October 25, 2022

ADDENDUM 1

To the Contract Documents for the Construction of:

Walnut Valley Unified School District
Diamond Bar High School
Building 400 Modernization New Classrooms/Library Media
DSA #03-121330 | File #19-H52

NOTICE TO BIDDERS

It is intended that all work affected by the following provisions shall conform to the original DSA approved Plans and Specifications with a DSA Approval Date of March 9, 2022. Delete or modify each of the following items wherever appearing on the Drawings and/or Specifications. Acknowledge receipt of this Addendum in the space provided on the Contractor's Proposal. Failure to do so may subject bidder to disqualification.

SPECIFICATIONS - GENERAL ITEM

Item **G.1** Add the following note to all the blank pages within the Specifications where occurs "THIS PAGE INTENTIONLLY LFFT BLANK"

SPECIFICATIONS:

Item **1.1** TABLE OF CONTENT

A. Revised TABLE OF CONTENTS is hereby issued.

Item 1.2 01 30 00 ADMINISTRATIVE REQUIREMENTS – Revised Section is hereby issued.

A. Part 1.7-A: Revised to provide Electronic Submittals
B. Part 1.7-A 1: Revised to provide Submittal Cover Sheet
C. Part 1.12-E: Revised to require the Submittals in digital format
D. Part 1.13-B: Revised to require the Submittals in digital format
E. Part 1.14-E: Revised to require digital copies of the product samples

Item 1.3 01 31 16.13 NETWORK ANALYSIS SCHEDULES – Revised Section is hereby issued.

A. Part 1.7-G: Added new section for the contractor to provide a Manpower Schedule.

Item 1.4 01 33 00 SUBMITTAL PROCEDURES – New Specifications Sections is hereby issued.

A. This section was inadvertently left out of the DSA Approved Documents

Item 1.5 01 50 00 TEMPORARY FACILITIES AND CONTROLS – Revised Section is hereby issued.

A. Part 1.14 through 1.30: Added new sections for materials and methods for the Contractor during Construction
B. Part 2.01: Added new section for materials and methods for the Contractor during Construction

Item 1.6 02 41 19 SELECTIVE DEMOLITION - Revised Section is hereby issued

A. Part 1.1-A: Revised section to clarify the intent of the demolish requirements.
B. Part 1.1-D: Add new section regarding protecting and maintaining of the existing utilities.

Item 1.7 03 30 00 CAST-IN-PLACE CONCRETE - Revised Section is hereby issued.

A. Part 2.2-E: Revised the Min 28-Day PSI Strength for the Structural Slabs above the Steel Deck and Other Locations from 3000 PSI to 4000 PSI to match the PSI Strength requirements shown on the Structural Drawings.

Item 1.8 03 35 43 POLISHED CONCRETE FINISHING - Section is hereby deleted.

A. No Polished Concrete Finishings are indicated on the Drawings.

Item 1.9 04 21 15 THIN CMU VENEER – Revised Section is hereby issued.

A. Part 2.2-C: Revised the size of the Thin CMU Veneer to "MATCH EXISTING" since the exact size of the existing Thin CMU VENEER is not known.

Item 1.10 04 22 00 CONCRETE UNIT MASONRY – Revised Section is hereby issued

A. Part 3.03 A: Revised the minimum mortar strength to match the minimum mortar strength listed on the Structural Drawings

Item 1.11 07 01 50.72 ROOF RESTORATION– Section is hereby deleted

A. This section is being replaced with 07 01 50.76 FOAMED ROOF REPAIRS

Item 1.12 07 01 50.73 REHABILITATION OF MODIFIED BITUMINOUS MEMBRANE ROOFING – Section is hereby deleted

A. The roofing scope is covered under 07 01 50.76 FOAMED ROOF REPAIRS.

Item 1.13 07 01 50.74 TILE AND GUTTER REPAIR– Revised Section is hereby issued

A. Part 1.1 A and A1.1 B: Deleted these two sections that referred to Specifications Sections 07 01 50.72 and 07 01 50.73 that are being deleted (see the two previous Addendum Items).

Item 1.14 07 01 50.76 FOAMED ROOF REPAIRS – New Section is hereby issued

B. The existing roofing is in good condition and only requires repairs at the installation of the work with some minor patching where occurs.

Item 1.15 07 01 52 ROOFING MEMBRANE PENETRATIONS – Section is hereby deleted

A. Work is covered under Section 07 01 50.76 REPAIRS TO COATED FOAMED ROOFING

Item 1.16 07 19 00 WATER REPELLENTS – Revised Section is hereby issued

B. Part 1.1 A – Clarified the locations that the Water Repellant is to be installed

Item 1.17 07 91 13 INTERIOR EXPANSION JOINT COVER ASSEMBLIES – Section is hereby issued

A. **The existing Expansion Joint Covers are being replaced to accommodate the remodel work therefore this sections section is being issued.**

Item 1.18 08 12 14 HOLLOW METAL FRAMES – KNOCKDOWN – Section is hereby deleted

A. All the door frames are shown as 08 12 13 HOLLOW METAL FRAMES - WELDED

Item 1.19 08 34 73 ACCOUSTIC DOOR SYSTEMS - Section is hereby deleted

A. This section was inadvertently included in the DSA Approved Documents

Item 1.20 08 41 13 ALUMINUM FRAMED ENTRANCE AND STOREFRONTS - Section is hereby deleted

A. All the typical door frames and window frames are shown as 08 12 13 HOLLOW METAL FRAMES – WELDED

Item 1.21 08 43 33 FOLDING GLASS STOREFRONT – New Section is hereby issued

A. This section was inadvertently missing from the DSA Approved Documents

Item 1.22 08 80 00 DOOR HARDWARE – Revised Section is hereby issued

A. 2.1: Added new hinge type and manufacture
B. Heading 05: Deleted
C. Heading 12: Deleted door 211.1 & 211.2
D. Heading 14: Revised door 122.1 to 122, & 217.1 to 217
E. Heading 05: Revised hardware set
F. Heading 21: Revised door dimensions
G. Heading 22: Deleted
H. Heading XWAL01: Deleted
I. Heading XWAL01A: Deleted
J. Heading XWAL02: Deleted
K. Heading XWAL03: Deleted
L. Heading XWAL09: Deleted
M. Heading XWAL10: Deleted
N. Heading XWAL12: Deleted
O. Heading XWAL13A: Deleted
P. Heading XWAL14A: Deleted
Q. Heading XWAL19: Deleted
R. Heading XWALPHGATE: Deleted

Item 1.23 09 29 00 GYPSUM BOARD – Revised Section is hereby issued

A. Part 3.5 G and Part 3.6 - clarified that the finish on gypsum board is to be Level 5 smooth finish

Item 1.24 09 30 13 CERANIC TILE – Revised Section is hereby issued

A. Part 1.1 A – Clarified that the ceramic tile floor is a thin set installation
B. Part 2.4 A through D – Deleted the setting bed materials
C. Part 2.6 A through D – Deleted the setting bed accessory materials
D. Part 2.7 A through G – Deleted the setting bed materials
E. Part 3.4 – Replaced the setting bed installation at floors with thin set installation and floors

Item 1.25 09 51 00 ACOUSTICAL CELINGS- LAY-IN – Revised section is hereby issued

A. Parts 2.2 A, C and D – The ceiling tiles listed in these sections are not used and have therefore been deleted.

Item 1.26 09 53 15 SUSPENDED CEILING SYSTEM – Revised section is hereby issued

A. Parts 2.2 A – Revised the ceiling system from Soundscape by Armstrong to Ultima Designflex by Armstrong

Item 1.27 09 72 19 VINYL COATED FABRIC COVERED TACK SURFACE – Section is hereby deleted

A. This section was inadvertently included in the DSA Approved Documents

Item 1.28 09 96 23 GRAFFITI-RESISTANT COATINGS - Section is hereby deleted

A. This Scope is deleted from the Project

Item 1.29 09 96 23 GRAFFITI-RESISTANT COATINGS – Section is hereby deleted

A. Graffiti Coating is not required

Item 1.30 10 11 16 MARKERBOARDS – Revised Section is hereby issued

A. Part 2 has been added

Item 1.31 10 14 54 EXTERIOR SIGNAGE – Section is hereby deleted

A. The existing Building Identification Signage will remain and the 12" cast aluminum letters are not required

Item 1.32 10 22 39.13 GLASS PANEL PARTITION – New section is hereby issued

B. This section was inadvertently excluded from the DSA Approved Documents

Item 1.33 10 26 23.11 DECORATIVE PROTECTION PANELS – Section is hereby deleted

B. This section was inadvertently included in the DSA Approved Documents

Item 1.34 11 52 14 PROJECTOR MOUNTS – Section is hereby deleted

A. See the Technology Drawings for the Projector and Projector Mounts

Item 1.35 27 15 00 HORIZONTAL CABLING REQUIREMENT – Revised Section is hereby issued

A. Part 2.1-A: Revise entire section to represent Cat. 6 cable in lieu of Cat. 6A.
B. Part 2.2-A: Revise entire section to represent Cat. 6 jacks in lieu of Cat. 6A.
C. Part 2.5-A: Revise entire section to represent Cat. 6 patch cords in lieu of Cat 6A

Item 1.36 32 12 16 ASPHALT PAVING – New Section is hereby issued

D. New Scope Added. The existing asphalt concrete paving is being removed replaced at the existing basketball courts.

Item 1.37 32 13 13 CONCRETE PAVING – New Section is hereby issued

A. Concrete paving section added for patching of the fire line trench at the concrete paving

Item 1.38 32 17 23 .13 PAINTED PAVEMENT MARKINGS – New Section is hereby issued

A. Section added for basketball court stripping.

Item 1.39 27 53 13.13 WIRELESS CLOCK SYSTEM - Section is hereby deleted

A. The Clock System has been replaced with a system that is IP system and a separate sections section is no longer required.

DRAWINGS:

Item 2.1 The following revised drawings are hereby issued.

G0.0 COVER SHEET

A. SHEET INDEX:
ADDED SHEET S018

A0.0 ACCESSIBILITY PLAN

A. 1/A0.0: REPLACED (N) TO (E)

A1.10 OVERALL SITE PLAN

A. KEYNOTES: ADDED KEYNOTE 32.31H
B. GENERAL NOTES:
ADDED NEW GENERAL NOTES
C. 1/A1.10: ADDED DETAIL REFERENCE 18/A10.60
ADDED KEYNOTE 32.13H
CHANGED (N) TO (E) FOR SOME WORK
REPLACED (N) TO (E)

A2.01 DEMOLITION PLANS – LOWER LEVEL & MAIN LEVEL

A. KEYNOTES: ADDED KEYNOTE D35
B. TYPICAL DEMOLITION NOTES:
ADDED NOTE Y
C. DEMOLITION PLAN LEGEND:
DELETED A LEGEND

D. 1/A2.01: ADDED (E) SEISMIC SEPARATION JOINT & KEYNOTES
CHANGED (E) EXTERIOR DOORS TO BE DEMOED
ADDED KEYNOTE D35
   a. ROOM D129
   ADDED (E) ELECTRICAL PANEL & KEYNOTES
E. 2/A2.01: ADDED (E) SEISMIC SEPARATION JOINT & KEYNOTES
CHANGED (E) EXTERIOR DOORS TO BE DEMOED
ADDED KEYNOTE D34 & D35
   a. ROOM D232
   ADDED (E) MDF & (E) CONDUIT AREA & KEYNOTES

A2.10 REMODEL FLOOR PLAN – LOWER LEVEL

A. FLOOR PLAN LEGEND:
REMOVED UNUSED WALL LEGEND
ADDED A NOTE
B. 1/A2.10: ADDED (E) SEISMIC SEPARATION JOINT & KEYNOTES
   a. ROOM 104
   SHIFTED (6) CASEWORKS & (1) WINDOWS
   RESIZED (1) 36" W CASEWORK TO 30" W
   SHORTENED (1) COUNTERTOP
   RELOCATED (1) TEACHING WALL FROM WEST TO EAST WALL
   b. ROOM 116A
   ADDED (E) ELECTRICAL PANEL & KEYNOTE
   c. ROOM 119
   SHIFTED (6) CASEWORKS & (1) WINDOWS
   RESIZED (1) 36" W CASEWORK TO 30" W
   SHORTENED (1) COUNTERTOP
   RELOCATED (1) TEACHING WALL FROM WEST TO EAST WALL
   d. ROOM 123
   ADDED WALL TAG
   ADDED KEYNOTES

A2.11 REMODEL FLOOR PLAN – MAIN LEVEL

A. FLOOR PLAN LEGEND:
REMOVED UNUSED WALL LEGEND
ADDED A NOTE
B. 1/A2.11: ADDED (E) SEISMIC SEPARATION JOINT & KEYNOTES
ADDED CORNER GUARD KEYNOTES
ADDED NOTES TO MATCH (E) PLASTER WALL
REPLACED ALL WALL TAGS 6C TO 6P
REPLACED ALL WALL TAGS 4C TO 4P
   a. ROOM 203
   SHIFTED (5) CASEWORKS & (1) WINDOWS
   RELOCATED (1) TEACHING WALL FROM WEST TO EAST WALL
   b. ROOM 212
   REPLACED DOOR TAG 212 TO 212.1
   ADDED DOOR TAG 212.2
   c. ROOM 217
   ADDED (E) MDF & (E) CONDUIT AREA & KEYNOTES

d. ROOM 220
SHIFTED (5) CASEWORKS & (1) WINDOWS
RELOCATED (1) TEACHING WALL FROM WEST TO EAST WALL

A3.10 REMODEL REFLECTED CEILING PLANLOWER LEVEL

A. REFLECTED CEILING PLAN NOTES:
ADDED NOTES J, K, & L
B. REFLECTED CEILING PLAN LEGEND:
ADDED LEGEND
C. 1/A3.10: ADDED (E) SEISMIC SEPARATION JOINT & KEYNOTES
ADDED ROLLER SAHDE AND KEYNOTES
ADDED PROJECTOR AND KEYNOTES
SHIFTED CLASSROOM LIGHTS 2" OFF OF CEILING GRID
a. ROOM 103
ADDED TYP. CEILING LAYOUT
b. ROOM 116B
RELOCATED SOLAR TUBES
ADDJUSTED ANGLE & ADDED (2) LIGHT FIXTURES

A3.10A REMODEL REFLECTED CEILING PLAN LOWER LEVEL – SECTOR A

A. REFLECTED CEILING PLAN LEGEND:
ADDED DETAIL REFERENCE 6/A10/30 & 7/A10.30 TO (ACT-1)
ADDED DETAIL REFERENCE 12/A10.31, 3/S013, 6/S013, 5/S015, & 7/S015 TO (GWB)
ADDED DETAIL REFERENCE 11/A10.31 TO (PLAS)
ADDED DETAIL REFERENCE 2/A10.31 & 3/A10.31 TO SKYLIGHT DIFFUSER
B. 1/A3.10A: ADDED (E) SEISMIC SEPARATION JOINT & KEYNOTES
ADDED PAINT COLORS TO SOFFITS AT ROOMS 107, 108, 109, 110, 111 & 114

A3.10B REMODEL REFLECTED CEILING PLAN LOWER LEVEL – SECTOR B

A. REFLECTED CEILING PLAN LEGEND:
ADDED DETAIL REFERENCE 6/A10/30 & 7/A10.30 TO (ACT-1)
ADDED DETAIL REFERENCE 12/A10.31, 3/S013, 6/S013, 5/S015, & 7/S015 TO (GWB)
ADDED DETAIL REFERENCE 11/A10.31 TO (PLAS)
ADDED DETAIL REFERENCE 2/A10.31 & 3/A10.31 TO SKYLIGHT DIFFUSER
B. 1/A3.10B: ADDED (E) SEISMIC SEPARATION JOINT & KEYNOTES
ADDED PAINT COLORS TO SOFFITS AT ROOMS 101, 102, 103, 104, 105, 106, 117, 118, 119, 120 & 121
a. ROOM 116B
RELOACTED SOLAR TUBES
ADDJUSTED ANGLE & ADDED (2) LIGHT FIXTURES

A3.11 REMODEL REFLECTED CEILING PLAN MAIN LEVEL

A. REFLECTED CEILING PLAN NOTES:
   ADDED NOTES J, K, & L
B. REFLECTED CEILING PLAN LEGEND:
   ADDED LEGEND
C. 1/A3.11: ADDED (E) SEISMIC SEPARATION JOINT & KEYNOTES
   ADDED ROLLER SAHDE AND KEYNOTES
   ADDED PROJECTOR AND KEYNOTES
   SHIFTED CLASSROOM LIGHTS 2" OFF OF CEILING GRID
   a. ROOM 202
      ADDED TYP. CEILING LAYOUT
   b. ROOM 205
      CHANGED CEILING (ACT-2) TO (GWB)
   c. ROOM 212
      CHANGED CEILING (ACT-1) TO (GWB)
   d. ROOM 213
      CHANGED CEILING (ACT-1) TO (GWB)
   e. ROOM 217
      CHANGED CEILING (ACT-1) TO (GWB)
   f. ROOM 219
      CHANGED CEILING (ACT-2) TO (GWB)
   g. ROOM 221
      CHANGED CEILING (ACT-2) TO (GWB)
   h. ROOM 222
      CHANGED CEILING (ACT-2) TO (GWB)
   i. ROOM 225
      CHANGED CEILING (ACT-2) TO (GWB)

A3.11A REMODEL REFLECTED CEILING PLAN MAIN LEVEL – SECTOR A

A. REFLECTED CEILING PLAN LEGEND:
   ADDED DETAIL REFERENCE 6/A10/30 & 7/A10.30 TO (ACT-1)
   ADDED DETAIL REFERENCE 12/A10.31, 3/S013, 6/S013, 5/S015, & 7/S015 TO (GWB)
   ADDED DETAIL REFERENCE 11/A10.31 TO (PLAS)
   ADDED DETAIL REFERENCE 2/A10.31 & 3/A10.31 TO SKYLIGHT DIFFUSER
B. 1/A3.11A: ADDED (E) SEISMIC SEPARATION JOINT & KEYNOTES
   a. ROOM 205
      CHANGED CEILING (ACT-2) TO (GWB)
   b. ROOM 206
      ADDED DETAIL REFERENCE 12/A10.31
   c. ROOM 212
      CHANGED CEILING (ACT-1) TO (GWB)
   d. ROOM 213
      CHANGED CEILING (ACT-1) TO (GWB)
   e. ROOM 217
      CHANGED CEILING (ACT-1) TO (GWB)

A3.11B REMODEL REFLECTED CEILING PLAN MAIN LEVEL – SECTOR B

A. REFLECTED CEILING PLAN LEGEND:
ADDED DETAIL REFERENCE 6/A10/30 & 7/A10.30 TO (ACT-1)
ADDED DETAIL REFERENCE 12/A10.31, 3/S013, 6/S013, 5/S015, & 7/S015 TO (GWB)
ADDED DETAIL REFERENCE 11/A10.31 TO (PLAS)
ADDED DETAIL REFERENCE 2/A10.31 & 3/A10.31 TO SKYLIGHT DIFFUSER

B. 1/A3.11B: ADDED (E) SEISMIC SEPARATION JOINT & KEYNOTES
ADDED PAINT COLORS TO SOFFITS AT ROOMS 201, 202, 203, 204, 218, 220 & 226

a. ROOM 205
CHANGED CEILING (ACT-2) TO (GWB)

b. ROOM 213
CHANGED CEILING (ACT-1) TO (GWB)

c. ROOM 217
CHANGED CEILING (ACT-1) TO (GWB)

d. ROOM 219
CHANGED CEILING (ACT-2) TO (GWB)

e. ROOM 221
CHANGED CEILING (ACT-2) TO (GWB)

f. ROOM 222
CHANGED CEILING (ACT-2) TO (GWB)

g. ROOM 225
CHANGED CEILING (ACT-2) TO (GWB)

A4.01 DEMOLITION ROOF PLAN

A. KEYNOTES: ADDED KEYNOTE 7.58
B. 1/A4.01: ADDED DEMO KEYNOTE TO (E) PARAPET WALL
ADDED GRAPHIC TO ROOF REPAIR AREA
ADDED KEYNOTE 7.58

A4.10 REMODEL ROOF PLAN

A. KEYNOTES: EDITTED KEYNOTE 7.57B & 7.92C

A5.10 EXTERIOR ELEVATION

A. KEYNOTES: CHANGED KEYNOTE 8.11E, 8.12F, 8.13G, & 10.14G

A6.10 BUILDING SECTOIONS

A. KEYNOTES: DELETED KEYNOTES
B. GENERAL NOTES:
ADDED GENERAL NOTES
C. 1/A6.10: ADDED (E) SEISMIC SEPARATION JOINT
ADDED NOTE FROM GRID 3.6 TO 14
ADDED DETAIL REFERENCE 24/A10.12 & 25/A10.12
D. 2/A6.10: ADDED (E) SEISMIC SEPARATION JOINT
ADDED NOTE FROM GRID 3.6 TO 14
ADDED DETAIL REFERENCE 24/A10.12 & 25/A10.12

E. 3/A6.10: ADDED NOTE FROM GRID F TO M
ADDED DETAIL REFERENCE 24/A10.12 & 25/A10.12
F. 4/A6.10: ADDED NOTE FROM GRID F TO N
ADDED DETAIL REFERENCE 24/A10.12 & 25/A10.12
G. 5/A6.10: ADDED NOTE FROM GRID G TO M
ADDED DETAIL REFERENCE 24/A10.12 & 25/A10.12

A8.10 INTERIOR ELEVATIONS – LOWER LEVEL

A. KEYNOTES: CHANGED KEYNOTES 8.12F, 8.13G, & 10.12B
B. 13/A8.10: ADDED (E) SEISMIC SEPARATION JOINT
SHIFTED (6) CASEWORKS & (1) WINDOWS
RESIZED (1) 36" W CASEWORK TO 30" W
SHORTENED & SHIFTED (1) COUNTERTOP
C. 14/A8.10: RELOACTED TEACHING WALL FROM 16/A8.10
REMOVED PORTION OF TACKBOARD
D. 15/A8.10: ADDED (E) SEISMIC SEPARATION JOINT
E. 16/A8.10: RELOCATED TEACHING WALL TO 14/A8.10
ADDED PORTION OF TACKBOARD

A8.11 INTERIOR ELEVATIONS – LOWER LEVEL

A. KEYNOTES: CHANGED KEYNOTES 8.11E, 8.12F, 8.13G, & 10.12B

A8.12 INTERIOR ELEVATIONS – LOWER LEVEL

A. KEYNOTES: CHANGED KEYNOTES 8.11E, 8.12F, 8.13G, & 10.12B

A8.13 INTERIOR ELEVATIONS – LOWER LEVEL

A. KEYNOTES: CHANGED KEYNOTES 8.11E, 8.12F, 8.13G, & 10.12B
B. 1/A8.13: ADDED (E) SEISMIC SEPARATION JOINT
C. 3/A8.13: ADDED (E) SEISMIC SEPARATION JOINT

A8.14 INTERIOR ELEVATIONS – LOWER LEVEL

A. KEYNOTES: CHANGED KEYNOTES 8.11E, 8.12F, 8.13G, & 10.12B
B. 1/A8.14: ADDED (E) SEISMIC SEPARATION JOINT
C. 2/A8.14: RELOACTED TEACHING WALL FROM 4/A8.14
REMOVED PORTION OF TACKBOARD
D. 3/A8.14: ADDED (E) SEISMIC SEPARATION JOINT
SHIFTED (6) CASEWORKS & (1) WINDOWS
RESIZED (1) 36" W CASEWORK TO 30" W
SHORTENED & SHIFTED (1) COUNTERTOP
E. 4/A8.14: RELOCATED TEACHING WALL TO 2/A8.14
ADDED PORTION OF TACKBOARD

A8.15 INTERIOR ELEVATIONS – LOWER LEVEL

A. KEYNOTES: CHANGED KEYNOTES 8.11E, 8.12F, & 8.13G

A8.16 INTERIOR ELEVATIONS – MAIN LEVEL

A. KEYNOTES: CHANGED KEYNOTES 8.12F, 8.13G, & 10.12B

B. 9/A8.16: ADDED (E) SEISMIC SEPARATION JOINT
SHIFTED CASEWORKS, COUNTERTOP & WINDOWS
RESIZED (1) CASEWORK
C. 10/A8.16: RELOACTED TEACHING WALL FROM 12/A8.16
REMOVED PORTION OF TACKBOARD
D. 11/A8.16: ADDED (E) SEISMIC SEPARATION JOINT
E. 12/A8.16: RELOCATED TEACHING WALL TO 10/A8.16
ADDED PORTION OF TACKBOARD

A8.17 INTERIOR ELEVATIONS – LOWER LEVEL

A. KEYNOTES: CHANGED KEYNOTES 8.12F, 8.13G, & 10.12B

A8.18 INTERIOR ELEVATIONS – LOWER LEVEL

A. KEYNOTES: CHANGED KEYNOTES 8.13G
B. 5/A8.18: ADDED TAGS TO CABINETS

A8.19 INTERIOR ELEVATIONS – MAIN LEVEL

A. KEYNOTES: CHANGED KEYNOTES 8.12F, 8.13G, & 10.12B
REPLACED KETNOTE 8.11C TO 8.11E
B. 6/A8.19: REPLACED KEYNOTE 8.11C TO 8.11E
C. 9/A8.19: ADDED (E) SEISMIC SEPARATION JOINT
D. 10/A8.19: RELOACTED TEACHING WALL FROM 12/A8.19
REMOVED PORTION OF TACKBOARD
E. 11/A8.19: ADDED (E) SEISMIC SEPARATION JOINT
SHIFTED CASEWORKS, COUNTERTOP & WINDOWS
RESIZED (1) CASEWORK
F. 12/A8.19: RELOCATED TEACHING WALL TO 10/A8.19
ADDED PORTION OF TACKBOARD
G. 13/A8.19: ADDED (E) SEISMIC SEPARATION JOINT
H. 14/A8.19: REPLACED KEYNOTE 8.11C TO 8.11E
I. 15/A8.19: ADDED (E) SEISMIC SEPARATION JOINT
J. 16/A8.19: REPLACED KEYNOTE 8.11C TO 8.11E

A8.20 INTERIOR ELEVATIONS – LOWER LEVEL

A. KEYNOTES: CHANGED KEYNOTES 8.12F & 8.13G
REPLACED KEYNOTE 10.11A TO 10.12B

A8.21 ENLARGED CASEWORK PLANS & INTERIOR ELEVATIONS

A. ADDED DETAIL 15/A8.21

A9.10 DOOR AND FRAME SCHEDULE

A. DOOR PANEL TYPES:
DELETED DOOR PANEL TYPES C, E, F, & G
B. DOOR FRAME TYPES:
ADDED DETAIL REFERENCE TO DOOR FRAME TYPE 2, 3, 4, & 5
C. DOOR AND FRAME SCHEDULE:
REPLACED DOORD TAG 212 TO 212.1

ADDED DOOR TAG 212.2
ADDED COMMENTS TO DOORS
REPLACED COMMENTS TO DOORS
REPLACED DOOR DETAILS TO DOOR 206.3 & 206.4

A9.11 STOREFRONT SCHEDULE

A. INTERIOR STOREFRONT SCHEDULE
ADDED STOREFRONT TYPE ISF-12

A9.20 WALL TYPES

A. 1/A9.20: CHANGED DETAIL REFERENCE 4/A10.12 TO 7/A10.12
MOVED DETAIL REFERENCE 6/A10.12 TO 3/A10.12
B. 2/A9.20: CHANGED DETAIL REFERENCE 4/A10.12 TO 7/A10.12
MOVED DETAIL REFERENCE 6/A10.12 TO 3/A10.12
C. 3/A9.20: DELETED 3/A9.20 FROM SHEET
D. 4/A9.20: CHANGED DETAIL REFERENCE 4/A10.12 TO 7/A10.12
MOVED DETAIL REFERENCE 6/A10.12 TO 3/A10.12
E. 5/A9.20: CHANGED DETAIL REFERENCE 4/A10.12 TO 7/A10.12
MOVED DETAIL REFERENCE 6/A10.12 TO 3/A10.12
F. 7/A9.20: CHANGED DETAIL REFERENCE 4/A10.12 TO 7/A10.12
MOVED DETAIL REFERENCE 6/A10.12 TO 3/A10.12
G. 8/A9.20: CHANGED DETAIL REFERENCE 7/A10.12 TO 4/A10.12
H. 9/A9.20: CHANGED DETAIL REFERENCE 7/A10.12 TO 4/A10.12
I. 12/A9.20: ADDED WALL TYPE D

A9.30 FINISH FLOOR PLAN – LOWER LEVEL AND FINISH SCHEDULE

A. 1/A9.30:
a. ROOM 116A
ADDED WALL GRAPHIC ELEVATION 6/A12.00 & 7/A12.00
b. ROOM 116B
ADDED ROOM FINISH TAG

A9.31 FINISHED FLOOR PLAN – MAIN LEVEL AND FINISH SCHEDULE

A. FINISH SPECIFICATION LEGEND:
DELETED ACCOUSTIC WALL PANEL (AWP-01)
ADDED INFORMATION TO CONCRETE (CONC-01)
B. FINISH FLOOR PLAN NOTES:
ADDED EXPOSED COLUMN FINISH TO NOTE K
C. 1/A9.31: ADDED WALL GRAPHIC ELEVATION MARKERS

A10.10 EXTERIOR DETAILS

A. 8/A10.10: CHANGED DETAIL ANNOTATION
B. 9/A10.10: CHANGED DETAIL ANNOTATION
C. 15/A10.10: DELETED DETAIL
D. 21/A10.10: DELETED DETAIL
E. 22/A10.10: DELETED DETAIL

A10.11 INTERIOR DETAILS

A. 7/A10.11: EDITED DETAIL
B. 16/A10.11: EDITED DETAIL ADDED
DETAIL REFERENCE 24/A10.12 & 25/A10.12

A10.12 INTERIOR DETAILS

A. 2/A10.12: CHANGED ANNOTATION
B. 3/A10.12: DELETED 3/A10.12 FROM SHEET
C. 4/A10.12: CHANGED TOP OF WALL CONDITION
D. 6/A10.12: CHANGED TOP OF WALL CONDITION
ADDED DETAIL REFERENCE 1A/S018
E. 7/A10.12: CHANGED TOP OF WALL CONDITION
ADDED DETAIL REFERENCE 1A/S018
F. 12/A10.12: DELETED 12/A10.12 FROM SHEET
G. 13/A10.12: DELETED 13/A10.12 FROM SHEET
H. 14/A10.12: REPLACED DETAIL
I. 24/A10.12: ADDED DETAIL
J. 25/A10.12: ADDED DETAIL

A10.20 EXTERIOR OPENING DETAILS

A. 2/A10.20: CHANGED DETAIL ANNOTATION
B. 3/A10.20: CHANGED DETAIL ANNOTATION
C. 4/A10.20: CHANGED DETAIL ANNOTATION
D. 5/A10.20: CHANGED DETAIL ANNOTATION
E. 6/A10.20: CHANGED DETAIL ANNOTATION
F. 7/A10.20: CHANGED DETAIL ANNOTATION
G. 8/A10.20: CHANGED DETAIL ANNOTATION
H. 9/A10.20: CHANGED DETAIL ANNOTATION
I. 10/A10.20: CHANGED DETAIL ANNOTATION
J. 11/A10.20: CHANGED DETAIL ANNOTATION
K. 12/A10.20: CHANGED DETAIL ANNOTATION
L. 13/A10.20: CHANGED DETAIL ANNOTATION
M. 14/A10.20: CHANGED DETAIL ANNOTATION
N. 15/A10.20: CHANGED DETAIL ANNOTATION
O. 16/A10.20: DELETED DETAIL
P. 17/A10.20: DELETED DETAIL
Q. 18/A10.20: DELETED DETAIL
R. 19/A10.20: CHANGED DETAIL ANNOTATION
S. 20/A10.20: CHANGED DETAIL ANNOTATION
T. 21/A10.20: DELETED DETAIL
U. 22/A10.20: DELETED DETAIL
V. 24/A10.20: DELETED DETAIL
W. 25/A10.20: DELETED DETAIL
X. 26/A10.20: DELETED DETAIL
Y. 27/A10.20: DELETED DETAIL
Z. 28/A10.20: DELETED DETAIL

A10.21 INTERIOR OPENING DETAILS

A. 9/A10.21: CHANGED DETAIL TITLLE

B. 10/A10.21: CHANGED DETAIL TITTLE
C. 11/A10.21: ADDED DETAIL
D. 12/A10.21: ADDED DETAIL
E. 13/A10.21: ADDED DETAIL
F. 16/A10.21: DELETED DETAIL
G. 17/A10.21: REPLACED DETAIL
H. 18/A10.21: DELETED DETAIL
I. 19/A10.21: CHNAGED DETAIL TITLLE

A10.30 CEILING DETAILS

A. 8/A10.30: ADDED DETAIL REFERENCE 16/A10.30 THROUGH 20/A10.30
B. 14/A10.30: REPLACED DETAIL
C. 15/A10.30: ADDED DETAIL
D. 16/A10.30: CHANGED DETAIL ANNOTAION
E. 18/A10.30: REPLACED DETAIL
F. 19/A10.30: ADDED DETAIL

A10.31 CEILING DETAILS

A. 4/A10.31: ADDED DETAIL REFERENCE 4/S013
B. 5/A10.31: ADDED DETAIL REFERENCE 3/S013 & 4/S013
C. 9/A10.31: ADDED DETAIL
D. 12/A10.31: CHANGED ATTACHEMENT CONDITION
ADDED DETAIL REFERENCE 4/S013
REMOVED DETAIL REFERENCE 6/S015
E. 14/A10.31: ADDED DETAIL

A10.40 ROOF DETAILS

A. 1/A10.40: ADDED (E) GYP. BD. AND ANNOTATION
B. 2/A10.40: ADDED (E) GYP. BD. AND ANNOTATION
C. 6/A10.40: ADDED (E) GYP. BD. AND ANNOTATION
D. 13/A10.40: ADDED (E) GYP. BD. AND ANNOTATION
E. 14/A10.40: ADDED (E) GYP. BD. AND ANNOTATION
F. 16/A10.40: ADDED (E) GYP. BD. AND ANNOTATION
G. 17/A10.40: ADDED (E) GYP. BD. AND ANNOTATION

A10.60 SIGNAGE DETAILS

A. 18/A10.60: ADDED ENLARGED PLAN
B. 19/A10.60: ADDED ASPHALT SECTION DETAIL
C. 20/A10.60: ADDED BASKETBALL COURT STRIPPING DETAIL
D. 21/A10.60: ADDED CONCRETE PAVING JOINT DETAIL
E. 25/A10.60: ADDED ENLARGED BASKETBALL COURT STRIPPING DEATIL

A10.70 SEISMIC SEPERATION JOINT COVER DETAIL

A. NEW SHEET

A12.00 WALL GRAPHIC ELEVATIONS

A. NEW SHEET

A12.01 WALL GRAPHIC ELEVATIONS

A. NEW SHHET

S000 GENERAL NOTES

A. SHEET INDEX:
ADDED S018

S011 TYPICAL DETAILS

A. 10/S011: REPLACED BY DETAILS ON SHEET S018
B. 12/S011: CORRECTED CALL OUT REFERENCE

S012 TYPICAL DETAILS

A. 1F/S012: REPLACED BY DETAILS ON SHEET S018
B. 1G/S012: REPLACED BY DETAILS ON SHEET S018
C. 6/S012: REPLACED BY DETAILS ON SHEET S018

S014 TYPICAL DETAILS

A. 1B/S014: REPLACED BY DETAILS ON SHEET S018
B. 1C/S014: REPLACED BY DETAILS ON SHEET S018

S015 TYPICAL DETAILS

A. 1C/S015: REPLACED BY DETAILS ON SHEET S018
B. 1F/S015: REPLACED BY DETAILS ON SHEET S018
C. 3/S015: ADD A CEILING JOIST TO THE SCHEDULE TO SPAN 20'-0"
D. 6/S015: REPLACED BY DETAILS ON SHEET S018

S017 TYPICAL DETAILS

A. 5/S015: SHOW GYP BD FINISH ON THE (E) ROOF MEMBERS

S018 TYPICAL DETAILS

A. NEW SHEET
B. 1/S018: MISC CONNECTIONS TO THE EXISTING WOOD FRAMED ROOF TO AVOID THE EXISTING GY BD
C. 2/S018: TYPICAL METAL STUD WALL IN FILL DETAILS

S203 (E) FRAMING PLAN – ROOF

A. 1/S203ADD NEW OPENINGS ON ROOF FOR DUCTS.

M2.11 REMODEL FLOOR PLAN LOWER LEVEL

A. ADDED KEYNOTE 4
B. ADDED SEISMIC FLEX JOINTS FOR DUCTWORK THAT PASSES GRIDLINE 7
C. RELOCATED DIFFUSERS AND ASSOCIATED DUCTWORK TO ACCOMMODATE UPDATED REFLECTIVE CEILING PLAN

M2.12 REMODEL FLOOR PLAN MAIN LEVEL

A. MODIFIED DUCTWORK ALONG GRIDLINE 7 TO ALLOW FOR DUCTWORK TO PENETRATE THE ROOF AND CROSS OVER GRIDLINE 7 AT THE ROOF LEVEL

M4.11 REMODEL ROOF PLAN

A. DUCTWORK SHOWN PENETRATING THE ROOF FROM MAIN LEVEL AND PASSING OVER GRIDLINE 7 WITH SEISMIC FLEX JOINTS ON THE ROOF
B. ADDED KEYNOTES 3 AND 4

M5.02 DETAILS

A. ADDED DETAIL 6 – DUCT SUPPORT ON ROOF DETAIL

M5.04 MECHANICAL SEISMIC FLEX JOINT SUPPORT DETAILS

A. NEW SHEET WITH DETAIL 1 & 2 FOR SEISMIC FLEX JOINT SUPPORT DETAILS FOR INDOOR AND OUTDOOR APPLICATIONS. (PLEASE NOTE, THESE DETAILS REPRESENT CONCEPT, AND CONTRACTOR COORDINATION WITH MANUFACTURE SHALL PROVIDE SUBMITTALS FOR A/E REVIEW AND APPROVAL)

E0.03 FIXTURE SCHEDULE

A. LIGHTING FIXTURE SCHEDULE:
UPDATED FIXTURE TYPE C, G, GE, & JD

E0.04 PANEL SCHEDULE

A. BRANCH PANEL LP2:
UPDATED SCHEDULE

E0.05 PANEL SCHEDULE

A. BRANCH PANEL MP1:
UPDATED SCHEDULE
B. BRANCH PANEL MP2:
UPDATED SCHEDULE

E2.11 LIGHTING PLAN LOWER LEVEL

A. KEYNOTES: UPDATED KEYNOTE 5, & 6
B. LIGHTING PLAN GENERAL NOTES:
UPDATED NOTES
C. 1/E2.11: UPDATED LIGHT FIXTURE

E2.12 LIGHTING PLAN MAIN LEVEL

A. LIGHTING PLAN GENERAL NOTES:
UPDATED NOTES
B. 1/E2.11: UPDATED LIGHT FIXTURE

E2.21 POWER PLAN LOWER LEVEL

A. KEYNOTES: UPDATED KEYNOTES

B. 1/E2.21: REMOVED POWER TO HAND DRYER
ADDED POWER TO MOTORIZED ROLLER SHADES
RELOACTED POWER TO PROJECTORS AND SCREEN

E2.22 POWER PLAN LOWER LEVEL

A. KEYNOTES: UPDATED KEYNOTES
B. 1/E2.21: REMOVED POWER TO HAND DRYER
ADDED POWER TO MOTORIZED ROLLER SHADES
RELOACTED POWER TO PROJECTORS AND SCREEN

E5.01 DETAILS

A. 6/E5.01: REPLACED DETAIL
B. 9/E5.01: REPLACED DETAIL

E5.02 DETAILS

A. 6/E5.02: ADDED DETAIL
B. 7/E5.02: ADDED DETAIL

FP2.11 REMODEL FLOOR PLAN LOWER LEVEL

A. 1/FP2.11: ADDED SEISMIC ASSEMBLIES TO TWO 4" SUPPLY MAINS AT GRID #7

FP2.12 REMODEL FLOOR PLAN MAIN LEVEL

A. 1/FP2.12: ADDED SEISMIC ASSEMBLIES TO TWO 4" SUPPLY MAINS AT GRID #7
REVISED HYDRAULIC CALC WITH SEISMIC ASSEMBLY PSI LOSS

FP5.01 DETAILS

A. 3/FP5.01: CHANGED STRUCTURAL ATTACHMENT CALL OUT TO STRUCTURAL DETAIL SHEET
B. 6/FP5.01: REPLACED HANGER ATTACHMENT TO WOOD DETAIL WITH SEISMIC FLEXIBLE JOINT DETAIL
C. 8/FP5.01: REMOVED HANGER STRAP ATTACHMENT TO STRUCTURE AND ADDED CALL OUT FOR ATTACHMENT TO DETAIL ON SHEET A10.30

T0.01 TECHNOLOGY COVERSHEET

A. REVISE SC-WAP-C DESCRIPTION ON TECHNOLOGY SYMBOL LIST

T0.02 SCHEDULES

A. REVISE EQUIPMENT DESCRIPTIONS ON GENERAL TECHNOLOGY EQUIPMENT SCHEDULE.
B. REVISE INFORMATION OUTLET SCHEDULE TO REPRESENT CAT. 6 IN LIUE OF CAT6A

T2.11 REMODEL FLOORPLAN LOWER LEVEL

A. ADDED INTRUSION SYSTEM MOTION SENSORS THROUGHOUT FLOOR. REFER TO PLAN FOR ALL LOCATIONS.
B. REMOVED DATA OUTLETS FROM WINDOW ALL IN CLASSROOMS 105 & 118.

C. ADD SECOND AUDIO VIDEO PRESENTATION SYSTEM TO CLASSROOMS 117 AND 106. EACH SYSTEM WILL BE STAND ALONE AND WILL BE AN EXTRON POLEVAULT SYSTEM. THERE WILL BE NO PROJECTION SCREEN AS THE IMAGE WILL BE PRESENTED ON THE GLASS/WINDOW WALL. ASSUME EACH SYSTEM WILL INCLUDE TWO AV SPEAKERS. SPEAKERS ARE NOT SHOWN AND LOCATION IS TO BE DETERMINED. PROVIDE POWER OUTLETS FOR CEILING PROJECTOR

T2.11 REMODEL FLOORPLAN MAIN LEVEL

A. ADDED INTRUSION SYSTEM MOTION SENSORS THROUGHOUT FLOOR. REFER TO PLAN FOR ALL LOCATIONS.
B. ADDED OUTLET LOCATOINS FOR FUTURE VIDEO SURVEILLANCE CAMERAS. CONTRACTOR IS ONLY RESPONSIBLE FOR PROVIDING ROUGH-IN AND CAT. 6 CABLE TERMINATED WITH RJ45 MALE PLUG FOR USE BY DISTRICTS SECURITY VENDOR.
C. ADDED EXTERIOR WAP LOCATION NORTH SIDE OF BUILDING.
D. RELOCATED EXTERIOR HORN ON NORTH SIDE OF BUILDING.
E. ADDED KEYNOTE #4 TO FURTHER CLARIFY SCOPE FOR EXISTING MDF ROOM.
F. ADDED (2) AV SPEAKERS IN LIBRARY FOR A TOTAL OF (4) AV CEILING SPEAKERS.
G. ADD SECOND AUDIO VIDEO PRESENTATION SYSTEM TO LIBRARY. SYSTEM WILL MIMIC SAME SYSTEM AS ALREADY ILLISTRATED IN LIBRARY. THIS WILL BE A SECOND, STAND ALONG SYSTEM BASED ON EXTRON POLEVAULT SYSTEM.
H. ADD SECOND AUDIO VIDEO PRESENTATION SYSTEM IN COMPUTER AREA 210. SYSTEM WILL BE A COMPLETE SYSTEM BASED ON EXTRON POLEVAULT. PROVIDE APPLICABLE POWER OUTLETS FOR CEILING PROJECTOR AND VIDEO PROJECTION SCREEN.

T3.00 ENLARGED PLANS - TECHNOLOGY

A. DETAIL #1, ADDED INTRUSION DETECTION PANEL TO MDF ROOM.

T5.01 ENLARGED PLANS - TECHNOLOGY

A. DETAIL #3, REPLACED CLOCK RISER DIAGRAM WITH INTRUSION DEETECTION RISER DIAGRAM.

EXIBITS:

Item 3.1 The following revised drawings are hereby issued.

EXIBIT 1: CONSTRUCTION BARRICADE FENCING AND MILESONE SCHEDULE PLAN

A. NEW SHEET

End of Addendum 1

SGH Architects, Inc.

Scott Griffith, AIA
Managing Partner
Architect C-24897



BUILDING 400 MODERNIZATION
DIAMOND BAR HIGH SCHOOL

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SECTION 01 30 00 - ADMINISTRATIVE REQUIREMENTS

PART 1 - GENERAL

1.1 SECTION INCLUDES

A. Project Management and Coordination: Project Coordination, Mechanical and Electrical Coordination, Project Meetings.

B. Construction Progress Documentation: Construction Progress Schedule, Two-week Look Ahead Schedule, Construction Photographs.

C. Submittal Procedures: Shop Drawings, Product Data, Samples, Source Quality Control Reports, Finishes Materials Schedule, Coordinated Drawings.

1.2 PROJECT COORDINATION

A. Coordinate scheduling, submittals, and Work of various Sections of Project Manual to ensure efficient and orderly sequence of installation of interdependent construction elements, with provisions for accommodating items installed later.

B. Verify utility requirements and characteristics of operating equipment are compatible with building utilities. Coordinate Work of various Sections having interdependent responsibilities for installing, connecting to, and placing in service, such equipment.

C. Coordinate space requirements and installation of mechanical and electrical Work that are indicated diagrammatically on Drawings. Follow routing shown for pipes, ducts, and conduit, as closely as practicable; place runs parallel with line of building. Utilize spaces efficiently to maximize accessibility for other installation, for maintenance, and for repairs.

D. In finished areas except as otherwise indicated, conceal pipes, ducts, and wiring within construction. Coordinate locations of fixtures and outlets with finish elements.

E. Coordinate completion and cleanup of Work of separate sections in preparation for Certified Completion and for portions of Work designated for Owner's occupancy.

F. After Owner occupancy of premises, coordinate access to site for correction of defective Work and Work not in accordance with Contract Documents, to minimize disruption of Owner's activities.

1.3 MECHANICAL AND ELECTRICAL COORDINATION

A. Carefully coordinate interface between Divisions 21, 22, 23, 26 and Division 28, before submitting any equipment for review or commencing installation.

B. Control Wiring:

1. Consists of wiring in pilot circuits of contactors and starters, sensors, controllers, relays, and wiring for valve and damper operators.

C. Connections:

1. Provide connections to controls directly attached to ducts, piping and mechanical equipment with flexible connections.

D. Starters:

1. Provide magnetic starters or adjustable frequency drives for three phase motors and equipment complete with:

a. Control transformers.
b. 120 V holding coil.
c. Integral hand-off-auto switch.
d. Auxiliary contacts required for system operation plus one (1) spare.

E. Control Voltage:

1. Maximum allowable control voltage 120V/208V. Fully protect control circuit conductors in accordance with California Electrical Code.

1.4 PRECONSTRUCTION MEETING

A. Architect will schedule meeting after Notice of Award.

B. Attendance Required: Architect, Prime Contractors, Major Subcontractors, Project Inspector and key Owner personnel.

C. Agenda:

1. Contract Agreement:

a. Transmit 5 signed originals of the Agreement to the Owner.
b. Transmit Attachment Certifications to the Owner.
c. Transmit Performance and Payment Bonds to the Owner.
d. Contractor to transmit Certificates of Insurance to the Owner.
e. Owner to transmit copy of Certificates of Property Insurance to Contractor,
f. Review General Conditions.

2. Receive documentation from Contractor:

a. Construction Progress Schedule.
b. Schedule of Values.
c. List of Subcontractors with addresses and phone numbers.
d. List of Submittals and estimated date of submittal.

3. Project Administration:

a. Application for Payment, Stop-Notice Release, Record Drawings.
b. Change Order Requests, Change Orders, Request For Proposals, Construction Change Directive/Instruction Bulletins. Preparation of Change Orders by Architect according to 2019 California Administrative Code, Code of Regulations Title 24 Part 1, Section 4-233
c. Submittals
d. Substitution procedures.
e Site Meetings.
f Testing Laboratory.
g. Verified Reports.
h. Phasing,
i. Critical work sequencing and long-leaditems.
j. Designation of key personnel and their duties.
k. Lines of communications.
1. Procedures for RFIs.
m. Procedures for testing and inspecting.
n. Distribution of the Contract Documents.
o. Preparation of record documents.
p. Work restrictions.
q. Working hours.
r. Procedures for moisture and mold control.
s. Procedures for disruptions and shutdowns.
t. Construction waste management and recycling.
u. Parking availability.
v. Storage areas.
w. Equipment deliveries and priorities.
x. Security.
y. Progress cleaning.

4. Special Owner Conditions:

a. Temporary Facilities.
b. Owner Occupancy.
c. Work by Owner.
d. Access to Site - Owner Contact.

5. Construction Process:

a. Contractor shall discuss overview of construction.
b. Contractor shall identify items to be selected by Architect/Owner and date selections must be made.
c. Contractor shall review special requirements for equipment, safety, and noise.

6. Pre-Job Conference:

a. Prevailing Wage Requirements.
b. Checklist and signatures.

D. Architect will record minutes and distribute copies within seven days after meeting to participants and those affected by decisions made.

1.5 PROGRESS MEETINGS

A. Architect will schedule and administer meetings throughout progress of Work as needed.

B. Architect will make arrangement for meetings, prepare agenda with copies for participants, preside at meetings.

C. Attendance Required: Project Coordinator, Prime Contractors, Major Subcontractors and Suppliers, Project Inspector, key Owner personnel and Architect as appropriate to agenda topics for each meeting.

D. Agenda:

1. Review minutes of previous meetings.

2. Review of Work progress.

3. Field observations, problems, and decisions.

4. Identification of problems that impede planned progress.

5. Review of submittals schedule and status of submittals.

6. Maintenance of Construction Progress Schedule.

7. Corrective measures to regain projected schedules.

8. Maintenance of quality and work standards.

9. Effect of proposed changes on progress schedule and coordination.

10. Other business relating to Work.

E. Architect will record minutes and distribute copies within seven days after meeting to participants, and those affected by decisions made.

1.6 PREINSTALLATION MEETING

A. When required in individual Specification Sections, convene pre-installation meeting before starting Work of Section.

B. Require attendance of parties directly affecting, or affected by, Work of specific Section.

a. Notify Architect four days in advance of meeting date.

D. Prepare agenda and preside at meeting:

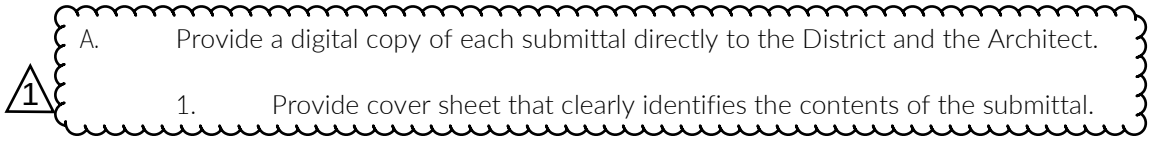
1. Review conditions of installation, preparation and installation procedures.

2. Review coordination with related Work.

E. Contractor shall record minutes and distribute copies within three days after meeting to

participants, Architect and those affected by decisions made.

1.7 SUBMITTAL PROCEDURES



A. Provide a digital copy of each submittal directly to the District and the Architect.

1. Provide cover sheet that clearly identifies the contents of the submittal.

2. Include SGH Architects job number as it appears on Contract Documents.

3. Include Authority Having Jurisdiction application or approval number.

B. Submittal number shall use a sequential number followed by a hyphen then the Specification Section followed by a hyphen and then the revision number (e.g., 0001-051200-0). Resubmittals shall have the original number and include the revision number as the suffix (e.g., 0001-051200-1).

C. Identify Project, Contractor, Subcontractor or supplier; pertinent Drawing sheet and detail number(s), and Specification Section number, as appropriate.

1. Provide name, and telephone number of individual who may be contacted for further information.

D. Apply Contractor's dated stamp with Contractor's original signature or initials affixed thereto, certifying that review, verification of products required, field dimensions, adjacent construction Work, and coordination of information is according to requirements of Work and Contract Documents. Stamped signatures or initials are not acceptable.

E. Schedule submittals to expedite Project. Coordinate submission of related items.

1. Make submittals according to Construction Schedule and adequate enough in advance of scheduled dates of installation to provide required time for reviews for securing necessary approvals for possible revision and re-submittal and for placing orders and securing delivery.

2. Schedule submittals such that related materials and assemblies that support or are affected by the submitted materials are either submitted simultaneously or in order of installation sequence such that impacts and coordination can be evaluated as part of the review.

3 Late submittals, not in accordance with the "Schedule for Submission of Shop Drawings, Product Data and Samples" and the Construction Schedule, will not be considered an acceptable reason for initiating a substitution requests caused by late ordering and procurement of materials.

F. Identify variations from Contract Documents and Product or system limitations that is detrimental to performance of completed Work.

G. Substitutions: Submit only as approved per the General Conditions and Section 01 60 00, state effect of approved substitution on construction schedule, and changes required in other work or products.

H. Owner-Directed Substitution Approval: Substitution submittals specifically directed by Owner to be approved by the Architect for this project shall pertain to a specific item only. The Architect's stamped approval of Owner-Directed Substitution does not constitute approval for any other item, other projects or parts of project. A Change Order shall be prepared to effect the Owner's authorization of Owner-Directed Substitution.

I. Provide space for Contractor and Architect review stamps.

J. Revise and resubmit submittals in their entirety, identify changes made since previous submittal.

K. Distribute copies of reviewed submittals to concerned parties. Instruct parties to promptly report any inability to comply with provisions.

L. Determine and verify field dimensions and conditions, materials, catalog numbers and similar data.

M. Coordinate as required with all trades and all public agencies involved.

N. Unless otherwise specifically authorized by Architect, make submittals in groups containing associated items within the same Section. Architect may reject partial submittals as not complying with provisions of this Section.

0 Where individual Sections require structural calculations, prepare submittal under direction of qualified California Licensed Structural Engineer and shall bear the Engineer's stamp and signature.

P. Format of Submittals: Submit Electronic Submittals, including but not limited to Product Data, Shop Drawings, Schedules, Certifications, tests, logs, for ease of information distribution. At Contractor's option he may submit standard printed data on reproducible media and in number of copies required per this Section and other project Sections. Identify submitted items that are applicable to the project, including any deviations, with arrows, clouds, or other distinct graphic, or in highlighted writing that can be reproduced with black and white copiers easily discernible from background information.

1.8 CONSTRUCTION PROGRESS SCHEDULE

A. Submit Construction Progress Schedule in duplicate within 15 calendar days after the date on the Notice to Proceed for Architect's review.

1. Schedule shall reflect amount of time stipulated in Agreement.

2. If the Contractor proposes an earlier completion dated than stipulated in the Agreement, Change Order will be issued reflecting revised completion date at no change in Contract Sum.

B. Revise and resubmit as required.

C Scheduling may utilize programs including Microsoft Project Schedule, Primavera Project Planner (P3), Primavera SureTrak Project Manager, Meridian Project Systems or similar programs addressing the requirements.

D. Submit computer generated network analysis diagram in accordance with Section 01 32 16.13 using Critical Path Method, generally as outlined in Associated General Contractors of America (AGC) publication "Construction Planning and Scheduling", latest Edition.

E. Indicate complete sequence of construction by activity, identifying Work of separate stages and other logically grouped activities. Indicate early and late start, early and late finish, float dates and duration. Ownership of float time is shared commodity, not for exclusive use by either party. Use float time to make up Work behind schedule until float time is depleted. Submittals returned in less time than allowed by Contract, shall be used to reduce Contractor time extension requests.

F. Indicate Milestones and target date and their activities including completion dates,

G. No Time extensions will be granted nor delay damages paid until a delay occurs that impacts the schedule consumes all available float or contingency time available and extends the work beyond the contract completion date.

H. Indicate estimated percentage of completion for each item of Work at each submission.

I. Schedule for Submission of Shop Drawings, Product Data and Samples: Incorporate "Schedule for Submission of Shop Drawings, Product Data and Samples" in Construction Progress Schedule. This schedule shall include submittal dates required for shop drawings, product data, samples and product delivery dates, including Deferred Approval Items, if any, and including those items furnished by Owner. Provide time in schedule for Architect's review of submittals according to Contract Time. Allow 14 calendar days for submittals requiring consultants' review.

J. Submit revised schedules with each Application for Payment identifying changes since previous version.

K. As a minimum allow 15 calendar days in schedule for final inspections before final acceptance. Include time to correct punch list items prior to final acceptance.

L. Substantially Completed buildings, alterations, additions and relocatables: in projects consisting of different buildings, alterations, additions and relocatables, scheduled to be substantially completed and delivered to the Owner for beneficial occupancy prior to Final Completion of entire project, indicate in the Construction Schedule each building, alteration, addition and relocatable progress, completion date, Punch List items and time for completion of Punch list items.

1. DSA 152-Project Inspection Cards: The Inspector shall post the forms in his/her job file and shall electronically post the forms. Inspection Cards required: DSA issued 152-Project Inspection Cards for EACH building, alteration, addition, each relocatable, and one for the site work when site work is involved. The Project Inspector is responsible to sign off applicable blocks and sections on the form as Work progresses as required in accordance with DSA Procedures. No one is allowed to modify the Project Inspection Cards except the Project Inspector.

1.9 TWO-WEEK LOOK AHEAD SCHEDULE

A. Submit a Two Week Look Ahead Schedule and shall contain the following:

1. Prepare detailed two-week schedule projections for the Work to be performed

during the following weeks beyond the week it is presented at the weekly construction meeting or at the request of the Architect during the construction period.

2. Be plotted in bar chart or time scale logic format and be of such size that all activity numbers and descriptions are clearly legible.

3. Be sorted by sub contractor responsibility, actual start, early start and total float.

4. Include activity ID, description and float for each activity.

5. Include all activities, completed, in progress and scheduled to start within the time frame of the date minus one week to the data date plus two weeks.

6. Schedule shall be updated and provided at each regular progress meeting for review and comparison to approved project schedule status.

1.10 CONSTRUCTION PHOTOGRAPHS

A. Photographer: Engage qualified photographer [persons] to take construction photographs.

B. Photographic Film: Medium format, 2-1/4 by 2-3/4 inches.

C. Do not permit prints to be issued for any purpose without specific written authorization from the Architect.

D. Digital Images: Provide images in uncompressed TIFF format, produced by a digital camera with minimum sensor size of 4.0 megapixels, and at an image resolution of not less than 1024 by 768.

1. Provide 2 sets (CD's) of copies to Owner.

E. Date Stamp: Unless otherwise indicated, date and time stamp each photograph as it is being taken so stamp is integral to photograph.

1. Identify each print with job name, location from which photograph was taken, photographer's name address and photograph number.

F. Pre-Construction Photographs: Before starting construction, take 4 color photographs of Project site and surrounding properties from different vantage points, as directed by Architect. Show existing conditions adjacent to property.

G. Periodic Construction Photographs: Take 4 color photographs monthly, coinciding with cut off date associated with each Application of Payment. Photographer shall select vantage points to best show status of construction and progress since last photographs were taken. Take photographs same time of day.

1. Field Office Prints: Retain 1 set of prints of periodic photographs in field office at Project site available at all times for reference. Identify photographs same as for those submitted to Architect.

2. Final Completion Construction Photographs: Take 8 color photographs after

date of Substantial Completion for submission as Project Record Documents. Architect will direct photographer for desired vantage points.

3. Submit Construction Photographs to Owner monthly, submit before Application for Payment.

1.11 COORDINATED DRAWINGS

A. Submit drawings that indicate routing, locations sizes, types and number of components in concealed spaces where potential conflict may occur between structures, mechanical, electrical, Automatic Fire Sprinkler System (AFSS), communications and ceiling suspension systems.

B. Indicate locations of ceiling penetrations and surface-mounted items. Provide cross sections at areas to indicate proper support of ceilings and non-interference with work of other Sections of specifications. Cross sections shall indicate coordination required and proposed solutions for routing of elements where potential conflict exists. Reproduction of Architect's reflected ceiling plan is not acceptable.

C Drawings shall be based on field measurements, shop drawings and product data.

D. Conflicts shall be brought to Architect's attention immediately.

E. Submit to Architect, in writing, requests for clarification or interpretations that will affect intent and/or scope of Contract Documents.

F. Coordinated drawings shall indicate each class of Work in affected area. Drawing or written submittal shall include Contractor's recommendations for solution of any potential conflicts as well as recommendations tendered by any Work of any Section of Specifications which may be affected thereby.

G. Submit coordinated drawings in scale of not less than 1/8" = 1'-0" with necessary sections and profiles at an appropriate, clearly readable enlarged scale. Submit coordinated drawings as one electronic (CD) copy and one bond (hard) copy.

H. Architect will review submittals, make appropriate notations and comments to ensure solution meets intent of Contract Documents and then return to Contractor for implementation.

I. Contractor shall be responsible for proper coordination of Work of Sections of Specifications in execution of coordinated drawings. Installation of materials, components or equipment under one Section of Specifications without full and complete, agreement, knowledge and consent by fabricators of adjacent or otherwise related or affected Work will not be approved.

J. It shall be incumbent upon Contractor that fabricators of Work involved in execution of coordinated drawings be informed, consulted and advised in sufficient advance time to arrive at solutions where no extension of contract time for extra cost to Owner will be approved due to Contractor's negligence in expeditious, timely submittal of coordinated drawings.

1.12 SHOP DRAWINGS

A. Within 15 days from Notice to Proceed, submit to Architect for review and acceptance,

"Schedule for Submission of Shop Drawings, Product Data and Samples" (Submission Schedule) listing required submittals and review dates. Schedule shall allow sufficient time for checking by Architect. Incorporate Submission Schedule in Construction Progress Schedule. Days: Calendar Days.

1. Additionally, submit all Shop Drawings, Product Data and Samples according to the following guidelines. Guidelines are provided to allow Architect and Engineers adequate time for review and is not intended to dictate contractor's means and methods:

    a. Contract of 60 to 90 days: Submit within 15 days from acceptance of Submission Schedule. Allow Architect 15 days to respond (defined as reviewed and returned). Re-submittals: allow contractor 7 days, allow Architect 10 days to respond.
    b. Contract of 90 to 180 days: Submit within 30 days from Notice to Proceed. Allow Architect 15 days to respond. Re-submittals: allow Contractor 10 days, and Architect 15 days to respond.
    c. Contract of 180 to 270 days: Submit within 45 days from Notice to Proceed. Allow Architect 21 days to respond. Re-submittals: allow Contractor 10 days, and Architect 15 days to respond.
    d. Contract of 270 to 360 days: Submit within 60 days from Notice to Proceed. Allow Architect 21 days to respond. Re-submittals: allow Contractor 10 days, and Architect 15 days to respond.
    e. Contract of 360 to 450 days: Submit within 60 days from Notice to Proceed. Allow Architect 21 days to respond. Re-submittals: allow Contractor 15 days and Architect 21 days to respond.
    f. Contract of 450 days and longer: Contractor to schedule submittals. Allow Architect 30 days to respond. Re-submittals: allow Contractor 15 days and Architect 21 days to respond.

B. Submit newly prepared information, drawn to accurate scale. Highlight, encircle or otherwise indicate deviations from Contract Documents. Do not reproduce Contract Documents or copy standard information as the basis of Shop Drawings. Standard information prepared without specific reference to Project will not be approved as shop drawings.

C Shop drawings shall include fabrications and installation drawings, setting diagrams, schedules, patterns, templates and similar drawings. Include following information:

    1. Dimensions

    2. Identification of products and materials included.

    3. Compliance with specified standards.

    4. Notation of coordination requirements.

    5. Notation of dimensions established by field measurement.

D. Sheet Size for print submittals: Except for templates, patterns and similar full-size drawings, submit shop drawings on sheets at least 8-1/2 inch x 11 inch, but not larger than 30 inch x 42 inch.

E. 1 Contractor shall provide digital copies for review. Contractor shall review, stamp with his approval as herein required, and submit with reasonable promptness and in orderly sequence, according to Submittal Schedule, all shop drawings required by Contract Documents or subsequently by Architect as covered by modifications. Shop drawings shall be properly identified. At time of submission Contractor shall inform Architect in writing and with highlighted annotation on shop drawings of any deviation in shop drawings from requirements of Contract Documents.

F. Stamp: Each page of shop drawings shall bear Contractor's stamp, which shall signify Contractor's representation that he has determined and verified materials, field measurements and field construction criteria related thereto, or will do so, and has checked and coordinated information contained in shop drawings. Each stamp shall be accompanied by wet signature or initial of employee of Contractor who may be contacted for information. Stamped signatures or initials are not acceptable.

G. Method of Review: Submit Electronic Shop Drawing Submittals. Identify submitted items that are applicable to the project, including any deviations, with arrows, clouds, or other distinct graphic, or in highlighted writing that can be reproduced with black and white copiers easily discernible from background information.

1. Comments or corrections will be noted on submittals and returned to Contractor, who shall identify all changes made since previous submittal and resubmit in same manner. When reviewed, submittals will be stamped and returned to Contractor Who shall make distribution of electronic copies as required.

H. Processing Time

1. Allow enough time for submittal review, including time for re-submittals, as follows:

a. Time for review shall commence on Architect's receipt of submittal. No extension of the Contract Time will be authorized because of failure to transmit submittals enough in advance of the Work to permit processing, including re-submittals.

b. In accordance with the Schedule for Submission of Shop Drawings, Product Data and Samples. Review of each submittal for conformance with design concept of Project and with information given in Contract Documents. Architect's review of a separate item shall not indicate acceptance of assembly in which that item functions. Allow additional time if coordination with subsequent submittals is required. Architect will advise Contractor when a submittal being processed must be delayed for coordination.

c. Submittals requiring Consultants' Review: Where review of submittals by Architect's consultants is required, allow minimum 14 calendar days for review of each submittal.

2. Re-submittal Review: In accordance with the Schedule for Submission of Shop Drawings, Product Data and Samples for each re-submittal.

I. Submittal of shop drawings to Architect, shall be made by Contractor with dated transmittal form or letter, and not by subcontractors or suppliers.

J. Architect's review of shop drawings shall not relieve Contractor of responsibility for any deviation from requirements of Contract Documents unless Contractor has informed Architect in writing of such deviation at time of submission and Architect has given written acceptance to specific deviation, nor shall Architect's review relieve Contractor from responsibility for errors or omissions in shop drawings.

K. No portion of Work requiring shop drawings shall be commenced until shop drawings have been returned with review by Architect.

L. At Contractor's option, he may request and if Architect approves use Architect's computer-generated drawings in electronic format. Contractor's request must be in writing with list of drawings requested and BIM format required. Contractor assumes all liability for accuracy of shop drawings if he opts to use Architect's drawings. Software for BIM formats requested by Contractor not currently available to Architect will be provided by Contractor at his own expense. Complete BIM Drawing Request Form at the end of this Section for request.

1. Engineers' Drawings, BIM engineers' drawings are available only at discretion of the Engineer.

1.13 PRODUCT DATA

A. Submit within time required by Shop Drawings.

1 B. Provide digital copy of submittal to the District and Architect.

C Mark each copy to identify applicable products, models, options and other data. Supplement manufacturers' standard data to provide information unique to this Project.

D. After review, distribute and provide copies for Record Documents.

1.14 SAMPLES

A. Submit within time required by Shop Drawings.

B. Submit samples to illustrate functional and aesthetic characteristics of product with integral parts and attachment devices. Coordinate sample submittals for interfacing Work.

C Submit samples of finishes from the full range of manufacturers' standard colors, textures and patterns for Architect selections, or in custom colors selected.

D. Include identification on each sample with full Project information.

1 E. Submit a digital copy of the sample(s), and provide a minimum of three (3) samples, or as specified in individual Sections of Specifications, two (2) of which will be retained by Architect.

F. Reviewed samples which may be used in the Work are indicated Sections of the Specifications, two (2) of which will be retained by the Architect.

G. Selection or rejection of samples will be determined by Architect in writing.

H. Colors: Materials that are visually related to other finishes require that subcontractors submit their samples before normally scheduled in order that color selection can be made for other items that are scheduled to be ordered earlier in construction schedule. Complete submittal of

color charts and color samples shall be made before related colors will be selected Architect. Contractor shall be responsible to coordinate submittal schedules so as not to delay Work.

1.15 FINISHES MATERIALS SCHEDULE

A. Submit in accordance with Submittal Procedures.

B. Submit Schedule verifying lead times of materials and products as scheduled on the Drawings.

1.16 MANUFACTURER'S INSTRUCTIONS

A. When specified in individual Specification Sections, submit manufacturer's printed instruction for delivery, storage, assembly, installation, start-up, adjusting and finishing in quantities specified for product data.

B. Identify conflicts between manufacturer's Instructions and contract documents.

1.17 MANUFACTURER'S CERTIFICATIONS

A. When specified in individual Specification Sections, submit manufacturers' certificate to Architect for review in quantities specified for product data.

B. Indicate that material or product conforms to or exceeds specified requirements. Submit supporting reference data, affidavits and certifications as appropriate.

C. C Certificates may be recent or previous test results on material or product but must be acceptable to Architect.

1.18 SPECIAL PROCEDURES - ACCELERATION OF THE WORK

A. If, in judgment of Architect or Owner, it becomes necessary at any time to accelerate Work or portion thereof, Contractor, when ordered or directed by Architect or Owner, shall deploy workers in such portions of Project where directed to enable others to properly engage and carry on their work.

1. If circumstances require that entire Work or portion thereof be completed at date earlier than Contract Completion Date as adjusted by change orders, Contractor, when ordered or directed by Owner or Architect, shall increase his forces, equipment, hours of work, and/or number of shifts and shall expedite delivery of materials to meet the altered completion date or dates ordered or directed. Any increase in cost to Contractor in compliance with such orders or directives will be adjusted in accordance with Contact Documents.

B. If, in judgment of Architect or Owner, Work is behind schedule and rate of placement of work is inadequate to regain scheduled progress so as to ensure timely completion of Work or separable portion thereof, Contractor, when so informed by Architect or Owner, shall immediately take action to increase rate of Work placement.

1. This shall be accomplished by any one or combination of following or other suitable measures:

a. An increase in working forces,

b. An increase in equipment or tools,
c. An increase in hours of work or number of shifts,
d. Expediting delivery of materials.

2. Contractor shall, within ten (10) calendar days after being so informed, notify Architect of specific measures taken and/or planned to increase rate of progress together with estimate of when scheduled progress will be regained. Should plan of action be deemed inadequate by Architect or Owner, Contractor will take additional steps or make adjustments as necessary to his plan of action until it meets with Architect's or Owner's approval.

3. Acceleration of Work will continue until scheduled progress is regained. Scheduled progress shall be established from latest revised approved progress schedule for Project.

4. Timely completion will be understood as Contract Completion Date as revised by all time extensions granted at time acceleration is undertaken.

5. Contractor shall not be entitled to additional compensation for additional effort he applies to Work under terms of this sub-paragraph.

C. Any directive or order to accelerate Work will be in writing. Any directive or order terminating accelerated Work will be in writing.

1.19 PRECEDENCE

A. The intent of the Contract Documents is to include all items necessary for the proper execution and completion of the Work by the Contractor. The Contract Documents are complementary, and what is required by one shall be as binding as if required by all; performance by the Contractor shall be required only to the extent consistent with the Contract Documents and reasonably inferable from them as being necessary to produce the indicated results.

B. In the event of conflicts or discrepancies among the Contract Documents, interpretations will be based on the following priorities:

1. The Agreement.

2. Addenda, with those of later date having precedence over those of earlier date.

3. The General Conditions of the Contract for Construction.

4. Drawings and Technical Specifications.

5. In the case of an inconsistency between Drawings and Specifications or within either Document not clarified by addendum, the better quality or greater quantity of Work shall be provided in accordance with the Architect's interpretation.

6. Any work called for in the Drawings and not mentioned in the Specifications, or vice versa, shall be performed as though fully set forth in both.

7. Contractor shall secure written permission from, Architect before proceeding with

work affected by omission or discrepancies in the Contract.

a. Separate sections of this Specification are arranged only for convenience of Contractor, and nothing stated herein should be misconstrued as suggesting jurisdiction over items of work by any different building trades.

1.20 SAFETY PLAN

A. During the entire construction period, it shall be the sole responsibility of each Contractor to maintain conditions at the Project Site to meet the requirements of the Federal Occupational Safety and Health Administration (OSHA) and California Occupational regulations. This provision shall cover the Contractor's employees and all other persons working upon or visiting the site. The Contractor shall become fully informed of all applicable standards and regulations and inform all persons and representatives responsible for work under this Contract.

1. Each Contractor shall submit to the Project Manager their Company Safety Plan within seven (7) calendar days following date of issuance of the letter of intent.

PART 2 - PRODUCTS

2.1 MOTOR HORSEPOWER - MECHANICAL AND ELECTRICAL COORDINATION

A. In general, motors larger than 1/2 Hp shall be three phase, motors 1/2 Hp or less shall be single phase.

B. Voltage and phase of motors as scheduled on electrical drawings shall take precedence in case of conflict between mechanical and electrical drawings or requirements 2 01 A., above.

C. Under Work of Divisions 21, 22, and 23 shall include coordination of mechanical equipment with requirements of Division 26 before ordering.

1. If motors' horsepower are changed under Work of Divisions 21, 22, and 23 additional electrical cost of change shall be responsibility of Divisions 21, 22, and 23. Increase or decrease motor horsepower from that specified shall not be made without written approval from Architect.

2.2 PRODUCTS FOR PATCHING AND EXTENDING WORK

A. Refer to Section 01 70 00 Execution Requirements.

PART 3 - EXECUTION

3.1 NOT USED.

BIM MODEL REQUEST FORM

Date: _____ **SGH Job Number:** _____

Project: _____ **Project Architect:** _____

We _____
Contractor

Request the following listed BIM Model(s) for use in the execution of our Work under the Contract Documents of the subject project, and hereby assume all and sole responsibility of field verification and coordination with the Work of associated trades.

The Contractor further agrees, to the fullest extent permitted by law, to indemnify and hold harmless the Architect, its officers, directors, employees and subconsultants (collectively, Architect) against any damages, liabilities or costs, including reasonable attorneys' fees and defense costs, arising from or allegedly arising from or in any way connected with the unauthorized reuse or modification of the electronic files by the Contractor or any person or entity that acquires or obtains the electronic files from or through the Contractor without the written authorization of the Architect.

Model Name:	Dated	Model Title
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Requested File Format

☐ RVT (Revit - 2015)

Requested File Deliverable

☐ USB Flash Drive

☐ E-MAIL (Newforma Info Exchange)

☐ FTP (Zipped Files)

☐ CD Rom

_____
Contractor's E-mail address

Contractors are not required to pay for the first 2 models (maximum). Additional models available at a rate of $50.00 per model.

Total payment enclosed $_____, (checks made payable to **SGH**Architects).

Signed: _____

Title: _____

Company: _____

Address: _____

Telephone: _____

Contact: *SGHArchitects Inc.*
Project Manager

END OF FORM

SECTION 01 31 16.13 - NETWORK ANALYSIS SCHEDULES

PART 1 - GENERAL

1.1 SECTION INCLUDES

A References

B. Quality Assurance.

C. Format

D. Schedule

E. Submittals

F. Review and Evaluation.

G. Updating Schedule.

H. Distribution

1.2 REFERENCES

A. "Construction Planning and Scheduling", The Associated General Contractors of America (AGC), Washington, D.C., Latest Edition.

1.3 QUALITY ASSURANCE

A. Scheduler: Contractor's Personnel specializing in CPM scheduling with one year minimum experience in scheduling construction Work of complexity comparable to this Project, and having use of computer facilities capable of delivering detailed graphic printout within 48 hours of request.

B. Contractor's Administrative Personnel: One year minimum experience in using and monitoring CPM schedule on comparable projects.

1.4 FORMAT

A. Scheduling may utilize programs (Latest Editions) including Microsoft Project, Primavera Project Planner for Windows (P3), Primavera SureTrack Project Manager, Meridian Project Systems or similar programs addressing the requirements.

B. Listings: Reading from left to right, in ascending order for each activity. Identify each activity with applicable Specification section number.

C Diagram Sheet Size: 30 inches high by width required.

D. Scale and Spacing: To allow for notations and revisions.

1.5 SCHEDULE

A. Prepare Network Analysis Schedule and supporting mathematical analyses using Critical Path Method, under concepts and methods outlines in AGC's "Construction Planning and Scheduling".

B. Diagrams to illustrate order and interdependence of activities and sequence of Work, how start of given activity depends on completion of preceding activities, and how completion of activity may restrain start of subsequent activities.

C. Illustrate complete sequence of construction by activity, identifying Work of separate stages and other logically grouped activities. Indicate early and late start, early and late finish, float dates and duration. Provide dates for procurement and delivery of critical products and dates for installation and provision for testing. Provide legend for symbols and abbreviations used. Indicate fabrication, delivery and installation activities.

D. Incorporate Schedule for Submission of Shop Drawings and Samples. Submittal dates required for shop drawings, product data, samples and product delivery dates, including those furnished by Owner. Provide time in schedule for review of submittals.

E. Mathematical Analysis: Tabulate each activity of detailed network diagrams, using calendar dates and identifying for each activity:

1. Preceding and following event number.
2. Activity description.
3. Estimated duration of activity, in maximum 15 day intervals.
4. Earliest start date.
5. Earliest finish date.
6. Actual start date.
7. Actual finish date.
8. Latest start date.
9. Latest finish date.
10. Lag time, total and free float for each activity and critical path.
11. Monetary value of activity, keyed to Schedule of Values.
12. Manpower and cost loading of scheduled activities.
13. Percentage of activity completed.
14. Responsibility

D. Analysis Program: Capable of compiling monetary value of completed and partially completed activities of accepting revised completion dates and re-computation of all dates and float.

E. Required Sorts: List activities in sorts or groups:

1. By preceding Work item or event number from lowest to highest.
2. By amount of float, then in order of early start.
3. By responsibility in order of earliest possible start date.
4. In order of latest allowable start dates.
5. In order of latest allowable finish dates.
6. Contractor's periodic payment request sorted by Schedule of Values.
7. Listing of basic input data that generates report.
8. Listing of activities on critical path.

F. Coordinate contents with Schedule of Values.

1. Contractor shall not sequester float through strategies including extending activity duration estimates to consume available float, using preferential logic, using extensive or insufficient crew or resource loading, use of float suppression techniques, special lead or lag logic restraints or imposed dates.

1.6 SUBMITTALS

A. COMPLETE Network Analysis Schedule: Within 10 days after Notice to Proceed, submit Draft of proposed COMPLETE Network Analysis Schedule for review. Include written certification that major mechanical and electrical Subcontractors have reviewed and accepted proposed schedule. Make submittals in sufficient time for Architect's review.

B. Participate in review of Preliminary and Complete Network Analysis Schedule jointly with Architect.

C Number of opaque reproductions Contractor requires, plus three copies which will be retained by Architect.

D. One reproducible transparency and one opaque reproduction.

E. All schedule submittals, including progress updates for duration of Work, shall include electronic submittal in original file format, by e-mail or delivered on storage media agreed to.

F. Updated network schedule with each Application for Payment.

1

G. Network Analysis Schedules. Contractor shall provide a Manpower Schedule along with the Baseline and Updated Schedules.

1.7 REVIEW AND EVALUATION

A. Participate in joint review and evaluation of network diagrams and analysis with Architect at each submittal.

B. Evaluate project status to determine Work behind schedule and Work ahead of schedule.

C. After review, revise as necessary as result of review and resubmit within 10 days.

1.8 UPDATING SCHEDULE

A. Maintain schedule to record actual start and finish dates of completed activities.

1. Submit updated schedule at each scheduled project meeting or monthly, whichever is more frequent.

B. Indicate progress of each activity to date of revision with project completion date of each activity. Update diagrams to graphically depict current status of Work.

C. Identify activities modified since previous submittal, major changes in Work, and other identifiable changes.

D. Indicate changes required to maintain Date of Certified Completion.

E. Submit sorts required to support recommended changes.

F. Provide narrative report to define problem areas, anticipated delays and impact on Schedule. Report corrective action taken or proposed and its effect including effect of change on schedule of separate contractors.

1.9 DISTRIBUTION

A. Following joint review, distribute copies of updated schedule to Contractor's project site file, to Subcontractors, Suppliers, Architect, Owner and other concerned parties.

B. Instruct recipients to promptly report, in writing, problems anticipated by projections shown in schedule.

PART 2 - PRODUCTS

2.1 NOT USED.

PART 3 - EXECUTION

3.1 NOT USED.

END OF SECTION

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PART 1 - GENERAL

1.1 SECTION INCLUDES

A. Submittal Procedures

B. Shop Drawings

C. Product Data

D. Samples

E. Manufacturers' Instructions

F. Manufacturers' Certificates

G. Coordinated Drawings

1.2 SUBMITTAL PROCEDURES

Project submittals shall be submitted by contractor in electronic format – hard copies of final stamped approved submittals shall be provided to the district by contractor.

A. Transmit separate request for each submittal directly to the General Contractor.

1. Bind submittals sturdily, neatly label covers.

2. Include Architect job number as it appears on Contract Documents.

3. Include state agency application or approval number.

B. Sequentially number the transmittal forms. Resubmittals to have original number with an alphabetic suffix.

C. Identify Project, Contractor, Subcontractor or supplier; pertinent Drawing sheet and detail number(s), and Specification Section number, as appropriate.

1. Provide name and telephone number of individuals who may be contacted for further information.

D. Apply Contractor's dated stamp with Contractor's original signature or initials affixed thereto, certifying that review, verification of Products required, field dimensions, adjacent construction Work, and coordination of information is in accordance with the requirements of the Work and Contract Documents. Stamped signatures or initials are not acceptable.

E. Schedule submittals to expedite the Project. Coordinate submission of related items.

1. Make all submittals in accordance with the progress schedule and far enough in advance of scheduled dates of installation to provide required time for reviews for securing necessary approvals for possible revision and resubmittal and for placing orders and securing delivery.

F. Identify variations from Contract Documents and Product or system limitations which may be detrimental to successful performance of the completed Work.

G. State effect of substitution on construction schedule, and changes required in other work or products.

H. Provide space for Contractor and Architect review stamps.

I. Revise and resubmit submittals as required, identify all changes made since previous submittal.

J. Distribute copies of reviewed submittals to concerned parties. Instruct parties to promptly report any inability to comply with provisions.

K. Determine and verify all field dimensions and conditions, materials, catalog numbers and similar data.

L. Coordinate as required with all trades and all public agencies involved.

M. Unless otherwise specifically authorized by Architect, make all submittals in groups containing all associated items. Architect may reject partial submittals as not complying with the provisions of this section.

1.3 SHOP DRAWINGS

A. Submit a schedule of the shop drawings, listing their required submission and review dates to the Architect for review and acceptance. The schedule shall allow sufficient time for checking by the Architect. In addition, the shop drawing submission and review dates shall be incorporated into the progress schedule required in the General Conditions.

B. Submit newly prepared information, drawn to accurate scale. Highlight, encircle or otherwise indicate deviations from the Contract Documents. Do not reproduce Contract Documents or copy standard information as the basis of Shop Drawings. Standard information prepared without specific reference to the Project will not be approved as Shop Drawings.

C. Shop Drawings shall include fabrications and installation drawings, setting diagrams, schedules, patterns, templates and similar drawings. Include the following information:

1. Dimensions

2. Identification of products and materials included.

3. Compliance with specified standards.

4. Notation of coordination requirements.

5. Notation of dimensions established by field measurement.

D. Sheet Size: Except for templates, patterns and similar full-size drawings, submit Shop Drawings on sheets at least 8-1/2 inch x 11 inch, but not larger than 30 inch x 42 inch.

E. The Contractor shall review, stamp with his approval as herein required, and submit with reasonable promptness and in orderly sequence, in accordance with the submittal schedule, all shop drawings required by the Contract Documents or subsequently by the Architect as covered by modifications. Shop drawings shall be properly identified. At the time of submission, the Contractor shall inform the Architect in writing of any deviation in the shop drawings from the requirements of the Contract Documents.

F. Stamp: Each page of shop drawings shall bear the Contractor's stamp, which shall signify the Contractor's representation that he has determined and verified materials, field measurements and field construction criteria related thereto, or will do so, and has checked and coordinated the information contained in the shop drawings. Each stamp shall be accompanied by a wet signature or initial of an employee of the Contractor who may be contacted for information. Stamped signatures or initials are not acceptable.

G. Method of Review: Make initial submittal of two blueline prints and one sepia transparency of the shop drawings. Comments or corrections will be noted on the transparency and returned to the Contractor, who shall identify all changes made since the previous submittal and resubmit in the same manner. When reviewed, the transparency will be stamped and returned to the Contractor who shall make distribution of copies as required.

H. The Architect will review shop drawings with reasonable promptness so as not to cause any delay, but only for conformance with the design concept of the project and with the information given in the Contract Documents. The Architect's favorable review of a separate item shall not indicate acceptance of an assembly in which the item functions.

I. Submittal of shop drawings to the Architect shall be made by the Contractor with a dated transmittal form or letter, and not by subcontractors or suppliers.

J. The Architect's review of shop drawings shall not relieve the Contractor of responsibility for any deviation from the requirements of the Contract Documents unless the Contractor has informed the Architect in writing of such deviation at the time of submission and the Architect has given written acceptance to the specific deviation, nor shall the Architect's favorable review relieve the Contractor from responsibility for errors or omissions in the shop drawings.

K. No portion of work requiring shop drawings shall be commenced until the shop drawings have been returned with a favorable review by the Architect.

1.4 PRODUCT DATA

A. Submit data in electronic format. Hard copies of final stamped approved submittals shall be provided to the district by contractor.

B. Mark each copy to identify applicable products, models, options and other data.

Supplement manufacturers' standard data to provide information unique to this Project.

C. After review, distribute and provide copies for Record Documents.

1.5 SAMPLES

A. Submit samples to illustrate functional and aesthetic characteristics of the Product with integral parts and attachment devices. Coordinate sample submittals for interfacing work.

B. Submit samples of finishes from the full range of manufacturers' standard colors, textures and patterns for Architect selection, or in custom colors selected.

C. Include identification on each sample with full Project information.

D. Submit a minimum of six (6) samples or as specified in individual sections of the specifications, three of which will be retained by the Architect.

E. Reviewed samples which may be used in the Work are indicated in individual specification Sections.

F. Selection or rejection of samples will be made by the Architect in writing.

1.6 MANUFACTURER'S INSTRUCTIONS

A. When specified in individual specification Sections, submit manufacturers' printed instructions for delivery, storage, assembly, installation, start-up, adjusting and finishing in quantities specified for Product Data.

B. Identify conflicts between manufacturers' instructions and Contract Documents.

1.7 MANUFACTURER'S CERTIFICATES

A. When specified in individual specification Sections, submit manufacturers' certificate to Architect for review in quantities specified for Product Data.

B. Indicate material or product conforms to or exceeds specified requirements. Submit supporting reference date, affidavits and certifications as appropriate.

C. Certificates may be recent or previous test results on material or product but must be acceptable to Architect.

1.8 COORDINATED DRAWINGS

A. Submit drawings which indicate routing, locations, sizes, types and numbers of components in concealed spaces where potential conflict may occur between structures, mechanical, electrical, fire sprinklers, communications and ceiling suspension systems.

B. Indicate locations of all ceiling penetrations and surface-mounted items. Provide cross sections at all areas to indicate proper support of ceilings and non-interference with work of other sections of the specifications. Cross sections shall indicate coordination required and proposed solutions for routing of elements where potential conflict exists. Reproduction of Architect's reflected ceiling plan is not acceptable.

C. Drawings shall be based on field measurements, shop drawings and product data.

D. Conflicts shall be brought to Architect's attention immediately.

E. Submit to the General Contractor, in writing, requests for clarification or interpretations that will affect the intent of the Contract Documents.

F. The coordinated drawings shall indicate each class of work in the affected area. The drawing or written submittal shall include Contractor's recommendations for the solution of any potential conflicts as well as recommendations tendered by any work of any section of the specifications which may be affected thereby.

G. Submit the coordinated drawings in a scale of not less than 1/8" = 1' - 0" with necessary sections and profiles at an appropriate, clearly readable enlarged scale. Submit the coordinated drawings as one reproducible and two blue-line prints.

H. The Architect will review the submittals, make appropriate notations and comments to ensure the solution meets the intent of the Contract Documents and then return to Contractor for implementation.

I. The Contractor shall be responsible for the proper coordination of the work of all sections of the specifications in the execution of coordinated drawing. Any installation of materials, components or equipment under one section of the specifications without full and complete, agreement, knowledge and consent by fabricators of adjacent or otherwise related or affected work will not be approved.

J. It shall be incumbent upon the Contractor that all fabricators of work involved in the execution of coordinated drawings be informed, consulted and advised in sufficient advance time to arrive at solutions where no extension of contract time or extra cost to the Owner will be approved due to Contractor's negligence in the expeditious, timely submittal of coordinated drawings.

PART 2 - PRODUCTS

NOT USED

PART 3 - EXECUTION

NOT USED

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PART 1 - GENERAL

1.1 SECTION INCLUDES

A. Temporary Utilities: Electricity, lighting, heat, ventilation, telephone service, water and sanitary facilities.

B. Temporary Controls: Barriers, enclosures, fencing, protection of Work and security.

C. Construction Facilities: Access roads, parking, progress cleaning, project sign, Architect's banner, and field office trailer.

D. Special Controls: Waste disposal facilities, Water Control, Dust Control, Erosion and Sediment Control, Noise Control, Pollution Control.

E. Comply with Title 24, Part 9, California Fire Code, Chapter 33 Fire Safety During Construction and Demolition, during all Phases of project.

1.2 SUBMITTALS

A. Site Plan: Show temporary facilities, utility hookups, staging areas, limits of work area boundaries, and parking areas for construction personnel.

B. Phasing Plan: Submit Phasing Plan to confirm understanding of phasing work required and in coordination with Architect's Phasing Plan indicating horizontal routing of pedestrian traffic, entryways, , barrier plans and signage plan. Include schedule or time of day when Owner's use of facilities will be affected by construction Work.

1.3 TEMPORARY ELECTRICITY

A. Provide temporary electrical service suitable to conduct construction operations.

B. Connect to existing power service. Power consumption shall not disrupt Owner's need for continuous service.

C. Contractor shall pay cost of energy used. Exercise measures to conserve energy.

D. Provide power outlets for construction operations with branch wiring and distribution boxes located where needed. Provide flexible power cords as required.

E. Provide feeder switch at source distribution equipment.

F. Permanent existing convenience receptacles may be utilized during construction.

1.4 TEMPORARY LIGHTING

A. Provide and maintain adequate lighting for construction operations.

B. Maintain lighting and provide routine repairs.

C. Permanent building lighting may be utilized during construction.

1.5 TEMPORARY HEAT

A. Provide heating devices and heat as required to maintain specified conditions for construction operations.

B. Utilize Owner's existing heat plant, extend and supplement with temporary heating devices as required to maintain specified conditions for construction operations.

C. Contractor shall pay cost of energy used. Exercise measures to conserve energy.

1.6 TEMPORARY VENTILATION

A. Ventilate enclosed areas to assist cure of materials to dissipate humidity and noxious fumes and to prevent accumulation of dust, fumes, vapors or gases.

1.7 TELEPHONE SERVICE

A. Provide, maintain and pay for two separate telephone service lines and telephone service to field office and Project Inspector's field office at time of project mobilization. Project Inspector's telephone shall be equipped with exterior, clearly audible bell.

B. Provide and pay for cellular telephone service for Project Inspector's use at time of project mobilization.

C. Provide "Fax" facility at worksite.

D. Provide answering machine.

E. Provide, maintain, and pay for copy machine with 11 by 17 inch capability.

1.8 TEMPORARY WATER SERVICE

A. Provide for suitable quality water service.

B. Contractor shall pay cost of water used. Exercise measures to conserve water.

C. Extend branch piping with outlets located so water is available by hose with threaded connections.

1.9 TEMPORARY SANITARY FACILITIES

A. Provide and maintain required facilities and enclosures. Existing facilities

1.10 TEMPORARY FIRE PROTECTION

A. Provide fire protection during construction according to CFC Chapter 33, including but not limited to fire extinguisher requirements and exit access requirements.

B. Conform to Title 24, Part 9, California Fire Code, Chapter 33, , Fire Safety During Construction/Demolition.

1.11 BARRIERS

A. Provide barriers to prevent unauthorized entry to construction areas and to protect existing facilities and adjacent properties from damage from construction operations and demolition.

B. Provide barricades required by governing authority for public rights-of-way and for public access to existing facilities.

C. Provide protection for plant life designated to remain. Replace damaged plant life.

D. Protect non-owned vehicular traffic, stored materials, site and structures from damage.

E. Provide steel trench plates, orange mesh fencing, construction site marker and other protective means to keep site and users, Owner's personnel, visitors and students safe, protected, and separated from ongoing construction operations. Provide temporary access at all paths of travel. Yellow warning tape is not acceptable means of separation and protection. At all open trenching operations, enclose entire trenching operation area including stockpiled backfill within orange mesh construction fencing. Provide steel trench plate "bridges" at all walkways.

1. Notify Fire Marshall at least 48-hours prior to beginning utility work in the existing Fire Lane.

2. Allow Fire Marshall access at reasonable times during progress of the work for inspections.

1.12 FENCING FOR CONSTRUCTION OPERATIONS

A. Construction: Commercial grade chain link fence, , top and bottom knuckled selvage (closed end).

1. Provide screen full height of fence, 1-3/4 inch mesh, 11 gauge, woven open mesh 100% polypropylene with 78 percent wind break, reinforced tape at grommets at 18 inches centers at perimeter, attach screen to chain link fence with 11 gauge hog rings by Roxford Fordell, Los Angeles, CA.

B. Provide 6 foot high fence around construction site; equip with vehicular and pedestrian gates with locks.

C. Submit detailed fencing and construction traffic plan for review and approval by

Architect.

D At completion of project repair concrete or A.C. substrate, fill holes to match existing materials flush with adjacent surface.

1.13 STAGING AREAS

A. Coordinate with Owner for location, extent, and type of construction staging area.

2. Fixed Equipment may be new or used, temporary or permanent, devices including any heat generating or cooling equipment that can be operated in a safe manner and with approval from the authorities having jurisdiction.

1.14 PROTECTION OF INSTALLED WORK

A. Protect installed Work and provide special protection where specified in individual Specification Sections.

B. Provide temporary and removable protection for installed products. Control activity in immediate work area to minimize damage.

C. Provide protective coverings at walls, projections, jambs, sills and openings. Provide protective and removal coverings for metal finishes intended to be exposed.

D. Protect finished floors and other surfaces from traffic, dirt, wear, damage or movement of heavy objects by protecting with durable sheet materials.

E. Prohibit traffic or storage upon waterproofed or roofed surfaces.

F. Prohibit traffic from landscaped areas.

G. Provide sticky track mats at transition areas to minimize footprints and distribution of dirt from construction areas through occupied corridors, classrooms, and adjacent workspaces. At carpet floors provide “Velcro Brand Carpet” protection in lieu of sticky mats.

1.15 SECURITY

A. Where security or fire detection systems are disabled for any reason, including where Owner has given approval for such system shutdown, provide fire watch or security guard service as directed by Owner at no additional cost to owner.

1.16 ACCESS ROADS

A. Provide and maintain access to fire hydrants, free of obstructions. Where required by local fire authority, provide and maintain a 26 foot wide fire apparatus access road.

B. Provide means of removing mud from vehicle wheels before entering streets.

1 C. Designated existing on-site roads may be used for construction traffic.

D. Where construction traffic occurs when students and staff are on campus, provide "spotter" responsible for leading construction traffic through site areas.

E. Route construction equipment, trucks, and similar vehicles via existing public streets to and from site as approved by governing authorities.

1.17 PARKING

A. Arrange for temporary parking areas to accommodate construction personnel.

B. When site space is not adequate, provide additional off-site parking.

1.18 PROGRESS CLEANING

A. Refer to Section 01 70 00 Execution Requirements and the requirements of this Section.

B. Maintain areas free of waste materials, debris and rubbish. Maintain site in a clean and orderly condition.

C. Remove debris and rubbish from closed or remote spaces, prior to enclosing space.

D. Broom and vacuum clean interior areas prior to start of surface finishing and continue cleaning to eliminate dust. Clean substrate' remove dirt, oil, grease, construction markings, and foreign matter that could adversely affect surface finish appearance or performance.

E. Remove waste materials, debris and rubbish from site weekly and dispose off-site.

F. Maintain public street free of mud, dust and debris and as required by jurisdictional authority.

1.19 FIELD OFFICE TRAILER(S)

A. Provide space for office and project meetings.

B. Field Office Trailer: Provide field office trailer, weather tight with lighting, electrical outlets, communications capabilities, heating, cooling and ventilating equipment and equipped to adequately conduct meetings for construction operations, minimum size; 160 sq. ft.

1. In SAME Field Office trailer provide plan rack suitable for 30" x 42" drawings, and access to the internet.

2. Provide a SECOND separate Field Office trailer similarly equipped as Contractor's Office trailer and furnish desk, chairs, 2 drawer file cabinet, table, plan rack suitable for 30" x 42" drawings, and have access to the internet. Office should be lockable for use by Project Inspector. Access

C. Cost of use permits, occupancy permits and related fees, if any required by Governing Authorities for temporary construction facilities, shall be paid by Contractor.

1 D. Provide 4' x 8' conference table, 6 conference chairs and 3' x 6' white markerboard at both Field Office trailers.

E. Install no closer than 45 feet from project buildings in accordance with NFPA 241.

F. Maintain facility until Substantial Completion of entire project. Remove within 1 week of Substantial Completion.

G. Provide property insurance and protection.

1.20 REMOVAL OF UTILITIES, FACILITIES AND CONTROLS

A. Remove temporary above grade or buried utilities, equipment, facilities, materials prior to Certified Completion inspection.

B. Remove temporary underground or overhead installations.

C. Clean and repair damage caused by installation or use of temporary Work.

D. Restore permanent facilities used during construction to original condition. Restore permanent facilities used during construction to specified condition.

1.21 WATER CONTROL

A. Do not permit surface, rainwater or subsurface water or other liquids to accumulate in or about premises and vicinity thereof. Should such conditions be encountered or develop, control water or other liquid shall be suitably disposed of by means of temporary pumps, piping, drainage lines, troughs, ditches, dams, or other methods as reviewed by Architect and approved by authority having jurisdiction.

B. Reference Section 01 57 23 for Storm Water Pollution Prevention Plan Requirements.

C. Dewatering Facilities and drains: Comply with requirements of authorities having jurisdiction. Maintain Project site, excavations, and construction free of water.

D. Dispose of rainwater in lawful manner that will not result in flooding Project or adjoining properties nor endanger permanent Work or temporary facilities.

E. Pools: Provide all necessary measures to remove all ground water and rain water from pool excavation.

1.22 DUST CONTROL

A. Conduct earthwork operations in a manner to prevent windblown dust and dirt from interfering with progress of Work, Owner's activities and existing occupied structures in areas immediately adjacent s well as adjacent properties.

B. Periodically water construction areas as required minimizing accumulation of dust and dirt.

C. Water spray or cover with tarpaulins truck loads of soil to additionally minimize generation of dust and dirt from construction operations.

1 D. Prevent dust and dirt from accumulating on walks, roadways, parking areas and from washing into sewer and storm drain lines.

1.23 EROSION AND SEDIMENT CONTROL

A. Plan and execute construction by methods to control surface drainage from cuts and fills from borrow and waste disposal areas. Prevent erosion and sedimentation.

B. Minimize amount of bare soil exposed at one time.

C. Provide temporary measures such as berms, dikes and drains to prevent water flow over adjacent properties or City rights-of-way.

D. Construct fill and waste areas by selective placement to avoid erosive surface silts or clays.

E Periodically inspect earthwork to detect evidence of erosion and sedimentation; promptly apply corrective measures.

F. Reference Section 01 57 23 for Storm Water Pollution Prevention Plan Requirements.

1.24 NOISE CONTROL

A. Avoid excessive noise where adjacent Owner's functions may be detrimentally affected.

B. Refer to requirements in Section 01 57 20, Control of Construction Noise.

1.25 POLLUTION CONTROL

A. Provide methods, means and facilities to prevent contamination of soil, water and atmosphere from discharge of noxious, toxic substances and pollutants produced by construction operations.

B. Burning of refuse, debris or other materials will not be permitted on Site.

C. Comply with regulatory requirements and anti-pollution ordinances during course of construction and disposal operations.

1.26 WASTE DISPOSAL FACILITIES

A. Comply with requirements of Authorities having Jurisdiction. Remove loose refuse and dispose off site legally.

B. Provide waste-collection containers in sizes adequate to handle waste from construction operations.

C. Provide and maintain trash bins on the Project site. Trash bins shall be serviced on an as needed basis.

D. Free Fall Maximum; 8 ft. Provide enclosed waste CHUTES for higher fall.

1 1. Provide disposals sufficiently sized to prevent debris from scattering around areas,

2. Use support systems, intake hoppers, protective liners and durable non-breakable chutes. Max-Access Inc., Houston, TX, Chutes International,

   White Plains, MD or equal.

3. When using demolition chutes, chute opening must be sealed when not in use. Chute and dumpster shall be sprayed with water to maintain dust control.

4. Do not use Owner's disposal system.

1.27 PROTECTION OF EXISTING FACILITIES AND SITEWORK

A. Provide site plan of proposed route of construction equipment for approval by Owner.

B. Use caution to minimize disturbance and damage to existing landscaped areas and sitework.

C. Protect sidewalks, curbs, entry areas and utilities.

D. The Contractor shall preserve and protect all structures, equipment, and vegetation (such as trees, shrubs, and grass) and irrigation on or adjacent to the work site, which are not to be removed and which do not unreasonably interfere with the work required under this contract. The Contractor shall only remove trees when specifically authorized to do so and shall avoid damaging vegetation that will remain in place. If any limbs or branches of trees are broken during contract performance, or by the careless operation of equipment, or by workmen, the Contractor shall trim those limbs or branches with a clean cut and paint the cut with a tree-pruning compound as directed by the Contracting Officer.

E. Protect from damage all existing improvements and utilities at or near the work site and on adjacent property of a third party, the locations of which are made known to or should be known by the Contractor. Repair any damage to those facilities, including those that are the property of a third party, resulting from failure to comply with the requirements of this contract or failure to exercise reasonable care in performing the work,

F Repair landscaped areas, irrigation and sidewalks and any other damaged facilities where trucks, erection equipment or other construction equipment was used in removal and replacement of the HVAC units during construction. Repair damaged areas to match existing construction to satisfaction of the Owner, and at no additional cost to the Owner.

1.28 CONTRACTOR CONDUCT AND DRESS CODE

A. Contractor's and subcontractors' personnel shall observe and abide by Owner requirements concerning appropriate conduct, loud noise (unrelated to construction activities) and dress requirements for a safe and un-disturbing workplace. Conduct work activities in a professional manner at all times.

B Dress Code requirements: contractor's personnel shall wear traditional work attire or uniforms without logos, graphics or wording detrimental to work [school] environment: unless logos, graphics or wording are for business identification purposes.

1

G Contractors and subcontractors shall wear orange safety vests along with other required safety attire including hard hats and safety glasses.

D. Identification badges Issued by the Owner shall be worn at all times, worn on the left side shirt-pocket area, displayed in full view and not concealed.

E, No radios permitted on the job site.

F. Owner reserves the right to remove any person(s) not observing conduct and dress requirements specified herein.

G. Animals: Contractors' and worker's pets or animals of any kind are not permitted on the Campus, including being retained in a vehicle.

H. All District property is tobacco free, drug free, alcohol free, weapons free and graffiti free. Contract shall enforce these rules to his crew, subcontractors and suppliers.

1.29 MOBILIZATION AND DEMOBILIZATION

A The work consists of the mobilization and demobilization of the contractor's forces and equipment necessary far performing the work required under the contract. It does not include mobilization and demobilization for specific items of work for which payment is provided elsewhere in the contract. Mobilization will not be considered as work in fulfilling the contract requirements for commencement of work.

B. Mobilization: Equipment and Material: Mobilization shall include all activities and associated costs for transportation of contractor's personnel, equipment, and operating supplies to the site; establishment of offices, buildings, and other necessary general facilities for the contractor's operations at the site; premiums paid for performance and payment bonds including coinsurance and reinsurance agreements as applicable.

C Demobilization shall include all activities and costs for transportation of personnel, equipment, and supplies not required or included in the contract from the site; including the disassembly, removal, and site cleanup of offices, buildings, and other facilities assembled on the site specifically for this contract.

D. This work includes mobilization and demobilization required by the contract at the time of award. If additional mobilization and demobilization activities and costs are required during the performance of the contract as a result of changed, deleted, or added items of work for which the contractor is entitled to an adjustment in contract price, compensation for such costs will be included in the price adjustment for the item or items of work changed or added.

E. Payment; Payment will be made as the work proceeds, after presentation of paid invoices or documentation of direct costs by the contractor showing specific mobilization and demobilization costs and supporting evidence of the charges of suppliers, subcontractors, and others. When the total of such payments is less than the lump sum contract price, the balance remaining will be included in the final contract payment. Payment of the lump sum contract price for mobilization and demobilization will constitute full compensation for completion of the work.

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F. Payment will not be made under this item for the purchase costs of materials having a residual value, the purchase costs of materials to be incorporated in the project, or the purchase costs of operating supplies.

1.30 DAILY REPORTS

A. CONTRACTOR shall provide and maintain in the Project site office of CONTRACTOR, a daily sign in sheet for use by all employees of CONTRACTOR and all Subcontractors at whatever tier. At the beginning of each workday, the foreman, project manager, superintendent of CONTRACTOR and/or Subcontractor shall visit the site office of the CONTRACTOR and shall enter onto the daily sign in sheet: all employee names; trade classification; and represented company. The completed sign in sheet shall serve as the basis of and snail be submitted with the daily construction report as set forth in Paragraph 1.34.b.

B. By the end of each workday, CONTRACTOR shall submit to CMR and IOR a daily construction report denoting the daily manpower counts and a brief description/location of the workday activities. Manpower shall be broken down by trade classification such as foreman, journeyman or apprentice. The report shall also note the date, day of the week, weather conditions, deliveries, equipment on the Project Site whether active and/or idle, visitors, inspections, accidents and unusual events, meetings, stoppages, losses, delays, shortages, strikes, orders and requests of governing agencies, Construction Directive and/or Change Orders received and implemented, services disconnected and/or connected, equipment start up or test and partial use and/or occupancies. CONTRACTOR shall also include on the daily construction report the above information for all Subcontractors at whatever tier.

PART 2 - PRODUCTS

2.01 MATERIALS

A. Materials for temporary work may be new or used.

1. Use materials that are adequate in capacity for the required use and loads.

2. Do not use materials that would create unsafe conditions,

3. Do not violate requirements of authorities having jurisdiction.

4. Sticky Track Mats: Trim-Tack Adhesive mats by Markell Industries, Manchester, CT or equal. At carpet floors provide "Velcro Brand Carpet"* protection in lieu of sticky mats.

B. Electrical Materials

1. Power Receptacles: 15 ampere, 120 volt, duplex grounding type with ground fault circuit interrupters. Furnish in suitable boxes with hinged cover plates.

1 2. Light Fixtures and Lamps: Medium-base, rubber pigtail, type lamp sockets or porcelain lamp holders furnish with boxes, and lamps.

3. Conductors: insulated copper or aluminum, with phase conductor insulation rated for the circuit voltage, and insulation or jacketing suitable for the conditions, and branch circuit conductors - No. 12 AWG minimum size, except No. 10 AWG where length of branch circuit exceeds 100 feet.

C. Mechanical Materials

1. Portable Equipment may be new or used, temporary units that will not damage construction materials or processes, that will not create unhealthy conditions for workers, and that can be operated with approval from the authorities having jurisdiction

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PART 3 – EXECUTION

3.1 REMOVAL

A. Remove all temporary control measures in accordance with regulatory requirements at completion of construction.

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PART 1 GENERAL

1.1 SUMMARY

A. Demonstration of products and systems to be commissioned and where indicated in specific specification sections.

B. Training of District personnel in operation and maintenance is required for:

1. All software-operated systems.

2. HVAC systems and equipment.

3. Electrical systems and equipment.

4. Items specified in individual product Sections.

C. Training of District personnel in care, cleaning, maintenance, and repair is required for:

1. Roofing, waterproofing, and other weather-exposed or moisture protection products.

2. Finishes, including flooring, wall finishes, ceiling finishes.

3. Fixtures and fittings.

4. Items specified in individual product Sections.

1.2 RELATED REQUIREMENTS

A. Section 01 91 13 - General Commissioning Requirements: Additional requirements applicable to demonstration and training.

B. Other Specification Sections: Additional requirements for demonstration and training.

1.3 SUBMITTALS

A. See Section 01 33 00 – Submittal Procedures.

B. Training Plan: District will designate personnel to be trained; tailor training to needs and skill-level of attendees.

1. Each Sub, Design-Builder SubContractor and vendor responsible for training submits a written training plan to the Architect and District Representative for review and approval prior to training.

2. Submit to Architect for transmittal to District.

3. Submit not less than four weeks prior to start of training.

4. Revise and resubmit until acceptable.

5. Provide an overall schedule showing all training sessions.

6. Include at least the following for each training session:

    a. Identification, date, time, and duration.
    b. Description of products and/or systems to be covered.
        1) Equipment list
    c. Name of firm and person conducting training; include qualifications.
    d. Intended audience, such as job description.
    e. Objectives of training and suggested methods of ensuring adequate training.
        1) Agenda and subjects (design intent, equipment inspections, modes of operation, system interactions, troubleshooting, preventative maintenance, etc.)
    f. Methods to be used, such as classroom lecture, live demonstrations, hands-on, etc.
    g. Media to be used, such a slides, hand-outs, etc.
        1) The approved O&M manuals shall be used during the training for equipment specific references.
    h. Training equipment required, such as projector, projection screen, etc., to be provided by Contractor.

C. Training Manuals: Provide training manual for each attendee; allow for minimum of two attendees per training session.

1. Include applicable portion of O&M manuals.

2. Include copies of all hand-outs, slides, overheads, video presentations, etc., that are not included in O&M manuals.

3. Provide one extra copy of each training manual to be included with operation and maintenance data.

D. Training Reports:

1. Identification of each training session, date, time, and duration.

2. Sign-in sheet showing names and job titles of attendees.

3. List of attendee questions and written answers given, including copies of and references to supporting documentation required for clarification; include answers to questions that could not be answered in original training session.

4. Include Commissioning Authority's formal acceptance of training session.

E. Video Recordings: Submit digital video recording of each demonstration and training session for District's subsequent use.

1. Format: DVD Disc.

2. Label each disc and container with session identification and date.

1.4 QUALITY ASSURANCE

A. Instructor Qualifications: Familiar with design, operation, maintenance and troubleshooting of the relevant products and systems.

1. Provide as instructors the most qualified trainer of those contractors and/or installers who actually supplied and installed the systems and equipment.

2. Where a single person is not familiar with all aspects, provide specialists with necessary qualifications.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION

3.1 TRAINING OF OWNER PERSONNEL

A. The Contractor and Design-Builder SubContractors shall be responsible for training coordination and scheduling and for ensuring that training is completed.

B. The Commissioning Authority (CA) shall be responsible for reviewing and approving the content of the training of Owner personnel for commissioned equipment.

C. The specific training requirements of District personnel by Subs, Design-Builder SubContractors and vendors is specified in the Division in which the equipment is specified.

D. For primary HVAC equipment, the Controls Contractor shall provide a short discussion of the control of the equipment during the mechanical or electrical training conducted by others.

3.2 DEMONSTRATION - GENERAL

A. Demonstrations conducted during system start-up do not qualify as demonstrations for the purposes of this section, unless approved in advance by District.

B. Demonstrations conducted during Functional Testing need not be repeated unless District personnel training is specified.

C. Demonstration may be combined with District personnel training if applicable.

D. Operating Equipment and Systems: Demonstrate operation in all modes, including start-up, shut-down, seasonal changeover, emergency conditions, and troubleshooting, and maintenance procedures, including scheduled and preventive maintenance.

1. Perform demonstrations not less than two weeks prior to Substantial Completion.

2. For equipment or systems requiring seasonal operation, perform demonstration for other season within six months.

E. Non-Operating Products: Demonstrate cleaning, scheduled and preventive maintenance, and repair procedures.

1. Perform demonstrations not less than two weeks prior to Substantial Completion.

3.3 TRAINING - GENERAL

A. Commissioning Authority will prepare the Training Plan based on draft plans submitted.

B. Conduct training on-site unless otherwise indicated.

C. District will provide classroom and seating at no cost to Contractor.

D. Do not start training until Functional Testing is complete, unless otherwise specified or approved by the Commissioning Authority.

E. Provide training in minimum two hour segments.

F. The Commissioning Authority is responsible for determining that the training was satisfactorily completed and will provide approval forms.

G. Training schedule will be subject to availability of District's personnel to be trained; re-schedule training sessions as required by District; once schedule has been approved by District failure to conduct sessions according to schedule will be cause for District to charge Contractor for personnel "show-up" time.

H. Review of Facility Policy on Operation and Maintenance Data: During training discuss:

1. The location of the O&M manuals and procedures for use and preservation; backup copies.

2. Typical contents and organization of all manuals, including explanatory information, system narratives, and product specific information.

3. Typical uses of the O&M manuals.

I. Product- and System-Specific Training:

1. Review the applicable O&M manuals.

2. For systems, provide an overview of system operation, design parameters and constraints, and operational strategies.

3. Review instructions for proper operation in all modes, including start-up, shut-down, seasonal changeover and emergency procedures, and for maintenance, including preventative maintenance.

4. Provide hands-on training on all operational modes possible and preventive maintenance.

5. Emphasize safe and proper operating requirements; discuss relevant health and safety issues and emergency procedures.

6. Discuss common troubleshooting problems and solutions.

7. Discuss any peculiarities of equipment installation or operation.

8. Discuss warranties and guarantees, including procedures necessary to avoid voiding coverage.

9. Review recommended tools and spare parts inventory suggestions of manufacturers.

10. Review spare parts and tools required to be furnished by Contractor.

11. Review spare parts suppliers and sources and procurement procedures.

J. Be prepared to answer questions raised by training attendees; if unable to answer during training session, provide written response within three days.

END OF SECTION

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SECTION 02 41 19 - SELECTIVE DEMOLITION

PART 1 - GENERAL

1.1 SECTION INCLUDES

1

A. Remove all existing wall framing/furring, flooring, ceiling systems, mechanical, plumbing, lighting, electrical and associated bracing. suspension construction, building equipment, fixtures, components and utilities to permit installation of new construction.

B. Include Work required to demolish and remove elements of existing construction including sitework, sitework utilities and similar elements of existing building construction, all as noted on Drawings or as required to permit installation of new construction. Refer to Cutting and Patching in Section 01 70 00 for differentiation between "Demolition" and "Cutting and Patching".

C. Comply with Title 24, Part 9, California Fire Code, Chapter 33 Fire Safety During Construction and Demolition, during all Phases of project.

1

D. Contractor shall protect and maintain operable utilities feeding the campus until new work cross over is available.

1.2 REFERENCE STANDARDS

A. Conform to current adopted reference standards by date of issue of the current code cycle and the date of the Contract Documents.

B. CBC - 2019 California Building Code

1. CBC-19A - CBC Chapter 19A, Concrete.
2. CBC-33 - CBC Chapter 33, Safeguards During Construction

C. CCR - California Code of Regulations

1. CCR-8.4 - Title 8, Subchapter 4, Construction Safety Orders

D. CFC - 2019 California Fire Code

1. CFC-5 - CFC Chapter 5, Fire Service Features
2. CFC-7, CFC Chapter 7, Fire-Resistance-Rated Construction
3. CFC-9 - CFC Chapter 9, Fire Protection Systems
4. CFC-33 - CFC Chapter 33, Fire Safety During Construction and Demolition

E. ICRI - International Concrete Repair Institute.

F. NFPA - National Fire Protection Association

1. NFPA 241- Safeguarding Construction, Alteration and Demolition Operations

1.3 ADMINISTRATIVE REQUIREMENTS

A. Pre-Demolition Conference: Conduct conference at Project site to comply with below and requirements in Section 01 30 00.

B. Contractor shall schedule meeting after Notice of Award to review demolition operations.

C. Attendance Required: Owner, Architect, Contractor, Demolition Subcontractors, Project Inspector.

D. Construction Process:

1. Contractor shall discuss overview of demolition procedures.
2. Contractor shall identify items to be selected by Owner for salvage.
3. Contractor shall review special requirements for equipment, safety, and noise.

E. Architect will record minutes and distribute copies within seven days after meeting to participants and those affected by decisions made.

F. Regulatory Requirements: Secure demolition permit from the Local Air Quality Management District for renovations involving the removal of 100 square feet/linear feet or greater of demolition, per District Regulations. Notify the AQMD at least 10 working days prior to commencement of demolition/renovation.

1.4 SUBMITTALS

A. Project Record Documents accurately record actual locations of capped utilities.

B. Pre-demolition Photographs or Video: Show existing conditions of adjoining construction, including finish surfaces, that might be misconstrued as damage caused by demolition operations. Comply with Division 01. Submit before Work begins.

1.5 EXISTING CONDITIONS

A. Before beginning Work, investigate and verify existence and location of mechanical, drainage, and electrical systems and other construction affecting Work, including underground utilities.

1. Before construction, survey and record points of connection of utility services.
2. Locate invert elevation at points of connection to existing sanitary - and storm drain, water-service piping, and underground electrical services.
3. Employ a utility service locator company to locate underground utilities.
4. Verify Owner”s Record Drawings.
5. Furnish survey of existing utilities.

PART 2 - PRODUCTS

2.1 NOT USED.

PART 3 - EXECUTION

3.1 PREPARATION

A. Disconnect, remove and cap designated utility services within demolition areas. Notify Owner 48 hours in advance of any utility shut-down.

B. Prior to commencement of demolition operations, notify Underground Service Alert of Southern California (800) 422-4133, Monday through Friday, 7:00 A.M. to 5:00 P.M.

C. Protection:

1. Protect existing items that are not indicated to be altered.

2. Adequately protect staff and public from harm and accident during demolition operations by the erection of proper barricades, signs, lighting, guard rails or other safety precautions. Conform to Title 8, Subchapter 4, CCR and NFPA 241.

3. Protective Devices: Install substantial enclosures, weatherproof and dust-proof shields, protective covers, screens and similar devices. Erect and move when necessary to permit use of existing rooms, areas or facilities. Remove entirely when their use is no longer essential. Patch or repair all areas where devices have been removed.

D. Survey of Existing Conditions: Record existing conditions by use of measured

drawings and preconstruction photographs or video.

1. Comply with requirements specified in Division 01.

2. Inventory and record the condition of items to be removed and salvaged. Provide photographs or video of conditions that might be misconstrued as damage caused by salvage operations.

3.2 TEMPORARY MEASURES - LIFE SAFETY

A. Emergency Exits: No enclosure, shield or protective covering shall interfere with use of emergency exits in existing facilities at any time. Rated egress systems shall provide temporary rated egress.

B. Maintain fully charged certified compliant fire extinguishers and water hoses readily available during demolition operations, per Section 906 CBC. Test electrical conductors for disconnection prior to removing.

C. Provide temporary, but equivalent, fire alarm, detection or suppression systems when any system is impaired by Work of this Section. Temporary systems shall be inspected and tested monthly or at other more frequent intervals as required by Owner.

D. Impairment of fire protection systems, Section 3308.6: Impairments to any fire

protection system shall be in accordance with Section 901.

1. Systems out of Service: Per requirement of Section 901.7 through 901.7.6, California Fire Code.

E. Maintain free and unobstructed access to emergency services per Title 19, CFC 503.1; 503.1.1, 503.4; and Appendix D, CFC Chapter 33 Sections 3310.1; 3312.1 and when required by Owner.

F. Post NO SMOKING signs in English and Spanish, in number and location as approved by Architect.

G. Reduce flammable and combustible fire load to minimum by daily removal of debris.

H. Instruct construction personnel in fire safety and fire drill policies appropriate for areas where demolition operations occur.

I. Deployment, disposition, administration and implementation of any and all safety measures shall be sole responsibility of Contractor.

3.3 EXECUTION

A. Demolish in orderly and careful manner. Maintain protected egress and access at all times.

B. Except where noted otherwise, immediately remove demolished materials from site and dispose legally. Do not utilize Owner's disposal system.

C. Remove materials to be re-installed or retained in manner to prevent damage. Store and protect until re-installation.

D. Do not burn or bury materials on site.

E. Upon completion of Work, leave areas of Work in clean condition.

3.4 SELECTIVE DEMOLITION, REPAIR AND ALTERATIONS WORK

A. New and existing Work that is cut into, altered, damaged, relocated or reinstalled shall be restored to original conditions. Workmanship and materials to conform to applicable provisions of other applicable Sections of Specifications.

B. Cutting Equipment: Jackhammers and vibratory cutting equipment may be utilized under following conditions:

1. Approval by Owner.

2. Time of day and duration of Work on each given day shall be coordinated with Project Inspector and Owner. Minimum of 24 hours advance notice required.

3. Compressors shall be well muffled.

4. Every consideration shall be exercised toward comfort of staff and public. Excessive noise or vibrations will constitute just cause for immediate stoppage of Work.

C. Cutting:

1. Conform to Provisions of Division 01, General Requirements.

2. Concrete: Cut with saws or other approved method, but do not overcut openings. Reinforcing bars, except where bonded into new concrete, shall be cut off and ends painted with bituminous paint before being enclosed.

3. Structural Members: Cut only when authorized by Architect and approved by Structural engineer of Record, and DGS/DSA. Agency approvals shall be obtained by Architect, not by Contractor.

D. Asphalt Paving: remove AC paving including sub-base where indicated in drawings and disposed in legal dumpsites, crushing operations on site and re-use of pulverized AC not permitted.

E. Remove AC striping, lettering, [game lines] and markings by wet sandblasting machine with sufficient sand, water, and air capacity to completely remove existing striping, [game lines] or markings. Machine shall meet all requirements of air pollution control district having jurisdiction. Conform to Section 310-5.6.3 Standard Specifications for Public Works Construction.

F. Removal of concrete flatwork: remove concrete paving (panel) to the nearest expansion joint or contraction joint and provide matching concrete surface to abut to new work at same finish levels unless noted otherwise.

G. Holes required through existing stud wall, concrete or masonry construction to accommodate new electrical conduits and piping and ductwork shall be provided as specified in Division 22, Plumbing; Division 23, Heating Ventilating and Air Conditioning; Division 26, Electrical and Division 27 Communications. Provide proposed routing of utilities as required in Coordinated Drawing, Division 01, General Requirements.

H. Holes required through concrete or masonry Work required for structural purposes shall be neatly drilled as required to accommodate specific items. Coring shall be performed with approval of Architect and in accordance with details on Drawings.

1. Approval of details by DGS/DSA is required. Agency approvals shall be obtained by Architect, not by Contractor.

I. Work shall be fully coordinated to ensure proper sequence, limits, methods and time of

performance. Arrange Work so as to impose a minimum of hardship on present operation of facilities.

J. Remove such existing ceilings, floors, walls, finish materials or equipment as required to complete Work. Restore such surfaces to their original condition after Work is completed.

K. Provide adequate ventilation during all operations to prevent accumulation of dust, fumes, vapors or gases.

L. Miscellaneous Removal Items: Items not specifically mentioned shall be removed as indicated on drawings.

M. Miscellaneous Work: Items not specifically mentioned shall be repaired, patched or finished like new Work or to match existing adjoining surfaces as approved. Surfaces damaged shall be restored to original condition.

3.5 SALVAGE AND DISPOSAL

A. Disposal: Removed material, other than items directed to be salvaged or indicated to be reused, become Contractor's property upon removal, and shall be removed from site. Debris shall be picked up and disposed of, off site, by Contractor promptly and continuously as Work progresses, and not allowed to accumulate. Sprinkle the debris to prevent dust nuisance. Secure and pay for required hauling permits and pay dumping fees and charges. Contractor shall make every reasonable effort to divert debris to recycling or reuse facilities.

END OF SECTION

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Cast-in-place normal weight and lightweight concrete, placement and finishing.

B. Related Requirements:

1. Division 01 - General Requirements.

2. Section 32 13 13: Site Concrete Work.

3. Section 03 10 00: Concrete Forming and Accessories.

4. Section 03 20 00: Concrete Reinforcing.

1.2 REFERENCES

A. American Concrete Institute (ACI) Publication:

1. ACI 117 – Specifications for Tolerances for Concrete Construction and Materials.

2. ACI 301 – Specifications for Structural Concrete.

3. ACI 302.1R – Guide for Concrete Floor and Slab Construction.

4. ACI 305R - Specification for Hot Weather Concreting.

4. ACI 306.1 – Standard Specification for Cold Weather Concreting.

5. ACI 318 - Building Code Requirements for Structural Concrete, as modified by CBC-SS/CC Sections 1903A and 1908A.

B. American Society for Testing and Materials (ASTM) Standards:

1. ASTM C31 – Standard Specification for Making and Curing Concrete Test Specimens in the Field.

2. ASTM C33 - Standard Specification for Concrete Aggregates.

3. ASTM C39 - Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens.

4. ASTM C42 - Standard Test Method for Obtaining and Testing Drilled Cores and Sawed Beams of Concrete.

5. ASTM C88 - Standard Test Method for Soundness of Aggregates by use of Sodium Sulphate or Magnesium Sulphate.

6. ASTM C94 - Standard Specification for Ready-Mixed Concrete.

7. ASTM C143 - Standard Test Method for Slump of Hydraulic Cement Concrete.

8. ASTM C150 - Standard Specification for Portland Cement.

9. ASTM C171 - Standard Specification for Sheet Materials for Curing Concrete.

10. ASTM C172 – Standard Practice for Sampling Freshly Mixed Concrete.

11. ASTM C173 – Standard Test Method for Air Content of Freshly Mixed Concrete by the Volumetric Method.

12. ASTM C260 – Standard Specification for Air-Entraining Admixtures for Concrete.

13. ASTM C289 - Standard Test Method for Potential Alkali-Silica Reactivity of Aggregates (Chemical Method).

14. ASTM C309 - Standard Specification for Liquid Membrane-Forming Compounds for Curing Concrete.

15. ASTM C330 - Standard Specification for Lightweight Aggregates for Structural Concrete.

16. ASTM C494 - Standard Specification for Chemical Admixtures for Concrete.

17. ASTM C567 - Standard Test Method for Determining Density of Structural Lightweight Concrete.

18. ASTM C618 - Standard Specification for Coal Fly Ash and Raw or Calcined Natural Pozzolan for Use in Concrete.

19. ASTM C845 - Standard Specification for Expansive Hydraulic Cement

20. ASTM C989 - Standard Specification for Ground Granulated Blast-Furnace Slag for Use in Concrete and Mortars.

21. ASTM C1107 - Standard Specification for Packaged Dry, Hydraulic-Cement Grout (Nonshrink).

22. ASTM C1064 - Standard Test Method for Temperature of Freshly Mixed Hydraulic-Cement Concrete

23. ASTM C1240 - Standard Specification for Silica Fume Used in Cementitious Mixtures

24. ASTM C1567 - Standard Test Method for Determining the Potential Alkali-Silica Reactivity of Combinations of Cementitious Materials and Aggregate (Accelerated Mortar-Bar Method).

25. ASTM D1751 - Standard Test Method for Preformed Expansion Joint Filler for Concrete Paving and Structural Construction (Non-extruding and Resilient Bituminous Types).

26. ASTM E96 - Standard Test Methods for Water Vapor Transmission of Materials.

27. ASTM E1155 - Standard Test Method for Determining F_F Floor Flatness and F_L Floor Levelness Numbers.

28. ASTM E1643 - Standard Practice for Selection, Design, Installation, and Inspection of Water Vapor Retarders Used in Contact with Earth or Granular Fill Under Concrete Slabs.

29. ASTM E1745 - Standard Specification for Water Vapor Retarders Used in Contact with Soil or Granular Fill under Concrete Slabs.

1.3 SUBMITTALS

A. Shop Drawings: Submit Shop Drawings indicating locations of cast-in-place concrete Work and accessory items such as vapor barriers. Include details and locations of reinforcing, embedded items, and interfacing with other Work.

B. Mix Design Data: Submit concrete mix designs as specified herein and in Article 2.02.

1. Submit name, address and telephone number of the concrete production facility which the contractor intends to engage to design the concrete mixes. Submit name and qualifications of the proposed concrete technologist.

2. Mix Design: Submit a concrete mix design for each strength and type of concrete indicated in the drawings or specified. Include water/cement ratio, source, size and amount of coarse aggregate and admixtures. Predict minimum compressive strength, maximum slump and air content percentage. Clearly indicate locations where each mix design will be used.

3. Test Reports: Submit copies of test reports showing that the proposed mixes produce concrete with the strengths and properties specified. Include tests for cement, aggregates and admixtures. Provide gradation analysis.

C. Material Samples: Submit Samples illustrating concrete finishes and hardeners, minimum 12-inch by 12-inch.

D. Certificates: Submit certification that each of the following conforms to the standards indicated:

1. Portland cement: ASTM C150.

2. Normal weight concrete aggregates: ASTM C33.

3. Lightweight concrete aggregates: ASTM C330.

4. Aggregates: Submit evidence that the aggregate is not reactive in the presence of cement alkalis. In the absence of evidence, aggregate shall be tested per ASTM C289. If results of test are other than innocuous, aggregates shall be tested per ASTM C1567 as reported per ACI 318 as modified by CBC-SS/CC, Section 1903A.3.

5. Curing materials: ASTM C171.

E. Admixtures: Submit product data for proposed concrete admixtures.

1.4 QUALITY ASSURANCE

A. Continuous inspection shall be provided at the batch plant and for transit-mixed concrete to run check sieve analysis of aggregate, check moisture content of fine aggregate, check design of mix, check cement being used with test reports, check loading of mixer trucks, and certify to quantities of materials placed in each mixer truck.

B. Inspection shall be performed by a representative of a testing laboratory selected by the Owner. Owner will pay for inspection costs. Notify the laboratory 24 hours in advance of time concrete is to be mixed. Notify the laboratory of postponement or cancellation of mixing within at least 24 hours of scheduling time.

C. Contractor shall assist the testing laboratory in obtaining and handling samples at the project site and at the source of materials.

D. Continuous batch plant inspection requirement may be waived in accordance with CBC-SS/CC Section 1704A.4.3. Waiver shall be in writing, including DSA approval. When batch plant inspection is waived by DSA, the following requirements shall be met:

1. Approved inspector of the testing laboratory shall check the first batching at the start of work and furnish mix proportions to the licensed weightmaster.

2. Licensed weightmaster shall positively identify materials as to quantity and certify to each load by a ticket.

3. Tickets shall be transmitted to the Inspector by a truck driver with load identified thereon. The Inspector will not accept the load without a load ticket identifying the mix and will keep a daily record of placements, identifying each truck, its load and time of receipt and approximate location of deposit in the structure and will transmit a copy of the daily record to DSA.

4. At the end of the project, the weightmaster shall furnish an affidavit to DSA certifying that all concrete furnished conforms in every particular to proportions established by mix designs.

E. Special Inspections and Tests shall be in accordance with CBC-SS/CC Chapter 17A, Reinforcement and Anchor testing per CBC-SS/CC Section 1916A and Specification Section 01 4523.

1.5 DELIVERY, STORAGE AND HANDLING

A. Store cement and aggregate materials so as to prevent their deterioration or intrusion by foreign matter. Deteriorated or contaminated materials shall not be furnished.

B. Packaged materials shall bear the manufacturers and brand name label, and shall be stored in their original unbroken package in a weather tight place until ready for use in the work.

1.6 PROJECT CONDITIONS

A. Cold Weather Requirements: Batching, mixing, delivering and placing of concrete in cold weather shall comply with the applicable requirements of ACI 306.1.

B. Hot Weather Requirements: Batching, mixing, delivering and placing of concrete in hot weather shall comply with the applicable requirements of ACI 305R.

C. Concrete temperature of freshly mixed concrete shall be determined per ASTM C1064.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Cement: ASTM C150. Portland Cement.

B. Aggregates: Conform to the following standards:

1. Normal weight concrete: ASTM C33.

2. Lightweight concrete: ASTM C330, with fine aggregates per ASTM C33.

3. Aggregate shall be tested for Potential Alkali Reactivity of Cement-Aggregate Combinations per ASTM C289.

4. Nominal maximum size of coarse aggregate shall be no larger than:

a. 1/5 the narrowest dimension between sides of forms, nor

b. 1/3 the depth of slabs, nor

c. 3/4 the clear spacing between individual reinforcing bars or wires, bundles of bars, individual tendons, or ducts.

d. Contractor may request the Architect and DSA waiver of the above limitations reported per ACI 318 as modified per CBC-SS/CC Section 1903A.3, provided that the workability and methods of consolidation are such that the concrete can be placed without honeycombs or voids.

C. Water: Water for concrete mixes, curing and cleaning shall be potable and free from deleterious matter.

D. Admixtures: Shall be shown capable of maintaining essentially the same composition and performance throughout the work as the product used in establishing concrete proportions in accordance with ACI 318, Section 3.6.

1. Admixtures containing chlorides or sulfides are not permitted.

2. Air-entraining admixtures shall comply with ASTM C260. Air-entrained admixtures shall not be used for floor slabs to receive steel trowel finish.

3. Admixtures for water reduction and setting time modification shall conform to ASTM C494.

4. Admixtures for producing flowing concrete shall conform to ASTM C1017.

5. Fly ash, pozzolan and ground granulated blast-furnace slag: Modify ACI 318 Sections 3.6.6 and 3.6.7 as follows:

a. Fly ash or other pozzolan used as a partial substitution for ASTM C150 Portland cement shall meet the following requirements:

1) Shall conform to ASTM C618 for Class N or F materials

6. Admixtures containing ASTM C845 expansive cements shall be compatible with the cement and produce no deleterious effects.

7. Silica fumes used as an admixture shall conform to ASTM C1240.

E. Reinforcement Fibers: Chop strands of alkali-resistant polypropylene or nylon fibers added to the concrete mix for protection against shrinkage cracks.

F. Expansion Joint Fillers: Preformed strips, non-extruding and resilient bituminous type, of thickness indicated, conforming to ASTM D1751.

G. Curing Paper: Shall conform to ASTM C171 and consist of two sheets of kraft paper cemented together with a bituminous material in which are embedded cords or strands of fiber running in both directions. The paper shall be light in color, shall be free of visible defects, with uniform appearance.

H. Floor Hardener: Water soluble, inorganic, silicate-based curing, hardening, sealing and dustproofing compound. Aquaseal W20 by Monopole Inc., Kure-N-Harden by BASF, Chem Hard by L&M, Liqui-Hard by W. R. Meadows, or equal.

I. Underlayment: Two component latex underlayment for filling low spots in concrete for both interior and exterior applications, from featheredge to a maximum of 3/8 inch in thickness. Underlayment shall be non-shrink and suitable for repairing exposed concrete surfaces and for underlayment of carpet, resilient, tile and quarry floor coverings. La-O-Tex by TexRite, Underlay C, RS by Mer-Krete Systems, Underlayment 962 by C-Cure, or equal.

J. Vapor Barrier: Polyolefin-based 15 mils minimum thickness, meeting or exceeding ASTM E1745, 10 feet minimum width. Permeance shall be less than 0.01 perms [grains/(ft^2*hr*inHg)] as determined by ASTM E96 or ASTM F1249 and after mandatory conditioning tests per ASTM E154 Sections 8, 11, 12, & 13. Include accessories including tape and/or mastic. Stego Wrap by Stego Industries LLC, Perminator by W.R. Meadows, Ecoshield-E by Epro, or equal.

K. Stair Strips and Nosing: Nystrom two part stair treads and nosings.

2.2 CONCRETE MIX

A. Mix shall be signed and sealed by a Civil or Structural Engineer currently registered in the State of California.

B. The required strength and durability of concrete shall be determined by compliance with the proportioning, testing, mixing and placing provisions of CBC-SS/CC Sections 1905A.1 through 1905A.13. Concrete mix shall meet the durability requirements of ACI 318, Chapter 4.

C. Concrete proportioning shall be determined on the basis of field experience and/or trial mixtures shall in accordance with ACI 318, Section 5.3. Proportions of materials shall provide workability and consistency to permit concrete to be placed readily into forms and around reinforcement under conditions of placement to be employed, without segregation or excessive bleeding.

D. Ready-Mixed Concrete: Mix and deliver in accordance with requirements of ASTM C94.

E. Provide concrete to the following criteria:

Element	Min. 28-day Strength psi	Max. Slump	Max. Size Aggregate	
Grade Beams and Foundation	4,000	4 inch	1 ½" Normal wt. concrete	
Slabs	4,000	4 inch	¾" Normal wt. concrete	
Structural Slabs above Steel deck	4,,000 (1)	4 inch	3/8"	Lightweight concrete (115pcf)
Other	4,000	4 inch	¾"	Normal wt. concrete

PART 3 - EXECUTION

3.01 GENERAL

A. Surfaces to receive concrete shall be free of debris, standing water, and any other deleterious substances before start of concrete placing.

B. Time of Placing: Do not place concrete until reinforcement, conduits, outlet boxes, anchors, hangers, sleeves, bolts, and other embedded materials are securely fastened in place. Contact the Inspector at least 24 hours before placing concrete; do not place concrete until inspected by the IOR.

C. Pouring Record: A record shall be kept on the Project site of time and date of placing concrete in each portion of structure. Such record shall be maintained on the Project site until Substantial Completion and shall be available for examination by the Architect and DSA.

3.2 TOLERANCES

A. Concrete construction tolerances shall be as specified in ACI 117 and as modified herein.

B. Refer to ACI 302.1R, Tables 8.1 and 8.2 Slab on Ground and Suspended Flatness/Levelness Construction Guide, for recommended concrete placing and finishing methods.

C. Floor Flatness and Floor Levelness shall be tested in accordance to ASTM E1155. Floor measurements shall be made within 48 hours after slab installation and shall precede removal of shores and forms.

3.3 PREPARATION

A. Vapor Barrier: Before installation of screeds and slab reinforcement, install vapor barrier under slabs on grade, as indicated in the drawings.

1. Install in accordance to ASTM E1643.

2. Place vapor retarder sheeting with the longest dimension parallel with the direction of the concrete pour.

3. Laps or seams shall be overlapped 6 inches, or as recommended by manufacturer. Las and penetrations shall be sealed with the manufacturer's recommended tape and/or mastic.

4. Inspector will inspect and mark areas of damage and insufficient installation of the vapor barrier sufficiently in advance of concrete placement.

a) Deficiencies shall be corrected before concrete is placed.

b) Patch damaged areas with vapor barrier overlapping four sides 6 inches and adhering with tape.

B. Reglets and Rebates:

1. Form reglets and rebates in concrete to receive flashing, frames and other equipment as detailed and required. Coordinate dimensions and locations required with other related Work.

2. If concrete slabs on grade adjoin a wall or other perpendicular concrete surface, form a reglet in wall to receive and carry horizontal concrete Work. Reglet shall be full

thickness of the slab and shall be 3/4 inch wide, unless otherwise indicated. Requirement does not apply to exterior walks, unless specifically indicated.

C. Anchor Slots: Embedded anchor slots in concrete walls to receive masonry veneer shall be set vertically in forms, 24 inches maximum on centers measured horizontally. Anchor slots shall be No. 24 gage galvanized sheet steel with removable fiber filler to prevent seepage of cement in slot.

D. Screeds: Install screeds accurately and maintain at required grade or slab elevations after steel reinforcement has been installed, but before starting to place concrete. Install screeds adjacent to walls and in parallel rows not to exceed 8 feet on centers.

3.4 INSTALLATION

A. Conveying and Placing:

1. Concrete shall be placed only under direct observation of the PI. Do not place concrete outside of regular working hours, unless the Inspector has been notified at least 48 hours in advance.

2. Concrete shall be conveyed from mixer to location of final placement by methods that will prevent separation or loss of materials.

3. Concrete shall be placed as nearly as practicable to its final position to avoid segregation due to re-handling or flowing. No concrete that has partially hydrated or has been contaminated by foreign materials shall be placed, nor shall re-tempered concrete or concrete which has been remixed after initial set be placed.

4. In placing concrete in columns, walls or thin sections, provide openings in forms, elephant trunks, tremies or other recognized devices, to prevent segregation and accumulation of partially hydrated concrete on forms or metal reinforcement above level of concrete being placed. Such devices shall be installed so that concrete will be dropped vertically. Unconfined vertical drop of concrete from end of such devices to final placement surface shall not exceed 6 feet.

5. Concrete shall be placed as a continuous operation until placing of panel or section is completed. Top surfaces of vertically formed lifts shall be level.

6. Concrete shall be thoroughly consolidated by suitable means during placement, and shall be thoroughly worked around reinforcement and embedded fixtures and into corners of forms.

7. Where conditions make consolidation difficult or where reinforcement is congested, batches of mortar containing same proportions of cement, sand, and water as provided in the concrete, shall first be deposited in the forms to a depth of at least one inch.

B. Cold Weather:

1. Provide adequate equipment for heating concrete materials and protecting concrete during freezing or near-freezing weather. All ground with which concrete is to come in contact shall be free from frost. No frozen materials or materials containing ice shall be used.

2. The temperature of concrete at the time of placement shall not be below the minimum temperatures given in Table 3.1 of ACI 306.1.

3. Concrete shall be maintained at a temperature of at least 50° F. for not less than 72 hours after placing or until it has thoroughly hardened. Cover concrete and provide sufficient heat as required. When necessary, aggregates shall be heated before mixing. Special precautions shall be taken for protection of transit-mixed concrete.

C. Hot Weather:

1. Concrete to be placed during hot weather shall comply with the requirements of ACI 318, Section 5.13.

2. Maintain concrete temperatures indicated in Table 2.1.5 of ACI 305R to prevent the evaporation rate from exceeding 0.2 pound of water per square feet of exposed concrete per hour.

3. Cool concrete using methods indicated in ACI 305R Appendix B.

4. Place and cure concrete as specified in ACI 305R Chapter 4.

D. Compaction and Screeding:

1. Tamp freshly placed concrete with a heavy tamper until at least 3/8 inch of mortar is brought to surface. Concrete shall then be tamped with a light tamper and screeded with a heavy straightedge until depressions and irregularities are eliminated, and surface is true to finish grades or elevations. Remove excess water and debris.

2. Where slabs are to receive separate cement finish or mortar setting bed, continued tamping to raise mortar to surface is not performed. Laitance shall be removed by brushing with a stiff brush or by light sandblasting to expose clean top surface of coarse aggregate.

E. Floating and Troweling:

1. When concrete has hydrated sufficiently, it shall be floated to a compact and smooth surface. After floating, wait until concrete has reached proper consistency before troweling. Top surfaces shall receive at least 2 troweling operations with steel hand trowel. Prior to and during final troweling, apply a fine mist of water frequently with an atomizing type fog sprayer. Omit troweling for slabs to receive a separate cement finish.

2. For interior finish slabs, final troweling shall provide a hard, impervious, and non-slip surfaces, free from defects and blemishes. Finished surface shall be within tolerances

indicated in Article 3.02. Avoid burnishing. Do not add cement or sand to absorb excess moisture.

3. Exterior Paving and Cement Walks: Finish as specified above, except surface shall be given a non-slip broom finish to match Sample reviewed by the Architect.

4. Vertical concrete surfaces shall be finished smooth and free from marks or other surface defects.

F. Curing:

1. Length of time, temperature and moisture conditions for curing concrete shall be in accordance with ACI 318, Section 5.11.

2. Forms containing concrete, top of concrete between forms, and exposed concrete surfaces after removal of forms shall be maintained in a thoroughly wet condition for at least 7 consecutive days after placing.

3. If weather is hot or surface has dried out, spray surface of concrete slabs and paving with fine mist of water, starting not later than 2 hours after final troweling and continuing until sunset. Surface of finish shall be kept continuously wet until curing medium has been installed.

4. Immediately after finishing, monolithic floor slabs shall be covered with curing paper. Paper shall be lapped 4 inches at joints and sealed with waterproof sealer. Edges shall be cemented to finish. Repair or replace paper damaged during construction operations.

G. Filling, Leveling and Patching:

1. Concrete slabs exhibiting high or low spots and indicated to receive resilient floor covering or soft floor covering, shall have surfaces repaired. High spots shall be honed, or ground with power-driven machines to required tolerances. Low spots shall be filled with latex underlayment, installed in strict accordance with manufacturer's written recommendations.

2. Holes resulting from form ties or sleeve nuts shall be solidly packed, through exterior walls, by pressure grouting with cement grout, as specified. Grouted holes on exposed surfaces shall be screeded flush and finished to match adjoining surfaces.

H. Cement Base: Cement base shall be of the height, thickness, and shape detailed. Base shall be reinforced with one inch mesh, 18 gage, zinc-coated wire fabric. Base finish mixture shall be one part Portland cement, 2 parts of fine aggregate and one part pea gravel. Colored cement base shall include a chemically inert mineral oxide pigment in the mix.

3.5 FINISHING

A. Soda and Acid Wash: Concrete surfaces to receive plaster, paint or other finish, and which have been formed by oil coated forms, shall be scrubbed with a solution of 1-1/2 pounds of

caustic soda to one gallon of water. Surfaces where smooth wood or waste molds have been furnished shall be scrubbed with a solution of 20 percent muriatic acid. Wash with clean water after scrubbing.

B. Sacking: Exposed concrete curbs, walls, and other surfaces shall be sacked by an application of Portland cement grout, floated, and rubbed. Sacking shall not be performed until patching and filling of holes has been completed. Entire sacking operation for any continuous area shall be started and completed within the same day.

1. Mix one part Portland cement and 1-1/2 parts fine sand with sufficient water to produce a grout having consistency of thick paint. Wet surface of concrete sufficiently to prevent absorption of water from grout. Apply grout uniformly with a brush or spray gun, then immediately float surface with a cork or other suitable float, scouring wall vigorously.

2. While grout is still plastic, finish surface with a sponge-rubber float, removing excess grout. Allow surface to dry thoroughly, then rub vigorously with dry burlap to completely remove dried grout. No visible film or grout shall remain after rubbing with burlap.

C. Sandblasting: Exterior concrete surfaces to receive stucco dash coat finish, where plywood or other smooth forms have been furnished, shall be uniformly sand-blasted with sharp quartz sand under sufficient air pressure to remove dirt, form oil and other foreign materials, and roughen surface to provide a proper bond. Such surfaces shall be thoroughly washed with clean water after sandblasting.

D. Abrasive: Concrete stair treads, landings, ramps and steps on interior and exterior of buildings, and interior exposed concrete floors in shop buildings shall receive an abrasive finish.

E. Floor Hardener: Exposed interior concrete floors throughout shall be treated with floor hardener.

1. Protect adjacent surfaces. Clean surfaces to receive treatment in accordance with manufacturer's instructions, ensuring that all stains, oil, grease, form release agents, laitance, dust and dirt are removed prior to application.

2. Apply hardener in accordance with manufacturer’s instructions as soon as concrete is firm enough to work on after final troweling.

F. Cement Grout and Dry-Pack Concrete: Cement grout shall be mixed at the Project site and shall be composed of one volume of Portland cement and 2-1/2 volumes of fine aggregate. Materials shall be mixed dry with sufficient water added to make mixture flow under its own weight. When grout is used as a dry pack concrete, add sufficient water to provide a stiff mixture, which can be molded into a sphere.

G. Broom Finish: Exterior stair treads and landings shall be provided with a non-slip broom finish in addition to abrasive finish specified.

H. Abrasive Stair Nosing: Nosing shall be installed according to manufacturers written recommendations.

3.6 EXPANSION AND CONSTRUCTION JOINTS

A. Construction Joints: Details and proposed location of construction joints shall be as indicated on the Drawings, located to least impair strength of structure, in accordance with the following:

1. Thoroughly clean contact surface by sand blasting entire surface not earlier than 5 days after initial placement.

2. A mix containing same proportion of sand and cement provided in concrete plus a maximum of 50 percent of coarse aggregate shall be placed to a depth of at least one inch on horizontal joints. Vertical joints shall be wetted and coated with a neat cement grout immediately before placing of new concrete.

3. Should contact surface become coated with earth, sawdust, or deleterious material of any kind after being cleaned, entire surface shall be re-cleaned before applying mix.

B. Expansion Joints: Provide expansion joints where indicated in walks and exterior slabs. Space approximately 20 feet apart, unless otherwise indicated. Joints shall extend entirely through slab with joint filler in one piece for width of walk or slab. Joint filler shall be 3/8 inch thick, unless otherwise indicated.

C. Tooled Joints: Slabs, walks and paving shall be marked into areas as indicated with markings made with a V-grooving tool. Marks shall be round-edged, free from burrs or obstructions, with clean cut angles and shall be straight and true. Walks, if not indicated, shall be marked off into rectangles of not more than 12 square feet and shall have a center marking where more than 5 feet wide.

3.7 TESTING

A. Molded Cylinder Tests:

1. Inspector or testing lab personnel will prepare cylinders and perform slump tests. Samples for concrete strength shall be taken in accordance to ASTM C172. Each cylinder shall be dated, given a number, point in structure from which sample was obtained, mix design number, mix design strength and result of accompanying slump test noted.

2. Separate tests of molded concrete cylinders obtained at same place and time shall be made at age of three days, seven days, and 28 days. A strength test shall be the average of the compressive strength of two cylinders, obtained from the same sample of concrete and tested at 28 days or at test age designated for determination of f'c.

3. Test cylinders shall be prepared at the Project site and stored in testing laboratory in accordance with ASTM C31, and tested in accordance with ASTM C39.

B. Core Test: At request of the Architect, cores of hardened concrete shall be cut from portions of hydrated structures for testing, in accordance with CBC-SS/CC and ASTM C42.

1. Provide 4 inch diameter cores at representative places throughout the structure as designated by the Architect.

2. In general, provide sufficient cores to represent concrete placed with at least one core for each 4,000 square feet of building area, and at least 3 cores total for each Project.

3. Where cores have been removed, fill voids with drypack, and patch the finish to match the adjacent existing surfaces.

C. Concrete Consistency: Measure consistency according to ASTM C143. Test twice each day or partial day's run of the mixer.

D. Adjustment of Mix: If the strength of any grade of concrete for any portion of Work, as indicated by molded test cylinders, falls below minimum 28 days compressive strength specified or indicated, adjust mix design for remaining portion of construction so that resulting concrete meets minimum strength requirements.

E. Air Content Testing: Measure in accordance to ASTM C173 or ASTM C231, for each composite sample taken in accordance to ASTM C172.

F. Defective Concrete:

1. Should strength of any grade of concrete, for any portion of Work indicated by tests of molded cylinders and core tests, fall below minimum 28 days strength specified or indicated, concrete will be deemed defective Work and shall be replaced or adequately strengthened in a manner acceptable to the Architect and DSA.

2. Concrete Work that is not formed as indicated, is not true within 1/250 of span, not true to intended alignment, not plumb or level where so intended, not true to intended grades and levels, contains sawdust shavings, wood or embedded debris, or does not fully conform to Contract provisions, shall be deemed to be defective Work and shall be removed and replaced.

G. Concrete for Equipment Pads, Mechanical and Electrical Work: Unless otherwise indicated, strength shall have a minimum $f'c$ = 3,000 psi. Exposed concrete shall be provided with a hand trowel finish with radius corners and edges. Form and place concrete where necessary as described in Section 03 1000 Concrete Forming and Accessories, and reinforced as described in Section 03 2000 Concrete Reinforcing. Calcium chloride shall not be furnished in any concrete mix provided for the installation of underground electrical conduits. For concrete encasement of more than one conduit, furnish 3/4 inch maximum aggregate.

3.8 CLEAN UP

A. Remove rubbish, debris and waste materials and legally dispose of off the Project site.

3.9 PROTECTION

A. Protect the Work of this section until Substantial Completion.

END OF SECTION

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PART 1 - GENERAL

1.1 SECTION INCLUDES

A. CMU on exterior walls using the adhered thick set application method.

B. Substrate preparation.

C. Related Sections

1. Section 09 24 00, Portland Cement Plaster, scratch and leveling coat for thick set mortar bed.
2. Section 07 19 00, Water Repellents.

1.2 REFERENCE STANDARDS

A. Conform to current adopted reference standards by date of issue of the current code cycle and the date of the Contract Documents.

B. ASTM C55 Concrete Building Brick.

C. ASTM C90 Load Bearing Concrete Masonry Units.

D. ASTM C126 - Ceramic Glazed Structural Clay Facing Tile, Facing Brick and Solid Masonry Units.

E. ASTM C 1088 - Solid Units of thin Veneer Brick.

F. TCNA (Tile Council of North America) - Handbook for Ceramic Tile Installation, Latest Edition.

G. CBC- California Building Code 2019, Chapters 14A, 21A and 17A.

H. Building Code Requirements for Masonry Structures

1. TMS 402/ACI 530/ASCE 5 - Building Code Requirements and Specification for Masonry Structures, 2013 Edition.

2. TMS 602/ACI 530.1/ASCE 6 - Specification for Masonry Structures, 2013 Edition.

1.3 SUBMITTALS

A. Product data indicating manufacturer's specifications and instructions for using Portland cement and latex-Portland cement mortars and grouts.

B. Sufficient samples of each size, color and texture to demonstrate the maximum ranges of sizes, colors, textures and flatness. Provide samples of all corners and trim shapes. Mount thin brick and apply grout on two 24 inch by 24 inch plywood panels, representative of pattern, color variations and grout joint size variations.

C. Manufactured cement mortars and grouts provide labels certifying compliance with

referenced standards.

D. Maintenance data. Include recommended cleaning, stain removal methods and cleaning materials.

1.4 QUALITY ASSURANCE

A. Conform to CBC Chapter 2103A.

B. Qualifications

1. Manufacturer: Company specializing in the manufacture of products specified in this Section with minimum five years' experience.

2. Installer: Company specializing in applying the work of this Section with minimum five years' experience.

C. Mock-up

1. Provide mock-up minimum 3x4 feet in size.

2. Mock-up may be used as part of the work if approved by the Architect.

D. Pre-installation Conference

1. Convene one week prior to commencing work of this Section.

1.5 DELIVERY, STORAGE AND HANDLING

A. Deliver products to site only in unbroken cartons.

B. Thin brick units delivered to the job or installed in the work that do not fall within the specified standards of quality or accepted color range shall be removed from the jobsite and promptly by replaced with approved material.

C. Store and protect products in dry, secure areas.

1.6 ENVIRONMENTAL REQUIREMENTS

A. Maintain 50 degrees F or above during installation of adhesive and grout materials.

B. Shade the work area from direct sunlight during the installation as needed to prevent rapid evaporation caused by excessive heat.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Products of the following manufacturers form the basis for design and quality intended.

1. Angelus Block Co., Inc., Sun Valley, CA.

2. Oreo Block Co., Inc., Stanton, CA.

3. RCP Block and Brick, Lemon Grove, CA.

B. Or equal as approved in accordance with Division 01 General Requirements for substitutions.

2.2 CONCRETE MASONRY UNITS

A. Masonry Units: ASTM C90, Grade N, Type I, as selected to the following design, Medium weight:

1. Type: Ribbed and split with four vertical ribs.

B. Color: as indicated on Drawings

C. Masonry Unit Sizes: Nominal modular size - match existing CMU Veneer Size. Provide special units for 90 degree corners, and special profiles as indicated.

D. Provide units manufactured in one batch production to assure continuity of color.

2.3 REINFORCEMENT AND ANCHORAGE

A. Manufacturers:

1. Halfen Anchoring Systems, Converse, Tx.

B. Dovetail Anchors:

1. Stamped steel strap, 1-1/2" wide x 2-inch, 3-inch, or 4-inch depth to suit veneer depth leaving 1" cavity behind veneer, 14 gauge thick, galvanized to ASTM A123 G90 finish.

2. Anchor Channels (Slots): 22 gauge "C" channel, with dovetail key profile galvanized to ASTM 123 G90 finish, with pre-punched mounting holes at 12" o.c.

2.4 MORTAR - THICK BED SET

A. Mortar Proportions by Volume: Cement-lime mortar, Type S, 1 part Portland cement, loose damp sand in the amount of not less than 2-1/4 and not more than 3 times the sum of the separate volumes of cementitious materials and 1/4 to 1/2 part lime. Mortar strength: 1500 psi minimum at 28 days.

1. Mortar Type: Type S; Conform to 2103A.9 CBC and Tables SC-1 and SC-2 TMS 602/ACI 250.1/ASCE 6.

B. Neat Portland Cement: Mixture of one sack of Type I or Type II Portland cement (ninety-four pounds) to not less than five nor more than seven gallons of water.

C. Lath, scratch and leveling coat, and weather resistive materials: specified in Section 09 24 00.

2.5 GROUT MATERIALS

A. Grout: Type N Portland cement-Lime mortar. Mix of 1 part Portland cement to 1/2 part lime to not more than 3 parts sand by volume.

B. Color: TRUE TONE mortar color by Davis Colors, Los Angeles, CA, or equal as approved in accordance with Division 01 General Requirements for substitutions, color to match thin-brick units or as selected by Architect. Provide up to 4 lbs per sack of masonry cement, as required to achieve selected color.

2.6 ACCESSORIES

A. Expansion Joint Filler: Premolded filler strips complying with ASTM D 1056, Grade 2A1; compressible up to 35 percent; of width and thickness indicated; formulated from neoprene, OClosed Cell Neoprene8 by Sandell Manufacturing, or equal.

B. Preformed Control-Joint Gaskets: Made from styrene-butadiene-rubber compound, complying with ASTM D 2000, Designation M2AA-805 and designed to fit standard sash block and to maintain lateral stability in masonry wall; size and configuration as indicated.

C. Sealant: Two component Polyurethene, Non-sag, as specified in Section 07 92 00.

D. Backer Rod: Closed cell polyethylene; oversized 50 percent to joint width; self-expanding; DENVER FOAM or GREEN ROD manufactured by Pecora Corp., Harleysville, PA, or equal as approved in accordance with Division 01, General Requirements for Substitutions.

E. Cleaning Solution: Non-acidic, not harmful to masonry work or adjacent materials.

F. Building Paper: 28 lb. per square, asphalt saturated, Type II.

G. Thru-Wall Flashing: 40 mils self-adhered modified SBS membrane by Henry Company, Blueskin TWF, Grace Construction Products, Carlisle Coatings & Waterproofing CCW-705 TWF, FortiFlash 40 Recessed Window Flashing by Fortifiber or equal.

1. Provide prefabricated corner pieces or field cut corners, make waterproof, assemble overlapping in Oweatherboard* fashion, minimum 4* flanges.

H. Primers: manufacturer's standard product for flashing specified.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Verify that surfaces are ready to receive work.

B. Beginning of installation means installer accepts condition of substrate.

3.2 PREPARATION

A. Protect surrounding work from damage or disfiguration.

B. Clean substrate and damp clean.

3.3 MIXING-THICK SET

A. Mixing: per Section 2.6 TMS 602/ACI 350.1/ASCE 6.

3. 4 APPLICATION - MORTAR SET (THICK SET)

A. Install per Section 1405.10 (Sections 6.1, 6.3 of TMS 402/ACI 350/ASCE 5) and 2104A.1.2 (TMS 602/ACI350.1/ASCE 6) CBC.

B. Do not soak units unless absorptive units are used with neat Portland cement bond coat.

C. Brush a paste of neat Portland cement on the backing and on the back of the veneer unit.

D. Apply Type S mortar to the backing and to the veneer unit.

E. Tap the veneer unit into place, completely filling the space between the veneer unit and the backing. Sufficient mortar shall be used to create slight excess to be forced out between the edges of the units. The resulting thickness of mortar in back of the veneer unit shall not be less than 3/8" or more than 1-1/4", per Article 3.3C of TMS 602/ACI 350.1/ASCE 6.

F. Tool the mortar joint with a round jointer when the mortar is thumbprint hard.

3.5 APPLICATION OF GROUT

A. Dampen dry joints prior to grouting.

B. Force a maximum amount of grout into the joints. Joints shall be tooled concave.

C. The finished joint shall be uniform in color, smooth and without pinholes, voids or low spots.

3.6 INSTALL MASONRY ANCHORING SYSTEM:

A. Secure anchor channels to stud framed back-up at maximum 16" on centers horizontally. Place around perimeter of openings within 12" of openings.

1. Installed in specialized manner per manufacturer's instructions to meet the requirements of DSA for earthquake construction.

2. Insert dovetail anchors in channels at 12 inches oc vertically, depth of dovetail anchor shall allow minimum 1" cavity behind veneer. Wedge 16d G.I.nail between the anchor and channel slot, nail until tight to prevent end-play of anchor in slot.

3. Engage wire reinforcement in tabs, install wire within middle 1/3 of masonry unit. Overlap wire joints 6".

3.7 INSPECTION AND TESTING

A. Inspection: All veneer shall be inspected per Section 1705.4, CBC 2019.

B. Bond strength and Tests: Veneer shall develop a bond to the supporting element in accordance with TMS 402/ACI 530/ASCE 5 Section 6.3.2.4, of sufficient strength to provide a working shear stress of 50 psi.

1. Tests: Not less than two shear tests shall be performed for the adhered veneer between the units and supporting element. At least one shear test shall be performed at each building for each 5,000 square feet of floor area or faction thereof.

3.8 CLEANING

A. Clean surfaces with appropriate materials.

3.9 CURING

A. Damp-cure grout for a minimum of 72 hours. Remove and replace improperly cured grout.

B. Water Resistant Application: As specified in Section 07 19 00.

3.10 REPLACEMENT OF MATERIALS

A. Provide three percent additional units and corner shapes of each type, color, pattern and size used in the work for Owner's use in replacement and maintenance. Package securely to prevent damage and label clearly.

END OF SECTION

PART 1 - GENERAL

1.01 SUMMARY

A. Section Includes:

1. Concrete masonry units.
2. Reinforcing steel.
3. Mortar, grout and grouting.
4. Bolts, anchors, hardware, metal frames, and other insert items.

B. Related Requirements:

1. Division 01 - General Requirements.
2. Section 01 40 00 – Quality Requirements
3. Section 03 10 00 - Concrete Forming and Accessories.
4. Section 03 20 00 - Concrete Reinforcing.
5. Section 03 30 00 - Cast-In-Place Concrete.
6. Section 05 12 00 - Structural Steel Framing.
7. Section 08 13 13 - Hollow Metal Doors .

1.02 REFERENCES:

A. American Society for Testing and Materials International (ASTM):

1. ASTM A307 - Standard Specification for Carbon Steel Bolts and Studs, 60 000 PSI Tensile Strength.
2. ASTM C90 - Standard Specification for Load Bearing Concrete Masonry Units.
3. ASTM C94 - Standard Specification for Ready-Mixed Concrete.
4. ASTM C140 - Standard Test Methods for Sampling and Testing Concrete Masonry Units and Related Units.
5. ASTM C144 - Standard Specification for Aggregate for Masonry Mortar.
6. ASTM C150 - Standard Specification for Portland Cement.

7. ASTM C207 - Standard Specification for Hydrated Lime for Masonry Purposes.

8. ASTM C270 - Standard Specification for Mortar for Unit Masonry.

9. ASTM C404 - Standard Specification for Aggregates for Masonry Grout.

10. ASTM C426 - Standard Test Method for Linear Drying Shrinkage of Concrete Masonry Units.

11. ASTM C476 - Standard Specification for Grout for Masonry.

12. ASTM C780 - Standard Test Method for Preconstruction and Construction Evaluation of Mortars for Plain and Reinforced Unit Masonry.

