WESTMINSTER SCHOOL DISTRICT

SCHROEDER ELEMENTARY SCHOOL
HVAC UPGRADE & MODERNIZATION

CONSTRUCTION DOCUMENTS

11-14-2025



OWNER

WESTMINSTER SCHOOL DISTRICT

14121 Cedarwood St.
Westminster, CA 92683
t: 714.894.7311
Contact: Scott Harvey
sharvey@wsdk8.us

ARCHITECT

PBK

2400 East Katella Suite 950
Anaheim, CA 92806
t: 949-548-5000
Contact: Art Gonzalez Jr.

STRUCTURAL

VCA ENGINEERS, INC.

631 S Atlantic Blvd.
Monterey park, CA 91754
t: 323.729.6098
Contact: Nam Young

MEP ENGINEER

LEAF Engineers

8163 Rochester Ave. #100
Rancho Cucamonga, CA 91730
t: 909-390-3111
Contact: Rex Wang

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-124972 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/17/2026

PBK

SCHROEDER ELEMENTARY SCHOOL
HVAC UPGRADE & MODERNIZATION

PROJECT ADDRESS:
15151 Columbia Ln
Huntington Beach, CA 92647

CONSTRUCTION DOCUMENTS

DSA APPL NO.: 04-124972 DSA FILE NO.: 30-43

Architect
LICENSED ARCHITECT
Tong Yoo
No. C-31162
REN. 10-31-2027
STATE OF CALIFORNIA

COVER SHEET

G0.00

G0.01 - SHEET INDEX, DRAWING CONVENTIONS, AND LOCATION MAP

0" 1"

DRAWING CONVENTIONS

PROPERTY LINE

AREA DRAIN

NORTH / TRUE NORTH — NORTH SYMBOL

COLUMN LINE

Name / Elevation — FLOOR LINE

MATCH LINE

1 / A101 — SECTION CALLOUT SYMBOL

A1.01 / 12 — EXTERIOR ELEVATION SYMBOL

2 / 3 / A1.01 / 1 / 4 — INTERIOR ELEVATION SYMBOL

101 — DOOR DESIGNATION

A — WINDOW DESIGNATION

A / 11 — PARTITION TYPE

EXISTING PARTITION

NEW PARTITION

1 — REVISION NUMBER

1 / A-100 — DETAIL ENLARGED

1 / A-100 — PLAN OR DETAIL ENLARGED

1 / A101 — DETAIL SECTIONS AND VERTICAL SECTIONS

6'-0" 4'-0" 10'-0" — DIMENSIONS

NOTE: all dimensions to face of wall unless otherwise noted

SPOT ELEVATION

MATCH LINE
SEE XX/X-XXX — SHEET NUMBER ON WHICH CONTINUATION IS FOUND

FENCING (WITH POSTS)

BREAK LINE

12.34 — KEY NOTE

Room name
101
150 SF — ROOM NAME AND NUMBER

FHC FHC — FIRE HOSE CABINET (RECESSED AND SURFACE MOUNTED)

FEC FEC — FIRE EXTINGUISHER CABINET (RECESSED AND SURFACE MOUNTED)

TA1 — TOILET ACCESSORY SYMBOL

F.D. — FLOOR DRAIN

STATEMENT OF GENERAL CONFORMANCE

STATEMENT OF GENERAL CONFORMANCE

Application No. : 04-124972
File No. : 30-43

The drawings identified as follows:

- [X] All drawing sheets included in this set not bearing my stamp and signature.
- [ ] Drawing sheets denoted in the sheet index as follows_____
- [ ] Drawing sheets included under the following PC approval(s):_____

have been prepared by other design professionals or consultants who are licensed and authorized to prepare such drawings (plans) in this state. They have been examined by me for:

1. Design intent and appear to meet the appropriate requirements of Title 24, California Code of Regulations and the project specifications prepared by me, and

2. Coordination with my drawings (plans) and specifications and are acceptable for incorporation into the construction of this project.

Per Title 24, Part 1, Section 4-316(b): This statement of general conformance shall not be construed as relieving me of my rights, duties, and responsibilities under Section 17302 and 81138 of the Education Code and Section 4-336, 4-344 of Title 24, Part 1.

Signature		11/14/2025 Date
Yong Yoo	C-31162	10/31/2027
Printed Name	License Number	Expiration Date

DSA NOTES

1. CHANGES TO THE APPROVED DRAWINGS AND SPECIFICATIONS SHALL BE MADE BY A CONSTRUCTION CHANGE DOCUMENT (CCD) APPROVED BY THE DIVISION OF THE STATE ARCHITECT, AS REQUIRED BY SECTION 4-338, PART I, TITLE 24, CCR
2. A PROJECT INSPECTOR EMPLOYED BY THE DISTRICT (OWNER) AND APPROVED BY THE DIVISION OF THE STATE ARCHITECT SHALL PROVIDE CONTINUOUS INSPECTION OF THE WORK. THE DUTIES OF THE INSPECTOR ARE DEFINED IN SECTION 4-342, PART 1, TITLE 24, CCR; CLASS 2
3. A DSA ACCEPTED TESTING LABORATORY DIRECTLY EMPLOYED BY THE DISTRICT (OWNER) SHALL CONDUCT ALL THE REQUIRED TESTS AND INSPECTIONS FOR THE PROJECT.
4. ALL WORK SHALL CONFORM TO 2022 EDITION TITLE 24, CALIFORNIA CODE OF REGULATIONS (CCR).
5. THE INTENT OF THESE DRAWINGS AND SPECIFICATIONS IS THAT THE WORK OF THE ALTERNATION, 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).

SCOPE OF WORK

BUILDING IMPROVEMENTS INCLUDE, BUT ARE NOT LIMITED TO;

ADMIN BUILDING (EXISTING ADMINISTRATION BUILDING) [AL]
- (N) HVAC
- (N) INTERIOR / EXTERIOR PAINT FINISH
- STAFF & NURSE TOILET MODERNIZATION
- FIRE ALARM UPGRADE

BUILDING "K1 & K2" (EXISTING KINDERGARTEN CLASSROOM)
- (N) HVAC
- (N) INTERIOR / EXTERIOR PAINT FINISH
- FIRE ALARM UPGRADE

BUILDING "A,B,C,D" (EXISTING CLASSROOMS)
- (N) HVAC
- (N) INTERIOR / EXTERIOR PAINT FINISH
- STUDENT TOILET MODERNIZATION
- FIRE ALARM UPGRADE

MULTIPURPOSE BUILDING [MP]
- FIRE ALARM UPGRADE
- (N) INTERIOR / EXTERIOR PAINT FINISH

BUILDING RELOCATABLE CLASSROOMS (EXISTING RELO CLASSROOMS)
[R1, R2, R3, R4, R5, R6, R7, R8, R9, R10, R11, R12, R13]
- (N) EXTERIOR PAINT FINISH
- (N) PAINT AT FASCIA, EAVE

SITEWORK
- (N) PAINT FOR ALL (E) BLDG ROOF FASCIA, EAVE
- (N) PAINT FOR ALL (E) WALKWAY ROOF FASCIA, EAVE & POST.
- (N) PAINT FOR (E) DECORATIVE METAL FENCE
- PARKING LOT ACCESSIBLE PARKING & DROP-OFF AREA MODERNIZATION
- MAIN ENTRANCE ORNAMENTAL GATE & HARDWARE MODERNIZATION
- (N) ACCESSIBILITY COMPLIANT CONCRETE PAVING IN FRONT OF RELO R-7 TO R-13
- (N) CONCRETE PAVEMENT WALKWAY & (N) CONCRETE MECHANICAL PAD / ENCLOSURE

SITE IMPROVEMENTS INCLUDE, BUT ARE NOT LIMITED TO ACCESSIBILITY TO PATH OF TRAVEL.

NOTE:
- FIRE SAFETY DURING DEMOLITION AND/OR CONSTRUCTION SHALL COMPLY WITH 2022 CFC CHAPTER 33
- A WRITTEN SITE SAFETY PLAN IN COMPLIANCE WITH CFC 3303.1.1 MUST BE PREPARED AND AVAILABLE ON SITE PRIOR TO COMMENCEMENT OF ANY MOBILIZATION, DEMOLITION AND/OR CONSTRUCTION.

DRAWING INDEX

GENERAL

G0.00	COVER SHEET
G0.01	SHEET INDEX, DRAWING CONVENTIONS, AND LOCATION MAP
G0.02	ACCESSIBILITY SITE PLAN
G0.03	FIRE ACCESS SITE PLAN
G0.04	ENLARGED SITEPLAN
G0.05	CODE ANALYSIS - OVERALL
G0.06	SITE DETAILS
G0.07	SITE DETAILS

CIVIL

C2.00	GRADING PLAN
C2.01	GRADING PLAN
C3.00	DETAIL SHEET

DEMOLITION

D0.01	SITE DEMOLITION PLAN
D0.02	SITE DEMOLITION PLAN
D1.01	DEMO FLOOR PLAN
D1.02	DEMO FLOOR PLAN
D2.01	DEMO REFLECTED CEILING PLAN
D2.02	DEMO REFLECTED CEILING PLAN

ARCHITECTURAL

A1.01	FLOOR PLAN
A1.02	FLOOR PLAN
A2.01	REFLECTED CEILING PLAN
A2.02	REFLECTED CEILING PLAN
A3.01	OVERALL ROOF PLAN
A4.01	ENLARGED RESTROOM PLANS & ELEVATIONS
A4.02	ENLARGED RESTROOM PLANS & ELEVATIONS
A5.01	INTERIOR ELEVATIONS
A5.02	INTERIOR ELEVATIONS
A5.03	INTERIOR ELEVATIONS
A5.04	EXTERIOR ELEVATION
A5.05	EXTERIOR ELEVATION
A5.06	BUILDING SECTIONS
A6.01	DOOR SCHEDULE
A7.01	FINISH PLANS & SCHEDULE

ARCHITECTURAL DETAILS

AX1.01	WALL DETAILS
AX2.01	CEILING DETAILS
AX3.01	ROOF DETAILS
AX4.01	ACCESSIBILITY DETAILS
AX6.01	DOOR DETAILS

STRUCTURAL

S-0.1	GENERAL NOTES
S-1.1	DETAILS

MECHANICAL

M0.00	MECHANICAL SYMBOLS, LEGENDS & GENERAL NOTES
M0.01	MECHANICAL TITLE 24 FORMS
M0.02	MECHANICAL TITLE 24 FORMS
M0.03	MECHANICAL TITLE 24 FORMS
M0.04	MECHANICAL TITLE 24 FORMS
M1.01	MECHANICAL SITE PLAN
MD2.01	MECHANICAL FLOOR PLANS - DEMOLITION
MD2.02	MECHANICAL FLOOR PLANS - DEMOLITION
M2.01	MECHANICAL FLOOR PLANS
M2.02	MECHANICAL FLOOR PLANS
M5.01	MECHANICAL SCHEDULES
M6.01	MECHANICAL DETAILS
M6.02	MECHANICAL DETAILS
M6.03	MECHANICAL PIPING DIAGRAMS
M6.04	MECHANICAL WIRING DIAGRAMS

PLUMBING

P0.00	PLUMBING SYMBOLS, LEGENDS & GENERAL NOTES
P1.01	PLUMBING SITE PLAN
P2.01	PLUMBING FLOOR PLANS
P2.02	PLUMBING FLOOR PLANS
P5.01	PLUMBING SCHEDULES
P6.01	PLUMBING DETAILS
PD2.01	PLUMBING FLOOR PLANS - DEMOLITION
PD2.02	PLUMBING FLOOR PLANS - DEMOLITION

FIRE ALARM

FA0.00	FIRE ALARM SYMBOLS, LEGENDS & GENERAL NOTES
FA1.01	FIRE ALARM SITE PLAN
FA2.01A	FIRE ALARM FLOOR PLAN - ADMIN
FA2.01B	FIRE ALARM FLOOR PLAN - KINDERGARDEN
FA2.01C	FIRE ALARM FLOOR PLAN - MPR
FA2.02A	FIRE ALARM FLOOR PLANS - CLASSROOMS A & B
FA2.02C	FIRE ALARM FLOOR PLANS - CLASSROOMS C & D
FA2.03	FIRE ALARM FLOOR PLANS - RELOCATABLES
FA6.01	FIRE ALARM DETAILS
FA7.01	FIRE ALARM RISER
FA7.02	FIRE ALARM RISER
FA8.01	FIRE ALARM CALCULATIONS
FA8.02	FIRE ALARM CALCULATIONS

TOTAL SHEET: 84

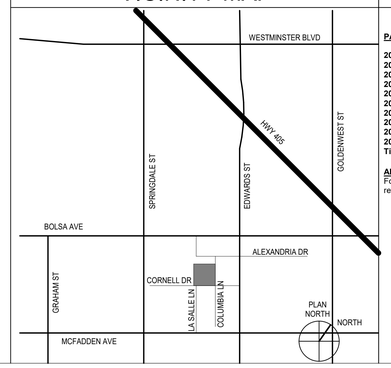
ABBREVIATIONS

A	A.D.	AREA DRAIN	E	ELECT.	ELECTRICAL	M	MFR. / MANUF.	MANUFACTURE (R)	S	SECT	SECTION
A	A.D.A.	AMERICANS WITH DISABILITIES ACT	E	ELEV	ELEVATION (DRAWING)	M	MH.	MANHOLE	S	SHT	SHEET
			E	EQUIP	EQUIPMENT	M	MIN.	MINIMUM	S	SIM	SIMILAR
A	A.D.A.	2010 ADA STANDARDS FOR ACCESSIBLE DESIGN	E	EXIST	EXISTING	M	MISC.	MISCELLANEOUS	S	SPC	SPECIAL COATING SYSTEM
			E	EXP	EXPANSION	M	MOD	MODULAR	S	SPEC	SPECIFICATION (S)
A	A.D.A.A.G.	AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES	E	EXT	EXTERIOR	M	MTL	METAL	S	SQ.	SQUARE
						M	MTP.	METAL TOILET PARTITION	S	SS / SS. STL	STAINLESS STEEL
A	A.F.F.	ABOVE FINISH FLOOR	F	F.E.	FIRE EXTINGUISHER				S	STL	STEEL
A	A.F.G.	ABOVE FINISH GRADE	F	F.E.C.	FIRE EXTINGUISHER CABINET	N	N.D.	NAPKIN DISPOSAL	S	STRUC / STRUCT	STRUCTURAL
A	A.H.J.	ATHORITY HAVING JURISDICTION	F	F.H.C.	FIRE HOSE CABINET	N	N.I.C.	NOT IN CONTRACT			
			F	FB.	FACE BRICK	N	N.T.S.	NOT TO SCALE	S	SUSP	SUSPENDED
A	A/C	AIR CONDITIONING	F	FD.	FLOOR DRAIN	N	N.V.	NAPKIN VENDOR	S	SVDF	SHEET VINYL DANCE FLOORING
A	ACC.	ACCESSIBLE, ACCESSIBILITY	F	FIN.	FINISH (ED)	N	NO.	NUMBER	S	SVF	SHEET VINYL FLOORING
A	ACP.	ACOUSTICAL PANEL	F	FIXT.	FIXTURE	N	NOM.	NOMINAL			
A	ACT.	ACOUSTICAL TILE	F	FLR.	FLOOR (ING)				T	T.A.S.	TEXAS ACCESSIBILITY STANDARDS (2012)
A	ADJ.	ABADJUSTABLE	F	FLSHG.	FLASHING	O	O.C.	ON CENTER (S)			
A	ALT.	ALTERNATE	F	FLUOR	FLUORESCENT	O	O.C.E.W.	ON CENTER EACH WAY	T	T.B.	TACK BOARD
A	ALUM.	ALUMINUM	F	FRP	FIBER REINFORCED PLASTIC	O	O.D.	OUTSIDE DIAMETER	T	T.D.R.	TOWEL DISPENSER AND RECEPTACL
A	ASPH.	ASPHALT				O	O.F.C.I.	OWNER FURNISHED, CONTRACTOR INSTALLED	T	T.O.	TOP OF
A	∠	ANGLE	G	G.B.	GRAB BAR				T	T.O.B.	TOP OF (WOOD) BLOCKING
			G	G.I.	GALVANIZED IRON	O	O.H.	OPPOSITE HAND	T	T.O.M.	TOP OF MASONRY
B	B.O.D.	BOTTOM OF DECK	G	GA.	GAUGE	O	OPNG.	OPENING	T	T.O.P.	TOP OF PARAPET
B	B.U.R.	BUILT-UP ROOF	G	GALV.	GALVANIZED	O	OPP.	OPPOSITE	T	T.O.S.	TOP OF STEEL
B	BD.	BOARD	G	GCMU	GLAZED CONCRETE MASONRY UNIT				T	T.T.D.	TOILET TISSUE DISPENSER
B	BLDG.	BUILDING	G	GEN.	GENERAL	P	P. LAM. / PLAM	PLASTIC LAMINATE	T	TEL	TELEPHONE
B	BLK.	BLOCK	G	GEN.	GENERAL	P	P.C.	PRECAST	T	TERR	TERRAZZO
B	BM.	BEAM	G	GL.	GLASS / GLAZING	P	P.H.	PAPER HOLDER	T	THK	THICK (NESS)
			G	GL.	GLASS	P	P.L.	PROPERTY LINE	T	TYP	TYPICAL
C	C	CHANNEL	G	GR.	GRADE	P	P.P.	POWER POLE			
C	C.J.	CONTROL JOINT	G	GTP.	GLAZED TILE PAVER	P	P.W.B.	PREFINISHED WALL BOARD	U	U.N.O.	UNLESS NOTED OTHERWISE
C	C.M.U.	CONCRETE MASONRY UNIT	G	GYP.	GYPSUM DRYWALL	P	PL.	PLATE	U	UR.	URINAL
C	C.W.	COLD WATER				P	PLUMB.	PLUMBING			
C	CAB. CABT	CABINET	H	H.W.	HOT WATER	P	PLYWD.	PLYWOOD	V	V	VENT
C	CFMF	COLD-FORMED METAL FRAMING	H	HM	HOLLOW METAL FRAME	P	POL.	POLISHED	V	V.C.T.	VINYL COMPOSITION TILE
C	CFSF	COLD-FORMED STEEL FRAMING	H	HORIZ.	HORIZONTAL	P	PR.	PAIR	V	V.I.F.	VERIFY IN FIELD
C	CL	CENTERLINE	H	HT.	HEIGHT	P	PREFIN.	PRE-FINISHED	V	VENT.	VENTILATING, VENTILATED
C	CLG.	CEILING				P	PT	PRESSURE-TREATED	V	VER.	VERIFY
C	CLR	CLEAR	I	I.D.	INSIDE DIAMETER	P	PT.	POINT	V	VERT.	VERTICAL
C	COL.	COLUMN	I	I.P.S.	IRON PIPE SIZE	P	PTD.	PAINTED	V	VGB	(PREFINISHED) VINYL CLAD GYPSUM BOARD
C	COMP.	COMPRESSIBLE	I	INSUL.	INSULATE (ED), (ION)						
C	CONC.	CONCRETE	I	INT.	INTERIOR	Q	Q.T.	QUARRY TILE	V	VWC	VINYL WALL COVERING
C	COND.	CONDITION									
C	CONT.	CONTINUOUS	J	JT.	JOINT	R	R / RAD	RADIUS	W	W	WASHING MACHINE
C	CORR.	CORRIDOR				R	RCP	REFLECTED CEILING PLAN	W	W.P.	WATER PROOFING
C	CPT.	CARPET (ED)	L	L.P.	LIGHT POLE	R	RD	ROOF DRAIN	W	W.S.	WEATHERSTRIP
C	CT.	CERAMIC TILE	L	LAM.	LAMINATE (D)	R	RE. . REF.	REFER TO / REFERENCE / SEE	W	W.W.	WATER WELL
C	CTSK.	COUNTER SINK	L	LAV.	LAVATORY	R	RECP.	RECEPTACLE	W	W.W.F.	WELDED WIRE FABRIC
			L	LT.	LIGHT	R	REINF.	REINFORCE (D), (ING)	W	W.W.M.	WOVEN WIRE MESH
D	D	DRYER	L	LT. WT.	LIGHTWEIGHT	R	REQ'D.	REQUIRED	W	W/	WITH
D	D.F.	DRINKING FOUNTAIN				R	RES.	RESILIENT	W	WC	WATER CLOSET
D	D.P.	DAMPPROOFING	M	M.O.	MASONRY OPENING	R	REV.	REVISION (S), REVISED	W	WD	WOOD
D	D.S.	DOWN SPOUT	M	MAS.	MASONRY	R	RF	RECREATIONAL RESILIENT FLOORING	W	WDW	WINDOW
D	DIA.	DIAMETER	M	MATL	MATERIAL (S)				W	WT	WEIGHT
D	DIM.	DIMENSION	M	MAX.	MAXIMUM	R	RPG.	RELOCATABLE PAINTED GYPSUM BOARD			
D	DTL.	DETAIL	M	MB.	MARKER BOARD						
D	DWG.	DRAWING	M	MECH.	MECHANICAL	R	RSS.	ROD STOCK AND SEALANT			
			M	MEM.	MEMBRANE						
E	E.J.	EXPANSION JOINT	M	MEM. WP.	MEMBRANE WATERPROOFING	S	S.C.	SEALED CONCRETE			
E	E.Q.	EQUAL	M	MEP	MECHANICAL, ELECTRICAL, PLUMBING	S	S.D.	SOAP DISPENSER			
E	EA.	EACH				S	S.N.D.	SANITARY NAPKIN DISPOSAL			
E	EDF	ELECTRIC DRINKING FOUNTAIN	M	MEPT	MECHANICAL, ELECTRICAL, PLUMBING, TECHNOLOGY	S	SCHED	SCHEDULE			
E	EL.	ELEVATION (HEIGHT)	M	MEZZ.	MEZZANINE	S	SCPL	SOLID CORE PLASTIC LAMINATE			
E	ELEC.	ELECTRICAL									

GENERAL NOTES

1. CONSTRUCTION DOCUMENTS DESCRIBE THE PRODUCTS, SYSTEMS, QUANTITIES, CONFIGURATION AND PERFORMANCE SPECIFICATIONS THAT DELIVER THE OVERALL DESIGN INTENT OF THE PROJECT.
2. THE CONSTRUCTION DOCUMENT DRAWINGS AND SPECIFICATIONS ARE COMPLIMENTARY, AND WHAT IS REQUIRED BY ONE SHALL BE AS BINDING AS IF REQUIRED BY BOTH.
3. PERFORMANCE BY THE CONSTRUCTION TEAM SHALL BE CONSISTENT WITH THE CONSTRUCTION DRAWINGS AND SPECIFICATIONS AS NECESSARY TO DELIVER THE INDICATED RESULTS OF THE DESIGN INTENT.
4. IF CONFLICTS ARISE BETWEEN DRAWINGS AND SPECIFICATIONS, NOTIFY ARCHITECT IMMEDIATELY FOR DETERMINATION BEFORE PROCEEDING, OTHERWISE THE MOST STRINGENT REQUIREMENTS SHALL GOVERN.
5. ALL MATERIALS AND WORKMANSHIP SHALL COMPLY WITH ALL GOVERNING CODES, ORDINANCES, REGULATIONS AND LAWS.
6. THE DESIGN ADEQUACY AND SAFETY OF ERECTION BRACING, SHORING, TEMPORARY SUPPORTS AND SCAFFOLDING IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
7. WHERE ANY CONFLICT OCCURS BETWEEN THE REQUIREMENTS OF LAWS, CODES, ORDINANCES, RULES AND REGULATIONS, THE MOST STRINGENT SHALL GOVERN.
8. ENACT ALL MEASURES TO PROTECT AND SAFEGUARD ALL EXISTING ELEMENTS TO REMAIN FROM BEING DAMAGED. REPLACE OR REPAIR EXISTING ELEMENTS DAMAGED BY THE EXECUTION OF THIS CONTRACT TO EQUAL OR BETTER CONDITION.
9. CUTTING, BORING, SAWCUTTING OR DRILLING THROUGH THE EXISTING OR NEW STRUCTURAL ELEMENTS SHALL NOT BE STARTED UNTIL THE DETAILS HAVE BEEN REVIEWED AND APPROVED BY THE ARCHITECT, AND STRUCTURAL ENGINEER OF RECORD.
10. VERIFY DIMENSIONS AND EXISTING CONDITIONS BEFORE COMMENCING WORK. REPORT DISCREPANCIES TO THE ARCHITECT PRIOR TO PROCEEDING WITH AFFECTED WORK.
11. DIMENSIONS NOTED AS "FIELD VERIFY" SHALL BE CHECKED AT THE SITE BY THE CONTRACTOR AND REVIEWED WITH THE ARCHITECT BEFORE INCORPORATING INTO THE WORK.
12. DO NOT SCALE DRAWING. WRITTEN DIMENSIONS TAKE PRECEDENCE. IF CLARIFICATION IS REQUIRED IN ORDER TO DETERMINE THE INTENT OF THE CONTRACT DOCUMENTS, CONTACT THE ARCHITECT.
13. NOTES OR DIMENSIONS LABELED "TYPICAL" SHALL APPLY TO SITUATIONS THAT ARE THE SAME OR SIMILAR.
14. SHOULD ANY EXISTING CONDITIONS SUCH AS DETERIORATION OR NON-COMPLYING CONSTRUCTION BE DISCOVERED WHICH IS NOT COVERED BY THE DSA-APPROVED DOCUMENTS WHEREIN THE FINISHED WORK WILL NOT COMPLY WITH TITLE 24, CALIFORNIA CODE OF REGULATIONS, A CONSTRUCTION CHANGE DOCUMENT, OR A SEPARATE SET OF PLANS AND SPECIFICATIONS, DETAILING AND SPECIFYING THE REQUIRED REPAIR WORK SHALL BE SUBMITTED TO AND APPROVED BY DSA BEFORE PROCEEDING WITH THE REPAIR WORK, PER CAC, 2013, 4-317(c)
15. SAFES DURING CONSTRUCTION MUST COMPLY WITH CBC AND CFC CHAPTER 33 - FIRE SAFETY DURING CONSTRUCTION AND DEMOLITION.
16. CONTRACTOR OPERATIONS SHALL NOT BLOCK, HINDER, IMPEDE OR OTHERWISE INHIBIT THE USE OF REQUIRED EXITS AT ANY TIME. CONTRACTOR SHALL MAINTAIN UNOBSTRUCTED ACCESS TO FIRE EXTINGUISHERS, FIRE HYDRANTS, TEMPORARY FIRE PROTECTION FACILITIES, STAIRWAYS AND OTHER ACCESS ROUTES FOR FIRE-FIGHTING EQUIPMENT AND OR PERSONNEL.
17. THE CALIFORNIA ENERGY CODE SECTION 10-103 REQUIRES ACCEPTANCE TESTING ON ALL NEWLY INSTALLED LIGHTING CONTROLS, MECHANICAL SYSTEMS, ENVELOPES, AND PROCESS EQUIPMENT AFTER INSTALLATION AND BEFORE PROJECT COMPLETION. AN ACCEPTANCE TEST IS A FUNCTIONAL PERFORMANCE TEST TO HELP ENSURE THAT NEWLY INSTALLED EQUIPMENT IS OPERATING AND IN COMPLIANCE WITH THE ENERGY CODE.
18. LIGHTING CONTROLS ACCEPTANCE TESTS MUST BE PERFORMED BY A CERTIFIED LIGHTING CONTROLS ACCEPTANCE TEST TECHNICIAN (ATT).
19. MECHANICAL SYSTEM ACCEPTANCE TESTS MUST BE PERFORMED BY A CERTIFIED MECHANICAL ATT FOR PROJECTS SUBMITTED ON OR AFTER OCTOBER 1, 2021.
20. ENVELOPE AND PROCESS EQUIPMENT ACCEPTANCE TESTS SHALL BE PERFORMED BY THE INSTALLING CONTRACTOR, ENGINEER/ARCHITECT OF RECORD OR THE OWNER'S AGENT.
21. A LISTING OF CERTIFIED ATT CAN BE FOUND AT: HTTPS://WWW.ENERGY.CA.GOV/PROGRAMS-AND-TOPICS/PROGRAMS/ACCEPTANCE-TEST-TECHNICIAN-CERTIFICATION-PROVIDER-PROGRAM/ACCEPTANCE
22. THE ACCEPTANCE TESTING PROCEDURES MUST BE REPEATED, AND DEFICIENCIES MUST BE CORRECTED BY THE BUILDER OR INSTALLING CONTRACTOR UNTIL THE CONSTRUCTION/INSTALLATION OF THE SPECIFIED SYSTEMS CONFORM AND PASS THE REQUIRED ACCEPTANCE CRITERIA.
23. PROJECT INSPECTORS WILL COLLECT THE FORMS TO CONFIRM THAT THE REQUIRED ACCEPTANCE TESTS HAVE BEEN COMPLETED.

VICINITY MAP



CODES & STANDARDS

PARTIAL LIST OF APPLICABLE CODES

2025 California Administration Code (CAC).....(Part 1, Title 24, CCR)
2022 California Building Code (CBC).....(Part 2, Title 24, CCR)
2022 California Electrical Code (CEC).....(Part 3, Title 24, CCR)
2022 California Mechanical Code (CMC).....(Part 4, Title 24, CCR)
2022 California Plumbing Code (CPC).....(Part 5, Title 24, CCR)
2022 California Energy Code (CEC).....(Part 6, Title 24, CCR)
2022 California Fire Code (CFC).....(Part 9, Title 24, CCR)
2022 California Existing Building Code (CEBC).....(Part 10, Title 24, CCR)
2022 California Green Building Standards Code.....(Part 11, Title 24, CCR)
2022 California Referenced Standards Code.....(Part 12, Title 24, CCR)
Title 19 CCR, Public Safety, State Fire Marshall Regulations

APPLICABLE STANDARDS
For a list of applicable standards, including California amendments to the NFPA Standards, refer to CBC Chapter 35 and CFC Chapter 80.

SHEET NUMBERING

A2.01A
- **SHEET NUMBER**
- **BUILDING AREA**
- **SEQUENCE (.01 - .99.....etc.)**
- **SHEET DISCIPLINE TYPE**

DISCIPLINE

G	GENERAL
C	CIVIL
L	LANDSCAPE
CA	SPORTS
S	STRUCTURAL
D	DEMOLITION
A	ARCHITECTURAL
M	MECHANICAL
E	ELECTRICAL
P	PLUMBING
T	TECHNOLOGY
FS	FOOD SERVICE
AV	ACOUSTICAL
TH	THEATRICAL

0	GENERAL
0	SITE PLANS & DETAILS
1	FLOOR PLANS
2	REFLECTED CEILING PLANS & DETAILS
3	ROOF PLANS & DETAILS
4	BUILDING SECTIONS
5	ADA & ENLARGED PLANS
6	ENLARGED PLAN DETAILS
7	ENLARGED MILLWORK & DETAILS
8	PARTITION TYPES & WALL SECTIONS
9	WINDOWS, DOORS, FRAME ELEVATIONS & DETAILS
10	FINISH SCHEDULES
11	ELEVATIONS (EXTERIOR & INTERIOR)
12	CASEWORK ELEVATIONS

Not for permitting or construction

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-124972 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/17/2026

PBK

ARCHITECT PBK Architects, Inc.
ANAHEIM PBK.com
2400 E KATELLA AVE, Suite 950
ANAHEIM, CA 92806
P 949-548-5000

SCHROEDER ELEMENTARY SCHOOL
HVAC UPGRADE & MODERNIZATION

PROJECT ADDRESS:
15151 Columbia Ln
Huntington Beach, CA 92647

CONSTRUCTION DOCUMENTS

DSA APPL NO.: 04-124972 DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT EST. 1872

RELO
A K2 K1
B ADMIN
C
D MPR
RELO

KEY PLAN
NORTH: PLAN

Consultant

Architect
LICENSED ARCHITECT Yong Yoo No. C-31162 REN. 10-31-2027 STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
11-14-2025	250376

REVISIONS

No.	Description	Date

CONSTRUCTION DOCUMENTS

SHEET INDEX, DRAWING CONVENTIONS, AND LOCATION MAP

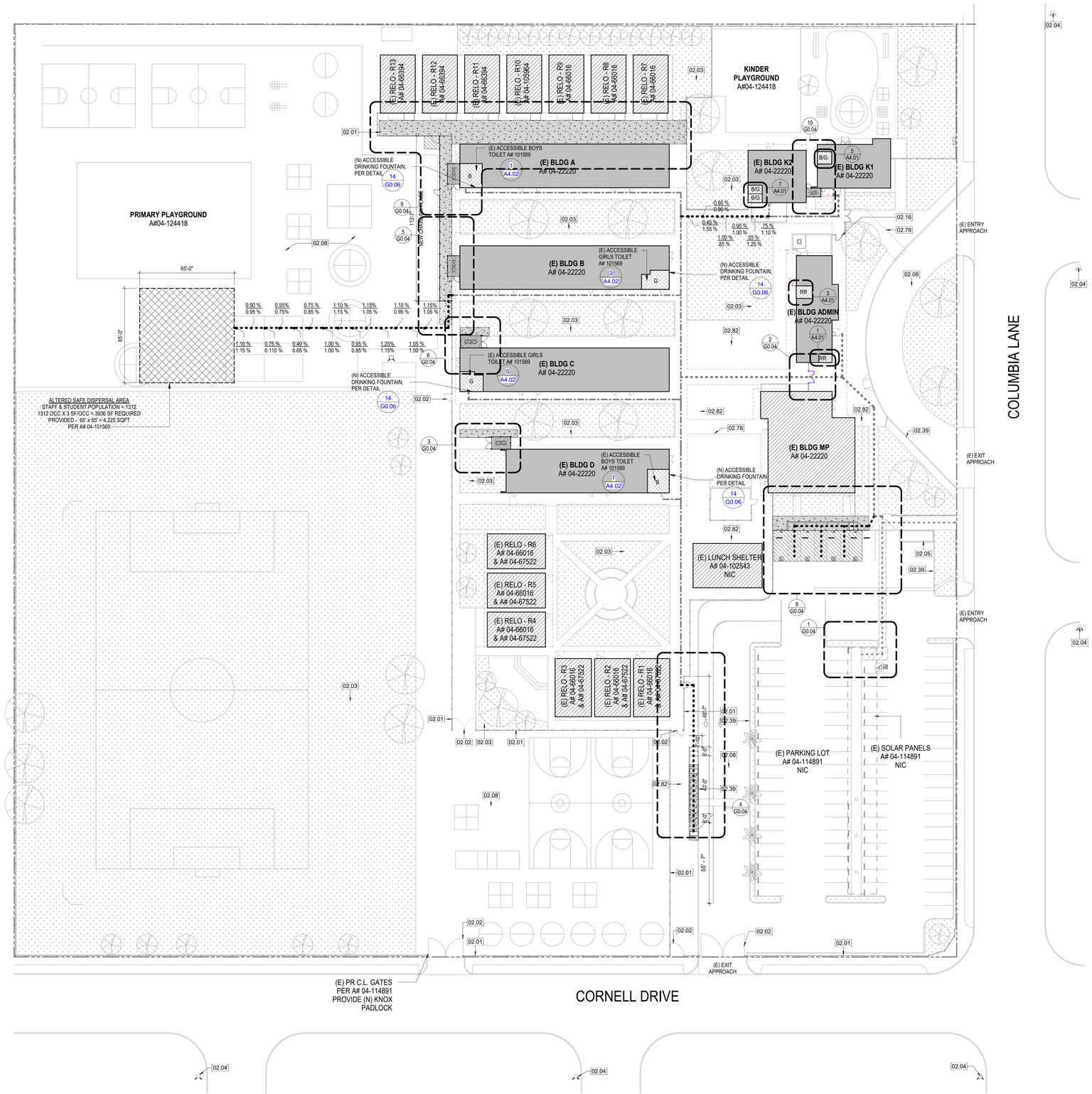
This document is for plan review only

G0.01

FILE PATH: Z:\Projects\...
3/13/2026 5:35:22 PM

G0.02 - ACCESSIBILITY SITE PLAN

0" 1"



1 SITE ACCESSIBILITY PLAN

1" = 30'-0"

GENERAL ARCH SITE PLAN NOTES

1. REFER TO CIVIL DOCUMENTS
2. COORD. ALL SPOT ELEVATIONS AND DIMENSIONS WITH CIVIL
3. PROVIDE AND INSTALL POSITIVE DRAINAGE AWAY FROM ALL BUILDINGS OF 5 % FOR A HORIZ. DISTANCE OF 10 FEET AT ALL EXTERIOR NON-PAVED AREAS U.N.O
4. REFER TO CIVIL DOCUMENTS FOR CONCRETE SIDEWALK EXPANSION JOINTS AND CONCRETE SIDEWALK CONTROL JOINTS
5. VERIFY AND CONFIRM ALL JOINT LAYOUTS AT ALL CONCRETE SIDEWALKS WITH ARCH. PRIOR TO POURING OF CONCRETE
6. PROVIDE AND INSTALL CONCRETE SIDEWALK CONTROL JOINTS AT AREAS NOT SPECIFICALLY INDICATED AT DISTANCES EQUIVALENT TO SIDEWALK WIDTH, BUT NOT TO EXCEED 10 FEET ON-CENTER MAX.
7. VERIFY ALL SITE SIGNAGE LOCATIONS WITH ARCH. PRIOR TO INSTALLATION OF SITE SIGNAGE

PATH OF TRAVEL

DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE STATEMENT:
THE POT INDENTIFIED IN THESE CONSTRUCTION DOCUMENTS IS COMPLIANT WITH THE CURRENT APPLICABLE CALIFORNIA BUILDING CODE ACCESSIBILITY PROVISIONS FOR **PATH OF TRAVEL REQUIREMENTS FOR ALTERATIONS, ADDITIONS AND STRCUTURAL REPAIRS**. AS PART OF THE DESIGN OF THIS PROJECT, THE POT WAS EXAMINED AND ANY ELEMENTS, COMPONENTS OR PORTIONS OF THE POT THAT WERE DETERMINED TO BE NONCOMPLIANT 1) HAVE BEEN IDENTIFIED AND 2) THE CORRECTIVE WORK NECESSARY TO BRING THEM INTO COMPLIANCE HAS BEEN INCLUDED WITHIN THE SCOPE OF THIS PROJECT'S WORK THROUGH DETAILS, DRAWINGS AND SPECIFICATIONS INCORPORATED INTO THESE CONSTRUCTION DOCUMENTS. ANY NONCOMPLIANT ELEMENTS, COMPONENTS OR PORTIONS OF THE POT THAT WILL NOT BE CORRECTED BY THIS PROJECT BASED ON VALUATION THRESHHOLD LIMITATIONS OR A FINDING OF UNREASONABLE HARDSHIP ARE SO INDICATED IN THESE CONSTRUCTION DOCUMENTS. DURING CONSTRUCTION, IF POT ITEMS WITHIN THE SCOPE OF THE PROJECT REPRESENTED AS CODE COMPLIANT ARE FOUND TO BE NONCONFORMING BEYOND RESONABLE CONSTRUCTION TOLERANCES, THEY SHALL BE BROUGHT INTO COMPLIANT WITH THE CBC AS A PART OF THIS PROJECT BY MEANS OF A CONSTRUCTION CHANGE DOCUMENT.

BARRIER-FREE ACCESS ROUTE WITHOUT ANY ABRUPT VERTICAL CHANGES EXCEEDING 1/2" BEVELED AT 1:2 MAXIMUM SLOPE EXCEPT THAT LEVEL CHANGES DO NOT EXCEED 1/4" VERTICAL AND IS AT LEAST 48" WIDE.

SURFACE IS SLIP RESISTANT, STABLE, FIRM AND SMOOTH.

CROSS SLOPE DOES NOT EXCEED 2% AND SLOPE IN THE DIRECTION OF TRAVEL IS LESS THAN 5% UNLESS OTHERWISE INDICATED.

P.O.T. SHALL MAINTAIN FREE OF OVERHANGING OBSTRUCTIONS TO 80" MINIMUM (11B-307.4) AND PROTRUDING OBJECTS GREATER THAN 4" PROJECTION FROM WALL AND ABOVE 27" AND LESS THAN 80" (11B-204 AND 11B-307). ARCHITECT TO VERIFY THAT ALL BARRIERS IN THE P.O.T. HAVE BEEN REMOVED OR WILL BE REMOVED UNDER THIS PROJECT, AND PATH OF TRAVEL COMPLIES WITH CBC 11B-206 AND 11B-201.4.

THERE SHALL BE AN ACCESSIBLE P.O.T. IN THE "CONSTRUCTION SUPPORT FACILITIES" AREA (TEMPORARY OR PERMANENT) SUCH AS BUT NOT LIMITED TO OFFICES, MEETING ROOMS, PLAN ROOMS, ADMINISTRATIVE, RELATED PARKING, AND BATHING / TOILETS.
WHERE PORTABLE TOILET UNITS ARE PROVIDED AT LEAST ONE OF EACH TYPE SHALL BE ACCESSIBLE AND CONNECTED BY ACCESSIBLE ROUTE TO THE "CONSTRUCTION SUPPORT FACILITIES" (EXCEPT AS NOTED IN 11B-203.2) DURING CONSTRUCTION, AN ACCESSIBLE ROUTE SHALL NOT BE REQUIRED BETWEEN SITE ARRIVAL POINTS OR BOUNDARY OF THE BOUNDARY OF THE AREA OF CONSTRUCTION AND THE ENTRANCE TO THE "CONSTRUCTION SUPPORT FACILITIES" IF THE ONLY MEANS OF ACCESS BETWEEN THEM IS A VEHICULAR WAY NOT PROVIDING PEDESTRIAN ACCESS.

ACCESSIBILITY LEGEND

- (N) PATH OF TRAVEL.
- (E) PATH OF TRAVEL A# 04-101569 FIELD VERIFIED
- (E) PATH OF TRAVEL A# 04-114891
- PROPERTY LINE
- (E) CHAINLINK FENCE
- (E) BUILDINGS WITH LIMITED SCOPE
  - RELOCATABLES R1 TO R-13 - FIRE ALARM, INTERIOR & EXTERIOR PAINT FINISH
  - MPR - FIRE ALARM ONLY
  - (E) LUNCH SHELTER - EXTERIOR PAINT FINISH
- BUILDING TO BE REMODELED
- ACCESSIBLE TOILET ROOMS
  RR = GENDER NEUTRAL STAFF RESTROOM
  B = BOYS
  G = GIRLS
- AREA OF (N) MEP CONC.PAD.
- AREA OF (N) CONCRETE PAVING.
- AREA OF (N) ASPHALT PAVING.
- AREA OF (N) ASPHALT OVERLAY AND (N) PARKING STRIPING.

% = SLOPE IN THE DIRECTION OF TRAVEL
% = CROSS SLOPE

***(E) SLOPES PER SMART LEVEL, VERIFIED IN FIELD.

PARKING CALCULATIONS

	TOTAL	REGULAR	ACCESSIBLE REQUIRED	ACCESSIBLE PROVIDED	ACCESSIBLE VAN REQUIRED	ACCESSIBLE VAN PROVIDED
PARKING SPACES	83	79	4	5	1	1
COVERED SPACES	17	16	1	1	1	1

DSA CERTIFICATION LIST

1. THE FOLLOWING PROJECT... **A# 04-124418** CLOSED WITH DSA CERTIFICATION ON
2. THE FOLLOWING PROJECT... **A# 04-118193** VOID/CANCELED DATE: 12/8/2023
3. THE FOLLOWING PROJECT... **A# 04-114891** CLOSED WITH DSA CERTIFICATION ON 1/26/2017
4. THE FOLLOWING PROJECT... **A# 04-105982** VOID/CANCELED DATE: 6/28/2007
5. THE FOLLOWING PROJECT... **A# 04-102543** CLOSED WITH DSA CERTIFICATION ON 11/7/2007

CONSTRUCTION KEYED NOTES

02.01 (E) CHAINLINK FENCING, TO REMAIN.
02.02 (E) CHAINLINK GATE, TO REMAIN.
02.03 (E) TURF
02.04 (E) FIRE HYDRANT
02.05 (E) TRASH ENCLOSURE
02.08 (E) A.C PAVING
02.16 (E) GATE WITH PANIC HARDWARE & KICKPLATE
02.39 (E) CONCRETE CURB AND GUTTER TO REMAIN, PROTECT IN PLACE
02.78 (E) EDGE OF ROOF/COVERED WALKWAY OVERHANG.
02.82 (E) CONCRETE PAVEMENT TO REMAIN & PROTECT IN PLACE.

Not for permitting or construction

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-124972 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/17/2026

PBK

ARCHITECT PBK Architects, Inc.
PBK.com
ANAHEIM
2400 E KATELLA AVE, Suite 950
ANAHEIM, CA 92806
P 949-548-5000

SCHROEDER ELEMENTARY SCHOOL
HVAC UPGRADE & MODERNIZATION

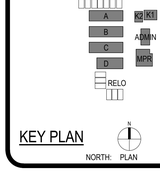
PROJECT ADDRESS:
15151 Columbia Ln
Huntington Beach, CA 92647

CONSTRUCTION DOCUMENTS

DSA FILE NO.: 30-43

DSA APPL NO.: 04-124972





Consultant

Architect



CLIENT
WESTMINSTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
11-14-2025	250376

REVISIONS

No.	Description	Date

CONSTRUCTION DOCUMENTS

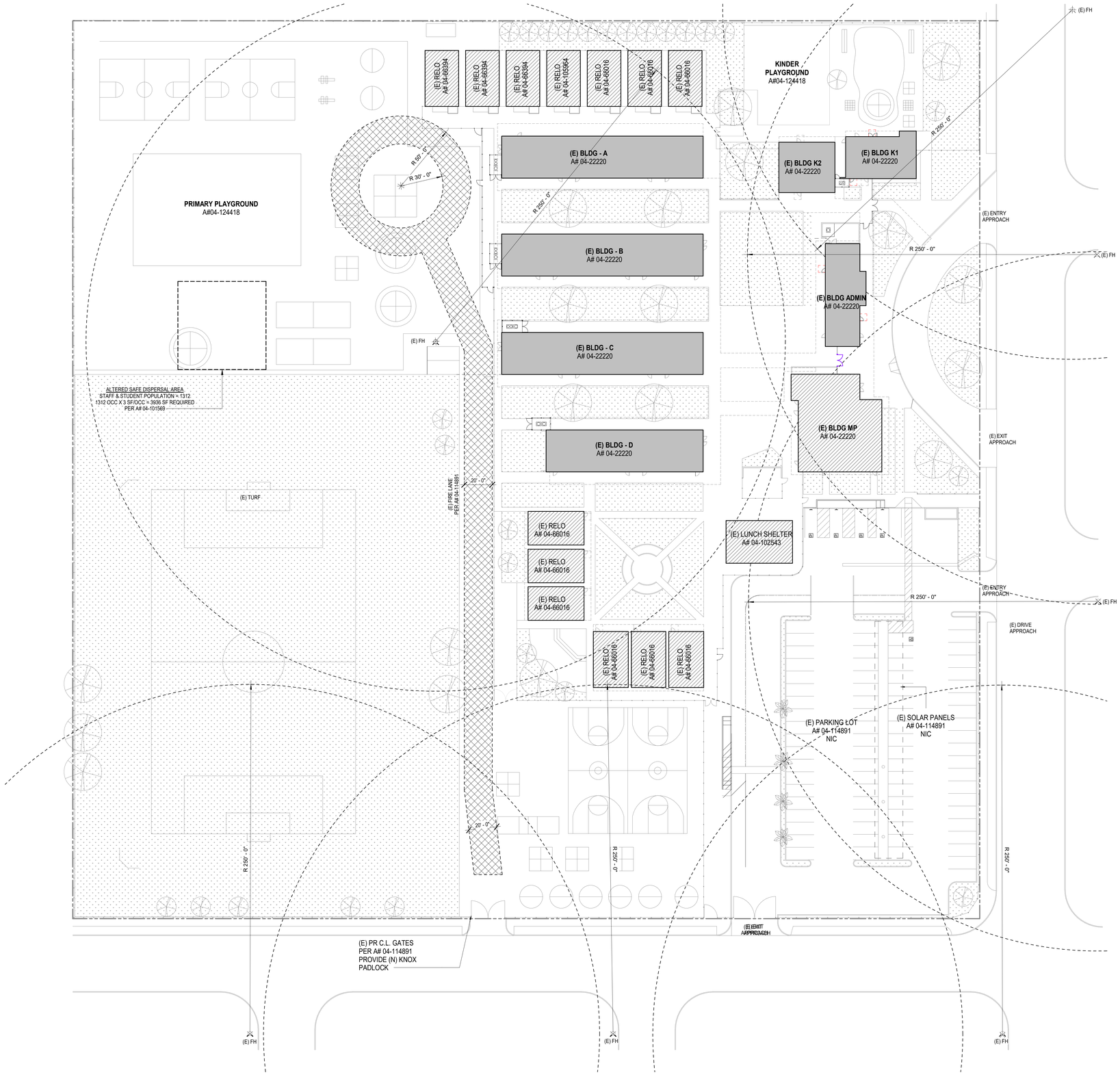
ACCESSIBILITY SITE PLAN

This document is for plan review only

G0.02

FILE PATH: Z:\Projects\...
3/13/2026 5:35:33 PM

0" 1"



1 ACCESSIBILITY SITE PLAN
1" = 30'-0"

DSA 810

FIRE & LIFE SAFETY SITE CONDITIONS SUBMITTAL

Division of the State Architect (DSA) documents referenced within this publication are available on the DSA Forms or DSA Publications webpages.

To facilitate the Division of the State Architect's (DSA) fire and life safety plan review of project site conditions, DSA requires the design professional to provide the following information at time of project submittal for projects consisting of construction of a new campus, construction of new building(s), additions to existing buildings, and for site alternate design means for fire department emergency vehicle access, and fire suppression water supply.

Information associated with compliance items 1 through 3 below is to be provided for all project types indicated above. Information associated with items 4 through 7 is to be completed when an alternate means is utilized. Acknowledgement by the school district and signature from the Local Fire Authority (LFA) is only required when an alternate design means is being requested.

The Project Information and Fire & Life Safety Information sections are to be completed for all projects and imaged onto the fire access site plan. When an alternate design/means is proposed, all sections on pages 1 and 2 are to be completed and imaged on the fire access site plan.

For additional information refer to the instructions at the end of this form and DSA Policy *PL 09-01: Fire Flow for Buildings.*

PROJECT INFORMATION	
School District/Owner:	Westminster School District
Project Name/School:	Schroeder Elementary School
Project Address:	15151 Columbian Ln. Huntington Beach. CA 92647

FIRE & LIFE SAFETY INFORMATION				
1.	Has a fire hydrant flow test been performed within the past 12 months? *(If yes, provide a copy of the test data.)*	Yes ☐		No ☑
2.	Was the fire hydrant water flow test performed as part of this LFA review?	Yes ☐		No ☑
3.	Is the project located within a designated fire hazard severity zone (FHSZ) as established by Cal-Fire? *(If yes, indicate FHSZ classification below.)*	Yes ☐		No ☑
	Refer to the following website for FHSZ locations: Fire Hazard Severity Zones in State Responsibility Area	Moderate ☐	High ☐	Very High ☐
	Wildland Interface Area (WIFA) *(If any designations are checked, project design must meet the requirements of CBC Chapter 7A.)*			WIFA ☐

FIRE ACCESS SITE PLAN LEGEND

- (E) PROPERTY LINE
- (E) BUILDINGS WITH LIMITED SCOPE - RELOCATABLES R1 TO R-13 - FIRE ALARM, INTERIOR & EXTERIOR PAINT FINISH - MPR - FIRE ALARM, STOREFRONT
- BUILDING TO BE REMODELED
- AREA OF SAFE DISPERSAL
- (E) FIRE ACCESS LANE PER A#114891
- R 250' - 0 — FIRE HYDRANT WITH RADIUS OF REACH

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-124972 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/17/2026

Not for permitting or construction

ARCHITECT PBK Architects, Inc.
PBK.com
ANAHEIM
2400 E KATELLA AVE, Suite 950
ANAHEIM, CA 92806
P 949-548-5000

SCHROEDER ELEMENTARY SCHOOL
HVAC UPGRADE & MODERNIZATION

PROJECT ADDRESS:
15151 Columbia Ln
Huntington Beach, CA 92647

CONSTRUCTION DOCUMENTS

DSA FILE NO.: 30-43
DSA APPL NO.: 04-124972

KEY PLAN
NORTH: PLAN

Consultant

Architect

LICENSED ARCHITECT Tong Yao No. C-31162 REN. 10-31-2027 STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
11-14-2025	250376

REVISIONS

No.	Description	Date

CONSTRUCTION DOCUMENTS

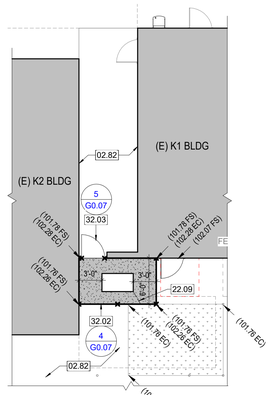
FIRE ACCESS SITE PLAN

This document is for plan review only

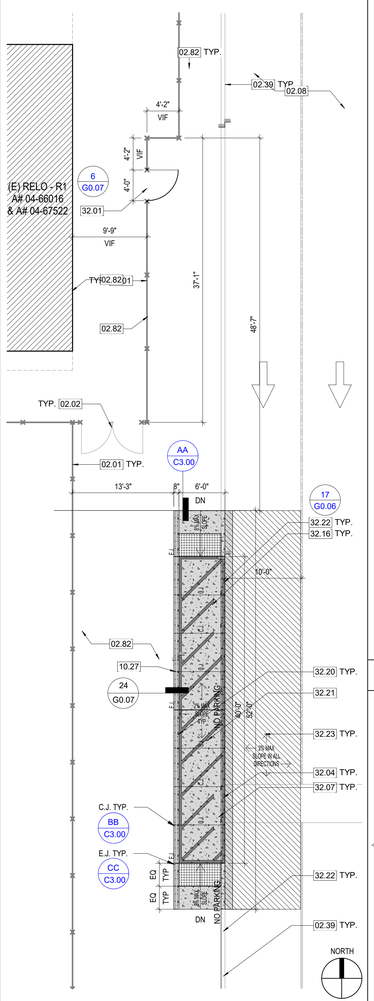
G0.03

FILE PATH: Z:\Projects\...
3/13/2026 5:35:35 PM

0" 1"

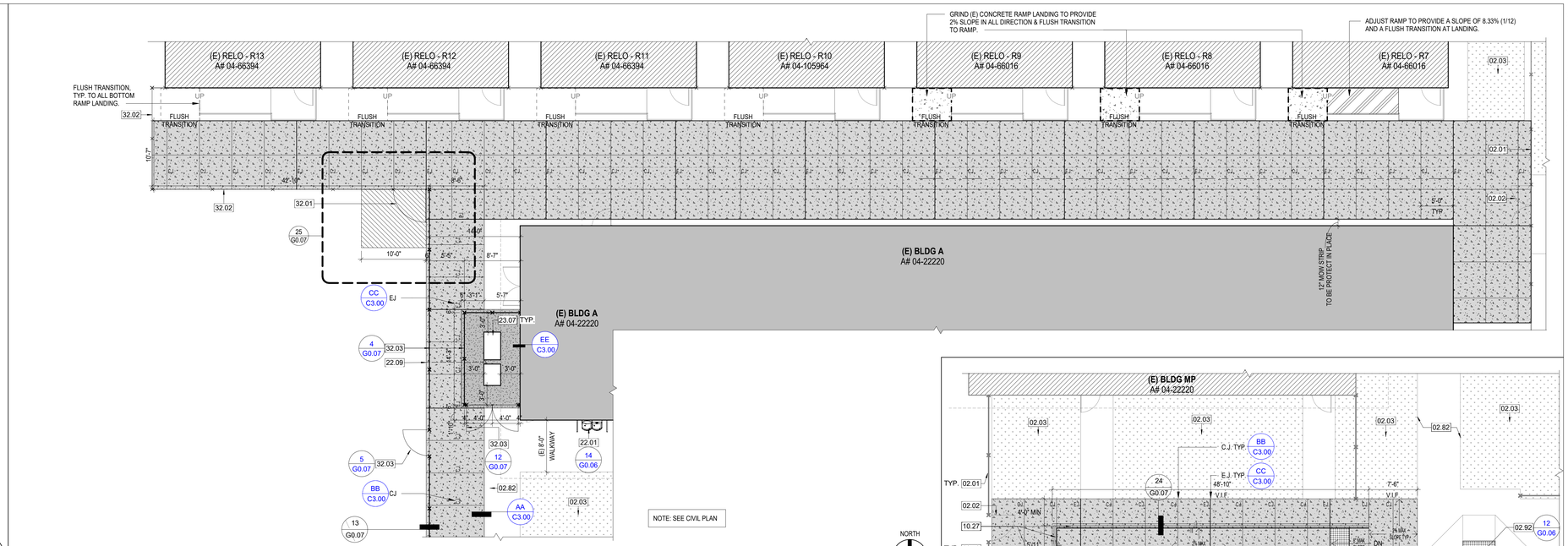


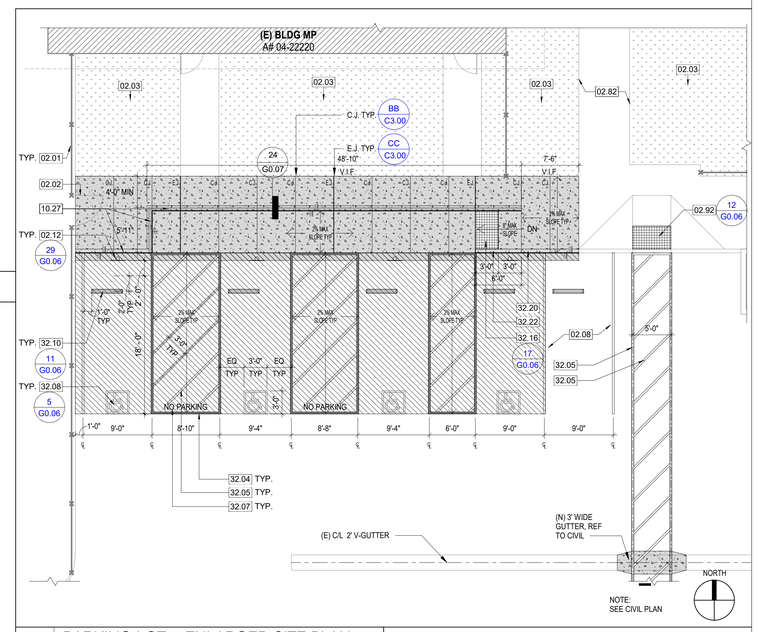
10 KINDER MECH ENCLOSURE SITEPLAN
1/8" = 1'-0"



4 (N) ACCESSIBLE DROP-OFF CURB & GATE
1/8" = 1'-0"

9 (N) AC PAVING & CONCRETE RAMP AT RELO R7 & R13 & BLDG A MECHANICAL ENCLOSURE ENLARGED SITE PLAN
1/8" = 1'-0"





8 PARKING LOT - ENLARGED SITE PLAN
1/8" = 1'-0"

SITE ABBREVIATION LEGEND

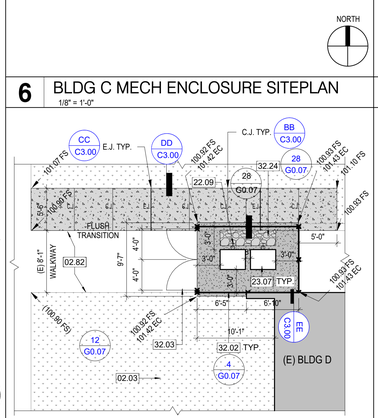
(#)	- TOPOGRAPHIC HEIGHT IN FEET
BW	- BACK OF WALL
CLF	- CHAIN LINK FENCE
EC	- EDGE OF CONCRETE
EG	- EDGE OF GUTTER
EP	- EDGE OF PAVEMENT
INV	- INVERT
LP	- LIP OF GUTTER
FG	- FINISH GRADE
FL	- FLOW LINE
FP	- FINISH PAVEMENT
FS	- FINISH SURFACE
NG	- NATURAL GROUND
TC	- TOP OF CURB

CONSTRUCTION KEYED NOTES

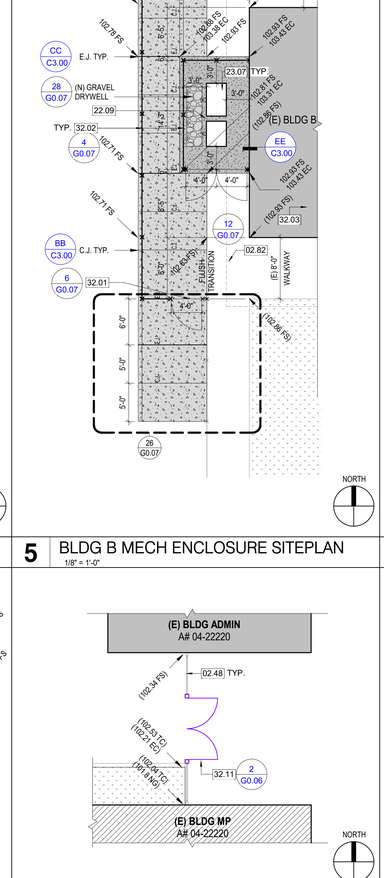
02.01	(E) CHAINLINK FENCING, TO REMAIN.
02.02	(E) CHAINLINK GATE, TO REMAIN.
02.03	(E) TURF
02.08	(E) A.C.PAVING
02.12	(E) ACCESSIBLE PARKING POST TO REMAIN, REPLACE SIGNAGE PER DETAIL
02.39	(E) CONCRETE CURB AND GUTTER TO REMAIN, PROTECT IN PLACE
02.48	(E) METAL FENCE AND POSTS TO REMAIN. PROTECT IN PLACE. PREPARE FOR (N) PAINT FINISH
02.82	(E) CONCRETE PAVEMENT TO REMAIN & PROTECT IN PLACE.
02.84	(E) CONCRETE WHEELSTOP
02.92	(E) ACCESSIBLE CURB RAMP
02.95	(E) 4" BLUE STRIPING
02.96	(E) 4" WHITE STRIPING
02.97	(E) 12" HIGH MIN. LETTERS IN WHITE PAINT, READING 'NO PARKING'. NO DIAGONAL STRIPING THROUGH TEXT, TYP.
02.98	(E) INTERNATIONAL SYMBOL OF ACCESSIBILITY
10.27	(N) METAL RAIL, REF 24/G0.07
22.01	(N) ACCESSIBLE DRINKING FOUNTAIN W/ BOTTLE FILLER AND WING GUARDS
22.09	(N) MECHANICAL UNIT DRAIN LINE UNDER CONCRETE SLAB
23.07	(N) MECHANICAL UNIT , SEE MECHANICAL DRAWING
32.01	(N) 6'-0" HIGH BY 4'-0" WIDE GALV. STEEL CHAIN LINK GATE WITH PANIC HARDWARE
32.02	(N) 6'-0" HIGH GALV. STEEL CHAIN LINK FENCE
32.03	(N) 6'-0" HIGH GALV. STEEL CHAIN LINK GATE
32.04	(N) 4" BLUE STRIPING
32.05	(N) 4" WHITE STRIPING
32.07	(N) 12" HIGH MIN. LETTERS IN WHITE PAINT, READING 'NO PARKING'. NO DIAGONAL STRIPING THROUGH TEXT, TYP.
32.08	(N) INTERNATIONAL SYMBOL OF ACCESSIBILITY
32.10	(N) CONCRETE WHEELSTOP
32.11	(N) PAIR OF ORNAMENTAL GATES WITH PANIC HARDWARE
32.16	(N) TRUNCATED DOMES
32.20	(N) CONCRETE CURB SEE CIVIL DETAIL
32.21	(N) CONCRETE PAVEMENT W/ 5% MAX SLOPE IN DIRECTION OF TRAVEL & 2% MAX CROSS SLOPE
32.22	(N) CONCRETE CURB TRANSITION
32.23	(N) PAINTED WHITE DRIVE AISLE DIRECTIONAL SIGNAGE
32.24	(N) GRAVEL DRYWELL, REF 28/G0.07

ENLARGED SITE LEGEND

- (N) PATH OF TRAVEL
- PROPERTY LINE
- (E) CHAINLINK FENCE
- (N) CHAINLINK FENCE
- (E) BUILDING N.I.C. - NO SCOPE OF WORK
- (E) BUILDING - FIRE ALARM SCOPE ONLY (IN SCOPE OF WORK)
- (E) BUILDING TO BE REMODELED (IN SCOPE OF WORK)
- TOILET ROOMS
  - RR = GENDER NEUTRAL RESTROOM
  - B = BOYS
  - G = GIRLS
  - S = STAFF
- AREA OF (N) MEP CONC.PAD PROVIDE 2% SLOPE AWAY FROM THE BUILDING
- AREA OF (N) CONCRETE PAVING
- AREA OF (N) ASPHALT PAVING
- AREA OF (N) ASPHALT SLURRY COAT
- ADJUST METAL RAMP PER
- (E) SLOPES PER SMART LEVEL, VERIFIED IN FIELD. (0.0% / 0.0%; SLOPE IN DIRECTION OF TRAVEL; CROSS SLOPE)



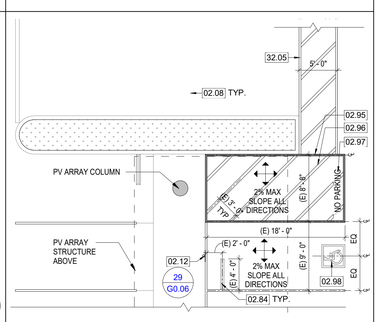
6 BLDG C MECH ENCLOSURE SITEPLAN
1/8" = 1'-0"



5 BLDG B MECH ENCLOSURE SITEPLAN
1/8" = 1'-0"

3 BLDG D MECH ENCLOSURE SITEPLAN
1/8" = 1'-0"

2 (N) ACCESSIBLE MAIN ENTRANCE GATE
1/8" = 1'-0"



1 ENLARGED (E) ACCESS PARK AT SOLAR
1/8" = 1'-0"

PER A# 04-114891

Not for permitting or construction

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-124972 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/17/2026

PBK

ARCHITECT PBK Architects, Inc.
PBK.com
ANAHEIM
2400 E KATELLA AVE, Suite 950
ANAHEIM, CA 92806
P 949-548-5000

SCHROEDER ELEMENTARY SCHOOL
HVAC UPGRADE & MODERNIZATION

PROJECT ADDRESS:
15151 Columbia Ln
Huntington Beach, CA 92647

CONSTRUCTION DOCUMENTS

DSA FILE NO.: 30-43

DSA APPL NO.: 04-124972

RELO
A
B
C
D
K2 K1
ADMIN
MPR
RELO
KEY PLAN
NORTH: PLAN

Consultant

Architect
LICENSED ARCHITECT
Yong Yoo
No. C-31162
REN. 10-31-2021
STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
11-14-2025	250376

REVISIONS

No.	Description	Date

CONSTRUCTION DOCUMENTS

This document is for plan review only

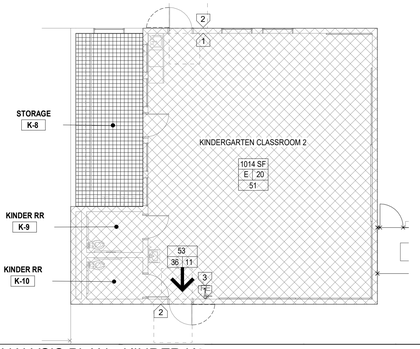
ENLARGED SITEPLAN

G0.04

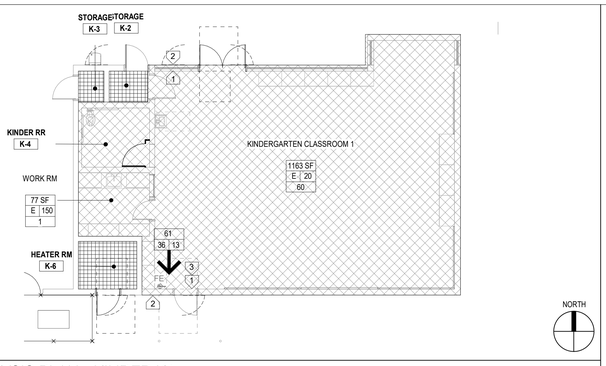
FILE PATH: Z:\Projects\...
3/13/2026 6:27:08 PM

G0.05 - CODE ANALYSIS - OVERALL

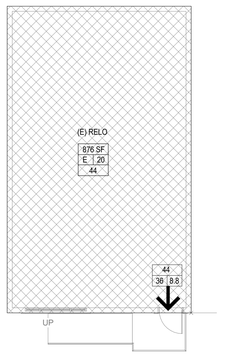
0" 1"



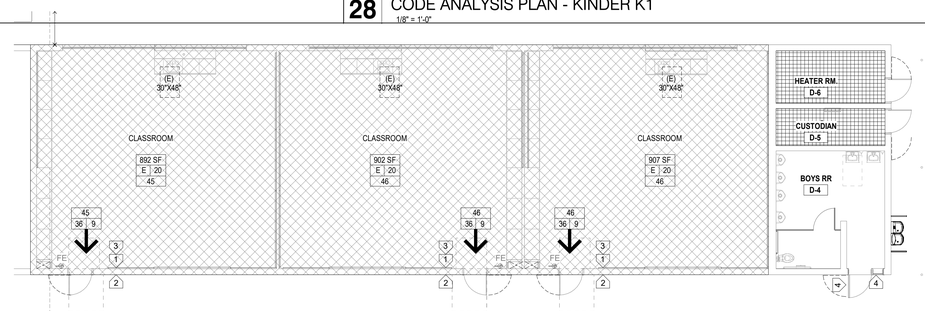
30 CODE ANALYSIS PLAN - KINDER K2
1/8" = 1'-0"



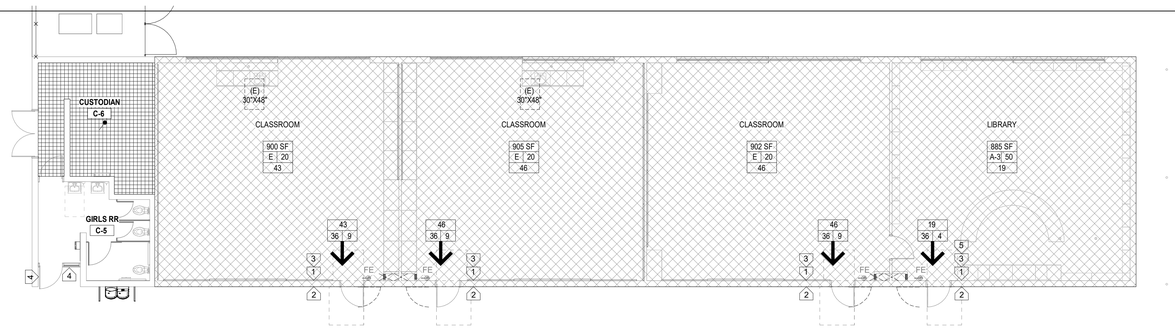
28 CODE ANALYSIS PLAN - KINDER K1
1/8" = 1'-0"



20 CODE ANALYSIS RELO R7 TO R13
1/8" = 1'-0"

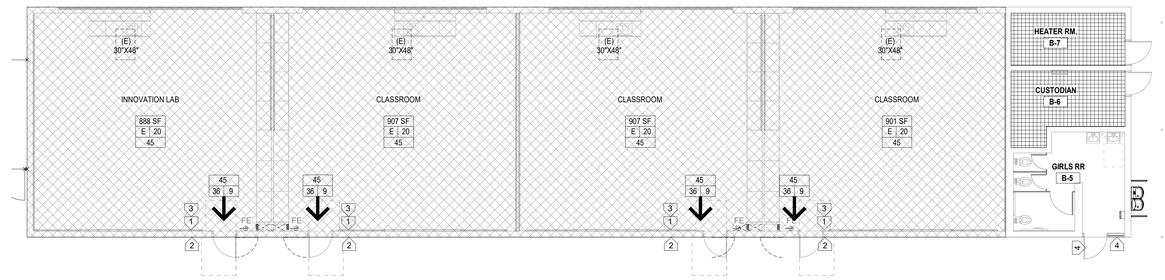


24 CODE ANALYSIS FLOOR PLAN - BLDG D
1/8" = 1'-0"

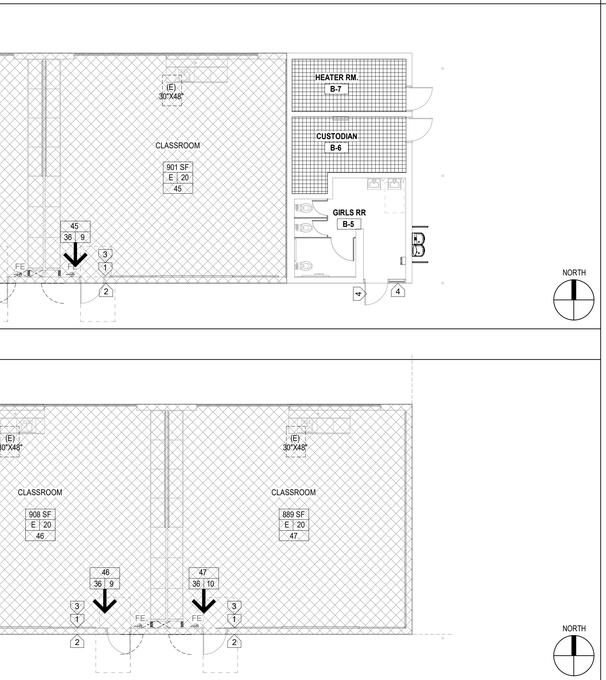


18 CODE ANALYSIS FLOOR PLAN - BLDG C
1/8" = 1'-0"

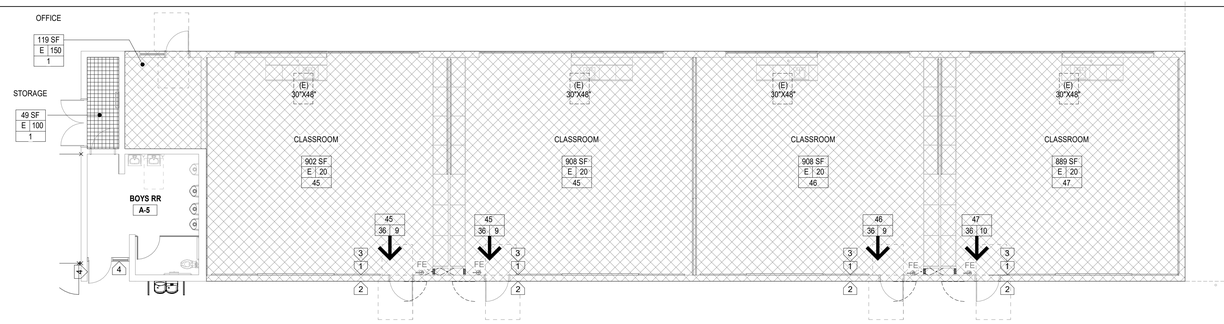
14 CODE ANALYSIS TYP FOR RELO R1 TO R6
1/8" = 1'-0"



12 CODE ANALYSIS FLOOR PLAN - BLDG B
1/8" = 1'-0"



2 CODE ANALYSIS PLAN - BLDG ADMIN
1/8" = 1'-0"



6 CODE ANALYSIS FLOOR PLAN - BLDG A
1/8" = 1'-0"

PROJECT GENERAL INFORMATION

Name of Project	SCHROEDER E.S. HVAC , UPGRADE & MODERNIZATION
Building/ Facility Name:	ADMIN, BLDG KI , K2, A, B, C, D, RELO R1 TO R13
Location/ Address:	15151 Columbia Ln. Huntington Beach, CA 92647
Description of Project:	See Scope of Work G0.01
Applicable Building Codes :	2022 CBC
Overall Type of Construction:	TYPE V-B
Mixed Type of Construction:	N/A
Occupancy Classification(s):	E-OCCUPANCY & B-OCCUPANCY
Overall Use of Building:	CLASSROOM
Automatic Fire Sprinker System :	N/A

OCCUPANCY LEGEND

OCCUPANCY TYPES:

- E - EDUCATIONAL
- S-1 AND S-2 STORAGE

CLASSROOM — ROOM NAME
H-1 — ROOM NUMBER
960 — ROOM AREA (SQ. FT.)
E 20 — OCCUPANT LOAD FACTOR
48 — ROOM OCCUPANT
OCCUPANCY TYPE

100 — COMBINED EXIT LOAD
32 20 — REQUIRED CLEAR EXIT WIDTH (IN INCHES) / PROVIDED CLEAR EXIT WIDTH (IN INCHES)

MIN. EGRESS WIDTH (PER CBC 2022, 1005.3.1 & 1005.3.2)

DOOR WIDTH = 0.2" X OCCUPANT LOAD
STAIR WIDTH = 0.3" X OCCUPANT LOAD

THE REQUIRED CAPACITY OF EACH DOOR OPENING SHALL BE SUFFICIENT FOR THE OCCUPANT LOAD THEREOF AND SHALL PROVIDE A MINIMUM CLEAR WIDTH OF 32 INCHES.

EXIT

FE — FIRE EXTINGUISHER

(#) — DOOR TAG. SEE SHEET A6.01

(#) — SIGNAGE TAG. SEE SIGNAGE LEGEND BELOW

SIGNAGE LEGEND

SIGNAGE TAG (#)

1. TACTILE EXIT SIGNAGE, SEE DETAIL 19 / AX4.01 AND/OR SEE ELECTRICAL PLANS FOR ILLUMINATED EXIT REQUIREMENTS.
2. ROOM IDENTIFICATION SIGNAGE, SEE DETAIL 8 / AX4.01 (VERIFY ROOM NAME & NUMBER W/ OWNER). WHERE TWO ROOMS ADJOIN ONE ANOTHER, PROVIDE SIGNAGE ON EACH SIDE OF THE WALL, TYP. ALL ROOMS.
3. ASSISTIVE LISTENING SIGNAGE, SEE DETAIL 26 / AX4.01
4. ACCESSIBLE RESTROOM DOOR AND WALL SIGNAGE, SEE DETAIL 7 / AX4.01
5. MAX. OCCUPANT SIGN , SEE DETAIL 21 / AX4.01

NOTE:
CONTRACTOR TO REMOVE ALL EXISTING SIGNAGE PRESENT THROUGHOUT EACH BUILDING WHICH INCLUDES:
1. ROOM ID SIGNAGE
2. EXIT SIGNAGE
3. RESTROOM DOOR SIGNAGE INCLUDING ISA SYMBOL.

REPAIR AND FINISH WALL AS NECESSARY WHERE REMOVED.

Not for permitting or construction

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-124972 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/17/2026

PBK

ARCHITECT PBK Architects, Inc.
PBK.com
ANAHEIM
2400 E KATELLA AVE, Suite 950
ANAHEIM, CA 92806
P 949-548-5000

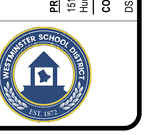
SCHROEDER ELEMENTARY SCHOOL
HVAC UPGRADE & MODERNIZATION

PROJECT ADDRESS:
15151 Columbia Ln
Huntington Beach, CA 92647

CONSTRUCTION DOCUMENTS

DSA APPL NO.: 04-124972 DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT EST. 1873



KEY PLAN
NORTH: PLAN

Consultant

Architect
LICENSED ARCHITECT
Yong Yoo
No. C-31162
REN 10-31-2023
STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
11-14-2025	250376

REVISIONS

No.	Description	Date

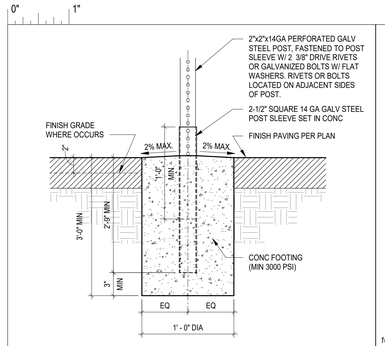
CONSTRUCTION DOCUMENTS

CODE ANALYSIS - OVERALL

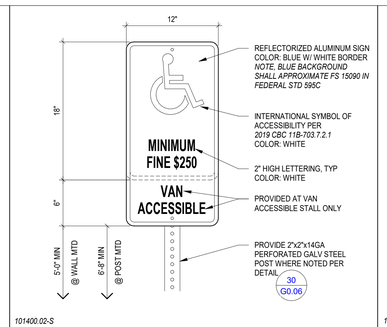
This document is for plan review only

G0.05

FILE PATH: Z:\Projects\...
3/13/2026 5:35:42 PM

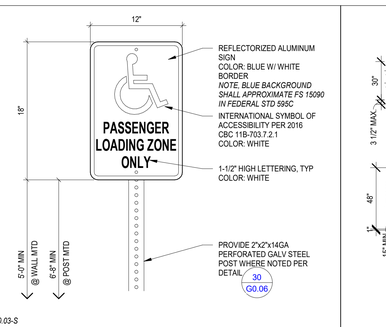


30 SIGN POST DETAIL
1 1/2" = 1'-0"



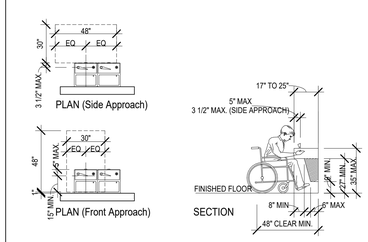
101400.02-S

29 SIGNAGE - ACCESSIBLE PARKING
1 1/2" = 1'-0"

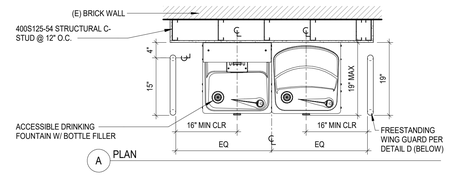


101400.03-S

28 SIGNAGE - PASSENGER LOADING ZONE
1 1/2" = 1'-0"

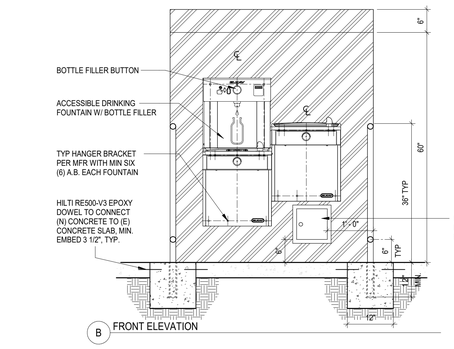


27 DRINKING FOUNTAIN GUIDELINE
1/4" = 1'-0"



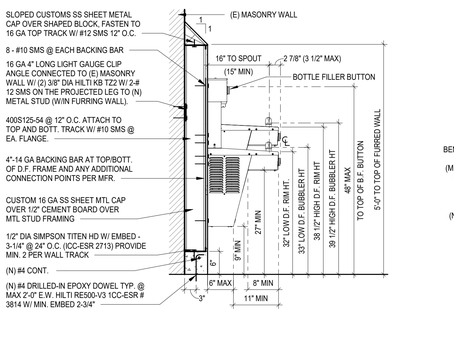
NOTES:

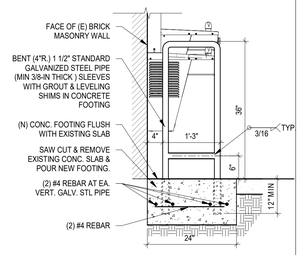
1. SPOUT SHALL PROVIDE A FLOW OF WATER 4" MIN. HIGH.
2. WHERE SPOUTS ARE LOCATED 3"-5" FROM FRONT OF UNIT, THE ANGLE OF THE WATER SHALL BE 15 DEGREES MAX.
3. WHERE SPOUTS ARE LOCATED LESS THAN 3" FROM THE FRONT OF THE UNIT, THE ANGLE OF THE WATER STREAM SHALL BE 30 DEGREES MAX.
4. UNDERSIDE OF DRINKING FOUNTAIN SHALL BE FREE OF SHARP OR ABRASIVE EDGES OR SURFACES GRIND ALL WELDS.
5. CLEARANCES PER 27 G0.06



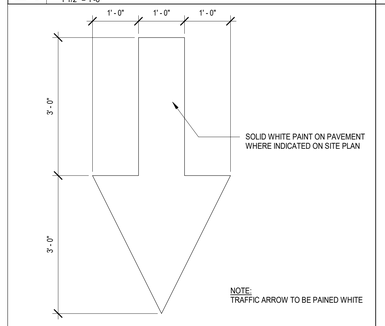
WATER FLOW PER 11B-602.6

THE SPOUT SHALL PROVIDE A FLOW OF WATER 4 INCHES HIGH MINIMUM AND SHALL BE LOCATED 5 INCHES MAXIMUM FROM THE FRONT OF THE UNIT. THE ANGLE OF THE WATER STREAM SHALL BE MEASURED HORIZONTALLY RELATIVE TO THE FRONT FACE OF THE UNIT. WHERE SPOUTS ARE LOCATED LESS THAN 3 INCHES OF THE FRONT OF THE UNIT, THE ANGLE OF THE WATER STREAM SHALL BE 30 DEGREES MAXIMUM. WHERE SPOUTS ARE LOCATED BETWEEN 3 INCHES AND 5 INCHES MAXIMUM FROM THE FRONT OF THE UNIT. THE ANGLE OF THE WATER STREAM SHALL BE 15 DEGREES MAXIMUM.



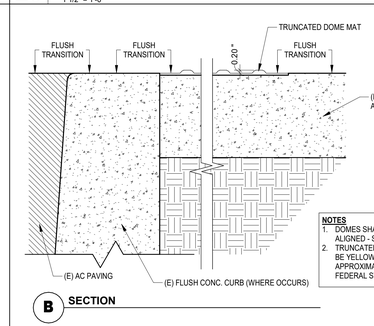


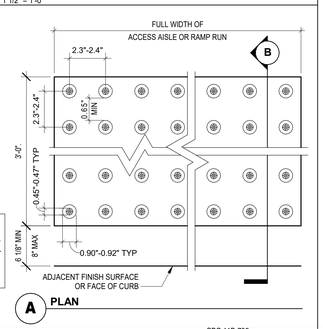
14 ACCESSIBLE D.F. W/ BOTTLE FILLER
3/4" = 1'-0"



NOTE:
TRAFFIC ARROW TO BE PAINED WHITE

18 PAVEMENT DIRECTIONAL ARROW
3/4" = 1'-0"

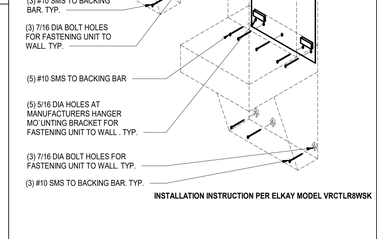




NOTES
1. DOMES SHALL BE ALIGNED - SEE DSA IR11B-4
2. TRUNCATED DOMES SHALL BE YELLOW IN COLOR AND APPROXIMATE FS 33538 OF FEDERAL STANDARD 595A

CBC:11B-705

17 TRUNCATED DOME MAT
3" = 1'-0"



INSTALLATION INSTRUCTION PER ELKAY MODEL VRCTLR8WSK

15 D.F. ANCHORAGE DETAIL
1/4" = 1'-0"

12 ACCESSIBLE CURB RAMP
1/4" = 1'-0"

CONCRETE: 3000 PSI MIN.
MIN. WEIGHT: AT 6'-0" LENGTH - 190 LBS.

11 CONCRETE WHEEL STOP
1" = 1'-0"

10 HM GATE JAMB DETAIL
3" = 1'-0"

9 HM GATE HEAD DETAIL
3" = 1'-0"



HARDWARE GROUP (EMERGENCY EGRESS PANIC HARDWARE)
- 3 HINGE (HEAVY WEIGHT): TA43386 4-1/2" X 4-1/2" NRP
- EXIT HARDWARE: VON DUPRIN PA-AX98EO-US26D - 3 OR 4 FT LENGTH DEPENDING ON GATE SIZE (PUSH BAR EXIT DEVICE) VON DUPRIN 996L-NL-R/V-US26D (OUTSIDE TRIM FOR PUSH BAR NIGHT LATCH FUNCTION)
- EXIT PULL DEVICE: VON DUPRIN 996L-DT
- FORMAT IC CORE (KEYED PER DISTRICT REQUIREMENT)
- CLOSURE: LOCINOX PART # MAMMOTH 180-ZILV (HYDRAULIC GATE CLOSER)
- KICK PLATE: 10 GA. GALV.
- HARDWARE BACKING-PLATE: 24" TALL X WIDTH OF GATE 16 GA GALV.
- CLOSURE BACKING PLATE: SIZED FIT ITEM C. CLOSURE.
- FLAT MOUNTED GORILLA WELD ON HINGES.

***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
*** THE FORCE REQUIRED TO ACTIVATE GATE OPERABLE PARTS (SWING & UNLATCHING) SHALL BE 5 LBS. MAXIMUM.

PROVIDE NEW SECURITY GATES WITH POWDER COATED PAINTS.

NOTE:
*GATES SHALL HAVE AN OPENING FORCE OF FIVE POUNDS MAXIMUM PER CBC 11B-404.2.9.
*HARDWARE SHALL UNLATCH WITH FIVE POUNDS MAXIMUM FORCE PER CBC 11B-309.4.

14 (N) ACCESSIBLE MAIN ENTRANCE ORNAMENTAL GATE
1/2" = 1'-0"

6 ACCESSIBLE PEDESTRIAN PATH
1/2" = 1'-0"

NOTE:
GRID LINES ARE SHOWN FOR PROPORTION ONLY AND ARE NOT TO APPEAR AS PART OF SYMBOL.

ACCESSIBILITY SYMBOL SHALL COMPLY WITH SECTION 11B-703.7.2.1 CALIFORNIA BUILDING CODE.

SYMBOL SHALL BE LOCATED SO THAT IT IS VISIBLE TO A TRAFFIC ENFORCEMENT OFFICER WHEN VEHICLE IS PARKED IN THE SPACE.

5 ACCESSIBLE PARKING SYMBOL
3/4" = 1'-0"

4 HM GATE SILL DETAIL
3" = 1'-0"

NOTE:
1. CONCRETE MINIMUM COMPRESSIVE STRENGTH 3000 PSI
2. REBARS: ASTM A615 GR 40 FOR # 3, GR60 FOR #4 & LARGER.

3 STEEL COLUMN AT METAL GATES
3/4" = 1'-0"

PBK Architects, Inc.
ANAHEIM
2400 E KATELLA AVE, Suite 950
ANAHEIM, CA 92806
P 949-548-5000

SCHROEDER ELEMENTARY SCHOOL HVAC UPGRADE & MODERNIZATION

PROJECT ADDRESS:
15151 Columbia Ln
Huntington Beach, CA 92647

CONSTRUCTION DOCUMENTS

DSA FILE NO.: 30-43
DSA APPL NO.: 04-124972

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-124972 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/17/2026

Not for permitting or construction

RELO
A
B
C
D
K2 K1
ADMIN
MPR
RELO

KEY PLAN
NORTH: PLAN

Consultant

Architect
LICENSED ARCHITECT
Yong Yoo
No. C-31162
REN 10-31-2027
STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
11-14-2025	250376

REVISIONS

No.	Description	Date

CONSTRUCTION DOCUMENTS

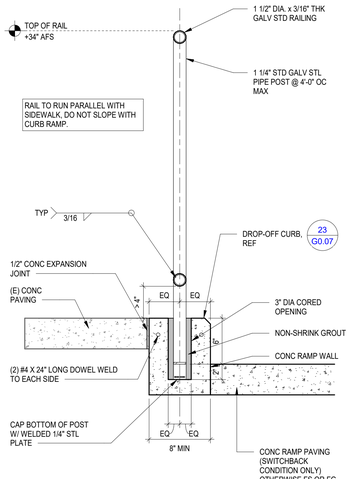
SITE DETAILS

This document is for plan review only

G0.06

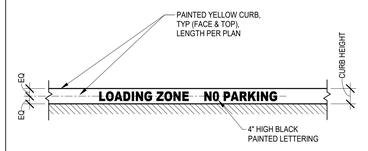
FILE PATH: Z:\Projects\...
3/13/2026 5:35:44 PM

0" 1"



NOTES:
1. ALL EXPOSED WELDS SHALL BE GROUND SMOOTH. OBTAIN WELDING INSPECTON AFTER GRINDING.
2. ALL EXPOSED STEEL SHALL HAVE A GALVINIZED FINISH U.N.O.
3. ALL EXPOSED CONC WALL SURFACES (VERT & HORIZ) SHALL HAVE A SMOOTH-RUBBED FINISH U.N.O.
4. FINISH NON-SHRINK GROUT FLUSH TO ADJACENT CONCRETE TO PROVIDE UNIFORM APPEARANCE

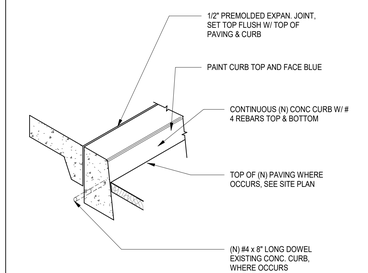
24 CURB MOUNTED HANDRAIL AT RAMP
1 1/2" = 1'-0"



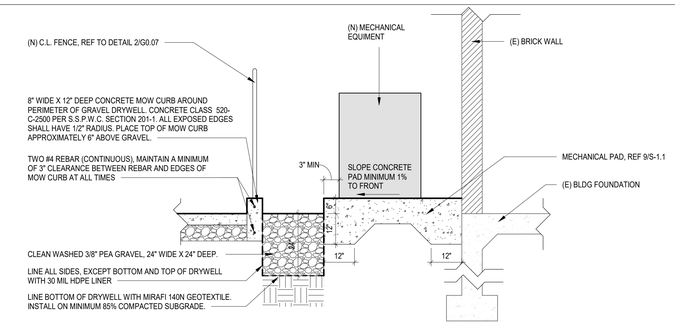
CONC CURB ELEVATION

321723.10-S Rev 09/23

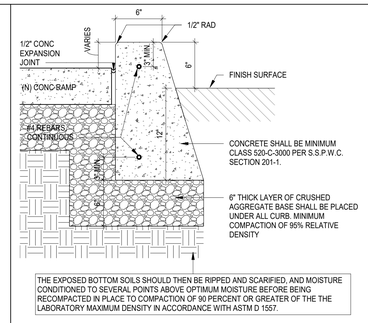
29 LOADING ZONE CURB MARKING
1/2" = 1'-0"



23 DROP-OFF CURB
1/2" = 1'-0"

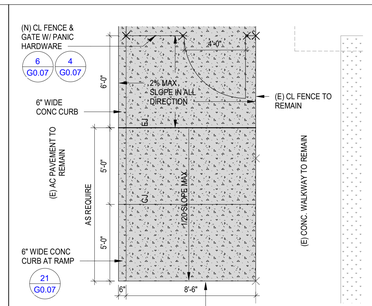


28 GRAVEL DRYWELL
1/2" = 1'-0"

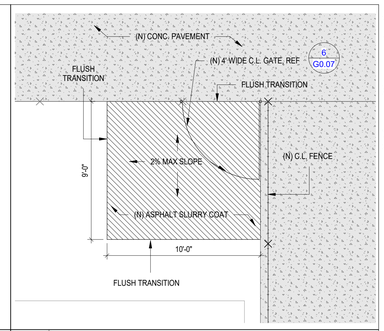


THE EXPOSED BOTTOM SOILS SHOULD THEN BE RIPPED AND SCARIFIED, AND MOISTURE CONDITIONED TO SEVERAL POINTS ABOVE OPTIMUM MOISTURE BEFORE BEING RECOMPACTED IN PLACE TO COMPACTION OF 90 PERCENT OR GREATER OF THE THE LABORATORY MAXIMUM DENSITY IN ACCORDANCE WITH ASTM D 1557.

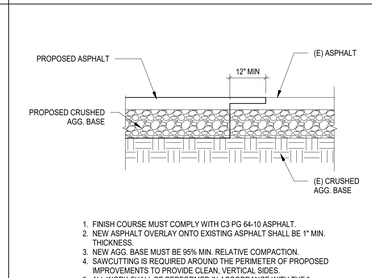
21 CONCRETE CURB DETAIL @ RAMP
1 1/2" = 1'-0"



26 (N) CONCRETE RAMP @ BLG C
1/4" = 1'-0"

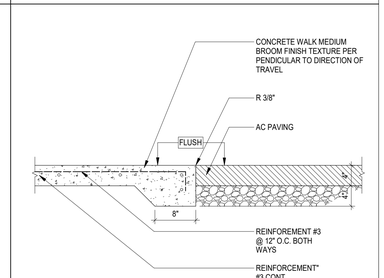


25 (N) SLURRY COAT @ CL GATE & BLDG A
1/4" = 1'-0"

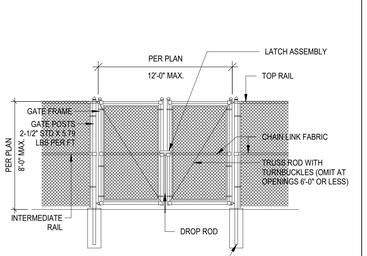


1. FINISH COURSE MUST COMPLY WITH C3 PG 64-10 ASPHALT.
2. NEW ASPHALT OVERLAY ONTO EXISTING ASPHALT SHALL BE 1" MIN. THICKNESS.
3. NEW AGG. BASE MUST BE 95% MIN. RELATIVE COMPACTION.
4. SAWCUTTING IS REQUIRED AROUND THE PERIMETER OF PROPOSED IMPROVEMENTS TO PROVIDE CLEAN, VERTICAL SIDES.
5. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE " STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION" (GREENBOOK) . LATEST APPROVED EDITION.

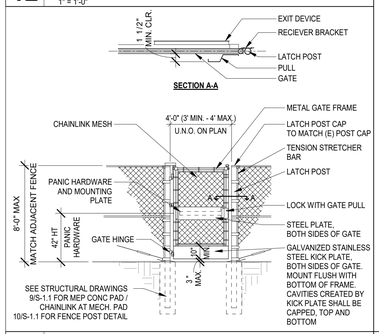
14 NEW ASPHALT TO EXISTING ASPHALT
1" = 1'-0"



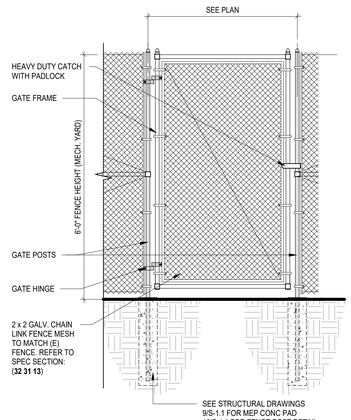
13 CONC. SIDEWALK @ AC PAVING
1" = 1'-0"



12 CHAINLINK DOUBLE GATE
1" = 1'-0"

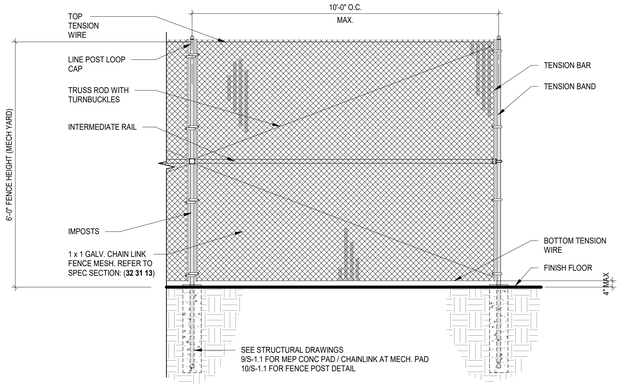


6 CHAINLINK GATE W/ PANIC HARDWARE
1/4" = 1'-0"



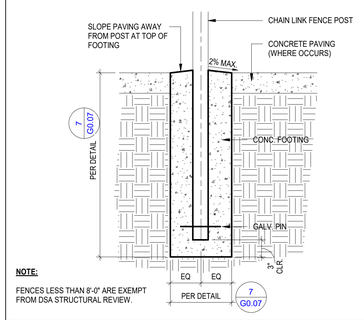
NOTE:
- FENCES LESS THAN 8'-0" ARE EXEMPT FROM DSA STRUCTURAL REVIEW.

5 CHAIN LINK FENCE - SINGLE GATE
1/2" = 1'-0"



NOTE:
- FENCES LESS THAN 8'-0" ARE EXEMPT FROM DSA STRUCTURAL REVIEW.

4 CHAIN LINK FENCE
1/2" = 1'-0"

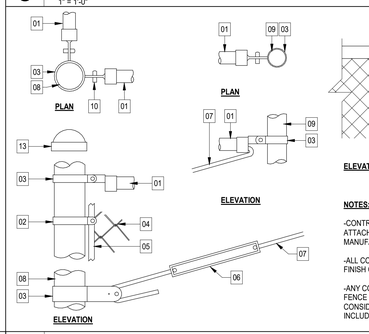


NOTE:
FENCES LESS THAN 8'-0" ARE EXEMPT FROM DSA STRUCTURAL REVIEW.

8 CHAIN LINK FENCE POST FOOTING
1" = 1'-0"

Item	Height	Nominal Pipe Size (Inches)	Outside Diameter (Inches)	Weight (pounds per foot)	Conc.Footings f'c=3000 psi min.	
					Diameter (Inches)	Depth (Inches)
Top Rail, Brace Rails and Transom Rails	Up to 10'-0"	1-1/4	1.660	2.27	N/A	N/A
	10'-1" to 16'-0"	1-1/2	1.900	2.72	N/A	N/A
Line Posts	Up to 6'-0"	2	2.375	2.65	12	30
	6'-1" to 8'-0"	2	2.375	2.65	12	36
	8'-1" to 10'-0"	2-1/2	2.875	5.79	12	42
	10'-1" to 16'-0"	3	3.500	7.58	14	60
Terminal, Corner, Angle & Pull Posts	Up to 8'-0"	2-1/2	2.875	5.79	12	36
	8'-1" to 10'-0"	2-1/2	2.875	5.79	14	42
	10'-1" to 16'-0"	3	3.500	7.58	14	60
Pedestrian Gate Posts	Up to 8'-0"	2-1/2	2.875	5.79	14	36
Gate Frames	Up to 8'-0"	1-1/2	1.900	2.72	N/A	N/A
Driveway Double-Leaf Swing Gate Posts: Opening						
Up to 17' - 3-1/2"	Up to 8'-0"	3-1/2	4.000	9.11	16	42
17'-4" to 20'- 3 1/2"	Up to 8'-0"	3-1/2	4.000	9.11	16	42

7 CHAINLINK & FENCE SCHEDULE
3" = 1'-0"



NOTES:

-CONTRACTOR TO VERIFY ALL ATTACHEMENTS/DIMENSIONS AND INSTALL PER MANUFACTURER RECOMMENDATIONS

-ALL COMPONENTS ARE TO MATCH COLOR AND FINISH OF EXISTING

-ANY COMPONENTS REQUIRED FOR A COMPLETE FENCE SYSTEM, BUT NOT SHOWN, SHOULD BE CONSIDERED A PART OF THESE DRAWINGS ADN INCLUDED IN THE FINAL INSTALLED SYSTEM.

01	BRACE RAIL
02	TENSION CLIP/BAND
03	BRACE BAND
04	CHAIN LINK MESH
05	TENSION FLAR BAR
06	TURNBUCKLE
07	TRUSS ROD
08	CORNER OR END POST
09	LINE POST
10	BOLT AND NUT. VERY WITH MANUFACTURER
11	RAIL TIE WIRE
12	TOP RAIL
13	DOME POST CAP. SIZE TO MATCH POST

2 CHAIN LINK CONNECTIONS1
1 1/2" = 1'-0"

Not for permitting or construction

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-124972 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/17/2026

PBK

ARCHITECT PBK Architects, Inc.
PBK.com
ANAHEIM
2400 E KATELLA AVE, Suite 950
ANAHEIM, CA 92806
P 949-548-5000

SCHROEDER ELEMENTARY SCHOOL
HVAC UPGRADE & MODERNIZATION

PROJECT ADDRESS:
15151 Columbia Ln
Huntington Beach, CA 92647

CONSTRUCTION DOCUMENTS

DSA APPL NO.: 04-124972 DSA FILE NO.: 30-43

RELO
A K2 K1
B ADMIN
C MPR
D
RELO

KEY PLAN N
NORTH: PLAN

Consultant

Architect
LICENSED ARCHITECT Yong Yoo No. C-31162 REN. 10-31-2027 STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
11-14-2025	250376

REVISIONS

No.	Description	Date

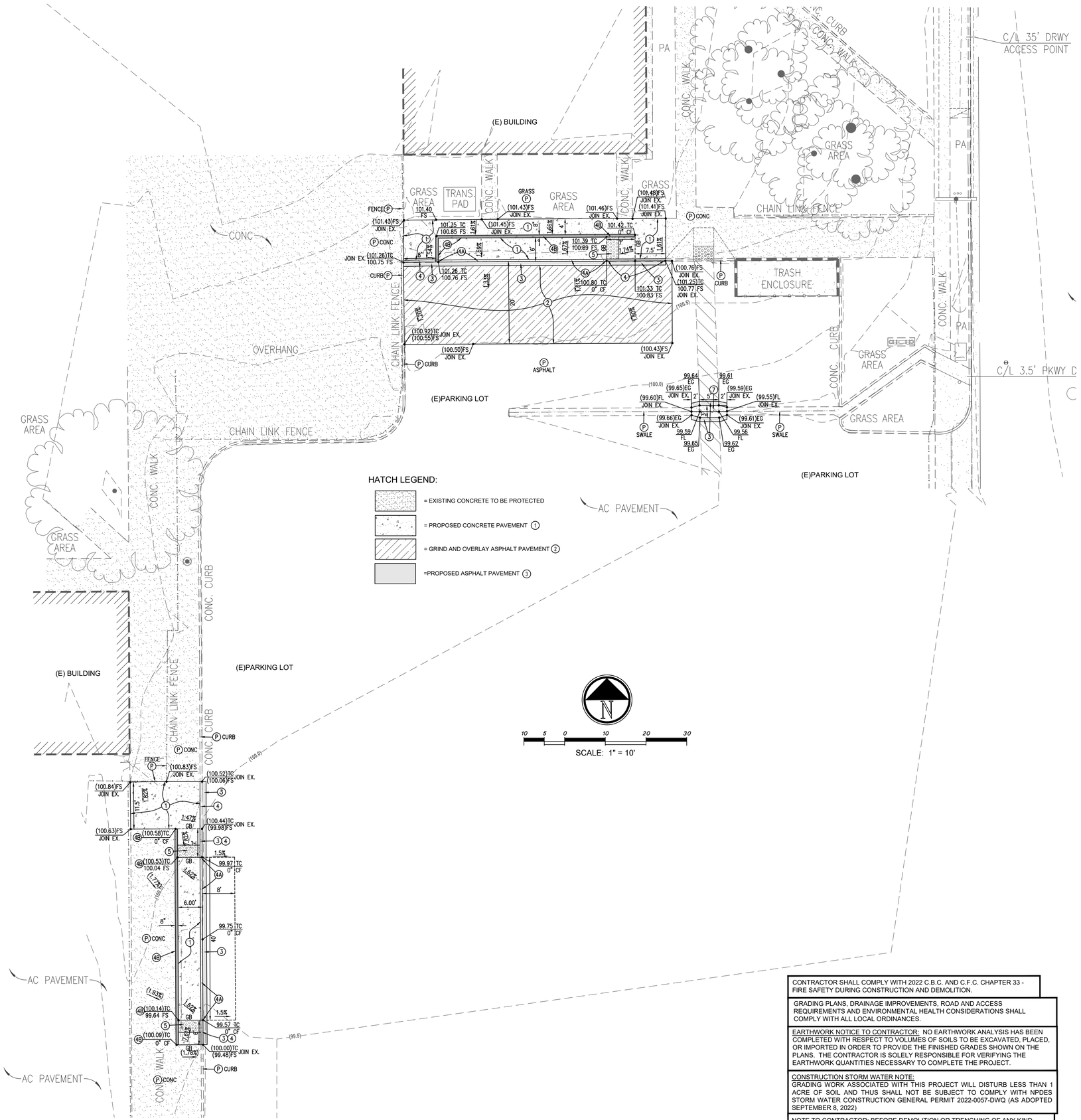
CONSTRUCTION DOCUMENTS

SITE DETAILS

This document is for plan review only

G0.07

FILE PATH: Z:\Projects\...
3/13/2026 5:35:47 PM



LEGEND

S	SEWER MANHOLE		SIGN POST
D	STORM DRAIN MANHOLE		MAIL BOX
T	TELEPHONE MANHOLE		WROUGHT IRON FENCE
	FIRE HYDRANT		CHAIN LINK FENCE
C	SEWER CLEANOUT		TREE
	WATER VALVE		FLOW DIRECTION
	GAS VALVE	KV	IRRIGATION VALVE
	WATER METER	T	TRASH ENCLOSURE
	GAS METER		GRATE
W	WATER VAULT		SLOPE
G	GAS VAULT	CF	CURB FACE
T	TELEPHONE VAULT	INV	INVERT
E	ELECTRIC VAULT	EG	EDGE OF GUTTER
EPB	ELECTRIC PULLBOX	TC	TOP OF CURB
	GUY WIRE	FL	FLOWLINE
	LIGHT		(E)CONTOUR ELEVATION
	OVERHANG POST		
FS	FINISHED SURFACE		
FF	FINISHED FLOOR		

CONSTRUCTION NOTES:

P PROTECT EXISTING IMPROVEMENT IN PLACE.

1 CONSTRUCT CONCRETE PAVEMENT PER DETAIL 1/C3.00.

2 GRIND DOWN MINIMUM 1-INCH OF EXISTING ASPHALT PAVEMENT AND REMOVE FROM SITE. CLEAN SURFACE OF GRINDED DOWN ASPHALT, APPLY TACK COAT MEETING SECTION 302-5.4 PROVISION PER THE S.S.P.W.C. (GREEN BOOK) ON ALL EXISTING PAVEMENT SURFACES TO BE OVERLAID. INSTALL ASPHALT PAVEMENT WITH VARIABLE THICKNESS (TYPE III-C3-PG-64-10) TO MEET SLOPES HEREON. APPLY 2 COATS OF SEAL COAT OVER NEW ASPHALT A MINIMUM OF 30 DAYS AFTER OVERLAY. SEE DETAIL 2/C3.00.

3 CONSTRUCT 12" WIDE X 4" THICK FULL DEPTH ASPHALT PAVEMENT (TYPE III-C3-PG-64-10). APPLY 2 COATS OF SEAL COAT OVER NEW ASPHALT A MINIMUM OF 15 DAYS AFTER OVERLAY.

4 CONSTRUCT VARIABLE HEIGHT CONCRETE CURB PER DETAIL 4/C3.00 AND GRADES HEREON.

4A CONSTRUCT 0" HIGH CONCRETE CURB PER DETAIL 4A/C3.00.

4B CONSTRUCT VARIABLE HEIGHT RAISED CURB & GUARD RAIL PER DETAIL 13/C3.00.

5 CONSTRUCT TRUNCATED DOMES PER 17/G0.06.

6 CONSTRUCT FENCE PER ARCHITECTURAL PLANS.

7 CONSTRUCT 3' WIDE CONCRETE SWALE PER DETAIL 7/C3.00.

GENERAL NOTES TO CONTRACTOR

1. THE CONTRACTOR'S ATTENTION IS DIRECTED TO SECTION 7-10, PUBLIC CONVENIENCE AND SAFETY, OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (GREENBOOK), IN REGARDS TO SAFETY ORDERS.
2. MATERIALS: ALL MATERIALS, APPLIANCES & EQUIPMENT SHALL BE NEW & THE BEST OF THEIR RESPECTIVE KIND. FREE FROM ALL DEFECTS AND OF THE MAKE, BRAND, AND QUANTITY SPECIFIED.
3. CLEAN-UP: UPON COMPLETION OF THE WORK UNDER THIS SECTION THE CONTRACTOR SHALL REMOVE ALL SURPLUS MATERIALS, EQUIPMENT & DEBRIS INCIDENTAL TO THIS WORK & LEAVE THE PREMISES CLEAN AND ORDERLY.
4. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO VERIFY AVAILABLE SPACES FOR INSTALLING THE WORK.
5. COORDINATION: THE DRAWINGS ARE DIAGRAMMATIC & INTENDED TO SHOW SCOPE. CONTRACTOR SHALL COORDINATE HIS WORK WITH OTHER TRADES TO PROVIDE BEST ARRANGEMENT OF ALL DUCT, PIPES, CONDUIT, ETC.
6. WORKMANSHIP: THE WORK SHALL BE ACCOMPLISHED BY THE USE OF COMPETENT MECHANICS SKILLED IN THEIR TRADE. THE ENGINEER AND ARCHITECT SHALL HAVE THE RIGHT TO INTERPRET COMPLIANCE OF WORKMANSHIP WITH THE CONTRACT DOCUMENTS.

GENERAL NOTES FOR GRADING

1. ALL WORK SHALL CONFORM WITH THE "GREENBOOK" STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (SSPWC), 2024 EDITION AND THE LATEST REVISIONS THERETO, THE WORK AREA TRAFFIC CONTROL HANDBOOK (W.A.T.C.H. MANUAL), A.D.A, TITLE 24 REQUIREMENTS, AND 2022 C.B.C. UNLESS SPECIFIED OTHERWISE IN THE CONTRACT SPECIFICATIONS.
2. THROUGHOUT ALL PHASES OF CONSTRUCTION, INCLUDING SUSPENSION OF WORK, UNTIL FINAL ACCEPTANCE OF THE PROJECT, THE CONTRACTOR SHALL KEEP THE WORK SITE CLEAN AND FREE FROM RUBBISH AND DEBRIS. THE CONTRACTOR SHALL ALSO ABATE DUST NUISANCE BY CLEANING, SWEEPING AND SPRINKLING WITH WATER AND USING DUST FENCES OR OTHER METHODS AS DIRECTED BY THE CONSTRUCTION MANAGER OR FIELD INSPECTOR THROUGHOUT THE CONSTRUCTION OPERATION AND SHALL INCORPORATE IN BASE BID.
3. THE CONTRACTOR SHALL KEEP A STRICT RECORD OF ALL CHANGES THAT OCCUR DURING CONSTRUCTION PRACTICES AND SUBMIT THIS RECORD TO THE SCHOOL DISTRICT AS "RECORD DRAWING" PLANS.
4. ALL DAMAGE CAUSED TO PUBLIC STREETS, INCLUDING HAUL ROUTES, ALLEYS, SIDEWALKS, CURBS OR STREET FURNISHINGS, OR TO PRIVATE PROPERTY SHALL BE REPAIRED AT THE SOLE EXPENSE OF THE CONTRACTOR TO THE ENGINEER'S SATISFACTION.
5. THE CONTRACTOR SHALL REMOVE AND REPLACE ANY BROKEN OR DAMAGED SIDEWALK, CURB, GUTTER OR ASPHALT PAVING AND TURF (PATCH, REPAIR OR OVERLAY) CAUSED BY THEIR WORK ON THIS PROJECT AT THE DIRECTION OF THE OWNER.
6. ALL DELETERIOUS MATERIAL (I.E. LUMBER, LOGS, BRUSH, RUBBISH, ETC.) SHALL BE REMOVED FROM ALL AREAS TO RECEIVE COMPACTED FILL AND HAULED TO DUMP-SITE APPROVED BY THE OWNER.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING STORM DAMAGE PREVENTION MEASURES OR EROSION CONTROL DEVICES AND/OR TO PERFORM CERTAIN GRADING TO PREVENT SOIL OR EXCESS RUNOFF FROM FLOWING INTO PUBLIC STREETS OR ADJACENT PROPERTIES. IN THE EVENT OF SUCH AN OCCURRENCE, CLEANUP SHALL COMMENCE IMMEDIATELY. SHOULD CITY FORCES OR THE CITY CONTRACTOR PERFORM ANY CLEANUP RESULTING FROM THIS DEVELOPMENT, THE CONTRACTOR SHALL PAY THE COST INCURRED WITHIN TEN (10) WORKING DAYS UPON RECEIPT OF BILLING.
8. EITHER WATER OR DUST PALLIATIVE, OR BOTH, MUST BE APPLIED FOR THE ALLEVIATION OR PREVENTION OF EXCESSIVE DUST RESULTING FROM THE LOADING OR TRANSPORTATION OF EARTH FROM OR TO THE PROJECT SITE OR PRIVATE AND PUBLIC ROADWAYS.
9. NO OVERSIZE OR OVERWEIGHT LOADS ARE PERMITTED WITHOUT A SEPARATE MOVING PERMIT.
10. ALL EQUIPMENT USED TO HAUL EXCAVATION OR FILL MATERIAL FROM OR TO THE SITE SHALL FOLLOW A DESIGNATED ROUTE OR ROUTES IN GOING TO AND FROM THE SITE. THE CONTRACTOR SHALL BE ENTITLED TO THE DESIGNATION OF A ROUTE PROVIDING ACCESS TO A SPECIFIED PLACE OTHER THAN THE SITE, AFTER SHOWING TO THE SATISFACTION OF THE CITY BUILDING OFFICIAL THAT SUCH SPECIFIED PLACE IS A PLACE WHERE EXCAVATION MATERIAL MAY BE REASONABLY DEPOSITED OR FILL MATERIAL MAY BE OBTAINED. A SEPARATE ENCROACHMENT PERMIT IS REQUIRED WHEN IT IS NECESSARY TO FLAG TRAFFIC OR INSTALL ANY TRAFFIC CONTROL DEVICES ON CITY RIGHT-OF-WAY.
11. ANY EARTH ROCK, GRAVEL, SAND, STONE OR OTHER EXCAVATED MATERIAL DEPOSITED OR CAUSED TO ROLL, FLOW OR WASH UPON ANY PUBLIC PLACE OR PRIVATE PROPERTY SHALL BE REMOVED FROM SUCH PUBLIC PLACE OR PRIVATE PROPERTY BY THE END OF THE WORKDAY BY THE CONTRACTOR RESPONSIBLE FOR THE DEPOSITION. IF AN ADVERSE CONDITION IS CAUSED BY DEPOSIT, THE CONDITION SHALL BE CORRECTED IMMEDIATELY.
12. EVERY EFFORT SHOULD BE MADE TO ELIMINATE THE DISCHARGE OF NON-STORMWATER FROM THE PROJECT SITE AT ALL TIMES.
13. ALL TRUCKS HAULING DIRT, SAND, OIL, OR OTHER LOOSE MATERIALS ARE TO BE COVERED OR SHOULD MAINTAIN AT LEAST TWO FEET OF FREEBOARD IN ACCORDANCE WITH THE REQUIREMENTS OF CVC SECTION 23114.
14. ADJUST UTILITY BOXES TO BE FLUSH WITH ULTIMATE FINISH SURFACE IN PAVING SCOPE OF WORK AREAS.
15. NO PERSON SHALL, WHEN HAULING ANY EARTH, SAND, GRAVEL, ROCK, STONE OR OTHER EXCAVATED MATERIAL OR DEBRIS OVER ANY PUBLIC STREET, ALLEY OR OTHER PUBLIC PLACE, ALLOW SUCH MATERIAL TO BLOW OR SPILL OVER UPON SUCH STREET, ALLEY OR PUBLIC PLACE OR ADJACENT PRIVATE PROPERTY OR ANY WATER BODIES, CREEKS OR STREAMS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CLEANUP AND REMOVAL OF ANY CONSTRUCTION OR SOILS MATERIALS DEPOSITED ON THE PUBLIC RIGHT-OF-WAY, PUBLIC WATERS OR ADJACENT PRIVATE PROPERTY.

CONTRACTOR SHALL COMPLY WITH 2022 C.B.C. AND C.F.C. CHAPTER 33 - FIRE SAFETY DURING CONSTRUCTION AND DEMOLITION.

GRADING PLANS, DRAINAGE IMPROVEMENTS, ROAD AND ACCESS REQUIREMENTS AND ENVIRONMENTAL HEALTH CONSIDERATIONS SHALL COMPLY WITH ALL LOCAL ORDINANCES.

EARTHWORK NOTICE TO CONTRACTOR: NO EARTHWORK ANALYSIS HAS BEEN COMPLETED WITH RESPECT TO VOLUMES OF SOILS TO BE EXCAVATED, PLACED, OR IMPORTED IN ORDER TO PROVIDE THE FINISHED GRADES SHOWN ON THE PLANS. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR VERIFYING THE EARTHWORK QUANTITIES NECESSARY TO COMPLETE THE PROJECT.

CONSTRUCTION STORM WATER NOTE:
GRADING WORK ASSOCIATED WITH THIS PROJECT WILL DISTURB LESS THAN 1 ACRE OF SOIL AND THUS SHALL NOT BE SUBJECT TO COMPLY WITH NPDES STORM WATER CONSTRUCTION GENERAL PERMIT 2022-0057-DWQ (AS ADOPTED SEPTEMBER 8, 2022)

NOTE TO CONTRACTOR: BEFORE DEMOLITION OR TRENCHING OF ANY KIND OCCURS, THE CONTRACTOR SHALL COMPLETE HIS OWN UNDERGROUND UTILITY MAPPING SURVEY OF THE PROJECT SITE TO DETERMINE WERE EXISTING UTILITIES ARE AND WHERE POSSIBLE UNDERGROUND CONFLICTS MAY OCCUR. PROVIDE SURVEY TO OWNER PRIOR TO STARTING WORK.

PLANS PREPARED BY:
FPL FPL and Associates, Inc.
Traffic • Transportation • Civil
30 Corporate Park, Suite 401
Irvine, CA 92606
Phone: 949-252-1688

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-124972 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/17/2026

Not for permitting or construction

PBK

ARCHITECT PBK Architects, Inc.
ANAHEIM PBK.com
2400 E KATELLA AVE, Suite 950
ANAHEIM, CA 92806
P 949-548-5000

SCHROEDER ELEMENTARY SCHOOL
HVAC UPGRADE & MODERNIZATION

PROJECT ADDRESS:
15151 Columbia Ln
Huntington Beach, CA 92647

CONSTRUCTION DOCUMENTS

DSA APPL NO.: 04-124972 DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT EST. 1872

RELO
ADMIN
RELO

KEY PLAN
NORTH: PLAN

Consultant
REGISTERED PROFESSIONAL ENGINEER
Timothy Lee Gillespie
No. 0 34971
Exp. 09-30-27
CIVIL
STATE OF CALIFORNIA

Architect
LICENSED ARCHITECT
Tong Yoo
No. C-31162
REN. 10-31-2027
STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
02-10-2026	250376

REVISIONS

No.	Description	Date

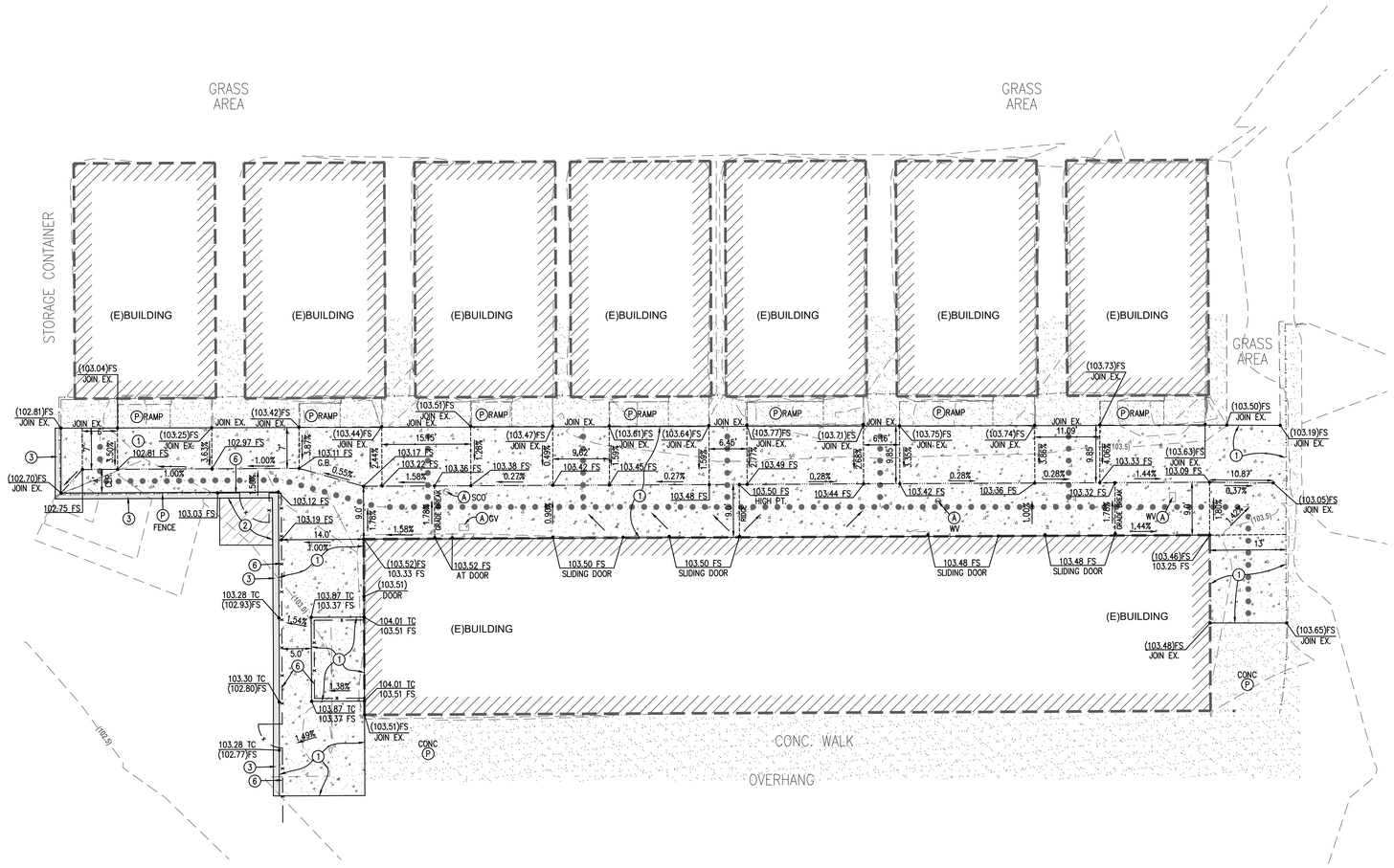
CONSTRUCTION DOCUMENTS

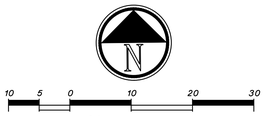
This document is for plan review only

GRADING PLAN

C2.00

FILE PATH: R:\Projects\2577 - PBK\2577a26 - Schroeder Elementary School\Civil\Schroeder ES - C2.00 Grading Plan.dwg
12/8/2025 2:37:51 PM





SCALE: 1" = 10'

CONSTRUCTION NOTES:

- (P) PROTECT EXISTING IMPROVEMENT IN PLACE.
- (A) ADJUST EXISTING UTILITY LID TO BE FLUSH WITH ULTIMATE FINISH SURFACE OF CONCRETE.
- (1) CONSTRUCT CONCRETE PAVEMENT PER DETAIL 1/C3.00.
- (3) CONSTRUCT 12" WIDE X 4" THICK FULL DEPTH ASPHALT PAVEMENT (TYPE III-C3-PG-64-10). APPLY 2 COATS OF SEAL COAT OVER NEW ASPHALT A MINIMUM OF 15 DAYS AFTER OVERLAY.
- (4) CONSTRUCT VARIABLE HEIGHT CONCRETE CURB PER DETAIL 4/C3.00 AND GRADES HEREON.
- (6A) CONSTRUCT 0" HIGH CONCRETE CURB PER DETAIL 4A/C3.00.
- (6B) CONSTRUCT VARIABLE HEIGHT RAISED CURB & GUARD RAIL PER DETAIL 13/C3.00.
- (5) CONSTRUCT TRUNCATED DOMES PER 17/G0.06.
- (8) CONSTRUCT FENCE PER ARCHITECTURAL PLANS.

HATCH LEGEND:

= EXISTING CONCRETE TO BE PROTECTED

= PROPOSED CONCRETE PAVEMENT (1)

=PROPOSED ASPHALT PAVEMENT (3)

= MINIMUM 4' WIDE ACCESSIBLE PATH OF TRAVEL

STORM WATER POLLUTION CONTROL NOTES:

1. APPROPRIATE BMP'S FOR CONSTRUCTION-RELATED MATERIALS, WASTE, SPILLS OR RESIDUES SHALL BE IMPLEMENTED AND RETAINED ON SITE TO MINIMIZE TRANSPORT FROM THE SITE TO STREETS, DRAINAGE FACILITIES, OR ADJOINING PROPERTY BY WIND OR RUNOFF.

2. SEDIMENT FROM AREAS DISTURBED BY CONSTRUCTION SHALL BE RETAINED ON SITE USING STRUCTURAL CONTROLS TO THE MAXIMUM EXTENT PRACTICABLE.

3. STOCKPILES OF SOIL SHALL BE PROPERLY CONTAINED TO MINIMIZE SEDIMENT TRANSPORT FROM THE SITE TO STREETS, DRAINAGE FACILITIES OR ADJACENT PROPERTIES VIA RUNOFF, VEHICLE TRACKING, OR WIND.

4. ALL REMOVABLE EROSION PROTECTIVE DEVICES SHALL BE IN PLACE AT THE END OF EACH WORKING DAY WHEN THE 5-DAY RAIN PROBABILITY FORECAST EXCEEDS 50%.

5. RUNOFF FROM EQUIPMENT AND VEHICLE WASHING SHALL BE CONTAINED AT CONSTRUCTION SITES UNLESS TREATED TO REDUCE OR REMOVE SEDIMENT AND OTHER POLLUTANTS.

6. ALL CONSTRUCTION CONTRACTOR AND SUBCONTRACTOR PERSONNEL ARE TO BE MADE AWARE OF THE REQUIRED BEST MANAGEMENT PRACTICES AND GOOD HOUSEKEEPING MEASURES FOR THE PROJECT SITE AND ANY ASSOCIATED CONSTRUCTION STAGING AREAS.

