-lite tags and storefront tags indicated on drawings A2.01, A2.02 and A2.03 are correct with the storefront elevations shown on A8.02 and the vision-lite elevations shown on A8.05.
- 3. Refer to revisions in this addendum. Door elevations have been revised, and the fire rated aluminum storefront specification has been provided.
- 4. The Genius Wall specification is provided with this addendum.
- 5. Partition type 'I' is a laminated existing wall. In this location the gypsum wallboard is laminated to existing concrete block piers.
- 6. Refer to revisions in this addendum. Door elevations have been revised, and the fire rated aluminum storefront specification has been provided.
- 7. Specification section 084123 is included in this addendum.
- 8. Refer to revisions in this addendum. Door elevations have been revised, and the fire rated aluminum storefront specification has been provided.
- 9. Specification section 083453 is not required for this project.

#### ACS System Associates, Inc., dated 3/13/25:

1. The spec book says that work is to be performed during normal working hours, however there is a fair amount that is scheduled to be done while school is in session. Can you please confirm that all work is straight time or if those portions of work will be on premium time.

### **BBS** Response:

- 1. Work hours will vary as indicated in specification section 011100 Milestone Schedule.
  - a. During Summer and School Vacation Times: Contractors will have access to all project spaces in the building during regular first-shift hours. Access to other areas of the building will be coordinated and approved by the Owner and Construction Manager.
  - b. During School Hours: Contractors may access all designated project spaces within the building during regular first-shift hours. However, access to occupied areas during the school day is strictly prohibited. If work in occupied spaces is necessary, it must be conducted after school hours during a second shift.
  - c. Contractors must include second shift work in their base bid. No work will be permitted during school testing and/or Regents exams. While specific dates have not been determined, contractors should account for five (5) non-working days.
  - d. The abatement contractor will work additional shifts & weekends as necessary to meet contract Milestone dates. Abatement contractors must work multiple crews as required. (Milestone dates include final air clearances and protections)

### Piazza Brothers, dated 3/12/25:

- 1. Fox Lane High School Drawing A0.01 First Floor Code Compliance Key Plan, Fire Resistance Rating
  - a. Descriptions has notes regarding applied and intumescent fireproofing, however, there are no fireproofing details.
  - b. Where is the 2 HR horizontal fire barrier?
  - c. Which columns supporting the Second Floor Only are scheduled to receive intumescent fireproofing?
  - d. Where is the Second Floor Framing Plan?
- Fox Lane Middle School Drawing A0.01 Lower Level Compliance Key Plan, Fire Resistance Rating Descriptions has notes regarding applied and intumescent fireproofing, however, the only details for applied fireproofing are along the firewall, i.e., 'PROVIDE SPRAY APPLIED FIREPROOFING ON

STRUCTURAL COMPONENTS UP TO 10'-0" FROM FIREWALL U.L. No. P819.". There are no intumescent fireproofing details.

- a. Where is the 2 HR horizontal fire barrier?
- b. Which columns supporting the Second Floor Only are scheduled to receive intumescent fireproofing?
- c. Where is the Second Floor Framing Plan?

#### **BBS** Response:

- 1. At Fox Lane High School:
  - a. Spray-applied and intumescent fireproofing is not required on structure, columns or the bottom of the second-floor slab.
  - b. There is no 2-hour horizontal fire barrier required for this project.
  - c. There are no columns scheduled to receive intumescent fireproofing.
  - d. There is no second-floor framing plan required for this project.
- 2. At Fox Lane Middle School:
  - a. Refer to comments above for response to RFI.

#### Piazza Brothers, dated 3/18/25:

1. No landscape plans or more important no plant schedule on any of the civil plans for HS, MS or Admin Building. Forward scope when you can.

#### **BBS Response:**

1. Refer to drawing modifications to the civil drawings included in this addendum.

**END OF ADDENDUM** 

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#### 1.1 PROJECT INFORMATION

- A. Project: Bedford Central School District Phase 2
- B. Project Location: Bedford, NY
- C. Owner: Bedford Central School District
- D. Architect: BBS Architects & Design
- E. Construction Manager: Arris Contracting Company, Inc.
- F. The overall scope of work includes:

Fox Lane High School – abatement, library renovation, cafeteria renovations, locker room renovations, gym and fitness center renovations, guidance and art room renovations, plus all associated. HVAC, electrical and plumbing upgrades.

Fox Lane Middle School – abatement, main office and nurse suite renovation, music room renovation, steam room renovations, main entrance addition, plus all associated. HVAC, electrical and plumbing upgrades.

Administration Building – abatement, men's/women's toilet room renovations plus all associated, custodial storage room addition plus all associated, toilet room renovation, boiler room renovation. HVAC, electrical and plumbing upgrades.

All prime contractors are required to actively coordinate and sequence with other contractors and the owner provided items to ensure accuracy of the installations and a smooth flow of work.

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.
- Prime Contracts are separate contracts between the Owner and separate contractors, representing significant construction activities. Each prime contract is performed concurrently with and closely coordinated with construction activities performed on the Project under prime contracts. Prime contracts for this Project include:
  - a. General Work Contract. (GC or GWC)
  - b. Mechanical Work Contract. (MC, HVAC or HC)
  - c. Electrical Work Contract. (EC)
  - d. Plumbing Work Contract. (PC)

#### 1.2 DIVISION OF WORK

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

- 1. All DIVISION 00 Sections
- 2. All DIVISION 01 Sections

## Special Notes – ALL CONTRACTS:

- 1. Work hours M-F 7:00AM 4:30PM. Contractor will appropriately staff the project to avoid Saturday and Overtime hours which result in Owner, Construction Manager and Architect additional costs. (2<sup>nd</sup> shift where indicated by Milestone schedule 3:00 pm 11:00 pm)
- 2. Delivery black out times- No Contractor trucks/deliveries are allowed during school bus times as indicated by owner approx. **7:00 am 8:30 am or 2:00 pm 3:30 pm**.
- 3. Each prime contractor to include all required insurance coverages as outlined by the General Conditions and front-end sections in their base bid. Provide renewals ahead of expiration. No contractors will be allowed onsite if their insurance has expired.
- 4. Contractors are specifically reminded of 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, within 4 hours of being notified the owner will perform the work with others and deduct the cost from the contractor.
- 5. Each Contractor shall provide suitable rubbish containers device(s) for their own use (both demolition and construction debris), properly maintained and serviced, replaced as required and protected from access by the public fencing as may be specified herein or approved by the Architect or Construction Manager.
- 6. Existing building space may not be used for storage unless approved by Owner.
- 7. Each Contractor is required to submit their corporate safety policy within 10 days of receipt of the Notice to Proceed. Said Policy must minimally meet OSHA Standards and define details concerning the maintenance of a safe work environment and shall also define practices for the maintenance of hygiene and minimizing of the spread of infectious / contagious diseases.

# 1.4 GENERAL WORK CONTRACT (GC or GWC)

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

#### **DIVISION 02 - EXISTING CONDITIONS**

Section 024119 - Selective Demolition

Section 028000 - Asbestos Work Under This Contract

Section 028100 – Asbestos Handling Certificate

Section 028218 - Abatement of Asbestos Flooring/Mastic - Liquid Chemical Scrape Method

Section 029000 - Lead Containing Materials Abatement

### **DIVISION 03 - CONCRETE**

Section 030100 - Concrete Surface Preparation for Coating

Section 030130 - Concrete Reconstruction and Resurfacing (Non-Structural)

Section 030130.11 - Cementitious Concrete Finish Coating

Section 030130.12 - Elastomeric Concrete Finish Coating

Section 033000 - Cast-in-Place Concrete

Section 035416 - Self Leveling Cementitious Underlayment

#### **DIVISION 04 - MASONRY**

Section 040100 - Masonry Restoration and Cleaning

Section 040120 - Masonry Surface Preparation for Coating

Section 040140 - Natural Stone Repair and Repointing

Section 042000 - Unit Masonry

Section 047200 - Architectural Cast Stone

#### **DIVISION 05 - METALS**

Section 050530 - Cold Galvanizing

Section 051200 - Structural Steel Framing

Section 052100 - Steel Joist Framing

Section 053000 - Metal Decking

Section 054000 - Cold Formed Metal Framing

Section 055000 - Metal Fabrications

Section 055200 - Metal Railings

### **DIVISION 06 - WOODS, PLASTICS & COMPOSITES**

Section 061000 - Rough Carpentry

Section 061643 – Exterior Gypsum Sheathing

Section 062000 – Finish Carpentry

Section 068400 – Architectural Composite Columns

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

Section 071000 - Dampproofing

Section 071326 - Self-Adhering Sheet Waterproofing

Section 072100 - Building Insulation

Section 072113 – Ultra Wall Insulation and Air Barrier System

Section 072114 – Mineral Board Insulation (Thermafiber)

Section 072419 - Exterior Insulation and Finish System

Section 072423 - Direct Applied Exterior Finish System

Section 072500 - Gypsum Board Weather-Resistant Barrier & Air Barrier System

Section 072600 - Vapor Retarders

Section 072713 – Self-Adhered Non-Permeable Air Barrier Membrane

Section 073113.10 – Asphalt Shingles (Landmark Premium)

Section 074213.23 – Metal Composite Material Wall Panels (Alucobond)

Section 074293 - Metal Fascia and Soffit Panels

Section 074600 - Vinyl Siding

Section 075216 - SBS Modified Bitumen Roofing (Mop-Torch)

Section 075323 - EPDM Roofing System Fully Adhered

Section 075423 - TPO Roofing System Fully Adhered

Section 076000 - Flashing and Sheet Metal

Section 076219 - Fabricated Gravel Stops and Fascia

Section 077000 - Roof Specialties and Accessories

Section 078100 – Spray-Applied Fire Resistive Materials

Section 078413 – Penetration Firestopping

Section 078443 - Joint Firestopping

Section 079100 - Exterior Wall Joint Seals (Emseal)

Section 079200 - Joint Sealants

Section 079219 - Acoustical Joint Sealants

Section 079513 - Expansion Joint Cover Assemblies

### **DIVISION 08 - OPENINGS**

Section 081113 - Hollow Metal Doors and Frames

Section 081416 - Flush Wood Doors

Section 083300 - Rolling Counter Fire Shutters

Section 084113 - Aluminum Entrances and Storefronts

Section 085113 - Aluminum Windows

Section 085659 - Aluminum Voice Around Transaction Security Window

Section 087100 - Door Hardware

Section 088000 - Glazing

Section 088200 - Metal Window Panels

Section 088723 - Security Window Film

Section 088813 - Fire Rated Glazing

### **DIVISION 09 - FINISHES**

Section 090561.13 - Moisture Vapor Emission Control

Section 092300 - Gypsum Plaster

Section 092900 - Gypsum Wall Board

Section 093013 - Porcelain and Glazed Ceramic Tile

Section 095000 - Acoustical Ceiling Systems

Section 095133 - Acoustical Metal Ceiling Systems

Section 095426 – Suspended Wood Ceilings

Section 096466.11 - Wood Athletic Flooring (Conner "Duracushion III")

Section 096513 - Resilient Rubber Stair Treads

Section 096519 - Resilient Tile Flooring

Section 096566.11 – Indoor Resilient Athletic Surfacing

Section 096623 - Thin-Set Epoxy Terrazzo Flooring

Section 096723.12 - Resinous Flooring (Accelera-C)

Section 096766 - Polyurethane Floor System

Section 096800 - Carpeting

Section 098129 - Sprayed Acoustical Applications

Section 098413 - Acoustical Wall Panels

Section 098413.11 - Sound-Absorbing Wall Panels

Section 099000 - Painting

Section 099600.11 - High-Performance Coatings (Scrubtough)

#### **DIVISION 10 - SPECIALTIES**

Section 101100 - Visual Display Units

Section 101400 - Signage

Section 101416 - Roof Identification Plaque

Section 101453 - Traffic Signage

Section 102119 - Plastic Toilet Compartments

Section 102226 – Operable Partitions Section 102813 – Toilet Accessories

Section 104400 - Fire Extinguishers, Cabinets and Accessories

Section 105114 - Fully-Welded Athletic Lockers

### **DIVISION 11 – EQUIPMENT**

Section 111200 - Parking Control Equipment

#### **DIVISION 12 - FURNISHINGS**

Section 122400 - Manual Operated Roller Shades

Section 123200 - Laboratory Wood Casework and Equipment

Section 123213 - Wood Casework and Classroom Wardrobe Units

Section 123216 - Manufactured Plastic-Laminate-Clad Casework

#### **DIVISION 31 – EARTHWORK**

Section 310000 - Earthwork

Section 310001 - Site Work General Provisions

Section 310002 - Stake Out

Section 311000 - Site Clearing

Section 312317 - Trenching

Section 312318 - Rock Removal

Section 312500 - Erosion and Sediment Controls

Section 312510 - Temporary Tree and Plant Protection

#### **DIVISION 32 – EXTERIOR IMPROVEMENTS**

Section 320116 - Cold Milling

Section 320117 - Pavement Repair and Resurfacing

Section 321216 - Asphalt Paving

Section 321216.11 - Asphalt Overlay

Section 321236 - Pavement Sealing

Section 321413.19 - Permeable Pre-Cast Concrete Unit Paving

Section 321640 - Granite Curbs

Section 321723 - Pavement Markings

Section 321913.14 – Playground Surfacing (Synthetic Grass)

Section 322700 - Site Furnishings

Section 323113 - Vinyl Coated Chain Link Fences and Gates

Section 323119 - Decorative Metal Fences and Gates

Section 323223 - Segmented Retaining Walls

Section 328000 - Irrigation System

Section 329200 - Turf and Grasses

Section 329219 - Seeding

Section 329219.11 - Native Plant Seeding

Section 329300 - Plants

Section 329301 - Plant Maintenance

#### **DIVISION 33 – UTILITIES**

Section 333000 - Sanitary Sewage

Section 334000 - Storm Drainage Utilities

Section 334000.11 - Cleaning Existing Storm Water Drainage Systems

Section 334010 - Storm Water Drainage Retention Structures

Section 334100 - Reinforced Concrete Piping

Section 334613 – Subsurface Drainage System (Foundation Walls)

### Special Notes: General Work Contract (GC or GWC):

- 1. All exterior site work (walks, stairs, asphalt, etc.) is by the General Contractor.
- 2. General Contractor will include in their base bid to supply and install ¼" thick minimum of self-leveling for ALL areas receiving new flooring at all schools. The thickness will vary due to varying floor slab elevations from room to room, areas where chases and walls removed, ceramic tile removed, floor abatement, grind down high spots, etc. GC will closely review and bid accordingly to achieve a consistent flat and level floor at no additional cost to Owner.
- All asbestos abatement work is by the General Contractor. GC is specifically notified that
  they will need to provide temporary framing/plywood protections to secure window wall
  openings after abatement is completed.
- 4. Access doors for MEP trades furnished by trade requiring access; installation by General Contractor.
- 5. All new windows to receive window shades.
- 6. Fire Alarm magnetic holders furnished and wired by Electrical Contractor, installed on door by the General Contractor.
- 7. In addition to daily general housekeeping, the General Contractor shall provide a weekly broom sweep and damp mop of all areas for the entire duration of the project.
- 8. For roof Skylight removals and install, General Contractor will abate area, cut hole, install wood blocking & flash for watertight installation using a roofer who is certified by the existing roof manufacturer to maintain warranty coverage. (Roof abatement and related patching for HVAC items will be by the General Contractor)
- 9. General Contractor will install floor protections (utilizing heavy duty "Ram-Board" with taped joints, or equivalent) to protect new floor surfaces from damage until final cleaning and acceptance by owner.

#### 1.5 MECHANICAL WORK CONTRACT (MC, HVAC or HC)

In addition to the General Requirements, Division 1, included in this bid package contractor 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 02 - EXISTING CONDITIONS**

Section 024119 – Selective Demolition (Building)
Section 028000 – Asbestos Work Under This Contract (As needed for Mechanical Work)
Section 029000 – Lead Containing Materials Abatement (As needed for Mechanical Work)

## **DIVISION 03 - CONCRETE**

Section 033000 - Cast-in-Place Concrete (For Mechanical related pads, etc.)

#### **DIVISION 05 - METALS**

Section 051200 – Structural Steel Framing (For Mechanical penetrations, etc.) Section 055000 – Metal Fabrications (For Mechanical penetrations, etc.)

# **DIVISION 06 - WOODS, PLASTICS & COMPOSITES**

Section 061000 - Rough Carpentry (For Mechanical related blocking, etc.)

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

Section 075323 – EPDM Roofing System Fully Adhered (As needed for Mechanical Work)

Section 075423 - TPO Roofing Fully Adhered (As needed for Mechanical Work)

Section 076000 – Flashing and Sheet Metal (As needed for Mechanical Work)

Section 078413 – Penetration Firestopping (As needed for Mechanical Work)

Section 079200 - Joint Sealants (As needed for Mechanical Work)

#### **DIVISION 23 – HEATING, VENTILATING AND AIR CONDITIONING (HVAC)**

Section 230000 - General Provisions

Section 230010 - Codes, Standards and Permits

Section 230300 - Basic Mechanical Materials and Methods

Section 230400 – Painting of Mechanical Work

Section 230513 - Common Motor Requirements for HVAC Equipment

Section 230516 - Expansion Compensation

Section 230519 – Meters and Gauges for HVAC Piping

Section 230523 - General Duty Valves for HVAC Piping

Section 230548 - Vibration Controls for HVAC

Section 230580 - Mechanical Testing Requirements

Section 230593 – HVAC Testing, Adjusting and Balancing

Section 230680 - Fire Stopping

Section 230700 - HVAC Insulation

Section 230713 - Duct Insulation - Interior Section 230714 – Duct Insulation – Exterior Section 230800 - Commissioning of HVAC Section 230900 – Direct Digital Control System for HVAC Section 230923 – Automatic Temperature Control Systems (Andover) Section 230923.1 - Automatic Temperature Control Systems (Andover) - Maintenance Building Section 230923.2 – Sequence of Operations Section 231123 - Facility Natural-Gas Piping Section 232113 - Hydronic Piping Section 232116 - Hydronic Piping Specialties Section 232123 - Hydronic Pumps Section 232213 – Steam and Condensate Piping Section 232300 - Refrigeration Piping Systems Section 233000 - Air Distribution Section 233101 - Duct Cleaning Section 233113 - Ductwork Section 233300 - Duct Accessories Section 233400 - Fans Section 233543 – Variable Frequency Drives Section 233600 - Air Terminal Units Section 233713 - Diffusers, Registers and Grilles Section 234568 – Hydronic Finned Tube Radiation Section 235100 - Chimneys & Breeching Section 235200 - Cast Iron Boilers, Burners, Lead Lag Equipment Section 236000 - VRF System Indoor Evaporator Units (2 to 5 Ton) Section 236700 – VRF System Outdoor Condenser Units (6 to 42 Tons) Section 238126 - VRF System Outdoor Condenser Units (6 to 42 Tons) Section 238126.1 - VRF System Outdoor Condenser Units (1 to 3 Tons) Section 237406 – Packaged Rooftop Ventilators with Energy Recovery Section 237433 - Indoor Package Make-up Air Unit with Heating Section 237488 – Dedicated Outdoor Air Systems with Energy Recovery Section 238223 - Unit Ventilators Section 238236 - Heating & Cooling Terminal Units Section 238239.1 – Hydronic Cabinet Unit Heaters Section 238239.2 - Electric Cabinet Heaters

#### **DIVISION 26 - ELECTRICAL**

Section 260519 - Low Voltage Electrical Power Conductors and Cables (For HVAC control wiring)

#### Special Notes: Mechanical Work Contract (MC, HVAC or HC):

 Access doors are furnished by the Mechanical Contractor and installed by the General Contractor.

- 2. All HVAC Louvers/vents are supplied and installed by the Mechanical Contractor. MC will make their own penetration cuts through existing walls, install lintels and/or new metal panels provided by the General Contractor.
- 3. Mechanical Contractor to provide finished end caps and/or trim necessary to properly finish off any areas where HVAC units have been cut into existing fin tube, cabinets, etc.
- 4. Mechanical related roofing work is by the Mechanical Contractor. MC will layout mechanical work, furnish new roof curbs and install new rooftop units. The General Contractor will cut holes, install steel supports/wood blocking, install curb/rails, flash, and provide watertight installation using roofer subcontractor who is approved by manufacturer of existing roofing system to maintain warranty. (Roof Skylight work is by General Contractor)
- 5. VFD's, disconnects, starters, etc. are to be supplied by the Mechanical Contractor, and will be installed by the Electrical Contractor, unless noted otherwise.
- 6. All HVAC control wiring is provided and installed by the Mechanical Contractor. (Power wiring to units by the Electrical Contractor)
- 7. Mechanical Contractor is responsible for making their own through wall and through floor duct/piping penetrations and associated patching/fire-stopping.
- 8. Any existing ceiling removal/replacement and modifications necessary to install new mechanical work to be done by the Mechanical Contractor.
- 9. Fire Alarm Duct detectors supplied and wired by the Electrical Contractor. (Mechanical Contractor installs the duct detector)
- 10. Solenoid valves supplied and installed by Mechanical Contractor will be wired by Electrical Contractor, unless noted otherwise.

#### 1.6 ELECTRICAL WORK CONTRACT (EC)

In addition to the General Requirements, Division 1, included in this bid package contractor 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 02 - EXISTING CONDITIONS**

Section 024119 – Selective Demolition (Building)

#### **DIVISION 03 - CONCRETE**

Section 033000 - Cast-in-Place Concrete (As needed for Electrical Work)

### **DIVISION 05 - METALS**

Section 055000 – Metal Fabrications (As needed for Electrical Work)

#### **DIVISION 06 - WOODS, PLASTICS & COMPOSITES**

Section 061000 – Rough Carpentry (As needed for Electrical Work)

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

Section 078413 – Penetration Firestopping (As needed for Electrical Work)

### **DIVISION 26 - ELECTRICAL**

Section 260500 - Common Work Results for Electrical

Section 260519 - Low Voltage Electrical Power Conductors and Cables

Section 260526 - Grounding and Bonding

Section 260529 - Fasteners, Attachments and Supporting Devices

Section 260532 - Raceways, Fittings and Accessories

Section 260534 - Outlet Junction and Pull Boxes

Section 260543 - Underground Cable and Conduit Systems

Section 260553 - Identification for Electrical Systems

Section 260810 - Mandatory UL Participation

Section 260924 - Lighting Controls - Lutron Vive

Section 260943 - Network Lighting Controls

Section 260943.13 - Wireless Network Lighting Controls

Section 262213 - Dry-Type Distribution Transformers

Section 262416 - Panelboards

Section 262726 - Wiring Devices

Section 262816 - Heavy Duty Safety Switches

Section 265100 - Interior Lighting

Section 265600 - Exterior Lighting

### **DIVISION 27 - COMMUNICATIONS**

Section 271501 - Communications and Horizontal Cabling

Section 272000 - Data Communications Network Equipment

Section 274116 - Audio Visual Systems

Section 274116.10 - PA Sound System - Modify/Expand Existing System

Section 275313 - Synchronized Clock Systems

#### <u>DIVISION 28 – ELECTRONIC SAFETY AND SECURITY</u>

Section 281500 - Integrated Access Control Hardware

Section 281523.17 - Audio Video Intercom (IP)

Section 282100 - Surveillance Cameras

Section 284613.10 – Fire Alarm (Modify Existing)

### **DIVISION 31 – EARTHWORK**

Section 310000 – Earthwork (as needed for Electrical Work)

Section 310001 - Site Work General Provisions (As needed for Electrical Work)

#### **DIVISION 32 – EXTERIOR IMPROVEMENTS**

Section 321216 – Asphalt Paving (As needed for Electrical Work)

### **Special Notes: Electrical Work Contract (EC)**

- Access doors if needed for electrical are furnished by Electrical Contractor and installed by General Contractor.
- 2. VFD's, disconnects, motor starters, etc. which are supplied by Mechanical Contractor will be installed by Electrical Contractor, unless noted otherwise.
- 3. Any excavation/backfill for electrical items (U/G conduits, site lighting bases, etc.) is by the Electrical Contractor. This includes proper backfill, compaction and restoration to original condition for any impacted surfaces.
- 4. Any existing ceiling removal/replacement necessary to install new electrical work to be done by the Electrical Contractor. (e.g. new conduits for feeders through existing ceilings, etc.). In areas of ceiling removal, the EC will tie up and secure any low hanging wires, using zip ties at 6'-0" on center.
- 5. Electrical Contractor will relocate existing utilities which conflict with the new construction. (e.g. wire mold on casework or window wall scheduled for replacement.
- 6. Fire Alarm magnetic holders furnished and wired by Electrical Contractor, Installed on door by the General Contractor.
- 7. All systems work is by Electrical Contractor including Fire Alarm, Security, PA system Door Access, WAP's, Data, etc. (This includes removal and reinstallation of any devices impacted by new construction work).
- 8. Any wood blocking or panel backboards for electrical items by Electrical Contractor.
- 9. All concrete for electrical items is by Electrical Contractor. (Site Lighting bases, conduit encasement, etc.)
- 10. Electrical Contractor to wire any Fire Alarm duct detectors which are provided by the Mechanical Contractor.
- 11. Electrical Contractor is 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.
- 12. Solenoid valves supplied and installed by Mechanical Contractor will be wired by Electrical Contractor, unless noted otherwise.

### 1.7 PLUMBING WORK CONTRACT (PC)

In addition to the General Requirements, Division 1, included in this bid package contractor 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 02 - EXISTING CONDITIONS**

Section 024119 – Selective Demolition (Building)

### **DIVISION 03 - CONCRETE**

Section 033000 - Cast-in-Place Concrete (As needed for Plumbing Work)

### **DIVISION 05 - METALS**

Section 055000 - Metal Fabrications (As needed for Plumbing Work)

### **DIVISION 06 - WOODS, PLASTICS & COMPOSITES**

Section 061000 - Rough Carpentry (As needed for Plumbing Work)

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

Section 078413 - Penetration Firestopping (As needed for Plumbing Work)

### **DIVISION 21 – FIRE SUPPRESSION**

Section 210500 - Fire Sprinkler Work included

### **DIVISION 22 - PLUMBING**

Section 220000 - Plumbing General Provisions

Section 220010 - Codes, Standards & Permits

Section 220020 - Cutting and Patching

Section 220030 - Schedule of Equivalency

Section 220100 - Maintenance Instructions

Section 220300 - Plumbing Basic Materials & Methods

Section 220553 - Plumbing Identification Systems

Section 220555 - Access to Plumbing Work

Section 220680 - Fire Stopping

Section 220719 - Plumbing Insulation

Section 220801 - Plumbing Testing, Adjusting & Balancing

Section 221000 - Plumbing Piping Systems

Section 221316 - Sanitary Waste and Vent Piping

Section 221400 - Storm Water Piping

Section 224000 - Plumbing Fixtures and Trim

## **DIVISION 31 – EARTHWORK**

Section 310000 – Earthwork (As needed for Plumbing Work)

Section 310001 – Site Work General Provisions (As needed for Plumbing Work)

### **DIVISION 33 – UTILITIES**

Section 333000 – Sanitary Sewage (As needed for Plumbing Work) Section 334000 – Storm Drainage Utilities (As needed for Plumbing Work)

### **Special Notes: Plumbing Work Contractor (PC):**

- 1. Access doors are furnished by Plumbing Contractor and installed by General Contractor.
- 2. Any control wiring for plumbing supplied equipment is provided and installed by Plumbing Contractor. (Power wiring by Electrical Contractor)
- 3. Plumbing Contractor is responsible for making their own through wall and through floor piping penetrations and associated patching/fire-stopping.
- 4. Plumbing Contractor is responsible for any plumbing-related sub slab cut and patch. This includes existing slab sawcut, chop out concrete, excavation, sub slab piping, trench drains, backfill with 3/8" pea gravel, new concrete slab patch.
- Plumbing related roofing work is by the Plumbing Contractor. PC to remove and install roof drains.

#### 1.8 PRIME CONTRACTOR'S USE OF PREMISES

- A. 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.
- B. Driveways and Entrances: Keep driveways and entrances serving the premises clear and available to the Owner, the Owner 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.
- C. Owner's representative(s) will cover the project for the standard Monday Friday shift. If a contractor requests additional hours to make up schedule time or weekends, he will need to reimburse Owner for additional coverage or costs (e.g. Architect, Construction Manager, etc.) at their contractual rate.
- D. 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 to minimize space and time requirements for storage of materials and equipment on site.
- E. After the 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.
- F. 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.

- G. 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 from the Owner, which may be withheld in the sole discretion of the Owner.
- H. The Contractor(s) 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 building adjacent to the site of the work or the building in the event of partial occupancy.
- I. Maintain the 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 during the construction period.
- J. Each Prime Contractor is responsible for maintaining a safe jobsite. This includes 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 ensure 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 the General Conditions including providing their employees with PPE (personal protective equipment) such as masks, hand sanitizer, hard hats, proper work boots, safety harness, safety glasses, etc.
- K. Tobacco use in any form, drinking alcoholic beverages or open fires will not be permitted on the project site.
- L. Utility Outages and Shutdown:
  - 1. Limit the disruption of utility services to hours the building is unoccupied, weekends or holidays at no additional cost.
  - Do not disrupt or shut down line safety systems, including but not limited to fire sprinklers and fire alarm system, without 7 days' notice to Owner and authorities having jurisdiction.
  - 3. Prevent accidental disruption of utility services to other facilities.
  - All costs for manning of temporary shutdowns and utility crossovers, including 24-hour fire watch if necessary, are included in the contractor's bid regardless of weekend, holiday, etc

### 1.9 OCCUPANCY REQUIREMENTS

- A. 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.
- B. The Architect will prepare a Certificate of Substantial Completion for each specific portion of the work to be occupied prior to Owner occupancy.
- C. Obtain a Certificate of Occupancy from local building officials prior to Owner occupancy.
- D. 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.

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

#### 1.10 DEFINITIONS

- A. Definitions as applied to "Contractors" involved with the work of this Project:
  - 1. "The Contractor" or "Contractor" meaning that Respective Prime Contractor normally responsible for that work referenced;
  - 2. "Respective Prime Contractor" meaning either the General Contractor, Plumbing, HVAC, Electrical, Sitework, Fire Protection Contractors normally responsible for the referenced work.
  - 3. "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.
  - 4. 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".
- B. The Owner 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.
- C. The Owner will purchase certain items required for the overall operation of this facility through outside vendors.
- D. The Contractor(s) will cooperate with said vendors as may be necessary to permit the work to be accomplished.
  - 1. The cooperation may extend to the receiving, unloading and placement of said equipment if directed by the Owner.
  - 2. Each Contractor is advised that the Owner may enter into separate contracts as may be in their best interest.
  - Each Contractor is further advised that there will be a full on-site Project Representative/Construction Manager, whose duties will be defined at the preconstruction meeting.

#### 1.11 ADDITIONAL SECURITY PROVISIONS

- A. All Contractors' employees shall use a single means of access and egress, except in the case of emergency, to be designated by the Construction Manager.
- B. 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 upto-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

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

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

#### 1.13 CONSTRUCTION TIME AND PHASING REQUIREMENTS

- A. Each Contractor is advised the "time is of the essence" of the Contract as defined in 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.
- B. Time of Completion shall be as established in the Milestone Schedules (Section 011100).
- C. 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.
- D. Maintain at all times, all exits and walkways.
- E. 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.
- F. Construction Phasing: The phasing and/ or milestone schedule contained in Section 011100 has been established for the overall construction of the project.
- G. Electrical and mechanical services to the functioning spaces shall be maintained at all times.
- H. 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.
  - 2. Heat loss from existing building, water (rain or ground) infiltration into existing building.
- J. 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.
- K. 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, DELIVERY DATES AND SUPPLY CHAIN TRACKING

- A. 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.
- B. To mitigate potential disruptions in material supply chains, the Contractor(s) must procure all necessary project materials in advance and store them onsite in their own Conex boxes.