13. ASTM C1019 - Standard Test Method for Sampling and Testing Grout.

14. ASTM C1314 - Standard Test Method for Compressive Strength of Masonry Prisms.

15. ASTM C1586 – Standard Guide for Quality Assurance of Mortars.

B. Masonry Standards Joint Committee (MSJC), The Masonry Society (TMS), American Concrete Institute (ACI) and American Society of Civil Engineers (ASCE).

1. TMS 602/ACI 530.1/ASCE 6 – Specification for Masonry Structures.

2. TMS 402/ACI 530/ASCE 5 – Building Code Requirements for Masonry Structures.

1.03 SUBMITTALS

A. Mix Design: Submit grout and mortar mix designs. Mix designs shall be signed and sealed by a Civil or Structural Engineer registered in the State of California.

B. Product Data: Submit manufacturer's Product Data for assembly components, materials, and accessories. Submit certificates and data assuring that the proposed materials meet the specified ASTM standards.

C. Samples: Submit Samples for each type of required masonry unit, including reinforcement and accessories.

D. Shop Drawings: Indicate wall reinforcement, splice locations and bending diagrams.

E. Admixtures: Additives and admixtures to mortar and grout shall not be used unless approved by the enforcing agency. Submit product data for any proposed admixture.

1.04 REGULATORY REQUIREMENTS

A. Perform the Work in accordance with CBC-SS/CC, Chapter 21A.

B. Comply with requirements of TMS 602.

1.05 QUALITY ASSURANCE

A. Comply with the requirements of Section 01 40 00 – Quality Requirements

B. Concrete Masonry Units:

1. Notify the testing laboratory a minimum of 45 days in advance of installing concrete unit masonry, to allow for preconstruction testing of the units.

   a. Units will be sampled and tested in accordance with ASTM C140 for compressive strength, absorption and moisture content.

   b. Units will be sampled and tested in accordance with ASTM C426 for linear drying shrinkage.

2. The material testing laboratory shall receive concrete masonry unit specimens for testing from masonry unit manufacturer. Number of specimens shall be as indicated in referenced ASTM standard tests. Testing laboratory will perform and send test results to the Architect and Project Inspector.

C. Portland Cement: Submit certification from the cement manufacturer that the cement proposed for use on the project has been manufactured in accordance with ASTM C150. Certification shall include test results made on cement samples during production.

D. Mortar and Grout Tests: Prior to the beginning of masonry work, mortar and grout will be tested, unless prism tests will be performed as indicated below.

1. Mortar: Shall conform to ASTM C270 Table 2 for Type S mortar.

   a. Provide qualifications of mortar as meeting ASTM C270 at the beginning of the job and whenever mix design is changed.

   b. Mortars will be evaluated during preconstruction and tested during construction for proportioning or compressive strength in accordance to ASTM C780.

2. Grout: Shall conform to ASTM C476, and will be tested in accordance with ASTM C1019. Compressive strength shall equal or exceed specified compressive strength ($f'm$) at 28 days, but not less than 2,000 psi.

   a. Ready-Mix Grout: Grout manufacturer shall furnish batch ticket information in accordance to ASTM C94.

E. Prism Test: The compressive strength of concrete masonry will be determined by the prism test method prior to the start of construction and during construction in accordance with CBC-SS/CC Section 2105A.2.2.2.

F. Masonry Core Testing: Core testing will be performed in accordance with CBC-SS/CC, Section 2105A.4.

G. Inspection During Installation: A special inspector will continuously observe the installation of reinforced masonry. The Project Inspector shall be responsible for monitoring the work of the special inspector and testing laboratories to ensure that the testing program is satisfactorily completed.

H. The Owner will be responsible for the costs of original tests and inspection.

1.06 DELIVERY, STORAGE AND HANDLING

A. Store units above grade on level platforms or pallets, in a dry location.

B. Store cementitious materials and aggregates in such a manner as to prevent deterioration or intrusion of foreign matter or moisture.

C. Handle units on pallets or flat bed barrows. Free discharge from conveyor units or transportation in mortar trays is not permitted.

PART 2 - PRODUCTS

2.01 MATERIALS

A. Concrete Unit Masonry: Modular medium weight conforming to ASTM C90, hollow load-bearing concrete unit masonry. Masonry units shall meet the minimum compressive strength requirements of ASTM C90, or as indicated on project drawings, whichever is greater.

1. Concrete masonry unit sizes shall be as indicated on the drawings.

2. Provide open-end units at walls to be fully grouted.

3. Provide closed-end units at walls and at openings where ends will be exposed in finish Work; provide bond beam blocks where horizontal reinforcement is indicated.

4. Provide special shapes and accessory units at locations indicated on Drawings.

5. Provide units in colors and textures as indicated in the drawings.

6. Masonry unit shall have been cured for a minimum of 28 days.

7. Masonry unit shall have maximum liner shrinkage of 0.065 percent from saturated to oven dry.

B. Portland Cement: ASTM C150, Type II, from one source.

C. Hydrated Lime: ASTM C207, Type S.

D. Aggregates: ASTM C144 for mortar and ASTM C404 for grout.

E. Mortar: ASTM C270, Type S, conforming to the property specifications of CBC-SS/CC Table 2103A.8 (2).

F. Grout: ASTM C476.

G. Admixture for Grout: Grout Aid, as manufactured by Sika Chemical Corp., or equal.

H. Water: Clean, potable, free from substances deleterious to mortar, grout or reinforcement.

I. Reinforcing Steel: Provide and install reinforcing steel in accordance with Section 03 20 00 - Concrete Reinforcing.

J. Cleaning Materials: Sure Klean No. 600 detergent by ProSoCo.

K. Miscellaneous Materials: As required to complete the Work.

L. Anchor Bolts: Shall be hex headed bolts conforming to ASTM A307 Grade A with the dimensions of the hex head conforming to ANSI/ASME B18.2.1.

PART 3 - EXECUTION

3.01 EXAMINATION

A. Discard units with cracks or other defects not complying with requirements of ASTM C 90.

3.02 CONSTRUCTION

A. Construct per applicable provisions of CBC-SS/CC and TMS 602.

B. Conform to TMS 602 for hot and cold weather masonry construction.

3.03 MORTAR AND GROUT MIXING

A. Mortar: Shall provide a minimum strength of 2,000 PSI. 1

B. Grout: Shall provide a minimum strength of 2,000 psi or as indicated in the drawings, whichever is higher. Grout space requirements for coarse and fine grouts shall be per Table 7 of TMS 602. Add Sika Chemical Corp. Grout Aid per manufacturer's instructions.

C. Measurements: Measure in calibrated devices that can be checked at any time.

1. Add water for workable consistency.

2. Shovel measurements are not permitted.

D. Mixing: Mix in accordance to TMS 602.

1. Mortar: Mix cementitious materials and aggregates between three and five minutes in a mechanically operated mixer. Mix dry ingredients with a sufficient amount of water to provide a workable mix. Batches of less than one sack of cement, and fractional sack batches are not permitted.

2. Factory Blended Mortar: Mix in accordance with manufacturer's recommendations.

3. Grout: Add sufficient water for a workable mix that will flow into all voids of the masonry without separation or segregation. Grout slump shall be between 8 and 11 inches.

E. Re-tempering Time Limit: Use mortar within 2 ½ hours after mixing. Discard any mortar that has been mixed longer or that has begun to set. If necessary re-temper within this time limit, by replacing only water lost due to evaporation and by thoroughly remixing.

3.04 INSTALLATION OF MASONRY UNITS

A. Workmanship: Install masonry plumb and true to line with straight level joints of uniform thickness. Comply with TMS 602 tolerances. Maintain masonry clean during and after installation.

1. Lay-out and incorporate embedded hardware items.

2. Assist other trades with built-in items, which require cutting and fitting of masonry.

3. Cut block units with a diamond saw or carborundum wheel. Trowel or chisel cutting is not permitted.

4. Keep cavities clear of droppings and debris. Remove droppings prior to grouting.

B. Reinforcing Steel: Install as indicated on Drawings. Except as otherwise indicated, install reinforcement in accordance with standards of Concrete Reinforcing Steel Institute and to requirements specified in Section 03 20 00 - Concrete Reinforcing. Do not splice vertical reinforcement except where indicated on the Drawings.

C. Shoring: Provide temporary shoring for lintels with sufficient strength to carry load without deflecting. Remove temporary shoring not less than 28 days after masonry has been installed.

D. Block Installation: Clean dirt and dust from surfaces before installation. Do not wet masonry units.

1. Foundation preparation: Clean top surface of concrete foundation of dirt, projections and laitance before starting masonry construction. Wet saw cutting of units immediately prior to laying is permitted.

2. Install masonry with mortar to required joint thickness. Install blocks with 3/8-inch mortar bed. Fill head joints solid, install tightly to adjoining units. Provide 3/8-inch joint thickness.

a. Hold racking to a minimum.

b. No toothing is permitted.

c. If it becomes necessary to move a unit after it has been installed, remove the unit, discard the mortar, and install the unit in fresh mortar.

3. Anchor Bolts: Provide 1/2-inch minimum grout space between bolts and masonry.

4. Bond: Unless otherwise indicated, install units in common running bond.

5. Finish Joint Treatment: Unless otherwise indicated, cut both interior and exterior joints flush, and tool slightly concave to a dense, uniform surface.

6. Grouting: Unless noted otherwise on Drawings, completely fill cells with grout.

E. Steel Door Frames:

1. Locate door frames accurately, install plumb, Set frames to floor with powder driven or expansion anchors to floor surface and brace in position before start of masonry installation.

a. Frames are specified to be furnished with adjustable anchors.

b. Fill interior of frames solid with mortar or grout as walls are constructed.

2. Provide temporary wood spreaders from jamb to jamb and from head to floor to ensure that jambs do not bow-in, distort from a straight line, or deflect from superimposed loads during construction.

3.05 GROUTING

A. Prior to grouting all cells shall be cleaned so that all spaces to be filled with grout do not contain mortar projections greater than 1/4 inch, loose mortar or foreign material.

B. Grout materials and water contents shall be controlled to provide adequate fluidity for placement without segregation of the constituents, and shall be mixed thoroughly. Reinforcement shall be properly positioned and solidly embedded in the grout.

C. The grouting of any section of wall shall be completed in one day with no interruptions greater than one hour.

D. Between grout pours, a horizontal control joint shall be formed by stopping all wythes at the same elevation and with the grout stopping at 1 ½ inches below a mortar joint, except at the top of the wall. Where bond beams occur, the grout pour shall be stopped a minimum of ½ inch below the top of the masonry.

3.06 LOW-LIFT GROUTING FOR HOLLOW MASONRY UNITS

A. Grouting shall meet the requirements of CBC-SS/CC Section 2104A.5.1.1.2.

B. After mortar joints have set, cells are cleaned of mortar and debris, and reinforcement is installed and inspected, grout cells in 4-foot maximum lifts. Horizontal and vertical reinforcement shall be held in place within permitted tolerances by suitable devices.

C. Grout may be installed by pump, tremie or bucket, using hoppers to avoid spilling on exposed surfaces.

D. All grout shall be consolidated and reconsolidated with a mechanical vibrator after placing so as to completely fill all voids and to consolidate the grout. Grouted walls shall be solid and without voids.

3.07 HIGH-LIFT GROUTING OPTION FOR HOLLOW MASONRY UNITS

A. Grouting shall meet the requirements of CBC-SS/CC Section 2104A.5.1.1.3 and DSA IR 21-2.

B. High-lift grouting shall apply only to cell sizes available with 8 inch and wider block units. This method is subject to approval of the Division of the State Architect (DSA).

C. Provide bond beam units, inverted for start course, and omit alternate blocks or remove entire face shell of every other unit to allow access to all cells on bottom course for cleanouts.

D. Plug each cleanout by setting a face shell in mortar into opening and securely bracing it in place to prevent displacement. If masonry is not exposed in finish Work, cleanouts may be formed.

E. Grouting: Grouting shall be done in a continuous pour in lifts not exceeding 5-foot in height. The grouting of any section of a wall between control barriers shall be completed in one day, with no interruptions greater than one hour.

F. Consolidating: Grout shall be consolidated by mechanical vibration only, and shall be reconsolidated after excess moisture has been absorbed, but before plasticity is lost. Vibrating of reinforcing steel is not permitted.

3.08 CURING

A. Remove efflorescence, stains, debris, excess grout, and foreign matter.

B. During curing, or for any other purpose, do not saturate masonry with water.

3.09 PARGE COAT

A. Apply parge coat to the earth side of surfaces that are to receive waterproofing.

B. A Portland cement and sand mix (1:3.5 by volume) or Type S mortar may be used for the parge coat.

C. Parging should be applied to damp (not saturated) concrete masonry in two 1/4 inch thick layers. The first coat should be roughened when partially set, hardened for 24 hours, and then moistened before second coat is applied. The second coat should be trowelled to a smooth, dense surface.

D. The parge coat should be beveled at the top to form a wash, and thickened at the bottom to form a cove between the base of the wall and the top of footing.

3.10 CLEANING

A. At completion of masonry Work, remove misplaced mortar, grout or other foreign substances, and clean surfaces which will be exposed in finish Work with specified cleaner, or with clean water and stiff fiber brushes.

B. Remove rubbish, debris, and waste materials and legally dispose of off the Project site.

3.11 PROTECTION

A. Protect the Work of this section until Substantial Completion.

END OF SECTION

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1 PART 1 - GENERAL

1.1 SCOPE OF WORK

A. Remove first three courses of tile and tile fastening system around entire perimeter of building where gutter is present.

1. If broken or damaged tiles are found prior to the start of work the district is to be notified in writing.

2. Contractor is responsible for replacing any tiles damaged during removal or re-installation.

B. Remove and properly dispose of existing coping metal.

1. Contractor shall replace existing coping metal with new Kynar coping metal matching existing design.

2. Coping metal to be installed to ANSI-SPRI requirements.

3. Coping metal color to be selected by contractor.

C. Remove debris, excess granules and dirt from exposed underlayment, cap sheet and gutter system using a broom followed by a leaf blower.

D. Use a wire brush to clean all rusted areas of the gutter system.

E. Prime all rusted areas with a rust inhibiting primer.

F. Gutter Lining and Repairs:

1. Fully adhere 45 mil. TPA single ply membrane to gutter system, cap sheet roofing and exposed tile underlayment.

2. Adhere TPA in bonding adhesive according to manufacturer's written instructions for coverage rate and application.

3. Extend fully adhered TPA under where coping metal is to be installed and secure to outside face of nailed.

4. Install corner patches at all inside and outside corners.

5. Heat weld all seams.

6. Re-install all tile.

G. Tile Roof Repairs:

1. Remove all damaged, loose and broken tile cement along the transition to the parapet wall at the top of all tile roof sections.

2. Replace all removed cement with new color matched tile cement tooled neatly to shed water and prevent water intrusion at roof to wall flashing.

3. At all areas where no cement is removed, install a coat of new color matched tile cement over the existing cement.

4. All damaged/broken or missing tiles are to be replaced with new matching tiles.

5. Attach all replaced tiles in same manner as existing attachment system.

END OF SECTION

SECTION 07 01 50.76 – FOAM ROOF REPAIRS

PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes the following:

1. Roof repair preparation including foamed roof partial removal and patching, scarification, and cleaning preparation for repairs.

2. Rehabilitation or replacement of base flashings.

3. Application of coating on foamed roofing.

B. Allowances: Refer to Division 01 Section "Allowances" for description of Work in this Section affected by allowances.

C. Unit Prices: Refer to Division 01 Section "Unit Prices" for description of Work in this Section affected by unit prices.

1.2 DEFINITIONS

A. Roofing Terminology: Refer to ASTM D 1079 "Standard Terminology Relating to Roofing and Waterproofing" and glossary in NRCA's "The NRCA Roofing Manual: Membrane Roof Systems" for definition of terms related to roofing work in this Section.

B. Existing Roofing System: Coated foamed roofing, and components and accessories.

C. Patching: Removal of a portion of existing foamed roofing system from deck or removal of selected components and accessories from existing foamed roofing and replacement with similar materials.

D. Remove: Detach items from existing construction and legally dispose of them off-site unless indicated to be removed and reinstalled.

E. Existing to Remain: Existing items of construction that are not indicated to be removed.

1.3 ACTION SUBMITTALS

A. Product Data: For each type of product specified.

1.4 INFORMATIONAL SUBMITTALS

A. Contractor's Product Certificate: Submit notarized certificate, indicating products intended for Work of this Section, including product names and numbers and manufacturers' names, with statement indicating that products to be provided meet the requirements of the Contract Documents.

B. Qualification Data: For Installer, Manufacturer, and Roofing Inspector.

1. Letter written for this Project indicating manufacturer approval of Installer to apply specified products and provide specified warranty.

C. Product Test Reports: Based on evaluation of comprehensive tests performed by manufacturer and witnessed by a qualified testing agency, for components of roofing rehabilitation system.

D. Proposed Protection Measures: Submit report, including Drawings, that indicates the measures proposed for protecting individuals and property, for environmental protection, and for dust control. Indicate proposed locations and construction of barriers.

E. Inspection Reports: Daily reports of Roofing Inspector. Include weather conditions, description of work performed, tests performed, defective work observed, and corrective actions required and carried out.

1.5 CLOSEOUT SUBMITTALS

A. Maintenance Data: To include in maintenance manuals.

B. Warranties: Executed copies of approved warranty forms.

1.6 QUALITY ASSURANCE

A. Installer Qualifications: An employer of workers trained and certified by manufacturer, including a full-time on-site supervisor with a minimum of five years' experience installing products comparable to those specified, able to communicate verbally with Contractor, Architect, and employees, and the following:

1. Qualified by the manufacturer to install manufacturer's product and furnish warranty of type specified.

B. Manufacturer Qualifications: Approved manufacturer listed in this Section with minimum five years' experience in manufacture of specified products in successful use in similar applications.

C. Roofing Inspector Qualifications: A technical representative of manufacturer not engaged in the sale of products and experienced in the installation and maintenance of the specified roofing system, qualified to perform roofing observation and inspection specified in Field Quality Control Article, to determine Installer's compliance with the requirements of this Project, and approved by the manufacturer to issue warranty certification. The Roofing Inspector shall be one of the following:

1. An authorized full-time technical employee of the manufacturer.

D. Roofing Rehabilitation Preinstallation Conference: Conduct conference at Project site to review methods and procedures related to roofing system.

1. Meet with Owner; roofing re-coating materials manufacturer's representative; roofing re-coating Installer including project manager and foreman; and installers whose work interfaces

with or affects re-coating including installers of roof accessories and roof-mounted equipment requiring removal and replacement as part of the Work.

2. Review methods and procedures related to repair preparation, including existing foamed roofing system manufacturer's written instructions.

3. Review temporary protection requirements for existing roofing system that is to remain, during and after installation.

4. Review roof drainage during each stage of re-coating and review roof drain plugging and plug removal procedures.

5. Review and finalize construction schedule, and verify availability of materials, Installer's personnel, equipment, and facilities needed to make progress and avoid delays.

6. Review base flashings, special roofing details, drainage, penetrations, equipment curbs, and condition of other construction that will affect re-coating.

7. Review HVAC shutdown and sealing of air intakes.

8. Review shutdown of fire-suppression, -protection, and -alarm and -detection systems.

9. Review procedures for asbestos removal or unexpected discovery of asbestos-containing materials.

10. Review governing regulations and requirements for insurance and certificates if applicable.

11. Review existing conditions that may require notification of Owner before proceeding.

1.7 FIELD CONDITIONS

A. Existing Roofing System: Coated foamed roofing over asphalt built up roof system.

B. Owner will occupy portions of building immediately below reroofing area. Conduct reroofing so Owner's operations are not disrupted. Provide Owner with not less than 72 hours' notice of activities that may affect Owner's operations.

1. Coordinate work activities daily with Owner so Owner can place protective dust and water-leakage covers over sensitive equipment and furnishings, shut down HVAC and fire-alarm or -detection equipment if needed, and evacuate occupants from below work area.

C. Protect building to be reroofed, adjacent buildings, walkways, site improvements, exterior plantings, and landscaping from damage or soiling from reroofing operations.

D. Maintain access to existing walkways, corridors, and other adjacent occupied or used facilities.

E. Weather Limitations: Proceed with reroofing preparation only when existing and forecasted weather conditions permit Work to proceed without water entering existing roofing system or building.

1. Remove only as much roofing in one day as can be made watertight in the same day.

1.8 WARRANTY

A. Installer Warranty: Installer's warranty signed by Installer, as follows.

1. Form of Warranty: Form acceptable to Owner and Architect.

2. Scope of Warranty: Work of this Section.

3. Warranty Period: 2 years from date of completion.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

A. General: Provide recoated foamed roofing and base flashings that remain watertight; do not permit the passage of water; and resist specified uplift pressures, thermally induced movement, and exposure to weather without failure.

1. Accelerated Weathering: Roofing system shall withstand 2000 hours of exposure when tested according to ASTM G 152, ASTM G 154, or ASTM G 155.

B. Material Compatibility: Provide roofing materials that are compatible with one another under conditions of service and application required, as demonstrated by roofing manufacturer based on testing and field experience.

C. Solar Reflectance Index: Not less than 78 when calculated according to ASTM E 1980, based on testing identical products by a qualified testing agency.

D. Solar Reflectance Index: Solar reflectance index not less than 90 for not less than 75 percent of the roof surface, when calculated according to ASTM E 408 based on testing identical products by a qualified testing agency.

E. Energy Performance: Roofing system shall have an initial solar reflectance index of not less than 0.70 and an emissivity of not less than 0.75 when tested according to CRRC-1.

F. Exterior Fire-Test Exposure: ASTM E 108, Class A; for application and roof slopes indicated, as determined by testing identical membrane roofing materials by a qualified testing agency. Materials shall be identified with appropriate markings of applicable testing agency.

2.2 MATERIALS, GENERAL

A. General: Re-coating materials recommended by roofing system manufacturer for intended use and compatible with components of existing membrane roofing system.

B. Temporary Roofing Materials: Selection of materials and design of temporary roofing is responsibility of Contractor.

C. Infill Materials: Where required to replace test cores and to patch existing roofing, use infill materials matching existing membrane roofing system materials, unless otherwise indicated.

D. Temporary Roof Drainage: Design and selection of materials for temporary roof drainage are responsibilities of the Contractor.

2.3 POLYURETHANE FOAM INFILL AND REPLACEMENT MATERIAL

A. Polyurethane Foam: Rigid, cellular polyurethane, zero-ozone-depleting, designed for roofing applications; complying with ASTM C 1029, Type III; spray applied, with fire retardants as required, and acceptable to coating manufacturer.

1. Basis-of-Design Product; BASF Polyurethanes North America, www.polyurethanes.basf.us; Elastospray 81000 series, or a comparable product by one of the following:

    a. Bayer MaterialScience LLC.
    b. Gaco Western LLC.
    c. Neogard; a division of Jones-Blair, Inc.

2. In-Place Density: 2.8 to 3.0 lb/cu. ft. (44.9 to 48.1 kg/cu. m); ASTM D 1622.

3. Compressive Strength: 45 psi, ASTM D 1621.

4. Surface-Burning Characteristics: Comply with ASTM E 84; testing by a qualified testing agency. Identify products with appropriate markings of applicable testing agency.

    a. Flame-Spread Index: 75 or less.

2.4 COATING SYSTEM

A. Silicone fluid-applied roof coating system: ASTM D6694 single component moisture curing low odor, formulated for use as a restoration coating.

1. Basis of design product: Tremco, AlphaGuard Si 100 .

2. Combustion Characteristics, UL 790: Class A, for two-coat system applied over Class A rooF.

3. Volatile Organic Compounds (VOC), maximum, ASTM D3960: 50 g/L.

4. Tensile Strength, ASTM D412: 307 psi at 73 degrees farenheit.

5. Elongation, ASTM D412: 205 percent at 73 percent.

6. Tear Resistance, ASTM D624: 26 lbf per in at 73 degrees farenheit.

7. Accelerated Weathering, 5000 hours, ASTM G154: Pass.

8. Hardness, Shore A, minimum, ASTM D2240: 45.

9. Permeance, ASTM E96 Method B: 9.3.

10. Solids, by volume, ASTM D2697: 96 percent.

11. Solar Reflectance Index (SRI), initial: 110, white .

12. Color: White.

13. Base coat application, smooth surface: 1 gal per 100 s.f..

14. Base coat application, over rough surface: 2 gal per 100 s.f..

15. Top coat application: 1.5 gal per 100 s.f..

B. Silicone fluid-applied roof coating system primer: two-component water-based thixotropic epoxy primer, formulated for use as a primer over metal, wood, masonry, bituminous surfaces, SPUF, and single ply membranes.

1. Basis of design product: Tremco, AlphaGuard Si Primer.

2. Volatile Organic Compounds (VOC), maximum, ASTM D3960: 55 g/L.

3. Solids, by volume, minimum, ASTM D2697: 40 percent.

4. *Application*.

5. Primer application, smooth surface: 1 gal per 100 to 150 s.f..

6. Primer application, over rough surface: 1 gal per 75 to 100 s.f..

7. Primer application, over single ply membranes: 1 gal per 250 to 300 s.f..

2.5 AUXILIARY MATERIALS

A. Primer, Urethane Foam: Polyurethane foam manufacturer's standard factory-formulated primers for scarified polyurethane and for prepared metals.

B. Reinforcing Fabric:

1. Polyester Reinforcing and Protection Fabric: 100 percent stitch-bonded mildew-resistant polyester fabric intended for reinforcement of compatible fluid-applied membranes and flashings and as a protection layer under pavers or stone aggregates.

a. Basis of design product: Tremco, Permafab.
b. Tensile Strength, Minimum, ASTM D1682: 50 lbf (23 kg) avg..
c. Elongation, Minimum, ASTM D1682: 60 percent.
d. Tear Strength, Minimum, ASTM D1117: 16 lbf (7.3 kg) avg..
e. Weight: 3 oz./sq. yd (102 g/sq. m).

C. Polyethylene micro fiber additive: Tremco US, AlphaGuard Si Poly FIL.

1. Basis of design product: Tremco, AlphaGuard Si Poly FIL.

D. Joint Sealant:

1. Joint Sealant, Silicone: ASTM C920 Type S, Grade NS, Class 25, Use NT, M, G, A, and O. Single-component low-modulus moisture curing self-leveling sealant, formulated for compatibility and use with specified substrates.

a. Basis of design product: Tremco, Tremseal S.
b. Volatile Organic Compounds (VOC), maximum, ASTM D3960: 0 g/L.
c. Tensile Strength at maximum elongation, ASTM D412: 200 psi (1379 kPa).
d. Tear Resistance, ASTM D624: 40 pli (7 kN/m).
e. Peel Strength onlisted substrates, ASTM C794: 30 pli (5 kN/m).
f. Hardness, Shore A, ASTM C661: 15.
g. Color: White.

E. Sheet Flashing and Accessories: Types recommended by coated foamed roofing manufacturer, provided at locations indicated and as recommended by coated foamed roofing manufacturer.

2.6 WALKWAYS

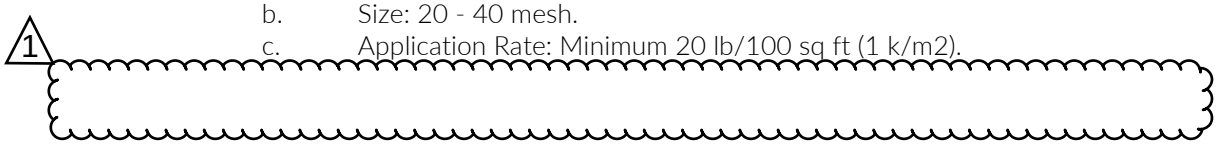
A. Slip-resistant Fluid Applied Walkway

1. Silicone fluid-applied roof coating system: ASTM D6694 single component moisture curing low odor, formulated for use as a restoration coating.

a. Basis of design product: Tremco, AlphaGuard Si 100 .
b. Combustion Characteristics, UL 790: Class A, for two-coat system applied over Class A roof .
c. Volatile Organic Compounds (VOC), maximum, ASTM D3960: 50 g/L.
d. Tensile Strength, ASTM D412: 307 psi at 73 degrees farenheit.
e. Elongation, ASTM D412: 205 percent at 73 percent.
f. Tear Resistance, ASTM D624: 26 lbf per in at 73 degrees farenheit.
g. Accelerated Weathering, 5000 hours, ASTM G154: Pass.
h. Hardness, Shore A, minimum, ASTM D2240: 45.
i. Permeance, ASTM E96 Method B: 9.3.
j. Solids, by volume, ASTM D2697: 96 percent.
k. Solar Reflectance Index (SRI), initial: 110, white .
l. Color: Light Grey.
m. Base coat application, smooth surface: 1 gal per 100 s.f..
n. Base coat application, over rough surface: 2 gal per 100 s.f..
o. Top coat application: 1.5 gal per 100 s.f..

2. Aggregate, Slip Resistant Silica Sand: Silica sand, broadcast into fluid-applied roof coating products for use as aggregate fill for slip-resistant, abrasion-resistant coating applications.

a. Basis of design product: Aggregate, Slip Resistant Silica Sand.
b. Size: 20 - 40 mesh.
c. Application Rate: Minimum 20 lb/100 sq ft (1 k/m2).



PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine portions of existing coated foamed roofing indicated for rehabilitation.

B. Verify that related work is complete. Do not install coated foamed roofing until new work or repair work to roof openings, curbs, and parapets, if any, are complete and roof drains, vents, and other roof penetrations are in place and properly prepared.

C. Examine substrates, areas, and conditions under which coated foamed roofing and roof coatings will be applied, with Installer present, for compliance with requirements.

D. Proceed with installation only after unsatisfactory conditions have been corrected and substrates are dry.

E. Weather Limitations: Proceed with installation only when existing and forecasted weather conditions permit roofing work to be performed according to manufacturer's written instructions and warranty requirements.

1. Apply materials within the range of ambient and substrate temperatures recommended by material manufacturers, but not below 50 deg F (10 deg C).

2. Apply materials within range of relative humidity recommended by manufacturer of each component, but not when relative humidity exceeds 85 percent, or when temperatures are less than 5 deg F (3 deg C) above dew point.

3. Do not apply materials to damp or wet surfaces.

4. Do not apply primers, polyurethane foam, or coatings in snow, rain, fog, or mist, or when such weather conditions are imminent during the application and curing period.

5. Do not apply polyurethane foam when wind conditions result in surface finish textures not complying with requirements.

6. Do not apply coatings when wind conditions prevent uniform coating application.

3.2 PREPARATION

A. Shut down air intake equipment in the vicinity of the Work in coordination with the Owner. Cover air intake louvers before proceeding with re-coating work that could affect indoor air quality or activate smoke detectors in the ductwork.

1. Verify that rooftop utilities and service piping affected by the Work have been shut off before commencing Work.

B. Roof Drains: Inspect and flush roof drains within roof system to be rehabilitated; verify roof drains are free flowing. Notify Owner of slow flowing or blocked roof drains.

1. Maintain roof drains in functioning condition to ensure roof drainage at end of each workday. Prevent debris from entering or blocking roof drains and conductors. Use roof-drain plugs specifically designed for this purpose. Remove roof-drain plugs at end of each workday, when no work is taking place, or when rain is forecast.

C. Pollution Control: Comply with environmental regulations of authorities having jurisdiction. Limit spread of dust and debris.

1. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.

2. Remove debris from building roof by chute, hoist, or other device that will convey debris to grade

D. Protect existing roofing system that is indicated not to be rehabilitated, and adjacent portions of building and building equipment.

1. Limit traffic and material storage to areas of existing roofing membrane that have been protected.

2. Maintain temporary protection and leave in place until roofing rehabilitation has been completed.

E. Protection during Work: Do not permit water to enter into or under existing roofing system components that are to remain.

F. Cover and mask adjoining surfaces not receiving coated foamed roofing to prevent overspray or spillage affecting other construction. Temporarily close off roof drains, removing roof-drain plugs when not doing coated foamed roofing work or when rain is forecast.

1. Remove masking after polyurethane foam application; cover and re-mask adjoining surfaces before coating polyurethane foam.

G. Prime substrate as recommended by coated foamed roofing manufacturer.

H. Fill, cover, or tape joints and cracks in substrate that exceed a width of 1/4 inch (6 mm). Remove dust and dirt from narrower joints and cracks before applying polyurethane foam.

3.3 ROOFING RE-COATING PREPARATION



A. Foamed Roofing Surface Preparation and General Roof Repairs for Areas Indicated and at Irregularities, Failures, and Damaged Areas of the Existing Roofing:

1. Remove and dispose of existing walkway system.

2. Remove loose granular aggregate from granular aggregate-surfaced foamed roofing using power broom in areas to be repaired.

3. Remove blisters, ridges, buckles, and other substrate irregularities from existing roofing that would inhibit application of uniform, waterproof coating.

4. Repair substrate at locations where irregularities have been removed.

1

5. In repair areas shave surface of sprayed polyurethane foam as necessary to achieve a sufficiently uniform plan to receive new roofing.

6. Remove wet or damaged foamed roofing material to clean, dry foam.

7. Build up isolated low spots on existing roofing with sprayed foam to prevent ponding.

8. Clean substrate of contaminants such as dirt, debris, oil, grease and other substances that may affect adhesion of coating with a high-pressure power wash at maximum 800 psi, using only clean water.

a. Where power washing with water does not remove contaminants, power wash with detergent solution and water.
b. Scour areas of accumulated dirt, fungus, mold, grease, oil, etc. with detergent solution and water. Do not use solvents.
c. In areas where a detergent solution has been used, rinse with clean water to remove residual detergent.

9. Prime scarified and repaired foamed roofing substrate using foam manufacturer's recommended primer.

10. Verify that existing substrate is dry before proceeding with work. Spot check substrates with an electrical capacitance moisture-detection meter.

3.4 FLASHING REPAIR

A. Where indicated, remove existing base flashings to be replaced around parapets, curbs, walls, and penetrations.

1

1. Clean substrates of contaminants such as asphalt, sheet materials, dirt, and debris.

B. Do not damage metal counterflashings that are to remain. Replace metal counterflashings damaged during removal with counterflashings of same metal, weight or thickness, and finish.

C. Install new counterflashing where indicated or required at new equipment.

D. Repair flashings, gravel stops, copings, and other roof-related sheet metal and trim elements. Reseal joints, replace loose or missing fasteners, and replace components where required to leave in a watertight condition.

3.5 FLASHING AND STRIPPING INSTALLATION

A. Install base flashing over cant strips and other sloping and vertical surfaces, at roof edges, and at penetrations through roof, and secure to substrates according to roofing system manufacturer's written instructions and as follows:

1. Prime substrates with recommended primer if required by roofing system manufacturer.

1

2. Flashing Sheet Application: Install foam flashing per manufacturer's requirements at all new equipment locations, where repairs are required and at all locations indicated on drawings.

B. Extend base flashing up walls or parapets a minimum of 8 inches (200 mm) above roofing membrane and 6 inches (150 mm) onto field of roofing membrane.

3.6 POLYURETHANE FOAM APPLICATION

A. General: Mix and apply polyurethane foam according to ASTM D 5469 and coated foamed roofing manufacturer's written instructions.

1

1. Install foam roofing in repair areas and at new penetration/equipment locations according to manufacturer's written instructions and standard details for work indicated.

2. Fill irregularities and depressions to prevent ponding water.

3. Apply the required full thickness of polyurethane foam in any specific area on same day.

4. Apply only the area of polyurethane foam that can be covered with required base coating on same day or within 24 hours.

5. Apply polyurethane foam to avoid overspray beyond immediate area of work.

B. Apply polyurethane foam in lift thicknesses not less than 1/2 inch (13 mm) and not more than 1-1/2 inches (38 mm).

1. Apply one inch thickness of foamed roof product over existing scarified foamed roofing and prepared flashings.

C. Build-up isolated low spots on existing roofing with recoating manufacturer's recommended products to alleviate ponding.

D. Uniformly apply total thickness of polyurethane foam indicated, but not less than 1 inch (25 mm), to a surface tolerance of plus 1/4 inch (6 mm) and no minus.

1. Slope to Drain: Vary thickness uniformly and fill low spots to achieve minimum 1/4 inch per foot (1:48) slope to drain unless otherwise indicated.

E. Apply polyurethane foam to roof penetrations, terminations, and vertical surfaces as indicated. Unless otherwise indicated, extend polyurethane foam at least 4 inches (100 mm) above elevation of adjacent roof field.

F. Surface Finish: Provide finished surface of polyurethane foam within the following range of surface textures as defined by ASTM D 5469:

1. Texture: Smooth to orange peel or coarse orange peel.

G. Remove and replace polyurethane foam not complying with surface-texture limitations. Remove defective thickness and prepare and reapply polyurethane foam with acceptable, uniform results.

3.7 ROOF COATING APPLICATION

A. Allow polyurethane foam substrate to cure for a minimum time recommended by coating manufacturer before coating. Apply base coat of coating system to polyurethane foam the same day as application of the foam. Remove dust, dirt, water, and other contaminants before applying coating system. Allow base coat to cure minimum of 24 hours before applying top coat.

B. Apply coating system to polyurethane foam by spray, roller, or other suitable application method according to coating manufacturer's written instructions.

C. Prime foamed roofing, metal, and masonry substrates with coating system primer when recommended by coating system manufacture.

D. Apply base coat and topcoat to obtain a uniform, seamless membrane free of blisters and pinholes.

1. Application rate: Apply base coat and top coat to thicknesses indicated in Part 2 Product listing unless greater thickness is recommended by coating system manufacturer.

E. Height at Terminations: Apply coating system at wall terminations and other vertical surfaces to extend vertically beyond polyurethane foam by a minimum of 4 inches (100 mm).

F. Joint Sealant: Apply joint sealant to perimeter and other terminations and penetrations where indicated on Drawings or required in order to provide a complete weathertight installation.

1. Tool v-groove 1/2 inch (12 mm) wide in foamed roofing at intersection of foamed roofing with perimeter edge metal and fill with joint sealant.

3.8 WALKWAY INSTALLATION

A. Walkways: Install roof walkways in a continuous path from roof access points to and surrounding all serviceable equipment as follows:

1. Slip-Resistant Walkway Topcoat: Apply walkway second topcoat following application and curing of top coat.

a. Mask walkway location with tape.
b. Prime first top coat prior to application of walkway top coat if walkway top coat is not applied within 72 hours of the first top coat application, using manufacturer's recommended primer.
c. Apply walkway topcoat and back roll to achieve minimum coating thickness indicated on Part 2 product listing, unless greater thickness is recommended by manufacturer; verify thickness of base coat as work progresses.

d. Broadcast Slip-Resistant Top Coat Aggregate in wet top coat at rate indicated in Part 2 product listing or as otherwise recommended by coating manufacturer.

1) Back roll aggregate and top coat creating even dispersal of aggregate. Remove masking immediately.

3.9 FIELD QUALITY CONTROL

A. Roofing Inspector: Owner will engage a qualified roofing inspector to perform roof tests and inspections and to prepare test reports.

B. Roof Inspection: Contractor shall engage roofing system manufacturer's technical personnel to inspect roofing installation and submit report. Notify 48 hours in advance of dates and times of inspections. Inspect work as follows:

1. Upon completion of preparation of first component of work, prior to application of re-coating materials.

2. Following application of re-coating to flashings and application of base coat to field of roof.

3. Upon completion of re-coating but prior to re-installation of other roofing components.

C. Repair fluid-applied membrane where test inspections indicate that they do not comply with specified requirements.

D. Arrange for additional inspections, at Contractor's expense, to verify compliance of replaced or additional work with specified requirements.

3.10 PROTECTING AND CLEANING

A. Protect roofing system from damage and wear during remainder of construction period.

B. Correct deficiencies in or remove coating that does not comply with requirements, repair substrates, and reapply coating.

C. Clean overspray and spillage from adjacent construction using cleaning agents and procedures recommended by manufacturer of affected construction.

END OF SECTION

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PART 1 - GENERAL

1.1 SECTION INCLUDES

A. Water repellent coatings to:

1. Exterior concrete masonry unit (CMU), and thin CMU being installed as part of the remodel work. The existing CMU and existing thin CMU veneer do not receive the water repellent coating.

B. Related Section

1. Section 01 35 42, CALGreen Requirements.

1.2 REFERENCE STANDARDS

A. Conform to current adopted reference standards by date of issue of the current code cycle and the date of the Contract Documents.

B. AQMD - Local Air Quality Management District Regulations.

C. California Green Building Standards Code, CALGreen - 2019.

1.3 SUBMITTALS

A. Product data including details of product description, tests performed, limitations to coating, cautionary procedures required during application and chemical properties, including percentage of solids.

B. CALGreen Submittals:

1. Product Data Sheets and Declaration Statements showing compliance with CALGreen Code per 1.04.B.

C. Manufacturer's installation instructions.

D. Provide qualification data as required by Paragraph under Quality Assurance.

1.4 QUALITY ASSURANCE

A. Manufacturer: Company specializing in manufacture of water repellent coatings with 5 years minimum experience.

B. California Green Building Standards Code, CALGreen - 2019.

1. Adhesives, sealants, primers and caulks shall comply with air quality management district rules where applicable, or SCAQMD Rule 1168 VOC limits, per CALGreen Tables 5.504.4.1 and 5.504.4.2.

2. Paints and Coatings shall comply with VOC limits in Table 1 of the ARB, per

CALGreen Table 5.504.4.3.

C. Applicator: 5 years experience in the application of the specified product and approved by the manufacturer.

D. Field Sample

1. Apply coating to maximum 4 square feet vertical or horizontal area of surface.

E. Do not proceed with full application until sample has been subjected to water application and approved by Architect.

1.5 ENVIRONMENTAL REQUIREMENTS

A. Do not apply coating when surface temperature is lower than 50 degrees F or higher than 100 degrees F.

B. Comply with AQMD Regulations.

1. Water repellents less than 400 grams per liter.

1.6 WARRANTY

A. General Warranty: Special warranty specified in this Article shall not deprive Owner of other rights Owner may have under other provisions of Contract Documents and shall be in addition to, and run concurrent with, other warranties made by Contractor under requirements of Contract Documents.

B. Special Warranty: Submit written warranty, executed by applicator and water repellent manufacturer, covering materials and labor, agreeing to repair or replace materials that fail to provide water repellency within specified warranty period. Warranty does not include deterioration or failure of coating due to unusual weather phenomena, failure of prepared and treated substrate, formation of new joints and cracks in excess of 1/16 inch wide, fire, vandalism, or abuse by maintenance equipment.

C. Warranty Period: 5 years from Date of Certified Completion.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Products of following manufacturers form basis for design and quality intended.

1. Prosoco., Inc., Kansas City, KS. Product:

a. Weather Seal Siloxane WB Concentrate.

2. Raingard International Products Co, Corona Del Mar, CA; Product: Micro-Seal Concentrate.

3. Okon, Inc., Denver, CO; Products: Plugger

4. Harris Specialty Chemicals Inc./Hydrozo, Jacksonville, FL.

5. Diedrich Technologies Inc., Oak Creek, WI.

6. Sivento Inc., Somerset, NJ, Aqua-Trete Concentrate.

7. Tnemec, Product: Chemprobe

8. Evonik Industries, Product: Protectosil Chem-Trete PB 100

B. Or equal as approved in accordance with Division 01, General Requirements for substitutions.

2.2 MATERIAL CHARACTERISTICS

A. Weather Seal Siloxane WB: Self-emulsifying water repellent concentrate for dilution with fresh water at jobsite. Solvent-free blend of silanes and oligomeric alkoxy siloxanes mixes easily with water, with following characteristics:

1. Form: Liquid

2. Color: Clear, amber

3. Specific Gravity: 0.96

4. Active Substance: Microemulsion concentrate of silanes and oligomeric alkyl alkoxy siloxanes

5. Solids: 100% concentrate

6. VOC: Maximum VOC content 120 grams/liter.

7. Flash Point 69°F (in concentrate) (140°F @ 1:9 dilution) (145°F @1:14 dilution) ASTM D 3278

PART 3 - EXECUTION

3.1 INSPECTION

A. Verify joint sealants are installed and cured.

B. Verify cracks and mortar-joint holes, bee holes are mortared.

C. Verify surfaces to be coated are dry, clean, and free of efflorescence, oil, or other matter detrimental to application of coating.

D. Beginning of installation means acceptance of substrate.

3.2 PREPARATION

A. Remove loose particles and foreign matter.

B. Remove oil or foreign substance with chemical solvent that will not affect coating.

C. Scrub and rinse surfaces with water and let dry completely.

D. Protect adjacent surfaces not scheduled to receive coating.

E. If applied on unscheduled surfaces, remove immediately by approved method.

F. Protect landscaping, property and vehicles.

3.3 APPLICATION

A. Delay work until masonry mortar substrate is cured minimum of 60 days, or as acceptable to coating manufacturer.

B. Concrete surfaces: Cured.

C. Apply coating in accordance with manufacturer's instructions by airless spray to provide continuous uniform coat.

D. Coatings:

1. Apply multiple coatings recommended by manufacturer for specific porosity of surface material, minimum two coats. Apply prepared solution within 8 hours of preparation.

    a. Weather Seal Siloxane WB: Dilution ratio 1 part concentrate: 9 parts water for vertical surfaces and 1 part concentrate: 5 parts water for horizontal surfaces.

END OF SECTION

PART 1 – GENERAL

1.1 SUMMARY

A. Section includes interior expansion joint cover assemblies.

1.2 ACTION SUBMITTALS

A. Product Data: For each type of product.

1. Include construction details, material descriptions, dimensions of individual components and profiles, and finishes for expansion joint cover assemblies.

B. Shop Drawings: For each expansion joint cover assembly.

1. Include plans, elevations, sections, details, splices, block-out requirement, attachments to other work, and line diagrams showing entire route of each expansion joint.

2. Where expansion joint cover assemblies change planes, provide isometric or clearly detailed drawing depicting how components interconnect.

C. Samples: For each expansion joint cover assembly and for each color and texture specified, full width by 6 inches long in size.

D. Samples for Initial Selection: For each type of exposed finish.

1. Include manufacturer's color charts showing the full range of colors and finishes available for each exposed metal and elastomeric-seal material.

E. Samples for Verification: For each type of expansion joint cover assembly, full width by 6 inches long in size.

F. Expansion Joint Cover Assembly Schedule: Prepared by or under the supervision of the supplier. Include the following information in tabular form:

1. Manufacturer and model number for each expansion joint cover assembly.

2. Expansion joint cover assembly location cross-referenced to Drawings.

3. Nominal, minimum, and maximum joint width.

4. Movement direction.

5. Materials, colors, and finishes.

6. Product options.

7. Fire-resistance ratings.

1.3 INFORMATIONAL SUBMITTALS

A. Product Test Reports: For each fire-resistance-rated expansion joint cover assembly, for tests performed by a qualified testing agency.

1.4 QUALITY ASSURANCE

A. Mockups: Build mockups to demonstrate aesthetic effects and to set quality standards for materials and execution.

1. Build mockup of typical expansion joint cover assembly as shown on Drawings.

2. Approval of mockups does not constitute approval of deviations from the Contract Documents contained in mockups unless Architect specifically approves such deviations in writing.

3. Subject to compliance with requirements, approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.

PART 2 - PRODUCTS

2.1 MANUFACTURES

A. Products:

1. Construction Specialties Muncy, PA

2. Or equal approved in accordance with Division 01 General Requirements for substitutions.

2.2 ASSEMBLY DESCRIPTION

A. Furnish units in longest practicable lengths to minimize field splicing.

B. Include factory-fabricated closure materials and transition pieces, T-joints, corners, curbs, cross-connections, and other accessories as required to provide continuous expansion joint cover assemblies.

2.3 PERFORMANCE REQUIREMENTS

A. Seismic Performance: Expansion joint cover assemblies to withstand the effects of earthquake motions.

B. Fire-Resistance Ratings: Provide expansion joint cover assemblies with fire barriers identical to those of systems tested for fire resistance according to UL 2079 by a qualified testing agency.

1. Hose Stream Test: Wall-to-wall and wall-to-ceiling assemblies to be subjected to hose stream testing.

2. Seismic Movement:

   a. Joint Movement: As indicated on drawings.

2.4 EXPANSION JOINT COVERS

A. See drawings for joint type and model number.

2.5 MATERIALS

A. Aluminum: Alloy 6063-T5 for extrusions; Alloy 6061-T6 for sheet and plate.

1. Apply manufacturer's standard protective coating on aluminum surfaces to be placed in contact with cementitious materials.

2.6 ALUMINUM FINISHES

A. Mill finish.

B. Clear Anodic Finish: AAMA 611, or thicker.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine surfaces where expansion joint cover assemblies will be installed for installation tolerances and other conditions affecting performance of the Work.

B. Notify Architect where discrepancies occur that will affect proper expansion joint cover assembly installation and performance.

C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

A. Prepare substrates according to expansion joint cover assembly manufacturer's written instructions.

B. Coordinate and furnish anchorages, setting drawings, and instructions for installing expansion joint cover assemblies. Provide fasteners of metal, type, and size to suit type of construction indicated and to provide for secure attachment of expansion joint cover assemblies.

3.3 INSTALLATION

A. Comply with manufacturer's written instructions for storing, handling, and installing expansion joint cover assemblies and materials unless more stringent requirements are indicated.

B. Metal Frames: Perform cutting, drilling, and fitting required to install expansion joint cover assemblies.

1. Repair or grout block out as required for continuous frame support using nonmetallic, shrinkage-resistant grout.
2. Install frames in continuous contact with adjacent surfaces.

a. Shimming is not permitted.

3. Install in true alignment and proper relationship to joints and adjoining finished surfaces measured from established lines and levels.

4. Adjust for differences between actual structural gap and nominal design gap due to ambient temperature at time of installation.

5. Cut and fit ends to accommodate thermal expansion and contraction of metal without buckling of frames.

6. Locate anchors at interval recommended by manufacturer.

C. Seals: Install elastomeric seals and membranes in frames to comply with manufacturer's written instructions. Install with minimum number of end joints.

1. Provide in continuous lengths for straight sections.

2. Seal transitions. Vulcanize or heat-weld field-spliced joints as recommended by manufacturer.

3. Installation: Mechanically lock seals into frames or adhere to frames with adhesive or pressure-sensitive tape as recommended by manufacturer.

D. Install with hairline mitered corners where expansion joint cover assemblies change direction or abut other materials.

E. Terminate exposed ends of expansion joint cover assemblies with field- or factory-fabricated termination devices.

F. Fire-Resistance-Rated Assemblies: Coordinate installation of expansion joint cover assembly materials and associated work so complete assemblies comply with performance requirements.

1. Fire Barriers: Install fire barriers to provide continuous, uninterrupted fire resistance throughout length of joint, including transitions and field splices.

END OF SECTION

PART 1 - GENERAL

1.1 SUMMARY

A. Section includes furnishing and installing a floor track supported, sliding-folding, thermally broken, aluminum-framed glass panel system that includes:

1. Aluminum frame.
2. Threshold.
3. Panels.
4. Sliding-folding and locking hardware.
5. Weatherstripping.
6. Glass and glazing.
7. Accessories as required for a complete working installation.

B. Related Documents and Sections: Contractor to examine Contract Documents for requirements that directly affect or are affected by Work of this Section. A list of those Documents and Sections include, but is not limited to, the following:

1. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 General Requirements, Specification Sections, apply to this Section.
2. Section 06 10 00, Rough Carpentry: Wood framing R.O. and blocking.
3. Section 06 20 00, Finish Carpentry Section 07 26 16, Vapor Barriers: Building paper and building wrap.
4. Section 07 62 00, Sheet Metal Flashing and Trim: Flashing gutters, and other sheet metal work.
5. Section 07 92 00 Joint Protection.
6. Section 09 22 16, Non-Structural Metal Framing: Metal framing R.O. and reinforcement.

1.2 REFERENCES

A. Reference Standards in accordance with Division 01 and current editions from the following:

1. AAMA. American Architectural Manufacturers Association; www.aamanet.org.

   a. AAMA 502, Voluntary Specification for Field Testing of Newly Installed Fenestration Products.
   b. AAMA 520, Voluntary Specification for Rating the Severe Wind-Driven Rain Resistance of Windows, Doors and Unit Skylights.
   c. AAMA 611, Voluntary Specification for Anodized Architectural Aluminum.
   d. AAMA 920, Operation / Cycling Performance.
   e. AAMA 1304, Voluntary Specification for Forced Entry Resistance of Side-Hinged Door Systems.

f. AAMA 2604, Voluntary Specifications, Performance Requirements and Test Procedures for High Performance Organic Coatings on Aluminum Extrusions and Panels.
g. AAMA 2605, Voluntary Specifications, Performance Requirements and Test Procedures for Superior Performing Organic Coatings on Aluminum Extrusions and Panels.
h. AAMA/WDMA/CSA 101/I.S.2/A440, NAFS, North American Fenestration Standard - Specification for Windows, Doors and Skylights.

2. ANSI. American National Standards Institute; www.ansi.org

   a. ANSI Z97.1, Safety Performance Specifications and Methods of Test for Safety Glazing Material Used in Buildings.

3. ASTM. ASTM International; www.astm.org

   a. ASTM C1036, Standard Specification for Flat Glass.
   b. ASTM C1048, Standard Specification for Heat-Strengthened and Fully Tempered Flat Glass.
   c. ASTM E90-09, Standard Test Method for Laboratory Measurements of Airborne Sound Transmission Loss if Building Partitions and Elements.
   d. ASTM E283, Test Method for Rate of Air Leakage through Exterior Windows, Curtain Walls, and Doors by Uniform Static Air Pressure Difference.
   e. ASTM E330, Test Method for Structural Performance of Exterior Windows, Curtain Walls, and Doors by Uniform Static Air Pressure Difference.
   f. ASTM E331, Standard Test Method for Water Penetration of Exterior Windows, Skylights, Doors, and Curtain Walls by Uniform Static Air Pressure Difference.
   g. ASTM E413, Classification for Rating Sound Insulation.
   h. ASTM E547, Test Method for Water Penetration of Exterior Windows, Curtain Walls, and Doors by Cyclic Static Air Pressure Differential.
   i. ASTM E1332, Standard Classification for Rating Outdoor-Indoor Sound Attenuation.
   j. ASTM E2268, Standard Test Method for Water Penetration of Exterior Windows, Skylights, and Doors by Rapid Pulsed Air Pressure Difference.
   k. ASTM F842, Standard Test Methods for Measuring the Forced Entry Resistance of Sliding Door Assemblies.

4. CPSC. Consumer Product Safety Commission; www.cpsc.gov

   a. CPSC 16CFR-1201, Safety Standard for Architectural Glazing Materials

5. CSA Group (Canadian Standards Association); www.csagroup.org/global/en/home

   a. CSA A440S1 - The Canadian supplement to North American (NAFS) standards

6. DIN. "Deutsches Institut fur Normung" (German institute for standardization); www.en-standard.eu/din-standards.

   a. DIN EN 1191, Windows and doors - Resistance to repeated opening and closing – Test method; German version EN 1191: 2000.

b. DIN EN ISO 717-1, Acoustics - Rating of sound insulation in buildings and building elements.

c. DIN EN ISO 9001,2015 quality management system registration.
d. DIN EN ISO 10140-1, 2, 4 & 5, Airborne sound measurement.
e. DIN EN ISO 12400, Window and pedestrian doors- Mechanical durability - Requirements and classification.
f. DIN EN ISO 14001, 2015 environmental management system registration.
g. DIN 52210-3, Testing of acoustics in buildings - Airborne and impact sound insulation - Laboratory measurements of sound insulation of building elements and field measurements between rooms.
h. DIN 52210-4, Tests in Building Acoustics - Airborne and Impact Sound.

7. NFRC. National Fenestration Rating Council; www.nfrc.org

a. NFRC 100, Procedure for Determining Fenestration Product U-factors
b. NFRC 200, Procedure for Determining Fenestration Product Solar Heat Gain Coefficient
and Visible Transmittance at Normal Incidence
c. NFRC 400, Procedure for Determining Fenestration Product Air Leakage
d. NFRC 500, Procedure for Determining Fenestration Product Condensation Resistance
Rating Values

1.3 ADMINISTRATIVE REQUIREMENTS

A. Coordination: Coordinate Folding Glass system and framing R.O.
B. Pre-installation Meetings: See Section 01 30 00.

1.4 SUBMITTALS

A. For Contractor submittal procedures see Section 01 30 00.

B. Product Data: Submit manufacturer's printed product literature for each Folding Glass Storefront system to be incorporated into the Work. Show performance test results and details of construction relative to materials, dimensions of individual components, profiles, and colors.

C. Product Drawings: Indicate Folding Glass Storefront system component sizes, dimensions and framing R.O., configuration, swing panels, direction of swing, stacking layout, typical head jamb, side jambs and sill details, type of glazing material, handle height and field measurements.

D. Installation, Operation and Maintenance Data: Submit Owner's Manual from manufacturer. Identify with project name, location and completion date, and type and size of unit installed.

1.5 QUALITY ASSURANCE

A. Manufacturer Qualifications: Manufacturer capable of providing complete, precision built, engineered, pre-fitted units with a minimum thirty (30) years' experience in the sale of folding-sliding door systems for large openings in the North American market.

B. Installer Qualifications: Installer experienced in the installation of manufacturer's products or other similar products for large openings. Installer to provide reference list of at least three (3) projects of similar scale and complexity successfully completed in the last three (3) years.

1. Installer to be trained and certified by manufacturer.

C. Single Source Responsibility: Furnish Folding Glass Storefront system materials from one manufacturer for entire Project.

1.6 DELIVERY, STORAGE, AND HANDLING

A. Comply with manufacturer's instructions and recommendations, Section 01 60 00 requirements, and as follows:

1. Deliver materials to job site in sealed, unopened cartons or crates.

a. Upon receipt, inspect the shipment to ensure it is complete, in good condition and meets project requirements.

2. Store material under cover in a clean and dry location, protecting units against weather and defacement or damage from construction activities, especially to the edges of panels.

1.7 FIELD CONDITIONS

A. Field Measurements: Contractor to field verify dimensions of rough openings (R.O.) and threshold depressions to receive sill. Mark field measurements on product drawing submittal.

1.8 WARRANTY

A. Manufacturer Warranty: Provide Folding Glass Storefront system manufacturer's standard limited warranty as per manufacturer's published warranty document in force at time of purchase, subject to change, against defects in materials and workmanship.

1. Warranty Period beginning with the earliest of 120 days from Date of Delivery or Date of Substantial Completion:

a. Rollers and Glass Seal Failure: Ten (10) years.
b. All other Components Except Screens: Ten (10) years.
1) Exception: Five (5) Years if NOT installed by manufacturer's specific system approved or certified trained installer.

PART 2 – PRODUCTS

2.1 MANUFACTURERS

A. Basis-of-Design Product by Manufacturer: NanaWall SL70 by NANA WALL SYSTEMS, INC.

1. Substitution Procedures: See General Conditions and Section 01 60 00 Product Requirements.

2.2 PERFORMANCE / DESIGN CRITERIA

A. Performance Criteria (Lab Tested): Low Profile Saddle Sill-Outward Opening.

1. Air Infiltration (ASTM E283):

a. 0.14 cfm/ft^2 (0.71 L/s/m^2) at a static air pressure difference of 1.57 psf (75 Pa)
b. 0.30 cfm/ft^2 (1.52 L/s/m^2) at a static air pressure difference of 6.24 psf (300 Pa)

2. Water Penetration (ASTM E331, ASTM E547):

a. No uncontrolled water leakage at a static (with weeps) test pressure of 6.0 psf (300 Pa).

3. Structural Loading (ASTM E330):

a.	Windload Resistance:	Pass; C4
1)	Design Pressure Positive	70 psf (3350 Pa)
2)	Design Pressure Negative	70 psf (3350 Pa)

B. Glass and Glazing: Glass type as specified in section 08 80 00 “Glazing”.

1. Safety Glass Standard for Partition Panels: Glass products complying with testing requirements in 16 CFR 1201, Category II, or ANSI Z97.1, Class A.

2.3 MATERIALS

A. Monumental Thermally Broken Aluminum Framed Folding Glass Storefront Description: Floor track supported system designed for angle changes, segmented curves. Manufacturer’s standard or post reinforced frame and panel profiles, with top track, side jambs and panels with dimensions as shown on Drawings.

1. Panels and Frames

a. Panels

1)	Single lite.	
2)	Rail Depth:	2-3/4 inch
3)	Top Rail and Stile Width:	2-1/4 inch
4)	Bottom Rail Width:	2-1/4 inch

b. Frame:

1)	Matching to track and side jambs.	
a)	Top Track and Side Jambs Width:	2-9/16 inch
b)	Top Track and Side Jambs Depth:	3-1/8 inch
2)	Sill Type:	
a)	Higher weather performance raised sill (thermally broken)	
b)	Low profile saddle sill (thermally broken)	
3)	Sill Finish: Aluminum with	
a)	a clear anodized finish.	
4)	For ADA Compliance: Provide gasket to cover the channel in the sill at swing doors.	

2. Aluminum Extrusion: AlMgSi0.5 alloy, 6063-T5 (F-11 – European standard)

   a. Thickness: 0.078 inch, nominal
   b. Thermal Break: ¾ to 15/16 inch wide polymide plastic reinforced with glass fibers. Thinner or poured and de-bridge type thermal breaks not acceptable.

3. Panel and Frame Aluminum Finish: Inside and Outside;

   a. Same (one Color)
   b. Anodized (AAMA 611)
      1) Clear

B. GLASS AND GLAZING:

1. Safety Glazing: In compliance with ASTM C1036, ASTM C1048, ANSI Z97.1 and CPSC 16 CFR 1201.

2. Manufacturer's tempered insulated glazing units, dry glazed with glass stops on the inside.

   a. Glass Lite/Insulated Glass Unit (IGU):
      1) Double IGU:
         a) 1 Inch (25mm), 6mm + 6mm STC 42 laminated glass to achieve unit STC of 41.
   b. Glass Spacers: Manufacturer's standard.
      1) Silver gray finish with capillary tubes.

   c. IGU Surface:
      1) Low-E coating on #2 and #4 surface of double IGU.

C. LOCKING HARDWARE AND HANDLES:

1. Main Entry Panel for Models WITH a Swing Panel: Provide manufacturer's push/pull handles with separate lock set and dead bolt and one-point locking at the top and bottom consisting of locking rods operated by a 180° turn of a flat handles on the inside.

   a. Push-pull handles in a brushed stainless-steel finish.
   b. Panic Hardware:
      1) Von Duprin 33/35A Series Narrow Stile Rim Exit Device.

2. Secondary Panels and Pairs of Folding Panels: Provide manufacturer's concealed two-point locking hardware operated by 180° turn of handle between each pair. Face applied flush bolt locking NOT acceptable.
   a. Standard Secondary Handle – Finish:
      1) Brushed satin stainless steel.

3. Handle Height: 41-3/8 inch centered from bottom of panel or as otherwise indicated.

4. Aluminum locking rods with standard fiberglass reinforced polyamide end caps at the top and bottom. Rods to have a stroke of 15/16 inch.

5. Additional profile cylinders to be keyed alike.

D. Sliding-Folding Hardware: Provide manufacturer's standard combination sliding and folding hardware with top and bottom tracks and threshold. All running carriages to be with sealed, self-lubrication, ball bearing multi-rollers. Surface mounted hinges and running carriages NOT acceptable. Weight of panels borne by the bottom of the guide channel in the sill is NOT acceptable.
1. Lower Running Carriage Carrying Capacity: 440 lbs.

2. Upper guide carriage and lower running carriage provided with four vertical stainless-steel wheels and two horizontal polyamide wheels.

3. Vertical wheels to ride on top of stainless-steel guide track covers over the full length of the sill track and lie above the water run-off level.

4. Wheels riding below water run-off level and wheels riding on aluminum surfaces are NOT acceptable.

5. Swing Panel Hinges:
a. Stainless-steel hinges and security hinge pins with set-screws.

6. Adjustment: Provide folding-sliding hardware capable of compensation and adjustments without needing to remove panels from tracks, in width, 1/16 inch per hinge and in height, 5/64 inch up and down.

E. Weather stripping: Manufacturer's double layer EPDM between panels, EPDM gasket and Q-lon gasket, or brush seal between panel and frame, or brush seals with a two-layer fiberglass reinforced polyamide fin attached at both inner and outer edge of bottom of door panels with a recessed sill or on frame for sealing between panels and between panel and frame.

2.4 FABRICATION

A. Folding Glass Wall: Extruded aluminum frame and panel profiles, corner connectors and hinges, sliding and folding hardware, locking hardware and handles, glass and glazing and weather stripping.

1. Each unit factory pre-assembled and shipped with complete system components and installation instructions.

2. Exposed work to be carefully matched to produce continuity of line and design with all joints.

3. No raw edges visible at joints.

PART 3 – EXECUTION

3.1 EXAMINATION

A. Examination and Acceptance of Conditions per Section 01 70 00 and as follows:

1. Carefully examine rough openings with Installer present, for compliance with requirements affecting Work performance.

    a. Examine surfaces of openings and verify dimensions; verify rough openings are level, plumb, and square with no unevenness, bowing, or bumps on the floor; and other conditions as required by the manufacturer for readiness to receive Work.

    b. Verify structural integrity of the header for deflection with live and dead loads limited to the lesser of L/720 of the span or 1/4 inch. Provide structural support for lateral loads, and both wind load and eccentric load when the panels are stacked open.

2. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION

A. General: Install Folding Glass Storefront system in accordance with the Drawings, approved submittals, manufacturer's recommendations, and installation instructions, and as follows:

1. Properly flash, waterproof and seal around opening perimeter.

2. Securely attach anchorage devices to rigidly fit frame in place, level, straight, plumb and square. Install frame in proper elevation, plane and location, and in proper alignment with other work.

3. When lower track is designed to drain, provide connections to allow for drainage.

4. Install panels, handles, lockset, screens and other accessories in accordance with manufacturer's recommendations and instructions.

3.3 FIELD QUALITY CONTROL

A, Field Tests and Inspections per Section 01 40 00 of the following:

1. Verify the Folding Glass Storefront system operates and functions properly. Adjust hardware for proper operation.

B. Non-Conforming Work: Repair or replace non-conforming work as directed by the Architect; see General and Supplementary Conditions, and Division 01, General Requirements.

3.4 CLEANING AND PROTECTION

A. Keep units closed and protect Folding Glass Storefront installation against damage from construction activities.

B. Remove protective coatings and use manufacturer recommended methods to clean exposed surfaces.

END OF SECTION

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

Door hardware.
Storefront and entrance door hardware.
Gate Hardware.
Allowance for Best brand cores and keys

B. Related Divisions:

A. Division 06 – door hardware installation

B. Division 07 – sealant at exterior thresholds

C. Division 08 – metal doors and frames, interior aluminum frames, wood doors, integrated security systems, specialty doors, storefront and glazed curtainwall systems.

D. Division 10 – operable partitions

E. Division 21 – fire and life safety systems

F. Division 28 – security access systems

C. Allowances:

A. Procure scheduled Best brand temporary and permanent cylinder cores and keys from (Owner's lock shop / Owner's Physical Plant Maintenance Dept). Allow $45 per core and $7.50 per key. Owner's agent will purchase the cores and keys directly from Best Access Systems or provide the units from Owner's attic stock.

D. Specific Omissions: Hardware for the following is specified or indicated elsewhere.

A. Windows.

B. Cabinets, including open wall shelving and locks.

C. Signs, except where scheduled.

D. Toilet accessories, including grab bars.

E. Installation.

F. Rough hardware

G. Conduit, junction boxes & wiring.

H. Folding partitions, except cylinders where detailed.

I. Sliding aluminum doors, except cylinders where detailed.

J. Access doors and panels, except cylinders where detailed.

K. Corner Guards.

L. Welded steel gates and supports.

1.2 REFERENCES

A. Use date of standard in effect as of Bid date.

1. American National Standards Institute

   a) ANSI 156.18 – Materials and Finishes.
   b) ICC/ANSI A117.1 - 2009 – Specifications for making buildings and facilities usable by physically handicapped people. [omit for CA work – not applicable]

2. BHMA – Builders Hardware Manufacturers Association

3. 2019 California Building Code

   a) Chapter 11B – Accessibility To Public Buildings, Public Accommodations, Commercial Buildings and Public Housing

4. DHI – Door and Hardware Institute

5. NFPA – National Fire Protection Association

   a) NFPA 80 2016 Edition – Standard for Fire Doors and Other Opening Protectives.
   b) NFPA 105 – Smoke and Draft Control Door Assemblies
   c) NFPA 252 – Fire Tests of Door Assemblies

6. UL – Underwriters Laboratories

   a) UL10C – Positive Pressure Fire Tests of Door Assemblies.
   b) UL 305 – Panic Hardware

7. WHI – Warnock Hersey Incorporated State of California Building Code

8. Local applicable codes

9. SDI – Steel Door Institute

10. WI – Woodwork Institute

11. AWI – Architectural Woodwork Institute

12. NAAMM – National Association of Architectural Metal Manufacturers

B. Abbreviations

1. Manufacturers: see table at 2.1.A of this section

2. Finishes: see 2.7 of this section.

1.3 SUBMITTALS & SUBSTITUTIONS

A. SUBMITTALS: Submit six copies of schedule per D. Only submittals printed one sided will be accepted and reviewed. Organize vertically formatted schedule into "Hardware Sets" with index of doors and headings, indicating complete designations of every item required for each door or opening. Minimum 10pt font size. Include following information:

1. Type, style, function, size, quantity and finish of hardware items.
2. Use BHMA Finish codes per ANSI A156.18.
3. Name, part number and manufacturer of each item.
4. Fastenings and other pertinent information.
5. Location of hardware set coordinated with floor plans and door schedule.
6. Explanation of abbreviations, symbols, and codes contained in schedule.
7. Mounting locations for hardware.
8. Door and frame sizes, materials and degrees of swing.
9. List of manufacturers used and their nearest representative with address and phone number.
10. Catalog cuts.
11. Point-to-point wiring diagrams.
12. Manufacturer's technical data and installation instructions for electronic hardware.

B. Bid and submit manufacturer's updated/improved item if scheduled item is discontinued.

C. Deviations: Highlight, encircle or otherwise identify deviations from "Schedule of Finish Hardware" on submittal with notations clearly designating those portions as deviating from this section.

D. If discrepancy between drawings and scheduled material in this section, bid the more expensive of the two choices, note the discrepancy in the submittal and request direction from Architect for resolution.

E. Substitutions per Division 1. Include product data and indicate benefit to the Project. Furnish operating samples on request.

F. Items listed with no substitute manufacturers have been requested by Owner to meet existing standard.

G. Furnish as-built/as-installed schedule with closeout documents, including keying schedule, riser and point-to-point wiring diagrams, manufacturers' installation, adjustment and maintenance information, and supplier's final inspection report.

1.4 QUALITY ASSURANCE

A. Qualifications:

1. Hardware supplier: direct factory contract supplier who employs a certified architectural hardware consultant (AHC), available at reasonable times during course of work for project hardware consultation to Owner, Architect and Contractor.

    a) Responsible for detailing, scheduling and ordering of finish hardware. Detailing implies that the submitted schedule of hardware is correct and complete for the intended function and performance of the openings.

B. Hardware: Free of defects, blemishes and excessive play. Obtain each kind of hardware (latch and locksets, exit devices, hinges and closers) from one manufacturer.

C. Exit Doors: Operable from inside with single motion without the use of a key or special knowledge or effort.

D. Fire-Rated Openings: NFPA 80 compliant. Hardware UL10C (positive pressure) compliant for given type/size opening and degree of label. Provide proper latching hardware, non-flaming door closers, approved-bearing hinges, and resilient seals. Coordinate with wood door section for required intumescent seals. Furnish openings complete.

E. Furnish hardware items required to complete the work in accordance with specified performance level and design intent, complying with manufacturers' instructions and code requirements.

F. Pre-Installation Meetings: Initiate and conduct with supplier, installer and related trades, coordinate materials and techniques, and sequence complex hardware items and systems installation. Include manufacturers' representatives of locks, panic hardware and door closers in the meetings. Convene prior to commencement of related work.

1.5 DELIVERY, STORAGE AND HANDLING

A. Delivery: coordinate delivery to appropriate locations (shop or field).

1. Permanent keys and cores: secured delivery direct to Owner's representative.

B. Acceptance at Site: Items individually packaged in manufacturers' original containers, complete with proper fasteners and related pieces. Clearly mark packages to indicate contents, locations in hardware schedule and door numbers.

C. Storage: Provide securely locked storage area for hardware, protect from moisture, sunlight, paint, chemicals, dust, excessive heat and cold, etc.

1.6 PROJECT CONDITIONS AND COORDINATION

A. Where exact types of hardware specified are not adaptable to finished shape or size of members requiring hardware, provide suitable types having as nearly as practical the same operation and quality as type specified, subject to Architect's approval.

B. Coordination: Coordinate hardware with other work. Furnish hardware items of proper design for use on doors and frames of the thickness, profile, swing, security and similar requirements indicated, as necessary for proper installation and function, regardless of omissions or conflicts in the information on the Contract Documents. Furnish related trades with the following information:

1. Location of embedded and attached items to concrete.

2. Location of wall-mounted hardware, including wall stops.

3. Location of finish floor materials and floor-mounted hardware.
4. At masonry construction, coordinate with the anchoring and hollow metal supplier prior to frame installation by placing a strip of insulation, wood, or foam, on the back of the hollow metal frame behind the rabbet section for continuous hinges, as well as at rim panic hardware strike locations, silencers, coordinators, and door closer arm locations. When the frame is grouted in place, the backing will allow drilling and tapping without dulling or breaking the installer's bits.

5. Locations for conduit and raceways as needed for electrical, electronic and electro-pneumatic hardware items. Fire/life-safety system interfacing. Point-to-point wiring diagrams plus riser diagrams to related trades.

6. Coordinate: back-up power for doors with automatic operators.

7. Coordinate: flush top rails of doors at outswinging exteriors, and throughout where adhesive-mounted seals occur.

8. Manufacturers' templates to door and frame fabricators.

C. Check Shop Drawings for doors and entrances to confirm that adequate provisions will be made for proper hardware installation.

D. Environmental considerations: segregate unused recyclable paper and paper product packaging, uninstalled metals, and plastics, and have these sent to a recycling center.

1.7 WARRANTY

A. Part of respective manufacturers' regular terms of sale. Provide manufacturers' written warranties.

B. Include factory order numbers with close-out documents to validate warranty information, required for Owner in making future warranty claims:

C. Minimum warranties:

1.	Locksets:	Three years
2.	Exit Devices:	Three years mechanical
3.	Closers:	Thirty years mechanical
4.	Hinges:	One year
5.	Other Hardware	Two years

1.8 REGULATORY REQUIREMENTS

A. Locate latching hardware between 34 inches to 44 inches above the finished floor, per 2019 California Building Code, Section 11B-404.2.7.

1. Panic hardware: locate between 36 inches to 44 inches above the finished floor.

B. Handles, pull, latches, locks, other operable parts:

1. Readily openable from egress side with one hand and without tight grasping, tight pinching, or twisting of the wrist to operate. 2019 California Building Code Section 11B-309.4.

2. Force required to activate the operable parts: 5.0 pounds maximum, per 2019 California Building Code Section 11B-309.4.

C. Adjust doors to open with not more than 5.0-pounds pressure to open at exterior doors and 5.0-pounds at interior doors. As allowed per 2019 California Building Code Section 11B-404.2.9, local authority may increase the allowable pressure for fire doors to achieve positive latching, but not to exceed 15-pounds.

1. Exception: exterior doors' pressure-to-open may be increased to 8.5-pounds if: at a single location, and one of a bank of eight leafs or fraction of eight, and one leaf of this bank is fitted with a low- or high-energy operator.

D. Low-energy powered doors: comply with ANSI/BHMA A156.19. Reference: 2019 California Building Code Section 11B-404.2.9.

1. Where powered door serves an occupancy of 100 or more, provide back-up battery power or stand-by generator power, capable of supporting a minimum of 100 cycles.

2. Actuators, vertical bar type: minimum 2-inches wide, 30-inches high, bottom located minimum 5-inches above floor or ground, top located minimum 35-inches above floor or ground. Displays International Symbol of Accessibility, per 2019 California Building Code Section 11B-703.7.

3. Actuators, plate type: use two at each side of the opening. Minimum 4-inches diameter or 4-inches square. Displays International Symbol of Accessibility, per 2019 California Building Code Section 11B-703.7. Locate centerline of lower plate between 7- and 8-inches above floor or ground, and upper plate between 30- and 44-inches above floor or ground.

4. Actuator location: conspicuously located, clear and level floor/ground space for forward or parallel approach.

E. Adjust door closer sweep periods so that from an open position of 90 degrees, the door will take at least 5 seconds to move to a point 12 degrees from the latch, measured to the landing side of the door, per 2019 California Building Code Section 11B-404.2.8.

1. Spring hinges: adjust for 1.5 seconds minimum for 70 degrees to fully-closed.

F. Smooth surfaces at bottom 10 inches of push sides of doors, facilitating push-open with wheelchair footrests, per 2019 California Building Code Section 11B-404.2.10.

1. Applied kickplates and armor plates: bevel the left and right edges; free of sharp or abrasive edges.

2. Tempered glass doors without stiles: bottom rail may be less than 10 inches if top leading edge is tapered 60 degrees minimum.

G. Door opening clear width no less than 32 inches, measured from face of frame stop, or edge of inactive leaf of pair of doors, to door face with door opened to 90 degrees. Hardware projection not a factor in clear width if located above 34 inches and below 80 inches, and the hardware projects no more than 4 inches. 2019 California Building Code Section 11B-404.2.3.

1. Exception: doors not requiring full passage through the opening, that is, to spaces less than 24 inches in depth, may have the clear opening width reduced to 20 inches. Example: shallow closets.

2. Door closers and overhead stops: not less than 78 inches above the finished floor or ground, per 2019 California Building Code 11B-307.4.

H. Thresholds: floor or landing no more than 0.50 inches below the top of the threshold of the doorway, per 2019 California Building Code Section 11B-404.2.5. Vertical rise no more than 0.25 inches, change in level between 0.25 inches and 0.50 inches: beveled to slope no greater than 1:2 (50 percent slope). 2019 California Building Code Section 11B-303.2 & ~.3.

I. Floor stops: Do not locate in path of travel. Locate no more than 4 inches from walls, per DSA Policy #99-08 (Access).

J. Pairs of doors with independently-activated hardware both leafs: limit swing of right-hand or right-hand-reverse leaf to 90 degrees to protect persons reading wall-mounted tactile signage, per 2019 California Building Code Section 11B-703.4.2.

K. Door and door hardware encroachment: when door is swung fully-open into means-of-egress path, the door may not encroach/project more than 7 inches into the required exit width, with the exception of door release hardware such as lockset levers or panic hardware. These hardware items must be located no less than 34-inches and no more than 48-inches above the floor/ground. 2019 California Building Code, Section 1005.7.1.

2. In I-2 occupancies, surface mounted latch release hardware, mounted to the side of the door facing away from the adjacent wall where the door I sin the open position, is not exempt from the inclusion in the 7-inch maximum encroachment, regardless of its mounting height, per 2019 California Building Code, Section 1005.7.1 at Exception 1.

L. New buildings that are included in public schools (kindergarten through 12th grade) state funded projects and receiving state funding pursuant to Leroy F. Green, School Facilities Act of 1998, California Education Code Sections 17070.10 through 17079, and that are submitted to the Division of the State Architect for plan review after July 1, 2011 in accordance with the Education Code 17075.50, shall include locks that allow doors to classrooms and any room with an occupancy of five or more persons to be locked from the inside. The locks shall conform to the specification and requirements found in Section 1010.1.9. 2019 California Building Code Section 1010.1.11

Exceptions:

1. Doors that are locked from the outside at all times such as, but not limited to, janitor's closet, electrical room, storage room, boiler room, elevator equipment room and pupil restroom.

2. Reconstruction projects that utilize original plans in accordance with California Administrative Code, Section 4-314.

3. Existing relocatable buildings that are relocated within same site in accordance with California Administrative Code, Section 4-314.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Listed acceptable alternate manufacturers: these will be considered; submit for review products with equivalent function and features of scheduled products.

ITEM:	MANUFACTURER:	ACCEPTABLE ALTERNATE:
Hinges	(IVE) Ives	Bommer
HINGES	(WAT) Waterso	Trademark Hardware
Continuous Hinges	(IVE) Ives	Select
Key System	(SCH) Schlage	Owner standard
Mechanical Locks	(SCH) Schlage	Owner standard
Exit Devices	(VON) Von Duprin	Owner standard
Closers	(LCN) LCN	Owner standard
Auto Flush Bolts	(IVE) Ives	DCI
Coordinators	(IVE) Ives	DCI
Silencers	(IVE) Ives	Rockwood, Trimco
Push & Pull Plates	(IVE) Ives	Rockwood, Trimco
Kickplates	(IVE) Ives	Rockwood, Trimco
Stops & Holders	(IVE) Ives	Rockwood, Trimco
Overhead Stops	(GLY) Glynn-Johnson	ABH
Thresholds	(ZER) Zero	NGP, Pemko
Seals & Bottoms	(ZER) Zero	NGP, Pemko

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2.2 HINGING METHODS

A. Drawings typically depict doors at 90 degrees, doors will actually swing to maximum allowable. Use wide-throw conventional or continuous hinges as needed up to 8 inches in width to allow door to stand parallel to wall for true 180-degree opening. Advise architect if 8-inch width is insufficient.

B. Conform to manufacturer's published hinge selection standard for door dimensions, weight and frequency, and to hinge selection as scheduled. Where manufacturer's standard exceeds the scheduled product, furnish the heavier of the two choices, notify Architect of deviation from scheduled hardware.

C. Conventional Hinges: Steel or stainless-steel pins and approved bearings. Hinge open widths minimum, but of sufficient throw to permit maximum door swing.

1. Outswinging exterior doors: non-ferrous with non-removable (NRP) pins and security studs.

2. Non-ferrous material exteriors and at doors subject to corrosive atmospheric conditions.

D. Continuous Hinges:

1. Geared-type aluminum.

a) Use wide-throw units where needed for maximum degree of swing, advise architect if commonly available hinges are insufficient.
b) If units are used at storefront openings, color-coordinate hinge finish with storefront color. Custom anodizing and custom powdercoat finishes subject to Architect approval.

2. Pinned steel/stainless steel type: continuous stainless steel, 0.25-inch diameter stainless-steel hinge pin.

a) Use engineered application-specific wide-throw units as needed to provide maximum swing degree of swing, advise architect if required width exceeds 8 inches.

2.3 LOCKSETS, LATCHSETS, DEADBOLTS

A. Mortise Type Locks and Latches:

1. Tested and approved by BHMA for ANSI A156.13, Series 1000, Operational Grade 1, Extra- Heavy Duty, Security Grade 2 and be UL10C

2. Fit ANSI A115.1 door preparation

3. Functions and design as indicated in the hardware groups

4. Solid, one-piece, 3/4-inch (19mm) throw, anti-friction latchbolt made of self-lubricating stainless steel

5. Deadbolt functions shall have 1 inch (25mm) throw bolt made of hardened stainless steel

6. Latchbolt and Deadbolt are to extend into the case a minimum of 3/8 inch (9.5mm) when fully extended

7. Auxiliary deadlatch to be made of one-piece stainless steel, permanently lubricated.

8. Provide curved-lip strike with dust box for each latch or lock bolt, with lip extended to protect frame, finished to match door hardware set, unless otherwise indicated.

9. Lever handles must be of forged or cast brass, bronze or stainless-steel construction and conform to ANSI A117.1. Levers that contain a hollow cavity are not acceptable.

10. Lock shall have self-aligning, thru-bolted trim.

11. Levers to operate a roller bearing spindle hub mechanism.

12. Mortise cylinders of lock shall have a concealed internal setscrew for securing the cylinder to the lockset. The internal setscrew will be accessible only by removing the core, with the control key, from the cylinder body.

    a) Spindle to be designed to prevent forced entry from attacking of lever
    b) Provide locksets with 7-pin removable and interchangeable core cylinders
    c) Each lever to have independent spring mechanism controlling it
    d) Core face must be the same finish as the lockset

2.4 EXIT DEVICES / PANIC HARDWARE

A. General features:

1. Independent lab-tested 1,000,000 cycles.

2. Push-through push-pad design. No exposed push-pad fasteners, no exposed cavities when operated. Return stroke fluid dampeners and rubber bottoming dampeners, plus anti-rattle devices.

3. Deadlocking latchbolts, 0.75 inch projection.

4. End caps: impact-resistant, flush-mounted. No raised edges or lips to catch carts or other equipment.

5. No exposed screws to show through glass doors.

6. Non-handed basic device design with center case interchangeable with all functions, no extra parts required to effect change of function.

7. Releasable in normal operation with 15-pound maximum operating force per UBC Standard 10-4, and with 32-pound maximum pressure under 250-pound load to the door.

8. Exterior doors scheduled with XP-series devices: Static load force resistance of at least 2000 pounds.

9. Accessibility: Require not more than 5 lb to retract the latchbolt, per CBC 2019 11B-404.2.7 and 11B-309.4.

    a) Mechanical method: Von Duprin "AX-" feature, where touchpad directly retracts the latchbolt with 5 lb or less of force. Provide testing lab certification confirming that the mechanical device is independent third-party tested to meet this 5 lb requirement.

b) Electrical method: Von Duprin's "RX-QEL-", where lightly pressing the touchpad with 5 lb or less of force closes an electric switch, activating quiet electric latch retraction.

B. Specific features:

1. Non-Fire Rated Devices: cylinder dogging.

2. Lever Trim: breakaway type, forged brass or bronze escutcheon min. 0.130 inch thickness, compression spring drive, match lockset lever design.

3. Rod and latch guards with sloped full-width kickplates for doors fitted with surface vertical rod devices with bottom latches.

4. Fire-Labeled Devices: UL label indicating "Fire Exit Hardware". Vertical rod devices less bottom rod (LBR) unless otherwise scheduled.

5. Inpact recessed devices: 1.25 inch projection when push-pad is depressed. Sloped metal end caps to deflect carts, etc. No pinch points to catch skin between touchbar and door.

6. Delayed Egress Devices: Function achieved within single exit device component, including latch, delayed locking device, request-to-exit switch, nuisance alarm, remote alarm, key switch, indicator lamp, relay, internal horn, door position input, external inhibit input plus fire alarm input. NFPA 101 "Special Locking Arrangement" compliant.

7. Electrically Operated Devices: Single manufacturer source for electric latch retraction devices, electrically controlled trim, power transfers, power supplies, monitoring switches and controls.

8. Removable Mullions: Removable with single turn of building key. Securely reinstalled without need for key. Furnish storage brackets for securely stowing the mullion away from the door when removed.

9. Accepted substitutions: None, District Standard.

2.5 CLOSERS

A. Surface Closers:

1. Full rack-and-pinion type cylinder with removable non-ferrous cover and cast iron body. Double heat-treated pinion shaft, single piece forged piston, chrome-silicon steel spring.

2. ISO 2000 certified. Units stamped with date-of-manufacture code.

3. Independent lab-tested 10,000,000 cycles.

4. Non-sized, non-handed, and adjustable. Place closer inside building, stairs, and rooms.

5. Plates, brackets and special templating when needed for interface with particular header, door and wall conditions and neighboring hardware.

6. Adjust doors to open with not more than 5.0-pounds pressure to open at exterior doors and 5.0-pounds at interior doors. As allowed per 2019 California Building Code Section 11B-404.2.9, local authority may increase the allowable pressure for fire doors to achieve positive latching, but not to exceed 15-pounds.

   a) Exception: exterior doors' pressure-to-open may be increased to 8.5-pounds if: at a single location, and one of a bank of eight leafs or fraction of eight, and one leaf of this bank is fitted with a low- or high-energy operator.

7. Separate adjusting valves for closing speed, latching speed and backcheck, fourth valve for delayed action where scheduled.

8. Extra-duty arms (EDA) at exterior doors scheduled with parallel arm units.

9. Exterior door closers: tested to 100 hours of ASTM B117 salt spray test, furnish data on request.

10. Exterior doors: seasonal adjustments not required for temperatures from 120 degrees F to -30 degrees F, furnish checking fluid data on request.

11. Non-flaming fluid, will not fuel door or floor covering fires.

12. Pressure Relief Valves (PRV) not permitted.

13. Accepted substitutions: None, District Standard.

2.6 OTHER HARDWARE

A. Automatic Flush Bolts: Low operating force design.

B. Overhead Stops: Non-plastic mechanisms and finished metal end caps. Field-changeable hold-open, friction and stop-only functions.

C. Kick Plates: Four beveled edges, .050 inches minimum thickness, height and width as scheduled. Sheet-metal screws of bronze or stainless steel to match other hardware.

D. Door Stops: Provide stops to protect walls, casework or other hardware.

1. Unless otherwise noted in Hardware Sets, provide floor type with appropriate fasteners. Where floor type cannot be used, provide wall type. If neither can be used, provide overhead type.

2. Locate overhead stops for maximum possible opening. Consult with Owner for furniture locations. Minimum: 90deg stop / 95deg deadstop. Note degree of opening in submittal.

C. Seals: Four-fingered type at head & jambs. Inelastic, rigid back, not subject to stretching. Self-compensating for warp, thermal bow, door settling, and out-of-plumb. Adhesive warranted for life of installation.

1. Proposed substitutions: submit for approval.
2. Three-fingered type at hinge jambs of doors fitted with continuous hinges where jamb leaf of hinge is fastened to the frame reveal.

D. Thresholds: As scheduled and per details. Comply with CBC 2019 11B-404.2.5. Substitute products: certify that the products equal or exceed specified material's thickness. Proposed substitutions: submit for approval.

1. Saddle thresholds: 0.125 inches minimum thickness.

2. Exteriors: Seal perimeter to exclude water and vermin. Use sealant complying with requirements in Division 7 "Thermal and Moisture Protection". Minimum 0.25 inch diameter fasteners and lead expansion shield anchors, or Red-Head #SFS-1420 (or approved equivalent) Flat Head Sleeve Anchors. National Guard Products' "COMBO" or Pemko Manufacturing's "FHSL".

3. Fire-rated openings, 90-minutes or less duration: use thresholds to interrupt floor covering material under the door where that material has a critical radiant flux value less than 0.22 watts per square centimeter, per NFPA 253. Use threshold unit as scheduled. If none scheduled, include a 0.25in high 5in wide saddle in the bid, and request direction from Architect.

4. Fire-rated openings, 3-hour duration: Thresholds, where scheduled, to extend full jamb depth.

5. Acoustic openings: Set units in full bed of Division-7-compliant, leave no air space between threshold and substrate.

6. Plastic plugs with wood or sheet metal screws are not an acceptable substitute for specified fastening methods.

7. Fasteners: Generally, exposed screws to be Phillips or Robertson drive. Pinned TORX drive at high security areas. Flat head sleeve anchors (FHSL) may be slotted drive. Sheet metal and wood screws: full-thread. Sleeve nuts: full length to prevent door compression.

E. Through-bolts: Do not use. Coordinate with wood doors; ensure provision of proper blocking to support wood screws for mounting panic hardware and door closers. Coordinate with metal doors and frames; ensure provision of proper reinforcement to support machine screws for mounting panic hardware and door closers.

1. Exception: surface-mounted overhead stops, holders, and friction stays.

F. Silencers: Interior hollow metal frames, 3 for single doors, 4 for pairs of doors. Leave no unfilled/uncovered pre-punched silencer holes. Intent: door bears against silencers, seals make minimal contact with minimal compression – only enough to effect a seal.

2.7 FINISH

A. Generally: BHMA 626 Satin Chromium.

1. Areas using BHMA 626: furnish push-plates, pulls and protection plates of BHMA 630, Satin Stainless Steel, unless otherwise scheduled.

B. Door closers: factory powder coated to match other hardware, unless otherwise noted.

2.8 KEYING REQUIREMENTS

A. Key System: Verify with District. Existing Best Access Systems small format interchangeable core system, procured per Allowances in 1.1.C. Owner's agent will install the cores prior to Substantial Completion. Initiate and conduct meeting(s) with Owner to determine system structure and keybow styles, furnish Owner's written approval of the system; do not order keys or cylinders without written confirmation of actual requirements from the Owner. Owner will order and supply permanent cylinders/cores.

B. Interchangeable Cores: 7-pin solid brass construction.

C. Permanent cores: furnish factory-keyed.

PART 3 - EXECUTION

3.1 ACCEPTABLE INSTALLERS

A. Can read and understand manufacturers' templates, suppliers' hardware schedule and printed installation instructions. Can readily distinguish drywall screws from manufacturers' furnished fasteners. Available to meet with manufacturers' representatives and related trades to discuss installation of hardware.

3.2 PREPARATION

A. Ensure that walls and frames are square and plumb before hardware installation. Make corrections before commencing hardware installation. Installation denotes acceptance of wall/frame condition.

B. Locate hardware per SDI-100 and applicable building, fire, life-safety, accessibility, and security codes.

1. Notify Architect of code conflicts before ordering material.

2. Locate latching hardware between 34 inches to 44 inches above the finished floor, per California Building Code, Section 1010.1.9.2 and 11B-404.2.7.

3. Locate panic hardware between 36 inches to 44 inches above the finished floor.

4. Where new hardware is to be installed near existing doors/hardware scheduled to remain, match locations of existing hardware.

C. Overhead stops: before installing, determine proposed locations of furniture items, fixtures, and other items to be protected by the overhead stop's action.

3.3 INSTALLATION

A. Install hardware per manufacturer's instructions and recommendations. Do not install surface-mounted items until finishes have been completed on substrate. Set units level, plumb and true to line and location. Adjust and reinforce attachment substrate for proper installation and operation. Remove and reinstall or replace work deemed defective by Architect.

1. Gaskets: install jamb-applied gaskets before closers, overhead stops, rim strikes, etc; fasten hardware over and through these seals. Install sweeps across bottoms of doors before astragals, cope sweeps around bottom pivots, trim astragals to tops of sweeps.

2. When hardware is to be attached to existing metal surface and insufficient reinforcement exists, use RivNuts, NutSerts or similar anchoring device for screws.

3. Use manufacturers' fasteners furnished with hardware items, or submit Request for Substitution with Architect.

4. Replace fasteners damaged by power-driven tools.

B. Locate floor stops no more that 4 inches from walls and not within paths of travel. See paragraph 2.2 regarding hinge widths, door should be well clear of point of wall reveal. Point of door contact no closer to the hinge edge than half the door width. Where situation is questionable or difficult, contact Architect for direction.

C. Core concrete for exterior door stop anchors. Set anchors in approved non-shrink grout.

D. Locate overhead stops for minimum 90 degrees at rest and for maximum allowable degree of swing.

E. Drill pilot holes for fasteners in wood doors and/or frames.

F. Lubricate and adjust existing hardware scheduled to remain. Carefully remove and give to Owner items not scheduled for reuse.

3.4. ADJUSTING

A. Adjust and check for proper operation and function. Replace units, which cannot be adjusted to operate freely and smoothly.

1. Hardware damaged by improper installation or adjustment methods: repair or replace to Owner's satisfaction.

2. Adjust doors to fully latch with no more than 1 pound of pressure.

   a) Door closer valves: turn valves clockwise until at bottom – do not force. Turn valves back out one and one-half turns and begin adjustment process from that point. Do not force valves beyond three full turns counterclockwise.

3. Adjust delayed-action closers on fire-rated doors to fully close from fully-opened position in no more than 10 seconds.

4. Adjust door closers per 1.9 this section.

B. Inspection of fire door assemblies and means-of-egress panic-hardware doors: Per 2016 NFPA-80 5.2.1: hire an independent third-party inspection service to prepare a report listing these doors, and include a statement that there are zero deficiencies with the fire-rated assemblies and the openings with panic hardware.

C. Fire-rated doors:

1. Wood doors: adjust to 0.125 inches clearance at heads, jambs, and meeting stiles.

2. Steel doors: adjust to 0.063 inches minimum to 0.188 inches maximum clearance at heads, jambs, and meeting stiles.

3. Adjust wood and steel doors to 0.75 inches maximum clearance (undercut) above threshold or finish floor material under door.

D. Final inspection: Installer to provide letter to Owner that upon completion installer has visited the Project and has accomplished the following:

1. Has re-adjusted hardware.

2. Has evaluated maintenance procedures and recommend changes or additions, and instructed Owner's personnel.

3. Has identified items that have deteriorated or failed.

4. Has submitted written report identifying problems.

3.5 DEMONSTRATION

A. Demonstrate mechanical hardware and electrical, electronic and pneumatic hardware systems, including adjustment and maintenance procedures.

3.6 PROTECTION/CLEANING

A. Cover installed hardware, protect from paint, cleaning agents, weathering, carts/barrows, etc. Remove covering materials and clean hardware just prior to substantial completion.

B. Clean adjacent wall, frame and door surfaces soiled from installation / reinstallation process.

3.7 SCHEDULE OF FINISH HARDWARE

A. See door schedule in drawings for hardware set assignments.

B. Do not order material until submittal has been reviewed, stamped, and signed by Architect's door hardware consultant.

C. The hardware sets represent the design intent and direction of the owner and architect. They are a guideline only and should not be considered a detailed hardware schedule. Discrepancies, conflicting hardware and missing items should be brought to the attention of the architect with corrections made prior to the bidding process. Omitted items not included in a hardware set should be scheduled with the appropriate additional hardware required for proper application and functionality.

HEADING 01

1	SGL	Door 101.1	EXTERIOR / CLASSROOM
1	SGL	Door 102.1	EXTERIOR / CLASSROOM
1	SGL	Door 103.1	EXTERIOR / CLASSROOM
1	SGL	Door 104.1	EXTERIOR / CLASSROOM
1	SGL	Door 105.2	EXTERIOR / CLASSROOM
1	SGL	Door 106.1	EXTERIOR / CLASSROOM
1	SGL	Door 108.1	EXTERIOR / CLASSROOM
1	SGL	Door 109.1	EXTERIOR / CLASSROOM
1	SGL	Door 110.1	EXTERIOR / CLASSROOM
1	SGL	Door 111.1	EXTERIOR / CLASSROOM
1	SGL	Door 114.1	EXTERIOR / CLASSROOM
1	SGL	Door 118.2	EXTERIOR / CLASSROOM
1	SGL	Door 119.1	EXTERIOR / CLASSROOM
1	SGL	Door 120.1	EXTERIOR / CLASSROOM
1	SGL	Door 121.1	EXTERIOR / CLASSROOM
1	SGL	Door 123.4	EXTERIOR / COLLABORATION SPACE
1	SGL	Door 130.1	EXTERIOR / COLLABORATION SPACE
1	SGL	Door 203.2	EXTERIOR / CLASSROOM
1	SGL	Door 204.2	EXTERIOR / CLASSROOM
1	SGL	Door 204.3	EXTERIOR / CLASSROOM
1	SGL	Door 205	EXTERIOR / HALL
1	SGL	Door 210.2	EXTERIOR / COMPUTER AREA
1	SGL	Door 218.1	EXTERIOR / CLASSROOM
1	SGL	Door 226.1	EXTERIOR / CLASSROOM

36.000 X 84.000 X 1.750 X HMD X HMF X --

Each Assembly to have:

Qty		Description	Catalog Number	Finish	Mfr
3	EA	HINGE	5BB1HW 4.5 X 4.5 NRP	630	IVE
1	EA	PERMANENT CORE	OWNER STANDARD	626	BES
1	EA	PANIC HARDWARE	LD-PA-AX-99-L-2SI-06	626	VON
1	EA	RIM CYLINDER	OWNER STANDARD	626	BES
1	EA	ADA RIM CYL THUMBTURN	XB13-088	626	SCH
1	EA	SURFACE CLOSER	4040XP EDA	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	630	IVE
1	EA	FLOOR STOP	FS18L	BLK	IVE
1	EA	RAIN DRIP	142AA (OMIT @ OVERHANG)	AA	ZER
1	SET	SET SEAL	429AA-S (@ HEAD & JAMBS)	AA	ZER
1	EA	DOOR SWEEP	39A	A	ZER
1	EA	THRESHOLD	102A-223 (OR AS REQ'D. OR PER DETAIL/CONDITIONS)	A	ZER

MOUNT HEAD SEAL BEFORE CLOSER ARM.

HEADING 02

1	SGL	Door 105.1	EXTERIOR / CLASSROOM
1	SGL	Door 107.1	EXTERIOR / CLASSROOM
1	SGL	Door 112	EXTERIOR / GLC OFFICE
1	SGL	Door 113	EXTERIOR / OFFICE
1	SGL	Door 117.1	EXTERIOR / CLASSROOM
1	SGL	Door 118.1	EXTERIOR / CLASSROOM
1	SGL	Door 201.2	EXTERIOR / CLASSROOM
1	SGL	Door 202.2	EXTERIOR / CLASSROOM
1	SGL	Door 220.1	EXTERIOR / CLASSROOM
1	SGL	Door 222	EXTERIOR / HALL

36.000 X 84.000 X 1.750 X HMD X HMF X --

Each Assembly to have:

Qty		Description	Catalog Number	Finish	Mfr
3	EA	HINGE	5BB1HW 4.5 X 4.5 NRP	630	IVE
1	EA	PERMANENT CORE	OWNER STANDARD	626	BES
1	EA	PANIC HARDWARE	LD-PA-AX-99-L-2SI-06	626	VON
1	EA	RIM CYLINDER	OWNER STANDARD	626	BES
1	EA	ADA RIM CYL THUMBTURN	XB13-088	626	SCH
1	EA	SURFACE CLOSER	4040XP SCUSH	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	630	IVE
1	EA	RAIN DRIP	142AA (OMIT @ OVERHANG)	AA	ZER
1	SET	SET SEAL	429AA-S (@ HEAD & JAMBS)	AA	ZER
1	EA	DOOR SWEEP	39A	A	ZER
1	EA	THRESHOLD	102A-223 (OR AS REQ'D. OR PER DETAIL/CONDITIONS)	A	ZER

MOUNT HEAD SEAL BEFORE CLOSER ARM.

HEADING 03

1	PR	Door 116	EXTERIOR / COLLABORATION SPACE
1	PR	Door 206.1	EXTERIOR / LIBRARY (READING AREA)

72.000 X 84.000 X 1.750 X HMD X HMF X --

Each Assembly to have:

Qty		Description	Catalog Number	Finish	Mfr
6	EA	HINGE	5BB1HW 4.5 X 4.5 NRP	630	IVE
1	EA	REMOVABLE MULLION	KR4954 STAB	689	VON
2	EA	PERMANENT CORE	OWNER STANDARD	626	BES
1	EA	PANIC HARDWARE	LD-PA-AX-99-EO	626	VON
1	EA	PANIC HARDWARE	LD-PA-AX-99-L-2SI-06	626	VON
1	EA	MULLION STORAGE KIT	MT54	689	VON
1	EA	RIM CYLINDER	OWNER STANDARD	626	BES
1	EA	MORTISE CYLINDER	OWNER STANDARD	626	BES
1	EA	ADA RIM CYL THUMBTURN	XB13-088	626	SCH
2	EA	SURFACE CLOSER	4040XP EDA	689	LCN
2	EA	FLOOR STOP	FS18L	BLK	IVE
1	EA	RAIN DRIP	142AA (OMIT @ OVERHANG)	AA	ZER
2	SET	MEETING STILE	328AA-S	AA	ZER
1	EA	MULLION SEAL	8780NBK PSA	BK	ZER
2	EA	DOOR SWEEP	39A	A	ZER
1	EA	THRESHOLD	102A-223 (OR AS REQ'D. OR PER DETAIL/CONDITIONS)	A	ZER

MOUNT HEAD SEAL BEFORE CLOSER ARM.

HEADING 04

1	SGL	Door 207.2	EXTERIOR / TEXT BOOK WORK AREA
1	SGL	Door 208.2	EXTERIOR / LIBRARY OFFICE & WORKROOM

36.000 X 84.000 X 1.750 X HMD X HMF X --

Each Assembly to have:

Qty		Description	Catalog Number	Finish	Mfr
3	EA	HINGE	5BB1 4.5 X 4.5	630	IVE
1	EA	OFFICE LOCK	45H-7-AT-15-H-VIT	626	BES
1	EA	PERMANENT CORE	OWNER STANDARD	626	BES
1	EA	SURFACE CLOSER	4040XP EDA	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	630	IVE
1	EA	FLOOR STOP	FS18L	BLK	IVE
1	EA	RAIN DRIP	142AA (OMIT @ OVERHANG)	AA	ZER
1	SET	SET SEAL	429AA-S (@ HEAD & JAMBS)	AA	ZER
1	EA	DOOR SWEEP	39A	A	ZER
1	EA	THRESHOLD	102A-223 (OR AS REQ'D. OR PER DETAIL/CONDITIONS)	A	ZER

MOUNT HEAD SEAL BEFORE CLOSER ARM.



HEADING 06

1 SGL Door 126 EXTERIOR / HALL

36.000 X 84.000 X 1.750 X HMD X HMF X --

Each Assembly to have:

Qty		Description	Catalog Number	Finish	Mfr
3	EA	HINGE	5BB1 4.5 X 4.5	630	IVE
1	EA	PERMANENT CORE	OWNER STANDARD	626	BES
1	EA	CLASSROOM LOCK	45H-7-R-15-H	626	BES
1	EA	SURFACE CLOSER	4040XP EDA	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	630	IVE
1	EA	FLOOR STOP	FS18L	BLK	IVE
1	EA	RAIN DRIP	142AA (OMIT @ OVERHANG)	AA	ZER
1	SET	SET SEAL	429AA-S (@ HEAD & JAMBS)	AA	ZER
1	EA	DOOR SWEEP	39A	A	ZER
1	EA	THRESHOLD	102A-223 (OR AS REQ'D. OR PER DETAIL/CONDITIONS)	A	ZER

MOUNT HEAD SEAL BEFORE CLOSER ARM.

HEADING 07

1 SGL Door 213 EXTERIOR / HALL

36.000 X 84.000 X 1.750 X HMD X HMF X --

Each Assembly to have:

Qty		Description	Catalog Number	Finish	Mfr
3	EA	HINGE	5BB1 4.5 X 4.5	630	IVE
1	EA	PERMANENT CORE	OWNER STANDARD	626	BES
1	EA	CLASSROOM LOCK	45H-7-R-15-H	626	BES
1	EA	SURFACE CLOSER	4040XP SCUSH	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	630	IVE
1	EA	RAIN DRIP	142AA (OMIT @ OVERHANG)	AA	ZER
1	SET	SET SEAL	429AA-S (@ HEAD & JAMBS)	AA	ZER
1	EA	DOOR SWEEP	39A	A	ZER
1	EA	THRESHOLD	102A-223 (OR AS REQ'D. OR PER DETAIL/CONDITIONS)	A	ZER

MOUNT HEAD SEAL BEFORE CLOSER ARM.

HEADING 08

1 SGL Door 227 EXTERIOR / CUSTODIAN ROOM
36.000 X 84.000 X 1.750 X HMD X HMF X --

Each Assembly to have:

Qty		Description	Catalog Number	Finish	Mfr
3	EA	HINGE	5BB1 4.5 X 4.5	630	IVE
1	EA	PERMANENT CORE	OWNER STANDARD	626	BES
1	EA	STOREROOM LOCK	45H-7-D-15-H	626	BES
1	EA	SURFACE CLOSER	4040XP	689	LCN
1	EA	WALL STOP	WS406/407CCV AS REQ'D	630	IVE
1	EA	RAIN DRIP	142AA (OMIT @ OVERHANG)	AA	ZER
1	SET	SET SEAL	429AA-S (@ HEAD & JAMBS)	AA	ZER
1	EA	DOOR SWEEP	110AA	AA	ZER
1	EA	THRESHOLD	102A-223 (OR AS REQ'D. OR PER DETAIL/CONDITIONS)	A	ZER

HEADING 09

1 SGL Door 214 EXTERIOR / ELECTRICAL ROOM

36.000 X 84.000 X 1.750 X HMD X HMF X --

Each Assembly to have:

Qty		Description	Catalog Number	Finish	Mfr
3	EA	HINGE	5BB1 4.5 X 4.5 NRP	630	IVE
1	EA	PERMANENT CORE	OWNER STANDARD	626	BES
1	EA	STOREROOM LOCK	45H-7-D-15-H	626	BES
1	EA	SURFACE CLOSER	4040XP SCUSH	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	630	IVE
1	EA	RAIN DRIP	142AA (OMIT @ OVERHANG)	AA	ZER
1	SET	SET SEAL	429AA-S (@ HEAD & JAMBS)	AA	ZER
1	EA	DOOR SWEEP	39A	A	ZER
1	EA	THRESHOLD	102A-223 (OR AS REQ'D. OR PER DETAIL/CONDITIONS)	A	ZER

MOUNT HEAD SEAL BEFORE CLOSER ARM.

HEADING 10

1 SGL Door 129.1 EXTERIOR / DEAN OFFICE

36.000 X 84.000 X 1.750 X HMD X HMF X --

Each Assembly to have:

Qty		Description	Catalog Number	Finish	Mfr
3	EA	HINGE	5BB1 4.5 X 4.5 NRP	630	IVE
1	EA	OFFICE LOCK	45H-7-AT-15-H-VIT	626	BES
1	EA	PERMANENT CORE	OWNER STANDARD	626	BES
1	EA	SURFACE CLOSER	4040XP SCUSH	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	630	IVE
1	EA	RAIN DRIP	142AA (OMIT @ OVERHANG)	AA	ZER
1	SET	SET SEAL	429AA-S (@ HEAD & JAMBS)	AA	ZER
1	EA	DOOR SWEEP	39A	A	ZER
1	EA	THRESHOLD	102A-223 (OR AS REQ'D. OR PER DETAIL/CONDITIONS)	A	ZER

MOUNT HEAD SEAL BEFORE CLOSER ARM.

HEADING 11

1	SGL	Door 207.1	LIBRARY (READING AREA) / TEXT BOOK WORK AREA
		42.000 X 84.000 X 1.750 X HMD X HMF X --	
1	SGL	Door 101.2	COLLABORATION SPACE / CLASSROOM
1	SGL	Door 102.2	COLLABORATION SPACE / CLASSROOM
1	SGL	Door 103.2	COLLABORATION SPACE / CLASSROOM
1	SGL	Door 104.2	COLLABORATION SPACE / CLASSROOM
1	SGL	Door 105.3	COLLABORATION SPACE / CLASSROOM
1	SGL	Door 106.2	COLLABORATION SPACE / CLASSROOM
1	SGL	Door 107.2	COLLABORATION SPACE / CLASSROOM
1	SGL	Door 108.2	COLLABORATION SPACE / CLASSROOM
1	SGL	Door 110.2	COLLABORATION SPACE / CLASSROOM
1	SGL	Door 111.2	COLLABORATION SPACE / CLASSROOM
1	SGL	Door 114.2	COLLABORATION SPACE / CLASSROOM
1	SGL	Door 117.2	COLLABORATION SPACE / CLASSROOM
1	SGL	Door 118.3	COLLABORATION SPACE / CLASSROOM
1	SGL	Door 119.2	COLLABORATION SPACE / CLASSROOM
1	SGL	Door 120.2	COLLABORATION SPACE / CLASSROOM
1	SGL	Door 121.2	COLLABORATION SPACE / CLASSROOM
1	SGL	Door 201.1	COLLABORATION SPACE / CLASSROOM
1	SGL	Door 202.1	COLLABORATION SPACE / CLASSROOM
1	SGL	Door 203.1	COLLABORATION SPACE / CLASSROOM
1	SGL	Door 204.1	COLLABORATION SPACE / CLASSROOM
1	SGL	Door 212	LIBRARY (READING AREA) / CAREER CENTER
1	SGL	Door 218.2	COLLABORATION SPACE / CLASSROOM
1	SGL	Door 219	LIBRARY (READING AREA) / COLLABORATION SPACE
1	SGL	Door 220.2	COLLABORATION SPACE / CLASSROOM
1	SGL	Door 226.2	COLLABORATION SPACE / CLASSROOM
		36.000 X 84.000 X 1.750 X HMD X HMF X --	

Each Assembly to have:

Qty		Description	Catalog Number	Finish	Mfr
3	EA	HINGE	5BB1 4.5 X 4.5	626	IVE
1	EA	OFFICE LOCK	45H-7-AT-15-H-VIT	626	BES
1	EA	PERMANENT CORE	OWNER STANDARD	626	BES
1	EA	SURFACE CLOSER	4040XP	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	630	IVE
1	EA	FLOOR STOP	FS436/438 AS REQ'D	626	IVE
1	EA	GASKETING	488SBK PSA	BK	ZER

HEADING 12

1	SGL	Door 129.2	ASSISTANT OFFICE / DEAN OFFICE
1	SGL	Door 223	HALL / GLC OFFICE
1	SGL	Door 224	HALL / OFFICE

36.000 X 84.000 X 1.750 X HMD X HMF X --

Each Assembly to have:

Qty		Description	Catalog Number	Finish	Mfr
3	EA	HINGE	5BB1 4.5 X 4.5	626	IVE
1	EA	OFFICE LOCK	45H-7-AT-15-H-VIT	626	BES
1	EA	PERMANENT CORE	OWNER STANDARD	626	BES
1	EA	FLOOR STOP	FS436/438 AS REQ'D	626	IVE
3	EA	SILENCER	SR64	GRY	IVE

HEADING 13

1	SGL	Door 127	HALL / ALL GENDER RESTROOM
1	SGL	Door 128	HALL / ALL GENDER RESTROOM
1	SGL	Door 215	HALL / ALL GENDER RESTROOM
1	SGL	Door 216	HALL / ALL GENDER RESTROOM

36.000 X 84.000 X 1.750 X HMD X HMF X --

Each Assembly to have:

Qty		Description	Catalog Number	Finish	Mfr
3	EA	HINGE	5BB1 4.5 X 4.5	626	IVE
1	EA	PRIVACY LOCK	45H-7-LT-15-H-VIN	626	BES
1	EA	SURFACE CLOSER	4040XP	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	630	IVE
1	EA	MOP PLATE	8400 4" X 1" LDW B-CS	630	IVE
1	EA	WALL STOP	WS406/407CCV AS REQ'D	630	IVE
3	EA	SILENCER	SR64	GRY	IVE

HEADING 14

1	SGL	Door 122	ASSISTANT OFFICE / STORAGE
1	SGL	Door 124	HALL / CUSTODIAN ROOM
1	SGL	Door 125	HALL / ELECTRICAL ROOM
1	SGL	Door 217	COLLABORATION SPACE / DATA

36.000 X 84.000 X 1.750 X HMD X HMF X --

Each Assembly to have:

Qty		Description	Catalog Number	Finish	Mfr
3	EA	HINGE	5BB1 4.5 X 4.5	626	IVE
1	EA	PERMANENT CORE	OWNER STANDARD	626	BES
1	EA	STOREROOM LOCK	45H-7-D-15-H	626	BES
1	EA	SURFACE CLOSER	4040XP	689	LCN
1	EA	WALL STOP	WS406/407CCV AS REQ'D	630	IVE
3	EA	SILENCER	SR64	GRY	IVE

HEADING 15

1 SGL Door 130.2 COLLABORATION SPACE / ASSISTANT OFFICE
1 SGL Door 209 LIBRARY (READING AREA) / CIRCULATION DESK
36.000 X 34.000 X 1.750 X UNK X UNK X --

Each Assembly to have:

Qty		Description	Catalog Number	Finish	Mfr
2	EA	SPRING HINGE	K51L-SWRH-450-D3	630	WAT
1	EA	BALL CATCH	345	626	IVE
1	EA	PERMANENT CORE	OWNER STANDARD	626	BES
1	EA	WALL STOP	WS406/407CCV AS REQ'D	630	IVE
4	EA	SILENCER	SR64	GRY	IVE

HEADING 16

1 SGL Door 115 COLLABORATION SPACE / IDF ROOM
36.000 X 84.000 X 1.750 X HMD X HMF X --

Each Assembly to have:

Qty		Description	Catalog Number	Finish	Mfr
3	EA	HINGE	5BB1 4.5 X 4.5	626	IVE
1	EA	PERMANENT CORE	OWNER STANDARD	626	BES
1	EA	STOREROOM LOCK	45H-7-D-15-H	626	BES
1	EA	SURFACE CLOSER	4040XP EDA	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	630	IVE
1	EA	FLOOR STOP	FS436/438 AS REQ'D	626	IVE
3	EA	SILENCER	SR64	GRY	IVE

HEADING 17

1 SGL Door 109.2 COLLABORATION SPACE / CLASSROOM
36.000 X 84.000 X 1.750 X HMD X HMF X --

Each Assembly to have:

Qty		Description	Catalog Number	Finish	Mfr
3	EA	HW HINGE	5BB1HW 4.5 X 4.5	626	IVE
1	EA	PERMANENT CORE	OWNER STANDARD	626	BES
1	EA	PANIC HARDWARE	LD-PA-AX-99-L-2SI-06	626	VON
1	EA	RIM CYLINDER	OWNER STANDARD	626	BES
1	EA	ADA RIM CYL THUMBTURN	XB13-088	626	SCH
1	EA	SURFACE CLOSER	4040XP EDA	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	630	IVE
1	EA	FLOOR STOP	FS436/438 AS REQ'D	626	IVE
1	EA	GASKETING	488SBK PSA	BK	ZER

HEADING 18

1 SGL Door 208.1 CIRCULATION DESK / LIBRARY OFFICE & WORKROOM
36.000 X 84.000 X 1.750 X HMD X HMF X --

Each Assembly to have:

Qty		Description	Catalog Number	Finish	Mfr
3	EA	HINGE	5BB1 4.5 X 4.5	626	IVE
1	EA	OFFICE LOCK	45H-7-AT-15-H-VIT	626	BES
1	EA	PERMANENT CORE	OWNER STANDARD	626	BES
1	EA	SURFACE CLOSER	4040XP EDA	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	630	IVE
1	EA	FLOOR STOP	FS436/438 AS REQ'D	626	IVE
1	EA	GASKETING	488SBK PSA	BK	ZER

HEADING 19

1 PR Door 225 COLLABORATION SPACE / COLLABORATION SPACE
72.000 X 84.000 X 1.750 X HMD X HMF X --

Each Assembly to have:

Qty		Description	Catalog Number	Finish	Mfr
6	EA	HW HINGE	5BB1HW 4.5 X 4.5	626	IVE
1	EA	REMOVABLE MULLION	KR4954 STAB	689	VON
2	EA	PERMANENT CORE	OWNER STANDARD	626	BES
1	EA	PANIC HARDWARE	LD-PA-AX-99-EO	626	VON
1	EA	PANIC HARDWARE	LD-PA-AX-99-L-2SI-06	626	VON
1	EA	MULLION STORAGE KIT	MT54	689	VON
1	EA	RIM CYLINDER	OWNER STANDARD	626	BES
1	EA	MORTISE CYLINDER	OWNER STANDARD	626	BES
1	EA	ADA RIM CYL THUMBTURN	XB13-088	626	SCH
2	EA	SURFACE CLOSER	4040XP EDA	689	LCN
2	EA	KICK PLATE	8400 10" X 1" LDW B-CS	630	IVE
2	EA	FLOOR STOP	FS436/438 AS REQ'D	626	IVE
1	EA	GASKETING	488SBK PSA	BK	ZER
1	EA	MULLION SEAL	8780NBK PSA	BK	ZER

HEADING 20

1 PR Door 221 COLLABORATION SPACE / COLLABORATION SPACE
72.000 X 84.000 X 1.750 X HMD X HMF X --

Each Assembly to have:

Qty		Description	Catalog Number	Finish	Mfr
6	EA	HINGE	5BB1 4.5 X 4.5	626	IVE
1	SET	AUTO FLUSH BOLT	FB31P	630	IVE
1	EA	DUST PROOF STRIKE	DP1/2 AS REQ'D	626	IVE
1	EA	OFFICE LOCK	45H-7-AT-15-H-VIT	626	BES
1	EA	PERMANENT CORE	OWNER STANDARD	626	BES
1	EA	COORDINATOR	COR X FL	628	IVE
2	EA	MOUNTING BRACKET	MB AS REQ'D	689	IVE
2	EA	SURFACE CLOSER	4040XP RW/PA	689	LCN
2	EA	FLOOR STOP	FS436/438 AS REQ'D	626	IVE
1	EA	GASKETING	488SBK PSA	BK	ZER

HEADING 21

1	SL	Door 206.4	LIBRARY (READING AREA)
1	SL	Door 206.3	EXTERIOR / LIBRARY (READING AREA)
		1 228.000 X 102.000 X 1.750 X GLD X ALF X --	
1	SL	Door 210.1	LIBRARY (READING AREA) / COMPUTER AREA
		1 282.500 X 102.000 X 1.750 X GLD X ALF X --	
1	SL	Door 123.2	COLLABORATION SPACE / COLLABORATION SPACE
1	SL	Door 123.3	COLLABORATION SPACE / COLLABORATION SPACE
		1 198.000 X 102.000 X 1.750 X GLD X ALF X --	

HARDWARE TO BE PROVIDED BY DOOR MANUFACTURER.

1

End of Schedule

END OF SECTION

PART 1 - GENERAL

1.1 SECTION INCLUDES

A. Gypsum Board Panels.

B. Vertical wall gypsum board application.

C. Taped and sanded joint treatment.

D. Metal channel ceiling framing and horizontal ceiling gypsum board application.

E. Exterior gypsum sheathing board.

F. Glass Mat Water-Resistant Backing Board for ceramic tile application.

G. Related Sections

1. Section 01 35 42, CALGreen Requirements.
2. Section 05 40 00, Cold-Formed Metal Framing.
3. Section 09 22 16, Non-Structural Metal Framing.
4. Section 09 24 00, Portland Cement Plaster.
5. Section 09 30 13, Ceramic Tile.
6. Section 09 90 00, Painting

1.2 REFERENCE STANDARDS

A. Conform to current adopted reference standards by date of issue of the current code cycle and the date of the Contract Documents.

B. American Society for Testing and Materials (ASTM)

1. ASTM C475 - Joint Compound and Joint Tape for Finishing Gypsum Board.
2. ASTM C645 - Specification for Nonstructural Steel Framing Members.
3. ASTM C754 - Specification for Installation of Steel Framing Members to Receive Screw-Attached Gypsum Panel Products.
4. ASTM C840 - Application and Finishing of Gypsum Board.
5. ASTM C954 - Specification for Steel Drill Screws for the Application of Gypsum Panel Products or Metal Plaster Bases to Steel Studs from 0.033 in. to 0.112 in. in thickness.
6. ASTM C1002 - Steel Drill Screws for the Application of Gypsum Board or Metal Plaster Bases.
7. ASTM C1177 - Glass Mat Gypsum Substrate for Use as Sheathing.

8. ASTM C1178 - Glass Mat Water-Resistant Gypsum Backing Panel.

9. ASTM C1396 - Specification for Gypsum Board.

C. Underwriters Laboratories, Inc. (UL)

1. UL Directory - Fire Resistance Directory, Volume 1, Latest Edition.

D. Gypsum Association (GA)

1. GA-201 - Gypsum Board for Walls and Ceilings

2. GA-214 - Levels of Gypsum Board Finish

3. GA-216 - Application and Finishing of Gypsum Board

4. GA-600 - Fire Resistance Design Manual

5. GA-226 - Gypsum Board installation on Curved Walls.

E. 2019 California Building Code (CBC)

1. CBC-7 - Chapter 7, Fire Resistant Materials and Construction

2. CBC-19A - Chapter 19A, Concrete (for DSA)

3. CBC-25 - Chapter 25, Gypsum Board and Plaster.

F. California Green Building Standards Code, CALGreen - 2019.

G. Division of the State Architect, Interpretation of Regulations (DSA-IR)

1. DSA-IR 25-3.13, Drywall Ceiling Suspension Conventional Construction-One Layer.

1.3 SUBMITTALS

A. Product Data: For each type of product indicated.

B. Shop Drawings: Show locations, fabrication, and installation of control and expansion joints including plans, elevations, sections, details of components, and attachments to other units of Work.

C. Samples: For following products:

1. Trim Accessories: Full-size sample in 12-inch-long length for each trim accessory indicated.

2. Textured Finishes: Manufacturer's standard size for each textured finish indicated and on same backing indicated for Work.

D. CALGreen Submittals:

1. Product Data Sheets and Declaration Statements showing compliance with CALGreen Code, per paragraph 1.04.B this Section.

1.4 QUALITY ASSURANCE

A. Applicator: Company specializing in gypsum board systems work with three years' experience.

B. California Green Building Standards Code, CALGreen - 2019.

1. Adhesives, sealants, primers and caulks shall comply with air quality management district rules where applicable, or SCAQMD Rule 1168 VOC limits, per CALGreen Tables 5.504.4.1 and 5.504.4.2.

2. Paints and Coatings shal! comply with VOC limits in Table 1 of the ARB, per CALGreen Table 5.504.4.3

3. Composite wood products (plywood, particle board, medium density fiberboard) shall comply with Formaldehyde limits per CALGreen Table 5.504.4.5.

4. Recycled Content per CALGreen Section A5.405.4.

1.5 DELIVERY, STORAGE, AND HANDLING

A. Deliver materials in original packages, containers, or bundles bearing brand name and identification of manufacturer or supplier.

B. Store materials inside under cover and keep them dry and protected against damage from weather, direct sunlight, surface contamination, corrosion, construction traffic, and other causes. Stack gypsum panels flat to prevent sagging.

C. Steel Framing and related accessories shall be stored and handled in accordance with AISI Code of Standard Practice.

1.6 WARRANTY

A. Provide manufacturer's warranty, 3 years against manufacturing defects.

1.7 PROJECT CONDITIONS

A. Environmental Limitations: Comply with ASTM C840 requirements or gypsum board manufacturer's written recommendations, whichever are more stringent.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Products of following manufacturer form basis for design and quality intended:

1. United States Gypsum Corporation (USG), Chicago, IL.

B. Subject to compliance with requirements, other acceptable manufacturers include the following:

1. Georgia-Pacific, Atlanta, GA.
2. National Gypsum Co./Gold Bond Building Products, Charlotte, NC.
3. Pabco Gypsum, Rancho Cordova, CA.
4. CertainTeed Corporation, Valley Forge, PA.
5. Temple-Inland Forest Products, Diboll, TX.

C. Or equal as approved in accordance with Division 01, General Requirements for Substitutions.

2.2 BOARD MATERIALS

A. Regular Gypsum Board: ASTM C1396; 5/8 inch thick, maximum permissible length; ends square cut, tapered round edges, USG SHEETROCK BRAND TAPERED GYPSUM PANELS SW.

B. Fire-rated Gypsum Board, 1HR: ASTM C1396; Type X, fire resistive type, 5/8 inch thick, maximum permissible length; ends square cut, tapered round edges, USG SHEETROCK BRAND FIRECODE, or equal.

C. Exterior Gypsum Sheathing Board System: ASTM C1177; moisture resistant, and fire resistant, Type X, 5/8 inch thick, maximum permissible length, ends square cut, inorganic glass fiber mat faced, 48 inch width, DensGlass Exterior Sheathing by Georgia Pacific, USG Securock Glass-Mat, Gold Bond e2XP by National Gypsum, GlasRoc Brand Sheathing by BPB America or equal.

1. Install Water Resistive Barrier at exterior wall over sheathing substrate. Tyvek CommercialWrap by DuPont, Typar Metro Wrap or equal.

2. For parapet wall in fire-resistive construction: Parapet Wall Paneling, Fire-Resistive Buildings: Exterior fire-resistive gypsum board 5/8 inches Dens Deck Prime Fireguard Roof Boards by Georgia-Pacific, ASTM C1177.

D. High Performance (Glass Mat) Water-Resistant Tile Backing Board: ASTM C1178, ASTM D3273, 5/8 inch thick Fireguard Type X, and 1/2 inch thick for non-rated walls. Glass mats on front and back, applied acrylic coating on front side, Dens-Shield Tile Backer by Georgia-Pacific, Atlanta GA, USG Fiberock Mold Tough VHI Exterior Sheathing or equal.

E. Paperless, Mold-Resistant Soundproof Gypsum Board: ASTM D3273, ASTM C1396

1. Manufacturer: Quite Solution, Inc., QuietRock 530, or equal, thickness: 5/8 inches, Type X; Weight: 2.8 pounds per square foot; Edges: Tapered.

2. STC-rated: 52-74 (ASTM E90)
3. Surfacing: Coated fiberglass mat on face and back.

4. Fire-rated: 1 hour

5. Surface flame: Class A (ASTM E84)

6. Water absorption: less than 5 percent (percent of weight)

7. R value: 0.38

2.3 MATERIALS

A. Furring Channels: 25 gauge galvanized steel, 7/8 inch deep by 2-9/16 inch wide hat channels, 275 pounds per 1,000 feet weight, FHC-25 and CEMCO METAL FURRING CHANNEL CLIPS. Z Type, where required: CEMCO Z-FURRING CHANNEL, 1", 1-1/2", 2" and 3" depths.

1. Dietrich UltraSteel Framing, 25 gauge or equal.

B. Angles: 1-3/8 inch by 7/8 inch, 24 gauge, Dietrich Metal Framing, CEMCO GALVANIZED METAL ANGLES or equal.

C. Runner Channels: Minimum weights, sizes and maximum spans conform to reference standard listed in Table 2506.2 California Building Code, 1-1/2", 1.12 lbs/foot, hot-rolled channels as defined therein.

D. Hanger Wire: 8 gauge for 16 square feet maximum, galvanized annealed, size of wire in accordance with reference standard listed Table [2506.2] [25A-A], California Building Code.

E. Tie Wire: 18 gauge galvanized annealed.

F. Taping, Bedding and Finishing Compound: ASTM C475; compatible with tape and substrate.

1. USG SHEETROCK Brand Taping Joint Compound Ready-Mixed, drying-type, non-asbestos, vinyl base.

2. USG SHEETROCK Brand Topping Joint Compound Ready-Mixed, drying-type non-asbestos, vinyl base.

3. USG SHEETROCK Powder Joint Compound, drying-type, non-asbestos vinyl base, conventionally drying. For Taping and Topping.

4. USG SHEETROCK Powder Setting-type Joint Compound, chemical hardening.

5. Contractor's Option: USG SHEETROCK Lightweight All Purpose Joint Compound (Plus 3) with Dust Control.

6. USG SHEETROCK Brand All Purpose Joint Compound Ready-Mixed for

laminating gypsum panels in multilayer partitions.

7. USG SHEETROCK Brand Joint Tape-Heavy, ASTM C475, high strength cross-fibered paper tape.

8. Drywall Primers: USG First Coat.

9. Or equal as approved in accordance with Division 01, General Requirements for substitutions.

G. Accessories: Corrosive Protective-Coated steel.

1. U-Trims: USG, Dietrich No. 200-A for joint compound or equal. .

2. J-Trim Casings, reveal type: USG, Dietrich No. 401 for 1/2" panels, 402 for 5/8" panels, no finishing compound.

3. Control Joint: Dietrich 093, USG Control Joint No. 093, Zinc metal.

4. Corner Bead: USG, Dietrich No. 103 for joint compounds or equal. .

H. Fasteners: Self-drilling tapping screws shall comply ASTM C 954; Self piercing

screws shall comply ASTM C 1002;

1. ASTM C1002, No. 2 Phillips recessed, bugle head, power-driven. Nails not permitted.

2. Type S-12, ASTM C954, 16 gage steel studs, minimum penetration 3/8 inch.

3. Type S, ASTM C 1002, 20 gage steel studs, minimum penetration 3/8 inch.

4. Type G, gypsum board to gypsum board, minimum penetration 1/2 inch.

5. Type W, wood construction, minimum penetration 5/8 inch. I. 2 3

I. Reveal Moldings: Extruded aluminum moldings as detailed and a manufactured by Fry Reglet Co., Alhambra, CA, or equal as approved in accordance with Division 01, General Requirements for substitutions. All intersections shall be factory fabricated with joints heliarc welded and backs sealed with permanent waterproof tape. Furnish with 6 inch legs to join with straight sections. Provide connector clips at butt joints of straight sections and end caps at terminations. Color as selected by Architect.

1. Manufacturers: Subject to compliance with requirements, provide products by the following:

a. Fry Reglet Corp.
b. Gordon, Inc.
c. MM Systems Corporation.
d. Pittcon Industries.

2. Aluminum: Alloy and temper with not less than the strength and durability properties of ASTM B 221, alloy 6063-T5.

3. Finish: Anodized finish, Class II medium etch 0.40 mils, AA-M12C22A31, clear anodized

2.4 TEXTURE FINISHES

A. USG Spray Texture Finish: orange peel.

B. Primer as recommended by texture finish manufacturer.

PART 3 - EXECUTION

3.1 INSPECTION

A. Verify that site conditions are ready to receive Work.

B. Beginning installation means acceptance of substrate.

3.2 PREPARATION

A. Delivery and Storage: Arrange for an adequate supply of materials on the jobsite so that progress of Work will be uninterrupted. Materials and accessories shall be delivered in original containers and bundles, and identified with the manufacturer's name and brand. Store gypsum board on flat, solid supports in dry areas, well protected from the elements.

B. Provide fixtures, anchors, sleeves, inserts and miscellaneous items, and provide openings and chases as necessary. Prior to closing in and finishing of dry wall Work, ascertain that piping, conduit, ductwork and fixtures which are to be concealed and which penetrate gypsum boards are in place, tested and approved.

C. Scaffolding: Construct, erect and maintain in conformance with applicable laws and ordinances.

D. Protection, Patching and Cleaning: Adjacent surfaces of other materials shall be protected from damage. Dry wall surfaces that have been cut out shall be neatly patched. Damaged or defective gypsum board finish shall be replaced. During progress of Work, rubbish droppings and water materials shall be removed.

E. Fire Protection: Where required, the Work shall comply with the requirements for the protection rating indicated in the governing building code.

F. Fire Sprinkler System: In areas where sprinkler heads occur, exercise care when installing drywall work. Do not damage or obstruct the heads in any way.

3.3 CEILING FRAMING INSTALLATION

A. Framing for suspended ceilings and vertical curtain walls between dropped ceilings: Install to provide plumbed surfaces with no variation of more than 1/4 inch in 10 feet.

B. Ceilings shall not support material or building components other than grilles light fixtures, small electrical conduits and small ducts.

1. Small Electrical Conduits: 3/4 inch in diameter or less, feeding electrical fixtures

or electrical devices in the ceiling assembly.

2. Large duct work, plumbing and like Work shall have its own support system and shall not be attached to the ceiling system.

3. Only gypsum board dead loads shall be supported by cross-furring.

C. Ceiling Support System: Conform to Section 2504A, 2511A and reference standard listed in Table 2506.2, California Building Code and DSA, IR 25-3.13, for sizes, types and spacing of ceiling support components.

1. Main Runners: 1-1/2 inch, 0.475 pound per foot, cold-rolled channels, designated 150U050-54.
2. Vertical hanger wires are #9 gauge (0.148" dia.) and galvanized conforming to ASTM A641. Soft temper and minimum tensile strength = 70 ksi.
3. Cross-furring may be 7/8 inch hat sections, designated 087F125, 25 gauge galvanized hat sections at 24 inches maximum on centers.
4. Main runners, spaced at 3 feet on centers, hanger wires shall be spaced at 4 feet maximum. To use hanger spacing of 4 feet on centers with a main runner spacing of 4 feet on centers, main runners shall be 1-1/2 inch hot-rolled channels weighing 1.12 pounds per foot.

D. Spacing of both hangers and runners: 48 by 48 inches is permissible if following conditions are met:

1. Vertical hanger wires are 8 gauge and galvanized. If ceiling is non-accessible, 12 gauge wire may be used.

2. Main runners are 1-1/2 inch channels, 1.12 pounds per foot minimum, hot rolled.

3. Cross-furring may be 7/8 inch, 25 gauge galvanized hat sections at 24 inches maximum on centers.

E. Hangers: Provide Hanger wires for primary runners within 6 inches from ceiling perimeters.

1. Hanger wires with ends twisted at least 3 times around itself, shall be saddle tied to primary runner channels.

2. Primary runner channel shall be crossed with furring channels, saddle tied to runners with one strand of 16 gauge or two strands of 18 gauge tie wire. Runner

channels shall be located not more than 6 inches from parallel boundary walls, or beams; furring channels 2 inches from parallel walls.

3. Primary runner channels shall be spliced by lapping 12 inches and furring channels shall be spliced by lapping 8 inches. Splices shall be tied at 2 inches from each end with two loops of 16 gauge wire.

4. Hanger wires that are more than 1 in 6 out of plumb shall have counterbraced

wires. Wires shall not attach or bend around interfering material such as duct work. Trapeze or equivalent devices shall be used where obstructions interfere with direct suspension. Trapeze suspension shall have a minimum construction of back-to-back 1-1/2 inch cold formed channels for spans up to 6 ft.

5. Ceiling wires and unbraced ducts, pipes and similar components must be separated.

6. Refer to Division 01, General Requirements for size and testing requirements for concrete expansion anchor bolts and powder actuated fasteners.

7. Fasten hanger wires with not less than three (3) tight turns. Fasten bracing wires with four (4) tight turns. Make all tight turns within distance of 1-1/2 inches. Hanger or bracing wire anchors to structure should be installed in such manner that direction of wire aligns as closely as possible with direction of forces acting on wire.

    a. Wire turns made by machine where both strands have been deformed or bent in wrapping can waive 1-1/2 inch requirement, but number of turns should be maintained, and be as tight as possible.

8. Separate all ceiling hanging and bracing wires at least 6 inches from all unbraced ducts, pipes, conduit, it is acceptable to attach lightweight items, such as single electrical conduit not exceeding 3/4 inch nominal diameter, to hanger wires using connectors acceptable to the Division of the State Architect (DSA).

9. When drilled-in (expansion) concrete anchors or shot-in (Powder-activated) anchors are used in reinforced concrete for hanger wires, 1 out of 10 must be field tested for 200 pounds in tension. When drilled-in anchors are used for bracing wires, 1 out of 2 must be field tested for 440 pounds in tension. Shot-in anchors in concrete are not permitted for bracing wires.

10. Provide trapeze or other supplementary support members at obstructions to typical hanger spacing. Provide additional hangers, struts or braces as required at all ceiling breaks, soffits or discontinuous areas. Hanger wires that are more than 1 in 6 out of plumb are to have counter-sloping wires.

F. Horizontal (Lateral) Support System:

1. Set of 4 splay wires shall be provided for each 12 by 12 feet. First set of splay

   wires shall be 4 feet from any wall. Wires shall be taut without causing ceiling to lift. Provide one vertical compression strut at each set of bracing wires per the following: DSA IR 25-3.

    a. Up to 48 inches in length: minimum, 4-inch stud, 20 gauge. Attach to main runners within 2 inch of cross runner with 2-#12 self-drilling self-tapping screws and to steel deck structure. At Wood Structure: 2-#12 x 2 inch screws or 3/16 inch diameter expansion anchor at concrete/steel deck. Compression strut shall not replace hanger wire.

b. Up to 96 inches in length: back brace 4-inch brace stud with 4-inch stud, 20 gauge, screw perpendicular to center of brace stud with #10 screws at 24 inches on center. Attach to main runners within 2 inch of cross runner with 2-#12 self-drilling self-tapping screws and to steel deck structure. At Wood Structure: 2-#12 x 2 inch screws or 3/16 inch diameter expansion anchor at concrete/steel deck. Compression strut shall not replace hanger wire.

c. And as indicated in drawings.

2. Splay wires shall be No. 12 gauge, with 4 tight turns at each end. Powder actuated fasteners shall not be used for attachment of splay wires to supporting structure.

3. Slope of splay wires shall not exceed 45 degrees from the plane of the ceiling and shall be taut. Splices in bracing wires are not to be permitted.

4. Ceiling grid members may be attached to not more than two adjacent walls. Ceiling grid members shall be at least 1/2 inch free of other walls. If walls run diagonally to ceiling grid system runners, one end of main and cross runners should be free, and minimum of 1/2 inch clear of wall.

5. Suspended ceiling systems with an area of 144 square feet or less, and fire rated ceiling systems with area of 96 square feet or less, surrounded by walls that connects directly to structure above, do not require bracing assemblies when attached to at least two adjacent walls.

G. Light Fixture Support:

1. Recessed or drop-in light fixtures shall be supported directly by main runners or by supplemental framing which is supported by main runners.

2. Surface mounted fixtures shall be attached to a main runner with a positive clamping device made of minimum 14 gauge metal. Rotational spring catches not allowed.

3. Light fixtures shall be attached to ceiling to resist horizontal force equal to weight of fixtures.

4. Install firestopping envelopes around recessed light fixtures and other electrical devices or boxes that exceed 100 sq. inches in 100 sq. ft where required to maintain designated fire rating of ceiling assembly.

H. Furring Channel Spacing: Furring channels at drywall ceilings shall be spaced at 16 inches on centers maximum.

3.4 GYPSUM BOARD INSTALLATION

A. Install gypsum board in accordance with ASTM C840, GA 201, GA 216 and Section 2508 California Building Code. Conform to DSA, IR 25-3. Use board types as indicated; if not indicated use board types as follows.

1. Use Type X (fire-rated core) drywall unless indicated otherwise.

2. Where gypsum wallboard is indicated as base for ceramic tile use board types as follows

   a. Use Type (moisture resistant) board, except as follows
   b. At walls to which plumbing fixtures are mounted and portions of adjoining walls within 2'-0" of a plumbing fixture, install fiberglass-mat faced tile backer board to 4'-0" above the finished floor with Type WR, above, moisture and mold resistant gypsum board.

B. Non-rated: Erect single layer gypsum board parallel or perpendicular on vertical framing, attached to studs and framing members with the specified fasteners spaced at 16" on center with screws and at top and bottom, 12" on center with screws at ceilings. Solid backing not required at joints running perpendicular to studs and framing members for walls.

1. For walls requiring STC 50 or higher, install extra layer of 1/2" gypsum board on one side, unless noted otherwise on wall schedule.

C. Rated: Erect single or double layer fire-rated gypsum board panels in accordance with Table 705.4, Note a, and Section 708 California Building Code, and GA-600, for one-hour or two hour, fire-rated, non-bearing Fire Walls or Fire Partitions, steel or wood stud construction.

1. Gypsum board panels installed parallel to vertical studs or framing shall be spaced at 8" on center with screws at vertical edges, and 12" on center with screws in field and at top and bottom, and 12" on center with screws at ceilings. Solid backing not required at joints running perpendicular to studs and framing members for walls. Stagger vertical joints 24 inches on centers each side and opposite sides. Where joints are not staggered required minimum 24 inches, solid backing shall be provided. All joints shall be treated except as provided herein.

2. For walls requiring STC 50 or higher, install extra layer of 1/2" gypsum board on one side, unless noted otherwise on wall schedule.

D. Treat cut edges and holes in moisture-resistant gypsum board with sealant.

E. Place control joints consistent with lines of building spaces as indicated or at maximum of 30 ft on centers. At rated walls, provide with fire rated panels same as wall construction.

F. Place corner beads at external corners. Use longest practical length. Place edge trim where gypsum board abuts dissimilar materials.

G. Seal all cutout and penetrations: For electrical, mechanical, plumbing and structural framing cutouts and penetration at interior surfaces. Per Section 07 92 00 for non-rated wall, and fire-rated sealant for rated walls per section 07 84 00.

H. Foil-backed gypsum board shall be applied on the inside of exterior walls.

I. Install reveal moldings according to manufacturer's recommendations.

3.5 JOINT TREATMENT

A. Exposed gypsum board in wall areas and ceiling areas shall have joint compound and be taped and sanded per requirements of GA-114 for levels specified and ready for paint.

B. On installations where two layers of gypsum board are required, only the face layer will require finishing of joints and screwheads.

C. Gypsum wallboard joints in walls may either be exposed or covered with joint tape and joint compound for the portion of the wall above a suspended ceiling, which is part of a fire resistive floor-ceiling or roof-ceiling assembly, as listed in U.L. Fire Resistive Ratings (BXUV), when the following conditions are met:

1. Vertical joints occur over framing members.

2. Horizontal joints are staggered 24 inches on opposite sides or covered with 6 inch wide strips of gypsum board attached with 1-1/2 inch laminating screws at 8 inches on centers.

3. Partition is two-ply system with joints staggered 16 inches or 24 inches.

4. Partition is not part of a smoke or sound control system.

D. Fire-Rated Partitions: Perimeters of fire-rated partitions shall be caulked with fire-rated sealant as specified in Section 07 84 00, both sides of partition.

E. Sound-Rated Partitions: Perimeters and penetrations of sound-rated partitions shall be caulked with acoustical sealant as specified in Section 07 92 00, both sides of partition.

F. Joints, except where excluded above including internal corners, shall be filled and taped. Thin uniform layer of joint compound, approximately 3 inches wide, shall be applied over joint. Tape shall be set in joint compound and finish levels required below. Internal angles, both horizontal and vertical, shall be reinforced and with tape folded to form straight and true angle. Metal external corners shall be set in place. Joints shall be allowed to dry at least 24 hours between each application of cement.

G. Gypsum board finish shall be to the following levels as defined by GA-214:

1. Plenum areas above ceilings - Level 1.

2. Substrate for tile, tackable wall panels, tackboards and markerboards - Level 2.

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3. All Areas receiving Wall Coverings, non-textured, flat, egg-shell, gloss or semi-gloss paint - Level 5. Backroll application of sealer. Level 5 requires one of the following.

   a. Skim coat: A thin skim coat of joint compound, or a material manufactured especially for this purpose, shall be applied to entire surfaces. Surfaces shall be smooth and free of tool marks and ridges.
   b. Acrylic latex-based coating, spray apply: USG SHEETROCK Brand Primer-Surfacer Tuf-Hide or ProForm Surfacer/Primer by National Gypsum or equal. Apply to 15-20 mils wet film thickness to entire surface.
   c. "Smooth Coat" level 5 by Westpac Materials, Orange, CA.
   d. Additionally apply primer coat per Section 09 90 00 Painting.

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3.6 FINISHES

A. Provide Smooth Level 5 Mock-up for Architect's approval before proceeding with Work.

3.7 INSTALLATION OF HIGH-PERFORMANCE TILE BACKER

A. Install panels to framing. Precut board to required sizes and make all cutouts. Butt ends and edges. Cut board to fit by scoring and breaking or by sawing from face side. Install Board horizontally or vertically at non-rated walls, vertically at rated walls as required by UL Design.

B. Secure to light gauge steel with 1 inch -1-5/8 inch waferhead or buglehead, multilevel thread, sharp point drywall screw (Type S Hi-Lo) and to heavy gauge steel with 1 inch -1-5/8 inch waferhead or buglehead, fine thread, drill point drywall screw (Type S-12). For Wood framing: ASTM C1002, No. 2 Phillips recessed, bugle head, power-driven, Type W, minimum penetration 5/8 inch. Space fasteners 6 inches on centers for walls and ceilings.

C. For joints and angles in tile areas: Apply 2 inches glass fiber tape over joints. Embed tape in adhesive used to set tile. Allow joints to dry prior to setting tile. Caulk openings with flexible sealant prior to installation of tile.

D. For installation as finished material (non-tile areas): Embed with 2 inch 10x10 glass mesh tape set with GP Speed Set setting compound or equal. Trowel GP Speed Set (skim coat) over entire Dens-Shield panel to product smooth surface. Prime with alkyd primer before painting.

3.8 EXTERIOR GYPSUM SHEATHING INSTALLATION

A. Install per manufacturer’s instructions.

B. Erect exterior gypsum sheathing horizontally with edges butted tight and ends occurring over firm bearing. Tack into place sufficiently to hold material until permanent attachment is provided by self-furring lath fasteners for cement plaster application. Install screw pattern per Gypsum Association G216 for vertical application.

C. Treat joints per manufacturer’s system for exterior sheathing.

3.9 TOLERANCES

A. Maximum Variation from True Flatness: 1/8 inch in 10 feet in any direction.

END OF SECTION

PART 1 - GENERAL

1.1 SECTION INCLUDES

A. Ceramic Tile at floors using thin set application method and ceramic tile at walls and base using thinset application method.

B. Related Sections.

1. Section 01 35 42, CALGreen Requirements.
2. Section 09 29 00, Gypsum Board.

1.2 REFERENCE STANDARDS

A. Conform to current adopted reference standards by date of issue of the current code cycle and the date of the Contract Documents.

B. ADA - Americans with Disabilities Act of 1990 as amended

1. ADA Standards - ADA Title II Regulations and the 2010 ADA Standards for Accessible Design.

C. California Green Building Standards Code, CALGreen - 2019.

D. ANSI/TCNA A108.1B - Installation of Ceramic Tile on Cured Portland Cement Mortar Setting Bed with Dry-set or Latex-Portland Cement Mortar.

E. ANSI/TCNA A108.5 - Installation of Ceramic Tile with Dry-Set Portland Cement Mortar or Latex-Portland Cement Mortar.

F. ANSI/TCNA A108.10 - Installation of Grout in Tile Work.

G. ANSI/TCNA A118.6 - Cement Grouts for Tile Installation.

H. ANSI/TCNA A118.1 - Dry-Set Portland Cement Mortar.

I. ANSI/TCNA A118.4 - Latex-Portland Cement Mortar.

J. ANSI/TCNA A118.7 - Polymer Modified Tile Grouts for Tile Installation.

K. ANSI/TCNA A118.10 - Bonded Waterproof Membranes for Thin-set Ceramic Tile and Dimension Stone Installation.

L. ANSI/TCNA A137.1 - Ceramic Tile.

M. ASTM A185 - Steel Welded Wire Fabric, Plain, for Concrete Reinforcement.

N. ASTM C144 - Aggregate for Masonry Mortar.

O. ASTM C150 - Portland Cements,

P. ASTM C207 - Hydrated Lime for Masonry Purposes.

Q. ASTM C373 - Water Absorption, Bulk Density, Apparent Porosity and Apparent Specific Gravity of Fired Whiteware Products.

R. ASTM D1056 - Flexible Cellular Materials.

S. ASTM C1178 - Coated Glass Mat Water-Resistant Gypsum Backing Panel.

T. ASTM C171 - Sheet Materials for Curing Concrete.

U. ASTM C920 - Elastomeric Joint Sealants.

V. TCNA (Tile Council of North America) - Handbook for Ceramic Tile Installation, Latest Edition.

1.3 SUBMITTALS

A. Product Data: For each type of tile, bond coat, grout, and other products specified.

B. CALGreen Submittals:

1. Product Data Sheets and Declaration Statements showing compliance with CALGreen Code per 1.04.D.

C. Shop Drawings: Include following:

1. Tile patterns and locations.

2. Widths, details, and locations of expansion, contraction, control, and isolation joints in tile substrates and finished tile surfaces.

D. Samples for Verification: Of each item listed below, prepared on Samples of size and construction indicated. Where products involve normal color and texture variations, include Sample sets showing full range of variations expected.

1. Each type and composition of tile and for each color and texture required, at least 12 inches square, mounted on braced cementitious backer units, and with grouted joints using product complying with specified requirements and approved for completed work in color or colors selected by Architect.

2. Full-size units of each type of trim and accessory for each color required.

3. Metal edge strips in 6-inch lengths.

E. Product Certificates: Master Grade Certificate signed by the manufacturer certifying that products furnished comply with requirements of Standard Grade.

F. Qualification Data: For firms and persons specified in "Quality Assurance" Article to demonstrate their capabilities and experience. Include lists of completed projects with project names and addresses, names of architects and owners, and other information specified.

1.4 QUALITY ASSURANCE

A. Manufacturer's Qualifications: Company specializing in the manufacture of products specified in this Section with minimum five years' experience.

B. Installer Qualifications: Engage experienced installer who has completed tile installations similar in material, design, and extent to that indicated for this Project and with record of successful in-service performance. Minimum 5 years of documented experience of tile installation.

1. Installer-Tile Layer: Journeyman Level Classification required, recognized by California Directory of Industrial Relations or the U.S. Department of Labor. Certification required or Installer employs Certified Tile Installer (CTI) by the Ceramic Tile Education Foundation (CTEF)

C. Source Limitations for Tile: Obtain each color, grade, finish, type, composition, and variety of tile from one source with resources to provide products from same production run for each contiguous area of consistent quality in appearance and physical properties without delaying Work.

D. California Green Building Standards Code, CALGreen 2019.

1. Adhesives, sealants, primers, and caulks shall comply with air quality management district rules where applicable, or SCAQMD Rule 1168 VOC limits, per CALGreen Tables 5.504.4.1 and 5.504.4.2.

E. Source Limitations for Setting and Grouting Materials: Obtain ingredients of uniform quality for each bond coat, and grout component from single manufacturer and each aggregate from one source or producer.

F. Mockups: Before installing tile, construct mockups for each form of construction and finish required to verify selections made under Sample submittals and to demonstrate aesthetic effects and qualities of materials and execution. Build mockups to comply with following requirements, using materials indicated for completed Work.

1. Locate mockups in location and of size indicated or, if not indicated, as directed by Architect.

2. Notify Architect 7 days in advance of dates and times when mockups will be constructed.

3. Demonstrate proposed range of aesthetic effects and workmanship.

4. Obtain Architect's approval of mockups before proceeding with final unit of Work.

5. Maintain mockups during construction in undisturbed condition as standard for judging completed Work.

a. When directed, demolish and remove mockups from Project site.

G. Pre-installation Conference: Conduct conference at Project site to comply with requirements of Division 01, General Requirements.

H. Tile Adhesives and Joint Sealers: As recommended by the tile manufacturer. Comply with VOC Limits set by .

1.4 QUALITY ASSURANCE

A. Manufacturer's Qualifications: Company specializing in the manufacture of products specified in this Section with minimum five years' experience.

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3. Demonstrate proposed range of aesthetic effects and workmanship.

4. Obtain Architect's approval of mockups before proceeding with final unit of Work.

5. Maintain mockups during construction in undisturbed condition as standard for judging completed Work.

a. When directed, demolish and remove mockups from Project site.

G. Pre-installation Conference: Conduct conference at Project site to comply with requirements of Division 01, General Requirements.

H. Tile Adhesives and Joint Sealers: As recommended by the tile manufacturer. Comply 1.05 DELIVERY, STORAGE AND HANDLING

1.05 DELIVERY, STORAGE AND HANDLING

A. Deliver products to site only in cartons which have been grade sealed by manufacturer in accordance with ANSI A137.1 and with grade seals unbroken. Seconds grade seal quality not permitted.

B. Tiles delivered to job or installed in Work that do not fall within specified standards of quality or accepted color range shall be removed from jobsite and properly be replaced with acceptable material.

C. Store and protect products in dry, secure areas.

1.6 ENVIRONMENTAL REQUIREMENTS

A. Do not install volatile materials in a closed, unventilated environment.

B. Maintain 50 degrees F or above during installation of adhesive and grout materials.

C. Shade work from direct sunlight during tile installation as needed to prevent rapid evaporation caused by excessive heat.

1.7 MAINTENANCE

A. Extra Materials

1. Extra Materials shall be from same production run as installed materials.

2. Wrap or crate for storage and label for contents and dates and locations of related installations.

3. Deliver Extra Materials to Site as directed by Owner.

4. Tile. For each type, size and color or finish of tile provide, as extra materials, a quantity equal to approximately 2-percent of the quantity required for its installation; round quantity up to next higher full carton.

5. Special Shapes. For each type, size and color or finish of special shaped tile required, provide, as extra materials, a quantity equal to the following.

    a. Coved Base: 10-linear-feet
    b. Formed Coved Base Corners: 6 pieces, each inside and outside
    c. Bullnose Tile: 15-linear feet
    d. Bullnose Corner: 6 pieces

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Products of following manufacturers form basis for design and quality intended.

1. Dal-Tile, Corona, CA./American Olean Tile, City of Industry, CA.

B. No Substitutions.

2.2 TILE

A. Ceramic Mosaic Floor Tile: ANSI/TCA A137.1, conforming to following:with VOC Limits set by .

1. Moisture Absorption: 0 to 0.5 percent, (impervious) ASTM C373
2. Size: as indicated on drawings
3. Surface Finish: as indicated on drawings
4. Colors: as indicated on drawings
5. Patterns: Per Architectural Drawings.
6. Slip Resistant: Ceramic Tile flooring shall be stable, firm, and slip resistant. CBC Section 11B-302.1.

B. Ceramic Wall Tile: ANSI/TCA A137.1, conforming to following:

1. Moisture Absorption: As permitted by ANSI A137.1.
2. Size: as indicated on drawings
3. Surface Finish: as indicated on drawings
4. Colors: as indicated on drawings
5. Patterns: Per Architectural Drawings.

C. Slip Resistant: Ceramic Tile flooring shall be stable, firm, and slip resistant. CBC Section 11B-302.1.

D. Base: Match wall tile for moisture absorption, surface finish and color, coved bottom and as specified on drawings. Where no wall tile is installed, match floor tile, 6" high.

E. Wainscot Cap: Match wall tile for moisture absorption, surface finish and color, bullnosed top edge. Coordinate sizes and coursing of adjoining tile.

F. Corners: coved at inside corners and bullnose at exterior corners.

G. Colors and Patterns: as indicated on drawings

2.3 BOND COAT

A. ANSI/TCNA A118.1 - Dry-Set Portland Cement Mortar.

B. ANSI/TCNA A118.4 - Latex Portland Cement Mortar.

2.4 GROUT

A. Grout: ANSI/TCNA A118.3, chemical-resistant type consisting of epoxy resin and hardener. Manufacturers:

1. Custom Building Products. Product: Epoxy Grout.
2. Refer to Finish Schedule on Drawings.
3. Or equal in accordance with Division 01, General Requirements for Substitutions. Colors as selected by Architect.

2.5 ACCESSORIES

A. Curing Paper: Kraft paper conforming to ASTM C171.

B. Grout Sealer for Walls and Floors, epoxy-based grouts.

1. Pro Spec Grout Sealer (acrylic), by Bonsai American Co, Charlotte, NC.
2. Grout Armor Color Sealer (acrylic), by Grout Armor, Fort Lauderdale, FL
3. Acrylic Grout Sealer (acrylic), by Glaze 'N Seal.
4. MicroGuard AD708 (Silane), by Adsil, Palm Coast, FL.
5. Silox 8 (Silane), by Bostik, Middleton, MA.
6. Or equal and as recommended by grout manufacturer.

C. Edge Strips, Coves:

1. Angle, L-shape, reducers, or T-shape, height to match tile and setting-bed thickness, metallic or combination of metal and PVC or neoprene base, designed specifically, for flooring applications.
2. Acceptable manufacturer: Schluter Systems or approved equivalent.
3. Edge Strip - Floors: Schluter-Reno Series and Schluter-Schiene Series . Size for tile materials specified.
4. Cove Base: Schluter-DILEX-AHK; anodized aluminum, trapezoid-perforated

anchoring leg, 3/8" radius. Thickness per tile specified.

5. Edge Strip - Walls: Schluter-JOLLY edge-protection profile for the outside corners. Size for tile materials specified.

6. Material: Satin Anodized Aluminum (AE).

7. Colors, sized: Refer to Drawings.

D. Corner Trims: Aluminum

1. Manufacturer: Profilitec

2. Product: Mosaictec RJF, Invisible Aluminum profile for mosaic.

3. Finish: Silver Anodized aluminum.

I. High Performance (Glass Mat) Water-Resistant Tile Backing Board: Refer to Section 09 29 00.

2.6 EXPANSION JOINT MATERIALS

A. Joint Sealer: ASTM C920

1. Vertical Joints: One part silicone sealant, non-sag, elongation movements 25/25 percent, Shore A, hardness range 20 -27, Pecora 890FTS and 890FTS-TXTR.

2. Horizontal Joints: Polyurethane joint sealant; ASTM C 920, Type M, Grade NS, Class 25, Use T, M, A and O. Pecora DynaTred or equal.

3. Color: to match grout color.

B. Primer: Non-staining type, recommended by sealant manufacturer to suit application.

C. Joint Cleaner: Non-corrosive and non-staining type, recommended by sealant manufacturer; compatible with joint forming materials.

D. Joint Backing: ASTM D1056; round, closed cell polyethylene foam rod; oversized 25 percent larger than joint width; Backer Rod Mfg. DENVER FOAM or Nomaco Green rod.

E. Bond Breaker: Pressure sensitive tape recommended by sealant manufacturer to suit application. Apply to bottom of joints that are too shallow to receive foam backer rod.

1

PART 3 - EXECUTION

3.1 EXAMINATION

A. Verify that surfaces are ready to receive work. Verify types of materials that may have been in contact with surfaces.

B. Beginning of installation means installer accepts condition of existing substrate.

C. Verify waterproof paper and Backer Units have been installed per Section 09 29 00 for thin set application on walls.

3.2 PREPARATION

A. Protect surrounding work from damage or disfiguration.

B. Vacuum clean existing substrate and damp clean.

C. Seal substrate surface cracks with filler. Level existing substrate surfaces to acceptable flatness tolerances.

3.3 MIXING BOND COAT

A. Use brand of prepackaged dry mix specified by manufacturer.

B. Mixing: Mix dry set Portland-cement bond coat or latex Portland-cement bond {epoxy bond} coat in accordance with manufacturer's instructions.

C. Proper bond coat consistency is such that when applied with recommended notched trowel to backing, ridges formed in bond coat will not flow or slump.

D. During use, remix mortar occasionally. Additional water or fresh materials shall not be added after initial mixing. Mortar shall not be used after initial set.

3.4 INSTALLATION: THIN SET AT FLOORS

1

A. FLOORS: Install in accordance with TCNA Handbook for Ceraic and ANSI A108.5 and A118.1.Tile Installation for thin-set application;

D. Thickness of Setting Bed: Approximately 1-3/4 inches.

1. Thickness of setting bed at slope to drains: High point shall be not less than 2 inches not more than 9 inches below top of finished dam and shall have a minimum of 1/4 inch per foot pitch toward drain.

E. Firmly tamp setting bed to levels required.

F. Allow setting bed to cure in accordance with ANSI/TCNA A108.1.

3.5 INSTALLATION: THIN SET AT WALLS.

A. Walls: Install in accordance with TCNA Handbook for Ceramic and ANSI A108.5 and A118.1.Tile Installation for thin-set application:

1. No. W245 for Coated Glass Mat Water-Resistant Gypsum Backing Panel. ASTM C1178, Georgia Pacific Dens-Shield Tile or equal.

B. Align wall tile grout with floor tile grout.

3.6 BOND COAT APPLICATION

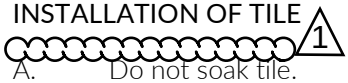
A. Clean surface thoroughly. Dampen if very dry, but do not saturate.

B. Apply bond coat with flat side of trowel over an area no greater than covered with tile while bond coat remains plastic.

C. Within ten minutes before applying tile and using a notched trowel of type recommended by bond coat manufacturer, comb bond coat obtain even setting bed without scraping backing material.

D. Cover surface uniformly with no bare spot, with sufficient bond coat to ensure a minimum bond coat thickness of 3/32 inch between tile and backing after tile has been beaten into place. Tile shall not be applied to skinned-over bond coat.

3.7 INSTALLATION OF TILE



A. Do not soak tile.

B. Set tile firmly on bond coat over substrate surfaces with minimum of 95 percent coverage at floors and wet areas. Back-butter ribbed tiles and other tiles in accordance with ANSI/TCNA 108.5. Spacers on tile determine joint width between tile. Strings or pegs may be used to space tile that have no spacers. Bring all surfaces to a true plane at proper position or elevation. Thoroughly beat-in all tile with a beating block while bond coat is still plastic. Beating shall fill minimum of 95 percent of entire space between units and setting bed. 80 percent coverage is permitted for walls in non-wet areas.

C. Lay tile to pattern indicated on Drawings or request tile pattern from Architect. Do not interrupt tile pattern through openings.

D. Place edge strips at exposed tile edges.

E. Cut and fit tile tight to penetrations through tile. Align floor, base and wall joints where floor tiles and wall tiles are same width.