7. AT THE END OF EACH DAY OF CONSTRUCTION ACTIVITY ALL CONSTRUCTION DEBRIS AND WASTE MATERIALS SHALL BE COLLECTED AND PROPERLY DISPOSED IN TRASH OR RECYCLE BINS.

8. CONSTRUCTION SITES SHALL BE MAINTAINED IN SUCH A CONDITION THAT AN ANTICIPATED STORM DOES NOT CARRY WASTES OR POLLUTANTS OFF THE SITE. DISCHARGES OF MATERIAL OTHER THAN STORMWATER ONLY WHEN NECESSARY FOR PERFORMANCE AND COMPLETION OF CONSTRUCTION PRACTICES AND WHERE THEY DO NOT: CAUSE OR CONTRIBUTE TO A VIOLATION OF ANY WATER QUALITY STANDARD; CAUSE OR THREATEN TO CAUSE POLLUTION, CONTAMINATION, OR NUISANCE; OR CONTAIN A HAZARDOUS SUBSTANCE IN A QUANTITY REPORTABLE UNDER FEDERAL REGULATIONS 40 CFR PARTS 117 AND 302.

9. POTENTIAL POLLUTANTS INCLUDE BUT ARE NOT LIMITED TO: SOLID OR LIQUID CHEMICAL SPILLS; WASTES FROM PAINTS, STAINS, SEALANTS, GLUES, LIMES, PESTICIDES, HERBICIDES, WOOD PRESERVATIVES AND SOLVENTS; ASBESTOS FIBERS, PAINT FLAKES OR STUCCO FRAGMENTS; FUELS, OILS, LUBRICANTS, AND HYDRAULIC, RADIATOR OR BATTERY FLUIDS; FERTILIZERS, VEHICLE/EQUIPMENT WASH WATER AND CONCRETE WASH WATER; CONCRETE, DETERGENT OR FLOATABLE WASTES; WASTES FROM ANY ENGINE/EQUIPMENT STEAM CLEANING OR CHEMICAL DEGREASING AND SUPERCHLORINATED POTABLE WATER LINE FLUSHING. DURING CONSTRUCTION, PERMITTEE SHALL DISPOSE OF SUCH MATERIALS IN A WASHOUT BIN OR SPECIFIED AND CONTROLLED TEMPORARY AREA ON-SITE PHYSICALLY SEPARATED FROM POTENTIAL STORMWATER RUNOFF, WITH ULTIMATE DISPOSAL IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REQUIREMENTS.

10. DEWATERING OF CONTAMINATED GROUNDWATER, OR DISCHARGING CONTAMINATED SOILS VIA SURFACE EROSION IS PROHIBITED. DEWATERING OF NON-CONTAMINATED GROUNDWATER REQUIRES A NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT FROM THE RESPECTIVE STATE REGIONAL WATER QUALITY CONTROL BOARD.

11. GRADED AREAS ON THE PERMITTED AREA PERIMETER MUST DRAIN AWAY FROM THE FACE OF SLOPES AT THE CONCLUSION OF EACH WORKING DAY. DRAINAGE IS TO BE DIRECTED TOWARD DESILTING FACILITIES.

12. THE CONTRACTOR SHALL BE RESPONSIBLE AND SHALL TAKE NECESSARY PRECAUTIONS TO PREVENT PUBLIC TRESPASS ONTO AREAS WHERE IMPOUNDED WATER CREATES A HAZARDOUS CONDITION.

13. THE CONTRACTOR SHALL INSPECT THE EROSION CONTROL WORK AND INSURE THAT THE WORK IS IN ACCORDANCE WITH THE APPROVED PLANS.

14. THE GENERAL CONTRACTOR SHALL NOTIFY ALL SUBCONTRACTORS & MATERIAL SUPPLIERS: THAT DUMPING OF CHEMICALS INTO THE STORM DRAIN SYSTEM OR THE WATERSHED IS PROHIBITED.

15. EQUIPMENT AND WORKERS FOR EMERGENCY WORK SHALL BE MADE AVAILABLE AT ALL TIMES DURING THE RAINY SEASON. NECESSARY MATERIALS SHALL BE AVAILABLE ON SITE AND STOCKPILED AT CONVENIENT LOCATIONS TO FACILITATE RAPID CONSTRUCTION OF TEMPORARY DEVICES WHEN RAIN IS IMMINENT.

CONTRACTOR SHALL COMPLY WITH 2022 C.B.C. AND C.F.C. CHAPTER 33 - FIRE SAFETY DURING CONSTRUCTION AND DEMOLITION

GRADING PLANS, DRAINAGE IMPROVEMENTS, ROAD AND ACCESS REQUIREMENTS AND ENVIRONMENTAL HEALTH CONSIDERATIONS SHALL COMPLY WITH ALL LOCAL ORDINANCES.

EARTHWORK NOTICE TO CONTRACTOR: NO EARTHWORK ANALYSIS HAS BEEN COMPLETED WITH RESPECT TO VOLUMES OF SOILS TO BE EXCAVATED, PLACED, OR IMPORTED IN ORDER TO PROVIDE THE FINISHED GRADES SHOWN ON THE PLANS. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR VERIFYING THE EARTHWORK QUANTITIES NECESSARY TO COMPLETE THE PROJECT.

NOTE TO CONTRACTOR: BEFORE DEMOLITION OR TRENCHING OF ANY KIND OCCURS, THE CONTRACTOR SHALL COMPLETE HIS OWN UNDERGROUND UTILITY MAPPING SURVEY OF THE PROJECT SITE TO DETERMINE WERE EXISTING UTILITIES ARE AND WHERE POSSIBLE UNDERGROUND CONFLICTS MAY OCCUR. PROVIDE SURVEY TO OWNER PRIOR TO STARTING WORK.

NOTE TO CONTRACTOR: ALL EXISTING UNDERGROUND UTILITIES ARE TO BE PROTECTED IN PLACE UNLESS NOTED OTHERWISE ON THE PLANS.

PLANS PREPARED BY:
FPL and Associates, Inc.
Traffic • Transportation • Civil
30 Corporate Park, Suite 401
Irvine, CA 92606
Phone: 949-252-1688

Not for permitting or construction

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-124972 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/17/2026

PBK

ARCHITECT PBK Architects, Inc.
PBK.com
ANAHEIM
2400 E KATELLA AVE, Suite 950
ANAHEIM, CA 92806
P 949-548-5000

SCHROEDER ELEMENTARY SCHOOL
HVAC UPGRADE & MODERNIZATION

PROJECT ADDRESS:
15151 Columbia Ln
Huntington Beach, CA 92647

CONSTRUCTION DOCUMENTS

DSA APPL NO.: 04-124972 DSA FILE NO.: 30-43

RELO

KEY PLAN

NORTH: PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER
Alan Lin Chen
No. C 34971
Exp. 09-30-27
CIVIL
STATE OF CALIFORNIA

Architect

LICENSED ARCHITECT
Yong Yao
No. C-31162
REN. 10-31-2027
STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
02-10-2026	250376

REVISIONS

No.	Description	Date

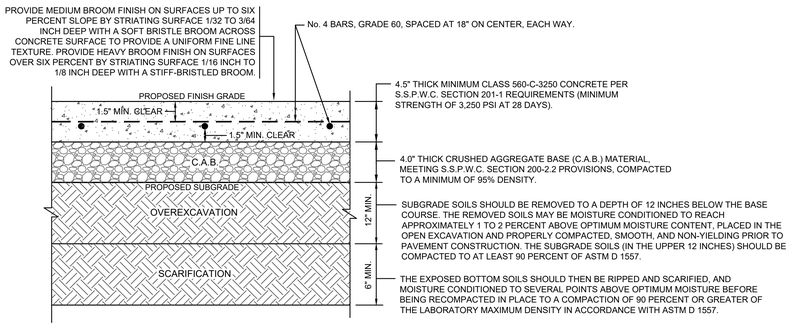
CONSTRUCTION DOCUMENTS

GRADING PLAN

This document is for plan review only

C2.01

FILE PATH: 8:\Projects\27 - PBK\27177a26 - Schroeder Elementary School\Civil\Schroeder ES - C2.01 Grading Plan.dwg
12/8/2025 2:37:51 PM

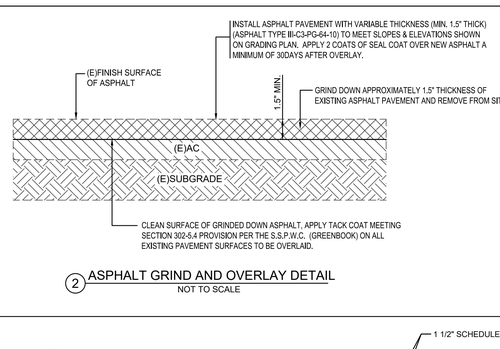


1 CONCRETE PAVEMENT DETAIL
NOT TO SCALE

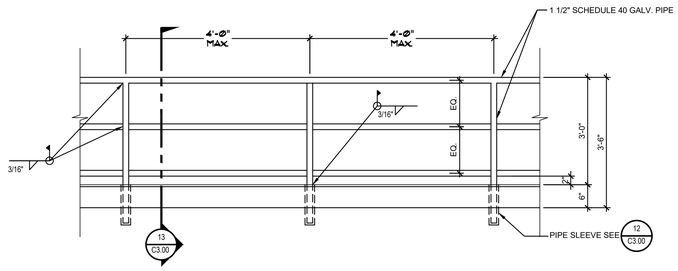
FLOOD TEST NOTE:

BEFORE ACCEPTANCE, ALL NEW CONCRETE SHALL BE WATER TESTED TO ENSURE PROPER DRAINAGE AS DIRECTED BY THE INSPECTOR. THE CONTRACTOR SHALL PROVIDE WATER FOR THIS PURPOSE. THE FLOODING SHALL BE DONE BY WATER TANK TRUCK. DEPRESSIONS WHERE THE WATER PONDS TO A DEPTH OF MORE THAN 0.01 FOOT SHALL BE FILLED OR THE SLOPE CORRECTED TO PROVIDE PROPER DRAINAGE. THE EDGES OF THE FILL SHALL BE FEATHERED AND SMOOTHED SO THAT THE JOINT BETWEEN THE FILL AND THE ORIGINAL SURFACE IS INVISIBLE. PRACTICAL FIELD MEASUREMENT: 0.01 FOOT = TWO QUARTERS STACKED. NO STANDING WATER SHALL REMAIN AFTER 60 MINUTES ON A 70 DEGREE F (OR WARMER) DAY.

NOTE TO CONTRACTOR:
A. THE CONTRACTOR SHALL INSTALL EXPANSION AND CONTROL JOINTS IN CONCRETE FLATWORK AT LOCATIONS NOTED ON THE ARCHITECTURAL PLANS FOLLOWING DETAILS 'AA' THRU 'CC' HEREON.
B. CONTRACTOR SHALL FOLLOW DETAILS 'DD' THRU 'FF' HEREON WHEN CONSTRUCTING CONCRETE FLATWORK EDGE TREATMENTS.



2 ASPHALT GRIND AND OVERLAY DETAIL
NOT TO SCALE



NOTE: WELD ALL JOINTS AND GRIND SMOOTH

NOTE: SPECIAL INSPECTION FOR GUARD RAIL WELDS IS NOT REQUIRED

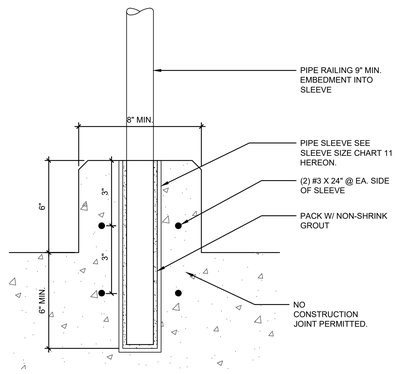
TYPICAL RAIL ELEVATION | 17

SCALE: 3/4" = 1'-0"

PIPE SLEEVE SIZE CHART						
RAILING / PIPE POST			PIPE SLEEVE			
WEIGHT CLASS SCHED. NO.	NOMINAL DIAMETER	O. D.	WT. / SCHED.	I. D.	NOMINAL DIAMETER	CLEARANCE I.D. SLEEVE - O.D. POST (INCHES)
STD. WT. SCHED. 40	1-1/2"	1.900	EX. STRONG SCHED. 80	2.323	2-1/2"	0.423

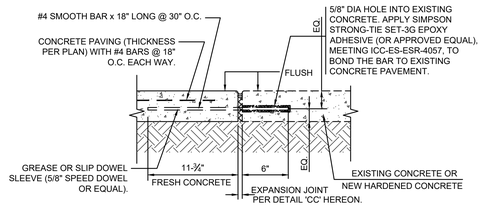
NOTE: REFER TO ASTM A53, TABLE X2.2 FOR DIMENSIONS AND SIZES OF PIPE.

PIPE SLEEVE SIZE CHART | 11



PIPE SLEEVE | 12

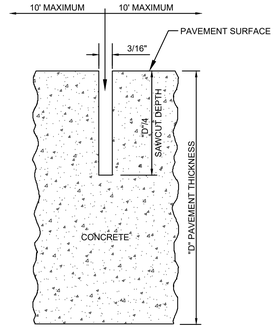
SCALE: 3" = 1'-0"



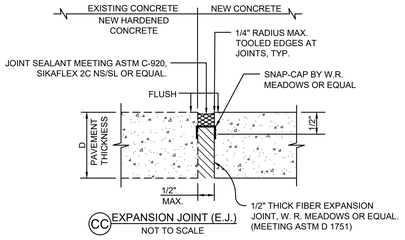
NOTE:1. VERTICAL CHANGE IN ELEVATION ALONG ACCESSIBLE PATH OF TRAVEL CANNOT EXCEED 1/4" PER CBC 11B-303.2

2. LEVEL CHANGE BETWEEN 1/4"-1/2" MUST BE BEVELED AT 1:2 MAX PER CBC 11B-303.3

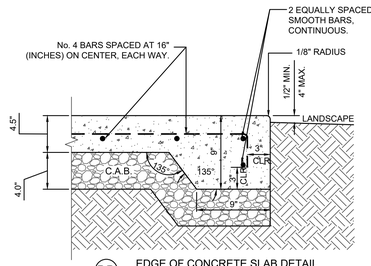
AA EXPANSION JOINT (E.J.) WITH REBAR
NOT TO SCALE



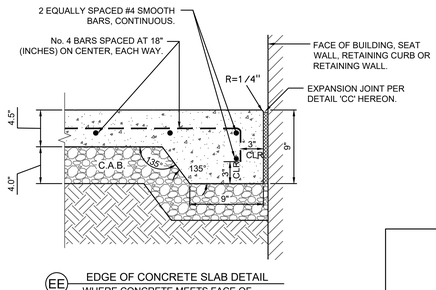
BB CONTROL JOINT (C.J.)
NOT TO SCALE



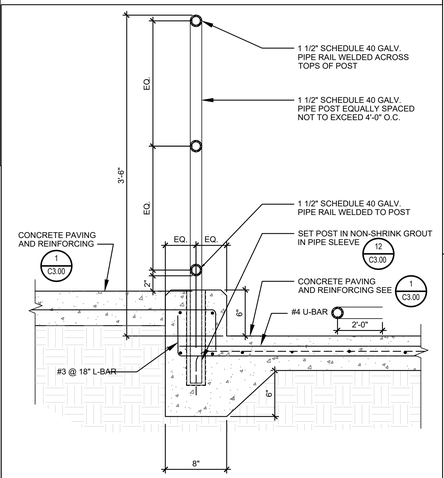
CC EXPANSION JOINT (E.J.)
NOT TO SCALE



DD EDGE OF CONCRETE SLAB DETAIL
WHERE CONCRETE MEETS SOFTSCAPE
NOT TO SCALE



EE EDGE OF CONCRETE SLAB DETAIL
WHERE CONCRETE MEETS FACE OF BUILDING OR WALLS
NOT TO SCALE

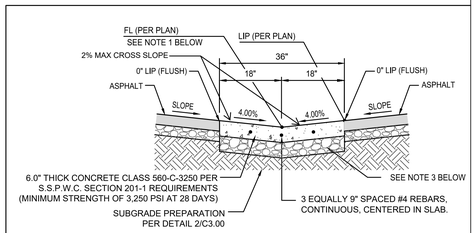


NOTE: ALL WELDED CONTINUOUS AND GRIND SMOOTH

GUARD RAIL SECTION | 13

SCALE: 1-1/2" = 1'-0"

CONCRETE PAVEMENT JOINT & END TREATMENT DETAILS

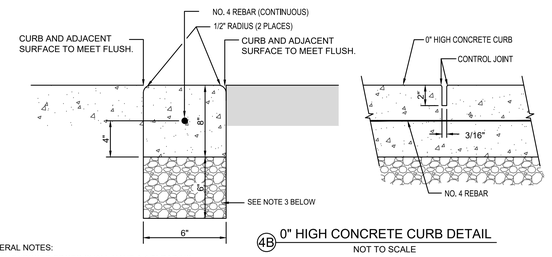


7 CONCRETE SWALE DETAIL
NOT TO SCALE

CONCRETE SWALE NOTES:

1. CONCRETE SWALE SHALL HAVE A 4" WIDE FLOWLINE SMOOTH STEEL TROWEL FINISH.
2. CONSTRUCT CONTROL JOINTS IN SWALE AT REGULAR INTERVALS OF 10'. CONSTRUCT EXPANSION JOINTS AT 30' INTERVALS. FOLLOW JOINT DETAILS HEREON.
3. A 4" THICK LAYER OF CRUSHED AGGREGATE BASE MATERIAL SHALL BE PLACED UNDER THE CONCRETE SWALE. MINIMUM COMPACTION OF 95% ON SUBGRADE IS REQUIRED.

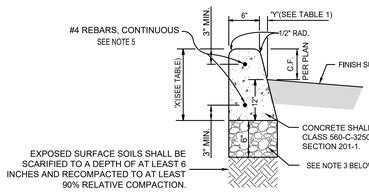
SECTION ELEVATION



4B 0" HIGH CONCRETE CURB DETAIL
NOT TO SCALE

GENERAL NOTES:

1. ALL EXPOSED EDGES SHALL HAVE A 1/2" RADIUS.
2. CONTROL JOINTS SHALL BE PLACED IN CURBING AT REGULAR INTERVALS OF 10'. EXPANSION JOINTS AT 30' INTERVALS AND AT DRIVE APPROACHES, B.C.'S, E.C.'S, CROSS GUTTERS AND CATCH BASIN TRANSITIONS.
3. A 6" THICK LAYER OF CRUSHED AGG. BASE SHALL BE PLACED UNDER ALL CURB. MINIMUM COMPACTION OF 95% IS REQUIRED.
4. CONCRETE SHALL BE CLASS 560-C-3250 PER S.S.P.W.C. SECTION 201-1.



4 CONCRETE CURB DETAIL
NOT TO SCALE

CURB FACE	0"	2"	4"	5"	6"	8"
"X"	12"	14"	16"	17"	18"	20"
"Y"	0"	0.5"	1"	1.25"	1.5"	2"

CURB GENERAL NOTES:

1. ALL EXPOSED EDGES SHALL HAVE A 1/2" RADIUS.
2. CONTROL JOINTS SHALL BE PLACED IN CURBING AT REGULAR INTERVALS OF 10'. EXPANSION JOINTS AT 30' INTERVALS, B.C.'S AND E.C.'S, PER JOINT DETAIL AA & BB HEREON.
3. A 6" THICK LAYER OF CRUSHED AGGREGATE BASE SHALL BE PLACED UNDER ALL CURB. MINIMUM COMPACTION OF 95% OFF AGGREGATE BASE IS REQUIRED UNLESS WAIVED BY THE CIVIL ENGINEER.
4. CONCRETE CURB SHALL BE MINIMUM CLASS 560-C-3250 PER S.S.P.W.C. SECTION 201-1.
5. PLACE NO. 4 REBARS 3" MINIMUM FROM TOP AND BOTTOM OF CURB.

PLANS PREPARED BY:
FPL FPL and Associates, Inc.
Traffic • Transportation • Civil
30 Corporate Park, Suite 401
Irvine, CA 92606
Phone: 949-252-1688

Not for permitting or construction

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-124972 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/17/2026

ARCHITECT PBK Architects, Inc.
PBK.com
ANAHEIM
2400 E KATELLA AVE, Suite 950
ANAHEIM, CA 92806
P 949-548-5000

SCHROEDER ELEMENTARY SCHOOL HVAC UPGRADE & MODERNIZATION

PROJECT ADDRESS:
15151 Columbia Ln
Huntington Beach, CA 92647

CONSTRUCTION DOCUMENTS

DSA FILE NO.: 30-43

DSA APPL. NO.: 04-124972

RELO

ADMIN

RELO

KEY PLAN

NORTH: PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER — CIVIL — No. C 34971 Exp. 09-30-27 — STATE OF CALIFORNIA

Architect

LICENSED ARCHITECT — Yong Yoo — No. C-31162 — REN. 10-31-2027 — STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
02-10-2026	250376

REVISIONS

No.	Description	Date

CONSTRUCTION DOCUMENTS

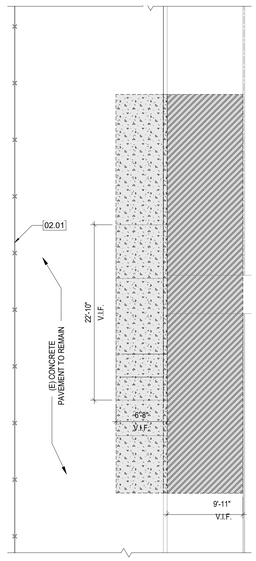
DETAIL SHEET

This document is for plan review only

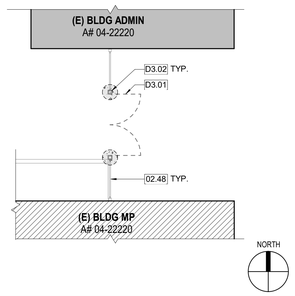
C3.00

FILE PATH: 8:\Projects\...PBK\2777.2c\S - Schroeder Elementary School\Civil\Schroeder ES - C3.00 Detail Sheet.dwg
12/8/2025 2:37:51 PM

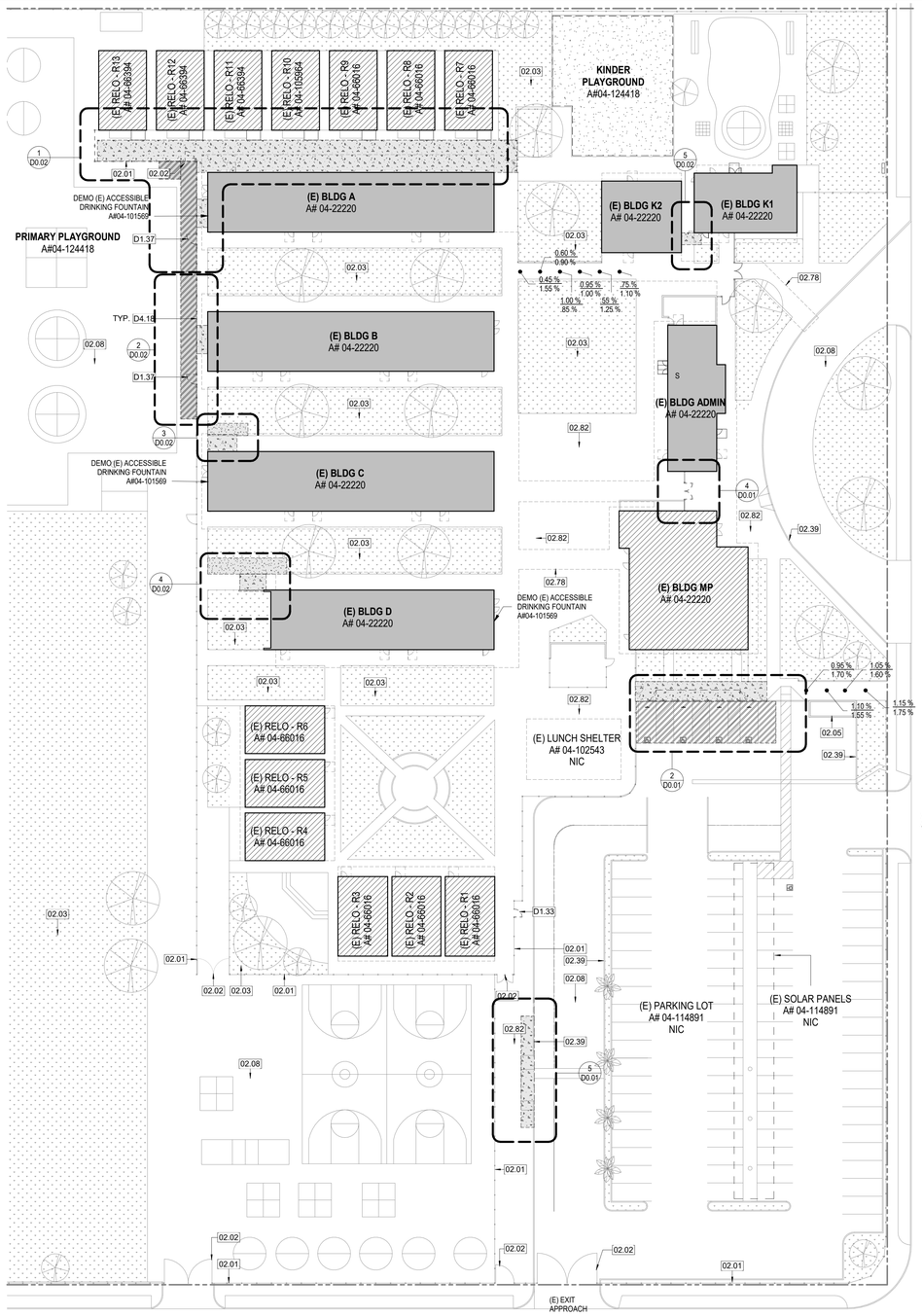
0" 1"



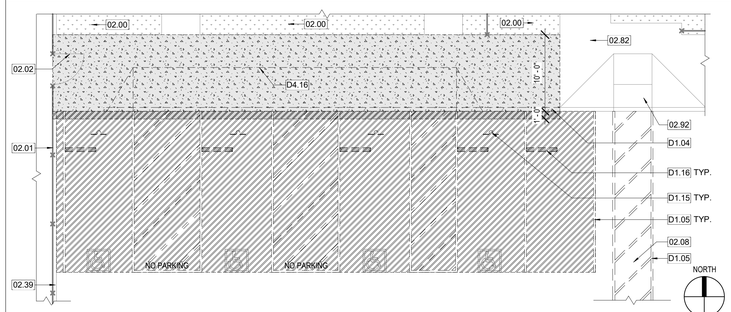
5 DEMO @ (E) DROP-OFF
1/8" = 1'-0"



4 (E) ORNAMENTAL MAIN ENTRY GATE
1/8" = 1'-0"



1 SITE DEMOLITION PLAN
1" = 30'-0"



2 PARKING LOT ENLARGED DEMO SITE PLAN
1/8" = 1'-0"

SITE DEMOLITION LEGEND

- PROPERTY LINE
- (E) CHAINLINK FENCE
- DEMO (E) CHAINLINK FENCE
- (E) RELOCATABLE BUILDINGS WITH LIMITED SCOPE
- BUILDING TO BE REMODELED. SEE DEMOLITION FLOOR AND CEILING PLANS.
- AREA OF (E) ASPHALT PAVING TO BE REMOVED AND REPLACED.
- AREA OF (E) TURF TO BE REMOVED , PREPARE FOR (N) NEW PAVING. ADJUST IRRIGATION AS NECESSARY.
- AREA OF (E) CONCRETE PAVING TO BE REMOVED , PREPARE FOR (N) CONCRETE PAVING.
- AREA OF (E) ASPHALT PAVING TO GRIND, PREPARE FOR (N) ASPHALT OVERLAY.

CONSTRUCTION KEYED NOTES

02.00 (E) TURF TO REMAIN
02.01 (E) CHAINLINK FENCING, TO REMAIN.
02.02 (E) CHAINLINK GATE, TO REMAIN.
02.03 (E) TURF
02.05 (E) TRASH ENCLOSURE
02.08 (E) A.C.PAVING
02.39 (E) CONCRETE CURB AND GUTTER TO REMAIN, PROTECT IN PLACE
02.48 (E) METAL FENCE AND POSTS TO REMAIN. PROTECT IN PLACE. PREPARE FOR (N) PAINT FINISH
02.78 (E) EDGE OF ROOF/COVERED WALKWAY OVERHANG.
02.82 (E) CONCRETE PAVEMENT TO REMAIN & PROTECT IN PLACE.
02.92 (E) ACCESSIBLE CURB RAMP

DEMOLITION KEYNOTES

D1.04 REMOVE (E) CONCRETE CURB AS INDICATED
D1.05 REMOVE (E) STRIPING AS INDICATED
D1.15 REMOVE (E) SIGNAGE, POST, AND FOOTING. PROVIDE SIGNAGE TO CAMPUS FOR STORAGE AND REINSTALLATION, DISPOSE OF POST AND FOOTING
D1.16 REMOVE (E) CONCRETE WHEEL STOP
D1.33 REMOVE (E) CHAINLINK GATE.
D1.37 DEMO AND DISPOSE (E) CHAINLINK GATE / POST & ASSOCIATED ACCESSORIES
D3.01 REMOVE (E) METAL GATES. REMOVE POST AND FOOTING ADJACENT TO MP BLDG AND PREPARE FOR (N) CONCRETE INFILL. CLEAN AND REPAIR BRICK WALL AS REQ'D.
D3.02 (E) GATE POST TO BE REMOVED. PATCH AND REPAIR CONCRETE WITH A FLUSH TRANSITION
D4.16 REMOVE (E) CONCRETE CURB RAMP
D4.18 REMOVE (E) CHAINLINK FENCE

NOTES:
LIST ON THE PLANS OR SPECS COMPLIANCE WITH CBC AND CFC CH 33 - FIRE SAFETY DURING CONSTRUCTION AND DEMOLITION. REFER TO DSA BULLETIN 24-05 FOR FURTHER INFORMATION.

Not for permitting or construction

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-124972 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/17/2026

PBK

ARCHITECT PBK Architects, Inc.
ANAHEIM PBK.com
2400 E KATELLA AVE, Suite 950
ANAHEIM, CA 92806
P 949-548-5000

SCHROEDER ELEMENTARY SCHOOL
HVAC UPGRADE & MODERNIZATION

PROJECT ADDRESS:
15151 Columbia Ln
Huntington Beach, CA 92647

CONSTRUCTION DOCUMENTS

DSA APPL NO.: 04-124972 DSA FILE NO.: 30-43

RELO
A K2 K1
B ADMIN
C MPR
D
RELO

KEY PLAN
NORTH: PLAN

Consultant

Architect
LICENSED ARCHITECT Yong Yoo No. C-31162 REN. 10-31-2027 STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
11-14-2025	250376

REVISIONS

No.	Description	Date

CONSTRUCTION DOCUMENTS

SITE DEMOLITION PLAN

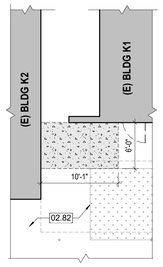
This document is for plan review only

D0.01

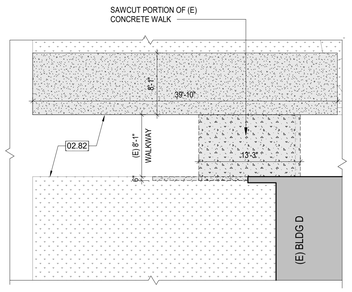
FILE PATH: Z:\Projects\...
3/13/2026 6:34:49 PM

0" 1"

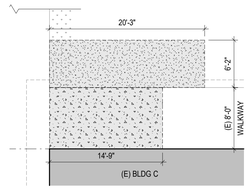
D0.02 - SITE DEMOLITION PLAN



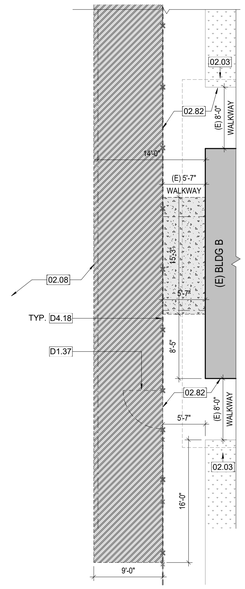
5 KINDER MECH ENCLOSURE DEMO PLAN
1/8" = 1'-0"



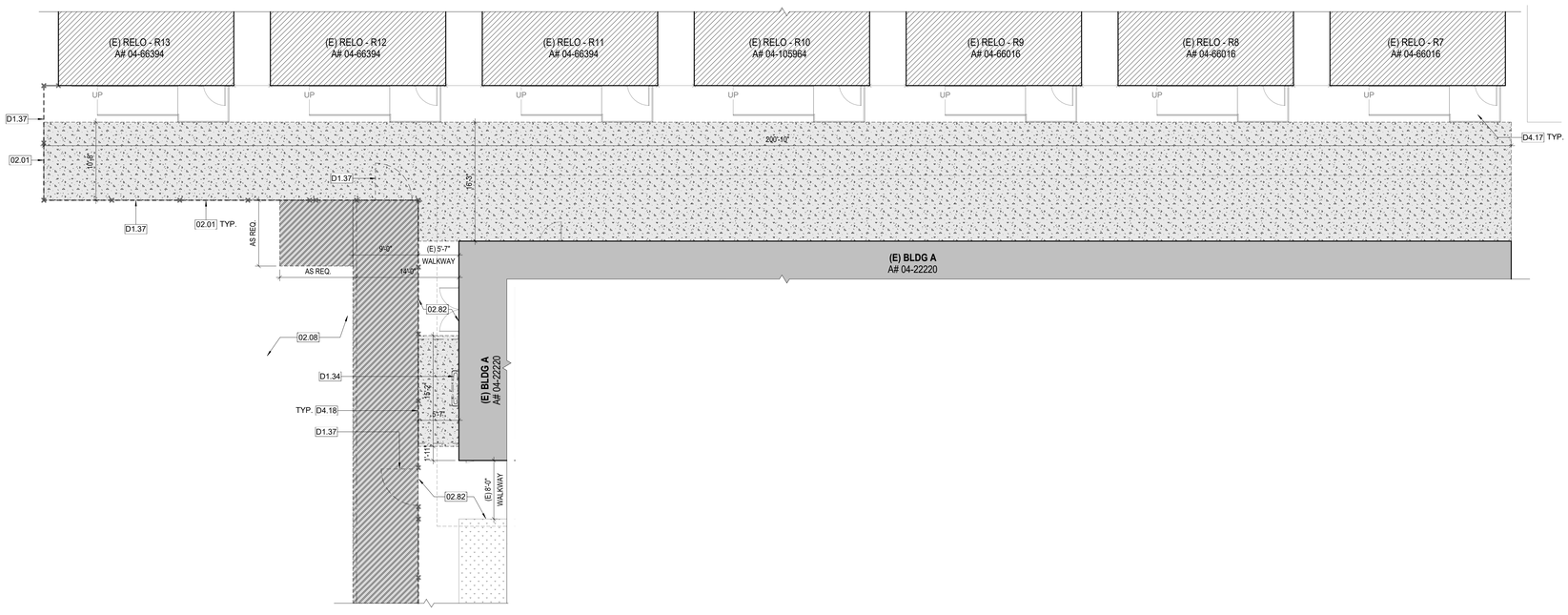
4 BLDG D - MECH ENCLOSURE DEMO PLAN
1/8" = 1'-0"



3 BLDG C - MECH ENCLOSURE DEMO PLAN
1/8" = 1'-0"



2 BLDG B - MECH ENCLOSURE DEMO PLAN
1/8" = 1'-0"



1 (E) CONCRETE SLAB & RELO RAMP DEMO AT RELO R7 TO R13
1/8" = 1'-0"

SITE DEMOLITION LEGEND

- PROPERTY LINE
- (E) CHAINLINK FENCE
- DEMO (E) CHAINLINK FENCE
- (E) RELOCATABLE BUILDINGS WITH LIMITED SCOPE
- BUILDING TO BE REMODELED. SEE DEMOLITION FLOOR AND CEILING PLANS.
- AREA OF (E) ASPHALT PAVING TO BE REMOVED AND REPLACED.
- AREA OF (E) TURF TO BE REMOVED , PREPARE FOR (N) NEW PAVING. ADJUST IRRIGATION AS NECESSARY.
- AREA OF (E) CONCRETE PAVING TO BE REMOVED , PREPARE FOR (N) CONCRETE PAVING.
- AREA OF (E) ASPHALT PAVING TO GRIND, PREPARE FOR (N) ASPHALT OVERLAY.

CONSTRUCTION KEYED NOTES

02.01 (E) CHAINLINK FENCING, TO REMAIN.
02.03 (E) TURF
02.08 (E) A.C.PAVING
02.82 (E) CONCRETE PAVEMENT TO REMAIN & PROTECT IN PLACE.

DEMOLITION KEYNOTES

D1.34 DEMO AND DISPOSE (E) DRINKING FOUNTAIN
D1.37 DEMO AND DISPOSE (E) CHAINLINK GATE / POST & ASSOCIATED ACCESSORIES
D4.17 REMOVE (E) RELOCATABLE RAMP
D4.18 REMOVE (E) CHAINLINK FENCE

FILE PATH: Z:\Projects\...
3/13/2026 6:37:20 PM

Not for permitting or construction

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-124972 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/17/2026

PBK

ARCHITECT PBK Architects, Inc.
ANAHEIM PBK.com
2400 E KATELLA AVE, Suite 950
ANAHEIM, CA 92806
P 949-548-5000

SCHROEDER ELEMENTARY SCHOOL
HVAC UPGRADE & MODERNIZATION

PROJECT ADDRESS:
15151 Columbia Ln
Huntington Beach, CA 92647

CONSTRUCTION DOCUMENTS

DSA FILE NO.: 30-43
DSA APPL NO.: 04-124972

RELO
A
B
C
D
RELO
K2 K1
ADMIN
MPR
N
KEY PLAN
NORTH: PLAN

Consultant

Architect
LICENSED ARCHITECT
Tong Yoo
No. C-31162
REN. 10-31-2027
STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
11-14-2025	250376

REVISIONS

No.	Description	Date

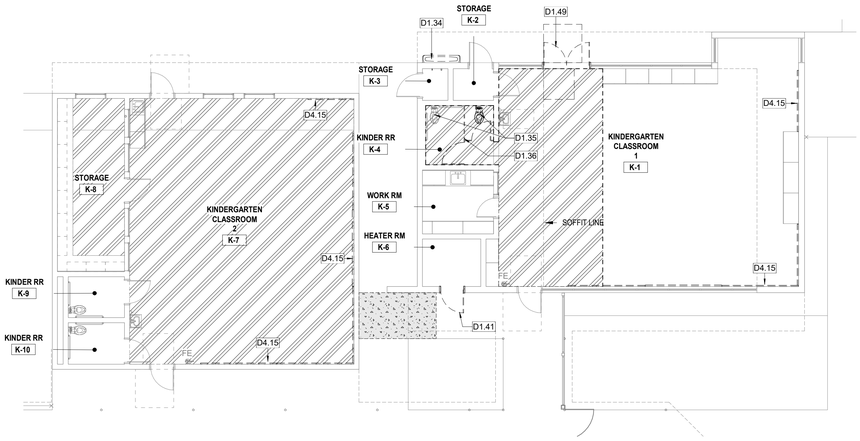
CONSTRUCTION DOCUMENTS

SITE DEMOLITION PLAN

This document is for plan review only

D0.02

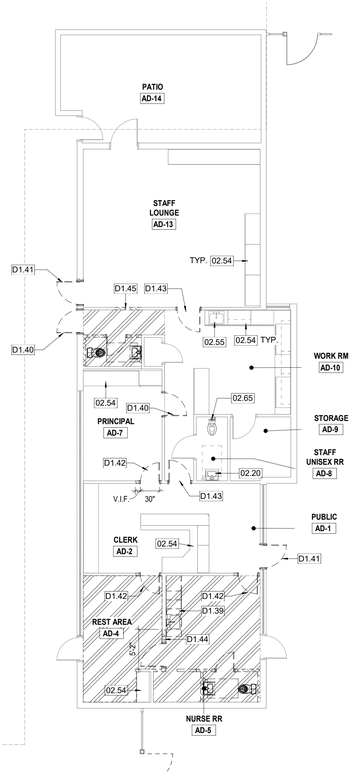
0" 1"



2 DEMO PLAN - KINDERGARTEN BLDG K1 & K2

1/8" = 1'-0"

NORTH



NORTH

1 DEMO PLAN - BLDG ADMIN

1/8" = 1'-0"

DEMOLITION LEGEND

EXISTING NON-BEARING WALL TO BE REMOVED

DOOR AND FRAME TO BE REMOVED, U.N.O.

DEMO ALL (E) WALL FINISH, FLOOR SLAB, DUCTS, PIPES, CONDUITS & FIXTURES, U.N.O.

DEMO (E) FLOORING FINISH. PREPARE SURFACE FOR NEW FLOOR FINISH. REF FINISH SCHEDULE

GENERAL DEMOLITION NOTES

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

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

DEMOLITION KEYNOTES

D1.34	DEMO AND DISPOSE (E) DRINKING FOUNTAIN
D1.35	DEMO AND DISPOSE (E) FLOOR MOUNTED WATER CLOSET. PATCH AND REPLACE FLOOR TILE TO MATCH EXISTING
D1.36	DEMO AND DISPOSE (E) TOILET PARTITION. PATCH AND REPLACE FLOOR AND WALL FINISH MATERIALS TO MATCH EXISTING
D1.39	DEMO AND DISPOSE (E) CONCRETE PAVING AT (E) DROP OFF CURB, PREPARE FOR (N) CONCRETE PAVING
D1.40	DEMO AND DISPOSE (E) DOOR & DOOR FRAME. PREPARE FOR WALL INFILLED
D1.41	REMOVE (E) DOOR & DOORS HARDWARE. PROVIDE NEW PAINT AND INSTALLED PER PLAN
D1.42	DEMO AND DISPOSE (E) DOOR AND PORTION OF WALL FOR INSTALLATION OF (N) DOOR. REF TO DOOR SCHEDULE
D1.43	DEMO AND DISPOSE (E) DOOR AND DOOR FRAME. PREPARE SURFACE FOR (N) 36"X7'2" OPENING
D1.44	DEMO PORTION OF (E) WALL AND PREPARE FOR A NEW FAME FOR OPENING. PATCH AND REPLACE FINISH MATERIALS TO MATCH EXISTING
D1.45	DEMO PORTION OF (E) WALL AND PREPARE FOR A NEW DOOR FRAME & NEW DOOR. REF TO DOOR SCHEDULE
D1.49	DEMO AND DISPOSE (E) DOOR & ASSOCIATED HARDWARE. (E) DOOR FRAME TO BE PROTECT IN PLACE AND PREPARE FOR NEW DOOR.
D4.15	REMOVE (E) MARKERBOARD / TACKBOARD. PATCH & REPAIR WALL FASTENING, TO BE REPLACED.

CONSTRUCTION KEYED NOTES

02.20	(E) LAVATORY TO REMAIN
02.54	(E) CASEWORK TO REMAIN. PROTECT IN PLACE.
02.55	(E) ACCESSIBLE SINK TO REMAIN. PROTECT IN PLACE
02.65	(E) ACCESSIBLE WATER CLOSET TO REMAIN, PROTECT IN PLACE

Not for permitting or construction

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-124972 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/17/2026

PBK

ARCHITECT PBK Architects, Inc.
ANAHEIM PBK.com
2400 E KATELLA AVE, Suite 950
ANAHEIM, CA 92806
P 949-548-5000

SCHROEDER ELEMENTARY SCHOOL
HVAC UPGRADE & MODERNIZATION

PROJECT ADDRESS:
15151 Columbia Ln
Huntington Beach, CA 92647

CONSTRUCTION DOCUMENTS

DSA FILE NO.: 30-43

DSA-APPL NO.: 04-124972

WESTMINSTER SCHOOL DISTRICT EST. 1872

RELO
A
B
C
D
RELO
K2 K1
ADMIN
MPR

KEY PLAN N
NORTH: PLAN

Consultant

Architect

LICENSED ARCHITECT
Yong Yoo
No. C-31162
REN. 10-31-2027
STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
11-14-2025	250376

REVISIONS

No.	Description	Date

CONSTRUCTION DOCUMENTS

DEMO FLOOR PLAN

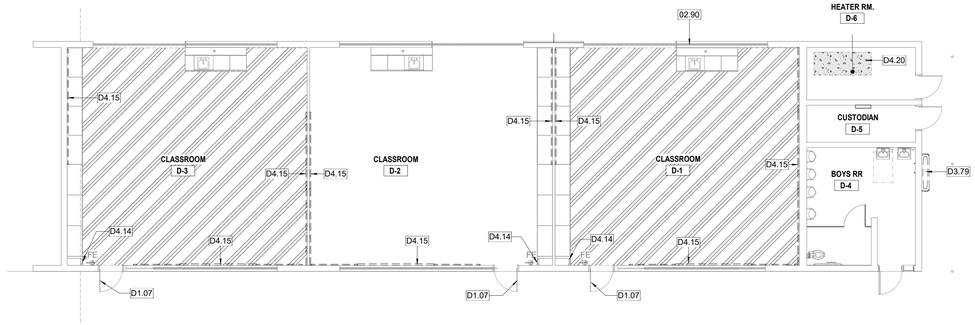
This document is for plan review only

D1.01

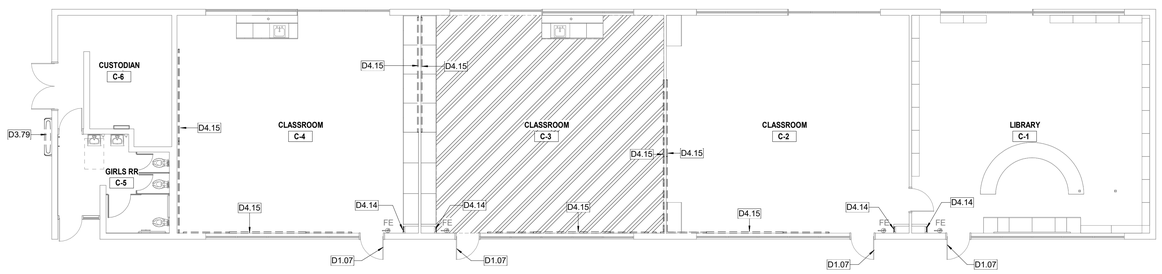
FILE PATH: Z:\Projects\...
3/13/2026 5:35:54 PM

D1.02 - DEMO FLOOR PLAN

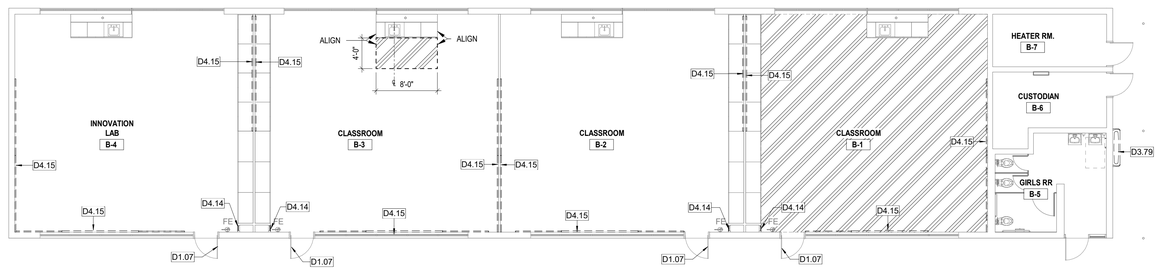
0" 1"



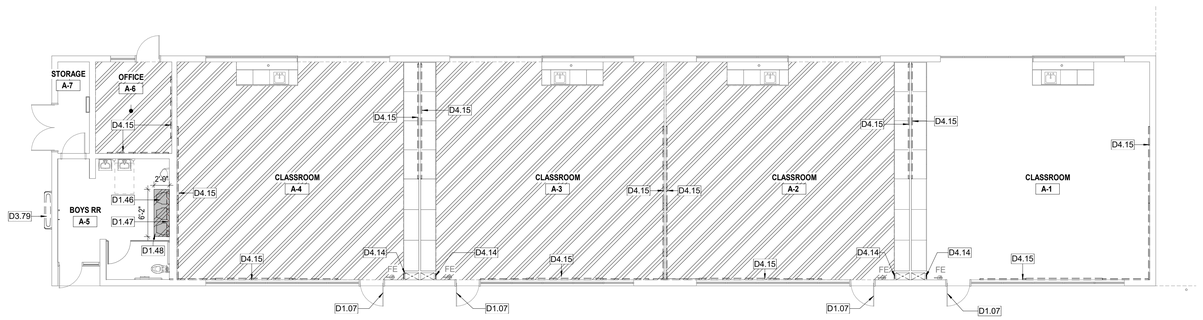
4 DEMO PLAN - BLDG D
1/8" = 1'-0"



3 DEMO PLAN - BLDG C
1/8" = 1'-0"



2 DEMO PLAN - BLDG B
1/8" = 1'-0"



1 DEMO PLAN - BLDG A
1/8" = 1'-0"

DEMOLITION LEGEND

EXISTING NON-BEARING WALL TO BE REMOVED

DOOR AND FRAME TO BE REMOVED, U.N.O.

DEMO ALL (E) WALL FINISH, FLOOR SLAB, DUCTS, PIPES, CONDUITS & FIXTURES, U.N.O.

DEMO (E) FLOORING FINISH. PREPARE SURFACE FOR NEW FLOOR FINISH. REF FINISH SCHEDULE

GENERAL DEMOLITION NOTES

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

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

DEMOLITION KEYNOTES

D1.07 (E) EXTERIOR DOOR HARDWARE TO BE REMOVED AND REPLACED, WHERE REQUIRED, SEE DOOR SCHEDULE
D1.46 DEMO (E) FLOOR MOUNTED URINAL AND PREPARE FOR A NEW URINAL
D1.47 DEMO (E) FURRED WALL. PATCH AND PREPARE WALL FOR A NEW WALL-HUNG URINAL WITH TILE FINISHES TO MATCH ADJACENT TILES.
D1.48 DEMO PORTION OF (E) FLOOR TILE AND PREPARE FOR NEW TILE.
D3.79 REMOVE (E) DRINKING FOUNTAINS, PREPARE FOR NEW DRINKING FOUNTAIN
D4.14 REMOVE (E) MECH. DUCT / GRILLE, CAP & COVER (E) CHASE.
D4.15 REMOVE (E) MARKERBOARD / TACKBOARD, PATCH & REPAIR WALL FASTENING, TO BE REPLACED.
D4.20 DEMO AND DISPOSE (E) BOILER, CONCRETE PAD, AND ALL ASSOCIATED ACCESSORIES

CONSTRUCTION KEYED NOTES

02.90 (E) WINDOW TO REMAIN. PROTECT IN PLACE.

Not for permitting or construction

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-124972 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/17/2026

PBK

ARCHITECT PBK Architects, Inc.
ANAHEIM PBK.com
2400 E KATELLA AVE, Suite 950
ANAHEIM, CA 92806
P 949-548-5000

SCHROEDER ELEMENTARY SCHOOL
HVAC UPGRADE & MODERNIZATION

PROJECT ADDRESS:
15151 Columbia Ln
Huntington Beach, CA 92647

CONSTRUCTION DOCUMENTS

DSA FILE NO.: 30-43

DSA APPL NO.: 04-124972

RELO
A K1
B ADMIN
C MPR
D
RELO

KEY PLAN
NORTH: PLAN

Consultant

Architect
LICENSED ARCHITECT
Hong Yao
No. C-31162
REN. 10-31-2027
STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
11-14-2025	250376

REVISIONS

No.	Description	Date

CONSTRUCTION DOCUMENTS

DEMO FLOOR PLAN

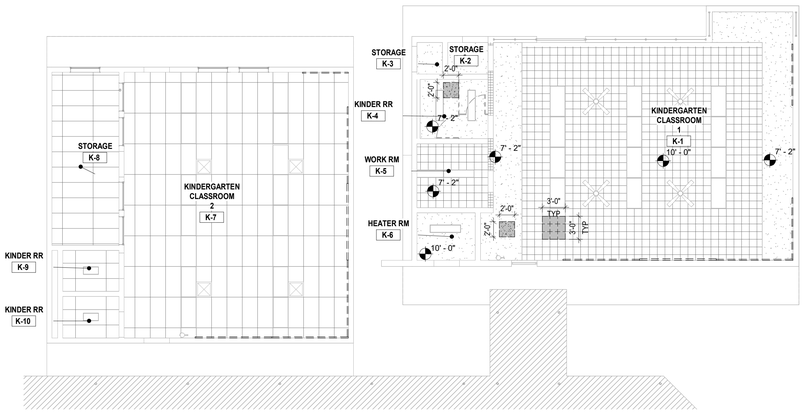
This document is for plan review only

D1.02

FILE PATH: Z:\Projects\...
3/13/2026 5:35:57 PM

D2.01 - DEMO REFLECTED CEILING PLAN

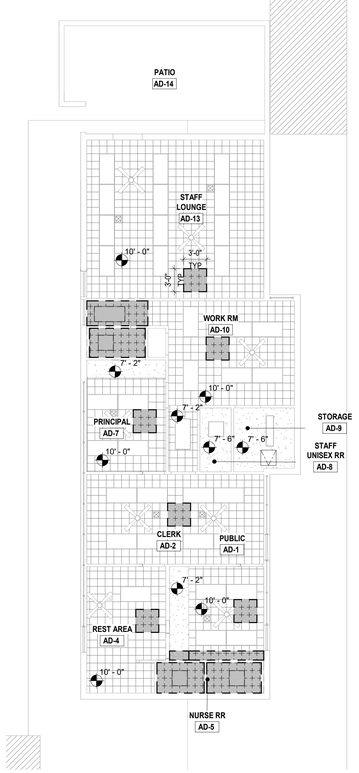
0" 1"



NORTH

2 DEMO RCP - KINDERGARTEN BLDG K1 & K2

1/8" = 1'-0"



NORTH

1 DEMO RCP - BLDG ADMIN

1/8" = 1'-0"

GENERAL DEMOLITION NOTES

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

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

DEMOLITION RCP LEGEND

- EXISTING CEILING TO REMAIN
- EXISTING PLASTER /GYP.BD. CEILING & SUBSTRATE TO BE REMOVED AND DISPOSED.
- EXISTING NON-BEARING WALL TO BE REMOVED
- EXISTING 12"x12" GLUE UP / STAPLED ACOUSTIC TILE AND (E) SUBSTRATES TO BE REMOVED AND DISPOSED.
- REMOVE AND DISPOSE (E) LIGHT FIXTURES AND WIRING
- MECHANICAL GRILLES, REFER TO MECHANICAL DRAWINGS (REMOVE WHEN SHOWN DASHED)
- (E) CEILING FAN AND ACCESSORIES TO BE REMOVED BY G.C. AND RETURNED TO THE DISTRICT.
- (E) ACCESS PANEL TO BE REMOVED & DISPOSED, WHERE OCCURS.

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

Not for permitting or construction

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-124972 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/17/2026

PBK

ARCHITECT PBK Architects, Inc.
ANAHEIM PBK.com
2400 E KATELLA AVE, Suite 950
ANAHEIM, CA 92806
P 949-548-5000

SCHROEDER ELEMENTARY SCHOOL
HVAC UPGRADE & MODERNIZATION

PROJECT ADDRESS:
15151 Columbia Ln
Huntington Beach, CA 92647

CONSTRUCTION DOCUMENTS

DSA FILE NO.: 30-43

DSA APPL NO.: 04-124972

RELO
A
B
C
D
RELO
K2 K1
ADMIN
MPR

KEY PLAN
N
NORTH: PLAN

Consultant

Architect

LICENSED ARCHITECT
Yong Yoo
No. C-31162
REN 10-31-2027
STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
11-14-2025	250376

REVISIONS

No.	Description	Date

CONSTRUCTION DOCUMENTS

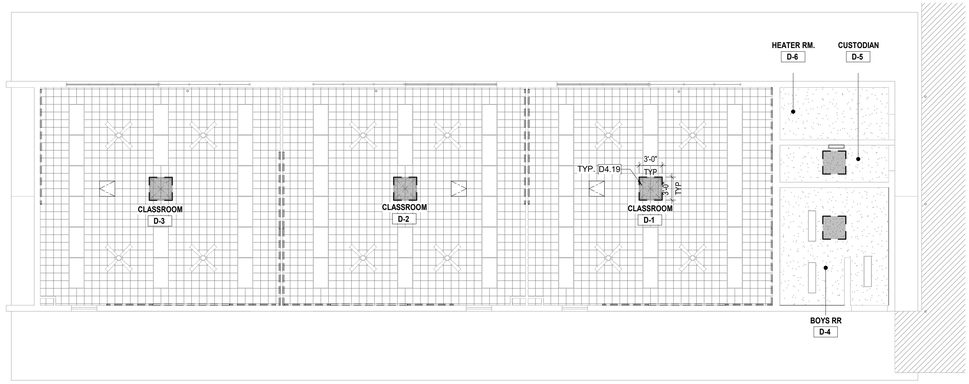
DEMO REFLECTED CEILING PLAN

This document is for plan review only

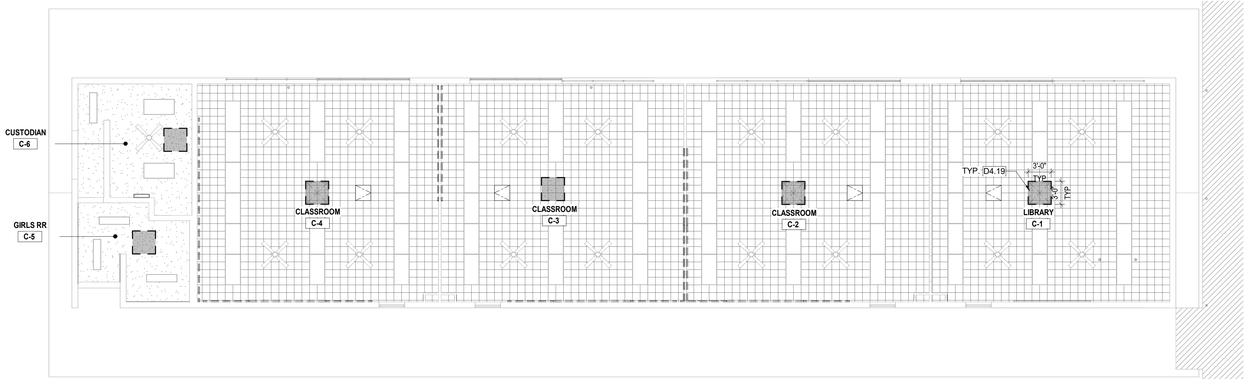
D2.01

FILE PATH: Z:\Projects\...
3/13/2026 5:35:58 PM

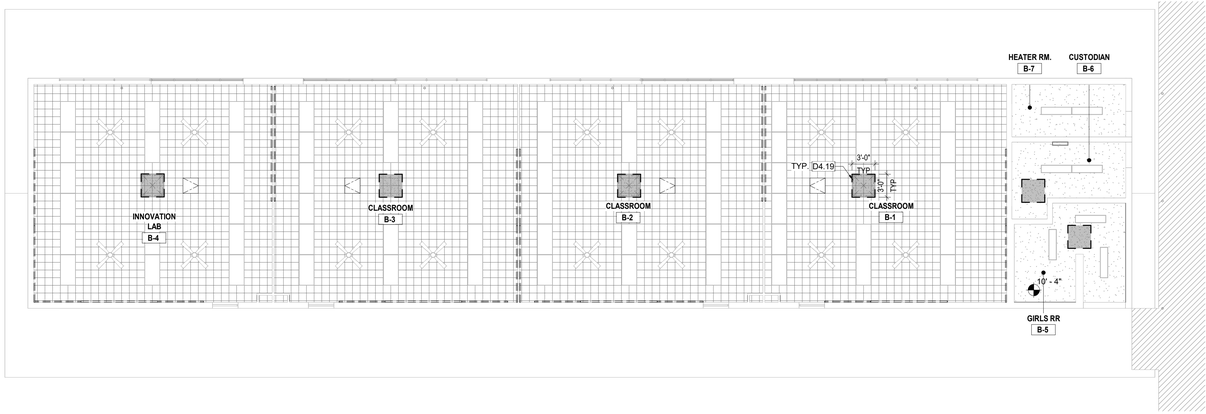
0" 1"



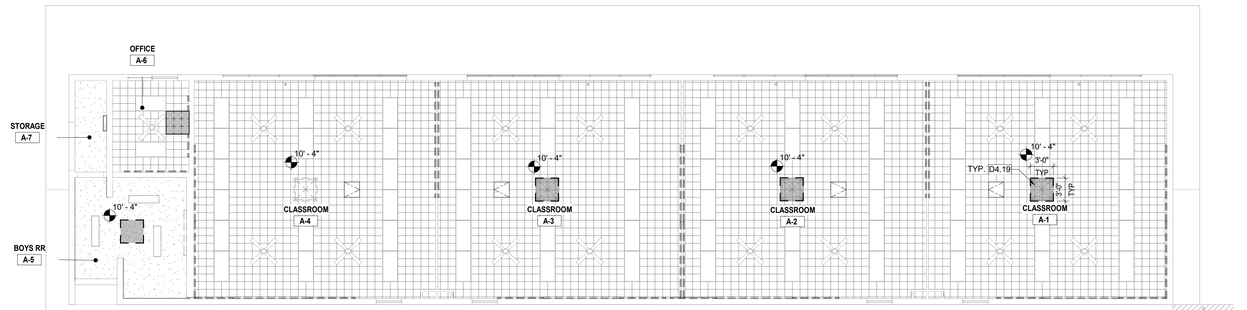
4 DEMO RCP - BLDG D
1/8" = 1'-0"



3 DEMO RCP - BLDG C
1/8" = 1'-0"



2 DEMO RCP - BLDG B
1/8" = 1'-0"



1 DEMO RCP - BLDG A
1/8" = 1'-0"

GENERAL DEMOLITION NOTES

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

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

DEMOLITION RCP LEGEND

- EXISTING CEILING TO REMAIN
- EXISTING PLASTER /GYP.BD. CEILING & SUBSTRATE TO BE REMOVED AND DISPOSED.
- EXISTING NON-BEARING WALL TO BE REMOVED
- EXISTING 12"x12" GLUE UP / STAPLED ACOUSTIC TILE AND (E) SUBSTRATES TO BE REMOVED AND DISPOSED.
- REMOVE AND DISPOSE (E) LIGHT FIXTURES AND WIRING
- MECHANICAL GRILLES, REFER TO MECHANICAL DRAWINGS (REMOVE WHEN SHOWN DASHED)
- (E) CEILING FAN AND ACCESSORIES TO BE REMOVED BY G.C. AND RETURNED TO THE DISTRICT.
- (E) ACCESS PANEL TO BE REMOVED & DISPOSED, WHERE OCCURS.

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

DEMOLITION KEYNOTES

D4.19 REMOVE (E) MECHANICAL GRILLE & ASSOCIATED DUCTS & ACCESSORIES

Not for permitting or construction

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-124972 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/17/2026

PBK

ARCHITECT PBK Architects, Inc.
ANAHEIM PBK.com
2400 E KATELLA AVE, Suite 950
ANAHEIM, CA 92806
P 949-548-5000

SCHROEDER ELEMENTARY SCHOOL
HVAC UPGRADE & MODERNIZATION

PROJECT ADDRESS:
15151 Columbia Ln
Huntington Beach, CA 92647

CONSTRUCTION DOCUMENTS

DSA FILE NO.: 30-43

DSA APPL NO.: 04-124972

RELO
A K2 K1
B ADMIN
C MPR
D
RELO

KEY PLAN
N
NORTH: PLAN

Consultant

Architect
LICENSED ARCHITECT
Yong Yoo
No. C-31162
REN. 10-31-2027
STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
11-14-2025	250376

REVISIONS

No.	Description	Date

CONSTRUCTION DOCUMENTS

DEMO REFLECTED CEILING PLAN

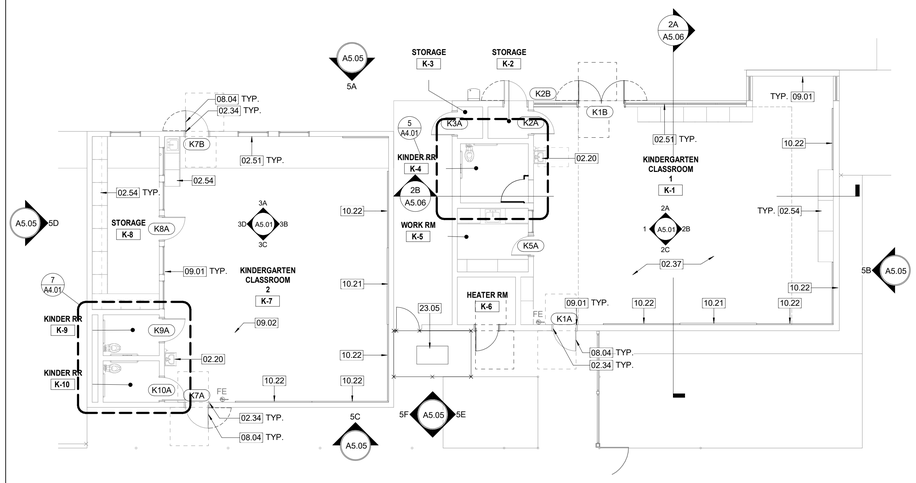
D2.02

This document is for plan review only

FILE PATH: Z:\Projects\...
3/13/2026 5:36:00 PM

A1.01 - FLOOR PLAN

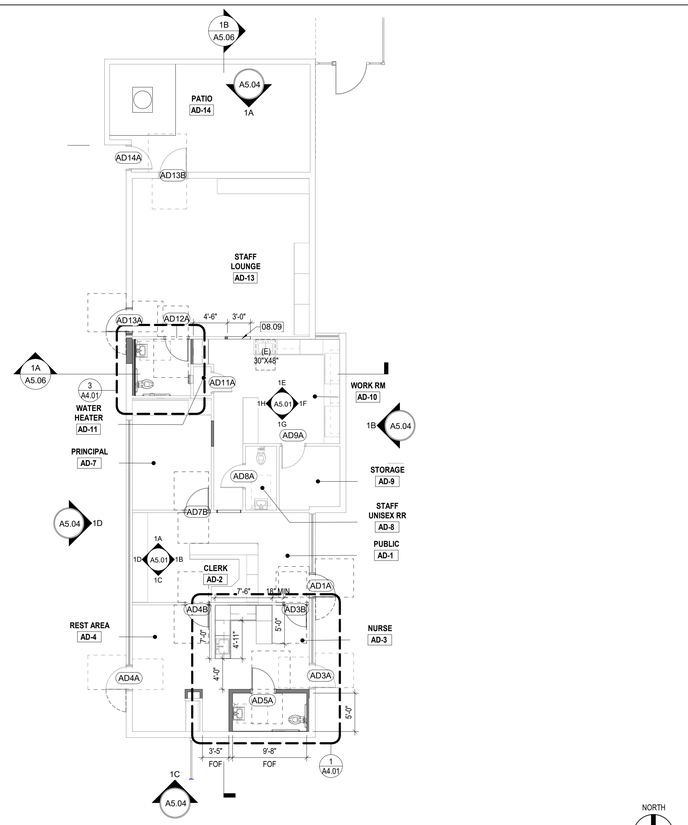
0" 1"



NORTH

3 FLOOR PLAN - KINDERGARTEN BLDG K1 & K2

1/8" = 1'-0"



NORTH

1 FLOOR PLAN - BLDG ADMIN

1/8" = 1'-0"

GENERAL ARCH PLAN NOTES

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

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

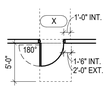
EXTERIOR PAINT SCOPE OF WORK

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

REMODEL PLAN LEGEND

EXISTING WALL TO REMAIN

NEW WALL TO BE PROVIDED



(E) DOOR PANEL & (E) HM DOOR FRAME TO REMAIN. PROVIDE (N) DOOR HARDWARE; REFER TO A6.01 FOR DOOR SCHEDULE AND TYPES.

NOTE: VERIFY IN FIELD 2% SLOPES AWAY FROM BUILDING AND 2% MAX CROSS SLOPE. PROVIDE NEW CONCRETE AS REQ.



LETTER INDICATES PARTITION TYPE, REF. DETAIL - 1 / AX1.01
# INDICATES CORE WIDTH 2 / AX1.01
LETTER INDICATES CORE TYPE (S=STUD)

FE

WHERE EXISTING FIRE EXTINGUISHER IS MISPLACED IN CLASSROOM, MOVE (E) FIRE EXTINGUISHER WITH WALL BRACKET TO LOCATION SHOWN ON PLAN. IF FIRE EXTINGUISHER AND/OR MOUNTING BRACKET IS MISSING PROVIDE PER SPEC 10 44 00 AND REFER TO DETAIL 6 / AX6.01

CONSTRUCTION KEYED NOTES

02.20	(E) LAVATORY TO REMAIN
02.34	(E) EXTERIOR H.M. DOOR FRAME TO REMAIN, PROVIDE (N) PAINT FINISH
02.37	(E) FLOOR FINISH & (E) RUBBER BASE TO REMAIN. SEE FINISH SCHEDULE
02.51	(E) ALUMINUM FRAME & GLAZING STOREFONT SYSTEM, TO REMAIN.
02.54	(E) CASEWORK TO REMAIN. PROTECT IN PLACE.
08.04	(E) DOOR PANEL & (E) DOOR FRAME, PROVIDE (N) DOOR HARDWARE WHERE NEEDED AND (N) PAINT FINISH. SEE DOOR SHEDULE
08.09	(N) 36"W x 72"H WALL OPENING
09.01	(N) INTERIOR PAINT FINISH, SEE FINISH SCHEDULE
09.02	(N) FLOOR FINISH AND RUBBER BASE, SEE FINISH PLAN AND SCHEDULE
10.21	(N) MARKER BOARD
10.22	(N) TACKABLE SURFACE
23.05	(N) VRF UNIT, SEE MECHANICAL DRAWING

Not for permitting or construction

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-124972 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/17/2026

PBK

ARCHITECT PBK Architects, Inc.
PBK.com
ANAHEIM
2400 E KATELLA AVE, Suite 950
ANAHEIM, CA 92806
P 949-548-5000

SCHROEDER ELEMENTARY SCHOOL
HVAC UPGRADE & MODERNIZATION

PROJECT ADDRESS:
15151 Columbia Ln
Huntington Beach, CA 92647

CONSTRUCTION DOCUMENTS

DSA APPL NO.: 04-124972 DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT EST. 1872

RELO
A K2 K1
B ADMIN
C MPR
D
RELO

KEY PLAN N
NORTH: PLAN

Consultant

Architect

LICENSED ARCHITECT Yong Yoo No. C-31162 REN. 10-31-2027 STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
11-14-2025	250376

REVISIONS

No.	Description	Date

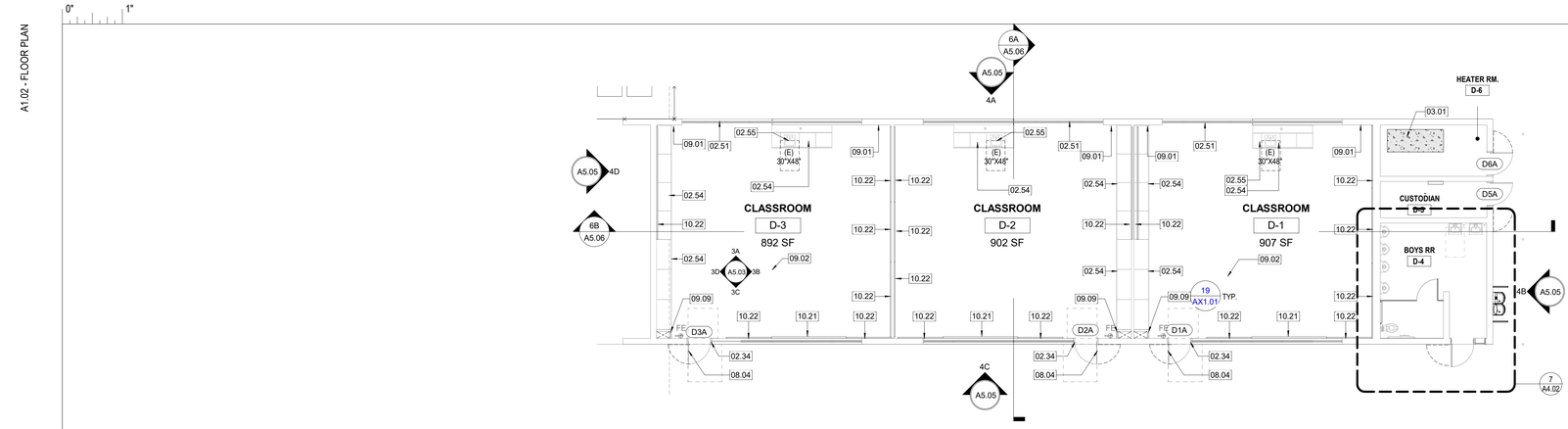
CONSTRUCTION DOCUMENTS

FLOOR PLAN

This document is for plan review only

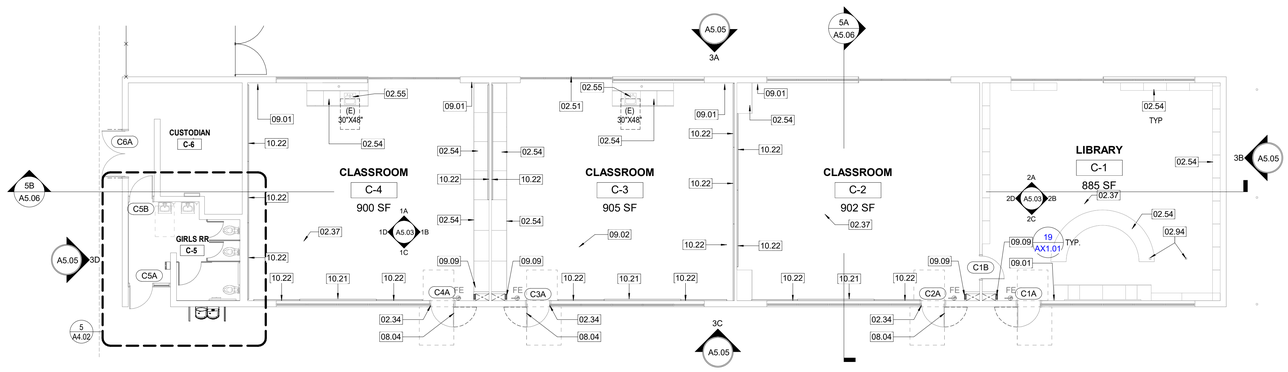
A1.01

FILE PATH: Z:\Projects\...
3/13/2026 5:36:02 PM



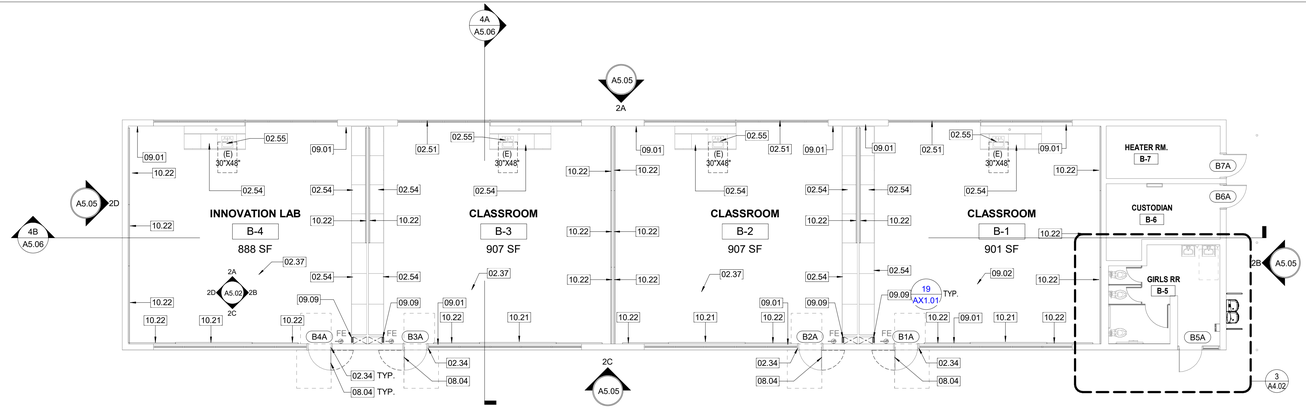
4 FLOOR PLAN - BLDG D

1/8" = 1'-0"



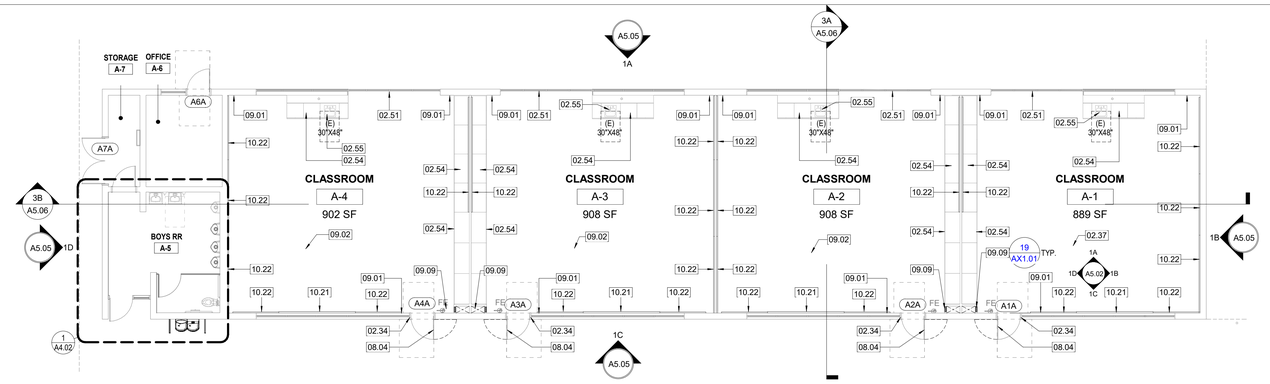
3 FLOOR PLAN - BLDG C

1/8" = 1'-0"



2 FLOOR PLAN - BLDG B

1/8" = 1'-0"



1 FLOOR PLAN - BLDG A

1/8" = 1'-0"

GENERAL ARCH PLAN NOTES

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

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

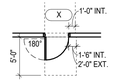
EXTERIOR PAINT SCOPE OF WORK

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

REMODEL PLAN LEGEND

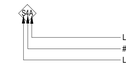
EXISTING WALL TO REMAIN

NEW WALL TO BE PROVIDED



(E) DOOR PANEL & (E) HM DOOR FRAME TO REMAIN. PROVIDE (N) DOOR HARDWARE, REFER TO A6.01 FOR DOOR SCHEDULE AND TYPES.

NOTE: VERIFY IN FIELD 2% SLOPES AWAY FROM BUILDING AND 2% MAX CROSS SLOPE, PROVIDE NEW CONCRETE AS REQ.



FE — WHERE EXISTING FIRE EXTINGUISHER IS MISPLACED IN CLASSROOM, MOVE (E) FIRE EXTINGUISHER WITH WALL BRACKET TO LOCATION SHOWN ON PLAN. IF FIRE EXTINGUISHER AND/OR MOUNTING BRACKET IS MISSING PROVIDE PER SPEC 10 44 00 AND REFER TO DETAIL 6 / AX6.01

CONSTRUCTION KEYED NOTES

02.34 (E) EXTERIOR H.M. DOOR FRAME TO REMAIN, PROVIDE (N) PAINT FINISH
02.37 (E) FLOOR FINISH & (E) RUBBER BASE TO REMAIN. SEE FINISH SCHEDULE
02.51 (E) ALUMINUM FRAME & GLAZING STOREFONT SYSTEM, TO REMAIN.
02.54 (E) CASEWORK TO REMAIN. PROTECT IN PLACE.
02.55 (E) ACCESSIBLE SINK TO REMAIN. PROTECT IN PLACE
02.94 (E) VERTICAL ELECTRICAL COLUMN TO REMAIN. PROTECT IN PLACE
03.01 (N) CONCRETE SLAB INFILL, REF TO STRUCT. DETAIL 7/S-1.1
08.04 (E) DOOR PANEL & (E) DOOR FRAME, PROVIDE (N) DOOR HARDWARE WHERE NEEDED AND (N) PAINT FINISH. SEE DOOR SHEDULE
09.01 (N) INTERIOR PAINT FINISH, SEE FINISH SCHEDULE
09.02 (N) FLOOR FINISH AND RUBBER BASE, SEE FINISH PLAN AND SCHEDULE
09.09 (N) DRYWALL IN-FILL W/ PAINT FINISH, REMOVE & CAP (E) MECH GRILLE
10.21 (N) MARKER BOARD
10.22 (N) TACKABLE SURFACE

Not for permitting or construction

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-124972 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/17/2026

PBK

ARCHITECT PBK Architects, Inc.
PBK.com
ANAHEIM
2400 E KATELLA AVE, Suite 950
ANAHEIM, CA 92806
P 949-548-5000

SCHROEDER ELEMENTARY SCHOOL
HVAC UPGRADE & MODERNIZATION

PROJECT ADDRESS:
15151 Columbia Ln
Huntington Beach, CA 92647

CONSTRUCTION DOCUMENTS

DSA FILE NO.: 30-43
DSA APPL NO.: 04-124972

RELO
A K2 K1
B ADMIN
C MPR
D
RELO

KEY PLAN N
NORTH: PLAN

Consultant

Architect
LICENSED ARCHITECT Yong Yoo No. C-31162 REN. 10-31-2027 STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
11-14-2025	250376

REVISIONS

No.	Description	Date

CONSTRUCTION DOCUMENTS

FLOOR PLAN

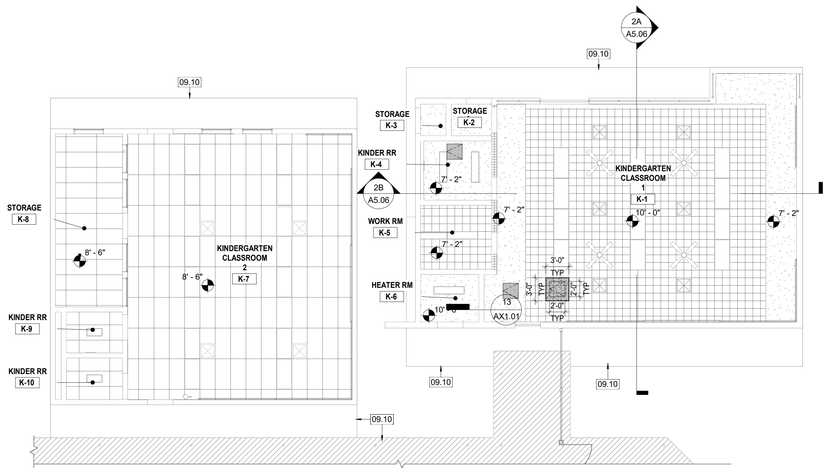
This document is for plan review only

A1.02

FILE PATH: Z:\Projects\...
3/13/2026 5:36:05 PM

A2.01 - REFLECTED CEILING PLAN

0" 1"



NORTH

2 RCP - KINDERGARTEN BLDG K1 & K2

1/8" = 1'-0"

NORTH

1 RCP - BLDG ADMIN

1/8" = 1'-0"

GENERAL CEILING PLAN NOTES

1. REFER TO AND COORD. WITH ROOM FINISH SCHEDULES FOR SPECIFIC CEILING TYPES.
2. ALL SCHEDULED CEILING HEIGHTS ARE FROM THE MAIN FLOOR LEVEL WITHIN THE ROOM AND OR SPACE, AND ARE NOT FROM AN ELEVATED FLOOR LEVEL, AND ARE NOT FROM A RECESSED FLOOR LEVEL.
3. NO FIRE SPRINKLER HEADS ARE SHOWN ON ARCH. CEILING PLANS. ALL SPRINKLER HEADS SHALL BE CENTERED WITHIN CEILING TILES U.N.O.
4. ONLY CEILING MOUNTED FIXTURES AND EQUIP. IS SHOWN ON ARCH. CEILING PLANS. REFER TO INTERIOR ELEVATIONS FOR WALL MOUNTED FIXTURES. REFER TO MEPT DOCUMENTS FOR ADDITIONAL INFORMATION CONCERNING CEILING MOUNTED FIXTURES AND OR WALL MOUNTED FIXTURES.
5. CEILING MOUNTED LIGHT FIXTURES ARE SHOWN FOR LOCATION PURPOSES ONLY. COORD. WITH ELEC. DOCUMENTS FOR LIGHT FIXTURE DESIGNATIONS.
6. CEILING MOUNTED LIGHT FIXTURES WITHIN FIRE RATED CEILING ASSEMBLIES SHALL HAVE LIGHT FIXTURE PROTECTION AND BE TENTED OR OTHERWISE FIRE RATED TO MATCH CEILING ASSEMBLY FIRE RATING.
7. VERIFY LOCATIONS OF ALL CEILING ACCESS PANELS WITH MEPT DOCUMENTS. COORD. LOCATIONS OF CEILING ACCESS PANELS WITH ARCH. PRIOR TO INSTALLATION. CEILING ACCESS PANEL FIRE RATINGS SHALL MATCH CEILING ASSEMBLY FIRE RATINGS.
8. REFER TO WALL SECTIONS FOR WALL-CEILING INTERFACE

REFLECTED CEILING PLAN LEGEND

- EXISTING PLASTER/GYP. BD. CEILING TYP REMAIN. PROVIDE NEW PAINT FINISH.
- EXISTING 12"x12" GLUE UP / STAPLED ACOUSTIC TILE. TO REMAIN. PROTECT IN PLACE. PROVIDE NEW PAINT FINISH.
- NEW PLASTER/GYP. BD. CEILING TYP. PROVIDE NEW PAINT FINISH. PER DETAIL 4 / AX2.01
- NEW 12"x12" GLUE UP / STAPLED ACOUSTIC TILE. PER DETAIL 6 / AX2.01
- NEW LIGHT FIXTURE(S). SEE ELECTRICAL DRAWINGS.
- (E) CEILING FAN AND ACCESSORIES TO REMAIN. PROTECT IN PLACE.
- (E) LIGHT FIXTURE(S). SEE ELECTRICAL DRAWINGS.
- MECHANICAL GRILLES, REFER TO MECHANICAL DRAWINGS
- (E) ACCESS PANEL.
- NEW ACCESS PANEL. SEE DETAIL 1 / AX2.01
- CEILING HEIGHT

CONSTRUCTION KEYED NOTES

09.10 (N) EXTERIOR PAINT FINISH AT (E) ROOF FASCIA / EAVE / GUTTER / DOWNSPOUT

Not for permitting or construction

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-124972 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/17/2026

PBK

ARCHITECT PBK Architects, Inc.
PBK.com
ANAHEIM
2400 E KATELLA AVE, Suite 950
ANAHEIM, CA 92806
P 949-548-5000

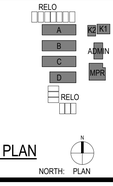
SCHROEDER ELEMENTARY SCHOOL
HVAC UPGRADE & MODERNIZATION

PROJECT ADDRESS:
15151 Columbia Ln
Huntington Beach, CA 92647

CONSTRUCTION DOCUMENTS

DSA APPL NO.: 04-124972 DSA FILE NO.: 30-43





Consultant

Architect



CLIENT
WESTMINSTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
11-14-2025	250376

REVISIONS

No.	Description	Date

CONSTRUCTION DOCUMENTS

REFLECTED CEILING PLAN

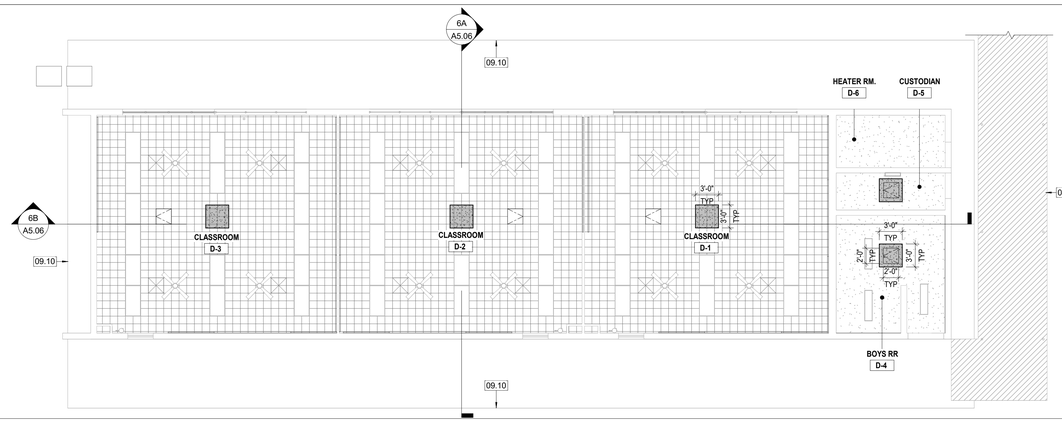
This document is for plan review only

A2.01

FILE PATH: Z:\Projects\...
3/13/2026 5:36:07 PM

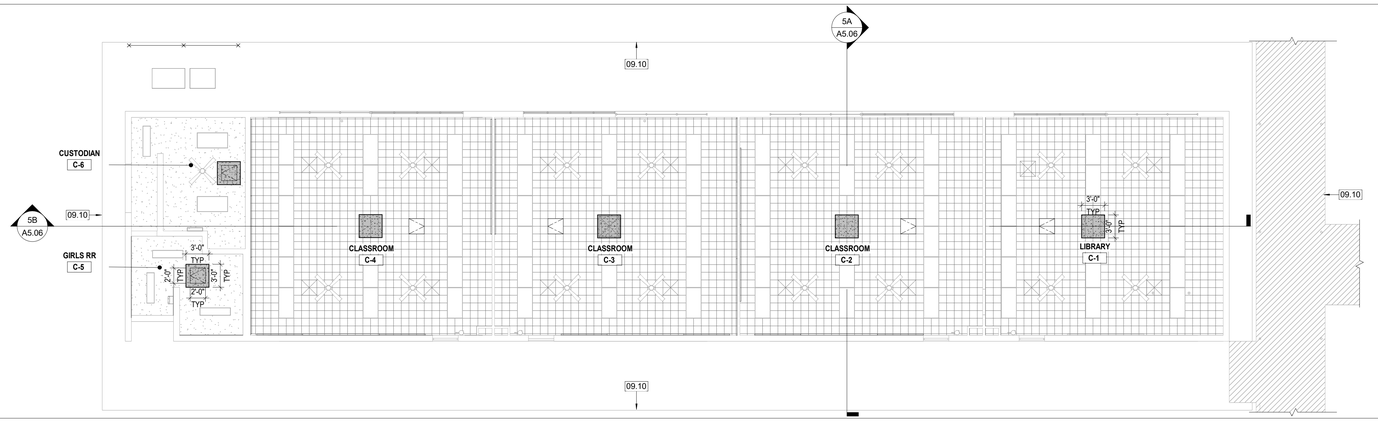
A2.02 - REFLECTED CEILING PLAN

0" 1"



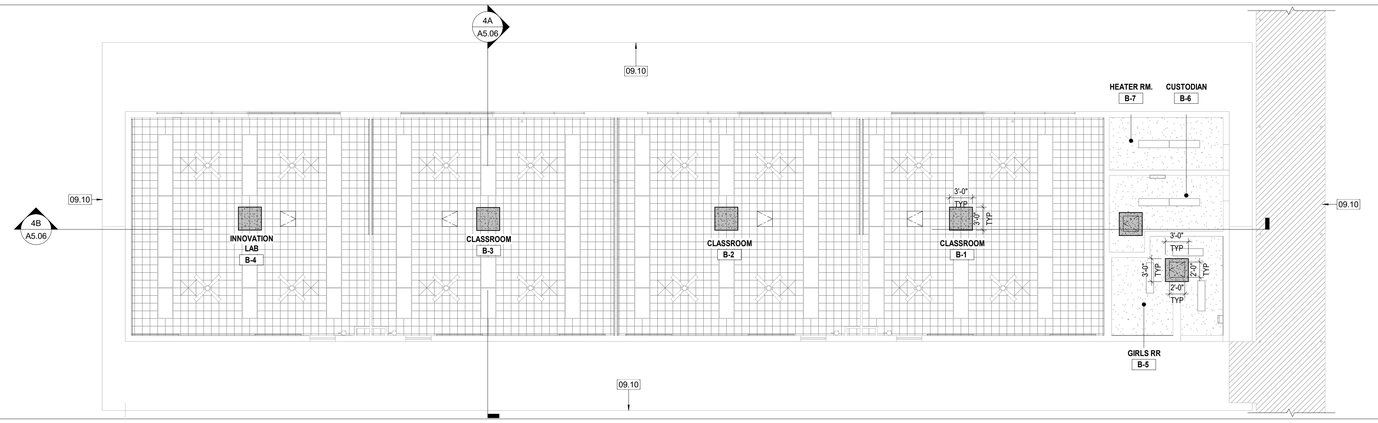
4 RCP - BLDG D

1/8" = 1'-0"



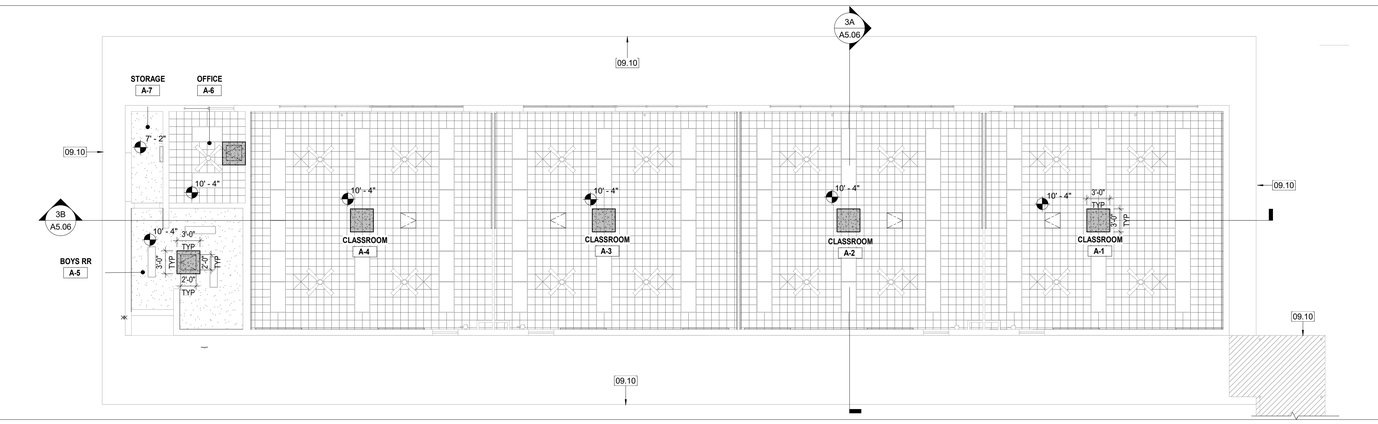
3 RCP - BLDG C

1/8" = 1'-0"



2 RCP - BLDG B

1/8" = 1'-0"



1 RCP - BLDG A

1/8" = 1'-0"

GENERAL CEILING PLAN NOTES

1. REFER TO AND COORD. WITH ROOM FINISH SCHEDULES FOR SPECIFIC CEILING TYPES.
2. ALL SCHEDULED CEILING HEIGHTS ARE FROM THE MAIN FLOOR LEVEL WITHIN THE ROOM AND OR SPACE, AND ARE NOT FROM AN ELEVATED FLOOR LEVEL, AND ARE NOT FROM A RECESSED FLOOR LEVEL.
3. NO FIRE SPRINKLER HEADS ARE SHOWN ON ARCH. CEILING PLANS. ALL SPRINKLER HEADS SHALL BE CENTERED WITHIN CEILING TILES U.N.O.
4. ONLY CEILING MOUNTED FIXTURES AND EQUIP. IS SHOWN ON ARCH. CEILING PLANS. REFER TO INTERIOR ELEVATIONS FOR WALL MOUNTED FIXTURES. REFER TO MEPT DOCUMENTS FOR ADDITIONAL INFORMATION CONCERNING CEILING MOUNTED FIXTURES AND OR WALL MOUNTED FIXTURES.
5. CEILING MOUNTED LIGHT FIXTURES ARE SHOWN FOR LOCATION PURPOSES ONLY. COORD. WITH ELEC. DOCUMENTS FOR LIGHT FIXTURE DESIGNATIONS.
6. CEILING MOUNTED LIGHT FIXTURES WITHIN FIRE RATED CEILING ASSEMBLIES SHALL HAVE LIGHT FIXTURE PROTECTION AND BE TENTED OR OTHERWISE FIRE RATED TO MATCH CEILING ASSEMBLY FIRE RATING.
7. VERIFY LOCATIONS OF ALL CEILING ACCESS PANELS WITH MEPT DOCUMENTS. COORD. LOCATIONS OF CEILING ACCESS PANELS WITH ARCH. PRIOR TO INSTALLATION. CEILING ACCESS PANEL FIRE RATINGS SHALL MATCH CEILING ASSEMBLY FIRE RATINGS.
8. REFER TO WALL SECTIONS FOR WALL-CEILING INTERFACE

REFLECTED CEILING PLAN LEGEND

- EXISTING PLASTER/GYP. BD. CEILING TYP REMAIN. PROVIDE NEW PAINT FINISH.
- EXISTING 12"x12" GLUE UP / STAPLED ACOUSTIC TILE. TO REMAIN. PROTECT IN PLACE. PROVIDE NEW PAINT FINISH.
- NEW PLASTER/GYP. BD. CEILING TYP. PROVIDE NEW PAINT FINISH. PER DETAIL 4 / AX2.01
- NEW 12"x12" GLUE UP / STAPLED ACOUSTIC TILE. PER DETAIL 6 / AX2.01
- NEW LIGHT FIXTURE(S). SEE ELECTRICAL DRAWINGS.
- (E) CEILING FAN AND ACCESSORIES TO REMAIN. PROTECT IN PLACE.
- (E) LIGHT FIXTURE(S). SEE ELECTRICAL DRAWINGS.
- MECHANICAL GRILLES, REFER TO MECHANICAL DRAWINGS
- (E) ACCESS PANEL.
- NEW ACCESS PANEL. SEE DETAIL 1 / AX2.01
- CEILING HEIGHT

CONSTRUCTION KEYED NOTES

09.10 (N) EXTERIOR PAINT FINISH AT (E) ROOF FASCIA / EAVE / GUTTER / DOWNSPOUT

Not for permitting or construction

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-124972 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/17/2026

PBK

ARCHITECT PBK Architects, Inc.
ANAHEIM PBK.com
2400 E KATELLA AVE, Suite 950
ANAHEIM, CA 92806
P 949-548-5000

SCHROEDER ELEMENTARY SCHOOL
HVAC UPGRADE & MODERNIZATION

PROJECT ADDRESS:
15151 Columbia Ln
Huntington Beach, CA 92647

CONSTRUCTION DOCUMENTS

DSA APPL NO.: 04-124972 DSA FILE NO.: 30-43

RELO
A K2 K1
B ADMIN
C MPR
D
RELO

KEY PLAN NORTH: PLAN

Consultant

Architect

LICENSED ARCHITECT Yong Yoo No. C-31162 REN 10-31-2027 STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
11-14-2025	250376

REVISIONS

No.	Description	Date

CONSTRUCTION DOCUMENTS

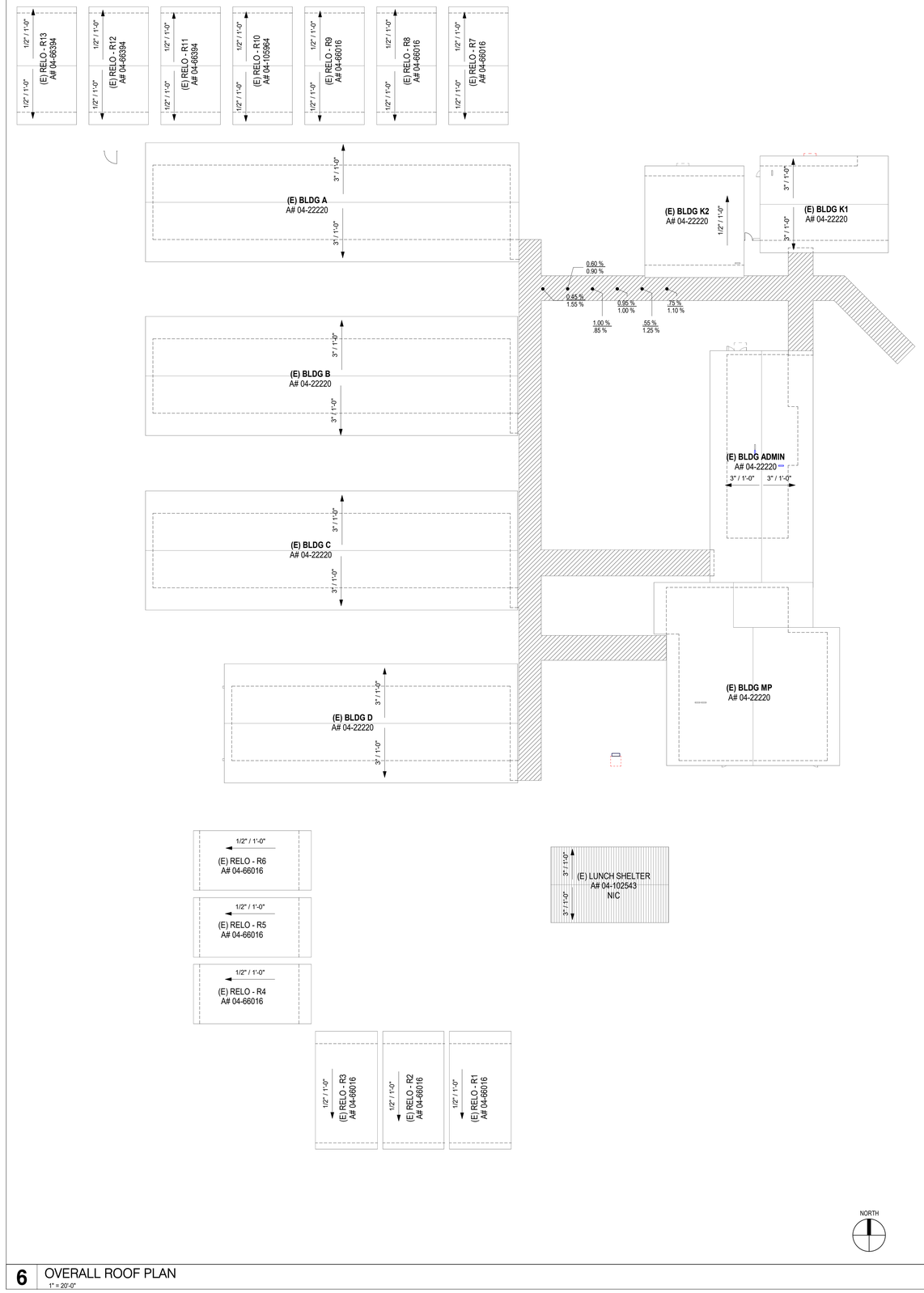
REFLECTED CEILING PLAN

This document is for plan review only

A2.02

FILE PATH: Z:\Projects\...
3/13/2026 5:36:09 PM

0" 1"



6 OVERALL ROOF PLAN

1" = 20'-0"

ROOF GENERAL NOTES

A. CONTRACTOR SHALL VISIT TO SITE TO ASCERTAIN EXACT EXISTING CONDITIONS AND COMPONENTS RELATED TO THE WORK DESCRIBED BY THESE DOCUMENTS. AFTER AWARD OF THE CONTRACT, CHANGE ORDER REQUEST FOR ADDITIONAL MONEY SHALL NOT BE APPROVED IF THE WORK COULD HAVE BEEN ANTICIPATED DURING THE SITE VISIT BY THE CONTRACTOR, ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH ACCEPTED MANUFACTURER'S PRINTED INSTRUCTIONS AND WARRANTY REQUIREMENTS.

B. DIMENSIONS, DETAILS, EQUIPMENT SIZE AND LOCATION SHOWN IN THESE DOCUMENTS ARE FOR INFORMATION AND REFERENCE ONLY. EXACT SIZE, LOCATION, TYPE OF MATERIAL AND TYPE OF CONSTRUCTION OF EXISTING CONDITIONS ARE THE RESPONSIBILITY OF THE CONTRACTOR TO ASCERTAIN AND CONFIRM.

C. ALL NEW CRICKETS AND TAPERED INSULATION SHALL BE INSTALLED WITH A FINISHED 1/4" PER FOOT MIN. SLOPE. CRICKET THE UP SLOPE SIDE OF ALL SQUARE CURBS AND PROJECTIONS.

D. REMOVE ALL ABANDONED EQUIPMENT IDENTIFIED ON ROOF TOP AND AS SHOWN ON DRAWINGS (PATCH DECK) HOLES LESS THAN 10" WIDE - SCREW 22 GA STAINLESS STEEL SHEET METAL TO EXISTING DECK.

E. ALL HVAC AND / OR DX UNITS, ELECTRICAL TRANSFORMERS, ROOF TOP EQUIPMENT, ETC. THAT ARE ON SLEEPERS SHALL BE DISCONNECTED / REMOVED , RAISED & PLACED ON NEW CURBED PLATFORMS (RE: DETAIL) AND RECONNECTED / RE-INSTALL. VERIFY ALL EXISTING CURB MOUNTED UNITS, EQUIPMENT, ETC. HAVE A MINIMUM 10" CURB HEIGHT (RAISED AS REQUIRED) - ALL DISCONNECTS AND RECONNECTS SHALL BE PERFORMED BY A LICENSED ELECTRICIAN.

F. IF EXISTING ELECTRICAL / GAS / WATER / ETC. LINES ARE MODIFIED - ONLY LICENSED SUBCONTRACTORS SPECIALIZING IN HVAC, PLUMBING AND ELECTRICAL SHALL PERFORM THAT TYPE OF WORK. PERMITS AND INSPECTIONS REQUIRED - PROVIDE " MERCURY" GAS LINE TEST (COORDINATE OWNER / ARCHITECT WITNESS OF TEST) , REPAIR ALL LEAKS AND RE-TEST.

G. REPLACE AND RAISE (AS REQUIRED) ALL EXISTING EXPANSION JOINT / AREA DIVIDERS / CURB MOUNTED EQUIPMENT / SKYLIGHTS AS MIN. 10" ABOVE ROOF DECK. (UNLESS INDICATED OTHERWISE ON DRAWING.)

H. ENSURE ALL SOIL STACK FLASHING IS MIN 10" ABOVE ROOF. COUPLE PVC PIPE ABOVE DECK, COUPLE CAST IRON PIPE UNDER DECK.

I. PROVIDE SHEET META HOODED (W/ METAL FACE CLOSURE), WOOD CURB, BOX COVER AT ALL GAS LINE AND WATER LINE ROOF PENETRATIONS (RE: DETAILS). ENSURE LINES SLOPE AWAY FROM FACE COVER.

J. PROVIDE WALKWAY PROTECTION PADS (AS ACCEPTABLE TO MANUFACTURER - RE: SPECS) AROUND ALL ROOF HATCHES, A/C UNITS, DOORS THAT OPEN ONTO ROOF, AND AT ALL ROOF TOP ACCESS LADDERS (TOP & BOTTOM).

K. ISOLATE ALL HEAT PIPES / FLUES AS RECOMMENDED & OUTLINED IN THE NRCA MANUAL FOR ISOLATED STACK FLASHING - (RE: DETAILS)

L. ALL OUTSIDE AIR INTAKES SHALL BE COVERED TO ELIMINATE ODORS AND FUMES FROM ENTERING INTO THE BUILDING DURING WORK.

M. EXAMINE AND CLEAN EXISTING DRAIN LINES OF DEBRIS AND BLOCKAGE, FLUSH WITH WATER TO ENSURE THAT DRAINS FLOW FREELY.

N. OWNER WILL VERIFY CORRECT OPERATION OF ALL ROOF TOP EQUIPMENT BEFORE AND AFTER. CONTRACTOR SHALL BE RESPONSIBLE FOR IDENTIFYING ALL INOPERABLE EQUIPMENT PRIOR TO RELEASE OR RETAIN.

O. REPLACE ALL RUSTED / DETERIORATED EXISTING METAL VENT FLASHING AND FLUES.

P. COORDINATE WALK OF ENTIRE ROOF (PRIOR TO STARTING) WITH ROOFING MANUFACTURER'S TECHNICAL REP. TO IDENTIFY AND LOCATE ALL AREAS OF HIGH SLOPE WHICH MIGHT REQUIRE SPECIAL PROCEDURES FOR SYSTEM ATTACHMENT.

Q. PROVIDE ONE-WAY MOISTURE VENTS 1 PER 900 SF AT ALL LT. WT. OVER POUR AREAS.

ROOF LEGEND

ROOF AT WALKWAY SCOPE OF WORK
- (N) PAINT FINISH AT (E) FASCIA, GUTTER
- (N) PAINT FINISH AT (E) ROOF EAVE
- (N) PAINT FINISH AT WALKWAY POST

EXISTING STANDING SEAM ROOF AT LUNCH
- POWER WASH (E) STANDING SEAM ROOF, (E) UNDERSIDE OF STRUCTURE PREPARE FOR (N) PAINT
- (N) PAINT FINISH AT (E) STANDING SEAM ROOF
- (N) PAINT FINISH AT (E) ROOF UNDERSIDE OF STRUCTURE
- (N) PAINT FINISH AT (E) POST
- REPLACE OR REPAIR ALL EXISTING ROOF DAMAGE.

NOT IN SCOPE

ROOF SCHEDULE

AREA	APPROX SQ.FT.	Comments
RELO R13	1141 SF	
RELO R6	1141 SF	
RELO R5	1141 SF	
RELO R4	1141 SF	
RELO R3	1189 SF	
RELO R2	1170 SF	
RELO R1	1184 SF	
RELO R12	1141 SF	
RELO R11	1141 SF	
RELO R10	1141 SF	
RELO R9	1141 SF	
RELO R8	1141 SF	
RELO R7	1141 SF	
WALKWAY ROOF	5224 SF	
BLDG A	7446 SF	
BLDG B	7422 SF	
BLDG C	7422 SF	
BLDG D	5851 SF	
BLDG K2	1802 SF	
BLDG K1	2078 SF	
BLDG ADMIN	4083 SF	
LUNCH SHELTER	1493 SF	CLEAN & RE-PAINT(E) STANDING SEAM ROOF

Not for permitting or construction

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-124972 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/17/2026

PBK

ARCHITECT PBK Architects, Inc.
PBK.com
ANAHEIM
2400 E KATELLA AVE, Suite 950
ANAHEIM, CA 92806
P 949-548-5000

SCHROEDER ELEMENTARY SCHOOL
HVAC UPGRADE & MODERNIZATION

PROJECT ADDRESS:
15151 Columbia Ln
Huntington Beach, CA 92647

CONSTRUCTION DOCUMENTS

DSA FILE NO.: 30-43

DSA APPL NO.: 04-124972

RELO
A K2 K1
B ADMIN
C MP
D MPR
RELO

KEY PLAN N
NORTH: PLAN

Consultant

Architect

LICENSED ARCHITECT Yong Yoo No. C-31162 REN. 10-31-2027 STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
11-14-2025	250376

REVISIONS

No.	Description	Date

CONSTRUCTION DOCUMENTS

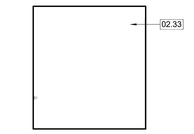
OVERALL ROOF PLAN

This document is for plan review only

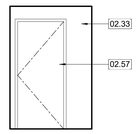
A3.01

FILE PATH: Z:\Projects\...
3/13/2026 5:36:10 PM

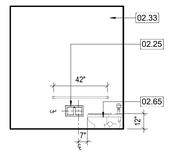
0" 1"



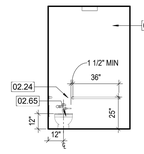
8A NORTH INTERIOR ELEVATION
1/4" = 1'-0"



8B EAST INTERIOR ELEVATION
1/4" = 1'-0"



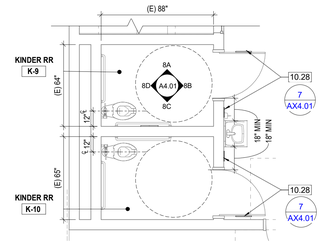
8C SOUTH INTERIOR ELEVATION
1/4" = 1'-0"



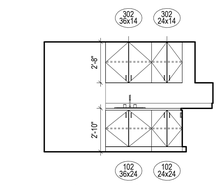
8D WEST INTERIOR ELEVATION
1/4" = 1'-0"

NOTE: SEE TOILET FIXTURE MOUNTING HEIGHT - AGES 5 THRU 8 (GRADES PRE-K THRU 3) 15 AX4.01

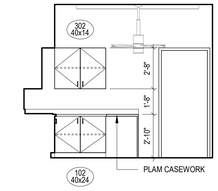
8 TYPICAL KINDER REST ROOM K-9 & K-10 - INTERIOR ELEVATIONS
1/4" = 1' - 0"



7 (E) KINDERGARTEN 2 RR K-9 & K-10 PLAN
1/4" = 1'-0"



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



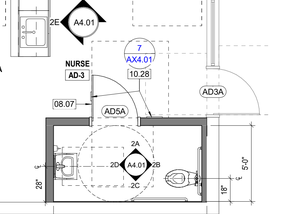
6B EAST INTERIOR ELEVATION
1/4" = 1'-0"

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

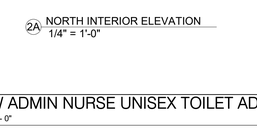
6D WEST INTERIOR ELEVATION
1/4" = 1'-0"

NOTE: SEE TOILET FIXTURE MOUNTING HEIGHT - AGES 5 THRU 8 (GRADES PRE-K THRU 3) 15 AX4.01

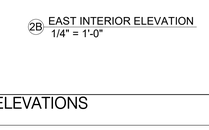
6 KINDER REST ROOM K-4 - INTERIOR ELEVATIONS
1/4" = 1' - 0"



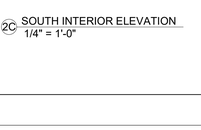
5 (E) KINDERGARTEN 1 RR K-4 PLAN
1/4" = 1'-0"



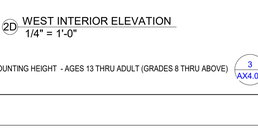
4A NORTH INTERIOR ELEVATION
1/4" = 1'-0"



4B EAST INTERIOR ELEVATION
1/4" = 1'-0"



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



4D WEST INTERIOR ELEVATION
1/4" = 1'-0"

NOTE: SEE TOILET FIXTURE MOUNTING HEIGHT - AGES 13 THRU ADULT (GRADES 8 THRU ABOVE) 3 AX4.01

4 NEW ADMIN STAFF UNISEX TOILET AD-12 INTERIOR ELEVATIONS
1/4" = 1' - 0"

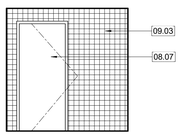
3 (N) ADMIN STAFF UNISEX TOILET AD-12
1/4" = 1'-0"

2E NURSE RM - WEST
1/4" = 1'-0"

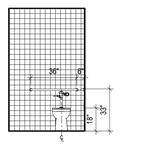
2F NURSE ROOM - NORTH
1/4" = 1'-0"

**VERIFY ALL DIMENSIONS IN FIELD,

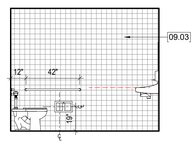
1 (N) ADMIN UNISEX TOILET AD-6 PLAN
1/4" = 1'-0"



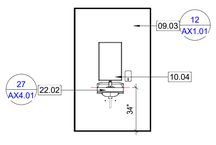
2A NORTH INTERIOR ELEVATION
1/4" = 1'-0"



2B EAST INTERIOR ELEVATION
1/4" = 1'-0"



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



2D WEST INTERIOR ELEVATION
1/4" = 1'-0"

NOTE: SEE TOILET FIXTURE MOUNTING HEIGHT - AGES 13 THRU ADULT (GRADES 8 THRU ABOVE) 3 AX4.01

2 NEW ADMIN NURSE UNISEX TOILET AD-6 INTERIOR ELEVATIONS
1/4" = 1' - 0"

CASEWORK LEGEND

RESTROOM ACCESSORIES SCHEDULE

LABEL	DESCRIPTION	MANUF	MODEL #
TA1	SOAP DISPENSER	BOBRICK	B-2111
TA2	MIRROR (24"X36" U.N.O.)	BOBRICK	B-290
TA3	TOILET PAPER DISPENSER - RECESSED	BOBRICK	B-35883
TA4	PAPER TOWEL DISPENSER	BOBRICK	B-262
TA5	GRAB BARS AT TYPICAL ACCESSIBLE TOILET STALLS	BOBRICK	B-6806X24, X36, X42
TA6	SANITARY NAPKIN DISPENSER	BOBRICK	B-2706
TA7	SANITARY NAPKIN DISPOSAL	BOBRICK	B-270
TA8	SANITARY NAPKIN DISPENSER - SEMI-RECESSED	BOBRICK	B-37063
TA9	GRAB BARS AT ACCESSIBLE SHOWER	N.A.	N.A.
TA10	FOLDING SHOWER BENCH	N.A.	N.A.
TA11	CLOTHES HOOK	N.A.	N.A.
TA12	SHOWER CURTAIN, ROD AND HOOKS	N.A.	N.A.
TA13	ELECTRIC HAND DRYER	N.A.	N.A.
TA14	COMBO PAPER TOWEL DISPENSER/TRASH RECEPTACLE	BOBRICK	B-3949
TA15	GRAB BAR AT AMBULATORY ACCESSIBLE TOILET STALL	BOBRICK	B-6806
TA16	CHANGING STATION	N.A.	N.A.
TA17	TRASH RECEPTACLE	N.A.	N.A.
TA18	TOILET PAPER DISPENSER, SEMI-RECESSED	N.A.	N.A.
TA19	TOILET SEAT COVER DISPENSER	BOBRICK	B-221
TA20	SANITARY NAPKIN DISPOSAL, SEMI-RECESSED	BOBRICK	B-353

NOTES:

1. ALL NEW TOILET ACCESSORIES SHALL BE CONTRACTOR FURNISHED AND INSTALLED UNLESS NOTED OTHERWISE.
2. COORDINATE FINAL LOCATIONS WITH ARCHITECT PRIOR TO INSTALLATION.
3. CONTRACTOR IS TO VERIFY ALL HEIGHTS OF ACCESSORIES TO COMPLY WITH ADA.
4. REFER TO ALL FINISHES AND COLORS IN FINISH SCHEDULE. VERIFY ALL PATTERNS WITH ARCHITECT.

SEE SHEET AX4.01 FOR TOILET FIXTURES AND ACCESSORIES MOUNTING HEIGHT.

