ADDENDUM NO. 02 **Date: FEBRUARY 07, 2024**
To Drawings and Specifications dated 02/07/2024

PROJECT: **Eastwood Elementary School HVAC Upgrade & Modernization A#04-121953**
Westminster School District

PROJECT LOCATION: 13552 University Street
Westminster, CA 92683

PROJECT ARCHITECT PBK Architects
2400 E. Katella Ave., Ste 950
Anaheim, CA 92806

This Addendum forms a part of the Contract Documents. It modifies the original Project Manual and Drawings, as well as any Addendum previously issued, as noted below. Bidders are required to acknowledge receipt of this Addendum in the space provided in the proposal form. Failure to acknowledge receipt of each addendum may subject bidder to disqualification.

GENERAL:

Item No. 1-01: PQ Bids corrected their list that was missing previously approved firms from the posted PDF. The list on the website is current and correct per the cutoff date.

Item No. 1-02: The website inadvertently posted three files listed as Addendum #1. These files are not part of Addendum #1 and all items included in the files are incorporated into Addendum #2. Addendum #1 included the three-page file that postponed the prequal date and provided the sign-in sheet from the mandatory job walk. Disregard the three files listed below.

1. Eastwood Addendum No. 01 to Drawings
2. Sequoia Addendum No. 01 to Drawings
3. Warner Addendum No. 01 to Drawings

Item No. 1-03: Project duration revised from 291 days to 365 days.

Item No. 1-04: Pre-Bid RFI's. See attached log for pre-bid RFI questions and responses.

Item No. 1-05: Revised "BID FORM." See attached form for updated version.

SPECIFICATIONS:

Item No. 1-06: 08 51 13 ALUMINUM OPERABLE WINDOWS

1. Added “08 51 13 – Aluminum Operable Windows.”

Item No. 1-07: 08 80 00 GLAZING

1. Replaced the section entirely.

Item No. 1-08: 08 71 00 DOOR HARDWARE

1. Revise section 2.2 Materials to include the following:
   K. Contractor to ensure closers are 180 degree closers, but that stops will protect the windows or walls adjacent to protect against damage.
   L. Contractor to ensure the classroom doors that don’t have panic hardware use a Corbin Russwin CL 3300 (IC Prep) lever handle that will be a keyed handle from the outside and passage/storeroom finish on the inside. So basically lock on outside, passage on inside.
   M. Panic Bars to be AX-PA-CD-98NL-OP.

Item No. 1-09: 09 65 20 RESILIENT BASES

1. Replaced the section entirely.

Item No. 1-10: 09 65 23 LUXURY VINYL TILE FLOORING

1. Added “09 65 23 – Luxury Vinyl Tile Flooring.”

Item No. 1-11: 09 68 00 CARPETING

1. Replaced the section entirely.

DRAWINGS:

Item No. 1-12: D2.1 DEMO RCP BLDG ‘A-B’, ‘C-D’, ‘K’ & ADMIN

1. Detail – “Demolition RCP Legend”
   a. Revised Demolition RCP Legend.

2. Detail – “Keynote Legend”
    a. Added keynote “02.85 – (E) MDF/IDF to remain and protect in place.”

3. Detail “12 – BLDG C-D – Demo Reflected Ceiling Plan”
    a. Revised “BLDG C-D – Demo Reflected Ceiling Plan.”

4. Detail “16 – BLDG A-B – Demo Reflected Ceiling Plan”
    a. Revised “BLDG A-B – Demo Reflected Ceiling Plan.”

5. Detail “18 – BLDG ADMIN – Demo Reflected Ceiling Plan”
    a. Revised “BLDG ADMIN – Demo Reflected Ceiling Plan.”

Item No. 1-13: A1.01 BLDG ‘A-B,’ ‘C-D,’ ‘K’ & ‘ADMIN’ FLOOR PLANS

1. Detail – “Construction Keyed Notes”
    a. Added keynote “22.06 – Adjust existing to remain plumbing vents. Relocate line and secure to existing column or exterior walls, coordinate with new work to provide patching of finishes as necessary.”

2. Detail “4 – BLDG C-D FLOOR PLAN”
    a. Added keynote tag “22.06 TYP.”

3. Detail “6 – BLDG K FLOOR PLAN”
    a. Added keynote tag “22.06.”

4. Detail “16 – BLDG A-B FLOOR PLAN”
    a. Added keynote tag “22.06 TYP.”

Item No. 1-14: A2.01 BLDG ‘A-B’,‘C-D’, ‘ADMIN’ & ‘K’ REFLECTED CEILING PLANS

1. Detail – “Construction Keyed Notes”
    a. Added keynote “02.85 – (E) MDF/IDF to remain and protect in place.”

2. Detail “4 – BLDG C-D Reflected Ceiling Plan”
    a. Revised “BLDG C-D Reflected Ceiling Plan.”

3. Detail “16 – BLDG A-B – Reflected Ceiling Plan”
    a. Revised “BLDG A-B – Reflected Ceiling Plan.”

4. Detail “18 – BLDG ADMIN – Reflected Ceiling Plan”
    a. Revised “BLDG ADMIN – Demo Reflected Ceiling Plan.”

Item No. 1-15: A7.01 INTERIOR ELEVATIONS

1. Detail “2D – Kindergarten K2 – East Interior Elevation”

a. Added keynote “Remove and reinstalled (E) Power & (E) Data after tackboard reinstallation. Typ.”

2. Detail “6B – Typ. Classroom – A4 – East Interior Elevation”
   a. Added keynote “Remove and reinstalled (E) Power & (E) Data after tackboard reinstallation. Typ.”

3. Detail “18B – Typ. Classroom – C4 – East Interior Elevation”
   a. Added keynote “Remove and reinstalled (E) Power & (E) Data after tackboard reinstallation. Typ.”

Item No. 1-16: A8.01 DOORS, WINDOW FRAME DETAILS

1. Detail “16 – Operable Window @ Vert. Mullion 2”
   a. Added detail “Operable Window @ Vert. Mullion 2.”

2. Detail “23 – Operable Window Horiz. Mullion”
   a. Added detail “Operable Window Horiz. Mullion.”

3. Detail “24 – Operable Window @ Horiz. Mullion 2”
   a. Added detail “Operable Window @ Horiz. Mullion 2.”

4. Detail “28 – Operable Window @ Vert. Mullion”
   a. Added detail “Operable Window @ Vert. Mullion.”

5. Detail “29 – Operable Window Header”
   a. Added detail “Operable Window Header.”

Item No. 1-17: A8.03 CEILING DETAILS

1. Detail “6 – Operable Window Sill”
   a. Added detail “Operable Window Sill.”

Item No. 1-18: A9.01 DOORS SCHEDULE & WINDOW FRAMING ELEVATION

1. Detail – “General Window Framing Notes”
   a. Revised “General Window Framing Notes.”

2. Detail – “Frame Type Legend”
   a. Revised “Frame Type Legend.”

3. Detail – “Door Type Legend”
   a. Revised “Door Type Legend.”

4. Detail – “Door Schedule”
   a. Revised “Door Schedule.”

5. Detail “1 – Window Frame Elevation – W1”
    a. Added “Operable Window”
    b. Added detail call out: 28/A8.01, 29/A8.01 & 6/A8.03.

6. Detail “3 – Window Frame Elevation – W2”
    a. Added “Operable Window”
    b. Added detail call out: 24/A8.01, 28/A8.01 & 29/A8.01.

7. Detail “9 – Window Frame Elevation – W6 & W7”
    a. Added “Operable Window”
    b. Added detail call out: 16/A8.01, 23/A8.01, 24/A8.01 & 28/A8.01.

Item No. 1-19: A10.01 FINISH PLANS & SCHEDULE

1. Detail – “Material Abbreviations”
    a. Added “LVT – Luxury Vinyl Tile.”

2. Detail – “Material Finish Abbreviations”
    a. Added “LVT1 – Luxury Vinyl Tile 1, See Specifications.”

3. Detail – “Finish Floor Materials Legend”
    a. Added “LVT-1, Luxury Vinyl Tile”
4. Detail – “Finish Schedule”
    a. Revised “Finish Schedule.”

5. Detail “4 – Finish Floor Plan – BLDG C-D”
    a. Revised “Finish Floor Plan – BLDG C-D.”

6. Detail “6 – Finish Floor Plan – BLDG A-B”
    a. Revised “Finish Floor Plan – BLDG A-B.”

7. Detail “19 – Finish Floor Plan – BLDG ADMIN”
    a. Revised “Finish Floor Plan – BLDG ADMIN.”

8. Detail “20 – Finish Floor Plan – BLDG K”
    a. Revised “Finish Floor Plan – BLDG K.”

Item No. 1-20: M5.01 MECHANICAL SCHEDULES

1. Detail – “Rooftop Package Air Conditioning (Heat Pump) Unit Schedule”
    a. Revised “Note No. 9,” updated the T-stat specification to NT Model X7C-WIFI.

Item No. 1-21: **M6.01 MECHANICAL DETAILS**

1. Detail “4 – A/C Unit Wiring Diagram”
    a. Added detail “4 – A/C Unit Wiring Diagram.”

END OF ADDENDUM 01

RFI Questions and Responses

Question: Please provide Engineers Estimates for the project?

Answer: Sequoia $6.4 Million, Warner $8.8 Million, Eastwood $6.4 Million.

Question: Will a qualified Superintendent be required a each site full time?

Answer: The staffing minimum requirements are a full-time onsite Project Superintendent and Project Engineer. In addition, a dedicated Project Manager is required as specified in the Front-end document. Any work being performed on school sites will require on-site supervision from the Contractor. This supervision could be any of the persons noted above or an additional staff by the Contractor. All Contractor staffing will be required to be badged by the Distrcit including a background check.

Question: Addendum #1 states that is issuing new specs for LVT and Carpeting, as well as revised plan sheet A10.01. Will these be issued in a new addendum?

Answer: See addendum 2 for spec section 09 65 23 Luxury Vinyl Tile and spec section 09 68 00 Carpeting.

Question: The switchgear lean times far exceed the duration of the project schedule. The lead times are approx. 52-65 weeks after approved submittal. Will the project duration be extended to allow for the long lead times?

Answer: The intent is to have the work completed and not have the HVAC unit's operation. The Contractor to utilize the existing switchgear as a temporary equipment with the new load for HVAC not hooked up. As soon as the material is procured the Contractor is to make the switchover and energize the HVAC and perform startup.

Question: Please reference Addendum 1 for all three schools. At specific window types for each school, there is a directive to "provide operable window". However, it is not clear what type of operable window is desired (e.g. hopper, awning, etc.) or which windows are to be operable. Additionally, window types W9 and W10 at Eastwood are rake shaped along the top. Generally speaking, window manufacturers will not build windows out of square. PROPOSED SOLUTION: Please provide updated window schedules for all three schools and eliminate operable windows at openings that are not square. Each revised schedule should include the following;

- Indicate which windows are to be operable
- Type of operable window (hopper, awning, etc.)

Answer: See Addendum 2 for revised drawings and specifications for operable windows.

Question: Please reference Sheet A9.01 of the Warner Middle School plans. 48 doors in the schedule are described as type "A" which is identified as being aluminum and shows no glass. This type of door would not be classified as a storefront door, rather a flush panel door. Since there is nothing in the spec that describes a flush panel door, it is believed this is probably a mistake. PROPOSED SOLUTION**:** Please confirm that aluminum flush panel doors are not required. Please indicate what types of doors are to be used at type "A" locations and whether or not they will require any glazing.

Answer: See Addendum 2 for revised door schedule.

ADDENDUM #2

BID FORM

FOR

HVAC UPGRADE & MODERNIZATION PROJECT

AT

EASTWOOD ELEMENTRY SCHOOL
13521 Edwards St,
Westminster, CA 92683

SEQUOIA ELEMENTRY SCHOOL
7200 Trask Ave'
Westminster, CA 92683

WARNER ELEMENTRY SCHOOL
14142 Hoover St.
Westminster, CA 92683

Bid No. 2023/24-03

WESTMINSTER SCHOOL DISTRICT

CONTRACTOR NAME: _____

ADDRESS: _____

_____

TELEPHONE: ( ) _____

FAX: ( ) _____

EMAIL _____

ADDENDUM #2

TO: Westminster School District, acting by and through its Governing Board, herein called "District".

1. Pursuant to and in compliance with your Notice Inviting Bids and other documents relating thereto, the undersigned bidder, having familiarized himself with the terms of the Contract, the local conditions affecting the performance of the Contract, the cost of the work at the place where the work is to be done, with the Drawings and Specifications, and other Contract Documents, hereby proposes and agrees to perform within the time stipulated, the Contract, including all of its component parts, and everything required to be performed, including its acceptance by the District, and to provide and furnish any and all labor, materials, tools, expendable equipment, and utility and transportation services necessary to perform the Contract and complete all of the Work in a workmanlike manner required in connection with the construction of:

Eastwood, Sequoia, & Warner Elementary School HVAC Upgrade & Modernization Bid # 2023/24-03

in the District described above, all in strict conformance with the drawings and other Contract Documents for amounts set forth herein.

2. BIDDER ACKNOWLEDGES THE FOLLOWING ADDENDUM:

Number	Number	Number	Number	Number	Number	Number	Number
_____	_____	_____	_____	_____	_____	_____	_____

Acknowledge the inclusion of all addenda issued prior to bid in the blanks provided above. Your failure to do so may render your bid non-responsive.

3. The total Contract will be awarded to the Lowest Responsive and Responsible Bidder based on the grand total of all three schools Eastwood, Sequoia, & Warner ES. The District, at its discretion may deduct Sequoia school from the project. The district requires pricing separately for Eastwood, Sequoia, & Warner ES for budgetary reasons.

TOTAL CASH PURCHASE PRICE IN WORDS & NUMBERS:

Warner ES_____ DOLLARS

($ _____)

Sequoia ES_____ DOLLARS

($ _____)

Eastwood ES_____ DOLLARS

($ _____)

Total contract cost for Eastwood, Sequioa, and Warner ES

_____ DOLLARS

($ _____)

ADDENDUM #2

Alternate Deduct for Sequoia ES:_____ DOLLARS

($ _____)

4. TIME FOR COMPLETION: The District may give a notice to proceed within ninety (90) days of the award of the bid by the District. Once the Contractor has received the notice to proceed, the Contractor shall complete the work in the time specified in the Agreement. By submitting this bid, Contractor has thoroughly studied this Project and agrees that the Contract Time for this Project is adequate for the timely and proper completion of the Project. Further, Contractor has included in the analysis of the time required for this Project, Rain Days, Governmental Delays, and the requisite time to complete Punch List.

In the event that the District desires to postpone giving the notice to proceed beyond this ninety (90) day period, it is expressly understood that with reasonable notice to the Contractor, giving the notice to proceed may be postponed by the District. It is further expressly understood by the Contractor, that the Contractor shall not be entitled to any claim of additional compensation as a result of the postponement of giving the notice to proceed.

If the Contractor believes that a postponement will cause a hardship to it, the Contractor may terminate the contract with written notice to the District within ten (10) days after receipt by the Contractor of the District's notice of postponement. Should the Contractor terminate the Contract as a result of a notice of postponement, the District shall have the authority to award the Contract to the next lowest responsible bidder, if applicable.

It is understood that the District reserves the right to reject any or all bids and/or waive any irregularities or informalities in this bid or in the bid process. The Contractor understands that it may not withdraw this bid for a period of ninety (90) days after the date set for the opening of bids.

5. Attached is bid security in the amount of not less than ten percent (10%) of the bid:

Bid bond (10% of the Bid), certified check, or cashier's check (circle one)

6. The required List of Designated Subcontractors is attached hereto.

7. The required Non-Collusion Declaration is attached hereto.

8. The Substitution Request Form, if applicable, is attached hereto.

9. It is understood and agreed that if written notice of the acceptance of this bid is mailed, telegraphed, or delivered to the undersigned after the opening of the bid, and within the time this bid is required to remain open, or at any time thereafter before this bid is withdrawn, the undersigned will execute and deliver to the District a Contract in the form attached hereto in accordance with the bid as accepted, and that he or she will also furnish and deliver to the District the Performance Bond and Payment Bond, all within five (5) calendar days after award of Contract, and that the work under the Contract shall be commenced by the undersigned bidder, if awarded the Contract, by the start date provided in the District's Notice to Proceed, and shall be completed by the Contractor in the time specified in the Contract Documents.

ADDENDUM #2

10. The names of all persons interested in the foregoing proposal as principals are as follows:

_____

_____

_____

_____

_____

(IMPORTANT NOTICE: If bidder or other interested person is a corporation, state the legal name of such corporation, as well as the names of the president, secretary, treasurer, and manager thereof; if a co-partnership, state the true names of the firm, as well as the names of all individual co-partners comprising the firm; if bidder or other interested person is an individual, state the first and last names in full.)

11. PROTEST PROCEDURES. If there is a bid protest, the grounds shall be submitted as set forth in the Instructions to Bidders.

12. The undersigned bidder shall be licensed and shall provide the following California Contractor's license information:

License Number: _____

License Expiration Date: _____

Name on License: _____

Class of License: _____

DIR Registration Number: _____

If the bidder is a joint venture, each member of the joint venture must include the above information.

13. Time is of the essence regarding this Contract, therefore, in the event the bidder to whom the Contract is awarded fails or refuses to post the required bonds and return executed copies of the Agreement form within five (5) calendar days from the date of receiving the Notice of Award, the District may declare the bidder's bid deposit or bond forfeited as damages.

14. The bidder declares that he/she has carefully examined the location of the proposed Project, that he/she has examined the Contract Documents, including the Plans, General Conditions, Supplemental Conditions, Addenda, and Specifications, all others documents and requirements that are attached to and/or contained in the Project Manual, all other documents issued to bidders and read the accompanying instructions to bidders, and hereby proposes and agrees, if this proposal is accepted, to furnish all materials and do all work required to complete the said work in accordance with the Contract Documents, in the time and manner therein prescribed for the unit cost and lump sum amounts set forth in this Bid Form.

ADDENDUM #2

15. DEBARMENT. In addition to seeking remedies for False Claims under Government Code section 12650 et seq. and Penal Code section 72, the District may debar a Contractor pursuant to Article 15 of the General Conditions if the Board, or the Board may designate a hearing officer who, in his or her discretion, finds the Contractor has done any of the following:

a. Intentionally or with reckless disregard, violated any term of a contract with the District;

b. Committed an act or omission which reflects on the Contractor's quality, fitness or capacity to perform work for the District;

c. Committed an act or offense which indicates a lack of business integrity or business honesty; or

d. Made or submitted a false claim against the District or any other public entity. (See Government Code section 12650, et seq., and Penal Code section 72)

16. DESIGNATION OF SUBCONTRACTORS. In compliance with the Subletting and Subcontracting Fair Practices Act (California Public Contract Code section 4100 et seq.) and any amendments thereof, each bidder shall list subcontractors on the District's form Subcontractor list. This subcontractor list shall be submitted with the bid and is a required form

I agree to receive service of notices at the e-mail address listed below.

I the below-indicated bidder, declare under penalty of perjury that the information provided and representations made in this bid are true and correct.

_____
Proper Name of Company

_____
Name of Bidder Representative

_____
Street Address

_____
City, State, and Zip

( )_____
Phone Number

( )_____
Fax Number

_____
E-Mail

ADDENDUM #2

By: _____ Date:_____
Signature of Bidder Representative

NOTE: If bidder is a corporation, the legal name of the corporation shall be set forth above together with the signature of authorized officers or agents and the document shall bear the corporate seal; if bidder is a partnership, the true name of the firm shall be set forth above, together with the signature of the partner or partners authorized to sign contracts on behalf of the partnership; and if bidder is an individual, his signature shall be placed above.

All signatures must be made in permanent blue ink

SECTION 08 51 13

ALUMINUM OPERABLE WINDOWS

PART 1 GENERAL

1.01 Summary
- A. Section includes:
  - 1. Aluminum Windows
    - a. Arcadia Inc., T200 Series (thermal) Heavy Commercial Hopper Windows
- B. Related Sections:

1.02 References
- A. American Architectural Manufacturers Association (AAMA)
- B. American Society for Testing and Materials (ASTM)
- C. Aluminum Association (AA)
- D. National Wood Window & Door Association (NWWDA)
- E. California Association of Window Manufacturers (CAWM)

1.03 System Description
- A. General: In addition to requirements shown or specified, comply with:
  - 1. Applicable provisions of AAMA Windows and Sliding Glass Doors Manual for design, materials, fabrication and installation of component parts.
- B. Design Requirements: Arcadia T200 Series (thermal) Heavy Commercial Fixed, Casement, Awning and Hopper Windows 2-inch depth. Hinged compression sealed aluminum windows. Suitable for outside or inside glazing.
- C. Performance Requirements: Each assembly shall be tested by a recognized testing laboratory or agency in accordance with specified test methods.
  - 1. Conformance to F-AW55, C-AW80, AP-AW80 specifications in AAMA/NWWDA 101/I.S. 2/A440-8.
    - a. Air Infiltration: Accordance with ASTM E 283 at a static air pressure difference of 6.24 psf. Air infiltration shall not exceed .30 cfm per square foot.
    - b. Water Resistance: Accordance with ASTM E 331/ASTM E 547 at a static air pressure difference of 12 psf. No water leakage.
    - c. Uniform Load Structural: Aluminum window systems comply with AAMA/WDMA/CSA 101/I.S.2/A440-08, Voluntary specifications for aluminum windows. Guidelines for specified AW rated product.
    - d. Component testing: Accordance with procedures described in AAMA/NWWDA 101/I.S. 2/A440-08.
    - e. Forced Entry Resistance: All windows shall conform to CAWM 301-90.
    - f. Condensation Resistance Test: (CRF) when tested in accordance with AAMA 1503.1-88, the condensation resistance factor shall not be less than 51.
    - g. Thermal Transmittance Test: Accordance with AAMA 1503.1-88, (U-Value) not more than .59 BTU/hr/sf/ºF.
    - h. Thermal Movements: Allow thermal movement resulting from the following maximum change (range) in ambient temperature.
      - (a) 120 deg F (67 deg C), ambient; 180 deg F (100 deg C), material surfaces.

1.04 Quality Assurance
- A. Single Source Responsibility:
  - 1. Obtain entrances, storefronts, ribbon walls, window walls, curtain walls, window systems, and finish through one source from a single manufacturer.
- B. Provide test reports from AAMA accredited laboratories certifying the performances as specified in 1.03.

1.05 Warranty

A. Warranted against failure and/or deterioration of metals due to manufacturing process for a period of two (2) years.

Part 2 – Products

2.01 Manufacturers

A. Acceptable Manufacturers:
   1. Arcadia, Inc., 2301 E Vernon, Vernon, CA. Telephone 323/269-7300, Fax 323/269-7390.
B. Acceptable Products:
   1. Arcadia Inc., T200 Series (thermal)

2.02 Materials

A. Extruded aluminum profiles 6063-T6 alloy and temper (ASTM B221 G.S. 10A-T6).
B. All framing members .125 minimum wall thickness.
C. At Casement, Awning, and Hopper windows provide heavy-duty four bar hinges shall be stainless steel only, with asymmetric end caps, and adjustable limit stops. Lock and latches cast white bronze, US-25D finish.
D. Weatherstrip EPDM bulb type conforming to ASTM D2000 AA515 and shall be keyed into extruded grooves.
E. Back glazing two-sided adhesive, 15 lbs./ft.^{3} density, polyethylene tape. Glazing wedges shall be EPDM or Santoprene.
F. At operable windows provide screens made of extruded aluminum frame and screened with either 18 x 14 aluminum or fiber mesh.
G. Thermal barrier material poured-in-place two part polyurethane.

2.03 Finish

2. An Architectural Class II or I color anodic coating conforming with AA-M12C22A34/AA-M12C22A44.
   a. Anodized finish color shall be Colornodic _____. (AB1 Light Champagne, AB2 Champagne, AB3 Light Bronze, AB4 Medium Bronze, AB5 Standard Medium Bronze, AB6 Dark Bronze, AB7 Standard Dark Bronze, AB8 Black.)

(or) 1. An Architectural Class II or I anodic coating conforming with AA-M12C22A31/AA-M12C22A41.
   a. Anodize finish color shall be Colornodic _____ (#11 Clear)

(or) 1. Fluorocarbon Coating: AAMA 2605.2.
   a. Resin: 70% PVDF Kynar 500/Hylar 5000.
   b. Substrate: cleaned and pretreated with chromium phosphate.
   c. Primer: Manufacturer's standard resin base compatible coating. Dry film thickness.
      (a) Extrusion: Minimum 0.20 mil.
   d. Color Coat: 70% PVDF, dry film thickness.
      (a) Extrusion: 0.20 mil.
   e. Color: As selected by Architect.
   f. Acceptable Coatings Manufacturers:
      (a) PPG Industries, Inc.
      (b) Valspar Corporation
      (c) BASF

2.04 Fabrication

A. Frame components mitered, reinforced extruded corner key, hydraulically crimped, and "cold welded."
B. All ventilator extensions tubular, each corner mitered, reinforced extruded corner key, hydraulically crimped, and "cold welded."
C. All corners weather sealed with an elastomeric sealant.

Part 3 – Execution

3.01 Examinations

A. Examine conditions and verify substrate conditions are acceptable for product installation.

3.02 Installation

A. Install in accordance with approved shop drawings and manufacturers installation instructions.

3.03 Field Quality Control

A. Contractor's responsibility to make all necessary final adjustments to attain normal operation of each window and its mechanical hardware.

END OF SECTION 08 51 13

SECTION 08 80 00

GLAZING

PART 1 GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

A. Section Includes: Requirements including but not limited to:
1. Tempered glass.
2. Reflective glass.
3. Glazing sealants.
4. Fire rated glass and sealants
5. Accessories necessary for a complete installation.

B. Related Sections:
1. Section 08 11 13, Hollow Metal Doors and Frames.
2. Section 08 14 16, Flush Wood Doors.
3. Section 08 51 00, Aluminum Windows.
4. Section 08 41 13, Aluminum-Framed Entrances and Storefronts.

1.2 DEFINITIONS

A. Glass Thickness: Indicated by thickness designations in millimeters according to ASTM C 1036.

B. Interspace: Space between lites of an insulating lass unit.

1.3 PERFORMANCE REQUIREMENTS

A. Delegated Design: Design glass panels including comprehensive engineering analysis by a qualified professional engineer lawfully licensed in the State of California, using performance requirements and design criteria indicated.

B. Installed Glazing: Design glazing systems to withstand normal thermal movement and wind and impact loads (where applicable) without failure, including loss or glass breakage attributable to the following: defective manufacture, fabrication, or installation; failure of sealants or gaskets to remain watertight and airtight; deterioration of glazing materials; or other defects in construction.

C. Structural Performance: Glazing shall withstand the following design loads within limits and under conditions indicated determined according to the CBC and ASTM E 1300.
1. Design Wind Pressures: Indicated on Drawings.
2. Design Wind Pressures: Determine design wind pressures applicable to Project according to ASCE/SEI 7, based on heights above grade indicated on Drawings.
   a. Wind Design Data: As indicated on Drawings.
   b. Basic Wind Speed: 110 mph (49 m/s). Or as indicated on structural drawings.

c. Importance Factor: 1.0.
3. Exposure Category: C.
4. Design Snow Loads: Indicated on Drawings.
5. Thickness of Patterned Glass: Base design of patterned glass on thickness at thinnest part of the glass.
6. Probability of Breakage for Sloped Glazing: For glass surfaces sloped more than 15 degrees from vertical, design glass for a probability of breakage not greater than 0.001.
7. Maximum Lateral Deflection: For glass supported on all four edges, the center of glass deflection limit at design wind pressure shall be not more than 1/50 times the short side length or 1 inch (25 mm), whichever is less.

D. Safety Glazing: Where safety glazing is indicated, provide glazing that complies with 16 CFR 1201, Category II.

E. Thermal and Optical Performance Properties: Provide glass with performance properties specified, as indicated in manufacturer's published test data, based on procedures indicated below:
1. For monolithic glass lites, properties are based on units with lites 6 mm thick.
2. For laminated glass lites, properties are based on products of construction indicated.
3. For insulating glass units, properties are based on units of thickness indicated for overall unit and for each lite.
4. U-Factors: Center of glazing values, according to NFRC 100 and based on LBL's WINDOW 5.2 computer program, expressed as Btu/sq. ft. x h x deg. F (W/sq. m x K).
5. Solar Heat Gain Coefficient and Visible Transmittance: Center of glazing values, according to NFRC 200 and based on LBL's WINDOW 5.2 computer program.
6. Visible Reflectance: Center-of-glazing values, according to NFRC 300.

1.4 SUBMITTALS

A. Product Data: Technical data for each type of product including recommended installation and cleaning procedures.

B. Glass Samples: For each type of glass required. Prepare samples from same material to be used for Work.

C. Glazing Schedule: List glass types and thickness for each size opening and location. Use same designations indicated here-in and on Drawings.

D. Delegated Design Submittal: For glass indicated to comply with performance requirements and design criteria, including analysis data signed and sealed by the qualified professional engineer responsible for their preparation.

E. Product Certificates: Submit glass product certificates required by Code.
1. Glass Manufacturer Certificate: The glass manufacturer shall submit a letter certifying it has reviewed the glazing details proposed for the project, including the use of gaskets and sealants, and that each product furnished is recommended for the application shown and compliance with the Code.

F. Thermal Stress and Wind Load Analyses: Submit the following from the glass manufacturer:
1. Thermal stress analysis for each exterior glass unit type, each building elevation. The analysis shall clearly indicate the expected service temperature ranges and the effects of partial and full shading on the glass.
a. Attach to the thermal stress analysis a statement from the glass manufacturer that based upon this analysis that the resulting thermal stresses will not reduce the

specified statistical probability of breakage.

2. Wind load analysis for each glass unit type, each building elevation. The analysis shall indicate the statistical probability of breakage at the design wind pressure does not exceed the specified statistical probability of breakage.

G. Product Test Reports: Submit test reports for insulating glass and glazing sealants, for tests performed by a qualified testing agency.
   1. Glazing Sealants: Provide test reports based on testing current sealant formulations within previous 36 month period.
   2. Glazing Sealants: Preconstruction adhesion and compatibility test report.

1.5 QUALITY ASSURANCE

A. Regulatory Requirements:
   1. Building Code: Comply with applicable requirements for glazing in CBC 2019 California Building Code (CCR Title 24, Part 2, as adopted and amended by DSA).
   2. Energy Code: Comply with applicable requirements of glazing in the 2019 California Green Building Standards Code California Code of Regulations, Title 24, Part 11.
   3. Safety Glazing Labeling: Where safety glazing is indicated, permanently mark glazing with certification label of the SGCC or manufacturer. Label shall indicate manufacturer's name, type of glass, thickness, and safety glazing standard with which glass complies.
      a. As a minimum provide Category II materials complying with testing requirements in 16 CFR 1201 (Consumer Product Safety Commission *Safety Standard for Architectural Glazing Materials*, published in the Code of Federal Regulations) and ANSI Z97.1.
      b. Permanently mark safety glass with certification label of Safety Glazing Certification Council.
   4. Insulating Glass Certification Program: Permanently marked either on spacers or on at least one component lite of units with appropriate certification label of IGCC.
   5. Glazing Publications: Comply with published recommendations of glass product organizations.
      a. GANA: Glazing Manual.
      b. IGMA: SIGMA TM-3000 Vertical Glazing Guidelines.
      c. GANA: Laminated Glazing Reference Manual.
      d. AAMA: AAMA GDSG-1 Glass Design for Sloped Glazing.
      e. AAMA: TIR A7 Sloped Glazing Guidelines.
      f. IGMA for Sloped Glazing: IGMA TB-3001 Guidelines for Sloped Glazing.
      g. IGMA for Insulating Glass: SIGMA TM-3000 North American Glazing Guidelines for Sealed Insulating Glass Units for Commercial and Residential Use.
   6. Fire Rated Door Assemblies: Assemblies complying with NFPA 80 listed and labeled by UL for fire ratings indicated, based on testing according to NFPA 252.
   7. Thickness: Where glass thickness is indicated, it is a minimum. Provide glass that complies with performance requirements and is not less than the thickness indicated.
      a. Minimum Glass Thickness for Exterior Lites: 1/4 inch (6 mm).
      b. Thickness of Tinted Glass: Provide same thickness for each tint color indicated.
   8. Strength: Where annealed float glass is indicated, provide annealed float glass, heat strengthened float glass, or fully tempered float glass necessary to comply with performance requirements.
      a. Where heat strengthened float glass is indicated, provide heat strengthened float glass or fully tempered float glass necessary to comply with performance requirements.
      b. Where fully tempered float glass is indicated, provide fully tempered float glass.

B. Installer Qualifications, Glazer: Experience entity having minimum 5 years documented experience and who employs glass installers certified under the National Glass

Association's Certified Glass Installer Program.