F. Place tile joints uniform in width, subject to variance in tolerance allowed in tile size. Make joints watertight without voids, cracks, excess setting bed mix or excess grout. All inside corners shall be coved and exterior corners shall be bullnose. No butted 90 degree intersections permitted. All outside corners shall be bullnose. All tile edges and terminations shall have bullnose unless noted otherwise.

G. Sound tile after setting. Replace hollow sounding units.

H. Keep expansion or control joints free of setting bed mix or grout. Apply sealant to joints.

I. Allow tile to set for a minimum of 16 hours prior to grouting.

J. Apply sealant to junction of tile and dissimilar materials and junction of dissimilar

planes.

K. If tile is face-mounted, remove paper within one hour after tile is set and adjust all tiles that are out of line or level. Use no more water than necessary in removing paper.

L. Align wall tile grout with floor tile grout.

3.8 INSTALLATION OF GROUT

A. Remove bond coat from face and edges of tile.

B. Mixing: Refer to manufacturer's directions.

C. Dry blend contents of an entire container of grout prior to mixing with water or latex.

D. Use caution to prevent scratching or damaging tile surfaces.

E. Dampen dry joints prior to grouting. Do not leave puddles of water in joints before grouting.

F. Force maximum amount of grout into joints. Cushion edge tile shall be finished evenly to depth of cushion. Square-edge tile shall be finished flush with surface. Finished joint shall be uniform in color, smooth and without pinholes, voids or low spots.

G. Grout width: 1/8" unless noted otherwise on drawings.

3.9 CURING

A. Damp-Cure grout for a minimum of 72 hours. Remove and replace improperly cured grout.

1. with 40-pound kraft paper.

2. Polyethylene curing membrane not permitted.

3.10 EXPANSION JOINTS

A. Install expansion joints over any construction (cold joint), contraction joint, expansion joint, at juncture of floors and walls, changes in material at other restraining surfaces such as curbs, columns, bases, and wall corners and where recommended by TCNA EJ171Afor mortar bed tile or EJ171F for thin set tile.

B. Expansion joint shall penetrate full depth of setting bed.

C. Do not damage waterproofing membrane.

D. Install sealant in accordance with manufacturer's instructions, using hand pointing tools.

E. Measure joint dimensions and size materials to achieve required width/depth ratios. Minimum width: 3/8 inch.

F. Install joint backing to achieve a neck dimension no greater than 1/3 joint width. Concrete shall be fully cured.

G. Install bond breaker where joint backing is not used. Install removable masking

material to maintain clean lines and protect adjoining surfaces.

H. Apply sealant within recommended application temperature ranges. Consult manufacturer when sealant cannot be applied within these temperature ranges. Do no install sealant on wet or damp surfaces.

I. Install sealant free of air pockets, foreign embedded matter, ridges and sags.

J. Tool joints concave, channel shaped or as detailed. Use slicking agent type recommended by manufacturer.

3.11 EDGE STRIP

A. Install according to manufacturer's recommended procedures.

3.12 CLEANING

A. Clean tile work and adjacent surfaces.

3.13 PROTECTION

A. Protect finished installation.

B. Do not permit traffic over finished floor surface.

END OF SECTION

PART 1 - GENERAL

1.1 WORK INCLUDES

A. Acoustical panels, lay-in.

B. Related Sections:

1. Section 01 35 42, CALGreen Requirements.

2. Section 09 53 23, Acoustical Suspension Systems.

1.2 REFERENCE STANDARDS

A. Conform to current adopted reference standards by date of issue of the current code cycle and the date of the Contract Documents.

B. CBC - California Building Code, 2019.

C. California Green Building Standards Code, CALGreen - 2019.

D. ASTM E84 - Surface Burning Characteristics of Building Materials.

E. ASTM E1264 - Acoustic Ceiling Products.

1.3 SUBMITTALS

A. Product data for acoustical panels.

B. Three samples illustrating material and finish of acoustic units.

C. Manufacturer's installation instructions.

D. CALGreen Submittals:

1. Product Data Sheets and Declaration Statements showing compliance with CALGreen Code per 1.04.C.

1.4 QUALITY ASSURANCE

A. Qualifications

1. Manufacturer: Company specializing in manufacture of ceiling panels with five years minimum experience.

2. Installer: Company with three years minimum experience.

B. Fire Classification Requirements: ASTM E84, flame spread of less than 25 and smoke density rating of less than 450, Class I, California Building Code Table 803.5, 2019 CBC, Tables 8A and 8B.

C. California Green Building Standards Code, CALGreen - 2019.

1. Adhesives, sealants, primers, and caulks shall comply with air quality management district rules where applicable, or SCAQMD Rule 1168 VOC limits, per CALGreen Tables 5.504.4.1 and 5.504.4.2.

2. Paints and Coatings shall comply with VOC limits in Table 1 of the ARB, per Table 5.504.4.3.

3. Composite wood products (plywood, particle board, medium density fiberboard) shall comply with Formaldehyde limits per CALGreen Table 5.504.4.5.

1.5 ENVIRONMENTAL REQUIREMENTS

A. Interior wet work shall be completed prior to installation of panels. Windows and doors shall be in place. HVAC systems shall be installed and operable where necessary to maintain a temperature range of 60 to 85 degrees F and maximum 70 percent relative humidity.

1.6 WARRANTY

A. Acoustical Panel: Submit a written warranty executed by the manufacturer, agreeing to repair or replace panels that fail within the warranty period. Failures include, but are not limited to the following:

1. Acoustical Panels: Sagging and warping

2. Grid System: Rusting and manufacturer's defects

B. Warranty Period:

1. Acoustical panels: One (1) year from date of substantial completion

C. The Warranty shall not deprive the Owner of other rights the Owner may have under other provisions of the Contract Documents and will be in addition to and run concurrent with other warranties made by the Contractor under the requirements of the Contract Documents.

1.7 EXTRA STOCK

A. Provide extra quantity of acoustic units in the amount of one box of each type specified.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Products of the following manufacturers form the basis for design and quality intended.

1. Armstrong World Industries, Lancaster, PA.

2. USG Corporation, Chicago, IL.

3. CertainTeed Corporation, Malvern, PA.

B. Or equal as approved in accordance with Division 01, General Requirements for substitutions.

2.2 MATERIALS

A. Acoustical Panels: Armstrong Ultima, ASTM E1264

1. Size: 24" x 48"

2. Thickness: 3/4"

3. Light Reflectance: 0.90

4. NRC: 0.75

5. CAC: 40

B. Retention Clips: Armstrong #414 Retention Clip or equal. Refer to INSTALLATION Part 3 for conditions requiring clips.

C. Hold-Down Clips for Fire-Rated Ceilings: Armstrong UHDC Clip at fire-rated corridors and exit ways, manufacturer's standard at non-rated ceilings.

D. Colors: Refer to Drawings.

PART 3 - EXECUTION

3.1 INSPECTION

A. Verify that existing conditions are ready to receive work.

B. Verify that layout of hangers will not interfere with installation of acoustic units.

C. Beginning of installation means acceptance of existing conditions.

3.2 INSTALLATION

A. Conform to Interpretation of Regulations - DSA IR 25-2.13.

B. Fit acoustic units in place, free from damaged edges or other defects detrimental to appearance and function.

C. Where square units are indicated, lay directional patterned units in basket weave pattern. Fit border neatly against abutting surfaces.

D. Install acoustic units level, in uniform plane, and free from twist, warp and dents. Replace damaged or soiled units.

E. Provide for complete accessibility for all units.

F. Install Hold Down Clips at Fire-Rated ceilings.

G. Install Retention Clips at multipurpose corridor ceilings.

END OF SECTION

PART 1 - GENERAL

1.1 SECTION INCLUDES

A. Independent suspended ceiling system, specialty ceiling and panels.

B. Suspension Accessories and hardware.

1.2 REFERENCE STANDARDS

A. Conform to current adopted reference standards by date of issue of the current code cycle and the date of the Contract Documents.

B. ASTM C635 - Metal Suspension Systems for Acoustical Tile and Lay-in Panel Ceilings

C. ASTM C636 - Installation of Metal Ceiling Suspension Systems for Acoustical Tile and Lay-in Panels.

D. ASTM E84 - Surface Burning Characteristics of Building Materials.

E. Chapter 19A, California Building Code.

F. Chapter 23A, California Building Code.

1.3 SUBMITTALS

A. Procedures: Make submittals in accordance with Division 01 General Requirements on submittals.

B. Product Data: Submit manufacturer's product specifications and installation instructions for each ceiling material required. For each suspension system, include certified laboratory test reports and other data as may be required to show compliance with the documents.

C. Samples: Submit 3 each representative samples of each material that is to be exposed in the finished work. Include full range of colors and finishes.

D. Shop Drawings showing complete reflected ceiling plan. Drawings shall clearly show the following:

1. Layout of ceiling system and panels.

2. Suspension system layouts showing suspension points and connections to structural.

3. Locations of all ceiling penetrations, including, lights, air diffusers, fire sprinklers, speakers or other penetrations.

4. Complete installation details.

1.4 QUALITY ASSURANCE

A. Manufacturer: Company specializing in manufacture of ceiling suspension system with five years minimum experience.

B. Installer: Company with five years minimum experience.

C. Fire Performance Characteristics: Identify acoustical ceiling components with appropriate markings of applicable testing and inspecting organization.

1. Surface Burning Characteristics: As follows, tested per ASTM E84 and complying with ASTM E 1264 for Class A products.

a. Flame Spread: 25 or less
b. Smoke Developed: 50 or less

1.5 DELIVERY, STORAGE AND HANDLING

A. Delivery of materials: Deliver materials in original, unopened packages clearly labeled with manufacturer's name, item description, part number, type and class, as applicable.

B. Storage: Store in manner that will prevent warpage, scratches, or damage of any kind. Prevent interference to/by other trades and any other adverse job conditions due to storage locations or methods.

C. Handling: Handle in such manner to ensure against racking, distortion, or physical damage of any kind.

1.6 PROJECT CONDITIONS

A. Commence installation of materials only when conditions are within the limits established by the manufacturer.

B. All work required above ceiling is to be completed prior to installation of ceiling panels.

1.7 WARRANTY

A. Acoustical Panel: Submit a written warranty executed by the manufacturer, agreeing to repair or replace acoustical panels that fail within the warranty period. Failures include, but are not limited to:

1. Acoustical Panels: Sagging and warping

2. Hanging System: Rusting and manufacturer's defects

B. Warranty Period:

1. Acoustical panels: 10 years from date of substantial completion.

2. Hanging: 10 years from date of substantial completion.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Products of the following manufacturers form the basis for design and quality intended.

1. Armstrong World Industries, Fullerton, CA.

B. Or equal as approved in accordance with Division 01, General Requirements for substitutions.

2.2 ACOUSTICAL CEILING UNITS

1

A. Acoustical Panels Type 1

1. Surface Texture: Fine

2. Composition: Mineral Fiber

3. Color: White

4. Size: Teg 60 Degree Tri 24" Base, Teg 60 Degree LPE 24" Base, Teg 60 Degree RPG 24" Base.

5. Edge Profile: Beveled tegular for interface with **Suprafine XL 9/16" exposed tee grid.**

6. Noise Reduction Coefficient (NRC): ASTM C 423; Classified with UL label on product carton, 0.75.

7. Ceiling Attenuation Class (CAC): ASTM C 1414; Classified with UL label on product carton, 35.

8. Articulation Class (AC): ASTM E 1111; N/A

9. Emissions Testing: Section 01350 Protocol, < 13.5 ppb of formaldehyde when used under typical conditions required by ASHRAE Standard 62.1-2004, "Ventilation for Acceptable Indoor Air Quality"

10. Flame Spread: ASTM E 1264; Class A (UL)

11. Light Reflectance (LR): ASTM E 1477; White Panel: Light Reflectance: 0.90.

12. Dimensional Stability: HumiGuard Plus - Temperature is between 32°F (0° C) and 120°F (49° C). It is not necessary for the area to be enclosed or for HVAC systems to be functioning. All wet work (plastering, concrete, etc) must be complete and dry.

13. Antimicrobial Protection: Bioblock - Resists the growth of mold/mildew and bacterial growth.

14. Acceptable Product: **Ultima Designflex Pattern SH5, Reference ProjectWorks #02243657, as manufactured by Armstrong World Industries.**

2.3 SUSPENSION SYSTEM MATERIALS

1

A. Components: All main beams and cross tees shall be commercial quality hot-dipped galvanized (galvanized steel, aluminum, or stainless steel) as per ASTM A 653. Main beams and cross tees are double-web steel construction with 15/16 IN type exposed flange design. Exposed surfaces chemically cleansed, capping pre-finished galvanized steel (aluminum or stainless steel) in baked polyester paint. Main beams and cross tees shall have rotary stitching (exception: extruded aluminum or stainless steel).

1. Structural Classification: ASTM C 635 HD.

2. Color: White and match the actual color of the selected ceiling tile, unless noted otherwise.

3. Acceptable Product: **Suprafine XL 9/16" for Designflex pattern SH5 exposed tee grid as manufactured by Armstrong World Industries, Inc. Reference ProjectWorks #02243657.**

B. Attachment Devices: Size for five times design load indicated in ASTM C 635, Table 1, Direct Hung unless otherwise indicated.

C. Edge Molding and Trim: Metal or extruded aluminum of types and profiles indicated or, if not indicated, manufacturer's standard moldings for edges and penetrations, including light fixtures that fit type of edge detail and suspension system indicated. Provide moldings with exposed flange of the same width as exposed runner.

1. Axiom Classic 4" – AX4STR

D. Accessories

1. AXTBC, T-Bar connector clip

2. AX4SPLICE2, splice plate with setscrews

a. NOTE: JLC Tech T-Bar Flex LED Light to be used (Reference ProjectWorks #02243657)

PART 3 - EXECUTION

3.1 INSPECTION

A. Verify that existing conditions are ready to receive work.

B. Verify that layout of hangers will not interfere with other work.

C. Verify dimensions prior to installation.

D. Beginning of installation means acceptance of existing conditions.

3.2 INSTALLATION

A. Install independent suspended ceiling system per manufacture's details and instructions.

3.3 CLEANING

A. Touch up all minor scratches and spots, as acceptable, or replace damaged sections when touch-up is not permitted.

B. Removal of debris: Remove all debris resulting from work of this section.

3.4 TOLERANCES

A. Variation from Flat and Level Surface: 1/8 inch in 10 feet.

END OF SECTION

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PART 1 - GENERAL

1.1 SECTION INCLUDES

A. Markerboards.

B. Trim, chalkrail and accessories.

1.2 REFERENCE STANDARDS

A. Conform to current adopted reference standards by date of issue of the current code cycle and the date of the Contract Documents.

B. ASTM B209 - Aluminum-Alloy Sheet and Plate.

C. ASTM A653/A 653M Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process

D. ASTM B221 - Aluminum-Alloy Extruded Bars, Rods, Wire, Shapes and Tubes.

E. PEI - Porcelain Enamel Institute - Performance Specifications for Porcelain Enamel Markerboards.

F. ASTM A424 - Sheet Steel for Porcelain Enameling.

G. ANSI A208.1 - Mat Formed Wood Particleboard.

1.3 SUBMITTALS

A. Shop drawings indicating, wall elevations, sizes, dimensions and joint locations between panels, and mounting details.

B. Provide product data on trim and accessories.

C. Three samples illustrating materials and finish, color and texture of markerboard.

D. Include maintenance information on regular cleaning, stain removal and removal of damaged components.

1.4 WARRANTY

A. General Warranty: Special Markerboard warranty specified in this Article shall not deprive Owner of other rights Owner may have under other provisions of Contract Documents and shall be in addition to, and run concurrent with, other warranties made by Contractor under requirements of Contract Documents.

a. Marker Tray:

1) Standard Continuous, solid, blade-type aluminum tray with ribbed section and injection molded end closures at bottom of each markerboard.

b. Flag Holder:

1) Provide one (1) flag holder for each classroom space and offices.

PART 2 – PRODUCT

2.1 MANUFACTURES:

2.1.1 SLIDING MARKERBOARD

A. Horizontal Sliding Chalkboard units – as manufactured by: Claridge Products and Equipment, Inc., Harrison, Arkansas.

2.1.2 FIXED MARKERBOARD:

A. Visual Display Board Manufacturer: Claridge Products and Equipment, Inc., Harrison, Arkansas.

2.2 MATERIALS:

2.2.1 SLIDING MARKER BOARDS

A. Horizontal Sliding Chalkboard/Markerboard Units

1 1. Series: (Architect to specify from manufacturer's standard units – two-track;

a. Sliding Panels and/or Back Panel – Writing surface:
b. Sliding Panels and/or Back Panel – Tack surface:
1) Claridge Cork
2) Fabricork
3) Designer Fabric
4) Tan Nucork
5) Hook-Fab

2. Sizes: 4'-0" x 16'-0".

B. Metal Trim and Accessories: Provide aluminum extrusions as manufactured by Claridge Products and Equipment, Inc. Frame and exposed members shall be heavy gauge extruded aluminum and shall meet or exceed ASTM B221 Alloy Standards.

1. Finish: Anodized satin finish.

2. Chalktrough: Standard continuous, solid type aluminum accessory tray with ribbed section and injection molded end closures.

C. Adhesive: As recommended by manufacturer.

2.2.2 FIXED MARKER BOARDS
(MATERIALS FOR MARKERBOARD AND CHALKBOARD PANELS)

A. Writing Surface Face Sheet – Manufactured in accordance with Porcelain Enamel Institute's specification.

1. Shall be enameling grade cold rolled steel manufactured from a minimum of 30 percent post-consumer and post-industrial waste.

2. Enameling grade steel shall be coated with LCS³ Porcelain Enamel by Claridge Products and Equipment.

1

a. 3-Coat process shall include:

1) Bottom Ground Coat – 1.5 to 2.2 mils
2) Top Ground Coat – 2.0 to 2.8 mils
3) Top Cover (Color) Coat – 3.0 to 4.0 mils

3. Firing Temperature: Enamel shall be fired at lowest possible temperatures to reduce steel and porcelain stresses and achieve superior enamel and hardness.

B. Writing Surface Core

1. 7/16" Medium Density Fiberboard (MDF) composed of approximately 90% post-industrial waste.

C. Writing Surface Backing

1. Moisture Barrier Back

2. Foil Back

3. Aluminum Sheet Back

4. Steel Back

D. Factory Framed Markerboards.

1. Panel Size: See Drawings for Size.

7. Color: White

2.3 FABRICATION

A. Shop assembly: Provide Horizontal Sliding Units with all corners reinforced with angles to strengthen frame. Nylon ball bearing rollers at top of unit and nylon guide rollers at bottom of unit to be of sufficient size and number to eliminate vibration and provide smooth and quiet operation of the panels.

1. Porcelain Markerboard or Chalkboard:

a. Sliding Panels:
1) Face Sheet: Porcelain Enamel Steel
2) Core: ½" honeycomb
3) Backing: Steel

b. Back Panels:
1) Face Sheet: Porcelain Enamel Steel
2) Core: 7/16" MDF (Medium Density Fiberboard)
3) Backing: Moisture Barrier Back

2.4 ALUMINUM TRIM

A. Trim shall be 6063 alloy grade aluminum with T5 tempering in accordance with ASTM B221, and shall have 201-R1 satin anodize finish. (Color: Anodize and Powder Coat finishes optional)

1. Field-Applied Trim:

a. Screw-On Aluminum Trim
b. Slip-On Aluminum Trim
c. Snap-On Aluminum Trim

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B. Accessories:

1. Marker Tray/Chalktrough

a. Standard continuous, solid, blade-type aluminum tray with ribbed section and injection molded end closures at bottom of each markerboard or chalkboard.
b. Standard continuous, hollow, box-type aluminum tray with injection molded end closures at bottom of each markerboard or chalkboard.
c. Optional continuous, hollow aluminum tray with cast aluminum end closures at bottom of each markerboard or chalkboard.

2. Map Rail

a. Standard continuous 1" map rail with cork insert and end stops at the top of each markerboard and chalkboard.
b. Optional continuous 2" map rail with cork insert and end stops at the top of each markerboard and chalkboard.

1) Map Hooks: (Two map hooks furnished for map rail on factory-framed units.)

PART 3 - EXECUTION

3.1 INSPECTION

A. Verify that surfaces and internal wall blocking are ready to receive Work and dimensions are as indicated on shop drawings.

B. Beginning of installation means acceptance of substrate construction.

3.2 INSTALLATION

A. Install markerboards in accordance with manufacturer's instructions.

B. Establish bottom of frame perimeter at 24 inches for Kindergarten (26 inches 1st to 3rd Grades), (30 inches 4th to 6th Grade) (34 inches 7th to 9th Grades) (37 inches 10th Grade and higher) above finished floor or as approved by Architect.

C. Secure units level and plumb.

D. Where markerboard adjoins tackboard or chalkboard, join panels with H/Bar divider joint.

E. NO holes in markerboard permitted.

3.3 CLEANING

A. Clean markerboard surfaces and aluminum in accordance with manufacturer's instructions.

B. Cover markerboard surfaces with clear protective covering.

C. Remove protective cover at Date of Notice of Completion.

END OF SECTION

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PART 1 - GENERAL

1.1 SECTION INCLUDES

A. Operable Wall System shall be furnished, installed and serviced by wall manufacturer's authorized distributor, in compliance with the architectural drawings and specifications contained herein.

1.2 RELATED WORK

A. Structural Support: Structural support system required for suspending the operable wall shall be designed, installed and pre-punched by others, in accordance with ASTM E 557 and manufacturer's shop drawings.

B. Insulation: Sound insulation and baffles for the plenum area above the track system, under the permanent floor, inside air ducts passing over or around the operable wall, and in permanent walls adjoining the operable wall system shall be by others, in accordance with ASTM E 557.

C. Opening Preparation: Proper and complete preparation of the operable wall system opening shall be by others in accordance with ASTM E 557, and shall include floor leveling; plumbness of adjoining permanent walls; substrate and/or ceiling tile enclosures for the track system; and the painting and finishing of trim and other materials adjoining the head and jamb areas of the operable wall. Any permanent wall(s) receiving an adjustable or fixed wall jamb will require internal structural blocking in order to secure the jamb to the permanent wall. Refer to a copy of the shop drawings for additional details.

1.3 SYSTEM DESCRIPTION

A. The operable wall system shall consist of Individual Panels that are top supported by two (2) multi-directional carriers that are capable of negotiating 90° “X”, “L” and “T” intersections.

B. The operable wall system shall consist of acoustically rated panels tested in accordance with ASTM E 90 and ASTM E 413 test procedures, and shall have achieved a STC rating as specified herein (see "Acoustical Performance" article listed under Part 2 - Products).

1.4 QUALITY ASSURANCE

A. The operable wall shall have been tested in an independent acoustical testing laboratory in accordance with ASTM E 90 and ASTM E 413 test procedures.

B. The operable wall panel construction and finish materials shall consist of Class A rated materials in accordance with ASTM E 84.

C. The operable wall shall be installed by the manufacturer's authorized distributor in accordance with ASTM E 557.

1.5 REFERENCES

A. ASTM E 90: Laboratory Measurement of Airborne-Sound Transmission Loss of Building Partitions.

B. ASTM E 413: Determination of Sound Transmission Class (STC).

C. ASTM E 557: Architectural Application and Installation of Operable Partitions.

D. ASTM E 84: Surface Burning Characteristics of Building Materials.

E. ASTM A 653: Specification for General Requirements for Steel Sheet, Alloy-Coated (Galvannealed) by the Hot Dip Process.

F. ASTM C 423: Standard Test Method for Sound Absorption and Sound Absorption Coefficients by the Reverberation Room Method.

G. ATTM E 2190: Certification and testing for Insulated Glass inserts.

1.6 SUBMITTALS

A. Manufacturer shall provide written technical information and related detail drawings, which demonstrate that the products comply with contract documents for each type of operable partition specified.

B. Manufacturer shall provide detailed engineering drawings featuring track plan, panel elevation, horizontal and vertical details and beam punching template as required.

C. Manufacturer shall provide written test report of the independent acoustical testing laboratory certifying the attainment of the specified STC rating, upon request.

D. Manufacturer shall provide written instructions specifying the proper operation and maintenance of the operable wall system.

E. Manufacturer shall provide a color selector demonstrating the manufacturer's selections of the specified finish material. Samples shall consist of actual swatches of the specified finish material.

1.7 DELIVERY, STORAGE AND HANDLING

A. Panels shall be individually wrapped in a protective plastic covering to keep panels clean during delivery, storage and handling.

B. Panels shall be stored on edge and above the floor on cushioned blocking in a dry and ventilated area, protected from humidity and temperature extremes.

1.8 SEQUENCING/SCHEDULING

A. Beam Punching: Manufacturer shall provide beam punching template drawing detailing the anchor locations for the suspended track system (as required for Drop Rod Mounting), as required for the fabrication and installation of structural overhead support by others.

B. Track Installation: Scheduling of operable wall track installation shall occur after structural overhead support has been properly and completely fabricated and installed by others.

C. Panel Installation: Operable wall panel installation shall occur after fixed wall substrate construction is properly and completely installed by others, as required to protect panels from ongoing adjacent construction.

1.9 WARRANTY

A. Manufacturer shall warrant each operable wall panel and its component parts to be free from defects in material and workmanship for a period of five (5) years from the date of delivery to the original purchaser, when installed by an authorized KWIK-WALL distributor. KWIK-WALL also warrants the fixed top seals, track, carriers, and its component parts to be free from defects in material and workmanship for a period of ten (10) years. (Contact your local KWIK-WALL Distributor or KWIK-WALL Company for complete warranty information.) (Glass is specifically excluded from the warranty.)

PART 2 – PRODUCT

2.1 ACCEPTABLE MANUFACTURER

A. Operable walls shall be Series 3000, Model 3020GL Individual Panels / Multi-Directional as manufactured by KWIK-WALL Company.

2.2 PANEL CONSTRUCTION

A. Panel Dimensions: Standard panel dimension shall be a nominal 4" thick.

B. Panel Frame: Steel frame shall be 16-gauge galvanneal steel; horizontal top cross member shall be minimum 12-gauge galvanneal steel which meets or exceeds ASTM A 653 requirements. Frame shall be all-welded construction and shall be Class A rated, fire retardant, non-combustible and non-corrosive in accordance with ASTM E 84. Panel frame shall be designed to accept insulated glass unit 1 3/4" thick with 1" air space in opening cut out. (Glass opening size will vary based on panel height and width. Refer to shop drawings for sizes.)

C. Glass: Opening cut out in panel shall be glazed with insulated glass that is manufactured in accordance with ASTM E 2190. Glass type shall be an acoustical insulated glass unit 1 3/4" thick with 1" air space. Glass shall be retained in opening cut out using an aluminum extrusion.

D. Panel Weight: Maximum panel weight shall be 11.3 - 12.3 lb./ft.2 depending on STC rating, size and options selected.

2.3 OPERATIONS

A. Operation shall be Individual Panels with a Multi-Directional track system that allows the panels to negotiate 90° "X", "L" and "T" intersections as required for movement of panels from storage location(s) to various installed positions. Panels shall be top supported by two (2) carriers featuring dual horizontal precision bearings with high strength polymer tires riding on a structural aluminum track.

2.4 STACK ARRANGEMENTS

A. Stack Type: Panel storage configuration shall be (select):

1. Standard Perpendicular Stack: consisting of panels stacked perpendicular to the wall's installed position.

B. Stack Quantity: Panels shall be stored in separate stack areas as required for panel storage.

2.5 FINISHES

A. Finish Material Supplier: Finish material shall be:

1. Standard Factory Supplied: from manufacturer's standard selection of finish materials, as specified.

B. Finish Material Application: Finish material shall be:

1. Standard Factory Applied: by operable wall manufacturer. Customer supplied finish material samples must be submitted to manufacturer for testing and approval prior to acceptance and application.

2.6 PERIMETER TRI AND SEALS

A. Vertical Trim and Seals: Panels shall have vertical astragals containing flexible vinyl seals and incorporate reversible tongue-and-groove-type configurations for positive interlocking with adjacent panels. Vertical astragal type shall be:

1. Standard Trimless Astragal: consisting of an aluminum extrusion with tongue-and-groove-type vertical astragals. Vertical trim shall not be permitted on the panel faces, resulting in a minimal groove appearance between adjacent panels.

B. Horizontal Top Trim and Seals: Top seals shall consist of flexible vinyl sweep seals installed on both sides of the panel. The seals shall consist of a compressed bulb between two (2) fingers of vinyl. Top seal type shall be:

1. Standard Fixed Top Seals: consisting of continuous-contact flexible vinyl sealing against the bottom flange of the overhead track.

C. Horizontal Bottom Trim and Seals: Bottom seals shall consist of multiple fingers of flexible vinyl for positive contact and sealing with various floor surfaces. Bottom seal type shall be:

1. Standard Adjustable Bottom Seals: consisting of field adjustable, continuous-contact vinyl sweep with 2" nominal height with 3/4" of adjustment.

D. Horizontal and Vertical Panel Trim: All exposed panel trim and hinges shall be of one (1) similar color:

1. Dark Bronze.

2. Grey.

2.7 CLOSURE SYSTEMS

A. Initial Closure System: The lead panel (the first panel exiting the stack) shall form a seal vertically against a rigid wall surface, as accomplished by a:

1. Standard Bulb Seal: consisting of continuous-contact, flexible vinyl bulb seals installed along the vertical edge of the lead panel for positive compression against a rigid wall surface.

B. Final Closure System: The final closure panel (the last panel exiting the stack) shall form a seal vertically against a rigid wall surface. The type of final closure panel shall be:

1. Standard Hinged Panel(s) Closure: consisting of a panel hinged permanently and directly to a structural wall surface. The Hinged Panel(s) shall be equipped with an adjustable bottom seal, a lap-type extrusion for sealing against its adjacent panel (standard) or (optional) expander mechanism with a nominal 5" of travel, and a flush pull handle on each side of the panel.

2.8 ACOUSTICAL PERFORMANCE

A. Certification: The operable wall shall have been tested in an independent acoustical testing laboratory in accordance with ASTM E 90 and ASTM E 413 test procedures,

B. STC Rating: The operable wall acoustical performance rating shall be based on:

1. Standard acoustical substrate: with a standard rating of 43 or STC.

2.9 TRACK SYSTEMS

A. Track Type: The operable wall track system shall be extruded from structural aluminum alloy, which prohibits deterioration caused by rust or corrosion. The aluminum track shall have a durable anodized clear satin finish, which resists color fading and flaking. The track shall utilize grooves and interlocking steel pins for positive alignment of adjacent track sections. The track joints shall be reinforced overhead by a heavy-duty steel bracket made of hot-rolled, 3/8" thick plate steel. Aluminum track shall include an integral nut slot to accept a hardened steel square nut to facilitate attachment of each steel all-rod and splice brackets to the overhead structural support.

B. Track Size: The track size shall be (selected from Track and Carrier Selection Chart.

1. Type 425 Multi-Directional Aluminum Track: certified to be capable of supporting up to 525 lb. of total live load weight per panel.

2. Type 850 Multi-Directional Aluminum Track: certified to be capable of supporting up to 850 lb. of total live load weight per panel.

2.10 CARRIER SYSTEMS

A. Carrier Type: Each Individual Panel shall be top supported by two (2) carriers utilizing a 5/8" diameter pendant bolt. Each carrier shall consist of dual horizontal, permanently lubricated, precision ground steel bearings with high strength polymer tires as required for smooth and quiet operation. Multi-Directional carriers shall be capable of negotiating 90° “X”, “L” and “T” intersections as required for moving panels from storage location(s) to various installed positions.

B. CARRIER SIZE: The carrier size shall be:

1. Type 850 Multi-Directional Carrier: certified to be capable of supporting up to 850 lb. of total live load weight per panel.

2.12 SUSPENSION SYSTEMS

A. Mounting Systems: The track shall be supported by (select):

1. Standard Drop Rod Mount: consisting of adjustable rod of grade 2, 3/8" diameter threaded steel all-rod provided with 3/8" serrated steel nuts.

PART 3 – EXECUTION

3.1 INSPECTION

A. Proper and complete preparation of the operable wall system opening shall be by others in accordance with the architectural drawings, manufacturers shop drawings and ASTM E 557. Any deviation of the actual opening from these specifications shall be called to the attention of the architect prior to the installation of the operable wall,

B. Deficiencies in the operable wall opening shall be corrected by others prior to installation of the operable wall.

3.2 INSTALLATION

A. The operable wall system shall be installed by manufacturer's authorized distributor.

B. The operable wall shall be installed in accordance with manufacturer's written instructions, shop drawings and ASTM E 557 installation guidelines.

3.3 ADJUSTING AND CLEANING

A. The operable wall panels and track system shall be adjusted and cleaned in accordance with manufacturer's written instructions.

3.4 PROTECTION

A. The operable wall panels shall be stored in the stacked (retracted) position prior to acceptance by the owner's representative.

3.5 DEMONSTRATION

A. The operable wall manufacturer's authorized distributor shall demonstrate proper operation and explain proper and necessary maintenance requirements of the operable wall system to the owner's representative.

END OF SECTION

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SECTION 23 73 23
CUSTOM AIR HANDLING UNITS

PART 1 - GENERAL

1.01 SUMMARY

A. Provisions of Division 01 apply to this section.

B. Section Includes: Air conditioning equipment as indicated on drawings and as specified. Air conditioning equipment shall include but not be limited to the following:

1. Custom package rooftop multizone VAV air conditioning unit.

C. Related Sections:

1. Section 23 05 00: Basic Mechanical Requirements.

2. Section 23 05 50: Seismic Requirements for Equipment and Supports.

3. Section 23 07 13: Ductwork Insulation.

4. Section 23 09 00: Controls

1.02 REFERENCES

A. Air Movement and Control Association International (AMCA):

1. 211 - Certified Ratings Program - Product Rating Manual for Fan Air Performance.

2. AMCA 300 - Reverberant Room Method for Sound Testing of Fans.

3. AMCA 301 – Methods for Calculating Fan Sound Ratings from Laboratory Test Data.

B. Air Conditioning and Refrigeration Institute (ARI):

1. ARI 410 - Forced Circulation Air-Cooling and Air-Heating Coils.

C. American Society for Testing and Materials International (ASTM):

1. ASTM B117 - Standard Practice for Operating Salt Spray (Fog) Apparatus.

2. ASTM D2247 - Standard Practice for Testing Water Resistance of Coatings in 100% Relative Humidity.

3. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials.

D. Underwriters Laboratories, Inc. (UL):

1. UL 181 - Standard for Factory-Made Air Ducts and Air Connectors.

2. UL 723 - Tests for Surface Burning Characteristics of Building Materials.

3. UL 1995 - Standard for Safety Heating and Cooling Equipment.

E. Underwriters Laboratories of Canada (ULC):

1. CAN/ULC S102-M88 - Standard Method of Test for Surface Burning Characteristics of Flooring, Floor Covering, and Miscellaneous Materials and Assemblies.

F. American Society of Heating, Refrigeration, and Air-Conditioning Engineers (ASHRAE):

1. ASHRAE Standard 62 - Ventilation for Acceptable Indoor Air Quality.

G. National Electrical Manufacturers Association (NEMA):

1. NEMA - Table 12-10.

1.03 SUBMITTALS

A. Comply with provisions of Division 01 and Section 15010: Basic Mechanical Requirements.

B. Manufacturer's Data:

1. Complete materials list of items proposed to be furnished and installed under this section. Materials lists, which do not require performance data, shall include manufacturer's name, type, and model number for indicated installation.

2. Manufacturer's specifications and other data required to demonstrate compliance with specified requirements. Literature shall include descriptions of equipment, types, models and sizes proposed, capacity tables or curves marked to indicate performance characteristics, electrical requirements, options selected, space requirements and other data necessary to ensure compliance with requirements of this Specification and performances indicated on Drawings.

3. Provide data of filter media, filter performance data, filter assembly, and filter frames.

C. Shop Drawings indicating methods of installation of equipment and materials, and details of supporting structures for items indicated. Items to be submitted shall include but not be limited to the following:

1. Layout Drawings of Equipment: Include plans, elevations and sections, of proposed equipment drawn to scale, to establish which equipment shall fit in allotted spaces with clearance for installation and maintenance. Indicate proposed details for attachment. Indicate vibration isolation units, foundations, supports, and openings for passage of pipes and ducts.

2. Electrical interlock or control diagrams for electrically controlled components furnishing more than one automatic or manual control devices, which are not indicated on Drawings.

D. Manufacturer's Recommended Installation Procedures: Manufacturer's recommended installation procedures, when reviewed by the Architect shall become basis for inspecting actual installation procedures provided.

E. Operations and Maintenance Data: Include instructions for lubrication, filter replacement, motor and drive replacement, spare parts list and wiring diagrams.

1.04 QUALITY ASSURANCE

A. Qualifications of Manufacturers and Installers: Comply with provisions in Section 15010: Basic Mechanical Requirements.

B. Sound Level Measurements and Calculations:

1. All sound power level measurements and calculations shall be made in complete accordance with latest version of AMCA Standard 300, Test Code for Sound Rating, and AMCA Standard 301, Method for Calculating Fan Sound Ratings from Laboratory Test Data.

2. The results of all testing shall be certified by independent testing agency or an AMCA-approved testing laboratory and submitted to architect for approval. The submittal shall include a complete description of test conditions, methods and procedures, including specific installation type used for measurements, as detailed in AMCA 300.

3. Maximum Allowable Sound Power Levels: Maximum allowable sound power levels for supply discharge, return intake, and casing radiated noise shall not exceed values given in schedule below as indicated on drawings with equipment operating at design airflow and static pressure conditions.

C. Factory Leak Testing: Manufacturer shall provide a factory leak test on units at design total static pressure across the cabinet exterior walls. Cabinet leakage shall not exceed 1% of specified airflow on the operating side of the unit. All panels shall be sealed with closed cell gasketing material. A written test report shall be prepared by the manufacturer and submitted to the owner.

D. Factory Operational Test: Manufacture shall conduct a full cooling and heating operational test on the unit, for a minimum of four (4) hours, before it leaves the factory. A written test report shall be prepared by the manufacturer and submitted to the owner.

E. High Ambient Operation: The equipment manufacturer shall verify operational ability to 115°F. An operational factory test shall raise the head pressure to the equivalent of 115°F to simulate operating conditions. They will then verify operation and that the compressor circuits will pump down without issue. A written test report shall be prepared by the manufacturer and submitted to the owner.

1.05 PROJECT RECORD DOCUMENTS

A. Provide Owner instructions on equipment operation and maintenance procedures, as indicated in Section 15010: Basic Mechanical Requirements.

1.06 PRODUCT HANDLING

A. Protection, Replacements, Delivery and Storage: Comply with provisions stated under Section 15010: Basic Mechanical Requirements.

1.07 COORDINATION

A. Coordinate related and adjacent activities in accordance with provisions of Section 01100: Coordination.

1.08 SUBSTITUTION

A. The product named on the equipment schedule is the basis of design and the use of any item other than that named product may require modifications of the design. If Contractor uses any product, material or equipment other than that named on the schedule, Contractor shall, at least 10 days before bid time, along with request for equipment substitution, provide the following:

1. Contractor to provide all technical data including drawings, performance, specifications, complete control sequence, system performance data, energy analysis, dimensional and weight information of proposed equipment showing a clear understanding and compliance with the requirements of the replacement project.

2. Contractor to provide at least five successful custom package rooftop multizone VAV air conditioning unit jobs with contact name and phone number.

3. Contractor to provide an itemized list of any exceptions taken to the base bid specification.

4. Contractor to provide a letter from an officer of the custom package rooftop multizone VAV air conditioning unit manufacturer stating that the exceptions listed are the only deviations from the specifications.

5. Contactor to provide seismic drawings and calculations, stamped by a registered professional structural engineer, showing the attachment of the new units to the existing curbs or equipment pads per applicable codes.

6. Contractor to provide equipment manufacturer's letter standing compliance with delivery requirements as indicated in these bid documents.

7. Owner representative's decision on the merits of the substitution request shall be final. An approval of any substitute equipment shall not void compliance with all aspects of these specifications.

8. Once reviewed and if approved, equipment substitution information shall be issued to all bidding contractors so as not to give an unfair advantage in bidding process.

B. If the Contractor uses a product, material or equipment other than that named on the equipment schedule, Contactor shall, at its sole cost:

1. Make all revisions and modifications to the design and construction of the Work necessitated by the use the product, material or equipment.

2. Be responsible for all costs of any changes resulting from the use of the product, material or equipment including without limitation, costs or changes which affect other parts of the Work, the work of Separate Contractors, or any other property or operations of the owner.

3. If more than 2 submissions of supporting data are required, the cost of reviewing the additional supporting data shall be at Contractor's expense.

C. Owners Representative may reject any substitution not proposed in the manner and within the time limits prescribed herein.

D. If a substitution request is finally rejected by the Owners Representative, Contractor shall furnish and install the specified product, material, or equipment as shown on the equipment schedule. Contractor will still need to comply with all submittal requirements (including submittal and project deadlines).

PART 2 - PRODUCTS

2.01 EQUIPMENT

A. Capacities of air conditioning and air handling equipment as indicated on Drawings are the net capacities actually required. Standard catalog ratings shall be adjusted to actual project site environmental conditions.

B. Approved Manufacturers:

1. SEASONS-4, Contact Robert Bayer, 714-244-8500

2. Buffalo Forge, Governaire, Huntair.

3. Pre-approved equals per the requirements of sections: Part 1 - General, 1.08 Substitution.

2.02 AIR CONDITIONING UNITS

A. General and special requirements

1. The custom package rooftop multizone VAV air conditioning unit equipment shall have the design and construction in accordance with all applicable codes and standards. The equipment must comply with the requirement and terms of ETL's Listing and Labeling. The complete unit must bear the ETL Label. The unit shall comply with the requirements of CEC Title 24, UL, and AGA.

2. The new unit must be designed to exactly match the curb, ducts, electrical, gas and condensate drain connections as shown on the drawings.

3. The entire unit must be fabricated in the same manufacturing facility. Units requiring field assembly of sections are not acceptable.

4. Manufacturer must have a minimum of 10 years documented custom package rooftop multizone VAV air conditioning experience which includes fabrication and use of its own condensing sections.

B. Exterior casing and frame construction

1. The unit frame shall be constructed of heavy gauge aluminum with a formed galvanized steel base, be electrically welded and coated for corrosion resistance. Construction of base frame shall provide an integral curb counter flashing for positive curb positioning. Heavy duty lifting brackets must be welded to the base frame for rigging unit into position.

2. The unit's bulkheads must be constructed of heavy gauge 0.080" thick Series 3003 aluminum and all exterior panels must be fabricated from 0.040", thick Series 3105 aluminum, galvanized steel is not acceptable.

3. The aluminum casing must be painted with a corrosion inhibitive primer (.020 mils) and a finish coating (.08 mils) of a fluropolymer coating containing 70% KYNAR 500 resin. The finish coat must pass a 3000-hour salt spray resistance test per ASTM B117-90. Color shall be 'tan' or owner selected color. Painted galvanized steel is not acceptable. Aluminum panels must be fastened to the frame with stainless steel screws and isolated from the steel frame with dielectric gaskets to prevent galvanic corrosion.

4. The roof of the unit must be pitched to provide positive drainage. Top seams shall be covered with cap strips to prevent water leakage into the unit. The floor of each section shall have a galvanized steel deck to isolate the entire unit from the building. All seams shall be caulked with silicone inside and out to prevent air and water leakage.

5. Full height, walk-in access doors must be provided for all sections housing components that require routine maintenance. Doors must be supported on full length with continuous aluminum hinges and have a single handle – multi latch closure system. Doors must be equipped with stainless steel door hold-backs. Multiple-single hinge doors are not acceptable.

6. Two (2) Southco Series E3-15 key operated door locks per door shall be furnished. The locks must be halfway between the standard latch and the top or bottom of the door. Provide reinforcement under the locks to preserve the integrity of the doors.

7. All roofs, walls, floors and doors must be double wall construction enclosing 2" thick, Polymethylene Polyphenyl foam injected insulation with an insulation value of R-13. Liners shall be 0.030 thick aluminum sheet metal to protect the insulation during routine maintenance to the unit, galvanized steel is not acceptable.

8. Provide 'Hydra-Zorb' refrigerant pipe insulation clamps.

C. Air cooled condensing section

1. The air-cooled condensing section must be designed and manufactured by the unit manufacturer. "Third party" condensing units bolted on the frame are not acceptable. The condensing section must have full height hinged service access doors, identical to air handling section. Provide walk-in service vestibule when unit size permits. The floor of the air-cooled condenser section shall be crowned for water drainage and constructed of aluminum to resist the corrosive effects of the weather. All refrigerant piping must be installed and leak tested in the factory prior to shipment of the complete unit.

2. Construction of condensing section must be identical to that described in Section 2.02.B.1 thru 7.

3. The roof of the condensing unit section must be pitched to provide positive drainage.

4. Unit shall the number of compressors as listed on the schedule. Compressors must be heavy duty suction cooled, hermetic scroll type complete with forced feed lubrication, suction and discharge service valves, suction strainer, crankcase heater, and 3 phase solid state thermal motor protection. The compressors must be mounted on rubber in shear isolators to prevent transmission of any noise and vibration to the space below. The lead compressor must be a VFD scroll compressor to enable operation at low load conditions and for efficient unloading down to 4 to 1 nominal capacity.

5. All compressors shall have independent refrigerant circuits and be completely piped, tested, dehydrated and fully charged with oil and R-410a refrigerant. Brazing of refrigerant piping must be done with the proper application of nitrogen. The refrigeration circuit components shall include compressor, condenser with integral liquid sub-cooling, liquid line service and charging valve, replaceable core filter drier in the liquid line, filter in the suction line, liquid line sight glass and relief valve, thermostatic expansion valve with removable/replaceable power head element.

6. The air-cooled condenser coils shall be a minimum of six (6) rows deep and have copper tubes expanded into a maximum of ten aluminum fins per inch. Coils shall be tested at 550 PSIG and mounted vertically for complete surface utilization. Coils must be counter flow with a minimum of 10 degrees of liquid sub-cooling and have adequate capacity to dissipate the total heat rejection of the system at design conditions.

   Condenser coils must have 11-gauge aluminum vandalism guards to protect the coils from vandalism and weather related damage.

7. The air-cooled condenser coils shall be coated with Electro-Fin Coating:

   a. Coating Materials - The materials shall be a cathodic epoxy electrodeposition coating formulated for high edge build consisting of composition as noted below.
   b. Resin feed component - The resin feed component shall consist of an epoxy or an epoxy-urethane resin combined with the necessary amounts of flow control agents.
   c. Pigment paste component - The pigment paste shall consist of a resin as above, volatile solvents, titanium dioxide and siliceous extenders. Hexavalent chromate, zinc chromate, or lead pigments shall not be used alone or as a component part of any pigment.
   d. Refrigerant Coils - Refrigerant coils contain a charge of dry nitrogen and are capped and sealed. Seals are not to be broken. Both connection ends are to be masked for a minimum distance of 1.0 inch.
   e. Coil Connections - Coils shall be inspected for open tubes, headers, and capillary tubes and sealed to prevent contamination of cleaning or coating solutions to the interior coil surfaces.
   f. Cleaning - Cleaning shall include complete coil immersion in a heated alkaline cleaning solution to remove light fin lubricants, machining oils, and residual factory contamination. The cleaning immersion shall be followed by complete coil immersion in fresh city water to neutralize and remove residual alkaline solution.
   g. Coating - The coil shall be completely immersed in the coating bath including headers, casing and heat exchanger surfaces. The coating shall be electrodeposited to obtain a nominal dry film thickness of .001" +/- .0002" (mils). The coating shall be free from voids, checks, cracks, and blisters. The quality and application shall be such that any portion of the coil will meet a minimum 2000 hours of 5% salt spray testing to American Society for Testing and Materials (ASTM) B117 under the following criteria:
   h. No loss of coating adhesion and no evidence of attack to the fin proper. Only 5% of the fin collars may show corrosion product.
   i. Complete deterioration of the sample in any location is considered failure of the part on this test, and shall be cause for rejection.

j. Baking - The coating shall be cured by baking at a metal temperature not to exceed 400° F.

k. Allow the coil to cool to ambient temperature of 65-95o F. A soft cloth or laboratory tissue should be saturated with Acetone. Applying medium pressure with the index finger, rub the same area of the primer for a minimum of 40 strokes (movement in one direction). Examine the coating for loss of film. The coating shall show no film softening when compared to an untested portion of the panel. Nonconformance shall constitute failure of this test and the coil shall be placed in bake oven for additional cure time and re-tested for conformance.

l. Process Quality - The coating process shall be carefully established and controlled to assure consistent and repeatable results. This includes documentation of coating composition, temperature, pH, and conductivity, including pretreatment of parts and baking procedures. All measuring and test equipment shall be calibrated and traceable to (National Institute of Standards and Testing) N.I.S.T.

m. No fin areas shall be bunched together, spread apart, cocked, or bowed. No fins shall be movable by hand on tubes, torn or buckled. Fins shall be straightened before the coil is shipped. When coils are direct shipped to the customer instead of the manufacturing facility originating the Purchase Order, the supplier shall document and notify the manufacturer Quality Assurance prior to shipping, if over 5% of the total face area of a coil requires straightening of fins.

8. Condenser fans shall be steel coated with epoxy enamel and have a steel hub locked on a stainless-steel motor shaft with a keyway and square head set screws. Fans shall have a radius spun venturi for efficient performance. Fans shall have vinyl coated OSHA type inlet and outlet guards capable of being removed for service without removing the fan motor. Fans must be direct driven by NEMA constructed, three phase motors operating at 1140 RPM. Motors shall have stainless steel shafts to prevent "rust welding" of the fan hubs to the shaft. Each motor must have a shaft slinger to prevent water seepage into the motors. Condenser head pressure shall be controlled and maintained down to an ambient of 50 degrees Fahrenheit by the application of a Variable Frequency Drive (VFD) controlling the speed of all condenser fans simultaneously. For the VFD, provide manual bypass and line reactors. A condenser fan staging controller shall also be included for fan cycling in case of a VFD failure. Variable Frequency Drive (VFD) manufacturer shall be ABB. VFD must be housed in a UL listed NEMA 12 enclosure.

D. Cooling coil section

1. Cooling coil must be installed downstream of the supply air blower and parallel with the heating section. Coils shall be direct expansion type and constructed of seamless copper tubes expanded into aluminum fins and be provided with thermostatic expansion valves with provision for superheat adjustment and external equalizer. Coils shall be tested at 550 PSIG and mounted vertically for complete surface utilization.

2. Provide capillary tube plastic covers to prevent rubbing.

3. The drain pans shall be 316 stainless steel and known as the Indoor Air Quality (IAQ) type that ensures that no standing condensate ever remains in the pan. The drains for the main IAQ pan must be metallic and extend through the side of the unit.

4. The coil casing shall be 316 stainless steel.

E. Heating section

1. The heater shall be natural gas indirect gas fired Heatco Module with minimum efficiency of 80% and capacity as required for the individual project. The module shall employ a stainless-steel tubular heat exchanger and a draft inducer assembly to provide for positive venting of the flue gases.

2. Burner assemblies shall employ inshot type burners constructed of aluminized steel body and sintered metal flame holder with integral carryover plenum. The burner shall be a Recognized Component by Intertek Testing Service (ITS / ETL).

3. The gas train shall be complete with a modulating gas valve for each heat exchanger and be ready for connection to a natural gas supply with pressure between 7" and 14" WC.

4. Standard controls shall include a combination redundant gas valve consisting of combination pilot solenoid valve, electric gas valve, pilot filter, pressure regulator, pilot shut-off, and manual shut-off all in one body. Each gas train shall have its own shut-off valve.

F. Multizone 3-Deck VAV Damper Section

1. Units shall have factory mounted multizone 3-deck VAV damper in the hot, cold and bypass deck for each zone.

2. Dampers must be linked together to provide individual zone control with a single factory mounted electric operator and wired for each zone.

3. Damper shafts shall be mounted in permanently lubricated Nylon, Turcite or Teflon bearings to assure smooth operation. Damper blades shall operate without clatter or binding.

4. The cold deck, bypass deck, and hot deck shall be separated by double wall insulated dividers.

5. Provide a single actuator to operate each zone's hot/bypass/cold deck. Separate actuators for hot, cold and bypass decks are not acceptable.

6. All damper actuators to have complete and easy access for service and maintenance.

G. Supply air blower section

1. The supply air blower must be a single width/single inlet airfoil backward inclined plenum type, secured to a machined, ground and polished solid steel shaft. The shaft shall be coated with a rust inhibitor and supported by two outboard bearings. The complete blower assembly must be dynamically balanced.

2. Blower drive must be a direct drive motor.

3. Blower is connected to a direct drive, heavy inverter ready, premium efficiency totally enclosed fan cooled, 3-phase, 1800 rpm motor. Motor and blower assembly shall be mounted on a heavy-duty steel frame base supported by 2 " deflection springs designed for 90-98% isolation efficiency. In addition to the spring isolators, the blower assembly must have seismic restraints designed for Seismic Zone 4.

4. Blower speed shall be controlled by an ABB variable frequency drive (VFD) housed in a UL listed NEMA 12 enclosure, factory mounted & wired in a flush mounted unit control panel. Mounting the drive on the side of the unit is unacceptable. The drive shall be an advanced microprocessor type utilizing a PWM/Voltage Vector design technique. Six step and current source drives are not acceptable. The drive shall be furnished with manual bypass and line reactors. Unit shall include controls to provide variable air volume and maintain constant static pressure at the unit. Provide a manually reset adjustable range high pressure safety switch to prevent excessive pressure build up.

5. Supply air blower section shall be lined with an additional 2", 3-lb. density insulation protected by a perforated aluminum liner with perforations selected for maximum sound attenuation.

6. Provide a motor trolley to lift motor out of motor mounts and trolley it out to edge of access door.

H. Power return air section

1. The return air blower must be a single width/single inlet airfoil backward inclined plenum type, secured to a machined, ground and polished solid steel shaft. The shaft shall be coated with a rust inhibitor and supported by two outboard bearings. The complete blower assembly must be dynamically balanced.

2. Blower drive must be a direct drive motor.

3. Blower is connected to a direct drive, heavy inverter ready, premium efficiency totally enclosed fan cooled, 3-phase, 1800 rpm motor. Motor and blower assembly shall be mounted on a heavy duty steel frame base supported by 2 " deflection springs designed for 90-98% isolation efficiency. In addition to the spring isolators, the blower assembly must have seismic restraints designed for Seismic Zone 4.

4. Blower speed shall be controlled by an ABB variable frequency drive (VFD) housed in a UL listed NEMA 12 enclosure, factory mounted & wired in a flush mounted unit control panel. Mounting the drive on the side of the unit is unacceptable. The drive shall be an advanced microprocessor type utilizing a PWM/Voltage Vector design technique. Six step and current source drives are not acceptable. The drive shall be furnished with manual bypass and line reactors. Unit shall include controls to provide variable air volume and maintain constant static pressure at the unit. Provide a manually reset adjustable range high pressure safety switch to prevent excessive pressure build up.

5. Power return air section shall be lined with an additional 2", 3-lb. density insulation protected by a perforated aluminum liner with perforations selected for maximum sound attenuation.

I. Filter section

1. The filter sections must include UL Class 2, 6" thick MERV 13 panel type filters. Access for filter maintenance shall be through a full height service door on the side of the unit. Filter support rails must include slide out "pulls" to facilitate removal of the filters.

2. Provide filter gauge, magnehelic type (Dwyer 200) mounted in control panel.

J. Return air/outside air/exhaust air section (economizer)

1. Outside air intake shall have stormproof louvers or hoods sized to prevent entrainment of rain water into the unit and must include an aluminum bird screen.

2. Outside air intake must be located on the opposite side of the unit from the exhaust air discharge.

3. Outside and return air dampers shall have factory mounted and wired electric operators.

4. Damper shafts must be mounted in permanently lubricated nylon bearings to assure smooth operation. Damper blades must operate without clatter or binding.

5. Motorized dampers shall be low leakage type limiting leakage to 6 CFM per square feet at a pressure differential of 4 inches.

6. Exhaust dampers shall be gravity relief type with a hood to divert rain from the face of the dampers.

K. Main Control Panel

1. The unit shall have a single point electrical power connection in the same location as the unit being replaced. The new unit must be able to utilize the same power wiring as the unit being replaced. The main control panel must be a flush mounted weatherproof enclosure including a thru the door fused disconnect switch mounted in the front of the panel.

2. All components shall be identified with nametags and wired in accordance with the National Electric Code. The main control panel must include the following:

   a. A terminal block for single point power supply with fuses for all branch circuits.
   b. A 24-volt control transformer and 24-volt field wiring control terminal strip. Terminals shall be numbered for field connection of all controls in accordance with the wiring diagram.
   c. All wiring must be numbered and color-coded.
   d. A phase failure and low voltage protection relay.
   e. All refrigeration safety and operating controls.
   f. Temperature control components as required for the system described below in the "Temperature Control Sequence".
   g. Wiring diagrams must be laminated to the control panel door.
   h. A service light with switch and a 115-volt, 15-amp Ground Fault Interrupted convenience outlet, factory mounted and wired to its own transformer in accordance with the NEC.
   i. ABB NEMA 1 VFDs for condenser, supply or return fans including full 3 contactor manual bypass with necessary disconnects, 100 ka SCCR for both drive and bypass.
   j. Compressor motor starters.
   k. Condensing unit low ambient lockout set at 50 degrees F.
   l. Condenser fan Variable Speed Drive (VSD) and bypass default mild weather switches.

3. To continue District-wide multizone control standardization, the controller shall be controlled by an Alerton solid-state integrated control system.

L. System Temperature Control Sequence

1. Equipment Description: The unit is a custom package rooftop multizone VAV unit with an air-cooled condensing section. Including the following items:

   a. DX Cooling System including VFD lead compressor

b. Scroll Compressors and Direct Drive Propeller Condenser Fans
c. Plenum Supply Air Blower
d. Plenum Return Air Blower
e. Power Vented Tubular Duct Furnace
f. Dry bulb Changeover Economizer
g. Alerton DC Temperature Control System

2. Occupied Mode: The unit can be placed in the occupied mode by a 7-day programmable schedule in the DDC controller, accessible through the keypad. A digital input shall be available to override any other command and turn the unit on even when the schedule is calling for the unit to be off (unoccupied mode). The digital input can become the primary means of enabling the unit by not having any on/off times in the schedule.

3. Unoccupied Mode: The supply air blower and return air blower shall be de-energized. The outdoor air damper will be fully closed and the return air damper will be fully open. No cooling or heating function will be allowed.

4. Supply Air Blower: The supply air blower will run continuously in occupied mode. The supply air blower will be a variable air volume type controlled by variable speed drive. The input to the VSD shall be via a pressure transducer located in the supply air blower plenum. This transducer will send a control signal to the controller that will in turn send a signal to the drive. The drive will ramp the speed of the supply air blower to maintain a constant supply air blower plenum pressure (approx. set point = 4.5" W.C., adjustable). There shall be a manual reset high pressure safety switch located in the supply air blower plenum to de-energize the supply air blower in the event that the supply air blower plenum pressure becomes excessive (set point = 5.0" W.C., adjustable).

5. Return Air Blower: The return air blower will run continuously in occupied mode. The return air blower will be a variable air volume type controlled by variable speed drive. The input to the VSD shall be a pressure transducer located in the space. The VSD will maintain a constant space static pressure of 0.05" W.C. Static sensor shall be located centrally in the space being served. Confirm location with the engineer (customer) prior to installation. The DDC controller shall prevent the return air blower from running at speeds less than 70% (adjustable) of supply air blower speed to prevent "dragging" the air through the return air blower.

6. Compressor & Cooling Section: A call for cooling will be initiated when any one zone is fully open to the cold deck and the temperature rises above the cooling set point of the zone's temperature control. The call for cooling will continue until all zones are satisfied. The unit is equipped with an evaporator cooling coil and scroll compressors, including a VFD driven scroll lead compressor capable of modulating capacity for capacity control. The compressors will stage based on a call for cooling and shall maintain a cold deck temperature of 55°F (adjustable).

    a. Compressor staging sequence will be: Compressor 1 (dehumid) on, Compressor 2 (precool) on, etc. Compressor staging must be re-started beginning with Stage 1 upon reset of any safety device. Once there is a call for cooling, the DDC controller will enable Compressor 1 and provide a demand signal based on discharge air temperature. Each subsequent compressor will have an on-delay of 5 minutes to allow the lead compressor to modulate to meet set point before any other compressors are turned on/off. If after 5 minutes the lead compressor is at full capacity and the discharge air temperature is still above the discharge air temperature deadband, the next compressor will be staged on. If after 5 minutes the lead compressor is at minimum output and the discharge air temperature is still below the deadband, the next compressor will be staged off. Each compressor will run for a minimum of 3 minutes once energized to ensure proper oil return to the compressor. Each compressor has a solid-state 5 minute timer to prevent short cycling.
    b. Mechanical cooling is disabled if the coil leaving temperature drops below 38°FDB (adjustable). Cooling will reactivate once the freeze stat downstream of evaporator coil is satisfied. The unit will have a low ambient lockout set at 50°F (adjustable).

7. Heating Section: A call for heating will be initiated when any one zone is fully open to the hot deck and the temperature falls below the heating set point of the zone's temperature control. The call for heating will continue until all zones are satisfied. The unit will incorporate a tubular duct furnace with power vented exhaust. The duct furnace will be modulating type with a 5:1 turndown ratio. A time-delay relay is hard wired to allow the fan to run for a period of 5 minutes upon unit shut-down after heating mode of operation in order to dissipate the residual heat. The unit will have a high ambient temperature lockout set at 73°F (adjustable).

8. Economizer (Outside, Return & Gravity Exhaust Dampers): The economizer will have a dry bulb changeover control which will enable the economizer anytime there is a call for cooling and the ambient dry bulb temperature is below the changeover set point of 53°F. The outdoor and return air dampers will modulate to maintain a mixed air temperature of 55°F (adjustable). When the economizer is disabled and the unit is in occupied mode, the outdoor air damper will be set at minimum position. When the economizer is disabled and the unit is in unoccupied mode, the outdoor air damper will be closed. The exhaust air damper is a gravity damper. The outdoor and return air damper actuators will be electric.

9. Triple Deck Damper: The zone damper will be a 3-deck damper and shall consist of hot deck, bypass (neutral) deck, and cold deck. The zone actuators will be electric.

    a. During full cooling demand, the cold deck damper shall be 100% open, neutral and hot deck dampers shall be closed. If cooling demand decreases in a zone, cold deck damper shall modulate towards closed position, neutral deck damper shall modulate to open position in proportion to cold deck damper. Hot deck damper shall remain closed.
    b. During full heating demand, hot deck damper shall be 100% open, neutral and cold deck dampers shall be closed. If heating demand increases in a zone, hot deck damper shall modulate towards open position, neutral deck damper shall modulate to closed position, in proportion to hot deck damper. Cold deck damper shall remain closed.
    c. The damper operation shall be reversed in the event that heating demand decreases and cooling demand increases. Hot deck and cold deck dampers shall not be open at the same time. Simultaneous heating and cooling shall not be allowed. If there is no demand for heating or cooling, the associated hot and cold deck dampers shall be closed and neutral deck damper shall be 100% open.
    d. A single, manually adjustable damper is provided between the hot deck and cold deck of the unit to restrict the airflow to the bypass (neutral) deck to create pressure drop required for the VSD to slow the fan speed. The manual damper must be set to minimum outside air requirements by the air balancing contractor.

10. Condenser Fan Control: The condenser fan motors will be controlled by a variable frequency drive. The variable frequency drive will ramp up and down based upon input signals coming from pressure transducers mounted on the discharge lines. As a backup to the condenser fan VFD, a Hoffman controller will sequence the fans according to input from liquid line temperature sensors.

11. Control for CO2 Levels: The set point of the CO2 detector will be 800ppm (adj).

    a. On a rise in CO2 level above set point, the outdoor air damper will modulate open and the return air damper will modulate closed to increase outdoor air ventilation to the space. The dampers will continue to modulate until the CO2 level has fallen below set point. If the discharge air temperature cannot be maintained, the dampers will modulate back to provide the maximum outdoor air ventilation possible while maintaining the discharge set point. Temperature control will take precedence over CO2 level control.
    b. When the economizer is enabled, the OA/RA dampers will modulate to provide the secondary minimum ventilation as scheduled in the plans. The CO2 detector is disabled during economizer operation.

12. Night Purge Cycle: The unit has a Night Purge Cycle (NPC) to allow the unit to schedule ventilation of the building during the unoccupied mode. Included with this mode is an on/off point on the Purge screen (to enable the NPC), and a time clock integral to the controller (to schedule the NPC). The time clock will enable the NPC at 1:00 AM. When the outside air temperature is above 55°F (adjustable), the controller will allow the NPC to operate. The supply air blower will operate, cooling and/or heating is disabled, the return air damper closes, the outdoor air damper opens, and the exhaust air forces the exhaust air gravity damper open. The controller terminates the Night Purge Cycle (adjustable based on the schedule set via the display).

13. Morning Warm Up Cycle: Unit shall have a morning warm up cycle activated at the beginning of the daily operating cycle of the unit. On activation, the outside air dampers shall remain closed until the return air temperature exceeds the setting (adjustable) of the factory mounted and wired morning warm up cycle sensor located in the return air opening of the unit. When the return air temperature rises above the setting of the return air sensor, the outside air dampers shall return to their normal automatic operating mode.

M. Other controls

1. Unit shall have terminal strips and interlocking relays factory mounted and wired to interlock with other components of the building. It will be the responsibility of Maintenance and Operations Branch and installing Contractors to advise the equipment supplier of any requirements for any additional interlocks not covered in this specification.

2. A manual reset firestat must be mounted and wired in the return air opening to the unit. Upon detection of excess heat, fans musty stop and a signal must be sent to the building fire alarm system.

3. Photoelectric type smoke detectors must be mounted and wired in the return air openings to the unit. Upon detection of smoke, the supply air fan will de-energize. The outdoor (and exhaust) air damper(s) will drive to a fully closed position. The return air damper will drive to a fully open position. A terminal block shall be provided for field wiring connections to a remote location if desired.

N. Installation

1. The equipment manufacturer must send an installation expert to the job site to advise on proper rigging, alignment and startup of the equipment. The Maintenance and Operations Branch personnel and/or Installing Contractor must be advised of rigging and installation requirements prior to shipment of the equipment to the job site.

2. Roof curb gasket shall be provided and shipped with unit.

3. Unit shall match new roof curb and shall be a weather tight installation without the use of a curb adaptor or modifications to roof or roof support.

O. Check, test, startup and warranty

1. Units shall be run tested at the factory and the operation of all functions, safeties, devices, etc, shall be verified. Operational test sheets shall be provided upon request.

2. The manufacturer must have trained and authorized service personnel with documented ten years of service experience on multi-zone and custom air-handler located in the Los Angeles area for testing and startup of the equipment that is available 365 days a year from 6 AM to 5 PM. The manufacturer's service representative must provide a written record for each unit to the owner's representative for unit startup information.

3. Equipment (excluding Alerton Controller & Alerton controls) must have a standard twenty-four (24) month parts and labor warranty. The equipment manufacturer shall be responsible for warranty service during the first twenty-four (24) months of equipment operation. The equipment manufacturer shall respond to a warranty call within 4 hours from receiving such call from the District. If OEM replacement parts are needed, then three (3) days from the response time will be allocated for replacement.

4. The compressors must have a five (5) year parts and labor warranty provided by the equipment manufacturer.

5. The gas heat exchangers must have a ten (10) year parts warranty provided by the equipment manufacturer.

6. The external unit cabinetry must have a fifteen (15) year warranty provided by the equipment manufacturer against defects, workmanship and corrosion.

7. The fan motors must have a three (3) year parts warranty provided by the equipment manufacturer.

8. All parts shall be available at the local wholesaler level, therefore no proprietary OEM parts will be allowed

9. The equipment manufacturer's engineer/technician shall submit a check-test-start up report after the installation in complete.

P. Maintenance

1. Provide a twenty-four (24) month (to coordinate with twenty-four (24) month labor warranty) standard maintenance services agreement, tri-annual (August-September, December-January, April-May) on all unit manufacturers' equipment (excluding Alerton Controller & Alerton controls) including, but not limited to, the following. Correct any items that are not within factory tolerances.

    a. Check unit proper operation
    b. Check electrical circuits for blown fuses, tripped overloads, etc.
    c. Check tightness & condition of blower fan belts & pulleys
    d. Lubricate bearings per factory recommended schedule
    e. Check motor mountings
    f. Check damper linkage
    g. Check refrigerant levels (keep records for audits if charging required)
    h. Check condenser & evaporator coils for dirt & debris (April-May)
    i. Check OSA & EA grilles for dirt & debris (clean if necessary)
    j. Change filters with same efficiency filters (every scheduled visit)
    k. Check access doors for air leaks (correct if leaking)
    l. Refer to manufacturer's recommended maintenance procedures

2. Services shall be provided during normal business hours.

3. Contractor must be safety pre-qualify before working on any WVUSD school site.

Q. Warning decal

1. A sign shall be affixed to all AC units' casing. Such sign shall provide warning to "Shut off power before working on blower and drive assembly".

R. Catalogs, brochures and diagrams

1. Not later than four (4) weeks after a Purchase Order is issued, manufacturer MUST provide complete submittal documentation, catalog, brochure, and diagrams for approval prior to shipment from factory.

2. Manufacturer to provide four (4) additional maintenance and operation manuals with delivery. Include product performance literature, mounting details, trouble shooting guide, schematic diagrams, etc.

S. Training

1. The equipment manufacturer shall provide six (6) hours training to owner personnel engaged in the operation, maintenance and repair of air conditioning units. Training may be broken up into two (2) separate sessions if needed. Refresher courses shall be provided free of charge for the life of the equipment.

2. The training shall cover the following as a minimum (excluding Alerton Controller & Alerton controls):

   a. Commercial off-the-shelf components
   b. Fans, coils, filters, smoke detectors
   c. Safeties
   d. Compressors
   e. Variable speed drives
   f. Sequence of operation and electrical diagrams
   g. Unit controls design, components, operations, and troubleshooting
   h. Required major and minor maintenance

3. Handouts shall be provided by the manufacturer's representative. Training shall be conducted by a qualified factory certified technician.

4. Coordination for training shall be done through owner.

PART 3 - EXECUTION

3.01 GENERAL

A. Examine areas under which Work of this Section will be performed. Correct conditions detrimental to proper and timely completion of Work. Do not proceed until unsatisfactory conditions have been corrected.

3.02 EQUIPMENT INSTALLATION

A. Equipment Installation: Equipment installation shall be in strict accordance with these specifications and manufacturers installation instructions. Piping shall be installed in such a manner as not to place a strain on any of the equipment. Flanged joints shall be adequately extended before installation.

1. Install equipment in a neat and skillful manner, properly aligned, leveled, and adjusted for satisfactory operation.

2. Install so connecting and disconnecting of piping and accessories can be readily accomplished, parts are readily accessible for inspection, service and repair. Space shall be provided to readily remove filters, coils, and fan wheels.

3.03 NOISE AND VIBRATION

A. Operation of Equipment: Mechanical equipment and piping systems shall operate without exceeding specified (or industry standards) noise and/or vibration levels.

B. Corrective Measures: If specified (or industry standards) noise and/or vibration levels are exceeded, provide necessary changes to reduce noise and/or vibration levels to within specified levels or industry standards.

C. Operation of Equipment: Mechanical equipment and piping systems shall operate without exceeding specified noise and/or vibration levels.

D. Corrective Measures: If specified noise and/or vibration levels are exceeded, provide necessary changes to reduce noise and/or vibration levels to within specified levels.

E. Operation of Equipment: Mechanical equipment and piping systems shall operate without exceeding industry standard noise and/or vibration levels.

F. Corrective Measures: If industry standard noise and/or vibration levels are exceeded, provide necessary changes to reduce noise and/or vibration levels to within industry standard levels.

3.04 FIELD TESTS AND INSPECTION

A. General: Perform field inspections, field tests, and trial operations. Provide labor, equipment and incidentals required for testing. The owner's representative will witness field tests and trial operations.

B. Equipment and Material: Equipment and material certified as being successfully tested by manufacturer, in accordance with referenced Specifications and standards, will not require re-testing before installation. Equipment and materials not tested at the place of manufacture will be tested before or after installation, as applicable or necessary, to determine compliance with reference specifications and standards.

C. Start-Up and Operational Test: System shall be started up and initially operated with components operating. During this test, filters shall be periodically cleaned until no further accumulation of foreign material occurs. Adjust safety and automatic control instruments as required to provide proper operation and control sequence. Refer to Section 15010: Basic Mechanical Requirements.

D. Extent of Field Tests: After installation and before completion, Work of this section shall be subjected to required field tests, including those specified here and in Section 15010: Basic Mechanical Requirements.

E. Operation and Maintenance Data: Provide required operation and maintenance data as specified in Section 15010: Basic Mechanical Requirements.

3.05 PROTECTION

A. Protect the Work of this section until Substantial Completion.

3.06 CLEANUP

A. Remove rubbish, debris, and waste materials and legally dispose of off the Project site.

END OF SECTION

PART 1 - GENERAL

1.1 SECTION INCLUDES

A. This section describes the products and execution requirements relating to furnishing and installing horizontal communications cabling and termination components and related subsystems as part of a cabling plant. The cabling plant consists of copper and optical fiber cabling.

1.2 RELATED WORK

A. Section 27 05 00 - Basic Communications Systems Requirements

1.3 QUALITY ASSURANCE

A. Refer to Section 27 05 00 for relevant standards and plenum or non-plenum cable requirements.

B. The channel shall be required to meet the performance requirements indicated herein. The manufacturer shall warranty the performance of their system to the required performance (and not just to the Standard, should the required performance exceed the Standard).

C. Specific components of the channel shall be required, at a minimum, to meet the Standard component requirements for that particular component.

D. The installing contractor must be certified by the manufacturer of the structured cabling system.

1.4 SUBMITTALS

A. Under the provisions of Section 27 05 00 and Division 1, prior to the start of work the Contractor shall submit:

1. Manufacturer's data covering <u>all</u> products proposed, including construction, materials, ratings and all other parameters identified in Part 2 - Products, below.

2. Manufacturer's installation instructions.

PART 2 - PRODUCTS

2.1 HORIZONTAL CABLE

A. CAT 6 Enhanced Cable:

1. The horizontal cable requirements must be met as well as the following channel requirements.

2. CAT 6 cable shall terminate on rack-mounted modular patch panels in their respective communication equipment room as indicated on the drawings.

3. Performance Tests shall be conducted using swept frequency testing through 250 MHz for the channel. All numbers given are for a 4-connection channel. Discrete frequency testing results at 250 MHz is not acceptable.

4. Performance data shall be characterized as "Guaranteed Headroom" and shall be guaranteed by the manufacturer to perform at guaranteed margins over ANSI/TIA/EIA-568-C.2. Performance data that is not warranted by the manufacturer will not be considered.

5. The structured cabling and connectivity must be provided by the same company. For the purpose of this specification that shall mean that the cabling and connectivity must be marketed, branded, supported, warranted, and distributed by the same company. Specifically, ally or partnerships between cabling manufacturers and connectivity manufacturers do not meet this requirement unless otherwise listed in Section 27 17 20 as an acceptable manufacturer. Specifically, products made by others through an OEM relationship are acceptable if the products are marketed, branded, supported, warranted, and distributed by the same company.

6. The 4-connector channel performance margins in the table below shall be guaranteed margins above ANSI/TIA/EIA-568-C.2:

Electrical Value (1 - 250 MHz)	Minimum Margin
Insertion Loss:	14.0%
NEXT:	7.0 dB
PS NEXT:	8.0 dB
ACR-F (ELFEXT):	8.0 dB
PS ACR-F (PS ELFEXT):	8.0 dB
Return Loss:	4.0 dB

7. The jacket color for CAT 6 cable shall blue for all applications.

8. Basis of Design:

   a. Leviton

2.2 FACEPLATES/JACKS

A. CAT 6 Jacks:

1. CAT 6 horizontal cable shall each be terminated at their designated work area location on RJ-45 modular jacks. These modular jack assemblies shall snap into a modular mounting frame. The combined modular jack assembly is referred to as an information outlet.

2. The same orientation and positioning of modular jacks shall be utilized throughout the installation. Prior to installation, the Contractor shall submit the proposed configuration for each information outlet type for review by the Architect/Engineer.

3. Information outlet faceplates shall incorporate recessed designation strips at the top and bottom of the frame for identifying labels. Designation strips shall be fitted with clear plastic covers.

4. Where standalone CAT 6 only modular jacks are identified, the information outlet faceplate shall be configured as to allow for the addition of one (1) additional modular jack (CAT 3, CAT 5E, or CAT 6) to be installed to supplement each such modular jack as defined by this project. The installation of these supplemental modular jacks is NOT part of this project.

5. Any unused modular jack positions on an information outlet faceplate shall be fitted with a removable blank inserted into the opening.

6. The information outlet faceplate shall be constructed of high impact plastic (except where noted otherwise). The information outlet faceplate color shall:

    a. Match the faceplate color used for other utilities in the building, or

    b. When installed in surface raceway (if applicable), match the color of that raceway.

7. Different faceplate and frame designs for locations, which include optical fiber cabling relative to those, that terminate only copper cabling are acceptable. Information outlets that incorporate optical fiber shall be compliant with the above requirements plus:

    a. Be a low-profile assembly.

    b. Incorporate a mechanism for storage of cable and fiber slack needed for termination.

    c. Position the optical fiber couplings to face downward or at a downward angle to prevent contamination.

    d. Incorporate a shroud that protects the optical fiber couplings from impact damage.

8. All information outlets and the associated modular jacks shall be of the same manufacturer throughout the project.

9. The CAT 6 modular jacks shall be non-keyed 8-pin modular jacks.

10. The interface between the modular jack and the horizontal cable shall be a 110-type termination block or insulation displacement type contact. Termination components shall be designed to maintain the horizontal cable's pair twists as closely as possible to the point of mechanical termination.

11. CAT 6 modular jacks shall be pinned per TIA-568B.

12. CAT 6 termination hardware shall, as a minimum, meet all the mechanical and electrical performance requirements of the following standards:

    a. ANSI/TIA/EIA-568-A-5
    b. ANSI/TIA/EIA-568A
    c. ISO/IEC 11801
    d. IEC 603-7
    e. FCC PART 68 SUBPART F

13. The color for CAT 6 jacks shall be blue for all applications.

2.3 HORIZONTAL FIBER CABLE

A. Multimode (MM)/Singlemode (SM):

1. Horizontal optical fiber cable shall be suitable for installation in building riser systems, in conduit, in cable tray and/or in innerduct.

2. Horizontal optical fiber cable shall carry an OFNR (optical fiber non-conductive riser) or OFNP (optical fiber non-conductive plenum) rating. Refer to Section 27 05 00 for project requirements.

3. Outer Sheath: The outer sheath shall be marked with the manufacturer's name, date of manufacture, fiber type, flame rating, UL symbol, and sequential length markings every two feet.

4. Temperature Range:

   a. Storage: -40°C to +70°C (no irreversible change in attenuation).
   b. Operating: -40°C to +70°C.

5. Humidity Range: 0% to 100%.

6. Maximum Tensile Strength (≥12 fibers):

   a. During Installation: 1332 Newton (300 lb. force) (no irreversible change in attenuation).
   b. Long Term: 600 N (135-lb. force).

7. Maximum Tensile Strength (≤6 fibers).

   a. During Installation: 1000 Newton (225 lb. force) (no irreversible change in attenuation).
   b. Long Term: 100 N (67 lb. force).

8. Bending Radius:

   a. During Installation: 20 times cable diameter.
   b. No Load: 10 times cable diameter.

B. The horizontal optical fiber cable plant is based on the installation of low strand-count optical fiber cables "fiber to the desk" to be installed from the work area to the communication equipment room serving that area. Refer to the floor plan drawings that identify the location of communication equipment rooms and information outlets. Note that the optical fiber cable count to each information outlet location may vary by location.

C. Basis of Design (MM):

   Leviton

2.4 HORIZONTAL FIBER PERFORMANCE

A. Multimode (MM):

1. Fiber Type: Multimode; doped silica core surrounded by a concentric glass cladding.

2. Index Profile: Graded Index.

3. Transmission Windows: 850-nm and 1300-nm.

4. Core Diameter (nom): 50-ηm (microns) ± 3.

5. Cladding Diameter: 125-ηm ± 2.

6. Core-clad Concentricity: ≤ 3-□m.

7. Cladding Non-circularity: ≤ 2.0%.

8. Fiber Coating Diameter:

   a. 250-ηm ± 15 (primary coating)
   b. 900-ηm (nominal) secondary coating (tight buffer)
   c. All coatings shall be mechanically strippable without damaging the optical fiber.

9. Attenuation (maximum @ 23±5 °C; backbone):

   a. @ 850-nm: 3.0 dB/km
   b. @ 1300-nm: 1.0 dB/km
   c. When tested in accordance with FOTP-3, "Procedure to Measure Temperature Cycling Effects on Optical Fibers, Optical Cable, and Other Passive Fiber Optic Components," the average change in attenuation over the rated temperature range of the cable shall not exceed 0.50 dB/km with 80% of the measured optical fibers not exceeding 0.25 dB/km.

10. Bandwidth (minimum):

    a. @ 850-nm: 500 MHz*km
    b. @ 1300-nm: 500 MHz*km

11. No optical fiber shall show a point discontinuity greater than 0.2 dB at the specified wavelengths. Such a discontinuity or any discontinuity showing a reflection at that point shall be cause for rejection of that optical fiber by the Owner.

B. Singlemode (SM):

1. Singlemode; doped silica core surrounded by a concentric glass cladding.

2. Core Diameter: 8-9 µm. All optical fibers shall be of the same nominal core diameter and profile.

3. Cladding Diameter: 125±1.0µm.

4. Cladding Non-circularity: ≤ 1%.

5. Core to Cladding Offset: ≤ 0.8 µm.

6. Fiber Coating Diameter:

   a. 245±15µm (primary coating)
   b. 900-nm (nominal) secondary coating (tight buffer)

   All coatings shall be mechanically strippable without damaging the optical fiber.

7. Cut-off Wavelength (cabled fiber; λccf) < 1260-nm.

8. Mode Field Diameter: 8.3 - 9.8 m at 1300-nm; 10.5±1.0 µm at 1550-nm.

9. Zero Dispersion Wavelength (λ0): 1301.5 nm < l0 < 1321.5 nm.

10. Zero Dispersion Slope (S_0): ≤ 0.092 ps/nm^2*km.

11. Fiber Attenuation (maximum @ 23±5 °C; Backbone):

    a. @ 1300-nm: 2.0 dB/km
    b. @ 1550-nm: 1.75 dB/km
    c. When tested in accordance with FOTP-3, "Procedure to Measure Temperature Cycling Effects on Optical Fibers, Optical Cable, and Other Passive Fiber Optic Components," the average change in attenuation over the rated temperature range of the cable shall not exceed 0.05 dB/km at 1550-nm. The magnitude of the maximum attenuation change of each individual optical fiber shall not be greater than 0.15 dB/km at 1550-nm.

12. Fiber Dispersion (maximum):

    a. 1285-1330-nm: 3.2-ps/nm*km
    b. @ 1550-nm: 18-ps/nm*km

13. No optical fiber shall show a point discontinuity greater than 0.1 dB at the specified wavelengths. Such a discontinuity or any discontinuity showing a reflection at that point shall be cause for rejection of that optical fiber by the Owner.

2.5 COPPER WORK AREA CORDS

A. RJ-45:

1. Provide the same quantity of Category 6 copper work area cords as copper patch panel cords specified in Section 27 11 00. Copper work area cords shall be equipped with an 8-pin modular RJ-45 connector on each end.

2. Work area cords shall be 10' in length.

3. Manufacturer of copper patch cable shall be the same as the manufacturer of the horizontal copper cable.

PART 3 - EXECUTION

3.1 CABLE INSTALLATION REQUIREMENTS

A. Horizontal Cabling:

1. The maximum horizontal cable drop length for Data UTP shall not exceed 295 feet (90 meters) in order to meet data communications performance specifications. This length is measured from the termination panel in the wiring closet to the outlet and must include any slack required for the installation and termination. The Contractor is responsible for installing horizontal cabling in a fashion so as to avoid unnecessarily long runs. Any area that cannot be reached within the above constraints should be identified and reported to the Architect/Engineer prior to installation. Changes to the contract documents shall be approved by the Architect/Engineer.

2. All cable shall be free of tension at both ends. In cases where the cable must bear some stress, Kellum grips may be used to spread the strain over a longer length of cable.

3. Manufacturer's minimum bend radius specifications shall be observed in all instances.

4. Horizontal cabling installed as open cabling shall be supported at a maximum of 5' between supports. Refer to the specifications for required cable supports.

5. Horizontal cabling installed as open cable or in cable tray shall be bundled at not less than 10' intervals with hook-and-loop tie wraps. The use of plastic cable ties is strictly prohibited.

6. The maximum conduit fill for horizontal cabling shall not exceed 40% regardless of conduit length.

7. Cable sheaths shall be protected from damage from sharp edges. Where a cable passes over a sharp edge, a bushing or grommet shall be used to protect the cable.

8. A coil of 3 feet in each cable shall be placed in the ceiling at the last support (e.g., J-hook, bridle ring, etc.) before the cables enter a fishable wall, conduit, surface raceway or box. At any location where cables are installed into movable partition walls or modular furniture via a service pole, approximately 15-feet of slack shall be left in each horizontal cable under 250 feet in length to allow for change in the office layout without re-cabling. These "service loops" shall be secured at the last cable support before the cable leaves the ceiling and shall be coiled from 100% to 200% of the cable recommended minimum bend radius.

9. Category 6A cables shall not be mixed with any other category cable in any bundle. Bundles of Category 6A cable shall maintain a 0.5" separation from bundles of cables containing different categories (e.g., Cat 6, Cat 5E).

10. To reduce or eliminate EMI, the following minimum separation distances from 480V power lines shall be adhered to:

    a. Twelve (12) inches from power lines of <5-kVa.
    b. Eighteen (18) inches from high-voltage lighting (including fluorescent).

c. Thirty-nine (39) inches from power lines of 5-kVa or greater.
d. Thirty-nine (39) inches from transformers and motors.

11. Information outlets shown on floor plans with the subscript "W" are intended to be used for wall mounted telephones. Back boxes for wall mounted telephones shall not be located within 12" vertically, or horizontally, from any light switches, power receptacles, nurse call devices, thermostats, or any other architectural element that would otherwise prevent the installation of a wall mounted telephone on the mating lugs.

B. Horizontal Cabling in Modular Furniture:

1. This Contractor shall be responsible for providing and installing cable completely to the information outlet in the furniture. This Contractor's responsibility does not end at the furniture feed point.

2. Where furniture panels are installed to include contact with a wall, cabling shall be fed to the furniture panels via conduit.

3. Where modular furniture is installed without wall contact, the Contractor shall install cabling through floor fittings as shown on the drawings.

4. Cabling shall be protected in the transition from the floor or wall fittings to the modular furniture via a length of flexible plastic conduit or other approved protective means. Conduit fittings shall be compatible with the Floor and Wall Fittings proposed. There shall be no exposed cable in the transition to the modular furniture. Fill ratio (cable area vs. conduit area) in each feed shall not exceed 40%.

5. For purposes of bidding, it is to be assumed that the cable pathway shall be limited to the bottom panel of the modular furniture only. Communications cables would be run through these channels to the jack location.

6. For purposes of bidding, it is to be assumed that it will be the responsibility of the Contractor to punch and reinstall the bottom molding panels on the modular furniture as required to accommodate the communications cabling and information outlets. The panels shall be marked prior to installation by the Owner to identify the desired location of the information outlets.

7. The information outlet shall be secured to the panel via mounting tabs, pop-rivets, screws or other approved method. Use of adhesive tape is not acceptable. The method of securing the information outlet to the panel shall not result in sharp protrusions (e.g., sheet metal screw tip) into the channel behind the panel.

3.2 CABLE TERMINATION REQUIREMENTS

A. Cable Terminations - Data UTP:

1. Modular patch panels shall be designed and installed in a fashion as to allow future horizontal cabling to be terminated on the panel without disruption to existing connections.

2. If the "last" patch (per rack) is greater than 50% utilized, one additional patch panel shall be provided for future use.

3. At information outlets and modular patch panels, the Contractor shall ensure that the twists in each cable pair are preserved to within 0.5-inch of the termination for data cables. The cable jacket shall be removed only to the extent required to make the termination.

END OF SECTION

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SECTION 32 12 16 – ASPHALT PAVING

PART 1 - GENERAL

1.1 SECTION INCLUDES

A. Asphaltic Concrete Paving

B. Aggregates

C. Surface Sealer

D. Patching and Repair

E. Weed Killer

F. Pavement Striping

1.2 REFERENCE STANDARDS

A. AI MS-2 - Mix Design Methods for Asphalt Concrete and Other Hot-Mix Types; The Asphalt Institute; 1997.

B. AI MS-19 - A Basic Asphalt Emulsion Manual; The Asphalt Institute; Fourth Edition.

C. ASTM D946 - Standard Specification for Penetration-Graded Asphalt Cement for Use in Pavement Construction; 2009a.

D. Standard Specifications for Public Works Construction (Greenbook), latest edition.

1. Standard Specifications shall be as amended and adopted by authorities having jurisdiction, including the County of Los Angeles.

2. Where reference is made to Standard Details, such reference shall be to the Standard Details accompanying the Standard Specifications, as amended and adopted by the authorities having jurisdiction.

3. Wherever term "Agency" occurs in Standard Specifications, it shall be understood to mean Owner for purposes of the Contract.

4. Wherever term "Engineer" occurs in Standard Specifications, it shall be understood to mean Architect for purposes of the Contract.

1.4 SUBMITTALS

A. Materials List: List source and quality standard for all asphaltic concrete materials.

B. Weighmaster's Certificates or certified delivery tickets for each truckload of bituminous material delivered to site.

C. Certificates of Conformance: Asphalt, aggregate and sterilant materials.

D. Mix Designs: Submit designs for asphaltic concrete prepared by a materials laboratory under direct supervision of a Civil Engineer licensed in the State of California or a standard mix design proven in actual performance.

1.5 QUALITY ASSURANCE

A. Perform work in accordance with Local Public Works Standards.

B. Mixing Plant: Conform to Local Public Work Standards.

C. Testing and analysis of granular base material and asphaltic concrete paving mix shall be performed under provisions of Division 1.

D. Obtain materials from same source throughout.

1.6 REGULATORY REQUIREMENTS

A. Conform to applicable code for paving work on public property.

B. Where reference is made to Standard Specifications, the following shall apply.

1. Perform off-site work in the public right-of-way in accordance with requirements of authorities having jurisdiction.

a. Including Standard Specifications for Public Works Construction (Greenbook), as amended and adopted by those authorities.

b. For conditions not indicated otherwise on Contract Drawings, conform to Standard Details adopted by authorities having jurisdiction, including Standard Plans for Public Works Construction, as amended and adopted by those authorities.

2. Perform on-site work as indicated and referenced on Contract Drawings and as specified herein.

C. The quantity of volatile organic compounds (VOC) used in weed killer, tack coat, primer and other materials shall not exceed limits permitted under current regulations of South Coast Air Quality Management District (AQMD).

1.7 FIELD CONDITIONS

A. Do not place asphalt when ambient air or base surface temperature is less than 40 degrees F (4 degrees C), or surface is wet or frozen; or when rain is imminent.

B. Place bitumen mixture when temperature is not more than 15 F degrees (8 C degrees) below bitumen supplier's bill of lading and not more than maximum specified temperature.

PART 2 - PRODUCTS

2.1 ASPHALT CONCRETE MIX

A. Provide hot plant mixed asphaltic concrete paving materials in accordance with Section 203-6 of Standard Specifications for Public Works Construction.

1. Binder Course Mix: B

2. Parking and Drive Aisle Wearing Course: C2

3. Hardscape Play Area Wearing Course: D2

a. Standard Specifications, PG-70-10 or PG-64-10 choose one.

b. Standard Specifications, C2-AR-4000.

B. Use dry material to avoid foaming. Mix uniformly.

C. Base Course: 3.0 to 6 percent of asphalt cement by weight in mixture in accordance with AI MS-2.

D. Binder Course: 4.5 to 6 percent of asphalt cement by weight in mixture in accordance with AI MS-2.

E. Wearing Course: 5 to 7 percent of asphalt cement by weight in mixture in accordance with AI MS-2.

2.2 AGGREGATES

A. Provide aggregate for base course consisting of angular crushed stone, free of shale, clay, friable material and debris.

B. Granular base aggregate shall be in accordance with Section 200-2.2 of Standard Specifications for Public Works Construction (Greenbook).

C. Granular base aggregate maximum size:

1. Base courses under 6" thick: ¾ inches

2. Base courses over 6" thick: 1-1/2 inches

D. Aggregates for asphaltic concrete paving shall be in accordance with Section 203.6.2.2 of Standard Specifications for Public Works Construction (Greenbook).

2.1 MATERIALS

A. General: Aggregate base, prime coat paint binder, bituminous surface course and other materials shall be as noted on the Contract Drawings and shall comply with requirements of authorities having jurisdiction.

B. Asphalt Cement: ASTM D 946.

C. Aggregate for Base Course: Angular crushed washed stone; free of shale, clay, friable material and debris.

1. Graded in accordance with ASTM D2487 Group Symbol GW.

2. Crushed Aggregate Base in accordance with Standard Specifications (Greenbook), Sub-Section 200-2.2.

D. Asphalt Concrete Materials: Standard Specifications (Greenbook), Sub-Section 203-6.

E. Aggregate for Binder Course: Angular crushed washed stone; free of shale, clay, friable material and debris.

1. Graded in accordance with ASTM D2487 Group Symbol GW.

F. Aggregate for Wearing Course: Angular crushed washed stone; free of shale, clay, friable material and debris.

1. Graded in accordance with ASTM D2487 Group Symbol GW.

G. Fine Aggregate: Sand

H. Mineral Filler: Finely ground particles of limestone, hydrated lime or other mineral dust, free of foreign matter.

I. Primer: Homogeneous, medium curing, liquid asphalt.

J. Tack Coat: Emulsified asphalt.

K. Seal Coat: AI MS-19, slurry type.

1. Guard Top by Industrial Asphalt Inc., Irwindale, CA.

2. Satin Seal by Blue Diamond Co., Long Beach, CA.

3. OverKote by Diversified Asphalt Products, Anaheim, CA.

4. Substitutions: See Section 01 60 00 - Product Requirements.

2.2 SOURCE QUALITY CONTROL

A. Test mix design and samples in accordance with AI MS-2.

2.4 ACCESSORIES

A. Headers and Stakes: 2 x 6 inch (50 x 305 mm) nominal preservative treated Douglas Fir (PTDF), except at curves provide laminated 1 x 6 inch (25 x 305 mm) nominal preservative treated Douglas Fir. Stakes, 2 x 3 x 18 inch (50 x 150 x 457 mm) long PTDF at 48 inch (1219 mm) on center maximum. Use hot dipped galvanized nails only.

B. Pavement Reinforcing Fabric: Petromat by Amoco Fabrics and Fibers Co., Austell, GA (800) 445-7732, or approved equal. Non-woven polypropylene fabric conforming to Standard Specifications, Sub-Section 213-1.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Verify that compacted subgrade and granular base is dry and ready to support paving and imposed loads.

B. Verify gradients and elevations of base are correct.

C. Fine grading, checking, shaping, and compacting of subgrade shall be complete before start of asphaltic concrete work.

D. Soil Sterilant: Sterilize soil areas to receive asphaltic concrete paving. Apply soil sterilant in accordance with manufacturer's instructions and applicable environmental regulations. Take care to confine application to the areas to be paved. See Section 32 11 23 - Aggregate Base Courses for product information.

E. Curbs and Gutters: Gutters shall be in place and cured prior to start of asphaltic concrete work. Provide lumber ramping at all locations where rolling equipment or vehicles cross new concrete paving, curbs and gutters.

F. Headers: Place headers with tops flush with finish asphaltic concrete surfaces. Back headers with stakes.

3.2 BASE COURSE

A. Place and compact base course.

3.3 PREPARATION - PRIMER

A. Apply primer in accordance with Local Municipality Public Work's Standards.

B. Apply primer on aggregate base or subbase at uniform rate of 0.25 gal/sq yd (0.80 L/sq m).

C. Apply primer to contact surfaces of curbs and/or gutters.

D. Use clean sand to blot excess primer.

3.4 PREPARATION - TACK COAT

A. Apply tack coat in accordance with manufacturer's instructions.
B. Apply tack coat on asphalt or concrete surfaces over subgrade surface at uniform rate of 0.10 gal/sq yd (0.32 L/sq m).
C. Apply tack coat to contact surfaces of curbs, gutters and previously placed or existing paving.
D. Coat surfaces of manhole frames with oil to prevent bond with asphalt pavement. Do not tack coat these surfaces.
E. Joining Pavement: Expose, cut and clean edges of existing pavement to straight, vertical surfaces for full depth of existing pavement. Paint edge with asphalt emulsion before placing new asphaltic concrete. Joints in new paving shall be in accordance with Standard Specifications.

3.5 PLACING ASPHALT PAVEMENT - SINGLE COURSE

A. Install work in accordance with the Municipality of the ciot of Los Angeles Public Work's Standards.
B. Place asphalt within 24 hours of applying primer or tack coat.
C. Place thickness as indicated on Civil Drawings to minimum 2 inch (51 mm) compacted thickness.
D. Install gutter drainage grates and frames and manhole frames in correct position and elevation.
E. Compact pavement by rolling to specified density. Do not displace or extrude pavement from position.
   1. Compact (roll) asphaltic concrete in accordance with Standard Specifications (Greenbook), Sub-Section 302-5.6, using machine rollers.
      a. Compaction by vehicular traffic is prohibited.
      b. Compact areas inaccessible to rolling equipment with machine-powered tamper.
F. Perform rolling with consecutive passes to achieve even and smooth finish without roller marks.

3.6 PLACING ASPHALT PAVEMENT - DOUBLE COURSE

A. Install work in accordance with Standard Specifications (Greenbook), Sub-Section 302-5.
B. Place asphalt binder course within 24 hours of applying primer or tack coat.
C. Place binder course to thickness as indicated on Civil Drawings, minimum 2 inch (51 mm) compacted thickness.
D. Place wearing course within two hours of placing and compacting binder course.
E. Place wearing course to thickness as indicated on Civil Drawings, minimum 2 inch (51 mm) compacted thickness.
F. Install gutter drainage grates and frames and manhole frames in correct position and elevation.
G. Compact pavement by rolling to specified density. Do not displace or extrude pavement from position.
   1. Compact (roll) asphaltic concrete in accordance with Standard Specifications (Greenbook), Sub-Section 302-5.6, using machine rollers.
      a. Compaction by vehicular traffic is prohibited.
      b. Compact areas inaccessible to rolling equipment with machine-powered tamper.
H. Perform rolling with consecutive passes to achieve even and smooth finish, without roller marks.

3.7 CURBS

A. Install extruded asphalt curbs of standard profile as indicated by plan detail or referenced standard detail.

3.8 SEAL COAT

A. Apply seal coat after surface course application, in accordance with manufacturer's recommendations.
B. Apply seal coat to surface course and asphalt curbs in accordance with Standard Specifications (Greenbook), Sub-Section 302-8.2.
C. Add water to specified seal coat material. When air temperatures of 90 degrees F or more are encountered during application, consult manufacturer for recommendations.
D. If pavement surface exhibits imperfections of roller marks, rock pockets, ridges or depressions as determined by the Architect, the addition of sand aggregate to seal coat, and amounts thereof, shall be as recommended by the manufacturer.
E. A second application shall be made after first coat has dried to the touch. When sand is added to the first seal coat, two additional coats without extra sand shall be applied.
F. Allow seal coat to dry before permitting traffic or striping.

3.9 PAVEMENT REPAIR AND PAVING

A. Preparation of existing pavement: Where indicated, remove loose asphaltic concrete, cleanout "pot holes" and cracks, remove dirt, oil and other foreign materials.
B. Repair holes with full paving section as specified. Repair "alligatoring" with asphalt "skin-patch". Fill all cracks larger than 1/4 inch (6 mm) wide with asphalt emulsion slurry.
C. Tack Coat: Apply asphalt oil AR-4000 or AR-8000, as required for jobsite condition, at metered application rate of no less than a range from 0.2 to 0.3 gallons per square yard of fabric or as directed by manufacturer and to provide 100 percent fabric saturation and ample bonding for paving section.
D. Fabric Reinforcement: Place fabric smooth side up in tack coat with 2 to 4 inch overlap. Hand-broom to remove wrinkles. Apply addition tack coat to joints and between overlapped fabric layers.

E. Overlay Asphalt: Place single course asphalt, 1-1/2 inch (38 mm) compacted thickness, in conformance with specified standards in this section.

3.10 TOLERANCES

A. Flatness: Maximum variation of 1/4 inch (6 mm) measured with 10 foot (3 m) straight edge.

B. Compacted Thickness: Within 1/4 inch (6 mm) of specified or indicated thickness.

C. Variation from True Elevation: Within 1/2 inch (12 mm).

3.11 FIELD QUALITY CONTROL

A. See Section 01 40 00 - Quality Requirements, for general requirements for quality control.

B. Provide field inspection and testing. Take samples and perform tests in accordance with AI MS-2.

C. Test: Flood test all paving to demonstrate positive drainage. No standing water shall remain 1 hour after test.

3.12 PROTECTION

A. Immediately after placement, protect pavement from mechanical injury for 2 days or until surface temperature is less than 140 degrees F (60 degrees C).

1. After final rolling, prohibit all traffic on asphaltic concrete until mix has fully cooled and set. Minimum time, in all cases shall be 6 hours.

3.13 CLEANING

A. After completion of paving operations, clean all existing and new improvements that have been soiled, especially by oil tracking from asphalt tanks or placement in general.

B. For Substantial Completion review, broom clean and wash paving with hoses. Clean residue from landscaping installation.

END OF SECTION

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SECTION 32 13 13 – CONCRETE PAVING

PART 1 - GENERAL

1.1 SECTION INCLUDES

A. Concrete sidewalks.

1.2 RELATED REQUIREMENTS

A. Section 31 22 00 - Grading: Preparation of site for paving and base.

B. Section 31 23 23 - Fill: Compacted subbase for paving.

1.3 REFERENCE STANDARDS

A. ACI 211.1 - Standard Practice for Selecting Proportions for Normal, Heavyweight, and Mass Concrete; American Concrete Institute International; 1991 (Reapproved 2002).

B. ACI 301 - Specifications for Structural Concrete; American Concrete Institute International; 2010 (Errata 2012).

C. ACI 304R - Guide for Measuring, Mixing, Transporting, and Placing Concrete; American Concrete Institute International; 2000.

D. ACI 305R - Hot Weather Concreting; American Concrete Institute International; 2010.

E. ACI 306R - Cold Weather Concreting; American Concrete Institute International; 2010.

F. ASTM A615/A615M - Standard Specification for Deformed and Plain Carbon-Steel Bars for Concrete Reinforcement; 2014 is current; use 2004a as indicated in 2019 CBC Referenced Standards.

G. ASTM C33/C33M - Standard Specification for Concrete Aggregates; 2011a is current; use 2003 as indicated in 2019 CBC Referenced Standards.

H. ASTM C39/C39M - Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens; 2014.

I. ASTM C94/C94M - Standard Specification for Ready-Mixed Concrete; 2014 is current; use 2004a as indicated in 2019 CBC Referenced Standards.

J. ASTM C150/C150M - Standard Specification for Portland Cement; 2012 is current; use 2007 as indicated in 2019 CBC Referenced Standards.

K. ASTM C309 - Standard Specification for Liquid Membrane-Forming Compounds for Curing Concrete; 2011.

L. ASTM C494/C494M - Standard Specification for Chemical Admixtures for Concrete; 2013.

M. ASTM D1751 - Standard Specification for Preformed Expansion Joint Filler for Concrete Paving and Structural Construction (Non-extruding and Resilient Bituminous Types); 2004 (Reapproved 2013).

N. ASTM D1752 - Standard Specification for Preformed Sponge Rubber Cork and Recycled PVC Expansion Joint Fillers for Concrete Paving and Structural Construction; 2004a (Reapproved 2013).

O. Standard Specifications for Public Works Construction, County of Los Angeles, latest edition.

1. Standard Specifications shall be as amended and adopted by authorities having jurisdiction, including the County of Los Angeles.

2. Where reference is made to Standard Details, such reference shall be to the Standard Details accompanying the Standard Specifications, as amended and adopted by the authorities having jurisdiction.

3. Wherever term "Agency" occurs in Standard Specifications, it shall be understood to mean Owner for purposes of the Contract.

4. Wherever term "Engineer" occurs in Standard Specifications, it shall be understood to mean Architect for purposes of the Contract.

1.4 SUBMITTALS

A. See Section 01 30 00 - Administrative Requirements, for submittal procedures.

B. Mix Design: Design mixes for each concrete mix.

C. Product Data: Provide data on joint filler, admixtures, and curing compound.

1. Material Certificates signed by manufacturers for each of the following:

a. Cementitious materials and aggregates.

b. Steel reinforcement and reinforcement accessories.

c. Admixtures.

d. Curing compounds.

e. Joint fillers.

2. Colored concrete product data and color selections.

D. Samples: Submit two sample panels, 12 x 12 inch (300 x 300 mm) in size illustrating exposed aggregate finish.

E. Shop drawings: For pattern layout and verification.

1.5 QUALITY ASSURANCE

A. Industry Standard: Perform concrete paving Work in accordance with ACI 301.

B. Regulatory Requirements: Where reference is made to Standard Specifications, the following shall apply:

1. Where reference is made to Standard Specifications, the following shall apply:

a. Perform off-site Work in public rights-of-way as indicated on the Contract Drawings and in accordance with requirements of authorities having jurisdiction, including Standard Specifications for Public Works Construction, as amended and adopted those authorities.

1) For conditions not indicated otherwise on Contract Drawings, conform to Standard Details adopted by authorities having jurisdiction, including Standard Details for Public Works Construction, as amended and adopted those authorities.

b. Perform on-site work as indicated and referenced on the Contract Drawings and as specified herein.

2. Conform to Standard Specifications for Public Works Construction.

3. Conform to California Code of Regulations (CCR), Volume 2, Part 2, Chapters 18A and 19A.

4. Conform to California Building Code (CBC), Chapter 11B and ADAAG for accessibility requirements.

a. Concrete paving and concrete finishes along accessible routes of travel shall be at least as slip-resistant as that described as a medium salted finish for slopes of less than 6%, and slip resistant at slopes of 6% or greater; CBC 11B-403.2.

5. Comply with OSHA and Cal-OSHA requirements.

6. Continuous surfaces, including walks and sidewalks, shall have a continuous common surface, not interrupted by steps or by abrupt changes in level exceeding 1/4 inch (3 mm) vertical (CBC 11B-303.2), or beveled at 1:2 slope to a maximum height of 1/2 inch (12 mm) (CBC 11B-303.3) and shall have a minimum width of 48 inches (1219 mm); CBC 11B-403.5.1.

7. Surface cross slopes shall not exceed 2 percent on any accessible path of travel.

8. Surface slopes shall not exceed 2 percent in any direction for areas of flatwork that have no discernable path of travel. These areas are also known as plaza areas.

C. Source Quality Control: Obtain like materials from one source throughout.

D. Lines and Levels: Established by State of California licensed Surveyor or registered Civil Engineer. Costs of surveying services shall be included in the Contract Sum.

1.6 MOCK-UP

A. Install minimum 48 x 48 inch (1219 x 1219 mm) mock-up of concrete flatwork for each texture or color specified.

B. Install mock-up one month prior to installation, located where directed by Architect.

C. Use identical forming system, subgrade type, reinforcing, expansion joints, score joints, finishing and edge trim as specified for installation.

D. Architect approval required prior to proceeding with finish installation. Acceptable sample shall serve as quality basis for evaluating subsequent work.

1. Refinish mock-up area as required to produce acceptable work.

2. Do not proceed with remaining work until workmanship, color, and sheen are approved by Architect.

E. Mock-up may not be used in final installation. Remove mock-up materials from site and dispose of legally.

1.7 DELIVERY, STORAGE AND HANDLING

A. Delivery, Storage and Handling: Comply with requirements specified for regular concrete in Section 03 30 00 - Cast in Place Concrete.

PART 2 - PRODUCTS

2.1 PAVING ASSEMBLIES

A. Comply with applicable requirements of ACI 301.

B. Concrete Sidewalks: 2,500 psi (17.2 MPa) 28-day concrete, thickness as indicated on Civil drawings, minimum 4 inches (100 mm), natural grey color Portland cement. Concrete thickness and psi recommended in Geotechnical Report shall be used if are thicker and stronger.

2.2 FORM MATERIALS

A. Wood form material, profiled to suit conditions.

B. Joint Filler: Preformed; non-extruding bituminous type (ASTM D 1751) or sponge rubber or cork (ASTM D 1752).

1. Thickness: 1/2 inch (12 mm).

2.3 REINFORCEMENT

A. General: As indicated on drawing, reinforcement per sheet A10.01. Reinforcement for portland cement concrete paving in public rights-of-way shall comply with all applicable requirements in the Standard Specifications for Public Works Construction and Standard Details, as adopted by local authorities having jurisdiction.

B. Reinforcing Steel: ASTM A615/A615M Grade 60 (420); deformed billet steel bars; unfinished finish.

1. Unless detailed otherwise on drawings, provide number 4 reinforcing bars at 24 inches (610 mm) on center, each way.

C. Tie Wires: 18 gage minimum, black annealed steel.

D. Construction Joint Reinforcing:

1. Dowels: ASTM A615/A615M, Grade 60 - 60,000 psi (420 MPa) yield strength; deformed billet steel bars; unfinished finish.

2.4 PERFORMANCE REQUIREMENTS

A. Albedo reflectance of finish concrete shall be minimum 0.30.

2.5 CONCRETE MATERIALS

A. Obtain cementitious materials from same source throughout.

B. Cement: ASTM C150/C150M Sulfate Resistant - Type V portland type, grey color.

C. Fine and Coarse Mix Aggregates: ASTM C33/C33M.

D. Water: Clean, and not detrimental to concrete.

2.6 ACCESSORIES

A. Liquid Curing Compound: ASTM C 309, Type 1, Class A. Comply with all applicable air pollution requirements.

B. Liquid Surface Sealer:

1. High solids, acrylic curing and sealing compound: Minimum 30% non-yellowing, acrylic solids curing compound; shall conform to ASTM C 309 and ASTM C 1315, Type I, Class A, VOC compliant.

a. Acceptable Products:

1) L&M Construction Chemicals, Inc.; Dress & Seal WB: www.lmcc.com.
2) L.M. Scofield Company; Cureseal-W: www.scofield.com.
3) W. R. Meadows Company; Decra-Seal W/B: www.wrmeadows.com.
4) Substitutions: See Section 01 60 00 - Product Requirements.

C. Concrete Paving Joint Sealant: Polyurethane, self-leveling; ASTM C920, Class 25, Uses T, I, M and A; single component.

1. Color: Gray.

2. Applications: Use for:

a. Joints in sidewalks and vehicular paving.

3. Products:

a. Pecora Corporation; NR-201 Self-Leveling Traffic and Loop Sealant: www.pecora.com.

b. BASF Construction Chemicals-Building Systems: www.buildingsystems.basf.com.

c. Sherwin-Williams Company; Stampede 1SL Polyurethane Sealant: www.sherwin-williams.com.

d. Substitutions: See Section 01 60 00 - Product Requirements.

F. Soil Sterilant: As specified in Standard Specifications for Public Works Construction. Soil sterilant shall comply with all applicable environmental protection and hazardous materials laws and regulations.

G. Headers and Stakes: Pressure preservative treated Douglas Fir, 2 x 6 inch (50 x 150 mm) nominal size except at curves provide laminated 1 x 6 inch (25 x 150 mm). Use hot dipped galvanized nails only.

H. Expansion Joint Filler: ASTM D1751, pre-molded, compressible 1/2 inch (12 mm) thick non-extruding bituminous type resilient filler, compatible with joint backing and sealing products.

2.7 CONCRETE MIX DESIGN

A. Proportioning Normal Weight Concrete: Comply with ACI 211.1 recommendations.

B. Concrete Mix for Pedestrian (Sidewalk) Pavements, Natural Color, unless indicated otherwise: Standard Specification for Public Works Construction, Section 201-1.1.2 - Class 520-C-2500, with minimum slump of 4-inches, except concrete paving in public rights of way shall be as required authorities having jurisdiction.

C. Concrete Strength: Establish required average strength for each type of concrete on the basis of field experience or trial mixtures, as specified in ACI 301.

1. For trial mixtures method, employ independent testing agency acceptable to Architect for preparing and reporting proposed mix designs.

E. Admixtures: Add acceptable admixtures as recommended in ACI 211.1 and at rates recommended by manufacturer.

1. Use accelerating admixtures in cold weather or set retarding admixtures in hot weather only when approved by Architect. Do not use calcium chloride.

F. Concrete Properties:

1. Compressive strength, when tested in accordance with ASTM C39/C39M at 28 days; As scheduled.

2. Water-Cement Ratio: Maximum 50 percent by weight.

3. Maximum Slump: 4 inches (100 mm).

2.8 MIXING

A. Transit Mixers: Comply with ASTM C94/C94M.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Verify compacted stabilized soil is acceptable and ready to support paving and imposed loads.

1. Provide as indicated on Civil Drawings, as specified in Earthwork Sections and as recommended in geotechnical report.

B. Fine grading, checking, shaping, and compacting of subgrade shall be complete before start of concrete paving Work.

C. Verify gradients and elevations of base are correct.

3.2 SUBBASE

A. Aggregate base is not required under Portland cement concrete paving subject only to pedestrian traffic in normal use.

3.3 PREPARATION

A. Project Conditions:

1. Water and Dust Control: Maintain control of concrete dust and water at all times. Do not allow adjacent planting areas to be contaminated.

2. Do not place pavement when base surface or ambient temperature is less than 40 degrees F (4 degrees C) or if base surface is wet or frozen.

3. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's absolute limits.

B. Moisten base to minimize absorption of water from fresh concrete. Do not place concrete on standing water.

C. Coat surfaces of manhole frames with oil to prevent bond with concrete pavement.

D. Notify Architect a minimum of 24 hours prior to commencement of concreting operations.

3.4 FORMING

A. Place and secure forms to correct location, dimension, profile, and gradient.

1. Surfaces and Edges: Except where special finishes and tooled edges are indicated, provide all exposed finish surfaces of dense concrete with sharp arises and outside corners.

2. Recesses and Openings: As indicated on Drawings or as directed.

B. Concrete Formwork:

1. Construct formwork accurately and to configurations and dimensions indicated for finish concrete Work.

2. Formwork shall be substantial, mortar-tight and braced to maintain position and shape during placement of reinforcing and concrete.

3. Hold forms rigidly in place by stakes, clamps, spreaders and braces where required to ensure rigidity.

4. Formwork shall not deviate more than 1/4 inch (6 mm) maximum from required positions and levels.

6. Verify formwork alignment and levels as Work proceeds, promptly making adjustments and adding bracing as necessary.

C. Assemble formwork to permit easy stripping and dismantling without damaging concrete.

1. Remove the form on the front of curbs in not less than one hour nor more than 6 hours after the concrete has been placed.

2. Remove side forms for sidewalks, gutter depressions, island paving and driveways, not less than 12 hours after the finishing has been completed.

D. Place joint filler vertical in position, in straight lines. Secure to formwork during concrete placement.

3.5 REINFORCEMENT

A. Place reinforcement at mid-height of slabs-on-grade.

B. Reinforcement Placement, General: Locate reinforcement as indicated on Drawings or in Standard Specifications, whichever is more stringent.

1. Locate reinforcement to provide required cover by concrete. If not otherwise indicated on Drawings or in Standard Specifications, provide concrete cover in compliance with ACI 318, Table 3.3.2.3.

2. Place, support and secure reinforcement against displacement.

C. Reinforcement Spacing: Space reinforcement as indicated on Drawings or in Standard Specifications, whichever is more stringent. If not indicated, maintain clear spacing of two times bar diameter but not less than 1-1/2 inch (38 mm) nor less than 1-1/3 times maximum size aggregate.

D. Coordination: Locate reinforcement to accommodate embedded products and formed openings and recesses.

E. Reinforcement Supports: Provide load bearing pads under supports or provide precast concrete block bar supports.

F. Interrupt reinforcement at contraction and expansion joints.

G. Place dowels to achieve pavement and curb alignment as detailed.

1. Secure tie dowels in place before depositing concrete. Provide No. 3 bars, 18 inch (457 mm) long at 24 inches (610 mm) O.C. for securing dowels where no other reinforcement is provided.

3.6 COLD AND HOT WEATHER CONCRETING

A. Follow recommendations of ACI 305R when concreting during hot weather.

B. Follow recommendations of ACI 306R when concreting during cold weather.

C. Do not place concrete when base surface temperature is less than 40 degrees F (4 degrees C), or surface is wet or frozen.

3.7 PLACING CONCRETE

A. Mixing: If batch plant is within travel time not exceeding maximum limits, transit mix concrete in accordance with ASTM C94. If travel time exceeds limits, provide alternative means for mixing and submit for review and approval.

B. Place concrete in accordance with ACI 304R.

C. Do not place concrete when base surface is wet.

D. Ensure reinforcement, inserts, embedded parts, formed joints are not disturbed during concrete placement.

E. Place concrete continuously over the full width of the panel and between predetermined construction joints. Do not break or interrupt successive pours such that cold joints occur.

F. Use internal vibration to consolidate concrete around reinforcing per industry guidelines.

G. Place concrete to pattern indicated.

3.8 JOINTS

A. Place 1/2 inch (12 mm) wide expansion joints as indicated on Drawings (if not indicated provide at 20 foot (6 m) intervals) and to separate paving from vertical surfaces and other components and in pattern indicated.

1. Place in all concrete walks, other exterior flatwork and concrete curbs and gutters.

2. If expansion joints are not indicated, comply with standard details and specifications of authorities having jurisdiction, including Standard Details for Public Works Construction and Standard Specification for Public Works Construction, as applicable.

3. Place expansion control filler to correct elevation and profile. Form joints with joint filler extending from bottom of pavement to within 1/2 inch (13 mm) of finished surface.

4. Secure to resist movement by wet concrete.

5. Coordinate locations to align expansion joints in adjoining concrete walks, curbs, gutters and other exterior flatwork.

6. Provide expansion joints also at beginning and end of all curved segments.

7. Provide expansion joints also at intersections of concrete curbs and gutters and building footing.

8. Provide expansion joints also at intersections of concrete paving and building footing.

9. Lay out expansion joint locations to occur where possible at penetrations such as handrail posts and columns.

10. Place expansion control filler to correct elevation and profile.

C. Provide scored joints:

1. As indicated on Drawings. If not indicated, locate joints in compliance with Standard Details and as indicated below.

2. Evenly spaced at maximum 5 feet (1.5 m) intervals for vehicular paving and 5 feet (1.5 m) for pedestrian paving or as indicated on drawing 2/A10.01.

3. Between sidewalks and curbs.

4. Between curbs and pavement.

5. Lay out control joint locations to occur at penetrations such as handrail posts and columns and where shown on Drawings.

6. Refer to Architectural, Landscape and Civil Drawings for additional information and joint locations.

D. Provide keyed joints as indicated.

E. Saw cut contraction joints 1/8 inch (3 mm) wide at an optimum time after finishing. Cut 1/3 into depth of slab.

3.9 FINISHING

A. Concrete Paving Finish: ACI 301, two-step trowel finish, followed after surface has achieved initial set by flooding of surface and light rubbing with bristle brush so that concrete fines are exposed slightly.

1. Finish surface less than 6 percent shall receive medium broom finish resembling medium grit sandpaper. CBC 11B-403 and 11B-302.1.

2. Finish surface greater than 6 percent shall receive heavy broom finish. CBC 11B-403 and 11B-302.1.

3. Surfaces shall have static coefficients of friction of 1.3 to 1.6 (dry) and 1.2 to 1.4 (wet) when field tested in accordance with ASTM C1028.
4. Portland cement concrete paving shall be stable, firm, and slip resistant and shall comply with CBC Sections 11B-302 and 11B-403.

B. Sidewalk Paving: Light broom, texture perpendicular to direction of travel with troweled and radiused edge 1/8 inch (3 mm) radius.
1. Broomed: Pull broom across freshly floated concrete to produce medium texture in straight lines perpendicular to main line of traffic. Do not dampen brooms.
2. Tooled Joints: 1-inch deep by 3/16-inch wide tooled joints with 1/8-inch radius corners.

3.10 JOINT SEALING

A. See Section 07 92 00 - Joint Sealants for joint sealer requirements.

3.11 TOLERANCES

A. ACI 301, Class B, except paving in public rights-of-way shall comply with the Standard Specifications.

B. Maximum Variation of Surface Flatness: 1/4 inch (6 mm) in 10 ft (3 m).

C. Maximum Variation from True Position: 1/4 inch (6 mm).

3.12 FIELD QUALITY CONTROL

A. An independent testing agency will perform field quality control tests, as specified in Section 01 40 00.

1. Provide free access to concrete operations at project site and cooperate with appointed firm.

2. Submit proposed mix design of each class of concrete to inspection and testing firm for review prior to commencement of concrete operations.

3. Tests of concrete and concrete materials may be performed at any time to ensure conformance with specified requirements.

B. Compressive Strength Tests: ASTM C 39/C 39M. For each test, mold and cure three concrete test cylinders. Obtain test samples for every 75 cu yd (57 cu m) or less of each class of concrete placed each day.

1. Take one additional test cylinder during cold weather concreting, cured on job site under same conditions as concrete it represents.

2. Perform one slump test for each set of test cylinders taken.

C. Maintain records of placed concrete items. Record date, location of pour, quantity, air temperature, and test samples taken.

3.13 PROTECTION

A. Immediately after placement, protect pavement from premature drying, excessive hot or cold temperatures, and mechanical injury.

B. Do not permit pedestrian or vehicular traffic over pavement until 75 percent design strength of concrete has been achieved.

C. Prohibit all vehicular traffic across pedestrian paving unless suitable base and reinforcement have been added.

D. Provide lumber ramping and plywood covering where curbs and gutters are subject to vehicular and equipment traffic during construction.

E. Provide protection of colored concrete in accordance with colored concrete manufacturer's instructions and recommendations.

END OF SECTION

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BUILDING 400 MODERNIZATION
NEW CLASSROOM/ LIBRARY MEDIA CENTER

DIAMOND BAR HIGH SCHOOL

21400 PATHFINDER ROAD, DIAMOND BAR, CALIFORNIA 91765

GENERAL NOTES

1. CONTRACTOR SHALL REVIEW THE CONTRACT DOCUMENTS, FIELD CONDITIONS AND DIMENSIONS FOR ACCURACY AND CONSTRUCTABILITY. CONTRACTOR SHALL NOTIFY THE ARCHITECT OF ANY DISCREPANCIES.
2. CONTRACTOR SHALL VISIT THE SITE PRIOR TO BIDDINGS AND SHALL DETERMINE ANY DISCREPANCIES BETWEEN THESE DRAWINGS AND ACTUAL FIELD CONDITIONS. CONTRACTOR SHALL NOTIFY THE ARCHITECT AND OWNER OF ANY DISCREPANCIES.
3. CONTRACTOR SHALL THOROUGHLY INVESTIGATE, VERIFY AND BEAR RESPONSIBILITY FOR DIMENSIONS AND EXISTING CONDITIONS. CONTRACTOR SHALL NOTIFY ARCHITECT OF ANY CONDITION REQUIRING MODIFICATION OR CHANGE PRIOR TO STARTING WORK. ANY WORK INSTALLED IN CONFLICT WITH THE DRAWINGS WITHOUT PRIOR APPROVAL SHALL BE CORRECTED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE.
4. WHERE EXISTING FINISHES, FACILITIES, AND SURFACES ARE DISTURBED, DAMAGED, OR REMOVED DURING THE COURSE OF CONSTRUCTION OPERATIONS, THE CONTRACTOR IS TO REPAIR OR REPLACE AS NECESSARY TO MATCH EXISTING. ALL NEW MATERIALS SHALL MATCH EXISTING IN ALL RESPECTS.
5. LOCATIONS OF UTILITIES, WHERE SHOWN, ARE APPROXIMATE, AND CONTRACTOR SHALL EXERCISE EXTREME CAUTION IN EXCAVATING AND TRENCHING ON ALL SITES TO AVOID EXISTING DUCTS, PIPING, OR CONDUITS, ETC. AND TO PREVENT HARM TO PERSONNEL AND/OR DAMAGE TO EXISTING UTILITIES AND STRUCTURES. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ARCHITECT OR ENGINEER SHOULD UNIDENTIFIED CONDITIONS BE DISCOVERED.
6. THE CONTRACTOR SHALL NOTIFY THE OWNER IMMEDIATELY WHERE THE PROPOSED WORK AFFECTS THE EXISTING IRRIGATION SYSTEMS THE CONTRACTOR SHALL PERFORM ANY WORK NECESSARY TO MAINTAIN AN OPERATIONAL IRRIGATION SYSTEM.
7. THESE DRAWINGS AND SPECIFICATIONS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY.
8. CONSTRUCTION WORKERS WILL ONLY BE ALLOWED IN THE AREAS APPROPRIATE TO THE WORK AND SHALL NOT DISTURB THE OWNER, STAFF, STUDENTS OR CUSTOMERS.
9. CONSTRUCTION WORKERS SHALL WEAR APPROPRIATE SAFETY GEAR & COMPLY WITH SAFETY REGULATIONS.
10. CONSTRUCTION WORKERS SHALL DRESS & BEHAVIOR IN A MANNER APPROPRIATE TO THE JOB SITE AND BE ACCEPTABLE TO THE OWNER REPRESENTATIVES.
11. SMOKING IS NOT PERMITTED ON THE CONSTRUCTION SITE.
12. THERE SHALL BE NO POSSESSION OR CONSUMPTION OF DRUGS OR ALCOHOLIC BEVERAGES ON THE JOB SITE BY ANY PERSON AT ANY TIME OR CONSUMPTION PRIOR THAT MAY IMPAIR THE USE OF EQUIPMENT IN A SAFE MANNER.

CODES AND STANDARDS

PARTIAL LIST OF APPLICABLE CODES

- 2019 BUILDING STANDARDS ADMINISTRATIVE CODE (CAC), PART 1, TITLE 24 C.C.R.
- 2019 CALIFORNIA BUILDING CODE (CBC), PART 2, TITLE 24 C.C.R. (2018 INTERNATIONAL BUILDING CODE, VOL. 1 & 2, AND 2019 CALIFORNIA AMENDMENTS)
- 2019 CALIFORNIA ELECTRICAL CODE (CEC) , PART 3, TITLE 24 C.C.R. (2017 NATIONAL ELECTRICAL CODE AND 2019 CALIFORNIA AMENDMENTS)
- 2019 CALIFORNIA MECHANICAL CODE (CMC), PART 4, TITLE 24 C.C.R. (2018 IAPMO UNIFORM MECHANICAL CODE AND 2019 CALIFORNIA AMENDMENTS)
- 2019 CALIFORNIA PLUMBING CODE (CPC), PART 5, TITLE 24 C.C.R. (2018 IAPMO PLUMBING CODE AND 2019 CALIFORNIA AMENDMENTS)
- 2019 CALIFORNIA ENERGY CODE (CEC), PART 6, TITLE 24 C.C.R.
- 2019 CALIFORNIA FIRE CODE (CFC), PART 9, TITLE 24 C.C.R.
- 2019 CALIFORNIA EXISTING BUILDING CODE (CEBC), PART 10, TITLE 24 C.C.R. (2018 INTERNATIONAL EXISTING BUILDING CODE AND 2019 CALIFORNIA AMENDMENTS)
- 2019 CALIFORNIA GREEN BUILDING STANDARDS CODE (CALGREEN), PART 11, TITLE 24 C.C.R.
- 2019 CALIFORNIA REFERENCED STANDARDS, PART 12, TITLE 24 C.C.R.
- TITLE 19 C.C.R., PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS

PARTIAL LIST OF APPLICABLE STANDARDS

NFPA 13	AUTOMATIC FIRE SPRINKLER SYSTEMS (CA AMENDED)	2016 EDITION
NFPA 14	STANDPIPE AND HOSE SYSTEMS (CA AMENDED)	2016 EDITION
NFPA 17	DRY CHEMICAL EXTINGUISHING SYSTEMS	2017 EDITION
NFPA 17A	WET CHEMICAL EXTINGUISHING SYSTEMS	2017 EDITION
NFPA 20	STATIONARY PUMPS FOR FIRE PROTECTION	2016 EDITION
NFPA 24	PRIVATE FIRE SERVICE MAINS & THEIR APPURTENANCES (CA AMENDED)	2016 EDITION
NFPA 72	NATIONAL FIRE ALARM & SIGNALING CODE (CA AMENDED)	2016 EDITION
NFPA 80	FIRE DOORS AND OTHER OPENING PROTECTIVES	2016 EDITION
UL 464	AUDIBLE SIGNALING DEVICES FOR FIRE ALARM AND SIGNALING SYSTEM, INCLUDING ACCESSORIES	2003 EDITION
UL 521	HEAT DETECTORS FOR FIRE PROTECTIVE SIGNALING SYSTEMS	1999 EDITION
UL 1971	SIGNALING DEVICES FOR THE HEARING IMPAIRED	2002 (R2010)

FOR A COMPLETE LIST OF APPLICABLE NFPA STANDARDS REFER TO 2019 CBC (SFM) CHAPTER 35 AND CALIFORNIA FIRE CODE CHAPTER 80

SEE CALIFORNIA BUILDING CODE CHAPTER 35 FOR STATE OF CALIFORNIA AMENDMENTS TO THE NFPA STANDARDS.

COMPLIANCE WITH CFC CHAPTER 33 FIRE SAFETY DURING CONSTRUCTION AND DEMOLITION.

SCOPE OF WORK

ALL CONSTRUCTION AND SERVICES REQUIRED FOR THE MODERNIZATION OF THE EXISTING 400 BUILDING WHICH IS A TWO STORY STANDARD CLASSROOMS & LIBRARY AND CONVERTING INTO NEW CLASSROOMS & LIBRARY MEDIA CENTER AND ASSOCIATED IMPROVEMENTS GOVERNED BY THE CALIFORNIA BUILDING CODE (CBC) TYPE V-A CONSTRUCTION OF APPROXIMATELY 45,427 SF FLOOR AREA INCLUDE BUT NOT LIMIT TO:

- SITE IMPROVEMENTS INCLUDE BUT ARE NOT LIMITED TO: PATCH AND REPAIR EXISTING WALKWAYS, UTILITIES, LANDSCAPING AND IRRIGATION.
- DSA MAY ISSUE A STOP WORK ORDER AND REQUIRE REVISION FOR MANDATORY SEISMIC UPGRADES PER CAC 4-309 (C) IF THE APPLICABLE CONSTRUCTION COST EXCEEDS 50% OF REPLACEMENT VALUE SET AT $606.91 PER SQUARE FOOT. DISTRICT TO SUBMIT COST DOCUMENTATION UPON CONTRACT ISSUANCE AND PROJECT COMPLETION TO DSA FOR COMP-LIANCE REVIEW.

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*.CIVIL.

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A3.10B	REMODEL REFLECTED CEILING PLAN LOWER LEVEL - SECTOR B
A3.11	REMODEL REFLECTED CEILING PLAN MAIN LEVEL
A3.11A	REMODEL REFLECTED CEILING PLAN MAIN LEVEL - SECTOR A
A3.11B	REMODEL REFLECTED CEILING PLAN MAIN LEVEL - SECTOR B
A4.01	DEMOLITION ROOF PLAN
A4.10	REMODEL ROOF PLAN
A5.10	EXTERIOR ELEVATIONS
A6.10	BUILDING SECTIONS
A7.10	ENLARGED TOILET PLANS & INTERIOR ELEVATIONS
A8.10	INTERIOR ELEVATIONS - LOWER LEVEL
A8.11	INTERIOR ELEVATIONS - LOWER LEVEL
A8.12	INTERIOR ELEVATIONS - LOWER LEVEL
A8.13	INTERIOR ELEVATIONS - LOWER LEVEL
A8.14	INTERIOR ELEVATIONS - LOWER LEVEL
A8.15	INTERIOR ELEVATIONS - LOWER LEVEL
A8.16	INTERIOR ELEVATIONS - MAIN LEVEL
A8.17	INTERIOR ELEVATIONS - MAIN LEVEL
A8.18	INTERIOR ELEVATIONS - MAIN LEVEL
A8.19	INTERIOR ELEVATIONS - MAIN LEVEL
A8.20	INTERIOR ELEVATIONS - MAIN LEVEL
A8.21	ENLARGED CASEWORK PLANS & INTERIOR ELEVATIONS
A9.10	DOOR AND FRAME SCHEDULE
A9.11	STOREFRONT SCHEDULE
A9.20	WALL TYPES
A9.30	FINISH FLOOR PLAN - LOWER LEVEL AND FINISH SCHEDULE
A9.31	FINISH FLOOR PLAN - MAIN LEVEL AND FINISH SCHEDULE
A10.10	EXTERIOR DETAILS
A10.11	INTERIOR DETAILS
A10.12	INTERIOR DETAILS
A10.20	EXTERIOR OPENING DETAILS
A10.21	INTERIOR OPENING DETAILS
A10.30	CEILING DETAILS
A10.31	CEILING DETAILS
A10.40	ROOF DETAILS
A10.50	CASEWORK DETAILS
A10.60	SIGNAGE DETAILS
A10.70	SEISMIC SEPARATION JOINT COVER DETAIL
A12.00	WALL GRAPHIC ELEVATIONS
A12.01	WALL GRAPHIC ELEVATIONS

SUBTOTAL: 49

*.STRUCTURAL.

S000	GENERAL NOTES
S001	GENERAL NOTES
S010	TYPICAL DETAILS
S011	TYPICAL DETAILS
S012	TYPICAL DETAILS
S013	TYPICAL DETAILS
S014	TYPICAL DETAILS
S015	TYPICAL DETAILS
S016	TYPICAL DETAILS
S017	TYPICAL DETAILS
S018	TYPICAL DETAILS
S201	(E) FOUNDATION PLAN - LOWER LEVEL
S202	(E) FRAMING PLAN - MAIN LEVEL
S203	(E) FRAMING PLAN - ROOF
S204	AC-10 SUPPORT FRAMING PLAN
ES201	WEST STRUCTURAL (E) FOUNDATION PLAN SHEET S4
ES202	WEST STRUCTURAL (E) MAIN LEVEL FRAMING PLAN SHEET S5
ES203	WEST STRUCTURAL (E) ROOF FRAMING PLAN SHEET S6
ES204	EAST STRUCTURAL (E) FOUNDATION PLAN SHEET S5
ES205	EAST STRUCTURAL (E) MAIN LEVEL & ROOF FRAMING PLANS SHEET S6

SUBTOTAL: 20

*.MECHANICAL.

M0.01	MECHANICAL COVERSHEET
M0.02	SCHEDULES
M0.03	TITLE 24 COMPLIANCE DOCUMENTS
M0.04	TITLE 24 COMPLIANCE DOCUMENTS
M0.05	TITLE 24 COMPLIANCE DOCUMENTS
M2.01	DEMO FLOOR PLAN LOWER LEVEL
M2.02	DEMO FLOOR PLAN MAIN LEVEL
M2.11	REMODEL FLOOR PLAN LOWER LEVEL
M2.12	REMODEL FLOOR PLAN MAIN LEVEL
M4.01	DEMO ROOF PLAN
M4.11	REMODEL ROOF PLAN
M5.01	DETAILS
M5.02	DETAILS
M5.03	MECHANICAL AHU DETAILS
M6.01	MECHANICAL CONTROLS
M6.02	MECHANICAL CONTROLS

SUBTOTAL: 16

*.PLUMBING.

P0.01	PLUMBING COVERSHEET
P0.02	SCHEDULES
P1.10	SITE PLAN
P2.00	DEMO UNDERFLOOR PLAN
P2.01	DEMO FLOOR PLAN LOWER LEVEL
P2.02	DEMO FLOOR PLAN MAIN LEVEL
P2.10	REMODEL UNDERFLOOR PLAN
P2.11	REMODEL FLOOR PLAN LOWER LEVEL
P2.12	REMODEL FLOOR PLAN MAIN LEVEL
P3.01	ENLARGED PLANS
P4.01	DEMO ROOF PLAN
P4.11	REMODEL ROOF PLAN
P5.01	DETAILS
P5.02	DETAILS
P5.03	RATED DETAILS

SUBTOTAL: 15

*.ELECTRICAL.

E0.01	ELECTRICAL COVERSHEET
E0.02	SINGLE LINE DIAGRAM
E0.03	FIXTURE SCHEDULE
E0.04	PANEL SCHEDULES
E0.05	PANEL SCHEDULES
E0.06	TITLE 24
E0.07	TITLE 24
E1.10	SITE PLAN
E2.01	DEMO FLOOR PLAN LOWER LEVEL
E2.02	DEMO FLOOR PLAN MAIN LEVEL
E2.11	LIGHTING PLAN LOWER LEVEL
E2.11A	LOWER LEVEL PHOTOMETRIC PLAN
E2.12	LIGHTING PLAN MAIN LEVEL
E2.12A	MAIN LEVEL PHOTOMETRIC PLAN
E2.21	POWER PLAN LOWER LEVEL
E2.22	POWER PLAN MAIN LEVEL
E4.11	REMODEL ROOF PLAN
E5.01	DETAILS
E5.02	DETAILS

SUBTOTAL: 19

*.FIRE ALARM.

FA0.01	FIRE ALARM COVERSHEET
FA0.02	FIRE ALARM CALCULATION & RISER DIAGRAM
FA1.10	SITE PLAN
FA2.01	DEMO FLOOR PLAN LOWER LEVEL
FA2.02	DEMO FLOOR PLAN MAIN LEVEL
FA2.11	REMODEL FLOOR PLAN LOWER LEVEL
FA2.12	REMODEL FLOOR PLAN MAIN LEVEL
FA5.01	DETAILS

SUBTOTAL: 8

*.FIRE PROTECTION.

FP0.01	FIRE PROTECTION COVERSHEET
FP0.02	SEISMIC CALCULATIONS
FP1.10	SITE PLAN
FP2.11	REMODEL FLOOR PLAN LOWER LEVEL
FP2.12	REMODEL FLOOR PLAN MAIN LEVEL
FP3.11	REMODEL CEILING PLAN LOWER LEVEL
FP3.12	REMODEL CEILING PLAN MAIN LEVEL
FP4.01	SECTIONS
FP5.01	DETAILS

SUBTOTAL: 9

*.TECHNOLOGY.

T0.01	TECHNOLOGY COVERSHEET
T0.02	SCHEDULES
T1.10	SITE PLAN
T2.01	DEMO FLOOR PLAN LOWER LEVEL
T2.02	DEMO FLOOR PLAN MAIN LEVEL
T2.11	REMODEL FLOOR PLAN LOWER LEVEL
T2.12	REMODEL FLOOR PLAN MAIN LEVEL
T3.00	ENLARGED PLANS - TECHNOLOGY
T5.01	DETAILS
T5.02	DETAILS

SUBTOTAL: 10

.TOTAL SHEET . 152

REGULATION NOTES

1. ALL WORK SHALL CONFORM TO 2019 TITLE 24, CALIFORNIA CODE OF REGULATIONS (CCR).
2. THE SCOPE OF WORK - CLEARLY INDICATE THE SCOPE OF WORK ON THE COVER SHEET OR GENERAL NOTE SHEET OF THE DRAWINGS.
3. FABRICATION AND INSTALLATION OF DEFERRED SUBMITTAL ITEMS SHALL NOT BE STARTED UNTIL CONTRACTOR'S DRAWINGS, SPECIFICATIONS, AND ENGINEERING CALCULATIONS FOR THE ACTUAL SYSTEMS TO BE INSTALLED HAVE BEEN ACCEPTED AND SIGNED BY THE ARCHITECT OR STRUCTURAL ENGINEER AND APPROVED BY THE DSA. LIST DEFERRED SUBMITTAL ITEMS FOR THIS PROJECT.
4. CHANGES TO THE APPROVED DRAWINGS AND SPECIFICATIONS SHALL BE MADE BY AN ADDENDUM OR A CONSTRUCTION CHANGED DOCUMENT (CCD) APPROVED BY THE DIVISION OF THE STATE ARCHITECT, AS REQUIRED BY SECTION 4-338, PART 1, TITLE 24, CCR.
5. A " DSA CERTIFIED" PROJECT INSPECTOR EMPLOYED BY THE DISTRICT (OWNER) AND APPROVED BY THE DSA SHALL PROVIDE CONTINUOUS INSPECTION OF THE WORK, THE DUTIES OF THE INSPECTOR ARE DEFINED IN SECTION 4-342, PART 1, TITLE 24, CCR.
-INSPECTOR CLASS = 2
6. A DSA ACCEPTED TESTING LABORATORY DIRECTLY EMPLOYED BY THE DISTRICT (OWNER) SHALL CONDUCT ALL THE REQUIRED TESTS AND INSPECTIONS FOR THE PROJECT.
7. THE INTENT OF THESE DRAWINGS AND SPECIFICATIONS IS THAT THE WORK OF THE ALTERATION, REHABILITATION OR RECONSTRUCTION IS TO BE IN ACCORDANCE WITH TITLE 24, CCR. SHOULD ANY EXISTING CONDITIONS SUCH AS DETERIORATION OR NON-COMPLYING CONSTRUCTION BE DISCOVERED WHICH IS NOT COVERED BY THE CONTRACT DOCUMENTS WHEREIN THE FINISHED WORK WILL NOT COMPLY WITH TITLE 24, CCR, A CONSTRUCTION CHANGE DOCUMENT (CCD), OR A SEPARATE SET OF PLANS AND SPECIFICATIONS, DETAILING AND SPECIFYING THE REQUIRED WORK SHALL BE SUBMITTED TO AND APPROVED BY DSA BEFORE PROCEEDING WITH THE WORK. (SECTION 4-317(C), PART 1, TITLE 24, CCR).
8. GRADING PLANS, DRAINAGE IMPROVEMENTS, ROAD AND ACCESS REQUIREMENTS AND ENVIRONMENTAL HEALTH CONSIDERATIONS SHALL COMPLY WITH ALL LOCAL ORDINANCES.
9. A COPY OF CCR TITLE 24, PARTS 1-6, 9 AND 12 SHALL BE KEPT ON SITE DURING CONSTRUCTION.
10. A COPY OF THE APPROVED DRAWINGS, SPECIFICATIONS, ADDENDUMS AND CONSTRUCTION CHANGE DOCUMENTS SHALL BE KEPT ON SITE DURING CONSTRUCTION.
11. THE CONTRACTOR SHALL MAINTAIN CONSTRUCTION SAFE GUARDS IN ACCORDANCE WITH CHAPTER 33, PART 2 TITLE 24, CCR AND CHAPTER 33, PART 9 TITLE 24, CCR (2016 CBC)
12. THE CONTRACTOR SHALL PROVIDE CLEAN, SANITARY, TEMPORARY TOILET FACILITIES FOR THE CONSTRUCTION PERSONNEL. UNDER NO CIRCUMSTANCES SHALL CONSTRUCTION PERSONNEL BE ALLOWED TO UTILIZE THE PERMANENT SITE FACILITIES. ALL TEMPORARY FACILITIES SHALL BE REMOVED FROM THE SITE AT THE CONCLUSION OF CONSTRUCTION.

STATEMENT OF GENERAL CONFORMANCE

FOR ARCHITECTS / ENGINEERS WHO UTILIZE PLANS, INCLUDING BUT NOT LIMITED TO SHOP DRAWINGS, PREPARED BY OTHER LICENSED DESIGN PROFESSIONALS AND / OR CONSULTANTS.

(APPLICATION NO. 03-121330 FILE NO. 19-H52)

☒ THE SHEETS LISTED ON THE COVER WITH A MARKED * IN THE HEADING.

☐ THIS DRAWING, PAGE OF SPECIFICATIONS / CALCULATIONS.

HAVE BEEN PREPARED BY OTHER DESIGN PROFESSIONALS OR CONSULTANTS WHO ARE LICENSED AND / OR AUTHORIZED TO PREPARE SUCH DRAWINGS IN THIS STATE. IT HAS BEEN EXAMINED BY ME FOR:

1. DESIGN INTENT AND APPEARS TO MEET THE APPROPRIATE REQUIREMENTS OF TITLE 24, CALIFORNIA CODE OF REGULATORS AND THE PROJECT SPECIFICATIONS PREPARED BY ME AND
2. COORDINATION WITH MY PLANS AND SPECIFICATIONS AND IS ACCEPTABLE FOR INCORPORATION INTO THE CONSTRUCTION OF THIS PROJECT.

THE STATEMENT OF GENERAL CONFORMANCE "SHALL NOT BE CONSTRUED AS RELIEVING ME OF MY RIGHTS, DUTIES AND RESPONSIBILITIES UNDER SECTIONS 17302 AND 81138 OF THE EDUCATION CODE AND SECTIONS 4-336, 4-341 AND 4-344" OF TITLE 24, PART 1. (TITLE 24, PART 1, SECTION 4-317(B))

I CERTIFY THAT: ☒ ALL DRAWINGS OR SHEETS LISTED ON THE COVER OR INDEX SHEET.

☐ THIS DRAWING OR PAGE.

☒ IS / ARE IN GENERAL CONFORMANCE WITH THE PROJECT DESIGN, AND

☒ HAS / HAVE BEEN COORDINATED WITH THE PROJECT PLANS AND SPECIFICATIONS

SIGNATURE — DATE 03/18/2021

ARCHITECT OR ENGINEER DESIGNATED TO BE IN GENERAL RESPONSIBLE CHARGE.

SCOTT GRIFFITH
PRINT NAME

C24497 — LICENSE NUMBER
07/31/2023 — EXPIRATION DATE

☐ IS / ARE IN GENERAL CONFORMANCE WITH THE PROJECT DESIGN, AND

☐ HAS / HAVE BEEN COORDINATED WITH THE PROJECT PLANS AND SPECIFICATIONS

SIGNATURE — DATE

ARCHITECT OR ENGINEER DESIGNATED TO BE IN GENERAL RESPONSIBILITY FOR THIS PORTION OF THE WORK.

PRINT NAME

LICENSE NUMBER — EXPIRATION DATE

BUILDING CODE ANALYSIS

BUILDING 400

LOWER LEVEL

	A-3	B	E
OCCUPANCY TYPE:			
CONSTRUCTION TYPE:	VA	VA	VA
SPRINKLERED:	YES	YES	YES
BUILDING S.F.:	----	1,108 S.F.	24,775 SF
SUBTOTAL S.F.:	25,883 S.F.		

MAIN LEVEL

	A-3	B	E
OCCUPANCY TYPE:			
CONSTRUCTION TYPE:	VA	VA	VA
SPRINKLERED:	YES	YES	YES
BUILDING S.F.:	3,101 S.F	2,455 S.F.	9,469 SF
SUBTOTAL S.F.:	15,025 S.F.		

TOTAL BUILDING S.F: 40,908 S.F.

ALLOWABLE AREA AND HEIGHT: C.B.C. 2019 TABLE 504.3 AND 504.4 AND 506.2 AND SECTION 506.3

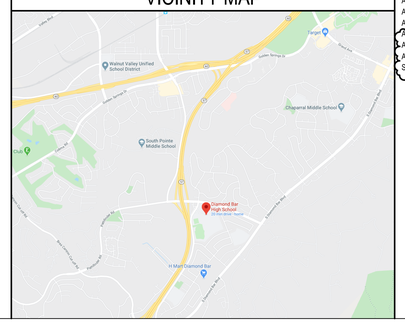
	A-3	B	E
OCCUPANCY:			
BUILDING HEIGHT:	70'	70'	70'
NUMBER OF STORIES:	3	4	2
MAX. BLDG. AREA (SM):	34,500 S.F.	54,000 S.F.	55,500 S.F.
TOTAL ALLOWABLE EA. FLOOR	11,500 S.F.	13,500 S.F.	27,750 S.F.

ACTUAL AREA:

	A-3	B	E
OCCUPANCY:			
BUILDING HEIGHT:	33'	33'	33'
NUMBER OF STORIES:	2	2	2
BUILDING AREA LOWER LEVEL:	---- S.F.	1,108 S.F.	24,775 S.F
BUILDING AREA MAIN LEVEL:	3,101 S.F.	2,455 S.F.	9,469 S.F.
TOTAL S.F.:	3,101 S.F.	3,563 S.F.	34,244 S.F.

MIXED-AREA RATIO:
3,101/34,500 + 3,563/54,000 + 34,244/55,000 = 0.090 + 0.066 + 0.623 = 0.779 > 1

VICINITY MAP



10/24/2022 7:47:45 AM

CONSULTANT:

BUILDING 400 MODERNIZATION NEW CLASSROOM/ LIBRARY MEDIA CENTER
WALNUT VALLEY UNIFIED SCHOOL DISTRICT
DIAMOND BAR HIGH SCHOOL
21400 PATHFINDER RD. DIAMOND BAR, CA 91765

COVER SHEET

WALNUT VALLEY UNIFIED SCHOOL DISTRICT

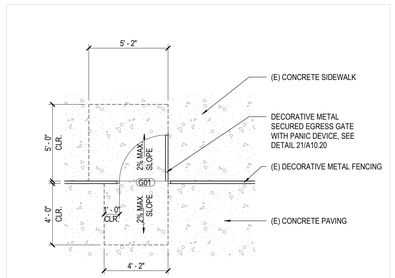
ISEALS:

sgh ARCHITECTS

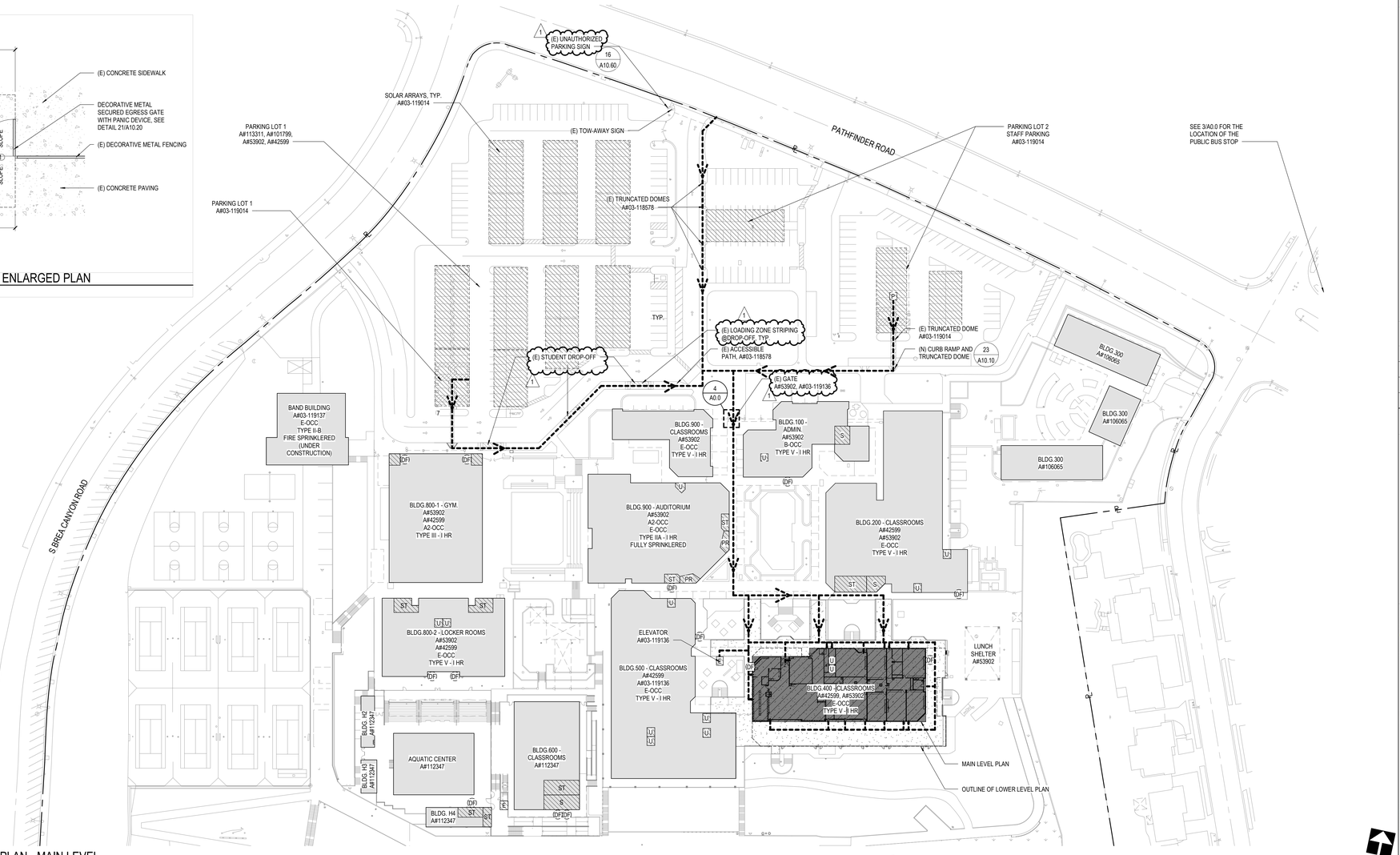
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PROJECT NUMBER: 19-47100-00
PROJECT STATUS: CD 100%
PROJECT ISSUED: 03/18/2021
REVISION DATE: DESCRIPTION:
1 10/25/2022 ADDENDUM - 1

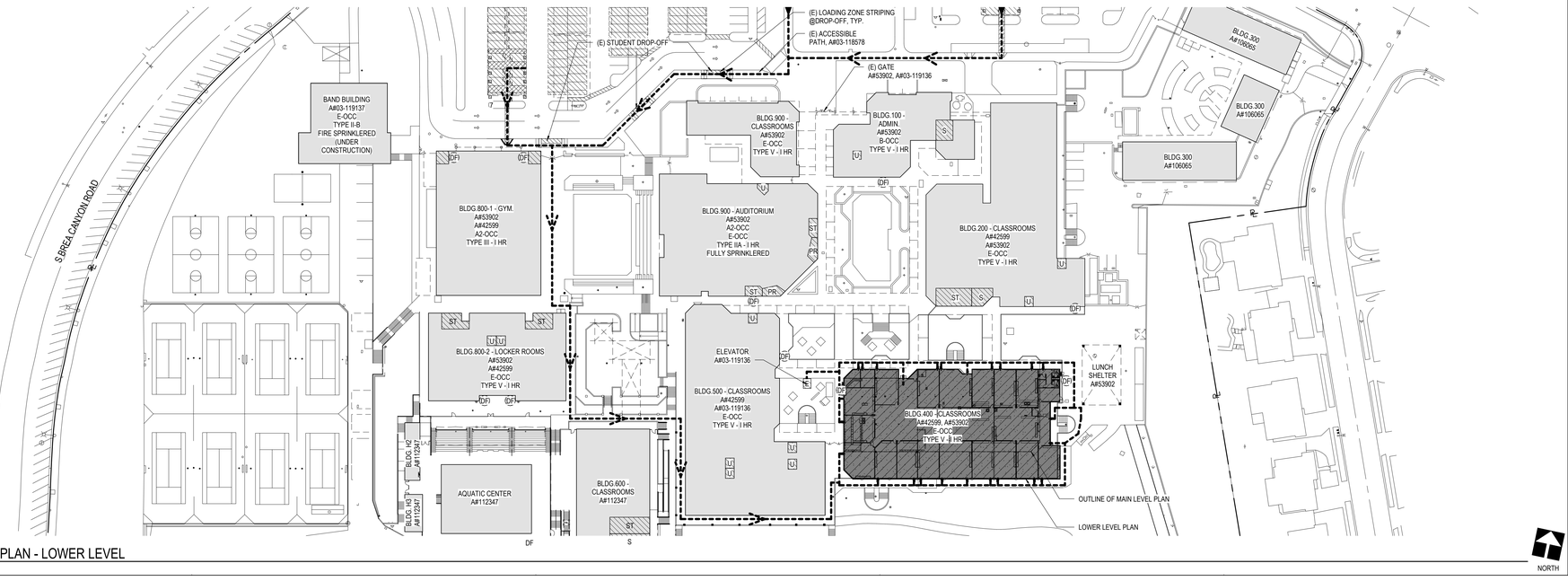
G0.0



4 A0.0 EXTERIOR GATE ENLARGED PLAN
SCALE: 1/4" = 1'-0"



1 A0.0 ACCESSIBILITY SITE PLAN - MAIN LEVEL
SCALE: 1" = 60'-0"



2 A0.0 ACCESSIBILITY SITE PLAN - LOWER LEVEL
SCALE: 1" = 60'-0"

NORTH

BUILDING CODE ANALYSIS

BUILDING 400

LOWER LEVEL

OCCUPANCY TYPE:	A-3	B	E
CONSTRUCTION TYPE:	VA	VA	VA
SPRINKLERED:	YES	YES	YES
BUILDING S.F.:	7,417	1,108 S.F.	17,358SF
SUBTOTAL S.F.:	25,883 S.F.		

MAIN LEVEL

OCCUPANCY TYPE:	A-3	B	E
CONSTRUCTION TYPE:	VA	VA	VA
SPRINKLERED:	YES	YES	YES
BUILDING S.F.:	4,649 S.F	2,455 S.F.	7,921 SF
SUBTOTAL S.F.:	15,025 S.F.		

TOTAL BUILDING S.F: 40,908 S.F.

ALLOWABLE AREA AND HEIGHT: C.B.C. 2019 TABLE 504.3 AND 504.4 AND 506.2 AND SECTION 506.3

OCCUPANCY:	A-3	B	E
BUILDING HEIGHT:	70'	70'	70'
NUMBER OF STORIES:	3	4	2
MAX. BLDG. AREA (SM):	34,500 S.F.	54,000 S.F.	55,500 S.F.
TOTAL ALLOWABLE EA. FLOOR	11,500 S.F.	13,500 S.F.	27,750 S.F.

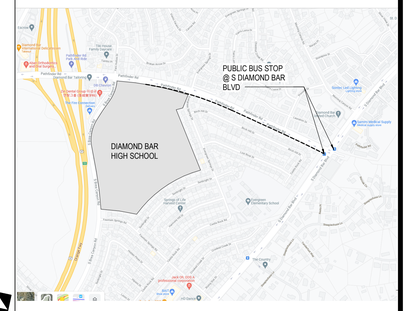
ACTUAL AREA:

OCCUPANCY:	A-3	B	E
BUILDING HEIGHT:	33'	33'	33'
NUMBER OF STORIES:	2	2	2
BUILDING AREA LOWER LEVEL:	7,417 S.F.	1,108 S.F.	17,358 S.F
BUILDING AREA MAIN LEVEL:	4,649 S.F.	2,455 S.F.	7,921 S.F.
TOTAL S.F.:	12,066 S.F.	3,563 S.F.	25,279 S.F.