CONSTRUCTION KEYED NOTES

02.24 (E) GRAB BAR TO REMAIN
02.25 (E) TOILET PAPER DISPENSER TO REMAIN
02.33 (E) INTERIOR FINISH TO REMAIN. PROTECT IN PLACE
02.57 (E) DOOR FRAME & PANEL TO REMAIN. PROVIDE (N) PAINT FINISH AS NEEDED, PROTECT IN PLACE.
02.65 (E) ACCESSIBLE WATER CLOSET TO REMAIN, PROTECT IN PLACE
02.88 (E) 4"X4" CERAMIC TILE FINISH TO REMAIN.
04.01 (N) EXTERIOR WALL. PER DETAIL
08.07 (N) INTERIOR SOLID CORE WOOD DOOR PANEL & HM FRAME. SEE DOOR SCHEDULE
09.03 (N) 4"X4" CERAMIC TILES
10.04 (N) WALL MOUNTED HAND SOAP DISPENSER
10.26 (N) RESTROOM PARTITION
10.28 (N) RESTROOM DOOR & WALL SIGNAGE. REF 7/AX4.01
22.02 (N) WALL MOUNTED LAVATORY. SEE PLUMBING DRAWING

Not for permitting or construction

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-124972 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/17/2026

PBK
ARCHITECT PBK Architects, Inc.
PBK.com
ANAHEIM
2400 E KATELLA AVE, Suite 950
ANAHEIM, CA 92806
P 949-548-5000

SCHROEDER ELEMENTARY SCHOOL
HVAC UPGRADE & MODERNIZATION

PROJECT ADDRESS:
15151 Columbia Ln
Huntington Beach, CA 92647

CONSTRUCTION DOCUMENTS

DSA APPL NO.: 04-124972 DSA FILE NO.: 30-43

RELO
A K2 K1
B ADMIN
C MPR
D
RELO

KEY PLAN
NORTH: PLAN

Consultant

Architect
LICENSED ARCHITECT Tong You No. C-31162 REN. 10-31-2027 STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT
DATE 11-14-2025
PROJECT NUMBER 250376

REVISIONS

No.	Description	Date

CONSTRUCTION DOCUMENTS

This document is for plan review only

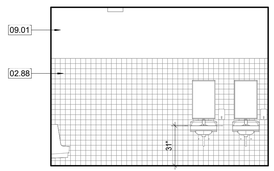
ENLARGED RESTROOM PLANS & ELEVATIONS

A4.01

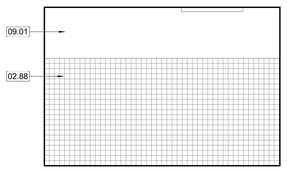
FILE PATH: Z:\Projects\...
3/13/2026 5:36:14 PM

A4.02 - ENLARGED RESTROOM PLANS & ELEVATIONS

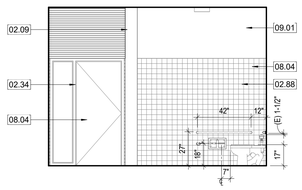
0" 1"



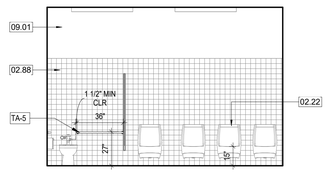
8A NORTH INTERIOR ELEVATION
1/4" = 1'-0"



8B EAST INTERIOR ELEVATION
1/4" = 1'-0"

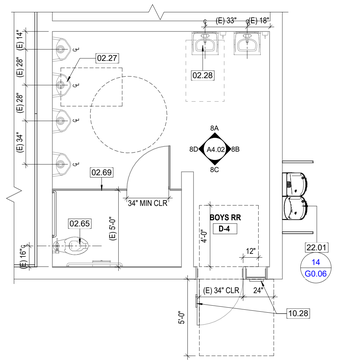


8C SOUTH INTERIOR ELEVATION
1/4" = 1'-0"

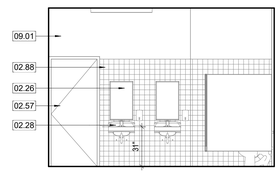


8D WEST INTERIOR ELEVATION
1/4" = 1'-0"

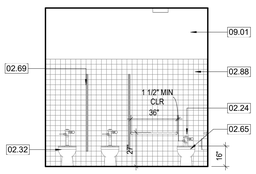
8 TYPICAL BOYS REST ROOM D-4 - INTERIOR ELEVATIONS - AGE 9-12
1/4" = 1' - 0"



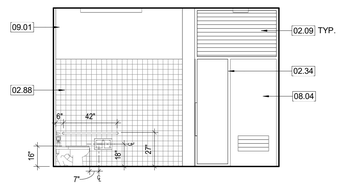
7 (E) BLDG D BOYS RESTROOM D-4 PLAN
1/4" = 1'-0"



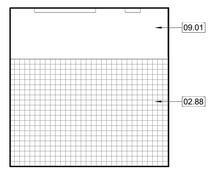
6A NORTH INTERIOR ELEVATION
1/4" = 1'-0"



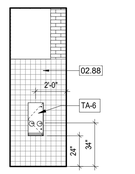
6B EAST INTERIOR ELEVATION
1/4" = 1'-0"



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



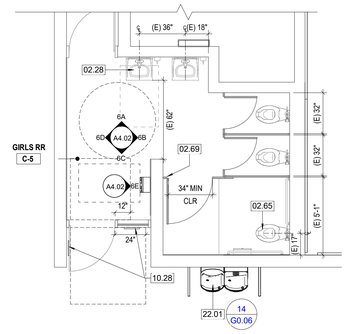
6D WEST INTERIOR ELEVATION
1/4" = 1'-0"



6E WEST INTERIOR ELEVATION
1/4" = 1'-0"

NOTE: SEE TOILET FIXTURE MOUNTING HEIGHT - AGES 9 THRU 12 (GRADES 4 THRU 7) 9 / AX4.01

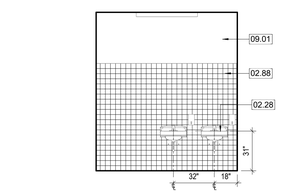
6 TYPICAL GIRLS REST ROOM C-5 - INTERIOR ELEVATIONS - AGE 9 - 12
1/4" = 1' - 0"



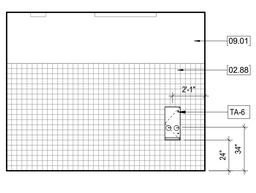
5 (E) BLDG C GIRLS RESTROOM C-5 PLAN
1/4" = 1'-0"

RESTROOM ACCESSORIES SCHEDULE

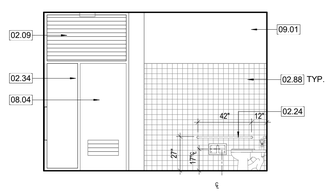
LABEL	DESCRIPTION	MANUF	MODEL #
TA1	SOAP DISPENSER	BOBRICK	B-2111
TA2	MIRROR (24"x36" U.N.O.)	BOBRICK	B-290
TA3	TOILET PAPER DISPENSER - RECESSED	BOBRICK	B-35883
TA4	PAPER TOWEL DISPENSER	BOBRICK	B-262
TA5	GRAB BARS AT TYPICAL ACCESSIBLE TOILET STALLS	BOBRICK	B-6806/X24, X36, X42
TA6	SANITARY NAPKIN DISPENSER	BOBRICK	B-2706
TA7	SANITARY NAPKIN DISPOSAL	BOBRICK	B-270
TA8	SANITARY NAPKIN DISPENSER - SEMI-RECESSED	BOBRICK	B-370634
TA9	GRAB BARS AT ACCESSIBLE SHOWER	N.A.	N.A.
TA10	FOLDING SHOWER BENCH	N.A.	N.A.
TA11	CLOTHES HOOK	N.A.	N.A.
TA12	SHOWER CURTAIN, ROD AND HOOKS	N.A.	N.A.
TA13	ELECTRIC HAND DRYER	N.A.	N.A.
TA14	COMBO PAPER TOWEL DISPENSER/TRASH RECEPTACLE	BOBRICK	B-3949
TA15	GRAB BAR AT AMBULATORY ACCESSIBLE TOILET STALL	BOBRICK	B-6806
TA16	CHANGING STATION	N.A.	N.A.
TA17	TRASH RECEPTACLE	N.A.	N.A.
TA18	TOILET PAPER DISPENSER, SEMI-RECESSED	N.A.	N.A.
TA19	TOILET SEAT COVER DISPENSER	BOBRICK	B-221
TA20	SANITARY NAPKIN DISPOSAL, SEMI-RECESSED	BOBRICK	B-353



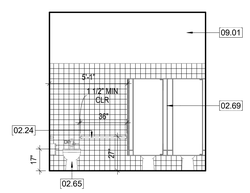
4A NORTH INTERIOR ELEVATION
1/4" = 1'-0"



4B EAST INTERIOR ELEVATION
1/4" = 1'-0"



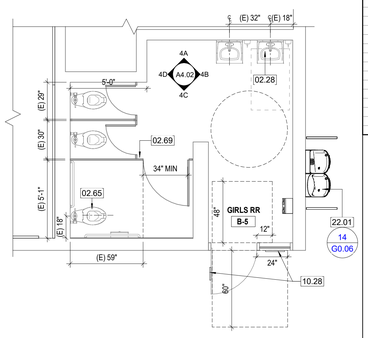
4C SOUTH INTERIOR ELEVATION
1/4" = 1'-0"



4D WEST INTERIOR ELEVATION
1/4" = 1'-0"

NOTE: SEE TOILET FIXTURE MOUNTING HEIGHT - AGES 9 THRU 12 (GRADES 4 THRU 7) 9 / AX4.01

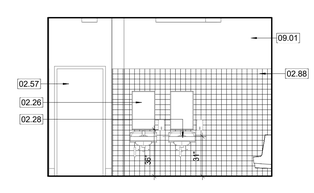
4 TYPICAL GIRLS REST ROOM B-5 - INTERIOR ELEVATIONS - AGE 9 - 12
1/4" = 1' - 0"



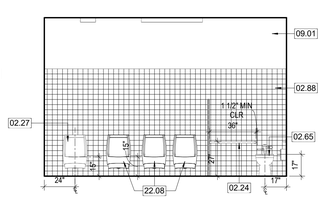
3 (E) BLDG B GIRLS RESTROOM B-5 PLAN
1/4" = 1'-0"

CONSTRUCTION KEYED NOTES

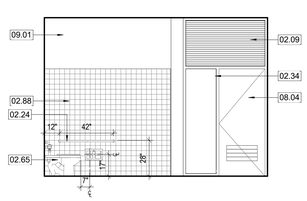
02.09	(E) LOUVER TO REMAIN. PROVIDE (N) PAINT
02.22	(E) URINAL TO REMAIN
02.24	(E) GRAB BAR TO REMAIN
02.26	(E) MIRROR TO REMAIN
02.27	(E) ACCESSIBLE URINAL TO REMAIN
02.28	(E) ACCESSIBLE LAVATORY TO REMAIN
02.32	(E) FLOOR MOUNTED WATER CLOSET TO REMAIN
02.34	(E) EXTERIOR H.M. DOOR FRAME TO REMAIN, PROVIDE (N) PAINT FINISH
02.57	(E) DOOR FRAME & PANEL TO REMAIN. PROVIDE (N) PAINT FINISH AS NEEDED, PROTECT IN PLACE.
02.65	(E) ACCESSIBLE WATER CLOSET TO REMAIN, PROTECT IN PLACE
02.69	(E) PLASTIC TOILET PARTITION, TO REMAIN
02.88	(E) 4"X4" CERAMIC TILE FINISH TO REMAIN.
08.04	(E) DOOR PANEL & (E) DOOR FRAME. PROVIDE (N) DOOR HARDWARE WHERE NEEDED AND (N) PAINT FINISH. SEE DOOR SHEDULE
09.01	(N) INTERIOR PAINT FINISH. SEE FINISH SCHEDULE
09.20	PATCH FLOOR TO PROVIDE MAX 2% SLOPE IN ALL DIRECTION AND PROVIDE (N) TILE TO MATCH ADJACENT FLOOR FINISH.
10.28	(N) RESTROOM DOOR & WALL SIGNAGE, REF 7/AX4.01
22.01	(N) ACCESSIBLE DRINKING FOUNTAIN W/ BOTTLE FILLER AND WING GUARDS
22.08	(N) WALL MOUNTED URINAL, SEE PLUMBING DRAWING



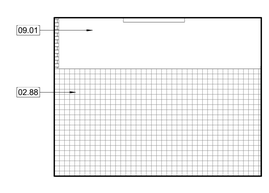
2A NORTH INTERIOR ELEVATION
1/4" = 1'-0"



2B EAST INTERIOR ELEVATION
1/4" = 1'-0"



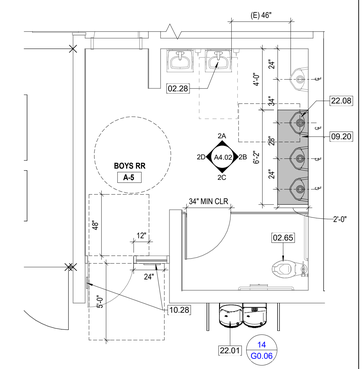
2C SOUTH INTERIOR ELEVATION
1/4" = 1'-0"



2D WEST INTERIOR ELEVATION
1/4" = 1'-0"

NOTE: SEE TOILET FIXTURE MOUNTING HEIGHT - AGES 9 THRU 12 (GRADES 4 THRU 7) 9 / AX4.01

2 TYPICAL BOYS REST ROOM A-5 - INTERIOR ELEVATIONS - AGE 9 - 12
1/4" = 1' - 0"



1 (E) BLDG A BOYS RESTROOM A-5 PLAN
1/4" = 1'-0"

CONSTRUCTION KEYED NOTES

02.09	(E) LOUVER TO REMAIN. PROVIDE (N) PAINT
02.22	(E) URINAL TO REMAIN
02.24	(E) GRAB BAR TO REMAIN
02.26	(E) MIRROR TO REMAIN
02.27	(E) ACCESSIBLE URINAL TO REMAIN
02.28	(E) ACCESSIBLE LAVATORY TO REMAIN
02.32	(E) FLOOR MOUNTED WATER CLOSET TO REMAIN
02.34	(E) EXTERIOR H.M. DOOR FRAME TO REMAIN, PROVIDE (N) PAINT FINISH
02.57	(E) DOOR FRAME & PANEL TO REMAIN. PROVIDE (N) PAINT FINISH AS NEEDED, PROTECT IN PLACE.
02.65	(E) ACCESSIBLE WATER CLOSET TO REMAIN, PROTECT IN PLACE
02.69	(E) PLASTIC TOILET PARTITION, TO REMAIN
02.88	(E) 4"X4" CERAMIC TILE FINISH TO REMAIN.
08.04	(E) DOOR PANEL & (E) DOOR FRAME. PROVIDE (N) DOOR HARDWARE WHERE NEEDED AND (N) PAINT FINISH. SEE DOOR SHEDULE
09.01	(N) INTERIOR PAINT FINISH. SEE FINISH SCHEDULE
09.20	PATCH FLOOR TO PROVIDE MAX 2% SLOPE IN ALL DIRECTION AND PROVIDE (N) TILE TO MATCH ADJACENT FLOOR FINISH.
10.28	(N) RESTROOM DOOR & WALL SIGNAGE, REF 7/AX4.01
22.01	(N) ACCESSIBLE DRINKING FOUNTAIN W/ BOTTLE FILLER AND WING GUARDS
22.08	(N) WALL MOUNTED URINAL, SEE PLUMBING DRAWING

FILE PATH: Z:\Projects\...
3/13/2026 5:36:19 PM

Not for permitting or construction

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-124972 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/17/2026

PBK

ARCHITECT PBK Architects, Inc.
PBK.com
ANAHEIM
2400 E KATELLA AVE, Suite 950
ANAHEIM, CA 92806
P 949-548-5000

SCHROEDER ELEMENTARY SCHOOL
HVAC UPGRADE & MODERNIZATION

PROJECT ADDRESS:
15151 Columbia Ln
Huntington Beach, CA 92647

CONSTRUCTION DOCUMENTS

DSA FILE NO.: 30-43

DSA APPL NO.: 04-124972

WESTMINSTER SCHOOL DISTRICT EST. 1873

RELO
A K2 K1
B ADMIN
C MPR
D
RELO

KEY PLAN N NORTH: PLAN

Consultant

Architect

LICENSED ARCHITECT Yong Yoo No. C-31162 REN. 10-31-2027 STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
11-14-2025	250376

REVISIONS

No.	Description	Date

CONSTRUCTION DOCUMENTS

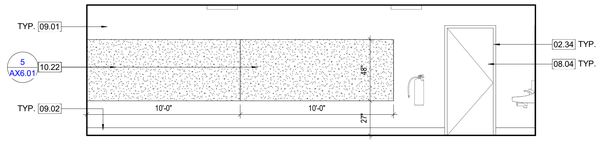
ENLARGED RESTROOM PLANS & ELEVATIONS

This document is for plan review only

A4.02

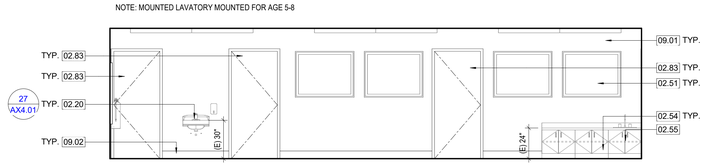
A5.01 - INTERIOR ELEVATIONS

0" 1"

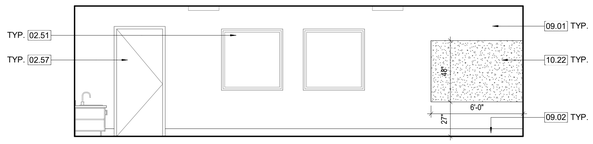


3C SOUTH INTERIOR ELEVATION
1/4" = 1'-0"

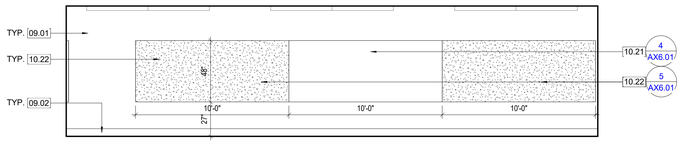
NOTE: MOUNTED LAVATORY MOUNTED FOR AGE 5-8



3D WEST INTERIOR ELEVATION
1/4" = 1'-0"

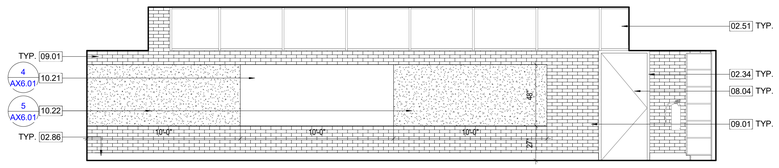


3A NORTH INTERIOR ELEVATION
1/4" = 1'-0"



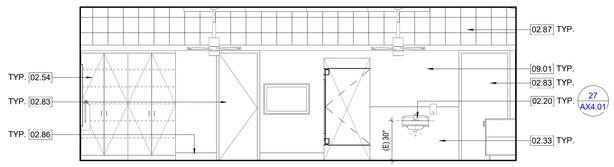
3B EAST INTERIOR ELEVATION
1/4" = 1'-0"

3 KINDERGARTEN CLASSROOM 2 - K-7 - INTERIOR ELEVATIONS
1/4" = 1' - 0"

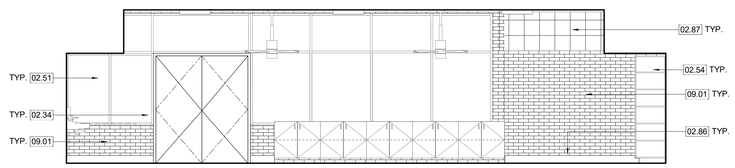


2C SOUTH INTERIOR ELEVATION
1/4" = 1'-0"

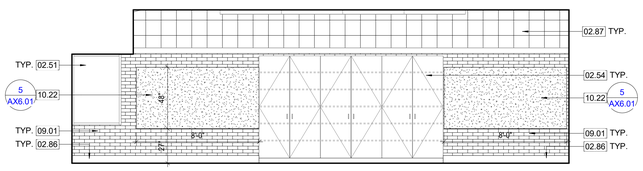
NOTE: MOUNTED LAVATORY MOUNTED FOR AGE 5-8



1 WEST INTERIOR ELEVATION
1/4" = 1'-0"

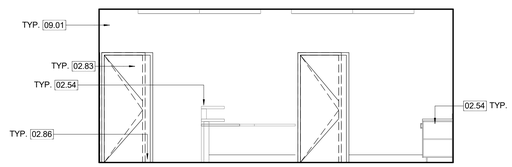


2A NORTH INTERIOR ELEVATION
1/4" = 1'-0"

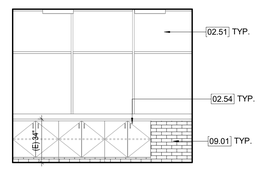


2B EAST INTERIOR ELEVATION
1/4" = 1'-0"

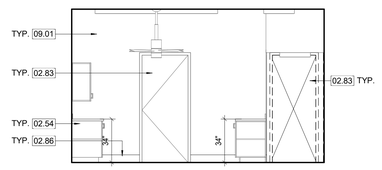
2 KINDERGARTEN CLASSROOM 1- K-1 - INTERIOR ELEVATIONS
1/4" = 1' - 0"



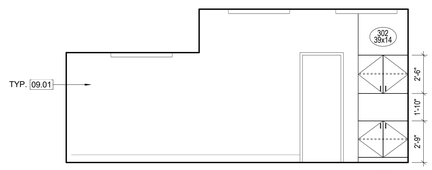
1C SOUTH INTERIOR ELEVATION
1/4" = 1'-0"



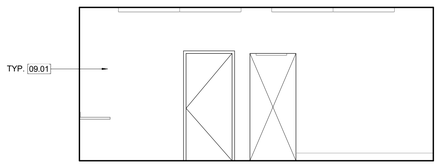
1D WEST INTERIOR ELEVATION
1/4" = 1'-0"



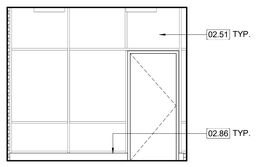
1G SOUTH INTERIOR ELEVATION
1/4" = 1'-0"



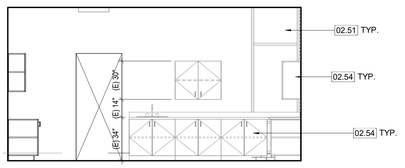
1H WEST INTERIOR ELEVATION
1/4" = 1'-0"



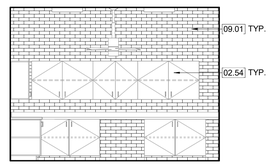
1A NORTH INTERIOR ELEVATION
1/4" = 1'-0"



1B EAST INTERIOR ELEVATION
1/4" = 1'-0"



1E NORTH INTERIOR ELEVATION
1/4" = 1'-0"



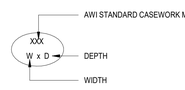
1F EAST INTERIOR ELEVATION
1/4" = 1'-0"

1 BLDG ADMIN INTERIOR ELEVATIONS
1/4" = 1' - 0"

GENERAL FINISH LEGEND NOTES

1. ALL FINISH MATERIALS SHALL MEET THE FLAME SPREAD RATINGS PER THE BUILDING CODE.
2. REFER TO INTERIOR ELEVATIONS FOR SPECIFIC MATERIAL LOCATIONS.
3. PAINT ALL EXPOSED STRUCT. MEMBERS, STRUCT. DECK, DUCTWORK, DIFFUSERS, PIPING, CONDUIT, EQUIP, HOUSINGS, LIGHT FIXTURE HOUSINGS, CABLE SUPPORTS, CABLE TRAYS, EQUIP. SUPPORTS, HANGERS, ETC. TO MATCH ADJACENT SURFACES.
4. PAINT ALL NON-FACTORY FINISHED EXPOSED METAL.
5. REFER TO TYPICAL FLOORING TRANSITION DETAILS FOR FLOORING MATERIAL TRANSITIONS.
6. ALL FLOORING TRANSITIONS AT DOORS SHALL BE LOCATED UNDER THE DOOR IN THE CLOSED POSITION, U.N.O.
7. PROTECT ALL FINISHED FLOORING SURFACES FROM DAMAGE DURING ALL CONSTRUCTION PHASES.
8. PROVIDE AND INSTALL BULLNOSE TRIM AT ALL TRANSITIONS FROM CERAMIC WALL TILE TO OTHER MATERIAL U.N.O.
9. REFER TO REFLECTED CEILING PLANS FOR CEILING HEIGHTS.
10. ALL ELECTRICAL DEVICE COVERS ARE TO BE WHITE U.N.O.
11. ALL CARPET PATTERNS TO RUN PARALLEL TO CORRIDOR, U.N.O.
12. PAINT ALL HOLLOW METAL DOOR FRAMES TO MATCH ADJACENT WALL COLOR U.N.O.

CASEWORK LEGEND



CONSTRUCTION KEYED NOTES

02.20	(E) LAVATORY TO REMAIN
02.33	(E) INTERIOR FINISH TO REMAIN, PROTECT IN PLACE
02.34	(E) EXTERIOR H.M. DOOR FRAME TO REMAIN, PROVIDE (N) PAINT FINISH
02.51	(E) ALUMINUM FRAME & GLAZING STOREFONT SYSTEM, TO REMAIN.
02.54	(E) CASEWORK TO REMAIN. PROTECT IN PLACE.
02.55	(E) ACCESSIBLE SINK TO REMAIN. PROTECT IN PLACE
02.57	(E) DOOR FRAME & PANEL TO REMAIN. PROVIDE (N) PAINT FINISH AS NEEDED, PROTECT IN PLACE
02.83	(E) INTERIOR DOOR PANEL & FRAME TO REMAIN & PROTECT IN PLACE. PROVIDE NEW PAINT FINISH.
02.86	(E) RUBBER BASE. SEE FINISH SCHEDULE
02.87	(E) 12"X12" ACT TILE TO REMAIN. PROVIDE (N) PAINT FINISH. SEE FINISH SCHEDULE
08.04	(E) DOOR PANEL & (E) DOOR FRAME, PROVIDE (N) DOOR HARDWARE WHERE NEEDED AND (N) PAINT FINISH. SEE DOOR SHEDULE
09.01	(N) INTERIOR PAINT FINISH, SEE FINISH SCHEDULE
09.02	(N) FLOOR FINISH AND RUBBER BASE, SEE FINISH PLAN AND SCHEDULE
10.21	(N) MARKER BOARD
10.22	(N) TACKABLE SURFACE

Not for permitting or construction

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-124972 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/17/2026

PBK

ARCHITECT PBK Architects, Inc.
PBK.com
ANAHEIM
2400 E KATELLA AVE, Suite 950
ANAHEIM, CA 92806
P 949-548-5000

SCHROEDER ELEMENTARY SCHOOL
HVAC UPGRADE & MODERNIZATION

PROJECT ADDRESS:
15151 Columbia Ln
Huntington Beach, CA 92647

CONSTRUCTION DOCUMENTS

DSA APPL NO.: 04-124972 DSA FILE NO.: 30-43

RELO
A K2 K1
B ADMIN
C MPR
D
RELO

KEY PLAN NORTH: PLAN

Consultant

Architect
LICENSED ARCHITECT Yong Yoo No. C-31162 REN. 10-31-2027 STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
11-14-2025	250376

REVISIONS

No.	Description	Date

CONSTRUCTION DOCUMENTS

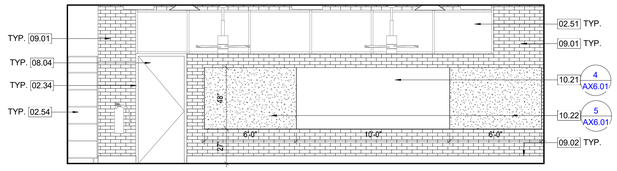
INTERIOR ELEVATIONS

This document is for plan review only

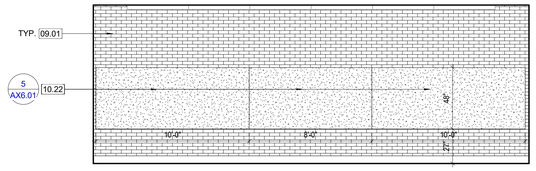
A5.01

FILE PATH: Z:\Projects\...
3/13/2026 5:36:22 PM

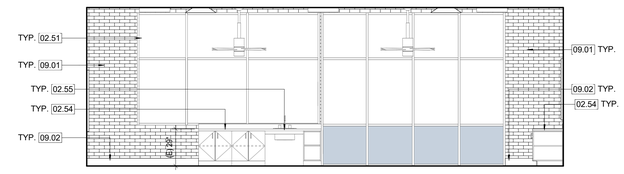
0" 1"



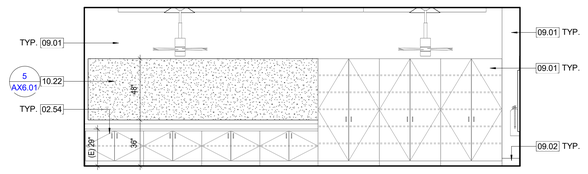
2C SOUTH INTERIOR ELEVATION
1/4" = 1'-0"



2D WEST INTERIOR ELEVATION
1/4" = 1'-0"

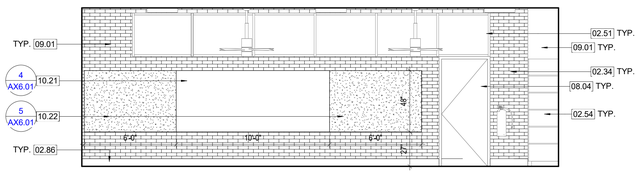


2A NORTH INTERIOR ELEVATION
1/4" = 1'-0"

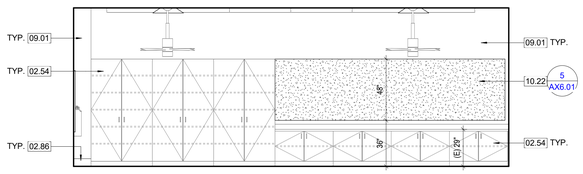


2B EAST INTERIOR ELEVATION
1/4" = 1'-0"

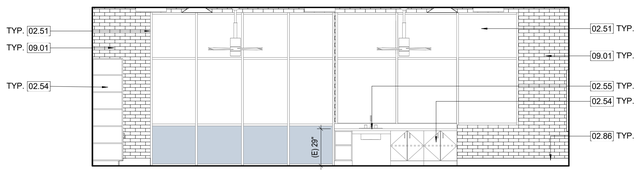
2 TYPICAL CLASSROOM AT BLDG B - INTERIOR ELEVATIONS
1/4" = 1' - 0"



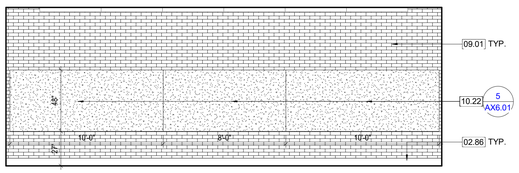
1C SOUTH INTERIOR ELEVATION
1/4" = 1'-0"



1D WEST INTERIOR ELEVATION
1/4" = 1'-0"



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



1B EAST INTERIOR ELEVATION
1/4" = 1'-0"

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

GENERAL FINISH LEGEND NOTES

1. ALL FINISH MATERIALS SHALL MEET THE FLAME SPREAD RATINGS PER THE BUILDING CODE.
2. REFER TO INTERIOR ELEVATIONS FOR SPECIFIC MATERIAL LOCATIONS.
3. PAINT ALL EXPOSED STRUCT. MEMBERS, STRUCT. DECK, DUCTWORK, DIFFUSERS, PIPING, CONDUIT, EQUIP, HOUSINGS, LIGHT FIXTURE HOUSINGS, CABLE SUPPORTS, CABLE TRAYS, EQUIP. SUPPORTS, HANGERS, ETC. TO MATCH ADJACENT SURFACES.
4. PAINT ALL NON-FACTORY FINISHED EXPOSED METAL.
5. REFER TO TYPICAL FLOORING TRANSITION DETAILS FOR FLOORING MATERIAL TRANSITIONS.
6. ALL FLOORING TRANSITIONS AT DOORS SHALL BE LOCATED UNDER THE DOOR IN THE CLOSED POSITION, U.N.O.
7. PROTECT ALL FINISHED FLOORING SURFACES FROM DAMAGE DURING ALL CONSTRUCTION PHASES.
8. PROVIDE AND INSTALL BULLNOSE TRIM AT ALL TRANSITIONS FROM CERAMIC WALL TILE TO OTHER MATERIAL U.N.O.
9. REFER TO REFLECTED CEILING PLANS FOR CEILING HEIGHTS.
10. ALL ELECTRICAL DEVICE COVERS ARE TO BE WHITE U.N.O.
11. ALL CARPET PATTERNS TO RUN PARALLEL TO CORRIDOR, U.N.O.
12. PAINT ALL HOLLOW METAL DOOR FRAMES TO MATCH ADJACENT WALL COLOR U.N.O.

CONSTRUCTION KEYED NOTES

02.34	(E) EXTERIOR H.M. DOOR FRAME TO REMAIN, PROVIDE (N) PAINT FINISH
02.51	(E) ALUMINUM FRAME & GLAZING STOREFONT SYSTEM, TO REMAIN.
02.54	(E) CASEWORK TO REMAIN. PROTECT IN PLACE.
02.55	(E) ACCESSIBLE SINK TO REMAIN. PROTECT IN PLACE
02.86	(E) RUBBER BASE. SEE FINISH SCHEDULE
08.04	(E) DOOR PANEL & (E) DOOR FRAME. PROVIDE (N) DOOR HARDWARE WHERE NEEDED AND (N) PAINT FINISH. SEE DOOR SHEDULE
09.01	(N) INTERIOR PAINT FINISH, SEE FINISH SCHEDULE
09.02	(N) FLOOR FINISH AND RUBBER BASE, SEE FINISH PLAN AND SCHEDULE
10.21	(N) MARKER BOARD
10.22	(N) TACKABLE SURFACE

Not for permitting or construction

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-124972 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/17/2026

PBK

ARCHITECT PBK Architects, Inc.
ANAHEIM PBK.com
2400 E KATELLA AVE, Suite 950
ANAHEIM, CA 92806
P 949-548-5000

SCHROEDER ELEMENTARY SCHOOL
HVAC UPGRADE & MODERNIZATION

PROJECT ADDRESS:
15151 Columbia Ln
Huntington Beach, CA 92647

CONSTRUCTION DOCUMENTS

DSA APPL NO.: 04-124972 DSA FILE NO.: 30-43

RELO
A K2 K1
B ADMIN
C MPR
D
RELO

KEY PLAN
NORTH: PLAN

Consultant

Architect
LICENSED ARCHITECT Yong Yoo No. C-31162 REN. 10-31-2027 STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
11-14-2025	250376

REVISIONS

No.	Description	Date

CONSTRUCTION DOCUMENTS

INTERIOR ELEVATIONS

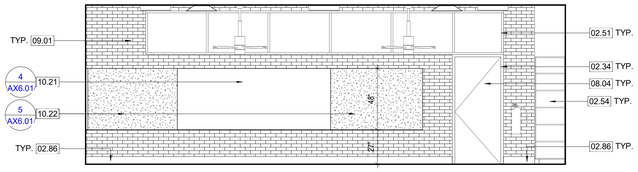
This document is for plan review only

A5.02

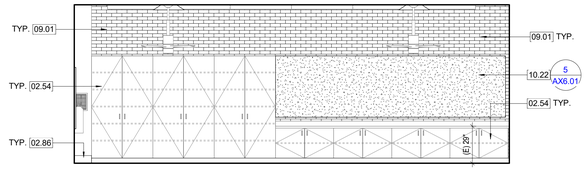
FILE PATH: Z:\Projects\...
3/13/2026 5:36:24 PM

A5.03 - INTERIOR ELEVATIONS

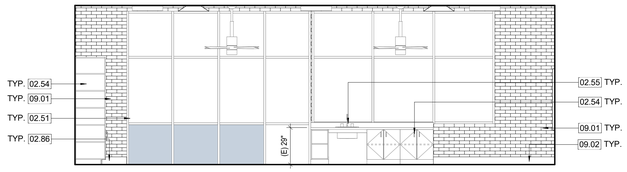
0" 1"



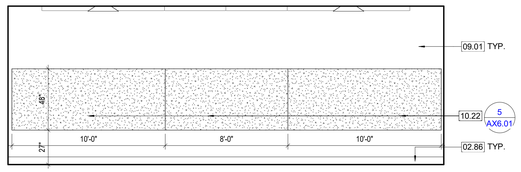
3C SOUTH INTERIOR ELEVATION
1/4" = 1'-0"



3D WEST INTERIOR ELEVATION
1/4" = 1'-0"

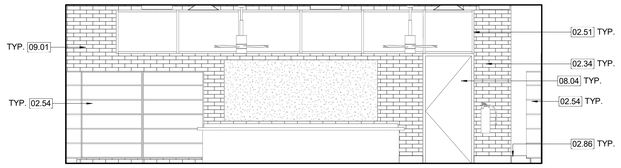


3A NORTH INTERIOR ELEVATION
1/4" = 1'-0"

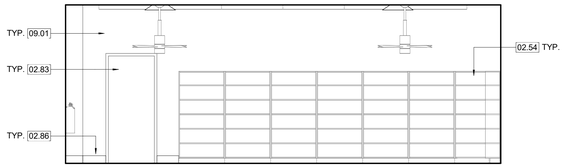


3B EAST INTERIOR ELEVATION
1/4" = 1'-0"

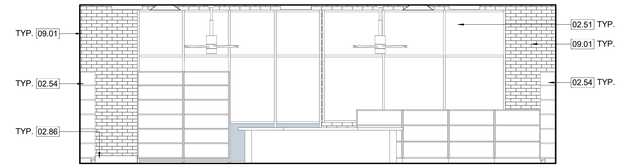
3 TYPICAL CLASSROOM AT BLDG D - INTERIOR ELEVATIONS
1/4" = 1' - 0"



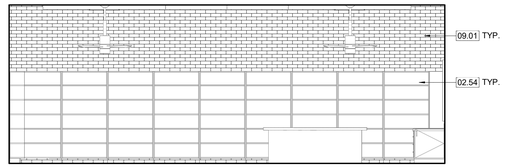
2C SOUTH INTERIOR ELEVATION
1/4" = 1'-0"



2D WEST INTERIOR ELEVATION
1/4" = 1'-0"

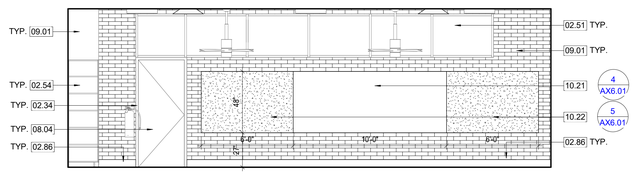


2A NORTH INTERIOR ELEVATION
1/4" = 1'-0"

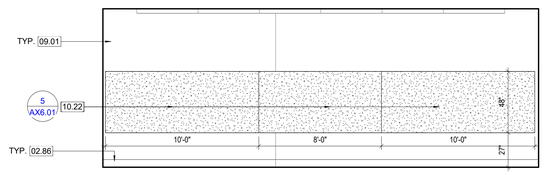


2B EAST INTERIOR ELEVATION
1/4" = 1'-0"

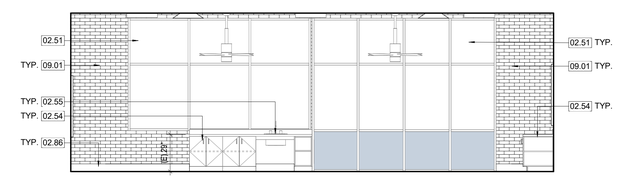
2 LIBRARY AT BLDG C - INTERIOR ELEVATIONS
1/4" = 1' - 0"



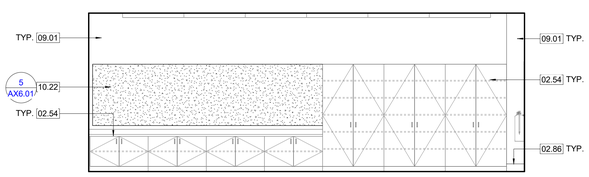
1C SOUTH INTERIOR ELEVATION
1/4" = 1'-0"



1D WEST INTERIOR ELEVATION
1/4" = 1'-0"



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



1B EAST INTERIOR ELEVATION
1/4" = 1'-0"

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

GENERAL FINISH LEGEND NOTES

1. ALL FINISH MATERIALS SHALL MEET THE FLAME SPREAD RATINGS PER THE BUILDING CODE.
2. REFER TO INTERIOR ELEVATIONS FOR SPECIFIC MATERIAL LOCATIONS.
3. PAINT ALL EXPOSED STRUCT. MEMBERS, STRUCT. DECK, DUCTWORK, DIFFUSERS, PIPING, CONDUIT, EQUIP. HOUSINGS, LIGHT FIXTURE HOUSINGS, CABLE SUPPORTS, CABLE TRAYS, EQUIP. SUPPORTS, HANGERS, ETC. TO MATCH ADJACENT SURFACES.
4. PAINT ALL NON-FACTORY FINISHED EXPOSED METAL.
5. REFER TO TYPICAL FLOORING TRANSITION DETAILS FOR FLOORING MATERIAL TRANSITIONS.
6. ALL FLOORING TRANSITIONS AT DOORS SHALL BE LOCATED UNDER THE DOOR IN THE CLOSED POSITION, U.N.O.
7. PROTECT ALL FINISHED FLOORING SURFACES FROM DAMAGE DURING ALL CONSTRUCTION PHASES.
8. PROVIDE AND INSTALL BULLNOSE TRIM AT ALL TRANSITIONS FROM CERAMIC WALL TILE TO OTHER MATERIAL U.N.O.
9. REFER TO REFLECTED CEILING PLANS FOR CEILING HEIGHTS.
10. ALL ELECTRICAL DEVICE COVERS ARE TO BE WHITE U.N.O.
11. ALL CARPET PATTERNS TO RUN PARALLEL TO CORRIDOR, U.N.O.
12. PAINT ALL HOLLOW METAL DOOR FRAMES TO MATCH ADJACENT WALL COLOR U.N.O.

CONSTRUCTION KEYED NOTES

02.34 (E) EXTERIOR H.M. DOOR FRAME TO REMAIN, PROVIDE (N) PAINT FINISH
02.51 (E) ALUMINUM FRAME & GLAZING STOREFONT SYSTEM, TO REMAIN.
02.54 (E) CASEWORK TO REMAIN. PROTECT IN PLACE.
02.55 (E) ACCESSIBLE SINK TO REMAIN. PROTECT IN PLACE
02.83 (E) INTERIOR DOOR PANEL & FRAME TO REMAIN & PROTECT IN PLACE. PROVIDE NEW PAINT FINISH.
02.86 (E) RUBBER BASE. SEE FINISH SCHEDULE
08.04 (E) DOOR PANEL & (E) DOOR FRAME, PROVIDE (N) DOOR HARDWARE WHERE NEEDED AND (N) PAINT FINISH. SEE DOOR SHEDULE
09.01 (N) INTERIOR PAINT FINISH, SEE FINISH SCHEDULE
09.02 (N) FLOOR FINISH AND RUBBER BASE, SEE FINISH PLAN AND SCHEDULE
10.21 (N) MARKER BOARD
10.22 (N) TACKABLE SURFACE

Not for permitting or construction

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-124972 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/17/2026

PBK

ARCHITECT PBK Architects, Inc.
ANAHEIM PBK.com
2400 E KATELLA AVE, Suite 950
ANAHEIM, CA 92806
P 949-548-5000

SCHROEDER ELEMENTARY SCHOOL
HVAC UPGRADE & MODERNIZATION

PROJECT ADDRESS:
15151 Columbia Ln
Huntington Beach, CA 92647

CONSTRUCTION DOCUMENTS

DSA APPL NO.: 04-124972 DSA FILE NO.: 30-43

RELO
A K2 K1
B ADMIN
C MPR
D
RELO

KEY PLAN
NORTH: PLAN

Consultant

Architect
LICENSED ARCHITECT
Yong Yoo
No. C-31162
REN. 10-31-2027
STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
11-14-2025	250376

REVISIONS

No.	Description	Date

CONSTRUCTION DOCUMENTS

INTERIOR ELEVATIONS

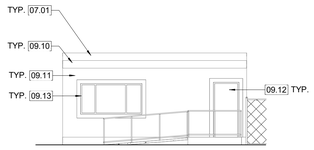
This document is for plan review only

A5.03

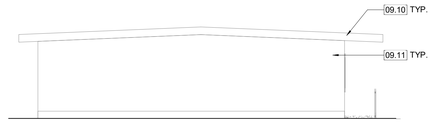
FILE PATH: Z:\Projects\...
3/13/2026 5:36:27 PM

A5.04 - EXTERIOR ELEVATION

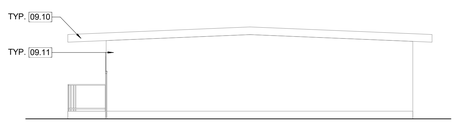
0" 1"



3A FRONT ELEVATION
1/8" = 1'-0"



3B LEFT SIDE ELEVATION
1/8" = 1'-0"

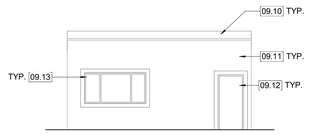


3C RIGHT SIDE ELEVATION
1/8" = 1'-0"



3D REAR ELEVATION
1/8" = 1'-0"

3 TYPICAL RELO CLASSROOM R7 TO R13 EXTERIOR ELEVATION
1/4" = 1' - 0"



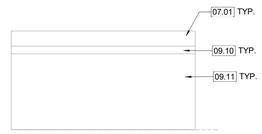
2A FRONT ELEVATION
1/8" = 1'-0"



2B LEFT SIDE ELEVATION
1/8" = 1'-0"

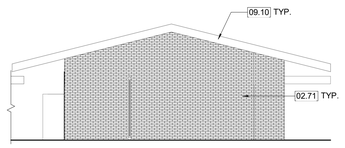


2C RIGHT SIDE ELEVATION
1/8" = 1'-0"

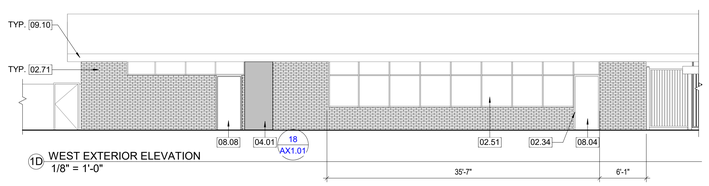


2D REAR ELEVATION
1/8" = 1'-0"

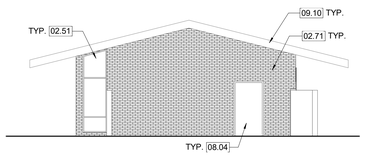
2 TYPICAL RELO CLASSROOM R1 TO R6 EXTERIOR ELEVATION
1/4" = 1' - 0"



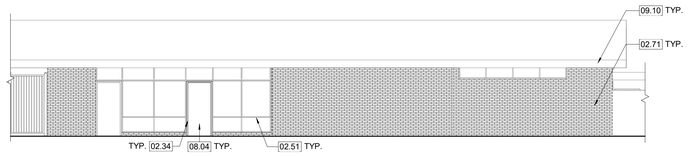
1C SOUTH EXTERIOR ELEVATION
1/8" = 1'-0"



1D WEST EXTERIOR ELEVATION
1/8" = 1'-0"



1A NORTH EXTERIOR ELEVATION
1/8" = 1'-0"



1B EAST EXTERIOR ELEVATION
1/8" = 1'-0"

1 ADMIN BLDG EXTERIOR ELEVATION
1/4" = 1' - 0"

EXTERIOR PAINT SCOPE OF WORK

1. EXISTING BUILDINGS: CONTRACTOR TO PAINT THE EXTERIOR OF ALL EXISTING BUILDINGS. PAINTING SCOPE TO INCLUDE ALL PLASTER SYSTEMS INCLUDING WALL AND UNDERSIDE OF ROOF OVERHANGS, ROOF FASCIA, DOWNSPOUT AND GUTTER, LOUVERS DOORS AND FRAMES, EXPOSED CONDUITS. NO PAINTING IS REQUIRED ON EXTERIOR BRICK SURFACES AND ALUMINUM STOREFRONT FRAMES. MINIMUM OF (4) COLORS TO BE SELECTED BY THE ARCHITECT.
2. EXISTING PORTABLE BUILDINGS: CONTRACTOR TO PAINT THE EXTERIOR OF ALL EXISTING PORTABLE BUILDINGS. PAINTING SCOPE TO INCLUDE EXTERIOR WALLS, WINDOW TRIMS, DOORS AND FRAMES, METAL RAMP POSTS AND RAILS
3. LUNCH SHELTER/SHADE STRUCTURES: CONTRACTOR TO PAINT EXISTING SHADE STRUCTURES. PAINTING SCOPE TO INCLUDE ALL COLUMNS, BEAMS, ROOF, AND UNDERSIDE OF STRUCTURE. MINIMUM OF (2) COLORS TO BE SELECTED BY THE ARCHITECT.
4. GENERAL CONTRACTOR TO NOTIFY AND DOCUMENT ANY AREAS WITH DRY ROT AND / OR TERMITE DAMAGE IN WRITTEN FORMAT PRIOR TO BID.

CONSTRUCTION KEYED NOTES

02.34	(E) EXTERIOR H.M. DOOR FRAME TO REMAIN, PROVIDE (N) PAINT FINISH
02.51	(E) ALUMINUM FRAME & GLAZING STOREFONT SYSTEM, TO REMAIN.
02.71	(E) BRICK WALL, PROTECT IN PLACE, PATCH AND REPAIR WHERE NEEDED.
04.01	(N) EXTERIOR WALL. PER DETAIL
07.01	(N) ROOFING SYSTEM WITH TAPERED INSULATION & ACCESSORIES TO (E) BUILDING ROOF STRUCTURE
08.04	(E) DOOR PANEL & (E) DOOR FRAME, PROVIDE (N) DOOR HARDWARE WHERE NEEDED AND (N) PAINT FINISH. SEE DOOR SHEDULE
08.08	(N) DOOR PANEL & (N) DOOR FRAME, PROVIDE (N) DOOR HARDWARE WHERE NEEDED AND (N) PAINT FINISH. SEE DOOR SHEDULE
09.10	(N) EXTERIOR PAINT FINISH AT (E) ROOF FASCIA / EAVE / GUTTER / DOWNSPOUT
09.11	(N) EXTERIOR PAINT FINISH AT (E) EXTERIOR WALL
09.12	(N) EXTERIOR PAINT FINISH AT (E) EXTERIOR DOOR PANEL / TRIM
09.13	(N) EXTERIOR PAINT FINISH AT (E) EXTERIOR WINDOW TRIM

FILE PATH: Z:\Projects\...
3/13/2026 5:36:29 PM

Not for permitting or construction

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-124972 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/17/2026

PBK

ARCHITECT PBK Architects, Inc.
ANAHEIM PBK.com
2400 E KATELLA AVE, Suite 950
ANAHEIM, CA 92806
P 949-548-5000

SCHROEDER ELEMENTARY SCHOOL
HVAC UPGRADE & MODERNIZATION

PROJECT ADDRESS:
15151 Columbia Ln
Huntington Beach, CA 92647

CONSTRUCTION DOCUMENTS

DSA FILE NO.: 30-43

DSA APPL NO.: 04-124972

RELO
A K2 K1
B ADMIN
C
D MPR
RELO

KEY PLAN
NORTH: PLAN

Consultant

Architect
LICENSED ARCHITECT
Yong Yoo
No. C-31162
REN 10-31-2027
STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
11-14-2025	250376

REVISIONS

No.	Description	Date

CONSTRUCTION DOCUMENTS

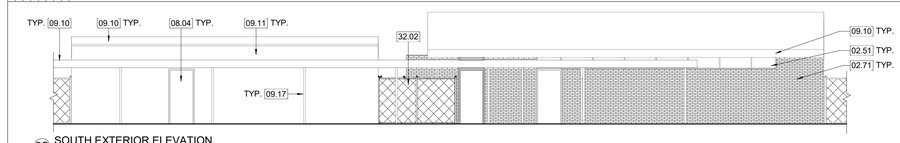
EXTERIOR ELEVATION

This document is for plan review only

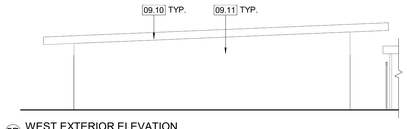
A5.04

A5.05 - EXTERIOR ELEVATION

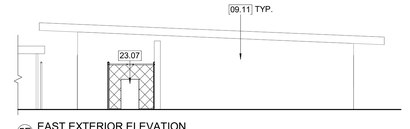
0" 1"



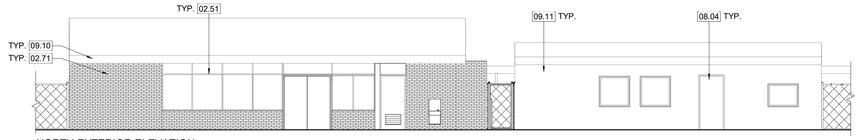
5C SOUTH EXTERIOR ELEVATION
1/8" = 1'-0"



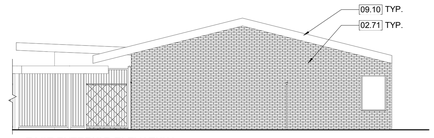
5D WEST EXTERIOR ELEVATION
1/8" = 1'-0"



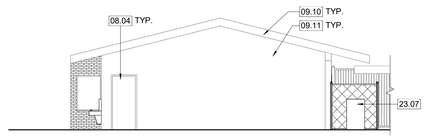
5F EAST EXTERIOR ELEVATION
1/8" = 1'-0"



5A NORTH EXTERIOR ELEVATION
1/8" = 1'-0"

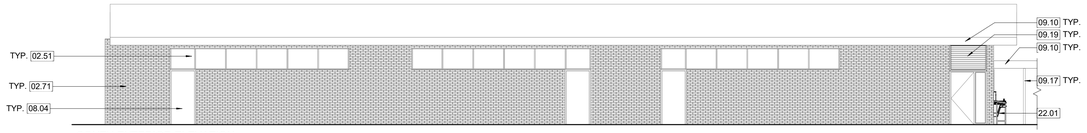


5B EAST EXTERIOR ELEVATION
1/8" = 1'-0"



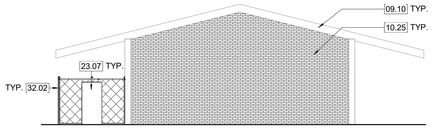
5E WEST EXTERIOR ELEVATION
1/8" = 1'-0"

5 KINDERGARTEN BLDG EXTERIOR ELEVATION
1/4" = 1' - 0"



4C SOUTH EXTERIOR ELEVATION
1/8" = 1'-0"

4A NORTH EXTERIOR ELEVATION
1/8" = 1'-0"



4D WEST EXTERIOR ELEVATION
1/8" = 1'-0"

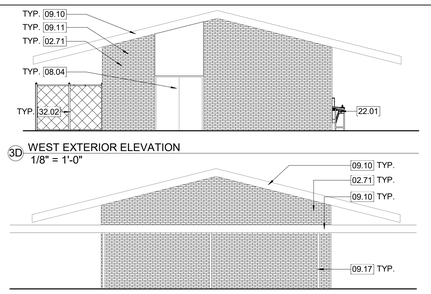
4B EAST EXTERIOR ELEVATION
1/8" = 1'-0"

4 BLDG D EXTERIOR ELEVATION
1/4" = 1' - 0"



3C SOUTH EXTERIOR ELEVATION
1/8" = 1'-0"

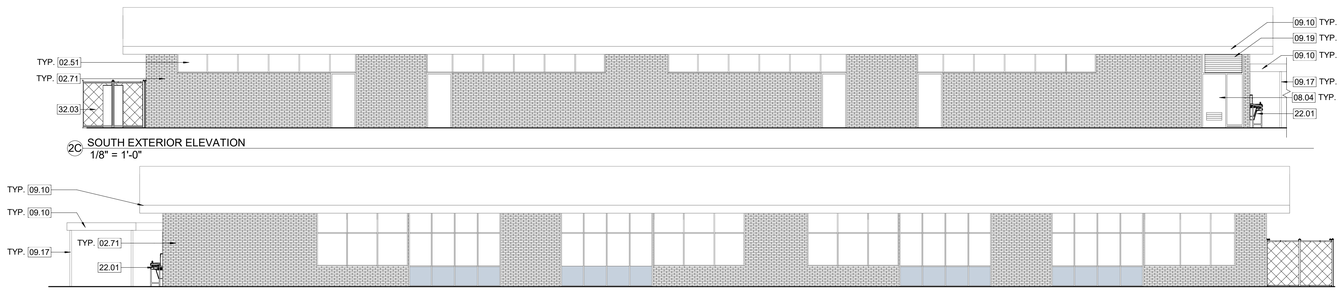
3A NORTH EXTERIOR ELEVATION
1/8" = 1'-0"



3D WEST EXTERIOR ELEVATION
1/8" = 1'-0"

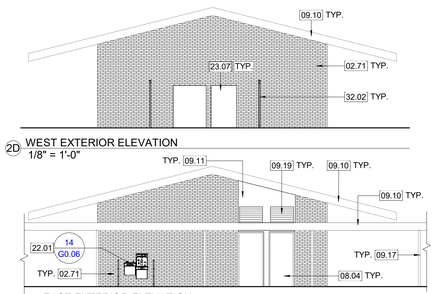
3B EAST EXTERIOR ELEVATION
1/8" = 1'-0"

3 BLDG C EXTERIOR ELEVATION
1/4" = 1' - 0"



2C SOUTH EXTERIOR ELEVATION
1/8" = 1'-0"

2A NORTH EXTERIOR ELEVATION
1/8" = 1'-0"



2D WEST EXTERIOR ELEVATION
1/8" = 1'-0"

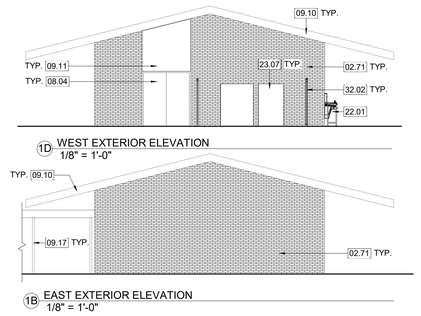
2B EAST EXTERIOR ELEVATION
1/8" = 1'-0"

2 BLDG B EXTERIOR ELEVATION
1/4" = 1' - 0"



1C SOUTH EXTERIOR ELEVATION
1/8" = 1'-0"

1A NORTH EXTERIOR ELEVATION
1/8" = 1'-0"



1D WEST EXTERIOR ELEVATION
1/8" = 1'-0"

1B EAST EXTERIOR ELEVATION
1/8" = 1'-0"

1 BLDG A EXTERIOR ELEVATION
1/4" = 1' - 0"

EXTERIOR PAINT SCOPE OF WORK

1. EXISTING BUILDINGS: CONTRACTOR TO PAINT THE EXTERIOR OF ALL EXISTING BUILDINGS. PAINTING SCOPE TO INCLUDE ALL PLASTER SYSTEMS INCLUDING WALL AND UNDERSIDE OF ROOF OVERHANGS, ROOF FASCIA, DOWNSPOUT AND GUTTER, LOUVERS DOORS AND FRAMES, EXPOSED CONDUITS. NO PAINTING IS REQUIRED ON EXTERIOR BRICK SURFACES AND ALUMINUM STOREFRONT FRAMES. MINIMUM OF (4) COLORS TO BE SELECTED BY THE ARCHITECT.
2. EXISTING PORTABLE BUILDINGS: CONTRACTOR TO PAINT THE EXTERIOR OF ALL EXISTING PORTABLE BUILDINGS. PAINTING SCOPE TO INCLUDE EXTERIOR WALLS, WINDOW TRIMS, DOORS AND FRAMES, METAL RAMP POSTS AND RAILS
3. LUNCH SHELTER/SHADE STRUCTURES: CONTRACTOR TO PAINT EXISTING SHADE STRUCTURES. PAINTING SCOPE TO INCLUDE ALL COLUMNS, BEAMS, ROOF, AND UNDERSIDE OF STRUCTURE. MINIMUM OF (2) COLORS TO BE SELECTED BY THE ARCHITECT.
4. GENERAL CONTRACTOR TO NOTIFY AND DOCUMENT ANY AREAS WITH DRY ROT AND / OR TERMITE DAMAGE IN WRITTEN FORMAT PRIOR TO BID.

CONSTRUCTION KEYED NOTES

02.01	(E) CHAINLINK FENCING, TO REMAIN.
02.51	(E) ALUMINUM FRAME & GLAZING STOREFRONT SYSTEM, TO REMAIN.
02.71	(E) BRICK WALL. PROTECT IN PLACE, PATCH AND REPAIR WHERE NEEDED.
07.01	(N) ROOFING SYSTEM WITH TAPERED INSULATION & ACCESSORIES TO (E) BUILDING ROOF STRUCTURE
08.04	(E) DOOR PANEL & (E) DOOR FRAME, PROVIDE (N) DOOR HARDWARE WHERE NEEDED AND (N) PAINT FINISH. SEE DOOR SHEDULE
09.10	(N) EXTERIOR PAINT FINISH AT (E) ROOF FASCIA / EAVE / GUTTER / DOWNSPOUT
09.11	(N) EXTERIOR PAINT FINISH AT (E) EXTERIOR WALL
09.17	(N) EXTERIOR PAINT FINISH AT (E) BREEZEWAY POST
09.19	(N) EXTERIOR PAINT FINISH AT (E) METAL LOUVERED PANELS
10.25	(E) EXTERIOR WALL GRAPHICS TO REMAIN. PROTECT IN PLACE
22.01	(N) ACCESSIBLE DRINKING FOUNTAIN W/ BOTTLE FILLER AND WING GUARDS
23.07	(N) MECHANICAL UNIT , SEE MECHANICAL DRAWING
32.02	(N) 6'-0" HIGH GALV. STEEL CHAIN LINK FENCE
32.03	(N) 6'-0" HIGH GALV. STEEL CHAIN LINK GATE

FILE PATH: Z:\Projects\...
3/13/2026 5:36:35 PM

Not for permitting or construction

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-124972 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/17/2026

PBK

ARCHITECT PBK Architects, Inc.
ANAHEIM PBK.com
2400 E KATELLA AVE, Suite 950
ANAHEIM, CA 92806
P 949-548-5000

SCHROEDER ELEMENTARY SCHOOL
HVAC UPGRADE & MODERNIZATION

PROJECT ADDRESS:
15151 Columbia Ln
Huntington Beach, CA 92647

CONSTRUCTION DOCUMENTS

DSA APPL NO.: 04-124972 DSA FILE NO.: 30-43

RELO
A K1
B ADMIN
C
D MPR
RELO

KEY PLAN
NORTH: PLAN

Consultant

Architect
LICENSED ARCHITECT
Yong Yoo
No. C-31162
REN. 10-31-2027
STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT
DATE 11-14-2025
PROJECT NUMBER 250376

REVISIONS

No.	Description	Date

CONSTRUCTION DOCUMENTS

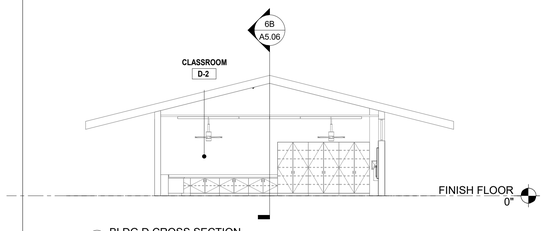
EXTERIOR ELEVATION

This document is for plan review only

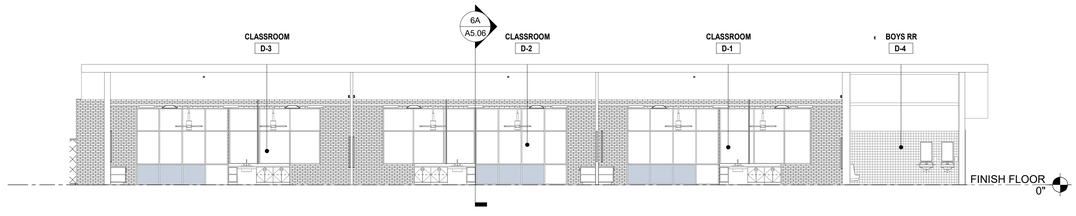
A5.05

A5.06 - BUILDING SECTIONS

0" 1"

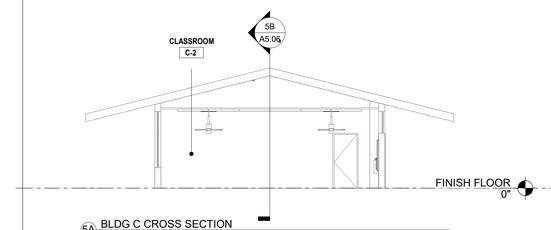


6A BLDG D CROSS SECTION
1/8" = 1'-0"

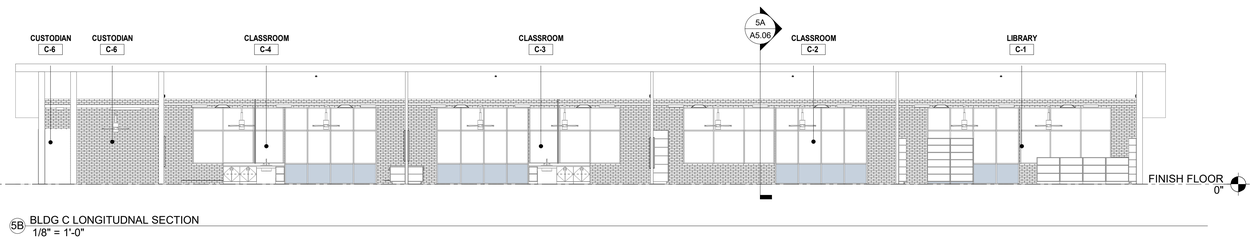


6B BLDG D LONGITUDINAL SECTION
1/8" = 1'-0"

6 BLDG D BUILDING SECTION
1/4" = 1' - 0"

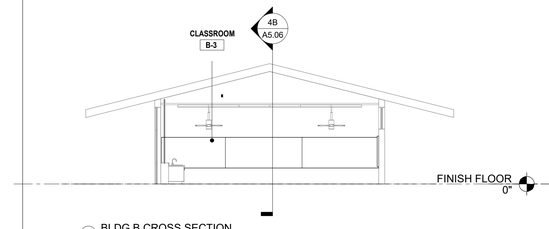


5A BLDG C CROSS SECTION
1/8" = 1'-0"

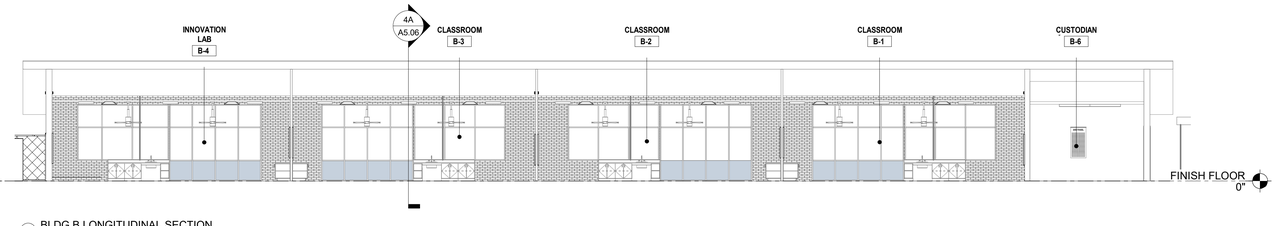


5B BLDG C LONGITUDNAL SECTION
1/8" = 1'-0"

5 BLDG C BUILDING SECTION
1/4" = 1' - 0"

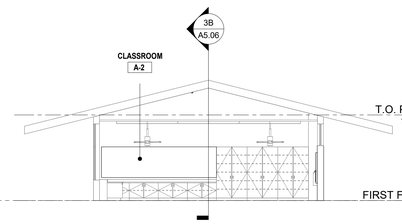


4A BLDG B CROSS SECTION
1/8" = 1'-0"

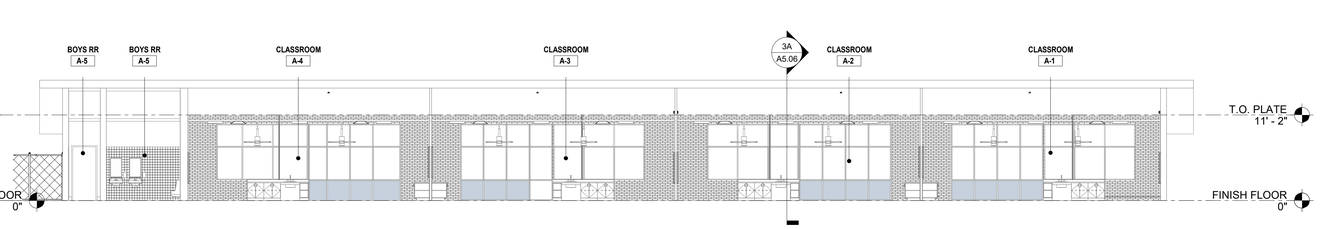


4B BLDG B LONGITUDINAL SECTION
1/8" = 1'-0"

4 BLDG B BUILDING SECTION
1/4" = 1' - 0"

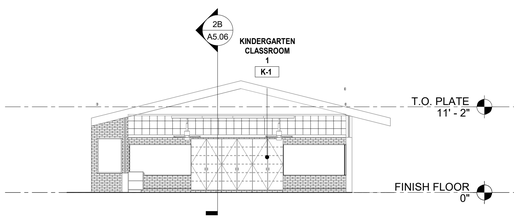


3A BLDG A TYPICAL CROSS SECTION
1/8" = 1'-0"

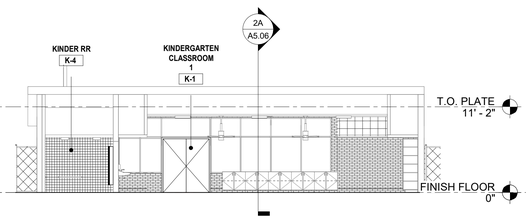


3B BLDG A LONGITUDINAL SECTION
1/8" = 1'-0"

3 BLDG A BUILDING SECTION
1/4" = 1' - 0"

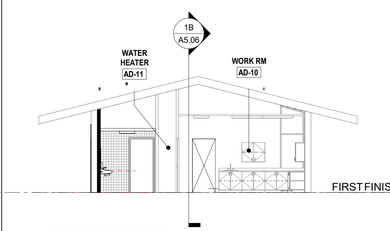


2A BLDG K1 CROSS SECTION
1/8" = 1'-0"

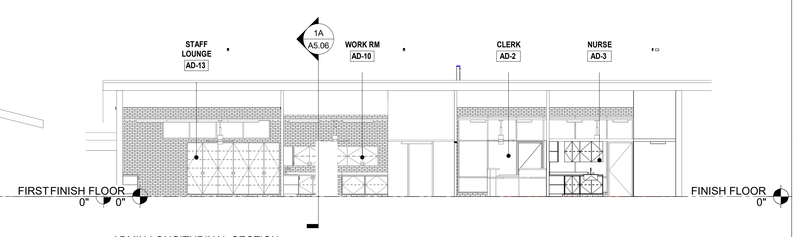


2B BLDG K1 LONGITUDINAL SECTION
1/8" = 1'-0"

2 KINDERGARTEN K1 & K2 BUILDING SECTION
1/4" = 1' - 0"



1A ADMIN CROSS SECTION
1/8" = 1'-0"



1B ADMIN LONGITUDINAL SECTION
1/8" = 1'-0"

1 ADMIN BUILDING SECTION
1/4" = 1' - 0"

FILE PATH: Z:\Projects\...
3/13/2026 5:36:40 PM

Not for permitting or construction

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-124972 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/17/2026

PBK

ARCHITECT PBK Architects, Inc.
ANAHEIM PBK.com
2400 E KATELLA AVE, Suite 950
ANAHEIM, CA 92806
P 949-548-5000

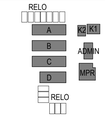
SCHROEDER ELEMENTARY SCHOOL
HVAC UPGRADE & MODERNIZATION

PROJECT ADDRESS:
15151 Columbia Ln
Huntington Beach, CA 92647

CONSTRUCTION DOCUMENTS

DSA APPL NO.: 04-124972 DSA FILE NO.: 30-43





KEY PLAN
NORTH: PLAN

Consultant

Architect



CLIENT
WESTMINSTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
11-14-2025	250376

REVISIONS

No.	Description	Date

CONSTRUCTION DOCUMENTS

This document is for plan review only

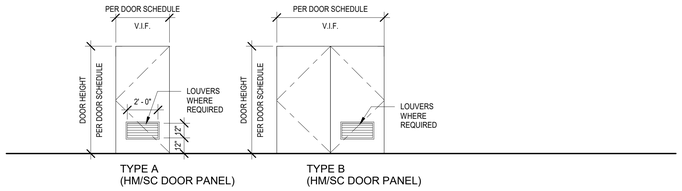
BUILDING SECTIONS

A5.06

0" 1"

Door Schedule

DOOR #	ROOM NAME	BUILDING NAME	DOOR						FRAME				DETAILS			PROVIDE NEW HARDWARE (SEE HARDWARE SPECS)	PANIC HARDWARE	ACCESSIBLE SECURITY LOCKING HARDWARE	EXISTING DOOR TO REMAIN MARKED (E)
			DOOR TYPE	PAIR/SINGLE	SIZE WXH WIDTH	SIZE WXH HEIGHT	MATL.	FINISH	FRAME TYPE	MATERIAL	FINISH	SILL	JAMB	HEAD				
	KINDER CLASSROOM 1 K-1	BLDG K1	B	PAIR	6' - 0"	7' - 0"	(E)SC	PT	(E) 4	(E) HM	PT	1 OR 2/AX6.01	(E)	(E)	1	Yes	YES	(E)
	HEATER ROOM K-6	BLDG K1	A	SINGLE	3' - 0"	7' - 0"	(E)SC	PT	(E) 2	(E) HM	PT	(E)	(E)	(E)		No		(E)
A1A	CLASSROOM A-1	BLDG A	A	SINGLE	3' - 0"	7' - 0"	(E)SC	PT	(E) 2	(E) HM	PT	1 OR 2/AX6.01	(E)	(E)	1	Yes	YES	(E)
A2A	CLASSROOM A-2	BLDG A	A	SINGLE	3' - 0"	7' - 0"	(E)SC	PT	(E) 2	(E) HM	PT	1 OR 2/AX6.01	(E)	(E)	1	Yes	YES	(E)
A3A	CLASSROOM A-3	BLDG A	A	SINGLE	3' - 0"	7' - 0"	(E)SC	PT	(E) 2	(E) HM	PT	1 OR 2/AX6.01	(E)	(E)	1	Yes	YES	(E)
A4A	CLASSROOM A-4	BLDG A	A	SINGLE	3' - 0"	7' - 0"	(E)SC	PT	(E) 2	(E) HM	PT	1 OR 2/AX6.01	(E)	(E)	1	Yes	YES	(E)
A6A	OFFICE A-6	BLDG A	A	SINGLE	3' - 0"	7' - 0"	(E)SC	PT	(E) 2	(E) HM	PT	1 OR 2/AX6.01	(E)	(E)		No		(E)
A7A	STORAGE A-7	BLDG A	B	PAIR	6' - 0"	7' - 0"	(E)SC	PT	(E) 4	(E) HM	PT	(E)	(E)	(E)		No		(E)
AD1A	PUBLIC AD-1	ADMIN	A	SINGLE	3' - 0"	7' - 0"	(E)SC	PT	(E) 2	(E) HM	PT	1 OR 2/AX6.01	(E)	(E)		No		(N)
AD3A	NURSE AD-3	ADMIN	A	SINGLE	3' - 0"	7' - 0"	(E)SC	PT	(E) 2	(E) HM	PT	1 OR 2/AX6.01	(E)	(E)	2	Yes	YES	(E)
AD3B	NURSE AD-3	ADMIN	A	SINGLE	3' - 0"	7' - 0"	SC	PT	2	HM	PT	-	HM	HM		Yes		(N)
AD4A	REST AREA AD-4	ADMIN	A	SINGLE	3' - 0"	7' - 0"	(E)SC	PT	(E) 2	(E) HM	PT	1 OR 2/AX6.01	(E)	(E)	2	Yes	YES	(E)
AD4B	REST AREA AD-4	ADMIN	A	SINGLE	3' - 0"	7' - 0"	SC	PT	1	HM	PT	-	HM	HM		Yes		(N)
AD5A	UNISEX RESTROOM AD-5	ADMIN	A	SINGLE	3' - 0"	7' - 0"	SC	PT	1	HM	PT	-	HM	HM		No		(N)
AD7B	PRINCIPAL AD-7	ADMIN	A	SINGLE	3' - 0"	7' - 0"	SC	PT	1	HM	PT	-	HM	HM		No		(N)
AD8A	WOMEN TOILET AD-8	ADMIN	A	SINGLE	3' - 0"	7' - 0"	(E)SC	PT	(E) 1	(E) WD	PT	(E)	(E)	(E)		No		(E)
AD9A	STORAGE AD-9	ADMIN	A	SINGLE	3' - 0"	7' - 0"	(E)SC	PT	(E) 1	(E) WD	PT	(E)	(E)	(E)		No		(E)
AD11A	WATER HEATER AD-11	ADMIN	A	SINGLE	2' - 6"	7' - 0"	(E)SC	PT	(E) 1	(E) WD	PT	(E)	(E)	(E)		No		(E)
AD12A	STAFF UNISEX TOILET AD-12	ADMIN	A	SINGLE	3' - 0"	7' - 0"	SC	PT	1	HM	PT	-	HM	HM		No		(N)
AD13A	STAFF LOUNGE AD-13	ADMIN	A	SINGLE	3' - 0"	7' - 0"	SC	PT	1	HM	PT	1 OR 2/AX6.01	HM	HM		Yes		(N)
AD13B	STAFF LOUNGE AD-13	ADMIN	A	SINGLE	3' - 6"	7' - 0"	(E)SC	PT	(E) 2	(E) HM	PT	1 OR 2/AX6.01	(E)	(E)	2	Yes	YES	(E)
B1A	CLASSROOM B-1	BLDG B	A	SINGLE	3' - 0"	7' - 0"	(E)SC	PT	(E) 2	(E) HM	PT	1 OR 2/AX6.01	(E)	(E)	1	Yes	YES	(E)
B2A	CLASSROOM B-2	BLDG B	A	SINGLE	3' - 0"	7' - 0"	(E)SC	PT	(E) 2	(E) HM	PT	1 OR 2/AX6.01	(E)	(E)	1	Yes	YES	(E)
B3A	CLASSROOM B-3	BLDG B	A	SINGLE	3' - 0"	7' - 0"	(E)SC	PT	(E) 2	(E) HM	PT	1 OR 2/AX6.01	(E)	(E)	1	Yes	YES	(E)
B4A	CLASSROOM B-4	BLDG B	A	SINGLE	3' - 0"	7' - 0"	(E)SC	PT	(E) 2	(E) HM	PT	1 OR 2/AX6.01	(E)	(E)	1	Yes	YES	(E)
B5A	GIRLS RESTROOM B-5	BLDG B	A	SINGLE	3' - 0"	7' - 0"	(E)SC	PT	(E) 3	(E) HM	PT	(E)	(E)	(E)				(E)
B6A	CUSTODIAN B-6	BLDG B	A	SINGLE	3' - 0"	7' - 0"	(E)SC	PT	(E) 2	(E) HM	PT	(E)	(E)	(E)		No		(E)
B7A	HEATER B-7	BLDG B	A	SINGLE	3' - 0"	7' - 0"	(E)SC	PT	(E) 2	(E) HM	PT	(E)	(E)	(E)		No		(E)
C1A	LIBRARY C-1	BLDG C	A	SINGLE	3' - 0"	7' - 0"	(E)SC	PT	(E) 2	(E) HM	PT	1 OR 2/AX6.01	(E)	(E)	1	Yes	YES	(E)
C1B	LIBRARY C-1	BLDG C	A	SINGLE	3' - 0"	7' - 0"	(E)SC	PT	(E) 1	(E) WD	PT	(E)	(E)	(E)		No		(E)
C2A	CLASSROOM C-2	BLDG C	A	SINGLE	3' - 0"	7' - 0"	(E)SC	PT	(E) 2	(E) HM	PT	1 OR 2/AX6.01	(E)	(E)	1	Yes	YES	(E)
C3A	CLASSROOM C-3	BLDG C	A	SINGLE	3' - 0"	7' - 0"	(E)SC	PT	(E) 2	(E) HM	PT	1 OR 2/AX6.01	(E)	(E)	1	Yes	YES	(E)
C4A	CLASSROOM C-4	BLDG C	A	SINGLE	3' - 0"	7' - 0"	(E)SC	PT	(E) 2	(E) HM	PT	1 OR 2/AX6.01	(E)	(E)	1	Yes	YES	(E)
C5A	GIRLS RESTROOM C-5	BLDG C	A	SINGLE	3' - 0"	7' - 0"	(E)SC	PT	(E) 3	(E) HM	PT	1 OR 2/AX6.01	(E)	(E)				(E)
D1A	CLASSROOM D-1	BLDG D	A	SINGLE	3' - 0"	7' - 0"	(E)SC	PT	(E) 2	(E) HM	PT	1 OR 2/AX6.01	(E)	(E)	1	Yes	YES	(E)
D2A	CLASSROOM D-2	BLDG D	A	SINGLE	3' - 0"	7' - 0"	(E)SC	PT	(E) 2	(E) HM	PT	1 OR 2/AX6.01	(E)	(E)	1	Yes	YES	(E)
D3A	CLASSROOM D-3	BLDG D	A	SINGLE	3' - 0"	7' - 0"	(E)SC	PT	(E) 2	(E) HM	PT	1 OR 2/AX6.01	(E)	(E)	1	Yes	YES	(E)
D4A	BOYS RR D-4	BLDG D	A	SINGLE	3' - 0"	6' - 10"	(E)SC	PT	(E) 2	(E) HM	PT	1 OR 2/AX6.01	(E)	(E)				(E)
D5A	CUSTODIAN D-5	BLDG D	A	SINGLE	3' - 0"	7' - 0"	(E)SC	PT	(E) 2	(E) HM	PT	(E)	(E)	(E)		No		(E)
D6A	HEATER ROOM D-6	BLDG D	A	SINGLE	3' - 0"	7' - 0"	(E)SC	PT	(E) 2	(E) HM	PT	(E)	(E)	(E)		No		(E)
K1A	KINDER CLASSROOM 1 K-1	BLDG K1	A	SINGLE	3' - 0"	7' - 0"	(E)SC	PT	(E) 2	(E) HM	PT	1 OR 2/AX6.01	(E)	(E)	1	Yes	YES	(E)
K1B	KINDER CLASSROOM 1 K-1	BLDG K1	B	PAIR	6' - 0"	7' - 0"	HM	PT	(E) 4	(E) ALUM	PT	(E)	(E)	(E)	3	Yes		(N)
K2A	STORAGE K-2	BLDG K1	A	SINGLE	3' - 0"	7' - 0"	(E)SC	PT	(E) 1	(E) WD	PT	(E)	(E)	(E)		No		(E)
K2B	STORAGE K-2	BLDG K1	A	SINGLE	3' - 0"	7' - 0"	(E)SC	PT	(E) 2	(E) HM	PT	(E)	(E)	(E)		No		(E)
K3A	STORAGE K-3	BLDG K1	A	SINGLE	3' - 0"	7' - 0"	(E)SC	PT	(E) 2	(E) HM	PT	(E)	(E)	(E)		No		(E)
K5A	WORK ROOM K-5	BLDG K1	A	SINGLE	2' - 6"	7' - 0"	(E)SC	PT	(E) 1	(E) WD	PT	(E)	(E)	(E)		No		(E)
K6A	KINDER CLASSROOM 1 K-1	BLDG K1	A	SINGLE	3' - 0"	7' - 0"	(E)SC	PT	(E) 2	(E) HM	PT	1 OR 2/AX6.01	(E)	(E)	1	Yes	YES	(N)
K7A	KINDER CLASSROOM 2 K-7	BLDG K2	A	SINGLE	3' - 0"	7' - 0"	(E)SC	PT	(E) 2	(E) HM	PT	(E)	(E)	(E)	1	Yes	YES	(E)
K7B	KINDER CLASSROOM 2 K-7	BLDG K2	A	SINGLE	3' - 0"	7' - 0"	(E)SC	PT	(E) 2	(E) HM	PT	(E)	(E)	(E)	1	Yes	YES	(E)
K8A	STORAGE K-8	BLDG K2	A	SINGLE	3' - 0"	7' - 0"	(E)SC	PT	(E) 1	(E) HM	PT	(E)	(E)	(E)		No		(E)
K9A	KINDER RESTROOM K-9	BLDG K2	A	SINGLE	3' - 0"	7' - 0"	(E)SC	PT	(E) 1	(E) HM	PT	(E)	(E)	(E)		No		(E)
K10A	KINDER RESTROOM K-10	BLDG K2	A	SINGLE	3' - 0"	7' - 0"	(E)SC	PT	(E) 1	(E) HM	PT	(E)	(E)	(E)		No		(E)

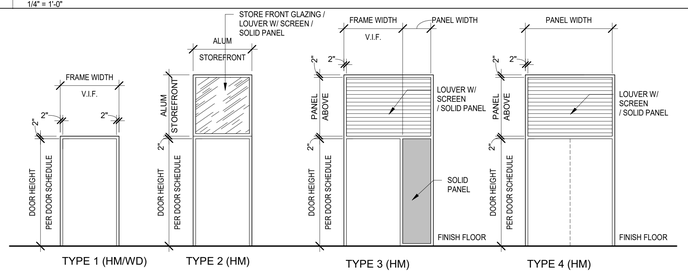


TYPE A (HM/SC DOOR PANEL)

TYPE B (HM/SC DOOR PANEL)

DOOR TYPE LEGEND

1/4" = 1'-0"



TYPE 1 (HM/WD) TYPE 2 (HM) TYPE 3 (HM) TYPE 4 (HM)

FRAME TYPE LEGEND

1/4" = 1'-0"

DOOR & WINDOW SCHEDULE ABBREVIATIONS

ALUM	ALUMINUM
FF	FACTORY FINISH
HM	HOLLOW METAL
N/A	NOT APPLICABLE
PT	PAINT
SC	SOLID CORE
ST	STAIN
WD	WOOD
(E)	EXISTING

Not for permitting or construction

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-124972 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/17/2026

PBK

ARCHITECT PBK Architects, Inc.
PBK.com
ANAHEIM
2400 E KATELLA AVE, Suite 950
ANAHEIM, CA 92806
P 949-548-5000

SCHROEDER ELEMENTARY SCHOOL
HVAC UPGRADE & MODERNIZATION

PROJECT ADDRESS:
15151 Columbia Ln
Huntington Beach, CA 92647

CONSTRUCTION DOCUMENTS

DSA APPL NO.: 04-124972 DSA FILE NO.: 30-43

RELO
A B C D
K2 K1
ADMIN
MPR
RELO

KEY PLAN NORTH: PLAN

Consultant

Architect

LICENSED ARCHITECT Yong Yoo No. C-31162 REN. 10-31-2027 STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
11-14-2025	250376

REVISIONS

No.	Description	Date

CONSTRUCTION DOCUMENTS

DOOR SCHEDULE

A6.01

This document is for plan review only

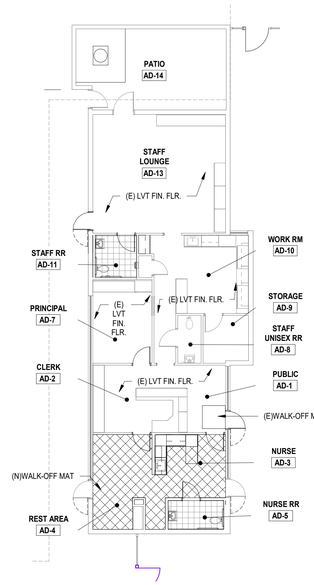
FILE PATH: Z:\Projects\...
3/13/2026 5:36:41 PM

A7.01 - FINISH PLANS & SCHEDULE

0" 1"

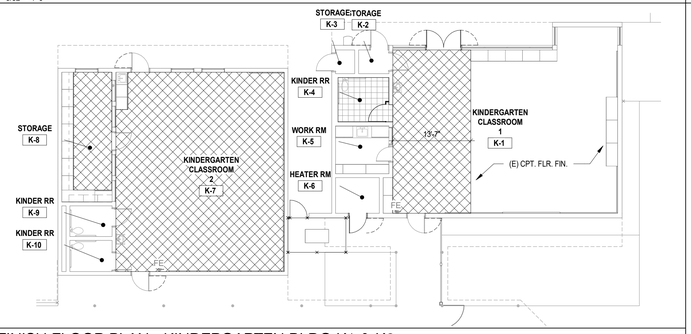
FINISH SCHEDULE

ROOM NUMBER	ROOM NAME	(E) FLOOR MATERIAL	FLOOR		BASE		NORTH WALL		EAST WALL		SOUTH WALL		WEST WALL		CEILING	
			MATERIAL	FINISH	MATERIAL	FINISH	MATERIAL	FINISH	MATERIAL	FINISH	MATERIAL	FINISH	MATERIAL	FINISH	MATERIAL	FINISH
A-1	CLASSROOM	CPT	(E)	(E)	(E)	(E)	(E) BW	PT1	(E) BW	PT1	(E) BW	PT1	(E) GYP	PT2	(E) ACT	PT3
A-2	CLASSROOM	CPT	LVT	LVT1	RB	RB1	(E) BW	PT1	(E) GYP	PT2	(E) BW	PT1	(E) GYP	PT2	(E) ACT	PT3
A-3	CLASSROOM	CPT	LVT	LVT1	RB	RB1	(E) BW	PT1	(E) GYP	PT2	(E) BW	PT1	(E) GYP	PT2	(E) ACT	PT3
A-4	CLASSROOM	CPT	LVT	LVT1	RB	RB1	(E) BW	PT1	(E) GYP	PT2	(E) BW	PT1	(E) GYP	PT2	(E) ACT	PT3
A-5	BOYS RR	CT	(E)	(E)	(E)	(E)	(E) CT / (E) GYP	(E) CT / PT2	(E) CT / (E) GYP	(E) CT / PT2	(E) CT / (E) GYP	(E) CT / PT2	(E) CT / (E) GYP	(E) CT / PT2	(E) GYP	PT4
A-6	OFFICE	CPT	LVT	LVT1	RB	RB1	(E) BW	PT1	(E) GYP	PT2	(E) GYP	PT2	(E) GYP	PT2	(E) ACT	PT3
A-7	STORAGE	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)
AD-1	PUBLIC	LVT	(E)	(E)	(E)	(E)	(E) GYP	PT2	(E)	(E)	(E) GYP	PT2	(E) BW	PT1	(E) ACT	PT3
AD-2	CLERK	LVT	(E)	(E)	(E)	(E)	(E) GYP	PT2	(E)	(E)	(E) GYP	PT2	(E) BW	PT1	(E) ACT	PT3
AD-3	NURSE	LVT	LVT	LVT1	RB	RB1	(E) GYP	PT2	(E) GYP	PT2	(E) GYP	PT2	(E) GYP	PT2	(E) ACT	PT3
AD-4	REST AREA	VCT	LVT	LVT1	RB	RB1	(E) GYP	PT2	(E) GYP	PT2	(E) BW / (E) GYP	PT1 / PT2	(E) BW	PT1	(E) ACT	PT3
AD-5	NURSE RR	LVT	LVT	LVT1	RB	RB1	(E) GYP	PT2	(E) GYP	PT2	(E) GYP	PT2	(E) CT / (E) GYP	PT2	(E) ACT	PT3
AD-7	PRINCIPAL	LVT	(E)	(E)	(E)	(E)	(E) GYP / GYP	PT2	(E) GYP	PT2	(E) GYP	PT2	(E) BW	PT1	(E) ACT	PT3
AD-8	STAFF UNISEX RR	LVT	(E)	(E)	(E)	(E)	(E) GYP	PT2	(E) GYP	PT2	(E) GYP	PT2	(E) GYP	PT2	(E) GYP	PT4
AD-9	STORAGE	LVT	(E)	(E)	(E)	(E)	(E) GYP	PT2	(E) GYP	PT2	(E) GYP	PT2	(E) GYP	PT2	(E) GYP	PT4
AD-10	WORK RM	LVT	(E)	(E)	(E)	(E)	(E) GYP	PT2	(E) BW	PT1	(E) GYP	PT2	(E) GYP	PT2	(E) ACT	PT3
AD-11	STAFF RR	(E)	LVT	LVT1	RB	RB1	GYP / CT	CT1	GYP / CT	CT1	GYP / CT	CT1	GYP / CT	CT1	GYP	PT4
AD-13	STAFF LOUNGE	LVT	(E)	(E)	(E)	(E)	(E) BW	PT1	(E) BW	PT1	(E) GYP	PT2	(E) BW	PT1	(E) ACT	PT3
B-1	CLASSROOM	CPT	LVT	LVT1	RB	RB1	(E) BW	PT1	(E) GYP	PT2	(E) BW	PT1	(E) GYP	PT2	(E) ACT	PT3
B-2	CLASSROOM	LVT	(E)	(E)	(E)	(E)	(E) BW	PT1	(E) GYP	PT2	(E) BW	PT1	(E) GYP	PT2	(E) ACT	PT3
B-3	CLASSROOM	CPT	(E)	(E)	(E)	(E)	(E) BW	PT1	(E) GYP	PT2	(E) BW	PT1	(E) GYP	PT2	(E) ACT	PT3
B-4	INNOVATION LAB	LVT	(E)	(E)	(E)	(E)	(E) BW	PT1	(E) GYP	PT2	(E) BW	PT1	(E) GYP	PT2	(E) ACT	PT3
B-5	GIRLS RR	CT	(E)	(E)	(E)	(E)	(E) CT / (E) GYP	(E) CT / PT2	(E) CT / (E) GYP	(E) CT / PT2	(E) CT / (E) GYP	(E) CT / PT2	(E) CT / (E) GYP	(E) CT / PT2	(E) GYP	PT4
B-6	CUSTODIAN	(E)	(E)	(E)	(E)	(E)	(E) GYP	PT2	(E) BW	PT1	(E) GYP	PT2	(E) GYP	PT2	(E) GYP	PT4
B-7	HEATER RM.	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)
C-1	LIBRARY	LVT	(E)	(E)	(E)	(E)	(E) BW	PT1	(E) BW	PT1	(E) BW	PT1	(E) GYP	PT2	(E) ACT	PT3
C-2	CLASSROOM	CPT	(E)	(E)	(E)	(E)	(E) BW	PT1	(E) GYP	PT2	(E) BW	PT1	(E) GYP	PT2	(E) ACT	PT3
C-3	CLASSROOM	CPT	LVT	LVT1	RB	RB1	(E) BW	PT1	(E) GYP	PT2	(E) BW	PT1	(E) GYP	PT2	(E) ACT	PT3
C-4	CLASSROOM	LVT	(E)	(E)	(E)	(E)	(E) BW	PT1	(E) GYP	PT2	(E) BW	PT1	(E) GYP	PT2	(E) ACT	PT3
C-5	GIRLS RR	CT	(E)	(E)	(E)	(E)	(E) CT / (E) GYP	(E) CT / PT2	(E) CT / (E) GYP	(E) CT / PT2	(E) CT / (E) GYP	(E) CT / PT2	(E) CT / (E) GYP	(E) CT / PT2	(E) GYP	PT4
C-6	CUSTODIAN	CPT	LVT	LVT1	RB	RB1	(E) BW	PT1	(E) BW	PT1	(E) GYP	PT2	(E) BW	PT1	(E) GYP	PT4
D-1	CLASSROOM	CPT	LVT	LVT1	RB	RB1	(E) BW	PT1	(E) GYP	PT2	(E) BW	PT1	(E) GYP	PT2	(E) ACT	PT3
D-2	CLASSROOM	VCT	(E)	(E)	(E)	(E)	(E) BW	PT1	(E) GYP	PT2	(E) BW	PT1	(E) GYP	PT2	(E) ACT	PT3
D-3	CLASSROOM	CPT	LVT	LVT1	RB	RB1	(E) BW	PT1	(E) GYP	PT2	(E) BW	PT1	(E) BW	PT1	(E) ACT	PT3
D-4	BOYS RR	CT	(E)	(E)	(E)	(E)	(E) CT / (E) GYP	(E) CT / PT2	(E) CT / (E) GYP	(E) CT / PT2	(E) CT / (E) GYP	(E) CT / PT2	(E) CT / (E) GYP	(E) CT / PT2	(E) GYP	PT4
D-5	CUSTODIAN	(E)	(E)	(E)	(E)	(E)	(E) GYP	PT2	(E) BW	PT1	(E) GYP	PT2	(E) GYP	PT2	(E) GYP	PT4
D-6	HEATER RM.	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)
E1	RELOCATBLE	(E)	(E)	(E)	(E)	(E)	(E) GYP	PT1	(E) GYP	PT1	(E) GYP	PT1	(E) GYP	PT1	(E) ACT	PT4
E2	RELOCATBLE	(E)	(E)	(E)	(E)	(E)	(E) GYP	PT1	(E) GYP	PT1	(E) GYP	PT1	(E) GYP	PT1	(E) ACT	PT4
E3	RELOCATBLE	(E)	(E)	(E)	(E)	(E)	(E) GYP	PT1	(E) GYP	PT1	(E) GYP	PT1	(E) GYP	PT1	(E) ACT	PT4
E4	RELOCATBLE	(E)	(E)	(E)	(E)	(E)	(E) GYP	PT1	(E) GYP	PT1	(E) GYP	PT1	(E) GYP	PT1	(E) ACT	PT4
E5	RELOCATBLE	(E)	(E)	(E)	(E)	(E)	(E) GYP	PT1	(E) GYP	PT1	(E) GYP	PT1	(E) GYP	PT1	(E) ACT	PT4
K-1	KINDERGARTEN CLASSROOM 1	CPT	(E)	(E)	(E)	(E)	(E) GYP	PT2	(E) GYP	PT2	(E) GYP	PT2	(E) GYP	PT2	(E) ACT	PT3
K-2	STORAGE	CPT	(E)	(E)	(E)	(E)	(E) BW	PT1	(E) GYP	PT2	(E) GYP	PT2	(E) GYP	PT2	(E) GYP	PT4
K-3	STORAGE	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)
K-4	KINDER RR	CT	(E)	(E)	(E)	(E)	(E) CT / (E) GYP	(E) CT / PT2	(E) CT / (E) GYP	(E) CT / PT2	(E) CT / (E) GYP	(E) CT / PT2	(E) CT / (E) GYP	(E) CT / PT2	(E) GYP	PT4
K-5	WORK RM	CPT	(E)	(E)	(E)	(E)	(E) GYP	PT2	(E) GYP	PT2	(E) GYP	PT2	(E) GYP	PT2	(E) ACT	PT3
K-6	HEATER RM	(E)	(E)	(E)	(E)	(E)	(E) GYP	PT2	(E) GYP	PT2	(E) BW	PT1	(E) BW	PT1	(E) GYP	PT4
K-7	KINDERGARTEN CLASSROOM 2	CPT	LVT	LVT1	RB	RB1	(E) GYP	PT2	(E) GYP	PT2	(E) GYP	PT2	(E) GYP	PT2	(E) ACT	PT3
K-8	STORAGE	LVT	LVT	LVT1	RB	RB1	(E) GYP	PT2	(E) GYP	PT2	(E) GYP	PT2	(E) GYP	PT2	(E) ACT	PT3
K-9	KINDER RR	LVT	LVT	LVT1	RB	RB1	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E) ACT	PT3
K-10	KINDER RR	LVT	LVT	LVT1	RB	RB1	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E) ACT	PT3
MP-1	MULTI PURPOSE ROOM	LVT	(E)	(E)	(E)	(E)	(E) BW	PT1	(E) BW / (E) GYP	PT1 / PT2	(E) BW / (E) GYP	PT1 / PT2	(E) BW / (E) GYP	PT1 / PT2	(E) ACT	PT3
MP-2	ENTRY	LVT	(E)	(E)	(E)	(E)	(E) BW	(E)	(E)	(E)	(E) GYP	PT1 / PT2	(E) GYP	PT2	(E) GYP	PT4
MP-3	CHAIR STORAGE	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)
MP-4	CUSTODIAN	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)
MP-5	HEATER RM	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)
MP-6	DISHWASHING	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)
MP-7	KITCHEN	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)
MP-8	TEACHERS DINING	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)
MP-9	WOMEN TOILET	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)
MP-10	MEN TOILET	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)
MP-11	FOYER	LVT	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)



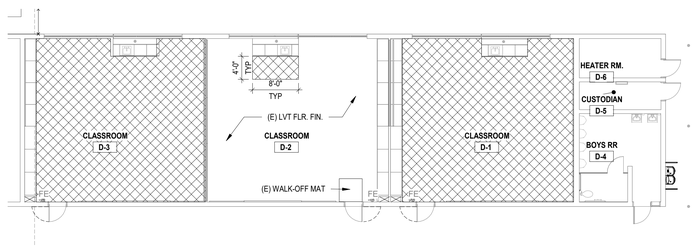
6 FINISH FLOOR PLAN - BLDG ADMIN

3/32" = 1'-0"



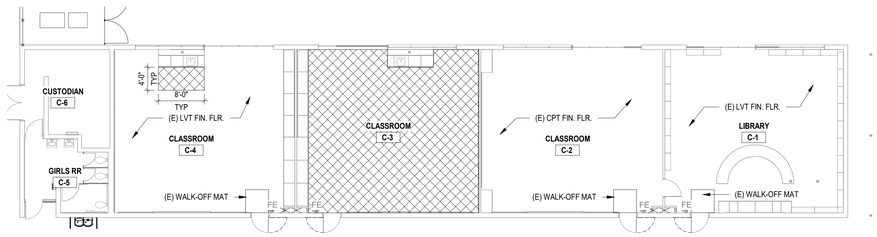
5 FINISH FLOOR PLAN - KINDERGARTEN BLDG K1 & K2

3/32" = 1'-0"



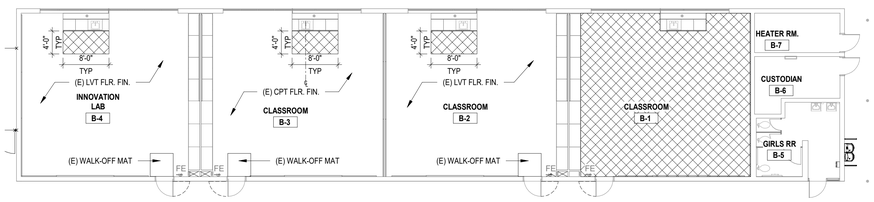
4 FLOOR PLAN - BLDG D

3/32" = 1'-0"



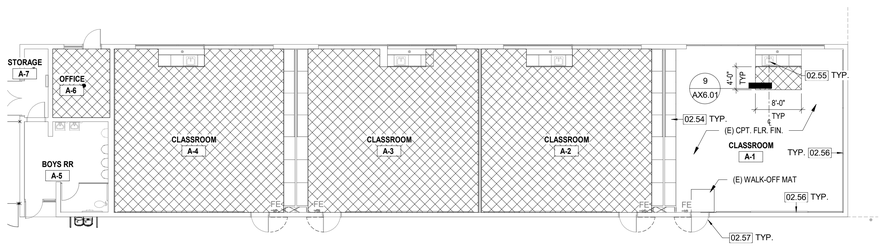
3 FLOOR PLAN - BLDG C

3/32" = 1'-0"



2 FINISH FLOOR PLAN - BLDG B

3/32" = 1'-0"



1 FINISH FLOOR PLAN - BLDG A

3/32" = 1'-0"

GENERAL FINISH LEGEND NOTES

1. ALL FINISH MATERIALS SHALL MEET THE FLAME SPREAD RATINGS PER THE BUILDING CODE.
2. REFER TO INTERIOR ELEVATIONS FOR SPECIFIC MATERIAL LOCATIONS.
3. PAINT ALL EXPOSED STRUCT. MEMBERS, STRUCT. DECK, DUCTWORK, DIFFUSERS, PIPING, CONDUIT, EQUIP. HOUSINGS, LIGHT FIXTURE HOUSINGS, CABLE SUPPORTS, CABLE TRAYS, EQUIP. SUPPORTS, HANGERS, ETC. TO MATCH ADJACENT SURFACES.
4. PAINT ALL NON-FACTORY FINISHED EXPOSED METAL.
5. REFER TO TYPICAL FLOORING TRANSITION DETAILS FOR FLOORING MATERIAL TRANSITIONS.
6. ALL FLOORING TRANSITIONS AT DOORS SHALL BE LOCATED UNDER THE DOOR IN THE CLOSED POSITION, U.N.O.
7. PROTECT ALL FINISHED FLOORING SURFACES FROM DAMAGE DURING ALL CONSTRUCTION PHASES.
8. PROVIDE AND INSTALL BULLNOSE TRIM AT ALL TRANSITIONS FROM CERAMIC WALL TILE TO OTHER MATERIAL U.N.O.
9. REFER TO REFLECTED CEILING PLANS FOR CEILING HEIGHTS.
10. ALL ELECTRICAL DEVICE COVERS ARE TO BE WHITE U.N.O.
11. ALL CARPET PATTERNS TO RUN PARALLEL TO CORRIDOR, U.N.O.
12. PAINT ALL HOLLOW METAL DOOR FRAMES TO MATCH ADJACENT WALL COLOR U.N.O.

FINISH FLOOR MATERIALS LEGEND

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

MATERIAL FINISH ABBREVIATIONS

ACP1	2'X2' ACOUSTICAL CEILING PANEL , SEE SPECIFICATIONS
CPT1	CARPET TYPE 1 , SEE SPECIFICATIONS
CT1	CERAMIC TILE 1, SEE SPECIFICATIONS
CTB1	CERAMIC TILE BASE 1, SEE SPECIFICATIONS
LVT1	LUXURY VINYL TILE 1, SEE SPECIFICATIONS
PT1	PAINT ON (E) BRICK WALL TO BE SELECTED BY OWNER, SEE SPECIFICATIONS
PT2	PAINT ON (E) GYP BD WALL TO BE SELECTED BY OWNER, SEE SPECIFICATIONS
PT3	PAINT ON (E) ACT CEILING TO BE SELECTED BY OWNER, SEE SPECIFICATIONS
PT4	PAINT ON (E) GYB BD CEILING TO BE SELECTED BY OWNER, SEE SPECIFICATIONS
RB1	RUBBER BASE , SEE SPECIFICATIONS
(E)	(E) FINISH TO REMAIN
MF	MANUFACTURERS FINISH, SEE SPECIFICATIONS
TS1	TACKABLE SURFACE, SEE SPECIFICATIONS

MATERIAL ABBREVIATIONS

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

FILE PATH: Z:\Projects\...
3/13/2026 5:36:44 PM

Not for permitting or construction

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-124972 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/17/2026

PBK

ARCHITECT PBK Architects, Inc.
ANAHEIM PBK.com
2400 E KATELLA AVE, Suite 950
ANAHEIM, CA 92806
P 949-548-5000

SCHROEDER ELEMENTARY SCHOOL HVAC UPGRADE & MODERNIZATION

PROJECT ADDRESS:
15151 Columbia Ln
Huntington Beach, CA 92647

CONSTRUCTION DOCUMENTS

DSA APPL NO.: 04-124972 DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT EST. 1872

RELO
A K2 K1
B ADMIN
C MPR
D
RELO

KEY PLAN N NORTH: PLAN

Consultant

Architect

LICENSED ARCHITECT Tong Yao No. C-31162 REN. 10-31-2027 STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
11-14-2025	250376

REVISIONS

No.	Description	Date

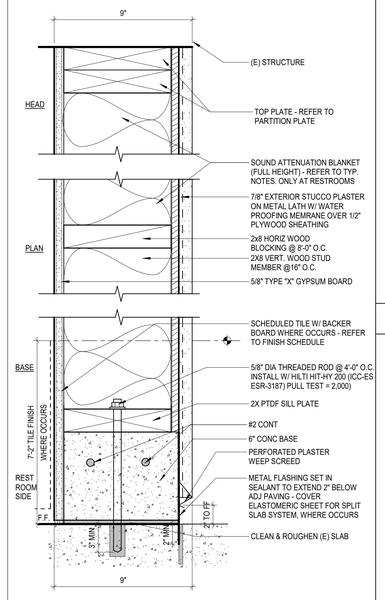
CONSTRUCTION DOCUMENTS

FINISH PLANS & SCHEDULE

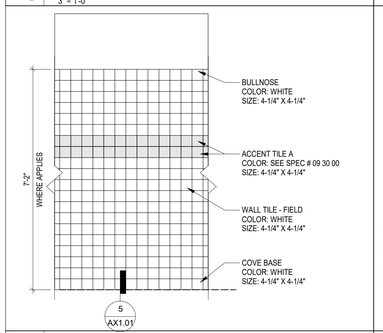
This document is for plan review only

A7.01

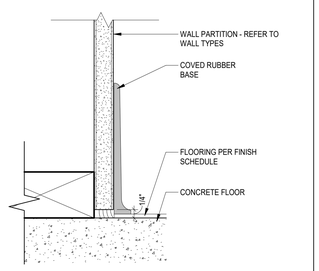
0" 1"



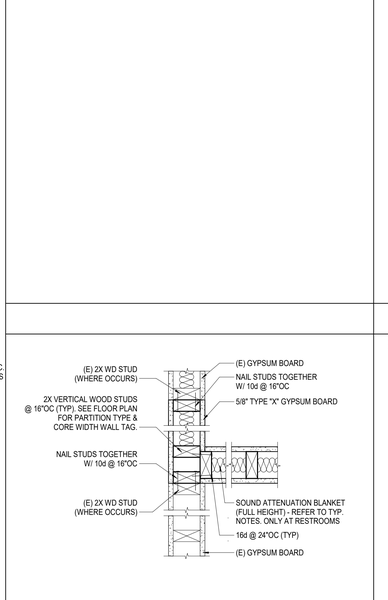
18 EXTERIOR WALL IN-FILL
3" = 1'-0"



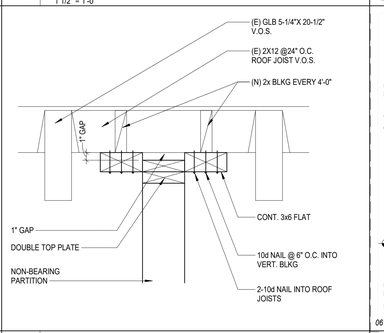
12 TILE FINISH ELEVATION
1/2" = 1'-0"



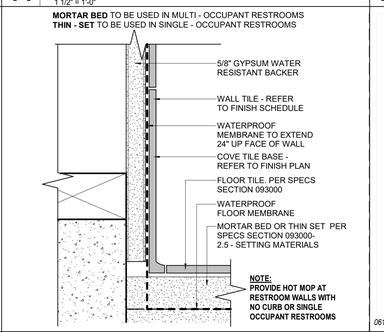
6 TYPICAL WALL BASE
6" = 1'-0"



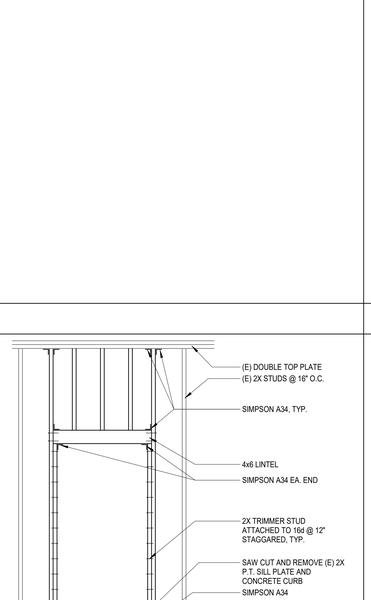
17 (E) WALL TO (N) WALL CONNECTION
1 1/2" = 1'-0"



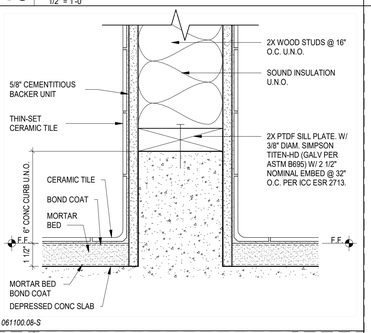
11 TOP CONNECTION - PERPENDICULAR
1 1/2" = 1'-0"



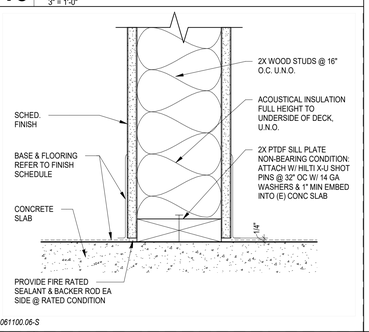
5 TYPICAL TILE WALL BASE
6" = 1'-0"



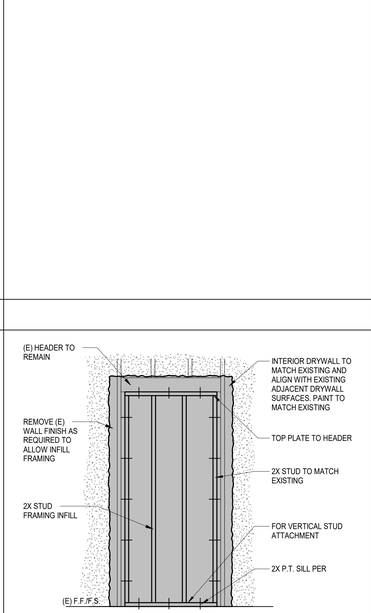
16 (N) DOOR OPENING
1/2" = 1'-0"



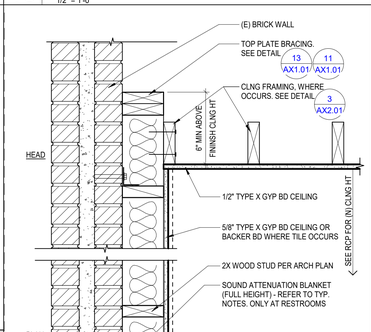
10 INT WALL BASE AT CERAMIC TILE
3" = 1'-0"



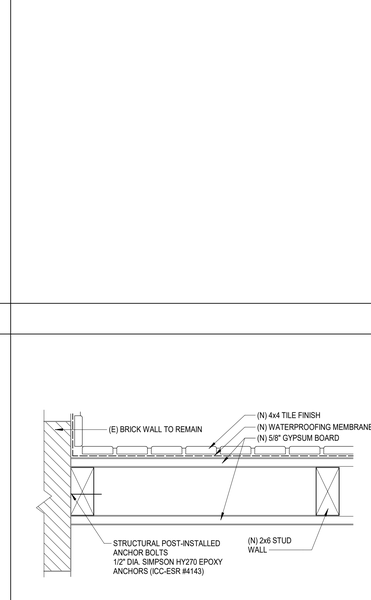
4 INT WALL BASE, TYP
3" = 1'-0"



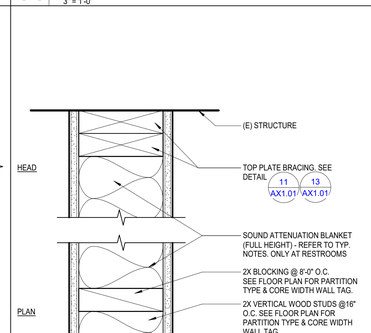
15 WALL INFILL DETAIL
1/2" = 1'-0"



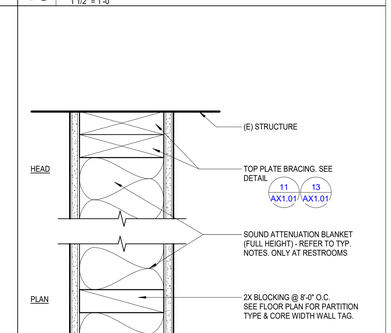
3 C- PARTITION TYPE (WALL FURRING)
1 1/2" = 1'-0"



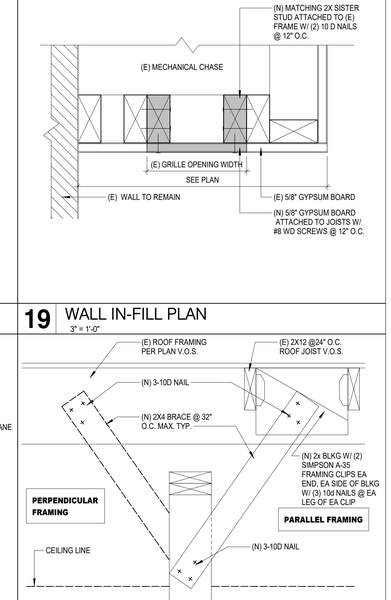
14 (N) WALL TO (E) BRICK WALL
3" = 1'-0"



2 B-PARTITION TYPE
3" = 1'-0"



1 A-PARTITION TYPE
3" = 1'-0"



13 TOP CONNECTION - PARALLEL
1 1/2" = 1'-0"

19 WALL IN-FILL PLAN
3" = 1'-0"

Not for permitting or construction

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-124972 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/17/2026

PBK

ARCHITECT PBK Architects, Inc.
ANAHEIM PBK.com
2400 E KATELLA AVE, Suite 950
ANAHEIM, CA 92806
P 949-548-5000

SCHROEDER ELEMENTARY SCHOOL
HVAC UPGRADE & MODERNIZATION

PROJECT ADDRESS:
15151 Columbia Ln
Huntington Beach, CA 92647

CONSTRUCTION DOCUMENTS

DSA FILE NO.: 30-43
DSA APPL NO.: 04-124972

RELO
A K2 K1
B ADMIN
C
D MPR
RELO

KEY PLAN
NORTH: PLAN

Consultant

Architect
LICENSED ARCHITECT
Tong Yoo
No. C-31162
REN. 10-31-2027
STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
11-14-2025	250376

REVISIONS

No.	Description	Date

CONSTRUCTION DOCUMENTS

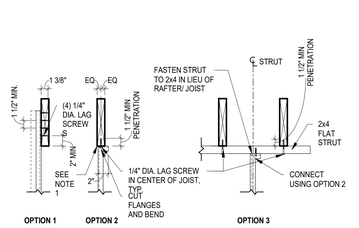
This document is for plan review only

WALL DETAILS

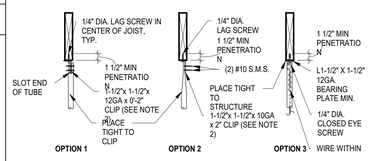
AX1.01

FILE PATH: Z:\Projects\...
3/13/2026 5:36:46 PM

0" 1"



CHANNEL STRUT



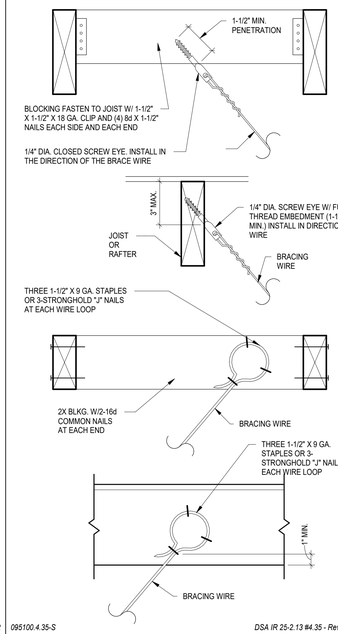
TUBE STRUT

NOTES:

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

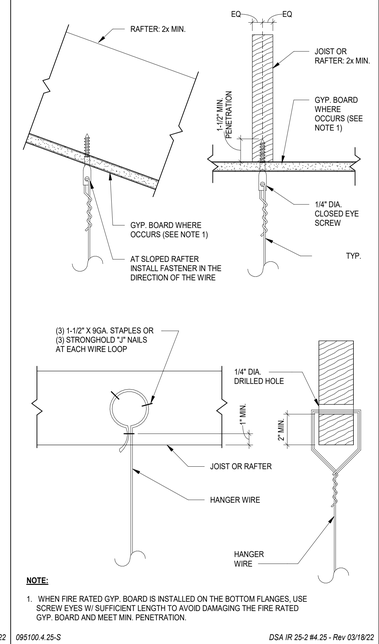
095100.5.60-S DSA IR 25-2, #5.60 - Rev 03/18/22

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



095100.4.35-S DSA IR 25-2.13 #4.35 - Rev 03/18/22

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

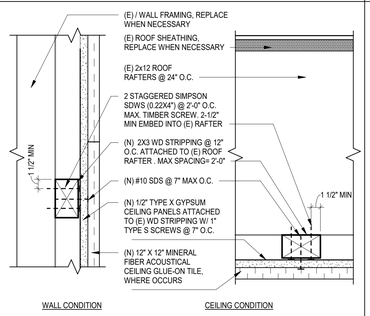


NOTE:

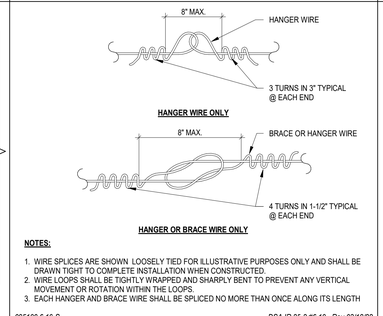
1. WHEN FIRE RATED GYP. BOARD IS INSTALLED ON THE BOTTOM FLANGES, USE SCREW EYES W/ SUFFICIENT LENGTH TO AVOID DAMAGING THE FIRE RATED GYP. BOARD AND MEET MIN. PENETRATION.

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

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



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

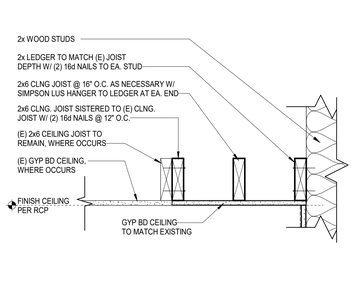


NOTES:

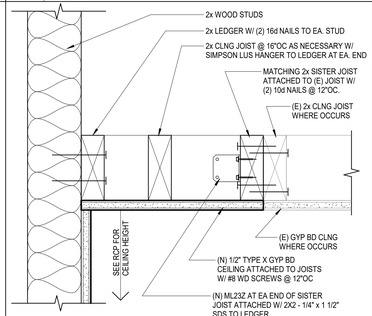
1. WIRE SPLICES ARE SHOWN LOOSELY TIED FOR ILLUSTRATIVE PURPOSES ONLY AND SHALL BE DRAWN TIGHT TO COMPLETE INSTALLATION WHEN CONSTRUCTED.
2. WIRE LOOPS SHALL BE TIGHTLY WRAPPED AND SHARPLY BENT TO PREVENT ANY VERTICAL MOVEMENT OR ROTATION WITHIN THE LOOPS.
3. EACH HANGER AND BRACE WIRE SHALL BE SPLICED NO MORE THAN ONCE ALONG ITS LENGTH

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

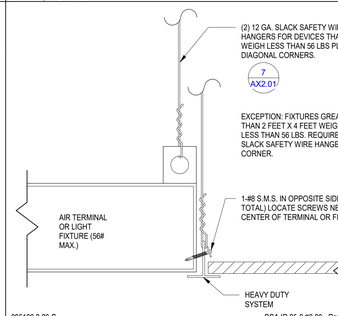
5 CEILING WIRE SPLICES
6" = 1'-0"



4 (N) GYP CEILING FRAMING
1 1/2" = 1'-0"

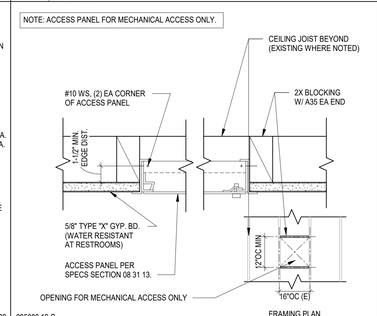


3 (N) HARD LID CLNG FRAMING
3" = 1'-0"



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

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



095000.12-S

1 ACCESS PANEL
3" = 1'-0"

Not for permitting or construction

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-124972 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/17/2026

PBK

ARCHITECT PBK Architects, Inc.
ANAHEIM PBK.com
2400 E KATELLA AVE, Suite 950
ANAHEIM, CA 92806
P 949-548-5000

SCHROEDER ELEMENTARY SCHOOL
HVAC UPGRADE & MODERNIZATION

PROJECT ADDRESS:
15151 Columbia Ln
Huntington Beach, CA 92647

CONSTRUCTION DOCUMENTS

DSA APPL NO.: 04-124972 DSA FILE NO.: 30-43

RELO
A K2 K1
B ADMIN
C MPR
D
RELO

KEY PLAN
NORTH: N PLAN

Consultant

Architect
LICENSED ARCHITECT Yong Yoo No. C-31162 REN. 10-31-2027 STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
11-14-2025	250376

REVISIONS

No.	Description	Date

CONSTRUCTION DOCUMENTS

CEILING DETAILS

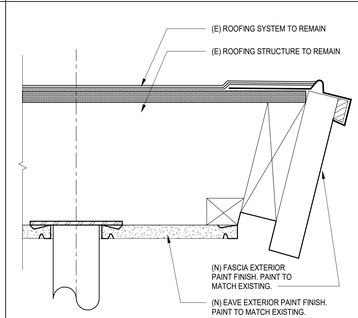
This document is for plan review only

AX2.01

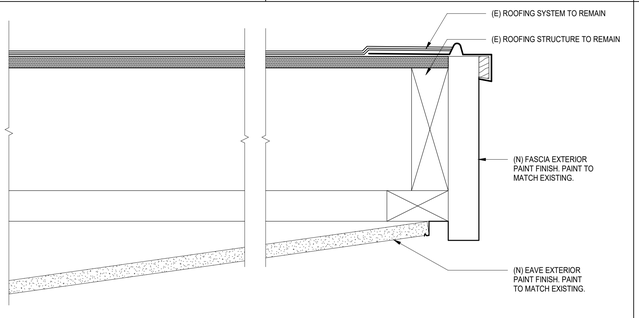
FILE PATH: Z:\Projects\...
3/13/2026 5:36:46 PM

AX3.01 - ROOF DETAILS

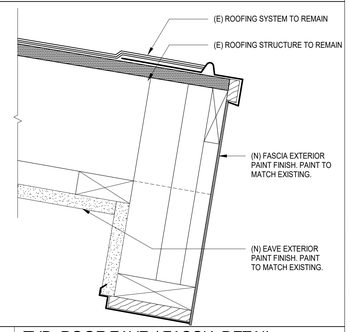
0" 1"



4 TYP. SHELTER EAVE / FASCIA DETAIL
3" = 1'-0"



3 TYP. ROOF RAKE DETAIL
3" = 1'-0"



1 TYP. ROOF EAVE / FASCIA DETAIL
3" = 1'-0"

FILE PATH: Z:\Projects\...
3/13/2026 5:36:47 PM

Not for permitting or construction

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-124972 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/17/2026

PBK

ARCHITECT PBK Architects, Inc.
ANAHEIM PBK.com
2400 E KATELLA AVE, Suite 950
ANAHEIM, CA 92806
P 949-548-5000

SCHROEDER ELEMENTARY SCHOOL
HVAC UPGRADE & MODERNIZATION

PROJECT ADDRESS:
15151 Columbia Ln
Huntington Beach, CA 92647

CONSTRUCTION DOCUMENTS

DSA APPL NO.: 04-124972 DSA FILE NO.: 30-43

RELO
A
B
C
D
RELO
K2 K1
ADMIN
MPR

KEY PLAN
NORTH: PLAN

Consultant

Architect

LICENSED ARCHITECT
Yong Yoo
No. C-31162
REN 10-31-2027
STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
11-14-2025	250376

REVISIONS

No.	Description	Date

CONSTRUCTION DOCUMENTS

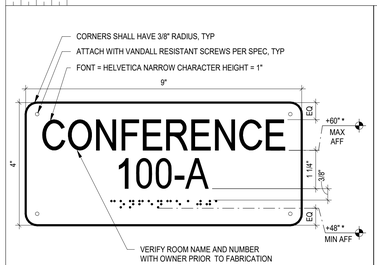
ROOF DETAILS

This document is for plan review only

AX3.01

AX4.01 - ACCESSIBILITY DETAILS

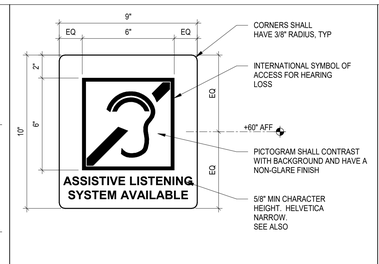
0" 1"



* 60" MAX A.F.F. TO THE BASELINE OF THE HIGHEST LINE OF RAISED CHARACTERS & 48" MIN. A.F.F. TO THE BASELINE OF THE LOWEST BRAILLE CELLS

101400.11-S CBC 2019- Rev 09/19

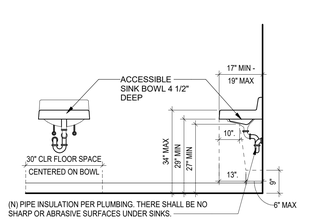
25 TYP. ROOM ID SIGN
6" = 1'-0"



NOTES:
1. SIGN MATERIAL SHALL BE 1/4" THICK PLASTIC W/ 1/32" RAISED LETTERS
2. MOUNT W/ VANDAL RESISTANT FASTENERS

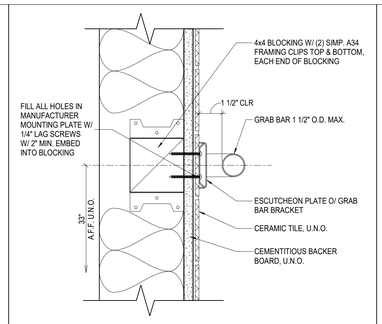
101400.13-S

26 ASSISTIVE LISTENING SIGNAGE
3" = 1'-0"



NOTE:
UNDERSIDE OF SINK AND PIPES MUST CONFORM TO REQ'D KNEE CLEARANCES PER CBC 11B-306.3. SEE DETAIL

27 MOUNTING @ TYPICAL LAVATORIES
1/2" = 1'-0"



28 GRAB BAR MOUNT
3" = 1'-0"

CHARACTER REQUIREMENTS PER 11B-703

RAISED CHARACTERS SHALL COMPLY WITH CBC SECTION 11B-703.2:
- CHARACTERS SHALL BE RAISED 1/32 INCH (0.8 MM) MINIMUM ABOVE THEIR BACKGROUND, SHALL BE SANS SERIF UPPERCASE LETTERS, AND SHALL BE DUPLICATED IN BRAILLE.
- CHARACTER HEIGHT SHALL BE 5/8 INCH (15.9 MM) MINIMUM AND 2 INCHES (51 MM) MAXIMUM BASED ON THE HEIGHT OF THE UPPERCASE LETTER "I". CBC SECTION 11B-703.2.5.
- CHARACTERS AND THEIR BACKGROUND SHALL HAVE A NON-GLARE FINISH. CHARACTER SHALL CONTRAST WITH THEIR BACKGROUND WITH EITHER LIGHT CHARACTERS ON A DARK BACKGROUND OR DARK CHARACTERS ON A LIGHT BACKGROUND. CBC SECTION 11B-703.5.1
- PORTIONS FOR RAISED CHARACTERS SHALL BE SELECTED FROM FONTS WHERE THE WIDTH OF THE UPPERCASE LETTER "O" IS 60% MINIMUM AND 110% MAXIMUM OF THE HEIGHT OF THE UPPERCASE LETTER "I". STROKE THICKNESS OF THE UPPERCASE LETTER "I" SHALL BE 15% MAXIMUM OF THE HEIGHT OF THE CHARACTER. CBC SECTIONS 11B-703.2.4 AND 11B-703.2.6
- CHARACTER SPACING BETWEEN INDIVIDUAL RAISED CHARACTERS SHALL COMPLY WITH CBC SECTION 11B-703.2.7 AND 11B-703.2.8
- LINE SPACING: SPACING BETWEEN THE BASELINES OF SEPARATE LINES OF RAISED CHARACTERS WITHIN A MESSAGE SHALL BE 135 PERCENT MIN. AND 170 PERCENT MAX. OF THE RAISED CHARACTER HEIGHT. 11B-703.2.8
- TEXT SHALL BE IN A HORIZONTAL FORMAT. CBC SECTION 11B-703.2.9

BRAILLE:
- BRAILLE SHALL BE CONTRACTED (GRADE 2) AND SHALL COMPLY WITH CBC SECTIONS 11B-703.3 AND 11B-703.4.
- BRAILLE DOTS SHALL HAVE A DOMED OR ROUNDED SHAPE AND SHALL COMPLY WITH CBC TABLE AND FIGURE 11B-703.3.1. THE INDICATION OF AN UPPERCASE LETTER SHALL BE USED BEFORE THE FIRST WORD OF SENTENCES, PROPER NOUNS AND NAMES, INDIVIDUAL LETTERS OF THE ALPHABET, INITIALS, AND ACRONYMS.
- 11B-703.3.2 POSITION. BRAILLE SHALL BE POSITIONED BELOW THE CORRESPONDING TEXT IN A HORIZONTAL FORMAT. FLUSH LEFT OR CENTERED. IF TEXT IS MULTI-LINED, BRAILLE SHALL BE PLACED BELOW THE ENTIRE TEXT. BRAILLE SHALL BE SEPARATED 3/8" MIN. AND 1/2" MAX. FROM ANY OTHER TACTILE CHARACTERS AND 3/8" MIN. FROM RAISED BORDERS AND DECORATIVE ELEMENTS.

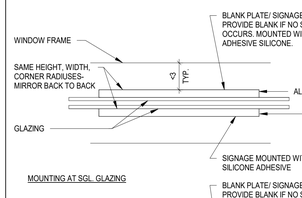
TACTILE:
- TACTILE CHARACTERS ON SIGNS SHALL BE LOCATED 48" MINIMUM TO THE BASELINE OF THE LOWEST BRAILLE CELLS AND 60" MAXIMUM TO THE BASELINE OF THE HIGHEST LINE OF RAISED CHARACTERS ABOVE THE FINISH FLOOR OR GROUND SURFACE. CBC SECTION AND FIGURE 11B-703.4.1
- TACTILE SIGNS SHALL BE LOCATED PER CBC SECTION AND FIGURE 11B-703.4.2 AS FOLLOWS:
  1. ALONGSIDE A SINGLE DOOR AT THE LATCH SIDE
  2. ON THE INACTIVE LEAF AT DOUBLE DOORS WITH ONE ACTIVE LEAF.
  3. TO THE RIGHT OF THE RIGHT HAND DOOR AT DOUBLE DOORS WITH TWO ACTIVE LEAFS
  4. ON THE NEAREST ADJACENT WALL WHERE THERE IS NO WALL SPACE AT THE LATCH SIDE OF A SINGLE DOOR OR AT THE RIGHT SIDE OF DOUBLE DOORS WITH TWO ACTIVE LEAFS.
  5. SO THAT A CLEAR FLOOR SPACE OF 18"x18" MINIMUM, CENTERED ON THE TACTILE CHARACTERS, IS PROVIDED BEYOND THE ARC OF ANY DOOR SWING BETWEEN THE CLOSED POSITION AND 45 DEGREE OPEN POSITION.

VISUAL CHARACTERS:
- VISUAL CHARACTERS SHALL COMPLY WITH CBC SECTION 11B-703.5 AND SHALL BE 40" MINIMUM ABOVE FINISH FLOOR OR GROUND. CHARACTER HEIGHT SHALL BE DETERMINED BASED UPON HEIGHT ABOVE GROUND AND HORIZONTAL VIEWING DISTANCE PER CBC TABLE 11B-703.5.5
- CHARACTER SPACING SHALL BE MEASURED BETWEEN THE TWO CLOSEST POINTS OF ADJACENT CHARACTERS, EXCLUDING WORD SPACES. SPACING BETWEEN INDIVIDUAL CHARACTERS SHALL BE 10 PERCENT MINIMUM AND 35 PERCENT MAXIMUM OF CHARACTER HEIGHT. 11B-703.5.8 CHARACTER SPACING
- SPACING BETWEEN THE BASELINES OF SEPARATE LINES OF CHARACTERS WITHIN A MESSAGE SHALL BE 135 PERCENT MINIMUM AND 170 PERCENT MAXIMUM OF THE CHARACTER HEIGHT. 11B-703.5.9 LINE SPACING
- PROPORTIONS FOR VISUAL CHARACTERS SHALL BE SELECTED FROM FONTS WHERE THE WIDTH OF THE UPPERCASE LETTER "O" IS 60% MINIMUM AND 110% MAXIMUM OF THE HEIGHT OF THE UPPERCASE LETTER "I". STROKE THICKNESS SHALL BE 10% MINIMUM AND 20% MAXIMUM OF THE HEIGHT OF THE CHARACTER. CBC SECTIONS 11B-703.5.4 AND 11B-703.5.7
- PICTOGRAMS SHALL COMPLY WITH CBC SECTION 11B-703.6.
- SYMBOLS OF ACCESSIBILITY SHALL COMPLY WITH CBC SECTION 11B-703.7.
- VARIABLE MESSAGE SIGNS SHALL COMPLY WITH CBC SECTION 11B-703.8:

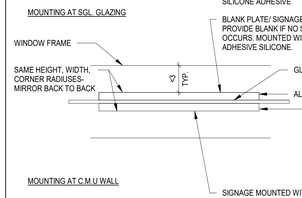
23 CHARACTER REQ. FOR SIGNAGE
1" = 1'-0"

NOTE:
PROVIDE SPACES AS NEEDED SO SIGNAGE IS WITHIN 3" OF WINDOW FRAME

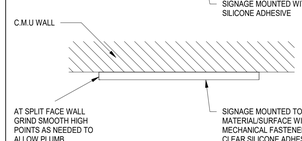
MOUNTING AT DBL. GLAZING



MOUNTING AT SGL. GLAZING



MOUNTING AT C.M.U WALL



24 ROOM IDENTIFICATION SIGN MOUNTING
3" = 1'-0"

* 60" MAX A.F.F. TO THE BASELINE OF THE HIGHEST LINE OF RAISED CHARACTERS & 48" MIN. A.F.F. TO THE BASELINE OF THE LOWEST BRAILLE CELLS

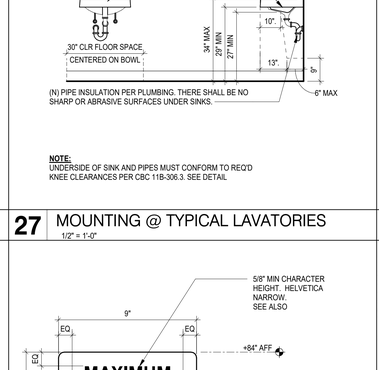
101400.12-S CBC 2019 - Rev 10/19

19 TACTILE EXIT SIGNS
3" = 1'-0"

* 60" MAX A.F.F. TO THE BASELINE OF THE HIGHEST LINE OF RAISED CHARACTERS & 48" MIN. A.F.F. TO THE BASELINE OF THE LOWEST BRAILLE CELLS

101400.15-S

20 ACCESSIBLE ROUTE SIGN
6" = 1'-0"

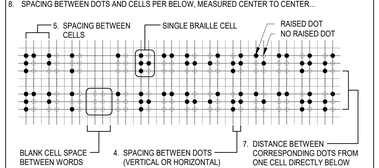


NOTES:
1. SIGN MATERIAL SHALL BE 1/4" THICK PLASTIC
2. MOUNT W/ VANDAL RESISTANT FASTENERS

101400.14-S

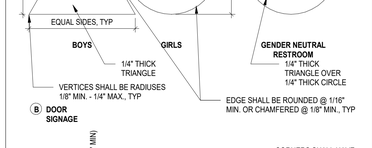
21 OCCUPANT LOAD SIGN
3" = 1'-0"

BRAILLE REQUIREMENTS PER 2019 CBC 11B-703.3:
1. CONTRACTED CALIFORNIA GRADE 2 BRAILLE SHALL COMPLY WITH SECTIONS 11B-703.3 AND 11B-703.4
2. BRAILLE DOTS SHALL HAVE A DOMED OR ROUNDED SHAPE AND COMPLY WITH TABLE 11B-703.3.1
3. DOT BASE DIAMETER = 0.059 TO 0.063 INCHES
4. DISTANCE BETWEEN TWO DOTS IN THE SAME CELL = 0.100 INCHES
5. DISTANCE BETWEEN CORRESPONDING DOTS IN ADJACENT CELLS = 0.300 INCHES
6. DOT HEIGHT = 0.025 TO 0.037 INCHES
7. DISTANCE BETWEEN CORRESPONDING DOTS FROM ONE CELL DIRECTLY BELOW = 0.395 TO 0.400 INCHES
8. SPACING BETWEEN DOTS AND CELLS PER BELOW, MEASURED CENTER TO CENTER...

