ADMIN SERVICES REMODEL AT SUSD BUSINESS PARK 2

1254 COMMERCE AVE, SANGER, CA 93657

SANGER UNIFIED SCHOOL DISTRICT

1905 7TH ST, SANGER, CA 93657

Planning Department

Ethan Davis,
Senior Planner
09/04/2026

All Department Stamped Plans will be released when a licensed contractor is assigned to the project. Attached plan set is approved by City Departments.

APPROVALS

LICENSED ARCHITECT JAMES R. MORRELLI No. C-33128 EXP. 05-31-27 STATE OF CALIFORNIA

DATE: 07/21/2026

ABBREVIATIONS

ABBREVIATIONS WHEN USED IN THESE DOCUMENTS SHALL CONFORM TO THE FOLLOWING LIST UNLESS OTHERWISE NOTED. INDIVIDUAL DRAWINGS (SUCH AS CIVIL, STRUCTURAL, MECHANICAL, PLUMBING, AND ELECTRICAL) MAY CONTAIN SPECIFIC REFERENCES AND LEGENDS WITH INTERPRETATIONS INTENDED ONLY FOR THOSE DRAWINGS.

&	AND	F.O.C.	FACE OF CONCRETE	PREFIN.	PREFINISHED
L.	ANGLE	F.O.F.	FACE OF FINISH	PROJ.	PROJECT
@	AT	F.O.M.	FACE OF MASONRY	PT.	POINT
℄	CENTERLINE	F.O.P.	FACE OF PLYWOOD	P.T.	PAPER TOWEL DISPENSER
⌀	DIAMETER	F.O.S.	FACE OF STUDS		
#	POUND OR NUMBER	F.R.P.	FIBER REINFORCED PANEL	Q.T.	QUARRY TILE
(E)	EXISTING	F.R.T.	FIRE RETARDANT TREATED		
(N)	NEW	FT.	FOOT OR FEET	R.	RADIUS
		FTG.	FOOTING	R.A.	RETURN AIR
A.B.	ANCHOR BOLT	FUT.	FUTURE	R.B.	RUBBER BASE
A/C	AIR CONDITIONING			R.D.	ROOF DRAIN
A.C.	ASPHALT CONCRETE	G.	GAS	REF.	REFERENCE
ACOUST.	ACOUSTICAL	GA.	GAGE	REFR.	REFRIGERATOR
ADJ.	ADJUSTABLE	GALV.	GALVANIZED	REINF.	REINFORCED
AGG.	AGGREGATE	G.B.	GRAB BAR	REQ.	REQUIRED
ALUM.	ALUMINUM	G.I.	GALVANIZED IRON	RESIL.	RESILIENT
ALT.	ALTERNATE	GND.	GROUND	RM.	ROOM
APPROX.	APPROXIMATE	GR.	GRADE	R.O.	ROUGH OPENING
ARCH.	ARCHITECTURAL (OR ARCHITECT)	GYP.	GYPSUM	R.O.W.	RIGHT-OF-WAY
				RDWD.	REDWOOD
AUTO.	AUTOMATIC	H.B.	HOSE BIB	RWL.	RAIN WATER LEADER
		HD.	HEAD		
BEL.	BELOW	HDWD.	HARDWOOD	S.	SOUTH
BET./BTWN.	BETWEEN	HGT./HT.	HEIGHT	S.A.	SUPPLY AIR
BD.	BOARD	H.M.	HOLLOW METAL	S.C.	SOLID CORE
BLDG.	BUILDING	HORIZ.	HORIZONTAL	SCHED.	SCHEDULE
BLK./BLKG.	BLOCKING	HR.	HOUR	S.D.	STORM DRAIN OR SOAP DISPENSER
BM.	BEAM	H.V.A.C.	HEATING VENTILATING, AND AIR CONDITIONING	SECT.	SECTION
B.O.	BOTTOM OF			S.F.	SQUARE FOOT (FEET)
BOT./BTM.	BOTTOM			SH.	SHELF
B.U.R.	BUILT-UP ROOF	I.D.	INSIDE DIAMETER	SHR./SHWR.	SHOWER
		IN.	INCHES	SHT.	SHEET
CAB.	CABINET	INCL.	INCLUDING, INCLUDES	SHTG.	SHEATHING
C.I.	CAST IRON	INSUL.	INSULATION	SIM.	SIMILAR
C.J.	CONTROL JOINT	INT.	INTERIOR	S.M.S.	SHEET METAL SCREW
CLG.	CEILING	INV.	INVERT	S.N.D.	SANITARY NAPKIN DISPOSAL
CLR.	CLEAR			S.N.V.	SANITARY NAPKIN VENDOR
CNTR.	COUNTER	JAN.	JANITOR	S.O.V.	SHUT OFF VALVE
COL.	COLUMN	JB.	JAMB	SPEC.	SPECIFICATIONS
C.M.U.	CONCRETE MASONRY UNIT	JT.	JOINT	SQ.	SQUARE
CONC.	CONCRETE	JST	JOIST	ST.STL.	STAINLESS STEEL
CONN.	CONNECTION			S.S.	SERVICE SINK
CONSTR.	CONSTRUCTION	K.	KITCHEN	S.T.	SELF TAPPING
CONT.	CONTINUOUS			STA.	STATION
CONTR.	CONTRACTOR	L.	LONG	STD.	STANDARD
CORR.	CORRIDOR	LAB.	LABORATORY	STL.	STEEL
CTR.	CENTER	LAM.	LAMINATE	STOR.	STORAGE
CTSK.	COUNTERSUNK	LAV.	LAVATORY	STRUCT.	STRUCTURAL
C.Y.	CUBIC YARD	LKR.	LOCKER	SUSP.	SUSPENDED
		LT.	LIGHT	S.V.	SHEET VINYL
DBL.	DOUBLE			S.Y.	SQUARE YARD
DEPT.	DEPARTMENT	MAX.	MAXIMUM	SYM.	SYMMETRICAL
DET.	DETAIL	M.B.	MACHINE BOLT		
D.F.	DRINKING FOUNTAIN	MATL.	MATERIAL		
D.I.	DROP INLET	MECH.	MECHANICAL	T.C.	TERMINAL CABINET
DIA	DIAMETER	MET./MTL.	METAL	TEL.	TELEPHONE
DIAG.	DIAGONAL	MFR.	MANUFACTURER	TEMP.	TEMPERED
DIM.	DIMENSION	MH.	MANHOLE	T&G	TONGUE AND GROOVE
DISP.	DISPENSER	MIN.	MINIMUM	THK.	THICK
DN.	DOWN	MISC.	MISCELLANEOUS	T.P.	TOILET PAPER DISPENSER
DP.	DEEP	M.O.	MASONRY OPENING	T.O.M.	TOP OF MASONRY
DR.	DOOR	MOD.	MODULE, MODULAR	T.PL.	TOP OF PLATE
DS.	DOWNSPOUT	MTD.	MOUNTED	T.O.S.	TOP OF STEEL
DW.	DOMESTIC WATER	MUL.	MULLION	TRD.	TREAD
DWG.	DRAWING			T.S.C.	TOILET SEAT COVER DISPENSER
DWR.	DRAWER	N.	NORTH	T.V.	TELEVISION
		N.I.C.	NOT IN CONTRACT (N.I.C. ITEMS NOT PART OF THIS APPROVAL)	T.W.	TOP OF WALL
E.	EAST			TYP.	TYPICAL
EA.	EACH				
E.J.	EXPANSION JOINT	NO.	NUMBER	UNF.	UNFINISHED
ELEV.	ELEVATION	NOM.	NOMINAL	U.O.N.	UNLESS OTHERWISE NOTED
ELEC.	ELECTRICAL	N.T.S.	NOT TO SCALE	UR.	URINAL
EMBED.	EMBEDMENT				
ENCL.	ENCLOSURE	O/	OVER	V.B.	VINYL BASE
ENGR.	ENGINEER	O.C.	ON CENTER	V.C.T.	VINYL COMPOSITION TILE
EQ.	EQUAL	O.D.	OUTSIDE DIAMETER	VCTB	VINYL COVERED TACKBOARD
EQUIP.	EQUIPMENT	OFF.	OFFICE	VWC	VINYL WALLCOVERING
EXP.	EXPANSION	O.H.	OPPOSITE HAND	VERT.	VERTICAL
EXIST.	EXISTING	O.H.M.S.	OVAL HEAD MACHINE SCREW	VEST.	VESTIBULE
EXT	EXTERIOR	O.H.W.S.	OVAL HEAD WOOD SCREW		
		OPNG.	OPENING.	W.	WEST
F.A.	FIRE ALARM	OPP.	OPPOSITE	W/	WITH
F.D.	FLOOR DRAIN			W.C.	WATER CLOSET
FDN.	FOUNDATION	PART.	PARTITION	WD.	WOOD
F.E.	FIRE EXTINGUISHER	P.E.N.	PLYWOOD EDGE NAILING	W.H.	WATER HEATER
F.E.C.	FIRE EXTINGUISHER AND CABINET	PL.	PLATE	W/O	WITHOUT
		P. LAM.	PLASTIC LAMINATE	WP.	WATERPROOF
F.F.E.	FINISH FLOOR ELEVATION	PL.	PLATE	W.R.	WATER RESISTANT
F.H.C.	FIRE HOSE CABINET	PLAS.	PLASTER	W.S.	WOOD SCREW
F.H.M.S.	FLAT HEAD MACHINE SCREW	PLUMB.	PLUMBING	WSCT.	WAINSCOT
F.H.W.S.	FLAT HEAD WOOD SCREW	PLYWD.	PLYWOOD	WT.	WEIGHT
FIN.	FINISH	P.O.C.	POINT OF CONNECTION	WWF	WELDED WIRE FABRIC
FL.	FLOOR	PR.	PAIR		
FLSHG.	FLASHING	PRCST.	PRECAST		

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PROJECT SCOPE

THE PROJECT CONSISTS OF THE INTERIOR REMODEL/MODERNIZATION OF AN EXISTING PRE-ENGINEERED METAL BUILDING WITH ASSOCIATED ON SITE DEVELOPMENT. THE PROPOSED PROJECT WILL CONVERT THE FORMER WAREHOUSE AREA (6,720 SQ FT) TO ADMINISTRATIVE OFFICE USE, RESULTING IN THE BUILDING BEING ENTIRELY GROUP B OCCUPANCY UPON COMPLETION.

APPLICABLE CODES

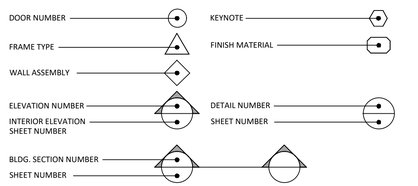
ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE PLANS, SPECIFICATIONS AND THE FOLLOWING REGULATIONS :

1. 2025 CALIFORNIA BUILDING CODE (CBC) - TITLE 24, PART 2
2. 2025 CALIFORNIA RESIDENTIAL CORE (CRC) - TITLE 24, PART 2.5 (IF APPLICABLE)
3. 2025 CALIFORNIA ELECTRICAL CODE (CEC) - TITLE 24, PART 3
4. 2025 CALIFORNIA MECHANICAL CODE (CMC) - TITLE 24, PART 4
5. 2025 CALIFORNIA PLUMBING CODE (CPC) - TITLE 24, PART 5
6. 2025 CALIFORNIA ENERGY CODE - TITLE 24, PART 6
7. 2025 CALIFORNIA FIRE CODE (CFC) - TITLE 24, PART 9
8. 2025 CALIFORNIA GREEN BUILDING STANDARDS CODE (CALGREEN) - TITLE 24, PART 11
9. 2025 CALIFORNIA EXISTING BUILDING CODE (CEBC) - TITLE 24, PART 10
10. APPLICABLE CITY OF SANGER MUNICIPAL CODE AND LOCAL AMMENDMENTS

CALGREEN MANDATORY MEASURES

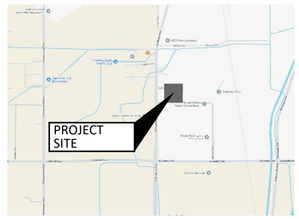
1. ALL WORK SHALL COMPLY WITH THE MANDATORY REQUIREMENTS OF THE 2025 CALIFORNIA GREEN BUILDING STANDARDS CODE (CALGREEN), TITLE 24, PART 11.
2. ADHESIVES, SEALANTS, PAINTS, COATINGS, FLOORING MATERIALS, COMPOSITE WOOD PRODUCTS, AND FINISH MATERIALS SHALL COMPLY WITH APPLICABLE LOW POLLUTANT MATERIAL REQUIREMENTS OF CALGREEN.
3. BUILDING MATERIALS SUBJECT TO MOISTURE DAMAGE SHALL BE PROTECTED FROM THE WEATHER AND KEPT DRY DURING STORAGE AND CONSTRUCTION.
4. DUCT OPENINGS AND AIR DISTRIBUTION COMPONENTS SHALL BE PROTECTED FROM DUST AND DEBRIS DURING CONSTRUCTION.
5. PLUMBING FIXTURES SHALL COMPLY WITH THE WATER CONSERVATION REQUIREMENTS OF CALGREEN.
6. CONSTRUCTION WASTE SHALL BE MANAGED IN ACCORDANCE WITH CALGREEN REQUIREMENTS AND LOCAL JURISDICTIONAL REQUIREMENTS.
7. TESTING AND ADJUSTING OF BUILDING SYSTEMS, INCLUDING HVAC SYSTEMS AND CONTROLS, INDOOR AND OUTDOOR LIGHTING AND CONTROLS, WATER HEATING SYSTEMS, AND OTHER APPLICABLE SYSTEMS, SHALL BE PERFORMED IN ACCORDANCE WITH CALGREEN SECTION 5.410.4.

SYMBOL LEGEND



VICINITY MAP

SANGER UNIFIED SCHOOL DISTRICT BUSINESS PARK 2 N.T.S.
1254 COMMERCE AVE, SANGER, CA 93657



ZONING DATA:

JURISDICTION: CITY OF SANGER
ZONING: BP-2 (BUSINESS PARK 2)
APN: 332-042-77
LOT AREA: 78,400 SF
EXISTING BUILDING AREA: 10,035 SF
EXISTING LOT COVERAGE: 12.8% (~13%) - COMPLIES.

DEFERRED APPROVALS

INSTALLATION OF DEFERRED APPROVAL ITEMS SHALL NOT BE STARTED UNTIL THE CONTRACTOR'S DRAWINGS SPECIFICATIONS, AND ENGINEERING CALCULATIONS FOR THE ACTUAL SYSTEMS HAVE BEEN ACCEPTED AND SIGNED BY THE ARCHITECT OR STRUCTURAL ENGINEER AND APPROVED BY THE DIVISION OF THE STATE ARCHITECT.

1. FIRE SPRINKLER: EXISTING SYSTEM TO BE MODIFIED TO ACCOMMODATE NEW GROUP B LAYOUT. SPRINKLER SHOP DRAWINGS TO BE SUBMITTED AS DEFERRED SUBMITTAL FOR CITY APPROVAL PRIOR TO INSTALLATION.

GENERAL NOTES

1. CUTTING, BORING, SAW CUTTING, OR DRILLING THROUGH NEW OR EXISTING STRUCTURAL MEMBERS WILL BE PERMITTED ONLY WHERE INDICATED ON THE DRAWINGS, OR WHEN ACCEPTED BY THE ARCHITECT.
2. CHANGES TO THE APPROVED DRAWINGS AND SPECIFICATIONS SHALL BE MADE BY AN ADDENDUM OR A CONSTRUCTION CHANGED DOCUMENT AS REQUIRED.
3. GRADING PLANS, DRAINAGE IMPROVEMENTS, ROAD AND ACCESS REQUIREMENTS, AND ENVIRONMENTAL HEALTH CONSIDERATIONS SHALL COMPLY WITH ALL LOCAL ORDINANCES.
4. THE INTENT OF THESE DRAWINGS AND SPECIFICATIONS IS THAT THE WORK OF THE ALTERATION, REHABILITATION OR RECONSTRUCTION IS TO BE IN ACCORDANCE WITH TITLE 24, CCR. SHOULD ANY EXISTING CONDITIONS SUCH AS DETERIORATION OR NON-COMPLYING CONSTRUCTION BE DISCOVERED 'WHICH IS NOT COVERED BY THE CONTRACT DOCUMENTS WHEREIN THE FINISHED WORK WILL NOT COMPLY WITH TITLE 24, CCR, A CONSTRUCTION CHANGE DOCUMENT (CCD), OR A SEPARATE SET OF PLANS AND SPECIFICATIONS, DETAILING AND SPECIFYING THE REQUIRED WORK SHALL BE SUBMITTED TO AND APPROVED BY THE CITY BEFORE PROCEEDING WITH THE WORK. (SECTION 4-317 (c), PART 1, TITLE 24, CCR).
5. THE DRAWINGS AND SPECIFICATIONS ARE BASED ON LIMITED FIELD INVESTIGATION. CONTRACTOR SHALL FIELD VERIFY THE EXISTING CONDITIONS PRIOR TO THE BID NECESSARY TO ACCOMPLISH THE WORK WHETHER SPECIFICALLY INDICATED OR NOT.
6. THE STORAGE OF MATERIAL AND EFFECTS OF WORK SHALL BE APPROVED BY LOCAL FIRE AUTHORITY. COMPLY WITH CALIF. FIRE CODE CHAPTER 33 - FIRE SAFETY DURING CONSTRUCTION AND DEMOLITION. COMPLY WITH CBC CHAPTER 33, SAFETY DURING CONSTRUCTION.

SHEET INDEX (54 SHEETS TOTAL)

GENERAL INFORMATION

G1 COVER SHEET, SHEET INDEX, & VICINITY MAP

SITE DEVELOPMENT

SD1 OVERALL SITE PLAN & BUILDING CODE SUMMARY
SD2 SITE PLANS - DEMOLITION & PROPOSED
SD3 SITE DETAILS

ARCHITECTURAL

A1 DEMOLITION FLOOR PLAN
A2 FLOOR PLAN - PROPOSED
A3 FLOOR PLAN - PROPOSED DIMENSIONS
A4 ENLARGED FLOOR PLAN
A5 REFLECTED CEILING PLAN - DEMOLITION
A6 REFLECTED CEILING PLAN - PROPOSED
A7 ROOF PLAN - PROPOSED
A8 SECTIONS
A9 EXTERIOR ELEVATIONS
A10 INTERIOR ELEVATIONS
A11 INTERIOR ELEVATIONS
A12 DOOR & FINISH SCHEDULES
A13 DOOR & FRAME TYPES & DETAILS
A14 TYPICAL DETAILS
A15 TYPICAL METAL FRAMING NOTES & DETAILS
A16 DETAILS
A17 DETAILS

PLUMBING

P1.0 OVERALL PLUMBING PLAN
P2.0 ENLARGED PLUMBING PLAN
P3.0 PLUMBING DETAILS
P4.0 PLUMBING SCHEDULES

MECHANICAL

M1.0 OVERALL MECHANICAL PLAN
M2.0 PARTIAL MECHANICAL PLAN
M3.0 PARTIAL MECHANICAL ROOF PLAN
M4.0 MECHANICAL DETAILS
M4.1 MECHANICAL DETAILS
M4.2 MECHANICAL CONTROL DETAILS
M4.3 MECHANICAL CONTROL DETAILS
M5.0 MECHANICAL SCHEDULES
M6.0 MECHANICAL T24
M6.1 MECHANICAL T24
M6.2 MECHANICAL T24

ELECTRICAL

EG1.1 ELECTRICAL SYMBOLS, CODES, NOTES AND FIXTURE SCHEDULE
EG1.2 INDOOR LIGHTING COMPLIANCE
EG1.3 ELECTRICAL POWER DISTRIBUTION COMPLIANCE
ES1.1 SITE ELECTRICAL PLAN
E1.1 POWER PLANS
E1.2 ENLARGED POWER PLAN
E1.3 ROOF ELECTRICAL PLANS
E1.4 LIGHTING PLANS
E1.5 LIGHTING CONTROL PLANS
E1.6 FIRE ALARM PLANS
E2.1 FIRE ALARM SYSTEM SPECIFICATIONS, CODE AND NOTES
E2.2 FIRE ALARM RISER SYSTEM DIAGRAM AND DETAILS
E3.1 ONE LINE DIAGRAM
E4.1 PANEL SCHEDULES
ES.1 DETAILS
ES.2 DETAILS
TG1.1 SIGNALS DETAILS
T1.1 SIGNALS PLANS

Reviewed for Code Compliance
08/24/2026
CSG CONSULTANTS, INC.

ADMIN SERVICES REMODEL AT SANGER UNIFIED BUSINESS PARK 2
SANGER UNIFIED SCHOOL DISTRICT
1254 COMMERCE AVE, SANGER, CA 93657

REVISIONS

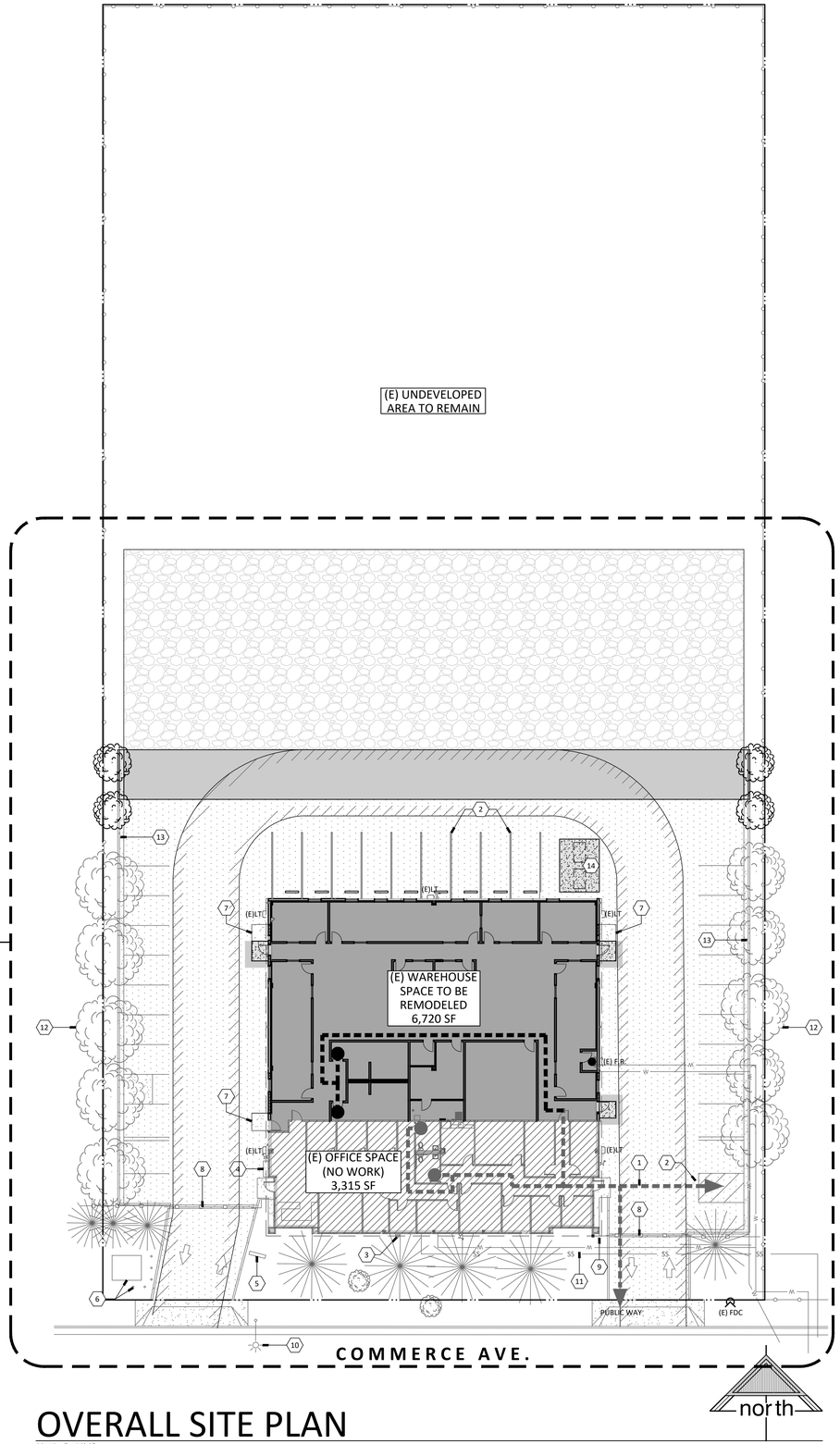
MANGINI ARCHITECTURE INGENUITY
MANGINI ASSOCIATES INC.
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Visalia, California 93291
www.mangini.us
(559) 627.0530 Office
(559) 627.1926 Fax

TITLE
COVER SHEET, SHEET INDEX, VICINITY MAP

G1

PROJECT 25041

APPROVALS



7 SD2 PROPOSED 17 SD2 DEMOLITION

OVERALL SITE PLAN

SCALE: 1" = 20'-0"

BUILDING DATA:

EXISTING BUILDING AREA: 10,035 SF

EXISTING OCCUPANCY: GROUP S-1 (6,720 SF) + GROUP B (3,315 SF)
PROPOSED OCCUPANCY: GROUP B (10,035 TOTAL)

OCCUPANT LOAD FACTOR (CBC TABLE 1004.5):
15 SF PER OCCUPANT AT CONFERENCE AND BREAK ROOMS: 1044 sf/15 = 69.6 = 70
150 SF PER OCCUPANT AT GENERAL OFFICE SPACE: 8991 sf/150 = 59.94 = 60
CALCULATED TOTAL OCCUPANT LOAD: 70 + 60 = 130 OCCUPANTS

ALLOWABLE AREA (GROUP B), TYPE IIB, SPRINKLERED): 69,000 SF MAX PER CBC TABLE 506.2 AND SECTION 506.3
EXISTING BUILDING AREA: 10,035 SF. (NO ADDITION). COMPLIES.

EXISTING CONSTRUCTION TYPE: TYPE IIB (PER CITY RECORD #BP04-839). NO CHANGE.

ALLOWABLE HEIGHT (GROUP B), TYPE IIB, SPRINKLERED): 3 STORIES PER CBC TABLE 504.4.
EXISTING: 1 STORY. COMPLIES.

FIRE SPRINKLER:
EXISTING: BUILDING SPRINKLERED THROUGHOUT
PROPOSED: SYSTEM TO BE MODIFIED TO ACCOMMODATE NEW LAYOUT UNDER DEFERRED SUBMITTAL PER CBC SECTION 107.3.4 AND NFPA 13.

LEGEND

- EXISTING BUILDING AREA IN SCOPE OF WORK
- EXISTING BUILDING AREA NOT IN SCOPE OF WORK
- EXISTING CONCRETE TO REMAIN, PROTECT
- EXISTING AC PAVING TO REMAIN, PROTECT
- EXISTING TREE TO REMAIN, PROTECT
- NEW TREE, MATCH EXISTING (CHINESE PISTACHE OR BRADFORD PEAR)
- CONCRETE PAVING
- AC PAVING
- AGGREGATE BASE, CLASS 2
- 20' WIDE FIRE LANE
- PROPERTY LINE
- EXISTING WROUGHT IRON FENCE AND ROLLING GATE
- EXISTING 6'-0"CHAIN LINK FENCE
- EXISTING ACCESSIBLE PATH OF TRAVEL
- NEW ACCESSIBLE PATH OF TRAVEL
- (E) FDC — EXISTING FIRE DEPARTMENT CONNECTION W/ EXISTING 4" PVC FIRE LINE FROM BLDG
- (E) F.R. — EXISTING FIRE SPRINKLER RISER W/ EXISTING 6" PVC FIRE SERVICE LINE TO BLDG.
- (E) LT — EXISTING WALL PACK LIGHT FIXTURE

KEYNOTES

1. EXISTING & NEW ACCESSIBLE PATH OF TRAVEL:
   THIS PROJECT ALTERS A PRIMARY FUNCTION AREA (WAREHOUSE CONVERSION TO GROUP B OFFICE). IN ACCORDANCE WITH CBC SECTION 11B-202.4, AN ACCESSIBLE PATH OF TRAVEL SERVING THE ALTERED AREA SHALL BE PROVIDED. SHALL BE A BARRIER-FREE ACCESS WITHOUT ANY ABRUPT VERTICAL CHANGES EXCEEDING 1/2" AT 1:2 MAX. SLOPE, EXCEPT THAT LEVEL CHANGES DO NOT EXCEED 1/4" VERTICAL. PATH OF TRAVEL SHALL BE SLIP RESISTANT AND HAVE MAXIMUM CROSS SLOPE OF 5%. THE EXISTING ACCESSIBLE ROUTE FROM ACCESSIBLE PARKING SPACES TO THE PRIMARY BUILDING ENTRANCE WAS PREVIOUSLY APPROVED UNDER CITY PERMIT NO. BP04-839 AND WILL BE FIELD VERIFIED FOR CONTINUED COMPLIANCE. REQUIRED UPGRADES SHALL BE PROVIDED TO THE EXTENT TECHNICALLY FEASIBLE.
2. PARKING SUMMARY
   EXISTING STALLS: 22
   NEW STALLS: 9
   TOTAL PROVIDED: 31

   ACCESSIBLE PARKING (EXISTING TO REMAIN):
   1 VAN ACCESSIBLE
   1 STANDARD ACCESSIBLE
   TOTAL ACCESSIBLE: 2

   EV INFRASTRUCTURE TO COMPLY WITH APPLICABLE CALGREEN REQUIREMENTS FOR NONRESIDENTIAL ALTERATIONS, SUBJECT TO CITY OF SANGER INTERPRETATION
3. EXISTING GAS SERVICE LOCATION
4. EXISTING MAIN ELEC. SERVICE PANEL
5. EXISTING MONUMENT SIGN WITH ADDRESS
6. EXISTING PG&E TRANSFORMER & BOLLARDS
7. EXISTING CONC. LANDING
8. EXISTING 20'-0" ORNAMENTAL ROLLING GATE
9. EXISTING POST MOUNTED KNOX BOX
10. EXISTING CITY LIGHT POLE
11. EXISTING WATER AND SEWER LINES
12. EXISTING TREES TO REMAIN, PROTECT, TYP.
13. EXISTING CURB AND GUTTER
14. EXISTING REFUSE SERVICE PROVIDED BY MID VALLEY DISPOSAL. TWO EXISTING 3-YARD BINS TO BE LOCATED ON CONCRETE PAD BEHIND PARKING AREA, SCREENED FROM STREET FRONTAGE. TRASH ENCLOSURE REQUIREMENTS, IF ANY, TO BE CONFIRMED WITH CITY OF SANGER PLANNING DURING SITE PLAN REVIEW

LICENSED ARCHITECT
JAMES R. MORRELL
No. C-30128
EXP. 05-31-27
STATE OF CALIFORNIA

DATE: 07/21/2026

ADMIN SERVICES REMODEL AT
SANGER UNIFIED BUSINESS PARK 2

SANGER UNIFIED SCHOOL DISTRICT
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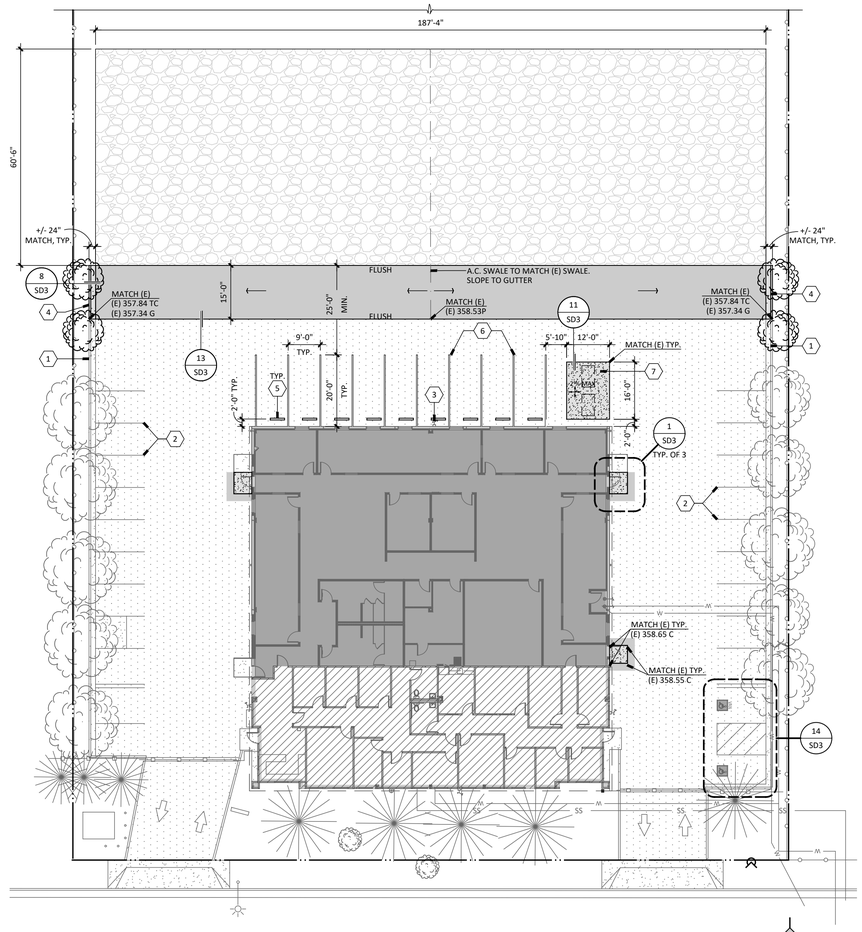
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TITLE
OVERALL SITE PLAN & BUILDING CODE SUMMARY

SD1

PROJECT 25041



north

17 SITE PLAN - PROPOSED

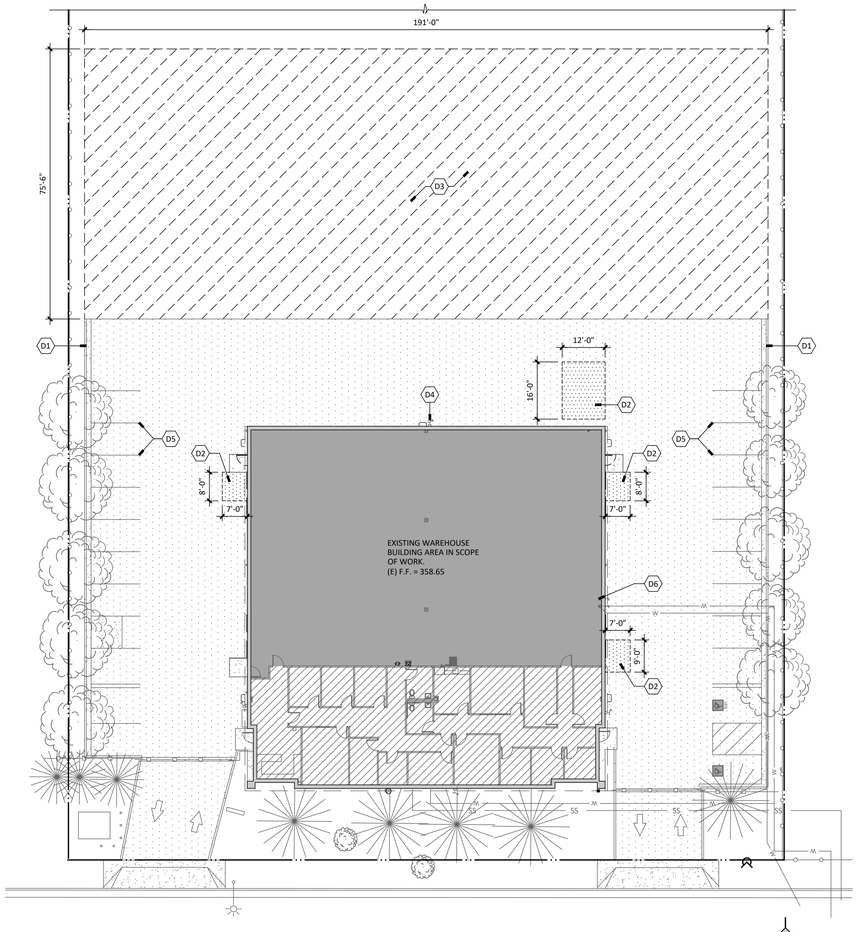
SCALE: 1" = 20'-0"

LEGEND

- EXISTING BUILDING AREA IN SCOPE OF WORK
- EXISTING BUILDING AREA NOT IN SCOPE OF WORK
- EXISTING CONCRETE TO REMAIN, PROTECT
- EXISTING AC PAVING TO REMAIN, PROTECT
- CONCRETE PAVING
- AC PAVING, SEE **13/SD3**
- AGGREGATE BASE, CLASS 2. SEE **9/SD3**
- EXISTING TREE TO REMAIN, PROTECT
- TREE, MATCH EXISTING (CHINESE PISTACHE OR BRADFORD PEAR)
- PROPERTY LINE
- EXISTING WROUGHT IRON FENCE AND ROLLING GATE
- EXISTING 6'-0" CHAIN LINK FENCE

KEYNOTES

1. EXISTING CONC. CURB & GUTTER TO REMAIN, PROTECT, TYP.
2. EXISTING PARKING STRIPING TO REMAIN, PROTECT, TYP.
3. EXISTING HOSE BIB TO REMAIN, PROTECT, TYP.
4. CONC. CURB & GUTTER. SLOPE TO DRAIN, SEE **8/SD3**
5. CONC. WHEELSTOP, SEE **10/SD3**
6. 4" WIDE STRIPING PAINTED WHITE, TYP.
7. 6" THK. CONC. PAVING, SEE **12/SD3**



north

7 SITE PLAN - DEMOLITION

SCALE: 1" = 20'-0"

LEGEND

- EXISTING BUILDING AREA IN SCOPE OF WORK
- EXISTING BUILDING AREA NOT IN SCOPE OF WORK
- EXISTING CONCRETE TO REMAIN, PROTECT
- EXISTING AC PAVING TO REMAIN, PROTECT
- REMOVE/PREP EXISTING EARTHWORK/SOILS AS NEEDED FOR SITE IMPROVEMENTS
- REMOVE EXISTING AC PAVING AS NEEDED FOR SITE IMPROVEMENTS
- EXISTING TREE TO REMAIN, PROTECT
- PROPERTY LINE
- EXISTING WROUGHT IRON FENCE AND ROLLING GATE
- EXISTING 6'-0"CHAIN LINK FENCE

KEYNOTES

- D1 EXISTING CONC. CURB & GUTTER TO REMAIN, PROTECT
- D2 REMOVE EXISTING AC PAVING AS NEEDED FOR SITE IMPROVEMENTS
- D3 REMOVE/PREP EXISTING EARTHWORK/SOILS AS NEEDED FOR SITE IMPROVEMENTS
- D4 EXISTING HOSE BIB TO REMAIN, PROTECT
- D5 EXISTING PARKING STRIPING TO REMAIN, PROTECT
- D6 EXISTING FIRE RISER TO REMAIN, PROTECT

APPROVALS

LICENSED ARCHITECT
JAMES R. MORRELL
No. C-30128
EXP. 05-31-27
STATE OF CALIFORNIA

DATE: 07/21/2026

ADMIN SERVICES REMODEL AT SANGER UNIFIED BUSINESS PARK 2

SANGER UNIFIED SCHOOL DISTRICT
1254 COMMERCE AVE, SANGER, CA 93657

Reviewed for Code Compliance
08/24/2026
CSG CONSULTANTS, INC.

REVISIONS

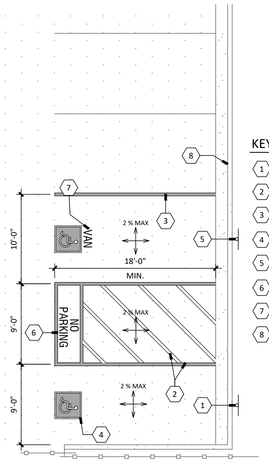
MANGINI ARCHITECTURE INGENUITY
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www.mangini.us
(559) 627.0530 Office
(559) 627.1926 Fax

TITLE
SITE PLANS - DEMOLITION & PROPOSED

SD2

PROJECT 25041

APPROVALS

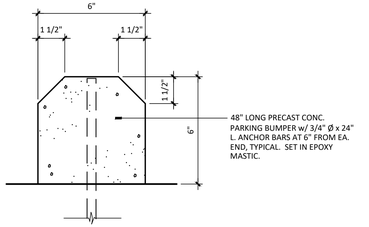


NOTE:
RESTRIPE EXISTING ACCESSIBLE PARKING SPACES AND ACCESS AISLES AS REQUIRED, AND REPLACE POST MOUNTED ACCESSIBLE PARKING SIGNAGE AS REQUIRED. VERIFY EXISTING CONDITIONS IN THE FIELD.

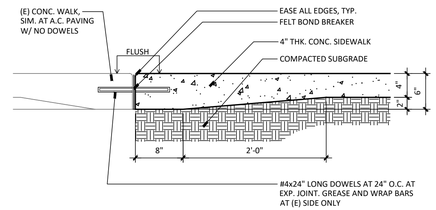
KEYNOTES:

1. ACCESS. PARKING SIGN, SEE **16-**
2. 4" WIDE BORDER PAINTED BLUE W/ 4" WIDE STRIPING @ 36" O.C. PAINTED WHITE, TYP.
3. 4" STRIPING TO BE PAINTED BLUE, TYP.
4. 36"x36" ACCESS. PARKING LOGO. PAINT: WHITE w/ BLUE BACKGROUND, SEE **16-**, TYP.
5. ACCESS. VAN PARKING SIGN, SEE **16-**
6. 12" HIGH LETTERS TO READ "NO PARKING" AS SHOWN, PAINT: WHITE
7. 12" HIGH LETTERS TO READ "VAN" AS SHOWN, PAINT: WHITE
8. EXISTING CURB & GUTTER

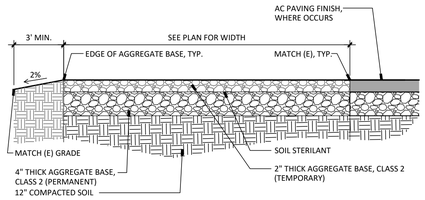
14 (E) ACCESS. PARKING
SCALE: 1/8" = 1'-0"



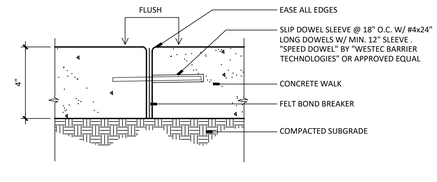
10 CONC. WHEELSTOP
SCALE: 3" = 1'-0"



5 (N) CONC. WALK AT (E) WALK
SCALE: 1" = 1'-0"
SC: 23 - REV. - 25_09.05



9 AGGREGATE BASE SECTION
NTS



4 CONSTRUCTION JOINT (CJ)
SCALE: 3" = 1'-0"
SC: 22 - REV. - 25_09.04

GENERAL NOTES:
1. SIGNS TO BE REFLECTORIZED AND EQUAL TO PORCELAIN ON STEEL WITH BEADED TEXT.
2. TEXT SHALL BE PROPORTIONED TO GIVEN OVERALL SIGN DIMENSIONS, SEE SIGN DESCRIPTIONS BELOW FOR SYMBOL OR TEXT.

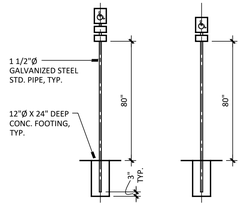
SIGN DESCRIPTIONS:



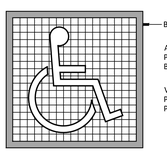
A VAN PARKING STALL SIGN
TOP SIGN TO BE TYPE Ⓑ WITH SYMBOL OF ACCESSIBILITY & BOTTOM SIGN SHALL READ AS NOTED ABOVE:



B CAR PARKING STALL SIGN
SIGN TO SHOW SYMBOL OF ACCESSIBILITY & TEXT SHALL READ "MININUM FINE $250"



A VAN PARKING STALL SIGN
B PARKING STALL SIGN



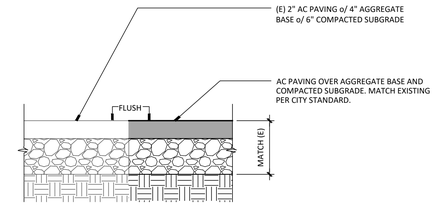
BORDER

ALL SIGNS USING THIS SYMBOL SHALL BE PROPORTIONED TO THIS GRID BACKGROUND.

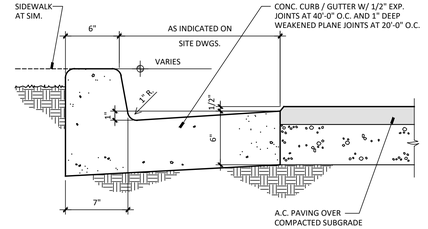
VAN PARKING SIGN: 8" X 10"
PARKING STALL SIGN: 8" X 10"
PAVEMENT LOGO: 36" X 36" TO INSIDE EDGE OF BLUE FIELD

NOTE :
FOR PARKING SIGNS ONLY, PROVIDE 1/2" REFLECTIVE WHITE BAND AROUND PERIMETER OF SIGN. PROVIDE 3" WIDE BORDER @ PAVEMENT LOGO.