C. Installer Qualifications, Decorative Film: Experience entity having minimum 5 years documented experience in the installation of glass films.

D. Source Limitations for Glass and Glass Accessories: Obtain each type of glass and glass accessories from a single source.

E. Sealant Testing Agency Qualifications: An independent testing agency qualified according to ASTM C 1021 to conduct the testing indicated.

F. Pre-installation Conference: Conduct conference at site.

G. Fire Protective Rated Glass: Each lite shall bear permanent, non-removable label of UL certifying it for use in tested and rated fire protective assemblies.

1.6 DELIVERY, STORAGE, AND HANDLING

A. Protect glazing materials according to manufacturer's written instructions. Prevent damage to glass and glazing materials from condensation, temperature changes, direct exposure to sun, or other causes.

B. Delivery: Deliver materials in manufacturer’s original, unopened, undamaged containers with identification labels intact.

C. Storage and Protection: Store materials protected from exposure to harmful environmental conditions and at temperature and humidity conditions recommended by manufacturer.

D. Exercise exceptional care to prevent edge damage to glass, and damage/deterioration to coating on glass.

E. Comply with insulating glass manufacturer's written instructions for venting and sealing units to avoid hermetic seal ruptures due to altitude change.

1.7 FIELD CONDITIONS

A. Environmental Limitations: Do not proceed with glazing when ambient and substrate temperature conditions are outside limits permitted by glazing material manufacturers and when glazing channel substrates are wet from rain, frost, condensation, or other causes.
   1. Do not install glazing sealants when ambient and substrate temperature conditions are outside limits permitted by sealant manufacturer or are below 40 degrees F (4.4 degrees C).

B. Field Measurements: Verify actual dimensions of openings and construction contiguous with decorative glass by field measurements before fabrication.

1.8 COORDINATION

A. Coordinate glazing channel dimensions to provide necessary bite on glass, minimum edge and face clearances, and adequate sealant thicknesses, with reasonable tolerances.

1.9 WARRANTY

A. Coated Glass Products: Written warranty signed by manufacturer in which glass manufacturer agrees to replace coated glass units that deteriorate within specified warranty

period. Deterioration of coated glass is defined as defects developed from normal use that are not attributed to glass breakage or to maintaining and cleaning coated glass contrary to manufacturer's written instructions. Defects include peeling, cracking, and other indications of deterioration in coating.
1. Warranty Period: Ten (10) years from date of Substantial Completion.

B. Insulating Glass: Written warranty signed by manufacturer in which manufacturer agrees to replace insulating glass units that deteriorate within specified warranty period. Deterioration of insulating glass is defined as failure of hermetic seal under normal use that is not attributed to glass breakage or to maintaining and cleaning insulating glass contrary to manufacturer's written instructions. Evidence of failure is the obstruction of vision by dust, moisture, or film on interior surfaces of glass.
1. Warranty Period: Ten (10) years from date of Substantial Completion.

C. Glass Film: Written warranty signed by glass film manufacturer and installer in which manufacturer and installer agree to replace glass film that crack, peel, delaminate, discolor, change appearance, or failure to meet solar criteria within specified warranty period.
1. Warranty Period: Five (5) years from date of Substantial Completion.

PART 2 PRODUCTS

2.1 MATERIALS

A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
1. Glass:
   a. Cardinal Glass Industries.
   b. AGC Glass Company North America, Inc.
   c. Cardinal Glass Industries.
   d. Guardian Industries Corp.; SunGuard.
   e. Oldcastle Building Envelope.
   f. Pilkington North America.
   g. Vitro Architectural Glass.
   h. Vetrotech Saint-Gobain.
2. Glass Film:
   a. 3M Construction Markets Division. http://www.3m.com
   b. Bekaert Specialty Films. http://www.solargard.com
   c. Madico. http://www.madico.com

B. Clear Annealed Float Glass: ASTM C 1036, Type I, Class 1 (clear), Quality-Q3.

C. Ultra-clear Float Glass: ASTM C 1036, Type I, Class I (clear), Quality-Q3; and with visible light transmission of not less than 91 percent and solar heat gain coefficient of not less than 0.87.

D. Tinted Annealed Float Glass: ASTM C 1036, Type I, Class 2 (tinted), Quality-Q3.

E. Fully Tempered Float Glass: ASTM C 1048, Kind FT (fully tempered), Condition A (uncoated) unless otherwise indicated, Type I, Class 1 (clear) or Class 2 (tinted) as indicated, Quality-Q3.
1. Fabrication Process: By horizontal (roller hearth) process with roll wave distortion parallel to bottom edge of glass as installed unless otherwise indicated.

F. Laminated Float Glass: ASTM 1036 / ASTM C1172 / ASTM C1376, Kind LT (fully tempered and bonded by an interlayer), Condition A (uncoated) unless otherwise indicated, Class 1

(clear) and/or Class 2 (tinted) as indicated, Quality-Q3.

1. Fabrication Process: By horizontal (roller hearth) process with roll wave distortion parallel to bottom edge of glass as installed unless otherwise indicated.

G. Pyrolytic Coated, Low Maintenance Glass: Clear float glass with a coating on first surface having both photocatalytic and hydrophilic properties that act to loosen dirt and to cause water to sheet evenly over the glass instead of beading.

H. Ceramic Coated Vision Glass: ASTM C 1048, Condition C, Type I, Class 1 (clear) or Class 2 (tinted) as indicated, Quality-Q3; and complying with Specification No. 95-1-31 in GANA *Engineering Standards Manual*.

I. Reflective Coated Vision Glass: ASTM C 1376.

J. Ceramic Coating Color: Selected by Architect from manufacturer's full range.

K. Adhered Backing: Adhered scrim backing to ceramic coated surface; provide backed units identical to materials which, while possibly developing cracks and fissures, show no shear nor develop any openings large enough for the unobstructed penetration of 3 inch diameter sphere when tested by approved independent testing laboratory:

1. Mount test specimens consisting of 3 glass assemblies, 34" x 76" (plus zero or minus 3/16 inch), for testing as specified in ANSI Z-97.1.
2. Expose specimens to 100 cycles of the following conditions:
   a. 1 hour at 0 degrees F, ambient humidity.
   b. 3 hours increase from 0 degrees F to 140 degrees F, 95 to 100 percent relative humidity.
   c. 1 hour at 140 degrees F, 95 to 100 percent relative humidity.
   d. 3 hours decrease from 140 degrees F to 0 degrees F, ambient humidity.
3. Break glass by spring-loaded prick punch at midpoint of either vertical edge.
4. After breaking glass, subject it to pressure of 4 lbs. per sq. ft. for 5 minutes to simulate wind load.
5. Inorganic Opacifier: Provide polyethylene opacifier where no insulation and other backing material is applied directly to spandrel glass. Use polyester where direct attachment does occur.
6. Fallout Resistance: Provide spandrel units identical to those passing fallout resistance test for spandrel glass specified in ASTM C 1048.

2.2 FIRE RATED GLAZING

A. Manufacturer: FireLite® as manufactured by Nippon Electric Glass Company, Ltd., and distributed by Technical Glass Products, 8107 Bracken Place SE, Snoqualmie, WA 98065 phone (800.426.0279) fax (425.396.8300) e-mail sales@fireglass.com, web site http://www.fireglass.com

B. Passes positive pressure test standards UL 10C.

C. Labeling: Permanently label each piece of FireLite® with the FireLite® logo, UL logo and fire rating in sizes up to 3,325 sq. in., and with the FireLite® label only for sizes that exceed the listing (as approved by the local authority having jurisdiction).

D. Fire Rating: Fire rating classified and labeled by UL for fire rating scheduled at opening locations on drawings, when tested in accordance with ASTM E2010-01, NFPA 257, UL 9 and UL 10B.

E. Substitutions: No substitutions permitted.

2.3 INSULATING GLASS

A. Insulating Glass Units: Factory assembled units consisting of sealed lites of glass separated by a dehydrated interspace, qualified according to ASTM E 2190.

B. Sealing System: Dual seal, with polyisobutylene and silicone primary and secondary sealants.
   1. Spacer: Aluminum with black, color anodic finish. Thermally broken aluminum.
      a. Manufacturers: Subject to compliance with requirements, provide products by Technoform Glass Insulation NA, Inc.
      b. Desiccant: Molecular sieve or silica gel, or a blend of both.

C. Performance Properties:
   1. Basis of Design Product: <Insert manufacturer's name; product name or designation>.
   2. Overall Unit Thickness: 1 inch (25 mm).
   3. Minimum Thickness of Each Glass Lite: 1/4 inch (6 mm).
   4. Outdoor Lite: Fully tempered float glass.
   5. Interspace Content: Air.
   6. Indoor Lite: Fully tempered float glass.
   7. Safety glazing required.

2.4 GLASS FILM

A. Performance Requirements:
   1. Scratch resistant coating that, after fully cured, facilitates cleaning without damaging or scratching film.
   2. Optical Distortion: When viewed from a distance of 10 feet at angles up to 45 degrees from either side of the glass, there is no discernable distortion.
   3. Edges: Seal edges except when the film is applied with a lacquer that prevents moisture or free water from penetrating between the film and the glass.

B. Coating: Provide coating with uniform finish, without noticeable pin holes, streaks, thin spots, scratches, or banding.
   1. Light Transmission:
      a. Maximum Variation across Width and Length: Not to exceed 1 percent.
      b. Variation *in Transmission across Width and Length: Not to exceed 2 percent.*

C. Rate of Change of Total Transmission across Width and Length: Not to exceed 1 percent in 4 inches.

2.5 GLAZING ACCESSORIES

A. Compatibility: Provide glazing sealants compatible with one another and with other materials in contact, including glass products, seals of insulating glass units, and glazing channel substrates, under conditions of service and application, demonstrated by sealant manufacturer based on testing and field experience.

B. Suitability: Comply with sealant and glass manufacturers' written instructions for selecting glazing sealants suitable for applications indicated and for conditions existing at time of installation.

C. Colors of Exposed Glazing Sealants: Selected by Architect.

D. Glazing Sealant: Neutral curing silicone glazing sealant complying with ASTM C 920, Type S, Grade NS, Class 100/50, Use NT.
   1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
      a. Dow Corning Corporation.
      b. GE Construction Sealants; Momentive Performance Materials Inc.
      c. May National Associates, Inc.; a subsidiary of Sika Corporation.
      d. Pecora Corporation.
      e. Sika Corporation.

E. Back Bedding Mastic Glazing Tapes: Preformed, butyl based, 100 percent solids elastomeric tape; non-staining and non-migrating in contact with nonporous surfaces; with or without spacer rod recommended in writing by tape and glass manufacturers for application indicated; and complying with ASTM C 1281 and AAMA 800 for products indicated below:
   1. AAMA 804.3 tape, where indicated.
   2. AAMA 806.3 tape, for glazing applications in which tape is subject to continuous pressure.
   3. AAMA 807.3 tape, for glazing applications in which tape is not subject to continuous pressure.

F. Expanded Cellular Glazing Tapes: Closed-cell, PVC foam tapes; factory coated with adhesive on both surfaces; and complying with AAMA 800 for the following types:
   1. AAMA 810.1, Type 1, for glazing applications in which tape acts as the primary sealant.
   2. AAMA 810.1, Type 2, for glazing applications in which tape is used in combination with a full bead of liquid sealant.

G. Miscellaneous Glazing Accessories: Provide products of material, size, and shape complying with referenced glazing standard, with requirements of manufacturers of glass and other glazing materials for application indicated, and with proven record of compatibility with surfaces contacted in installation.
   1. Cleaners, Primers, and Sealers: Types recommended by sealant or gasket manufacturer.
   2. Setting Blocks: Elastomeric material with a Shore, Type A durometer hardness of 85, plus or minus 5.
   3. Spacers: Elastomeric blocks or continuous extrusions of hardness required by glass manufacturer to maintain glass lites in place for installation indicated.
   4. Edge Blocks: Elastomeric material of hardness needed to limit glass lateral movement (side walking).
   5. Cylindrical Glazing Sealant Backing: ASTM C 1330, Type O (open-cell material), of size and density to control glazing sealant depth and otherwise produce optimum glazing sealant performance.
   6. Perimeter Insulation for Fire Resistive Glazing: Product approved by testing agency listed and labeled fire resistant glazing product with which it is used for application and fire protection rating indicated.

2.6 GLAZING COMPOUND FOR FIRE-RATED GLAZING MATERIALS (G5.1)

A. Glazing Tape: Closed cell polyvinyl chloride (PVC) foam, coiled on release paper over adhesive on two sides, maximum water absorption by volume of 2 percent. Glass panels that exceed 1,393 sq. inches for 90-minute ratings must be glazed with fire-rated glazing tape supplied by manufacturer.

B. Glazing Compound: DAP 33 putty.

C. [Silicone Sealant: One-part neutral curing silicone, medium modulus sealant, Type S; Grade NS; Class 25 with additional movement capability of 50 percent in both extension and compression (total 100 percent); Use (Exposure) NT; Uses (Substrates) G, A, and O as applicable. Available Products:
   1. Dow Corning 795 - Dow Corning Corp.
   2. Silglaze-II 2800 - General Electric Co.
   3. Spectrem 2 - Tremco Inc.

D. Setting Blocks: Neoprene, EPDM, or silicone; tested for compatibility with glazing compound; of 70 to 90 Shore A hardness.

2.7 FABRICATION OF GLAZING UNITS

A. Fabricate glazing units in sizes required to fit openings indicated for Project, with edge and face clearances, edge and surface conditions, and bite complying with written instructions of product manufacturer and referenced glazing publications, to comply with system performance requirements.
   1. Allow for thermal movements from ambient and surface temperature changes acting on glass framing members and glazing components.
      a. Temperature Change: 120 degrees F (67 degrees C), ambient; 180 degrees F (100 degrees C), material surfaces.
   2. Edge and Surface Conditions: Comply with the recommendations of AAMA *Structural Properties of Glass* for clean cut edges, except comply with manufacturer's recommendations.
   3. Exposed Glass Edges and Surface Condition: Finish edges flat with an arrissed edge profile (small bevel of uniform width not exceeding 1.5 mm at an angle of approximately 45 degrees to the surface of the glass) with polished (surface is reflective in appearance similar to the major surface of the glass) surface.

B. Cutting: Wheel cut or sawed edges and seamed at manufacturer's option. For site cut glass, provide glass 2 inches (50.8 mm) larger than required in both dimensions to facilitate cutting of clean cut edges without the necessity of seaming or nipping. Do not cut, seam, nip or abrade heat treated glass.

C. Butt Glazing: Clean cut or flat grind vertical edges of butt glazed monolithic lites to produce square edges with slight chamfers at junctions of edges and faces.
   1. Edges: Grind smooth and polish exposed glass edges and corners.

PART 3 EXECUTION

3.1 EXAMINATION

A. Examine framing, glazing channels, and stops, with Installer present, for compliance with the following:
   1. Manufacturing and installation tolerances, including size, squareness, and offsets at corners.
   2. Presence and functioning of weep systems.
   3. Minimum required face and edge clearances.
   4. Effective sealing between joints of glass-framing members.

B. Proceed with installation after correcting unsatisfactory conditions.

3.2 PREPARATION

A. Clean glazing channels and framing members receiving glass immediately before glazing.

Remove coatings not firmly bonded to substrates.
1. Comply with manufacturer instructions for wiping of surfaces immediately before application of primers.
2. Wipe metal surfaces with IPA (isopropyl alcohol) unless otherwise required by compatibility and adhesion testing results.

B. Inspect each piece of glass immediately before installation. Do not install pieces improperly sized or with damaged edges, scratches, abrasion, or evidence damage. Remove labels from glass immediately after installation.

C. Examine glazing units to locate exterior and interior surfaces. Label or mark units so exterior and interior surfaces are readily identifiable. Do not use materials that leave visible marks in the completed Work.

D. Seal vent (breather or capillary) tubes in insulating glass units in accordance with insulating glass manufacturer written recommendations.

E. Glass Film Preparation:
1. Remove particulate matter on the glass surface using a scraping blade.
2. Place an absorbent towel on window sill or sash to absorb moisture generated by the film application.

3.3 GLAZING

A. Comply with combined written instructions of manufacturers of glass, sealants, gaskets, and glazing materials, unless more stringent requirements are indicated, including those in referenced glazing publications.

B. Protect glass edges from damage during handling and installation. Remove damaged glass from Project site and legally dispose of off Project site. Damaged glass includes glass with edge damage or other imperfections that, when installed, could weaken glass, impair performance, or impair appearance.

C. Apply primers to joint surfaces where required for adhesion of sealants, as determined by preconstruction testing.

D. Install setting blocks in sill rabbets, sized and located to comply with referenced glazing publications, unless otherwise required by glass manufacturer. Set blocks in thin course of compatible sealant suitable for heel bead.

E. Do not exceed edge pressures stipulated by glass manufacturers for installing glass lites.

F. Provide spacers for glass lites where length plus width is larger than 50 inches (1270 mm).
1. Locate spacers directly opposite each other on both inside and outside faces of glass. Install correct size and spacing to preserve required face clearances, unless gaskets and glazing tapes are used that have demonstrated ability to maintain required face clearances and to comply with system performance requirements.
2. Provide 1/8 inch (3 mm) minimum bite of spacers on glass and use thickness equal to sealant width. With glazing tape, use thickness slightly less than final compressed thickness of tape.

G. Provide edge blocking where indicated or needed to prevent glass lites from moving sideways in glazing channel, as recommended in writing by glass manufacturer and according to requirements in referenced glazing publications.

H. Set glass lites in each series with uniform pattern, draw, bow, and similar characteristics.

I. Set glass lites with proper orientation so that coatings face exterior or interior as specified.

J. Where wedge shaped gaskets are driven into one side of channel to pressurize sealant or gasket on opposite side, provide adequate anchorage so gasket cannot walk out when installation is subjected to movement.
   1. Square cut wedge shaped gaskets at corners and install gaskets as recommended by gasket manufacturer to prevent corners from pulling away; seal corner joints and butt joints with sealant recommended by gasket manufacturer.

K. Tape Glazing: Position tapes on fixed stops so that, when compressed by glass, the exposed edges are flush with or protrude slightly above sightline of stops.
   1. Install tapes continuously, but not necessarily in one continuous length. Do not stretch tapes to make tapes fit opening.
   2. Cover vertical framing joints by applying tapes to heads and sills first, then to jambs. Cover horizontal framing joints by applying tapes to jambs, then to heads and sills.
   3. Place joints in tapes at corners of opening with adjoining lengths butted together, not lapped. Seal joints in tapes with compatible sealant approved by tape manufacturer.
   4. Do not remove release paper from tape until right before each glazing unit is installed.
   5. Apply heel bead of elastomeric sealant.
   6. Center glass lites in openings on setting blocks, and press firmly against tape by inserting dense compression gaskets formed and installed to lock in place against faces of removable stops. Start gasket applications at corners and work toward centers of openings.
   7. Apply cap bead of elastomeric sealant over exposed edge of tape.

L. Gasket Glazing (Dry): Cut compression gaskets to lengths recommended by gasket manufacturer to fit openings exactly, with allowance for stretch during installation.
   1. Insert soft compression gasket between glass and frame or fixed stop so it is securely in place with joints miter cut and bonded together at corners.
   2. Installation with Drive in Wedge Gaskets: Center glass lites in openings on setting blocks, and press firmly against soft compression gasket by inserting dense compression gaskets formed and installed to lock in place against faces of removable stops. Start gasket applications at corners and work toward centers of openings. Compress gaskets to produce a weathertight seal without developing bending stresses in glass. Seal gasket joints with sealant recommended by gasket manufacturer.
   3. Installation with Pressure Glazing Stops: Center glass lites in openings on setting blocks, and press firmly against soft compression gasket. Install dense compression gaskets and pressure glazing stops, applying pressure uniformly to compression gaskets. Compress gaskets to produce a weathertight seal without developing bending stresses in glass. Seal gasket joints with sealant recommended by gasket manufacturer.
   4. Install gaskets to protrude past face of glazing stops.

M. Sealant Glazing (Wet): Install continuous spacers, or spacers combined with cylindrical sealant backing, between glass lites and glazing stops to maintain glass face clearances and to prevent sealant from extruding into glass channel and blocking weep systems until sealants cure. Secure spacers or spacers and backings in place and in position to control depth of installed sealant relative to edge clearance for optimum sealant performance.
   1. Force sealants into glazing channels to eliminate voids and to ensure complete wetting or bond of sealant to glass and channel surfaces.
   2. Tool exposed surfaces of sealants to provide a substantial wash away from glass.

N. Erection Tolerances:
   1. Maximum Deviation from Vertical: 1/8 inch in any story and 1/4 inch in any 45 foot run.

2. Maximum Deviation from Horizontal: 1/8 inch in any 30 foot run.
3. Maximum Deviation from True Alignment: 1/32 inch for any two (2) abutting units. Allow no edge projections.
4. Maximum Joint Gap: 1/32 inch.

3.4 CLEANING AND PROTECTION

A. Immediately after installation remove nonpermanent labels and clean surfaces.

B. Protect glass from contact with contaminating substances resulting from construction operations. Examine glass surfaces adjacent to or below exterior concrete and other masonry surfaces at frequent intervals during construction, but not less than once a month, for buildup of dirt, scum, alkaline deposits, or stains.
   1. If contaminating substances come into contact with glass, remove substances immediately as recommended in writing by glass manufacturer. Remove and replace glass that cannot be cleaned without damage to coatings.

C. Remove and replace glass that is damaged during construction period.

D. Wash glass on both exposed surfaces not more than four days before date scheduled for inspections that establish date of Substantial Completion. Wash glass as recommended in writing by glass manufacturer.

PART 4 SCHEDULE

4.1 GLAZING SCHEDULE

A. **G-1 Insulated Glass:** 1 in Glass Unit: 1/4" Bronze Tempered, 1/2" Black Spacer, 1/4" Solarban 70 - #3 Surface Tempered

~~B. **G-2 Tinted Tempered Glass:** 1 inch Glass Unit: Solarban 70 on Solarbronze 6mm (2), Air ½" (12.7 mm), 100% Pavla Acid Etch on 6mm clear.~~

~~C. **G-3 Clear Tempered Glass:** 1/4 inch (6 mm) clear tempered float glass.~~

~~D. G-4 Annealed Float Glass: *Not Used.*~~

~~E. G-5 20 min. Fire Rated Glass: *Not Used*~~

~~F. **G-5.1 90 min. Fire Rated Glass:** 3/16" inch (5 mm) ceramic, premium clear fire rated glass; 90 minute UL labeled No. R13377. All test performed in accordance with UL 9, UL 10C, NFPA 80, NFPA 257.~~

~~G. G-6 Acoustic Glazing: *Not Used*~~

~~H. G-7 Laminated Glass: *Not Used*~~

~~I. G-10 Insulated Spandrel Glass: *Not Used*~~

END OF SECTION 08 80 00

SECTION 09 65 20 - RESILIENT BASE

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

A. Section Includes: Requirements including but not limited to:
   1. Rubber base.
   2. Accessories necessary for a complete installation.

1.3 SUBMITTALS

A. Product Data: Technical data for each type of product including manufacturer's installation instructions.

B. Samples: Sample of Base Selected or Color Chart if none selected.

C. Maintenance Data: Submit for inclusion in maintenance manuals.

D. Extra Stock: Provide 20 feet of each.

1.4 QUALITY ASSURANCE

A. Installer Qualifications: Entity having minimum 5 years documented experience who employs workers competent in techniques required by manufacturer for floor tile installation and seaming method indicated.

B. Interior floor-wall base that is 6 inches (152mm) or less in height shall be tested in accordance with Section 804.2 and shall be not than Class II. Where a Class I floor finish is required, the floor-wall base shall be Class I.
   1. Exception: Interior trim material that comply with Section 806.7

1.5 DELIVERY, STORAGE, AND HANDLING

A. Store base and installation materials in dry spaces protected from the weather, with ambient temperatures maintained within range recommended by manufacturer, but not less than 50 degrees F (10 degrees C) or more than 85 degrees F (29 degrees C). Store floor tiles on flat surfaces.

1.6 FIELD CONDITIONS

A. Maintain ambient temperatures within range recommended by manufacturer, but not less than 70 degrees F (21 degrees C) or more than 85 degrees F (29 degrees C), in spaces to receive floor tile during the following time periods:
   1. 48 hours before installation.
   2. During installation.
   3. 48 hours after installation.

B. After installation and until Substantial Completion, maintain ambient temperatures within range recommended by manufacturer, but not less than 55 degrees F (13 degrees C) or more than 95 degrees F (35 degrees C).

C. Close spaces to traffic for 48 hours after installation.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Basis of Design Product: Manufacturers and tile series, pattern, and color selections are indicated in the Finish Schedule and are a basis of design. Subject to compliance with requirements, provide product indicated in Finish Schedule or comparable product by one of the following:
   1. Burke Mercer.
   2. Johnsite, a division of Tarkett Group.
   3. Roppe Rubber Corporation.
   4. Or approved equal.

B. Rubber Base: ASTM F1861.
   1. Material: Rubber, vulcanized, Type TS, Group I.
   2. Manufacturing Method: Group I (solid, homogeneous).
   3. Style: Topset cove; minimum 100 foot coil, cut to length required.
   4. Minimum Thickness: 0.125 inch (3.2 mm).
   5. Color: BLACK
   6. Height: 4 inches, unless indicated otherwise.
   7. Outside Corners: Pre-formed.
   8. Inside Corners: Pre-formed.

C. Adhesives: Water resistant type recommended by floor tile and adhesive manufacturers to suit floor tile and substrate conditions indicated.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine substrates for compliance with requirements for maximum moisture content and other conditions affecting performance of the work.
   1. Verify that finishes of substrates comply with tolerances and other requirements specified for other work and that substrates are free of cracks, ridges, depressions, scale, and foreign deposits that might interfere with adhesion of floor tile.

B. Proceed with installation after correcting unsatisfactory conditions. Installation of resilient flooring and accessories indicates acceptance of surfaces and conditions.

3.2 PREPARATION

A. Immediately before installation, sweep clean substrates to be covered by resilient base.

3.3 INSTALLATION

A. Comply with manufacturer's written instructions for installing flooring. Scribe and cut flooring to butt neatly and tightly to vertical surfaces, permanent fixtures, and built in furniture including cabinets, pipes, outlets, edgings, thresholds, and nosings. Extend flooring into toe spaces, door reveals, closets, and similar openings.

B. Maintain reference markers, holes, and openings that are in place or marked for future cutting by repeating on flooring as marked on substrates. Use chalk or other nonpermanent marking device.

C. Resilient Base: Comply with manufacturer's written instructions for installing resilient base. Apply resilient base to walls, columns, pilasters, casework and cabinets in toe spaces, and other permanent fixtures in rooms and areas where base is required.
   1. Install resilient base in lengths as long as practical without gaps at seams and with tops of adjacent pieces aligned.
   2. Tightly adhere resilient base to substrate throughout length of each piece, with base in continuous contact with horizontal and vertical substrates.
   3. Do not stretch resilient base during installation.
   4. On masonry surfaces or other similar irregular substrates, fill voids along top edge of resilient base with manufacturer's recommended adhesive filler material.
   5. Preformed Corners: Install preformed corners before installing straight pieces.
   6. Job Formed Corners: Not allowed.

END OF SECTION 09 65 20

SECTION 09 65 23 LUXURY VINYL TILE FLOORING

PART 1 GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

A. Section Includes requirements limited to:
   1. Luxury vinyl floor tile.
   2. Accessories necessary for a complete installation.

B. Related Sections:
   1. Section 03 30 00: Cast-In-Place Concrete.
   2. Section 09 65 13.13: Resilient Base.

1.3 SUBMITTALS

A. Product Data: Technical data for each type of product including manufacturer's installation instructions.

B. Shop Drawings - For each type of floor tile. Include floor tile layouts, edges, columns, doorways, enclosing partitions, built in furniture, cabinets, and cutouts:
   1. Show details of special patterns.

C. Samples - Full size units of each color and pattern of floor tile required:
   1. Luxury Vinyl Tile (LVT) flooring: 18 inch by 18 inch (460 mm by 460 mm) tile in each color selected and 12 inch long piece of base material in each color selected for approval.

D. Product Schedule: Submit for floor tile using same designations indicated on Drawings.

E. Maintenance Data: Submit for inclusion in maintenance manuals.

F. Reports: Certified Moisture Testing Results.

1.4 QUALITY ASSURANCE

A. Regulatory Requirements:
   1. Fire Test Response Characteristics - For resilient tile flooring, as determined by testing identical products according to ASTM E648 or NFPA 253 by a qualified testing agency:
      a. Critical Radiant Flux Classification: Class I, not less than 0.45 W/sq. cm.
      b. Smoke Density: Maximum specific optical density of 450 per ASTM E662.
   2. Accessibility Requirements - Comply with applicable requirements:
      a. U.S. Architectural and Transportation Barriers Compliance Board Americans with Disabilities Act Accessibility Guidelines for Buildings and Facilities (ADAAG).
      b. 2010 ADA regulations.
      c. 2019 CBC Section 11B-302.1.

B. Installer Qualifications: Entity having minimum 5 years documented experience who employs workers competent in techniques required by manufacturer for floor tile installation

and seaming method indicated.

C. Contractor is required to achieve the specified concrete moisture content prior to installation of all flooring materials or use a flooring manufacture approved moisture barrier prior to installation of all flooring products. Contractor shall provide certified moisture testing results per ASTM F2170 (*Standard Test Method for Determining Relative Humidity in Concrete Floor Slabs Using in situ Probes*) to Architect and Owner prior to floor installation. Acceptable moisture content of concrete sub floor shall be within approved manufacture limits or lower prior to installation.

D. Source Limitations:
   1. Tile: Obtain floor products of same type and color or finish from one source or producer. Obtain tile from same production run and of consistent quality in appearance and physical properties for each contiguous area.
   2. Setting Materials: Obtain ingredients of a uniform quality for each mortar, adhesive, and grout component from a single manufacturer and each aggregate from one source or producer.

1.5 WARRANTY

A. Warrant the Work specified herein for ten (10) years against becoming unserviceable or causing an objectionable appearance resulting from either defective, or nonconforming materials and workmanship.

B. Defects shall include, but not be limited to, the following:
   1. Damaged tile, including broken or chipped edges.
   2. Loose or missing tile.
   3. Noticeable deterioration or discoloring of tile or grout.

1.6 DELIVERY, STORAGE, AND HANDLING

A. Store floor tile and installation materials in dry spaces protected from the weather, with ambient temperatures maintained within range recommended by manufacturer, but not less than 50 degrees F (10 degrees C) or more than 85 degrees F (29 degrees C). Store floor tiles on flat surfaces.

PART 2 PRODUCTS

2.1 MATERIALS

A. Basis of Design Product:
   1. Manufacturers and tile series, pattern, and color selections are indicated in the Finish Schedule and are a basis of design. Subject to compliance with requirements, provide product indicated in Finish Schedule or comparable product by one of the following:
      a. Luxury Vinyl Tile (LVT):
         1) Basis of Design: **Ground Rules by Bently Mills**.

B. Luxury Solid Vinyl Tile (LVT-1) - ASTM F1700:
   1. Class III, Type B:
   2. Thickness: 0.1 inch (2.5 mm).
   3. Size: Refer to Finish Schedule.
   4. Construction: Heterogeneous Resilient Flooring with .030” (30 mil) high density wear layer.
   5. Colors: As selected by Architect from manufacturer’s available colors.
   6. Patterns: Factory mounted patterns as selected by Architect.

C. Trowelable Leveling and Patching Compounds: Latex modified, portland cement based formulation provided or approved by floor tile manufacturer for applications indicated.

D. Adhesives: Water resistant type recommended by floor tile and adhesive manufacturers to suit floor tile and substrate conditions indicated.

E. Floor Polish: Provide protective, liquid floor polish products recommended by floor tile manufacturer.

PART 3 EXECUTION

3.1 FIELD CONDITIONS

A. Maintain ambient temperatures within range recommended by manufacturer, but not less than 70 degrees F (21 degrees C) or more than 85 degrees F (29 degrees C), in spaces to receive floor tile during the following time periods:
   1. 48 hours before installation.
   2. During installation.
   3. 48 hours after installation.

B. After installation and until Substantial Completion, maintain ambient temperatures within range recommended by manufacturer, but not less than 55 degrees F (13 degrees C) or more than 95 degrees F (35 degrees C).

C. Close spaces to traffic during floor tile installation.

D. Close spaces to traffic for 48 hours after floor tile installation.

E. Where demountable partitions, cabinets, and similar items are indicated for installation on top of resilient tile flooring, install tile before these items are installed.

F. Do not install flooring over concrete slabs until slabs have cured and are sufficiently dry to bond with adhesive, as determined by flooring manufacturer's recommended bond and moisture test.