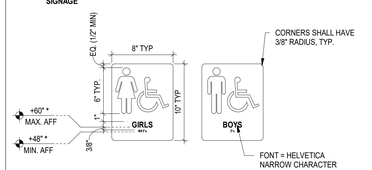


9. BRAILLE SHALL BE POSITIONED BELOW THE CORRESPONDING TEXT IN A HORIZONTAL FORMAT, FLUSH LEFT OR CENTERED. IF TEXT IS MULTI-LINED, BRAILLE SHALL BE PLACED BELOW THE ENTIRE TEXT. BRAILLE SHALL BE SEPARATED 3/8" (9.5MM) MIN. AND 1/2 INCH (12.7MM) MAXIMUM FROM ANY OTHER TACTILE CHARACTERS AND 3/8" MIN. FROM RAISED BORDERS AND DECORATIVE ELEMENTS.

22 BRAILLE STANDARDS FOR SIGNAGE
6" = 1'-0"



B DOOR SIGNAGE





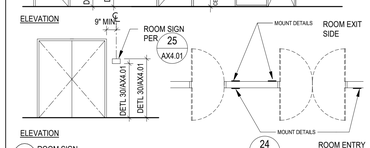
GENDER NEUTRAL RESTROOM

A WALL SIGNAGE

* 60" MAX A.F.F. TO THE BASELINE OF THE HIGHEST LINE OF RAISED CHARACTERS & 48" MIN. A.F.F. TO THE BASELINE OF THE LOWEST BRAILLE CELLS

NOTE:
FOR CHARACTER TYPE AND BRAILLE REQUIREMENTS SEE DETAILS 22 AX4.01

7 RESTROOM DOOR & WALL SIGNS
1 1/2" = 1'-0"



NOTES:
1. FOR CHARACTER TYPE & BRAILLE, SEE ALSO DETAIL 22 AX4.01
2. SIGN MATERIAL SHALL BE PAINTED, 1/8" THICK ES PLASTIC USING GRAPHIC PROCESS SAND-CARVED W/ 3/32" RAISED GRAPHIC AND LETTERS. PROVIDE MECHANICAL MOUNTING W/ COUNTERSUNK, VANDAL RESISTANT #8 FASTENERS. MOUNT ON GLAZING WITH CLEAR SILICONE ADHESIVE AND A SECOND SIGN OR BLANK ALIGNED ON THE OTHER SIDE OF GLAZING TO MASK THE ADHESIVE.
3. PROVIDE ONE SIGN WHERE INDICATED ON PLANS OR SCHEDULE.
4. SIGNS SHALL BE INSTALLED ON THE WALL ADJACENT TO THE LATCH SIDE OF THE DOOR. WHERE THERE IS NO WALL SPACE ON THE LATCH SIDE, INCLUDING DOUBLE LEAF DOORS, SIGNS SHALL BE PLACED ON THE NEAREST ADJACENT WALL, PREFERABLY ON THE RIGHT. MOUNTING LOCATION SHALL BE DETERMINED SO THAT A PERSON MAY APPROACH WITHIN 3" OF SIGNAGE WITHOUT ENCOUNTERING PROTRUDING OBJECTS OR STANDING WITHIN THE SWING OF A DOOR. FOR PAIRS OF DOORS WHERE DOOR SWING IS LIMITED TO 90 DEGREES, MOUNT SIGN 9" FROM EDGE OF DOOR. FOR PAIRS OF DOORS WHERE DOOR SWING ECCEEDS 90 DEGREES, MOUNT SIGN DOOR WIDTH PLUS 9" FROM EDGE OF DOOR.

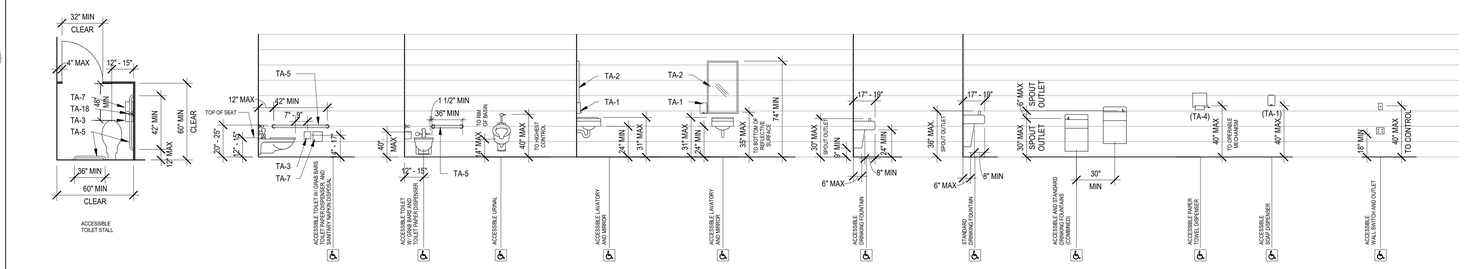
8 ROOM IDENTIFICATION SIGNAGE
1 1/2" = 1'-0"

LABEL	DESCRIPTION	MANUF	MODEL #
TA1	SOAP DISPENSER	BOBRICK	B-2111
TA2	MIRROR (24"x36" U.N.O.)	BOBRICK	B-290
TA3	TOILET PAPER DISPENSER - RECESSED	BOBRICK	B-35883
TA4	PAPER TOWEL DISPENSER	BOBRICK	B-262
TA5	GRAB BARS AT TYPICAL ACCESSIBLE TOILET STALLS	BOBRICK	B-6806/X24, X36, X42
TA6	SANITARY NAPKIN DISPENSER	BOBRICK	B-2706
TA7	SANITARY NAPKIN DISPOSAL	BOBRICK	B-270
TA8	SANITARY NAPKIN DISPENSER - SEMI-RECESSED	BOBRICK	B-370634
TA9	GRAB BARS AT ACCESSIBLE SHOWER	N.A.	N.A.
TA10	FOLDING SHOWER BENCH	N.A.	N.A.
TA11	CLOTHES HOOK	N.A.	N.A.
TA12	SHOWER CURTAIN, ROD AND HOOKS	N.A.	N.A.
TA13	ELECTRIC HAND DRYER	N.A.	N.A.
TA14	COMBO PAPER TOWEL DISPENSER/TRASH RECEPTACLE	BOBRICK,	B-3949
TA15	GRAB BAR AT AMBULATORY ACCESSIBLE TOILET STALL	BOBRICK	B-6806
TA16	CHANGING STATION	N.A.	N.A.
TA17	TRASH RECEPTACLE	N.A.	N.A.
TA18	TOILET PAPER DISPENSER, SEMI-RECESSED	N.A.	N.A.
TA19	TOILET SEAT COVER DISPENSER	BOBRICK	B-221
TA20	SANITARY NAPKIN DISPOSAL, SEMI-RECESSED	BOBRICK	B-353

NOTES:
1. ALL NEW TOILET ACCESSORIES SHALL BE CONTRACTOR FURNISHED AND INSTALLED UNLESS NOTED OTHERWISE
2. COORDINATE FINAL LOCATIONS WITH ARCHITECT PRIOR TO INSTALLATION.
3. CONTRACTOR IS TO VERIFY ALL HEIGHTS OF ACCESSORIES TO COMPLY WITH ADA.
4. REFER TO ALL FINISHES AND COLORS IN FINISH SCHEDULE. VERIFY ALL PATTERNS WITH ARCHITECT.

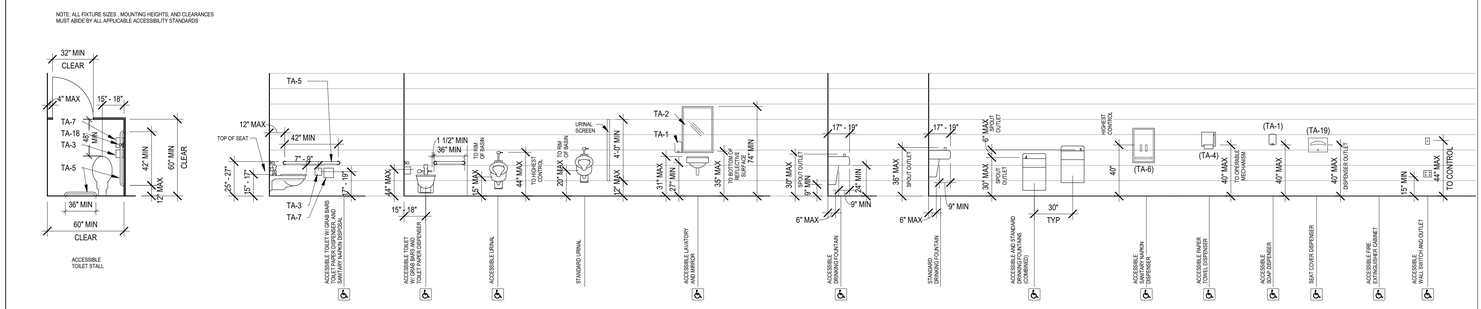
SEE SHEET AX4.01 FOR TOILET FIXTURES AND ACCESSORIES MOUNTING HEIGHT.

NOTE: ALL FIXTURE SIZES , MOUNTING HEIGHTS, AND CLEARANCES MUST ABIDE BY ALL APPLICABLE ACCESSIBILITY STANDARDS



15 ACCESSIBILITY - AGES 5 THRU 8 (GRADES PRE-K THRU 3)
1/4" = 1'-0"

NOTE: ALL FIXTURE SIZES , MOUNTING HEIGHTS, AND CLEARANCES MUST ABIDE BY ALL APPLICABLE ACCESSIBILITY STANDARDS



9 ACCESSIBILITY - AGES 9 THRU 12 (GRADES 4 THRU 7)
1/4" = 1'-0"

1 ACCESSIBLE VANITY
3/8" = 1'-0"

NOTE: ALL FIXTURE SIZES , MOUNTING HEIGHTS, AND CLEARANCES MUST ABIDE BY ALL APPLICABLE ACCESSIBILITY STANDARDS

2 RESTROOM ACCESSORIES SCHEDULE
12" = 1'-0"

3 ACCESSIBILITY - AGES 13 THRU ADULT (GRADES 8 AND ABOVE)
1/4" = 1'-0"

FILE PATH: Z:\Projects\...
3/13/2025 5:36:49 PM

Not for permitting or construction

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-124972 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/17/2026

PBK

ARCHITECT PBK Architects, Inc.
PBK.com
ANAHEIM
2400 E KATELLA AVE, Suite 950
ANAHEIM, CA 92806
P 949-548-5000

SCHROEDER ELEMENTARY SCHOOL
HVAC UPGRADE & MODERNIZATION

PROJECT ADDRESS:
15151 Columbia Ln
Huntington Beach, CA 92647

CONSTRUCTION DOCUMENTS

DSA APPL NO.: 04-124972 DSA FILE NO.: 30-43

RELO
A K51
B ADMIN
C MPR
D
RELO

KEY PLAN
NORTH: PLAN

Consultant

Architect
LICENSED ARCHITECT
Trong Vo
No. C-31162
RENEW 10-31-2027
STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
11-14-2025	250376

REVISIONS

No.	Description	Date

CONSTRUCTION DOCUMENTS

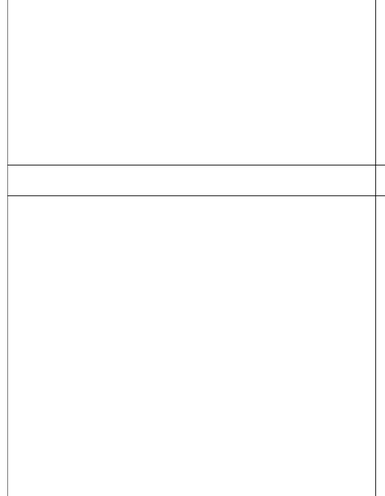
This document is for plan review only

ACCESSIBILITY DETAILS

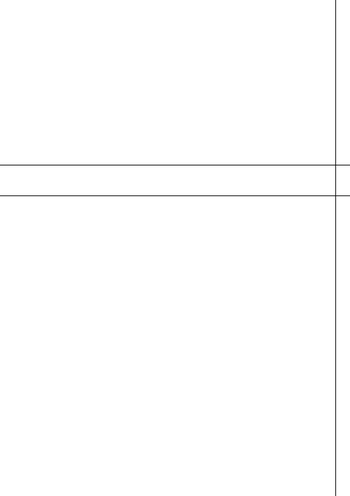
AX4.01

AX6.01 - DOOR DETAILS

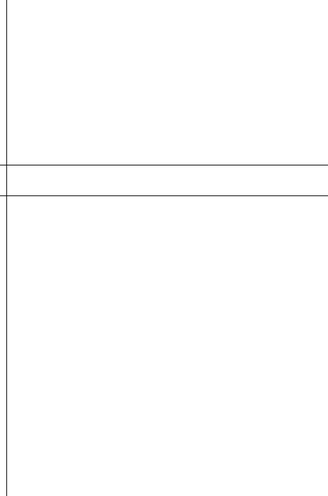
0" 1"



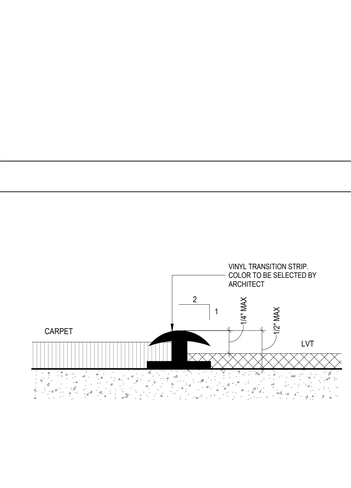
6 WALL MOUNT FIRE EXTINGUISHER
3" = 1'-0"



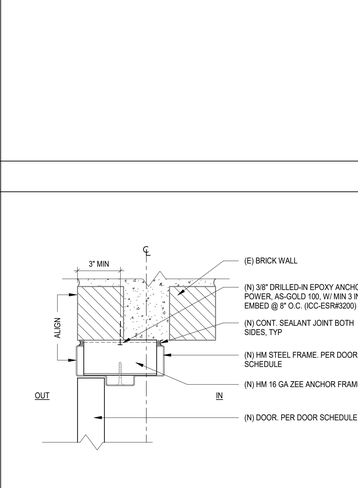
5 TACKBOARD DETAIL
3" = 1'-0"



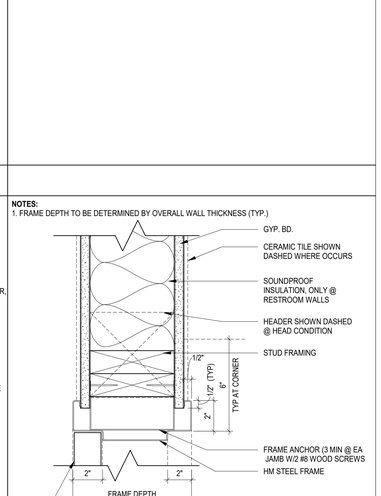
4 MARKERBOARD DETAIL
3" = 1'-0"



3 INT SILL AT CERAMIC TILE
6" = 1'-0"



2 EXT SILL DOOR THRESHOLD
6" = 1'-0"



NOTE:
WHERE EXTERIOR & INTERIOR FINISH FLOOR ELEVATIONS ARE NOT ALIGNED, SEE DETAIL 2 AX6.01

1 EXTERIOR DOOR SILL
6" = 1'-0"

9 TRANSITION @ CARPET & LVT
12" = 1'-0"

8 HM DOOR JAMB/HEAD AT BRICK
3" = 1'-0"

NOTES:
1. FRAME DEPTH TO BE DETERMINED BY OVERALL WALL THICKNESS (TYP.)

7 HM INTERIOR DOOR FRAME DETAIL
3" = 1'-0"

FILE PATH: Z:\Projects\...
3/13/2026 5:36:50 PM

This document is for plan review only

Not for permitting or construction

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-124972 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/17/2026

PBK

ARCHITECT PBK Architects, Inc.
ANAHEIM PBK.com
2400 E KATELLA AVE, Suite 950
ANAHEIM, CA 92806
P 949-548-5000

SCHROEDER ELEMENTARY SCHOOL
HVAC UPGRADE & MODERNIZATION

PROJECT ADDRESS:
15151 Columbia Ln
Huntington Beach, CA 92647

CONSTRUCTION DOCUMENTS

DSA APPL NO.: 04-124972 DSA FILE NO.: 30-43

RELO
A
B
C
D
RELO
K2 K1
ADMIN
MPR

KEY PLAN
NORTH: PLAN

Consultant

Architect
LICENSED ARCHITECT
Yong Yoo
No. C-31162
REN 10-31-2027
STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
11-14-2025	250376

REVISIONS

No.	Description	Date

CONSTRUCTION DOCUMENTS

DOOR DETAILS

AX6.01

GENERAL NOTES:

1. DETAILS OF CONSTRUCTION NOT SHOWN SHALL BE OF SAME NATURE AS THOSE SHOWN FOR SIMILAR CONDITIONS. REFER TO THE TYPICAL DETAIL SHEETS FOR TYPICAL DETAILS OF CONSTRUCTION. TYPICAL DETAILS APPLY TO ALL CONSTRUCTION UNLESS SPECIFICALLY NOTED OR SHOWN OTHERWISE. WHERE CONDITIONS REQUIRE MODIFICATIONS OF A TYPICAL DETAIL, THE CONTRACTOR SHALL SUBMIT MODIFIED DETAIL FOR APPROVAL BY THE ENGINEER OF RECORD PRIOR TO FABRICATION AND INSTALLATION.
2. CONTRACTOR SHALL CONSIDER THE PROJECT SPECIFICATIONS A PART OF THE CONTRACT DOCUMENTS. WHERE INFORMATION IS CONFLICTING, SPECIFIC DETAILS SHALL GOVERN OVER TYPICAL DETAILS WHICH SHALL GOVERN OVER THESE NOTES WHICH SHALL GOVERN OVER SPECIFICATIONS.
3. ALL DIMENSIONS ON STRUCTURAL DRAWINGS SHALL BE CHECKED AGAINST ARCHITECTURAL DIMENSIONS. DO NOT SCALE DRAWINGS. IF DIMENSIONS ARE OMITTED OR NOT CLEAR, CONTACT THE ARCHITECT (ARCH) OR STRUCTURAL ENGINEER OF RECORD (SEOR). ALL DIMENSIONS RELATED TO EXISTING CONDITIONS SHALL BE FIELD VERIFIED BY THE CONTRACTOR. DIMENSIONS ARE TO THE FACE OF STUDS, AND TO CENTERLINE OF COLUMNS UNO.
4. IT IS THE CONTRACTOR'S RESPONSIBILITY TO IMMEDIATELY NOTIFY THE SEOR OF ANY CONFLICTS BETWEEN THE STRUCTURAL DRAWINGS AND OTHER DRAWINGS; OR EXISTING CONDITIONS NOT SHOWN OR DIFFERENT FROM THOSE SHOWN ON DRAWINGS PRIOR TO COMMENCEMENT OF WORK. THE CONTRACTOR IS NOT TO ORDER MATERIAL OR CONSTRUCT ANY PORTION OF THE BUILDING THAT IS IN CONFLICT UNTIL THE CONFLICT IS RESOLVED WITH THE AFFECTED PARTIES.
5. THE STRUCTURAL DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE. UNLESS OTHERWISE SHOWN THEY DO NOT INDICATE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT THE CONSTRUCTION AND ALL ADJACENT PROPERTIES DURING CONSTRUCTION. SUCH MEASURES SHALL INCLUDE BUT ARE NOT LIMITED TO BRACING, SHORING OF LOADS DUE TO CONSTRUCTION EQUIPMENT, ETC. OBSERVATION VISITS TO THE SITE BY THE ARCHITECT OR SEOR SHALL NOT INCLUDE OBSERVATION OF THE ABOVE ITEMS.
6. SUBSTITUTION REQUESTS FOR MATERIALS SPECIFIED ON THE STRUCTURAL DRAWINGS MAY BE CONSIDERED WITH MATERIALS HAVING EQUIVALENT OR GREATER CAPACITY AND PERFORMANCE. CURRENT EVALUATION REPORTS AND PRODUCT INFORMATION SHALL BE PROVIDED TO THE STRUCTURAL ENGINEER DEMONSTRATING THE REQUIRED CAPACITY AND PERFORMANCE OF THE MATERIAL TO BE SUBSTITUTED. WRITTEN APPROVAL FROM THE SEOR SHALL BE OBTAINED PRIOR TO THE SUBSTITUTION OF ANY MATERIAL SPECIFIED ON THE STRUCTURAL DOCUMENTS.
7. IT IS THE CONTRACTOR'S RESPONSIBILITY TO COMPLY WITH THE PERTINENT SECTIONS OF THE "CONSTRUCTION SAFETY ORDERS" ISSUED BY THE STATE OF CALIFORNIA, LATEST EDITION, AND ALL OSHA REQUIREMENTS AS THEY APPLY TO THIS PROJECT. THE ARCHITECT, SEOR, AND THE OWNER DO NOT ACCEPT ANY RESPONSIBILITY FOR THE CONTRACTOR'S FAILURE TO COMPLY WITH THESE REQUIREMENTS.
8. ALL WORK IS NEW (N) UNLESS INDICATED AS EXISTING (E).
9. CONSTRUCTION MATERIALS SHALL BE DISTRIBUTED WHEN PLACED ON THE STRUCTURE SUCH THAT LOADS DO NOT EXCEED DESIGN LIVE LOADS OR RESULT IN AN UNBALANCED CONDITION.
10. REFER TO THE PROJECT SPECIFICATIONS FOR SHOP DRAWING REQUIREMENTS AND SUBMITTALS.

STRUCTURAL DESIGN CRITERIA:

1. CODES:
   ALL WORK SHALL BE IN CONFORMANCE WITH THE CALIFORNIA BUILDING CODE (CBC) 2022 EDITION, INCLUDING ALL AMENDMENTS. ALL STANDARDS USED SHALL BE THE LATEST VERSION APPROVED BY THE CODE ENFORCEMENT AGENCY ON THE DATE OF THE PERMIT ISSUANCE UNLESS SPECIFICALLY NOTED OTHERWISE.
2. WIND DESIGN INFORMATION
   - RISK CATEGORY = III
   - BASIC WIND SPEED, V = 101 MPH
   - EXPOSURE = C
   - Kz = 0.85, Kd = 0.85, Kzt = 1.0
3. SEISMIC DESIGN INFORMATION (ASCE 7)
   - RISK CATEGORY = III Ie = 1.5
   - SITE CLASS = D (DEFAULT)
   - S_S = 1.43 , S_1 = 0.513, S_{DS} = 1.144
   - SEISMIC DESIGN CRITERIA = D
   - ANALYSIS PROCEDURE USED = EQUIVALENT LATERAL FORCE PROCEDURE

EXISTING UNDERGROUND UTILITY NOTES:

1. THE ARCHITECT AND ENGINEERS ARE NOT RESPONSIBLE FOR THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES WHETHER OR NOT SHOWN ON THE DRAWINGS. THE LOCATION OF ANY EXISTING UNDERGROUND UTILITIES SHOWN ON THE DRAWINGS ARE APPROXIMATE. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER SHOULD ANY SUCH UNIDENTIFIED CONDITIONS BE DISCOVERED.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGES WHICH MAY RESULT FROM HIS FAILURE TO EXACTLY LOCATE AND PRESERVE ALL EXISTING UNDERGROUND UTILITIES.

FOUNDATION NOTES (NO SOILS REPORT):

1. NO SOILS REPORT AVAILABLE; THEREFORE, MINIMUM PRESUMPTIVE LOAD-BEARING VALUES FOR CLASS OF MATERIALS 5 (CLAY, SANY CLAY, SILTY CLAY, CLAYEY SILT, SILT AND SANDY SILT) ARE USED PER *2022 CBC*.
2. ALLOWABLE VERTICAL BEARING PRESSURE = 1500 PSF
   ALLOWABLE LATERAL BEARING PRESSURE = 100 PSF PER FT OF DEPTH
3. THE CONTRACTOR SHALL CONFORM TO ALL RECOMMENDATIONS AND CONDITIONS INDICATED IN THE *2022 CBC*.
4. WHERE THE BUILDING OFFICIAL HAS REASON TO DOUBT THE CLASSIFICATION, STRENGTH OR COMPRESSIBILITY OF THE SOIL OR WHERE A LOAD-BEARING VALUE SUPERIOR TO THAT SPECIFIED IN THIS CODE IS CLAIMED, THE BULIDNG OFFICIAL SHALL BE PERMITTED TO REQUIRE THAT A GEOTECHNICAL INVESTIGATION BE CONDUCTED.
5. PRESUMPTIVE LOAD-BEARING VALUES SHALL APPLY TO MATERIALS WITH SIMILAR PHYSICAL CHARACTERISTICS AND DISPOSITIONS.
   MUD, ORGANIC SILT, ORGANIC CLAYS, PEAT OR UNPREPARED FILL SHALL NOT BE ASSUMED TO HAVE A PRESUMPTIVE LOAD-BEARING CAPACITY UNLESS DATA TO SUBSTANIATE THE USE OF SUCH A VALUE ARE SUBMITTED.
   - EXCEPTION: A PRESUMPTIVE LOAD-BEARING CAPACITY SHALL BE PERMITTED TO BE USED WHERE THE BUILDING OFFICIAL DEEMS THE LOAD-BEARING CAPACITY OF MUD, ORGANIC SILT OR UNPREPARED FILL IS ADEQUATE FOR THE SUPPORT OF LIGHTWEIGHT OR TEMPORARY STRUCTURES.
6. THE BOTTOM OF FOUNDATION SHALL BE CLEARED AND COMPACTED TO 90 PERCENT OF THE MAXIMUM DRY DENSITY AT OPTIMUM MOISTURE CONTENT DETERMINED IN ACCORDANCE WITH ASTM D1557.
7. SPREAD FOOTINGS ARE CENTERED UNDER WALLS AND COLUMNS, UNO.
8. FOOTING ELEVATIONS ARE NOTED ON THE PLANS AND DETAILS AND SHALL BE USED FOR BIDDING. IN ANY CASE, FOOTINGS SHALL BEAR ON FIRM UNDISTURBED SOIL OR ENGINEERED FILL, IN ACCORDANCE WITH THE *CURRENT BUILDING CODE* AND DETAILS SHOWN.
9. CONTRACTOR SHALL PROTECT ALL UTILITY LINES, ETC. ENCOUNTERED DURING EXCAVATION AND BACKFILLING.
10. ALL EXCAVATION SHALL COMPLY WITH APPLICABLE OSHA REQUIREMENTS.
11. PRIOR TO REINFORCEMET FOR FOUNDATIONS BEING PLACED, THE CONTRACTOR SHALL SUBMIT A REPORT INDICATES THE ITEMS 5, 6, 7, 8, 9 AND 10 ARE VERIFIED.
    THE REPORT SHALL ALSO STATE THAT:
    A. THE BUILDING PAD WAS PREPARED IN ACCORDANCE WITH THE APPROVED CONSTRUCTION DOCUMENTS.
    B. THE UTILITY TRENCHES HAVE BEEN PROPERLY BACKFILLED AND COMPACTED.
    C. THE FOUNDATION EXCAVATIONS COMPLY WITH THE INTENT OF THE APPROVED CONSTRUCTION DOCUMENTS.

REINFORCING STEEL NOTES:

1. REINFORCING GRADES FOR CONCRETE OR MASONRY:
   - ALL BARS EXCEPT THOSE TO BE WELDED ASTM A615, GRADE 60
   - TIES AND STIRRUPS ASTM A615, GRADE 60
   - WELDED WIRE FABRIC ASTM A1064
   - ALL BARS TO BE WELDED ASTM A706, GRADE 60
   - ALL BARS IN THE CONCRETE SHEARWALL INDICATED ON WALL ELEVATION INCLUDING SUPPORTING WALL FOOTING LONGITUDINAL BARS (WF), AND ALL GRADE BEAMS (GB) A706, GRADE 60
2. MAINTAIN MINIMUM CONCRETE COVER FROM FACE OF CONCRETE TO EDGE OF ALL REINFORCEMENT AS FOLLOWS (U.N.O.) AND PROVIDE THE LARGEST COVER REQUIRED FOR ALL APPLICABLE CONDITIONS. WHERE #3 STIRRUPS OR TIES ARE USED, ENSURE THAT THE COVER FOR LONGITUDINAL BARS IS ADEQUATE.
   (SEE PLAN/ SECTION FOR CONCRETE W/ FIRE RATING.)

CONDITION	COVER
CONCRETE POURED AGAINST EARTH	3"
CONCRETE POURED IN FORMS AND EXPOSED TO WEATHER OR EARTH	
#6 BARS AND LARGER	2"
#5 BARS AND SMALLER	1 1/2"
INTERIOR COLUMNS AND BEAMS	1 1/2"
INTERIOR WALL FACES AND RAISED SLABS	1"
STRUCTURAL SLABS ON GRADE	
FROM BOTTOM OF SLAB	2"
FROM TOP OF SLAB	1 1/2"
OTHER CONCRETE NOT EXPOSED TO WEATHER OR EARTH FOR #11 BARS AND SMALLER	1"

3. REINFORCEMENT SHALL BE PLACED IN ACCORDANCE WITH THE CONCRETE REINFORCING STEEL INSTITUTE (CRSI) "MANUAL OF STANDARD PRACTICE". EACH REINFORCING BAR SHALL BE WIRED TO A CROSS BAR AT A MAXIMUM SPACING OF 24" O.C. PROVIDE ALL ACCESSORIES NECESSARY TO SUPPORT REINFORCING IN POSITIONS SHOWN ON THE PLANS.
4. SPLICES IN CONTINUOUS REINFORCEMENT AS USED IN WALLS, FOOTINGS, SLABS, ETC., SHALL HAVE A CLASS "B" LAP (1' - 6" MIN) AND THE SPLICES IN ADJACENT BARS SHALL BE NOT LESS THAN 5' - 0" APART. VERTICAL WALL BARS SHALL BE SPLICED AT OR NEAR FLOOR LINES. BARS MAY BE WIRED TOGETHER AT SPLICES OR LAPS EXCEPT FOR TOP REINFORCING OF BEAMS AND SLABS OR WHERE SPECIFICALLY DETAILED TO BE SEPARATED. WELDED WIRE FABRIC SHALL BE LAPPED 12" MINIMUM.
5. ALL DOWELS, ANCHOR BOLTS AND OTHER HARDWARE TO BE SET IN CONCRETE SHALL BE TIED IN PLACE PRIOR TO PLACEMENT OF CONCRETE. NO WET SETTING, STABBING, RODDING OR OTHER MOVEMENT OF EMBEDDED ITEMS SHALL BE PERFORMED DURING PLACEMENT OF CONCRETE.
6. BEND REINFORCING BARS COLD.
7. STEEL SHALL BE KEPT CLEAN AND FREE OF RUST.
8. DOWELS BETWEEN FOOTING AND WALLS OR COLUMNS SHALL BE THE SAME GRADE, SIZE AND SPACING AS THE MAIN REINFORCING U.N.O.
9. ALL BARS SHALL BE MARKED SO THEIR IDENTIFICATION CAN BE MADE WHEN THE FINAL IN PLACE INSPECTION IS MADE.
10. CHAIRS OR SPACERS FOR REINFORCING SHALL BE NON-FERROUS OR PLASTIC COATED WHEN RESTING ON EXPOSED SURFACES.

STRUCTURAL CONCRETE NOTES:

1. CONCRETE SHALL BE MIXED, PLACED AND CURED IN ACCORDANCE WITH ACI 318, 2019 EDITION, AND PROJECT SPECIFICATIONS.
2. CONCRETE SHALL NOT BE DROPPED THROUGH REINFORCING STEEL (AS IN WALLS) SO AS TO CAUSE SEGREGATION OF AGGREGATES. IN SUCH CASES, HOPPERS AND VERTICAL CHUTES OR TRUNKS SHALL BE USED. CHUTES OR TRUNKS SHALL BE OF VARIABLE LENGTHS SO THAT FREE UNCONFINED FALL OF CONCRETE SHALL NOT EXCEED SIX FEET. A SUFFICIENT NUMBER OF CHUTES OR TRUNKS SHALL BE USED TO ENSURE THE CONCRETE IS KEPT LEVEL AT ALL TIMES.
3. CONSTRUCTION JOINTS SHALL BE INTENTIONALLY ROUGHENED TO A FULL AMPLITUDE OF 1/4 INCH. JOINTS SHALL THEN BE CLEANED AN LAITANCE REMOCED BEFORE NEW CONCRETE IS PLACED. IMMEDIATELY BEFORE NEW CONCRETE IS PLACED, JOINTS SHALL BE PREWETTED AND STANDING WATER REMOVED. SEE PLANS AND DETAILS FOR LOCATION AND TYPE OF CONSTRUCTION JOINT. LOCATIONS OF ADDITIONAL CONSTRUCTION JOINTS NOT SHOWN ON THESE PLANS SHALL BE SUBMITTED FOR APPROVAL BY THE SEOR PRIOR TO PLACING ANY CONCRETE.
4. STRUCTURAL CONCRETE SHALL MEET THE FOLLOWING DESIGN CRITERIA:

LOCATION	f'c	CONC TYPE[a]	MAX AGGR. SIZE	MAX W/C RATIO	MAX SLUMP[b]	CEMENT TYPE
FOUNDATIONS,	4000 psi	NWC	1 1/2"	0.45	4"	II/V
ALL OTHER STRUCTUAL CONC. NOT NOTED	4000 psi	NWC	1"	0.50	6"	II / V

   a. MAXIMUM DRY WEIGHT OF LIGHTWEIGHT CONCRETE SHALL BE 110 PCF.
   b. SLUMP MEASURED PRIOR TO SUPERPLASTICIZER, WHERE OCCURS.
5. CONCRETE MIX DESIGN AND TESTING SHALL MEET THE REQUIREMENTS OF THE BUILDING CODE, AND SPECIFICATIONS. ALL CONCRETE MIXES SHALL BE DESIGNED BY A RECOGNIZED TESTING LAB STAMPED AND SEALED BY A LICENSED CALIFORNIA CIVIL ENGINEER AND SUBMITTED TO THE SEOR FOR REVIEW PRIOR TO CONCRETE PLACEMENT. STRUCTURAL CONCRETE MIXES SHALL CONSIST OF 5 SACK MINIMUM U.N.O.
6. AGGREGATES IN NORMAL WEIGHT CONCRETE SHALL CONFORM TO ASTM C-33 (HARDROCK). AGGREGATES IN LIGHT WEIGHT CONCRETE SHALL CONFORM TO ASTM C-330.
7. COMPRESSIVE STRENGTH TEST REPORTS SHALL BE SUBMITTED TO THE BUILDING DEPARTMENT AND THE SEOR.
8. PORTLAND CEMENT SHALL BE AS NOTED ABOVE FOR ALL CONCRETE CONFORMING TO ASTM C150, LOW ALKALI. MILL TESTS WITH CERTIFICATES OF COMPLIANCE SHALL BE SUBMITTED.
9. FLY ASH OR OTHER POZZOLANS CONFORMING TO ASTM C618 CLASS N OR F MAY BE USED AS A PARTIAL SUBSTITUTION FOR PORTLAND CEMENT UP TO A MAXIMUM OF 15% TOTAL CEMENTITIOUS MATERIALS BY WEIGHT IF THE MIX DESIGN IS PROPORTIONED PER ACI 318, SECTION 26.4.3.
10. CONCRETE MIXING OPERATIONS, ETC. SHALL CONFORM TO ASTM C94.
11. LEAN CONCRETE, WHERE SPECIFICALLY INDICATED, SHALL CONTAIN 2 SACKS OF CEMENT PER CUBIC YARD OF CONCRETE.
12. DRYPACK OR NONSHRINK GROUT SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 2 TIMES THE SUPPORTING CONCRETE STRENGTH, AND SHALL BY SIKA GROUT, OR APPROVED EQUAL WITH VALID CODE REPORT (LARR,ICC,ESR,IAPMO ER).
    FOR THICK GROUT LAYERS FOLLOW MANUFACTURER'S GUIDELINES TO ATTAIN THE REQUIRED STRENGTH, WHICH MAY INCLUDE THE ADDITION OF PEA GRAVEL.
13. DO NOT USE ANY CONCRETE OR GROUT CONTAINING CHLORIDES. WATER USED IN MIX SHALL BE CLEAN AND POTABLE.
14. PRIOR TO ERECTING ANY ELEMENTS THAT LOAD THE FOUNDATION, CONCRETE MUST REACH AN UNCONFINED COMPRESSION STRENGTH OF 2000 PSI MINIMUM AS DETERMINED BY TESTING OR PREVIOUSLY DOCUMENTED DATA FOR THE MIX DESIGN USED UNDER SIMILAR CONDITIONS, AND MUST BE ALLOWED TO CURE FOR A MINIMUM OF 3 DAYS.
15. FOR INTERIOR SLABS-ON-GRADE AND ALL OTHER SLABS RECEIVING ADHERED FLOORING FINISHES (I.E., GLUED, ETC.), THE MAXIMUM W/C RATIO SHALL NOT EXCEED 0.45. CURING COMPOUNDS USED ON CONCRETE THAT IS TO RECIEVE FINISHES SHALL BE COMPATIBLE WITH TILE AND ADHESIVES OR GROUTS IN ACCORDANCE WITH MANUFACTURER'S DATA AND BE APPROVED BEFORE USE.
16. MAINTAIN CONCRETE ABOVE 50 DEGREES FAHRENHEIT AND IN A MOIST CONDITION FOR A MINIMUM OF 7 DAYS AFTER PLACEMENT UNLESS OTHERWISE ACCEPTED BY SEOR.
17. SEE ARCHITECTURAL DRAWINGS FOR WALL OPENINGS, WALL OFFSETS, CHAMFERS, KERFS, DRIPS AND FOR EXTENT OF DEPRESSIONS, RAMPS, ETC. PROVIDE SLEEVES FOR ALL PIPES THROUGH CONCRETE WALLS AND FOOTINGS WHERE SHOWN ON THESE DRAWINGS. CORING IS NOT PERMITTED WITHOUT PRIOR APPROVAL BY THE SEOR.
18. SEE ARCHITECT'S PLANS FOR LOCATIONS OF SLAB SLOPES, DEPRESSIONS, CURBS, DRAINS, NON-STRUCTURAL PARTITIONS AND OTHER EMBEDDED ITEMS NOT SHOWN ON THE STRUCTURAL PLANS.
19. EXPOSED CORNERS OF SLABS, BEAMS, WALLS, COLUMNS, ETC. SHALL BE FORMED WITH 3/4" CHAMFER, U.N.O.
20. CONSTRUCTION JOINTS (CJ) AND SAWCUT (SC) JOINTS IN SLABS SHALL OCCUR WHERE LOCATED ON PLANS AND DETAILS. CJ'S SHALL HAVE FORMED POUR STOPS. CONSTRUCTION JOINTS IN WALLS AND FOOTINGS NEED NOT OCCUR AT THE SAME LOCATION, U.N.O.

TYPICAL ABBREVIATIONS

A.B.	ANCHOR BOLT	KLF	KIPS PER LINEAR FOOT
ABV	ABOVE	KSL	KIPS PER SQUARE FOOT
ADDT'L	ADDITIONAL	KSI	KIPS PER SQUARE INCH
ADJ	ADJACENT	L	ANGLE
A.F.F.	ABOVE FINISH FLOOR	LBS	POUND
ALT	ALTERNATE	LFRS	LATERAL FORCE RESISTING SYSTEM
ARCH	ARCHITECT(URAL)		
A.T.R.	ALL THREADED ROD	LLBB	LONG LEG BACK TO BACK
BLDG	BUILDING	LLH	LONG LEG HORIZONTAL
BLK'G	BLOCKING	LLV	LONG LEG VERTICAL
BLW	BELOW	LONG.	LONGITUDINAL
BM	BEAM	LP	LOW POINT
BN	BOUNDARY NAILING	LWC	LIGHTWEIGHT CONCRETE
B.O.	BOTTOM OF	MAX	MAXIMUM
BOT	BOTTOM	M.B.	MACHINE BOLT
BRG	BEARING	MECH	MECHANICAL
B.S.	BOTH SIDES	MFR	MANUFACTURER
	BOUNDARY SCREW	MIN	MINIMUM
BTWN	BETWEEN	MTL	METAL
C	CAMBER OR C-CHANNEL	(N)	NEW
		NOM.	NOMINAL
C.I.P.	CAST IN PLACE	NS	NEAR SIDE OR NON-SHRINK
CJ	CONTROL CONSTRUCTION JOINT	NTS	NOT TO SCALE
		NW'C	NORMAL WEIGHT CONCRETE
CL	CENTERLINE	OD	OUTSIDE DIAMETER
CLR	CLEAR	O.C.	ON CENTER
CMU	CONCRETE MASONRY UNIT	O.F.	OUTSIDE FACE
COL	COLUMN	OH	OPPOSITE HAND
CONC	CONCRETE	OPM	OSHPD PRE APPROVAL OF MANUFACTURER'S CERTIFICATION
CONN	CONNECTION		
CONT	CONTINUOUS		
CP	COMPLETE PENETRATION	OPN'G	OPENING
CSK	COUNTERSINK	PDF	POWDER DRIVEN FASTENER
CTR(D)	CENTER(ED)	PENE	PENETRATION
DB	BAR OR BOLT DIAMETER	PERF.	PERFORATED
DBL	DOUBLE	PJ	PANEL JOIST
DC	DEMAND CRITICAL	PL	PLATE
DEMO	DEMOLITION	PLC(S)	PLACE(S)
DET	DETAIL	PLF	POUND PER LINEAR FOOT
DIA	DIAMETER	PLYWD	PLYWOOD
DIAG	DIAGONAL	PREFAB	PREFABRICATED
DIM	DIMENSION	PSF	POUND PER SQUARE FOOT
DIST	DISTANCE	PSI	POUND PER SQUARE INCH
DO	DITTO	PT	PRESSURE TREATED OR POST TENSION
DWG	DRAWING		
(E)	EXISITNG	QTY	QUNATITY
EA	EACH	RAD, R	RADIUS
E.F.	EACH FACE	REF	REFERENCE
EJ	EXPANSION JOIST	REINF	REINFORCING
EMBED	EMBEDMENT	REQ'D	REQUIRED
ELEC	ELECTRICAL	RJ	ROOF JOIST
ELEV	ELEVATION	R.O.	ROUGH OPENING
EN	EDGE NAILING	S.A.D.	SEE ARCHITECUTRAL DRAWINGS
E.O.	EDGE OF	SB	SILL BOLT
EOR	ENGINEER OF RECORD	SC	SAW CUT OR SLIP CRITICAL
EQ	EQUAL	SCHED	SCHEDULE
EQUIP	EQUIPMENT	SEOR	STRUCTURAL ENGINEER ON RECORD
E.S.	EACH SIDE/ EDGE SCREW		
E.W.	EACH WAY	SF	SPREAD FOOTING
EXP	EXPANSION	SHT'G	SHEATHING
EXT	EXTERIOR	SIM	SIMILAR
FIN	FINISH	SLRS	SEISMIC LOAD RESISTING SYSTEM
FJ	FLOOR JOIST		
FLR	FLOOR	SMS	SHEET METAL SCREW
FN	FIELD NAILING	SN	SILL NAIL
FN HT	FINISH HEIGHT	S.O.G.	SLAB ON GRADE
FND	FOUNDATION	SQ	SQUARE
F.O.	FACE OF	SS	STAINLESS STEEL
FS	FAR SIDE OR FIELD SCREW	STD	STANDARD
	FINISH SURFACE	STAGG.	STAGGERED
FRM'G	FRAMING	STIFF	STIFFENER
FT	FOOT OR FEET	STL	STEEL
FTG	FOOTING	STRUCT	STRUCTURAL
G	GIRDER	T&B	TOP AND BOTTOM
GA	GAUGE	THK	THICK
GALV	GALVANIZED	T.O.	TOP OF
GB	GRADE BEAM	T.O.M.	TOP OF MASONRY
H.A.B.	HEADED ANCHOR BOLT	T.O.S.	TOP OF STEEL
HD	HOLDOWN	TRANS.	TRANSVERSE
HDR	HEADER	TYP	TYPICAL
HGR	HANGER	U.N.O.	UNLESS NOTED OTHERWISE
HK	HOOK	VERT	VERTICAL
HORIZ	HORIZONTAL	W/	WITH
HP	HIGH POINT	W/O	WITHOUT
HS	HIGH STRENGTH	WF	WIDE FLANGE/WALL FOOTING
HSS	HOLLOW STRUCTURAL SECTION	WLD	WELDED
		WO	WHERE OCCURS
HT	HEIGHT	WP	WORK POINT
IN	INCH	W.S.	WELDED STUD
INT	INTERIOR	WT	WEIGHT
JST	JOIST	WWF	WELDED WIRE FABRIC
	REFERENCE ELEVATION OR WORK POINT	WWM	WELDED WIRE MESH
		ø	DIAMETER

Not for permitting or construction

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-124972 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/17/2026

PBK

ARCHITECT PBK Architects, Inc.
ANAHEIM PBK.com
2400 E KATELLA AVE, Suite 950
ANAHEIM, CA 92806
P 949-548-5000

SCHROEDER ES HVAC UPGRADE & MODERNIZATION

PROJECT ADDRESS:
15151 Columbia Ln
Huntington Beach, CA 92647

50 % CD

DSA APPL NO.: ##-##### DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT EST. 1872

RELO
A
B
C
D
RELO
K1
ADMIN
MPR

KEY PLAN
N
NORTH: PLAN

VCA Consultant
CIVIL ● STRUCTURAL ENGINEERS INC
2401 E Katella Ave. #430
Anaheim, CA 92806
Tel. 949.679.0870
Fax. 949.679.9330
Project No. L1134

PROFESSIONAL ENGINEER JORGE LUIS YAMA No. C-31162 Exp. 9/30/26 STATE OF CALIFORNIA

Architect

LICENSED ARCHITECT Jorge Yau No. C-31162 REN. 10-31-2025 STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
09-30-2025	250376

REVISIONS

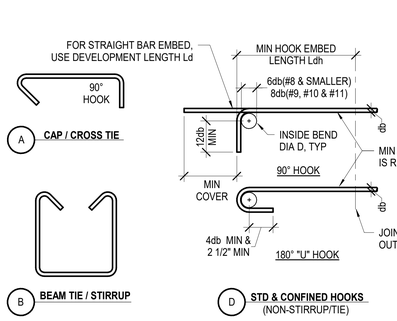
No.	Description	Date

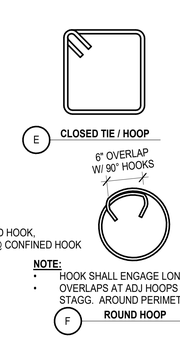
50 % CD

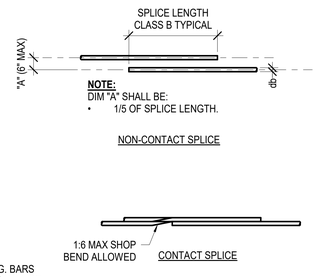
GENERAL NOTES

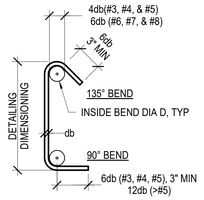
This document is for plan review only

S-0.1









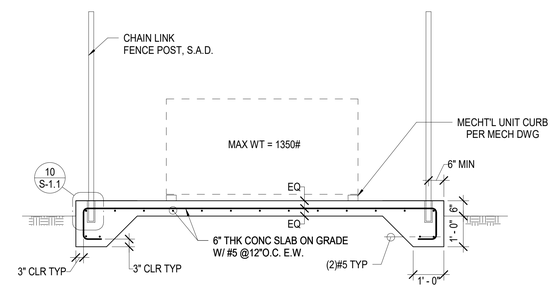
BAR SIZE	FINISHED BEND DIAMETER "D" IN INCHES
#3	2 1/4"
#4	3"
#5	3 3/4"
#6	4 1/2"
#7	5 1/4"
#8	8"

STANDARD HOOKS

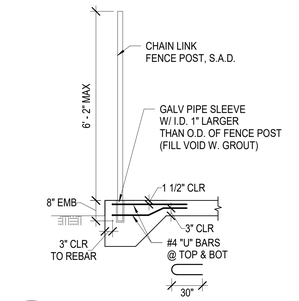
	BAR SIZE	L_{dh}(in) STD HOOK	LAP SPLICE (in) CLASS B		L_d(in) DEVELOPMENT LENGTH	
			TOP	OTHER	TOP	OTHER
4000 PSI NWC	#3	6	25	20	19	15
	#4	7	33	25	25	19
	#5	9	41	32	31	24
	#6	12	49	38	37	29
	#7	15	71	55	54	42
	#8	19	81	63	62	48
	#9	22	91	71	70	54
	#10	27	103	80	79	61
	#11	31	114	88	87	67

NOTES:
1. Ldh = HOOK DEVELOPMENT LENGTH.
2. Ld = DEVELOPMENT LENGTH.
3. db = REINFORCING BAR DIAMETER
4. SEE BUILDING CODE AND ACI 318-19 VERSION FOR ALL REQUIREMENTS NOT NOTED.
5. FOR LIGHTWEIGHT CONCRETE MULTIPLY Ldh AND Ld VALUES SHOWN BY 1.33.
6. TOP BARS ARE HORIZONTAL WITH MORE THAN 12" OF FRESH CONCRETE CAST BELOW BARS. ALL OTHER BARS ARE "OTHER" BARS.
7. STANDARD HOOK Ldh DOES NOT ACCOUNT FOR THE EFFECT OF TIES. CONFINED HOOK Ldh MAY BE USED WHERE ACI 318-19 25.4.3 APPLIES.
8. VALUES SHOWN ABOVE ARE FOR GRADE 60 (FY=80 KSI) REINFORCEMENT.
9. SPLICE LENGTHS SHOWN ARE FOR CLEAR SPACING NOT LESS THAN 2db, CONCRETE COVER NOT LESS THAN db.
10. IF EPOXY-COATED REINFORCEMENT IS USED, THE DEVELOPMENT/LAP SPLICE LENGTHS HEREIN SHALL BE MULTIPLIED BY APPLICABLE FACTORS IN ACI 318-19 SECTIONS 25.4.2.5 OR 25.4.3.2.
11. IN LIEU OF LAP SPLICES, PROVIDE TYPE 2 COUPLERS PER IAPMO ER 0129. STAGGER COUPLERS SO THAT COUPLERS DO NOT OCCUR IN ROW.

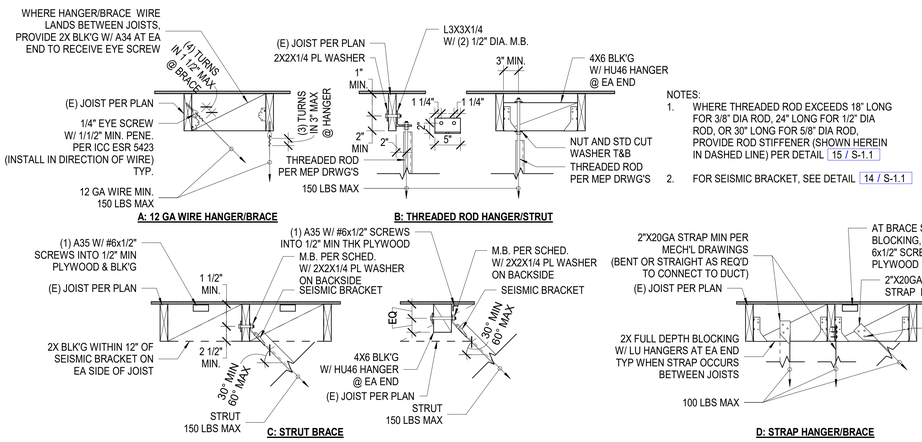
5 S-1.1 TYP CONC REINFORCEMENT DETAILS AND DEVELOPMENT LENGTHS
SCALE:N.T.S.



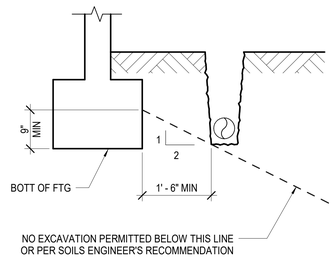
9 S-1.1 MEP CONC PAD DETAIL
SCALE: 1/2" = 1'-0"



10 S-1.1 FENCE POST DETAIL
SCALE: 1/2" = 1'-0"
REF DET:9 S-1.1

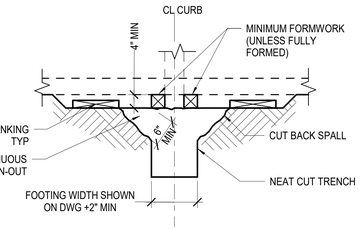


13 S-1.1 MEP HANGER AND BRACE CONNECTION TO STRUCTURE (WOOD FRAMING
SCALE:N.T.S.
REF DET:14 S-1.1



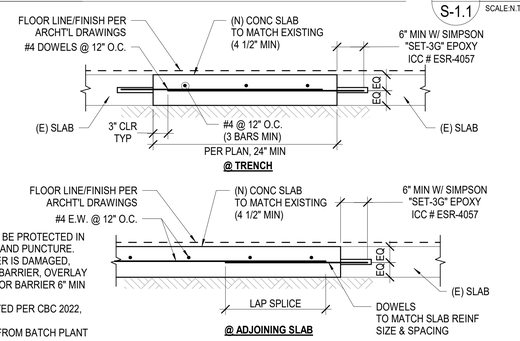
NOTE:
THE CONTRACTOR SHALL BE RESPONSIBLE FOR SHORING OR OTHERWISE MAINTAINING THE SIDES OF THE EXCAVATION FROM CAVE-INS UNTIL ALL BACKFILL IS COMPLETED PER SPECIFICATIONS AND GEOTECHNICAL REPORT.

3 S-1.1 TYPICAL EXCAVATION PARALLEL TO FOOTING
SCALE:N.T.S.



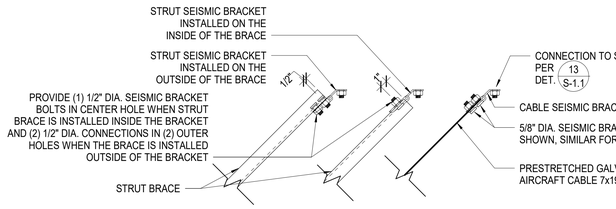
NOTES:
1. FOOTINGS POURED AGAINST EARTH ARE SUBJECT TO APPROVAL OF GEOTECH. ENGR.
2. FOOTING WIDTHS SHALL NOT BE MORE THAN 4" WIDER THAN SHOWN ON PLAN.
3. FORMWORK NOT PERMITTED BELOW GRADE UNLESS FULLY FORMED.
4. FOUNDATION CONCRETE MAY BE PLACED DIRECTLY INTO NEAT EXCAVATIONS PROVIDED THE FOUNDATION TRENCH WALLS ARE STABLE AS DETERMINED BY THE GEOTECHNICAL ENGINEER. THE MINIMUM FORMWORK SHOWN ON THE DRAWINGS IS MANDATORY TO ENSURE CLEAN EXCAVATIONS IMMEDIATELY PRIOR TO AND DURING THE PLACING OF CONCRETE.
5. CONT CLEAN-OUT STAKES NOT PERMITTED IN THE FTG AREA.
6. AFTER CONCRETE HAS SET, REMOVE LAITANCE AND SCUM.

4 S-1.1 FOOTING POURED AGAINST EARTH
SCALE:N.T.S.



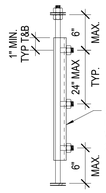
NOTES:
1. VAPOR BARRIER MUST BE PROTECTED IN PLACE FROM DAMAGE AND PUNCTURE.
2. WHERE VAPOR BARRIER IS DAMAGED, PROVIDE NEW VAPOR BARRIER, OVERLAY THE (E) DAMAGED VAPOR BARRIER 6" MIN OVERLAP ALL AROUND
3. PULL TESTING EXEMPTED PER CBC 2022, 1910A.5.3
4. CONCRETE EXCEMPT FROM BATCH PLANT INSPECTION.

7 S-1.1 SLAB ON GRADE PATCH DETAIL
SCALE:N.T.S.



NOTES:
1. STRUT SEISMIC BRACKET TYPE (BY MASON WEST OR EQUAL WITH APPROVED OPM):
   A. FOR 3/8" AND 1/2" DIA. ANCHOR USE SSBS-12
   B. FOR 5/8" AND 3/4" DIA. ANCHOR USE SSBS-20
   C. SEISMIC BRACKET BOLTS FOR THE SSBS-12 AND SSBS-20 SHALL BE 1/2" DIA. STRUT NUT WITH STUD AND BREAK-OFF NUT (MW-BON-1/2) AND STANDARD WASHER TORQUED TO 50 FT-LBS
2. CABLE SEISMIC BRACKET TYPE (BY MASON WEST OR EQUAL WITH APPROVED OPM):
   A. FOR 3/32" DIA. CABLE USE SCB-0 W/ (1) 5/8" BOLT
   B. FOR 1/8" DIA. CABLE USE SCB-1 W/ (2) 5/8" BOLTS
   C. FOR 3/16" DIA. CABLE USE SCB-2 W/ (2) 5/8" BOLTS
   D. SEISMIC BRACKET BOLTS FOR SCB-0, SCB-1, AND SCB-2 SHALL BE 5/8" DIA. SQUARE HEAD BOLTS AND NUTS, TORQUED TO 30 FT-LBS OR USE 30 FT-LBS MIN BREAK AWAY NUT (MW-SCB-BON)

14 S-1.1 BRACE UPPER DETAIL
SCALE:N.T.S.



NOTES:
1. ROD STIFFENER CLAMP TYPE (BY MASON WEST OR EQUAL WITH APPROVED OPM):
   A. UCC SEISMIC ROD CLAMP TORQUED TO 10 FT-LBS

15 S-1.1 THREADED ROD STIFFENER
SCALE:N.T.S.

Not for permitting or construction

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-124972 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/17/2026

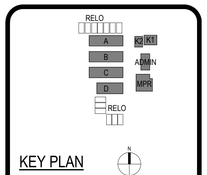
PBK
ARCHITECT PBK Architects, Inc.
ANAHEIM PBK.com
2400 E KATELLA AVE, Suite 950
ANAHEIM, CA 92806
P 949-548-5000

SCHROEDER ES HVAC UPGRADE & MODERNIZATION

PROJECT ADDRESS:
15151 Columbia Ln
Huntington Beach, CA 92647

50 % CD

DSA APPL NO.: ##-##### DSA FILE NO.: 30-43



KEY PLAN
NORTH: PLAN

VCA Consultant
ENGINEERS INC
CIVIL ★ STRUCTURAL MEP ● CMX ● MEC
2401 E Katella Ave. #430
Anaheim, CA 92806
Tel. 949.679.0870
Fax. 949.679.9370
Project No. L1134



Architect



CLIENT
WESTMINSTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
09-30-2025	250376

REVISIONS

No.	Description	Date

50 % CD

DETAILS

This document is for plan review only

S-1.1

M0.00 - MECHANICAL SYMBOLS, LEGENDS & GENERAL NOTES

0" 1"

TITLE 24 NOTES

THE FOLLOWING SHALL BE REQUIRED WHETHER OR NOT SPECIFICALLY SHOWN OR MENTIONED IN DRAWINGS AND/OR SPECIFICATIONS:

1. EQUIPMENT SHALL MEET EFFICIENTY REQUIREMENTS OF TABLES 110.2-A THROUGH 110.2-K.
2. ALL AIR-COOLED, UNITARY, DX UNITS (PACKAGED, SPLIT-SYSTEM, HEAT PUMPS AND VRF) WITH ECONOMIZERS SHALL BE EQUIPPED WITH FAULT DETECTION AND DIAGNOSTICS SYSTEMS.
3. PIPE INSULATION FOR SPACE CONDITIONING AND SERVICE WATER-HEATING WITH FLUID TEMPERATURES LISTED IN TABLE 120.3-A SHALL HAVE INSULATION LEVELS AS SPECIFIED IN SUBSECTION (A) AND (B).
4. MECHANICAL HEATING AND COOLING EQUIPMENT SHALL BE THE SMALLEST SIZE, WITHIN THE AVAILABLE OPTIONS OF THE DESIRED EQUIPMENT LINE, NECESSARY TO MEET THE DESIGN HEATING AND COOLING LOADS OF THE BUILDING, AS CALCULATED ACCORDING TO THE REQUIREMENTS OF SECTION 140.4(B).
5. HVAC MOTORS FOR FANS THAT ARE LESS THAN 1 HP AND 1/12 HP OR GREATER SHALL BE ECM OR HAVE A MINIMUM MOTOR EFFICIENCY OF 70%. MOTORS SHALL ALSO HAVE MEANS TO ADJUST MOTOR SPEED FOR BALANCING OR REMOTE CONTROL.
6. ELECTRIC RESISTANCE HEATING SYSTEMS ARE NOT PROVIDED FOR SPACE HEATING.
7. IN DRIER CLIMATES AND WHEN LARGE OUTDOOR AIR FRACTIONS ARE REQUIRED, EVAPORATIVE PRE-COOLING PACKAGES WERE EVALUATED TO PRE-COOL OUTSIDE AIR AND COOL THE AIR FLOWING OVER THE DX CONDENSING UNIT.
8. ZONE EACH AIR HANDLER TO SERVE ONLY AREAS WITH COMMON LOADS TO ALLOW MORE AGGRESSIVE CONTROL STRATEGIES AND IMPROVE COMFORT. HAVE DIFFERENT AHU'S SERVING CORE VS. PERIMETER AREAS.
9. THE DESIGN ACCOMMODATES PARTIAL OCCUPANCY ENERGY SAVINGS WHEN THE OWNER'S REQUIREMENTS OR NARRATIVE DESCRIBE ANY POSSIBILITY OF PARTIAL OCCUPANCY, BY ZONING AIR HANDLERS BY FLOOR OR BY PART OF A FLOOR, OR BY INCORPORATING CONTROLLED FLOOR DAMPERS, OR VAV AIR TERMINALS GOING TOTALLY SHUT WHEN NOT OCCUPIED, ETC.
10. EACH ZONE IS CONTROLLED BY AN INDIVIDUAL THERMOSTATIC CONTROL. CONTROLS SHALL BE CAPABLE OF SETTING TEMPERATURES TO 55 DEG F FOR HEATING AND 85 DEG F FOR COOLING AND PROVIDE A TEMPERATURE DEADBAND OF AT LEAST 5 DEG F IF CONTROLLING BOTH HEATING AND COOLING.
11. EACH SPACE CONDITIONING SYSTEM SHALL BE EQUIPPED WITH CONTROLS TO SHUT THE SYSTEM OFF DURING PERIODS OF NONUSE AND WILL TEMPORARILY OPERATE THE SYSTEM TO MAINTAIN SETBACK AND SETUP TEMPERATURES WHILE KEEPING VENTILATION DAMPERS CLOSED.
12. SYSTEMS SERVING MULTIPURPOSE ROOMS LESS THAN 100 SF AND CLASSROOMS, CONFERENCE, AUDITORIUM OR MEETING CENTER ROOMS GREATER THAN 750 SF SHALL HAVE OCCUPANCY SENSORS THAT INTERFACE WITH HVAC CONTROLS TO AUTOMATICALLY SETUP THE COOLING SETPOINT BY 2F OR MORE AND AUTOMATICALLY RESET THE MINIMUM REQUIRED VENTILATION RATE. THESE OCCUPANT SENSOR VENTILATION CONTROL DEVICES MUST MEET THE REQUIREMENTS OF SECTION 120.1(C)5.
13. OUTDOOR AIR SUPPLY AND EXHAUST EQUIPMENT SHALL BE INSTALLED WITH DAMPERS THAT AUTOMATICALLY CLOSE UPON EF FAN SHUTDOWN.
14. HVAC SYSTEMS WITH DDC TO THE ZONE LEVEL SHALL BE PROGRAMMED TO ALLOW CENTRALIZED DEMAND SHED FOR NON-CRITICAL ZONES.
15. ZONE CONTROLS PREVENT REHEATING, RECOOLING AND SIMULTANEOUS PROVISIONS OF HEATING AND COOLING TO THE SAME ZONE.
16. EACH WALL MOUNTED THRMOSTAT SHALL BE LOCATED AWAY FROM POTENTIAL SOURCES THAT WOULD ADVERSELY AFFECT THE READING (CLOSE TO COPIERS, DIRECT SUNLIGHT, BELOW OR ABOVE A SUPPLY AIR DIFFUSER OR CONVECTOR, ETC.). ANY THERMOSTATS MOUNTED ON EXTERIOR WALLS SHALL BE INSTALLED IN SEALED AND INSULATED JUNCTION BOXES.
17. CORNER OFFICE SHALL ALWAYS HAVE THEIR OWN THERMOSTATS, AIR TERMINAL BOXES OR FAN-TUBE RADIATORS.
18. CONTROL SEQUENCES SHALL BE LISTED FOR EQUIPMENT OPERATED BY STAND-ALONE PACKAGED CONTROLS. UNOCCUPIED SEQUENCES SHALL BE INCLUDED.
19. CONTROL SEQUENCES SHALL BE PROVIDED FOR EACH PIECE OF EQUIPMENT LISTED IN THE EQUIPMENT SCHEDULE THAT IS MONITORED OR CONTROLLED BY THE BUILDING AUTOMATION SYSTEM (BAS). UNOCCUPIED SEQUENCES SHALL BE INCLUDED.
20. OUTSIDE AIR TEMPERATURE SENSORS SHALL BE IN A COMMERCIALLY DESIGNED SOLAR SHIELD LOCATED ON A NORTH WALL OR SOME OTHER LOCATION OUT OF DIRECT SUNLIGHT AND AWAY FROM BUILDING EXHAUST OR HEAT REJECTION EQUIPMENT.
21. THE OUTDOOR AIR-VENTILATION RATE AND AIR-DISTRIBUTION ASSUMPTIONS MADE IN THE DESIGN OF THE VENTILATING SYSTEM ARE CLEARLY IDENTIFIED ON THE PLANS.
22. EACH SPACE IS DESIGNED TO HAVE NATURAL VENTILATION OR MECHANICAL VENTILATION THAT IS NO LESS THAN THE LARGER OF CONDITIONED FLOOR AREA TIMES THE REQUIREMENTS IN TABLE 120.1-A OR 15 CFM TIMES THE EXPECTED NUMBER OF OCCUPANTS.
23. THE MINIMUM AND MAXIMUM OUTDOOR AIR RATES FOR EACH AIR HANDLER ARE LISTED ON THE EQUIPMENT SCHEDULES.
24. THE OUTDOOR AIR-VENTILATION RATES ARE BASED ON PLANNED OWNER OCCUPANCY AS DEFINED IN OWNER'S DESIGN INTENT AND ARE NOT BASED ON MAXIMUM EGRESS OCCUPANCY RATES.
25. HVAC SYSTEMS THAT HAVE AN ECONOMIZER, SERVE A SPACE WITH A DESIGN OCCUPANT DENSITY GREATER THAN OR EQUAL TO 25 PEOPLE PER 1000 SF, AND ARE EITHER A SINGLE ZONE SYSTEM WITH ANY CONTROLS OR MULTIPLE ZONE SYSTEM WITH DDC CONTROLS TO THE ZONE LEVEL MUST HAVE DEMAND CONTROL VENTILATION CONTROLS. THE FOLLOWING MUST BE MET:
    A. CO2 SENSORS INSTALLED IN EACH ROOM SERVED BY SYSTEMS WITH DCV CONTROLS.
    B. CO2 SENSORS ARE LOCATED BETWEEN 3 FT AND 6 FT ABOVE THE FLOOR.
    C. CO2 CONCENTRATIONS MAINTAINED AT LESS THAN OR EQUAL TO 600 PPM PLUS OUTDOOR PPM.
    D. DURING HOURS OF EXPECTED OCCUPANCY, CONTROLS MAINTAIN THE SYSTEM VENTILATION RATE.
26. EACH COOLING FAN SYSTEM THAT HAS A DESIGN MECHANICAL COOLING CAPACITY OVER 54,000 BTU/H SHALL HAVE AN AIR ECONOMIZER OR A WATER ECONOMIZER. AIR ECONOMIZERS MUST COMPLY WITH THE HIGH LIMIT SHUTOFF CONTROLS SHOWN IN TABLE 140.4-B.
27. INTEGRATED ECONOMIZER CONTROLS SHALL BE SET UP SUCH THAT PARTIAL COOLING IS PROVIDED BY THE ECONOMIZER EVEN WHEN ADDITIONAL MECHANICAL COOLING ID REQUIRED.
28. ECONOMIZER DAMPERS SHALL BE DRIVEN BY DIRECT DRIVE ACTUATORS RATHER THAN ROD LINKAGES, WHICH CAN BE A MAJOR CAUSE OF ECONOMIZER MALFUNCTION.
29. BAROMETRIC RELIEF IS USED, IF POSSIBLE. IF NOT, RELIEF FANS (RATHER THAN RETURN FANS) SHALL BE USED IN MOST CASES.
30. OUTDOOR AND RETURN AIR SENSORS SHALL BE PROPERLY SELECTED, PROPERLY LOCATED TO PROVIDE ACCURATE AND REPEATABLE MEASUREMENTS FOR CONTROLLING ECONOMIZER OPERATION. AVERAGING SENSORS COVER THE ENTIRE DUCT OR COIL FACE AREAS.
31. ALL AIR DISTRIBUTION SYSTEM DUCTS AND PLENUMS MUST BE INSTALLED, SEALED AND INSULATED AS REQUIRED BY 120.4(A).
32. DUCT SEALING LEAKAGE RATES SHALL BE NO MORE THAN 6% OF AIR FLOW FOR NEW DUCT SYSTEMS AND NO MORE THAN 15% OF AIR FLOW FOR ALTERED EXISTING DUCT SYSTEMS.
33. DUCT SHALL UTILIZE LOW STATIC PRESSURE DESIGN. IDENTIFY THE MOST RESTRICTIVE BRANCH FROM THE FAN TO THE LAST AIR TERMINAL UNIT. IDENTIFY POSSIBLE MEANS OF SIGNIFICANTLY REDUCING THE PRESSURE DROP. BRANCH DUCT SYSTEMS SHALL DESIGNED FOR EQUAL PRESSURE DROP, WHEN POSSIBLE.
34. DUCT BRANCHES WITH SIGNIFICANTLY DIFFERING STATIC PRESSURE REQUIREMENTS SHALL HAVE VOLUME CONTROL STRATEGICALLY PLACED TO AID IN TAB WORK.
35. FAN SHALL DISCHARGE INTO DUCT SECTIONS THAT REMAIN STRAIGHT FOR AS LONG AS POSSIBLE (IDEALLY 10 DUCT DIAMETERS) TO REDUCE FAN INEFFICIENCIES FROM SYSTEM EFFECTS.
36. DUCT VELOCITIES SHALL GENERALLY BE BELOW 2,000 FPM FOR DUCTS IN CEILING PLENUMS, 1500 FPM FOR EXPOSED DUCTS AND 3500 FPM IN MECHANICAL ROOMS AND NON-NOISE SENSITIVE SHAFTS AND DO NOT REDUCE ANY DUCT SIZES LISTED ON PLANS.
37. DUCT FRICTION RATES SHALL GENERALLY BE LESS THAN 0.25" WC PER 100 LINEAL FEET NEARER THE FAN, 0.15 TO 0.20" IN THE MAIN DUCTS AND 0.08 TO 0.12" WC/100' NEARER THE END OF THE SYSTEM. DESIGNS OVER THESE RATES SHALL BE QUESTIONED. VERY ENERGY EFFICIENT DESIGN CAN LOWER THESE VALUES BY UP TO 40%.
38. CONTRACTOR SHOP DRAWINGS SHALL BE SUFFICIENTLY DETAILED TO ENSURE THAT DISTRIBUTION SYSTEM DESIGN INTENT IS ADEQUATELY CONVEYED TO MATCH PLANS. IF SUFFICIENT DETAIL IS NOT INCLUDED IN DRAWINGS, INSTALLATIONS MAY RESULT IN SIGNIFICANTLY HIGHER PRESSURE DROPS AND HENCE HIGHER ENERGY CONSUMPTION AND OTHER OPERATING ISSUES.
39. ACCEPTANCE REQUIREMENTS ARE CLEARLY IDENTIFIED IN CONSTRUCTION DOCUMENTS.
40. COMMISSIONING MEASURES OR REQUIREMENTS ARE REFLECTED IN THE CONSTRUCTION DOCUMENTS.
41. REQUIREMENTS FOR FUNCTIONAL PERFORMANCE TESTS ARE REFLECTED IN THE CONSTRUCTION DOCUMENTS.
42. COOLING SYSTEMS IDENTIFIED IN TABLE 140.4-D SHALL HAVE FAN CONTROLS TO VARY THE INDOOR FAN AIRFLOW AS A FUNCTION OF LOAD:
    A. DX AND CHILLED WATER COOLING SYSTEMS THAT CONTROL CAPACITY BASED ON OCCUPIED SPACE TEMPERATURE SHALL HAVE A MINIMUM OF 2 STAGES OF CONTROL.
    B. SYSTEMS THAT CONTROL SPACE TEMPERATURE BY MODULATING AIRFLOW TO THE SPACE SHALL HAVE PROPORTIONAL FAN CONTROL.
    C. SYSTEMS WITH AIR SIDE ECONOMIZER SHALL HAVE A MINIMUM OF 2 SPEEDS OF FAN CONTROL DURING ECONOMIZER OPERATION.
43. FAN CABINET ENCLOSURE AND INTERNAL COMPONENTS SHALL BE ELECTED TO MINIMIZE PRESSURE DROP, E.G. FACE VELOCITY IS LESS THAN 500 FPM, LOW PRESSURE DROP COILS, FILTERS, ETC.
44. FAN WHEEL SHALL BE SELECTED FOR EFFICIENT OPERATION, E.G. LARGER DIAMETER ROTATING AT LOWER SPEED.
45. SYSTEMS THAT SERVE MULTIPLE ZONES SHALL HAVE CONTROLS THAT AUTOMATICALLY RESET SUPPLY AIR TEMPERATURE. ZONES WITH HIGH INTERNAL LOADS WITH NEAR CONSTANT AIRFLOW SHALL BE DESIGNED FOR THE ELEVATED RESET SUPPLY AIR TEMPERATURE. RESET CONTROLS SHALL BE IN RESPONSE TO BUILDING LOADS OR TO OUTDOOR AIT TEMPERATURE AND SHALL BE AT LEAST 25% OF THE DIFFERENCE BETWEEN SUPPLY AIR AND DESIGN ROOM AIR TEMPERATURE. CONTROL SEQUENCES ARE IDENTIFIED IN CONSTRUCTION DOCUMENTS.
46. SAT RESET SHALL BE ESTABLISHED WITH AN AGGRESSIVE RESET SCHEDULE OF 10F, E.G. 55F DURING WARM WEATHER AND 65F DURING COOL WEATHER.

GENERAL NOTES

1. ALL WORK SHALL COMPLY WITH CURRENT CALIFORNIA CODE OF REGULATIONS TITLE 24, ALL OTHER APPLICABLE CODES AND REGULATIONS, SMACNA AND ASHRAE GUIDELINES, AND LOCAL CODES.
2. ALL HVAC EQUIPMENT SHALL BE COMPLIANT WITH EFFICIENCY STANDARDS PER TITLE-24, PART 6.
3. ALL FRESH AIR INTAKES SHALL BE AT LEAST 10 FEET IN A HORIZONTAL DIRECTION FROM ALL EXHAUST, FLUE, FUEL BURNING APPLIANCE AND PLUMBING VENT OUITLETS. FOR GAS/ELECTRIC AIR CONDITIONING UNITS WHERE THE CODE REQUIRED CLEARANCES ARE NOT MET, A FACTORY FLUE GAS DEFLECTOR AND EXTENSION SHALL BE USED TO MINIMIZE THESE CLEARANCES. CONTRACTOR SHALL DETERMINE LOCATIONS WHERE REQUIRED PRIOR TO BID. THIS SHALL BE PROVIDED AT NO ADDITIONAL COST TO THE OWNER.
4. AIR FILTERS SHALL BE STATE FIRE MARSHAL APPROVED AND LISTED. PREFORMED FILTERS HAVING COMBUSTIBLE FRAMING SHALL BE TESTED AS A COMPLETE ASSEMBLY. AIR FILTERS IN ALL OCCUPANCIES SHALL BE PER TITLE-24 PART 6 AND APPLICABLE AGENCY AMENDMENTS. FILTERS SHALL BE ACCESSIBLE
5. REVIEW THESE PLANS AND SPECIFICATIONS PRIOR TO BID. REVIEW PLANS AND SPECIFICATIONS OF OTHER RELATED TRADES INCLUDING ARCHITECTURAL, STRUCTURAL, ELECTRICAL, AND FIRE PROTECTION.
6. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS AS THESE ARE PART OF THE CONTRACT DOCUMENTS. WHERE A CONFLICT OCCURS BETWEEN THIS SPECIFICATION AND OTHER SPECIFICATIONS ISSUED AS A PART OF THE CONTRACT DOCUMENTS, THE MORE STRINGENT REQUIREMENT SUPERCEDES.
7. THESE DRAWINGS ARE DIAGRAMMATIC ONLY AND NOT INTENDED TO INDICATE ALL REQUIRED OFFSETS, BENDS, ELBOWS, TRANSITIONS, FITTINGS AS REQUIRED TO CONFORM TO THE BUILDING STRUCTURE, CLEARANCE INSIDE CEILINGS, AVOIDANCE OF OBSTRUCTIONS, AND MAINTAINING HEAD CLEARANCE.
8. COORDINATE INSTALLATION WITH ALL OTHER TRADES PRIOR TO INSTALLATION OF EQUIPMENT OR MATERIALS, INCLUDING BUT NOT LIMITED TO, STRUCTURAL, ARCHITECTURAL, ELECTRICAL, AND PLUMBING.
9. COORDINATE THE LOCATIONS OF ALL CEILING DIFFUSERS, REGISTERS, AND GRILLES WITH THE ARCHITECTURAL REFLECTIVE CEILING PLANS, ELECTRICAL LIGHTING LAYOUT, AND ARCHITECTURAL ROOM ELEVATIONS. THE ARCHITECT AND ENGINEER SHALL BE IMMEDIATELY NOTIFIED OF ANY CONFLICTS PRIOR TO FABRICATION AND INSTALLATION.
10. COORDINATE THE LOCATION OF ALL ROOF OPENINGS AND THE LOCATIONS OF ALL ROOF MOUNTED EQUIPMENT WITH THE STRUCTURAL AND ARCHITECTURAL WEIGHTS FOR PLATFORM AND CURB SIZES. FOR ROOF AND WALL PENETRATION DETAILS AND REQUIREMENTS, SEE ARCHITECTURAL AND STRUCTURAL DRAWINGS. REQUIRED PLATFORMS AND FLASHINGS FOR MECHANICAL EQUIPMENT SHALL BE AS INDICATED ON THE STRUCTURAL AND ARCHITECTURAL PLANS, UNLESS NOTED OTHERWISE.
11. HIRE A TEST AND BALANCE AGENCY TO PERFORM THE TESTING PROCEDURES, REQUIRED BY THE MECH-2A THROUGH MECH-11A CERTIFICATE OF ACCEPTANCE FORMS, AS APPLICABLE FOR ALL NEWLY INSTALLED HEATING AND COOLING SYSTEMS. THE CONTRACTOR AND TEST AND BALANCE AGENCY ARE RESPONSIBLE FOR OBTAINING THE CERTIFICATE OF ACCEPTANCE FORMS REQUIRED BY THE IOR. THE TEST AND BALANCE AGENCY SHALL BE WELL VERSED WITH ALL THE REQUIREMENTS OF THESE CERTIFICATE OF ACCEPTANCE FORMS, AND SHALL COORDINATE AND WORK WITH THE EQUIPMENT AND CONTROLS INSTALLERS TO COMPLY WITH THESE REQUIREMENTS IN A TIMELY MANNER WITHIN THE PROJECT SCHEDULE. THE AIR BALANCE CONTRACTOR SHALL BE A MEMBER OF AABC (ASSOCIATED AIR BALANCE COUNCIL).
12. PAINT ALL EXPOSED DUCTWORK, DUCT SUPPORTS, ACCESSORIES, REGISTERS, GRILLES, DIFFUSERS, AND APPURTENANCES, WHETHER OR NOT COLORS ARE DESIGNATED IN SCHEDULES, EXCEPT WHERE A SURFACE OR MATERIAL IS SPECIFICALLY INDICATED NOT TO BE PAINTED OR IS TO REMAIN NATURAL. WHERE AN ITEM OR SURFACE IS NOT SPECIFICALLY MENTIONED, PAINT THE SAME AS SIMILAR ADJACENT MATERIALS OR SURFACES. IF COLOR OR FINISH IS NOT DESIGNATED, THE ARCHITECT WILL SELECT FROM STANDARD COLORS OR FINISHES AVAILABLE. PAINTING INCLUDES FIELD PAINTING EXPOSED BARE AND COVERED PIPES AND DUCTS (INCLUDING COLOR CODING), HANGERS, EXPOSED STEEL AND IRON WORK, AND PRIMED METAL SURFACES OF MECHANICAL EQUIPMENT.
13. PROVIDE ALL LABOR, MATERIAL, INSURANCE, EQUIPMENT, INSTALLATION, CONSTRUCTION TOOLS, TRANSPORTATION, AND OTHER WORK AS REQUIRED. FOR A COMPLETE AND PROPERLY OPERATING MECHANICAL SYSTEM.
14. ALL MATERIALS SHALL BE NEW AND OF THE SAME MANUFACTURER FOR EACH CLASS OR GROUP OF EQUIPMENT. EQUIPMENT SHALL BE LISTED AND APPROVED BY UNDERWRITER'S LABORATORIES, AND SHALL BEAR THE INSPECTION LABEL WHERE SUBJECT TO SUCH APPROVAL. MATERIALS SHALL MEET WITH THE APPROVAL OF THE GOVERNING BODIES HAVING JURISDICTION. MATERIALS SHALL BE MANUFACTURED AND INSTALLED IN ACCORDANCE WITH APPLICABLE STANDARDS ESTABLISHED BY THE LATEST EDITION OF CMC, CBC U.L., SMACNA AND ASHRAE GUIDELINES. INSTALL PER MANUFACTURERS' RECOMMENDATIONS, AND INSTALLATION INSTRUCTIONS.
15. OBTAIN AND PAY FOR ALL NECESSARY BUILDING PERMITS AND VARIANCES. COORDINATE TEMPORARY CONSTRUCTION REQUIREMENTS WITH ALL TRADES PRIOR TO CONSTRUCTION. INCLUDE ALL COSTS IN THE BID.
16. IF THE CONTRACTOR PROPOSES ALTERNATE EQUIPMENT OR MATERIAL, THE CONTRACTOR SHALL BE RESPONSIBLE TO OBTAIN ALL DSA APPROVALS, PAY ALL RELATED FEES AND OBTAIN APPROVAL FROM OWNER & ENGINEER OF RECORD. PROVIDE TITLE-24 COMPLIANCE CERTIFICATION AND ALL ASSOCIATED FEES REQUIRED. COORDINATE SUBMITTED EQUIPMENT WITH OTHER TRADES. INCLUDE IN THE SHOP DRAWINGS THE EQUIPMENT SUBMITTED FOR APPROVAL WITH A DIFFERENT PHYSICAL SIZE OR ARRANGEMENT FROM THAT SHOWN.
17. PROVIDE SHOP DRAWINGS PER PROJECT SCHEDULE. SEE 23 00 00 SPECIFICATIONS FOR REQUIREMENTS. IF SHOP DRAWINGS ARE NOT PROVIDED TO THE ENGINEER FOR REVIEW, AND ANY CONFLICTS OCCUR BETWEEN TRADES, DURING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WORK NECESSARY TO RESOLVE THE CONFLICT AND BEAR ALL COSTS INCURRED FOR ALL REVISIONS, AT NO ADDITIONAL COST TO THE DISTRICT. THE DISTRICT AND ENGINEER SHALL BE NOTIFIED IMMEDIATELY PRIOR TO FABRICATION AND INSTALLATION OF ALL WORK THAT CAUSES CONFLICTS BETWEEN TRADES.
18. PROVIDE ALL MANUFACTURER'S PRODUCT DATA CLEARLY INDICATING MODEL NUMBERS, CAPACITIES, CONSTRUCTION, ELECTRICAL INFORMATION, AND OPTIONAL ACCESSORIES, PER PROJECT SCHEDULE AND PRIOR TO THE START OF WORK. THESE SHALL BE REVIEWED BY THE MECHANICAL ENGINEER PRIOR TO PURCHASING.
19. SUBMIT TO THE OWNER ALL BROCHURES, OPERATING MANUALS, CATALOGS, SHOP DRAWINGS, "AS-BUILTS", ETC. AT THE COMPLETION OF THE JOB. PROVIDE THE OWNER WITH COMPLETE MECHANICAL "AS-BUILTS" INDICATING FINAL EQUIPMENT LOCATIONS, DUCTWORK AND PIPE ROUTING, ETC.
20. OBTAIN APPROVAL FROM THE OWNER ON ALL ADDENDA AND CONSTRUCTION CHANGE DOCUMENT (CCD) PRIOR TO DOING THE WORK.
21. INSTALL ALL EQUIPMENT, ACCESSORIES, AND MATERIAL IN STRICT ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS AND RECOMMENDATIONS.
22. PROVIDE FIRESTOPPING FOR PIPE AND DUCT PENETRATIONS THROUGH RATED WALLS. CONTRACTOR SHALL COORDINATE WITH OTHER TRADES AS NECESSARY PRIOR TO INSTALLATION.
23. ANY MATERIAL EXPOSED WITHIN A PLENUM OR DUCT MUST HAVE A FLAME SPREAD INDEX OF NOT MORE THAN 25, AND A SMOKE DEVELOPED RATING OF NOT MORE THAN 50, AND A MOLD/HUMIDITY RESISTANCE PER U.L. 181.
24. ALL EQUIPMENT, DUCTS, PIPING, AND OTHER DEVICES AND MATERIALS OUTSIDE OF THE BUILDING OR OTHERWISE EXPOSED TO THE WEATHER SHALL BE COMPLETELY WEATHERPROOFED.
25. LOCATE ALL EQUIPMENT SUCH THAT CODE REQUIRED ACCESS IS MAINTAINED, INCLUDING N.E.C. REQUIREMENTS. ACCESS PANELS WHERE REQUIRED, SHALL BE COORDINATED WITH ARCHITECT, AND PROVIDED BY FACTORY OR BE FIELD-PROVIDED. FOR ATTIC EQUIPMENT, G.C. TO PROVIDE A CATWALK & LIGHT PER CMC FOR ATTIC EQUIPMENT.
26. FOR ACCESSIBLE AREAS THE CONTRACTOR SHALL PROVIDE ACCESS PANELS FOR ALL DAMPERS, EQUIPMENT, SMOKE DETECTORS, AND CONTROL DEVICES. THESE PANELS SHALL MATCH THE RATING OF THE WALL AND/OR CEILING WHERE THEY ARE LOCATED IN. MINIMUM ACCESS PANEL SIZES SHALL BE AS FOLLOWS:
    1) HAND ACCESS: 12"x12" MIN.
    2) BODY ACCESS: 30"x30" MIN.
27. ALL EQUIPMENT WITH MOVING PARTS SHALL BE PROVIDED WITH FLEXIBLE DUCT AND PIPE CONNECTIONS.
28. LABEL ALL EQUIPMENT AS TO THE SPACE IT SERVES. SEE SPECIFICATIONS FOR IDENTIFICATION STANDARDS. LABEL DUCT SMOKE DETECTOR LOCATIONS (AT CEILING) AS TO THE EQUIPMENT IT SERVES.
29. A/C UNITS PROVIDED WITH ECONOMIZER CYCLE DAMPERS SHALL HAVE OSA DAMPERS SET UP TO CLOSE AUTOMATICALLY ON FAN SHUT DOWN.
30. PROVIDE MANUAL VOLUME DAMPERS AND BACKDRAFT DAMPERS FOR FRESH AIR INTAKES ON ALL AIR HANDLING EQUIPMENT AND EXHAUST FANS SERVING CONDITIONED SPACES. EXCEPTION: EQUIPMENT WITH FACTORY-ECONOMIZERS.
31. DRAWINGS ARE FOR REFERENCE ONLY. CONTRACTOR TO FIELD VERIFY EXISTING CONDITION PRIOR TO BID DATE.
32. OWNER RETAINS SALVAGE RIGHTS, PROVIDE A MINIMUM OF 72 HOURS NOTICE PRIOR TO REMOVAL OF ROOF TOP UNITS AND EXHAUST FANS.
33. PATCH AND SEAL ALL SLAB, ROOF AND WALL OPENINGS WITH LIKE MATERIAL WHERE MECHANICAL EQUIPMENT ONCE PENETRATED.
34. REMOVE EXISTING AND PROVIDE ALL NEW DUCT AND PIPE HANGER SUPPORTS WHERE DUCT AND PIPE IS BEING REPLACED.
35. PROVIDE ALL NEW PIPE SUPPORTS WHERE PIPING IS SCHEDULED TO BE REPLACED.
36. OUTDOOR REFRIGERANT PIPING TO BE INSULATED AND ALUMINUM WRAPPED.
37. CONTRACTOR IS RESPONSIBLE FOR COMPLETE AND OPERABLE SYSTEM.
38. ALL MECHANICAL EQUIPMENTS, PIPES AND DUCTS SHALL BE SUPPORTED AND BRACED PER THE CURRENT CALIFORNIA BUILDING CODE. ALL MECHANICAL COMPONENTS SHALL BE ABLE TO RESIST THE EFFECTS OF SEISMIC FORCES.
39. MECHANICAL WORK SHALL COMPLY WITH ALL FEDERAL, STATE, AND LOCAL CODES AND REGULATIONS.
40. CONTRACTOR SHALL PROTECT EXISTING BUILDING INFRASTRUCTURE DURING CONSTRUCTION FROM OUTDOOR ELEMENT. IF DAMAGED, CONTRACTOR SHALL REPLACE DAMAGED BUILDING COMPONENTS WITH NEW AT NO ADDITIONAL COST TO THE OWNER.
41. ALL DUCTWORK SHALL BE FABRICATED AND INSTALLED IN ACCORDANCE WITH THE LATEST EDITION OF THE SMACNA LOW PRESSURE DUCT CONSTRUCTION STANDARDS.
42. ALL DUCT JOINTS SHALL BE MADE WITH MASTIC SEALANT, SHEET METAL SCREWS AND TAPED AIR TIGHT WITH HARDCAST OR EQUIV., MINIMUM 2-1/2" WIDTH.
43. WHERE BRACING DETAILS ARE NOT SHOWN ON THE DRAWINGS OR IN THE GUIDELINES, THE FIELD INSTALLATION SHALL BE SUBJECT TO THE APPROVAL OF THE ARCHITECT, MECHANICAL ENGINEER AND DSA FIELD ENGINEER.
44. A COPY OF THE GUIDELINES PUBLISHED BY SMACNA AND APPROVED BY DSA SHALL BE PROVIDED BY THE CONTRACTOR AND KEPT ON THE JOB AT ALL TIMES.
45. CONTRACTOR SHALL COORDINATE ALL DUCTWORK ROUTING WITH WORK OF OTHER TRADES AND MAKE ANY OFFSET AS REQUIRED TO AVOID CONFLICT WITH PIPING, LIGHT FIXTURES, TRUSSES, ETC.
46. COORDINATE ALL EQUIPMENT VOLTAGES WITH ELECTRICAL PRIOR TO ORDERING ANY EQUIPMENT.

MEP COMPONENT ANCHORAGE NOTE

ALL MECHANICAL, PLUMBING AND ELECTRICAL COMPONENTS SHALL BE ANCHORED AND INSTALLED PER THE DETAILS ON THE DSA APPROVED CONSTRUCTION DOCUMENTS. THE FOLLOWING COMPONENTS SHALL BE ANCHORED OR BRACED TO MEET THE FORCE AND DISPLACEMENT REQUIREMENTS PRESCRIBED IN THE 2022 CBC, SECTIONS 1617A.1.18 THROUGH 1617A.1.26 AND ASCE 7-16 CHAPTER 13, 26 AND 30:

1. ALL PERMANENT EQUIPMENT AND COMPONENTS.
2. TEMPORARY, MOVABLE OR MOBILE EQUIPMENT THAT IS PERMANENTLY ATTACHED (e.g. HARD WIRED) TO THE BUILDING UTILITY SERVICES SUCH AS ELECTRIC, GAS OR WATER. "PERMANENTLY ATTACHED" SHALL INCLUDE ALL ELECTRICAL CONNECTIONS EXCEPT PLUGS FOR 110/220 VOLT RECEPTACLES HAVING A FLEXIBLE CABLE.
3. TEMPORARY, MOVABLE OR MOBILE EQUIPMENT WHICH IS HEAVIER THAN 400 POUNDS OR HAS A CENTER OF MASS LOCATED 4 FEET OR MORE ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENT IS REQUIRED TO BE RESTRAINED IN A MANNER APPROVED BY DSA.

THE FOLLOWING MECHANICAL AND ELECTRICAL COMPONENTS SHALL BE POSITIVELY ATTACHED TO THE STRUCTURE BUT NEED NOT DEMONSTRATE DESIGN COMPLIANCE WITH THE REFERENCES NOTED ABOVE. THESE COMPONENTS SHALL HAVE FLEXIBLE CONNECTIONS PROVIDED BETWEEN THE COMPONENT AND ASSOCIATED DUCTWORK, PIPING, AND CONDUIT. FLEXIBLE CONNECTIONS MUST ALLOW MOVEMENT IN BOTH TRANSVERSE AND LONGITUDINAL DIRECTIONS:

1. COMPONENTS WEIGHING LESS THAN 400 POUNDS AND HAVE A CENTER OF MASS LOCATED 4 FEET OR LESS ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENT.
2. COMPONENTS WEIGHING LESS THAN 20 POUNDS, OR IN THE CASE OF DISTRIBUTED SYSTEMS, LESS THAN 5 POUND PER FOOT, WHICH ARE SUSPENDED FROM A ROOF OR FLOOR OR HUNG FROM A WALL.

THE ANCHORAGE OF ALL MECHANICAL, ELECTRICAL AND PLUMBING COMPONENTS SHALL BE SUBJECT TO THE APPROVAL OF THE DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE OR STRUCTURAL ENGINEER DELEGATED RESPONSIBILITY AND ACCEPTANCE BY DSA. THE PROJECT INSPECTOR WILL VERIFY THAT ALL COMPONENTS AND EQUIPMENT HAVE BEEN ANCHORED IN ACCORDANCE WITH ABOVE REQUIREMENTS.

MEP DISTRIBUTION SYSTEM BRACING NOTES FOR PIPING, DUCTWORK, AND ELECTRICAL CONDUIT

PIPING, DUCTWORK, AND ELECTRICAL DISTRIBUTION SYSTEMS SHALL BE BRACED TO COMPLY WITH THE FORCES AND DISPLACEMENTS PRESCRIBED IN ASCE 7-16 SECTION 13.3 AS DEFINED IN ASCE 7-16 SECTION 13.6.5, 13.6.6, 13.6.7, 13.6.8, AND 2022 CBC, SECTION 1617A.1.24, 1617A.1.25, AND 1617A.1.26.

THE METHOD OF SHOWING BRACING AND ATTACHMENTS TO THE STRUCTURE FOR THE IDENTIFIED DISTRIBUTION SYSTEM ARE AS NOTED BELOW AND SHALL BE IN ACCORDINANCE WITH DSA IR 16-13. THE MEP DESIGN PROFESSIONALENGINEER RESPONSIBLE FOR CONTENT ON THESE SHEETS HAS VERIFIED THAT THE DESIGN METHODS IDENTIFIED BELOW ARE IN ACCORDANCE WITH DSA IR 16-13.

MECHANICAL PIPING (MP), MECHANICAL DUCTS (MD), PLUMBING PIPING (PP), ELECTRICAL DISTRIBUTION SYSTEMS (E):

MP☐ MD☒ PP☐ E☐ OPTION 1: PROJECT-SPECIFIC DESIGN

MP☐ MD☐ PP☐ E☐ OPTION 2: DESIGN BASED ON OSHPD OPM, WITHIN PROJECT SUBMITTAL

MP☐ MD☐ PP☐ E☐ OPTION 3: DESIGN BASED ON OSHPD OPM, DEFERRED SUBMITTAL

CAL GREEN NOTES

1. TESTING AND ADJUSTING. TESTING AND ADJUSTING OF SYSTEMS SHALL BE REQUIRED FOR NEW BUILDING LESS THAN 10,000 SQUARE FEET OR NEW SYSTEMS TO SERVE AN ADDITION OR ALTERATION SUBJECT TO SECTION 303.1

2. SYSTEMS. DEVELOP A WRITTEN PLAN OF PROCEDURES FOR

STATE OF CALIFORNIA
Mechanical Systems
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-MCH-E
This document is used to demonstrate compliance for mechanical systems that are within the scope of the permit application and are demonstrating compliance using the prescriptive path outlined in 140.4, or 141.0(b)2 for alterations.	
Project Name: schroader ES HVAC Upgrade & Modernizaton	**Report Page:** (Page 1 of 34)
Project Address: 15151 Columbia Ln., Huntington Beach, CA 92647	**Date Prepared:** 2025-11-12T20:25:55-05:00

A. GENERAL INFORMATION

01	Project Location (city)	Huntington Beach	04	Total Conditioned Floor Area	16300
02	Climate Zone	6	05	Total Unconditioned Floor Area	0
03	Occupancy Types Within Project:		06	# of Stories (Habitable Above Grade)	1

● Classroom ● Library ● Office ● School or Classroom

B. PROJECT SCOPE

This table includes mechanical systems or components that are within the scope of the permit application and are demonstrating compliance using the prescriptive path outlined in 140.4, 170.2(b) or 141.0(b)2 and 180.2(b)2 for alterations.

01	02	03
Air System(s)	Wet System Components	Dry System Components
☒ Heating Air System	☐ Water Economizer	☐ Air Economizer
☒ Cooling Air System	☐ Pumps	☐ Electric Resistance Heat
Mechanical Controls	☐ System Piping	☒ Fan Systems
☒ Mechanical Controls (existing to remain, altered or new)	☐ Cooling Towers	☒ Ductwork (existing to remain, altered or new)
	☐ Chillers	☒ Ventilation
	☐ Boilers	☐ Zonal Systems/ Terminal Boxes

STATE OF CALIFORNIA
Mechanical Systems
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-MCH-E
Project Name: schroader ES HVAC Upgrade & Modernizaton	**Report Page:** (Page 2 of 34)
	Date Prepared: 2025-11-12T20:25:55-05:00

C. COMPLIANCE RESULTS

Table C will indicate if the project data input into the compliance document is compliant with mechanical requirements. This table is not editable by the user. If this table says "DOES NOT COMPLY" or "COMPLIES with Exceptional Conditions" refer to Table D., or the table indicated as not compliant for guidance.

01		02		03		04		05		06		07		08	09
System Summary 110.1, 110.2, 140.4, 170.2(c)	AND	Pumps 140.4(k), 170.2(c)4I	AND	Fans/ Economizers 140.4(c), 140.4(e), 170.2(c)	AND	System Controls 110.2, 120.2, 140.4(f), 170.2(c)	AND	Ventilation 120.1, 160.2	AND	Terminal Box Controls 140.4(d), 170.2(c)4B	AND	Distribution 120.3, 140.4(l), 160.2, 160.3	AND	Cooling Towers 110.2(e)2	Compliance Results
(See Table F)		(See Table G)		(See Table H)		(See Table I)		(See Table J)		(See Table K)		(See Table L)		(See Table M)	
Yes	AND		AND	Yes	AND	Yes	AND	Yes	AND		AND	Yes	AND		COMPLIES with Exceptional Conditions
Mandatory Measures Compliance (See Table Q for Details)															COMPLIES

D. EXCEPTIONAL CONDITIONS

This table is auto-filled with uneditable comments because of selections made or data entered in tables throughout the form.

The permit applicant has indicated on Table J that ventilation calculations have been attached or included elsewhere on the plans.

E. ADDITIONAL REMARKS

This table includes remarks made by the permit applicant to the Authority Having Jurisdiction.

F. HVAC SYSTEM SUMMARY (DRY & WET SYSTEMS)

Space Conditioning System Information

01	02	03	04	05	06
System Name	Quantity	System Serving	System Status	Space Type	Utilizing Recovered Heat
HP-ADM-1	1	Multi-zone			☐

STATE OF CALIFORNIA
Mechanical Systems
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-MCH-E
Project Name: schroader ES HVAC Upgrade & Modernizaton	**Report Page:** (Page 3 of 34)
	Date Prepared: 2025-11-12T20:25:55-05:00

F. HVAC SYSTEM SUMMARY (DRY & WET SYSTEMS)

Space Conditioning System Information

01	02	03	04	05	06
System Name	Quantity	System Serving	System Status	Space Type	Utilizing Recovered Heat
HP-A-1	1	Multi-zone			☐
HP-B-1	1	Multi-zone			☐
HP-C-1	1	Multi-zone			☐
HP-D-1	1	Multi-zone			☐
HP-K1-1	1	Single zone	New/ Addition	School or Classroom	☒

Dry System Equipment Sizing (includes air conditioners, condensers, heat pumps, VRF, furnaces and unit heaters and DOAS systems)

01	02	03	04	05	06	07	08	09	10	11
Name or Item Tag	Equipment Category per Tables 110.2, 140.4(a)2 and 170.2(c)3aii	Equipment Type per Tables 110.2 and Title 20	Smallest Size Available [1] 140.4(a) and 170.2(c)1	Equipment Sizing per Mechanical Schedule (kBtu/h) 140.4(a&b), 170.2(c)1 & 170.2(c)2						
				Heating Output [2,3]			Cooling Output [2,3]		Load Calculations [3,4]	
				Per Design (kBtu/h)	Rated (kBtu/h)	Supp. Heating Output (kBtu/h)	Sensible Per Design (kBtu/h)	Rated (kBtu/h)	Total Heating Load (kBtu/h)	Total Sensible Cooling Load (kBtu/h)
HP-ADM-1	Variable Refrigerant Flow	VRF heat pump, air cooled	Yes	108,000	108,000	0	96,000	96,000	62000	85,200
HP-A-1	Variable Refrigerant Flow (with heat recovery)		Yes	297,000	297,000	0	264,000	264,000	149700	196,300
HP-B-1	Variable Refrigerant Flow (with heat recovery)		Yes	270,000	270,000	0	240,000	240,000	151700	196,400
HP-C-1	Variable Refrigerant Flow (with heat recovery)		Yes	270,000	270,000	0	240,000	240,000	145800	195,600
HP-D-1	Variable Refrigerant Flow (with heat recovery)		Yes	216,000	216,000	0	192,000	192,000	110900	144,700
HP-K1-1	Variable Refrigerant Flow (with heat recovery)		Yes	57,130	58,000	0	75,700	75,700	52500	69,300

STATE OF CALIFORNIA
Mechanical Systems
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-MCH-E
Project Name: schroader ES HVAC Upgrade & Modernizaton	**Report Page:** (Page 4 of 34)
	Date Prepared: 2025-11-12T20:25:55-05:00

F. HVAC SYSTEM SUMMARY (DRY & WET SYSTEMS)

Dry System Equipment Sizing (includes air conditioners, condensers, heat pumps, VRF, furnaces and unit heaters and DOAS systems)

01	02	03	04	05	06	07	08	09	10	11

[1] *FOOTNOTES: Equipment shall be the smallest size, within the available options of the desired equipment line, necessary to meet the design heating and cooling loads of the building per 140.4(a) and 170.2(c)1. Healthcare facilities are excepted.*
[2] *It is common practice to show rated output capacity on the equipment schedule. Sensible cooling output comes from specification sheet tables.*
[3] *If equipment is heating only, leave cooling output and load blank. If equipment is cooling only, leave heating output and load blank.*
[4] *Authority Having Jurisdiction may ask for load calculations used for compliance per 140.4(b) and 170.2(c).*

Dry System Equipment Efficiency (other than Package Terminal Air Conditioners (PTAC) and Package Terminal Heat Pumps (PTHP), DX-DOAS and Dual Fuel Heat Pumps)

01	02	03	04	05	06	07	08	09
		Heating Mode				Cooling Mode		
Name or Item Tag	Size Category (Btu/h)	Rating Condition (°F)	Efficiency Unit	Minimum Efficiency Required per Tables 110.2 / Title 20	Design Efficiency	Efficiency Unit	Minimum Efficiency Required per Tables 110.2 / Title 20	Design Efficiency
HP-ADM-1	>=65,000 and <135,000	47°Fdb/ 43°Fwb OSA	COP	3.3	3.83	EER IEER	11 14.6	12 15
HP-A-1		47°Fdb/ 43°Fwb OSA	COP		3.82	EER IEER	9.3 12.5	10.3 13
HP-B-1		47°Fdb/ 43°Fwb OSA	COP		3.88	EER IEER	9.3 12.5	11.2 13
HP-C-1		47°Fdb/ 43°Fwb OSA	COP		3.88	EER IEER	9.3 12.5	11.2 13
HP-D-1		47°Fdb/ 43°Fwb OSA	COP		4	EER IEER	10.4 13.7	11.3 14
HP-K1-1		47°Fdb/ 43°Fwb OSA	COP		3.4	EER IEER	10.8 14.4	11.7 15

G. PUMPS

This section does not apply to this project.

STATE OF CALIFORNIA
Mechanical Systems
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-MCH-E
Project Name: schroader ES HVAC Upgrade & Modernizaton	**Report Page:** (Page 5 of 34)
	Date Prepared: 2025-11-12T20:25:55-05:00

H. FAN SYSTEMS & AIR ECONOMIZERS

This table is used to demonstrate compliance with prescriptive requirements found in 140.4(c), 140.4(e), 140.4(m), 170.2(c)3, and 170.2(c)4A for fan systems. Fan systems serving only process loads are exempt from these requirements and do not need to be included in Table H.

System Name	FA-ADM-1	Quantity	1	Fan System Status	New	System Zoning	all other systems	Serving Dwelling Units	Not Serving Dwelling Units	Fan System Airflow (cfm)	668	Site Elevation	40	Economizer	NA: Efficiency per Table 140.4-F
01	02	03	04			05		06	07	08	09			10	11
Fan Name or Item Tag	Fan Type	Qty	Component			Airflow through Component (%)		Water Gauge (w.g)	Allowance: Component Allowance (watt/cfm)	Allowance: Fan Allowance (watt/cfm)[3]	Design: Design Electrical Input Power Method		Design: Motor Nameplate Horsepower		Design: Fan Electrical Input Power (kW)
FC-ADM-1	Supply	1	Hydronic/DX cooling coil or heat pump coil			100			0.139	0.324	Manufacturer provided				0.11
			Electric heat			100			0.046						
			Energy Recovery 0.50 <= ERR > 0.55			100			0.139						
Supply Fan Base Allowance (watt/cfm)			Exhaust/Return/Relief/Transfer Fan Base Allowance(watt/cfm)						Fan System Allowance (kW)[3]				Fan System Electrical Input Power (kW)		0.11

STATE OF CALIFORNIA
Mechanical Systems
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-MCH-E
Project Name: schroader ES HVAC Upgrade & Modernizaton	**Report Page:** (Page 6 of 34)
	Date Prepared: 2025-11-12T20:25:55-05:00

H. FAN SYSTEMS & AIR ECONOMIZERS

System Name	FC-ADM-2	Quantity	1	Fan System Status	New	System Zoning	all other systems	Serving Dwelling Units	Not Serving Dwelling Units	Fan System Airflow (cfm)	668	Site Elevation	40	Economizer	NA: Efficiency per Table 140.4-F
01	02	03	04			05		06	07	08	09			10	11
Fan Name or Item Tag	Fan Type	Qty	Component			Airflow through Component (%)		Water Gauge (w.g)	Allowance: Component Allowance (watt/cfm)	Allowance: Fan Allowance (watt/cfm)[3]	Design: Design Electrical Input Power Method		Design: Motor Nameplate Horsepower		Design: Fan Electrical Input Power (kW)
FC-ADM-2	Supply	1	Hydronic/DX cooling coil or heat pump coil			100			0.139	0.324	Manufacturer provided				0.11
			Electric heat			100			0.046						
			Energy Recovery 0.50 <= ERR > 0.55			100			0.139						
Supply Fan Base Allowance (watt/cfm)			Exhaust/Return/Relief/Transfer Fan Base Allowance(watt/cfm)						Fan System Allowance (kW)[3]				Fan System Electrical Input Power (kW)		0.11

STATE OF CALIFORNIA
Mechanical Systems
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-MCH-E
Project Name: schroader ES HVAC Upgrade & Modernizaton	**Report Page:** (Page 7 of 34)
	Date Prepared: 2025-11-12T20:25:55-05:00

H. FAN SYSTEMS & AIR ECONOMIZERS

System Name	FC-ADM-3	Quantity	1	Fan System Status	New	System Zoning	all other systems	Serving Dwelling Units	Not Serving Dwelling Units	Fan System Airflow (cfm)	424	Site Elevation	40	Economizer	NA: Efficiency per Table 140.4-F
01	02	03	04			05		06	07	08	09			10	11
Fan Name or Item Tag	Fan Type	Qty	Component			Airflow through Component (%)		Water Gauge (w.g)	Allowance: Component Allowance (watt/cfm)	Allowance: Fan Allowance (watt/cfm)[3]	Design: Design Electrical Input Power Method		Design: Motor Nameplate Horsepower		Design: Fan Electrical Input Power (kW)
FC-ADM-3	Supply	1	Hydronic/DX cooling coil or heat pump coil			100			0.139	0.324	Manufacturer provided				0.07
			Electric heat			100			0.046						
			Energy Recovery 0.50 <= ERR > 0.55			100			0.139						
Supply Fan Base Allowance (watt/cfm)			Exhaust/Return/Relief/Transfer Fan Base Allowance(watt/cfm)						Fan System Allowance (kW)[3]				Fan System Electrical Input Power (kW)		0.07

STATE OF CALIFORNIA
Mechanical Systems
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-MCH-E
Project Name: schroader ES HVAC Upgrade & Modernizaton	**Report Page:** (Page 8 of 34)
	Date Prepared: 2025-11-12T20:25:55-05:00

H. FAN SYSTEMS & AIR ECONOMIZERS

System Name	FC-ADM-4	Quantity	1	Fan System Status	New	System Zoning	all other systems	Serving Dwelling Units	Not Serving Dwelling Units	Fan System Airflow (cfm)	668	Site Elevation	40	Economizer	NA: Efficiency per Table 140.4-F
01	02	03	04			05		06	07	08	09			10	11
Fan Name or Item Tag	Fan Type	Qty	Component			Airflow through Component (%)		Water Gauge (w.g)	Allowance: Component Allowance (watt/cfm)	Allowance: Fan Allowance (watt/cfm)[3]	Design: Design Electrical Input Power Method		Design: Motor Nameplate Horsepower		Design: Fan Electrical Input Power (kW)
FC-ADM-4	Supply	1	Hydronic/DX cooling coil or heat pump coil			100			0.139	0.324	Manufacturer provided				0.11
			Electric heat			100			0.046						
			Energy Recovery 0.50 <= ERR > 0.55			100			0.139						
Supply Fan Base Allowance (watt/cfm)			Exhaust/Return/Relief/Transfer Fan Base Allowance(watt/cfm)						Fan System Allowance (kW)[3]				Fan System Electrical Input Power (kW)		0.11

STATE OF CALIFORNIA
Mechanical Systems
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-MCH-E
Project Name: schroader ES HVAC Upgrade & Modernizaton	**Report Page:** (Page 9 of 34)
	Date Prepared: 2025-11-12T20:25:55-05:00

H. FAN SYSTEMS & AIR ECONOMIZERS

System Name	FC-ADM-5	Quantity	1	Fan System Status	New	System Zoning	all other systems	Serving Dwelling Units	Not Serving Dwelling Units	Fan System Airflow (cfm)	923	Site Elevation	40	Economizer	NA: Efficiency per Table 140.4-F
01	02	03	04			05		06	07	08	09			10	11
Fan Name or Item Tag	Fan Type	Qty	Component			Airflow through Component (%)		Water Gauge (w.g)	Allowance: Component Allowance (watt/cfm)	Allowance: Fan Allowance (watt/cfm)[3]	Design: Design Electrical Input Power Method		Design: Motor Nameplate Horsepower		Design: Fan Electrical Input Power (kW)
FC-ADM-5	Supply	1	Hydronic/DX cooling coil or heat pump coil			100			0.139	0.324	Manufacturer provided				0.24
			Electric heat			100			0.046						
			Energy Recovery 0.50 <= ERR > 0.55			100			0.139						
Supply Fan Base Allowance (watt/cfm)			Exhaust/Return/Relief/Transfer Fan Base Allowance(watt/cfm)						Fan System Allowance (kW)[3]				Fan System Electrical Input Power (kW)		0.24

FILE PATH: Z:\Projects\...
3/12/2026 2:28:42 PM

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-124972 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/17/2026

PBK

ARCHITECT PBK Architects, Inc.
ANAHEIM
2400 E KATELLA AVE, Suite 950
ANAHEIM, CA 92806
P 949-548-5000

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

SCHROEDER ES HVAC UPGRADE & MODERNIZATION

PROJECT ADDRESS:
15151 Columbia Ln
Huntington Beach, CA 92647

100% CONSTRUCTION DOCUMENTS

DSA APPL NO.: 04-124972 DSA FILE NO.: 30-43

RELO
A — K2 K1
B — ADMIN
C — MPR
D
RELO

KEY PLAN
NORTH: PLAN

Consultant
REGISTERED PROFESSIONAL ENGINEER — REX DAVID WANG — No.M36165 Exp.09-30-2026 — STATE OF CALIFORNIA

Architect
LICENSED ARCHITECT — Yong Yoo — No. C-31162 — REN. 10-31-2027 — STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT
DATE 11-14-2025
PROJECT NUMBER 250376

REVISIONS

No.	Description	Date

100% CONSTRUCTION DOCUMENTS

MECHANICAL TITLE 24 FORMS

M0.01

STATE OF CALIFORNIA
Mechanical Systems
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-MCH-E
Project Name: schroader ES HVAC Upgrade & Modernizaton	**Report Page:** (Page 10 of 34)
	Date Prepared: 2025-11-12T20:25:55-05:00

H. FAN SYSTEMS & AIR ECONOMIZERS

System Name	FC-A-1	Quantity	1	Fan System Status	New	System Zoning	all other systems	Serving Dwelling Units	Not Serving Dwelling Units	Fan System Airflow (cfm)	424	Site Elevation	40	Economizer	NA: Efficiency per Table 140.4-F
01	02	03	04			05		06	07	08	09			10	11
Fan Name or Item Tag	Fan Type	Qty	Component			Airflow through Component (%)		Water Gauge (w.g)	Allowance		Design				
									Component Allowance (watt/cfm)	Fan Allowance (watt/cfm)[3]	Design Electrical Input Power Method			Motor Nameplate Horsepower	Fan Electrical Input Power (kW)
FC-A-1	Supply	1	Hydronic/DX cooling coil or heat pump coil			100			0.139	0.324	Manufacturer provided				0.07
			Electric heat			100			0.046						
			Energy Recovery 0.50 <= ERR > 0.55			100			0.139						
Supply Fan Base Allowance (watt/cfm)			Exhaust/Return/Relief/Transfer Fan Base Allowance(watt/cfm)						Fan System Allowance (kW)[3]				Fan System Electrical Input Power (kW)		0.07

STATE OF CALIFORNIA
Mechanical Systems
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-MCH-E
Project Name: schroader ES HVAC Upgrade & Modernizaton	**Report Page:** (Page 11 of 34)
	Date Prepared: 2025-11-12T20:25:55-05:00

H. FAN SYSTEMS & AIR ECONOMIZERS

System Name	FC-A-2	Quantity	1	Fan System Status	New	System Zoning	all other systems	Serving Dwelling Units	Not Serving Dwelling Units	Fan System Airflow (cfm)	1,728	Site Elevation	40	Economizer	NA: Efficiency per Table 140.4-F
01	02	03	04			05		06	07	08	09			10	11
Fan Name or Item Tag	Fan Type	Qty	Component			Airflow through Component (%)		Water Gauge (w.g)	Allowance		Design				
									Component Allowance (watt/cfm)	Fan Allowance (watt/cfm)[3]	Design Electrical Input Power Method			Motor Nameplate Horsepower	Fan Electrical Input Power (kW)
FC-A-2	Supply	1	Hydronic/DX cooling coil or heat pump coil			100			0.139	0.35	Manufacturer provided				0.52
			Electric heat			100			0.046						
			Energy Recovery 0.55 <= ERR > 0.60			100			0.165						
Supply Fan Base Allowance (watt/cfm)			Exhaust/Return/Relief/Transfer Fan Base Allowance(watt/cfm)						Fan System Allowance (kW)[3]				Fan System Electrical Input Power (kW)		0.52

STATE OF CALIFORNIA
Mechanical Systems
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-MCH-E
Project Name: schroader ES HVAC Upgrade & Modernizaton	**Report Page:** (Page 12 of 34)
	Date Prepared: 2025-11-12T20:25:55-05:00

H. FAN SYSTEMS & AIR ECONOMIZERS

System Name	FC-A-3	Quantity	1	Fan System Status	New	System Zoning	all other systems	Serving Dwelling Units	Not Serving Dwelling Units	Fan System Airflow (cfm)	1,728	Site Elevation	40	Economizer	NA: Efficiency per Table 140.4-F
01	02	03	04			05		06	07	08	09			10	11
Fan Name or Item Tag	Fan Type	Qty	Component			Airflow through Component (%)		Water Gauge (w.g)	Allowance		Design				
									Component Allowance (watt/cfm)	Fan Allowance (watt/cfm)[3]	Design Electrical Input Power Method			Motor Nameplate Horsepower	Fan Electrical Input Power (kW)
FC-A-3	Supply	1	Hydronic/DX cooling coil or heat pump coil			100			0.139	0.324	Manufacturer provided				0.52
			Electric heat			100			0.046						
			Energy Recovery 0.50 <= ERR > 0.55			100			0.139						
Supply Fan Base Allowance (watt/cfm)			Exhaust/Return/Relief/Transfer Fan Base Allowance(watt/cfm)						Fan System Allowance (kW)[3]				Fan System Electrical Input Power (kW)		0.52

STATE OF CALIFORNIA
Mechanical Systems
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-MCH-E
Project Name: schroader ES HVAC Upgrade & Modernizaton	**Report Page:** (Page 13 of 34)
	Date Prepared: 2025-11-12T20:25:55-05:00

H. FAN SYSTEMS & AIR ECONOMIZERS

System Name	FC-A-4	Quantity	1	Fan System Status	New	System Zoning	all other systems	Serving Dwelling Units	Not Serving Dwelling Units	Fan System Airflow (cfm)	1,728	Site Elevation	40	Economizer	NA: Efficiency per Table 140.4-F
01	02	03	04			05		06	07	08	09			10	11
Fan Name or Item Tag	Fan Type	Qty	Component			Airflow through Component (%)		Water Gauge (w.g)	Allowance		Design				
									Component Allowance (watt/cfm)	Fan Allowance (watt/cfm)[3]	Design Electrical Input Power Method			Motor Nameplate Horsepower	Fan Electrical Input Power (kW)
FC-A-4	Supply	1	Hydronic/DX cooling coil or heat pump coil			100			0.139	0.324	Manufacturer provided				0.52
			Electric heat			100			0.046						
			Energy Recovery 0.50 <= ERR > 0.55			100			0.139						
Supply Fan Base Allowance (watt/cfm)			Exhaust/Return/Relief/Transfer Fan Base Allowance(watt/cfm)						Fan System Allowance (kW)[3]				Fan System Electrical Input Power (kW)		0.52

STATE OF CALIFORNIA
Mechanical Systems
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-MCH-E
Project Name: schroader ES HVAC Upgrade & Modernizaton	**Report Page:** (Page 14 of 34)
	Date Prepared: 2025-11-12T20:25:55-05:00

H. FAN SYSTEMS & AIR ECONOMIZERS

System Name	FC-5	Quantity	1	Fan System Status	New	System Zoning	all other systems	Serving Dwelling Units	Not Serving Dwelling Units	Fan System Airflow (cfm)	1,728	Site Elevation	40	Economizer	NA: Efficiency per Table 140.4-F
01	02	03	04			05		06	07	08	09			10	11
Fan Name or Item Tag	Fan Type	Qty	Component			Airflow through Component (%)		Water Gauge (w.g)	Allowance		Design				
									Component Allowance (watt/cfm)	Fan Allowance (watt/cfm)[3]	Design Electrical Input Power Method			Motor Nameplate Horsepower	Fan Electrical Input Power (kW)
FC-A-5	Supply	1	Hydronic/DX cooling coil or heat pump coil			100			0.139	0.324	Manufacturer provided				0.51
			Electric heat			100			0.046						
			Energy Recovery 0.50 <= ERR > 0.55			100			0.139						
Supply Fan Base Allowance (watt/cfm)			Exhaust/Return/Relief/Transfer Fan Base Allowance(watt/cfm)						Fan System Allowance (kW)[3]				Fan System Electrical Input Power (kW)		0.51

STATE OF CALIFORNIA
Mechanical Systems
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-MCH-E
Project Name: schroader ES HVAC Upgrade & Modernizaton	**Report Page:** (Page 15 of 34)
	Date Prepared: 2025-11-12T20:25:55-05:00

H. FAN SYSTEMS & AIR ECONOMIZERS

System Name	FC-B-1	Quantity	1	Fan System Status	New	System Zoning	all other systems	Serving Dwelling Units	Not Serving Dwelling Units	Fan System Airflow (cfm)	1,728	Site Elevation	40	Economizer	NA: Efficiency per Table 140.4-F
01	02	03	04			05		06	07	08	09			10	11
Fan Name or Item Tag	Fan Type	Qty	Component			Airflow through Component (%)		Water Gauge (w.g)	Allowance		Design				
									Component Allowance (watt/cfm)	Fan Allowance (watt/cfm)[3]	Design Electrical Input Power Method			Motor Nameplate Horsepower	Fan Electrical Input Power (kW)
FC-B-1	Supply	1	Hydronic/DX cooling coil or heat pump coil			100			0.139	0.324	Manufacturer provided				0.52
			Electric heat			100			0.046						
			Energy Recovery 0.50 <= ERR > 0.55			100			0.139						
Supply Fan Base Allowance (watt/cfm)			Exhaust/Return/Relief/Transfer Fan Base Allowance(watt/cfm)						Fan System Allowance (kW)[3]				Fan System Electrical Input Power (kW)		0.52

STATE OF CALIFORNIA
Mechanical Systems
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-MCH-E
Project Name: schroader ES HVAC Upgrade & Modernizaton	**Report Page:** (Page 16 of 34)
	Date Prepared: 2025-11-12T20:25:55-05:00

H. FAN SYSTEMS & AIR ECONOMIZERS

System Name	FC-B-2	Quantity	1	Fan System Status	New	System Zoning	all other systems	Serving Dwelling Units	Not Serving Dwelling Units	Fan System Airflow (cfm)	1,728	Site Elevation	40	Economizer	NA: Efficiency per Table 140.4-F
01	02	03	04			05		06	07	08	09			10	11
Fan Name or Item Tag	Fan Type	Qty	Component			Airflow through Component (%)		Water Gauge (w.g)	Allowance		Design				
									Component Allowance (watt/cfm)	Fan Allowance (watt/cfm)[3]	Design Electrical Input Power Method			Motor Nameplate Horsepower	Fan Electrical Input Power (kW)
FC-B-2	Supply	1	Hydronic/DX cooling coil or heat pump coil			100			0.139	0.324	Manufacturer provided				0.52
			Electric heat			100			0.046						
			Energy Recovery 0.50 <= ERR > 0.55			100			0.139						
Supply Fan Base Allowance (watt/cfm)			Exhaust/Return/Relief/Transfer Fan Base Allowance(watt/cfm)						Fan System Allowance (kW)[3]				Fan System Electrical Input Power (kW)		0.52

STATE OF CALIFORNIA
Mechanical Systems
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-MCH-E
Project Name: schroader ES HVAC Upgrade & Modernizaton	**Report Page:** (Page 17 of 34)
	Date Prepared: 2025-11-12T20:25:55-05:00

H. FAN SYSTEMS & AIR ECONOMIZERS

System Name	FC-B-3	Quantity	1	Fan System Status	New	System Zoning	all other systems	Serving Dwelling Units	Not Serving Dwelling Units	Fan System Airflow (cfm)	1,728	Site Elevation	40	Economizer	NA: Efficiency per Table 140.4-F
01	02	03	04			05		06	07	08	09			10	11
Fan Name or Item Tag	Fan Type	Qty	Component			Airflow through Component (%)		Water Gauge (w.g)	Allowance		Design				
									Component Allowance (watt/cfm)	Fan Allowance (watt/cfm)[3]	Design Electrical Input Power Method			Motor Nameplate Horsepower	Fan Electrical Input Power (kW)
FC-B-3	Supply	1	Hydronic/DX cooling coil or heat pump coil			100			0.139	0.324	Manufacturer provided				0.52
			Electric heat			100			0.046						
			Energy Recovery 0.50 <= ERR > 0.55			100			0.139						
Supply Fan Base Allowance (watt/cfm)			Exhaust/Return/Relief/Transfer Fan Base Allowance(watt/cfm)						Fan System Allowance (kW)[3]				Fan System Electrical Input Power (kW)		0.52

STATE OF CALIFORNIA
Mechanical Systems
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-MCH-E
Project Name: schroader ES HVAC Upgrade & Modernizaton	**Report Page:** (Page 18 of 34)
	Date Prepared: 2025-11-12T20:25:55-05:00

H. FAN SYSTEMS & AIR ECONOMIZERS

System Name	FC-B-4	Quantity	1	Fan System Status	New	System Zoning	all other systems	Serving Dwelling Units	Not Serving Dwelling Units	Fan System Airflow (cfm)	1,728	Site Elevation	40	Economizer	NA: Efficiency per Table 140.4-F
01	02	03	04			05		06	07	08	09			10	11
Fan Name or Item Tag	Fan Type	Qty	Component			Airflow through Component (%)		Water Gauge (w.g)	Allowance		Design				
									Component Allowance (watt/cfm)	Fan Allowance (watt/cfm)[3]	Design Electrical Input Power Method			Motor Nameplate Horsepower	Fan Electrical Input Power (kW)
FC-B-4	Supply	1	Hydronic/DX cooling coil or heat pump coil			100			0.139	0.324	Manufacturer provided				0.52
			Electric heat			100			0.046						
			Energy Recovery 0.50 <= ERR > 0.55			100			0.139						
Supply Fan Base Allowance (watt/cfm)			Exhaust/Return/Relief/Transfer Fan Base Allowance(watt/cfm)						Fan System Allowance (kW)[3]				Fan System Electrical Input Power (kW)		0.52

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-124972 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/17/2026

ARCHITECT PBK Architects, Inc.
ANAHEIM
2400 E KATELLA AVE, Suite 950
ANAHEIM, CA 92806
P 949-548-5000

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

SCHROEDER ES HVAC UPGRADE & MODERNIZATION

PROJECT ADDRESS:
15151 Columbia Ln
Huntington Beach, CA 92647

100% CONSTRUCTION DOCUMENTS

DSA APPL NO.: 04-124972 DSA FILE NO.: 30-43

RELO
A
B
C
D
RELO
K2 K1
ADMIN
MPR

KEY PLAN
NORTH: PLAN

Consultant
REGISTERED PROFESSIONAL ENGINEER REA DAVID WANG No.M36156 Exp.09-30-2026 STATE OF CALIFORNIA

Architect
LICENSED ARCHITECT Yong Yoo No. C-31162 REN. 10-31-2027 STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT
DATE 11-14-2025
PROJECT NUMBER 250376

REVISIONS

No.	Description	Date

100% CONSTRUCTION DOCUMENTS

MECHANICAL TITLE 24 FORMS

M0.02

STATE OF CALIFORNIA
Mechanical Systems
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-MCH-E
Project Name: schroader ES HVAC Upgrade & Modernizaton	**Report Page:**	**(Page 19 of 34)**
	Date Prepared:	2025-11-12T20:25:55-05:00

H. FAN SYSTEMS & AIR ECONOMIZERS

System Name	FC-C-1	Quantity	1	Fan System Status	New	System Zoning	all other systems	Serving Dwelling Units	Not Serving Dwelling Units	Fan System Airflow (cfm)	1,728	Site Elevation	40	Economizer	NA: Efficiency per Table 140.4-F
01	02	03	04			05		06	07	08	09			10	11

Fan Name or Item Tag	Fan Type	Qty	Component	Airflow through Component (%)	Water Gauge (w.g)	Allowance: Component Allowance (watt/cfm)	Allowance: Fan Allowance (watt/cfm)[3]	Design: Design Electrical Input Power Method	Design: Motor Nameplate Horsepower	Design: Fan Electrical Input Power (kW)
FC-C-1	Supply	1	Hydronic/DX cooling coil or heat pump coil	100		0.139	0.324	Manufacturer provided		0.52
			Electric heat	100		0.046				
			Energy Recovery 0.50 <= ERR > 0.55	100		0.139				
Supply Fan Base Allowance (watt/cfm)			Exhaust/Return/Relief/Transfer Fan Base Allowance(watt/cfm)			Fan System Allowance (kW)[3]			Fan System Electrical Input Power (kW)	0.52

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance
Generated Date/Time:
Report Version: 2022.0.000
Schema Version: rev 20220101
Documentation Software: Energy Code Ace
Compliance ID: 345424-1125-0002
Report Generated: 2025-11-12 17:26:04

STATE OF CALIFORNIA
Mechanical Systems
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-MCH-E
Project Name: schroader ES HVAC Upgrade & Modernizaton	**Report Page:**	**(Page 20 of 34)**
	Date Prepared:	2025-11-12T20:25:55-05:00

H. FAN SYSTEMS & AIR ECONOMIZERS

System Name	FC-C-2	Quantity	1	Fan System Status	New	System Zoning	all other systems	Serving Dwelling Units	Not Serving Dwelling Units	Fan System Airflow (cfm)	1,728	Site Elevation	40	Economizer	NA: Efficiency per Table 140.4-F
01	02	03	04			05		06	07	08	09			10	11

Fan Name or Item Tag	Fan Type	Qty	Component	Airflow through Component (%)	Water Gauge (w.g)	Allowance: Component Allowance (watt/cfm)	Allowance: Fan Allowance (watt/cfm)[3]	Design: Design Electrical Input Power Method	Design: Motor Nameplate Horsepower	Design: Fan Electrical Input Power (kW)
FC-C-2	Supply	1	Hydronic/DX cooling coil or heat pump coil	100		0.139	0.324	Manufacturer provided		0.52
			Electric heat	100		0.046				
			Energy Recovery 0.50 <= ERR > 0.55	100		0.139				
Supply Fan Base Allowance (watt/cfm)			Exhaust/Return/Relief/Transfer Fan Base Allowance(watt/cfm)			Fan System Allowance (kW)[3]			Fan System Electrical Input Power (kW)	0.52

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance
Generated Date/Time:
Report Version: 2022.0.000
Schema Version: rev 20220101
Documentation Software: Energy Code Ace
Compliance ID: 345424-1125-0002
Report Generated: 2025-11-12 17:26:04

STATE OF CALIFORNIA
Mechanical Systems
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-MCH-E
Project Name: schroader ES HVAC Upgrade & Modernizaton	**Report Page:**	**(Page 21 of 34)**
	Date Prepared:	2025-11-12T20:25:55-05:00

H. FAN SYSTEMS & AIR ECONOMIZERS

System Name	FC-C-3	Quantity	1	Fan System Status	New	System Zoning	all other systems	Serving Dwelling Units	Not Serving Dwelling Units	Fan System Airflow (cfm)	1,728	Site Elevation	40	Economizer	NA: Efficiency per Table 140.4-F
01	02	03	04			05		06	07	08	09			10	11

Fan Name or Item Tag	Fan Type	Qty	Component	Airflow through Component (%)	Water Gauge (w.g)	Allowance: Component Allowance (watt/cfm)	Allowance: Fan Allowance (watt/cfm)[3]	Design: Design Electrical Input Power Method	Design: Motor Nameplate Horsepower	Design: Fan Electrical Input Power (kW)
FC-C-3	Supply	1	Hydronic/DX cooling coil or heat pump coil	100		0.139	0.324	Manufacturer provided		0.52
			Electric heat	100		0.046				
			Energy Recovery 0.50 <= ERR > 0.55	100		0.139				
Supply Fan Base Allowance (watt/cfm)			Exhaust/Return/Relief/Transfer Fan Base Allowance(watt/cfm)			Fan System Allowance (kW)[3]			Fan System Electrical Input Power (kW)	0.52

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance
Generated Date/Time:
Report Version: 2022.0.000
Schema Version: rev 20220101
Documentation Software: Energy Code Ace
Compliance ID: 345424-1125-0002
Report Generated: 2025-11-12 17:26:04

STATE OF CALIFORNIA
Mechanical Systems
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-MCH-E
Project Name: schroader ES HVAC Upgrade & Modernizaton	**Report Page:**	**(Page 22 of 34)**
	Date Prepared:	2025-11-12T20:25:55-05:00

H. FAN SYSTEMS & AIR ECONOMIZERS

System Name	FC-C-4	Quantity	1	Fan System Status	New	System Zoning	all other systems	Serving Dwelling Units	Not Serving Dwelling Units	Fan System Airflow (cfm)	1,728	Site Elevation	40	Economizer	NA: Efficiency per Table 140.4-F
01	02	03	04			05		06	07	08	09			10	11

Fan Name or Item Tag	Fan Type	Qty	Component	Airflow through Component (%)	Water Gauge (w.g)	Allowance: Component Allowance (watt/cfm)	Allowance: Fan Allowance (watt/cfm)[3]	Design: Design Electrical Input Power Method	Design: Motor Nameplate Horsepower	Design: Fan Electrical Input Power (kW)
FC-C-4	Supply	1	Hydronic/DX cooling coil or heat pump coil	100		0.139	0.324	Manufacturer provided		0.52
			Electric heat	100		0.046				
			Energy Recovery 0.50 <= ERR > 0.55	100		0.139				
Supply Fan Base Allowance (watt/cfm)			Exhaust/Return/Relief/Transfer Fan Base Allowance(watt/cfm)			Fan System Allowance (kW)[3]			Fan System Electrical Input Power (kW)	0.52

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance
Generated Date/Time:
Report Version: 2022.0.000
Schema Version: rev 20220101
Documentation Software: Energy Code Ace
Compliance ID: 345424-1125-0002
Report Generated: 2025-11-12 17:26:04

STATE OF CALIFORNIA
Mechanical Systems
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-MCH-E
Project Name: schroader ES HVAC Upgrade & Modernizaton	**Report Page:**	**(Page 23 of 34)**
	Date Prepared:	2025-11-12T20:25:55-05:00

H. FAN SYSTEMS & AIR ECONOMIZERS

System Name	FC-D-1	Quantity	1	Fan System Status	New	System Zoning	all other systems	Serving Dwelling Units	Not Serving Dwelling Units	Fan System Airflow (cfm)	1,728	Site Elevation	40	Economizer	NA: Efficiency per Table 140.4-F
01	02	03	04			05		06	07	08	09			10	11

Fan Name or Item Tag	Fan Type	Qty	Component	Airflow through Component (%)	Water Gauge (w.g)	Allowance: Component Allowance (watt/cfm)	Allowance: Fan Allowance (watt/cfm)[3]	Design: Design Electrical Input Power Method	Design: Motor Nameplate Horsepower	Design: Fan Electrical Input Power (kW)
FC-D-1	Supply	1	Hydronic/DX cooling coil or heat pump coil	100		0.139	0.324	Manufacturer provided		0.52
			Electric heat	100		0.046				
			Energy Recovery 0.50 <= ERR > 0.55	100		0.139				
Supply Fan Base Allowance (watt/cfm)			Exhaust/Return/Relief/Transfer Fan Base Allowance(watt/cfm)			Fan System Allowance (kW)[3]			Fan System Electrical Input Power (kW)	0.52

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance
Generated Date/Time:
Report Version: 2022.0.000
Schema Version: rev 20220101
Documentation Software: Energy Code Ace
Compliance ID: 345424-1125-0002
Report Generated: 2025-11-12 17:26:04

STATE OF CALIFORNIA
Mechanical Systems
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-MCH-E
Project Name: schroader ES HVAC Upgrade & Modernizaton	**Report Page:**	**(Page 24 of 34)**
	Date Prepared:	2025-11-12T20:25:55-05:00

H. FAN SYSTEMS & AIR ECONOMIZERS

System Name	FC-D-2	Quantity	1	Fan System Status	New	System Zoning	all other systems	Serving Dwelling Units	Not Serving Dwelling Units	Fan System Airflow (cfm)	1,728	Site Elevation	40	Economizer	NA: Efficiency per Table 140.4-F
01	02	03	04			05		06	07	08	09			10	11

Fan Name or Item Tag	Fan Type	Qty	Component	Airflow through Component (%)	Water Gauge (w.g)	Allowance: Component Allowance (watt/cfm)	Allowance: Fan Allowance (watt/cfm)[3]	Design: Design Electrical Input Power Method	Design: Motor Nameplate Horsepower	Design: Fan Electrical Input Power (kW)
FC-D-2	Supply	1	Hydronic/DX cooling coil or heat pump coil	100		0.139	0.324	Manufacturer provided		0.52
			Electric heat	100		0.046				
			Energy Recovery 0.50 <= ERR > 0.55	100		0.139				
Supply Fan Base Allowance (watt/cfm)			Exhaust/Return/Relief/Transfer Fan Base Allowance(watt/cfm)			Fan System Allowance (kW)[3]			Fan System Electrical Input Power (kW)	0.52

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance
Generated Date/Time:
Report Version: 2022.0.000
Schema Version: rev 20220101
Documentation Software: Energy Code Ace
Compliance ID: 345424-1125-0002
Report Generated: 2025-11-12 17:26:04

STATE OF CALIFORNIA
Mechanical Systems
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-MCH-E
Project Name: schroader ES HVAC Upgrade & Modernizaton	**Report Page:**	**(Page 25 of 34)**
	Date Prepared:	2025-11-12T20:25:55-05:00

H. FAN SYSTEMS & AIR ECONOMIZERS

System Name	FC-D-3	Quantity	1	Fan System Status	New	System Zoning	all other systems	Serving Dwelling Units	Not Serving Dwelling Units	Fan System Airflow (cfm)	1,728	Site Elevation	40	Economizer	NA: Efficiency per Table 140.4-F
01	02	03	04			05		06	07	08	09			10	11

Fan Name or Item Tag	Fan Type	Qty	Component	Airflow through Component (%)	Water Gauge (w.g)	Allowance: Component Allowance (watt/cfm)	Allowance: Fan Allowance (watt/cfm)[3]	Design: Design Electrical Input Power Method	Design: Motor Nameplate Horsepower	Design: Fan Electrical Input Power (kW)
FC-D-3	Supply	1	Hydronic/DX cooling coil or heat pump coil	100		0.139	0.324	Manufacturer provided		0.52
			Electric heat	100		0.046				
			Energy Recovery 0.50 <= ERR > 0.55	100		0.139				
Supply Fan Base Allowance (watt/cfm)			Exhaust/Return/Relief/Transfer Fan Base Allowance(watt/cfm)			Fan System Allowance (kW)[3]			Fan System Electrical Input Power (kW)	0.52

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance
Generated Date/Time:
Report Version: 2022.0.000
Schema Version: rev 20220101
Documentation Software: Energy Code Ace
Compliance ID: 345424-1125-0002
Report Generated: 2025-11-12 17:26:04

STATE OF CALIFORNIA
Mechanical Systems
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-MCH-E
Project Name: schroader ES HVAC Upgrade & Modernizaton	**Report Page:**	**(Page 26 of 34)**
	Date Prepared:	2025-11-12T20:25:55-05:00

H. FAN SYSTEMS & AIR ECONOMIZERS

System Name	FC-K1-1	Quantity	1	Fan System Status	New	System Zoning	all other systems	Serving Dwelling Units	Not Serving Dwelling Units	Fan System Airflow (cfm)	2,500	Site Elevation	40	Economizer	NA: Efficiency per Table 140.4-F
01	02	03	04			05		06	07	08	09			10	11

Fan Name or Item Tag	Fan Type	Qty	Component	Airflow through Component (%)	Water Gauge (w.g)	Allowance: Component Allowance (watt/cfm)	Allowance: Fan Allowance (watt/cfm)[3]	Design: Design Electrical Input Power Method	Design: Motor Nameplate Horsepower	Design: Fan Electrical Input Power (kW)
FC-K1-1	Supply	1	Hydronic/DX cooling coil or heat pump coil	100		0.139	0.324	Manufacturer provided		0.67
			Electric heat	100		0.046				
			Energy Recovery 0.50 <= ERR > 0.55	100		0.139				
Supply Fan Base Allowance (watt/cfm)			Exhaust/Return/Relief/Transfer Fan Base Allowance(watt/cfm)			Fan System Allowance (kW)[3]			Fan System Electrical Input Power (kW)	0.67

[1] FOOTNOTES: Fans serving spaces with design background noise goals below NC35
[2] Low-turndown single-zone VAV fan system must be capable of and configured to reduce airflow to 50 percent of design airflow and use no more than 30 percent of the design wattage at that airflow. No more than 10 percent of the design load served by the equipment shall have fixed loads.
[3] Fan system allowance includes fan system base allowance.
[4] Filter pressure loss can only be counted once per fan system.
[5] Complex Fan System means a fan system that combines a single cabinet fan system with other supply fans, exhaust fans, or both.
[6] Computer room economizers must meet requirements of 140.9(a) and will be documented on the NRCC-PRC-E document..