This requirement applies to commonly available materials such as piping, conduits, wire, and metal studs. The owner will compensate for these stored materials upon delivery to the jobsite, as outlined in Section 012900.

C. 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.

#### 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.

#### 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 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 Owner
- 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 sheet rocking 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 stopwork 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.

- A. 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.
- B. If the work is complete but the area has not been cleaned or debris and equipment remain, the Owner and/or Construction Manager will notify the Contractor of the deficiencies. The Contractor will have up to four hours to clean the specified area(s) to the satisfaction of the Owner and/or Construction Manager. If the Contractor fails to do so, the Owner reserves the right to prepare the area for occupancy using their own resources and deduct the associated costs from the Contract amount.
- C. 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 must be regulated by a flagman. Trucking and delivery operation should be coordinated with Construction Manager's Superintendent and all other trades.
- D. Contractor is responsible to maintain existing site fencing in its existing condition. Modifications of the fence to better accommodate the contract work can be discussed with the Construction Manager. These changes shall than 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 changed to this Contractor.
- E. Contractor's personnel will not be permitted to use Owners facilities (including toilet, telephone, food services, etc.) for their own benefit. Contractor's Superintendent must explain this to all their field forces.
- F. Contractor shall limit his operations including storage of materials and prefabrication to areas within the Contract Limit Lines.
- G. 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.
- H. Contractor shall obtain and pay for off-site storage as needed to maintain the Owner's use of their premises. The costs of any required storage shall not be an additional expense to the Owner.
- 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 ensure security for the Owner's Property.
- J. The intention of the work is to follow a logical sequence; however, the Contractor may be required by Construction Manger 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.
- K. Contractor shall submit a three-week (man-loaded 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.
- L. 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 coordination drawings and actively participate in resolving discrepancies, conflicts, interferences, etc.
- M. The Contractor shall take special care in verifying that his equipment matches the characteristics of the power being supplied.
- N. 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.
- O. 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.
- P. Each Contractor is responsible to supply and install all blocking/bracing necessary to properly secure their work. This responsibility includes coordinating the installation in concealed areas without delaying other trades.
- Q. Union business shall not be conducted on site. Any Union representative that visits 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 representatives 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.
- R. 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.
- S. Contractor shall submit hourly rate sheets that would apply to time and material work for all pertinent trades upon Award of Contract.
- T. 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 work implies acceptance of existing conditions.
- U. 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 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.
- V. 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.
- W. 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.
- X. 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.
- Y. Each Contractor shall coordinate with the Construction Manager for lay down areas, staging areas, and overall use of project site.
- Z. All Contractors and their employees, subcontractors and supplier are expressly prohibited from entering the occupied areas of the school building during school hours without prior written permission of the Construction Manager and for using any of its facilities (i.e. restrooms, cafeteria, etc.).
- AA. No recycled import fill materials are permitted.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION 011000

### **SECTION 01 11 00 MILESTONE**

# **SCHEDULE**

Part 1 - GENERAL

### 1.1 Milestone

Bedford CSD Phase 2 - FLMS/FLHS/Admin

The following milestone schedule serves as basis for bidding. A Final Construction Schedule will be developed at a general meeting within 21 days of Letter of Intent to Award the Contracts. Contractor will coordinate activities, forward submittals, deliver materials and provide the necessary workforce to meet the milestones listed below.

# 1.2 Milestone Schedule – Fox Lane High School

Bedford CSD Phase 2 – Fox Lane High School	Start	Finish
Fox Lane High School – Mobilization, Staging Areas, Temporary Walls/Doors at Small Locker Room	06/27/25	07/25/25
High School Media Center/Library/Guidance – Abatement – Work weekends of 6/28 and 7/5 to meet 7/8/25 date. (All dates include final air clearances and protections)	06/27/25	07/08/25
High School Media Center/Library/Guidance – Temporary protective walls, demo Library/Guidance (prior to students return), Temporary Exit Corridor/Exterior Doors	06/27/25	08/22/25
High School Media Center/Library/Guidance – Substantial completion		05/01/26
High School Media Center/Library/Guidance – Punch list preparation	05/11/26	05/15/26
High School Media Center/Library/Guidance – Punch list completion	05/18/26	05/29/26
High School Media Center/Library/Guidance – Full duration of renovation work	06/27/25	05/29/26
High School Large Locker Room – Abatement – Work weekends of 7/12 and 7/19 to meet 7/21/25 date. (All dates include final air clearances and protections)	07/09/25	07/21/25
High School Large Locker Room – Substantial completion		01/23/26
High School Large Locker Room – Punch list preparation	02/02/26	02/06/26
High School Large Locker Room – Punch list completion	02/09/26	02/20/26
High School Large Locker Room – Full duration of renovation work	07/22/25	02/20/26

High School Small Locker Room – Convert Small Locker Room	07/09/25	00/04/05
into Girl's & Boy's Locker Room, install temporary divider walls (for separate Locker Rooms)	01/03/20	08/01/25
High School Small Locker Room – Abatement – Work weekends/multiple crews/shifts to complete prior to students return from February Break. (All dates include final air clearances and protections)	February Break 2026	February Break 2026
High School Small Locker Room – Create new Staging Area outside	03/02/26	03/13/26
High School Small Locker Room – Substantial completion		07/24/26
High School Small Locker Room – Punch list preparation	08/03/26	08/07/26
High School Small Locker Room – Punch list completion	08/10/26	08/24/26
High School Small Locker Room – Full duration of renovation work	03/16/26	08/24/26
High School Cafeteria – Abatement – (All dates include final air clearances and protections)	06/27/26	07/08/26
High School Cafeteria/Corridor/Art/Fitness Center – Substantial completion		07/17/26
High School Cafeteria/Corridor/Art/Fitness Center – Punch list preparation	07/27/26	07/31/26
High School Cafeteria/Corridor/Art/Fitness Center – Punch list completion	08/03/26	08/14/26
High School Cafeteria/Corridor/Art/Fitness Center – Full duration of renovation work. (Including any remaining items not otherwise listed)	06/29/26	08/14/26
Fox Lane High School – Restore courtyard and parking areas	06/29/26	07/31/26
Fox Lane High School – Main Office move-in, Library/Guidance move-in	06/29/26	08/14/26

# 1.3 Milestone Schedule – Fox Lane Middle School

Bedford CSD Phase 2 – Fox Lane Middle School	Start	Finish
<ul> <li>Fox Lane Middle School – Electrical contractor will survey the existing main office systems wiring (Data, PA, FA, etc.) trace/ring out, label, and remove any abandoned wires. EC to mark results on a drawing for record (2<sup>nd</sup> Shift – full clean-up each night for following day's school)</li> </ul>	04/14/25	05/09/25
Middle School Covered Walkway – Substantial completion		08/25/25
Middle School Covered Walkway – Punch list preparation	09/08/25	09/12/25

Middle School	Covered Walkway – Punch list completion	09/15/25	09/26/25
	Covered Walkway – Full duration of addition work s to be maintained during construction)	06/27/25	09/26/25
Abatement – Wo	Main Office/Nurse Suite/Music/STEAM – ork weekends of 6/28 and 7/5 to meet 7/8/25 date. le final air clearances and protections)	06/27/25	07/08/25
Middle School     Substantial com	Main Office/Nurse Suite/Music/STEAM – pletion		07/17/26
Middle School preparation	Main Office/Nurse Suite/Music/STEAM – Punch lis	ot 07/27/26	07/31/26
Middle School completion	Main Office/Nurse Suite/Music/STEAM – Punch lis	ost 08/03/26	08/14/26
Middle School duration of renovation	Main Office/Nurse Suite/Music/STEAM – Full vation work	06/29/26	08/14/26
	New Entrance – Foundations, slab, ramp & stairs, and roofing. (Student and public access to being construction)	06/27/25	08/22/25
Middle School	New Entrance – Substantial completion		07/20/26
Middle School	New Entrance – Punch list preparation	08/03/26	08/07/26
Middle School	New Entrance – Punch list completion	08/10/26	08/24/26
Middle School work	New Entrance – Duration of all remaining addition	06/29/26	08/24/26
<ul><li>Middle School completion</li></ul>	Outdoor Shelter Wall (ALTERNATE) – Substantial		07/28/25
<ul><li>Middle School preparation</li></ul>	Outdoor Shelter Wall (ALTERNATE) – Punch list	08/11/25	08/15/25
<ul> <li>Middle School completion</li> </ul>	Outdoor Shelter Wall (ALTERNATE) – Punch list	08/18/25	08/29/25
	Outdoor Shelter Wall (ALTERNATE) – Full duratio (Through-access to be maintained during	n 06/27/25	08/29/25
Middle School     Temporary site s	Outdoor Amphitheater (ALTERNATE) – security fencing	06/29/26	08/07/26
Middle School     Substantial com	Outdoor Amphitheater (ALTERNATE) – apletion		07/17/26
Middle School preparation	Outdoor Amphitheater (ALTERNATE) – Punch list	07/27/26	07/31/26
Middle School completion	Outdoor Amphitheater (ALTERNATE) – Punch list	08/03/26	08/14/26

Middle School Outdoor Amphitheater (ALTERNATE) – Full duration of renovation work	06/29/26	08/14/26
Middle School Central Building Corridor  Abatement Central Building Corridor, New LVT Flooring Corridor. Any remaining items not otherwise listed.	06/29/26	08/14/26

### Work hours will vary:

- 1. During Summer and School Vacation Times: Contractors will have access to all project spaces in the building during regular first-shift hours. Access to other areas of the building will be coordinated and approved by the Owner and Construction Manager.
- 2. During School Hours: Contractors may access all designated project spaces within the building during regular first-shift hours. However, access to occupied areas during the school day is strictly prohibited. If work in occupied spaces is necessary, it must be conducted after school hours during a second shift. Contractors must include second shift work in their base bid. No work will be permitted during school testing and/or Regents exams. While specific dates have not been determined, contractors should account for five (5) non-working days.
- 3. Abatement contractor will work additional shifts & weekends as necessary to meet contract Milestone dates. Abatement contractor must work multiple crews as required. (Milestone dates include final air clearances and protections)

#### Other Provisions:

- 1. All Work required by any of the Owner's representatives and consultants, including the Construction Manager, Architect, Architect's consultants, Owner's Attorneys, etc., to execute final the contract beyond Milestone dates, or to execute final closeout after 30 days past substantial completion, if determined to be caused by Contractor, shall result in payment(s) to the Owner for additional services to the Construction Manager, Architect, Architect's consultants, Owner's Attorneys, etc. These costs will then be issued in the form of a Deduct Change Order to the Contractor's contract at the Owner consultant's contractual rate.
- 2. Due to space limitations at the jobsite, all Prime Contractors are specifically notified that jobsite material lay-down areas will need to be relocated as necessary. All contractors are required to comply with Construction Managers direction and sequencing.
- 3. Any additional costs incurred by the owner's representatives, including the Construction Manager, Architect, Owner's staff, Owner's consultants and any related costs, due to schedule overruns beyond the milestone dates, if determined to be the contractor's responsibility, will result in a deduct change order at the contractual rate established by the Owner or their representatives.
- 4. Enough workforce 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 staffing the job.
- 5. The objective of this project is to complete the overall work in the shortest duration of time. Thus, if access is provided to a work area sooner than originally scheduled, each contractor will likewise mobilize their forces earlier to maintain the reduction in overall schedule time.
- 6. Each Contractor is advised that "Time is of the essence" as per the General Conditions of the Contract and they will work with multiple crews of sufficient size as necessary to carry out the work with the utmost speed with good workmanship. If the contractor fails to expedite and pursue any part of the work, the Owner may order the contractor to take "Extraordinary Measures" or hire others to complete the work and adjust their contract amount accordingly as per the General Conditions.
- 7. Contractors are specifically notified that they must properly staff the project with a competent field superintendent and a sufficient supply of workers to maintain progress and flow of the work as required by the schedule, and to coordinate/install in a timely manner to facilitate the work of other trades.

8. All trades are hereby informed that construction will proceed in phases, requiring temporary disconnection, reconnection, and maintenance of utilities and services as needed. It is imperative to ensure uninterrupted use of essential services (such as mechanical, electrical, fire alarm, and public address systems) to all occupied areas throughout the project.

PRODUCTS (Not Applicable)

**EXECUTION** (Not Applicable)

**END OF SECTION** 

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

#### **SECTION 077233 – ROOF HATCHES**

#### PART 1 - GENERAL

#### 1.01 SUMMARY

A. Work Included: Provide factory-fabricated roof hatches, ladder safety post, & hatch rail system for ladder access to roof.

#### 1.02 SUBMITTALS

- A. Product Data: Submit manufacturer's product data.
- B. Shop Drawings: Submit shop drawings including profiles, accessories, location, adjacent construction interface, and dimensions.
- C. Warranty: Submit executed copy of manufacturer's standard warranty.

#### 1.03 QUALITY ASSURANCE

- A. Manufacturer: A minimum of 5 years experience manufacturing similar products.
- B. Installer: A minimum of 2 years experience installing similar products.
- C. Manufacturer's Quality System: Registered to ISO 9001 Quality Standards including in-house engineering for product design activities.

#### 1.04 DELIVERY, STORAGE AND HANDLING

A. Deliver products in manufacturer's original packaging. Store materials in a dry, protected, well-vented area. Inspect product upon receipt and report damaged material immediately to delivering carrier and note such damage on the carrier's freight bill of lading.

#### 1.05 WARRANTY

A. Manufacturer's Warranty: Provide manufacturer's standard warranty. Materials shall be free of defects in material and workmanship for a period of five years from the date of purchase. Should a part fail to function in normal use within this period, manufacturer shall furnish a new part at no charge.

#### PART 2 - PRODUCTS

#### 2.01 MANUFACTURER

A. Basis-of-Design Manufacturer: The BILCO Company, P.O. Box 1203, New Haven, CT 06505, 1-800-366-6530, Fax: 1-203-535-1582, Web: <a href="https://www.BILCO.com">www.BILCO.com</a>; or Architect approved equal.

#### 2.02 ROOF HATCH

A. Furnish and install Type E-50TB Roof Hatch, Type E-50TB, size width: 36" x length: 36" where indicated on plans. The roof hatch shall be single leaf. The roof hatch shall be pre-assembled from the manufacturer.

#### B. Performance characteristics:

- 1. Cover and curb shall be thermally broken to prevent heat transfer between interior and exterior surfaces.
- 2. Cover shall be reinforced to support a minimum live load of 40 psf with a maximum deflection of 1/150th of the span or 20 psf wind uplift.
- 3. Operation of the cover shall be smooth and easy with controlled operation throughout the entire arc of opening and closing.
- 4. Operation of the cover shall not be affected by temperature.
- 5. Entire hatch shall be weather tight with fully welded corner joints on cover and curb.
- C. Cover: Shall be 11 gauge aluminum with a 5" beaded flange with formed reinforcing members. Interior and exterior surfaces shall be thermally broken to minimize heat transfer and to resist condensation. Cover shall have a heavy extruded EPDM rubber gasket bonded to the cover interior to assure a continuous seal when compressed to the top surface of the curb.
- D. Cover insulation: Shall be 3" thick polyisocyanurate with an R-value = 20.3 (U=0.279 W/m2K), fully covered and protected by an 18 gauge aluminum liner.
- E. Curb: Shall be 12" in height and of 11 gauge aluminum. Interior and exterior surfaces shall be thermally broken to minimize heat transfer and to resist condensation. The curb shall be formed with a 5-1/2" flange with 7/16" holes provided for securing to the roof deck. The curb shall be equipped with an integral metal capflashing of the same gauge and material as the curb, fully welded at the corners, that features the Bil-Clip® flashing system, including stamped tabs, 6" on center, to be bent inward to hold single ply roofing membrane securely in place.
- F. Curb insulation: Shall be 3" (75mm) thick polyisocyanurate with an R-value = 20.3 (U=0.279 W/m2K).
- G. Lifting mechanisms: Manufacturer shall provide compression spring operators enclosed in telescopic tubes to provide, smooth, easy, and controlled cover operation throughout the entire arc of opening and closing. The upper tube shall be the outer tube to prevent accumulation of moisture, grit, and debris inside the lower tube assembly. The lower tube shall interlock with a flanged support shoe welded to the curb assembly.

### H. Hardware:

- 1. Heavy stainless steel pintle hinges shall be provided.
- Cover shall be equipped with a spring latch with interior and exterior turn handles.
- 3. Roof hatch shall be equipped with interior and exterior padlock hasps.
- 4. The latch strike shall be a stamped component bolted to the curb assembly.
- 5. Cover shall automatically lock in the open position with a rigid hold open arm equipped with a 1" diameter red vinyl grip handle to permit easy release for closing.
- 6. All hardware shall be zinc plated and chromate sealed.
- 7. Cover hardware shall be bolted into heavy gauge channel reinforcing welded to the underside of the cover and concealed within the insulation space.
- I. Finishes: Factory finish shall be mill finish aluminum.

#### 2.03 LADDER SAFETY POST

A. Furnish and install Type LU Ladder Safety Post, Model LU-1. The ladder safety post shall be preassembled from the manufacturer.

#### B. Performance characteristics:

- 1. Tubular post shall lock automatically when fully extended.
- 2. Safety post shall have controlled upward and downward movement.
- 3. Release lever shall disengage the post to allow it to be returned to its lowered position.
- 4. Post shall have adjustable mounting brackets to fit ladder rung spacing up to 14" on center and clamp brackets to accommodate ladder rungs up to 1-3/4" in diameter.
- C. Post: Shall be manufactured of high strength square tubing. A pull up loop shall be provided at the upper end of the post to facilitate raising the post.
- D. Material of construction: Shall be steel Model LU-1.
- E. Balancing spring: A stainless steel spring balancing mechanism shall be provided to provide smooth, easy, controlled operation when raising and lowering the safety post.
- F. Hardware: All mounting hardware shall be Type 316 stainless steel.
- G. Finishes: Factory finish shall be yellow powder coat steel Model LU-1.

#### 2.04 HATCH RAIL SYSTEM

- A. Furnish and install Type Bil-Guard® 2.0 Roof Hatch Railing System, Model RL2-ETB. The hatch rail system shall be field assembled and installed (by the contractor) per the manufacturer's instructions.
- B. Performance characteristics:
  - 1. High visibility safety yellow powder coat paint finish.
  - 2. Hatch rail system shall attach to the capflashing of the roof hatch and shall not penetrate any roofing material.
  - 3. Hatch rail system shall satisfy the requirements of OSHA 29 CFR 1910.29 and shall meet OSHA strength requirements with a factor of safety of two.
  - 4. Corrosion resistant construction with a five-year warranty.
  - 5. Hinged gate shall ensure continuous barrier around the roof hatch.
  - 6. Self-closing gate hinge and positive latching system provided with hatch rail system.
- C. Posts and Rails: 1-1/4" 6061 T6 schedule 40 aluminum pipe.
- D. Hardware: Mounting brackets shall be 3/8" thick extruded aluminum. Pivoting post guides with compression fittings and latching mechanism shall be cast aluminum. Self-closing hinges and all fasteners shall be type 316 stainless steel.

#### PART 3 - EXECUTION

#### 3.01 EXAMINATION

A. Examine substrates and openings for compliance with requirements for installation tolerances and other conditions affecting performance. Proceed with installation only after unsatisfactory conditions have been corrected.

#### 3.02 INSTALLATION

- A. Contractor shall field check dimensions and conditions to assure proper installation. Report any conditions which would interfere with proper execution of this work. Do not proceed until all unsatisfactory conditions are corrected.
- B. Install products in strict accordance with manufacturer's instructions and approved submittals. Locate units level, plumb, and in proper alignment with adjacent work.
  - 1. Test units for proper function and adjust until proper operation is achieved.
  - 2. Repair finishes damaged during installation.
  - 3. Restore finishes so no evidence remains of corrective work.

#### 3.03 ADJUSTING AND CLEANING

A. Clean exposed surfaces using methods acceptable to the manufacturer which will not damage finish

**END OF SECTION** 

#### DIVISION 8 - DOORS AND WINDOS

#### SECTION 081210 - DEMOUNTABLE PANEL PARTITION (GENIUS Architectural Wall)

#### 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.
- B. Specifications throughout all Divisions of the Project Manual are directly applicable to this Section, and this Section is directly applicable to them.

#### 1.2 SUMMARY

- A. Section Includes:
  - 1. Non-Progressive, movable and reconfigurable system of unitized or pre-assembled panels, from a single manufacturer.
  - 2. Trim, Sealants, Hardware and Accessories.

#### 1.3 RELATED SECTIONS

- 1. Door Hardware Section 08710
- 2. Glass and Glazing Section 08800

#### 1.4 PERFORMANCE REQUIREMENTS

- A. Installer Qualifications: Engage an experienced installer who has successfully completed demountable partition installations similar in material, design, and extent to that indicated for this Project and is mutually accepted by the manufacturer and the customer.
- B. Performance Bond: The successful demountable manufacturer should have the ability to provide a performance bond to insure Project completion.
- C. Structural Performance: Provide demountable partitions capable of withstanding the effects of gravity loads and the following loads and stresses within limits and under conditions indicated:
  - 1. Load-Bearing Capacity of Panel System: Two shelving units loaded with 300 lb each (180 lb inside 120 lb on top) and 1 worksurface with 270 lb meeting the distributed functional load requirement when tested according to
    - BIFMA X 5.6-2003, Section 6, Table 1.
  - 2. Transverse-Load Capacity of Panel System:
    - a. Interior wall panel deflections cannot exceed 1/120 of the span for flexible facing material or 1/240 of the span for brittle facing materials under 5 psf  $(0.240 \text{ kN/m}^2)$  uniform transverse design load per the 2018 IBC Table 1604.3. Interior wall panel deflections for glass panel frames cannot exceed 1/175 of the span or 0.75 inches, whichever is less under a 5 psf  $(0.240 \text{ kNm}^2)$  uniform transverse design load per the 2018 IBC Table 2403.3.
    - b.2020 IBC Section 1607.15: Interior demountable partition or butt-glazed entrances/storefronts wall products that exceed 6 feet (1829 mm) in height, including their finish materials, have adequate strength to resist the loads which they are subjected but not less than a horizontal load of 5 psf (0.240 kN/m $^2$ ).
    - c.Seismic Performance: Provide demountable partitions capable of withstanding the effects of earthquake motions determined according to ASCE 7 - Minimum Design Loads for Buildings and Other Structures.
- D. Sound Control: Solid panels provide an overall sound transmission class of not less than 44 STC rating in accordance with ASTM E-90, ASTM E412 when recessed ceiling channel, recessed panel connectors and wallposts are used. Solid panels provide an overall sound transmission class of not less than 48 STC rating in accordance with ASTM E90, ASTM E412 when flush

ceiling channel, flush panel connectors and U-channels are used.

- E. Fire Retardancy: No flammable materials are used in the manufacture of the wall system. Provide independent laboratory tests for surface-burning characteristics of panel finishes in accordance with ASTM E-84 (UL 723). Flame Spread/Smoke Development: Class A for powder-coat finish and steel, and 100% Polyester or Recycled Polyester fabric per IBC, Section 803.1.2.
- F. Electrical Components, Devices and Accessories: UL listed and labeled as defined in NFPA 70, Article 110, by a testing agency acceptable to authorities have jurisdiction, and marked for intended use.
- G. Indoor Air Quality: Demountable partition wall manufacturer's non-wood products must meet the SCS Indoor Advantage™ Gold Certification or equivalent. Conforms to indoor air concentrations meeting ANSI/BIFMA Furniture Emissions Standard (M7.1/X7.1-2011 R2016), CDPH/EHLB Standard Method (CA 01350)
  - v1.2-2017 AND ANSI/BIFMA e3-2019 (Credit 7.6.1, 7.6.2, 7.6.3) conducted in an independent third-party air quality testing laboratory.
- H. FSC is available by request. FSC Chain of Custody Certification number is SCS-COC-002476.
- I. Combustibility Performance: Products have finishes and construction acceptable for use in Non-Combustible buildings, in accordance with Chapters 6 and 8 of the International Building Code, 2018 Edition.
- J. ICC A117.1-2017:

Doors Clear Width (A117.1-2017 404.2.3) Suggested Specification. Doorways have a minimum clear opening of 32'' (815 mm) with the door open  $90^{\circ}$ , measured between the face of the door and the opposite stop, and have 80'' (2030 mm) minimum clear headroom.

Doors Opening Force (Al17.1-2017 404.2.9) Suggested Specification. Interior hinged, sliding or folding doors require no more than five pounds of force to open.

Doors Door Hardware (Al17.1-2017 404.2.7) Suggested Specification. Door handles are levers that can be operated with a closed fist. Hardware is mounted no higher than 48" (1220 mm) above finished floor and a minimum of 34" above finished floor.

- K. Certification: Include supporting certified laboratory testing data indicating that material meets specified test requirements.
- L. Mock up for Verification Purposes: In a location designated by the Architect, install a full scale installation incorporating at least one of each type of panel, and accessory required, illustrating each installation condition. Retain mock up installation until completion of total installation or dismantle earlier at the direction of the Architect. Materials used for the mock up installation will not be considered part of either the base contract materials or the attic stock materials. If life cycle costs of the product are important decision criteria, the mock up installation and reconfiguration should be timed, and the reuse of components should be evaluated.

#### 1.5 SUBMITTALS

- A. Product Data: Product data on physical characteristics, durability, resistance to fading, and flame spread characteristics for each type of partition and accessory.
- B. Shop Drawings: Shop drawings showing location and extent of partitions. Include plans, elevations, sections, details, and attachments to other work.
- C. Samples:
  - 1. Samples for Initial Selection: Samples for initial selection purposes in form of manufacturer's standard color charts showing full range of colors, textures, and patterns available for each type of material exposed to view.
  - 2. Samples for verification: For each type of exposed finish required, prepared on Samples of size indicated below.

- a.Panel Finish Face: Manufacturer's standard-size unit, but not less than 3 inches (75 mm) square.
- b.Base Trim: 12-inch- (300-mm-) long Samples.
- c.Door Finish Face: Manufacturer's standard-size unit, but not less than 3 inches (75 mm)
  square.
- d. Glazing: Manufacturer's standard-size unit, but not less than 3 inches (75 mm) square.
- D. Product Test Reports: Based on evaluation of comprehensive tests performed by a qualified testing agency, for each type of demountable partition.
- E. Contract Closeout Information:
  - 1. Warranty.
  - 2. Maintenance Data: For demountable partitions to include in maintenance manuals.
    - a. Recommended cleaning materials and warning about cleaning methods that could be detrimental to finishes and performance.
    - b. Installation manual detailing methods to move reuse and adjust demountable product.

#### 1.6 PROJECT CONDITIONS

- A. Delivery, Storage, and Handling: Deliver materials to Project Site in original factory wrappings and containers/skids, clearly labeled with identification of manufacturer, brand name, model number and order number. Store materials in original undamaged packages and containers, inside well ventilated area protected from weather, moisture, soiling, extreme temperatures, humidity; store product according to installation manual and away from other trades.
- B. Environmental Limitations: Do not deliver or install demountable partition components until building is enclosed and finishing operations, including ceiling and floor-covering installation and painting, are complete.
- C. Field Measurements: Indicate measurements on Shop Drawings.
- D. Coordination of Work: Coordinate layout and installation of demountable partition components with other units of Work. Installation of ceilings, floor coverings, lighting fixtures, HVAC equipment, and fire-suppression systems should be completed before demountable partitions are installed.
- E. Special Requirements: Comply with instructions and recommendations of manufacture for special delivery, storage, and handling requirements.

#### 1.7 EXTRA MATERIALS

Deliver to the Owner, not less than three percent of the Project total for each component panel and accessory of each type, color, and finish of demountable partition system exclusive of material required to properly complete installation. Furnish accessory components and installation tools as indicated on schedule. Furnish extra materials from same production run as materials installed. Package extra materials with protective covering, identified with appropriate labels.

#### 1.8 WARRANTY

Demountable system glazed units, door frames, and related components to be without defects in material or workmanship for a period of ten (10) years from the date of delivery. Wood doors are warranted for ten (10) years from the date of delivery, subject to the manufacturer's terms and conditions. Third party supplied product such as door hardware and film applied to glass will be warranted based on their own warranty terms.

This warranty does not cover defects or damage resulting from accidents, misuse, improper relocation methods or transfer to storage. Plastic laminates, and wood veneer finishes are not warranted against fading or wearing, or if improperly cleaned or treated by the Owner or by others.

#### 1.9 NON-OBSOLESCENCE

Demountable system components and parts, with exception of third party supplied product (such as door hardware, glass, film applied to glass) are guaranteed to be compatible and available for

purchase for ten years from the date of the original order.

#### PART 2 - PRODUCTS

#### 2.1 DEMOUNTABLE PANEL PARTITIONS

- A. Products: Subject to compliance with requirements, provide the Basis-of-Design Product, or architect approved equal.
- B. Basis-of-Design Product: Subject to compliance with requirements, provide KI "Genius Wall"
- C. Solid Panels With Steel Substrate:  $8.89 \text{ cm} (3^{1}/2")$  thick and consisting of an aluminum extruded frame construction, two removable panel shell assemblies each composed of one sheet of 22-gauge steel glued to vertical / horizontal stiffeners and intermediate

horizontal stiffeners, non-toxic fiberglass insulation, and the base assembly. Top of panel engages the ceiling channel. Aluminum frames (including glass panels) as a standard will have cavities on each side to accommodate cabling. Field notching the horizontal frame members will also allow easy cable access from the ceiling or the floor. As standard, solid panel vertical frame posts can be slotted for hang-on furniture and the slots concealed by a dual durometer PVC gasket which is 1" wide and recessed from panel face or by

a flush-to-panel face connector. Component bracketry is optional. Panels to contain integral, adjustable bottom connectors, and the panel shells to be equipped with a mushroom-shaped extrusion that forms a compression fit with the vertical frame for easy removal from the frame structure.