G. Install flooring after other finishing operations, including painting, have been completed.

3.2 EXTRA STOCK

A. Furnish extra materials matching products installed and packaged with protective covering for storage and identified with labels describing contents:
   1. LVT Flooring: 1 percent of quality installed or 2 full unopened containers, whichever is greater.

3.3 EXAMINATION

A. Examine substrates for compliance with requirements for maximum moisture content and other conditions affecting performance of the Work:
   1. Verify that finishes of substrates comply with tolerances and other requirements specified for other Work and that substrates are free of cracks, ridges, depressions, scale, and foreign deposits that might interfere with adhesion of floor tile.

B. Proceed with installation after correcting unsatisfactory conditions. Installation of resilient flooring and accessories indicates acceptance of surfaces and conditions.

3.4 PREPARATION

A. Prepare substrates according to floor tile manufacturer's written instructions to ensure adhesion of resilient products.

B. Concrete Substrates - Prepare according to ASTM F710:
   1. Verify substrates are dry and free of curing compounds, sealers, and hardeners.
   2. Remove substrate coatings and other substances that are incompatible with adhesives and that contain soap, wax, oil, or silicone, using mechanical methods recommended by floor tile manufacturer. Do not use solvents.
   3. Alkalinity and Adhesion Testing: Perform tests recommended by floor tile manufacturer. Proceed with installation only after substrate alkalinity falls within range on pH scale recommended by manufacturer in writing, but not less than 5 or more than 9 pH.
   4. Moisture Testing - Proceed with installation only after substrates pass testing according to floor tile manufacturer's written recommendations, but not less stringent than the following:
      a. Perform anhydrous calcium chloride test according to ASTM F1869. Proceed with installation only after substrates have maximum moisture-vapor-emission rate of 3 lb of water/1000 sq. ft. (1.36 kg of water/92.9 sq. m) in 24 hours.
      b. Perform relative humidity test using in situ probes according to ASTM F2170. Proceed with installation only after substrates have a maximum **95** percent relative humidity level.
   5. Bond Test: Bond 3' x 3' panels spaced 50 feet apart throughout subfloor area. After moisture test proves floor acceptably dry, install panels using adhesive. If panels are securely bonded after 72 hours, subfloor is sufficiently clean of foreign materials for satisfactory installation of resilient flooring.

C. Fill cracks, holes, and depressions in substrates with trowelable leveling and patching compound; remove bumps and ridges to produce a uniform and smooth substrate.

D. Do not install floor tiles until they are the same temperature as the space where they are to be installed:
   1. At least 48 hours in advance of installation, move resilient floor tile and installation materials into spaces where they will be installed.

E. Immediately before installation, sweep and vacuum clean substrates to be covered by resilient floor tile.

3.5 INSTALLATION

A. Comply with manufacturer's written instructions for installing flooring. Scribe and cut flooring to butt neatly and tightly to vertical surfaces, permanent fixtures, and built in furniture including cabinets, pipes, outlets, edgings, thresholds, and nosings. Extend flooring into toe spaces, door reveals, closets, and similar openings.

B. Maintain reference markers, holes, and openings that are in place or marked for future cutting by repeating on flooring as marked on substrates. Use chalk or other nonpermanent marking device.

C. Lay out floor tiles from center marks established with principal walls, discounting minor offsets, so tiles at opposite edges of room are of equal width. Adjust as necessary to avoid using cut widths that equal less than one/half tile at perimeter:
   1. Lay tiles square with room axis.

D. Match floor tiles for color and pattern by selecting tiles from cartons in the same sequence as manufactured and packaged, if so numbered. Discard broken, cracked, chipped, or deformed tiles:
   1. Lay tiles with grain running in one direction.

E. Scribe, cut, and fit floor tiles to butt neatly and tightly to vertical surfaces and permanent fixtures including built in furniture, cabinets, pipes, outlets, and door frames.

F. Extend floor tiles into toe spaces, door reveals, closets, and similar openings. Extend floor tiles to center of door openings.

G. Maintain reference markers, holes, and openings that are in place or marked for future cutting by repeating on floor tiles as marked on substrates. Use chalk or other nonpermanent marking device.

H. Install floor tiles on covers for telephone and electrical ducts, building expansion-joint covers, and similar items in finished floor areas. Maintain overall continuity of color and pattern between pieces of tile installed on covers and adjoining tiles. Tightly adhere tile edges to substrates that abut covers and to cover perimeters.

I. Adhere floor tiles to flooring substrates using a full spread of adhesive applied to substrate to produce a completed installation without open cracks, voids, raising and puckering at joints, telegraphing of adhesive spreader marks, and other surface imperfections.

J. Floor Tile - Comply with manufacturer's written instructions for installing floor tile:
   1. Lay out floor tiles from center marks established with principal walls, discounting minor offsets, so tiles at opposite edges of room are of equal width. Adjust as necessary to avoid using cut widths that equal less than one/half tile at perimeter:
      a. Lay tiles square with room axis unless pattern indicated for an area.
   2. Match floor tiles for color and pattern by selecting tiles from cartons in the same sequence as manufactured and packaged, if so numbered. Discard broken, cracked, chipped, or deformed tiles. Lay tiles with grain running in one direction.

K. Resilient Accessories - Comply with manufacturer's written instructions for installing resilient accessories:
   1. Resilient Molding Accessories: Butt to adjacent materials and tightly adhere to substrates throughout length of each piece. Install reducer strips at edges of floor covering that would otherwise be exposed.

3.6 CLEANING AND PROTECTION

A. Comply with manufacturer's written instructions for cleaning and protecting floor tile.

B. Perform the following operations immediately after completing floor tile installation:
   1. Remove adhesive and other blemishes from exposed surfaces.
   2. Sweep and vacuum surfaces thoroughly.
   3. Damp mop surfaces to remove marks and soil.

C. Protect floor tile from mars, marks, indentations, and damage from construction operations and placement of equipment and fixtures during remainder of construction period.

D. Floor Polish: Remove soil, adhesive, and blemishes from floor tile surfaces before applying liquid floor polish. Apply two coat(s).

E. Sealers and Finish Coats:

1. Remove soil, visible adhesive, and surface blemishes from resilient terrazzo floor tile surfaces before applying liquid cleaners, sealers, and finish products:
   a. Sealer: Apply two base coats of liquid sealer.
   b. Finish: Apply two coats of liquid floor finish.

F. Cover floor tile until Substantial Completion.

G. Clean floor surfaces not more than 4 days before dates scheduled for inspections intended to establish date of Substantial Completion in each area of Project. Clean products according to manufacturer's written recommendations:
   1. Before cleaning, strip protective floor polish.
   2. Reapply polish to floor surfaces to restore protective floor finish according to flooring manufacturer's written recommendations.

END OF SECTION 09 65 23

SECTION 09 68 00 - CARPETING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

A. Section Includes: Requirements including but not limited to:
   1. Carpet and pad.
   2. Accessories necessary for a complete installation.

1.3 DEFINITIONS

A. Comparable Product: Product demonstrated and approved through submittal process, or where indicated as a produce substitution, to have the indicated qualities related to type, function, dimension, in-service performance, physical properties, appearance, and other characteristics that equal or exceed those of specified product.

1.4 SUBMITTALS

A. Product Data: Technical data including installation recommendations for each type of substrate:
   1. Carpet: For each type indicated. Include manufacturer's written data on physical characteristics, durability, and fade resistance.

B. Samples: For each products and for each color and texture required. Label each Sample with manufacturer's name, material description, color, pattern, and designation indicated on Drawings and in schedules.
   1. Carpet: 12 inch (300 mm) square Sample from approved color and product of carpet.
   2. Exposed Edge, Transition, and Other Accessory Stripping: 12 inch (300 mm) long Samples.
   3. Carpet Seam: 6 inch (150 mm) Sample.
   4. Mitered Carpet Border Seam: 12 inch (300 mm) square Sample. Show carpet pattern alignment.
   5. Carpet base and accessory samples.

C. Product Test Reports: For carpet and carpet cushion, for tests performed by a qualified testing agency.

D. Shop Drawings: Showing extent of product, seam direction, and location and type of carpet accessories. Submittal to indicate columns, doorways, enclosing walls or partitions, casework, and locations where cutouts are required.

E. Maintenance Data: For carpet to include in maintenance manuals. Include the following:
   1. Methods for maintaining carpet, including cleaning and stain-removal products and procedures and manufacturer's recommended maintenance schedule.
   2. Precautions for cleaning materials and methods that could be detrimental to carpet and carpet cushion.

1.5 QUALITY ASSURANCE

A. Regulatory Requirements:
   1. Building Code: Comply with applicable requirements for the IBC for interior finishes.
   2. Fire Test Response Characteristics: Provide products with the critical radiant flux classification determined by testing identical products in accordance with ASTM E 648. Critical Radiant Flux Classification: Class I, not less than 0.45 W/sq. cm.
   3. Accessibility Requirements: Comply with applicable requirements.
      a. U.S. Architectural and Transportation Barriers Compliance Board Americans with Disabilities Act Accessibility Guidelines for Buildings and Facilities (ADAAG).
      b. ICC/ANSI A117.1 Accessible and Useable Building and Facilities.
      c. Texas Accessibility Standards (TAS).

B. Installer Qualifications: Installer having minimum 5 years documented experience as a commercial carpet installer, who is certified by the International Certified Floorcovering Installers Association at the Commercial II or higher certification level.

C. Contractor is required to achieve the specified concrete moisture content prior to installation of all flooring materials or use a flooring manufacture approved moisture barrier prior to installation of all flooring products.

D. Contractor is required to achieve the specified concrete moisture content prior to installation of all flooring materials or use a flooring manufacture approved moisture barrier prior to installation of all flooring products. Contractor shall provide certified moisture testing results per ASTM F2170 (*Standard Test Method for Determining Relative Humidity in Concrete Floor Slabs Using in situ Probes*) to Architect and Owner prior to floor installation. Acceptable moisture content of concrete sub floor shall be within approved manufacture limits or lower prior to installation.

1.6 DELIVERY, STORAGE, AND HANDLING

A. Comply with CRI 104.

B. Store in a dry location between 65 degrees F and 90 degrees F and a relative humidity below 65%. Protect from damage and soiling. Stack carpet rolls horizontally, elevated above slab level on a flat surface, stacked no higher than two rolls.

C. Store materials in area of installation for minimum period of 48 hours prior to installation.

D. Protect carpet from damage, dirt, stains, and moisture.

1.7 FIELD CONDITIONS

A. Comply with CRI 104 for temperature, humidity, and ventilation limitations.

B. Environmental Limitations: Do not deliver or install carpet and carpet cushion until spaces are enclosed and weathertight, wet work in spaces is complete and dry, and ambient temperature and humidity conditions are maintained at occupancy levels during the remainder of the construction period.

C. Do not install carpet and carpet cushion over concrete slabs until slabs have cured, are sufficiently dry to bond with adhesive, and have pH range recommended by carpet manufacturer.

D. Where demountable partitions or other items are indicated for installation on top of carpet, install carpet before installing these items.

E. Do not install carpet under any base cabinet casework except at open knee space.

1.8 COORDINATION

A. Contractor's responsibility to hire movers to move furniture as required for flooring installation. Coordinate with Owner and Architect regarding temporary furniture relocation.

1.9 WARRANTY

A. Carpet: Written warranty in which manufacturer agrees to repair or replace components of carpet installation that fail in materials or workmanship within specified warranty period.
   1. Warranty does not include deterioration or failure of carpet due to unusual traffic, failure of substrate, vandalism, or abuse.
   2. Failures include, but are not limited to, more than 10 percent loss of face fiber, edge raveling, snags, runs, loss of tuft bind strength, dimensional stability, excessive surface wear, excess static discharge, and delamination.
   3. Warranty Period: 25 years non-prorated from date of Substantial Completion.

1.10 PRE-INSTALLATION CONFERENCE

A. Refer to Section 01 31 00 – Project Management and Coordination.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Basis of Design Manufacturer: Bentley Mills; (800) 423 - 4709.

B. Redux Deux by Bentley Mills
   1. Performance:
      a. Product Code: 6RET409A1K
      b. Construction: Tufted Textured Loop
      c. Fiber: Bentley Premium™ Nylon
      d. Dye Method: Solution Dyed
      e. Backing & Size: AFIRMA II™ Hardback (9 in x 36 in) & (24 in x 24 in)
      f. Yarn Weight: 14 oz/yd^2
      g. Machine Gauge: 1/12 in (47.2 ends/ 10 cm)
      h. Pile Height (High): 0.144 in
      i. Pile Height (Medium): 0 in
      j. Pile Height (Low): 0.092 in
      k. Stitches: 10.3 / in - 40.6 ends/ 10 cm
      l. Pile Density: 5911 oz/yd^3
      m. Total Weight: 60 oz/yd^2 - 2034.3 g/m^2
      n. Total Thickness: 0.29 in - 7.4 mm
      o. Radiant Panel: Passes Class 1, $\geq$ 0.45 W/cm^2 (ASTM-E648)
      p. Smoke Density: $\leq$ 450 Dm corr (ASTM-E662), Flaming
      q. Static: $\leq$ 3.5 kV (AATCC-134), Step
      r. Flammability: Passes Methenamine Pill Test (CPSC-FF1-70)

C. History Notes by Bentley Mills
   1. Performance:
      a. Product Code: 4RIT20AA1K
      b. Construction: Tufted Textured Loop
      c. Fiber: Bentley Premium™ Type 6,6 Nylon
      d. Dye Method: Solution Dyed
      e. Backing & Size: AFIRMA II™ Hardback (9 in x 36 in) & (24 in x 24 in)

f.	Yarn Weight:	12 oz/yd^2
g.	Machine Gauge:	1/12 in
h.	Pile Height (High):	0.218 in
i.	Pile Height (Medium):	0.187 in
j.	Pile Height (Low):	0.125 in
k.	Stitches:	11.9
l.	Radiant Panel:	Passes Class 1 $\geq$ 0.45 W/cm^2 (ASTM-E648)
m.	Smoke Density:	< 450 dm Corrected (ASTM-E662), Flaming
n.	Static:	$\leq$ 3.5 kV (AATCC-134), Step
o.	Flammability:	Passes Methenamine Pill Test (CPSC-FF1-70)

D. Carpet (Walk-Off):
1. Basis of Design Product/Manufacturer: “Assertive Action” as manufactured by Tandus-Centiva, A Tarkett Company.
2. Pattern Type: Texture.
3. Dye Method: TDX SD Solution.
4. Color(s): As selected by Architect from manufacturer’s extended color line.
5. Locations: As shown on drawings.

E. Applied Soil Resistance Treatment: Standard with manufacturer.

F. Antimicrobial Treatment: Standard with manufacturer.

G. Adhesives: Water resistant, mildew resistant, nonstaining, pressure sensitive type to suit products and subfloor conditions indicated, complying with flammability requirements for installed carpet and is recommended by carpet manufacturer for releasable installation.

H. Trowelable Leveling and Patching Compounds: Latex modified, hydraulic cement based formulation provided or recommended by carpet cushion manufacturer.

I. Adhesives: Water resistant, mildew resistant, nonstaining type to suit products and subfloor conditions indicated, that complies with flammability requirements for installed carpet and is recommended or provided by carpet and carpet cushion manufacturers.

J. Seam Adhesive: Hot melt adhesive tape or similar product recommended by carpet manufacturer for sealing and taping seams and butting cut edges at backing to form secure seams and to prevent pile loss at seams.

K. Metal Edge/Transition Strips: Extruded aluminum with mill finish of profile and width shown, of height required to protect exposed edge of carpet, and of maximum lengths to minimize running joints.

L. Extra Carpet: After completion of the carpet installation, the carpet subcontractor shall provide an additional three (3) percent of total yards installed of each carpet specified to the Owner for future carpet replacement that may be required. This extra stock is to be unused rolls, tiles, and mats and does not include scraps.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine substrates, areas, and conditions for compliance with requirements for maximum moisture content, alkalinity range, installation tolerances, and other conditions affecting carpet performance. Examine carpet for type, color, pattern, and potential defects.

B. Concrete Subfloors: Verify that concrete slabs comply with ASTM F 710 and the following:
   1. Slab substrates are dry and free of curing compounds, sealers, hardeners, and other materials that may interfere with adhesive bond. Determine adhesion and dryness characteristics by performing bond and moisture tests recommended by carpet and cushion manufacturer.
   2. Subfloor finishes comply with requirements specified in Section 03 30 00 for slabs receiving carpet.
   3. Subfloors are free of cracks, ridges, depressions, scale, and foreign deposits.

C. Proceed with installation after correcting unsatisfactory conditions.

3.2 PREPARATION

A. Comply with CRI 104, Section 7.3 *Site Conditions; Floor Preparation* and with carpet manufacturer's written installation instructions for preparing substrates.

B. Use trowelable leveling and patching compounds, according to manufacturer's written instructions, to fill cracks, holes, depressions, and protrusions in substrates. Fill or level cracks, holes and depressions 1/8 inch (3 mm) wide or wider, and protrusions more than 1/32 inch (0.8 mm), unless more stringent requirements are required by manufacturer's written instructions.

C. Remove coatings, including curing compounds, and other substances that are incompatible with adhesives and that contain soap, wax, oil, or silicone, without using solvents. Use mechanical methods recommended in writing by carpet and cushion manufacturer.

D. Broom and vacuum clean substrates to be covered immediately before installing carpet.

3.3 INSTALLATION

A. Comply with CRI 104 and carpet and carpet cushion manufacturer written installation instructions for the following:
   1. Direct Glue Down Installation: Comply with CRI 104, Section 9 *Direct Glue Down Installation*.
   2. Stair Installation: Comply with CRI 104, Section 13 *Carpet on Stairs* for glue down installation.

B. Comply with carpet manufacturer's written recommendations and Shop Drawings for seam locations and direction of carpet; maintain uniformity of carpet direction and lay of pile. At doorways, center seams under the door in closed position.
   1. Do not bridge building expansion joints with carpet.
   2. Cut and fit carpet to butt tightly to vertical surfaces, permanent fixtures, and built-in furniture including cabinets, pipes, outlets, edgings, thresholds, and nosings. Bind or seal cut edges as recommended by carpet manufacturer.
   3. Extend carpet into toe spaces, door reveals, closets, open-bottomed obstructions, removable flanges, alcoves, and similar openings.

C. Maintain reference markers, holes, and openings that are in place or marked for future cutting by repeating on finish flooring as marked on subfloor. Use nonpermanent, nonstaining marking device.

D. Install pattern parallel to walls and borders to comply with CRI 104, Section 15, *Patterned Carpet Installations* and with carpet manufacturer's written recommendations.

3.4 CLEANING AND PROTECTING

A. Perform cleaning operations immediately after installing carpet:
   1. Remove excess adhesive, seam sealer, and other surface blemishes using cleaner recommended by carpet manufacturer.
   2. Remove yarns that protrude from carpet surface.
   3. Vacuum carpet using commercial machine with face beater element.

B. Protect installed carpet to comply with CRI 104, Section 16, *Protecting Indoor Installations*.

C. Protect carpet against damage from construction operations and placement of equipment and fixtures during the remainder of construction period. Use protection methods indicated or recommended in writing by carpet manufacturer and carpet cushion manufacturer.

END OF SECTION 09 68 00

D2.1 - DEMO RCP BLDG 'A-B', 'C-D','K'& ADMIN

0" 1"

DEMOLITION KEYED NOTES

#	DESCRIPTION
D3.11	(E) LOW SOFFIT AND ASSOCIATED FRAMING TO BE DEMOLISHED AND DISPOSED. REFER TO ASBESTOS REPORT. PATCH ADJACENT WALLS AS NECESSARY.
D3.15	(E) CEILING EXHAUST FAN TO BE DEMOLISHED, REMOVE CIRCUIT BACK TO THE SOURCE. SEE ELECTRICAL ED2.01

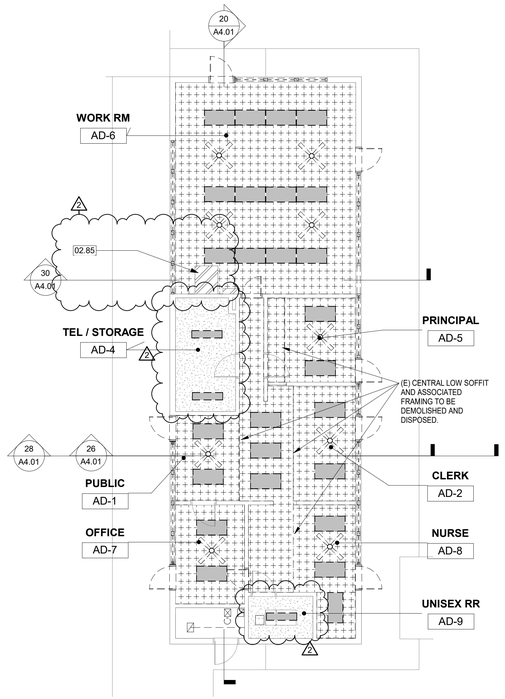
KEYNOTE LEGEND

#	DESCRIPTION
02.85	(E) MDF/IDF TO REMAIN AND PROTECT IN PLACE

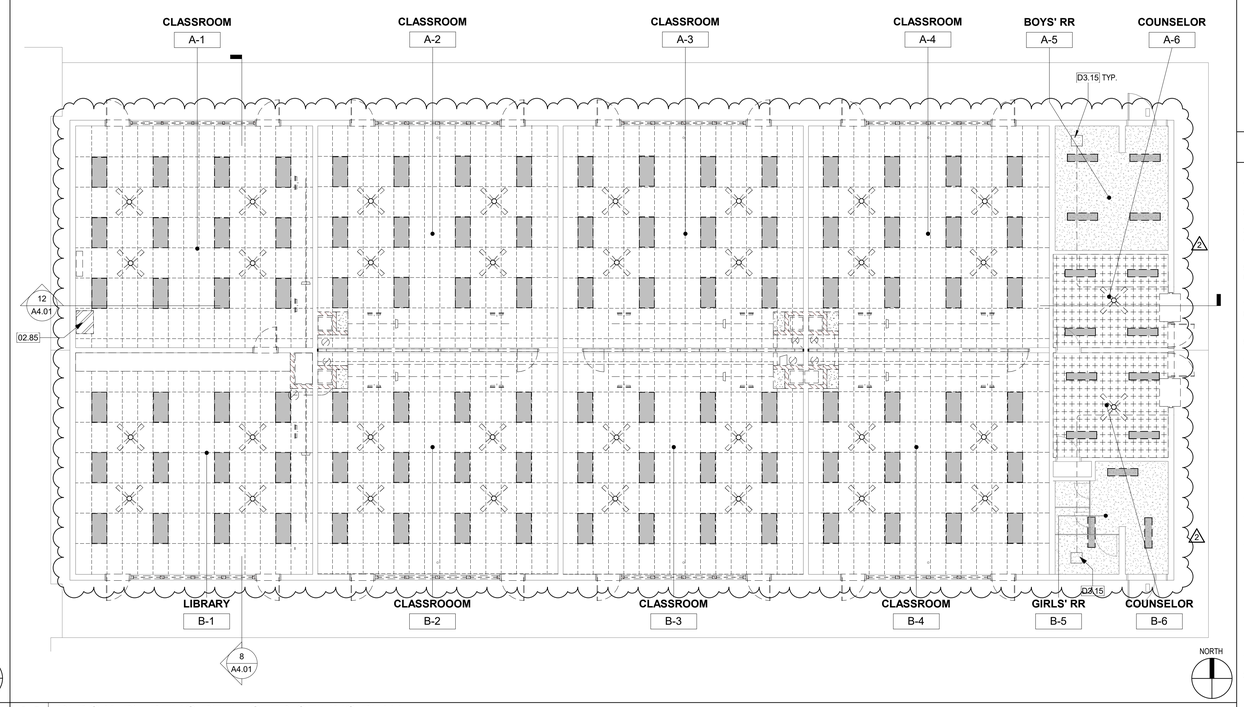
DEMOLITION RCP LEGEND

- EXISTING CEILING TO REMAIN
- EXISTING PLASTER CEILING TO BE REMOVED.
- EXISTING NON-BEARING WALL TO BE REMOVED
- EXISTING 12"x12" GLUE UP TILE AND (E) SUBSTRATES TO BE REMOVED AND DISPOSED.
- EXISTING 24"x48" ACOUSTIC CEILING TILE AND (E) FRAME, HANGERS & ACCESSORIES TO BE REMOVED AND DISPOSED.
- REMOVE AND DISPOSE (E) LIGHT FIXTURES AND WIRING
- MECHANICAL GRILLES, REFER TO MECHANICAL DRAWINGS (REMOVE WHEN SHOWN DASHED)
- (E) CEILING FAN AND ACCESSORIES TO BE REMOVED AND DISPOSED.
- (E) ACCESS PANEL TO BE REMOVED & DISPOSED, WHERE OCCURS.

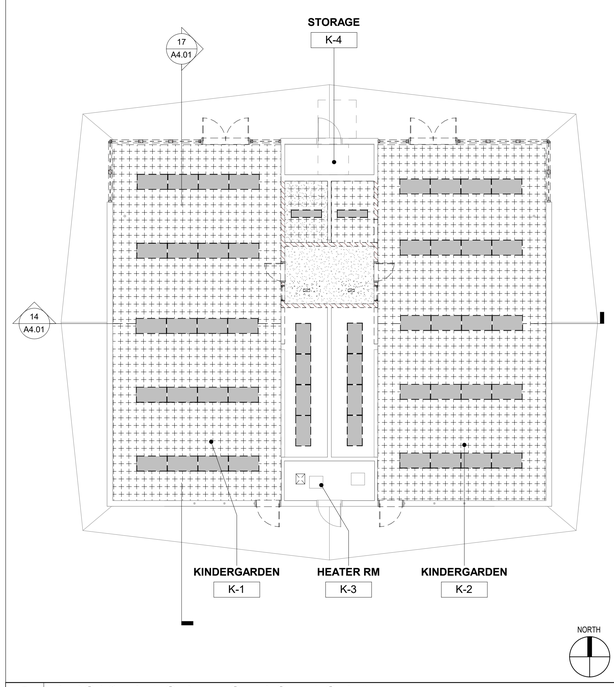
NOTE:
1. REMOVE & DISPOSE OF EXISTING ROOF INSULATION. WHERE OCCURS.



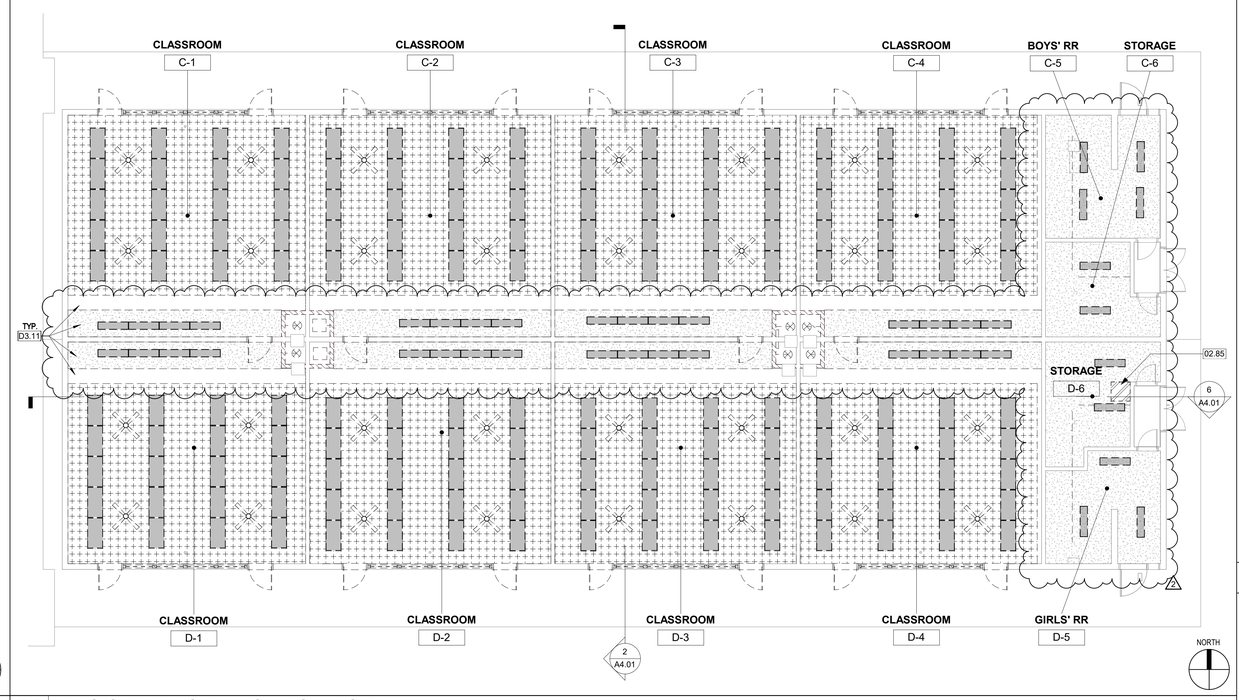
18 BLDG 'ADMIN' - DEMO REFLECTED CEILING PLAN
1/8" = 1'-0"



16 BLDG 'A-B' - DEMO REFLECTED CEILING PLAN
1/8" = 1'-0"



9 BLDG 'K' - DEMO REFLECTED CEILING PLAN
1/8" = 1'-0"



12 BLDG 'C-D' - DEMO REFLECTED CEILING PLAN
1/8" = 1'-0"

GENERAL DEMOLITION NOTES:

1. DEMOLITION PLANS INDICATE SOME OF THE SCOPE-OF-WORK INVOLVED FOR THE DEMOLITION PHASE OF THIS PROJECT. CONTRACTOR SHALL REVIEW ALL SHEETS FOR ADDITIONAL DEMOLITION SCOPE.
2. CONTRACTOR SHALL VERIFY EXISTING SITE AND BUILDING CONDITIONS AND DIMENSIONS IN THE FIELD PRIOR TO DEMOLITION ACTIVITIES AND WORK.
3. CONTRACTOR SHALL NOTIFY ARCHITECT OF ANY DISCREPANCIES IN WRITING.
4. CONTRACTOR SHALL NOTIFY ARCHITECT AND OWNER OF ANY POSSIBLE ASBESTOS CONTAINING MATERIALS DISCOVERED BEFORE PROCEEDING WITH WORK, PROTECT INTERIOR CONSTRUCTION TO REMAIN DURING DEMOLITION AND CONSTRUCTION.
5. CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS BEFORE COMMENCING WORK.
6. AFTER AWARD OF THE CONTRACT, CHANGE ORDER REQUESTS FOR ADDITIONAL MONEY WILL NOT BE APPROVED IF THE WORK COULD HAVE BEEN ANTICIPATED DURING A SITE VISIT BY THE CONTRACTOR.
7. CONTRACTOR SHALL NOT SCALE DRAWINGS.
8. CONTRACTOR SHALL PROVIDE ALL NECESSARY TEMPORARY SHORING, TEMPORARY BRACING, AND/OR TEMPORARY SUPPORTS AS REQUIRED TO MAINTAIN STRUCTURAL INTEGRITY OF EXISTING STRUCTURE TO REMAIN AND OR EXISTING BUILDING ELEMENTS TO REMAIN.
9. CONTRACTOR IS TO VERIFY THE EXACT LOCATION OF ALL EXISTING UTILITIES PRIOR TO DEMOLITION ACTIVITIES AND WORK.
10. CONTRACTOR SHALL REMOVE TRASH AND DEBRIS REGULARLY AS NECESSARY TO ELIMINATED INTERFERENCE WITH ROADS, STREET, WALKS, AND ALL OTHER ADJACENT FACILITIES.
11. CONTRACTOR SHALL REMOVE TRASH AND DEBRIS FROM THE SITE ON A DAILY BASIS.
12. CONTRACTOR IS RESPONSIBLE FOR CONSTRUCTION OF TEMPORARY DUST AND OR SOUND PARTITION BETWEEN CONSTRUCTION AREA AND AREAS NOT IN SCOPE AS NECESSARY. DEMOLITION ACTIVITIES SHALL BE PERFORMED SO AS TO PRODUCE MINIMAL DISTURBANCE TO EXISTING FACILITY AND OCCUPANTS (I.E. MINIMIZE EXCESSIVE AND PROLONGED NOISE LEVELS AND DUST).
13. CONTRACTOR SHALL REPAIR, REPLACE, OR PATCH EXISTING BUILDINGS, DRIVEWAYS, SIDEWALKS, CANOPIES, AND OR PARKING AREAS DAMAGED, MODIFIED, AND OR DISTURBED BY DEMOLITION WORK AT NO COST TO THE OWNER.
14. ALL EXISTING EQUIPMENT THAT REMAINS SHALL BE PROTECTED DURING DEMOLITION AND OR CONSTRUCTION TO PREVENT DAMAGE. ANY DAMAGE TO REMAINING EXISTING EQUIPMENT SUSTAINED DURING DEMOLITION AND OR CONSTRUCTION SHALL BE EQUIVALENTLY REPLACED OR EQUIVALENTLY REPAIRED AT NO COST TO THE OWNER.
15. CONTRACTOR SHALL PROVIDE TRAFFIC HANDLING MEASURES TO PROTECT THE GENERAL PUBLIC AT ALL TIMES, AS NECESSARY AND AS REQUIRED BY AUTHORITIES HAVING JURISDICTION.
16. DO NOT INTERRUPT EXISTING UTILITES, EXCEPT WHEN AUTHORIZED IN WRITING BY AUTHORITIES HAVING JURISDICTION. PROVIDE TEMPORARY SERVICES DURING INTERRUPTIONS TO EXISTING UTILITIES, AS ACCEPTABLE TO AUTHORITIES HAVING JURISDICTION.
17. WHEN UTILITY SERVICES ARE REQUIRED TO BE REMOVED, RELOCATED, OR ABANDONED, PROVIDE BYPASS CONNECTIONS TO MAINTAIN CONTINUITY OF SERVICE BEFORE PROCEEDING WITH DEMOLITION.
18. CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES INCLUDING BUT NOT LIMITED TO THE FOLLOWING: ELECTIC, GAS, WATER, TELEPHONE, STORM SEWER, AND SANITARY SEWER FOR FIELD LOCATION OF ALL UNDERGROUND AND OVERHEAD UTILITY LINES. PRIOR TO COMMENCEMENT OF ANY DEMOLITION WORK, CONTRACTOR SHALL IDENTIFY ALL ELECTRICAL CIRCUITS SERVICING THE AREA INVOLVED WITH THIS DEMOLITION. THOSE CIRCUITS SHALL THEN BE LOCKED OUT AND TAGGED OUT IF THEY DO NOT SERVICE ANY OF THE REMAINING BUILDING. THOSE CIRCUITS WHICH ARE IDENTIFIED TO SERVICE BOTH THE AREA TO BE DEMOLISHED AND THE REMAINING BUILDING SHALL BE SPLIT SO AS TO KILL ALL ELECTRICAL POWER TO THE AREA TO BE DEMOLISHED WHILE MAINTAINING POWER TO THE REMAINDER OF THE BUILDING.
19. CONTRACTOR SHALL RELOCATE UTILITES AND EQUIPMENT AS REQUIRED TO ACCOMMODATE NEW HVAC, ELECTRICAL, PLUMBING, AND TECHNOLOGY REQUIREMENTS FOR NEW WORK.
20. PROTECT EXISTING SITE ELEMENTS AND EXISTING LANDSCAPING TO REMAIN. PROTECTION SHALL INCLUDE BUT NOT BE LIMITED TO EXISTING TREES AND OTHER EXISTING VEGETATION INDICATED TO REMAIN IN PLACE AGAINST UNNECESSARY CUTTING, BREAKING, OR SKINNING OF ROOTS, SKINNING OR BRUISING OF BARK, SMOTHERING OF TREES BY STOCKPILING CONSTRUCTION MATERIAL OR EXCAVATED MATERIAL WITHIN DRIP LINES.
21. CONTRACTOR SHALL REGRADE AND HYDROMULCH AREAS AFFECTED BY DEMOLITION.
22. OWNER HAS RIGHT TO FIRST REFUSAL OF ALL ITEMS REMOVED AS PART OF THE SCOPE OF WORK, WHETHER IDENTIFIED AS SALVAGE OR NOT.
23. NOTIFY THE BUILDING OWNER OF ANY MATERIALS, FIXTURES, ETC. TO BE REMOVED THAT ARE DEEMED SALVAGEABLE. TURN OVER ANY REQUESTED ITEMS TO THE BUILDING OWNER IN GOOD AND CLEAN CONDITION.
24. ALL FURNITURE WILL BE REMOVED OR RELOCATED BY THE OWNER AS NECESSARY PRIOR TO THE DEMOLITION WORK OF THIS PROJECT. CONTRACTOR SHALL COORDINATE WITH OWNER AS REQUIRED.
25. REMOVE EXISTING CONSTRUCTION TO THE EXTENT INDICATED ON THE DRAWINGS. SHOULD ANY DAMAGE OCCUR TO ANY EXISTING CONSTRUCTION TO REMAIN, THE CONTRACTOR SHALL REPAIR THE DAMAGE TO MATCH EXISTING AND OR ADJACENT CONSTRUCTION AT NO COST TO THE OWNER.
26. MAINTAIN ANY AND ALL EXISTING FIRE-RATED ASSEMBLIES THAT ARE TO REMAIN, AND THEIR ASSOCIATED FIRE-RATINGS, INCLUDING BUT NOT LIMITED TO ALL ASSOCIATED EXISTING FIRE-RATED OPENINGS, ALL ASSOCIATED EXISTING FIRE-RATED PENETRATIONS, AND ALL ASSOCIATED EXISTING FIRE-RATED FIRESTOPPING CONDITIONS.
27. WHEN UNANTICIPATED MECHANICAL, ELECTRICAL, OR STRUCTURAL ELEMENTS THAT CONFLICT WITH THE INTEDED FUNCTION OR DESIGN ARE ENCOUNTERED, DETERMINE THE NATURE AND EXTENT OF THE CONFLICT AND NOTIFY THE ARCHITECT IMMEDIATELY FOR RESOLUTION.
28. REMOVE, PATCH, AND REPAIR ALL ABANDONED ROOF PENETRATIONS RESULTING FROM WORK.
29. SAW-CUT AND REMOVE EXISTING FLOOR FINISHES AND FLOOR SLAB AS REQUIRED TO INSTALL NEW FIXTURES, ITEMS, AND OR DEVISES FOR ALL SCOPE-OF-WORK PERTAINING TO NEW MECHANICAL WORK, NEW PLUMBING UTILITIES, NEW PLUMBING WORK, NEW ELECTRICAL WORK, AND NEW TECHNOLOGY WORK. SPLICE NEW REINFORNCING BARS DOWELLED INTO EXISTING CONCRETE AND PROVIDE NEW VAPOR RETARDER AND NEW CONTINUOUS WATERSTOPS AT JOINT BETWEEN NEW CONCRETE FLOOR SLAB AND EXISTING CONCRETE FLOOR SLAB. PATCH WITH NEW 3,500 PSI MINIMUM CONCRETE AND PREPARE FLOOR, INCLUDING NEW CONCRETE, TO RECEIVE NEW FLOOR FINISHES. CORRDINATE WITH STRUCTURAL.
30. EXISTING WALLS (OR PORTIONS OF WALLS) TO BE REMOVED SHALL BE CUT FLUSH WHERE INTERSECTING WITH WALLS TO REMAIN. REMAINING WALLS TO BE PATCHED AND FINISHED SMOOTH.
31. NEW OPENING TO BE CUT IN EXISTING WALLS SHALL BE SAW-CUT AT LOCATIONS INDICATED TO THE HEIGHT AND WIDTH INDICATED. NEW LINTELS SHALL BE INSTALLED TO SUPPORT EXISTING WALL CONSTRUCTION ABOVE AS INDICATED ON THE DRAWINGS, OR IF NOT INDICATED, AS REQUIRED FOR NEW WALL CONSTRUCTION PER STRUCTURAL DRAWINGS. COORDINATE LOCATIONS OF ALL NEW OPENINGS IN EXISTING WALLS AND PARTITIONS WITH ARCHITECTURAL PLANS.
32. WHERE EXISTING WALL OPENINGS ARE TO BE NEWLY CLOSED-OFF, REMOVE ANY EXISTING OPENING FRAME AND PATCH AND REPAIR EXISTING WALL TO MATCH EXISTING ADJACENT MATERICALS AND FINISHES, UNLESS NOTED OTHERWISE.
33. WHERE EXISTING INTERIOR WALLS ARE REPLACED OR REMOVED, REMOVE MEPT SYSTEMS BACK TO PANEL, OR MECHANICAL ROOM, OR FARTHEST POSSIBLE POINT WITHOUT DISTURBING EXISTING CONSTRUCTION. REMOVE EXISTING MECHANICAL EQUIPMENT, RELOCATE POWER PER MEPT DRAWINGS.
34. REFER TO MEPT DRAWINGS FOR DEMOLITION OF MEPT SYSTEMS. IDENTIFY WORK REQUIRED BY THIS CONTRACTOR WHICH MAY AFFECT DEMOLITION AND OR REPARIS OF ARCHITECTURAL ELEMENTS. COORDINATE WITH RELATED SUBCONTRACTORS THE EXTENT OF ALL DEMOLITION WORK.
35. PATCH FLOORS, WALLS CEILINGS WHICH REMAIN AT LOCATIONS WHERE PIPES, CONDUITS, ETC. ARE REMOVED AS REQUIRED TO MATCH EXISTING CONDITIONS OR TO RECEIVE NEW FINISHES.
36. WHERE EXISTING FINISH FLOOR IS REMOVED, PREPARE FLOOR SURFACE TO RECEIVE NEW FLOORING.
37. ALL DASHED LINES ARE DEMOLITION LINES. U.N.O.
38. REMOVE (E) ROOF INSULATION, AND PROVIDE (N) ROOF INSULATION BETWEEN RAFTERS.
39. REMOVE (E) TACKBOARDS AND DISPOSE. PATCH & REPAIR AS REQ'D, PREPARE SURFACE TO RECEIVE NEW TACKBOARD. TYP ON ALL WALLS.

NOTE: CONTRACTOR SHALL PROTECT ALL EXISTING WALL MURALS AND SCHEDULE A MEETING WITH THE OWNER AND ARCHITECT TO REVIEW ALL PROTECTION IN PLACE PRIOR TO INITIATING DEMOLITION.

BUILDING MPE NOTES

1. EXISTING GAS AND WATER PIPES. REMOVE AND REPLACE ANY RUSTED OR DETERIORATED PIPES, VALVES AND YARD BOXES TO REMAIN.
2. RELOCATE / RE-ROUTE ANY ELECTRICAL CONDUITS AND LOW VOLTAGE RACEWAYS AND WIRING ABOVE & BELOW CEILING TO ACCOMMODATE NEW WORK.
3. RELOCATE / RE-ROUTE ANY VENT PIPES INTERFERING WITH NEW WORK.
4. REMOVE AND DISPOSE OLD CLOCK AND SPEAKERS NO LONGER IN USE.
5. REMOVE AND DISPOSE ELECTRICAL CABLING AND DEVICES NOT IN USE.
6. REMOVE AND DISPOSE FAU HEATING UNITS IN EACH ROOM AND ALL ASSOCIATED DUCTWORK, REGISTERS, CONDUITS AND WIRING.
7. REMOVE PROJECTORS WHERE OCCURS AND RETURN TO DISTRICT.

PBK

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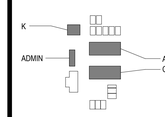
EASTWOOD ELEMENTARY SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
13552 University St.
Westminster, CA 92683

DSA Submittal

DSA APPL NO.: 04-121953 DSA FILE NO.: 30-43



Consultant

Architect

CLIENT
WESTMINSTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
03/31/23	04-121953

REVISIONS

No.	Description	Date
2	ADDENDUM 2	02/07/24

DSA Submittal

DEMO RCP BLDG 'A-B', 'C-D','K'& ADMIN

D2.1

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A1.01 - BLDG 'A-B', 'C-D', 'K' & 'ADMIN' FLOOR PLANS

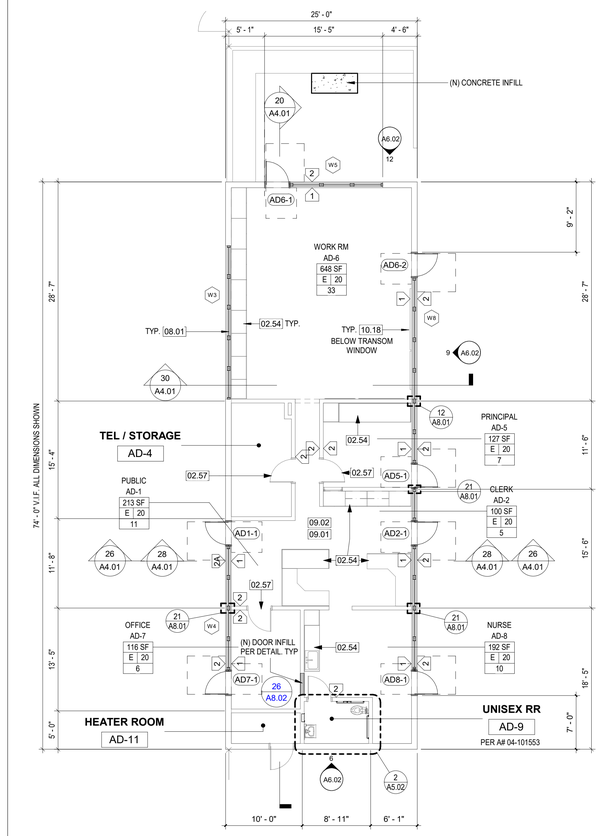
ASSISTIVE LISTENING SYSTEMS AND SIGNAGE 11B-219

1) PROVIDE AN ASSISTIVE LISTENING SYSTEM, COMPLYING WITH CBC 11B-219 & 11B-706.PROVIDE EACH ASSEMBLY WITH A SIGN WHICH INCLUDES THE SYMBOL FOR HEARING LOSS IN COMPLIANCE WITH 11B-216.10 & 11B-703.7.2.4.

2) ASSISTIVE-LISTENING SYSTEMS SHALL BE PROVIDED IN ACCORDANCE WITH CBC SECTION 11B-219 AND SHALL COMPLY WITH CBC SECTION 11B-706.

ALTERNATIVE ALS SYSTEM REQUIREMENTS

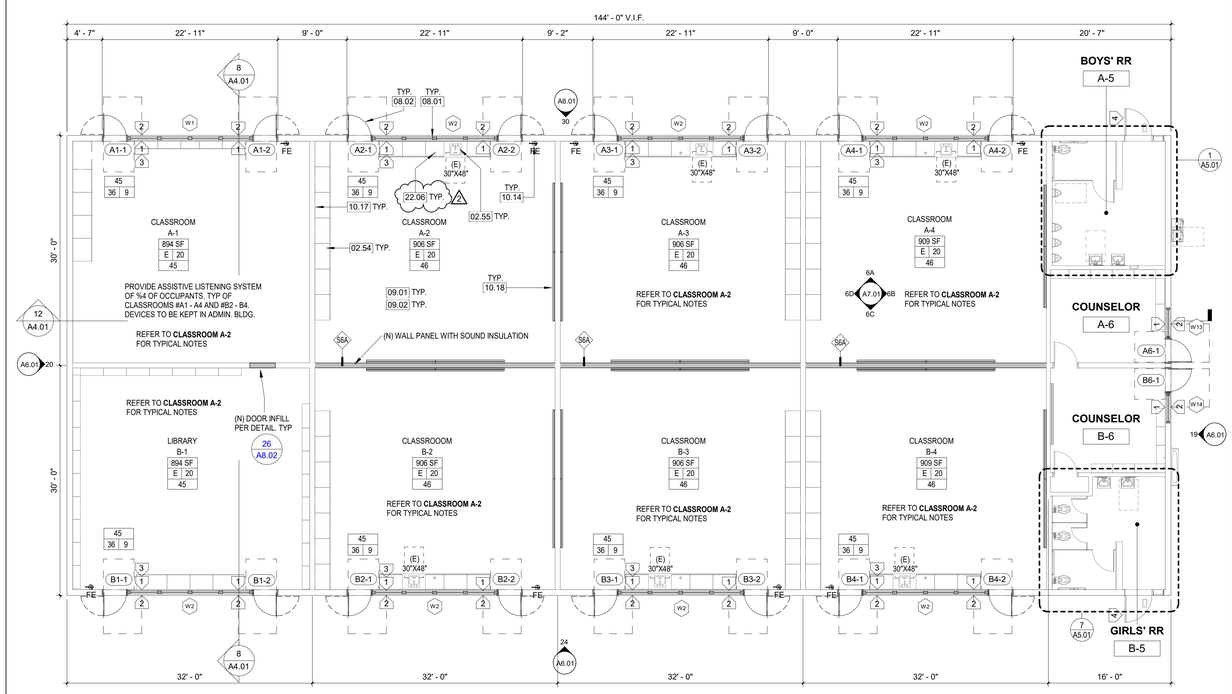
PROVIDE 2 PORTABLE ASSISTIVE LISTENING SYSTEMS, EACH WITH A TRANSMITTER AND A MINIMUM OF 2 RECEIVERS, FOR USE IN CLASSROOMS WITHOUT AUDIO AMPLIFICATION. THE ASSISTIVE LISTENING RECEIVERS AND TRANSMITTER SHALL BE STORED IN THE SCHOOL SITE ADMINISTRATION OFFICE UNTIL REQUESTED.



NOTE: ALL EXISTING INTERIOR WALL ARE NON FULL HEIGHT.

NORTH

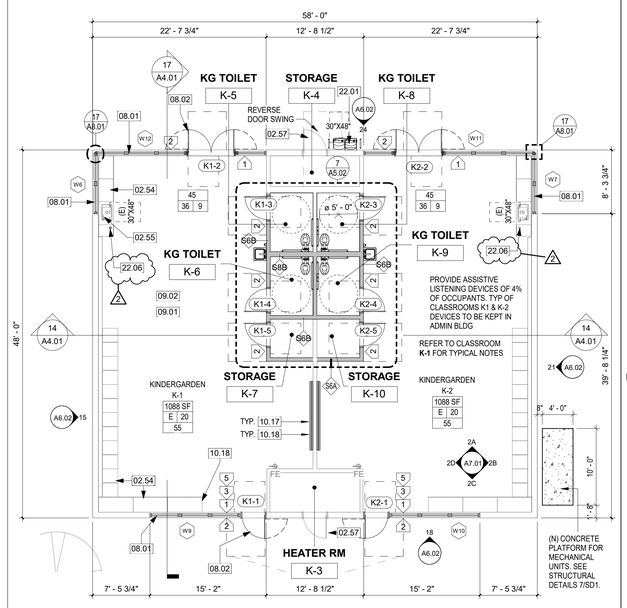
18 FLOOR PLAN - BLDG ADMIN
1/8" = 1'-0"



NOTE: FOR TYP CLASSROOM NOTES, SEE ROOM #A-2

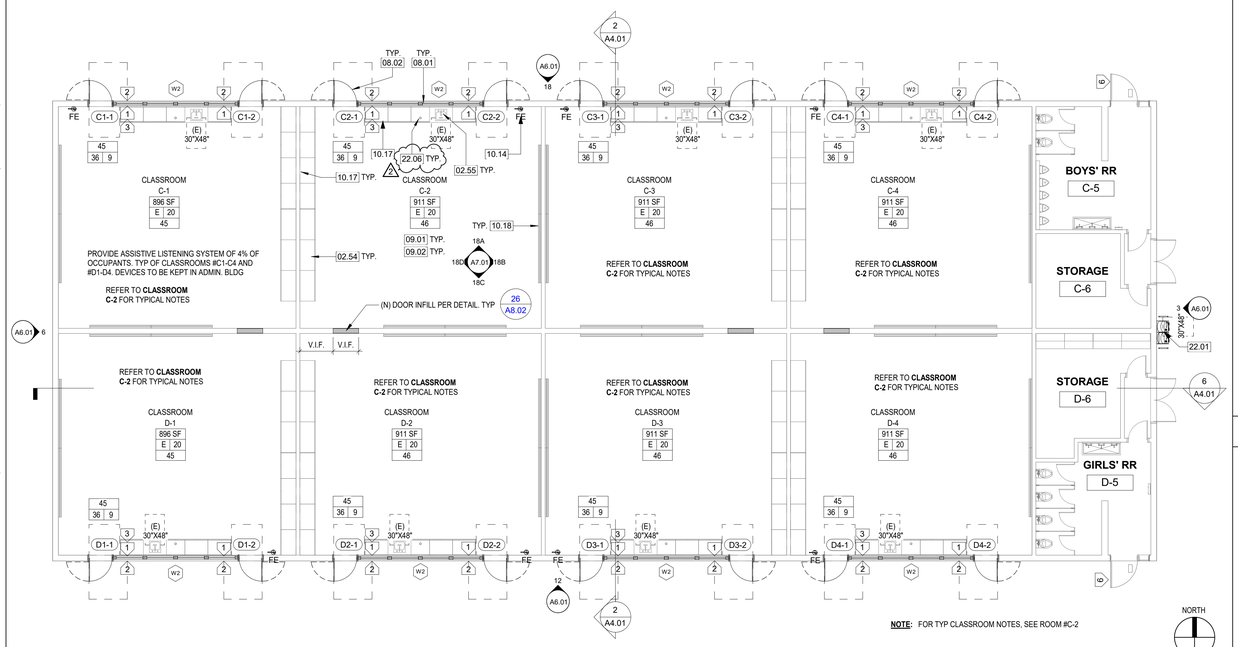
NORTH

16 BLDG 'A-B' FLOOR PLAN
1/8" = 1'-0"



NORTH

6 BLDG 'K' FLOOR PLAN
1/8" = 1'-0"



NOTE: FOR TYP CLASSROOM NOTES, SEE ROOM #C-2

NORTH

4 BLDG 'C-D' FLOOR PLAN
1/8" = 1'-0"

CONSTRUCTION KEYED NOTES

#	DESCRIPTION
02.54	(E) CASEWORK TO REMAIN, RE-PAINT & PROTECT IN PLACE.
02.55	(E) ACCESSIBLE SINK TO REMAIN. PROTECT IN PLACE
02.57	(E) DOOR FRAME & PANEL TO REMAIN. PROTECT IN PLACE.
08.01	(N) ALUMINUM FRAME & GLAZING WINDOW SYSTEM.SEE WINDOWS FRAMING ELEVATION A9.01, PER ALUMINUM-FRAMED STOREFRONT & ALUMINUM WINDOWS & GLAZING SPEC SECTION
08.02	(N) INTEGRAL ALUMINUM FRAME DOOR SYSTEM.SEE FRAMING ELEVATION A9.01 & DOOR SCHEDULE, PER ALUMINUM-FRAMED STOREFRONT & DOOR SPEC SECTION
09.01	(N) INTERIOR PAINT FINISH, SEE FINISH SCHEDULE
09.02	(N) FLOOR FINISH AND BASEBOARD, SEE FINISH SCHEDULE
10.14	(N) FIRE EXTINGUISHER, SURFACE MOUNTED TO (E) WALL
10.17	(N) TACKABLE SURFACE ON (E) WALL, SEE DETAIL
10.18	(N) MARKER BOARD, SEE FINISH SCHEDULE
22.01	(N) ACCESSIBLE DRINKING FOUNTAIN W/ BOTTLE FILLER AND GUARDS. SEE DETAIL 18/G0.02
22.06	ADJUST EXISTING TO REMAIN PLUMBING VENTS. RELOCATE LINE AND SECURE TO EXISTING COLUMN OR EXTERIOR WALL. COORDINATE WITH NEW WORK TO PROVIDE PATCHING OF FINISHES AS NECESSARY.

EXTERIOR PAINT SCOPE OF WORK

1. CONTRACTOR SHALL PAINT ALL EXTERIOR AND INTERIOR SURFACES OF ALL BUILDINGS INCLUDING PORTABLES PER SPECIFICATION, THIS WORK INCLUDES ALL FLASHING, FASCIA, PLASTER, LOUVER, DRYWALL, DOORS AND FRAMES WITH THE EXCEPTION OF BRICK SURFACES. MINIMUM OF 4 COLORS TO BE SELECTED BY THE ARCHITECTS.
2. CONTRACTOR SHALL PAINT ALL COLUMN AND BEAMS OF SOLAR SHADE STRUCTURE PER SPECIFICATION, EXCEPT GALVANIZED AND SOLAR PANEL SURFACES, MINIMUM OF 2 COLORS TO BE SELECTED BY ARCHITECT.
3. GENERAL CONTRACTOR TO NOTIFY AND DOCUMENT ANY AREAS WITH DRYROT AND / OR TERMITE DAMAGE IN WRITTEN FORMAT PRIOR TO BID.

GENERAL ARCH PLAN NOTES

1. COORDINATE ALL SPOT ELEVATIONS AND DIMENSIONS WITH CIVIL
2. PROVIDE AND INSTALL POSITIVE DRAINAGE AWAY FROM ALL BUILDINGS OF 1 % MINIMUM. 2 % MAXIMUM AT ALL EXTERIOR PAVED PEDESTRIAN AREAS, INCLUDING BUT NOT LIMITED TO, SIDEWALKS, PATIOS, STAIRS, PAVING, U.N.O.
3. PROVIDE AND INSTALL POSITIVE DRAINAGE AWAY FROM ALL BUILDINGS OF 5 % FOR A HORIZ. DISTANCE OF 10 FEET AT ALL EXTERIOR NON-PAVED AREAS U.N.O
4. REFER TO CIVIL DOCUMENTS FOR CONCRETE SIDEWALK EXPANSION JOINTS AND CONCRETE SIDEWALK CONTROL JOINTS
5. PROVIDE AND INSTALL CONCRETE SIDEWALK CONTROL JOINTS AT DISTANCES EQUIVALENT TO SIDEWALK WIDTH, BUT NOT TO EXCEED 10 FEET ON-CENTER MAX.

NOTE:
1. ALL BUILDINGS ARE NON-SPRINKLERED
2. ALL EXTERIOR CLASSROOM, ADMIN WINDOW FRAMES AND GLAZING TO BE REPLACED. PATCH AND REPAIR WALLS, AS NEEDED, FOLLOWING WINDOW INSTALLATION. VERIFY IN FIELD ALL DIMENSIONS SHOWN.

REMODEL PLAN LEGEND

- EXISTING WALL TO REMAIN
- NEW WALL TO BE PROVIDED (1 / A8.02) (2 / A8.02)
- NEW CONCRETE SIDEWALK TO BE PROVIDED, ALIGNED TO ADJACENT (E) CONCRETE, WITH LESS THAN 2% CROSS SLOPE (2 / SD1)
- WINDOW MARK, REFER TO WINDOW SCHEDULE A9.01 FOR WINDOW FRAMES AND GLAZING TYPES
- (N) WINDOW
- (N) DOOR TO BE PROVIDED. REFER TO A9.01 FOR DOOR SCHEDULE AND TYPES.
  NOTE: VERIFY IN FIELD 2% SLOPES AWAY FROM BUILDING AND 2% MAX CROSS SLOPE, PROVIDE NEW CONCRETE AS REQ.
- WALL PARTITIONS TAG
  - LETTER INDICATES PARTITION TYPE. REF. DETAIL (1 / A8.02) (2 / A8.02)
  - # INDICATES CORE WIDTH IN INCHES
  - LETTER INDICATES CORE TYPE (S=STUD)
- CLASSROOM 400 — ROOM NAME; ROOM NUMBER
- 960 — ROOM AREA (SQ. FT.)
- E 20 — OCCUPANT LOAD FACTOR
- 45 — ROOM OCCUPANT
- OCCUPANCY TYPE
- 100 — COMBINED EXIT LOAD
- 32 20 — REQUIRED CLEAR EXIT WIDTH (IN INCHES)
- PROVIDED CLEAR EXIT WIDTH (IN INCHES)
- FE — WHERE EXISTING FIRE EXTINGUISHER IS MISPLACED IN CLASSROOM, MOVE (E) FIRE EXTINGUISHER WITH WALL BRACKET TO LOCATION SHOWN ON PLAN. IF FIRE EXTINGUISHER AND/OR MOUNTING BRACKET IS MISSING PROVIDE PER SPEC 10 44 00 AND REFER TO DETAIL (29 / A8.02)

SIGNAGE LEGEND

SIGNAGE TAG #

1. TACTILE EXIT SIGNAGE, SEE DETAIL 16 / A8.02 AND/OR SEE ELECTRICAL PLANS FOR ILLUMINATED EXIT REQUIREMENTS.
2. ROOM IDENTIFICATION SIGNAGE, SEE DETAIL 19 / A8.02 (VERIFY ROOM NAME & NUMBER W/ OWNER). WHERE TWO ROOMS ADJOIN ONE ANOTHER, PROVIDE SIGNAGE ON EACH SIDE OF THE WALL, TYP. ALL ROOMS.
3. ASSISTIVE LISTENING SIGNAGE, SEE DETAIL 23 / A8.02 .
4. ACCESSIBLE RESTROOM DOOR AND WALL SIGNAGE, SEE DETAIL 24 / A8.02 .
5. MAX. OCCUPANT SIGN , SEE DETAIL 17 / A8.02
6. NON ACCESSIBLE RESTROOM DOOR AND WALL SIGNAGE 9 / A8.02 24 / A8.02

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EASTWOOD ELEMENTARY SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
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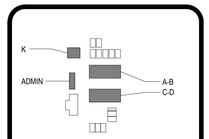
DSA Submittal

DSA APPL NO.: 04-121953 DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT



KEY PLAN
NORTH: PLAN

Consultant

Architect

CLIENT
WESTMINSTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
03/31/23	04-121953

REVISIONS

No.	Description	Date
2	ADDENDUM 2	02/07/24

DSA Submittal

BLDG 'A-B', 'C-D', 'K' & 'ADMIN' FLOOR PLANS

A1.01

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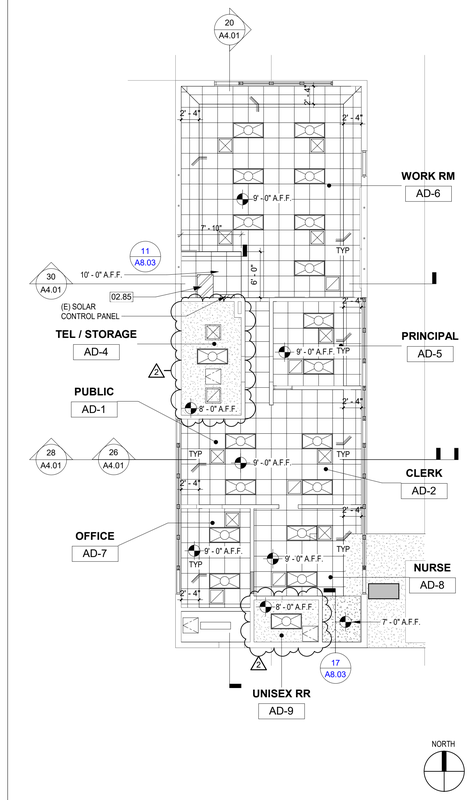
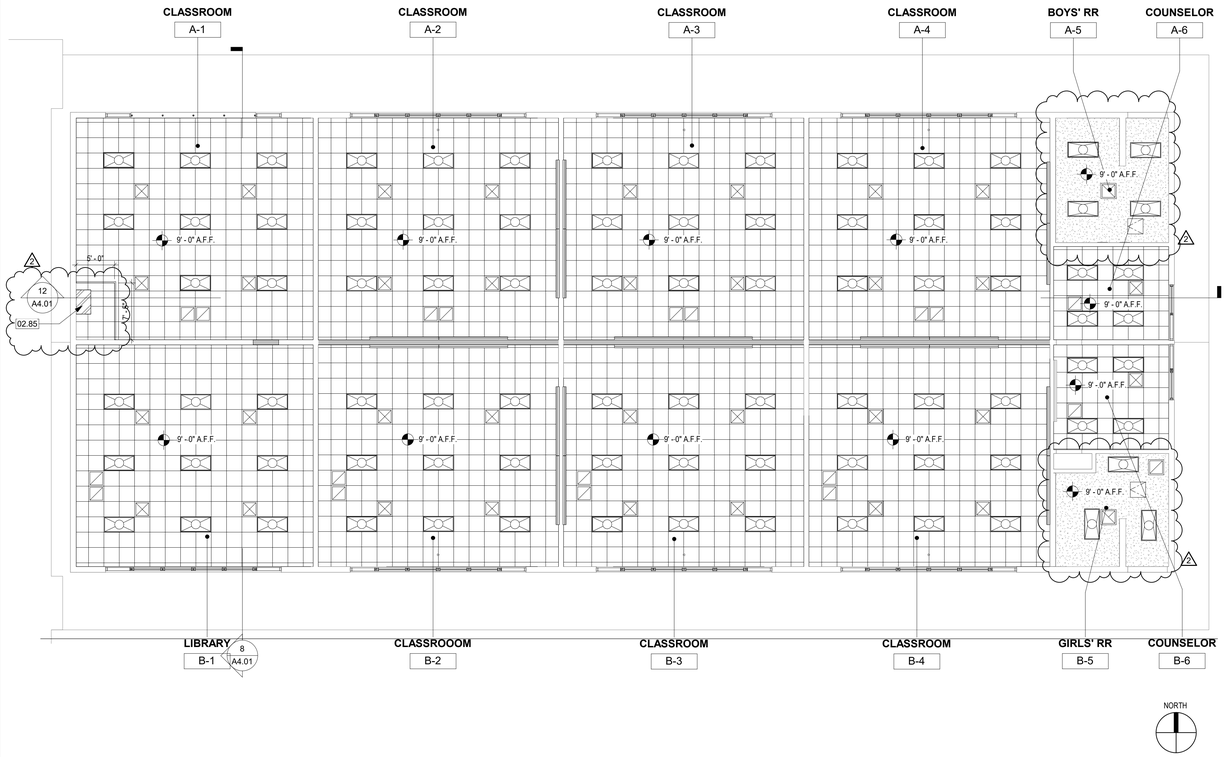
A2.01 - BLDG 'A-B', 'C-D', 'ADMIN' & 'K' REFLECTED CEILING PLANS