Fan Energy Index (FEI)

01	02	03

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance
Generated Date/Time:
Report Version: 2022.0.000
Schema Version: rev 20220101
Documentation Software: Energy Code Ace
Compliance ID: 345424-1125-0002
Report Generated: 2025-11-12 17:26:04

STATE OF CALIFORNIA
Mechanical Systems
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-MCH-E
Project Name: schroader ES HVAC Upgrade & Modernizaton	**Report Page:**	**(Page 27 of 34)**
	Date Prepared:	2025-11-12T20:25:55-05:00

Fan Energy Index (FEI)

Name or Item Tag	FEI Exception	FEI
FC-ADM-1	<1.00 HP or 0.89 kW	
FC-ADM-2	<1.00 HP or 0.89 kW	
FC-ADM-3	<1.00 HP or 0.89 kW	
FC-ADM-4	<1.00 HP or 0.89 kW	
FC-ADM-5	<1.00 HP or 0.89 kW	
FC-A-1	<1.00 HP or 0.89 kW	
FC-A-2	<1.00 HP or 0.89 kW	
FC-A-3	<1.00 HP or 0.89 kW	
FC-A-4	<1.00 HP or 0.89 kW	
FC-A-5	<1.00 HP or 0.89 kW	
FC-B-1	<1.00 HP or 0.89 kW	
FC-B-2	<1.00 HP or 0.89 kW	
FC-B-3	<1.00 HP or 0.89 kW	
FC-B-4	<1.00 HP or 0.89 kW	
FC-C-1	<1.00 HP or 0.89 kW	
FC-C-2	<1.00 HP or 0.89 kW	
FC-C-3	<1.00 HP or 0.89 kW	
FC-C-4	<1.00 HP or 0.89 kW	
FC-D-1	<1.00 HP or 0.89 kW	
FC-D2	<1.00 HP or 0.89 kW	
FC-D-3	<1.00 HP or 0.89 kW	
FC-K1-1	<1.00 HP or 0.89 kW	

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance
Generated Date/Time:
Report Version: 2022.0.000
Schema Version: rev 20220101
Documentation Software: Energy Code Ace
Compliance ID: 345424-1125-0002
Report Generated: 2025-11-12 17:26:04

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-124972 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/17/2026

PBK

ARCHITECT PBK Architects, Inc.
ANAHEIM
2400 E KATELLA AVE, Suite 950
ANAHEIM, CA 92806
P 949-548-5000

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

SCHROEDER ES HVAC UPGRADE & MODERNIZATION

PROJECT ADDRESS:
15151 Columbia Ln
Huntington Beach, CA 92647

100% CONSTRUCTION DOCUMENTS

DSA APPL NO.: 04-124972 DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT EST. 1871

RELO
A K2 K1
B ADMIN
C MPR
D
RELO

KEY PLAN
NORTH: PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER
REX DAVID WANG
No.M38155
Exp.09-30-2026
MECHANICAL
STATE OF CALIFORNIA

Architect

LICENSED ARCHITECT
Yong Yoo
No. C-31162
REN. 10-31-2027
STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT
DATE 11-14-2025
PROJECT NUMBER 250376

REVISIONS

No.	Description	Date

100% CONSTRUCTION DOCUMENTS

MECHANICAL TITLE 24 FORMS

M0.03

FILE PATH: Z:\Projects\...
3/12/2026 2:28:51 PM

I. SYSTEM CONTROLS

This table is used to demonstrate compliance with mandatory controls in 110.2 and 120.2 and prescriptive controls in 140.4(f) and (n), 170.2(c)4D 170.2(c)4L or requirements in 141.0(b)2E 180.2(b)2 for altered space conditioning systems.

01	02	03	04	05	06	07	08	09	10
System Name	System Zoning	Conditioned Floor Area Being Served (ft^2)	Thermostats 110.2(b) & (c)[1], 120.2(a) 160.3(a)2A or 141.0(b)2E & 180.2(b)2	Shut-Off Controls 120.2(e) & 160.3(a)2D	Isolation Zone Controls 120.2(g) & 160.3(a)2F	Demand Response 110.12 120.2(b) & 160.3(a)2B	Supply Air Temp. Reset 140.4(f) & 170.2(c)4D	Window Interlocks per 140.4(n) & 170.2(c)4D	Direct Digital Control (DDC) per 120.2
FC-ADM-1	Single zone	<= 25,000 ft^2	Setback + DR Tstat per 110.12	NA: 7 day per 120.2(e)1	NA: Single Zone	DR Tstat per 110.12	NA: Single Zone	NA: No operable windows	NA: Single Zone
FC-ADM-2	Single zone	<= 25,000 ft^2	Setback + DR Tstat per 110.12	NA: 7 day per 120.2(e)1	NA: Single Zone	DR Tstat per 110.12	NA: Single Zone	NA: No operable windows	NA: Single Zone
FC-ADM-3	Single zone	<= 25,000 ft^2	Setback + DR Tstat per 110.12	NA: 7 day per 120.2(e)1	NA: Single Zone	DR Tstat per 110.12	NA: Single Zone	NA: No operable windows	NA: Single Zone
FC-ADM-4	Single zone	<= 25,000 ft^2	Setback + DR Tstat per 110.12	NA: 7 day per 120.2(e)1	NA: Single Zone	DR Tstat per 110.12	NA: Single Zone	NA: No operable windows	NA: Single Zone
FC-ADM-5	Single zone	<= 25,000 ft^2	Setback + DR Tstat per 110.12	NA: 7 day per 120.2(e)1	NA: Single Zone	DR Tstat per 110.12	NA: Single Zone	NA: No operable windows	NA: Single Zone
FC-A-1	Single zone	<= 25,000 ft^2	Setback + DR Tstat per 110.12	NA: 7 day per 120.2(e)1	NA: Single Zone	DR Tstat per 110.12	NA: Single Zone	NA: No operable windows	NA: Single Zone
FC-A-2	Single zone	<= 25,000 ft^2	Setback + DR Tstat per 110.12	NA: 7 day per 120.2(e)1	NA: Single Zone	DR Tstat per 110.12	NA: Single Zone	NA: No operable windows	NA: Single Zone
FC-A-3	Single zone	<= 25,000 ft^2	Setback + DR Tstat per 110.12	NA: 7 day per 120.2(e)1	NA: Single Zone	DR Tstat per 110.12	NA: Single Zone	NA: No operable windows	NA: Single Zone

STATE OF CALIFORNIA
Mechanical Systems
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	**NRCC-MCH-E**
Project Name: schroader ES HVAC Upgrade & Modernizaton	**Report Page:** (Page 29 of 34)
	Date Prepared: 2025-11-12T20:25:55-05:00

I. SYSTEM CONTROLS

FC-A-4	Single zone	<= 25,000 ft^2	Setback + DR Tstat per 110.12	NA: 7 day per 120.2(e)1	NA: Single Zone	DR Tstat per 110.12	NA: Single Zone	NA: No operable windows	NA: Single Zone
FC-A-5	Single zone	<= 25,000 ft^2	Setback + DR Tstat per 110.12	NA: 7 day per 120.2(e)1	NA: Single Zone	DR Tstat per 110.12	NA: Single Zone	NA: No operable windows	NA: Single Zone
FC-B-1	Single zone	<= 25,000 ft^2	Setback + DR Tstat per 110.12	NA: 7 day per 120.2(e)1	NA: Single Zone	DR Tstat per 110.12	NA: Single Zone	NA: No operable windows	NA: Single Zone
FC-B-2	Single zone	<= 25,000 ft^2	Setback + DR Tstat per 110.12	NA: 7 day per 120.2(e)1	NA: Single Zone	DR Tstat per 110.12	NA: Single Zone	NA: No operable windows	NA: Single Zone
FC-B-3	Single zone	<= 25,000 ft^2	Setback + DR Tstat per 110.12	NA: 7 day per 120.2(e)1	NA: Single Zone	DR Tstat per 110.12	NA: Single Zone	NA: No operable windows	NA: Single Zone
FC-B-4	Single zone	<= 25,000 ft^2	Setback + DR Tstat per 110.12	NA: 7 day per 120.2(e)1	NA: Single Zone	DR Tstat per 110.12	NA: Single Zone	NA: No operable windows	NA: Single Zone
FC-C-1	Single zone	<= 25,000 ft^2	Setback + DR Tstat per 110.12	NA: 7 day per 120.2(e)1	NA: Single Zone	DR Tstat per 110.12	NA: Single Zone	NA: No operable windows	NA: Single Zone
FC-C-2	Single zone	<= 25,000 ft^2	Setback + DR Tstat per 110.12	NA: 7 day per 120.2(e)1	NA: Single Zone	DR Tstat per 110.12	NA: Single Zone	NA: No operable windows	NA: Single Zone
FC-C-3	Single zone	<= 25,000 ft^2	Setback + DR Tstat per 110.12	NA: 7 day per 120.2(e)1	NA: Single Zone	DR Tstat per 110.12	NA: Single Zone	NA: No operable windows	NA: Single Zone
FC-C-4	Single zone	<= 25,000 ft^2	Setback + DR Tstat per 110.12	NA: 7 day per 120.2(e)1	NA: Single Zone	DR Tstat per 110.12	NA: Single Zone	NA: No operable windows	NA: Single Zone

STATE OF CALIFORNIA
Mechanical Systems
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	**NRCC-MCH-E**
Project Name: schroader ES HVAC Upgrade & Modernizaton	**Report Page:** (Page 30 of 34)
	Date Prepared: 2025-11-12T20:25:55-05:00

I. SYSTEM CONTROLS

FC-D-1	Single zone	<= 25,000 ft^2	Setback + DR Tstat per 110.12	NA: 7 day per 120.2(e)1	NA: Single Zone	DR Tstat per 110.12	NA: Single Zone	NA: No operable windows	NA: Single Zone
FC-D-2	Single zone	<= 25,000 ft^2	Setback + DR Tstat per 110.12	NA: 7 day per 120.2(e)1	NA: Single Zone	DR Tstat per 110.12	NA: Single Zone	NA: No operable windows	NA: Single Zone
FC-D-3	Single zone	<= 25,000 ft^2	Setback + DR Tstat per 110.12	NA: 7 day per 120.2(e)1	NA: Single Zone	DR Tstat per 110.12	NA: Single Zone	NA: No operable windows	NA: Single Zone
FC-K1-1	Single zone	<= 25,000 ft^2	Setback + DR Tstat per 110.12	NA: 7 day per 120.2(e)1	NA: Single Zone	DR Tstat per 110.12	NA: Single Zone	NA: No operable windows	NA: Single Zone

[1]*FOOTNOTES: Gravity gas wall heaters, gravity floor heaters, gravity room heaters, non-central electric heaters, fireplaces or decorative gas appliances, wood stoves are not required to have setback thermostats.*

J. VENTILATION AND INDOOR AIR QUALITY

This table is used to demonstrate compliance with mandatory ventilation requirements in 120.1 120.2(e)3B 140.4(p) and 140.4(q) for all nonresidential and hotel/motel and d:\24\refnolink\1160.2, 160.3(a)3D, 170.2(a)4N, 170.2(a)4O for high-rise residential occupancies. For alterations, only ventilation systems being altered within the scope of the permit application need to be documented in this table. In lieu of this table, the required outdoor ventilation rates and airflows may be shown on the plans or the calculations can be presented in a spreadsheet.

01	☒	Check the box if the project is showing ventilation calculations on the plans, or attaching the calculations instead of completing this table.
02	☐	Check this box if the project included Nonresidential, Hotel/Motel Spaces or Multifamily Common Use Spaces
	☐	
03	☐	Check the box if the project is using natural ventilation in any nonresidential or hotel/motel spaces to meet required ventilation rates per 120.1(c)2.

K. TERMINAL BOX CONTROLS

This section does not apply to this project.

STATE OF CALIFORNIA
Mechanical Systems
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	**NRCC-MCH-E**
Project Name: schroader ES HVAC Upgrade & Modernizaton	**Report Page:** (Page 31 of 34)
	Date Prepared: 2025-11-12T20:25:55-05:00

L. DISTRIBUTION (DUCTWORK and PIPING)

This table is used to show compliance with mandatory pipe insulation requirements found in 120.3 and mandatory requirements found in 120.4(g) for duct sealing.

01	☐	Insulation shall be protected from damage, including that due to sunlight, moisture, equipment maintenance, and wind. Insulation exposed to weather shall be installed with a cover suitable for outdoor service. Insulation covering chilled water piping and refrigerant suction piping located outside the conditioned space shall have a Class I or Class II vapor retarder. All penetrations and joints of which shall be sealed.

Duct Leakage Testing

The answers to the questions below apply to the following duct systems:		Supply, Return and Exhaust Duct	**NR/ Common Use:** Duct leakage testing shall not exceed 6% per NA7.5.3 required for these systems?	No
			Dwelling Units: Total duct leakage of duct system shall not exceed 12% or duct system to outside shall not exceed 6% per RA3.1.4 required for systems?	---
			Duct leakage testing per CMC Section 603.9.2 required for these systems?	Yes

11	No	The scope of the project includes only duct systems serving healthcare facilities
12	Yes	Duct system provides conditioned air to an occupiable space for a constant volume, single zone, space-conditioning system.
13	Yes	The space conditioning system serves less than 5,000 ft^2 of conditioned floor area.
14	No	The combined surface area of the ducts is more than 25% of the total surface area of the entire duct system:
15	No	The scope of the project includes extending an existing duct system, which is constructed, insulated or sealed with asbestos.
16	No	The scope of the project includes an existing duct system that is documented to have been previously sealed as confirmed through field verification and diagnostic testing in accordance with procedures in the Reference Nonresidential Appendix NA2.
17	Yes	All Ductwork and plenums with pressure class ratings shall be constructed to Seal Class A
18	No	All ductwork is an extension of an existing duct system
19	No	Ductwork serving individual dwelling unit
20		< 25 ft of new or replacement space conditioning ducts installed
21	R-8	Duct Insulation R-value
22	No	Ductwork Existing To Remain
23	No	Duct System Connected To Altered Space Conditioning System

STATE OF CALIFORNIA
Mechanical Systems
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	**NRCC-MCH-E**
Project Name: schroader ES HVAC Upgrade & Modernizaton	**Report Page:** (Page 32 of 34)
	Date Prepared: 2025-11-12T20:25:55-05:00

M. COOLING TOWERS

This section does not apply to this project.

N. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION

Selections have been made based on information provided in previous tables of this document. If any selection needs to be changed, please explain why in Table E Additional Remarks. These documents must be provided to the building inspector during construction and can be found online at https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2022-building-energy-efficiency-4

Form/Title
NRCI-MCH-01-E - Must be submitted for all buildings

O. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

Selections have been made based on information provided in previous tables of this document. If any selection needs to be changed, please explain why in Table E Additional Remarks. These documents must be provided to the building inspector during construction and can be found online at https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2022-building-energy-efficiency-4

Form/Title	Systems/Spaces To Be Field Verified
NRCA-MCH-02-A - Outdoor Air must be submitted for all newly installed HVAC units. Note: MCH-02-A can be performed in conjunction with MCH-07-A Supply Fan VFD Acceptance (if applicable) since testing activities overlap.	
NRCA-MCH-03-A - Constant Volume Single Zone HVAC NOTE: This form does not automatically move to "Yes". If Constant Volume Single Zone HVAC Systems are included in the scope, permit applicant should move this form to "Yes".	FC-ADM-1; FC-ADM-2; FC-ADM-3; FC-ADM-4; FC-ADM-5; FC-A-1; FC-A-2; FC-A-3; FC-A-4; FC-A-5; FC-B-1; FC-B-2; FC-B-3; FC-B-4; FC-C-1; FC-C-2; FC-C-3; FC-C-4; FC-D-1; FC-D-2; FC-D-3; FC-K1-1

STATE OF CALIFORNIA
Mechanical Systems
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	**NRCC-MCH-E**
Project Name: schroader ES HVAC Upgrade & Modernizaton	**Report Page:** (Page 33 of 34)
	Date Prepared: 2025-11-12T20:25:55-05:00

P. DECLARATION OF REQUIRED CERTIFICATES OF VERIFICATION

There are no NRCV forms required for this project.

Q. MANDATORY MEASURES DOCUMENTATION LOCATION

This table is used to indicate where mandatory measures are documented in the plan set or construction documentation.

01		02
Compliance with Mandatory Measures documented through MCH Mandatory Measures Note Block	No	Plan sheet or construction document location

03	04
Mandatory Measure	**Plan sheet or construction document location**
Heating Equipment Efficiency per 110.1	M5.01
Cooling Equipment Efficiency per 110.1	M5.01
Furnace Standby Loss Control per 110.2(d)	N/A
Duct Insulation per 120.4	M0.00
Heat Pump with Supplemental electric Resistance Heater Controls per 110.2(b)	M0.00
The air duct and plenum system is designed per 120.4(a)-(f)	M0.00
Kitchen range hoods shall be rated for sound in accordance with Section 7.2 of ASHRAE 62.2	N/A

STATE OF CALIFORNIA
Mechanical Systems
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	**NRCC-MCH-E**
Project Name: schroader ES HVAC Upgrade & Modernizaton	**Report Page:** (Page 34 of 34)
Project Address: 15151 Columbia Ln., Huntington Beach, CA 92647	**Date Prepared:** 2025-11-12T20:25:55-05:00

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name: Maher Dandachi	Documentation Author Signature:
Company: LEAF Engineers	Signature Date: 11-13-2025
Address: 8163 Rochester Ave.	CEA/ HERS Certification Identification (if applicable):
City/State/Zip: Rancho Cucamonga, CA 91730	Phone: (909) 987-0909

RESPONSIBLE PERSON'S DECLARATION STATEMENT

I certify the following under penalty of perjury, under the laws of the State of California:

1. The information provided on this Certificate of Compliance is true and correct.
2. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer)
3. The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.
4. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.
5. I will ensure that a completed signed copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a completed signed copy of this Certificate of Compliance is required to be included with the documentation the building professional or building owner at occupancy.

Responsible Designer Name: Rex Wang	Responsible Designer Signature:
Company: LEAF Engineers	Date Signed: 11-13-2025
Address: 8163 Rochester Ave.	License: M-36155
City/State/Zip: Rancho Cucamonga, CA 91730	Phone: (909) 987-0909

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-124972 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/17/2026

PBK
ARCHITECT PBK Architects, Inc.
ANAHEIM PBK.com
2400 E KATELLA AVE, Suite 950
ANAHEIM, CA 92806
P 949-548-5000

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

SCHROEDER ES HVAC UPGRADE & MODERNIZATION

PROJECT ADDRESS: 15151 Columbia Ln Huntington Beach, CA 92647

100% CONSTRUCTION DOCUMENTS

DSA APPL NO.: 04-124972 DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT EST. 1871

RELO
A K2 K1
B ADMIN
C MPR
D
RELO

KEY PLAN N NORTH: PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER REX DAVID WANG No.M36155 Exp.09-30-2026 SIGNATURE STATE OF CALIFORNIA

Architect

LICENSED ARCHITECT Jong You No. C-31162 REN. 10-31-2027 STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
11-14-2025	250376

REVISIONS

No.	Description	Date

100% CONSTRUCTION DOCUMENTS

MECHANICAL TITLE 24 FORMS

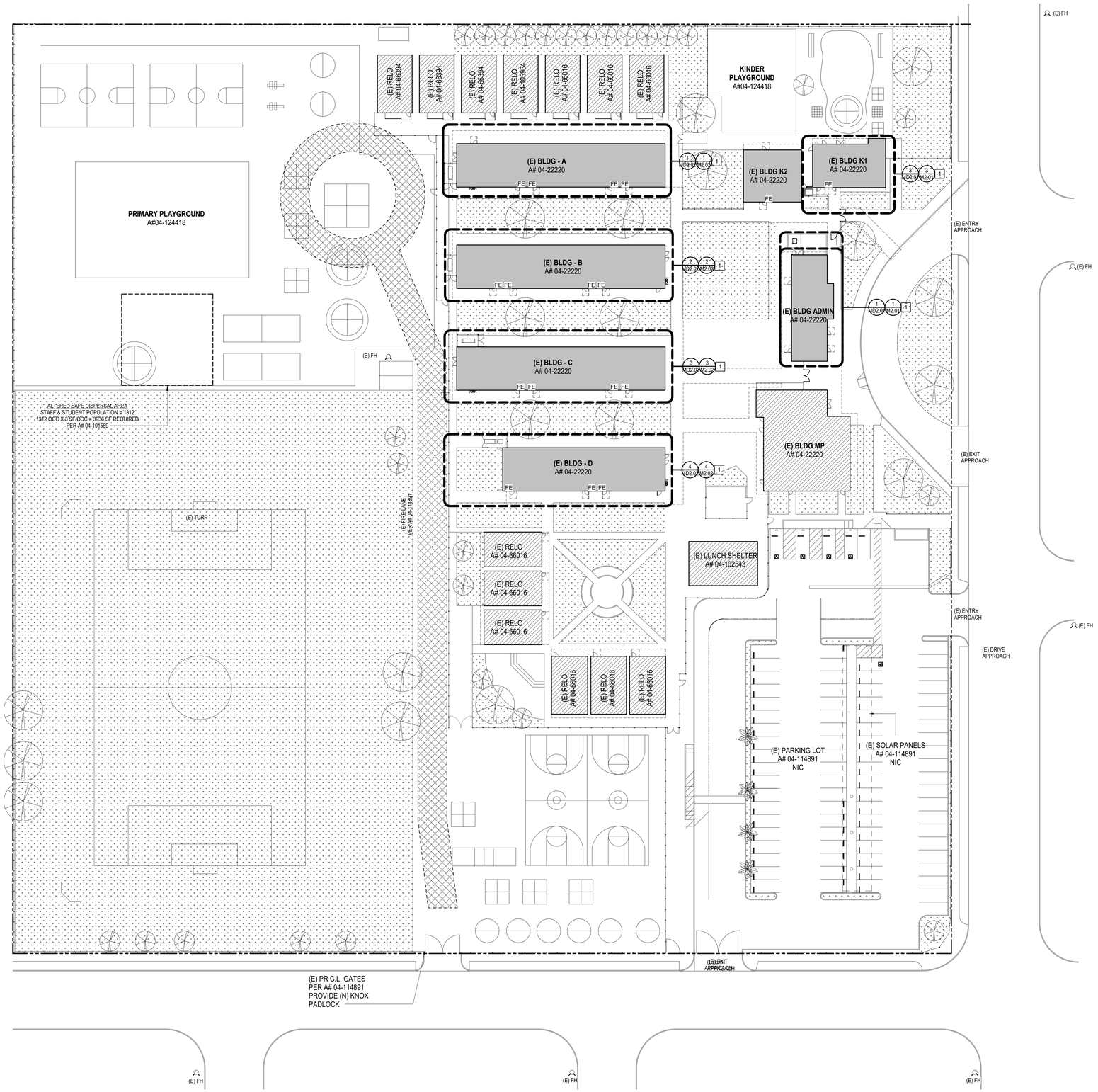
M0.04

M0.04 - MECHANICAL TITLE 24 FORMS

FILE PATH: Z:\Projects\...
3/12/2026 2:28:57 PM

M1.01 - MECHANICAL SITE PLAN

0" 1"



KEY NOTES

1 AREA OF SCOPE OF WORK.

1 SITE PLAN
1" = 30'-0"

FILE PATH: Z:\Projects\...
3/12/2026 2:29:01 PM

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-124972 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/17/2026

PBK

ARCHITECT PBK Architects, Inc.
PBK.com
ANAHEIM
2400 E KATELLA AVE, Suite 950
ANAHEIM, CA 92806
P 949-548-5000

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

SCHROEDER ES HVAC UPGRADE & MODERNIZATION

PROJECT ADDRESS:
15151 Columbia Ln
Huntington Beach, CA 92647

100% CONSTRUCTION DOCUMENTS

DSA APPL NO.: 04-124972 DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT EST. 1873

RELO
A
B
C
D
RELO
K2 K1
ADMIN
MPR

KEY PLAN
NORTH: PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER
REX DAVID WANDT
No.M36155
Exp.09-30-2026
STATE OF CALIFORNIA

Architect

LICENSED ARCHITECT
Tong Yao
No. C-31162
REN.10-31-2027
STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
11-14-2025	250376

REVISIONS

No.	Description	Date

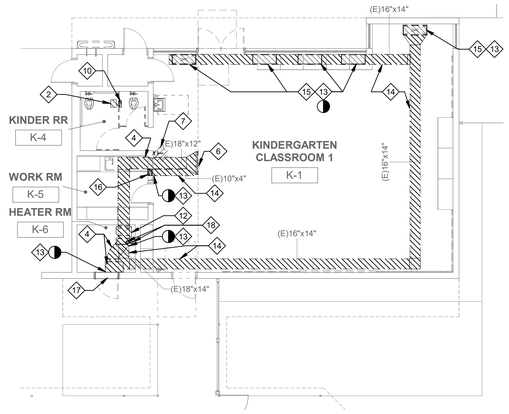
100% CONSTRUCTION DOCUMENTS

MECHANICAL SITE PLAN

M1.01

0" 1"

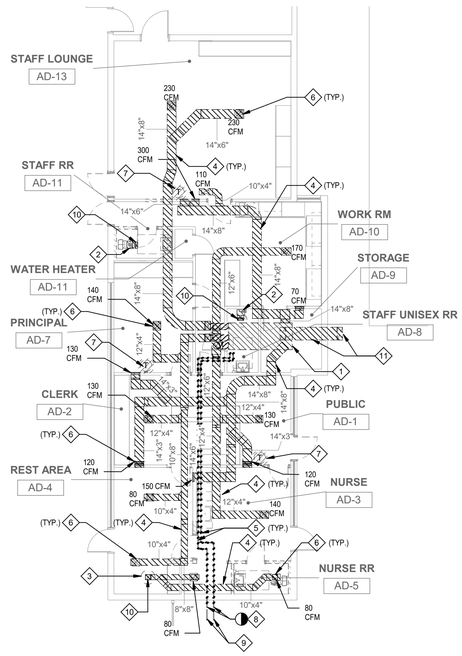
MD2.01 - MECHANICAL FLOOR PLANS - DEMOLITION



NORTH

3 KINDERGARTEN - FLOOR PLAN - DEMOLITION

1/8" = 1'-0"



NORTH

1 ADMIN - FLOOR PLAN - DEMOLITION

1/8" = 1'-0"

GENERAL NOTES

1. CONTRACTOR TO FIELD VERIFY ALL EXISTING CONDITIONS (EQUIPMENT, DUCT, PIPES, ETC.) BEFORE COMMENCING ANY WORK AND REPORT ANY DISCREPANCY TO ENGINEER.

DEMOLITION KEY NOTES

1. (E) UNIT HEATER TO BE DEMOLISHED WITH ALL ASSOCIATED WIRING, CONDUIT, HANGERS, DUCT, PIPE, ACCESSORIES, ETC. PATCH, REPAIR AND PAINT AFFECTED SURFACES TO MATCH EXISTING.
2. (E) CEILING MOUNT EXHAUST FAN TO BE DEMOLISHED WITH ALL ASSOCIATED WIRING, CONDUIT, HANGERS, DUCT, ACCESSORIES, ETC. PATCH, REPAIR AND PAINT AFFECTED SURFACES TO MATCH EXISTING.
3. E) ROOF MOUNT EXHAUST FAN TO BE DEMOLISHED WITH ALL ASSOCIATED WIRING, CONDUIT, HANGERS, DUCT, CURB, ACCESSORIES, ETC. PATCH, REPAIR AND PAINT AFFECTED SURFACES TO MATCH EXISTING.
4. (E) DUCT TO BE DEMOLISHED WITH ALL ASSOCIATED DAMPERS, HANGERS, ACCESSORIES, ETC. PATCH, REPAIR AND PAINT AFFECTED SURFACES TO MATCH EXISTING.
5. (E) HS & HR PIPING TO BE DEMOLISHED WITH ALL ASSOCIATED VALVES, HANGERS, ACCESSORIES, ETC. PATCH, REPAIR AND PAINT AFFECTED SURFACES TO MATCH EXISTING.
6. (E) DIFFUSER, REGISTER, GRILLE TO BE DEMOLISHED WITH ALL ASSOCIATED DAMPERS, HANGERS, ACCESSORIES, ETC. PATCH, REPAIR AND PAINT AFFECTED SURFACES TO MATCH EXISTING.
7. (E) THERMOSTAT TO BE DEMOLISHED WITH ALL ASSOCIATED WIRING, SUPPORT, ACCESSORIES, ETC. PATCH, REPAIR AND PAINT AFFECTED SURFACES TO MATCH EXISTING.
8. POINT OF DISCONNECT. DISCONNECT PIPE AT POINT OF DISCONNECT AND CAP.
9. (E) HS & HR PIPING TO REMAIN.
10. (E) EA DUCT UTR TO BE DEMOLISHED WITH ALL ASSOCIATED DAMPER, HANGERS, ACCESSORIES, ETC. PATCH, REPAIR AND PAINT AFFECTED SURFACES TO MATCH EXISTING.
11. (E) OSA DUCT, GRILLE TO BE DEMOLISHED WITH ALL ASSOCIATED DAMPERS, ACCESSORIES, ETC. PATCH, REPAIR AND PAINT AFFECTED SURFACES TO MATCH EXISTING.
12. (E) UNIT HEATER TO BE DEMOLISHED WITH ALL ASSOCIATED WIRING, CONDUIT, HANGERS, DUCT, GAS FLUE, PIPE, PAD, ACCESSORIES, ETC. PATCH, REPAIR AND PAINT AFFECTED SURFACES TO MATCH EXISTING.
13. DISCONNECT (E) UNDERFLOOR SA DUCT (BELOW FLOOR), CAP AND ABANDON IN PLACE.
14. (E) UNDERFLOOR DUCT TO BE ABANDONED IN PLACE.
15. (E) FLOOR MOUNT SA GRILLE TO BE DEMOLISHED WITH ALL ASSOCIATED DAMPER, ACCESSORIES, ETC. PATCH, REPAIR AND PAINT AFFECTED SURFACES TO MATCH EXISTING.
16. (E) WALL MOUNT SA GRILLE TO BE DEMOLISHED WITH ALL ASSOCIATED DAMPER, DUCT, ACCESSORIES, ETC. PATCH, REPAIR AND PAINT AFFECTED SURFACES TO MATCH EXISTING.
17. (E) OSA LOUVER (ABOVE DOOR TO REMAIN.
18. (E) GAS FLUE DUCT UP AND UTR TO BE DEMOLISHED WITH ALL ASSOCIATED DAMPER, DUCT, ACCESSORIES, ETC. PATCH, REPAIR AND PAINT AFFECTED SURFACES TO MATCH EXISTING.

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-124972 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/17/2026

PBK

ARCHITECT PBK Architects, Inc.
PBK.com
ANAHEIM
2400 E KATELLA AVE, Suite 950
ANAHEIM, CA 92806
P 949-548-5000

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

SCHROEDER ES HVAC UPGRADE & MODERNIZATION

PROJECT ADDRESS:
15151 Columbia Ln
Huntington Beach, CA 92647

100% CONSTRUCTION DOCUMENTS

DSA APPL NO.: 04-124972 DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT EST. 1871

RELO
A
B
C
D
K2 K1
ADMIN
MPR
RELO

KEY PLAN N
NORTH: PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER REX DAVID WANG No.M36155 Exp.09-30-2026 SIGNATURE STATE OF CALIFORNIA

Architect

LICENSED ARCHITECT Yong You No. C-31162 REN. 10-31-2027 STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
11-14-2025	250376

REVISIONS

No.	Description	Date

100% CONSTRUCTION DOCUMENTS

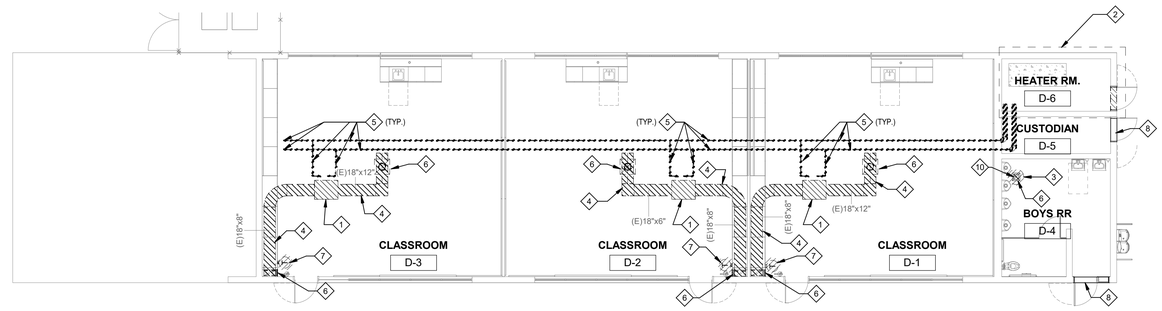
MECHANICAL FLOOR PLANS - DEMOLITION

MD2.01

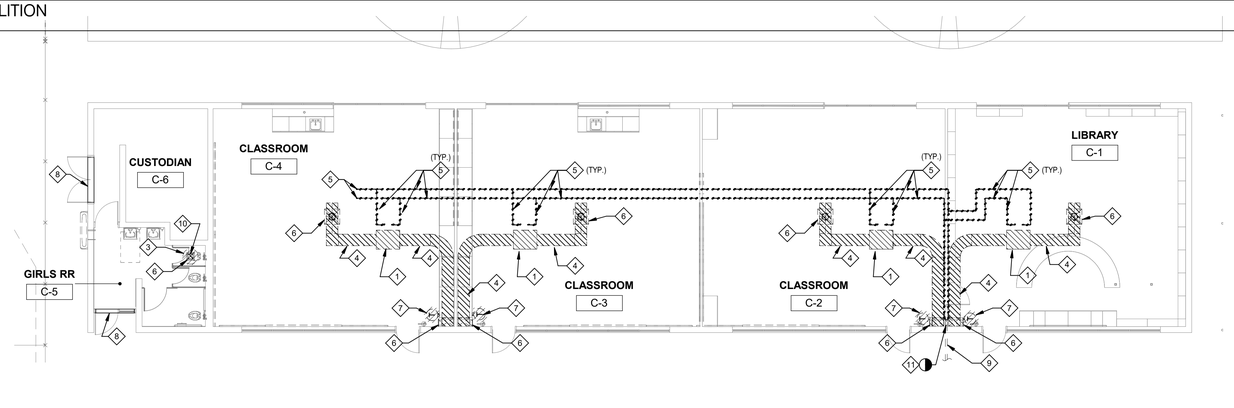
FILE PATH: Z:\Projects\...
3/12/2026 2:29:06 PM

MD2.02 - MECHANICAL FLOOR PLANS - DEMOLITION

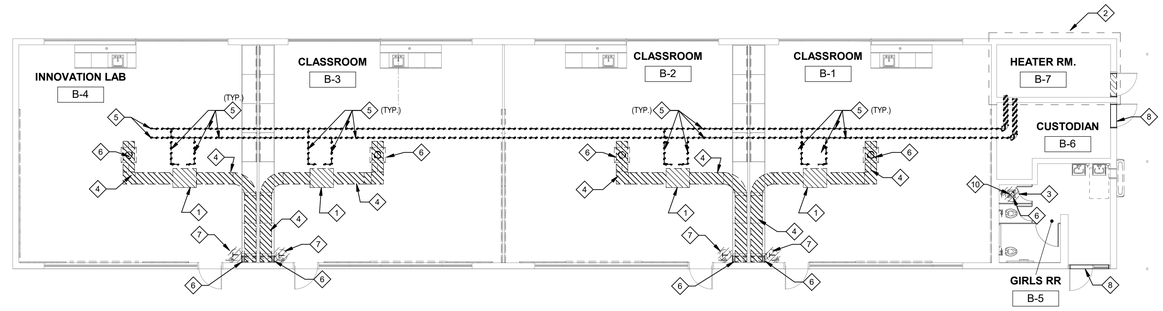
0" 1"



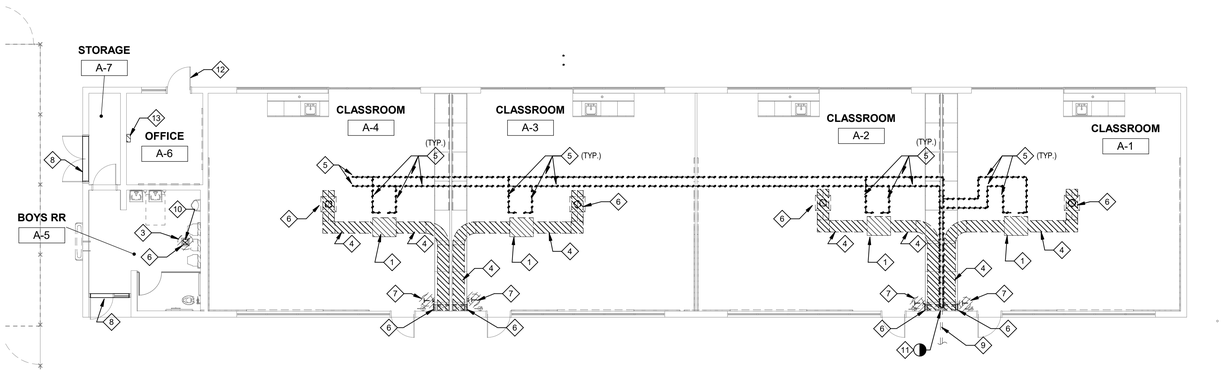
4 FLOOR PLAN - BLDG D - DEMOLITION
1/8" = 1'-0"



3 FLOOR PLAN - BLDG C - DEMOLITION
1/8" = 1'-0"



2 FLOOR PLAN - BLDG B - DEMOLITION
1/8" = 1'-0"



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

DEMOLITION SHEET NOTES

1. CONTRACTOR TO FIELD VERIFY ALL EXISTING CONDITIONS (EQUIPMENT, DUCT, PIPES, ETC.) BEFORE COMMENCING ANY WORK AND REPORT ANY DISCREPANCY TO ENGINEER.

DEMOLITION KEY NOTES

1. (E) UNIT HEATER TO BE DEMOLISHED WITH ALL ASSOCIATED WIRING, CONDUIT, HANGERS, DUCT, PIPE, ACCESSORIES, ETC. PATCH, REPAIR AND PAINT AFFECTED SURFACES TO MATCH EXISTING.
2. (E) HEATER ROOM. DEMOLISH ALL EQUIPMENT, DUCT, PIPING, GAS FLUE, WIRING, CONDUITS, PADS, SUPPORTS, ROOF OPENING, LOUVERS, ACCESSORIES, ETC., PATCH, REPAIR AND PAINT AFFECTED SURFACES TO MATCH EXISTING.
3. E) ROOF MOUNT EXHAUST FAN TO BE DEMOLISHED WITH ALL ASSOCIATED WIRING, CONDUIT, HANGERS, DUCT, CURB, ACCESSORIES, ETC. PATCH, REPAIR AND PAINT AFFECTED SURFACES TO MATCH EXISTING.
4. (E) DUCT TO BE DEMOLISHED WITH ALL ASSOCIATED DAMPERS, HANGERS, ACCESSORIES, ETC. PATCH, REPAIR AND PAINT AFFECTED SURFACES TO MATCH EXISTING.
5. (E) HS & HR PIPING TO BE DEMOLISHED WITH ALL ASSOCIATED VALVES, HANGERS, ACCESSORIES, ETC. PATCH, REPAIR AND PAINT AFFECTED SURFACES TO MATCH EXISTING.
6. (E) DIFFUSER, REGISTER, GRILLE TO BE DEMOLISHED WITH ALL ASSOCIATED DAMPERS, HANGERS, ACCESSORIES, ETC. PATCH, REPAIR AND PAINT AFFECTED SURFACES TO MATCH EXISTING.
7. (E) THERMOSTAT TO BE DEMOLISHED WITH ALL ASSOCIATED WIRING, SUPPORT, ACCESSORIES, ETC. PATCH, REPAIR AND PAINT AFFECTED SURFACES TO MATCH EXISTING.
8. (E) EA LOUVER (ABOVE DOOR) TO REMAIN.
9. (E) HS & HR PIPING TO REMAIN.
10. (E) EA DUCT UTR TO BE DEMOLISHED WITH ALL ASSOCIATED DAMPER, HANGERS, ACCESSORIES, ETC. PATCH, REPAIR AND PAINT AFFECTED SURFACES TO MATCH EXISTING.
11. POINT OF DISCONNECT. DISCONNECT PIPE AT POINT OF DISCONNECT AND CAP.
12. (E) DOOR LOUVER TO BE DEMOLISHED, REFER TO ARCHITECTURAL PLANS.
13. (E) HEATER TO BE DEMOLISHED WITH ALL ASSOCIATED WIRING, CONDUIT, J-BOX, TIMER, SWITCH, WALL PANEL, HANGERS, ACCESSORIES, ETC. PATCH, REPAIR AND PAINT AFFECTED SURFACES TO MATCH EXISTING. DISCONNECT POWER.

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-124972 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/17/2026

PBK

ARCHITECT PBK Architects, Inc.
PBK.com
ANAHEIM
2400 E KATELLA AVE, Suite 950
ANAHEIM, CA 92806
P 949-548-5000

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

SCHROEDER ES HVAC UPGRADE & MODERNIZATION

PROJECT ADDRESS:
15151 Columbia Ln
Huntington Beach, CA 92647

100% CONSTRUCTION DOCUMENTS

DSA APPL NO.: 04-124972 DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT EST. 1873

RELO
A
B
C
D
RELO
K1
ADMIN
MPR

KEY PLAN
N
NORTH: PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER
REX DAVID WANG
No.M36155
Exp.09-30-2026
CIVIL
STATE OF CALIFORNIA

Architect

LICENSED ARCHITECT
Yong Yao
No. C-31162
REN 10-31-2026
STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
11-14-2025	250376

REVISIONS

No.	Description	Date

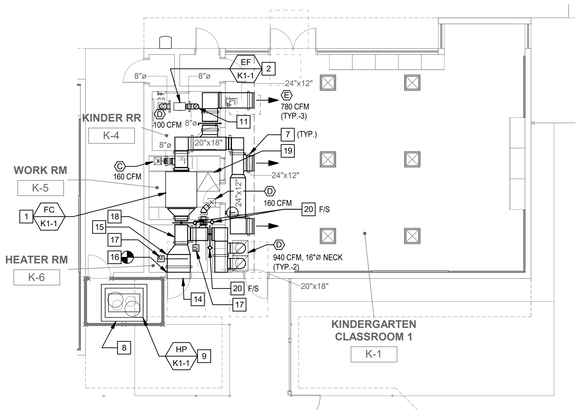
100% CONSTRUCTION DOCUMENTS

MECHANICAL FLOOR PLANS - DEMOLITION

MD2.02

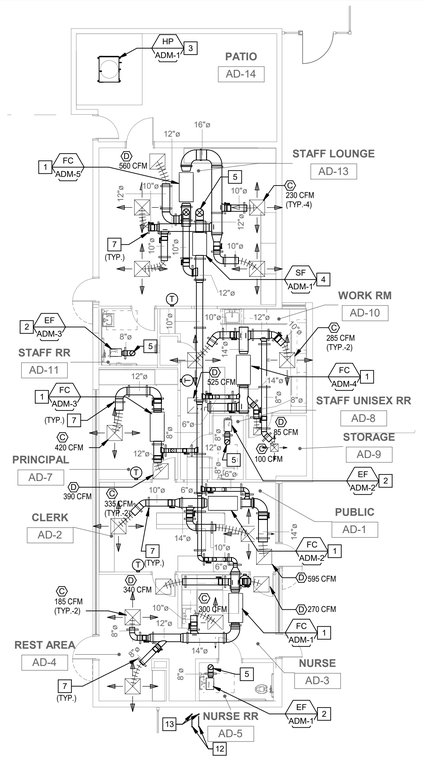
FILE PATH: Z:\Projects\...
3/12/2026 2:29:12 PM

0" 1"



NORTH

3 KINDERGARTEN - FLOOR PLAN
1/8" = 1'-0"



NORTH

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

SHEET NOTES

1. CONTRACTOR TO FIELD VERIFY ALL EXISTING CONDITIONS (EQUIPMENT, DUCT, PIPES, ETC.) BEFORE COMMENCING ANY WORK AND REPORT ANY DISCREPANCY TO ENGINEER.
2. PROVIDE ALL BRANCH DUCT TO DIFFUSER, REGISTER, GRILLE, OSA CONNECTION TO FC UNIT WITH VOLUME (BALANCING DAMPER).

KEY NOTES

1. SUSPENDED, DUCTED FAN COIL UNIT, SEE SCHEDULE SHEET M5.01 FOR INFORMATION.
2. CEILING MOUNT EXHAUST FAN, SEE SCHEDULE SHEET M5.01 FOR INFORMATION.
3. GROUND MOUNT VRF OUTDOOR HEAT PUMP, SEE SCHEDULE SHEET M5.01 FOR INFORMATION.
4. SUSPENDED SUPPLY FAN, SEE SCHEDULE SHEET M5.01 FOR INFORMATION.
5. 10"ø EA DUCT UTR. TERMINATE ON ROOF WITH ROOF JACK.
6. 12"ø OSA DUCT UTR. TERMINATE ON ROOF WITH ROOF JACK.
7. DUCT SUPPORT AND HANGER, SEE DETAILS 2/M6.02, 4/M6.02, 6/M6.02, 14/M6.02.
8. CONCRETE HOUSEKEEPING PAD, REFER TO ARCHITECTURAL AND STRUCTURAL PLANS.
9. GROUND MOUNTED HEAT PUMP UNIT, SEE SCHEDULE SHEET M5.01 FOR INFORMATION.
10. INLINE EXHAUST FAN, SEE SCHEDULE SHEET M5.01 FOR INFORMATION.
11. 8"ø EA DUCT UTR. TERMINATE ON ROOF WITH ROOF JACK.
12. (E) HS & HR PIPING.
13. CAPPED HS & HR PIPES.
14. (E) LOUVER ABOVE DOOR.
15. OSA PLENUM, SAME SIZE AS EXISTING LOUVER.
16. CONNECT OSA PLENUM TO (E) LOUVER AT POINT OF CONNECTION, AS SHOWN.
17. MOTORIZED DAMPER, SEE SCHEDULE SHEET M5.01 FOR INFORMATION.
18. 20"x20" MIXING BOX.
19. 30"x30" ACCESS PANEL, REFER TO ARCHITECTURAL PLANS.
20. COMBINATION SMOKE/FIRE DAMPER, SEE SCHEDULE SHEET m5.01 FOR INFORMATION.

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-124972 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/17/2026

PBK

ARCHITECT PBK Architects, Inc.
PBK.com
ANAHEIM
2400 E KATELLA AVE, Suite 950
ANAHEIM, CA 92806
P 949-548-5000

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

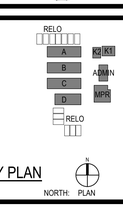
SCHROEDER ES HVAC UPGRADE & MODERNIZATION

PROJECT ADDRESS:
15151 Columbia Ln
Huntington Beach, CA 92647

100% CONSTRUCTION DOCUMENTS

DSA APPL NO.: 04-124972 DSA FILE NO.: 30-43





KEY PLAN
NORTH: PLAN

Consultant



Architect



CLIENT
WESTMINSTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
11-14-2025	250376

REVISIONS

No.	Description	Date

100% CONSTRUCTION DOCUMENTS

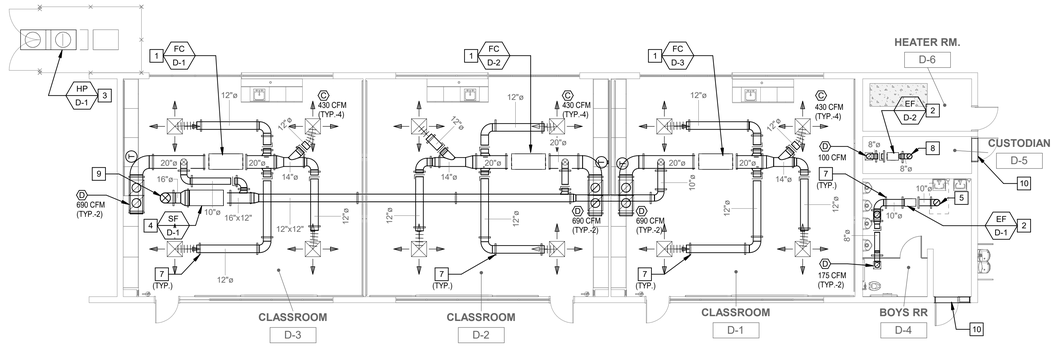
MECHANICAL FLOOR PLANS

M2.01

FILE PATH: Z:\Projects\...
3/12/2026 2:29:17 PM

M2.02 - MECHANICAL FLOOR PLANS

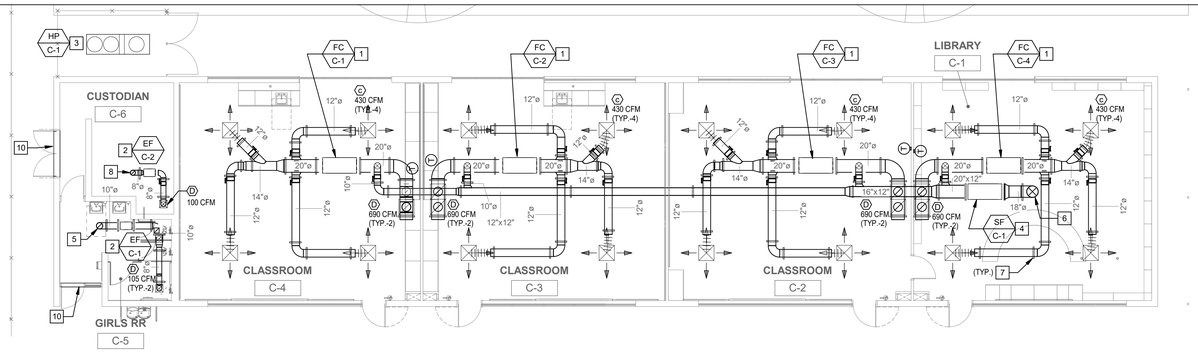
0" 1"



NORTH

4 FLOOR PLAN - BLDG D

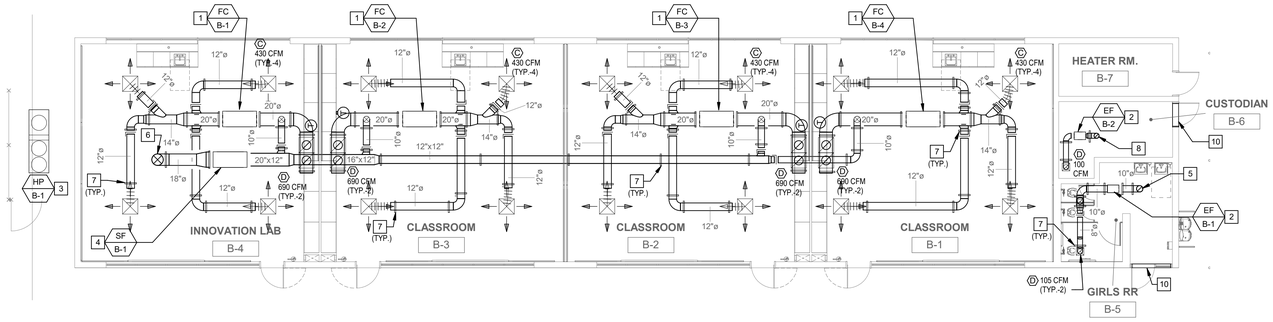
1/8" = 1'-0"



NORTH

3 FLOOR PLAN - BLDG C

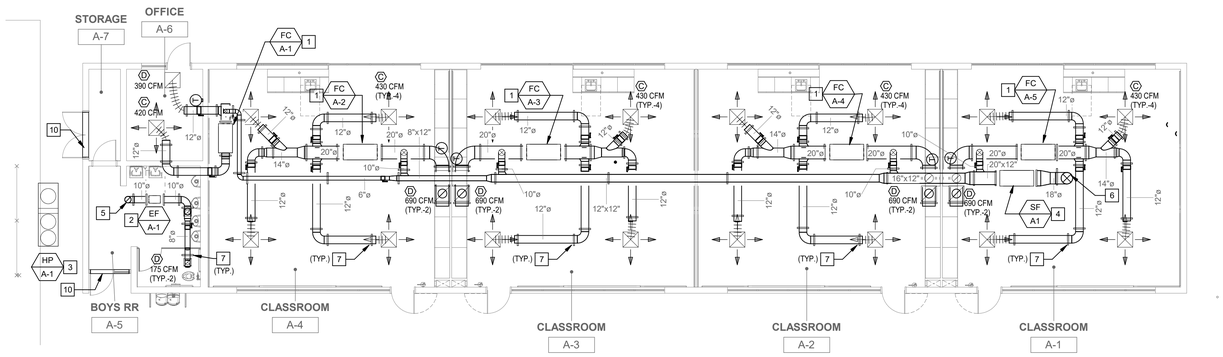
1/8" = 1'-0"



NORTH

2 FLOOR PLAN - BLDG B

1/8" = 1'-0"



NORTH

1 FLOOR PLAN - BLDG A

1/8" = 1'-0"

SHEET NOTES

1. CONTRACTOR TO FIELD VERIFY ALL EXISTING CONDITIONS (EQUIPMENT, DUCT, PIPES, ETC.) BEFORE COMMENCING ANY WORK AND REPORT ANY DISCREPANCY TO ENGINEER.
2. PROVIDE ALL BRANCH DUCT TO DIFFUSER, REGISTER, GRILLE, OSA CONNECTION TO FC UNIT WITH VOLUME (BALANCING DAMPER).

KEY NOTES

1. SUSPENDED, DUCTED FAN COIL UNIT, SEE SCHEDULE SHEET M5.01 FOR INFORMATION.
2. INLINE EXHAUST FAN, SEE SCHEDULE SHEET M5.01 FOR INFORMATION.
3. GROUND MOUNT VRF OUTDOOR HEAT PUMP, SEE SCHEDULE SHEET M5.01 FOR INFORMATION.
4. SUSPENDED SUPPLY FAN, SEE SCHEDULE SHEET M5.01 FOR INFORMATION.
5. 10"ø EA DUCT UTR. TERMINATE ON ROOF WITH ROOF JACK.
6. 18"ø OSA DUCT UTR. TERMINATE ON ROOF WITH ROOF JACK.
7. DUCT SUPPORT AND HANGER, SEE DETAILS 2/M6.02, 4/M6.02, 6/M6.02, 14/M6.02.
8. 8"ø EA DUCT UTR. TERMINATE ON ROOF WITH ROOF JACK.
9. 16"ø OSA DUCT UTR. TERMINATE ON ROOF WITH ROOF JACK.
10. (E) LOUVER ABOVE DOOR.

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-124972 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/17/2026

PBK

ARCHITECT PBK Architects, Inc.
PBK.com
ANAHEIM
2400 E KATELLA AVE, Suite 950
ANAHEIM, CA 92806
P 949-548-5000

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

SCHROEDER ES HVAC UPGRADE & MODERNIZATION

PROJECT ADDRESS:
15151 Columbia Ln
Huntington Beach, CA 92647

100% CONSTRUCTION DOCUMENTS

DSA APPL NO.: 04-124972 DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT EST. 1873

RELO
A K1
B ADMIN
C MPR
D
RELO

KEY PLAN
NORTH: PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER
REX DAVID WANG
No.M36155
Exp.09-30-2026
MECHANICAL
STATE OF CALIFORNIA

Architect

LICENSED ARCHITECT
Yong Yoo
No. C-31162
REN. 10-31-2027
STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT
DATE 11-14-2025
PROJECT NUMBER 250376

REVISIONS

No.	Description	Date

100% CONSTRUCTION DOCUMENTS

MECHANICAL FLOOR PLANS

M2.02

FILE PATH: Z:\Projects\...
3/12/2026 2:29:26 PM

0" 1"

OUTDOOR HEAT PUMP/CONDENSING UNIT SCHEDULE

UNIT NO.	MANUFACTURER AND MODEL NO.	INDOOR UNIT SERVING	COOLING CAP. (MBH)		COP2/ HSPF2 (@17°F AMB. WB)	AMB.°F	E.E.R.2 I.E.E.R. S.E.E.R.2	ELECTRICAL								OPER WT. (LBS)	ANCHORAGE DETAIL	REMARKS
								COMPRESSOR			OUTDOOR FAN							
			COOLING (TOTAL)	HEATING (@17°F AMB. WB)				QTY.	RLA	LRA	QTY.	FLA	MCA	MOCP	VOLTAGE			
HP ADM-1	TOSHIBA/CARRIER MMY-MUP0961HT9P-UL	FC ADM-1 TO FC ADM-5	96.0	108.0	3.83/ -	83.0 DB 67.0 WB	12.0 - -	1	-	-	1	-	36.6	45	230V / 3Ø / 60HZ	525	6 M6.01	SEE NOTES #1-9
HP A-1	TOSHIBA/CARRIER MMY-UP2641HT9P-UL	FC A-1 TO FC A-5	264.0	297.0	3.82/ -	83.0 DB 67.0 WB	10.3 - -	1	-	-	1	-	57.4 + 36.6 = 94	80 + 45 = 125	230V / 3Ø / 60HZ	778 + 521 = 1299	6 M6.01	SEE NOTES #1-9
HP B-1	TOSHIBA/CARRIER MMY-UP2401HT9P-UL	FC B-1 TO FC B-4	240.0	270.0	3.88/ -	83.0 DB 67.0 WB	11.2 - -	1	-	-	1	-	51.5 + 36.6 = 88.1	70 + 45 = 115	230V / 3Ø / 60HZ	725 + 521 = 1246	6 M6.01	SEE NOTES #1-9
HP C-1	TOSHIBA/CARRIER MMY-UP2401HT9P-UL	FC C-1 TO FC C-4	240.0	270.0	3.88/ -	83.0 DB 67.0 WB	11.2 - -	1	-	-	1	-	51.5 + 36.6 = 88.1	70 + 45 = 115	230V / 3Ø / 60HZ	725 + 521 = 1246	6 M6.01	SEE NOTES #1-9
HP D-1	TOSHIBA/CARRIER MMY-UP1921HT9P-UL	FC C-1 TO FC D-3	192.0	216.0	4.0/ -	83.0 DB 67.0 WB	11.3 - -	1	-	-	1	-	36.6 + 36.6 = 73.2	45 + 45 = 90	230V / 3Ø / 60HZ	521 + 521 = 1042	6 M6.01	SEE NOTES #1-9
HP K1-1	TOSHIBA/CARRIER 38AXQ	FC K1-1	75.7	57.13	3.4/ -	83.0 DB 67.0 WB	11.7 15.3 -	1	19.2	162	1	1.5	28	45	230V / 3Ø / 60HZ	450	6 M6.01	SEE NOTES #1-9

NOTES:
1. PROVIDE CRANKCASE HEATER, HIGH & LOW PRESSURE SWITCHES.
2. PROVIDE LOW AMBIENT KIT.
3. PROVIDE 3/4" EXPAND METAL CONDENSING COIL GUARD.
4. PROVIDE MINIMUM CLEARANCE AROUND EACH UNIT PER THE MANUFACTURER'S RECOMMENDATIONS.
5. SIZE REFRIGERANT LINES PER MANUFACTURER'S RECOMMENDATIONS. PROVIDE LONG LINE KIT IF REQUIRED.
6. PROVIDE HAIL-GUARD.
7. INSTALL UNIT ON 6" CONCRETE PAD.
8. GROUND MOUNT HEAT PUMP UNIT.
9. ALL UNITS SHALL HAVE R-32 REFRIGERANT.

FANS SCHEDULE

UNIT	MANUFACTURER & MODEL NO.	SERVICE	TYPE	CFM	SP IN W.G.	FAN RPM	MOTOR								SONES	OPER WT (LBS)	ANCHORAGE DETAIL	REMARKS
							HP/ BHP	FLA	MCA	MOCP	DRIVE	VOLT	PH	HZ				
EF ADM-1	GREENHECK SP-A125	ADMIN. BLDG NURSE RR AD-5	CEILING FAN	100	0.25	1056	18 WATTS	0.18	-	-	DIRECT	115	1	60	0.6	35	12 M6.02	SEE NOTES #1, 3, 4, 5, 9, 10, 11.
EF ADM-2	GREENHECK SP-A125	ADMIN. BLDG STAFF UNISEX RR AD-8	CEILING FAN	100	0.25	1056	18 WATTS	0.18	-	-	DIRECT	115	1	60	0.6	35	12 M6.02	SEE NOTES #1, 3, 4, 7, 9, 10, 11.
EF ADM-3	GREENHECK SP-A125	ADMIN. BLDG STAFF RR AD-12	CEILING FAN	100	0.25	1056	18 WATTS	0.18	-	-	DIRECT	115	1	60	0.6	35	12 M6.02	SEE NOTES #1, 3, 4, 8, 9, 10, 11.
EF A-1	GREENHECK CSP-A510-VG	BLDG. "A" BOYS RR A-5	INLINE	350	0.5	1190	83 WATTS	2.45	-	-	DIRECT	115	1	60	6.6	55	19 M6.02	SEE NOTES #1, 2, 3, 4, 10, 11.
EF B-1	GREENHECK CSP-A390-VG	BLDG. "B" GIRLS RR B-5	INLINE	210	0.5	1251	42 WATTS	1.5	-	-	DIRECT	115	1	60	6.7	35	19 M6.02	SEE NOTES #1, 2, 3, 4, 10, 11.
EF B-2	GREENHECK CSP-A390-VG	BLDG. "B" CUSTODIAN B-6	INLINE	100	0.3	1127	23 WATTS	1.5	-	-	DIRECT	115	1	60	5	35	19 M6.02	SEE NOTES #1, 2, 3, 4, 10, 11.
EF C-1	GREENHECK CSP-A390-VG	BLDG. "C" GIRLS RR C-5	INLINE	210	0.5	1251	42 WATTS	1.5	-	-	DIRECT	115	1	60	6.7	35	19 M6.02	SEE NOTES #1, 2, 3, 4, 10, 11.
EF C-2	GREENHECK CSP-A390-VG	BLDG. "C" CUSTODIAN C-6	INLINE	100	0.3	1127	23 WATTS	1.5	-	-	DIRECT	115	1	60	5	35	19 M6.02	SEE NOTES #1, 2, 3, 4, 10, 11.
EF D-1	GREENHECK CSP-A510-VG	BLDG. "D" BOYS RR D-4	INLINE	350	0.5	1190	83 WATTS	2.45	-	-	DIRECT	115	1	60	6.6	55	19 M6.02	SEE NOTES #1, 2, 3, 4, 10, 11.
EF D-2	GREENHECK CSP-A390-VG	BLDG. "D" CUSTODIAN D-5	INLINE	100	0.3	1127	23 WATTS	1.5	-	-	DIRECT	115	1	60	5	35	19 M6.02	SEE NOTES #1, 2, 3, 4, 10, 11.
EF K1-1	GREENHECK CSP-A390-VG	BLDG. "K1" KINDER RR K-4	INLINE	140	0.3	1007	21 WATTS	1.5	-	-	DIRECT	115	1	60	5	35	19 M6.02	SEE NOTES #1, 2, 3, 4, 10, 11.
SF ADM-1	GREENHECK SQ-7-VG	ADMIN. BLDG.	INLINE	585	1.0	2827	1/2 / 0.18	5.7	7	15	DIRECT	115	1	60	10.4 INLET 13.0 OUTLET 8.8 RADIATED	45	19 M6.02	SEE NOTES #1, 2, 3, 4, 6, 12.
SF A-1	GREENHECK SQ-130-VG	BLDG. "A"	INLINE	1,410	1.0	1555	3/4 / 0.44	8.8	11	20	DIRECT	115	1	60	12.1 INLET 9.7 RADIATED	70	19 M6.02	SEE NOTES #1, 2, 3, 4, 6, 14.
SF B-1	GREENHECK SQ-130-VG	BLDG. "B"	INLINE	1,380	1.0	1544	3/4 / 0.43	8.8	11	20	DIRECT	115	1	60	11.9 INLET 9.5 RADIATED	70	19 M6.02	SEE NOTES #1, 2, 3, 4, 6, 15.
SF C-1	GREENHECK SQ-130-VG	BLDG. "C"	INLINE	1,380	1.0	1544	3/4 / 0.43	8.8	11	20	DIRECT	115	1	60	11.9 INLET 9.5 RADIATED	70	19 M6.02	SEE NOTES #1, 2, 3, 4, 6, 16.
SF D-1	GREENHECK SQ-120-VG	BLDG. "D"	INLINE	1,035	1.0	1509	1/2 / 0.31	6.4	8	15	DIRECT	115	1	60	9.1 INLET 7.0 RADIATED	65	19 M6.02	SEE NOTES #1, 2, 3, 4, 6, 17.

NOTES:
1. PROVIDE BUILT-IN FACTORY MOUNTED AND WIRED DISCONNECT SWITCH AND NEMA 3R ENCLOSURE.
2. PROVIDE BACKDRAFT DAMPER.
3. INTERLOCK FAN 'S OPERATION WITH TIMKE CLOCK SCHEDULE PROVIDED BY THE SCHOOL DISTRICT.
4. PROVIDE FACTORY SOLID STATE SPEED CONTROLLER MOUNTED WITHIN THE FAN CASING.
5. INTERLOCK FAN 'S OPERATION WITH FAN COIL UNITS FC-ADM-1.
6. PROVIDE FAN WITH MERV 13 FILTER BOX.
7. INTERLOCK FAN 'S OPERATION WITH FC-ADM-4.
8. INTERLOCK FAN 'S OPERATION WITH FC-ADM-5.
9. PROVIDE WITH FACTORY INTEGRAL BACKDRAFT DAMPER..
10. PROVIDE WITH HANGING KIT.
11. PROVIDE WITH ROUND DUCT CONNECTOR.
12. INTERLOCK FAN'S OPERATION WITH FAN COIL UNITS FC-ADM-1, FC-ADM-2, FC ADM-3, FC-ADM-4, AND FC-ADM-5.
13. INTERLOCK FAN'S OPERATION WITH FAN COIL UNIT FC-K1-1.
14. INTERLOCK FAN'S OPERATION WITH FAN COIL UNITS FC-A-1, FC-A-2, FC-A-3, FC-A-4, AND FC-A-5.
15. INTERLOCK FAN'S OPERATION WITH FAN COIL UNITS FC-B-1, FC-B-2, FC-B-3, AND FC-B-4.
16. INTERLOCK FAN'S OPERATION WITH FAN COIL UNITS FC-C-1, FC-C-2, FC-C-3, AND FC-C-4.
17. INTERLOCK FAN'S OPERATION WITH FAN COIL UNITS FC-D-1, FC-D-2, FC-D-3, AND FC-D-4.

INDOOR FAN COIL UNIT SCHEDULE

UNIT NO.	MANUFACTURER AND MODEL NO.	SERVICE	LOCATION	TYPE	CAPACITY (MBH)		OSA TEMP. (°F) (DB/WB)	EAT. (°F) (DB/WB)	LAT. (°F) (DB/WB)	SUPPLY FAN				ELECTRICAL			OPER. WT. (LBS.)	MIN. OSA (CFM)	ANCHORAGE DETAIL	REMARKS
					COOLING (TOTAL/ SENSIBLE)	HEATING (@17°F AMB. WB)				MAX. CFM	E.S.P. (IN.)	B.H.P.	MAX. B.H.P.	RPM.	VOLTAGE	UNIT MCA	MOCP				
FC ADM-1	TOSHIBA/CARRIER MMD-UB0181VHN-UL	NURSE AD-3, REST AREA AD-4	ADMIN. BLDG.	VRF INDOOR	18.0	20.0	83.0/67.0	80.0	67.0	668	0.4	112 WATTS	-	-	208V/ 1Ø / 60HZ	4	6	60	60	25 M6.01	SEE NOTES 1-7.
FC ADM-2	TOSHIBA/CARRIER MMD-UB0181VHN-UL	PUBLIC AD-1, CLERK AD-2	ADMIN. BLDG.	VRF INDOOR	18.0	20.0	83.0/67.0	80.0	67.0	668	0.4	112 WATTS	-	-	208V/ 1Ø / 60HZ	4	6	60	75	25 M6.01	SEE NOTES 1-7.
FC ADM-3	TOSHIBA/CARRIER MMD-UB0121VHN-UL	PRINCIPAL AD-7	ADMIN. BLDG.	VRF INDOOR	12.0	13.5	83.0/67.0	80.0	67.0	424	0.4	73 WATTS	-	-	208V/ 1Ø / 60HZ	4	6	60	30	25 M6.01	SEE NOTES 1-7.
FC ADM-4	TOSHIBA/CARRIER MMD-UB0181VHN-UL	WORK RM AD-10, STORAGE AD-9	ADMIN. BLDG.	VRF INDOOR	18.0	20.0	83.0/67.0	80.0	67.0	668	0.4	112 WATTS	-	-	208V/ 1Ø / 60HZ	4	6	60	60	25 M6.01	SEE NOTES 1-7.
FC ADM-5	TOSHIBA/CARRIER MMD-UB0301VHN-UL	STAFF LOUNGE AD-13	ADMIN. BLDG.	VRF INDOOR	30.0	34.0	83.0/67.0	80.0	67.0	923	0.6	241 WATTS	-	-	208V/ 1Ø / 60HZ	5	6	65	360	25 M6.01	SEE NOTES 1-7.
FC A-1	TOSHIBA/CARRIER MMD-UB0121VHN-UL	OFFICE A-6	BLDG. "A"	VRF INDOOR	12.0	13.5	83.0/67.0	80.0	67.0	424	0.4	73 WATTS	-	-	208V/ 1Ø / 60HZ	4	6	60	30	25 M6.01	SEE NOTES 1-7.
FC A-2	TOSHIBA/CARRIER MMD-UB0601VHN-UL	CLASSROOM A-4	BLDG. "A"	VRF INDOOR	60.0	67.0	83.0/67.0	80.0	67.0	1,728	0.6	519 WATTS	-	-	208V/ 1Ø / 60HZ	7	10	80	345	25 M6.01	SEE NOTES 1-7.
FC A-3	TOSHIBA/CARRIER MMD-UB0601VHN-UL	CLASSROOM A-3	BLDG. "A"	VRF INDOOR	60.0	67.0	83.0/67.0	80.0	67.0	1,728	0.6	519 WATTS	-	-	208V/ 1Ø / 60HZ	7	10	80	345	25 M6.01	SEE NOTES 1-7.
FC A-4	TOSHIBA/CARRIER MMD-UB0601VHN-UL	CLASSROOM A-2	BLDG. "A"	VRF INDOOR	60.0	67.0	83.0/67.0	80.0	67.0	1,728	0.6	519 WATTS	-	-	208V/ 1Ø / 60HZ	7	10	80	345	25 M6.01	SEE NOTES 1-7.
FC A-5	TOSHIBA/CARRIER MMD-UB0601VHN-UL	CLASSROOM A-1	BLDG. "A"	VRF INDOOR	60.0	67.0	83.0/67.0	80.0	67.0	1,728	0.6	519 WATTS	-	-	208V/ 1Ø / 60HZ	7	10	80	345	25 M6.01	SEE NOTES 1-7.
FC B-1	TOSHIBA/CARRIER MMD-UB0601VHN-UL	CLASSROOM B-4	BLDG. "B"	VRF INDOOR	60.0	67.0	83.0/67.0	80.0	67.0	1,728	0.6	519 WATTS	-	-	208V/ 1Ø / 60HZ	7	10	80	345	25 M6.01	SEE NOTES 1-7.
FC B-2	TOSHIBA/CARRIER MMD-UB0601VHN-UL	CLASSROOM B-3	BLDG. "B"	VRF INDOOR	60.0	67.0	83.0/67.0	80.0	67.0	1,728	0.6	519 WATTS	-	-	208V/ 1Ø / 60HZ	7	10	80	345	25 M6.01	SEE NOTES 1-7.
FC B-3	TOSHIBA/CARRIER MMD-UB0601VHN-UL	CLASSROOM B-2	BLDG. "B"	VRF INDOOR	60.0	67.0	83.0/67.0	80.0	67.0	1,728	0.6	519 WATTS	-	-	208V/ 1Ø / 60HZ	7	10	80	345	25 M6.01	SEE NOTES 1-7.
FC B-4	TOSHIBA/CARRIER MMD-UB0601VHN-UL	CLASSROOM B-1	BLDG. "B"	VRF INDOOR	60.0	67.0	83.0/67.0	80.0	67.0	1,728	0.6	519 WATTS	-	-	208V/ 1Ø / 60HZ	7	10	80	345	25 M6.01	SEE NOTES 1-7.
FC C-1	TOSHIBA/CARRIER MMD-UB0601VHN-UL	CLASSROOM C-4	BLDG. "C"	VRF INDOOR	60.0	67.0	83.0/67.0	80.0	67.0	1,728	0.6	519 WATTS	-	-	208V/ 1Ø / 60HZ	7	10	80	345	25 M6.01	SEE NOTES 1-7.
FC C-2	TOSHIBA/CARRIER MMD-UB0601VHN-UL	CLASSROOM C-3	BLDG. "C"	VRF INDOOR	60.0	67.0	83.0/67.0	80.0	67.0	1,728	0.6	519 WATTS	-	-	208V/ 1Ø / 60HZ	7	10	80	345	25 M6.01	SEE NOTES 1-7.
FC C-3	TOSHIBA/CARRIER MMD-UB0601VHN-UL	CLASSROOM C-2	BLDG. "C"	VRF INDOOR	60.0	67.0	83.0/67.0	80.0	67.0	1,728	0.6	519 WATTS	-	-	208V/ 1Ø / 60HZ	7	10	80	345	25 M6.01	SEE NOTES 1-7.
FC C-4	TOSHIBA/CARRIER MMD-UB0601VHN-UL	LIBRARY C-1	BLDG. "C"	VRF INDOOR	60.0	67.0	83.0/67.0	80.0	67.0	1,728	0.6	519 WATTS	-	-	208V/ 1Ø / 60HZ	7	10	80	345	25 M6.01	SEE NOTES 1-7.
FC D-1	TOSHIBA/CARRIER MMD-UB0601VHN-UL	CLASSROOM D-3	BLDG. "D"	VRF INDOOR	60.0	67.0	83.0/67.0	80.0	67.0	1,728	0.6	519 WATTS	-	-	208V/ 1Ø / 60HZ	7	10	80	345	25 M6.01	SEE NOTES 1-7.
FC D-2	TOSHIBA/CARRIER MMD-UB0601VHN-UL	CLASSROOM D-2	BLDG. "D"	VRF INDOOR	60.0	67.0	83.0/67.0	80.0	67.0	1,728	0.6	519 WATTS	-	-	208V/ 1Ø / 60HZ	7	10	80	345	25 M6.01	SEE NOTES 1-7.
FC D-3	TOSHIBA/CARRIER MMD-UB0601VHN-UL	CLASSROOM D-1	BLDG. "D"	VRF INDOOR	60.0	67.0	83.0/67.0	80.0	67.0	1,728	0.6	519 WATTS	-	-	208V/ 1Ø / 60HZ	7	10	80	345	25 M6.01	SEE NOTES 1-7.
FC K1-1	TOSHIBA/CARRIER 40RLQ07A2A5-UA0A0	KINDERGARTEN CLASSROOM 1 K-1, WORK RM K-5	BLDG. "K1"	VRF INDOOR	75.7/57.2	57.13	83.0/67.0	77.9/65.5	56.5/ 55.6	2,500	0.6	0.67	2.40	1218	230V/ 3Ø / 60HZ	8	15	385	465	25 M6.01	SEE NOTES 1-8.

NOTES:
1. PROVIDE WITH CONDENSATE DRAIN PAN (PRIMARY AND SECONDARY) FOR FAN COIL UNIT AND ASSOCIATED PIPING.
2. PROVIDE WITH "REVCO" GOVI2 CONDENSATE DRAIN LIFT PUMP (CONDENSATE PUMP SHALL BE POWERED THRU INDOOR FAN COIL UNIT).
3. SIZE REFRIGERANT LINES PER MANUFACTURER'S RECOMMENDATIONS.
4. PROVIDE FACTORY T-24 COMPLIANT PROGRAMMABLE THERMOSTAT "COOLMASTER" WITH TEMPERATURE/CO2 SENSOR & DCV CONTROLS.
5. SUSPENDED HORIZONTAL MOUNT UNIT.
6. UNIT SHALL HAVE DUCT FLEX CONNECTIONS INSTALLED ON HORIZONTAL AND/OR VERTICAL DUCTS.
7. ALL UNITS SHALL HAVE R-32 REFRIGERANT.
8. UNIT WITH STEP DOWN TRANSFORMER. INTERLOCK UNIT WITH OSA & RA MOTORIZED DAMPERS, SEE MOTORIZED DAMPER SCHEDULE THIS SHEET.

AIR DISTRIBUTION SCHEDULE

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

NOTES:
1. EQUIVALENT MODELS OF KRUEGER, ANEMOSTAT, PRICE OR T&B ARE ACCEPTABLE.
2. REFER TO THE FLOOR PLANS FOR NECK SIZE, CFM, AIR DIFFUSION PATTERN AND FIRE/DAMPER, IF REQUIRED.
3. PROVIDE AIR CONTROL GRID FOR ALL CEILING SUPPLY DIFFUSERS SET AT 90°.
4. INTERIOR OF ALL GRILLES SHALL BE PAINTED FLAT BLACK.

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-124972 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/17/2026

PBK

ARCHITECT PBK Architects, Inc. PBK.com
ANAHEIM
2400 E KATELLA AVE, Suite 950
ANAHEIM, CA 92806
P 949-548-5000

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

SCHROEDER ES HVAC UPGRADE & MODERNIZATION

PROJECT ADDRESS:
15151 Columbia Ln
Huntington Beach, CA 92647

100% CONSTRUCTION DOCUMENTS

DSA APPL NO.: 04-124972 DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT EST. 1873

RELO
A K2 K1
B ADMIN
C
D MPR
RELO

KEY PLAN
NORTH: PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER REX DAVID WANGER No.M36155 Exp.09-30-2026 STATE OF CALIFORNIA

Architect

LICENSED ARCHITECT Tong Yao No. C-31162 REN. 10-31-2027 STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
11-14-2025	250376

REVISIONS

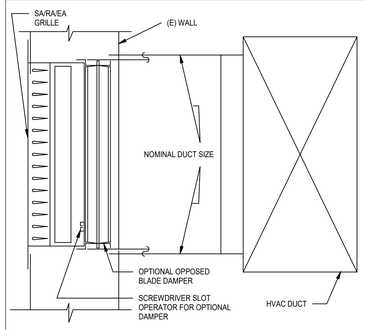
No.	Description	Date

100% CONSTRUCTION DOCUMENTS

MECHANICAL SCHEDULES

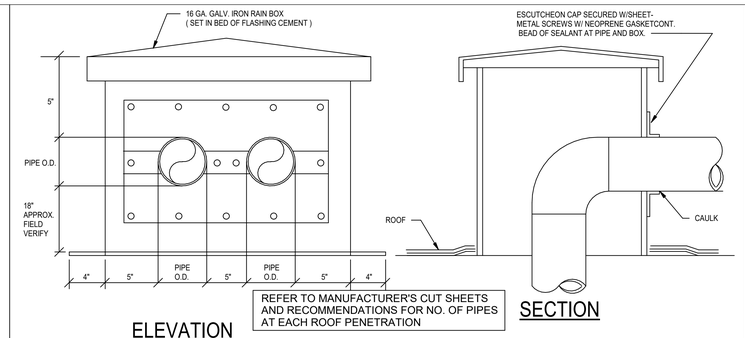
M5.01

0" 1"



30 SIDE WALL GRILLE DETAIL
NOT TO SCALE

NOTES:
1. LOCATE VOLUME DAMPER AS FAR AWAY FROM REGISTER AS POSSIBLE.



REFER TO MANUFACTURER'S CUT SHEETS AND RECOMMENDATIONS FOR NO. OF PIPES AT EACH ROOF PENETRATION

ELEVATION SECTION

29 REFRIGERANT PIPE PENETRATION THROUGH ROOF DETAIL
NOT TO SCALE

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

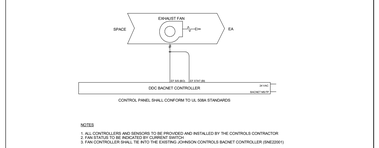
NOTES:
1. FIRE DAMPER & INSTALLATION TO BE IN ACCORDANCE WITH CALIFORNIA STATE FIRE MARSHAL # LISTED ABOVE.
2. FIRE DAMPER SHALL BE STATE FIRE MARSHAL APPROVED & INSTALLED STRICTLY PER MFG'S PRINTED INSTRUCTIONS.
3. MANUFACTURER'S INSTALLATION INSTRUCTIONS SHALL BE MADE AVAILABLE TO THE INSPECTION AUTHORITIES.
4. AREA SMOKE DETECTOR SHALL BE FURNISHED AND INSTALLED BY ELECTRICAL CONTRACTOR. SEE ELECTRICAL DRAWINGS.
5. FIRE DAMPER DETAIL FOR REFERENCE ONLY.

DAMPER CSFM LISTING NO: 3235-0245:0124

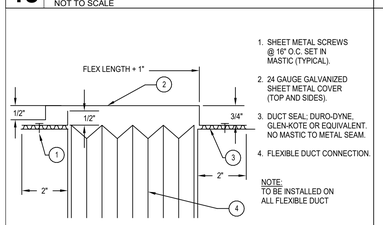
DETAIL NOTES:
1. SLEEVE TO EXTEND 3" BEYOND WALL.
2. DUCT TO SLEEVE CONNECTION (S-LOCK).
3. FRAMED FIRE RATED WALL, SEE ARCHITECTURAL DWGS.
4. EFL, ELECTRIC RESET LINK, REST ON OUTSIDE OF DMP.
5. AREA SMOKE DETECTOR SHALL BE FURNISHED AND CONNECTED BY ELECTRICAL CONTRACTOR. OVERALL DETECTION SYSTEM SHALL CONTROL DAMPERS, SEE ELECTRICAL DRAWINGS.
6. JUNCTION BOX.
7. 120 VOLT ELECTRIC ACTUATOR.
8. 16 GA. ANGLE FRAME, WELDED BOLTED OR SCREWED TO ALL FOUR SIDES OF SLEEVE. ANGLE FRAME NOT LESS THAN 1-1/2" ANGLE. NET OPENING IN FRAMED WALLS SHALL EXCEED NET O.D. OF THE DAMPER ASSEMBLY BY 1/8" FOR EACH FOOT OF WIDTH AND HEIGHT OF DAMPER ASSEMBLY. USE S/M SCREWS OR FASTENERS AS REQUIRED TO SECURE ASSEMBLY.
9. STANDARD REGISTER SCREW INTO FRAMING MEMBE FOR WOOD FRAMED WALLS.
10. 1-1/2 HOUR FIRE/SMOKE DAMPER SHALL BE U.L. 555 LISTED FOR FIRE AND U.L. 555S LEAKAGE RATED FOR NO LESS THAN CLASS II. RUSKIN MODEL FSD36 WITH FACTORY G-STYLE ENCLOSURE FOR SQUARE OR RECTANGULAR DUCTS. PROVIDE W/ RELAYS AS REQUIRED BY SMOKE DETECTORS. PROVIDE SP100 DUAL POSITION INDICATOR SWITCH, TS150 FIRESTAT AND MP10 REMOTE PANEL.
11. REGISTER OR GRILLE, SEE MECHANICAL PLAN.

20 COMBINATION FIRE/SMOKE DAMPER DETAIL
NOT TO SCALE

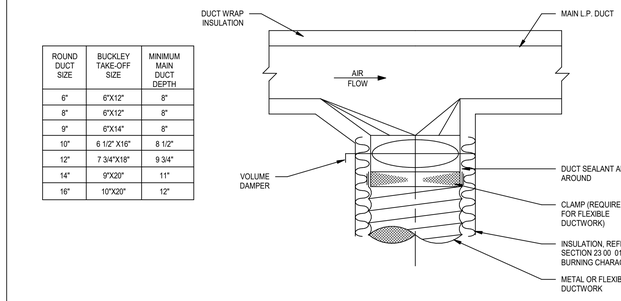
NOTES:
1. ALL DUCTWORK AND ACCESSORIES SHALL BE INSTALLED IN A MANNER TO PREVENT VIBRATION AND RATTLING.
2. ALL DUCTWORK SHALL BE FABRICATED AND CONSTRUCTED TO COMPLY WITH THE 2022 CALIFORNIA MECHANICAL CODE AND 2022 ENERGY EFFICIENCY STANDARDS.



18 EXHAUST FAN CONTROL DIAGRAM
NOT TO SCALE



12 FLEX CONNECTOR DETAIL
NOT TO SCALE



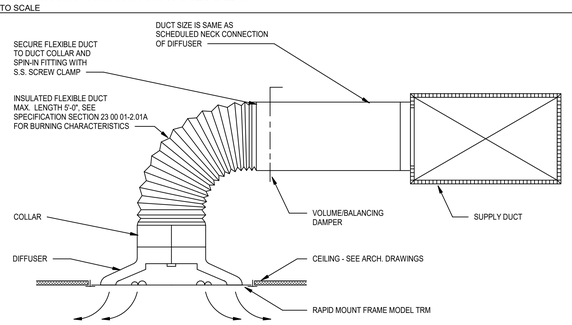
ROUND DUCT SIZE	BUCKLEY TAKE-OFF SIZE	MINIMUM MAIN DUCT DEPTH
6"	6"X12"	8"
8"	6"X12"	8"
9"	6"X14"	8"
10"	6 1/2" X16"	8 1/2"
12"	7 3/4"X18"	9 3/4"
14"	9"X20"	11"
16"	10"X20"	12"

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

DIMENSION OF LONGEST SIDE, INCHES	SHEET METAL GAGE (ALL FOUR SIDES)	TRANSVERSE REINFORCING (1)					
		MINIMUM REINFORCING ANGLE SIZE AND MAXIMUM LONGITUDINAL SPACING BETWEEN TRANSVERSE JOINTS &/OR INTERMEDIATE REINFORCING	AT JOINTS				
			MIN. HT. IN.	DRIVE SLIP / PLAIN S SLIP	HEMMED S SLIP	ALTER'NT BAR SLIP	REINFORCED BAR SLIP
				RECOM-MENDED GAGE	RECOM-MENDED GAGE	RECOM-MENDED GAGE	RECOM-MENDED GAGE
UP THRU 12	26	NONE REQUIRED	1	26	26	24	24
13 - 18	24	NONE REQUIRED	1	24	24	24	24
19 - 30	24	1" X 1" X 1/8" @ 60 IN.	1		24	24	24
31 - 42	22	1" X 1" X 1/8" @ 60 IN.	1			22	22
43 - 60	20	1" X 1" X 1/8" @ 60 IN.	1				20
61 & ABOVE	18	1" X 1" X 1/8" @ 60 IN.	1				18

(1) TRANSVERSE REINFORCING SIZE IS DETERMINED BY DIMENSION OF SIDE TO WHICH ANGLE IS APPLIED.

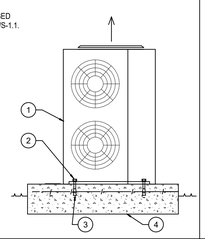
11 DUCT CONSTRUCTION STANDARDS
NOT TO SCALE



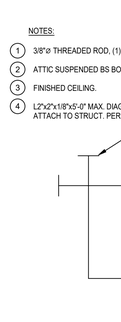
6 HEAT PUMP ON GRADE MOUNTING DET.
NOT TO SCALE

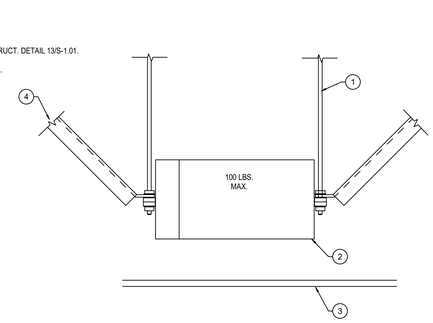
NOTES:
1. HEAT PUMP UNIT. SEE HEAT PUMP UNIT SCHEDULE SHEET M5.01. 1350 MAX. WEIGHT.
2. SEE STRUCTURAL DETAIL 9/S-1.1 FOR ANCHORAGE INFORMATION.
3. EXPANSION BOLT. (TYP.) SEE STRUCTURAL DETAIL 9/S-1.1 FOR ATTACHMENT (TYP.)
4. CONCRETE PAD POURED ON UNDISTURBED OR PACKED SOIL, SEE STRUCT. DETAIL 9/S-1.1.

NOTE:
MAINTAIN CLEARANCES REQUIRED BY ANUFACTURER.



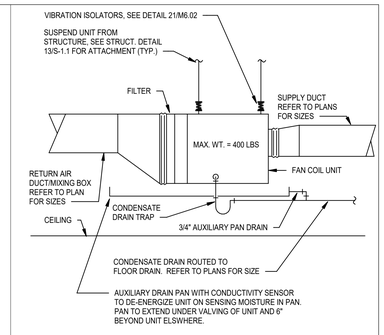
5 CEILING DIFFUSER CONNECTION DETAIL (SURFACE MOUNT)
NOT TO SCALE



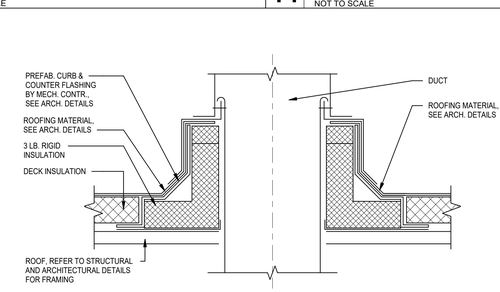


27 BS BOX MOUNTING DETAIL
NOT TO SCALE

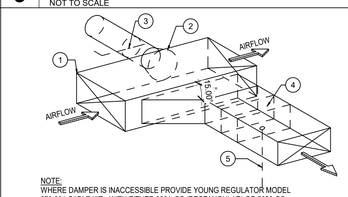
NOTES:
1. 3/8"ø THREADED ROD, (1) EACH CORNER. ATTACH TO STRUCT. PER STRUCT. DETAIL 13/S-1.01.
2. ATTIC SUSPENDED BS BOX. SEE MECH. SCHEDULE FOR MAKE & MODEL.
3. FINISHED CEILING.
4. L2"x2"x1/8"x5'-0" MAX. DIAG. BRACE. TYP. OF 4, ONE IN EACH DIRECTION. ATTACH TO STRUCT. PER STRUCT. DETAIL 13/S-1.01.



25 DUCTED FAN COIL UNIT DETAIL
NOT TO SCALE

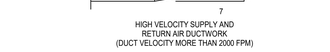


9 DUCTWORK THROUGH ROOF CURB DETAIL
NOT TO SCALE



NOTE:
WHERE DAMPER IS INACCESSIBLE PROVIDE YOUNG REGULATOR MODEL 270-301 CABLE KIT WITH EITHER 830A-CC (RECTANGULAR) OR 5020-CC (ROUND) DAMPER.
1. RECTANGULAR GALVANIZED SHEET METAL SUPPLY AIR DUCT - SEE MECHANICAL PLAN FOR SIZE.
2. CUT OPENING ACCURATELY FOR SPIN IN (FLARED) FITTING - WHERE POSSIBLE.
3. BUTTERFLY DAMPER W/ LOCKING QUAD. (TYP)
4. VOLUME CONTROL DAMPER WITH LOCKING QUADRANT.
5. DAMPER REGULATOR

21 ROOF JACK DETAIL
NOT TO SCALE



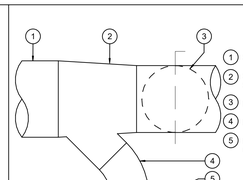
LOW VELOCITY SUPPLY AND RETURN AIR DUCTWORK (DUCT VELOCITY LESS THAN 2000 FPM)

HIGH VELOCITY SUPPLY AND RETURN AIR DUCTWORK (DUCT VELOCITY MORE THAN 2000 FPM)

15 RECTANGULAR DUCT TRANSITION DETAIL
NOT TO SCALE



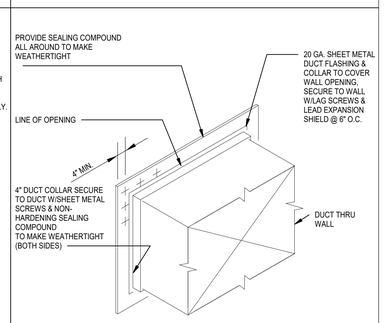
14 FLEXIBLE DUCTWORK HANGER DETAIL
NOT TO SCALE



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

1. SHEET METAL DUCT.
2. SHEET METAL TAPER WITH BRANCH STUB.
3. DAMPER AT END OF DUCT RUN ONLY.
4. BRANCH TAKE-OFF.
5. BUTTERFLY DAMPER W/ LOCKING QUAD. (TYP)

2 BRANCH DUCT DAMPER DETAIL
NOT TO SCALE



1 DUCT THROUGH WALL DETAIL
NOT TO SCALE

FILE PATH: Z:\Projects\...
3/12/2026 2:29:31 PM

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-124972 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/17/2026

PBK

ARCHITECT PBK Architects, Inc.
PBK.com
ANAHEIM
2400 E KATELLA AVE, Suite 950
ANAHEIM, CA 92806
P 949-548-5000

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

SCHROEDER ES HVAC UPGRADE & MODERNIZATION

PROJECT ADDRESS:
15151 Columbia Ln
Huntington Beach, CA 92647

100% CONSTRUCTION DOCUMENTS

DSA APPL NO.: 04-124972 DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT EST. 1871

RELO
A
B
C
D
RELO
K1
K1
ADMIN
MPR
KEY PLAN
N
NORTH: PLAN

Consultant
REGISTERED PROFESSIONAL ENGINEER REX DAVID NANTAIS No.M36155 Exp.09-30-2026 STATE OF CALIFORNIA

Architect
LICENSED ARCHITECT Yong Yoo No. C-31162 REN 10-31-2027 STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
11-14-2025	250376

REVISIONS

No.	Description	Date

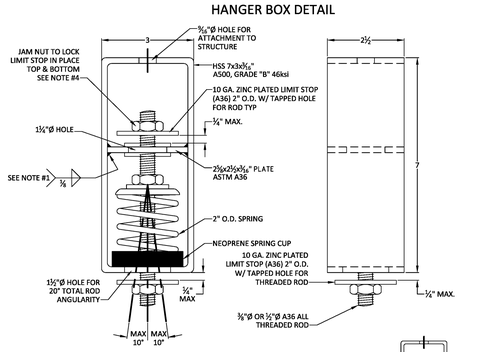
100% CONSTRUCTION DOCUMENTS

MECHANICAL DETAILS

M6.01

0" 1"

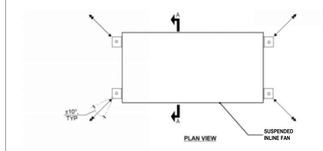
HANGER BOX DETAIL



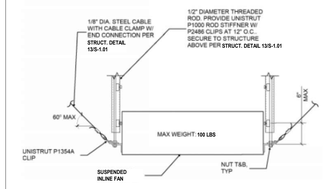
SPRING	COLOR	OD	DEFL	LOAD @ DEFL	ASTM DESIGN	WIRE Ø	TOTAL COILS	FREE HT.	SOLID HT.
2220	YELLOW	2"	1"	20 LBS	A229-12	0.125"	4.75	2.25	0.594
2250	RED	2"	1"	50 LBS	A229-12	0.156"	4.75	2.25	0.741
2275	GREEN	2"	1"	75 LBS	A229-12	0.156"	3.8	2.25	0.593
22100	PINK	2"	1"	100 LBS	A229-12	0.177"	4.25	2.25	0.752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

NOTE(S):
1. MAX. LOAD CAPACITY (DEAD): 225 LBS
2. MAX. SEISMIC LOAD RATING: 1,200 LBS
3. WELDING WILL BE DONE USING ER 70XX ELECTRODES.
4. THE LIMIT STOPS ARE TO BE ADJUSTED ONCE THE SPRING IS SET AT THE OPERATING DEFLECTION SO THE ½" GAP IS ACHIEVED.
5. W/ DESIGN DEFL. @ 1", THE LOAD @ DEFL. IS ALSO THE SPRING RATE IN LBS/IN.
6. A229-12 WIRE USED IS MIN CLASS I (MIN. TENSILE STRENGTH IS 188ksi).

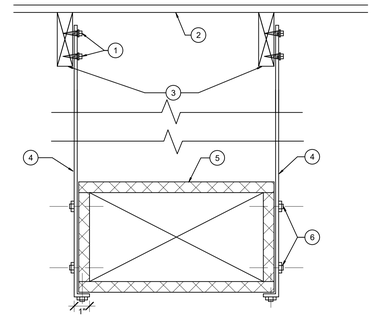
21 HANGER BOX DETAIL
NOT TO SCALE







19 INLINE FAN HANGING DETAIL
NOT TO SCALE

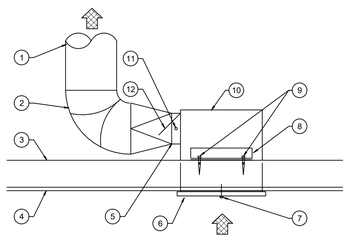


NOTES:
1. #10 X 1-1/4" CADIUM PLATED SCREWS. (TYPICAL).
2. ROOF OR FLOOR SLAB, SEE ARCH. & STRUCT. DWGS.
3. 2X WOOD FRAMING MEMBER, SEE STRUCTURAL DRAWINGS.
4. 1 X 18 GA. GALV. SHEET METAL STRAP @ 8'-0" O.C.
5. ACOUSTIC LINED GALVANIZED SHEET METAL DUCT - SEE MECHANICAL PLAN FOR SIZE.
6. #10 X 3/4" SELF TAPPING CADMIUM PLATED SHEET METAL SCREWS TO ANCHOR STRAPS TO DUCT. ALL STRAPS TO BE TIGHT AGAINST DUCT AND SUPPORT MEMBERS. (TYPICAL)

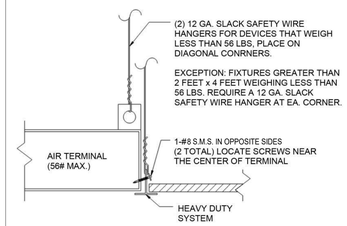
NOTE:
SEE STRUCT. DETAIL 13/S-1.01 FOR ATTACHMENT TO STRUCTURE.

14 GRAVITY DUCT STRAP HANGER DETAIL
NOT TO SCALE

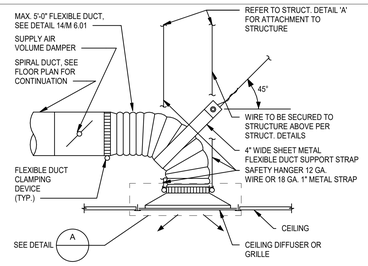
NOTES:
1. ROUND GALVANIZED SHEET METAL DUCT THRU ROOF, SEE MECHANICAL PLAN FOR SIZE.
2. ROUND GALVANIZED SHEET METAL 90° ELBOW.
3. 2X WOOD FRAMING OR BLOCKING.
4. GYPSUM BOARD CEILING, SEE ARCH. DRAWINGS.
5. SQUARE TO ROUND GALVANIZED SHEET METAL TRANSITION.
6. MOLDED WHITE PLASTIC GRILLE FURNISHED WITH EXHAUST FAN.
7. GRILLE BUTTON FURNISHED WITH FAN.
8. ADJUSTABLE MOUNTING FLANGE ON EACH SIDE, FURNISHED WITH EXHAUST FAN.
9. 1/4"Ø X 1-1/2" LAG SCREW INTO WOOD FRAMING OR BLOCKING.
10. CEILING MOUNTED EXHAUST FAN.
11. #7 X 1/2"Ø SHEET METAL SCREWS MIN. 4" O.C., TAPE WITH 2" HARDCAST TAPE
12. INTEGRAL BACKDRAFT DAMPER.



12 EXHAUST FAN CEILING MOUNTING DETAIL
NOT TO SCALE

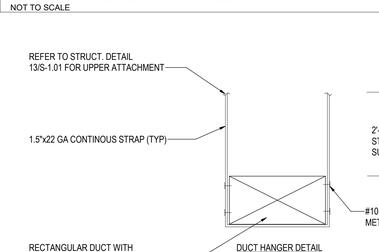


DETAIL A



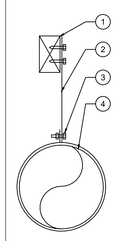
NOTES:
1. REFER TO DETAIL 14/M6.01 FOR FLEXIBLE DUCTWORK DETAIL.
2. LOCATE VOLUME DAMPER AS FAR AWAY FROM DIFFUSER OR GRILLE AS POSSIBLE.

10 LAY-IN DIFFUSER CONNECTION DETAIL
NOT TO SCALE



NOTES:
1. MAXIMUM SPACING OF HANGERS SHALL BE 5'-0".
2. PROVIDE TRANSVERSE BRACING AT 30 FT AND LONGITUDINAL BRACING AT 60 FT, WHERE BRACING IS REQUIRED.
3. INSTALL ROD STIFFENER AS REQUIRED.
4. REFER TO CBC 1617A.1.25 EXEMPTION #2 AND DSA IR 16-13 APPENDIX B-3.0 FOR BRACING EXEMPTION REQUIREMENTS, IF APPLIES.

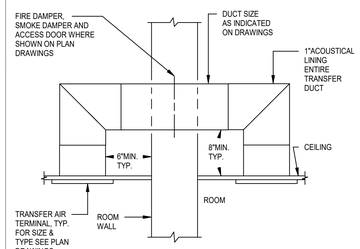
2 RECTANGULAR DUCT HANGER DETAIL
NOT TO SCALE



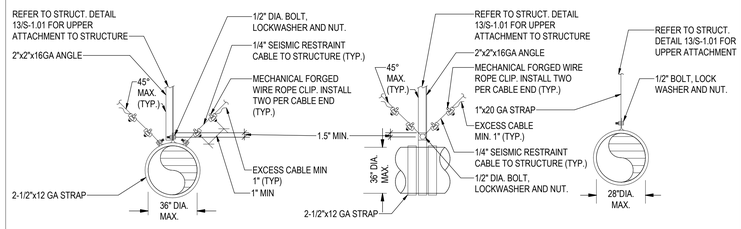
DETAIL NOTES:
1. 2x FRAMING, SEE STRUCT. DRAWINGS OR NEW 4x6 BLOCKING WITH U46 EACH END.
2. 1"x18 GA. GALV. S.M. STRAP, ATTACH TO STRUCTURE WITH (2) #10x1-1/4" CADMIUM PLATED SCREWS.
3. 1/4"ø THRU BOLT WITH LOCKWASHER AND NUT.
4. ROUND DUCTWORK, SEE PLAN FOR SIZE.

NOTES:
A. DUCT SUPPORTS SHALL BE 10'-0" O.C.
B. ALL DUCTS ARE LESS THAN 28"ø, NO LATERAL BRACING REQUIRED.
C. SEE STRUCTURAL DETAIL 13/S-1.01 FOR ATTACHMENT TO STRUCTURE.

6 GRAVITY ROUND DUCT SUPPORT DETAIL
NOT TO SCALE



5 TRANSFER DUCT DETAIL
NOT TO SCALE



DUCT BRACE DETAIL

NOTES:
1. HANGERS SHALL BE INSTALLED AT EVERY CHANGE OF DIRECTION AND NO MORE THAN 8'-0" APART.
2. PROVIDE SEISMIC CABLE TRANSVERSE BRACING AT 30 FT AND SEISMIC CABLE LONGITUDINAL BRACING AT 60 FT.
3. REFER TO CBC 1617A.1.25 EXEMPTION #2 AND DSA IR 16-13 APPENDIX B-3.0 FOR BRACING EXEMPTION REQUIREMENTS, IF APPLIES.

4 ROUND DUCT SUPPORT
NOT TO SCALE

FILE PATH: Z:\Projects\...
3/12/2026 2:29:33 PM

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-124972 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/17/2026

PBK

ARCHITECT PBK Architects, Inc.
PBK.com
ANAHEIM
2400 E KATELLA AVE, Suite 950
ANAHEIM, CA 92806
P 949-548-5000

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

SCHROEDER ES HVAC UPGRADE & MODERNIZATION

PROJECT ADDRESS:
15151 Columbia Ln
Huntington Beach, CA 92647

100% CONSTRUCTION DOCUMENTS

DSA APPL NO.: 04-124972 DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT EST. 1873

RELO
A K2 K1
B ADMIN
C
D MPR
RELO

KEY PLAN
NORTH: PLAN

Consultant
REGISTERED PROFESSIONAL ENGINEER REX DAVID WANG No.M36155 Exp.09-30-2026 MECHANICAL STATE OF CALIFORNIA

Architect
LICENSED ARCHITECT Yong Yao No. C-31162 REN 10-31-2026 STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
11-14-2025	250376

REVISIONS

No.	Description	Date

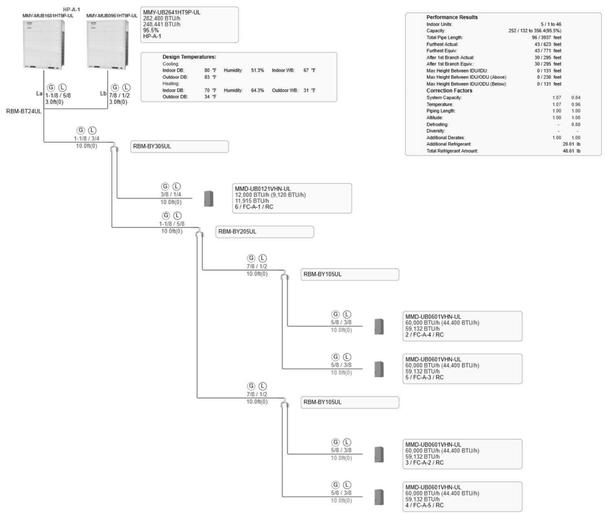
100% CONSTRUCTION DOCUMENTS

MECHANICAL DETAILS

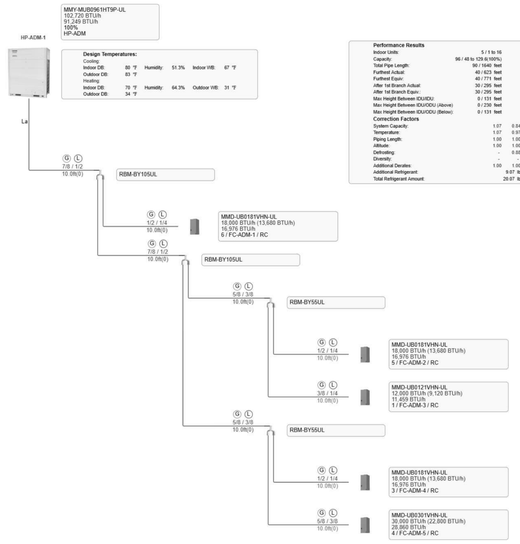
M6.02

M6.03 - MECHANICAL PIPING DIAGRAMS

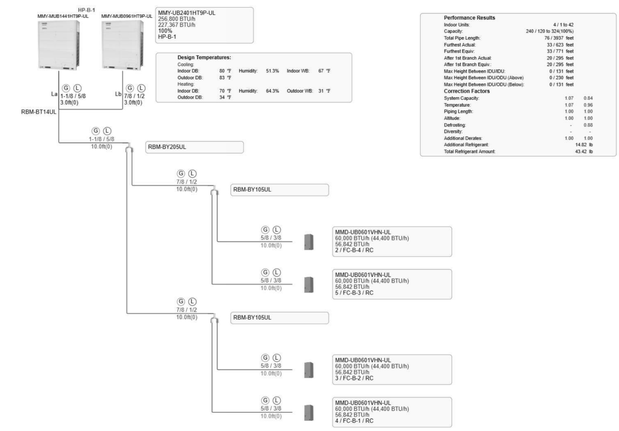
0" 1"



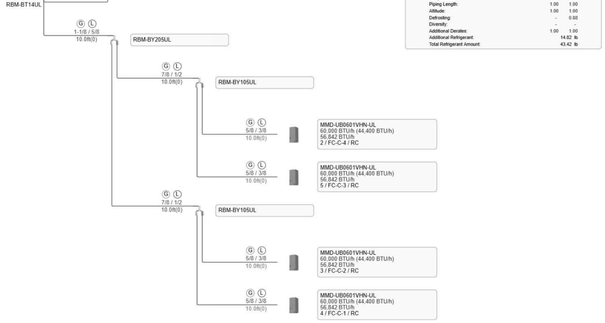
1 HP-A-1 PIPING DIAGRAM
NOT TO SCALE



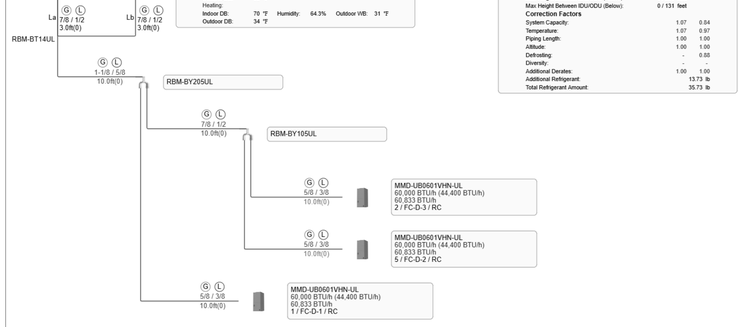
2 HP-ADM-1 PIPING DIAGRAM
NOT TO SCALE



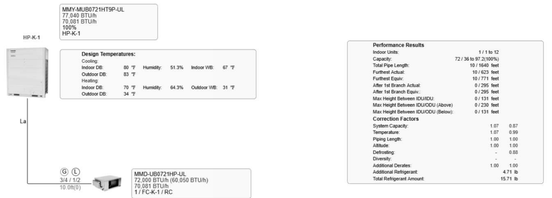
3 HP-B-1 PIPING DIAGRAM
NOT TO SCALE



4 HP-C-1 PIPING DIAGRAM
NOT TO SCALE



5 HP-D-1 PIPING DIAGRAM
NOT TO SCALE



6 HP-K-1 PIPING DIAGRAM
NOT TO SCALE

FILE PATH: Z:\Projects\...
3/12/2026 2:29:39 PM

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-124972 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/17/2026

PBK

ARCHITECT PBK Architects, Inc.
ANAHEIM PBK.com
2400 E KATELLA AVE, Suite 950
ANAHEIM, CA 92806
P 949-548-5000

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

SCHROEDER ES HVAC UPGRADE & MODERNIZATION

PROJECT ADDRESS:
15151 Columbia Ln
Huntington Beach, CA 92647

100% CONSTRUCTION DOCUMENTS

DSA APPL NO.: 04-124972 DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT EST. 1871

RELO
A
B
C
D
K2 K1
ADMIN
MPR
RELO

KEY PLAN
NORTH: PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER
REX DAVID WANG
No.M36155
Exp.09-30-2026
MECHANICAL
STATE OF CALIFORNIA

Architect

LICENSED ARCHITECT
Yong Yoo
No. C-31162
REN. 10-31-2027
STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
11-14-2025	250376

REVISIONS

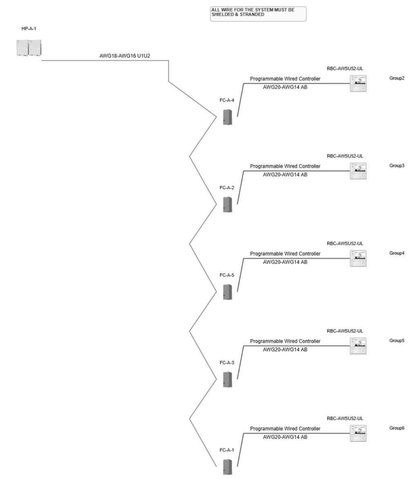
No.	Description	Date

100% CONSTRUCTION DOCUMENTS

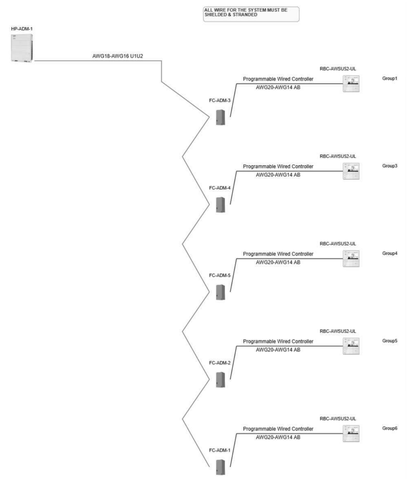
MECHANICAL PIPING DIAGRAMS

M6.03

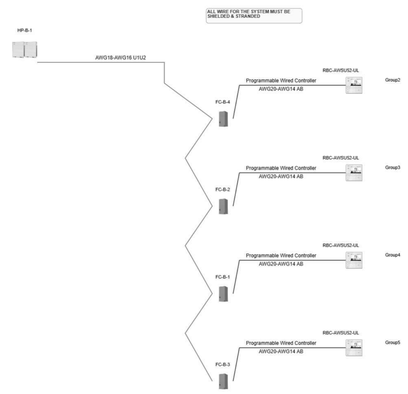
0" 1"



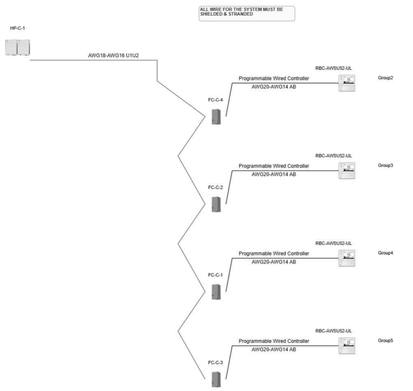
1 HP-A-1 WIRING DIAGRAM
1/2" = 1'-0"



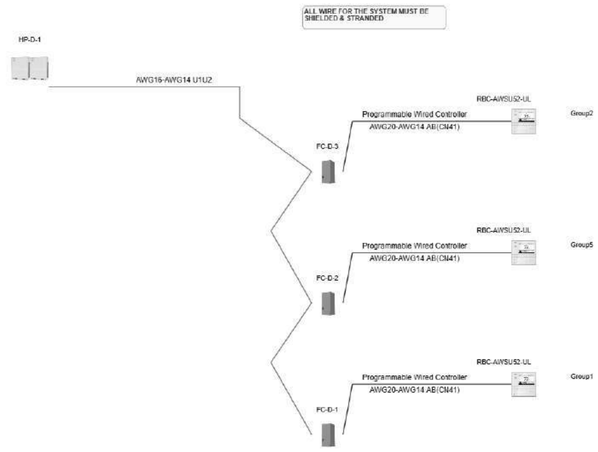
2 HP-ADM-1 WIRING DIAGRAM
1/2" = 1'-0"



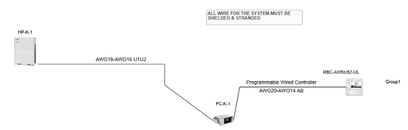
3 HP-B-1 WIRING DIAGRAM
1/2" = 1'-0"



4 HP-C-1 WIRING DIAGRAM
1/2" = 1'-0"



5 HP-D-1 WIRING DIAGRAM
1/2" = 1'-0"



6 HP-K-1 WIRING DIAGRAM
1/2" = 1'-0"

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-124972 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/17/2026

PBK

ARCHITECT PBK Architects, Inc.
PBK.com
ANAHEIM
2400 E KATELLA AVE, Suite 950
ANAHEIM, CA 92806
P 949-548-5000

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

SCHROEDER ES HVAC UPGRADE & MODERNIZATION

PROJECT ADDRESS:
15151 Columbia Ln
Huntington Beach, CA 92647

100% CONSTRUCTION DOCUMENTS

DSA APPL NO.: 04-124972 DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT EST. 1873

RELO
A K2 K1
B ADMIN
C MPR
D
RELO

KEY PLAN
NORTH: PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER
REX DAVID WANG
No.M36155
Exp.09-30-2026
SIGNATURE
STATE OF CALIFORNIA

Architect

LICENSED ARCHITECT
Yong Yoo
No. C-31162
REN 10-31-2027
STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
11-14-2025	250376

REVISIONS

No.	Description	Date

100% CONSTRUCTION DOCUMENTS

MECHANICAL WIRING DIAGRAMS

M6.04

FILE PATH: Z:\Projects\...
3/12/2026 2:29:42 PM

ELECTRICAL NOTES & SYMBOL LEGEND

SYMBOLS SHOWN ON LEGEND MAY NOT APPEAR ON DRAWINGS

MEP COMPONENT ANCHORAGE NOTES

1. ALL MECHANICAL, PLUMBING AND ELECTRICAL COMPONENTS SHALL BE ANCHORED AND INSTALLED PER THE DETAILS ON THE DSA APPROVED CONSTRUCTION DOCUMENTS. THE FOLLOWING COMPONENTS SHALL BE ANCHORED OR BRACED TO MEET THE FORCE AND DISPLACEMENT REQUIREMENTS PRESCRIBED IN THE 2022CBC, SECTIONS 1617A.1.18 THROUGH 1617A.1.26 AND ASCE 7-16 CHAPTER 13, 26 AND 30:

   A. ALL PERMANENT EQUIPMENT AND COMPONENTS.

   B. TEMPORARY, MOVABLE OR MOBILE EQUIPMENT THAT IS PERMANENTLY ATTACHED (e.g. HARD WIRED) TO THE BUILDING UTILITY SERVICES SUCH AS ELECTRIC, GAS OR WATER. "PERMANENTLY ATTACHED" SHALL INCLUDE ALL ELECTRICAL CONNECTIONS EXCEPT PLUGS FOR 110/220 VOLT RECEPTACLES HAVING A FLEXIBLE CABLE.

   C. TEMPORARY, MOVABLE OR MOBILE EQUIPMENT WHICH IS HEAVIER THAN400 POUNDS OR HAS A CENTER OF MASS LOCATED 4 FEET OR MORE ABOVETHE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENT IS REQUIRED TO BE RESTRAINED IN A MANNER APPROVED BY DSA.