- 1. Type: Factory finished
- 2. Panel Thickness: Manufacturer's standard,  $3^{1}/2^{"}$  thickness.
- 3. Panel Width: As indicated on drawings.
- 4. Panel Finish: [Powder-coat finish]
- 5. Panel Color and Pattern: [As selected by Architect from manufacturer's full range]
- 6.Magnetic Accessory
- D. Aluminum Glass Framing:
  - 1.Frame Finishes: [Factory-applied powder-coat paint]
  - 2.Frame Color: [As selected by Architect from manufacturer's full range].
  - 3.Glass frame Vertical Dimensions: [1.9"] [3.5"]
  - 4. Glass Panel Configuration: [Single Center mounted]
- E. Panel Connector or Joint Closure:
  - 1.Connector Type: [Flush]
  - 2.Finish: [As selected by Architect from manufacturer's full range]
- F. Trim: Base trim is continuous, factory-finished, snap-on type or recessed; adjustable for variations in floor. Ceiling trim is continuous and compensates for ceiling irregularities.
  - 1.Base Trim Profile: [Flush]
  - 2.Flush Base Trim Height: [4"]
  - 3.Ceiling Trim Profile: [Flush]
  - 4.Exposed-Metal Trim Finish: [Factory-applied powder-coat paint]
  - 5. Trim Color: [As selected by Architect from manufacturer's full range]
- I. Aluminum Door Leaves: Manufacturer's standard aluminum extrusion and fully glazed.
  - 1. Door Finish: [Factory-applied powdercoat].
- J. Door Frames: Manufacturer's standard aluminum extrusion, factory-machined to receive hardware, for  $1^3/4$ " (45 mm) doors.
  - 1. Frame Finishes: [Factory-applied powder-coat paint].
  - 2. Frame Color: [As selected by Architect from manufacturer's full range]
  - 3. Frame Height: [Ceiling height]
  - 4. Frame Type: [Single butt-hung]
- K. Door Hardware: As specified in Hardware Section 087100

- L. Glass and Glazing: Safety glazing in compliance with Glass and Glazing Section 08800.
  - 1. Single Glazed Thickness: As indicated on drawings.
- M. Solid Panel Acoustical Rating: [STC 48 Flush Ceiling Channel, No Slotting]
- N. Seals: Manufacturer's standard.

#### 2.2 FABRICATION

- A. Demountable Panels: Factory-assembled, flush, hollow unit construction; with faces smooth and free buckles, oil canning, and seam; and insulated with solidly packed, formaldehyde free insulation. Fabricate panels for installation with concealed fastening devices and pressure-fit components that will not damage ceiling or floor coverings. Fabricate panels with continuous light-and-sound seals at floor, ceiling, and other locations where panels abut fixed construction.

  1. Factory glaze panels to the greatest extent possible.
- B. Components: Fabricate components for installation with concealed fastening devices and pressurefit members that will not damage ceiling or floor coverings. Fabricate for installation with continuous seals at floor, ceiling, and other locations where partition assemblies about fixed construction and for installation and for installation of sound attenuation insulation in partition cavities.

#### 2.3 FINISHES, GENERAL

- A. Protect mechanical finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipping.
- B. Appearance of Finished Work: Variations in appearance of abutting or adjacent pieces are acceptable if they are within one-half of the range of approved Samples. Noticeable variations in the same piece are not acceptable. Variations in appearance of other components are acceptable if they are within the range of approved samples and are assembled or installed to minimize contrast.

#### PART 3 - EXECUTION

#### 3.1 PREPARATION

- A. Prior to installation of demountable partition system, clean floor to remove dust, debris, and loose particles.
- **B.** Illuminate areas of installation to provide an ambient light level of at least 100 foot candles measured in the area where partitions are to be installed.
- C. Maintain temperature in the area of installation at a constant minimum of 65 degrees F with relatively humidity less than 70 percent for a period of 48 hours prior to installation and during installation process.
- D. General Contractor will deliver all GWB construction interfacing with the demountable partition system in true and plumb condition.
- E. For manufacturer to accept responsibility of dimensional compatibility between demountable partition wall system and GWB construction, manufacturers have access to the completed GWB for accurate field measuring eight weeks prior to requiring product on site to commence installation. If time line does not permit the eight weeks lead time, demountable manufacturers provide "hold-to" dimensions for the General Contractor. General Contractor then assumes responsibility that GWB construction delivers on "hold-to" dimensions.
- F. Demountable manufacturer determines that conditions are acceptable to receive the work of this section. Do not proceed with the work until satisfactory conditions have been corrected in a manner acceptable to installer. Starting of work shall be construed as acceptance of conditions.

#### 3.2 INSTALLATION

- A. Install demountable partition systems rigid, level, plumb, and aligned. Install seals to prevent light and sound transmission at connections to floors. ceilings, fixed walls, and abutting surfaces.
  - 1. Installation Tolerance: Install each demountable partition so surfaces vary not more than  $^{1}/8$  inch (3 mm) from the plane formed by the faces of adjacent partitions.
- B. Do not alter ceiling suspension system.
- C. Install door-and-frame, solid panel and frame, and glazing-and-glazing-frame assemblies securely anchored to partitions and with doors aligned and fitted. Install and adjust door hardware for proper operation.

#### 3.3 DEMONSTRATION

A. Engage a factory-authorized service representative to demonstrate and train Owner's maintenance personnel to adjust, operate, and maintain demountable partitions. Refer to Division 01 Section "Demonstration and Training."

END OF SECTION

#### **DIVISION 08 - OPENINGS**

#### SECTION 084123 - FIRE RATED ALUMINUM ENTRANCES AND STOREFRONTS

#### PART 1 - GENERAL

#### 1.01 SUMMARY

- A. Related Documents: Drawings and General Provisions of the Contract, including General and Supplemental Conditions and Division 01 Specification Section apply to work in this section.
- B. Section includes:
  - 1. Fire rated glazing and framing systems for installation as sidelights, borrowed lights, windows, and transoms or wall sections in interior openings as indicated on the Construction Documents.
- C. Related Sections include the following:
  - 1. Section 051200 Structural Steel Framing
  - 2. Section 055000 Metal Fabrications
  - 3. Section 061000 Rough Carpentry
  - 4. Section 072113 Ultra Wall Insulation and Air Barrier System
  - 5. Section 072713 Self-Adhered Non-Permeable Air Barrier Membrane
  - 6. Section 078443 Joint Firestopping
  - 7. Section 079200 Joint Sealants
  - 8. Section 081113 Hollow Metal Doors and Frames
  - 9. Section 085113 Aluminum Windows
  - 10. Section 087100 Door Hardware
  - 11. Section 088813 Fire Rated Glazing

#### 1.02 REFERENCES

- A. American Architectural Manufacturers Association (AAMA):
  - 1. AAMA 2603-2002 Voluntary Specification, Performance Requirements and Test Procedures for Pigmented Organic Coatings on Aluminum Extrusions and Panels.
  - 2. AAMA 2604 -2005 Voluntary Specification, Performance Requirements and Test Procedures for High Performance Organic Coatings on Aluminum Extrusions and Panels.
  - 3. AAMA 2605 -2005 Voluntary Specification, Performance Requirements and Test Procedures for Superior Performing Organic Coatings on Aluminum Extrusions and Panels.
- B. American Society for Testing and Materials (ASTM):
  - 1. Fire safety related:
    - a. ASTM E119: Methods for Fire Tests of Building Construction and Materials.
  - 2. Material related:
    - a. ASTM A 1008/A 1008M Standard Specification for Steel, Sheet, Cold-Rolled, Carbon, Structural, High-Strength, Low Alloy, and High-Strength Low-Alloy with Improved Formability, Solution Hardened, and Bake Hardenable; 2007.
    - b. ASTM A 1011/A 1011M Standard Specification for Steel, Sheet and Strip, Hot-Rolled, Carbon, Structural, High-Strength Low-Alloy and High-Strength Low-Alloy with Improved Formability, and Ultra-High Strength; 2006b.

#### 3. Exterior related:

- a. ASTM E 283-04: Test Method for Determining the Rate of Air Leakage through Exterior Windows, Curtain Walls, and Doors under Specified Pressure Differences across the Specimen.
- b. ASTM E 330-02: Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference Procedure A.
- c. ASTM E 331-04: Test Method for Water Penetration of Exterior Windows, Skylights, Doors, and Curtain Walls by Uniform Static Air Pressure Difference.
- d. ASTM E 783-02: Test Method for Field Measurement of Air Leakage through Installed Exterior Windows and Doors.
- e. ASTM E 1105-00: Test Method for Field Determination of Water Penetration of Installed Exterior Windows, Skylights, Doors, and Curtain Walls by Uniform or Cyclic Static Air Pressure Difference.

### C. American Welding Society (AWS)

- 1. AWS D1.3 Structural Welding Code Sheet Steel; 2007
- D. Builders Hardware Manufacturers Association, Inc.
  - 1. BHMA A156 American National Standards for door hardware; 2006 (ANSI/BHMA A156).

#### E. Canadian Standards

- 1. CAN/ULC-S101 Standard Test of Fire Endurance Tests of Building Construction and Materials
- 2. CAN/ULC-S104 Standard Method of Fire Tests of Door Assemblies
- 3. CAN/ULC-S106 Standard Method of Fire Tests of Window and Glass Block Assemblies
- F. National Fire Protection Association (NFPA):
  - 1. NFPA 80: Fire Doors and Windows.
  - 2. NFPA 251: Fire Tests of Building Construction & Materials
  - 3. NFPA 252: Fire Tests of Door Assemblies
  - 4. NFPA 257: Fire Test of Window Assemblies
- G. Underwriters Laboratories, Inc. (UL):
  - 1. UL 9: Fire Tests of Door Assemblies
  - 2. UL 10 B: Fire Tests of Door Assemblies
  - 3. UL 10 C: Positive Pressure Fire Tests of Window & Door Assemblies
  - 4. UL 263: Fire tests of Building Construction and Materials
  - 5. UL-752 Ratings of Bullet-Resistant Materials
- H. American National Standards Institute (ANSI):
  - 1. ANSI Z97.1: Standard for Safety Glazing Materials Used in Buildings
- I. Consumer Product Safety Commission (CPSC):
  - 1. CPSC 16 CFR 1201: Safety Standard for Architectural Glazing Materials
- J. American Society of Civil Engineers (ASCE)
  - 1. ASCE 7 Minimum Design Loads for Buildings and Other Structures; 2005

#### 1.03 PERFORMANCE REQUIREMENTS

#### A. System Description:

- 1. Steel fire-rated glazed wall and/or window system, dual aluminum cover cap format.
  - a. Face widths available:
    - 1) 2"
    - 2) Custom extruded aluminum cover caps
    - 3) Custom stainless steel cover caps
- 2. Duration Doors: Capable of providing a fire rating for 20, 45, 60, 90 minutes as indicated on the drawings.
- 3. Duration Windows Capable of providing a fire rating for 45, 60, 120 minutes as indicated on the drawings.
- 4. Duration Walls: Capable of providing a fire rating for 60, 120 minutes as indicated on the drawings.
- B. Delegated design: For the performance requirements listed below requiring structural design provide data, calculations and drawings signed and sealed by an engineer licensed in the state where the project is located.

#### 1. Structural Performance

- a. Design and size the system to withstand structural forces placed upon it without damage or permanent set when tested in accordance with ASTM E330 using load 1.5 times the design wind loads and of 10 seconds in duration.
- b. Positive wind Load: as indicated on the drawings.
- c. Negative wind Load: as indicated on the drawings.
- d. Member deflection: Limit deflection of the edge of the glass normal to the plane of the glass to flexure limit of glass or 1/175 of the glass edge length or ¾ inch, whichever is less of any framing member.
- e. Accommodate movement between storefront and adjoining systems.
- f. Accommodate anticipated story drift.
- C. Story Drift provide systems that accommodate the design displacement of adjacent stories as indicated on structural drawings as measured per AAMA 501.4.
- D. Air Infiltration: ASTM E 283; Air infiltration rate shall not exceed 0.06 cfm/ft² at a static air pressure differential of 6.24 psf.
- E. Water Resistance, (static): ASTM E 331; No leakage at a static air pressure differential of 15 psf as defined in AAMA 501.

#### 1.04 SUBMITTALS

A. Submissions shall be in accordance with Section 013300 – Submittal Procedures and as modified below.

#### B. Product Data:

1. Technical Information: Submit latest edition of manufacturer's product data providing product descriptions, technical data, Underwriters Laboratories, Inc. listings and installation instructions.

#### C. Shop Drawings:

- 1. Include plans, elevations and details of product showing component dimensions; framed opening requirements, dimensions, tolerances, and attachment to structure.
- Provide templates for the location of embeds and anchor locations required for any adjoining work.

#### D. Structural Calculations:

- 1. Provide structural calculations sealed by a licensed professional engineer in the State in which the project is located; prepared in compliance with referenced documents and these specifications.
- E. Powder coat finish systems offered and provided by Technical Glass Products are manufactured by Tiger Drylac only.
- F. Hardware schedule: List of manufacture supplied hardware and verification of cylinder size complying with Section 087100.
- G. Samples for Initial Color Selection: For aluminum frames with factory-applied powder coat color finishes.
  - 1. Triplicate copies of manufacturer's powder coating color charts showing the full range of colors available.
- H. Verification Sample of selected finish on aluminum sample piece.
- I. Samples: For following products:
  - 1. Two 8-inch by 10-inch Glass sample-as provided by manufacturer.
  - 2. Sample of frame.
  - 3. Verification of sample of selected finish.
- J. Glazing Schedule: Use same designations indicated on Drawings for glazed openings in preparing a schedule listing glass types and thicknesses for each size opening and location.
- K. Technical Information: Submit latest edition of manufacturer's product data providing product descriptions, technical data and installation instructions. Including blank warranty form.
- L. Installer Qualification Data: For firms and persons specified in "Quality Assurance" Article to demonstrate their capabilities and experience. Include lists of completed projects with project names and addresses, names and addresses of architects and owners, and other information specified.
- M. Certificates of compliance from glass and glazing materials manufacturers attesting that glass and glazing materials furnished for project comply with requirements.
  - 1. Separate certification will not be required for glazing materials bearing manufacturer's permanent label designating type and thickness of glass, provided labels represent a quality control program involving a recognized certification agency or independent testing laboratory acceptable to authority having jurisdiction.
- N. Field Quality-control reports
- O. Maintenance Data

P. Warranties: Submit manufacturer's warranty and ensure that forms have been completed in the Owner's name and registered with the manufacturer.

#### 1.05 QUALITY ASSURANCE

- A. Testing Agency Qualifications:
- B. Installer Qualifications: An experienced installer who has completed glazing similar in material, design, and extent to that indicated for this Project; whose work has resulted in glass installations with a record of successful in-service performance; and who employs glass installers for this Project who are certified under the National Glass Association Glazier Certification Program as Level 2 (Senior Glaziers) or Level 3 (Master Glaziers).
- C. Source Limitations for Glazing Accessories: Obtain glazing accessories from one source for each product and installation method indicated.
- D. Fire-Rated Door Assemblies: Assemblies complying with NFPA 80 that are listed and labeled by UL, for fire ratings indicated, based on testing according to NFPA 252. Door assembly must be factory-welded or come complete with factory-installed mechanical joints and must not require job site fabrication.
- E. Fire-Rated Window Assemblies: Assemblies complying with NFPA 80 that are classified and labeled by UL, for fire ratings indicated, based on testing according to NFPA 257 and UL 9.
- F. Fire-Rated Wall Assemblies: Assemblies complying with ASTM E119 that are classified and labeled by UL, for fire ratings indicated, based on testing in accordance with UL 263, ASTM E119.
- G. Certification: Signed by manufacturers of glass and glazing products certifying that products furnished comply with requirements.
  - 1. Door assemblies shall be tested to the acceptance criteria of ASTM E2074-00, NFPA 252, UL 9, UL 10-C Standard Methods of Fire Tests of Door Assemblies.
  - 2. Window assemblies shall be tested to the acceptance criteria of ASTM E2010-01, NFPA 257, UL 10-B. UL 10-C Standard methods for Fire Tests of Window Assemblies.
  - 3. Wall assemblies shall be tested to the acceptance criteria of ASTM E119, NFPA 251, UL 263 Standard Test Methods for Fire Tests of Building Construction and Materials.
  - 4. Underwriters Laboratories (UL) shall conduct fire test.
- H. Listings and Labels Fire Rated Assemblies: Under current follow-up service by an approved independent agency maintaining a current listing or certification. Label assemblies accordance with limits of manufacturer's listing.
- I. Door assemblies shall be marked with the hourly rating followed by the letter "S". The letter "S" indicates air leakage resistance testing conformance to UBC 7-2 Parts I and II.
- J. Window assemblies with ratings of less than 60 minutes may be tested in accordance with ASTM E2010-01, NFPA 257, UBC 7-4, UL 9, CAN4-S106 Standard Test Methods.
- K. Regulatory Requirements: Comply with provisions of the following:
  - Where indicated to comply with accessibility requirements, comply with Americans with Disabilities Act (ADA), "Accessibility Guidelines for Buildings and Facilities ANSI A117.1, as follows:

- a. Handles, Pulls, Latches, Locks, and other Operating Devices: Shape that is easy to grasp with one hand and does not require tight grasping, tight pinching, or twisting of the wrist.
- b. Door Closers: Comply with the following maximum opening-force requirements indicated:
- c. Fire Doors: Minimum opening force allowable by authorities having jurisdiction.
- 2. NFPA 101: Comply with the following for means of egress doors:
  - a. Latches, Locks, and Exit Devices: Not more than 15 lbf (67 N) to release the latch. Locks shall not require the use of a key, tool, or special knowledge for operation.
  - b. Door Closers: Not more than 30 lbf (133 N) to set door in motion and not more than 15 lbf (67 N) to open door to minimum required width.

#### 1.06 PRE-INSTALLATION MEETING

A. Conduct a pre-installation conference at least one week prior to the work of this section.

#### 1.07 DELIVERY, STORAGE AND HANDLING

- A. Deliver, store and handle under provisions specified by manufacturer.
  - 1. At delivery inspect all containers for damage.
  - 2. Examine glass and frame units for damage.
  - 3. List all damage to containers on the shipping company's Bill of Lading.
  - 4. Report damage to manufacturer immediately.
  - 5. Store glazing materials and frame units in original packing containers.
  - 6. Do not expose glazing material of frame units to sunlight and weather.
  - 7. Do not store horizontally.
  - 8. Place glass and frames upright, no less than 6 degrees from vertical.
  - 9. Store all materials in dry conditions, off the ground.
  - 10. Protect from construction activities.
  - 11. Fully support Glass units along entire length.
  - 12. Non-abrasive pads such as cloth or cork must separate glass and frame units.
  - 13. Do not stack containers.

#### 1.08 PROJECT CONDITIONS

- A. Obtain field measurements prior to fabrication of frame units. If field measurements will not be available in a timely manner coordinate planned measurements with the work of other sections.
  - 1. Note whether field or planned dimensions were used in the creation of the shop drawings.
- B. Coordinate the work of this section with others effected including but not limited to: other exterior envelope components and door hardware beyond that provided by this section.

#### 1.09 WARRANTY

A. Provide the Pilkington Pyrostop® and Frame supplier's limited five-year warranty dated from substantial completion.

#### PART 2 – PRODUCTS

#### 2.01 MANUFACTURERS - FIRE RATED WALL ASSEMBLY

- A. Manufacturer Glazing Material: "Pilkington Pyrostop®" fire-rated glazing as manufactured by the Pilkington Group and distributed by Technical Glass Products, 8107 Bracken Place SE, Snoqualmie, WA 98065 (800-426-0279) fax (425-396-8300) e-mail <a href="mailto:sales@fireglass.com">sales@fireglass.com</a>, web site <a href="http://www.fireglass.com">http://www.fireglass.com</a>
- B. Frame System: "Fireframes® Aluminum Series" fire-rated frame system as manufactured and supplied by Technical Glass Products, 8107 Bracken Place SE, Snoqualmie, WA 98065 (800-426-0279) fax (425-396-8300) e-mail sales@fireglass.com web site http://www.fireglass.com

#### 2.02 MATERIALS – GLASS

- A. Low-E Coated glass for use in insulated exterior units See Section 088000.
- B. Fire Rated Glazing: ASTM C 1036 and ASTM C 1048; composed of multiple sheets of Pilkington Optiwhite™ high visible light transmission glass laminated with an intumescent interlayer.
- C. Impact Safety Resistance: ANSI Z97.1 and CPSC 16CFR1201 (Cat. I and II).
- D. Properties Interior Glazing:

Fire-Rating	45 minute	60 m	inute	120 minute
Manufacturer's designation	45-200	60-101	60-201	120-106
Glazing type	single	single	single	IGU
Nominal Thickness	3/4" (19mm)	7/8"	1-1/16"	2-1/4"
		(23mm)	(27mm)	(57mm)
Weight in lbs/sf	9.2	10.85	12.5	22.9
Daylight Transmission	86	87%	86%	75%
Sound Transmission Coefficient	40dB	41dB	44dB	46dB

### E. Properties Exterior Glazing:

Fire-Rating	45 mir	nute	60 mi	nute	120 minute
Manufacturer's designation	45-200	45-260 45-360	60-201	60-261 60-361*	120-262 120-362*
Glazing type	single	IGU	single	IGU	IGU
Nominal Thickness	3/4" (19mm)	1-5/16" (33mm)	1-1/16" (27mm)	1-5/8" (41mm)	2-3/8" (60mm) [with 14 mm spacer, or 2- 1/8" (54 mm) with 8 mm spacer]
Weight in lbs/sf	9.2	12.5	12.5	15.8	22.1
Daylight Transmission	96	77	86%	77%	74%
Daylight Transmission	86	59-71	00%	59-70%	33-68%
Sound Transmission Coefficient	40dB	40dB	44dB	44dB	46dB

<sup>\*</sup> Low-E product.

- F. Exterior Grade: PVB inner layer installed toward exterior.
- G. Logo: Each piece of fire-rated glazing shall be labeled with a permanent logo including name of product, manufacture, testing laboratory (UL), fire rating period, safety glazing standards, and date of manufacture.
- H. Glazing Accessories: Manufacturer's standard compression gaskets, standoff, spacers, setting blocks and other accessories necessary for a complete installation.

#### 2.03 MATERIALS -ALUMINUM FRAMING

- A. Aluminum Framing System 45 min. 60 min. 120 min. as indicated on the drawings
  - 1. Steel Frame The steel framing members are made of two halves, nom. 1.9 in. wide (48.3 mm) with a nom. minimum depth of 1.38 in. (35 mm) with lengths cut according to glazing size.
  - 2. Aluminum Trim Supplied with the steel framing members. Nom. 2 in. (50.8 mm) wide with a nom. depth of 1.54 in. (39 mm) with lengths cut according to glazing size.
  - 3. Stainless Steel Standoffs Supplied with the steel framing members. Nom 5/16 in. (8 mm) diameter with a nom. minimum depth of 1 in. (25 mm) with depth adjusted to match Pilkington Pyrostop® Panel thickness.
  - 4. Stainless Steel Moment and Connecting Braces: Supplied with the steel framing members. Nom 5/16 in. (8 mm) diameter with a nom. minimum depth of 1 in. (25 mm) with depth adjusted to match Pilkington Pyrostop® Panel thickness.
  - 5. Framing Member Fasteners Supplied with the steel framing members. Screws are M6 x16mm Button Head Socket Cap Screws for frame assembly and #6 x 3/4" Pan Head Sheet Metal Screws for door installation.
  - 6. Glazing Gasket:
    - a. Interior Gasketing-Supplied with the steel framing members. Nom. 3/4 in. (19 mm) x 3/16 (4.5 mm) black applied to the steel framing members to cushion and seal the glazing material when installed.
    - b. Exterior Gasketing- Supplied with the steel framing members. Nom. 2 in. (50 mm) x 3/16 (4.5 mm) black applied to the steel framing members to cushion and seal the glazing material when installed.
- B. Aluminum: Alloy and temper recommended by manufacturer for type of use and finish indicated.
  - 1. Extruded Bars, Rods, Shapes, and Tubes: ASTM B 221 (ASTM B 221M).
- C. Steel Reinforcement: With manufacturer's standard corrosion-resistant primer complying with SSPC-PS Guide No. 12.00 applied immediately after surface preparation and pretreatment. Select surface preparation methods according to recommendations in SSPC-SP COM and prepare surfaces according to applicable SSPC standard.
  - 1. Structural Shapes, Plates, and Bars: ASTM A 36/A 36M Standard Specification for Carbon Structural Steel.

- 2. Cold-Rolled Sheet and Strip: ASTM A1008/A1008M Standard Specification for Steel, Sheet, Cold-Rolled, Carbon, Structural, High-Strength Low-Alloy, High-Strength Low-Alloy with Improved Formability, Required Hardness, Solution Hardened, and Bake Hardenable.
- 3. Hot-Rolled Sheet and Strip: ASTM A1011/A1011M Standard Specification for Steel, Sheet and Strip, Hot-Rolled, Carbon, Structural, High-Strength Low-Alloy, High-Strength Low-Alloy with Improved Formability, and Ultra-High Strength.
- D. Fasteners and Accessories: Manufacturer's standard corrosion-resistant, nonstaining, nonbleeding fasteners and accessories compatible with adjacent materials.
  - 1. Where fasteners are subject to loosening or turn out from thermal and structural movements, wind loads, or vibration, use self-locking devices.
  - 2. Reinforce members as required to receive fastener threads.

#### 2.04 ACCESSORIES

- A. Fasteners: Use fasteners fabricated from Type 304 or Type 316 stainless steel.
- B. Glazing Gaskets:
  - 1. Glazing gaskets for interior or exterior applications: ASTM C 864 (extruded EPDM rubber that provides for silicone adhesion) or ASTM C1115 Standard Specification for Dense Elastomeric Silicone Rubber Gaskets and Accessories (extruded silicone).
- C. Intumescent Tape: As supplied by frame manufacturer.
- D. Setting Blocks: 1/4" Calcium silicate.
- E. Perimeter Anchors: Steel.
- F. Flashings: As recommended by manufacturer; same material and finish as cover caps.
- G. Silicone Sealant: One-Part Low Modulus, neutral cure High Movement-Capable Sealant: Type S; Grade NS; Class 25 with additional movement capability of 100 percent in extension and 50 percent in compression (total 150 percent); Use (Exposure) NT; Uses (Substrates) M, G, A, and O as applicable. (Use-O joint substrates include: Metal factory-coated with a high-performance coating; galvanized steel; ceramic tile.)
- H. Intumescent Caulk: Single component, latex-based, intumescent caulk designed to stop passage of fire, smoke, and fumes through fire-rated separations; permanently flexible after cure; will not support mold growth; flame spread/smoke developed 10/10.
  - 1. Available Products:
    - a. 3M CP-25 WP+

#### 2.05 SLAG-WOOL-FIBER/ROCK-WOOL-FIBER INSULATION

A. Refer to Section 072114 – Mineral Board Insulation.

#### 2.06 MATERIALS – DOORS

A. Manufacturer's standard single leaf and double leaf doors with manufacture's standard hardware; where indicated on the drawings.

B. Coordinate door hardware with cylinder specified in Section 087100 - Door Hardware.

#### 2.07 FABRICATION

- A. Obtain reviewed Shop Drawings prior to fabrication.
- B. Fabrication Dimensions: Fabricate fire rated assembly to field dimensions.
- C. Factory prepared, fire-rated steel door assemblies by TGP to be prehung, prefinished with hardware preinstalled for field mounting.
- D. Field glaze door and frame assemblies.

#### 2.08 FINISHES, GENERAL

- A. Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations for applying and designating finishes.
- B. Finish frames after assembly.
- C. Protect finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipping.
- D. Appearance of Finished Work: Variations in appearance of abutting or adjacent pieces are acceptable. Noticeable variations in the same piece are not acceptable.

#### 2.09 ALUMINUM FINISHES

- A. General: Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations relative to applying and designating finishes. Appearance of Finished Work: Variations in appearance of abutting or adjacent pieces are acceptable if they are within one-half of the range of approved Samples. Noticeable variations in the same piece are not acceptable. Variations in appearance of other components are acceptable if they are within the range of approved Samples and are assembled or installed to minimize contrast.
- B. Finish designations prefixed by AA conform to the system established by the Aluminum Association for designating aluminum finishes.
  - 1. Apply the specified finish to visible aluminum surfaces of all aluminum entrance assemblies. Apply a compatible and durable matching finish to visible fasteners or hardware.
  - 2. Prepare the surfaces for finishing in accordance with recommendations of the aluminum producer and the finisher or processor for the specified finish.
  - 3. Three coat process finish on doors and immediate or adjacent frames. Class I, Color Kynar Finish: Architectural Class I, integrally colored or electrolytically deposited color coating 0.018 mm or thicker) complying with AAMA2605. Color as selected by Architect from the full range of industry colors and color densities.
    - a. Primer coat: Kynar.
    - b. Kynar finish color coat:
      - 1) Provide Fluoropolymer finish (Kynar 500) based laminated coating similar to "Duranar" (70% PVDF) by PPG Industries.

2) Color as indicated on the drawings or as selected and approved by Architect.

#### PART 3 - EXECUTION

#### 3.01 EXAMINATION

- A. Site Verification of Conditions: Verify substrate conditions, which have been previously installed under other sections, are acceptable for product installation in accordance with manufacturer's instructions. Verify openings are sized to receive curtain wall system and sill plate is level in accordance with manufacturer's acceptable tolerances. Examine substrates and members to which the work of this section attaches or adjoins prior to frame installation.
- B. Provide openings plumb, square and within allowable tolerances.
  - 1. The manufacturer recommends 3/8 inch shim space at all walls.
- C. Notify Architect of any conditions which jeopardize the integrity of the proposed fire wall / door system.
- D. Do not proceed until such conditions are corrected.

#### 3.02 INSTALLATION

- A. Follow manufacturer's written instructions and reviewed shop drawings.
- B. Install fully fire window, wall, and door in strict accordance with the approved shop drawings.
- C. Set continuous sill members and flashing in full sealant bed to produce a watertight installation.
- D. Install fire safing / fire stopping at edges of system.
- E. Install glazing in strict accordance with fire resistant glazing material manufacturer's specifications. Field cutting or tampering is not permissible.
- F. Do not install damaged frames or chipped glassing units.
- G. Install plumb and true. Limit out of plumb or true to 1/8 inch in 10'-0" in any dimension.

#### 3.03 REPAIR AND TOUCH UP

A. Remove and replace glass that is broken, chipped, cracked, abraded, or damaged.

#### 3.04 FIELD QUALITY CONTROL

A. Owner or will engage a qualified independent testing agency to perform field tests and inspections of entrance system.

#### 3.05 PROTECTION AND CLEANING

- A. Protect glass from damage immediately after installation by attaching crossed streamers to framing held away from glass. Do not apply markers to glass surface`. Remove nonpermanent labels, and clean surfaces.
  - 1. Do not clean with astringent cleaners. Use a clean "grit free" cloth and a small amount of mild soap and water or mild detergent.

- 2. Bullet resistant glazing materials employing PVB layer on exterior surface.
- 3. Protect surface applied film. Do not use any of the following:
  - a. Steam jets.
  - b. Abrasives.
  - c. Strong acidic or alkaline detergents, or surface-reactive agents.
  - d. Detergents not recommended in writing by the manufacturer.
  - e. Do not use any detergent above 77 degrees F.
  - f. Organic solvents including but not limited to those containing ester, ketones, alcohols, aromatic compounds, glycol ether, or halogenated hydrocarbons.
  - g. Metal or hard parts of cleaning equipment must not touch the glass surface.
- B. Protect glass from contact with contaminating substances resulting from construction operations, including weld splatter. If, despite such protection, contaminating substances do come into contact with glass, remove them immediately as recommended by glass manufacturer.
- C. Wash glass on both exposed surfaces in each area of Project not more than four days before date scheduled for inspections that establish date of Substantial Completion. Wash glass as recommended by glass manufacturer.

**END OF SECTION** 

#### **DIVISION 09 - FINISHES**

#### **SECTION 097700 - SPECIAL WALL SURFACES**

#### PART 1 - GENERAL

#### 1.01 SECTION INCLUDES

A. Pre-manufactured panel system including mounting hardware and specified accessories.

#### 1.02 RELATED SECTIONS

- A. Section 061000 Rough Carpentry furring, blocking, and other carpentry work that is not exposed to view.
- B. Section 062000 Finish Carpentry for interior woodwork other than wall systems not included in this section.
- C. Section 092900 Gypsum Wall Board for metal support systems not included in this section.