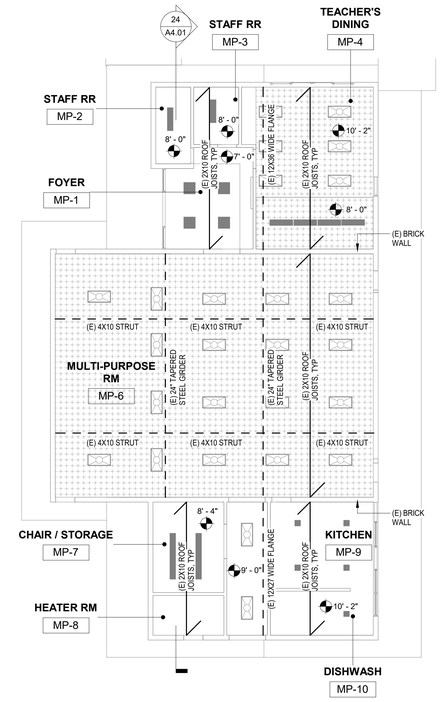


18 BLDG 'ADMIN' REFLECTED CEILING PLAN
1/8" = 1'-0"

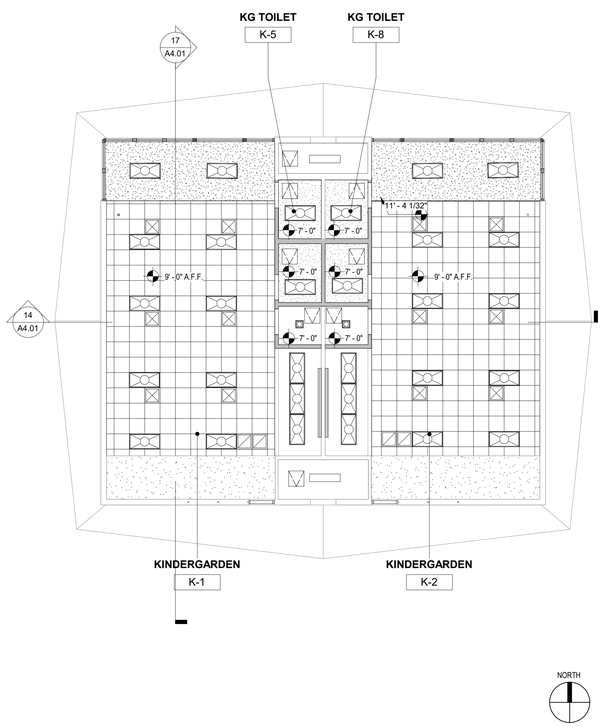


16 BLDG 'A-B' REFLECTED CEILING PLAN
1/8" = 1'-0"

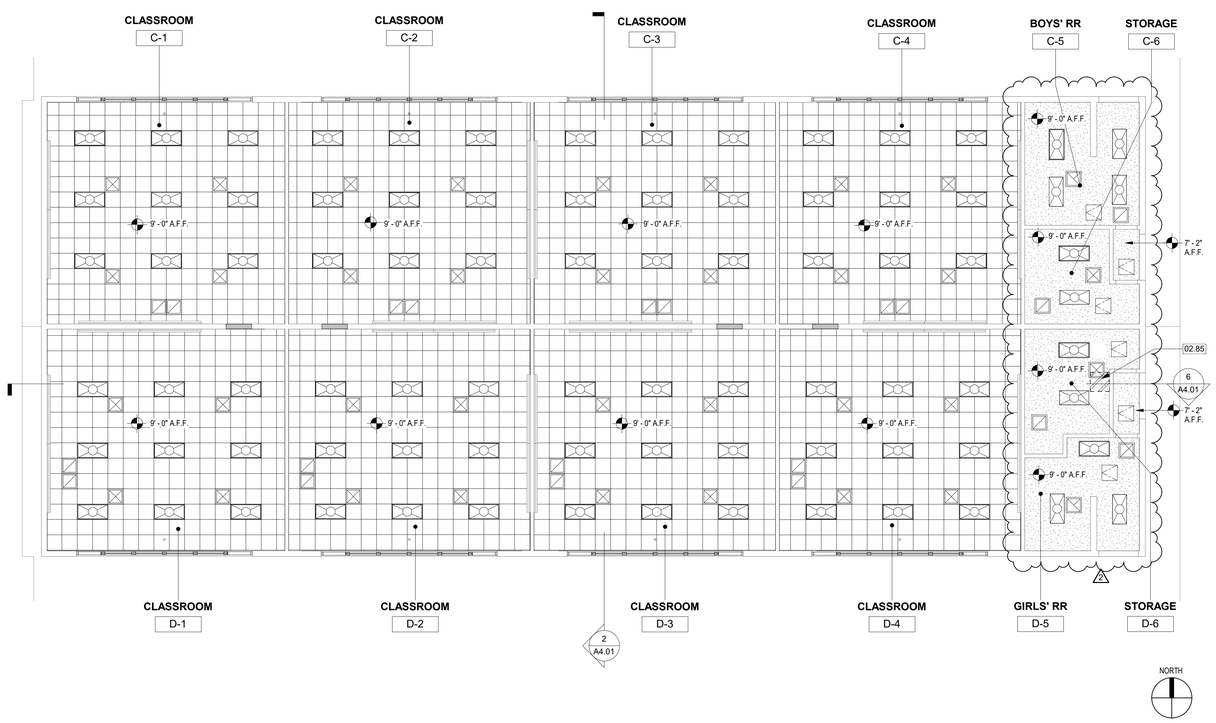
NOTE: RCP SHOWN FOR REFERENCE ONLY. NO SCOPE IN THIS BUILDING OTHER THAN FIRE ALARM UPGRADES. SEE FIRE ALARM SHEETS.



13 BLDG 'M/P' - DEMO REFLECTED CEILING PLAN
3/32" = 1'-0"



6 BLDG 'K' REFLECTED CEILING PLAN
1/8" = 1'-0"



4 BLDG 'C-D' REFLECTED CEILING PLAN
1/8" = 1'-0"

CONSTRUCTION KEYED NOTES

#	DESCRIPTION
02.85	(E) MDF/IDF TO REMAIN AND PROTECT IN PLACE

REFLECTED CEILING PLAN LEGEND

- EXISTING PLASTER /GYP. BD. CEILING TO REMAIN. RE-PAINT TO MATCH EXISTING.
- NEW GYPSUM BOARD CEILING ATTACHED TO (E) CEILING JOIST. SEE DETAIL 5 / A8.03
- NEW 24" x 24" SUSPENDED ACOUSTIC CEILING TILE. SEE DETAIL 7 / A8.03
- NEW LIGHT FIXTURE(S). SEE ELECTRICAL DRAWINGS.
- MECHANICAL GRILLES, REFER TO MECHANICAL DRAWINGS
- ACCESS PANEL. SEE DETAIL 4 / A8.03
- CEILING SLOPE TRANSITION. 24 / A8.03
- CEILING HEIGHT

NOTE:
ALL (E) BLDGS ARE NON-SPRINKLERED

GENERAL CEILING PLAN NOTES

1. REFER TO AND COORD. WITH ROOM FINISH SCHEDULES FOR SPECIFIC CEILING TYPES.
2. ALL SCHEDULED CEILING HEIGHTS ARE FROM THE MAIN FLOOR LEVEL WITHIN THE ROOM AND OR SPACE, AND ARE NOT FROM AN ELEVATED FLOOR LEVEL, AND ARE NOT FROM A RECESSED FLOOR LEVEL.
3. ONLY CEILING MOUNTED FIXTURES AND EQUIP. IS SHOWN ON ARCH. CEILING PLANS. REFER TO INTERIOR ELEVATIONS FOR WALL MOUNTED FIXTURES. REFER TO MEPT DOCUMENTS FOR ADDITIONAL INFORMATION CONCERNING CEILING MOUNTED FIXTURES AND OR WALL MOUNTED FIXTURES.
4. CEILING MOUNTED LIGHT FIXTURES ARE SHOWN FOR LOCATION PURPOSES ONLY. COORD. WITH ELEC. DOCUMENTS FOR LIGHT FIXTURE DESIGNATIONS.
5. CEILING MOUNTED LIGHT FIXTURES WITHIN FIRE RATED CEILING ASSEMBLIES SHALL HAVE LIGHT FIXTURE PROTECTION AND BE TENTED OR OTHERWISE FIRE RATED TO MATCH CEILING ASSEMBLY FIRE RATING.
6. VERIFY LOCATIONS OF ALL CEILING ACCESS PANELS WITH MEPT DOCUMENTS. COORD. LOCATIONS OF CEILING ACCESS PANELS WITH ARCH. PRIOR TO INSTALLATION. CEILING ACCESS PANEL FIRE RATINGS SHALL MATCH CEILING ASSEMBLY FIRE RATINGS.
7. REFER TO WALL SECTIONS FOR WALL-CEILING INTERFACE
8. EXISTING CEILING ACCESS PANEL TO REMAIN.
9. PROVIDE NEW CEILING ACCESS PANEL WHERE REQUIRED PER CODE.

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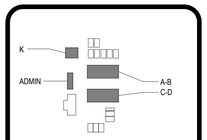
EASTWOOD ELEMENTARY SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
13552 University St.
Westminster, CA 92683

DSA Submittal

DSA APPL NO.: 04-121953 DSA FILE NO.: 30-43



KEY PLAN
NORTH: PLAN

Consultant

Architect

CLIENT
WESTMINSTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
03/31/23	04-121953

REVISIONS

No.	Description	Date
2	ADDENDUM 2	02/07/24

DSA Submittal

BLDG 'A-B', 'C-D', 'ADMIN' & 'K' REFLECTED CEILING PLANS

A2.01

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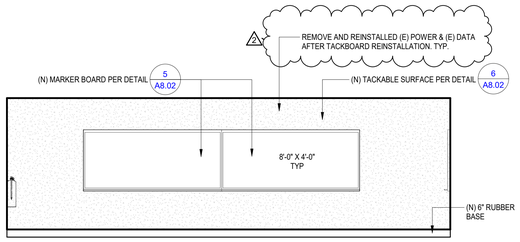
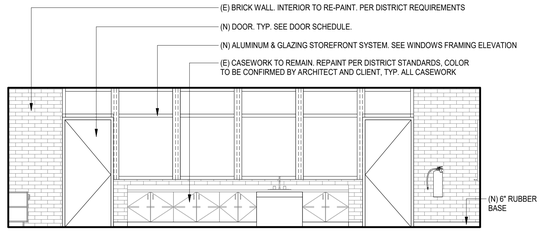
A7.01 - INTERIOR ELEVATIONS

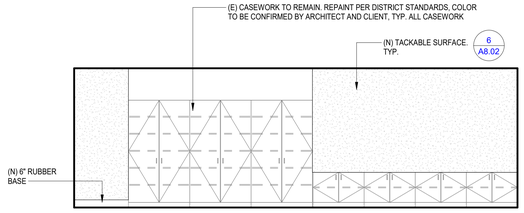
0" 1"



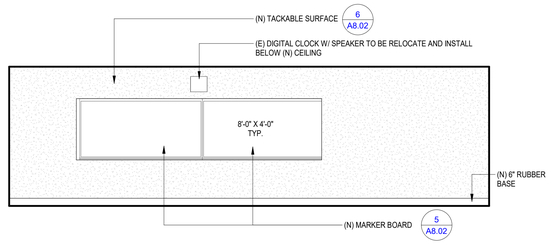
18B TYP CLASSROOM - C4 - EAST INTERIOR ELEVATION
1/4" = 1'-0"



18A TYP CLASSROOM - C4 - NORTH INTERIOR ELEVATION
1/4" = 1'-0"

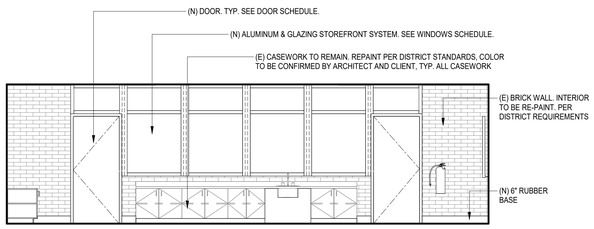


18D TYP CLASSROOM - C4 - WEST INTERIOR ELEVATION
1/4" = 1'-0"

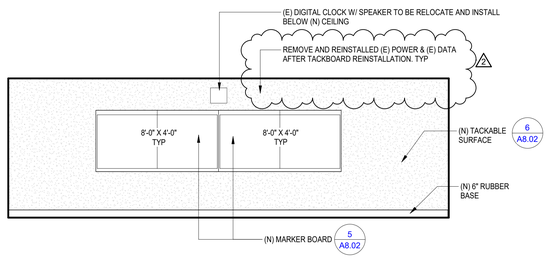


18C TYP CLASSROOM - C4 - SOUTH INTERIOR ELEVATION
1/4" = 1'-0"

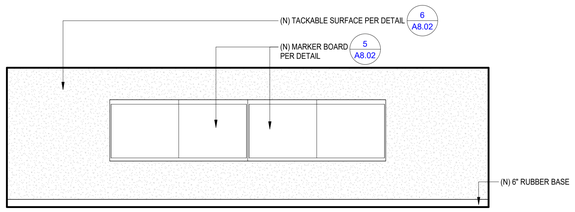
18 TYPICAL CLASSROOM AT BLDG C-D - INTERIOR ELEVATIONS
1/4" = 1' - 0"



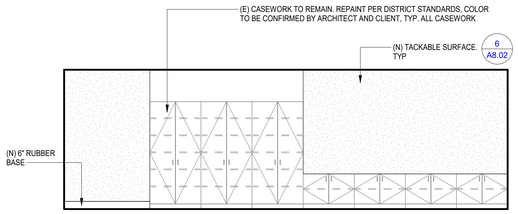
6A TYP CLASSROOM - A4 - NORTH INTERIOR ELEVATION
1/4" = 1'-0"



6B TYP CLASSROOM - A4 - EAST INTERIOR ELEVATION
1/4" = 1'-0"

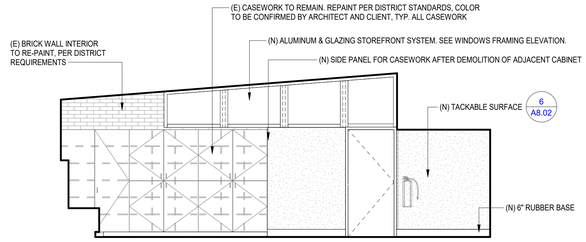


6C TYP CLASSROOM - A4 - SOUTH INTERIOR ELEVATION
1/4" = 1'-0"

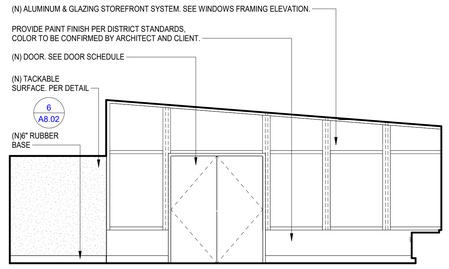


6D TYP CLASSROOM - A4 - WEST INTERIOR ELEVATION
1/4" = 1'-0"

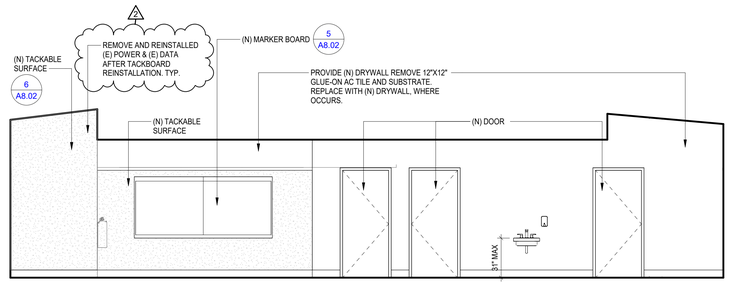
6 TYPICAL CLASSROOM AT BLDG A-B - INTERIOR ELEVATIONS
1/4" = 1' - 0"



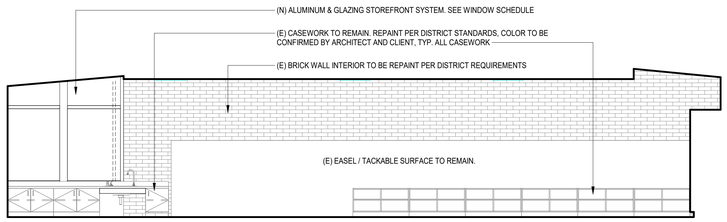
2C KINDERGARTEN K2 - SOUTH INTERIOR ELEVATION
1/4" = 1'-0"



2A KINDERGARTEN K2 - NORTH INTERIOR ELEVATION
1/4" = 1'-0"



2D KINDERGARTEN K2 - EAST INTERIOR ELEVATION
1/4" = 1'-0"



2B KINDERGARTEN K2 - WEST INTERIOR ELEVATION
1/4" = 1'-0"

2 KINDERGARTEN K1&K2 - TYP. INTERIOR ELEVATIONS
1/4" = 1' - 0"

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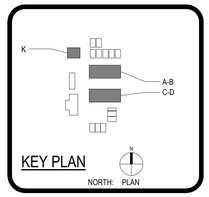

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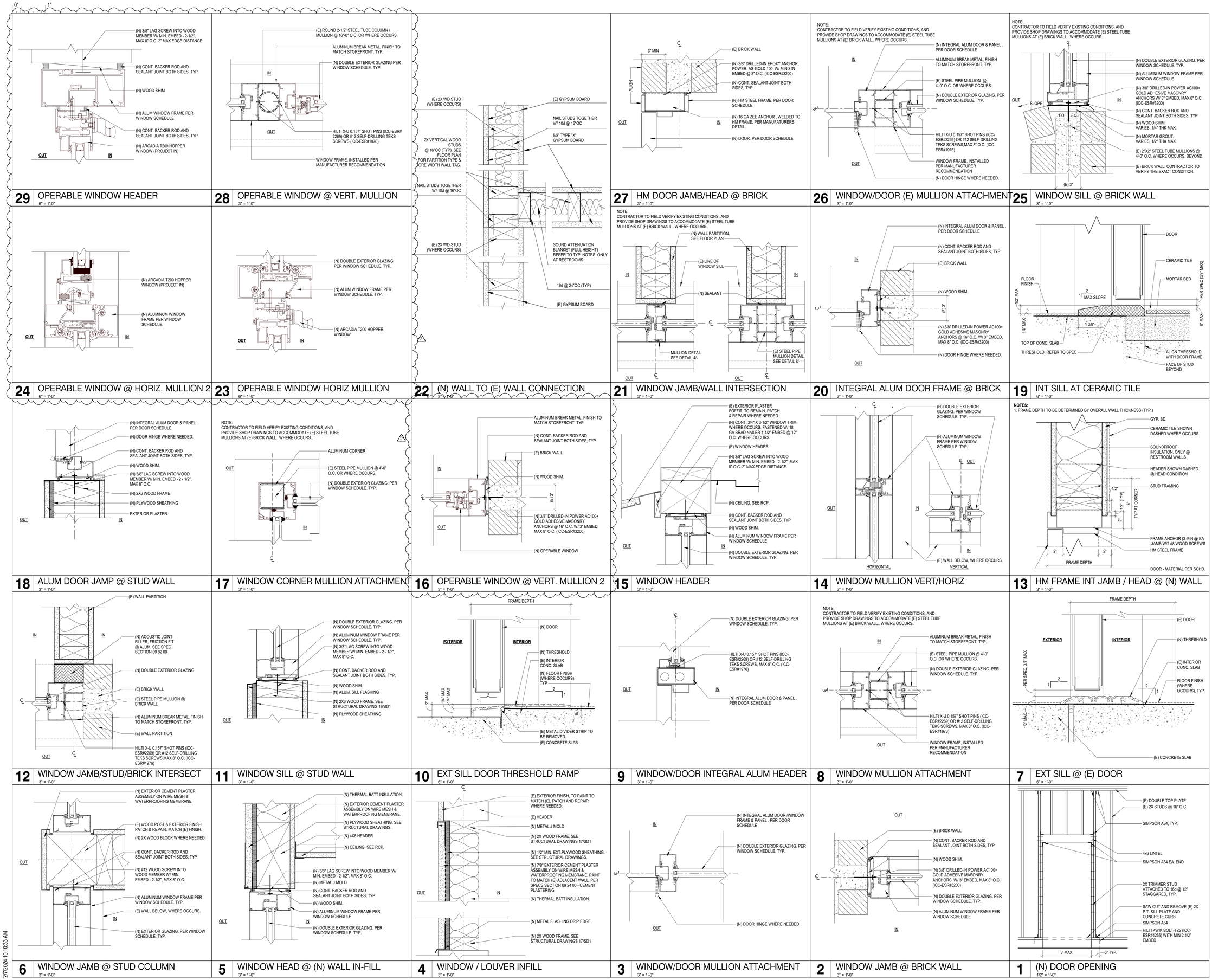
DSA Submittal

INTERIOR ELEVATIONS

A7.01

A8.01 - DOORS, WINDOW FRAME DETAILS



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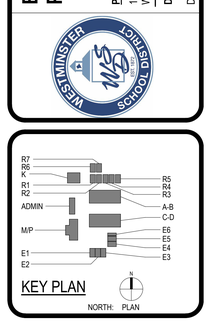

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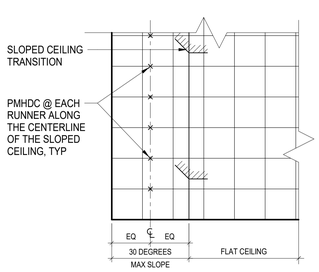
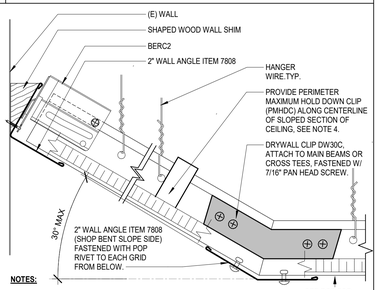
DSA Submittal

DOORS, WINDOW FRAME DETAILS

A8.01



RCP SKETCH

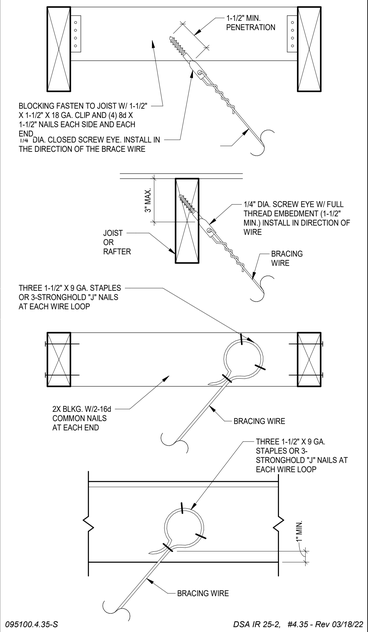


NOTES:

1. SEE DETAIL 8/- FOR SUSPENDED CEILING PERIMETER JOINTS.
2. SEE DETAIL 8/- NOTE # 4 FOR SLOPED CEILING REQUIREMENTS.
3. TYP. CEILING PLAN PER 7/-.

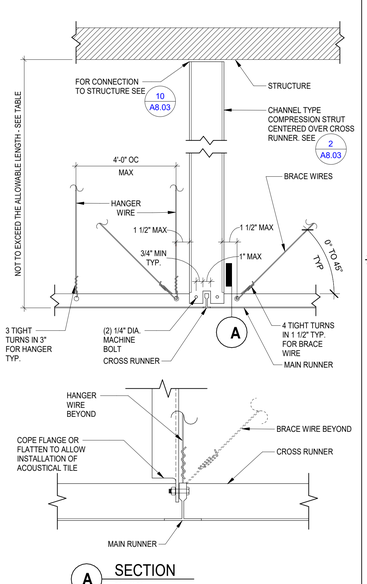
095100.4.35-S DSA IR 25-2, #4.35 - Rev 03/18/22

24 SLOPED CEILING
6" = 1'-0"



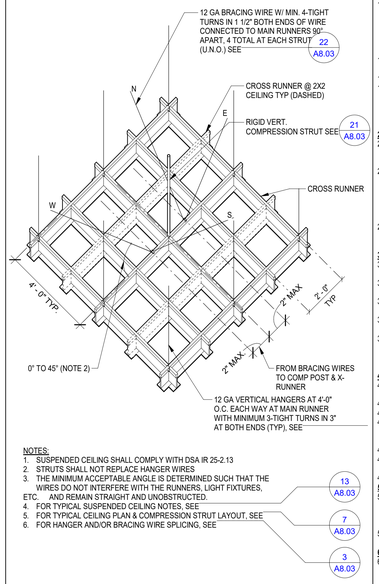
095100.4.35-S DSA IR 25-2, #4.35 - Rev 03/18/22

22 BRACING WIRE TO WOOD
3" = 1'-0"



095100.3.10-S DSA IR 25-2 , #3.10 - Rev 03/18/22

21 COMPRESSION STRUT - CHANNEL
1 1/2" = 1'-0"



NOTES:

1. SUSPENDED CEILING SHALL COMPLY WITH DSA IR 25-2-13
2. STRUTS SHALL NOT REPLACE HANGER WIRES
3. THE MINIMUM ACCEPTABLE ANGLE IS DETERMINED SUCH THAT THE WIRES DO NOT INTERFERE WITH THE RUNNERS, LIGHT FIXTURES, ETC. AND REMAIN STRAIGHT AND UNOBSTRUCTED.
4. FOR TYPICAL SUSPENDED CEILING NOTES, SEE 13 A8.03
5. FOR TYPICAL CEILING PLAN & COMPRESSION STRUT LAYOUT, SEE 7 A8.03
6. FOR HANGER AND/OR BRACING WIRE SPLICING, SEE 3 A8.03

095100.2.35-S DSA IR 25-2, #2.35 - Rev 03/18/22

20 SUSPENDED CEILING SYSTEM
3/8" = 1'-0"

1. CEILING SYSTEM GENERAL NOTES:

1.01 CEILING SYSTEM COMPONENTS SHALL COMPLY WITH ASTM C635-07 AND SECTION 5.1 OF ASTM E580-10a.
1.02 THE CEILING GRID SYSTEM MUST BE RATED HEAVY DUTY AS DEFINED BY ASTM C635-08.
1.03 CEILING SYSTEMS: THE FOLLOWING CEILING SYSTEM(S) ISARE PART OF THE SCOPE OF THIS PROJECT:
MANUFACTURER'S NAME ARMSTRONG WORLD INDUSTRIES, INC.
PRODUCT EVALUATION REPORT TYPE AND NUMBER ICC ESR-1308
MANUFACTURER'S MODEL NUMBER - MAIN RUNNER ARMSTRONG:HEAVY DUTY PRELUDE XL 7301
MANUFACTURER'S CATALOG NUMBER - CROSS RUNNER ARMSTRONG: XL7328
1.04 SEISMIC WALL CLIP:
MANUFACTURER'S MODEL BERC2
1.05 CEILING PANELS SHALL NOT SUPPORT ANY LIGHT FIXTURES, AIR TERMINALS OR DEVICES.
1.06 FOR CEILING INSTALLATIONS UTILIZING ACOUSTICAL TILE PANELS OF MINERAL OR GLASS FIBER, IT IS NOT MANDATORY TO PROVIDE 3/4" CLEARANCE BETWEEN THE ACOUSTICAL TILE PANELS AND THE WALL ON THE SIDES OF THE CEILING WHICH ARE FREE TO SLIP. FOR ALL OTHER CEILING PANEL TYPES, PROVIDE 3/4" CLEARANCE BETWEEN THE CEILING PANEL AND THE WALL ON THE SIDES OF THE CEILING FREE TO SLIP.

2. MATERIALS:

2.01 CEILING WIRE SHALL BE CLASS 1 ZINC COATED (GALVINIZED) CARBON STEEL CONFORMING TO ASTM A641-09a. WIRE SHALL BE #12 GAGE (0.106" DIAMETER) WITH SOFT TEMPER AND MINIMUM TENSILE STRENGTH = 70 KSI.
2.02 GALVANIZED SHEET STEEL (INCLUDING THAT USED FOR METAL STUD AND TRACK COMPRESSION STRUTS/POST) SHALL CONFORM TO ASTM A6453-11, OR OTHER EQUIVALENT SHEET STEEL LISTED IN SECTION A2.1 OF THE NORTH AMERICAN SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS 2007, INCLUDING SUPPLEMENT 2 DATED 2010 (AISI S100-07/S2-10). MATERIAL 43 MIL (18 GAGE) AND LIGHTER SHALL HAVE A MINIMUM YIELD STRENGTH OF 32 KSI. MATERIAL 54 MIL (16 GAGE) AND HEAVIER SHALL HAVE A MINIMUM YIELD STRENGTH OF 50 KSI.
2.03 ELECTRICAL METALLIC TUBE (EMT) SHALL BE AND C80.3/UL 797 CARBON STEEL WITH G90 GALVANIZING. EMT SHALL HAVE MINIMUM YIELD STRENGTH (Fy) OF 30 KSI AND MINIMUM ULTIMATE STRENGTH (Fu) OF 48 KSI.

3. ATTACHMENT OF HANGER AND BRACING WIRES:

3.01 SEPARATE ALL CEILING HANGER AND BRACING WIRES AT LEAST SIX (6) INCHES FROM ALL UNBRACED DUCTS, PIPES, CONDUIT, ETC.
3.02 HANGER AND BRACING WIRES SHALL NOT ATTACH TO OR BEND AROUND OBSTRUCTIONS INCLUDING BUT NOT LIMITED TO: PIPING, DUCTWORK, CONDUIT AND EQUIPMENT.
3.03 HANGER WIRES THAT ARE MORE THAN ONE (HORIZONTAL) IN SIX (VERTICAL) OUT OF PLUMB SHALL HAVE COUNTER-SLOPING WIRES.
3.04 SLACK SAFETY WIRES SHALL BE CONSIDERED HANGER WIRES FOR INSTALLATION AND TESTING REQUIREMENTS.
3.05 HANGER AND BRACING WIRE ANCHORAGE TO THE STRUCTURE SHALL BE INSTALLED IN SUCH A MANNER THAT THE DIRECTION OF THE ANCHORAGE ALIGNS CLOSELY WITH THE DIRECTION OF THE WIRE. (E.G. BRACING WIRE CEILING CLIPS MUST BE BENT AS SHOWN IN THE DETAILS AND ROTATED AS REQUIRED TO ALIGN CLOSELY WITH THE DIRECTION OF THE WIRE, ETC.)

4. FASTENERS AND WELDING:

4.01 SHEET METAL SCREWS SHALL COMPLY WITH ASTM C1513-10, ASME B18.6.4-89 (R2005). PENETRATION OF SCREWS THROUGH JOINED MATERIAL SHALL NOT BE LESS THAN THREE EXPOSED THREADS.
4.02 EXPANSION ANCHORS SHALL BE: NA
4.03 POWER-ACTUATED FASTENERS SHALL BE: NA
4.04 IF NOT OTHERWISE SPECIFIED IN THE EVALUATION REPORT, POWER-ACTUATED FASTENERS INSTALLED IN STEEL SHALL BE INSTALLED SO THE ENTIRE POINTED END OF THE FASTENER IS DRIVEN THROUGH THE STEEL MEMBER.
4.05 POWER-ACTUATED FASTENERS IN CONCRETE ARE NOT PERMITTED FOR BRACING WIRES.
4.06 CONCRETE REINFORCEMENT AND PRESTRESSING TENDONS SHALL BE LOCATED BY NON DESTRUCTIVE MEANS PRIOR TO INSTALLING POST - INSTALLED ANCHOR.
4.07 WELDING SHALL BE IN ACCORDANCE WITH AWS D1.3 USING E60XX SERIES ELECTRODES.