MIXED-AREA RATIO:
12,066/34,500 + 3,563/54,000 + 25,279/55,000 = 0.350 + 0.066 + 0.460 = 0.876 > 1

PARKING COUNT

	TOTAL	REQUIRED (VAN/ STANDARD)	PROVIDED
STUDENT (LOT 1)	235	2 VAN/ 5 STANDARD	2 VAN/ 6 STANDARD
STAFF/ VISITOR (LOT 2)	121	1 VAN/ 4 STANDARD	1 VAN/ 4 STANDARD
TOTAL	**356**	3 VAN/ 9 STANDARD	3 VAN/ 10 STANDARD



3 A0.0 SITE - BUS STOP LOCATION
SCALE: 12" = 1'-0"

PATH OF TRAVEL NOTES:

1. ACCESSIBLE PATH OF TRAVEL AS INDICATED ON PLANS IS A BARRIER FREE ACCESS ROUTE WITHOUT AN ABRUPT LEVEL CHANGES EXCEEDING 1/2" IF BEVELED AT 1:2 MAXIMUM SLOPE OR VERTICAL LEVEL CHANGES NOT EXCEEDING 1/4" MAXIMUM AND AT LEAST 48" IN WIDTH. SURFACE IS STABLE, FIRM, AND SLIP RESISTANT. CROSS SLOE DOES NOT EXCEED 2% AND SLOPE IN THE DIRECTION OF TRAVEL IS LESS THAN 5% UNLESS OTHERWISE INDICATED. ACCESSIBLE PATH OF TRAVEL SHALL BE MAINTAINED FREE OF OVERHANGING OBSTRUCTIONS TO 80" MINIMUM AND PROTRUDING OBJECTS GREATER THAN 4" PROJECTION FROM WALL ABOVE 27" AND LESS THAN 80". ARCHITECT SHALL VERIFY THAT THERE ARE NO BARRIERS IN THE PATH OF TRAVEL.
2. DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE STATEMENT: THE POT IDENTIFIED IN THESE CONSTRUCTION DOCUMENTS IS COMPLIANT WITH THE CURRENT CALIFORNIA BUILDING CODE ACCESSIBILITY PROVISIONS FOR PATH OF TRAVEL REQUIREMENTS FOR ALTERATIONS AND STRUCTURAL REPAIRS. AS PART OF THE DESIGN OF THIS PROJECT, THE P.O.T. WAS EXAMINED AND ANY ELEMENTS, COMPONENTS OR PORTIONS OF THE P.O.T. THAT WERE DETERMINED TO BE NON COMPLIANT 1) HAVE BEEN IDENTIFIED AND 2) THE CORRECTIVE WORK NECESSARY TO BRING THEM INTO COMPLIANCE HAS BEEN INCLUDED WITHIN THE SCOPE OF THIS PROJECTS WORK THROUGH DETAILS, DRAWINGS, AND SPECIFICATIONS INCORPORATED INTO THESE CONSTRUCTION DOCUMENTS. ANY NONCOMPLIANT ELEMENTS, COMPONENTS OR PORTIONS OF THE P.O.T. THAT WILL NOT BE CORRECT BY THIS PROJECT BASED ON VALUATION THRESHOLD LIMITATIONS OR A FINDING OF UNREASONABLE HARDSHIP ARE SO INDICATED IN THESE CONSTRUCTION DOCUMENTS.
3. DURING CONSTRUCTION, IF P.O.T. ITEMS WITHIN THE SCOPE OF THE PROJECT REPRESENTED AS CODE COMPLIANT ARE FOUND TO BE NONCONFORMING BEYOND REASONABLE CONSTRUCTION TOLERANCES, THEY SHALL BE BROUGHT INTO COMPLIANCE WITH THE CBC AS PART OF THIS PROJECT BY MEANS OF A "CONSTRUCTION CHANGE DOCUMENT"
4. GATES IN THE ACCESSIBLE PATH OF TRAVEL SHALL COMPLY WITH ALL DOOR REQUIREMENTS STATED IN CBC SECTIONS 1010 AND 11B-404 FOR DOOR WIDTH, CLEARANCE, LANDINGS, DOOR HARDWARE, EXIT DEVICE, DOOR OPERATING FORCE AND SURFACES

ACCESSIBILITY SITE PLAN LEGEND

- ACCESSIBLE ROUTE OF TRAVEL
- (E) BUILDING 400 (AREA OF WORK)
- E — (E) ELEVATOR
- P — (E) ACCESSIBLE PARKING
- PR — (E) PUBLIC RESTROOM
- U — (E) ALL GENDER RESTROOM
- S — (E) STAFF RESTROOM
- ST — (E) STUDENT RESTROOM
- DF — (E) ACCESSIBLE DRINKING FOUNTAIN
- U — (N) ALL GENDER RESTROOM

CONSULTANT:

ACCESSIBILITY SITE PLAN

BUILDING 400 MODERNIZATION NEW CLASSROOM/ LIBRARY MEDIA CENTER

WALNUT VALLEY UNIFIED SCHOOL DISTRICT
DIAMOND BAR HIGH SCHOOL
21400 PATHFINDER RD. DIAMOND BAR, CA 91765

WALNUT VALLEY UNIFIED SCHOOL DISTRICT

SEALS:

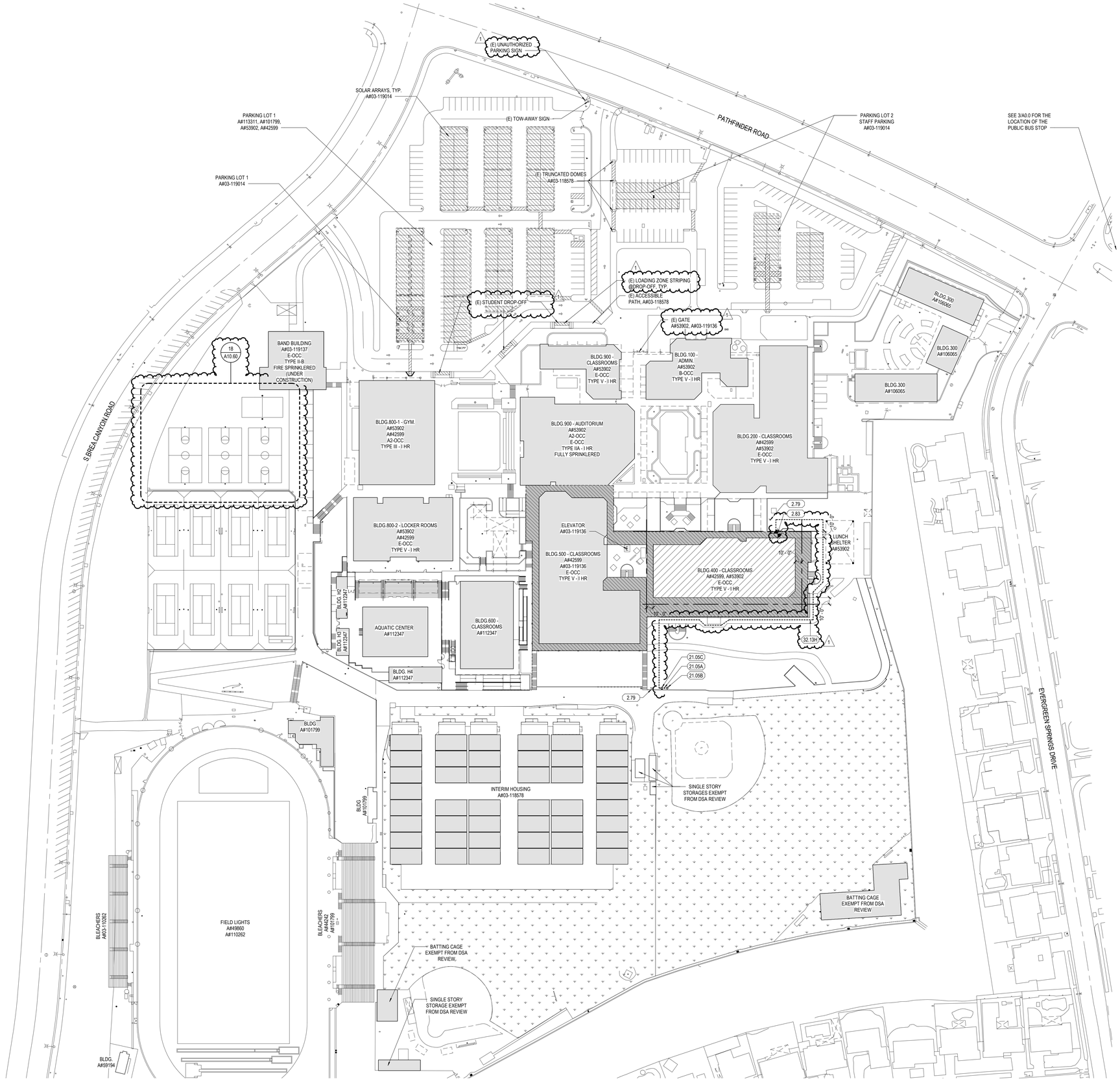
sgh ARCHITECTS

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PROJECT NUMBER: 19-471100-00
PROJECT STATUS: CD 100%
PROJECT ISSUED: 03/18/2021
REVISION DATE: DESCRIPTION:
1 10-5-2022 ADDENDUM - 1

A0.0

10/24/2022 7:43:59 AM



1 A1.10 OVERALL SITE PLAN
SCALE: 1" = 60'-0"

10/24/2022 7:44:03 AM

KEYNOTES

	DESCRIPTION
2.79	(E) FIRE HYDRANT
2.83	(N) 6" FIRE P.O.C., SEE CIVIL C-2.1 FOR MORE INFO.
21.05A	WATER CHECK VALVE, CIVIL C-2.1 FOR MORE INFO.
21.05B	6" PIV, CIVIL C-2.1 FOR MORE INFO.
21.06C	FIRE DEPARTMENT CONNECTION, CIVIL C-2.1 FOR MORE INFO.
1 32.13H	REMOVE AND PATCH PORTION OF (E) CONCRETE PAVING FOR FIRE UTILITY LINE, SEE 2/A10.60 FOR CONCRETE PAVING JOINT DETAIL, SEE CIVIL FOR TRENCHING LOCATIONS.

GENERAL NOTES

1. SEE EXIBIT 1 FOR CONSTRUCTION BARRICADE FENCING AND MILESTONE SCHEDULE PLAN

DIAMOND BAR HIGH SCHOOL - DSA STATUS

DSA APPL.#	DSA STATUS
03-42599	CERTIFIED AS OF 01/29/1983
03-44242	CERTIFIED AS OF 02/24/1983
03-44538	CERTIFIED AS OF 07/29/1998
03-45282	CERTIFIED AS OF 02/26/1987
03-48257	CERTIFIED AS OF 09/09/1993
03-48916	CLOSE W/O CERT AS OF 09/09/1993
03-49860	CLOSE W/O CERT AS OF 09/10/1993
03-53902	CERTIFIED AS OF 06/24/1997
03-58295	CANCELLED ON 09/30/1996
03-59194	CLOSE W/O CERT AS OF 01/04/1995
03-61016	VOIDED ON 02/05/1999
03-64521	CERTIFIED AS OF10/03/1997
03-66324	CLOSE W/O CERT AS OF 05/01/1998
03-69805	CERTIFIED AS OF 01/20/2000
03-80032	VOIDED ON 04/09/1999
03-100726	CERTIFIED AS OF 10/12/2000
03-101799	CERTIFIED AS OF 02/27/2018
03-106065	CERTIFIED AS OF 05/08/2019
03-107109	VOIDED ON 07/08/2003
03-108764	CERTIFIED AS OF 05/08/2007
03-109167	VOIDED ON 01/26/2021
03-109283	CERTIFIED AS OF 07/20/2007
03-110262	CERTIFIED AS OF11/18/2008
03-110884	VOIDED ON 09/26/2013
03-112347	CERTIFIED AS OF 06/02/2015
03-112947	VOIDED ON 04/13/2010
03-113311	CERTIFIED AS OF 11/08/2011
03-113351	CERTIFIED AS OF 07/22/2015
03-113582	STILL OPEN/ ACTIVE ACCORDING TO THE TRACKER
03-114267	CERTIFIED AS OF 04/12/2017
03-116918	CERTIFIED AS OF 06/20/2018
03-117342	CERTIFIED AS OF 10/23/2019
03-118578	CERTIFIED AS OF 11/13/2019
03-119014	CERTIFIED AS OF 07/25/2019
03-119136	UNDER CONSTRUCTION - BLDG 500 REMODEL
03-119137	UNDER CONSTRUCTION - BAND/ MUSIC BLDG
03-119237	CERTIFIED AS OF 04/02/2020
03-120848	CERTIFIED AS OF 05/17/2021

SITE PLAN LEGEND_OVERALL

- EXISTING BUILDINGS
- EXISTING BUILDING 400 TO BE MODERINIZED
- EXISITNG LANDSCAPE
- EXISTING WALKWAY TO BE MODERINIZED

CONSULTANT:

OVERALL SITE PLAN

BUILDING 400 MODERNIZATION NEW CLASSROOM/ LIBRARY MEDIA CENTER

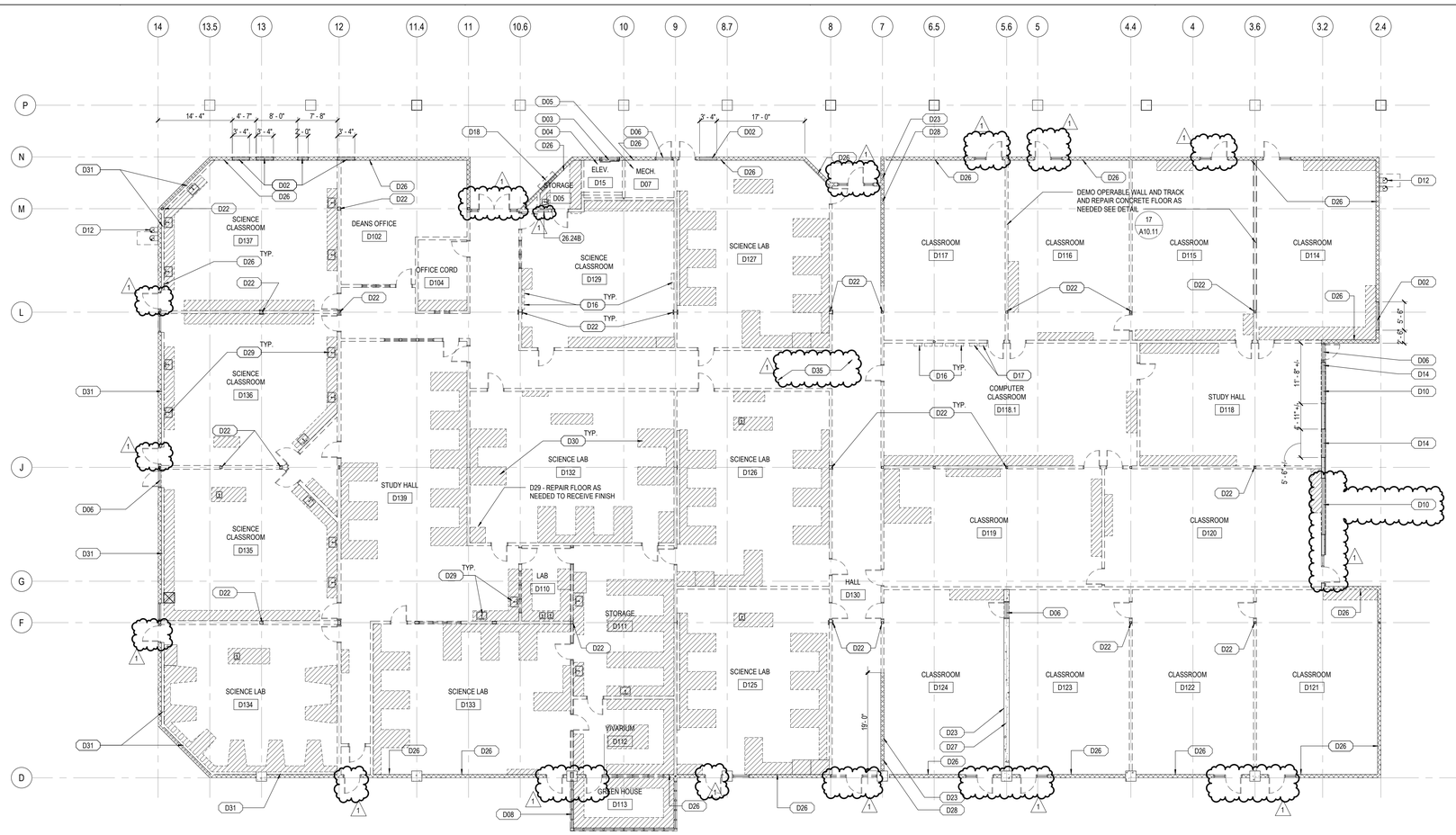
WALNUT VALLEY UNIFIED SCHOOL DISTRICT
DIAMOND BAR HIGH SCHOOL
21400 PATHFINDER RD. DIAMOND BAR, CA 91765

SEALS:

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PROJECT NUMBER: 19-47100-00
PROJECT STATUS: CD 100%
PROJECT ISSUED: 05/26/20
REVISION: DATE: DESCRIPTION:
1 10.25.2022 ADDENDUM - 1

A1.10



2 A2.01 LOWER LEVEL DEMOLITION FLOOR PLAN
SCALE: 3/32" = 1'-0"

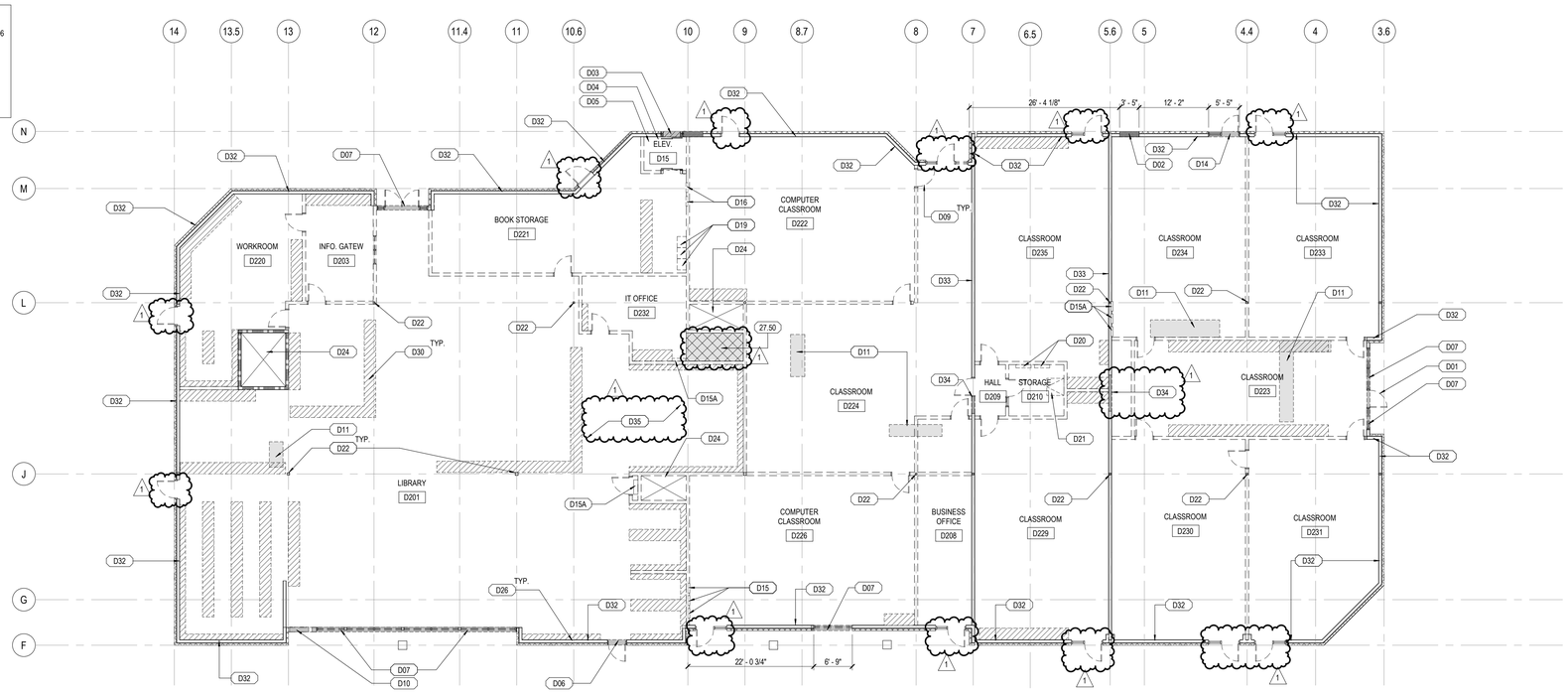
NORTH

DURING DEMOLITION:

MAINTAIN 1-HR. RATED ROOF/CEILING ASSEMBLY PER U.L. TEST N706 AND U.L TEST P517

SELECTIVE DEMOLITION/ PENETRATIONS THROUGH CEILING/ ROOF SHALL ADHERE TO (E) 1-HR RATED CONSTRUCTION TYPE.

FIRE SAFETY SHALL BE MAINTAINED OPERATIONAL AT ALL TIMES DURING CONSTRUCTION, ALTERATION OR DEMOLITION PER 2019, CFC, CHAPTER 14



1 A2.01 MAIN LEVEL DEMOLITION FLOOR PLAN
SCALE: 3/32" = 1'-0"

NORTH

KEYNOTES

	DESCRIPTION
1 26.24B	EXISTING PANEL BOARD TO REMAIN. PROTECT IN PLACE
27.50	(E) MDF & (E) CONDUIT IN THE SHADED AREA TO REMAIN. CONTRACTOR TO PROTECT IN PLACE AND REMAIN OPERATIONAL DURING THE DURATION OF THE CONSTRUCTION
D01	(E) DOOR/FRAME/SIDELITE AND TRANSOM TO BE REMOVED INCLUDING FIN. HARDWARE. PREPARE (E) OPENING TO RECEIVE NEW DOOR AND FRAME
D02	PORTION OF EXISTING DEEP SCORED CONCRETE BLOCK WALL TO BE REMOVED FOR NEW OPENING. REFER TO STRUCTURAL DRAWINGS FOR NEW OPENING REINFORCEMENT
D03	(E) ELEVATOR DOOR AND FRAME TO TO REMOVED INCLUDING ALL APPURTENANCES
D04	(E) ELEVATOR CAB TO BE REMOVED INCLUDING ALL APPURTENANCES
D05	(E) ELEVATOR EQUIPMENT TO BE REMOVED INCLUDING ALL APPURTENANCES AND INFILL ELEVATOR PIT
D06	(E) DOOR AND FRAME TO BE REMOVED INCLUDING FINISH HARDWARE. IN-FILL OPENING TO MATCH ADJACENT MATERIALS. REFER TO MODERNIZATION DRAWINGS
D07	(E) ALUMINUM FRAME STOREFRONT TO BE REMOVED
D08	(E) GREEN HOUSE TO BE REMOVED INCLUDING ALL APPURTENANCES. CAP-OFF ALL UTILITIES AS REQUIRED. PATCH AND REPAIR ALL ADJACENT SURFACES TO MATCH ADJACENT SURFACES AND FINISHES
D09	(E) DOOR AND FRAME TO BE REMOVED INCLUDING FINISH HARDWARE
D10	PORTION OF EXISTING WOOD STUD WALL TO BE REMOVED. REFER TO STRUCTURAL DRAWINGS FOR NEW OPENING REINFORCEMENT
D11	REMOVE (E) FLOOR FOR (N) SHAFT OPENING
D12	REMOVE AND REPLACE EXISTING DRINKING FOUNTAIN W/HI-LO DRINKING FOUNTAIN WITH BOTTLE FILLER AND CERAMIC TILE BACK
D14	(E) ALUMINUM STOREFRONT TO BE REMOVED INCLUDING FINISH HARDWARE. IN-FILL EXISTING OPENING TO MATCH ADJACENT SURFACES
D15	REMOVE AND RELOCATE (E) ELECTRICAL PANEL(S). REFER TO ELECTRICAL DRAWINGS
D15A	(E) ELECTRICAL PANEL(S) TO REMAIN, PROTECT IN PLACE. REFER TO ELECTRICAL DRAWINGS
D16	REMOVE (E) ELECTRICAL PANEL(S)
D17	REMOVE (E) TELEPHONE CABINET AND BACKBOARD
D18	REMOVE (E) SHOWCASE AND INFILL
D19	REMOVE (E) MOTOR CONTROL
D20	REMOVE (E) HVAC CONTROL
D21	REMOVE (E) ROOF HATCH
D22	ALL (E) STRUCTURAL COLUMNS, BEAMS AND OTHER MEMBERS TO REMAIN, PROTECT IN PLACE
D23	(E) CMU OR CONCRETE WALL TO REMAIN & REMOVE (E) WALL FINISHING ONLY
D24	(E) SHAFT TO REMAIN
D26	DEMOLITION ALL TACKBOARD, DRYWALL, WALL FINISHING TO BARE STUDS/ CMU WALL AS OCCURS FOR ALL EXTERIOR WALLS
D27	DEMOLITION (E) TACKBOARD, DRYWALL AND/ OR PLASTER TO BARE CONCRETE WALL
D28	DEMOLITION (E) TACKBOARD, DRYWALL AND/ OR PLASTER TO BARE CMU WALL
D29	REMOVE ALL (E) PLUMBING FIXTURES AND CAP UTILITIES TO WALL OR FLOOR AS REQUIRED. TYPICAL FOR ALL ROOMS.
D30	REMOVE ALL (E) CASEWORK, COUNTER TOPS, TYPICAL FOR ALL ROOMS
D31	DEMOLITION ALL (E) FURRING WALL AND CAP UTILITIES TO BARE STUDS/ CMU WALL AS OCCURS FOR ALL EXTERIOR WALLS
D32	DEMOLITION ALL (E) TACKBOARD, DRYWALL, WALL FINISHING TO STRUCTURAL PLYWOOD SHEATHING
D33	(E) WALL TO REMAIN, DEMOLITION (E) TACKBOARD, DRYWALL AND WALL FINISHING TO BARE PLYWOOD SHEAR WALL
D34	PORTION OF EXISTING WALL TO BE REMOVED FOR NEW OPENING
D35	REMOVE ALL (E) FLOOR FINISHES TO (E) CONCRETE AND PREPARE AS REQUIRED
D36	REMOVE ALL (E) FLOOR FINISHES TO (E) CONCRETE AND BASE MATERIALS IN ALL ROOMS 1

TYPICAL DEMOLITION NOTES

A. REMOVE ALL PARTITIONS SHOWN AS DASHED, COMPLETE WITH ALL CONDUITS AND PIPINGS, RE-ROUTE, RE-CIRCUIT, TERMINATE OR ABANDON ALL EXISTING SERVICES AS INDICATED ON THE ELECTRICAL, MECHANICAL AND PLUMBING DRAWINGS; PATCH AND REPAIR ALL AFFECTED AREAS AS PER NEW ROOM FINISH SCHEDULE FOR NEW MODEL CLASSROOM AND REPAIR EXISTING AREAS TO MATCH ADJACENT SURFACES AND MATERIALS.

B. REMOVE CAREFULLY ALL PLUMBING FIXTURES AND TURN OVER TO THE DISTRICT AS INDICATED ON THE PLUMBING DRAWINGS OR AS BEING DIRECTED BY THE OWNER. CAP-OFF UTILITIES (TO WALL) AS REQUIRED.

C. REMOVE EXISTING CEILING FINISH, AS INDICATED INCLUDING ALL LIGHT FIXTURES, HVAC REGISTERS, SUPPORT WIRINGS AND ANCHORS THROUGHOUT NOT INTENDED FOR USE.

D. REMOVE ALL WALL MOUNTED MARKERBOARDS, CHALKBOARDS, PROJECTION SCREENS AND OTHER ROOM ACCESSORIES (TYPICAL TO ALL CLASSROOMS), RETURN TO DISTRICT IN GOOD CONDITION.

E. REMOVE ALL EXISTING CASEWORK INCLUDING ALL COUNTERTOPS, SINKS, AND RELATED ITEMS. CAP-OFF OR EXTEND ALL UTILITIES AS REQUIRED PER NEW MODERNIZATION FLOOR PLAN.

F. REMOVE AND DISPOSE ALL EXISTING FLOOR FINISH INCLUDING BASE. PREPARE EXISTING SUBSTRATE, LEVEL AS REQUIRED TO RECEIVE NEW FLOOR FINISH AS ROOM FINISH SCHEDULE. PATCH AND REPAIR EXISTING CONCRETE SLAB AS REQUIRED PER NEW ROOM FINISH.

G. REMOVE AND DISPOSE ALL EXISTING WALL FINISH INCLUDING ALL FURRING WALLS WHERE OCCURS.

H. AT ALL WALLS TO REMAIN, REMOVE ALL INTERIOR FINISHES, INCLUDING BUT NOT LIMITED TO TACKBOARD, DRYWALL AND/OR PLASTER TO BARE STUDS, CMU, OR CONCRETE AS OCCURS.

I. COORDINATE EXTENT OF DEMOLITION WITH THE NEW CONSTRUCTION PLAN.

J. THE CONTRACTOR SHALL DISPOSE OF ALL REMOVED AND/OR DEMOLISHED MATERIALS, WASTE AND DEBRIS CAUSED BY THE WORK. THIS MATERIAL SHALL BE REMOVED FROM THE PROPERTY AND TAKEN TO A LEGALLY OPERATED DISPOSAL SITE.

K. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CUTTING, FITTING, OR PATCHING THAT MAY BE REQUIRED TO COMPLETE THE WORK OR TO MAKE ITS SEVERAL PARTS FIT TOGETHER PROPERLY.

L. PENETRATION THROUGH RATED WALLS AND FLOORS SHALL BE SEALED WITH A MATERIAL CAPABLE OF PREVENTING THE PASSAGE OF FLAMES AND HOT GASES WHEN SUBJECTED TO THE REQUIREMENTS OF THE TEST STANDARD SPECIFIC FOR FIRE STOPS. (ASTM-E-814)

M. CONTRACTOR TO INSTALL A DUST FREE HEAVY GAUGE PLASTIC BARRIER WALL. NEGATIVE AIR MACHINES SHALL BE ON AT ALL TIMES INCLUDING THE TIME WHILE THE CONSTRUCTION CREW IS WORKING.

N. ALL EXISTING FIRE SPRINKLER HEADS (IF ANY), ELECTRICAL POWER SUPPLY STRIPS DUPLEX OUTLETS, CONTRACTOR SHALL ADJUST TO THE EXISTING DROP CEILING SYSTEM TO ACCOMMODATE THE NEW WALL SYSTEM.

O. CONTRACTOR TO PROVIDE ALL REQUIRED PROTECTIONS AND NEGATIVE AIR, HEPA FILTER APPLICATIONS FOR THE CONSTRUCTION AREAS TO ELIMINATE AND REDUCE THE AMOUNT OF DUST, ODORS AND NOISE.

P. CONTRACTOR TO MAKE EFFORT TO CLEAN THE CONSTRUCTION AREA AS WELL AS OTHER LOCATIONS AFFECTED BY THE RENOVATIONS.

Q. CONTRACTOR IS ALLOWED TO WORK ON OFF HOURS INCLUDING WEEKENDS WITH THE APPROVAL OF THE CONSTRUCTION MANAGER AND THE OWNER.

R. ADDITIONAL REQUIREMENTS FOR THE PROJECT AS NOTED IN THE GENERAL REQUIREMENTS SPECIFICATIONS

S. DEMOLITION WITHIN THOSE LIMITS SHALL INCLUDE BUT NOT NECESSARILY BE LIMITED TO THE ITEM REFERENCED TO DEMOLITION KEY NOTES OR DEMOLITION GENERAL NOTE, AND SHALL INCLUDE ANY AND ALL OTHER ITEMS NECESSARY TO COMPLETE THE WORK UNDER THIS CONTRACT. FOR ALL SUCH ITEMS WHICH ARE NOT INDICATED ON THESE DRAWINGS, CONTRACTOR SHALL WALK THE SITE PRIOR TO BIDDING TO DETERMINE THE TRUE EXTENT OF DEMOLITION OR REMOVAL WORK REQUIRED.

T. THIS DRAWINGS IS INTENDED AS A GENERAL DEMOLITION PLAN. CONTRACTOR SHALL INCLUDE ALL OTHER INCIDENTAL DEMOLITION NOT SPECIFICALLY INDICATED ON THIS PLANS BUT REQUIRED TO ACCOMPLISHED NEW WORK.

U. NO CONCRETE MASONRY WALLS SHALL BE REMOVED OR CUT UNLESS SPECIFICALLY NOTED: WITH LOCATIONS ON PLANS AND DETAILS ARE SHOWN.

V. ALL NEW EXTERIOR DOORS AND NEW WINDOWS (WHERE OCCURS) SHALL BE FITTED ON (E) OPENINGS WITHOUT ANY TRIMMING OR ENLARGING UNLESS SPECIFICALLY NOTED AT EACH LOCATION AND REFERENCE DETAILS ARE SHOWN.

W. THIS DRAWINGS IS INTENDED AS A GENERAL DEMOLITION PLAN. CONTRACTOR SHALL INCLUDE ALL OTHER INCIDENTAL DEMOLITION NOT SPECIFICALLY INDICATED ON THIS PLANS BUT REQUIRED TO ACCOMPLISHED NEW WORK.

X. SEE ALSO MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS FOR ADDITIONAL DEMOLITION SCOPE OF WORK.

Y. DEMO ALL (E) INTERIOR SEISMIC SEPARATION JOINT COVER ASSEMBLIES ON GRIDLINE 7 1

DEMOLITION PLAN LEGEND

- (E) STUD WALL TO REMAIN
- (E) PARTITION WALLS TO BE REMOVED, SEE A2.01 FOR MORE INFORMATION
- (E) DEEP SCORED/ SPLIT FACE CONCRETE BLOCK WALL TO REMAIN, U.N.O.
- (E) DEEP SCORED/ SPLIT FACE CONCRETE BLOCK WALL W/ FURRING WALL TO REMAIN, U.N.O.
- (E) CASEWORK TO BE REMOVED
- (E) ACOUSTIC CEILING PANEL AND GRID TO BE REMOVED
- (E) GYPSUM BROAD CEILING TO BE REMOVED
- (E) DOOR AND FRAME TO BE REMOVED 1

DEMOLITION PLANS - LOWER LEVEL & MAIN LEVEL

BUILDING 400 MODERNIZATION NEW CLASSROOM/ LIBRARY MEDIA CENTER

WALNUT VALLEY UNIFIED SCHOOL DISTRICT
DIAMOND BAR HIGH SCHOOL
21400 PATHFINDER RD. DIAMOND BAR, CA 91765

CONSULTANT:

SEALS:

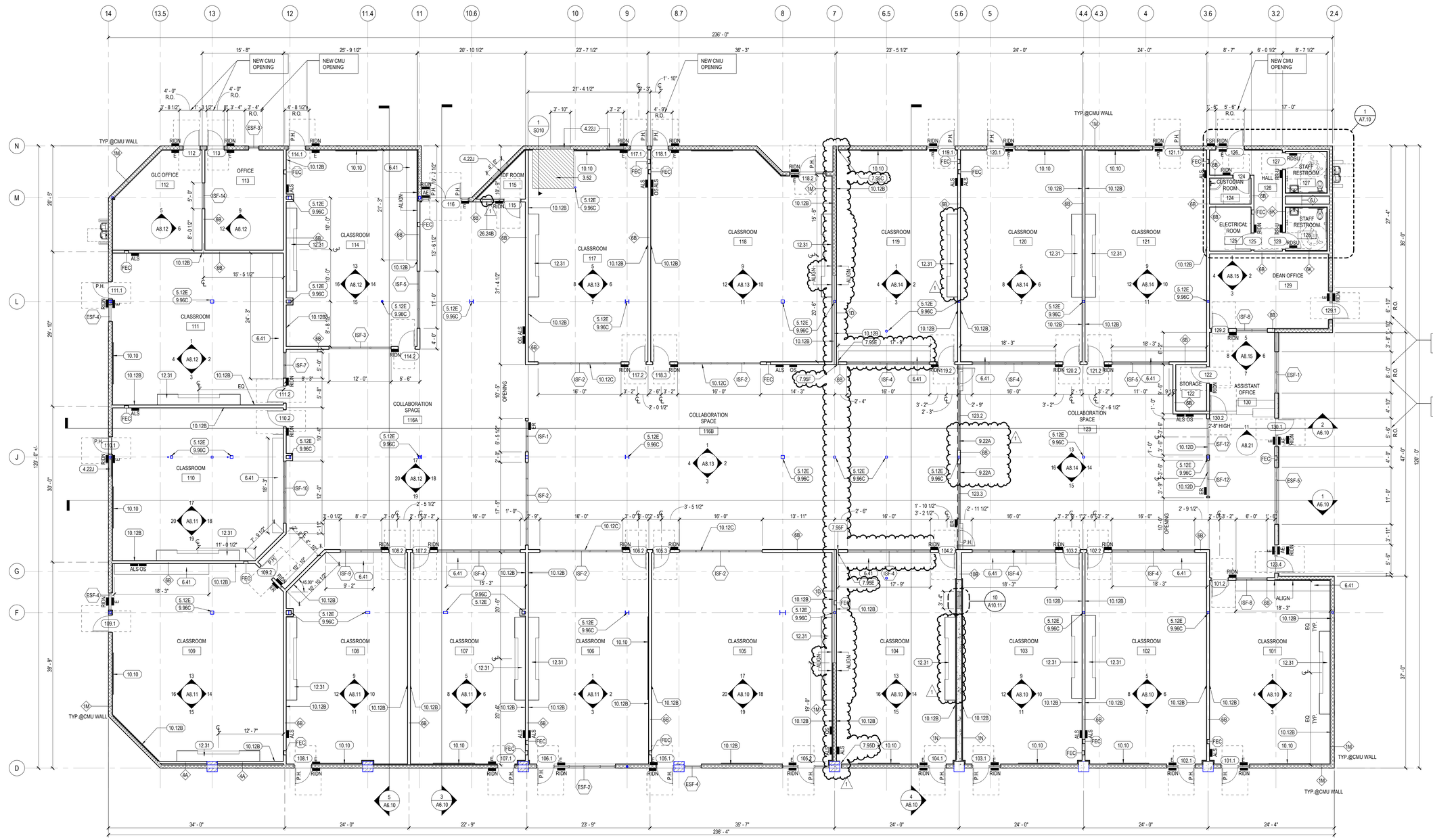
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PROJECT NUMBER: 19-47100-00
PROJECT STATUS: CD 100%
PROJECT ISSUED: 05/26/20
REVISION: DESCRIPTION: ADDENDUM - 1
DATE: 10-25-2022

A2.01

10/24/2022 7:44:07 AM



1 A2.10 REMODEL FLOOR PLAN LOWER LEVEL
SCALE: 1/8" = 1'-0"

NORTH

KEYNOTES

DESCRIPTION

3.52	IN-FILL EXISTING CONCRETE FLOOR OPENING, SEE 8/S010
4.22J	IN-FILL EXISTING DOOR OPENING TO MATCH ADJACENT MATERIALS & COLOR
5.12E	EXISTING STRUCTURE COLUMN, PROTECT IN PLACE
6.41	PLASTIC LAMINATE CLAD ARCHITECTURAL CABINETS SEE 8/A10.60
7.95C	SEISMIC SEPERATION JOINT COVER @ (E) CMU WALL, SEE 6/A10.70
7.95D	SEISMIC SEPERATION JOINT COVER @ (E) CMU WALL & (E) COLUMN, SEE 11/A10.70
7.95E	SEISMIC SEPERATION JOINT COVER @ METAL STUD WALL 90°, SEE 1/A10.70
7.95F	SEISMIC SEPERATION JOINT COVER @ METAL STUD WALL 180°, SEE 1/A10.70
9.22A	NON-STRUCTURAL METAL FRAMING ABOVE FOLDING GLASS PANEL PARTITION
9.96C	INTUMESCENT PAINTING - FIRE RETARDANT COATINGS
10.10	WALL MOUNTED MARKER BOARD, SEE 1/A10.12
10.12B	TACKABLE WALL, SEE 2/A10.12
10.12C	SCENERY BACKDROP
10.12D	STOREFRONT PARTITION, SEE ELEVATIONS ON A9.11 AND DETAIL ON A10.20 & A10.21
12.31	CUSTOM TEACHING WALL MODULAR, SEE 22/A10.50
26.24B	EXISTING PANEL BOARD TO REMAIN, PROTECT IN PLACE

NOTES

1. GENERAL NOTES APPLY TO THIS DRAWINGS
2. ALL DIMENSIONS ARE ACTUAL AND ARE TO FACE OF STUDS, FACE OF MASONRY, CENTERLINE OF DOORS OR CENTERLINE OF COLUMN, UNLESS NOTED OTHERWISE.
3. ALL CLEARANCE DIMENSIONS ARE ACTUAL AND ARE TO FINISH FACE, CENTERLINE OF PLUMBING FIXTURES, AND DOOR OPENINGS, UNLESS NOTED OTHERWISE.
4. REFERENCE ADULT MOUNTING HEIGHTS FOR ADDITIONAL DIMENSION NOT SHOWN ON PLANS AND ELEVATIONS.

FLOOR PLAN LEGEND

- 60" DIA. ACCESSIBLE TURN AROUND
- 4'-0" MIN. ACCESSIBLE CLEAR FLOOR SPACE
- PANIC HARDWARE
- 2'-0" EXT. 1'-6" INT. DOOR ACCESSIBLE CLEAR FLOOR SPACE
- 1'-0"
- X WALLS: SEE WALL TYPES SHEET A9.20
- (N) FULL HEIGHT NON-BEARING METAL STUD WALL
- (N) CMU WALL IN-FILL 17/A10.10
- 1-HR RATED WALL
- (E) 1-HR EXTERIOR DEEP SCORED/ SPLIT FACE CONCRETE BLOCK WALL TO REMAIN, U.N.O.
- (E) 1-HR EXTERIOR 2X6 WD STUD WALL W/ SPLIT FACE CONCRETE BLOCK VENEER TO REMAIN, U.N.O.
- FEC FIRE EXTINGUISHER CABINET, TYPE ABC PER DETAIL 12/A10.11
- XX DOOR TAG - SEE DOOR SCHEDULE PER SHEET A9.10
- XXX-X STOREFRONT TAG - SEE STOREFRONT SCHEDULE PER A9.11

NOTE: ALL METAL STUD WALL WILL RECEIVE ACCOUSTICAL INSULATION

SIGNAGE LEGEND

ALS	ASSISTIVE LISTENING SYSTEMS SIGN - SEE 11/A10.60
AE	ACCESSIBLE ENTRANCE SIGN - SEE 6/A10.60
AR	ACCESSIBLE ROUTE - SEE 6/A10.60
E	EXIT - SEE 12/A10.60
ER	EXIT ROUTE - SEE 12/A10.60
FSR	FIRE SPRINKLER RISER SIGN - SEE 4/A10.60
OS	OCCUPANT LOAD SIGN - SEE 13/A10.60
RDSU	RESTROOM - ALL GENDER (ON DOOR) - SEE 15/A10.60
RR-U	RESTROOM - ALL GENDER - SEE 14/A10.60
RIDN	ROOM ID NAME- SEE 7/A10.60

10/24/2022 7:44:12 AM

REMODEL FLOOR PLAN - LOWER LEVEL

BUILDING 400 MODERNIZATION NEW CLASSROOM/ LIBRARY MEDIA CENTER

WALNUT VALLEY UNIFIED SCHOOL DISTRICT
DIAMOND BAR HIGH SCHOOL
21400 PATHFINDER RD. DIAMOND BAR, CA 91765

CONSULTANT:

SEALS:

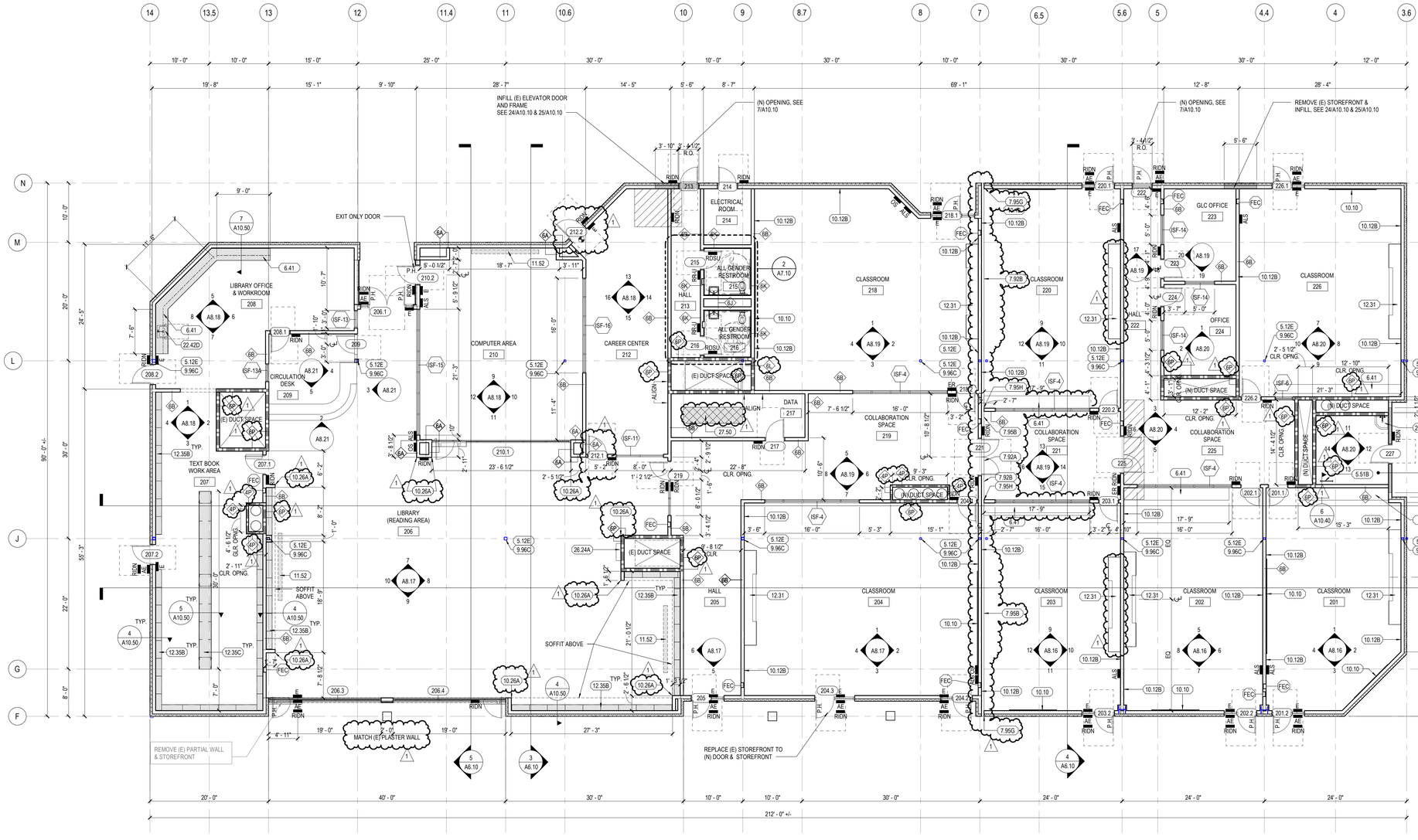
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PROJECT NUMBER: 19-47100-00
PROJECT STATUS: CD 100%
PROJECT ISSUED: 10/28/2020

REVISION	DATE:	DESCRIPTION:
1	10-25-2022	ADDENDUM - 1

A2.10



1 A2.11 REMODEL FLOOR PLAN MAIN LEVEL
SCALE: 1/8" = 1'-0"

NORTH

KEYNOTES

	DESCRIPTION
5.12E	EXISTING STRUCTURE, COLUMN, PROTECT IN PLACE
5.12	INFILL (E) OPENING - SEE STRUCTURE
5.31F	CMU - METAL ACCESS LADDER - SEE 9/A10.40
6.41	PLASTIC-LAMINATE-CLAD ARCHITECTURAL CABINETS,SEE 8/A10.50
7.92A	JOINT SEALANTS
7.92B	ACOUSTICAL JOINT SEALANTS
7.95B	SEISMIC SEPERATION JOINT COVER @ (E) FLOOR DECK & (E) WOOD STUD WALL, SEE 23/A10.70
7.95G	SEISMIC SEPERATION JOINT COVER @ (E) WOOD STUD WALL, SEE 21/A10.70
7.95H	SEISMIC SEPERATION JOINT COVER @ METAL STUD WALL & (E) WOOD STUD WALL, SEE 16/A10.70
9.96C	INTUMESCENT PAINTING - FIRE RETARDANT COATINGS
10.10	WALL MOUNTED MARKER BOARD, SEE 1/A10.12
10.12B	TACKABLE WALL, SEE 2/A10.12
10.26A	CORNER GUARD
11.52	PROJECTION SCREEN, SEE 11/A10.11
12.31	CUSTOM TEACHING WALL MODULAR, SEE 22/A10.50
12.35B	BOOK SHELVING UNITS (7'-0" HIGH), SEE 4/A10.50
12.35C	BOOK SHELVING UNITS (2'-10" HIGH), SEE 5/A10.50
22.42D	COMMERCIAL SINKS
26.24A	EXISTING DIS. PANEL, SEE ELECT. DWG.
27.50	(E) MDF & (E) CONDUIT IN THE SHADED AREA TO REMAIN. CONTRACTOR TO PROTECT IN PLACE AND REMAIN OPERATIONAL DURING THE ENTIRITY OF THE CONSTRUCTION

NOTES

1. GENERAL NOTES APPLY TO THIS DRAWINGS
2. ALL DIMENSIONS ARE ACTUAL AND ARE TO FACE OF STUDS, FACE OF MASONRY, CENTERLINE OF DOORS OR CENTERLINE OF COLUMN, UNLESS NOTED OTHERWISE.
3. ALL CLEARANCE DIMENSIONS ARE ACTUAL AND ARE TO FINISH FACE, CENTERLINE OF PLUMBING FIXTURES, AND DOOR OPENINGS, UNLESS NOTED OTHERWISE.
4. REFERENCE ADULT MOUNTING HEIGHTS FOR ADDITIONAL DIMENSION NOT SHOWN ON PLANS AND ELEVATIONS.

FLOOR PLAN LEGEND

- 60" DIA. ACCESSIBLE TURN AROUND
- 4'-0" MIN. ACCESSIBLE CLEAR FLOOR SPACE
- PANIC HARDWARE
- 2'-0" EXT. 1'-6" INT. DOOR ACCESSIBLE CLEAR FLOOR SPACE
- 5'-0" CLR. 4'-0" CLR. FEC FIRE EXTINGUISHER CABINET, TYPE ABC PER DETAIL 12/A10.11
- XX DOOR TAG - SEE DOOR SCHEDULE PER SHEET A9.10
- XXX-X STOREFRONT TAG - SEE STOREFRONT SCHEDULE PER A9.11
- X WALLS: SEE WALL TYPES SHEET A9.20
- (N) FULL HEIGHT NON-BEARING METAL STUD WALL
- (N) CMU WALL IN-FILL 17/A10.10
- 1-HR RATED WALL
- (E) 1-HR EXTERIOR DEEP SCORED/ SPLIT FACE CONCRETE BLOCK WALL TO REMAIN, U.N.O.
- (E) 1-HR EXTERIOR 2X6 WD STUD WALL W/ SPLIT FACE CONCRETE BLOCK VENEER TO REMAIN, U.N.O.
- NOTE: ALL METAL STUD WALL WILL RECEIVE ACCOUSTICAL INSULATION

SIGNAGE LEGEND

ALS	ASSISTIVE LISTENING SYSTEMS SIGN - SEE 11/A10.60
AE	ACCESSIBLE ENTRANCE SIGN - SEE 6/A10.60
AR	ACCESSIBLE ROUTE - SEE 6/A10.60
E	EXIT - SEE 12/A10.60
ER	EXIT ROUTE - SEE 12/A10.60
FSR	FIRE SPRINKLER RISER SIGN - SEE 4/A10.60
OS	OCCUPANT LOAD SIGN - SEE 13/A10.60
RDSU	RESTROOM - ALL GENDER (ON DOOR) - SEE 15/A10.60
RR-U	RESTROOM - ALL GENDER - SEE 14/A10.60
RIDN	ROOM ID NAME- SEE 7/A10.60

10/24/2022 7:44:16 AM

CONSULTANT:

REMODEL FLOOR PLAN - MAIN LEVEL

BUILDING 400 MODERNIZATION NEW CLASSROOM/ LIBRARY MEDIA CENTER

WALNUT VALLEY UNIFIED SCHOOL DISTRICT
DIAMOND BAR HIGH SCHOOL
21400 PATHFINDER RD. DIAMOND BAR, CA 91765

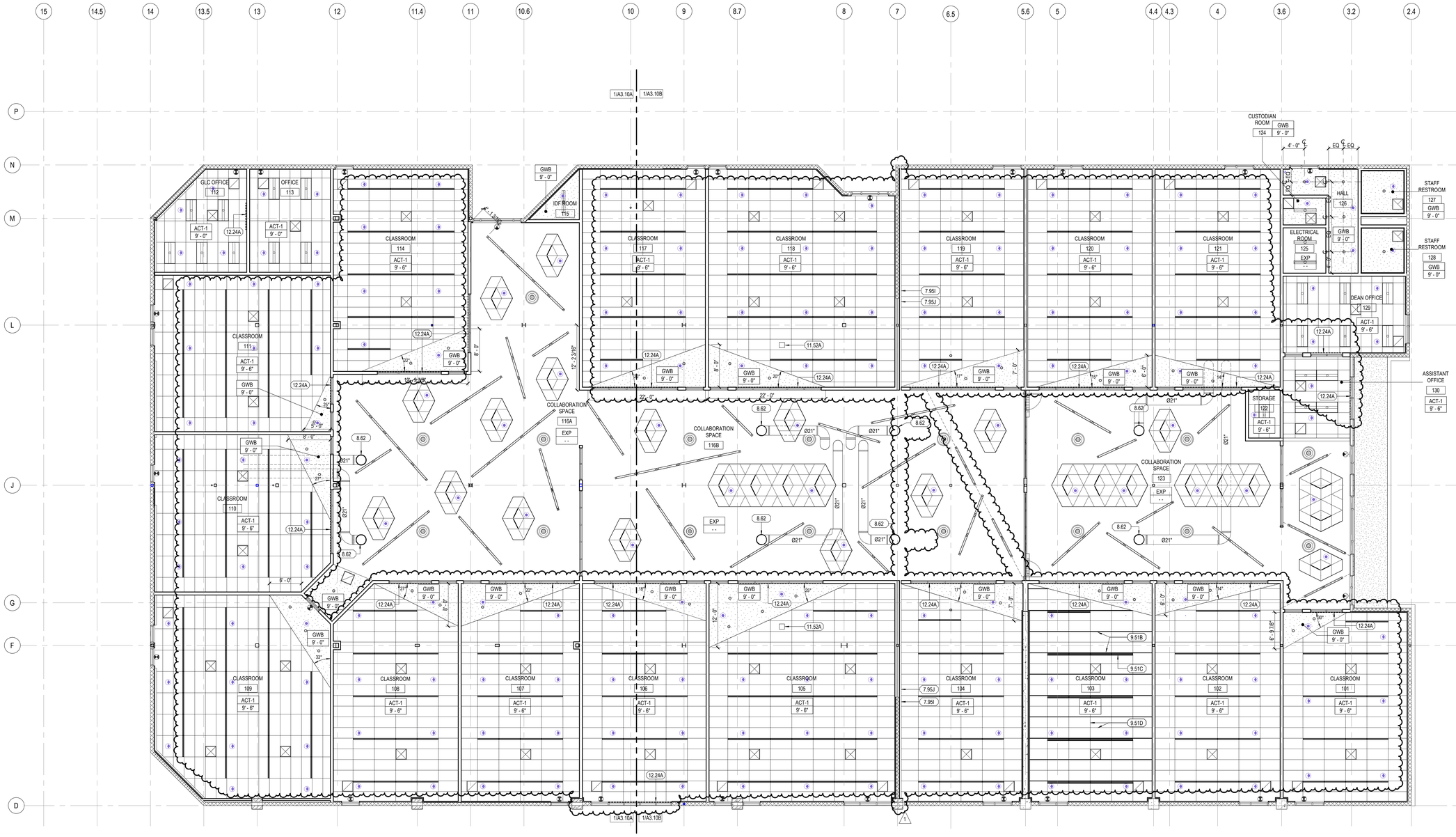
SEALS:

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PROJECT NUMBER:	19-47100-00
PROJECT STATUS	CD 100%
PROJECT ISSUED:	11/04/2020
REVISION	DATE: DESCRIPTION:
	10-25-2022 ADDENDUM - 1

A2.11



NOTE: SEE DIMENSIONS ON A3.10A & A3.10B

1 A3.10 LOWER LEVEL NEW REFLECTED CEILING PLAN
SCALE: 1/8" = 1'-0"

NORTH

KEYNOTES

	DESCRIPTION
1	7.95I SEISMIC SEPERATION JOINT COVER @ (E) CMU WALL & SUSPENDED CEILING SYSTEM, SEE 3/A10.70
	7.95J SEISMIC SEPERATION JOINT COVER @ METAL STUD WALL & SUSPENDED CEILING SYSTEM, SEE 8/A10.70
	8.62 (N) SOLATUBE DAYLIGHTING SYSTEM, SEE TOP CONNECTION ON 17/A10.40 & HANGER AND BRACING DETAILS ON 2,3,4/M5.01 AND 3,4/M5.02 & RATED PENETRATION ON 10/A10.12 AND 11/A10.12
1	9.51B TYP. MAIN RUNNER SPAN FULL WIDTH OF CEILING
	9.51C SECONDARY MAIN RUNNER SPAN THE WIDTH OF LIGHT FIXTURE, CONNECTING TO MAIN RUNNER WITH YOKE AT 4'-0" O.C. - SEE 15/A10.30
	9.51D TYP. CROSS RUNNER CONNECTING MAIN RUNNER, USE YOKE WHERE APPLYS
	11.52A PROJECTOR MOUNT AND PROJECTOR
	12.24A FRAME MOUNTED MOTORIZED ROLLER SHADES WITH 5% OPEN FACTOR

REFLECTED CEILING PLAN NOTES

A. REFLECTED CEILING PLAN GENERAL NOTES APPLY TO ALL REFLECTED CEILING PLAN SHEETS.
B. ALL CEILING GRIDS/PANELS SHALL BE CENTERED IN EACH ROOM UNLESS NOTED OTHERWISE.
C. CEILING HEIGHTS ARE AS NOTED ON THE REFLECTED CEILING PLAN UNLESS NOTED OTHERWISE.
D. ALL ELECTRICAL FIXTURES, SPEAKERS, SMOKE AND THERMAL DETECTORS, MECHANICAL GRILLES, SPRINKLER HEADS, ETC., SHALL BE CENTERED BETWEEN CEILING GRIDS UNLESS NOTED OTHERWISE. SPRINKLER HEADS SHALL BE WITHIN A 3" RADIUS CENTERED BETWEEN CEILING GRIDS.
E. IN ACOUSTICAL CEILING PANELS WITH SCORE IN THE CENTER, CENTER DEVICES REFERENCED IN NOTED, IN ONE HALF OF THE TILE. DO NOT LOCATE ON THE SCORE. FOR APC WITH MULTIPLE SCORED PATTERNS, COORDINATE LOCATION WITH ARCHITECT.
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2. FACE OF FINISHED BULKHEADS
3. CENTERLINE OF COLUMNS
4. CENTERLINE OF TEES
H. IN AREAS WITH EXPOSED STRUCTURE CEILINGS, COORDINATE EXACT LOCATIONS OF MECHANICAL GRILLES, DIFFUSERS, DUCTWORK, AND ELECTRICAL FIXTURES WITH EACH RESPECTIVE SUBCONTRACTOR.
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L. MAIN RUNNER FOR SUSPENDED CEILING SYSTEM TO RUN PARRALLEL WITH THE RECESSED LIGHT FIXTURNS IN THE CLASSROOM - SEE ROOM 103 FOR LOWER LEVEL LAYOUT AND ROOM 202 FOR MAIN LEVEL LAYOUT

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- EXTERIOR CEMENT PLASTER (PLAS)
- ARMSTRONG DESIGNFLEX CEILING SYSTEM, SEE DETAIL 8/A10.30
- REFER TO CEILING DETAILS ON SHEET A10.30 & A10.31
- LINEAR PENDANT LIGHT FIXTURE
- 2 x 4 RECESSED LIGHTING FIXTURE
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- SKYLIGHT DIFFUSER
- EXIT SIGN
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- SUPPLY
- RETURN
- EXHAUST
- ROUND SUPPLY DIFFUSER
- 24" X 30" ACCESS PANEL
- ROOF HATCH

10/24/2022 7:44:29 AM

CONSULTANT:

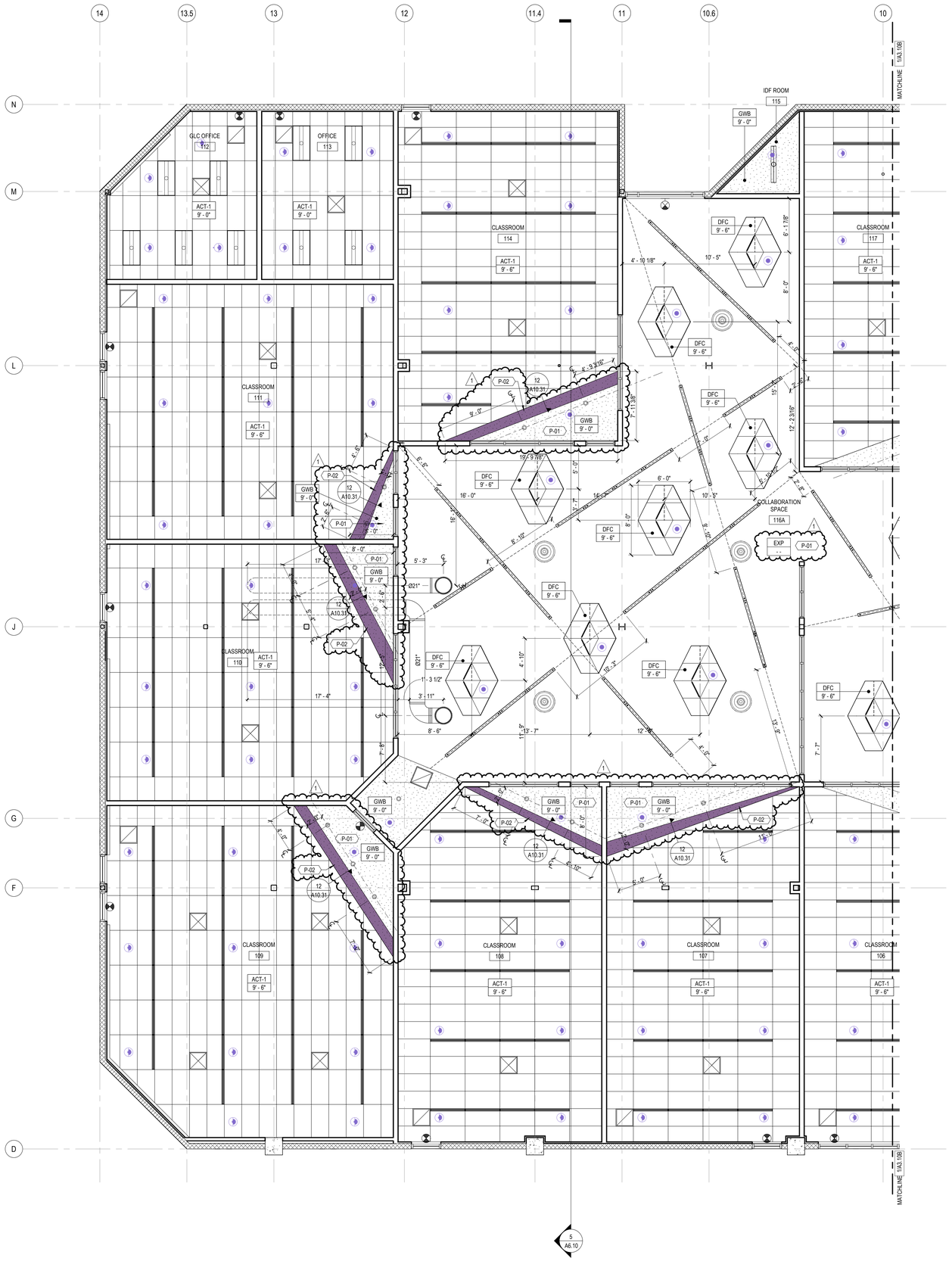
REMODEL REFLECTED CEILING PLAN LOWER LEVEL
BUILDING 400 MODERNIZATION NEW CLASSROOM/ LIBRARY MEDIA CENTER
WALNUT VALLEY UNIFIED SCHOOL DISTRICT
DIAMOND BAR HIGH SCHOOL
21400 PATHFINDER RD. DIAMOND BAR, CA 91765

SEALS:

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PROJECT NUMBER: 19-471100-00
PROJECT STATUS: CD 100%
PROJECT ISSUED: 05/26/20
REVISION DATE: DESCRIPTION:
1 10-25-2022 ADDENDUM - 1

A3.10



REFLECTED CEILING PLAN NOTES

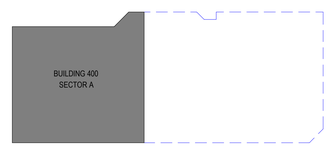
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- ROOF HATCH
- REFER TO CEILING DETAILS ON SHEET A10.30 & A10.40

KEY PLAN



1 A3.10A REMODEL RCP - LOWER LEVEL - SECTOR A
SCALE: 3/16" = 1'-0"

10/24/2022 7:44:33 AM

CONSULTANT:

REMODEL REFLECTED CEILING PLAN LOWER LEVEL - SECTOR A
BUILDING 400 MODERNIZATION NEW CLASSROOM/ LIBRARY MEDIA CENTER
WALNUT VALLEY UNIFIED SCHOOL DISTRICT
DIAMOND BAR HIGH SCHOOL
21400 PATHFINDER RD. DIAMOND BAR, CA 91765

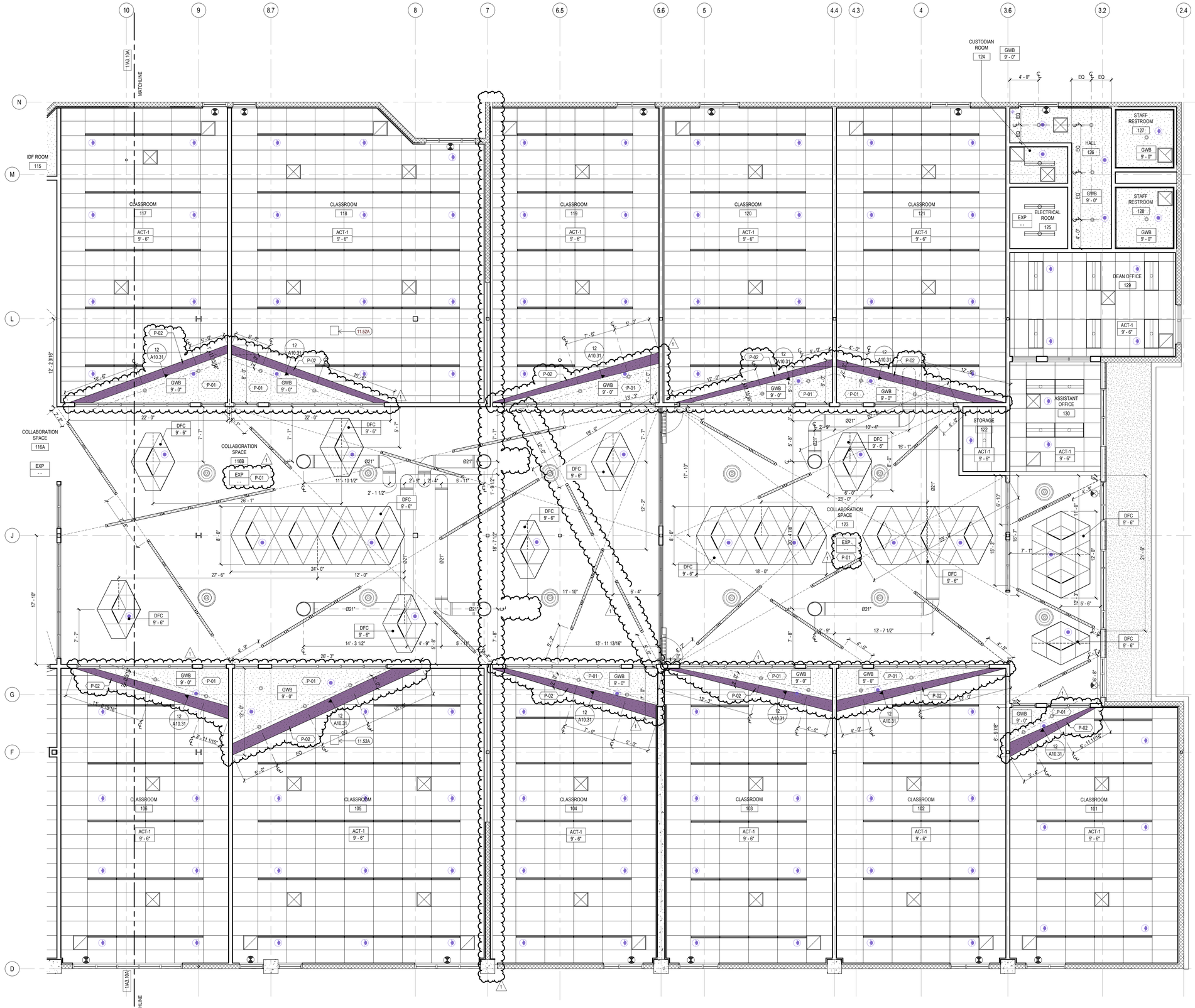
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PROJECT NUMBER: 19-47100-00
PROJECT STATUS: CD 100%
PROJECT ISSUED: 12/03/20
REVISION: DATE: DESCRIPTION:
1 10-25-2022 ADENDUM - 1

A3.10A



1 REMODEL RCP - LOWER LEVEL - SECTOR B
A3.10B SCALE: 3/16" = 1'-0"

10/24/2022 7:44:38 AM

REFLECTED CEILING PLAN NOTES

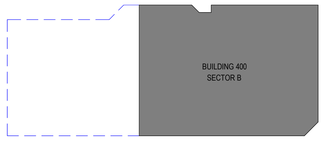
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KEY PLAN



CONSULTANT:

REMODEL REFLECTED CEILING PLAN LOWER LEVEL - SECTOR B

BUILDING 400 MODERNIZATION NEW CLASSROOM/ LIBRARY MEDIA CENTER

WALNUT VALLEY UNIFIED SCHOOL DISTRICT
DIAMOND BAR HIGH SCHOOL
21400 PATHFINDER RD. DIAMOND BAR, CA 91765

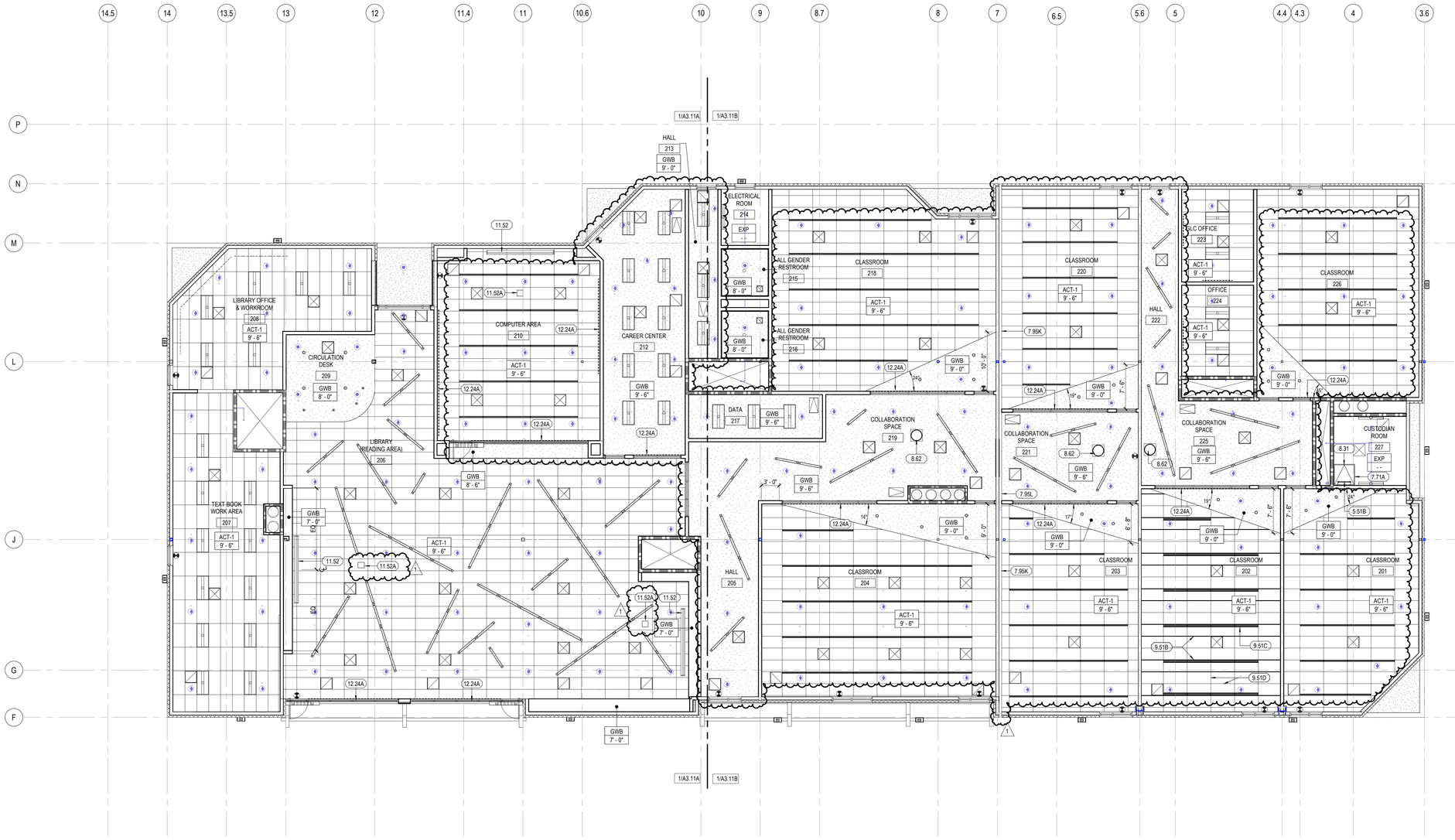
SEALS:

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PROJECT NUMBER: 19-47100-00
PROJECT STATUS: CD 100%
PROJECT ISSUED: 12/02/20
REVISION DATE: DESCRIPTION:
1 10-25-2022 ADDENDUM - 1

A3.10B



NOTE: SEE DIMENSION S ON A3.11A & A3.11B

1 A3.11 REFLECTED CEILING PLAN MAIN LEVEL
SCALE: 1/8" = 1'-0"

KEYNOTES

DESCRIPTION

5.51B GALV. METAL ACCESS LADDER, SEE 6/A10.40
7.71A IN ROOF HATCH, SEE A10.40
7.95K SEISMIC SEPERATION JOINT COVER @ (E) WOOD STUD WALL & SUSPENDED CEILING SYSTEM, SEE 13/A10.70
7.99L SEISMIC SEPERATION JOINT COVER @ (E) WOOD STUD WALL & GYP. BD. CEILING, SEE 15/A10.70
8.31 ACCESS DOORS AND FRAMES
8.62 (N) SOLATUBE DAYLIGHTING SYSTEM, SEE TOP CONNECTION ON 17/A10.40 & HANGER AND BRACING DETAILS ON 2,3,4/M5.01 AND 3,4/M5.02 & RATED PENETRATION ON 10/A10-12 AND 1/A10-13
9.51B TYP. MAIN RUNNER SPAN FULL WIDTH OF CEILING
9.51C SECONDARY MAIN RUNNER SPAN THE WIDTH OF LIGHT FIXTURE, CONNECTING TO MAIN RUNNER WITH YOKE AT 4'-0" O.C. - SEE 15/A10.30
9.51D TYP. CROSS RUNNER CONNECTING MAIN RUNNER, USE YOKE WHERE APPLYS
11.52A PROJECTOR MOUNT AND PROJECTOR
12.24A FRAME MOUNTED MOTORIZED ROLLER SHADES WITH 5% OPEN FACTOR

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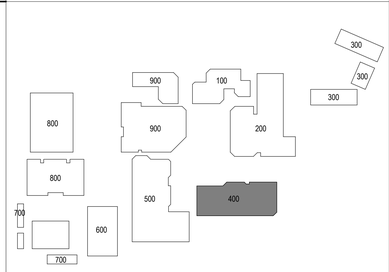
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ROUND SUPPLY DIFFUSER
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ROOF HATCH

KEY PLAN



NORTH

10/24/2022 7:44:44 AM

CONSULTANT:

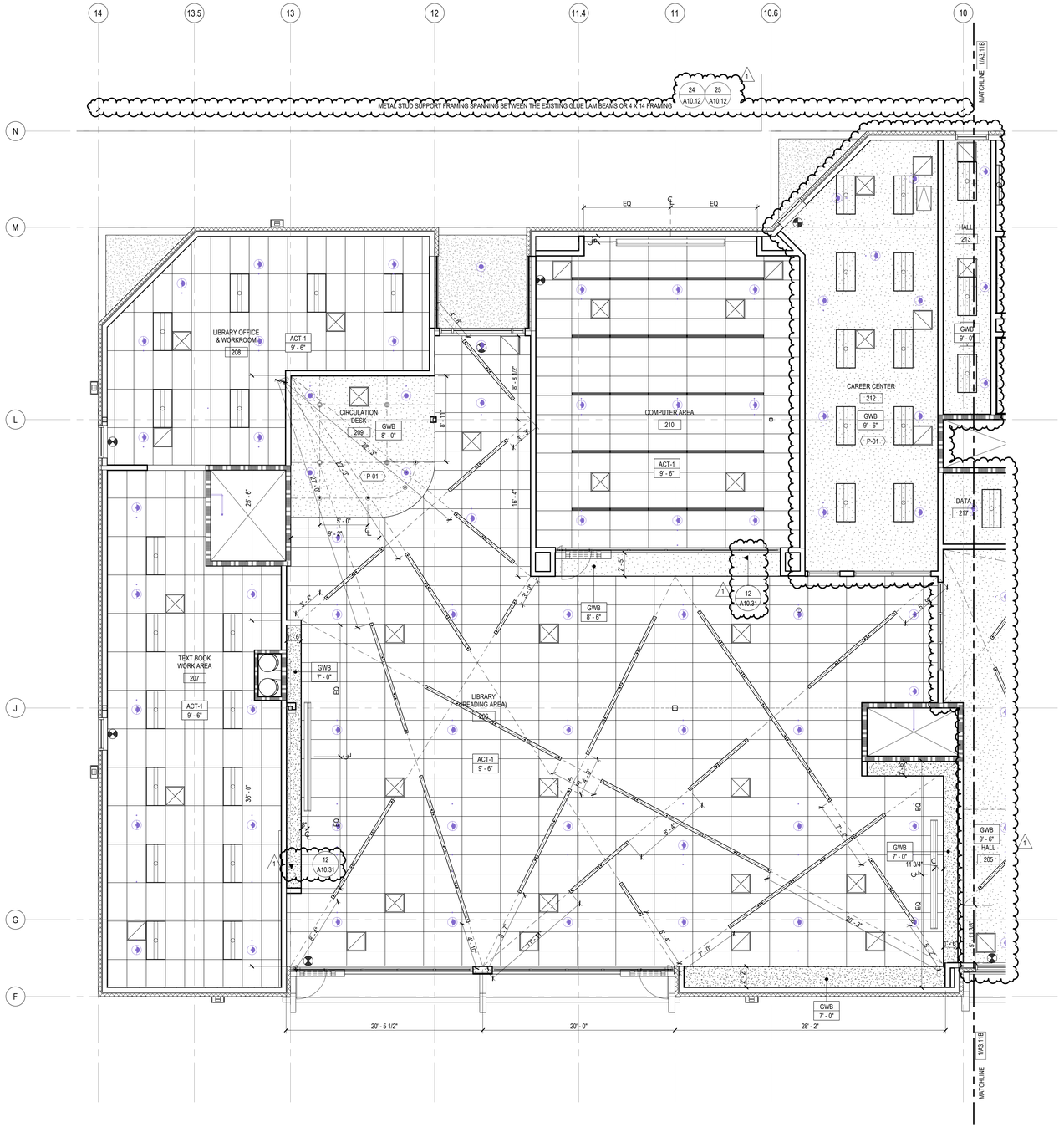
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PROJECT NUMBER: 19-471100-00
PROJECT STATUS: CD 100%
PROJECT ISSUED: 05/29/20
REVISION: DATE: DESCRIPTION:
1 10-25-2022 ADDENDUM - 1

A3.11



1 A3.11A REMODEL RCP - MAIN LEVER - SECTOR A
SCALE: 3/16" = 1'-0"

10/24/2022 7:44:47 AM

REFLECTED CEILING PLAN NOTES

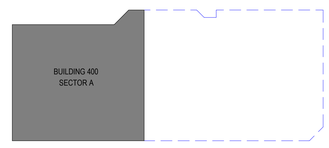
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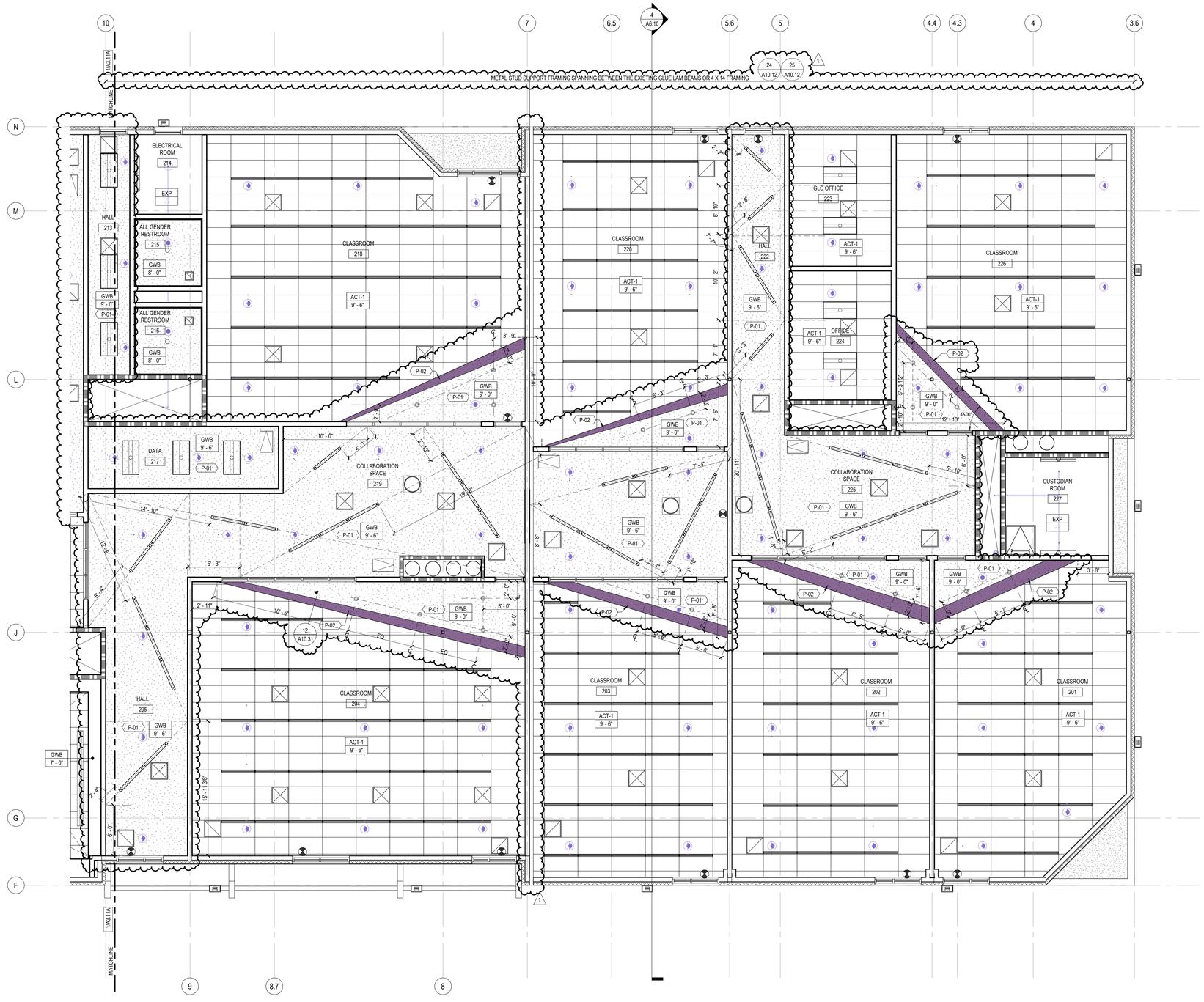
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SEALS:

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PROJECT NUMBER: 19-47100-00
PROJECT STATUS: CD: 100%
PROJECT ISSUED: 12/02/20
REVISION DATE: DESCRIPTION:
1 10-25-2022 ADDENDUM - 1

A3.11A



REFLECTED CEILING PLAN NOTES

A. REFLECTED CEILING PLAN GENERAL NOTES APPLY TO ALL REFLECTED CEILING PLAN SHEETS.
B. ALL CEILING GRIDS/PANELS SHALL BE CENTERED IN EACH ROOM UNLESS NOTED OTHERWISE.
C. CEILING HEIGHTS ARE AS NOTED ON THE REFLECTED CEILING PLAN UNLESS NOTED OTHERWISE.
D. ALL ELECTRICAL FIXTURES, SPEAKERS, SMOKE AND THERMAL DETECTORS, MECHANICAL GRILLES, SPRINKLER HEADS, ETC., SHALL BE CENTERED BETWEEN CEILING GRIDS UNLESS NOTED OTHERWISE. SPRINKLER HEADS SHALL BE WITHIN A 3" RADIUS CENTERED BETWEEN CEILING GRIDS.
E. IN ACOUSTICAL CEILING PANELS WITH SCORE IN THE CENTER, CENTER DEVICES REFERENCED IN NOTED, IN ONE HALF OF THE TILE. DO NOT LOCATE ON THE SCORE. FOR APC WITH MULTIPLE SCORED PATTERNS, COORDINATE LOCATION WITH ARCHITECT.
F. PROVIDE SUSPENSION SYSTEM AROUND ELECTRICAL FIXTURES, MECHANICAL GRILLES, DIFFUSERS, ETC. AT ACOUSTICAL PANEL CEILINGS.
G. ALL DIMENSIONS ON REFLECTED CEILING PLANS ARE ACTUAL AND ARE TO THE FOLLOWING UNLESS NOTED OTHERWISE: 1. FACE OF FINISHED WALL
2. FACE OF FINISHED BULKHEADS
3. CENTERLINE OF COLUMNS
4. CENTERLINE OF TEES
H. IN AREAS WITH EXPOSED STRUCTURE CEILINGS, COORDINATE EXACT LOCATIONS OF MECHANICAL GRILLES, DIFFUSERS, DUCTWORK, AND ELECTRICAL FIXTURES WITH EACH RESPECTIVE SUBCONTRACTOR.
I. ALL WALLS EXTEND TO UNDERSIDE OF DECK EXCEPT THOSE SHOWN SHADED IN WHICH GYPSUM BOARD OR MASONRY EXTENDS MIN. 4" ABOVE FINISHED CEILING. ALL METAL STUDS EXTEND TO UNDERSIDE OF STRUCTURE.
J. ALL EXPOSED MECHANICAL EQUIPMENT IN EXPOSED STRUCTURE CEILING AREAS IS TO BE PAINTED P-01.
K. ALL GYP. BOARD SOFFITS AT CLASSROOMS SHALL BE PAINTED AS INDICATED ON THE REFLECTED CEILING PLAN WITH THE EXCEPTION OF THE FACE OF ALL SOFFITS SHALL BE PAINTED P-02
L. MAIN RUNNER FOR SUSPENDED CEILING SYSTEM TO RUN PARRALLEL WITH THE RECESSED LIGHT FIXTURES IN THE CLASSROOM. CENTER MAIN RUNNER ON LIGHT FIXTURES ON EACH SIDE OF MAIN LEVEL LAYOUT

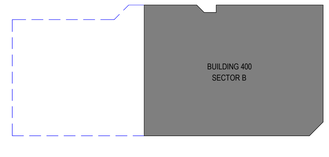
PROVIDE ACCESS PANELS TO ALL CONCEALED SPACES (I.E. ATTICS, VOID SPACES, ETC.) AS REQUIRED BY THE BUILDING CODE AND AUTHORITY HAVING JURISDICTION AND AS NEEDED TO SERVICE ANY ITEMS SPECIFIED BY THESE DOCUMENTS

REFLECTED CEILING PLAN LEGEND

- ACT-1 / 9'-0" — CEILING TYPE / CEILING HEIGHT
- 4' x 2' ACOUSTIC CEILING PANEL (ACT-1)
- GYP. BD. CEILING (GWB)
- EXTERIOR CEMENT PLASTER (PLAS)
- ARMSTRONG DESIGNFLEX CEILING SYSTEM (DFC), SEE DETAIL 8/A10.30
- LINEAR PENDANT LIGHT FIXTURE
- 2 x 4 RECESSED LIGHTING FIXTURE
- SURFACE MOUNTED UTILITY LIGHTING FIXTURE
- RECESSED DOWNLIGHT - 6" ROUND
- SUSPENDED CEILING RECESSED LIGHTING FIXTURE
- T-BAR LED LIGHTING FIXTURE
- SKYLIGHT DIFFUSER
- EXIT SIGN
- SUPPLY
- RETURN
- EXHAUST
- ROUND SUPPLY DIFFUSER
- 24" X 30" ACCESS PANEL
- ROOF HATCH

REFER TO CEILING DETAILS ON SHEET A10.30 & A10.40

KEY PLAN



1 / A3.11B REMODEL RCP - MAIN LEVEL - SECTOR B
SCALE: 3/16" = 1'-0"

10/24/2022 7:44:53 AM

CONSULTANT:

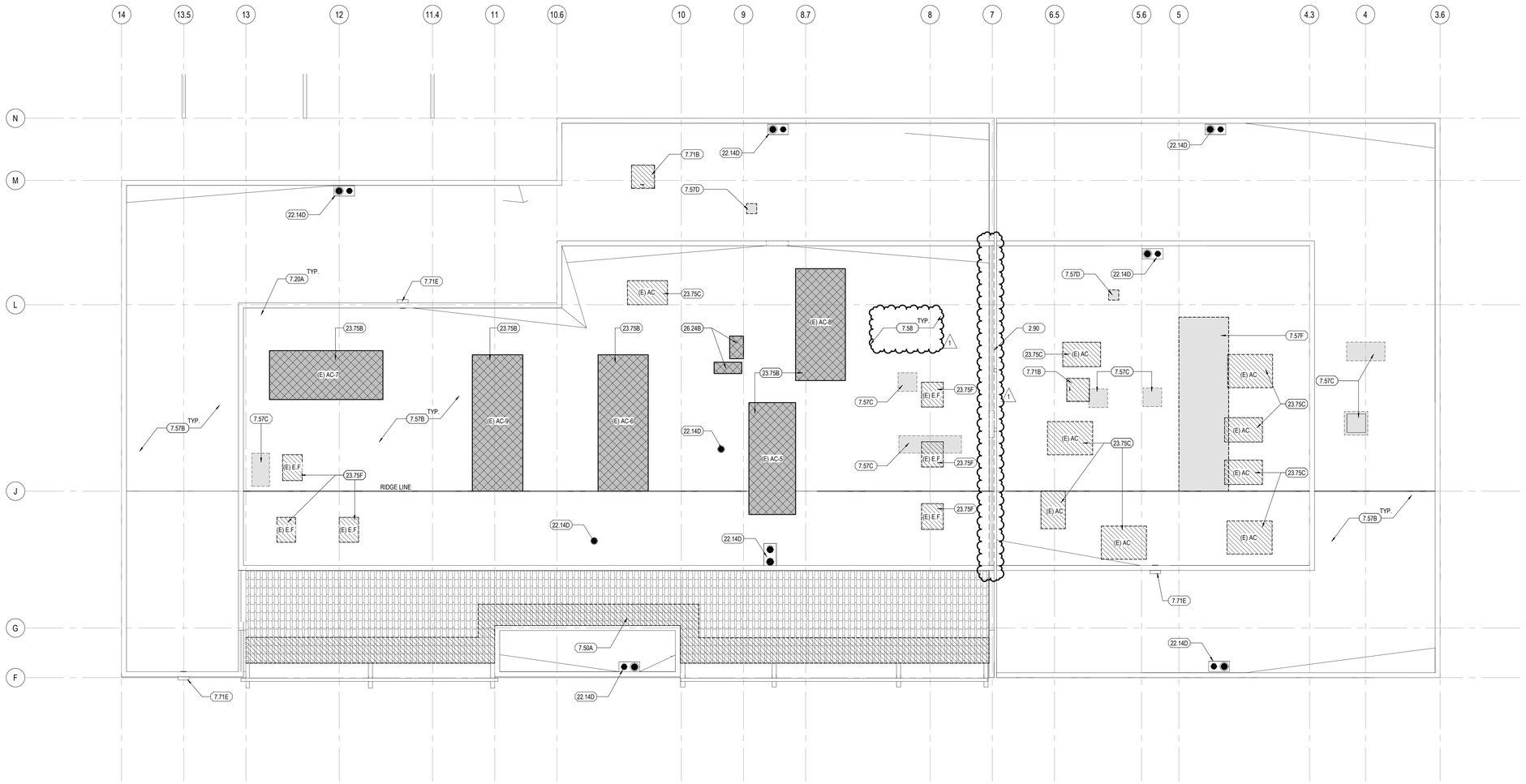
REMODEL REFLECTED CEILING PLAN MAIN LEVEL - SECTOR B
BUILDING 400 MODERNIZATION NEW CLASSROOM/ LIBRARY MEDIA CENTER
WALNUT VALLEY UNIFIED SCHOOL DISTRICT
DIAMOND BAR HIGH SCHOOL
21400 PATHFINDER RD. DIAMOND BAR, CA 91765

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1 10-25-2022 ADENDUM - 1

A3.11B



1 A4.01 DEMOLITION ROOF PLAN
SCALE: 1/8" = 1'-0"

NORTH

KEYNOTES

	DESCRIPTION
2.90	PORTION OF (E) PARAPET WALL TO BE REMOVED. 1"- 6" OF PARAPET WALL FROM TOP OF ROOF PLYWOOD SHEATHING TO REMAIN. FINISH TOP OF PARAPET WALL WITH METAL FLASHING
7.50A	EXISTING ROOF GUTTER TO REMAIN, PROTECT IN PLACE
7.50A	REMOVE AND SALVAGE THE FIRST THREE COURSES OF (E) ROOF TILE TO UNCOVER CONCEALED GUTTER, CLEAN AND PREPARE FOR RE-ROOFING
7.57B	REPAIRS TO EXISTING COATED FOAMED ROOFING
7.57C	REMOVE PARTIAL (E) ROOF TO RECEIVE (N) SOLARTUBES ASSEMBLY, ALL DIMENSION V.I.F.
7.57D	REMOVE PARTIAL (E) ROOF TO RECEIVE (N) EXHAUST FAN, ALL DIMENSION V.I.F.
7.57E	REMOVE PARTIAL (E) ROOF FOR (N) A.C. UNIT AND SUPPORTING STRUCTURE, SEE MECH AND STRUCT.
7.58	REMOVE EXISTING WALKING MATTS
7.71B	EXISTING ROOF HATCH TO BE REMOVED, PATCH OPENING AND ROOF FINISH TO MATCH EXISTING ADJACENT
7.71E	EXISTING ROOF SCUPPER TO REMAIN, PROTECT IN PLACE
22.14D	EXISTING ROOF DRAIN TO REMAIN, PROTECT IN PLACE
23.75B	EXISTING MECHANICAL UNITS TO REMAIN, PROTECT IN PLACE
23.75C	EXISTING MECHANICAL UNITS TO BE REMOVED, PATCH OPENINGS AS REQUIRED, ROOF FINISH TO MATCH EXISTING ADJACENT
23.75F	EXISTING ROOF TOP EXHAUST FAN TO BE REMOVED, PATCH OPENINGS AS REQUIRED, ROOF FINISH TO MATCH EXISTING ADJACENT
26.24B	EXISTING PANEL BOARD TO REMAIN, PROTECT IN PLACE

ROOF PLAN GENERAL NOTES:

A. ALL ITEMS TO REMAIN SHALL BE PROTECTED IN PLACE.
B. ROOF PLAN NOTES APPLY TO ALL ROOF PLAN SHEETS.
C. MOST ROOF SLOPES ARE CREATED BY SLOPING THE ROOF STRUCTURE. SEE STRUCTURAL DRAWINGS FOR ELEVATIONS OF THE HIGH AND LOW POINTS TO DETERMINE PROPER TAPER IN INSULATION. SHADED AREAS INDICATE TAPERED INSULATION. TAPERED INSULATION SHALL PROVIDE A MINIMUM OF 1/8-INCH PER FOOT OF SLOPE TO ROOF DRAINS, UNLESS NOTED OTHERWISE.
D. ALL ROOF CURBS TO BE A MINIMUM OF 8" ABOVE ROOFING LEVELS. PROVIDE TAPERED INSULATION ROOF SADDLES AT ROOF CURBS TO PROVIDE APPROPRIATE DRAINAGE.
E. SEE STRUCTURAL FOR FRAMING AROUND ROOF PENETRATIONS.
F. COORDINATE THE SIZE AND LOCATION OF ROOF PENETRATIONS FOR MECHANICAL AND ELECTRICAL EQUIPMENT. REFER TO MECHANICAL AND ELECTRICAL DRAWINGS FOR PENETRATIONS NOT SHOWN ON THIS SHEET.
G. FLASH DRAINS, CURBS, VENTS AND STACKS PER MANUFACTURER'S RECOMMENDATIONS IF DETAIL NOT SHOWN ON PLANS.
H. REFERENCE SHEET FOR ALL ROOF PENETRATIONS NOT CALL OUT ON THE DRAWING.
I. ROOF CRICKETS 1/8" TO 1'-0" SLOPE, TYP.

CONSULTANT:

DEMOLITION ROOF PLAN

BUILDING 400 MODERNIZATION NEW CLASSROOM/ LIBRARY MEDIA CENTER

WALNUT VALLEY UNIFIED SCHOOL DISTRICT
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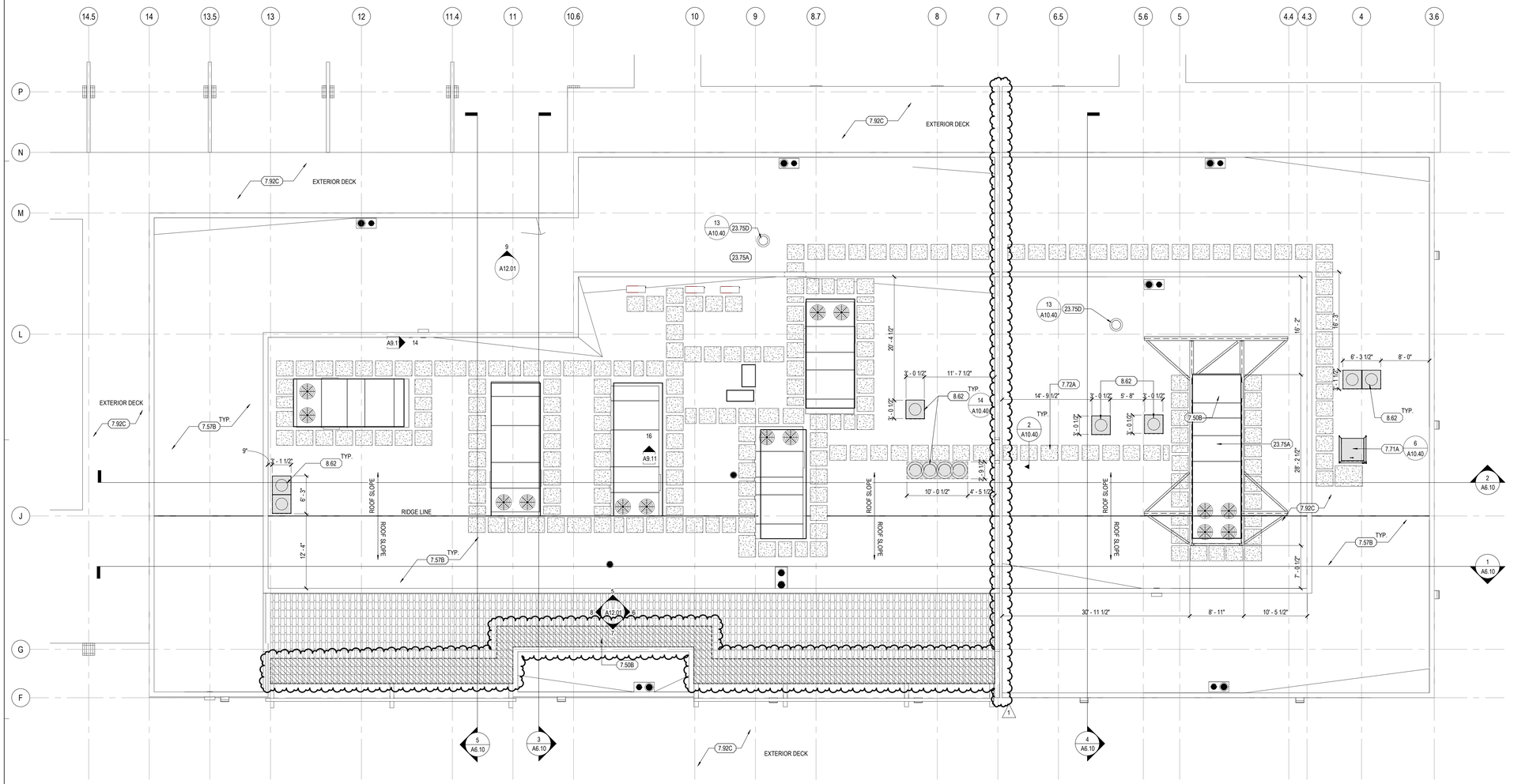
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PROJECT STATUS: CD: 100%
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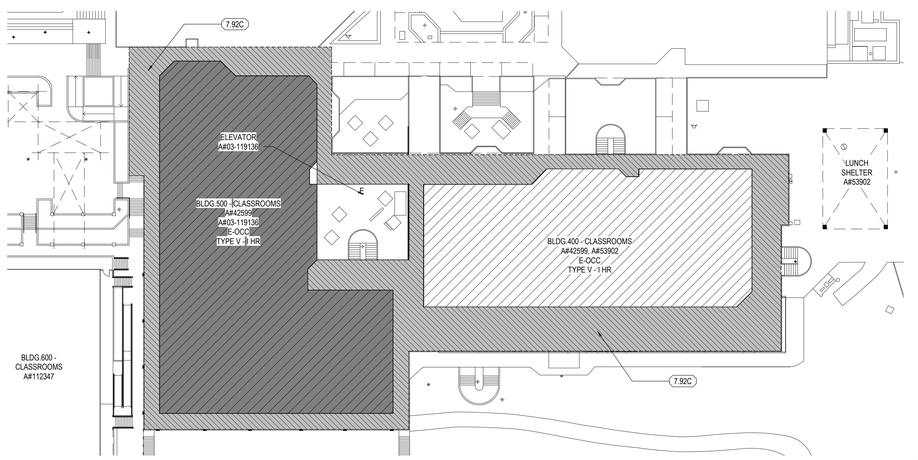
A4.01

10/24/2022 7:45:01 AM



1 A4.10 REMODEL ROOF PLAN
SCALE: 1/8" = 1'-0"

NORTH



2 A4.10 SITE PLAN - EXTERIOR DECK RESTORATION
SCALE: 1" = 40'-0"

NORTH

KEYNOTES

DESCRIPTION

7.50B INSTALL 45MIL. SINGLE-PLY ROOFING FLASHING BY TREMCO (3 LBS/SF) TO LINE THE GUTTERS AND EXPOSED ROOF SUBSTRATE, RE-INSTALL (E) ROOF TILE (10 LBS/SF) PER DETAIL 20/A10.40 AND REPLACE ALL BROKEN ROOF TILE AS NEEDED

7.50C REPAIR OF EXISTING RATED RAMED ROOFING

7.71A (N) ROOF HATCH. SEE 6/A10.40

7.72A (N) RUBBER ROOF TOP WALKWAY MATS

7.92C REMOVE EXISTING CAULKING AND RE-CAULK ALL CONSTRUCTION JOINTS AND DRAINS ON THE EXTERIOR DECK @ BUILDING 400 & 500

8.62 (N) SOLATUBE DAYLIGHTING SYSTEM. SEE TOP CONNECTION ON 17/A10.40 & HANGER AND BRACING DETAILS ON 2,3,4/M5.01 AND 3,4/M5.02 & RATED PENETRATION ON 10/A10.12 AND 11/A10.12

23.75A (N) MECHANICAL UNITS M4.11

23.75D (N) ROOF TOP EXHAUST FAN 7/M5.01

ROOF PLAN NOTES:

REFER TO THE A#03-119014 AS THE COMPLIANT PROJECT

EXCEPTION 1: A COMPLIANT SOLAR ELECTRIC SYSTEM IS PERMANENTLY INSTALLED ON NONRESIDENTIAL BUILDINGS. THE SYSTEM MUST HAVE A NAMEPLATE DIRECT CURRENT (DC) POWER RATING OF NO LESS THAN 1 WATT PER SQ.FT. OF THE ROOF AREA. THE NAMEPLATE RATING MUST BE MEASURED UNDER STANDARD TEST CONDITIONS, SEE PAGE 9-6 SOLAR READY - SOLAR ZONE EXCEPTIONS 2019 NONRESIDENTIAL COMPLIANCE MANUAL JANUARY 2019 EXAMPLE 9-6. TO VERIFY COMPLIANCE WITH THIS EXCEPTION, NRCI-SPV-01-E CERTIFICATE OF INSTALLATION: SOLAR PHOTOVOLTAIC SYSTEM MUST BE SUBMITTED AS A CONDITION OF FINAL APPROVAL.

ROOF PLAN GENERAL NOTES:

A. ALL ITEMS TO REMAIN SHALL BE PROTECTED IN PLACE.
B. ROOF PLAN NOTES APPLY TO ALL ROOF PLAN SHEETS.
C. MOST ROOF SLOPES ARE CREATED BY SLOPING THE ROOF STRUCTURE. SEE STRUCTURAL DRAWINGS FOR ELEVATIONS OF THE HIGH AND LOW POINTS TO DETERMINE PROPER TAPER IN INSULATION. SHADED AREAS INDICATE TAPERED INSULATION. TAPERED INSULATION SHALL PROVIDE A MINIMUM OF 1/8-INCH PER FOOT OF SLOPE TO ROOF DRAINS, UNLESS NOTED OTHERWISE.
D. ALL ROOF CURBS TO BE A MINIMUM OF 8" ABOVE ROOFING LEVELS. PROVIDE TAPERED INSULATION ROOF SADDLES AT ROOF CURBS TO PROVIDE APPROPRIATE DRAINAGE.
E. SEE STRUCTURAL FOR FRAMING AROUND ROOF PENETRATIONS.
F. COORDINATE THE SIZE AND LOCATION OF ROOF PENETRATIONS FOR MECHANICAL AND ELECTRICAL EQUIPMENT. REFER TO MECHANICAL AND ELECTRICAL DRAWINGS FOR PENETRATIONS NOT SHOWN ON THIS SHEET.
G. FLASH DRAINS, CURBS, VENTS AND STACKS PER MANUFACTURER'S RECOMMENDATIONS IF DETAIL NOT SHOWN ON PLANS.
H. REFERENCE SHEET FOR ALL ROOF PENETRATIONS NOT CALL OUT ON THE DRAWING.
I. ROOF CRICKETS 1/8" TO 1'-0" SLOPE, TYP.

CONSULTANT:

REMODEL ROOF PLAN
BUILDING 400 MODERNIZATION NEW CLASSROOM/ LIBRARY MEDIA CENTER

WALNUT VALLEY UNIFIED SCHOOL DISTRICT
DIAMOND BAR HIGH SCHOOL
21400 PATHFINDER RD. DIAMOND BAR, CA 91765

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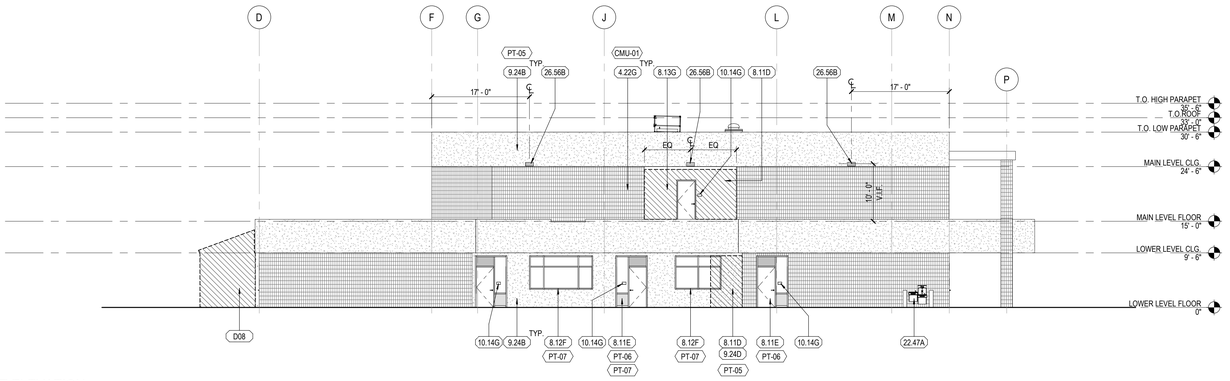
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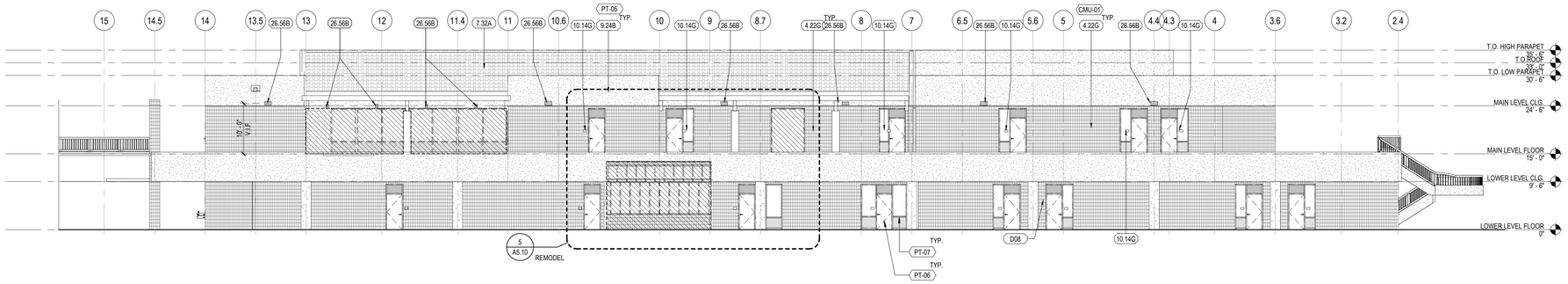
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PROJECT ISSUED: 11/17/20
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1 10-25-2022 ADDENDUM - 1

A4.10

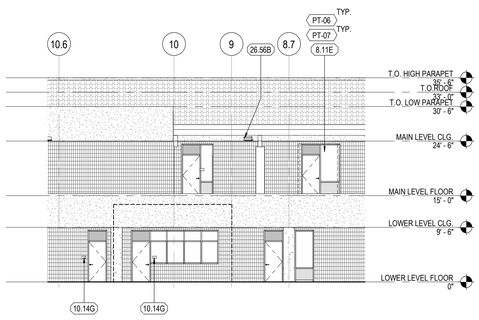
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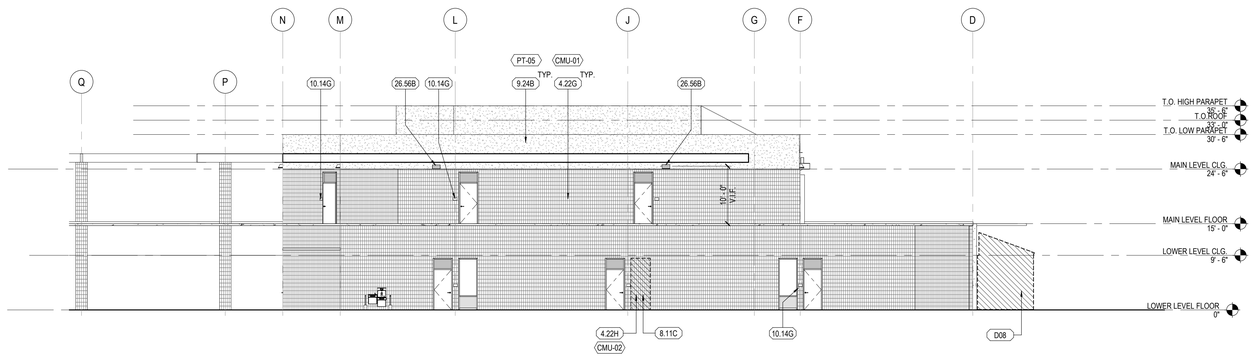
4 / A5.10 EAST ELEVATION
SCALE: 3/32" = 1'-0"



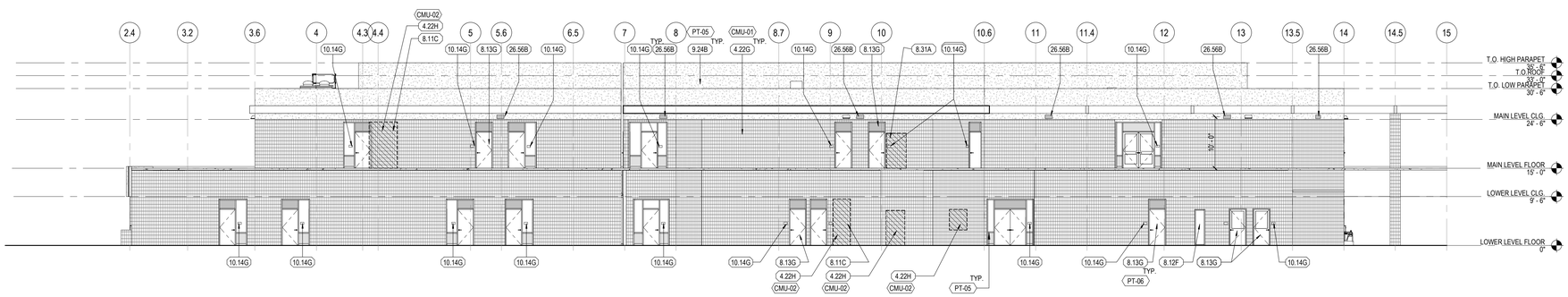
3 / A5.10 SOUTH ELEVATION
SCALE: 3/32" = 1'-0"



5 / A5.10 PARTIAL SOUTH ELEVATION - REMODEL
SCALE: 3/32" = 1'-0"



2 / A5.10 WEST ELEVATION
SCALE: 3/32" = 1'-0"



1 / A5.10 NORTH ELEVATION
SCALE: 3/32" = 1'-0"

KEYNOTES

	DESCRIPTION
4.22G	EXISTING DEEP SCORED SPLIT FACE C.M.U.
4.22H	(N) DEEP SCORED SPLIT FACE C.M.U. INFILL, COLOR TO MATCH EXISTING ADJACENT, SEE 17/A10.10
7.32A	EXISTING CALV TILE ROOFING
8.11C	EXISTING HOLLOW METAL STOREFRONTS/ DOORS AND FRAMES TO BE REMOVED AND INFILL CMU SEE 17/A10.10
8.11D	EXISTING HOLLOW METAL STOREFRONTS/ DOORS AND FRAMES TO BE REPLACED
8.11E	HOLLOW METAL FRAMES DOOR OR WINDOW AS OCCURES, SEE PLAN AS SCHEDULED
8.12F	HOLLOW METAL FRAMES, DOOR OR WINDOW AS OCCURES, SEE PLAN AS SCHEDULED
8.13G	HOLLOW METAL FRAMES, DOOR OR WINDOW AS OCCURES, SEE PLAN AS SCHEDULED
8.31A	EXISTING ELEVATOR DOOR TO BE REMOVED AND INFILL SEE 17/A10.10 FOR MASONRY INFILL AND 24/A10.10 FOR WOOD FRAMING W/ CONC. BLOCK VENEER INFILL
9.24B	EXISTING CEMENT PLASTERING TO REMAIN, PROTECT IN PLACE
9.24D	(N) EXTERIOR STUD WALL INFILL WITH CEMENT PLASTERING, SEE 20/A10.10
10.14G	IDENTIFICATION SIGNAGE - SEE FLOOR PLANS AND SIGNAGE LEGEND
22.47A	EXISTING DRINKING FOUNTAINS TO BE REPLACED WITH (N) HI-LO DRINKING FOUNTAIN W/ BOTTLE FILLER
26.56B	LED EXTERIOR LIGHTING, SEE DETAIL 21/A10.40
D08	(E) GREEN HOUSE TO BE REMOVED INCLUDING ALL APPURTENANCES. CAP-OFF ALL UTILITIES AS REQUIRED. PATCH AND REPAIR ALL ADJACENT SURFACES TO MATCH ADJACENT SURFACES AND FINISHES

EXTERIOR MATERIAL LEGEND

(SEE FINISH SPECIFICATION LEGEND ON SHEET A9.30/ A9.31 FOR FURTHER INFORMATION)

XXX MATERIAL TAG

CMU-01	EXISTING DEEP SCORED SPLIT FACE C.M.U.
CMU-02	(N) DEEP SCORED SPLIT FACE C.M.U.
P-05	PAINT, PPG VOICE OF COLOR, COLOR PPG1001-3 THIN ICE
P-06	PAINT, EXTERIOR DOOR PANEL, COLOR: 7150 REGAL JEWEL
P-07	PAINT, EXTERIOR DOOR FRAME, COLOR: DISTRICT BLACK

CONSULTANT:

EXTERIOR ELEVATIONS

BUILDING 400 MODERNIZATION NEW CLASSROOM/ LIBRARY MEDIA CENTER

WALNUT VALLEY UNIFIED SCHOOL DISTRICT
DIAMOND BAR HIGH SCHOOL
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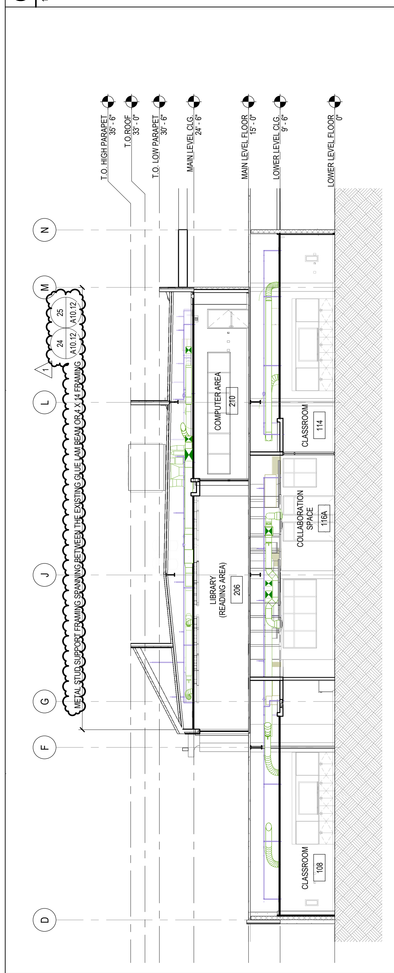
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PROJECT ISSUED: 01/28/2021
REVISION: DATE: 10-25-2022 DESCRIPTION: ADDENDUM - 1

A5.10

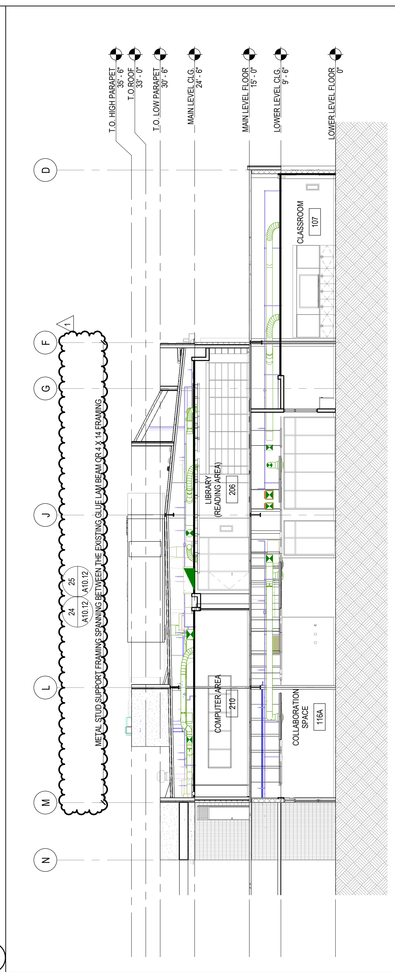
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GENERAL NOTES

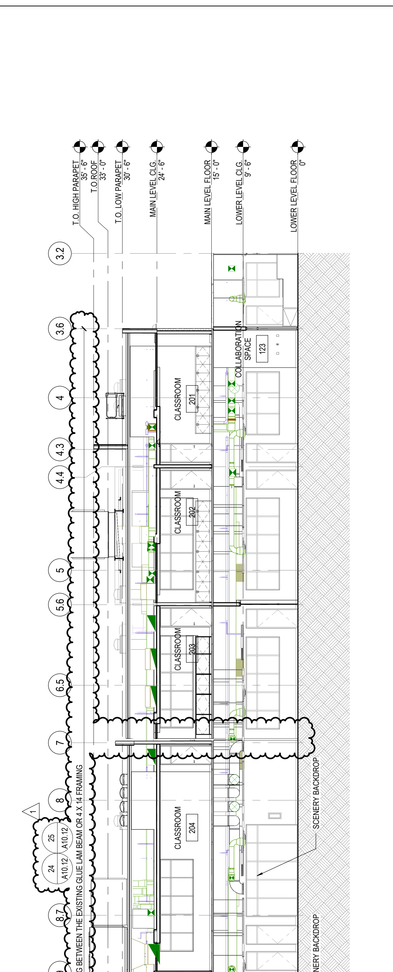
1. TYPICAL (E) BUILDING STRUCTURE PROTECT IN PLACE - REPLACE ANY FIRE PROTECTION SHEATHING AND CEMENTIOUS FIRE PROOFING DISTURBED BY INSTALLATION OF NEW WORK



5 SECTION 5
A6.10 SCALE: 3/32" = 1'-0"



3 SECTION 3
A6.10 SCALE: 3/32" = 1'-0"



2 SECTION 2
A6.10 SCALE: 3/32" = 1'-0"

4 SECTION 4
A6.10 SCALE: 3/32" = 1'-0"

1 SECTION 1
A6.10 SCALE: 3/32" = 1'-0"

SEALS:

CONSULTANT:

BUILDING SECTIONS

BUILDING 400 MODERNIZATION NEW CLASSROOM/ LIBRARY MEDIA CENTER

WALNUT VALLEY UNIFIED SCHOOL DISTRICT
DIAMOND BAR HIGH SCHOOL
21400 PATHFINDER RD. DIAMOND BAR, CA 91765

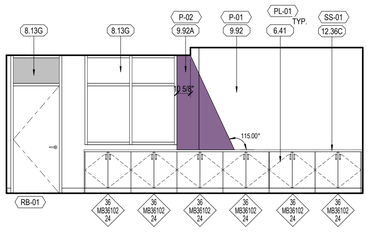
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sqa ARCHITECTS

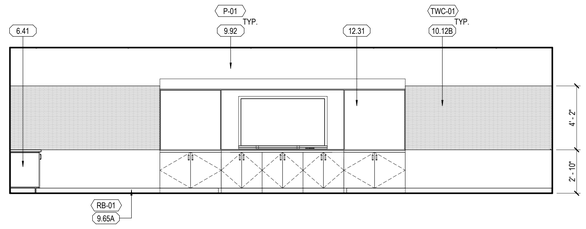
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1	10-25-2022 ADDENDUM - 1

A6.10

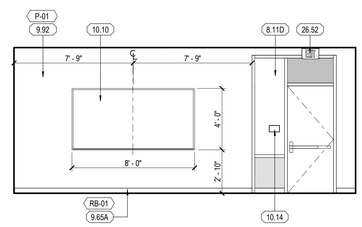
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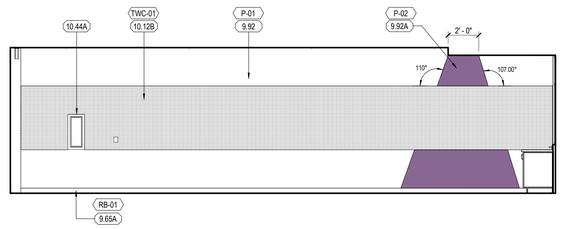
1 A8.10 CLASSROOM 101 - NORTH
SCALE: 1/4" = 1'-0"



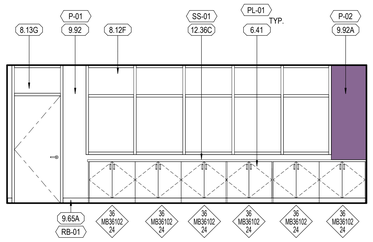
2 A8.10 CLASSROOM 101 - EAST
SCALE: 1/4" = 1'-0"



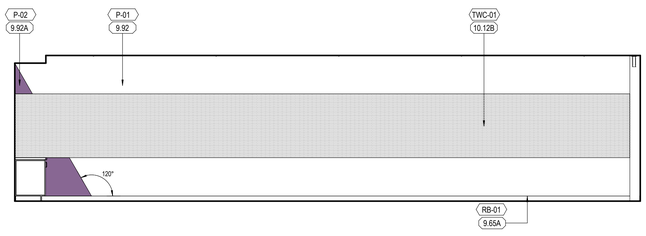
3 A8.10 CLASSROOM 101 - SOUTH
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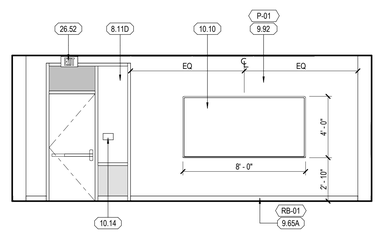
4 A8.10 CLASSROOM 101 - WEST
SCALE: 1/4" = 1'-0"



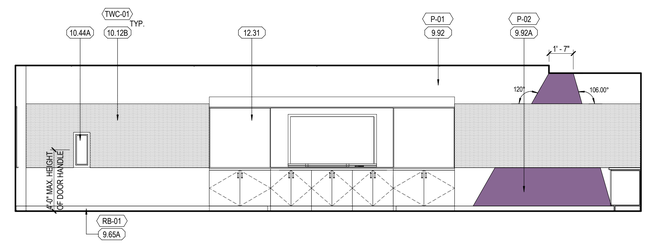
5 A8.10 CLASSROOM 102 - NORTH
SCALE: 1/4" = 1'-0"



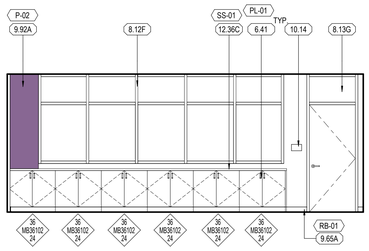
6 A8.10 CLASSROOM 102 - EAST
SCALE: 1/4" = 1'-0"



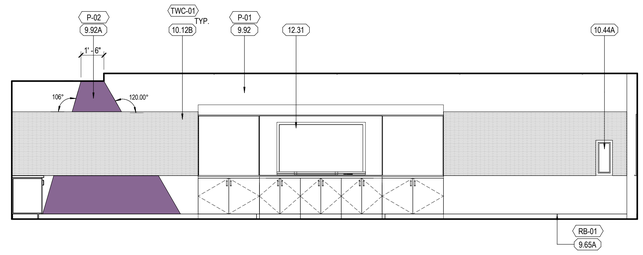
7 A8.10 CLASSROOM 102 - SOUTH
SCALE: 1/4" = 1'-0"



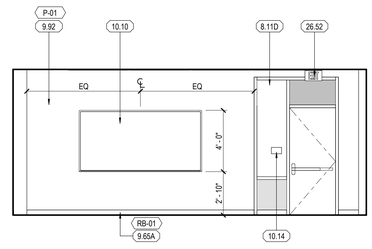
8 A8.10 CLASSROOM 102 - WEST
SCALE: 1/4" = 1'-0"



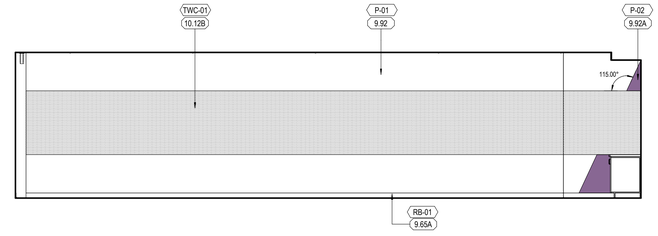
9 A8.10 CLASSROOM 103 - NORTH
SCALE: 1/4" = 1'-0"



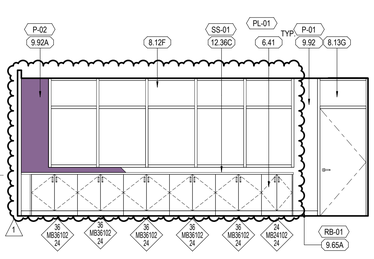
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SCALE: 1/4" = 1'-0"



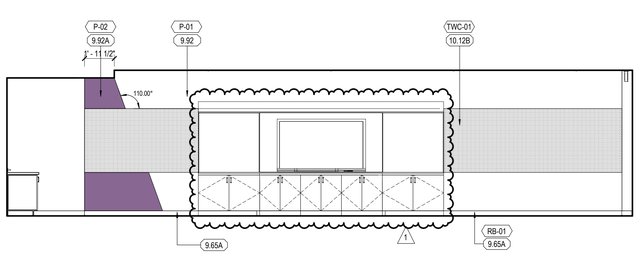
11 A8.10 CLASSROOM 103 - SOUTH
SCALE: 1/4" = 1'-0"



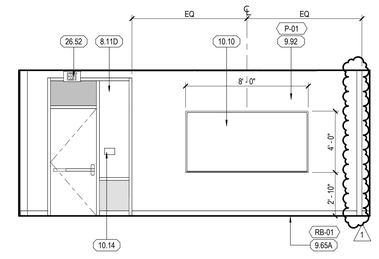
12 A8.10 CLASSROOM 103 - WEST
SCALE: 1/4" = 1'-0"



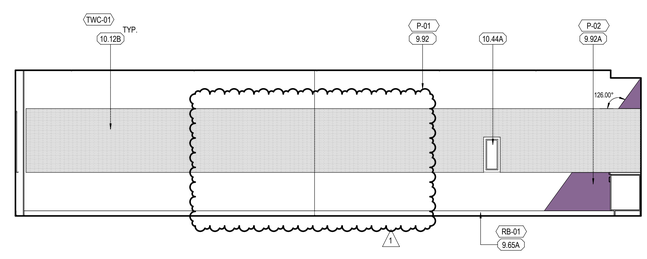
13 A8.10 CLASSROOM 104 - NORTH
SCALE: 1/4" = 1'-0"



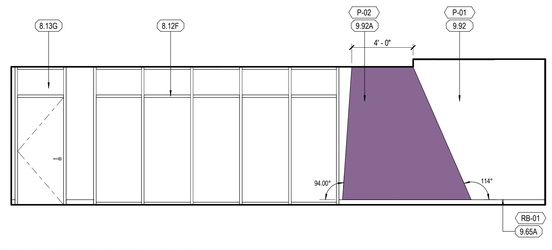
14 A8.10 CLASSROOM 104 - EAST
SCALE: 1/4" = 1'-0"



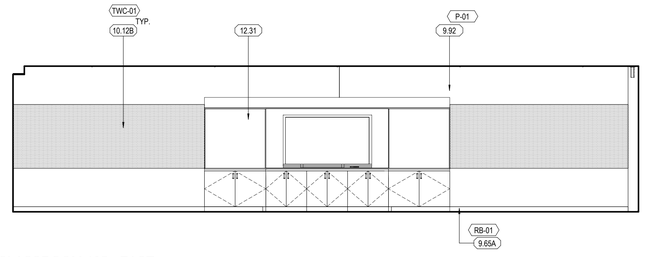
15 A8.10 CLASSROOM 104 - SOUTH
SCALE: 1/4" = 1'-0"



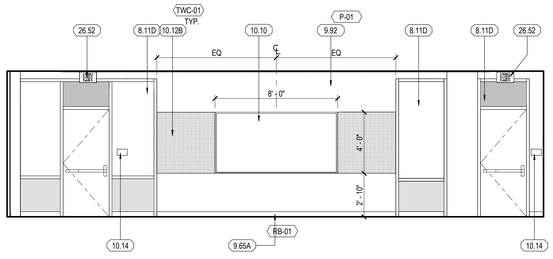
16 A8.10 CLASSROOM 104 - WEST
SCALE: 1/4" = 1'-0"



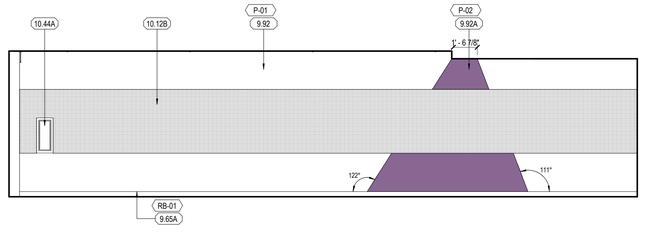
17 A8.10 CLASSROOM 105 - NORTH
SCALE: 1/4" = 1'-0"



18 A8.10 CLASSROOM 105 - EAST
SCALE: 1/4" = 1'-0"



19 A8.10 CLASSROOM 105 - SOUTH
SCALE: 1/4" = 1'-0"



20 A8.10 CLASSROOM 105 - WEST
SCALE: 1/4" = 1'-0"

KEYNOTES

	DESCRIPTION
6.41	PLASTIC-LAMINATE-CLAD ARCHITECTURAL CABINETS,SEE 8/A10.50
8.11D	EXISTING HOLLOW METAL STOREFRONT DOORS AND FRAMES TO BE REPLACED
8.12F	HOLLOW METAL FRAMES; DOOR OR WINDOW AS OCCURS. SEE PLAN AS SCHEDULED
8.13G	HOLLOW METAL FRAMES; DOOR OR WINDOW AS OCCURS. SEE PLAN AS SCHEDULED
9.65A	RESILIENT BASE
9.92	INTERIOR PAINTING
9.92A	INTERIOR PAINT PATTERN
10.1B	WALL MOUNTED MARKER BOARD, SEE 1/A10.12
10.12B	TACKABLE WALL, SEE 2/A10.12
10.14	SIGNAGE
10.44A	FIRE EXTINGUISHER CABINETS, SEE 13/A10.11
12.31	CUSTOM TEACHING WALL MODULAR, SEE 22/A10.50
12.36C	SOLID SURFACING COUNTERTOPS, SEE 23/A10.50
26.52	EMERGENCY AND EXIT LIGHTING

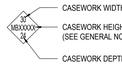
MATERIAL LEGEND

(SEE FINISH SPECIFICATION LEGEND ON SHEET A9.30 FOR FURTHER INFORMATION)

XXX MATERIAL TAG

AWP-01	ACOUSTIC WALL PANEL, TECTUM DIRECT ATTACH	P-04	PAINT, PPG VOICE OF COLOR PPG1001-5 DOVER GRAY
CT-01	CERAMIC TILE, COLOR: QH63 PEARL WHITE 4" X 4"	P-05	PAINT, PPG VOICE OF COLOR PPG1001-3 THIN ICE
CT-02	CERAMIC TILE, COLOR: QU19 ROSE BEIGE 4" X 4"	P-06	PAINT, 7150 REGAL JEWEL
CT-03	CERAMIC TILE, COLOR: QH70 WISTERIA 4" X 4"	P-07	PAINT, DISTRICT BLACK
CT-04	CERAMIC TILE, COLOR: QH51 EGGPLANT 4" X 4"	PL-01	PLASTIC LAMINATE, COLOR: VERMONT MAPLE
CTB-01	COVED WALL BASE, D618 CASTLEROCK 2" X 2"	PL-02	PLASTIC LAMINATE, COLOR: CHARCOAL VELVET
FRP-01	FIBERGLASS REINFORCED PANEL HRB-4CN	SS-01	SOLID SURFACE, MATTE, COLOR: ZEN GREY
P-01	PAINT, PPG VOICE OF COLOR PPG14-31 PARAFFIN	TWC-01	KOROSEAL WALLTALKERS/ SMS22061 HARBOR
P-02	PAINT, PPG VOICE OF COLOR PPG116-6 MIRABELLA		
P-03	PAINT, PPG VOICE OF COLOR PPG1204-6 GOLDEN OPPORTUNITY		

CASEWORK ELEVATION TAG



CASEWORK GENERAL NOTES:

CASEWORK TYPE / HEIGHTS:

BASE CABINETS:

TB*	BASE CABINET	42" A.F.F.
B*	BASE CABINET	36" A.F.F.
MB*	MEDIUM BASE CABINET	34" A.F.F.
LB*	LOWER BASE CABINET	30" A.F.F.
MS*	MEDIUM SHELVING UNIT	34" A.F.F.

WALL CABINETS: (MOUNTED AT 84" TO TOP)

W*	WALL CABINET	36" HIGH
MW*	MEDIUM WALL CABINET	30" HIGH
LW*	LOW WALL CABINET	24" HIGH

TALL STORAGE CABINETS:

T*	TALL STORAGE (2 DOOR)	84" A.F.F.
TW*	TALL WARDROBE (2 DOOR)	84" A.F.F.
TWG*	TALL CABINET (2 GLASS DOOR)	96" A.F.F.
TS*	TALL SHELVING UNIT	84" A.F.F.

CONSULTANT:

INTERIOR ELEVATIONS - LOWER LEVEL

BUILDING 400 MODERNIZATION NEW CLASSROOM/ LIBRARY MEDIA CENTER

WALNUT VALLEY UNIFIED SCHOOL DISTRICT
DIAMOND BAR HIGH SCHOOL
21400 PATHFINDER RD. DIAMOND BAR, CA 91765

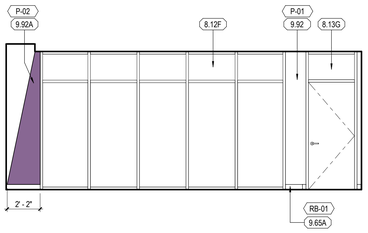
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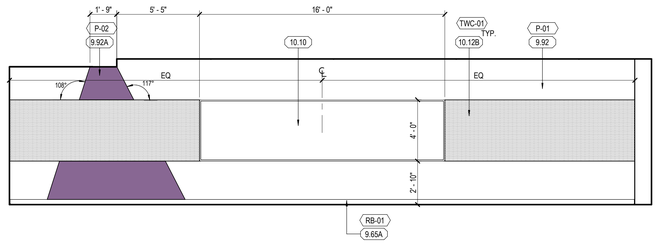
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A8.10

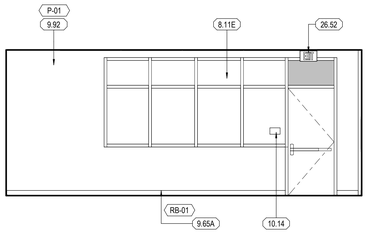
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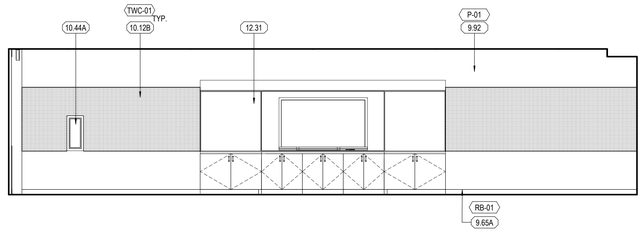
1 A8.11 CLASSROOM 106 - NORTH
SCALE: 1/4" = 1'-0"



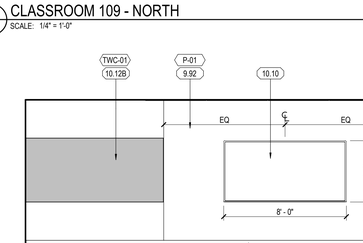
2 A8.11 CLASSROOM 106 - EAST
SCALE: 1/4" = 1'-0"



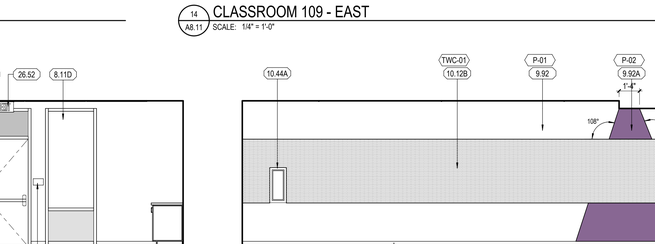
3 A8.11 CLASSROOM 106 - SOUTH
SCALE: 1/4" = 1'-0"



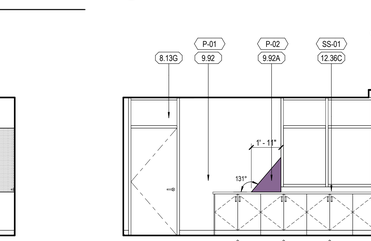
4 A8.11 CLASSROOM 106 - WEST
SCALE: 1/4" = 1'-0"



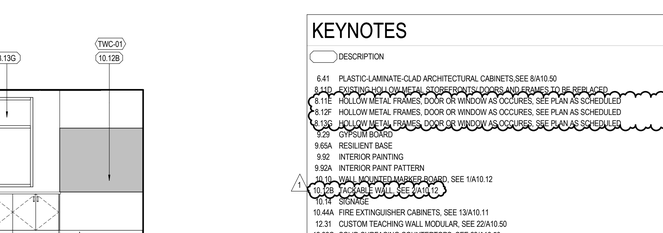
5 A8.11 CLASSROOM 107 - NORTH
SCALE: 1/4" = 1'-0"



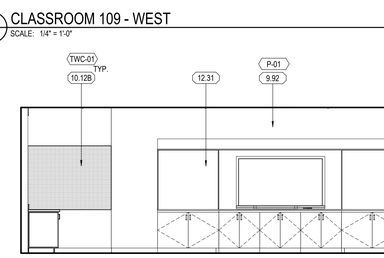
6 A8.11 CLASSROOM 107 - EAST
SCALE: 1/4" = 1'-0"



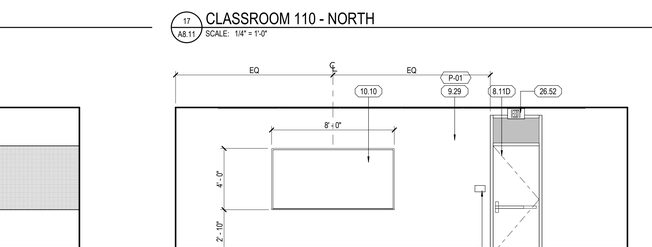
7 A8.11 CLASSROOM 107 - SOUTH
SCALE: 1/4" = 1'-0"



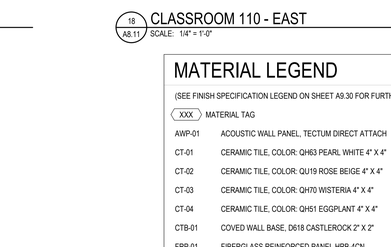
8 A8.11 CLASSROOM 107 - WEST
SCALE: 1/4" = 1'-0"



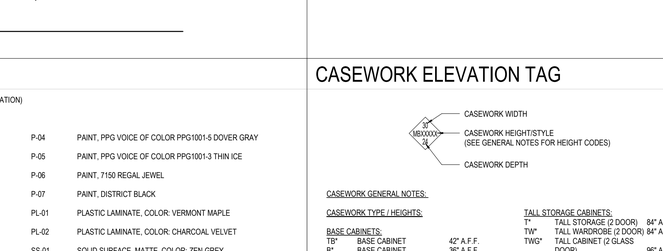
9 A8.11 CLASSROOM 108 - NORTH
SCALE: 1/4" = 1'-0"



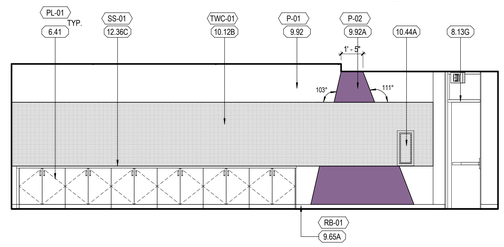
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SCALE: 1/4" = 1'-0"



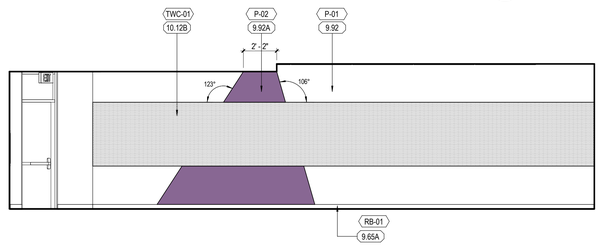
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SCALE: 1/4" = 1'-0"



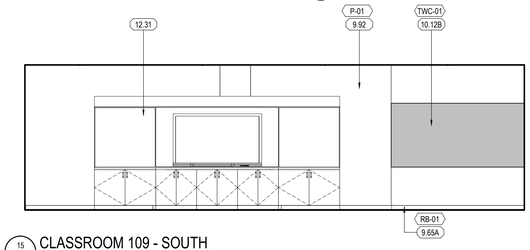
12 A8.11 CLASSROOM 108 - WEST
SCALE: 1/4" = 1'-0"



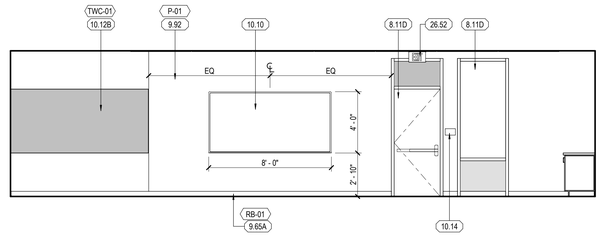
13 A8.11 CLASSROOM 109 - NORTH
SCALE: 1/4" = 1'-0"



14 A8.11 CLASSROOM 109 - EAST
SCALE: 1/4" = 1'-0"

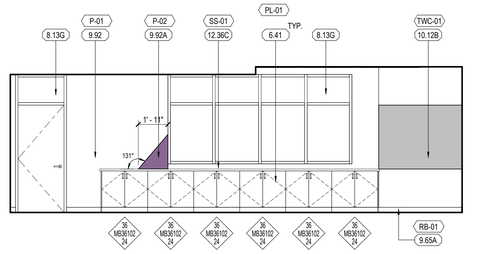


15 A8.11 CLASSROOM 109 - SOUTH
SCALE: 1/4" = 1'-0"



16 A8.11 CLASSROOM 109 - WEST
SCALE: 1/4" = 1'-0"

17 A8.11 CLASSROOM 110 - NORTH
SCALE: 1/4" = 1'-0"



18 A8.11 CLASSROOM 110 - EAST
SCALE: 1/4" = 1'-0"

19 A8.11 CLASSROOM 110 - SOUTH
SCALE: 1/4" = 1'-0"

20 A8.11 CLASSROOM 110 - WEST
SCALE: 1/4" = 1'-0"

KEYNOTES

	DESCRIPTION
6.41	PLASTIC-LAMINATE-CLAD ARCHITECTURAL CABINETS.SEE 8/A10.50
8.11D	EXISTING HOLLOW METAL STOREFRONTS DOORS AND FRAMES TO BE REPLACED
8.11E	HOLLOW METAL FRAMES, DOOR OR WINDOW AS OCCURES. SEE PLAN AS SCHEDULED
8.12F	HOLLOW METAL FRAMES, DOOR OR WINDOW AS OCCURES. SEE PLAN AS SCHEDULED
8.13G	HOLLOW METAL FRAMES, DOOR OR WINDOW AS OCCURES. SEE PLAN AS SCHEDULED
9.29	GYPSUM BOARD
9.65A	RESILIENT BASE
9.92	INTERIOR PAINTING
9.92A	INTERIOR PAINT PATTERN
10.10	WALL MOUNTED MARKER BOARD, SEE 1/A10.12
10.12B	TACKABLE WALL, SEE 1/A10.12
10.14	SIGNAGE
10.44A	FIRE EXTINGUISHER CABINETS, SEE 13/A10.11
12.31	CUSTOM TEACHING WALL MODULAR, SEE 22/A10.50
12.36C	SOLID SURFACING COUNTERTOPS, SEE 23/A10.50
12.36D	PLASTIC-LAMINATE SURFACING COUNTERTOPS, SEE 18/A10.50
26.52	EMERGENCY AND EXIT LIGHTING

MATERIAL LEGEND

(SEE FINISH SPECIFICATION LEGEND ON SHEET A9.30 FOR FURTHER INFORMATION)

XXX MATERIAL TAG

AWP-01	ACOUSTIC WALL PANEL, TECTUM DIRECT ATTACH	P-04	PAINT, PPG VOICE OF COLOR PPG1001-5 DOVER GRAY
CT-01	CERAMIC TILE, COLOR: QH63 PEARL WHITE 4" X 4"	P-05	PAINT, PPG VOICE OF COLOR PPG1001-3 THIN ICE
CT-02	CERAMIC TILE, COLOR: QU19 ROSE BEIGE 4" X 4"	P-06	PAINT, 7150 REGAL JEWEL
CT-03	CERAMIC TILE, COLOR: QH70 WISTERIA 4" X 4"	P-07	PAINT, DISTRICT BLACK
CT-04	CERAMIC TILE, COLOR: QH51 EGGPLANT 4" X 4"	PL-01	PLASTIC LAMINATE, COLOR: VERMONT MAPLE
CTB-01	COVED WALL BASE, D618 CASTLEROCK 2" X 2"	PL-02	PLASTIC LAMINATE, COLOR: CHARCOAL VELVET
FRP-01	FIBERGLASS REINFORCED PANEL HRB-4CN	SS-01	SOLID SURFACE, MATTE, COLOR: ZEN GREY
P-01	PAINT, PPG VOICE OF COLOR PPG14-31 PARAFFIN	TWC-01	KOROSEAL WALLTALKERS/ SMS22061 HARBOR
P-02	PAINT, PPG VOICE OF COLOR PPG116-6 MIRABELLA		
P-03	PAINT, PPG VOICE OF COLOR PPG1204-6 GOLDEN OPPORTUNITY		

CASEWORK ELEVATION TAG

MBXXXX 24
- CASEWORK WIDTH
- CASEWORK HEIGHT/STYLE (SEE GENERAL NOTES FOR HEIGHT CODES)
- CASEWORK DEPTH

CASEWORK GENERAL NOTES:

CASEWORK TYPE / HEIGHTS:

BASE CABINETS:

TB*	BASE CABINET	42" A.F.F.
B*	BASE CABINET	36" A.F.F.
MB*	MEDIUM BASE CABINET	34" A.F.F.
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MS*	MEDIUM SHELVING UNIT	34" A.F.F.

WALL CABINETS: (MOUNTED AT 84" TO TOP)

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TALL STORAGE CABINETS:

T*	TALL STORAGE (2 DOOR)	84" A.F.F.
TW*	TALL WARDROBE (2 DOOR)	84" A.F.F.
TWG*	TALL CABINET (2 GLASS DOOR)	96" A.F.F.
TS*	TALL SHELVING UNIT	84" A.F.F.

CONSULTANT:

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DIAMOND BAR HIGH SCHOOL
21400 PATHFINDER RD. DIAMOND BAR, CA 91765

SEAL:S

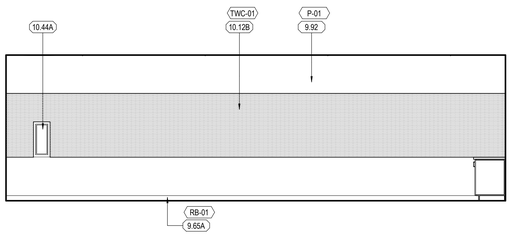
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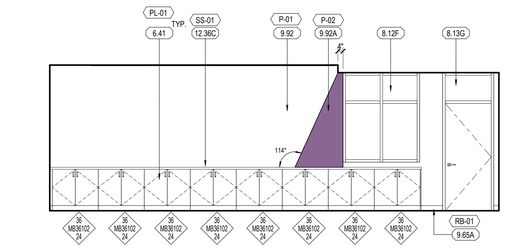
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PROJECT STATUS: CD 100%
PROJECT ISSUED: 05/26/20
REVISION: DATE: DESCRIPTION:
1 10-25-2022 ADDENDUM - 1

A8.11

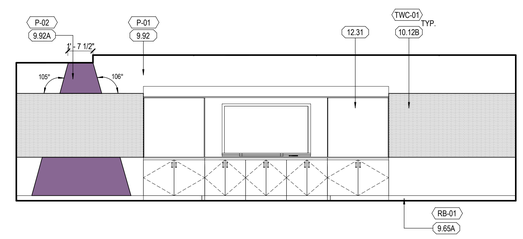
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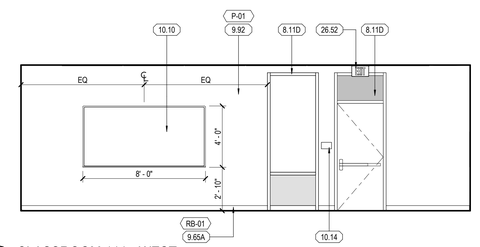
1 A8.12 CLASSROOM 111 - NORTH
SCALE: 1/4" = 1'-0"



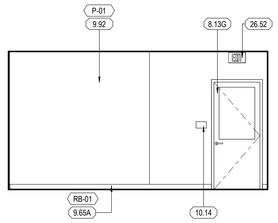
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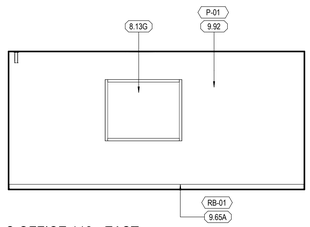
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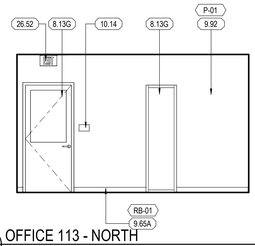
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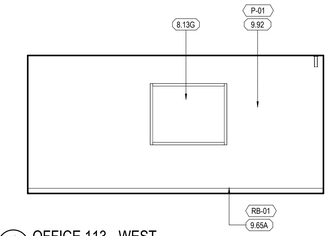
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SCALE: 1/4" = 1'-0"



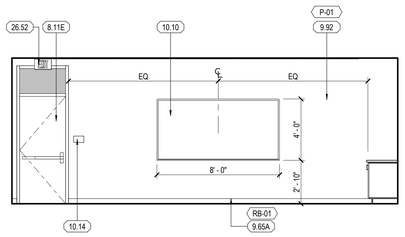
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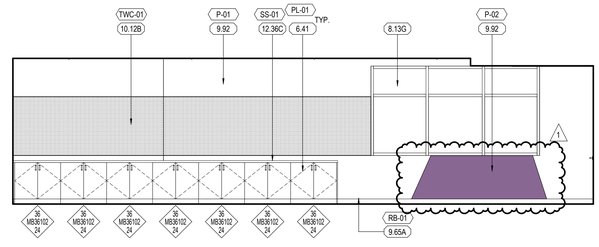
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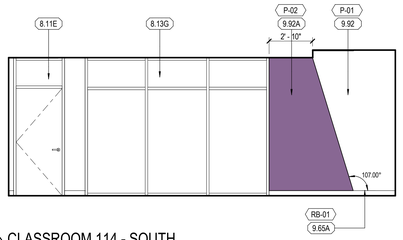
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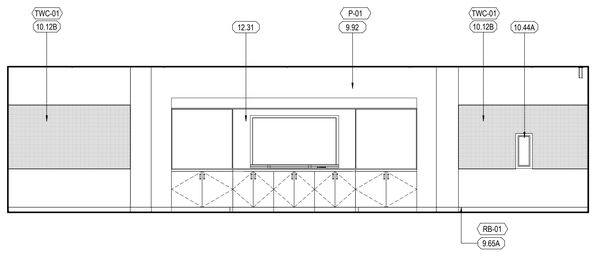
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SCALE: 1/4" = 1'-0"



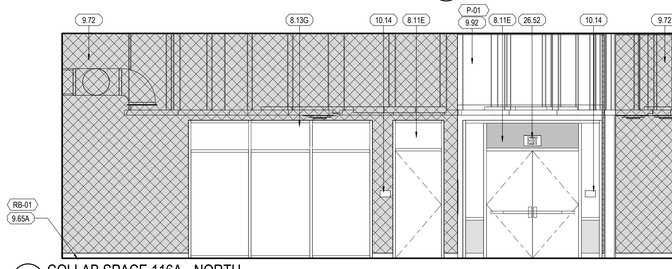
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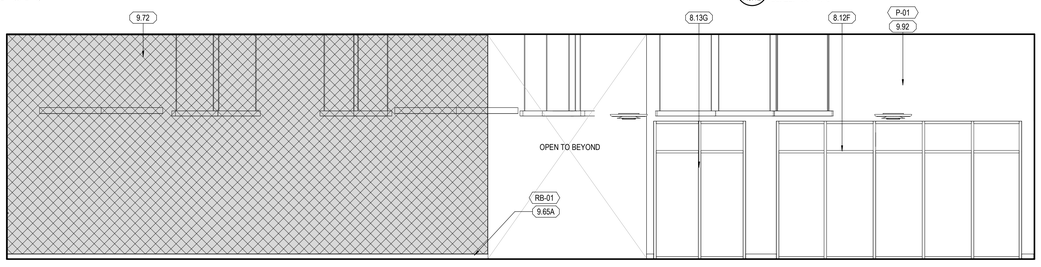
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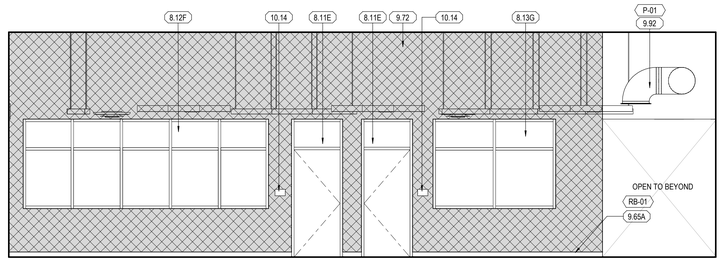
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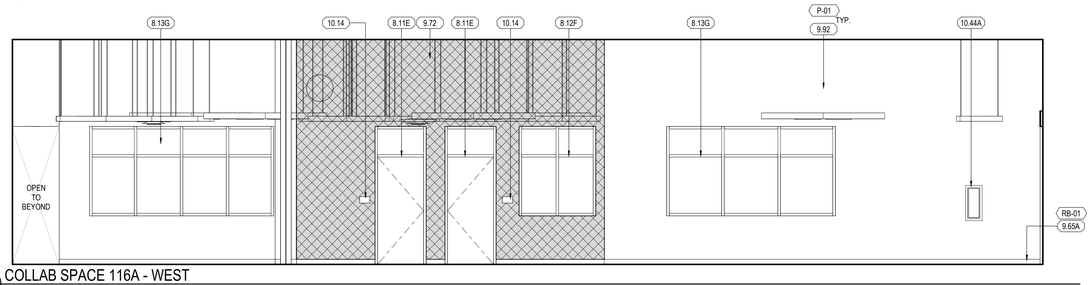
17 A8.12 COLLAB SPACE 116A - NORTH
SCALE: 1/4" = 1'-0"



18 A8.12 COLLAB SPACE 116A - EAST
SCALE: 1/4" = 1'-0"



19 A8.12 COLLAB SPACE 116A - SOUTH
SCALE: 1/4" = 1'-0"



20 A8.12 COLLAB SPACE 116A - WEST
SCALE: 1/4" = 1'-0"

KEYNOTES

DESCRIPTION

6.41 PLASTIC-LAMINATE-CLAD ARCHITECTURAL CABINETS,SEE 8/A10.50
8.11D EXISTING HOLLOW METAL STOREFRONT DOORS AND FRAMES TO BE REPLACED
8.11E HOLLOW METAL FRAMES, DOOR OR WINDOW AS OCCURES, SEE PLAN AS SCHEDULED
8.12F HOLLOW METAL FRAMES, DOOR OR WINDOW AS OCCURES, SEE PLAN AS SCHEDULED
8.13G HOLLOW METAL FRAMES, DOOR OR WINDOW AS OCCURES, SEE PLAN AS SCHEDULED
9.65A RESILIENT BASE
9.72 CUSTOM GRAPHIC VINYL WALL COVERING
9.92 INTERIOR PAINTING
9.92A INTERIOR PAINT PATTERN
10.10 WALL MOUNTED MARKER BOARD, SEE 1/A10.12
10.105 TACKABLE WALL, SEE 2/A10.12
10.14 SIGNAGE
10.44A FIRE EXTINGUISHER CABINETS, SEE 13/A10.11
12.31 CUSTOM TEACHING WALL MODULAR, SEE 22/A10.50
12.36C SOLID SURFACING COUNTERTOPS, SEE 23/A10.50
26.52 EMERGENCY AND EXIT LIGHTING

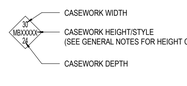
MATERIAL LEGEND

(SEE FINISH SPECIFICATION LEGEND ON SHEET A9.30 FOR FURTHER INFORMATION)

XXX MATERIAL TAG

AWP-01	ACOUSTIC WALL PANEL, TECTUM DIRECT ATTACH	P-04	PAINT, PPG VOICE OF COLOR PPG1001-5 DOVER GRAY
CT-01	CERAMIC TILE, COLOR: QH63 PEARL WHITE 4" X 4"	P-05	PAINT, PPG VOICE OF COLOR PPG1001-3 THIN ICE
CT-02	CERAMIC TILE, COLOR: QU19 ROSE BEIGE 4" X 4"	P-06	PAINT, 7150 REGAL JEWEL
CT-03	CERAMIC TILE, COLOR: QH70 WISTERIA 4" X 4"	P-07	PAINT, DISTRICT BLACK
CT-04	CERAMIC TILE, COLOR: QH51 EGGPLANT 4" X 4"	PL-01	PLASTIC LAMINATE, COLOR: VERMONT MAPLE
CTB-01	COVED WALL BASE, D618 CASTLEROCK 2" X 2"	PL-02	PLASTIC LAMINATE, COLOR: CHARCOAL VELVET
FRP-01	FIBERGLASS REINFORCED PANEL HRB-4CN	SS-01	SOLID SURFACE, MATTE, COLOR: ZEN GREY
P-01	PAINT, PPG VOICE OF COLOR PPG14-31 PARAFFIN	TWC-01	KOROSEAL WALLTALKERS/ SMS22061 HARBOR
P-02	PAINT, PPG VOICE OF COLOR PPG116-6 MIRABELLA		
P-03	PAINT, PPG VOICE OF COLOR PPG1204-6 GOLDEN OPPORTUNITY		

CASEWORK ELEVATION TAG



CASEWORK GENERAL NOTES:

CASEWORK TYPE / HEIGHTS:

BASE CABINETS:

TS*	BASE CABINET	42" A.F.F.
B*	BASE CABINET	36" A.F.F.
MB*	MEDIUM BASE CABINET	34" A.F.F.
LB*	LOWER BASE CABINET	30" A.F.F.
MS*	MEDIUM SHELVING UNIT	34" A.F.F.

WALL CABINETS: (MOUNTED AT 84" TO TOP)

W*	WALL CABINET	36" HIGH
MW*	MEDIUM WALL CABINET	30" HIGH
LW*	LOW WALL CABINET	24" HIGH

TALL STORAGE CABINETS:

T*	TALL STORAGE (2 DOOR)	84" A.F.F.
TW*	TALL WARDROBE (2 DOOR)	84" A.F.F.
TWC*	TALL CABINET (2 GLASS DOOR)	96" A.F.F.
TS*	TALL SHELVING UNIT	84" A.F.F.