#### 1.03 REFERENCES

- A. American Society for Testing and Materials (ASTM) E84 Standard Test Method for Surface Burning Characteristics of Building Materials
  - 1. Class 1/A Flame Spread 0-25, Smoke Developed 450 or less.
  - 2. Class 2/B Flame Spread 26-75, Smoke Developed 450 or less.
- B. Architectural Woodwork Institute (AWI) Quality Standards
- C. National Electrical Manufacturer's Association (NEMA)

#### 1.04 SUBMITTALS

- A. Shall comply with the requirements of Section 013300 and with the requirements listed below.
- B. Product Data: Manufacturer's Safety Data Sheets (MSDS) on each product to be used, including:
  - 1. Preparation instructions and recommendations.
  - 2. Storage and handling requirements and recommendations.
  - 3. Installation methods.
- C. Shop Drawings: Shop drawings in sufficient detail to show fabrication, installation, anchorage, and interface of the work of this Section with adjacent work.
- D. Selection Samples: For each finish product specified, one complete set of color samples representing manufacturer's standard range of available colors and patterns.

#### 1.05 QUALITY ASSURANCE

- A. Manufacturer Qualifications:
  - 1. Firm experienced in successful production of wall systems similar to that indicated for the Project, with sufficient production capacity to produce required units without causing delay in the work.

- 2. Provide certificate signed by panel manufacturer certifying that products comply with specified requirements.
- B. Installer Qualifications: Demonstrate successful experience in installing architectural woodwork similar in type and quality to those required for this project.

#### 1.06 DELIVERY, STORAGE AND HANDLING

- A. Do not deliver wall system until painting, wet work, grinding, and similar operations that could damage, soil, or deteriorate wall system have been completed in installation areas as specified by AWI 1700-G-3.
- B. If panels are stored prior to installation, store them flat in completely enclosed areas, out of the weather. If panels must be stored in other than installation areas, store only in areas where environmental conditions comply with manufacturers recommendations. Do not expose panels to continuous direct sunlight, nor to extremes in temperature and humidity. Store products in manufacturer's packaging until ready for installation.
- C. Store and dispose of solvent-based materials, and materials used with solvent-based materials, in accordance with requirements of local authorities having jurisdiction.

#### 1.07 PROJECT CONDITIONS

- A. Do not deliver or install wall system until building is enclosed, wet work is complete and HVAC system is operating and will maintain temperature and relative humidity at occupancy levels during the remainder of the construction period as specified by AWI 1700-G-3.
- B. Do not install wall system until normal lighting conditions exist. Normal lighting conditions are described as those in place when the project is finished. This includes, but not limited to, design lighting (wall washers, spotlights and flood lights, and similar fixtures) and natural lighting.
- C. Wall, ceilings, floors, and openings must be level, plumb, straight, in-line and square as specified by AWI 1700-G-3.
- D. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results, both during installation and subsequent occupancy. Do not install products under environmental conditions outside manufacturer's absolute limits. Panels shall be conditioned in the environment in which they will be installed for a minimum of 72 hours prior to installation. The recommended environment is 60° to 80° F and 35% to 55% relative humidity.
- E. Manufacturer warrants any product it has manufactured and sold against defects in materials or workmanship for a period of one year from the date of original purchase and acceptance for use. This warranty extends to products assembled / installed and used in the manner intended and does not cover damage or failure caused by misuse, abuse or accidents, exposure to extreme temperature, improper installation, improper maintenance, and exposure to water or excessive humidity or excessive moisture.

#### PART 2 - PRODUCTS

#### 2.01 ACCEPTABLE MANUFACTURERS

A. Acceptable Manufacturer: Panel Specialists, Inc.; 3115 Range Rd., Temple, TX 76504. ASD. Toll Free Tel: (800) 947-9422. Tel: (254) 774-9800. Fax: (254) 598-3222. Email: <a href="mailto:psiwalls@panelspec.com">psiwalls@panelspec.com</a>. Web: <a href="http://www.panelspec.com">http://www.panelspec.com</a>; or Architect approved equal.

#### 2.02 PANEL SYSTEMS

- A. Provide prefinished decorative panels where shown on the drawings, as specified herein, and as needed for a complete and proper installation.
- B. Comply with applicable requirements of "Architectural Woodwork Quality Standards" in the production and installation of the wall panel system as published by the Architectural Woodwork Institute (AWI) unless otherwise indicated.
- C. Panel System: #310 as manufactured by Panel Specialists inc. A progressive panel system with an exposed divider molding creating a 1/16 inch (1.5mm) horizontal and vertical reveal between edge banded panels.
  - 1. Panel Thickness: 7/16 inches (11.1 mm).
  - 2. Horizontal Reveal: System to provide a reveal of 1/16 inch (1.5mm) between panels.
  - 3. Vertical Reveal: System to provide a reveal of 1/16 inch (1.5mm) between panels.
  - 4. Panel Edge Finish: Panel edges to be finished with .018-inch (.5mm) PVC edge banding.
  - 5. Panel Finish: Refer to Construction Drawings.
  - 6. Main Laminated Panel Fire Rating:
    - a. Fire Rating: ASTM E84, Class A.
  - 7. Molding: All moldings to be .062" thick (at structural areas) 6063 alloy aluminum with T5 temper. Refer to details and elevations on Construction Drawings for moldings and finishes required.
    - a. Divider Moldings
      - 1) #302a 1/16 in.(1.5mm) wide Divider Molding
      - 2) #410 H Divider Molding available for use with marker boards, resilient tack board, and other specialty panels.
    - b. 1/2" Wide Edge Trims & 1" Corners
      - 1) #304 ½" Edge Trim Molding
      - 2) #304A ½" Edge Trim Molding (2-piece)
      - 3) #103-90 1" Rounded 90° Outside Corner
      - 4) #103-135 135 Outside Corner
      - 5) #304-90 End Cap for top and bottom of 90° outside corner
      - 6) #304-135 End Cap for top and bottom of 135° outside corner
    - c. 3/8" Wide Edge Trims and 3/8" Wide Stepped corners
      - 1) #604 3/8" Edge Trim molding
      - 2) #604A 3/8" Edge Trim molding (2-piece)
      - 3) #603-90 3/8" Stepped 90° Outside Corner
      - 4) #603-135 3/8" Stepped 135<sup>O</sup> Outside Corner
      - 5) #604-90 End Cap for top and bottom of 90° Outside Corner
    - d. #404C Chair Rail Top Trim with #412RI flat or #312RI concave reveal insert for use in wainscot height installations.
  - 8. Finishes: (Refer to details and elevations on Construction Drawings for moldings and finishes required)
    - a. Panel Face Pattern Direction:
      - 1) Horizontal
      - 2) Vertical
    - b. Panel Edge Banding:
      - 1) .5mm PVC Black
      - 2) .5mm PVC Platinum
    - c. Aluminum Molding Finish:
      - 1) Clear Anodized

#### 2) Black

### 2.03 MATERIALS

#### A. High Pressure Decorative Laminates

1. High Pressure Laminate (VGS, VGF.) and non-decorative backers (BKV) used to surface wall panels systems shall be manufactured to meet or exceed the National Electrical Manufacturing Association (NEMA LD3-2005) for thickness, performance properties and appearance.

#### B. Custom Graphic High-Pressure Laminate

- Custom High-Pressure Laminate (CHPL) and non-decorative backers (BKV) used to surface wall panels systems shall be manufactured to meet or exceed the National Electrical Manufacturing Association (NEMA LD3-2005) for thickness, performance properties and appearance.
- 2. Images can be either photographs or graphic images in a format in accordance with the manufacturer's artwork requirements described on their website.

#### C. Wood Veneer Panels.

- 1. Veneers from standard range of veneer species will be HPVA Architectural Grade A or better.
- 2. Veneer leaves to be balanced matched on the panel.
- 3. Panels to be finished on the edge with matching veneer edge banding.
- 4. Finish to be durable UV coating with a gloss (50%) or satin (20%) finish as selected by Architect.
- 5. Finish to be clear or custom stained as selected by Architect.
- 6. Panels to be random matched or vertically sequenced matched on the wall as selected by Architect.

#### D. Bulletin Board (Tack Board)

- 1. Linoleum resilient homogeneous tackable surface material shall be of natural materials consisting of linseed oil, granulated cork, resin binders and dry pigments, mixed and bonded to a natural jute backing.
- 2. Color as scheduled in the Room Finish Schedule or as indicated on the drawings.
- 3. Panels are not edge banded.

#### E. Acoustical Panel

- 1. ½ in. thick 100% polyester fiber acoustical panels edge machined to fit into specified molding system.
- 2. Noise Reduction Coefficient- .45 NRC
- 3. Fire Rating; ASTM E84, Class A
- 4. Color as noted in the Room Finish Schedule or as indicated on the drawings.
- 5. Not edge banded.

#### F. Marker Board Panels (Dry Erase).

- 1. Magnetic porcelain enamel steel faced panels.
- 2. Panels are not edge banded

#### G. Phenolic Panels

1. Panels to be durable 3/8" Compact Laminate panels formed from melamine resin saturated overlay and decorative papers bonded to a core of phenolic resin impregnated kraft papers to

- provide superior impact and moisture resistance.
- 2. Fire Rating ASTM- E84 Class A.

#### H. Back Painted Glass Panels

- 1. Back painted glass panels to be ¼" (6mm) tempered, low iron glass bonded to a suitable substrate profiled to accept full range of molding systems
- 2. Paint adhesion to meet or exceed 2,000PSI
- 3. Paint Color to be as selected by Architect.
- 4. Magnetic marker boards to be 3/16" tempered low iron glass, bonded to a steel faced substrate profiled to accept full range of PSI moldings. Colors to be as selected by Architect.
- 5. Imaged glass panels to be printed with ceramic fret inks bonded to glass with a resolution of at least 720 DPI. Image to be graphics or photographs provided by architect.
- 6. Digital etched glass panels to have graphic image provided by architect fused to panel surface with a contrasting matte finish.
- I. Panel core to be industrial grade M2 particle board used in Class II (B) panel composition. Fire-rated particle board shall be used for Class I (A) panel compositions (refer to AWI Section 200). Particle board is TCSA Title VI compliant and contains no added formaldehyde (NAF).

#### PART 3 - EXECUTION

#### 3.01 EXAMINATION

- A. Do not begin installation until substrates have been properly prepared according to AWI 1700-G-3.
- B. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.

#### 3.02 FIELD DIMENSIONS

- A. Where wall system is indicated to be fitted to other constructions, check actual dimensions of other constructions by accurate field measurements before manufacturing wall system; show recorded measurements on final shop drawings. Coordinate manufacturing schedule with construction progress to avoid delay of work.
- B. Where field measurements cannot be made without delaying the work, guarantee dimensions and proceed with manufacture of wall system without field measurements coordinate other construction to ensure that actual dimensions correspond to guaranteed dimensions.

#### 3.03 PREPARATION

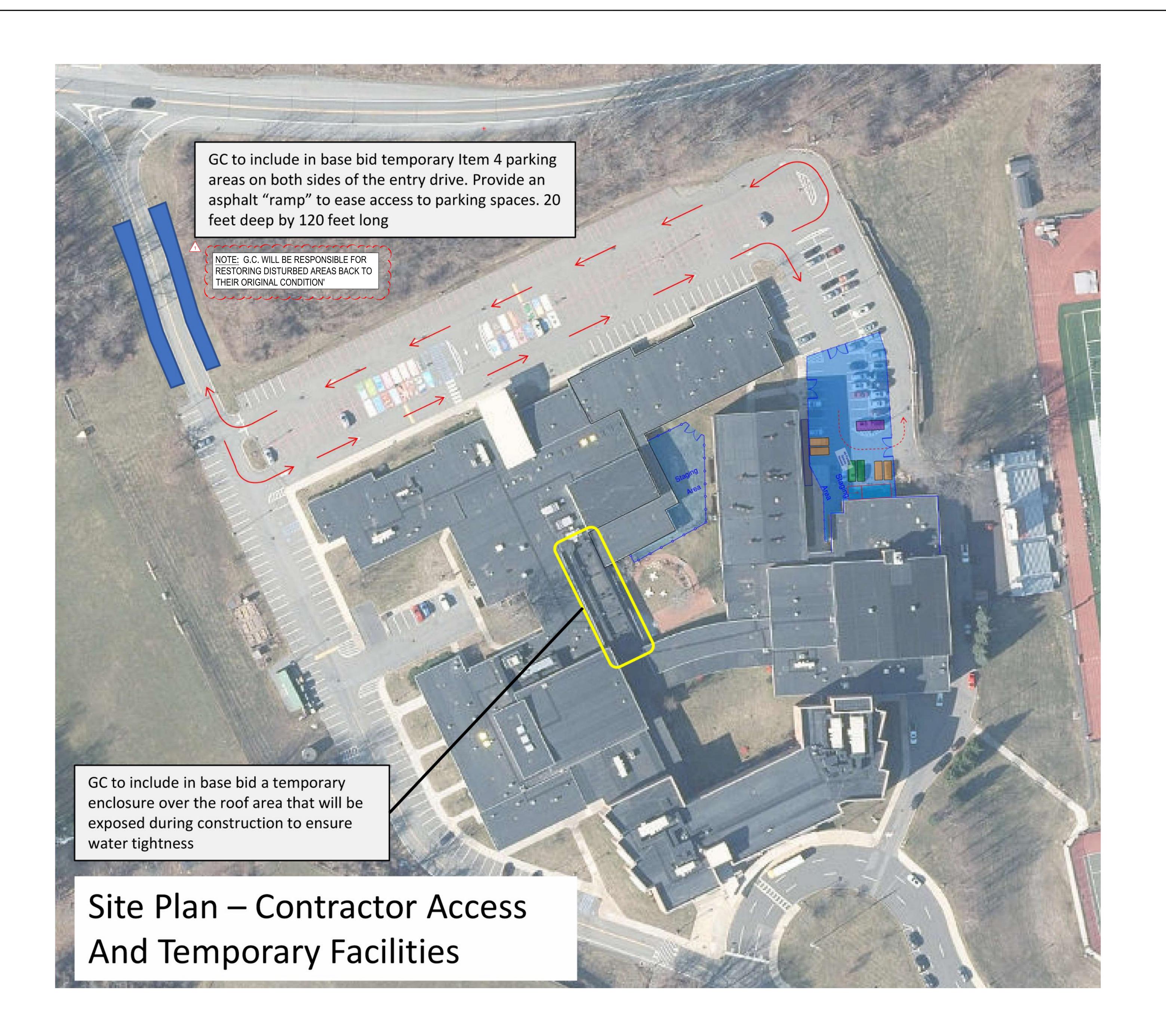
- A. Install in accordance with manufacturer's instructions.
- B. When interior paneling is on an exterior wall or in a wet area, provide a barrier sheet of plastic film between the outside wall and the panels in order to prevent condensation affecting the stability of the panels.
- C. Field cutting of all wall systems should be accomplished using carbide tools. All face penetrations and cutouts should have a minimal 1/8-inch (3 mm) radius in corners according to NEMA Standards Publication LD 3-2005.
- D. All wall systems should receive an "S" bead of panel mastic on the back of the panel during installation.

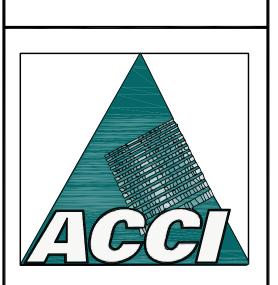
- E. For vertical applications, wall systems shall be mechanically fastened to horizontal metal furring strapping spaced 24 inches (610 mm) O.C. Furring straps shall be no less than 18-ga 3-1/2 inches (89 mm) wide, continuously. Metal strapping to be installed to the drywall studs prior to the application of the gypsum board by the framing contractor. For panels installed with a horizontal orientation, strapping is recommended but not necessary.
- F. Or installation over CMU walls: Walls must be plumb and true to 1/8" over 10'. CMU blocks must be flat in respect to the adjacent blocks. Wall panel molding and trims should be attached on 2' centers with 3/16"x1-3/4" Tapcon Phillips Climaseal Steel Flathead Concrete Anchors.

#### 3.04 CLEANING AND PROTECTION

- A. Clean surfaces. Touch up marred finishes or replace damaged components that cannot be restored to factory-finished appearance. Use only materials and procedures recommended or furnished by manufacturer.
- B. Protect installed products from damage, abuse, dust, dirt, stain, or paint until completion of project. Do not permit use during construction.

**END OF SECTION** 





DISTRICT BEDFORD CENTRAL

BOND IMPROVEMENTS

DWG TITLE SITE PLAN - CONTRACTOR

CIP0.01

	D007			Inoon								SCHE	DULE	HADDIVA	IDETA"				LIDE BATTLE	.	DOGE WE
AREA	DOOR NO.	LOCATION	SIGNAGE	DOOR LEAVES	WDTH	HEIGHT	THICKNESS	ELEV. TYPE	MAT.	GLAZING	FRAME TYPE.	MAT.	GLAZING	HARDWARE SET	HEAD	JAMB	SILL	T'HOLD	FIRE RATING	REMARKS	DOOR NO.
	100a	CROSS-CORRIDOR DOORS		2	3'-0"	7'-0"	1 3/4"	F	SCLCMV	F.G.	F2	H.M.		14A	H1	J1	~~	T2	20 MIN.	PROVIDE MAGNETIC HOLD OPEN DEVICES IN CLOSERS.	100a
[	100b	CROSS-CORRIDOR DOORS		2	3'-0"	7'-0"	1 3/4"	F	SCLCMV	F.G.	F2	H.M.		14A	H1	J1	~~	T2	20 MIN.	PROVIDE MAGNETIC HOLD OPEN DEVICES IN CLOSERS.	100b
	100c	CROSS-CORRIDOR DOORS		2	3'-0"	7'-0"	1 3/4"	F	SCLCMV	F.G.	F2	H.M.		14A	H1	J1	~~	T2	20 MIN.	PROVIDE MAGNETIC HOLD OPEN DEVICES IN CLOSERS.	100c
l h	101 102	NOT USED  LARGE GROUP INST. CLASSRM.	Λ	1	3'-0"	7'-0"	1 3/4"	D	SCLCMV	F.G.	SF-1	H.M.	F.L.P.	05A	H2	J1	~~	T3	20 MIN.		101 102
1 1	102	STORAGE ROOM No. 103	A B	1	3'-0"	7'-0"	1 3/4"	A	MCMV	F.G.	F1	H.M.	F,L,F,	8	H1	.I1	~~	T2	45 MIN.		102
l i	104	STORAGE ROOM No. 104	B	1	3'-0"	7'-0"	1 3/4"	A	MCMV		F1	H.M.		8	H1	 J1	~~	T4	45 MIN.		104
1 1	105	STORAGE ROOM No. 105	В	1	3'-0"	7'-0"	1 3/4"	А	MCMV		F1	H.M.		8	H1	J1	~~	T4	45 MIN.		105
	106	CLASSROOM No. 106	Α	1	3'-0"	7'-0"	1 3/4"	G	ALUM.	TEMP.	SF-2	ALUM.	TEMP.	06A	H1/A8.05	J4	~~	T3		PROVIDE GENIUS DOOR AND FRAME BY 'KI WALL'	106
	107	CLASSROOM No. 107	Α	1	3'-0"	7'-0"	1 3/4"	G	ALUM.	TEMP.	SF-7	ALUM.	TEMP.	06A	H1/A8.05	J5	~~	T4		PROVIDE GENIUS DOOR AND FRAME BY 'KI WALL'	107
1	108	CLASSROOM No. 107	A	1	3'-0"	7'-0"	1 3/4"	D	SCLCMV	F.G.	F1	H.M.		5	H1	J1	~~	T3	20 MIN.		108
1 -	109	QUIET STUDY ROOM No. 109	A	1	3'-0"	7'-0"	1 3/4"	G	ALUM.	TEMP.	SF-3	ALUM.	TEMP.	2	H1/A8.05	J5	~~	T4		PROVIDE GENIUS DOOR AND FRAME BY 'KI WALL'	109
l	110 111	QUIET STUDY ROOM No. 110	A B	1	3'-0" 3'-0"	7'-0 <b>"</b> 7'-0"	1 3/4" 1 3/4"	G	ALUM.	TEMP. TEMP.	SF-4 SF-6	ALUM.	TEMP.	6	H1/A8.05 H3/A8.05	J5 J6	~~	T4 T3		PROVIDE GENIUS DOOR AND FRAME BY 'KI WALL' PROVIDE GENIUS DOOR AND FRAME BY 'KI WALL'	110 111
l h	112	CLASSROOM No. 106	B	1	3'-0"	7'-0"	1 3/4"	G	ALUM.	TEMP.	SF-6	ALUM.	TEMP.	6	H3/A8.05		~~	T2		PROVIDE GENIUS DOOR AND FRAME BY 'KI WALL'	112
1 1	113	LIBRARY No. 113	B	1	3'-0"	7'-0"	1 3/4"	G	ALUM.	TEMP.	SF-18	ALUM.	TEMP.	6	H1/A8.05		~~	T3		PROVIDE GENIUS DOOR AND FRAME BY 'KI WALL'	113
l	114	QUIET STUDY ROOM No. 114	А	1	3'-0"	7'-0"	1 3/4"	G	ALUM.	TEMP.	SF-5	ALUM.	TEMP.	04A	H1/A8.05	J6	~~	T3		PROVIDE GENIUS DOOR AND FRAME BY 'KI WALL'	114
	115	QUIET STUDY ROOM No. 115	А	1	3'-0"	7'-0"	1 3/4"	G	ALUM.	TEMP.	SF-5	ALUM.	TEMP.	04A	H1/A8.05	J6	~~	T3		PROVIDE GENIUS DOOR AND FRAME BY 'KI WALL'	115
	116	LIBRARY No. 113	В	1	3'-0"	7'-0"	1 3/4"	G	ALUM.	TEMP.	SF-18	ALUM.	TEMP.	6	H1/A8.05	J4	~~	T3		PROVIDE GENIUS DOOR AND FRAME BY 'KI WALL'	116
	117	L.M.S. OFFICE	В	1	3'-0"	7'-0"	1 3/4"	G	ALUM.	TEMP.	SF-6	ALUM.	TEMP.	02A	H3/A8.05	J6	~~	T3		PROVIDE GENIUS DOOR AND FRAME BY 'KI WALL'	117
	118	SENSORY ROOM No. 118	Α	1	3'-0"	7'-0"	1 3/4"	G	ALUM.	TEMP.	SF-6	ALUM.	TEMP.	02A	H3/A8.05	J6	~~	T3		PROVIDE GENIUS DOOR AND FRAME BY 'KI WALL' AND BLACKOUT SHADES.	118
	119 120	EXTERIOR  QUIET STUDY ROOM No. 120	A	2	3'-0"	7'-0 <b>"</b> 7'-0 <b>"</b>	1 3/4" 1 3/4"	C	FRP ALUM.	INSUL. TEMP.	F2 SF-8	ALUM.	TEMP.	20	H7 H1/A8.05	J13 J6	~~	T1 T4		PROVIDE GENIUS DOOR AND FRAME BY 'KI WALL'	119 120
-	120	QUIET STUDY ROOM No. 121	A	1	3'-0"	7-0"	1 3/4"	G	ALUM.	TEMP.	SF-8	ALUM.	TEMP.	2	H1/A8.05		~~	T4		PROVIDE GENIUS DOOR AND FRAME BY 'KI WALL'	120
	122	NOT USED	, ,	'			. 5/ 1	J	, (EQ141)	. — 1911 .	J. U	, (20141)	14/1	_				17		The second secon	122
	123	VESTIBULE		1	3'-0"	7'-0"	1 3/4"	С	SCLCMV	F.G.	F1	H.M.		1	H1	J1	~~	T3	20 MIN.		123
	124	EXTERIOR		2	3'-0"	7'-0"	1 3/4"	С	FRP	INSUL.	F2	ALUM.		20	H7	J12	~~	T1			124
	125	COUNSELOR'S OFFICE No. 125	В	1	3'-0"	7'-0"	1 3/4"	D	SCLCMV	F.G.	F1	H.M.		4	H1	J1	~~	Т3	20 MIN.		125
	126	VAULT No. 126	В	1	3'-0"	7'-0"	1 3/4"	A	H.M.		F1	H.M.		10	H4	J8	~~	T2	45 MIN.		126
	127	NOT USED			01.0	71.61	4.044		0010111						114				00.110		127
	128 129	DIRECTOR'S OFFICE No. 128  OFFICE No. 129	B B	1	3'-0" 3'-0"	7'-0 <b>"</b> 7'-0"	1 3/4" 1 3/4"	D	SCLCMV SCLCMV	F.G. F.G.	F1 F1	H.M.		4	H1 H1	J1 J1	~~	T3	20 MIN. 20 MIN.		128 129
1 1	130	OFFICE No. 130	В	1	3'-0"	7-0"	1 3/4"	D	SCLCMV	F.G.	F1	H.M.		4	H1	J1	~~	T3	20 MIN.		130
1 1	131	OFFICE No. 131	B	1	3'-0"	7'-0"	1 3/4"	D	SCLCMV	F.G.	F1	H.M.		4	H1	 J1	~~	T3	20 MIN.		131
l ∡ ऻ	132	OFFICE No. 132	В	1	3'-0"	7'-0"	1 3/4"	D	SCLCMV	F.G.	F1	H.M.		4	H1	J1	~~	T3	20 MIN.		132
₹	133	OFFICE No. 133	В	1	3'-0"	7'-0"	1 3/4"	D	SCLCMV	F.G.	F1	H.M.		4	H1	J1	~~	T3	20 MIN.		133
ARE	134	OFFICE No. 134	В	1	3'-0"	7'-0"	1 3/4"	D	SCLCMV	F.G.	F1	H.M.		4	H1	J1	~~	T3	20 MIN.		134
l ≰ ∣	135	OFFICE No. 135	В	1	3'-0"	7'-0"	1 3/4"	D	SCLCMV	F.G.	F1	H.M.		4	H1	J1	~~	T3	20 MIN.		135
1 1	136	OFFICE No. 136	В	1	3'-0"	7'-0"	1 3/4"	D	SCLCMV	F.G.	F1	H.M.		4	H1	J1	~~	T3	20 MIN.		136
1 1	137 138	COLLEGE CAREER CENTER No. 137  I.T. CLOSET No. 138	<u>В</u> В	1	3'-0"	7'-0 <b>"</b> 7'-0 <b>"</b>	1 3/4" 1 3/4"	D 0	SCLCMV SCLCMV	F.G.	SF-13 F1	H.M.	F.L.P.	08B	H2 H1	J1	~~	T2 T13	20 MIN. 20 MIN.		137 138
1 1	139	NOT USED	В		3-0	7-0	1 3/4	A	SCLCIVIV		FI	□ □.lVI.		008	пі	J1	~~	113	ZU IVIIN.		139
1 1	140	LIBRARY No. 113	B	1	3'-0"	7'-0"	1 3/4"	G	ALUM.	F.G.	SF-6	ALUM.	F.L.P.	6	H3/A8.05	J7	~~	T2	20 MIN.		140
	141	READING ROOM No. 141	В	1	3'-0"	7'-0"	1 3/4"	G	ALUM.	TEMP.	SF-6	ALUM.	TEMP.	06A	H3/A8.05	J6	~~	T2		PROVIDE GENIUS DOOR AND FRAME BY 'KI WALL' WITH TRANSOM PNL.	141
	142	LIBRARY NO. 113	В	2	3'-0"	7'-0"	1 3/4"	F	ALUM.	TEMP.	F3	ALUM.		15	H3/A8.05	J6	~~	T2		PROVIDE GENIUS DOOR AND FRAME BY 'KI WALL' AND MHO DEVICES.	142
	143	LIBRARY No. 113	В	2	3'-0"	7'-0"	1 3/4"	F	ALUM.	TEMP.	F3	ALUM.		15	H3/A8.05	J6	~~	T2		PROVIDE GENIUS DOOR AND FRAME BY 'KI WALL' AND MHO DEVICES.	143
	144	LARGE CAFETERIA No. 144	В	2	3'-0"	7'-0"	1 3/4"	F	ALUM.	TEMP.	SF-10	ALUM.	TEMP.	17	H3/A8.05	J4/A8.05	~~	T2		PROVIDE GENIUS DOOR AND FRAME AND MHO DEVICES IN CLOSERS.	144
1 -	145	STORAGE ROOM	В	1	3'-0" V.IF	7'-0" V.I.F.	1 3/4"	A	MCMV		E.T.R.	E.T.R.		08C	~~	~~	~~	T11	45 MIN.		145
l	145a 146	FACULTY CAFETERIA No. D140 STORAGE ROOM	В В	1	3'-0" V.IF	7'-0" V.I.F. 7'-0" V.I.F.	1 3/4"	Λ	SCLCMV MCMV		E.T.R.	E.T.R. E.T.R.		05A 08C	~~	~~	~~	T11	45 MIN.		145a 146
l h	147	KITCHEN	В	1	3'-0" V.IF	8'-0" V.I.F.	1 3/4"	D	MCMV	F.L.P.	E.T.R.	E.T.R.		05A	~~	~~	~~	T10	45 MIN.		147
1 1	148	SERVING LINE No. 148	B	1 1	3'-0"	7'-0"	1 3/4"	G	ALUM.	F.L.P.	SF-11	ALUM.	F.L.P.	05E	H3/A8.05	J7	~~	T2	45 MIN.	PROVIDE MAGNETIC HOLD OPEN DEVICES IN CLOSERS.	148
1 1	149	SERVING LINE No. 148	В	1	3'-0"	7'-0"	1 3/4"	G	ALUM.	F.L.P.	SF-11	ALUM.	F.L.P.	05E	H3/A8.05	J7	~~	T2	45 MIN.	PROVIDE MAGNETIC HOLD OPEN DEVICES IN CLOSERS.	149
	150	SERVING LINE No. 148	В	2	3'-0"	7'-0"	1 3/4"	F	ALUM.	TEMP.	SF-9	ALUM.	TEMP.	17	H3/A8.05	J3 SIM.	~~	T2		PROVIDE GENIUS DOOR AND FRAME AND MHO DEVICES IN CLOSERS.	150
	151	SERVING LINE No. 148	В	2	3'-0"	7'-0"	1 3/4"	F	ALUM.	TEMP.	SF-9	ALUM.	TEMP.	17	H3/A8.05	J3 SIM.	~~	T2		PROVIDE GENIUS DOOR AND FRAME AND MHO DEVICES IN CLOSERS.	151
	152	SERVING LINE No. 148	В	1	3'-0"	7'-0"	1 3/4"	G	ALUM.	F.L.P.	SF-11 OPP.	ALUM.	F.L.P.	05E	H3/A8.05	J7	~~	T2	45 MIN.	PROVIDE MAGNETIC HOLD OPEN DEVICES IN CLOSERS.	152
	153	SERVING LINE No. 148	В	1	3'-0"	7'-0"	1 3/4"	G	ALUM.	F.L.P.	SF-11 OPP.	ALUM.	F.L.P.	05E	H3/A8.05	J7	~~	T2	45 MIN.	PROVIDE MAGNETIC HOLD OPEN DEVICES IN CLOSERS.	153
	154 155	KITCHEN  GUIDANCE OFFICE SUITE No. 155	В В	1 1	3'-0" V.IF	8'-0" V.I.F. 7'-0"	1 3/4" 1 3/4"	G G	MCMV ALUM.	F.L.P. F.G.	E.T.R. SF-19	E.T.R.	F.L.P.	05A 6	H3/A8.05	 	~~	T10	45 MIN. 20 MIN.		154 155
-	156	YEARBOOK OFFICE No. 156	В	1	3'-0"	7-0"	1 3/4"	G	ALUM.	F.L.P.	SF-19 SF-13	ALUM.	F.L.P.	06A	H3/A8.05	 J5 SIM.	~~	T3	45 MIN.		156
	157	CROSS-CORRIDOR DOORS		2	3'-0"	7'-0"	1 3/4"	C	SCLCMV	F.G.	F2	H.M.		14	H1	J2 SIM.	~~	T2	20 MIN.	PROVIDE MAGNETIC HOLD OPEN DEVICES.	157
	158	SMALL CAFETERIA No. 158	В	2	3'-0"	7'-0"	1 3/4"	G	ALUM.	F.G.	F2	ALUM.		16	НЗ	J3 SIM.	~~	T2	20 MIN.	PROVIDE MAGNETIC HOLD OPEN DEVICES.	158
	159	VESTIBULE		2	3'-0"	7'-0"	1 3/4"	C	SCLCMV	F.G.	F2	H.M.		13	H1	J2	~~	Т3	20 MIN.		159
	160	EXTERIOR		2	3'-0"	7'-0"	1 3/4"	С	FRP	INSUL.	SF-14	ALUM.	INSUL.	20	9A/A6.02	J14	~~	T1			160
	161	SMALL CAFETERIA EXTERIOR		2	3'-0"	7'-0"	1 3/4"	F	FRP	INSUL.	SF-15	ALUM.	INSUL.	19	10A/A6.02	J14 SIM.	~~	T1			161
	162	CAFETERIA CLOSET		1	3'-0"	7'-0"	1 3/4"	A	SCLCMV		F1	H.M.	 C 462 TUDOUO	08D	H5	J9	~~	T11			162
-	172	TOILET ROOM	D	1	3'-0" V.IF	7'-0" V.I.F.	3 3/4"	Δ	SCLCMV		SEE 'AREA E.T.R.	B' FOR DOOR E.T.R.	S 163 THROUG	H 171. 03B	~~	~~	~~	T12	20 MIN.		172
	172	TOILET ROOM	D D	1 1	3'-0" V.IF		3 3/4"	A	SCLCMV		E.T.R.	E.T.R.		03B	~~	~~	~~	T12	20 MIN.		172
	174	COPY ROOM	В	1	3'-0" V.IF		2 3/4"	A	SCLCMV		E.T.R.	E.T.R.		05C	~~	~~	~~	T11	20 MIN.		174
	175	CUSTODIAL CLOSET	В	1	3'-0" V.IF		1 3/4"	А	SCLCMV		E.T.R.	E.T.R.		08G	~~	~~	~~	T11	20 MIN.	REVERSE SWING.	175
	163	CONFERENCE ROOM No. 163	В	1	3'-0"	7'-0"	1 3/4"	D	SCLCMV	F.G.	SF-13	H.M.		5	H2	J2	~~	T3	20 MIN.		163
	164	SECURITY OFFICE No. 164	В	1	3'-0"	7'-0"	1 3/4"	D	SCLCMV	F.G.	F1	H.M.		05B	H1	J2	~~	T3	20 MIN.		164
	165	ART OFFICE CLOSET	 D	1	3'-0"	7'-0"	1 3/4"	A	SCLCMV	TEMP	F1	H.M.	TEMP	08A	H1	J1	~~	T4			165
	166 167	ART DIRECTOR'S OFFICE No. 165  ART OFFICE No. 167	В В	1 1	3'-0" 3'-0"	7'-0 <b>"</b> 7'-0"	1 3/4" 1 3/4"	D D	SCLCMV SCLCMV	TEMP. F.G.	SF-13 SF-13	H.M.	TEMP.	4	H2 H2	J1 J2	~~	T4 T3	20 MIN.		166 167
A   B	168	GALLERY No. 168	В	2	3'-0"	7-0"	1 3/4"	С	SCLCMV	F.G.	F2	H.M.		7	H1	J2 J2	~~	T2	20 MIN.		168
REA	168a	GALLERY CLOSET		2	2'-7"	7'-0"	1 3/4"	A	SCLCMV		F2	H.M.		9	H1	J1	~~	T2			168a
AR	169	CROSS-CORRIDOR DOORS		2	3'-0" V.IF		1 3/4"	D	SCLCMV	F.G.	E.T.R.	E.T.R.		14	~~	~~	~~	T11	20 MIN.	PROVIDE MAGNETIC HOLD OPEN DEVICES.	169
	170	SCHOOL STORE	В	1	3'-0" V.IF		1 3/4"	D	SCLCMV	F.G.	E.T.R.	E.T.R.		05C	~~	~~	~~	T11	20 MIN.		170
	171	STORAGE CLOSET	В	1	3'-0" V.IF	7'-0" V.I.F.	1 3/4"	Α	SCLCMV		E.T.R.	E.T.R.		08E	~~	~~	~~	T11	20 MIN.		171