5. TESTING: ALL FIELD TESTING MUST BE PERFORMED IN THE PRESENCE OF THE PROJECT INSPECTOR.

5.01 POST-INSTALLED ANCHORS IN CONCRETE USED TO SUPPORT HANGER WIRES SHALL BE TESTED AT A FREQUENCY OF 10 PERCENT. POWER ACTUATED FASTENERS IN CONCRETE SHALL BE FIELD TESTED FOR 200 LBS. IN TENSION. ALL OTHER POST-INSTALLED ANCHORS IN CONCRETE SHALL BE TESTED IN ACCORDANCE WITH CBC SECTION 1913A.7.
5.02 POST-INSTALLED ANCHORS IN CONCRETE USED TO ATTACH BRACING WIRES SHALL BE TESTED AT A FREQUENCY OF 50 PERCENT IN ACCORDANCE WITH CBC SECTION 1913A.7.

6. LIGHT FIXTURES:

6.01 ALL LIGHT FIXTURES SHALL BE POSITIVELY ATTACHED TO THE CEILING SUSPENSION SYSTEMS BY MECHANICAL MEANS TO RESIST A HORIZONTAL FORCE EQUAL TO THE WEIGHT OF THE FIXTURE. A MINIMUM OF TWO SCREWS OR APPROVED FASTENERS ARE REQUIRED AT EACH LIGHT FIXTURES, PER ASTM E580, SECTION 5.3.1.
6.02 SURFACE-MOUNTED LIGHT FIXTURES SHALL BE ATTACHED TO THE MAIN RUNNER WITH AT LEAST TWO POSITIVE CLAMPING DEVICES. THE CLAMPING DEVICE SHALL COMPLETELY SURROUND THE SUPPORTING CEILING RUNNER AND BE MADE OF STEEL WITH A MINIMUM THICKNESS OF #14 GAGE. ROTATIONAL SPRING CATCHES DO NOT COMPLY. A #12 GAGE SLACK SAFETY WIRE SHALL BE CONNECTED FROM EACH CLAMPING DEVICE TO THE STRUCTURE ABOVE. PROVIDE ADDITIONAL SUPPORTS WHEN LIGHT FIXTURES ARE EIGHT (8) FEET OR LONGER OR EXCEED 56 LB. MAXIMUM SPACING BETWEEN SUPPORTS SHALL NOT EXCEED EIGHT (8) FEET.
6.03 LIGHT FIXTURES WEIGHING LESS THAN OR EQUAL TO 10 LB. SHALL HAVE A MINIMUM OF ONE (1) #12 GAGE SLACK SAFETY WIRE CONNECTED FROM THE FIXTURE HOUSING TO THE STRUCTURE ABOVE.
6.04 LIGHT FIXTURES WEIGHING GREATER THAN 10 LB. BUT LESS THAN OR EQUAL TO 56 LBS. MAY BE SUPPORTED DIRECTLY ON THE CEILING RUNNERS, BUT THEY SHALL HAVE A MINIMUM OF TWO (2) #12 GAGE SLACK SAFETY WIRE CONNECTED FROM THE FIXTURE HOUSING AT DIAGONAL CORNERS TO THE STRUCTURE ABOVE.
EXCEPTION: ALL LIGHT FIXTURES GREATER THAN TWO BY FOUR FEET WEIGHING LESS THAN 56LBS. SHALL HAVE A #12 GAGE SLACK SAFETY WIRE AT EACH CORNER.
6.05 ALL LIGHT FIXTURES WEIGHING GREATER THAN 56 LB. SHALL BE INDEPENDENTLY SUPPORTED BY NOT LESS THAN FOUR (4) TAUT #12 GAGE HANGER WIRES (ONE AT EACH CORNER) ATTACHED FROM THE FIXTURE HOUSING TO THE STRUCTURE ABOVE OR OTHER APPROVED HANGERS. THE FOUR (4) TAUT #12 GAGE WIRES OR OTHER APPROVED HANGERS, INCLUDING THEIR ATTACHMENT TO THE STRUCTURE ABOVE, SHALL BE CAPABLE OF SUPPORTING FOUR (4) TIMES THE WEIGHT OF THE FIXTURE.

7. SERVICES WITHIN THE CEILING:

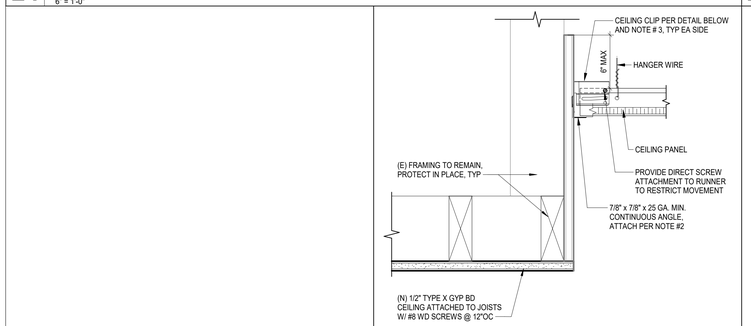
7.01 ALL FLEXIBLE SPRINKLER HOSE FIRRING MOUNTING BRACKETS, CEILING-MOUNTED AIR TERMINALS OR OTHER SERVICES SHALL BE POSITIVELY ATTACHED TO THE CEILING SUSPENSION SYSTEMS BY MECHANICAL MEANS. SCREWS OR APPROVED FASTENERS ARE REQUIRED. A MINIMUM OF TWO ATTACHMENTS ARE REQUIRED AT EACH COMPONENT.
7.02 CEILING-MOUNTED AIR TERMINALS OR OTHER SERVICES WEIGHING LESS THAN OR EQUAL TO 20 LB. SHALL HAVE ONE (1) #12 GAGE SLACK SAFETY WIRE ATTACHED FROM THE TERMINAL OR SERVICE TO THE STRUCTURE ABOVE.
7.03 FLEXIBLE SPRINKLER HOSE FITTINGS, CEILING-MOUNTED AIR TERMINALS OR OTHER SERVICES WEIGHING MORE THAN 20 LB. BUT LESS THAN OR EQUAL TO 56 LB. SHALL HAVE TWO (2) #12 GAGE SLACK SAFETY WIRES (AT DIAGONAL CORNERS) CONNECTED FROM THE TERMINAL OR SERVICE TO THE STRUCTURE ABOVE.
7.04 FLEXIBLE SPRINKLER HOSE FITTINGS, CEILING-MOUNTED AIR TERMINALS OR OTHER SERVICES WEIGHING MORE THAN 56 LB. SHALL BE SUPPORTED DIRECTLY FROM THE STRUCTURE ABOVE BY NOT LESS THAN FOUR (4) TAUT #12 GAGE HANGER WIRES ATTACHED FROM THE TERMINAL OR SERVICE TO THE STRUCTURE ABOVE OR OTHER APPROVED HANGERS.

8. OTHER DEVICES WITHIN THE CEILING:

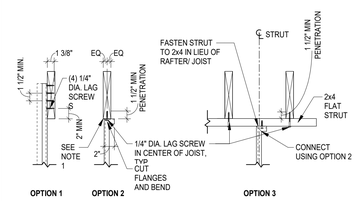
8.01 ALL LIGHTWEIGHT MISCELLANEOUS DEVICES, SUCH AS STROBE LIGHTS, OCCUPANCY SENSORS, SPEAKERS, EXIT SIGNS, ETC., SHALL BE ATTACHED TO THE CEILING GRID. IN ADDITION, DEVICES WEIGHING MORE THAN 10 LBS. SHALL HAVE A #12 GAGE SLACK SAFETY WIRE ANCHORED TO THE STRUCTURE ABOVE. DEVICES WEIGHING MORE THAN 20 LB. SHALL BE SUPPORTED INDEPENDENTLY FROM THE STRUCTURE ABOVE.

095100.1.00-S DSA IR 25-2 - Rev 03/18/22

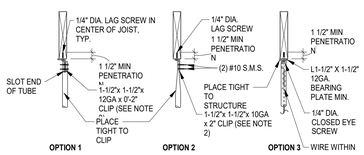
13 SUSPENDED CEILING NOTES
1/2" = 1'-0"



17 SOFFIT ELEVATION TRANSITION
3" = 1'-0"



CHANNEL STRUT



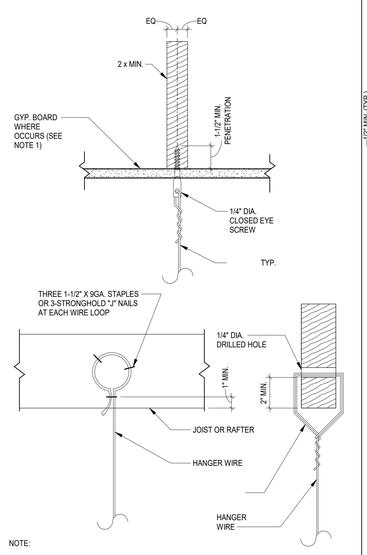
TUBE STRUT

NOTES:

1. WEB OF CHANNEL TO BEAR WITHIN WIDTH OF WOOD MEMBER.
2. VERTICAL LEG OF MEMBER TO FALL WITHIN THE WIDTH OF THE WOOD MEMBER.

095100.5.60-S DSA IR 25-2, #5.60 - Rev 03/18/22

10 STRUT TO WOOD FRAMING
1" = 1'-0"

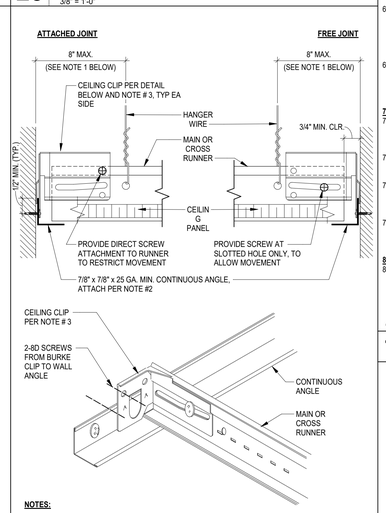


NOTE:

(1) WHEN FIRE RATED GYP. BOARD IS INSTALLED ON THE BOTTOM FLANGES, USE SCREW EYES W/ SUFFICIENT LENGTH TO AVOID DAMAGING THE FIRE RATED GYP. BOARD AND MEET MIN. PENETRATION.

095100.4.25-S DSA IR 25-2, #4.25 - Rev 03/18/22

09 HANGER WIRE TO WOOD
3" = 1'-0"

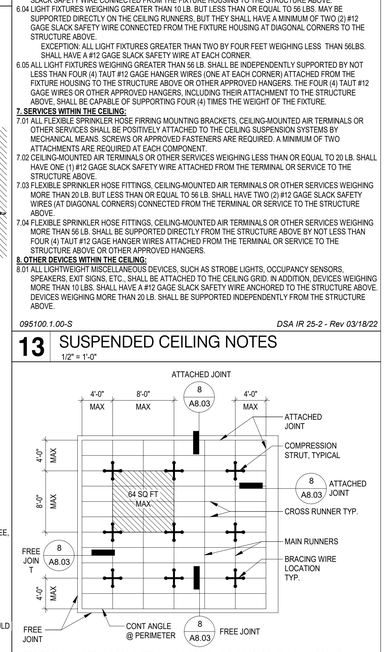


NOTES:

1. PROVIDE #12 GAGE HANGER WIRES AT THE ENDS OF ALL MAIN AND CROSS RUNNERS WITHIN EIGHT (8) INCHES OF THE SUPPORT OF WITHIN ONE-FORTH (1/4) OF THE LENGTH OF THE END TEE, WHICHEVER IS LESS, FOR THE PERIMETER OF THE CEILING AREA. PERIMETER WIRES ARE NOT REQUIRED WHEN THE LENGTH OF THE END TEE IS EIGHT (8) INCHES OR LESS.
2. AT METAL STUD FRAMING: (1) #10 SMS TO 20 GA. MIN. WALL STUD @ 24" O.C. AT WOOD STUD FRAMING: (1) #10 WOOD SCREW TO 2X MIN. WALL STUD @ 24" O.C.
3. CEILING CLIP: ARMSTRONG BERC2 CLIP, OR EQUAL
4. SLOPED CEILING: USE ACCEPTABLE SUSPENSION SYSTEM & ACCESSORIES. WALL ANGLE ARE PAINTED AND WALL SHIMMED TO ACHIEVE THE CORRECT ANGLE. 7/8" WALL ANGLE ITEM 7800 SHOULD BE USED.

095100.2.60-S DSA IR 25-2, #2.60 - Rev 03/18/22

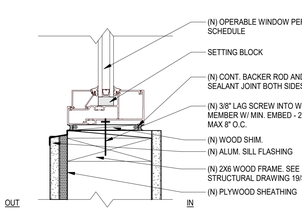
8 SUSPENDED CEILING PERIMETER JOINTS
6" = 1'-0"



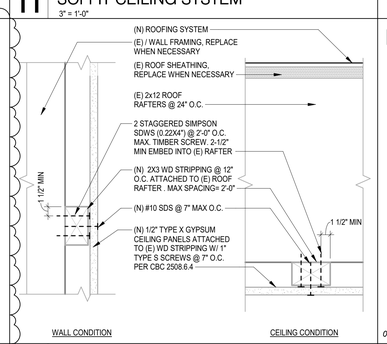
NOTE: BRACING WIRES AND COMP. STRUT SHALL OCCUR AT EVERY 64 SQ. FT. MAX. IN ROOMS OVER 144 SQ. FT.

095100.2.10-S DSA IR 25-2 #2.10 - Rev 03/18/22

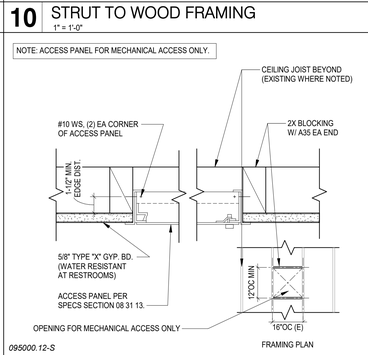
7 TYP CEILING PLAN
1/8" = 1'-0"



6 OPERABLE WINDOW SILL
3" = 1'-0"

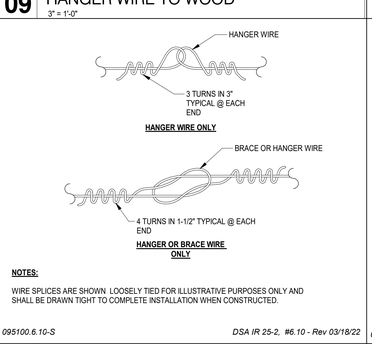


5 GYP. BD. WALL / CEILING
3" = 1'-0"



095000.12-S

4 ACCESS PANEL
3" = 1'-0"



NOTES:

WIRE SPLICES ARE SHOWN LOOSELY TIED FOR ILLUSTRATIVE PURPOSES ONLY AND SHALL BE DRAWN TIGHT TO COMPLETE INSTALLATION WHEN CONSTRUCTED.

095100.6.10-S DSA IR 25-2, #6.10 - Rev 03/18/22

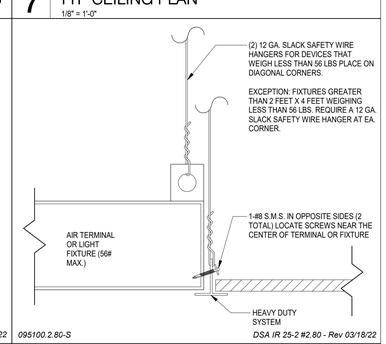
3 CEILING WIRE SPLICES
6" = 1'-0"

EMT COMPRESSION STRUT	MAXIMUM LENGTH
1/2" DIAMETER EMT (0.042" WALL THICKNESS)	3'-11"
3/4" DIAMETER EMT (0.049" WALL THICKNESS)	6'-4"
1" DIAMETER EMT (0.057" WALL THICKNESS)	9'-9"
1 1/4" DIAMETER EMT (0.065" WALL THICKNESS)	12'-9"
1 1/2" DIAMETER EMT (0.065" WALL THICKNESS)	14'-9"
2" DIAMETER EMT (0.065" WALL THICKNESS)	18'-10"

CHANNEL COMPRESSION STRUT	MAXIMUM LENGTH
250S125-33	5'-10"
250S137-33	6'-10"
362S137-33	8'-0"
250137-43	8'-10"
400S137-43	10'-10"

095100.3.21-S DSA IR 25-2, #3.21 - Rev 03/18/22

2 COMPRESSION STRUT TABLE
1/2" = 1'-0"



095100.2.80-S DSA IR 25-2 #2.80 - Rev 03/18/22

1 SUSPENDED LIGHT FIXT./AIR TERMINALS
3" = 1'-0"

PBK

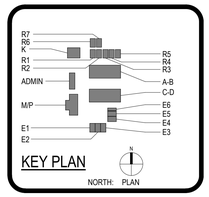
ARCHITECT PBK Architects, Inc.
PBK.com
ANAHEIM
2400 E. Katella Ave., Suite 950
Anaheim, CA 92806
P 949-548-5000

EASTWOOD ELEMENTARY SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
13552 University St.
Westminster, CA 92683

DSA Submittal

DSA APPL NO.: 04-121953 DSA FILE NO.: 30-43



Consultant

Architect

CLIENT
WESTMINSTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
03/31/23	04-121953

REVISIONS

No.	Description	Date
2	ADDENDUM 2	02/07/24

DSA Submittal

CEILING DETAILS

A8.03

FILE PATH: Z:\Projects\...
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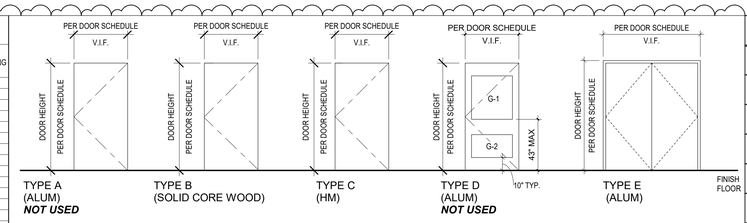
A9.01 - DOOR SCHEDULE & WINDOW FRAMING ELEVATION

Door Schedule

DOOR #	ROOM NAME	BUILDING NAME	DOOR TYPE	DOOR PAIR/SINGLE	DOOR SIZE WXH WIDTH	DOOR SIZE WXH HEIGHT	MATL.	FINISH	FRAME TYPE	FRAME MATERIAL	FRAME FINISH	DETAILS SILL	DETAILS JAMB	DETAILS HEAD	HARDWARE	FIRE RATING	PANIC HARDWARE	ACCESSIBLE SECURITY LOCKING HARDWARE
A1-1	A-1	BLDG A-B	C	SINGLE	3' - 0"	7' - 0"	HM	PT	1	ALUM	AC	7 OR 10/ A8.01	20&26/A8.01	9/A8.01	1		Yes	Yes
A1-2	A-1	BLDG A-B	C	SINGLE	3' - 0"	7' - 0"	HM	PT	1	ALUM	AC	7 OR 10/ A8.01	20&26/A8.01	9/A8.01	6		No	Yes
A2-1	A-2	BLDG A-B	C	SINGLE	3' - 0"	7' - 0"	HM	PT	1	ALUM	AC	7 OR 10/ A8.01	20&26/A8.01	9/A8.01	1		Yes	Yes
A2-2	A-2	BLDG A-B	C	SINGLE	3' - 0"	7' - 0"	HM	PT	1	ALUM	AC	7 OR 10/ A8.01	20&26/A8.01	9/A8.01	6		No	Yes
A3-1	A-3	BLDG A-B	C	SINGLE	3' - 0"	7' - 0"	HM	PT	1	ALUM	AC	7 OR 10/ A8.01	20&26/A8.01	9/A8.01	1		Yes	Yes
A3-2	A-3	BLDG A-B	C	SINGLE	3' - 0"	7' - 0"	HM	PT	1	ALUM	AC	7 OR 10/ A8.01	20&26/A8.01	9/A8.01	6		No	Yes
A4-1	A-4	BLDG A-B	C	SINGLE	3' - 0"	7' - 0"	HM	PT	1	ALUM	AC	7 OR 10/ A8.01	20&26/A8.01	9/A8.01	1		Yes	Yes
A4-2	A-4	BLDG A-B	C	SINGLE	3' - 0"	7' - 0"	HM	PT	1	ALUM	AC	7 OR 10/ A8.01	20&26/A8.01	9/A8.01	6		No	Yes
A6-1	A-6	BLDG A-B	C	SINGLE	3' - 0"	7' - 0"	HM	PT	1	ALUM	AC	7 OR 10/ A8.01	20&26/A8.01	9/A8.01	2		Yes	Yes
AD1-1	AD-1	BLDG ADMIN	C	SINGLE	3' - 0"	7' - 0"	HM	PT	1	ALUM	AC	7 OR 10/ A8.01	20&26/A8.01	9/A8.01	1		Yes	Yes
AD2-1	AD-2	BLDG ADMIN	C	SINGLE	3' - 0"	7' - 0"	HM	PT	1	ALUM	AC	7 OR 10/ A8.01	20&26/A8.01	9/A8.01	1		Yes	Yes
AD5-1	AD-5	BLDG ADMIN	C	SINGLE	3' - 0"	7' - 0"	HM	PT	1	ALUM	AC	7 OR 10/ A8.01	20&26/A8.01	9/A8.01	2		Yes	Yes
AD6-2	AD-6	BLDG ADMIN	C	SINGLE	3' - 0"	7' - 0"	HM	PT	1	ALUM	AC	7 OR 10/ A8.01	20&26/A8.01	9/A8.01	1		Yes	Yes
AD6-1	AD-6	BLDG ADMIN	C	SINGLE	3' - 0"	7' - 0"	HM	PT	1	ALUM	AC	7 OR 10/ A8.01	20&26/A8.01	9/A8.01	1		Yes	Yes
AD7-1	AD-7	BLDG ADMIN	C	SINGLE	3' - 0"	7' - 0"	HM	PT	1	ALUM	AC	7 OR 10/ A8.01	20&26/A8.01	9/A8.01	2		Yes	Yes
AD8-1	AD-8	BLDG ADMIN	C	SINGLE	3' - 0"	7' - 0"	HM	PT	1	ALUM	AC	7 OR 10/ A8.01	20&26/A8.01	9/A8.01	2		Yes	Yes
B1-2	B-1	BLDG A-B	C	SINGLE	3' - 0"	7' - 0"	HM	PT	1	ALUM	AC	7 OR 10/ A8.01	20&26/A8.01	9/A8.01	6		No	Yes
B1-1	B-1	BLDG A-B	C	SINGLE	3' - 0"	7' - 0"	HM	PT	1	ALUM	AC	7 OR 10/ A8.01	20&26/A8.01	9/A8.01	1		Yes	Yes
B2-1	B-2	BLDG A-B	C	SINGLE	3' - 0"	7' - 0"	HM	PT	1	ALUM	AC	7 OR 10/ A8.01	20&26/A8.01	9/A8.01	1		Yes	Yes
B2-2	B-2	BLDG A-B	C	SINGLE	3' - 0"	7' - 0"	HM	PT	1	ALUM	AC	7 OR 10/ A8.01	20&26/A8.01	9/A8.01	6		No	Yes
B3-1	B-3	BLDG A-B	C	SINGLE	3' - 0"	7' - 0"	HM	PT	1	ALUM	AC	7 OR 10/ A8.01	20&26/A8.01	9/A8.01	1		Yes	Yes
B3-2	B-3	BLDG A-B	C	SINGLE	3' - 0"	7' - 0"	HM	PT	1	ALUM	AC	7 OR 10/ A8.01	20&26/A8.01	9/A8.01	6		No	Yes
B4-1	B-4	BLDG A-B	C	SINGLE	3' - 0"	7' - 0"	HM	PT	1	ALUM	AC	7 OR 10/ A8.01	20&26/A8.01	9/A8.01	1		Yes	Yes
B4-2	B-4	BLDG A-B	C	SINGLE	3' - 0"	7' - 0"	HM	PT	1	ALUM	AC	7 OR 10/ A8.01	20&26/A8.01	9/A8.01	6		No	Yes
B6-1	B-6	BLDG A-B	C	SINGLE	3' - 0"	7' - 0"	HM	PT	1	ALUM	AC	7 OR 10/ A8.01	20&26/A8.01	9/A8.01	2		Yes	Yes
C1-1	C-1	BLDG C-D	C	SINGLE	3' - 0"	7' - 0"	HM	PT	1	ALUM	AC	7 OR 10/ A8.01	20&26/A8.01	9/A8.01	1		Yes	Yes
C1-2	C-1	BLDG C-D	C	SINGLE	3' - 0"	7' - 0"	HM	PT	1	ALUM	AC	7 OR 10/ A8.01	20&26/A8.01	9/A8.01	6		No	Yes
C2-1	C-2	BLDG C-D	C	SINGLE	3' - 0"	7' - 0"	HM	PT	1	ALUM	AC	7 OR 10/ A8.01	20&26/A8.01	9/A8.01	1		Yes	Yes
C2-2	C-2	BLDG C-D	C	SINGLE	3' - 0"	7' - 0"	HM	PT	1	ALUM	AC	7 OR 10/ A8.01	20&26/A8.01	9/A8.01	6		No	Yes
C3-1	C-3	BLDG C-D	C	SINGLE	3' - 0"	7' - 0"	HM	PT	1	ALUM	AC	7 OR 10/ A8.01	20&26/A8.01	9/A8.01	1		Yes	Yes
C3-2	C-3	BLDG C-D	C	SINGLE	3' - 0"	7' - 0"	HM	PT	1	ALUM	AC	7 OR 10/ A8.01	20&26/A8.01	9/A8.01	6		No	Yes
C4-1	C-4	BLDG C-D	C	SINGLE	3' - 0"	7' - 0"	HM	PT	1	ALUM	AC	7 OR 10/ A8.01	20&26/A8.01	9/A8.01	1		Yes	Yes
C4-2	C-4	BLDG C-D	C	SINGLE	3' - 0"	7' - 0"	HM	PT	1	ALUM	AC	7 OR 10/ A8.01	20&26/A8.01	9/A8.01	6		No	Yes
D1-1	D-1	BLDG C-D	C	SINGLE	3' - 0"	7' - 0"	HM	PT	1	ALUM	AC	7 OR 10/ A8.01	20&26/A8.01	9/A8.01	1		Yes	Yes
D1-2	D-1	BLDG C-D	C	SINGLE	3' - 0"	7' - 0"	HM	PT	1	ALUM	AC	7 OR 10/ A8.01	20&26/A8.01	9/A8.01	6		No	Yes
D2-1	D-2	BLDG C-D	C	SINGLE	3' - 0"	7' - 0"	HM	PT	1	ALUM	AC	7 OR 10/ A8.01	20&26/A8.01	9/A8.01	1		Yes	Yes
D2-2	D-2	BLDG C-D	C	SINGLE	3' - 0"	7' - 0"	HM	PT	1	ALUM	AC	7 OR 10/ A8.01	20&26/A8.01	9/A8.01	6		No	Yes
D3-1	D-3	BLDG C-D	C	SINGLE	3' - 0"	7' - 0"	HM	PT	1	ALUM	AC	7 OR 10/ A8.01	20&26/A8.01	9/A8.01	1		Yes	Yes
D3-2	D-3	BLDG C-D	C	SINGLE	3' - 0"	7' - 0"	HM	PT	1	ALUM	AC	7 OR 10/ A8.01	20&26/A8.01	9/A8.01	6		No	Yes
D4-1	D-4	BLDG C-D	C	SINGLE	3' - 0"	7' - 0"	HM	PT	1	ALUM	AC	7 OR 10/ A8.01	20&26/A8.01	9/A8.01	1		Yes	Yes
D4-2	D-4	BLDG C-D	C	SINGLE	3' - 0"	7' - 0"	HM	PT	1	ALUM	AC	7 OR 10/ A8.01	20&26/A8.01	9/A8.01	6		No	Yes
K1-2	K-1	BLDG K	E	DOUBLE	6' - 0"	7' - 0"	HM	PT	1	ALUM	AC	7 OR 10/ A8.01	20&26/A8.01	9/A8.01	3		Yes	Yes
K1-1	K-1	BLDG K	C	SINGLE	3' - 0"	7' - 0"	HM	PT	1	ALUM	AC	7 OR 10/ A8.01	20&18/A8.01	9/A8.01	1		Yes	Yes
K2-2	K-2	BLDG K	E	DOUBLE	6' - 0"	7' - 0"	HM	PT	1	ALUM	AC	7 OR 10/ A8.01	20&26/A8.01	9/A8.01	3		Yes	Yes
K2-1	K-2	BLDG K	C	SINGLE	3' - 0"	7' - 0"	HM	PT	1	ALUM	AC	7 OR 10/ A8.01	20&18/A8.01	9/A8.01	1		Yes	Yes
K1-3	K-5	BLDG K	B	SINGLE	3' - 0"	7' - 0"	SCWD	PT	2	HM	AC	7 OR 10/ A8.01	13/A8.01	13/A8.01			No	
K1-4	K-6	BLDG K	B	SINGLE	3' - 0"	7' - 0"	SCWD	PT	2	HM	AC	7 OR 10/ A8.01	13/A8.01	13/A8.01			No	
K1-5	K-7	BLDG K	B	SINGLE	3' - 0"	7' - 0"	SCWD	PT	2	HM	AC	7 OR 10/ A8.01	13/A8.01	13/A8.01			No	
K2-3	K-8	BLDG K	B	SINGLE	3' - 0"	7' - 0"	SCWD	PT	2	HM	AC	7 OR 10/ A8.01	13/A8.01	13/A8.01			No	
K2-4	K-9	BLDG K	B	SINGLE	3' - 0"	7' - 0"	SCWD	PT	2	HM	AC	7 OR 10/ A8.01	13/A8.01	13/A8.01			No	
K2-5	K-10	BLDG K	B	SINGLE	3' - 0"	7' - 0"	SCWD	PT	2	HM	AC	7 OR 10/ A8.01	13/A8.01	13/A8.01			No	



NOTE:

G-1 = INSULATED, TINTED, TEMPERED GLASS

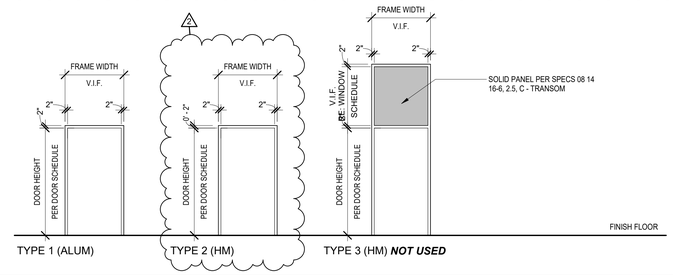
GLASS COLOR TO BE VERIFIED BY THE DISTRICT

DOOR & WINDOW SCHEDULE ABBREVIATIONS

ALUM	ALUMINUM
AC	ANODIZED CLEAR
FF	FACTORY FINISH
HM	HOLLOW METAL
N/A	NOT APPLICABLE
PT	PAINT
SC	SOLID CORE
ST	STAIN
WD	WOOD

DOOR TYPE LEGEND

1/4" = 1'-0"

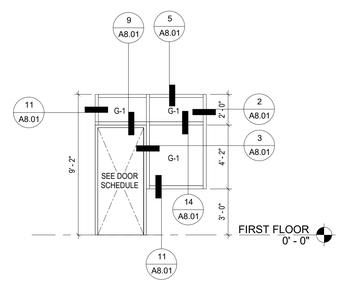


GENERAL WINDOW FRAMING NOTES

1. (N) ALUMINUM FRAME . PER SPEC SEC. 08 41 13
2. G-1 - TEMPERED GLASS (N) 1" INSULATED GLASS. SEE GLAZING SPECS.
3. USE BRONZE GLAZING COLOR
4. FIELD VERIFY ALL DIMENSIONS

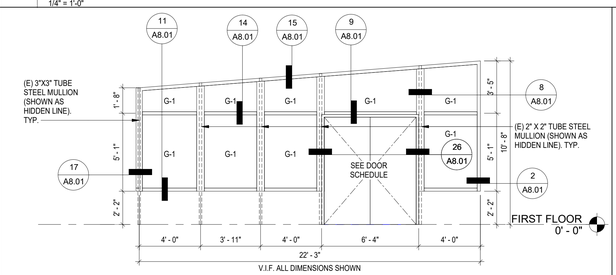
FRAME TYPE LEGEND

1/4" = 1'-0"



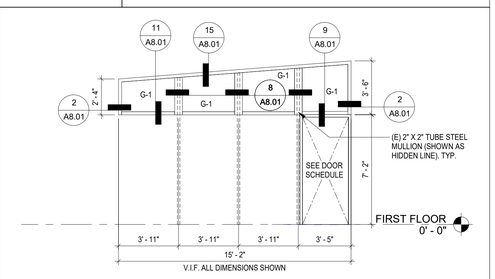
W13 & W14 ARE SIMILAR BUT WITH MIRROR LAYOUT.