2. THE FOLLOWING MECHANICAL AND ELECTRICAL COMPONENTS SHALL BEPOSITIVELY ATTACHED TO THE STRUCTURE BUT NEED NOT DEMONSTRATE DESIGNCOMPLIANCE WITH THE REFERENCES NOTED ABOVE. THESE COMPONENTS SHALLHAVE FLEXIBLE CONNECTIONS PROVIDED BETWEEN THE COMPONENT AND ASSOCIATED DUCTWORK, PIPING, AND CONDUIT. FLEXIBLE CONNECTIONS MUST ALLOW MOVEMENT IN BOTH TRANSVERSE AND LONGITUDINAL DIRECTIONS:

   A. COMPONENTS WEIGHING LESS THAN 400 POUNDS AND HAVE A CENTER OF MASS LOCATED 4 FEET OR LESS ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENT.

   B. COMPONENTS WEIGHING LESS THAN 20 POUNDS, OR IN THE CASE OF DISTRIBUTED SYSTEMS, LESS THAN 5 POUND PER FOOT, WHICH ARE SUSPENDED FROM A ROOF OR FLOOR OR HUNG FROM A WALL.

3. THE ANCHORAGE OF ALL MECHANICAL, ELECTRICAL AND PLUMBING COMPONENTS SHALL BE SUBJECT TO THE APPROVAL OF THE DESIGN PROFESSIONAL IN GENERALRESPONSIBLE CHARGE OR STRUCTURAL ENGINEER DELEGATED RESPONSIBILITY AND ACCEPTANCE BY DSA. THE PROJECT INSPECTOR WILL VERIFY THAT ALL COMPONENTS AND EQUIPMENT HAVE BEEN ANCHORED IN ACCORDANCE WITH ABOVE REQUIREMENTS.

UL LISTINGS NOTE

ALL ELECTRICAL MATERIALS AND EQUIPMENT SHALL BE NEW AND SHALL BE LISTED BY UNDERWRITER'S LABORATIES (UL) AND BEAR THEIR LABEL OR LISTED AND CERTIFIED BY A NATIONALLY RECOGNIZED TESTING AUTHORITY.

ALL EQUIPMENT/DEVICES INSTALLED RECESSED IN FIRE RATED CEILINGS OR WALLS SHALL BE ENCLOSED WITH AN APPROVED UL LISTED ENCLOSURE CARRYING THE SAME FIRE RATING AS THE CEILING OR WALL.

DEVICE LOCATION NOTE

THE LOCATION OF ALL ELECTRICAL DEVICES AND EQUIPMENT SHALL BE COORDINATED WITH THE ARCHITECTURAL ELEVATIONS, DETAILS, OR SECTIONS PRIOR TOINSTALLATIONS. ALL ELECTRICAL DEVICES AND EQUIPMENT SHALL BE RECESSED INWALLS UNLESS OTHERWISE NOTED. OUTLETS NOT INDICATED ON ARCHITECTURAL ELEVATIONS SHALL BE COORDINATED WITH THE ARCHITECT PRIOR TO ROUGH-IN, UNLESS OTHERWISE NOTED. ELECTRICAL DEVICES SHALL BE MOUNTED PER "ACCESSIBLE DEVICE MOUNTING HEIGHT" DETAIL.

COORDINATE WITH OTHER TRADES AS TO THE EXACT LOCATION OF THEIR RESPECTIVE EQUIPMENT SUPPLY POWER AND MAKE CONNECTION TO MOTORS AND EQUIPMENT REQUIRING ELECTRICAL CONNECTIONS AS INDICATED ON THE SINGLE LINE DIAGRAM, ELECTRICAL DRAWINGS, AND DRAWINGS OF OTHER TRADES. REVIEW THE DRAWINGS OF OTHER TRADES FOR CONTROL DIAGRAMS, SIZE AND LOCATION OF EQUIPMENT. DISCONNECT SWITCHES, STARTERS, WIRING, CONTROLS, AND CONDUIT FOR MECHANICAL AND PLUMBING OPERATIONS SHALL BE PROVIDED THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING MANUFACTURER'S SHOP DRAWINGS PRIOR TO ROUGHING IN ALL CONDUIT TO THIS EQUIPMENT.

GENERAL NOTES

1. THE CONTRACTOR SHALL VISIT THE SITE INCLUDING ALL AREAS INDICATED ON THE DRAWINGS. HE SHALL THOROUGHLY FAMILIARIZE HIMSELF WITH THE EXISTING CONDITIONS BY SUBMITTING A BID, ACCEPTS THE CONDITIONS UNDER WHICH HE SHALL BE REQUIRED TO PERFORM HIS WORK, AND SHALL COMPLY WITH ALL AUTHORITIES HAVING JURISDICTION, CEC, ALL STATE AND LOCAL CODES AND AMENDMENT
2. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN A COMPLETE SET OF CONTRACT DOCUMENTS AND ADDENDA (DRAWINGS AND SPECIFICATIONS.) HE SHALL CHECK THE CONTRACT DOCUMENTS OF THE OTHER TRADES AND DETERMINE HIS RESPONSIBILITIES. FAILURE TO DO SO SHALL NOT RELEASE THE CONTRACTOR FROM COMPLETING ALL RESPONSIBLE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
3. THE CONTRACTOR SECURE AND PAY FOR ALL PERMITS, FEES, CHARGES, AND INCIDENTAL COSTS NECESSARY FOR EXECUTION AND COMPLETION OF ELECTRICAL WORK, INCLUDING ALL CHARGES BY STATE, COUNTY AND LOCAL GOVERNMENTAL AGENCIES.
4. ALL ELECTRICAL WORK REFERENCED HEREIN SHALL BE COORDINATED WITH OTHER TRADES AND SITE CONDITIONS. ANY COSTS TO INSTALL WORK TO ACCOMPLISH SAID COORDINATION WHICH DIFFERS FROM THE WORK AS SHOWN ON THE CONTRACT DOCUMENTS SHALL BE INCURRED BY THE CONTRACTOR. ANY DISCREPANCIES, AMBIGUITIES OR CONFLICTS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT DURING BID TIME FOR CLARIFICATION. ANY SUCH CONFLICTS NOT CLARIFIED PRIOR TO BID SHALL BE SUBJECT TO THE INTERPRETATION OF THE ARCHITECT AT NO ADDITIONAL COST TO THE OWNER.
5. PROVIDE TEMPORARY POWER FACILITIES AND CONNECTIONS FOR ALL FEEDERS, BRANCH CIRCUITS, OR SIGNAL AND COMMUNICATIONS SYSTEMS BEING DISCONNECTED TO MAINTAIN SYSTEMS IN OPERATION.
6. ALL INTERRUPTION OF ELECTRICAL POWER SHALL BE KEPT TO A MINIMUM. HOWEVER, WHEN AN INTERRUPTION IS NECESSARY, THE SHUTDOWN MUST BE COORDINATED WITH THE OWNER AND ENGINEER 14 DAYS PRIOR TO THE OUTAGE, AND OVERTIME PAY SHALL BE INCLUDED IN THE CONTRACTOR'S BID. WORK IN EXISTING SWITCHBOARDS OR PANEL BOARDS SHALL BE COORDINATED WITH THE OWNER PRIOR TO REMOVING ACCESS PANELS OR DOORS.
7. AFTER ALL REQUIREMENTS OF THE CONTRACT DOCUMENTS HAVE BEEN FULLY COMPLETED, REPRESENTATIVES OF THE OWNERS WILL INSPECT THE WORK. THE CONTRACTOR SHALL PROVIDE COMPETENT PERSONNEL TO DEMONSTRATE THE OPERATION OF ANY ITEM OR SYSTEM TO THE FULL SATISFACTION OF EACH REPRESENTATIVE. FINAL ACCEPTANCE OF THE WORK WILL BE MADE BY THE OWNER AFTER RECEIPT OF APPROVAL AND RECOMMENDATION OF ACCEPTANCE FROM EACH REPRESENTATIVE.
8. FURNISH A ONE-YEAR WRITTEN GUARANTEE OF MATERIALS AND WORKMANSHIP FROM THE DATE OF PUNCH LIST COMPLETION.
9. ALL FINAL CONNECTIONS TO OWNER-FURNISHED EQUIPMENT SHALL BE MADE BY THE CONTRACTOR.
10. THE EXACT METHOD AND LOCATION OF CONDUIT PENETRATION AND OPENINGS IN CONCRETE OR MASONRY WALLS, GRADE BEAMS, FLOORS, OR STRUCTURAL STEEL MEMBERS SHALL BE AS DIRECTED BY THE STRUCTURAL ENGINEER. PERFORM CORING, SAW CUTTING, PATCHING, AND REFINISHING OF WALLS AND SURFACES WHEREVER IT IS NECESSARY TO PENETRATE. OPENINGS SHALL BE SEALED IN AN APPROVED METHOD TO MEET THE FIRE RATING OF THE PARTICULAR WALL, FLOOR, OR CEILING. THE EXACT METHOD AND LOCATION OF CONDUIT PENETRATIONS AND OPENINGS IN CONCRETE WALLS OR FLOORS SHALL BE UL APPROVED.
11. FINAL CONNECTIONS TO VIBRATING EQUIPMENT AND AT SEISMIC SEPARATIONS SHALL BE FLEXIBLE STEEL CONDUIT IN DRY INTERIOR LOCATIONS, AND LIQUID-TIGHT FLEXIBLE STEEL CONDUIT IN AREAS EXPOSED TO WEATHER, DAMP LOCATIONS, CONNECTIONS TO TRANSFORMER ENCLOSURES, AND FINAL CONNECTIONS TO MOTORS.
12. EQUIPMENT OUTLETS, LIGHTING FIXTURES, CONDUIT, WIRE, AND CONNECTION METHODS IN HVAC AIR PLENUMS SHALL BE APPROVED FOR USE IN PLENUMS AND SHALL CONFORM TO THE CALIFORNIA ELECTRICAL CODE.
13. ROUTE EXPOSED CONDUIT AND CONDUIT ABOVE ACCESSIBLE CEILING SPACES PARALLEL AND PERPENDICULAR TO WALLS AND ADJACENT PIPING. ARRANGE CONDUIT TO MAINTAIN HEADROOM AND TO PRESENT A NEAT APPEARANCE.
14. CONDUIT SHALL NOT BE INSTALLED IN ANY FLOOR SLAB. CONDUIT SHALL BE INSTALLED CONCEALED IN THE CEILING SPACE, CONCEALED WALLS, OR 24" MINIMUM BELOW SLAB ON GRADE UNLESS NOTED OTHERWISE.
15. LOCATE ELECTRICAL EQUIPMENT AND BOXES IN ACCESSIBLE CEILING SPACE OR PROVIDE AN ACCESS PANEL FOR INACCESSIBLE CEILING SYSTEMS. ACCESS DOORS SHALL BE A MINIMUM DIMENSION OF 24" X 24". ACCESS DOOR LOCATIONS SHALL SUIT ACCESSIBILITY AND CONSTRUCTION CONDITIONS. ACCESS DOORS SHALL HAVE A FIRE RATING EQUAL TO THE CEILING ASSEMBLY IN WHICH THEY ARE INSTALLED.
16. COORDINATE REQUIRED ACCESS DOORS IN NON-ACCESSIBLE CEILINGS TO SUIT FIELD CONDITIONS. THE EXACT SIZES AND PHYSICAL LOCATIONS SHALL SUIT ACCESSIBILITY AND CONSTRUCTION CONDITIONS. ACCESS DOORS SHALL BE PROVIDED IN OTHER SECTIONS OF THE SPECIFICATIONS. ACCESS DOORS SHALL HAVE A FIRE RATING EQUAL TO THE CEILING ASSEMBLY IN WHICH THEY ARE INSTALLED.
17. WHENEVER A DISCREPANCY OF ANY SYSTEM AND/OR EQUIPMENT ARISES ON THE CONTRACT DOCUMENTS OR SPECIFICATIONS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND INSTALLING ALL MATERIAL AND SERVICES REQUIRED BY THE STRICTEST CONDITIONS NOTED ON THE DRAWINGS OR SPECIFICATIONS TO ENSURE COMPLETE AND OPERABLE SYSTEMS AS REQUIRED BY THE OWNER AND ARCHITECT/ENGINEER.
18. STRAIGHT FEEDER BRANCH CIRCUIT AND CONDUIT RUNS SHALL BE PROVIDED WITH SUFFICIENT PULL BOXES OR JUNCTION BOXES TO LIMIT THE MAXIMUM LENGTH OF ANY SINGLE CABLE PULL TO 100 FEET. PULL BOXES SHALL BE SIZED PER CODE OR AS INDICATED ON DRAWINGS.
19. PANEL SCHEDULES SHALL BE REVISED TO REFLECT FINAL ROOM NAMES AND NUMBERS USING THE OWNER'S ROOM NAMES AND NUMBERS DESIGNATIONS. CONTRACTOR TO PROVIDE FINAL PANEL SCHEDULE TO EEOR AT COMPLETION OF PROJECT.
20. WHERE OUTLETS OCCUR AT TACKABLE WALL PANELS OR OTHER WALL FINISHES, PROVIDE EXTENSION RINGS AS REQUIRED SO THAT NO SPACE WILL EXIST BETWEEN DEVICE PLATE AND BACKBOX PER CALIFORNIA ELECTRICAL CODE 314.20. SEE ARCHITECTURAL ELEVATIONS FOR WALL FINISHES AND LOCATIONS.
21. COORDINATE LOCATIONS OF ALL SEISMIC SEPARATIONS.
22. ALL 120V POWER REQUIRED FOR THE FUNCTIONALITY OF ALL LOW VOLTAGE / TECHNOLOGY SYSTEMS SHALL BE A DEDICATED CIRCUIT AND ON EMERGENCY POWER WHEN AVAILABLE. CABLING CONTRACTOR SHALL COORDINATE ALL 120V POWER REQUIREMENTS AND LOCATIONS WITH ELECTRICAL CONTRACTOR FOR ALL EQUIPMENT.
23. ALL AC POWER CABLES ARE TO BE INSTALLED WITH A MINIMUM OF 12 INCHES OF SEPARATION FROM TECHNOLOGY LOW VOLTAGE CABLES, INTERCOM, FIRE ALARM, SECURITY CABLES IN ANY PARALLEL OPEN WIRE RUN.
24. CONTRACTOR SHALL PROVIDE AND INSTALL ALL SLEEVES REQUIRED TO INSTALL COMMUNICATION CABLING THROUGH RATED WALLS. ALL TECHNOLOGY SYSTEM CONDUIT SLEEVES SHALL HAVE PROTECTIVE BUSHING ON BOTH ENDS, BE DEDICATED FOR TECHNOLOGY SYSTEMS ONLY AND SHALL NOT SHARE WITH OTHER BUILDING TRADES.
25. CONTRACTOR SHALL MAINTAIN WALL RATING WITH PROPER FIRE BLOCKING METHODS.
26. ALL CONDUCTORS SHALL BE UL LISTED, COPPER #12 MINIMUM SIZE, TYPE THHN/THWN THERMOPLASTIC, 600 VOLT, 75 DEGREES CELSIUS WET AND 90 DEGREES CELSIUS DRY, UNLESS NOTED OTHERWISE.
27. ALL CABLING SHALL BE ROUTED IN CONDUIT. SIZE CONDUIT AS REQUIRED TO ROUTE SYSTEMS WITH MAXIMUM 40% CABLE FILL. MINIMUM CONDUIT SIZE SHALL BE 3/4" INTERIOR & 1" EXTERIOR.
28. ALL CONDUIT STUB OUTS AND SLEEVES SHALL HAVE PROTECTIVE BUSHINGS TO PREVENT CABLE DAMAGE. BUSHING TO BE INSTALLED PRIOR TO CABLE INSTALLATION. CUTTING BUSHING AND INSTALLING AFTER CABLE IS INSTALLED WILL NOT BE ACCEPTED.
29. COORDINATE MOUNTING HEIGHTS AND DETAILS OF ALL OUTLETS (POWER, SIGNAL, ETC.) WITH ARCHITECTURAL CASEWORK DRAWINGS PRIOR TO DIVISION 26 ROUGH-IN. PROVIDE COORDINATION DRAWINGS IN ACCORDANCE WITH DIVISION 26 SPECIFICATIONS WHERE CONFLICTS EXIST. OBTAIN APPROVAL FROM ARCHITECT BEFORE ELECTRICAL ROUGH-IN WHEN CONFLICTS ARISE.
30. REFER TO MECHANICAL DRAWINGS FOR EXACT LOCATION OF ALL HVAC AND PLUMBING EQUIPMENT.
31. CIRCUITING:

   A. BRANCH CIRCUITING IS SCHEMATIC IN NATURE AND IS INTENDED TO INDICATE CIRCUIT LOADING AND CONTROL, NOT METHODS OF INSTALLATION. REFER TO SPECIFICATIONS FOR METHODS OF INSTALLATION AND MATERIALS, INCLUDING WHETHER OR NOT BX IS ALLOWED AND WHETHER "THROUGH-FIXTURE" OR"OCTOPUS (EMT WITH FLEXIBLE WHIPS)" TYPE LIGHTING BRANCH CIRCUITING IS REQUIRED.

   B. WHERE WIRE SIZE AND CONDUIT SIZE IS NOT INDICATED ON THE DRAWINGS AND/OR PANELSCHEDULES, REFER TO SPECIFICATIONS FOR MINIMUM SIZE REQUIRED.

   C. BRANCH CIRCUITS ON THE DRAWINGS ARE GENERALLY NOT SHOWN GROUPED IN SINGLE RACEWAYS. HOWEVER, GROUPING IS ALLOWED UNDER CERTAIN CONDITIONS. REFER TO DIVISION 26 SPECIFICATIONS UNDER SECTION ENTITLED "ELECTRICAL WIRING" FOR REQUIREMENTS.

   D. THE DRAWINGS GENERALLY INDICATE QUANTITY OF CONDUCTORS ON BRANCH CIRCUIT HOME RUNS ONLY. ELSEWHERE WITHIN CIRCUITS, PROVIDE QUANTITY OF CONDUCTORS AS NEEDED TO ACCOMPLISH CIRCUITING AND SWITCHING REQUIREMENTS SHOWN.

32. WHEN REMOVING EXISTING ELECTRICAL WORK WHERE OTHER ITEMS REMAIN ON THE SAME CIRCUIT, THE CONTRACTOR SHALL TAKE WHATEVER STEPS ARE NECESSARY TO MAINTAIN CIRCUIT CONTINUITY.
33. ALL ITEMS NOTED TO BE REMOVED ARE TO REMAIN THE PROPERTY OF THE OWNER; HOWEVER, CONTRACTOR SHALL REMOVE FROM JOB SITE ALL MATERIAL NOT RETAINED BY OWNER.
34. FIELD VERIFY CONDITION OF, AND MODIFICATIONS AND ADDITIONS TO, ALL EXISTING ELECTRICAL FIXTURES, PANELS, WIRING, ETC.
35. CONTRACTOR SHALL FIELD VERIFY EXISTING BRANCH CIRCUIT LOADING WHEN MAKING MODIFICATIONS AND/OR ADDITIONS TO THAT CIRCUIT. IF NEW WORK WOULD OVERLOAD EXISTING CIRCUIT, CONTRACTOR SHALL LOCATE ANOTHER EXISTING CIRCUIT (THE CLOSEST), WHICH WOULD NOT BE OVERLOADED UPON ADDING NEW LOAD, AND SHALL TIE NEW LOAD INTO THAT CIRCUIT.
36. CONTRACTOR TO REFER TO ARCHITECTURAL PHASING PLANS AND HAVE A GOOD UNDERSTANDING OF SCOPE OF PROJECT PRIOR TO COMMENCEMENT OF WORK.
37. LUMINAIRE SUPPORT IN SUSPENDED CEILINGS:

   A. PROVIDE MEANS OF SUPPORT FOR LUMINAIRES PER NEC 410-16. T BAR CLIPS SHALL BE INSTALLED ON THE LUMINAIRE AND SHALL BE FIELD SECURED TO THE INVERTED CEILING TEES SO THAT THE LUMINAIRE IS SECURELY FASTENED TO THE CEILING SYSTEM FRAMING MEMBERS.

   B. CEILING TILES SHALL NOT BEAR THE WEIGHT OF LUMINAIRES. SURFACE MOUNT LUMINAIRES, RECESSED DOWNLIGHTS, LIGHT TRACK, EXIT SIGN, ETC. SHALL BE SUPPORTED BY PROPER FRAMES OR OTHER ATTACHMENT TO MAIN CEILING SYSTEM GRID OR BUILDING STRUCTURE ABOVE CEILING.

   C. LUMINAIRES SHALL BE CENTERED IN CEILING TILE.

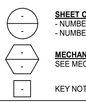
   D. LUMINAIRE SHALL HAVE FLANGE OR TRIM RING FOR CLOSURE OF CEILING CUTOUT OR OPENING.

   E. FIRE-RATED CEILING ASSEMBLY: FOR LUMINAIRES TO BE FLUSH-MOUNTED INTO A FIRE-RATED CEILING OR SURFACE MOUNTED TO A FIRE-RAGED CEILING, INSTALL WITH INDEPENDENT, SECURE SUPPORT. RACEWAY, CABLE ASSEMBLIES, BOXES AND FITTINGS LOCATED ABOVE A FIRE-RATED FLOOR/CEILING OR ROOF CEILING ASSEMBLY SHALL NOT BE SECURED TO, OR SUPPORTED BY, THE CEILING ASSEMBLY INCLUDING THE CEILING SUPPORT WIRES. PROVIDE AN INDEPENDENT MEANS OF SECURE SUPPORT. INDEPENDENT SUPPORT WIRES SHALL BE DISTINGUISHABLE BY COLOR, TAGGING, OR OTHER EFFECTIVE MEANS FROM THOSE THAT ARE PART OF THE FIRE-RATED DESIGN.

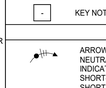
38. CONTRACTOR SHALL FIELD VERIFY ANY EXISTING UNDERGROUND PIPING, WIRING OR OTHER FACILITIES PRIOR TO TRENCHING, AND SHALL BE RESPONSIBLE FOR ANY DAMAGE CAUSED BY INSTALLATION OF NEW WORK.

ELECTRICAL ABBREVIATIONS

ABBREVIATION	DESCRIPTION	ABBREVIATION	DESCRIPTION
A OR AMP	AMPERES	LV	LOW VOLTAGE
ABV	ABOVE	MAX	MAXIMUM
AFF	ABOVE FINISHED FLOOR	MCA	MINIMUM CIRCUIT AMPS
AFG	ABOVE FINISH GRADE	MCC	MOTOR CONTROL CENTER
AIC	AMPERE INTERRUPTING CAPACITY	MFR	MANUFACTURER
AL	ALUMINUM	MH	MANHOLE
AS	DISCONNECT SWITCH SIZE RATING	MOCP	MAXIMUM OVERCURRENT PROTECTION
ATS	AUTOMATIC TRANSFER SWITCH	MTD	MOUNTED
AUX	AUXILIARY	MTG	MOUNTING
AWG	AMERICAN WIRE GAUGE	MV	MEDIUM VOLTAGE
B.S.	BARE STRANDED	NAC	NOTIFICATION APPLIANCE CIRCUIT
BKBD	BACKBOARD	NC	NORMALLY CLOSED
BKR	BREAKER	NEC	NATIONAL ELECTRICAL CODE
BLDG	BUILDING	NF	NON-FUSED
C	CONDUIT	NIC	NOT IN CONTRACT
C.O.	CONDUIT ONLY WITH PULL WIRE	NO.	NUMBER
CB	CIRCUIT BREAKER	OC	ON CENTER
CKT	CIRCUIT	OD	OUTSIDE DIAMETER
CL	CENTER LINE	PB	PULL BOX
CLG.	CEILING	PC	PHOTOCELL
COL	COLUMN	PH OR Ø	PHASE
CU	COPPER	PIV	POST INDICATING VALVE
DIS	DISCONNECT	PNL	PANEL
DP	DISTRIBUTION PANEL	POC	POINT OF CONNECTION
DWG	DRAWING	PRI.	PRIMARY
EA	EACH	PVC	POLY-VINYL CHLORIDE
ELEC.	ELECTRICAL	PWR	POWER
EMH	ELECTRICAL MANHOLE	REC/RECEPT	RECEPTACLE
EMT	ELECTRICAL METALLIC TUBING	REQ'D	REQUIRED
EPO	EMERGENCY POWER OFF	RGS	RIGID GALVANIZED STEEL
EQ	EQUIPMENT	RPBP	REDUCED PRESSURE BACK FLOW PREVENTER
FA	FIRE ALARM	SF	SQUARE FEET
FACP	FIRE ALARM CONTROL PANEL	SP	SPARE
FATC	FIRE ALARM TERMINAL CABINET	SPECS	SPECIFICATIONS
FF	FINISHED FLOOR	STD	STANDARD
FLA	FULL LOAD AMPS	SW	SWITCH
FO	FIBER OBTIC	SWBD	SWITCHBOARD
FT	FEET	TB	TERMINAL BLOCK
GFI	GROUND FAULT INTERRUPTER	TEL./TELE	TELEPHONE
GFR	GROUND FAULT RELAY	TPS	TWISTED SHIELDED PAIR
GND	GROUND	TRANSF/XFMR	TRANSFORMER
HP	HORSEPOWER	TS	TAMPER SWITCH
HTR	HEATER	TYP	TYPICAL
HV	HIGH VOLTAGE	UG	UNDERGROUND
ISC	SHORT CIRCUIT CURRENT	UNO	UNLESS NOTED OTHERWISE
KCMIL	THOUSAND CIRCULAR MILS	V	VOLTS
KV	KILOVOLT	VA	VOLT-AMPERES
KVA	KILOVOLT-AMPERES	VFD	VARIABLE FREQUENCY DRIVE
KW	KILOWATT	W	WATTS
LF	LINEAR FEET	WP	WEATHERPROOF
LIS	LOAD INTERRUPTER SWITCH	Z	IMPEDANCE
LOC.	LOCATION		
LTG	LIGHTING		



SHEET OR DETAIL REFERENCE
- NUMBER ON TOP INDICATES DETAIL NUMBER
- NUMBER ON BOTTOM INDICATES SHEET NUMBER



MECHANICAL EQUIPMENT CALLOUT
SEE MECHANICAL PLANS FOR EXACT LOCATION AND REQUIREMENTS

KEY NOTE

CIRCUITING

ARROW INDICATES HOME RUN, LONGER TICK(S) INDICATE NEUTRAL WIRE(S), SHORTER STRAIGHT TICK(S) INDICATE PHASE WIRE(S), SLANTED SHORTER TICK(S) INDICATE SWITCH LEG(S), DOT(S) INDICATE GROUNDING CONDUCTOR(S), DASHED WIRING (LONG-SHORT-LONG DASHES) INDICATES WIRING BELOW SLAB OR GRADE, DASHED WIRING (SERIES OF SHORT DASHES) INDICATES EXISTING WIRING, SLASH THROUGH ARROWINDICATES PARTIAL CIRCUIT, "D" ON HOMERUN ARROW INDICATES DEDICATED CIRCUIT:

PROVIDE A SEPARATE NEUTRAL FOR EACH PHASE CONDUCTOR FOR ENTIRE LENGTH OF CIRCUIT FROM PANEL TO OUTLET; COUNT EACH NEUTRAL AS CURRENT-CARRYING AND GROUP A MAXIMUM OF SIX THHN/THWN CONDUCTORS IN A SINGLE RACEWAY; GROUNDING CONDUCTOR IS NOT COUNTED.

LC1-X — LIGHTING CIRCUIT DESIGNATION FOR SPACE, U.N.O.

LC1-X — CIRCUIT DESIGNATION NEXT TO RECEPTACLE DEVICES INDICATES BRANCH CIRCUIT NUMBER. SEE PANEL SCHEDULES FOR INFORMATION.

+42" — A NOTATION INDICATING THE MOUNTING HEIGHT OF A DEVICE AS MEASURED FROM FINISHED FLOOR OR GRADE TO CENTER LINE OF DEVICE

MOUNTING OVER OBSTRUCTION DETAIL

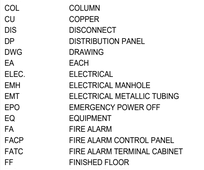
NOTE: SIDE REACH

1. UNOBSTRUCTED: WHERE A CLEAR FLOOR OR GROUND SPACE ALLOWS A PARALLEL APPROACH TO AN ELEMENT AND THE SIDE REACH IS UNOBSTRUCTED, THE HIGH SIDE REACH SHALL BE 48 INCHES MAX, AND THE LOW SIDE REACH SHALL BE 15 INCHES MIN ABOVE THE FINISH FLOOR OR GROUND.

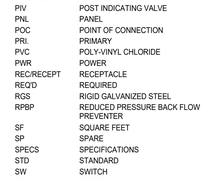
   1.1. EXCEPTION: AN OBSTRUCTION SHALL BE PERMITTED BETWEEN THE CLEAR FLOOR OR GROUND SPACE AND THE ELEMENT WHERE THE DEPTH OF THE OBSTRUCTION IS 10 INCHES MAX.

2. OBSTRUCTED HIGH REACH: WHERE A CLEAR FLOOR OR GROUND SPACE ALLOWS A PARALLEL APPROACH TO AN ELEMENT AND THE HIGH SIDE REACH IS OVER AN OBSTRUCTION, THE HEIGHT OF THE OBSTRUCTION SHALL BE 34 INCHES MAX, AND THE DEPTH OF THE OBSTRUCTION SHALL BE 24 INCHES MAX. THE HIGH SIDE REACH SHALL BE 48 INCHES MAX.FOR A REACH DEPTH OF 10 INCHES MAX. WHERE THE REACH DEPTH EXCEEDS 10 INCHES, THE HIGH SIDE REACH SHALL BE 46 INCHES MAX FOR A REACH DEPTH OF 24 INCHES MAX.

3. OPERATION: OPERABLE PARTS SHALL BE OPERABLE WITH ONE HAND AND SHALL NOT REQUIRE TIGHT GRASPING, PINCHING, OR TWISTING OF THE WRIST. THE FORCE REQUIRED TO ACTIVATE OPERABLE PARTS SHALL BE 5 POUNDS MAX.



UNOBSTRUCTED SIDE REACH 2022 CBC 11B-308.3.1



OBSTRUCTED SIDE REACH 2022 CBC 11B-308.3.2

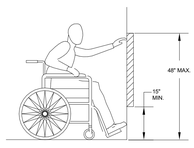
NOTES: FORWARD REACH

1. UNOBSTRUCTED:

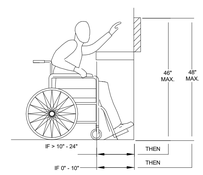
WHERE A FORWARD REACH IS UNOBSTRUCTED, THE HIGH FORWARD REACH SHALL BE 48 INCHES MAX, AND THE LOW FORWARD REACH SHALL BE 15 INCHES MIN ABOVE THE FINISH FLOOR OR GROUND.

2. OBSTRUCTED REACH: WHERE A CLEAR FLOOR OR GROUND SPACE THAT ALLOWS A FORWARD REACH IS OVER AN OBSTRUCTION, THE CLEAR SPACE SHALL EXTEND BENEATH THE ELEMENT FOR A DISTANCE NOT LESS THAN THE REQUIRED REACH DEPTH OVER THE OBSTRUCTION, AND THE DEPTH OF THE OBSTRUCTION SHALL BE 25 INCHES MAX. THE HIGH FORWARD REACH SHALL BE 44 INCHES MAX FOR A DEPTH OF 25 INCHES MAX.

3. OPERATION: OPERABLE PARTS SHALL BE OPERABLE WITH ONE HAND AND SHALL NOT REQUIRE TIGHT GRASPING, PINCHING, OR TWISTING OF THE WRIST. THE FORCE REQUIRED TO ACTIVATE OPERABLE PARTS SHALL BE 5 POUNDS MAX.



UNOBSTRUCTED FORWARD REACH 2022 CBC 11B-308.2.1



OBSTRUCTED FORWARD REACH 2022 CBC 11B-308.2.2

ELECTRICAL DEVICES & EQUIPMENT

- JUNCTION BOX
- ^{M} 20A MOTOR-RATED TOGGLE SWITCH
- 20A-125V DUPLEX RECEPTACLE
- 20A-125V GROUND FAULT CIRCUIT INTERRUPTER RECEPTACLE
- 20A-125V DUPLEX RECEPTACLE MOUNTED ABOVE COUNTER TOP
- $_{C}$ 20A-125V CONTROLLED PLUG-LOAD DUPLEX RECEPTACLE
- 20A-125V ISOLATED GROUND TYPE DUPLEX RECEPTACLE
- $_{OH}$ 20A-125V DUPLEX TAMPER RESISTANT RECEPTACLE WITH (2) USB CHARGING PORTS
- 20A-125V FOURPLEX RECEPTACLE (SAME SYMBOLOGY TYPES AS DUPLEX RECEPTACLE)
- SPECIAL PURPOSE SINGLE POWER RECEPTACLE. RATED AS INDICATED (IF NO RATING INDICATED, RECEPTACLE RATING SHALL MATCH BRANCH CIRCUIT OVERCURRENT PROTECTIVE DEVICE AND SHALL MEET REQUIREMENTS OF EQUIPMENT BEING CONNECTED)
- 20A-125V FLUSH FLOOR DUPLEX RECEPTACLE
- 20A-125V CEILING MOUNTED DUPLEX RECEPTACLE
- $_{BELL}^{B}$ BELL
- EMERGENCY POWER OFF (EPO)
- PUSHBUTTON
- DISCONNECT SWITCH. DISCONNECT SWITCHES SHALL BE 30/NF/3 UON. NF = NON-FUSIBLE, NEMA 1 ENCLOSURE. PROVIDE FUSED BUSWAY PLUG WHEN SWITCH IS INDICATED ON BUSWAY.
- TRANSFORMER
- PANELBOARD
- SWITCHBOARD OR DISTRIBUTION PANELBOARD
- PHOTOVOLTAIC SOLAR PANEL

SINGLE LINE DIAGRAM

- L1A — PANELBOARD
- AUTOMATIC TRANSFER SWITCH
- CIRCUIT BREAKER (FUSED TYPE)
- CIRCUIT BREAKER
- GF — GROUND FAULT CIRCUIT BREAKER
- (M) — METER
- TRANSFORMER
- COMBINATION MOTOR-STARTER
- DISCONNECT SWITCH W/COMBINATION MOTOR-STARTER
- F — DISCONNECT SWITCH - FUSED
- DISCONNECT SWITCH
- ECM — ELECTRIC CIRCUIT MONITOR
- SPD — SURGE PROTECTIVE DEVICE
- MOTOR
- TAP
- POINT OF CONNECTION
- CONTINUATION LINE
- G — GENERATOR
- GROUND

RENOVATION WORK

EXISTING WORK SHALL BE SHOWN LIGHT - NEW WORK SHALL BE SHOWN DARK

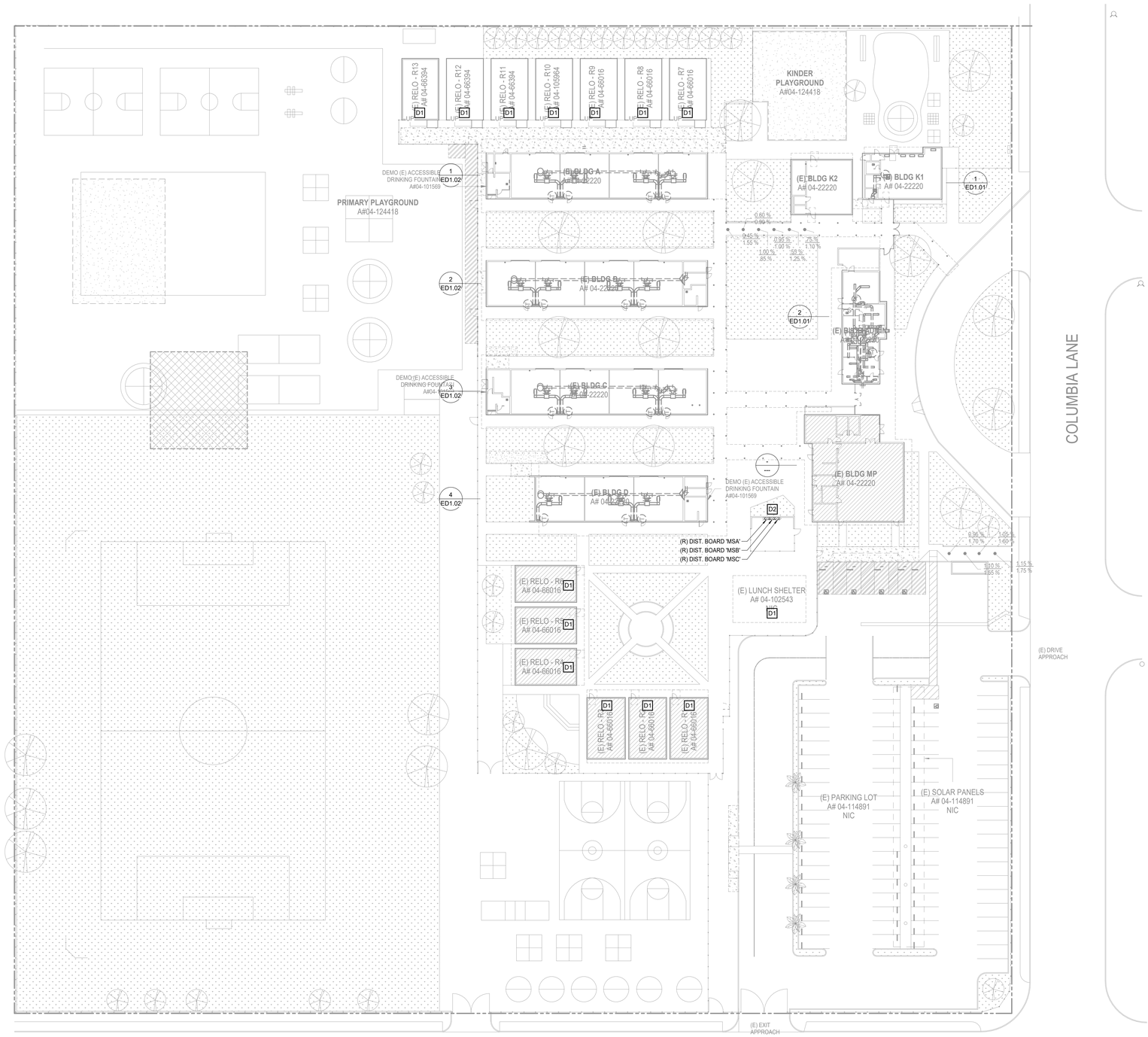
- (E) — EXISTING TO REMAIN
- (R) — EXISTING SHALL BE DEMOLISHED AND REMOVED.
- (ER) — EQUIPMENT WITH "ER" ADJACENT IS RELOCATED EQUIPMENT SHOWN IN NEW LOCATION.
- (RR) — EXISTING EQUIPMENT WITH "RR" ADJACENT IS TO BE DISCONNECTED, REMOVED AND RELOCATED TO NEW LOCATION AND RECONNECTED AS REQUIRED.
- NO TAG INDICATES NEW EQUIPMENT

LIGHTING CONTROLS

EXISTING WORK SHALL BE SHOWN LIGHT - NEW WORK SHALL BE SHOWN DARK
MANUFACTURER - nLIGHT

- $ — WALL SWIT

0" 1"



1 ELECTRICAL SITE PLAN - DEMOLITION
1" = 30'-0"

GENERAL NOTES

1. COORDINATE ROUTING FOR ALL UNDERGROUND ELECTRICAL BRANCH CIRCUITS AND FEEDERS WITH OTHER DISCIPLINES PRIOR TO TRENCHING.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO EXISTING UTILITIES CAUSED BY INSTALLATION OF NEW WORK.
3. COORDINATE WITH CAMPUS REPRESENTATIVE TO PROVIDE ACCESSIBLE LOCATION FOR SEPARATION, COLLECTION AND STORAGE OF DEMOLISHED MATERIALS FOR RECYCLING AND DISPOSAL.
4. ALL OUTAGES TO EXISTING ELECTRICAL AND SIGNAL SERVICES SHALL BE SCHEDULED IN ADVANCE WITH THE OWNER.

KEY NOTES

D1 BUILDING NOT IN SCOPE.

D2 REFER TO SINGLE LINE DIAGRAM FOR FURTHER INFORMATION FOR SCOPE OF WORK.

Not for permitting or construction

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-124972 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/17/2026

PBK

ARCHITECT PBK Architects, Inc.
PBK.com
ANAHEIM
2400 E KATELLA AVE, Suite 950
ANAHEIM, CA 92806
P 949-548-5000

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

SCHROEDER ES HVAC UPGRADE & MODERNIZATION

PROJECT ADDRESS:
15151 Columbia Ln
Huntington Beach, CA 92647

100% DESIGN DEVELOPEMENT DSA APPL NO.: ##-##### DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT EST. 1872

RELO
A
B
C
D
RELO
K2 K1
ADMIN
MPR

KEY PLAN N
NORTH: PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER
STEVEN C. MISSER
No. E-19817
Exp. 3-31-26
ELECTRICAL
STATE OF CALIFORNIA

Architect

LICENSED ARCHITECT
Yong Yoo
No. C-31162
REN. 10-31-2027
STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
09-30-2025	04-124418

REVISIONS

No.	Description	Date

100% DESIGN DEVELOPEMENT

ELECTRICAL SITE PLAN - DEMOLITION

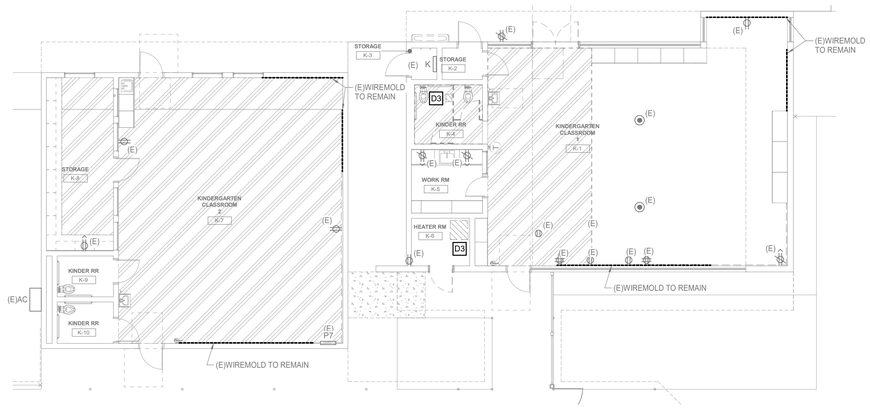
This document is for plan review only

ED0.01

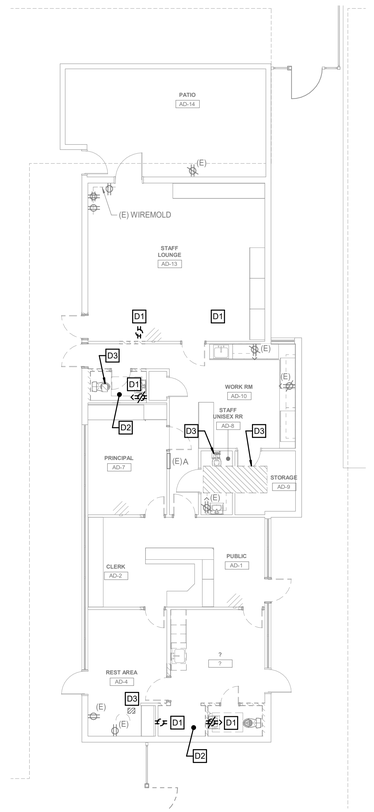
FILE PATH: Z:\Projects\...
3/12/2026 2:31:51 PM

0" 1"

ED1.01 - ELECTRICAL DEMOLITION PLANS



1 KINDERGARTEN - ELECTRICAL DEMOLITION PLAN
1/8" = 1'-0"



2 ADMIN - ELECTRICAL DEMOLITION PLAN
1/8" = 1'-0"

GENERAL DEMOLITION NOTES

1. ALL EQUIPMENT/DEVICES AND OTHER SALVAGEABLE MATERIALS TO BE STORED OR DISPOSED-OF AS DIRECTED BY THE BUILDING OWNER.
2. TO MINIMIZE DOWNTIME, CONTRACTOR SHALL COORDINATE SHUTDOWN OF EXISTING EQUIPMENT SERVED BY THE HOT WATER SYSTEM WITH CAMPUS REPRESENTATIVE.
3. POWER/DATA OUTLETS IN AREA OF WORK WHICH ARE NOT GOING TO BE DEMOLISHED/REMOVED SHALL BE PROTECTED IN-PLACE.
4. CAREFULLY PROTECT ALL EQUIPMENT, UTILITY LINES AND MATERIALS, WHEN WORKING ON FINISHED SURFACES RESTORE TO THE ORIGINAL CONDITION ALL SURFACES WHICH ARE DAMAGED BECAUSE OF THE INSTALLATION OF THIS WORK.
5. REMOVE ALL ABANDONED WIRES BACK TO PANEL BOARD. LABEL CIRCUIT BREAKER AS SPARE.
6. ELECTRICAL CONTRACTOR TO LABEL RECEPTACLE AND JUNCTION BOXES WITH CORRESPONDING PANEL NAME AND CIRCUIT.
7. PROVIDE AND/OR REPLACE MISSING OR DAMAGED OUTLET COVER PLATES OF EXISTING OUTLETS TO REMAIN.

DEMOLITION KEY NOTES

D1 DISCONNECT AND REMOVE ELECTRICAL DEVICE. MAINTAIN EXISTING CIRCUITRY TO ANY OTHER ELECTRICAL COMPONENTS ASSOCIATED WITH CIRCUIT.

D2 DISCONNECT AND REMOVE EXISTING LIGHTING FIXTURES AND LIGHTING CONTROLS IN THIS SPACE. MAINTAIN EXISTING CIRCUITRY TO ANY OTHER ELECTRICAL COMPONENTS ASSOCIATED WITH CIRCUIT.

D3 DISCONNECT AND REMOVE EXISTING MECHANICAL EQUIPMENT, ALONG WITH ASSOCIATED DOWNSTREAM COMPONENTS. CIRCUIT(S) SHALL BECOME SPARE BACK AT SOURCE.

Not for permitting or construction

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-124972 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/17/2026

PBK

ARCHITECT PBK Architects, Inc.
PBK.com
ANAHEIM
2400 E KATELLA AVE, Suite 950
ANAHEIM, CA 92806
P 949-548-5000

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

SCHROEDER ES HVAC UPGRADE & MODERNIZATION

PROJECT ADDRESS:
15151 Columbia Ln
Huntington Beach, CA 92647

100% DESIGN DEVELOPEMENT

DSA APPL NO.: ##-##### DSA FILE NO.: 30-43

RELO
A K1
B ADMIN
C MPR
D
RELO

KEY PLAN N
NORTH: PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER
STEVEN C. MOSSER
No. E-19817
Exp. 3-31-26
ELECTRICAL
STATE OF CALIFORNIA

Architect

LICENSED ARCHITECT
Yong You
No. C-31162
REN 10-31-2027
STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
09-30-2025	04-124418

REVISIONS

No.	Description	Date

100% DESIGN DEVELOPEMENT

ELECTRICAL DEMOLITION PLANS

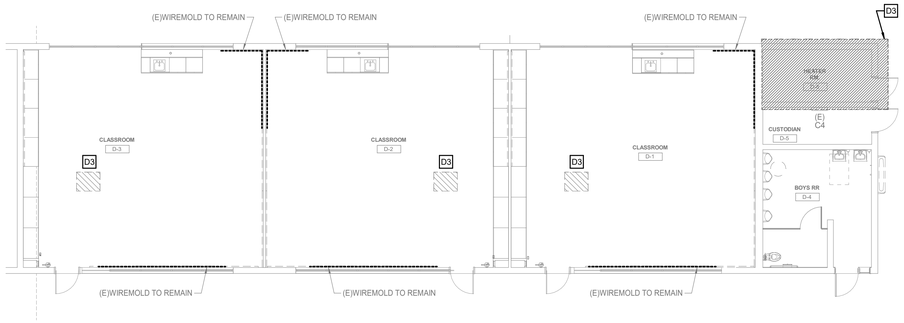
This document is for plan review only

ED1.01

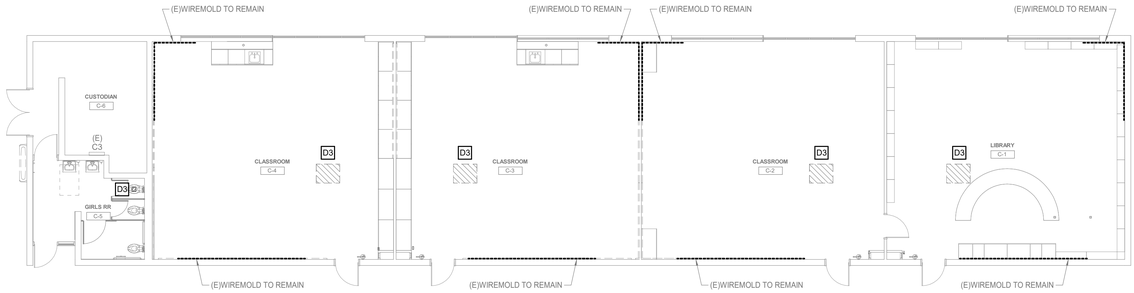
FILE PATH: Z:\Projects\...
3/12/2026 2:31:53 PM

ED1.02 - ELECTRICAL DEMOLITION PLANS

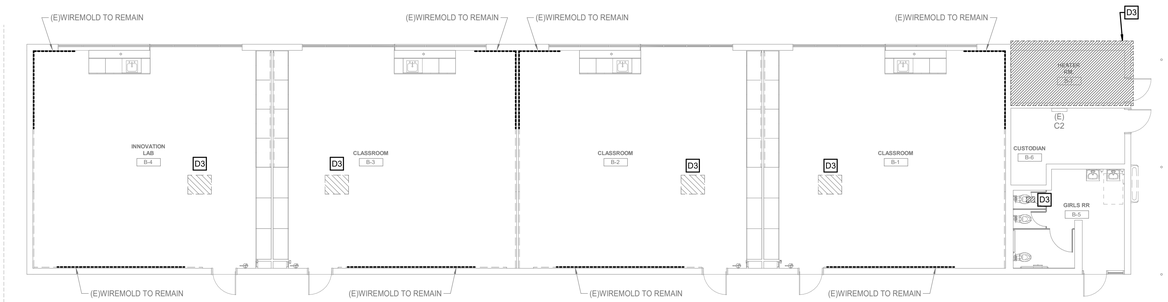
0" 1"



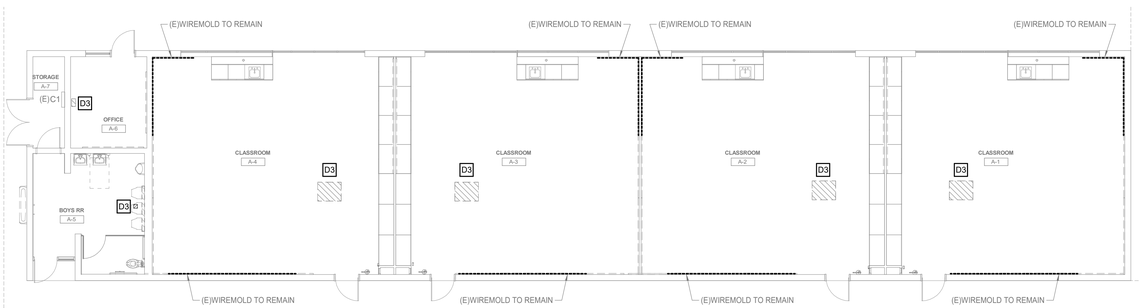
4 BLDG D - ELECTRICAL DEMOLITION PLAN
1/8" = 1'-0"



3 BLDG C - ELECTRICAL DEMOLITION PLAN
1/8" = 1'-0"



2 BLDG B - ELECTRICAL DEMOLITION PLAN
1/8" = 1'-0"



1 BLDG A - ELECTRICAL DEMOLITION PLAN
1/8" = 1'-0"

GENERAL NOTES

1. BRANCH CIRCUITS SHALL BE 3/4"C - 2#12 & 1#12G, UNLESS OTHERWISE NOTED.
2. COORDINATE LOCATION AND INSTALLATION REQUIREMENTS PER MANUFACTURER'S RECOMMENDATIONS FOR MISC. SPECIFIED EQUIPMENT PRIOR TO ROUGH-IN.
3. COORDINATE INSTALLATION REQUIREMENTS WITH MECHANICAL DRAWINGS FOR SPECIFIED MECHANICAL EQUIPMENT AND DEVICES PRIOR TO ROUGH-IN.
4. MAINTAIN CODE REQUIRED CLEARANCES AROUND ELECTRICAL EQUIPMENT.
5. COORDINATE MOUNTING HEIGHTS FOR ELECTRICAL DEVICES WITH CAMPUS REPRESENTATIVE PRIOR TO ROUGH-IN.
6. SEE DETAILS ON SHEET E6.01 FOR ELECTRICAL DETAILS.
7. FOR EQUIPMENT OR DEVICES SHOWN ON ARCHITECTURAL DRAWINGS THAT REQUIRE POWER AND NOT IDENTIFIED ON ELECTRICAL PLANS, ASSUME AT A MINIMUM A DUPLEX OUTLET, A DEDICATED CIRCUIT WITH 2#12,1#12G,3/4"C. WITH HOMERUN TO NEAREST 120/208V PANEL.
8. PROVIDE 1-HOUR SEALANT FOR ALL (N) WALL PENETRATIONS.

DEMOLITION KEY NOTES

D1 DISCONNECT AND REMOVE ELECTRICAL DEVICE. MAINTAIN EXISTING CIRCUITRY TO ANY OTHER ELECTRICAL COMPONENTS ASSOCIATED WITH CIRCUIT.

D2 DISCONNECT AND REMOVE EXISTING LIGHTING FIXTURES AND LIGHTING CONTROLS IN THIS SPACE. MAINTAIN EXISTING CIRCUITRY TO ANY OTHER ELECTRICAL COMPONENTS ASSOCIATED WITH CIRCUIT.

D3 DISCONNECT AND REMOVE EXISTING MECHANICAL EQUIPMENT, ALONG WITH ASSOCIATED DOWNSTREAM COMPONENTS. CIRCUIT(S) SHALL BECOME SPARE BACK AT SOURCE.

Not for permitting or construction

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-124972 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/17/2026

PBK

ARCHITECT PBK Architects, Inc.
PBK.com
ANAHEIM
2400 E KATELLA AVE, Suite 950
ANAHEIM, CA 92806
P 949-548-5000

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

SCHROEDER ES HVAC UPGRADE & MODERNIZATION

PROJECT ADDRESS:
15151 Columbia Ln
Huntington Beach, CA 92647

100% DESIGN DEVELOPEMENT

DSA APPL NO.: ##-#### DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT EST. 1873

RELO
A
B
C
D
RELO
K1
ADMIN
MPR

KEY PLAN N NORTH: PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER
STEVEN C. MUSSER
No. E-19817
Exp. 3-31-26
ELECTRICAL
STATE OF CALIFORNIA

Architect

LICENSED ARCHITECT
Yong You
No. C-31162
REN. 10-31-2027
STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
09-30-2025	04-124418

REVISIONS

No.	Description	Date

100% DESIGN DEVELOPEMENT

ELECTRICAL DEMOLITION PLANS

ED1.02

This document is for plan review only

FILE PATH: Z:\Projects\...
3/12/2026 2:31:56 PM

E0.01 - ELECTRICAL SITE PLAN

0" 1"



GENERAL NOTES

1. COORDINATE ROUTING FOR ALL UNDERGROUND ELECTRICAL BRANCH CIRCUITS AND FEEDERS WITH OTHER DISCIPLINES PRIOR TO TRENCHING.
2. UNLESS NOTED OTHERWISE ALL UNDERGROUND CONDUIT SHOWN ON THIS PLAN TO BE MINIMUM 1" IN SIZE.
3. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO EXISTING UTILITIES CAUSED BY INSTALLATION OF NEW WORK.

KEY NOTES

1. BUILDING NOT IN SCOPE.
2. REFER TO SINGLE LINE DIAGRAM FOR FURTHER INFORMATION FOR SCOPE OF WORK.
3. PROVIDE CONNECTION FOR FIRE ALARM POWER SUPPLY AND AMPLIFIER. CONNECT TO PANEL SERVING THIS PORTABLE. PROVIDE RED LOCK-ON CIRCUIT BREAKER.
4. FEEDER(S) SHALL BE ROUTED ALONG ROOF. BACK DOWN WALL TO MECHANICAL EQUIPMENT DISCONNECT. REFER TO FEEDER(S) SIZE(S) IN ELECTRICAL EQUIPMENT CONNECTION SCHEDULES ON SHEETS E2.01 & E2.02.

1 ELECTRICAL SITE PLAN
1" = 30'-0"

FILE PATH: Z:\Projects\...
3/12/2026 2:31:58 PM

Not for permitting or construction

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-124972 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/17/2026

PBK

ARCHITECT PBK Architects, Inc.
PBK.com
ANAHEIM
2400 E KATELLA AVE, Suite 950
ANAHEIM, CA 92806
P 949-548-5000

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

SCHROEDER ES HVAC UPGRADE & MODERNIZATION

PROJECT ADDRESS:
15151 Columbia Ln
Huntington Beach, CA 92647

100% DESIGN DEVELOPEMENT

DSA APPL NO.: ##-##### DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT EST. 1873

RELO
A
B
C
D
RELO
K1
ADMIN
MPR

KEY PLAN NORTH: PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER
STEVEN C. MOSSER
No. E-19817
Exp. 3-31-26
ELECTRICAL
STATE OF CALIFORNIA

Architect

LICENSED ARCHITECT
Yong You
No. C-31162
REN. 10-31-2027
STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
09-30-2025	04-124418

REVISIONS

No.	Description	Date

100% DESIGN DEVELOPEMENT

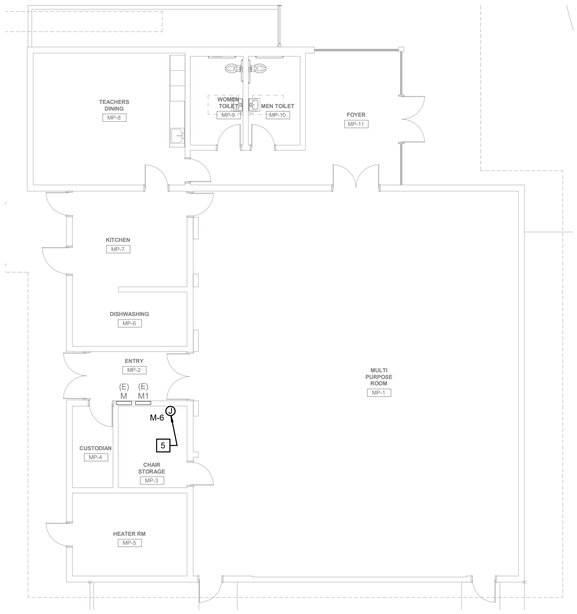
ELECTRICAL SITE PLAN

This document is for plan review only

E0.01

E1.01 - ELECTRICAL RENOVATION PLANS

0" 1"

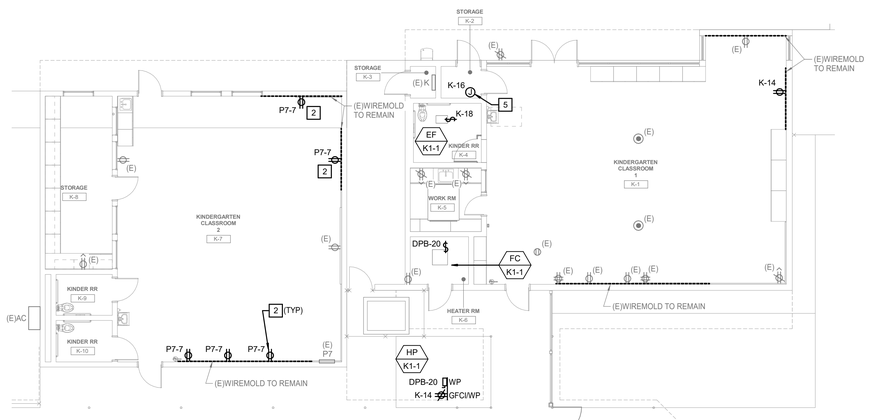


3 MPR - - ELECTRICAL RENOVATION PLAN

1/8" = 1'-0"

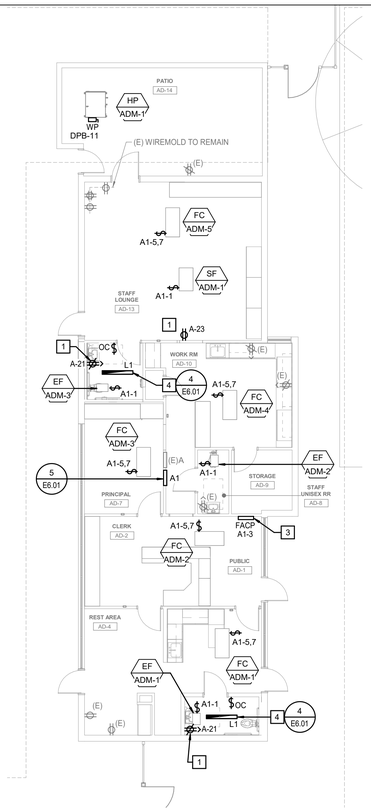
LIGHT FIXTURE SCHEDULE

FIXTURE DESIGNATION	DESCRIPTION	MANUFACTURER	MODEL NO.	MOUNTING	LED DATA	WATTAGE	VOLTAGE	NOTES
L1	SURFACE LINEAR - EM BATTERY PACK	LITHONIA	BLWP4-30L-ADSM-MVOLT-GZ10-LP840-E10WLCP	SURFACE	4000K, 3000LM, 82CRI	25W	UNV	



1 KINDERGARTEN - ELECTRICAL RENOVATION PLAN

1/8" = 1'-0"



2 ADMIN - ELECTRICAL RENOVATION PLAN

1/8" = 1'-0"

ELECTRICAL CONNECTIONS SCHEDULE

EQUIPMENT ID	EQUIPMENT VOLTAGE	DISCONNECT SIZE (AMPS, FUSE, POLES)	BRANCH CIRCUIT SIZE	NEMA-3R
EF ADM-1	120V	20A MRTS	3/4"C - 2#12 & 1#12G	No
EF ADM-2	120V	20A MRTS	3/4"C - 2#12 & 1#12G	No
EF ADM-3	120V	20A MRTS	3/4"C - 2#12 & 1#12G	No
EF K1-1	120V	20A MRTS	3/4"C - 2#12 & 1#12G	No
FC ADM-1	208V	20A2P MRTS	3/4"C - 3#12 & 1#12G	No
FC ADM-2	208V	20A2P MRTS	3/4"C - 3#12 & 1#12G	No
FC ADM-2	208V	20A2P MRTS	3/4"C - 3#12 & 1#12G	No
FC ADM-2	208V	20A2P MRTS	3/4"C - 3#12 & 1#12G	No
FC ADM-3	208V	20A2P MRTS	3/4"C - 3#12 & 1#12G	No
FC ADM-4	208V	20A2P MRTS	3/4"C - 3#12 & 1#12G	No
FC ADM-5	208V	20A2P MRTS	3/4"C - 3#12 & 1#12G	No
FC K1-1	208V	20A2P MRTS	3/4"C - 3#12 & 1#12G	No
HP ADM-1	208V	60/45/3	1-1/2"C - 3#4 & 1#8G	Yes
HP K1-1	208V	60/45/3	1-1/2"C - 3#6 & 1#10G	Yes
SF ADM-1	120V	20A MRTS	3/4"C - 2#12 & 1#12G	No

GENERAL NOTES

1. BRANCH CIRCUITS SHALL BE 3/4"C - 2#12 & 1#12G, UNLESS OTHERWISE NOTED.
2. COORDINATE LOCATION AND INSTALLATION REQUIREMENTS PER MANUFACTURER'S RECOMMENDATIONS FOR MISC. SPECIFIED EQUIPMENT PRIOR TO ROUGH-IN.
3. COORDINATE INSTALLATION REQUIREMENTS WITH MECHANICAL DRAWINGS FOR SPECIFIED MECHANICAL EQUIPMENT AND DEVICES PRIOR TO ROUGH-IN.
4. MAINTAIN CODE REQUIRED CLEARANCES AROUND ELECTRICAL EQUIPMENT.
5. COORDINATE MOUNTING HEIGHTS FOR ELECTRICAL DEVICES WITH CAMPUS REPRESENTATIVE PRIOR TO ROUGH-IN.
6. SEE DETAILS ON SHEET E6.01 FOR ELECTRICAL DETAILS.
7. FOR EQUIPMENT OR DEVICES SHOWN ON ARCHITECTURAL DRAWINGS THAT REQUIRE POWER AND NOT IDENTIFIED ON ELECTRICAL PLANS, ASSUME AT A MINIMUM A DUPLEX OUTLET, A DEDICATED CIRCUIT WITH 2#12,1#12G,3/4"C. WITH HOMERUN TO NEAREST 120/208V PANEL.
8. PROVIDE 1-HOUR SEALANT FOR ALL (N) WALL PENETRATIONS.

KEY NOTES

1. CONNECT NEW DEVICE TO EXISTING CIRCUIT INDICATED.
2. PROVIDE NEW ELECTRICAL DEVICE IN EXISTING WIREMOLD.
3. PROVIDE CONNECTION FOR FACP. PROVIDE RED LOCK-ON CIRCUIT BREAKER AT POWER SOURCE.
4. UTILIZE EXISTING LIGHTING CIRCUIT IN THIS SPACE TO RECONNECT TO NEW LIGHT FIXTURE.
5. PROVIDE CONNECTION FOR FIRE ALARM POWER SUPPLY AND AMPLIFIER.

Not for permitting or construction

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-124972 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/17/2026

PBK

ARCHITECT PBK Architects, Inc.
PBK.com
ANAHEIM
2400 E KATELLA AVE, Suite 950
ANAHEIM, CA 92806
P 949-548-5000

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

SCHROEDER ES HVAC UPGRADE & MODERNIZATION

PROJECT ADDRESS:
15151 Columbia Ln
Huntington Beach, CA 92647

100% DESIGN DEVELOPEMENT DSA APPL NO.: ##-##### DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT EST. 1873

RELO
A
B
C
D
RELO
K1
ADMIN
MPR

KEY PLAN N
NORTH: PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER STEVEN C. MUSSER No. E-19817 Exp. 3-31-26 ELECTRICAL STATE OF CALIFORNIA

Architect

LICENSED ARCHITECT Yong Yoo No. C-31162 REN. 10-31-2027 STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
09-30-2025	04-124418

REVISIONS

No.	Description	Date

100% DESIGN DEVELOPEMENT

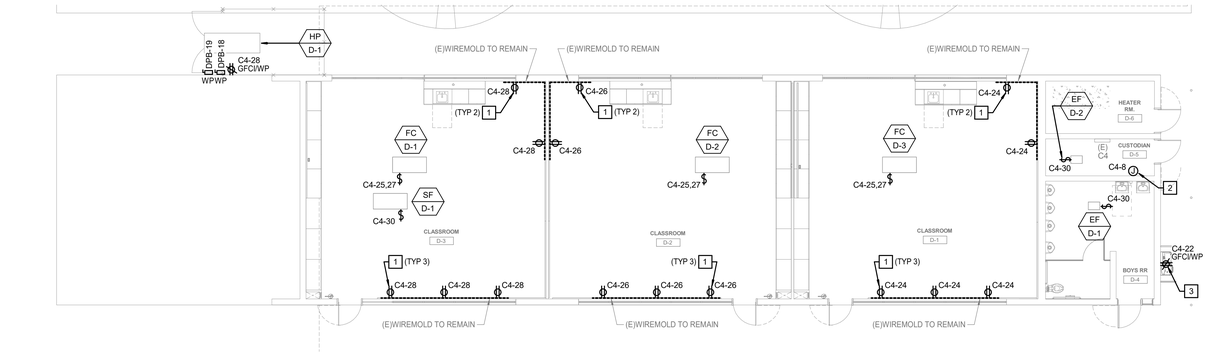
ELECTRICAL RENOVATION PLANS

This document is for plan review only

E1.01

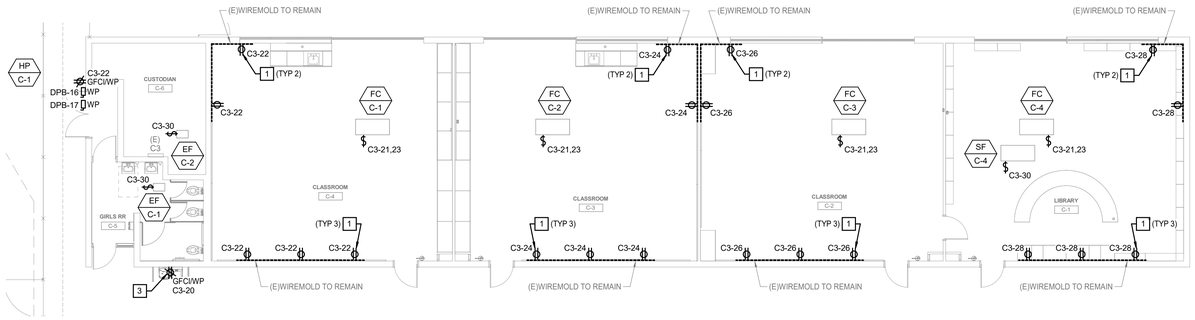
FILE PATH: Z:\Projects\...
3/12/2026 2:32:02 PM

0" 1"



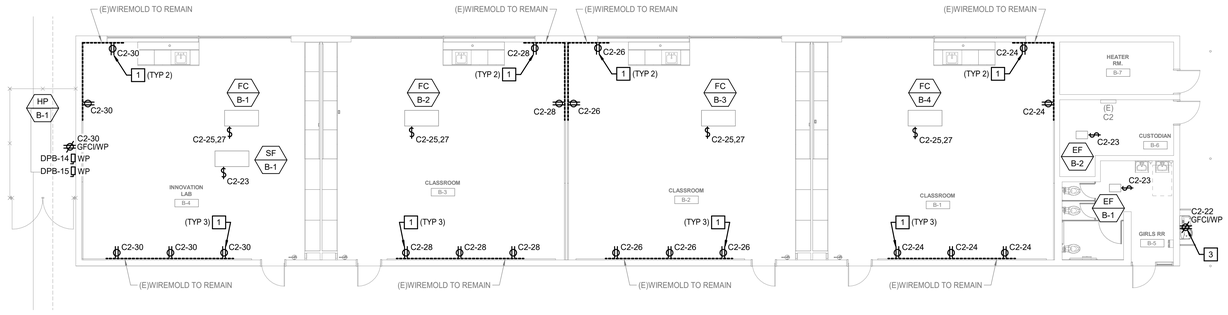
4 BLDG D - ELECTRICAL RENOVATION PLAN

1/8" = 1'-0"



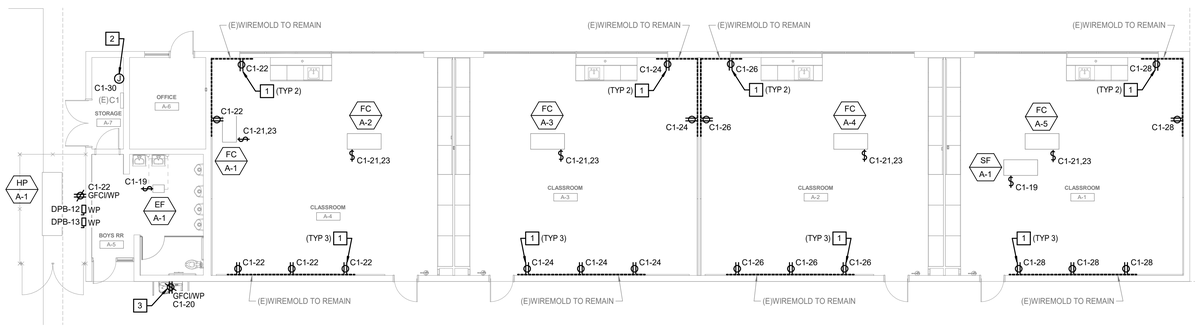
3 BLDG C - ELECTRICAL RENOVATION PLAN

1/8" = 1'-0"



2 BLDG B - ELECTRICAL RENOVATION PLAN

1/8" = 1'-0"



1 BLDG A - ELECTRICAL RENOVATION PLAN

1/8" = 1'-0"

ELECTRICAL CONNECTION SCHEDULE

EQUIPMENT ID	EQUIPMENT VOLTAGE	DISCONNECT SIZE (AMPS, FUSE, POLES)	BRANCH CIRCUIT SIZE	NEMA-3R
EF A-1	120V	20A MRTS	3/4"C - 2#12 & 1#12G	No
EF B-1	120V	20A MRTS	3/4"C - 2#12 & 1#12G	No
EF B-2	120V	20A MRTS	3/4"C - 2#12 & 1#12G	No
EF C-1	120V	20A MRTS	3/4"C - 2#12 & 1#12G	No
EF C-2	120V	20A MRTS	3/4"C - 2#12 & 1#12G	No
EF D-1	120V	20A MRTS	3/4"C - 2#12 & 1#12G	No
EF D-2	120V	20A MRTS	3/4"C - 2#12 & 1#12G	No
FC A-1	208V	20A2P MRTS	3/4"C - 3#12 & 1#12G	No
FC A-2	208V	20A2P MRTS	3/4"C - 3#12 & 1#12G	No
FC A-3	208V	20A2P MRTS	3/4"C - 3#12 & 1#12G	No
FC A-4	208V	20A2P MRTS	3/4"C - 3#12 & 1#12G	No
FC A-5	208V	20A2P MRTS	3/4"C - 3#12 & 1#12G	No
FC B-1	208V	20A2P MRTS	3/4"C - 3#12 & 1#12G	No
FC B-2	208V	20A2P MRTS	3/4"C - 3#12 & 1#12G	No
FC B-3	208V	20A2P MRTS	3/4"C - 3#12 & 1#12G	No
FC B-4	208V	20A2P MRTS	3/4"C - 3#12 & 1#12G	No
FC C-1	208V	20A2P MRTS	3/4"C - 3#12 & 1#12G	No
FC C-2	208V	20A2P MRTS	3/4"C - 3#12 & 1#12G	No
FC C-3	208V	20A2P MRTS	3/4"C - 3#12 & 1#12G	No
FC C-4	208V	20A2P MRTS	3/4"C - 3#12 & 1#12G	No
FC D-1	208V	20A2P MRTS	3/4"C - 3#12 & 1#12G	No
FC D-2	208V	20A2P MRTS	3/4"C - 3#12 & 1#12G	No
FC D-3	208V	20A2P MRTS	3/4"C - 3#12 & 1#12G	No
HP A-1	208V	100/80/3	1-1/2"C - 4#1 & 1#8G	Yes
HP A-1	208V	60/45/3	1"C - 3#4 & 1#8G	Yes
HP B-1	208V	100/70/3	1-1/2"C - 3#1 & 1#8G	Yes
HP B-1	208V	60/45/3	1"C - 3#4 & 1#8G	Yes
HP C-1	208V	100/70/3	1-1/2"C - 3#1 & 1#8G	Yes
HP C-1	208V	60/45/3	1"C - 3#4 & 1#8G	Yes
HP D-1	208V	60/45/3	1"C - 3#4 & 1#8G	Yes
HP D-1	208V	60/45/3	1"C - 3#4 & 1#8G	Yes
SF A-1	120V	20A MRTS	3/4"C - 2#12 & 1#12G	No
SF B-1	120V	20A MRTS	3/4"C - 2#12 & 1#12G	No
SF C-4	120V	20A MRTS	3/4"C - 2#12 & 1#12G	No
SF D-1	120V	20A MRTS	3/4"C - 2#12 & 1#12G	No

GENERAL NOTES

1. BRANCH CIRCUITS SHALL BE 3/4"C - 2#12 & 1#12G, UNLESS OTHERWISE NOTED.
2. COORDINATE LOCATION AND INSTALLATION REQUIREMENTS PER MANUFACTURER'S RECOMMENDATIONS FOR MISC. SPECIFIED EQUIPMENT PRIOR TO ROUGH-IN.
3. COORDINATE INSTALLATION REQUIREMENTS WITH MECHANICAL DRAWINGS FOR SPECIFIED MECHANICAL EQUIPMENT AND DEVICES PRIOR TO ROUGH-IN.
4. MAINTAIN CODE REQUIRED CLEARANCES AROUND ELECTRICAL EQUIPMENT.
5. COORDINATE MOUNTING HEIGHTS FOR ELECTRICAL DEVICES WITH CAMPUS REPRESENTATIVE PRIOR TO ROUGH-IN.
6. SEE DETAILS ON SHEET E6.01 FOR ELECTRICAL DETAILS.
7. FOR EQUIPMENT OR DEVICES SHOWN ON ARCHITECTURAL DRAWINGS THAT REQUIRE POWER AND NOT IDENTIFIED ON ELECTRICAL PLANS, ASSUME AT A MINIMUM A DUPELX OUTLET, A DEDICATED CIRCUIT WITH 2#12,1#12G,3/4"C. WITH HOMERUN TO NEAREST 120/208V PANEL.
8. PROVIDE 1-HOUR SEALANT FOR ALL (N) WALL PENETRATIONS.

KEY NOTES

1. PROVIDE NEW ELECTRICAL DEVICE IN EXISTING WIREMOLD.
2. PROVIDE CONNECTION FOR FIRE ALARM POWER SUPPLY AND AMPLIFIER.
3. PROVIDE CONNECTION FOR DRINKING FOUNTAIN.

Not for permitting or construction

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-124972 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/17/2026

PBK

ARCHITECT PBK Architects, Inc.
ANAHEIM
2400 E KATELLA AVE, Suite 950
ANAHEIM, CA 92806
P 949-548-5000

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

SCHROEDER ES HVAC UPGRADE & MODERNIZATION

PROJECT ADDRESS:
15151 Columbia Ln
Huntington Beach, CA 92647

100% DESIGN DEVELOPEMENT

DSA APPL NO.: ##-##### DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT EST. 1872

RELO
A
B
C
D
RELO
KEY
ADMIN
MPR

KEY PLAN N NORTH: PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER STEVEN C. MOSSER No. E-19817 Exp. 3-31-2027 ELECTRICAL STATE OF CALIFORNIA

Architect

LICENSED ARCHITECT Yong Yoo No. C-31162 REN. 10-31-2027 STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
09-30-2025	04-124418

REVISIONS

No.	Description	Date

100% DESIGN DEVELOPEMENT

ELECTRICAL RENOVATION PLANS

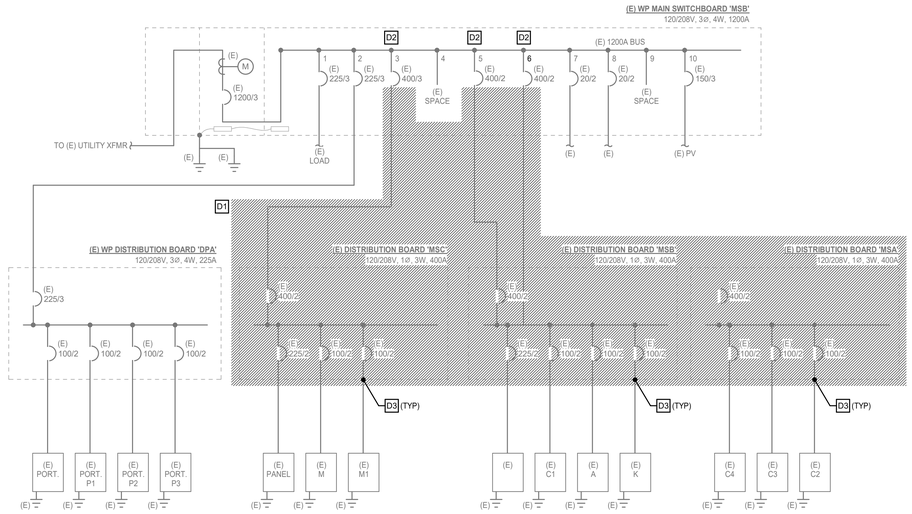
This document is for plan review only

E1.02

FILE PATH: Z:\Projects\...
3/12/2026 2:32:06 PM

0" 1"

1 SINGLE LINE DIAGRAM - DEMOLITION
NOT TO SCALE



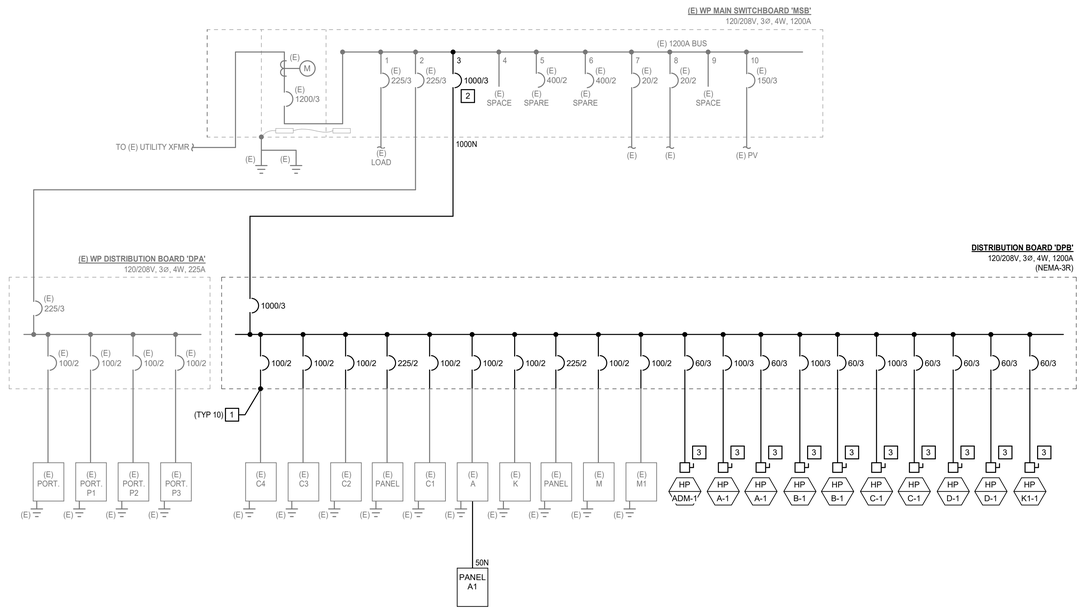
DEMOLITION KEY NOTES

D1 DEMOLISH AND REMOVE EXISTING FEEDERS AND EQUIPMENT INDICATED.

D2 EXISTING CIRCUIT BREAKER SHALL REMAIN AS SPARE IN RENOVATION PHASE, U.N.O.

D3 CAP EXISTING FEEDERS FOR RECONNECTION IN RENOVATION PHASE.

2 SINGLE LINE DIAGRAM - RENOVATION
NOT TO SCALE



Switchboard: DPB

Location:	**Volts:** 208Y/120V, 3PH, 4W	**A.I.C. Rating:**	
Supply From:	**Phases:** 3	**Mains Type:**	800 A MCB
Mounting: Surface	**Wires:** 4	**Mains Rating:**	1200 A

Circuit Description	Load	Remarks
(E) PANEL 'C4'	5991 VA	
(E) PANEL 'C3'	7113 VA	
(E) PANEL 'C2'	7113 VA	
(E) PANEL	0 VA	
(E) PANEL 'C1'	5628 VA	
(E) PANEL 'A'	11260 VA	
(E) PANEL 'K'	960 VA	
(E) PANEL	0 VA	
(E) PANEL 'M'	500 VA	
(E) PANEL 'M1'	0 VA	
HP-ADM-1	7612 VA	
HP-A-1	20697 VA	
HP-A-1	13185 VA	
HP-B-1	187553 VA	
HP-B-1	13185 VA	
HP-C-1	18553 VA	
HP-C-1	13185 VA	
HP-D-1	13185 VA	
HP-D-1	13185 VA	
HP-K1-1	8524 VA	
	347429 VA	
	964 A	

Load Classifications:	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Motor	308864 VA	100.00%	308864 VA		
Other	23265 VA	100.00%	23265 VA	**Total Conn. Load:**	347429 VA
Receptacle	15300 VA	82.68%	12650 VA	**Total Est. Demand:**	344779 VA
				Total Conn. Current:	964 A
				Total Est. Demand Current:	957 A

KEY NOTES

1 EXTEND EXISTING FEEDER(S) TO NEW EQUIPMENT SHOWN.

2 REPLACE EXISTING CIRCUIT BREAKER WITH NEW, SIZE INDICATED. MANUFACTURER AND AIC RATING TO MATCH EXISTING.

3 REFER TO EQUIPMENT CONNECTION SCHEDULE POWER PLANS FOR DISCONNECT AND FEEDER SIZE.

FEEDER SCHEDULE

TAG NUMBER	CONDUCTOR QUANTITY AND SIZE	CONDUIT SIZE	SETS
30N	4#10, 1#10G	1"	1
50N	4#6, 1#10G	1"	1
60N	4#6, 1#10G	1"	1
100	3#1, 1#8G	1 1/2"	1
100N	4#1, 1#8G	1 1/2"	1
125	3#1, 1#6G	1 1/2"	1
125N	4#1, 1#6G	2"	1
150	3#1/0, 1#6G	1 1/2"	1
150N	4#1/0, 1#6G	2"	1
175	3#2/0, 1#6G	2"	1
175N	4#2/0, 1#6G	2"	1
200	3#3/0, 1#6G	2"	1
200N	4#3/0, 1#6G	2"	1
225	3#4/0, 1#4G	2"	1
225N	4#4/0, 1#4G	2 1/2"	1
250	3#250, 1#4G	2 1/2"	1
250N	4#250, 1#4G	3"	1
300	3#350, 1#4G	3"	1
300N	4#350, 1#4G	3"	1
400	3#3/0, 1#3G	2"	2
400N	4#3/0, 1#3G	2"	2
400S	4#500	3 1/2"	1
600	3#350, 1#1G	3"	2
600N	4#350, 1#1G	3"	2
600S	4#350	3"	2
800	3#500, 1#1/0G	3"	2
800N	4#500, 1#1/0G	3 1/2"	2
800S	4#500	3 1/2"	2
1000	3#400, 1#2/0G	3"	3
1000N	4#400, 1#2/0G	3"	3
1000S	4#400	3"	3
1200	3#350, 1#3/0G	3"	4
1200N	4#350, 1#3/0G	3"	4
1200S	4#350	3"	4
1600S	4#400	3"	5
2000S	4#400	3"	6
2500S	4#500	3 1/2"	7
3000S	4#500	3 1/2"	8
4000S	4#500	3 1/2"	11

ELEC. SERVICE LOAD SUMMARY

LOAD DESCRIPTION	ESTIMATED DEMAND KVA
EXISTING PEAK DEMAND OVER THE PAST 12 MONTHS	77
125% OF PEAK DEMAND	96
RENOVATIONS - ADDED LOAD -	
NEWLY ADDED ESTIMATED DEMAND	0
ESTIMATED TOTAL BUILDING DEMAND LOAD =	96 267A @ 208V

Not for permitting or construction

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-124972 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/17/2026

ARCHITECT PBK Architects, Inc.
ANAHEIM
2400 E KATELLA AVE, Suite 950
ANAHEIM, CA 92806
P 949-548-5000

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

SCHROEDER ES HVAC UPGRADE & MODERNIZATION

PROJECT ADDRESS:
15151 Columbia Ln
Huntington Beach, CA 92647

100% DESIGN DEVELOPEMENT

DSA APPL NO.: ##-##### DSA FILE NO.: 30-43

RELO
A K1
B ADMIN
C
D MPS
RELO

KEY PLAN NORTH: PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER
STEVEN C. MOSSER
No. E-19817
Exp. 3-31-2027
ELECTRICAL
STATE OF CALIFORNIA

Architect

LICENSED ARCHITECT
Yong Yoo
No. C-31162
REN. 10-31-2027
STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
09-30-2025	04-124418

REVISIONS

No.	Description	Date

100% DESIGN DEVELOPEMENT

SINGLE LINE DIAGRAM & SCHEDULES

This document is for plan review only

E5.01

FILE PATH: Z:\Projects\...
3/12/2026 2:32:08 PM

(E) Branch Panel: K

NEUTRAL BUS: Yes | VOLTAGE: 120/208V, 1PH, 3W
NEUTRAL RATING: 100% | MAIN BUS: 100A
GROUND BUS: Yes | MLO: 100A
LOCATI... Existing | MOUNTING: Existing | AIC RATING: Existing

CIR NO	Circuit Description	Breaker Amps/ Poles	A	B	Breaker Amps/ Poles	Circuit Description	CIR NO
1	EXISTING LOAD	20 A 1 --	0 0		-- 1 20 A	EXISTING LOAD	2
3	EXISTING LOAD	20 A 1 --		0 0	-- 1 20 A	EXISTING LOAD	4
5	EXISTING LOAD	20 A 1 --	0 0		-- 1 20 A	EXISTING LOAD	6
7	EXISTING LOAD	20 A 1 --		0 0	-- 1 20 A	EXISTING LOAD	8
9	EXISTING LOAD	20 A 2 --	0 0		-- 1 20 A	EXISTING LOAD	10
11				0 0	-- 1 20 A	EXISTING LOAD	12
13	EXISTING LOAD	20 A 1 --	0 360		-- 1 20 A	RECEPTS - CLASSROOM/EXTERIOR	14
15	EXISTING LOAD	20 A 1 --		0 500	-- 1 20 A	# FIRE ALARM EQUIPMENT	16
17	SPARE	20 A 1 --	0 100		-- 1 20 A	EXHAUST FAN	18
19	SPARE	20 A 1 --		0 0	-- 1 20 A	EXISTING LOAD	20
21	SPARE	20 A 1 --	0 0		-- 2 20 A	EXISTING LOAD	22
23	SPARE	20 A 1 --		0 0			24
25	SPARE	20 A 1 --	0 --		-- 1 --	SPACE	26
27	SPARE	20 A 1 --		0 --	-- 1 --	SPACE	28
29	SPARE	20 A 1 --	0 --		-- 1 --	SPACE	30

LEGEND:	CONNECTED LOAD BY PHASE (VA)	CONNECTED	REMARKS:
** 6 mA GROUND FAULT CIRCUIT BREAKER		960 KVA	
*30 mA GROUND FAULT CIRCUIT BREAKER	A: 460	5 AMPS	
# RED LOCK-ON CIRCUIT BREAKER HANDLE	B: 500	DEMAND	
ST - SHUNT TRIP		5 AMPS	

(E) Branch Panel: M

NEUTRAL BUS: Yes | VOLTAGE: 120/208V, 1PH, 3W
NEUTRAL RATING: 100% | MAIN BUS: 100A
GROUND BUS: Yes | MLO: 100A
LOCATI... Existing | MOUNTING: Existing | AIC RATING: Existing

CIR NO	Circuit Description	Breaker Amps/ Poles	A	B	Breaker Amps/ Poles	Circuit Description	CIR NO
1	EXISTING LOAD	20 A 1 --	0 0		-- 1 20 A	EXISTING LOAD	2
3	EXISTING LOAD	20 A 1 --		0 0	-- 1 20 A	EXISTING LOAD	4
5	EXISTING LOAD	20 A 1 --	0 500		-- 1 20 A	#FIRE ALARM EQUIPMENT	6
7	EXISTING LOAD	20 A 1 --		0 0	-- 1 20 A	SPARE	8
9	EXISTING LOAD	20 A 1 --	0 0		-- 1 20 A	EXISTING LOAD	10
11	EXISTING LOAD	20 A 1 --		0 0	-- 1 20 A	EXISTING LOAD	12
13	EXISTING LOAD	20 A 1 --	0 0		-- 1 20 A	SPARE	14
15	EXISTING LOAD	20 A 1 --		0 0	-- 1 20 A	SPARE	16
17	SPARE	20 A 1 --	0 0		-- 1 20 A	SPARE	18
19	SPARE	20 A 1 --		0 0	-- 1 20 A	SPARE	20
21	SPARE	20 A 1 --	0 0		-- 1 20 A	SPARE	22
23	SPARE	20 A 1 --		0 0	-- 1 20 A	SPARE	24
25	SPARE	20 A 1 --	0 0		-- 1 20 A	SPARE	26
27	SPARE	20 A 1 --		0 0	-- 1 20 A	SPARE	28
29	SPARE	20 A 1 --	0 0		-- 1 20 A	SPARE	30

LEGEND:	CONNECTED LOAD BY PHASE (VA)	CONNECTED	REMARKS:
** 6 mA GROUND FAULT CIRCUIT BREAKER		500 KVA	
*30 mA GROUND FAULT CIRCUIT BREAKER	A: 500	2 AMPS	
# RED LOCK-ON CIRCUIT BREAKER HANDLE	B: 0	DEMAND	
ST - SHUNT TRIP		2 AMPS	

(E) Branch Panel: C1

NEUTRAL BUS: Yes | VOLTAGE: 120/208V, 1PH, 3W
NEUTRAL RATING: 100% | MAIN BUS: 100A
GROUND BUS: Yes | MLO: 100A
LOCATI... Existing | MOUNTING: Existing | AIC RATING: Existing

CIR NO	Circuit Description	Breaker Amps/ Poles	A	B	Breaker Amps/ Poles	Circuit Description	CIR NO
1	EXISTING LOAD	20 A 1 --	0 0		-- 1 20 A	EXISTING LOAD	2
3	EXISTING LOAD	20 A 1 --		0 0	-- 1 20 A	EXISTING LOAD	4
5	EXISTING LOAD	20 A 1 --	0 0		-- 1 20 A	EXISTING LOAD	6
7	EXISTING LOAD	20 A 1 --		0 0	-- 1 20 A	EXISTING LOAD	8
9	EXISTING LOAD	20 A 1 --	0 0		-- 1 20 A	EXISTING LOAD	10
11	EXISTING LOAD	20 A 1 --		0 0	-- 1 20 A	EXISTING LOAD	12
13	EXISTING LOAD	20 A 1 --	0 0		-- 1 20 A	EXISTING LOAD	14
15	EXISTING LOAD	20 A 1 --		0 0	-- 1 20 A	EXISTING LOAD	16
17	EXISTING LOAD	20 A 1 --	0 0		-- 2 20 A	EXISTING LOAD	18
19	EXHAUST/SUPPLY FAN	20 A 1		1095 180	1 20 A	DRINKING FOUNTAIN	20
21	CLASSROOM FAN COILS	20 A 2	37 1080		1 20 A	RECEPTS - CLASSROOM/EXTERIOR	22
23				37 900	1 20 A	RECEPTS - CLASSROOM	24
25	SPARE	20 A 1 --	0 900		1 20 A	RECEPTS - CLASSROOM	26
27	SPARE	20 A 1 --		0 900	1 20 A	RECEPTS - CLASSROOM	28
29	SPARE	20 A 1 --	0 500		1 20 A	#FIRE ALARM EQUIPMENT	30

LEGEND:	CONNECTED LOAD BY PHASE (VA)	CONNECTED	REMARKS:
** 6 mA GROUND FAULT CIRCUIT BREAKER		5628 KVA	
*30 mA GROUND FAULT CIRCUIT BREAKER	A: 2517	27 AMPS	
# RED LOCK-ON CIRCUIT BREAKER HANDLE	B: 3112	DEMAND	
ST - SHUNT TRIP		27 AMPS	

(E) Branch Panel: A

NEUTRAL BUS: Yes | VOLTAGE: 120/208V, 1PH, 3W
NEUTRAL RATING: 100% | MAIN BUS: 100A
GROUND BUS: Yes | MLO: 100A
LOCATI... Existing | MOUNTING: Existing | AIC RATING: Existing

CIR NO	Circuit Description	Breaker Amps/ Poles	A	B	Breaker Amps/ Poles	Circuit Description	CIR NO
1	EXISTING LOAD	20 A 1 --	0 0		-- 1 20 A	EXISTING LOAD	2
3	EXISTING LOAD	20 A 1 --		0 0	-- 1 20 A	EXISTING LOAD	4
5	EXISTING LOAD	20 A 1 --	0 0		-- 1 20 A	EXISTING LOAD	6
7	EXISTING LOAD	20 A 1 --		0 0	-- 1 20 A	EXISTING LOAD	8
9	EXISTING LOAD	20 A 1 --	0 0		-- 1 20 A	EXISTING LOAD	10
11	EXISTING LOAD	20 A 1 --		0 0	-- 1 20 A	EXISTING LOAD	12
13	EXISTING LOAD	20 A 1 --	0 0		-- 1 20 A	EXISTING LOAD	14
15	EXISTING LOAD	20 A 1 --		0 0	-- 1 20 A	EXISTING LOAD	16
17	EXISTING LOAD	20 A 2 --	0 0		-- 1 20 A	EXISTING LOAD	18
19				0 0	-- 1 20 A	EXISTING LOAD	20
21	EXISTING LOAD	20 A 1 --	0 0		-- 1 20 A	EXISTING LOAD	22
23	EXISTING LOAD	20 A 1 --		0 0	-- 1 20 A	EXISTING LOAD	24
25	EXISTING LOAD	20 A 2 --	0 10935				26
27				0 325	2 50 A	SUBPANEL 'A1'	28
29	EXISTING LOAD	20 A 1 --	0 0		-- 1 20 A	SPARE	30

LEGEND:	CONNECTED LOAD BY PHASE (VA)	CONNECTED	REMARKS:
** 6 mA GROUND FAULT CIRCUIT BREAKER		11260 KVA	
*30 mA GROUND FAULT CIRCUIT BREAKER	A: 10935	54 AMPS	
# RED LOCK-ON CIRCUIT BREAKER HANDLE	B: 325	DEMAND	
ST - SHUNT TRIP		54 AMPS	

Branch Panel: A1

NEUTRAL BUS: Yes | VOLTAGE: 120/208V, 1PH, 3W
NEUTRAL RATING: 100% | MAIN BUS: 50 A
GROUND BUS: Yes | MCB: 50A
LOCATI... | MOUNTING: RECESSED | AIC RATING: 10,000

CIR NO	Circuit Description	Breaker Amps/ Poles	A	B	Breaker Amps/ Poles	Circuit Description	CIR NO
1	EXHAUST/SUPPLY FANS	20 A 1 --	10610				2
3	#FACP	20 A 1 --		0			4
5	CLASSROOM FAN COILS	20 A 2	325				6
7				325			8
9	SPACE	-- 1 --	-- --		-- 1 --	SPACE	10
11	SPACE	-- 1 --		-- --	-- 1 --	SPACE	12
13	SPACE	-- 1 --	-- --		-- 1 --	SPACE	14
15	SPACE	-- 1 --		-- --	-- 1 --	SPACE	16
17	SPACE	-- 1 --	-- --		-- 1 --	SPACE	18

LEGEND:	CONNECTED LOAD BY PHASE (VA)	CONNECTED	REMARKS:
** 6 mA GROUND FAULT CIRCUIT BREAKER		11260 KVA	
*30 mA GROUND FAULT CIRCUIT BREAKER	A: 10935	54 AMPS	
#RED LOCK-ON CIRCUIT BREAKER HANDLE	B: 325	DEMAND	
ST - SHUNT TRIP		54 AMPS	

(E) Branch Panel: C2

NEUTRAL BUS: Yes | VOLTAGE: 120/208V, 1PH, 3W
NEUTRAL RATING: 100% | MAIN BUS: 100A
GROUND BUS: Yes | MLO: 100A
LOCATI... Existing | MOUNTING: Existing | AIC RATING: Existing

CIR NO	Circuit Description	Breaker Amps/ Poles	A	B	Breaker Amps/ Poles	Circuit Description	CIR NO
1	EXISTING LOAD	20 A 1 --	0 0		-- 1 20 A	EXISTING LOAD	2
3	EXISTING LOAD	20 A 1 --		0 0	-- 1 20 A	EXISTING LOAD	4
5	EXISTING LOAD	20 A 1 --	0 0		-- 1 20 A	EXISTING LOAD	6
7	EXISTING LOAD	20 A 1 --		0 0	-- 1 20 A	EXISTING LOAD	8
9	EXISTING LOAD	20 A 1 --	0 0		-- 1 20 A	EXISTING LOAD	10
11	EXISTING LOAD	20 A 1 --		0 0	-- 1 20 A	EXISTING LOAD	12
13	EXISTING LOAD	20 A 1 --	0 0		-- 1 20 A	EXISTING LOAD	14
15	EXISTING LOAD	20 A 1 --		0 0	-- 2 20 A	EXISTING LOAD	16
17	EXISTING LOAD	20 A 1 --	0 0		-- 1 20 A	EXISTING LOAD	18
19	EXISTING LOAD	20 A 1 --		0 0	-- 1 20 A	EXISTING LOAD	20
21	EXISTING LOAD	20 A 1 --	0 180		1 20 A	DRINKING FOUNTAIN	22
23	EXHAUST/SUPPLY FANS	20 A 1		1077 900	1 20 A	RECEPTS - CLASSROOM	24
25	CLASSROOM FAN COILS	20 A 2	1038 900		1 20 A	RECEPTS - CLASSROOM	26
27				1038 900	1 20 A	RECEPTS - CLASSROOM	28
29	SPARE	20 A 1 --	0 1080		1 20 A	RECEPTS - CLASSROOM/EXTERIOR	30

LEGEND:	CONNECTED LOAD BY PHASE (VA)	CONNECTED	REMARKS:
** 6 mA GROUND FAULT CIRCUIT BREAKER		7113 KVA	
*30 mA GROUND FAULT CIRCUIT BREAKER	A: 3198	34 AMPS	
# LOCK-ON CIRCUIT BREAKER HANDLE	B: 3915	DEMAND	
ST - SHUNT TRIP		34 AMPS	

(E) Branch Panel: C3

NEUTRAL BUS: Yes | VOLTAGE: 120/208V, 1PH, 3W
NEUTRAL RATING: 100% | MAIN BUS: 100A
GROUND BUS: Yes | MLO: 100A
LOCATI... Existing | MOUNTING: Existing | AIC RATING: Existing

CIR NO	Circuit Description	Breaker Amps/ Poles	A	B	Breaker Amps/ Poles	Circuit Description	CIR NO
1	EXISTING LOAD	20 A 1 --	0 0		-- 1 20 A	EXISTING LOAD	2
3	EXISTING LOAD	20 A 1 --		0 0	-- 1 20 A	EXISTING LOAD	4
5	EXISTING LOAD	20 A 1 --	0 0		-- 1 20 A	EXISTING LOAD	6
7	EXISTING LOAD	20 A 1 --		0 0	-- 1 20 A	EXISTING LOAD	8
9	SPARE	20 A 1 --	0 0		-- 1 20 A	EXISTING LOAD	10
11	EXISTING LOAD	20 A 1 --		0 0	-- 1 20 A	EXISTING LOAD	12
13	EXISTING LOAD	20 A 1 --	0 0		-- 2 20 A	EXISTING LOAD	14
15	EXISTING LOAD	20 A 1 --		0 0			16
17	EXISTING LOAD	20 A 1 --	0 0		-- 1 20 A	EXISTING LOAD	18
19				0 180	1 20 A	DRINKING FOUNTAIN	20
21	CLASSROOM FAN COILS	20 A 2	1038 1080		1 20 A	RECEPTS - CLASSROOM/EXTERIOR	22
23				1038 900	1 20 A	RECEPTS - CLASSROOM	24
25	SPARE	20 A 1 --	0 900		1 20 A	RECEPTS - CLASSROOM	26
27	SPARE	20 A 1 --		0 900	1 20 A	RECEPTS - CLASSROOM	28
29	SPARE	20 A 1 --	0 1077		1 20 A	EXHAUST/SUPPLY FANS	30

LEGEND:	CONNECTED LOAD BY PHASE (VA)	CONNECTED	REMARKS:
** 6 mA GROUND FAULT CIRCUIT BREAKER		7113 KVA	
*30 mA GROUND FAULT CIRCUIT BREAKER	A: 4095	34 AMPS	
# LOCK-ON CIRCUIT BREAKER HANDLE	B: 3018	DEMAND	
ST - SHUNT TRIP		34 AMPS	

(E) Branch Panel: C4

NEUTRAL BUS: Yes | VOLTAGE: 120/208V, 1PH, 3W
NEUTRAL RATING: 100% | MAIN BUS: 100A
GROUND BUS: Yes | MLO: 100A
LOCATI... Existing | MOUNTING: Existing | AIC RATING: Existing

CIR NO	Circuit Description	Breaker Amps/ Poles	A	B	Breaker Amps/ Poles	Circuit Description	CIR NO
1	EXISTING LOAD	20 A 1 --	0 0		-- 1 20 A	EXISTING LOAD	2
3	EXISTING LOAD	20 A 1 --		0 0	-- 1 20 A	EXISTING LOAD	4
5	EXISTING LOAD	20 A 1 --	0 0		-- 1 20 A	EXISTING LOAD	6
7	EXISTING LOAD	20 A 1 --		0 500	1 20 A	# FIRE ALARM EQUIPMENT	8
9	EXISTING LOAD	20 A 1 --	0 0		-- 1 20 A	EXISTING LOAD	10
11	SPARE	20 A 1 --		0 0	-- 1 20 A	EXISTING LOAD	12
13	EXISTING LOAD	20 A 1 --	0 0		-- 2 20 A	EXISTING LOAD	14
15	EXISTING LOAD	20 A 1 --		0 0			16
17	EXISTING LOAD	20 A 1 --	0 0		-- 1 20 A	EXISTING LOAD	18
19	EXISTING LOAD	20 A 1 --		0 0	-- 1 20 A	EXISTING LOAD	20
21	EXISTING LOAD	20 A 1 --	0 180		1 20 A	DRINKING FOUNTAIN	22
23	EXISTING LOAD	20 A 1 --		0 900	1 20 A	RECEPTS - CLASSROOM	24
25	CLASSROOM FAN COILS	20 A 2	779 900		1 20 A	RECEPTS - CLASSROOM	26
27				779 1080	1 20 A	RECEPTS - CLASSROOM/EXTERIOR	28
29	SPARE	20 A 1 --	0 874		1 20 A	EXHAUST/SUPPLY FANS	30

LEGEND:	CONNECTED LOAD BY PHASE (VA)	CONNECTED	REMARKS:
** 6 mA GROUND FAULT CIRCUIT BREAKER		5991 KVA	
*30 mA GROUND FAULT CIRCUIT BREAKER	A: 2733	29 AMPS	
# RED LOCK-ON CIRCUIT BREAKER HANDLE	B: 3259	DEMAND	
ST - SHUNT TRIP		29 AMPS	

(E) Branch Panel: P7

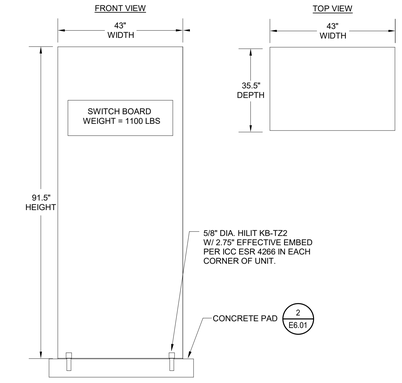
NEUTRAL BUS: Yes | VOLTAGE: 120/208V, 1PH, 3W
NEUTRAL RATING: 100% | MAIN BUS: Existing
GROUND BUS: Yes | MCB: Existing
LOCATI... Existing | MOUNTING: Existing | AIC RATING: Existing

CIR NO	Circuit Description	Breaker Amps/ Poles	A	B	Breaker Amps/ Poles	Circuit Description	CIR NO
1	EXISTING LOAD	20 A 1 --	0 0		-- 2 50 A	EXISTING LOAD	2
3	EXISTING LOAD	20 A 1 --		0 0			4
5	EXISTING LOAD	20 A 1 --	0 0		-- 1 20 A	SPARE	6
7	RECEPTS - CLASSROOM	20 A 1 --		900 0	-- 1 20 A	SPARE	8
9	SPARE	20 A 1 --	0 0		-- 1 20 A	SPARE	10
11	SPARE	20 A 1 --		0 0	-- 1 20 A	SPARE	12
13	SPACE	-- 1 --	-- --		-- 1 --	SPACE	14
15	SPACE	-- 1 --		-- --	-- 1 --	SPACE	16
17	SPACE	-- 1 --	-- --		-- 1 --	SPACE	18
19	SPACE	-- 1 --		-- --	-- 1 --	SPACE	20
21	SPACE	-- 1 --	-- --		-- 1 --	SPACE	22
23	SPACE	-- 1 --		-- --	-- 1 --	SPACE	24

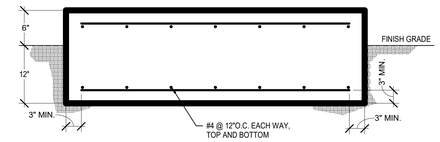
LEGEND:	CONNECTED LOAD BY PHASE (VA)	CONNECTED	REMARKS:
** 6 mA GROUND FAULT CIRCUIT BREAKER		900 KVA	
*30 mA GROUND FAULT CIRCUIT BREAKER	A: 0	4 AMPS	
# LOCK-ON CIRCUIT BREAKER HANDLE	B: 900	DEMAND	
ST - SHUNT TRIP		4 AMPS	

KEY NOTES

1. NEW CIRCUIT BREAKER, NEW LOAD. MANUFACTURER AND AIC RATING TO MATCH EXISTING.
2. EXISTING CIRCUIT BREAKER, NEW LOAD.

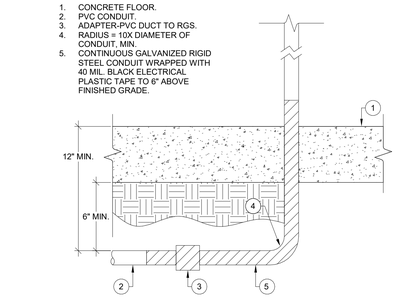


1 SWITCHBOARD MOUNTING DETAIL
NOT TO SCALE



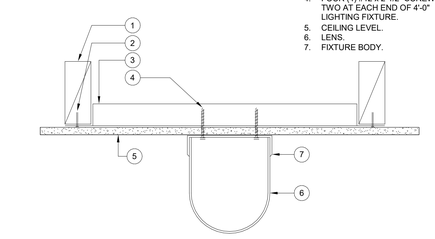
2 CONCRETE HOUSE KEEPING PAD DETAIL
NOT TO SCALE

1. CONCRETE FLOOR.
2. PVC CONDUIT.
3. ADAPTER-PVC DUCT TO RGS.
4. RADIUS = 10X DIAMETER OF CONDUIT, MIN.
5. CONTINUOUS GALVANIZED RIGID STEEL CONDUIT WRAPPED WITH 40 MIL. BLACK ELECTRICAL PLASTIC TAPE TO 6" ABOVE FINISHED GRADE.

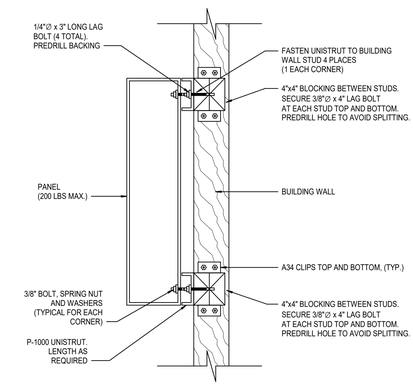


3 CONDUIT RISER DETAIL
NOT TO SCALE

1. WOOD CEILING JOIST (TYP.).
2. FOUR (4) #12 WOOD SCREWS, TYP. AT EACH END.
3. FLANGE CUT WOOD STUD BLOCKING, TWO PER EACH 4'-0" LIGHT FIXTURE.
4. FOUR (4) #12 x 2-1/2" SCREWS TWO AT EACH END OF 4'-0" LIGHTING FIXTURE.
5. CEILING LEVEL.
6. LENS.
7. FIXTURE BODY.



4 SURFACE MOUNTED LIGHT - HARD CEILING (WOOD STUD)
NOT TO SCALE



5 SURFACE MOUNTED PANEL/CABINET - WOOD FRAMING
NOT TO SCALE

Not for permitting or construction

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-124972 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/17/2026

PBK

ARCHITECT PBK Architects, Inc.
ANAHEIM PBK.com
2400 E KATELLA AVE, Suite 950
ANAHEIM, CA 92806
P 949-548-5000

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

SCHROEDER ES HVAC UPGRADE & MODERNIZATION

PROJECT ADDRESS:
15151 Columbia Ln
Huntington Beach, CA 92647

100% DESIGN DEVELOPEMENT

DSA APPL NO.: ##-##### DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT EST. 1872

RELO
A
B
C
D
RELO
K51
ADMIN
MPR
KEY PLAN
N
NORTH: PLAN

Consultant
REGISTERED PROFESSIONAL ENGINEER STEVEN C. MOSSER Reg. E-19817 Exp. 3-31-2027 ELECTRICAL STATE OF CALIFORNIA

Architect
LICENSED ARCHITECT Tong Yao No. C-31162 REN. 10-31-2027 STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT
DATE 09-30-2025 | PROJECT NUMBER 04-124418

REVISIONS

No.	Description	Date

100% DESIGN DEVELOPEMENT

This document is for plan review only

SCHEDULES & ELECTRICAL DETAILS

E6.01

FILE PATH: Z:\Projects\...
3/12/2026 2:32:10 PM

0" 1"

PLUMBING LEGEND

NOTE: NOT ALL SYMBOLS TABULATED BELOW ARE NECESSARILY USED ON THE DRAWINGS.

SYMBOL	ITEM	ABBR.
S / 1	FIXTURE DESIGNATION UNIT ABBREVIATION NUMBER	
01 / P-1	DETAIL DESIGNATION DETAIL NUMBER SHEET NO. WHERE SHOWN	
	DOMESTIC COLD WATER	CW
	DOMESTIC HOT WATER	HW
	DOMESTIC HW RETURN	HWR
	EXISTING PIPING	
X	POINT OF CONNECTION	POC
C	CONDENSATE DRAIN	
	SHUT-OFF VALVE IN BOX	SOV
	PIPING RISE	
	PIPING DROP	
S	SOIL OR WASTE	S OR W
V	VENT	V
	VENT THRU ROOF	VTR
FCO	FLOOR CLEANOUT	FCO
COTG	CLEANOUT TO GRADE	COTG
	WALL CLEANOUT	WCO
	HOSE BIBB	HB
RD	ROOF DRAIN	RD
OD	OVERFLOW DRAIN	OD
	DOWN SPOUT	DS
	UNDERGROUND	UG
TP	TRAP PRIMER	TP
SD	STORM DRAIN	SD
(E)	EXISTING	EXIST.
(N)	NEW	NEW
	UNDERFLOOR	UF
	OVERHEAD	OH
R	RELIEF	
D	DRAIN	
	CONDENSATE DRAIN CLEAN OUT	CO
SC	SECONDARY CONDENSATE DRAIN	
FC	FURNACE CONDENSATE	
	GAS SHUT OFF VALVE	GSOV
	CONDENSATE DRAIN TRAP	CDT
LPG	LIQUIFIED PETROLEUM GAS	LPG
G	NATURAL GAS	G
	FIRE SPRINKLER RISER	FSR
FSL	FIRE SPRINKLER LINE	FSL
	FIRE DEPARTMENT CONNECTION	FDC
	FINISHED FLOOR	FF
	FLOW LINE	FL
▲	FIRE RATED PENETRATION	
	POINT OF DISCONNECTION	POD
	POINT OF CONNECTION	POC

CALIFORNIA GREEN BUILDING STANDARDS

THE FOLLOWING SHALL BE REQUIRED WHETHER OR NOT SPECIFICALLY SHOWN OR MENTIONED IN DRAWINGS AND/OR SPECIFICATIONS:

5.303.1 METERS: SEPARATE SUBMETERS OR METERING DEVICES SHALL BE INSTALLED FOR USES DESCRIBED IN SECTIONS
5.303.1.1 AND 5.303.1.2.

5.303.1.1 NEW BUILDINGS OR ADDITIONS IN EXCESS OF 50,000 SQUARE FEET:
1. FOR EACH INDIVIDUAL LEASED, RENTED, OR OTHER TENANT SPACE WITHIN THE BUILDING PROJECTEED TO CONSUME MORE THAN 100 GAL/DAY, INCLUDING, BUT NOT LIMITED TO, SPACES USED FOR LAUNDRY OR CLEANERS, RESTAURANT OR FOOD SERVICE, MEDICAL OR DENTAL OFFICE, LABORATORY, OR BEAUTY SALON OR BARBER SHOP.
2. WHERE SEPARATE SUBMETERS FOR INDIVIDUAL BUILDING TENANTS ARE UNFEASIBLE, FOR WATER SUPPLIED TO THE FOLLOWING SUBSYSTEMS:
   a. MAKE-UP WATER FOR COOLING TOWERS WHERE FLOW THROUGH IS GREATER THAN 500 GPM.
   b. MAKE-UP WATER FOR EVAPORATIVE COOLERS GREATER THAN 6 GPM.
   c. STEAM AND HOT-WATER BOILERS WITH ENERGY INPUT MORE THAN 500,000 BTUH/H.

5.303.1.2 EXCESS CONSUMPTION: A SEPARATE SUBMETER OR BE PROVIDED FOR ANY TENANT WITHIN A NEW BUILDING OR WITHIN AN ADDITION THAT IS PROJECTED TO CONSUME MORE THAN 1,000 GAL/DAY.

5.303.2 RESERVED

5.303.3 WATER CONSERVING PLUMBING FIXTURES AND FITTINGS: PLUMBING FIXTURES (WATER CLOSETS AND URINALS) AND FITTINGS (FAUCETS AND SHOWERHEADS) SHALL COMPLY WITH THE FOLLOWING:

5.303.3.1 WATER CLOSETS: THE EFFECTIVE FLUSH VOLUME OF ALL WATER CLOSETS SHALL NOT EXCEED 1.28 GALLONS PER FLUSH. TANK-TYPE WATER CLOSETS SHALL BE CERTIFIED TO THE PERFORMANCE CRITERIA OF THE U.S. EPA WATERSENSE SPECIFICATION FOR TANK-TYPE TOILETS. NOTE: THE EFFECTIVE FLUSH VOLUME OF DUAL FLUSH TOILETS IS DEFINED AS THE COMPOSITE, AVERAGE FLUSH VOLUME OF TWO REDUCED FLUSHES AND ONE FULL FLUSH.

5.303.3.2 URINALS:

5.303.3.2.1 WALL-MOUNTED URINALS: THE EFFECTIVE FLUSH VOLUME OF WALL-MOUNTED URINALS SHALL NOT EXCEED 0.125 GALLONS PER FLUSH.

5.303.3.2.2 FLOOR-MOUNTED URINALS: THE EFFECTIVE FLUSH VOLUME OF FLOOR-MOUNTED URINALS SHALL NOT EXCEED 0.5 GALLONS PER FLUSH.

5.303.3.2.1 WALL-MOUNTED URINALS. THE EFFECTIVE FLUSH VOLUME OF WALL-MOUNTED URINALS SHALL NOT EXCEED 0.125 GALLONS PER FLUSH.

5.303.3.2.2 FLOOR-MOUNTED URINALS: THE EFFECTIVE FLUSH VOLUME OF FLOOR-MOUNTED URINALS SHALL NOT EXCEED 0.5 GALLONS PER FLUSH.

5.303.3.3 SHOWERHEADS:

5.303.3.3.1 SINGLE SHOWERHEAD: SHOWERHEADS SHALL HAVE A MAXIMUM FLOW RATE OF NOT MORE THAN 2.0 GALLONS PER MINUTE AT 80 PSI. SHOWERHEADS SHALL BE CERTIFIED TO THE PERFORMANCE CRITERIA OF THE U.S. EPA WATERSENSE SPECIFICATION FOR SHOWERHEADS.

5.303.3.3.2 MULTIPLE SHOWERHEADS SERVING ONE SHOWER: WHEN A SHOWER IS SERVED BY MORE THAN ONE SHOWERHEAD, THE COMBINED FLOW RATE OF ALL SHOWERHEADS AND/OR SHOWER OUTLETS CONTROLLED BY A SINGLE VALVE SHALL NOT EXCEED 2.0 GALLONS PER MINUTE AT 80 PSI, OR THE SHOWER SHALL BE DESIGNED TO ALLOW ONLY ONE SHOWER OUTLET TO BE IN OPERATION AT A TIME. NOTE: A HAND-HELD SHOWER SHALL BE CONSIDERED A SHOWERHEAD.

5.303.3.4 FAUCETS AND FOUNTAINS:

5.303.3.4.1 NONRESIDENTIAL LAVATORY FAUCETS: LAVATORY FAUCETS SHALL HAVE A MAXIMUM FLOW RATE OF NOT MORE THAN 0.5 GALLONS PER MINUTE AT 60 PSI.

5.303.3.4.2 KITCHEN FAUCETS: KITCHEN FAUCETS SHALL HAVE A MAXIMUM FLOW RATE OF NOT MORE THAN 1.8 GALLONS PER MINUTE AT 60 PSI. KITCHEN FAUCETS MAY TEMPORARILY INCREASE FLOW ABOVE THE MAXIMUM RATE, BUT NOT TO EXCEED 2.2 GALLONS PER MINUTE AT 60 PSI, AND MUST DEFAULT TO A MAXIMUM FLOW RATE OF 1.8 GALLONS PER MINUTE AT 60 PSI.

5.303.3.4.3 WASH FOUNTAINS: WASH FOUNTAINS SHALL HAVE A MAXIMUM FLOW RATE OF NOT MORE THAN 1.8 GALLONS PER MINUTE/20 [RIM SPACE (INCHES) AT 60 PSI].

5.303.3.4.4 METERING FAUCETS: METERING FAUCETS SHALL NOT DELIVER MORE THAN 0.20 GALLONS PER CYCLE.

5.303.3.4.5 METERING FAUCETS FOR WASH FOUNTAINS: METERING FAUCETS FOR WASH FOUNTAINS SHALL HAVE A MAXIMUM FLOW RATE OF NOT MORE THAN 0.20 GALLONS PER CYCLE/20 [RIM SPACE (INCHES) AT 60 PSI]. NOTE: WHERE COMPLYING FAUCETS ARE UNAVAILABLE, AERATORS OR OTHER MEANS MAY BE USED TO ACHIEVE REDUCTION.

PLUMBING TESTING

1. ALL EQUIPMENT AND/OR SYSTEMS NOTED ON THE DRAWINGS "TO REMAIN" SHALL BE INSPECTED AND TESTED ON SITE TO CERTIFY WORKING CONDITION. A WRITTEN REPORT ON THE CONDITION OF ALL EQUIPMENT TO REMAIN, INCLUDING A COPY OF THE TEST RESULTS AND RECOMMENDED REMEDIAL ACTIONS AND COSTS SHALL BE MADE BY THIS CONTRACTOR TO THE ARCHITECT/ENGINEER FOR REVIEW.

2. PIPE COVER AND BACKFILLING:
   A. AFTER HYDROSTATIC TEST, EVENLY BACKFILL ENTIRE TRENCH WIDTH BY HAND PLACING BACKFILL MATERIAL AND HAND TAMPING IN FOUR (4) ICHES COMPACTED LAYERS TO 12 INCHES MINIMUM COVER OVER TOP OF JACKET. COMPACT TO 95 PERCENT MAXIMUM DENSITY.
   B. EVENLY AND CONTINUOUSLY BACKFILL REMAINING TRENCH DEPTH IN
   C. UNIFORM LAYERS WITH BACKFILL MATERIAL.
   D. DO NOT USE WHEELED OR TRACKED VEHICLES FOR TAMPING.

3. PRESSURE TEST ALL DOMESTIC WATER PIPING, AFTER INSTALLATION AND PRIOR TO BACKFILL OR COVER-UP. RINSE PIPING SYSTEM OF PARTICULATE CONTAMINANTS, CAP AND SUBJECT TO STATIC WATER PRESSURE OF 125 PSIG FOR FOUR (4) HOURS. REPAIR LEAKS AND DEFECTS AND RE-TEST ANY PORTION OF PIPING SYSTEM THAT FAILS. PROVIDE WRITTEN TEST REPORT INCLUDING DATE AND TIME OF TEST, PASS OR FAIL INDICATION, SUMMARY OF REMEDIAL WORK REQUIRED AND DATE AND TIME OF EACH RE-TEST.

4. PRIOR TO COVER UP, WATER PIPE, SANITARY PIPE, AND GAS PIPING SHALL BE PRESSURE TESTED. TESTS SHALL BE WITNESSED BY CONSULTANT AND OWNER. NOTIFY OWNER 48 HOURS PRIOR TO TEST. TEST SHALL BEWITNESSED BY CLIENT PLUMBING TECHNICIAN.

5. UPON COMPLETION OF THE SANITARY PIPING SYSTEM, THE CONTRACTOR SHALL NOTIFY ENGINEER AND OWNER TO OBSERVE A SMOKE TEST OF THE SYSTEM. SMOKE TESTING SHALL BE PERFORMED ON SANITARY PIPING SYSTEM TWICE DURING CONSTRUCTION.

6. PRESSURE TEST NATURAL GAS PIPING IN ACCORDANCE WITH NFPA 54. CA PLUMBING CODE SECTION 1213

GENERAL PLUMBING NOTES

1. ALL BRACING OF PIPING SHALL BE INSTALLED IN ACCORDANCE WITH SMACNA GUIDELINES, HAZARD LEVEL 'A'.

2. WHERE BRACING DETAILS ARE NOT SHOWN ON THE DRAWINGS OR IN THE GUIDELINES, THE FIELD INSTALLATION SHALL BE SUBJECT TO THE APPROVAL OF THE ARCHITECT, MECHANICAL ENGINEER AND FIELD INSPECTOR.

3. SUPPORT AND BRACING OF ALL PIPING SHALL BE IN ACCORDANCE WITH THE SMACNA "GUIDELINES FOR SEISMIC RESTRAINTS OF PLUMBING PIPING SYSTEMS", OR THE "SUPERSTRUT SEISMIC RESTRAINT SYSTEM" FOR PIPING ONLY.

4. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO PROCEEDING WITH INSTALLATION. CONTRACTOR SHALL NOTIFY ARCHITECT/ENGINEER OF ANY EXISTING CONDITIONS WHICH CONFLICT WITH INFORMATION PROVIDED IN CONSTRUCTION DOCUMENTS.

5. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL PIPE ROUTING WITH WORK OF OTHER TRADES AND MAKE ANY OFFSETS AS REQUIRED TO AVOID CONFLICT WITH DUCTWORK, LIGHT FIXTURES, SKYLIGHTS, ETC.

6. PLUMBING CONTRACTOR TO COORDINATE WITH MECHANICAL CONTRACTOR FOR ALL CONDENSATE DRAIN CONNECTIONS TO MECHANICAL EQUIPMENT.

7. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING PLUMBING CONDITIONS PRIOR TO PROCEEDING WITH INSTALLATION. CONTRACTOR SHALL NOTIFY ARCHITECT/ ENGINEER OF ANY EXISTING CONDITIONS WHICH CONFLICT WITH INFORMATION PROVIDED IN CONSTRUCTION DOCUMENTS.

8. FOR PLUMBING FIXTURE MOUNTING HEIGHTS AND LOCATIONS, REFER TO THE ARCHITECTURAL DRAWINGS.

9. ALL PLUMBING CONVEYING OR DISPENSING WATER FOR HUMAN CONSUMPTION SHALL COMPLY WITH AB 1953 FOR LEAD CONTENT.

10. REFER TO ARCHITECTURAL DRAWING FOR EXACT LOCATIONS OF FIXTURES, EQUIPMENT, ETC. DO NOT SCALE FROM PLUMBING DRAWINGS.

11. ALL WALL CLEAN-OUTS SHALL BE ACCESSIBLE BY AN ACCESS PANEL.

12. PROVIDE A DOUBLE EXTERIOR CLEAN-OUT (DFCO) ON ALL SANITARY LINES EXITING THE BUILDING.

13. ALL FLOOR DRAINS AND FLOOR SINKS SHALL BE PROVIDED WITH A TRAP PRIMER.

14. FIXTURES DESIGNATED AS ADA ACCESSIBLE BY ARCHITECT SHALL BE INSTALLED AT ADA ACCESSIBLE HEIGHT PER ARCHITECTURAL DETAILS.

15. ALL DOMESTIC COLD AND HOT WATER TAKE-OFFS SHALL HAVE AN ISOLATION SHUT-OFF VALVE.

16. CONTRACTOR SHALL DEWATER ANY AREA AT OR BELOW GRADE PRIOR TO SETTING EQUIPMENT.

17. ANY AND ALL WATER PIPING EXPOSED TO OUTSIDE ELEMENTS SHALL BE INSULATED TO PREVENT FREEZING.

18. ALL WORK AND MATERIAL SHALL BE PERFORMED AND INSTALLED IN COMPLIANCE WITH THE FOLLOWING CODES AS ADOPTED BY THE INSPECTION AUTHORITY. NOTHING IN THESE PLANS IS TO BE CONSTUED TO PERMIT WORK NOT CONFORMING TO THESE CODES OR OTHER APPLICABLE PROJECT SPECIFICATIONS:

LIST OF APPLICABLE CODES
2022 CALIFORNIA ADMINISTRATIVE CODE (CAC), PART 1, TITLE 24 CCR
2022 CALIFORNIA BUILDING CODE (CBC), PART 2, TITLE 24 CCR
2022 CALIFORNIA ELECTRICAL CODE (CEC), PART 3, TITLE 24 CCR
2022 CALIFORNIA MECHANICAL CODE (CMC), PART 4, TITLE 24 CCR
2022 CALIFORNIA PLUMBING CODE (CPC), PART 5, TITLE 24 CCR
2022 CALIFORNIA ENERGY CODE, PART 6, TITLE 24 CCR
2022 CALIFORNIA FIRE CODE (CFC), PART 9, TITLE 24 CCR
2022 CALIFORNIA EXISTING BUILDING CODE (CEBC), PART 10, TITLE 24 CCR
2022 CALIFORNIA GREEN BUILDING STANDARD CODE (CALGREEN), PART 11, TITLE 24 CCR
2022 CALIFORNIA REFERENCE STANDARDS CODE (CBC), PART 12, TITLE 24 CCR
TITLE 19 CCR, PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS

APPLICABLE STANDARDS
FOR A LIST OF APPLICABLE STANDARDS, INCLUDING CALIFORNIA AMENDMENTS TO THE NFPA STANDARDS, REFER TO CBC CHAPTER 35 AND CFC CHAPTER 80.

19. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO THE FACILITY, UTILITIES AND APPURTENANCE CAUSED BY THE WORK IN THEIR SCOPE. CONTRACTOR SHALL RESTORE AND REPAIR ANY DAMAGE AT NO ADDITIONAL COST TO THE OWNERS BY INSTALLATION THE FACILITY OF NEW WORK.

MEP COMPONENT ANCHORAGE NOTES:

ALL MECHANICAL, PLUMBING AND ELECTRICAL COMPONENTS SHALL BE ANCHORED AND INSTALLED PER THE DETAILS ON THE DSA APPROVED CONSTRUCTION DOCUMENTS. THE FOLLOWING COMPONENTS SHALL BE ANCHORED OR BRACED TO MEET THE FORCE AND DISPLACEMENT REQUIREMENTS PRESCRIBED IN THE 2022 CBC, SECTIONS 1617A.1.18 THROUGH 1617A.1.26 AND ASCE 7-16 CHAPTER 13, 26 AND 30:

1. ALL PERMANENT EQUIPMENT AND COMPONENTS.
2. TEMPORARY, MOVABLE OR MOBILE EQUIPMENT THAT IS PERMANENTLY ATTACHED (e.g. HARD WIRED) TO THE BUILDING UTILITY SERVICES SUCH AS ELECTRIC, GAS OR WATER. "PERMANENTLY ATTACHED" SHALL INCLUDE ALL ELECTRICAL CONNECTIONS EXCEPT PLUGS FOR 110/220 VOLT RECEPTACLES HAVING A FLEXIBLE CABLE.
3. TEMPORARY, MOVABLE OR MOBILE EQUIPMENT WHICH IS HEAVIER THAN 400 POUNDS OR HAS A CENTER OF MASS LOCATED 4 FEET OR MORE ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENT IS REQUIRED TO BE RESTRAINED IN A MANNER APPROVED BY DSA.

THE FOLLOWING MECHANICAL AND ELECTRICAL COMPONENTS SHALL BE POSITIVELY ATTACHED TO THE STRUCTURE BUT NEED NOT DEMONSTRATE DESIGN COMPLIANCE WITH THE REFERENCES NOTED ABOVE. THESE COMPONENTS SHALL HAVE FLEXIBLE CONNECTIONS PROVIDED BETWEEN THE COMPONENT AND ASSOCIATED DUCTWORK, PIPING, AND CONDUIT. FLEXIBLE CONNECTIONS MUST ALLOW MOVEMENT IN BOTH TRANSVERSE AND LONGITUDINAL DIRECTIONS:

1. COMPONENTS WEIGHING LESS THAN 400 POUNDS AND HAVE A CENTER OF MASS LOCATED 4 FEET OR LESS ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENT.
2. COMPONENTS WEIGHING LESS THAN 20 POUNDS, OR IN THE CASE OF DISTRIBUTED SYSTEMS, LESS THAN 5 POUND PER FOOT, WHICH ARE SUSPENDED FROM A ROOF OR FLOOR OR HUNG FROM A WALL.

THE ANCHORAGE OF ALL MECHANICAL, ELECTRICAL AND PLUMBING COMPONENTS SHALL BE SUBJECT TO THE APPROVAL OF THE DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE OR STRUCTURAL ENGINEER DELEGATED RESPONSIBILITY AND ACCEPTANCE BY DSA. THE PROJECT INSPECTOR WILL VERIFY THAT ALL COMPONENTS AND EQUIPMENT HAVE BEEN ANCHORED IN ACCORDANCE WITH ABOVE REQUIREMENTS.

PIPING, DUCTWORK, AND ELECTRICAL DISTRIBUTION SYSTEM BRACING NOTE

PIPING, DUCTWORK, AND ELECTRICAL DISTRIBUTION SYSTEMS SHALL BE BRACED TO COMPLY WITH THE FORCES AND DISPLACEMENTS PRESCRIBED IN ASCE 7-16 SECTION 13.3 AS DEFINED IN ASCE 7-16 SECTION 13.6.5, 13.6.6, 13.6.7, 13.6.8; AND 2022 CBC, SECTION 1617A.1.24, 1617A.1.25, AND 1617A.1.26.

THE METHOD OF SHOWING BRACING AND ATTACHMENTS TO THE STRUCTURE FOR THE IDENTIFIED DISTRIBUTION SYSTEM ARE AS NOTED BELOW AND SHALL BE IN ACCORDINANCE WITH DSA R 16-13. THE MEP DESIGN PROFESSIONALENGINEER RESPONSIBLE FOR CONTENT ON THESE SHEETS HAS VERIFIED THAT THE DESIGN METHODS IDENTIFIED BELOW ARF IN ACCORDANCE WITH DSA IR 16-13.

MECHANICAL PIPING (MP), MECHANICAL DUCTS (MD), PLUMBING PIPING (PP), ELECTRICAL DISTRIBUTION SYSTEMS (E):

MP☐ MD☐ PP☒ E☐ OPTION 1: PROJECT-SPECIFIC DESIGN

MP☐ MD☐ PP☐ E☐ OPTION 2: DESIGN BASED ON OSHPD OPM, WITHIN PROJECT SUBMITTAL

MP☐ MD☐ PP☐ E☐ OPTION 3: DESIGN BASED ON OSHPD OPM, DEFERRED SUBMITTAL

DRAWING INDEX

SHEET	DESCRIPTION
P0.00	PLUMBING SYMBOLS, LEGENDS & GENERAL NOTES
P1.01	PLUMBING SITE PLAN
PD2.01	PLUMBING FLOOR PLANS - DEMOLITION
PD2.02	PLUMBING FLOOR PLANS - DEMOLITION
P2.01	PLUMBING FLOOR PLANS
P2.02	PLUMBING FLOOR PLANS
P5.01	PLUMBING SCHEDULES
P6.01	PLUMBING DETAILS

ABBREVIATIONS

NOTE: 1. ALL ABBREVIATIONS MAY NOT BE USED ON THESE DRAWINGS.

AAP	AREA ALARM PANEL
AAV	AUTOMATIC AIR VENT
A.F.F.	ABOVE FINISHED FLOOR
AP	ACCESS PANEL
B.F.F.	BELOW FINISHED FLOOR
BFP	BACKFLOW PREVENTER
BOB	BOTTOM OF BEAM
BOP	BOTTOM OF PIPE
BTUH	BRITISH THERMAL UNITS PER HOUR
CA	COMPRESSED AIR
C/C	CUT AND CAP
CFH	CUBIC FEET PER HOUR
CFS	CUBIC FEET PER SECOND
CI	CAST IRON
CLG	CEILING
CO	CLEANOUT
CONN	CONNECTION
CONT.	CONTINUATION
DF	DRINKING FOUNTAIN
DPV	DRY PIPE VALVE
DWG.	DRAWING
EA	EACH
EL.	ELEVATION
EDF	ELECTRIC DRINKING FOUNTAIN
FCO	FLOOR CLEANOUT
FD	FLOOR DRAIN
FDV	FIRE DEPARTMENT VALVE
F.F.	FINISHED FLOOR
FHC	FIRE HOSE CABINET
F.L.	FLOW LINE
FS	FLOOR SINK
FT	FEET
FU	FIXTURE UNITS
GC	GENERAL CONTRACTOR
GPH	GALLONS PER HOUR
GPM	GALLONS PER MINUTE
HB	HOSE BIBB
HP	HORSEPOWER
I.E.	INVERT ELEVATION
KW	KILOWATTS
LAV	LAVATORY
MAP	MASTER ALARM PANEL
MECH	MECHANICAL
MH	MANHOLE
MS	MOP SINK
N.C.	NORMALLY CLOSED
NIC	NOT IN CONTRACT
N.O.	NORMALLY OPEN
O.F./C.I.	OWNER FURNISHED/CONTRACTOR INSTALLED
O.F./O.I.	OWNER FURNISHED/OWNER INSTALLED
OFD	OVERFLOW DRAIN
PH	PHASE
PIV	POST INDICATOR VALVE
PRV	PRESSURE REDUCING VALVE
RD	ROOF DRAIN
RE:	REFER TO
R.I.C.	ROUGH-IN AND CONNECT
RO	REVERSE OSMOSIS
RPBFP	REDUCED PRESSURE BACKFLOW PREVENTER
RPM	REVOLUTIONS PER MINUTE
RVB	REFRIGERATOR VALVE BOX
SD	STORM DRAIN
S.F.	SQUARE FEET
SIA.	SIAMESE
SK	SINK
T.O.P.	TOP OF PIPE
TP	TRAP PRIMER
TYP	TYPICAL
U	URINAL
U/F	UNDERFLOOR
U/S	UNDERSLAB
VAC. BRKR.	VACUUM BREAKER
VIF	VERIFY IN FIELD
VTR	VENT THRU ROOF
WC	WATER CLOSET
WCO	WALL CLEANOUT
WH	WALL HYDRANT
WMB	WASHING MACHINE BOX
YH	YARD HYDRANT
ZV	ZONE VALVE
(A)	ITEM NOTED TO BE ABANDONED
(D)	ITEM NOTED TO BE DEMOLISHED
(E)	EXISTING ITEM
(N)	NEW ITEM
(R)	ZFITEM NOTED TO RELOCATED

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-124972 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/17/2026

PBK

ARCHITECT PBK Architects, Inc.
ANAHEIM PBK.com
2400 E KATELLA AVE, Suite 950
ANAHEIM, CA 92806
P 949-548-5000

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

SCHROEDER ELEMENTARY SCHOOL
HVAC UPGRADE & MODERNIZATION

PROJECT ADDRESS:
15151 Columbia Ln
Huntington Beach, CA 92647

CONSTRUCTION DOCUMENTS

DSA APPL NO. 04-12492 DSA FILE NO. 30-43

WESTMINSTER SCHOOL DISTRICT EST. 1873

RELO
A K2 K1
B ADMIN
C
D MPR
RELO

KEY PLAN
NORTH: PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER REX DAVID WANG No.M36155 Exp.09-30-2026 ELECTRICAL STATE OF CALIFORNIA

Architect

LICENSED ARCHITECT Tong Yao No. C-31162 REN. 10-31-2027 STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
11-14-2025	250376

REVISIONS

No.	Description	Date

CONSTRUCTION DOCUMENTS

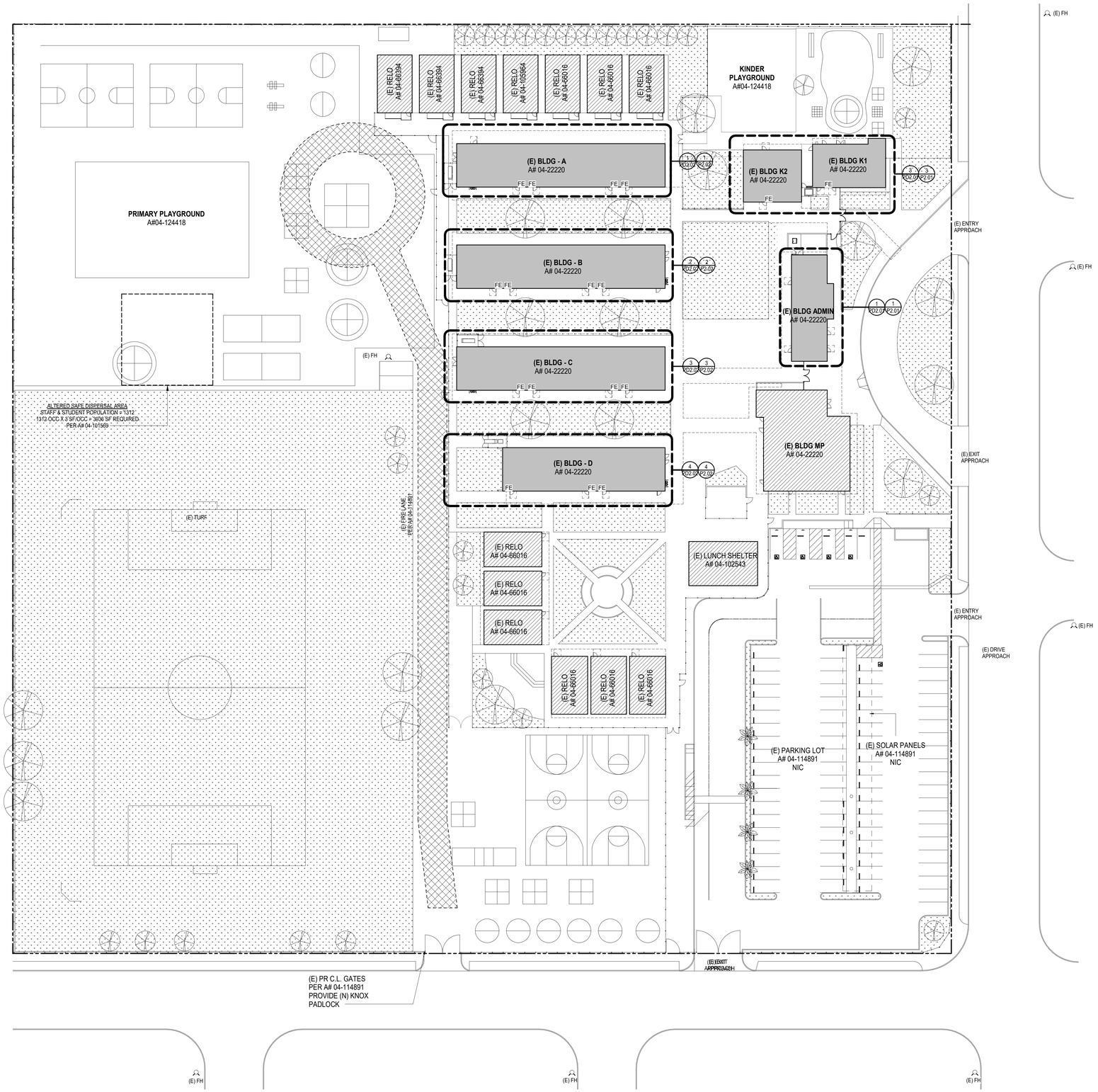
PLUMBING SYMBOLS, LEGENDS & GENERAL NOTES

P0.00

FILE PATH: Z:\Projects\...
3/12/2026 4:40:27 PM

P1.01 - PLUMBING SITE PLAN

0" 1"



1 SITE PLAN
1" = 30'-0"

SHEET NOTES

1. REFER TO LEAD SHEET M0.0 MECHANICAL SYMBOLS, LEGENDS & GENERAL NOTES.

KEY NOTES

1 AREA OF WORK

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-124972 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/17/2026

PBK

ARCHITECT PBK Architects, Inc.
PBK.com
ANAHEIM
2400 E KATELLA AVE, Suite 950
ANAHEIM, CA 92806
P 949-548-5000

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

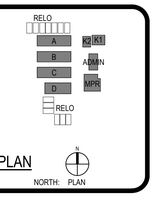
SCHROEDER ELEMENTARY SCHOOL
HVAC UPGRADE & MODERNIZATION

PROJECT ADDRESS:
15151 Columbia Ln
Huntington Beach, CA 92647

CONSTRUCTION DOCUMENTS

DSA APPL NO. 04-124972 DSA FILE NO. 30-43

WESTMINSTER SCHOOL DISTRICT EST. 1872



KEY PLAN
NORTH: PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER ALEX DAVID WANG No.M36155 Exp.09-30-2026 STATE OF CALIFORNIA

Architect

LICENSED ARCHITECT Yong Yoo No. C-31162 REN. 10-31-2027 STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
11-14-2025	250376

REVISIONS

No.	Description	Date

CONSTRUCTION DOCUMENTS

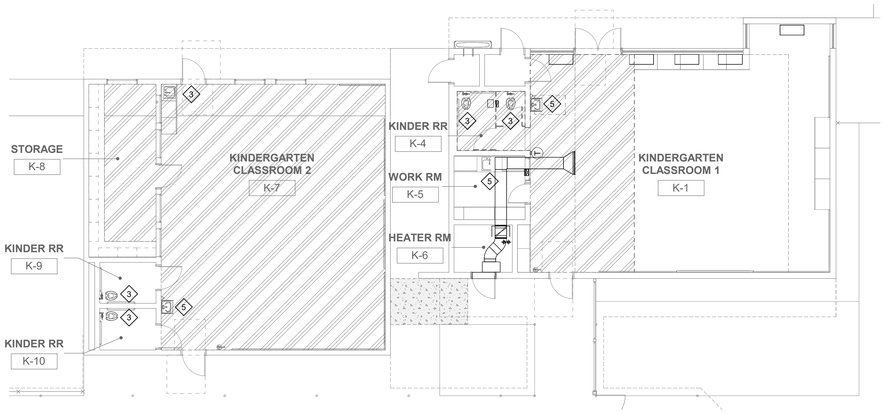
PLUMBING SITE PLAN

P1.01

FILE PATH: Z:\Projects\...
3/12/2026 4:40:29 PM

PD2.01 - PLUMBING FLOOR PLANS - DEMOLITION

0" 1"

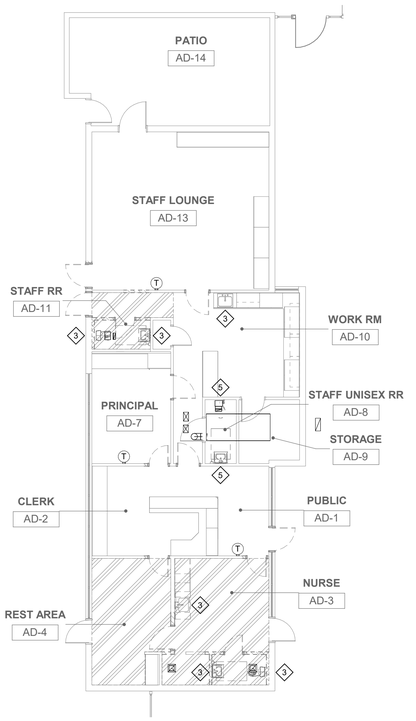


NORTH

3 KINDERGARTEN - FLOOR PLAN - DEMOLITION

1/8" = 1'-0"

NORTH



NORTH

1 ADMIN - FLOOR PLAN - DEMOLITION

1/8" = 1'-0"

GENERAL NOTES

1. ALL CONDENSATE DRAIN PIPING ABOVE CEILING SHALL SLOPE AT 1% UNLESS OTHERWISE NOTED.
2. FOR CONTINUATION OF ALL UTILITIES SEE BUILDING AS-BUILT/RECORD SET DRAWINGS.
3. BEFORE COMMENCEMENT OF WORK, THE CONTRACTOR SHALL VERIFY THE EXACT LOCATIONS, ELEVATIONS AND CHARACTERISTICS OF ALL UTILITIES AND PIPING BY PHYSICAL EXCAVATION, AND SHALL IMMEDIATELY NOTIFY THE ARCHITECT OF ANY DISCREPANCIES.
4. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITIES AND POINTS OF CONNECTION PRIOR TO BIDDING PROJECT.
5. WHERE PLANS INDICATE NEW FIXTURES OR EQUIPMENT CONNECTING TO EXISTING SERVICES, PLUMBING CONTRACTOR SHALL MODIFY AND/OR EXTEND EXISTING PIPING OR ROUGH-INS AS REQUIRED TO SUIT THE NEW FIXTURE.
6. THE PLUMBING CONTRACTOR SHALL RUN ALL SERVICE LINES, ROUGH-IN AND MAKE FINAL CONNECTIONS TO ALL FIXTURES AND EQUIPMENT. PLUMBING CONTRACTOR SHALL FURNISH AND INSTALL ALL TRIMS, TAILPIECES, STRAINERS, P-TRAPS, ARMS, HOT COLD WATER STOPS AND FAUCETS AS REQUIRED.

DEMOLITION KEY NOTES

1. EXISTING PIPING ABOVE EXPOSED TO REMAIN
2. EXISTING PIPING BELOW FLOOR / GRADE.
3. REMOVE EXISTING PLUMBING FIXTURE, RELATED ROUGH-IN & PIPING. CAP EXISTING PIPING BELOW GRADE, IN WALL OR OVERHEAD. PREPARE FOR RECONNECTION UNDER RENOVATION PHASE.
4. (E) WATER HEATER TO REMAIN
5. (E) PLUMBING FIXTURE TO REMAIN

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-124972 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/17/2026

PBK

ARCHITECT PBK Architects, Inc.
PBK.com
ANAHEIM
2400 E KATELLA AVE, Suite 950
ANAHEIM, CA 92806
P 949-548-5000

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

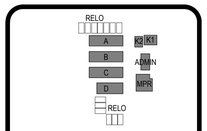
SCHROEDER ELEMENTARY SCHOOL
HVAC UPGRADE & MODERNIZATION

PROJECT ADDRESS:
15151 Columbia Ln
Huntington Beach, CA 92647

CONSTRUCTION DOCUMENTS

DSA APPL NO. 04-124972 DSA FILE NO. 30-43

WESTMINSTER SCHOOL DISTRICT EST. 1873



KEY PLAN NORTH: PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER
REZ DAVID MAND
No.M36155
Exp.09-30-2026
MECHANICAL
STATE OF CALIFORNIA

Architect

LICENSED ARCHITECT
Yong Yoo
No. C-31162
REN 10-31-2027
STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
11-14-2025	250376

REVISIONS

No.	Description	Date

CONSTRUCTION DOCUMENTS

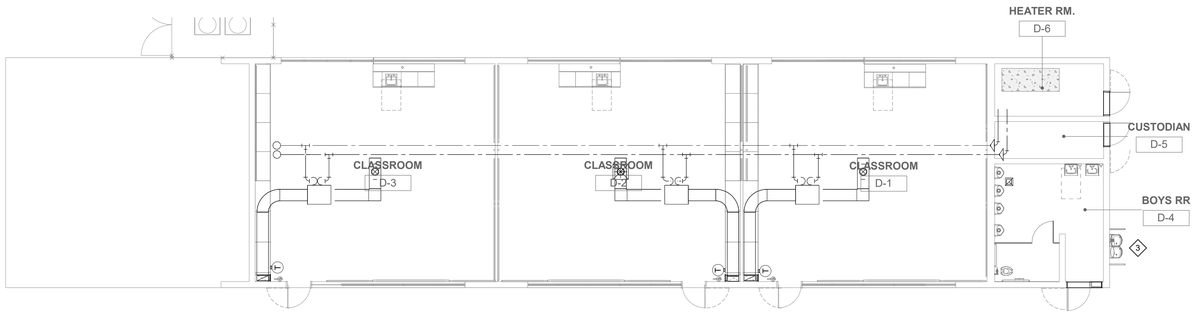
PLUMBING FLOOR PLANS - DEMOLITION

PD2.01

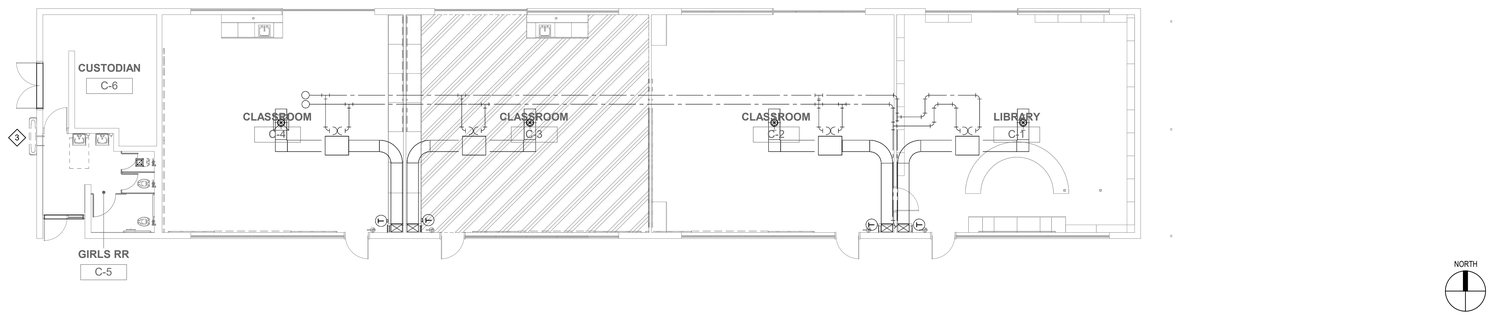
FILE PATH: Z:\Projects\...
3/12/2026 4:40:36 PM

PD2.02 - PLUMBING FLOOR PLANS - DEMOLITION

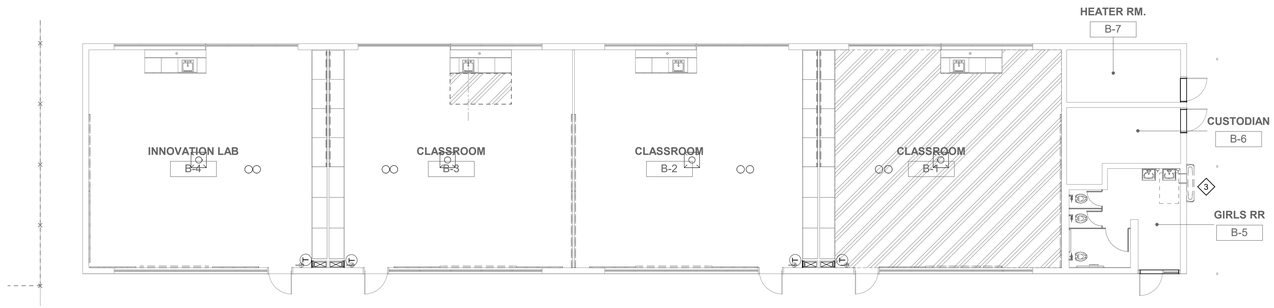
0" 1"



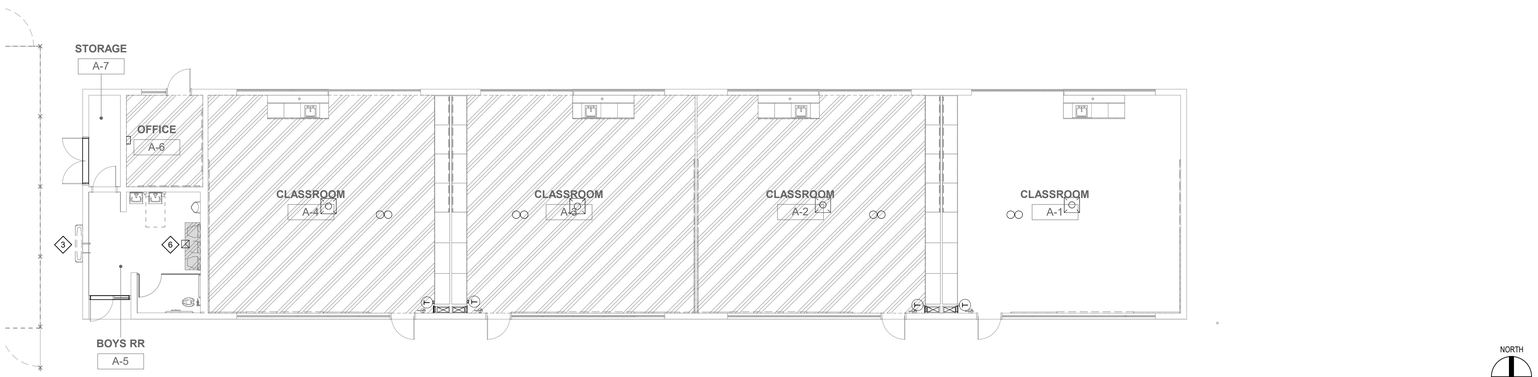
4 FLOOR PLAN - BLDG D - DEMOLITION
1/8" = 1'-0"



3 FLOOR PLAN - BLDG C - DEMOLITION
1/8" = 1'-0"



2 FLOOR PLAN - BLDG B - DEMOLITION
1/8" = 1'-0"



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

GENERAL NOTES

1. ALL CONDENSATE DRAIN PIPING ABOVE CEILING SHALL SLOPE AT 1% UNLESS OTHERWISE NOTED.
2. FOR CONTINUATION OF ALL UTILITIES SEE BUILDING AS-BUILT/RECORD SET DRAWINGS.
3. BEFORE COMMENCEMENT OF WORK, THE CONTRACTOR SHALL VERIFY THE EXACT LOCATIONS, ELEVATIONS AND CHARACTERISTICS OF ALL UTILITIES AND PIPING BY PHYSICAL EXCAVATION, AND SHALL IMMEDIATELY NOTIFY THE ARCHITECT OF ANY DISCREPANCIES.
4. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITIES AND POINTS OF CONNECTION PRIOR TO BIDDING PROJECT.
5. WHERE PLANS INDICATE NEW FIXTURES OR EQUIPMENT CONNECTING TO EXISTING SERVICES, PLUMBING CONTRACTOR SHALL MODIFY AND/OR EXTEND EXISTING PIPING OR ROUGH-INS AS REQUIRED TO SUIT THE NEW FIXTURE.
6. THE PLUMBING CONTRACTOR SHALL RUN ALL SERVICE LINES, ROUGH-IN AND MAKE FINAL CONNECTIONS TO ALL FIXTURES AND EQUIPMENT. PLUMBING CONTRACTOR SHALL FURNISH AND INSTALL ALL TRIMS, TAILPIECES, STRAINERS, P-TRAPS, ARMS, HOT COLD WATER STOPS AND FAUCETS AS REQUIRED.

DEMOLITION KEY NOTES

1. EXISTING PIPING ABOVE EXPOSED TO REMAIN
2. EXISTING PIPING BELOW FLOOR / GRADE.
3. REMOVE EXISTING PLUMBING FIXTURE, RELATED ROUGH-IN & PIPING. CAP EXISTING PIPING BELOW GRADE, IN WALL OR OVERHEAD. PREPARE FOR RECONNECTION UNDER RENOVATION PHASE.
4. (E) WATER HEATER TO REMAIN
5. (E) PLUMBING FIXTURE TO REMAIN
6. REMOVE EXISTING PLUMBING FIXTURE, RELATED ROUGH-IN & PIPING. CAP EXISTING PIPING BELOW GRADE, IN WALL OR OVERHEAD.

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-124972 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/17/2026

PBK

ARCHITECT PBK Architects, Inc.
PBK.com
ANAHEIM
2400 E KATELLA AVE, Suite 950
ANAHEIM, CA 92806
P 949-548-5000

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

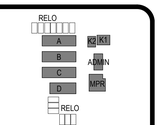
SCHROEDER ELEMENTARY SCHOOL
HVAC UPGRADE & MODERNIZATION

PROJECT ADDRESS:
15151 Columbia Ln
Huntington Beach, CA 92647

CONSTRUCTION DOCUMENTS

DSA APPL NO.:04-124972 DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT EST. 1872



KEY PLAN NORTH: PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER REZ DAVID MAHD No.M36155 Exp.09-30-2026 MECHANICAL STATE OF CALIFORNIA

Architect

LICENSED ARCHITECT Yong Yoo No. C-31162 REN. 10-31-2027 STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
11-14-2025	250376

REVISIONS

No.	Description	Date

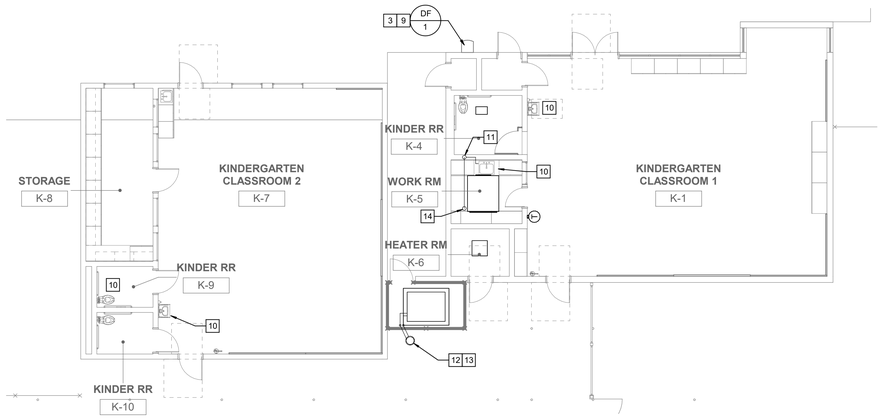
CONSTRUCTION DOCUMENTS

PLUMBING FLOOR PLANS - DEMOLITION

PD2.02

FILE PATH: Z:\Projects\...
3/12/2026 4:40:39 PM

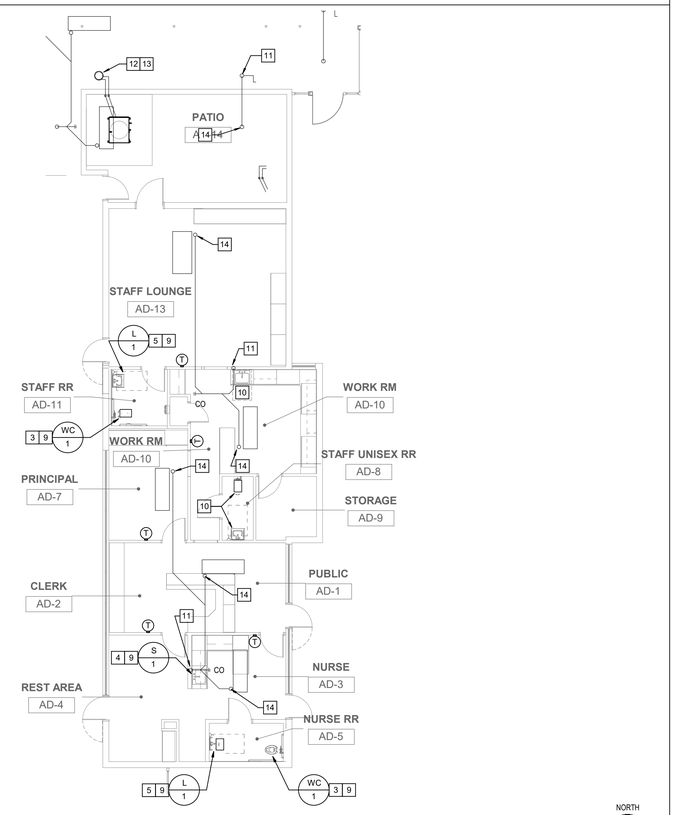
0" 1"



NORTH

3 KINDERGARTEN - FLOOR PLAN
1/8" = 1'-0"

NORTH



NORTH

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

GENERAL NOTES

1. ALL CONDENSATE DRAIN PIPING ABOVE CEILING SHALL SLOPE AT 1% UNLESS OTHERWISE NOTED.
2. FOR CONTINUATION OF ALL UTILITIES SEE BUILDING AS-BUILT/RECORD SET DRAWINGS.
3. BEFORE COMMENCEMENT OF WORK, THE CONTRACTOR SHALL VERIFY THE EXACT LOCATIONS, ELEVATIONS AND CHARACTERISTICS OF ALL UTILITIES AND PIPING BY PHYSICAL EXCAVATION, AND SHALL IMMEDIATELY NOTIFY THE ARCHITECT OF ANY DISCREPANCIES.
4. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITIES AND POINTS OF CONNECTION PRIOR TO BIDDING PROJECT.
5. WHERE PLANS INDICATE NEW FIXTURES OR EQUIPMENT CONNECTING TO EXISTING SERVICES, PLUMBING CONTRACTOR SHALL MODIFY AND/OR EXTEND EXISTING PIPING OR ROUGH-INS AS REQUIRED TO SUIT THE NEW FIXTURE.
6. THE PLUMBING CONTRACTOR SHALL RUN ALL SERVICE LINES, ROUGH-IN AND MAKE FINAL CONNECTIONS TO ALL FIXTURES AND EQUIPMENT. PLUMBING CONTRACTOR SHALL FURNISH AND INSTALL ALL TRIMS, TAILPIECES, STRAINERS, P-TRAPS, ARMS, HOT COLD WATER STOPS AND FAUCETS AS REQUIRED.

KEY NOTES

1. PIPING ABOVE IN CEILING SPACE.
2. PIPING BELOW FLOOR / GRADE.
3. WATER CLOSET TO BE INSTALLED. PLUMBING CONTRACTOR TO SUPPLY & INSTALL VACUUM BREAKER INTEGRAL SHUT OFF, SUPPLY. PROVIDE 2" SANITARY SEWER , 2" VENT AND 1 1/2" CW.
4. SINK AND FAUCET TO BE INSTALLED ADA COMPLIANT. PLUMBING CONTRACTOR TO SUPPLY & INSTALL NEW ANGLE STOP, SINK SUPPLY, COMPLETE WITH LOOSE KEY.
5. LAVATORY AND FAUCET. PLUMBING CONTRACTOR TO SUPPLY & INSTALL NEW ANGLE STOP, LAVATORY SUPPLY, COMPLETE WITH LOOSE KEY, CHROME ESCUTCHEON PLATE COMPRESSION INLET, HEAVY DUTY OUTLET RISER, PROVIDE 1/2" CW / HW, ACCORDING TO THE REQUIREMENT TO THE ROOM.
6. PLUMBING CONTRACTOR TO EXTEND AND CONNECT WASTE LINE AS REQUIRED TO CLEAN-OUT / FLOOR CLEAN-OUT.
7. EXISTING 2" VENT RISE THRU ROOF.
8. PROVIDE 3/4" CW LINE WITH SOV AND ACCESS PANEL.
9. POINT OF DISCONNECTION AND RE-CONNECTION. CONTRACTOR TO EXTEND AND CONNECT LINE AS REQUIRED POC TO EXISTING SANITARY SEWER LINE.
10. (E) PLUMBING FIXTURE TO REMAIN.
11. 3/4" CONDENSATE LINE DOWN IN WALL TO LAV TAILPIECE. SEE DETAIL 10 / P601
12. PROVIDE 3/4" CONDENSATE DRAIN FROM CONDENSER UNIT. PROVIDE SECONDARY SHEET METAL PAN BENEATH CONDENSER ON PAD. ROUTE PRIMARY AND SECONDARY DRAIN LINES TO DRYWELL 11 / P601
13. DRYWELL BELOW GRADE , ROUTE 3/4" CONDENSATE DRAIN TO DRYWELL 11 / P601
14. 3/4" CONDENSATE DRAIN LINE FROM A/C UNIT , TRAP AND VENT AS REQUIRED.

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-124972 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/17/2026

PBK

ARCHITECT PBK Architects, Inc.
ANAHEIM PBK.com
2400 E KATELLA AVE, Suite 950
ANAHEIM, CA 92806
P 949-548-5000

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

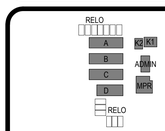
SCHROEDER ELEMENTARY SCHOOL
HVAC UPGRADE & MODERNIZATION

PROJECT ADDRESS:
15151 Columbia Ln
Huntington Beach, CA 92647

CONSTRUCTION DOCUMENTS

DSA APPL NO.:04-124972 DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT EST. 1873



KEY PLAN NORTH: PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER
REZ DAVID MAND
No.M36155
Exp.09-30-2026
MECHANICAL
STATE OF CALIFORNIA

Architect

LICENSED ARCHITECT
Yong Yoo
No. C-31162
REN 10-31-2027
STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
11-14-2025	250376

REVISIONS

No.	Description	Date

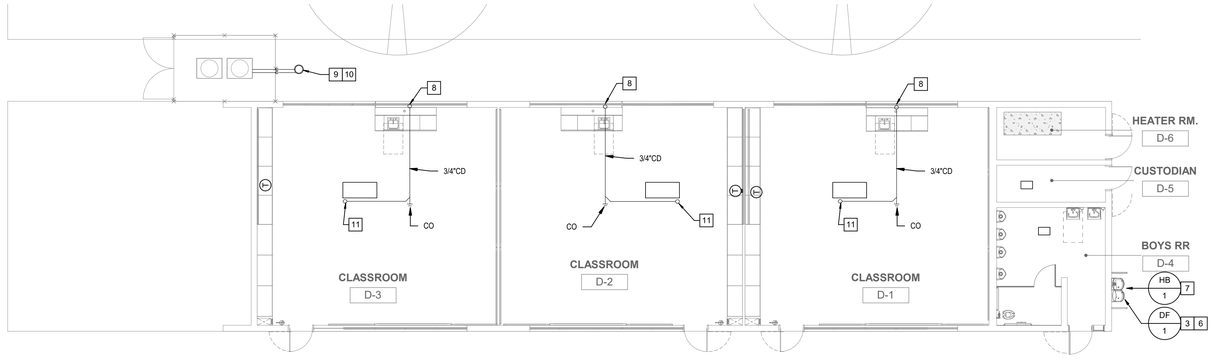
CONSTRUCTION DOCUMENTS

PLUMBING FLOOR PLANS

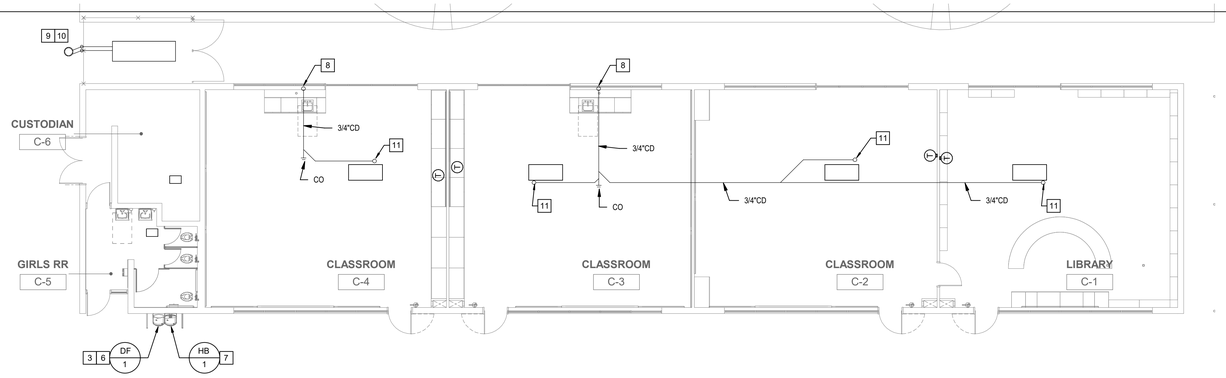
P2.01

FILE PATH: Z:\Projects\...
3/12/2026 4:40:30 PM

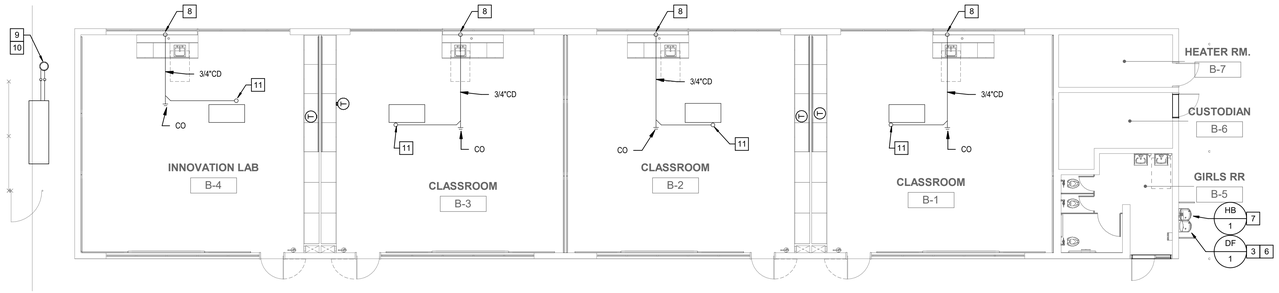
0" 1"



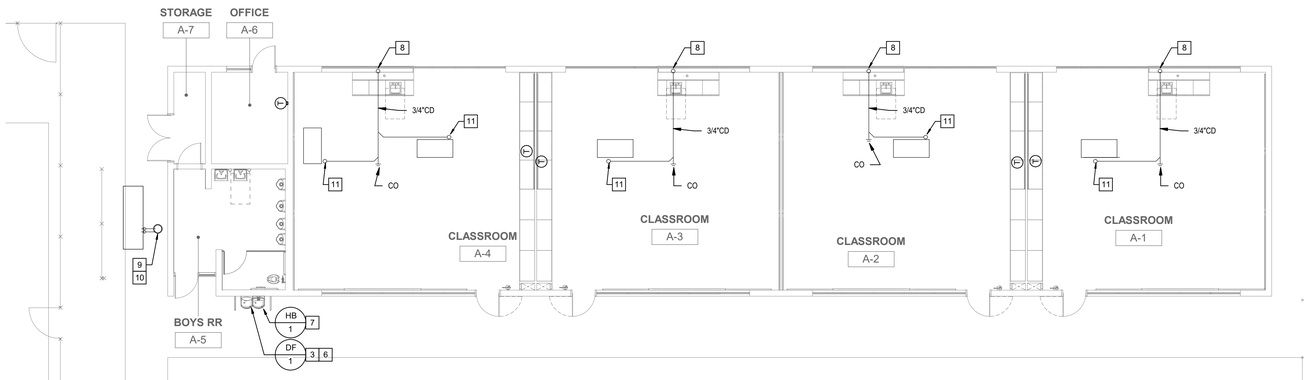
4 FLOOR PLAN - BLDG D
1/8" = 1'-0"



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



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



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

GENERAL NOTES

1. ALL CONDENSATE DRAIN PIPING ABOVE CEILING SHALL SLOPE AT 1% UNLESS OTHERWISE NOTED.
2. FOR CONTINUATION OF ALL UTILITIES SEE BUILDING AS-BUILT/RECORD SET DRAWINGS.
3. BEFORE COMMENCEMENT OF WORK, THE CONTRACTOR SHALL VERIFY THE EXACT LOCATIONS, ELEVATIONS AND CHARACTERISTICS OF ALL UTILITIES AND PIPING BY PHYSICAL EXCAVATION, AND SHALL IMMEDIATELY NOTIFY THE ARCHITECT OF ANY DISCREPANCIES.
4. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITIES AND POINTS OF CONNECTION PRIOR TO BIDDING PROJECT.
5. WHERE PLANS INDICATE NEW FIXTURES OR EQUIPMENT CONNECTING TO EXISTING SERVICES, PLUMBING CONTRACTOR SHALL MODIFY AND/OR EXTEND EXISTING PIPING OR ROUGH-INS AS REQUIRED TO SUIT THE NEW FIXTURE.
6. THE PLUMBING CONTRACTOR SHALL RUN ALL SERVICE LINES, ROUGH-IN AND MAKE FINAL CONNECTIONS TO ALL FIXTURES AND EQUIPMENT. PLUMBING CONTRACTOR SHALL FURNISH AND INSTALL ALL TRIMS, TAILPIECES, STRAINERS, P-TRAPS, ARMS, HOT COLD WATER STOPS AND FAUCETS AS REQUIRED.

KEY NOTES

1. PIPING ABOVE IN CEILING SPACE.
2. PIPING BELOW FLOOR / GRADE.
3. DRINKING FOUNTAIN TO BE INSTALLED. PLUMBING CONTRACTOR TO SUPPLY & INSTALL VACUUM BREAKER INTEGRAL SHUT OFF, SUPPLY. PROVIDE 2" SANITARY SEWER , 2" VENT AND 3/4" CW. INSTALLED AT ACCESSIBLE HEIGHT ; REFER TO ARCHITECTURAL PLANS. REFER TO DETAIL 13/G0.06.
4. PLUMBING CONTRACTOR TO EXTEND AND CONNECT WASTE LINE AS REQUIRED TO CLEAN-OUT / FLOOR CLEAN-OUT.
5. POC TO EXISTING SANITARY SEWER LINE.
6. POINT OF DISCONNECTION AND RE-CONNECTION. CONTRACTOR TO EXTEND AND CONNECT LINE AS REQUIRED POC TO EXISTING SANITARY SEWER LINE.
7. HOSE BIBB TO BE INSTALLED BELOW DRINKING FOUNTAIN. PLUMBING CONTRACTOR TO SUPPLY & INSTALL VACUUM BREAKER INTEGRAL SHUT OFF, SUPPLY. PROVIDE 3/4" CW. EXTEND AND CONNECT LINE AS REQUIRED. INSTALLED AT REFER TO ARCHITECTURAL PLANS. REFER TO DETAIL 13/G0.06.
8. 3/4" CONDENSATE LINE DOWN IN WALL TO LAV TAILPIECE. SEE DETAIL 10/P601
9. PROVIDE 3/4" CONDENSATE DRAIN FROM CONDENSER UNIT. PROVIDE SECONDARY SHEET METAL PAN BENEATH CONDENSER ON PAD. ROUTE PRIMARY AND SECONDARY DRAIN LINES TO DRYWELL 11/P601
10. DRYWELL BELOW GRADE , ROUTE 3/4" CONDENSATE DRAIN TO DRYWELL 11/P601
11. 3/4" CONDENSATE DRAIN LINE FROM A/C UNIT , TRAP AND VENT AS REQUIRED.

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-124972 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/17/2026

PBK

ARCHITECT PBK Architects, Inc.
PBK.com
ANAHEIM
2400 E KATELLA AVE, Suite 950
ANAHEIM, CA 92806
P 949-548-5000

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

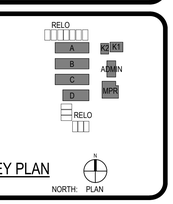
SCHROEDER ELEMENTARY SCHOOL
HVAC UPGRADE & MODERNIZATION

PROJECT ADDRESS:
15151 Columbia Ln
Huntington Beach, CA 92647

CONSTRUCTION DOCUMENTS

DSA APPL NO.:04-12492 DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT EST. 1872



Consultant

REGISTERED PROFESSIONAL ENGINEER
REZ DAVID REZAIAN
No.M36155
Exp.09-30-2026
MECHANICAL
STATE OF CALIFORNIA

Architect

LICENSED ARCHITECT
Yong Yoo
No. C-31162
REN.10-31-2027
STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
11-14-2025	250376

REVISIONS

No.	Description	Date

CONSTRUCTION DOCUMENTS

PLUMBING FLOOR PLANS

P2.02

FILE PATH: Z:\Projects\...
3/12/2026 4:40:33 PM

FIXTURE SCHEDULE

	FIXTURE	MIN. ROUGH-IN SIZES				FLOW RATE	REMARKS
		CW	HW	S OR W	V		
WC 1	WATER CLOSET STAFF (ACCESSIBLE)	1½"	-	4"	2"	1.28 GPF	AMERICAN STANDARD MODEL 2599.001 MADERA FLOWISE 14" FLOOR MOUNTED WATER CLOSET, VITREOUS CHINA, ELONGATED BOWL WITH 1½" TOP SPUD INLET. COMPLETE WITH SLOAN ROYAL MODEL 111-1.28 HET EXPOSED, MANUAL OPERATED FLUSHOMETER @ 1.28 GPF AND OLSONITE HEAVY-DUTY SEAT MODEL 95SSCT. (AGE 9-12)
WC 2	WATER CLOSET STAFF	1½"	-	4"	2"	1.28 GPF	AMERICAN STANDARD MODEL 3461.001 MADERA FLOWISE 16-1/2" FLOOR MOUNTED WATER CLOSET, VITREOUS CHINA, ELONGATED BOWL WITH 1½" TOP SPUD INLET. COMPLETE WITH SLOAN ROYAL MODEL 111-1.28 HET EXPOSED, MANUAL OPERATED FLUSHOMETER @ 1.28 GPF AND OLSONITE HEAVY-DUTY SEAT MODEL 95SSCT AT ACCESSIBLE HEIGHT .
WC 3	WATER CLOSET BOYS / GIRLS (KINDER 5-8)	1½"	-	4"	2"	1.28 GPF	AMERICAN STANDARD # 2282.001 BABY DEVORO FLOWISE FLUSHOMETER VITREOUS CHINA TOILET. HIGH EFFICIENCY LOW CONSUMPTION, ELONGATED BOWL 10-1/4 HEIGHT COMPLETEWITH CHURCH TOILET SEAT LESS COVER WITH AMERICAN STANDARD # 6047.121.002 MANUAL FLUSH VALVE AT 1.28 GPF.
U 1	URINAL	3/4"	-	2"	1½"	1.28 GPF	AMERICAN STANDARD NO. 6590.001 WASHBROOK, VITREOUS CHINA WALL HUNG SLOAN ROYAL SIPHON JET COMPLEATE W/ FLUSH VALVE, SLOAN ROYAL # 186/0 .125 WITH WALL HANGER AND STAINLESS STEEL STRAINER OR EQUAL. (REFER TO ARCHITECTURAL DRAWINGS FOR MOUNTING HEIGHTS).
L 1	LAVATORY PUBLIC (STAFF)	1/2"	-	2"	1½"	0.35 GPM	AMERICAN STANDARD NO. 0356.028"LUCERNE WALL HUNG LAVATORY" 20"X18" WALL HUNG, COMPLETE WITH CHICAGO NO. 2200-4ABCP FAUCET WITH 0.5 GPM AERATOR AND VANDAL RESISTANT COVER PLATE, SYMMONS "MAXLINE" NO. 7-225-CK-MS-BT-X THERMOSTATIC MIXING VALVE WITH STAINLES STEEL CABINET, MCGUIRE NO. 155A 1-1/4" OUTLET "OPEN GRID P.O. PLUG" MCGUIRE NO. PW8936NCO 1-1/4" L.A. PATTERN P-TRAP WITH TRAP AND SUPPLYCOVERS, GALVANIZED NIPPLE AND CHROMIUM PLATED BRASS CASING, CHICAGO NO. 1017 -ABCP LOOSE KEY STOPS WITH RIGID SUPPLIES, AND ZURN NO. Z-1231CARRIER WITH STEEL PLATE,
L 2	LAVATORY PUBLIC (KINDER 5-8)	1/2"	-	2"	1½"	0.35 GPM	AMERICAN STANDARD NO. 0356.041"LUCERNE WALL HUNG LAVATORY" 20"X18" WALL HUNG, COMPLETE WITH FAUCET WITH 0.5 GPM AERATOR AND VANDAL RESISTANT COVER PLATE, MCGUIRE NO. 155A 1-1/4" OUTLET "OPEN GRID P.O. PLUG" MCGUIRE NO. PW8936NCO 1-1/4" L.A. PATTERN P-TRAP WITH TRAP AND SUPPLYCOVERS, GALVANIZED NIPPLE AND CHROMIUM PLATED BRASS CASING, CHICAGO NO. 1017 -ABCP LOOSE KEY STOPSWITH RIGID SUPPLIES, AND ZURN NO. Z-1231CARRIER WITH STEEL PLATE, MOUNT AT ACCESIBLE HEIGHT.
DF 1	DRINKING FOUNTAIN (WALL MTD. W/ BOTTLE FILLER)	1/2"	-	2"	1½"	0.45 GPM	ELKAY MODEL LZS8WSLP / FILTERED SINGLE LZ COOLER WALL MOUNTED W/ TOUCHLESS BOTTLE FILLER EZH20 W / SOILENOID VALVE , CONTROLLED BY TRANSFORMER 115 / 60 HZ / 4.2 FLA 14 GAUGE STAINLESS STEEL W/ INTEGRAL 1/4" STAINLESS STEEL MOUNTING PLATE, ADA APPROVED, COMPLETE WITH VANDAL PROOF BOTTOM CHICAGO NO. 45LKABCP. ANGLE STOP W 1/2" FEMALE INLET & OUTLET. MOUNT AT ADA ACCEIBLE HEIGHT.
HB 1	HOSE BIBB (RECESSED)	3/4"	-	-	-	7.5 GPM	JAY R. SMITH MODEL 5518-R, WALL MOUNTED HOSE BOX IN STAINLESS STEEL RECESSED BOX WITH INTEGRAL VACUUM BREAKER, DUAL CHECK VALVE AND LOCKING COVER. REFER TO DETAIL 2/P6.3.
TP 1	TRAP PRIMER (PRESSURE TYPE)	1/2"	-	-	-	-	MIFAB NO. MR-500-NPB, MULTI-TRAP PRIMER. PROVIDE WITH DISTRIBUTION UNIT AND ACCESS PANELS AS REQUIRED.
WHA 1	WATER HAMMER ARRESTOR	SEE PLANS	-	-	-	-	WATTS "SS" SERIES, STAINLESS STEEL BELLOWS OPERATED TYPE WATER HAMMER ARRESTORS. INSTALLATION AND SIZING SHALL CONFORM TO PDI WH-201 STANDARD. PROVIDE BEHIND ACCESS PANELS WHERE REQUIRED.
WCO 1	WALL CLEANOUT	-	-	SEE PLANS	-	-	WATTS MODEL CO-590-RD THREADED BRASS CLEANOUT PLUG WITH COUNTERSUNK HEAD, STAINLESS STEEL ACCESS COVER AND VANDAL PROOF STAINLESS STEEL SCREW. WATTS MODEL CO-460-RD FOR STACK CLEANOUT APPLICATIONS. REFER TO DETAIL 5/P6.3.
FCO 1	FLOOR CLEANOUT	-	-	SEE PLANS	-	-	WATTS MODEL CO-200-R-6 EPOXY COATED CAST IRON CLEANOUT WITH ROUND NICKEL BRONZE TOP AND VANDAL PROOF SCREWS. REFER TO DETAIL 6/P6.3.

NOTES:

A. ALL FIXTURES SHALL BE PROVIDED WITH MINIMUM ROUGH-IN CONNECTIONS AS INDICATED IN THIS SCHEDULE OR PER MANUFACTURERS RECOMMENDATIONS. THE PLUMBING CONTRACTOR SHALL RUN ALL SERVICE LINES, ROUGH-IN AND MAKE FINAL CONNECTIONS TO ALL FIXTURES. PLUMBING CONTRACTOR SHALL FURNISH AND INSTALL ALL TRIMS, FLUSH VALVES, TAILPIECES, STRAINERS, P-TRAPS, TRAP ARMS, HOT & COLD WATER STOPS AND FAUCETS AS REQUIRED.

B. OPENINGS IN GRATINGS OR STRAINERS LOCATED IN PEDESTRIAN WAYS OR IN PATH OF TRAVEL (P.O.T.) SHALL NOT ALLOW PASSAGES OF A SPHERE MORE THAN 1/2" DIAMETER. ELONGATED OPENINGS SHALL BE PLACED SO THAT LONG DIMENSION IS PERPENDICULAR TO THE DOMINANT DIRECTION OF TRAVEL IN COMPLIANCE WITH SECTION 11B-302.3.

C. REFER TO ARCHITECTURAL DRAWINGS FOR ALL FIXTURE MOUNTING HEIGHTS.

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-124972 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/17/2026

PBK

ARCHITECT PBK Architects, Inc.
PBK.com
ANAHEIM
2400 E KATELLA AVE, Suite 950
ANAHEIM, CA 92806
P 949-548-5000

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

SCHROEDER ELEMENTARY SCHOOL
HVAC UPGRADE & MODERNIZATION

PROJECT ADDRESS:
15151 Columbia Ln
Huntington Beach, CA 92647

CONSTRUCTION DOCUMENTS

DSA APPL NO. 04-124972 DSA FILE NO. 30-43

WESTMINSTER SCHOOL DISTRICT EST. 1873

RELO
A
B
C
D
RELO
K2 K1
ADMIN
MPR

KEY PLAN
NORTH: PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER
REZ DAVID MANO
No.M36155
Exp.09-30-2026
CIVIL
STATE OF CALIFORNIA

Architect

LICENSED ARCHITECT
Yong Yoo
No. C-31162
REN. 10-31-2027
STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
11-14-2025	250376

REVISIONS

No.	Description	Date

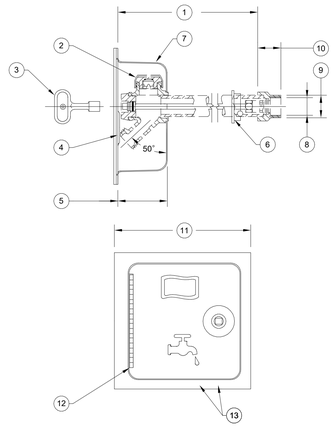
CONSTRUCTION DOCUMENTS

PLUMBING SCHEDULES

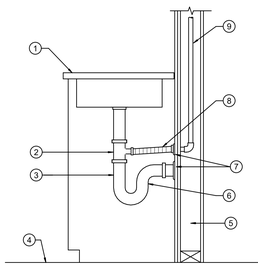
P5.01

FILE PATH: Z:\Projects\...
3/12/2026 4:40:34 PM

1. WALL THICKNEED.
2. INTEGRAL VACUUM BREAKER ASSEMBLY.
3. KEY.
4. 3/4" HOSE CONNECTION.
5. OPTIONAL BOX FOR MATERIAL SPECIFIED.
6. ADJUSTABLE WALL CLAMP. (SPECIFU-WC).
7. 20 GA. STAINLESS STEEL BOX.
8. 1/2" FEMALE NPT INLET.
9. 3/4" MALE NPL INLET.
10. 1 1/2".
11. 7" SQUARE.
12. CONTINUOUS STAINLESS STEEL FACE HINGE.
13. HINGED LOCKING COVER.



BOX TYPE WITH CONCEALED HOSE CONNECTION DETAIL
N.T.S 09

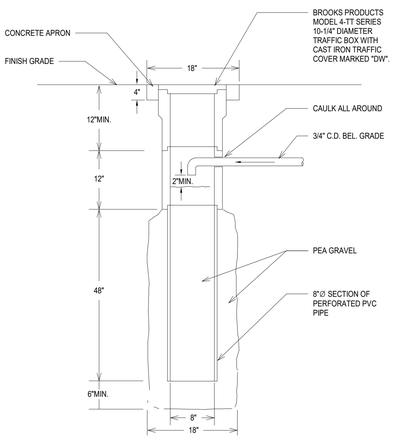


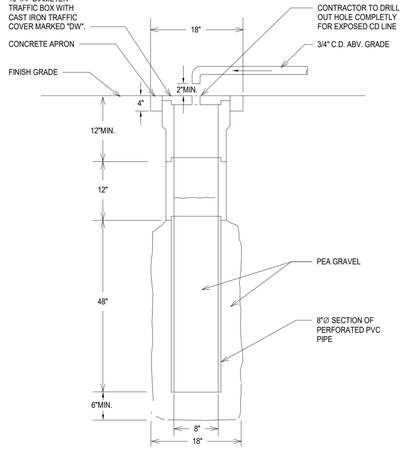
DETAIL NOTES:

1. SINK IN CABINET.
2. SLIP-JOINT FITTING.
3. TRAP.
4. FINISHED FLOOR.
5. WALL.
6. INSULATE SUPPLY AND DRAIN PER SPECIFICATIONS.
7. ESCUTCHEON PLATE.
8. NEOPRENE HOSE & CLAMPS.
9. 3/4" CONDENSATE DRAIN IN WALL.

NOTE:
SEE ARCHITECT'S DRAWINGS FOR ACCESSIBLE REQUIREMENTS.

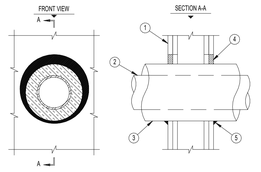
10 CONDENSATE TO TAILPIECE DETAIL
12" = 1'-0"





11 DRY WELL
12" = 1'-0"

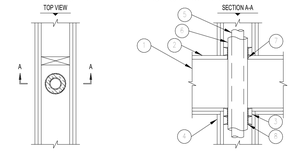
UL/cUL SYSTEM NO. WL5029
INSULATED METAL PIPE THROUGH 1-HR. OR 2-HR. GYPSUM WALL ASSEMBLY
F RATING = 1-HR. AND 2-HR.
T RATING = 1/2 HR., 3/4 HR., 1-HR., AND 1-1/2 HR. (SEE UL FIRE RESISTANCE DIRECTORY)
L RATING AT AMBIENT = 4 CFM/SQ. FT.
L RATING AT 400°F = LESS THAN 1 CFM/SQ. FT.



1. GYPSUM WALL ASSEMBLY (UL/cUL CLASSIFIED U300 OR U400 SERIES) (1-HR. OR 2-HR. FIRE-RATING) (2-HR. SHOWN).
2. PENETRATING ITEM TO BE ONE OF THE FOLLOWING :
   A. MAXIMUM 12" NOMINAL DIAMETER STEEL PIPE (SCHEDULE 20 OR HEAVIER).
   B. MAXIMUM 6" NOMINAL DIAMETER COPPER PIPE.
   C. MAXIMUM 4" NOMINAL DIAMETER STEEL CONDUIT.
   D. MAXIMUM 4" NOMINAL DIAMETER EMT.
3. MAXIMUM 2" THICK GLASS-FIBER PIPE INSULATION.
4. MINIMUM 5/8" DEPTH HILTI FS-ONE INTUMESCENT FIRESTOP SEALANT.
5. MINIMUM 1/2" BEAD HILTI FS-ONE INTUMESCENT FIRESTOP SEALANT AT POINT OF CONTACT.

NOTES: 1. MAXIMUM DIAMETER OF OPENING = 18".
2. ANNULAR SPACE = MINIMUM 0", MAXIMUM 1-7/8".

UL/cUL SYSTEM NO. FC5004
INSULATED METAL PIPE THROUGH 1-HR. OR 2-HR. WOOD FLOOR/CEILING ASSEMBLY
F RATING = 1-HR. OR 2-HR.
T RATING = 1-HR. OR 2-HR.
L RATING AT AMBIENT = 4 CFM/SQ. FT.
L RATING AT 400°F = LESS THAN 1 CFM/SQ. FT.



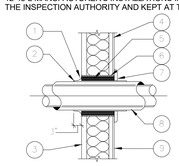
1. WOOD FLOOR/CEILING ASSEMBLY (UL/cUL CLASSIFIED L500 SERIES) (1-HR OR 2-HR FIRE-RATING) (2-HR SHOWN).
2. LUMBER OR PLYWOOD SUBFLOOR WITH FINISH FLOOR OF LUMBER, PLYWOOD, OR FLOOR TOPPING MIXTURE.
3. TOP PLATE.
4. GYPSUM WALL ASSEMBLY (1-HR OR 2-HR FIRE-RATING) (2-HR SHOWN).
5. PENETRATING ITEM TO BE ONE OF THE FOLLOWING:
   A. MAXIMUM 2" NOMINAL DIAMETER STEEL PIPE (SCHEDULE 10 OR HEAVIER).
   B. MAXIMUM 2" NOMINAL DIAMETER COPPER PIPE.
   C. MAXIMUM 2" NOMINAL DIAMETER STEEL CONDUIT.
   D. MAXIMUM 2" NOMINAL DIAMETER EMT.
6. PIPE INSULATION TO BE ONE OF THE FOLLOWING:
   A. MAXIMUM 1/2" THICK GLASS FIBER INSULATION.
   B. MAXIMUM 3/4" THICK AB/PVC FLEXIBLE FOAM INSULATION.
7. MINIMUM 3/4" DEPTH HILTI FS-ONE INTUMESCENT FIRESTOP SEALANT.
8. PROVIDE A GENEROUS BEAD OF HILTI FS-ONE INTUMESCENT FIRESTOP SEALANT FLUSH WITH THE BOTTOM OF THE TOP PLATE.

NOTES: 1. MAXIMUM DIAMETER OF OPENING = 4".
2. ANNULAR SPACE = 1/8" WHEN GLASS FIBER PIPE INSULATION IS USED, MINIMUM 1/8", MAXIMUM 3/8" WHEN AB/PVC PIPE INSULATION IS USED.

ADDITIONAL 3M APPROVED FIRESTOP ASSEMBLIES ARE ACCEPTABLE

FIRE RADE PENETRATION
N.T.S 06

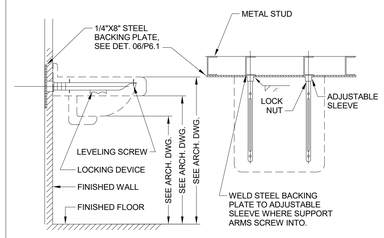
NOTE:
PENETRATIONS IN WALL, FLOOR OR CEILING REQUIRING PROTECTED. OPENING SHALL BE FIRE STOPPED. FIRE STOPPING SHALL BE OF AN APPROVED MATERIAL, SECURITY INSTALLED AND CAPABLE OF MAINTAINING ITS INTEGRITY WHEN SUBJECTED TO THE TIME-TEMPERATURE CURVE OF STATE FIRE MARSHAL STANDARD 12-43-3 AND STANDARD 12-43-L MANUFACTURER'S INSTALLATIONS INSTRUCTIONS SHALL BE MADE AVAILABLE TO THE INSPECTION AUTHORITY AND KEPT AT THE JOB SITE.



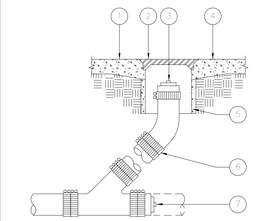
1. SEALANT-JOINT, 1/4" MIN. WIDTH BY 3/8" DEEP.
2. METAL JACKET ON INSULATED PIPE.
3. EXTERIOR FACE OF WALL.
4. FRAMED WALL.
5. BACKUP MATERIAL.
6. SLEEVE.
7. ESCUTCHEON.
8. INSULATION WHERE INDICATED.
9. INTERIOR FACE OF WALL.

FIRE PROOFING MATERIALS: U.L. 1479 TO ARCHIVE FIRE RATING NOTED ON DRAWINGS IN ACCORDANCE WITH THE UNDERWRITERS LABORATORIES INC. FIRE RESISTANCE DIRECTORY, THROUGH PENETRATION FIRE STOP SYSTEM NUMBER 147 AND 148

TYPICAL PIPE THRU FIRE RATED WALL
N.T.S 07

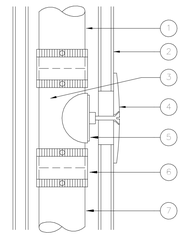


LAVATORY SUPPORT
N.T.S 08



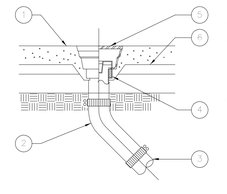
1. 24" X 24" X 6" DEEP CAST CONCRETE IN UNPAVED AREA.
2. LABEL COVER "SEWER".
3. CLEANOUT PLUG. CAST IRON FERRULE & BRASS PLUG.
4. 1/2" SLOPE.
5. PRE-CAST CONCRETE BOX WITH CAST IRON COVER.
6. NO-HUB COUPLING WITH STAINLESS STEEL SHIELD (TYP).
7. PLUGGED WYE AT END OF RUNS.

SURFACE CLEANOUT (COTG)
N.T.S 01



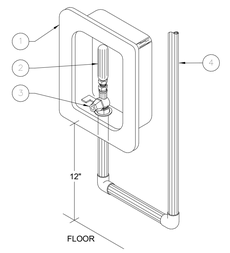
1. VENT STACK.
2. FACE OF WALL.
3. SANITARY TEE.
4. CHROME PLATED COVER & VANDAL PROOF SCREW.
5. THREADED PLUG.
6. NO-HUB COUPLING WITH STAINLESS STEEL CLAMP.
7. DRAIN LINE.

WALL CLEANOUT (WCO)
N.T.S 02



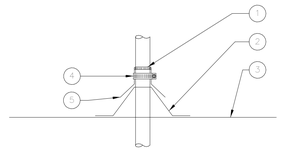
1. TOP OF CONCRETE FLOOR.
2. C.I. 1/8 BEND.
3. C.I. DRAIN LINE.
4. CAULK JOINT WITH LEAD NO WATER TO STAND ON UP.
5. ROUND ADJUSTABLE CAST IRON TOP. TRACTOR COVER.SET TOP FLUSH WITH FINISHED FLOOR.
6. SEE DETAIL 2/S1.1 FOR SLAB AND SUB-FLOOR CONSTRUCTION.

FLOOR CLEANOUT (FCO)
N.T.S 03



1. RECESSED WALL BOX.
2. WATER HAMMER ARRESTER PDI-A.
3. BALL VALVE.
4. WATER INLET.

COLD WATER SUPPLY BOX
N.T.S 04



1. SILICONE SEAL.
2. SHORT CONE FLASHING.
3. ROOF, SEE ARCH. DWGS.
4. SCREW BAND HOSE CLAMP.
5. COUNTER FLASHING.

PIPE THRU ROOF
N.T.S 05

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-124972 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/17/2026

PBK

ARCHITECT PBK Architects, Inc.
PBK.com
ANAHEIM
2400 E KATELLA AVE, Suite 950
ANAHEIM, CA 92806
P 949-548-5000

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

SCHROEDER ELEMENTARY SCHOOL
HVAC UPGRADE & MODERNIZATION

PROJECT ADDRESS:
15151 Columbia Ln
Huntington Beach, CA 92647

CONSTRUCTION DOCUMENTS

DSA APPL NO. 04-124972 DSA FILE NO. 30-43

WESTMINSTER SCHOOL DISTRICT EST. 1873

RELO
A K2 K1
B ADMIN
C
D MPR
RELO

KEY PLAN
NORTH: PLAN

Consultant
REGISTERED PROFESSIONAL ENGINEER REF. DAVID WANG No.M36165 Exp.09-30-2026 MECHANICAL STATE OF CALIFORNIA

Architect
LICENSED ARCHITECT Yong Yoo No. C-31162 REN. 10-31-2027 STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
11-14-2025	250376

REVISIONS

No.	Description	Date

CONSTRUCTION DOCUMENTS

PLUMBING DETAILS

P6.01

FILE PATH: Z:\Projects\...
3/12/2026 4:40:34 PM

FA0.00 - FIRE ALARM SYMBOLS, LEGENDS & GENERAL NOTES

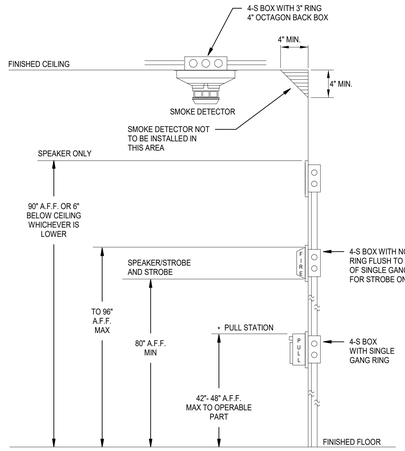
0" 1"

DEVICE SCHEDULE

SYMBOL	DESCRIPTION	MODEL	MANUFACTURER	BACKBOX	MOUNTING HEIGHT	C.S.F.M. NUMBER
FACP	NEW FIRE ALARM CONTROL PANEL AND VOICE EVAC MICROPHONE	IFP-2100ECS ECS-RPU	FARENHYT BY SILENT KNIGHT	PROVIDED		7165-0559:0505 7300-0559:0175
ANN	FIRE ALARM ANUNCIATOR	RA-2000	FARENHYT BY SILENT KNIGHT	N/A		7165-0559:0160
FATC	FIRE ALARM TERMINAL CABINET	N/A	BY ELECTRICAL CONTRACTOR	N/A		N/A
NAC	FIRE ALARM POWER SUPPLY	RPS-1000	FARENHYT BY SILENT KNIGHT	N/A		7165-0559:0135
AMP	FIRE ALARM AMPLIFIER	ECS-DUAL50W	FARENHYT BY SILENT KNIGHT	N/A		7300-0559:0173
SM	AUDIBLE/VISUAL SYNC MODULE	MDL3	SILENT KNIGHT	5S DEEP BOX W/ 5S EXTENSION		7300-1653:0202
S P	ADDRESSABLE AREA SMOKE DETECTOR (PHOTOELECTRIC)	IDP-PHOTO B300-6	FARENHYT BY SILENT KNIGHT	4S DEEP BOX W/ 3-0 RING	CEILING	7272-0559:0149 7300-1653:0109
I A / I C	ADDRESSABLE AREA HEAT DETECTOR	IDP-HEAT-HT-W B300-6	FARENHYT BY SILENT KNIGHT	4S DEEP BOX W/ 3-0 RING	ATTIC/ CEILING	7270-0559:0147 7300-1653:0109
F	FIRE ALARM ADDRESSABLE MANUAL PULL STATION	IDP-PULL-DA	FARENHYT BY SILENT KNIGHT	4S DEEP BOX W/ 3-0 RING		7150-0559:0140
CR	FIRE ALARM ADDRESSABLE CONTROL RELAY MODULE	IDP-RELAY	FARENHYT BY SILENT KNIGHT	4S DEEP BOX W/		7300-0559:0155
	FIRE ALARM WALL MOUNTED STROBE	SRL	SYSTEM SENSOR	4S DEEP BOX W/ 3-0 RING		7125-1653:0504
M	FIRE ALARM WALL MOUNTED SPEAKER/STROBE	SPSRL	SYSTEM SENSOR	4S DEEP BOX W/ 4S EXTENSION		7320-1653:0505
WP	FIRE ALARM EXTERIOR WEATHERPROOF SPEAKER	SPRK	SYSTEM SENSOR	4S DEEP BOX W/ 4S EXTENSION		7320-1653:0201
M	FIRE ALARM CEILING MOUNTED SPEAKER/STROBE	SPSCRL/ SPSCWL-P	SYSTEM SENSOR	4S DEEP BOX W/ 4S EXTENSION	"P" SYMBOLIZE "PLAIN"	7320-1653:0505
	FIRE ALARM CEILING MOUNTED STROBE	SCW	SYSTEM SENSOR	4S DEEP BOX W/ 4S EXTENSION		7125-1653:0186
JB	FIRE ALARM JUNCTION BOX	N/A	BY ELECTRICAL CONTRACTOR	N/A		N/A
EOL	END OF LINE RESISTOR	N/A	N/A	N/A		N/A
M	FIRE ALARM ADDRESSABLE MONITOR MODULE	IDP-MONITOR	FARENHYT BY SILENT KNIGHT	4S DEEP BOX W/ 3-0 RING		7300-0559:0155
I WP	WEATHERPROOF HEAT DETECTOR	302-ET-194	SILENT KNIGHT	4S DEEP BOX W/ 3-0 RING		7270-0021:0001
S M	MULTI-CRITERIA FIRE/CO DETECTOR	IDP-FIRE -CO B210-LP	FARENHYT BY SILENT KNIGHT	4S DEEP BOX W/ 3-0 RING	CEILING	7275-0559:0170 7300-1653:0109

* ALL FIRE ALARM DEVICES AND EQUIPMENTS ARE NEW UNLESS NOTED AS EXISTING.

ELEVATION MOUNTING DETAIL



NOTES:

THE ENTIRE LENS OF STROBE LIGHTS MUST BE BETWEEN 80" AND 96" ABOVE FLOOR FINISH (AFF)

IF CEILING HEIGHTS EXCEED 30 FEET, STROBE LIGHTS MUST BE SUSPENDED AT OR BELOW 30 FEET

MANUAL FIRE ALARM BOXES SHALL BE INSTALLED IN ACCORDANCE WITH 2022 CBC SECTIONS 907.4.2

MANUAL FIRE ALARM BOXES SHALL BE LOCATED NOT MORE THAN 5 FEET FROM THE ENTRANCE TO EACH EXIT. ADDITIONAL MANUAL FIRE ALARM BOXES SHALL BE LOCATED SO THAT THE TRAVEL DISTANCE TO THE NEAREST BOX DOES NOT EXCEED 200 FEET.

THE HEIGHT OF THE MANUAL FIRE ALARM BOXES SHALL BE A MINIMUM OF 42 INCHES AND A MAXIMUM OF 48 INCHES, MEASURED VERTICALLY, FROM THE FLOOR LEVEL TO THE HIGHEST POINT OF THE ACTIVATING HANDLE OR LEVER OF THE BOX. MANUAL FIRE ALARM BOXES SHALL ALSO COMPLY WITH 2022 CBC SECTION 11B-309.4.

PER NFPA 72 CHAPTER A.17.7.4.1 DETECTORS SHOULD NOT BE LOCATED IN ADIRECT AIRFLOW OR CLOSER THAN 36 IN. (910 MM) FROM AN AIR SUPPLY DIFFUSER OR RETURN AIR OPENING. SUPPLY OR RETURN SOURCES LARGER THAN THOSE COMMONLY FOUND IN RESIDENTIAL AND SMALL COMMERCIAL ESTABLISHMENT CAN REQUIRE GREATER CLEARANCE TO SMOKE DETECTORS . SIMILARLY, SMOKE DETECTORS SHOULD BE LOCATED FARTHER AWAY FROM HIGH VELOCITY AIR SUPPLIES.

SEQUENCE OF OPERATIONS

DEVICE / ACTION	MANUAL PULL STATION	AREA SMOKE DETECTOR	MULTI-CRITERIA DETECTOR	HEAT DETECTOR	120VAC POWER FAILURE	SHORT CIRCUIT	GROUND FAULT	BATTERY FAILURE	CO/SMOKE DETECTOR
SOUND ALARM AT "FACP"	**YES**	**YES**	**YES**	**YES**	NO	NO	NO	NO	**YES**
SOUND TROUBLE BUZZER AT "FACP"	NO	NO	NO	NO	**YES**	**YES**	**YES**	**YES**	NO
ANNUNCIATE AT "FACP" AND THE REMOTE ANNUNCIATOR (ALARM OR TROUBLE)	**YES**	**YES**	**YES**	**YES**	**YES**	**YES**	**YES**	**YES**	**YES**
ACTIVATE AUDIBLE / VISUAL ALARM SIGNAL THROUGHOUT BUILDING	**YES**	**YES**	**YES**	**YES**	NO	NO	NO	NO	**YES**
ACTIVATE AUDIBLE TEMPORAL-4 SIGNAL AT CO DETECTOR BASE	NO	NO	NO	NO	NO	NO	NO	NO	**YES**
ACTIVATE HVAC UNIT SHUTDOWN/ CLOSE COMBINATION FIRE/SMOKE DAMPERS	NO	NO	NO	NO	NO	NO	NO	NO	**YES**
ACTIVATE SIGNAL FOR OFF-SITE MONITORING	**YES**	**YES**	**YES**	**YES**	**YES**	NO	NO	NO	**YES**
MUTE AUTONOMOUS LOCAL SOUND SYSTEM	**YES**	**YES**	**YES**	**YES**	**YES**	NO	NO	NO	NO
SHUT DOWN ELEVATOR POWER SUPPLY	NO	NO	NO	NO	NO	NO	NO	NO	NO

LEGENDS

ABBREVIATION	DESCRIPTION	ABBREVIATION	DESCRIPTION
A OR AMP	AMPERES	NIC	NOT IN CONTRACT
AFF	ABOVE FINISHED FLOOR	NO.	NUMBER
AIC	AMPERES INTERRUPTING CAPACITY	PH. OR Ø	PHASE
ARCH.	ARCHITECT; ARCHITECTURAL	PNL	PANEL
AWG	AMERICAN WIRE GAUGE	PWR	POWER
C	CONDUIT	REC/RECEPT	RECEPTACLE
CKT	CIRCUIT	REQ'D	REQUIRED
CL.	CEILING MOUNTED DEVICE	RM	ROOM
C.O.	CONDUIT ONLY WITH PULL WIRE	SF	SQUARE FEET
CU	COPPER	SHT	SHEET
DWG	DRAWING	SP	SINGLE POLE
ER	EXISTING DEVICE TO BE REMOVED	SPECS	SPECIFICATIONS
EMT	ELECTRICAL METALLIC TUBING	SW	SWITCH
EQUIP	EQUIPMENT	TYP	TYPICAL
EXIST / (E)	EXISTING	UG	UNDERGROUND
FIN.	FINISH	U.O.N.	UNLESS OTHERWISE NOTED
FLR	FLOOR	V	VOLTS
FT	FEET	V-A	VOLT-AMPERES
GFI	GROUND FAULT INTERRUPTER	W	WATTS
GND	GROUND	W/	WITH
LTG.	LIGHTING	W/O	WITHOUT
MTG	MOUNTING	WP	WEATHERPROOF
N	NEW	CEC	CALIFORNIA ELECTRICAL CODE
FS	FLOW SWITCH		PULL BOX (WEATHERPROOF)
JB	JUNCTION BOX	##	RISER UP AND DOWN
PIV	POST INDICATOR VALVE	TS	TEMPER SWITCH
DCDV	DOUBLE CHECK DETECTOR VALVE	SFD	COMBINATION SMOKE FIRE DAMPER

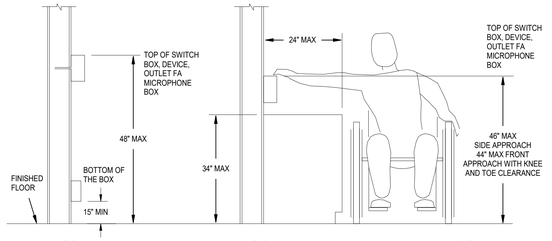
FIRE WATCH NOTE

A FIRE WATCH SHALL BE ESTABLISHED AND THE FIRE DEPARTMENT & FIRE CODE OFFICIAL SHALL BE NOTIFIED IMMEDIATELY WHENEVER THE FIRE PROTECTION / ALARM SYSTEM IS RENDERED OUT OF SERVICE. A FIRE WATCH SHALL BE STAGED WHENEVER THE BUILDING IS OCCUPIED (PARTIAL OR WHOLE) PER DSA IR F-2 AND CFC 901.7.

SCOPE OF WORK

PROVIDE COMPLETE FULL AUTOMATIC ADDRESSABLE FIRE ALARM SYSTEM AT ALL BUILDINGS ON SITE. PROVIDE FIRE ALARM SYSTEM DEVICES AS SHOWN IN EQUIPMENT LEGEND, FLOOR PLANS, AND SPECIFICATIONS IN THIS CONSTRUCTION DOCUMENT SET. USE NEW FIRE ALARM CONTROL PANEL TO CONNECT NEW FIRE ALARM SYSTEM DEVICES SHOWN PER DRAWING AND SPECIFICATION DOCUMENT. UPON COMPLETION, A COMPLETE PRE TEST SHALL BE PERFORMED TO VERIFY FUNCTIONALITY, IF FUNCTIONALITY IS COMPLETE THEN THE PROPER DOCUMENTATION SHALL BE SUBMITTED TO THE AUTHORITY HAVING JURISDICTION PRIOR TO SCHEDULING A FINAL INSPECTION.

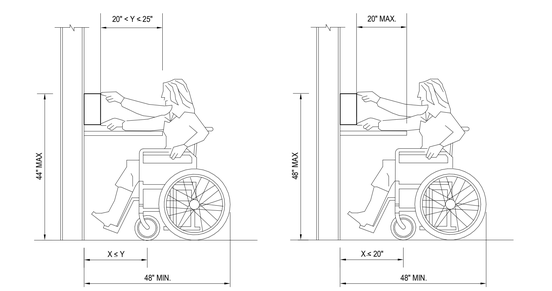
MOUNTING OVER OBSTRUCTION DETAIL



NOTES:

1. THIS DETAIL APPLIES TO MOUNTING OF ANY MECHANICAL AND ELECTRICAL DEVICE WHICH CONTAINS AN OPERABLE PART THAT IS ADJUSTABLE BY THE OCCUPANT. THIS DOES NOT APPLY TO SENSORS OR CONTROLS THAT ARE ONLY ADJUSTABLE THROUGH THE BUILDING AUTOMATION SYSTEM (IE: TEMPERATURE AND HUMIDITY SENSORS).

2. FORWARD OR FRONT APPROACH FOR DEVICES MOUNTED ABOVE COUNTERS ASSUMES THAT DIRECTLY BELOW THE DEVICE, THE COUNTER HAS A 30"MIN. WIDTH x27" HIGH x19" MIN. DEEP CLEAR OPENING. CBC SECTIONS 11B-306 & 11B-308.



FIRE ALARM ELEVATOR SEQUENCE OF OPERATIONS

DEVICE / ACTION	HEAT DETECTOR 1ST FLOOR ELEVATOR LOBBY	HEAT DETECTOR 2ND FLOOR ELEVATOR LOBBY	SMOKE DETECTOR ELEVATOR MACHINE ROOM	HEAT DETECTOR ELEVATOR MACHINE ROOM	HEAT DETECTOR ELEVATOR HOISTWAY
PRIMARY FLOOR RECALL	NO	**YES**	**YES**	NO	NO
SECONDARY FLOOR RECALL	**YES**	NO	NO	NO	NO
ELEVATOR SHUNT TRIP SHUTDOWN	NO	NO	NO	**YES**	**YES**
FIREMAN'S HAT ALARM	**YES**	**YES**	**YES**	**YES**	**YES**

APPLICABLE CODES

PARTIAL LIST OF APPLICABLE CODES:
2022 CALIFORNIA ADMINISTRATIVE CODE (CAC), PART 1, TITLE 24 CCR
2022 CALIFORNIA BUILDING CODE (CBC), PART 2, TITLE 24 CCR
2022 CALIFORNIA ELECTRICAL CODE (CEC), PART 3, TITLE 24 CCR
2022 CALIFORNIA MECHANICAL CODE (CMC), PART 4, TITLE 24 CCR
2022 CALIFORNIA PLUMBING CODE (CPC), PART 5, TITLE 24 CCR
2022 CALIFORNIA ENERGY CODE (CEC), PART 6, TITLE 24 CCR
2022 CALIFORNIA FIRE CODE (CFC), PART 9, TITLE 24 CCR
2022 CALIFORNIA EXISTING BUILDING CODE (CEBC), PART 10, TITLE 24 CCR
2022 CALIFORNIA GREEN BUILDING STANDARDS CODE (CALGREEN), PART 11, TITLE 24 CCR
2022 CALIFORNIA REFERENCED STANDARDS CODE, PART 12, TITLE 24 CCR
TITLE 19 CCR, PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS

PARTIAL LIST OF APPLICABLE STANDARDS
NFPA 72 NATIONAL FIRE ALARM AND SIGNALING CODE (CA AMENDED): 2022 EDITION
NFPA 720 STANDARD FOR THE INSTALLATION OF CARBON MONOXIDE DETECTION AND WARNING EQUIPMENT: 2015 EDITION
NFPA 80 STANDARD FOR FIRE DOORS AND OTHER OPENING PROTECTIVES; 2019 EDITION
UL 464 AUDIBLE SIGNALING DEVICES FOR FIRE ALARM AND SIGNALING SYSTEMS, INCLUDING ACCESSORIES; 2003 EDITION
UL 521 STANDARD FOR HEAT DETECTORS FOR FIRE PROTECTIVE SIGNALING SYSTEMS; 1999 EDITION
UL 1971 STANDARD FOR SIGNALING DEVICES FOR THE HEARING IMPAIRED; 2018 EDITION (R2010)

FOR A COMPLETE LIST OF APPLICABLE NFPA STANDARDS REFER TO 2022 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.

ANCHORAGE AND BRACING NOTES

ALL WORK SHALL BE IN CONFORMANCE WITH TITLE 24, 2022 CALIFORNIA CODE OF REGULATIONS (CCR), 2022 CALIFORNIA BUILDING CODE, PART 2, TITLE 24 CCR, 2022 CALIFORNIA ELECTRICAL CODE, PART 3, TITLE 24 CCR

CUTTING, BORING, SAWCUTTING OR DRILLING THROUGH THE NEW OR EXISTING STRUCTURAL ELEMENTS TO BE DONE ONLY WHEN SO DETAILED IN THE DRAWINGS OR ACCEPTED BY THE ARCHITECT AND STRUCTURAL ENGINEER WITH THE APPROVAL OF DSA REPRESENTATIVE.

MEP COMPONENT ANCHORAGE NOTE

ALL MECHANICAL, PLUMBING, AND ELECTRICAL COMPONENTS SHALL BE ANCHORED AND INSTALLED PER THE DETAILS ON THE DSA APPROVED CONSTRUCTION DOCUMENTS.

THE FOLLOWING COMPONENTS SHALL BE ANCHORED OR BRACED TO MEET THE FORCE AND DISPLACEMENT REQUIREMENTS PRESCRIBED IN THE 2022 CBC SECTIONS 1617A.1.18 THROUGH 1617A.1.26 AND ASCE 7-16 CHAPTERS 13, 26 AND 30:
1. ALL PERMANENT EQUIPMENT AND COMPONENTS.
2. TEMPORARY, MOVABLE OR MOBILE EQUIPMENT THAT IS PERMANENTLY ATTACHED (E.G. HARD WIRED) TO THE BUILDING UTILITY SERVICES SUCH AS ELECTRICITY, GAS OR WATER. "PERMANENTLY ATTACHED" SHALL INCLUDE ALL ELECTRICAL CONNECTIONS EXCEPT PLUGS FOR 110/220 VOLT RECEPTACLES HAVING A FLEXIBLE CABLE.
3. TEMPORARY, MOVABLE OR MOBILE EQUIPMENT WHICH IS HEAVIER THAN 400 POUNDS OR HAS A CENTER OF MASS LOCATED 4 FEET OR MORE ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENT IS REQUIRED TO BE RESTRAINED IN A MANNER APPROVED BY DSA.

THE FOLLOWING MECHANICAL AND ELECTRICAL COMPONENTS SHALL BE POSITIVELY ATTACHED TO THE STRUCTURE BUT NEED NOT DEMONSTRATE DESIGN COMPLIANCE WITH THE REFERENCES NOTED ABOVE. THESE COMPONENTS SHALL HAVE FLEXIBLE CONNECTIONS PROVIDED BETWEEN THE COMPONENT AND ASSOCIATED DUCTWORK, PIPING, AND CONDUIT. FLEXIBLE CONNECTIONS MUST ALLOW MOVEMENT IN BOTH TRANSVERSE AND LONGITUDINAL DIRECTIONS:
A. COMPONENTS WEIGHING LESS THAN 400 POUNDS AND HAVE A CENTER OF MASS LOCATED 4 FEET OR LESS ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENT.
B. COMPONENTS WEIGHING LESS THAN 20 POUNDS, OR IN THE CASE OF DISTRIBUTED SYSTEMS, LESS THAN 5 POUNDS PER FOOT, WHICH ARE SUSPENDED FROM A ROOF OR FLOOR OR HUNG FROM A WALL.

THE ANCHORAGE OF ALL MECHANICAL, ELECTRICAL AND PLUMBING COMPONENTS SHALL BE SUBJECT TO THE APPROVAL OF THE DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE OR STRUCTURAL ENGINEER DELEGATED RESPONSIBILITY AND ACCEPTANCE BY DSA. THE PROJECT INSPECTOR WILL VERIFY THAT ALL COMPONENTS AND EQUIPMENT HAVE BEEN ANCHORED IN ACCORDANCE WITH ABOVE REQUIREMENTS.

PIPING, DUCTWORK, AND ELECTRICAL DISTRIBUTION SYSTEM BRACING NOTE.

PIPING, DUCTWORK, AND ELECTRICAL DISTRIBUTION SYSTEMS SHALL BE BRACED TO COMPLY WITH THE FORCES AND DISPLACEMENTS PRESCRIBED IN ASCE 7-16 SECTION 13.3 AS DEFINED IN ASCE 7-16 SECTIONS 13.6.5, 13.6.6, 13.6.7, 13.6.8, AND 2022 CBC SECTIONS 1617A.1.24, 1617A.1.25 AND 1617A.1.26.

THE METHOD OF SHOWING BRACING AND ATTACHMENTS TO THE STRUCTURE FOR THE IDENTIFIED DISTRIBUTION SYSTEM ARE AS NOTED BELOW. WHEN BRACING AND ATTACHMENTS ARE BASED ON A PREAPPROVED INSTALLATION GUIDE (E.G., OSHPD OPM FOR 2013 CBC OR LATER), COPIES OF THE BRACING SYSTEM INSTALLATION GUIDE OR MANUAL SHALL BE AVAILABLE ON THE JOBSITE PRIOR TO THE START OF AND DURING THE HANGING AND BRACING OF THE DISTRIBUTION SYSTEMS. THE STRUCTURAL ENGINEER OF RECORD SHALL VERIFY THE ADEQUACY OF THE STRUCTURE TO SUPPORT THE HANGER AND BRACE LOADS.

MECHANICALPIPING (MP), MECHANICAL DUCTS (MD), PLUMBING PIPING (PP), ELECTRICAL DISTRIBUTION SYSTEMS (E):

MP [ ] MD [ ] PP [ ] E [X] OPTION 1: DETAILED ON THE APPROVED DRAWINGS WITH PROJECT SPECIFIC NOTES AND DETAILS.
MP [ ] MD [ ] PP [ ] E [ ] OPTION 2: SHALL COMPLY WITH THE APPLICABLE OSHPD PRE-APPROVAL (OPM #) #_____.

WIRE SCHEDULE

WIRE DESIGNATION	WIRE IN CONDUIT	WIRE IN CONDUIT UNDERGROUND/WET LOC.	UNDERGROUND/WET WIRE DESIGNATION
INIT. LOOP A	2 CONDUCTOR #16 FPL TWISTED/ SHIELDED WEST PENN #D991	2 CONDUCTOR #16 FPLP SHIELDED WEST PENN #AQ-294	INIT. LOOP Au
SBUS	4 CONDUCTOR #18 TWISTED SHIELDED PAIR CABLE	4 CONDUCTOR #18 TWISTED SHIELDED PAIR CABLE	SBUS
VBUS	2 CONDUCTOR #18 TWISTED SHIELDED PAIR CABLE	2 CONDUCTOR #18 TWISTED SHIELDED PAIR CABLE	VBUS
SPEAKER CKT. S	2 CONDUCTOR #14 THHN/THWN STRANDED	2 CONDUCTOR #14 THHN/THWN STRANDED	SPEAKER CKT. Su
VISUAL CKT. V	2 CONDUCTOR #12 THHN/THWN STRANDED	2 CONDUCTOR #12 THHN/THWN STRANDED	VISUAL CKT. Vu
POWER CKT. P	2 CONDUCTOR #12 THHN/THWN STRANDED	2 CONDUCTOR #12 THHN/THWN STRANDED	POWER CKT. Pu

NOTE:
ALL WIRE MODEL NUMBERS ARE WEST PENN.
EQUIVALENT BY OTHER MANUFACTURER IS ACCEPTABLE.

FIRE ALARM REQUIREMENTS

THE CONTRACTOR SHALL PROVIDE AND SUBMIT THE FIRE ALARM SHOP DRAWINGS TO THE ARCHITECT FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION OF THE FIRE ALARM SYSTEM. THE SUBMITTAL SHALL CONTAIN THE FOLLOWING:

A. SHOP DRAWINGS: COMPLETE 1/8" SCALE FLOOR PLANS SHOWING ALL DEVICES, COMPONENTS, CONDUIT AND WIRING INDICATING A COMPLETE AND OPERABLE SYSTEM AS DESIGNED AND SPECIFIED. REPRODUCED COPIES OF BID SET FIRE ALARM PLANS ARE NOT ACCEPTABLE AS SHOP DRAWINGS. SHOP DRAWINGS MUST ALSO INDICATE DEVICE MOUNTING HEIGHTS, ROOM NAMES AND NUMBERS AND THE LOCATION OF ALL FIRE RATED WALLS.
B. ELECTRICAL CONTRACTOR'S AND FIRE ALARM SYSTEM INSTALLER'S NAME, ADDRESS, PHONE NUMBER AND C-10 LICENSE NUMBER.
C. LIST OF SYSTEM COMPONENTS, EQUIPMENT AND DEVICES, INCLUDING MANUFACTURERS' MODEL NUMBER(S) AND CALIFORNIA STATE FIRE MARSHALL LISTING NUMBERS.
D. ORIGINAL COPIERS OF MANUFACTURERS' SPECIFICATION SHEETS FOR ALL EQUIPMENT AND DEVICES INDICATED.
E. VOLTAGE DROP CALCULATIONS -- INCLUDE THE FOLLOWING INFORMATION FOR THE WORST CASE:
1. POINT-TO-POINT OR OHMS LAW CALCULATIONS.
2. IDENTIFICATION OF ZONE USED IN CALCULATIONS.
3. VOLTAGE DROP PERCENT (NOT TO EXCEED MANUFACTURERS' REQUIREMENTS).
a. NOTE: IF VOLTAGE DROP EXCEEDS 10%, INDICATE MANUFACTURERS' LISTED OPERATING RANGE(S) OR EQUIPMENT AND DEVICES.
4. NOTE CIRCUIT NUMBER FOR WORST CASE CALCULATION.
F. BATTERY TYPE(S), AMPS HOURS AND LOAD CALCULATIONS -- INCLUDE THE FOLLOWING INFORMATION:
1. NORMAL OPERATION: 100% OF APPLICABLE DEVICES FOR 24 HOURS = CONTROL PANEL AMPS PLUS LIST OF AMPS PER DEVICE WHICH DRAW POWER FROM THE PANEL DURING STANDBY POWER – I.E.:
a. ZONE MODULES
b. DETECTORS
c. OTHER DEVICES (IDENTIFY)
2. ALARM CONDITION: 100% OF APPLICABLE DEVICES FOR 15 MINUTES = CONTROL PANEL AMPS PLUS LIST OF AMPS PER DEVICE WHICH DRAW POWER FROM THE PANEL DURING STANDBY POWER – I.E.:
a. ZONE MODULES
b. SIGNAL MODULES
c. DETECTORS
d. SIGNAL DEVICES
e. ANNUNCIATOR
f. OTHER DEVICES (IDENTIFY)
3. NORMAL OPERATION + ALARM OPERATION
a. TOTAL AMP HOURS REQUIRED.
b. TOTAL AMP HOURS PROVIDED.

10% OF EXISTING FIRE ALARM DEVICES AND APPLIANCES SHALL BE ADDED TO THE NEW FIRE ALARM DEVICES AND APPLIANCES FOR TESTING.

DRAWING INDEX

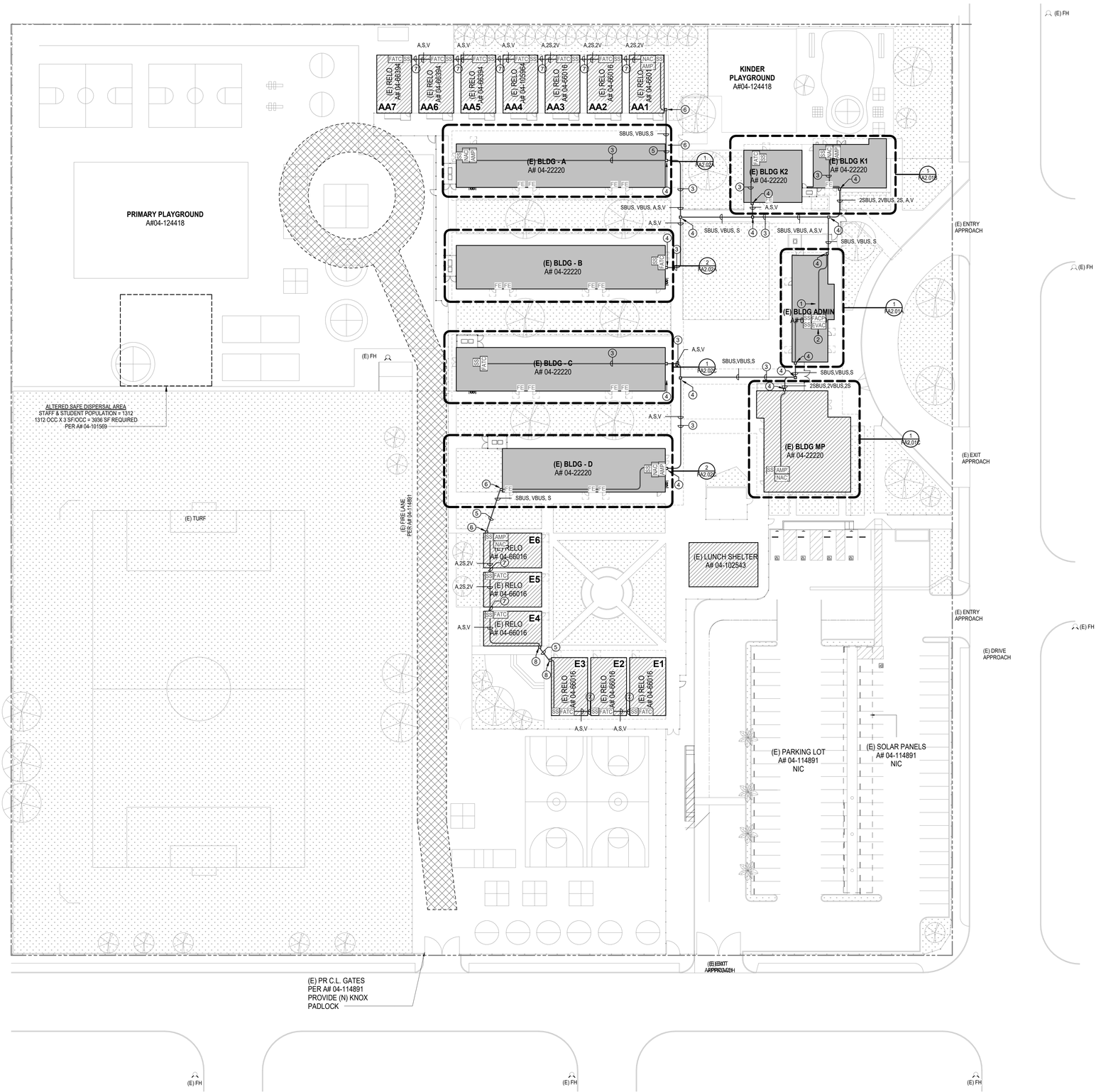
SHEET	DESCRIPTION
FA0.00	FIRE ALARM SYMBOLS, LEGENDS & GENERAL NOTES
FA1.01	FIRE ALARM SITE PLAN
FA2.01A	FIRE ALARM FLOOR PLAN - ADMIN
FA2.01B	FIRE ALARM FLOOR PLAN - KINDERGARDEN
FA2.01C	FIRE ALARM FLOOR PLAN - MPR
FA2.02A	FIRE ALARM FLOOR PLANS - CLASSROOMS A & B
FA2.02C	FIRE ALARM FLOOR PLANS - CLASSROOMS C & D
FA2.03	FIRE ALARM FLOOR PLANS - RELOCATABLES
FA6.01	FIRE ALARM DETAILS
FA7.01	FIRE ALARM RISER
FA7.02	FIRE ALARM RISER
FA8.01	FIRE ALARM CALCULATIONS
FA8.02	FIRE ALARM CALCULATIONS

GENERAL NOTES

1. APPLICABLE STANDARD 2022, NFPA 72, AS ADOPTED AND AMENDED IN CBC CHAPTER 35
2. INSTALLATION OF THE SYSTEMS SHALL NOT BE STARTED UNTIL DETAILED DESIGN DOCUMENTS AND SPECIFICATION, INCLUDING STATE FIRE MARSHAL LISTING NUMBERS FOR EACH COMPONENT OF THE SYSTEM, HAS BEEN APPROVED BY DSA.
3. UPON COMPLETION OF SYSTEM INSTALLATION, A SATISFACTORY TEST OF THE ENTIRE SYSTEM SHALL BE MADE IN THE PRESENCE OF A DSA PROJECT INSPECTOR.
4. A STAMPED SET OF APPROVED FIRE ALARM DESIGN DOCUMENTS SHALL BE ON THE JOB SITE AND USED FOR INSTALLATION.
5. ANY DISCREPANCIES BETWEEN THE DRAWINGS AND THE CODE OR RECOGNIZED STANDARDS SHALL BE BROUGHT TO THE ATTENTION OF DSA AND THE ARCHITECT/ENGINEER OF THE PROJECT.
6. DSA, ARCHITECT/ENGINEER AND OWNER SHALL BE NOTIFIED A MINIMUM OF 48 HOURS PRIOR TO THE FINAL INSPECTION AND /OR TESTING.
7. ALL PENETRATIONS THROUGH RATED ASSEMBLIES REQUIRING OPENING PROTECTION SHALL BE PROVIDED WITH A PENETRATION FIRE STOP SYSTEM AS IDENTIFIED IN CBC CHAPTER 7, UL OR OTHER APPROVED LAB TESTING CRITERIA. APPROVED TYPES OF MATERIALS SHALL BE IDENTIFIED WITHIN THE PROJECT SPECIFICATIONS WITHIN THE FIRE ALARM SECTION.
8. WALL MOUNTED VISIBLE NOTIFICATION DEVICES SHALL HAVE THEIR BOTTOMS MOUNTED AT 80" MINIMUM AND 96" MAXIMUM FROM FINISHED FLOOR.
9. WALL MOUNTED AUDIBLE NOTIFICATION DEVICES SHALL HAVE THEIR TOPS ABOVE THE FINISHED FLOORS AT HEIGHTS OF NOT LESS THAN 90" AND BELOW THE FINISHED CEILINGS AT DISTANCES OF NOT LESS THAN 6".
10. AUDIBLE DEVICES SHALL PROVIDE A SOUND PRESSURE LEVEL OF 15 DECIBELS (DBA) ABOVE THE AVERAGE AMBIENT SOUND LEVEL OR FIVE DBA ABOVE THE MAXIMUM SOUND LEVEL HAVING A DURATION OF AT LEAST 60 SECONDS, WHICHEVER IS GREATER, IN EVERY OCCUPIABLE SPACE WITHIN THE BUILDING.
11. AUDIBLE DEVICES SHALL BE SYNCHRONIZED TEMPORAL CODE 3 PATTERN.
12. THE CONTRACTOR SHALL ADJUST/INSTALL ALL DEVICES TO MAXIMIZE PERFORMANCE AND TO MINIMIZE FALSE ALARMS.
13. VISIBLE DEVICES SHOULD NOT EXCEED TWO FLASHES PER SECOND AND SHOULD NOT BE SLOWER THAN ONE FLASH EVERY SECOND. THE DEVICE SHALL HAVE A PULSING LIGHT SOURCE NOT LESS THAN 15 CANDELLA. VISIBLE DEVICES WITHIN 50' FROM EACH OTHER SHALL BE SYNCHRONIZED.
14. UNDERGROUND AND EXTERIOR CONDUITS TO HAVE WATER TIGHT FITTINGS AND WIRE TO BE APPROVED FOR WET LOCATIONS.
15. ALL FIRE ALARM WIRING SHALL BE FPL OR FPLP (FIRE POWER LIMITED OR FIRE POWER LIMITED PLENUM) AS REQUIRED FOR APPLICATION. WIRING IN CONDUIT ABOVE GROUND MAY BE TYPE THHN OR THWN.
16. PER CEC STANDARDS, ALL WIRING IS TO BE PULLED THROUGH EACH JUNCTION BOX AND CONNECTED DIRECTLY TO EACH FIRE DEVICE. DO NOT SPLICE THE WIRE. ALL BOXES TO BE SIZED PER CEC.
17. SMOKE DETECTORS SHALL NOT BE ANY CLOSER THAN 1' FROM FIRE SPRINKLERS OR 3' FROM ANY SUPPLY DIFFUSER. IN AREA OF CONSTRUCTION OR POSSIBLE DAMAGE/CONTAMINATION ON NEWLY INSTALLED FIRE ALARM. DEVICES SHALL BE COVERED UNTIL THAT AREA IS READY TO BE TURNED OVER TO THE OWNER.
18. ALL FIRE ALARM CIRCUITS SHALL BE IN CONDUIT, SURFACE RACEWAY OR OPEN RUN ABOVE CEILINGS, UNDER FLOORS AND IN WALLS IN A NEAT AND PROTECTED MANOR AS INDICATED ON DESIGN DOCUMENTS.
19. EXPOSED CIRCUITS ARE ONLY PERMITTED WHEN NOTED AS EXPOSED ON DESIGN DOCUMENTS.
20. FIRE ALARM PANEL, REMOTES, AND COMPONENTS SHALL BE SECURED TO MOUNTING SURFACES PER MANUFACTURERS SPECIFICATIONS. NO SINGLE DEVICE SHALL EXCEED 20 LBS. WITHOUT SPECIAL MOUNTING DETAILS.
21. A DEDICATED BRANCH CIRCUIT SHALL BE PROVIDED FOR FIRE ALARM EQUIPMENT. THIS CIRCUIT SHALL BE ENERGIZED FROM THE COMMON USE AREA PANEL AND SHALL HAVE NO OTHER OUTLETS. THE BREAKER SHALL HAVE A RED LOCKING DEVICE TO BLOCK THE HANDLE IN THE "ON" POSITION. THE CIRCUIT BREAKER SHALL BE LABELED "FIRE ALARM CIRCUIT CONTROL." CIRCUIT ID TO BE LABELED AT FIRE PANEL/EXTENDERS.
22. THE INSTALLING CONTRACTOR SHALL PROVIDE A COMPLETED "SYSTEM RECORD OF COMPLETION" PER NFPA 72, FIGURE 7.8.2.
23. FIRE ALARM CONTROL PANELS AND REMOTE ANNUNCIATORS SHALL BE INSTALLED WITH THEIR BOTTOMS MOUNTED AT 48" ABOVE THE FINISHED FLOOR.
24. MICROPHONES ASSOCIATED WITH EMERGENCY VOICE ALARM COMMUNICATION SYSTEMS (EVAC) SHALL BE ACCESSIBLE FOR USE. INSTALLED IN COMPLIANCE WITH CBC SECTIONS 11B-305 AND 11B-308.
25. THE INSTALLING CONTRACTOR SHALL PROVIDE SYSTEM PROGRAMMING FOR SUPERVISORY MONITORING PER CBC SECTION 901.6.2.
26. SUPERVISORY MONITORING SHALL BE TESTED AND VERIFIED AS SENDING CORRECT SIGNALS IN CONJUNCTION WITH FINAL ACCEPTANCE TEST.
27. OWNER SHALL BE RESPONSIBLE FOR ESTABLISHING A FIRE SYSTEM MONITORING CONTRACT OR PROVISIONS.
28. ALL CARBON MONOXIDE SIGNALS SHALL SOUND A FOUR-PULSE TEMPORAL PATTERN PER NFPA 720, 5.8.6.5.1.
29. ALL EQUIPMENT SHALL BE U.L. AND C.S.F.M. LISTED.
30. ELECTRICAL CONTRACTOR SHALL FURNISH ACC

FA1.01 - FIRE ALARM SITE PLAN

0" 1"



1 SITE PLAN
1" = 30'-0"

FIRE ALARM GENERAL NOTES

A. THE CONTRACTOR SHALL PROVIDE AND INSTALL A NEW SILENT KNIGHT SERIES FIRE ALARM PANEL WITH VOICE EVACUATION. PROVIDE ALL NEW BACKBOXES, CONDUIT, DEVICES, PULL BOXES, WIRING WHERE INDICATED. LOCATIONS SHOWN ARE APPROXIMATE.

B. THE EXISTING FIRE ALARM SYSTEM DEVICES AND WIRING SHALL REMAIN IN SERVICE AND FULLY FUNCTIONAL THROUGHOUT THE ENTIRETY OF CONSTRUCTION UNTIL COMPLETION. PLACE DUST CAPS ON ALL SMOKE DETECTION DEVICES IN AREAS OF CONSTRUCTION AND REMOVE AT THE END OF EACH WORKDAY.

C. A FIRE WATCH SHALL BE ESTABLISHED AND THE FIRE DEPARTMENT FIRE CODE OFFICIAL SHALL BE NOTIFIED IMMEDIATELY WHENEVER THE FIRE PROTECTION / ALARM SYSTEM IS RENDERED OF SERVICE. A FIRE WATCH SHALL BE STAGED WHENEVER THE BUILDING IS OCCUPIED (PARTIAL OR WHOLE).

D. AFTER THE NEW FIRE ALARM SYSTEM HAS BEEN INSTALLED AND PASSED INSPECTION, THE CONTRACTOR SHALL REMOVE THE EXISTING PANEL, DEVICES, WIRING, CONDUIT, AND BACKBOXES. PLACE WALLPLATES ON ALL UNUSED JUNCTION BOXES AND PAINT TO MATCH EXISTING LOCATIONS TO MATCH WALL. REPLACE ALL DAMAGED CEILING TILES WITH NEW MATCHING CEILING TILES.

E. SURGE PROTECTION SHALL BE PROVIDED ON ALL FIRE ALARM RELATED COMPONENTS, TO PROTECT FROM TRANSIENT VOLTAGE, INCLUDING BUT NOT LIMITED TO THE FOLLOWING: SIGNALING LINE CIRCUITS (SLC), NOTIFICATION APPLIANCE CIRCUITS (NAC), TELEPHONE LINES, AC POWER CONNECTION.

FIRE ALARM KEYED NOTES

1. INDICATES THE LOCATION OF THE EXISTING FIRE ALARM PANEL IN WORKROOM AD-10.

2. INDICATES THE NEW LOCATION OF THE NEW FIRE ALARM PANEL WITH VOICE EVACUATION AT FRONT OFFICE.

3. THE CONTRACTOR SHALL PROVIDE (2) 2" CONDUITS ROUTED OVERHEAD ABOVE CANOPY WALKWAY AND/OR CEILINGS . ONE CONDUIT IS FOR SPARE AND THE OTHER IS FOR FIRE ALARM CABLE AS INDICATED. PROVIDE PULL STRING AT ALL POINTS.

4. PROVIDE A 12"X12"X8" NEMA4 ENCLOSURE MOUNTED ABOVE CANOPY.

5. PROVIDE (2) 2' UNDERGROUND CONDUITS AND STUB UP TO EXTERIOR NEMA4 ENCLOSURE MOUNTED ABOVE CEILING LEVEL. ONE CONDUIT IS FOR SPARE AND THE OTHER IS FOR FIRE ALARM CABLE AS INDICATED. PROVIDE PULL STRING AT ALL POINTS. PROVIDE PATCH AN REPAIR TO EXISTING CONDITIONS.

6. PROVIDE A NEW 11"X17"X18" CONCRETE UNDERGROUND PULL BOX ON 6" DEEP GRAVEL BASE. PROVIDE WIDE SWEEPING TURNS ON ALL CONDUITS ENTERING AND EXITING BOX AS WELL AS ALL CONDUIT TURNS ALONG ROUTE.

7. PROVIDE (1) 2" FLEXIBLE SEAL-TITE CONDUIT SPANNING THE DISTANCE FROM ONE BUILDING TO THE OTHER.

8. PROVIDE A 12"X12"X8" NEMA4 ENCLOSURE MOUNTED ON THE EXTERIOR WALL ABOVE CEILING HEIGHT.

Not for permitting or construction

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-124972 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/17/2026

PBK

ARCHITECT PBK Architects, Inc.
ANAHEIM PBK.com
2400 E KATELLA AVE, Suite 950
ANAHEIM, CA 92806
P 949-548-5000

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

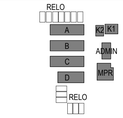
SCHROEDER ES HVAC UPGRADE & MODERNIZATION

PROJECT ADDRESS:
15151 Columbia Ln
Huntington Beach, CA 92647

100% CONSTRUCTION DOCUMENTS

DSA APPL NO.: ##-##### DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT EST. 1873



KEY PLAN
NORTH: PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER STEVEN C. MUSSER E-19817 Exp. 09-31-26 ELECTRICAL STATE OF CALIFORNIA

Architect

LICENSED ARCHITECT Tong Yao No. C-31162 REN. 10-31-2027 STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
11/14/2025	250376

REVISIONS

No.	Description	Date

100% CONSTRUCTION DOCUMENTS

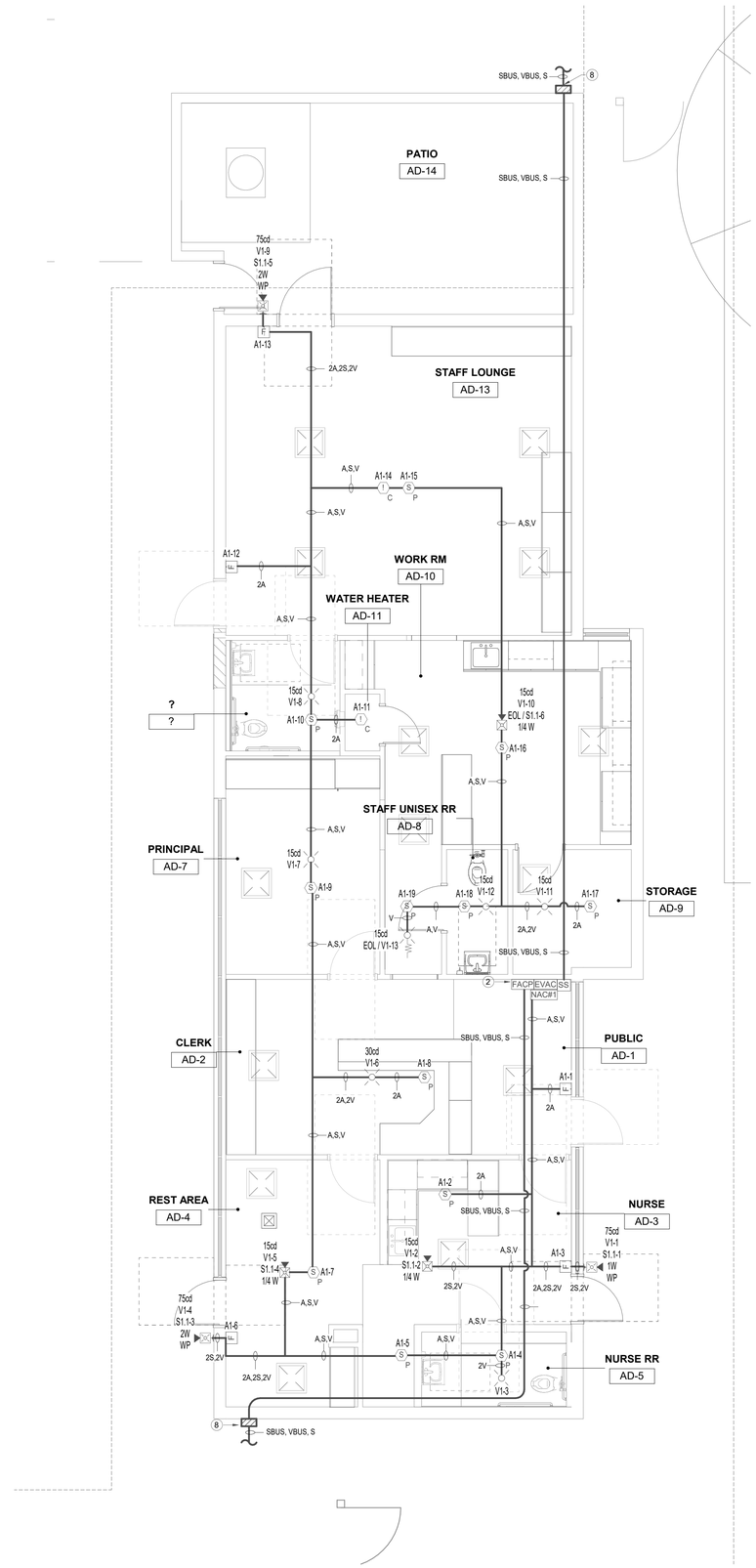
FIRE ALARM SITE PLAN

FA1.01

This document is for plan review only

FILE PATH: Z:\Projects\...
2/18/2026 3:08:21 PM

0" 1"



FIRE ALARM GENERAL NOTES

A. THE CONTRACTOR SHALL PROVIDE AND INSTALL A NEW SILENT KNIGHT SERIES FIRE ALARM PANEL WITH VOICE EVACUATION. PROVIDE ALL NEW BACKBOXES, CONDUIT, DEVICES, PULL BOXES, WIRING WHERE INDICATED. LOCATIONS SHOWN ARE APPROXIMATE.

B. THE EXISTING FIRE ALARM SYSTEM DEVICES AND WIRING SHALL REMAIN IN SERVICE AND FULLY FUNCTIONAL THROUGHOUT THE ENTIRETY OF CONSTRUCTION UNTIL COMPLETION. PLACE DUST CAPS ON ALL SMOKE DETECTION DEVICES IN AREAS OF CONSTRUCTION AND REMOVE AT THE END OF EACH WORKDAY.

C. A FIRE WATCH SHALL BE ESTABLISHED AND THE FIRE DEPARTMENT FIRE CODE OFFICIAL SHALL BE NOTIFIED IMMEDIATELY WHENEVER THE FIRE PROTECTION / ALARM SYSTEM IS RENDERED OF SERVICE. A FIRE WATCH SHALL BE STAGED WHENEVER THE BUILDING IS OCCUPIED (PARTIAL OR WHOLE).

D. AFTER THE NEW FIRE ALARM SYSTEM HAS BEEN INSTALLED AND PASSED INSPECTION, THE CONTRACTOR SHALL REMOVE THE EXISTING PANEL, DEVICES, WIRING, CONDUIT, AND BACKBOXES. PLACE WALLPLATES ON ALL UNUSED JUNCTION BOXES AND PAINT TO MATCH EXISTING LOCATIONS TO MATCH WALL. REPLACE ALL DAMAGED CEILING TILES WITH NEW MATCHING CEILING TILES.

E. SURGE PROTECTION SHALL BE PROVIDED ON ALL FIRE ALARM RELATED COMPONENTS, TO PROTECT FROM TRANSIENT VOLTAGE, INCLUDING BUT NOT LIMITED TO THE FOLLOWING: SIGNALING LINE CIRCUITS (SLC), NOTIFICATION APPLIANCE CIRCUITS (NAC), TELEPHONE LINES, AC POWER CONNECTION.

⑧ FIRE ALARM KEYED NOTES

1. INDICATES THE LOCATION OF THE EXISTING FIRE ALARM PANEL IN WORKROOM AD-10.

2. INDICATES THE NEW LOCATION OF THE NEW FIRE ALARM PANEL WITH VOICE EVACUATION AT FRONT OFFICE. SEE DETAIL 5/FA6.01

3. THE CONTRACTOR SHALL PROVIDE (2) 2" CONDUITS ROUTED OVERHEAD ABOVE CANOPY WALKWAY AND/OR CEILINGS . ONE CONDUIT IS FOR SPARE AND THE OTHER IS FOR FIRE ALARM CABLE AS INDICATED. PROVIDE PULL STRING AT ALL POINTS.

4. PROVIDE A 12"X12"X8" NEMA4 ENCLOSURE MOUNTED ABOVE CANOPY.

5. PROVIDE (2) 2' UNDERGROUND CONDUITS AND STUB UP TO EXTERIOR NEMA4 ENCLOSURE MOUNTED ABOVE CEILING LEVEL. ONE CONDUIT IS FOR SPARE AND THE OTHER IS FOR FIRE ALARM CABLE AS INDICATED. PROVIDE PULL STRING AT ALL POINTS. PROVIDE PATCH AN REPAIR TO EXISTING CONDITIONS.

6. PROVIDE A NEW 11"X17"X18" CONCRETE UNDERGROUND PULL BOX ON 6" DEEP GRAVEL BASE. PROVIDE WIDE SWEEPING TURNS ON ALL CONDUITS ENTERING AND EXITING BOX AS WELL AS ALL CONDUIT TURNS ALONG ROUTE.

7. PROVIDE (1) 2" FLEXIBLE SEAL-TITE CONDUIT SPANNING THE DISTANCE FROM ONE BUILDING TO THE OTHER.

8. PROVIDE A 12"X12"X8" NEMA4 ENCLOSURE MOUNTED ON THE EXTERIOR WALL ABOVE CEILING HEIGHT.

1 ADMIN - FLOOR PLAN
1/4" = 1'-0"

FILE PATH: Z:\Projects\...
2/18/2026 3:08:35 PM

Not for permitting or construction

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-124972 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/17/2026

PBK

ARCHITECT PBK Architects, Inc.
ANAHEIM PBK.com
2400 E KATELLA AVE, Suite 950
ANAHEIM, CA 92806
P 949-548-5000

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

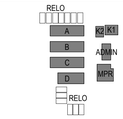
SCHROEDER ES HVAC UPGRADE & MODERNIZATION

PROJECT ADDRESS:
15151 Columbia Ln
Huntington Beach, CA 92647

100% CONSTRUCTION DOCUMENTS

DSA APPL NO.: ##-##### DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT EST. 1873



KEY PLAN
NORTH: PLAN

Consultant



Architect



CLIENT
WESTMINSTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
11/14/2025	250376

REVISIONS

No.	Description	Date

100% CONSTRUCTION DOCUMENTS

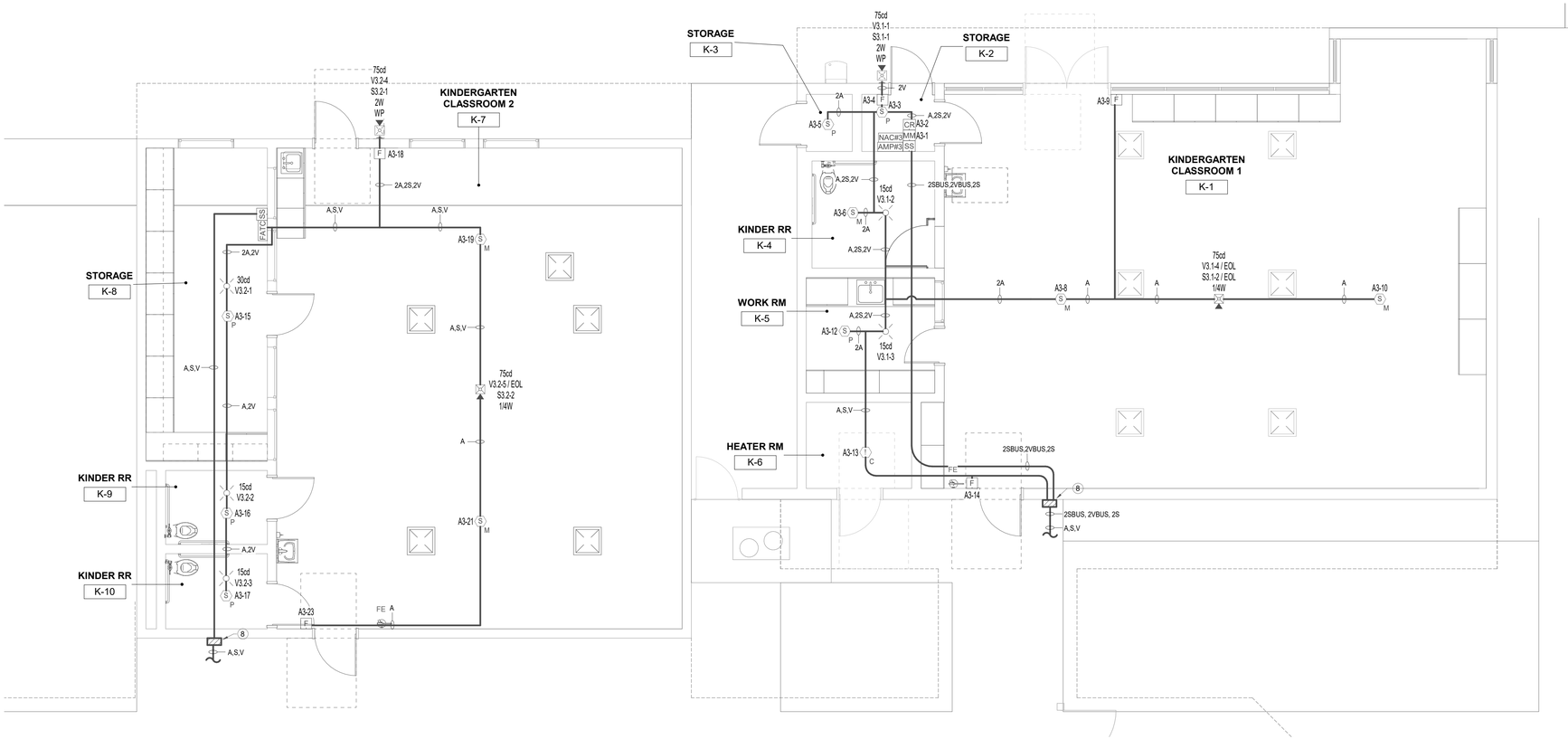
FIRE ALARM FLOOR PLAN - ADMIN

FA2.01A

This document is for plan review only

FA2.01B - FIRE ALARM FLOOR PLAN - KINDERGARDEN

0" 1"



FIRE ALARM GENERAL NOTES

A. THE CONTRACTOR SHALL PROVIDE AND INSTALL A NEW SILENT KNIGHT SERIES FIRE ALARM PANEL WITH VOICE EVACUATION. PROVIDE ALL NEW BACKBOXES, CONDUIT, DEVICES, PULL BOXES, WIRING WHERE INDICATED. LOCATIONS SHOWN ARE APPROXIMATE.