SEE SCHEDULE 3-0"	CHEDULE	SEE SCHEDULE	SEE SCHEDULE  8" 8"  9-0-18	SEE SCHEDULE  3.0" 6" 8" 8" 8" 8" 8" 8" 8" 8" 8" 8" 8" 8" 8"	SEE SCHEDULE  3.0."  8" 5"  SEE SCHEDULE	SEE SCHEDULE  O"  O"  O"  O"  O"  O"  O"  O"  O"  O	SEE SCHEDULE  5" 5" 5" 101
(A)	CENTERLINE OF HARDWARE (TYP.)	В	©	(D)	E	F	(G)

DOOR TYPE ELEVATIONS

SCALE: 1/4" = 1'-0" NOTE: REFER TO DOOR SCHEDULE FOR DOOR MATERIAL AND GLAZING TYPE (WHERE APPLICABLE).

## ABBREVIATION LEGEND

ALUM ALUMINUM	S.F
ALUMI	
S.C.L.C.O.V SOLID COMPOSITE LUMBER CORE OAK VENEER	SG-1
M.C.O.V	SG-2
S.C.L.C.M.V	SG-3
M.C.M.V	SG-4
F.R.P	SG-5
H.M	SG-6
F.G	BRG-L1
F.L.P	BRG-L2
PYRO	BRG-L3
INSUL	SGPL1
S.L	SGPL2
OBSC	SGPL3
U.O.N	TEMP

## DOOR NOTES

ALL DOORS, FRAMES AND HARDWARE SHALL BE PROVIDED AND INSTALLED BY GENERAL CONTRACTOR UNLESS OTHERWISE NOTED.

GENERAL CONTRACTOR SHALL COORDINATE ALL KEYING WITH OWNER.

FIRE RATED WOOD DOORS (45 MIN. AND ABOVE ONLY) SHALL HAVE SOLID MINERAL CORE, ALL OTHER WOOD DOORS SHALL HAVE SOLID COMPOSITE LUMBER CORE.

FLUSH WOOD DOORS SHALL BE 5 PLY LAMINATED FACE SHEETS WITH 2 PLY FINISH VENEER OVER SPECIFIED CORE. AT FIRE RATED DOORS, TOP AND BOTTOM RAILS AND STILES SHALL BE FIRE RESISTANT COMPOSITION MATERIAL BONDED TO CORE. PROVIDE SOLID BLOCKING FOR CLOSER AND HARDWARE. REFER TO SPECIFICATION SECTION 081416.

FLUSH WOOD DOORS AS MANUFACTURED BY 'VT INDUSTRIES' OR APPROVED EQUAL. SPECIES: SELECT WHITE MAPLE. COLOR: CLEAR, CL-18

ALL GLAZING IN DOORS SHALL BE INSTALLED IN METAL VISION KIT TO MATCH FIRE LABEL. VISION KIT COLOR SHALL BE AS SELECTED BY ARCHITECT. INTERIOR GLAZING TYPES AND SIZES SHALL CONFORM TO NFPA 80 AND/OR ASTM E119. WHERE SECURITY GLAZING IS INDICATED, VISION KIT SHALL BE THROUGH BOLT TYPE.

ALL NEW H.M. FRAMES SHALL BE FULLY WELDED WRAP AROUND TYPE (UNLESS OTHERWISE NOTED OR DETAILED). THROATS SHALL BE SIZED ACCORDING TO WALL THICKNESS AND FINISH, REFER TO FLOOR PLAN AND ENLARGED DETAILS FOR ADDITIONAL INFORMATION.

OPERATOR, LOCKSET, LATCH, HINGES, DOOR SWING AND/OR CLOSER, ETC. AS REQUIRED FOR COMPLETE AND FUNCTIONAL OPERATION. GENERAL CONTRACTOR IS RESPONSIBLE FOR VERIFYING HEIGHT AND WIDTH OF PROPOSED DOORS TO BE INSTALLED IN EXISTING FRAMES (PRIOR TO SHOP DRAWING SUBMITTAL) TO

FOR DOOR REPLACEMENTS IN KIND, GENERAL CONTRACTOR SHALL MODIFY AND PATCH EXISTING WOOD OR H.M. DOOR FRAMES (DESIGNATED TO REMAIN) TO ACCOMMODATE NEW DOOR

ENSURE PROPER FIT AND DOOR FUNCTION.

ALL NEW HOLLOW METAL FRAMES AND HOLLOW METAL DOORS SHALL BE FINISH PAINTED. REFER TO SPECIFICATION SECTION 099000 FOR PAINT TYPE. COLOR AS SELECTED BY

GENERAL CONTRACTOR SHALL PROVIDE AND INSTALL A.D.A. COMPLIANT SIGNAGE AT ALL DOORS WHERE SPECIFIED IN DOOR SCHEDULE AND/OR SHOWN ON FLOOR PLANS. INSTALL IN CONFORMANCE WITH ALL ADA HEIGHT AND PLACEMENT REQUIREMENTS.

▲ A. WHERE DENOTED IN SCHEDULE, PROVIDE 4"x4" SIGNAGE WITH BRAILLE INDICATING ROOM NUMBER (COORD. WITH OWNER), MODEL No. E-BTCUST. ▲ B. WHERE DENOTED IN SCHEDULE, PROVIDE 4"x12" SIGNAGE WITH BRAILLE INDICATING ROOM NAME AND NUMBER (COORD. WITH OWNER), MODEL No. E-BTCUST.

▲ C. WHERE DENOTED IN SCHEDULE, PROVIDE 8"x8" SIGNAGE WITH BRAILLE INDICATING GENDER AND WHEELCHAIR PICTOGRAMS AND ROOM NAME AT MULTI-USE TOILET ROOMS. - AT MULTI-USE TOILET ROOMS, PROVIDE AND INSTALL MODEL No. X-5687 (WOMEN), X-5672 (MEN), X-7095 (BOY'S), X-7096 (GIRL'S).

- AT MULTI-USE ACCESSIBLE TOILET ROOMS, PROVIDE AND INSTALL MODEL No. X-5688 (WOMEN), X-5671 (MEN), X-7108 (BOY'S), X-7107 (GIRL'S). ▲ D. WHERE DENOTED IN SCHEDULE, PROVIDE 6"x9" SIGNAGE WITH BRAILLE INDICATING GENDER AND WHEELCHAIR PICTOGRAMS AND ROOM NAME AT SINGLE-USE TOILET ROOMS. - AT SINGLE-USE TOILET ROOMS, PROVIDE AND INSTALL MODEL No. E-BTCUST. SIGN SHALL SPECIFY STAFF OR STUDENT USE AS REQUIRED.

- AT SINGLE-USE ACCESSIBLE TOILET ROOMS, PROVIDE AND INSTALL MODEL No. E-BTCUST. SIGN SHALL SPECIFY STAFF OR STUDENT USE AS REQUIRED.

MANUFACTURER: "ALLSTATE SIGN AND PLAQUE", DEER PARK, NY OR APPROVED EQUAL. ALL SIGNAGE SHALL BE SUBMITTED TO ARCHITECT FOR REVIEW AND APPROVAL. COLOR AS SELECTED BY ARCHITECT

ALL REMOVABLE MULLIONS ARE TO BE KEYED ALIKE AND TO MATCH EXISTING BUILDING SYSTEM.

AUTOMATIC DOOR OPERATORS - THE ELECTRICAL CONTRACTOR SHALL PROVIDE A LINE VOLTAGE CIRCUIT TO THE AUTO OPERATOR. LOCATION SHALL BE COORDINATED WITH THE GENERAL CONTRACTOR. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR ALL WIRING ASSOCIATED WITH AUTOMATIC DOOR OPERATORS, INCLUDING ELECTRONIC STRIKE, PUSH BUTTONS, TRANSFORMERS AND ANY OTHER DEVICES REQUIRED FOR A FULLY OPERATIONAL SYSTEM.

14. FIRE RATED GLAZING WITH SURFACE APPLIED FILMS WILL NOT BE CONSIDERED EQUIVALENT WHERE LAMINATED FILM IS SPECIFIED.

15. THE FOLLOWING DOOR LOCATIONS SHALL SWING 180 DEG.: 144, 149, 150, 152, 157, 158, 241, 242, 243.

16. THE FOLLOWING DOORS SHALL INCLUDE ELECTRIC STRIKES: 142, 143, 144, 150, 151, 155, 158.

17. REFER TO DRAWING A9.00 FOR DOOR LOCATIONS REQUIRING WINDOW SHADES.

19. ALL ALUMINUM DOOR FRAMES, STOREFRONTS, VISION-LITE FRAMES AND WINDOW FRAMES SHALL BE POWDERCOATED FINISH. CUSTOM COLOR AS SELECTED BY ARCHITECT.

## STOREFRONT ENTRANCE and FRAMING NOTES

REFER TO CODE COMPLIANCE DRAWINGS FOR WIND LOAD DESIGN CRITERIA.

ALL EXTERIOR STOREFRONT, CURTAIN WALL AND EXTERIOR DOOR GLAZING SHALL BE 1" DIRECT GLAZED AS INDICATED UNLESS OTHERWISE NOTED. REFER TO PROJECT MANUAL FOR GLAZING TYPE AND CONFIGURATION.

ALL STOREFRONT AND CURTAIN WALL FRAMING MEMBERS SHALL BE FACTORY FINISHED. COLOR: AS SELECTED BY ARCHITECT.

REFER TO WALL SECTIONS FOR STOREFRONT / CURTAIN WALL CONFIGURATION, ADJACENT CONDITIONS AND MATERIALS, AND TO ASSIST IN DETERMINING FASTENING LOCATIONS. STOREFRONT AND CURTAIN WALL SYSTEM SHALL BE SECURED TO STRUCTURE IN ACCORDANCE WITH MANUFACTURERS REQUIREMENTS TO MEET N.Y.S. WIND LOAD REQUIREMENTS.

5. G.C. SHALL COORDINATE STOREFRONT / CURTAIN WALL OPENING LOCATIONS / QUANTITIES WITH FLOOR PLAN, ELEVATIONS, AND SCHEDULE.

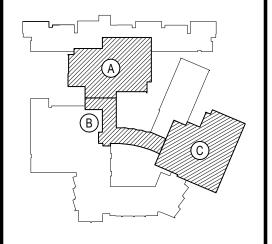
. G.C. SHALL SUBMIT SHOP DRAWINGS WITH CALCULATIONS TO SHOW COMPLIANCE WITH WIND PRESSURE LOADING, DEFLECTION AND MOVEMENT REQUIREMENTS. FRAME DEPTH 4 ½", MAX. FRAME DEPTH 6" (U.O.N.).

EXTERIOR STOREFRONT FRAMING SYSTEM SHALL BE 4½" x 2" 'TRIFAB 451-T' BY 'KAWNEER'. INTERIOR STOREFRONT FRAMING SYSTEM SHALL BE 4½" x 2" 'TRIFAB 451' BY 'KAWNEER UNLESS

OTHERWISE NOTED OR ARCHITECT APPROVED EQUAL.  $\sim\sim\sim\sim\sim\sim\sim\sim\sim$ 8. PROVIDE 'TGP FIREFRAMES' OR GENIUS WALL SYSTEM BY 'KI' OR ARCHITECT APPROVED EQUAL WHERE REQUIRED.

9. G.C. SHALL COORDINATE WIRING AND HARDWARE PREPARATION OF ELECTRONIC DOOR CONTROLS WITH E.C. FOR COMPLETE AND FUNCTIONAL OPERATION.

REV. DATE HESE DRAWINGS ARE BASED ON CONSTRUCTION DRAWINGS NO PREPARED BY BBS ARCHITECTS, LANDSCAPE ARCHITECTS AND ENGINEERS, PC. AND, THEREFORE, MAY NOT REPRESENT THE CONDITIONS AS CONSTRUCTED AT THE TIME. ALL EXISTIN CONDITIONS SHOWN ARE REPRESENTED AS SUGGESTIVE INFORMATION AS THEY MAY NOT HAVE BEEN BUILT AND DETAILED



KEY PLAN NOT TO SCALE

CENTRAL SCHOC 2 2 - BOND IMPROV X LANE HIGH SCH

DRAWING BY: P.J.H. CHECK BY: P.J.H.

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DISTRICT BEDFORD CENTRAL SCHOOL DISTRICT PROJECT PHASE 2 -BOND IMPROVEMENTS DWG TITLE DOOR SCHEDULE

SCALE: AS NOTED

BID PICK-UP: FEBRUARY 24, 2025

FILE No: 23-131a

A8.01

CONCRETE COVER SCHEDULE	
LOCATION	COVER
CONCRETE CAST AGAINST AND PERMANENTLY IN CONTACT WITH GROUND	3"
CONCRETE EXPOSED TO WEATHER OR IN CONTACT WITH GROUND	
#6 BARS AND LARGER	2"
#5 BARS AND SMALLER	1 1/2"
CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND	
SLABS, WALLS, JOIST	3/4"
BEAMS, GIRDERS, COLUMNS, AND PIERS	1 1/2"

	CLASS B TENSION LAP SPLICE SCHEDULE								
	fc' =3,000 PSI fc' = 4,000 PSI								
BAR SIZE	R SIZE TOP BAR OTHER BAR BAR SIZE TOP BAR OTHER BAR					R BAR			
DAR SIZE	CASE 1	CASE 2	CASE 1	CASE 2	BAR SIZE	CASE 1	CASE 2	CASE 1	CASE 2
#3	28	42	21	32	#3	24	36	18	28
#4	37	56	28	43	#4	32	48	25	37
#5	46	69	36	53	#5	40	60	31	46
#6	56	83	43	64	#6	48	72	37	55
#7	81	131	62	93	#7	70	105	54	81
#8	93	139	71	107	#8	80	120	62	92
#9	104	157	80	120	#9	90	136	70	104

- TABULATED VALUES ARE IN INCHES. 2. TOP BARS ARE HORIZONTAL BARS PLACED WITH MORE THAN 12 INCHES OF FRESH CONCRETE PLACED BELOW THE DEVELOPMENT LENGTH OR SPLICE.
- 3. CASE 1 APPLIES TO CLEAR SPACING GREATER THAN OR EQUAL TO 2 BAR DIAMETERS AND COVER GREATER THAN OR EQUAL TO 1 DIAMETER.
- 4. CASE 2 APPLIES TO CLEAR SPACING LESS THAN 2 BAR DIAMETERS AND COVER LESS THAN 1
- DIAMETER.
- 5. FOR VALUES OF COVER AND SPACING BETWEEN TABULATED VALUES USE THE LONGER LAP LENGTH. DO NOT INTERPOLATE.
- 6. CALCULATE CENTER TO CENTER SPACING OF BARS AT LAP SPLICE LOCATIONS. 7. FOR EPOXY COATED BARS INCREASE THE TABULATED VALUES AS FOLLOWS; TOP BARS MULTIPLY TABULATED VALUE BY 1.3, FOR OTHER BARS MULTIPLY TABULATED VALUE BY 1.5.
- 8. FOR LIGHTWEIGHT CONCRETE MULTIPLY TABULATED VALUE BY 1.3

	CC	NCRE	TE MIX	,	
APPLICATION	EXPOSURE	F'c	MAXIMUM W/C RATIO	AIR CONTENT	NOMINAL MAX. AGGREGATE SIZE (NOTE 4)
FOOTINGS	F0	3,000 PSI	SEE NOTE 2	6% ± 1.0%	-
EXT SLAB ON GRADE	F1	4,500 PSI	0.45	6% ± 1.0%	-
SLAB ON GRADE	F0	3,500 PSI	SEE NOTE 2	SEE NOTE 3	-
SLABS AND BEAMS	F0	4,500 PSI	0.45	6% ± 1.0%	-
PIERS	F0	4,500 PSI	0.45	6% ± 1.0%	-

- 1. EXPOSURE CATEGORIES AND CLASSES FOR SULFATES, PERMEABILITY AND CORROSION PROTECTION OF REINFORCEMENT IS CLASS ZERO UNLESS NOTED OTHERWISE.
- 2. WHERE NO MAXIMUM WATER TO CEMENT RATIO IS NOTED, PROPORTION WATER TO CEMENT RATIO FOR SPECIFIED CONCRETE MIX DESIGN STRENGTH.
- 3. DO NOT AIR ENTRAIN INTERIOR SLABS ON GRADE OR SLABS ON METAL DECK. AIR ENTRAINMENT IS NOT PERMITTED FOR CONCRETE TO RECEIVE HARD TROWEL FINISH AND ENTRAPPED AIR SHALL NOT EXCEED 3%. SLABS SHALL BE FINISHED TO AVOID SURFACE IMPERFECTIONS, INCLUDING BLISTERING AND DELAMINATION.
- 4. COARSE AGGREGATE SHALL BE AS INDICATED IN SPECIFICATIONS. MAXIMUM CONCRETE UNIT WEIGHT NOT TO EXCEED 150 POUNDS PER CUBIC FEET.

MASONRY REINFORCEMEN	T LAP SI	PLICE	
BAR LAP LENGTHS IN CMU WITH f'm	= 2,000 psi		
LOCATION	#4	#5	#6
(1) BAR AT CENTER OF 6" CMU CORE OR BOND BEAM	23"	36"	73"
(1) BAR AT CENTER OF 8" CMU CORE OR BOND BEAM	23"	27"	50"
(1) BAR AT CENTER OF 12" CMU CORE OR BOND BEAM	23"	36"	73"
(2) BARS IN 8" CMU CORE LOCATED 5" FROM EACH FACE SHELL	23"	36"	73"
(2) BARS IN 12" CMU CORE LOCATED 9" FROM EACH FACE SHELL	23"	36"	73"
(2) BARS IN 8", 10", 12" BOND BEAMS LOCATED 3/4" FOR INSIDE FACE OF FACE SHELL	22"	22"	22"

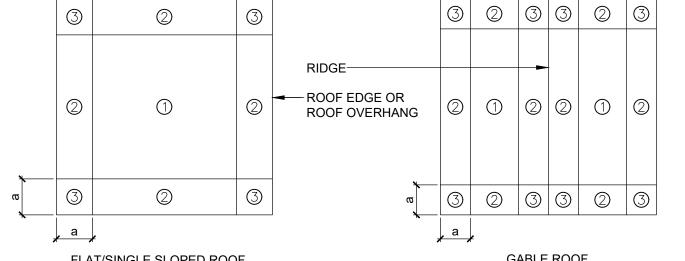
		LINTEL SCHEDULE						
MARK	MATERIAL	TYPE	LENGTH	REMARKS				
L1	L5X31/2X5/16 (LLV)	L	4'-8"±	COORD LENGTH W/ DOOR SCHEDUE				
L2	HSS16X8X1/4 W/ CONT 5/16" PL TOP AND BOTTOM	l	SEE PLAN	AT WINDOW VL-13. SEE SECTION 4/S0.01, BEAR 12" ON EXIST CMU AND CONN TO COL AT OPPOSITE END. SEE 5/S0.01.				

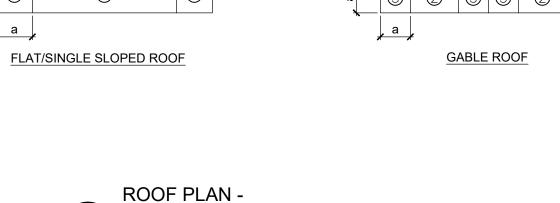
## LINTEL NOTES:

- 1. FOR OPENINGS NOT OTHERWISE DETAILED OR SCHEDULED, INCLUDING DOORS, WINDOWS, AND MECHANICAL OPENINGS, MINIMUM LINTELS SHALL BE (FOR EACH 4 INCHES OF MASONRY WIDTH), ONE L3 1/2 X3 1/2 X 5/16 FOR SPANS UP TO 4 FEET, ONE L4X3 1/2 X5/16 LLV FOR SPANS UP TO 6 FEET; ONE L5X3 1/2X5/16 LLV FOR SPANS UP TO 8 FEET. FOR SPANS LESS THAN 2 FEET, PROVIDE A 5/16 INCH PLATE. COORDINATE OPENINGS WITH ARCHITECTURAL AND MECHANICAL DRAWINGS.
- FOR 10-INCH MASONRY WALLS, USE TWO L5X5X5/16 FOR SPANS UP TO 6 FEET AND TWO L6X6X5/16 FOR SPANS UP TO 8 FEET. TRIM HORIZONTAL LEG TO 4 1/2 INCHES WIDE.
- 2. WELD TOGETHER BACK-TO-BACK LINTELS. MAXIMUM WELD SPACING SHALL NOT EXCEED 12 INCHES ON CENTER.
- 3. BEAR LINTELS A MINIMUM OF 8 INCHES EACH END UNLESS NOTED OTHERWISE. GROUT CMU CORES FULL HEIGHT BELOW LINTEL BEARING.

1

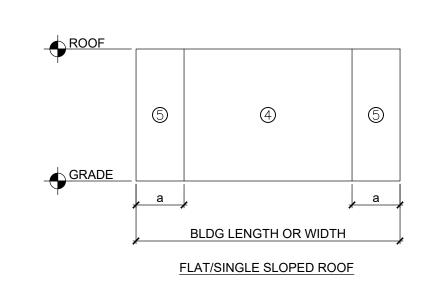
4. HOT-DIP GALVANIZE LINTELS IN EXTERIOR WALLS.





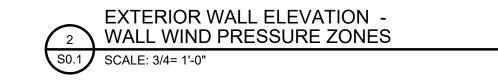
a = 10 PERCENT OF LEAST HORIZONTAL DIMENSION OR 0.4XROOF HEIGHT WHICHEVER IS SMALLER, BUT NOT LESS THAN EITHER 4

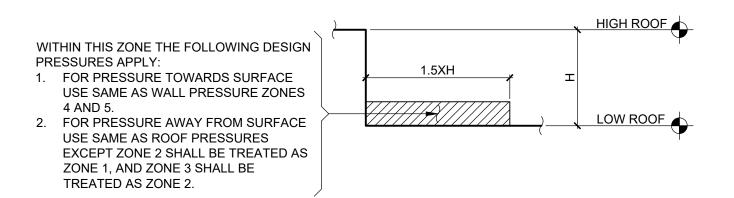
PERCENT OF LEAST HORIZONTAL DIMENSION OR 3 FEET.