19 WINDOW FRAME ELEVATION - W13 & W14
1/4" = 1'-0"



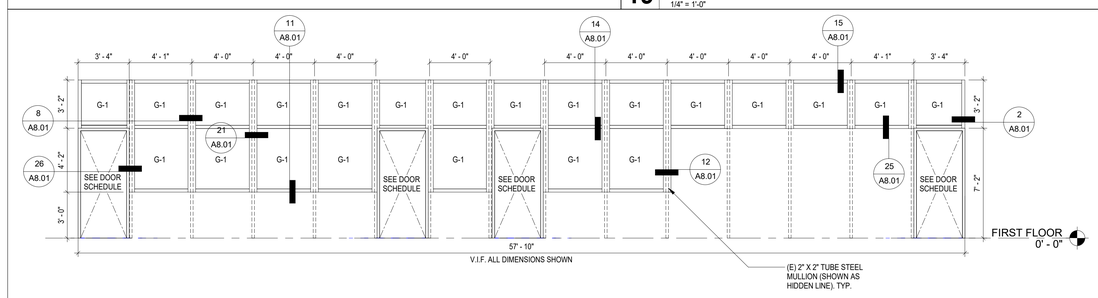
W11 & W12 ARE SIMILAR BUT WITH MIRROR LAYOUT.

15 WINDOW FRAME ELEVATION - W11 & W12
1/4" = 1'-0"

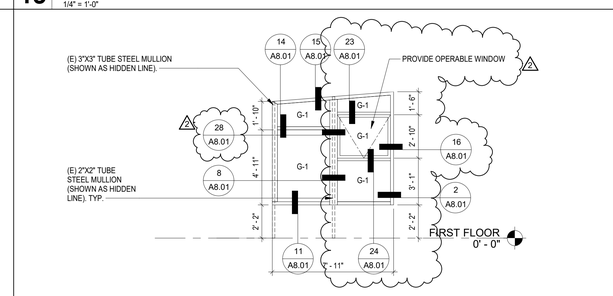


W9 & W10 ARE SIMILAR BUT WITH MIRROR LAYOUT.

13 WINDOW FRAME ELEVATION - W9 & W10
1/4" = 1'-0"

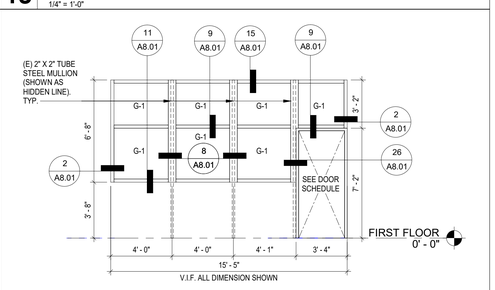


12 WINDOW FRAME ELEVATION - W8
1/4" = 1'-0"

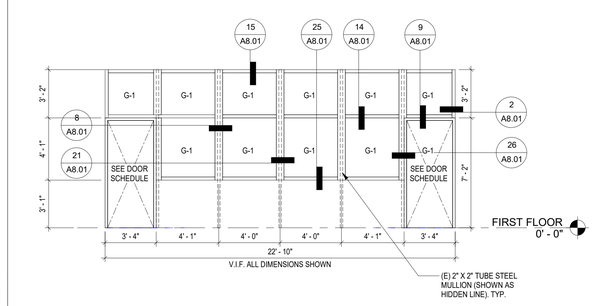


W6 & W7 ARE SIMILAR BUT WITH MIRROR LAYOUT.

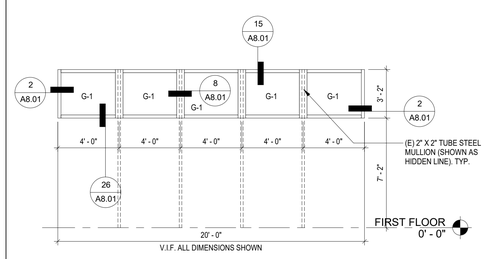
9 WINDOW FRAME ELEVATION - W6 & W7
1/4" = 1'-0"



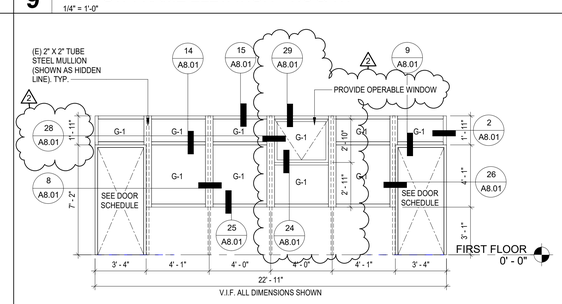
7 WINDOW FRAME ELEVATION - W5
1/4" = 1'-0"



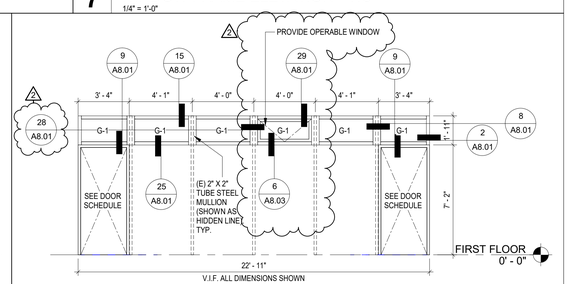
6 WINDOW FRAME ELEVATION - W4
1/4" = 1'-0"



4 WINDOW FRAME ELEVATION - W3
1/4" = 1'-0"



3 WINDOW FRAME ELEVATION - W2
1/4" = 1'-0"



1 WINDOW FRAME ELEVATION - W1
1/4" = 1'-0"

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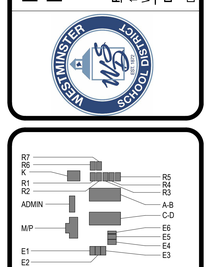
EASTWOOD ELEMENTARY SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
13552 University St.
Westminster, CA 92683

DSA Submittal

DSA APPL NO.: 04-121953 DSA FILE NO.: 30-43



KEY PLAN

NORTH: PLAN

Consultant

Architect

CLIENT
WESTMINSTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
03/31/23	04-121953

REVISIONS

No.	Description	Date
1	ADDENDUM 2	02/07/24

DSA Submittal

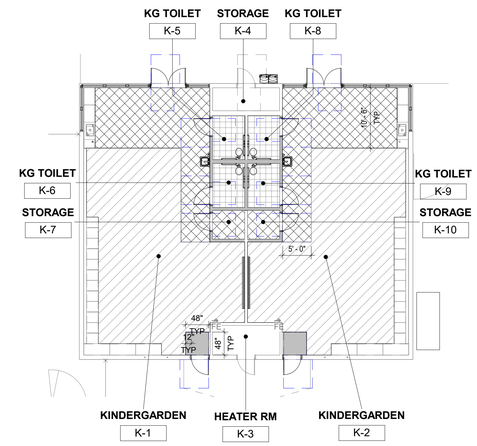
DOOR SCHEDULE & WINDOW FRAMING ELEVATION

A9.01

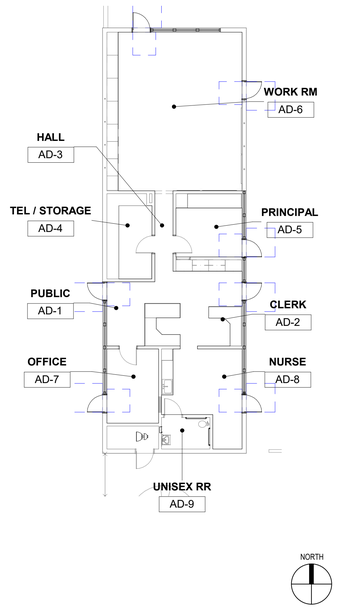
A10.01 - FINISH PLANS & SCHEDULE

FINISH SCHEDULE

ROOM NUMBER	ROOM NAME	(E) FLOOR MATERIAL	FLOOR MATERIAL	FLOOR FINISH	BASE MATERIAL	BASE FINISH	NORTH WALL MATERIAL	NORTH WALL FINISH	EAST WALL MATERIAL	EAST WALL FINISH	SOUTH WALL MATERIAL	SOUTH WALL FINISH	WEST WALL MATERIAL	WEST WALL FINISH	CEILING MATERIAL	CEILING FINISH
A-1	CLASSROOM	CPT	CPT	CPT1	RB	RB1	(E) BRICK	P1	(E) GYP	TS1	(N) GYP	TS1	(E) BRICK	P1 & TS1	ACP	ACP1
A-2	CLASSROOM	CPT	CPT & LVT	CPT1 & LVT1	RB	RB1	(E) BRICK	P1	(E) GYP	TS1	(N) GYP	TS1	(E) GYP	P1 & TS1	ACP	ACP1
A-3	CLASSROOM	CPT	CPT & LVT	CPT1 & LVT1	RB	RB1	(E) BRICK	P1	(E) GYP	P1 & TS1	(N) GYP	TS1	(E) GYP	TS1	ACP	ACP1
A-4	CLASSROOM	CPT	CPT & LVT	CPT1 & LVT1	RB	RB1	(E) BRICK	P1	(E) GYP	TS1	(N) GYP	TS1	(E) GYP	P1 & TS1	ACP	ACP1
A-6	COUNSELOR	CPT	LVT	LVT1	RB	RB1	(E) GYP	P1	(E) BRICK & (E) GYP	P1	(E) GYP	P1	(E) GYP	P1	ACP	ACP1
AD-1	PUBLIC	VCT	(E)	(E)	(E)	(E)	(E) GYP	P1	-	-	(E) GYP	P1	(E) BRICK	P1	ACP	ACP1
AD-2	CLERK	VCT	(E)	(E)	(E)	(E)	(E) GYP	P1	(E) GYP	P1	(E) GYP	P1	-	-	ACP	ACP1
AD-3	HALL	VCT	(E)	(E)	(E)	(E)	(E) GYP	P1	(E) GYP	P1	-	-	(E) GYP	P1	ACP	ACP1
AD-5	PRINCIPAL	VCT	(E)	(E)	(E)	(E)	(E) GYP	P1	(E) BRICK	P1	(E) GYP	P1	(E) GYP	P1	ACP	ACP1
AD-6	WORK RM	VCT	(E)	(E)	(E)	(E)	(E) BRICK & (E) GYP	P1	(E) BRICK	P1	(E) GYP	P1	(E) BRICK	P1	ACP	ACP1
AD-7	OFFICE	VCT	(E)	(E)	(E)	(E)	(E) GYP	P1	(E) GYP	P1	(E) GYP	P1	(E) BRICK	P1	ACP	ACP1
AD-8	NURSE	VCT	(E)	(E)	(E)	(E)	(E) GYP	P1	(E) BRICK & (E) GYP	P1	(E) BRICK & (E) GYP	P1	(E) GYP	P1	ACP	ACP1
AD-9	UNISEX RR	CT	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	GYP	P1
AD-11	HEATER ROOM	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)
B-1	LIBRARY	CPT	CPT	CPT1	RB	RB1	(E) GYP	P1	(E) GYP	P1	(E) BRICK	P1	(E) BRICK	P1	ACP	ACP1
B-2	CLASSROOOM	CPT	CPT & LVT	CPT1 & LVT1	RB	RB1	(E) GYP	TS1	(E) GYP	TS1	(E) BRICK	P1	(E) GYP	P1 & TS1	ACP	ACP1
B-3	CLASSROOM	CPT	CPT & LVT	CPT1 & LVT1	RB	RB1	(E) GYP	TS1	(E) GYP	P1 & TS1	(E) BRICK	P1	(E) GYP	TS1	ACP	ACP1
B-4	CLASSROOM	CPT	CPT & LVT	CPT1 & LVT1	RB	RB1	(E) GYP	TS1	(E) GYP	TS1	(E) BRICK	P1	(E) GYP	P1 & TS1	ACP	ACP1
B-6	COUNSELOR	CPT	LVT	LVT1	RB	RB1	(E) GYP	P1	(E) BRICK & (E) GYP	P1	(E) GYP	P1	(E) GYP	P1	ACP	ACP1
C-1	CLASSROOM	CPT	CPT & LVT	CPT1 & LVT1	RB	RB1	(E) BRICK	P1	(E) GYP	P1 & TS1	(E) GYP	TS1	(E) BRICK	TS1	ACP	ACP1
C-2	CLASSROOM	CPT	CPT & LVT	CPT1 & LVT1	RB	RB1	(E) BRICK	P1	(E) GYP	TS1	(E) GYP	TS1	(E) GYP	P1 & TS1	ACP	ACP1
C-3	CLASSROOM	CPT	CPT & LVT	CPT1 & LVT1	RB	RB1	(E) BRICK	P1	(E) GYP	P1 & TS1	(E) GYP	TS1	(E) GYP	TS1	ACP	ACP1
C-4	CLASSROOM	CPT	CPT & LVT	CPT1 & LVT1	RB	RB1	(E) BRICK	P1	(E) GYP	TS1	(E) GYP	TS1	(E) GYP	P1 & TS1	ACP	ACP1
D-1	CLASSROOM	CPT	CPT & LVT	CPT1 & LVT1	RB	RB1	(E) GYP	TS1	(E) GYP	P1 & TS1	(E) BRICK	P1	(E) BRICK	TS1	ACP	ACP1
D-2	CLASSROOM	CPT	CPT & LVT	CPT1 & LVT1	RB	RB1	(E) GYP	TS1	(E) GYP	TS1	(E) BRICK	P1	(E) GYP	P1 & TS1	ACP	ACP1
D-3	CLASSROOM	CPT	CPT & LVT	CPT1 & LVT1	RB	RB1	(E) GYP	TS1	(E) GYP	P1 & TS1	(E) BRICK	P1	(E) GYP	TS1	ACP	ACP1
D-4	CLASSROOM	CPT	CPT & LVT	CPT1 & LVT1	RB	RB1	(E) GYP	TS1	(E) GYP	TS1	(E) BRICK	P1	(E) GYP	P1 & TS1	ACP	ACP1
K-1	KINDERGARDEN	CPT & VCT	CPT & LVT	CPT1 & LVT1	RB	RB1	(E) GYP	P1	(E) GYP	P1 & TS1	(E) BRICK & (E) GYP	P1	(E) BRICK	P1	ACP & GYP	ACP1 & P1
K-2	KINDERGARDEN	CPT & VCT	CPT & LVT	CPT1 & LVT1	RB	RB1	(E) GYP	P1	(E) BRICK	P1	(E) BRICK & (E) GYP	P1	(E) GYP/GUT/CT	P1 & TS1	ACP & GYP	ACP1 & P1
K-5	KG TOILET	CT	CT	CT1	CT	CT1	(E) GYP	P1	(N) GYP	P1	(N) GYP	P1	(N) GYP	P1	GYP	P1
K-6	KG TOILET	CT	CT	CT1	CT	CT1	CT	CT1	CT	CT1	CT	CT1	CT	CT1	CT	CT1
K-7	STORAGE	VCT	LVT	LVT1	RB	RB1	(N) GYP	P1	(E) GYP	P1	(N) GYP	P1	(N) GYP	P1	GYP	P1
K-8	KG TOILET	CT	CT	CT1	CT	CT1	CT	P1	CT	P1	CT	P1	CT	P1	GYP	P1
K-9	KG TOILET	CT	CT	CT1	CT	CT1	CT	CT1	CT	CT1	CT	CT1	CT	CT1	CT	CT1
K-10	STORAGE	VCT	LVT	LVT1	RB	RB1	(N) GYP	P1	(N) GYP	P1	(N) GYP	P1	(E) GYP	P1	GYP	P1



20 FINISH FLOOR PLAN - BLDG "K"
3/32" = 1'-0"



19 FINISH FLOOR PLAN - BLDG ADMIN
3/32" = 1'-0"

FINISH FLOOR MATERIALS LEGEND

- EXISTING FLOOR FINISH TO REMAIN
  RE: FINISH SCHEDULE
- CPT-1, CARPET FLOORING TYPE 1
  RE: FINISH SCHEDULE
- LVT-1, LUXURY VINYL TILE
  RE: FINISH SCHEDULE
- CT-1 CERAMIC TILE FLOORING
  RE: FINISH SCHEDULE
- WALK-OFF MAT,
  TRANSITION FLUSHED W/ ADJACENT CARPET.
  RE: FLOOR FINISH PLAN
  48" DEPTH, 12" EXTEND ON PUSH SIDE, UNLESS SHOWN AS FLUSH TO DOOR WIDTH OR EDGE OF WALL

GENERAL FINISH LEGEND NOTES

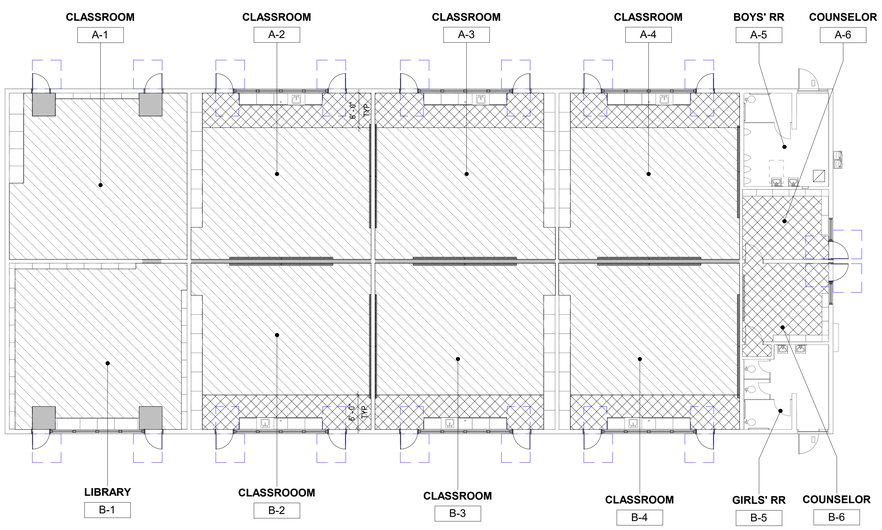
1. ALL FINISH MATERIALS SHALL MEET THE FLAME SPREAD RATINGS PER THE BUILDING CODE. PROVIDE CLASS A MATERIALS.
2. REFER TO INTERIOR ELEVATIONS FOR SPECIFIC MATERIAL LOCATIONS.
3. PAINT ALL EXPOSED STRUCT. MEMBERS, STRUCT. DECK, DUCTWORK, DIFFUSERS, PIPING, CONDUIT, EQUIP. HOUSINGS, LIGHT FIXTURE HOUSINGS, CABLE SUPPORTS, CABLE TRAYS, EQUIP. SUPPORTS, HANGERS, ETC. TO MATCH ADJACENT SURFACES.
4. PAINT ALL NON-FACTORY FINISHED EXPOSED METAL.
5. REFER TO TYPICAL FLOORING TRANSITION DETAILS FOR FLOORING MATERIAL TRANSITIONS.
6. ALL FLOORING TRANSITIONS AT DOORS SHALL BE LOCATED UNDER THE DOOR IN THE CLOSED POSITION, U.N.O.
7. PROTECT ALL FINISHED FLOORING SURFACES FROM DAMAGE DURING ALL CONSTRUCTION PHASES.
8. PROVIDE AND INSTALL BULLNOSE TRIM AT ALL TRANSITIONS FROM CERAMIC WALL TILE TO OTHER MATERIAL U.N.O.
9. REFER TO REFLECTED CEILING PLANS FOR CEILING HEIGHTS.
10. ALL ELECTRICAL DEVICE COVERS ARE TO BE WHITE U.N.O.
11. ALL CARPET PATTERNS TO RUN PARALLEL TO CORRIDOR, U.N.O.
12. PAINT ALL HOLLOW METAL DOOR FRAMES TO MATCH ADJACENT WALL COLOR U.N.O.
13. REMOVE EXISTING PAINT AT EXISTING BRICK WALL. PREPARE BRICK WALL SMOOTH TO RECEIVE NEW PAINT FINISH. WHERE OCCURS.
14. RE-PAINT ALL EXISTING CASEWORK (EXCLUDE PLAM/STONE COUNTERTOPS).
15. PROVIDE APPROPRIATE PREPARATION, CLEANING AND BASE MATERIAL TO EXISTING INTERIOR SURFACES TO RECEIVE NEW FINISHES PER FINISH SPECS.
16. PROVIDE APPROPRIATE PREPARATION, CLEANING AND BASE MATERIAL TO EXISTING BRICK WALL BEFORE RECEIVING NEW FINISH MATERIAL. PER FINISH SPECIFICATION.
17. PROVIDE CONSISTENT FLAT SURFACE USING CEMENT FLOAT AND APPROPRIATE BASE MATERIAL AT EXISTING BRICK WALL TO RECEIVE NEW TILE FINISH, PER FINISH SPECIFICATIONS.

MATERIAL FINISH ABBREVIATIONS

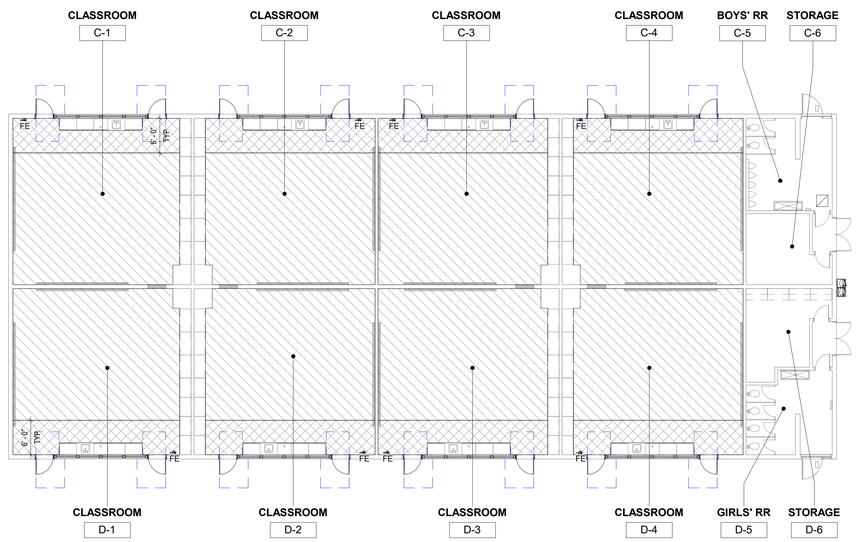
ACP1	2'X2' ACOUSTICAL CEILING PANEL , SEE SPECIFICATIONS
CPT1	CARPET TYPE 1, SEE SPECIFICATIONS
CT1	CERAMIC TILE 1, SEE SPECIFICATIONS
CTB1	CERAMIC TILE BASE 1, SEE SPECIFICATIONS
VCT1	VINYL COMPOSITE TILE 1, SEE SPECIFICATIONS
LVT1	LUXURY VINYL TILE 1, SEE SPECIFICATIONS
P1	PAINT TO BE SELECTED BY OWNER, SEE SPECIFICATIONS
RB1	RUBBER BASE, SEE SPECIFICATIONS
(E)	(E) FINISH TO REMAIN
MF	MANUFACTURERS FINISH, SEE SPECIFICATIONS
TS1	TACKABLE SURFACE, SEE SPECIFICATIONS

MATERIAL ABBREVIATIONS

ACP	ACOUSTIC CEILING PANEL
CONC	CONCRETE
CPT	CARPET
CT	CERAMIC TILE
CTB	CERAMIC TILE BASE
GUT	GLUE UP TILE
GYP	GYPSUM BOARD
P	PAINT
RB	RUBBER BASE
VCT	VINYL COMPOSITE TILE
LVT	LUXURY VINYL TILE
(E)	(E) FINISH TO REMAIN



6 FINISH FLOOR PLAN - BLDG "A-B"
3/32" = 1'-0"



4 FINISH FLOOR PLAN - BLDG "C-D"
3/32" = 1'-0"

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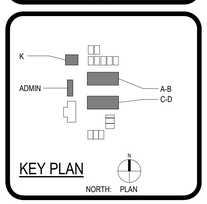
EASTWOOD ELEMENTARY SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
13552 University St.
Westminster, CA 92683

DSA Submittal

DSA APPL NO.: 04-121953 DSA FILE NO.: 30-43



Consultant

Architect

CLIENT
WESTMINSTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
03/31/23	04-121953

REVISIONS

No.	Description	Date
2	ADDENDUM 2	02/07/24

DSA Submittal

FINISH PLANS & SCHEDULE

A10.01

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ROOFTOP PACKAGED AIR CONDITIONING (HEAT PUMP) UNIT SCHEDULE

UNIT	MANUFACTURER & MODEL NO.	CFM	TONNAGE	TYPE	ESP (IN. WG)	COOLING CAP (MBH) TOTAL	COOLING CAP (MBH) SENS.	EVAP. ENT. AIR TEMP. (°F) DB	EVAP. ENT. AIR TEMP. (°F) WB	EVAP. LEAV. AIR TEMP. (°F) DB	EVAP. LEAV. AIR TEMP. (°F) WB	ENT. COND. TEMP. (°F) SUMMER DB	ENT. COND. TEMP. (°F) SUMMER WB	ENT. COND. TEMP. (°F) WINTER DB	EER SEER	HEATING CAPACITIES (MBH) TOTAL	HEATING CAPACITIES (MBH) INTEGRATED	COP HIGH TEMP.	COP LOW TEMP.	HSPF	INDOOR FAN NO.	INDOOR FAN RPM	INDOOR FAN HP/ BHP	INDOOR FAN DRIVE	COMPRESSOR NO.	COMPRESSOR RLA	COMPRESSOR LRA	ECONOMIZER WITH POWER EXHAUST PART #	CFM	HP	FLA	MCA	MOCP	V	PHASE	HZ	OPER. WT. (LBS)	ELECTRICAL OFM NO.	OFM (FLA)	IFM (FLA)	ELECTRIC HEATER (FLA)	V	PHASE	HZ	UNIT MCA	UNIT MCOP	FILTERS (IN.) MERV 13	OPER. WT. (UNIT + CURB + ECONOMIZER) (LBS)	OSA CFM	ANCHORAGE DETAIL	REMARKS
HP A1	CARRIER 50GCGM05	1,600	4	VERTICAL	1.0	48.15	40.42	80.4	65.2	56.9	55.3	91.0	68.0	36.0	16.20	38.97	37.24	3.7	-	8.7	1	1878	0.71	DIRECT	1	14.0	83.0	MICROMETL PECD-SRT12CA-D2DH-2LH	1,600	0.5	3.9	4.9	8.8	208	3	60	191	1	1.5	7.1	-	230	3	60	27	30	(4) 16"x16"x2"	590 + 98 + 49 = 737	360	1 M6.01	2 3 5 7 8 9 10 11 12 13
HP A2	CARRIER 50GCGM05	1,600	4	VERTICAL	1.0	48.15	40.42	80.4	65.2	56.9	55.3	91.0	68.0	36.0	16.20	38.97	37.24	3.7	-	8.7	1	1878	0.71	DIRECT	1	14.0	83.0	MICROMETL PECD-SRT12CA-D2DH-2LH	1,600	0.5	3.9	4.9	8.8	208	3	60	191	1	1.5	7.1	-	230	3	60	27	30	(4) 16"x16"x2"	590 + 98 + 49 = 737	360	1 M6.01	2 3 5 7 8 9 10 11 12 13
HP A3	CARRIER 50GCGM05	1,600	4	VERTICAL	1.0	48.15	40.42	80.4	65.2	56.9	55.3	91.0	68.0	36.0	16.20	38.97	37.24	3.7	-	8.7	1	1878	0.71	DIRECT	1	14.0	83.0	MICROMETL PECD-SRT12CA-D2DH-2LH	1,600	0.5	3.9	4.9	8.8	208	3	60	191	1	1.5	7.1	-	230	3	60	27	30	(4) 16"x16"x2"	590 + 98 + 49 = 737	360	1 M6.01	2 3 5 7 8 9 10 11 12 13
HP A4	CARRIER 50GCGM05	1,600	4	VERTICAL	1.0	48.15	40.42	80.4	65.2	56.9	55.3	91.0	68.0	36.0	16.20	38.97	37.24	3.7	-	8.7	1	1878	0.71	DIRECT	1	14.0	83.0	MICROMETL PECD-SRT12CA-D2DH-2LH	1,600	0.5	3.9	4.9	8.8	208	3	60	191	1	1.5	7.1	-	230	3	60	27	30	(4) 16"x16"x2"	590 + 98 + 49 = 737	360	1 M6.01	2 3 5 7 8 9 10 11 12 13
HP B1	CARRIER 50GCGM05	1,600	4	VERTICAL	1.0	48.15	40.42	80.4	65.2	56.9	55.3	91.0	68.0	36.0	16.20	38.97	37.24	3.7	-	8.7	1	1878	0.71	DIRECT	1	14.0	83.0	MICROMETL PECD-SRT12CA-D2DH-2LH	1,600	0.5	3.9	4.9	8.8	208	3	60	191	1	1.5	7.1	-	230	3	60	27	30	(4) 16"x16"x2"	590 + 98 + 49 = 737	360	1 M6.01	2 3 5 7 8 9 10 11 12 13
HP B2	CARRIER 50GCGM05	1,600	4	VERTICAL	1.0	48.15	40.42	80.4	65.2	56.9	55.3	91.0	68.0	36.0	16.20	38.97	37.24	3.7	-	8.7	1	1878	0.71	DIRECT	1	14.0	83.0	MICROMETL PECD-SRT12CA-D2DH-2LH	1,600	0.5	3.9	4.9	8.8	208	3	60	191	1	1.5	7.1	-	230	3	60	27	30	(4) 16"x16"x2"	590 + 98 + 49 = 737	360	1 M6.01	2 3 5 7 8 9 10 11 12 13
HP B3	CARRIER 50GCGM05	1,600	4	VERTICAL	1.0	48.15	40.42	80.4	65.2	56.9	55.3	91.0	68.0	36.0	16.20	38.97	37.24	3.7	-	8.7	1	1878	0.71	DIRECT	1	14.0	83.0	MICROMETL PECD-SRT12CA-D2DH-2LH	1,600	0.5	3.9	4.9	8.8	208	3	60	191	1	1.5	7.1	-	230	3	60	27	30	(4) 16"x16"x2"	590 + 98 + 49 = 737	360	1 M6.01	2 3 5 7 8 9 10 11 12 13
HP B4	CARRIER 50GCGM05	1,600	4	VERTICAL	1.0	48.15	40.42	80.4	65.2	56.9	55.3	91.0	68.0	36.0	16.20	38.97	37.24	3.7	-	8.7	1	1878	0.71	DIRECT	1	14.0	83.0	MICROMETL PECD-SRT12CA-D2DH-2LH	1,600	0.5	3.9	4.9	8.8	208	3	60	191	1	1.5	7.1	-	230	3	60	27	30	(4) 16"x16"x2"	590 + 98 + 49 = 737	360	1 M6.01	2 3 5 7 8 9 10 11 12 13
HP C1	CARRIER 50GCGM05	1,600	4	VERTICAL	1.0	48.15	40.42	80.4	65.2	56.9	55.3	91.0	68.0	36.0	16.20	38.97	37.24	3.7	-	8.7	1	1878	0.71	DIRECT	1	14.0	83.0	MICROMETL PECD-SRT12CA-D2DH-2LH	1,600	0.5	3.9	4.9	8.8	208	3	60	191	1	1.5	7.1	-	230	3	60	27	30	(4) 16"x16"x2"	590 + 98 + 49 = 737	170	1 M6.01	2 3 5 7 8 9 10 11 12 13
HP C2	CARRIER 50GCGM05	1,600	4	VERTICAL	1.0	48.15	40.42	80.4	65.2	56.9	55.3	91.0	68.0	36.0	16.20	38.97	37.24	3.7	-	8.7	1	1878	0.71	DIRECT	1	14.0	83.0	MICROMETL PECD-SRT12CA-D2DH-2LH	1,600	0.5	3.9	4.9	8.8	208	3	60	191	1	1.5	7.1	-	230	3	60	27	30	(4) 16"x16"x2"	590 + 98 + 49 = 737	360	1 M6.01	2 3 5 7 8 9 10 11 12 13
HP C3	CARRIER 50GCGM05	1,600	4	VERTICAL	1.0	48.15	40.42	80.4	65.2	56.9	55.3	91.0	68.0	36.0	16.20	38.97	37.24	3.7	-	8.7	1	1878	0.71	DIRECT	1	14.0	83.0	MICROMETL PECD-SRT12CA-D2DH-2LH	1,600	0.5	3.9	4.9	8.8	208	3	60	191	1	1.5	7.1	-	230	3	60	27	30	(4) 16"x16"x2"	590 + 98 + 49 = 737	360	1 M6.01	2 3 5 7 8 9 10 11 12 13
HP C4	CARRIER 50GCGM05	1,600	4	VERTICAL	1.0	48.15	40.42	80.4	65.2	56.9	55.3	91.0	68.0	36.0	16.20	38.97	37.24	3.7	-	8.7	1	1878	0.71	DIRECT	1	14.0	83.0	MICROMETL PECD-SRT12CA-D2DH-2LH	1,600	0.5	3.9	4.9	8.8	208	3	60	191	1	1.5	7.1	-	230	3	60	27	30	(4) 16"x16"x2"	590 + 98 + 49 = 737	220	1 M6.01	2 3 5 7 8 9 10 11 12 13
HP D1	CARRIER 50GCGM05	1,600	4	VERTICAL	1.0	48.15	40.42	80.4	65.2	56.9	55.3	91.0	68.0	36.0	16.20	38.97	37.24	3.7	-	8.7	1	1878	0.71	DIRECT	1	14.0	83.0	MICROMETL PECD-SRT12CA-D2DH-2LH	1,600	0.5	3.9	4.9	8.8	208	3	60	191	1	1.5	7.1	-	230	3	60	27	30	(4) 16"x16"x2"	590 + 98 + 49 = 737	220	1 M6.01	2 3 5 7 8 9 10 11 12 13
HP D2	CARRIER 50GCGM05	1,600	4	VERTICAL	1.0	48.15	40.42	80.4	65.2	56.9	55.3	91.0	68.0	36.0	16.20	38.97	37.24	3.7	-	8.7	1	1878	0.71	DIRECT	1	14.0	83.0	MICROMETL PECD-SRT12CA-D2DH-2LH	1,600	0.5	3.9	4.9	8.8	208	3	60	191	1	1.5	7.1	-	230	3	60	27	30	(4) 16"x16"x2"	590 + 98 + 49 = 737	360	1 M6.01	2 3 5 7 8 9 10 11 12 13
HP D3	CARRIER 50GCGM05	1,600	4	VERTICAL	1.0	48.15	40.42	80.4	65.2	56.9	55.3	91.0	68.0	36.0	16.20	38.97	37.24	3.7	-	8.7	1	1878	0.71	DIRECT	1	14.0	83.0	MICROMETL PECD-SRT12CA-D2DH-2LH	1,600	0.5	3.9	4.9	8.8	208	3	60	191	1	1.5	7.1	-	230	3	60	27	30	(4) 16"x16"x2"	590 + 98 + 49 = 737	220	1 M6.01	2 3 5 7 8 9 10 11 12 13
HP D4	CARRIER 50GCGM05	1,600	4	VERTICAL	1.0	48.15	40.42	80.4	65.2	56.9	55.3	91.0	68.0	36.0	16.20	38.97	37.24	3.7	-	8.7	1	1878	0.71	DIRECT	1	14.0	83.0	MICROMETL PECD-SRT12CA-D2DH-2LH	1,600	0.5	3.9	4.9	8.8	208	3	60	191	1	1.5	7.1	-	230	3	60	27	30	(4) 16"x16"x2"	590 + 98 + 49 = 737	130	1 M6.01	2 3 5 7 8 9 10 11 12 13

NOTES:

1. SCHEDULED LOADS INCLUDE FAN AND MOTOR HEAT.
2. PROVIDE ANTI-RECYCLE TIMER, CRANKCASE HEATER, LOW AMBIENT KIT AND HIGH CAPACITY FILTER RACK.
3. PROVIDE FACTORY "MICROMETL" MODULATING ECONOMIZER WITH POWER EXHAUST. AC UNIT SHALL HAVE C02 CONTROL. PROVIDE WITH LOCKING MESH COVER. POWER EXHAUST SHALL BE PROVIDED WITH A SEAPARTE DISCONNECT SWITCH, FIELD WIRED BY ELECTRICAL.
4. NOT USED.
5. BYPASS UNIT ANTI-RECYCLE TIMER WHEN ANTI-RECYCLE FUNCTION IS INCLUDED IN THE THERMOSTAT.
6. NOT USED.
7. PROVIDE WITH FACTORY MOUNTED NON-FUSED DISCONNECT SWITCH.
8. PROVIDE FACTORY CONDENSER COIL GUARDS.
9. PROVIDE T-24 COMPLIANT INTERNET PROGRAMMABLE THERMOSTAT "NT" MODEL X7C-WIFI WITH DEMAND CONTROL VENTILATION (DCV) W/CO2 SENSORS AND CONNECT TO EXISTING EMS.
10. UNITS SHALL HAVE DUCT FLEX CONNECTIONS INSTALLED WITHIN ROOF CURB.
11. ALL AC UNITS SHALL HAVE R-410A REFRIGERANT.
12. PROVIDE WITH FACTORY MOUNTED NON-POWERED CONVENIENT OUTLET.
13. PROVIDE A FACTORY "MICROMETL" MODEL CRBK-SRT12GA-14 PITCHED ROOF CURB, 98 LBS.