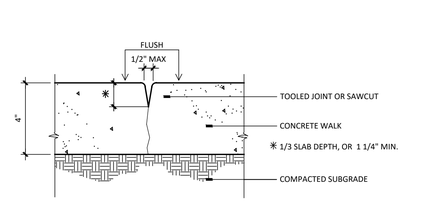
16 SITE SIGNAGE
SCALE: 1/4" = 1'-0"
ACC: 07 - REV-26_03.19



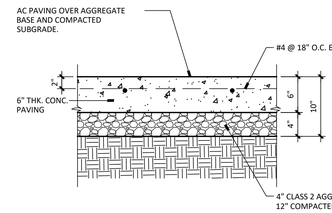
13 (E) AC PAVING @ (N) AC PAVING
SCALE: 1 1/2" = 1'-0"



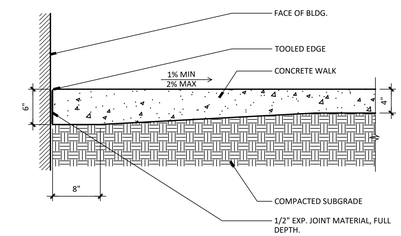
8 CONC. CURB / GUTTER
SCALE: 1 1/2" = 1'-0"
SC: 12 - REV. - 25_09.09



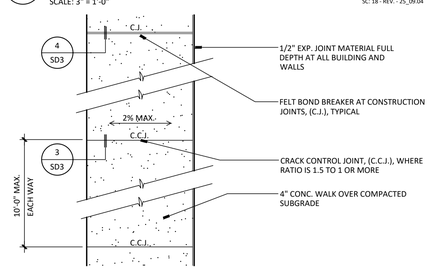
3 CRACK CONTROL JOINT (CCJ)
SCALE: 3" = 1'-0"
SC: 18 - REV. - 25_09.04



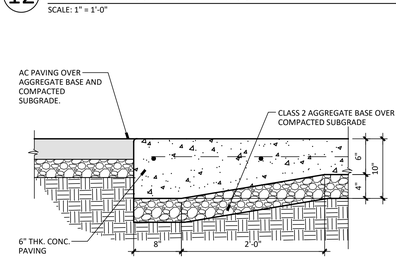
12 6" CONC. PAVING
SCALE: 1" = 1'-0"



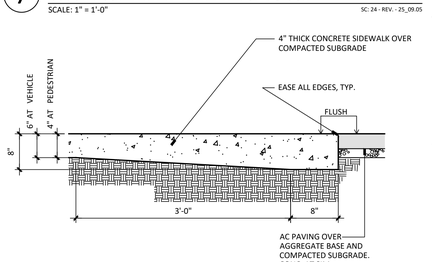
7 CONC. WALK AT BLDG.
SCALE: 1" = 1'-0"
SC: 24 - REV. - 25_09.05



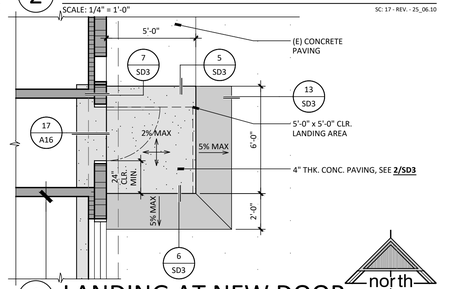
2 CONCRETE WALK
SCALE: 1/4" = 1'-0"
SC: 17 - REV. - 25_06.10



11 CONC. PAVING @ AC PAVING
SCALE: 1" = 1'-0"



6 CONC. WALK AT AC PAVING
SCALE: 1" = 1'-0"
SC: 21 - REV. - 25_06.10



1 LANDING AT NEW DOOR
SCALE: 1/4" = 1'-0"

DATE: 07/21/2026

ADMIN SERVICES REMODEL AT SANGER UNIFIED BUSINESS PARK 2

SANGER UNIFIED SCHOOL DISTRICT
1254 COMMERCE AVE, SANGER, CA 93657

REVISIONS

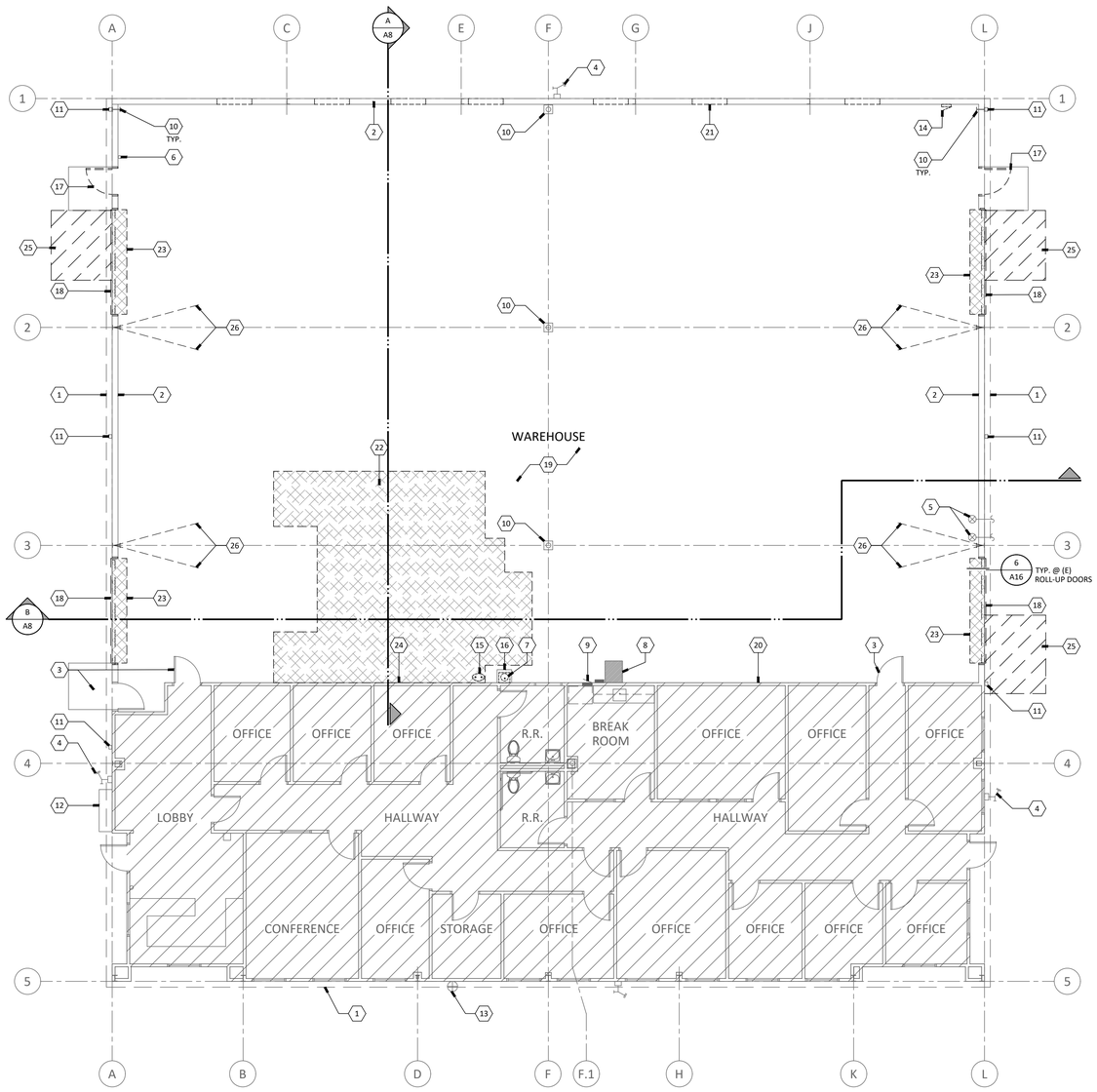
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08/24/2026
CSG CONSULTANTS, INC.

MANGINI ARCHITECTURE INGENUITY
MANGINI ASSOCIATES INC.
4320 West Mineral King Avenue
Visalia, California 93291
www.mangini.us
(559) 627.0530 Office
(559) 627.1926 Fax

TITLE
SITE DETAILS

SD3

PROJECT 25041



FLOOR PLAN - DEMOLITION

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

LEGEND:

HATCHED ARE DENOTES NO ARCHITECTURAL WORK IN THIS AREA, EXCEPT AS INDICATED. SEE OTHER DISCIPLINES DRAWINGS FOR ADDITIONAL REQUIREMENTS/INFORMATION; SCOPE MAY AFFECT AREAS NOT NOTED IN ARCHITECTURAL DRAWINGS

(E) 8" WALL GIRT ASSEMBLY TO REMAIN U.N.O.

MAJOR AREAS OF DEMOLITION SHOWN DASHED

KEYNOTES:

1. DASHED LINE INDICATES EXISTING OVERHANG ABOVE, TYP.
2. EXISTING METAL PANEL WALLS WITH R-6 WHITE VINYL FACED INSULATION TO REMAIN, PROTECT. TYPICAL AT EXISTING WAREHOUSE EXTERIOR WALLS.
3. EXISTING DOOR TO REMAIN, PROTECT
4. EXISTING HOSE BIB TO REMAIN, PROTECT
5. EXISTING FIRE RISER TO REMAIN, PROTECT
6. EXISTING FIRE SPRINKLER INSPECTOR'S TEST VALVE TO REMAIN, PROTECT. SEE PLUMBING DWGS.
7. REMOVE EXISTING WATER HEATER AND PLATFORM ABOVE, SEE PLUMBING DWGS.
8. EXISTING I.D.F. TO REMAIN, PROTECT
9. EXISTING ELEC. PANEL TO REMAIN, PROTECT
10. EXISTING COLUMN, PROTECT
11. EXISTING DOWNSPOUT TO REMAIN, PROTECT
12. EXISTING MAIN ELEC. SERVICE PANEL, SEE ELEC. DWGS.
13. EXISTING GAS METER
14. REMOVE EXISTING ELEC. PANEL, SEE ELECTRICAL DWGS.
15. REMOVE EXISTING EYEWASH SINK, SEE PLUMBING
16. EXISTING UTILITY SINK TO REMAIN, PROTECT
17. REMOVE EXISTING H.M. DOOR AND THRESHOLD, SALVAGE TO OWNER
18. REMOVE EXISTING ROLL-UP DOOR IN ITS ENTIRITY
19. EXISTING 4" THICK CONC. SLAB TO REMAIN, PROTECT
20. EXISTING 12'-0" HIGH 4" METAL STUD WALL PARTITION WITH GYP BOARD TO REMAIN, PROTECT. PATCH BACK AS NEEDED FOR IMPROVEMENTS.
21. REMOVE PORTION OF EXISTING METAL PANEL TO ACCOMMODATE WINDOW INSTALLATION, TYP. OF (7)
22. REMOVE PORTION OF EXISTING CONCRETE SLAB TO ACCOMMODATE PROPOSED IMPROVEMENTS. SEE FLOOR PLAN AND PLUMBING FOR ADDITIONAL INFORMATION.
23. REMOVE TOP PORTION OF EXISTING CONCRETE SLAB AT EXISTING ROLL-UP DOOR TO ACCOMMODATE PROPOSED IMPROVEMENTS. SEE **6&17/A16**
24. REMOVE EXISTING GYP. BOARD 5'-0" & BELOW DOWN TO METAL STUD FRAMING TO ACCOMMODATE IMPROVEMENTS AT NEW RESTROOM. COORDINATE WITH PLAN & SECTIONS.
25. REMOVE EXISTING AC PAVING TO ACCOMMODATE IMPROVEMENTS. SEE SITE DEVELOPMENT PLANS, TYP.
26. EXISTING #4 HAIRPAINS WITH 10'-0" LEGS WITH 60° INTERIOR ANGLE IN CONCRETE SLAB, PROTECT AND DO NOT ENCROACH, TYP.

GENERAL NOTES:

1. VERIFY ALL CONDITIONS PRIOR TO COMMENCEMENT OF WORK
2. PROTECT AREAS NOT IN SCOPE OF WORK
3. SEE OTHER DISCIPLINES FOR ADDITIONAL INFORMATION

APPROVALS

LICENSED ARCHITECT
JAMES R. MORRELL
No. C-30128
EXP. 05-31-27
STATE OF CALIFORNIA

DATE: 07/21/2026

ADMIN SERVICES REMODEL AT
SANGER UNIFIED BUSINESS PARK 2

SANGER UNIFIED SCHOOL DISTRICT
1254 COMMERCE AVE, SANGER, CA 93657

REVISIONS

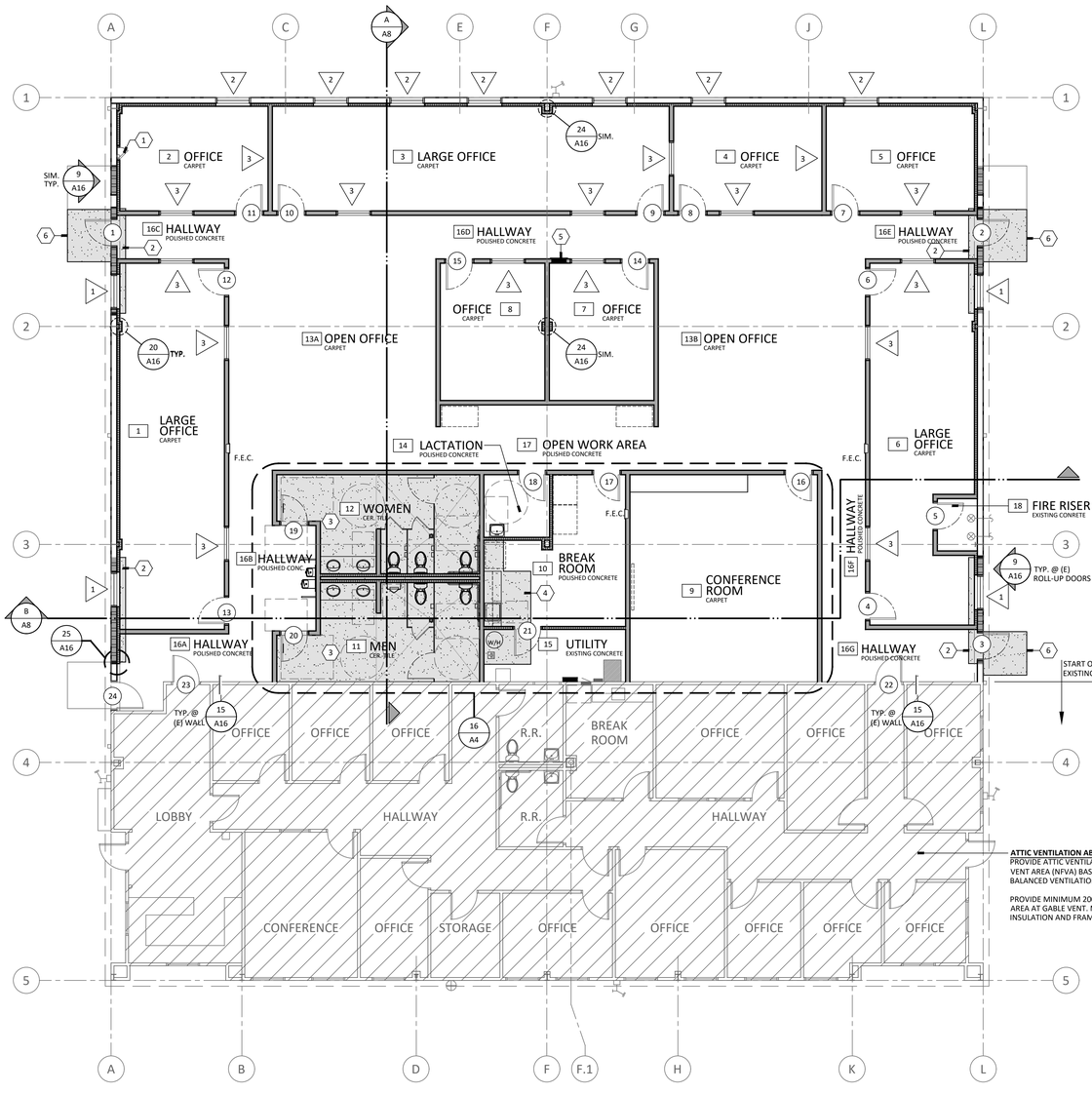
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(559) 627-1926 Office
(559) 627-1926 Fax

TITLE
DEMOLITION FLOOR PLAN

A1

PROJECT 25041



FLOOR PLAN - PROPOSED

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

north

ATTIC VENTILATION ABOVE EXISTING OFFICE SPACE:
PROVIDE ATTIC VENTILATION IN ACCORDANCE WITH CBC SECTION 1202.2. ATTIC AREA = 830 SF. REQUIRED NET FREE VENT AREA (NFVA) BASED ON 1/300 RATIO FOR BALANCED SYSTEM = 2.77 SF (400 IN^2) MINIMUM. PROVIDE BALANCED VENTILATION WITH APPROXIMATELY 50% LOW INTAKE AND 50% HIGH EXHAUST.

PROVIDE MINIMUM 200 IN^2 NET FREE INTAKE AREA AT SOFFIT VENTS AND MINIMUM 200 IN^2 NET FREE EXHAUST AREA AT GABLE VENT. MAINTAIN CLEAR AIR PATH BETWEEN INTAKE AND EXHAUST AND COORDINATE WITH EXISTING INSULATION AND FRAMING TO PREVENT BLOCKAGE. SEE REFLECTED CEILING PLAN AND EXTERIOR ELEVATIONS.

LEGEND:

- HATCHED ARE DENOTES NO ARCHITECTURAL WORK IN THIS AREA, EXCEPT AS INDICATED. SEE OTHER DISCIPLINES DRAWINGS FOR ADDITIONAL REQUIREMENTS/INFORMATION; SCOPE MAY AFFECT AREAS NOT NOTED IN ARCHITECTURAL DRAWINGS
- (E) 8" WALL GIRT ASSEMBLY TO REMAIN U.N.O.
- 6" METAL STUDS @ 16" O.C. & 6" CONCRETE CURB @ EXTERIOR WALL INFILL
- 6" METAL STUDS @ 16" O.C.
- 3-5/8" METAL STUDS @ 16" O.C.
- 30" / 48" / & — INDICATES 30"x48" CLEAR SPACE
- & — INDICATES 5' DIAMETER W.C. ROTATION SPACE
- F.E.C. — FIRE EXTINGUISHER AND SEMI-RECESSED CABINET U.N.O., SEE **13/A14**

KEYNOTES:

1. 12" X 12" ACCESS PANEL TO (E) FIRE SPRINKLER INSPECTOR'S TEST VALVE. INSTALL PANEL SILL HEIGHT AT APPROX. 6'-0" A.F.F. PAINT
2. DENOTES EXTENT OF CONCRETE SLAB INFILL AT EXISTING ROLL-UP DOORS SEE **6/A16** FOR 6" CURB & **17/A16** FOR THRESHOLD TRANSITION
3. 3" DEPRESSED CONCRETE SLAB. SLOPE TO DRAIN. PROVIDE 6" CONCRETE CURB AT PERIMETER WALLS EXCEPT AT EXISTING WALL. REFER TO SECTIONS.
4. PATCH CONCRETE SLAB FLUSH AND MATCH EXISTING. SEE **23/A16**
5. ELECTRICAL PANEL, SEE ELECTRICAL DRAWINGS
6. CONCRETE LANDING, SEE **1/SD3**
7. NEW MAIN SWITCHBOARD, SEE ELECTRICAL

GENERAL NOTES:

1. DIMENSIONS ARE TO FACE FACE OF STUD U.O.N.
2. FOR TYPICAL ACCESSIBLE MOUNTING HEIGHTS AND REQUIREMENTS, SEE INTERIOR ELEVATIONS AND DETAIL **21/A14**
3. FINISH ALL GYPSUM BOARD EDGES PER DETAIL **10/A14**
4. FOR TYPICAL METAL FRAMING NOTES & DETALS SEE SHEET **A15**
5. FOR WALL PENETRATIONS OF PIPE OR CONDUIT, SEE DETAIL **25/A14**
6. SOUND INSULATION SHALL RUN FULL HEIGHT OF WALL. SOUND INSULATE ALL INTERIOR WALLS.
7. THERMAL INSULATION SHALL RUN FULL HEIGHT OF EXTERIOR WALLS. R-13 MIN. OVER EXISTING R-6 INSULATION TO PROVIDE TOTAL R-19 VALUE. SEE SECTIONS.
8. PROVIDE ROPPE 1/4 INCH ADA COMPLIANT RUBBER CARPET EDGE TRIM, OR APPROVED EQUAL, AT ALL TRANSITIONS BETWEEN CARPET AND POLISHED CONCRETE FLOORING. SEE **13/A13**

APPROVALS

LICENSED ARCHITECT
JAMES R. MORRELL
No. C-30128
EXP. 05-31-27
STATE OF CALIFORNIA

DATE: 07/21/2026

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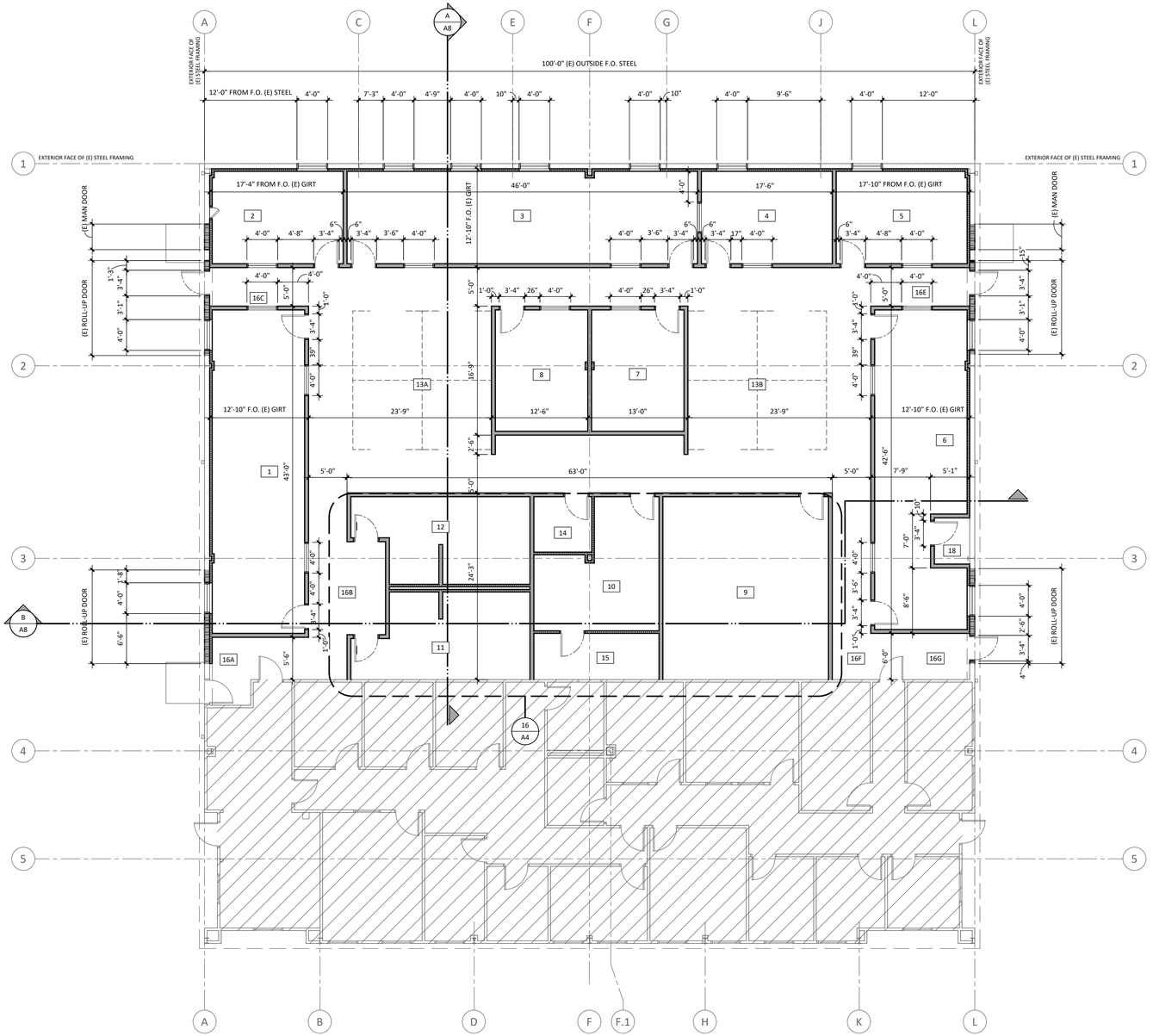
TITLE: FLOOR PLAN - PROPOSED

A2

PROJECT 25041

F:\01 Projects\25041\Drawings\01 Architectural\03 Sheets\25041 A2 Proposed Floor Plan.dwg Jul 21 2026 5:52pm

APPROVALS



LEGEND:

- HATCHED ARE DENOTES NO ARCHITECTURAL WORK IN THIS AREA, EXCEPT AS INDICATED. SEE OTHER DISCIPLINES DRAWINGS FOR ADDITIONAL REQUIREMENTS/INFORMATION; SCOPE MAY AFFECT AREAS NOT NOTED IN ARCHITECTURAL DRAWINGS
- (E) 8" WALL GIRT ASSEMBLY TO REMAIN U.N.O.
- 6" METAL STUDS @ 16" O.C. & 6" CONCRETE CURB @ EXTERIOR WALL INFILL
- 6" METAL STUDS @ 16" O.C.
- 3-5/8" METAL STUDS @ 16" O.C.

GENERAL NOTES:

1. DIMENSIONS ARE TO FACE FACE OF STUD U.O.N.
2. FINISH ALL GYPSUM BOARD EDGES PER DETAIL **10/A14**
3. FOR TYPICAL METAL FRAMING NOTES & DETALS SEE SHEET **A15**

FLOOR PLAN - PROPOSED DIMENSIONS

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

north

LICENSED ARCHITECT
JAMES R. MORRELL
No. C-30128
EXP. 05-31-27
STATE OF CALIFORNIA

DATE: 07/21/2026

ADMIN SERVICES REMODEL AT
SANGER UNIFIED BUSINESS PARK 2

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(559) 627.0530 Office
(559) 627.1926 Fax

TITLE
FLOOR PLAN - PROPOSED DIMENSIONS

A3

PROJECT **25041**

APPROVALS



DATE: 07/21/2026

LEGEND:

HATCHED ARE DENOTES NO ARCHITECTURAL WORK IN THIS AREA, EXCEPT AS INDICATED. SEE OTHER DISCIPLINES DRAWINGS FOR ADDITIONAL REQUIREMENTS/INFORMATION; SCOPE MAY AFFECT AREAS NOT NOTED IN ARCHITECTURAL DRAWINGS

6" METAL STUDS @ 16" O.C.

3-5/8" METAL STUDS @ 16" O.C.

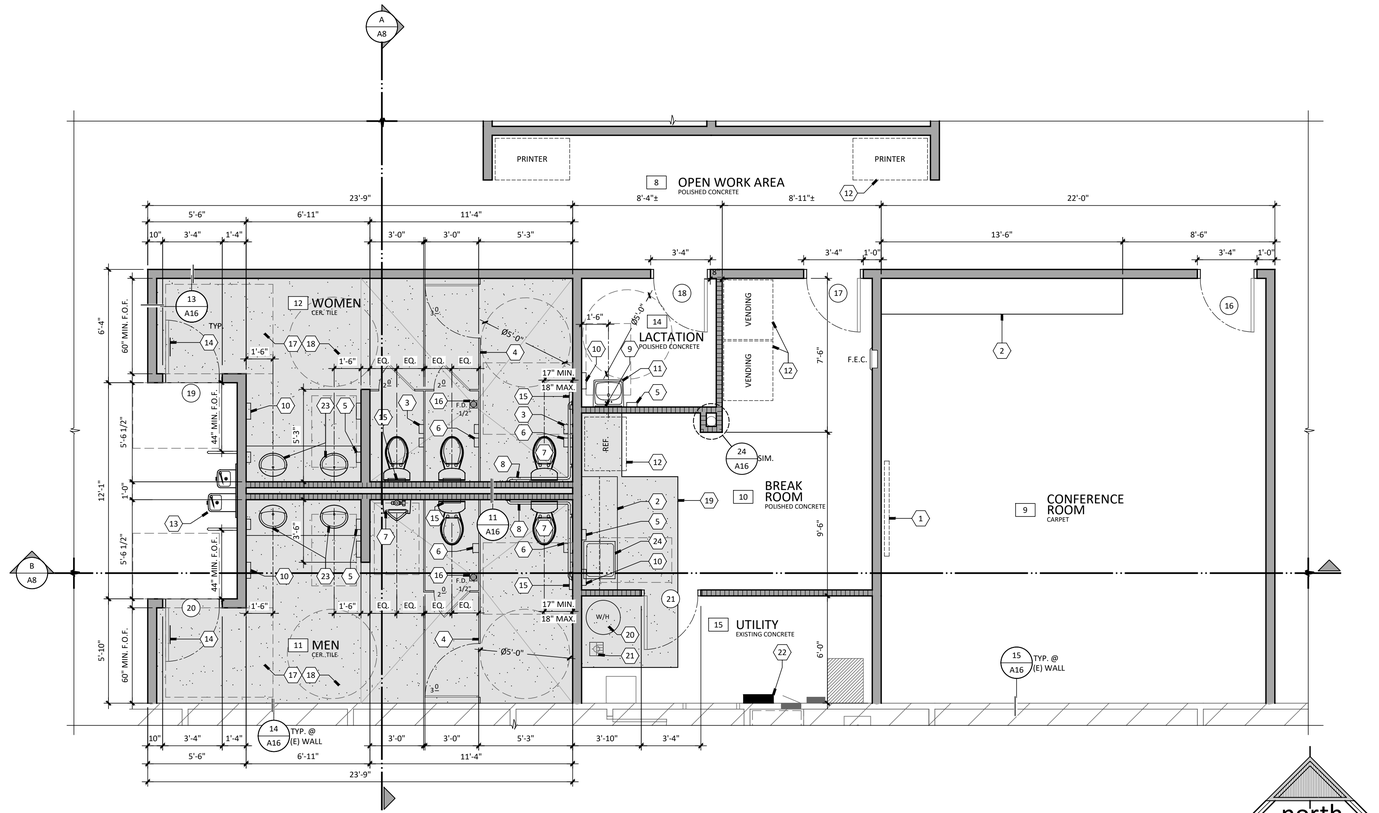
30" × 48" — INDICATES 30"x48" CLEAR FL. SPACE

Ø5'-0" — INDICATES 5' DIAMETER W.C. ROTATION SPACE

F.E.C. — FIRE EXTINGUISHER AND SEMI-RECESSED CABINET U.N.O., SEE **13/A14**

KEYNOTES:

1. TV & BRACKET, O.F.C.I. PROVIDE BLOCKING, SEE **7/A17**
2. CASEWORK, SEE INTERIOR ELEVATIONS, TYP.
3. SANITARY NAPKIN DISPENSER, SEE INT. ELEV.
4. TOILET PARTITIONS, TYP. SEE INTERIOR ELEVATIONS & DETAIL **5/A14**
5. SOAP DISPENSER, SEE INT. ELEV.
6. TOILET PAPER, SEE INT. ELEV., TYP.
7. PLUMBING FIXTURE, TYP., SEE INT. ELEV. AND PLUMBING
8. GRAB BAR, TYP., SEE INT. ELEV.
9. GLASS MIRROR, SEE INT. ELEV.
10. PAPER TOWEL DISPENSER, TYP.
11. ACCESSIBLE LAV. PLUMBING FIXTURE, TYP. SEE INT. ELEV., PLUMBING, AND **14/A14**
12. OFFICE EQUIPMENT, O.F.C.I.
13. ACCESS. HI/LO DRINKING FOUNTAIN WITH WALL BACK PANEL AND GUARD RAILS, SEE **11/A14** AND PLUMBING DRAWINGS.
14. SIGNAGE, SEE **22/A14**
15. TOILET SEAT COVER, TYP. SEE INT. ELEV.
16. FLOOR DRAIN. COORDINATE WITH PLUMBING DRAWINGS.
17. 3" DEPRESSED CONCRETE SLAB. SLOPE TO DRAIN. PROVIDE 6" CONCRETE CURB AT PERIMETER WALLS EXCEPT AT EXISTING WALL. REFER TO SECTIONS.
18. FLOORING SYSTEM AND BASE. SEE FINISH SCHEDULE.
19. PATCH CONCRETE SLAB FLUSH AND MATCH EXISTING. SEE **23/A16**
20. WATER HEATER. SEE PLUMBING DRAWINGS.
21. FLOOR SINK. SEE PLUMBING DRAWINGS.
22. ELECTRICAL PANEL. SEE ELECTRICAL DRAWINGS.
23. SOLID SURFACE COUNTER TOP WITH UNDER COUNTER SINK, SEE PLUMBING AND **6/A17**
24. ACCESSIBLE SINK CABINET. SEE PLUMBING, INT. ELEV., AND **4/A17**



16 ENLARGED FLOOR PLAN

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

GENERAL NOTES:

1. DIMENSIONS ARE TO FACE FACE OF STUD U.O.N.
2. FOR TYPICAL ACCESSIBLE MOUNTING HEIGHTS AND REQUIREMENTS, SEE INTERIOR ELEVATIONS AND DETAIL **21/A14**
3. FINISH ALL GYPSUM BOARD EDGES PER DETAIL **10/A14**
4. FOR TYPICAL METAL FRAMING NOTES & DETALS SEE SHEET **A15**
5. FOR WALL PENETRATIONS OF PIPE OR CONDUIT, SEE DETAIL **25/A14**
6. SOUND INSULATION SHALL RUN FULL HEIGHT OF WALL. SOUND INSULATE ALL INTERIOR WALLS.
7. THERMAL INSULATION SHALL RUN FULL HEIGHT OF EXTERIOR WALLS. R-13 MIN. OVER EXISTING R-6 INSULATION TO PROVIDE TOTAL R-19 VALUE. SEE SECTIONS.
8. ALL REQUIRED CLEARANCES SHALL BE TO THE FINISH.

ADMIN SERVICES REMODEL AT SANGER UNIFIED BUSINESS PARK 2

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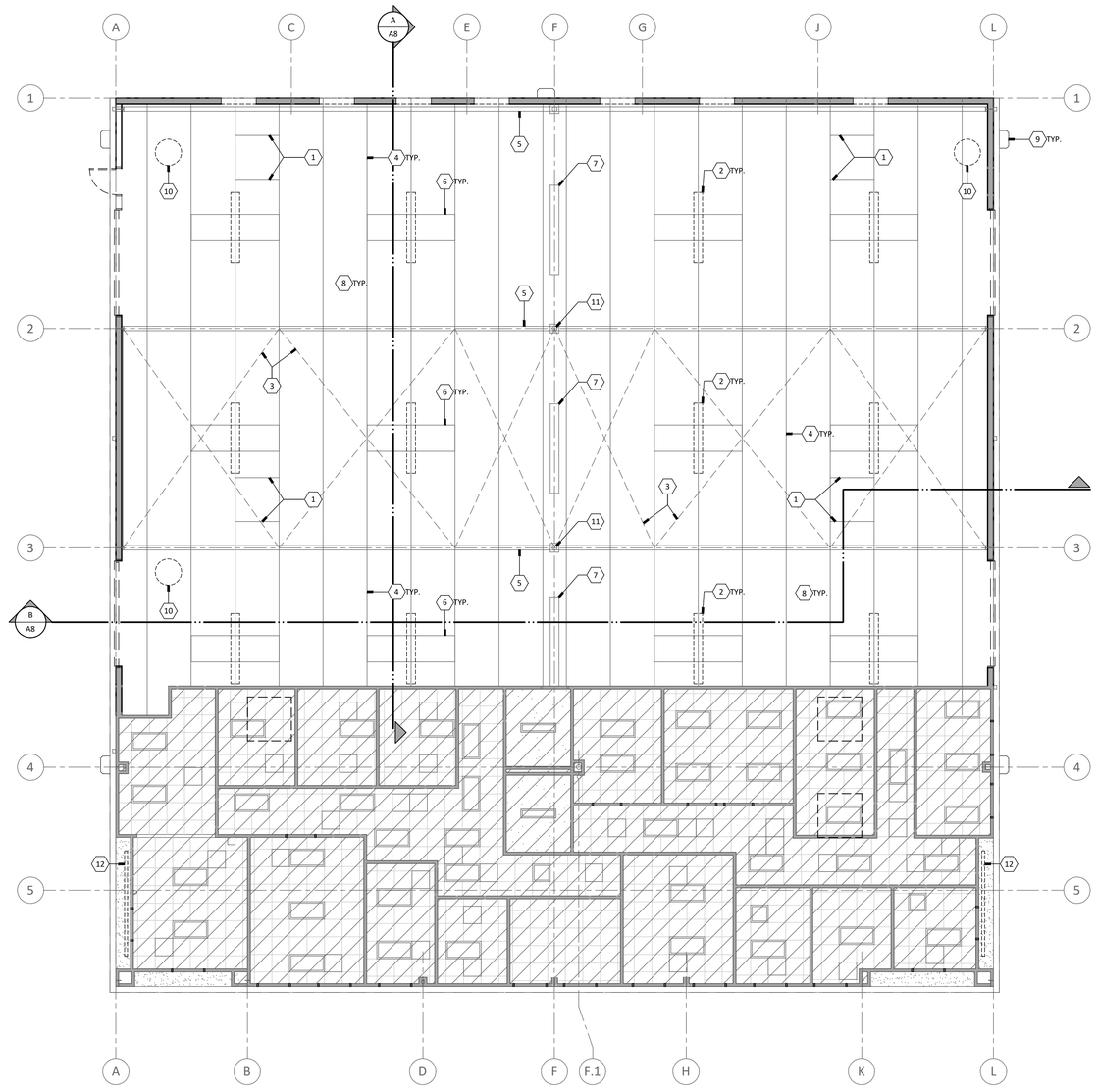
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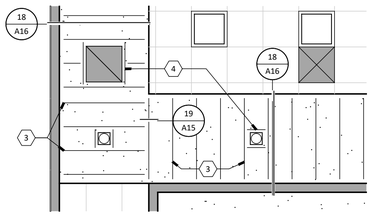
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TITLE
ENLARGED FLOOR PLAN

A4

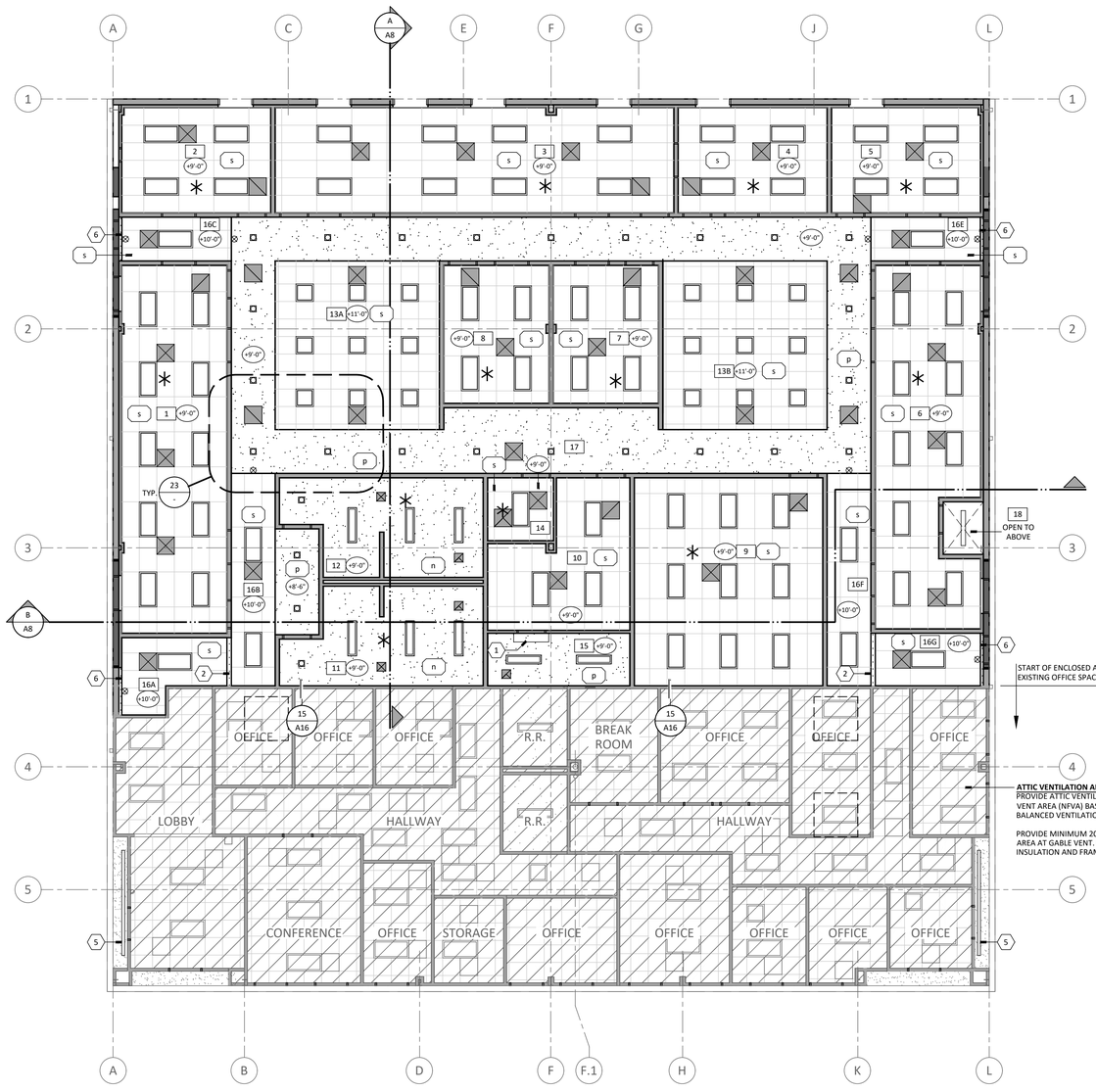
PROJECT 25041


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23 TYP. SOFFIT FRAMING INTERSECTION

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



REFLECTED CEILING PLAN - PROPOSED

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

north

LEGEND:

- HATCHED ARE DENOTES NO ARCHITECTURAL WORK IN THIS AREA, EXCEPT AS INDICATED. SEE OTHER DISCIPLINES DRAWINGS FOR ADDITIONAL REQUIREMENTS/INFORMATION; SCOPE MAY AFFECT AREAS NOT NOTED IN ARCHITECTURAL DRAWINGS
- TAPED, TEXTURED AND PAINTED 5/8" THICK GYP. BD. CEILING, PAINT. SEE **23/-** FOR FRAMING.
- 24" x 24" SUSP. LAY-IN CEILING SYSTEM, SEE **6/A14**
- 24" x 48" SUSP. LAY-IN CEILING SYSTEM, SEE **6/A14**
- (+X'-X") ELEVATION ABOVE FINISH FLOOR LEVEL
- # FINISH TAG, SEE FINISH SCHEDULE SHEET **A12**
- ASTERISK INDICATES 3 ½" SOUND INSULATION BATTS ABOVE CEILING, TYPICAL
- LIGHT FIXTURES, SEE ELECTRICAL DWGS.
- HVAC REGISTERS, SEE MECHANICAL DWGS.

KEYNOTES:

1. WALL-MOUNTED INDOOR UNIT. COORDINATE PER MECHANICAL DRAWINGS.
2. FRAME HEADER, PAINT. SEE **19/A14**
3. SOFFIT FRAMING AT 16 o.c., TYP.
4. FRAMED OPENING AT PROPOSED MECHANICAL AND ELECTRICAL CEILING EQUIPMENT LOCATIONS PER REFLECTED CEILING PLAN, TYP.
5. 12"-0" LONG CONTINUOUS 4" WIDE PERFORATED ALUMINUM SOFFIT VENTS, AIR VENT CONTINUOUS SOFFIT VENT OR APPROVED EQUAL. PROVIDE INSECT SCREEN. INSTALL PER MANUFACTURER'S REQUIREMENTS. PAINT TO MATCH ADJACENT SURFACE.
6. FURRED HEADER AND WALL ABOVE EXTERIOR DOORS, SEE HEADER DETAILS ON SHEET **A13** FOR ADDITIONAL INFORMATION.

GENERAL NOTES:

1. FINISH ALL GYPSUM BOARD EDGES PER DETAIL **10/A14**
2. FOR TYPICAL METAL FRAMING NOTES & DETALS SEE SHEET **A15**
3. FOR WALL PENETRATIONS OF PIPE OR CONDUIT, SEE DETAIL **25/A14**
4. THERMAL INSULATION SHALL COVER EXISTING WAREHOUSE INSULATION AT ROOF ABOVE. R-20 MIN. OVER EXISTING R-10 INSULATION TO PROVIDE TOTAL R-30 VALUE. SEE SECTIONS.

ATTIC VENTILATION ABOVE EXISTING OFFICE SPACE:
PROVIDE ATTIC VENTILATION IN ACCORDANCE WITH CBC SECTION 1202.2. ATTIC AREA = 830 SF. REQUIRED NET FREE VENT AREA (NFVA) BASED ON 1/300 RATIO FOR BALANCED SYSTEM = 2.77 SF (400 IN^2) MINIMUM. PROVIDE BALANCED VENTILATION WITH APPROXIMATELY 50% LOW INTAKE AND 50% HIGH EXHAUST.

PROVIDE MINIMUM 200 IN^2 NET FREE INTAKE AREA AT SOFFIT VENTS AND MINIMUM 200 IN^2 NET FREE EXHAUST AREA AT GABLE VENT. MAINTAIN CLEAR AIR PATH BETWEEN INTAKE AND EXHAUST AND COORDINATE WITH EXISTING INSULATION AND FRAMING TO PREVENT BLOCKAGE. SEE EXTERIOR ELEVATIONS FOR GABLE VENT.