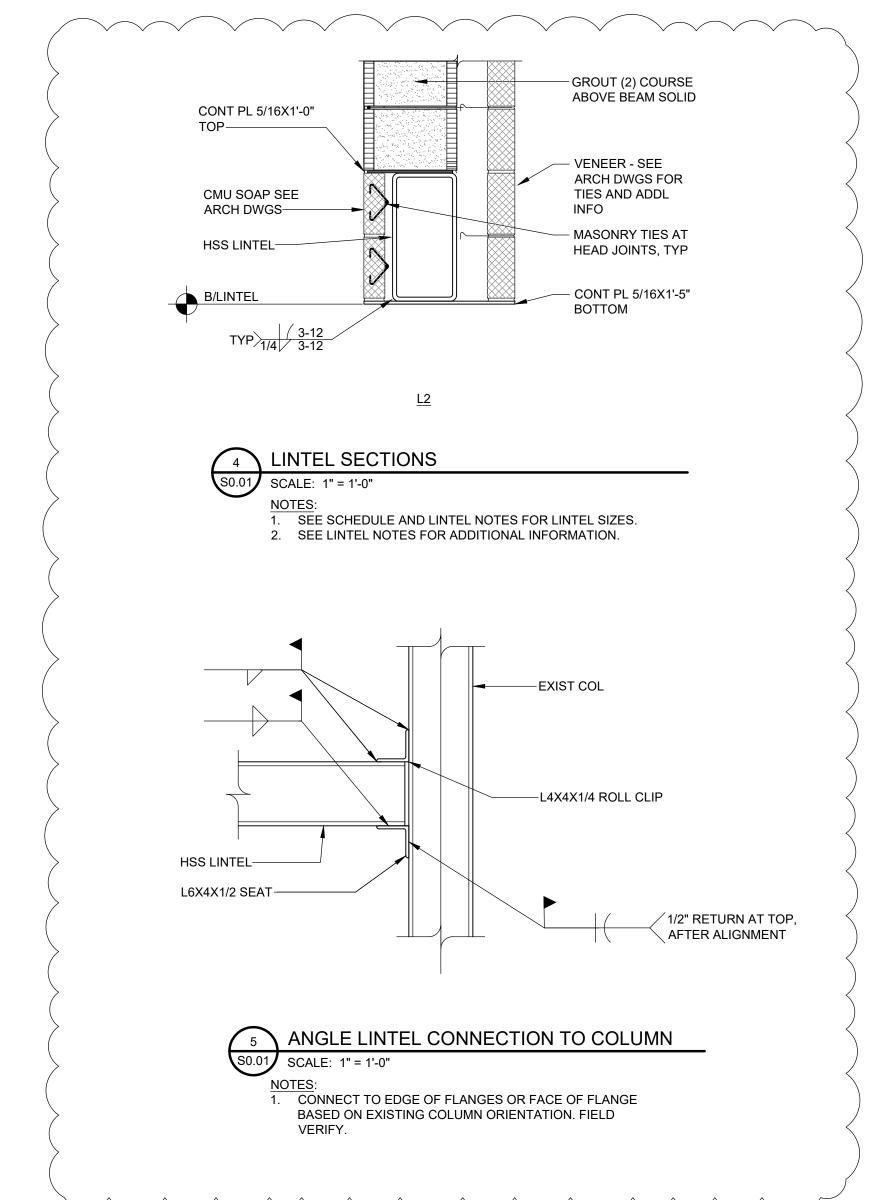
1 ROOF WIND PRESSURE ZONES

SCALE: 3/4= 1'-0"





## SECTION - ROOF WIND 3 PRESSURE ZONE AT ROOF STEPS

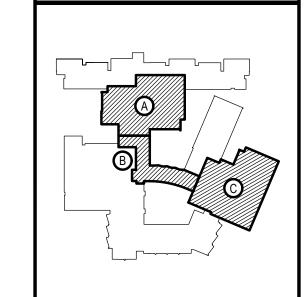


	COMPONE	NTS AND CLADDIN		
ROOF SLOPE	SURFACE	EFFECTIVE WIND AREA (sf)	WIND PRESSURE TOWARD SURFACE (psf)	WIND PRESSURE AWAY FROM SURFACE (psf)
	ZONE 1 ROOF	10 20 50 100	10 10 10 10	17 16 16 15
	ZONE 2 ROOF EDGES	10 20 50 100	10 10 10 10	28 25 21 18
0° TO 7°	ZONE 2 ROOF OVERHANG AT ROOF EDGES	10 20 50 100	0 0 0 0	24 24 23 23
	ZONE 3 ROOF CORNERS	10 20 50 100	10 10 10 10	42 35 25 18
	ZONE 3 ROOF OVERHANG AT ROOF CORNERS	10 20 50 100	0 0 0 0	40 31 20 12
> 7° TO 27°	ZONE 1 ROOF	10 20 50 100	10 10 10 10	15 15 14 14
	ZONE 2 ROOF EDGES	10 20 50 100	10 10 10 10	27 25 22 20
	ZONE 2 ROOF OVERHANG AT ROOF EDGES	10 20 50 100	0 0 0 0	31 31 31 31
	ZONE 3 ROOF CORNERS	10 20 50 100	10 10 10 10	39 37 33 31
	ZONE 3 ROOF OVERHANG AT ROOF CORNERS	10 20 50 100	0 0 0 0	53 47 41 36
	ZONE 1 ROOF	10 20 50 100	15 15 14 14	17 16 15 14
	ZONE 2 ROOF EDGES	10 20 50 100	15 15 14 14	20 19 18 17
> 27° TO 45°	ZONE 2 ROOF OVERHANG AT ROOF EDGES	10 20 50 100	0 0 0 0	28 28 26 25
	ZONE 3 ROOF CORNERS	10 20 50 100	15 15 14 14	20 19 18 17
	ZONE 3 ROOF OVERHANG AT ROOF CORNERS	10 20 50 100	0 0 0 0	28 28 26 26
	ZONE 4 WALL	10 20 50 100	17 16 15 14	18 17 16 16
NA	ZONE 5 WALL CORNERS	500 10 20 50 100 500	13 17 16 15 14 13	22 21 19 17

REV. DATE 01 03/19/25 BID ADD. NO. 04

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KEY PLAN

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DRAWING BY: CHECK BY: AED

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LANDSCAPE ARCHITECTS ENGINEERS

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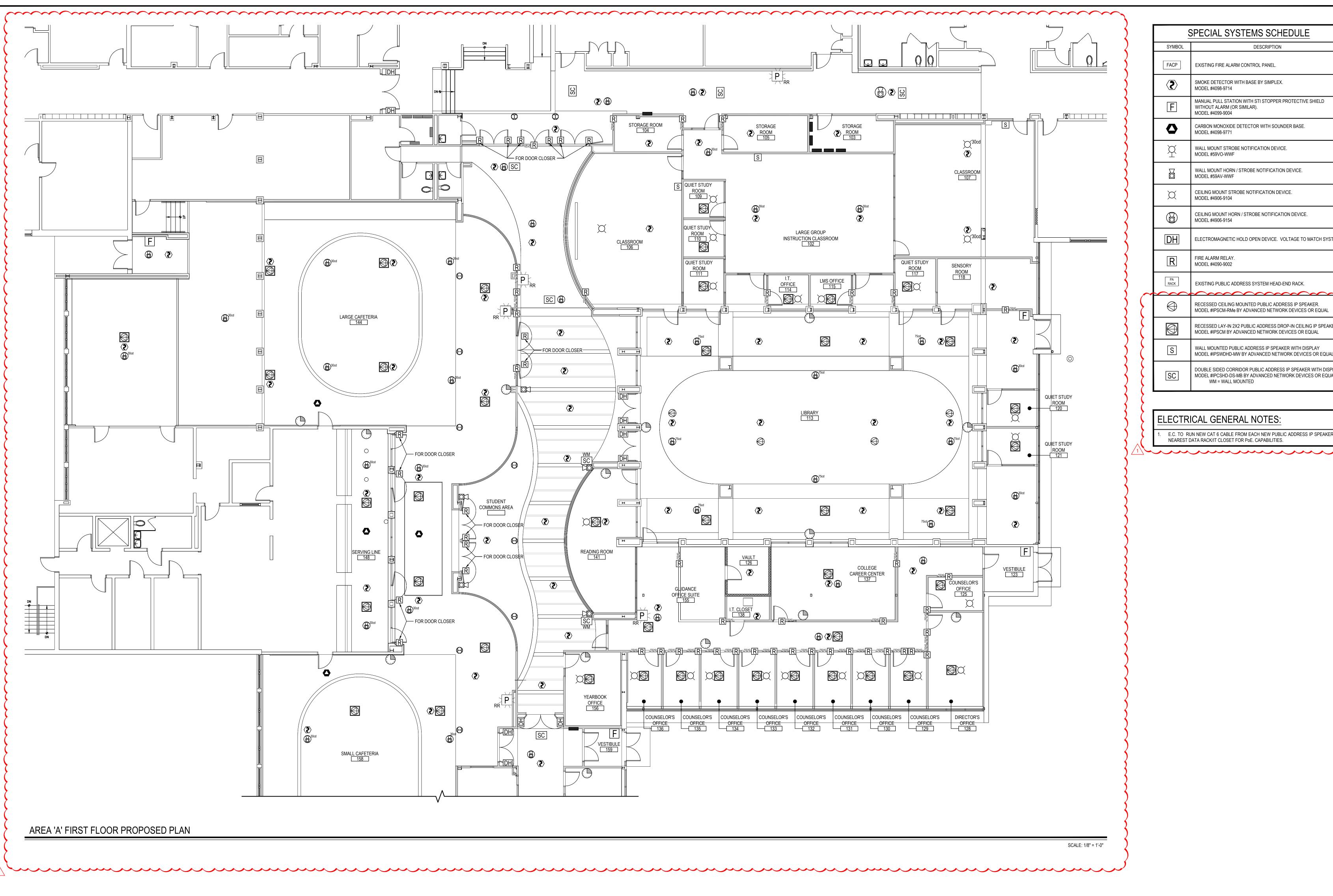
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66-01-02-06-0-003-024 <u>DISTRICT</u> BEDFORD CENTRAL SCHOOL DISTRICT PROJECT PHASE 2 -

BOND IMPROVEMENTS <u>DWG TITLE</u> GENERAL NOTES, SCHEDULES AND DETAILS

SCALE: AS NOTED DATE: APRIL 2024 BID PICK-UP: FEBRUARY 24, 2025 FILE No: 23-131a



{	SPECIAL SYSTEMS SCHEDULE					
}	SYMBOL	DESCRIPTION				
$\langle$	FACP	EXISTING FIRE ALARM CONTROL PANEL.				
}	<b>₹</b>	SMOKE DETECTOR WITH BASE BY SIMPLEX. MODEL #4098-9714				
	F	MANUAL PULL STATION WITH STI STOPPER PROTECTIVE SHIELD WITHOUT ALARM (OR SIMILAR). MODEL #4099-9004				
}	<b>\rightarrow</b>	CARBON MONOXIDE DETECTOR WITH SOUNDER BASE. MODEL #4098-9771				
	Ä	WALL MOUNT STROBE NOTIFICATION DEVICE. MODEL #59VO-WWF				
}		WALL MOUNT HORN / STROBE NOTIFICATION DEVICE. MODEL #59AV-WWF				
	X	CEILING MOUNT STROBE NOTIFICATION DEVICE. MODEL #4906-9104				
		CEILING MOUNT HORN / STROBE NOTIFICATION DEVICE. MODEL #4906-9154				
	DH	ELECTROMAGNETIC HOLD OPEN DEVICE. VOLTAGE TO MATCH SYSTEM.				
	R	FIRE ALARM RELAY. MODEL #4090-9002				
$\left. \begin{array}{c} \\ \\ \end{array} \right.$	PA RACK	EXISTING PUBLIC ADDRESS SYSTEM HEAD-END RACK.				
	$\bigoplus$	RECESSED CEILING MOUNTED PUBLIC ADDRESS IP SPEAKER. MODEL #IPSCM-RMe BY ADVANCED NETWORK DEVICES OR EQUAL				
		RECESSED LAY-IN 2X2 PUBLIC ADDRESS DROP-IN CEILING IP SPEAKER. MODEL #IPSCM BY ADVANCED NETWORK DEVICES OR EQUAL				
	S	WALL MOUNTED PUBLIC ADDRESS IP SPEAKER WITH DISPLAY MODEL #IPSWDHD-MW BY ADVANCED NETWORK DEVICES OR EQUAL				
	SC	DOUBLE SIDED CORRIDOR PUBLIC ADDRESS IP SPEAKER WITH DISPLAY MODEL #IPCSHD-DS-MB BY ADVANCED NETWORK DEVICES OR EQUAL.  WM = WALL MOUNTED				

# ELECTRICAL GENERAL NOTES:

E.C. TO RUN NEW CAT 6 CABLE FROM EACH NEW PUBLIC ADDRESS IP SPEAKER TO NEAREST DATA RACK/IT CLOSET FOR PoE. CAPABILITIES.

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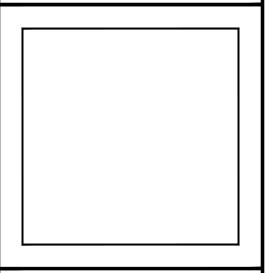
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ARCHITECTS

LANDSCAPE ARCHITECTS ENGINEERS 244 EAST MAIN STREET PATCHOGUE 100 GREAT OAKS BLVD. SUITE 115, ALBANY NEW YORK 12203 NEW YORK 11772 T. 631.475.0349

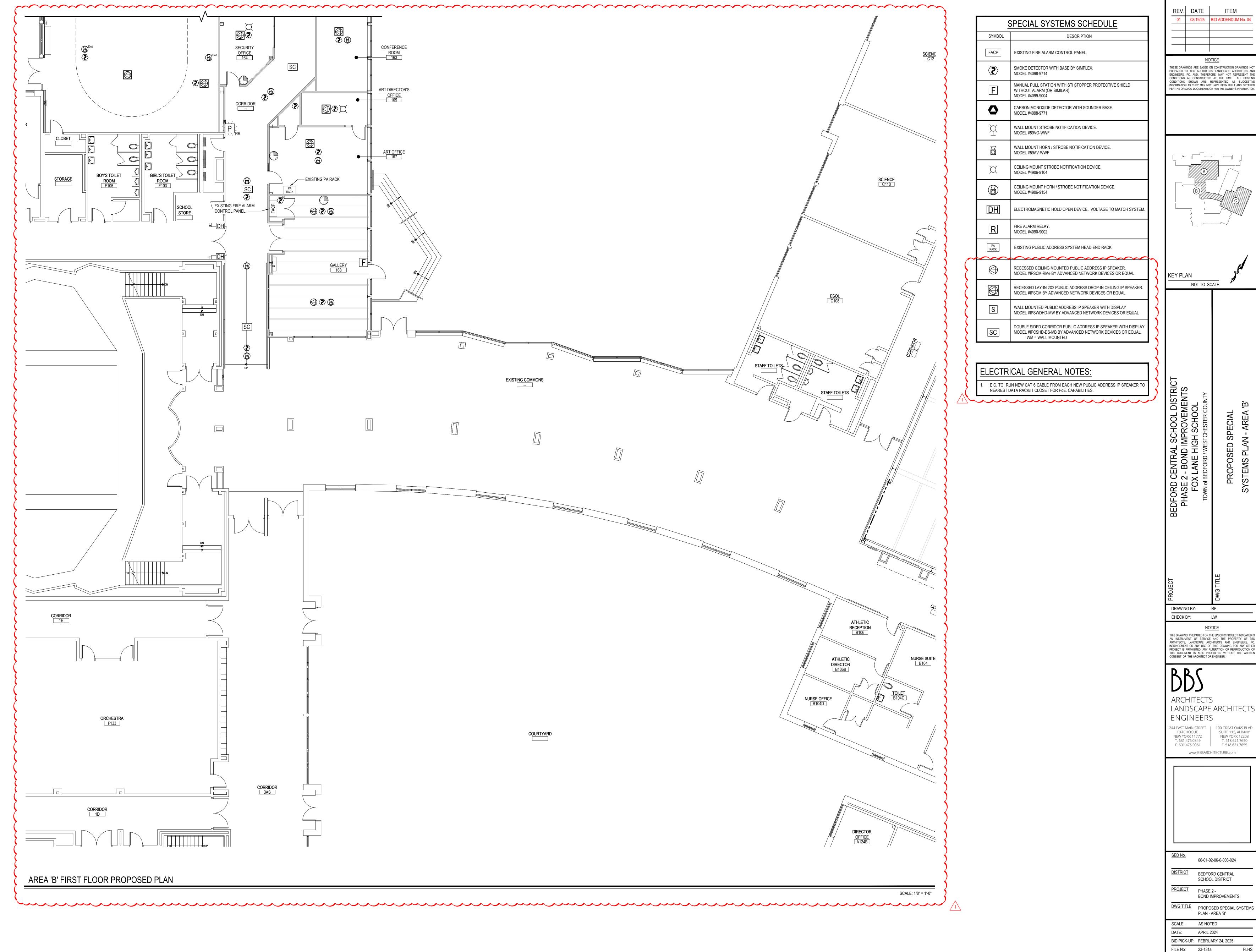
T. 518.621.7650 F. 518.621.7655 F. 631.475.0361 www.BBSARCHITECTURE.com



	SED No.	66-01-02-06-0-003-024			
	DISTRICT	BEDFORD CENTRAL SCHOOL DISTRICT			
	PROJECT	PHASE 2 - BOND IMPROVEMENTS			
	DWG TITLE	PROPOSED SPECIAL SYSTEM PLAN - AREA 'A'			
	SCALE:	AS NOTED			
	DATE:	APRIL 2024			
	BID PICK-UP:	FEBRUARY 24, 2025			

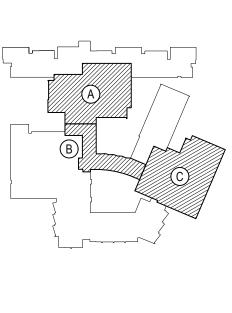
FILE No: 23-131a

E5.01



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KEY PLAN NOT TO SCALE

ARCHITECTS LANDSCAPE ARCHITECTS ENGINEERS

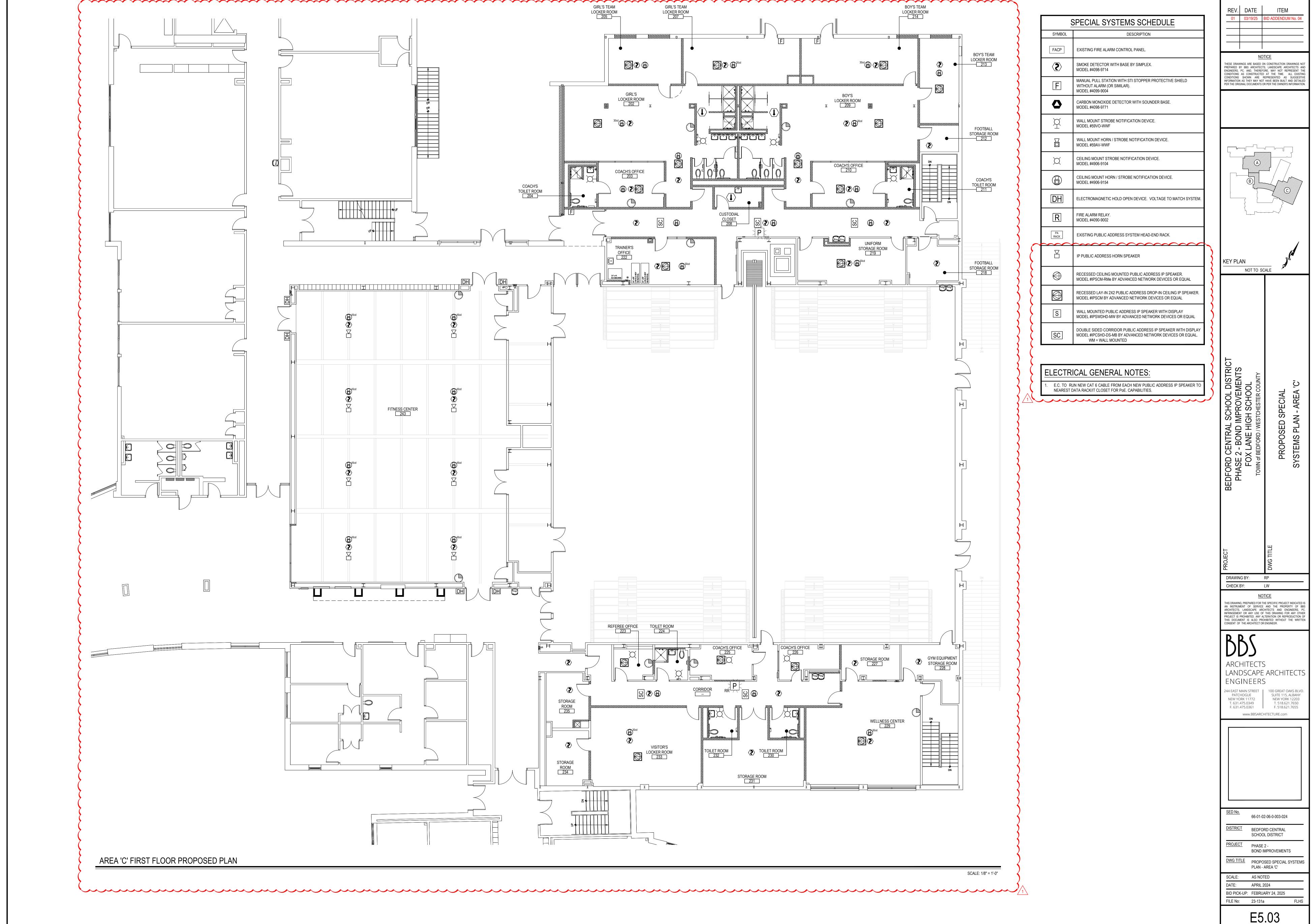
NOTICE

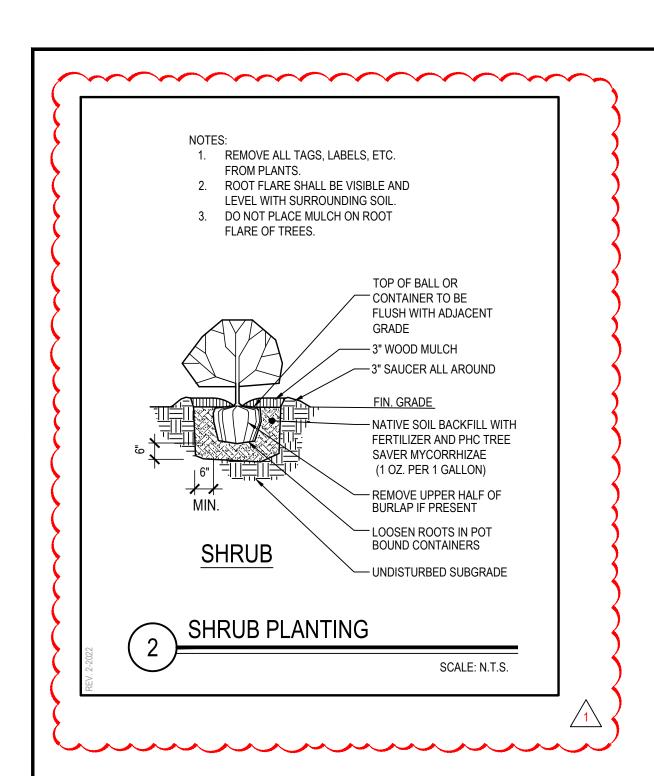
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66-01-02-06-0-003-024 DISTRICT BEDFORD CENTRAL SCHOOL DISTRICT PROJECT PHASE 2 -BOND IMPROVEMENTS

DWG TITLE PROPOSED SPECIAL SYSTEMS PLAN - AREA 'B' SCALE: AS NOTED

E5.02





SYMBOL LEGEND						
SYMBOL	DESCRIPTION					
EJ	EXPANSION JOINT					
A	NEW PAVEMENT TYPE SCHEDULE - SEE SCHEDULE ON CS6.01					
NEW ITEM DETAIL TAG - SEE DETAILS ON CS600 SERIES						
NEW ASPHALT PAVEMENT WALKWAYS						
NEW CONCRETE PAVEMENT						

PLANT SCHEDULE							
SYMBOL	BOTANICAL (LATIN) NAME	COMMON NAME	SIZE	SPACING	CONDITION	QTY.	
SHRUBS, GRASSES & PERRENIALS							
RP	Rosa palustrus	SWAMP ROSE	3 GALLON	4' O.C.	CONT	12	
TL	Typha latifolia	BROAD-LEAVED CATTAIL	3 GALLON	4' O.C.	CONT	8	
SA	Rhododendron viscosum	SWAMP AZALEA	3 GALLON	4' O.C.	CONT	8	
RM	Rhododendron maximum 'Roseum'	PINK ROSEBAY RHODY	5 GALLON	5' O.C.	CONT	7	
Al	Asclepias incarnata	SWAMP MILKWEED	3 GALLON	18" O.C.	CONT	10	

### NEW WORK KEY NOTES

COMPACTION ACTIVITIES.

- REFER TO DRAWING CS600 SERIES DRAWINGS FOR SITE DETAILS AND PAVEMENT SCHEDULE.
- REFER TO SYMBOL LEGEND FOR NEW WORK TAGS AND SYMBOLS.
- WALKS STRUCTURES AND OTHER MAJOR ITEMS SHALL BE STAKED FOR THE APPROVAL OF THE ENGINEER PRIOR TO INSTALLATION.
- 4. N.Y.S. LICENSED LAND SURVEYOR SHALL PERFORM ALL LAYOUT WORK, INCLUDING BASELINE ESTABLISHMENT. LAYOUT OF THE WORK MAY BE ADJUSTED IN THE FIELD TO MEET SITE CONDITIONS AS APPROVED BY THE ENGINEER.
- ADJUSTED IN THE FIELD TO MEET SITE CONDITIONS AS APPROVED BY THE ENGINEER.

CONTRACTOR SHALL CUT AND WELD SPLICE TUBES TO PROPERLY SECURE THE EXISTING RAILINGS INTO NEW SLEEVES.

- 5. LOOSEN TOPSOIL, TOP-DRESS AND SEED ALL DISTURBED AREAS NOT SCHEDULED FOR IMPROVEMENT.
- 6. CONTRACTOR SHALL REMOVE ALL TEMPORARY FENCING AND EROSION AND SEDIMENT CONTROL UPON COMPLETION OF THE WORK. RESTORE PROJECT SITE TO ITS EXISTING CONDITION INCLUDING REPAIRS TO PAVEMENT, TOP DRESSING AND SEEDING OF DISTURBED AREAS.
- CONTRACTOR SHALL CONTINUE TO MAINTAIN ALL NEWLY SEEDED AREAS UNTIL SEED IS FULLY GROWN AND DEEMED USEABLE FOR RECREATION BY ARCHITECT.
- ALL EXISTING RAILINGS AT PERIMETER OF CAFETERIA PLAZA SHALL BE REMOVED, PAINTED & REINSTALLED AFTER CONCRETE WORK IS COMPLETED.
- 9. CONTRACTOR IS SPECIFICALLY NOTIFIED THAT THE EXISTING CONCRETE DECK AT THE CAFETERIA PLAZA HAS SOME CRACKS AND HAS SETTLED IN CERTAIN AREAS. ONCE THE CONCRETE IS REMOVED ALL VOIDS SHALL BE BACKFILLED WITH STRUCTURAL FILL AND COMPACTED TO PROPOSED SUBGRADE AT NO ADDITIONAL COST. THE CONTRACTOR SHALL SHORE EXISTING CONCRETE WALLS TO INSURE THEY ARE NOT DISPLACED DURING
- 10. CONTRACTOR SHALL PITCH CONCRETE AT CAFETERIA PLAZA TO MEET SURROUNDING PAVEMENTS, DOORS & GRATINGS FLUSH.
- 1. CONTRACTOR SHALL SAWCUT & REPAVE ASPHALT AT BOTTOM OF RECONSTRUCTED STAIRWAYS TO MEET EXISTING PAVEMENT FLUSH

### GENERAL NOTES - ALIGNMENT

- THE CONTRACTOR SHALL VERIFY ALL LOCATIONS, DIMENSIONS, SIZES AND QUANTITIES OF ALL MATERIALS PRIOR TO THE START OF ANY WORK AND REPORT ANY DISCREPANCIES TO THE ARCHITECT FOR A DECISION. ALL WORK SHALL BE LOCATED AND MARKED OUT FOR APPROVAL BY THE ARCHITECT PRIOR TO THE START OF ANY CONSTRUCTION.
- 2. THE CONTRACTOR SHALL EXECUTE THE WORK IN SUCH MANNER THAT NO DAMAGE OR INJURY SHALL OCCUR TO PERSONS, EXISTING BUILDINGS AND STRUCTURES, CURBS, ROADS, ATHLETIC FIELDS, WALKS, PIPES, CONDUITS, POLES AND ANY AND ALL OTHER PROPERTY ABOVE AND BELOW GRADE. ANY
- DAMAGE OR INJURY RESULTING FROM THIS WORK SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR, WHO SHALL MAKE GOOD SUCH DAMAGE AND ASSUME ALL RESPONSIBILITY FOR EACH INJURY WITHOUT ADDITIONAL COST TO THE OWNER.

  THE ARCHITECT AND THEIR CONSULTANTS SHALL NOT BE RESPONSIBLE FOR CONSTRUCTION MEANS AND METHODS OR PROCEDURES UTILIZED BY THE
- IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.

  4. CONTRACTORS SHALL VERIFY ALL EXISTING CONDITIONS PRIOR TO PROCEEDING WITH WORK. NOTIFY ARCHITECT OF ANY DISCREPANCIES IN WRITING

IN ACCORDANCE WITH STATE AND LOCAL CODES, THE REQUIRED EXITS IN THE EXISTING BUILDING MUST BE KEPT CLEAR, MAINTAINED AND PROTECTED

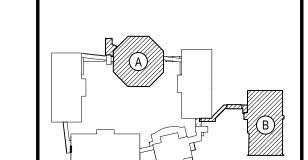
CONTRACTOR; NOR FOR THE SAFETY OF PUBLIC OR CONTRACTOR'S EMPLOYEES; OR FOR THE FAILURE OF THE CONTRACTOR TO CARRY OUT THE WORK

- PRIOR TO START OF WORK.
- DURING THE CONSTRUCTION PERIOD.

  CONTRACTORS SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL EXISTING DIMENSIONS AND CONDITIONS.
- 7. ALL WORK AND MATERIAL OF THIS PROJECT AND ADJACENT SURFACES SHALL BE PROTECTED FROM DAMAGE. IN THE EVENT OF DAMAGE, THE CONTRACTOR SHALL IMMEDIATELY MAKE ALL REPAIRS AND REPLACEMENT NECESSARY TO THE APPROVAL OF THE ARCHITECT AND OWNER AND AT NO
- ADDITIONAL COST TO OWNER.

. CONTRACTOR TO PROTECT ALL AREAS OF WORK FROM INCLEMENT WEATHER DURING AND AT THE END OF DAILY WORK OPERATIONS.

- ALL PROJECT WASTE MATERIAL AND RUBBISH TO BE DISPOSED IN CONTAINERS PROVIDED BY THE CONTRACTOR FOR SUBSEQUENT LEGAL OFF-SITE DISPOSAL. CONTAINER LOCATION TO BE COORDINATED WITH THE CONSTRUCTION MANAGER. OFF-SITE DISPOSAL TO BE ON A REGULAR BASIS.
- 10. ALL DEBRIS, DUST AND DIRT CAUSED BY WORK OF THIS CONTRACT SHALL BE REMOVED FROM SITE BY APPROPRIATE MEANS. RESTORE ALL CONDITIONS TO THE STATE OF CLEANLINESS THAT EXISTED PRIOR TO COMMENCEMENT OF WORK.
- 11. ALL DEMOLITION AND CONSTRUCTION WORK TO BE PREFORMED WITHOUT INTERRUPTION OF OWNER OPERATIONS. IF INTERRUPTION IS NECESSARY, WORK MUST NOT PROCEED UNTIL WRITTEN APPROVAL HAS BEEN OBTAINED FROM THE OWNER.