VRF SYSTEM OUTDOOR HEAT RECOVERY UNIT SCHEDULE

UNIT	MANUFACTURER AND MODEL NO.	TYPE	COOLING CAP. (MBH) COOLING (TOTAL/SENSIBLE)	COOLING CAP. (MBH) HEATING	COP	AMB. TEMP.(°F) SUMMER (DB/WB)	AMB. TEMP.(°F) WINTER (DB)	SCHE	E.E.R. I.E.E.R.	ELECTRICAL COMPRESSOR QTY.	ELECTRICAL COMPRESSOR RLA	ELECTRICAL OUTDOOR FAN QTY.	ELECTRICAL MCA	ELECTRICAL MOCP	ELECTRICAL VOLTAGE	OPER WT. (LBS)	ANCHORAGE DETAIL	REMARKS
VRF AD1	TOSHIBA/CARRIER MMY-MAP0966FT9P-UL	HEAT RECOVERY VRF	96.0	108.0	3.80	88.0/68.0	41.0	27.6	12.2 22.8	2	-	2	34.2	40	230V / 3Ø / 60HZ	684	7 SD1	1 2 3 4 5 6 7 9

NOTES:

1. PROVIDE CRANKCASE HEATER, HIGH & LOW PRESSURE SWITCHES.
2. PROVIDE LOW AMBIENT KIT.
3. PROVIDE 3/4" EXPAND METAL CONDENSING COIL GUARD.
4. PROVIDE MINIMUM CLEARANCE AROUND EACH UNIT PER THE MANUFACTURER'S RECOMMENDATIONS.
5. SIZE REFRIGERANT (R410A) LINES PER MANUFACTURERS RECOMMENDATIONS. PROVIDE LONG LINE KIT IF REQUIRED.
6. PROVIDE HAIL-GUARD.
7. PROVIDE WITH HOUSEKEEPING PAD.
8. NOT USED
9. PROVIDE UNIT WITH HEAT RECOVERY.

VRF SYSTEM INDOOR FAN COIL UNIT SCHEDULE

UNIT	MANUFACTURER AND MODEL NO.	SERVICE/ LOCATION	TYPE	CAPACITY (MBH) COOLING TOTAL	CAPACITY (MBH) COOLING SENSIBLE	CAPACITY (MBH) HEATING	OSA TEMP. (°F) SUMMER (DB/WB)	OSA TEMP. (°F) WINTER (DB)	EAT. (°F) (DB/WB)	SUPPLY FAN CFM (H/M/L)	SUPPLY FAN E.S.P. (IN.)	FLOW SELECTOR BOX MANUFACTURER & MODEL NO.	FLOW SELECTOR BOX VOLTAGE	FLOW SELECTOR BOX CURRENT DRAW (AMP)	FLOW SELECTOR BOX MOCP	FLOW SELECTOR BOX TOTAL WT. (LBS.)	ELECTRICAL VOLTAGE	ELECTRICAL UNIT FLA	ELECTRICAL UNIT MCA	ELECTRICAL MOCP	OPER. WT. (LBS.)	ANCHORAGE DETAIL	REMARKS
FC AD1	TOSHIBA/CARRIER MMD-AP0366BHPUL	WORK ROOM AD-6	CONCEALED DUCTED	36.0	-	40.0	88.0/68.0	41.0	80.0/67.0	1,130/ 954/ 812	0.6	TOSHIBA/CARRIER RBM-Y0383FUL	230V/1Ø/60HZ	-	-	13	230V/1Ø/60HZ	-	2.3	15	119	4 SD3	1 2 3 4 5 6 7
FC AD2	TOSHIBA/CARRIER MMD-AP0126BHPUL	PRINCIPAL AD-5	CONCEALED DUCTED	12.0	-	13.5	88.0/68.0	41.0	80.0/67.0	589/ 489/ 394	0.6	TOSHIBA/CARRIER RBM-Y0383FUL	230V/1Ø/60HZ	-	-	11	230V/1Ø/60HZ	-	<1	15	70	4 SD3	1 2 3 4 5 6 7
FC AD3	TOSHIBA/CARRIER MMD-AP0246BHPUL	PUBLIC AD-1	CONCEALED DUCTED	24.0	-	27.0	88.0/68.0	41.0	80.0/67.0	706/ 583/ 512	0.6	TOSHIBA/CARRIER RBM-Y0383FUL	230V/1Ø/60HZ	-	-	11	230V/1Ø/60HZ	-	1.8	15	119	4 SD3	1 2 3 4 5 6 7
FC AD4	TOSHIBA/CARRIER MMD-AP0126BHPUL	OFFICE AD-7	CONCEALED DUCTED	12.0	-	13.5	88.0/68.0	41.0	80.0/67.0	589/ 489/ 394	0.6	TOSHIBA/CARRIER RBM-Y0383FUL	230V/1Ø/60HZ	-	-	11	230V/1Ø/60HZ	-	<1	15	70	4 SD3	1 2 3 4 5 6 7
FC AD5	TOSHIBA/CARRIER MMD-AP0186BHPUL	NURSE AD-8	CONCEALED DUCTED	18.0	-	20.0	88.0/68.0	41.0	80.0/67.0	624/ 489/ 394	0.6	TOSHIBA/CARRIER RBM-Y0383FUL	230V/1Ø/60HZ	-	-	11	230V/1Ø/60HZ	-	1.2	15	93	4 SD3	1 2 3 4 5 6 7

NOTES:

1. PROVIDE WITH CONDENSATE DRAIN PAN (PRIMARY AND SECONDARY) FOR FAN COIL UNIT AND ASSOCIATED PIPING.
2. PROVIDE WITH FACTORY FURNISHED & INSTALLED CONDENSATE DRAIN LIFT PUMP (CONDENSATE PUMP SHALL BE POWERED THRU INDOOR FAN COIL UNIT).
3. SIZE REFRIGERANT LINES PER MANUFACTURERS RECOMMENDATIONS.
4. PROVIDE T-24 COMPLIANT INTERNET PROGRAMMABLE THERMOSTAT "NT" MODEL 241003-001 AND CONNECT TO EXISTING EMS.
5. CONCEALED/DUCTED FAN COIL UNIT.
6. PROVIDE DISCONNECT SWITCH.
7. PROVIDE WITH MEDIUM STATIC MOTOR.

AIR DISTRIBUTION SCHEDULE

SYMBOL	TYPE	MAKE & MODEL	DESCRIPTION
A	CEILING SUPPLY	TITUS MODEL MCD-3	MODULAR CORE DIFFUSER WITH FRAME FOR LAY-IN T-BAR CEILING, FLUSH FACE MOUNTING.
B	CEILING RETURN	TITUS MODEL PAR-3	PERFORATED FACE DIFFUSER WITH FRAME FOR LAY-IN T-BAR CEILING, FLUSH FACE MOUNTING.
C	CEILING SUPPLY	TITUS MODEL MCD-1	MODULAR CORE DIFFUSER WITH RAPID MOUNT FRAME MODEL TRM FOR SURFACE MOUNTING.
D	CEILING RETURN/EXHAUST	TITUS MODEL 50F	EGG CRATE GRILLE REGISTER WITH RAPID MOUNT FRAME TRM FOR SURFACE MOUNTING.
E	SIDEWALL SUPPLY	TITUS MODEL 1700	DOUBLE DEFLECTION HORIZONTAL 5" DOWN FRONT GRILLE WITH 1/2" BLADE SPACING, FRAME FOR WALL MOUNTING.
F	LINEAR CEILING SUPPLY	TITUS MODEL ML-38-2B	ALUMINUM LINEAR SLOT DIFFUSER, 3/4" SLOT,4-SLOT, PATTERN CONTROLLER, FLANGED BORDER FOR SURFACE MOUNTING, OPTIONAL PLENUM IN 2,3,4 OR 5 FOOT SECTIONS PER PLANS, COLOR PER ARCHITECT.
G	SIDEWALL RETURN	TITUS MODEL 355FL	ALUMINUM LOUVERED RETURN GRILLE, 1/2" BLADE SPACING, 35° DEFLECTION, LONG BLADES, FRAME FOR WALL MOUNTING.

NOTES:

1. EQUIVALENT MODELS OF KRUEGER, ANEMOSTAT, PRICE OR J&J ARE ACCEPTABLE.
2. REFER TO THE FLOOR PLANS FOR NECK SIZE, CFM, AIR DIFFUSION PATTERN AND FIRE/DAMPER, IF REQUIRED.
3. PROVIDE AIR CONTROL GRID FOR ALL CEILING SUPPLY DIFFUSERS SET AT 90°.
4. INTERIOR OF ALL GRILLES SHALL BE PAINTED FLAT BLACK.
5. DIFFUSERS, REGISTERS AND GRILLES SHALL HAVE A MAX OPERATING WEIGHT OF 10 LBS. SEE DETAIL 10/M6.01 FOR SUPPORT CONNECTION

PBK

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Anaheim, CA 92806
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CONSULTANT LEAF Engineers
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Rancho Cucamonga, CA 91730
909.987-0909
leafengineers.com

EASTWOOD ELEMENTARY SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
13552 University St.
Westminster, CA 92683

DSA Submittal

DSA APPL NO.: 04-121953 DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT

R7 R6 K R1 R2 ADMIN M/P E1 E2 R5 R4 R3 A-B C-D E6 E5 E4 E3

KEY PLAN

NORTH: PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER REX DAVID WANG No.M36155 Exp.09-30-2024 MECHANICAL STATE OF CALIFORNIA

Architect

CLIENT
WESTMINISTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
03/31/2023	220528

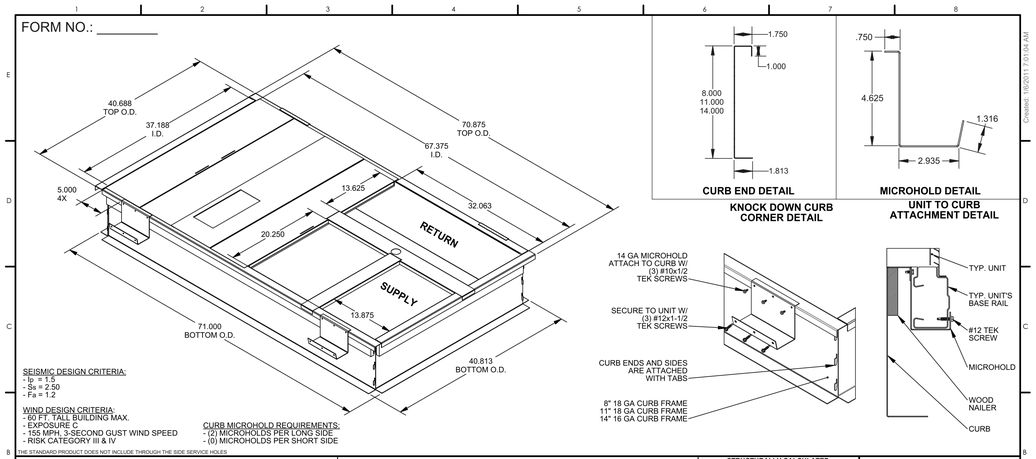
REVISIONS

No.	Description	Date
2	Addendum 2	02/07/2024

DSA Submittal

MECHANICAL SCHEDULES

M5.01



SEISMIC DESIGN CRITERIA:
- Ip = 1.5
- Ss = 2.50
- Fa = 1.2

WIND DESIGN CRITERIA:
- 60 FT. TALL BUILDING MAX.
- EXPOSURE C
- 155 MPH, 3-SECOND GUST WIND SPEED
- RISK CATEGORY III & IV

CURB MICROHOLD REQUIREMENTS:
- (2) MICROHOLDS PER LONG SIDE
- (0) MICROHOLDS PER SHORT SIDE

THE STANDARD PRODUCT DOES NOT INCLUDE THROUGH THE SIDE SERVICE HOLES

MicroMetl Corporation

CRBK-SRT12GA-08 Series	08" TALL	69 LBS.
CRBK-SRT12GA-11 Series	11" TALL	87 LBS.
CRBK-SRT12GA-14 Series	14" TALL	98 LBS.

STRUCTURALLY CALCULATED KNOCK DOWN CURB
MAX UNIT WEIGHT 1099 lbs.

ANCHORAGE DETAILS TO ROOF: ALL DETAILS ARE CALCULATED USING THE SEISMIC DESIGN CRITERIA INDICATED ABOVE. FOR ANY OTHER TYPE OF ANCHORAGE THE EOR HAS THE OPTION TO CALCULATE THE ANCHORAGE USING SITE SPECIFIC PARAMETERS AND LOADS.

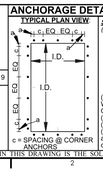
Indianapolis, IN. : (800) 662-4822
Sparks, NV. (800) 884-4662
Longview, TX. (903) 248-4800

DRAWN BY: IR DATE 08/20/2019

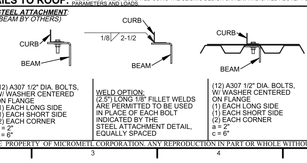
MEETS SEISMIC REQUIREMENTS FOR 2019 CBC & 2018 IBC

MEETS REQUIREMENTS FOR 155 MPH, 60' BUILDING HEIGHT MAX. 3 SEC. GUST, EXP C

TYPICAL PLAN VIEW



STEEL ATTACHMENT: (BEAM BY OTHERS)

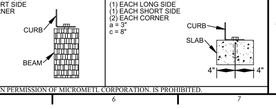


WOOD ATTACHMENT: (REF.: DOUGLAS FIR)

(34) 1/4" x 3" SIMPSON SDS W/ WASHER, CENTERED ON CURB FLANGE,
(8) EACH LONG SIDE
(3) EACH SHORT SIDE
(4) EACH CORNER
a = 1"
c = 3"

CONCRETE ATTACHMENT: (3000 PSI MINIMUM, 6" MINIMUM THICKNESS) (4" MIN EDGE DISTANCE, 3-3/4" EMBEDDED)

(12) 1/2" SIMPSON TITEN HD CENTERED ON CURB FLANGE,
8" MINIMUM SPACING
(1) EACH LONG SIDE
(1) EACH SHORT SIDE
(2) EACH CORNER
a = 3"
c = 8"



REGISTERED PROFESSIONAL ENGINEER CLIFFORD H. JOHNSON No. 2602 Exp. 12-31-23 STRUCTURAL STATE OF CALIFORNIA
7/26/2021

BJG# 20190065

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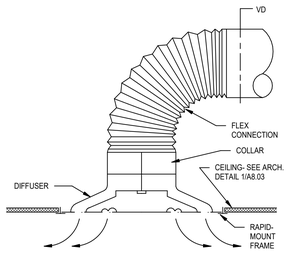
ENG503A

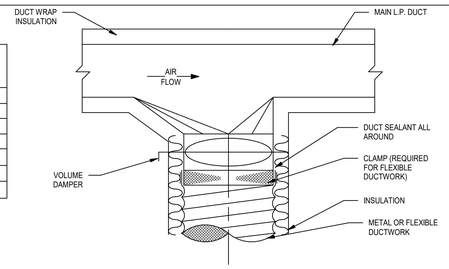
PRINTED: 8/27/2019

17 ROOF CURB DETAIL FOR A/C UNITS
NOT TO SCALE



NOTE: MAX OPERATING WEIGHT IS 10 LBS

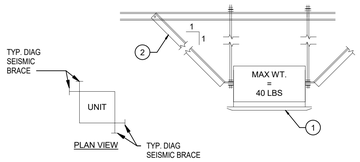
14 HARD LID DIFFUSER CONNECTION
NOT TO SCALE



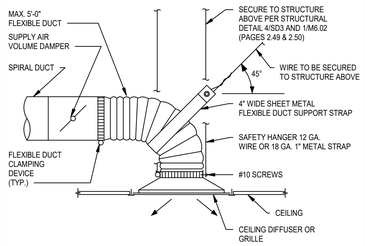
ROUND DUCT SIZE	BUCKLEY TAKE-OFF SIZE	MINIMUM MAIN DUCT DEPTH
6"	6"X12"	8"
8"	6"X12"	8"
9"	6"X14"	8"
10"	6 1/2" X16"	8 1/2"
12"	7 3/4"X18"	9 3/4"
14"	9"X20"	11"
16"	10"X20"	12"

13 RECTANGULAR TO ROUND TRANSITION TAKE-OFF DETAIL
NOT TO SCALE

1. CEILING SUSPENDED FAN WITH FACTORY PROVIDED HANGING KIT. SEE MECH. SCHEDULE FOR MAKE & MODEL.
2. REFER TO STRUCTURAL DETAIL 4/SD3 FOR ATTACHMENT TO STRUCTURE AND FOR ADDITIONAL INFORMATION.

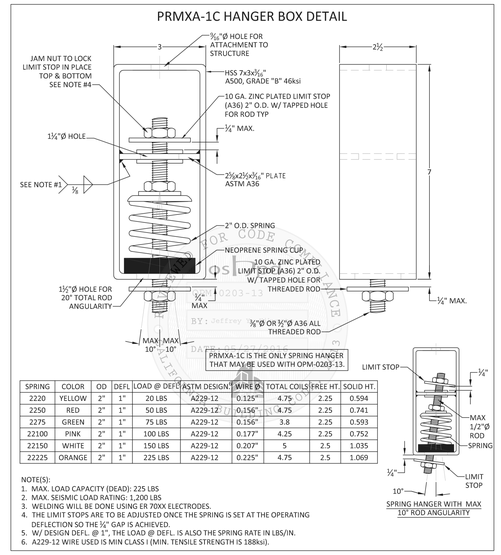


9 SUSPENDED EXHAUST FAN DETAIL
NOT TO SCALE



NOTES:
1. REFER TO DETAIL #14/M6.01 FOR FLEXIBLE DUCTWORK DETAIL.
2. LOCATE VOLUME DAMPER AS FAR AWAY FROM DIFFUSER OR GRILLE AS POSSIBLE.

8 LAY IN DIFFUSER CONNECTION DETAIL
NOT TO SCALE



PRMXA-1C IS THE ONLY SPRING HANGER THAT MAY BE USED WITH OPM-0203-13.

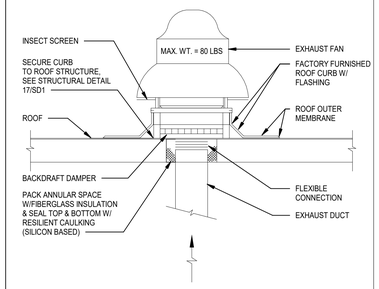
SPRING	COLOR	OD	DEFL	LOAD @ DEFL	ASTM DESIGN	WIRE Ø	TOTAL COILS	FREE HT.	SOLID HT.
2220	YELLOW	2"	1"	20 LBS	A229-12	0.125"	4.75	2.25	0.594
2250	RED	2"	1"	50 LBS	A229-12	0.156"	4.75	2.25	0.741
2275	GREEN	2"	1"	75 LBS	A229-12	0.156"	3.8	2.25	0.593
22100	PINK	2"	1"	100 LBS	A229-12	0.177"	4.25	2.25	0.752
22150	WHITE	2"	1"	150 LBS	A229-12	0.207"	5	2.5	1.035
22225	ORANGE	2"	1"	225 LBS	A229-12	0.225"	4.75	2.5	1.069

NOTE(S):
1. MAX. LOAD CAPACITY (DEAD): 225 LBS
2. MAX. SEISMIC LOAD RATING: 1,200 LBS
3. WELDING WILL BE DONE USING ER 70XX ELECTRODES.
4. THE LIMIT STOPS ARE TO BE ADJUSTED ONCE THE SPRING IS SET AT THE OPERATING DEFLECTION OR THE ¼" GAP IS ACHIEVED.
5. W/ DESIGN DEFL. @ 1", THE LOAD @ DEFL. IS ALSO THE SPRING RATE IN LBS/IN.
6. A229-12 WIRE USED IS MIN CLASS I (MIN. TENSILE STRENGTH IS 188ksi).

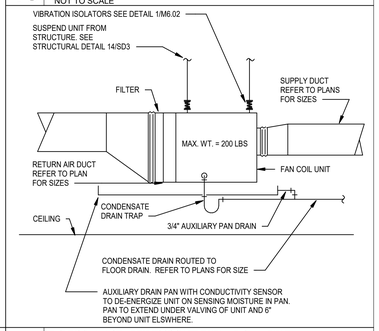
Vibrex vibration & seismic control systems
M.W. Sausse & Co., Inc.
28744 Witherspoon Parkway | Valencia, CA 91355
Ph: (661) 257-3311 | Fax: (661) 257-6050
Civil Engineer: P.K. Sachdeva
California PE No. C59644
Page No.: 4.1
Date: May 9, 2016

05/27/2016 OPM-0203-13: Reviewed for Code Compliance by Jeffrey Kikumoto Page 179 of 211

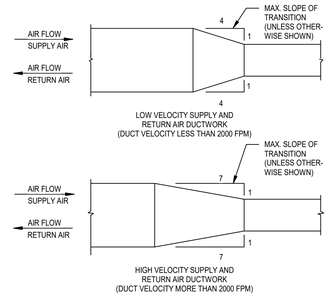
16 AIR DISTRIBUTION SCHEDULE
NOT TO SCALE



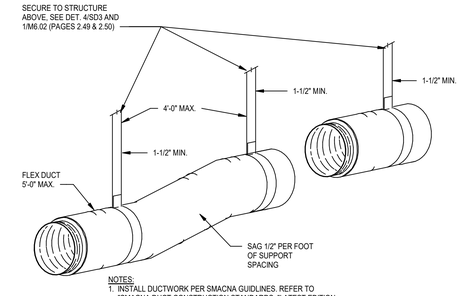
18 ROOF MOUNTED EXHAUST FAN DETAIL
NOT TO SCALE



15 DUCTED FAN COIL UNIT DETAIL
NOT TO SCALE

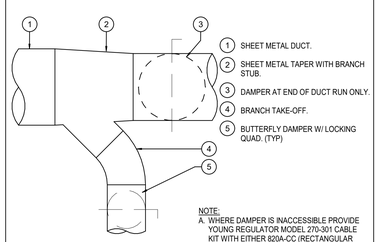


12 RECTANGULAR DUCT TRANSITION DETAIL
NOT TO SCALE



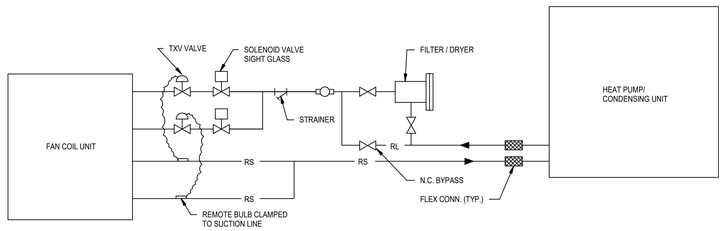
NOTES:
1. INSTALL DUCTWORK PER SMACNA GUIDLINES. REFER TO "SMACNA DUCT CONSTRUCTION STANDARDS, "LATEST EDITION.

11 FLEXIBLE DUCTWORK HANGER DETAIL
NOT TO SCALE



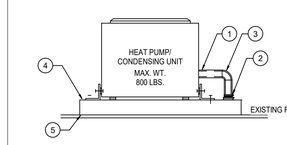
NOTE:
A. WHERE DAMPER IS INACCESSIBLE PROVIDE YOUNG REGULATOR MODEL 270-301 CABLE KIT WITH EITHER 820A-CC (RECTANGULAR OR 5020-CC (ROUND) DAMPER.
B. PROVIDE DAMPER WITH LOCKING QUADRANT AT ALL SINGLE RUNOUTS.

7 BRANCH DUCT DAMPER DETAIL
NOT TO SCALE



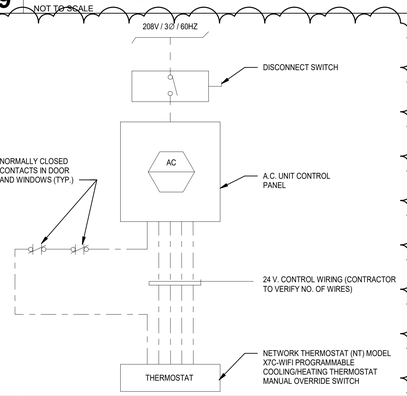
NOTE:
1. TYPICAL OF 2 INDEPENDENT CIRCUTS.
2. ALL REFRIGERANT PIPING TO BE SIZED PER MANUFACTURER'S INSTALLATION INSTRUCTIONS.

6 REFRIGERANT PIPING SCHEMATIC DETAIL
NOT TO SCALE

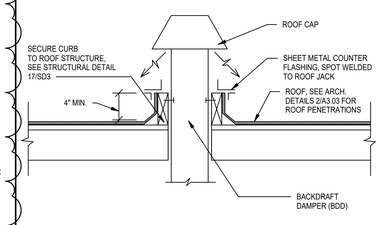


NOTES:
1. INSULATED REFRIGERANT PIPES THRU CURB. PIPES, THRU CURB.
2. PROVIDE GRADULATED STEP BOOT WITH STSAINLESS STEEL CLAMPS BY THE PATE COMPANY. BOOT JOINT AT CURB, SHALL BE MADE WATER TIGHT.
3. INSULATED, ALUMINUM WRAP REFRIGERANT PIPES, THRU CURB.
4. HEAT PUMP/CONDENSING UNIT'S PLATFORM WITH NEOPRENE PAD.
5. SEE STRUCTURAL DETAIL 16/SD1 FOR ATTACHEMENT TO STRUCTURE.

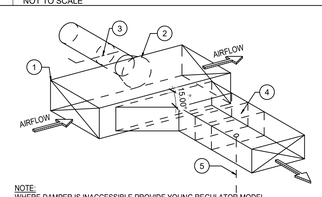
5 HP/CU ROOF MOUNTING DETAIL
NOT TO SCALE



4 A/C UNIT WIRING DIAGRAM
NOT TO SCALE



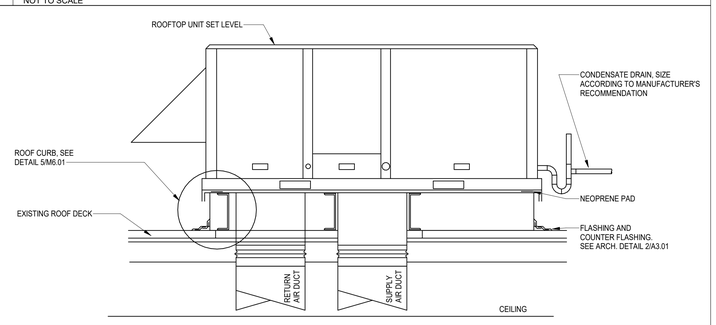
3 ROOF JACK DETAIL
NOT TO SCALE



NOTE:
WHERE DAMPER IS INACCESSIBLE PROVIDE YOUNG REGULATOR MODEL 270-301 CABLE KIT WITH EITHER 830A-CC (RECTANGULAR) OR 5020-CC (ROUND) DAMPER.

1. RECTANGULAR GALVANIZED SHEET METAL SUPPLY AIR DUCT - SEE MECHANICAL PLAN FOR SIZE.
2. CUT OPENING ACCURATELY FOR SPIN IN (FLARED) FITTING - WHERE POSSIBLE.
3. BUTTERFLY DAMPER W/ LOCKING QUAD. (TYP)
4. VOLUME CONTROL DAMPER WITH LOCKING QUADRANT.
5. DAMPER REGULATOR

2 BRANCH DUCT TAKE-OFF & DMP. DETAIL
NOT TO SCALE



1 ROOF TOP UNIT DETAIL
NOT TO SCALE

PBK

ARCHITECT PBK Architects, Inc. PBK.com
ANAHEIM
2400 E. Katella Ave., Suite 950
Anaheim, CA 92806
P 949-548-5000

CONSULTANT LEAF Engineers
LEAF ENGINEERS
8163 Rochester Avenue, Suite 100
Rancho Cucamonga, CA 91730
909.987-0909
leafengineers.com

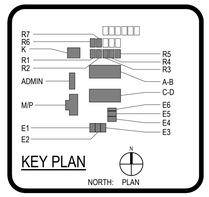
EASTWOOD ELEMENTARY SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
13552 University St.
Westminster, CA 92683

DSA Submittal

DSA APPL NO.: 04-121953 DSA FILE NO.: 30-43

WESTMINISTER SCHOOL DISTRICT



KEY PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER REX DAVID WANG No.M36155 Exp.09-30-2024 MECHANICAL STATE OF CALIFORNIA

Architect

CLIENT
WESTMINISTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
03/31/2023	220528

REVISIONS

No.	Description	Date
2	Addendum 2	02/07/2024

DSA Submittal

MECHANICAL DETAILS

M6.01

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