CONSULTANT:

INTERIOR ELEVATIONS - LOWER LEVEL

BUILDING 400 MODERNIZATION NEW CLASSROOM/ LIBRARY MEDIA CENTER

WALNUT VALLEY UNIFIED SCHOOL DISTRICT
DIAMOND BAR HIGH SCHOOL
21400 PATHFINDER RD. DIAMOND BAR, CA 91765

SEALS:

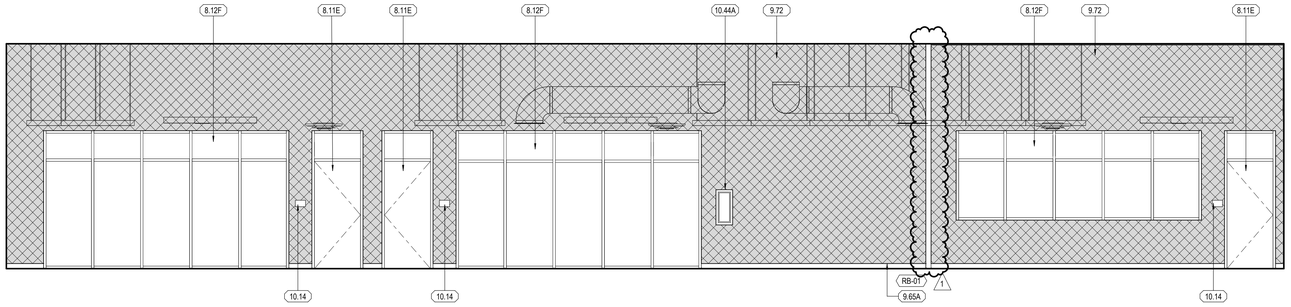
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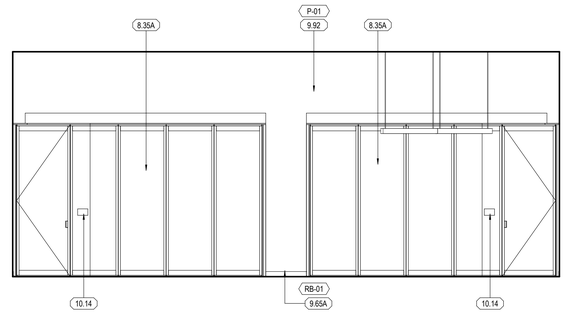
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PROJECT STATUS: CD 100%
PROJECT ISSUED: 01/13/21
REVISION: DATE: 10-25-2022 DESCRIPTION: ADDENDUM 1

A8.12

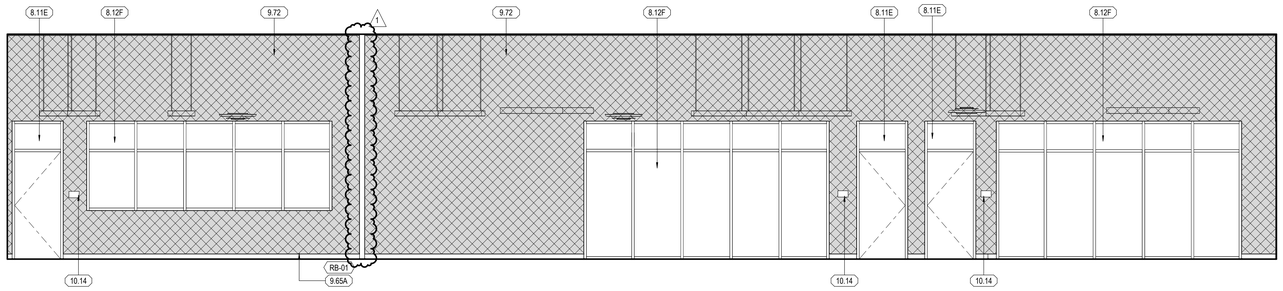
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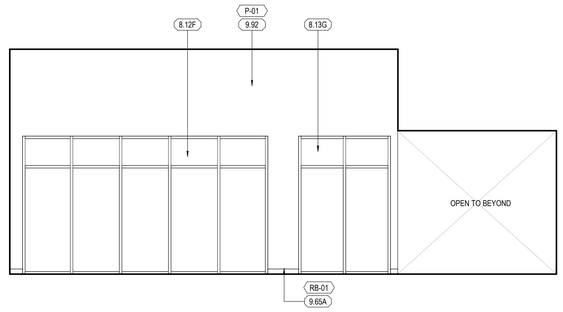
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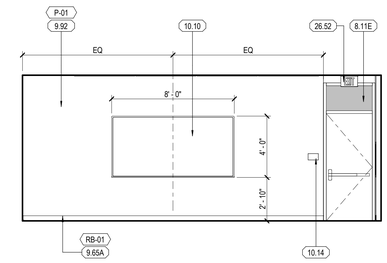
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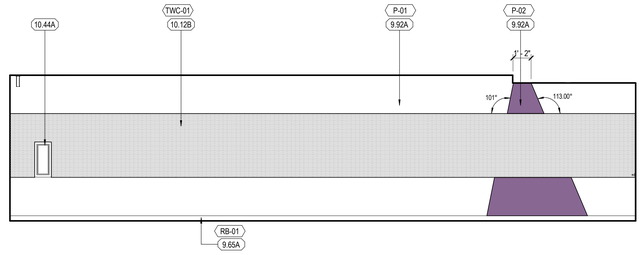
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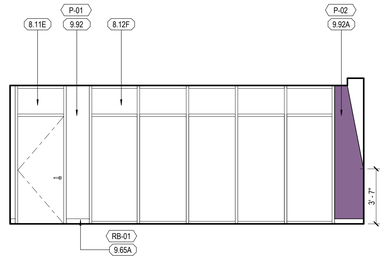
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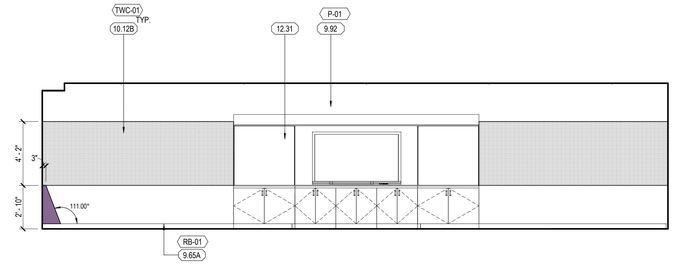
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SCALE: 1/4" = 1'-0"



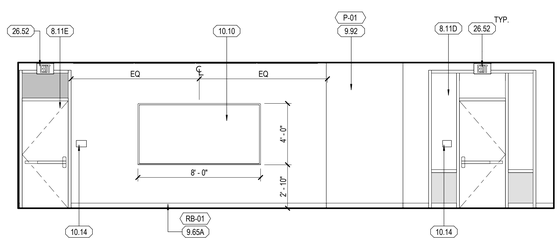
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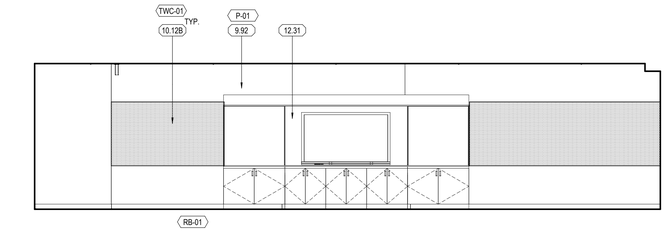
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SCALE: 1/4" = 1'-0"



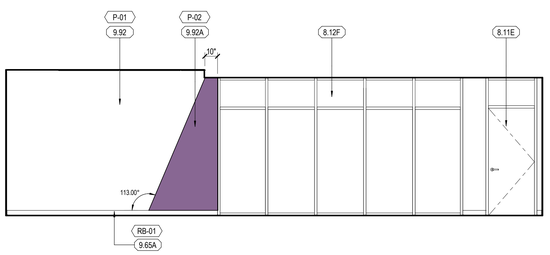
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SCALE: 1/4" = 1'-0"



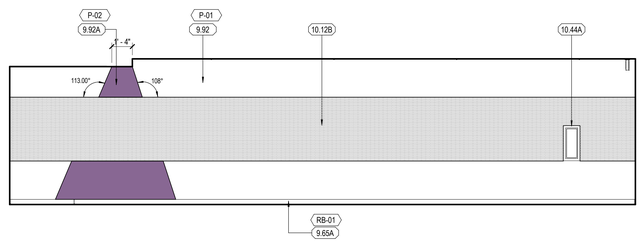
9 A8.13 CLASSROOM 118 - NORTH
SCALE: 1/4" = 1'-0"



10 A8.13 CLASSROOM 118 - EAST
SCALE: 1/4" = 1'-0"



11 A8.13 CLASSROOM 118 - SOUTH
SCALE: 1/4" = 1'-0"



12 A8.13 CLASSROOM 118 - WEST
SCALE: 1/4" = 1'-0"

KEYNOTES

	DESCRIPTION
8.11D	EXISTING HOLLOW METAL STOREFRONTS DOORS AND FRAMES TO BE REPLACED
8.11E	HOLLOW METAL FRAMES, DOOR OR WINDOW AS OCCURES, SEE PLAN AS SCHEDULED
8.12F	HOLLOW METAL FRAMES, DOOR OR WINDOW AS OCCURES, SEE PLAN AS SCHEDULED
8.13G	HOLLOW METAL FRAMES, DOOR OR WINDOW AS OCCURES, SEE PLAN AS SCHEDULED
8.35A	ALUMINUM FRAMED BI-FOLDING DOORS, SEE 10/A10.21
9.65A	RESILIENT BASE
9.72	CUSTOM GRAPHIC VINYL WALL COVERING
9.92	INTERIOR PAINTING
9.92A	INTERIOR PAINT PATTERN
10.10	WALL MOUNTED MARKER BOARD, SEE 1/A10.12
10.10B	TACKABLE WALL, SEE 2/A10.12
10.14	SIGNAGE
10.44A	FIRE EXTINGUISHER CABINETS, SEE 13/A10.11
12.31	CUSTOM TEACHING WALL MODULAR, SEE 22/A10.50
26.52	EMERGENCY AND EXIT LIGHTING

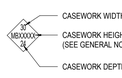
MATERIAL LEGEND

(SEE FINISH SPECIFICATION LEGEND ON SHEET A9.30 FOR FURTHER INFORMATION)

XXX MATERIAL TAG

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CT-02	CERAMIC TILE, COLOR: QU19 ROSE BEIGE 4" X 4"	P-06	PAINT, 7150 REGAL JEWEL
CT-03	CERAMIC TILE, COLOR: QH70 WISTERIA 4" X 4"	P-07	PAINT, DISTRICT BLACK
CT-04	CERAMIC TILE, COLOR: QH51 EGGPLANT 4" X 4"	PL-01	PLASTIC LAMINATE, COLOR: VERMONT MAPLE
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FRP-01	FIBERGLASS REINFORCED PANEL HRB-4CN	SS-01	SOLID SURFACE, MATTE, COLOR: ZEN GREY
P-01	PAINT, PPG VOICE OF COLOR PPG14-31 PARAFFIN	TWC-01	KOROSEAL WALLTALKERS/ SMS22061 HARBOR
P-02	PAINT, PPG VOICE OF COLOR PPG116-6 MIRABELLA		
P-03	PAINT, PPG VOICE OF COLOR PPG1204-6 GOLDEN OPPORTUNITY		

CASEWORK ELEVATION TAG



CASEWORK GENERAL NOTES:

CASEWORK TYPE / HEIGHTS:

BASE CABINETS:

TB*	BASE CABINET	42" A.F.F.
B*	BASE CABINET	36" A.F.F.
MB*	MEDIUM BASE CABINET	34" A.F.F.
LB*	LOWER BASE CABINET	30" A.F.F.
MS*	MEDIUM SHELVING UNIT	34" A.F.F.

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TALL STORAGE CABINETS:

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TW*	TALL WARDROBE (2 DOOR)	84" A.F.F.
TWG*	TALL CABINET (2 GLASS DOOR)	96" A.F.F
TS*	TALL SHELVING UNIT	84" A.F.F.

INTERIOR ELEVATIONS - LOWER LEVEL

BUILDING 400 MODERNIZATION NEW CLASSROOM/ LIBRARY MEDIA CENTER

WALNUT VALLEY UNIFIED SCHOOL DISTRICT
DIAMOND BAR HIGH SCHOOL
21400 PATHFINDER RD. DIAMOND BAR, CA 91765

CONSULTANT:

SEALS:

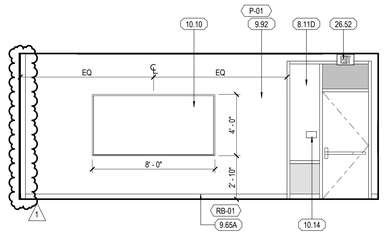
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PROJECT NUMBER: 19-47100-00
PROJECT STATUS: CD 100%
PROJECT ISSUED: 01/13/21

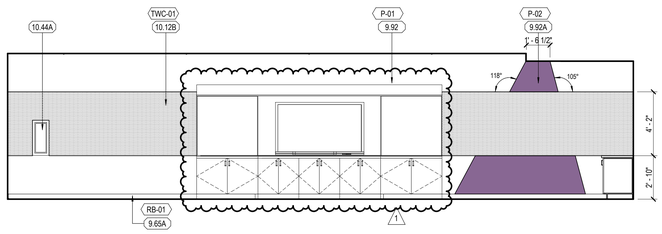
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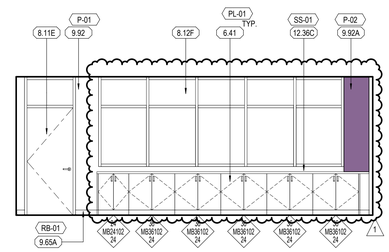
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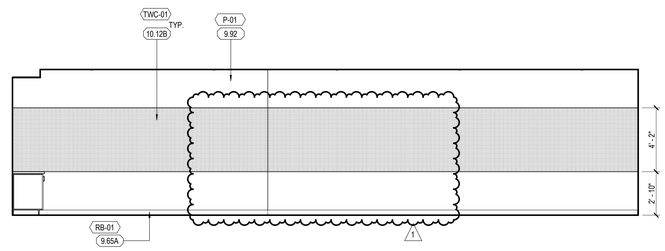
1 A8.14 CLASSROOM 119 - NORTH
SCALE: 1/4" = 1'-0"



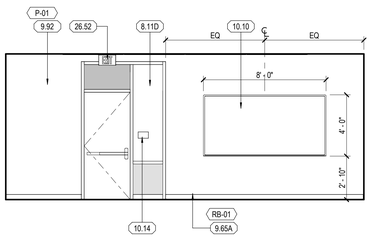
2 A8.14 CLASSROOM 119 - EAST
SCALE: 1/4" = 1'-0"



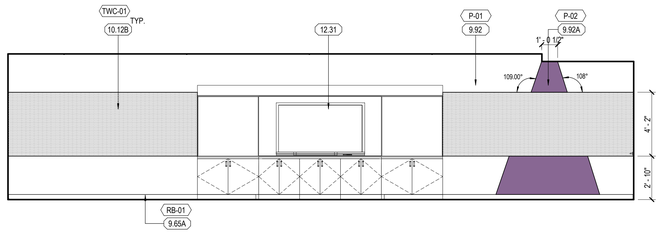
3 A8.14 CLASSROOM 119 - SOUTH
SCALE: 1/4" = 1'-0"



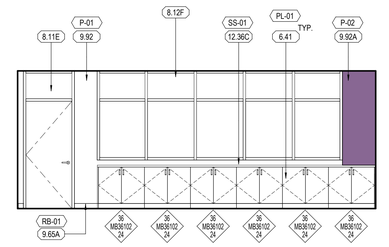
4 A8.14 CLASSROOM 119 - WEST
SCALE: 1/4" = 1'-0"



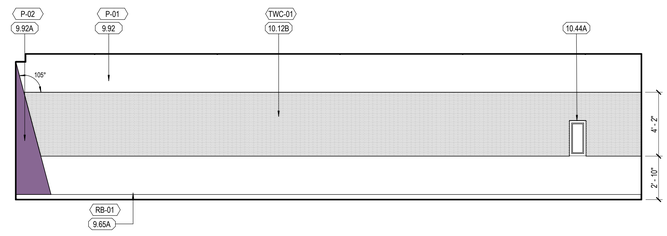
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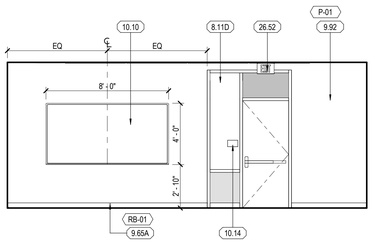
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SCALE: 1/4" = 1'-0"



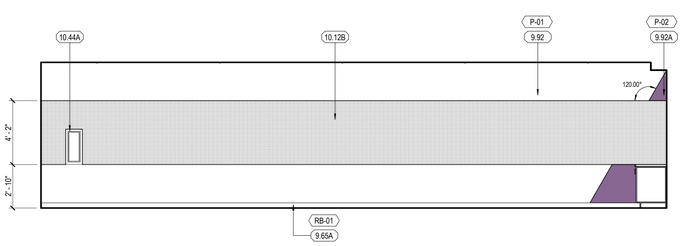
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SCALE: 1/4" = 1'-0"



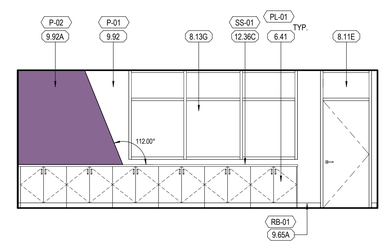
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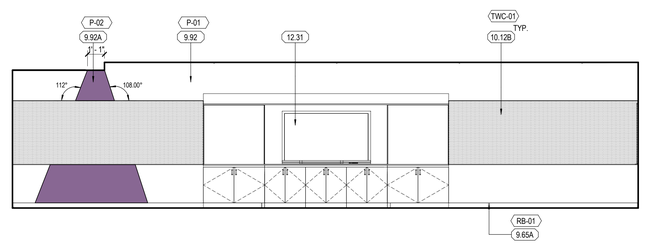
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SCALE: 1/4" = 1'-0"



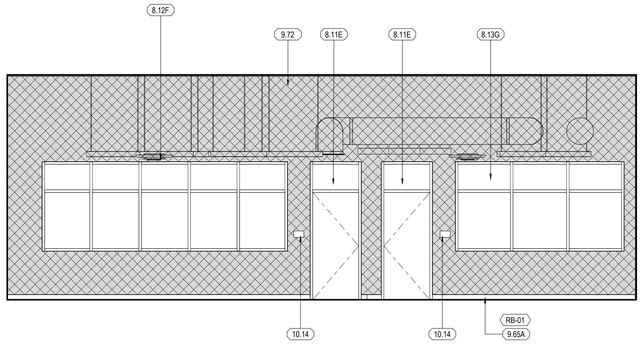
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SCALE: 1/4" = 1'-0"



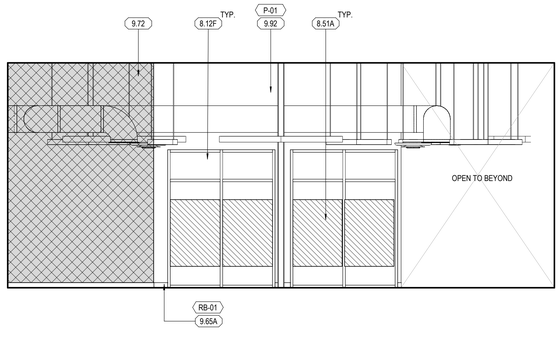
11 A8.14 CLASSROOM 121 - SOUTH
SCALE: 1/4" = 1'-0"



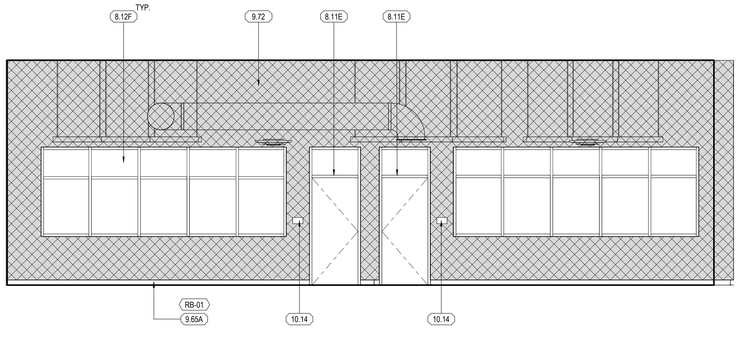
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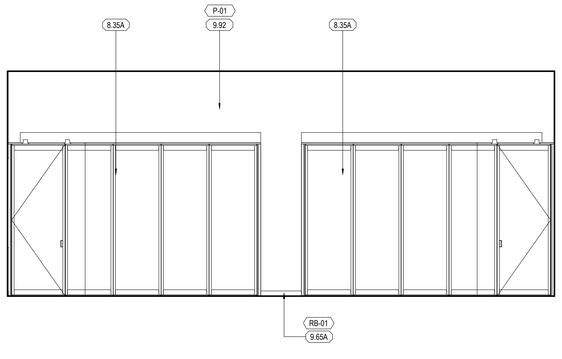
13 A8.14 COLLAB SPACE 123 - NORTH
SCALE: 1/4" = 1'-0"



14 A8.14 COLLAB SPACE 123 - EAST
SCALE: 1/4" = 1'-0"



15 A8.14 COLLAB SPACE 123 - SOUTH
SCALE: 1/4" = 1'-0"



16 A8.14 COLLAB SPACE 123 - WEST
SCALE: 1/4" = 1'-0"

KEYNOTES

	DESCRIPTION
6.41	PLASTIC-LAMINATE-CLAD ARCHITECTURAL CABINETS,SEE 8/A10.50
8.11D	EXISTING HOLLOW METAL STOREFRONT DOORS AND FRAMES TO BE REPLACED
8.11E	HOLLOW METAL FRAMES, DOOR OR WINDOW AS OCCURES, SEE PLAN AS SCHEDULED
8.12F	HOLLOW METAL FRAMES, DOOR OR WINDOW AS OCCURES, SEE PLAN AS SCHEDULED
8.13G	HOLLOW METAL FRAMES, DOOR OR WINDOW AS OCCURES, SEE PLAN AS SCHEDULED
8.35A	CUSTOM WOOD PANEL FEATURE WALL, SEE 10/A10.50
8.51A	FROSTED GLASS WINDOW FILM WITH CUSTOM PATTERN
9.65A	RESILIENT BASE
9.72	CUSTOM GRAPHIC VINYL WALL COVERING
9.92	INTERIOR PAINTING
9.92A	INTERIOR PAINT PATTERN
10.10	WALL MOUNTED MARKER BOARD, SEE 1/A10.12
10.10B	MOVABLE WALL, SEE 2/A10.12
10.14	SIGNAGE
10.44A	FIRE EXTINGUISHER CABINETS, SEE 13/A10.11
12.31	CUSTOM TEACHING WALL MODULAR, SEE 22/A10.50
12.36C	SOLID SURFACING COUNTERTOPS, SEE 23/A10.50
26.52	EMERGENCY AND EXIT LIGHTING

MATERIAL LEGEND

(SEE FINISH SPECIFICATION LEGEND ON SHEET A9.30 FOR FURTHER INFORMATION)

XXX MATERIAL TAG

AWP-01	ACOUSTIC WALL PANEL, TECTUM DIRECT ATTACH	P-04	PAINT, PPG VOICE OF COLOR PPG1001-5 DOVER GRAY
CT-01	CERAMIC TILE, COLOR: QH63 PEARL WHITE 4" X 4"	P-05	PAINT, PPG VOICE OF COLOR PPG1001-3 THIN ICE
CT-02	CERAMIC TILE, COLOR: QU19 ROSE BEIGE 4" X 4"	P-06	PAINT, 7150 REGAL JEWEL
CT-03	CERAMIC TILE, COLOR: QH70 WISTERIA 4" X 4"	P-07	PAINT, DISTRICT BLACK
CT-04	CERAMIC TILE, COLOR: QH51 EGGPLANT 4" X 4"	PL-01	PLASTIC LAMINATE, COLOR: VERMONT MAPLE
CTB-01	COVED WALL BASE, D618 CASTLEROCK 2" X 2"	PL-02	PLASTIC LAMINATE, COLOR: CHARCOAL VELVET
FRP-01	FIBERGLASS REINFORCED PANEL HRB-4CN	SS-01	SOLID SURFACE, MATTE, COLOR: ZEN GREY
P-01	PAINT, PPG VOICE OF COLOR PPG14-31 PARAFFIN	TWC-01	KOROSEAL WALLTALKERS/ SMS22061 HARBOR
P-02	PAINT, PPG VOICE OF COLOR PPG116-6 MIRABELLA		
P-03	PAINT, PPG VOICE OF COLOR PPG1204-6 GOLDEN OPPORTUNITY		

CASEWORK ELEVATION TAG

XX (XX)XXX XX — CASEWORK WIDTH; CASEWORK HEIGHT/STYLE (SEE GENERAL NOTES FOR HEIGHT CODES); CASEWORK DEPTH

CASEWORK GENERAL NOTES:

CASEWORK TYPE / HEIGHTS:

BASE CABINETS:

TB*	BASE CABINET	42" A.F.F.
B*	BASE CABINET	36" A.F.F.
MB*	MEDIUM BASE CABINET	34" A.F.F.
LB*	LOWER BASE CABINET	30" A.F.F.
MS*	MEDIUM SHELVING UNIT	34" A.F.F.

WALL CABINETS: (MOUNTED AT 84" TO TOP)

W*	WALL CABINET	36" HIGH
MW*	MEDIUM WALL CABINET	30" HIGH
LW*	LOW WALL CABINET	24" HIGH

TALL STORAGE CABINETS:

T*	TALL STORAGE (2 DOOR)	84" A.F.F.
TW*	TALL WARDROBE (2 DOOR)	84" A.F.F.
TWG*	TALL CABINET (2 GLASS DOOR)	96" A.F.F.
TS*	TALL SHELVING UNIT	84" A.F.F.

CONSULTANT:

INTERIOR ELEVATIONS - LOWER LEVEL

BUILDING 400 MODERNIZATION NEW CLASSROOM/ LIBRARY MEDIA CENTER

WALNUT VALLEY UNIFIED SCHOOL DISTRICT
DIAMOND BAR HIGH SCHOOL
21400 PATHFINDER RD. DIAMOND BAR, CA 91765

SEALS:

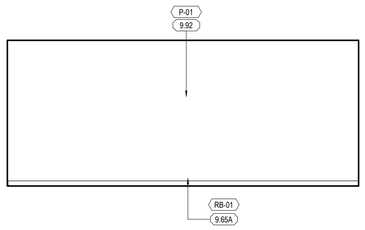
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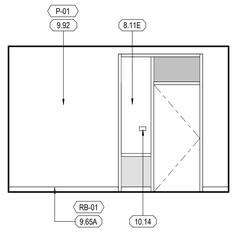
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PROJECT STATUS: CD 100%
PROJECT ISSUED: 01/14/21
REVISION: DATE: DESCRIPTION:
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A8.14

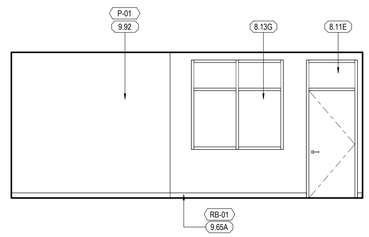
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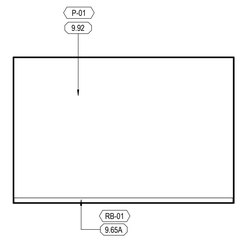
1 A8.15 DEAN OFFICE 129 - NORTH
SCALE: 1/4" = 1'-0"



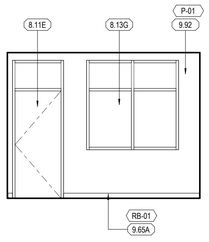
2 A8.15 DEAN OFFICE 129 - EAST
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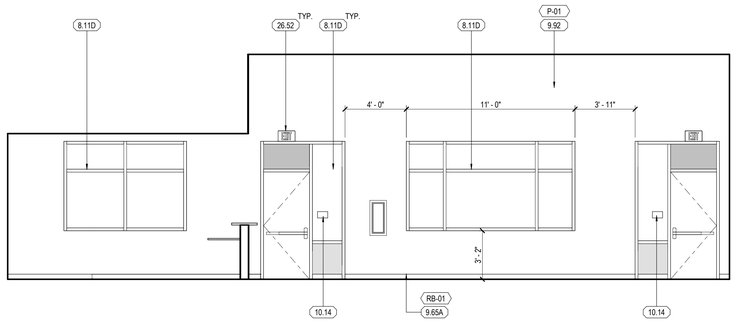
3 A8.15 DEAN OFFICE 129 - SOUTH
SCALE: 1/4" = 1'-0"



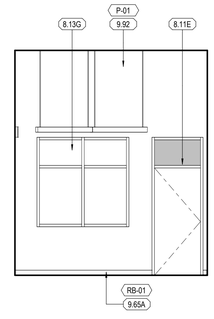
4 A8.15 DEAN OFFICE 129 - WEST
SCALE: 1/4" = 1'-0"



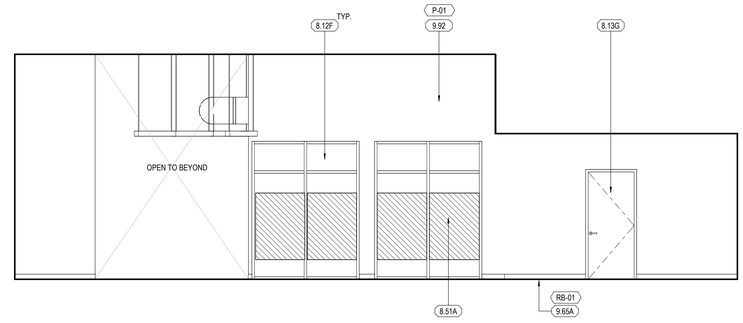
5 A8.15 ASSISTANT OFFICE 130 - NORTH
SCALE: 1/4" = 1'-0"



6 A8.15 ASSISTANT OFFICE 130 - EAST
SCALE: 1/4" = 1'-0"



7 A8.15 ASSISTANT OFFICE 130 - SOUTH
SCALE: 1/4" = 1'-0"



8 A8.15 ASSISTANT OFFICE 130 - WEST
SCALE: 1/4" = 1'-0"

KEYNOTES

	DESCRIPTION
8.11D	EXISTING HOLLOW METAL STOREFRONTS/ DOORS AND FRAMES TO BE REPLACED
8.11E	HOLLOW METAL FRAMES, DOOR OR WINDOW AS OCCURES, SEE PLAN AS SCHEDULED
8.12F	HOLLOW METAL FRAMES, DOOR OR WINDOW AS OCCURES, SEE PLAN AS SCHEDULED
8.13G	HOLLOW METAL FRAMES, DOOR OR WINDOW AS OCCURES, SEE PLAN AS SCHEDULED
8.51A	FROSTED GLASS WINDOW FILM WITH CUSTOM PATTERN
9.65A	RESILIENT BASE
9.92	INTERIOR PAINTING
10.14	SIGNAGE
26.52	EMERGENCY AND EXIT LIGHTING

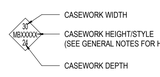
MATERIAL LEGEND

(SEE FINISH SPECIFICATION LEGEND ON SHEET A9.30 FOR FURTHER INFORMATION)

XXX MATERIAL TAG

AWP-01	ACOUSTIC WALL PANEL, TECTUM DIRECT ATTACH	P-04	PAINT, PPG VOICE OF COLOR PPG1001-5 DOVER GRAY
CT-01	CERAMIC TILE, COLOR: QH63 PEARL WHITE 4" X 4"	P-05	PAINT, PPG VOICE OF COLOR PPG1001-3 THIN ICE
CT-02	CERAMIC TILE, COLOR: QU19 ROSE BEIGE 4" X 4"	P-06	PAINT, 7150 REGAL JEWEL
CT-03	CERAMIC TILE, COLOR: QH70 WISTERIA 4" X 4"	P-07	PAINT, DISTRICT BLACK
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CTB-01	COVED WALL BASE, D618 CASTLEROCK 2" X 2"	PL-02	PLASTIC LAMINATE, COLOR: CHARCOAL VELVET
FRP-01	FIBERGLASS REINFORCED PANEL HRB-4CN	SS-01	SOLID SURFACE, MATTE, COLOR: ZEN GREY
P-01	PAINT, PPG VOICE OF COLOR PPG14-31 PARAFFIN	TWC-01	KOROSEAL WALLTALKERS/ SMS22061 HARBOR
P-02	PAINT, PPG VOICE OF COLOR PPG116-6 MIRABELLA		
P-03	PAINT, PPG VOICE OF COLOR PPG1204-6 GOLDEN OPPORTUNITY		

CASEWORK ELEVATION TAG



CASEWORK GENERAL NOTES:

CASEWORK TYPE / HEIGHTS:

BASE CABINETS:

TB*	BASE CABINET	42" A.F.F.
B*	BASE CABINET	36" A.F.F.
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LB*	LOWER BASE CABINET	30" A.F.F.
MS*	MEDIUM SHELVING UNIT	34" A.F.F.

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TWG*	TALL CABINET (2 GLASS DOOR)	96" A.F.F
TS*	TALL SHELVING UNIT	84" A.F.F.

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CONSULTANT:

INTERIOR ELEVATIONS - LOWER LEVEL

BUILDING 400 MODERNIZATION NEW CLASSROOM/ LIBRARY MEDIA CENTER

WALNUT VALLEY UNIFIED SCHOOL DISTRICT
DIAMOND BAR HIGH SCHOOL
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SEALS:

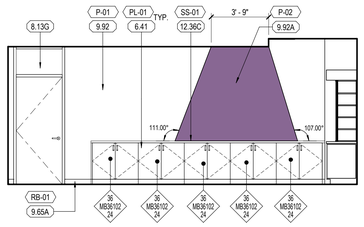
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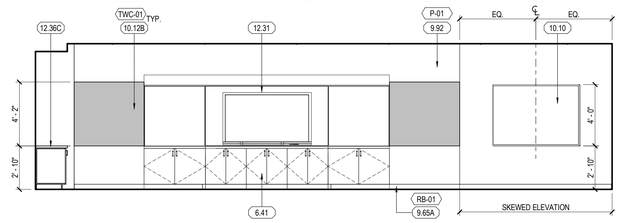
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PROJECT STATUS: CD 100%
PROJECT ISSUED: 03/15/21

REVISION	DATE:	DESCRIPTION:
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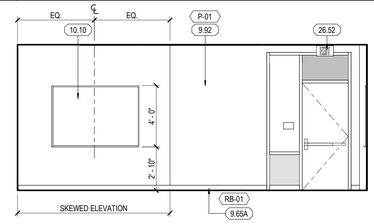
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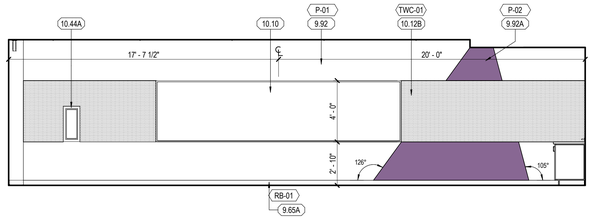
1 A8.16 CLASSROOM 201 - NORTH
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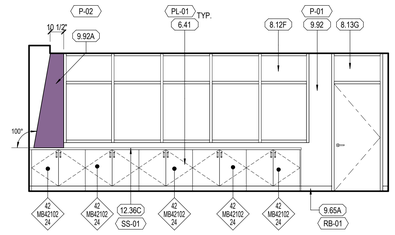
2 A8.16 CLASSROOM 201 - EAST
SCALE: 1/4" = 1'-0"



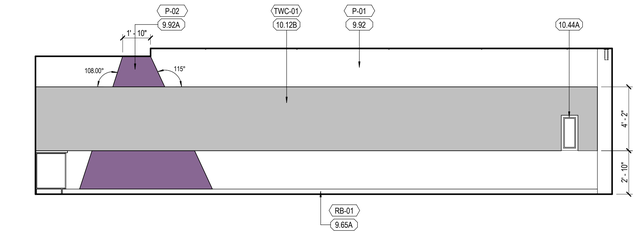
3 A8.16 CLASSROOM 201 - SOUTH
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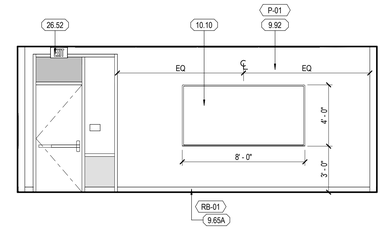
4 A8.16 CLASSROOM 201 - WEST
SCALE: 1/4" = 1'-0"



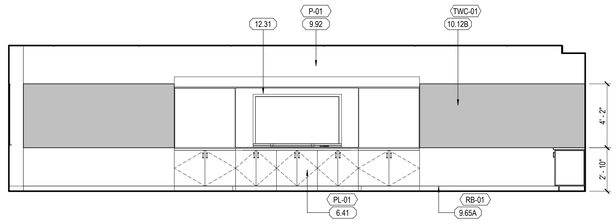
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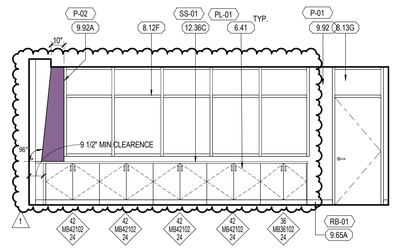
6 A8.16 CLASSROOM 202 - EAST
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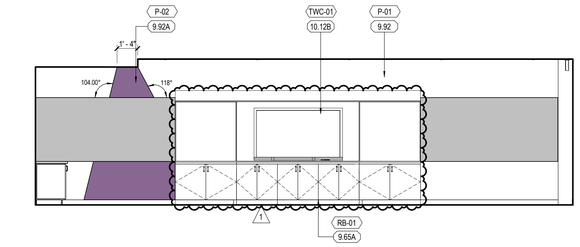
7 A8.16 CLASSROOM 202 - SOUTH
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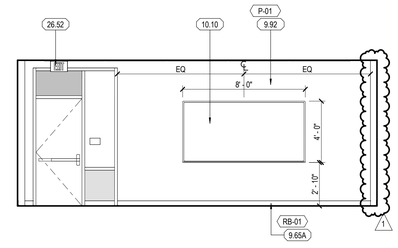
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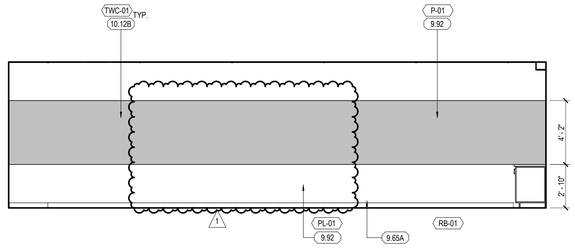
9 A8.16 CLASSROOM 203 - NORTH
SCALE: 1/4" = 1'-0"



10 A8.16 CLASSROOM 203 - EAST
SCALE: 1/4" = 1'-0"



11 A8.16 CLASSROOM 203 - SOUTH
SCALE: 1/4" = 1'-0"



12 A8.16 CLASSROOM 203 - WEST
SCALE: 1/4" = 1'-0"

KEYNOTES

DESCRIPTION

6.41 PLASTIC LAMINATE-CLAD ARCHITECTURAL CABINETS SEE 9/A10.40
8.12F HOLLOW METAL FRAMES, DOOR OR WINDOW AS OCCURES, SEE PLAN AS SCHEDULED
8.13G HOLLOW METAL FRAMES, DOOR OR WINDOW AS OCCURES, SEE PLAN AS SCHEDULED
9.65A RESILIENT BASE
9.92 INTERIOR PAINTING
9.92A INTERIOR PAINT PATTERN
10.10 WALL MOUNTED MARKER BOARD, SEE 1/A10.12
10.12B ACOUSTABLE WALL, SEE 2/A10.12
10.44A FIRE EXTINGUISHER CABINETS, SEE 13/A10.11
12.31 CUSTOM TEACHING WALL MODULAR, SEE 22/A10.50
12.36C SOLID SURFACING COUNTERTOPS, SEE 23/A10.50
26.52 EMERGENCY AND EXIT LIGHTING

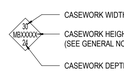
MATERIAL LEGEND

(SEE FINISH SPECIFICATION LEGEND ON SHEET A9.30 FOR FURTHER INFORMATION)

XXX MATERIAL TAG

AWP-01	ACOUSTIC WALL PANEL, TECTUM DIRECT ATTACH	P-04	PAINT, PPG VOICE OF COLOR PPG1001-5 DOVER GRAY
CT-01	CERAMIC TILE, COLOR: QH63 PEARL WHITE 4" X 4"	P-05	PAINT, PPG VOICE OF COLOR PPG1001-3 THIN ICE
CT-02	CERAMIC TILE, COLOR: QU19 ROSE BEIGE 4" X 4"	P-06	PAINT, 7150 REGAL JEWEL
CT-03	CERAMIC TILE, COLOR: QH70 WISTERIA 4" X 4"	P-07	PAINT, DISTRICT BLACK
CT-04	CERAMIC TILE, COLOR: QH51 EGGPLANT 4" X 4"	PL-01	PLASTIC LAMINATE, COLOR: VERMONT MAPLE
CTB-01	COVED WALL BASE, D618 CASTLEROCK 2" X 2"	PL-02	PLASTIC LAMINATE, COLOR: CHARCOAL VELVET
FRP-01	FIBERGLASS REINFORCED PANEL HRB-4CN	SS-01	SOLID SURFACE, MATTE, COLOR: ZEN GREY
P-01	PAINT, PPG VOICE OF COLOR PPG14-31 PARAFFIN	TWC-01	KOROSEAL WALLTALKERS/ SMS22061 HARBOR
P-02	PAINT, PPG VOICE OF COLOR PPG116-6 MIRABELLA		
P-03	PAINT, PPG VOICE OF COLOR PPG1204-6 GOLDEN OPPORTUNITY		

CASEWORK ELEVATION TAG



CASEWORK GENERAL NOTES:

CASEWORK TYPE / HEIGHTS:

BASE CABINETS:

TB*	BASE CABINET	42" A.F.F.
B*	BASE CABINET	36" A.F.F.
MB*	MEDIUM BASE CABINET	34" A.F.F.
LB*	LOWER BASE CABINET	30" A.F.F.
MS*	MEDIUM SHELVING UNIT	34" A.F.F.

WALL CABINETS: (MOUNTED AT 84" TO TOP)

W*	WALL CABINET	36" HIGH
MW*	MEDIUM WALL CABINET	30" HIGH
LW*	LOW WALL CABINET	24" HIGH

TALL STORAGE CABINETS:

T*	TALL STORAGE (2 DOOR)	84" A.F.F.
TW*	TALL WARDROBE (2 DOOR)	84" A.F.F.
TWG*	TALL CABINET (2 GLASS DOOR)	96" A.F.F.
TS*	TALL SHELVING UNIT	84" A.F.F.

10/24/2022 7:46:16 AM

INTERIOR ELEVATIONS - MAIN LEVEL

BUILDING 400 MODERNIZATION NEW CLASSROOM/ LIBRARY MEDIA CENTER

WALNUT VALLEY UNIFIED SCHOOL DISTRICT
DIAMOND BAR HIGH SCHOOL
21400 PATHFINDER RD. DIAMOND BAR, CA 91765

CONSULTANT:

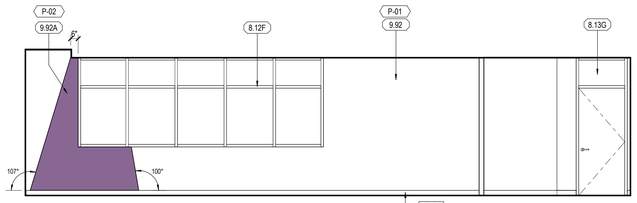
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sgh ARCHITECTS

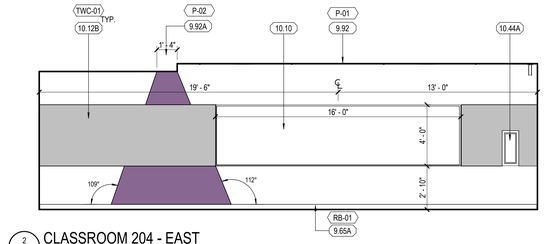
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PROJECT NUMBER: 19-471100-00
PROJECT STATUS: CD 100%
PROJECT ISSUED: 01/14/21
REVISION DATE: DESCRIPTION:
1 10-25-2022 ADDENDUM - 1

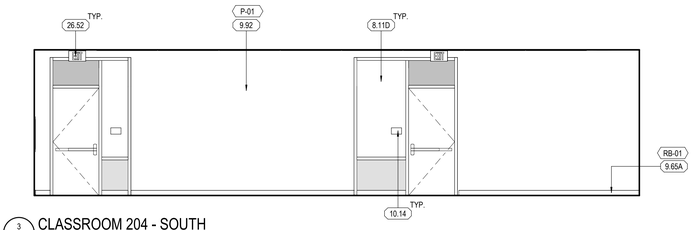
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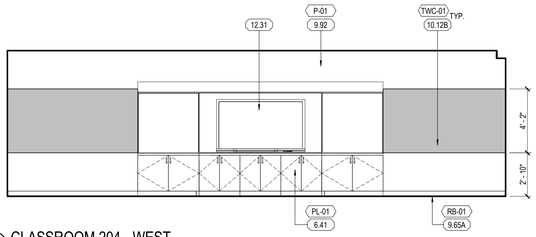
1 A8.17 CLASSROOM 204 - NORTH
SCALE: 1/4" = 1'-0"



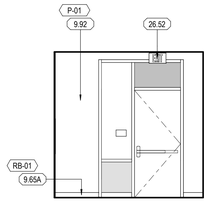
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SCALE: 1/4" = 1'-0"



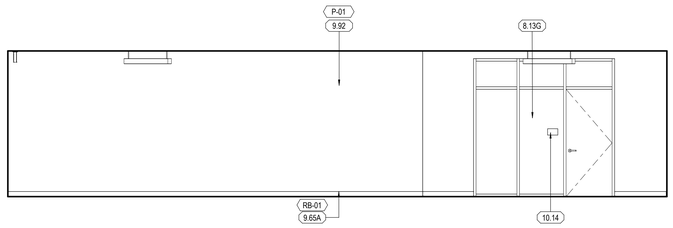
3 A8.17 CLASSROOM 204 - SOUTH
SCALE: 1/4" = 1'-0"



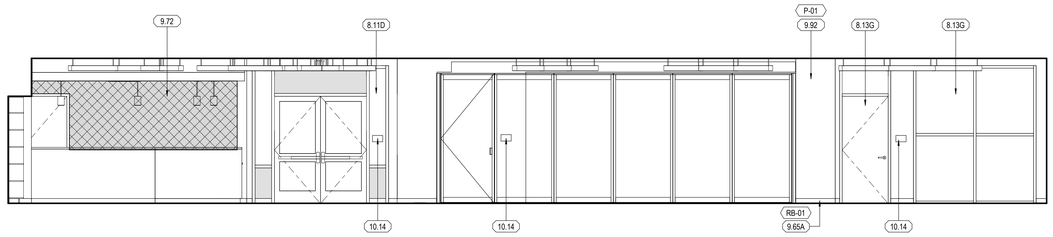
4 A8.17 CLASSROOM 204 - WEST
SCALE: 1/4" = 1'-0"



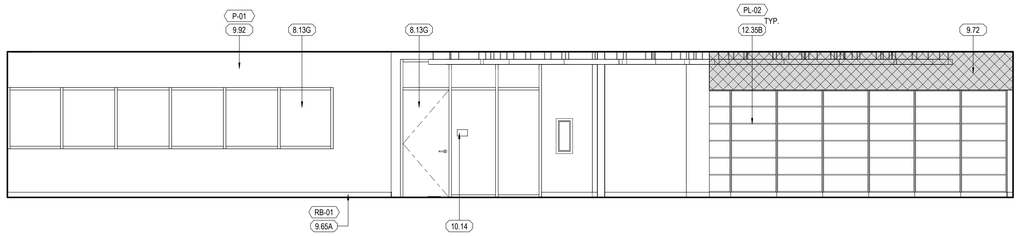
5 A8.17 HALL 205 - SOUTH
SCALE: 1/4" = 1'-0"



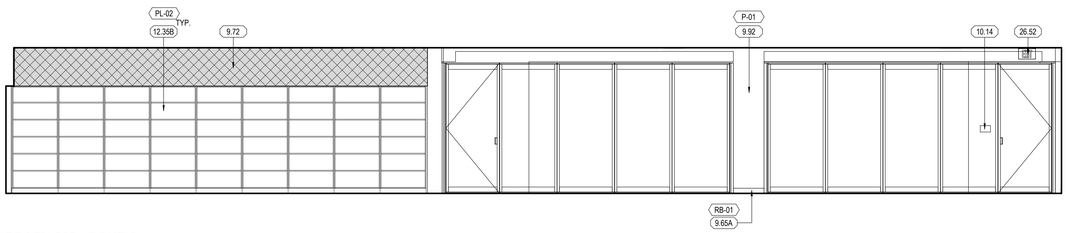
6 A8.17 HALL 205 - WEST
SCALE: 1/4" = 1'-0"



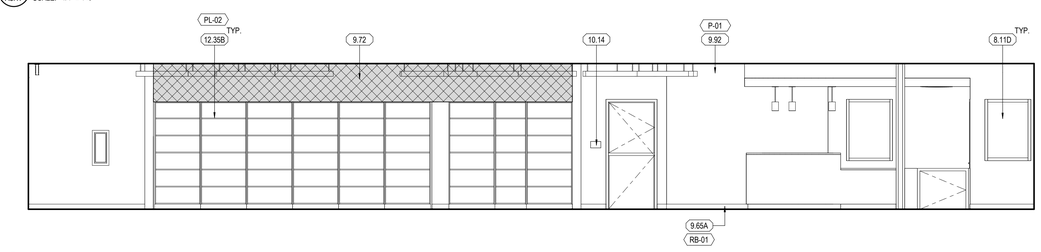
7 A8.17 LIBRARY 206 - NORTH
SCALE: 1/4" = 1'-0"



8 A8.17 LIBRARY 206 - EAST
SCALE: 1/4" = 1'-0"



9 A8.17 LIBRARY 206 - SOUTH
SCALE: 1/4" = 1'-0"



10 A8.17 LIBRARY 206 - WEST
SCALE: 1/4" = 1'-0"

KEYNOTES

	DESCRIPTION
6.41	PLASTIC-LAMINATE-CLAD ARCHITECTURAL CABINETS,SEE 8/A10.50
8.11D	EXISTING HOLLOW METAL STOREFRONT DOORS AND FRAMES TO BE REPLACED
8.12F	HOLLOW METAL FRAMES, DOOR OR WINDOW AS OCCURES, SEE PLAN AS SCHEDULED
8.13G	HOLLOW METAL FRAMES, DOOR OR WINDOW AS OCCURES, SEE PLAN AS SCHEDULED
9.65A	RESILIENT BASE
9.72	CUSTOM GRAPHIC VINYL WALL COVERING
9.92	INTERIOR PAINTING
9.92A	INTERIOR PAINT PATTERN
10.10	WALL MOUNTED MARKER BOARD, SEE 1/A10.12
10.12B	TACKABLE WALL, SEE 2/A10.12
10.14	SIGNAGE
10.44A	FIRE EXTINGUISHER CABINETS, SEE 13/A10.11
12.31	CUSTOM TEACHING WALL MODULAR, SEE 22/A10.50
12.35B	BOOK SHELVING UNITS (7'-0" HIGH), SEE 4/A10.50
26.52	EMERGENCY AND EXIT LIGHTING

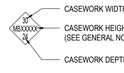
MATERIAL LEGEND

(SEE FINISH SPECIFICATION LEGEND ON SHEET A9.30 FOR FURTHER INFORMATION)

XXX MATERIAL TAG

AWP-01	ACOUSTIC WALL PANEL, TECTUM DIRECT ATTACH	P-04	PAINT, PPG VOICE OF COLOR PPG1001-5 DOVER GRAY
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CT-02	CERAMIC TILE, COLOR: QU19 ROSE BEIGE 4" X 4"	P-06	PAINT, 7150 REGAL JEWEL
CT-03	CERAMIC TILE, COLOR: QH70 WISTERIA 4" X 4"	P-07	PAINT, DISTRICT BLACK
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CTB-01	COVED WALL BASE, D618 CASTLEROCK 2" X 2"	PL-02	PLASTIC LAMINATE, COLOR: CHARCOAL VELVET
FRP-01	FIBERGLASS REINFORCED PANEL HRB-4CN	SS-01	SOLID SURFACE, MATTE, COLOR: ZEN GREY
P-01	PAINT, PPG VOICE OF COLOR PPG14-31 PARAFFIN	TWC-01	KOROSEAL WALLTALKERS/ SMS22061 HARBOR
P-02	PAINT, PPG VOICE OF COLOR PPG116-6 MIRABELLA		
P-03	PAINT, PPG VOICE OF COLOR PPG1204-6 GOLDEN OPPORTUNITY		

CASEWORK ELEVATION TAG



CASEWORK GENERAL NOTES:

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TB*	BASE CABINET	42" A.F.F.
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MB*	MEDIUM BASE CABINET	34" A.F.F.
LB*	LOWER BASE CABINET	30" A.F.F.
MS*	MEDIUM SHELVING UNIT	34" A.F.F.

WALL CABINETS: (MOUNTED AT 84" TO TOP)

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MW*	MEDIUM WALL CABINET	30" HIGH
LW*	LOW WALL CABINET	24" HIGH

TALL STORAGE CABINETS:

T*	TALL STORAGE (2 DOOR)	84" A.F.F.
TW*	TALL WARDROBE (2 DOOR)	84" A.F.F.
TWG*	TALL CABINET (2 GLASS DOOR)	96" A.F.F.
TS*	TALL SHELVING UNIT	84" A.F.F.

CONSULTANT:

INTERIOR ELEVATIONS - MAIN LEVEL

BUILDING 400 MODERNIZATION NEW CLASSROOM/ LIBRARY MEDIA CENTER

WALNUT VALLEY UNIFIED SCHOOL DISTRICT
DIAMOND BAR HIGH SCHOOL
21400 PATHFINDER RD. DIAMOND BAR, CA 91765

SEALS:

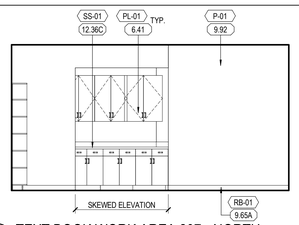
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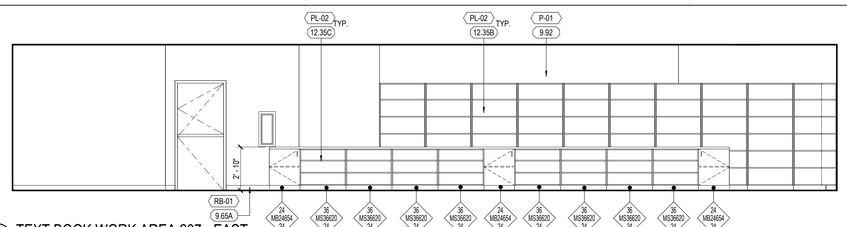
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PROJECT STATUS: CD 100%
PROJECT ISSUED: 02/15/21
REVISION: DATE: DESCRIPTION:
1 10-25-2022 ADDENDUM - 1

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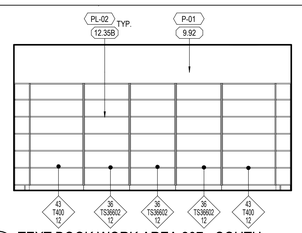
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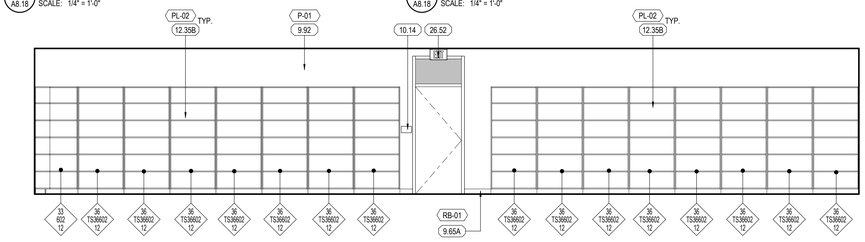
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SCALE: 1/4" = 1'-0"



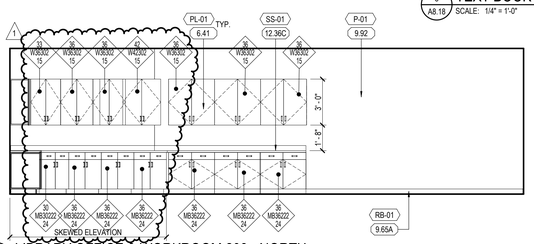
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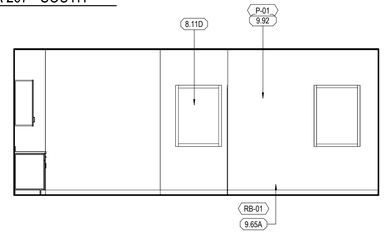
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SCALE: 1/4" = 1'-0"



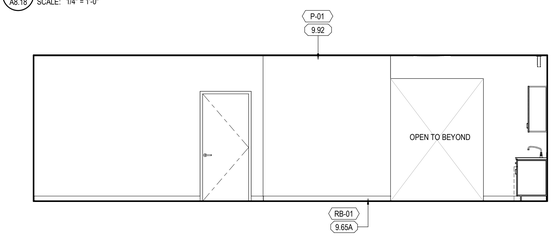
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SCALE: 1/4" = 1'-0"



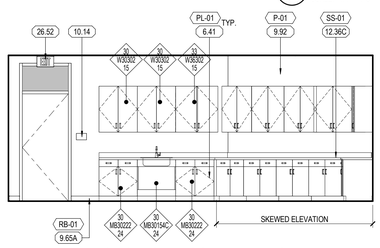
5 A8.18 LIBRARY OFFICE & WORKROOM 208 - NORTH
SCALE: 1/4" = 1'-0"



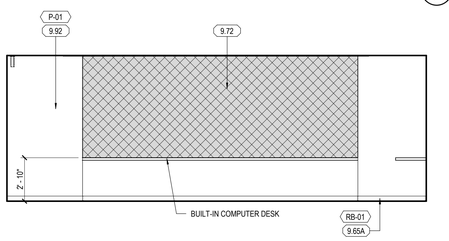
6 A8.18 LIBRARY OFFICE & WORKROOM 208 - EAST
SCALE: 1/4" = 1'-0"



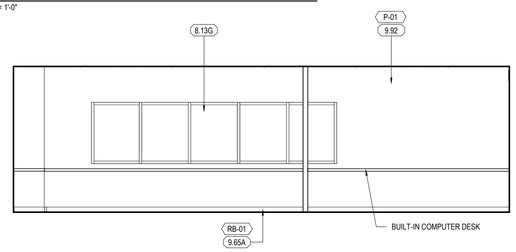
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SCALE: 1/4" = 1'-0"



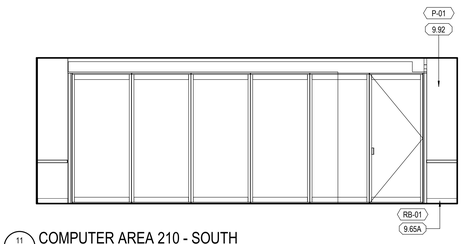
8 A8.18 LIBRARY OFFICE & WORKROOM 208 - WEST
SCALE: 1/4" = 1'-0"



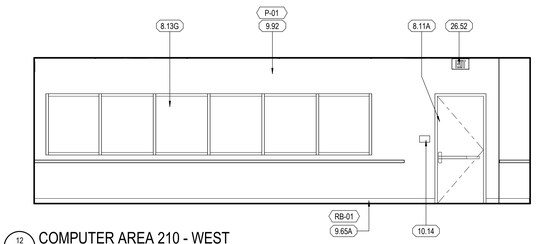
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SCALE: 1/4" = 1'-0"



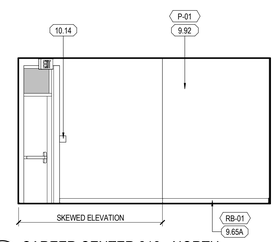
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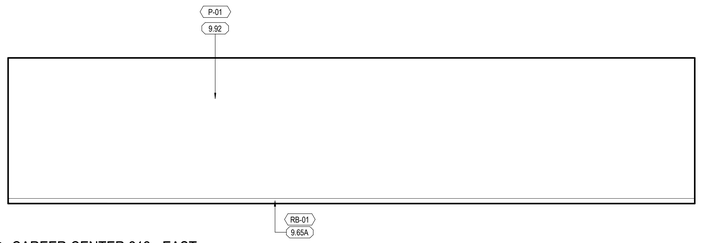
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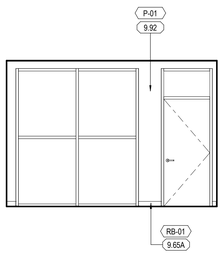
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SCALE: 1/4" = 1'-0"



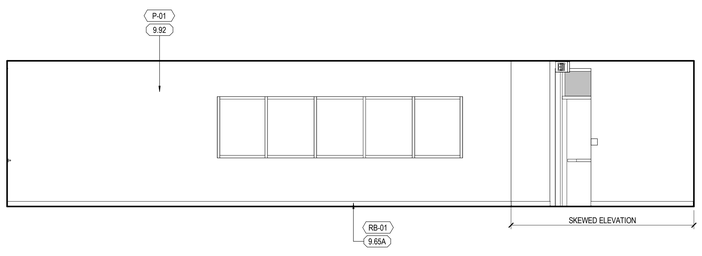
13 A8.18 CAREER CENTER 212 - NORTH
SCALE: 1/4" = 1'-0"



14 A8.18 CAREER CENTER 212 - EAST
SCALE: 1/4" = 1'-0"



15 A8.18 CAREER CENTER 212 - SOUTH
SCALE: 1/4" = 1'-0"



16 A8.18 CAREER CENTER 212 - WEST
SCALE: 1/4" = 1'-0"

KEYNOTES

	DESCRIPTION
6.41	PLASTIC-LAMINATE-CLAD ARCHITECTURAL CABINETS.SEE 8/A10.50
8.11A	HOLLOW METAL DOORS AND FRAMES, SEE A10.20 & A10.21 OPENING DETAILS
8.11D	EXISTING HOLLOW METAL STOREFRONTS DOORS AND FRAMES TO BE REPLACED
8.13G	HOLLOW METAL FRAMES, DOOR OR WINDOW AS OCCURES. SEE PLAN AS SCHEDULED
9.65A	RESILIENT BASE
9.72	CUSTOM GRAPHIC VINYL WALL COVERING
9.92	INTERIOR PAINTING
10.14	SIGNAGE
12.35B	BOOK SHELVING UNITS (7'-0" HIGH), SEE 4/A10.50
12.35C	BOOK SHELVING UNITS (2'-10" HIGH), SEE 5/A10.50
12.36C	SOLID SURFACING COUNTERTOPS, SEE 23/A10.50
26.52	EMERGENCY AND EXIT LIGHTING

MATERIAL LEGEND

(SEE FINISH SPECIFICATION LEGEND ON SHEET A9.30 FOR FURTHER INFORMATION)

XXX MATERIAL TAG

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CT-02	CERAMIC TILE, COLOR: QU19 ROSE BEIGE 4" X 4"	P-06	PAINT, 7150 REGAL JEWEL
CT-03	CERAMIC TILE, COLOR: QH70 WISTERIA 4" X 4"	P-07	PAINT, DISTRICT BLACK
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FRP-01	FIBERGLASS REINFORCED PANEL HRB-4CN	SS-01	SOLID SURFACE, MATTE, COLOR: ZEN GREY
P-01	PAINT, PPG VOICE OF COLOR PPG14-31 PARAFFIN	TWC-01	KOROSEAL WALLTALKERS/ SMS22061 HARBOR
P-02	PAINT, PPG VOICE OF COLOR PPG116-6 MIRABELLA		
P-03	PAINT, PPG VOICE OF COLOR PPG1204-6 GOLDEN OPPORTUNITY		

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B*	BASE CABINET	36" A.F.F.
MB*	MEDIUM BASE CABINET	34" A.F.F.
LB*	LOWER BASE CABINET	30" A.F.F.
MS*	MEDIUM SHELVING UNIT	34" A.F.F.

WALL CABINETS: (MOUNTED AT 84" TO TOP)

W*	WALL CABINET	36" HIGH
MW*	MEDIUM WALL CABINET	30" HIGH
LW*	LOW WALL CABINET	24" HIGH

TALL STORAGE CABINETS:

T*	TALL STORAGE (2 DOOR)	84" A.F.F.
TW*	TALL WARDROBE (2 DOOR)	84" A.F.F.
TWG*	TALL CABINET (2 GLASS DOOR)	96" A.F.F.
TS*	TALL SHELVING UNIT	84" A.F.F.

CONSULTANT:

INTERIOR ELEVATIONS - MAIN LEVEL

BUILDING 400 MODERNIZATION NEW CLASSROOM/ LIBRARY MEDIA CENTER

WALNUT VALLEY UNIFIED SCHOOL DISTRICT
DIAMOND BAR HIGH SCHOOL
21400 PATHFINDER RD. DIAMOND BAR, CA 91765

SEALS:

sgh ARCHITECTS

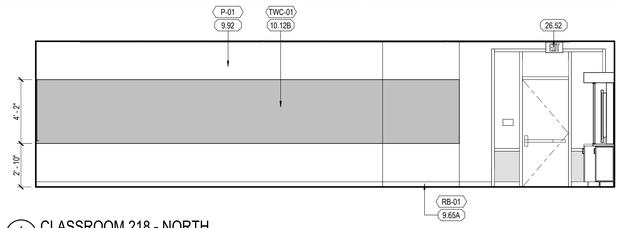
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PROJECT NUMBER: 19-471100-00
PROJECT STATUS: CD 100%
PROJECT ISSUED: 01/14/21

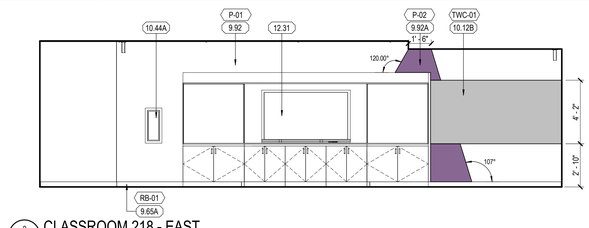
REVISION	DATE	DESCRIPTION
1	10-25-2021	ADDENDUM - 1

A8.18

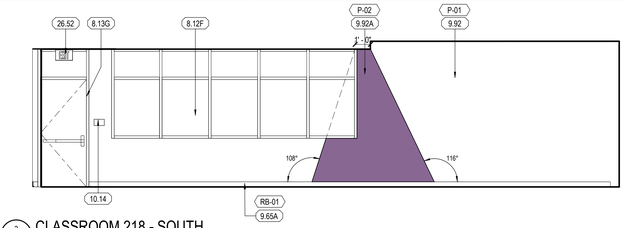
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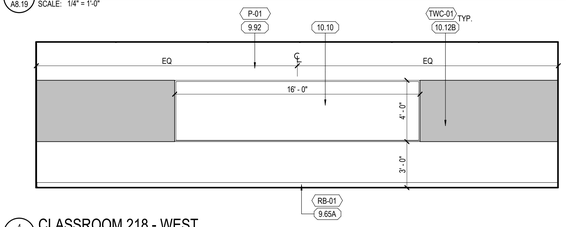
1 A8.19 CLASSROOM 218 - NORTH
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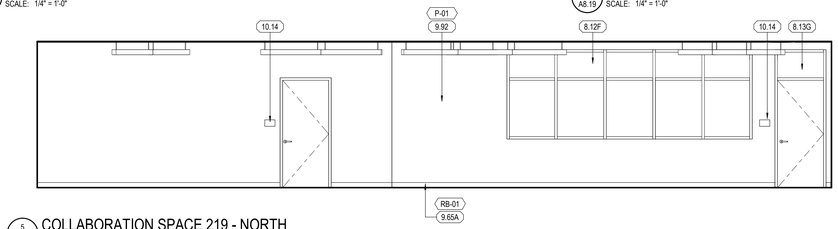
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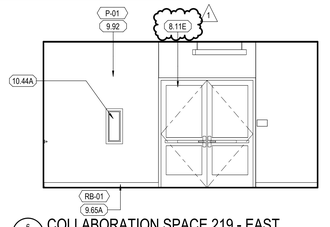
3 A8.19 CLASSROOM 218 - SOUTH
SCALE: 1/4" = 1'-0"



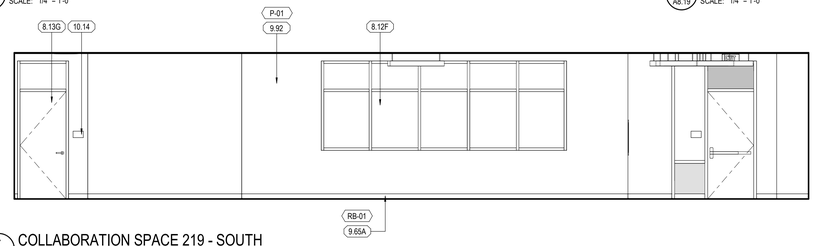
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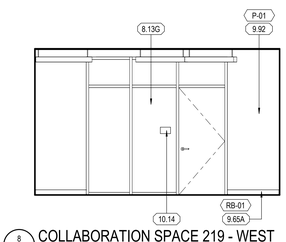
5 A8.19 COLLABORATION SPACE 219 - NORTH
SCALE: 1/4" = 1'-0"



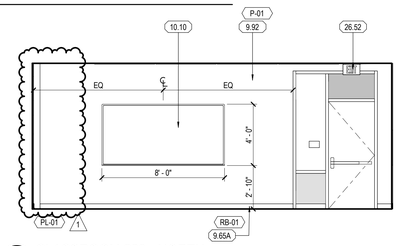
6 A8.19 COLLABORATION SPACE 219 - EAST
SCALE: 1/4" = 1'-0"



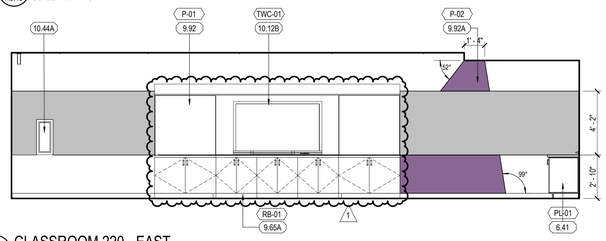
7 A8.19 COLLABORATION SPACE 219 - SOUTH
SCALE: 1/4" = 1'-0"



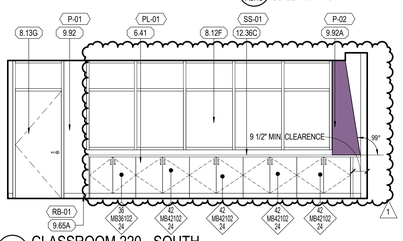
8 A8.19 COLLABORATION SPACE 219 - WEST
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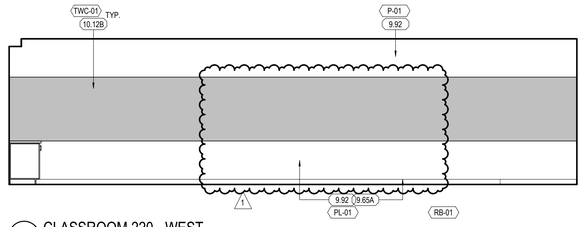
9 A8.19 CLASSROOM 220 - NORTH
SCALE: 1/4" = 1'-0"



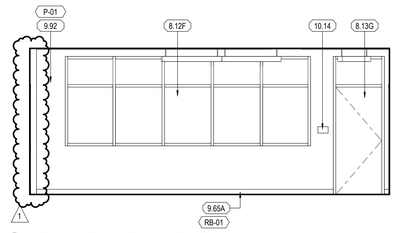
10 A8.19 CLASSROOM 220 - EAST
SCALE: 1/4" = 1'-0"



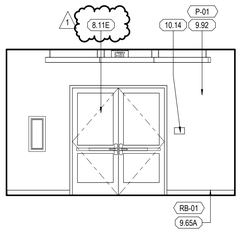
11 A8.19 CLASSROOM 220 - SOUTH
SCALE: 1/4" = 1'-0"



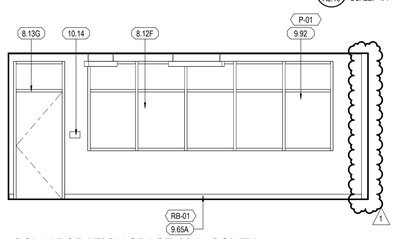
12 A8.19 CLASSROOM 220 - WEST
SCALE: 1/4" = 1'-0"



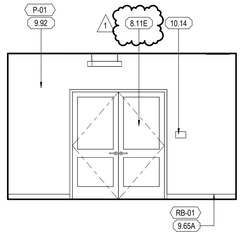
13 A8.19 COLLABORATION SPACE 221 - NORTH
SCALE: 1/4" = 1'-0"



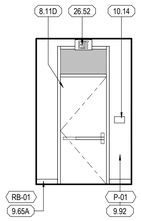
14 A8.19 COLLABORATION SPACE 221 - EAST
SCALE: 1/4" = 1'-0"



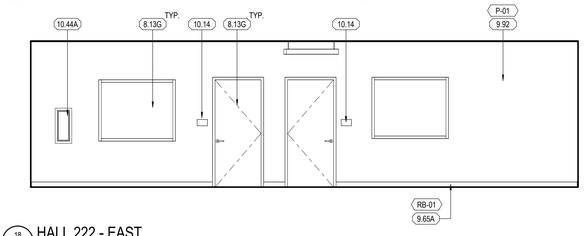
15 A8.19 COLLABORATION SPACE 221 - SOUTH
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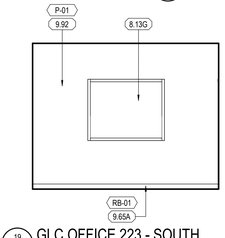
16 A8.19 COLLABORATION SPACE 221 - WEST
SCALE: 1/4" = 1'-0"



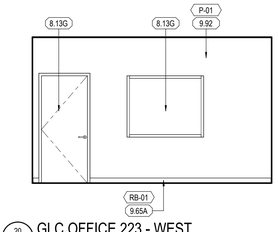
17 A8.19 HALL 222 - NORTH
SCALE: 1/4" = 1'-0"



18 A8.19 HALL 222 - EAST
SCALE: 1/4" = 1'-0"



19 A8.19 GLC OFFICE 223 - SOUTH
SCALE: 1/4" = 1'-0"



20 A8.19 GLC OFFICE 223 - WEST
SCALE: 1/4" = 1'-0"

KEYNOTES

	DESCRIPTION
6.41	PLASTIC-LAMINATE-CLAD ARCHITECTURAL CABINETS,SEE 8/A10.50
8.11D	EXISTING HOLLOW METAL STOREFRONTS DOORS AND FRAMES TO BE REPLACED
8.11E	HOLLOW METAL FRAMES, DOOR OR WINDOW AS OCCURES, SEE PLAN AS SCHEDULED
8.12F	HOLLOW METAL FRAMES, DOOR OR WINDOW AS OCCURES, SEE PLAN AS SCHEDULED
8.13G	HOLLOW METAL FRAMES, DOOR OR WINDOW AS OCCURES, SEE PLAN AS SCHEDULED
9.65A	RESILIENT BASE
9.92	INTERIOR PAINTING
9.92A	INTERIOR PAINT PATTERN
10.10	WALL MOUNTED MARKER BOARD, SEE 1/A10.12
10.12B	MOVABLE WALL, SEE 3/A10.12
10.14	SIGNAGE
10.44A	FIRE EXTINGUISHER CABINETS, SEE 13/A10.11
12.31	CUSTOM TEACHING WALL MODULAR, SEE 22/A10.50
12.36C	SOLID SURFACING COUNTERTOPS, SEE 23/A10.50
26.52	EMERGENCY AND EXIT LIGHTING

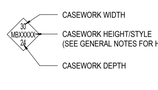
MATERIAL LEGEND

(SEE FINISH SPECIFICATION LEGEND ON SHEET A9.30 FOR FURTHER INFORMATION)

XXX MATERIAL TAG

AWP-01	ACOUSTIC WALL PANEL, TECTUM DIRECT ATTACH	P-04	PAINT, PPG VOICE OF COLOR PPG1001-5 DOVER GRAY
CT-01	CERAMIC TILE, COLOR: QH63 PEARL WHITE 4" X 4"	P-05	PAINT, PPG VOICE OF COLOR PPG1001-3 THIN ICE
CT-02	CERAMIC TILE, COLOR: QU19 ROSE BEIGE 4" X 4"	P-06	PAINT, 7150 REGAL JEWEL
CT-03	CERAMIC TILE, COLOR: QH70 WISTERIA 4" X 4"	P-07	PAINT, DISTRICT BLACK
CT-04	CERAMIC TILE, COLOR: QH51 EGGPLANT 4" X 4"	PL-01	PLASTIC LAMINATE, COLOR: VERMONT MAPLE
CTB-01	COVED WALL BASE, D618 CASTLEROCK 2" X 2"	PL-02	PLASTIC LAMINATE, COLOR: CHARCOAL VELVET
FRP-01	FIBERGLASS REINFORCED PANEL HRB-4CN	SS-01	SOLID SURFACE, MATTE, COLOR: ZEN GREY
P-01	PAINT, PPG VOICE OF COLOR PPG14-31 PARAFFIN	TWC-01	KOROSEAL WALLTALKERS/ SMS22061 HARBOR
P-02	PAINT, PPG VOICE OF COLOR PPG116-6 MIRABELLA		
P-03	PAINT, PPG VOICE OF COLOR PPG1204-6 GOLDEN OPPORTUNITY		

CASEWORK ELEVATION TAG



CASEWORK GENERAL NOTES:

CASEWORK TYPE / HEIGHTS:

BASE CABINETS:

TS*	BASE CABINET	42" A.F.F.
B*	BASE CABINET	36" A.F.F.
MB*	MEDIUM BASE CABINET	34" A.F.F.
LS*	LOWER BASE CABINET	30" A.F.F.
MS*	MEDIUM SHELVING UNIT	34" A.F.F.

WALL CABINETS: (MOUNTED AT 84" TO TOP)

W*	WALL CABINET	36" HIGH
MW*	MEDIUM WALL CABINET	30" HIGH
LW*	LOW WALL CABINET	24" HIGH

TALL STORAGE CABINETS:

T*	TALL STORAGE (2 DOOR)	84" A.F.F.
TW*	TALL WARDROBE (2 DOOR)	84" A.F.F.
TWC*	TALL CABINET (2 GLASS DOOR)	96" A.F.F.
TS*	TALL SHELVING UNIT	84" A.F.F.

10/24/2022 7:46:32 AM

INTERIOR ELEVATIONS - MAIN LEVEL

BUILDING 400 MODERNIZATION NEW CLASSROOM/ LIBRARY MEDIA CENTER

WALNUT VALLEY UNIFIED SCHOOL DISTRICT
DIAMOND BAR HIGH SCHOOL
21400 PATHFINDER RD. DIAMOND BAR, CA 91765

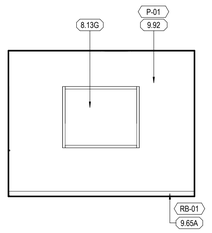
CONSULTANT:

SEALS:

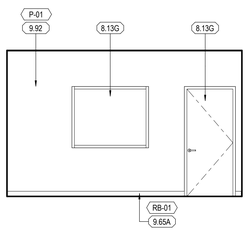
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PROJECT NUMBER: 19-47100-00
PROJECT STATUS: CD 100%
PROJECT ISSUED: 01/14/21
REVISION: DATE: DESCRIPTION:
1 10-25-2022 ADDENDUM - 1

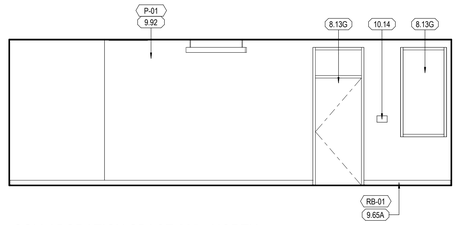
A8.19



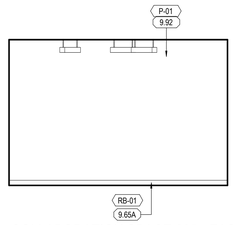
1 A8.20 OFFICE 224 - NORTH
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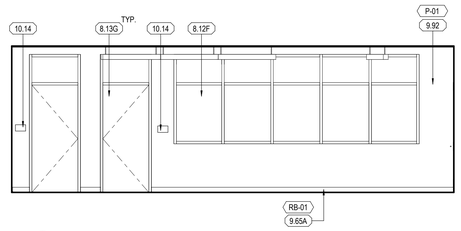
2 A8.20 OFFICE 224 - WEST
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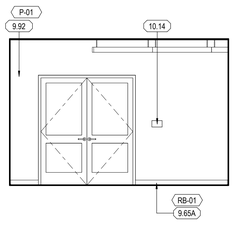
3 A8.20 COLLABORATION SPACE 225 - NORTH
SCALE: 1/4" = 1'-0"



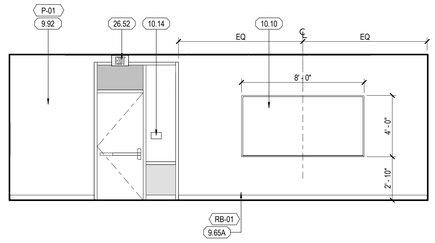
4 A8.20 COLLABORATION SPACE 225 - EAST
SCALE: 1/4" = 1'-0"



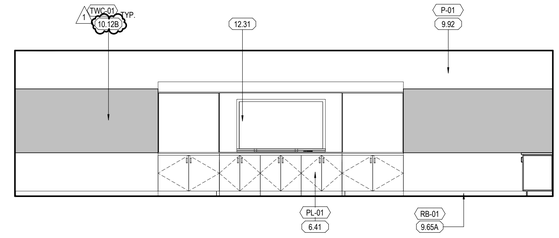
5 A8.20 COLLABORATION SPACE 225 - SOUTH
SCALE: 1/4" = 1'-0"



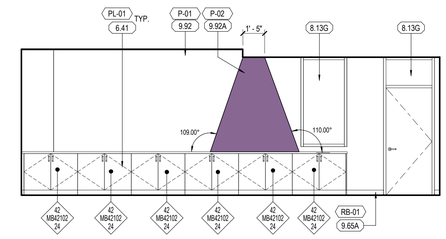
6 A8.20 COLLABORATION SPACE 225 - WEST
SCALE: 1/4" = 1'-0"



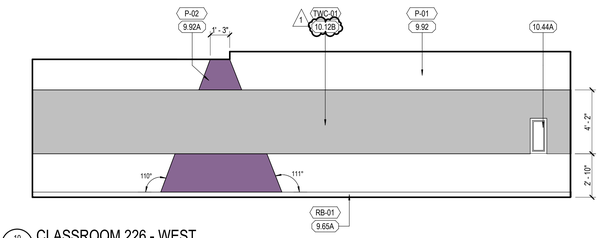
7 A8.20 CLASSROOM 226 - NORTH
SCALE: 1/4" = 1'-0"



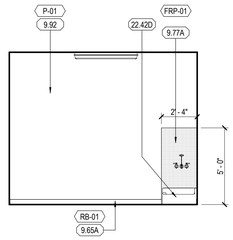
8 A8.20 CLASSROOM 226 - EAST
SCALE: 1/4" = 1'-0"



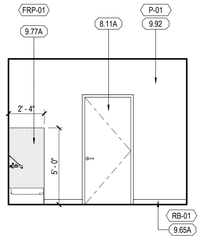
9 A8.20 CLASSROOM 226 - SOUTH
SCALE: 1/4" = 1'-0"



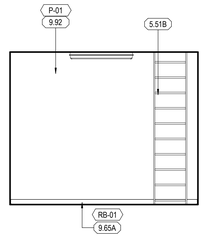
10 A8.20 CLASSROOM 226 - WEST
SCALE: 1/4" = 1'-0"



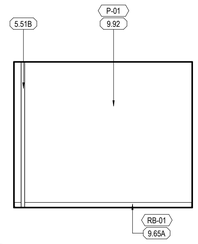
11 A8.20 CUSTODIAN ROOM 227 - NORTH
SCALE: 1/4" = 1'-0"



12 A8.20 CUSTODIAN ROOM 227 - EAST
SCALE: 1/4" = 1'-0"



13 A8.20 CUSTODIAN ROOM 227 - SOUTH
SCALE: 1/4" = 1'-0"



14 A8.20 CUSTODIAN ROOM 227 - WEST
SCALE: 1/4" = 1'-0"

KEYNOTES

	DESCRIPTION
5.51B	GALV. METAL ACCESS LADDER, SEE 6/A10.40
6.41	PLASTIC-LAMINATE-CLAD ARCHITECTURAL CABINETS,SEE 8/A10.50
8.11A	HOLLOW METAL DOOR AND FRAME, SEE 1/A10.14 AND 1/A10.15 FOR DETAILS
8.12F	HOLLOW METAL FRAMES, DOOR OR WINDOW AS OCCURES, SEE PLAN AS SCHEDULED
8.13G	HOLLOW METAL FRAMES, DOOR OR WINDOW AS OCCURES, SEE PLAN AS SCHEDULED
9.65A	RESILIENT BASE
9.77A	FIBERGLASS REINFORCED PLASTIC PANEL
9.92	INTERIOR PAINTING
9.92A	INTERIOR PAINT PATTERN
10.10	WALL MOUNTED MARKER BOARD, SEE 1/A10.12
10.12B	TACKABLE WALL, SEE 7/A10.14
10.14	SIGNAGE
10.44A	FIRE EXTINGUISHER CABINETS, SEE 13/A10.11
12.31	CUSTOM TEACHING WALL MODULAR, SEE 22/A10.50
22.42D	COMMERCIAL SINKS
26.52	EMERGENCY AND EXIT LIGHTING

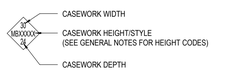
MATERIAL LEGEND

(SEE FINISH SPECIFICATION LEGEND ON SHEET A9.30 FOR FURTHER INFORMATION)

XXX MATERIAL TAG

AWP-01	ACOUSTIC WALL PANEL, TECTUM DIRECT ATTACH	P-04	PAINT, PPG VOICE OF COLOR PPG1001-5 DOVER GRAY
CT-01	CERAMIC TILE, COLOR: QH63 PEARL WHITE 4" X 4"	P-05	PAINT, PPG VOICE OF COLOR PPG1001-3 THIN ICE
CT-02	CERAMIC TILE, COLOR: QU19 ROSE BEIGE 4" X 4"	P-06	PAINT, 7150 REGAL JEWEL
CT-03	CERAMIC TILE, COLOR: QH70 WISTERIA 4" X 4"	P-07	PAINT, DISTRICT BLACK
CT-04	CERAMIC TILE, COLOR: QH51 EGGPLANT 4" X 4"	PL-01	PLASTIC LAMINATE, COLOR: VERMONT MAPLE
CTB-01	COVED WALL BASE, D618 CASTLEROCK 2" X 2"	PL-02	PLASTIC LAMINATE, COLOR: CHARCOAL VELVET
FRP-01	FIBERGLASS REINFORCED PANEL HRB-4CN	SS-01	SOLID SURFACE, MATTE, COLOR: ZEN GREY
P-01	PAINT, PPG VOICE OF COLOR PPG14-31 PARAFFIN	TWC-01	KOROSEAL WALLTALKERS/ SMS22061 HARBOR
P-02	PAINT, PPG VOICE OF COLOR PPG116-6 MIRABELLA		
P-03	PAINT, PPG VOICE OF COLOR PPG1204-6 GOLDEN OPPORTUNITY		

CASEWORK ELEVATION TAG



CASEWORK GENERAL NOTES:

CASEWORK TYPE / HEIGHTS:

BASE CABINETS:

TB*	BASE CABINET	42" A.F.F.
B*	BASE CABINET	36" A.F.F.
MB*	MEDIUM BASE CABINET	34" A.F.F.
LB*	LOWER BASE CABINET	30" A.F.F.
MS*	MEDIUM SHELVING UNIT	34" A.F.F.

WALL CABINETS: (MOUNTED AT 84" TO TOP)

W*	WALL CABINET	36" HIGH
MW*	MEDIUM WALL CABINET	30" HIGH
LW*	LOW WALL CABINET	24" HIGH

TALL STORAGE CABINETS:

T*	TALL STORAGE (2 DOOR)	84" A.F.F.
TW*	TALL WARDROBE (2 DOOR)	84" A.F.F.
TWG*	TALL CABINET (2 GLASS DOOR)	96" A.F.F.
TS*	TALL SHELVING UNIT	84" A.F.F.

CONSULTANT:

INTERIOR ELEVATIONS - MAIN LEVEL

BUILDING 400 MODERNIZATION NEW CLASSROOM/ LIBRARY MEDIA CENTER

WALNUT VALLEY UNIFIED SCHOOL DISTRICT
DIAMOND BAR HIGH SCHOOL
21400 PATHFINDER RD. DIAMOND BAR, CA 91765

SEALS:

sgh ARCHITECTS

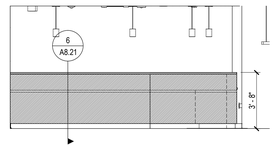
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PROJECT NUMBER: 19-47100-00
PROJECT STATUS: CD: 100%
PROJECT ISSUED: 01/14/21

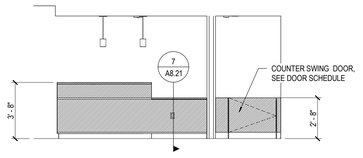
REVISION:	DATE:	DESCRIPTION:
1	10-25-2022	ADDENDUM - 1

A8.20

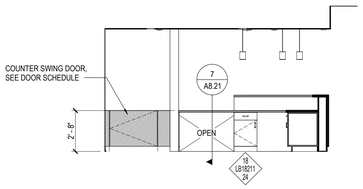
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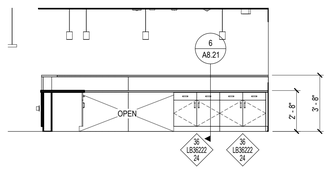
2 A8.21 CIRCULATION DESK - NORTH
SCALE: 1/4" = 1'-0"



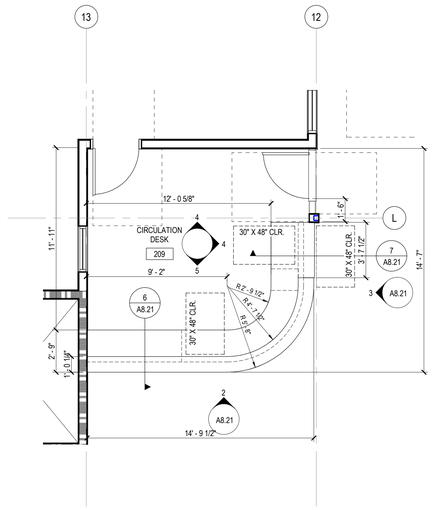
3 A8.21 CIRCULATION DESK - WEST
SCALE: 1/4" = 1'-0"



4 A8.21 CIRCULATION DESK - EAST
SCALE: 1/4" = 1'-0"

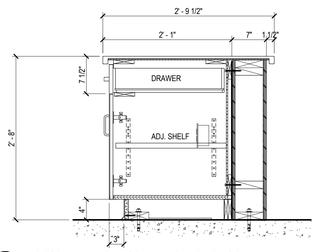


5 A8.21 CIRCULATION DESK - SOUTH
SCALE: 1/4" = 1'-0"

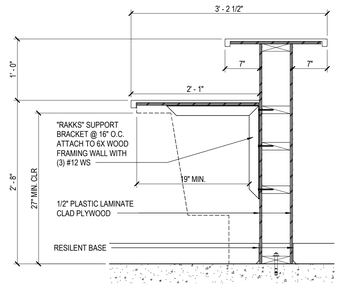


1 A8.21 ENLARGED FLOOR PLAN_CIRCULATION DESK 213
SCALE: 1/4" = 1'-0"

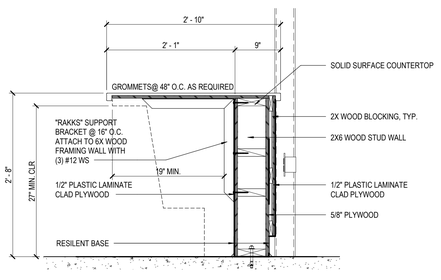
NORTH



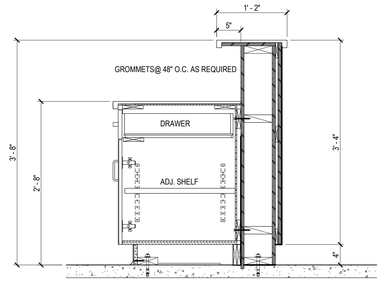
9 A8.21 ASSISTANT OFFICE DESK SECTION B
SCALE: 1" = 1'-0"



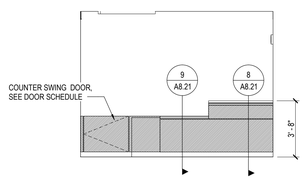
8 A8.21 ASSISTANT OFFICE DESK SECTION A
SCALE: 1" = 1'-0"



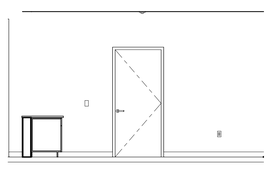
7 A8.21 CIRCULATION DESK - SECTION A
SCALE: 1" = 1'-0"



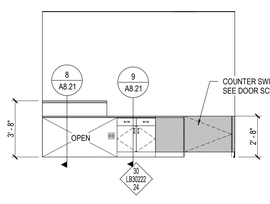
6 A8.21 CIRCULATION DESK - SECTION B
SCALE: 1" = 1'-0"



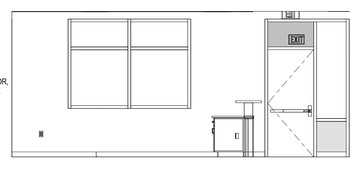
11 A8.21 ASSISTANT OFFICE DESK - NORTH
SCALE: 1/4" = 1'-0"



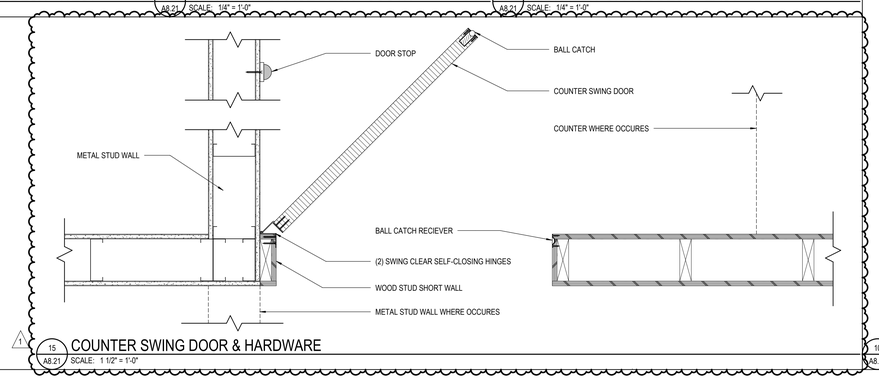
12 A8.21 ASSISTANT OFFICE DESK - WEST
SCALE: 1/4" = 1'-0"



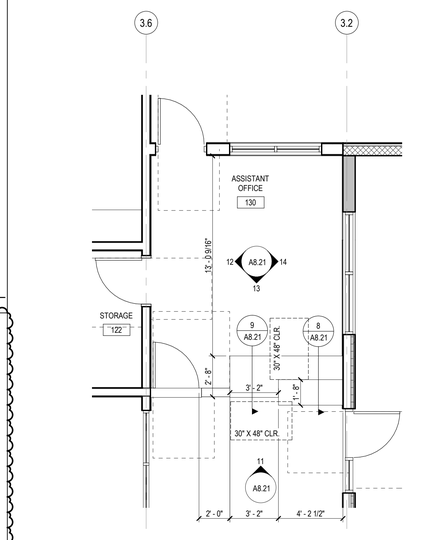
13 A8.21 ASSISTANT OFFICE DESK - SOUTH
SCALE: 1/4" = 1'-0"



14 A8.21 ASSISTANT OFFICE DESK - EAST
SCALE: 1/4" = 1'-0"



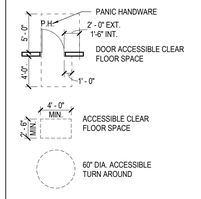
15 A8.21 COUNTER SWING DOOR & HARDWARE
SCALE: 1 1/2" = 1'-0"



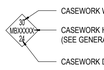
10 A8.21 ENLARGED FLOOR PLAN - ASSISTANT OFFICE 130
SCALE: 1/4" = 1'-0"

NORTH

FLOOR PLAN LEGEND



CASEWORK ELEVATION TAG



CASEWORK GENERAL NOTES:

CASEWORK TYPE / HEIGHTS:

BASE CABINETS:

TB*	BASE CABINET	42" A.F.F.
B*	BASE CABINET	36" A.F.F.
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CONSULTANT:

ENLARGED CASEWORK PLANS & INTERIOR ELEVATIONS

BUILDING 400 MODERNIZATION NEW CLASSROOM/ LIBRARY MEDIA CENTER

WALNUT VALLEY UNIFIED SCHOOL DISTRICT
DIAMOND BAR HIGH SCHOOL
21400 PATHFINDER RD. DIAMOND BAR, CA 91765

SEAL:

sgh ARCHITECTS

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PROJECT NUMBER:	19-47100-00
PROJECT STATUS:	CD 100%
PROJECT ISSUED:	03/15/21
REVISION:	DESCRIPTION:
DATE:	ADDENDUM - 1
10-25-2022	

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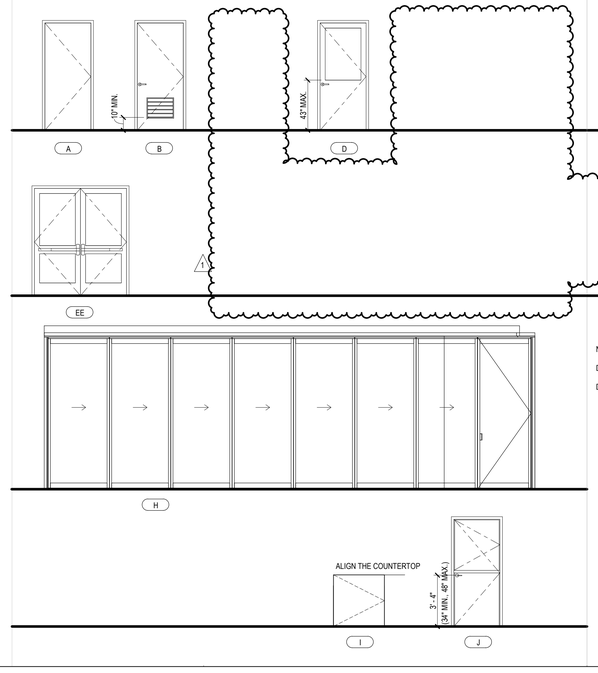
DOOR AND FRAME SCHEDULE

NUMBER	NO. OF PANELS	DOOR PANEL WIDTH	DOOR PANEL HEIGHT	DOOR PANEL THICKNESS	DOOR PANEL MATERIAL	DOOR PANEL TYPE	DOOR PANEL FINISH	GLASS TYPE	FRAME DEPTH	DOOR FRAME MATERIAL	DOOR FRAME TYPE	DOOR FRAME FINISH	PANIC DEVICE	HARDWARE SET	DETAILS HEAD	DETAILS JAMB LEFT	DETAILS JAMB RIGHT	DETAILS SILL	COMMENTS
101.1	1	3' - 0"	7' - 0"	1 3/4"	HM	A	PT		0"	HM	3	PT	Yes	01	9/A10.20	2/A10.20	9/A10.20	1/A10.20	
101.2	1	3' - 0"	7' - 0"	1 3/4"	HM	A	PT		0"	HM	2	PT	No	11	5/A10.21	4/A10.21	4/A10.21	1/A10.21	
102.1	1	3' - 0"	7' - 0"	1 3/4"	HM	A	PT		0"	HM	3	PT	Yes	01	9/A10.20	9/A10.20	2/A10.20	1/A10.20	
102.2	1	3' - 0"	7' - 0"	1 3/4"	HM	A	PT		0"	HM	2	PT	No	11	5/A10.21	4/A10.21	4/A10.21	1/A10.21	
103.1	1	3' - 0"	7' - 0"	1 3/4"	HM	A	PT		0"	HM	3	PT	Yes	01	9/A10.20	2/A10.20	9/A10.20	1/A10.20	
103.2	1	3' - 0"	7' - 0"	1 3/4"	HM	A	PT		0"	HM	2	PT	No	11	5/A10.21	4/A10.21	4/A10.21	1/A10.21	
104.1	1	3' - 0"	7' - 0"	1 3/4"	HM	A	PT		0"	HM	3	PT	Yes	01	9/A10.20	9/A10.20	2/A10.20	1/A10.20	
104.2	1	3' - 0"	7' - 0"	1 3/4"	HM	A	PT		0"	HM	2	PT	No	11	5/A10.21	4/A10.21	4/A10.21	1/A10.21	
105.1	1	3' - 0"	7' - 0"	1 3/4"	HM	A	PT		0"	HM	2	PT	Yes	02	9/A10.20	2/A10.20	2/A10.20	1/A10.20	
105.2	1	3' - 0"	7' - 0"	1 3/4"	HM	A	PT		0"	HM	3	PT	Yes	01	9/A10.20	9/A10.20	9/A10.20	1/A10.20	
105.3	1	3' - 0"	7' - 0"	1 3/4"	HM	A	PT		0"	HM	2	PT	No	11	5/A10.21	4/A10.21	4/A10.21	1/A10.21	
106.1	1	3' - 0"	7' - 0"	1 3/4"	HM	A	PT		0"	HM	2	PT	Yes	01	9/A10.20	2/A10.20	9/A10.20/ 2/A10.20	1/A10.20	
106.2	1	3' - 0"	7' - 0"	1 3/4"	HM	A	PT		0"	HM	2	PT	No	11	5/A10.21	4/A10.21	4/A10.21	1/A10.21	
107.1	1	3' - 0"	7' - 0"	1 3/4"	HM	A	PT		0"	HM	2	PT	Yes	02	9/A10.20	2/A10.20	2/A10.20	1/A10.20	
107.2	1	3' - 0"	7' - 0"	1 3/4"	HM	A	PT		0"	HM	2	PT	No	11	5/A10.21	4/A10.21	4/A10.21	1/A10.21	
108.1	1	3' - 0"	7' - 0"	1 3/4"	HM	A	PT		0"	HM	2	PT	Yes	01	9/A10.20	2/A10.20	2/A10.20	1/A10.20	
108.2	1	3' - 0"	7' - 0"	1 3/4"	HM	A	PT		0"	HM	2	PT	No	11	5/A10.21	4/A10.21	4/A10.21	1/A10.21	
109.1	1	3' - 0"	7' - 0"	1 3/4"	HM	A	PT		0"	HM	2	PT	No	01	9/A10.20	2/A10.20	2/A10.20	1/A10.20	
109.2	1	3' - 0"	7' - 0"	1 3/4"	HM	A	PT		0"	HM	2	PT	Yes	17	5/A10.21	4/A10.21	4/A10.21	1/A10.21	
110.1	1	3' - 0"	7' - 0"	1 3/4"	HM	A	PT		0"	HM	2	PT	Yes	01	9/A10.20	2/A10.20	2/A10.20	1/A10.20	
110.2	1	3' - 0"	7' - 0"	1 3/4"	HM	A	PT		0"	HM	2	PT	No	11	5/A10.21	4/A10.21	4/A10.21	1/A10.21	
111.1	1	3' - 0"	7' - 0"	1 3/4"	HM	A	PT		0"	HM	2	PT	Yes	01	9/A10.20	2/A10.20	2/A10.20	1/A10.20	
111.2	1	3' - 0"	7' - 0"	1 3/4"	HM	A	PT		0"	HM	2	PT	No	11	5/A10.21	4/A10.21	4/A10.21	1/A10.21	
112	1	3' - 0"	7' - 0"	1 3/4"	HM	D	PT	GL-1	0"	HM	1	PT	No	02	9/A10.10	8/A10.10	8/A10.10	1/A10.20	
113	1	3' - 0"	7' - 0"	1 3/4"	HM	D	PT	GL-1	0"	HM	1	PT	No	02	9/A10.10	8/A10.10	8/A10.10	1/A10.20	
114.1	1	3' - 0"	7' - 0"	1 3/4"	HM	A	PT		0"	HM	2	PT	Yes	01	9/A10.20	8/A10.10	8/A10.10	1/A10.20	
114.2	1	3' - 0"	7' - 0"	1 3/4"	HM	A	PT		0"	HM	2	PT	No	11	5/A10.21	4/A10.21	4/A10.21	1/A10.21	
115	1	3' - 0"	7' - 0"	1 3/4"	HM	A	PT		0"	HM	1	PT	No	16	4/A10.21	4/A10.21	4/A10.21	2/A10.21 (SIM)	
116	2	3' - 0"	7' - 0"	1 3/4"	HM	EE	PT	GL-1		HM	4	PT	Yes	03	9/A10.20	9/A10.20	9/A10.20	1/A10.20	
117.1	1	3' - 0"	7' - 0"	1 3/4"	HM	A	PT		0"	HM	2	PT	Yes	02	9/A10.20	2/A10.20	2/A10.20	1/A10.20	
117.2	1	3' - 0"	7' - 0"	1 3/4"	HM	A	PT		0"	HM	2	PT	No	11	5/A10.21	4/A10.21	4/A10.21	1/A10.21	
118.1	1	3' - 0"	7' - 0"	1 3/4"	HM	A	PT		0"	HM	2	PT	Yes	02	9/A10.20	8/A10.10	8/A10.10	1/A10.20	
118.2	1	3' - 0"	7' - 0"	1 3/4"	HM	A	PT		0"	HM	4	PT	Yes	01	9/A10.20	9/A10.20	9/A10.20	1/A10.20	
118.3	1	3' - 0"	7' - 0"	1 3/4"	HM	A	PT		0"	HM	2	PT	No	11	5/A10.21	4/A10.21	4/A10.21	1/A10.21	
119.1	1	3' - 0"	7' - 0"	1 3/4"	HM	A	PT		0"	HM	3	PT	Yes	01	9/A10.10	3/A10.20	9/A10.20	1/A10.20	
119.2	1	3' - 0"	7' - 0"	1 3/4"	HM	A	PT		0"	HM	2	PT	No	11	5/A10.21	4/A10.21	4/A10.21	1/A10.21	
120.1	1	3' - 0"	7' - 0"	1 3/4"	HM	A	PT		0"	HM	3	PT	Yes	01	9/A10.20	9/A10.20	3/A10.20	1/A10.20	
120.2	1	3' - 0"	7' - 0"	1 3/4"	HM	A	PT		0"	HM	2	PT	No	11	5/A10.21	4/A10.21	4/A10.21	1/A10.21	
121.1	1	3' - 0"	7' - 0"	1 3/4"	HM	A	PT		0"	HM	3	PT	Yes	01	9/A10.20	2/A10.20	9/A10.20	1/A10.20	
121.2	1	3' - 0"	7' - 0"	1 3/4"	HM	A	PT		0"	HM	2	PT	No	11	5/A10.21	4/A10.21	4/A10.21	1/A10.21	
122	1	3' - 0"	7' - 0"	1 3/4"	HM	A	PT		0"	HM	1	PT	No	14	4/A10.21	4/A10.21	4/A10.21	1/A10.21	
123.2	5	16' - 6"	8' - 6"			H		GL-2		AL			Yes		10/A10.21	19/A10.21	19/A10.21	9/A10.21	FOLDING GLASS-PANEL PARTITION
123.3	5	16' - 6"	8' - 6"			H		GL-2		AL			Yes		10/A10.21	19/A10.21	19/A10.21	9/A10.21	FOLDING GLASS-PANEL PARTITION
123.4	1	3' - 0"	7' - 0"	1 3/4"	HM	A	PT		0"	HM	3	PT	Yes	01	9/A10.10	2/A10.20	9/A10.20	1/A10.20	
124	1	3' - 0"	7' - 0"	1 3/4"	HM	B	PT		0"	HM	1	PT	No	14	4/A10.21	4/A10.21	4/A10.21		
125	1	3' - 0"	7' - 0"	1 3/4"	HM	B	PT		0"	HM	1	PT	No	14	4/A10.21	4/A10.21	4/A10.21		
126	1	3' - 0"	7' - 0"	1 3/4"	HM	A	PT		0"	HM	3	PT	No	06	9/A10.20	2/A10.20	9/A10.20	1/A10.20	
127	1	3' - 0"	7' - 0"	1 3/4"	HM	B	PT		0"	HM	1	PT	No	13	4/A10.21	4/A10.21	4/A10.21	3/A10.21	
128	1	3' - 0"	7' - 0"	1 3/4"	HM	B	PT		0"	HM	1	PT	No	13	4/A10.21	4/A10.21	4/A10.21	3/A10.21	
129.1	1	3' - 0"	7' - 0"	1 3/4"	HM	A	PT		0"	HM	3	PT	No	10	9/A10.20	8/A10.10	9/A10.20	1/A10.20	
129.2	1	3' - 0"	7' - 0"	1 3/4"	HM	A	PT		0"	HM	2	PT	No	12	5/A10.21	4/A10.21	4/A10.21	1/A10.21	
130.1	1	3' - 0"	7' - 0"	1 3/4"	HM	A	PT		0"	HM	3	PT	Yes	01	9/A10.20	9/A10.20	3/A10.20	1/A10.20	
130.2	1	3' - 0"	2' - 6"	1 3/4"	PL	I			0"	PL			No	15					COUNTER SWING DOOR
201.1	1	3' - 0"	7' - 0"	1 3/4"	HM	A	PT		0"	HM	2	PT	No	11	5/A10.21	4/A10.21	4/A10.21	1/A10.21	

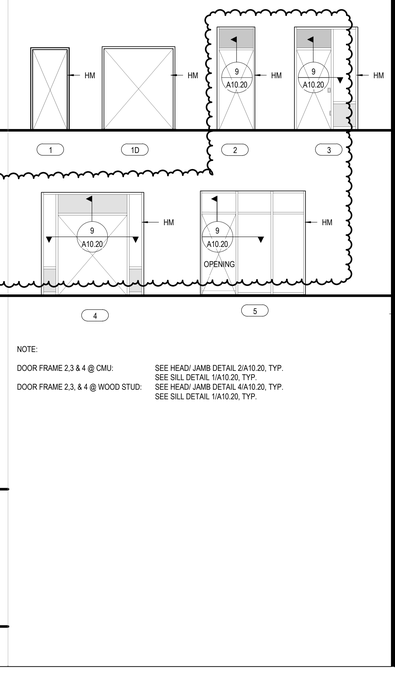
DOOR AND FRAME SCHEDULE

NUMBER	NO. OF PANELS	DOOR PANEL WIDTH	DOOR PANEL HEIGHT	DOOR PANEL THICKNESS	DOOR PANEL MATERIAL	DOOR PANEL TYPE	DOOR PANEL FINISH	GLASS TYPE	FRAME DEPTH	DOOR FRAME MATERIAL	DOOR FRAME TYPE	DOOR FRAME FINISH	PANIC DEVICE	HARDWARE SET	DETAILS HEAD	DETAILS JAMB LEFT	DETAILS JAMB RIGHT	DETAILS SILL	COMMENTS
201.2	1	3' - 0"	7' - 0"	1 3/4"	HM	A	PT		0"	HM	3	PT	Yes	02	2/A10.20	2/A10.20	9/A10.20	1/A10.20	
202.1	1	3' - 0"	7' - 0"	1 3/4"	HM	A	PT		0"	HM	2	PT	No	11	5/A10.21	4/A10.21	4/A10.21	1/A10.21	
202.2	1	3' - 0"	7' - 0"	1 3/4"	HM	A	PT		0"	HM	3	PT	Yes	02	2/A10.20	9/A10.20	2/A10.20	1/A10.20	
203.1	1	3' - 0"	7' - 0"	1 3/4"	HM	A	PT		0"	HM	2	PT	No	11	5/A10.21	4/A10.21	4/A10.21	1/A10.21	
203.2	1	3' - 0"	7' - 0"	1 3/4"	HM	A	PT		0"	HM	3	PT	Yes	01	2/A10.20	9/A10.20	2/A10.20	1/A10.20	
204.1	1	3' - 0"	7' - 0"	1 3/4"	HM	A	PT		0"	HM	2	PT	No	11	5/A10.21	4/A10.21	4/A10.21	1/A10.21	
204.2	1	3' - 0"	7' - 0"	1 3/4"	HM	A	PT		0"	HM	3	PT	Yes	01	2/A10.20	9/A10.20	2/A10.20	1/A10.20	
204.3	1	3' - 0"	7' - 0"	1 3/4"	HM	A	PT		0"	HM	3	PT	Yes	01	9/A10.20	8/A10.10	8/A10.10	1/A10.20	
205	1	3' - 0"	7' - 0"	1 3/4"	HM	A	PT		0"	HM	3	PT	Yes	01	2/A10.20	2/A10.20	9/A10.20	1/A10.20	
206.1	2	3' - 0"	7' - 0"	1 3/4"	HM	EE	PT	GL-1		HM	4	PT	Yes	03	5/A10.20	2/A10.20	4/A10.20	1/A10.20	
206.3	5	19' - 0"	8' - 6"			H		GL-1		AL			Yes		13/A10.21	12/A10.21	17/A10.21	11/A10.21	FOLDING GLASS STOREFRONT
206.4	5	19' - 0"	8' - 6"			H		GL-1		AL			No		13/A10.21	17/A10.21	12/A10.21	11/A10.21	FOLDING GLASS STOREFRONT
207.1	1	3' - 0"	7' - 0"	1 3/4"	HM	J	PT			HM	1	PT		11	4/A10.21	4/A10.21	4/A10.21	1/A10.21	THE DUTCH DOOR SHALL BE EQUIPPED WITH LATCHING DEVICES ON EITHER TOP OR BOTTOM LEAF TO ALLOW LEAVES TO LATCH TOGETHER. THE SPACE BETWEEN THE LEAVES SHALL BE PROTECTED WITH DEVICES SUCH AS ASTRAGALS TO LIMIT THE PASSAGE OF SMOKE.
207.2	1	3' - 0"	7' - 0"	1 3/4"	HM	A	PT		0"	HM	2	PT	No	04	9/A10.10	9/A10.20	2/A10.20	1/A10.20	
208.1	1	3' - 0"	7' - 0"	1 3/4"	HM	A	PT		0"	HM	1	PT	No	18	4/A10.21	4/A10.21	4/A10.21	1/A10.21	
208.2	1	3' - 0"	7' - 0"	1 3/4"	HM	A	PT		0"	HM	2	PT	No	04	9/A10.20	2/A10.20	2/A10.20	1/A10.20	
209	1	3' - 0"	2' - 6"	1 3/4"	PL					PL			No	15					COUNTER SWING DOOR
210.1	6	23' - 6 1/2"	8' - 6"			H		GL-2		AL			No		10/A10.21	19/A10.21	19/A10.21	9/A10.21	FOLDING GLASS-PANEL PARTITION
210.2	1	3' - 0"	7' - 0"	1 3/4"	HM	A	PT		0"	HM	1	PT	Yes	01	2/A10.20	2/A10.20	2/A10.20	1/A10.20	
212.1	1	3' - 0"	7' - 0"	1 3/4"	HM	A	PT		0"	HM	2	PT	No	11	5/A10.21	4/A10.21	4/A10.21	1/A10.21	
212.2	1	3' - 0"	7' - 0"	1 3/4"	HM	A	PT		0"	HM	1	PT	Yes						
213	1	3' - 0"	7' - 0"	1 3/4"	HM	A	PT		0"	HM	2	PT	No	07	9/A10.20	8/A10.10	8/A10.10	1/A10.20	
214	1	3' - 0"	7' - 0"	1 3/4"	HM	A	PT		0"	HM	2	PT	No	09	9/A10.20	2/A10.20	2/A10.20	1/A10.20	
215	1	3' - 0"	7' - 0"	1 3/4"	HM	A	PT		0"	HM	1	PT	No	13	4/A10.21	4/A10.21	4/A10.21	3/A10.21	
216	1	3' - 0"	7' - 0"	1 3/4"	HM	A	PT		0"	HM	1	PT	No	13	4/A10.21	4/A10.21	4/A10.21	3/A10.21	
217	1	3' - 0"	7' - 0"	1 3/4"	HM	A	PT		0"	HM	1	PT	No	14	4/A10.21	4/A10.21	4/A10.21	2/A10.21 (SIM)	
218.1	1	3' - 0"	7' - 0"	1 3/4"	HM	A	PT		0"	HM	4	PT	Yes	01	9/A10.20	9/A10.20	9/A10.20	1/A10.20	
218.2	1	3' - 0"	7' - 0"	1 3/4"	HM	A	PT		0"	HM	2	PT	Yes	11	5/A10.21	4/A10.21	4/A10.21	1/A10.21	
219	1	3' - 0"	7' - 0"	1 3/4"	HM	A	PT		0"	HM	5	PT	No	11	5/A10.21	4/A10.21	5/A10.21	1/A10.21	
220.1	1	3' - 0"	7' - 0"	1 3/4"	HM	A	PT		0"	HM	3	PT	Yes	02	9/A10.20	2/A10.20	9/A10.20	1/A10.20	
220.2	1	3' - 0"	7' - 0"	1 3/4"	HM	A	PT		0"	HM	2	PT	No	11	5/A10.21	4/A10.21	4/A10.21	1/A10.21	
221	2	3' - 0"	7' - 0"	1 3/4"	HM	EE	PT	GL-2	0"	HM	1D	PT	No	20	4/A10.21	4/A10.21	4/A10.21	1/A10.21	
222	1	3' - 0"	7' - 0"	1 3/4"	HM	A	PT		0"	HM	2	PT	Yes	02	9/A10.10	8/A10.10	8/A10.10	1/A10.20	
223	1	3' - 0"	7' - 0"	1 3/4"	HM	A	PT		0"	HM	1	PT	No	12	4/A10.21	4/A10.21	4/A10.21	1/A10.21	
224	1	3' - 0"	7' - 0"	1 3/4"	HM	A	PT		0"	HM	1	PT	No	12	4/A10.21	4/A10.21	4/A10.21	1/A10.21	
225	2	3' - 0"	7' - 0"	1 3/4"	HM	EE	PT	GL-2	0"	HM	1D	PT	Yes	19	4/A10.21	4/A10.21	4/A10.21	1/A10.21	
226.1	1	3' - 0"	7' - 0"	1 3/4"	HM	A	PT		0"	HM	3	PT	Yes	01	9/A10.20	9/A10.20	2/A10.20	1/A10.20	
226.2	1	3' - 0"	7' - 0"	1 3/4"	HM	A	PT		0"	HM	2	PT	No	11	5/A10.21	4/A10.21	4/A10.21	1/A10.21	
227	1	3' - 0"	7' - 0"	1 3/4"	HM	A	PT		0"	HM	1	PT	No	08	4/A10.20	3/A10.20	3/A10.20	1/A10.20	

DOOR PANEL TYPES



DOOR FRAME TYPES



NOTE:

DOOR FRAME 2,3 & 4 @ CMU:	SEE HEAD/ JAMB DETAIL 2/A10.20, TYP. SEE SILL DETAIL 1/A10.20, TYP.
DOOR FRAME 2,3, & 4 @ WOOD STUD:	SEE HEAD/ JAMB DETAIL 4/A10.20, TYP. SEE SILL DETAIL 1/A10.20, TYP.

DOOR SCHEDULE GENERAL NOTES

A. INSTALL STOREFRONT MULLIONS AND HOLLOW METAL FRAMES WITH 1/4 INCH SHIM AND JOINT SEALANT AROUND PERIMETER OF FRAME.

B. GLASS TYPES FOR DOORS ARE INDICATED IN DOOR AND FRAME SCHEDULE OR IN SPECIFICATIONS. GLASS TYPES FOR FRAMES ARE INDICATED ON FRAME ELEVATIONS OR IN SPECIFICATIONS.

C. OVERHEAD COILING DOORS, GRILLES AND SECTIONAL DOORS WIDTH AND HEIGHT DIMENSIONS INDICATED IN DOOR SCHEDULE REPRESENT FURNISHED OPENING SIZE. CONTRACTOR TO COORDINATE EXACT SIZE OF DOOR WITH MANUFACTURER.

D. COORDINATE LOCATIONS OF CONCEALED CONDUIT AND J-BOXES REQUIRED FOR SECURITY SYSTEM HARDWARE PRIOR TO MANUFACTURING OF HOLLOW METAL FRAMES AND COORDINATE WITH SECURITY HARDWARE AND DEVICES.

E. PROVIDE HEAD RECEIVERS AT ALUMINUM STOREFRONTS AND CURTAINWALLS AS REQUIRED FOR FRAME AND STRUCTURAL DEFLECTION.

F. SEE SPECIFICATIONS 087100 HARDWARE FOR HARDWARE SET NOTED IN DOOR SCHEDULE.

G. DOOR HARDWARE:
   a. MOUNTING HEIGHT OF LATCHING HARDWARE SHALL BE 34" TO 44" A.F.F. PER CBC SEC. 11B-404.2.7. AND 11B-309.4.
   b. PRESSURE TO OPERATE THE DOOR SHALL NOT EXCEED THE FOLLOWING, PER CBC SEC. 11B-404.2.9:
      - EXTERIOR DOORS: 5 POUNDS
      - INTERIOR DOORS: 5 POUNDS
      - FIRE RATED DOORS: 15 POUNDS
   c. DOOR CLOSERS AND GATE CLOSERS SHALL BE ADJUSTED SO THAT FROM AN OPEN POSITION OF 90 DEGREES, THE TIME REQUIRED TO MOVE THE DOOR TO A POSITION OF 12 DEGREES FROM THE LATCH IS 5 SECONDS MINIMUM. 11B-404.2.8.1.
   d. ALL HARDWARE SHALL MEET THE REQUIREMENTS OF CBC SECTION 11B-404.2.7, 1008.1.9, AND 11B-309.4
   e. THRESHOLDS SHALL COMPLY WITH CBC SECTION 11B-404.2.5.
   f. FLOOR STOPS SHALL NOT BE LOCATED IN THE PATH OF TRAVEL AND 4" MAXIMUM FROM WALLS. POLICY 99-08.
   g. * THE MAXIMUM EFFORT TO OPERATE A FIRE RATED DOOR MAY BE INCREASED TO THE MAXIMUM * ALLOWABLE BY THE APPROPRIATE ADMINISTRATIVE AUTHORITY, NOT TO EXCEED 15 LBS. 11B-404.2.9.
   h. ALL NEW CLASSROOM ENTRY DOORS SHALL BE LOCKABLE FROM THE INSIDE AND SHALL BE OPERABLE WITH ANY SPECIAL KNOWLEDGE OR EFFORT.

H. ALL OPENING DIMENSIONS SHALL BE FIELD VERIFY BY CONTRACTOR.

DOOR SCHEDULE LEGEND

AL	ALUMINUM	PT	PAINT (FIELD PAINT H.M. DOOR & FRAME)
AO	AUTOMATIC DOOR OPERATOR	S	SINGLE
AS	AS SPECIFIED	SG	STAIN GRADE WOOD VENEER
CW	CURTAIN WALL	SC	SOLID CORE
D	DOUBLE	SF	STOREFRONT
DE	DELAYED EGRESS	STL	STEEL
DP	DOOR POSITION SWITCH	SM	SMOKE BARRIER SEAL
EL	ELECTRICAL LOCK	UC	UNDERCUT
FA	FIRE ALARM INTERFACE RELAY	VA	VINYL ACRYLIC CLAD FINISH
FF	FACTORY FURNISHED	WF	WELDED STEEL FRAME
FRG	FIRE RATED GLASS & FRAMING	WD	WOOD (SOLID CORE)
FS	SYSTEM		
GL	GLASS		
HB	HELP BUTTON		
HM	HOLLOW METAL		
I	INTERCOM		
IP	INFILL PANEL		
LA	LOCAL ALARM		
MM	METAL MESH		
N/A	NOT APPLICABLE		
NR	NOT RATED		
PD	PANIC DEVICE		
PLO	PRIVATE LOCK		
PL	PLASTIC LAMINATE		
PP	PUSH PLATE (# OF PLATES)		
PR	PAIR OF DOOR (LEAF SIZE)		

GLAZING ABBREVIATIONS:

GL-1 - 1" INSULATED GLAZE TEMPERED, TINTED

GL-2 - 1/4" INTERIOR GLAZING, CLEAR TEMPERED

GL-3 - 1/4" INTERIOR GLAZING, ONE WAY VISION GLASS (ISF-13A AT ROOM 209 CIRCULATION DESK)

CONSULTANT:

DOOR AND FRAME SCHEDULE

BUILDING 400 MODERNIZATION NEW CLASSROOM/ LIBRARY MEDIA CENTER

WALNUT VALLEY UNIFIED SCHOOL DISTRICT
DIAMOND BAR HIGH SCHOOL
21400 PATHFINDER RD. DIAMOND BAR, CA 91765

SEALS:

sgh ARCHITECTS

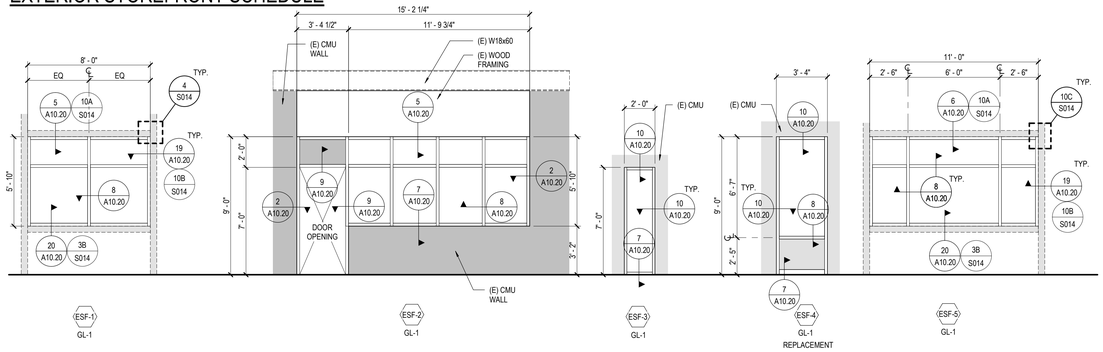
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PROJECT NUMBER: 19-47100-00
PROJECT STATUS: CD 100%
PROJECT ISSUED: 05/26/20
REVISION: DATE: DESCRIPTION:
1 10-25-2022 ADDENDUM - 1

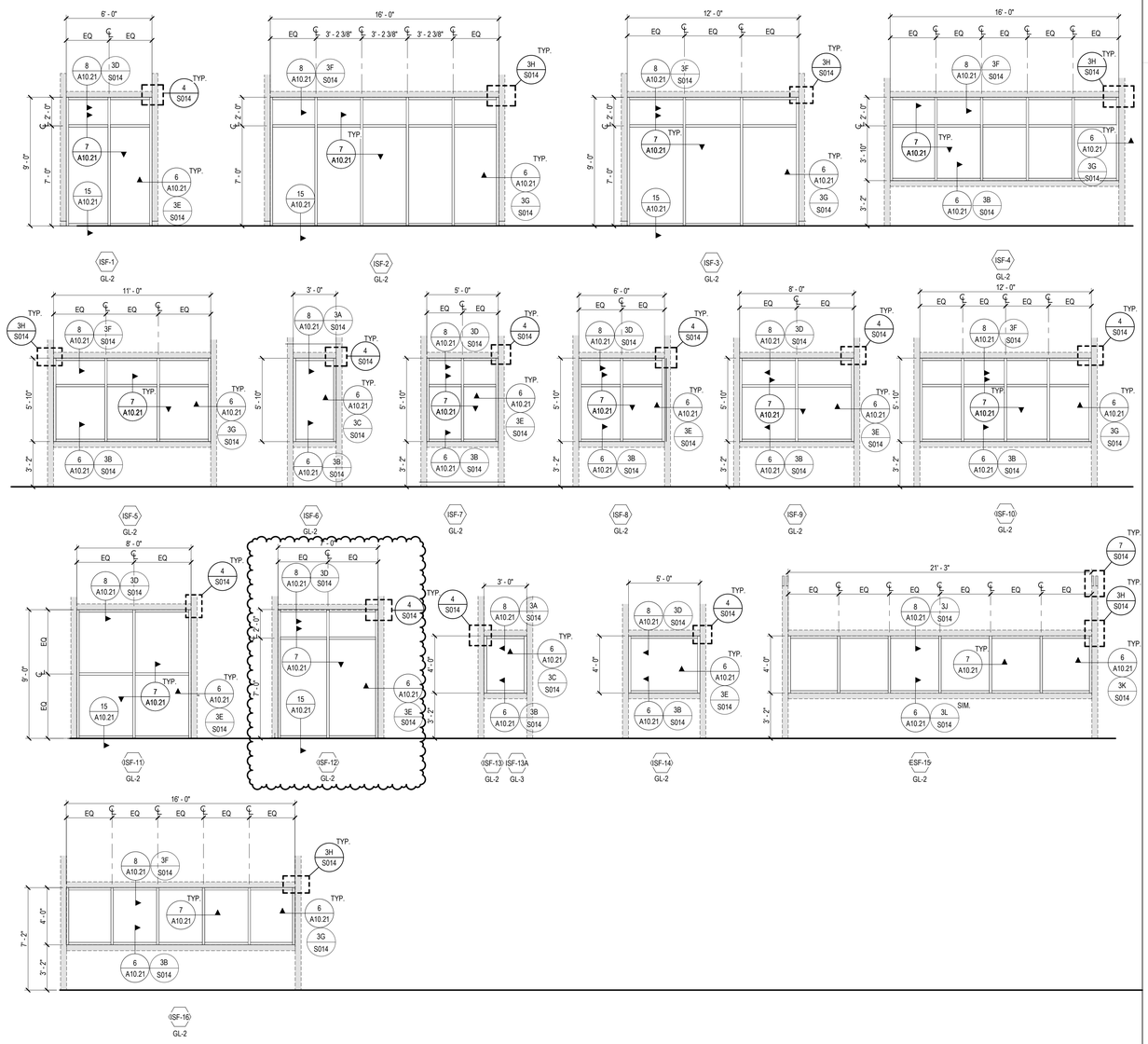
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EXTERIOR STOREFRONT SCHEDULE



INTERIOR STOREFRONT SCHEDULE



STOREFRONT GENERAL NOTES

A. INSTALL STOREFRONT MULLIONS AND HOLLOW METAL FRAMES WITH 1/4 INCH SHIM AND JOINT SEALANT AROUND PERIMETER OF FRAME.

B. GLASS TYPES FOR DOORS ARE INDICATED IN DOOR AND FRAME SCHEDULE OR IN SPECIFICATIONS. GLASS TYPES FOR FRAMES ARE INDICATED ON FRAME ELEVATIONS OR IN SPECIFICATIONS.

C. OVERHEAD COILING DOORS, GRILLES AND SECTIONAL DOORS WIDTH AND HEIGHT DIMENSIONS INDICATED IN DOOR SCHEDULE REPRESENT FURNISHED OPENING SIZE. CONTRACTOR TO COORDINATE EXACT SIZE OF DOOR WITH MANUFACTURER.

D. COORDINATE LOCATIONS OF CONCEALED CONDUIT AND J-BOXES REQUIRED FOR SECURITY SYSTEM HARDWARE PRIOR TO MANUFACTURING OF HOLLOW METAL FRAMES AND COORDINATE WITH SECURITY HARDWARE AND DEVICES.

E. PROVIDE HEAD RECEIVERS AT ALUMINUM STOREFRONTS AND CURTAINWALLS AS REQUIRED FOR FRAME AND STRUCTURAL DEFLECTION.

F. ALL OPENING DIMENSIONS SHALL BE FIELD VERIFY BY CONTRACTOR.

STOREFRONT GLAZING TYPES

GL-1 - 1" INSULATED GLAZE TEMPERED, TINTED

GL-2 - 1/4" INTERIOR GLAZING, CLEAR TEMPERED / GL-2B - 1/4" FROSTED TEMPERED GLAZING - SCENERY BACKDROP

GL-3 - 1/4" INTERIOR GLAZING, ONE WAY VISION GLASS (ISF-13A AT ROOM 209 CIRCULATION DESK)

CONSULTANT:

STOREFRONT SCHEDULE

BUILDING 400 MODERNIZATION NEW CLASSROOM/ LIBRARY MEDIA CENTER

WALNUT VALLEY UNIFIED SCHOOL DISTRICT
DIAMOND BAR HIGH SCHOOL
21400 PATHFINDER RD. DIAMOND BAR, CA 91765

SEALS:

sgh ARCHITECTS

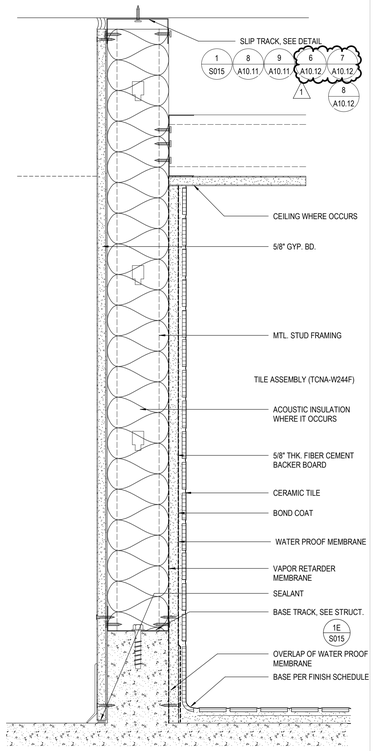
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PROJECT NUMBER: 19-47100-00
PROJECT STATUS: CD 100%
PROJECT ISSUED: 08/03/20
REVISION: DESCRIPTION: DATE:
1 ADDENDUM - 1 10-25-2022

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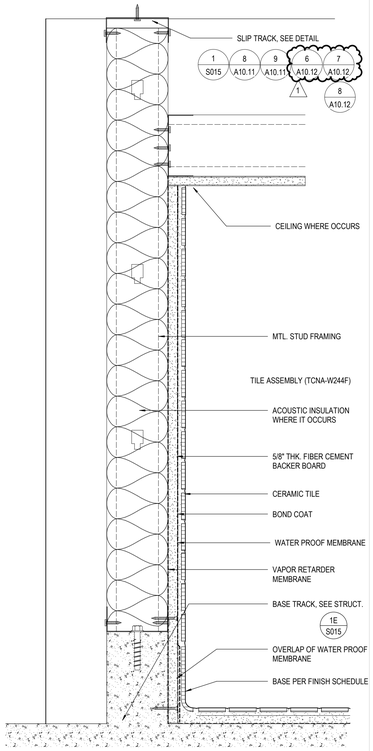
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NOTE:
WALL MAX. HEIGHT : 15'- 0", SEE DETAIL 3/S015 FOR MORE INFORMATION



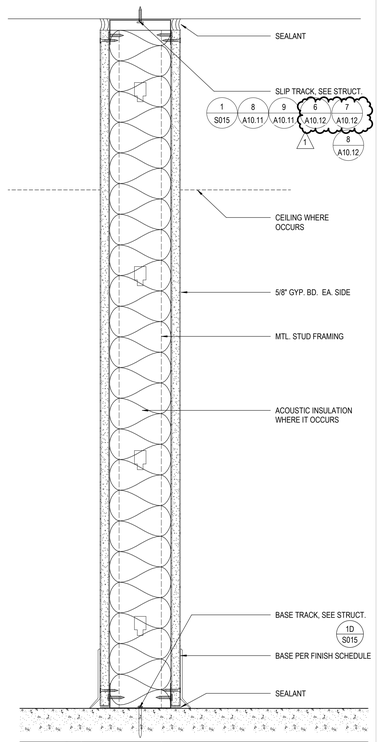
TYPE	4K	4" (400S162-54)	16 GA. METAL STUD AT 16" O.C.
TYPE	6K	5-1/2" (550S162-54)	16 GA. METAL STUD AT 16" O.C.

5 A9.20 WALL TYPE K- NON RATED FULL HEIGHT TILE WALL
SCALE: 3" = 1'-0"



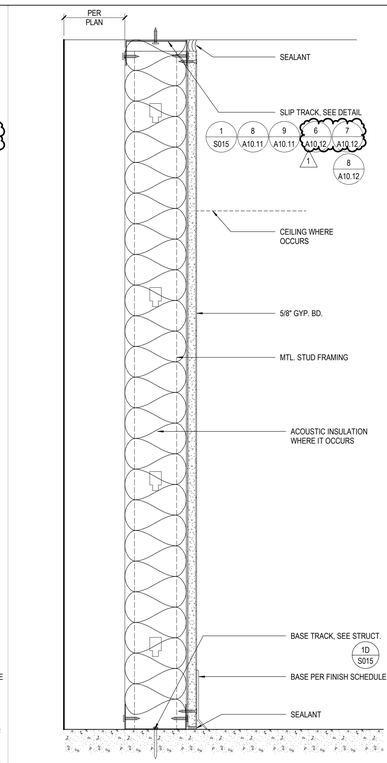
TYPE	4J	4" (400S162-54)	16 GA. METAL STUD AT 16" O.C.
TYPE	6J	5-1/2" (550S162-54)	16 GA. METAL STUD AT 16" O.C.

4 A9.20 WALL TYPE J - FURRED FULL HEIGHT TILE WALL
SCALE: 3" = 1'-0"



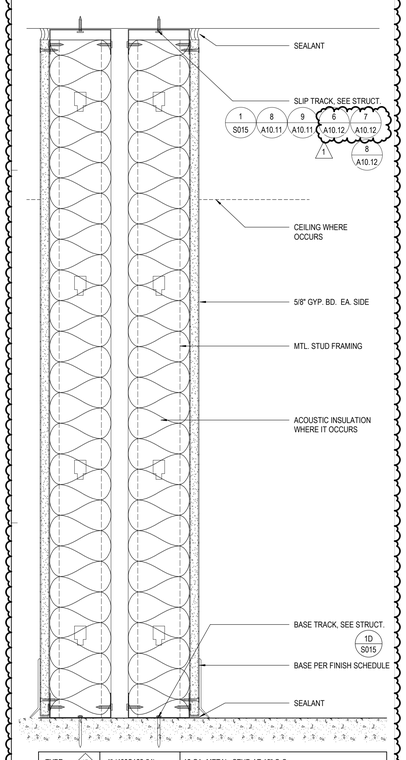
TYPE	4B	4" (400S162-54)	16 GA. METAL STUD AT 16" O.C.
TYPE	6B	5-1/2" (550S162-54)	16 GA. METAL STUD AT 16" O.C.
TYPE	8B	8" (800S162-54)	16 GA. METAL STUD AT 16" O.C.
TYPE	10B	10" (1000S162-54)	16 GA. METAL STUD AT 16" O.C.

2 A9.20 WALL TYPE B - NON RATED WALL
SCALE: 3" = 1'-0"



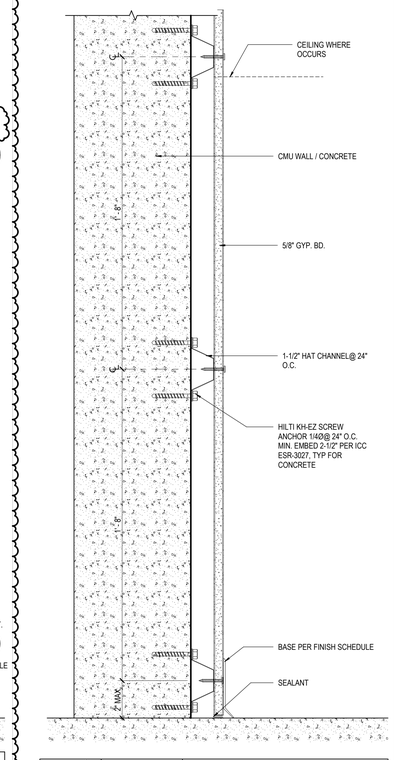
TYPE	2A	2 1/2" (200S162-54)	16 GA. METAL STUD AT 16" O.C.
TYPE	4A	4" (400S162-54)	16 GA. METAL STUD AT 16" O.C.
TYPE	6A	5-1/2" (550S162-54)	16 GA. METAL STUD AT 16" O.C.

1 A9.20 WALL TYPE A - FURRED WALL
SCALE: 3" = 1'-0"



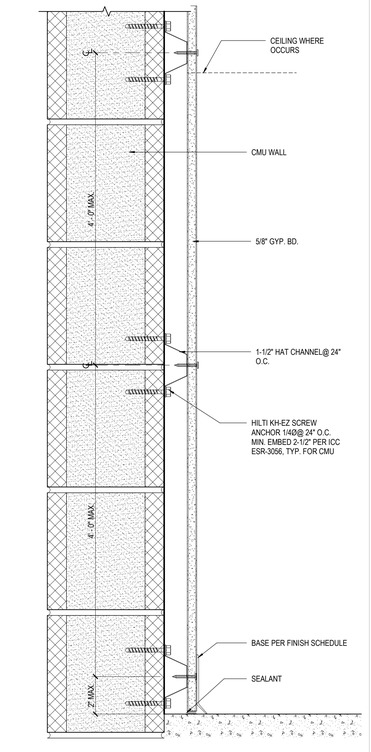
TYPE	4D	4" (400S162-54)	16 GA. METAL STUD AT 16" O.C.

12 A9.20 WALL TYPE D - NON RATED WALL
SCALE: 3" = 1'-0"



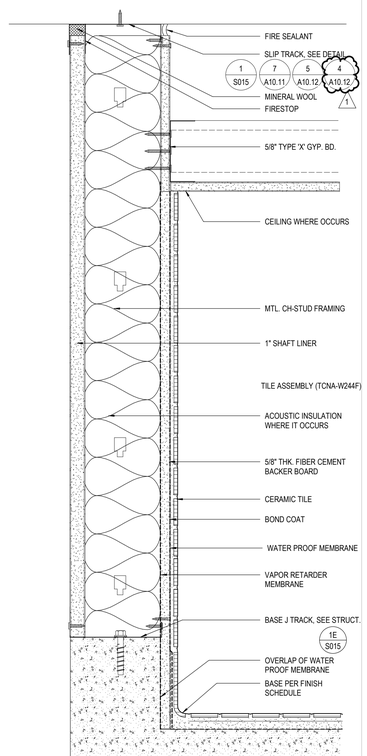
TYPE	1N	1-1/2" (150F125-54)	16 GA. HAT CHANNEL AT 24" O.C.

6 A9.20 WALL TYPE N - FURRED WALL@CONCRETE
SCALE: 3" = 1'-0"



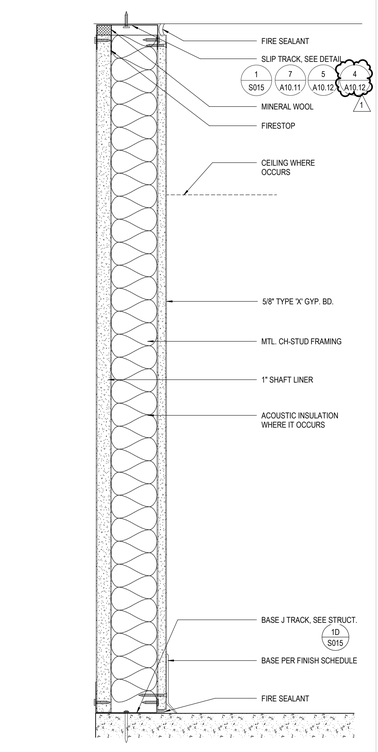
TYPE	1M	1-1/2" (150F125-54)	16 GA. HAT CHANNEL AT 24" O.C.

10 A9.20 WALL TYPE M - FURRED WALL@CMU
SCALE: 3" = 1'-0"



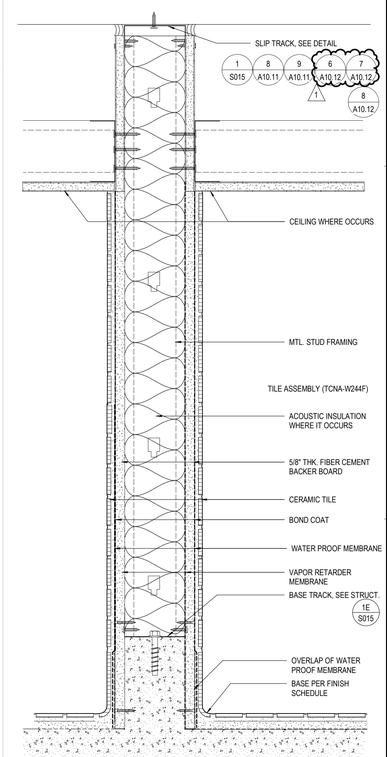
TYPE	4L	4" (400S162-54)	16 GA. METAL STUD AT 16" O.C. UL U442
TYPE	6L	5-1/2" (550S162-54)	16 GA. METAL STUD AT 16" O.C. UL U442

9 A9.20 WALL TYPE T - 1-HR RATED SHAFT TILE WALL
SCALE: 3" = 1'-0"



TYPE	4P	4" (400S162-54)	16 GA. METAL STUD AT 16" O.C. UL U499
TYPE	6P	5-1/2" (550S162-54)	16 GA. METAL STUD AT 16" O.C. UL U499

8 A9.20 WALL TYPE P - 1-HR SHAFT WALL
SCALE: 3" = 1'-0"



TYPE	4O	4" (400S162-54)	16 GA. METAL STUD AT 16" O.C.
TYPE	6O	5-1/2" (500S162-54)	16 GA. METAL STUD AT 16" O.C.

7 A9.20 WALL TYPE O - NON RATED FULL HEIGHT TILE WALL
SCALE: 3" = 1'-0"

10/24/2022 7:46:53 AM

CONSULTANT:

MODERNIZATION NEW CLASSROOM/ LIBRARY MEDIA CENTER

WALNUT VALLEY UNIFIED SCHOOL DISTRICT
DIAMOND BAR HIGH SCHOOL
21400 PATHFINDER RD. DIAMOND BAR, CA 91765

WALL TYPES

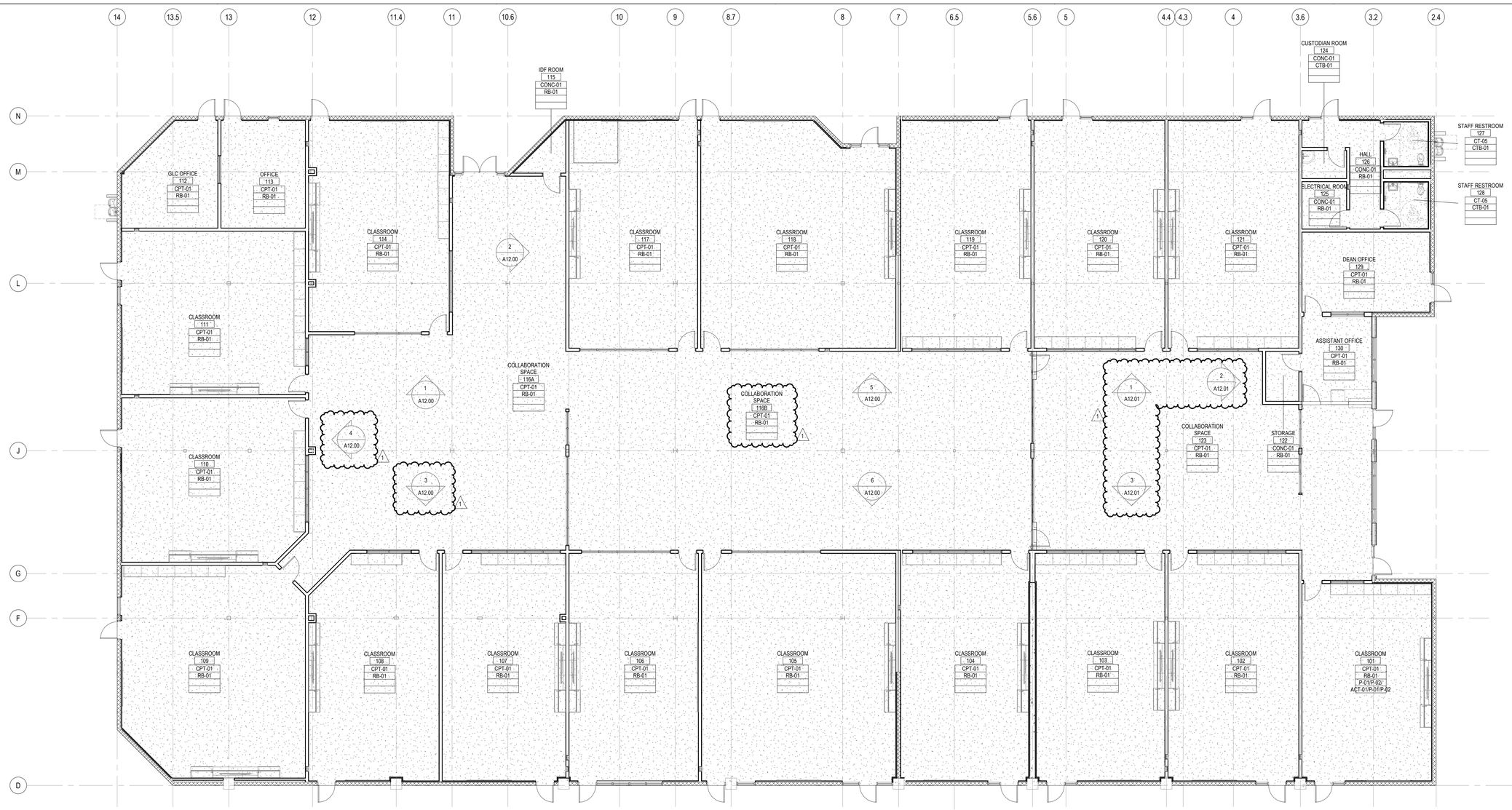
SEALS:

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PROJECT STATUS: CD 100%
PROJECT ISSUED: 05/26/20
REVISION: DATE: DESCRIPTION:
1 10-25-2022 ADDENDUM - 1

A9.20



1 INTERIOR FINISH PLAN LOWER LEVEL
A9.30 SCALE: 1/8" = 1'-0"

NORTH

_ROOM FINISH SCHEDULE_LOWER LEVEL_

ROOM NUMBER	ROOM NAME	FLOOR FINISH	BASE FINISH	WALL MATERIAL	WALL NORTH	WALL EAST	WALL SOUTH	WALL WEST	COMMENTS
101	CLASSROOM	CPT-01	RB-01	GWB	P-01/P-02	P-01/TWC-01	P-01	P-01/P-02/TWC-01	
102	CLASSROOM	CPT-01	RB-01	GWB	P-01/P-02	P-01/TWC-01	P-01	P-01/P-02/TWC-01	
103	CLASSROOM	CPT-01	RB-01	GWB	P-01/P-02	P-01/P-02/TWC-01	P-01	P-01/TWC-01	
104	CLASSROOM	CPT-01	RB-01	GWB	P-01/P-02	P-01/P-02/TWC-01	P-01	P-01/TWC-01	
105	CLASSROOM	CPT-01	RB-01	GWB	P-01/P-02	P-01/TWC-01	P-01	P-01/P-02/TWC-01	
106	CLASSROOM	CPT-01	RB-01	GWB	P-01/P-02	P-01/P-02/TWC-01	P-01	P-01/TWC-01	
107	CLASSROOM	CPT-01	RB-01	GWB	P-01/P-02	P-01/TWC-01	P-01	P-01/P-02/TWC-01	
108	CLASSROOM	CPT-01	RB-01	GWB	P-01/P-02	P-01/P-02/TWC-01	P-01	P-01/TWC-01	
109	CLASSROOM	CPT-01	RB-01	GWB	P-01/P-02/TWC-01	P-01/P-02/TWC-01	P-01/TWC-01	P-01/TWC-01	
110	CLASSROOM	CPT-01	RB-01	GWB	P-01/P-02/TWC-01	P-01/P-02	P-01/TWC-01	P-01	
111	CLASSROOM	CPT-01	RB-01	GWB	P-01/TWC-01	P-01/P-02/TWC-01	P-01/P-02/TWC-01	P-01	
112	GLC OFFICE	CPT-01	RB-01	GWB	P-01	P-01	P-01	P-01	
113	OFFICE	CPT-01	RB-01	GWB	P-01	P-01	P-01	P-01	
114	CLASSROOM	CPT-01	RB-01	GWB	P-01	P-01/P-02/TWC-01	P-01/P-02	P-01/TWC-01	
115	IDF ROOM	CONC-01	RB-01	GWB	P-01	P-01	P-01	P-01	
116A	COLLABORATION SPACE	CPT-01	RB-01	GWB	P-01/P-02/P-03/P-04/P-05	P-01/P-02/P-03/P-04/P-05	P-01/P-02/P-03/P-04/P-05	P-01/P-02/P-03/P-04/P-05	
116B	COLLABORATION SPACE	CPT-01	RB-01	GWB	P-01/P-02/P-03/P-04/P-05	P-01/P-02/P-03/P-04/P-05	P-01/P-02/P-03/P-04/P-05	P-01/P-02/P-03/P-04/P-05	
117	CLASSROOM	CPT-01	RB-01	GWB	P-01	P-01/P-02/TWC-01	P-01/P-02	P-01/TWC-01	
118	CLASSROOM	CPT-01	RB-01	GWB	P-01	P-01/TWC-01	P-01/P-02	P-01/P-02/TWC-01	
119	CLASSROOM	CPT-01	RB-01	GWB	P-01	P-01/P-02/TWC-01	P-01/P-02	P-01/TWC-01	
120	CLASSROOM	CPT-01	RB-01	GWB	P-01	P-01/P-02/TWC-01	P-01/P-02	P-01/TWC-01	
121	CLASSROOM	CPT-01	RB-01	GWB	P-01	P-01/TWC-01	P-01/P-02	P-01/P-02/TWC-01	
122	STORAGE	CONC-01	RB-01	GWB	P-01	P-01	P-01	P-01	
123	COLLABORATION SPACE	CPT-01	RB-01	GWB	P-01/P-02/P-03/P-04/P-05	P-03	P-01/P-02/P-03/P-04/P-05	P-03	
124	CUSTODIAN ROOM	CONC-01	CTB-01	GWB	P-01/FRP-01	P-01	P-01	P-01/FRP-01	
125	ELECTRICAL ROOM	CONC-01	RB-01	GWB	P-01	P-01	P-01	P-01	
126	HALL	CONC-01	RB-01	GWB	P-01	P-01	P-01	P-01	
127	STAFF RESTROOM	CT-05	CTB-01	GWB	CT-01/CT-02/CT-03/CT-04	CT-01/CT-02/CT-03/CT-04	CT-01/CT-02/CT-03/CT-04	CT-01/CT-02/CT-03/CT-04	
128	STAFF RESTROOM	CT-05	CTB-01	GWB	CT-01/CT-02/CT-03/CT-04	CT-01/CT-02/CT-03/CT-04	CT-01/CT-02/CT-03/CT-04	CT-01/CT-02/CT-03/CT-04	
129	DEAN OFFICE	CPT-01	RB-01	GWB	P-01	P-01	P-01	P-01	
130	ASSISTANT OFFICE	CPT-01	RB-01	GWB	P-01	P-01	P-01	P-01	

FINISH SPECIFICATION LEGEND

FINISH	MANUFACTURER	PRODUCT/STYLE NUMBER	PATTERN/FINISH	COLOR	FIRE RATING	SIZE	COMMENTS
ACOUSTIC CEILING GRID							
ACT-01	ARMSTRONG	ULTIMA LAY-IN AND TEGULAR		WHITE		24"x24", 24"x48"	
ACT-02	ARMSTRONG	DESIGNFLEX FOR FORMATIONS	SHAPES - PATTERN FCSH 5	WHITE		VARIES	VARIOUS SUSPENED SHAPES WITH INTEGRATED LINEAR LIGHTING PER RCP
CARPET TILE							
CPT-01	MOHAWK	VISUAL EDGE/ANGLED PERCEPTION 8T496 / QB496	HALF-LAP INSTALLATION	979 METAL GREY		12" x 36" PLANK	
CERAMIC WALL TILE							
CT-01	DALTILE	NATURAL HUES		QH63 PEARL WHITE		4"x4"	
CT-02	DALTILE	NATURAL HUES		QH19 ROSE BEIGE		4"x4"	
CT-03	DALTILE	NATURAL HUES		QH70 WISTERIA		4"x4"	
CT-04	DALTILE	NATURAL HUES		QH51 EGGPLANT		4"x4"	
CTB-01	DALTILE	KEYSTONE COLORBODY		D618 CASTLEROCK		2"x2"	COVED WALL BASE
CONCRETE							
CONC-01	CURECRETE CHEMICALS	ASHFORD FORMULA					COMBINATION HARDENER AND SEALER
FIBERGLASS REINFORCED PANEL							
FRP-01	CONSTRUCTION SPECIALTIES	HRB-4CN		TO MATCH EXISTING			
FLOOR TILE							
CT-05	DALTILE	KEYSTONE COLORBODY		D618 CASTLEROCK		2"x2"	
PAINT							
P-01	PPG	VOICE OF COLOR		PPG14-31 PARAFFIN			WALLS AND CEILINGS, TYPICAL U.N.O.
P-02	PPG	VOICE OF COLOR		PPG1176-6 MIRABELLA			
P-03	PPG	VOICE OF COLOR		PPG1204-6 GOLDEN OPPORTUNITY			
P-04	PPG	VOICE OF COLOR		PPG1001-5 DOVER GRAY			
P-05	PPG	VOICE OF COLOR		PPG1001-3 THIN ICE			
P-06				7150 REGAL JEWEL			TYPICAL CAMPUS EXTERIOR DOOR COLOR
P-07				DISTRICT BLACK			TYPICAL CAMPUS DOOR FRAME COLOR
PLASTIC LAMINATE							
PL-01	NEVAMAR	WM6528E		VERMONT MAPLE			GRAIN TO RUN VERTICALLY
PL-02	WILSONART	15504-31	TRACELESS	CHARCOAL VELVET			USE MATCHING 3MM EDGEBAND
RESILIENT WALL BASE							
RB-01	JOHNSONITE	RUBBER BASE, TYPE TS		48 GREY		4" COVE BASE	
SOLID SURFACE							
SS-01	WILSONART	9115GS	MATTE	ZEN GREY			
TACKABLE WALL SURFACE							
TWC-01	KOROSEAL	WALLTALKERS / SMS22061		HARBOR			USE MANUFACTURER'S ALUMINUM TRIM AT ALL EXPOSED EDGES

FINISH FLOOR PLAN LEGEND

ROOM FINISH TAG

ROOM NAME
101
C11
RB1
P1
ACT1

- ROOM NAME
- ROOM NUMBER
- FLOOR FINISH/ COLOR (TYP. ALL WALLS, U.N.O.)
- BASE TYPE/ COLOR (TYP. ALL WALLS, U.N.O.)
- WALL FINISH/ COLOR (TYP. ALL WALLS, U.N.O.)
- CEILING FINISH/ COLOR (TYP. ALL WALLS, U.N.O.)

FINISH FLOOR PLAN NOTES

A. ROOM FINISH SCHEDULE GENERAL NOTES APPLY TO ALL ROOM FINISH SCHEDULE SHEETS.

B. SEE SPECIFICATIONS FOR PAINTING OF ITEMS NOT NOTED IN THE ROOM FINISH SCHEDULE.

C. EXPOSED CONCRETE FLOOR SLABS NOT SCHEDULED TO RECEIVE A FINISH SHALL RECEIVE A CURING AND SEALING COMPOUND UNLESS OTHERWISE NOTED.

D. ALL GYPSUM WALLBOARD BULKHEADS SHALL BE PAINTED P-01 UNLESS OTHERWISE NOTED.

E. ALL EXPOSED HVAC DUCTING SHALL BE PAINTED P-01 UNLESS OTHERWISE NOTED.

F. CEILING HEIGHTS, AS NOTED ON THE REFLECTED CEILING, PLANS ARE MEASURED FROM THE FINISH FLOOR OF THE ROOM.

G. CONTRACTOR SHALL FURNISH AND INSTALL WALL BASE AROUND CASEWORK AND MILLWORK.

H. WHERE FLOOR FINISH CHANGES FROM ONE ROOM TO ANOTHER, SET JOINT OF THE MATERIALS AT THE CENTER OF THE COMMUNICATING DOOR.

I. SEE SHEET 1/A10.12 FOR TYPICAL MARKER BOARD AND 2/A10.12 FOR TYPICAL TACKWALL DETAILS.

J. SEE REFLECTED CEILING PLANS FOR CEILING TYPES AND HEIGHT.

K. ALL EXPOSED STRUCTURAL COLUMNS SHALL BE PAINTED P-01 UNLESS NOTED OTHERWISE.

INTERIOR WALL FINISHES SHALL COMPLY WITH THE FOLLOWING CLASS: CLASS A, FLAMES SPREAD 0-25, SMOKE DEVELOPED INDEX 0-450, CLASS B, FLAME SPREAD 26-76, SMOKE DEVELOPED INDEX 0-450, CLASS C, FLAME SPREAD 76-200, SMOKE DEVELOPED INDEX 450. REFERENCE TABLE 803.11 FOR CLASS REQUIREMENTS FOR EXITS AND ROOMS.

FINISH FLOOR PLAN - LOWER LEVEL AND FINISH SCHEDULE

BUILDING 400 MODERNIZATION NEW CLASSROOM/ LIBRARY MEDIA CENTER

WALNUT VALLEY UNIFIED SCHOOL DISTRICT
DIAMOND BAR HIGH SCHOOL
21400 PATHFINDER RD. DIAMOND BAR, CA 91765

CONSULTANT:

SEALS:

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PROJECT STATUS: CD 100%
PROJECT ISSUED: 05/26/20
REVISION DATE: DESCRIPTION:
1 10-25-2022 ADDENDUM - 1

A9.30

10/24/2022 7:46:58 AM



1 A9.31 INTERIOR FINISH PLAN MAIN LEVEL
SCALE: 1/8" = 1'-0"

NORTH

_ROOM FINISH SCHEDULE_MAIN LEVEL_

ROOM NUMBER	ROOM NAME	FLOOR FINISH	BASE FINISH	WALL MATERIAL	WALL NORTH	WALL EAST	WALL SOUTH	WALL WEST	COMMENTS
201	CLASSROOM	CPT-01	RB-01	GWB	P-01/P-02	P-01/TWC-01	P-01	P-01/P-02/TWC-01	
202	CLASSROOM	CPT-01	RB-01	GWB	P-01/P-02	P-01/P-02/TWC-01	P-01	P-01/TWC-01	
203	CLASSROOM	CPT-01	RB-01	GWB	P-01/P-02	P-01/P-02/TWC-01	P-01	P-01/TWC-01	
204	CLASSROOM	CPT-01	RB-01	GWB	P-01/P-02	P-01/P-02/TWC-01	P-01	P-01/TWC-01	
205	HALL	CPT-01	RB-01	GWB	P-01	P-01	P-01	P-01	
206	LIBRARY (READING AREA)	CPT-01	RB-01	GWB	P-01/P-02/P-03/P-04/P-05	P-01/P-02/P-03/P-04/P-05	P-01/P-02/P-03/P-04/P-05	P-01/P-02/P-03/P-04/P-05	
207	TEXT BOOK WORK AREA	CPT-01	RB-01	GWB	P-01	P-01	P-01	P-01	
208	LIBRARY OFFICE & WORKROOM	CPT-01	RB-01	GWB	P-01	P-01	P-01	P-01	
209	CIRCULATION DESK	CPT-01	RB-01	GWB	P-01/P-02/P-03/P-04/P-05	-	-	P-01	
210	COMPUTER AREA	CPT-01	RB-01	GWB	P-01/P-03	P-01	P-01	P-01	
212	CAREER CENTER	CPT-01	RB-01	GWB	P-01	P-01	P-01	P-01	
213	HALL	CONC-01	RB-01	GWB	P-01	P-01	P-01	P-01	
214	ELECTRICAL ROOM	CONC-01	RB-01	GWB	P-01	P-01	P-01	P-01	
215	ALL GENDER RESTROOM	CT-05	CTB-01	GWB	CT-01/CT-02/CT-03/CT-04	CT-01/CT-02/CT-03/CT-04	CT-01/CT-02/CT-03/CT-04	CT-01/CT-02/CT-03/CT-04	
216	ALL GENDER RESTROOM	CT-05	CTB-01	GWB	CT-01/CT-02/CT-03/CT-04	CT-01/CT-02/CT-03/CT-04	CT-01/CT-02/CT-03/CT-04	CT-01/CT-02/CT-03/CT-04	
217	DATA	CONC-01	RB-01	GWB	P-01	P-01	P-01	P-01	
218	CLASSROOM	CPT-01	RB-01	GWB	P-01	P-01/P-02/TWC-01	P-01/P-02	P-01/TWC-01	
219	COLLABORATION SPACE	CPT-01	RB-01	GWB	P-01	P-01	P-01	P-01	
220	CLASSROOM	CPT-01	RB-01	GWB	P-01	P-01/P-02/TWC-01	P-01/P-02	P-01/TWC-01	
221	COLLABORATION SPACE	CPT-01	RB-01	GWB	P-01	P-01	P-01	P-01	
222	HALL	CPT-01	RB-01	GWB	P-01	P-01	P-01	P-01	
223	GLC OFFICE	CPT-01	RB-01	GWB	P-01	P-01	P-01	P-01	
224	OFFICE	CPT-01	RB-01	GWB	P-01	P-01	P-01	P-01	
225	COLLABORATION SPACE	CPT-01	RB-01	GWB	P-01	P-01	P-01	P-01	
226	CLASSROOM	CPT-01	RB-01	GWB	P-01	P-01/TWC-01	P-01/P-02	P-01/P-02/TWC-01	
227	CUSTODIAN ROOM	CONC-01	CTB-01	GWB	P-01	P-01	P-01	P-01	

FINISH SPECIFICATION LEGEND

FINISH	MANUFACTURER	PRODUCT/STYLE NUMBER	PATTERN/FINISH	COLOR	FIRE RATING	SIZE	COMMENTS
ACOUSTIC CEILING GRID							
ACT-01	ARMSTRONG	ULTIMA LAY-IN AND TEGULAR		WHITE		24"x24", 24"x48"	
ACT-02	ARMSTRONG	DESIGNFLEX FOR FORMATIONS	SHAPES - PATTERN FCSH 5	WHITE		VARIES	VARIOUS SUSPENED SHAPES WITH INTEGRATED LINEAR LIGHTING PER RCP
CARPET TILE							
CPT-01	MOHAWK	VISUAL EDGE/ANGLED PERCEPTION BT496 / QB496	HALF-LAP INSTALLATION	979 METAL GREY		12" x 36" PLANK	
CERAMIC WALL TILE							
CT-01	DALTILE	NATURAL HUES		QH63 PEARL WHITE		4"x4"	
CT-02	DALTILE	NATURAL HUES		QH19 ROSE BEIGE		4"x4"	
CT-03	DALTILE	NATURAL HUES		QH70 WISTERIA		4"x4"	
CT-04	DALTILE	NATURAL HUES		QH51 EGGPLANT		4"x4"	
CTB-01	DALTILE	KEYSTONE COLORBODY		D618 CASTLEROCK		2"x2"	COVED WALL BASE
CONCRETE							
CONC-01	CURECRETE CHEMICALS	ASHFORD FORMULA					COMBINATION HARDENER AND SEALER
FRP-01	CONSTRUCTION SPECIALTIES	IRR-ION		TO MATCH EXISTING			FIBERGLASS REINFORCED PANEL
FLOOR TILE							
CT-05	DALTILE	KEYSTONE COLORBODY		D618 CASTLEROCK		2"x2"	
PAINT							
P-01	PPG	VOICE OF COLOR		PPG14-31 PARAFFIN			WALLS AND CEILINGS, TYPICAL U.N.O.
P-02	PPG	VOICE OF COLOR		PPG1176-6 MIRABELLA			
P-03	PPG	VOICE OF COLOR		PPG1204-6 GOLDEN OPPORTUNITY			
P-04	PPG	VOICE OF COLOR		PPG1001-5 DOVER GRAY			
P-05	PPG	VOICE OF COLOR		PPG1001-3 THIN ICE			
P-06				7150 REGAL JEWEL			TYPICAL CAMPUS EXTERIOR DOOR COLOR
P-07				DISTRICT BLACK			TYPICAL CAMPUS DOOR FRAME COLOR
PLASTIC LAMINATE							
PL-01	NEVAMAR	WM5528E		VERMONT MAPLE			GRAIN TO RUN VERTICALLY
PL-02	WILSONART	15504-31	TRACELESS	CHARCOAL VELVET			USE MATCHING 3MM EDGEBAND
RESILIENT WALL BASE							
RB-01	JOHNSONITE	RUBBER BASE, TYPE TS		48 GREY		4" COVE BASE	
SOLID SURFACE							
SS-01	WILSONART	9115GS	MATTE	ZEN GREY			
TACKABLE WALL SURFACE							
TWC-01	KOROSEAL	WALLTALKERS / SMS22061		HARBOR			USE MANUFACTURER'S ALUMINUM TRIM AT ALL EXPOSED EDGES

FINISH FLOOR PLAN LEGEND

ROOM FINISH TAG

ROOM NAME
101 — ROOM NUMBER
CT1 — FLOOR FINISH/ COLOR (TYP. ALL WALLS, U.N.O.)
RB1 — BASE TYPE/ COLOR (TYP. ALL WALLS, U.N.O.)
P1 — WALL FINISH/ COLOR (TYP. ALL WALLS, U.N.O.)
ACT1 — CEILING FINISH/ COLOR (TYP. ALL WALLS, U.N.O.)