APPROVALS

LICENSED ARCHITECT
JAMES R. MORRELL
No. C-30128
EXP. 05-31-27
STATE OF CALIFORNIA

DATE: 07/21/2026

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SANGER UNIFIED SCHOOL DISTRICT
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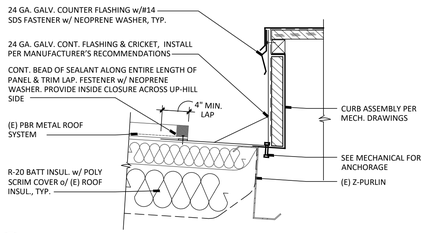
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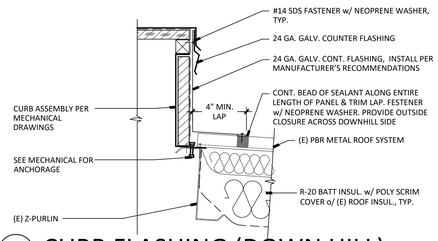
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REFLECTED CEILING PLAN - PROPOSED

A6

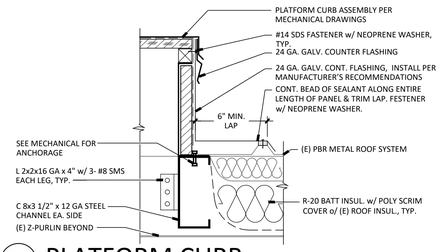
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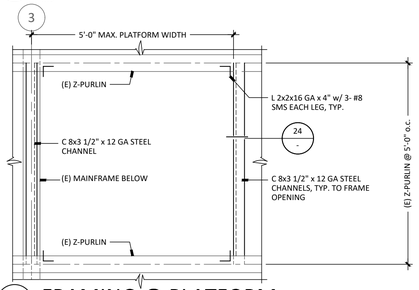
25 CURB FLASHING (UP HILL)
NTS



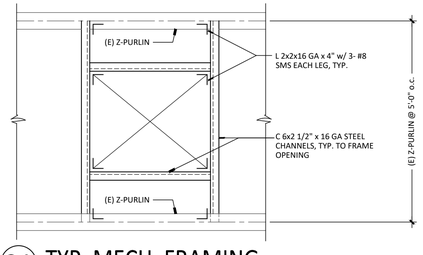
20 CURB FLASHING (DOWN HILL)
NTS



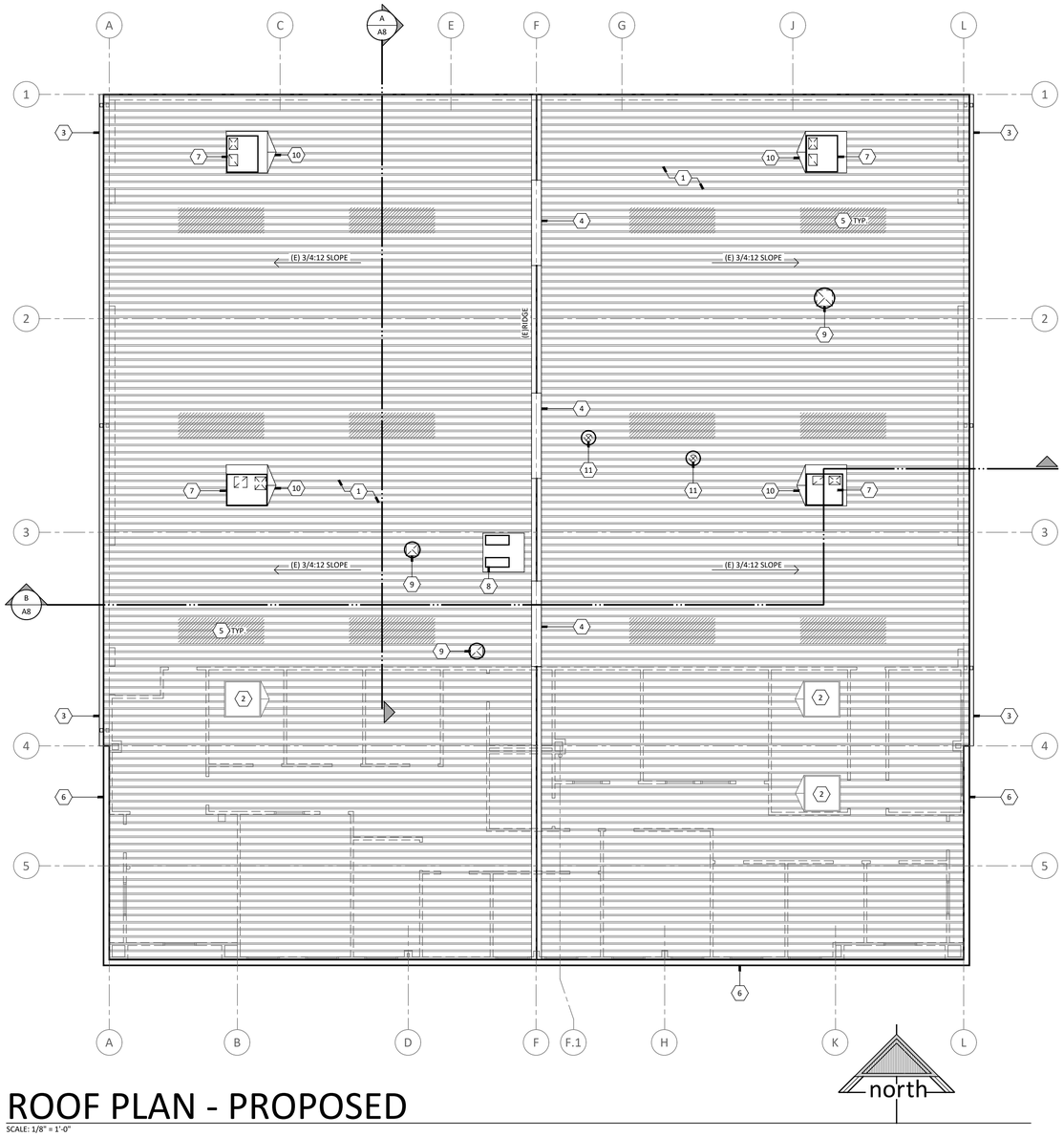
24 PLATFORM CURB
NTS



23 FRAMING @ PLATFORM
NTS



21 TYP. MECH. FRAMING
NTS



ROOF PLAN - PROPOSED
SCALE: 1/8" = 1'-0"

KEYNOTES:

1. EXISTING 26 GA. METAL 'PBR' ROOF PANEL SYSTEM TO REMAIN, PROTECT, TYP.
2. EXISTING MECHANICAL UNIT TO REMAIN, PROTECT, TYP.
3. EXISTING GUTTER TO REMAIN, PROTECT, TYP.
4. EXISTING RIDGE VENT TO REMAIN, PROTECT. SEE **9/A17**
5. EXISTING TRANSLUCENT ROOF PANEL TO REMAIN, PROTECT, TYP.
6. EXISTING PARAPET TO REMAIN, PROTECT, TYP.
7. HEAT PUMP UNIT AND CURB o/ CURB ADAPTER, SEE MECHANICAL. INSTALL AT EXISTING FRAMING. EXISTING PEMB FRAMING DESIGNED FOR 850 LB MAX LOAD; DO NOT EXCEED. FIELD VERIFY FRAMING LOCATION PRIOR TO INSTALL. SEE SHEET **A5** FOR ADDITIONAL INFORMATION REGARDING EXISTING FRAMING. FOR TYPICAL FLASHING SEE **24/A7, 25/A7, & 20/A7**
8. MECHANICAL OUTDOOR UNITS ON PLATFORM, SEE MECHANICAL DRAWINGS. PLATFORM INSTALLED AT EXISTING MAINFRAME AND Z-PURLING FRAMING. FOR ADDITIONAL FRAMING SEE **23/A7 25/A7, & 20/A7**
9. EXHAUST FAN UNIT AND CURB, SEE MECHANICAL DRAWINGS. SEE **21/A7** FOR FRAMING. FOR TYPICAL FLASHING AT CURB SEE **24/A7, 25/A7, & 20/A7**
10. 24 GA. GALV. CRICKET, TYP. 1/4":12 SLOPE MIN.
11. MECHANICAL EXHAUST VENT, SEE MECHANICAL DRAWINGS. SEE **21/A7** FOR FRAMING. FOR TYPICAL FLASHING SEE **24/A7**

GENERAL NOTES:

1. EXISTING PRE-ENGINEERED METAL BUILDING (PEMB) FRAMING AND CAPACITIES ARE BASED ON AVAILABLE RECORD DRAWINGS. CONTRACTOR SHALL VERIFY EXISTING CONDITIONS IN FIELD. ANY NEW ROOFTOP EQUIPMENT EXCEEDING DOCUMENTED DESIGN LOADS SHALL BE REPORTED TO ARCHITECT AND REQUIRE STRUCTURAL REVIEW.
2. COORDINATE ALL PENETRATIONS, CURBS, FLASHING, AND WEATHERPROOFING WITH EXISTING 26 GA. PBR ROOF SYSTEM AND ROOFING MANUFACTURER REQUIREMENTS.

APPROVALS

LICENSED ARCHITECT
JAMES R. MORRELL
No. C-30128
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STATE OF CALIFORNIA

DATE: 07/21/2026

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SANGER UNIFIED SCHOOL DISTRICT
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REVISIONS

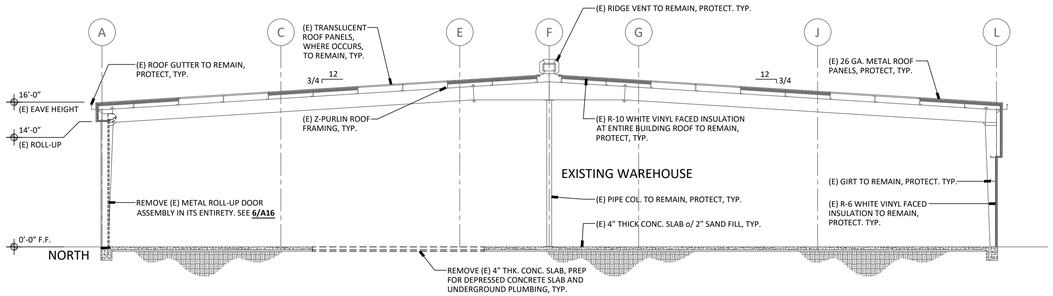
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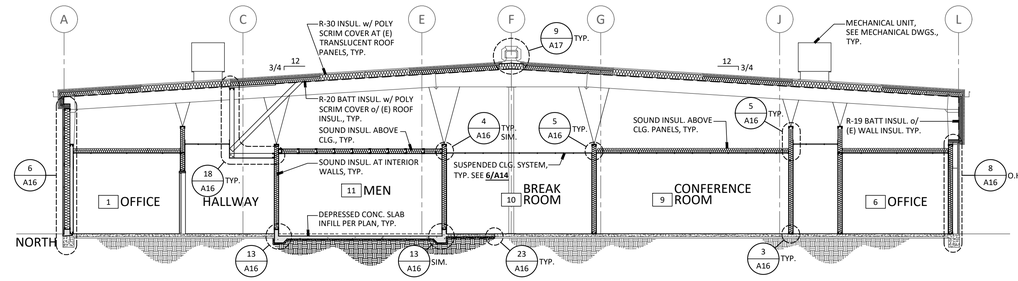
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ROOF PLAN - PROPOSED

A7

PROJECT 25041



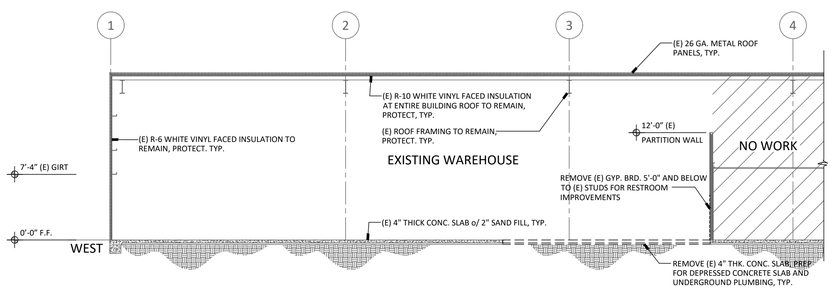
DEMOLITION



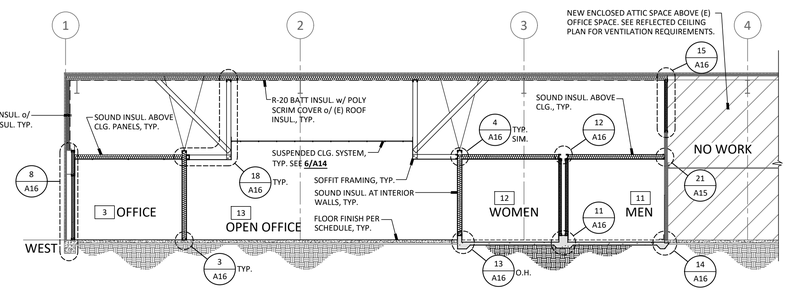
PROPOSED

B SECTION

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



DEMOLITION



PROPOSED

A SECTION

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

APPROVALS

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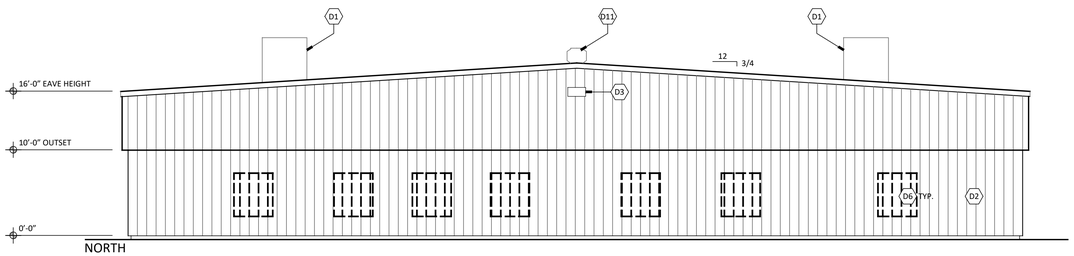
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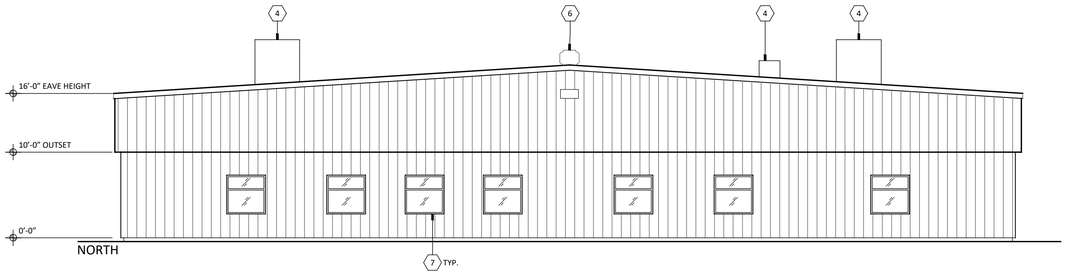
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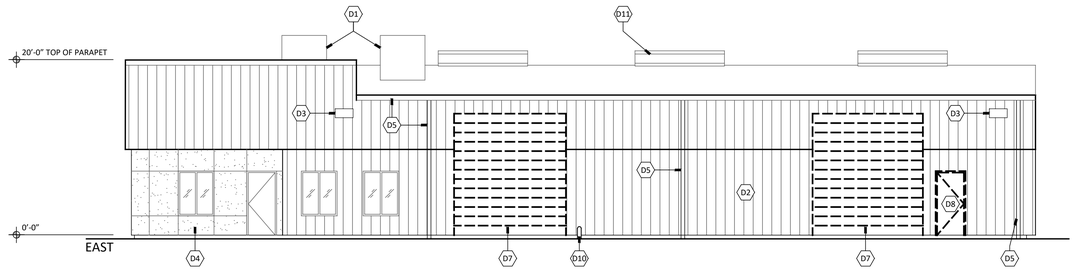
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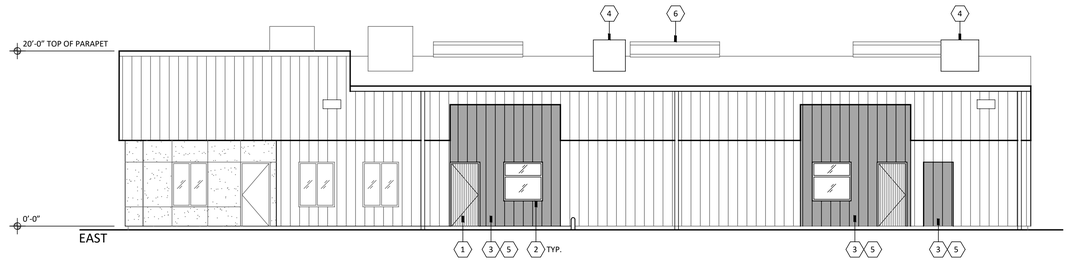
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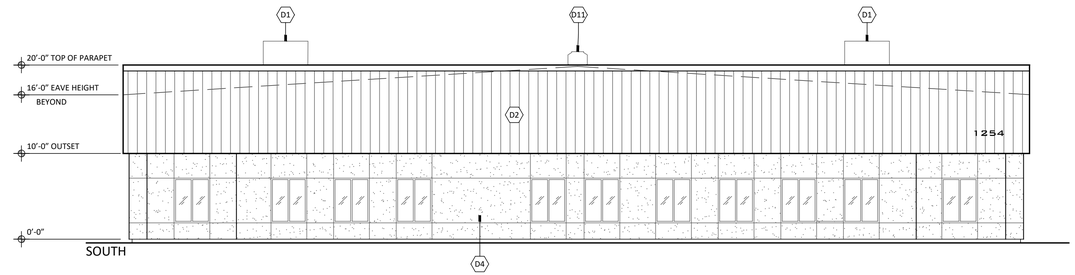
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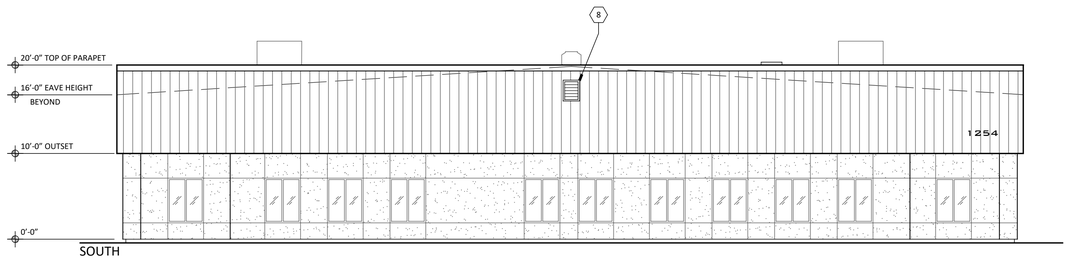


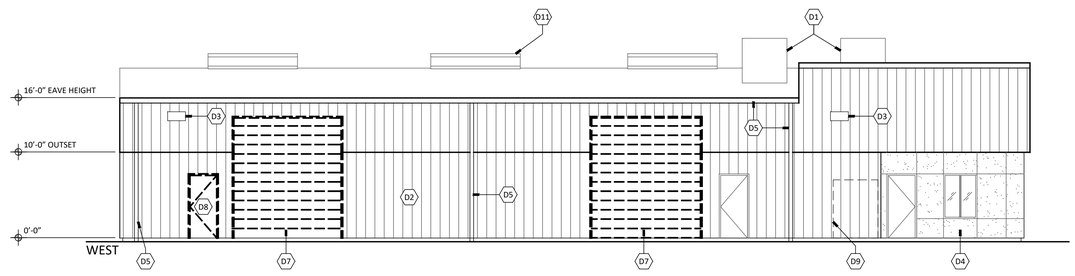


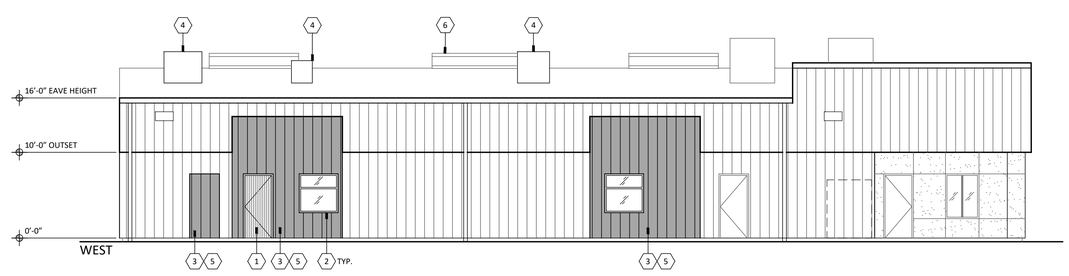












EXTERIOR ELEVATIONS - DEMOLITION

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

KEYNOTES:

- D1 EXISTING MECHANICAL UNIT AND CURB TO REMAIN, PROTECT
- D2 EXISTING 26 GA. 'PBR' METAL WALL PANELS TO REMAIN, PROTECT, TYP.
- D3 EXISTING ALL PACK LIGHT FIXTURE TO REMAIN, PROTECT
- D4 EXISTING CEMENT PLASTER TO REMAIN, PROTECT, TYP.
- D5 EXISTING GUTTER AND DOWNSPOUT, PROTECT, TYP.
- D6 REMOVE PORTION OF EXISTING METAL PANEL TO ACCOMMODATE PROPOSED IMPROVEMENTS, TYP.
- D7 REMOVE EXISTING ROLL UP DOOR, SEE **6/A16**
- D8 REMOVE EXISTING H.M. DOOR, RETURN TO OWNER
- D9 EXISTING ELECTRICAL SERVICE PANEL, SEE ELEC. DWGS.
- D10 EXISTING FIRE RISER PIPING, PROTECT
- D11 EXISTING RIDGE VENT TO REMAIN, TYP.

EXTERIOR ELEVATIONS - PROPOSED

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

KEYNOTES:

- 1 DOOR AND FRAME, TYP. SEE DOOR SCHEDULE
- 2 WINDOW AND FRAME ASSEMBLY, TYP. SEE WINDOW SCHEDULE.
- 3 2X METAL STUD INFILL AT EXISTING OPENING, TYP. SEE **19/A16**. SIM. AT MAN DOOR INFILL.
- 4 MECHANICAL UNIT, SEE MECHANICAL DRAWINGS
- 5 26 GA. PBR METAL WALL PANEL, EXPOSED FASTENER TYPE, MATCH EXISTING PROFILE AND FINISH. INSTALL PER MANUFACTURER'S STANDARD DETAILS INCLUDING ALL TRIM, FLASHING, AND ACCESSORIES
- 6 EXISTING RIDGE VENT TO REMAIN. SEE **9/A17** FOR CLOSURE PANEL, TYP.
- 7 WINDOW AND FRAME ASSEMBLY, TYP. SEE WINDOW SCHEDULE AND **21/A13** FOR NORTH SIDE WINDOWS.
- 8 EXTERIOR ALUMINUM LOUVERED GABLE VENT, APPROX. 18" X 24", AIR VENT OR APPROVED EQUAL, WITH MINIMUM NET FREE VENT AREA OF 200 IN². PROVIDE INSECT SCREEN AND PERIMETER FLASHING/TRIM FOR INSTALLATION IN METAL PANEL WALL. PROVIDE FACTORY FINISH TO MATCH EXISTING METAL PANEL COLOR. INSTALL PER MANUFACTURER'S REQUIREMENTS.

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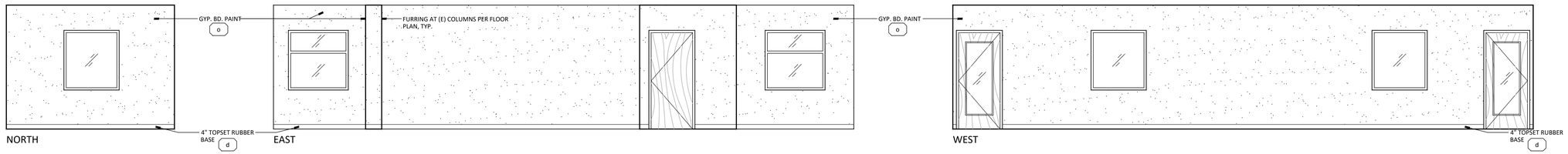
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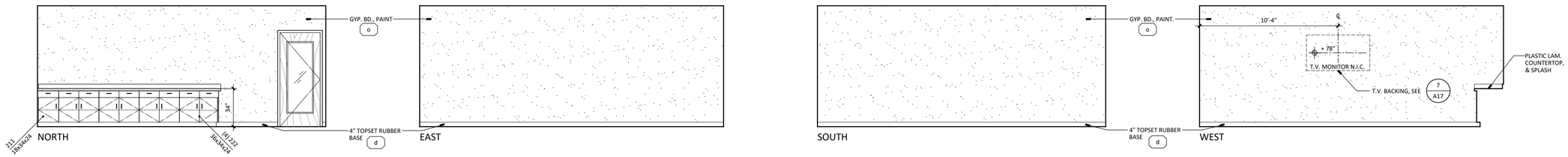
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A9

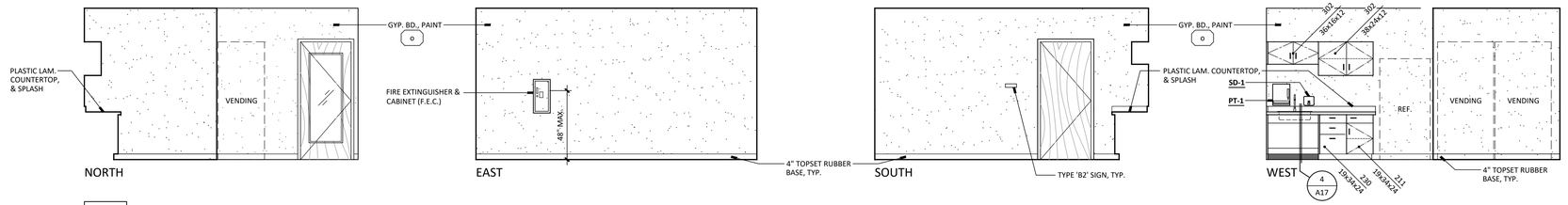
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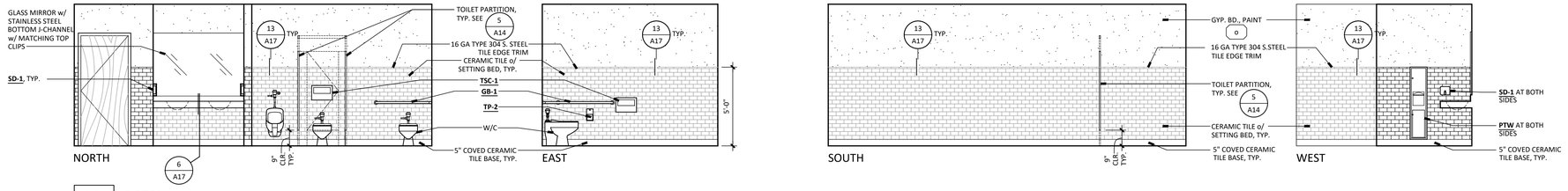
6 OFFICE (TYPICAL AT ALL OFFICE SPACES U.O.N.)



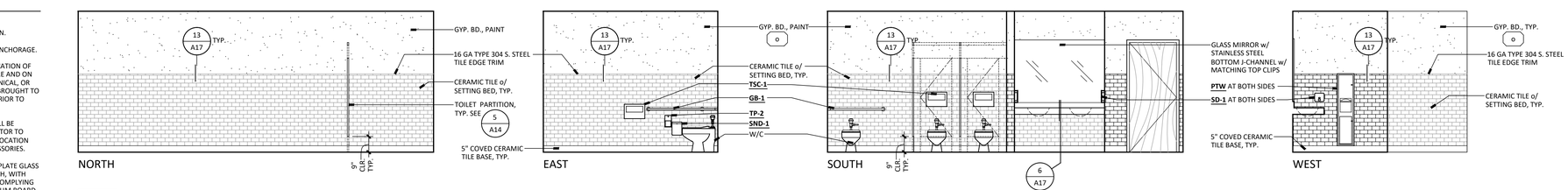
9 CONFERENCE ROOM



10 BREAK ROOM



11 MEN



12 WOMEN

INTERIOR ELEVATION NOTES

1. (=) MATERIAL DEFINITION. REFER TO SHEET **A12**
2. REFER TO FINISH SCHEDULE SHEET **A12** FOR DESIGNATION OF FINISHES.
3. REFER TO **21/A14** FOR TYPICAL ACCESSIBLE MOUNTING HEIGHTS AND REQUIREMENTS, U.O.N.
4. REFER TO SPECIFICATIONS FOR TOILET ACCESSORY ABBREVIATIONS.
5. REFER TO **1/A17** FOR TYPICAL COUNTERTOP AND BACK SPLASH DETAILS U.O.N.
6. REFER TO **1/A17** FOR TYPICAL CABINET ANCHORAGE.
7. SEE **22/A14** AND DOOR SCHEDULE FOR TYPICAL DOOR SIGNAGE.
8. REFER TO **10/A14** FOR TYPICAL GYPSUM BOARD EDGE DETAILS.
10. SEE **13/A14** FOR RECESSED FIRE EXTINGUISHER CABINET INFORMATION.
11. SEE **15/A14** FOR TYPICAL GRAB BAR ANCHORAGE.
13. ANY DISCREPANCY BETWEEN THE LOCATION OF DEVICES, FIXTURES, ETC., SHOWN HERE AND ON ANY PLUMBING, ELECTRICAL, MECHANICAL, OR SANITARY SEWER SHEETS ARE TO BE BROUGHT TO THE ATTENTION OF THE ARCHITECT PRIOR TO LAYOUT.
14. ANY ACCESSORIES SHOWN N.I.C. SHALL BE PROVIDED BY THE OWNER. CONTRACTOR TO PROVIDE BLOCKING PER **20/A14**, AT LOCATION SHOWN AND INSTALLATION OF ACCESSORIES.
15. AT RESTROOMS PROVIDE 1/4" THICK PLATE GLASS MIRROR, 4'-0" HIGH x COUNTER WIDTH, WITH POLISHED EDGES. PROVIDE MIRROR COMPLYING WITH ANSI Z97.1. INSTALL OVER GYPSUM BOARD WITH MASTIC AND MECHANICAL SUPPORT. PROVIDE BLOCKING PER **20/A14**

INTERIOR ELEVATIONS

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

REFER TO **17 / A34** FOR TYPICAL ACCESSIBLE MOUNTING HEIGHTS AND REQUIREMENTS U.O.N.

APPROVALS

LICENSED ARCHITECT
JAMES R. MORRELL
No. C-30128
EXP. 05-31-27
STATE OF CALIFORNIA

DATE: 07/21/2026

ADMIN SERVICES REMODEL AT
SANGER UNIFIED BUSINESS PARK 2
SANGER UNIFIED SCHOOL DISTRICT
1254 COMMERCE AVE, SANGER, CA 93657

Reviewed for Code Compliance
08/24/2026
CSG CONSULTANTS, INC.

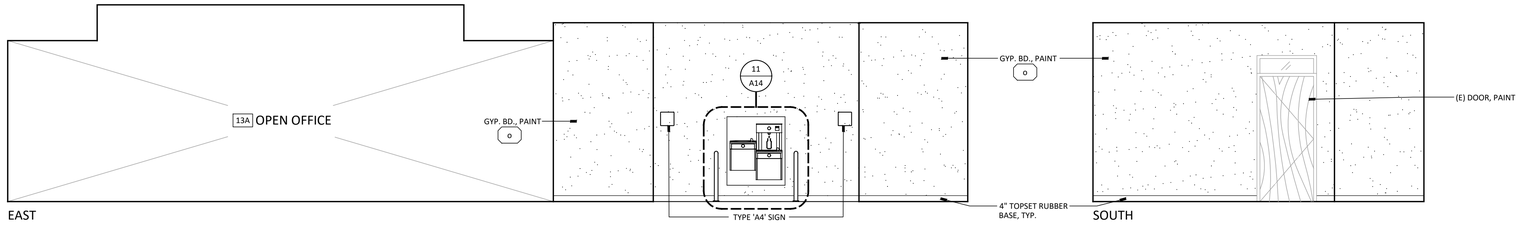
REVISIONS

MANGINI ARCHITECTURE INGENUITY
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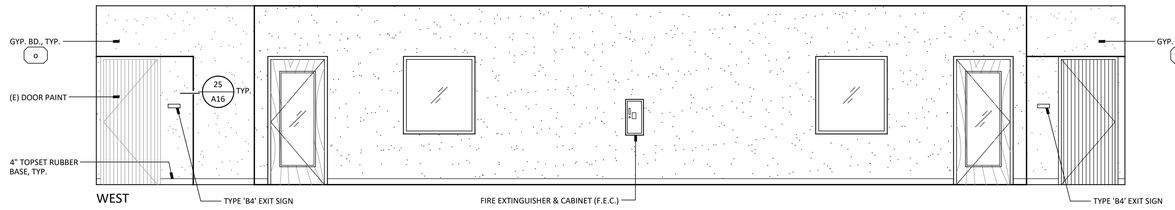
TITLE
INTERIOR ELEVATIONS

A10

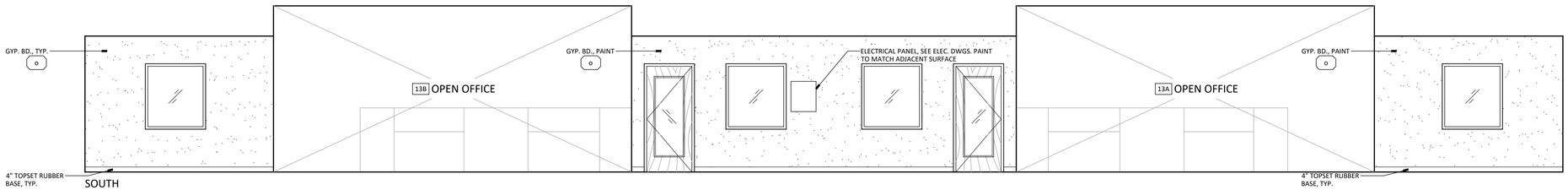
PROJECT 25041



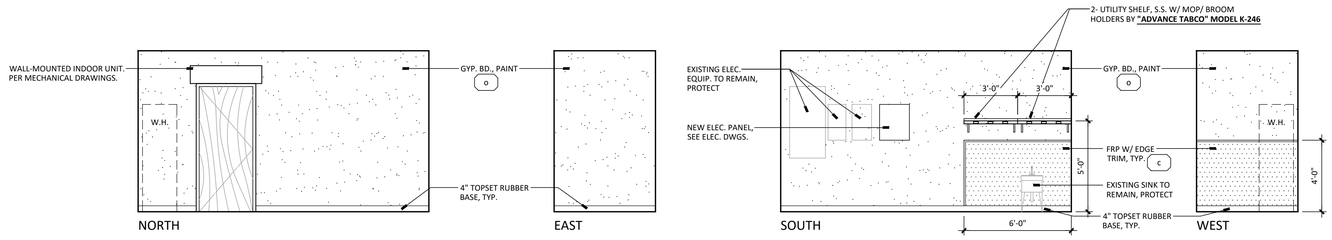
16B HALLWAY (TYPICAL AT ALL HALLWAY SPACES U.O.N.)



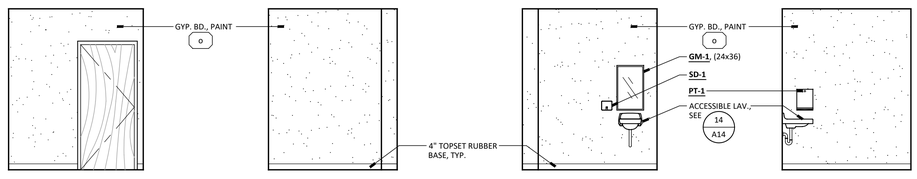
16B HALLWAY (TYPICAL AT ALL HALLWAY SPACES U.O.N.)



16D HALLWAY (TYPICAL AT ALL HALLWAY SPACES U.O.N.)



15 UTILITY



14 LACTATION

INTERIOR ELEVATION NOTES

1. = MATERIAL DEFINITION. REFER TO SHEET **A12**
2. REFER TO FINISH SCHEDULE SHEET **A12** FOR DESIGNATION OF FINISHES.
3. REFER TO **21/A14** FOR TYPICAL ACCESSIBLE MOUNTING HEIGHTS AND REQUIREMENTS, U.O.N.
4. REFER TO SPECIFICATIONS FOR TOILET ACCESSORY ABBREVIATIONS.
5. REFER TO **1/A17** FOR TYPICAL COUNTERTOP AND BACK SPLASH DETAILS U.O.N.
6. REFER TO **1/A17** FOR TYPICAL CABINET ANCHORAGE.
7. SEE **22/A14** AND DOOR SCHEDULE FOR TYPICAL DOOR SIGNAGE.
8. REFER TO **10/A14** FOR TYPICAL GYPSUM BOARD EDGE DETAILS.
10. SEE **13/A14** FOR RECESSED FIRE EXTINGUISHER CABINET INFORMATION.
11. SEE **15/A14** FOR TYPICAL GRAB BAR ANCHORAGE.
13. ANY DISCREPANCY BETWEEN THE LOCATION OF DEVICES, FIXTURES, ETC., SHOWN HERE AND ON ANY PLUMBING, ELECTRICAL, MECHANICAL, OR SANITARY SEWER SHEETS ARE TO BE BROUGHT TO THE ATTENTION OF THE ARCHITECT PRIOR TO LAYOUT.
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INTERIOR ELEVATIONS

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

REFER TO **17 / A34** FOR TYPICAL ACCESSIBLE MOUNTING HEIGHTS AND REQUIREMENTS U.O.N.

APPROVALS

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TITLE
INTERIOR ELEVATIONS

A11

PROJECT 25041

INTERIOR ROOM FINISH SCHEDULE

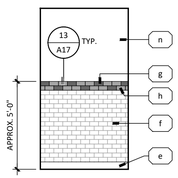
	ROOM NUMBER & NAME	FLOOR	BASE	WAINSCOT	WALLS NORTH	WALLS EAST	WALLS SOUTH	WALLS WEST	CEILING MAT'L.	CEILING HEIGHT	SOFFIT MAT'L.	SOFFIT HEIGHT	REMARKS:	COUNTER TOPS	MILLWORK LOWER	MILLWORK UPPER
1	LARGE OFFICE	11 -	20 d	- -	41 o	41 o	41 o	41 o	50 s	9'-0"						
2	OFFICE	11 -	20 d	- -	41 o	41 o	41 o	41 o	50 s	9'-0"						
3	LARGE OFFICE	11 -	20 d	- -	41 o	41 o	41 o	41 o	50 s	9'-0"						
4	OFFICE	11 -	20 d	- -	41 o	41 o	41 o	41 o	50 s	9'-0"						
5	OFFICE	11 -	20 d	- -	41 o	41 o	41 o	41 o	50 s	9'-0"						
6	LARGE OFFICE	11 -	20 d	- -	41 o	41 o	41 o	41 o	50 s	9'-0"						
7	OFFICE	11 -	20 d	- -	41 o	41 o	41 o	41 o	50 s	9'-0"						
8	OFFICE	11 -	20 d	- -	41 o	41 o	41 o	41 o	50 s	9'-0"						
9	CONFERENCE ROOM	11 -	20 d	- -	41 o	41 o	41 o	41 o	50 s	9'-0"				60 K	70 j	
10	BREAK ROOM	12 -	20 d	- -	41 o	41 o	41 o	41 o	50 s	9'-0"				60 K	70 j	70 j
11	MEN	13 -	21 e	- -	41/42 n/f	41/42 n/f	41/42 n/f	41/42 n/f	52 n	9'-0"			* SEE TILE PATTERN BELOW IN FINISHES	61 m		
12	WOMEN	13 -	21 e	- -	41/42 n/f	41/42 n/f	41/42 n/f	41/42 n/f	52 n	9'-0"			* SEE TILE PATTERN BELOW IN FINISHES	61 m		
13	OPEN OFFICE	11 -	20 d	- -	41 o	41 o	41 o	41 o	51 s	11'-0"	52 p	9'-0"	* POLISHED CONCRETE AT PERIMETER HALLWAYS. PROVIDE TRAFFIC TRANSITION			
14	LACTATION	12 -	20 d	- -	41 o	41 o	41 o	41 o	50 s	9'-0"						
15	UTILITY	10 -	20 d	30 c	41 o	41 o	41 o	41 o	52 p	9'-0"			* SEE INTERIOR ELEVATIONS FOR EXTENT OF FRP FINISH			
16	HALLWAY	12 -	20 d	- -	41 o	41 o	41 o	41 o	50/52 s	10'-0"/9'-0"	52 p	8'-6"	* SEE RCP			
17	OPEN WORK AREA	12 -	20 d	- -	41 o	41 o	41 o	41 o	52 p	9'-0"						
18	FIRE RISER	10 -	20 d	- -	41 o	44 s	41 o	41 o	53 -	-						

DOOR SCHEDULE

DOOR NO.	TYPE	DIMENSIONS WIDTH	HGT.	THK.	HDWR GROUP	FINISH	FIRE RATING	FRAME TYPE	FRAME DEPTH	FRAME FINISH	DETAILS HEAD	DETAILS JAMB	DETAILS JAMB	DETAILS SILL	SIGNAGE TYPE	SIGNAGE TEXT	REMARKS:
1	A	3'-0"	7'-0"	1 3/4"	01	-		4	9 1/2"	-	6	17	17	11			
											A13	A13	A13	A13	B4	"EXIT"	
2	A	3'-0"	7'-0"	1 3/4"	01	-		4	9 1/2"	-	6	17	17	11			
											A13	A13	A13	A13	B4	"EXIT"	
3	A	3'-0"	7'-0"	1 3/4"	01	-		4	9 1/2"	-	6	17	17	11			
											A13	A13	A13	A13	B4	"EXIT"	
4	C	3'-0"	7'-0"	1 3/4"	02	-		5		-	1	1	1	13			
											A13	A13	A13	A13			
5	B	3'-0"	7'-0"	1 3/4"	05	-		5		-	1	1	1	13			
											A13	A13	A13	A13	G	"FIRE RISER"	"G" MTD. ON DOOR
6	C	3'-0"	7'-0"	1 3/4"	02	-		5		-	1	1	1	13			
											A13	A13	A13	A13			
7	C	3'-0"	7'-0"	1 3/4"	02	-		5		-	1	1	1	13			
											A13	A13	A13	A13			
8	C	3'-0"	7'-0"	1 3/4"	02	-		5		-	1	1	1	13			
											A13	A13	A13	A13			
9	C	3'-0"	7'-0"	1 3/4"	02	-		5		-	1	1	1	13			
											A13	A13	A13	A13			
10	C	3'-0"	7'-0"	1 3/4"	02	-		5		-	1	1	1	13			
											A13	A13	A13	A13			
11	C	3'-0"	7'-0"	1 3/4"	02	-		5		-	1	1	1	13			
											A13	A13	A13	A13			
12	C	3'-0"	7'-0"	1 3/4"	02	-		5		-	1	1	1	13			
											A13	A13	A13	A13			
13	C	3'-0"	7'-0"	1 3/4"	02	-		5		-	1	1	1	13			
											A13	A13	A13	A13			
14	C	3'-0"	7'-0"	1 3/4"	02	-		5		-	1	1	1	13			
											A13	A13	A13	A13			
15	C	3'-0"	7'-0"	1 3/4"	02	-		5		-	1	1	1	13			
											A13	A13	A13	A13			
16	C	3'-0"	7'-0"	1 3/4"	02	-		5		-	1	1	1	13			
											A13	A13	A13	A13	B2	"CONFERENCE"	
17	C	3'-0"	7'-0"	1 3/4"	02	-		5		-	1	1	1	13			
											A13	A13	A13	A13	B2	"BREAK ROOM"	
18	B	3'-0"	7'-0"	1 3/4"	03	-		5		-	1	1	1	13			
											A13	A13	A13	A13	B2	"LACTATION"	
19	B	3'-0"	7'-0"	1 3/4"	04	-		5		-	1	1 & 23	1 & 23	12			
											A13	A13	A13	A13	A2/A4	"WOMEN"	
20	B	3'-0"	7'-0"	1 3/4"	04	-		5		-	1	1 & 23	1 & 23	12			
											A13	A13	A13	A13	A1/A4	"MEN"	
21	B	3'-0"	7'-0"	1 3/4"	06	-		5		-	1	1	1	13			1" UNDERCUT AT DOOR PANEL
											A13	A13	A13	A13	B2	"UTILITY"	
22		EXISTING				-				-				13			
														A13			
23		EXISTING				-				-				13			
														A13			
24		EXISTING				-				-					B4	"EXIT"	

FINISHES/ COLORS

- a CARPET- TARKETT TEXTUREMAP #11129-42801 TOMORROWLAND/POWERBOND RS HYBRID
- b NOT USED
- c FRP- GLASBORD #85 WHITE
- d 'ROPPE' BASE COLOR TO MATCH ON SITE
- e 'DAL TILE' COHESION | 12x24 #C206 DARK GRAY MATTE W/ CUSTOM BUILD GROUT #370 DOVE GRAY W/ 6X12 COVED BASE #S36C9TA
- f 'DAL TILE' COLOR WHEEL CLASSIC 3x6 WALL TILE | #0190 ARTIC WHITE W/ CUSTOM BUILD. GROUT #640 ARTIC WHITE
- g 'DAL TILE' COLOR WHEEL CLASSIC 3x6 WALL TILE | #0182 SUEDE GRAY W/ CUSTOM BUILD. GROUT #640 ARTIC WHITE
- h 'DAL TILE' COLOR WHEEL CLASSIC 3x6 WALL TILE | #K109 ARCHITECTURAL GRAY W/ CUSTOM BUILD. GROUT #640 ARTIC WHITE
- i 'BOBRICK' COMPACT LAMIANTE PARTITION -#5882-58 CITADEL WARP
- j 'WILSONART' CASEWORK- #8221-38 SAP WALNUT
- k 'WILSONART' COUNTER TOP- #4942-38 CRISP LINEN
- m 'DAL TILE' ONE QUARTZ-#OQ81 CALACATTA WISTERIA
- n 'SHERWIN WILLIAMS' #SW 7004 SNOWBOUND
- o 'SHERWIN WILLIAMS' #SW (PAINT COLOR 2 - OFFICE INTER) MATCH TO EXISTING
- p 'SHERWIN WILLIAMS' #SW (PAINT COLOR 3 - OFFICE CLG.) MATCH TO EXISTING
- q 'SHERWIN WILLIAMS' #SW (PAINT COLOR 4 - EXTERIOR 1) MATCH TO EXISTING
- r 'SHERWIN WILLIAMS' #SW (PAINT COLOR 5 - EXTERIOR 2) MATCH TO EXISTING
- s REFER TO SPECIFICATIONS FOR MATERIAL / COLOR DESIGNATION