B. THE EXISTING FIRE ALARM SYSTEM DEVICES AND WIRING SHALL REMAIN IN SERVICE AND FULLY FUNCTIONAL THROUGHOUT THE ENTIRETY OF CONSTRUCTION UNTIL COMPLETION. PLACE DUST CAPS ON ALL SMOKE DETECTION DEVICES IN AREAS OF CONSTRUCTION AND REMOVE AT THE END OF EACH WORKDAY.

C. A FIRE WATCH SHALL BE ESTABLISHED AND THE FIRE DEPARTMENT FIRE CODE OFFICIAL SHALL BE NOTIFIED IMMEDIATELY WHENEVER THE FIRE PROTECTION / ALARM SYSTEM IS RENDERED OF SERVICE. A FIRE WATCH SHALL BE STAGED WHENEVER THE BUILDING IS OCCUPIED (PARTIAL OR WHOLE).

D. AFTER THE NEW FIRE ALARM SYSTEM HAS BEEN INSTALLED AND PASSED INSPECTION, THE CONTRACTOR SHALL REMOVE THE EXISTING PANEL, DEVICES, WIRING, CONDUIT, AND BACKBOXES. PLACE WALLPLATES ON ALL UNUSED JUNCTION BOXES AND PAINT TO MATCH EXISTING LOCATIONS TO MATCH WALL. REPLACE ALL DAMAGED CEILING TILES WITH NEW MATCHING CEILING TILES.

E. SURGE PROTECTION SHALL BE PROVIDED ON ALL FIRE ALARM RELATED COMPONENTS, TO PROTECT FROM TRANSIENT VOLTAGE, INCLUDING BUT NOT LIMITED TO THE FOLLOWING: SIGNALING LINE CIRCUITS (SLC), NOTIFICATION APPLIANCE CIRCUITS (NAC), TELEPHONE LINES, AC POWER CONNECTION.

FIRE ALARM KEYED NOTES

1. INDICATES THE LOCATION OF THE EXISTING FIRE ALARM PANEL IN WORKROOM AD-10.

2. INDICATES THE NEW LOCATION OF THE NEW FIRE ALARM PANEL WITH VOICE EVACUATION AT FRONT OFFICE.

3. THE CONTRACTOR SHALL PROVIDE (2) 2" CONDUITS ROUTED OVERHEAD ABOVE CANOPY WALKWAY AND/OR CEILINGS . ONE CONDUIT IS FOR SPARE AND THE OTHER IS FOR FIRE ALARM CABLE AS INDICATED. PROVIDE PULL STRING AT ALL POINTS.

4. PROVIDE A 12"X12"X8" NEMA4 ENCLOSURE MOUNTED ABOVE CANOPY.

5. PROVIDE (2) 2" UNDERGROUND CONDUITS AND STUB UP TO EXTERIOR NEMA4 ENCLOSURE MOUNTED ABOVE CEILING LEVEL . ONE CONDUIT IS FOR SPARE AND THE OTHER IS FOR FIRE ALARM CABLE AS INDICATED. PROVIDE PULL STRING AT ALL POINTS. PROVIDE PATCH AN REPAIR TO EXISTING CONDITIONS.

6. PROVIDE A NEW 11"X17"X18" CONCRETE UNDERGROUND PULL BOX ON 6" DEEP GRAVEL BASE. PROVIDE WIDE SWEEPING TURNS ON ALL CONDUITS ENTERING AND EXITING BOX AS WELL AS ALL CONDUIT TURNS ALONG ROUTE.

7. PROVIDE (1) 2" FLEXIBLE SEAL-TITE CONDUIT SPANNING THE DISTANCE FROM ONE BUILDING TO THE OTHER.

8. PROVIDE A 12"X12"X8" NEMA4 ENCLOSURE MOUNTED ON THE EXTERIOR WALL ABOVE CEILING HEIGHT.

1 KINDERGARTEN - FLOOR PLAN
1/4" = 1'-0"

Not for permitting or construction

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-124972 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/17/2026

PBK

ARCHITECT PBK Architects, Inc.
ANAHEIM PBK.com
2400 E KATELLA AVE, Suite 950
ANAHEIM, CA 92806
P 949-548-5000

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

SCHROEDER ES HVAC UPGRADE & MODERNIZATION

PROJECT ADDRESS:
15151 Columbia Ln
Huntington Beach, CA 92647

100% CONSTRUCTION DOCUMENTS

DSA APPL NO.: ##-##### DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT EST. 1872

RELO
A K2 K1
B ADMIN
C MPR
D
RELO

KEY PLAN
NORTH: PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER
STEVENE MUSSER
E-19817
Exp.03/31/26
ELECTRICAL
STATE OF CALIFORNIA

Architect

LICENSED ARCHITECT
Yong Yoo
No. C-31162
REN 10-31-2027
STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
11/14/2025	250376

REVISIONS

No.	Description	Date

100% CONSTRUCTION DOCUMENTS

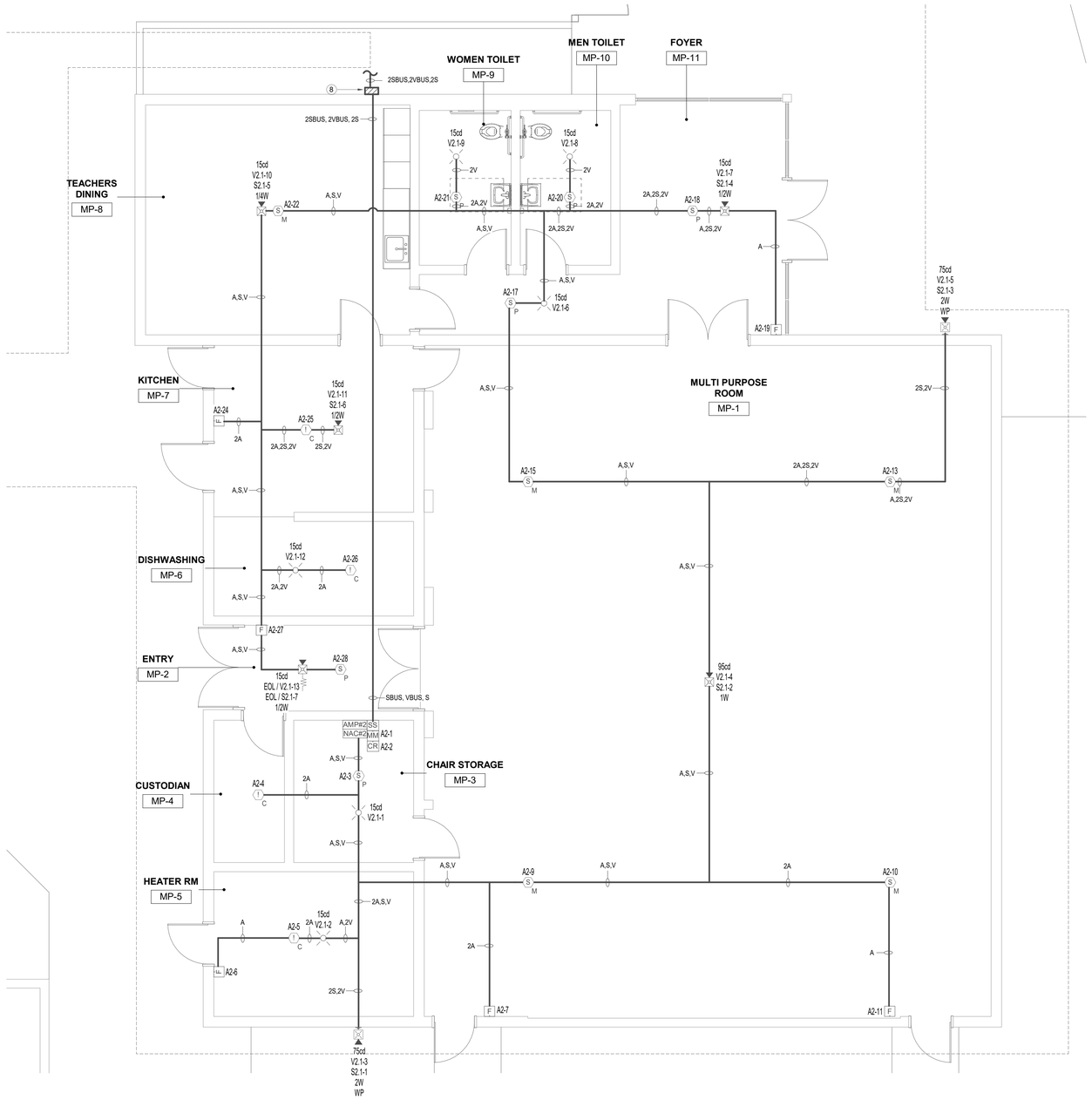
This document is for plan review only

FIRE ALARM FLOOR PLAN - KINDERGARDEN

FA2.01B

FILE PATH: Z:\Projects\...
2/18/2026 3:08:42 PM

0" 1"



FIRE ALARM GENERAL NOTES

A. THE CONTRACTOR SHALL PROVIDE AND INSTALL A NEW SILENT KNIGHT SERIES FIRE ALARM PANEL WITH VOICE EVACUATION. PROVIDE ALL NEW BACKBOXES, CONDUIT, DEVICES, PULL BOXES, WIRING WHERE INDICATED. LOCATIONS SHOWN ARE APPROXIMATE.

B. THE EXISTING FIRE ALARM SYSTEM DEVICES AND WIRING SHALL REMAIN IN SERVICE AND FULLY FUNCTIONAL THROUGHOUT THE ENTIRETY OF CONSTRUCTION UNTIL COMPLETION. PLACE DUST CAPS ON ALL SMOKE DETECTION DEVICES IN AREAS OF CONSTRUCTION AND REMOVE AT THE END OF EACH WORKDAY.

C. A FIRE WATCH SHALL BE ESTABLISHED AND THE FIRE DEPARTMENT FIRE CODE OFFICIAL SHALL BE NOTIFIED IMMEDIATELY WHENEVER THE FIRE PROTECTION / ALARM SYSTEM IS RENDERED OF SERVICE. A FIRE WATCH SHALL BE STAGED WHENEVER THE BUILDING IS OCCUPIED (PARTIAL OR WHOLE).

D. AFTER THE NEW FIRE ALARM SYSTEM HAS BEEN INSTALLED AND PASSED INSPECTION, THE CONTRACTOR SHALL REMOVE THE EXISTING PANEL, DEVICES, WIRING, CONDUIT, AND BACKBOXES. PLACE WALLPLATES ON ALL UNUSED JUNCTION BOXES AND PAINT TO MATCH EXISTING LOCATIONS TO MATCH WALL. REPLACE ALL DAMAGED CEILING TILES WITH NEW MATCHING CEILING TILES.

E. SURGE PROTECTION SHALL BE PROVIDED ON ALL FIRE ALARM RELATED COMPONENTS, TO PROTECT FROM TRANSIENT VOLTAGE, INCLUDING BUT NOT LIMITED TO THE FOLLOWING: SIGNALING LINE CIRCUITS (SLC), NOTIFICATION APPLIANCE CIRCUITS (NAC), TELEPHONE LINES, AC POWER CONNECTION.

ⓐ FIRE ALARM KEYED NOTES

1. INDICATES THE LOCATION OF THE EXISTING FIRE ALARM PANEL IN WORKROOM AD-10.

2. INDICATES THE NEW LOCATION OF THE NEW FIRE ALARM PANEL WITH VOICE EVACUATION AT FRONT OFFICE.

3. THE CONTRACTOR SHALL PROVIDE (2) 2" CONDUITS ROUTED OVERHEAD ABOVE CANOPY WALKWAY AND/OR CEILINGS . ONE CONDUIT IS FOR SPARE AND THE OTHER IS FOR FIRE ALARM CABLE AS INDICATED. PROVIDE PULL STRING AT ALL POINTS.

4. PROVIDE A 12"X12"X8" NEMA4 ENCLOSURE MOUNTED ABOVE CANOPY.

5. PROVIDE (2) 2' UNDERGROUND CONDUITS AND STUB UP TO EXTERIOR NEMA4 ENCLOSURE MOUNTED ABOVE CEILING LEVEL. ONE CONDUIT IS FOR SPARE AND THE OTHER IS FOR FIRE ALARM CABLE AS INDICATED. PROVIDE PULL STRING AT ALL POINTS. PROVIDE PATCH AN REPAIR TO EXISTING CONDITIONS.

6. PROVIDE A NEW 11"X17"X18" CONCRETE UNDERGROUND PULL BOX ON 6" DEEP GRAVEL BASE. PROVIDE WIDE SWEEPING TURNS ON ALL CONDUITS ENTERING AND EXITING BOX AS WELL AS ALL CONDUIT TURNS ALONG ROUTE.

7. PROVIDE (1) 2" FLEXIBLE SEAL-TITE CONDUIT SPANNING THE DISTANCE FROM ONE BUILDING TO THE OTHER.

8. PROVIDE A 12"X12"X8" NEMA4 ENCLOSURE MOUNTED ON THE EXTERIOR WALL ABOVE CEILING HEIGHT.

1 MPR - FLOOR PLAN
1/4" = 1'-0"

FILE PATH: Z:\Projects\...
2/18/2026 3:08:49 PM

Not for permitting or construction

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-124972 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/17/2026

ARCHITECT PBK Architects, Inc.
ANAHEIM PBK.com
2400 E KATELLA AVE, Suite 950
ANAHEIM, CA 92806
P 949-548-5000

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

SCHROEDER ES HVAC UPGRADE & MODERNIZATION

PROJECT ADDRESS:
15151 Columbia Ln
Huntington Beach, CA 92647

100% CONSTRUCTION DOCUMENTS

DSA APPL NO.: ##-##### DSA FILE NO.: 30-43

RELO
A K2 K1
B ADMIN
C MPR
D
RELO

KEY PLAN
NORTH: PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER STEVEN C. MUSSER E-19817 Exp.08/31/26 ELECTRICAL STATE OF CALIFORNIA

Architect

LICENSED ARCHITECT Tong You No. C-31162 REN. 10-31-2027 STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
11/14/2025	250376

REVISIONS

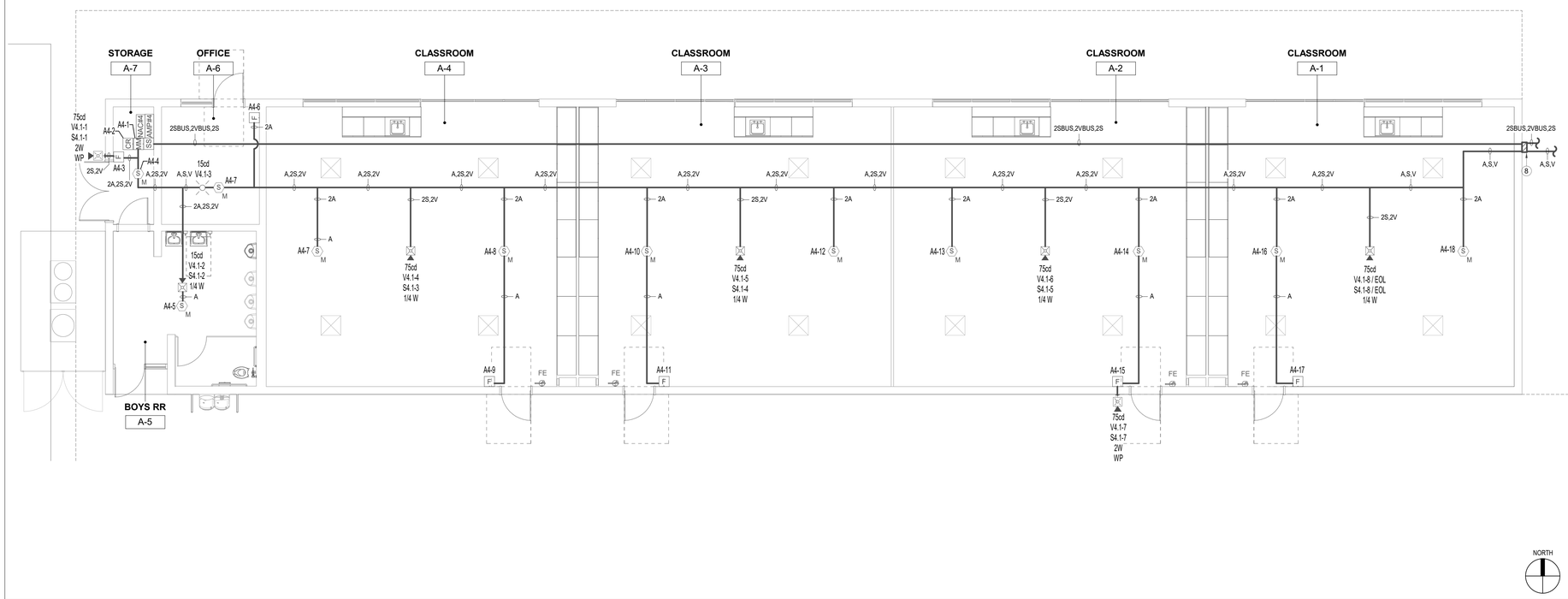
No.	Description	Date

100% CONSTRUCTION DOCUMENTS

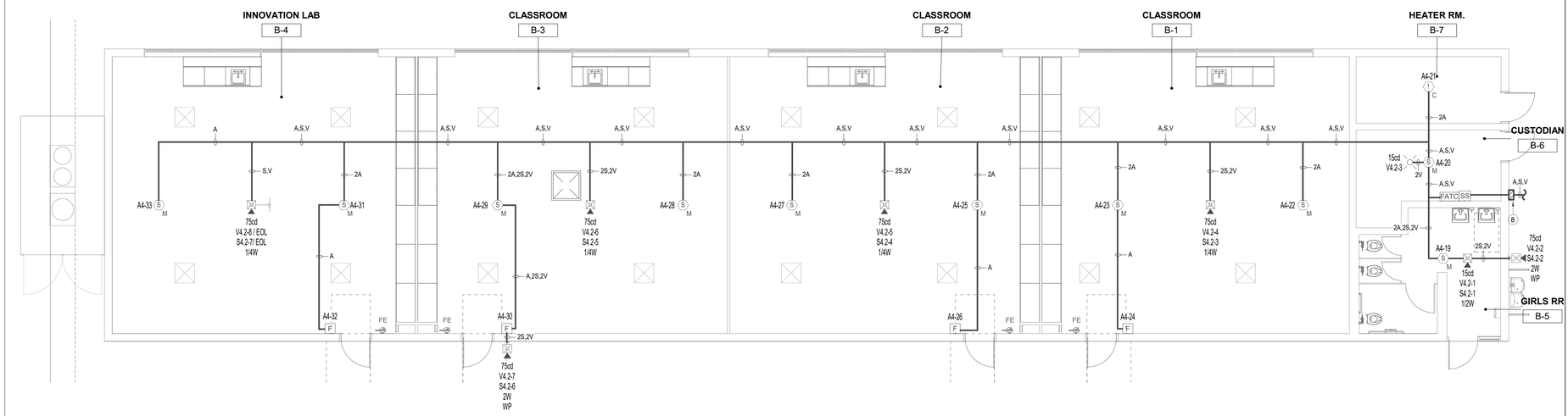
FIRE ALARM FLOOR PLAN - MPR

This document is for plan review only

FA2.01C



1 FLOOR PLAN - BLDG A
3/16" = 1'-0"



2 FLOOR PLAN - BLDG B
3/16" = 1'-0"

FIRE ALARM GENERAL NOTES

A. THE CONTRACTOR SHALL PROVIDE AND INSTALL A NEW SILENT KNIGHT SERIES FIRE ALARM PANEL WITH VOICE EVACUATION. PROVIDE ALL NEW BACKBOXES, CONDUIT, DEVICES, PULL BOXES, WIRING WHERE INDICATED. LOCATIONS SHOWN ARE APPROXIMATE.

B. THE EXISTING FIRE ALARM SYSTEM DEVICES AND WIRING SHALL REMAIN IN SERVICE AND FULLY FUNCTIONAL THROUGHOUT THE ENTIRETY OF CONSTRUCTION UNTIL COMPLETION. PLACE DUST CAPS ON ALL SMOKE DETECTION DEVICES IN AREAS OF CONSTRUCTION AND REMOVE AT THE END OF EACH WORKDAY.

C. A FIRE WATCH SHALL BE ESTABLISHED AND THE FIRE DEPARTMENT FIRE CODE OFFICIAL SHALL BE NOTIFIED IMMEDIATELY WHENEVER THE FIRE PROTECTION / ALARM SYSTEM IS RENDERED OF SERVICE. A FIRE WATCH SHALL BE STAGED WHENEVER THE BUILDING IS OCCUPIED (PARTIAL OR WHOLE).

D. AFTER THE NEW FIRE ALARM SYSTEM HAS BEEN INSTALLED AND PASSED INSPECTION, THE CONTRACTOR SHALL REMOVE THE EXISTING PANEL, DEVICES, WIRING, CONDUIT, AND BACKBOXES. PLACE WALLPLATES ON ALL UNUSED JUNCTION BOXES AND PAINT TO MATCH EXISTING LOCATIONS TO MATCH WALL. REPLACE ALL DAMAGED CEILING TILES WITH NEW MATCHING CEILING TILES.

E. SURGE PROTECTION SHALL BE PROVIDED ON ALL FIRE ALARM RELATED COMPONENTS, TO PROTECT FROM TRANSIENT VOLTAGE, INCLUDING BUT NOT LIMITED TO THE FOLLOWING: SIGNALING LINE CIRCUITS (SLC), NOTIFICATION APPLIANCE CIRCUITS (NAC), TELEPHONE LINES, AC POWER CONNECTION.

⑧ FIRE ALARM KEYED NOTES

1. INDICATES THE LOCATION OF THE EXISTING FIRE ALARM PANEL IN WORKROOM AD-10.

2. INDICATES THE NEW LOCATION OF THE NEW FIRE ALARM PANEL WITH VOICE EVACUATION AT FRONT OFFICE.

3. THE CONTRACTOR SHALL PROVIDE (2) 2" CONDUITS ROUTED OVERHEAD ABOVE CANOPY WALKWAY AND/OR CEILINGS . ONE CONDUIT IS FOR SPARE AND THE OTHER IS FOR FIRE ALARM CABLE AS INDICATED. PROVIDE PULL STRING AT ALL POINTS.

4. PROVIDE A 12"X12"X8" NEMA4 ENCLOSURE MOUNTED ABOVE CANOPY.

5. PROVIDE (2) 2' UNDERGROUND CONDUITS AND STUB UP TO EXTERIOR NEMA4 ENCLOSURE MOUNTED ABOVE CEILING LEVEL. ONE CONDUIT IS FOR SPARE AND THE OTHER IS FOR FIRE ALARM CABLE AS INDICATED. PROVIDE PULL STRING AT ALL POINTS. PROVIDE PATCH AN REPAIR TO EXISTING CONDITIONS.

6. PROVIDE A NEW 11"X17"X18" CONCRETE UNDERGROUND PULL BOX ON 6" DEEP GRAVEL BASE. PROVIDE WIDE SWEEPING TURNS ON ALL CONDUITS ENTERING AND EXITING BOX AS WELL AS ALL CONDUIT TURNS ALONG ROUTE.

7. PROVIDE (1) 2" FLEXIBLE SEAL-TITE CONDUIT SPANNING THE DISTANCE FROM ONE BUILDING TO THE OTHER.

8. PROVIDE A 12"X12"X8" NEMA4 ENCLOSURE MOUNTED ON THE EXTERIOR WALL ABOVE CEILING HEIGHT.

Not for permitting or construction

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-124972 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/17/2026

PBK

ARCHITECT PBK Architects, Inc.
ANAHEIM PBK.com
2400 E KATELLA AVE, Suite 950
ANAHEIM, CA 92806
P 949-548-5000

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

SCHROEDER ES HVAC UPGRADE & MODERNIZATION

PROJECT ADDRESS:
15151 Columbia Ln
Huntington Beach, CA 92647

100% CONSTRUCTION DOCUMENTS

DSA APPL NO.: ##-##### DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT EST. 1872

RELO
A K2 K1
B ADMIN
C MPR
D
RELO

KEY PLAN N
NORTH: PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER STEVENE MULLER E-19817 Exp.03/31/26 ELECTRICAL STATE OF CALIFORNIA

Architect

LICENSED ARCHITECT Yong Yoo No. C-31162 REN. 10-31-2027 STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
11/14/2025	250376

REVISIONS

No.	Description	Date

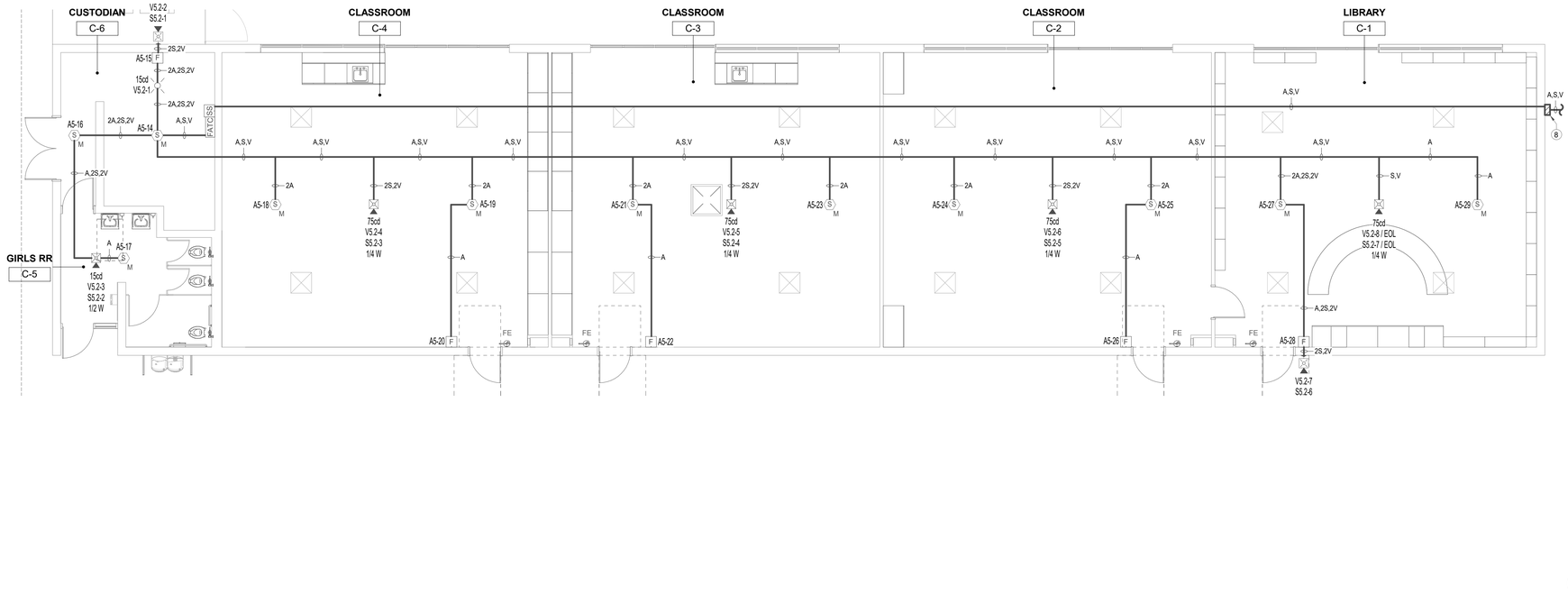
100% CONSTRUCTION DOCUMENTS

FIRE ALARM FLOOR PLANS - CLASSROOMS A & B

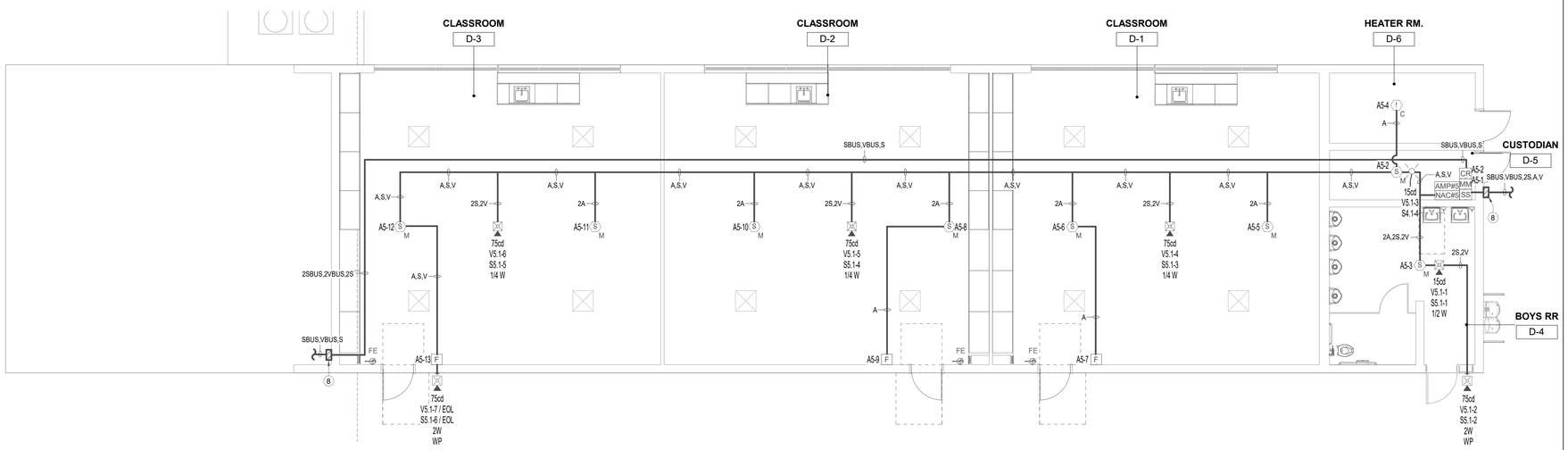
This document is for plan review only

FILE PATH: Z:\Projects\...
2/18/2026 3:08:57 PM

FA2.02A



1 FLOOR PLAN - BLDG C
3/16" = 1'-0"



2 FLOOR PLAN - BLDG D
3/16" = 1'-0"

FIRE ALARM GENERAL NOTES

A. THE CONTRACTOR SHALL PROVIDE AND INSTALL A NEW SILENT KNIGHT SERIES FIRE ALARM PANEL WITH VOICE EVACUATION. PROVIDE ALL NEW BACKBOXES, CONDUIT, DEVICES, PULL BOXES, WIRING WHERE INDICATED. LOCATIONS SHOWN ARE APPROXIMATE.

B. THE EXISTING FIRE ALARM SYSTEM DEVICES AND WIRING SHALL REMAIN IN SERVICE AND FULLY FUNCTIONAL THROUGHOUT THE ENTIRETY OF CONSTRUCTION UNTIL COMPLETION. PLACE DUST CAPS ON ALL SMOKE DETECTION DEVICES IN AREAS OF CONSTRUCTION AND REMOVE AT THE END OF EACH WORKDAY.

C. A FIRE WATCH SHALL BE ESTABLISHED AND THE FIRE DEPARTMENT FIRE CODE OFFICIAL SHALL BE NOTIFIED IMMEDIATELY WHENEVER THE FIRE PROTECTION / ALARM SYSTEM IS RENDERED OF SERVICE. A FIRE WATCH SHALL BE STAGED WHENEVER THE BUILDING IS OCCUPIED (PARTIAL OR WHOLE).

D. AFTER THE NEW FIRE ALARM SYSTEM HAS BEEN INSTALLED AND PASSED INSPECTION, THE CONTRACTOR SHALL REMOVE THE EXISTING PANEL, DEVICES, WIRING, CONDUIT, AND BACKBOXES. PLACE WALLPLATES ON ALL UNUSED JUNCTION BOXES AND PAINT TO MATCH EXISTING LOCATIONS TO MATCH WALL. REPLACE ALL DAMAGED CEILING TILES WITH NEW MATCHING CEILING TILES.

E. SURGE PROTECTION SHALL BE PROVIDED ON ALL FIRE ALARM RELATED COMPONENTS, TO PROTECT FROM TRANSIENT VOLTAGE, INCLUDING BUT NOT LIMITED TO THE FOLLOWING: SIGNALING LINE CIRCUITS (SLC), NOTIFICATION APPLIANCE CIRCUITS (NAC), TELEPHONE LINES, AC POWER CONNECTION.

(#) FIRE ALARM KEYED NOTES

1. INDICATES THE LOCATION OF THE EXISTING FIRE ALARM PANEL IN WORKROOM AD-10.

2. INDICATES THE NEW LOCATION OF THE NEW FIRE ALARM PANEL WITH VOICE EVACUATION AT FRONT OFFICE.

3. THE CONTRACTOR SHALL PROVIDE (2) 2" CONDUITS ROUTED OVERHEAD ABOVE CANOPY WALKWAY AND/OR CEILINGS . ONE CONDUIT IS FOR SPARE AND THE OTHER IS FOR FIRE ALARM CABLE AS INDICATED. PROVIDE PULL STRING AT ALL POINTS.

4. PROVIDE A 12"X12"X8" NEMA4 ENCLOSURE MOUNTED ABOVE CANOPY.

5. PROVIDE (2) 2' UNDERGROUND CONDUITS AND STUB UP TO EXTERIOR NEMA4 ENCLOSURE MOUNTED ABOVE CEILING LEVEL. ONE CONDUIT IS FOR SPARE AND THE OTHER IS FOR FIRE ALARM CABLE AS INDICATED. PROVIDE PULL STRING AT ALL POINTS. PROVIDE PATCH AN REPAIR TO EXISTING CONDITIONS.

6. PROVIDE A NEW 11"X17"X18" CONCRETE UNDERGROUND PULL BOX ON 6" DEEP GRAVEL BASE. PROVIDE WIDE SWEEPING TURNS ON ALL CONDUITS ENTERING AND EXITING BOX AS WELL AS ALL CONDUIT TURNS ALONG ROUTE.

7. PROVIDE (1) 2" FLEXIBLE SEAL-TITE CONDUIT SPANNING THE DISTANCE FROM ONE BUILDING TO THE OTHER.

8. PROVIDE A 12"X12"X8" NEMA4 ENCLOSURE MOUNTED ON THE EXTERIOR WALL ABOVE CEILING HEIGHT.

Not for permitting or construction

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-124972 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/17/2026

PBK

ARCHITECT PBK Architects, Inc.
ANAHEIM PBK.com
2400 E KATELLA AVE, Suite 950
ANAHEIM, CA 92806
P 949-548-5000

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

SCHROEDER ES HVAC UPGRADE & MODERNIZATION

PROJECT ADDRESS:
15151 Columbia Ln
Huntington Beach, CA 92647

100% CONSTRUCTION DOCUMENTS

DSA APPL NO.: ##-##### DSA FILE NO.: 30-43

RELO
A K2 K1
B ADMIN
C
D MPR
RELO

KEY PLAN N
NORTH: PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER STEVENE MUSSER E-19817 Exp.03/31/26 ELECTRICAL STATE OF CALIFORNIA

Architect

LICENSED ARCHITECT Yong Yoo No. C-31162 REN. 10-31-2027 STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
11/14/2025	250376

REVISIONS

No.	Description	Date

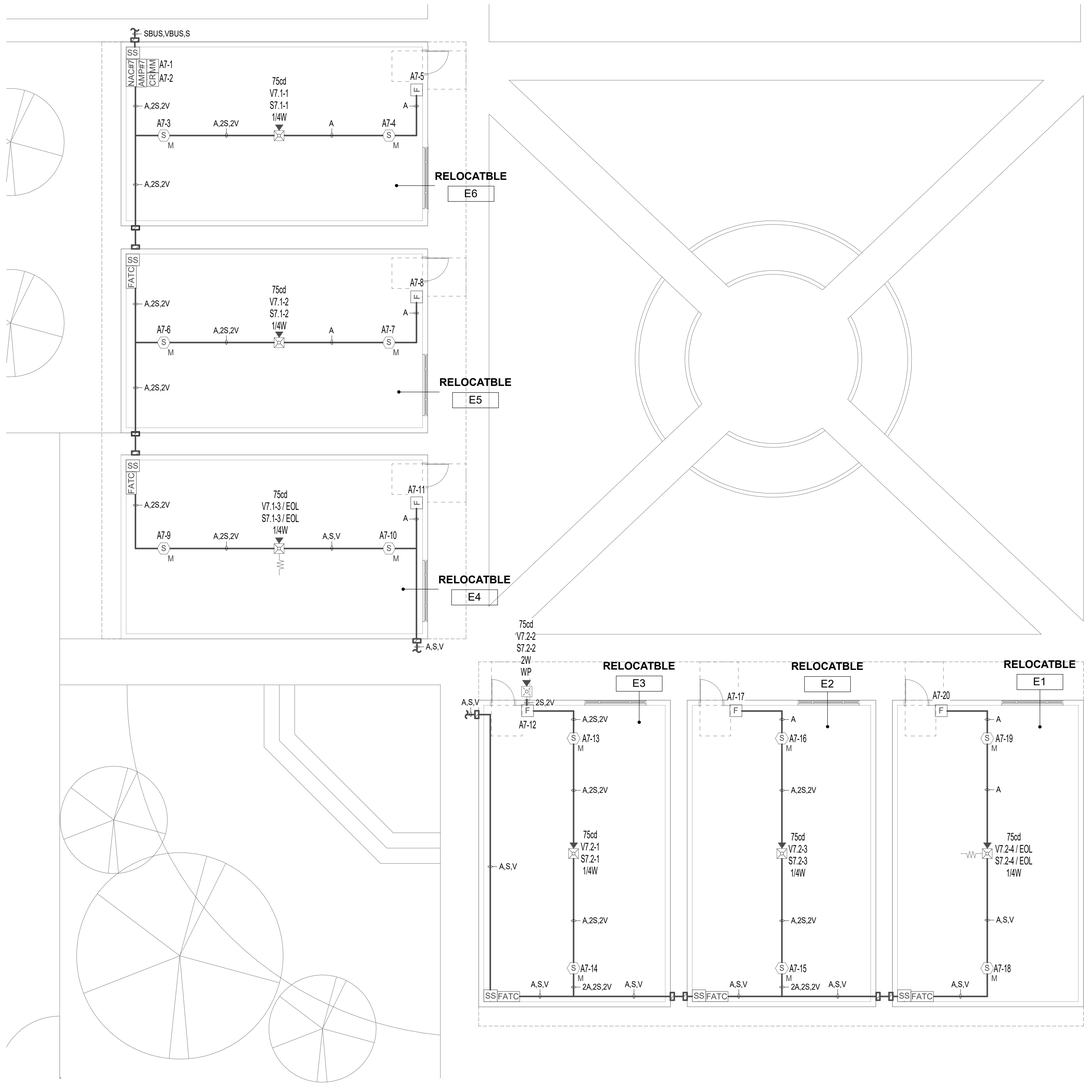
100% CONSTRUCTION DOCUMENTS

FIRE ALARM FLOOR PLANS - CLASSROOMS C & D

This document is for plan review only

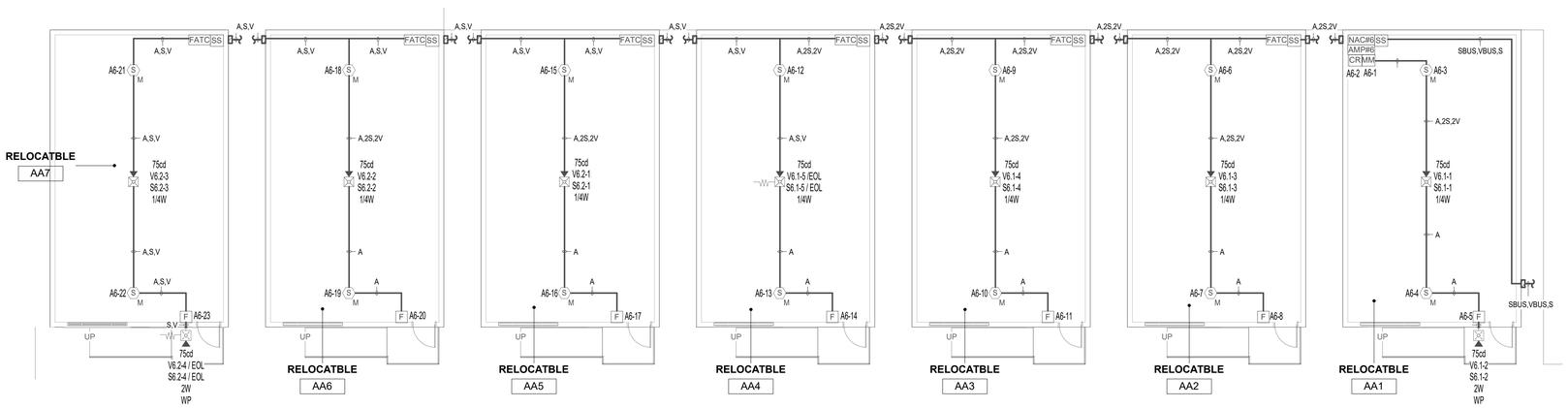
FILE PATH: Z:\Projects\...
2/18/2026 3:09:07 PM

FA2.02C



2 FLOOR PLAN - RELO E1-E6

1/8" = 1'-0"



1 FLOOR PLAN - RELO AA1-AA7

1/8" = 1'-0"

FIRE ALARM GENERAL NOTES

A. THE CONTRACTOR SHALL PROVIDE AND INSTALL A NEW SILENT KNIGHT SERIES FIRE ALARM PANEL WITH VOICE EVACUATION. PROVIDE ALL NEW BACKBOXES, CONDUIT, DEVICES, PULL BOXES, WIRING WHERE INDICATED. LOCATIONS SHOWN ARE APPROXIMATE.

B. THE EXISTING FIRE ALARM SYSTEM DEVICES AND WIRING SHALL REMAIN IN SERVICE AND FULLY FUNCTIONAL THROUGHOUT THE ENTIRETY OF CONSTRUCTION UNTIL COMPLETION. PLACE DUST CAPS ON ALL SMOKE DETECTION DEVICES IN AREAS OF CONSTRUCTION AND REMOVE AT THE END OF EACH WORKDAY.

C. A FIRE WATCH SHALL BE ESTABLISHED AND THE FIRE DEPARTMENT FIRE CODE OFFICIAL SHALL BE NOTIFIED IMMEDIATELY WHENEVER THE FIRE PROTECTION / ALARM SYSTEM IS RENDERED OF SERVICE. A FIRE WATCH SHALL BE STAGED WHENEVER THE BUILDING IS OCCUPIED (PARTIAL OR WHOLE).

D. AFTER THE NEW FIRE ALARM SYSTEM HAS BEEN INSTALLED AND PASSED INSPECTION, THE CONTRACTOR SHALL REMOVE THE EXISTING PANEL, DEVICES, WIRING, CONDUIT, AND BACKBOXES. PLACE WALLPLATES ON ALL UNUSED JUNCTION BOXES AND PAINT TO MATCH EXISTING LOCATIONS TO MATCH WALL. REPLACE ALL DAMAGED CEILING TILES WITH NEW MATCHING CEILING TILES.

E. SURGE PROTECTION SHALL BE PROVIDED ON ALL FIRE ALARM RELATED COMPONENTS, TO PROTECT FROM TRANSIENT VOLTAGE, INCLUDING BUT NOT LIMITED TO THE FOLLOWING: SIGNALING LINE CIRCUITS (SLC), NOTIFICATION APPLIANCE CIRCUITS (NAC), TELEPHONE LINES, AC POWER CONNECTION.

ⓕ FIRE ALARM KEYED NOTES

1. INDICATES THE LOCATION OF THE EXISTING FIRE ALARM PANEL IN WORKROOM AD-10.

2. INDICATES THE NEW LOCATION OF THE NEW FIRE ALARM PANEL WITH VOICE EVACUATION AT FRONT OFFICE.

3. THE CONTRACTOR SHALL PROVIDE (2) 2" CONDUITS ROUTED OVERHEAD ABOVE CANOPY WALKWAY AND/OR CEILINGS . ONE CONDUIT IS FOR SPARE AND THE OTHER IS FOR FIRE ALARM CABLE AS INDICATED. PROVIDE PULL STRING AT ALL POINTS.

4. PROVIDE A 12"X12"X8" NEMA4 ENCLOSURE MOUNTED ABOVE CANOPY.

5. PROVIDE (2) 2" UNDERGROUND CONDUITS AND STUB UP TO EXTERIOR NEMA4 ENCLOSURE MOUNTED ABOVE CEILING LEVEL. ONE CONDUIT IS FOR SPARE AND THE OTHER IS FOR FIRE ALARM CABLE AS INDICATED. PROVIDE PULL STRING AT ALL POINTS. PROVIDE PATCH AN REPAIR TO EXISTING CONDITIONS.

6. PROVIDE A NEW 11"X17"X18" CONCRETE UNDERGROUND PULL BOX ON 6" DEEP GRAVEL BASE. PROVIDE WIDE SWEEPING TURNS ON ALL CONDUITS ENTERING AND EXITING BOX AS WELL AS ALL CONDUIT TURNS ALONG ROUTE.

7. PROVIDE (1) 2" FLEXIBLE SEAL-TITE CONDUIT SPANNING THE DISTANCE FROM ONE BUILDING TO THE OTHER.

8. PROVIDE A 12"X12"X8" NEMA4 ENCLOSURE MOUNTED ON THE EXTERIOR WALL ABOVE CEILING HEIGHT.

NORTH

Not for permitting or construction

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-124972 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/17/2026

PBK

ARCHITECT PBK Architects, Inc.
PBK.com
ANAHEIM
2400 E KATELLA AVE, Suite 950
ANAHEIM, CA 92806
P 949-548-5000

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

SCHROEDER ES HVAC UPGRADE & MODERNIZATION

PROJECT ADDRESS:
15151 Columbia Ln
Huntington Beach, CA 92647

100% CONSTRUCTION DOCUMENTS

DSA APPL NO.: ##-##### DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT EST. 1873

RELO
A K2 K1
B ADMIN
C
D MPR
RELO

KEY PLAN
NORTH: PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER STEVEN C. MOSSER E-19817 Exp. 08-31-26 ELECTRICAL STATE OF CALIFORNIA

Architect

LICENSED ARCHITECT Tong You No. C-31162 RENEW 10-31-2027 STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
11/14/2025	250376

REVISIONS

No.	Description	Date

100% CONSTRUCTION DOCUMENTS

This document is for plan review only

FIRE ALARM FLOOR PLANS - RELOCATABLES

FA2.03

FILE PATH: Z:\Projects\...
2/18/2026 3:09:16 PM

0" 1"

ITEM 1

WALL ASSEMBLY - THE 1, 2, 3 OR 4 HOUR FIRE RATED GYPSUM WALL BOARD/STUD WALL ASSEMBLY SHALL BE CONSTRUCTED OF THE MATERIALS AND IN THE MANNER DESCRIBED IN THE INDIVIDUAL U300 OR U400 SERIES WALL PARTITION DESIGN IN THE UL FIRE RESISTANCE DIRECTORY AND SHALL INCLUDE THE FOLLOWING CONSTRUCTION FEATURES:

A. STUDS - WALL FRAMING MAY CONSIST OF EITHER WOOD STUDS (MAX. 2 HR. RATED ASSEMBLIES) OR STEEL CHANNEL STUDS. WOOD STUDS TO CONSIST OF NOMINAL 2" X 4" LUMBER SPACED IN 18" ON CENTER WITH NOMINAL 2" X 4" LUMBER AND PLATES AND CROSS BRACES. STEEL STUDS TO BE MINIMUM 3-8/8" WIDE BY 1-3/8" DEEP CHANNELS SPACED MAXIMUM 24" ON CENTER.
B. WALLBOARD/GYPSUM - NOMINAL 5/8" THICK, 4' WIDE SQUARE OR TAPERED EDGES. THE GYPSUM WALLBOARDS RYPS, THICKNESS, NUMBER OF LAYERS, FASTENER TYPE AND SHEET ORIENTATION SHALL BE SPECIFIED IN THE INDIVIDUAL U300 OR U400 DESIGN IN THE UL FIRE RESISTANCE DIRECTORY.

MAXIMUM DIAMETER OF OPENINGS IS 13-1/2".

ITEM 2

PIPE OR CONDUIT - NOMINAL 12" IN DIAMETER (OR SMALLER) SCHEDULE 10 (OR HEAVIER), STEEL PIPE NOMINAL 6" IN DIAMETER (OR SMALLER), STEEL CONDUIT NOMINAL 4" IN DIAMETER (OR SMALLER), STEEL ELECTRICAL METALLIC TUBING OR TYPE L (OR HEAVIER), COPPER TUBING NOMINAL 1" IN DIAMETER (OR SMALLER), FLEXIBLE STEEL CONDUIT. WHEN COPPER PIPE OR FLEXIBLE STEEL CONDUIT IS USED, MAXIMUM F RATING OF FIRESTOP SYSTEM (TIEM CONSTRUCTED USING STEEL CHANNEL STUDS). A MAXIMUM OF ONE (1) PIPE OR CONDUIT IS PERMITTED IN THE FIRESTOP SYSTEM. PIPE OR CONDUIT TO BE INSTALLED NEAR CENTER OF STUD CAVITY WIDTH AND TO BE RIGIDLY SUPPORTED IN BOTH SIDES OF WALL ASSEMBLY.

ITEM 3

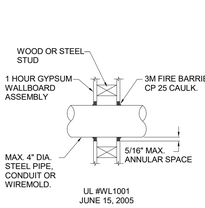
FILL, VOID OR CAVITY MATERIAL, CAULK - CAULK FILL MATERIAL INSTALLED TO COMPLETELY FILL ANNULAR SPACE BETWEEN PIPE OR CONDUIT AND GYPSUM WALLBOARD AND WITH A MINIMUM OF 1" IN DIAMETER BOARD OF CAULK APPLIED TO PERIMETER OF PIPE OR CONDUIT AT ITS EGRESS FROM THE WALL. CAULK INSTALLED SYMMETRICALLY ON BOTH SIDES OF WALL ASSEMBLY. THE HOURLY F RATING OF THE FIRESTOP SYSTEM IS DEPENDENT UPON THE HOURLY FIRE RATING OF THE WALL ASSEMBLY IN WHICH IT IS INSTALLED, AS SHOWN IN THE FOLLOWING TABLE. IN THE HOURLY T RATING OF THE FIRESTOP SYSTEM IS DEPENDENT UPON THE TYPE OR SIZE OF THE PIPE OR CONDUIT AND THE HOURLY FIRE RATING OF THE WALL ASSEMBLY IN WHICH IT IS INSTALLED AS TABULATED BELOW:

MAX PIPE OR CONDUIT DIA. (INCHES)	ANNULAR SPACE (INCHES)	F RATING (HOURS)	T RATING (HOURS)
1	0 TO 3/16	1 OR 2	0 + 1 OR 2
1	1/4 TO 1/2	3 OR 4	3 OR 4
4	0 TO 1/4	1 OR 2	0
6	1/4 TO 1/2	3 OR 4	0
12	3/16 TO 3/8	1 OR 2	0

+WHEN COPPER PIPE IS USED, T RATING IS 0 NOMINAL
MINNESOTA MINING & MFG. CO. - TYPES CP-23 S/L, CP-25 N/S, CP-25 WS, CP-25 WS +, (NOTE: L RATINGS APPLY WHEN THE TYPE CP-25WS+CAULK IS USED)

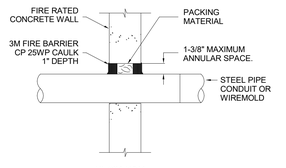
SYSTEM NUMBER: WL1001 (FORMERLY SYSTEM NUMBER 147)
F RATINGS: 1, 2, 3 AND 4 HOUR (SEE ITEMS 2 AND 3)
T RATINGS: 0, 1, 2, 3 AND 4 HOUR (SEE ITEM 3)
L RATING AT AMBIENT: LESS THAN 1 CFM/SQ FT (SEE ITEM 3)

1 THROUGH WALL & FIRE STOP PENETRATION DETAILS
12" = 1'-0"



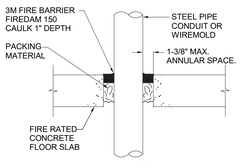
UL #WL1001
JUNE 15, 2005

2 GYPSUM BOARD WALL PENETRATION
12" = 1'-0"



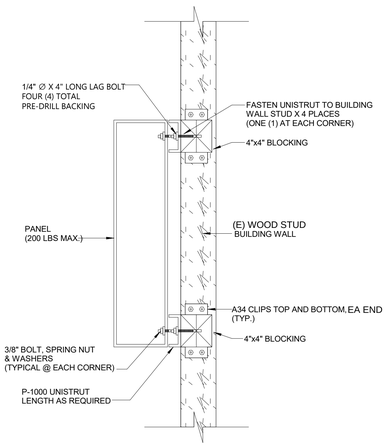
UL #CAJ1044
MARCH 15, 2007

3 CONCRETE WALL PENETRATION
12" = 1'-0"

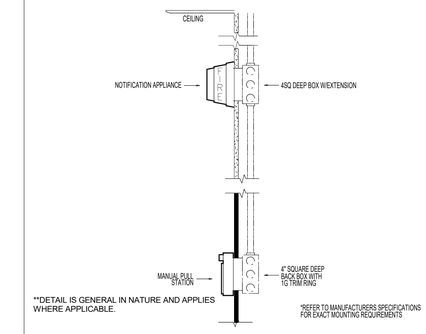


UL #CAJ1017
MARCH 14, 2023

4 CONCRETE FLOOR PENETRATION
12" = 1'-0"



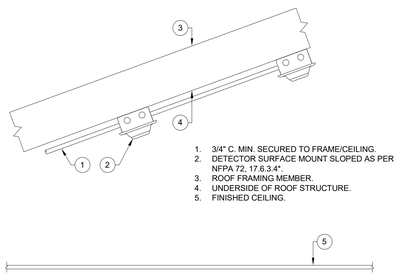
5 SURFACE MOUNT PANEL WOOD FRAME DETAIL
12" = 1'-0"



**DETAIL IS GENERAL IN NATURE AND APPLIES WHERE APPLICABLE.

*REFER TO MANUFACTURERS SPECIFICATIONS FOR EXACT MOUNTING REQUIREMENTS

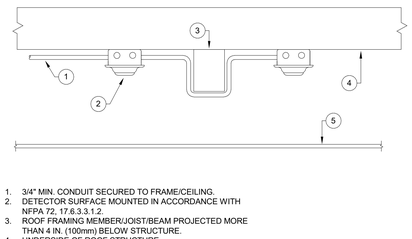
7 DEVICE WALL MOUNT DETAIL
12" = 1'-0"



1. 3/4" C. MIN. SECURED TO FRAME/CEILING.
2. DETECTOR SURFACE MOUNT SLOPED AS PER NFPA 72, 17.6.3.4*.
3. ROOF FRAMING MEMBER.
4. UNDERSIDE OF ROOF STRUCTURE.
5. FINISHED CEILING.

REFERENCE NFPA 72, CHAPTER 17.6.3*
**DETAIL IS GENERAL IN NATURE AND APPLIES WHERE APPLICABLE.

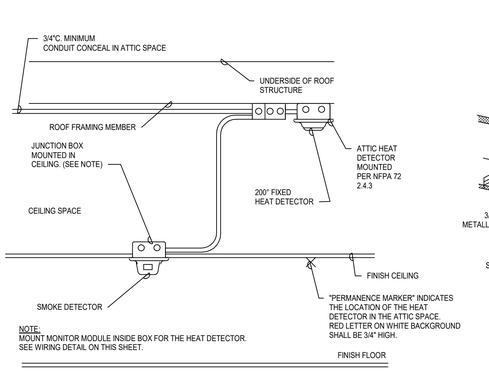
8 ABOVE CEILING SLOPED DETECTOR MOUNTING
12" = 1'-0"



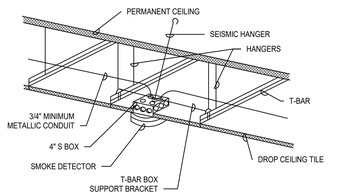
1. 3/4" MIN. CONDUIT SECURED TO FRAME/CEILING.
2. DETECTOR SURFACE MOUNTED IN ACCORDANCE WITH NFPA 72, 17.6.3.3.1 2.
3. ROOF FRAMING MEMBER/JOIST/BEAM PROJECTED MORE THAN 4 IN. (100mm) BELOW STRUCTURE.
4. UNDERSIDE OF ROOF STRUCTURE.
5. FINISHED CEILING.

REFERENCE NFPA 72, CHAPTER 17.6.3.3.1
**DETAIL IS GENERAL IN NATURE AND APPLIES WHERE APPLICABLE.

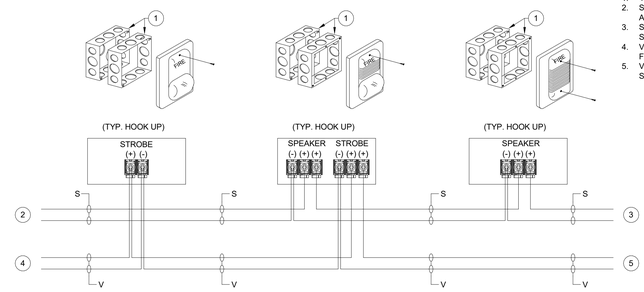
9 PORTABLE ABOVE CEILING DETECTOR MOUNTING DETAIL
12" = 1'-0"



NOTE:
MOUNT MONITOR MODULE INSIDE BOX FOR THE HEAT DETECTOR. SEE WIRING DETAIL ON THIS SHEET.



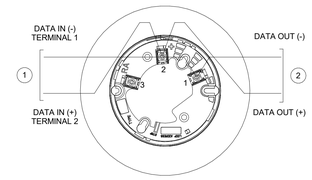
10 DROP CEILING DEVICE INSTALLATION DETAIL
12" = 1'-0"



1. 4S 2-1/8" DEEP W/1-1/2" EXTENSION.
2. SPEAKER CIRCUIT FROM PREVIOUS APPLIANCE, FACP OR POWER SUPPLY.
3. SPEAKER CIRCUIT TO NEXT APPLIANCE, SUPERVISION OR END OF LINE.
4. VISUAL CIRCUIT FROM PREVIOUS APPLIANCE, FACP OR POWER SUPPLY.
5. VISUAL CIRCUIT TO NEXT APPLIANCE, SUPERVISION OR END OF LINE.

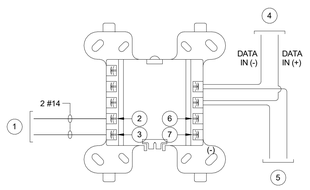
11 SPEAKER/STROBE DETAIL
12" = 1'-0"

1. FROM PREVIOUS ADDRESSABLE DEVICE OR CONTROL PANEL.
2. TO NEXT ADDRESSABLE DEVICE OR RETURN TO CONTROL PANEL.



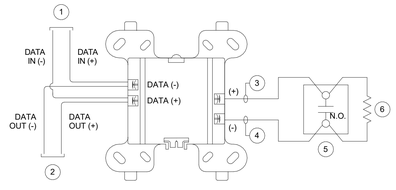
12 DETECTOR BASE WIRING DETAIL
12" = 1'-0"

1. DEVICE TO BE CONTROLLED
2. COMMON
3. NORMALLY CLOSED
4. SLC IN FROM FACP OR PREVIOUS DEVICE
5. SLC OUT TO NEXT DEVICE
6. T4
7. NORMALLY OPEN

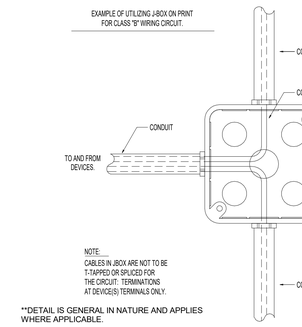


13 MONITOR MODULE DETAIL (TYPICAL)
12" = 1'-0"

1. SLC IN FROM FACP OR PREVIOUS DEVICE
2. SLC OUT TO NEXT DEVICE
3. POSITIVE
4. NEGATIVE
5. MONITORED DEVICE
6. END OF LINE RESISTOR



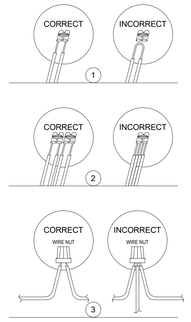
14 RELAY MODULE DETAIL (TYPICAL)
12" = 1'-0"



**DETAIL IS GENERAL IN NATURE AND APPLIES WHERE APPLICABLE.

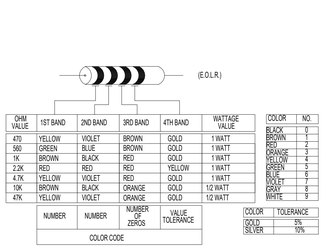
15 WIRE ROUTING DETAIL - JUNCTION BOX
12" = 1'-0"

1. DO NOT LOOP CONDUCTOR INTO TERMINAL. ALWAYS CUT WIRE AND INSERT INTO TERMINAL.
2. ONLY INSTALL TWO (2) CONDUCTORS IN EACH TERMINAL (MAXIMUM). DO NOT INSTALL FOUR (4) CONDUCTORS IN ONE TERMINAL.
3. WHEN USING A WIRE NUT, ONLY CONNECT TWO (2) CONDUCTORS WITH ONE (1) WIRE NUT. (USE AS NEEDED OR ALLOWED)



**DETAIL IS GENERAL IN NATURE AND APPLIES WHERE APPLICABLE.

16 WIRING METHOD DETAIL
12" = 1'-0"



OHM VALUE	1ST BAND	2ND BAND	3RD BAND	4TH BAND	WATTAGE VALUE
470	YELLOW	VIOLET	BROWN	GOLD	1 WATT
560	GREEN	BLUE	BROWN	GOLD	1 WATT
1K	BROWN	BLACK	RED	GOLD	1 WATT
2.2K	RED	RED	RED	YELLOW	1 WATT
4.7K	YELLOW	VIOLET	RED	GOLD	1 WATT
10K	BROWN	BLACK	ORANGE	GOLD	1/2 WATT
47K	YELLOW	VIOLET	ORANGE	GOLD	1/2 WATT

NUMBER	NUMBER	NUMBER OF ZEROS	VALUE TOLERANCE
COLOR CODE			

COLOR	NO.
BLACK	0
BROWN	1
RED	2
ORANGE	3
YELLOW	4
GREEN	5
BLUE	6
VIOLET	7
GRAY	8
WHITE	9

COLOR	TOLERANCE
GOLD	5%
SILVER	10%

17 RESISTOR COLOR CODE
12" = 1'-0"

Not for permitting or construction

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-124972 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/17/2026

PBK

ARCHITECT PBK Architects, Inc.
ANAHEIM PBK.com
2400 E KATELLA AVE, Suite 950
ANAHEIM, CA 92806
P 949-548-5000

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

SCHROEDER ES HVAC UPGRADE & MODERNIZATION

PROJECT ADDRESS:
15151 Columbia Ln
Huntington Beach, CA 92647

100% CONSTRUCTION DOCUMENTS

DSA APPL NO.: ##-##### DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT EST. 1872

RELO
A K2 K1
B ADMIN
C MPR
D
RELO

KEY PLAN
NORTH: PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER STEVEN MULLER E-19817 Exp.03/31/26 ELECTRICAL STATE OF CALIFORNIA

Architect

LICENSED ARCHITECT Yong You No. C-31162 REN. 10-31-2027 STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
11/14/2025	250376

REVISIONS

No.	Description	Date

100% CONSTRUCTION DOCUMENTS

FIRE ALARM DETAILS

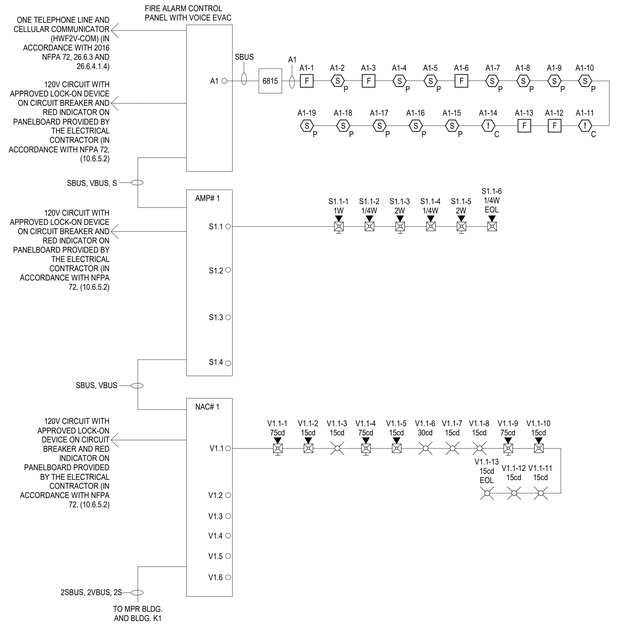
This document is for plan review only

FA6.01

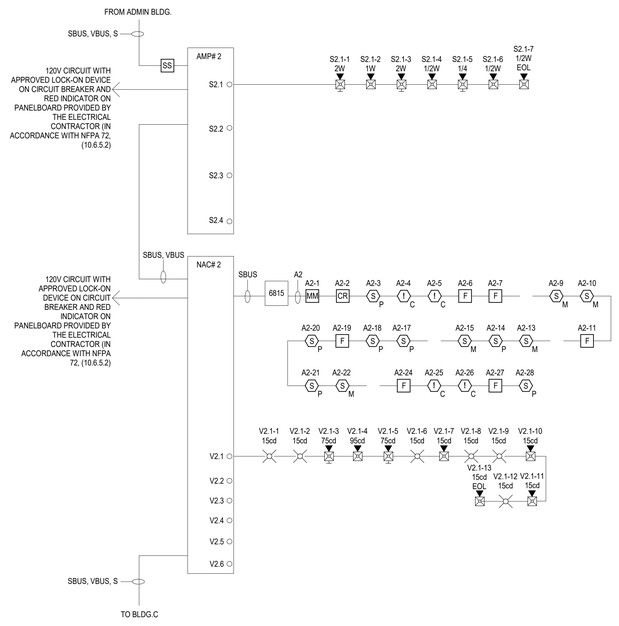
FILE PATH: Z:\Projects\...
2/18/2026 3:09:22 PM

FA7.01 - FIRE ALARM RISER

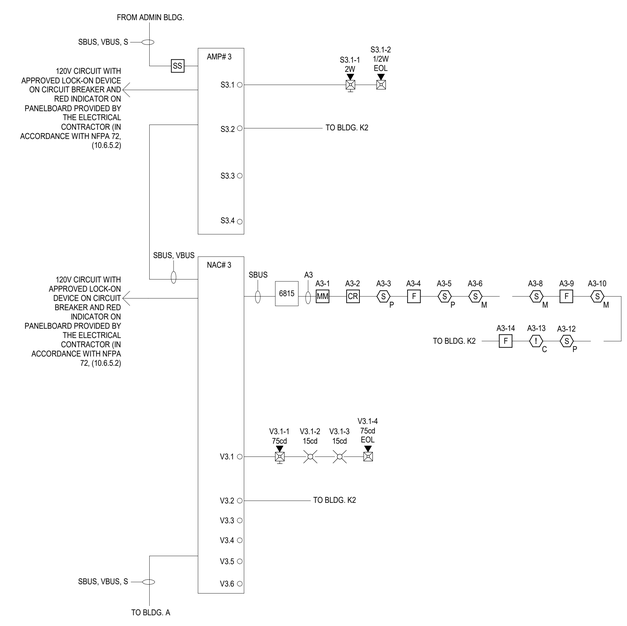
0" 1"



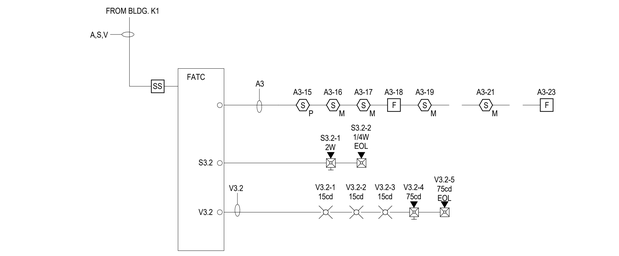
1 ADMIN - FA RISER
1/2" = 1'-0"



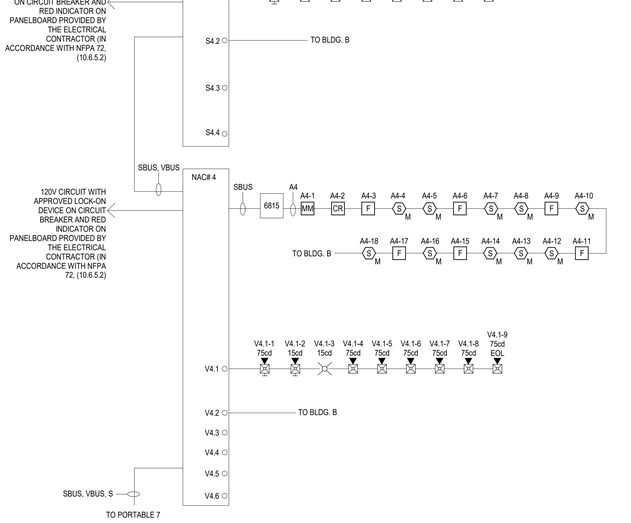
2 MPR - FA RISER
1/2" = 1'-0"



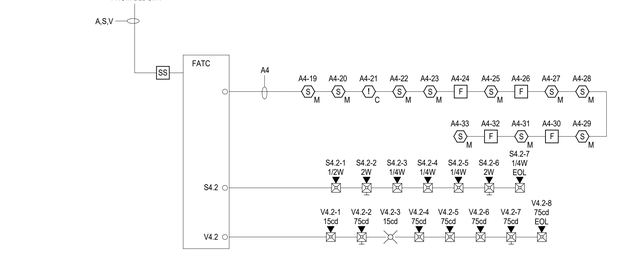
3 BLDG. K1 - FA RISER
1/2" = 1'-0"



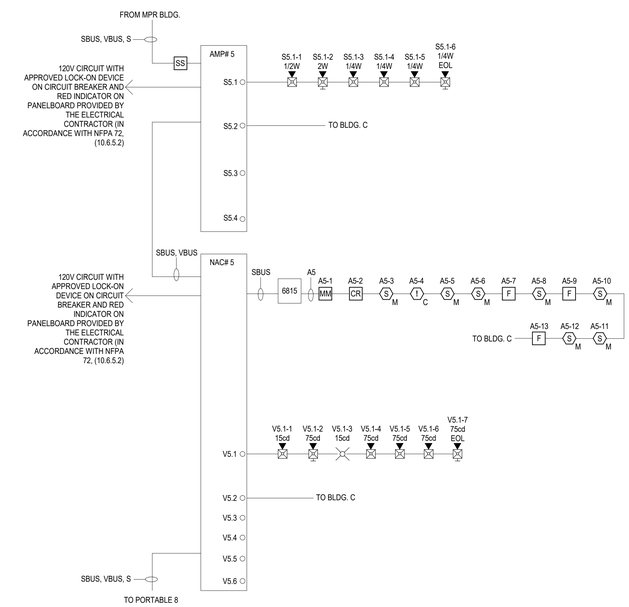
4 BLDG. K2 - FA RISER
1/2" = 1'-0"



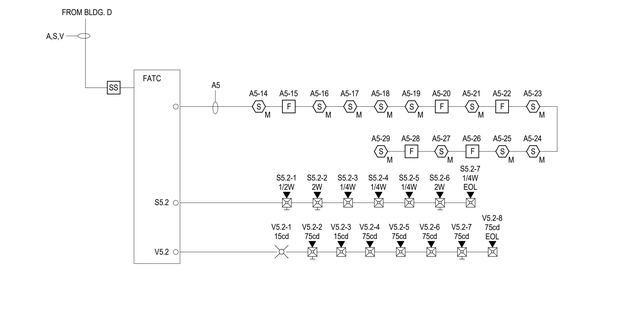
5 BLDG. A - FA RISER
1/2" = 1'-0"



6 BLDG. B - FA RISER
1/2" = 1'-0"



7 BLDG. D - FA RISER
1/2" = 1'-0"



8 BLDG. C - FA RISER
1/2" = 1'-0"

Not for permitting or construction

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-124972 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/17/2026

PBK

ARCHITECT PBK Architects, Inc.
PBK.com
ANAHEIM
2400 E KATELLA AVE, Suite 950
ANAHEIM, CA 92806
P 949-548-5000

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

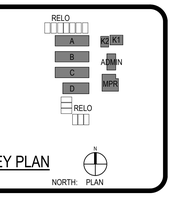
SCHROEDER ES HVAC UPGRADE & MODERNIZATION

PROJECT ADDRESS:
15151 Columbia Ln
Huntington Beach, CA 92647

100% CONSTRUCTION DOCUMENTS

DSA APPL NO.: ##-##### DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT EST. 1872



KEY PLAN
NORTH: PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER STEVEN C. MOSER E-19817 Exp 08/31/26 ELECTRICAL STATE OF CALIFORNIA

Architect

LICENSED ARCHITECT Tong You No. C-31162 RENEW 10-31-2027 STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
11/14/2025	250376

REVISIONS

No.	Description	Date

100% CONSTRUCTION DOCUMENTS

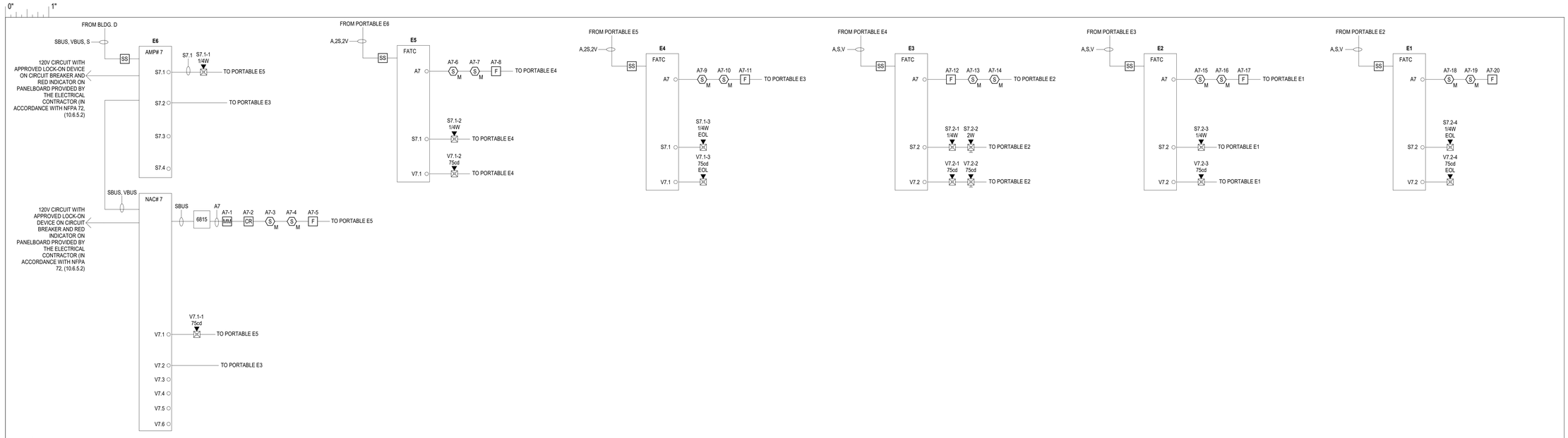
FIRE ALARM RISER

This document is for plan review only

FA7.01

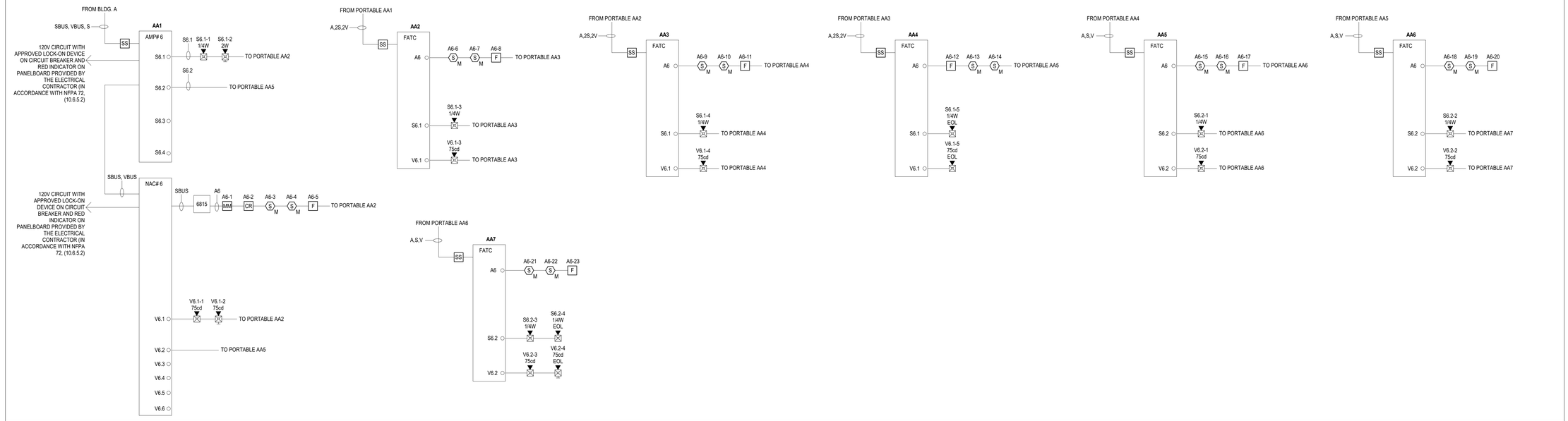
FILE PATH: Z:\Projects\...
2/18/2026 3:09:30 PM

FA7.02 - FIRE ALARM RISER



1 PORTABLES E1-E6 - FA RISER

1/2" = 1'-0"



2 PORTABLES AA1-AA7 - FA RISER

1/2" = 1'-0"

FILE PATH: Z:\Projects\...
2/18/2026 3:09:36 PM

This document is for plan review only

Not for permitting or construction

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-124972 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/17/2026

PBK

ARCHITECT PBK Architects, Inc.
PBK.com
ANAHEIM
2400 E KATELLA AVE, Suite 950
ANAHEIM, CA 92806
P 949-548-5000

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

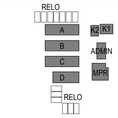
SCHROEDER ES HVAC UPGRADE & MODERNIZATION

PROJECT ADDRESS:
15151 Columbia Ln
Huntington Beach, CA 92647

100% CONSTRUCTION DOCUMENTS

DSA APPL NO.: ##-##### DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT EST. 1872



KEY PLAN
NORTH: PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER
STEVEN C. MUSSELMAN
E-19817
Exp. 09-30-2026
ELECTRICAL
STATE OF CALIFORNIA

Architect

LICENSED ARCHITECT
Tong Yao
No. C-31162
REN. 10-31-2027
STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
11/14/2025	250376

REVISIONS

No.	Description	Date

100% CONSTRUCTION DOCUMENTS

FIRE ALARM RISER

FA7.02

0" 1"

FACP Battery Size Calculations

Location: SCHROEDER ES HVAC UPGRADE & MODERNIZATION

Panel	Quantity		Current per device (Amps)			Standby Current Amps		Alarm Current (Amps)
IFP-2100ECS	1	X	0.230	(Aux Pwr On)	=	0.2300		
IFP-2100ECS	1	X	0.415	(Internal Oper)	=			0.4150
Panel Controllers and Cards:								
Model No.	**Quantity**		**Standby Current**	**Alarm Current**				
IDP-PULL-DA	4	X	0.00035	0.00035	=	0.00140		0.00140
IDP-Photo	12	X	0.00027	0.00324	=	0.00324		0.03888
IDP-Heat	2	X	0.00027	0.00027	=	0.00054		0.00054
6815	1	X	0.07800	0.07800	=	0.07800		0.07800
Model No.	**Quantity**		**Standby Current**	**Alarm Current**				

Total amperage required:	0.313	0.534
Number of Standby Hours required (4, 24, or 60, per NFPA 72)	24	
Amp Hours for Standby (without AC reporting delay)	7.516	
Amp Hours for AC reporting delay	0.96	
0 hrs = 0.00 AH ; 6 hrs = 0.24 AH ; 15 hrs = 0.60 AH ; 24 hrs = 0.96 AH		
Total Amp Hours for Standby	8.476	
Length of alarm operation		0.500
5 min = 0.0833 hrs ; 30 min = 0.5 hrs ; 1 hr or 2 hrs		
Amp Hours for Alarm		0.267
Total Standby and Alarm Amp Hours required		8.743
Battery De-rating Factor		1.25
Battery Amp-Hour Rating required		10.929

The following table shows the max. standby current allowed: When the Aux. Power Output is programmed to shutdown on AC power fault (SW1.4-ON), up to 3.015 Amps is allowed.

Standby Hours	Max. Standby Current (Amps)
4 Hrs	(7AH = 1.272 amps) ; (10AH = 1.872 amps) ; (17.2AH = 3.035 amps)
24 Hrs	(7AH = 0.212 amps) ; (10AH = 0.312 amps) ; (17.2AH = 0.552 amps)
24(a) Hrs	(7AH = 0.202 amps) ; (10AH = 0.302 amps) ; (17.2AH = 0.542 amps)
60 Hrs	(7AH = 0.084 amps) ; (10AH = 0.124 amps) ; (17.2AH = 0.220 amps)
60(b) Hrs	(7AH = 0.074 amps) ; (10AH = 0.114 amps) ; (17.2AH = 0.210 amps)
60(c) Hrs	(7AH = 0.068 amps) ; (10AH = 0.108 amps) ; (17.2AH = 0.204 amps)

(a) AC Reporting Delay set for 6 hrs.: (b) AC Reporting Delay set for 15 hrs.; © AC Reporting Delay set for 24 hrs.

N.A.C. Battery Size Calculations

Location: SCHROEDER ES HVAC UPGRADE & MODERNIZATION

NAC # 1

Device	Quantity		Current per device (Amps)			Standby Current Amps	Alarm Current (Amps)
RPS-1000 (6 Amp)	1	X	0.010	(Aux Pwr On)	=	0.010	
RPS-1000 (6 Amp)	1	X	0.010	(Internal Oper)	=		0.010

NOTIFICATION APPLIANCES:

Model No.	Quantity		Alarm Current			
System Sensor (L-Series)	9	X	0.035	15cd	0.000	0.315
System Sensor (L-Series)	1	X	0.038	30cd	0.000	0.038
System Sensor (L-Series)	3	X	0.087	75cd	0.000	0.261

Total amperage required:	0.010	0.624
Number of Standby Hours required (4, 24, or 60, per NFPA 72)	24	
Amp Hours for Standby (without AC reporting delay)	0.240	
Amp Hours for AC reporting delay	0.96	
0 hrs = 0.00 AH ; 6 hrs = 0.24 AH ; 15 hrs = 0.60 AH ; 24 hrs = 0.96 AH		
Total Amp Hours for Standby	1.200	
Length of alarm operation		0.500
5 min = 0.0833 hrs ; 30 min = 0.5 hrs ; 1 hr or 2 hrs		
Amp Hours for Alarm		0.312
Total Standby and Alarm Amp Hours required		1.512
Battery De-rating Factor		1.25
Battery Amp-Hour Rating required		1.890

The following table shows the max. standby current allowed: When the Aux. Power Output is programmed to shutdown on AC power fault (SW1.4-ON), up to 3.015 Amps is allowed.

Standby Hours	Max. Standby Current (Amps)
4 Hrs	(7AH = 1.272 amps) ; (10AH = 1.872 amps) ; (17.2AH = 3.035 amps)
24 Hrs	(7AH = 0.212 amps) ; (10AH = 0.312 amps) ; (17.2AH = 0.552 amps)
24(a) Hrs	(7AH = 0.202 amps) ; (10AH = 0.302 amps) ; (17.2AH = 0.542 amps)
60 Hrs	(7AH = 0.084 amps) ; (10AH = 0.124 amps) ; (17.2AH = 0.220 amps)
60(b) Hrs	(7AH = 0.074 amps) ; (10AH = 0.114 amps) ; (17.2AH = 0.210 amps)
60(c) Hrs	(7AH = 0.068 amps) ; (10AH = 0.108 amps) ; (17.2AH = 0.204 amps)

(a) AC Reporting Delay set for 6 hrs.: (b) AC Reporting Delay set for 15 hrs.; © AC Reporting Delay set for 24 hrs.

N.A.C. Battery Size Calculations

Location: WILLMORE ES HVAC UPGRADE & MODERNIZATION

NAC # 2

Device	Quantity		Current per device (Amps)			Standby Current Amps	Alarm Current (Amps)
RPS-1000 (6 Amp)	1	X	0.010	(Aux Pwr On)	=	0.0100	
RPS-1000 (6 Amp)	1	X	0.010	(Internal Oper)	=		0.0100

NOTIFICATION APPLIANCES:

Model No.	Quantity		Alarm Current			
System Sensor (L-Series)	8	X	0.038	15cd	0.0000	0.3800
System Sensor (L-Series)	2	X	0.087	75cd	0.0000	0.1740
System Sensor (L-Series)	1	X	0.092	95cd	0.0000	0.0920

DEVICES

Model No.		Standby Current	Alarm Current		
6815	1	X 0.07800	0.07800	0.0780	0.0780
IDP-MONITOR	1	X 0.00040	0.00500	0.0050	0.0050
IDP-RELAY	1	X 0.00030	0.00030	0.0003	0.0003
IDP-FIRE-CO	5	X 0.00030	0.00030	0.0015	0.0015
IDP-PULL-DA	5	X 0.00035	0.00035	0.0018	0.0018
IDP-Heat	4	X 0.00027	0.00027	0.0011	0.0011
IDP-Photo	6	X 0.00027	0.00324	0.0194	0.0194

Total amperage required:	0.117	0.763
Number of Standby Hours required (4, 24, or 60, per NFPA 72)	24	
Amp Hours for Standby (without AC reporting delay)	2.810	
Amp Hours for AC reporting delay	0.96	
0 hrs = 0.00 AH ; 6 hrs = 0.24 AH ; 15 hrs = 0.60 AH ; 24 hrs = 0.96 AH		
Total Amp Hours for Standby	3.770	
Length of alarm operation		0.500
5 min = 0.0833 hrs ; 30 min = 0.5 hrs ; 1 hr or 2 hrs		
Amp Hours for Alarm		0.382
Total Standby and Alarm Amp Hours required		4.151
Battery De-rating Factor		1.25
Battery Amp-Hour Rating required		5.189

The following table shows the max. standby current allowed: When the Aux. Power Output is programmed to shutdown on AC power fault (SW1.4-ON), up to 3.015 Amps is allowed.

Standby Hours	Max. Standby Current (Amps)
4 Hrs	(7AH = 1.272 amps) ; (10AH = 1.872 amps) ; (17.2AH = 3.035 amps)
24 Hrs	(7AH = 0.212 amps) ; (10AH = 0.312 amps) ; (17.2AH = 0.552 amps)
24(a) Hrs	(7AH = 0.202 amps) ; (10AH = 0.302 amps) ; (17.2AH = 0.542 amps)
60 Hrs	(7AH = 0.084 amps) ; (10AH = 0.124 amps) ; (17.2AH = 0.220 amps)
60(b) Hrs	(7AH = 0.074 amps) ; (10AH = 0.114 amps) ; (17.2AH = 0.210 amps)
60(c) Hrs	(7AH = 0.068 amps) ; (10AH = 0.108 amps) ; (17.2AH = 0.204 amps)

(a) AC Reporting Delay set for 6 hrs.: (b) AC Reporting Delay set for 15 hrs.; © AC Reporting Delay set for 24 hrs.

N.A.C. Battery Size Calculations

Location: WILLMORE ES HVAC UPGRADE & MODERNIZATION

NAC # 3

Device	Quantity		Current per device (Amps)			Standby Current Amps	Alarm Current (Amps)
RPS-1000 (6 Amp)	1	X	0.010	(Aux Pwr On)	=	0.0100	
RPS-1000 (6 Amp)	1	X	0.010	(Internal Oper)	=		0.0100

NOTIFICATION APPLIANCES:

Model No.	Quantity		Alarm Current			
System Sensor (L-Series)	5	X	0.038	15cd	0.0000	0.1900
System Sensor (L-Series)	4	X	0.087	75cd	0.0000	0.3480

DEVICES

Model No.		Standby Current	Alarm Current		
6815	1	X 0.07800	0.07800	0.0780	0.0780
IDP-MONITOR	1	X 0.00040	0.00500	0.0050	0.0050
IDP-RELAY	1	X 0.00030	0.00030	0.0003	0.0003
IDP-FIRE-CO	7	X 0.00030	0.00030	0.0021	0.0021
IDP-PULL-DA	5	X 0.00035	0.00035	0.0018	0.0018
IDP-Heat	1	X 0.00027	0.00027	0.0003	0.0003
IDP-Photo	4	X 0.00027	0.00324	0.0130	0.0130

Total amperage required:	0.110	0.649
Number of Standby Hours required (4, 24, or 60, per NFPA 72)	24	
Amp Hours for Standby (without AC reporting delay)	2.649	
Amp Hours for AC reporting delay	0.96	
0 hrs = 0.00 AH ; 6 hrs = 0.24 AH ; 15 hrs = 0.60 AH ; 24 hrs = 0.96 AH		
Total Amp Hours for Standby	3.609	
Length of alarm operation		0.500
5 min = 0.0833 hrs ; 30 min = 0.5 hrs ; 1 hr or 2 hrs		
Amp Hours for Alarm		0.324
Total Standby and Alarm Amp Hours required		3.933
Battery De-rating Factor		1.25
Battery Amp-Hour Rating required		4.917

The following table shows the max. standby current allowed: When the Aux. Power Output is programmed to shutdown on AC power fault (SW1.4-ON), up to 3.015 Amps is allowed.

Standby Hours	Max. Standby Current (Amps)
4 Hrs	(7AH = 1.272 amps) ; (10AH = 1.872 amps) ; (17.2AH = 3.035 amps)
24 Hrs	(7AH = 0.212 amps) ; (10AH = 0.312 amps) ; (17.2AH = 0.552 amps)
24(a) Hrs	(7AH = 0.202 amps) ; (10AH = 0.302 amps) ; (17.2AH = 0.542 amps)
60 Hrs	(7AH = 0.084 amps) ; (10AH = 0.124 amps) ; (17.2AH = 0.220 amps)
60(b) Hrs	(7AH = 0.074 amps) ; (10AH = 0.114 amps) ; (17.2AH = 0.210 amps)
60(c) Hrs	(7AH = 0.068 amps) ; (10AH = 0.108 amps) ; (17.2AH = 0.204 amps)

(a) AC Reporting Delay set for 6 hrs.: (b) AC Reporting Delay set for 15 hrs.; © AC Reporting Delay set for 24 hrs.

N.A.C. Battery Size Calculations

Location: WILLMORE ES HVAC UPGRADE & MODERNIZATION

NAC # 4

Device	Quantity		Current per device (Amps)			Standby Current Amps	Alarm Current (Amps)
RPS-1000 (6 Amp)	1	X	0.010	(Aux Pwr On)	=	0.0100	
RPS-1000 (6 Amp)	1	X	0.010	(Internal Oper)	=		0.0100

NOTIFICATION APPLIANCES:

Model No.	Quantity		Alarm Current			
System Sensor (L-Series)	4	X	0.038	15cd	0.0000	0.1520
System Sensor (L-Series)	13	X	0.087	75cd	0.0000	1.1310

DEVICES

Model No.		Standby Current	Alarm Current		
6815	1	X 0.07800	0.07800	0.0780	0.0780
IDP-MONITOR	1	X 0.00040	0.00500	0.0050	0.0050
IDP-RELAY	1	X 0.00030	0.00030	0.0003	0.0003
IDP-FIRE-CO	20	X 0.00030	0.00030	0.0060	0.0060
IDP-PULL-DA	10	X 0.00035	0.00035	0.0035	0.0035
IDP-Heat	1	X 0.00027	0.00027	0.0003	0.0003

Total amperage required:	0.103	1.366
Number of Standby Hours required (4, 24, or 60, per NFPA 72)	24	
Amp Hours for Standby (without AC reporting delay)	2.474	
Amp Hours for AC reporting delay	0.96	
0 hrs = 0.00 AH ; 6 hrs = 0.24 AH ; 15 hrs = 0.60 AH ; 24 hrs = 0.96 AH		
Total Amp Hours for Standby	3.434	
Length of alarm operation		0.500
5 min = 0.0833 hrs ; 30 min = 0.5 hrs ; 1 hr or 2 hrs		
Amp Hours for Alarm		0.693
Total Standby and Alarm Amp Hours required		4.127
Battery De-rating Factor		1.25
Battery Amp-Hour Rating required		5.158

The following table shows the max. standby current allowed: When the Aux. Power Output is programmed to shutdown on AC power fault (SW1.4-ON), up to 3.015 Amps is allowed.

Standby Hours	Max. Standby Current (Amps)
4 Hrs	(7AH = 1.272 amps) ; (10AH = 1.872 amps) ; (17.2AH = 3.035 amps)
24 Hrs	(7AH = 0.212 amps) ; (10AH = 0.312 amps) ; (17.2AH = 0.552 amps)
24(a) Hrs	(7AH = 0.202 amps) ; (10AH = 0.302 amps) ; (17.2AH = 0.542 amps)
60 Hrs	(7AH = 0.084 amps) ; (10AH = 0.124 amps) ; (17.2AH = 0.220 amps)
60(b) Hrs	(7AH = 0.074 amps) ; (10AH = 0.114 amps) ; (17.2AH = 0.210 amps)
60(c) Hrs	(7AH = 0.068 amps) ; (10AH = 0.108 amps) ; (17.2AH = 0.204 amps)

(a) AC Reporting Delay set for 6 hrs.: (b) AC Reporting Delay set for 15 hrs.; © AC Reporting Delay set for 24 hrs.

N.A.C. Battery Size Calculations

Location: WILLMORE ES HVAC UPGRADE & MODERNIZATION

NAC # 5

Device	Quantity		Current per device (Amps)			Standby Current Amps	Alarm Current (Amps)
RPS-1000 (6 Amp)	1	X	0.010	(Aux Pwr On)	=	0.0100	
RPS-1000 (6 Amp)	1	X	0.010	(Internal Oper)	=		0.0100

NOTIFICATION APPLIANCES:

Model No.	Quantity		Alarm Current			
System Sensor (L-Series)	4	X	0.038	15cd	0.0000	0.1520
System Sensor (L-Series)	11	X	0.087	75cd	0.0000	0.9570

DEVICES

Model No.		Standby Current	Alarm Current		
6815	1	X 0.07800	0.07800	0.0780	0.0780
IDP-MONITOR	1	X 0.00040	0.00500	0.0050	0.0050
IDP-RELAY	1	X 0.00030	0.00030	0.0003	0.0003
IDP-FIRE-CO	18	X 0.00030	0.00030	0.0054	0.0054
IDP-PULL-DA	8	X 0.00035	0.00035	0.0028	0.0028
IDP-Heat	1	X 0.00027	0.00027	0.0003	0.0003

Total amperage required:	0.102	1.211
Number of Standby Hours required (4, 24, or 60, per NFPA 72)	24	
Amp Hours for Standby (without AC reporting delay)	2.442	
Amp Hours for AC reporting delay	0.96	
0 hrs = 0.00 AH ; 6 hrs = 0.24 AH ; 15 hrs = 0.60 AH ; 24 hrs = 0.96 AH		
Total Amp Hours for Standby	3.402	
Length of alarm operation		0.500
5 min = 0.0833 hrs ; 30 min = 0.5 hrs ; 1 hr or 2 hrs		
Amp Hours for Alarm		0.605
Total Standby and Alarm Amp Hours required		4.008
Battery De-rating Factor		1.25
Battery Amp-Hour Rating required		5.010

The following table shows the max. standby current allowed: When the Aux. Power Output is programmed to shutdown on AC power fault (SW1.4-ON), up to 3.015 Amps is allowed.

Standby Hours	Max. Standby Current (Amps)
4 Hrs	(7AH = 1.272 amps) ; (10AH = 1.872 amps) ; (17.2AH = 3.035 amps)
24 Hrs	(7AH = 0.212 amps) ; (10AH = 0.312 amps) ; (17.2AH = 0.552 amps)
24(a) Hrs	(7AH = 0.202 amps) ; (10AH = 0.302 amps) ; (17.2AH = 0.542 amps)
60 Hrs	(7AH = 0.084 amps) ; (10AH = 0.124 amps) ; (17.2AH = 0.220 amps)
60(b) Hrs	(7AH = 0.074 amps) ; (10AH = 0.114 amps) ; (17.2AH = 0.210 amps)
60(c) Hrs	(7AH = 0.068 amps) ; (10AH = 0.108 amps) ; (17.2AH = 0.204 amps)

(a) AC Reporting Delay set for 6 hrs.: (b) AC Reporting Delay set for 15 hrs.; © AC Reporting Delay set for 24 hrs.

N.A.C. Battery Size Calculations

Location: WILLMORE ES HVAC UPGRADE & MODERNIZATION

NAC # 6

Device	Quantity		Current per device (Amps)			Standby Current Amps	Alarm Current (Amps)
RPS-1000 (6 Amp)	1	X	0.010	(Aux Pwr On)	=	0.0100	
RPS-1000 (6 Amp)	1	X	0.010	(Internal Oper)	=		0.0100

NOTIFICATION APPLIANCES:

Model No.	Quantity		Alarm Current			
System Sensor (L-Series)	8	X	0.087	75cd	0.0000	0.6960

DEVICES

Model No.		Standby Current	Alarm Current		
6815	1	X 0.07800	0.07800	0.0780	0.0780
IDP-MONITOR	1	X 0.00040	0.00500	0.0050	0.0050
IDP-RELAY	1	X 0.00030	0.00030	0.0003	0.0003
IDP-FIRE-CO	14	X 0.00030	0.00030	0.0042	0.0042
IDP-PULL-DA	7	X 0.00035	0.00035	0.0025	0.0025

Total amperage required:	0.100	0.790
Number of Standby Hours required (4, 24, or 60, per NFPA 72)	24	
Amp Hours for Standby (without AC reporting delay)	2.399	
Amp Hours for AC reporting delay	0.96	
0 hrs = 0.00 AH ; 6 hrs = 0.24 AH ; 15 hrs = 0.60 AH ; 24 hrs = 0.96 AH		
Total Amp Hours for Standby	3.359	
Length of alarm operation		0.500
5 min = 0.0833 hrs ; 30 min = 0.5 hrs ; 1 hr or 2 hrs		
Amp Hours for Alarm		0.398
Total Standby and Alarm Amp Hours required		3.757
Battery De-rating Factor		1.25
Battery Amp-Hour Rating required		4.696

The following table shows the max. standby current allowed: When the Aux. Power Output is programmed to shutdown on AC power fault (SW1.4-ON), up to 3.015 Amps is allowed.

Standby Hours	Max. Standby Current (Amps)
4 Hrs	(7AH = 1.272 amps) ; (10AH = 1.872 amps) ; (17.2AH = 3.035 amps)
24 Hrs	(7AH = 0.212 amps) ; (10AH = 0.312 amps) ; (17.2AH = 0.552 amps)
24(a) Hrs	(7AH = 0.202 amps) ; (10AH = 0.302 amps) ; (17.2AH = 0.542 amps)
60 Hrs	(7AH = 0.084 amps) ; (10AH = 0.124 amps) ; (17.2AH = 0.220 amps)
60(b) Hrs	(7AH = 0.074 amps) ; (10AH = 0.114 amps) ; (17.2AH = 0.210 amps)
60(c) Hrs	(7AH = 0.068 amps) ; (10AH = 0.108 amps) ; (17.2AH = 0.204 amps)

(a) AC Reporting Delay set for 6 hrs.: (b) AC Reporting Delay set for 15 hrs.; © AC Reporting Delay set for 24 hrs.

N.A.C. Battery Size Calculations

Location: WILLMORE ES HVAC UPGRADE & MODERNIZATION

NAC # 7

Device	Quantity		Current per device (Amps)			Standby Current Amps	Alarm Current (Amps)
RPS-1000 (6 Amp)	1	X	0.010	(Aux Pwr On)	=	0.0100	
RPS-1000 (6 Amp)	1	X	0.010	(Internal Oper)	=		0.0100

NOTIFICATION APPLIANCES:

Model No.	Quantity		Alarm Current			
System Sensor (L-Series)	7	X	0.087	75cd	0.0000	0.6090

DEVICES

Model No.		Standby Current	Alarm Current		
6815	1	X 0.07800	0.07800	0.0780	0.0780
IDP-MONITOR	1	X 0.00040	0.00500	0.0050	0.0050
IDP-RELAY	1	X 0.00030	0.00030	0.0003	0.0003
IDP-FIRE-CO	14	X 0.00030	0.00030	0.0042	0.0042
IDP-PULL-DA	7	X 0.00035	0.00035	0.0025	0.0025

Total amperage required:	0.100	0.709
Number of Standby Hours required (4, 24, or 60, per NFPA 72)	24	
Amp Hours for Standby (without AC reporting delay)	2.399	
Amp Hours for AC reporting delay	0.96	
0 hrs = 0.00 AH ; 6 hrs = 0.24 AH ; 15 hrs = 0.60 AH ; 24 hrs = 0.96 AH		
Total Amp Hours for Standby	3.359	
Length of alarm operation		0.500
5 min = 0.0833 hrs ; 30 min = 0.5 hrs ; 1 hr or 2 hrs		
Amp Hours for Alarm		0.354
Total Standby and Alarm Amp Hours required		3.713
Battery De-rating Factor		1.25
Battery Amp-Hour Rating required		4.642

The following table shows the max. standby current allowed: When the Aux. Power Output is programmed to shutdown on AC power fault (SW1.4-ON), up to 3.015 Amps is allowed.

Standby Hours	Max. Standby Current (Amps)
4 Hrs	(7AH = 1.272 amps) ; (10AH = 1.872 amps) ; (17.2AH = 3.035 amps)
24 Hrs	(7AH = 0.212 amps) ; (10AH = 0.312 amps) ; (17.2AH = 0.552 amps)
24(a) Hrs	(7AH = 0.202 amps) ; (10AH = 0.302 amps) ; (17.2AH = 0.542 amps)
60 Hrs	(7AH = 0.084 amps) ; (10AH = 0.124 amps) ; (17.2AH = 0.220 amps)
60(b) Hrs	(7AH = 0.074 amps) ; (10AH = 0.114 amps) ; (17.2AH = 0.210 amps)
60(c) Hrs	(7AH = 0.068 amps) ; (10AH = 0.108 amps) ; (17.2AH = 0.204 amps)

(a) AC Reporting Delay set for 6 hrs.: (b) AC Reporting Delay set for 15 hrs.; © AC Reporting Delay set for 24 hrs.

NAC-A1	Circuit V1.1			
mA		Qty.	mA	cd Rating
0.035	X	8	0.280	15cd
0.038	X	1	0.038	30cd
0.087	X	3	0.261	75cd
Total mA =			0.579	

Calculations:	
1. Approx. Length of Wire Run (Ft):	327
2. Calculated 15% Wire Drop Per Run:	49
3. Approx. Total Length of Wire Run (Ft):	376.05
4. Suggested Wire Gauge:	12
5. Starting Voltage:	20.4
6. Voltage at End of Run:	**19.7**
7. Voltage Drop:	0.7
8. Percentage in Drop:	3.5
9. Volts above minimum voltage:	3.7

NAC-A2	Circuit V2.1			
mA		Qty.	mA	cd Rating
0.087	X	10	0.870	15cd
0.222	X	2	0.444	75cd
0.292	X	1	0.292	95cd
Total mA =			1.606	

Calculations:	
1. Approx. Length of Wire Run (Ft):	409
2. Calculated 15% Wire Drop Per Run:	61
3. Approx. Total Length of Wire Run (Ft):	470.35
4. Suggested Wire Gauge:	12
5. Starting Voltage:	20.4
6. Voltage at End of Run:	**17.9**
7. Voltage Drop:	2.5
8. Percentage in Drop:	12.2
9. Volts above minimum voltage:	1.9

NAC-A3	Circuit V3.1			
mA		Qty.	mA	cd Rating
0.035	X	2	0.070	15cd
0.087	X	2	0.174	75cd
Total mA =			0.244	

Calculations:	
1. Approx. Length of Wire Run (Ft):	150
2. Calculated 15% Wire Drop Per Run:	23
3. Approx. Total Length of Wire Run (Ft):	172.5
4. Suggested Wire Gauge:	12
5. Starting Voltage:	20.4
6. Voltage at End of Run:	**20.3**
7. Voltage Drop:	0.1
8. Percentage in Drop:	0.7
9. Volts above minimum voltage:	4.3

NAC-A3	Circuit V3.2			
mA		Qty.	mA	cd Rating
0.035	X	3	0.105	15cd
0.087	X	2	0.174	75cd
Total mA =			0.279	

Calculations:	
1. Approx. Length of Wire Run (Ft):	392
2. Calculated 15% Wire Drop Per Run:	58.8
3. Approx. Total Length of Wire Run (Ft):	450.8
4. Suggested Wire Gauge:	12
5. Starting Voltage:	20.4
6. Voltage at End of Run:	**20.0**
7. Voltage Drop:	0.4
8. Percentage in Drop:	2.0
9. Volts above minimum voltage:	4.0

NAC-A4	Circuit V4.1			
mA		Qty.	mA	cd Rating
0.035	X	2	0.070	15cd
0.087	X	7	0.609	75cd
Total mA =			0.679	

Calculations:	
1. Approx. Length of Wire Run (Ft):	351
2. Calculated 15% Wire Drop Per Run:	53
3. Approx. Total Length of Wire Run (Ft):	403.65
4. Suggested Wire Gauge:	12
5. Starting Voltage:	20.4
6. Voltage at End of Run:	**19.5**
7. Voltage Drop:	0.9
8. Percentage in Drop:	4.4
9. Volts above minimum voltage:	3.5

NAC-A4	Circuit V4.2			
mA		Qty.	mA	cd Rating
0.035	X	2	0.070	15cd
0.087	X	6	0.522	75cd
Total mA =			0.592	

Calculations:	
1. Approx. Length of Wire Run (Ft):	570
2. Calculated 15% Wire Drop Per Run:	85.5
3. Approx. Total Length of Wire Run (Ft):	655.5
4. Suggested Wire Gauge:	12
5. Starting Voltage:	20.4
6. Voltage at End of Run:	**19.1**
7. Voltage Drop:	1.3
8. Percentage in Drop:	6.3
9. Volts above minimum voltage:	3.1

Not for permitting or construction

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-124972 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/17/2026

PBK

ARCHITECT PBK Architects, Inc.
ANAHEIM
2400 E KATELLA AVE, Suite 950
ANAHEIM, CA 92806
P 949-548-5000

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

SCHROEDER ES HVAC UPGRADE & MODERNIZATION

PROJECT ADDRESS:
15151 Columbia Ln
Huntington Beach, CA 92647

100% CONSTRUCTION DOCUMENTS

DSA APPL NO.: ##-##### DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT
EST. 1873

RELO
A
B
C
D
K2 K1
ADMIN
MPR
RELO

KEY PLAN
NORTH: PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER
STEVEN C. MOSER
E-19817
Exp.03/31/26
ELECTRICAL
STATE OF CALIFORNIA

Architect

LICENSED ARCHITECT
Tong You
No. C-31162
REN. 10-31-2027
STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT
DATE 11/14/2025
PROJECT NUMBER 250376

REVISIONS

No.	Description	Date

100% CONSTRUCTION DOCUMENTS

FIRE ALARM CALCULATIONS

This document is for plan review only

FA8.01

FILE PATH: Z:\Projects\...
2/18/2026 3:09:43 PM

FA8.02 - FIRE ALARM CALCULATIONS

0" 1"

NAC-A5	Circuit V5.1			
mA		Qty.	mA	cd Rating
0.035	X	2	0.070	15cd
0.087	X	5	0.435	75cd
Total mA =			0.505	

Calculations:	
1. Approx. Length of Wire Run (Ft):	305
2. Calculated 15% Wire Drop Per Run:	46
3. Approx. Total Length of Wire Run (Ft):	350.75
4. Suggested Wire Gauge:	12
5. Starting Voltage:	20.4
6. Voltage at End of Run:	**19.8**
7. Voltage Drop:	0.6
8. Percentage in Drop:	2.9
9. Volts above minimum voltage:	3.8

NAC-A5	Circuit V5.2			
mA		Qty.	mA	cd Rating
0.035	X	2	0.070	15cd
0.087	X	6	0.522	75cd
Total mA =			0.592	

Calculations:	
1. Approx. Length of Wire Run (Ft):	520
2. Calculated 15% Wire Drop Per Run:	78
3. Approx. Total Length of Wire Run (Ft):	598
4. Suggested Wire Gauge:	12
5. Starting Voltage:	20.4
6. Voltage at End of Run:	**19.2**
7. Voltage Drop:	1.2
8. Percentage in Drop:	5.7
9. Volts above minimum voltage:	3.2

NAC-A6	Circuit V6.1			
mA		Qty.	mA	cd Rating
0.087	X	5	0.435	75cd
Total mA =			0.435	

Calculations:	
1. Approx. Length of Wire Run (Ft):	386
2. Calculated 15% Wire Drop Per Run:	58
3. Approx. Total Length of Wire Run (Ft):	443.9
4. Suggested Wire Gauge:	12
5. Starting Voltage:	20.4
6. Voltage at End of Run:	**19.8**
7. Voltage Drop:	0.6
8. Percentage in Drop:	3.1
9. Volts above minimum voltage:	3.8

NAC-A6	Circuit V6.2			
mA		Qty.	mA	cd Rating
0.087	X	4	0.348	75cd
Total mA =			0.348	

Calculations:	
1. Approx. Length of Wire Run (Ft):	395
2. Calculated 15% Wire Drop Per Run:	59.25
3. Approx. Total Length of Wire Run (Ft):	454.25
4. Suggested Wire Gauge:	12
5. Starting Voltage:	20.4
6. Voltage at End of Run:	**19.9**
7. Voltage Drop:	0.5
8. Percentage in Drop:	2.6
9. Volts above minimum voltage:	3.9

NAC-A7	Circuit V7.1			
mA		Qty.	mA	cd Rating
0.087	X	3	0.261	75cd
Total mA =			0.261	

Calculations:	
1. Approx. Length of Wire Run (Ft):	258
2. Calculated 15% Wire Drop Per Run:	39
3. Approx. Total Length of Wire Run (Ft):	297.85
4. Suggested Wire Gauge:	12
5. Starting Voltage:	20.4
6. Voltage at End of Run:	**20.1**
7. Voltage Drop:	0.3
8. Percentage in Drop:	1.3
9. Volts above minimum voltage:	4.1

NAC-A7				
mA		Qty.	mA	cd Rating
0.087	X	4	0.348	75cd
Total mA =			0.348	

Calculations:	
1. Approx. Length of Wire Run (Ft):	415
2. Calculated 15% Wire Drop Per Run:	62.25
3. Approx. Total Length of Wire Run (Ft):	477.25
4. Suggested Wire Gauge:	12
5. Starting Voltage:	20.4
6. Voltage at End of Run:	**19.9**
7. Voltage Drop:	0.5
8. Percentage in Drop:	2.7
9. Volts above minimum voltage:	3.9

AMP# 1

SPEAKER CIRCUIT LOAD CALCULATION

SPEAKER CIRCUIT DESCRIPTION	PANEL CIRCUIT NUMBER	WIRE GAUGE (16, 14, 12)	CIRCUIT VOLTAGE (25 OR 70 VRMS)	APPLIANCES QUANTITIES / TAP VALUES: SPEAKER TAPPED AT 0.25 Watts	SPEAKER TAPPED AT 0.5 Watts	SPEAKER TAPPED AT 1 Watts	SPEAKER TAPPED AT 2 Watts	SPEAKER TAPPED AT 4 Watts	SPEAKER TAPPED AT 8 Watts	SPEAKER TAPPED AT 15 Watts	TOTAL CIRCUIT LOAD (WATTS)	ESTIMATED CIRCUIT LENGTH (FEET)	ACTUAL WIRE/LOSS (dB)	MAXIMUM ALLOWABLE CKT. LENGTH (FEET)	TOTAL CIRCUIT RESISTANCE (OHMS)
SA 1	CKT 1	12 awg	70 vrms	4	1	0	0	1	0	0	5.75 Watts	350 ft	-0.01 dB	91,500 ft.	1.4 Ohms
SA 1	CKT 1	12 awg	70 vrms	4	1	0	0	1	0	0	5.75 Watts	350 ft	-0.01 dB	91,500 ft.	1.4 Ohms
				Appliance Summary							Total Load (Watts)				
				8	2	0	0	2	0	0	11.50				

NOTE:
LUMP SUM METHOD WAS USED TO CALCULATE MAXIMUM ALLOWABLE CIRCUIT LENGTH. THIS METHOD ALLOWS FOR A SMALL MARGIN OF SAFETY, TAKING INTO CONSIDERATION THE ACTUAL INSTALLED CIRCUIT ROUTING MAY DIFFER FROM WHAT IS SHOWN ON THE SHOP DRAWINGS. IF THE ACTUAL CIRCUIT LENGTH IS GOING TO EXCEED THE MAXIMUM ALLOWABLE CIRCUIT LENGTH, CONTACT YOUR LOCAL SIMPLEX BRANCH.

Wire Resistance At 75 Degrees Celsius, 167 Degrees Fahrenheit
Ohms / ft
12GA = 0.00193
14GA = 0.00307
16GA = 0.00489
18GA = 0.00777

AMP# 2

SPEAKER CIRCUIT LOAD CALCULATION

SPEAKER CIRCUIT DESCRIPTION	PANEL CIRCUIT NUMBER	WIRE GAUGE (16, 14, 12)	CIRCUIT VOLTAGE (25 OR 70 VRMS)	APPLIANCES QUANTITIES / TAP VALUES: SPEAKER TAPPED AT 0.25 Watts	SPEAKER TAPPED AT 0.5 Watts	SPEAKER TAPPED AT 1 Watts	SPEAKER TAPPED AT 2 Watts	SPEAKER TAPPED AT 4 Watts	SPEAKER TAPPED AT 8 Watts	SPEAKER TAPPED AT 15 Watts	TOTAL CIRCUIT LOAD (WATTS)	ESTIMATED CIRCUIT LENGTH (FEET)	ACTUAL WIRE/LOSS (dB)	MAXIMUM ALLOWABLE CKT. LENGTH (FEET)	TOTAL CIRCUIT RESISTANCE (OHMS)
SA 1	CKT 1	12 awg	70 vrms	4	2	1	1	0	1	0	9.20 Watts	350 ft	-0.01 dB	84,500 ft.	1.6 Ohms
				Appliance Summary							Total Load (Watts)				
				4	2	1	1	0	1	0	9.20				

NOTE:
LUMP SUM METHOD WAS USED TO CALCULATE MAXIMUM ALLOWABLE CIRCUIT LENGTH. THIS METHOD ALLOWS FOR A SMALL MARGIN OF SAFETY, TAKING INTO CONSIDERATION THE ACTUAL INSTALLED CIRCUIT ROUTING MAY DIFFER FROM WHAT IS SHOWN ON THE SHOP DRAWINGS. IF THE ACTUAL CIRCUIT LENGTH IS GOING TO EXCEED THE MAXIMUM ALLOWABLE CIRCUIT LENGTH, CONTACT YOUR LOCAL SIMPLEX BRANCH.

Wire Resistance At 75 Degrees Celsius, 167 Degrees Fahrenheit
Ohms / ft
12GA = 0.00193
14GA = 0.00307
16GA = 0.00489
18GA = 0.00777

AMP# 3

SPEAKER CIRCUIT LOAD CALCULATION

SPEAKER CIRCUIT DESCRIPTION	PANEL CIRCUIT NUMBER	WIRE GAUGE (16, 14, 12)	CIRCUIT VOLTAGE (25 OR 70 VRMS)	APPLIANCES QUANTITIES / TAP VALUES: SPEAKER TAPPED AT 0.25 Watts	SPEAKER TAPPED AT 0.5 Watts	SPEAKER TAPPED AT 1 Watts	SPEAKER TAPPED AT 2 Watts	SPEAKER TAPPED AT 4 Watts	SPEAKER TAPPED AT 8 Watts	SPEAKER TAPPED AT 15 Watts	TOTAL CIRCUIT LOAD (WATTS)	ESTIMATED CIRCUIT LENGTH (FEET)	ACTUAL WIRE/LOSS (dB)	MAXIMUM ALLOWABLE CKT. LENGTH (FEET)	TOTAL CIRCUIT RESISTANCE (OHMS)
SA 1	CKT 1	12 awg	70 vrms	1	1	0	1	0	1	0	4.70 Watts	350 ft	-0.01 dB	103,000 ft.	1.5 Ohms
SA 2	CKT 2	12 awg	70 vrms	1	1	0	1	0	1	0	4.70 Watts	323 ft	-0.00 dB	223,570 ft.	1.4 Ohms
				Appliance Summary							Total Load (Watts)				
				2	2	0	2	0	2	0	9.40				

NOTE:
LUMP SUM METHOD WAS USED TO CALCULATE MAXIMUM ALLOWABLE CIRCUIT LENGTH. THIS METHOD ALLOWS FOR A SMALL MARGIN OF SAFETY, TAKING INTO CONSIDERATION THE ACTUAL INSTALLED CIRCUIT ROUTING MAY DIFFER FROM WHAT IS SHOWN ON THE SHOP DRAWINGS. IF THE ACTUAL CIRCUIT LENGTH IS GOING TO EXCEED THE MAXIMUM ALLOWABLE CIRCUIT LENGTH, CONTACT YOUR LOCAL SIMPLEX BRANCH.

Wire Resistance At 75 Degrees Celsius, 167 Degrees Fahrenheit
Ohms / ft
12GA = 0.00193
14GA = 0.00307
16GA = 0.00489
18GA = 0.00777

AMP# 4

SPEAKER CIRCUIT LOAD CALCULATION

SPEAKER CIRCUIT DESCRIPTION	PANEL CIRCUIT NUMBER	WIRE GAUGE (16, 14, 12)	CIRCUIT VOLTAGE (25 OR 70 VRMS)	APPLIANCES QUANTITIES / TAP VALUES: SPEAKER TAPPED AT 0.25 Watts	SPEAKER TAPPED AT 0.5 Watts	SPEAKER TAPPED AT 1 Watts	SPEAKER TAPPED AT 2 Watts	SPEAKER TAPPED AT 4 Watts	SPEAKER TAPPED AT 8 Watts	SPEAKER TAPPED AT 15 Watts	TOTAL CIRCUIT LOAD (WATTS)	ESTIMATED CIRCUIT LENGTH (FEET)	ACTUAL WIRE/LOSS (dB)	MAXIMUM ALLOWABLE CKT. LENGTH (FEET)	TOTAL CIRCUIT RESISTANCE (OHMS)
SA 1	CKT 1	12 awg	70 vrms	4	1	0	0	1	0	0	5.50 Watts	350 ft	-0.01 dB	95,500 ft.	1.4 Ohms
SA 2	CKT 2	12 awg	70 vrms	4	1	0	0	1	0	0	5.50 Watts	350 ft	-0.02 dB	95,500 ft.	1.4 Ohms
				Appliance Summary							Total Load (Watts)				
				10	2	0	0	4	0	0	11.00				

NOTE:
LUMP SUM METHOD WAS USED TO CALCULATE MAXIMUM ALLOWABLE CIRCUIT LENGTH. THIS METHOD ALLOWS FOR A SMALL MARGIN OF SAFETY, TAKING INTO CONSIDERATION THE ACTUAL INSTALLED CIRCUIT ROUTING MAY DIFFER FROM WHAT IS SHOWN ON THE SHOP DRAWINGS. IF THE ACTUAL CIRCUIT LENGTH IS GOING TO EXCEED THE MAXIMUM ALLOWABLE CIRCUIT LENGTH, CONTACT YOUR LOCAL SIMPLEX BRANCH.

Wire Resistance At 75 Degrees Celsius, 167 Degrees Fahrenheit
Ohms / ft
12GA = 0.00193
14GA = 0.00307
16GA = 0.00489
18GA = 0.00777

AMP# 5

SPEAKER CIRCUIT LOAD CALCULATION

SPEAKER CIRCUIT DESCRIPTION	PANEL CIRCUIT NUMBER	WIRE GAUGE (16, 14, 12)	CIRCUIT VOLTAGE (25 OR 70 VRMS)	APPLIANCES QUANTITIES / TAP VALUES: SPEAKER TAPPED AT 0.25 Watts	SPEAKER TAPPED AT 0.5 Watts	SPEAKER TAPPED AT 1 Watts	SPEAKER TAPPED AT 2 Watts	SPEAKER TAPPED AT 4 Watts	SPEAKER TAPPED AT 8 Watts	SPEAKER TAPPED AT 15 Watts	TOTAL CIRCUIT LOAD (WATTS)	ESTIMATED CIRCUIT LENGTH (FEET)	ACTUAL WIRE/LOSS	MAXIMUM ALLOWABLE CKT. LENGTH (FEET)	TOTAL CIRCUIT RESISTANCE (OHMS)
SA 1	CKT 1	12 awg	70 vrms	4	0	0	0	0	0	0	3.00 Watts	350 ft	-0.01 dB	156,500 ft.	1.2 Ohms
SA 2	CKT 2	12 awg	70 vrms	4	0	0	0	0	0	0	3.00 Watts	350 ft	-0.02 dB	99,500 ft.	2.0 Ohms
				Appliance Summary							Total Load (Watts)				
				8	0	0	0	0	0	0	6.00				

NOTE:
LUMP SUM METHOD WAS USED TO CALCULATE MAXIMUM ALLOWABLE CIRCUIT LENGTH. THIS METHOD ALLOWS FOR A SMALL MARGIN OF SAFETY, TAKING INTO CONSIDERATION THE ACTUAL INSTALLED CIRCUIT ROUTING MAY DIFFER FROM WHAT IS SHOWN ON THE SHOP DRAWINGS. IF THE ACTUAL CIRCUIT LENGTH IS GOING TO EXCEED THE MAXIMUM ALLOWABLE CIRCUIT LENGTH, CONTACT YOUR LOCAL SIMPLEX BRANCH.

Wire Resistance At 75 Degrees Celsius, 167 Degrees Fahrenheit
Ohms / ft
12GA = 0.00193
14GA = 0.00307
16GA = 0.00489
18GA = 0.00777

AMP# 6

SPEAKER CIRCUIT LOAD CALCULATION

SPEAKER CIRCUIT DESCRIPTION	PANEL CIRCUIT NUMBER	WIRE GAUGE (16, 14, 12)	CIRCUIT VOLTAGE (25 OR 70 VRMS)	APPLIANCES QUANTITIES / TAP VALUES: SPEAKER TAPPED AT 0.25 Watts	SPEAKER TAPPED AT 0.5 Watts	SPEAKER TAPPED AT 1 Watts	SPEAKER TAPPED AT 2 Watts	SPEAKER TAPPED AT 4 Watts	SPEAKER TAPPED AT 8 Watts	SPEAKER TAPPED AT 15 Watts	TOTAL CIRCUIT LOAD (WATTS)	ESTIMATED CIRCUIT LENGTH (FEET)	ACTUAL WIRE/LOSS	MAXIMUM ALLOWABLE CKT. LENGTH (FEET)	TOTAL CIRCUIT RESISTANCE (OHMS)
SA 1	CKT 1	12 awg	70 vrms	4	0	0	0	0	0	0	1.00 Watts	350 ft	-0.01 dB	470,500 ft.	0.4 Ohms
SA 2	CKT 2	12 awg	70 vrms	4	0	0	0	0	0	0	1.00 Watts	350 ft	-0.00 dB	1570426 ft.	1.4 Ohms
				Appliance Summary							Total Load (Watts)				
				8	0	0	0	0	0	0	2.00				

NOTE:
LUMP SUM METHOD WAS USED TO CALCULATE MAXIMUM ALLOWABLE CIRCUIT LENGTH. THIS METHOD ALLOWS FOR A SMALL MARGIN OF SAFETY, TAKING INTO CONSIDERATION THE ACTUAL INSTALLED CIRCUIT ROUTING MAY DIFFER FROM WHAT IS SHOWN ON THE SHOP DRAWINGS. IF THE ACTUAL CIRCUIT LENGTH IS GOING TO EXCEED THE MAXIMUM ALLOWABLE CIRCUIT LENGTH, CONTACT YOUR LOCAL SIMPLEX BRANCH.

Wire Resistance At 75 Degrees Celsius, 167 Degrees Fahrenheit
Ohms / ft
12GA = 0.00193
14GA = 0.00307
16GA = 0.00489
18GA = 0.00777

AMP# 5

SPEAKER CIRCUIT LOAD CALCULATION

SPEAKER CIRCUIT DESCRIPTION	PANEL CIRCUIT NUMBER	WIRE GAUGE (16, 14, 12)	CIRCUIT VOLTAGE (25 OR 70 VRMS)	APPLIANCES QUANTITIES / TAP VALUES: SPEAKER TAPPED AT 0.25 Watts	SPEAKER TAPPED AT 0.5 Watts	SPEAKER TAPPED AT 1 Watts	SPEAKER TAPPED AT 2 Watts	SPEAKER TAPPED AT 4 Watts	SPEAKER TAPPED AT 8 Watts	SPEAKER TAPPED AT 15 Watts	TOTAL CIRCUIT LOAD (WATTS)	ESTIMATED CIRCUIT LENGTH (FEET)	ACTUAL WIRE/LOSS	MAXIMUM ALLOWABLE CKT. LENGTH (FEET)	TOTAL CIRCUIT RESISTANCE (OHMS)
SA 1	CKT 1	12 awg	70 vrms	4	0	0	0	0	0	0	1.00 Watts	350 ft	-0.01 dB	470,500 ft.	0.4 Ohms
SA 2	CKT 2	12 awg	70 vrms	4	0	0	0	0	0	0	1.00 Watts	350 ft	-0.00 dB	1570426 ft.	1.4 Ohms
				Appliance Summary							Total Load (Watts)				
				8	0	0	0	0	0	0	2.00				

NOTE:
LUMP SUM METHOD WAS USED TO CALCULATE MAXIMUM ALLOWABLE CIRCUIT LENGTH. THIS METHOD ALLOWS FOR A SMALL MARGIN OF SAFETY, TAKING INTO CONSIDERATION THE ACTUAL INSTALLED CIRCUIT ROUTING MAY DIFFER FROM WHAT IS SHOWN ON THE SHOP DRAWINGS. IF THE ACTUAL CIRCUIT LENGTH IS GOING TO EXCEED THE MAXIMUM ALLOWABLE CIRCUIT LENGTH, CONTACT YOUR LOCAL SIMPLEX BRANCH.

Wire Resistance At 75 Degrees Celsius, 167 Degrees Fahrenheit
Ohms / ft
12GA = 0.00193
14GA = 0.00307
16GA = 0.00489
18GA = 0.00777

Not for permitting or construction

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-124972 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/17/2026

PBK

ARCHITECT	PBK Architects, Inc.
	ANAHEIM
	2400 E KATELLA AVE, Suite 950
	ANAHEIM, CA 92806
	P 949-548-5000

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

SCHROEDER ES HVAC UPGRADE & MODERNIZATION

PROJECT ADDRESS:
15151 Columbia Ln
Huntington Beach, CA 92647

100% CONSTRUCTION DOCUMENTS

DSA APPL NO.: ##-##### DSA FILE NO.: 30-43

RELO
A
B
C
D
RELO
K2 K1
ADMIN
MPR

KEY PLAN
NORTH: PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER STEVEN E. MUSICH E-19817 Exp.03/31/26 ELECTRICAL STATE OF CALIFORNIA

Architect

LICENSED ARCHITECT Yong Yoo No. C-31162 REN. 10-31-2027 STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
11/14/2025	250376

REVISIONS

No.	Description	Date

100% CONSTRUCTION DOCUMENTS

FIRE ALARM CALCULATIONS

This document is for plan review only

FA8.02

FILE PATH: Z:\Projects\...
2/18/2026 3:09:50 PM