FINISH FLOOR PLAN NOTES

A. ROOM FINISH SCHEDULE GENERAL NOTES APPLY TO ALL ROOM FINISH SCHEDULE SHEETS.

B. SEE SPECIFICATIONS FOR PAINTING OF ITEMS NOT NOTED IN THE ROOM FINISH SCHEDULE.

C. EXPOSED CONCRETE FLOOR SLABS NOT SCHEDULED TO RECEIVE A FINISH SHALL RECEIVE A CURING AND SEALING COMPOUND UNLESS OTHERWISE NOTED.

D. ALL GYPSUM WALLBOARD BULKHEADS SHALL BE PAINTED P-01 UNLESS OTHERWISE NOTED.

E. ALL EXPOSED HVAC DUCTING SHALL BE PAINTED P-01 UNLESS OTHERWISE NOTED.

F. CEILING HEIGHTS, AS NOTED ON THE REFLECTED CEILING, PLANS ARE MEASURED FROM THE FINISH FLOOR OF THE ROOM.

G. CONTRACTOR SHALL FURNISH AND INSTALL WALL BASE AROUND CASEWORK AND MILLWORK.

H. WHERE FLOOR FINISH CHANGES FROM ONE ROOM TO ANOTHER, SET JOINT OF THE MATERIALS AT THE CENTER OF THE COMMUNICATING DOOR.

I. SEE SHEET 1/A10.12 FOR TYPICAL MARKER BOARD AND 2/A10.12 FOR TYPICAL TACKWALL DETAILS.

J. SEE REFLECTED CEILING PLANS FOR CEILING TYPES AND HEIGHT.

K. ALL EXPOSED STRUCTURAL COLUMNS SHALL BE PAINTED P-01 UNLESS NOTED OTHERWISE.

1 INTERIOR WALL FINISHES SHALL COMPLY WITH THE FOLLOWING CLASS: CLASS A, FLAMES SPREAD 0-25, SMOKE DEVELOPED INDEX 0-450, CLASS B, FLAME SPREAD 26-75, SMOKE DEVELOPED INDEX 0-450, CLASS C, FLAME SPREAD 76-200, SMOKE DEVELOPED INDEX 450. REFERENCE TABLE 803.11 FOR CLASS REQUIREMENTS FOR EXITS AND ROOMS.

FINISH FLOOR PLAN - MAIN LEVEL AND FINISH SCHEDULE

BUILDING 400 MODERNIZATION NEW CLASSROOM/ LIBRARY MEDIA CENTER

WALNUT VALLEY UNIFIED SCHOOL DISTRICT
DIAMOND BAR HIGH SCHOOL
21400 PATHFINDER RD. DIAMOND BAR, CA 91765

CONSULTANT:

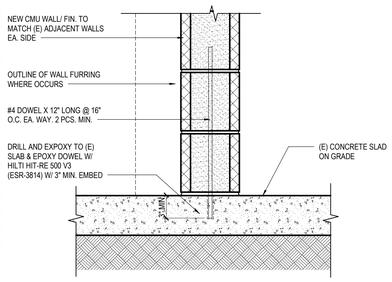
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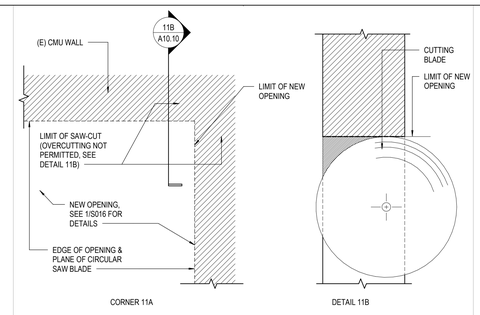
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1 10-25-2022 ADDENDUM - 1

A9.31

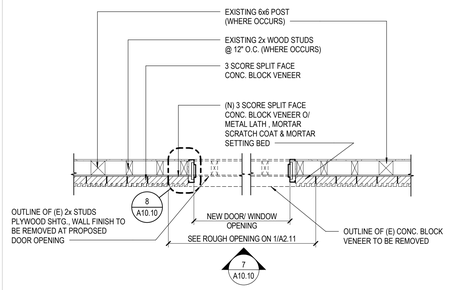
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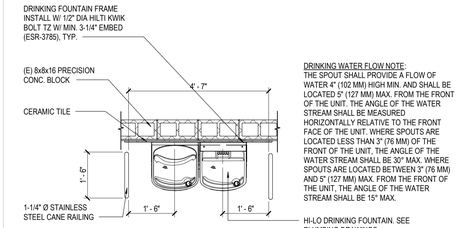
16 A10.10 SECTION_MASONRY IN-FILL DETAIL
SCALE: 1 1/2" = 1'-0"



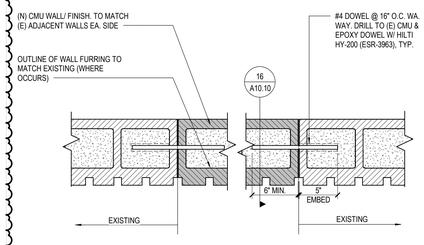
11 A10.10 EXISTING MASONRY WALL SAW-CUT DETAIL
SCALE: 3" = 1'-0"



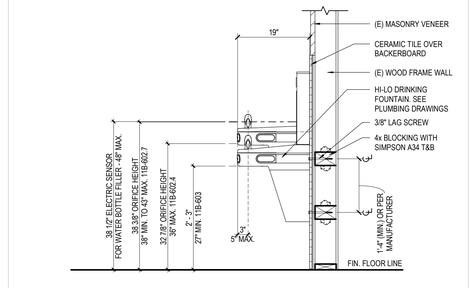
6 A10.10 PLAN_NEW OPENING OVER (E) MASONRY/ FURRING WALL
SCALE: 1/2" = 1'-0"



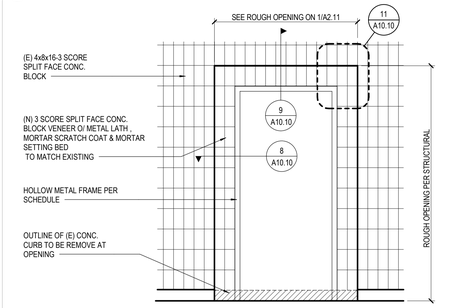
1 A10.10 PLAN_HI-LO DRINLING FOUNTAIN WITTH BOTTLE FILLER
SCALE: 1/2" = 1'-0"



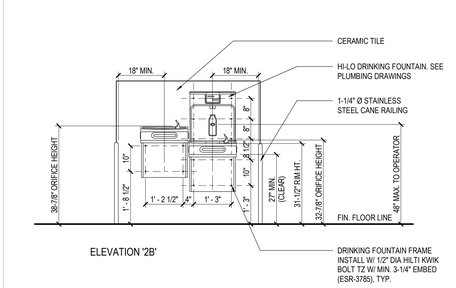
17 A10.10 PLAN_MASONRY IN-FILL DETAIL
SCALE: 1 1/2" = 1'-0"



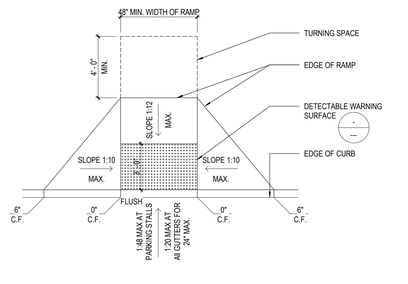
12 A10.10 HI-LO DRINKING FOUNTAIN WITH BOTTLE FILLER SECTION
SCALE: 3/4" = 1'-0"



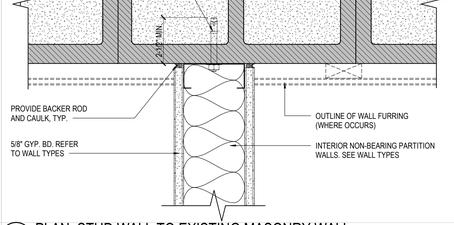
7 A10.10 ELEVATION_NEW OPENING OVER (E) MASONRY/ FURRING WALL
SCALE: 1/2" = 1'-0"



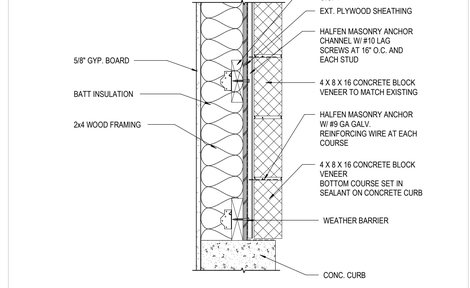
2 A10.10 ELEVATION_HI-LO DRINLKING FOUNTAIN WITH BOTTLE FILLER
SCALE: 1/2" = 1'-0"



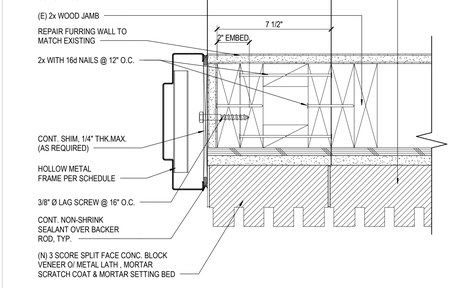
23 A10.10 CURB RAMP
SCALE: 1/4" = 1'-0"



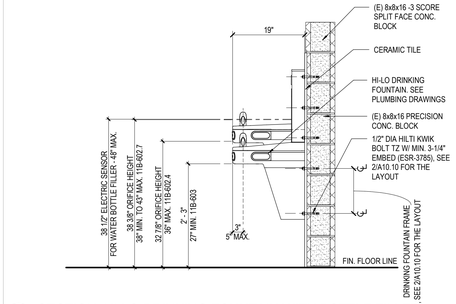
18 A10.10 PLAN_STUD WALL TO EXISTING MASONRY WALL
SCALE: 3" = 1'-0"



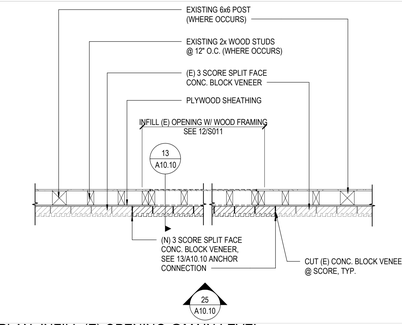
13 A10.10 CONCRETE BLOCK VENEER ANCHOR
SCALE: 1 1/2" = 1'-0"



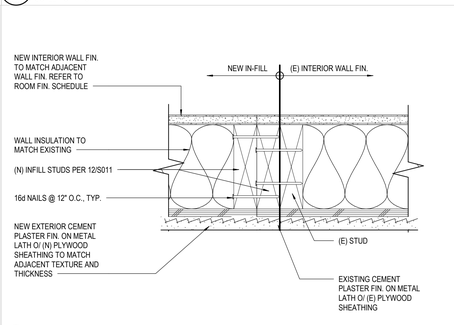
8 A10.10 DETAIL AT JAMB@MAIN LEVEL
SCALE: 3" = 1'-0"



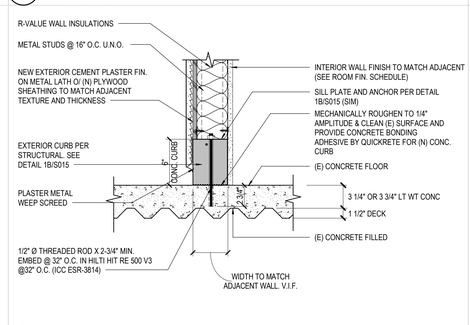
3 A10.10 SECTION_HI-LO DRINKING FOUNTAIN WITH BOTTLE FILLER
SCALE: 3/4" = 1'-0"



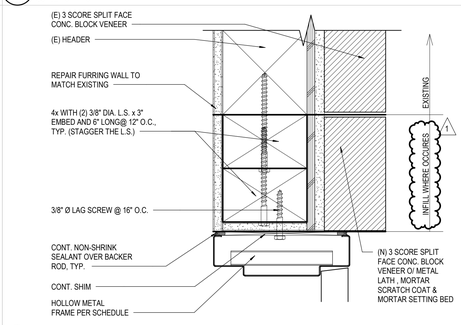
24 A10.10 PLAN_INFILL (E) OPENING @MAIN LEVEL
SCALE: 1/2" = 1'-0"



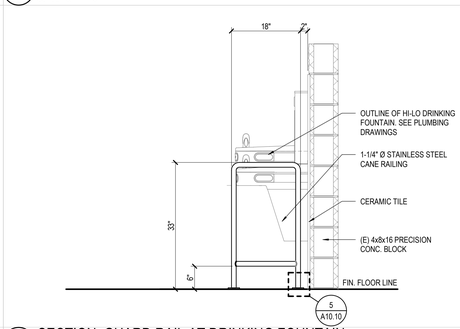
19 A10.10 PLAN_EXTERIOR STUD WALL IN-FILL
SCALE: 3" = 1'-0"



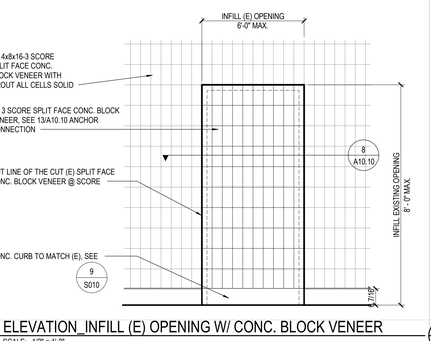
14 A10.10 WALL IN-FILL BOTTOM CONNECTION
SCALE: 1 1/2" = 1'-0"



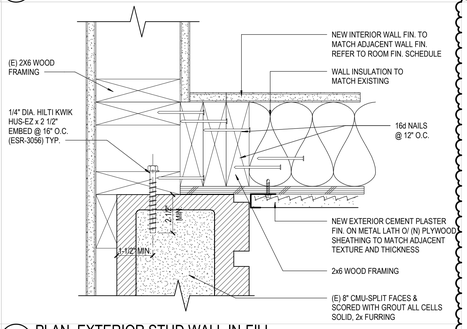
9 A10.10 DETAIL AT HEAD@ MAIN LEVEL
SCALE: 3" = 1'-0"



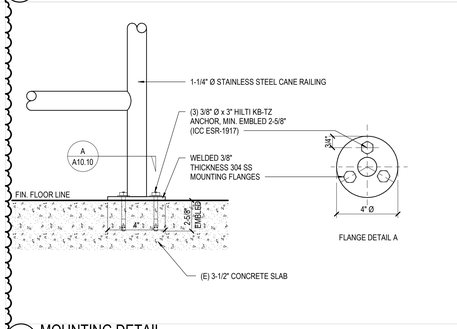
4 A10.10 SECTION_GUARD RAIL AT DRINKING FOUNTAIN
SCALE: 3/4" = 1'-0"



25 A10.10 ELEVATION_INFILL (E) OPENING W/ CONC. BLOCK VENEER
SCALE: 1/2" = 1'-0"



20 A10.10 PLAN_EXTERIOR STUD WALL IN-FILL
SCALE: 3" = 1'-0"



5 A10.10 MOUNTING DETAIL
SCALE: 3" = 1'-0"

CONSULTANT:

EXTERIOR DETAILS

BUILDING 400 MODERNIZATION NEW CLASSROOM/ LIBRARY MEDIA CENTER

WALNUT VALLEY UNIFIED SCHOOL DISTRICT
DIAMOND BAR HIGH SCHOOL
21400 PATHFINDER RD. DIAMOND BAR, CA 91765

SEALS:

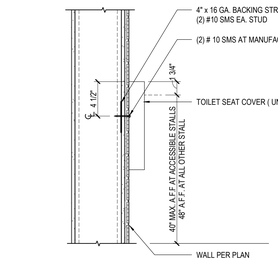
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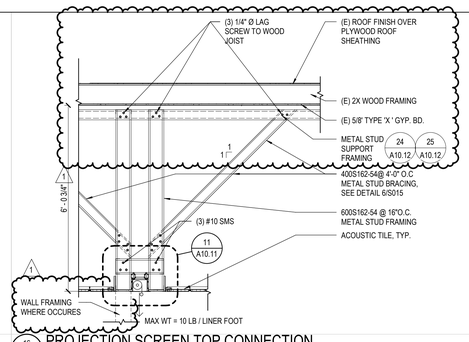
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PROJECT STATUS: CD 100%
PROJECT ISSUED: 05/26/20
REVISION: DATE: DESCRIPTION:
1 10-25-2022 ADDENDUM -1

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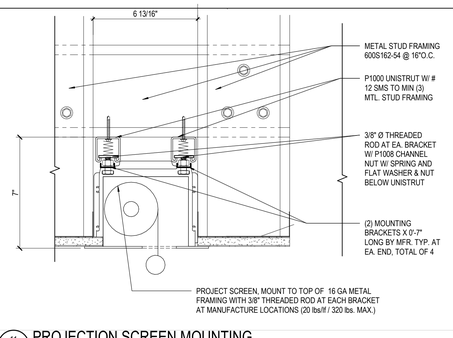
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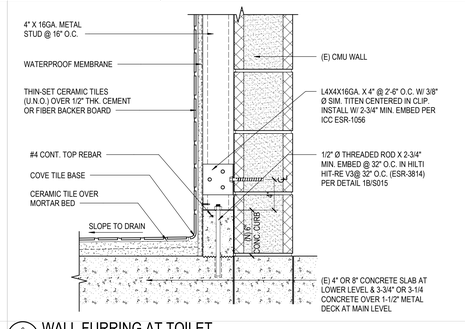
21 A10.11 TOILET SEAT COVER DISPENSER
SCALE: 1 1/2" = 1'-0"



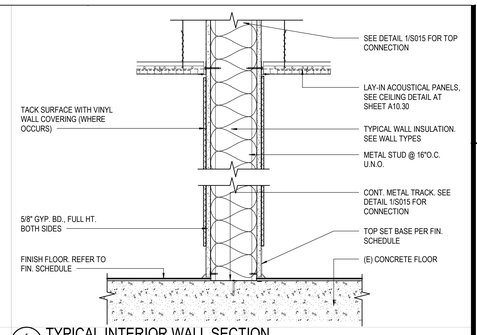
16 A10.11 PROJECTION SCREEN TOP CONNECTION
SCALE: 1/2" = 1'-0"



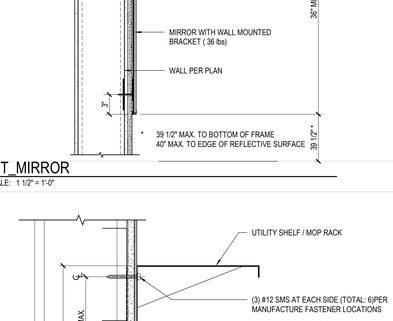
11 A10.11 PROJECTION SCREEN MOUNTING
SCALE: 3" = 1'-0"



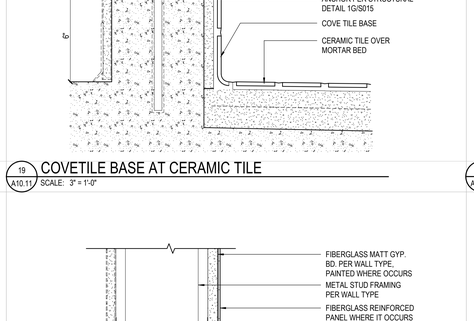
6 A10.11 WALL FURRING AT TOILET
SCALE: 1 1/2" = 1'-0"



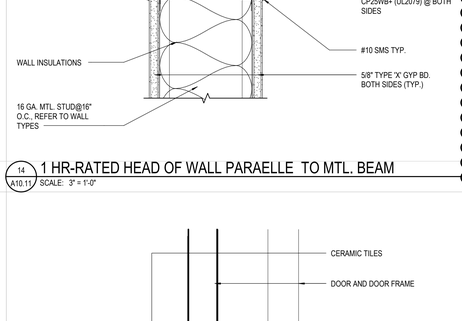
1 A10.11 TYPICAL INTERIOR WALL SECTION
SCALE: 1 1/2" = 1'-0"



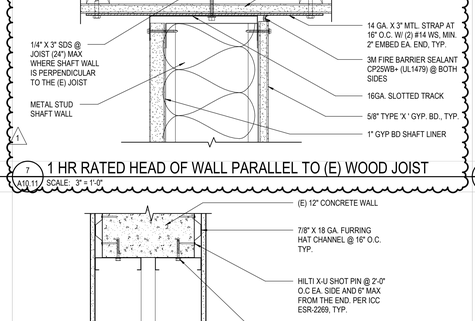
22 A10.11 INT_TOILET PAPER DISPENSER
SCALE: 1 1/2" = 1'-0"



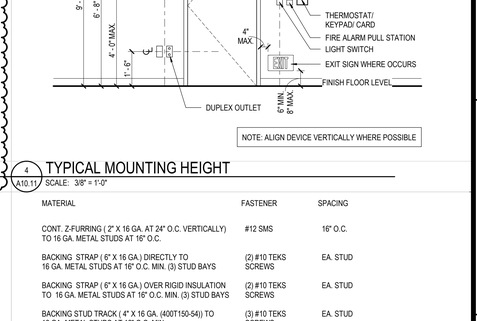
17 A10.11 EXISTING OPERABLE WALL TRACK
SCALE: 3" = 1'-0"



12 A10.11 RECESSED FIRE EXTINGUISHER MOUNTING DETAIL
SCALE: 1 1/2" = 1'-0"



9 A10.11 NON-RATED HEAD OF WALL PARALLEL TO (E) MTL. DECK
SCALE: 3" = 1'-0"



2 A10.11 WALL IN-FILL AT RESTROOM
SCALE: 1 1/2" = 1'-0"

23 A10.11 ELECTRIC HAND DRYER & SOAP DISPENSER
SCALE: 1 1/2" = 1'-0"

18 A10.11 RESILENT BASE
SCALE: 3" = 1'-0"

13 A10.11 SEMI RECESSED FIRE EXTINGUISHER MOUNTING DETAIL
SCALE: 1 1/2" = 1'-0"

8 A10.11 NON-RATED HEAD OF WALL PARAELLE TO (E) MTL. BEAM
SCALE: 3" = 1'-0"

3 A10.11 GRAB BAR MOUNTING DETAIL
SCALE: 3" = 1'-0"

24 A10.11 INT_MIRROR
SCALE: 1 1/2" = 1'-0"

19 A10.11 COVETILE BASE AT CERAMIC TILE
SCALE: 3" = 1'-0"

14 A10.11 1 HR-RATED HEAD OF WALL PARAELLE TO MTL. BEAM
SCALE: 3" = 1'-0"

7 A10.11 1 HR RATED HEAD OF WALL PARALLEL TO (E) WOOD JOIST
SCALE: 3" = 1'-0"

4 A10.11 TYPICAL MOUNTING HEIGHT
SCALE: 3/8" = 1'-0"

25 A10.11 UTILITY SHELF / MOP HOLDER
SCALE: 3" = 1'-0"

20 A10.11 SLIM-FOOT TILE BASE AT FRP
SCALE: 3" = 1'-0"

15 A10.11 CONC. TO TILE AT TOILET ROOMS
SCALE: 3" = 1'-0"

10 A10.11 INT_CONCRETE WALL INFILL W/ METAL STUD
SCALE: 1 1/2" = 1'-0"

MATERIAL	FASTENER	SPACING
CONT. Z-FURRING (2" X 16 GA. AT 24" O.C. VERTICALLY) TO 16 GA. METAL STUDS AT 16" O.C.	#12 SMS	16" O.C.
BACKING STRAP (6" X 16 GA.) DIRECTLY TO 16 GA. METAL STUDS AT 16" O.C. MIN. (3) STUD BAYS	(2) #10 TEKS SCREWS	EA. STUD
BACKING STRAP (6" X 16 GA.) OVER RIGID INSULATION TO 16 GA. METAL STUDS AT 16" O.C. MIN. (3) STUD BAYS	(2) #10 TEKS SCREWS	EA. STUD
BACKING STUD TRACK (4" X 16 GA. (400T150-54)) TO 16 GA. METAL STUDS AT 16" O.C. MIN.	(3) #10 TEKS SCREWS	EA. STUD
2" RIGID INSULATION TO 16 GA. METAL STUDS. INSULATION INSERTED IN Z-FURRING	N/A	N/A
5/8" EXT. GYP. SHEATING OVER RIGID INSULATION TO Z-FURRING (2" X 16 GA. AT 24" O.C. VERTICALLY)	#10 SMS	12" O.C. HORIZ. 24" O.C. VERT.
5/8" EXT. GYP. SHEATHING TO 16 GA. METAL STUDS AT 16" O.C. MIN.	#10 SMS	16" O.C. HORIZ. 12" O.C. VERT.
SELF FURRING METAL LATH TO 16 GA. METAL STUDS AT 16" O.C. MIN.	#12 WAFER HEAD SMS x 3/4"	16" O.C. HORIZ. 6" O.C. VERT.
SELF FURRING METAL LATH TO Z-FURRING (2" X 16 GA. AT 24" O.C. VERTICALLY)	#12 WAFER HEAD SMS x 3/4"	6" O.C. HORIZ. 24" O.C. VERT
NICHIHA FIBER CEMENT BOARD TO Z-FURRING	#12 TEKS	16" O.C. HORIZ. AT EACH PANEL

5 A10.11 TYP. MATERIAL, BACKING AND FASTENER AND SCHEDULE
SCALE: 12" = 1'-0"

10/24/2022 7:47:08 AM

CONSULTANT:

INTERIOR DETAILS

BUILDING 400 MODERNIZATION NEW CLASSROOM/ LIBRARY MEDIA CENTER

WALNUT VALLEY UNIFIED SCHOOL DISTRICT
DIAMOND BAR HIGH SCHOOL
21400 PATHFINDER RD. DIAMOND BAR, CA 91765

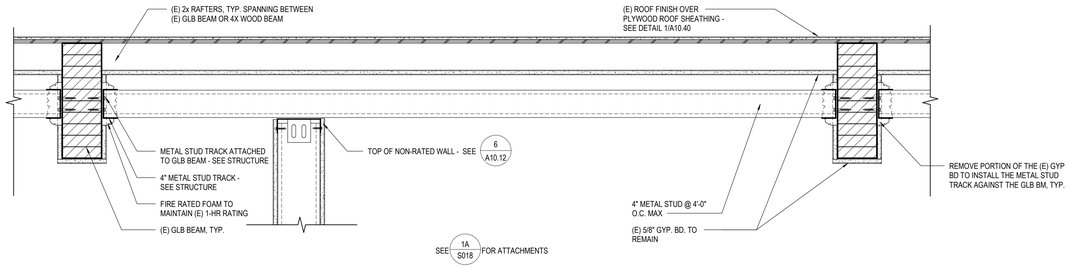
SEALS:

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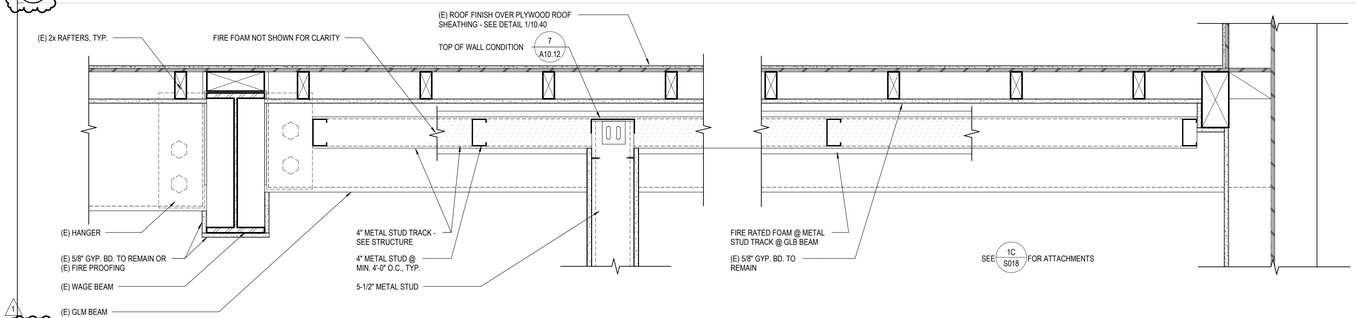
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PROJECT NUMBER: 19-47100-00
PROJECT STATUS: CD 100%
PROJECT ISSUED: 05/26/20
REVISION: DATE: 10-25-2022 DESCRIPTION: ADDENDUM - 1

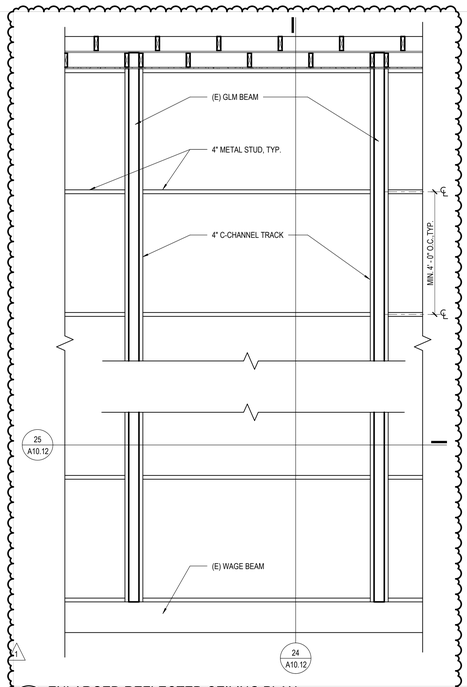
A10.11



25 A10.12 METAL STUD SUPPORT FRAMING PERPENDICULAR TO (E) GLUE LAMINATED BEAM
SCALE: 1 1/2" = 1'-0"

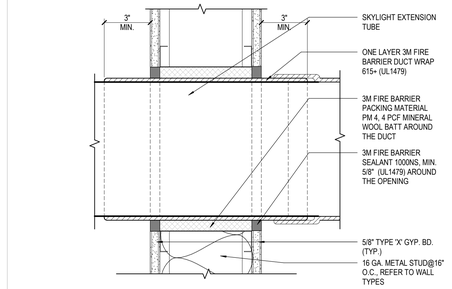


24 A10.12 METAL STUD SUPPORT FRAMING PARRALLE TO (E) GLUE LAMINATED BEAM
SCALE: 1 1/2" = 1'-0"

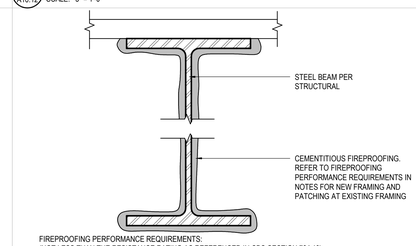


14 A10.12 ENLARGED REFLECTED CEILING PLAN
SCALE: 1/2" = 1'-0"

11 A10.12 1-HR RATED FLOOR THROUGH PENETRATION
SCALE: 3" = 1'-0"



10 A10.12 1-HR RATED WALL THROUGH PENETRATION
SCALE: 3" = 1'-0"



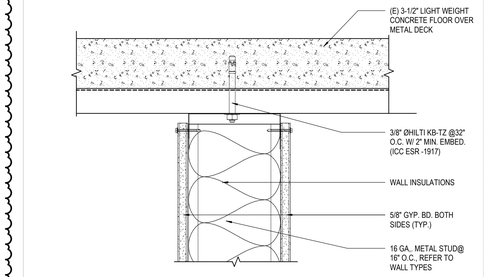
FIREPROOFING PERFORMANCE REQUIREMENTS:
(NOT LESS THAN THE RESISTANCE RATING AS REFERENCED IN CBC SECTION 704.10)

FLOOR CONSTRUCTION = 1-HR RATED
- DECK: UL DESIGN D925
- PRIMARY BEAMS: UL DESIGN N782
- SECONDARY BEAMS: UL DESIGN N782

ROOF CONSTRUCTION = 1-HR RATED
- PRIMARY BEAMS: UL DESIGN N854
- SECONDARY BEAMS: UL DESIGN N754

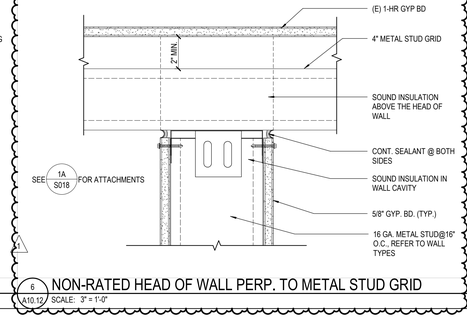
FOR ALL PATCHING AT EXISTING FIREPROOFING, REFER TO THE CHPX.R4339 SECTION OF THE UL FIRE RESISTIVE DIRECTORY, VOLUME 1

9 A10.12 BEAM FIREPROOFING DETAIL
SCALE: 3" = 1'-0"

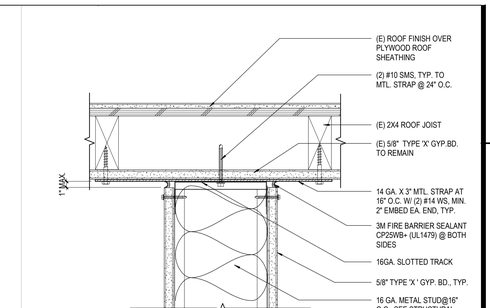


8 A10.12 NON-RATED HEAD OF WALL PERPENDICULAR TO (E) MTL. DECK
SCALE: 3" = 1'-0"

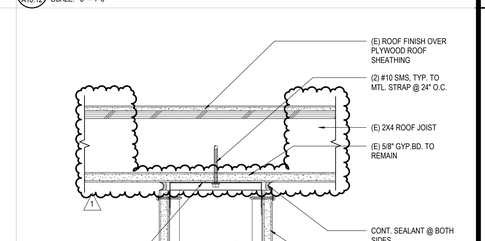
7 A10.12 NON-RATED RATED HEAD OF WALL PAR. TO METAL STUD GRID
SCALE: 3" = 1'-0"



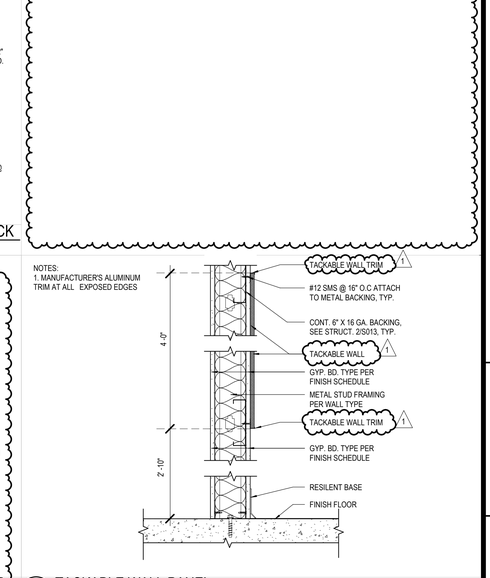
6 A10.12 NON-RATED HEAD OF WALL PERP. TO METAL STUD GRID
SCALE: 3" = 1'-0"



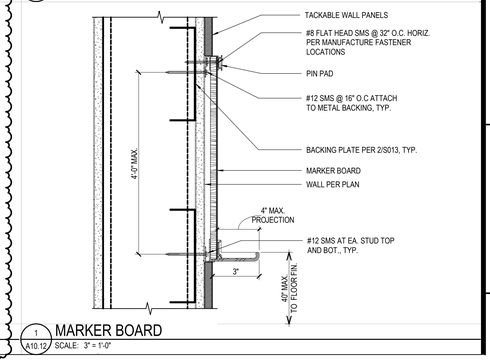
5 A10.12 1 HR RATED HEAD OF WALL PARALLEL TO (E) WOOD JOIST
SCALE: 3" = 1'-0"



4 A10.12 1 HR RATED HEAD OF WALL PERPENDICULAR TO (E) WOOD JOIST
SCALE: 3" = 1'-0"



2 A10.12 TACKABLE WALL PANEL
SCALE: 1 1/2" = 1'-0"



1 A10.12 MARKER BOARD
SCALE: 3" = 1'-0"

CONSULTANT:

INTERIOR DETAILS

BUILDING 400 MODERNIZATION NEW CLASSROOM/ LIBRARY MEDIA CENTER

WALNUT VALLEY UNIFIED SCHOOL DISTRICT
DIAMOND BAR HIGH SCHOOL
21400 PATHFINDER RD. DIAMOND BAR, CA 91765

SEALS:

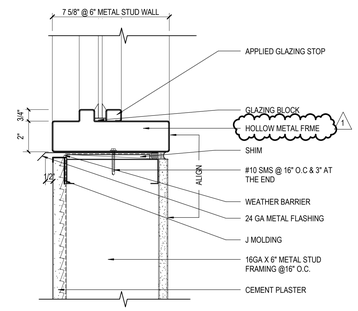
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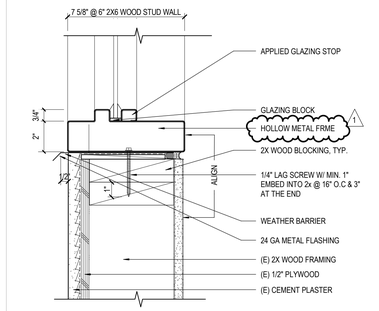
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PROJECT STATUS: CD 100%
PROJECT ISSUED: 03/18/21
REVISION DATE: DESCRIPTION:
1 10-25-2022 ADDENDUM - 1

A10.12

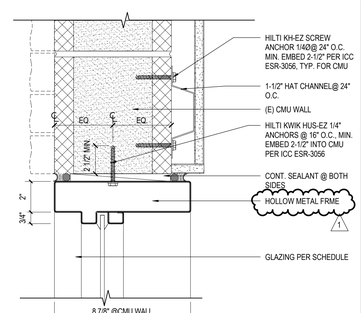
10/24/2022 7:47:10 AM



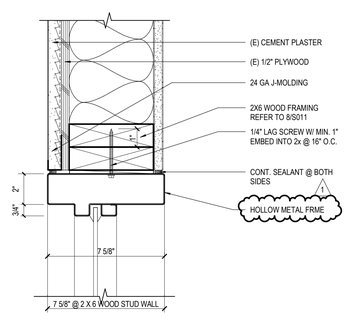
20 A10.20 EXT. HM. MS WINDOW SILL
SCALE: 3" = 1'-0"



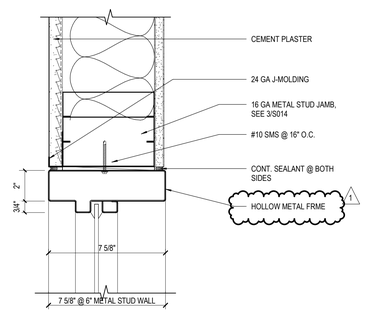
15 A10.20 EXT. HM. WD WINDOW SILL
SCALE: 3" = 1'-0"



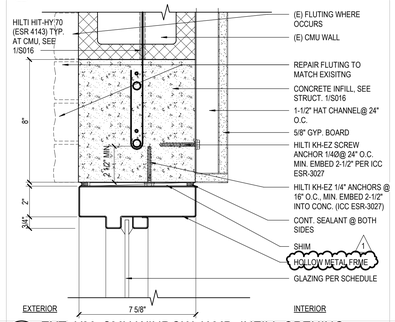
10 A10.20 EXT. HM. CMU WINDOW HEAD/ JAMB
SCALE: 3" = 1'-0"



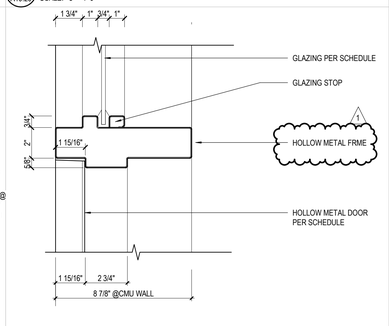
5 A10.20 EXT. HM. WD WINDOW JAMB
SCALE: 3" = 1'-0"



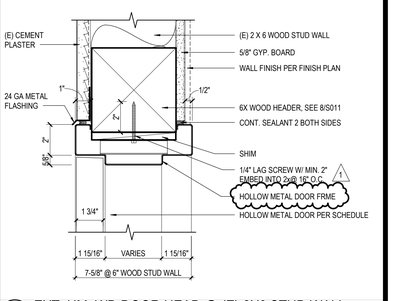
19 A10.20 EXT. HM. MS WINDOW JAMB
SCALE: 3" = 1'-0"



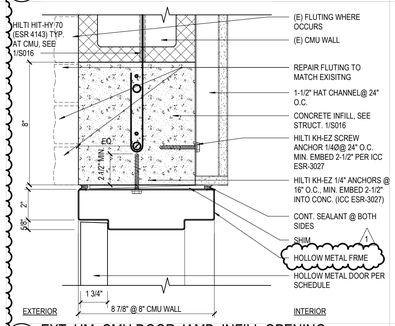
14 A10.20 EXT. HM. CMU WINDOW JAMB_INFILL OPENING
SCALE: 3" = 1'-0"



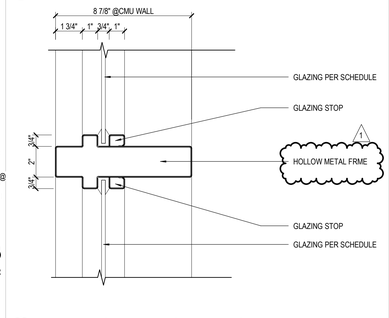
9 A10.20 EXT. HM. WINDOW @ DOOR MULLION
SCALE: 3" = 1'-0"



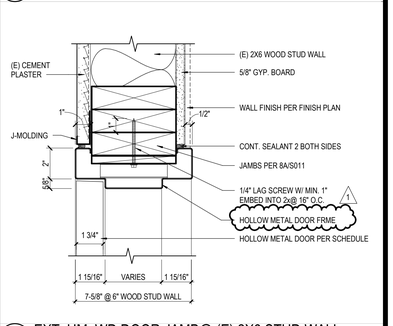
4 A10.20 EXT. HM. WD DOOR HEAD @ (E) 2X6 STUD WALL
SCALE: 3" = 1'-0"



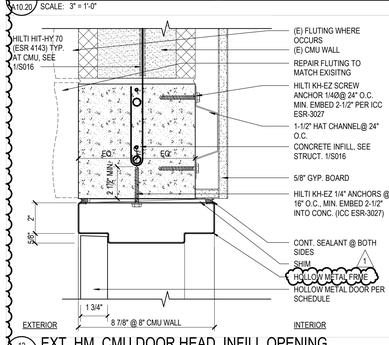
13 A10.20 EXT. HM. CMU DOOR JAMB_INFILL OPENING
SCALE: 3" = 1'-0"



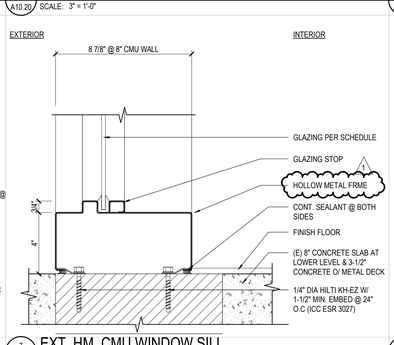
6 A10.20 EXT. HM. MS WINDOW HEAD
SCALE: 3" = 1'-0"



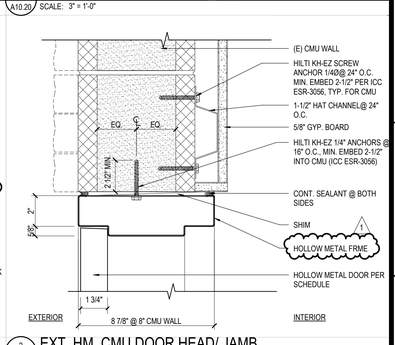
3 A10.20 EXT. HM. WD DOOR JAMB@ (E) 2X6 STUD WALL
SCALE: 3" = 1'-0"



12 A10.20 EXT. HM. CMU DOOR HEAD_INFILL OPENING
SCALE: 3" = 1'-0"

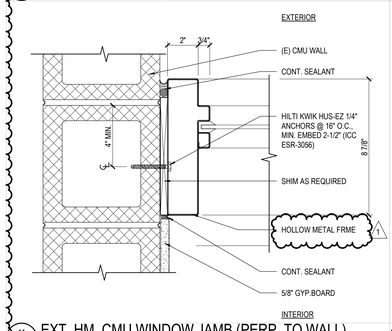


1 A10.20 EXT. HM. CMU WINDOW SILL
SCALE: 3" = 1'-0"

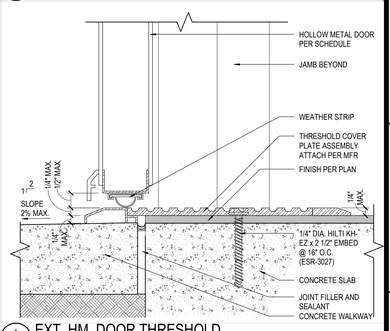


2 A10.20 EXT. HM. CMU DOOR HEAD/ JAMB
SCALE: 3" = 1'-0"

11 A10.20 EXT. HM. CMU WINDOW JAMB (PERP. TO WALL)
SCALE: 3" = 1'-0"



6 A10.20 EXT. HM. MS WINDOW HEAD
SCALE: 3" = 1'-0"



1 A10.20 EXT. HM. DOOR THRESHOLD
SCALE: 6" = 1'-0"

EXTERIOR OPENING DETAILS

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WALNUT VALLEY UNIFIED SCHOOL DISTRICT
DIAMOND BAR HIGH SCHOOL
21400 PATHFINDER RD. DIAMOND BAR, CA 91765

CONSULTANT:

SEALS:

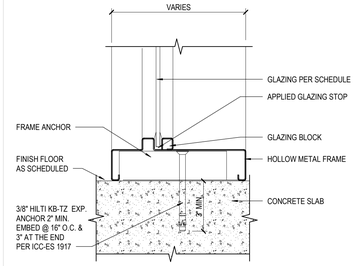
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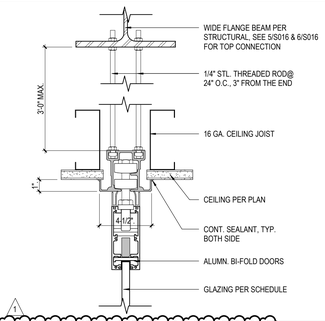
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PROJECT STATUS: CD 100%
PROJECT ISSUED: 03/19/2021
REVISION: DATE: 10/25/2022 DESCRIPTION: ADDENDUM -1

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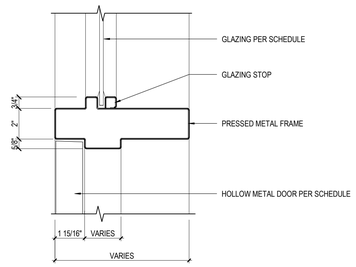
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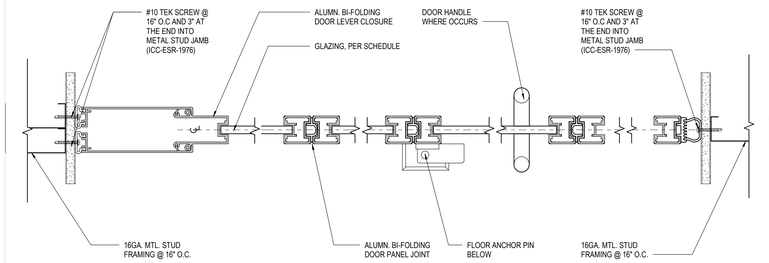
15 A10.21 INT. HM. MS WINDOW SILL AT SLAB
SCALE: 3" = 1'-0"



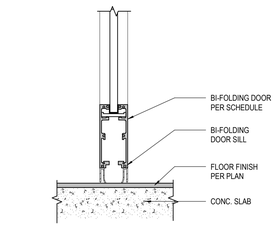
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10 A10.21 FOLDING GLASS-PANEL PARTITION HEAD
SCALE: 3" = 1'-0"



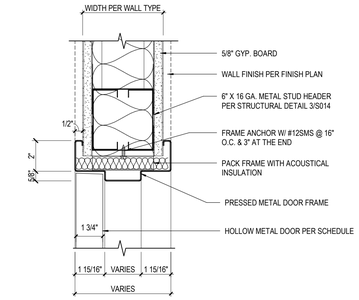
5 A10.21 INT. HM. WINDOW @ DOOR/ SIDE LITE MULLION
SCALE: 3" = 1'-0"



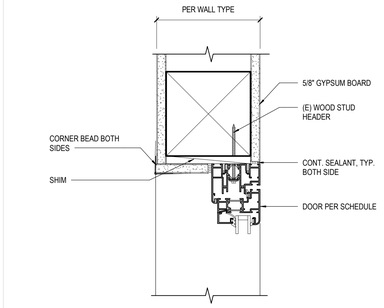
19 A10.21 FOLDING GLASS-PANEL PARTITION JAMB
SCALE: 3" = 1'-0"



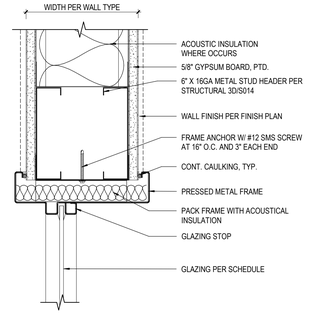
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9 A10.21 FOLDING GLASS-PANEL PARTITION SILL
SCALE: 3" = 1'-0"



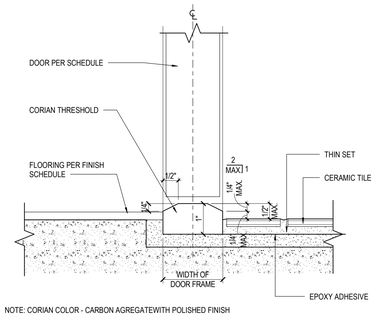
4 A10.21 INT. HM. MS DR HEAD/ JAMB
SCALE: 3" = 1'-0"



13 A10.21 FOLDING GLASS STOREFRONT HEAD
SCALE: 3" = 1'-0"

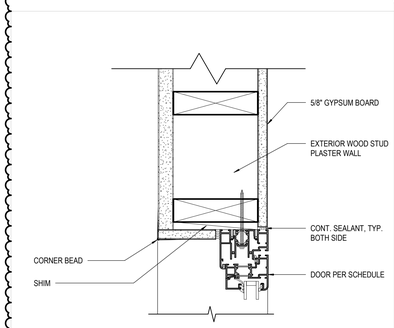


9 A10.21 INT. HM. MS WINDOW HEAD
SCALE: 3" = 1'-0"

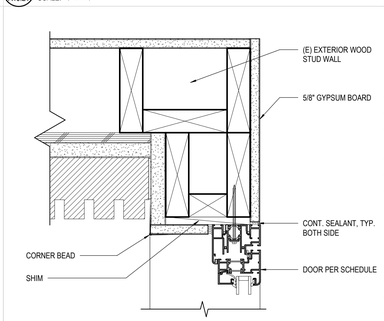


NOTE: CORIAN COLOR - CARBON AGREGATEWITH POLISHED FINISH

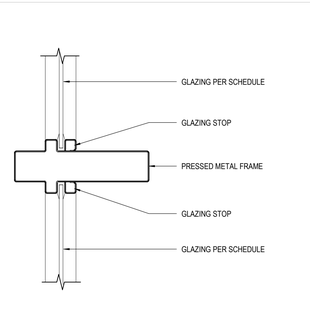
3 A10.21 INT. HM. DOOR THRESHOLD @ VINYL TO TILE
SCALE: 6" = 1'-0"



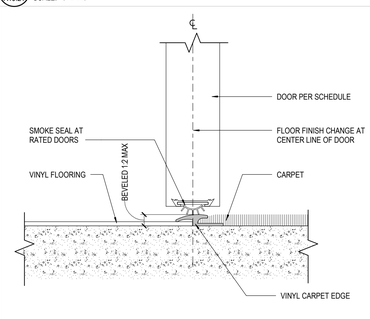
17 A10.21 FOLDING GLASS STOREFRONT JAMB @ WALL
SCALE: 3" = 1'-0"



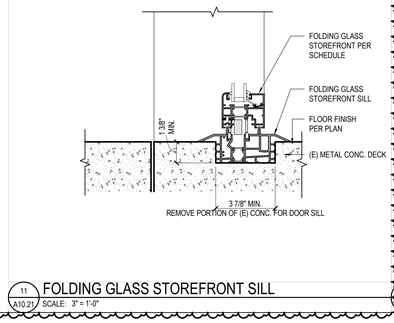
12 A10.21 FOLDING GLASS STOREFRONT JAMB @ (E) WALL
SCALE: 3" = 1'-0"



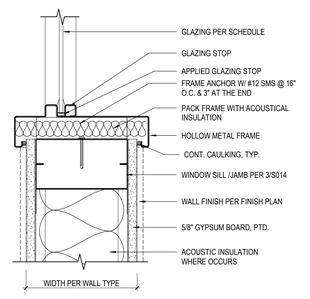
7 A10.21 INT. HM. MS WINDOW MULLION
SCALE: 3" = 1'-0"



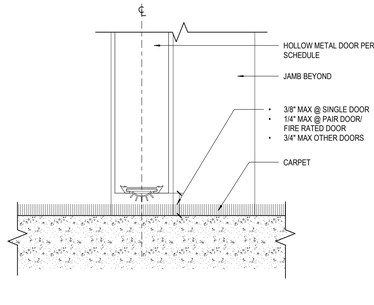
2 A10.21 INT. HM. DOOR THRESHOLD @ VINYL TO CARPET
SCALE: 6" = 1'-0"



11 A10.21 FOLDING GLASS STOREFRONT SILL
SCALE: 3" = 1'-0"



6 A10.21 INT. HM. MS WINDOW SILL/ JAMB
SCALE: 3" = 1'-0"



1 A10.21 INT. HM. DOOR THRESHOLD @ CARPET
SCALE: 6" = 1'-0"

CONSULTANT:

INTERIOR OPENING DETAILS

BUILDING 400 MODERNIZATION NEW CLASSROOM/ LIBRARY MEDIA CENTER

WALNUT VALLEY UNIFIED SCHOOL DISTRICT
DIAMOND BAR HIGH SCHOOL
21400 PATHFINDER RD. DIAMOND BAR, CA 91765

SEALS:

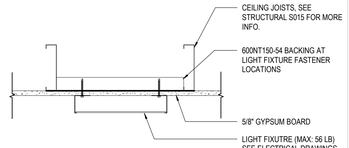
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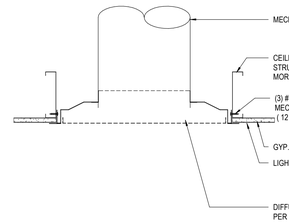
PROJECT NUMBER:	19-47100-00
PROJECT STATUS:	CD: 100%
PROJECT ISSUED:	03/18/2021
REVISION:	DESCRIPTION:
DATE:	ADDENDUM - 1
10-25-2021	

A10.21

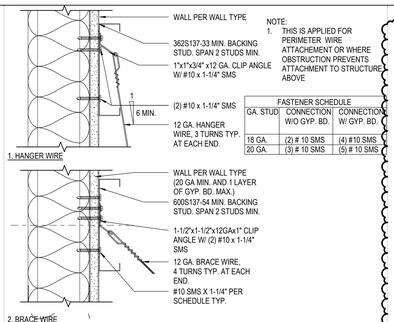
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30 A10.30 SURFACE MOUNTED LIGHT IN GYP. CEILING
SCALE: 1 1/2" = 1'-0"



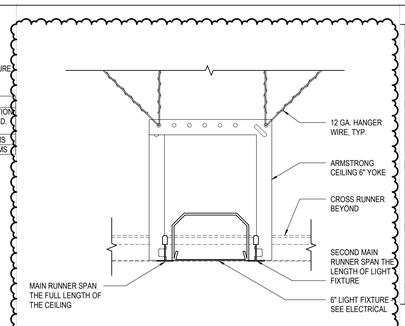
25 A10.30 MECHANICAL DIFFUSER IN GYP. CEILING - MS
SCALE: 1 1/2" = 1'-0"



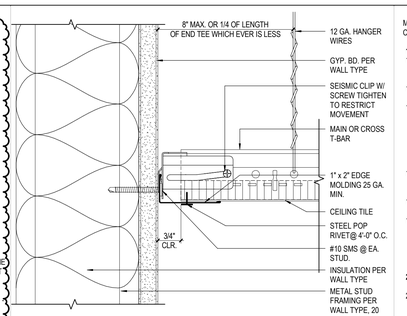
NOTE:
1. THIS IS APPLIED FOR PERIMETER WIRE ATTACHEMENT OR WHERE OBSTRUCTION PREVENTS ATTACHMENT TO STRUCTURE ABOVE

FASTENER SCHEDULE		
GA. STUD	CONNECTION W/O GYP. BD.	CONNECTION W/ GYP. BD.
18 GA.	(2) # 10 SMS	(4) #10 SMS
20 GA.	(3) # 10 SMS	(5) # 10 SMS

20 A10.30 HANGER AND BRACE WIRE AT OBSTRUCTION
SCALE: 3" = 1'-0"



15 A10.30 SUSPENDED CEILING YOKE FOR RECESSED LIGHT
SCALE: 3" = 1'-0"



10 A10.30 CEILING PERMITER - FIXED - MS
SCALE: 6" = 1'-0"

METAL SUSPENSION SYSTEMS FOR LAY-IN PANELS CEILING:
CBC 2019 DSA IR 25-2.13 REVISED 11-09-17

1. CEILING SYSTEM GENERAL NOTES:

1.01 CEILING SYSTEM COMPONENTS SHALL COMPLY WITH ASTM C635-07 AND SECTION 5.1 OF ASTM E850-10A.

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) IS/ARE PART OF THE SCOPEOF THIS PROJECT:

MANUFACTURER'S NAME:	ARMSTRONG CEILING SOLUTIONS
PRODUCT EVALUATION REPORT TYPE AND NUMBER:	ICC-ESR 1308
MANUFACTURER'S MODEL NUMBER - MAIN RUNNER:	PRELUDE XL–7301HRC
MANUFACTURER'S CATALOG NUMBER - CROSS RUNNER:	PRELUDE XL–7341 HRC PRELUDE XL–8340 HRC

1.04 SEISMIC WALL CLIP:
MANUFACTURER'S MODEL: ARMSTRONG BERC2 CLIP

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 ¼" 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 ¼" 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 (GALVANIZED) 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 A653-11, 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 MINIMUM YIELD STRENGTH OF 33 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 ANSI 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. SCREW EYES IN WOOD MUST BE INSTALLED SO THEY 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: HILTI KB-TZ PER ICC-ESR 1917

4.03 POWER-ACTUATED FASTENERS SHALL BE: HILTI X-U' SHOT PIN PER ICC-ESR 2269

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 1910A.5.

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 1910A.5.

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 FIXTURE, 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 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.

6.05 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 WIRES 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 56 LBS. SHALL HAVE A #12 GAGE SLACK SAFETY WIRE AT EACH CORNER.

6.06 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 FITTING 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.

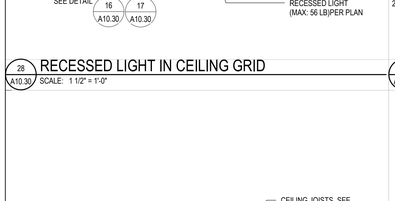
7.02 CEILING-MOUNTED AIR TERMINALS OR OTHER SERVICES WEIGHING LESS THAN OR EQUAL TO 20 LB. SHALL HAVE ONE(1) #12 GAGE SLACK SAFETY WIRE ATTACHED FROM THE TERMINAL OR SERVICE TO THE STRUCTURE ABOVE.

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.

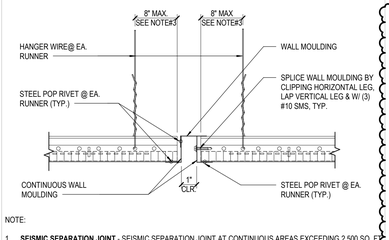
7.04 FLEXIBLE SPRINKLER HOSE FITTINGS, CEILING MOUNTED AIR TERMINALS OR OTHER SERVICES WEIGHING MORE THAN 56 LB. SHALL BE SUPPORTED DIRECTLY FROM THE STRUCTURE ABOVE BY NOT LESS HAN FOUR (4) TAUT #12 GAGE HANGER WIRES ATTACHED FROM THE TERMINAL OR SERVICE TO THE STRUCTURE ABOVE OR OTHER APPROVED HANGERS.

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.



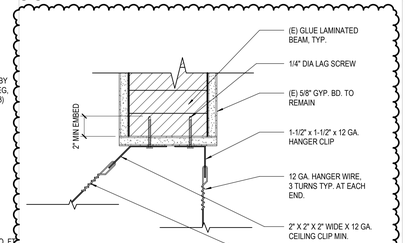
29 A10.30 ACCESS PANEL
SCALE: 3" = 1'-0"



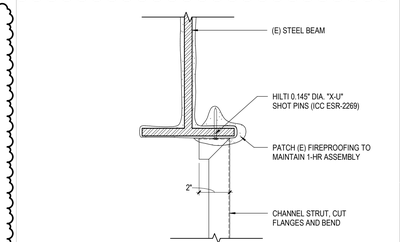
NOTE:

1. **SEISMIC SEPARATION JOINT** - SEISMIC SEPARATION JOINT AT CONTINUOUS AREAS EXCEEDING 2,500 SQ. FT.
2. PROVIDE #12 GAGE HANGER WIRES AT THE ENDS OF ALL MAIN AND CROSS RUNNERS WITHIN EIGHT (8) INCHES OF THE SUPPORT OR WITHIN ONE-FOURTH (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.

24 A10.30 MECH DIFFUSER IN CEILING GRID
SCALE: 1 1/2" = 1'-0"

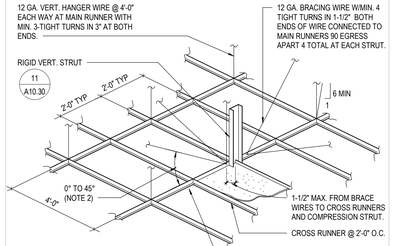


19 A10.30 WIRE CONNECTION TO METAL STUD
SCALE: 3" = 1'-0"



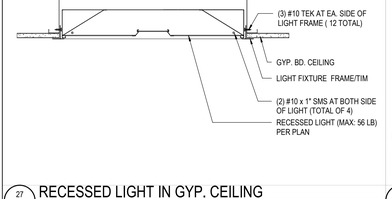
NOTE:
1. BEAM FLANGES THICKNESS SHALL NOT BE LESS THAN 3/16"
2. STRUCTURAL ENGINEER , IOR AND CONTRACTOR SHALL VERIFY THAT NO PAF IS INSTALLED IN THE PROTECT ZONE OF ANY STEEL MEMBER. SEE ANSI/AISC 341-10

14 A10.30 COMPRESSION STRUT TO METAL STUD
SCALE: 3" = 1'-0"

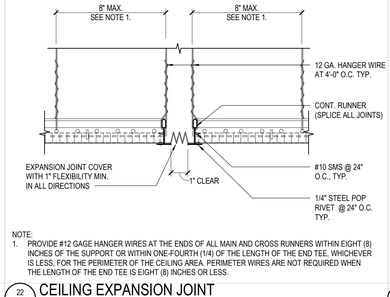


NOTES
1. STRUTS SHALL NOT REPLACE HANGER WIRES.
2. THE MINIMUM ACCEPTABLE ANGLE IS DETERMINED SUCH THAT THE WIRES DO NOT INTERFERE WITH THE RUNNERS, LIGHT FIXTURES, ETC. AND REMAIN STRAIGHT AND UNOBSTRUCTED.

9 A10.30 CEILING PERMITER - FREE - MS
SCALE: 6" = 1'-0"

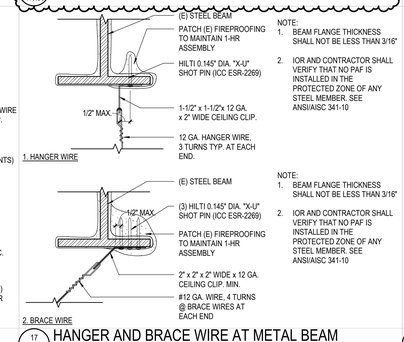


28 A10.30 RECESSED LIGHT IN CEILING GRID
SCALE: 1 1/2" = 1'-0"



NOTE:
1. PROVIDE #12 GAGE HANGER WIRES AT THE ENDS OF ALL MAIN AND CROSS RUNNERS WITHIN EIGHT (8) INCHES OF THE SUPPORT OR WITHIN ONE-FOURTH (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.

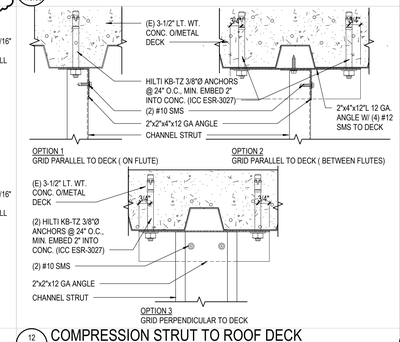
23 A10.30 CEILING SEISMIC SEPARATION JOINT
SCALE: 3" = 1'-0"



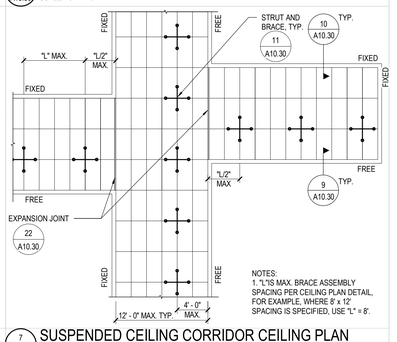
NOTE:
1. BEAM FLANGE THICKNESS SHALL NOT BE LESS THAN 3/16"
2. IOR AND CONTRACTOR SHALL VERIFY THAT NO PAF IS INSTALLED IN THE PROTECTED ZONE OF ANY STEEL MEMBER. SEE ANSI/AISC 341-10

NOTE:
1. BEAM FLANGE THICKNESS SHALL NOT BE LESS THAN 3/16"
2. IOR AND CONTRACTOR SHALL VERIFY THAT NO PAF IS INSTALLED IN THE PROTECTED ZONE OF ANY STEEL MEMBER. SEE ANSI/AISC 341-10

17 A10.30 HANGER AND BRACE WIRE AT METAL BEAM
SCALE: 3" = 1'-0"

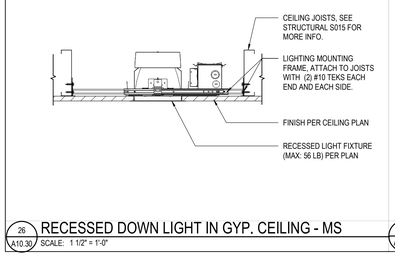


12 A10.30 COMPRESSION STRUT TO ROOF DECK
SCALE: 3" = 1'-0"

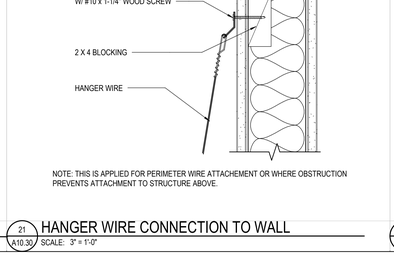


NOTES:
1. "L"IS MAX. BRACE ASSEMBLY SPACING PER CEILING PLAN DETAIL. FOR EXAMPLE, WHERE 8' x 12' SPACING IS SPECIFIED, USE "L" = 8'.

1 A10.30 SUSPENDED CEILING CORRIDOR CEILING PLAN
SCALE: 1/8" = 1'-0"

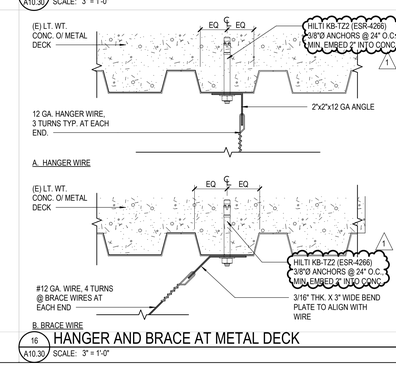


26 A10.30 RECESSED DOWN LIGHT IN GYP. CEILING - MS
SCALE: 1 1/2" = 1'-0"

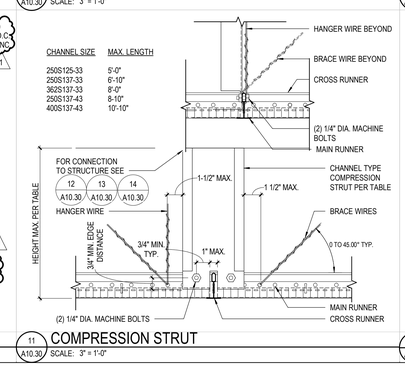


NOTE: THIS IS APPLIED FOR PERIMETER WIRE ATTACHEMENT OR WHERE OBSTRUCTION PREVENTS ATTACHMENT TO STRUCTURE ABOVE.

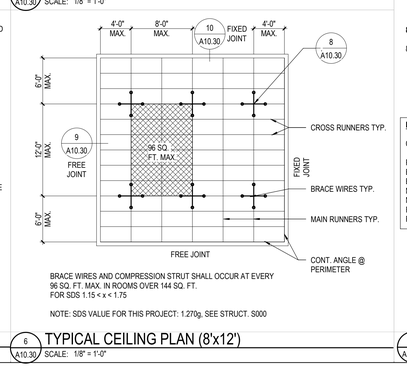
21 A10.30 HANGER WIRE CONNECTION TO WALL
SCALE: 3" = 1'-0"



16 A10.30 HANGER AND BRACE AT METAL DECK
SCALE: 3" = 1'-0"



11 A10.30 COMPRESSION STRUT
SCALE: 3" = 1'-0"



BRACE WIRES AND COMPRESSION STRUT SHALL OCCUR AT EVERY 96 SQ. FT. MAX. IN ROOMS OVER 144 SQ. FT.
FOR SDS 1.15 < x < 1.75

NOTE: SDS VALUE FOR THIS PROJECT: 1.270g, SEE STRUCT. S000

6 A10.30 TYPICAL CEILING PLAN (8'x12')
SCALE: 1/8" = 1'-0"

FIRE-RESISTANCE RATING REQUIREMENTS FOR BUILDING ELEMENTS (CBC TABLE 601)

CONSTRUCTION TYPE:	TYPE VA
PRIMARY STRUCTURE:	1 HR
BEARING WALLS EXT.:	1 HR
BEARING WALLS INT.:	1 HR
NON BEARING WALLS EXT.:	SEE TABLE 602
NON BEARING WALLS INT.:	0
FLOOR CONSTRUCTION:	1 HR
ROOF CONSTRUCTION:	1 HR

1 A10.30 SUSPENSION SYSTEM FOR LAY-IN CEILING
SCALE: 3" = 1'-0"

CONSULTANT:

CEILING DETAILS

BUILDING 400 MODERNIZATION NEW CLASSROOM/ LIBRARY MEDIA CENTER

WALNUT VALLEY UNIFIED SCHOOL DISTRICT
DIAMOND BAR HIGH SCHOOL
21400 PATHFINDER RD. DIAMOND BAR, CA 91765

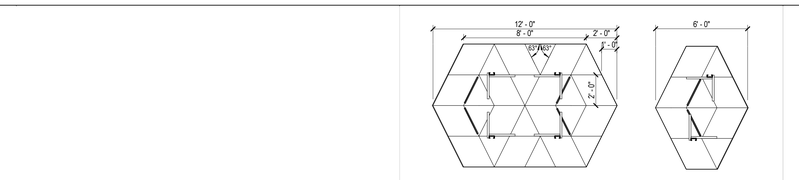
SEAL:

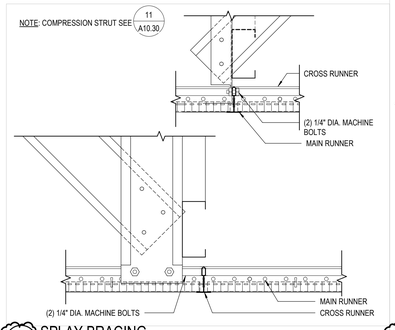
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PROJECT NUMBER:	19-27100-00
PROJECT STATUS:	CD 100%
PROJECT ISSUED:	03/18/2021
REVISION:	DESCRIPTION:
DATE:	ADDENDUM - 1
	10-25-2022

A10.30

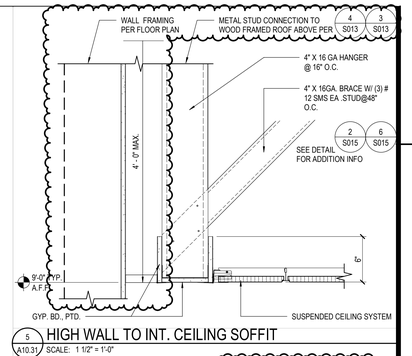
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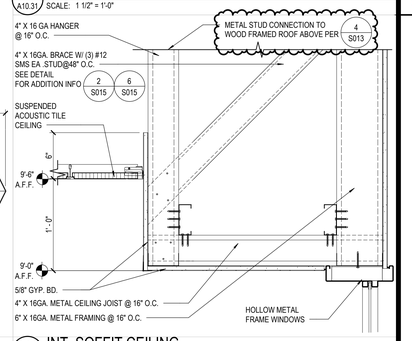


14 A10.31 SPLAY BRACING
SCALE: 3" = 1'-0"

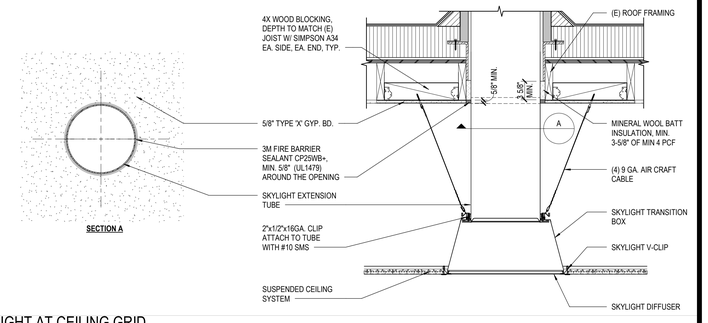
9 A10.31 ARMSTRONG DESIGNFLEX CEILING SYSTEM
SCALE: 1/4" = 1'-0"



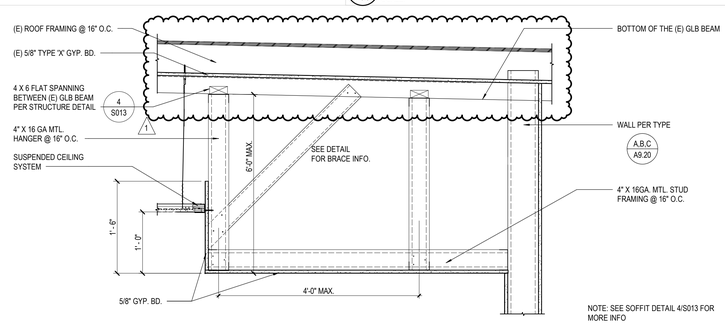
5 A10.31 HIGH WALL TO INT. CEILING SOFFIT
SCALE: 1 1/2" = 1'-0"



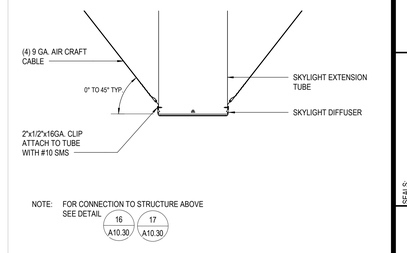
4 A10.31 INT. SOFFIT CEILING
SCALE: 1 1/2" = 1'-0"



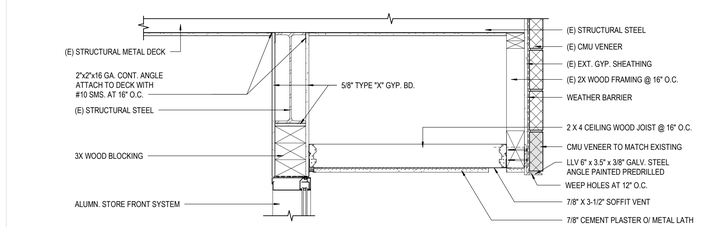
3 A10.31 SKYLIGHT AT CEILING GRID
SCALE: 1" = 1'-0"



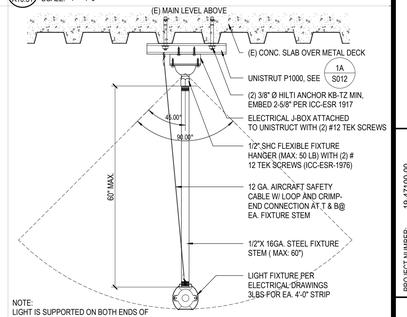
12 A10.31 INT. SOFFIT DETAIL
SCALE: 1" = 1'-0"



2 A10.31 SKYLIGHT IN OPENING CEILING
SCALE: 1" = 1'-0"



11 A10.31 PLASTER SOFFIT @ENTRY
SCALE: 1" = 1'-0"



1 A10.31 LINEAR PENDANT LIGHT
SCALE: 1 1/2" = 1'-0"

CEILING DETAILS

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DIAMOND BAR HIGH SCHOOL
21400 PATHFINDER RD. DIAMOND BAR, CA 91765

CONSULTANT:

SEALS:

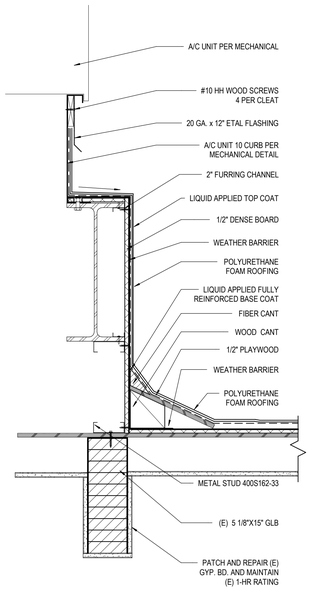
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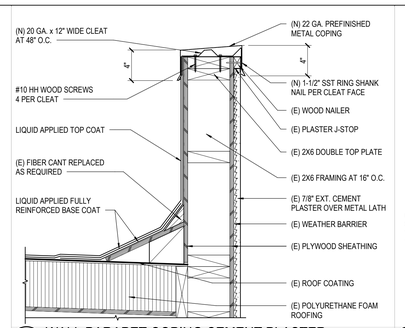
PROJECT NUMBER: 19-47100-00
PROJECT STATUS: CD. 100%
PROJECT ISSUED: 03/18/2021
REVISION: DATE: DESCRIPTION:
1 10-25-2022 ADDENDUM - 1

A10.31

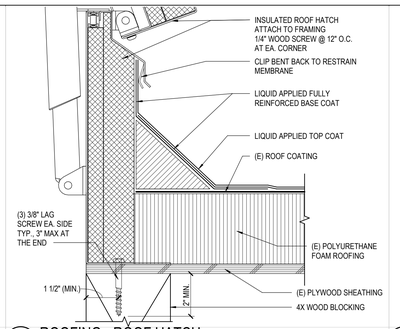
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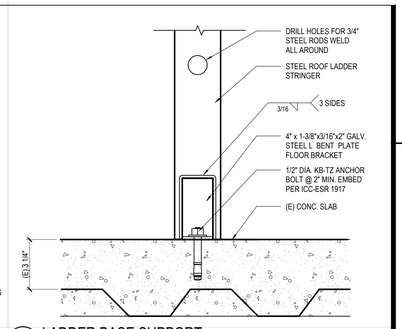
19 A10.40 A/C UNIT CURB WATERPROOFING DETAIL
SCALE: 1 1/2" = 1'-0"



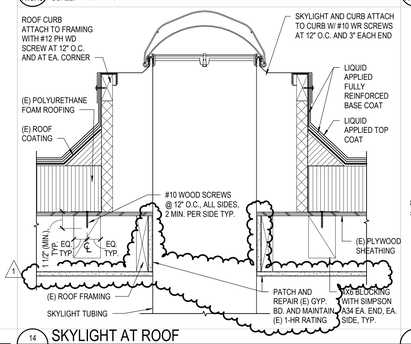
15 A10.40 WALL PARAPET COPING CEMENT PLASTER
SCALE: 1 1/2" = 1'-0"



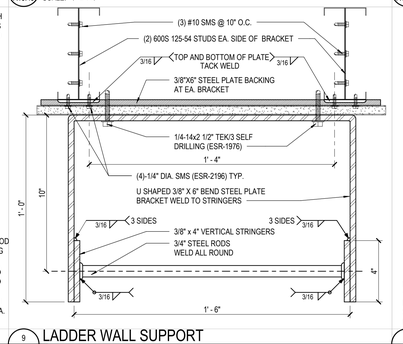
10 A10.40 ROOFING - ROOF HATCH
SCALE: 3" = 1'-0"



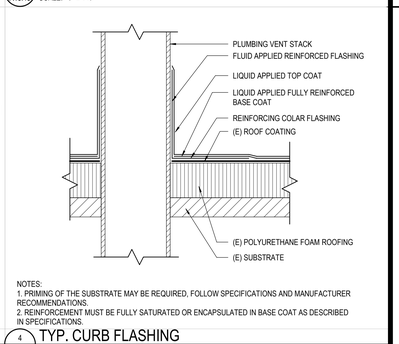
5 A10.40 LADDER BASE SUPPORT
SCALE: 3" = 1'-0"



14 A10.40 SKYLIGHT AT ROOF
SCALE: 1 1/2" = 1'-0"



9 A10.40 LADDER WALL SUPPORT
SCALE: 3" = 1'-0"



NOTES:
1. PRIMING OF THE SUBSTRATE MAY BE REQUIRED, FOLLOW SPECIFICATIONS AND MANUFACTURER RECOMMENDATIONS.
2. REINFORCEMENT MUST BE FULLY SATURATED OR ENCAPSULATED IN BASE COAT AS DESCRIBED IN SPECIFICATIONS.

4 A10.40 TYP. CURB FLASHING
SCALE: 3" = 1'-0"

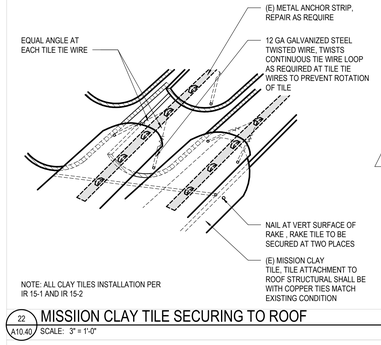
17 A10.40 SKYLIGHT AT ROOF
SCALE: 1" = 1'-0"

13 A10.40 ROOFING - GRAVIT VENT CAP
SCALE: 1 1/2" = 1'-0"

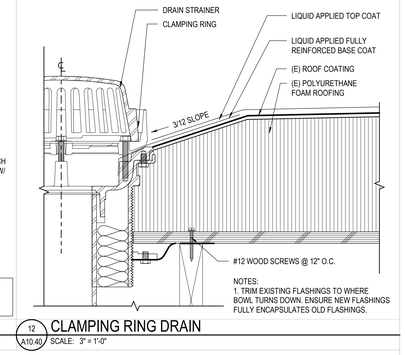
NOTES:
- VERIFY LADDER HEIGHT REQUIRED AT THE JOB SITE.
- THE LADDER AND ALL CONNECTIONS TO BE SHOP PRIMED AND PAINTED.
- REMOVE ALL SHARP EDGES. ALL WELDING TO BE GRINDED SMOOTH.

6 A10.40 ACCESS LADDER AT JANITOR
SCALE: 1" = 1'-0"

3 A10.40 ROOF HATCH FLASHING
SCALE: 3" = 1'-0"

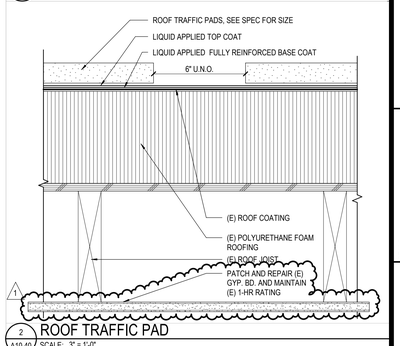


22 A10.40 MISSION CLAY TILE SECURING TO ROOF
SCALE: 3" = 1'-0"

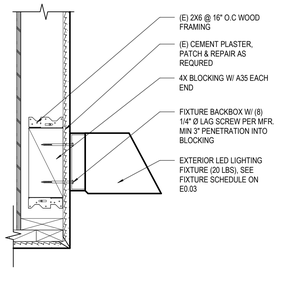


NOTES:
1. TRIM EXISTING FLASHINGS TO WHERE BOWL TURNS DOWN. ENSURE NEW FLASHINGS FULLY ENCAPSULATES OLD FLASHINGS.

12 A10.40 CLAMPING RING DRAIN
SCALE: 3" = 1'-0"

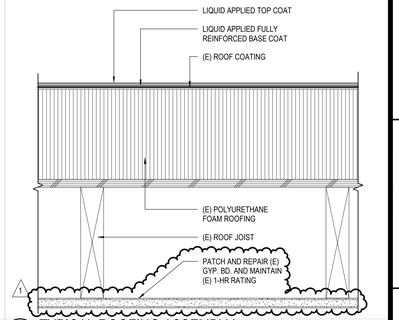


2 A10.40 ROOF TRAFFIC PAD
SCALE: 3" = 1'-0"



21 A10.40 EXTERIOR LIGHT FIXTURE
SCALE: 1 1/2" = 1'-0"

16 A10.40 ROOFING - ROOF DRAIN / OVER FLOW DRAIN
SCALE: 1 1/2" = 1'-0"



1 A10.40 TYPICAL ROOFING ASSEMBLY
SCALE: 3" = 1'-0"

CONSULTANT:

ROOF DETAILS

BUILDING 400 MODERNIZATION NEW CLASSROOM/ LIBRARY MEDIA CENTER

WALNUT VALLEY UNIFIED SCHOOL DISTRICT
DIAMOND BAR HIGH SCHOOL
21400 PATHFINDER RD. DIAMOND BAR, CA 91765

SEALS:

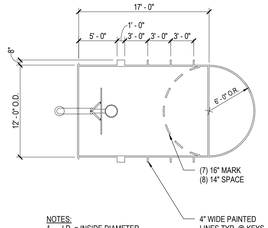
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PROJECT NUMBER: 19-47100-00
PROJECT STATUS: CD 100%
PROJECT ISSUED: 03/18/2021
REVISION: DATE: 10-25-2022 DESCRIPTION: ADDENDUM - 1

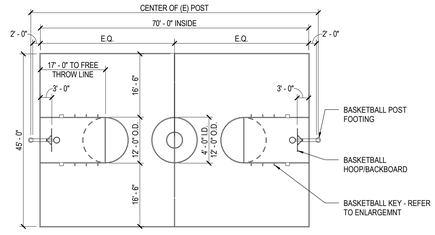
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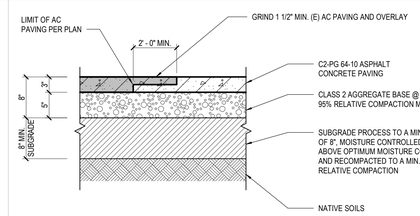
NOTES:
1. I.D. = INSIDE DIAMETER
2. O.D. = OUTSIDE DIAMETER
3. O.R. = OUTSIDE RADIUS

25 A10.60 BASKETBALL COURT STRIPPING DETAIL ENLARGED
SCALE: 1/8" = 1'-0"



BASKETBALL COURT:
A. DESIGN IS BASED ON THE USE OF PATTERSON-WILLIAMS STANDARD SWING SINGLE POST ADJUSTABLE MODEL NO. 1529G
   a. RIM HEIGHT 9'-0"
   b. BACKBOARD: REGULATION RECTANGLE MODEL NO.19, HEAVY DUTY ALUMINUM
   c. GOAL RING MODEL NO. 41 AND NET MODEL NO. 34, PROVIDED ALL HARDWARE FOR ATTACHMENTS NYLON NETS.
B. PROVIDE 2" WHITE LINE STRIPING FOR ALL END LINES, SIDELINES, AND OTHER COURT MARKINGS (EXCEPT KEYS).

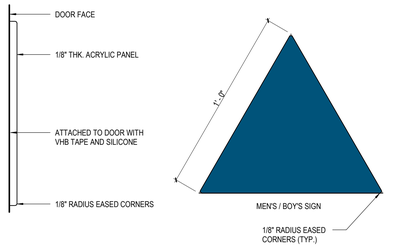
20 A10.60 BASKETBALL COURT STRIPPING DETAIL
SCALE: 1/16" = 1'-0"



STRUCTURAL SECTION TABLE	
	A/C PVMT
TRAFFIC INDEX	5
AC	3"
BASE	5"
SUBGRADE	8"

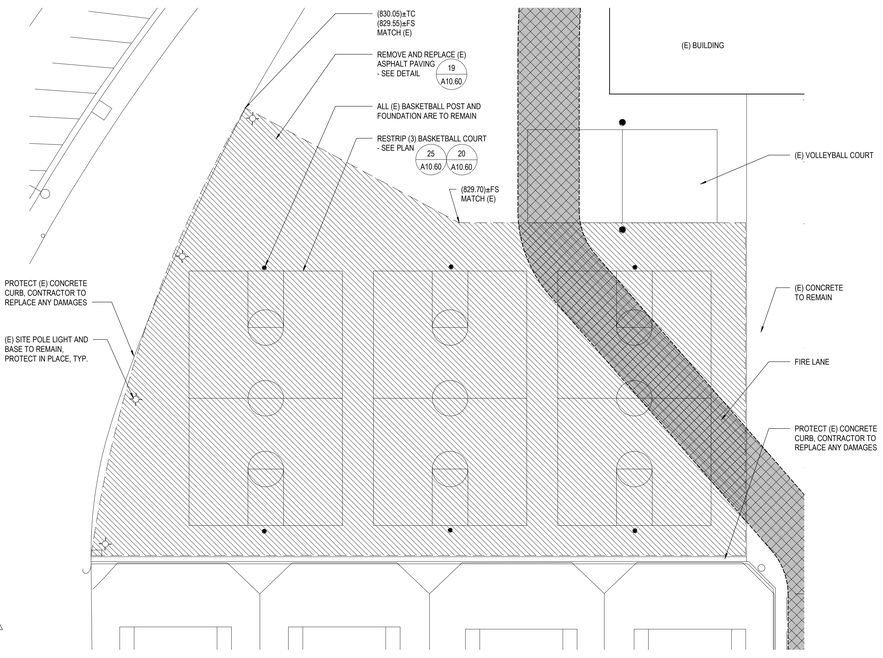
NOTES:
1. INSTALL EMULSIFIED ASPHALT "FOG SEAL" TYPE SS-1H.
2. ASPHALT CONCRETE SHALL BE COMPACTED TO 95% OF MAX. DENSITY OBTAINED USING CALIFORNIA TEST 304.
3. AGGREGATE BASE AND SUBGRADE SOILS SHALL BE COMPACTED TO 95% OF MAX. DENSITY AS DETERMINED BY ASTM D-1557.
4. STRUCTURAL SECTIONS SHOWN ARE PRELIMINARY. R-VALUE TESTS SHALL BE PERFORMED @ THE COMPLETION OF GRADING TO DETERMINE FINAL STRUCTURAL SECTION.

19 A10.60 VEHICULAR ASPHALT CONCRETE SECTION
SCALE: 1" = 1'-0"

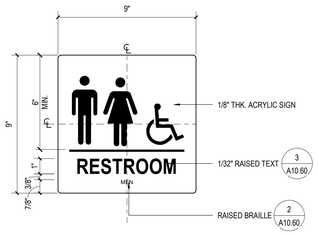


NOTES:
1. THE SIGN SHALL BE MOUNTED 58" MIN. AND 60" MAX. ABOVE FINISH FLOOR TO CENTERLINE OF SYMBOL.
2. SYMBOLS SHALL CONTRAST WITH THE DOOR. CBC 2019 11B-703.7.2.6.1 AND 11B-703.7.2.6.1
3. EDGES OF SIGNS SHALL BE ROUNDED, CHAMFERED OR EASED. CORNERS OF THE SIGNS TO BE RADIUSED 1/8" MIN. CBC 2019 11B-703.7.2.6.4
4. SIGNAGE MEETS THE REQUIREMENT FOR ALL-GENDER RESTROOM SIGN (AB-1732 / DSA-BU 17-01)
5. TRIANGLE COLOR SHALL CONTRAST FROM CIRCLE COLOR, CIRCLE COLOR SHALL CONTRAST FROM DOOR AND TRIANGLE COLOR.

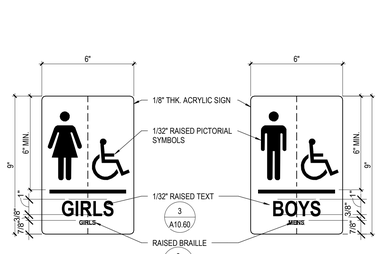
15 A10.60 RESTROOM GEOMETRIC SYMBOL
SCALE: 3" = 1'-0"



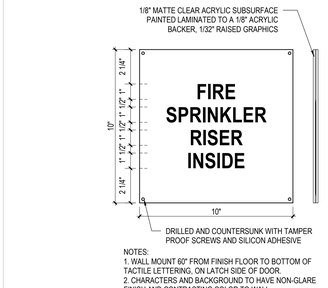
18 A10.60 PAVING PLAN
SCALE: 1" = 20'-0"



14 A10.60 ROOM SIGNAGE_ALL GENDER RESTROOM
SCALE: 3" = 1'-0"

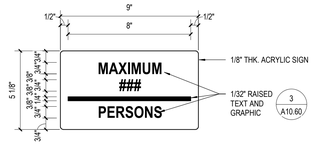


9 A10.60 RESTROOM SIGNAGE_GIRLS-BOYS
SCALE: 3" = 1'-0"

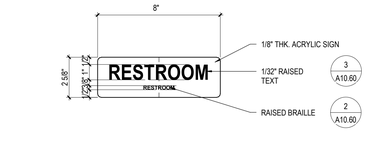


NOTES:
1. WALL MOUNT 60" FROM FINISH FLOOR TO BOTTOM OF TACTILE LETTERING, ON LATCH SIDE OF DOOR.
2. CHARACTERS AND BACKGROUND TO HAVE NON-GLARE FINISH AND CONTRASTING COLOR TO WALL.

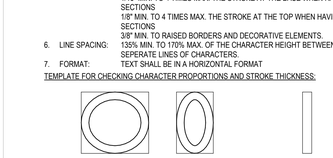
4 A10.60 FIRE SPRINKLER ROOM SIGNAGE
SCALE: 3" = 1'-0"



13 A10.60 ROOM SIGNAGE_MAXIMUM OCCUPANCY
SCALE: 3" = 1'-0"



6 A10.60 ROOM SIGNAGE_ACCESSIBLE ROUTE/ ENTRANCE
SCALE: 3" = 1'-0"



NOTES:
1. TACTILE CHARACTER ON SIGN SHALL BE LOCATED 48" MIN. TO THE LOWEST BASELINE BRAILLE CELL AND 60" MAX. TO THE BASELINE OF THE HIGHEST LINE OF RAISED CHARACTERS. CBC 2019 11B-703.4.1
2. 1/32" RAISED CHARACTERS TO COMPLY WITH CBC 2019 11B-703.2
3. BRAILLE DOTS TO COMPLY WITH CBC 2019 11B-703.3
4. VISUAL CHARACTERS TO COMPLY WITH CBC 2019 11B-703.5.
5. PICTORIAL SYMBOLS TO COMPLY WITH CBC 2019 11B-703.6 AND 11B-703.7
6. PROVIDE INTERNATIONAL SYMBOL OF ACCESSIBILITY AT DOORS AS REQUIRED PER CBC 2019 11B-216.6

1 A10.60 ROOM IDENTIFICATION SIGNAGE MOUNTING
SCALE: 1/2" = 1'-0"

21 A10.60 CONCRETE PAVING JOINT
SCALE: 3" = 1'-0"

17 A10.60 TYPICAL SIGN POST
SCALE: 1/2" = 1'-0"



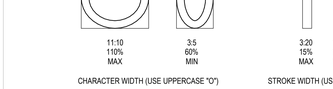
NOTES:
- SIGN MATERIAL TO BE 1/8" THICK ACRYLIC PLASTIC, WITH 1/32" RAISED BORDER, GRAPHICS, AND LETTERS. PROVIDE MECHANICAL MOUNTING WITH VANDAL RESISTANT FASTENERS.
- WHERE SIGNAGE IS INSTALLED ON GLASS, PROVIDE BLANK SIGNAGE ON OPPOSITE SIDE BEING EQUAL SIZE AND COLOR TO MASK ADHESIVE.
- FOR MOUNTING LOCATION, SEE PLANS OR ELEVATIONS, WHERE APPLICABLE.

12 A10.60 ROOM SIGNAGE_EXIT ROUTE-EXIT
SCALE: 3" = 1'-0"

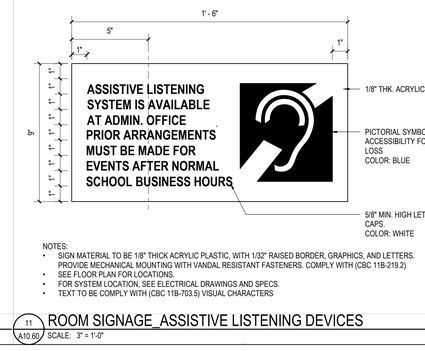
ROOM IDENTIFICATION SIGN

ROOM IDENTIFICATION SIGN WITH ROOM NUMBER

7 A10.60 ROOM SIGNAGE_ROOM ID
SCALE: 3" = 1'-0"



2 A10.60 BRAILLE PROPORTIONS AND TEMPLATE
SCALE: 1/2" = 1'-0"



NOTES:
1. SIGN TO BE INSTALLED AT ALL SCHOOL PARKING ENTRANCES AND ADJACENT TO ACCESSIBLE STALLS
2. SIGN TO BE MOUNTED 80" A.F.F TO BOTTOM OF SIGN AT POST MOUNTED LOCATIONS.
3. INFORMATION ON SIGN TO BE CONFIRMED BY CONTRACTOR PRIOR TO FABRICATION.
4. SEE DETAIL 17/A10.60 FOR SIGN MOUNTING.

16 A10.60 UNAUTHORIZED PARKING SIGN
SCALE: 1 1/2" = 1'-0"

NOTES:
- SIGN MATERIAL TO BE 1/8" THICK ACRYLIC PLASTIC, WITH 1/32" RAISED BORDER, GRAPHICS, AND LETTERS. PROVIDE MECHANICAL MOUNTING WITH VANDAL RESISTANT FASTENERS. COMPLY WITH (CBC 11B-219.2)
- SEE FLOOR PLAN FOR LOCATIONS.
- FOR SYSTEM LOCATION, SEE ELECTRICAL DRAWINGS AND SPECS.
- TEXT TO BE COMPLY WITH (CBC 11B-703.5) VISUAL CHARACTERS

11 A10.60 ROOM SIGNAGE_ASSISTIVE LISTENING DEVICES
SCALE: 3" = 1'-0"

8 A10.60 ROOM SIGNAGE_ACCESSIBLE ROUTE/ ENTRANCE
SCALE: 3" = 1'-0"

10 A10.60 ROOM SIGNAGE_ROOM ID
SCALE: 3" = 1'-0"

3 A10.60 RAISED CHARACTER PROPORTIONS
SCALE: 6" = 1'-0"

BRAILLE CBC 2019 11B-703.3

1. BRAILLE SHALL BE CONTRACTED (GRADE 2)
2. BRAILLE DOTS SHALL BE DOMED OR ROUNDED SHAPE.
3. INDICATION OF AN UPPERCASE LETTER OR LETTER SHALL ONLY BE USED FOR THE FIRST WORD OF SENTENCES, PROPER NOUNS AND NAMES, INDIVIDUAL LETTERS OF THE ALPHABET, INITIALS AND ACRONYMS.
4. BRAILLE SHALL BE BELOW THE CORRESPONDING TEXT IN A HORIZONTAL FORMAT, FLUSH LEFT OR CENTERED.
5. IN MULTI LINE TEXT, BRAILLE TO BE BELOW ENTIRE TEXT.
6. BRAILLE TO BE SEPARATED BY 3/8" IN. MIN. AND 1/2" MAX. FROM TACTILE CHARACTERS AND 3/8" FROM RAISED BORDERS AND DECORATIVE ELEMENTS.

CONSULTANT:

SIGNAGE DETAILS

BUILDING 400 MODERNIZATION NEW CLASSROOM/ LIBRARY MEDIA CENTER

WALNUT VALLEY UNIFIED SCHOOL DISTRICT
BAR HIGH SCHOOL
21400 PATHFINDER RD. DIAMOND BAR, CA 91765

SEALS:

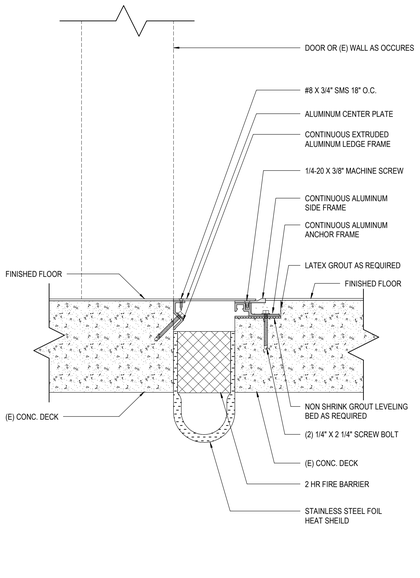
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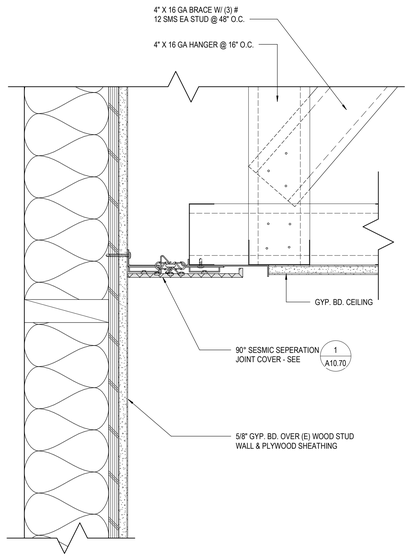
PROJECT NUMBER:	19-47100-00
PROJECT STATUS	CD 100%
PROJECT ISSUED:	12/10/2020
REVISION:	DESCRIPTION:
DATE:	ADDENDUM - 1
10-25-2022	

A10.60

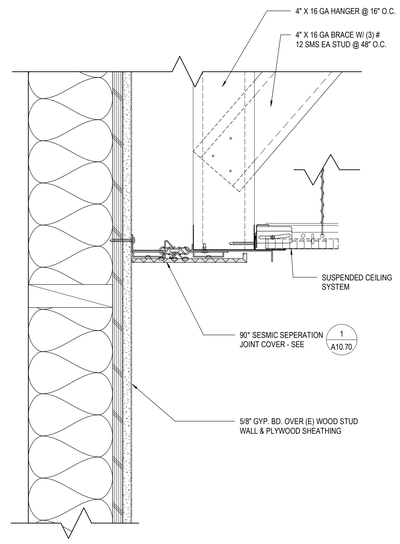
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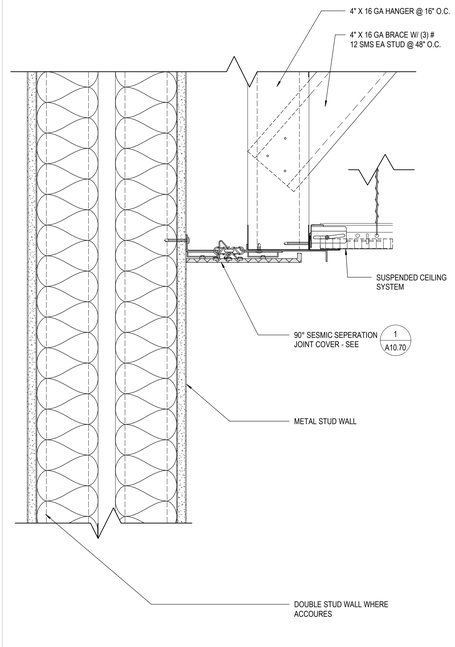
23 A10.70 SESMIC JOINT - FLOOR / FLOOR & FLOOR / WALL
SCALE: 3" = 1'-0"



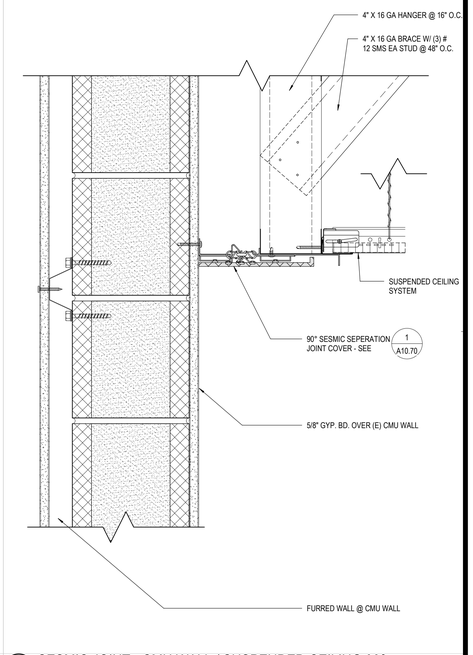
18 A10.70 SESMIC JOINT - (E) STUD WALL / GYP. BD. CEILING 90°
SCALE: 3" = 1'-0"



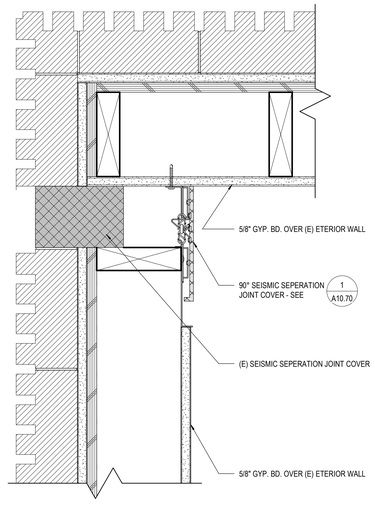
13 A10.70 SESMIC JOINT - (E) STUD WALL / SUSPENDED CEILING 90°
SCALE: 3" = 1'-0"



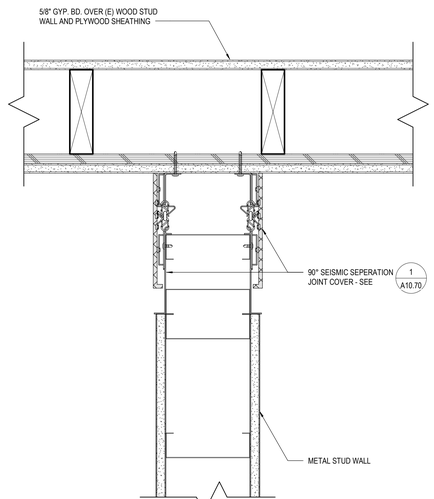
8 A10.70 SESMIC JOINT - STUD WALL / SUSPENDED CEILING 90°
SCALE: 3" = 1'-0"



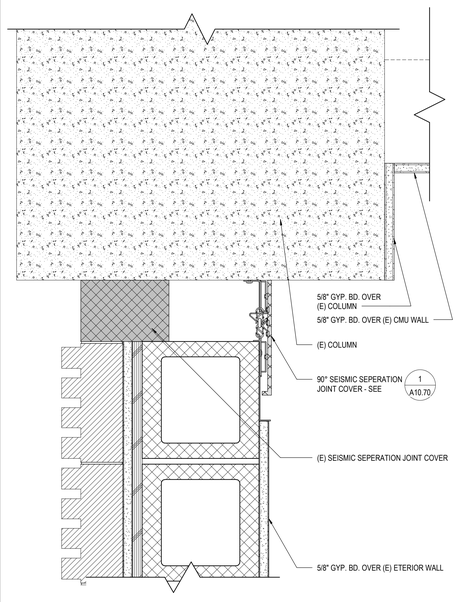
3 A10.70 SESMIC JOINT - CMU WALL / SUSPENDED CEILING 90°
SCALE: 3" = 1'-0"



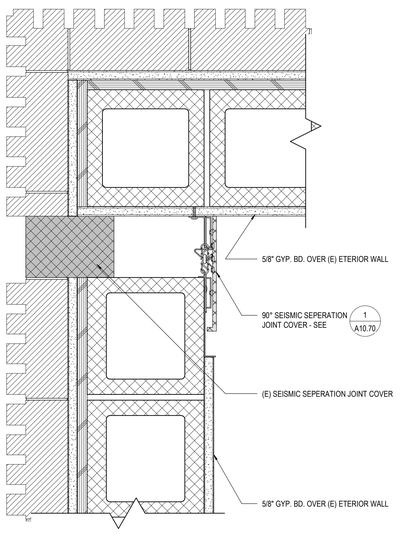
21 A10.70 SESMIC JOINT - (E) STUD WALL / (E) STUD WALL 90°
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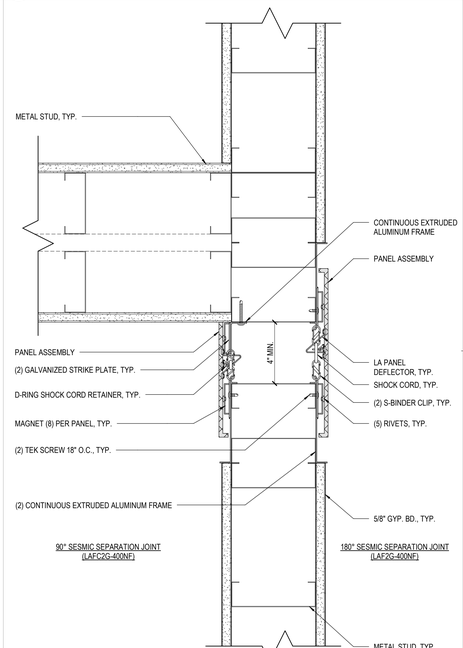
16 A10.70 SESMIC JOINT - STUD WALL / (E) STUD WALL 90°
SCALE: 3" = 1'-0"



11 A10.70 SESMIC JOINT - (E) CMU WALL / (E) COLUMN 90°
SCALE: 3" = 1'-0"



6 A10.70 SESMIC JOINT - (E) CMU WALL / (E) CMU WALL 90°
SCALE: 3" = 1'-0"



1 A10.70 SESMIC JOINT - STUD WALL / STUD WALL 90° & 180°
SCALE: 3" = 1'-0"

10/24/2022 7:47:29 AM

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SEISMIC SEPERATION JOINT COVER DETAIL

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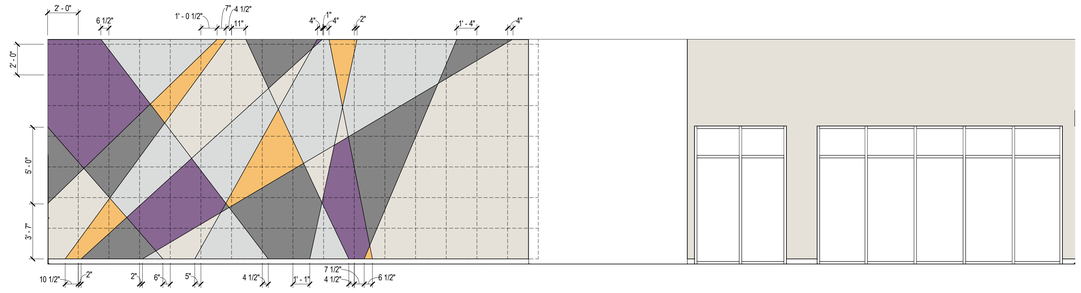
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PROJECT NUMBER: 19-47100-00
PROJECT STATUS: CD 100%
PROJECT ISSUED: 10/13/22
REVISION DATE: DESCRIPTION:
1 10-25-2022 ADDENDUM - 1

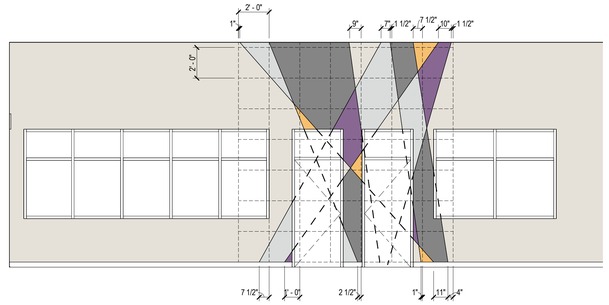
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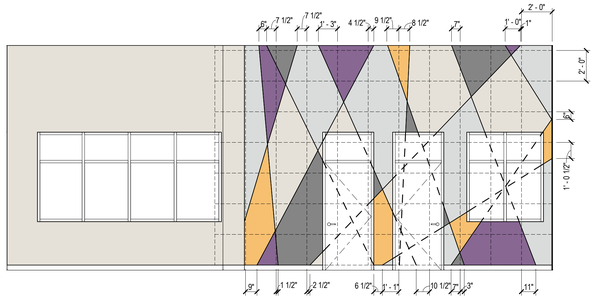
1 A12.00 COLLAB SPACE 116A - NORTH GRAPHIC
SCALE: 1/4" = 1'-0"



2 A12.00 COLLAB SPACE 116A - EAST GRAPHIC
SCALE: 1/4" = 1'-0"



3 A12.00 COLLAB SPACE 116A - SOUTH GRAPHIC PKG
SCALE: 1/4" = 1'-0"



4 A12.00 COLLAB SPACE 116A WEST
SCALE: 1/4" = 1'-0"

COLOR LEGEND

SEE MATERIAL LEGEND ON SHEETS A9.30 AND A9.31 FOR PAINT COLOR INFORMATION

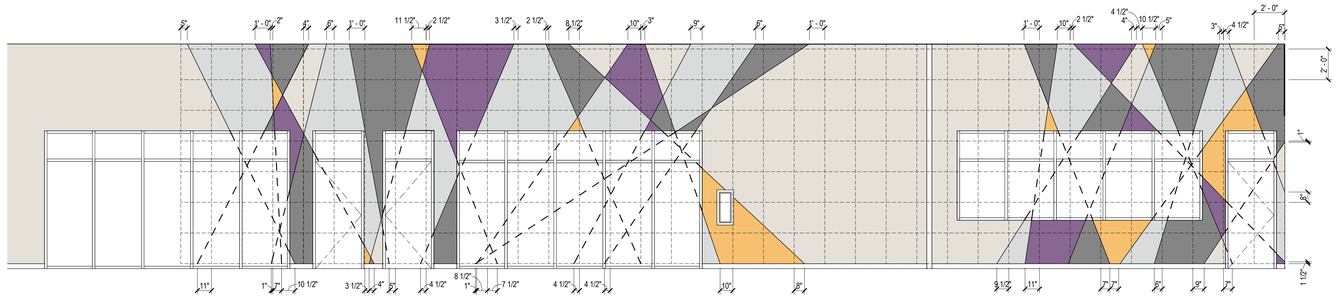
P-1	PPG14-31	PARAFFIN
P-2	PPG1176-6	MIRABELLA
P-3	PPG1204-6	GOLDED OPPORTUNITY
P-4	PPG1001-5	DOVER GRAY
P-5	PPG1001-3	THIN ICE

VINYL WALL GRAPHIC GENERAL NOTES:

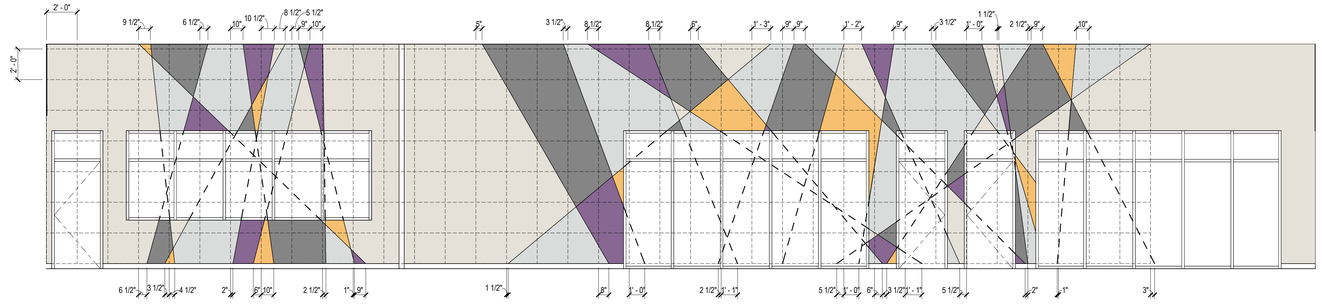
1. CONTRACTOR TO COORDINATE THE PRODUCTION AND PURCHASE OF VINYL WALL GRAPHIC WITH ARCHITECT

2. ALL COLORS USED IN GRAPHICS TO MATCH CORRESPONDING PAINT COLOR

3. VINYL WALL GRAPHIC MATERIAL SHALL BE WRAPPED AT ALL EDGES OF THE STOREFRONT WINDOW SYSTEMS OPENINGS AND AT ALL BOOKCASE SOFFITS



5 A12.00 COLLAB SPACE 116B - NORTH GRAPHIC
SCALE: 1/4" = 1'-0"



6 A12.00 COLLAB SPACE 116B - SOUTH GRAPHIC
SCALE: 1/4" = 1'-0"

CONSULTANT:

WALL GRAPHIC ELEVATIONS

BUILDING 400 MODERNIZATION NEW CLASSROOM/ LIBRARY MEDIA CENTER

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SEALS:

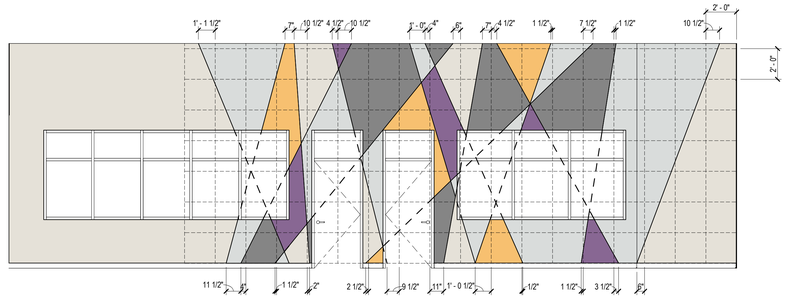
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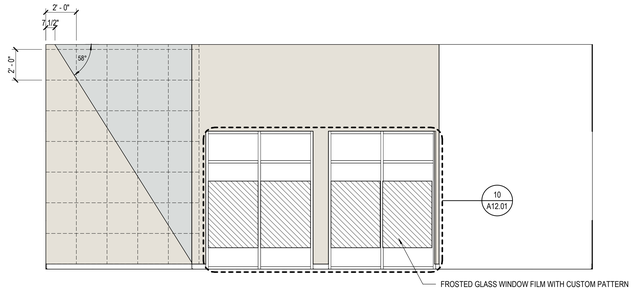
PROJECT NUMBER: 19-47100-00
PROJECT STATUS: CD 100%
PROJECT ISSUED: 04/27/21
REVISION: DESCRIPTION:
1 DATE: 10-25-2022 ADDENDUM - 1

A12.00

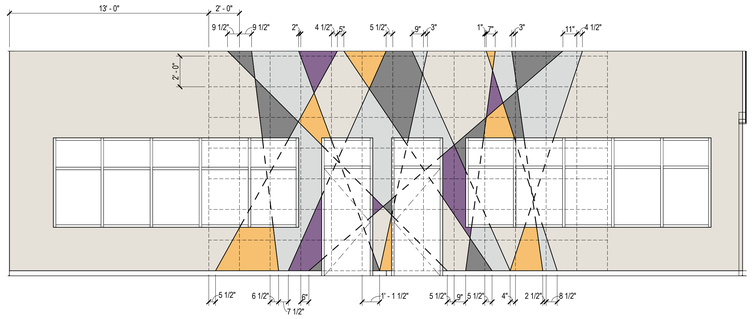
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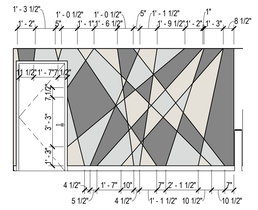
1 A12.01 COLLAB SPACE 123 NORTH
SCALE: 1/4" = 1'-0"



2 A12.01 COLLAB SPACE 123 - EAST GRAPHIC
SCALE: 1/4" = 1'-0"



3 A12.01 COLLAB SPACE 123 SOUTH
SCALE: 1/4" = 1'-0"



4 A12.01 CIRCULATION DESK 209 - NORTH
SCALE: 1/4" = 1'-0"

COLOR LEGEND

SEE MATERIAL LEGEND ON SHEETS A9.30 AND A9.31 FOR PAINT COLOR INFORMATION

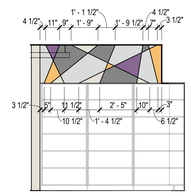
P-1	PPG14-31	PARAFFIN
P-2	PPG1176-6	MIRABELLA
P-3	PPG1204-6	GOLDED OPPORTUNITY
P-4	PPG1001-5	DOVER GRAY
P-5	PPG1001-3	THIN ICE

VINYL WALL GRAPHIC GENERAL NOTES:

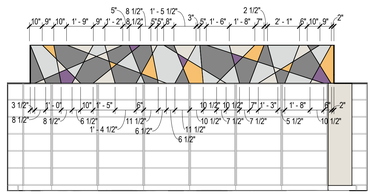
1. CONTRACTOR TO COORDINATE THE PRODUCTION AND PURCHASE OF VINYL WALL GRAPHIC WITH ARCHITECT

2. ALL COLORS USED IN GRAPHICS TO MATCH CORRESPONDING PAINT COLOR

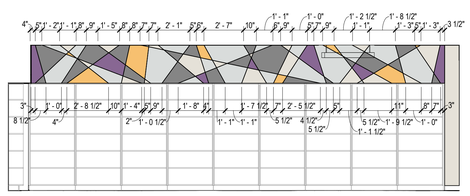
3. VINYL WALL GRAPHIC MATERIAL SHALL BE WRAPPED AT ALL EDGES OF THE STOREFRONT WINDOW SYSTEMS OPENINGS AND AT ALL BOOKCASE SOFFITS



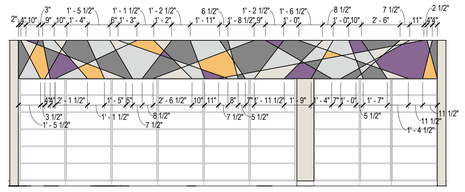
5 A12.01 LIBRARY 206 - NORTH BOOKSHELVES
SCALE: 1/4" = 1'-0"



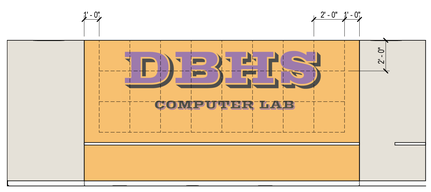
6 A12.01 LIBRARY 206 - EAST BOOKSHELVES
SCALE: 1/4" = 1'-0"



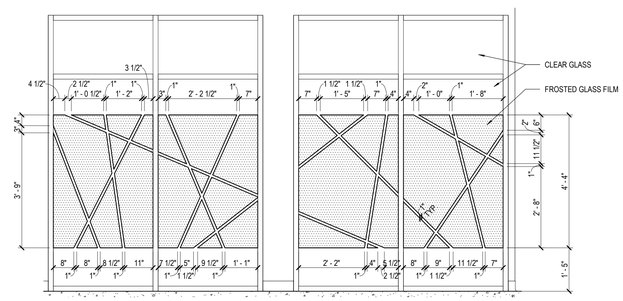
7 A12.01 LIBRARY 206 - SOUTH BOOKSHELVES
SCALE: 1/4" = 1'-0"



8 A12.01 LIBRARY 206 - WEST BOOKSHELVES
SCALE: 1/4" = 1'-0"



9 A12.01 COMPUTER AREA 210 - NORTH GRAPHIC
SCALE: 1/4" = 1'-0"



10 A12.01 COLLAB SPACE 123 - FROSTED GLASS FILM PATTERN
SCALE: 1/2" = 1'-0"

CONSULTANT:

WALL GRAPHIC ELEVATIONS

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PROJECT NUMBER: 19-47100-00
PROJECT STATUS: CD 100%
PROJECT ISSUED: 10/13/22
REVISION: DATE: DESCRIPTION:
1 10-25-2022 ADDENDUM - 1

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GENERAL NOTES

GENERAL

1. ALL WORK SHALL COMPLY WITH 2019 CALIFORNIA BUILDING CODE, CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 2, VOLUME 2 OF 2 (INCLUDING ALL SUPPLEMENTS) AND ALL OTHER LOCAL OR STATE AGENCIES HAVING JURISDICTION OVER THIS PROJECT.
2. ALL DRAWINGS AND SPECIFICATIONS ARE CONSIDERED TO BE A PART OF THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REVIEW AND COORDINATION OF ALL DRAWINGS AND SPECIFICATIONS PRIOR TO THE START OF CONSTRUCTION. ANY DISCREPANCIES THAT OCCUR SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT PRIOR TO THE START OF CONSTRUCTION SO THAT A CLARIFICATION CAN BE ISSUED. ANY WORK PERFORMED IN CONFLICT WITH THE CONTRACT DOCUMENTS OR ANY CODE REQUIREMENTS SHALL BE CORRECTED BY THE CONTRACTOR AT HIS OWN EXPENSE AND AT NO EXPENSE TO THE OWNER OR ARCHITECT.
3. ALL SYMBOLS AND ABBREVIATIONS USED ON THE DRAWINGS ARE CONSIDERED TO BE CONSTRUCTION STANDARDS. IF CLARIFICATION IS REQUIRED, THE CONTRACTOR SHALL NOTIFY THE ARCHITECT PRIOR TO PROCEEDING WITH THE WORK.
4. ALL DIMENSIONS AND THE SITE CONDITIONS SHALL BE VERIFIED BY THE CONTRACTOR AT THE JOB SITE PRIOR TO BID SUBMITTAL, START OF SHOP DRAWINGS, START OF CONSTRUCTION, AND/OR FABRICATION OF MATERIALS. IF DISCREPANCIES ARE ENCOUNTERED, OR CONDITIONS DEVELOP NOT COVERED BY THE CONTRACT DOCUMENTS, THE ARCHITECT SHALL BE NOTIFIED FOR CLARIFICATION.
5. CONTRACTOR SHALL PROVIDE AND BE RESPONSIBLE FOR THE PROTECTION AND REPAIR OF ADJACENT EXISTING SURFACES AND AREAS WHICH MAY BE DAMAGED AS A RESULT OF NEW WORK.
6. DO NOT SCALE DRAWINGS. PRINTED DIMENSIONS HAVE PRECEDENCE OVER SCALED DRAWINGS AND LARGE SCALE OVER SMALL.
7. TYPICAL DETAILS SHALL APPLY IN GENERAL CONSTRUCTION UNLESS SPECIFICALLY DETAILED. WHERE NO DETAILS ARE GIVEN, CONSTRUCTION SHALL BE AS SHOWN FOR SIMILAR WORK.
8. THE CONTRACT DOCUMENTS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE. THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT THE STRUCTURE AND SAFETY OF WORKMEN DURING CONSTRUCTION. SUCH MEASURES SHALL INCLUDE BUT NOT BE LIMITED TO, BRACING, SHORING FOR LOADS DUE TO CONSTRUCTION EQUIPMENT, ETC. OBSERVATION VISITS TO THE SITE BY THE ARCHITECT OR STRUCTURAL ENGINEER SHALL NOT INCLUDE INSPECTION OF THE ABOVE ITEMS AND DOES NOT IN ANY WAY RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITIES FOR THE ABOVE.
9. FOR TRENCHES OR EXCAVATIONS (5) FIVE FEET OR MORE IN DEPTH INTO WHICH A PERSON IS REQUIRED TO DESCEND, THE CONTRACTOR IS TO OBTAIN THE NECESSARY PERMIT FROM THE STATE OF CALIFORNIA, DIVISION OF INDUSTRIAL SAFETY, PRIOR TO THE ISSUANCE OF A BUILDING PERMIT.
10. REFER TO THE ARCHITECTURAL, ELECTRICAL AND MECHANICAL DRAWINGS, ETC. FOR DETAILS, DIMENSIONS, CONDITIONS, PITS, TRENCHES, DEPRESSIONS, OPENINGS, SLEEVES, ITEMS TO BE EMBEDDED OR ATTACHED TO STRUCTURAL ELEMENTS, ETC., NOT SHOWN ON THE STRUCTURAL DRAWINGS.
11. NO HOLES, NOTCHES, BLOCKOUTS, ETC. ARE ALLOWED IN STRUCTURAL ELEMENTS UNLESS DETAILED ON THE STRUCTURAL DRAWINGS OR APPROVED BY THE STRUCTURAL ENGINEER.
12. THE SEISMIC ANCHORAGE OF MECHANICAL, ELECTRICAL, PLUMBING EQUIPMENT AND ARCHITECTURAL ITEMS SHALL CONFORM TO C.C.R. TITLE 24, 2016 CBC. ANCHORAGE DETAILS FOR ROOF/FLOOR MOUNTED EQUIPMENT SHALL BE SHOWN ON PLANS OF EACH DISCIPLINE.

DEMOLITION

1. ALL DEMOLITION SHALL BE CARRIED ON IN SUCH A WAY AS NOT TO DAMAGE EXISTING ELEMENTS WHICH ARE TO REMAIN.
2. ALL ELEMENTS WHICH ARE TO REMAIN AND WHICH ARE DAMAGED DURING DEMOLITION WORK SHALL BE REPLACED AT NO ADDED COST. EXISTING ELEMENTS TO BE PROTECTED TO THE FULLEST EXTENT POSSIBLE TO REDUCE SUCH DAMAGE TO A MINIMUM.

EXPANSION ANCHOR BOLTS IN CONCRETE

1. CONCRETE: USE ONLY EXPANSION ANCHOR SYSTEMS THAT HAVE BEEN ISSUED AN ICC-ES REPORT IN ACCORDANCE WITH THE PROVISIONS OF ICC-ES AC193. ANCHOR SYSTEMS SHOULD BE APPROVED FOR USE IN CRACKED CONCRETE AND SEISMIC DESIGN CATEGORIES A-F PER SECTION 2.0 OF THE ICC EVALUATIONS SERVICES REPORT. ANCHOR SYSTEMS SHALL BE INSTALLED PER THE REQUIREMENTS OF THE ICC-ES EVALUATION SERVICES REPORT FOR THE SPECIFIC ANCHOR, AND AS REQUIRED BY THE MANUFACTURER. ALL EXPANSION ANCHORS SHALL BE HILTI KWIK BOLT TZ (ICC ESR-1917, AS SPECIFIED ON DETAIL. ANY SUBSTITUTION MUST BE APPROVED BY SEOR)
2. WHERE THE MANUFACTURER'S INSTALLATION INSTRUCTIONS OR APPLICABLE ICC-ES EVALUATION SERVICES REPORT CALL FOR THE APPLICATION OF AN INSTALLATION TORQUE, THE SPECIFIED TORQUE SHALL BE APPLIED WITH A CALIBRATED TORQUE WRENCH. THE SPECIFIED INSTALLATION TORQUE SHALL NOT BE EXCEEDED.
3. ANCHORS SHALL BE CARBON STEEL (INTERIOR) & STAINLESS STEEL (EXTERIOR) .
4. THE SPECIAL INSPECTOR SHALL BE ON THE JOBSITE CONTINUOUSLY DURING ANCHOR INSTALLATIONS, UNLESS OTHERWISE NOTED IN ICC-ES ESR, TO VERIFY ANCHOR TYPE, ANCHOR DIMENSIONS, CONCRETE TYPE, CONCRETE COMPRESSIVE STRENGTH, HOLE DIMENSIONS, ANCHOR SPACINGS, EDGE DISTANCES, SLAB THICKNESS, ANCHOR EMBEDMENT, AND TIGHTENING TORQUE.
5. THE TENSION TESTING OF THE EXPANSION ANCHORS SHALL BE DONE IN THE PRESENCE OF THE SPECIAL INSPECTOR AND A REPORT OF THE TEST RESULTS SHALL BE SUBMITTED TO THE ENFORCEMENT AGENCY. IF ANY ANCHORS FAIL THE TENSION-TESTING REQUIREMENTS, THE ADDITIONAL TESTING REQUIREMENTS SHALL BE PERFORMED ACCORDING TO CBC 2016, SECTION 1913A.7
6. TEST QUANTITY OF ANCHORS AS NOTED BELOW:

APPLICATION	QUANTITY
STRUCTURAL	100% OF BOLTS
NON-STRUCTURAL	50% OF BOLTS
SILL PLATE BOLTING	10% OF BOLTS

7. ANCHORS TO BE TESTED SHALL BE SELECTED AT RANDOM BY THE SPECIAL INSPECTOR.
8. THE TEST LOAD MAY BE APPLIED BY ANY METHOD THAT WILL EFFECTIVELY TRANSMIT A MEASURABLE TENSION LOAD TO THE ANCHOR. ACCEPTABLE METHODS INCLUDE:
   A. USE OF A HYDRAULIC JACK, WHEREBY EITHER UNCONFINED OR CONFINED TESTING SHALL BE ACCEPTABLE;
   B. USE OF CALIBRATED SPRING LOADED DEVICES; OR
   C. USE OF A CALIBRATED TORQUE WRENCH FOR TORQUE-CONTROLLED EXPANSION ANCHORS.
9. THE FOLLOWING CRITERIA APPLY FOR THE ACCEPTANCE OF INSTALLED ANCHORS:
   A. HYDRAULIC RAM METHOD: THE ANCHOR SHALL HAVE NO OBSERVABLE MOVEMENT AT THE APPLICABLE TEST LOAD. FOR EXPANSION ANCHORS, A PRACTICAL WAY TO DETERMINE OBSERVABLE MOVEMENT IS THAT THE WASHER UNDER THE NUT BECOMES LOOSE.
   B. TORQUE WRENCH METHOD: THE APPLICABLE TEST TORQUE MUST BE REACHED WITHIN ONE-HALF (1/2) TURN OF THE NUT.
10. IF ANY ANCHOR FAILS TESTING, TEST ALL ANCHORS OF THE SAME TYPE, INSTALLED BY THE SAME TRADE, NOT PREVIOUSLY TESTED UNTIL TWENTY (20) CONSECUTIVE ANCHORS PASS, THEN RESUME THE INITIAL TEST FREQUENCY.
11. WHEN INSTALLING DRILLED-IN ANCHORS IN EXISTING NON-PRESTRESSED REINFORCED CONCRETE, USE CARE AND CAUTION TO AVOID CUTTING OR DAMAGING THE EXISTING REINFORCING BARS. MAINTAIN A MINIMUM CLEARANCE OF ONE INCH BETWEEN THE REINFORCEMENT AND THE DRILLED-IN ANCHOR.
12. IF REBAR IS ENCOUNTERED DURING THE DRILLING, THE CONTRACTOR SHALL IMMEDIATELY TERMINATE DRILLING AND CONTACT THE ENGINEER OF RECORD.
13. LOCATE REINFORCEMENT AND CONFIRM FINAL ANCHOR LOCATIONS PRIOR TO FABRICATING PLATES, MEMBERS, OR OTHER STEEL ASSEMBLIES ATTACHED WITH MECHANICAL ANCHORS.
14. IF THE CONCRETE CRACKS DURING THE INSTALLATION OF THE ANCHOR, THE ANCHOR SHALL BE REMOVED OR ABANDONED.
15. REQUIRED TEST LOADS SHALL BE DETERMINED AS THE LESSER OF TWICE THE MINIMUM ALLOWABLE TENSION LOAD PROVIDED IN THE ICC-ESR REPORT FOR THE SPECIFIC ANCHOR OR 80% OF THE NOMINAL YIELD STRENGTH OF THE ANCHOR ELEMENT, AS SUMMARIZED IN THE TABLES BELOW:

EXPANSION ANCHOR BOLTS IN CONCRETE (CONT.)

- HILTI KWIK BOLT TZ CARBON & STAINLESS STEEL (ICC-ES/ESR-1917)
- CRACKED CONCRETE, SEISMIC (ASD), CONDITION B

HILTI KWIK BOLT TZ AT CONCRETE

NOMINAL ANCHOR DIAMETER	EMBEDMENT DEPTH, H_{EF} (INCHES)	INSTALLATION TORQUE (FT-LB)
3/8	2	25
1/2	2	40
1/2	3-1/4	40
5/8	3-1/8	60
5/8	4	60
3/4	3-3/4	110
3/4	4-3/4	110

HILTI KH-EZ AT CONCRETE (ESR-3027)

NOMINAL ANCHOR DIAMETER	EMBEDMENT DEPTH H_{EF} (INCHES)	INSTALLATION TORQUE (FT-LB)
1/4	2	18
3/8	2 1/2	40
1/2	3 1/4	45

16. TESTING SHALL OCCUR A MINIMUM OF 24 HOURS AFTER INSTALLATION OF THE SUBJECT ANCHORS.

ADHESIVE ANCHOR RODS, DOWELS AND REBAR IN HARDENED CONCRETE

1. CHEMICAL ANCHOR SYSTEMS:
   A. CONCRETE: HILTI HIT-RE-500 V3 (ICC-ES ESR 3814). USE ONLY ADHESIVE ANCHOR SYSTEMS THAT HAVE BEEN ISSUED AN ICC-ES REPORT IN ACCORDANCE WITH THE PROVISIONS OF ICC-ES AC308. ANCHOR SYSTEM SHOULD BE APPROVED FOR USE IN CRACKED CONCRETE AND SEISMIC DESIGN CATEGORIES A-F PER SECTION 2.0 OF THE ICC-ES EVALUATION SERVICES REPORT. ANCHOR SYSTEMS SHALL BE INSTALLED PER THE REQUIREMENTS OF THE ICC-ES EVALUATION SERVICES REPORT FOR THE SPECIFIC ANCHOR, AND AS REQUIRED BY THE MANUFACTURER.
2. ANCHOR RODS:
   HILTI HAS-E CONTINUOUSLY THREADED RODS OR HILTI HIS-N INTERNALLY THREADED INSERTS. ALL RODS SHALL BE ASTM A36 THREADED RODS WITH ASTM A 563 GRADE A NUTS AND ANSI B 18.22.1 TYPE A WASHERS, UNLESS OTHERWISE NOTED. ANCHORS DESIGNATED AS ASTM A193 GRADE B7 THREADED RODS SHALL USE ASTM 563 GRADE DH HEAVY HEX NUTS AND ASTM F436 WASHERS.
3. DOWELS:
   ASTM A615 GRADE 60 REINFORCING STEEL.
4. REINFORCEMENT BARS:
   ASTM A615 GRADE 60 STEEL.
5. REMOVE GREASE, OIL, RUST AND ANY OTHER LAITANCE FROM RODS AND DOWELS PRIOR TO INSTALLATION.
6. SPECIAL INSPECTION REQUIREMENTS WILL BE DICTATED BY SECTION 4.4 OF THE ICC-ES EVALUATION SERVICES REPORT. ANY SPECIAL INSPECTION SHALL VERIFY ANCHOR TYPE ANCHOR DIMENSIONS, CONCRETE TYPE, CONCRETE COMPRESSIVE STRENGTH, HOLE DIMENSIONS,ANCHOR SPACINGS, EDGE DISTANCES, SLAB THICKNESS, ANCHOR EMBEDMENT, AND TIGHTENING TORQUE.
7. THE TENSION TESTING OF THE CHEMICAL ANCHORS SHALL BE DONE IN THE PRESENCE OF THE SPECIAL INSPECTOR AND A REPORT OF THE TEST RESULTS SHALL BE SUBMITTED TO THE ENFORCEMENT AGENCY. IF ANY ANCHORS FAIL THE TENSION-TESTING REQUIREMENTS, THE ADDITIONAL TESTING REQUIREMENTS SHALL BE ACCEPTABLE TO THE ENFORCEMENT AGENCY.
8. TEST QUANTITY OF ANCHORS AS NOTED BELOW:

APPLICATION	QUANTITY
STRUCTURAL	100% OF BOLTS
NON -STRUCTURAL	50% OF BOLTS
SILL PLATE BOLTING	10% OF BOLTS

9. ANCHORS TO BE TESTED SHALL BE SELECTED AT RANDOM BY THE SPECIAL INSPECTOR.
10. WHERE ADHESIVE ANCHOR SYSTEMS ARE USED TO INSTALL REINFORCING DOWEL BARS IN HARDENED CONCRETE, ONLY 25% OF THE DOWELS NEED BE TESTED IF THE FOLLOWING CONDITIONS ARE MET:
    A. THE DOWELS ARE USED EXCLUSIVELY TO TRANSMIT SHEAR FORCES ACROSS JOINTS BETWEEN EXISTING AND NEW CONCRETE;
    B. THE NUMBER OF DOWELS IN ANY ONE MEMBER EQUALS OR EXCEEDS 12;
    C. THE DOWELS ARE UNIFORMLY DISTRIBUTED ACROSS SEISMIC FORCE RESISTING MEMBERS (SUCH AS SHEAR WALLS, COLLECTORS AND DIAPHRAGMS).
11. TESTING OF SHEAR DOWELS ACROSS COLD JOINTS IN SLABS ON GRADE WHERE THE SLAB IS NOT PART OF THE LATERAL FORCE-RESISTING SYSTEM IS NOT REQUIRED.
12. REPLACE ANCHORS AND DOWELS THAT FAIL DURING TESTING AND RETEST. IF MORE THAN 10% OF THE TESTED DOWELS AND ANCHORS FAIL TO ACHIEVE THE SPECIFIED TEST LOAD, TEST 100% OF THE DOWELS AND ANCHORS INSTALLED WITHIN THE LAST 2 DAYS OF ANCHOR INSTALLATION.
13. A HYDRAULIC CYLINDER SHALL BE USED TO APPLY THE TENSION TEST LOAD TO THE ANCHOR WITH THE CYLINDER SUPPORTED ON A LOADING PLATE HAVING A HOLE DIAMETER EQUAL TO 1.5 TO 2.0 TIMES THE ANCHOR HOLE DIAMETER (CONFINED CONFIGURATION) UNLESS OTHERWISE APPROVED BY ENFORCEMENT AGENCY.
14. THE FOLLOWING CRITERIA APPLY FOR THE ACCEPTANCE OF INSTALLED ANCHORS: A. HYDRAULIC RAM METHOD: THE ANCHOR SHALL HAVE NO OBSERVABLE MOVEMENT AT THE APPLICABLE TEST LOAD.
15. IF ANY ANCHOR FAILS TESTING, TEST ALL ANCHORS OF THE SAME TYPE, INSTALLED BY THE SAME TRADE, NOT PREVIOUSLY TESTED UNTIL TWENTY (20) CONSECUTIVE ANCHORS PASS, THEN RESUME THE INITIAL TEST FREQUENCY.

ADHESIVE ANCHOR RODS, DOWELS AND REBAR IN HARDENED CONCRETE (CONT.)

16. ALL HOLES FOR POST-INSTALLED ANCHORS SHALL BE DRILLED, CLEANED AND PREPARED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND THE APPLICABLE ICC-ESR. WHERE AN ANCHOR DOES NOT SET PROPERLY, OR FAILS A TENSION TEST, OR REINFORCEMENT IS ENCOUNTERED DURING DRILLING, THE DRILLED HOLE MAY NOT BE REUSED. ABANDONED HOLES SHALL BE FILLED WITH NON-SHRINK GROUT. THE MINIMUM SPACING BETWEEN AN ABANDONED HOLE AND A DRILLED HOLE USED FOR A POST-INSTALLED ANCHOR SHALL NOT BE LESS THAN 1-1/2 ANCHOR DIAMETERS UNLESS OTHERWISE APPROVED BY THE ENFORCEMENT AGENCY. IF THE ANCHOR OR DOWEL MAY NOT BE SHIFTED AS NOTED ABOVE, THE STATE WILL DETERMINE A NEW LOCATION.
17. LOCATE REINFORCEMENT AND CONFIRM FINAL ANCHOR LOCATIONS PRIOR TO FABRICATING PLATES, MEMBERS, OR OTHER STEEL ASSEMBLIES ATTACHED WITH ADHESIVE ANCHORS.
18. REQUIRED TEST LOADS SHALL BE DETERMINED AS THE LESSER OF TWICE THE MAXIMUM ALLOWABLE TENSION LOAD PROVIDE IN THE ICC-ESR FOR THE SPECIFIC ANCHOR OR 80% OF THE NOMINAL YIELD STRENGTH OF THE ANCHOR ELEMENT, AS SUMMARIZED IN THE TABLE BELOW:

TENSION TEST LOADS (POUNDS)[1]
HILTI HIT-RE 500-V3 (ICC-ES ESR-3814)
CRACKED CONCRETE, SEISMIC (ASD), CONDITION B

NOMINAL ANCHOR DIAMETER	NOMINAL REBAR SIZE	EMBED. DEPTH H_{ef} (INCHES)	NORMAL WEIGHT CONC. f'c = 3000 PSI
			CARBON STEEL
3/8	#3	3"	3436
1/2	#4	6"	6919
5/8	#5	8"	10590
3/4	#6	10"	16365

1. VALUES SHOWN ARE FOR IDEALIZED CASE WITH NO REDUCTIONS FOR EDGE DISTANCE, SPACING, OR BASE THICKNESS. CONTACT ENGINEER FOR VALUES BASED ON ACTUAL CONDITIONS.

DESIGN LOADS

1. ALL WORKS HAVE BEEN DESIGNED IN COMPLIANCE WITH OF THE CALIFORNIA BUILDING CODE 2019 EDITION
2. EARTHQUAKE DESIGN DATA
   a. RISK CATEGORY ---------- III
   b. SEISMIC IMPORTANCE FACTOR, Ie ---------- 1.25
   c. MAPPED SPECTRAL RESPONSE ACCELERATION PARAMETERS, SS = 2.181 g, S1 = 0.776 g
   d. SITE CLASS ---------- = D
   e. DESIGN SPECTRAL RESPONSE ACCELERATION PARAMETERS, SDS = 1.27 g, SD1 = 0.98 g
   f. SEISMIC DESIGN CATEGORY---------- E
   g. BASIC SEISMIC FORCE-RESISTING SYSTEM: CMU SHEAR WALL AT MAIN LEVEL, WOOD SHEAR WALL AT ROOF LEVEL
   h. DESIGN BASE SHEAR ---------- NOT APPLICABLE
   i. SEISMIC RESPONSE COEFFICIENT, CS ---------- NOT APPLICABLE
   j. RESPONSE MODIFICATION COEFFICIENT, R ---------- 2 (ORDINARY REINFORCED CMU), 6.5 (LIGHT FRAME WOOD WALL)
   k. ANALYSIS PROCEDURE USED ---------- NOT APPLICABLE
   l. APPLICABLE HORIZONTAL STRUCTURAL IRREGULARITIES ---------- NOT APPLICABLE
   m. APPLICABLE VERTICAL STRUCTURAL IRREGULARITIES ---------- NOT APPLICABLE
   n. LOCATION OF BASE AS DEFINED IN ASCE 7 SECTION 11.2 ---------- AT GROUND FLOOR
3. WIND DESIGN DATA:
   a. BASIC DESIGN WIND SPEED, V = 115 MPH, Vasd = 85 MPH
   b. RISK CATEGORY = III
   c. WIND EXPOSURE = C
   d. INTERNAL PRESSURE COEFFICIENT = +0.18 / -0.18
   e. DESIGN WIND PRESSURE 9COMPONENT & CLADDING) = 51 PSF
4. LIVE LOAD = 20 PSF (ROOF)
   LIVE LOAD = 40 PSF (FLOOR)
   LIVE LOAD = 80 PSF (CORRIDOR)
5. ALLOWABLE SOIL BEARING PRESSURE = 1500 PSF (CODE MIN.)

POWDER ACTUATED FASTENERS

1. ALL POWDER ACTUATED FASTENERS FOR SILL PLATE ATTACHMENT SHALL BE HITLI X-U (ESR -2269) APPLICATION AND INSTALLATION AND SHALL BE PER APPROVED ICC REPORT NUMBER.
2. FASTENERS SHALL NOT BE INSTALLED UNTIL THE CONCRETE HAS REACHED ITS DESIGNATED STRENGTH.
3. FASTENERS SHALL NOT BE INSTALLED IN CONCRETE WHOSE THICKNESS IS LESS THAN THREE TIMES THE PENETRATION REQUIRED, EXCEPT 1-1/8" PENETRATION IN 3-1/4" THICK FLOOR SLAB IS ACCEPTABLE.
4. THE MINIMUM DISTANCE FROM THE EDGE OF CONCRETE TO CENTER OF ANCHOR IS 3 INCHES.
5. FASTENERS IN THE UNDERSIDE OF CONCRETE SLABS ON METAL DECKING SHALL BE PLACED IN THE THICK PORTION OF THE SLAB.
6. FASTENERS SHALL BE INSTALLED BY A PRE-QUALIFIED OPERATOR ACCORDING TO THE ICC REPORT AND SHALL BE TESTED TO TWICE THE ALLOWABLE TENSION LOAD AS LISTED IN THE ICC ESR REPORT. FASTENERS TO BE TESTED SHALL BE SELECTED AT RANDOM BY THE SPECIAL INSPECTOR.

WOOD

1. ALL LUMBER SHALL BE GRADED PER GRADING RULES #17 OF WEST COAST LUMBER INSPECTION BUREAU
2. WOOD SHALL BE GRADE MARKED DOUGLAS FIR LARCH AND AS FOLLOWS:
   HORIZONTAL FRAMING NO. 1
   STUDS NO. 1
   SILLS & BLOCKING NO. 1
   POSTS & COLUMNS NO. 1
   LINTELS & BEAMS NO. 1
3. ALL PRESSURE TREATED LUMBER SHALL BE MARKED WITH A STAMP PER AWPB AS LP-2 OR LP-22.
4. ALL WOOD IN CONTACT WITH CONCRETE OR MASONRY SHALL BE PRESSURE TREATED PER CBC SECTION 2303.1.9 . ALL FASTENERS IN CONTACT WITH PRESSURE TREATED WOOD SHALL BE HOT-DIPPED AND ZINC GALVANIZED.
5. PLYWOOD SHEATHING SHALL BE DOUGLAS FIR PLYWOOD, 5 PLY, STRUCTURAL 1, CONFORMING TO PS 1 09. ALL PLYWOOD SHALL BE GRADE MARKED "APA WITH EXTERIOR GLUE".
6. PLYWOOD NAILING SHALL BE APPROVED BY THE JOB INSPECTOR PRIOR TO COVERING UP.
7. FRAMING HARDWARE SHALL BE AS MANUFACTURED BY THE SIMPSON STRONG TIE OR APPROVED EQUAL. FASTENERS TO BE FURNISHED BY THE MANUFACTURER AND ALL FASTENER HOLES TO BE FILLED.
8. MACHINE APPLIED NAILING IS SUBJECT TO A SATISFACTORY JOBSITE DEMONSTRATION FOR EACH PROJECT AND THE APPROVAL BY THE PROJECT ARCHITECT OR STRUCTURAL ENGINEER. THE APPROVAL IS SUBJECT TO CONTINUED SATISFACTORY PERFORMANCE. IF NAILHEADS PENETRATE THE OUTER PLY MORE THAN WOULD BE NORMAL FOR A HAND HAMMER, OR IF MINIMUM ALLOWABLE EDGE DISTANCES ARE NOT MAINTAINED, THE PERFORMANCE WILL BE DEEMED UNSATISFACTORY.
9. PROVIDE PLATE WASHERS UNDER ALL BOLTS, NUTS AND HEADS.
10. RE-TIGHTEN ALL BOLTS PRIOR TO CLOSING IN.
11. ALL NAILING SHALL CONFORM TO TABLES SET FORTH IN THE TITLE 24 OF THE CALIFORNIA CODE OF REGULATIONS EXCEPT SPECIFICALLY DETAILED CONNECTIONS. USE ONLY COMMON NAILS, ASTM 1667.
12. ALL FRAMING MEMBERS SHALL BE ERECTED WITH NATURAL OR BUILT-IN CAMBER UP UNLESS NOTED OTHERWISE.
13. UNLESS SPECIFICALLY SHOWN ON THESE PLANS NO STRUCTURAL MEMBER SHALL BE CUT, NEITHER DRILLED NOR NOTCHED WITHOUT PRIOR WRITTEN AUTHORIZATION FROM THE STRUCTURAL ENGINEER AND THE DIVISION OF THE STATE ARCHITECT.
14. BOLTS SHALL COMPLY WITH ASTM A-307. BOLT HOLES IN WOOD SHALL BE 1/32 INCH TO 1/16 INCH OVERSIZE. HOLES OVER 1/16 INCH LARGER SHALL REQUIRE REPLACEMENT OF LUMBER PIECE. ALL BOLT HEAD AND NUTS BEARING ON WOOD SHALL HAVE STEEL WASHERS.
15. NO LENGTH OF SPLIT IN MEMBER SHALL EXCEED THE WIDTH OF THE MINOR FACE.
16. FOR SIZE AND LOCATION OF ROOF, FLOOR AND WALL OPENING, SEE ARCHITECTURAL, MECHANICAL AND ELECTRICAL DRAWINGS. FRAME ALL FOUR SIDES OF OPENINGS WITH ADEQUATE MEMBERS AND CONNECTORS.
17. ALL BREAKS IN DOUBLE PLATES FOR VENTS, DUCTS AND PLUMBING SHALL BE STRAPPED AS PER TYPICAL DETAIL.
18. SEE ARCHITECTURAL DRAWINGS FOR SIZE AND LOCATION OF NON-BEARING PARTITIONS.
19. LEAD HOLES FOR FOR LAG SCREWS SHALL BE PROVIDED TO AVOID SPLITTING OF THE WOOD MEMBER:
(a) THE CLEARANCE HOLE FOR THE SHANK SHALL HAVE THE SAME DIAMETER AS THE SHANK, AND THE DEPTH OF PENETRATION AS THE LENGTH OF UNTHREADED SHANK.
(b) THE LEAD HOLE FOR THE THREADED PORTION SHALL HAVE A DIAMETER EQUAL TO 40% TO 70% OF THE SHANK DIAMETER AND A LENGTH EQUAL TO AT LEAST THE LENGTH OF THE THREADED PORTION.

MASONRY

1. CONCRETE BLOCKS SHALL BE OF SIZES SHOWN ON THE DRAWINGS, TYPE AND COLOR AS SELECTED BY THE ARCHITECT AND CONFORM TO ASTM C-90. BLOCK SHALL BE MEDIUM WEIGHT UNITS, f'm= 2000 PSI. ALL CMU UNITS SHALL BE LAYED IN RUNNING BOND, UNLESS NOTED OTHERWISE ON THE DRAWINGS. USE OPEN-END BLOCKS FOR CHORD/DRAG REINFORCEMENT & IN LINTELS.
2. COARSE GROUT MIX SHALL BE 1:3:2 PORTLAND CEMENT TO SAND TO PEA GRAVEL WITH 1/10 PART LIME PUTTY OR HYDRATED LIME, 2000 PSI.
3. MORTAR MIX SHALL BE 1:3 PORTLAND CEMENT TO SAND WITH NOT MORE THAN ONE-HALF NOR LESS THAN ONE-QUARTER PART LIME PUTTY, TYPE M OR S, 2000 PSI.
4. ALL REINFORCING SHALL HAVE A MINIMUM COVERAGE OF ONE BAR DIAMETER (1/2" MIN.) OF GROUT AND VERTICAL BARS SHALL BE PLACED IN THE CENTER OF THE WALL UNLESS SHOWN OTHERWISE.
5. GROUT CELLS SOLID IN ALL WALLS. REINFORCING SHALL BE SECURELY HELD IN PLACE. GROUT IN 4'-0" MAXIMUM LOW LIFTS FOR CMU WALLS PER SECTION 2104A.1.3.1.1.1, CALIFORNIA BUILDING CODE.
6. NO PIPES OR DUCTS SHALL BE PLACED IN MASONRY UNLESS NOTED OR DETAILED SPECIFICALLY.
7. BOLTS SHALL BE GROUTED SOLID WITH 1" MIN. GROUT BETWEEN BOLT AND MASONRY AT BLOCK FACE.
8. ALL CONCRETE TO RECEIVE MASONRY SHALL BE SANDBLASTED CLEAN.
9. BLOCK LAYING AND GROUTING TO BE CONTINUOUSLY INSPECTED BY SPECIAL INSPECTOR.
10. DESIGN METHOD USED: ALLOWABLE STRESS DESIGN (ASD)
11. SPECIAL INSPECTION SHALL BE PER 2019 CBC, SECTION 1705A.4. SPECIAL INSPECTIONS AND TESTS SHALL BE PERFORMED IN ACCORDANCE WITH THE QUALITY ASSURANCE PROGRAM REQUIREMENTS OF TMS 402 AND TMS 602, LEVEL 3 REQUIREMENTS AND 2019 CBC CHAPTER 21A. TESTING SHALL BE PERFORMED IN ACCORDANCE WITH 2019 CBC SECTION 2105A.

STRUCTURAL SHEET INDEX

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GRAND TOTAL: 20	

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GENERAL NOTES

BUILDING 400 MODERNIZATION TO NEW CLASSROOM/ LIBRARY MEDIA CENTER
WALNUT VALLEY UNIFIED SCHOOL DISTRICT
DIAMOND BAR HIGH SCHOOL
21400 PATHFINDER RD. DIAMOND BAR, CA 91765

WALNUT VALLEY UNIFIED SCHOOL DISTRICT

SEAL:
REGISTERED PROFESSIONAL ENGINEER TERRY C. TSANG No.32992 Exp. 06/30/2024 STRUCTURAL OF CALIFORNIA

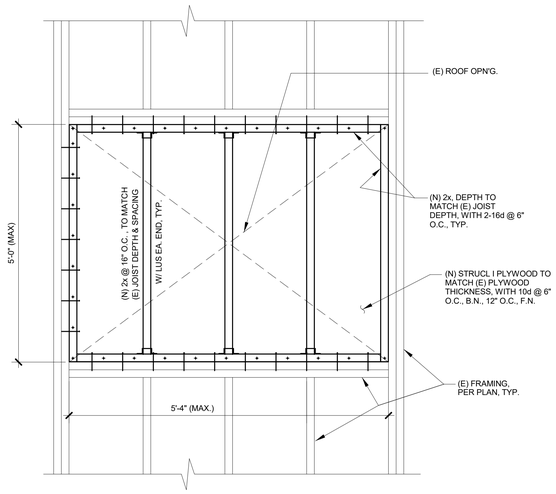
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REVISION DATE: DESCRIPTION:
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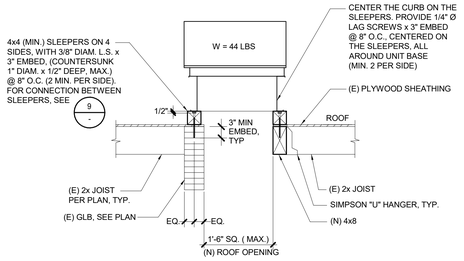
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1 INFILL OF (E) ROOF OPENING

NONE

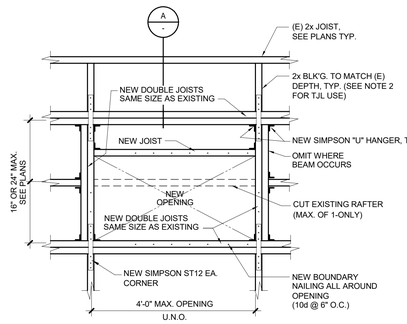


NOTE:

1. CONTRACTOR TO FIELD VERIFY (E) CONDITION ABOVE PRIOR TO INSTALL (N) UNIT AND ALERT SEOR IF ANY DEVIATION.
2. PROVIDE 10d @ 6" O.C. BOUNDARY NAILING AT PERIMETER OF THE NEW OPENING.

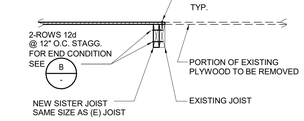
2 EF CURB DETAIL

NONE

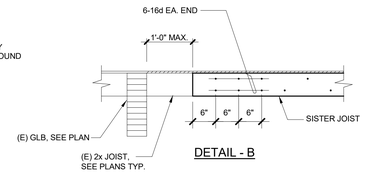


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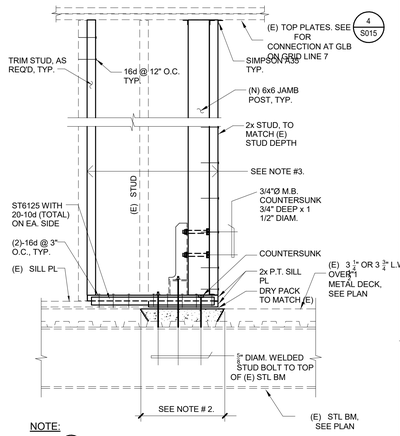
1. PROVIDE TEMPORARY SHORING PRIOR TO CUTTING EXISTING JOIST & SHEATHING.



DETAIL - A



DETAIL - B



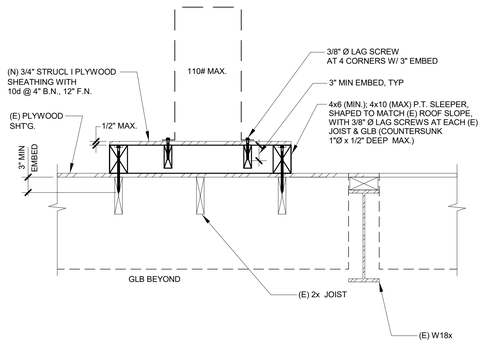
NOTE:

1. SEE 8A FOR OTHER DETAILS.
2. CHIP OUT (E) CONC., AS REQ'D. DO NOT DAMAGE (E) REINF OR THE METAL DECK. ROUGHEN JTS TO 1/4" AMPLITUDE. APPLY CONCRETE BONDING AGENT ON ALL SURFACES. GROUT SOLID WITH NON-SHRINK, NON-STAINING GROUT.
3. REMOVE (E) PLYWOOD SHEATHING AND FINISH, AS REQ'D. RESTORE FINISH TO MATCH (E); RESTORE PLYWOOD SHEATHING WITH STRUCL I PLYWOOD, MATCH (E) PLYWOOD THICKNESS, WITH THE FOLLOWING NAILINGS: 10d @ 3" B.N., 10d @ 12" F.N. FOR A 1/2" PLYWOOD; 8d @ 3" B.N., 8d @ 12" F.N. FOR A 3/8" PLYWOOD.