TYPICAL TILE PATTERN

MATERIALS

FLOOR
- 10 EXISTING CONCRETE
- 11 CARPET TILE
- 12 POLISHED CONCRETE
- 13 12"x24" MATTE CERAMIC TILE

BASE
- 2O 4" RUBBER TOPSET
- 21 5" HIGH COVED CERAMIC TILE

WAINSCOT
- 30 FIBERGLASS REINFORCED PANELING (FRP) o/ GYP. BOARD (WATER RESIST. WHERE OCCURS)

WALLS
- 41 EGGSHELL PAINT OVER GYPSUM BOARD
- 42 3" x 6" GLAZED CERAMIC TILE
- 43 WHITE VINYL FACED INSULATION

CEILINGS
- 50 2'x4' LAY-IN ACOUSTICAL TILE
- 51 2'x2' LAY-IN ACOUSTICAL TILE
- 52 SEMI-GLOSS ENAMEL OVER GYP. BOARD
- 53 OPEN TO ABOVE

COUNTER TOPS
- 60 PLASTIC LAMINATE COUNTERTOP
- 61 SOLID SURFACE COUNTERTOP

MILLWORK
- 70 PLASTIC LAMINATE FACED CABINETS

GENERAL NOTES

1) REFER TO FLOOR PLANS, INTERIOR ELEVATIONS AND REFLECTED CEILING PLANS FOR EXTENT OF FINISHES AND FOR CLARIFICATION OF MORE THAN ONE FINISH DESIGNATED IN A BOX. INDICATED ELSEWHERE IN DRAWINGS THUS : (#)
2) FOR TYPICAL GYP. BOARD EDGE AND CORNER DETAILS, SEE (10/A14)
   FOR TYPICAL SUSPENDED CEILING DETAILS, SEE (6/A14)
   FOR TYPICAL ACCESSIBLE MOUNTING HEIGHTS, SEE (21/A14)
   FOR TYPICAL CABINET ANCHORAGE, SEE (1/A17)
   FOR TYPICAL COUNTERTOP, SEE (5/A17)
   FOR CABINET LAYOUT, VERIFY DIMENSIONS IN FIELD. DIMENSIONS NOTED ON DRAWINGS ARE NORMAL - PROVIDE FILLERS @ END UNITS INCLUDING TOP OF CABINET AS REQUIRED FOR PROPER OPERATION AND CLOSING OF VOID SPACES.
   CEILING HEIGHTS NOTED, ON THIS SCHEDULE, ARE FROM THE FLOOR BELOW IN THAT ROOM. THIS IS FOR THE PURPOSE OF ESTIMATING

EXT. FINISH SCHEDULE

HOLLOW WINDOW & DOOR FRAME (q)

HOLLOW METAL DOOR PANEL (q)

METAL WALL PANELS, PRE-FINISHED COLOR (MATCH EXISTING FINISH) (s)

APPROVALS

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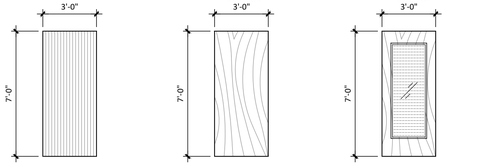
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TITLE
DOOR & FINISH SCHEDULES

A12

PROJECT 25041

DOOR TYPES



TYPE "A"
1 3/4" THK. H.M. DOOR

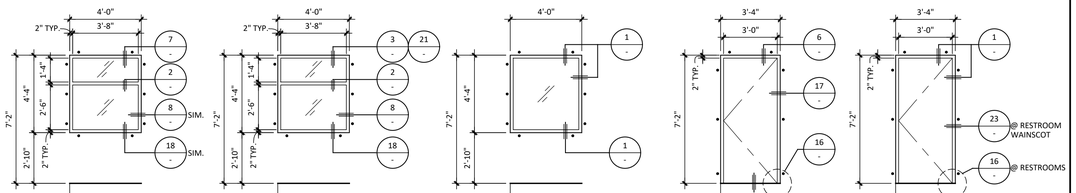
TYPE "B"
1 3/4" THK. SOLID CORE WOOD DOOR (MATCH EXISTING)

TYPE "C"
1 3/4" THK. SOLID CORE WOOD DOOR, FULL LITE w/ OPERABLE ENCLOSED BLINDS (MATCH EXISTING)

DOOR SCHEDULE NOTES:

1. VERIFY DOOR SWINGS WITH FLOOR PLAN.
2. METAL FRAMES SHALL FIT TIGHT TO WALL. SHIM GYP. BD. AS REQUIRED FOR PLUMB TOLERANCE AT FRAME AND GYP. BD.
3. PAINT H.M. DOORS AND FRAMES SEMI-GLOSS ENAMEL IN ACCORDANCE WITH SPECIFICATIONS. REFER TO FINISH COLORS FOR DESIGNATION.
4. PAINT DOORS AND FRAMES SEMI-GLOSS IN ACCORDANCE WITH SPECIFICATIONS. DO NOT PAINT OR ALTER FIRE RESISTANCE RATING LABELS, WHERE OCCURS.
5. PAINT DOORS THE SAME COLOR ON BOTH SIDES UNLESS OTHERWISE NOTED THUS:
   INTERIOR
   EXTERIOR
   WHEN INTERIOR AND EXTERIOR COLORS ARE DIFFERENT, LATCH EDGE SHALL MATCH EXTERIOR COLOR AND HINGE EDGE SHALL MATCH INTERIOR COLOR. FINISH ALL EDGES.
6. REFER TO SPECIFICATIONS FOR DOOR SIGNAGE TYPES. ALL SIGNS SHALL INCLUDE BRAILLE IDENTIFICATION IN ACCORDANCE WITH CBC. FOR TYPICAL SIGNAGE / MOUNTING, SEE DETAIL **22/A14**.
7. VERIFY ALL ROOM SIGNAGE TEXT WITH OWNER PRIOR TO LAYOUT.
8. REFER TO SPECIFICATIONS FOR DOOR HARDWARE AND SCHEDULES.
9. SEE SHEET A13 FOR FRAME TYPES
10. REFER TO GLAZING SCHEDULE ON SHEET A13 AND THE SPECIFICATIONS FOR TYPES OF GLAZING NOTED.
11. ALL CLASSROOM AND ROOMS WITH AN OCCUPANT LOAD OF 5 OR MORE MUST BE LOCKABLE FROM THE INTERIOR.
12. ALL DIMENSIONS ARE +/-, VERIFY IN THE FIELD (OR WITH FLOOR PLAN FOR APPROXIMATE AS INDICATED).
13. HAND ACTIVATED DOOR OPENING HARDWARE, HANDLES, PULLS, LATCHES, LOCKS AND OTHER OPERATING DEVICES ON ACCESSIBLE DOORS SHALL HAVE A SHAPE THAT IS EASY TO GRASP WITH ONE HAND AND DOES NOT REQUIRE TIGHT GRASPING, TIGHT PINCHING OR TWISTING OF THE WRIST TO OPERATE.
14. THE BOTTOM 10 INCHES OF ALL DOORS, EXCEPT AUTOMATIC AND SLIDING DOORS, SHALL HAVE A SMOOTH, UNINTERRUPTED SURFACE TO ALLOW THE DOOR TO BE OPENED BY A WHEELCHAIR FOOTREST WITHOUT CREATING A TRAP OR HAZARDOUS CONDITION.
15. MAXIMUM FORCE REQUIRED TO PUSH OR PULL OPEN A DOOR SHALL NOT EXCEED 5 LBF FOR INTERIOR AND EXTERIOR DOORS.
16. DOOR HARDWARE SHALL BE MOUNTED 34 INCHES MINIMUM AND 44 INCHES MAXIMUM ABOVE FINISH FLOOR.
17. DOOR CLOSING SPEEDS SHALL COMPLY WITH CBC SECTION 11B-404.2.8.

FRAME TYPES



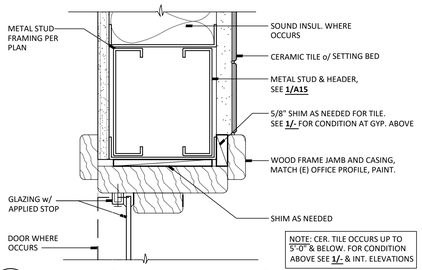
1. 2" WIDE X 9 1/2" DEEP HOLLOW METAL FRAME w/ TYPE 'B' GLAZING.
2. 2" WIDE X 9 1/2" DEEP HOLLOW METAL FRAME w/ TYPE 'B' GLAZING. SEE **21/-** FOR ADDITIONAL FRAMING NOTES
3. WOOD FRAME (MATCH EXISTING) w/ TYPE 'A' GLAZING.
4. 2" WIDE x 9 1/2" DEEP HOLLOW METAL FRAME
5. WOOD FRAME (MATCH EXISTING)

DOOR AND WINDOW FRAME TYPE NOTES

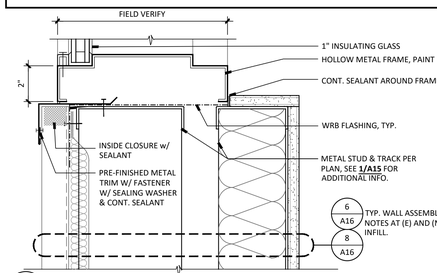
1. ALL GLASS SHALL BE TYPE AS NOTED.
2. GLAZING SCHEDULE: SEE SPECIFICATIONS
   TYPE 'A': 1/4" THICK, CLEAR, FULLY TEMPERED GLASS
   TYPE 'B': 1" TEMPERED, TINTED, INSULATING GLASS UNIT, 1/4" TINT LOW-E, 1/2" ARGON FILLED SPACE, 1/4" CLEAR, LOW-E

   NOTE: ALL TEMPERED GLASS IS TO BE SAFETY GLASS & MEET HUMAN IMPACT LOADS LISTED IN SPECIFICATIONS.
3. METAL FRAMES SHALL FIT TIGHT TO WALL. CENTER FRAME THROAT OPENING BETWEEN OUTSIDE FACE OF MATERIALS BEING WRAPPED BY FRAME, SHIM GYPSUM BOARD AS REQUIRED FOR PLUMB TOLERANCE AT FRAME / GYPSUM BOARD.
4. "LABEL" SHALL MEAN "ASSEMBLY" AS DEFINED IN CBC SECTION 715.4.5 AND 715.4.5.1.
5. FIRE-RATED FRAMES SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS AND NFPA 80. THE MANUFACTURER'S WRITTEN INSTRUCTIONS SHALL BE MADE AVAILABLE TO THE INSPECTING AUTHORITY.
6. PAINT FRAMES AND DOORS SEMI-GLOSS ENAMEL IN ACCORDANCE WITH SPECIFICATION SECTION 099100 AS NOTED ON THE DOOR SCHEDULE. REFER TO FINISH COLORS FOR DESIGNATION. PAINT BOTH SIDES THE SAME COLOR. U.O.N.
7. ALL DIMENSIONS ARE +/-. VERIFY IN THE FIELD (OR WITH FLOOR PLAN FOR APPROXIMATE AS INDICATED).
8. VERIFY DOOR SWINGS WITH FLOOR PLAN.
9. MINIMUM ANCHOR REQUIREMENTS (U.O.N.):
   FRAME HEIGHTS UP TO 4'-0": 2 JAMB ANCHORS
   FRAME HEIGHTS UP TO 7'-4": 3 JAMB ANCHORS
   FRAME WIDTHS UP TO 4'-0": 2 HEAD ANCHORS
   FRAME WIDTHS UP TO 7'-4": 3 HEAD ANCHORS
   PROVIDE 6" EDGE DISTANCE AT FIRST HEAD ANCHOR.
10. FRAMES SHALL BE ANCHORED AT THE FLOOR WITH MANUFACTURER'S STANDARD FLOOR ANCHORS AS REQUIRED.
11. ALL FRAME ANCHORS SHALL BE MANUFACTURER'S STANDARD CONCEALED ANCHORS, UL LISTED WHERE REQUIRED BY THE DOOR SCHEDULE.
12. EXPOSED DIMPLE FASTENERS WILL ONLY BE ALLOWED UPON PRIOR WRITTEN ACCEPTANCE BY THE ARCHITECT.
13. WHERE FRAMES ARE ALLOWED TO BE DIMPLED FOR ANCHORAGE, COUNTERSINK SCREW HEADS.
14. TYPICAL FRAME ANCHOR FASTENERS:
    a. METAL STUDS: 2-#12 F H. SCREWS EACH SIDE.
    b. DIMPLED FRAME: 3/8" Ø SCREW OR EXPOSED ANCHOR, 5" LONG.
    c. CONC. SLAB: (2) 1/4"Ø X 2 1/2" EXP. ANCHOR AT 24" O.C. MIN. PROVIDE MIN. 2 SETS
15. VERTICAL AND HORIZONTAL FRAMING MEMBERS AT 2" THICK UNLESS OTHERWISE NOTED.
16. FOR TYP. SIGNAGE / MOUNTING SEE **22/A14**.
17. FOR HOLLOW METAL FRAMES AT CONCRETE CURBS, SEE **16/A13**.

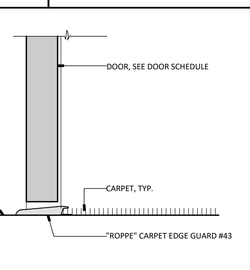
LEGEND
DOT INDICATED ANCHOR LOCATION, EQUALLY SPACED PER FRAME ELEVATIONS, TYPICAL.



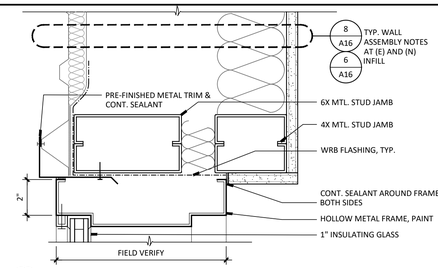
23 JAMB (RESTROOMS)
3" = 1'-0"



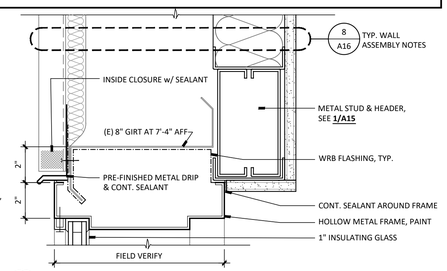
18 SILL AT WINDOW
SCALE: 3" = 1'-0"



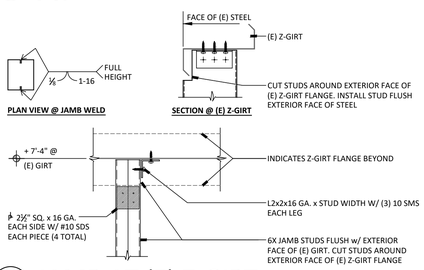
13 THRESHOLD (INTERIOR)
3" = 1'-0"



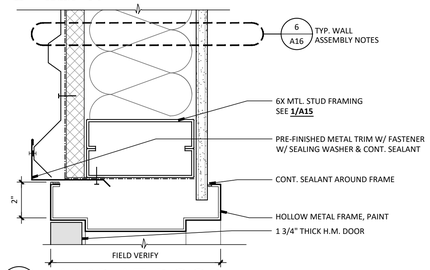
8 JAMB AT WINDOW
SCALE: 3" = 1'-0"



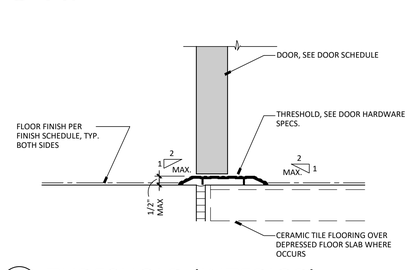
3 HEAD AT WINDOW
SCALE: 3" = 1'-0"



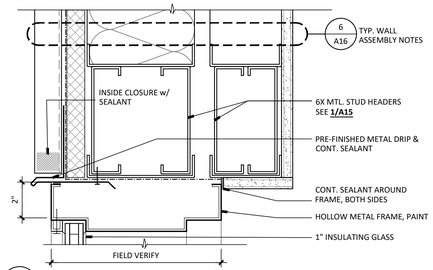
22 JAMB AT (E) Z-GIRT
SCALE: N.T.S.



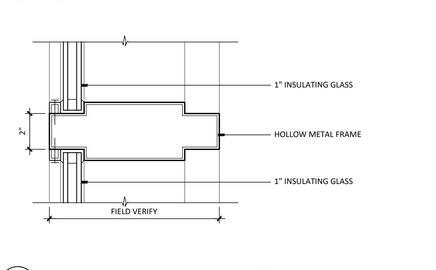
17 JAMB AT DOOR
SCALE: 3" = 1'-0"



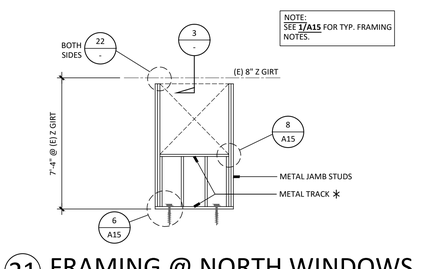
12 THRESHOLD (INTERIOR)
3" = 1'-0"



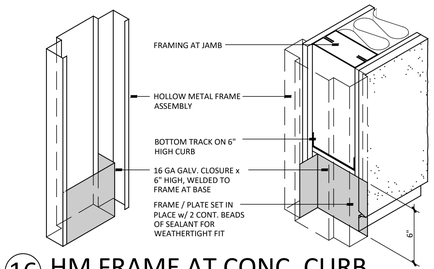
7 HEAD AT WINDOW
SCALE: 3" = 1'-0"



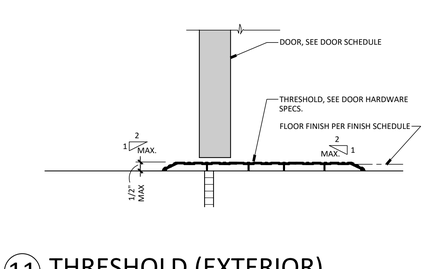
2 MULLION AT WINDOW
SCALE: 3" = 1'-0"



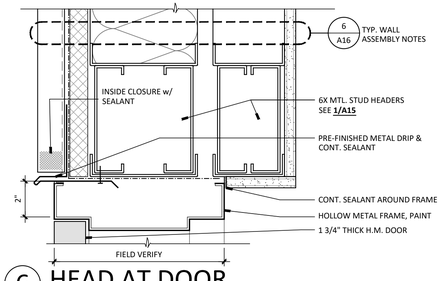
21 FRAMING @ NORTH WINDOWS
SCALE: N.T.S.



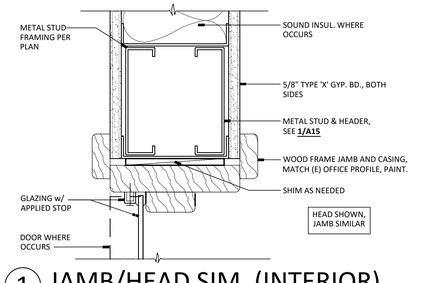
16 HM FRAME AT CONC. CURB
SCALE: N.T.S.



11 THRESHOLD (EXTERIOR)
3" = 1'-0"



6 HEAD AT DOOR
SCALE: 3" = 1'-0"



1 JAMB/HEAD SIM. (INTERIOR)
3" = 1'-0"

APPROVALS

LICENSED ARCHITECT
JAMES R. MORRELL
No. C-30128
EXP. 05-31-27
STATE OF CALIFORNIA

DATE: 07/21/2026

ADMIN SERVICES REMODEL AT SANGER UNIFIED BUSINESS PARK 2
SANGER UNIFIED SCHOOL DISTRICT
1254 COMMERCE AVE, SANGER, CA 93657

REVISIONS

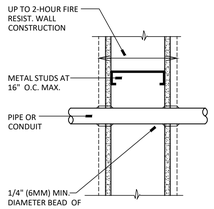
Reviewed for Code Compliance
08/24/2026
CSG CONSULTANTS, INC.

MANGINI ARCHITECTURE INGENUITY
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4320 West Mineral King Avenue
Visalia, California 93291
www.mangini.us
(559) 627.0530 Office
(559) 627.1926 Fax

TITLE
DOOR & FRAME TYPES & DETAILS

A13

PROJECT 25041

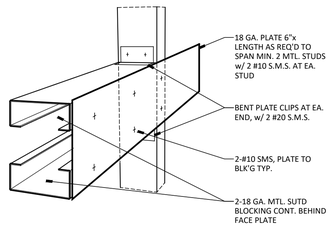


WALL PENETRATION NOTES :

1. CAULK IS TO BE FORCED INTO THE ANNULAR SPACE TO THE MAX. EXTENT POSSIBLE FLUSH W/ EXTERIOR OF THE PENETRATION SURFACE.
2. FINISH CAULKING W/ A 1/4" (6MM) MIN. BEAD OF 3M #CP25 N/S CAULK APPLIED TO PERIMETER OF CONDUIT PIPE AT ITS EGRESS FROM THE WALL.
3. THE MAX. ANNULAR SPACE IS NOT TO EXCEED 3/16" (5MM).
4. INSTALL FIRESTOP ON BOTH SIDES OF THE WALL.
5. THESE RECOMMENDATIONS ARE BASED ON PRODUCT PERFORMANCE PER ASTM E-814 (UL WL1001) FIRE TEST AND UL THROUGH PENETR. FIRESTOP SYSTEM #147.

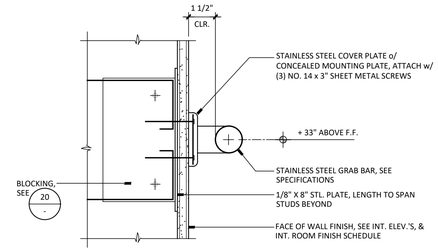
25 PENETRATIONS THRU WALL

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



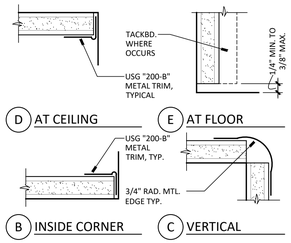
20 BLOCKING ELEV. AT WALL PLATE

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



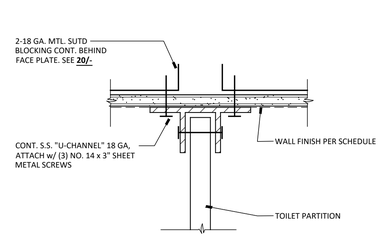
15 SECTION AT GRAB BAR

SCALE: 3" = 1'-0"



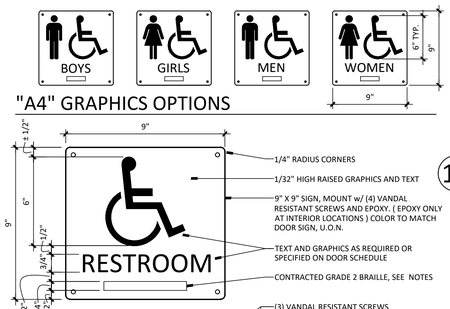
10 TYP. GYP. METAL EDGES

SCALE: N.T.S.



5 TOILET PARTITION ANCHORAGE

SCALE 3" = 1'-0"



"A4" GRAPHICS OPTIONS

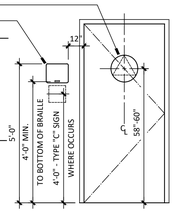
TYPE "A" SIGNS

SIGN TYPES "A1, A2, OR A3"

SIGN TYPE "A4" OR "B" ROOM I.D.

NOTES:

1. IN ADDITION TO SIGN TYPES "A1, A2, AND A3" MOUNTED ON RESTROOM DOORS, PROVIDE SIGN TYPE "A4", LOCATED AS SHOWN.
2. TYPE "B" SIGNS TO BE MOUNTED ON LATCH SIDE OF SINGLE DOOR. AT DOUBLE DOORS, MOUNT SIGN ON INACTIVE LEAF. IF BOTH LEAVES ARE ACTIVE MOUNT SIGN ON RIGHT SIDE OF DOUBLE DOOR. WHERE THERE IS NO WALL SPACE AT THE LATCH SIDE OF A SINGLE DOOR OR AT THE RIGHT SIDE OF DOUBLE DOORS, SIGNS SHALL BE LOCATED ON THE NEAREST ADJACENT WALL.
3. REFER TO DOOR SCHED. & ELEVATIONS FOR LOCATIONS.
4. USE 60" TO TOP OF THE UPPER SIGN TO SET SIGNS. CBC ALLOWS 60" MAX. TO BASELINE OF RAISED CHARACTERS & 48" MIN. TO BASELINE OF LOWEST LINE OF BRAILLE.



SIGN LOCATIONS

NOTES:

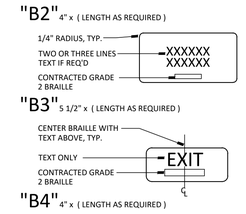
1. CONSTRUCT SIGNS OF 1/8" THK. PLASTIC UNLESS OTHERWISE NOTED. ALL CHARACTERS AND PICTOGRAMS SHALL BE RAISED 1/32".
2. COLOR TO BE SELECTED BY ARCHITECT. (SIGN BACKGROUND COLORS TO CONTRAST WITH DOOR COLOR) 70% CONTRAST BETWEEN CHARACTERS AND BACKGROUND. CIRCLE COLOR TO CONTRAST WITH TRIANGLE.
3. ALL EDGES SHALL BE EASED OR ROUNDED AT 1/16".
4. AT LOCATIONS WHERE AN EXIT SIGN AND A ROOM I.D. SIGN ARE BACK TO BACK ON GLASS, ALIGN & MAKE SIGNS THE SAME SIZE. WHEN SIGN IS MOUNTED ON GLASS WITH NO SIGN ON BACK SIDE, PROVIDE BLANK SIGN THE SAME SIZE ON THE BACK SIDE.
5. ROOM. I.D. SIGNAGE : RAISED CHARACTERS (LETTERS) (RAISED 1/32", ALL UPPER CASE CALIBRI) SHALL BE PROVIDED & SHALL BE ACCOMPANIED BY CONTRACTED (GRADE 2) BRAILLE.
6. RAISED CHARACTERS (LETTERS) SHALL COMPLY WITH CBC 11B-703.2.
7. CONTRACTED (GRADE 2) BRAILLE SHALL COMPLY WITH CBC 11B-703.3.

22 SIGN TYPES

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

ACC: 04 - REV-25_09.03

TYPE "B" SIGNS



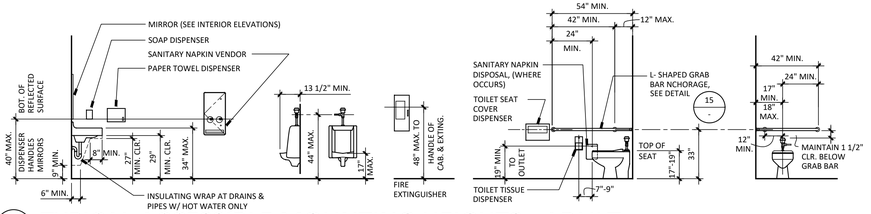
NOTES:

1. NUMBERS 2" HIGH.
2. LETTERS 1" HIGH.
3. EXTERIOR ATTACHMENT: EPOXY AND A MINIMUM OF 2 VANDAL RESISTANT SCREWS.
   INTERIOR ATTACHMENT: EPOXY.

NOTES: 1) THESE DIMENSIONS ARE FOR TYPICAL MOUNTING HEIGHTS FOR ACCESSIBLE FIXTURES AND ACCESSORIES. UNLESS OTHERWISE NOTED. REFER TO FLOOR PLANS, INTERIOR ELEVATIONS, AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.

2) REFER TO THE SPECIFICATIONS FOR TOILET ROOM ACCESSORIES.

3) DOOR HARDWARE SHALL COMPLY w/ CBC 11B-604.8.1.2 AT ACCESSIBLE WATER CLOSET COMPARTMENTS/PARTITIONS, TYP.



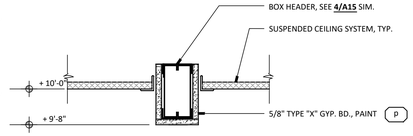
21 TYPICAL ACCESSIBLE MOUNTING HEIGHTS - ADULT

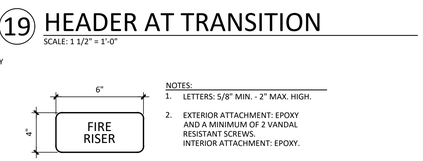
SCALE: 1/4" - 1'-0"

ACC: 03 - REV-25_09.03

19 HEADER AT TRANSITION

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





NOTES:

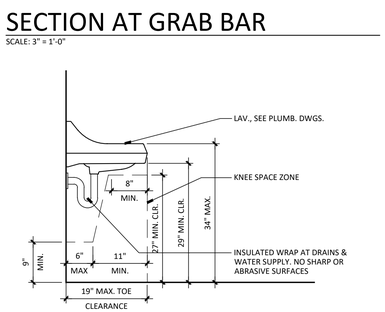
1. LETTERS: 5/8" MIN. - 2" MAX. HIGH.
2. EXTERIOR ATTACHMENT: EPOXY AND A MINIMUM OF 2 VANDAL RESISTANT SCREWS.
   INTERIOR ATTACHMENT: EPOXY.

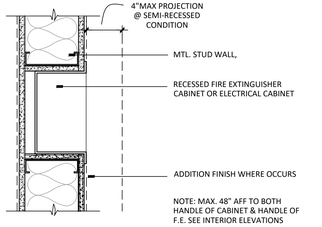
TYPE "G" FIRE RISER SIGN

14 ACCESS. LAV. - ADULT

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

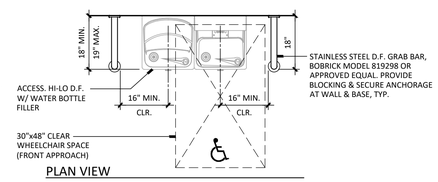
ACC: 09 - REV-26_03.19

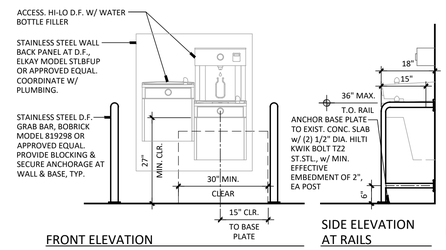




13 RECESSED FIRE EXTING. CAB.

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





11 HI-LO DRINKING FOUNTAIN

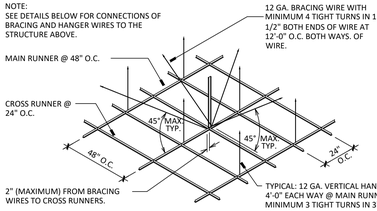
SCALE: 1/2" = 1'-0"

6 SUSPENDED CEILING DETAILS

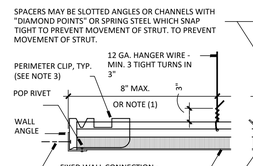
SCALE: N.T.S.

COMPRESSION STRUT: MINIMUM 18 GA. x 4" STEEL C STUD STARTING NOT MORE THAN 48" FROM TWO ADJACENT WALLS AND 72" FROM TWO OTHER ADJACENT WALLS TO SUPPORT A TRIBUTARY AREA OF 144 SQUARE FEET MAXIMUM. ATTACH TO MAIN RUNNERS WITH 1/4" M.B. COMPRESSION STRUT SHALL NOT REPLACE HANGER WIRE.

NOTE:
SEE DETAILS BELOW FOR CONNECTIONS OF BRACING AND HANGER WIRES TO THE STRUCTURE ABOVE.



A ACOUSTICAL CEILING GRID ATTACHMENT

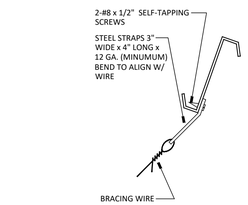


C AT STEEL BEAMS

SPACERS MAY BE SLOTTED ANGLES OR CHANNELS WITH "DIAMOND POINTS" OR SPRING STEEL WHICH SNAP TIGHT TO PREVENT MOVEMENT OF STRUT. TO PREVENT MOVEMENT OF STRUT.

NOTES : 1) 1/4 OF THE LENGTH OF THE END RUNNER, WHICHEVER IS LESS.
2) NAILS AT ENDS OF HORIZONTAL STRUTS ARE TO BE PLACED WITH NAIL HEAD TOWARD CENTERLINE OF SPAN OF STRUT.
3) IF PERIMETER CLIPS ARE USED, POP RIVETS AND SLOTTED ANGLE SPACERS ARE NOT REQUIRED. CLIPS SHALL BE REVIEWED AND APPROVED BY DSA

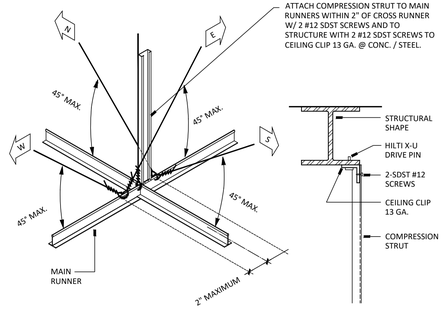
D HORIZONTAL STRUT



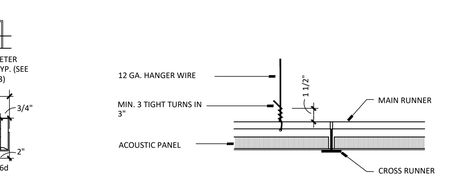
F 2" PURLIN

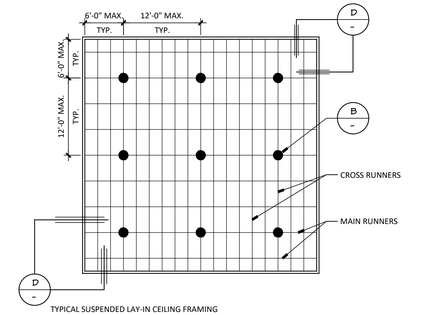
METAL STUD COMPRESSION STRUT ALLOWABLE LENGTHS				
SINGLE STUD 2505162-33	AREA	Ry	MAXIMUM HEIGHT	
	sq. in.	in.	in.	ft. - in.
20 ga. x 2 1/2"	.223	.624	125	10'-5"
DOUBLE STUDS (back to back)	AREA	Ry	MAXIMUM HEIGHT	
	sq. in.	in.	in.	ft. - in.
20 ga. x 2 1/2"	.446	.885	177	14'-9"

B COMPRESSION STRUT



E HANGER WIRE CONNECTION TO GRID





APPROVALS

LICENSED ARCHITECT JAMES R. MORRELL No. C-30128 EXPIRATION 05-31-27 STATE OF CALIFORNIA

DATE: 07/21/2026

ADMIN SERVICES REMODEL AT SANGER UNIFIED BUSINESS PARK 2

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Reviewed for Code Compliance
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REVISIONS

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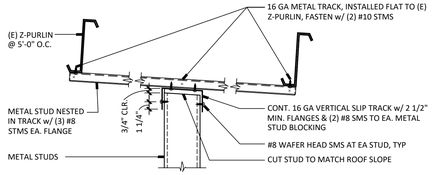
TITLE
TYPICAL DETAILS

A14

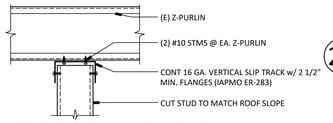
PROJECT 25041

F:\01 Projects\25041\Drawings\01 Architectural\03 Sheets\25041 A14 Typical Details.dwg Jul 21 2026 5:53pm

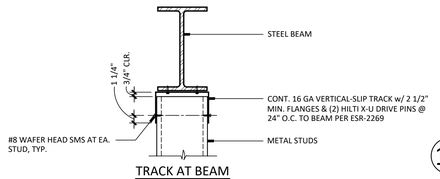
APPROVALS



TRACK PARALLEL TO Z-PURLIN OR GIRT



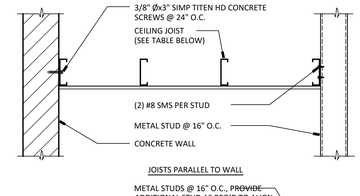
TRACK PERPENDICULAR TO Z-PURLIN OR GIRT



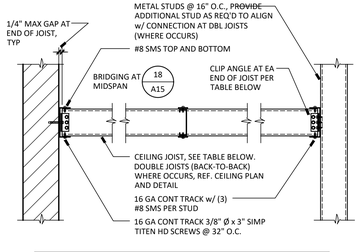
TRACK AT BEAM

24 SLIP TRACK DETAIL

SCALE: N.T.S.

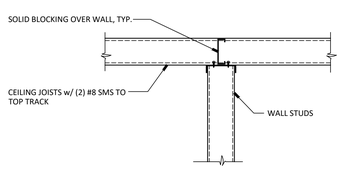


JOISTS PARALLEL TO WALL



CLIP ANGLES			
JOIST DEPTH	CLIP ANGLE	ATTACHMENT TO JOIST / TRACK	ATTACHMENT TO CONCRETE WALL
4" OR 3 5/8"	NOT REQ'D	----	----
6"	L2x2x16 GA x 0'-5"	(3) #8 SMS	(1) 3/8" Øx3" SIMP TITEN HD
8"	L2x2x16 GA x 0'-7"	(4) #8 SMS	(1) 3/8" Øx3" SIMP TITEN HD

JOISTS PERPENDICULAR TO WALL



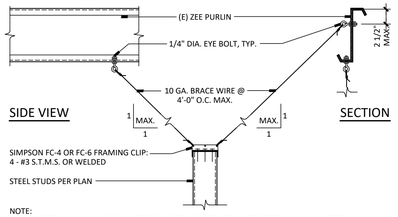
AT INTERIOR WALL

CEILING JOIST PAN TABLE			
JOIST SIZE	SPACING	GYP BD	PLASTER
3625162-33	24" O.C.	10'-0"	8'-0"
6005162-33	24" O.C.	13'-0"	10'-0"
6005162-43	24" O.C.	15'-0"	13'-0"

NOTE: HOLES / PUNCHOUTS ARE NOT ALLOWED IN CEILING JOISTS.

21 TYPICAL CEILING FRAMING

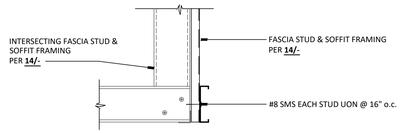
SCALE: N.T.S.



NOTE:
1. THIS DETAIL SHALL BE USED WHERE THE DISTANCE BETWEEN INTERSECTION WALL EXCEEDS 21'-0"
2. 10 GA WIRE ASTM A-82 PLACED AT SLOPE OF 1:1 OR FLATTER, FULL LOOPS TIGHT, 3 TURNS MIN. TYP. MAY BE PARALLEL OR PERPENDICULAR TO ROOF MEMBER..

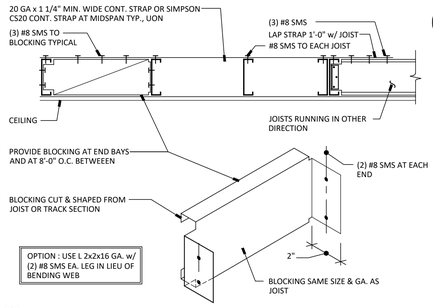
20 WIRE BRACING

SCALE: 1" = 1'-0"



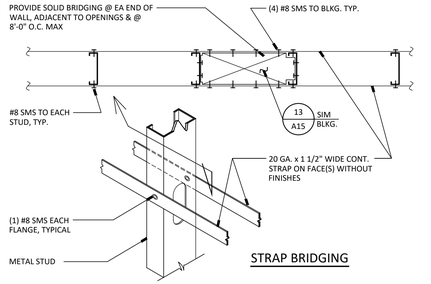
19 FASCIA/SOFFIT INTERSECTION

SCALE: 1" = 1'-0"



18 JOIST BRIDGING DETAIL

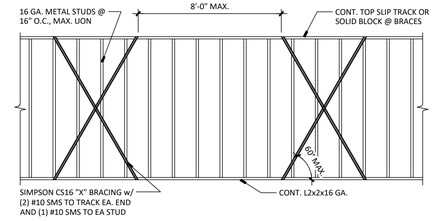
SCALE: N.T.S.



NOTES:
1. ALL WALLS THAT DO NOT HAVE FINISH APPLIED ON BOTH SIDES SHALL HAVE SOLID BLOCKING OR CONTINUOUS BRIDGING @ 48" O.C.
2. BRIDGING MAY CONSIST OF EITHER CHANNEL OR STRAP BRIDING FOR STUDS UP TO 8" WIDE. FOR STUDS OVER 8" WIDE, USE STRAP BRIDGING ONLY.
3. THIS DETAIL APPLIES TO BOTH INTERIOR AND EXTERIOR WALLS AS WELL AS FASCIAS, PARAPETS, DOUBLE WALLS, AND ANY OTHER SIMILAR WALL FRAMING UON.
4. PROVIDE MINIMUM OF ONE ROW OF BRIDGING AT MID-HEIGHT FOR WALLS OVER 8'-0" HIGH (EVEN w/ FINISHES APPLIED TO BOTH FACES)

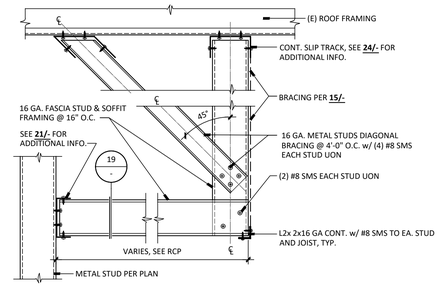
16 WALL BRIDGING DETAIL

SCALE: N.T.S.



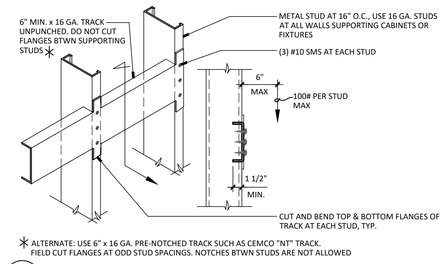
15 FASCIA SOFFIT BRACING

SCALE: N.T.S.



14 FASCIA/SOFFIT CORNER

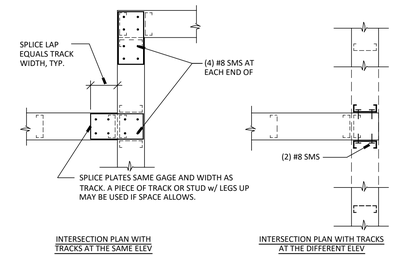
SCALE: 1" = 1'-0"



✳ ALTERNATE: USE 6" x 16 GA. PRE-NOTCHED TRACK SUCH AS CEMCO "NT" TRACK.
FIELD CUT FLANGES AT ODD STUD SPACINGS. NOTCHES BTWN STUDS ARE NOT ALLOWED

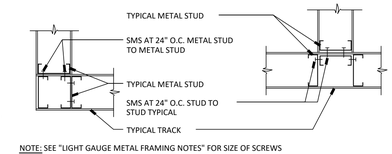
13 VERTICAL BLOCKING DETAIL

SCALE: N.T.S. (AT FIXTURES & CABINET ANCHORAGE)



12 TOP TRACK INTERSECTION

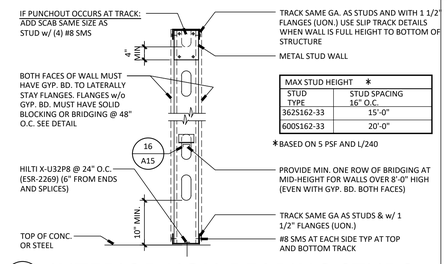
SCALE: N.T.S.



NOTE: SEE "LIGHT GAUGE METAL FRAMING NOTES" FOR SIZE OF SCREWS

11 STUD INTERSECTION

SCALE: N.T.S.

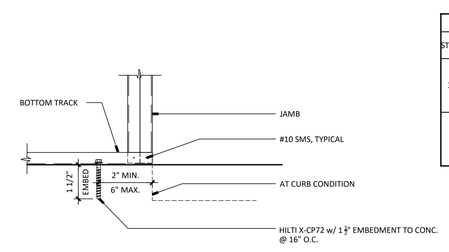


MAX STUD HEIGHT ✳	
STUD TYPE	STUD SPACING 16" O.C.
3625162-33	15'-0"
6005162-33	20'-0"

✳BASED ON 5 PSF AND L/240

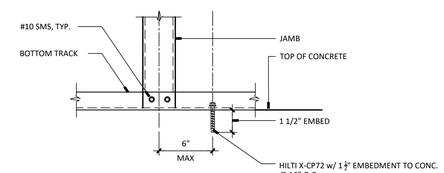
10 INTERIOR NON-BEARING STUDS

SCALE: N.T.S.



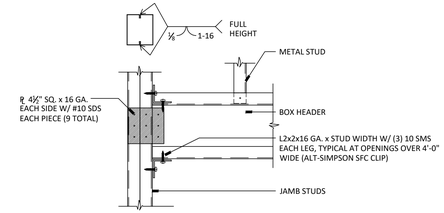
7 MTL. FRMG.: JAMB AT DOOR

SCALE: N.T.S.



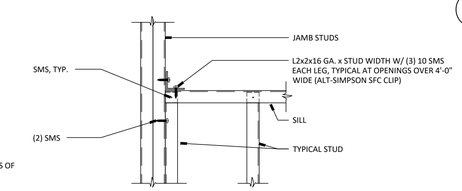
6 MTL. FRMG.:JAMB AT OPENING

SCALE: N.T.S.



9 MTL. FRMG.: HEADER TO JAMB

SCALE: N.T.S.