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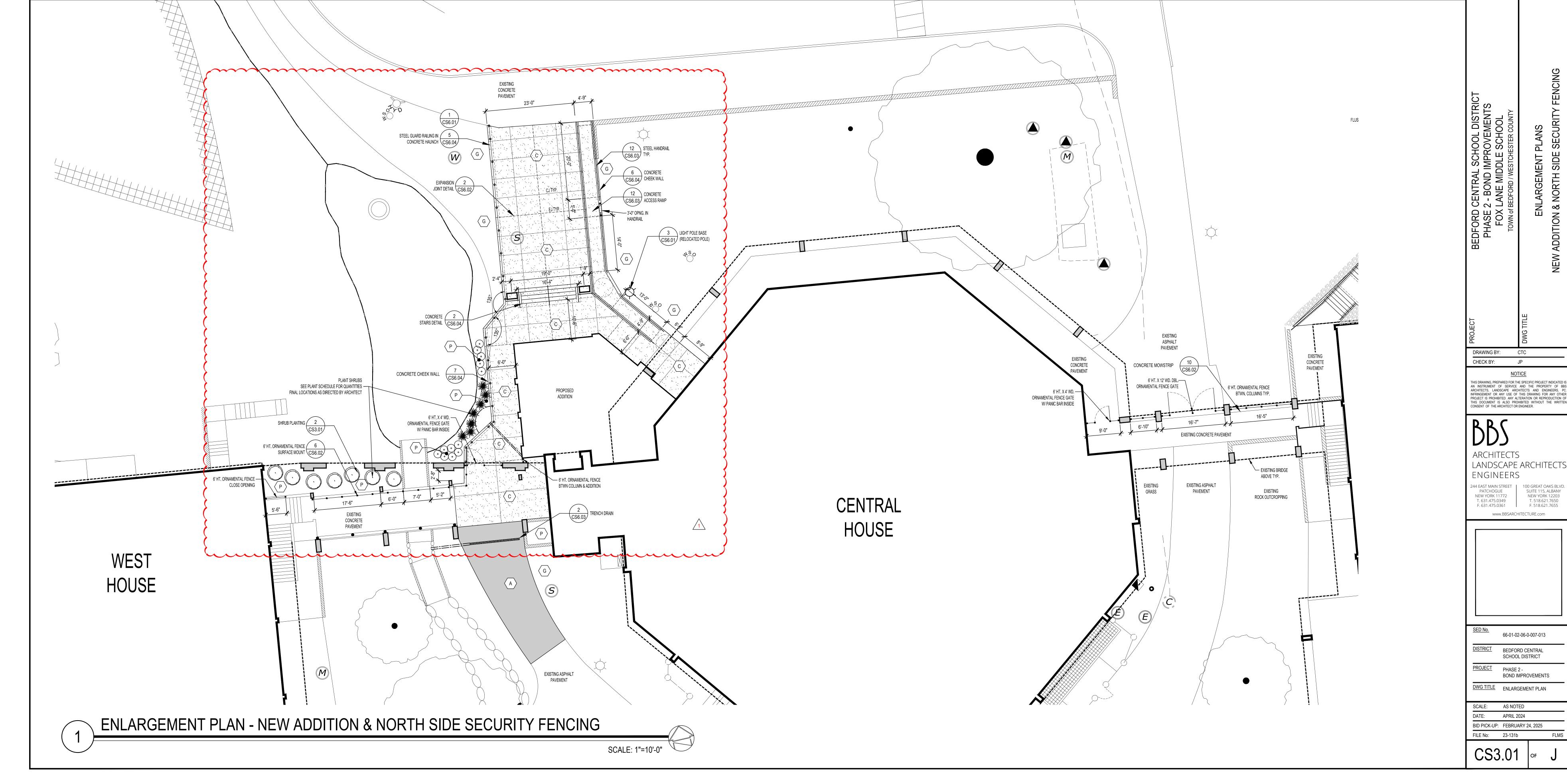
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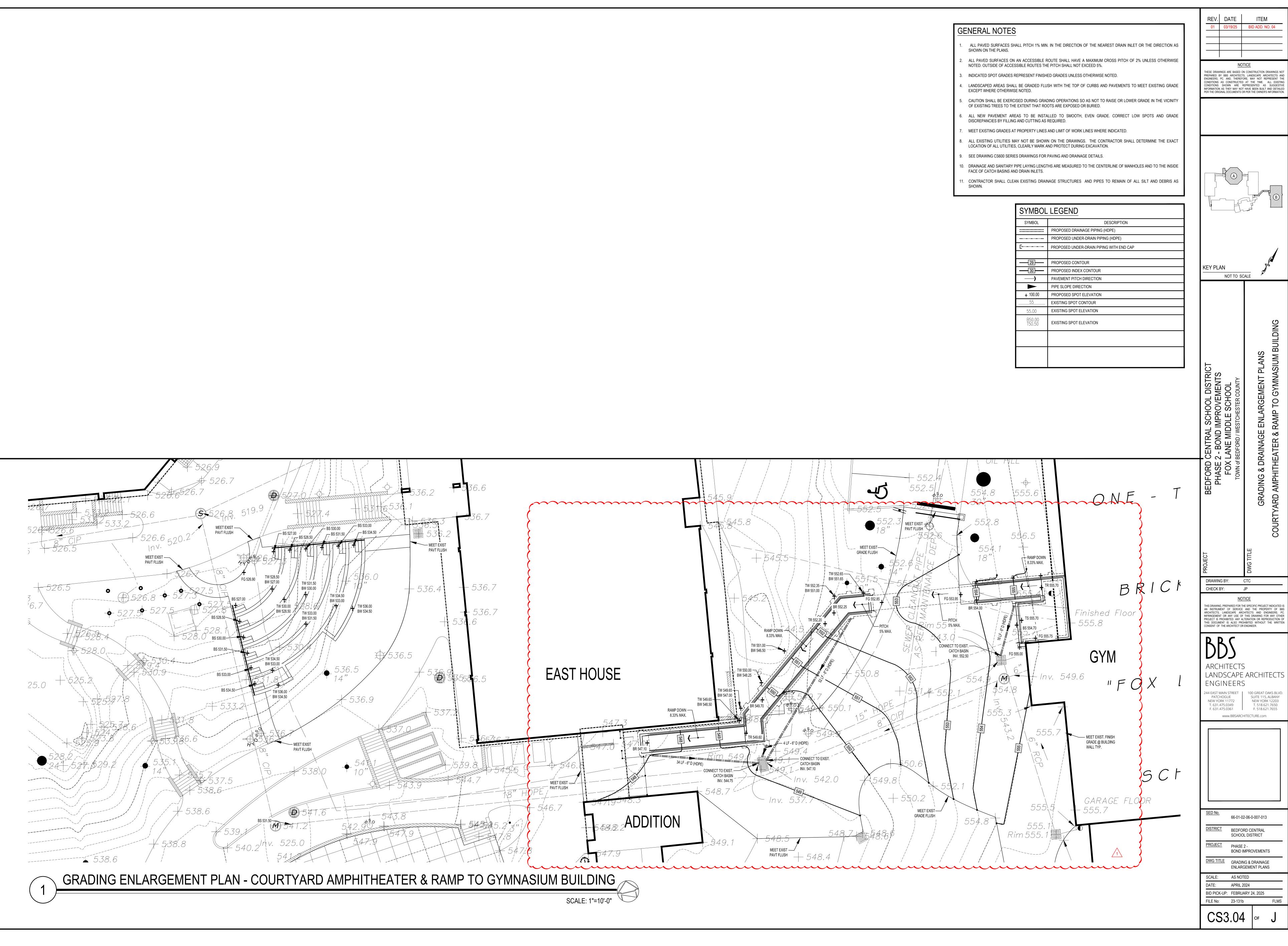
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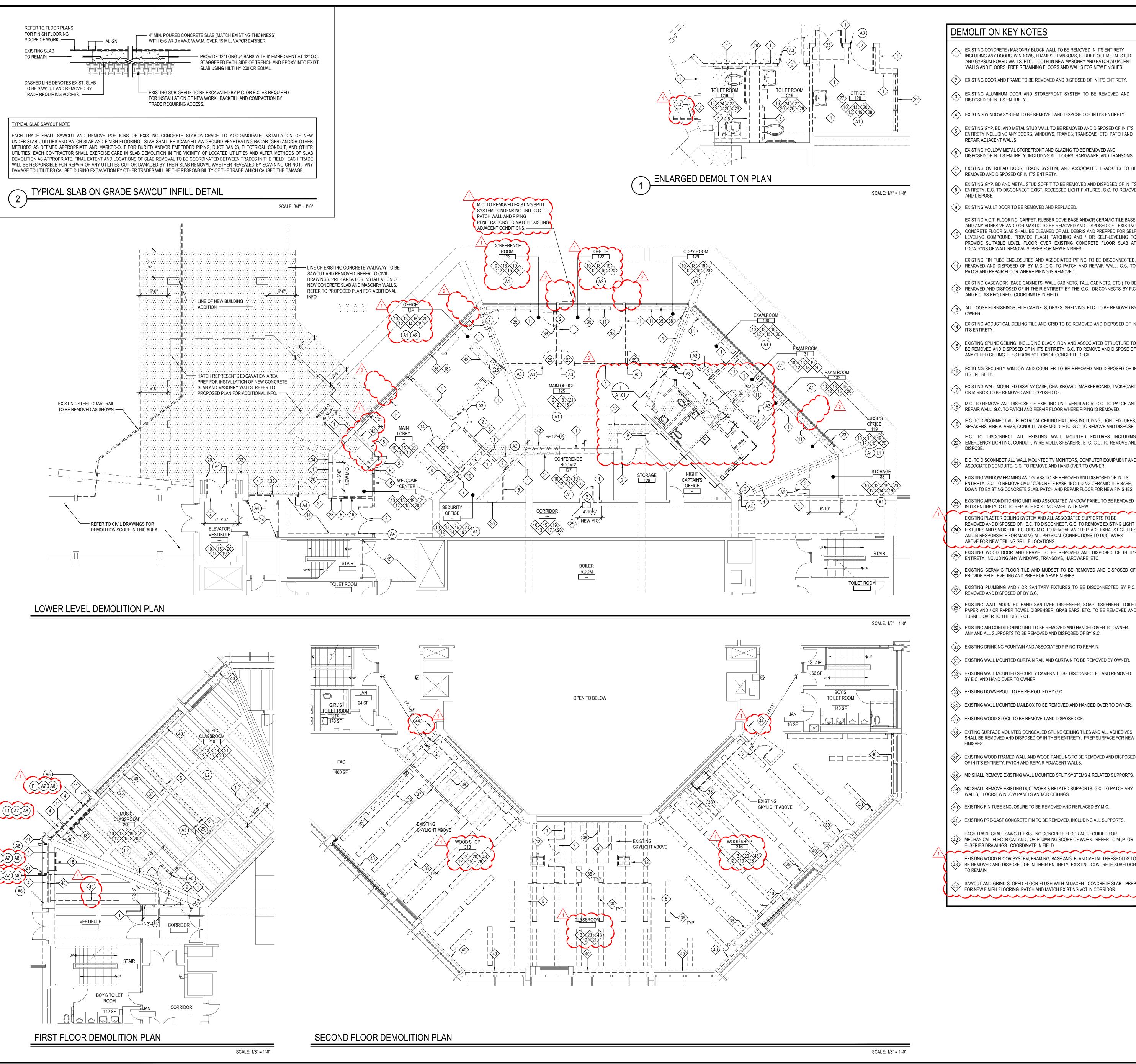
KEY PLAN

NOT TO SCALE



	SYMBOL LEGEND  SYMBOL DESCRIPTION  PROPOSED DRAINAGE PIPMS (HDPE)  PROPOSED UNDER-GRAIN PIPMS (HDPE)  PROPOSED UNDER-GRAIN PIPMS (HDPE)  PROPOSED UNDER-GRAIN PIPMS (HTH END CAP  PROPOSED UNDER-GRAIN PIPMS (HTH END CAP)  PROPOSED UNDER-GRAIN PIPMS (HTH END CAP)  PROPOSED UNDER-GRAIN PIPMS (HTH END CAP)  PROPOSED INDEX CONTOUR  PROPOSED INDEX CONTOUR  PROPOSED INDEX CONTOUR  PROPOSED STORE CONTOUR  ALL INSTITUTION SHALL SE EXERCISED DURN'S CREATING ORRAINS OR AND TO FOR CURBS AND PAVEMENTS TO MEET EXISTING GRADE EXCEPT WHERE CONTENSIES NOTED.  ALL INSTITUTION SHALL SE EXERCISED DURN'S CREATING ORRAINS OR AND TO TO ASSE OR LOWER GRADE IN THE VIDINITY OF EXISTING STRESS TO THE EXTENT THAT ROOTS ARE EXPOSED OR SURFILE.  ALL LESSING UTILITIES CLEARLY MARK AND PROPERTY LINES AND LINES AND LINES AND LINES OF MANHOLES AND TO THE EXACT LOCATION OF ALL UTILITIES, CLEARLY MARK AND PROPECT DURNS EXCOUNTED.  REAL EXISTING STRESS FORWINGS FOR PAVING AND DRAINAGE STRUCTURES AND LINE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL UTILITIES, CLEARLY MARK AND PROPECT DURNS EXCOUNTED.  SEE DRAINING STRESS FORWINGS FOR PAVING AND DRAINAGE STRUCTURES AND PIPES TO REMAIN OF ALL SILT AND DEBRIS AS SHOWN.	NOTICE  THESE DRAWINGS ARE BASED ON CONSTRUCTION DRAWINGS NOT PREPARED BY BBS ARCHITECTS, LANDSCAPE ARCHITECTS AND ENGINEERS, PC. AND, THEREFORE, MAY NOT REPRESENT THE CONDITIONS AS CONSTRUCTED AT THE TIME. ALL EXISTING CONDITIONS SHOWN ARE REPRESENTED AS SUGGESTIVE INFORMATION AS THEY MAY NOT HAVE BEEN BUILT AND DETAILED PER THE ORIGINAL DOCUMENTS OR PER THE OWNER'S INFORMATION.
CENTRAL HOUSE  WEST HOUSE  GRADING, DRAINAGE & SEWER ENLARGEMENT PLAN - NEW ADDITION  FORE T- WART		REPLOND CENTRAL  NOTTO SCALE  NOTTO SCALE  NOTTO SCALE  NOTTO SCALE  BEDEOND INDUMENTS  BHASE 5 - BOND INDUE SCHOOL PROJECT HIP





### DEMOLITION KEY NOTES

- EXISTING CONCRETE / MASONRY BLOCK WALL TO BE REMOVED IN IT'S ENTIRE INCLUDING ANY DOORS, WINDOWS, FRAMES, TRANSOMS, FURRED OUT METAL AND GYPSUM BOARD WALLS, ETC. TOOTH-IN NEW MASONRY AND PATCH ADJ WALLS AND FLOORS. PREP REMAINING FLOORS AND WALLS FOR NEW FINISHE
- $\langle 2 
  angle$  EXISTING DOOR AND FRAME TO BE REMOVED AND DISPOSED OF IN IT'S ENTIR
- EXISTING ALUMINUM DOOR AND STOREFRONT SYSTEM TO BE REMOVED
- 4 EXISTING WINDOW SYSTEM TO BE REMOVED AND DISPOSED OF IN IT'S ENTIRE
- EXISTING GYP. BD. AND METAL STUD WALL TO BE REMOVED AND DISPOSED ( ENTIRETY INCLUDING ANY DOORS, WINDOWS, FRAMES, TRANSOMS, ETC. PATO
- REPAIR ADJACENT WALLS. EXISTING HOLLOW METAL STOREFRONT AND GLAZING TO BE REMOVED AND
- OISPOSED OF IN IT'S ENTIRETY, INCLUDING ALL DOORS, HARDWARE, AND TRA
- EXISTING OVERHEAD DOOR, TRACK SYSTEM, AND ASSOCIATED BRACKETS TO BE REMOVED AND DISPOSED OF IN IT'S ENTIRETY.
- EXISTING GYP. BD AND METAL STUD SOFFIT TO BE REMOVED AND DISPOSED OF IN ITS  $\langle 8 
  angle$  entirety. E.C. to disconnect exist. Recessed light fixtures. G.C. to remove AND DISPOSE.
- EXISTING VAULT DOOR TO BE REMOVED AND REPLACED.
- EXISTING V.C.T. FLOORING, CARPET, RUBBER COVE BASE AND/OR CERAMIC TILE BASE, AND ANY ADHESIVE AND / OR MASTIC TO BE REMOVED AND DISPOSED OF. EXISTING CONCRETE FLOOR SLAB SHALL BE CLEANED OF ALL DEBRIS AND PREPPED FOR SELI LEVELING COMPOUND. PROVIDE FLASH PATCHING AND / OR SELF-LEVELING T PROVIDE SUITABLE LEVEL FLOOR OVER EXISTING CONCRETE FLOOR SLAB A LOCATIONS OF WALL REMOVALS. PREP FOR NEW FINISHES.
- EXISTING FIN TUBE ENCLOSURES AND ASSOCIATED PIPING TO BE DISCONNECTED REMOVED AND DISPOSED OF BY M.C. G.C. TO PATCH AND REPAIR WALL. G.C. TO PATCH AND REPAIR FLOOR WHERE PIPING IS REMOVED.
- EXISTING CASEWORK (BASE CABINETS, WALL CABINETS, TALL CABINETS, ETC.) TO BE > REMOVED AND DISPOSED OF IN THEIR ENTIRETY BY THE G.C. DISCONNECTS BY P.C AND E.C. AS REQUIRED. COORDINATE IN FIELD.
- 🔍 ALL LOOSE FURNISHINGS, FILE CABINETS, DESKS, SHELVING, ETC. TO BE REMOVED BY
- EXISTING ACOUSTICAL CEILING TILE AND GRID TO BE REMOVED AND DISPOSED OF IN
- EXISTING SPLINE CEILING, INCLUDING BLACK IRON AND ASSOCIATED STRUCTURE TO BE REMOVED AND DISPOSED OF IN IT'S ENTIRETY. G.C. TO REMOVE AND DISPOSE OF
- EXISTING SECURITY WINDOW AND COUNTER TO BE REMOVED AND DISPOSED OF IN
- EXISTING WALL MOUNTED DISPLAY CASE, CHALKBOARD, MARKERBOARD, TACKBOARD
- M.C. TO REMOVE AND DISPOSE OF EXISTING UNIT VENTILATOR. G.C. TO PATCH AND REPAIR WALL. G.C. TO PATCH AND REPAIR FLOOR WHERE PIPING IS REMOVED.
- E.C. TO DISCONNECT ALL ELECTRICAL CEILING FIXTURES INCLUDING, LIGHT FIXTURES,
- E.C. TO DISCONNECT ALL EXISTING WALL MOUNTED FIXTURES INCLUDING EMERGENCY LIGHTING, CONDUIT, WIRE MOLD, SPEAKERS, ETC. G.C. TO REMOVE AND ADDRESS.
- E.C. TO DISCONNECT ALL WALL MOUNTED TV MONITORS, COMPUTER EQUIPMENT AND
- EXISTING WINDOW FRAMING AND GLASS TO BE REMOVED AND DISPOSED OF IN ITS ENTIRETY. G.C. TO REMOVE CMU / CONCRETE BASE, INCLUDING CERAMIC TILE BASE, DOWN TO EXISTING CONCRETE SLAB. PATCH AND REPAIR FLOOR FOR NEW FINISHES.
- EXISTING AIR CONDITIONING UNIT AND ASSOCIATED WINDOW PANEL TO BE REMOVED IN ITS ENTIRETY. G.C. TO REPLACE EXISTING PANEL WITH NEW.
- EXISTING PLASTER CEILING SYSTEM AND ALL ASSOCIATED SUPPORTS TO BE REMOVED AND DISPOSED OF. E.C. TO DISCONNECT, G.C. TO REMOVE EXISTING LIGHT FIXTURES AND SMOKE DETECTORS. M.C. TO REMOVE AND REPLACE EXHAUST GRILLES AND IS RESPONSIBLE FOR MAKING ALL PHYSICAL CONNECTIONS TO DUCTWORK
- EXISTING WOOD DOOR AND FRAME TO BE REMOVED AND DISPOSED OF IN IT'S ENTIRETY, INCLUDING ANY WINDOWS, TRANSOMS, HARDWARE, ETC.
- EXISTING CERAMIC FLOOR TILE AND MUDSET TO BE REMOVED AND DISPOSED OF PROVIDE SELF LEVELING AND PREP FOR NEW FINISHES.
- EXISTING PLUMBING AND / OR SANITARY FIXTURES TO BE DISCONNECTED BY P.C. REMOVED AND DISPOSED OF BY G.C.
- EXISTING WALL MOUNTED HAND SANITIZER DISPENSER, SOAP DISPENSER, TOILET PAPER AND / OR PAPER TOWEL DISPENSER, GRAB BARS, ETC. TO BE REMOVED AND
- (29) EXISTING AIR CONDITIONING UNIT TO BE REMOVED AND HANDED OVER TO OWNER. ANY AND ALL SUPPORTS TO BE REMOVED AND DISPOSED OF BY G.C.
- (30) EXISTING DRINKING FOUNTAIN AND ASSOCIATED PIPING TO REMAIN.
- (31) EXISTING WALL MOUNTED CURTAIN RAIL AND CURTAIN TO BE REMOVED BY OWNER.
- (32) EXISTING WALL MOUNTED SECURITY CAMERA TO BE DISCONNECTED AND REMOVED BY E.C. AND HAND OVER TO OWNER.
- 33> EXISTING DOWNSPOUT TO BE RE-ROUTED BY G.C.
- 34 EXISTING WALL MOUNTED MAILBOX TO BE REMOVED AND HANDED OVER TO OWNER.
- (35) EXISTING WOOD STOOL TO BE REMOVED AND DISPOSED OF.
- (36) EXITING SURFACE MOUNTED CONCEALED SPLINE CEILING TILES AND ALL ADHESIVES SHALL BE REMOVED AND DISPOSED OF IN THEIR ENTIRETY. PREP SURFACE FOR NEW
- 27> EXISTING WOOD FRAMED WALL AND WOOD PANELING TO BE REMOVED AND DISPOSED OF IN IT'S ENTIRETY. PATCH AND REPAIR ADJACENT WALLS.
- (38) MC SHALL REMOVE EXISTING WALL MOUNTED SPLIT SYSTEMS & RELATED SUPPORTS.
- 39> MC SHALL REMOVE EXISTING DUCTWORK & RELATED SUPPORTS. G.C. TO PATCH ANY WALLS, FLOORS, WINDOW PANELS AND/OR CEILINGS.
- (40) EXISTING FIN TUBE ENCLOSURE TO BE REMOVED AND REPLACED BY M.C. (41) EXISTING PRE-CAST CONCRETE FIN TO BE REMOVED, INCLUDING ALL SUPPORTS.
- EACH TRADE SHALL SAWCUT EXISTING CONCRETE FLOOR AS REQUIRED FOR
- E- SERIES DRAWINGS. COORDINATE IN FIELD.  $\sim\sim\sim\sim\sim\sim\sim$ EXISTING WOOD FLOOR SYSTEM, FRAMING, BASE ANGLE, AND METAL THRESHOLDS TO
- BE REMOVED AND DISPOSED OF IN THEIR ENTIRETY. EXISTING CONCRETE SUBFLOOR
- SAWCUT AND GRIND SLOPED FLOOR FLUSH WITH ADJACENT CONCRETE SLAB. PREP FOR NEW FINISH FLOORING. PATCH AND MATCH EXISTING VCT IN CORRIDOR.

		DEMOLITION SYMBOL LEGEND			
RETY		SYMBOL	DESCRIPTION		
AL STUD DJACENT HES.			EXISTING CONSTRUCTION TO BE REMOVED (PATCH ALL REMAINI SURFACES)		
			EXISTING FLOOR SLAB TO BE SAWCUT TO ACCOMMODATE NEW UND SLAB UTILITIES. REFER TO SAWCUT DETAIL FOR ADDITION INFORMATION.		
ED AND		<b>\$</b>	KEYED NOTE		
RETY.		# AX.XX	DETAIL TAG — DETAIL NUMBER — DRAWING NUMBER		
TCH AND  RANSOMS.		XX XX.XX	SECTION / ELEVATION TAG — DETAIL NUMBER — DRAWING NUMBER		
			ROOM TAG		

## HAZARDOUS MATERIALS NOTES

- OWNER HAS EMPLOYED AN ENVIRONMENTAL CONSULTANT TO PERFORM DESIGN-PHASE INSPECTION AND TESTING FOR ASBESTOS, LEAD AND / OR PCBs. SUCH REPORTS ARE CONTAINED IN THE PROJECT MANUAL AND MAY CONTAIN ADDITIONAL REQUIREMENTS BEYOND THOSE SHOWN IN THE CONSTRUCTION DRAWINGS AND DIVISION 1 RELATED SPECIFICATIONS.
- CONSTRUCTION DRAWINGS INDICATE EXTENT OF HAZARDOUS MATERIALS REMOVALS, WHICH MAY BE ASSUMED OR CONFIRMED POSITIVE. CONTRACTOR SHALL VERIFY

REVISION CLOUD AND KEYED DESIGNATION. REFER TO DRAWING

TITLEBLOCK FOR ADDITIONAL INFORMATION.

- QUANTITIES OF SUCH MATERIALS AND ACCOUNT FOR THEM IN THE BID.
- CONTRACTOR SHALL EMPLOY A PROPERLY CREDENTIALED HAZARDOUS MATERIALS SUBCONTRACTOR AS REQUIRED FOR THE SCOPE OF WORK AT HAND.

ASBESTOS ABATEMENT SHALL BE PERFORMED IN ACCORDANCE WITH NYS INDUSTRIAL

- CODE RULE 56. REMOVAL OF LEAD CONTAINING CONSTRUCTION MATERIALS SHALL BE PERFORMED IN ACCORDANCE WITH FEDERAL HUD REGULATIONS AND THE EPA'S RRP RULE. THE
- WHERE WORK INVOLVES LEAD CONTAINING CONSTRUCTION MATERIALS, WIPE TESTS WILL BE PERFORMED UPON FINAL CLEANING. FAILURE WILL REQUIRE RE-CLEANING BY
- THE CONTRACTOR. PCB REMOVALS SHALL BE PERFORMED IN ACCORDANCE WITH FEDERAL EPA REGULATIONS AS ENFORCED BY NYS DEC. IF SUCH MATERIALS ALSO CONTAIN

WORK OF THIS PROJECT IS NOT INTENDED TO BE A LEAD ABATEMENT.

CONTRACTOR SHALL COORDINATE HAZARDOUS MATERIALS REMOVAL ACTIVITIES WITH THE OWNER'S ENVIRONMENTAL CONSULTANT FOR APPROPRIATE PROJECT MONITORING.

ASBESTOS, THEN SUCH MATERIALS SHALL BE HANDLED AND DISPOSED OF PER BOTH

- IF ANY SUSPECT MATERIALS ARE DISCOVERED DURING DEMOLITION THAT ARE
- OUTSIDE OF THE IDENTIFIED SCOPE OF WORK, THE CONTRACTOR SHALL CEASE REMOVAL AND NOTIFY THE ARCHITECT.
- THE FOLLOWING HAZARDOUS MATERIAL REMOVAL KEY NOTES CORRESPOND TO THE CONSTRUCTION DRAWINGS:
- ASBESTOS CONTAINING 9"X 9" FLOOR TILE (GRAY) AND ASSOCIATED MASTIC (BLACK) AT LOWER LEVEL ASBESTOS CONTAINING CARPET MASTIC (YELLOW) AT MAIN OFFICE ROOMS
- (A2) 122 AND 124 ASBESTOS CONTAINING DOOR CAULKING (GRAY) AT LOWER LEVEL MAIN
- ASBESTO
- ASBESTOS CONTAINING WINDOW CAULKING (BLACK) AT LOWER LEVEL MAIN OFFICE.
- ASBESTOS CONTAINING DOOR CAULKING (BLACK) AT SECOND FLOOR MUSIC
- ASBESTOS CONTAINING CONCRETE EXPANSION JOINT CAULK (BEIGE) AT ASBESTOS CONTAINING CONONLIL.
  SECOND FLOOR MUSIC ROOM 210
- ASBESTOS CONTAINING WINDOW CAULK (BLACK) AT SECOND FLOOR MUSIC ASBESTOS CO ROOM 210
- ASBESTOS CONTAINING WINDOW GLAZING (WHITE) AT SECOND FLOOR MUSIC ROOM 210
- (A9) NOT USED

NYS DEC AND NYS ICR 56.

- (L1) LEAD CONTAINING BLUE PAINT ON CINDER BLOCK WALL AT ROOM 119
- P1 EXTERIOR WINDOW PANEL CAULK (BLACK) AT OLD WINDOWS EXTERIOR BUILDING THROUGHOUT

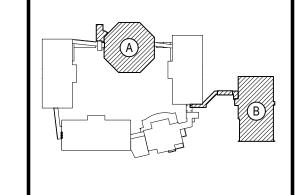
## DEMOLITION and REMOVAL NOTES

- THE GENERAL CONTRACTOR IS RESPONSIBLE FOR ALL DEMOLITION AND REMOVALS UNLESS NOTED OTHERWISE. MECHANICAL, PLUMBING AND ELECTRICAL CONTRACTORS SHALL BE RESPONSIBLE FOR ALL DISCONNECTS. G.C. TO COORDINATE DEMOLITION WITH M.C., P.C., AND E.C. REFER TO M.E.P. SERIES DEMOLITION DRAWINGS FOR ADDITIONAL INFORMATION AND DEMOLITION SCOPE BY GENERAL CONTRACTOR NOT SHOWN THIS DRAWING. TYPICAL FOR ALL AREAS OF INTERIOR DEMOLITION AND / OR RECONSTRUCTION.
- ALL OPENINGS IN EXISTING INTERIOR AND EXTERIOR WALLS SHALL BE PATCHED AS REQUIRED AND MASONRY TOOTHED-IN TO MATCH ADJACENT.
- G.C. SHALL PATCH, REPLACE, OR REPAIR DAMAGE CAUSED TO EXIST. FLOOR, WALLS ROOF, ETC. SHOWN TO REMAIN AS A RESULT OF DEMOLITION TO PRIOR CONDITION OR MATCH ADJACENT NEW CONSTRUCTION.
- G.C. SHALL VERIFY ALL REMOVALS WITH OWNERS REPRESENTATIVE / OWNER, AND
- M.C., P.C., OR E.C. PRIOR TO COMMENCEMENT. PROVIDE SELF-LEVELING TO PROVIDE SUITABLE LEVEL FLOOR OVER EXISTING CONCRETE SLAB. SHOT-BLAST SUB-FLOOR AS REQUIRED FOR REMOVAL OF EXISTING FLOORING. PREP FOR NEW FINISH FLOORING. ALIGN FOR NEW FINISHES TO BE FLUSH

WITH ADJACENT. REFER TO SPECIFICATIONS.