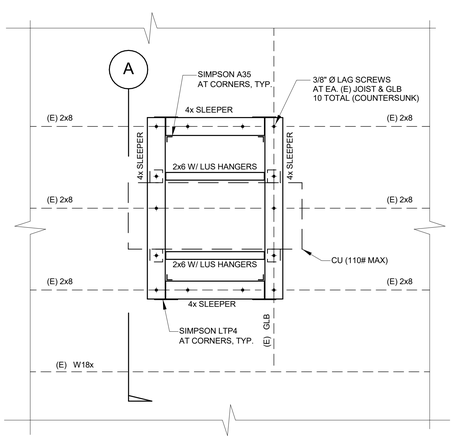
8B JAMB POST CONN. DETAIL AT MAIN LEVEL

3 FRAMING AT NEW ROOF OPENING

NONE



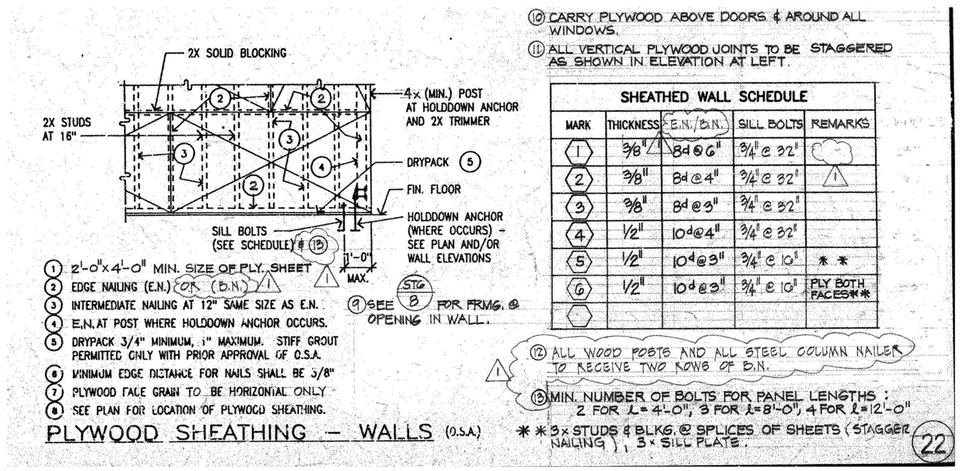
A SECTION



PLAN VIEW

9 CU ANCHORAGE DETAIL

NONE

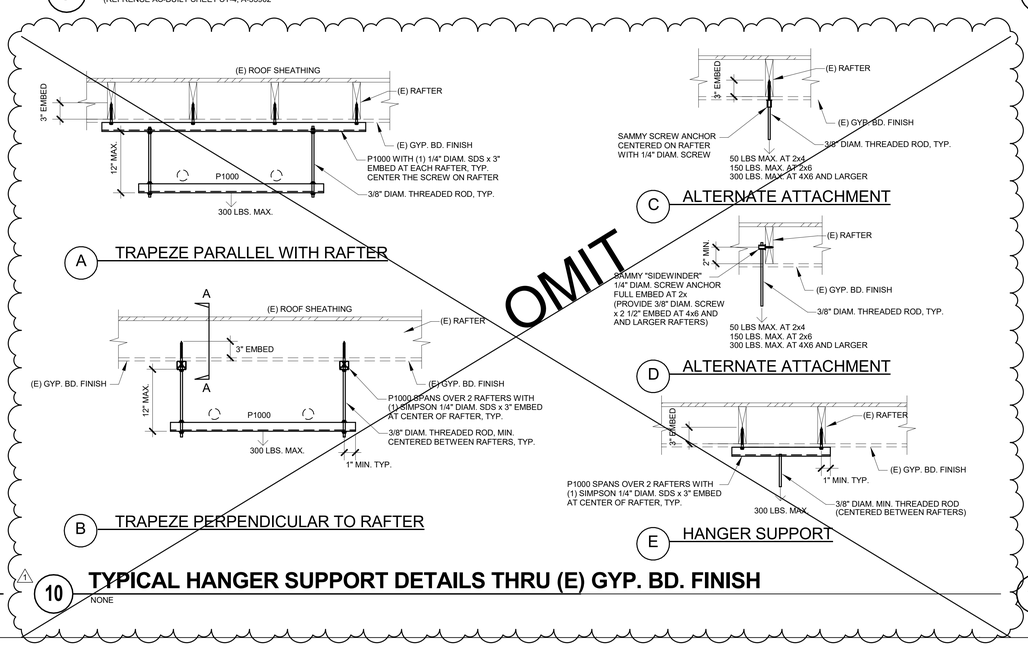


SHEATHED WALL SCHEDULE

MARK	THICKNESS	E.N. B.N.	SILL BOLTS	REMARKS
1	3/8"	8d@6"	3/4"@ 32"	
2	3/8"	8d@4"	3/4"@ 32"	
3	3/8"	8d@3"	3/4"@ 32"	
4	1/2"	10d@4"	3/4"@ 32"	
5	1/2"	10d@3"	3/4"@ 16"	**
6	1/2"	10d@3"	3/4"@ 16"	PLY BOTH FACES**

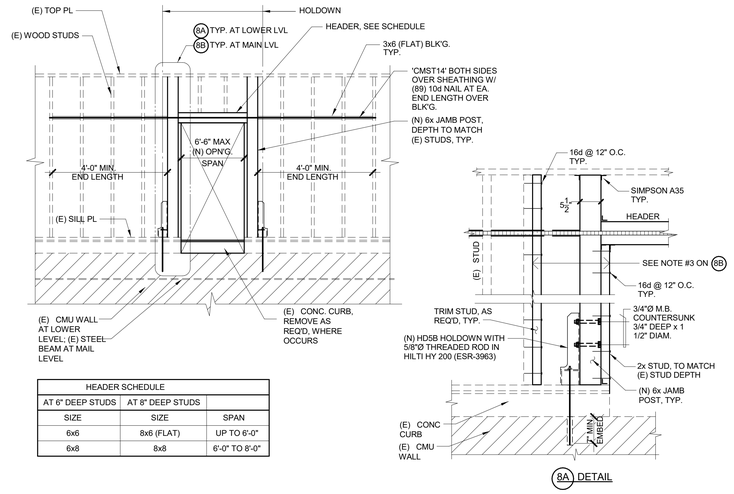
7 (E) WOOD SHEAR WALL PLYWOOD SHEATHING SCHEDULE

(REFRENCE AS-BUILT SHEET ST-4, A-53902



8 NEW OPENING IN (E) WOOD FRAMED WALL

NONE

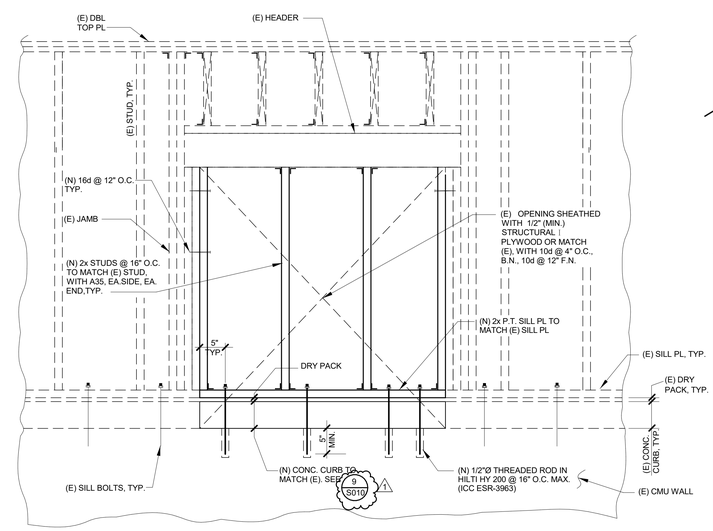


HEADER SCHEDULE		
AT 6" DEEP STUDS	AT 8" DEEP STUDS	
SIZE	SIZE	SPAN
6x6	8x6 (FLAT)	UP TO 6'-0"
6x8	8x8	6'-0" TO 8'-0"

8A DETAIL

10 TYPICAL HANGER SUPPORT DETAILS THRU (E) GYP. BD. FINISH

NONE



12 TYP. INFILL FOR EXISTING OPENING AT WOOD FRAMED WALLS

NONE

10/21/2022 9:49:41 AM

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TYPICAL DETAILS

BUILDING 400 MODERNIZATION TO NEW CLASSROOM/ LIBRARY MEDIA CENTER
WALNUT VALLEY UNIFIED SCHOOL DISTRICT
DIAMOND BAR HIGH SCHOOL
21400 PATHFINDER RD. DIAMOND BAR, CA 91765

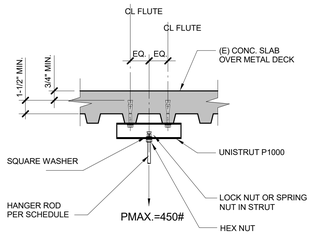
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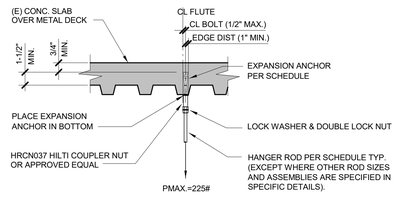
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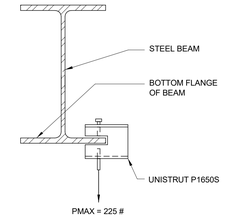
S011



A AT CONCRETE FILLED DECK DOUBLE - EXPANSION ANCHOR CONNECTION



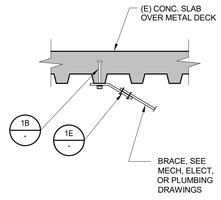
B AT CONCRETE FILLED DECK SINGLE - EXPANSION ANCHOR CONNECTION



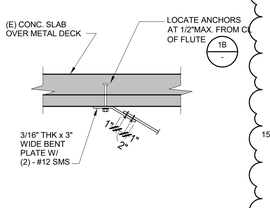
C HANGER ATTACHMENT AT STEEL BEAMS

FOR EXPANSION ANCHORS

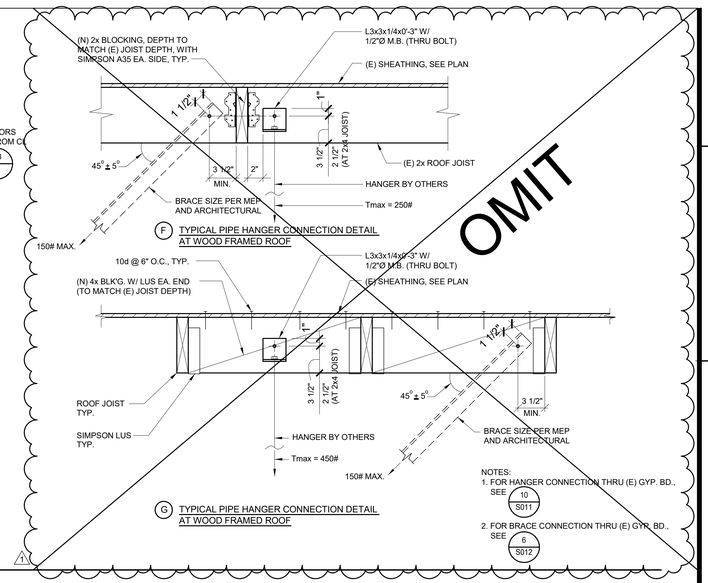
1. THE FOLLOWING MAY BE FASTENED TO AND SUSPENDED FROM THE FRAMED BEAMS AND SLABS:
   - PIPES 6" DIA. AND LESS
   - SUSPENDED UNITS WEIGHING LESS THAN 500#
   - HANGERS SUPPORTING LESS THAN 500#
2. ANY 4'-0" x 4'-0" AREA SHALL SUPPORT LESS THAN 500#



D BRACE PERP TO DECK FLUTE AT CONCRETE FILLED DECK



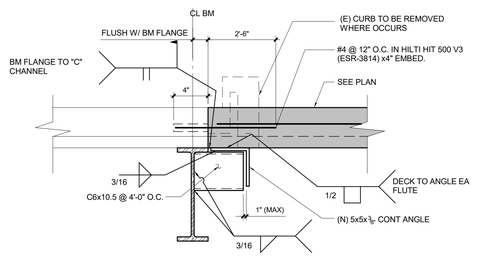
E BRACE PARALLEL TO DECK FLUTE AT CONCRETE FILLED DECK



EXPANSION ANCHOR SCHEDULE (HILTI KWIK BOLT TZ, ESR-1917)			
LOAD CONDITION	MAX. HANGER LOAD *	MIN. ROD SIZE	EXP. ANCHO. SIZE **
SINGLE EXPANSION ANCHOR	225#	3/8" DIA.	ONE 3/8" DIA.
DOUBLE EXPANSION ANCHOR	450#	3/8" DIA.	TWO 3/8" DIA.

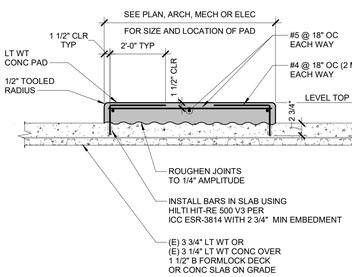
1 EQUIPMENT AND PIPE HANGERS HUNG FROM CONCRETE FILLED DECK, STEEL BEAMS AND WOOD

NONE



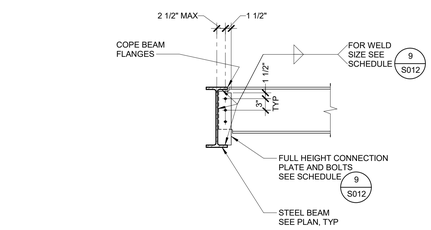
2 CONCRETE DECK OPENING INFILL

NONE



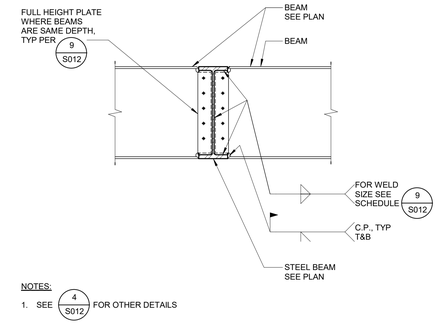
3 EQUIPMENT PAD ON (E) CONCRETE SLAB

3/4" = 1'-0"



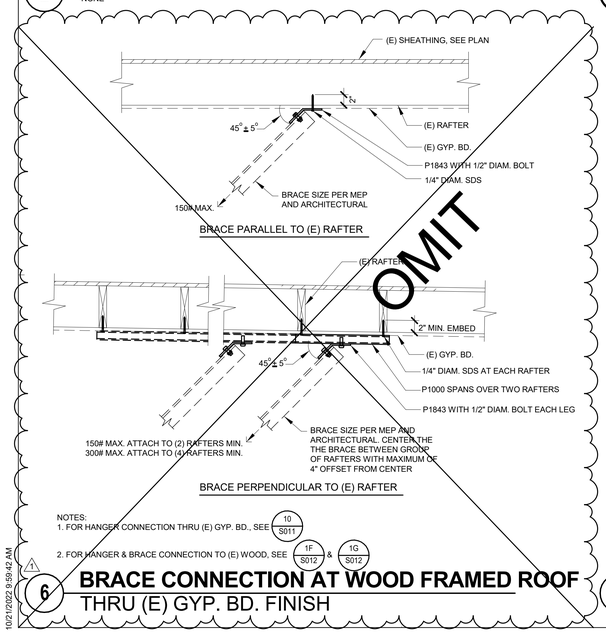
4 BEAM TO BEAM CONNECTION DETAIL

3/4" = 1'-0"

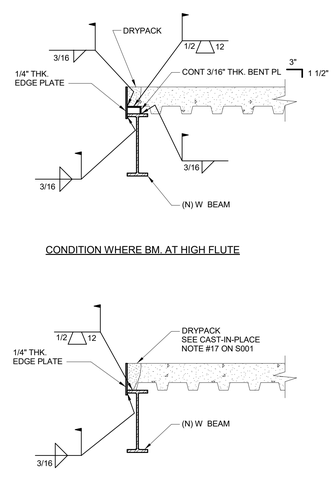


5 CANTILEVER BEAM CONNECTION DETAILS

3/4" = 1'-0"



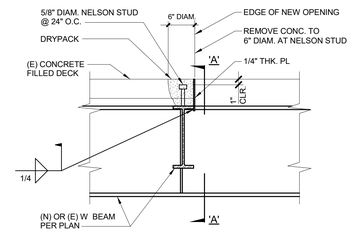
6 BRACE CONNECTION AT WOOD FRAMED ROOF THRU (E) GYP. BD. FINISH

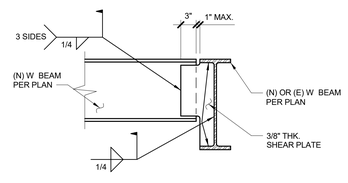


CONDITION WHERE BM. AT HIGH FLUTE

7 NEW CONC FILLED DECK FLR OPENING DETAIL

NONE





SEXTION 'A-A'

8 NEW BEAM CONNECTION DETAIL

NONE

TYPICAL BEAM CONNECTION SCHEDULE				
BEAM SIZE	CONNECTION PLATE THK.	CONNECTION* PLATE WELD	NO. OF BOLTS	BOLD SIZE (SC) BOLTS
C8, W8, W10	3/8"	1/4"	2	3/4" DIA. H.S.B.
C OR MC12, W12, W14	3/8"	5/16"	3	7/8" DIA. H.S.B.
W16	3/8"	5/16"	4	1" DIA. H.S.B.
W18	1/2"	3/8"	5	1" DIA. H.S.B.

NOTE:

1. FILLET WELD SIZE, 'W', SHALL BE AS SHOWN UNLESS A LARGER SIZE IS REQUIRED BY AISC STEEL CONSTRUCTION MANUAL, TABLE J2.4.
2. WHERE NUMBER OF BOLTS NOTED IN SCHEDULE CAN NOT BE IN A SINGLE ROW, ADD SECOND ROW WITH TWO BOLTS MINIMUM.
3. BOLT SIZE AND QUANTITY SHALL BE TYPICAL FOR ALL CONDITIONS UNLESS DETAILED OTHERWISE.
4. STIFF. PL THK WHERE NOT SPECIFIED SHALL BE SAME THK AS CONN. PL TYP, UNO.
5. ALL BOLTS ARE HSB, (A325 SC)

9 BEAM CONNECTION SCHEDULE

NO SCALE

10/21/2022 9:59:42 AM

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PROJECT #: 20000440.00

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EXTERIOR SCALE IN INCHES
0 1 2 3

TYPICAL DETAILS

BUILDING 400 MODERNIZATION TO NEW CLASSROOM/ LIBRARY MEDIA CENTER
WALNUT VALLEY UNIFIED SCHOOL DISTRICT
DIAMOND BAR HIGH SCHOOL
21400 PATHFINDER RD. DIAMOND BAR, CA 91765

WALNUT VALLEY UNIFIED SCHOOL DISTRICT

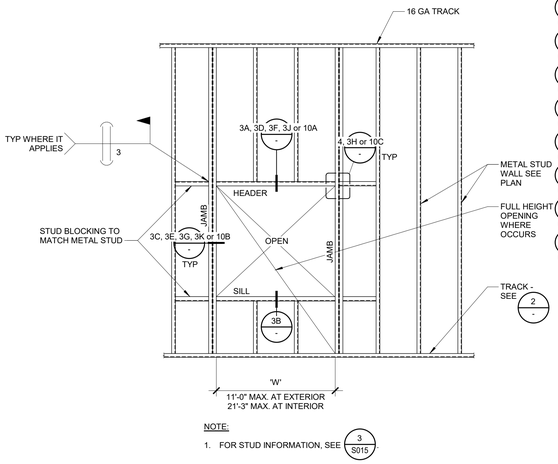
SEAL:
REGISTERED PROFESSIONAL ENGINEER CORY C. TSANG No. S2992 Exp. 06/30/2024 STRUCTURAL OF CALIFORNIA

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PROJECT NUMBER: 20000440.00
PROJECT STATUS: 100% CD
PROJECT ISSUED: 03/18/21
REVISION DATE: DESCRIPTION:
1 10/25/2022 Addendum 1

S012

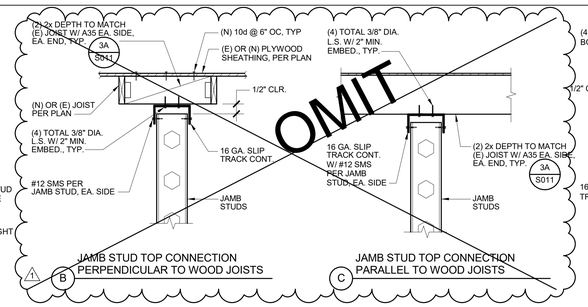


NOTE:

1. FOR STUD INFORMATION, SEE 3 / S015

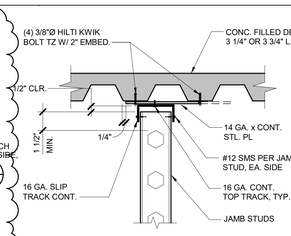
TYP EXTERIOR AND INTERIOR NON-BEARING WALL FRAMING

1 — 3/4" = 1'-0"

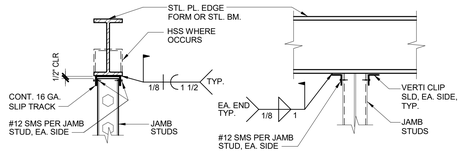


B JAMB STUD TOP CONNECTION PERPENDICULAR TO WOOD JOISTS

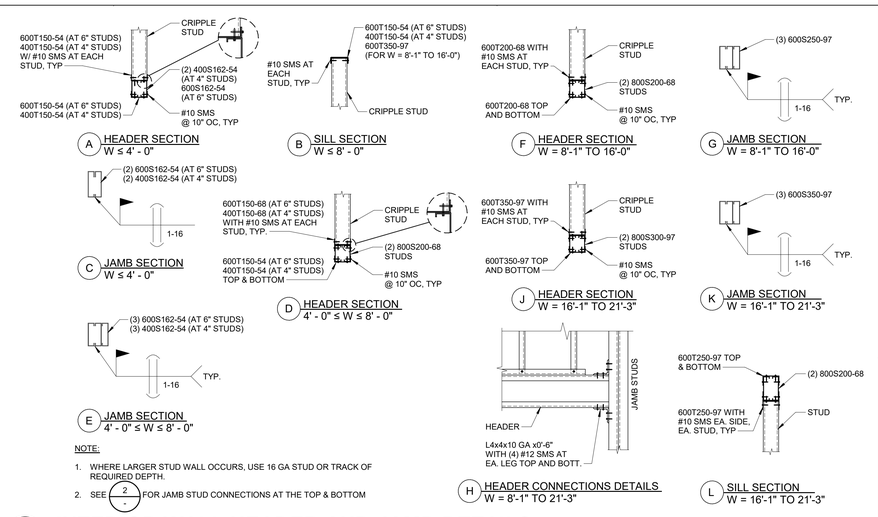
C JAMB STUD TOP CONNECTION PARALLEL TO WOOD JOISTS



D JAMB STUD TOP CONNECTION AT CONCRETE FILLED DECK



A JAMB STUD TOP CONNECTION AT STEEL BEAMS

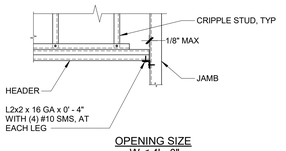


NOTE:

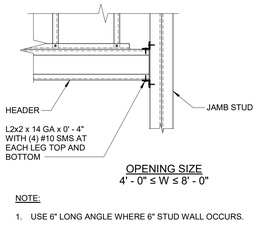
1. WHERE LARGER STUD WALL OCCURS, USE 16 GA STUD OR TRACK OF REQUIRED DEPTH.
2. SEE 2 / - FOR JAMB STUD CONNECTIONS AT THE TOP & BOTTOM

INTERIOR WALL HEADER AND JAMB DETAILS

3 — 3/4" = 1'-0"



OPENING SIZE
W ≤ 4' - 0"



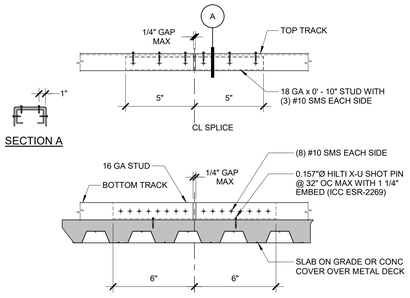
OPENING SIZE
4' - 0" ≤ W ≤ 8' - 0"

NOTE:

1. USE 6" LONG ANGLE WHERE 6" STUD WALL OCCURS.

NON-BEARING WALL HEADER CONNECTIONS DETAILS

4 — 3/4" = 1'-0"

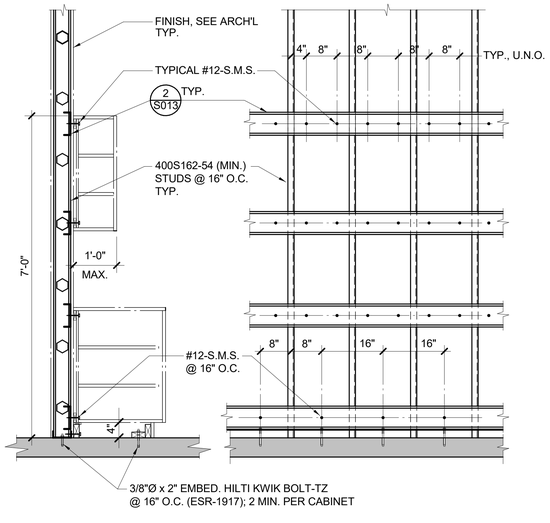


NON-BEARING WALL TRACK & JAMB STUDS ANCHORAGE DETAILS

2 — 3/4" = 1'-0"

NON-BEARING WALL TRACK SPLICE DETAILS

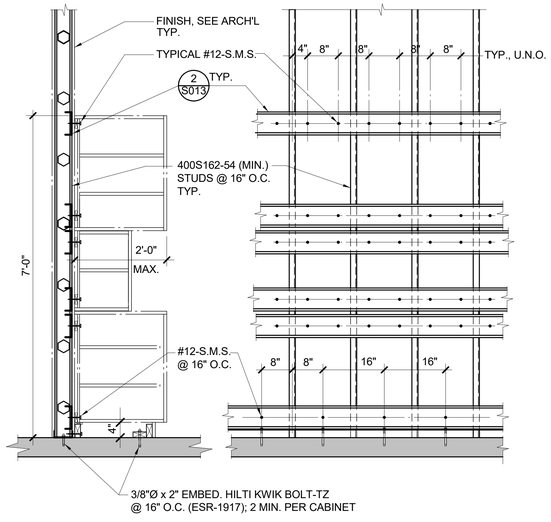
5 — 3/4" = 1'-0"



REFERENCE: 15 & 20/A10.50

CASEWORK WALL SUPPORT DETAIL

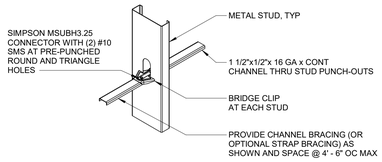
8 — 3/4" = 1'-0"



REFERENCE: 7/A10.50

CASEWORK WALL SUPPORT DETAIL

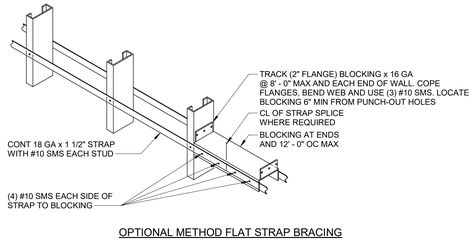
9 — 3/4" = 1'-0"



BRIDGING CHANNEL SCREW-ATTACHED USING BRIDGE CLIP

NOTE:

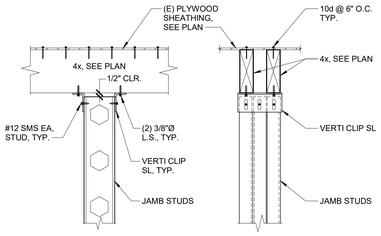
1. NOTCHING OR CUTTING OF COLD ROLLED CHANNEL OR STRAP IS NOT PERMITTED.



OPTIONAL METHOD FLAT STRAP BRACING

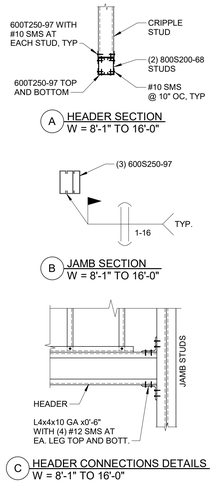
STUD WALL BRIDGING DETAILS

6 — 3/4" = 1'-0"



21'-3" WIDE STOREFRONT JAMB STUD CONNECTION TO WOOD BM

7 — 3/4" = 1'-0"



EXTERIOR WALL HEADER AND JAMB DETAILS

10 — 3/4" = 1'-0"

10/21/2022 9:59:43 AM

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PROJECT # 20000440.00

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TYPICAL DETAILS

BUILDING 400 MODERNIZATION TO NEW CLASSROOM/ LIBRARY MEDIA CENTER
WALNUT VALLEY UNIFIED SCHOOL DISTRICT
DIAMOND BAR HIGH SCHOOL
21400 PATHFINDER RD. DIAMOND BAR, CA 91765

WALNUT VALLEY UNIFIED SCHOOL DISTRICT

SEAL:

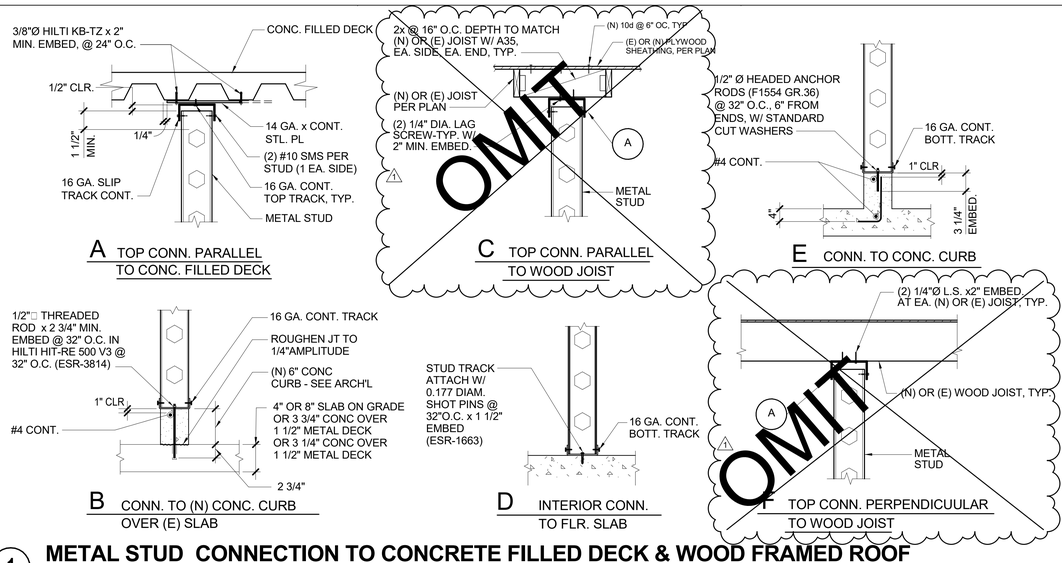
REGISTERED PROFESSIONAL ENGINEER TERRY C. TSANG No.52992 Exp. 06/30/2024 STRUCTURAL OF CALIFORNIA

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PROJECT STATUS: 100% CD
PROJECT ISSUED: 03/18/21
REVISION DATE: DESCRIPTION:
1 10/5/2022 Addendum 1

S014

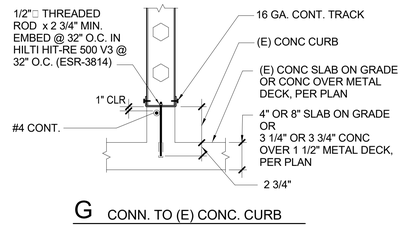


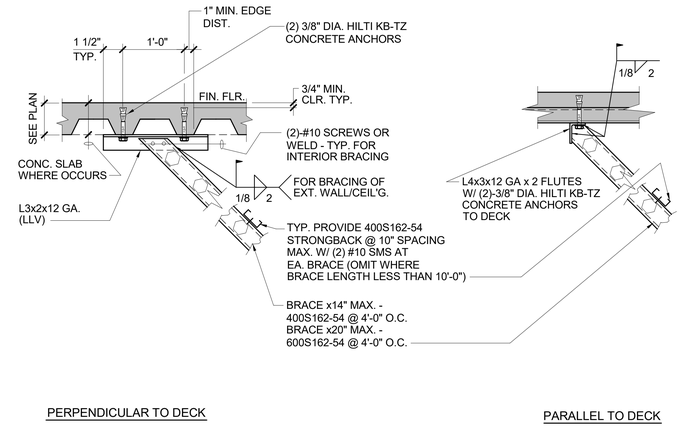
NOTE:

REFER TO ARCHITECTURAL DRAWINGS FOR STUD LAYOUT, SUSPENDED WALLS, SPECIAL SOFFITS AND WALL BRACING DETAILS.

METAL STUDS

1. METAL STUDS SHALL BE SSMA METAL SYSTEMS OR EQUAL, SEE GENERAL NOTES
2. ALL STUDS SHALL BE FORMED FROM STEEL THAT CORRESPONDS TO THE REQUIREMENTS OF ASTM A-570.
3. PROVIDE STUD WALL BRACING PER DETAIL 6/S014 AT ALL STEEL STUDS WITH WALL FINISH ON ONE SIDE ONLY.
4. SEE 3/S015 FOR SECTION PROPERTIES AND STUD SIZES.
5. BOLT HOLES IN TRACK SHALL BE 1/16" LARGER IN DIAMETER THAN NOMINAL SIZE OF BOLT SPECIFIED, UNLESS NOTED OTHERWISE
6. SEE DET. 1/S013 FOR MORE INFO.
7. SEE ARCH'L. FOR TOP TRACK OPTIONS.
8. USE SLIP TRACK FOR INTERIOR PARTITION.

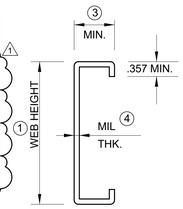




1 METAL STUD CONNECTION TO CONCRETE FILLED DECK & WOOD FRAMED ROOF

NONE

MAXIMUM SPAN FOR CEILING JOIST INTERIOR STEEL STUDS, 'S' SECTIONS				
TYPE	MILS / SPACING	33	43	97
400S162	12"	11'-10"	13'-0"	-
	16"	11'-0"	12'-0"	-
600S162	12"	13'-4"	14'-6"	20'-0"
	16"	12'-4"	13'-4"	-



TYP. 'S' STUD SECTION

MAXIMUM HEIGHT FOR NON-BEARING INTERIOR STEEL STUDS, 'S' SECTIONS			
TYPE	MILS / SPACING	43	54
362S162	12"	20'-0"	21'-5"
	16"	18'-2"	19'-6"
400S162	12"	21'-8"	23'-2"
	16"	19'-8"	21'-0"
600S162	12"	29'-10"	32'-0"
	16"	27'-2"	29'-1"

N O T E S:

GENERAL:

1. METAL STUDS SHALL COMPLY W/ ICC ESR-3064P METAL STUD EFFECTIVE PROPERTIES ARE: Fy=50ksi 54 MIL SECTIONS. Fy=33ksi FOR 43 AND 33 MILS SECTIONS.
2. 362S137-33 SEE MANUFACTURERS CALL-OUT FOR ①STUD DEPTH, ②STUD STYLE, ③FLANGE WIDTH AND ④STUD THICKNESS

CEILING JOIST:

1. ALL DBL JOIST TO BE 54 MILS.
2. TOP OF ALL CEILING JOIST SHALL BE BRACED AT 24" O.C. MAX.
3. CEILING D.L. = 6 PSF
4. AT ACCESSIBLE CEILING LOCATIONS, AN ADDITIONAL 200 POUND POINT LOAD IS CONSIDERED IN THE CEILING JOIST DESIGN. AT THESE LOCATIONS USE MINIMUM STUD DEPTH OF 6 INCHES AND MAXIMUM SPAN OF 8'-0"

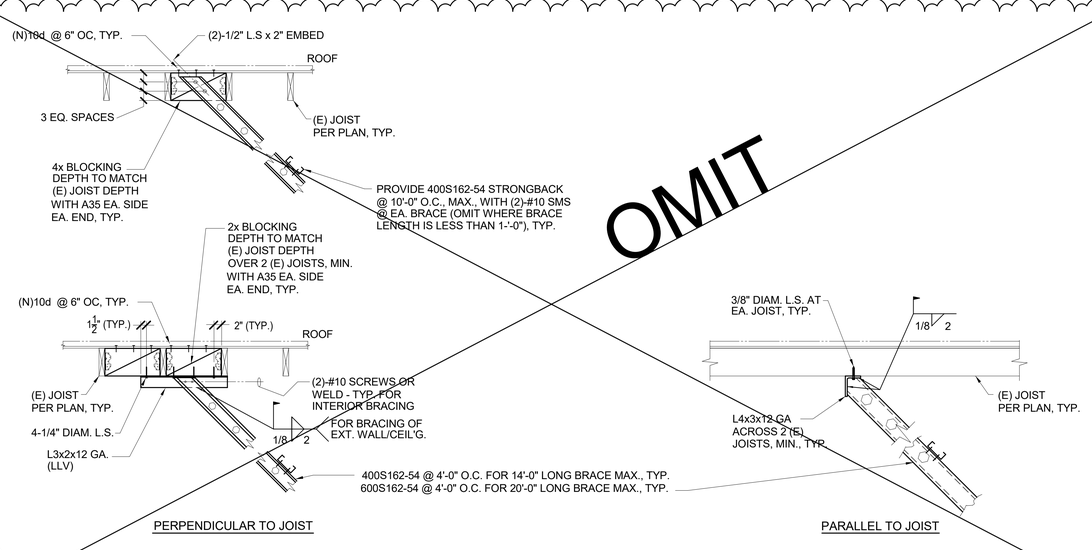
PARTITIONS:

1. ALL TRACKS TO BE ONE SIZE THICKER THAN STUDS OR JOIST FRAMING TO THEM UNLESS THICKER MILS REQUIRED AS NOTED BELOW OR NOTED OTHERWISE:
   A) PERIMETER WALLS = 54 MILS MIN.
2. ALL STUDS SUPPORTING DBL JOIST TO BE 54 MILS.
3. ALL PARTITIONS SUPPORTING ANY OF THE FOLLOWING ITEMS SHALL BE 54 MILS:
   A) HUNG CABINETS.
   B) FREE STANDING CABINETS AND EQUIPMENT TALLER THAN 36" SHALL BE ANCHORED TO WALL. SEE ARCH'L.

METAL STUD SECTION PROPERTIES					
SECTION	Sxx (in^3)	Ixx (in^4)	SECTION	Sxx (in^3)	Ixx (in^4)
362S162-33	0.304	0.551	600S162-33	0.598	1.793
362S162-43	0.392	0.710	600S162-43	0.772	2.316
362S162-54	0.481	0.873	600S162-54	0.953	2.860
400S162-33	0.346	0.692			
400S162-43	0.446	0.892			
400S162-54	0.549	1.098			

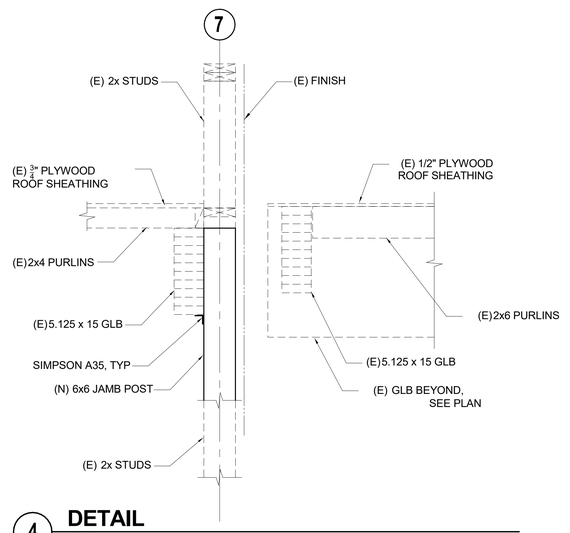
3 CLG. JOIST, PARTITION SCHED. AND METAL 'S' STUDS SECTION PROPERTIES

NONE



6 STUD BRACE CONNECTION TO WOOD FRAMED ROOF

NONE

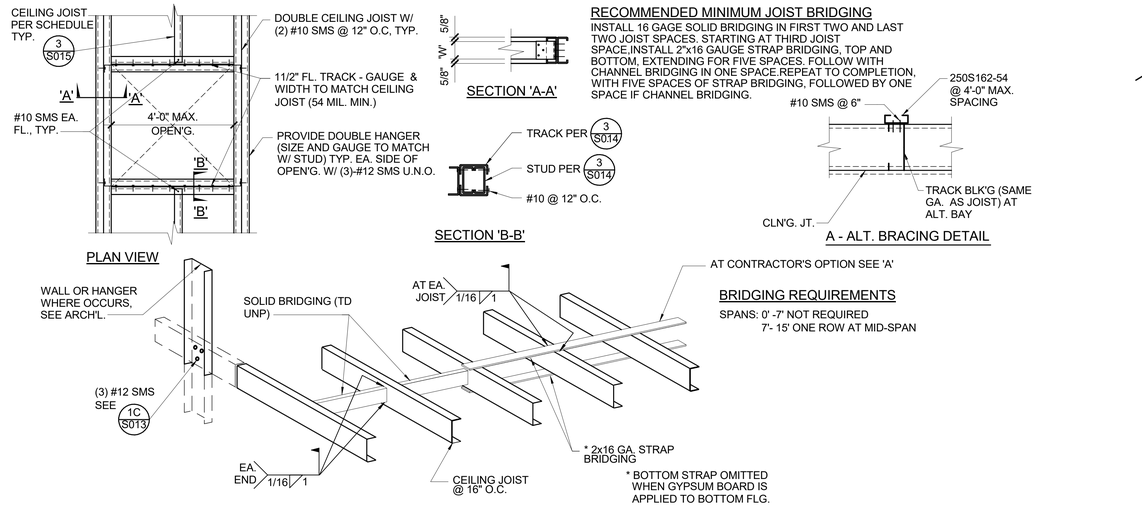


4 DETAIL

NONE

5 CEILING PLAN

NONE



7 TYPICAL CEILING JOIST BRIDGING AND BRACING

NONE

CONSULTANT:

IMEG

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EXTERIOR SCALE IN INCHES: 0 1 2 3

TYPICAL DETAILS

BUILDING 400 MODERNIZATION TO NEW CLASSROOM/ LIBRARY MEDIA CENTER

WALNUT VALLEY UNIFIED SCHOOL DISTRICT
DIAMOND BAR HIGH SCHOOL
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WALNUT VALLEY UNIFIED SCHOOL DISTRICT

SEAL:

REGISTERED PROFESSIONAL ENGINEER CLIFFORD C. TSANG No. 52992 Exp. 06/30/2024 STRUCTURAL STATE OF CALIFORNIA

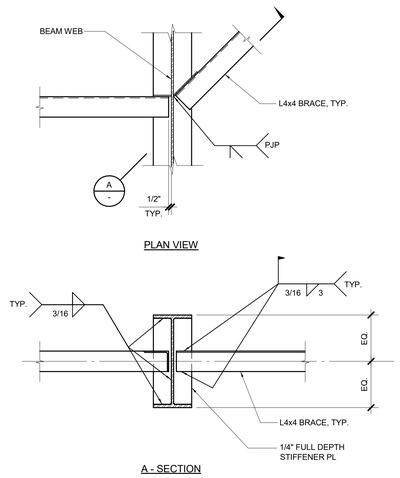
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PROJECT NUMBER:	20000440.00
PROJECT STATUS:	100% CD
PROJECT ISSUED:	02/18/21
REVISION:	DESCRIPTION:
1	Addendum 1
DATE:	10/25/2022

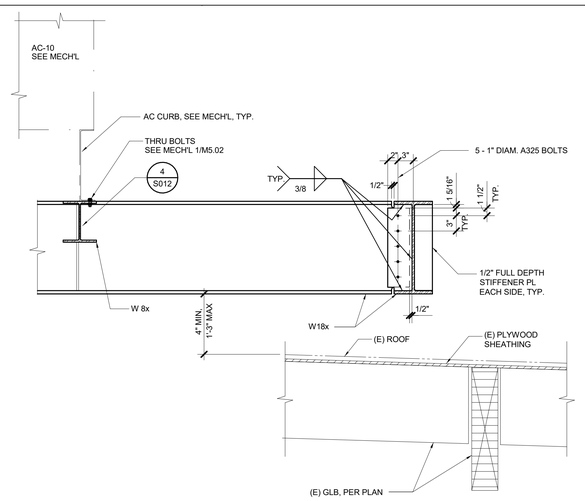
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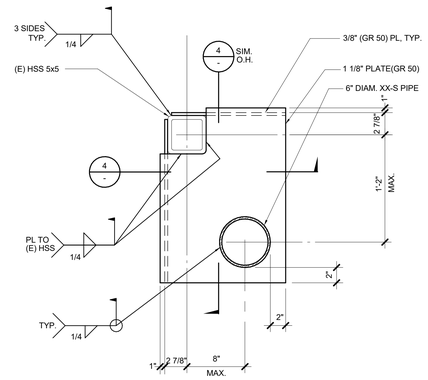
1 TYP. BRACE TO BEAM CONN. DETAIL

NONE



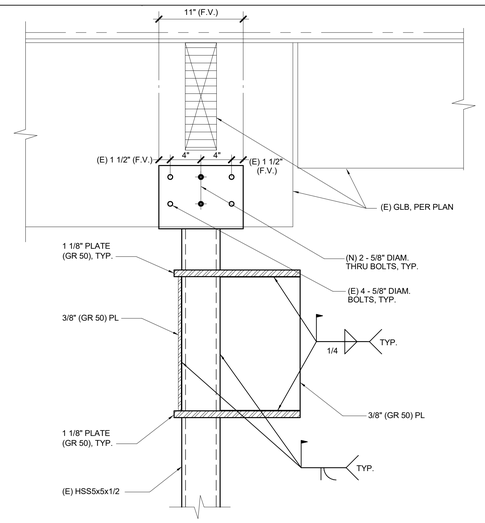
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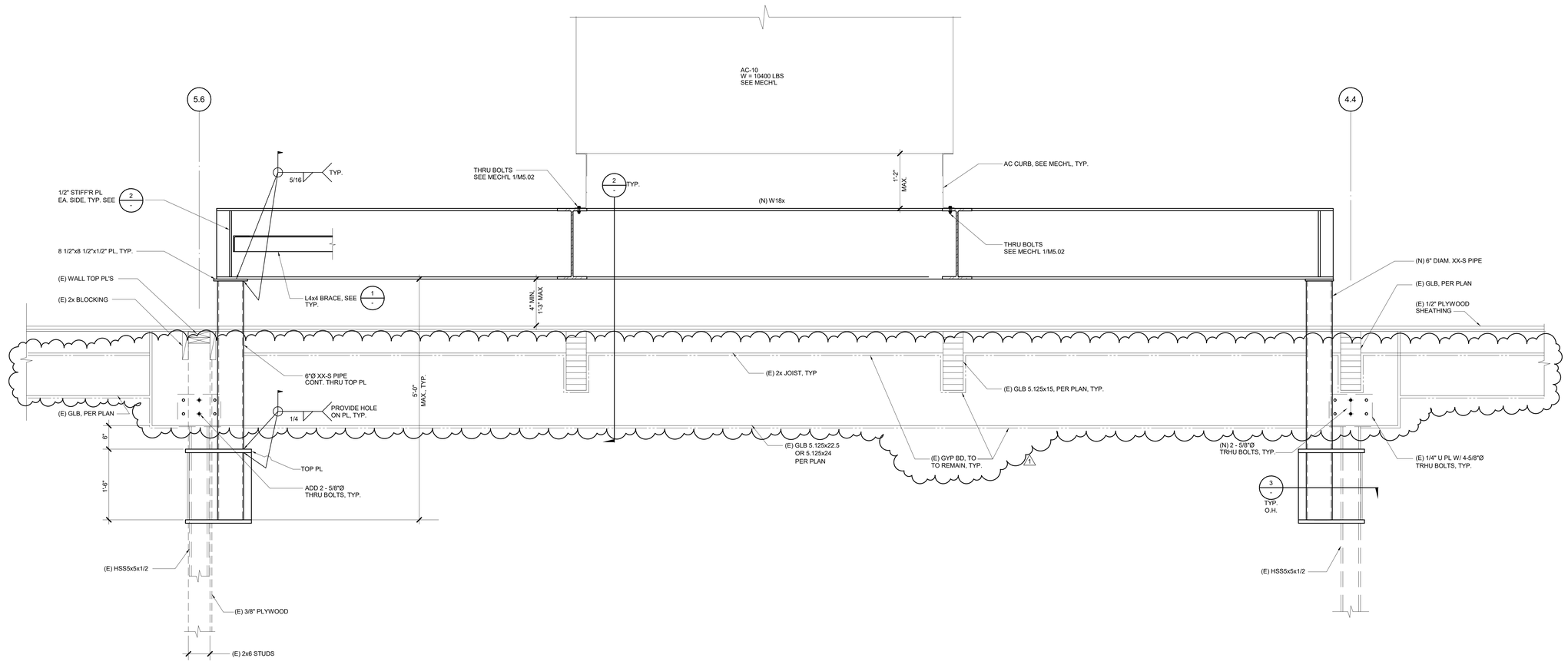
3 DETAIL

NONE



4 DETAIL

NONE



5 SECTION

NONE

10/21/2022 9:59:43 AM

CONSULTANT:

IMEG

301 LIN PEREZ PL, SUITE 100
DIAMOND BAR, CA 91765
PHONE # 909.444.8100
PROJECT # 20000440.00

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TYPICAL DETAILS

BUILDING 400 MODERNIZATION TO NEW CLASSROOM/ LIBRARY MEDIA CENTER

WALNUT VALLEY UNIFIED SCHOOL DISTRICT
DIAMOND BAR HIGH SCHOOL
21400 PATHFINDER RD. DIAMOND BAR, CA 91765

WALNUT VALLEY UNIFIED SCHOOL DISTRICT

SEALS:

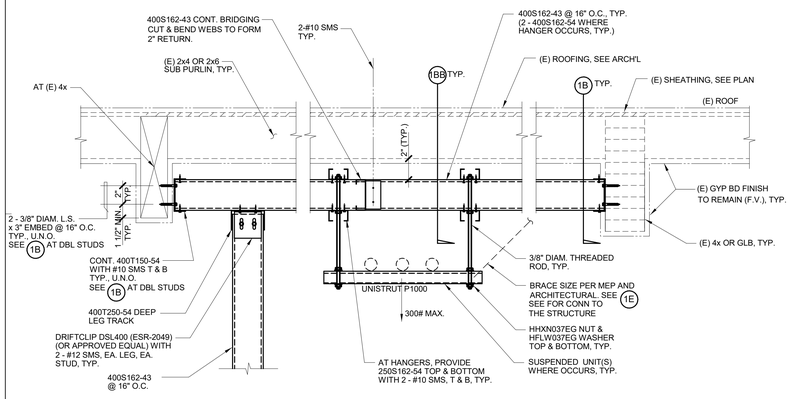
REGISTERED PROFESSIONAL ENGINEER
CORY C. TSANG
No. S2992
Exp. 06/30/2024
STRUCTURAL
STATE OF CALIFORNIA

sgh ARCHITECTS

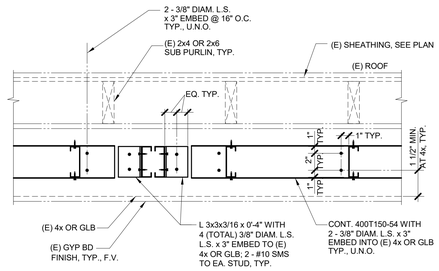
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PROJECT NUMBER: 20000440.00
PROJECT STATUS: 100% CD
PROJECT ISSUED: 03/18/21
REVISION DATE: DESCRIPTION:
1 10/25/2022 Addendum 1

S017

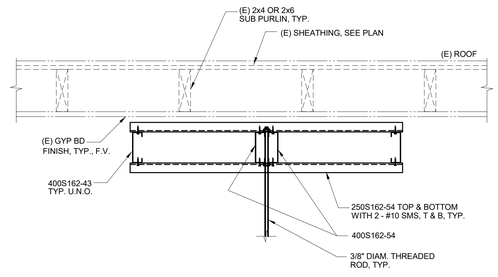


1A INTERIOR STUD PARALLEL TO (E) 4x OR GLB AND HANGER SUPPORT DETAILS

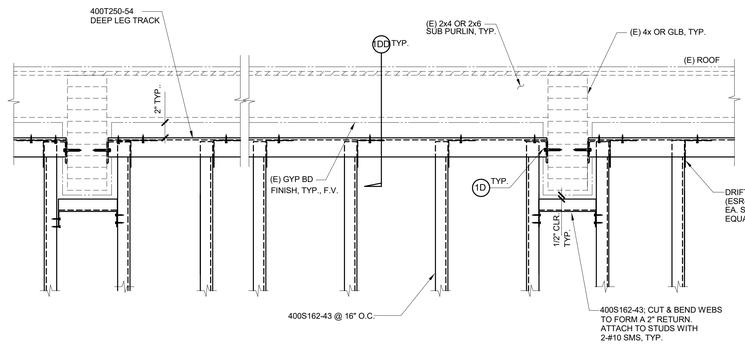


1B DBL STUD HANGER TYPICAL CONNECTION TO (E) 4x OR GLB

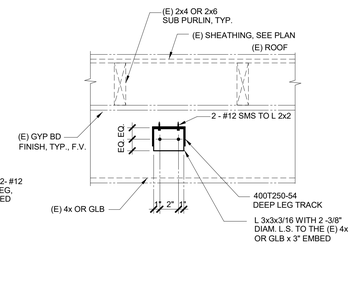
TYPICAL TRACK CONNECTION TO (E) 4x OR GLB



1BB TYPICAL SECTION AT DBL STUD HANGERS

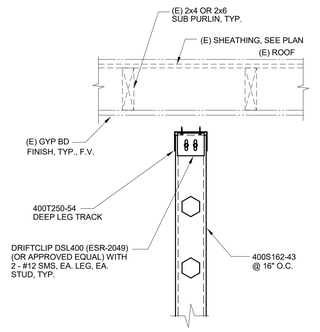


1C INTERIOR STUD PERPENDICULAR TO (E) 4X OR GLB

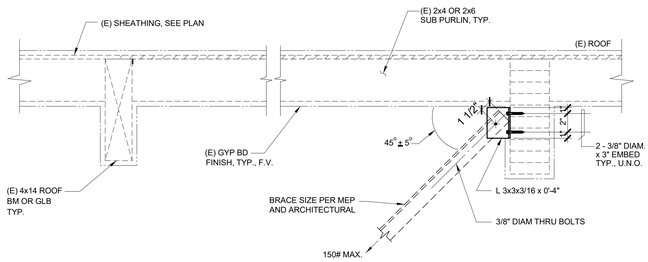


1D INTERIOR STUD PERPENDICULAR TO (E) 4x OR GLB

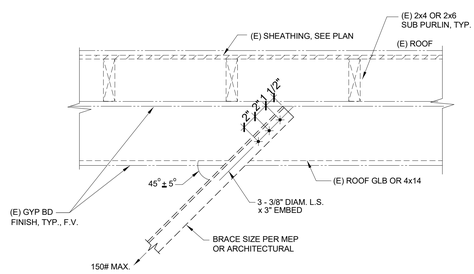
TOP TRACK CONNECTION TO (E) 4X OR GLB



DD SECTION - STUD PERPENDICULAR TO (E) 4 x OR GLB



1E TYPICAL BRACE CONNECTION PERPENDICULAR TO (E) 4x OR GLB



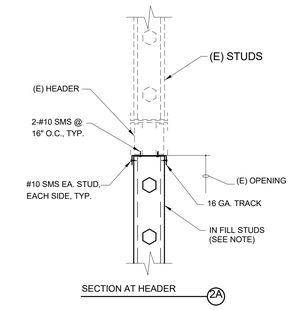
1F TYPICAL BRACE CONNECTION PARALLEL TO (E) 4x OR GLB

NOTE:

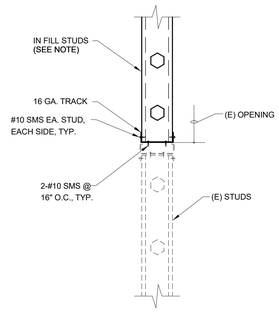
1. NO CONNECTION SHALL BE MADE ON THE (E) 2x SUB PURLINS.
2. CONNECTIONS SHALL BE DIRECTLY ON THE (E) 4x OR GLB.
2. SEE ARCH'L FOR THE REMOVAL & RESTORATION OF (E) GYP BD FINISH.

1 TYPICAL EQUIPMENT AND PIPE HANGERS/BRACES CONNECTION DETAILS AT WOOD MEMBERS

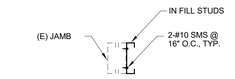
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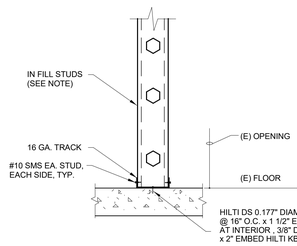
SECTION AT HEADER 2A



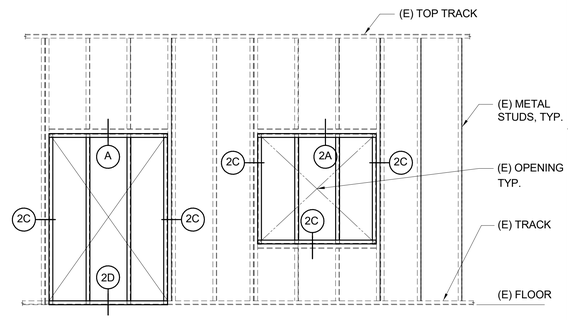
SILL SECTION 2B



SECTION AT JAMB 2C



SILL SECTION 2D



NOTES:

1. ALL TRACKS SHALL BE 16 GA. TO MATCH (E) STUD WIDTH.
2. IN FILL STUDS SHALL BE 18 GA. AT INTERIOR; 16 GA. AT EXTERIOR; WIDTH TO MATCH (E) STUD WIDTH.

2 TYPICAL METAL STUD WALL IN FILL DETAILS

NONE

CONSULTANT:

IMEG CORP. 301 LIN PEN PKWY, SUITE 400 NEW HYDE PARK, NY 11042 PH: 516.627.8918 FAX: 516.627.8919 PROJECT # 20000440.00

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TYPICAL DETAILS

BUILDING 400 MODERNIZATION TO NEW CLASSROOM/ LIBRARY MEDIA CENTER

WALNUT VALLEY UNIFIED SCHOOL DISTRICT
DIAMOND BAR HIGH SCHOOL
21400 PATHFINDER RD. DIAMOND BAR, CA 91765

WALNUT VALLEY UNIFIED SCHOOL DISTRICT

SEALS:

REGISTERED PROFESSIONAL ENGINEER TERRY C. TSANG No.S2992 Exp. 06/30/2024 STRUCTURAL OF CALIFORNIA

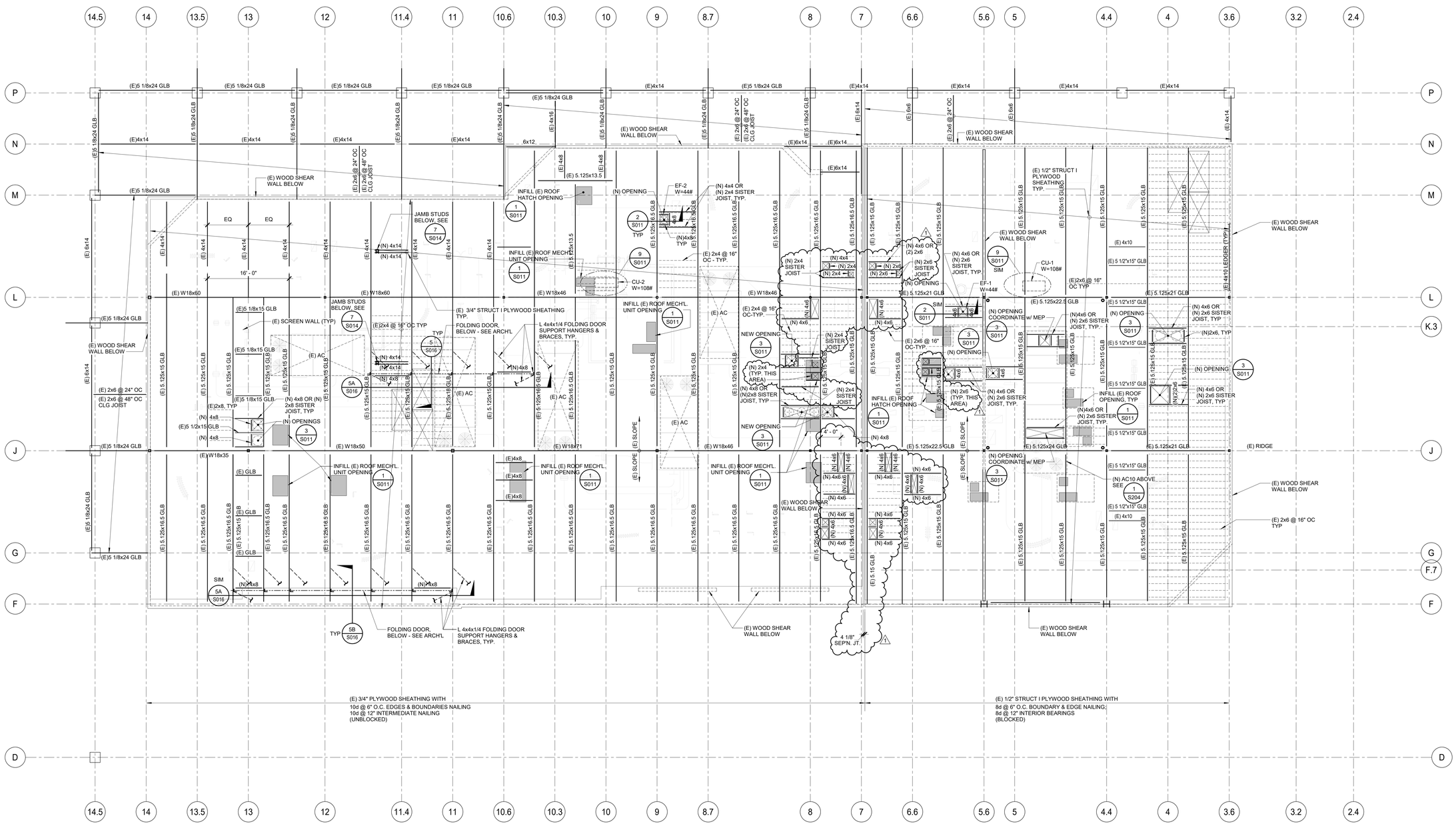
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PROJECT NUMBER:	20000440.00
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PROJECT ISSUED:	09/07/22
REVISION	DATE: DESCRIPTION:
1	10/5/2022 Addendum 1

S018

10/21/2022 9:59:44 AM



(E) FRAMING PLAN - ROOF

1/8" = 1'-0"

NOTES:
1. SEE SHEETS S000 & S001 FOR GENERAL NOTES.
2. SEE SHEETS S010 THRU S016 FOR TYPICAL DETAILS

CONSULTANT:

IMEG

IMEG CORP.
301 LIN PEREZ PL, SUITE 400
SAN LUIS OBISPO, CA 93401
PHONE # 805.547.0900 FAX # 805.547.0916
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(E) FRAMING PLAN - ROOF

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WALNUT VALLEY UNIFIED SCHOOL DISTRICT
DIAMOND BAR HIGH SCHOOL
21400 PATHFINDER RD. DIAMOND BAR, CA 91765

WALNUT VALLEY UNIFIED SCHOOL DISTRICT

SEALS:

REGISTERED PROFESSIONAL ENGINEER
ROBERT C. TSANG
No. 52992
Exp. 06/30/2024
STRUCTURAL
STATE OF CALIFORNIA

sgh ARCHITECTS

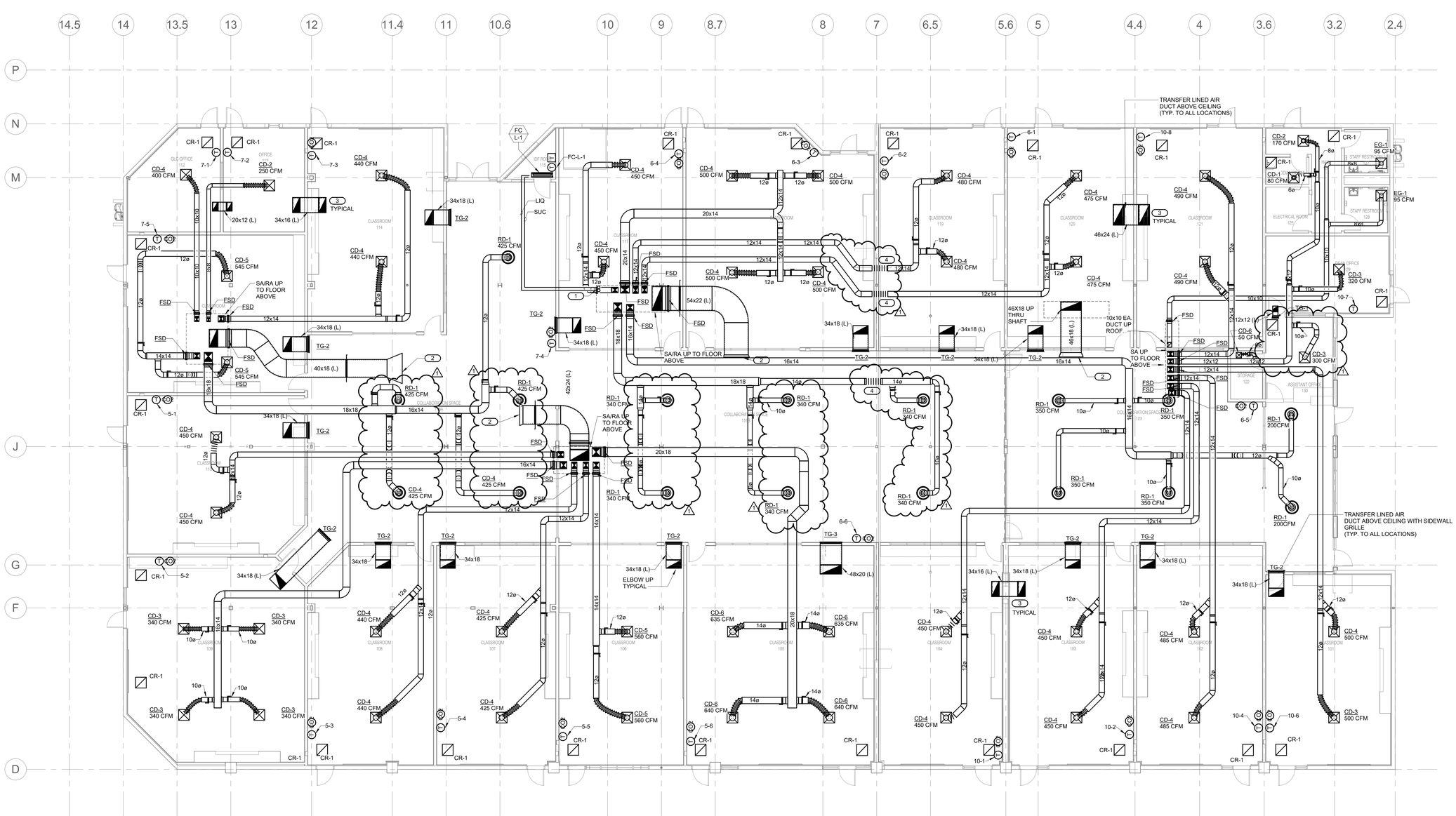
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PROJECT STATUS: 100% CD
PROJECT ISSUED: 03/18/21

REVISION:	DATE:	DESCRIPTION:
1	10/25/2022	Addendum 1

S203

10/21/2022 9:59:44 AM



NORTH

REMODEL FLOOR PLAN LOWER LEVEL | 1 | 1/8" = 1'-0"

GENERAL NOTES:

1. ALL VISIBLE DUCTWORK LOCATED BELOW THE CEILING SHALL BE PAINTED. REFER TO ARCHITECTURAL FOR REQUIREMENTS AND COLOR.
2. ALL EXPOSED VISIBLE DUCTWORK SHALL HAVE CLEAN FINISHES WITH SEALING OF DUCTS, FITTINGS, AND DUCT SUPPORTS. PROVIDE INTERNAL DUCT LINING INSULATION, NO EXTERNAL DUCTWORK INSULATION ALLOWED.
3. CONTROLS CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL REQUIRED LOW VOLTAGE CONDUITS AND LOW VOLTAGE WIRING. COORDINATE ROUTING OF CONDUITS WITH ALL OTHER TRADES. SUBMIT COORDINATED SHOP DRAWINGS FOR A/E REVIEW AND APPROVAL.
4. REFRIGERANT PIPING SIZES AND FITTINGS SHALL BE BASED ON MANUFACTURE REQUIREMENTS.
5. CONTRACTOR SHALL COORDINATE ALL THERMOSTAT AND CARBON DIOXIDE SENSOR LOCATIONS WITH THE ARCHITECT. SUBMIT COORDINATED SHOP DRAWINGS FOR A/E REVIEW AND APPROVAL.

KEY NOTES: (#)

1. REFRIGERANT PIPING UP TO SECOND FLOOR. SIZE PER MANUFACTURER'S RECOMMENDATION.
2. RA BELMONT OPENING WITH 1/4" WIRE MESH SCREEN.
3. TRANSFER AIR BOOT. REFER TO DETAIL 2/M5.02.
4. MASON INDUSTRIES/MERCER RUBBER, MODEL ME-3, 2-JOINT SERIES, 32 INCH LENGTH @ 12 INCH MOVEMENTS. INDOOR APPLICATION. PROVIDE WITH SEISMIC CABLE SUPPORTING SYSTEM, TO SUPPORT THE MIDDLE SECTION OF THE JOINT SYSTEM. CONTRACTOR TO PROVIDE COORDINATED SHOP DRAWINGS AND MANUFACTURE SUBMITTAL FOR A/E REVIEW AND APPROVAL.

10/21/2022 2:08:34 PM

CONSULTANT:

IMEG

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REMODEL FLOOR PLAN LOWER LEVEL

BUILDING 400 MODERNIZATION TO NEW CLASSROOM/ LIBRARY MEDIA CENTER

WALNUT VALLEY UNIFIED SCHOOL DISTRICT
DIAMOND BAR HIGH SCHOOL
21400 PATHFINDER RD. DIAMOND BAR, CA 91765

SEALS:

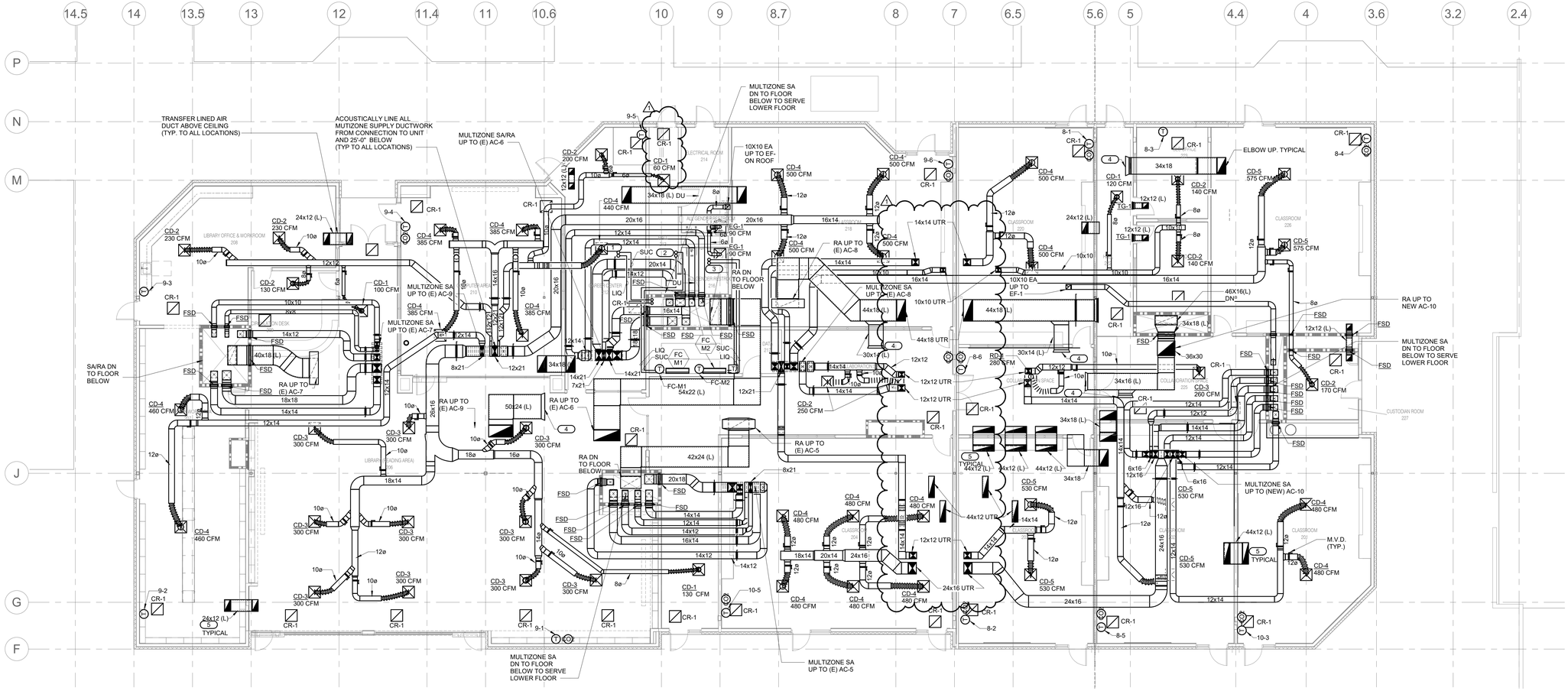
REGISTERED PROFESSIONAL ENGINEER
TIMANSU P. SHAH
No. M25602
Exp. 9/30/24
MECHANICAL
STATE OF CALIFORNIA

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PROJECT STATUS:	100% CD
PROJECT ISSUED:	08/12/20
REVISION	DATE: DESCRIPTION:
1	10-25-2022 ADDENDUM - 1

M2.11



NORTH

REMODEL FLOOR PLAN MAIN LEVEL | 1 | 1/8" = 1'-0"

GENERAL NOTES:

1. ALL VISIBLE DUCTWORK LOCATED BELOW THE CEILING SHALL BE PAINTED. REFER TO ARCHITECTURAL FOR REQUIREMENTS AND COLOR.
2. ALL EXPOSED VISIBLE DUCTWORK SHALL HAVE CLEAN FINISHES WITH SEALING OF DUCTS, FITTINGS, AND DUCT SUPPORTS. PROVIDE INTERNAL DUCT LINING INSULATION, NO EXTERNAL DUCTWORK INSULATION ALLOWED.
3. CONTROLS CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL REQUIRED LOW VOLTAGE CONDUITS AND LOW VOLTAGE WIRING. COORDINATE ROUTING OF CONDUITS WITH ALL OTHER TRADES. SUBMIT COORDINATED SHOP DRAWINGS FOR A/E REVIEW AND APPROVAL.
4. REFRIGERANT PIPING SIZES AND FITTINGS SHALL BE BASED ON MANUFACTURE REQUIREMENTS.
5. CONTRACTOR SHALL COORDINATE ALL THERMOSTAT AND CARBON DIOXIDE SENSOR LOCATIONS WITH THE ARCHITECT. SUBMIT COORDINATED SHOP DRAWINGS FOR A/E REVIEW AND APPROVAL.

KEY NOTES: (#)

(1) REFRIGERANT PIPING UP TO CU L-1. SIZE PER MANUFACTURER'S RECOMMENDATION.
(2) REFRIGERANT PIPING UP TO CU M1. SIZE PER MANUFACTURER'S RECOMMENDATION.
(3) REFRIGERANT PIPING UP TO CU M2. SIZE PER MANUFACTURER'S RECOMMENDATION.
(4) RA BELLMOUTH OPENING WITH 1/4" WIRE MESH SCREEN.
(5) TRANSFER AIR BOOT. REFER TO DETAIL 2/M5.02.

10/21/2022 2:08:38 PM

CONSULTANT:

IMEG
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SAN LUIS OBISPO, CA 93401
PHONE: 805.439.8700 FAX: 805.439.8701
PROJECT # 2000043535

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REMODEL FLOOR PLAN MAIN LEVEL

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WALNUT VALLEY UNIFIED SCHOOL DISTRICT
DIAMOND BAR HIGH SCHOOL
21400 PATHFINDER RD. DIAMOND BAR, CA 91765

SEALS:

REGISTERED PROFESSIONAL ENGINEER
ISMAMSU P SHAH
No. M25602
Exp. 9/30/24
MECHANICAL
STATE OF CALIFORNIA

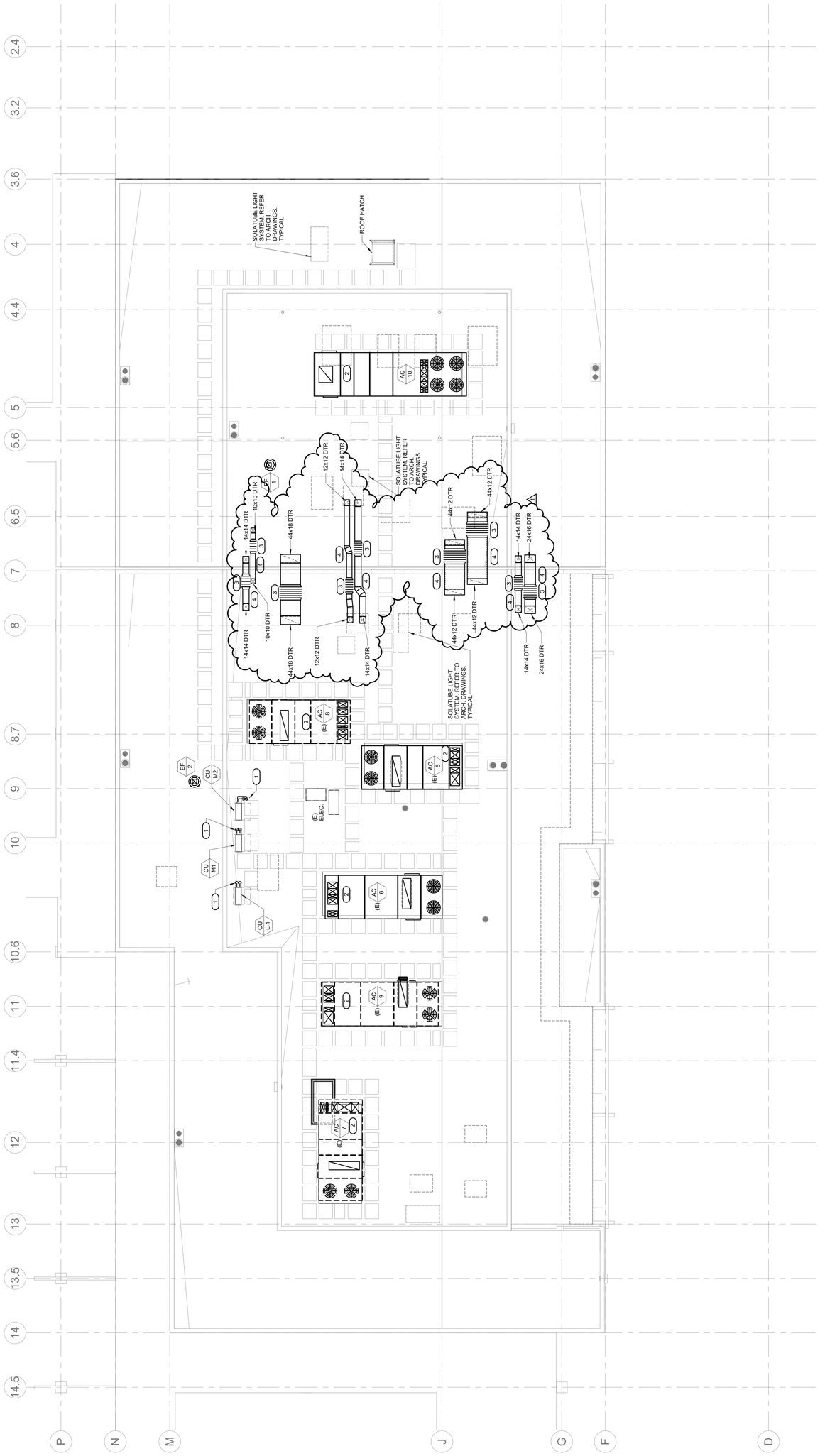
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PROJECT STATUS: 100% CD
PROJECT ISSUED: 08/12/20

REVISION	DATE	DESCRIPTION
1	10-5-2022	ADDENDUM - 1

M2.12



KEY NOTES (#)

1. REFRIGERANT PIPING DOWN THRU ROOF. SIZE PER MANUFACTURER'S RECOMMENDATION. REFER TO DETAIL 12/M5.01.
2. CONTRACTOR TO LOCATE DUCT DETECTORS INSIDE THE ROOFTOP UNIT PER CMC 608 REQUIREMENTS FOR UNIT SHUT DOWN. CONTRACTOR TO COORDINATE WITH UNIT MANUFACTURER AND ELECTRICAL WORK.
3. MASON CONTROLS CURB-MOUNTED ROOF CURB, 14" H, 2" INSULATION, 20 GA GALVANIZED STEEL WITH 12 INCH MOVEMENTS. OUTDOOR APPLICATION. PROVIDE WITH 3 SUPPORT PLATFORM 1 TIER OF PLATFORM TO BE INSTALLED LEVEL WITH DUCTWORK. PLATFORM SUPPORT LEDGES (W) WILL BE USED FOR SUPPORTING DUCTWORK. CONTRACTOR TO COORDINATE WITH COORDINATED SHOP DRAWINGS AND MANUFACTURE SUBMITTAL FOR A/E REVIEW AND APPROVAL.
4. ALL EXPOSED DUCTWORK LOCATED ON THE ROOF SHALL USE 1" INTERNALLY LINED NON-FIBEROUS INSULATION. SEAL ALL DUCT JOINTS WITH FIRE RATED DUCT SEALANT. DUCTWORK SHALL BE PAINTED WITH TWO COATS OF PAINT WITH THE FIRST COAT BEING A RUST INHIBITIVE PRIMER USED FOR OUTDOOR APPLICATION. COLOR PER ARCHITECT.

NORTH

ROOF PLAN 1 1/8" = 1'-0"

SEALS:

CONSULTANT:

IMEG
IMEG CORP. 951 VIA PIEMONTE, SUITE 400 ONTARIO, CA 91764 909.477.8916 FAX: 909.477.8916 www.imegcorp.com
PROJECT # 2000634.00

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REMODEL ROOF PLAN

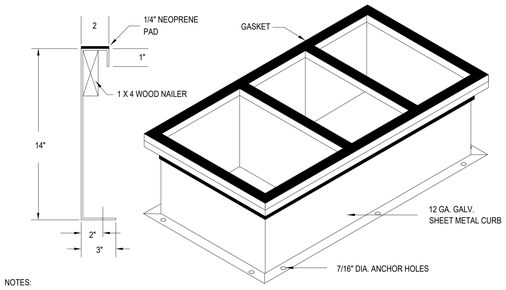
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PROJECT STATUS:	100% CD
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REVISION: DATE:	DESCRIPTION:
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M4.11

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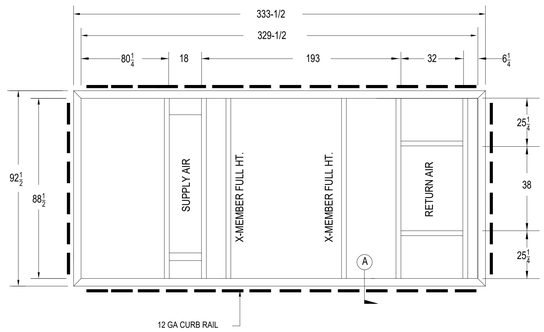


NOTES:

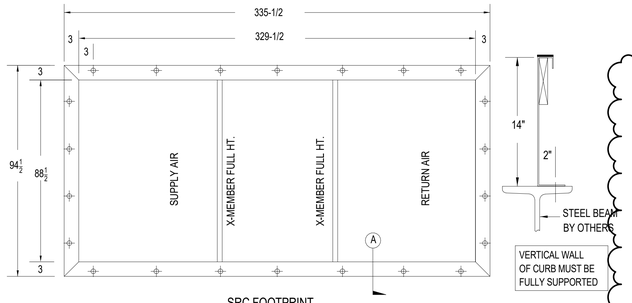
1. FOR ANCHOR REQUIREMENTS AND SEISMIC STRAPS, SEE DETAIL 2, 3.
2. SUBMITTED ROOF CURBS ARE LEVEL. PITCHED ROOF CURBS ARE AVAILABLE UPON REQUEST TO MATCH ROOF SLOPE.
3. NOT FOR CONSTRUCTION, ALL DIMENSIONS REQUIRE FINAL REVIEW AT COMMENCEMENT OF PROJECT
4. FULLY WELDED CONSTRUCTION.

NOTE:
1) -INDICATES SEISMIC TIE-DOWN PLATE.
(14) REQUIRED PER LONG SIDE, SEE DETAIL 2.
(6) REQUIRED PER SHORT SIDE, SEE DETAIL 2.

MARK	MAKE	MODEL	SIZE	SRC WT.
AC-10	SEASONS 4	LA	040	800#



SRC TOP VIEW



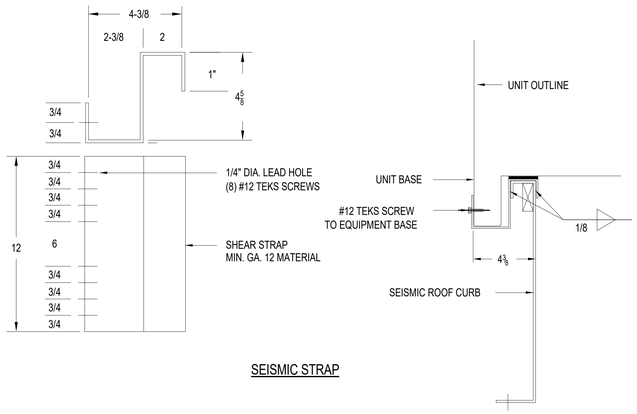
SRC FOOTPRINT

SECTION A

NOTES:

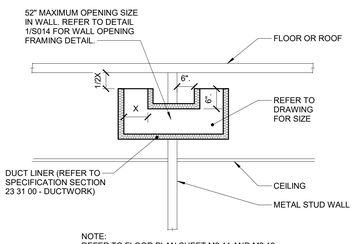
1. FOR ANCHORAGE, USE 3/8" DIA. A307 Gr. A HEX BOLTS. MIN (4) PER SHORT SIDE. (7) PER LONG SIDE SPACED EQUALLY.

1 ROOF CURB DETAIL FOR NEW AC-10
NO SCALE



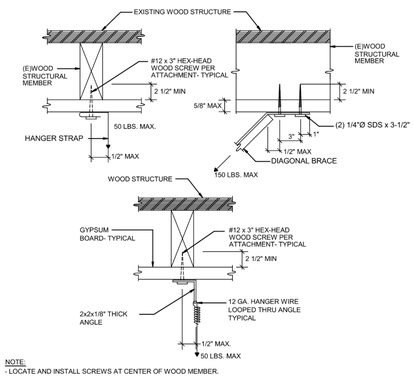
SEISMIC STRAP

2 TRANSFER DUCT DETAIL (ENDS UP)
NO SCALE



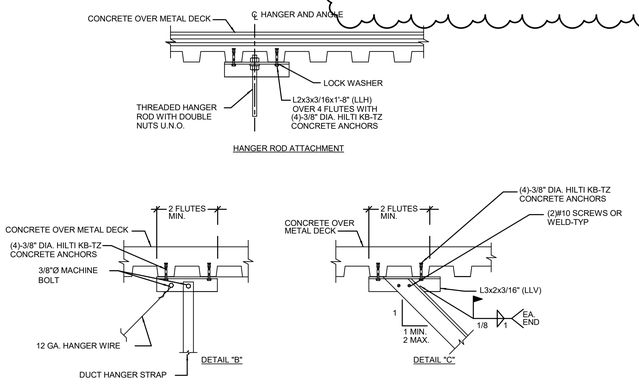
NOTE:
REFER TO FLOOR PLAN SHEET M2.11 AND M2.12
FOR LOCATIONS, DUCT SIZES, AND KEY NOTE #3.

3 DUCT CONNECTION TO STRUCTURE DETAIL
NO SCALE



NOTE:
- LOCATE AND INSTALL SCREWS AT CENTER OF WOOD MEMBER.
- BRACE SHALL ONLY BE CONNECTED TO 2X RAFTER IN DIRECTION PARALLEL TO RAFTER.

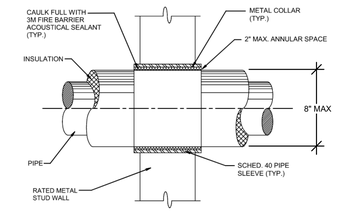
4 DUCT CONNECTION TO STRUCTURE
NO SCALE



ATTACHMENT PERPENDICULAR TO DECK

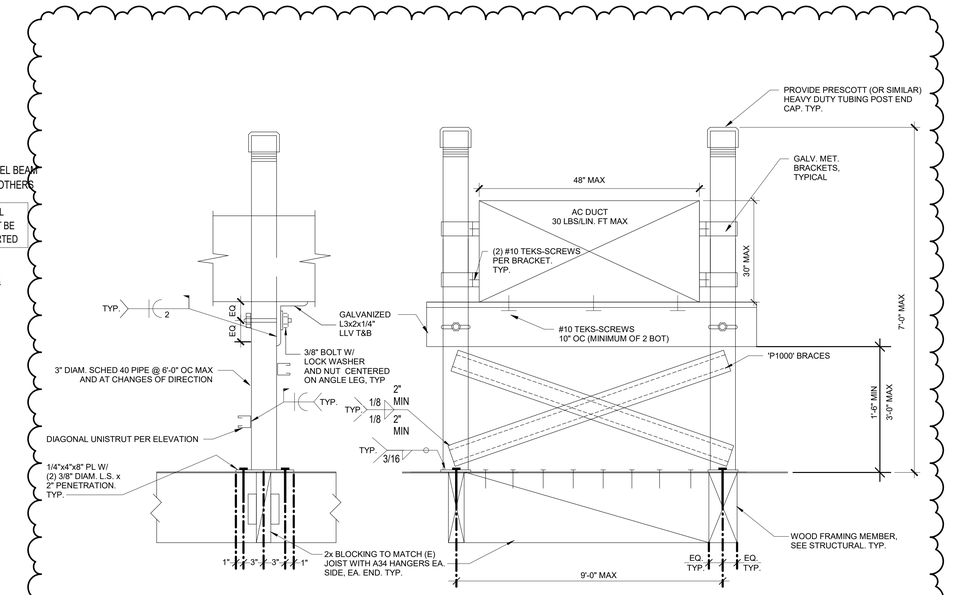
ANCHORAGE TO STRUCTURE REFER TO STRUCTURAL DETAILS 1/S012 & 2/S015

5 PIPE THRU RATED WALL DETAIL
NO SCALE



NOTE:

1. ALL PENETRATIONS THROUGH FIRE RATED WALL SHALL BE SLEEVED WITH A NON-COMBUSTABLE METAL SLEEVE. ALL SUCH PENETRATIONS SHALL BE FIRE STOPPED. 3M FIRE BARRIER (U.L. FILE R-9269-3) CAULK C 25NS WITH A MINIMUM 1" DEPTH FOR A RATING OF 3 HOURS. THE FIRE STOP MATERIAL SHALL MEET ASTM, UL, & FACTORY MUTUAL SYSTEM APPROVAL, ALONG WITH CALIFORNIA STATE FIRE MARSHAL (APPROVAL #4485941:0115).



6 DUCT SUPPORT ON ROOF DETAIL
NO SCALE

CONSULTANT:

IMEG CORP. 301 LIN PEDIATRIC, SUITE 400 DAYTON, OH 45402 P: 937.461.4949 F: 937.461.4944 PROJECT # 2000435.00

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REFERENCE SCALE IN INCHES
0 1 2 3

DETAILS

BUILDING 400 MODERNIZATION TO NEW CLASSROOM/ LIBRARY MEDIA CENTER
WALNUT VALLEY UNIFIED SCHOOL DISTRICT
WALNUT HIGH SCHOOL
21400 PATHFINDER RD. DIAMOND BAR, CA 91765

SEALS:

REGISTERED PROFESSIONAL ENGINEER — DIANDRU P. SPARKS — No. M25602 — Exp. 9/30/24 — MECHANICAL — STATE OF CALIFORNIA

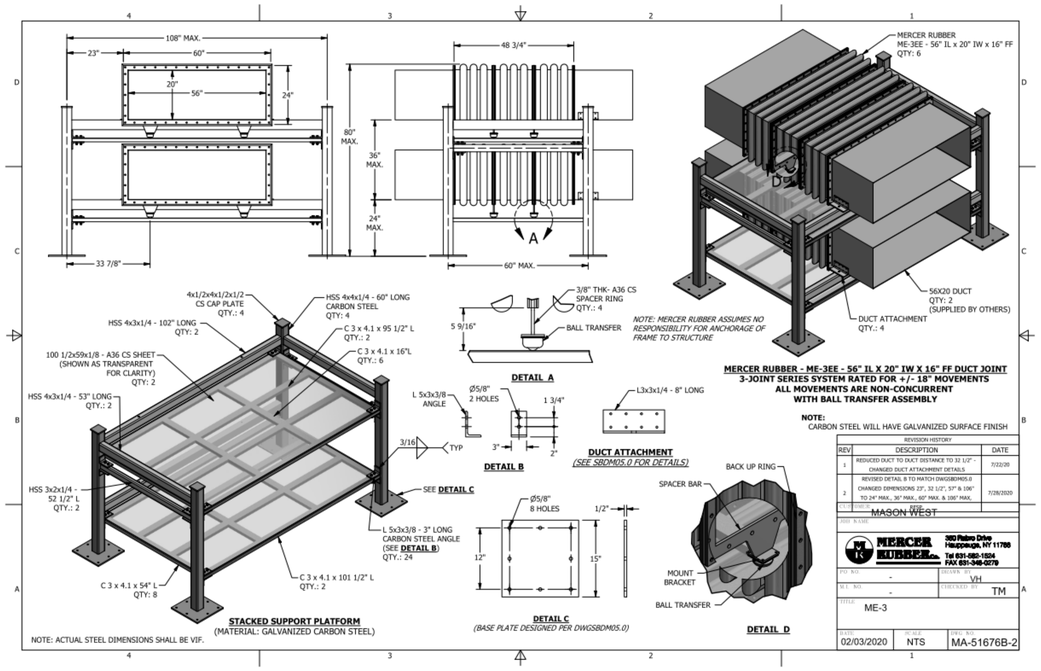
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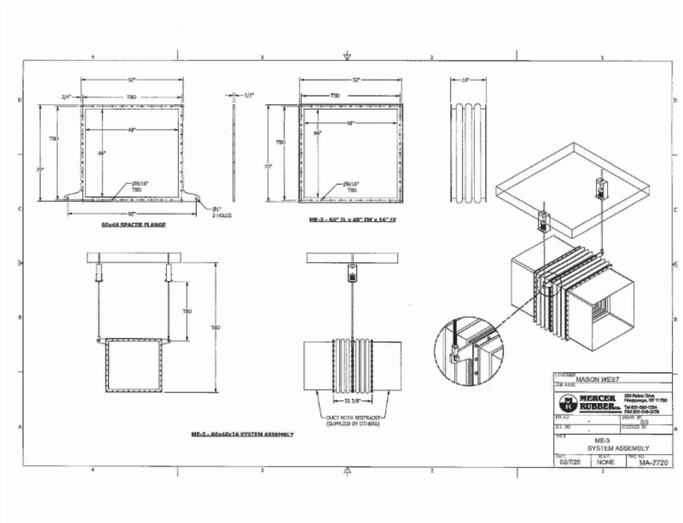
PROJECT NUMBER:	19-47100-00
PROJECT STATUS:	100% CD
PROJECT ISSUED:	12/01/20
REVISION:	DESCRIPTION:
DATE:	ADDENDUM - 1
10-25-2022	1

M5.02

10/21/2022 2:08:42 PM



2 SEISMIC FLEX JOINT ROOF SUPPORT DETAIL
NO SCALE



1 SEISMIC FLEX JOINT INDOOR SUPPORT DETAIL
NO SCALE

CONSULTANT:

IMEG
901 E 6th STREET, SUITE 400
LOS ANGELES, CA 90021
PHONE 213.627.8100 FAX 213.627.0916
PROJECT # 2000043535

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REFERENCE SCALE IN INCHES
0 1 2 3

MECHANICAL SEISMIC FLEX JOINT SUPPORT DETAILS

BUILDING 400 MODERNIZATION TO NEW CLASSROOM/ LIBRARY MEDIA CENTER
WALNUT VALLEY UNIFIED SCHOOL DISTRICT
DIAMOND BAR HIGH SCHOOL
21400 PATHFINDER RD. DIAMOND BAR, CA 91765

WALNUT VALLEY UNIFIED SCHOOL DISTRICT

SEALS:

REGISTERED PROFESSIONAL ENGINEER ISMAISU P. SANI No. M25602 Exp. 9/30/24 MECHANICAL STATE OF CALIFORNIA

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PROJECT NUMBER: 19-471100-00
PROJECT STATUS: 100% CD
PROJECT ISSUED: 10/21/22
REVISION DATE: DESCRIPTION:
1 10/5/2022 ADDENDUM - 1

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LIGHT FIXTURE SCHEDULE

TYPE	DESCRIPTION	LED	DRIVER	WATTAGE	MANUFACTURER AND CATALOG #	REMARKS
A	2X4 CENTER LUMINOUS RECESSED TROFFER WITH SOFT WHITE ACRYLIC LENSING	3000LM LED 40K	0-10V DIMMING	30	MARK LIGHTING WHSPR LCTR QS 2X4 80CRI 40K 3000LM MIN1 MVOLT SWC ZT	RECESSED
AE	2X4 CENTER LUMINOUS RECESSED TROFFER WITH SOFT WHITE ACRYLIC LENSING WITH INTEGRAL 90-MINUTE BATTERY BACK UP	3000LM LED 40K	0-10V DIMMING	30	MARK LIGHTING WHSPR LCTR QS 2X4 80CRI 40K 4000LM MIN1 MVOLT SWC E10WLCP ZT	RECESSED
B	4" RECESSED DOWNLIGHT WITH SEMI-SPECULAR REFLECTOR	2000LM LED 40K	0-10V DIMMING	22.12	LITHONIA LIGHTING LDN4 40/20 LO4AR LS MVOLT GZ10	RECESSED
BE	4" RECESSED DOWNLIGHT WITH SEMI-SPECULAR REFLECTOR WITH INTEGRAL 90-MINUTE BATTERY BACK UP	2000LM LED 40K	0-10V DIMMING	22.12	LITHONIA LIGHTING LDN4 40/20 LO4AR LS MVOLT GZ10 E10WCP	RECESSED
C	T-BAR LED, FOR DESIGNFLEX CEILING. 48"OC, 60"	1922LM LED 40K	0-10V DIMMING	22.4	JLC TECH TBFL MN 49 15 D A W UNV	RECESSED
D	4' LED LINEAR LED SURFACE MOUNTED STRIP WITH WRAP LENS	4000LM LED 40K	0-10V DIMMING	27.58	LITHONIA LIGHTING CLX L48 4000LM SEF RDL *** EZ1 40K 80CRI WH	SURFACE
DE	4' LED LINEAR LED STRIP WITH WRAP LENS AND INTEGRAL 90-MINUTE BATTERY BACK UP	4000LM LED 40K	0-10V DIMMING	27.58	LITHONIA LIGHTING CLX L48 4000LM SEF RDL *** EZ1 40K 80CRI E10WLCP SPD WH	SURFACE
G	6" LINEAR RECESSED DIRECT ARCHITECTRUAL LUMINAIRE WITH BATWING DISTRIBUTION	838 LM/FT LED 40K	0-10V DIMMING	9/FT	CORONET LED LSR6-4-40-MED-UNV-DB-W-T-FL	RECESSED
GE	6" LINEAR RECESSED DIRECT ARCHITECTRUAL LUMINAIRE WITH BATWING DISTRIBUTION	839 LM/FT LED 40K	0-10V DIMMING	9/FT	CORONET LED LSR6-4-40-MED-UNV-DB-W-T-FL-NA-EMPCK	RECESSED
J	NARROW LINEAR SUSPENDED DIRECT/INDIRECT ARCHITECTRUAL LUMINAIRE	552 LM/FT LED 40K	0-10V DIMMING	7/FT	CORONET LED RUSH UPDN-(PER PLAN)-40-LTG1-LTG-UNV-DB-W-AC-DC	SUSPENDED
JD	NARROW LINEAR SUSPENDED DIRECT (ONLY) ARCHITECTRUAL LUMINAIRE	553 LM/FT LED 40K	0-10V DIMMING	7/FT	CORONET LED RUSH UPDN-(PER PLAN)-40-LTG1-UNV-DB-W-AC-DC	SUSPENDED
JE	NARROW LINEAR SUSPENDED DIRECT/INDIRECT ARCHITECTRUAL LUMINAIRE WITH 90-MINUTE BATTERY BACK UP	552 LM/FT LED 40K	0-10V DIMMING	7/FT	CORONET LED RUSH UPDN-(PER PLAN)-40-LTG2-LTG2-UNV-DB-W-AC-DC-EM**	SUSPENDED
K	PENDANT MOUNT DECORATIVE FIXTURE	987 LM LED 40K	0-10V DIMMING	9.8	EUREKA MIKA 4230-8-LED-40K-80-120-DV-C-WHE-WH	SUSPENDED
EX1	LED EXTEIOR WALL PACK WITH RECESSED LIGHT ENGINE FOR GLARE CONTROL	1 - 25W LED 40K	MVOLT	25	LITHONIA LIGHTING WST LED P2 40K VF MVOLT E20WH ***XD	WALL SURFACE
X	UNIVERISAL MOUNTED EDGE LIT EXIT SIGN WITH RED LETERING	LED RED	LED	3	BEGHELLI BRU-SA-LR-U-M-BA-AT	PER PLANS

1

CONSULTANT:

IMEG

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REFERENCE SCALE IN INCHES

0 1 2 3

FIXTURE SCHEDULE

BUILDING 400 MODERNIZATION TO NEW CLASSROOM/ LIBRARY MEDIA CENTER

WALNUT VALLEY UNIFIED SCHOOL DISTRICT

DIAMOND BAR HIGH SCHOOL

21400 PATHFINDER RD. DIAMOND BAR, CA 91765

SEALS:

REGISTERED PROFESSIONAL ENGINEER NESTOR C. IGNACIO JR. Lic. E16934 Exp. 6-30-2023 STATE OF CALIFORNIA

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PROJECT NUMBER: 19-47100-00
PROJECT STATUS: 100% CD
PROJECT ISSUED: 09/02/20

REVISION:	DATE:	DESCRIPTION:
1	10-25-2022	ADENDUM - 1

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10/20/2022 4:43:11 PM

Branch Panel: LP1

Location: ELECTRICAL ROOM 125 | **Volts:** 120/208 Wye | **A.I.C. Rating:** 14000
Supply From: | **Phases:** 3 | **Mains Type:**
Mounting: SURFACE | **Wires:** 4 | **Mains Rating:** 400 A
Enclosure: BOLT-ON | **MCB Rating:** 400 A

Notes:

CKT	Circuit Description	Trip	Poles	A		B		C		Poles	Trip	Circuit Description	CKT
1	Classroom-101 Receptacles	20 A	1	1440 VA	1440 VA					1	20 A	Classroom-107 Receptacles	2
3	Classroom-101 TV	20 A	1			360 VA	360 VA			1	20 A	Classroom-107 TV	4
5	Classroom-102 Receptacles	20 A	1					1440 VA	1440 VA	1	20 A	Classroom-108 Receptacles	6
7	Classroom-102 TV	20 A	1	360 VA	360 VA					1	20 A	Classroom-108 TV	8
9	Classroom-103 Receptacles	20 A	1			1440 VA	1440 VA			1	20 A	Classroom-109 Receptacles	10
11	Classroom-103 TV	20 A	1					360 VA	360 VA	1	20 A	Classroom-109 TV	12
13	Classroom-104 Receptacles	20 A	1	1440 VA	1440 VA					1	20 A	Classroom-110 Receptacles	14
15	Classroom-104 TV	20 A	1			360 VA	360 VA			1	20 A	Classroom-110 TV	16
17	Classroom-105 Receptacles	20 A	1					900 VA	1440 VA	1	20 A	Classroom-111 Receptacles	18
19	Classroom-105 TV	20 A	1	360 VA	360 VA					1	20 A	Classroom-111 TV	20
21	Classroom-105 Receptacles	20 A	1			720 VA	1080 VA			1	20 A	Office-112 Receptacles	22
23	Classroom-105 Receptacles	20 A	1					720 VA	1080 VA	1	20 A	Office-113 Receptacles	24
25	Classroom-105 Receptacles	20 A	1	720 VA	180 VA					1	20 A	Stroge-118 Receptacles	26
27	Classroom-105 Receptacles	20 A	1			720 VA	180 VA			1	20 A	FA BELL	28
29	RM 105 AV CABINET	20 A	1					500 VA	360 VA	1	20 A	LOWER LEVEL WEST DRINKING...	30
31	Classroom-106 Receptacles	20 A	1	1440 VA	0 VA					1	20 A	SPARE	32
33	Classroom-106 TV	20 A	1			360 VA	0 VA			1	20 A	SPARE	34
35	LOWER LEVEL EAST DRINKING FOUNTAIN	20 A	1					360 VA	0 VA	1	20 A	SPARE	36
37	LP3 SUBFEED	100 A	3	6900 VA	10680 VA					3	100 A	LP2 SUBFEED	38
39	--	--	--			5760 VA	7840 VA			--	--	--	40
41	--	--	--					5080 VA	5810 VA	--	--	--	42
		Total Load:		27120 VA		20980 VA		19850 VA					
		Total Amps:		227.4 A		176.3 A		165.4 A					

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Power	6030 VA	100.00%	6030 VA		
Receptacles	61920 VA	58.07%	35960 VA	**Total Conn. Load:**	67950 VA
				Total Est. Demand:	41990 VA
				Total Conn. Current:	188.6 A
				Total Est. Demand Current:	116.6 A

Notes:

Branch Panel: LP2

Location: ELECTRICAL ROOM 125 | **Volts:** 120/208 Wye | **A.I.C. Rating:** 14000
Supply From: LP1 | **Phases:** 3 | **Mains Type:**
Mounting: SURFACE | **Wires:** 4 | **Mains Rating:** 100 A
Enclosure: BOLT-ON | **MCB Rating:** 100 A

Notes:

CKT	Circuit Description	Trip	Poles	A		B		C		Poles	Trip	Circuit Description	CKT
1	Classroom-121 Receptacles	20 A	1	1440 VA	900 VA					1	20 A	Classroom-118 Receptacles	2
3	Classroom-121 TV	20 A	1			360 VA	360 VA			1	20 A	Classroom-118 TV	4
5	Classroom-121 Receptacles	20 A	1					1440 VA	1200 VA	1	20 A	MOTORIZED SHADE	6
7	Classroom-120 TV	20 A	1	360 VA	1440 VA					1	20 A	Classroom-117 Receptacles	8
9	Classroom-119 Receptacles	20 A	1			1440 VA	360 VA			1	20 A	Classroom-117 TV	10
11	Classroom-119 TV	20 A	1					360 VA	1500 VA	1	20 A	MOTORIZED SHADE	12
13	Electrical-125 Receptacles	20 A	1	180 VA	1440 VA					1	20 A	Classroom-114 Receptacles	14
15	Custodian Room-124 Receptacles	20 A	1			540 VA	360 VA			1	20 A	Classroom-114 TV	16
17	Restroom-126 & 127 Receptacles	20 A	1					360 VA	500 VA	1	20 A	FATC-1	18
19	Collaboration Space-123 Receptacles	20 A	1	360 VA	1080 VA					1	20 A	Dean office-128 Receptacles	20
21	Collaboration Space-116 Receptacles	20 A	1			540 VA	720 VA			1	20 A	Storage-131 Receptacles	22
23	Collaboration Space-116 Receptacles	20 A	1					180 VA	180 VA	1	20 A	FC-1 DRAIN PUMP	24
25	Classroom-118 Receptacles	20 A	1	1440 VA	500 VA					1	20 A	RM 118 AV CABINET	26
27	Classroom-118 Receptacles	20 A	1			1440 VA	500 VA			1	20 A	RM 118 AV CABINET	28
29	Classroom-118 Receptacles	20 A	1					1440 VA	180 VA	1	20 A	Classroom-117 Receptacle	30
31	Classroom-118 Receptacles	20 A	1	720 VA	280 VA					1	20 A	MOTORIZED SHADE	32
33	Classroom-118 Receptacles	20 A	1			720 VA	0 VA			1	20 A	SPARE	34
35	Classroom-118 Receptacles	20 A	1					720 VA	0 VA	1	20 A	SPARE	36
37	Classroom-118 Receptacles	20 A	1	540 VA	0 VA					--	--	SPACE	38
39	Classroom-114 Receptacle	20 A	1			500 VA	0 VA			--	--	SPACE	40
41	Classroom-111 Receptacle	20 A	1					180 VA	0 VA	--	--	SPACE	42
		Total Load:		10680 VA		7840 VA		5810 VA					
		Total Amps:		91.6 A		67.9 A		48.4 A					

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Power	1230 VA	100.00%	1230 VA		
Receptacles	23100 VA	71.65%	16550 VA	**Total Conn. Load:**	24330 VA
				Total Est. Demand:	17780 VA
				Total Conn. Current:	67.5 A
				Total Est. Demand Current:	49.4 A

Notes:

Branch Panel: LP3

Location: ELECTRICAL ROOM 125 | **Volts:** 120/208 Wye | **A.I.C. Rating:** 14000
Supply From: LP1 | **Phases:** 3 | **Mains Type:**
Mounting: SURFACE | **Wires:** 4 | **Mains Rating:** 100 A
Enclosure: BOLT-ON | **MCB Rating:** 100 A

Notes:

CKT	Circuit Description	Trip	Poles	A		B		C		Poles	Trip	Circuit Description	CKT
1	Exterior Receptacles	20 A	1	1080...	1440...					1	20 A	Classroom-105 Receptacles	2
3	Collaboration Space-116 Receptacles	20 A	1			900 VA	1440...			1	20 A	Classroom-105 Receptacles	4
5	Exterior Receptacles	20 A	1					900 VA	1440...	1	20 A	Classroom-105 Receptacles	6
7	Classroom-109 Receptacle	20 A	1	180 VA	1080...					1	20 A	Exterior Receptacles	8
9	Classroom-108 Receptacle	20 A	1			180 VA	720 VA			1	20 A	Collaboration Space-123 Receptacles	10
11	Classroom-107 Receptacle	20 A	1					180 VA	500 VA	1	20 A	Classroom-121 Receptacle	12
13	Classroom-106 Receptacle	20 A	1	180 VA	500 VA					1	20 A	Classroom-120 Receptacle	14
15	Classroom-105 Receptacle	20 A	1			180 VA	500 VA			1	20 A	Classroom-119 Receptacle	16
17	Classroom-104 Receptacle	20 A	1					180 VA	500 VA	1	20 A	Classroom-118 Receptacle	18
19	Classroom-103 Receptacle	20 A	1	180 VA	500 VA					1	20 A	Classroom-117 Receptacle	20
21	Classroom-102 Receptacle	20 A	1			180 VA	500 VA			1	20 A	ROOM-117 CEILING MOUNTED SCREEN	22
23	Classroom-101 Receptacle	20 A	1					180 VA	500 VA	1	20 A	ROOM-106 CEILING MOUNTED SCREEN	24
25	FSD (1)	20 A	1	700 VA	360 VA					1	20 A	ROOM-118 CEILING MOUNTED SCREEN	26
27	FSD (1)	20 A	1			800 VA	360 VA			1	20 A	ROOM-123 CEILING MOUNTED SCREEN	28
29	FSD (1)	20 A	1					700 VA	0 VA	1	20 A	SPARE	30
31	FSD (1)	20 A	1	700 VA	0 VA					1	20 A	SPARE	32
33	SPARE	20 A	1			0 VA	0 VA			1	20 A	SPARE	34
35	SPARE	20 A	1					0 VA	0 VA	1	20 A	SPARE	36
37	SPACE	--	--	0 VA	0 VA					--	--	SPACE	38
39	SPACE	--	--			0 VA	0 VA			--	--	SPACE	40
41	SPACE	--	--					0 VA	0 VA	--	--	SPACE	42
		Total Load:		6900 VA		5760 VA		5080 VA					
		Total Amps:		58.4 A		48.9 A		42.3 A					

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Power	4620 VA	100.00%	4620 VA		
Receptacles	13120 VA	88.11%	11560 VA	**Total Conn. Load:**	17740 VA
				Total Est. Demand:	16180 VA
				Total Conn. Current:	49.2 A
				Total Est. Demand Current:	44.9 A

Notes:

1. PROVIDE "LOCK-ON" DEVICE TO BREAKER HANDLE AND RED LABEL TO CIRCUIT ID.

Branch Panel: LHL

Location: ELECTRICAL ROOM 125 | **Volts:** 480/277 Wye | **A.I.C. Rating:** 42000
Supply From: | **Phases:** 3 | **Mains Type:**
Mounting: SURFACE | **Wires:** 4 | **Mains Rating:** 100 A
Enclosure: BOLT-ON | **MCB Rating:** 100 A

Notes:

CKT	Circuit Description	Trip	Poles	A		B		C		Poles	Trip	Circuit Description	CKT
1	Lighting	20 A	1	3237...	2864...					1	20 A	Lighting	2
3	Lighting	20 A	1			3749...	2167...			1	20 A	Lighting	4
5	Lighting	20 A	1					4285...	2134...	1	20 A	Lighting	6
7	Lighting	20 A	1	1142...	800 VA					1	20 A	SOLATUBE	8
9	SPARE	20 A	1			0 VA	6000...			1	30 A	WATER HEATER	10
11	SPARE	20 A	1					0 VA	0 VA	1	20 A	SPARE	12
13	SPARE	20 A	1	0 VA	0 VA					1	20 A	SPARE	14
15	SPARE	20 A	1			0 VA	0 VA			1	20 A	SPARE	16
17	SPARE	20 A	1					0 VA	0 VA	1	20 A	SPARE	18
19	SPARE	20 A	1	0 VA	0 VA					1	20 A	SPARE	20
21	SPARE	20 A	1			0 VA	0 VA			1	20 A	SPARE	22
23	SPARE	20 A	1					0 VA	0 VA	1	20 A	SPARE	24
25	SPARE	20 A	1	0 VA	0 VA					1	20 A	SPARE	26
27	SPARE	20 A	1			0 VA	0 VA			1	20 A	SPARE	28
29	SPARE	20 A	1					0 VA	0 VA	1	20 A	SPARE	30
31	SPARE	20 A	1	0 VA	0 VA					1	20 A	SPARE	32
33	SPARE	20 A	1			0 VA	0 VA			1	20 A	SPARE	34
35	SPARE	20 A	1					0 VA	0 VA	1	20 A	SPARE	36
37	SPACE	--	--	0 VA	0 VA					--	--	SPACE	38
39	SPACE	--	--			0 VA	0 VA			--	--	SPACE	40
41	SPACE	--	--					0 VA	0 VA	--	--	SPACE	42
		Total Load:		8043 VA		11916 VA		6419 VA					
		Total Amps:		29.9 A		43.9 A		23.2 A					

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Lighting	19578 VA	100.00%	19578 VA		
Other	0 VA	0.00%	0 VA	**Total Conn. Load:**	26378 VA
Power	6800 VA	100.00%	6800 VA	**Total Est. Demand:**	26378 VA
				Total Conn. Current:	31.7 A
				Total Est. Demand Current:	31.7 A

Notes:

10/20/2022 4:43:15 PM

CONSULTANT:

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PROJECT # 2000435.00

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EXTENDED SCALE IN INCHES
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PANEL SCHEDULES

BUILDING 400 MODERNIZATION TO NEW CLASSROOM/ LIBRARY MEDIA CENTER
WALNUT VALLEY UNIFIED SCHOOL DISTRICT
DIAMOND BAR HIGH SCHOOL
21400 PATHFINDER RD. DIAMOND BAR, CA 91765

WALNUT VALLEY UNIFIED SCHOOL DISTRICT

SEAL:

REGISTERED PROFESSIONAL ENGINEER
NESTOR C. IGNACIO, JR.
Lic. E16934
Exp. 6-30-2023
STATE OF CALIFORNIA

sgh ARCHITECTS

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PROJECT NUMBER: 19-47100-00
PROJECT STATUS: 100% CD
PROJECT ISSUED: 10/20/20

REVISION	DATE	DESCRIPTION
1	10-25-2022	ADDENDUM - 1

E0.04

Branch Panel: MP1

Location: ELECTRICAL ROOM 214
Supply From:
Mounting: SURFACE
Enclosure: BOLT-ON

Volts: 120/208 Wye
Phases: 3
Wires: 4

A.I.C. Rating: 14000
Mains Type:
Mains Rating: 225 A
MCB Rating: 225 A

Notes:

CKT	Circuit Description	Trip	Poles	A		B		C		Poles	Trip	Circuit Description	CKT
1	Classroom-221 Receptacles	20 A	1	900 VA	1620 VA					1	20 A	Classroom-201 Receptacles	2
3	Classroom-221 TV	20 A	1			360 VA	500 VA			1	20 A	Classroom-201 TV	4
5	Classroom-202 Receptacle	20 A	1					180 VA	180 VA	1	20 A	RM 227 Circ Pump	6
7	Gic Office-224 Receptacles	20 A	1	720 VA	1260 VA					1	20 A	Classroom-202 Receptacles	8
9	Office-223 Receptacles	20 A	1			720 VA	360 VA			1	20 A	Classroom-204 TV	10
11	classroom-225 Receptacles	20 A	1					1440 VA	0 VA	--	--	SPACE	12
13	Classroom-224 TV	20 A	1	360 VA	1260 VA					1	20 A	Classroom-203 Receptacles	14
15	SPACE	--	--			0 VA	360 VA			1	20 A	Classroom-203 TV	16
17	classroom-226 Receptacles	20 A	1					1440 VA	500 VA	1	20 A	Classroom-203 Receptacle	18
19	Classroom-226 TV	20 A	1	360 VA	1080 VA					1	20 A	Classroom-204 Receptacles	20
21	Classroom-202 Receptacle	20 A	1			500 VA	360 VA			1	20 A	Classroom-204 TV	22
23	Office-227 Receptacles	20 A	1					540 VA	500 VA	1	20 A	Classroom-204 Receptacle	24
25	Unsex Restroom-218, 219 Receptacles	20 A	1	360 VA	700 VA					1	20 A	FSD (1)	26
27	Electrical Room-217, Hall-216 Receptacles	20 A	1			360 VA	600 VA			1	20 A	FSD (1)	28
29	Classroom-221 Receptacle	20 A	1					180 VA	1080 VA	1	20 A	Carrer Center-211 Receptacles	30
31	Classroom-220 Receptacle	20 A	1	180 VA	1080 VA					1	20 A	Coffe/Storage-210 Receptacles	32
33	Classroom-226 Receptacle	20 A	1			360 VA	540 VA			1	20 A	Study Room-209 Receptacles	34
35	FSD (1)	20 A	1	1100 VA	13590 VA					3	150 A	MP2 PANEL SUBFEED	38
37	FSD (1)	20 A	1							--	--	--	40
39	SPARE	20 A	1			0 VA	14778 VA			--	--	--	40
41	SPARE	20 A	1					0 VA	15928...	--	--	--	42
		Total Load:		24570 VA		19798 VA		22848 VA					
		Total Amps:		208.7 A		165 A		194.3 A					

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Lighting	1392 VA	100.00%	1392 VA		
Power	23264 VA	100.00%	23264 VA	**Total Conn. Load:**	67216 VA
Receptacles	42560 VA	61.75%	26280 VA	**Total Est. Demand:**	50936 VA
				Total Conn. Current:	186.6 A
				Total Est. Demand Current:	141.4 A

Notes:

1. PROVIDE "LOCK-ON" DEVICE TO BREAKER HANDLE AND RED LABEL TO CIRCUIT ID.

Branch Panel: MP2

Location: ELECTRICAL ROOM 214
Supply From: MP1
Mounting: SURFACE
Enclosure: BOLT-ON

Volts: 120/208 Wye
Phases: 3
Wires: 4

A.I.C. Rating: 14000
Mains Type:
Mains Rating: 150 A
MCB Rating: 150 A

Notes:

CKT	Circuit Description	Trip	Poles	A		B		C		Poles	Trip	Circuit Description	CKT
1	Classroom -218 Receptacles	20 A	1	1440 VA	1080 VA					1	20 A	Classroom -204 Receptacles	2
3	Classroom -218 Receptacles	20 A	1			1080 VA	1080 VA			1	20 A	Classroom -204 Receptacles	4
5	Classroom -218 Receptacles	20 A	1					1440 VA	1080 VA	1	20 A	Classroom -204 Receptacles	6
7	Classroom -218 Receptacles	20 A	1	720 VA	900 VA					1	20 A	Classroom -204 Receptacles	8
9	Classroom -218 Receptacles	20 A	1			720 VA	900 VA			1	20 A	Classroom -204 Receptacles	10
11	Classroom -218 Receptacles	20 A	1					720 VA	900 VA	1	20 A	Classroom -204 Receptacles	12
13	Office -211 Receptacles	20 A	1	900 VA	1440 VA					1	20 A	Computer Aera-210 Receptacles	14
15	Career Center-212 Receptacles	20 A	1			1440 VA	1440 VA			1	20 A	Computer Aera-210 Receptacles	16
17	Library-206 Receptacles	20 A	1					900 VA	360 VA	1	20 A	Computer Aera-210 Receptacles	18
19	CONVENIENCE Receptacles	20 A	1	1440 VA	1440 VA					1	20 A	Computer Aera-210 Receptacles	20
21	FC-M2 DRAIN PUMP	20 A	1			180 VA	696 VA			1	20 A	EF-1	22
23	FC-M3 DRAIN PUMP	20 A	1					500 VA	696 VA	1	20 A	EF-2	24
25	RM 210 AV CABINET	20 A	1	500 VA	450 VA					1	20 A	MOTORIZED SHADE	26
27	RM 218 AV CABINET	20 A	1			500 VA	150 VA			1	20 A	MOTORIZED SHADE	28
29	RM 204 AV CABINET	20 A	1					500 VA	2600 VA	2	30 A	CU L-1	30
31	FATC-2	20 A	1	500 VA	2600 VA								
33	ROOM-206 CEILING MOUNTED SCREEN	20 A	1			720 VA	360 VA			1	20 A	ROOM-210 CEILING MOUNTED SCREEN	34
35	ROOM-206 CEILING MOUNTED SCREEN	20 A	1					720 VA	0 VA	--	--	SPACE	36
37	FC-M1 DRAIN PUMP	20 A	1	180 VA	0 VA					--	--	SPACE	38
39	CU M-1	35 A	2			2912 VA	2600 VA			2	20 A	CU M-2	40
41	--	--	--					2912 VA	2600 VA	--	--	--	42
		Total Load:		13590 VA		14778 VA		15928 VA					
		Total Amps:		113.3 A		124.7 A		134.3 A					

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Lighting	1392 VA	100.00%	1392 VA		
Power	19984 VA	100.00%	19984 VA	**Total Conn. Load:**	44296 VA
Receptacles	22920 VA	71.82%	16460 VA	**Total Est. Demand:**	37836 VA
				Total Conn. Current:	123 A
				Total Est. Demand Current:	105 A

Notes:

Branch Panel: MHL

Location: ELECTRICAL ROOM 214
Supply From:
Mounting: SURFACE
Enclosure: BOLT-ON

Volts: 480/277 Wye
Phases: 3
Wires: 4

A.I.C. Rating: 42000
Mains Type:
Mains Rating: 225 A
MCB Rating: 225 A

Notes:

CKT	Circuit Description	Trip	Poles	A		B		C		Poles	Trip	Circuit Description	CKT
1	Lighting	20 A	1	3559...	3473...					1	20 A	Lighting	2
3	Lighting	20 A	1			4469...	1400...			1	20 A	Lighting	4
5	Exterior Lighting	20 A	1					111 VA	300 VA	1	20 A	SOLATUBE	6
7	SPARE	20 A	1	0 VA	0 VA					1	20 A	SPARE	8
9	SPARE	20 A	1			0 VA	0 VA			1	20 A	SPARE	10
11	SPARE	20 A	1					0 VA	6000...	1	30 A	WATER HEATER	12
13	SPARE	20 A	1	0 VA	0 VA					1	20 A	SPARE	14
15	SPARE	20 A	1			0 VA	0 VA			1	20 A	SPARE	16
17	SPARE	20 A	1					0 VA	0 VA	1	20 A	SPARE	18
19	SPARE	20 A	1	0 VA	0 VA					1	20 A	SPARE	20
21	SPARE	20 A	1			0 VA	0 VA			1	20 A	SPARE	22
23	SPARE	20 A	1					0 VA	0 VA	1	20 A	SPARE	24
25	SPARE	20 A	1	0 VA	0 VA					1	20 A	SPARE	26
27	SPARE	20 A	1			0 VA	0 VA			1	20 A	SPARE	28
29	SPARE	20 A	1					0 VA	0 VA	1	20 A	SPARE	30
31	SPARE	20 A	1	0 VA	0 VA					1	20 A	SPARE	32
33	SPARE	20 A	1			0 VA	0 VA			1	20 A	SPARE	34
35	SPARE	20 A	1					0 VA	0 VA	1	20 A	SPARE	36
37	SPACE	--	--	0 VA	3049...					3	125 A	AC-10	38
39	SPACE	--	--			0 VA	3049...			--	--	--	40
41	SPACE	--	--					0 VA	3049...	--	--	--	42
		Total Load:		37530 VA		36367 VA		36909 VA					
		Total Amps:		135.8 A		131.3 A		133.5 A					

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Lighting	13012 VA	100.00%	13012 VA		
Power	97794 VA	100.00%	97794 VA	**Total Conn. Load:**	110806 VA
				Total Est. Demand:	110806 VA
				Total Conn. Current:	133.3 A
				Total Est. Demand Current:	133.3 A

Notes:

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ESTIMATED SCALE IN INCHES
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PANEL SCHEDULES

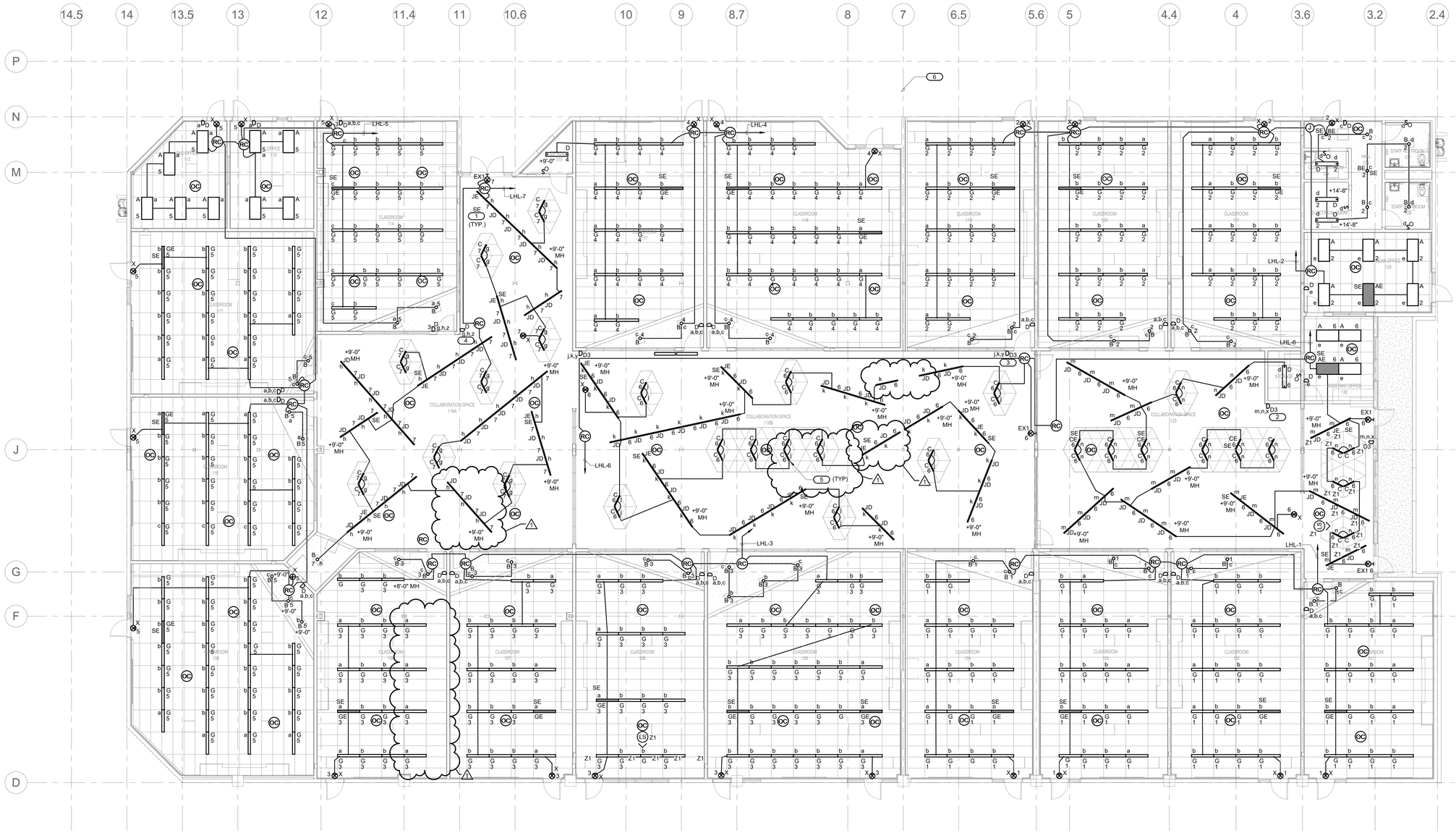
BUILDING 400 MODERNIZATION TO NEW CLASSROOM/ LIBRARY MEDIA CENTER
WALNUT VALLEY UNIFIED SCHOOL DISTRICT
DIAMOND BAR HIGH SCHOOL
21400 PATHFINDER RD. DIAMOND BAR, CA 91765

SEAL:S

PROJECT NUMBER: 19-47100-00
PROJECT STATUS: 100% CD
PROJECT ISSUED: 10/20/20
REVISION DATE: DESCRIPTION:
1 10-25-2022 ADDENDUM - 1

E0.05

10/20/2022 4:43:18 PM



KEYNOTES (#)

1. CONTRACTOR TO PROVIDE EMERGENCY BATTERY PACK. EMERGENCY BATTERY PACK SHALL HAVE BACKUP TIME FOR 90 MINUTES. TYPICAL FOR ALL FIXTURES REFLECTING SHADING AND LABELED "SE". PROVIDE UNSWITCHED CIRCUITS ON ALL EMERGENCY BATTERY PACK POWER.
2. SWITCHLEG "X" TO CONTROL SOLATUBE. REFER TO ROOF PLAN SHEET E4.11 FOR LOCATION OF SOLATUBE.
3. SWITCHLEG "Y" TO CONTROL SOLATUBE. REFER TO ROOF PLAN SHEET E4.11 FOR LOCATION OF SOLATUBE.
4. SWITCHLEG "Z" TO CONTROL SOLATUBE. REFER TO ROOF PLAN SHEET E4.11 FOR LOCATION OF SOLATUBE.
5. LUMINAIRE TYPE O/S A T-BAR LED INTEGRATED WITH ARMSTRONG DESIGNFLEX ACOUSTICAL CLOUD.
6. PROVIDE ELECTRICAL CONNECTION THROUGH SEISMIC JOINT ALONG GRIDLINE 7 PER DETAILS 6 AND 7 OF SHEET E5.02

LIGHTING PLAN GENERAL NOTES

A. ALL SUSPENDED LINEAR LIGHTS SHALL BE SPACED 18 INCHES MINIMUM FROM EACH OTHER OR ANY WALL OR ACOUSTICAL CLOUD CEILING.

B. UNLESS OTHERWISE DENOTED WITH MOUNTING HEIGHT, LUMINAIRES SHALL BE FLUSH OR SURFACE MOUNTED TO THE CEILING.

NORTH

LIGHTING PLAN LOWER LEVEL 1 1/8" = 1'-0"

10/20/2022 4:43:28 PM

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REFERENCE SCALE IN INCHES
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LIGHTING PLAN LOWER LEVEL

BUILDING 400 MODERNIZATION TO NEW CLASSROOM/ LIBRARY MEDIA CENTER
WALNUT VALLEY UNIFIED SCHOOL DISTRICT
DIAMOND BAR HIGH SCHOOL
21400 PATHFINDER RD. DIAMOND BAR, CA 91765

WALNUT VALLEY UNIFIED SCHOOL DISTRICT

SEALS:

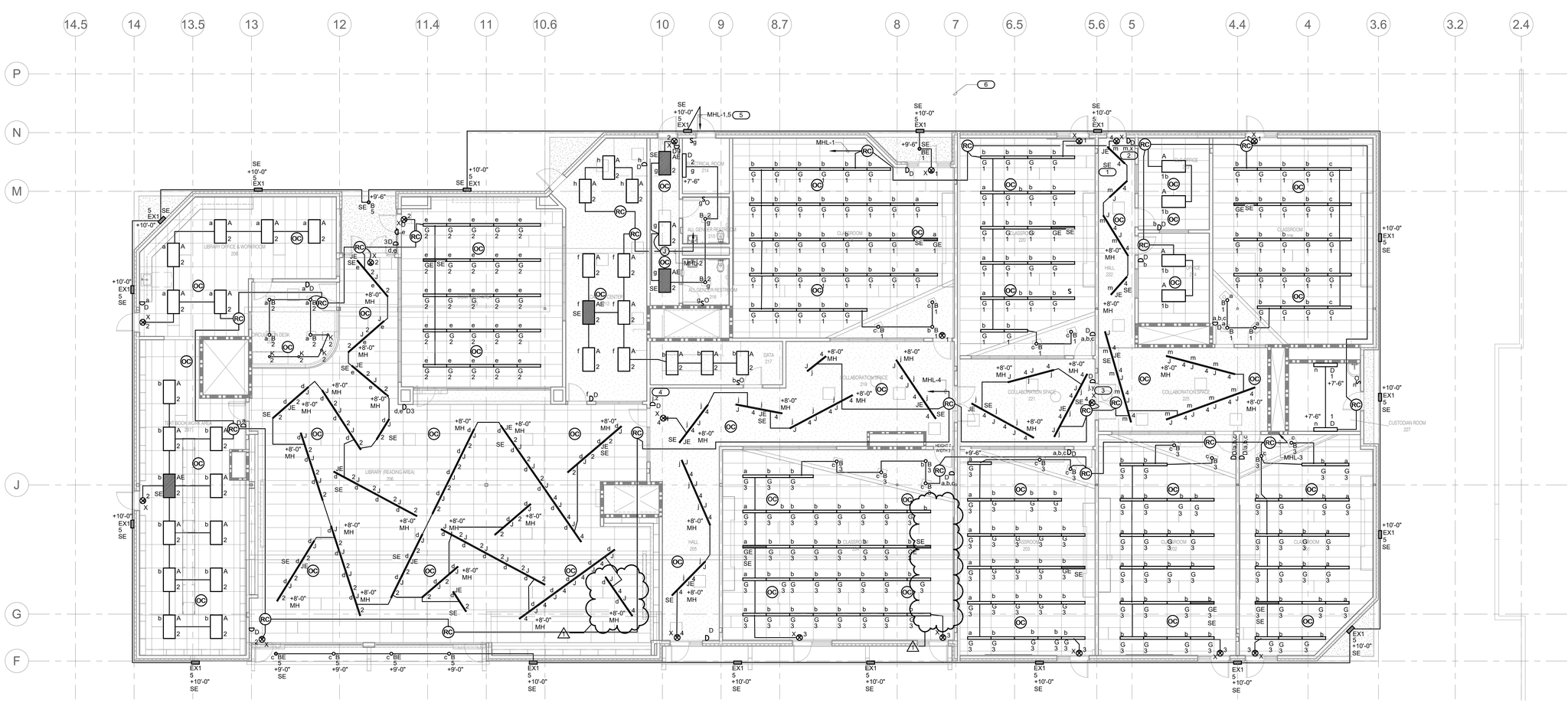
REGISTERED PROFESSIONAL ENGINEER
NESTOR C. IGNACIO JR.
Lic. E16934
Exp. 6-30-2023
OF CALIFORNIA

sgh ARCHITECTS

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PROJECT NUMBER: 19-47100-00
PROJECT STATUS: 100% CD
PROJECT ISSUED: 08/12/20
REVISION: DATE: DESCRIPTION:
1 10-25-2022 ADDENDUM - 1

E2.11



NORTH

LIGHTING PLAN MAIN LEVEL 1 1/8" = 1'-0"

KEYNOTES (#)

1. CONTRACTOR TO PROVIDE EMERGENCY BATTERY PACK. EMERGENCY BATTERY PACK SHALL HAVE BACKUP TIME FOR 90 MINUTES. TYPICAL FOR ALL FIXTURES REFLECTING SHADING AND LABELED "SE". PROVIDE UNSWITCHED CIRCUITS ON ALL EMERGENCY BATTERY PACK POWER.
2. SWITCHLEG "X" TO CONTROL SOLATUBE. REFER TO ROOF PLAN SHEET E4.11 FOR LOCATION OF SOLATUBE.
3. SWITCHLEG "Y" TO CONTROL SOLATUBE. REFER TO ROOF PLAN SHEET E4.11 FOR LOCATION OF SOLATUBE.
4. SWITCHLEG "Z" TO CONTROL SOLATUBE. REFER TO ROOF PLAN SHEET E4.11 FOR LOCATION OF SOLATUBE.
5. ROUTE CIRCUIT THROUGH LIGHTING CONTROL PANEL "LCPM" LOCATED IN ELECTRICAL ROOM 214.
6. PROVIDE ELECTRICAL CONNECTION THROUGH SEISMIC JOINT ALONG GRIDLINE 7 PER DETAILS 6 AND 7 OF SHEET E5.02.

LIGHTING PLAN GENERAL NOTES

A. ALL SUSPENDED LINEAR LIGHTS SHALL BE SPACED 18 INCHES MINIMUM FROM EACH OTHER OR ANY WALL.

B. UNLESS OTHERWISE DENOTED WITH MOUNTING HEIGHT, LUMINAIRES SHALL BE FLUSH OR SURFACE MOUNTED TO THE CEILING.

C. RECESSED LINEAR LIGHTS IN WAY OF A.C.T. SHALL BE INSTALLED WITHIN THE ARMSTRONG TECHZONE GRID.

10/20/2022 4:43:37 PM

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0 1 2 3
REFERENCE SCALE IN INCHES

LIGHTING PLAN MAIN LEVEL

BUILDING 400 MODERNIZATION TO NEW CLASSROOM/ LIBRARY MEDIA CENTER

WALNUT VALLEY UNIFIED SCHOOL DISTRICT
DIAMOND BAR HIGH SCHOOL
21400 PATHFINDER RD. DIAMOND BAR, CA 91765

WALNUT VALLEY UNIFIED SCHOOL DISTRICT

SEALS:

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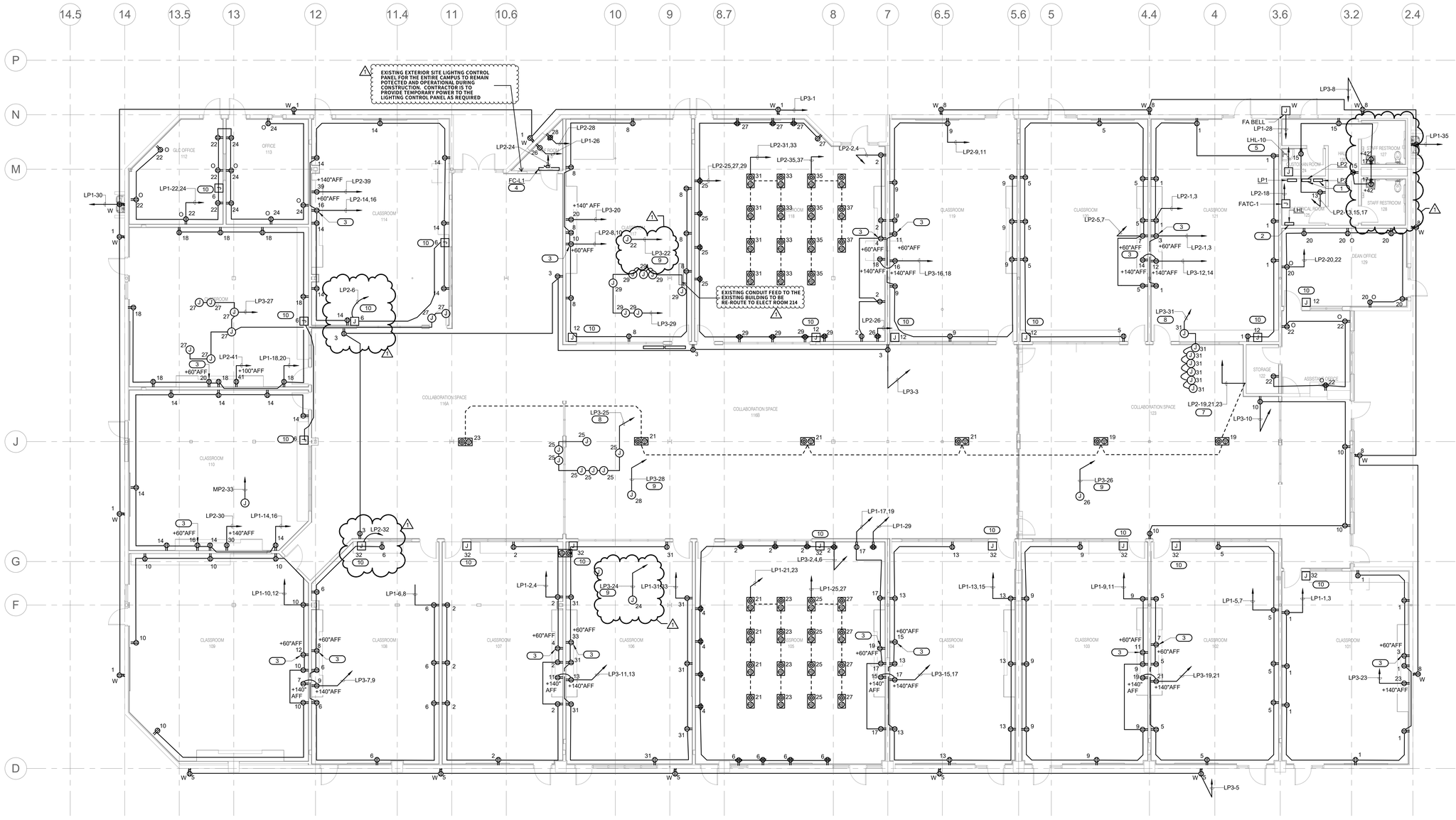
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PROJECT NUMBER: 19-47100-00
PROJECT STATUS: 100% CD
PROJECT ISSUED: 08/12/20

REVISION	DATE	DESCRIPTION
1	10-25-2022	ADDENDUM - 1

E2.12



NORTH

POWER PLAN LOWER LEVEL 1
1/8" = 1'-0"

KEYNOTES (#)

1. PANELS LP2, LP3: FOR EACH PANEL PROVIDE 4 #2 + 1 #8GND IN 1 1/2" CONDUIT FED FROM PANEL MP1.
2. PANEL LHM: PROVIDE 4 #2 + 1 #8GND IN 1 1/2" CONDUIT FED FROM PANEL LHL.
3. CONFIRM EXACT LOCATION OF TV SCREEN WITH ARCHITECT & TECHNOLOGY DRAWINGS PRIOR TO ROUGH-IN.
4. OUTDOOR CONDENSING UNIT TO FEED INTERIOR FAN COIL UNIT. REFER TO MECHANICAL DRAWINGS FOR MORE INFORMATION.
5. PROVIDE A 3/4"C -2#10 & 1#10GND FOR WATER HEATER. REFER TO PLUMBING PLANS FOR FINAL LOCATION.
6. NOT USED.
7. PROVIDE (1) 3/4" CONDUIT FROM THE FLOOR MONUMENT TO THE WALL AND UP TO ACCESSIBLE CEILING SPACE.
8. COORDINATE FINAL LOCATION OF SMOKE FIRE DAMPERS WITH MECHANICAL PLANS PRIOR TO ROUGH-IN.
9. VERIFY FINAL LOCATION & MOUNTING HEIGH OF PROJECTOR WITH ARCHITECTURAL AND TECHNOLOGY DRAWINGS PRIOR TO ROUGH-IN.
10. DENOTES JUNCTION BOX FOR MOTORIZED SHADE. ROUTE CIRCUIT VIA MOTORIZED SHADE MOTOR RELAY.

POWER PLAN GENERAL NOTES

A. REFER TO ONE LINE DIAGRAM SHEET E0.02 FOR FEEDER AND CONDUIT SIZING.

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EXTERIOR SCALE IN INCHES
0 1 2 3

POWER PLAN LOWER LEVEL - NEW CLASSROOM/ LIBRARY MEDIA

BUILDING 400 MODERNIZATION TO NEW CLASSROOM/ LIBRARY MEDIA CENTER
WALNUT VALLEY UNIFIED SCHOOL DISTRICT
DIAMOND BAR HIGH SCHOOL
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WALNUT VALLEY UNIFIED SCHOOL DISTRICT

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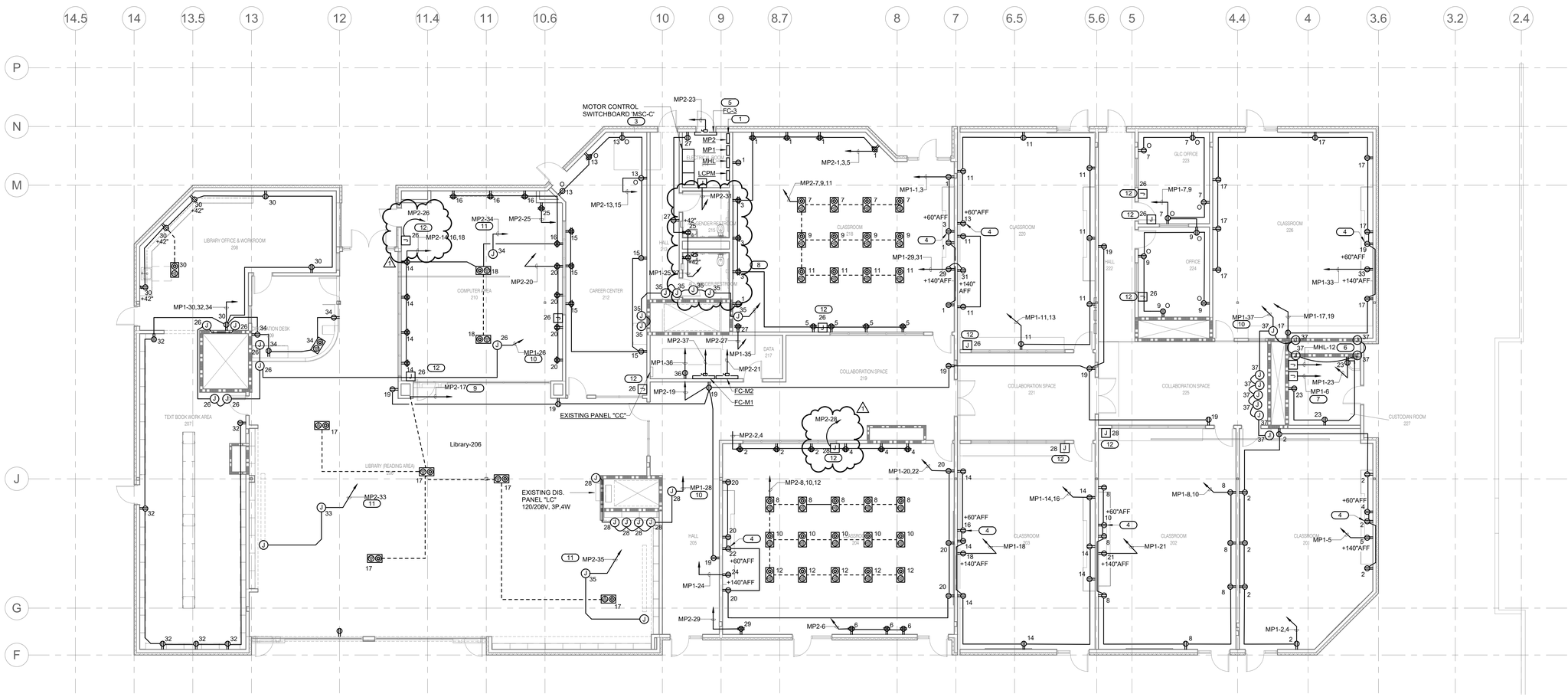
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PROJECT NUMBER: 19-47100-00
PROJECT STATUS: 100% CD
PROJECT ISSUED: 06/13/20

REVISION	DATE	DESCRIPTION
1	10-25-2022	ADDENDUM - 1

E2.21

10/20/2022 4:43:43 PM



NORTH

POWER PLAN MAIN LEVEL 1
1/8" = 1'-0"

KEYNOTES (#)

1. PANELS MP2: FOR PANEL PROVIDE 4 #2 + 1 #8GND IN 1 1/2" CONDUIT FED FROM PANEL MP1.
2. NOT USED.
3. RELOCATE EXISTING MOTOR CONTROL CENTER TO ELECTRICAL ROOM 214. EXTEND EXISTING FEEDER, BRANCH WIRING AND CONDUITS TO ROOM 214 AND CONNECT TO RELOCATED MOTOR CONTROL CENTER.
4. CONFIRM EXACT LOCATION OF TV SCREEN WITH ARCHITECT & TECHNOLOGY DRAWINGS PRIOR TO ROUGH-IN.
5. OUTDOOR CONDENSING UNIT TO FEED INTERIOR FAN COIL UNIT. REFER TO MECHANICAL DRAWINGS FOR MORE INFORMATION.
6. PROVIDE A 3/4"C -2#10 & 1#10GND FOR WATER HEATER. REFER TO PLUMBING PLANS FOR FINAL LOCATION.
7. REFER TO PLUMBING PLANS FOR FINAL LOCATION OF EWC PWR.
8. NOT USED.
9. PROVIDE (4) 3/4" CONDUIT FROM THE FLOOR MONUMENT TO THE WALL AND UP TO ACCESSIBLE CEILING SPACE.
10. COORDINATE FINAL LOCATION OF SMOKE FIRE DAMPERS WITH MECHANICAL PLANS PRIOR TO ROUGH-IN.
11. VERIFY FINAL LOCATION & MOUNTING HEIGH OF PROJECTOR/PROJECTION SCREEN WITH ARCHITECTURAL AND TECHNOLOGY DRAWINGS PRIOR TO ROUGH-IN.

KEYNOTES (#)

12. DENOTES JUNCTION BOX FOR MOTORIZED SHADE. ROUTE CIRCUIT VIA MOTORIZED SHADE MOTOR RELAY

POWER PLAN GENERAL NOTES

A. REFER TO ONE LINE DIAGRAM SHEET E0.02 FOR FEEDER AND CONDUIT SIZING.

CONSULTANT:

IMEG

IMEG CORP. 301 LIN PRESIDIO, SUITE 400 SAN ANTONIO, TX 78232 210.477.3100 FAX 877.818.4916

PROJECT # 2000424.00

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POWER PLAN MAIN LEVEL

BUILDING 400 MODERNIZATION TO NEW CLASSROOM/ LIBRARY MEDIA CENTER

WALNUT VALLEY UNIFIED SCHOOL DISTRICT

DIAMOND BAR HIGH SCHOOL

21400 PATHFINDER RD. DIAMOND BAR, CA 91765

WALNUT VALLEY UNIFIED SCHOOL DISTRICT

SEALS:

REGISTERED PROFESSIONAL ENGINEER NESTOR C. IGNACIO JR. Lic. E16934 Exp. 6-30-2023 STATE OF CALIFORNIA

sgh ARCHITECTS

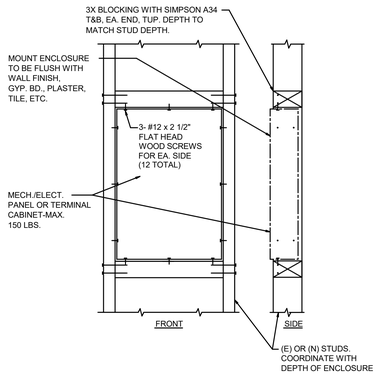
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PROJECT NUMBER: 19-47100-00
PROJECT STATUS: 100% CD
PROJECT ISSUED: 08/13/20

REVISION:	DATE:	DESCRIPTION:
4	10-25-2022	ADENDUM - 1

E2.22

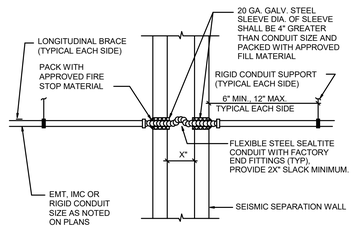
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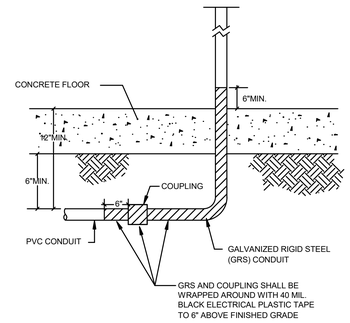
NOTE:

1. IF MOUNTED TO FIRE RATED WALL, REFER TO FIVE SIDED BOX DETAIL TO MAINTAIN FIRE RATING.

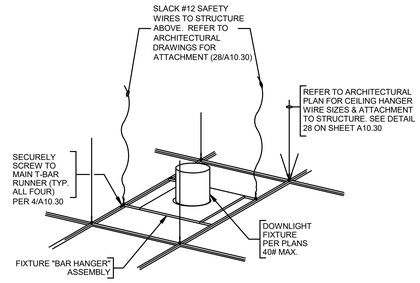
RECESSED MOUNTED PANEL/CABINET WOOD FRAMING | NTS | 10



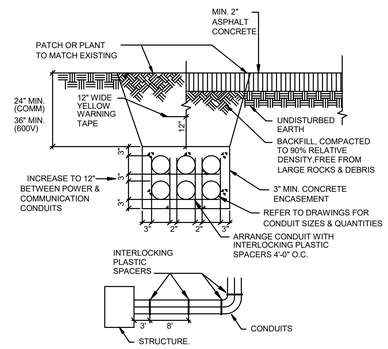
CONDUIT THROUGH SEISMIC SEPARATION | NTS | 7



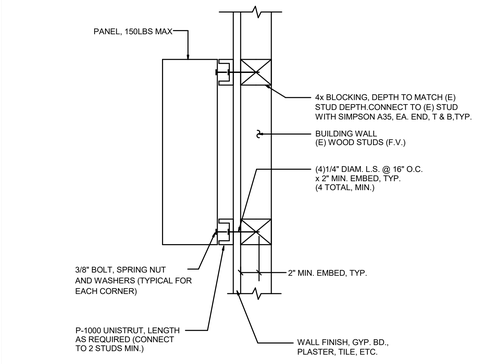
CONDUIT INSTALLED BELOW CONCRETE INSIDE BUILDING DETAIL | NTS | 4



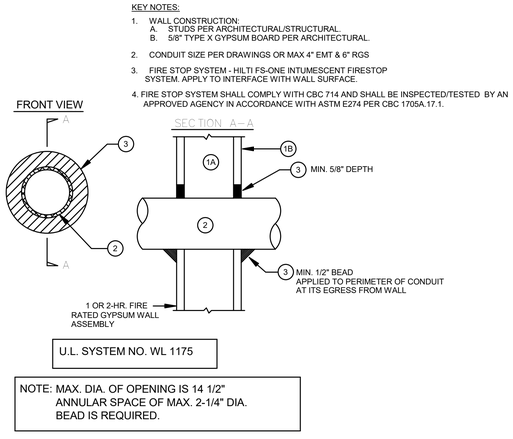
RECESSED DOWNLIGHT @ LAY-IN GRID DETAIL | NTS | 1



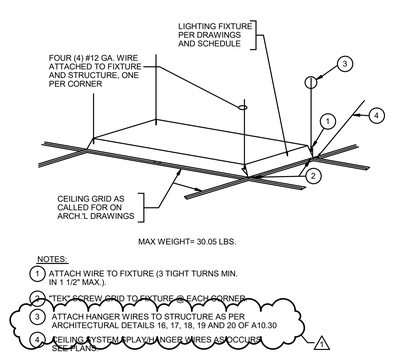
UNDERGROUND CONDUIT PLACEMENT DETAIL | NTS | 11



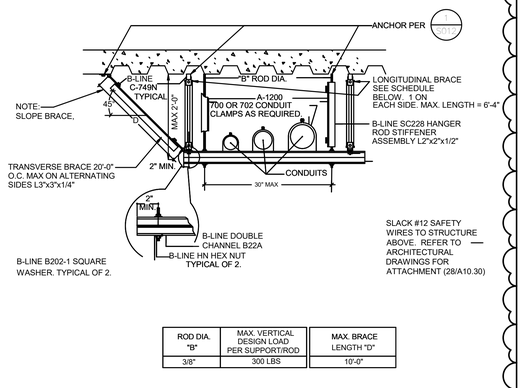
SURFACE MOUNTED PANEL/CABINET WOOD FRAMING | NTS | 8



CONDUIT PENETRATION AT RATED STUD WALL | NTS | 5



RECESSED LAY-IN CEILING FIXTURE MOUNTING DETAIL | NTS | 2

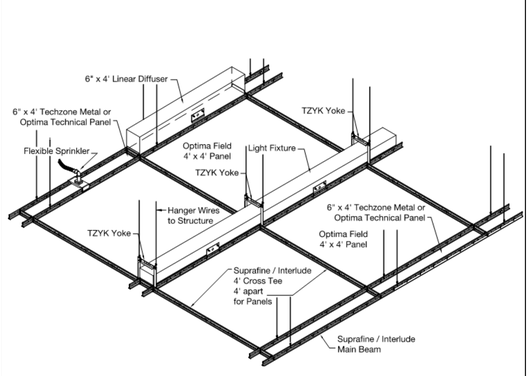


ROD DIA. "B"	MAX. VERTICAL DESIGN LOAD PER SUPPORT/ROD	MAX. BRACE LENGTH "D"
3/8"	300 LBS	10'-0"

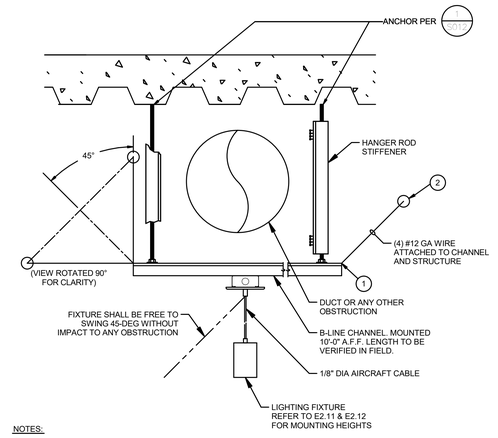
NOTES:

1. TRAPEZE SHALL BE SPACED 10'-0" MAXIMUM ON CENTER.
2. MIN. 3/8" ROB TO BE USED.
3. TRANSVERSE BRACE TO BE PROVIDED ON ONE SIDE AT EACH TRAPEZE ALTERNATING SIDES AT EVERY OTHER TRAPEZE.

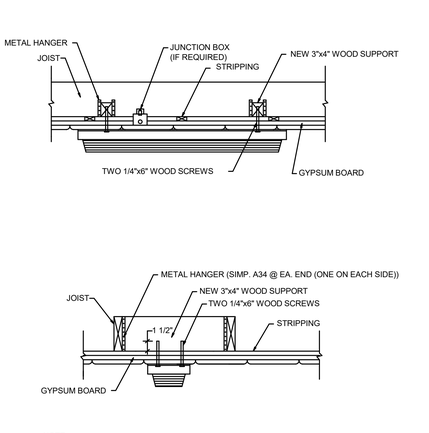
MULTI-CONDUIT SUPPORT DETAIL | NTS | 12



RECESSED LIGHT MOUNTING I.W.O. ACT | NTS | 9



SUSPENDED LIGHT MOUNTING I.W.O. OPEN TO STRUCTURE | NTS | 6



NOTE:
FIXTURE SHALL BE "UL" LISTED FOR LOW DENSITY CEILING MOUNTED.

SURFACE MOUNTED LED FIXTURE DETAIL | NTS | 3

10/20/2022 4:43:53 PM

CONSULTANT:

IMEG

301 LIN PEDIATRIC, SUITE 400
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PHONE: 937.461.4914
FAX: 937.461.4915
PROJECT # 220024535

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DETAILS

BUILDING 400 MODERNIZATION TO NEW CLASSROOM/ LIBRARY MEDIA CENTER
WALNUT VALLEY UNIFIED SCHOOL DISTRICT
DIAMOND BAR HIGH SCHOOL
21400 PATHFINDER RD. DIAMOND BAR, CA 91765

WALNUT VALLEY UNIFIED SCHOOL DISTRICT

SEALS:

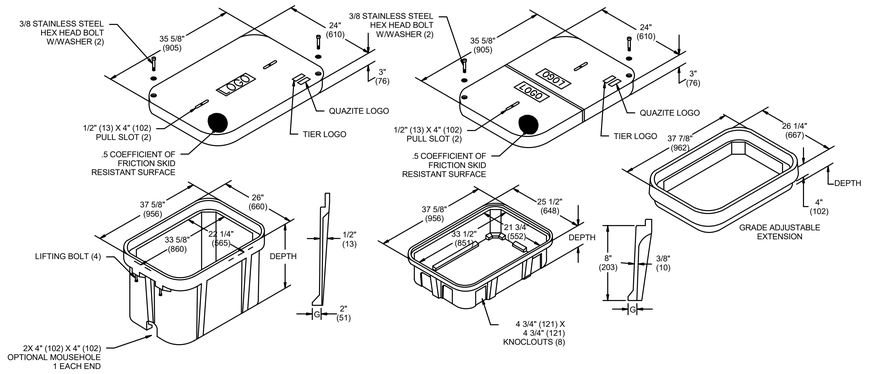
REGISTERED PROFESSIONAL ENGINEER
NESTOR C. IGNACIO JR.
Lic. E16934
Exp. 6-30-2023
OF CALIFORNIA

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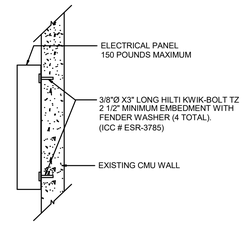
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PROJECT NUMBER:	19-47100-00
PROJECT STATUS:	100% CD
PROJECT ISSUED:	08/12/20
REVISION:	DESCRIPTION:
1	ADDENDUM - 1
DATE:	10-25-2022

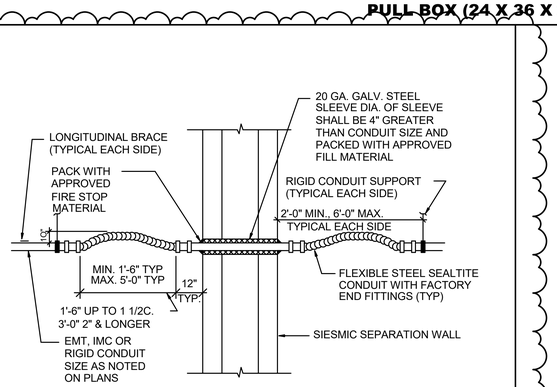
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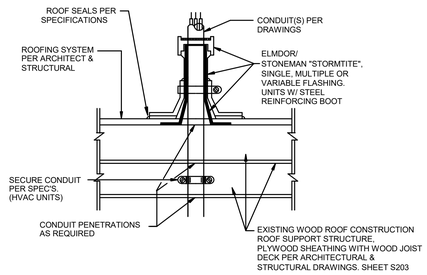
PULL BOX (24 X 36 X 24)" (W X L X D) | NTS | 3



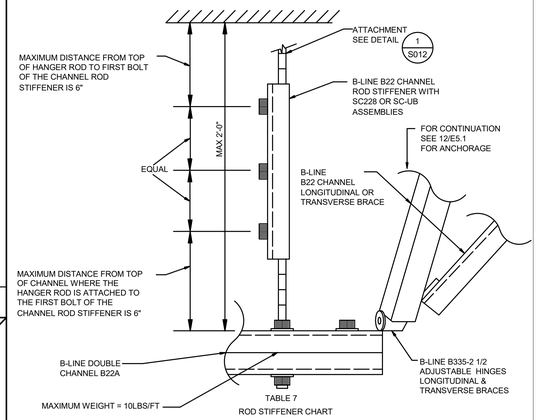
SURFACE MOUNTED PANEL/CABINET CMU OR MASONRY WALL | NTS | 1



CONDUIT THRU SEISMIC SEPARATION DETAIL | NTS | 6



CONDUIT ROOF PENETRATION DETAIL | NTS | 4

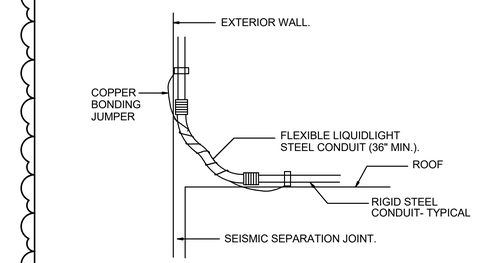


ATR SIZE A307 GRADE	MAX. SPACING BETWEEN B-LINE SC-228 OR B-LINE SC-UB IN.	(MM)
3/8"-16	13"	(330.2)
1/2"-13	18"	(457.2)
5/8"-11	23"	(584.2)
3/4"-10	28"	(711.2)
7/8"-9	33"	(838.2)

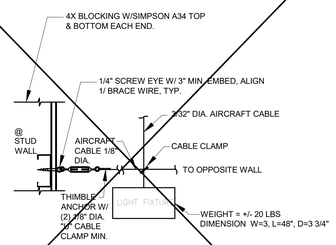
NOTE: MINIMUM OF (2)-SC228 OR SC-UB ARE REQUIRED PER ROD.