8 MTL. FRMG.: SILL TO JAMB

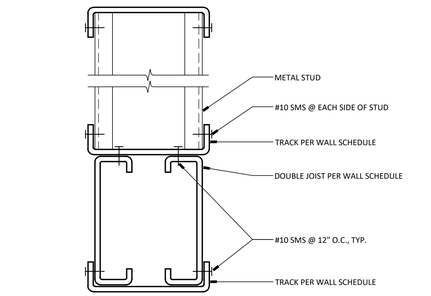
SCALE: N.T.S.

LIGHT-GAUGE METAL FRAMING NOTES

1. ALL MEMBERS SHALL CONFORM TO THE PROPERTIES AND STANDARDS LISTED IN ICC ESR-3064P BY THE "STEEL STUD MANUFACTURERS ASSOCIATION".
   A. MINIMUM TENSILE STRENGTH:
      ALL MEMBERS 16 GA. OR HEAVIER SHALL BE Fy = 50 ksi MINIMUM.
      ALL MEMBERS 18 GA. OR LIGHTER SHALL BE Fy = 33 ksi MINIMUM.
3. ALL MEMBERS SHALL HAVE G60 GALVANIZED COATING.
4. HOLES/PUNCHOUTS ARE NOT ALLOWED IN THE WEBS OF JOISTS, BEAMS OR TRACKS.
5. ALL WALL OPENINGS SHALL BE FRAMED PER DETAIL 1/- THIS SHEET.
6. SEE PLANS FOR INTERIOR WALLS REQUIRED TO RUN FULL HEIGHT TO BOTTOM OF DECK FOR SOUND OR FIRE CONTROL REQUIREMENTS.
7. UNLESS OTHERWISE NOTED, THE TYPICAL METAL STUD SIZES FOR THIS BUILDING SHALL BE AS SHOWN BELOW.

   EXTERIOR & INTERIOR WALLS*
   3½" WALLS SHALL BE 3625162-33 @ 16" O.C.
   6" WALLS SHALL BE 6005162-33 @ 16" O.C.
   (ALL INTERIOR WALLS ARE 6" STUDS UNLESS SPECIFICALLY DESIGNATED AS 3 5/8" STUDS)
   * USE 16 GA. STUDS AT ALL WALLS SUPPORTING CABINETS, FIXTURES, AND SOFFIT FRAMING.

   TRACKS
   SAME GAGE & STEEL GRADE AS STUDS W/ 1½" FLANGES.
8. SCREWS FOR INTERIOR WALL FRAMING SHALL BE #8 SMS EXCEPT AS SPECIFICALLY NOTED ON DETAILS.
9. SDS SCREWS MAY BE USED AT ALL DETAILS WHERE SMS SCREWS ARE SPECIFIED

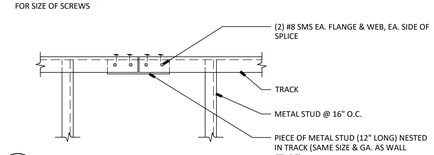


NOTE: SEE "LIGHT GAUGE METAL FRAMING NOTES" FOR SIZE OF SCREWS

4 BOX HEADER

SCALE: N.T.S.

NOTE: SEE "LIGHT GAUGE METAL FRAMING NOTES" FOR SIZE OF SCREWS



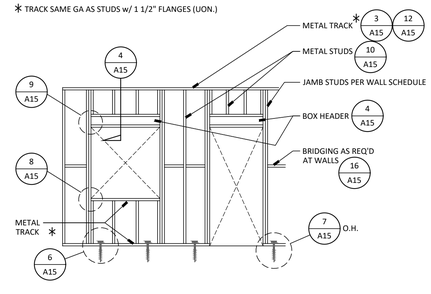
3 TRACK SPLICE

SCALE: N.T.S.

WALL SCHEDULE						
STUD SIZE	MAX STORY HEIGHT (H)	HEADER SPAN (L)	BOX HEADER		SILL TRACK	JAMB STUD
			STUD EACH FACE	TRACK TOP & BOTTOM		
3 5/8"	15'-0"	L ≤ 4'	600S137-33	362T150-33	362T150-33	(2) 362S137-33
		4'< L ≤ 8'	600S137-33	362T150-33	362T150-54	(2) 362S162-54
		8'< L ≤ 12'	600S162-54	362T150-54	362T150-54	(2) 362S162-54
6"	20'-0"	L ≤ 4'	600S137-33	600T150-33	600T150-33	(2) 600S137-33
		4'< L ≤ 8'	600S162-54	600T150-33	600T150-33	(2) 600S162-54
		8'< L ≤ 12'	600S162-54	600T150-33	600T150-54	(2) 600S162-54

INTERIOR NOTES:
1. DESIGN IS BASED ON LATERAL LOAD = 5 psf (ASD).
2. VERTICAL LOAD ON HEADER = 10 psf x (H-7'-0") + 90 plf.
3 USE 16 GA. STUDS AT ALL WALLS SUPPORTING CABINETS, FIXTURES, AND SOFFIT FASCIA.

✳ TRACK SAME GA AS STUDS w/ 1 1/2" FLANGES (UON.)



1 METAL STUD WALL (INTERIOR)

SCALE: N.T.S.

LICENSED ARCHITECT
JAMES R. MORRELL
No. C-30128
EXP. 05-31-27
STATE OF CALIFORNIA

DATE: 07/21/2026

ADMIN SERVICES REMODEL AT SANGER UNIFIED BUSINESS PARK 2

SANGER UNIFIED SCHOOL DISTRICT
1254 COMMERCE AVE, SANGER, CA 93657

REVISIONS

Reviewed for Code Compliance
08/24/2026
CSG CONSULTANTS, INC.

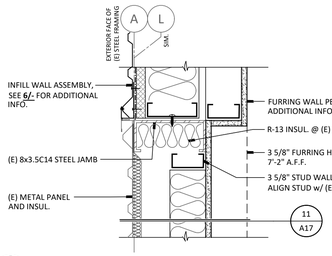
MANGINI | ARCHITECTURE INGENUITY
MANGINI ASSOCIATES INC.
4320 West Mineral King Avenue
Visalia, California 93291
www.mangini.us
(559) 627.0630 Office
(559) 627.1926 Fax

TITLE
TYPICAL METAL FRAMING NOTES & DETAILS

A15

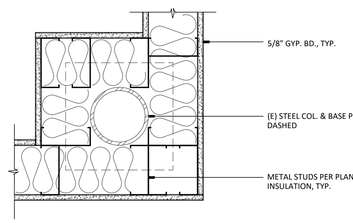
PROJECT 25041

APPROVALS



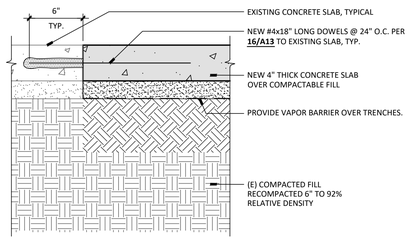
25 WALL INSUL. INFILL @ (E) WALL

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



24 FURRING AT INT. COL.

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

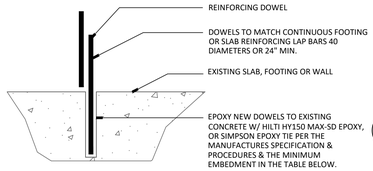


23 SLAB INFILL

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

NOTES:
1. ALL TEST SHALL BE PERFORMED IN THE PRESENCE OF THE INSPECTOR OF RECORD.
2. POST-INSTALLED ANCHORS MUSHT BE LISTED IN A CURRENT EVALUATION REPORT ISSUED BY ICC INCLUDING, BUT NOT LIMITED TO THE FOLLOWING:

A. HILTI KWIK-BOLT TZ2 (ESR-4266)
B. SIMPSON STRONG BOLT 2 (ER-3037)
C. SIMPSON TITEN HD (ESR-2713)

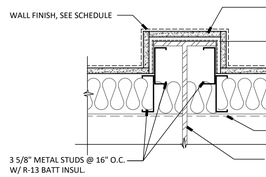


POST-INSTALLED ANCHORS IN CONCRETE	
ANCHOR	
ANCHOR DIAMETER	MINIMUM EMBEDMENT
1/4"	1 1/2"
5/16"	-
3/8"	2 1/2"
1/2"	3 1/2"
5/8"	4"
3/4"	4 3/4"
1"	6"

(BASED ON 3000 PSI)

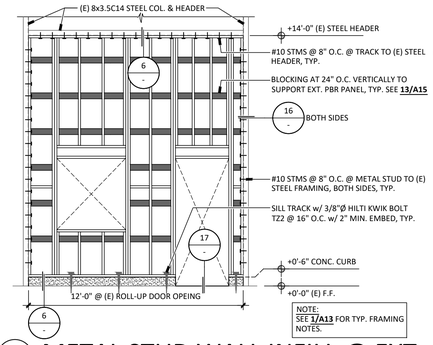
21 EPOXY DOWEL

N.T.S.



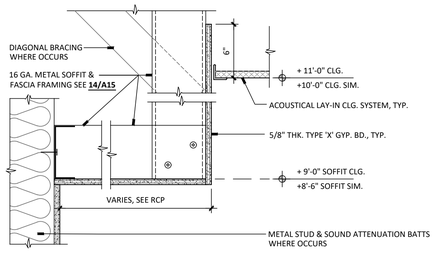
20 FURRING AT COLUMNS TYP.

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



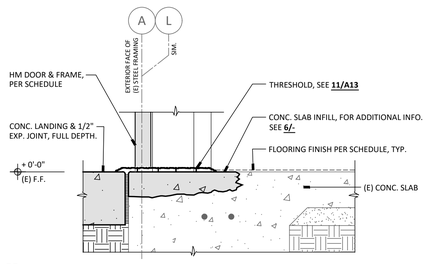
19 METAL STUD WALL INFILL @ EXT.

SCALE: N.T.S.



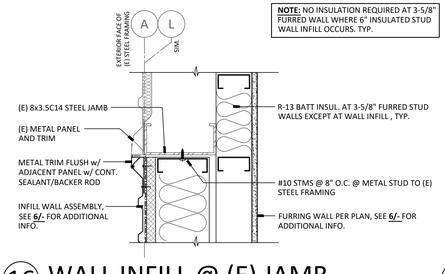
18 FASCIA/SOFFIT TRANSITION

SCALE: N.T.S.



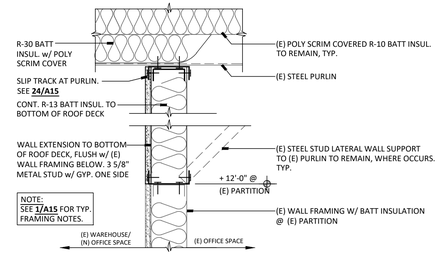
17 CONC. INFILL AT THRESHOLD

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



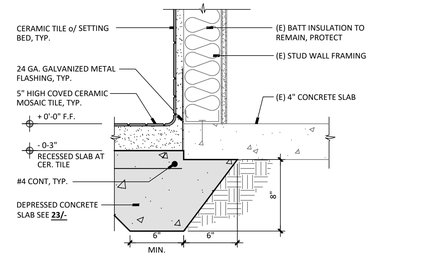
16 WALL INFILL @ (E) JAMB

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



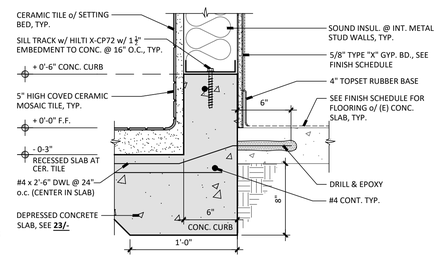
15 WALL EXTENSION @ (E) WALL

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



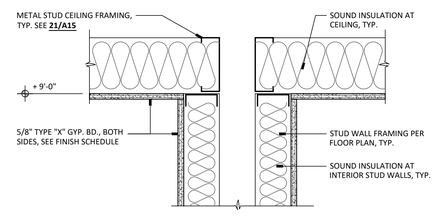
14 BASE AT INTERIOR WALL

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



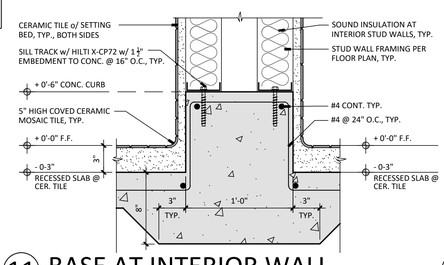
13 BASE AT INTERIOR WALL

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



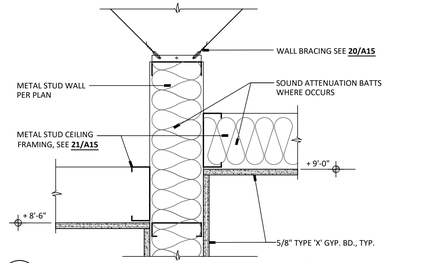
12 CEILING AT INTERIOR WALL

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



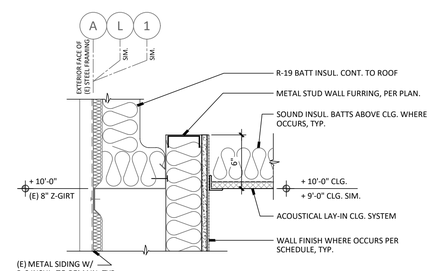
11 BASE AT INTERIOR WALL

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



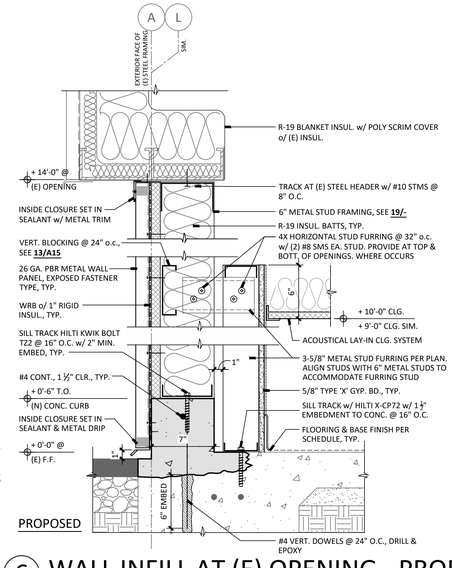
10 INTERIOR WALL AT CLG.

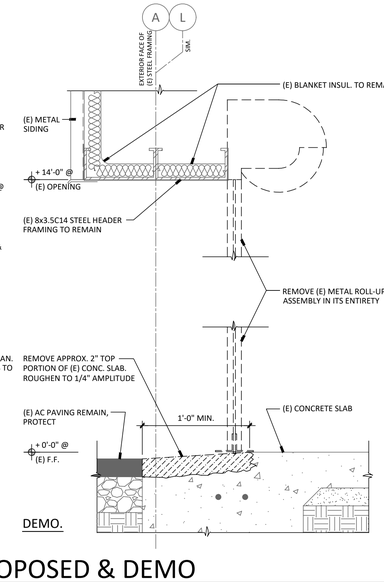
SCALE: 1 1/2" = 1'-0"



8 FURRING AT EXT. WALL

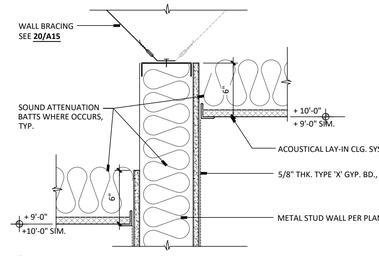
SCALE: 1 1/2" = 1'-0"





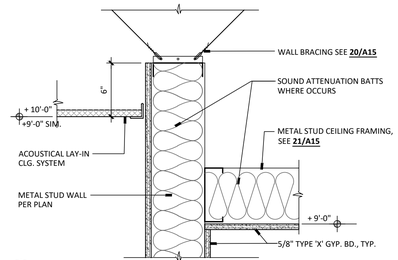
6 WALL INFILL AT (E) OPENING - PROPOSED & DEMO

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



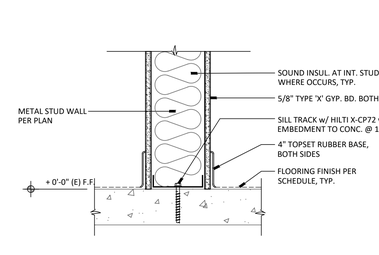
5 INTERIOR WALL AT CLG.

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



4 INTERIOR WALL AT CLG.

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



3 BASE AT INTERIOR WALL

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

LICENSED ARCHITECT
JAMES R. MORRELL
No. C-30128
EXP. 05-31-27
STATE OF CALIFORNIA

DATE: 07/21/2026

ADMIN SERVICES REMODEL AT SANGER UNIFIED BUSINESS PARK 2

SANGER UNIFIED SCHOOL DISTRICT
1254 COMMERCE AVE, SANGER, CA 93657

Reviewed for Code Compliance
08/24/2026
CSG CONSULTANTS, INC.
REVISIONS

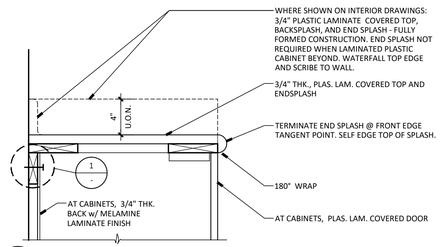
MANGINI
ARCHITECTURE INGENUITY
MANGINI ASSOCIATES INC.
4310 West Mineral King Avenue
Visalia, California 93291
www.mangini.us
(559) 627-0510 Office
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TITLE DETAILS

A16

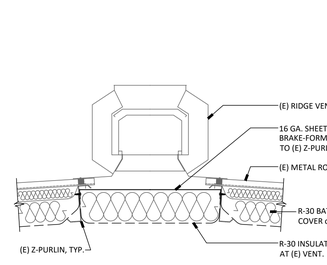
PROJECT 25041

APPROVALS



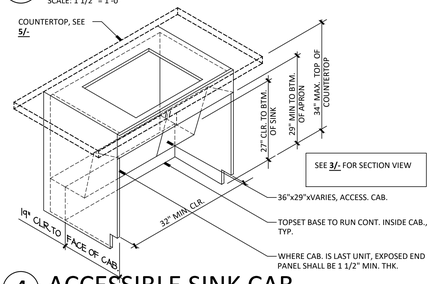
5 COUNTERTOP w/ SPLASH

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



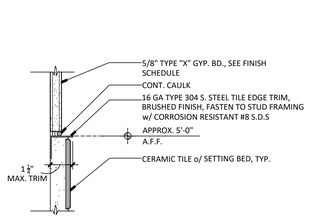
9 CLOSURE PANEL @ RIDGE VENT

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



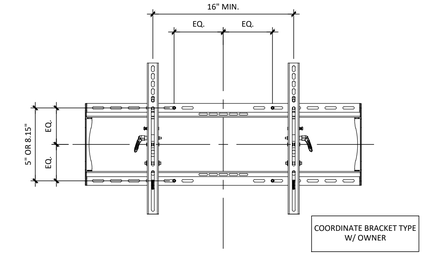
4 ACCESSIBLE SINK CAB.

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



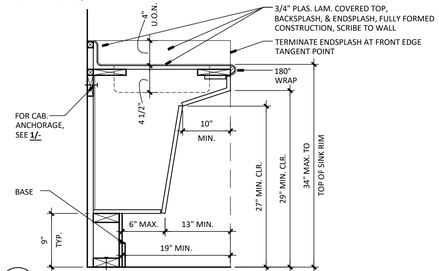
13 TRANSITION @ TILE & GYP.

SCALE: 3" = 1'-0"



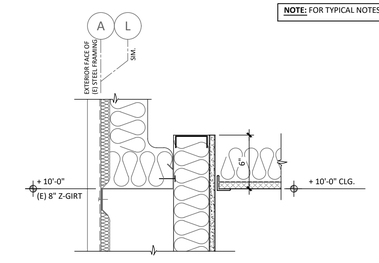
8 ELEV. AT WALL PLATE

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



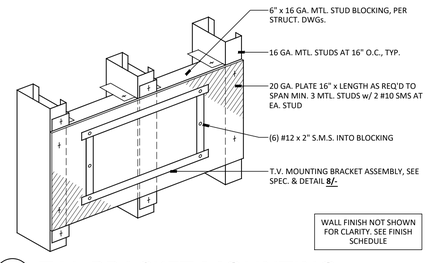
3 ACCESSIBLE SINK SECTION

SCALE: 1" = 1'-0"



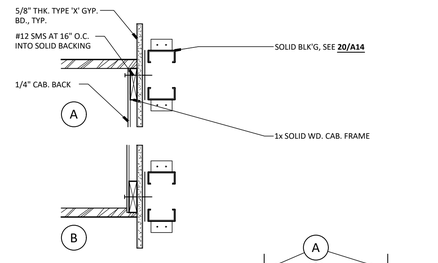
11 WALL INSUL. INFILL @ (E) WALL

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



7 T.V. BRACKET MOUNTING

SCALE: N.T.S.

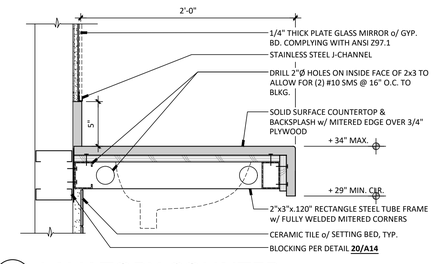


6 LAVATORY COUNTER

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

1 CAB. ANCHORAGE AT MTL. STUDS

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



LICENSED ARCHITECT
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TITLE DETAILS

A17

PROJECT 25041

APPROVALS

GENERAL PLUMBING NOTES:

1. *THE APPLICABLE CODES AND REGULATIONS FOR THIS PROJECT INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING:*

   CALIFORNIA CODE OF REGULATIONS
   TITLE 8, INDUSTRIAL RELATIONS
   TITLE 19, PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS
   TITLE 24, PART 1, ADMINISTRATIVE REGULATIONS
   2025 CALIFORNIA BUILDING CODE, PART 2, TITLE 24 CCR
   2025 CALIFORNIA ELECTRICAL CODE, PART 3, TITLE 24 CCR
   2025 CALIFORNIA MECHANICAL CODE, PART 4, TITLE 24 CCR
   2025 CALIFORNIA PLUMBING CODE, PART 5, TITLE 24 CCR
   2025 CALIFORNIA FIRE CODE, PART 9, TITLE 24 CCR

   NFPA 101 2024 EDITION
   OSHA - OCCUPATIONAL SAFETY AND HEALTH ACT

2. *LAYOUT OF MATERIALS, EQUIPMENT AND SYSTEMS IS GENERALLY DIAGRAMMATIC UNLESS SPECIFICALLY DIMENSIONED. SOME WORK MAY BE SHOWN OFFSET FOR CLARITY. THE PLUMBING BUILDING PLANS HAVE BEEN PREPARED TO MATCH THE ARCHITECTURAL PLANS. IF DIFFERENCES OCCUR, THE ARCHITECTURAL PLANS ARE TO TAKE PRECEDENCE. THE ACTUAL LOCATIONS OF ALL MATERIALS, PIPING, DUCTWORK, FIXTURES, EQUIPMENT, SUPPORTS, ETC. SHALL BE CAREFULLY PLANNED, PRIOR TO INSTALLATION OF ANY WORK, TO AVOID ALL INTERFERENCE WITH EACH OTHER, OR WITH STRUCTURAL, ELECTRICAL, ARCHITECTURAL, OR OTHER ELEMENTS. ALL PIPE OFFSET ELBOWS FOR COORDINATION BETWEEN TRADES ARE NOT SHOWN. CONTRACTOR SHALL INCLUDE SUFFICIENT FUNDS FOR THE COORDINATION OFFSETS IN THE BID. VERIFY THE PROPER VOLTAGE AND PHASE OF ALL EQUIPMENT WITH THE ELECTRICAL PLANS. ALL CONFLICTS SHALL BE CALLED TO THE ATTENTION OF THE ARCHITECT AND THE ENGINEER PRIOR TO INSTALLATION OF ANY WORK OR THE ORDERING OF ANY EQUIPMENT.*

3. *PENETRATIONS OF PIPES, CONDUITS, ETC. IN WALLS OR FLOORS REQUIRING PROTECTED OPENINGS SHALL BE FIRE STOPPED.*

4. *ALL PIPING AND CONDUIT REQUIRING SEISMIC BRACE AND SUPPORT SHALL BE SUPPORTED PER MASON WEST, INC. "SEISMIC RESTRAINT COMPONENTS FOR SUSPENDED DISTRIBUTION SYSTEMS", 2025 EDITION, HCAI (OSHPD) PRE-APPROVED ANCHORAGE OPM-0043-13, OR OTHER HCAI (OSHPD) PRE-APPROVED SYSTEM.*

5. *WHEN INSTALLING DRILLED-IN ANCHORS AND/OR POWDER-DRIVEN PINS IN EXISTING NON-PRESTRESSED CONCRETE, USE CARE AND CAUTION TO AVOID CUTTING OR DAMAGING THE EXISTING REINFORCING BARS. WHEN INSTALLING THEM INTO EXISTING PRE-STRESSED CONCRETE (PRE- OR POST-TENSIONED), LOCATE THE PRESTRESSED TENDONS BY USING A NON-DESTRUCTIVE METHOD PRIOR TO INSTALLATION. MAINTAIN A MINIMUM CLEARANCE OF ONE INCH BETWEEN THE REINFORCEMENT AND THE DRILLED-IN ANCHOR AND/OR PIN.*

6. *FIELD VERIFY THE EXACT LOCATION, DEPTH AND SIZE OF ALL NEW POINTS OF CONNECTION TO EXISTING UTILITIES PRIOR TO COMMENCING NEW UTILITY WORK.*

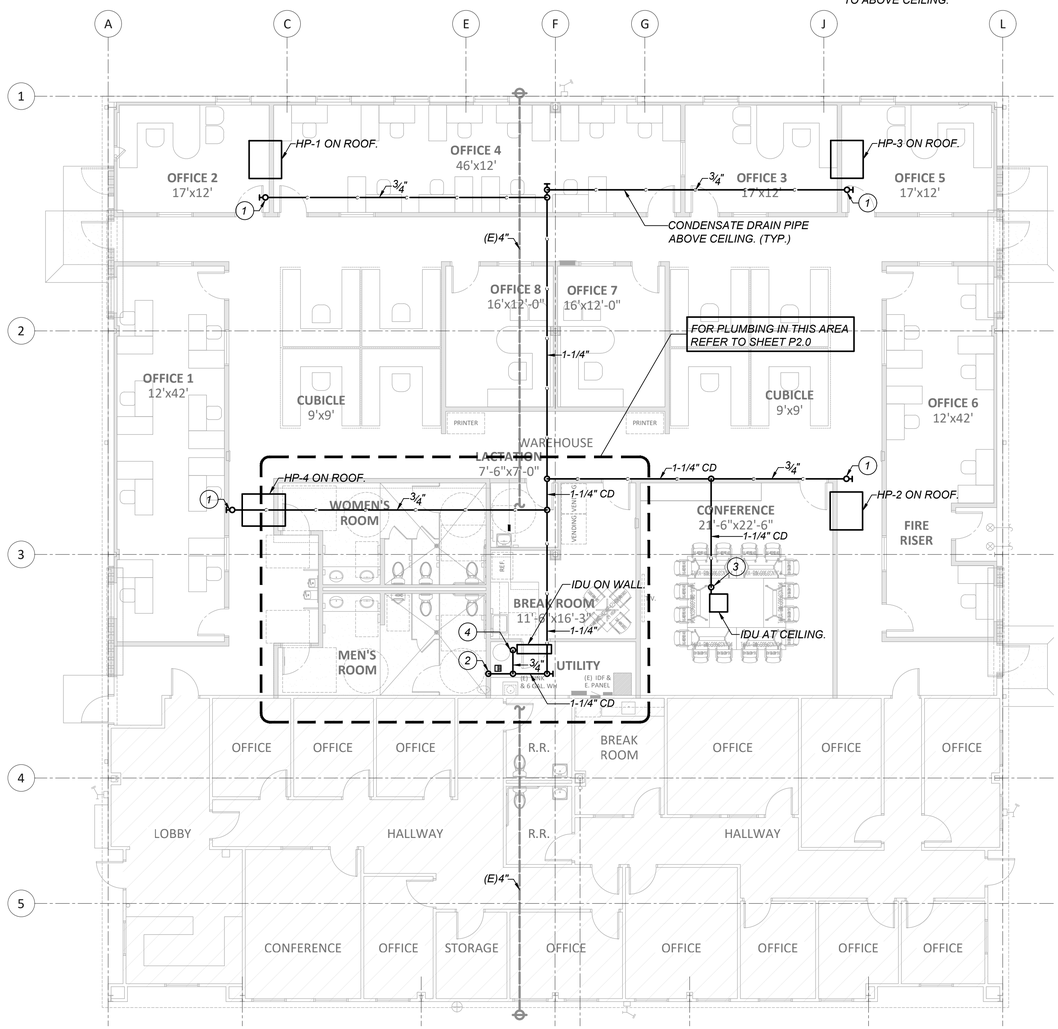
7. *ALL DOMESTIC WATER PIPING SHALL BE A MINIMUM OF 1/2" SIZE UNLESS NOTED OTHERWISE. USE A REDUCING DROP ELL AT FIXTURE CONNECTION WHEN APPLICABLE.*

8. *WASTE LINES EXCEEDING 5 FEET FROM THE MAIN SHALL BE PROVIDED CLEANOUTS. (CPC 707.4).*

9. *ALL WASTE/SEWER LINES TO BE MINIMUM 2% SLOPE PER CPC 708.0.*

KEYNOTES: (THIS SHEET ONLY)

1. *3/4" CONDENSATE DRAIN UP THRU ROOF. CONNECT TO HP UNIT ON ROOF WITH TRAP. REFER TO DETAIL A/P3.0.*
2. *1-1/4" CONDENSATE DRAIN DOWN IN WALL. OFFSET THRU WALL AND DISCHARGE INTO FLOOR SINK WITH 1" AIR GAP ABOVE RIM OF FLOOR SINK.*
3. *1-1/4" CONDENSATE DRAIN UP TO ABOVE CEILING. REFER TO DETAIL C/P3.0 FOR CONDENSATE CONNECTION TO IDU.*
4. *3/4" CONDENSATE FROM CONDENSATE PUMP UP TO ABOVE CEILING.*



OVERALL PLUMBING PLAN

SCALE: 1" = 20'-0"

north

PLUMBING LEGEND		
SYMBOL	ITEM	ABBR
	SOIL or WASTE	S or W
	VENT	V
	VENT RISER	VR
	VENT THRU ROOF	VTR
	DOMESTIC COLD WATER	CW
	DOMESTIC HOT WATER	HW
	DOMESTIC HOT WATER RETURN	HWR
—C—	CONDENSATE DRAIN	CD
—RWL—	RAIN WATER LEADER	RWL
—OD—	OVERFLOW DRAIN	OD
—GW—	GREASE WASTE	GW
	EXISTING PIPING	(E)
(E)	EXISTING	
(N)	NEW	
	REFERENCE	REF.
	SLOPE	SL
	BELOW FINISH GRADE	BFG
	BELOW FINISH FLOOR	BFF
	UNLESS NOTED OTHERWISE	UNO
	UNLESS OTHERWISE NOTED	UON
	WATER COLUMN	W.C.
	ABOVE CEILING	ABV CLG
	BELOW FLOOR	BEL FLR
	BELOW GRADE	BEL GR
	TYPICAL	TYP
	CONTINUATION	CONT
	DOWN	DN
	FLOOR CLEANOUT	FCO
	CLEANOUT TO GRADE	COTG
	WALL CLEANOUT	WCO
	PIPING TURN UP	
	PIPING TURN DOWN	
	POINT OF CONNECTION	POC
	SHUT-OFF VALVE IN BOX	SOV
	SHUT-OFF VALVE	SOV
	SHUT-OFF VALVE IN RISER	-
	SHUT-OFF VALVE IN DROP	-
	GATE VALVE	-
	BUTTERFLY VALVE	-
	GLOBE VALVE	-
	CHECK VALVE	-
	PLUG VALVE	-
	BALL VALVE	-
	REDUCER	-
	MANHOLE	MH
	FLEXIBLE CONNECTOR	-
	UNION	-
	RELIEF VALVE	-
	BALANCING VALVE	-
	PRESSURE GAUGE	-
	THERMOMETER	-

LICENSED ARCHITECT
JAMES R. MORRELL
No. C-30128
Exp. 05-31-27
STATE OF CALIFORNIA

DATE: 07/21/2026

ADMIN SERVICES REMODEL AT SANGER UNIFIED BUSINESS PARK 2

SANGER UNIFIED SCHOOL DISTRICT
1254 COMMERCE AVE, SANGER, CA 93657

Reviewed for Code Compliance
08/24/2026
CSG CONSULTANTS, INC.

REVISIONS

MANGINI ARCHITECTURE INGENUITY
MANGINI ASSOCIATES INC.
4320 West Mineral King Avenue
Visalia, California 93291
www.mangini.us
(559) 627.0630 Office
(559) 627.1926 Fax

TITLE
OVERALL PLUMBING PLAN

P1.0

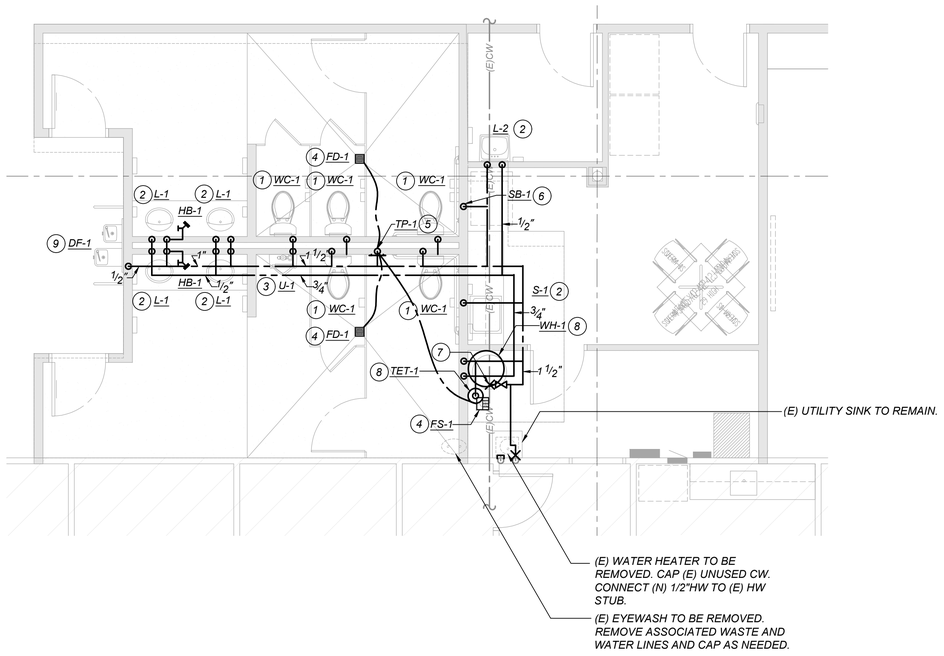
PROJECT 25041

LICENSED PROFESSIONAL ENGINEER
STAN W. CAWSEY
No. M34846
Exp. 6-30-28
MECHANICAL
STATE OF CALIFORNIA

LAWRENCE ENGINEERING GROUP
4910 E. Clinton Way, Suite 101
(559) 431-0101
Fresno, CA 93727
FAX (559) 431-1362
25134

KEYNOTES: (WATER PLUMBING PLAN ONLY)

1. *1/2"CW FOR FLOOR-MOUNTED FLUSH TANK WATER CLOSET.*
2. *1/2"CW AND 1/2"HW FOR LAVATORY/SINK. WHERE A HOSE BIBB IS INSTALLED ADJACENT TO LAVATORY, PROVIDE 3/4"CW.*
3. *1"CW FOR URINAL.*
4. *1/2"CW FROM TRAP PRIMER FROM FLOOR DRAIN/FLOOR SINK.*
5. *1/2"CW DOWN IN WALL FOR TRAP PRIMER BEHIND WALL ACCESS PANEL. ROUTE TRAP PRIMER DISCHARGE LINES DOWN BELOW FLOOR TO FLOOR DRAINS.*
6. *1/2"CW DOWN IN WALL TO REFRIGERATOR SUPPLY BOX.*
7. *CONNECT (N) 1-1/2"CW TO (E) CW ABOVE CEILING WITH SOV. FIELD VERIFY EXACT LOCATION.*
8. *REFER TO DETAIL D/P3.0 FOR WATER HEATER AND THERMAL EXPANSION TANK.*
9. *1/2"CW FOR DRINKING FOUNTAIN WITH BOTTLE FILLER. REFER TO DETAIL E/P3.0 FOR DRINKING FOUNTAIN.*



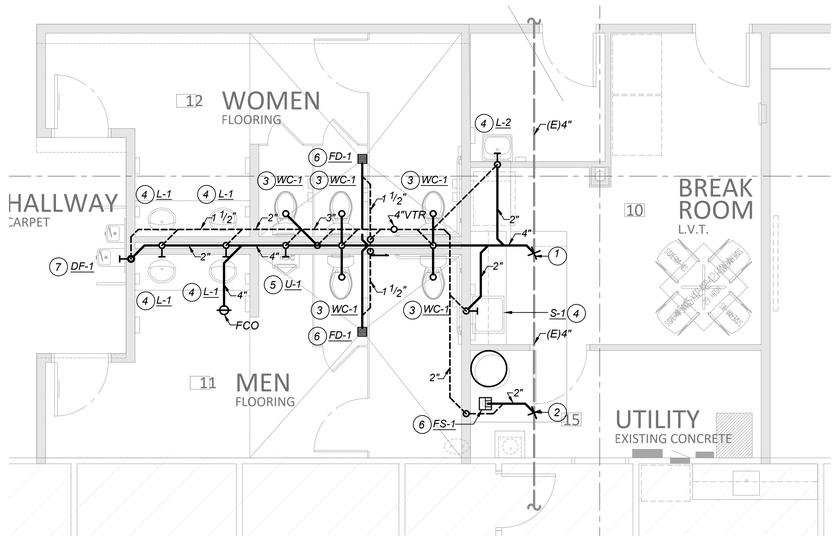
ENLARGED WATER PLUMBING PLAN

north

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

KEYNOTES: (WASTE & VENT PLUMBING PLAN ONLY)

1. *CONNECT (N) 4"S TO (E) 4"S BELOW FLOOR. FIELD VERIFY EXACT LOCATION.*
2. *CONNECT (N) 2"W TO (E) 4"S BELOW FLOOR. FIELD VERIFY EXACT LOCATION.*
3. *4"S FOR FLOOR MOUNTED WATER CLOSET.*
4. *2"W WITH WCO AND 1-1/2"V FOR LAVATORY/SINK.*
5. *2"W WITH WCO AND 1-1/2"V FOR URINAL.*
6. *2"W FOR FLOOR DRAIN/FLOOR SINK.*
7. *2"W WITH WCO AND 1-1/2"V FOR DRINKING FOUNTAIN.*



ENLARGED WASTE & VENT PLUMBING PLAN

north

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

APPROVALS

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CERTIFIED PROFESSIONAL ENGINEER
IAN W. CARLSON
No. M34846
Exp. 6-30-28
MECHANICAL
STATE OF CALIFORNIA

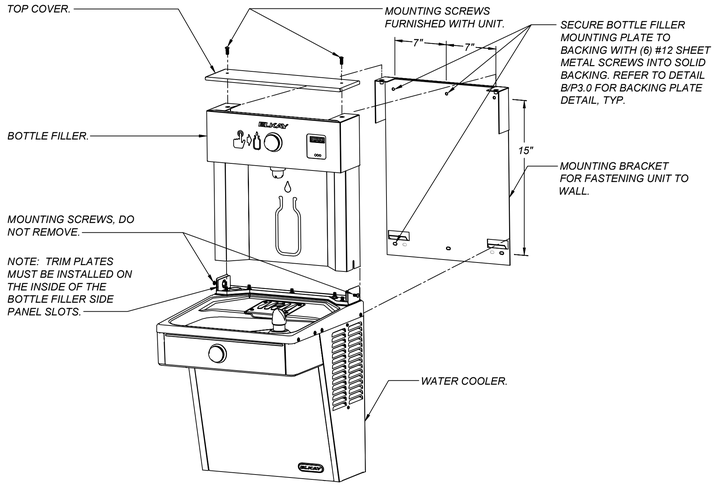
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Fresno, CA 93727
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TITLE
ENLARGED
PLUMBING PLAN

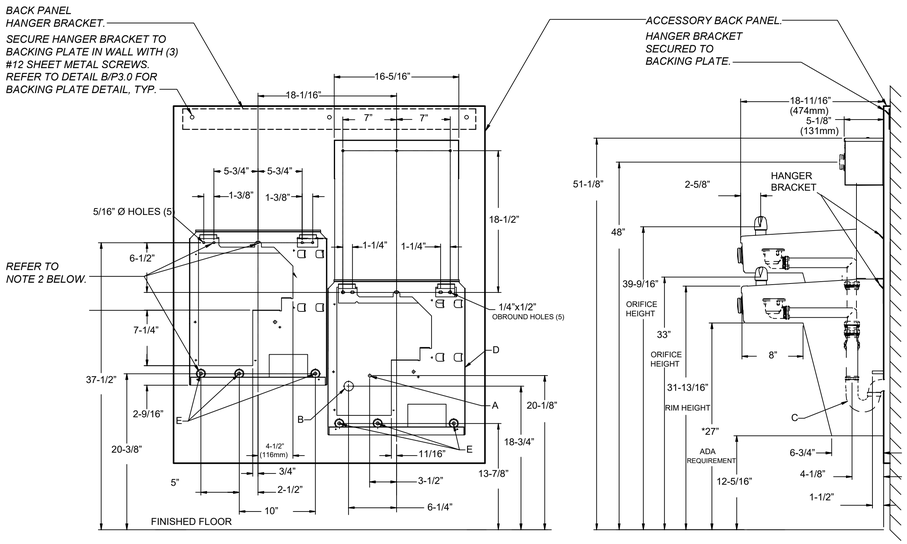
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PROJECT 25041

16 July 2026 1:09 PM P:\2025\25134 Sanger USD Admin Services Remodel\4-Drawings\5 P\P2.0 - Enlarged Plumbing Plan.dwg ryanf
P:\2025\25134 Sanger USD Admin Services Remodel\4-Drawings\5 P\P2.0 - Enlarged Plumbing Plan.dwg Jul 16 2026 1:09pm



BOTTLE FILLER



* REDUCE HEIGHT BY 3" FOR INSTALLATION OF CHILDREN'S ADA COOLER

* ADA REQUIREMENT.
* REQUISITO DE A.D.A.
* EXIGENCE ADA

LEGEND
A = RECOMMENDED WATER SUPPLY LOCATION 3/8 O.D. UNPLATED COPPER TUBE CONNECT STUB WITH SHUT OFF (BY OTHERS) 3 IN. (76mm) MAXIMUM OUT FROM WALL
B = RECOMMENDED LOCATION FOR WASTE OUTLET 1-1/2" O.D. DRAIN STUB 2 IN. OUT FROM WALL
C = P-TRAP
D = INSURE PROPER VENTILATION BY MAINTAINING 6" (152 mm) (MIN.) CLEARANCE FROM CABINET LOUVERS TO WALL.
E = 7/16 BOLT HOLES FOR FASTENING UNIT TO WALL. SEE NOTE 2 BELOW/

ANCHORAGE DETAIL

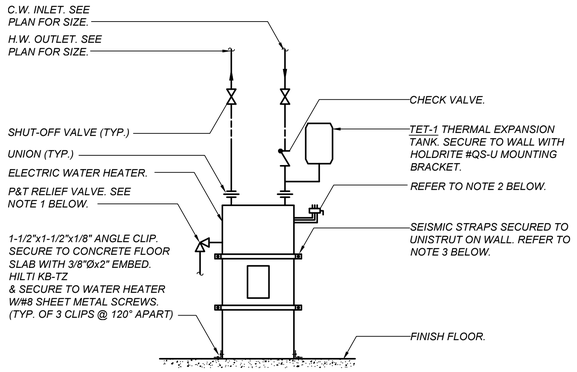
NOTES:

1. STANDARD TWO-LEVEL REVERSE CONFIGURATION SIMILAR. INSTALL IN COMPLIANCE WITH THE MANUFACTURER'S INSTALLATION GUIDELINES.
2. SECURE DRINKING MOUNTING PLATE TO BACKING WITH (6) #12 SHEET METAL SCREWS INTO SOLID BACKING. REFER TO DETAIL B/P3.0 FOR BACKING PLATE DETAIL, TYP.
3. DIMENSIONS SHOWN ON THIS DETAIL ARE SHOWN FOR REFERENCE ONLY. CONTRACTOR SHALL VERIFY INSTALLATION DIMENSIONS AND ACHIEVE REQUIRED HEIGHTS/MEASUREMENTS AS INDICATED ON ARCHITECTURAL DETAILS.

DRINKING FOUNTAIN / BOTTLE FILLER MOUNTING DETAIL

E P3.0

SCALE: NONE



NOTES:

1. DISCHARGE FULL SIZE T&P RELIEF DRAIN TO ADJACENT FLOOR SINK WITH 1"AIR GAP.
2. DISCONNECT AND WIRING BY ELECTRICAL SPEC. DIV. 16.
3. 18 GA.x1-1/2"WIDE GALV. STEEL STRAP AROUND WATER HEATER AND/OR EXPANSION TANK. SECURE BOTH ENDS TO METAL PLATE BACKING IN WALL WITH #12-24 TEKS SCREWS, (TYP. OF 2 STRAPS). REFER TO DETAIL B/P3.0 FOR METAL PLATE BACKING IN WALL, TYPICAL. STRAPS SHALL BE LOCATED WITHIN THE UPPER AND LOWER 1/3 OF THE WATER HEATER. STRAPS SHALL BE INSTALLED DIRECTLY ABOVE B22 CHANNEL SPACER. PROVIDE STANDARD CUT WASHER AT STRAP SCREW.