- PROVIDE FLASH PATCHING AND / OR SELF-LEVELING TO PROVIDE SUITABLE LEVEL FLOOR OVER EXISTING CONCRETE FLOOR SLAB AT LOCATIONS OF WALL REMOVALS.
- THROUGHOUT ALL AREAS OF WORK, E.C. SHALL ORGANIZE ALL EXISTING WIRES TO REMAIN AT UNDERSIDE OF ROOF DECK ABOVE NEW FINISHED CEILING. SECURE TO BOTTOM OF EXISTING ROOF DECK, STEEL JOISTS, ETC. REFER TO E-SERIES

XXXX - ROOM NAME XXX ROOM NUMBER XXX SF ROOM AREA



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REPARED BY BBS ARCHITECTS, LANDSCAPE ARCHITECTS AN

ONDITIONS AS CONSTRUCTED AT THE TIME. ALL EXISTI

INFORMATION AS THEY MAY NOT HAVE BEEN BUILT AND DETAILE

REV. DATE

KEY PLAN NOT TO SCALE

P.J.H. P.J.H. CHECK BY:

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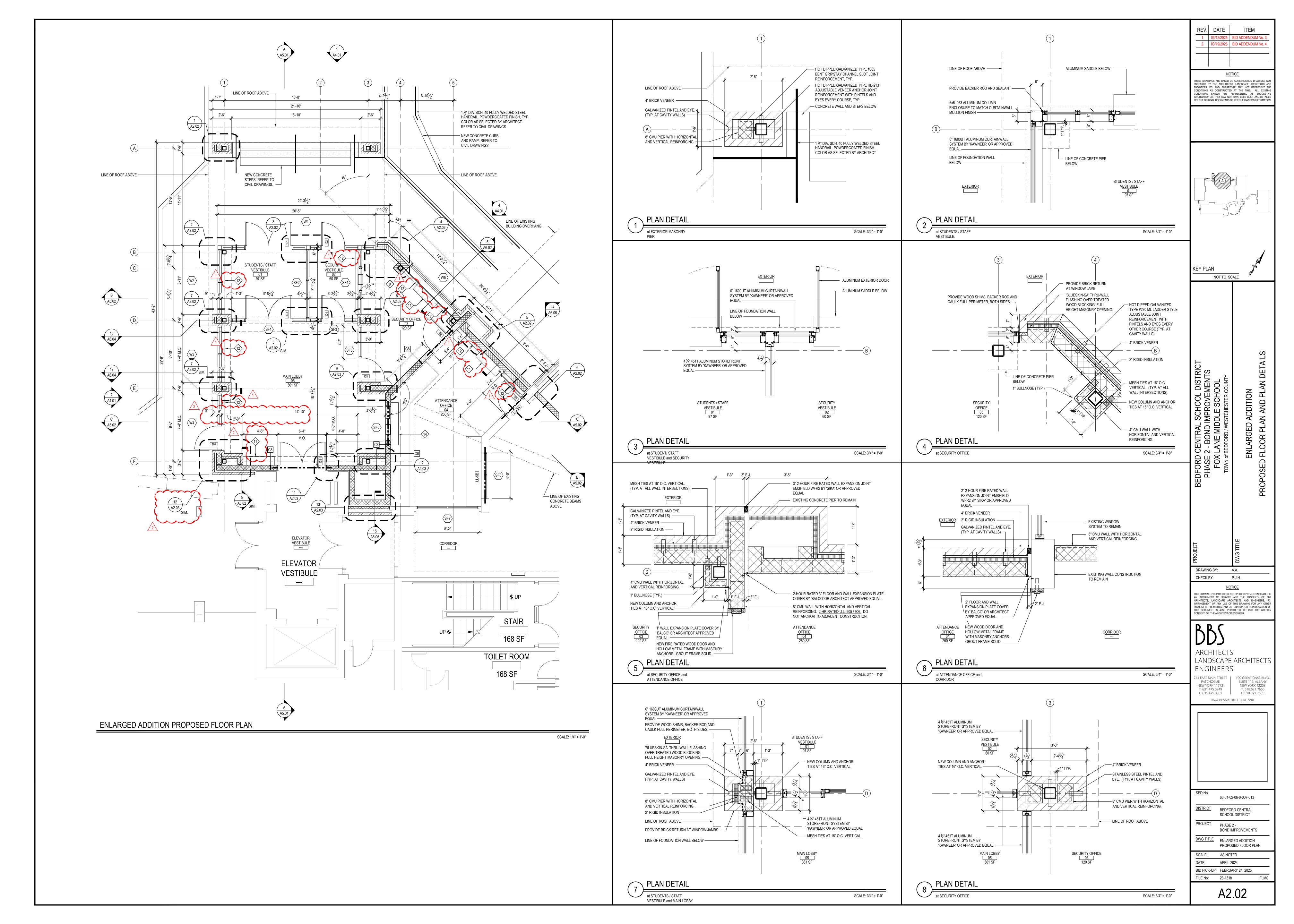
66-01-02-06-0-007-013 DISTRICT BEDFORD CENTRAL SCHOOL DISTRICT PROJECT PHASE 2 -BOND IMPROVEMENTS

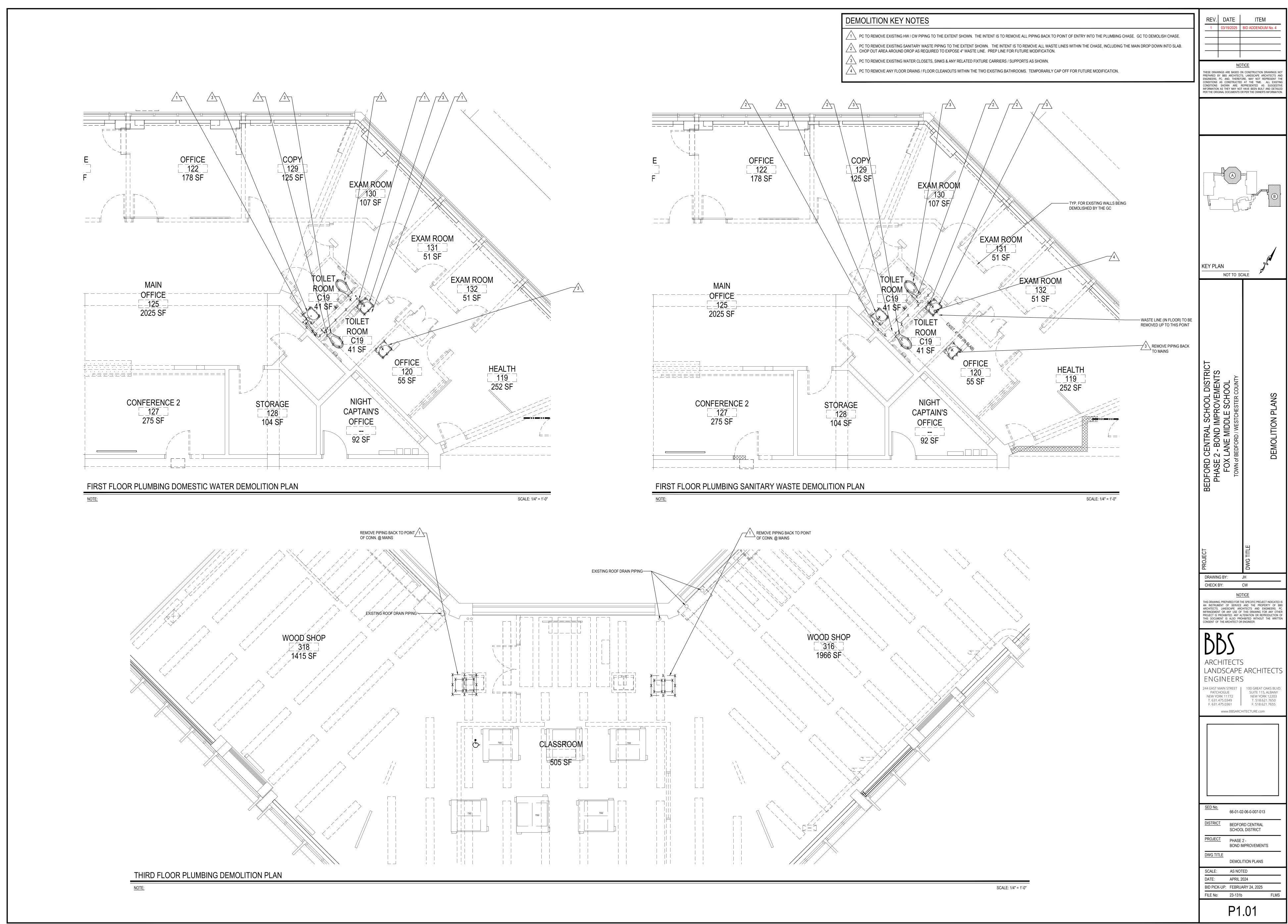
DWG TITLE **DEMOLITION FLOOR PLANS** SCALE: AS NOTED

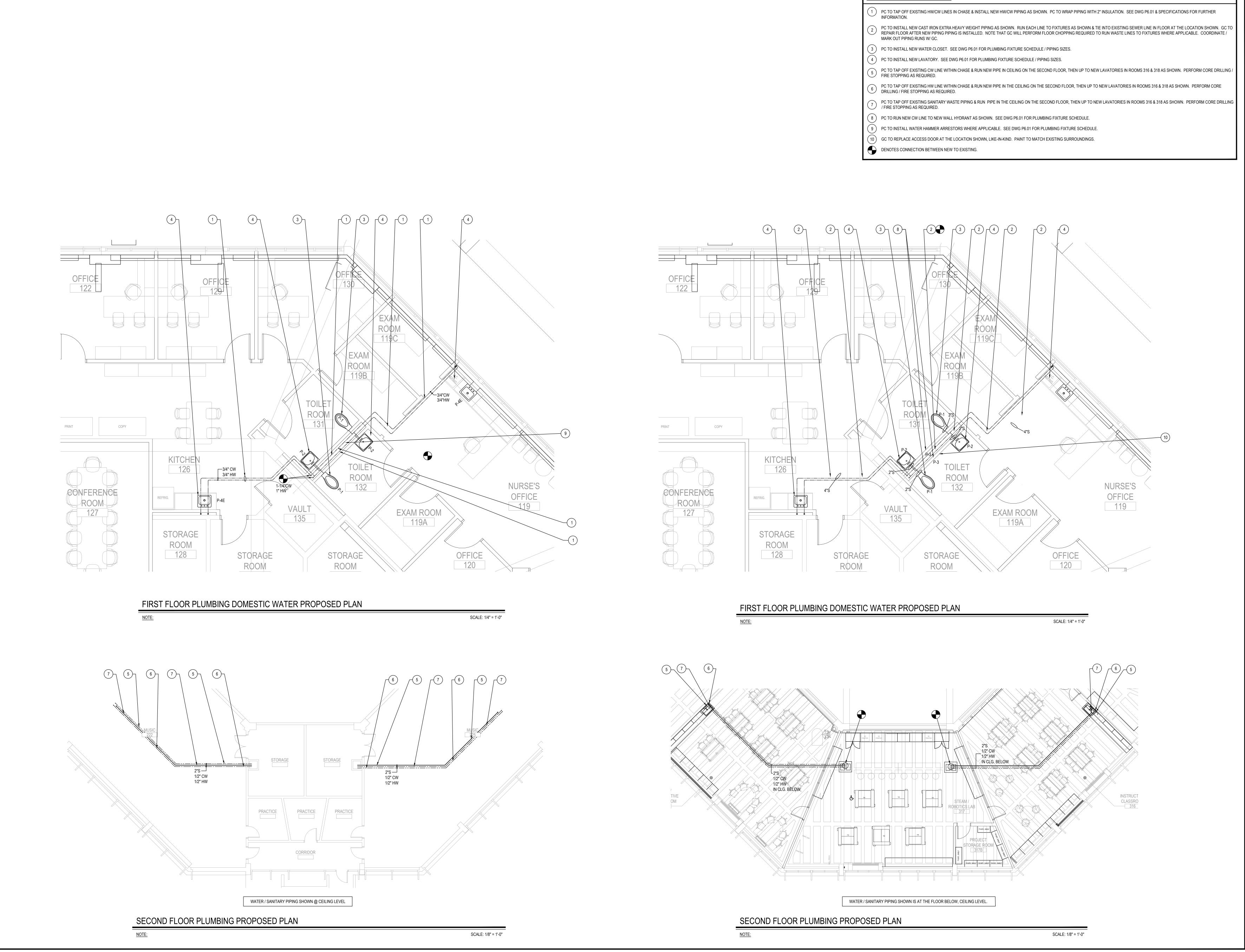
BID PICK-UP: FEBRUARY 24, 2025

FILE No: 23-131b

A1.01







PROPOSED KEY NOTES

REV. DATE ITEM

1 03/19/2025 BID ADDENDUM No. 4

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KEY PLAN

NOT TO SCALE

BEDFORD CENTRAL SCHOOL DISTRICT
PHASE 2 - BOND IMPROVEMENTS
FOX LANE MIDDLE SCHOOL
TOWN of BEDFORD / WESTCHESTER COUNTY
PROPOSED PLAN

DRAWING BY: JH
CHECK BY: CW

NOTICE

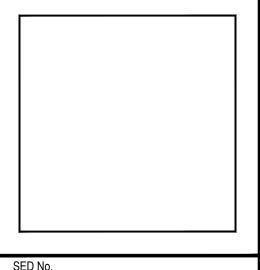
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SED No.

66-01-02-06-0-007-013

DISTRICT
BEDFORD CENTRAL SCHOOL DISTRICT

PROJECT
PHASE 2 BOND IMPROVEMENTS

DWG TITLE
PROPOSED PLANS

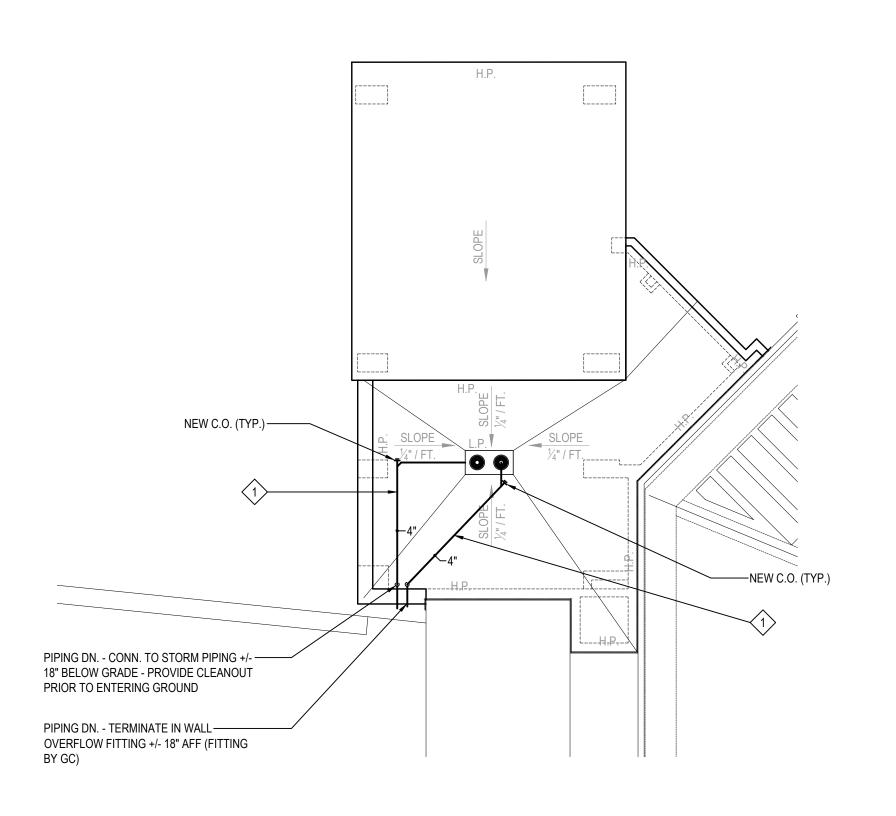
SCALE: AS NOTED

DATE: APRIL 2024

BID PICK-UP: FEBRUARY 24, 2025

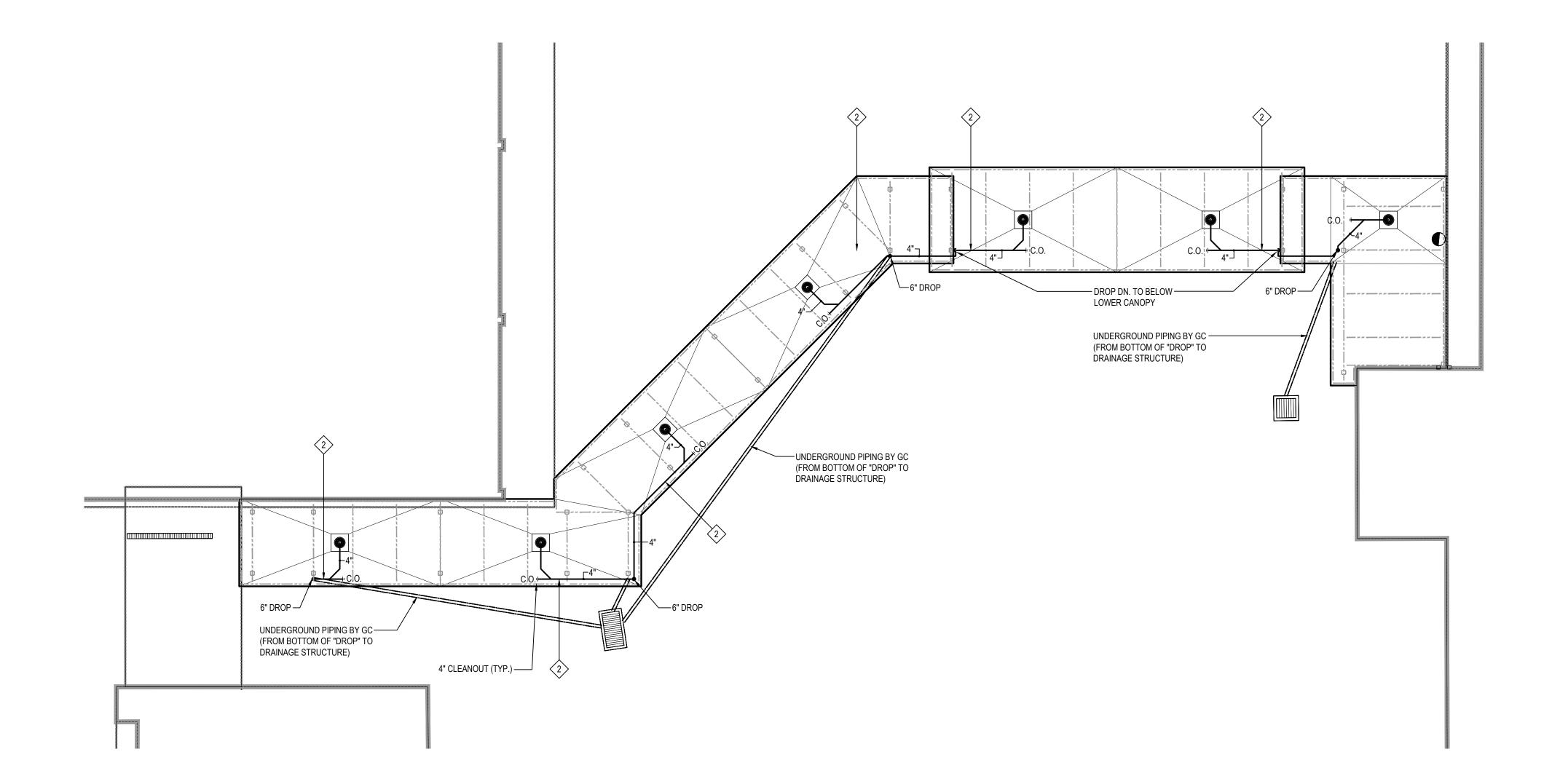
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P2.01



PART ROOF PLAN - NEW ENTRY AREA (ROOF DRAINAGE AT NEW MAIN ENTRY)

NOTE: SCALE: 1/8" = 1'-0"



PART ROOF PLAN - NEW CANOPY (NEW CANOPY BETWEEN "EAST" HOUSE & GYMNASIUM BUILDING)

NOTE:

SCALE: 1/8" = 1'-0"

PROPOSED KEY NOTES

PC SHALL PROVIDE & INSTALL A NEW SYSTEM OF STORM DRAINAGE (ROOF DRAIN) PIPING AS SHOWN. PIPING IS FOR MAIN ROOF DRAIN & OVERFLOW DRAIN. RUN PIPING AS TIGHT TO STRUCTURE ABOVE AS POSSIBLE & MAINTAIN \$\frac{1}{4}\'' / FT. PITCH. DROP PIPING DN. AT THE LOCATION SHOWN. OVERFLOW DRAIN TO EXIT SIDE WALL OF BUILDING @ +/- 18" ABOVE GRADE. DISCHARGE DRAIN FITTING AT WALL BY GC. PROVIDE ALL PIPING SUPPORTS AS REQUIRED BY CODE & AS LISTED WITHIN THE PROJECT MANUAL.

PC SHALL PROVIDE & INSTALL A NEW SYSTEM OF STORM DRAINAGE (ROOF DRAIN) PIPING AS SHOWN. PIPING IS FOR MAIN ROOF (CANOPY) DRAINS. RUN PIPING AS TIGHT TO STRUCTURE ABOVE AS POSSIBLE & MAINTAIN 1/4" / FT. PITCH. DROP PIPING DN. AT THE LOCATIONS SHOWN. PC TO TERMINATE PIPING IN 4" RECEPTORS (RECEPTORS BY GC). GC TO CONTINUE PIPING TO DRAINAGE SYSTEM. PROVIDE ALL PIPING SUPPORTS AS REQUIRED BY CODE & AS LISTED WITHIN THE PROJECT MANUAL.

REV. DATE ITEM

1 03/19/2025 BID ADDENDUM No. 4

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MAIN ENTRY AREA

GYM CANOPY / CONNECTOR

KEY PLAN

NOT TO SCALE

DISTRICT
ENTS
OL

FORD CENTRAL SCHOOL DISTRICHASE 2 - BOND IMPROVEMENTS
FOX LANE MIDDLE SCHOOL
TOWN of BEDFORD / WESTCHESTER COUNTY

WG TITLE

DRAWING BY: CMW

CHECK BY: CW

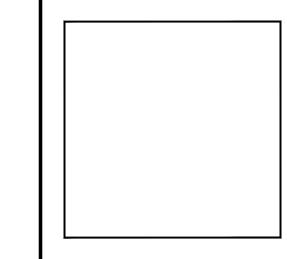
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<u>SED No.</u> 66-01-02-06-0-007-013

DISTRICT BEDFORD CENTRAL SCHOOL DISTRICT

PROJECT PHASE 2 - BOND IMPROVEMENTS

DWG TITLE

PROPOSED PLANS

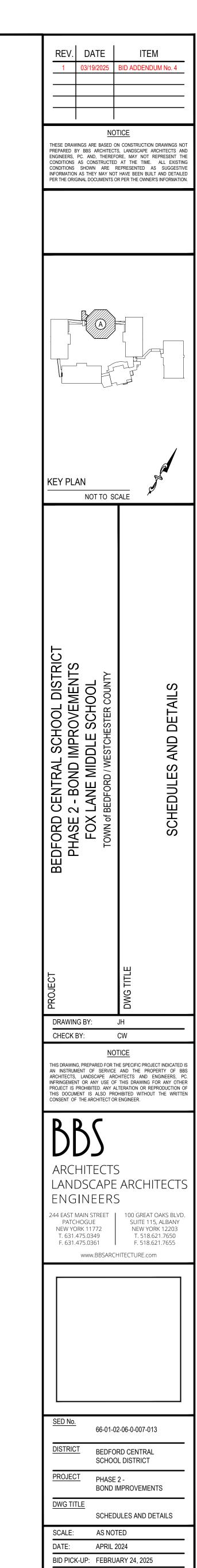
SCALE: AS NOTED

DATE: APRIL 2024

BID PICK-UP: FEBRUARY 24, 2025

P2.02

PLUMBING FIXTURE TYPES							
FIXTURE TYPE	TAG No.	FIXTURE	TRAP SIZE	VENT SIZE	COLD WATER	HOT WATER	DESCRIPTION
WATER CLOSET	P-1	WALL MOUNTED WATER CLOSET	4"	2"	1"		ZURN Z5615-BWL-AM ECOVANTAGE HIGH EFFICIENCY TOILET SYSTEM VITREOUS CHINA, 1.1 GPF [4.2 LPF] OR GREATER HIGH EFFICIENCY WALL HUNG TOILET WITH SIPHON JET FLUSHING ACTION, ZURNSHIELDTM CERAMIC GLAZE AND ELONGATED FRONT RIM WITH 1-1/2" TOP SPUD. UNIVERSAL HIGH, 1.1 GALLONS PER FLUSH. ZURN ZTR6200 EXPOSED, QUIET PISTON-TYPE, CHROME PLATED FLUSHOMETER VALVE WITH A POLISHED EXTERIOR. COMPLETE WITH CHLORAMINE RESISTANT, FILTERED PISTON KIT. THE VALVE INCORPORATES A BATTERY POWERED SOLENOID ACTUATOR, AUTOMATIC SENSOR WITH MANUAL OVERRIDE PUSH BUTTON, AND ROBUST VANDAL RESISTANT METAL COVER WITH 10 DEGREE ANGLED SENSOR. ZURN Z5956SS-AM, 1" HIGH, IS AN ELONGATED, EXTRA HEAVY DUTY, PREMIUM WHITE, OPEN FRONT TOILET SEAT WITH LESS COVER AND STAINLESS STEEL CHECK HINGE.REFER TO ARCHITECTURAL DRAWINGS FOR MOUNTING HEIGHT.
LAVATORY	P-2	ADA ACCESSIBLE LAVATORY	1½"	1½"	½"	½"	ZURN Z5341 WALL-MOUNTED CONCEALED CARRIER ARM LAVATORY – SINGLE HOLE 20" X 18" VITREOUS CHINA WALL-MOUNTED LAVATORY WITH SINGLE FAUCET HOLE. PROVIDED WITH HANGER PLATE AND HOLES FOR CONCEALED ARM CARRIER SYSTEMS, FRONT OVERFLOW. ZURN Z6950-XL-S-F ZURN HYDRO-X POWER SENSOR FAUCETS. CHROME-PLATED CAST BRASS SENSOR FAUCET WITH INFRARED PROXIMITY SENSOR. A STANDARD 0.5 GPM FLOW CONTROL AND MOUNTING HARDWARE. ZURN P6900-TMV-1-XL THERMOSTATIC LEAD FREE VALVE MEETS ASSE 1070. ZURN Z8746-PC, CHROME PLATED CAST BRASS OPEN GRID DRAIN STRAINER, AND CHROME PLATED CAST BRASS ELBOW. FURNISHED WITH 1-1/4 17 GAUGE CHROME PLATED TUBULAR BRASS OFFSET TAILPIECE FOR SINK DEPTH TO 2-1/2. ZURN Z8700-PC TO Z8708-PC. CHROME-PLATED CAST BRASS (COPPER ALLOY) BODY P-TRAP WITH CLEANOUT, TUBULAR BRASS WALL BEND AS SPECIFIED, DIE-CAST NUTS, AND SHALLOW ESCUTCHEON WITH COMPRESSION INLET. ZURN Z8800-XL-LR-PC TO Z8809-XL-LRLK-PC TWO ZURN CHROME PLATED, SOLID BRASS ANGLE STOPS WITH ROUND WHEEL HANDLES OR LOOSE KEY AS SPECIFIED, TWO 12" FLEXIBLE CHROME PLATED COPPER LAVATORY RISERS COMPLETE WITH TWO CHROME PLATED STEEL FLANGES. Z8808-XL-LR-PC TO Z8809-XL-LRLK-PC INCLUDE 5"[127MM] CHROME PLATED COPPER EXTENSION TUBES AND DEEP BELL STEEL FLANGES. TRUEBRO MODEL 2018-AS-L LAV SHIELD ENCLOSURE. ZURN Z1231 LAVATORY SUPPORT SYSTEM WITH CONCEALED ARMS. COMPLETE WITH DURA-COATED RECTANGULAR STEEL UPRIGHTS WITH WELDED FEET, CAST IRON ADJUSTABLE HEADERS, CONCEALED ARMS, STEEL SLEEVES, ALIGNMENT TRUSS, AND MOUNTING FASTENERS. REFER TO ARCHITECTURAL DRAWINGS FOR MOUNTING HEIGHT.
WALL HYDRANT	P-3	WALL HYDRANT (INTERIOR)	-	-	3/4"		ZURN Z1321XL EXPOSED, ECOLOTROL, LEAD-FREE, NON-FREEZE AUTOMATIC DRAINING WALL HYDRANT FOR FLUSH INSTALLATION. HYDRANT FEATURES INTEGRAL BACKFLOW PREVENTER WITH ANTI-SIPHON TECHNOLOGY, COPPER CASING, ALL-BRONZE INTERIOR COMPONENTS WITH 1/2 TURN LONG-LIFE CERAMIC DISC CARTRIDGE, COMBINATION 3/4" FEMALE SOLDER AND 3/4" MALE PIPE THREAD INLET CONNECTION, AND 3/4" MALE HOSE CONNECTION. HYDRANT FURNISHED WITH TYPE 304 STAINLESS STEEL FACEPLATE AND INCLUDES OPERATING KEY.
ARRESTOR	P-4	WATER HAMMER ARRESTOR			3/4"		OATEY QUIET PIPES HAMMER ARRESTORS SIZE A-F. ARRESTOR CHAMBERS SHAL BE SPECIFICALLY SIZED TO ACCOMMODATE AND DISSIPATE ENERGY GENERATED BY SUCH VALVES AND FAUCETS. ARRESTORS SHALL BE EFFECTIVE WHEN INSTALLED ANY ANGLE. ARRESTOR SHALL BE LEAD-FREE, MADE OF COPPER AND INCLUDE POLYPROPYLENE PISTON WITH TWO NBR O-RINGS. ARRESTORS SHALL BE ANSI/ASSE1010-200 CERTIFIED AND APPROVED FOR INSTALLATION WITH NO ACCESS PANEL REQUIRED. ARRESTOR BODY:COPPER(TYPE K). PISTION:POLYPROPYLENE WITH TWO NBR O-RINGS.PISTON LUBRICATION: DOW CORNING MOLYKOTE 111. FITTINGS AVAILABLE: MALES SWEAT/PRESS,FEMALE CPVC.MIP,F1807 PEX & F1960 PEX(NO LEAD BRASS C46400). TEMPERATURE RANGE:33°F-180°F.MAX WORKING PRESSURE: 0-400 Psi. ANSI/ASSE1010-2004cUPC.PDI WH-201-2017.
FLOOR DRAIN	P-5E	LOW PROFILE ADJUSTABLE FLOOR DRAIN	4"	2"			ZURN MODEL# <u>Z415B-IP-ZB</u> LOW PROFILE ADJUSTABLE FLOOR DRAIN, RECOMMENDED FOR FINISHED FLOOR AREAS. THE DRAIN IS DESIGNED FOR FOOT TRAFFIC AND LIGHT CART APPLICATIONS. COMPLETE WITH CAST IRON BODY AND ADJUSTABLE NICKEL BRONZE STRAINER ASSEMBLY. FURNISH AND INSTALL WITH J R. SMITH MODEL# <u>2692-04</u> QUAD CLOSE TRAP SEAL.
CLEANOUT	P-5B	WALL CLEAN-OUT	3"				ZURN MODEL# Z1441-Z-BP WALL CLEAN-OUT, ROUND STAINLESS STEEL WALL ACCESS COVER COMPLETE WITH SECURING SCREW AND BRONZE RAISED HEX HEAD PLUG. (CLEANOUT SIZE TO MATCH PIPE SIZE)
CLEANOUT	P-5A	FLOOR CLEAN-OUT	3"				ZURN MODEL# <u>ZN1400-BZ1-ZS-VP</u> CLEAN-OUT, DURA-COATED CAST IRON BODY WITH BOTTOM OUTLET, WITH GAS AND WATER TIGHT THREADED ABS TAPERED PLUG, POLISHED STAINLESS STEEL TOP AND VANDAL-PROOF SCREWS. (CLEANOUT SIZE TO MATCH PIPE SIZE)
SINK	P-4E	ADA ACCESSIBLE DROP-IN SINK	1-1/2""	1-1/2"	1/2"	1/2"	ELKAY LUSTERSTONE CLASIC STAINLESS STEEL 25"X22"X5-1/2" SINGLE BOWL DROP-IN ADA SINGLE MODEL# LRAD252255. SINK IS MANUFACTURED FROM 18 GAUGE 304 STAINLESS STEEL W/ SATIN FINISH, REAR CENTER DRAIN PLACEMENT & BOTTOM ONLY PADS. INSTALLATION TYPE: DROP-IN. MATERIAL: 304 STAINLESS STEEL, FINISH: SATIN GAUGE:18. BOWL DIMENSIONS: 21"X15-3/4"X5-1/8". DRAIN SIZE: 3-1/2". DRAIN LOCATION: 5" FROM REAR CENTER. MINIMUM CABINET SIZE: 30". MOUNTING HARDWARE: PART#64090012 INCLUDED FOR COUNTERTOPS UP TO 3/4"THICK. CUTOUT TEMPLATE#: 1000001188. PRODUCT COMPLIANCE: ADA&ICC A117.1, ASME A112.193/CSA B45.4. P.C. TO FURNISH & INSTALL ELKAY MODEL# LK35 3-1/2" DRAINING FITTING TYPE 304 STAINLESS STEEL BODY, STRAINER BASKET & TAILPIECE. OVERALL DIMENSIONS ARE 4-7/16"X7-5/16" MADE OF STAINLESS STEEL. DESIGNED TO FIT 3-1/2" DRAIN OPENING WITH AN OVERALL FLANGE SIZE OF 4-1/2". 1-1/2" O.D. X 4" CHROME PLATED BRASS TAILPIECE. STRAINER BASKET W/ METAL STEM & RUBBER SEAL. TYPE 304 STAINLESS STEEL BODY. POLISHED FINISH. PRODUCT COMPLIANCE: ASME A11.18.2/CA B125.2. F. ELKAY 4" CENTERSET MODEL# LK406LGN08T4 W/ EXPOSED DECK LAMINAR FLOW FAUCET WITH 8" GOOSENECK SPOUT, 4" CHROME WRIST BLADE HANDLES, CHROME PLATED BRASS MATERIAL, WITH A QUARTER TURN CERAMIC DISC VALVE. FAUCET REQUIRES (2) FAUCET HOLES. MOUNTING TYPE: DECK MOUNT. SPECIAL FEATURES: LOW FLOW SOLID BRASS CONSTRUCTION SPOUT SWING RESTRICTION PIN FINISH: CHROME (CR) HANDLE TYPE: 4" WRIST BLADE HANDLE, DECK CLEARANCE: 8-1/2", SPOUT REACH: 8", SPOUT HEIGHT: 14-1/8", HOLE DRILLINGS: 2, MATERIAL: CHROME PLATED BRASS. VALVE TYPE: QUARTER TURN CERAMIC DISC, VALVE CONNECTION: 1/2" NPS MALE, FLOW RATE: 1 GPM, FAUCET HOLE SPREAD: 4, SPOUT TYPE: GOOSENECK.



P6.01

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