ROD STIFFNERS REQUIRED ONLY ON HANGER RODS THAT HAVE SEISMIC BRACING ATTACHED TO THE HANGER OR TRAPEZE.

ROD STIFFENER DETAIL | NTS | 2



CONDUIT SEISMIC SEPARATION DETAIL | NTS | 7



NOTE:
1. PENDANT LUMINAIRES THAT ARE FREE TO SWING LATERALLY AT LEAST 45° FROM THE VERTICAL WITHOUT CONTACTING AN OBSTRUCTION ARE EXEMPT FROM BRACING RESTRAINS PER DSA IR-16-9.

SPLAY BRACE ATTACHMENT TO WALL | NTS | 5

CONSULTANT:

IMEG
301 LIN PRESCOTT, SUITE 400
CHINO, CA 91710
PHONE: 909.217.6100 FAX: 909.217.6101
PROJECT # 220024.S0

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DETAILS

BUILDING 400 MODERNIZATION TO NEW CLASSROOM/ LIBRARY MEDIA CENTER
WALNUT VALLEY UNIFIED SCHOOL DISTRICT
DIAMOND BAR HIGH SCHOOL
21400 PATHFINDER RD. DIAMOND BAR, CA 91765

WALNUT VALLEY UNIFIED SCHOOL DISTRICT

SEALS:

REGISTERED PROFESSIONAL ENGINEER — HENRY C. IGNACIO JR. — Lic. E16934 — Exp. 6-30-2023 — STATE OF CALIFORNIA

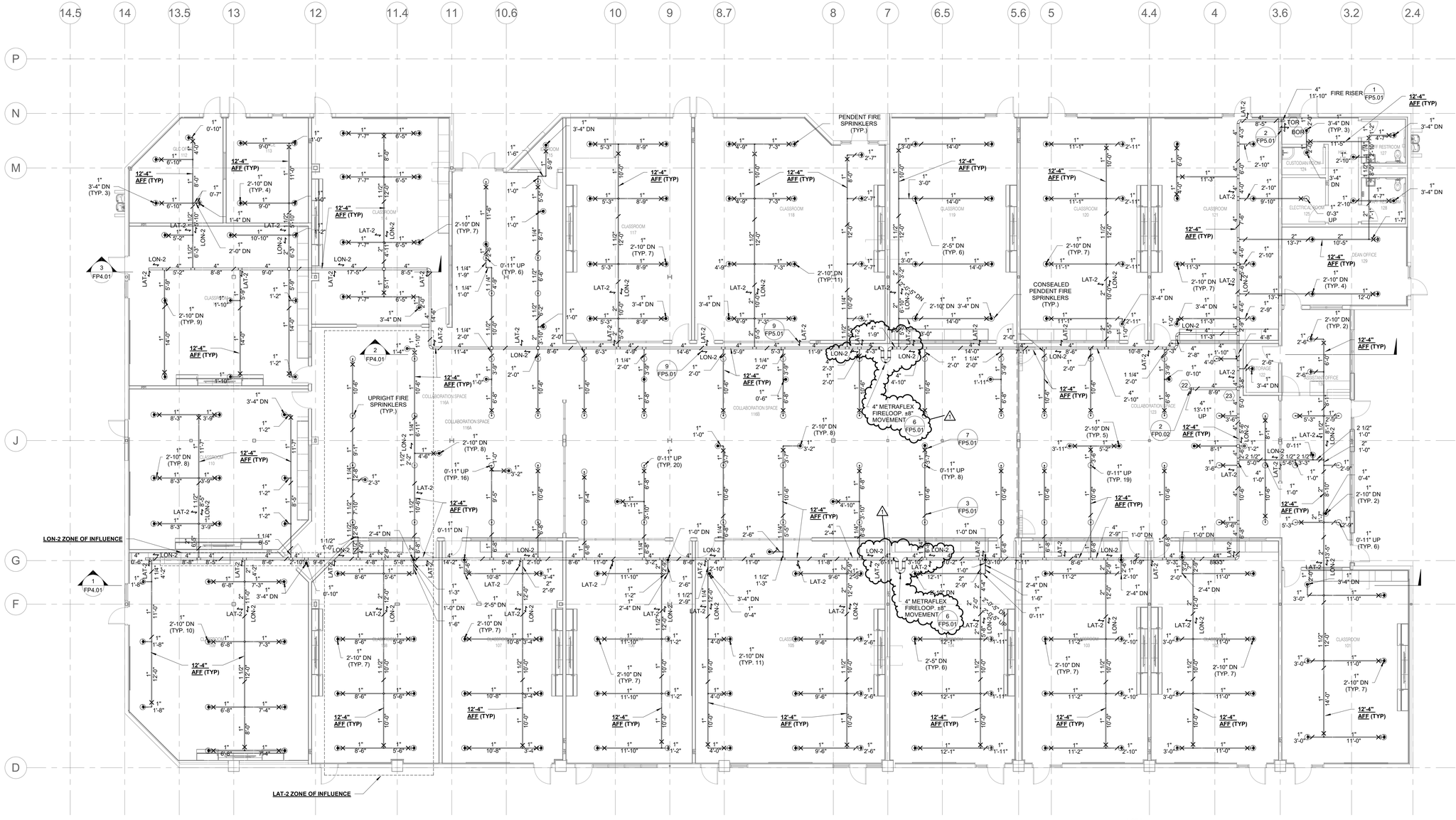
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PROJECT NUMBER: 19-47100-00
PROJECT STATUS: 100% CD
PROJECT ISSUED: 09/29/20
REVISION: DATE: DESCRIPTION:
1 10-25-2022 ADDENDUM 1

E5.02

10/20/2022 4:43:57 PM



NOTE:

1. ALL PIPE HEIGHTS SHOWN ARE MEASURED FROM CENTER OF PIPE.
2. PIPING AT 12'-4" ABOVE FINISHED FLOOR UNLESS NOTED OTHERWISE.

NORTH

REMODEL FLOOR PLAN LOWER LEVEL 1 — 1/8" = 1'-0"

SEISMIC BRACING NOTE:

LAT-2 SEISMIC BRACE - 20 FEET MAXIMUM SPACING.

LON-2 SEISMIC BRACE - 50 FEET MAXIMUM SPACING.

SPRINKLER SCHEDULE AND LEGEND

SYMBOL	MANUFACTURER	MODEL	SIN#	POSITION	ESCUTCHEON	ORIFICE	'K' FACTOR	TEMPERATURE	RESPONSE	FINISH	BLDG. QUANTITY	SPARES
◐	RELIABLE	F1FR56	RA1414	SSP	PENDENT	1/2"	5.6	155°	QUICK RESPONSE	PER ARCHITECT	288	6 MIN.
◉	RELIABLE	F1FR56	RA1414	SSP	CONCEALED PENDENT	1/2"	5.6	155°	QUICK RESPONSE	PER ARCHITECT	63	6 MIN.
⊙	RELIABLE	F1FR56	RA1425	SSU	UPRIGHT	1/2"	5.6	200°	QUICK RESPONSE	BRONZE	250	6 MIN.

CONSULTANT:

IMEG

IMEG CORP. 301 LIN PRESENTE, SUITE 400 DIAMOND BAR, CA 91765 PHONE: 909.417.9994 FAX: 909.417.9995 PROJECT # 2000243.00

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REMODEL FLOOR PLAN LOWER LEVEL

BUILDING 400 MODERNIZATION TO NEW CLASSROOM/ LIBRARY MEDIA CENTER

WALNUT VALLEY UNIFIED SCHOOL DISTRICT
DIAMOND BAR HIGH SCHOOL
21400 PATHFINDER RD. DIAMOND BAR, CA 91765

WALNUT VALLEY UNIFIED SCHOOL DISTRICT

SEALS:

REGISTERED PROFESSIONAL ENGINEER — HAIMOU P. SHAH — No. M25602 — Exp. 9/30/24 — MECHANICAL — STATE OF CALIFORNIA

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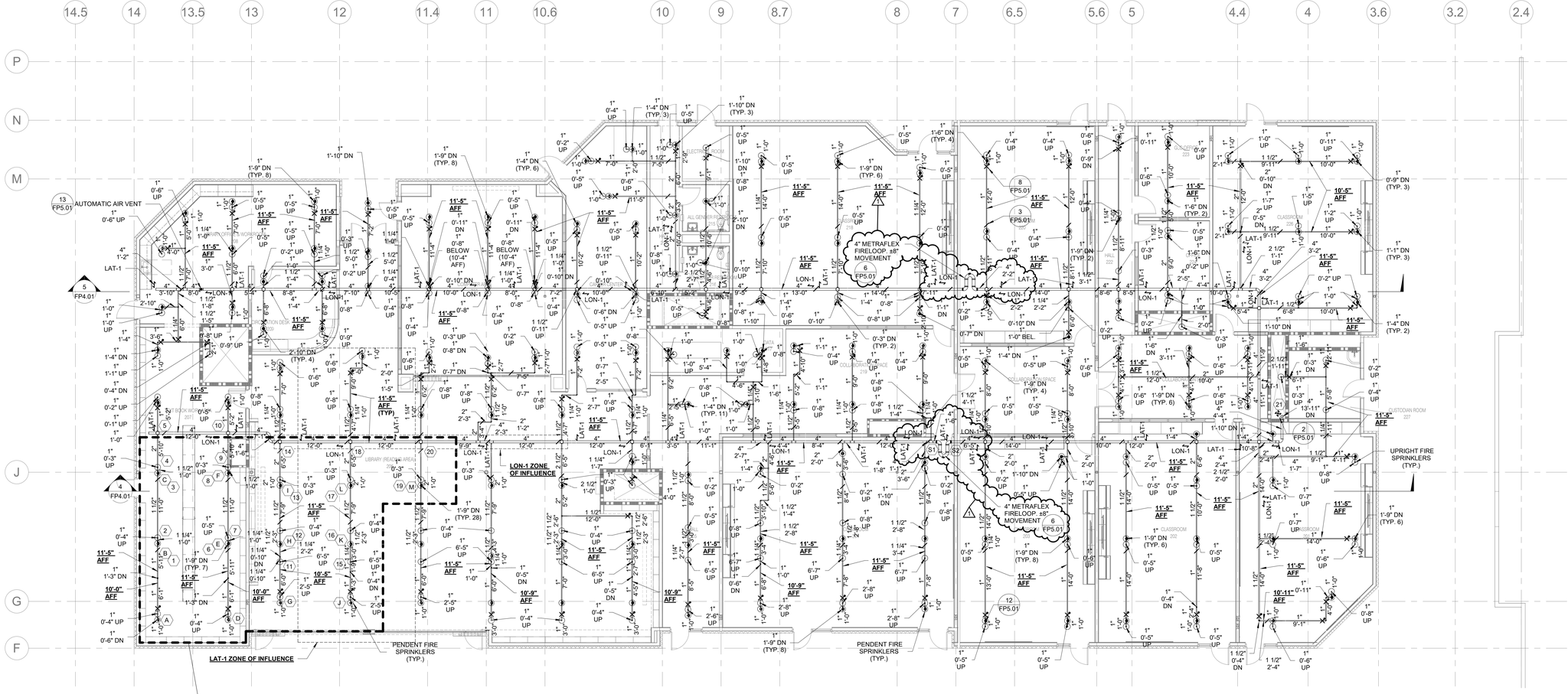
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PROJECT NUMBER: 19-47100-00
PROJECT STATUS: 100% CD
PROJECT ISSUED: 08/12/20

REVISION:	DATE:	DESCRIPTION:
1	10/5/2022	ADDENDUM - 1

FP2.11

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MOST REMOTE
HYDRAULIC SYSTEM
THIS BUILDING IS PROTECTED BY A HYDRAULICALLY DESIGNED AUTOMATIC SPRINKLER SYSTEM

LOCATION:	LIBRARY 206, TEXT
BASIS OF DESIGN	BOOK WORK AREA 207
LIGHT HAZARD	
NFPA 13 (2016 EDITION)	
COVERAGE PER HEAD:	156 SQ. FT.
No. OF SPRINKLERS:	13
SPRINKLER TYPE:	F1FR56
ORIFICE:	1/2"
K-FACTOR:	5.6
TEMPERATURE:	155
SIN:	RA1414 QR
DENSITY:	.10 GPM / SQ. FT.
DESIGN AREA OF DISCHARGE:	1,548 SQ. FT.
HOSE STREAM:	100 GPM
AVAILABLE FLOW:	323 GPM
AVAILABLE PRESSURE:	77 PSI
MIN. SPRINKLER FLOW RATE:	15.9 GPM
MIN. SPRINKLER PRESSURE:	8.1 PSI
FLOW RATE AT BASE OF RISER:	223 GPM
PRESSURE AT BASE OF RISER:	29 PSI
INSTALLING CONTRACTOR:	

NOTE:

1. **ALL PIPE HEIGHTS SHOWN ARE MEASSURED FROM CENTER OF PIPE.**
2. **PIPING AT 11'-5" ABOVE FINISHED FLOOR UNLESS NOTED OTHERWISE.**

NORTH

REMODEL FLOOR PLAN MAIN LEVEL 1 — 1/8" = 1'-0"

SEISMIC BRACING NOTE:

LAT-1 SEISMIC BRACE - 20 FEET MAXIMUM SPACING.

LON-1 SEISMIC BRACE - 25 FEET MAXIMUM SPACING.

SPRINKLER SCHEDULE AND LEGEND

SYMBOL	MANUFACTURER	MODEL	SIN#	POSITION	ESCUTCHEON	ORIFICE	'K' FACTOR	TEMPERATURE	RESPONSE	FINISH	BLDG. QUANTITY	SPARES
◐	RELIABLE	F1FR56	RA1414	SSP	PENDENT	1/2"	5.6	155°	QUICK RESPONSE	PER ARCHITECT	288	6 MIN.
◉	RELIABLE	F1FR56	RA1414	SSP	CONCEALED PENDENT	1/2"	5.6	155°	QUICK RESPONSE	PER ARCHITECT	63	6 MIN.
⊙	RELIABLE	F1FR56	RA1425	SSU	UPRIGHT	1/2"	5.6	200°	QUICK RESPONSE	BRONZE	250	6 MIN.

CONSULTANT:

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307 LIN FREEMONT, SUITE 400
ONTARIO, CA 91762
PHONE 909.477.0914 FAX 909.477.0915
PROJECT # 2000043530

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REMODEL FLOOR PLAN MAIN LEVEL

BUILDING 400 MODERNIZATION TO NEW CLASSROOM/ LIBRARY MEDIA CENTER
WALNUT VALLEY UNIFIED SCHOOL DISTRICT
DIAMOND BAR HIGH SCHOOL
21400 PATHFINDER RD. DIAMOND BAR, CA 91765

WALNUT VALLEY UNIFIED SCHOOL DISTRICT

SEAL:

REGISTERED PROFESSIONAL ENGINEER
EDMUND B. SRAY
No. M25602
Exp. 9/30/24
MECHANICAL
STATE OF CALIFORNIA

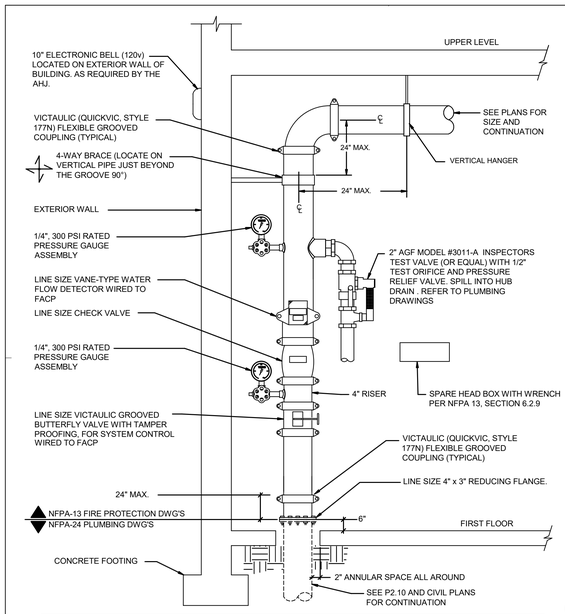
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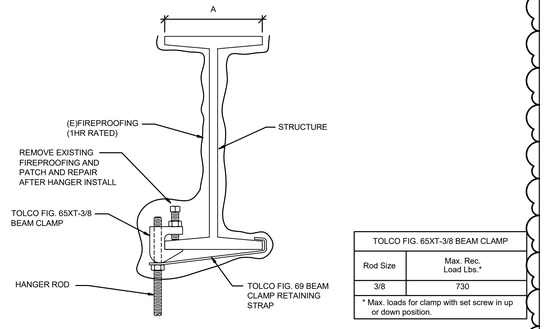
PROJECT NUMBER:	19-47100-00
PROJECT STATUS:	100% CD
PROJECT ISSUED:	08/12/20
REVISION: DATE:	DESCRIPTION:
1	10/5/2022 ADDENDUM- 1

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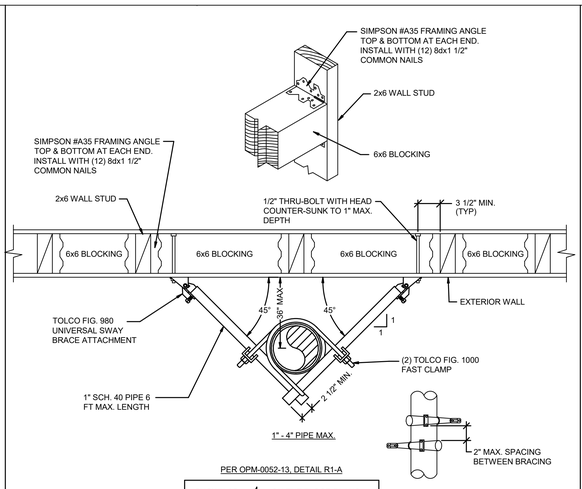
FIRE RISER | NTS | 1



TOLCO FIG. 65XT-3/8 BEAM CLAMP	
Rod Size	Max. Rec. Load Lbs.*
3/8	730

* Max. loads for clamp with set screw in up or down position.

HANGER ATTACHMENT TO STEEL STRUCTURE | NTS | 5

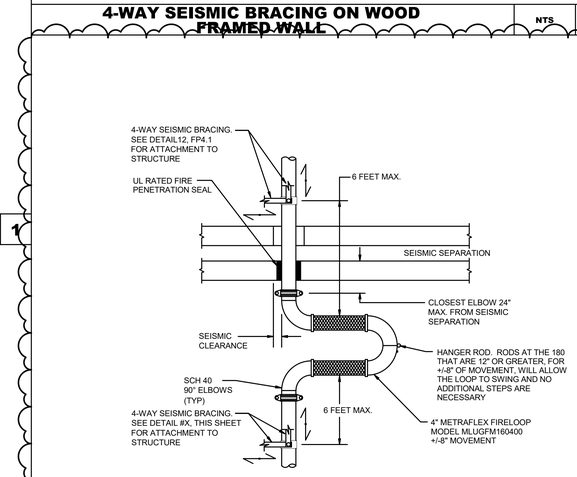


PER OPM-0052-13, DETAIL R1-A

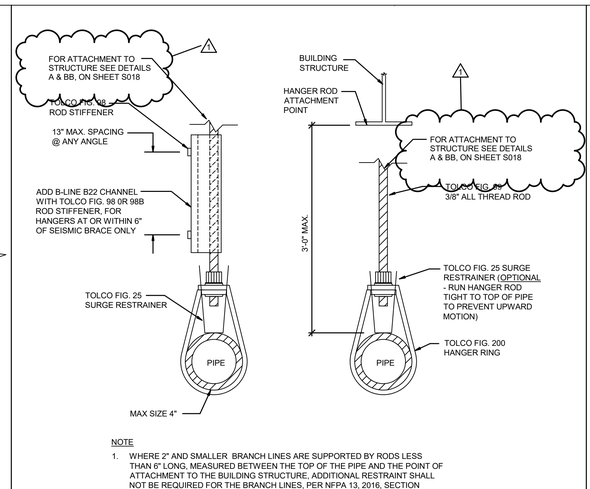
SHOWN AS ON THE FLOOR PLANS

ANGLE OF BRACE PIPE FROM LATERAL TO BE 45 DEG. MIN. FROM RISER - TYPICAL

4-WAY SEISMIC BRACING ON WOOD FRAMED WALL | NTS | 2



SEISMIC FLEXIBLE JOINT | NTS | 6

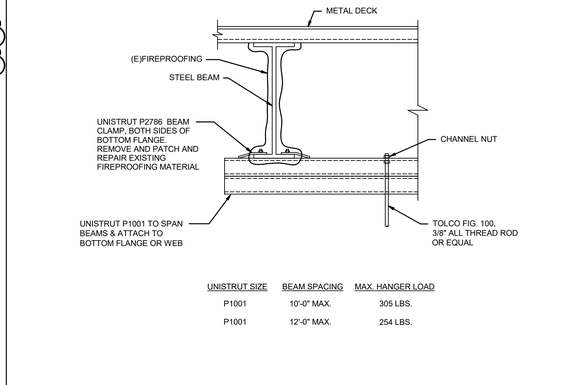


NOTE

1. WHERE 2" AND SMALLER BRANCH LINES ARE SUPPORTED BY RODS LESS THAN 6" LONG, MEASURED BETWEEN THE TOP OF THE PIPE AND THE POINT OF ATTACHMENT TO THE BUILDING STRUCTURE, ADDITIONAL RESTRAINT SHALL NOT BE REQUIRED FOR THE BRANCH LINES, PER NFPA 13, 2016, SECTION 9.3.6.5

SHOWN AS ON THE FLOOR PLANS

HANGER INSTALLATION | NTS | 3

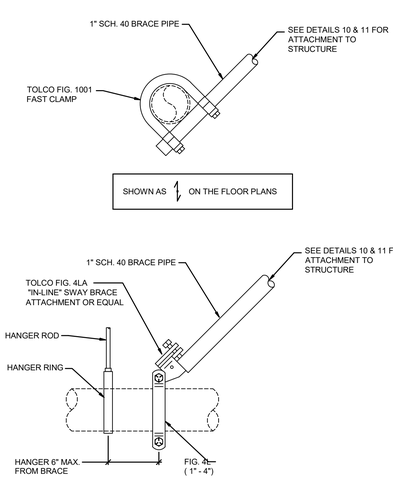


UNISTRUT SIZE	BEAM SPACING	MAX. HANGER LOAD
P1001	10'-0" MAX.	305 LBS.
P1001	12'-0" MAX.	254 LBS.

NOTE:

1. SEE DETAIL #1, A & B, ON S012 FOR HANGER ATTACHMENT TO CONCRETE FILLED METAL DECK.

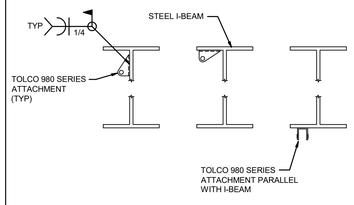
OPTIONAL HANGER ATTACHMENT TO STRUCTURE | NTS | 4



SHOWN AS ON THE FLOOR PLANS

SHOWN AS ON THE FLOOR PLANS

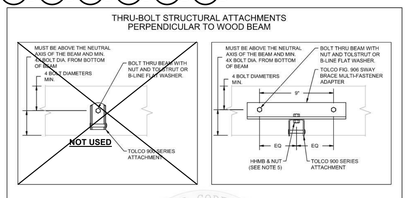
SEISMIC BRACING ATTACHMENT TO PIPE | NTS | 9



NOTE:

1. REMOVE AND PATCH AND REPAIR EXISTING FIREPROOFING MATERIAL.
2. OPTIONAL- BOLTING PER SEISMIC CALCULATION ON FP0.02 IS ACCEPTABLE.

SEISMIC BRACING ATTACHMENT TO STEEL STRUCTURE | NTS | 10



BOLT DIAMETER	MAX. HORIZONTAL SEISMIC LOAD W/ BRACE @ 45° FROM VERTICAL (Lbs.)	
	1 BOLT	2 BOLT
1/2"	300	600
5/8"	360	720
3/4"	400	800

BOLT DIAMETER	MAX. VERTICAL SEISMIC LOAD W/ BRACE @ 0° FROM VERTICAL (Lbs.)	
	1 BOLT	2 BOLT
1/2"	300	600
5/8"	360	720
3/4"	400	800

NOTES:

1.) BOLT HOLES SHALL BE BORED 1/16" LARGER THAN THE NOMINAL BOLT DIAMETER.
2.) LOADS FOR THRU-BOLT ATTACHMENTS ARE DERIVED FROM CBC 2013 AND NDS 2012 FOR DOUGLAS FIR-LARCH (S.G. = 0.50), CALIFORNIA REDWOOD (CLOSE GRAIN) (S.G. = 0.44) AND SOUTHERN PINE (S.G. = 0.55).
3.) MINIMUM BEAM SIZE = 4x.
4.) STRUCTURAL ENGINEER OF RECORD SHALL VERIFY ADEQUACY OF THE STRUCTURE FOR THE TABULATED ALLOWABLE LOADS, INCLUDING BUT NOT LIMITED TO ANY BLOCKING REQUIREMENTS.
5.) FASTENERS SHALL BE A307 BOLTS OR BETTER.
6.) DESIGN LOAD INFORMATION LISTED IN TABLE BECOMES INVALID WHEN THE BRACE ANGLE IS GREATER THAN 45° FROM THE VERTICAL. ANGLES GREATER THAN 45° SHALL BE SUBJECT TO FIRE APPROVAL AND IS TO BE SUBMITTED FOR REVIEW AND APPROVAL ON A PROJECT SPECIFIC BASIS BY OSHPD, EXCEPT WHEN BRACE IS 0° FROM VERTICAL.

EATON'S B-LINE BUSINESS
509 WEST MONROE STREET | HIGHLAND, IL 62249
P: (800) 851-7415 | F: (800) 356 1436

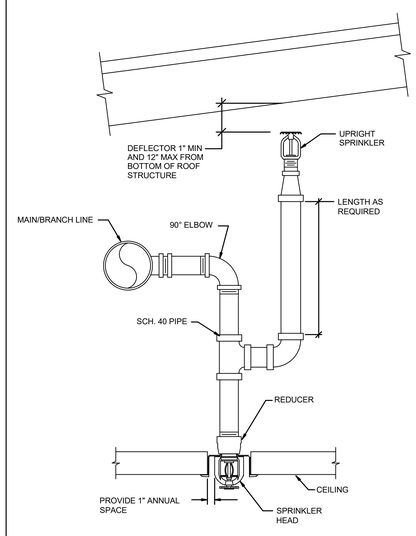
Structural Engineer: Mohammad Hariri
California SE No. S3545

PAGE: 10-3-12
DATE: NOVEMBER 29, 2016

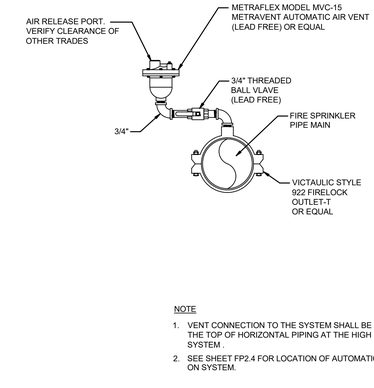
ANY PAGE REFERENCES MADE WITHIN SECTION 10 ARE TO PAGES WITHIN SECTION 10 ONLY

12/06/2016 OPM-0052-13: Reviewed for Code Compliance by Jeffrey Kikumoto Page 336 of 501

SEISMIC ATTACHMENT TO WOOD STRUCTURE | NTS | 11



BRANCH LINE PIPING | NTS | 12



NOTE

1. VENT CONNECTION TO THE SYSTEM SHALL BE LOCATED OFF THE TOP OF HORIZONTAL PIPING AT THE HIGH POINT OF THE SYSTEM .
2. SEE SHEET FP2.4 FOR LOCATION OF AUTOMATIC AIR VENT ON SYSTEM.

AUTOMATIC AIR VENT DETAIL | NTS | 13

CONSULTANT:
IMEG
901 LIA PRESENTE, SUITE 450
CHICAGO, IL 60616
PHONE: 312.346.8844 FAX: 312.346.8914
PROJECT # 220024535.00

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EXTERIOR SCALE IN INCHES: 0 1 2 3

DETAILS

BUILDING 400 MODERNIZATION TO NEW CLASSROOM/ LIBRARY MEDIA CENTER
WALNUT VALLEY UNIFIED SCHOOL DISTRICT
DIAMOND BAR HIGH SCHOOL
21400 PATHFINDER RD. DIAMOND BAR, CA 91765

WALNUT VALLEY UNIFIED SCHOOL DISTRICT

SEAL:
REGISTERED PROFESSIONAL ENGINEER
OSAMU E. SHAT
No. M25602
Exp. 9/30/24
MECHANICAL
STATE OF CALIFORNIA

sgh ARCHITECTS

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PROJECT NUMBER:	19-47100-00
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REVISION: DATE:	DESCRIPTION:
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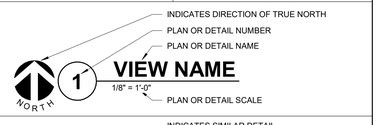
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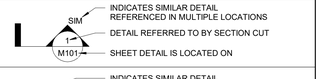
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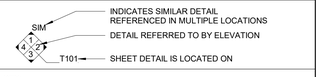
VIEW KEY

NAME — LEVEL NAME
10' - 0" — HEIGHT ABOVE PROJECT 0' - 0"

1 — INDICATES NOTE USED TO DESCRIBE ADDITIONAL INFORMATION ABOUT WORK REQUIRED, SPECIFIC TO THE SHEET AND/OR DETAIL







LINE TYPE AND TAG KEY:

——————— NEW WORK BY THIS CONTRACTOR (WIDE, DARK SOLID LINE)

— — — — NEW WORK UNDERFLOOR OR UNDERGROUND BY THIS CONTRACTOR (WIDE, DARK LONG DASHED LINE)

——————— NEW WORK BY OTHERS AND/OR EXISTING TO REMAIN (NARROW, HALFTONED LINE)

— — — — — — EXISTING TO BE REMOVED BY THIS CONTRACTOR (WIDE, DARK OR HALFTONE SHORT DASHED LINE)

'TAG'-E — TAGS WITH DASH 'E' INDICATES THE REFERENCED OBJECT IS EXISTING

TAG-1 — UNDERLINED TEXT INDICATES ADDITIONAL INFORMATION CAN BE FOUND ELSEWHERE IN A SCHEDULE, MATERIAL LIST, OR SYMBOL LIST

APPLICABLE CODES

CONTRACTOR SHALL COMPLY WITH APPLICABLE CODES AND LOCAL AMENDMENTS.

- 2019 CALIFORNIA BUILDING STANDARDS ADMINISTRATIVE CODE CALIFORNIA CODE OF REGULATIONS (CCR) TITLE 24, PART 1
- 2019 CALIFORNIA BUILDING CODE (CBC) CALIFORNIA CODE OF REGULATIONS (CCR) TITLE 24, PART 2
  (2015 INTERNATIONAL BUILDING CODE (IBC) W/CALIFORNIA AMENDMENTS)
- 2019 CALIFORNIA ELECTRICAL CODE (CEC) CALIFORNIA CODE OF REGULATIONS (CCR) TITLE 24, PART 3
  (2014 NATIONAL ELECTRICAL CODE (NEC) W/CALIFORNIA AMENDMENTS)
- 2019 CALIFORNIA ENERGY EFFICIENCY STANDARDS CODE CALIFORNIA CODE OF REGULATIONS (CCR) TITLE 24, PART 6
- 2019 CALIFORNIA FIRE CODE (CFC) CALIFORNIA CODE OF REGULATIONS (CCR) TITLE 24, PART 9
  (2015 INTERNATIONAL FIRE CODE (IFC) W/CALIFORNIA AMENDMENTS)
- 2019 CALIFORNIA REFERENCED STANDARDS CODE CALIFORNIA CODE OF REGULATIONS (CCR) TITLE 24, PART 12
- AMERICANS WITH DISABILITIES ACT (ADA) TITLE II - ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES (ADAG)
  1990 STATE FIRE MARSHAL REGULATIONS AND AMENDMENTS TO-DATE
- CALIFORNIA CODE OF REGULATIONS (CCR) TITLE 24, CALIFORNIA STATE ACCESSIBILITY STANDARDS
  CALIFORNIA CODE OF REGULATIONS (CCR) TITLE 19

CONTRACTOR ABBREVIATION KEY

ABBR:	DESCRIPTION:
A.V.C.	AUDIO/VISUAL CONTRACTOR
C.M.	CONSTRUCTION MANAGER
E.C.	ELECTRICAL CONTRACTOR
G.C.	GENERAL CONTRACTOR
T.C.	TECHNOLOGY CONTRACTOR

TECHNOLOGY ABBREVIATION KEY

ABBR:	DESCRIPTION:
AFF	ABOVE FINISHED FLOOR
BFC	BELOW FINISHED CEILING
C	CONDUIT
J-BOX	JUNCTION BOX
SIM	SIMILAR
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
+#	MOUNTING HEIGHT ABOVE FINISHED FLOOR
MC-#	MAIN CROSS-CONNECT
TR-#	TELECOMMUNICATIONS ROOM

TECHNOLOGY SYMBOL LIST

SYMBOL:	EQUIPMENT LIST ABBREV.:	DESCRIPTION:	NOTE:
C#	N/A	ELECTRICAL FLOOR BOX WITH TECHNOLOGY	1., 5.
C#-AV-#	C#-AV-#	COMBINATION INFORMATION OUTLET AND AUDIO/VISUAL DEVICE, CEILING MOUNT	5.
C#	SC-IO-W	INFORMATION OUTLET (WALL)	1.
C#-AV-#	C#-AV-#	COMBINATION INFORMATION OUTLET AND AUDIO/VISUAL DEVICE, WALL MOUNT	5.
WAP	SC-WAP-C	WIRELESS ACCESS POINT (CEILING)	1.
S1	PA-S1-W	PA/SPEAKER COMBO	.
H1	PA-H1-W	FACILITY PAGING LOUD SPEAKER HORN (WALL) TYPE 1	.
	SC-MON-75	MONITOR	.
SP1	AV-SP1-C	AV PERFORMANCE AUDIO SPEAKER (CEILING) TYPE 1	.
SP1	AV-SP1-W	AV PERFORMANCE AUDIO SPEAKER (WALL) TYPE 1	.
KP1	AV-KP1-W	AUDIO/VIDEO CONTROL KEYPAD (WALL) TYPE 1	.
WP1	AV-WP1-W	AUDIO/VISUAL FACEPLATE (WALL) - TYPE 1	.
WP2	AV-WP2-W	AUDIO/VISUAL FACEPLATE (WALL) - TYPE 2	.
LS	AV-LVS-W	AUDIO/VIDEO PROJECTION SCREEN UP/DOWN CONTROL	.
CAB	AV-CAB-1	AV CABINET WALL MOUNT	.
WIDTH X HEIGHT		CABLE TRAY, CHANNEL TRAY, BASKET TRAY	
WIDTH X HEIGHT		LADDER RACK	
DIAMETERø C		CONDUIT	
		CONDUIT DOWN	
		CONDUIT UP OR UP/DOWN	
		CONDUIT SLEEVE	
		CONTINUATION	

GENERAL NOTES:

1. ALL SYMBOLS AND ABBREVIATIONS LISTED MAY NOT BE APPLICABLE TO THIS PROJECT. REFER TO THE GENERAL TECHNOLOGY EQUIPMENT SCHEDULE FOR MORE COMPLETE DESCRIPTION AND ITEMS.
2. ALL SYMBOLS AND ABBREVIATIONS REFER TO TECHNOLOGY SHEETS ONLY AS DEFINED ON THE SHEET INDEX. REFER TO THE GENERAL TECHNOLOGY NOTES FOR ADDITIONAL INFORMATION.
3. ALL SYMBOLS LISTED ABOVE ARE FOR REFERENCE ONLY. REFER TO PLANS AND LINE TYPE KEY FOR NEW, EXISTING TO REMAIN AND TO BE REMOVED ITEMS FOR ADDITIONAL INFORMATION.

TECHNOLOGY SYMBOL NOTES:

1. "C#" INDICATES INFORMATION OUTLET FACEPLATE CONFIGURATION. REFER TO INFORMATION OUTLET SCHEDULE ON T0.02 FOR ADDITIONAL INFORMATION.
2. SYMBOL SUBSCRIPT INDICATES DEVICE TYPE. REFER TO GENERAL TECHNOLOGY EQUIPMENT SCHEDULE ON T0.02 FOR ADDITIONAL INFORMATION.
3. REFER TO CONTROLLED SECURITY SCHEME (CSS) TYPE SCHEDULE ON T0.02 FOR ADDITIONAL INFORMATION.
4. REFER TO CLOSED CIRCUIT (CCTV) INDIVIDUAL CAMERA REQUIREMENTS SCHEDULE ON T0.02 AND CAMERA TYPE SCHEDULE ON T0.02 FOR ADDITIONAL INFORMATION. SYMBOL SUBSCRIPT INDICATES FLOOR NUMBER-CAMERA NUMBER. A CAMERA HEIGHT IDENTIFIES THE HEIGHT FROM THE FLOOR TO THE CENTER OF THE CAMERA LENS. NO HEIGHT REFERS TO MOUNTING THE CAMERA ON THE CEILING. REFER TO THE INDIVIDUAL CAMERA SCHEDULE AND THE INDIVIDUAL CAMERA TYPE SCHEDULE FOR ADDITIONAL INFORMATION.
5. AV CABLE ROUTING DETAILED IN ASSOCIATED RISER DIAGRAM. DATA CABLE ROUTING TO MC/TR SERVICING AREA.

SUGGESTED MATRIX OF RESPONSIBILITY

ITEM:	SHOWN ON:	FURNISHED BY:	INSTALLED BY:	NOTES:
TECHNOLOGY ROUGH-IN: REFER TO GENERAL TECHNOLOGY EQUIPMENT SCHEDULE AND SPECIFICATIONS FOR DEFINITION	T-SERIES	E.C.	E.C.	3. 4.
INFORMATION OUTLET FACEPLATES, JACKS, AND TERMINATIONS	T-SERIES	T.C.	T.C.	
CONDUIT SLEEVES (WHEN SHOWN ON DRAWINGS)	T-SERIES	E.C.	E.C.	
CONDUIT SLEEVES (NOT SHOWN BUT REQUIRED FOR PROPER INSTALLATION OF SYSTEM)	N/A	T.C.	T.C.	2. 4.
TELECOMMUNICATION SYSTEMS ROUGH-IN	T-SERIES	E.C.	E.C.	1.
TELECOMMUNICATION EQUIPMENT, CABLING, AND TERMINATIONS	T-SERIES	T.C.	T.C.	
LADDER RACK	T-SERIES	T.C.	T.C.	5.
GROUNDING LUGS ON TECHNOLOGY EQUIPMENT	T-SERIES	T.C.	E.C.	6.
BONDING SYSTEM FOR TECHNOLOGY SYSTEM, REFER TO SPECIFICATION SECTION 27 05 26 FOR DEFINITION	T-SERIES	E.C.	E.C.	7. 8.
CONNECTION OF TECHNOLOGY BONDING SYSTEM TO THE ELECTRICAL GROUND SYSTEM	T-SERIES	E.C.	E.C.	
LOW VOLTAGE CABLING FOR TECHNOLOGY SYSTEMS	T-SERIES	T.C.	T.C.	
CABLE HANGERS AND SUPPORTS OR OTHER CABLE ROUTING METHODS (OTHER THAN CONDUIT AND CABLE TRAY)	T-SERIES	T.C.	T.C.	5.
TECHNOLOGY SERVICE ENTRANCE CONDUITS, HANDHOLES, AND MANHOLES	[E]T-SERIES	E.C.	E.C.	
FLOOR BOX (ROUGH-IN)	T & E SERIES	E.C.	E.C.	

SUGGESTED MATRIX OF RESPONSIBILITY NOTES

1. LOCATIONS OF TELECOMMUNICATIONS ROUGH-INS SHALL BE INDICATED BY THE INFORMATION OUTLET SYMBOLS ON THE DRAWINGS. REFER TO THE TECHNOLOGY SYMBOL LIST FOR ADDITIONAL INFORMATION.
2. BASED ON THE INHERENT DIFFERENCES IN PRODUCTS FROM VARIOUS MANUFACTURERS, ALL REQUIRED EQUIPMENT MAY NOT BE SHOWN ON THE DRAWINGS FOR ALL ACCEPTABLE MANUFACTURERS.
3. INCLUDES BACKBOXES AND CONDUIT REQUIRED FOR THE TECHNOLOGY SYSTEMS INSTALLATION. THE E.C. SHALL BASE THE BID ON THE BASIS OF DESIGN SHOWN ON THE CONTRACT DOCUMENTS.
4. ALL CHANGES TO THE SLEEVES, BACKBOXES, CONDUITS, AND POWER REQUIRED BECAUSE OF THE T.C.'S SELECTION OF AN ALTERNATE ACCEPTABLE MANUFACTURER OR FROM SYSTEM CONFIGURATIONS THAT ARE LEFT TO THE CHOICE OF THE CONTRACTOR SHALL BE INCLUDED IN THE T.C.'S BID. THIS BID SHALL INCLUDE INSTALLATION BY A LICENSED ELECTRICIAN.
5. UNLESS TRADE RULES DICTATE OTHERWISE.
6. FURNISHED AS PART OF THE EQUIPMENT WHEN POSSIBLE, OR FURNISHED TO THE E.C. FOR INSTALLATION IN THE FIELD.
7. INCLUDES ALL CONDUCTORS, GROUND BARS, AND TERMINATIONS FOR THE COMPLETE BONDING SYSTEM REQUIRED BY THE SPECIFICATIONS.
8. REFER TO ELECTRICAL DRAWINGS FOR LOCATIONS OF PANELS AND SWITCHBOARDS SHOWN IN THE TECHNOLOGY BONDING RISER DIAGRAM AND TYPICAL TELECOM ROOM BONDING FLOW DIAGRAM.

TELECOM ROOM REFERENCES

TELECOM ROOM	DETAIL / SHEET REFERENCE	FLOOR PLAN REFERENCE	ARCH ROOM NUMBER
MC-1	1/T3.00	1/T2.12	217

TECHNOLOGY GENERAL NOTES:

1. ###-#### INDICATES GENERAL TECHNOLOGY EQUIPMENT SCHEDULE ITEM LABELED AS "EQUIPMENT LIST ABBREVIATION"
2. REFER TO GENERAL TECHNOLOGY EQUIPMENT SCHEDULE AND SPECIFICATIONS FOR FULL DESCRIPTIONS AND MANUFACTURERS OF ALL DEVICES.

TECHNOLOGY MOUNTING SUBSCRIPT KEY:
- A MOUNT AT +6" TO CENTERLINE ABOVE COUNTER OR BACKSPLASH
- H MOUNT ORIENTED HORIZONTALLY
- L MOUNT IN CASEWORK
- M MOUNT IN MODULAR FURNITURE
- S MOUNT IN SURFACE RACEWAY

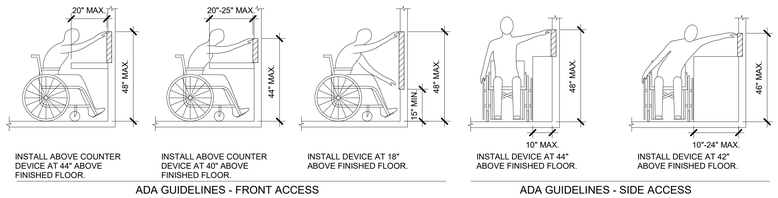
A SLASH IS USED BETWEEN TWO SUBSCRIPTS, E.G., A/H.

TECHNOLOGY INSTALLATION NOTES:

1. THE COMPLETE INSTALLATION SHALL BE IN ACCORDANCE WITH THE ADA STANDARDS FOR ACCESSIBLE DESIGN. REFER TO THE ADA GUIDELINES FOR ALL CONFIGURATION DETAILS ON THIS PAGE FOR ADDITIONAL INFORMATION.
2. CONCEAL ALL CONDUIT IN WALLS, PARTITIONS, ABOVE CEILING, IN FLOOR SLAB, ETC., UNLESS OTHERWISE INDICATED ON THE PLANS OR IN THE SPECIFICATIONS. CONDUIT IN MECHANICAL ROOMS AND STORAGE ROOMS WITHOUT CEILINGS MAY BE EXPOSED ON BUILDING STRUCTURE.
3. BOXES LOCATED ON OPPOSITE SIDES OF NON-RATED WALLS SHALL BE OFFSET A MINIMUM OF 6" HORIZONTALLY. BOXES ON OPPOSITE SIDES OF FIRE RATED WALLS SHALL BE OFFSET A MINIMUM OF 24" HORIZONTALLY. "THRU-THE-WALL" BOXES SHALL NOT BE ALLOWED WITHOUT PRIOR WRITTEN APPROVAL OF THE ARCHITECT/ENGINEER.
4. TELECOMMUNICATIONS EQUIPMENT SHALL BE MOUNTED TO ALLOW ACCESS TO ELECTRICAL AND MECHANICAL EQUIPMENT. ALL MOUNTING OF TELECOMMUNICATION DEVICES ON EQUIPMENT SUPPLIED BY ANOTHER CONTRACTOR SHALL BE APPROVED IN ADVANCE BY THE OTHER CONTRACTOR.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL OPENINGS REQUIRED IN WALLS. ALL OPENINGS SHALL BE REPAIRED TO MATCH EXISTING BY A QUALIFIED CONTRACTOR AT THE EXPENSE OF THIS CONTRACTOR. ALL CONDUITS THROUGH WALLS SHALL BE GROUTED OR SEALED INTO OPENINGS.
6. ALL MATERIALS USED TO SEAL PENETRATIONS OF FIRE RATED WALLS AND FLOORS SHALL BE TESTED AND CERTIFIED AS A SYSTEM PER ASTM E814 STANDARDS FOR FIRE TESTS OF THROUGH-PENETRATION FIRESTOPS. REFER TO 27 05 03 AND 28 05 03 FOR ADDITIONAL INFORMATION AND REQUIREMENTS SPECIFIC TO FIRESTOPPING.
7. REMOVE AND REINSTALL ALL CEILING TILES AS REQUIRED FOR THE EXECUTION OF TELECOMMUNICATIONS WORK THAT IS OUTSIDE THE CONTRACT LIMITS OF CONSTRUCTION. REPLACE CEILING TILES WITH IDENTICAL MATERIAL WHERE DAMAGED BY THIS CONTRACTOR.
8. ALL LADDER RACK SIZES ARE AS DEFINED ON THE DRAWINGS. REFER TO SPECIFICATION SECTION 27 05 28 FOR APPROVED MANUFACTURERS AND INSTALLATION REQUIREMENTS.
9. FLUSH MOUNT ALL TELECOMMUNICATION OUTLETS AT +18" FROM FLOOR (CENTERLINE DIMENSION), EXCEPT WHERE OTHERWISE NOTED. OUTLETS MAY BE SURFACE MOUNTED WHEN CONDUIT IS SPECIFIED EXPOSED.

TECHNOLOGY SHEET INDEX

T0.01	TECHNOLOGY COVERSHEET
T0.02	SCHEDULES
T1.10	SITE PLAN
T2.01	DEMO FLOOR PLAN LOWER LEVEL
T2.02	DEMO FLOOR PLAN MAIN LEVEL
T2.11	REMODEL FLOOR PLAN LOWER LEVEL
T2.12	REMODEL FLOOR PLAN MAIN LEVEL
T3.00	ENLARGED PLANS - TECHNOLOGY
T5.01	DETAILS
T5.02	DETAILS



ADA STANDARDS FOR ACCESSIBLE DESIGN

CONSULTANT:

IMEG
901 LOCUST, SUITE 400
KANSAS CITY, MO 64106
816.472.3344 FAX 816.471.6994
PROJECT # 200043535

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EXTERIOR SCALE IN INCHES: 0 1 2 3

TECHNOLOGY COVERSHEET

BUILDING 400 MODERNIZATION TO NEW CLASSROOM/ LIBRARY MEDIA CENTER

WALNUT VALLEY UNIFIED SCHOOL DISTRICT
DIAMOND BAR HIGH SCHOOL
21400 PATHFINDER RD. DIAMOND BAR, CA 91765

SEALS:



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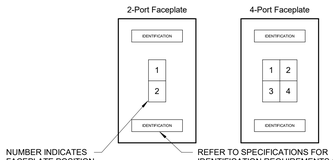
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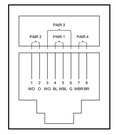
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INFORMATION OUTLET SCHEDULE

SINGLE GANG WALLPLATES





LEGEND

DATA	CAT 6 RJ-45 (BLUE)
VOICE	CAT 6 RJ-45 (WHITE)
AV	CAT 6 RJ-45 (PURPLE)

NOTES:
1. PROVIDE REMOVABLE BLANK INSERT(S) FOR ALL UNUSED PORTS.
2. REFER TO SPECIFICAITONS SECTION 27 05 53 FOR ADDITIONAL INFORMATION ON LABELING REQUIREMENTS.

SCHEDULE NOTES:
1. LOCATION OF FUTURE OR OWNER PROVIDED WIRELESS ACCESS POINT. PROVIDE A 20' SLACK COIL AT THE NEAREST CABLE SUPPORT FOR POSSIBLE RELOCATION AFTER WIRELESS SURVEY.
2. CONTRACTOR TO PROVIDE LABOR TO INSTALL OWNER PROVIDED ACCESS POINT.

CONFIGURATION	FACEPLATE PORTS	FACEPLATE PORT IDENTIFICATION: POSITION 1 JACK TYPE	POSITION 2 JACK TYPE	POSITION 3 JACK TYPE	POSITION 4 JACK TYPE	POSITION 5 JACK TYPE	POSITION 6 JACK TYPE	NOTES
C1	1	DATA						
C1-AV-1	2	DATA	AV					
C2	2	DATA	DATA					
C4	4	DATA	DATA	DATA	DATA			
WAP	2	DATA	DATA					

GENERAL TECHNOLOGY EQUIPMENT SCHEDULE

THE EQUIPMENT LIST ABBREVIATIONS AND THE GENERAL TECHNOLOGY EQUIPMENT SCHEDULE ARE FOR THE CONVENIENCE OF THE CONTRACTOR. EACH CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF QUANTITIES AND SHALL FURNISH ALL MATERIAL REQUIRED, WHETHER SPECIFIED OR NOT, TO PRODUCE A SATISFACTORY WORKING SYSTEM.

CATALOG NUMBERS ARE NOT TO BE CONSIDERED COMPLETE BUT ARE GIVEN ONLY TO AID THE CONTRACTOR IN THE SEARCH FOR MATERIAL. NO MATERIAL SHALL BE ORDERED BY MANUFACTURER AND CATALOG NUMBER ONLY. EACH CONTRACTOR SHALL FIRST READ THE COMPLETE DESCRIPTION OF THE MATERIAL ON THESE DRAWINGS AND SPECIFICATIONS. THE FIRST MANUFACTURER LISTED IS THE BASIS OF DESIGN. "STANDARD COLOR" INDICATES FACTORY FINISH AVAILABLE AT NO ADDITIONAL CHARGE.

EQUIPMENT LIST ABBREVIATION	EQUIPMENT LIST DESCRIPTION	EQUIPMENT LIST MANUFACTURER AND MODEL	MAX. WEIGHT	SUPPORT TYPE	DETAIL REFERENCE
AV-CAB-1	AUDIO/VIDEO EQUIPMENT CABINET. PROVIDED AS PART OF EXTRON WALL VAULT KIT (42-312-03). DIMENSIONS: 17.1" h X 16.4" W X 1/5" D. CABINET TOTAL WIEGHT 5.5LBS. CABINET MAXIMUM LOAD CAPACITY: 1SLBS INCLUDED IN WALLVAULT KIT (42-312-03)	EXTRON WMK 160 (60-818-03)		WALL	NONE
AV-KP1-W	KEYPAD/CONTROLLER. PROVIDING ETHERNET MONITORING AND CONTROL BIDIRECTIONAL RS-232 PORT FOR UNIVERSAL DISPLAY CONTROL, THREE DIGITAL I/O PORTS DEDICATED IR PORT SUPPORT FOR OPTIONAL IRCM - INFRARED CONTROL MODULES.	EXTRON MLC PLUS 100 (60-1469-03) INCLUDED IN WALLVAULT KIT (42-312-03) INCLUDED IN POLEVAULT KIT (42-307-13)			
AV-LS-W	LOW VOLTAGE WALL SWITCH, VIDEO PROJECTION SCREEN UP/DOWN STOP CONTROL.	DALITE 40975			
AV-MNT-1	DISPLAY MOUNT: X-LARGE DISPLAY ADJUSTABLE FIXED WALL MOUNT FOR DISPLAY 55" TO 100" DIA. AND 250 LBS. COORDINATE BLOCKING, AV BOXES AND AC POWER LOCATION REQUIREMENTS ON SITE DURING ROUGH-IN. OSHPD OPM-0284-13	CHIEF XTM1U	*	*	*
AV-MON-75	75" VIDEO DISPLAY. PROFESSIONAL COMMERCIAL GRADE 75" EDGE LED DISPLAY WITH UHD 3840 x 2160 RESOLUTION, 4000:1 CONTRAST RATIO, 178° VIEWING ANGLE, 350 NITS TYPICAL BRIGHTNESS. INPUTS SHALL INCLUDE HDMI, AUDIO MINI JACK, RS-232 AND IR EXTERNAL CONTROL. STANDARD VESA MOUNTING. TYPICAL DIMENSIONS 66.19" W X 37.80" H x 1.96" D, 76" DIAG. WEIGHT 84.4 LBS. COORDINATE AC POWER AND BLOCKING AT ROUGH-IN FOR STANDARD WALL MOUNT, UNO.	SAMSUNG QB75R	< 67 LBS PER FOOT MAX	HANGING	4/T5.02
AV-PRO-1	VIDEO PROJECTOR, 4000 LUMENS WITH DUAL LAMPS, FULL HD WUXGA (1920X1200) RESOLUTION, 2000:1 CONTRAST RATIO, 16:10 ASPECT RATIO, 4000 HOURS LIFE, (1) HDMI IN, (1) DVI-D IN, (1) SDI IN, (1) S-VIDEO IN, (2) RGB IN, (3) AUDIO IN (1) SERIAL IN AND (1) SERIAL OUT. DIMENSIONS (WXHXD) : 13-1/16" × 6-5/8" ^4 × 19-1/16".	PANASONIC PT-DZ570U PANASONIC BARCO	<40LBS	CEILING	*
AV-PRO-MNT	PROJECTOR MOUNT, WEIGHT 5 LBS, WEIGHT CAPACITY 50LBS. TO BE USED WITH SUSPENDED CEILING KIT, DIMENSIONS 1.2"H X 24.4"W X 8.0"D, WEIGHT 8LBS, WEIGHT CAPACITY 50LBS.	CHIEF PROJECTOR MOUNT RPAUW CEILING KIT CMA440	*	*	*
AV-SP1-C	PERFORMANCE AUDIO SPEAKER, CEILING MOUNT, RECESSED, SOUND REINFORCEMENT, 6.5" POLYPROPYLENE WOOFER, 3/4" FERROFLUID-COOLED DOME TWEETER. FREQUENCY RANGE: 50HZ TO 20KHZ. 25W CONTINUOUS PINK NOISE, 50W CONTINUOUS PROGRAM. PROVIDE WITH TILE BRIDGE (#70-1265-01)	EXTRON SF 26X	<20LBS	CEILING	NONE
AV-SP1-W	TWO-WAY SURFACE-MOUNT SPEAKERS WITH 6.5" WOOFER 6.5" (165 MM) LONG-THROW WOOFER WITH DUAL-TUNED BASS REFLEX PORTS 1" (25 MM) SILK DOME TWEETER 8 OHM DIRECT OPERATION ONLY 1 PAIR.	EXTRON SM26 (60-1308-03) INCLUDED IN WALLVAULT KIT (42-312-03) INCLUDED IN POLEVAULT KIT (42-307-13)	<20LBS	WALL	NONE
AV-SW-1	SWITCHER TO TWO LOCAL HDMI INPUTS AND TWO PVT TWISTED PAIR INPUTS THAT SUPPORT CLASSROOM AV SOURCES AT RESOLUTIONS UP TO 4K. INTEGRATED 50 WATT STEREO AUDIO AMPLIFIER. ETHERNET CONFIGURATION AND A NETWORK SWITCH.	EXTRON PVS 407D (60-1466-01) INCLUDED IN WALLVAULT KIT (42-312-03) INCLUDED IN POLEVAULT KIT (42-307-13)			
AV-VPS-1	10' VIDEO PROJECTION SCREEN, WALL OR CEILING MOUNT, MATTE WHITE, STANDARD LOW VOLTAGE CONTROL, STANDARD 120V MOTOR, FORMAT HDTV (16:10), 765" X 116" 133"DIAG.	DALITE COSMOPOLITAN SERIES 79914L	*	*	*
AV-WP1-W	AV WALLPLATE: 2 HDMI WALL PLATE TRANSMITS ONE OF TWO HDMI VIDEO AND AUDIO SIGNALS. MOUNTS TO A TWO-GANG MUD RING ON DEEP BOX.	EXTRON PVT HDMI (60-1270-13) INCLUDED IN WALLVAULT KIT (42-312-03) INCLUDED IN POLEVAULT KIT (42-307-13)			
AV-WP2-W	AV WALLPLATE: 1 HDMI/1 VGA WALL PLATE THAT TRANSMITS HDMI OR VGA COMPUTER VIDEO AND AUDIO SIGNALS. MOUNTS TO A TWO-GANG MUD RING ON DEEP BOX.	EXTRON PVT HD RGB (60-1756-03) INCLUDED IN WALLVAULT KIT (42-312-03) INCLUDED IN POLEVAULT KIT (42-307-13)	<20 LBS	WALL	NONE
ID-ICP-1	INTRUSION DETECTION CONTROLLER. PROVIDES UPTO 40 POINTS INCLUDING MOTION DETECTORS, KEYPADS, GLASS BREAKS, ETC. PROVIDE WITH INPUT CARDS AS REQUIRED TO SUPPORT THE CONNECTED DEVICES. PROVIDE AN INTERFACE MODULE FOR UPTO (2) TELEPHONE LINES, A LOCKABLE CABINET, AND BATTERY BACKUP FOR A MINIMUM OF 6 HOURS.	DMP XR550N SERIES NO SUBSTITUTIONS	<20 LBS	DOOR FRAME	NONE
ID-MD-W	MOTION DETECTOR, WALL MOUNT	ROKONET DT-7450 NO SUBSTITUTIONS	<20 LBS	WALL	NONE
NETWORK SWITCH	OWNER PROVIDED, OWNER INSTALLED.	N/A			
PA-H1-W	ETHERNET I/F 10/100 MBPS, AUDIO POWER 8 W / 16 W, SPEAKER SIZE 8", AVERAGE SENSITIVITY 95DB, 1W /1M FREQUENCY RESPONSE 60 HZ - 17 KHZ, AUDIO PAYLOAD TYPES G711, A-LAW AND M-LAW, POWER INPUT POE (IEEE802.3AF) 15.4 W OR POE+ (IEEE802.3AT) 30.0 W, SUPPORTED PROTOCOLS SIP, IPV4, IPV6, 802.1X, HTTP, SLP, TFTP, NTP, SNMPV1 & SNMPV2C, DHCP, IGMP, ICMP, TCP/IP, LLDP-MED, UDP, MDNS & MDNS-SD. MATERIAL WIREMOLD COMBINATION 5700 KNOCKOUT FOR 500 AND 700 SERIES RACEWAYS, OPERATING TEMPERATURE -10˚ TO 50˚ C (14˚ TO 122˚ F) DIMENSIONS 11.63" W X 11.63" H X 4.16" D, WEIGHT 9 LBS (4.1 KG).ETHERNET I/F 10/100 MBPS, AUDIO POWER 8 W / 16 W, SPEAKER SIZE 8", AVERAGE SENSITIVITY 95DB, 1W /1M FREQUENCY RESPONSE 60 HZ - 17 KHZ, AUDIO PAYLOAD TYPES G711, A-LAW AND M-LAW, POWER INPUT POE (IEEE802.3AF) 15.4 W OR POE+ (IEEE802.3AT) 30.0 W, SUPPORTED PROTOCOLS SIP, IPV4, IPV6, 802.1X, HTTP, SLP, TFTP, NTP, SNMPV1 & SNMPV2C, DHCP, IGMP, ICMP, TCP/IP, LLDP-MED, UDP, MDNS & MDNS-SD. MATERIAL WIREMOLD COMBINATION 5700 KNOCKOUT FOR 500 AND 700 SERIES RACEWAYS, OPERATING TEMPERATURE -10˚ TO 50˚ C (14˚ TO 122˚ F) DIMENSIONS 11.63" W X 11.63" H X 4.16" D, WEIGHT 9 LBS (4.1 KG).	ADVANCED NETWORK DEVICES IPSWS-SM-O	<10LBS	WALL	NONE
PA-S1-W	ETHERNET I/F 10/100 MBPS, AUDIO POWER 8 W / 16 W, SPEAKER SIZE 8",AVERAGE SENSITIVITY 95DB, 1W /1M FREQUENCY RESPONSE 60 HZ - 17 KHZ, AUDIO PAYLOAD TYPES G711, A-LAW AND M-LAW, POWER INPUT POE (IEEE802.3AF) 15.4 W OR POE+ (IEEE802.3AT) 30.0 W, SUPPORTED PROTOCOLS SIP, IPV4, IPV6, 802.1X, HTTP, SLP, TFTP, NTP, SNMPV1 & SNMPV2C, DHCP, IGMP, ICMP, TCP/IP, LLDP-MED, UDP, MDNS & MDNS-SD OPERATING TEMPERATURE -10˚ TO 50˚ C (14˚ TO 122˚ F), DIMENSIONS 13.25" W X 14.75" H X 5.15" D WEIGHT 8 LBS (3.6 KG).	ADVANCED NETWORK DEVICES IPSWD RWB & IPS-FMI	<20LBS	WALL	NONE
SC-CAB-1	WALL MOUNTED PIVOTING SECTIONAL EQUIPMENT CABINET. 23.4"*49"*22.3"D. BLACK. 300 LBS CAPACITY.	MIDDLE ATLANTIC DWR-24-22PD OR APPROVED EQUAL	*	*	*
SC-ER-1	EQUIPMENT RACK, 2 POST, 84"H x 20.3"W, x 15"D, STANDARD 19" MOUNTING SPACE, AVAILABLE WITH 3" DEEP HOLES. #12-24 TAPPED MOUNTING RAILS. DURABLE BLACK POWDER COAT FINISH, MEETS EIA-310-E REQUIREMENTS, 1000 LB WEIGHT CAPACITY.	PANDUIT R2P R2PAK-OSHPD OR PRE-APPROVED EQUAL	*	*	*
SC-FDC-1	FIBER DISTRIBUTION CABINET, RACK MOUNT, 72 LC FIBERS PER RU.	LEVITON 5R1UM-F03 OR APPROVED EQUAL	<20 LBS	RACK	NONE
SC-GND-1	WALL-MOUNT GROUND BAR. 2" H X 12" L X 1/4" D COPPER, ELECTRICALLY ISOLATED BY INSULATORS INTEGRAL TO MOUNTINGBRACKETS. PROVIDE UNIT CONFIGURED WITH SIXTEEN (16) SETS OF 5/16" HOLES SPACED 5/8" ON CENTER TO ACCOMMODATE "A" SPACED TWO-HOLE COMPRESSION LUGS AND THREE (3) SETS OF 7/16" HOLES SPACED 1" ON CENTER TO ACCOMMODATE "C" SPACED TWO-HOLE COMPRESSION LUGS. ANSI/EIA/TIA-607 AND BICSI COMPLIANT. UL LISTED.	B-LINE SBTGB OR APPROVED EQUAL	*	*	*
SC-HWM-1	ANGLED HORIZONTAL PATCH COPRD ORGANIZER, 2U.	LEVITON 49254-BCM OR APPROVED EQUAL	<20 LBS	RACK	NONE
SC-IO-C	INFORMATION OUTLET, CEILING MOUNT, 2-PORT COVERPLATE AS INDICATED ON DRAWINGS AND INFORMATION OUTLET SCHEDULE, REFER TO INFORMATION OUTLET SCHEDULE ON T0.02 FOR PIN CONFIGURATION INFORMATION. INSTALL INFORMATION OUTLET IN SURFACE BOX. PROVIDE REMOVABLE BLANK INSERTS FOR UNUSED PORTS.	LEVITON/BERK TEK SOLUTION SURFACE BOX 2-PORT: 41089-2WP JACK: LEVITON CAT6A 6110G-R*6 SERIES			
SC-IO-FB	FLOORBOX, [[2][4][6]]-COMPARTMENT BOX FOR USE IN EITHER CONCRETE OR WOOD FLOORS.	LEGRAND/WIREMOLD [RFB2][RFB2-SS][RFB2-OG][RFB4][RFB4-SS][RFB4-4DB][RFB4-CI-1][RFB4-CI-NA][RFB6][RFB6-OG]	*	*	*
SC-IO-W	INFORMATION OUTLET, WALL MOUNT, 4-PORT COVERPLATE AS INDICATED ON DRAWINGS. "#" INDICATES INFORMATION OUTLET FACEPLATE CONFIGURATION AS INDICATED ON THE FLOOR PLANS. REFER TO SHEET T0.02 FOR INFORMATION OUTLET SCHEDULE FOR PIN CONFIGURATION. INSTALL INFORMATION OUTLET IN A 4-11/16" SQUARE AND 2-1/8" DEEP BACKBOX WITH A RAISED SINGLE GANG COVER. INSTALL A 1-1/4" EMT CONDUIT ACCESSIBLE CEILING. PROVIDE DUST COVER FOR UNUSED PORTS (SYSTIMAX M21A-262).	COVERPLATE: LEVITON 42080-2WS (2-PORT) 42080-4WS (4-PORT) JACK: LEVITON CAT6A 6110G-R*6 SERIES OR PRE-APPROVED EQUAL	<20 LBS	WALL	NONE
SC-LDR-1	LADDER RACK, 18"W TUBULAR STEEL CONSTRUCTION, RUST RESISTANT ENAMEL FINISH, REMOVE SHARP BURRS FROM LADDER RACK AND REPAINT ALL AREAS THAT HAVE BEEN FIELD MODIFIED, CUT OR EXPOSED. U.L.LISTED.	LEGRAND RE10-18 CHATSWORTH PRODUCTS 10250-718 B-LINE	<67 LBS PER FOOT MAX	*	*
SC-MPP-1	MODULAR PATCH PANEL, RACK MOUNT, 2 RU, 48-PORT, CATEGORY 6A.	LEVITON 6A587-U48 OR APPROVED EQUAL	<20 LBS	RACK	NONE
SC-TTB	TELECOMMUNICATIONS TERMINAL BOARD. 4' X 8' X 3/4" A-C GRADE FIRE-RATED PLYWOOD. EXPOSED SIDE SHALL BE SMOOTH. MOUNT VERTICALLY WITH TOP OF PLYWOOD AT 8'6" A.F.F.	*			BY ARCH
SC-VWM-1	DUAL SIDED VERTICAL WIRE MANAGER, INCLUDES FOUR SLACK SPOOLS, 83.9"H X 8"W X 16.4"D PROVIDE WITH DUAL HINGED METAL DOOR (PANDUIT #PRD8)	LEVITON 8980L-VFR OR APPROVED EQUAL	<20 LBS	RACK	NONE
SC-WAP-W	SURFACE MOUNT WALL LOCATION. DIMENSIONS: 9"L x 7"W x 5"H'. PROVIDE INFORMATION OUTLET AT ENCLOSURE, WALL MOUNT, 2-PORT TERMINATION. REFER TO C2-WAP ON INFORMATION OUTLET SCHEDULE FOR DEVICE CONFIGURATION LOCATED ON T501 FOR ADDITIONAL INFORMATION. INSTALL INFORMATION OUTLET IN A 5" SQUARE BACKBOX (RANDAL T-55017) WITH A SINGLE GANG PLASTER RING. INSTALL A 1" EMT CONDUIT TO WITHIN 24" OF NEAREST CABLE TRAY. PROVIDE REMOVABLE BLANK INSERTS FOR UNUSED PORTS. CONTRACTOR SHALL INSTALL OWNER PROVIDED WIRELESS ACCESS POINT IN CONTRACTOR PROVIDED AND INSTALLED WIRELESS ACCESS POINT ENCLOSURE. COORDINATE FINAL LOCATION WITH CEILING TYPE PRIOR TO INSTALLATION.				

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PROJECT # 2000243.00

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0 1 2 3
REFERENCE SCALE IN INCHES

SCHEDULES

BUILDING 400 MODERNIZATION TO NEW CLASSROOM/ LIBRARY MEDIA CENTER
WALNUT VALLEY UNIFIED SCHOOL DISTRICT
DIAMOND BAR HIGH SCHOOL
21400 PATHFINDER RD. DIAMOND BAR, CA 91765

WALNUT VALLEY UNIFIED SCHOOL DISTRICT

SEALS:

REGISTERED PROFESSIONAL ENGINEER
NESTOR C. IGNACIO
Lic. E16934
Exp. 6-30-2023
STATE OF CALIFORNIA

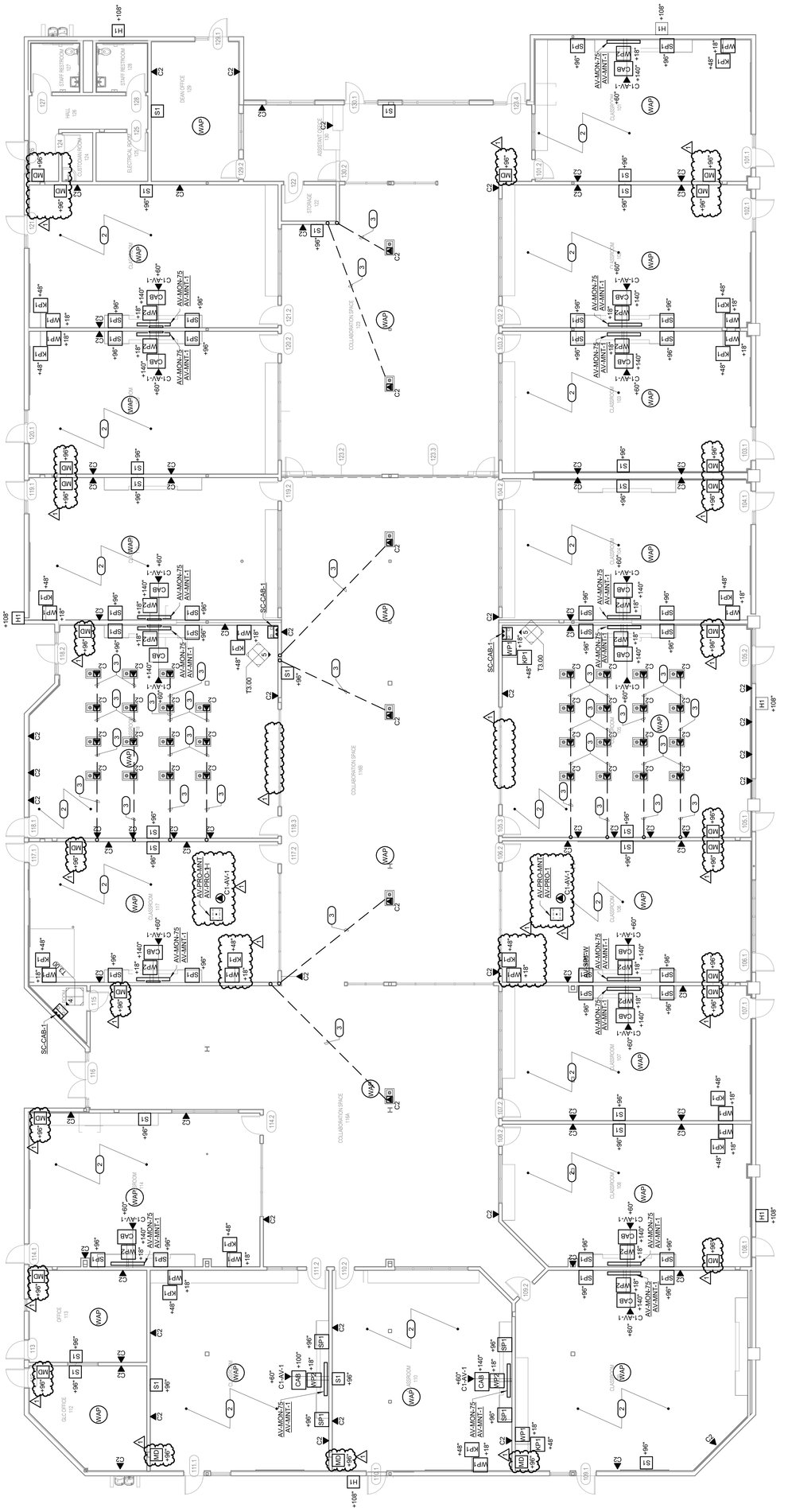
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PROJECT NUMBER: 19-47100-00
PROJECT STATUS: 100% CD
PROJECT ISSUED: 08/12/20
REVISION: DATE: DESCRIPTION:
10/20/2020 ADDENDUM - 1

T0.02

10/20/2022 1:36:43 AM



KEYNOTES: (#)

1. WP2 AND INFORMATION OUTLET (C2) WILL BE INSTALLED SIDE BY SIDE BEHIND THE AV-MON2-1.
2. AV-AS CONTACT FOR CONNECTION DETAILS. SYSTEM IS WIRELESS AND CONSISTS OF (1) TRANSMITTER PER CLASSROOM CONSISTING OF (4) RECEIVERS AND (1) TRANSMITTER PER ROOM IN A CASED KIT. BASIS OF DESIGN IS WILLIAMS SOUND PPA R37 RECEIVERS WITH WILLIAMS SOUND PPA T46 TRANSMITTER.
3. PROVIDE (1) 1 1/4 UNDERGROUND CONDUIT FROM THE FLOOR MONUMENT TO THE WALL AND UP TO THE ACCESSIBLE CEILING SPACE.

REMODEL FLOOR PLAN LOWER LEVEL

BUILDING 400 MODERNIZATION TO NEW CLASSROOM/ LIBRARY MEDIA CENTER

WALNUT VALLEY UNIFIED SCHOOL DISTRICT
DIAMOND BAR HIGH SCHOOL
21400 PATHFINDER RD. DIAMOND BAR, CA 91765

SEALS:

CONSULTANT:

PROJECT NUMBER: 19-47100-00
PROJECT STATUS: 100% CD
PROJECT ISSUED: 08/12/20
REVISION: DATE: DESCRIPTION:
1 10/25/2022 ADDENDUM - 1

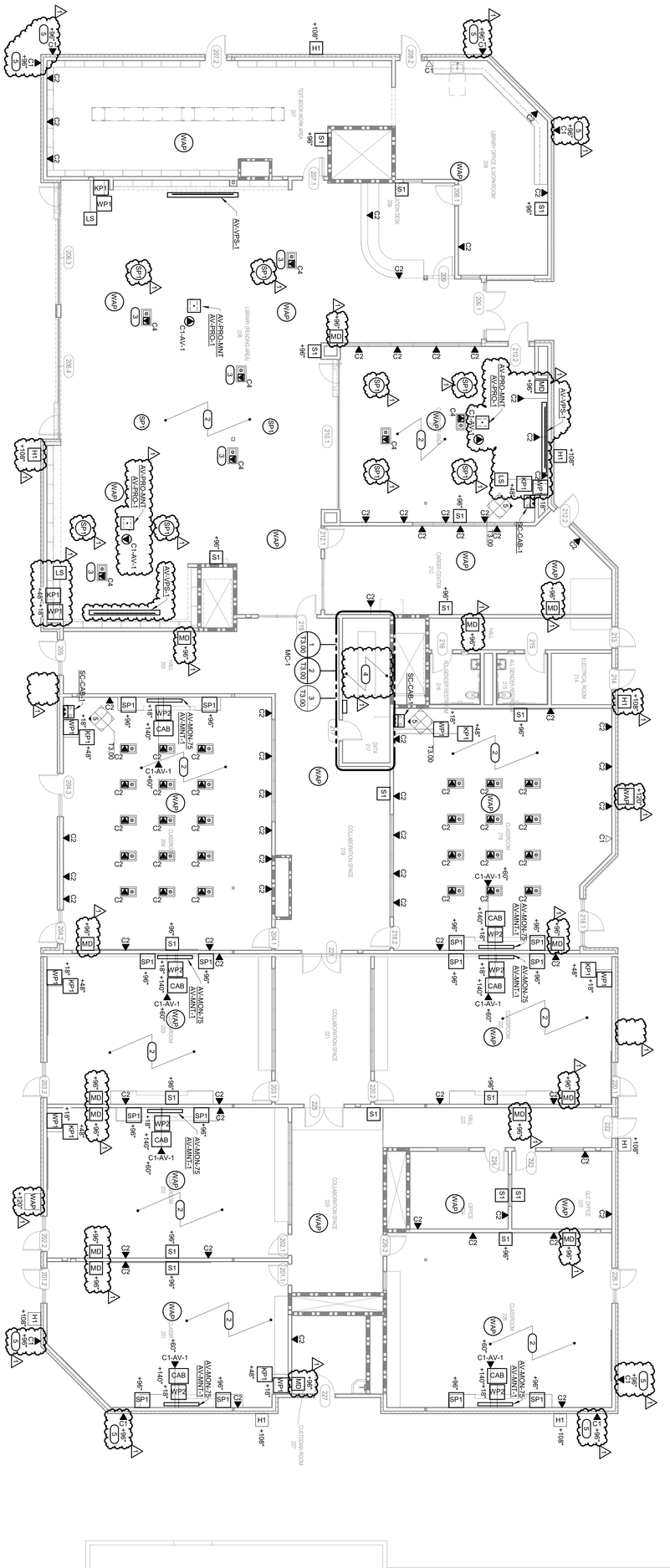
T2.11

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10/20/2022 1:36:44 AM

KEYNOTES: (#)

1. WP2 AND INFORMATION OUTLET (O2) WILL BE INSTALLED SIDE BY SIDE BEHIND THE AVA-CD-1.
2. AVA-SS-1 CONTRACTOR TO FURNISH ONE ASSISTED LISTENING SYSTEM KIT PER NOTED CLASSROOM. CONTRACTOR TO INSTALL AND TEST EACH ROOM AS A COMPLETE UNIT. BASIS OF DESIGN IS WILLIAMS SOUND PPA R57 RECEIVERS WITH WILLIAMS SOUND PPA T46 TRANSMITTER.
3. THE RELOCATABLE CLASSROOMS WILL POKE THRU TO THE LOWER LEVEL CEILING SPACE AND THE CABLING WILL FEED BACK UP INTO THE MDF. FIELD VERIFY BEFORE INSTALLATION.
4. DATA CABLING SHALL BE ROUTED SEPARATELY FROM ALL POWER CONDUCTORS AND CONDUIT. ALL EQUIPMENT WITHIN THE ROOM THROUGH THE DURATION OF THE PROJECT. CONTRACTOR SHALL CONSULT WITH DISTRICT IT PRIOR TO ANY POWER OR SYSTEM INTERRUPTIONS. CONTRACTOR SHALL PROTECT THE ROOM AND OPERATIONAL THROUGHOUT CONSTRUCTION. CONTRACTOR SHALL PROTECT THE ROOM AND



REMODEL FLOOR PLAN MAIN LEVEL

1

NORTH

T2.12

PROJECT NUMBER:	19-47100-00	
PROJECT STATUS:	100% CD	
PROJECT ISSUED:	08/12/20	
REVISION:	DATE:	DESCRIPTION:
1	10/25/2202	ADDENDUM - 1

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REMODEL FLOOR PLAN MAIN LEVEL

BUILDING 400 MODERNIZATION TO NEW CLASSROOM/ LIBRARY MEDIA CENTER

WALNUT VALLEY UNIFIED SCHOOL DISTRICT

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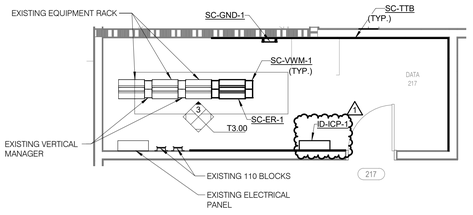
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PROJECT # 20000435.00

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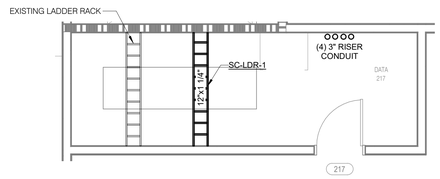


1 EXISTING MDF ROOM 217 LAYOUT

1/4" = 1'-0"

NOTES:

1. REFER TO SHEET T2.12 FOR THE MDF LOCATION.

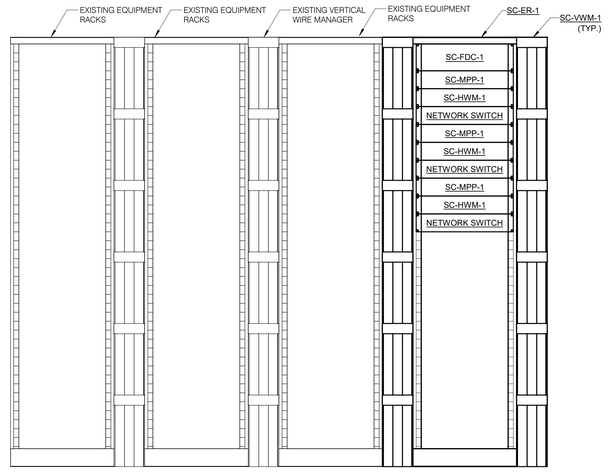


2 EXISTING MDF ROOM 217 PATHWAY

1/4" = 1'-0"

NOTES:

1. REFER TO SHEET T2.12 FOR THE MDF LOCATION.

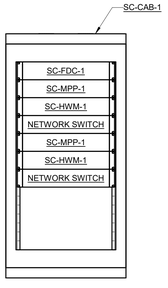


3 TECHNOLOGY ROOM DATA 217 - RACK ELEVATION

1" = 1'-0"

NOTES:

1. REFER TO SHEET T2.12 FOR THE MDF LOCATION.
2. REFER TO DETAIL 1/T5.02 FOR INSTALLATION.

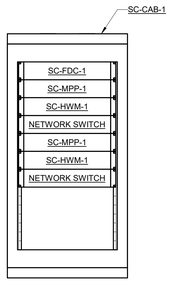


4 LOWER LEVEL IDF CABINET ROOM 115

1" = 1'-0"

NOTES:

1. REFER TO SHEET T2.11 FOR THE COMPUTER ROOM 115 LOCATION.
2. REFER TO DETAIL 6/T5.02 FOR MOUNTING OF THE CABINET.

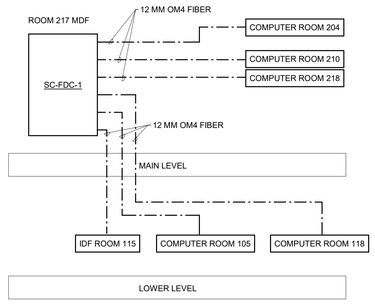


5 COMPUTER LABS, ROOMS 105, 118, 204, 210 & 218

1" = 1'-0"

NOTES:

1. REFER TO SHEET T2.11 FOR THE COMPUTER ROOM 105 & 118 LOCATIONS.
2. REFER TO SHEET T2.12 FOR THE COMPUTER ROOM 204, 210, & 218 LOCATIONS.
3. REFER TO DETAIL 6/T5.02 FOR MOUNTING OF THE CABINET.



6 FIBER RISER DIAGRAM

NO SCALE

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ENLARGED PLANS - TECHNOLOGY

BUILDING 400 MODERNIZATION TO NEW CLASSROOM/ LIBRARY MEDIA CENTER

WALNUT VALLEY UNIFIED SCHOOL DISTRICT

DIAMOND BAR HIGH SCHOOL

21400 PATHFINDER RD. DIAMOND BAR, CA 91765

WALNUT VALLEY UNIFIED SCHOOL DISTRICT

SEAL:

REGISTERED PROFESSIONAL ENGINEER
NESTOR C. IGNACIO
Lic. E16934
Exp. 6-30-2023
STATE OF CALIFORNIA

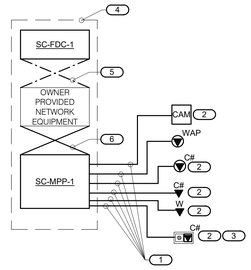
sgh ARCHITECTS

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PROJECT NUMBER:	19-47100-00
PROJECT STATUS:	100% CD
PROJECT ISSUED:	01/06/21
REVISION:	DESCRIPTION:
DATE:	ADDENDUM - 1
10/25/2022	

T3.00

10/20/2022 1:36:46 AM



1 CONNECTIVITY RISER DIAGRAM

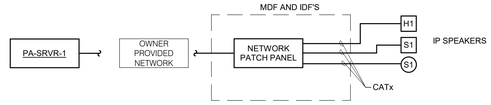
NO SCALE

NOTES:

1. THIS RISER IS DIAGRAMMATIC AND MAY NOT SHOW ACTUAL ROUTING OR QUANTITIES OF MATERIALS SHOWN. THIS RISER IS SHOWN FOR CLARIFICATION OF CONNECTION LOCATIONS AND CABLE TYPE. ALL INFORMATION OUTLETS ARE TYPICAL OF THE OUTLETS IN THE AREA SHOWN. REFER TO FLOOR PLANS FOR MORE SPECIFIC ROUTING AND QUANTITY INFORMATION. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.
2. REFER TO FLOOR PLANS FOR QUANTITY OF CABLES AND JACKS TO BE INSTALLED AT EACH INFORMATION OUTLET.

KEYNOTES: (#)

1. 23/24 GAUGE, 4-PAIR, CATEGORY 6, UNSHIELDED TWISTED PAIR CABLE, REFER TO SPECIFICATIONS.
2. "C#" INDICATES VOICE/DATA FACEPLATE CONFIGURATION. REFER TO INFORMATION OUTLET SCHEDULE ON T0.02 FOR ADDITIONAL INFORMATION. REFER TO FLOOR PLANS AND EQUIPMENT SCHEDULE FOR ADDITIONAL INFORMATION.
3. INFORMATION OUTLET INSTALLED IN E.C. PROVIDED AND INSTALLED FLOOR BOX.
4. THIS IS THE EXISTING RELAY RACK THAT IS LOCATED IN THE NEW MDF LOCATION
5. EXISTING FIBER OPTIC PATCH CORDS.
6. RJ-45 TO RJ-45 CATEGORY CAT 6A UTP PATCH CORD. REFER TO SPECIFICATIONS.



2 IP BASED PA/INTERCOM RISER

NO SCALE

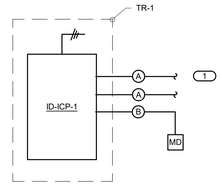
NOTES

1. THIS RISER IS DIAGRAMMATIC AND MAY NOT SHOW ACTUAL ROUTING OR QUANTITIES OF MATERIALS SHOWN. THIS RISER IS SHOWN FOR CLARIFICATION OF CONNECTIONS, LOCATIONS, AND CABLE TYPE. THIS RISER WILL NOT REPLICATE ALL DEVICE CONFIGURATIONS.
2. ALL PAGING/INTERCOM CABLES SHALL BE INSTALLED IN CABLE SUPPORTS ACCESSIBLE CEILING. UNLESS OTHERWISE NOTED ON THE FLOOR PLANS.
3. REFER TO SPECIFICATION SECTION 27 51 13 FOR PAGING CABLE REQUIREMENTS.
4. REFER TO SHEET T0.02 FOR TECHNOLOGY EQUIPMENT SCHEDULE.

WIRING KEY:

(A) 18 AWG (2) TWO CONDUCTOR STRANDED PLENUM CABLE.

(B) 18 AWG (4) FOUR CONDUCTOR STRANDED PLENUM CABLE.

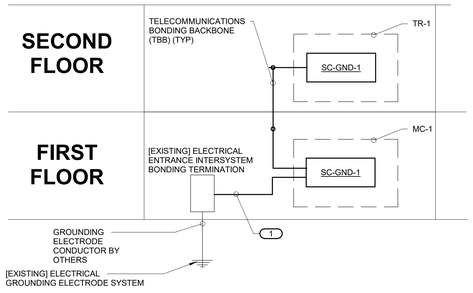


3 INTRUSION DETECTION RISER DIAGRAM

NO SCALE

NOTES:

1. THIS RISER IS DIAGRAMMATIC AND NOT INTENDED TO SHOW ACTUAL ROUTING OR QUANTITIES OF MATERIALS SHOWN. THIS RISER IS SHOWN FOR CLARIFICATION OF CONNECTION LOCATIONS AND CABLE TYPE.
2. ALL CABLING SHALL BE PLENUM RATED.
3. REFER TO SHEET T0.02 FOR GENERAL TECHNOLOGY EQUIPMENT SCHEDULE.



4 TECHNOLOGY BONDING RISER DIAGRAM

NO SCALE

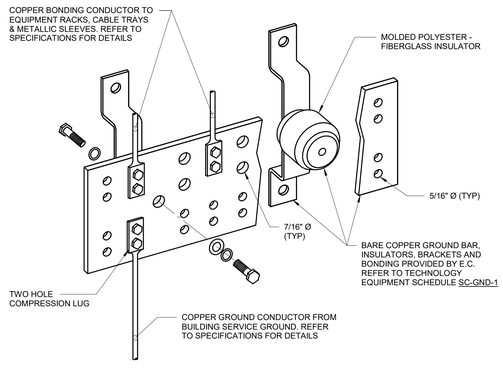
NOTES:

1. THIS RISER IS DIAGRAMMATIC AND MAY NOT SHOW ACTUAL ROUTING OR QUANTITIES OF MATERIALS. THIS RISER IS SHOWN FOR CLARIFICATION OF CONNECTION LOCATIONS AND CONDUCTOR TYPE. ALL CONNECTIONS AND SYSTEM DEVICES SHOWN ARE TYPICAL AND NOT REPRESENTATIVE OF ACTUAL PROJECT QUANTITIES. REFER TO FLOOR PLANS AND ENLARGED FLOOR PLANS FOR ACTUAL QUANTITIES AND LOCATIONS OF DEVICES AND MORE SPECIFIC ROUTING INFORMATION. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
2. ALL CONDUCTORS IN THE TECHNOLOGY BONDING SYSTEM SHALL BE MINIMUM SIZE OF 3/0 AWG [PLENUM RATED] COPPER (GREEN OR MARKED WITH A DISTINCTIVE GREEN COLOR) UNLESS CONDUCTOR LENGTH IS LESS THAN 66 FEET. REFER TO BONDING CONDUCTOR SIZING SCHEDULE FOR SIZING CRITERIA FOR CONDUCTORS LESS THAN 66 FEET IN LENGTH. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
3. ALL BONDING CONDUCTORS AND BONDING JUMPERS SHALL BE CONNECTED BY COMPRESSION LUGS, EXOTHERMIC WELDING, OR IRREVERSIBLE COMPRESSION CONNECTORS. SOLDER IS NOT AN ACCEPTABLE MEANS OF CONNECTION. SHEET METAL SCREWS SHALL NOT BE USED TO CONNECT COMMUNICATIONS BONDING CONDUCTORS TO EQUIPMENT. WHERE NECESSARY, REMOVE PAINT AND/OR USE PAINT-PIERCING WASHERS TO PROVIDE PROPER ELECTRICAL BOND AT ALL CONNECTIONS.
4. REFER TO 2/T300 FOR TYPICAL TELECOM ROOM BONDING FLOW DIAGRAM.
5. REFER TO TELECOM ROOM REFERENCES SCHEDULE ON DRAWING T0.1 FOR TELECOMMUNICATIONS ROOM NUMBER AND LOCATION INFORMATION.

KEYNOTES: (#)

1. BONDING CONDUCTOR FOR TELECOMMUNICATIONS (BCT). BCT SHALL BE THE SAME SIZE AS THE TBB OR LARGER. REFER TO BONDING CONDUCTOR SIZING SCHEDULE FOR SIZING REQUIREMENTS.

BONDING CONDUCTOR SIZING SCHEDULE	
CONDUCTOR LENGTH IN FEET	MINIMUM ACCEPTABLE SIZE - AWG
LESS THAN 13'	6
14' - 20'	4
21' - 26'	3
27' - 33'	2
34' - 41'	1
42' - 52'	1/0
53' - 66'	2/0
GREATER THAN 66'	3/0

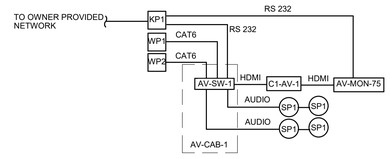


5 BONDING BUS BAR DETAIL

NO SCALE

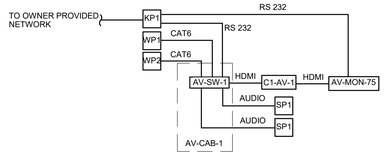
NOTES:

1. REFER TO TECHNOLOGY EQUIPMENT SCHEDULE SC-GND-1 FOR WIDTH REQUIREMENTS.
2. REFER TO 4/T5.01 FOR TECHNOLOGY BONDING SYSTEM DIAGRAM.



6 LIBRARY - AUDIO/VIDEO RISER DIAGRAM

NO SCALE



7 TYPICAL CLASSROOM - AUDIO/VIDEO RISER DIAGRAM

NO SCALE

CONSULTANT:

IMEG

IMEG CORP. 300 LIN PKWY, SUITE 490 CARY, NC 27511 P 984.377.0774 F 984.377.0814 PROJECT # 2000243.00

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APPROVAL AND PRINT DATE: 10/20/2022 1:36:46 AM

ISSUE DATE: 10/20/2022

REFERENCE SCALE IN INCHES

0 1 2 3

DETAILS

BUILDING 400 MODERNIZATION TO NEW CLASSROOM/ LIBRARY MEDIA CENTER

WALNUT VALLEY UNIFIED SCHOOL DISTRICT

DIAMOND BAR HIGH SCHOOL

21400 PATHFINDER RD. DIAMOND BAR, CA 91765

WALNUT VALLEY UNIFIED SCHOOL DISTRICT

SEALS:

REGISTERED PROFESSIONAL ENGINEER NESTOR C. IGNACIO, JR. Lic. E16934 Exp. 6-30-2023 STATE OF CALIFORNIA

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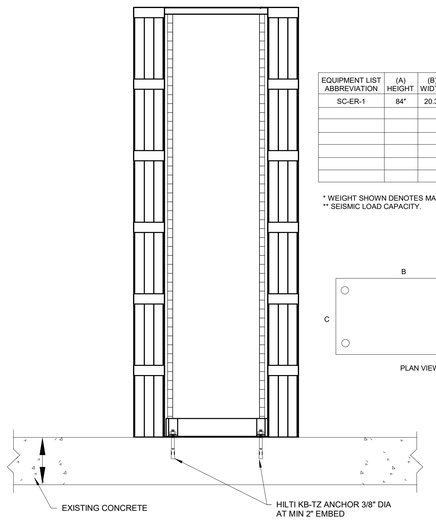
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PROJECT NUMBER: 19-47100-00
PROJECT STATUS: 100% CD
PROJECT ISSUED: 08/12/20

REVISION	DATE	DESCRIPTION
1	10/20/2022	ADDENDUM - 1

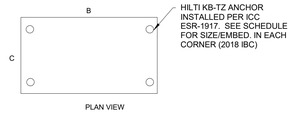
T5.01

10/20/2022 1:36:46 AM



EQUIPMENT LIST ABBREVIATION	(A) HEIGHT	(B) WIDTH	(C) DEPTH	WEIGHT (LBS) *	MIN NO. ANCHORS	SIZE OF ANCHORS	MINIMUM EMBEDMENT
SC-ER-1	84"	20.3"	15"	1000	4	ICC-ESR-1917	2 3/4" INTO CONCRETE

* WEIGHT SHOWN DENOTES MAX CAPACITY OF EQUIPMENT.
** SEISMIC LOAD CAPACITY.

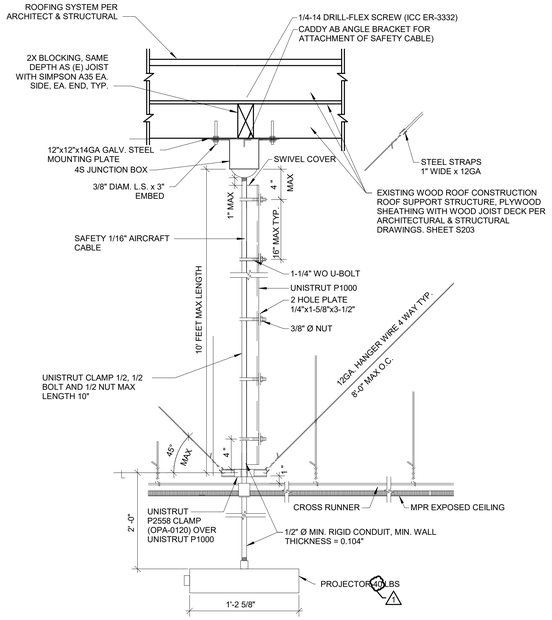


1 TECHNOLOGY EQUIPMENT ANCHORAGE SCHEDULE

NO SCALE

NOTE:

1. REFER TO 1/T3.00 FOR RACK LOCATION.
2. REFER TO 3/T3.00 FOR THE ELEVATION EQUIPMENT RACK.

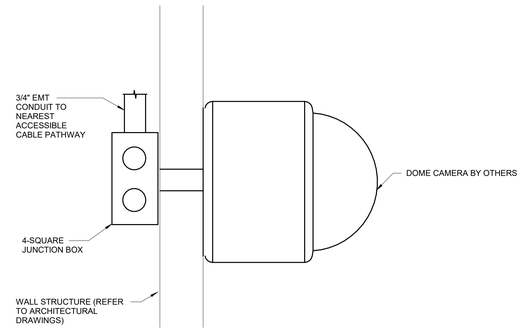


2 PROJECTOR SUPPORT DETAIL

NO SCALE

NOTE:

1. REFER TO T2.11 & T2.12 FOR PROJECTOR LOCATION.



3 INTERIOR SURFACE WALL CAMERA MOUNTING DETAIL

NO SCALE

NOTES:

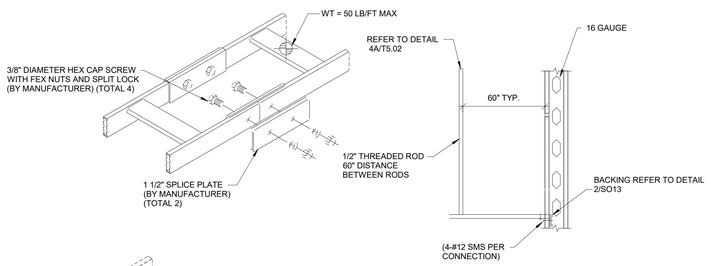
1. COORDINATE EXACT LOCATION OF CAMERA ON SITE WITH WORK BY OTHER TRADES TO ENSURE DESIRED VIEWING AREA AND SERVICE ACCESS AFTER COMPLETION OF PROJECT AND TO MINIMIZE ANY POSSIBLE DAMAGE TO INSTALLED CAMERA OR ASSOCIATED CABLING.
2. CONDUIT SHALL STUB TO NEAREST ACCESSIBLE CEILING AND TERMINATE ORIENTED HORIZONTALLY AT THE HEIGHT OF THE FUTURE CABLING PATHWAY. CONDUIT RUN SHALL NOT CONTAIN MORE THAN 180 DEGREES OF BEND BETWEEN ACCESSIBLE JUNCTION BOXES OR BETWEEN JUNCTION BOX AND END OF CONDUIT. ALL CONDUITS MUST BE FITTED WITH A NYLON BUSHING ON EACH END OF THE CONDUIT.
3. REFER TO FLOOR PLAN FOR THE MOUNTING LOCATIONS/HEIGHTS OF EACH INDIVIDUAL CAMERA.
4. REFER TO CLOSED CIRCUIT (CCTV) INDIVIDUAL CAMERA REQUIREMENTS SCHEDULE FOR MOUNTING HEIGHT OF CAMERA.

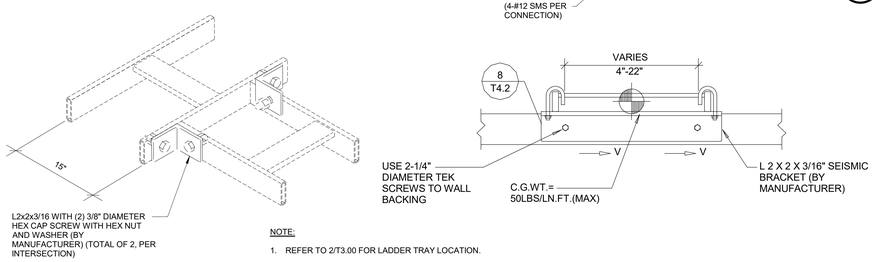
4 LADDER RACK MOUNTING DETAIL

NO SCALE

NOTE:

1. REFER TO 2/T3.00 FOR LADDER TRAY LOCATION.



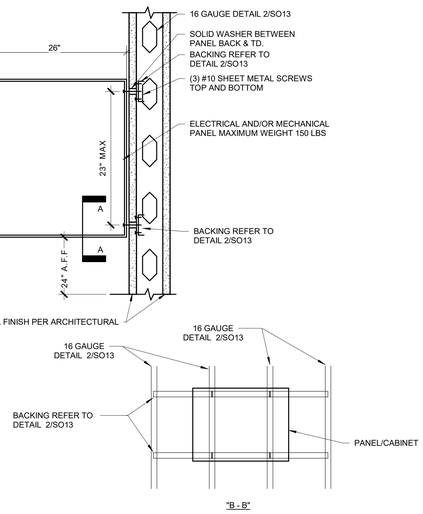


NOTE:

1. REFER TO 2/T3.00 FOR LADDER TRAY LOCATION.

5 HEAVY DUTY SPLICE KIT (BUTT AND JUNCTION) ANCHORAGE DETAILS

NO SCALE

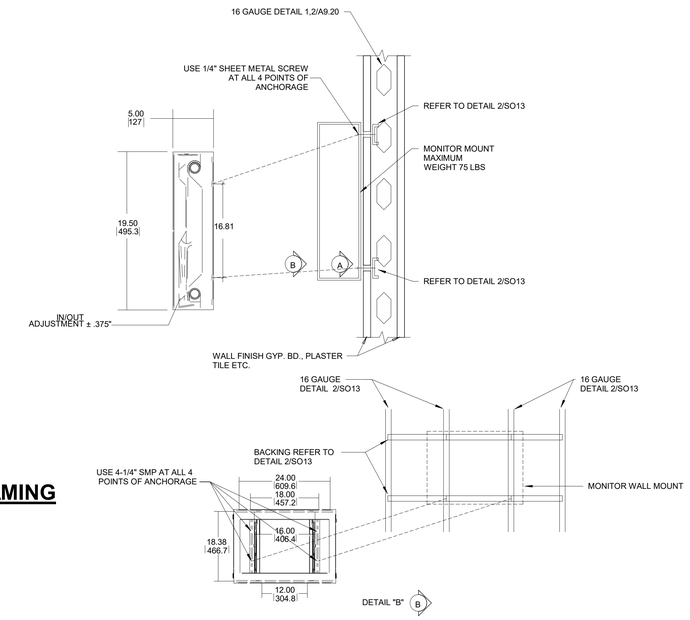


6 SURFACE MOUNTED PANEL/CABINET DETAIL - METAL STUD FRAMING

NO SCALE

NOTE:

1. REFER TO THE FLOOR PLANS FOR AV-CAB-1 LOCATION.
2. REFER TO T3.00 FOR THE ELEVATION EQUIPMENT RACK.



7 MONITOR MOUNTING DETAIL

NO SCALE

NOTES:

1. REFER TO 20/S0.8 FOR METAL BACKING DETAIL.
2. REFER TO THE FLOOR PLANS FOR MOUNTING LOCATION.

CONSULTANT:

IMEG

IMEG CORP.
301 LIN PASCENTE, SUITE 400
LIVERMORE, CA 94551
PH (925) 218-4700 FAX (877) 891-9916
PROJECT # 220024535.00

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0 1 2 3
REFERENCE SCALE IN INCHES

DETAILS

BUILDING 400 MODERNIZATION TO NEW CLASSROOM/ LIBRARY MEDIA CENTER
WALNUT VALLEY UNIFIED SCHOOL DISTRICT
DIAMOND BAR HIGH SCHOOL
21400 PATHFINDER RD. DIAMOND BAR, CA 91765

WALNUT VALLEY UNIFIED SCHOOL DISTRICT

SEALS:

REGISTERED PROFESSIONAL ENGINEER
KESTOR C. IGNACIO
Lic. E16934
Exp. 6-30-2023
OF CALIFORNIA

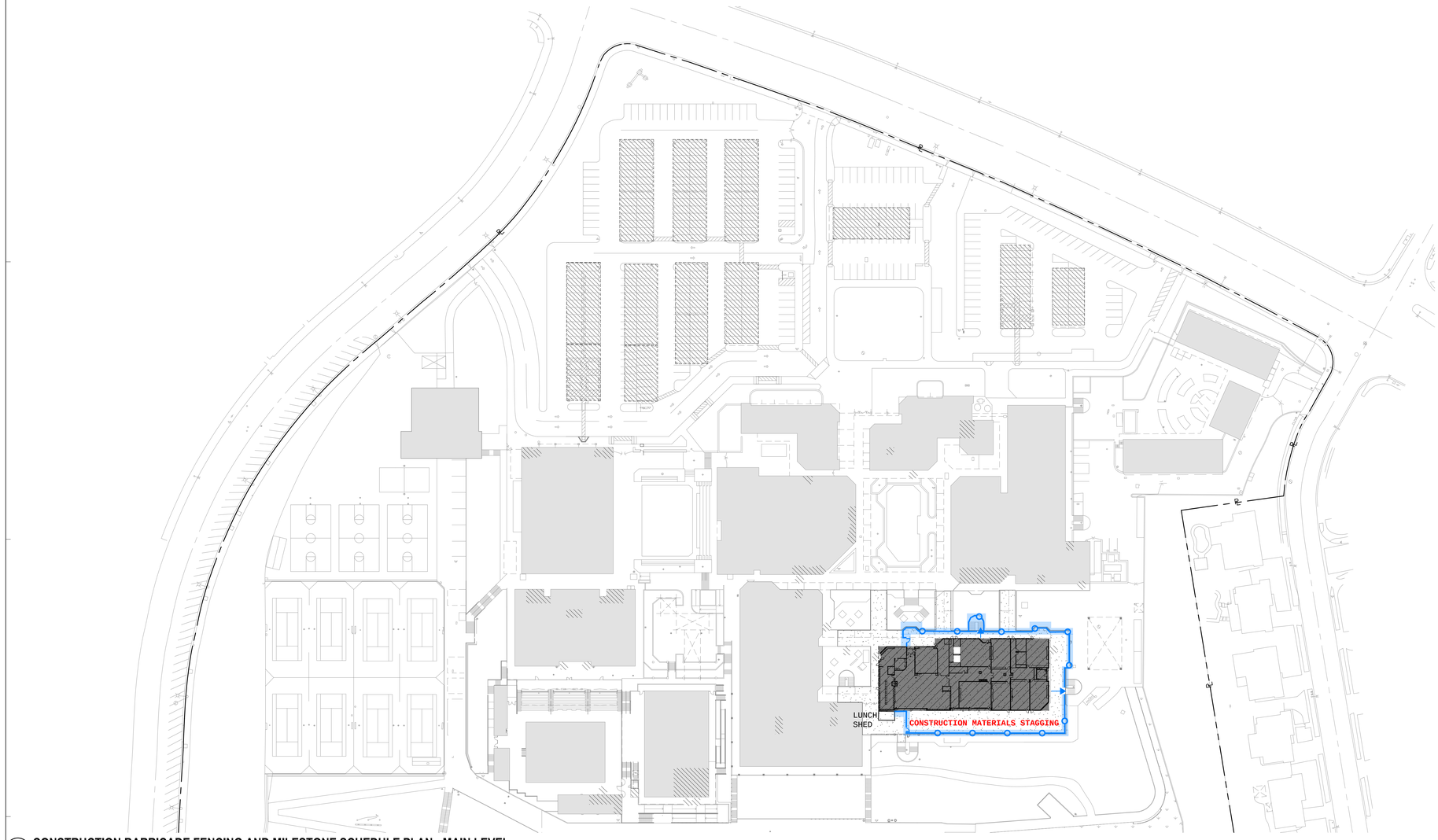
sgh ARCHITECTS

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PROJECT NUMBER:	19-47100-00
PROJECT STATUS:	100% CD
PROJECT ISSUED:	12/29/20
REVISION:	DESCRIPTION:
DATE:	ADDENDUM -1
10/20/2020	

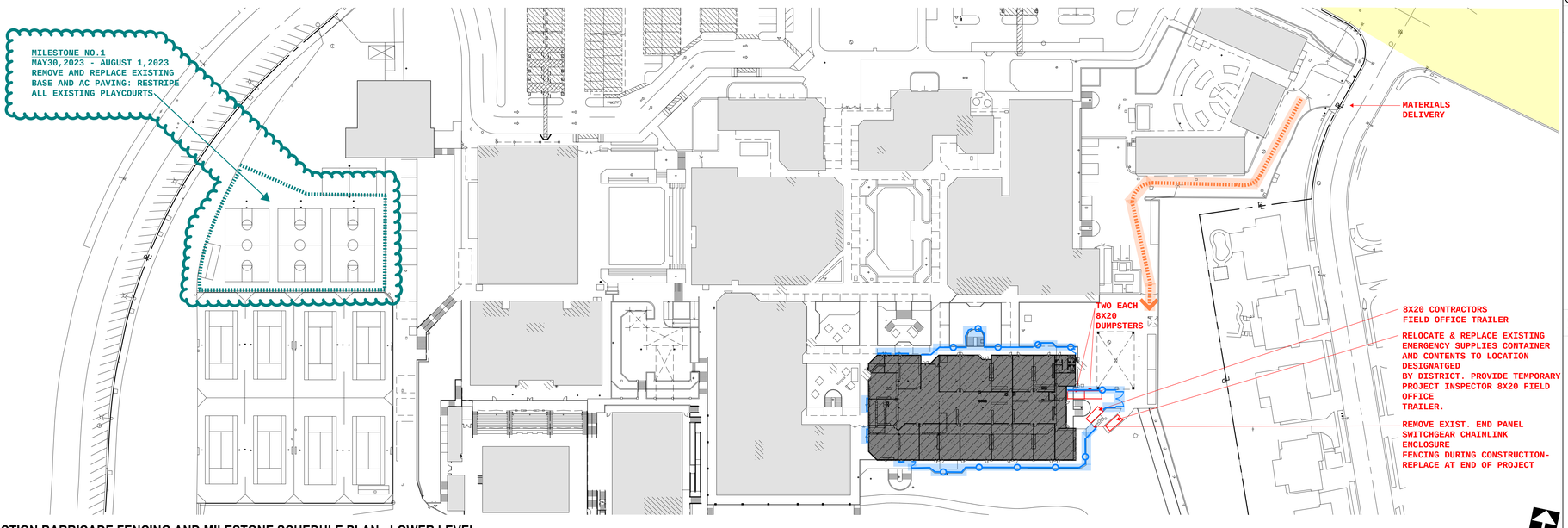
T5.02

10/20/2022 1:36:48 AM



1 A0.0 **CONSTRUCTION BARRICADE FENCING AND MILESTONE SCHEDULE PLAN - MAIN LEVEL**
SCALE: 1" = 60'-0"

NORTH



2 A0.0 **CONSTRUCTION BARRICADE FENCING AND MILESTONE SCHEDULE PLAN - LOWER LEVEL**
SCALE: 1" = 60'-0"

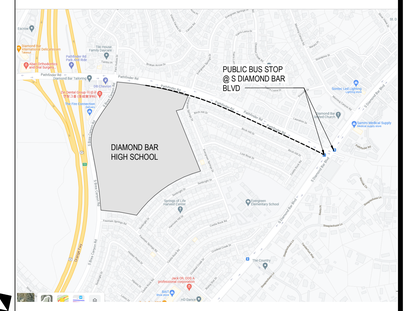
NORTH

LEGEND

STUDENT PATH OF TRAVEL

DBHS 400 BUILDING MODERNIZATION CONTRACTOR PARKING ALONG PATHFINDER RD.

TYPICAL 6 FT. HT. FABRIC COVERED CONSTRUCTION BARRICADE FENCING



3 A0.0 SITE - BUS STOP LOCATION
SCALE: 12" = 1'-0"

SITE PLAN LEGEND

- (E) BUILDING 400 (AREA OF WORK)
- (E) ELEVATOR
- (P) (E) ACCESSIBLE PARKING
- (PR) (E) PUBLIC RESTROOM
- (U) (E) ALL GENDER RESTROOM
- (S) (E) STAFF RESTROOM
- (ST) (E) STUDENT RESTROOM
- (DF) (E) ACCESSIBLE DRINKING FOUNTAIN
- (U) (N) ALL GENDER RESTROOM

CONSULTANT:

CONSTRUCTION BARRICADE FENCING AND MILESTONE SCHEDULE PLAN

BUILDING 400 MODERNIZATION NEW CLASSROOM/ LIBRARY MEDIA CENTER

WALNUT VALLEY UNIFIED SCHOOL DISTRICT
DIAMOND BAR HIGH SCHOOL
21400 PATHFINDER RD. DIAMOND BAR, CA 91765

SEALS:

sgh ARCHITECTS

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PROJECT NUMBER: 19-47100-00
PROJECT STATUS: CD 100%
PROJECT ISSUED: 03/18/2021
REVISION DATE: DESCRIPTION:

EXHIBIT 1

9/8/2022 5:54:18 PM

PB RFI 001

PRE-BID CLARIFICATION FORM (For Contractor's Use)

PROJECT NAME:	DIAMOND BAR HIGH SCHOOL 400 BUILDING MODERNIZATION		
PROJECT NUMBER:	110822-2		
TO:	Suzanne Beach	EMAIL:	sbeach@wvusd.org

DATE:			
FROM:	New Dynasty Construction	EMAIL:	estimating@new-dc.com
DOCUMENT/DIVISION NUMBER:	Div. 07	DRAWING NUMBER:	

REQUESTED CLARIFICATION:

1. Keynote #7.57B of plan sheet A4.01 Demolition Roof Plan and A4.10 Remodel Roof Plan states 'Existing polyurethane foam roofing to be restored.' There are over 16,000 sf (or 160 squares) of this roofing system and we did not get to see it during the job walk, so for bidding purposes, can you designate a certain percentage of the roof area that will need to be restored?

2. Please advise which manufacturer (or product) is the existing polyurethane roofing system by.

RESPONSE TO CLARIFICATION:

1. KEYNOTE HAVE BEEN CHANGED FROM "RESTORED" TO "REPAIR", SEE ADDENDUM.

2. SEE SPEC SECTION FOR FOAMED ROOF REPAIR

ALLEN TIAN, SGH ARCHITECTS
10.19.2022

Attach additional numbered sheets as necessary; however, only one (1) request shall be contained on each submitted form.

PRE-BID CLARIFICATION FORM (For Contractor's Use) Pre-Bid RFI #02

PROJECT NAME:	DIAMOND BAR HIGH SCHOOL 400 BUILDING MODERNIZATION		
PROJECT NUMBER:	110822-2		
TO:	Suzanne Beach	EMAIL:	sbeach@wvusd.org

DATE:			
FROM:	New Dynasty Construction	EMAIL:	estimating@new-dc.com
DOCUMENT/DIVISION NUMBER:		DRAWING NUMBER:	A9.30 Finish Floor Plan

REQUESTED CLARIFICATION:

1. A9.30 Lower Level Finish Floor Plan shows elevation drawing callouts 1 thru 5 on plan sheet A12.00. Said plan sheet A12.00, however, is missing. Neither is it listed on the sheet index. Please provide said plan sheet.

RESPONSE TO CLARIFICATION:

SHEET A12.00 IS ADDED, ADDITIONAL WITH A12.01, SEE ADDENDUM

ALLEN TIAN, SGH ARCHITECTS
10.19.2022

Attach additional numbered sheets as necessary; however, only one (1) request shall be contained on each submitted form.

PB RFI 003

PRE-BID CLARIFICATION FORM (For Contractor's Use)

PROJECT NAME:	DIAMOND BAR HIGH SCHOOL 400 BUILDING MODERNIZATION		
PROJECT NUMBER:	110822-2		
TO:	Suzanne Beach	EMAIL:	sbeach@wvusd.org

DATE:			
FROM:	New Dynasty Construction	EMAIL:	estimating@new-dc.com
DOCUMENT/DIVISION NUMBER:	Div. 26	DRAWING NUMBER:	E5.02 Details

REQUESTED CLARIFICATION:

1. Please provide missing Trenching Detail #10 on plan sheet E5.02 Details. Keynote #1 on E1.10 Site Plan directs us to 'Provide trenching for feeders and conduit pathways from exterior distribution boards HC-2 and LC-2 and route to Electrical Rooms 125 and 214.' Said detail drawing, however is missing.

RESPONSE TO CLARIFICATION:

The trenching detail (underground conduit placement detail) is located on detail 11 sheet E5.01.

Nestor Ignacio-IMEG
10-11-2022

Attach additional numbered sheets as necessary; however, only one (1) request shall be contained on each submitted form.

PB RFI 004

PRE-BID CLARIFICATION FORM (For Contractor's Use)

PROJECT NAME:	DIAMOND BAR HIGH SCHOOL 400 BUILDING MODERNIZATION		
PROJECT NUMBER:	110822-2		
TO:	Suzanne Beach	EMAIL:	sbeach@wvusd.org

DATE:			
FROM:	New Dynasty Construction	EMAIL:	estimating@new-dc.com
DOCUMENT/DIVISION NUMBER:	Div. 12	DRAWING NUMBER:	

REQUESTED CLARIFICATION:

1. Please advise if we are to furnish and install the specified motor-operated roller shades on all exterior windows on the Lower and Main Levels. Otherwise, please provide the specific locations only.

RESPONSE TO CLARIFICATION:

Motor Operated Roller Shades are part of Addendum 01

Karla Cerezo, SGH Architects
10.18.2022

Attach additional numbered sheets as necessary; however, only one (1) request shall be contained on each submitted form.

PB RFI 005

PRE-BID CLARIFICATION FORM (For Contractor's Use)

PROJECT NAME:	DIAMOND BAR HIGH SCHOOL 400 BUILDING MODERNIZATION		
PROJECT NUMBER:	110822-2		
TO:	Suzanne Beach	EMAIL:	sbeach@wvusd.org

DATE:			
FROM:	New Dynasty Construction	EMAIL:	estimating@new-dc.com
DOCUMENT/DIVISION NUMBER:	Div. 10	DRAWING NUMBER:	

REQUESTED CLARIFICATION:

1. Spec Section 10-2617 call for Corner Guards. However, nowhere on the plans can we find any call outs or keynotes for this scope of work. Please advise if there will be corner guards in this project and if so, please provide their specific locations.

RESPONSE TO CLARIFICATION:

Corner Guards are part of Addendum 01

Karla Cerezo, SGH Architects
10.18.2022

Attach additional numbered sheets as necessary; however, only one (1) request shall be contained on each submitted form.

PB RFI 006

PRE-BID CLARIFICATION FORM (For Contractor's Use)

PROJECT NAME:	DIAMOND BAR HIGH SCHOOL 400 BUILDING MODERNIZATION		
PROJECT NUMBER:	110822-2		
TO:	Suzanne Beach	EMAIL:	sbeach@wvusd.org

DATE:	10/5/2022		
FROM:	Harik Construction Inc.	EMAIL:	lilah@harikconstruction.com
DOCUMENT/DIVISION NUMBER:	Specs. 102617	DRAWING NUMBER:	A9.11

REQUESTED CLARIFICATION:

1. Ref. Specs. Section 122413 – Please indicate in the drawings the storefront windows to receive Roller Shades.

RESPONSE TO CLARIFICATION:

Motor Operated Roller Shades Location are part of Addendum 01

Karla Cerezo, SGH Architects
10.18.2022

Attach additional numbered sheets as necessary; however, only one (1) request shall be contained on each submitted form.

PB RFI 007

PRE-BID CLARIFICATION FORM (For Contractor's Use)

PROJECT NAME:	DIAMOND BAR HIGH SCHOOL 400 BUILDING MODERNIZATION		
PROJECT NUMBER:	110822-2		
TO:	Suzanne Beach	EMAIL:	sbeach@wvusd.org

DATE:	10/5/2022		
FROM:	Harik Construction Inc.	EMAIL:	lilah@harikconstruction.com
DOCUMENT/DIVISION NUMBER:	Specs. 102617	DRAWING NUMBER:	

REQUESTED CLARIFICATION:
1. Ref. Specs. Section 102617 – Please indicate in the drawings on what area to receive the Wall Protection.
RESPONSE TO CLARIFICATION:
Wall Protection is part of Addendum 01 Karla Cerezo, SGH Architects 10.18.2022

Attach additional numbered sheets as necessary; however, only one (1) request shall be contained on each submitted form.

PRE-BID CLARIFICATION FORM (For Contractor's Use)

PROJECT NAME:	DIAMOND BAR HIGH SCHOOL 400 BUILDING MODERNIZATION		
PROJECT NUMBER:	110822-2		
TO:	Suzanne Beach	EMAIL:	sbeach@wvusd.org

DATE:	10-07-2022		
FROM:	New Dynasty Construction	EMAIL:	estimating@new-dc.com
DOCUMENT/DIVISION NUMBER:	Div. 8	DRAWING NUMBER:	A9.10 Door & Frame Schedule

REQUESTED CLARIFICATION:

1. Please provide specifications for Type H Doors.

RESPONSE TO CLARIFICATION:

SEE ADDENDUM FOR SPEC SECTION 10 22 39.13 FOR INTERIOR, AND SECTION 08 43 33 FOR EXTERIOR

ALLEN TIAN, SGH ARCHITECTS
10.18.2022

Attach additional numbered sheets as necessary; however, only one (1) request shall be contained on each submitted form.

PRE-BID CLARIFICATION FORM (For Contractor's Use)

PROJECT NAME:	DIAMOND BAR HIGH SCHOOL 400 BUILDING MODERNIZATION		
PROJECT NUMBER:	110822-2		
TO:	Suzanne Beach	EMAIL:	sbeach@wvusd.org

DATE:	10-07-2022		
FROM:	New Dynasty Construction	EMAIL:	estimating@new-dc.com
DOCUMENT/DIVISION NUMBER:	Div. 8	DRAWING NUMBER:	A9.11 Storefront Schedule

REQUESTED CLARIFICATION:

1. While the specifications provide for Aluminum Framed Entrances and Storefronts (Sec. 08-4113), it appears on plan sheet A9.11 Storefront Schedule that all storefronts are called out as hollow metal storefronts. Please clarify.

RESPONSE TO CLARIFICATION:

ALL STOREFRONTS ARE HOLLOW METAL, SEE ADDENDUM

ALLEN TIAN, SGH ARCHITECTS
10.19.2022

Attach additional numbered sheets as necessary; however, only one (1) request shall be contained on each submitted form.

PRE-BID CLARIFICATION FORM (For Contractor's Use)

PROJECT NAME:	DIAMOND BAR HIGH SCHOOL 400 BUILDING MODERNIZATION		
PROJECT NUMBER:	110822-2		
TO:	Suzanne Beach	EMAIL:	sbeach@wvusd.org

DATE:	10-07-2022		
FROM:	New Dynasty Construction	EMAIL:	estimating@new-dc.com
DOCUMENT/DIVISION NUMBER:	Div. 8	DRAWING NUMBER:	A9.10 Door & Frame Schedule

REQUESTED CLARIFICATION:

1. The specifications provide for Acoustical Door Systems via Sec. 08-3473. Please identify which among the doors listed in A9.10 Door & Frame Schedule are these quiet-swing, STC 45 rated acoustical doors.

RESPONSE TO CLARIFICATION:

DELETED, SEE ADDENDUM

ALLEN TIAN, SGH ARCHITECTS
10.19.2022

Attach additional numbered sheets as necessary; however, only one (1) request shall be contained on each submitted form.

PRE-BID CLARIFICATION FORM (For Contractor's Use)

PROJECT NAME:	DIAMOND BAR HIGH SCHOOL 400 BUILDING MODERNIZATION		
PROJECT NUMBER:	110822-2		
TO:	Suzanne Beach	EMAIL:	sbeach@wvusd.org

DATE:	10-10-2022		
FROM:	New Dynasty Construction	EMAIL:	estimating@new-dc.com
DOCUMENT/DIVISION NUMBER:	Div. 9	DRAWING NUMBER:	A9.30 & A9.31 Finish Schedules

REQUESTED CLARIFICATION:

1. The Finish Specification Legend on both plan sheets A9.30 and A9.31 Finish Schedules specifies AWP-01 Tectum direct attach panels for the Acoustical Wall Panel. Nowhere, however, can we find any call outs or keynotes for this scope of work. Please advise if there will be acoustical wall panels in this project and if so, please provide their specific locations. Also, please provide specifications.

RESPONSE TO CLARIFICATION:

AWP-01 HAVE BEEN DELETED FROM SCHCEDULES, SEE ADDENDUM

ALLEN TIAN, SGH ARCHITECTS
10.19.2022

Attach additional numbered sheets as necessary; however, only one (1) request shall be contained on each submitted form.

PRE-BID CLARIFICATION FORM (For Contractor's Use)

PROJECT NAME:	DIAMOND BAR HIGH SCHOOL 400 BUILDING MODERNIZATION		
PROJECT NUMBER:	110822-2		
TO:	Suzanne Beach	EMAIL:	sbeach@wvusd.org

DATE:	10-10-2022		
FROM:	New Dynasty Construction	EMAIL:	estimating@new-dc.com
DOCUMENT/DIVISION NUMBER:	Div. 3	DRAWING NUMBER:	

REQUESTED CLARIFICATION:

1. The Project Manual lists under Division 3 03-35000 Concrete Floor Finishing and 03-3543 Polished Concrete Finishing. However, nowhere on the plans can we find any call outs or keynotes for these scopes of work. Please provide their specific locations.

RESPONSE TO CLARIFICATION:

SCHEDULE UPDATED, POLISH CONCRETE HAS BEEN DELETED, SEE ADDENDUM

ALLEN TIAN, SGH ARCHITECTS
10.19.2022

Attach additional numbered sheets as necessary; however, only one (1) request shall be contained on each submitted form.

PRE-BID CLARIFICATION FORM (For Contractor's Use)

PROJECT NAME:	DIAMOND BAR HIGH SCHOOL 400 BUILDING MODERNIZATION		
PROJECT NUMBER:	110822-2		
TO:	Suzanne Beach	EMAIL:	sbeach@wvusd.org

DATE:	10/11/2022		
FROM:	KYA Services LLC Steve Arlotti	EMAIL:	Steve.arlotti@thekyagroup.com
DOCUMENT/DIVISION NUMBER:		DRAWING NUMBER:	

REQUESTED CLARIFICATION:

1. On sheets A8.12, A8.14, A8.15, A8.19 & A8.20 there are many details that call out for keynote 8.13G "(N) hollow metal door and frame"
These look more like windows.
Please confirm that these are windows and not doors?

RESPONSE TO CLARIFICATION:

KEYNOTES HAVE BEEN UPDATED, SEE ADDENDUM

ALLEN TIAN, SGH ARCHITECTS
10.19.2022

Attach additional numbered sheets as necessary; however, only one (1) request shall be contained on each submitted form.

PB RFI 015

PRE-BID CLARIFICATION FORM (For Contractor's Use)

PROJECT NAME:	DIAMOND BAR HIGH SCHOOL 400 BUILDING MODERNIZATION		
PROJECT NUMBER:	110822-2		
TO:	Suzanne Beach	EMAIL:	sbeach@wvusd.org

DATE:	10/11/2022		
FROM:	KYA Services LLC Steve Arlotti	EMAIL:	Steve.arlotti@thekyagroup.com
DOCUMENT/DIVISION NUMBER:		DRAWING NUMBER:	

REQUESTED CLARIFICATION:
1. Is there any abatement or lead paint removal for this project? 2. Is there an abatement report for this project?

RESPONSE TO CLARIFICATION:
No Hazardous Material indicated in District Reports. Hazardous Material Survey Reports will be provided to Project Awarded Contractor. Pasqual Gutierrez, Roule Construction 10.21.2022

Attach additional numbered sheets as necessary; however, only one (1) request shall be contained on each submitted form.

PB RFI 016

PRE-BID CLARIFICATION FORM (For Contractor's Use)

PROJECT NAME:	DIAMOND BAR HIGH SCHOOL 400 BUILDING MODERNIZATION		
PROJECT NUMBER:	110822-2		
TO:	Suzanne Beach	EMAIL:	sbeach@wvusd.org

DATE:	10/11/2022		
FROM:	KYA Services LLC Steve Arlotti	EMAIL:	Steve.arlotti@thekyagroup.com
DOCUMENT/DIVISION NUMBER:		DRAWING NUMBER:	A2.01

REQUESTED CLARIFICATION:
1. On the demo sheet A2.01, it does not call out for the flooring to be removed. Does all of the flooring get removed?
RESPONSE TO CLARIFICATION:
KEYNOTES HAVE BEEN ADDED, SEE ADDENDUM ALLEN TIAN, SGH ARCHITECTS 10.19.2022

Attach additional numbered sheets as necessary; however, only one (1) request shall be contained on each submitted form.

PRE-BID CLARIFICATION FORM (For Contractor's Use)

PROJECT NAME:	DIAMOND BAR HIGH SCHOOL 400 BUILDING MODERNIZATION		
PROJECT NUMBER:	110822-2		
TO:	Suzanne Beach	EMAIL:	sbeach@wvusd.org

DATE:	10/12/2022		
FROM:	Harik Construction Inc.	EMAIL:	lilah@harikconstruction.com
DOCUMENT/DIVISION NUMBER:		DRAWING NUMBER:	A9.11 & A10.21

REQUESTED CLARIFICATION:

Reference on sheet A9.11 window schedule it says storefront but when you go to sheet A10.21 details it is hollow metal frame. Please clarify if it will be an storefront with alum. frame or with the hollow metal frames.

RESPONSE TO CLARIFICATION:

ALL STOREFRONT AND DOORS ARE HOLLOW METAL, SEE ADDENDUM

ALLEN TIAN, SGH ARCHITECTS
10.19.2022

Attach additional numbered sheets as necessary; however, only one (1) request shall be contained on each submitted form.

PRE-BID CLARIFICATION FORM (For Contractor's Use)

PROJECT NAME:	DIAMOND BAR HIGH SCHOOL 400 BUILDING MODERNIZATION		
PROJECT NUMBER:	110822-2		
TO:	Suzanne Beach	EMAIL:	sbeach@wvusd.org

DATE:	10-12-2022		
FROM:	New Dynasty Construction	EMAIL:	estimating@new-dc.com
DOCUMENT/DIVISION NUMBER:		DRAWING NUMBER:	S202 [E] Framing Plan - Main Level

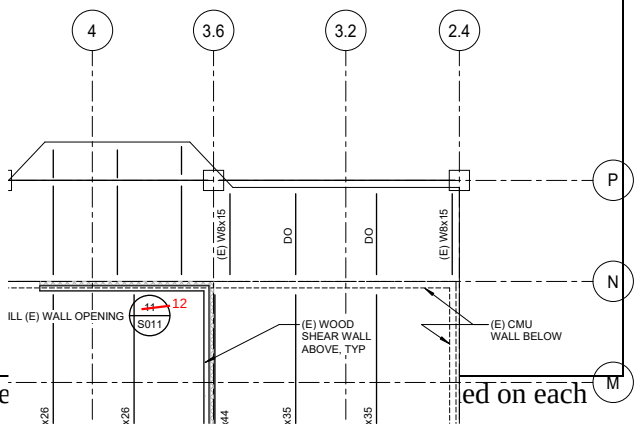
REQUESTED CLARIFICATION:

1. Please provide Det. 11/S011. This is being called out on plan S202 [E] Framing Plan - Main Level; however, there is no such detail drawing on plan sheet S011.

RESPONSE TO CLARIFICATION:

Typo error.
Call out should be 12/S011, just like the rest of the wood wall to be in filled.

FDT/IMEG 10/13/2022



Attach additional numbered sheets as necessary; however, ed on each submitted form.

PRE-BID CLARIFICATION FORM (For Contractor's Use)

PROJECT NAME:	DIAMOND BAR HIGH SCHOOL 400 BUILDING MODERNIZATION		
PROJECT NUMBER:	110822-2		
TO:	Suzanne Beach	EMAIL:	sbeach@wvusd.org

DATE:	10-12-2022		
FROM:	New Dynasty Construction	EMAIL:	estimating@new-dc.com
DOCUMENT/DIVISION NUMBER:	Div. 8	DRAWING NUMBER:	Det. 14/A8.14 Collaboration Space 123 - East

REQUESTED CLARIFICATION:

1. Please advise which among the Interior Storefront types in the Interior Storefront Schedule on A9.11 Storefront Schedule do the two (2) storefronts shown on Det. 14/A8.14 belong under? They are like 7'-0" wide and 10'-0" high; no storefront type on the schedule is 10'-0" high. In addition, they are not labeled on the A2.10 Lower Level Remodel Floor Plan, unlike the other interior storefronts.

RESPONSE TO CLARIFICATION:

HOLLOW METAL STOREFRONT TYPE ADDED, SEE ADDENDUM

ALLEN TIAN, SGH ARCHITECTS
10.19.2022

Attach additional numbered sheets as necessary; however, only one (1) request shall be contained on each submitted form.

PRE-BID CLARIFICATION FORM (For Contractor's Use)

PROJECT NAME:	DIAMOND BAR HIGH SCHOOL 400 BUILDING MODERNIZATION		
PROJECT NUMBER:	110822-2		
TO:	Suzanne Beach	EMAIL:	sbeach@wvusd.org

DATE:	10-12-2022		
FROM:	New Dynasty Construction	EMAIL:	estimating@new-dc.com
DOCUMENT/DIVISION NUMBER:	Div. 9	DRAWING NUMBER:	A8.10 thru A8.10 Interior Elevations

REQUESTED CLARIFICATION:

1. From plan sheet A8.10 through A8.19 Interior Elevations, Tackable Wall Surface TWC-01 is keynoted as 10.12B Tackboard. On plan sheet A8.20, however, TWC-01 is keynoted as 10.11A Tackable Wall Coverings, and it only goes to Classroom 226.

Please confirm the Tackable Wall Coverings per Spec Sec. 09-7270 Tackable Wall Coverings goes only to Classroom 226 while the Tackable Wall Surfaces per Spec Sec. 09-7219 Vinyl-Coated Fabric-Coated Tack Surfaces go to all the other classrooms.

RESPONSE TO CLARIFICATION:

KEYNOTES HAVE BEEN UPDATED, SEE ADDENDUM

ALLEN TIAN, SGH ARCHITECTS
10.19.2022

Attach additional numbered sheets as necessary; however, only one (1) request shall be contained on each submitted form.

PRE-BID CLARIFICATION FORM (For Contractor's Use)

PROJECT NAME:	DIAMOND BAR HIGH SCHOOL 400 BUILDING MODERNIZATION		
PROJECT NUMBER:	110822-2		
TO:	Suzanne Beach	EMAIL:	sbeach@wvusd.org

DATE:	10-14-2022		
FROM:	New Dynasty Construction	EMAIL:	estimating@new-dc.com
DOCUMENT/DIVISION NUMBER:	Div. 9	DRAWING NUMBER:	11/A10.31 Soffit at Entry, A3.10 & A3.11 Remodel RCPs

REQUESTED CLARIFICATION:

1. Det. 11/A10.31 Plaster Soffit at Entry shows a section of a soffit over an entry. Please advise if the '7/8" cement plaster soffit over metal lath' is existing or new. Most items on the drawing were shown as either new or existing. If new, please advise which entry soffits on the remodel reflected ceiling plans will receive new plaster per the detail drawing.

RESPONSE TO CLARIFICATION:

SEE ADDENDUM FOR LOCATION

ALLEN TIAN, SGH ACHITECTS
10.19.2022

Attach additional numbered sheets as necessary; however, only one (1) request shall be contained on each submitted form.

PRE-BID CLARIFICATION FORM (For Contractor's Use)

PROJECT NAME:	DIAMOND BAR HIGH SCHOOL 400 BUILDING MODERNIZATION		
PROJECT NUMBER:	110822-2		
TO:	Suzanne Beach	EMAIL:	sbeach@wvusd.org

DATE:	10/18/2022		
FROM:	KYA Services LLC Steve Arlotti	EMAIL:	Steve.arlotti@thekyagroup.com
DOCUMENT/DIVISION NUMBER:	07 51 16.11 Page 1 B) 2	DRAWING NUMBER:	

REQUESTED CLARIFICATION:

1. In Spec Section 07 51 16.11 page 1 1.2 Summary B-2 says Allowances: refer to Division 01 Section "allowances" for description of Work in this Section affected by Allowances. I don't section a spec for allowances or alternates in Division 1.
Are there any allowances on this project?
Are there any alternates on this project?
Please Advise

RESPONSE TO CLARIFICATION:

There are no allowances nor alternates on this projects.

Todd Huckins, SGH Architects
10.18.2022

Attach additional numbered sheets as necessary; however, only one (1) request shall be contained on each submitted form.

PRE-BID CLARIFICATION FORM (For Contractor's Use)

PROJECT NAME:	DIAMOND BAR HIGH SCHOOL 400 BUILDING MODERNIZATION		
PROJECT NUMBER:	110822-2		
TO:	Suzanne Beach	EMAIL:	sbeach@wvusd.org

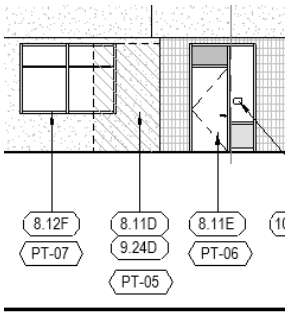
DATE:	10-18-2022		
FROM:	New Dynasty Construction	EMAIL:	estimating@new-dc.com
DOCUMENT/DIVISION NUMBER:	Div. 9	DRAWING NUMBER:	A5.10 Exterior Elevations

REQUESTED CLARIFICATION:

1. Please advise where we can find Keynote 9.24D '[N] Exterior stud infill with cement plastering' on A5.10 Exterior Elevations.

RESPONSE TO CLARIFICATION:

SEE EAST EXTERIOR ELEV.
BETWEEN GRID J & L



ALLEN TIAN, SGH ARCHITECTS
10.19.2022

Attach additional numbered sheets as necessary; however, only one (1) request shall be contained on each submitted form.

PRE-BID CLARIFICATION FORM (For Contractor's Use)

PROJECT NAME:	DIAMOND BAR HIGH SCHOOL 400 BUILDING MODERNIZATION		
PROJECT NUMBER:	110822-2		
TO:	Suzanne Beach	EMAIL:	sbeach@wvusd.org

DATE:	10-18-2022		
FROM:	New Dynasty Construction	EMAIL:	estimating@new-dc.com
DOCUMENT/DIVISION NUMBER:	Div. 27 & 28	DRAWING NUMBER:	

REQUESTED CLARIFICATION:

1. Please confirm there are no surveillance camera requirements in the project. Spec Section 28-2300 notes to provide cameras per schedule on T0.02 but none is provided and no cameras were noted on the drawings.
2. Please advise if the WAPs and enclosures are Owner furnished Contractor Installed? WAPs are shown on the plans but no model or other requirements are given.
3. Will the projection screen in the Library be wall or ceiling mounted? Please clarify.
4. Please provide approved mounting details for the Library projection screen.
5. Please clarify the plans and specs for the projection screens. Spec section 115213 calls out for manual projection screen while the Technology Schedule on T0.02 is calling out for an electric type. Please confirm which is the correct screen type.
6.Sheet T0.02 has an Equipment Schedule which includes AV equipment but there was no AV spec section included. Please provide the missing spec section for the AV work.

RESPONSE TO CLARIFICATION:

Refer to addendum #1 floorplans showing rough-ins for future camera locations. Contractor will be responsible for installation of camera rough-in per detail provided and Cat 6 cable and terminations. The owner will provide installation of the individual cameras.

Refer to outlet schedule on sheet T0.02, sched
ule notes 1 & 2. No enclosures are required. The owner will provide WAP and mounting clips for installation by contractor. The projection screen will be ceiling mounted. Details will be provided as part of future construction set.

Details will need to be reviewed by structural engineer and DSA prior to issuing. They will be provided as part of future construction set.

Proceed with the model number shown on the T-series drawings.

ALL AV configurations are based on Extron Polevault or Wall Vault. For bidding purposes, contractor shall follow manufactuer guidelines for a professional installation.

Attach additional numbered sheets as necessary; however, only one (1) request shall be contained on each submitted form.

PRE-BID CLARIFICATION FORM (For Contractor's Use) Pre-Bid RFI #25

PROJECT NAME:	DIAMOND BAR HIGH SCHOOL 400 BUILDING MODERNIZATION		
PROJECT NUMBER:	110822-2		
TO:	Suzanne Beach	EMAIL:	sbeach@wvusd.org

DATE:	10-18-2022		
FROM:	New Dynasty Construction	EMAIL:	estimating@new-dc.com
DOCUMENT/DIVISION NUMBER:	Div. 28	DRAWING NUMBER:	

REQUESTED CLARIFICATION:

1. The Panasonic PT-DZ570U projector that was called out on T0.02 is now discontinued. Please provide a current model number.

2. Please confirm how many AV ceiling speakers should be in the Library. Sheet T2.12 is showing (2) however sheet T5.01 is showing (4).

3. The Extron MLC 104 controller is now discontinued. Will the Extron MLC 100 be acceptable instead?

4. Should the Extron VoiceLift mic be included with the Extron AV systems?

5. Should the Extron paging interupt sensor be included with the Extron AV system?

RESPONSE TO CLARIFICATION:

1. The specific model number to replace the Panasonic PT-DZ570U projector is TBD. For bidding purposes, the projector will be Owner Furnished/Contractor Installed (OFCI)
2. There will be (4) AV ceiling speakers. Refer to Addendum #1 for locations.
3. The Extron controller will be included in the Extron Wall Vault/Pole Vault system. MLC Plus 100 is currently the model provided in these kits.
4. Yes, contractor shall provide as part of every AV system the Extron VoiceLift Pro Microphone (42-255-01)
5. Yes, contractor shall provide as part of every AV system the Extron Priority Page Sensor (70-1064-01)

Attach additional numbered sheets as necessary; however, only one (1) request shall be contained on each submitted form.

PRE-BID CLARIFICATION FORM (For Contractor's Use)

PROJECT NAME:	DIAMOND BAR HIGH SCHOOL 400 BUILDING MODERNIZATION		
PROJECT NUMBER:	110822-2		
TO:	Suzanne Beach	EMAIL:	sbeach@wvusd.org

DATE:	10-18-2022		
FROM:	New Dynasty Construction	EMAIL:	estimating@new-dc.com
DOCUMENT/DIVISION NUMBER:	Div. 28	DRAWING NUMBER:	

REQUESTED CLARIFICATION:

1. The plans and specs do not match for the projector mount. Spec section 115214 calls out for the projector to be mounted with a Premier Mounts 24"-48" adjustable pole which is fairly standard. However the mounting details on 2/T5.02 is showing the projector hanging from a 1/2" rigid conduit which is somewhat unusual. Then sheet T0.02 is calling out for a Chief projector mount (AV-PRO-MNT). Please confirm which of these three options is correct.

2. The Equipment Schedule on T0.02 has the Samsung flat panel (SC-MON-75) and the Chief mount (SC-MNT-1) listed with the Structured Cabling (SC) parts. These two pieces are part of the AV system and seems like they should be included with AV Systems. Please clarify if these should be provided with the AV systems OR with the Structured Cabling?

3. Please provide the missing model number for the "AV-SP1-C" ceiling speakers that are located in the Library.

RESPONSE TO CLARIFICATION:

1. Contractor shall bid mounting system shown on drawing T5.02, detail #2.
2. Both the monitor SC-MON-75 and monitor mount (SC-MNT-1) shall be part of the AV system installation.
3. Refer to Addendum #1 for speaker model information. Speaker basis of design shall be Extron SF-26X.

Attach additional numbered sheets as necessary; however, only one (1) request shall be contained on each submitted form.

PB RFI 027

PRE-BID CLARIFICATION - ~~RFI # 1~~

PROJECT NAME:	DIAMOND BAR HIGH SCHOOL 400 BUILDING MODERNIZATION		
PROJECT NUMBER:	110822-2		
TO:	Suzanne Beach	EMAIL:	sbeach@wvusd.org

DATE:	October 18, 2022		
FROM:	NOVUS CONSTRUCTION	EMAIL:	bid@novusconstruction.com
DOCUMENT/DIVISION NUMBER:	RFI Deadline	DRAWING NUMBER:	N/A

REQUESTED CLARIFICATION:
Per jobwalk information the Pre-Bid RFI deadline is on October 18, 2022 no later than 5:00 PM, however per Instruction to Bidders the Pre-bid clarification request shall be filed a minimum of six business (6) days prior to bid opening. Please clarify.

RESPONSE TO CLARIFICATION:
RFI DEADLINE IS TUESDAY OCTOBER 18, 2022 BY 5:00PM PASQUAL GUTIERREZ, ROULE CONSTRUCTION 10.19.2022

PB RFI 028

PRE-BID CLARIFICATION - ~~RFI~~ # 2

PROJECT NAME:	DIAMOND BAR HIGH SCHOOL 400 BUILDING MODERNIZATION		
PROJECT NUMBER:	110822-2		
TO:	Suzanne Beach	EMAIL:	sbeach@wvusd.org

DATE:	October 18, 2022		
FROM:	NOVUS CONSTRUCTION	EMAIL:	bid@novusconstruction.com
DOCUMENT/DIVISION NUMBER:	Temporary Fencing Layout	DRAWING NUMBER:	N/A

REQUESTED CLARIFICATION:

Please provide temporary fencing layout on the lower and main level of the building perimeter. Also please provide laydown, dumpster, trailer and parking layout including access/entry/exit to site.

RESPONSE TO CLARIFICATION:

Issuance with Addendum No. 1, Construction Barricade Fencing & Milestone Schedule Plan with expanded Specification 01 50 00 Temporary Facilities and Controls.

PASQUAL GUTIERREZ, ROULE CONSTRUCTION
10.19.2022

PB RFI 029

PRE-BID CLARIFICATION - ~~RFI~~ # 3

PROJECT NAME:	DIAMOND BAR HIGH SCHOOL 400 BUILDING MODERNIZATION		
PROJECT NUMBER:	110822-2		
TO:	Suzanne Beach	EMAIL:	sbeach@wvusd.org

DATE:	October 18, 2022		
FROM:	NOVUS CONSTRUCTION	EMAIL:	bid@novusconstruction.com
DOCUMENT/DIVISION NUMBER:	~~Temporary Fencing Layout~~	DRAWING NUMBER:	N/A

REQUESTED CLARIFICATION:

Please confirm that the existing 400 Building will not be occupied by the District during the entire construction period.

RESPONSE TO CLARIFICATION:

The District will not occupy any portion of the 400 Building during construction.

PASQUAL GUTIERREZ, ROULE CONSTRUCTION
10.19.2022

PB RFI 030

PRE-BID CLARIFICATION - RFI # 4

PROJECT NAME:	DIAMOND BAR HIGH SCHOOL 400 BUILDING MODERNIZATION		
PROJECT NUMBER:	110822-2		
TO:	Suzanne Beach	EMAIL:	sbeach@wvusd.org

DATE:	October 18, 2022		
FROM:	NOVUS CONSTRUCTION	EMAIL:	bid@novusconstruction.com
DOCUMENT/DIVISION NUMBER:	Aluminum Framed Bi-Folding Doors	DRAWING NUMBER:	A10.21

REQUESTED CLARIFICATION:

Referencing to detail 10/A10.21, keynote 8.35A, please provide specification section for Aluminum Framed Bi-Folding Doors.

RESPONSE TO CLARIFICATION:

SEE ADDENDUM FOR SPEC SECTION 10 22 39.13 FOR INTERIOR, AND SECTION 08 43 33 FOR EXTERIOR

ALLEN TIAN, SGH ARCHITECTS
10.19.2022

PB RFI 31

PRE-BID CLARIFICATION - RFI # 5

PROJECT NAME:	DIAMOND BAR HIGH SCHOOL 400 BUILDING MODERNIZATION		
PROJECT NUMBER:	110822-2		
TO:	Suzanne Beach	EMAIL:	sbeach@wvusd.org

DATE:	October 18, 2022		
FROM:	NOVUS CONSTRUCTION	EMAIL:	bid@novusconstruction.com
DOCUMENT/DIVISION NUMBER:	Roller Shades - Section 12 24 13	DRAWING NUMBER:	N/A

REQUESTED CLARIFICATION:

Please provide plan indicating the locations of Roller Shades.

Roller Shades are part of Addendum 01

Karla Cerezo, SGH Architects
10.18.2022

RESPONSE TO CLARIFICATION:

PB RFI 032

PRE-BID CLARIFICATION - RFI # 6

PROJECT NAME:	DIAMOND BAR HIGH SCHOOL 400 BUILDING MODERNIZATION		
PROJECT NUMBER:	110822-2		
TO:	Suzanne Beach	EMAIL:	sbeach@wvusd.org

DATE:	October 18, 2022		
FROM:	NOVUS CONSTRUCTION	EMAIL:	bid@novusconstruction.com
DOCUMENT/DIVISION NUMBER:	New Exterior Gate	DRAWING NUMBER:	A0.0; 4/A0.0; 21/A10.20

REQUESTED CLARIFICATION:

Please provide specification section for the decorative metal secured egress gate with panic hardware per Detail 21/A10.20. Also, please confirm if the fence scope is only for the pedestrian gate and the fence on each side of the gate is existing.

RESPONSE TO CLARIFICATION:

BUILD ACCORDING TO THE DRAWINGS.

ALLEN TIAN, SGH ARCHITECTS
10.20.2022

PB RFI 033

PRE-BID CLARIFICATION - RFI # 7

PROJECT NAME:	DIAMOND BAR HIGH SCHOOL 400 BUILDING MODERNIZATION		
PROJECT NUMBER:	110822-2		
TO:	Suzanne Beach	EMAIL:	sbeach@wvusd.org

DATE:	October 18, 2022		
FROM:	NOVUS CONSTRUCTION	EMAIL:	bid@novusconstruction.com
DOCUMENT/DIVISION NUMBER:	Section 10 26 17 - Wall Protection/Corner Guards	DRAWING NUMBER:	N/A

REQUESTED CLARIFICATION:

Please provide plans/elevations indicating the locations of Corner Guards.

RESPONSE TO CLARIFICATION:

SEE ADDENDUM FOR LOCATION

ALLEN TIAN, SGH ARCHITECTS
10.19.2022

PB RFI 034

PRE-BID CLARIFICATION - RFI # 8

PROJECT NAME:	DIAMOND BAR HIGH SCHOOL 400 BUILDING MODERNIZATION		
PROJECT NUMBER:	110822-2		
TO:	Suzanne Beach	EMAIL:	sbeach@wvusd.org

DATE:	October 18, 2022		
FROM:	NOVUS CONSTRUCTION	EMAIL:	bid@novusconstruction.com
DOCUMENT/DIVISION NUMBER:	Section 10 26 23.11 - Decorative Protection Panels	DRAWING NUMBER:	N/A

REQUESTED CLARIFICATION:

Please provide plans/elevations indicating the locations of Decorative Protection Panels.

RESPONSE TO CLARIFICATION:

THERE ARE NO DECORATIVE PROTECTION PANELS, SEE ADDENDUM

ALLEN TIAN, SGH ARCHITECTS
10.19.2022

PB RFI 035

PRE-BID CLARIFICATION - RFI # 9

PROJECT NAME:	DIAMOND BAR HIGH SCHOOL 400 BUILDING MODERNIZATION		
PROJECT NUMBER:	110822-2		
TO:	Suzanne Beach	EMAIL:	sbeach@wvusd.org

DATE:	October 17, 2022		
FROM:	NOVUS CONSTRUCTION	EMAIL:	bid@novusconstruction.com
DOCUMENT/DIVISION NUMBER:	AWP-I (Tectum Panel)	DRAWING NUMBER:	A9.30

REQUESTED CLARIFICATION:

Please provide plans/elevations indicating the locations of AWP-1.

RESPONSE TO CLARIFICATION:

AWP-1 HAS BEEN DELETED, SEE ADDENDUM

ALLEN TIAN, SGH ARCHITECTS
10.19.2022

PB RFI 036

PRE-BID CLARIFICATION - RFI # 10

PROJECT NAME:	DIAMOND BAR HIGH SCHOOL 400 BUILDING MODERNIZATION		
PROJECT NUMBER:	110822-2		
TO:	Suzanne Beach	EMAIL:	sbeach@wvusd.org

DATE:	October 18, 2022		
FROM:	NOVUS CONSTRUCTION	EMAIL:	bid@novusconstruction.com
DOCUMENT/DIVISION NUMBER:	Floor Finish CONC-1	DRAWING NUMBER:	A9.30 & A9.31

REQUESTED CLARIFICATION:

Please confirm if floor finish CONC-1 per sheets A9.30 & A9.31 Room Finish Schedule is refering to Section 03 35 43 -Polished Concrete Finishing?

RESPONSE TO CLARIFICATION:

SPEC HAVE BEEN DELETED, SEE ADDENDUM

ALLEN TIAN, SGH ARCHITECTS
10.19.2022

PB RFI 037

PRE-BID CLARIFICATION - RFI # 11

PROJECT NAME:	DIAMOND BAR HIGH SCHOOL 400 BUILDING MODERNIZATION		
PROJECT NUMBER:	110822-2		
TO:	Suzanne Beach	EMAIL:	sbeach@wvusd.org

DATE:	October 18, 2022		
FROM:	NOVUS CONSTRUCTION	EMAIL:	bid@novusconstruction.com
DOCUMENT/DIVISION NUMBER:	Section 09 72 19- Vinyl Coated Fabric Covered Tack Surface	DRAWING NUMBER:	N/A

REQUESTED CLARIFICATION:

Please provide plans/elevations indicating the locations of Section 09 72 19.

RESPONSE TO CLARIFICATION:

DELETED, SEE ADDENDUM

ALLEN TIAN, SGH ARCHITECTS
10.19.2022

PB RFI 039

PRE-BID CLARIFICATION - RFI # ~~13~~

PROJECT NAME:	DIAMOND BAR HIGH SCHOOL 400 BUILDING MODERNIZATION		
PROJECT NUMBER:	110822-2		
TO:	Suzanne Beach	EMAIL:	sbeach@wvusd.org

DATE:	October 18, 2022		
FROM:	NOVUS CONSTRUCTION	EMAIL:	bid@novusconstruction.com
DOCUMENT/DIVISION NUMBER:	Hand Dryers	DRAWING NUMBER:	E2.21 & E2.22

REQUESTED CLARIFICATION:

Referencing to E2.21 Keynote #6 and E2.22 Keynote #8, please provide architectural plans indicating the final location of Hand Dryers. Also provide manufacturer and model number.

RESPONSE TO CLARIFICATION:

No Hand Dryers, SEE ADDENDUM

ALLEN TIAN, SGH ARCHITECTS
10.20.2022

PB RFI 040

PRE-BID CLARIFICATION - RFI # ~~14~~

PROJECT NAME:	DIAMOND BAR HIGH SCHOOL 400 BUILDING MODERNIZATION		
PROJECT NUMBER:	110822-2		
TO:	Suzanne Beach	EMAIL:	sbeach@wvusd.org

DATE:	October 18, 2022		
FROM:	NOVUS CONSTRUCTION	EMAIL:	bid@novusconstruction.com
DOCUMENT/DIVISION NUMBER:	Division 5 - Metals	DRAWING NUMBER:	S202

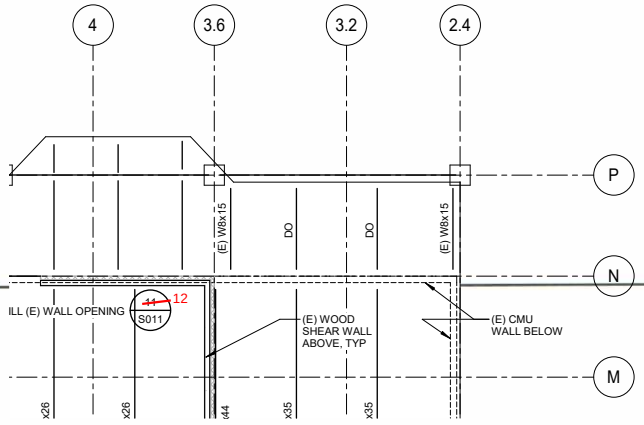
REQUESTED CLARIFICATION:

Referencing to Sheet S202, please provide the missing Detail 11/S011 between Grid 5 & 4.4 along Grid Line N.

RESPONSE TO CLARIFICATION:

Typo error.
Call out should be 12/S011, just like the rest of the wood wall to be in filled.

FDT/IMEG 10/13/2022



PB RFI 041

PRE-BID CLARIFICATION - RFI # 15

PROJECT NAME:	DIAMOND BAR HIGH SCHOOL 400 BUILDING MODERNIZATION		
PROJECT NUMBER:	110822-2		
TO:	Suzanne Beach	EMAIL:	sbeach@wvusd.org

DATE:	October 18, 2022		
FROM:	NOVUS CONSTRUCTION	EMAIL:	bid@novusconstruction.com
DOCUMENT/DIVISION NUMBER:	Division 5 - Metals	DRAWING NUMBER:	12/S011

REQUESTED CLARIFICATION:

Referencing to detail 12/S011, please provide the missing detail 13/S010 for the new concrete curb infill.

RESPONSE TO CLARIFICATION:

Type error. Call out should be 9/S011, instead of 13/S010

Francisco Tibajia, IMEG Corp.
10.19.2022

PB RFI 042

PRE-BID CLARIFICATION - RFI # 16

PROJECT NAME:	DIAMOND BAR HIGH SCHOOL 400 BUILDING MODERNIZATION		
PROJECT NUMBER:	110822-2		
TO:	Suzanne Beach	EMAIL:	sbeach@wvusd.org

DATE:	October 18, 2022		
FROM:	NOVUS CONSTRUCTION	EMAIL:	bid@novusconstruction.com
DOCUMENT/DIVISION NUMBER:	Wall Mount Monitor @ Teaching Wall	DRAWING NUMBER:	22/A10.50

REQUESTED CLARIFICATION:

Please confirm if monitor with non articulated wall mount @ teaching wall is OFCI?

RESPONSE TO CLARIFICATION:

ON ARCHITECTRUAL, WHERE INDICATES "MONITOR WITH NON-ARTICULATED WALL MOUNT - O.F.C.I." IS INCORRECT.

INCLUDED IN THE BID, SEE TECHNOLOGY

ALLEN TIAN, SGH ARCHITECTS
10.20.2022

PB RFI 043

PRE-BID CLARIFICATION FORM (For Contractor's Use)

PROJECT NAME:	DIAMOND BAR HIGH SCHOOL 400 BUILDING MODERNIZATION		
PROJECT NUMBER:	110822-2		
TO:	Suzanne Beach	EMAIL:	sbeach@wvusd.org

DATE:	10-18-2022		
FROM:	New Dynasty Construction	EMAIL:	estimating@new-dc.com
DOCUMENT/DIVISION NUMBER:	Div. 27	DRAWING NUMBER:	

REQUESTED CLARIFICATION:

1. Keynote #1 on Sheet T5.01 Det. 1 Connectivity Riser Diagram calls out for CAT-6 cable. Spec Sec. 27-1500 Par. 2.1 Horizontal Cabling, on the other hand, calls for CAT-6A cabling. Please confirm which cable should be installed for this project, CAT-6, or CAT-6A?

2. Detail 2 IP Based PA/Intercom Riser on plan sheet T5.01 Details shows a PA system server, PA-SRVR-1. This item is not shown on the Equipment Schedule on plan sheet T0.02. Is the PA system server existing? If not, please advise if this is Owner-furnished Owner-installed. If Contractor-furnished Contractor-installed, please provide requirements for a PA system server and its software. Please advise also who is responsible for programming and configuring the PA system server.

RESPONSE TO CLARIFICATION:

SEE ADDENDUM

Attach additional numbered sheets as necessary; however, only one (1) request shall be contained on each submitted form.

PRE-BID CLARIFICATION FORM (For Contractor's Use)

PROJECT NAME:	DIAMOND BAR HIGH SCHOOL 400 BUILDING MODERNIZATION		
PROJECT NUMBER:	110822-2		
TO:	Suzanne Beach	EMAIL:	sbeach@wvusd.org

DATE:	10-18-2022		
FROM:	New Dynasty Construction	EMAIL:	estimating@new-dc.com
DOCUMENT/DIVISION NUMBER:	Div. 27	DRAWING NUMBER:	

REQUESTED CLARIFICATION:

1. Part 2 of Spec Sec. 27-1513.13 Wireless Clock System calls out various equipment for a wireless clock system. The floor plans, however, do not show any wireless clocks. Instead, the plans call for combination clock speakers for the PA system. Are wireless clocks required for this project? Please confirm and provide the make and model required.

RESPONSE TO CLARIFICATION:

SEE ADDENDUM

Attach additional numbered sheets as necessary; however, only one (1) request shall be contained on each submitted form.