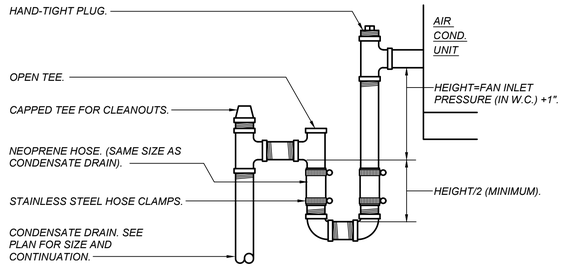
WATER HEATER DETAIL

D P3.0

SCALE: NONE

METAL WALL

P072

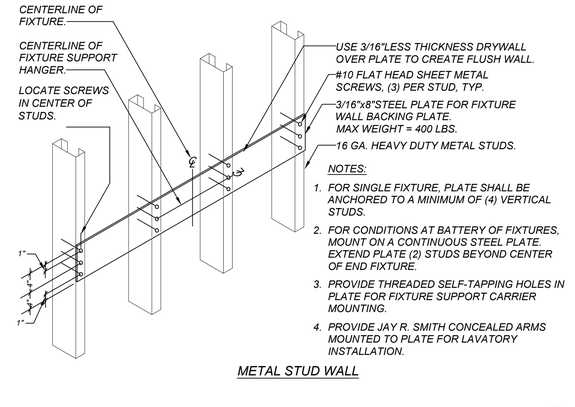


CONDENSATE DRAIN CONNECTION DETAIL

A P3.0

SCALE: NONE

P020



NOTES:

1. FOR SINGLE FIXTURE, PLATE SHALL BE ANCHORED TO A MINIMUM OF (4) VERTICAL STUDS.
2. FOR CONDITIONS AT BATTERY OF FIXTURES, MOUNT ON A CONTINUOUS STEEL PLATE. EXTEND PLATE (2) STUDS BEYOND CENTER OF END FIXTURE.
3. PROVIDE THREADED SELF-TAPPING HOLES IN PLATE FOR FIXTURE SUPPORT CARRIER MOUNTING.
4. PROVIDE JAY R. SMITH CONCEALED ARMS MOUNTED TO PLATE FOR LAVATORY INSTALLATION.

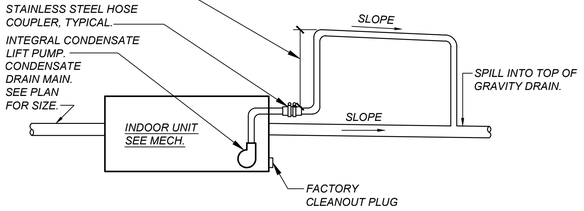
METAL STUD WALL

FIXTURE SUPPORT BACKING PLATE DETAIL

B P3.0

SCALE: NONE

REFER TO THE MANUFACTURER'S INSTALLATION GUIDELINES FOR MAXIMUM ELEVATION OF PIPING. PROVIDE CHECK VALVE WHERE REQUIRED BY THE MANUFACTURER'S GUIDELINES.



IDU CONDENSATE CONNECTION DETAIL

C P3.0

SCALE: NONE

APPROVALS

LICENSED ARCHITECT JAMES R. MORRELL No. C-30128 EXP. 05-31-27 STATE OF CALIFORNIA

DATE: 07/21/2026

ADMIN SERVICES REMODEL AT SANGER UNIFIED BUSINESS PARK 2

SANGER UNIFIED SCHOOL DISTRICT
1254 COMMERCE AVE, SANGER, CA 93657

Reviewed for Code Compliance
08/24/2026
CSG CONSULTANTS, INC.
REVISIONS

MANGINI ARCHITECTURE INGENUITY
MANGINI ASSOCIATES INC.
4320 West Mineral King Avenue
Visalia, California 93291
www.mangini.us
(559) 627.0530 Office
(559) 627.1926 Fax

TITLE
PLUMBING DETAILS

P3.0

PROJECT 25041

REGISTERED PROFESSIONAL ENGINEER BRIAN W. CARLSON No. M34846 Exp. 6-30-28 MECHANICAL STATE OF CALIFORNIA

LAWRENCE ENGINEERING GROUP
4910 E. Clinton Way, Suite 101
(559) 431-0101
25134
Fresno, CA 93727
FAX (559) 431-1362

16 July 2026 1:09 PM P:\2025\25134 Sanger USD Admin Services Remodel\4-Drawings\5 P\P3.0 - Plumbing Details.dwg nyonf

APPROVALS

PLUMBING PIPE MATERIAL SCHEDULE

PLUMBING SYSTEM		DESCRIPTION
SOIL, WASTE AND VENT	INSIDE BUILDING BELOW GRADE WITHIN FIVE FEET OF BUILDING EXTERIOR	STANDARD WEIGHT COATED CAST IRON PIPE AND FITTINGS, PLAIN END, CISPI 301, ASTM A888, OR HUB END WITH RUBBER GASKETS, ASTM A74, ASTM C564. ABI, CHARLOTTE, TYLER. COUPLINGS SHALL BE HEAVY-DUTY SHIELDED COUPLINGS. TYPE 304 STAINLESS STEEL, WITH NEOPRENE GASKET, ASTM C-1540. HUSKY HD 2000, CLAMP-ALL 80, MISSION HEAVYWEIGHT. MG COUPLINGS ARE ALSO ACCEPTABLE.
	INSIDE BUILDING ABOVE GRADE	STANDARD WEIGHT NO-HUB CAST IRON, CISPI 301 AND ASTM A888, FM 1680, ASTM C1540, ASTM C564 LISTED COUPLINGS, HUSKEY HD 2000, CLAMP ALL 80, MG COUPLING. SIZE 2" AND SMALLER ABOVE GRADE MAY BE STANDARD WEIGHT GALVANIZED STEEL, ASTM A53, WITH COATED CAST IRON RECESSED DRAINAGE FITTINGS, ANSI B16.12. 2" AND SMALLER EXPOSED TO VIEW SHALL BE GALVANIZED STEEL, ASTM A53, WITH COATED CAST IRON RECESSED DRAINAGE FITTINGS, ANSI B16.12.
DOMESTIC COLD AND HOT WATER PIPING	INSIDE BUILDING, WITHIN FIVE FEET OF BUILDING WALLS	SCHEDULE 40 GALVANIZED STEEL PIPE, ASTM A53. 150 PSI GALVANIZED MALLEABLE IRON SCREWED FITTINGS, ANSI B16.3. OR: HARD TEMPER SEAMLESS COPPER, ASTM B88. WROUGHT COPPER FITTINGS, ANSI B16.22. TYPE L WITH BRAZED JOINTS (1100F, MIN.). 1-1/2" AND SMALLER ABOVE GRADE MAY BE SOLDERED, 95-5 TIN-ANTIMONY SOLDER. ALL NIPPLES SHALL BE LEAD-FREE RED BRASS (85% COPPER). ABOVE GRADE FITTINGS MAY BE COPPER PRESS FITTINGS, ASME B16.18 OR ASME B16.22. EPDM O-RINGS. ALL INTERIOR DOMESTIC HOT WATER PIPING SHALL BE INSULATED. REFER TO SPEC. DIV. 22 FOR INSULATION SPECIFICATIONS.
	INSIDE BUILDING FROM TRAP PRIMERS TO FLOOR DRAINS AND FLOOR SINKS.	TYPE "L" SOFT TEMPERED SEAMLESS COPPER, ASTM B88 WITH WROUGHT COPPER FITTINGS WITH LEAD-FREE SOLDER. ENCASE IN 8 MIL. POLYWRAP.

NOTE: REFER TO SPECIFICATIONS DIVISION 22 FOR ADDITIONAL INFORMATION.

PLUMBING FIXTURE CALCULATIONS

ROOM	FIXTURE	NO.	CW WSFU		HW WSFU		SEWER DFU	
			UNIT	TOTAL	UNIT	TOTAL	UNIT	TOTAL
	WC-FT	7	2.50	18	-	-	4.00	28.00
	UR	1	4.00	4	-	-	2.00	2.00
	LAV	7	0.75	5	0.75	5	1.00	7.00
	MS	1	3.00	3	3.00	3	3.00	3.00
	SINK	2	1.50	3	1.50	3	2.00	4.00
	FD-E	2	-	-	-	-	-	-
	HB	1	2.50	3	-	-	-	-
	HB-1	3	1.00	3	-	-	-	-
	WSB	1	0.50	1	-	-	-	-
	DF	2	0.50	1	-	-	0.50	1.00
		-	-	-	-	-	-	-
SUBTOTAL / TOTAL				40		11		45.0
GPM FLOW				25		9		

DOMESTIC WATER DEMAND AND PIPE SIZING

WATER METER SIZE	WATER METER USED?	YES	1.50"
TOTAL FIXTURE UNITS			39.75
FIXTURE UNIT GPM			24.53
ADDITIONAL EQUIPMENT GPM			0.00
TOTAL BUILDING GPM			24.53
MINIMUM PSI AVAILABLE AT JOBSITE			45.00
PSI FLOW LOSS THROUGH WATER METER (CHART A-1)			2.00
PSI LOSS THROUGH BACK FLOW PREVENTER (*RP = 12.0 PSI / *D.C. = 12.0 PSI.)			12.00
SITE WATER PIPE SIZE			1.50
TOTAL DEVELOPED LENGTH FROM METER TO BUILDING POINT OF ENTRY (FT)			140.00
SITE WATER PSI PRESSURE DROP/100' OF PIPE			1.72
TOTAL PSI MAIN LOSS FROM METER TO BUILDING			2.41
TOTAL PRESSURE AVAILABLE AT BUILDING EXTERIOR WALL			28.59
TOTAL DEVELOPED BUILDING MAIN LENGTH TO MOST REMOTE FIXTURE (FT)			150.00
TOTAL RISE FOR HEAD LOSS (FT x 0.43)		5.0	2.15
MAIN PRV PSI LOSS OR OTHER SIMILAR EQUIPMENT / MAIN PSI LOSS			0.00
PSI REQUIRED FOR GOVERNING FIXTURE			20.00
TOTAL BUILDING LOSS (PSI)			22.15
REMAINING PSI AVAILABLE (IF NEGATIVE, USE BOOSTER PUMP)			6.44
BOOSTER PUMP (PSI)			0.00
TOTAL REMAINING PSI AVAILABLE			6.44
FRICTION LOSS (PSI/100 FT.)			4.29
MAXIMUM COLD WATER VELOCITY ALLOWED (FT/S)			8.00
MAXIMUM HOT WATER VELOCITY ALLOWED (FT/S)			6.00

COLD WATER COPPER TYPE L SYSTEM

PIPE SIZE INCHES (ID)		GPM	VELOCITY (fps)	FLUSH VALVE	FLUSH TANK
2"	1.985	-	-	-	-
1.5"	1.505	34.9	6.3	19	68.98
1.25"	1.265	21.9	5.6	9	33.74
1"	1.025	12.5	4.9	-	16.48
.75"	0.785	6.2	4.0	-	7.46
.50"	0.545	2.2	2.9	-	1.98

HOT WATER COPPER TYPE L SYSTEM

PIPE SIZE INCHES (ID)		GPM	VELOCITY (fps)	FLUSH VALVE	FLUSH TANK
1.5"	1.505	33.1	6.0	16	63.12
1.25"	1.265	21.9	5.6	9	33.74
1"	1.025	12.5	4.9	-	16.48
.75"	0.785	6.2	4.0	-	7.46
.50"	0.545	2.2	2.9	-	1.98

NOTE: BUILDING HAS TOTAL OF 40 WSFU. ACCORDING TO THIS WATER CALCUATION, A 1-1/2" WATER MAIN (63 WSFU MAX.) IS SUFFICIENT FOR THE BUILDING WATER DEMAND THAT IS PRIMARILY FLUSH TANK.

PLUMBING FIXTURE AND EQUIPMENT SCHEDULE

MARK	FIXTURE	CONNECTION SIZES S or W	V	CW	HW	DESCRIPTION
U-1	URINAL	2"	1-1/2"	3/4"	-	**KOHLER "BARDON" #K-4991-ET**, (OR AMERICAN STANDARD OR ZURN EQUAL) CBC ACCESS COMPLIANT, 0.125 GPF, WASHOUT STYLE W/ #85061 STRAINER & SLOAN "ROYAL" #186 SFSM-0.125-CP-TMO (OR ZURN EQUAL) FLUSH VALVE, 0.125 GPF, TRUE MECHANICAL OVERRIDE, BATTERY POWERED. PROVIDE STEEL SUPPORT PLATE FOR MOUNTING FIXTURE PER DETAIL B/P3.0. SEE ARCHITECTURAL DRAWINGS FOR MOUNTING HEIGHT.
FD-1	FLOOR DRAIN	2"	1-1/2"	1/2"	-	**JAY R. SMITH #2005-P050-HP** (OR MIFAB OR ZURN EQUAL) DUCO CAST IRON BODY WITH 5" SQUARE NICKEL BRONZE STRAINER. PROVIDE TRAP PRIMER CONNECTION AND CONNECT TRAP PRIMER LINE.
S-1	BREAKROOM SINK	2"	1-1/2"	1/2"	1/2"	**JUST #CRAADA1923A45-J**, (OR ELKAY EQUAL) DROP-IN SINK, ADA COMPLIANT, 18 GAUGE STAINLESS STEEL, 13-1/2"x16"x4-1/2" DEEP BOWL SIZE, SINGLE FAUCET HOLE PUNCHED AT LEFT SIDE, REAR CENTER DRAIN. **CHICAGO #50-GN8AE35ABCP** 8" GOOSENECK FAUCET, 1.5 GPM AERATOR, VANDAL PROOF LEVER HANDLES, QUATURN COMPRESSION CARTRIDGES. **CASH ACME #HG135** THERMOSTATIC MIXING VALVE, ASSE 1070 COMPLIANT. SET HW TEMP FOR 105°F.
WH-1	WATER HEATER	-	-	3/4"	3/4"	**BRADFORD WHITE #LE255T3-3**, (OR AO SMITH EQUAL) 23"Øx57" HIGH; 55 GALLON STORAGE CAPACITY, 75 GPH RECOVERY RATE AT 100° F. TEMP. RISE, 5,000 WATTS, 208V/3Ø, 3/4"P&T RELIEF VALVE. OPERATING WEIGHT = 600 LBS.
TET-1	THERMAL EXPANSION TANK	-	-	3/4"	-	**WESSELS TTA-5**, 3.5 GALLON ASME RATED TANK, 2.3 GALLON ACCEPTANCE WITH INLINE CONNECTIONS AND WITH FDA APPROVED BLADDER FOR POTABLE WATER USE. OPERATING WEIGHT = 52 LBS.
DF-1	DRINKING FOUNTAIN	2"	1-1/2"	1/2"	-	**ELKAY #VRCTLDDMWSK** VANDAL RESISTANT BOTTLE FILLING STATION AND BI-LEVEL DRINKING FOUNTAIN, NON-FILTERED, NON-REFRIGERATED, MECHANICAL BOTTLE FILLER ACTIVATION, MECHANICAL FRONT BUBBLER ACTIVATION, RATED FOR INDOOR & OUTDOOR INSTALLATIONS. **ELKAY #STLBFUP** ACCESSORY STAINLESS STEEL BACK PANEL. PROVIDE STEEL SUPPORT PLATES AS NEEDED FOR MOUNTING FIXTURE PER DETAIL B/P3.0.
HB-1	HOSE BIBB	-	-	3/4"	-	**WOODFORD #24P** (OR MIFAB EQUAL) OPTIONAL POLISHED CHROME WALL HOSE VALVE WITH LOCKSHIELD, NON-REMOVABLE VACUUM BREAKER, AND OPTIONAL LOOSE TEE KEY HANDLE WITH MODEL 34HD.
HB-2	HOSE BIBB	-	-	3/4"	-	**WOODFORD #Y24** (OR MIFAB EQUAL) ROUGH BRONZE STANDPIPE HOSE VALVE WITH NON-REMOVABLE VACUUM BREAKER, AND OPTIONAL LOOSE TEE KEY HANDLE WITH MODEL 34HD.
SB-1	SUPPLY BOX	-	-	1/2"	-	**SPECIALTY PRODUCTS #OB-509**, METAL RECESSED REFRIGERATOR WATER SUPPLY BOX WITH WHITE FINISH, INTEGRAL SHUT-OFF VALVE AND MINI-WATER HAMMER ARRESTER.
SA-1	SHOCK ABSORBER	-	-	1"	-	**JAY R. SMITH #5010**, (OR ZURN EQUAL) STAINLESS STEEL CONSTRUCTION, P.D.I. SYMBOL "B" FOR UP TO 32 FIXTURE UNITS. INSTALL IN UPWARD POSITION.
TP-1	TRAP PRIMER	-	-	1/2"	-	**PRECISION PLUMBING PRODUCTS MODEL #P1-500** (OR MIFAB EQUAL) VALVE W/ DISTRIBUTION UNITS AS REQUIRED FOR UP TO 4 DRAINS PER DISTRIBUTION UNIT.

PLUMBING FIXTURE AND EQUIPMENT SCHEDULE

MARK	FIXTURE	CONNECTION SIZES S or W	V	CW	HW	DESCRIPTION
WC-1	WATER CLOSET (MANUAL)	4"	2"	1/2"	-	**KOHLER #K-25077 "KINGSTON"**, ELONGATED FLOOR MOUNT, 1.28 GPF, CBC ACCESS COMPLIANT. **BEMIS #1655SSCT** (OR CHURCH EQUAL) COMMERCIAL EXTRA HEAVY-DUTY PLASTIC WHITE TOILET SEAT, OPEN-FRONT LESS COVER, SELF-SUSTAINING CHECK HINGES, WITH STA-TITE FASTENING SYSTEM. TRIP LEVER ON TANK POINTED TOWARDS WIDE SIDE OF STALL.
L-1	LAVATORY (SENSOR)	2"	2"	1/2"	1/2"	**AMERICAN STANDARD "OVALYN" #0497.221** UNDER COUNTER SINK, CBC ACCESS COMPLIANT, 21-1/2"x17-3/8x5-1/2" VIT. CHINA WITH 4" CENTERS. **CHICAGO FAUCETS "HYTRONIC" #116.980.AB.1T** SENSOR OPERATED FAUCET WITH ABOVE-DECK ELECTRONICS, 0.35 GPM VANDAL RESISTANT NON-AERATING OUTLET, SINGLE SUPPLY FOR TEMPERED WATER, 6V BATTERY POWERED. **McGUIRE #155A** GRID DRAIN. **CASH ACME #HG135** THERMOSTATIC MIXING VALVE, ASSE 1070 COMPLIANT. PIPING FROM THE ANGLE STOPS TO THE THERMOSTATIC MIXING VALVE SHALL BE RIGID TUBING. SET TEMPERATURE AT 105°F. ADJUST FAUCET TO STAY OPEN FOR 40 SECONDS. (2) LOOSE KEY COMPRESSION ANGLED WALL STOPS WITH SUPPLIES, 17 GA. C.P. P-TRAP/TAILPIECE WITH ESCUTCHEON, WRAP CW, HW, AND TRAP/TAILPIECE PER SPECIFICATIONS. REFER TO ARCHITECTURAL DRAWINGS FOR MOUNTING HEIGHT.
L-2	LAVATORY (SENSOR)	2"	2"	1/2"	1/2"	**KOHLER WALL-MOUNT "KINGSTON" #K-2007**, CBC ACCESS COMPLIANT, 21-1/4"x18-1/8", VIT. CHINA WITH SINGLE FAUCET HOLE. **CHICAGO FAUCETS "HYTRONIC" #116.980.AB.1T** SENSOR OPERATED FAUCET WITH ABOVE-DECK ELECTRONICS, 0.35 GPM VANDAL RESISTANT NON-AERATING OUTLET, SINGLE SUPPLY FOR TEMPERED WATER, 6V BATTERY POWERED. **McGUIRE #155A** GRID DRAIN. **CASH ACME #HG135** THERMOSTATIC MIXING VALVE, ASSE 1070 COMPLIANT. PIPING FROM THE ANGLE STOPS TO THE THERMOSTATIC MIXING VALVE SHALL BE RIGID TUBING. SET TEMPERATURE AT 105°F. ADJUST FAUCET TO STAY OPEN FOR 40 SECONDS. **JAY R. SMITH #0723** CONCEALED ARMS, AND A STEEL SUPPORT PLATE FOR MOUNTING FIXTURE PER DETAIL D/P3.01. (2) LOOSE KEY COMPRESSION ANGLED WALL STOPS WITH SUPPLIES, 17 GA. C.P. P-TRAP/TAILPIECE WITH ESCUTCHEON, WRAP CW, HW, AND TRAP/TAILPIECE PER SPECIFICATIONS. REFER TO ARCHITECTURAL DRAWINGS FOR MOUNTING HEIGHT.

LICENSED ARCHITECT — JAMES R. MORRELL — No. C-30128 — EXP. 05-31-27 — STATE OF CALIFORNIA

DATE: 07/21/2026

ADMIN SERVICES REMODEL AT SANGER UNIFIED BUSINESS PARK 2

SANGER UNIFIED SCHOOL DISTRICT
1254 COMMERCE AVE, SANGER, CA 93657

Reviewed for Code Compliance
08/24/2026
CSG CONSULTANTS, INC.
REVISIONS

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(559) 627-0530 Office
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TITLE: PLUMBING SCHEDULES AND CALCS

P4.0

PROJECT 25041

REGISTERED PROFESSIONAL ENGINEER — IAN W. CARLSON — No. M34846 Exp. 6-30-28 — MECHANICAL — STATE OF CALIFORNIA

LAWRENCE ENGINEERING GROUP
4910 E. Clinton Way, Suite 101 (559) 431-0101
25134
Fresno, CA 93727 FAX (559) 431-1362

16 July 2026 1:43 PM P:\2025\25134 Sanger USD Admin Services Remodel\4-Drawings\5 P\P4.0 - Plumbing Schedules.dwg ryanf

GENERAL MECHANICAL NOTES:

1. *THE INTENT OF THE DRAWING AND SPECIFICATIONS IS TO CONSTRUCT THE BUILDING IN ACCORDANCE WITH THE 2025 EDITION OF TITLE 24, CALIFORNIA CODE OF REGULATIONS. CHANGES TO THE STRUCTURAL, ACCESSIBILITY OR FIRE AND LIFE-SAFETY PORTIONS OF THE APPROVED PLANS AND SPECIFICATIONS SHALL BE MADE BY AN ADDENDUM OR CONSTRUCTION CHANGE DOCUMENT AS REQUIRED IN SECTION 4-338, PART 1, TITLE 24, CCR, AND SHALL BE SUBMITTED TO AND APPROVED BY AHJ PRIOR TO COMMENCEMENT OF THE WORK.*

2. *LAYOUT OF MATERIALS, EQUIPMENT AND SYSTEMS IS GENERALLY DIAGRAMMATIC UNLESS SPECIFICALLY DIMENSIONED. SOME WORK MAY BE SHOWN OFFSET FOR CLARITY. THE HVAC BUILDING PLANS HAVE BEEN PREPARED TO MATCH THE ARCHITECTURAL PLANS. IF DIFFERENCES OCCUR, THE ARCHITECTURAL PLANS ARE TO TAKE PRECEDENCE. THE ACTUAL LOCATIONS OF ALL MATERIALS, PIPING, DUCTWORK, FIXTURES, EQUIPMENT, SUPPORTS, ETC. SHALL BE CAREFULLY PLANNED, PRIOR TO INSTALLATION OF ANY WORK TO AVOID ALL INTERFERENCES WITH EACH OTHER, OR WITH STRUCTURAL, ELECTRICAL, ARCHITECTURAL, OR OTHER ELEMENTS. ALL DUCT AND PIPE OFFSET ELBOWS FOR COORDINATION BETWEEN TRADES ARE NOT SHOWN. CONTRACTOR SHALL INCLUDE SUFFICIENT FUNDS FOR THE COORDINATION OFFSETS IN THE BID. VERIFY THE PROPER VOLTAGE AND PHASE OF ALL EQUIPMENT WITH THE ELECTRICAL PLANS. ALL CONFLICTS SHALL BE CALLED TO THE ATTENTION OF THE ARCHITECT AND THE ENGINEER PRIOR TO THE INSTALLATION OF ANY WORK OR THE ORDERING OF ANY EQUIPMENT.*

3. *PENETRATIONS OF PIPES, CONDUITS, ETC. IN WALLS OR FLOORS REQUIRING PROTECTED OPENINGS SHALL BE FIRE STOPPED INCLUDING EXISTING PIPE AND CONDUIT THROUGH NEW WALLS AND FLOORS.*

4. *ALL PIPING, DUCTWORK AND CONDUIT REQUIRING SEISMIC BRACE AND SUPPORT SHALL BE SUPPORTED PER MASON INDUSTRIES, INC. "SEISMIC RESTRAINT COMPONENTS FOR SUSPENDED UTILITIES", HCAI (OSHPD) PREAPPROVED ANCHORAGE OPM-0043-13 OR OTHER HCAI (OSHPD) PREAPPROVED SYSTEM.*

5. *WHEN INSTALLING DRILLED-IN ANCHORS AND/OR POWDER-DRIVEN PINS IN EXISTING NON-PRESTRESSED CONCRETE, USE CARE AND CAUTION TO AVOID CUTTING OR DAMAGING THE EXISTING REINFORCING BARS. WHEN INSTALLING THEM INTO EXISTING PRESTRESSED CONCRETE (PRE-OR POST-TENSIONED), LOCATE THE PRESTRESSED TENDONS BY USING A NON-DESTRUCTIVE METHOD PRIOR TO INSTALLATION. EXERCISE EXTREME CARE AND CAUTION TO AVOID CUTTING OR DAMAGING THE TENDONS DURING INSTALLATION. MAINTAIN A MINIMUM CLEARANCE OF ONE INCH BETWEEN THE REINFORCEMENT AND THE DRILLED-IN ANCHOR AND/OR PIN.*

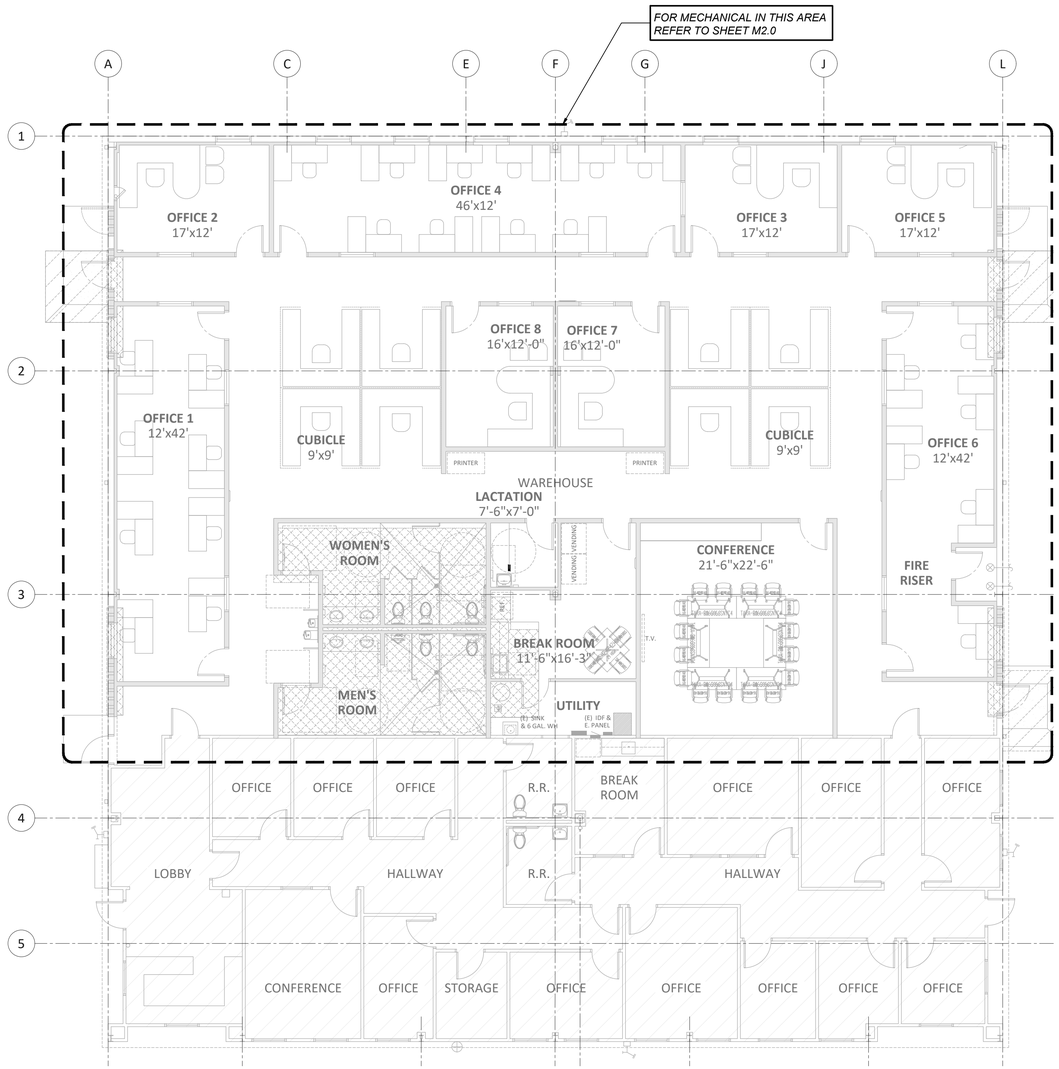
6. *ALL MECHANICAL, PLUMBING, AND ELECTRICAL COMPONENTS SHALL BE ANCHORED AND INSTALLED PER THE DETAILS ON THE APPROVED CONSTRUCTION DOCUMENTS. WHERE THERE NO DETAIL IS INDICATED, THE FOLLOWING COMPONENTS SHALL BE ANCHORED OR BRACED TO MEET THE FORCE AND DISPLACEMENT REQUIREMENTS PRESCRIBED IN THE 2025 CBC, SECTIONS 1617A.1.18 THROUGH 1617A.1.26 AND ASCE 7-16 CHAPTERS 13, 26 AND 30..*
   - *A. ALL PERMANENT EQUIPMENT AND COMPONENTS..*
   - *B. TEMPORARY OR MOVABLE.EQUIPMENT THAT IS PERMANENTLY ATTACHED (E.G. HARD WIRED) TO THE BUILDING UTILITY SERVICES SUCH AS ELECTRICAL, GAS, OR WATER.*
   - *C. MOVABLE EQUIPMENT WHICH IS STATIONED IN ONE PLACE FORM MORE THAN 8 HOURS AND HEAVIER THAN 400 LBS ARE REQUIRED TO BE ANCHORED WITH TEMPORARY ATTACHMENTS.*

7. *DUCTWORK SIZES SHOWN ARE INSIDE CLEAR DIMENSIONS. WHERE ACOUSTIC LINING IS SHOWN, INCREASE EACH SHEET METAL DIMENSION TO ACCOMMODATE LINING & MAINTAIN CLEAR INSIDE DUCT DIMENSIONS SHOWN.*

8. *SA DUCTWORK FOR VAV SYSTEMS SHALL BE 2" PRESSURE CLASS UPSTREAM OF BOXES AND 1" DOWNSTREAM OF BOXES, AND SA DUCTWORK SHALL BE 1" PRESSURE CLASS AND RA & EA DUCTWORK SHALL BE 1" PRESSURE CLASS UNLESS OTHERWISE NOTED.*

9. *REFER TO DETAIL A/M4.0 FOR TYPICAL SUPPLY AIR DEVICE AND BRANCH DUCT.*

10. *FOR SYSTEM CONTROLS SEE SHEET SHEET M4.2.*



OVERALL MECHANICAL PLAN

SCALE: 1" = 20'-0"

north

AIR CONDITIONING LEGEND		
SYMBOL	ITEM	ABBR
	ROUND DUCT	Ø
	FLAT OVAL DUCT	⬭
	SHEET METAL DUCT	—
	ACOUSTIC LINING FOR DUCT OR GRILLES	(L)
	SUPPLY AIR DUCT DROP	—
	RETURN AIR DUCT DROP	—
	EXHAUST DUCT AIR DROP	—
	SUPPLY AIR DUCT RISE	—
	RETURN AIR DUCT RISE	—
	EXHAUST AIR DUCT RISE	—
	TURNING VANES	TV
	EXTRACTOR	—
	VOLUME CONTROL DAMPER W/LOCKING QUADRANT	VCD
	OPPOSED BLADE DAMPER	OBD
	BACKDRAFT DAMPER	BDD
	VOLUME CONTROL DAMPER W/ REMOTE REGULATOR	VCR
CFM	CUBIC FEET OF AIR PER MINUTE	CFM
M	EMS MOTORIZED DUCT DAMPER/ PIPE VALVE ACTUATOR	—
T	THERMOSTAT @ +4'-0" TOP OF BOX	T'STAT
C	CO_2 SENSOR @ +4'-0" TOP OF BOX	CO_2
T	EMS TEMPERATURE SENSOR @ +4'-0" TOP OF BOX	—
C	EMS CO_2 SENSOR @ +4'-0" TOP OF BOX	CO_2
SP	EMS STATIC PRESSURE SENSOR	SP
DP	EMS DIFFERENTIAL PRESSURE SENSOR	DP
CS	EMS CURRENT SENSOR	CS
	DIRECTION OF FLOW	—
	SUPPLY AIR	SA
	RETURN AIR	RA
	EXHAUST AIR	EA
	OUTSIDE AIR	OSA
	PIPE/DUCT TURN DOWN	—
	PIPE/DUCT TURN UP	—
	POINT OF CONNECTION	POC
	EXISTING (DESIGNATED)	(E)
	NEW (DESIGNATED)	(N)
SD	DUCT SMOKE DETECTOR	SD
A/V	AUDIBLE/VISUAL ALARM	A/VA
	BYPASS TIMER	BPT
—EMS—	ENERGY MANAGEMENT SYSTEM CABLE IN CONDUIT	EMS

APPROVALS

LICENSED ARCHITECT JAMES R. MORRELL No. C-35128 EXP. 05-31-27 STATE OF CALIFORNIA

DATE: 07/21/2026

ADMIN SERVICES REMODEL AT SANGER UNIFIED BUSINESS PARK 2

SANGER UNIFIED SCHOOL DISTRICT
1254 COMMERCE AVE, SANGER, CA 93657

REVISIONS

Reviewed for Code Compliance
08/24/2026
CSG CONSULTANTS, INC.

REGISTERED PROFESSIONAL ENGINEER RYAN W. CARLSON No. M34846 Exp. 6-30-28 MECHANICAL STATE OF CALIFORNIA

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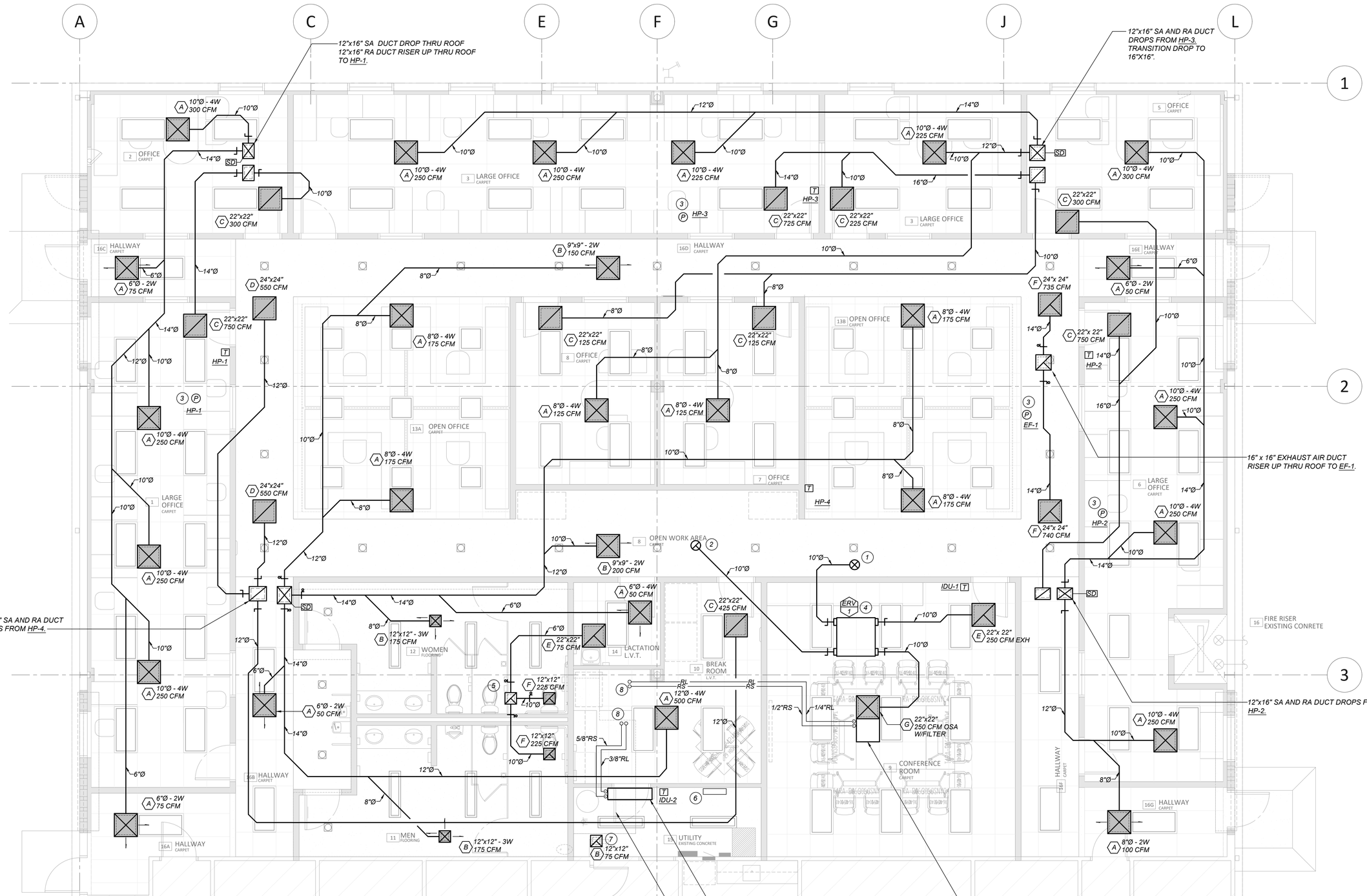
MANGINI ARCHITECTURE | INGENUITY
MANGINI ASSOCIATES INC.
4320 West Mineral King Avenue
Visalia, California 93291
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TITLE
OVERALL MECHANICAL PLAN

M1.0

PROJECT 25041

5 August 2026 5:26 PM P:\2025\25134 Sanger USD Admin Services Remodel\4-Drawings\4 M\M1.0 - Overall Mechanical Plan.dwg alex m



KEYNOTES: (THIS SHEET ONLY)

1. 10"Ø OSA INTAKE VENT THRU ROOF W/ ROOF CAP.
2. 10"Ø EXH. VENT THRU ROOF W/ ROOF CAP.
3. ROOM PRESSURE SENSOR AT CEILING TO CONTROL EF, OR UNIT POWERED EXHAUST.
4. ERV ABOVE CEILING SEE DETAIL B/M4.1 FOR MOUNTING. ALL DUCT CONNECTIONS SHALL TRANSITION FROM 10" TO 8" AT ERV.
5. 12" x 12" EXHAUST AIR DUCT RISER UP THRU ROOF TO EF-2
6. EMS PANEL, REFER TO DETAIL H/M4.1 FOR MOUNTING AND G/M4.1 FOR PANEL ENCLOSURE. 120V AND SIGNAL BY ELECTRICAL.
7. 12" x 12" EXHAUST AIR DUCT RISER FROM EXHAUST GRILLE UP THRU ROOF TO EF-3.
8. REFRIGERANT PIPE DROP FROM ODU ON ROOF.

SHEET NOTES:

1. SEE DETAIL A/M4.0 FOR S/A GRILLE AND BRANCH DUCT REQUIREMENTS (TYP.)
2. SEE DETAIL B/M4.0 FOR R/A & E/A GRILLE AND BRANCH DUCT REQUIREMENTS (TYP.)
3. SEE DETAIL D/M4.1 FOR PRESSURE TUBE MOUNTING DETAIL. (TYP.)
4. SEE DETAIL E/M4.0 FOR ROUND DUCT HANGING DETAIL. (TYP.)
5. FOR AREAS WHERE DUCT VOLUME DAMPER IS INACCESSIBLE, INSTALL ELECTRONIC REMOTE DAMPER. REFER TO DETAIL C/M4.1. (TYP)

PARTIAL MECHANICAL PLAN

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

north

APPROVALS

LICENSED ARCHITECT
JAMES R. MORRELL
No. C-35128
EXP. 05-31-27
STATE OF CALIFORNIA

DATE: 07/21/2026

ADMIN SERVICES REMODEL AT
SANGER UNIFIED BUSINESS PARK 2

SANGER UNIFIED SCHOOL DISTRICT
1254 COMMERCE AVE, SANGER, CA 93657

REVISIONS

Reviewed for Code Compliance
08/24/2026
CSG CONSULTANTS, INC.

MANGINI ARCHITECTURE INGENUITY
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Visalia, California 93291

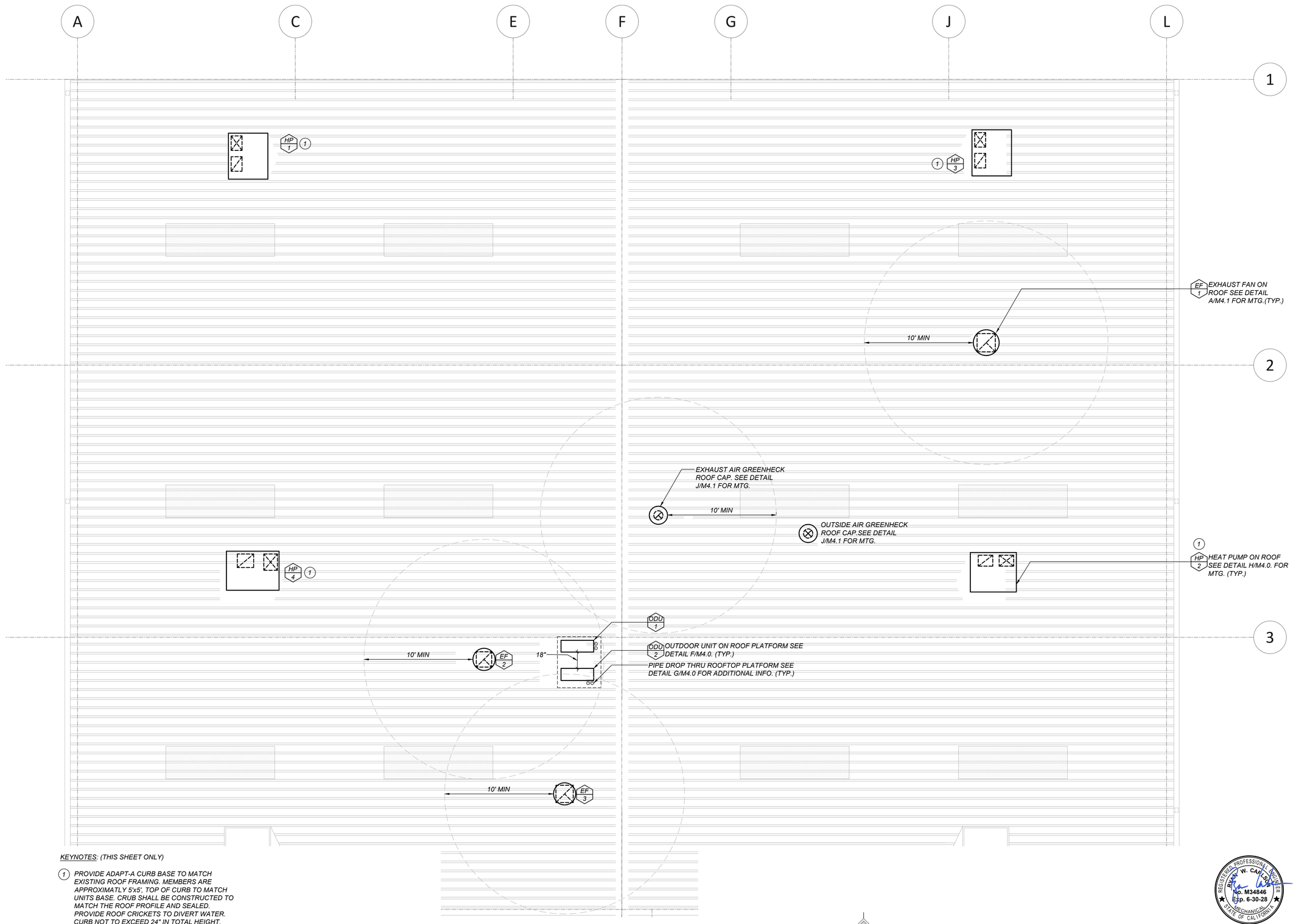
REGISTERED PROFESSIONAL ENGINEER
RYAN W. CARLSON
No. M34846
Exp. 6-30-28
MECHANICAL
STATE OF CALIFORNIA

LAWRENCE ENGINEERING GROUP
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25134
Fresno, CA 93727
FAX (559) 431-1362

TITLE
PARTIAL MECHANICAL PLAN

M2.0

PROJECT 25041



KEYNOTES: (THIS SHEET ONLY)

(1) PROVIDE ADAPT-A CURB BASE TO MATCH EXISTING ROOF FRAMING. MEMBERS ARE APPROXIMATLY 5'x5', TOP OF CURB TO MATCH UNITS BASE. CRUB SHALL BE CONSTRUCTED TO MATCH THE ROOF PROFILE AND SEALED. PROVIDE ROOF CRICKETS TO DIVERT WATER. CURB NOT TO EXCEED 24" IN TOTAL HEIGHT.

PARTIAL MECHANICAL ROOF PLAN

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

north

APPROVALS

LICENSED ARCHITECT
JAMES R. MORRELL
No. C-35128
EXP. 05-31-27
STATE OF CALIFORNIA

DATE: 07/21/2026

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1254 COMMERCE AVE, SANGER, CA 93657

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REGISTERED PROFESSIONAL ENGINEER
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MECHANICAL
STATE OF CALIFORNIA

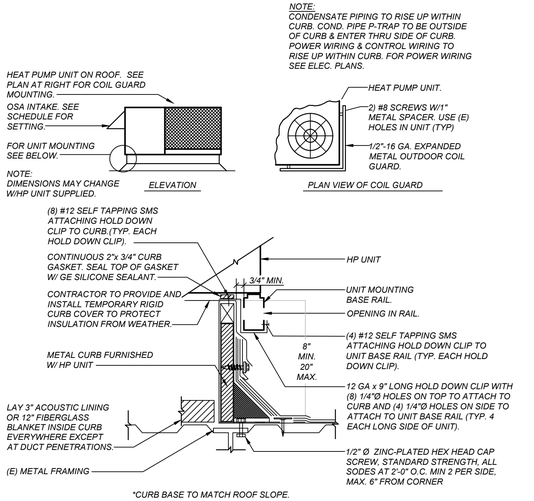
LAWRENCE ENGINEERING GROUP
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(559) 431-0101
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Fresno, CA 93727
FAX (559) 431-1362

TITLE
PARTIAL MECHANICAL ROOF PLAN

M3.0

PROJECT 25041

5 August 2026 5:26 PM P:\2025\25134 Sanger USD Admin Services Remodel\4-Drawings\4 M\M3.0 - Mechanical Roof Plan.dwg alex m



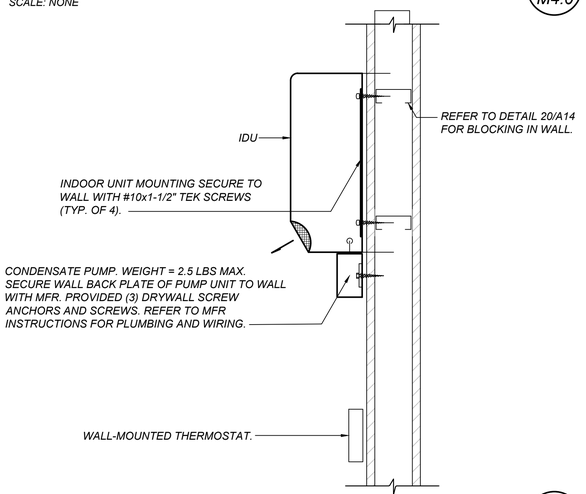
*CURB BASE TO MATCH ROOF SLOPE.

NOTES :
1. METAL CURB HEIGHT TO BE SELECTED BY CONTRACTOR TO PROVIDE MIN. 8" CLEAR FROM BOTTOM OF POWER EXHAUST ACCESSORY TO TOP OF FINISH ROOF.
2. ALL WOOD PRODUCTS ABOVE THE ROOF SHALL BE FIRE RETARDANT TREATED.

HP UNIT ROOF MOUNTING DETAIL

H / M4.0

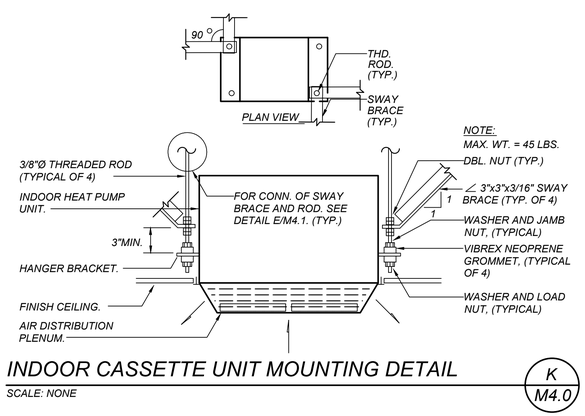
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IDU MOUNTING DETAIL (WALL)

J / M4.0

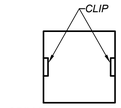
SCALE: NONE



INDOOR CASSETTE UNIT MOUNTING DETAIL

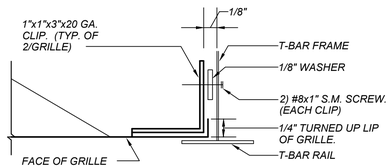
K / M4.0

SCALE: NONE



PLAN VIEW

NOTE : USE THIS DETAIL FOR SUPPLY & RETURN GRILLES IN A T-BAR CEILING.



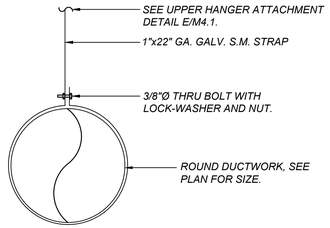
GRILLE RESTRAINT DETAIL

D / M4.0

SCALE: NONE

MD090

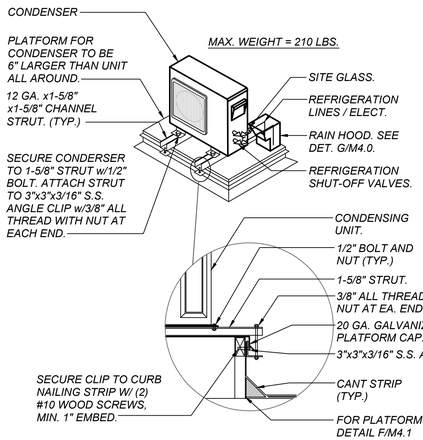
NOTES:
1. DUCT SUPPORTS SHALL BE 10'-0" O.C.
2. ALL DUCTS ARE LESS THAN 36"Ø PER SMACNA - HVAC DUCT CONSTRUCTION STANDARDS, FIGURE 5-5.
3. ALL ROUND DUCT DO NOT REQUIRE SEISMIC BRACING PER DSA 1R 16-13, SECTION 3.3.2. REFER TO ROUND DUCT SESIMIC REGULATIONS FOR ADDITIONAL DETAIL.



ROUND DUCT HANGING DETAIL

E / M4.0

SCALE: NONE



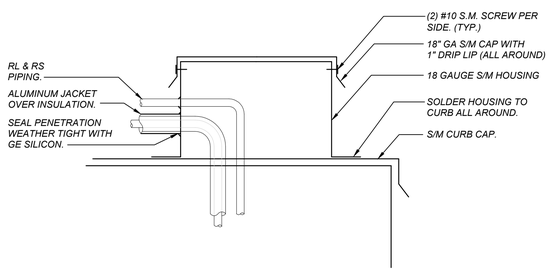
NOTES :
1. ALL WOOD PRODUCTS ABOVE THE ROOF SHALL BE FIRE RETARDANT TREATED.

OUTDOOR UNIT MOUNTING DETAIL

F / M4.0

SCALE: NONE

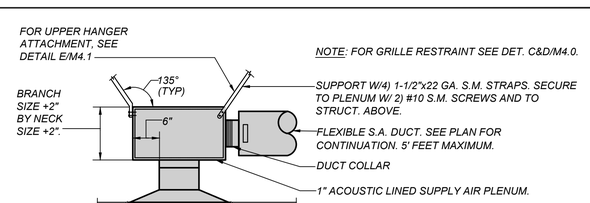
MM302



INSULATED PIPE ROOF PENETRATION

G / M4.0

SCALE: NONE

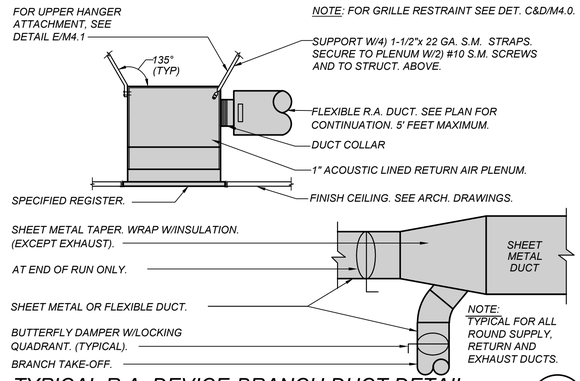


TYPICAL S.A. DEVICE-BRANCH DUCT DETAIL

A / M4.0

SCALE: NONE

MD001

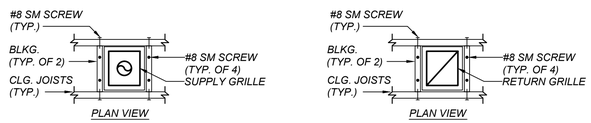


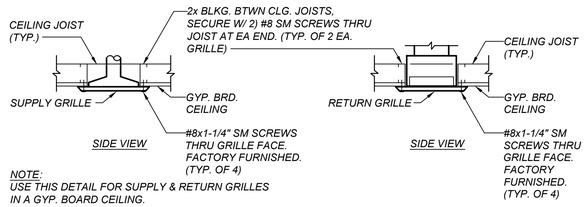
TYPICAL R.A. DEVICE-BRANCH DUCT DETAIL

B / M4.0

SCALE: NONE

MD102





NOTE:
USE THIS DETAIL FOR SUPPLY & RETURN GRILLES IN A GYP. BOARD CEILING.

GRILLE RESTRAINT DETAIL

C / M4.0

SCALE: NONE

MD107

APPROVALS

LICENSED ARCHITECT JAMES R. MORRELL No. C-35128 Exp. 05-31-27 STATE OF CALIFORNIA

DATE: 07/21/2026

ADMIN SERVICES REMODEL AT SANGER UNIFIED BUSINESS PARK 2

SANGER UNIFIED SCHOOL DISTRICT
1254 COMMERCE AVE, SANGER, CA 93657

Reviewed for Code Compliance
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CSG CONSULTANTS, INC.

REVISIONS

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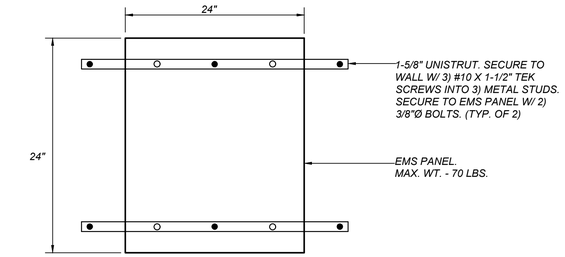
TITLE
MECHANICAL DETAILS

M4.0

PROJECT 25041

REGISTERED PROFESSIONAL ENGINEER RYAN W. CARLSON No. M34846 Exp. 6-30-28 MECHANICAL STATE OF CALIFORNIA

LAWRENCE ENGINEERING GROUP
4910 E. Clinton Way, Suite 101
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FAX (559) 431-1362
25134

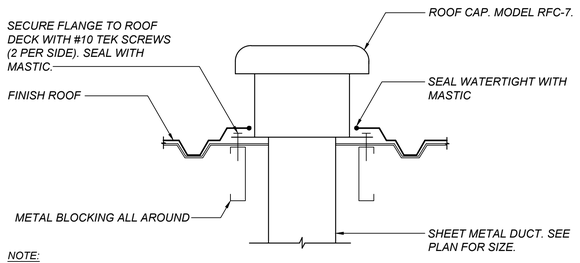


EMS PANEL MOUNTING DETAIL

H / M4.1

SCALE: NONE

MC015



NOTE:

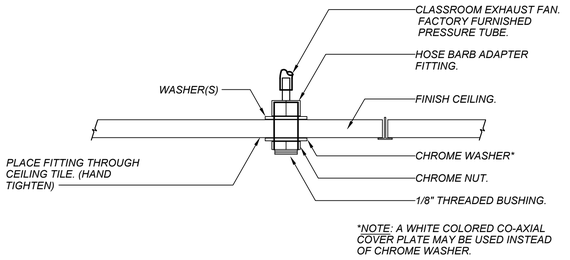
1. ALL WOOD PRODUCTS ABOVE THE ROOF SHALL BE FIRE RETARDANT TREATED.

ROOF EXHAUST CAP DETAIL

J / M4.1

SCALE: NONE

MM028

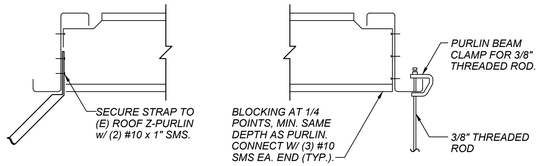


*NOTE: A WHITE COLORED CO-AXIAL COVER PLATE MAY BE USED INSTEAD OF CHROME WASHER.

PRESSURE SENSOR TUBE MOUNTING DETAIL

D / M4.1

SCALE: NONE

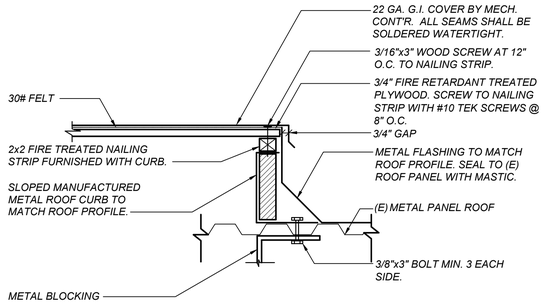


Z PURLIN UPPER ATTACHMENT

UPPER ATTACHMENT DETAIL

E / M4.1

SCALE: NONE

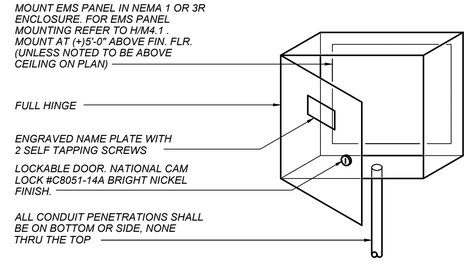


ROOF PLATFORM DETAIL

F / M4.1

SCALE: NONE

MM128

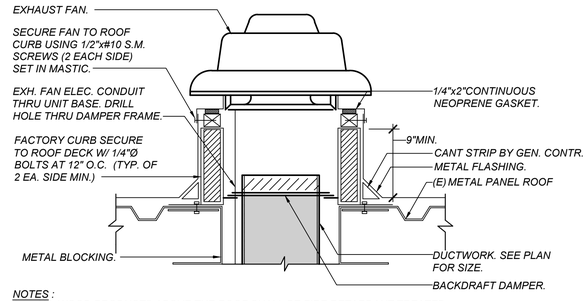


EMS PANEL ENCLOSURE DETAIL

G / M4.1

SCALE: NONE

MC014



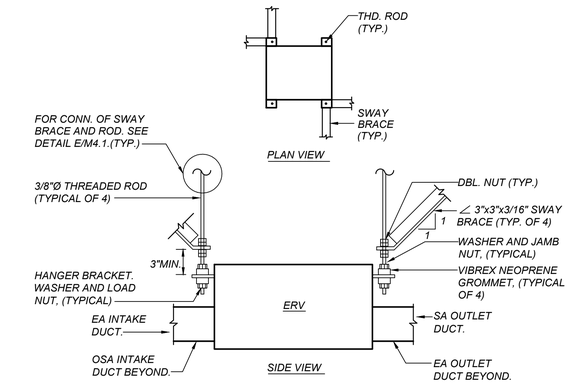
NOTES :

1. ALL WOOD PRODUCTS ABOVE THE ROOF SHALL BE FIRE RETARDANT TREATED.

ROOF EXHAUST FAN MOUNTING DETAIL

A / M4.1

SCALE: NONE



NOTE: MAX. WT.- 80 LBS.

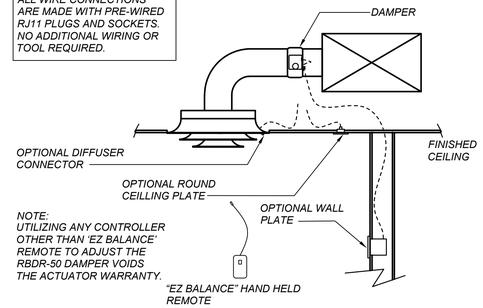
ERV MOUNTING DETAIL

B / M4.1

SCALE: NONE

MM228

NOTE:
ALL WIRE CONNECTIONS ARE MADE WITH PRE-WIRED RJ11 PLUGS AND SOCKETS. NO ADDITIONAL WIRING OR TOOL REQUIRED.



ELECTRONIC REMOTE REGULATOR DETAIL

C / M4.1

SCALE: NONE

APPROVALS

LICENSED ARCHITECT JAMES R. MORRELL No. C-35128 EXP. 05-31-27 STATE OF CALIFORNIA

DATE: 07/21/2026

ADMIN SERVICES REMODEL AT SANGER UNIFIED BUSINESS PARK 2

SANGER UNIFIED SCHOOL DISTRICT
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TITLE
MECHANICAL DETAILS

M4.1

PROJECT 25041

REGISTERED PROFESSIONAL ENGINEER RYAN W. CARLSON No. M34846 Exp. 6-30-28 MECHANICAL STATE OF CALIFORNIA

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4910 E. Clinton Way, Suite 101
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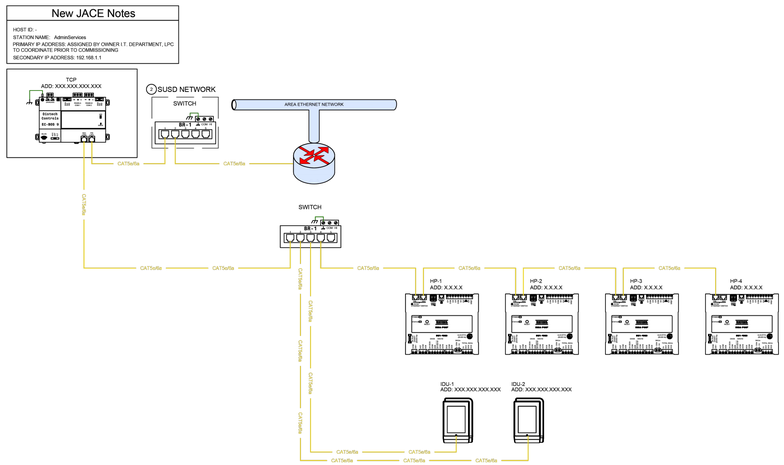
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APPROVALS

New JACE Notes

HOST ID :
STATION NAME: AdminServices
PRIMARY IP ADDRESS: ASSIGNED BY OWNER I.T. DEPARTMENT, LPC TO COORDINATE PRIOR TO COMMISSIONING
SECONDARY IP ADDRESS: 192.168.1.1



1/4 LAN ARCHITECTURE

Sheet Notes

1. CONTROLS AND DESIGN BY LPC AUTOMATION INC. FOR ANY INFORMATION CONTACT LPC AUTOMATION AT (888) 742-5572
2. NETWORK SWITCH PROVIDED BY OTHERS.
3. DETAILS ONLY APPLICABLE TO THE QUOTE FOR THIS PROJECT.

LEGEND

SYMBOLS

	SUPERVISORY TCP
	IP SYSTEM CONTROLLER
	IP TERMINAL UNIT CONTROLLER
	ZIO SENSOR
	AC
	LIGHTING PANEL
	AHU
	MS/TP ROUTER
	RTU
	IDU
	CHILLER
	DISPLAY
	PROTONODE
	BACNET KW METER
	FIRE ALARM
	BACNET ROOM PRESSURE MONITOR
	GAS WATER HEATER
	DOMESTIC COLD WATER BOOSTER PUMP
	THERMOSTATIC MIXING VALVE
	CONTROL PANEL
	MODULATING ECONOMIZER
	UNIT VENTILATOR WITH WATER COIL
	CONDENSING UNIT
	DAMPER
	TEMPERATURE SENSOR
	EFAN
	FIRE ALARM CONTROL PANEL
	GENERATOR CONTROL PANEL
	FAN
	PRESSURE SENSOR
	START/STOP CONTROL DEVICE
	OUTSIDE AIR TEMP
	FAN

SYMBOLS CONTD.

	BARD UNIT
	COMPRESSOR STATUS
	CUSTOMER SUPPLIED NETWORK SWITCH
	SWITCH
	N LIGHT

DRAWING TAGS

CONTROL TAG: C / XX.# — EQUIPMENT TAG — EQUIPMENT TAGGED WITH CONTROL TAG TO BE PROVIDED BY OTHERS. UNLESS NOTED, ALL EQUIPMENT TAGGED WITH A CONTROL TAG TO APPEAR ON BILL OF MATERIALS REGARDING ON SAME DRAWING UNLESS NOTED. ALL EQUIPMENT TAGGED WITH A CONTROL TAG TO BE INSTALLED BY LPC AUTOMATION OR LPC AUTOMATION SUBCONTRACTOR.

MECHANICAL TAG: M / XX.# — EQUIPMENT TAG — EQUIPMENT TAGGED WITH MECHANICAL TAG TO BE PROVIDED BY OTHERS. UNLESS NOTED, ALL EQUIPMENT TAGGED WITH A MECHANICAL TAG TO BE INSTALLED BY OTHERS.

SHEET NOTES:

ALL LON COMMUNICATION CABLE MUST BE 22 AWG UNSHIELDED COMMUNICATION WIRE (CONNECT AIR P/N: W221P-2001GRIB) WITH 120 OHM RESISTORS (CONNECT AIR P/N: W181P-2051 QTY 2 PER RUN). 120 OHM RESISTORS ARE REQUIRED AT EACH END OF THE WIRE.

ALL BACNET MS/TP COMMUNICATION CABLE MUST BE 24 AWG SHIELDED COMMUNICATION WIRE (CONNECT AIR P/N: W241P-2000FBLRB) WITH 120 OHM RESISTORS (CONNECT AIR P/N: W181P-2051 QTY 2 PER RUN). 120 OHM RESISTORS ARE REQUIRED AT EACH END OF THE WIRE.

ALL BACNET/IP COMMUNICATION CABLE MUST BE CAT5E ETHERNET CABLE (CONNECT AIR P/N: W244P-2176) WITH LIMITS OF 300 FEET BETWEEN DEVICES.

GENERAL NOTES:

* DO NOT BUNDLE SWITCHED 120VAC WIRING TOGETHER WITH SENSOR WIRING OR LOW VOLTAGE (24VAC) OR COMMUNICATION WIRING.
* ALL DDC WIRES/CABLES INSTALLED WITHIN CEILING PLENUM WILL HAVE PLENUM RATED CABLE JACKET/COVER.
* THE MOUNTING HEIGHT OF T-STAT IS AT 48" ABOVE THE FINISHED FLOOR.

Sheet Notes

1. CONTROLS AND DESIGN BY LPC AUTOMATION INC. FOR ANY INFORMATION CONTACT LPC AUTOMATION AT (888) 742-5572
2. DETAILS ONLY APPLICABLE TO THE QUOTE FOR THIS PROJECT.

ABBREVIATIONS

	A
A	AMP(S)
AC	AIR CONDITIONER
AMS	AIR FLOW MEASURING STATION
AHU	AIR HANDLING UNIT
AI	ANALOG INPUT
	B
BC	BLOWER COIL
BLDG	BUILDING
BTU	BRITISH THERMAL UNIT
BYP	BYPASS
	C
CA	COLD ASILE
CB	CIRCUIT BREAKER
CC	COOLING COIL
CD	CONTROL DAMPER
CFM	CUBIC FEET PER MINUTE
CH	CHILLER
CHW	CHILLED WATER
CHWP	CHILLED WATER PUMP
CHWR	CHILLED WATER RETURN
CHWRV	CHILLED WATER RETURN VALVE
CHWS	CHILLED WATER SUPPLY
CHWSV	CHILLED WATER SUPPLY VALVE
CLP	CONDENSATE LIFT PUMP
CMD	COMMAND
CO	CARBON MONOXIDE
CO2	CARBON DIOXIDE
COM	COMMON
COMM	COMMUNICATION
CS	CURRENT SWITCH
CSR	COMBINATION CURRENT SWITCH/RELAY
CTRL	CONTROL
CT	CURRENT TRANSDUCER
CT	COOLING TOWER (MECHANICAL TAG)
CTR	COMBINATION CURRENT TRANSDUCER/RELAY
CU	CONDENSING UNIT
CV	FLOW COEFFICIENT
CW	CONDENSER WATER
CWP	CONDENSER WATER PUMP
CWR	CONDENSER WATER RETURN
CWS	CONDENSER WATER SUPPLY
	D
DA	DISCHARGE AIR
DAT	DISCHARGE AIR TEMPERATURE
DCV	DEMAND CONTROL VENTILATION
DDC	DIRECT DIGITAL CONTROL
DEG	DEGREES
DEWPT	DEWPOINT
DI	DIGITAL INPUT
DM	DAMPER MOTOR
DMPR	DAMPER
DO	DIGITAL OUTPUT
DPDT	DOUBLE POLE DOUBLE THROW
DPST	DOUBLE POLE SINGLE THROW
DPS	DIFFERENTIAL PRESSURE SWITCH
DPT	DIFFERENTIAL PRESSURE TRANSDUCER
DS	DEWPOINT SENSOR
	E
(E)	EXISTING
EA	EXHAUST AIR
EAD	EXHAUST AIR DAMPER
EDH	ELECTRIC DUCT HEATER
EF	EXHAUST FAN
ENC	ENCLOSURE

ABBREVIATIONS

ENTH	ENTHAPLY
EOL	END OF LINE
EPT	ELECTRO PNEUMATIC TRANSDUCER
ES	END SWITCH
	F
FA	FIRE ALARM
FCU	FAN COIL UNIT
FLT	FILTER
FM	FLOW METER
FS	FLOW SWITCH
FSD	FIRE SMOKE DAMPER
FT	FOOT(FEET)
	G
GND	GROUND
GPM	GALLONS PER MINUTE
	H
HA	HOT AISLE
HC	HEATING COIL
HCV	HEATING COIL VALVE
HI	HIGH
HUM	HUMIDITY SENSOR
HW	HOT WATER
HWR	HOT WATER RETURN
HWS	HOT WATER SUPPLY
HWV	HOT WATER VALVE
HHW	HEATING HOT WATER
HHWR	HEATING HOT WATER RETURN
HHWS	HEATING HOT WATER SUPPLY
HHWV	HEATING HOT WATER VALVE
HX	HEAT EXCHANGER
HYS	HYDROGEN SENSOR
	I
IDF	INTERMEDIATE DISTRIBUTION FRAME
IN	IND(VES)
ISO	ISOLATION
	K
KEF	KITCHEN EXHAUST FAN
	L
LAN	LOCAL AREA NETWORK
LB	POUND(S)
LD	LEAK DETECTOR
LON	LOCAL OPERATING NETWORK
	M
MA	MIXED AIR
MA	MIXED AIR TEMPERATURE
MAU	MAKEUP AIR UNIT
	N
N	NEUTRAL
NCP	NETWORK CONTROL PANEL
N.C.	NORMALLY CLOSED
N.O.	NORMALLY OPEN
	O
OA	OUTSIDE AIR
OAD	OUTSIDE AIR DAMPER
OAT	OUTSIDE AIR TEMPERATURE
	P
PB	PUSH BUTTON
PCHW	PRIMARY CHILLED WATER
PCHWR	PRIMARY CHILLED WATER RETURN
PCHWS	PRIMARY CHILLED WATER SUPPLY
PCHW	PRIMARY HOT WATER
PHWR	PRIMARY HOT WATER RETURN
PHWS	PRIMARY HOT WATER SUPPLY
PL	PILOT LIGHT
PNL	PANEL

ABBREVIATIONS

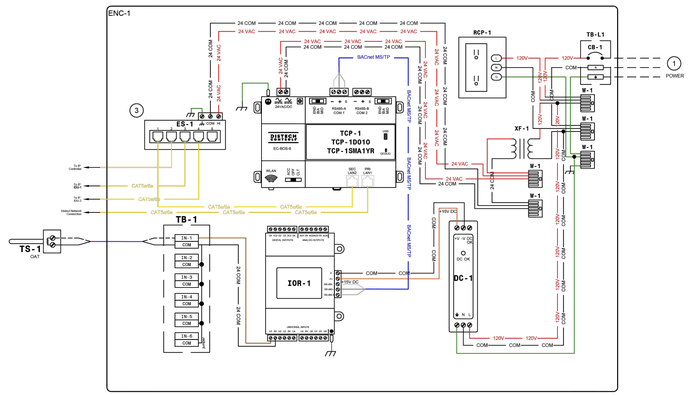
PP	PRESSURE PICKUP
PT	PRESSURE TRANSDUCER
PS	POWER SUPPLY
	Q
QTY	QUANTITY
	R
R	RELAY
RA	RETURN AIR
RAD	RETURN AIR DAMPER
RAF	RETURN AIR FAN
RAF	RETURN AIR TEMPERATURE
RD	RELIEF DAMPER
RF	RELIEF FAN
RH	REHEAT
REL	RELIEF
RM	ROOM
RMP	REFRIGERANT MONITOR PANEL
RTU	ROOFTOP UNIT
	S
SA	SUPPLY AIR
SAD	SUPPLY AIR DAMPER
SAT	SUPPLY AIR TEMPERATURE
SCHW	SECONDARY CHILLED WATER
SCHWR	SECONDARY CHILLED WATER RETURN
SCHWS	SECONDARY CHILLED WATER SUPPLY
SCHW	SECONDARY HOT WATER
SD	SMOKE DETECTOR
SETPT	SET POINT
SF	SUPPLY FAN
SH	SHIELDED
SHWR	SECONDARY HOT WATER RETURN
SHWS	SECONDARY HOT WATER SUPPLY
SOL	SOLENOID
SPDT	SINGLE POLE DOUBLE THROW
SPST	SINGLE POLE SINGLE THROW
SW	SWITCH
	T
TCP	TEMPERATURE CONTROL PANEL
TEF	TOILET EXHAUST FAN
TF	TRANSFER FAN
THS	COMBINATION TEMPERATURE/HUMIDITY SENSOR
TS	TEMPERATURE SENSOR
TW	TWISTED WIRE
TX	TRANSFORMER
TXP	TRANSFORMER PANEL
	U
UI	UNIVERSAL INPUT
UO	UNIVERSAL OUTPUT
	V
V	VOLT(S)
VA	VOLT-AMPERES
VAC	VOLTS ALTERNATING CURRENT POWER
VAV	VARIABLE AIR VOLUME
VDC	VOLTS DIRECT CURRENT POWER
VFD	VARIABLE FREQUENCY DRIVE
VS	VIBRATION SWITCH
	W
WC	WATER COLUMN

1/2 SYMBOL & ABBREVIATIONS LEGEND

TCP Panel Components			
Tag	Quantity	Manufactuer	Part No.
ENC-1	1	Distech Controls	PP-N1A24247
TS-1	1	Distech Controls	TS-02X
TCP-1	1	Distech Controls	EC-BOS-9
5 YR SMA	1	Distech Controls	SMA-BOS9025-5YR
NS-1	1	Distech Controls	NC-EISK5-100T
DC-1	1	Mean Well	MDR-20-15
IOR-1	1	Distech Controls	IO-R-16
RCP-1	1	Allen Bradley	1492-REC15
CB-1	1	Allen Bradley	1489-M1C050
ES-1	1	Distech Controls	NC-EISK5-100T
XF-1	1	Distech Controls	PW-TR50VA005

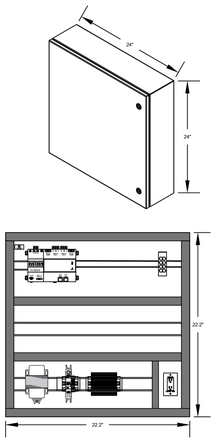
SHEET NOTES

1. CONTROLS AND DESIGN BY LPC AUTOMATION INC. FOR ADDITIONAL INFORMATION CONTACT LPC AUTOMATION AT (888) 742-5572
2. LINE VOLTAGE & CONDUIT BY DIVISION 26.



1/5 TCP SCHEMATIC DETAIL
TYPICAL OF: 1

2/1 OAT CONTROL DETAIL
TYPICAL OF:1



3/5 TCP PANEL LAYOUT DETAIL
TYPICAL OF: 1

CABLE SCHEDULE

SYMBOL	SUPPLIER	PART NUMBER	DESCRIPTION	CIRCUIT	COLOR	CONDUCTOR COLORS
CAT5e/6a	CONNTECT AIR (209) 221-6900	W244P-2274	CAT 6 24AWG UTP 4 PAIR TIA/EIA 568B	ETHERNET BACnet/IP	YELLOW	WHITE/ORANGE ORANGE WHITE/GREEN BLUE WHITE/BLUE GREEN WHITE/BROWN BROWN
Subnet		W244P-2176	CAT 5E 24AWG UTP 4P TIA/EIA 568B	SUBNET COMMUNICATION	GREEN	
BACnet MS/TP		W241P-2000FBLRB	24AWG 2C STR SHLD	BACNET MS/TP	BLUE	WHITE BLACK
LON		W221P-2001GRIB	22AWG 2C STR SHLD	LON COMMUNICATION	YELLOW	WHITE BLACK
18/2		W181P-2051	18AWG 2C STR	SENSOR INPUT, SINGLE COMMAND	PURPLE	WHITE BLACK
18/4		W184C-2099	18AWG 4C STR	POWERED COMMAND, POWERED COMMAND W/ FEEDBACK	PINK	WHITE BLACK RED GREEN
18/8		W188C-2046	18AWG 8C STR	THERMOSTAT TERMINALS	WHITE	WHITE BLACK RED GREEN YELLOW

1/3 CABLE SCHEDULE

Sheet Notes

1. CONTROLS AND DESIGN BY LPC AUTOMATION INC. FOR ANY INFORMATION CONTACT LPC AUTOMATION AT (888) 742-5572
2. DETAILS ONLY APPLICABLE TO THE QUOTE FOR THIS PROJECT.

LICENSED ARCHITECT — JAMES R. MORRELL — No. C-35128 — Exp. 05-31-27 — STATE OF CALIFORNIA

DATE: 07/21/2026

ADMIN SERVICES REMODEL AT SANGER UNIFIED BUSINESS PARK 2

SANGER UNIFIED SCHOOL DISTRICT
1254 COMMERCE AVE, SANGER, CA 93657

Reviewed for Code Compliance
08/24/2026
CSG CONSULTANTS, INC.

REVISIONS

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TITLE
MECHANICAL CONTROL DETAILS

M4.2

PROJECT 25041

REGISTERED PROFESSIONAL ENGINEER — RYAN W. CARLSON — No. M34846 — Exp. 6-30-28 — MECHANICAL — STATE OF CALIFORNIA

LAWRENCE ENGINEERING GROUP
4910 E. Clinton Way, Suite 101
(559) 431-0101
25134
Fresno, CA 93727
FAX (559) 431-1362

5 August 2026 5:26 PM P:\2025\25134 Sanger USD Admin Services Remodel\4-Drawings\4 M\M4.0 - Mechanical Details.dwg olex rn

IDU
Sequence of Operation:

HVAC Mode

The unit shall be capable of receiving HVAC mode commands from the network. When no network commands are present the unit shall operate in Auto mode and operate to maintain designated setpoints.
Network commands include heat, morning warmup, cool, night purge, precool, and off.
The end user shall be able to override the HVAC mode from the space sensor.

Occupancy

The occupancy status of the unit is determined by a network occupancy command or space sensor auxiliary contact.

Space Setpoint

The space temperature setpoint shall be calculated based on occupancy status and HVAC mode.
The user can adjust the final setpoints at the space sensor.
The thermostat internal sensor is configured as the space temperature input.
All heating stages shall be off
All cooling stages shall be off

Heating

The system shall cycle on/off the mechanical heating stage(s) to maintain the space temperature heating setpoint.

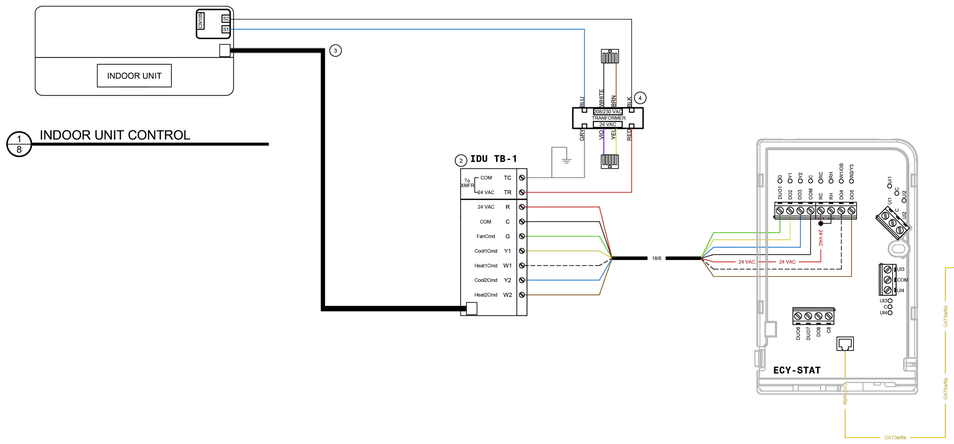
Cooling

The system shall cycle on/off the mechanical cooling stage(s) to maintain the space temperature cooling setpoint.

Sheet Notes

1. CONTROLS AND DESIGN BY LPC AUTOMATION INC. FOR ANY INFORMATION CONTACT LPC AUTOMATION AT (888) 742-5572
2. FACTORY PROVIDED PAA UNIT CONTROL BOARD.
3. THERMOSTAT HARNESS BY OTHERS.
4. TRANSFORMER: VPL24-210 PROVIDED BY TRANE. 208V APPLICATION ONLY, VERIFY DUV. IF NOT 208V, REFER TO TRANE DOCUMENTATION

Controller Components				
Tag	Quantity	Manufacturer	Part No.	Description
ECY-STAT	2	Distech Controls	ECYSTAT	Programmable Thermostat



1/8 INDOOR UNIT CONTROL

2/8 INDOOR UNIT CONTROL
TYPICAL OF: 2

Sheet Notes

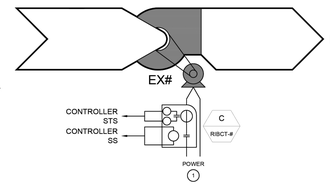
1. CONTROLS AND DESIGN BY LPC AUTOMATION INC. FOR ANY INFORMATION CONTACT LPC AUTOMATION AT (888) 742-5572
2. LINE VOLTAGE & CONDUIT BY DIVISION 16.
3. FACTORY INSTALLED CLASS 2 TRANSFORMER
4. CONTROLLER SHALL BE MOUNTED IN UNIT.
5. TYPICAL OF 2 RIBCT-1 WIRED TO NEAREST CONTROLLER EF-1 AND EF-2.
6. INSTALLED BY OTHERS.

Controller Components			
Tag	Quantity	Manufacturer	Part No.
ECY-TU 203	4	Distech Controls	ECY-203
SMV-1	4	Distech Controls	PDIDI-RDISWC-00 W/CO2
TS-1/TS-2	8	Distech Controls	TS-D2X008
CT-1	4	Functional Devices	RIBXGTA-ECM
CT-2/CT-3	8	Functional Devices	RIBGTF
RIB-CT	2	Functional Devices	RIBHX24BF

Exhaust Fan
Sequence of Operation:

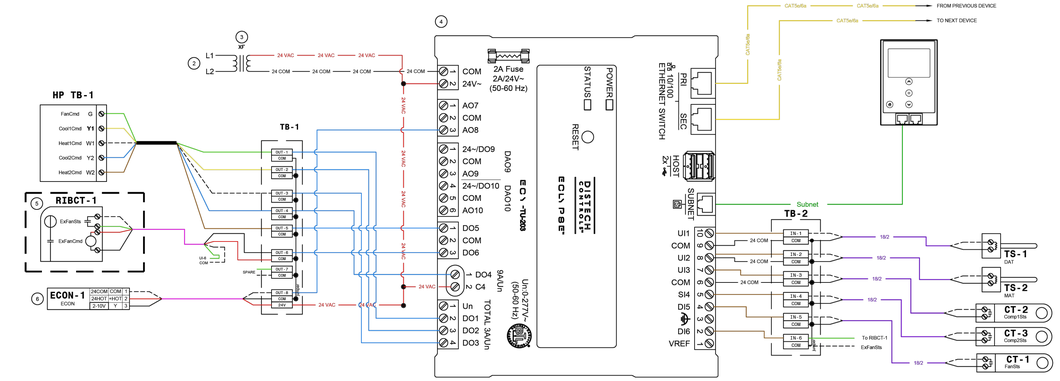
The exhaust fans shall be enabled whenever the unit is enabled.
Exhaust fans will stop during
unoccupied modes.

Alarms shall be provided as follows:
- Exhaust Fan Failure: Commanded on, but the status is off.
- Exhaust Fan in Hand: Commanded off, but the status is on.
- Exhaust Fan Runtime Exceeded: Status runtime exceeds a user definable limit (adj.).



WHERE APPLICABLE: WIRED TO NEAREST CONTROLLER

EXHAUST FAN CONTROL DETAIL | 1



1/6 HP UNIT SCHEMATIC DETAIL
TYPICAL OF: 4

Sheet Notes

1. CONTROLS AND DESIGN BY LPC AUTOMATION INC. FOR ANY INFORMATION CONTACT LPC AUTOMATION AT (888) 742-5572
2. LINE VOLTAGE & CONDUIT BY DIVISION 16.
3. INSTALLED BY OTHERS.

SHEET NOTES

1. CONTROLS AND DESIGN BY LPC AUTOMATION INC. FOR ANY INFORMATION CONTACT LPC AUTOMATION AT (888) 742-5572
2. DEVICE SCHEDULE DETAILS TO BE CONFIRMED AND PROVIDED WITH AS BUILT DRAWINGS WITH. ALL DEVICES WILL BE UNIQUELY ADDRESSED PRIOR TO COMMISSIONING.

Device Schedule					
Jace-Bldg 200					
Equipment Tag	Manufacturer	Com Port	MAC Address	Device ID	Bldg
HP1-2	Distech Controls				100
HP1-3	Distech Controls				
HP1-4	Distech Controls				
IDU-1	Distech Controls				
IDU-2	Distech Controls				

Temperature Sensor's	
Controller	Room
HP-1	
HP-2	
HP-3	
HP-4	

Exhaust Fan Schedule			
Controller	EF	Building	Control
HP-3	EF-1	Admin	UIO-6/UI-6
HP-4	EF-2		UIO-6/UI-6

1/9 DEVICE SCHEDULES

Sequence of Operation:

1. HVAC Mode

The unit shall be capable of receiving HVAC mode commands from the network. When no network commands are present the unit shall operate in Auto mode and operate to maintain designated setpoints. Network commands include heat, morning warmup, cool, night purge, precool, and off.

2. Occupancy

The occupancy status of the unit is determined by a network occupancy command or space sensor auxiliary contact.

3. Space Setpoint

The space temperature setpoint shall be calculated based on occupancy status and HVAC mode.
The user can adjust the final setpoints at the space sensor.
The EC-SMART-VUE Sensor is configured as the space temperature input
All heating stages shall be off
All cooling stages shall be off
Outside air damper shall be closed fully

4. Damper Control

The system shall control the dampers/economizer fully as described below in the cooling section. This option shall be selected when the unit is equipped with an economizer and designed to be controlled by the system.

4. Heating

The system shall cycle on/off the mechanical heating stage(s) to maintain the space temperature heating setpoint.

5. Cooling

The system shall control the dampers when available and mechanical cooling in sequence to maintain the space temperature cooling setpoint.
Dampers shall be used as the first stage of cooling and system shall modulate the dampers to maintain space temperature cooling setpoint.
Before enabling the control of the damper for cooling, the following conditions shall be satisfied:
The outdoor temperature shall be below the enabled setpoint 70°F (adjustable)
Mechanical cooling shall be used as the second stage of cooling, and it shall be enabled after the economizer is at 100% and locked. When in mechanical cooling, the system shall cycle on/off all available stages in sequence to maintain space temperature cooling setpoint.

6. ECLYPSE Commissioning Solution

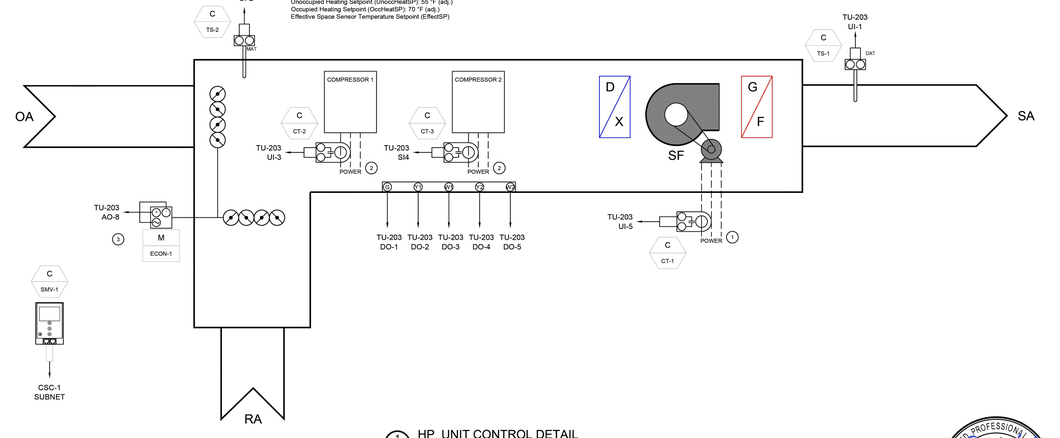
Auto commissioning features shall be available to schedule automatic testing and record values (temperatures, temperatures delta, etc.) for different operating modes.
The auto commissioning feature shall be able to email reports and run commissioning on a specified schedule.

7. Setpoints:

Unoccupied Cooling Setpoint (UnoccCoolSP): 85 °F (adj.)
Occupied Cooling Setpoint (OccCoolSP): 75 °F (adj.)
Unoccupied Heating Setpoint (UnoccHeatSP): 55 °F (adj.)
Occupied Heating Setpoint (OccHeatSP): 70 °F (adj.)
Effective Space Sensor Temperature Setpoint (EffectSP)

Sheet Notes

1. CONTROLS AND DESIGN BY LPC AUTOMATION INC. FOR ANY INFORMATION CONTACT LPC AUTOMATION AT (888) 742-5572
2. LINE VOLTAGE & CONDUIT BY DIVISION 16.
3. INSTALLED BY OTHERS.



1/7 HP UNIT CONTROL DETAIL
TYPICAL OF: 4

REGISTERED PROFESSIONAL ENGINEER
RYAN W. CARTER
No. M34846
Exp. 6-30-28
MECHANICAL
STATE OF CALIFORNIA

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APPROVALS

LICENSED ARCHITECT
JAMES R. MORREU
No. C-35128
EXP. 05-31-27
STATE OF CALIFORNIA
DATE: 07/21/2026

ADMIN SERVICES REMODEL AT SANGER UNIFIED BUSINESS PARK 2

SANGER UNIFIED SCHOOL DISTRICT
1254 COMMERCE AVE, SANGER, CA 93657

Reviewed for Code Compliance
08/24/2026
CSG CONSULTANTS, INC.

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TITLE
MECHANICAL CONTROL DETAILS

M4.3

PROJECT 25041

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APPROVALS

ENERGY RECOVERY VENTILATOR SCHEDULE

DESIGNATION		ERV 1
VOLTS / PHASE		208 / 1
MCA / MOCP (AMPS)		4.3 / 15.0
SA BLOWER	SUPPLY AIR (CFM)	250
	EXT. SP (IN WC)	0.5
	BHP	0.3
EA BLOWER	EXHAUST AIR (CFM)	250
	EXT. SP (IN WC)	0.5
	BHP	0.30
SUMMER	INDOOR DESIGN (°F)	75.0 / 62.0
	OUTDOOR DESIGN (°F)	105.0 / 72.0
	SUPPLY CONDITIONS (°F)	84.0 / 65.0
WINTER	INDOOR DESIGN (°F)	72.0 / 57.0
	OUTDOOR DESIGN (°F)	30.0 / 27.0
	SUPPLY CONDITIONS (°F)	59.4 / 48.0
MANUFACTURER		LOSSNAY
MODEL NUMBER		LGH-F300RVX2-E
TYPE		CORE
OPER. WT (LBS)		80
ACCESSORIES		1, 2, 3, 4, 5, 6

1. CO2 SENSOR, WALL MOUNTED
2. 2" MERV 7 E/A FILTERS
3. 2" MERV 14 S/A FILTERS
4. FIELD INSTALLED SAFETY DISCONNECT SWITCH
5. LOW LEAKAGE DAMPERS
6. GRAVITY BACKDRAFT DAMPERS AT DISCHARGE POSITIONS

EXHAUST FAN SCHEDULE

DESIGNATION	EF 1	EF 2	EF 3
CFM	1475	525	75
EXT. S.P. (IN. WC)	0.50	0.58	0.20
HP / BHP	0.5 / 0.28	0.25 / 0.12	0.25 / 0.01
VOLTS / PHASE	115 / 1	115 / 1	115 / 1
MCA / MOP (AMPS)	8 / 15	4 / 15	4 / 15
FLA (AMPS)	6.4	2.85	2.85
RPM	1200	1725	742
TIP SPEED/ SONES	4266 / 8.8	4306 / 8.5	2173 / 1.9
DRIVE	DIRECT	DIRECT	DIRECT
MOUNTING	ROOF	ROOF	ROOF
MANUFACTURER	GREENHECK	GREENHECK	GREENHECK
TYPE	DOWNBLAST	DOWNBLAST	DOWNBLAST
MODEL NUMBER	G-140-VG	G-098-VG	G-097-VG
CONTROL	PRESSURE SEN.	EMS	CONTINUOUS
LOCATION	-	-	-
OPER. WT. (LBS)	95	75	75
ACCESSORIES	1, 2, 3, 4, 5	1, 2, 3, 5	1, 2, 3, 5

1. INTERGRATED BACK DRAFT DAMPER
2. FACTORY SLOPED ROOF CURB
3. VARI-GREEN EC MOTOR
4. INTERLOCK OPERATION OF EXHAUST FAN WITH PRESSURE SENSOR SERVING THE SAME SPACE.
5. FACTORY INSTALLED BIRDSCREEN.

OUTDOOR UNIT SCHEDULE

DESIGNATION	ODU 1	ODU 2
COOLING CAPACITY (MBH)	18.0	24.00
HEATING CAPACITY (MBH)	20.0	28.00
NOMINAL TONS	1.5	2.00
VOLTS/PHASE	208-230 / 1	208-230 / 1
FLA	-	-
MCA / MOCP	25 / 42	22 / 37
SEER2 / EER2	SEE IDU-1	SEE IDU-2
AMBIENT (°F)	105	105
REFRIG. LINE SIZE		
LIQUID (IN.OD)	1/4"	5/8"
SUCTION (IN. OD)	1/2"	3/8"
REFRIG. TYPE	R454B	R454B
MANUFACTURER	TRANE	TRANE
TYPE	SPLIT HEAT PUMP	SPLIT HEAT PUMP
MODEL NUMBER	SUZ-AA18NL	PUZ-AH24NL
SERVICE	IDU-1	IDU-2
LOCATION	ROOF	ROOF
OPER. WT (LBS)	130	175
ACCESSORIES	-	-

PACKAGE AIR CONDITIONING SCHEDULE

DESIGNATION		HP 1	HP 2	HP 3	HP 4
VOLTS/PHASE		208-230 / 3	208-230 / 3	208-230 / 3	208-230 / 3
F.L.A.		-	-	-	-
MCA/MOP (AMPS)		35 / 40	35 / 40	35 / 40	42 / 50
SEER2/EER2 @ AHRI		15.2 / 11.5	15.2 / 11.5	15.2 / 11.5	15.2 / 11.5
BLOWER	SUPPLY AIR (CFM)	1,200	1,200	1,200	2,000
	EXT. SP (IN. WC)	0.8"	0.8"	0.8"	0.8"
	MIN. O.S.A. (CFM)	150	150	270	535
	BHP	0.5	0.5	0.5	1
	RPM	-	-	-	-
	DRIVE	DIRECT	DIRECT	DIRECT	DIRECT
COOLING	SENSIBLE (MBH)	25.40	25.40	25.40	42.30
	TOTAL (MBH)	33.00	33.00	33.00	55.00
	EADB/EAWB (°F)	80 / 67	80 / 67	80 / 67	80 / 67
	AMBIENT AIR (°F)	105.0	105.0	105.0	105.0
	UNIT DISCH. TEMP (°F)	-	-	-	-
	REFRIGERANT TYPE	R-454B	R-454B	R-454B	R-454B
	REFRIG. CLASSIFICATION	A2L	A2L	A2L	A2L
	TONS OF REFRIGERATION	3	3	3	5
HEATING	CAPACITY @ 47 DEG. (MBH)	17.5	17.5	17.5	29.74
	HSPF2	7.7	7.7	7.7	7.2
	AUXILIARY ELEC. (KW)	5.0	5.0	5.0	5
	NO. OF STAGES	-	-	-	-
FILTERS	QUANTITY/SIZE (RETURN)	1 / 18X25X2	1 / 18X25X2	1 / 18X25X2	2 / 18X20X2
	TYPE	MERV 13	MERV 13	MERV 13	MERV 13
	P D (IN WC)	0.3	0.3	0.3	0.3
MANUFACTURER		TRANE	TRANE	TRANE	TRANE
TYPE		HEAT PUMP	HEAT PUMP	HEAT PUMP	HEAT PUMP
MODEL NUMBER		5WCZ5036A3000A	5WCZ5036A3000A	5WCZ5036A3000A	5WCZ5060A3000A
LOCATION		ROOF	ROOF	ROOF	ROOF
OPER. WT (LBS)		650	650	650	675
ACCESSORIES		1, 2, 3, 4, 5, 6, 7	1, 2, 3, 4, 5, 6, 7	1, 2, 3, 4, 5, 6, 7	1, 3, 4, 5, 6, 7

1.TITLE 24 COMPLIANT DRY BULB MODULATING ECONOMIZER
2. MODULATING POWERED EXHAUST MICROMETL PECC-IMP2SCB-DYDB-2LH REQUIRES SEPARATE ELECTRICAL CONNECT / ON 208-230/3 PH, 3.9 MCA, 10 AMP INTERNAL FUSE.
3.FACTORY SLOPED CURB
4.SUPPLEMENTAL ELECTRIC STRIP HEAT
5.REFRIGERANT DETECTOR FOR UNIT SHUTDOWN
6.SUPPLY DUCT SMOKE DETECTOR FOR AUTOMATIC FAN SHUT DOWN UPON SMOKE DETECTION PER CMC 609.1
7.FOR CONTROL OF EQUIPMENT SEE CONTROLS ON SHEET M4.2 AND 4.3

INDOOR UNIT SCHEDULE

DESIGNATION		IDU 1	IDU 2
BLOWER	SUPPLY AIR (CFM)	420	775
	EXT. S P (IN. WC)	-	-
	MIN. O.S.A. (CFM)	-	-
	MOCP	SEE ODU-1	SEE ODU-2
	MCA / FLA (AMPS)	SEE ODU-1	SEE ODU-2
	VOLTS / PHASE	208 -230 / 1	208 -230 / 1
	SEER2 / EER2	17.5 / 12	21.1 / 12
COOLING	SENSIBLE (MBH)	18.0	24.0
	TOTAL (MBH)	18.0	24.0
	EADB/EAWB (°F)	-	-
	REFRIGERANT	R454B	R454B
HEATING	CAPACITY (MBH) @47°F	20.0	28.0
	KW	-	-
	STAGES	-	-
FILTER	QUANTITY/SIZE	FACTORY	FACTORY
	TYPE	FACTORY	FACTORY
	P D (IN. WC)	-	-
MANUFACTURER		TRANE	TRANE
TYPE		CASSETTE	HIGHWALL
MODEL NUMBER		SLZ-AF18NL	PKA-AK24NL
CONDENSING UNIT		ODU-1	ODU-2
SERVICE		CONFRENCE	UTILITY
LOCATION		CEILING	WALL
OPER. WT (LBS)		45	50
ACCESSORIES		1, 2, 3	1, 2, 3

1. POWER FROM ASSOCIATED ODU.
2. CONDENSATE PUMP.
3. 24 V THERMOSTAT INTERFACE.

NOTE:
FOR CONTROL OF EQUIPMENT SCHEDULED ON THIS SHEET SEE M4.2

TITLE 24 ACCEPTANCE TESTING TABLE

DESIGNATION		HP 1	HP 2	HP 3	HP 4	IDU 1	IDU 2
FORM / TITLE	NRCA-MCH-02-A OUTDOOR AIR.	X	X	X	X		
	NRCA-MCH-03-A CONSTANT VOLUME SINGLE ZONE HVAC.	X	X	X	X	X	X
	NRCA-MCH-04-A AIR DISTRIBUTION DUCT LEAKAGE.						
	NRCA-MCH-05-A AIR ECONOMIZER CONTROLS.	X	X	X	X		
	NRCA-MCH-06-A DEMAND CONTROL VENTILATION SYSTEMS.						
	NRCA-MCH-07-A SUPPLY FAN VARIABLE FLOW CONTROLS.						
	NRCA-MCH-08-A VALVE LEAKAGE TEST.						
	NRCA-MCH-09-A SUPPLY WATER TEMPERATURE RESET CONTROLS.						
	NRCA-MCH-10-A HYDRONIC SYSTEM VARIABLE FLOW CONTROLS.						
	NRCA-MCH-11-A AUTOMATIC DEMAND SHED CONTROLS.						
	NRCA-MCH-12-A FDD FOR PACKAGED DIRECT EXPANSION UNITS.	X	X	X	X		
	NRCA-MCH-13-A AUTOMATIC FDD FOR AIR HANDLING UNITS AND ZONE TERMINAL UNITS.						
	NRCA-MCH-14-A DISTRIBUTED ENERGY STORAGE DX AC SYSTEMS.						
	NRCA-MCH-15-A THERMAL ENERGY STORAGE (TES) SYSTEM.						
	NRCA-MCH-16-A SUPPLY AIR TEMPERATURE RESET CONTROLS.						
	NRCA-MCH-17-A CONDENSER WATER TEMPERATURE RESET CONTROLS.						
	NRCA-MCH-18-A ENERGY MANAGEMENT CONTROL SYSTEMS.						
	NRCA-MCH-19-A OCCUPANCY SENSOR CONTROLS.						
	NRCA-MCH-20 MULTI-FAMILY VENTILATION.						
	NRCA-MCH-21 MULTI-FAMILY ENVENLOPE LEAKAGE.						
	NRCA-MCH-22-A MF DUCT LEAKAGE.						
	NRCA-MCH-23-A MF HRV/ERV VERIFICATION.						

1. REFER TO TITLE-24 DOCUMENTS FOR ADDITIONAL INFORMATION.
2. NRCA MUST BE SUMBITTED AND COMPLETED BY A CERTIFIED ACCEPTANCE TEST TECHNICIAN TO COMPLY WITH CALIFORNIA ENERGY CODE.
3. SUBMIT ACCEPTANCE FORMS TO PROJECT INSPECTOR & MEOR FOR REVIEW.

GRILLE SCHEDULE

MARK	DUTY	DESCRIPTION
A	CEILING SUPPLY	TITUS TDC (TYPE 3) LOUVER FACE SQUARE OR RECTANGULAR NECK DIFFUSER FOR STD. LAY-IN CEILING, AND NO. 26 OFF-WHITE FINISH. (18"X18" NECK ADAPTER SIZE SHOWN).
B	CEILING SUPPLY	TITUS TDC (TYPE 1) LOUVER FACE SQUARE OR RECTANGULAR NECK DIFFUSER FOR SURFACE MOUNTING. NO. 26 OFF-WHITE FINISH.
C	CEILING RETURN	TITUS CORE 50F (TYPE 3) ALUMINUM EGG CRATE REGISTER WITH 1/2" x 1/2" GRID, FOR LAY-IN CEILING. NO. 26 OFF-WHITE FINISH.
D	CEILING RETURN	TITUS CORE 50F (TYPE 1) ALUMINUM EGG CRATE REGISTER WITH 1/2" x 1/2" GRID, FOR SURFACE MOUNTING. NO. 26 OFF-WHITE FINISH.
E	CEILING EXHAUST	TITUS CORE 50F (TYPE 3) ALUMINUM EGG CRATE REGISTER WITH 1/2" x 1/2" GRID, FOR LAY-IN CEILING. NO. 26 OFF-WHITE FINISH.
F	CEILING EXHAUST	TITUS CORE 3FL (TYPE 1) ALUMINUM REGISTER, FOR SURFACE MOUNTING. NO. 26 OFF-WHITE FINISH.
G	CEILING SUPPLY	TITUS CORE 50FF (TYPE 3) FOR LAY-IN CEILING W/ 2" FILTER FRAME AND NO. 26 OFF-WHITE FINISH.

LICENSED ARCHITECT JAMES R. MORRELL No. C-35128 EXP. 05-31-27 STATE OF CALIFORNIA

DATE: 07/21/2026

ADMIN SERVICES REMODEL AT SANGER UNIFIED BUSINESS PARK 2

SANGER UNIFIED SCHOOL DISTRICT
1254 COMMERCE AVE, SANGER, CA 93657

Reviewed for Code Compliance
08/24/2026
CSG CONSULTANTS, INC.

REVISIONS

REGISTERED PROFESSIONAL ENGINEER BRIAN W. CAMPBELL No. M34846 Exp. 6-30-28 MECHANICAL STATE OF CALIFORNIA

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4910 E. Clinton Way, Suite 101 (559) 431-0101
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TITLE: MECHANICAL SCHEDULES

M5.0

PROJECT 25041

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C1. COMPLIANCE SUMMARY

	COMPLIES*		
	Long-term System Cost (LSC)[1]		Source Energy Use
	Efficiency[2] ($/ft²-yr)	Total[3] ($/ft²-yr)	Total[3] (kBtu/ft²-yr)
Standard Design	83.84	n/a	n/a
Proposed Design	56.4	n/a	n/a
Compliance Margins	**27.44**	**n/a**	**n/a**
	Pass	**n/a**	**n/a**

[1] Long-term System Cost (LSC) is a 30-year present value cost to California's energy system. LSC is not a predicted utility bill.
[2] Efficiency measures include energy efficiency improvements such as better building envelope and more efficient mechanical equipment
[3] Compliance Totals include efficiency, photovoltaics and batteries
** New Construction: Building complies when Proposed Design is equal to or less than Standard Design in all compliance categories and unmet load hour limits are not exceeded. Complete Addition Scope and Existing, Addition and Alteration Scope: Building complies when efficiency compliance margin is greater than or equal to zero and unmet load hour limits are not exceeded.*

B. PROJECT SUMMARY

Table B shows which building components are included in the performance calculation. If indicated as not included, the project must show compliance prescriptively if within the permit application.

Building Components Complying via Performance						Building Components Complying Prescriptively	
Envelope (See Table G)	Nonres	Performance	Solar Thermal Water Heating (See Table I3)	☐	Performance	The following building components are ONLY eligible for prescriptive compliance and should be documented on the NRCC form listed if within the scope of the permit application (i.e. compliance will not be shown on the NRCC-PRF-E).	
	MultiFam	Not Included		☒	Not Included		
Mechanical (See Table H)	Nonres	Performance	Covered Process: Commercial Kitchens (see Table J)	☐	Performance	Indoor Lighting (Unconditioned) 140.6 & 170.2(e)	NRCC-LTI-E is required
	MultiFam	Not Included		☒	Not Included	Outdoor Lighting 140.7 & 170.2(e)	NRCC-LTO-E is required
Domestic Hot Water (See Table I)	Nonres	Performance	Covered Process: Laboratory Exhaust (see Table J)	☐	Performance	Sign Lighting 140.8 & 170.2(e)	NRCC-LTS-E is required
	MultiFam	Not Included		☒	Not Included	**Building Components Complying with Mandatory Measures**	
Lighting (Indoor Conditioned, see Table K)	Nonres	Performance	Photovoltaics (see Table F)	☐	Performance	Electrical power systems, commissioning, solar ready, elevator and escalator requirements are mandatory and should be documented on the NRCC form listed if applicable (i.e. compliance will not be shown on the NRCC-PRF-E.)	
	MultiFam	Not Included		☒	Not Included	Electrical Power Distribution 110.11	NRCC-ELC-E is required
			Battery (see Table F)	☐	Performance	Commissioning 120.8	NRCC-CXR-E is required
				☒	Not Included	Solar and Battery 110.10	NRCC-SAB-E is required

Project Name: Sanger USD Admin **Date Prepared:** 2026-08-05

A. General Information

1	Project Name	Sanger USD Admin			
2	Run Title	Title 24 Analysis			
3	Project Location	1254 Commerce Ave			
4	City	Sanger	5	Standards Version	Compliance 2025
6	Zip code	93657	7	Compliance Software (version)	EnergyPro 10.0
8	Climate Zone	13	9	Building Orientation (deg)	270
10	Building Type(s)	• Nonresidential	11	Weather File	CA_Title24_2025_CZ13_FRESNO-YOSEMITE.epw
12	Project Scope	• Existing alteration	13	Number of Dwelling Units	0
14	Total Conditioned Floor Area in Scope (ft²)	6207	15	Total # of hotel/motel rooms	0
16	Total Unconditioned Floor Area (ft²)	0	17	Fuel Type	Natural gas
18	Is Natural Gas Available per Section 100.1?	Yes	19	Nonresidential Conditioned Floor Area	6207
20	Total # of Stories (Habitable Above Grade)	1	21	Residential Conditioned Floor Area	0

C7. ENERGY USE SUMMARY

Energy Component	Standard Design Site (MWh)	Proposed Design Site (MWh)	Margin (MWh)	Standard Design Site (MBtu)	Proposed Design Site (MBtu)	Margin (MBtu)
Space Heating	4.4	2.8	1.6	---	---	---
Space Cooling	40.3	42.6	-2.3	---	---	---
Indoor Fans	46.2	15.1	31.1	---	---	---
Heat Rejection	---	---	---	---	---	---
Pumps & Misc.	---	1.3	---	---	---	---
Domestic Hot Water	2.1	2.1	0	---	---	---
Indoor Lighting	8.5	8.5	0	---	---	---
Flexibility	---	---	---	---	---	---
EFFICIENCY TOTAL	**101.5**	**72.4**	**29.1**	**0**	**0**	**0**
Photovoltaics	---	---	---	---	---	---
Batteries	---	---	---	---	---	---
ENERGY USE SUBTOTAL	**101.5**	**72.4**	**29.1**	**0**	**0**	**0**
Receptacle	174.4	174.4	0	---	---	---
Process	---	---	---	---	---	---
Other Ltg	---	---	---	---	---	---
Process Motors	---	---	---	---	---	---
ENERGY USE TOTAL	**275.9**	**246.8**	**29.1**	**0**	**0**	**0**

C3. LSC ENERGY RESULTS FOR NON-REGULATED COMPONENTS[1]

Non-Regulated Energy Component	Standard Design (LSC)	Proposed Design (LSC)	Compliance Margin (LSC)[2]
Receptacle	130.73	130.73	---
Process	---	---	---
Other Ltg	---	---	---
Process Motors	---	---	---
TOTAL (TOTAL COMPLIANCE + NON-REGULATED COMPONENTS)	**214.57**	**187.13**	**27.44 (12.8%)**

[1] Notes: This table is not used for Energy Code Compliance.
[2] Notes: This number in parenthesis following the Compliance Margin in column 4, represents the Percent Better than Standard.

C6. 'ABOVE CODE' QUALIFICATIONS

☐ This project is pursuing CalGreen Tier 1 ☐ This project is pursuing CalGreen Tier 2

C2. LSC ENERGY COMPLIANCE RESULTS FOR PERFORMANCE COMPONENTS (Annual LSC Energy Use, $/ft²-yr)

	COMPLIES		
Energy Component	Standard Design (LSC)	Proposed Design (LSC)	Compliance Margin (LSC)[1]
Space Heating	4.95	3.14	1.81
Space Cooling	30.08	31.07	-0.99
Indoor Fans	40.6	12.9	27.7
Heat Rejection	0	0	0
Pumps & Misc.	0	1.06	-1.06
Domestic Hot Water	1.66	1.68	-0.02
Indoor Lighting	6.55	6.55	0
Flexibility	---	---	---
EFFICIENCY COMPLIANCE TOTAL	**83.84**	**56.4**	**27.44 (32.7%)**
Photovoltaics	---	---	---
Batteries	---	---	---
TOTAL COMPLIANCE	**83.84**	**56.4**	**27.44 (32.7%)**

[1] Notes: This number in parenthesis following the Compliance Margin in column 4, represents the Percent Better than Standard.

G5. OPAQUE SURFACE ASSEMBLY SUMMARY

01	02	03	04	05	06		07	08	09	10
Surface Name	Construction Type	Area (ft²)	Framing Type	Cavity R-Value	Continuous R-Value		Units	Value	Description of Assembly Layers	Status[1]
					Interior	Exterior				
Exterior Walls 2 layers8	Exterior Wall	3,226	Metal	19	N/A	N/A	U-factor	0.1002	Metal Siding - 1/16 in. Composite-1 Air - Cavity - Wall Roof Ceiling - 4 in. or more Composite-2 Gypsum Board - 5/8 in.	A
Slab On Grade12	Underground Floor	6,207	N/A	0	N/A	N/A	F-factor	0.73	Slab Type =Unheated slab on grade Insulation Orientation =None Insulation R-Value =none	E
Roof 2 Layers14	Roof	5,828	N/A	10	N/A	21	U-factor	0.0337	Metal Standing Seam - 1/16 in. Composite-3 Glass fiber batt - 5 1/2 in. R21 (CEC Default)	A
Exterior Walls 1 layer31	Exterior Wall	672	Metal	19	N/A	5.87	U-factor	0.084	Metal Siding - 1/16 in. Vapor permeable felt - 1/8 in. Cellular polyisocyanurate (unfaced) - 1 in. R5.9 Composite-4 Gypsum Board - 5/8 in.	A
Roof 1 Layer81	Roof	379	N/A	30	N/A	N/A	U-factor	0.072	Metal Standing Seam - 1/16 in. Composite-5	A
Interior Wall93	Interior Wall	10	N/A	0	N/A	N/A	U-factor	0.3145	Gypsum Board - 1/2 in. Air - Cavity - Wall Roof Ceiling - 4 in. or more Gypsum Board - 1/2 in.	E

[1] Status: N - New, A - Altered, E - Existing

G4. NONRESIDENTIAL AIR BARRIER

01	02
Building Story Name	Air Barrier
Com-Floor 1	No air barrier

C8. ENERGY USE INTENSITY (EUI)

	Standard Design (kBtu/ft² / yr)	Proposed Design (kBtu/ft² / yr)	Margin (kBtu/ft² / yr)	Margin Percentage
GROSS EUI[1]	151.66	135.67	15.99	10.54
NET EUI[1]	151.66	135.67	15.99	10.54

[1] Notes: Gross EUI is Energy Use Total (not including PV)/Total Building Area. Net EUI is Energy Use Total (including PV)/Total Building Area.

D1. EXCEPTIONAL CONDITIONS

- The user model includes space(s) that are designed to be served by mechanical cooling systems, but the cooling systems were not included in the simulation model. A cooling system has been modeled for both the proposed and standard cases.
- The user model includes space(s) without sufficient cooling equipment. Cooling equipment has been added to the model to meet cooling loads.
- Verify project meets the requirements for Vestibules as per Section 120.7(e).

G1. ENVELOPE GENERAL INFORMATION (conditioned spaces only)

01	02	03	04
Opaque Surfaces & Orientation	Total Gross Surface Area (ft²)	Total Fenestration Area (ft²)	Window to Wall Ratio (%)
North-Facing[1]	1782	112	6.29
East-Facing[2]	980	40	4.08
South-Facing[3]	0	0	0
West-Facing[4]	1136	40	3.52
Total	**3898**	**192**	**4.93**
Roof	6207	0	0

Notes
[1]North-Facing is oriented to within 45 degrees of true north, including 4500'00" east of north (NE), but excluding 4500'00" west of north (NW),
[2]East-Facing is oriented to within 45 degrees of true east, including 4500'00" south of east (SE), but excluding 4500'00" north of east (NE),
[3]South-Facing is oriented to within 45 degrees of true south, including 4500'00" west of south (SW), but excluding 4500'00" east of south (SE),
[4]West-Facing is oriented to within 45 degrees of true west, including 4500'00" north of west (NW), but excluding 4500'00" south of west (SW),

APPROVALS

LICENSED ARCHITECT JAMES R. MORRELL No. C-35128 Exp. 05-31-27 STATE OF CALIFORNIA

DATE: 07/21/2026

ADMIN SERVICES REMODEL AT SANGER UNIFIED BUSINESS PARK 2
SANGER UNIFIED SCHOOL DISTRICT
1254 COMMERCE AVE, SANGER, CA 93657

Reviewed for Code Compliance
08/24/2026
CSG CONSULTANTS, INC.
REVISIONS

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REGISTERED PROFESSIONAL ENGINEER RYAN W. CARLSON No. M34846 Exp. 6-30-28 MECHANICAL STATE OF CALIFORNIA

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TITLE MECHANICAL T24

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PROJECT 25041

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CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD NRCC-PRF-E

Nonresidential Performance Compliance Method (Page 12 of 18)

H3. NONRESIDENTIAL / COMMON USE AREA FAN SYSTEMS SUMMARY

01	02	03	04	05	06	07	08	09	10	11	12	13
Name or Item Tag	Qty	Design OA CFM	Supply Fan				Return / Relief Fan					Status[1]
			CFM	Power	Power Units	Control	Fan Type	CFM	Power	Power Units	Control	
HP-1 Trane 5WCZ5036A3000A	1	135.75	1,200	0.5	BHP	Constant Vol	N/A	N/A	N/A	N/A	N/A	N
HP-2 Trane 5WCZ5036A3000A	1	127.35	1,200	0.5	BHP	Constant Vol	N/A	N/A	N/A	N/A	N/A	N
HP-3 Trane 5WCZ5036A3000A	1	175.5	1,200	0.5	BHP	Constant Vol	N/A	N/A	N/A	N/A	N/A	N
HP-4 Trane 5WCZ5060A3000A	1	404.85	2,000	1	BHP	Constant Vol	N/A	N/A	N/A	N/A	N/A	N
ODU-1 Trane SUZ-AA18NL	1	243.54	420	0.06	BHP	Constant Vol	N/A	250	0.03	BHP	Constant Vol	N
ODU-2 Trane SUZ-AA18NL	1	0	775	0.08	BHP	Constant Vol	N/A	N/A	N/A	N/A	N/A	N

01	14	15	16	17	18	19
Name or Item Tag	Supply Fan			Return / Relief Fan		
	Modeling Method	Fan Efficiency	Motor Efficiency	Modeling Method	Fan Efficiency	Motor Efficiency
HP-1 Trane 5WCZ5036A3000A	Brake Horse Power	0.65	0.86	N/A	N/A	N/A
HP-2 Trane 5WCZ5036A3000A	Brake Horse Power	0.65	0.86	N/A	N/A	N/A
HP-3 Trane 5WCZ5036A3000A	Brake Horse Power	0.65	0.86	N/A	N/A	N/A
HP-4 Trane 5WCZ5060A3000A	Brake Horse Power	0.65	0.87	N/A	N/A	N/A
ODU-1 Trane SUZ-AA18NL	Brake Horse Power	0.65	0.86	Brake Horse Power	0.65	0.86

[1] *Status: N - New, A - Altered, E - Existing*

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD NRCC-PRF-E

Nonresidential Performance Compliance Method (Page 11 of 18)

H1. DRY SYSTEM EQUIPMENT (FURNACES, AIR HANDLING UNITS, HEAT PUMPS, VRF, ECONOMIZERS ETC.)

01	02	03	04	05	06	07	08	09	10	11	12
Equipment Name	Equipment Type	Qty	Heating				Cooling			Economizer Type (if present)	Status[1]
			Total Heating Output (kBtu/h)	Supp Heat Output (kBtu/h)	Efficiency Unit	Efficiency	Total Cooling Output (kBtu/h)	Efficiency Unit	Efficiency		
HP-1 Trane 5WCZ5036A3000A	Single Zone Heat Pump (SZHP) Air System	1	18.23	17.06	HSPF2	7.7	24.39	EER2 SEER2	11.5 15.2	Differential DB	N
HP-2 Trane 5WCZ5036A3000A	Single Zone Heat Pump (SZHP) Air System	1	18.23	17.06	HSPF2	7.7	24.39	EER2 SEER2	11.5 15.2	Differential DB	N
HP-3 Trane 5WCZ5036A3000A	Single Zone Heat Pump (SZHP) Air System	1	18.23	17.06	HSPF2	7.7	24.39	EER2 SEER2	11.5 15.2	Differential DB	N
HP-4 Trane 5WCZ5060A3000A	Single Zone Heat Pump (SZHP) Air System	1	30.97	17.06	HSPF2	7.2	40.61	EER2 SEER2	11.5 15.2	Differential DB	N
ODU-1 Trane SUZ-AA18NL	Single Zone Heat Pump (SZHP) Air System	1	20.83	0	HSPF2	9.6	17.28	EER2 SEER2	12 17.5	No Economizer	N
ODU-2 Trane SUZ-AA18NL	Single Zone Heat Pump (SZHP) Air System	1	29.16	0	HSPF2	9.2	23.04	EER2 SEER2	12 21.1	No Economizer	N

[1] *Status: N - New, A - Altered, E - Existing*

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD NRCC-PRF-E

Nonresidential Performance Compliance Method (Page 10 of 18)

G6A. OPAQUE DOOR SUMMARY (NONRESIDENTIAL)

01	02	03	04
Assembly Name	Area (ft²)	Overall U-factor	Status[1]
Metal Door22	63	0.7	A
Exist Metal Door27	21	0.7	E

[1] *Status: N - New, A - Altered, E - Existing*

G7A. FENESTRATION ASSEMBLY SUMMARY (NONRESIDENTIAL)

01	02	03	04	05	06	07	08	09
Fenestration Assembly Name	Fenestration Type/ Product Type / Frame Type	Certification Method[1]	Assembly Method	Area (ft²)	Overall U-factor	Overall SHGC	Overall VT	Status[2]
25041 Windows	Vertical fenestration Fixed window N/A	NFRC	Manufactured	192	0.24	0.46	0.5	N

[1] *Notes: Newly installed fenestration shall have a certified NFRC Label Certificate or use the CEC default tables found in Table 110.6-A and Table 110.6-B. Center of Glass (COG) values are for the glass-only, determined by the manufacturer, and are shown for ease of verification. Site-built fenestration values are calculated per Nonresidential Appendix NA6 and are used in the analysis.*

[2] *Status: N - New, A - Altered, E - Existing*

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD NRCC-PRF-E

Nonresidential Performance Compliance Method (Page 15 of 18)

H13. ENERGY RECOVERY SUMMARY

01	02	03	04	05	06	07	08	09	10
Equipment Name	Equipment Type	Equipment Type	Heating			Cooling			Status[1]
			Sensible	Latent	Total	Sensible	Latent	Total	
ODU-1 Trane SUZ-AA18NL	Single Zone Heat Pump (SZHP) Air System	HVI	0.65	0	0	0.65	0	0	N

[1] *Status: N - New, A - Altered, E - Existing*

I1. WATER HEATER EQUIPMENT SUMMARY

01	02	03	04	05	06	07	08	09	10	11	12	13	14
Name	Heater Element Type	Tank Type	Qty	Tank Vol (gal)	Rated Input	Rated Input Unit	Efficiency	Efficiency Unit	Tank Insulation R-value Int/Ext	Standby Loss Fraction	1st Hr. Rating or Flow Rate (gal)	Heat Pump Type	Tank Location or Ambient Condition
WH-1 Bradford White LE2552	Electricity	Storage	1	55	4.5	kW	0.93	UEF	N/A	N/A	75	N/A	N/A

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD NRCC-PRF-E

Nonresidential Performance Compliance Method (Page 14 of 18)

H9. NONRESIDENTIAL / COMMON USE AREA & HOTEL/MOTEL VENTILATION

01	02	03			04	05	06	07
Zone Name	Mechanical Ventilation						Conditioned Area (sf)	DCV or Occupant Sensor Controls, or Both
	Ventilation Function	# of People			Supply OA CFM	Exhaust CFM		
1-Zone 1	Office - Office space	4.53			135.75	0	905	N/A
2-Zone 2	Office - Office space	4.25			127.35	0	849	N/A
3-Zone 3	Office - Office space	5.85			175.5	0	1170	N/A
4-Zone 4	Office - Office space	13.49			404.85	2000	2699	N/A
5-Zone 5	General - Conference/meeting	16.24			243.54	0	492	N/A
6-Zone 6	General - Unoccupied	0			0	0	92	N/A

H11. ZONAL SYSTEM AND TERMINAL UNIT SUMMARY

01	02	03	04	05	06	07	08	09	10	11	12
System ID	System Type	Qty	Rated Capacity (kBtuh)		Airflow (cfm)			Fan			VSD
			Heating	Cooling	Design	Min.	Min. Ratio	Power	Power Units	Cycles	
1-Zone 1-Trm	Uncontrolled	1	N/A	N/A	1,200	N/A	0	N/A	N/A	N/A	☐
2-Zone 2-Trm	Uncontrolled	1	N/A	N/A	1,200	N/A	0	N/A	N/A	N/A	☐
3-Zone 3-Trm	Uncontrolled	1	N/A	N/A	1,200	N/A	0	N/A	N/A	N/A	☐
4-Zone 4-Trm	Uncontrolled	1	N/A	N/A	2,000	N/A	0	N/A	N/A	N/A	☐
5-Zone 5-Trm	Uncontrolled	1	N/A	N/A	420	N/A	0	N/A	N/A	N/A	☐
6-Zone 6-Trm	Uncontrolled	1	N/A	N/A	775	N/A	0	N/A	N/A	N/A	☐

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD NRCC-PRF-E

Nonresidential Performance Compliance Method (Page 13 of 18)

H3. NONRESIDENTIAL / COMMON USE AREA FAN SYSTEMS SUMMARY

01	02	03	04	05	06	07	08	09	10	11	12	13
Name or Item Tag	Qty	Design OA CFM	Supply Fan				Return / Relief Fan					Status[1]
			CFM	Power	Power Units	Control	Fan Type	CFM	Power	Power Units	Control	
ODU-2 Trane SUZ-AA18NL	Brake Horse Power		0.65		0.86		N/A		N/A		N/A	

[1] *Status: N - New, A - Altered, E - Existing*

H5. GENERAL EXHAUST FAN SUMMARY

01	02	03	04	05	06	07	08
System ID	Zone Name	Qty	CFM	Power	Power Units	Continuous Operation?	Status[1]
Zone 464-EF	4-Zone 4	1	2000	0.4	BHP	No	N

[1] *Status: N - New, A - Altered, E - Existing*

H8. SYSTEM SPECIAL FEATURES

01	02	03	04
System Name	Equipment Type	Interlocks per 140.4(n)[1]	Other Special Features and Controls
HP-1 Trane 5WCZ5036A3000A	Single Zone Heat Pump (SZHP) Air System	N/A	Differential DB
HP-2 Trane 5WCZ5036A3000A	Single Zone Heat Pump (SZHP) Air System	N/A	Differential DB
HP-3 Trane 5WCZ5036A3000A	Single Zone Heat Pump (SZHP) Air System	N/A	Differential DB
HP-4 Trane 5WCZ5060A3000A	Single Zone Heat Pump (SZHP) Air System	N/A	Differential DB
ODU-1 Trane SUZ-AA18NL	Single Zone Heat Pump (SZHP) Air System	N/A	Heat Recovery
WH-1 Bradford White LE2551 - SHW	Service Hot Water	N/A	Fixed Temperature Control

Notes: This table includes controls related to the performance path only. For projects using the prescriptive path, mandatory and prescriptive controls requirements are documented on the NRCC-MCH-E.

[1] *Yes = interlocks are provided, No = interlocks are not provided, NA means no operable openings.*

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD NRCC-PRF-E

Nonresidential Performance Compliance Method (Page 18 of 18)

Documentation Author's Declaration Statement

1. I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name: Brent Yang	Documentation Author Signature: Brent Yang
Company: Lawrence Engineering Group	Signature Date: 2026-08-05
Address: 4910 E Clinton Way, Suite 101	CEA/AEA/ECC Certification Identification (if applicable):
City/State/Zip: Fresno, CA 93727	Phone: (559) 431-0101

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 understand that a completed signed copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building and shall be made available to the enforcement agency for all applicable inspections. I will take the necessary steps to fulfill this requirement.
6. I understand that a completed signed copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy. I will take the necessary steps to fulfill this requirement.

Responsible Designer Name: James R. Morrelli	Responsible Designer Signature:	
Company: Mangini Associates INC.		
Address: 4320 West Mineral King Avenue	Date Signed: 08-14-2026	
City/State/Zip: Visalia, CA 93291	License #: C-33128	
Phone: (559) 627-0530	Title:	Scope:
Responsible Designer Name: Ryan W. Carlson	Responsible Designer Signature:	
Company: Lawrence Engineering Group		
Address: 4910 E. Clinton Way, Suite 101	Date Signed: 2026-08-05	
City/State/Zip: Fresno, CA 93727	License #: M34846	
Phone: (559) 431-0101	Title:	Scope:

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD NRCC-PRF-E

Nonresidential Performance Compliance Method (Page 17 of 18)

O. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

Selections made by Documentation Author indicate which Certificates of Acceptance must be submitted for the features to be recognized for compliance. These documents must be provided to the building inspector during construction. Lighting controls and mechanical NRCAs must be completed through an Acceptance Test Technician Certification Provider (ATTCP).

Building Component[1]	Form/Title & System Name(s)
Envelope	NRCA-ENV-02-F - NRFC label verification for fenestration
Mechanical	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
	HP-1 Trane 5WCZ5036A3000A, HP-2 Trane 5WCZ5036A3000A, HP-3 Trane 5WCZ5036A3000A, HP-4 Trane 5WCZ5060A3000A, ODU-1 Trane SUZ-AA18NL and ODU-2 Trane SUZ-AA18NL.
Mechanical	NRCA-MCH-03-A - Constant Volume Single Zone HVAC
	HP-1 Trane 5WCZ5036A3000A, HP-2 Trane 5WCZ5036A3000A, HP-3 Trane 5WCZ5036A3000A, HP-4 Trane 5WCZ5060A3000A, ODU-1 Trane SUZ-AA18NL and ODU-2 Trane SUZ-AA18NL.
Mechanical	NRCA-MCH-05-A - Air Economizer Controls
	HP-1 Trane 5WCZ5036A3000A, HP-2 Trane 5WCZ5036A3000A, HP-3 Trane 5WCZ5036A3000A and HP-4 Trane 5WCZ5060A3000A.
Mechanical	NRCA-MCH-12-A FDD for Packaged Direct Expansion Units
	HP-4 Trane 5WCZ5060A3000A

[1] *Refer to other prescriptive NRCC forms applicable to the project for additional NRCA tests required that are not included in the NRCC-PRF-E form*

P. DECLARATION OF REQUIRED CERTIFICATES OF VERIFICATION

Selections made by Documentation Author indicate which Certificates of Verification must be submitted for the features to be recognized for compliance. These documents must be retained and provided to the building inspector during construction and can be found online

There are no certificates applicable to this project

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD NRCC-PRF-E

Nonresidential Performance Compliance Method (Page 16 of 18)

K1. INDOOR CONDITIONED LIGHTING GENERAL INFO

01	02	03	04	05	06
Occupancy Type[1]	Conditioned Floor Area[2] (ft²)	Installed Lighting Power (Watts)	Lighting Control Credits (Watts)	Additional (Custom) Allowance	
				Area Category Footnotes (Watts)	Area Category Footnotes (Watts)
Convention, Conference, Multipurpose and Meeting Center	492	369	0	0	0
Electrical Mechanical Telephone Room	92	36.8	0	0	0
Office (250 square feet)	5623	3373.8	0	0	0
Building Totals:	**6207**	**3779.6**	**0**	**0**	**0**

[1] *See Table 140.6-C*

[2] *See NRCC-LTI-E for unconditioned spaces*

[3] *Lighting information for existing spaces modeled is not included in this table*

K4. INDOOR CONDITIONED LIGHTING MANDATORY LIGHTING CONTROL

See NRCC-LTI-E for mandatory controls

N. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION

Selections made by Documentation Author indicate which Certificates of Installation must be submitted for the features to be recognized for compliance. These documents must be retained and provided to the building inspector during construction and can be found online

Building Component	Form/Title
Envelope	NRCI-ENV-E - Envelope (for all buildings)
Mechanical	NRCI-MCH-E - For all buildings with Mechanical Systems
Plumbing	NRCI-PLB-E - For all buildings with Plumbing Systems

LICENSED ARCHITECT JAMES R. MORRELLI No. C-33128 Exp. 05-31-27 STATE OF CALIFORNIA

DATE: 07/21/2026

ADMIN SERVICES REMODEL AT SANGER UNIFIED BUSINESS PARK 2

SANGER UNIFIED SCHOOL DISTRICT
1254 COMMERCE AVE, SANGER, CA 93657

Reviewed for Code Compliance
08/24/2026
CSG CONSULTANTS, INC.

REVISIONS

MANGINI ARCHITECTURE | INGENUITY
MANGINI ASSOCIATES INC.
4320 West Mineral King Avenue
Visalia, California 93291
www.mangini.us
(559) 627.0530 Office
(559) 627.1926 Fax

REGISTERED PROFESSIONAL ENGINEER RYAN W. CARLSON No. M34846 Exp. 6-30-28 MECHANICAL STATE OF CALIFORNIA

LAWRENCE ENGINEERING GROUP
4910 E. Clinton Way, Suite 101
(559) 431-0101
25134
Fresno, CA 93727
FAX (559) 431-1362

TITLE MECHANICAL T24

M6.1

PROJECT 25041

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DOMESTIC HOT WATER DISTRIBUTION SYSTEM

This table is used to demonstrate compliance for nonresidential occupancies with distribution requirements in §120.3 and §140.5. For multifamily and hotel/motel occupancies, compliance is demonstrated with requirements §110.3(c), §160.4, §170.2(d).

Mandatory Pipe Insulation All Occupancies - §120.3, §160.4

System Name			
	Yes	Not Applicable	Requirement
16	○	●	For systems serving dwelling units, pipe insulation must meet the minimum insulation requirements in Table 160.4-A (see blow) except: • Piping that penetrates framing members shall not be required to have pipe insulation for the distance of the framing penetration. Piping that penetrates metal framing shall use grommets, plugs, wrapping or other insulating material to assure that no contact is made with the metal framing. Insulation shall abut securely against all framing members • Piping installed in interior or exterior walls shall not be required to have pipe insulation if all of the requirements are met for compliance with Quality Insulation Installation (QII) as specified in the Reference Residential Appendix RA3.5. • Piping surrounded with a minimum of 1 inch of wall insulation, 2 inches of crawlspace insulation, or 4 inches of attic insulation, shall not be required to have pipe insulation.
17	●	○	For systems serving nonresidential spaces, pipe insulation for the following applications is specified to comply with Table 120.3-A1 or Table 120.3-A2 (see below) per §120.3: • Recirculating system piping, including supply and return piping of the water heater • The first 8 ft of hot and cold outlet piping, including between storage tank and heat trap, for a nonrecirculating storage system • Pipes that are externally heated
18	●	○	Per §120.3(b)/ §160.4(f), pipe and appurtenance 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. Pipe insulation buried below grade must be installed in a water proof and non-crushable casing or sleeve.

TABLE 160.4-A PIPE INSULATION THICKNESS

Fluid Temperature Range (°F)	Conductivity Range (Btu-in per hour per ft² per °F)	Insulation Mean Rating Temp (°F)	Nominal Pipe Diameter (in)			
			< 1	1 to < 1.5	1.5 to < 4	1.5 to < 4 Multifamily & Hotel/Motel
			Minimum Insulation Required			
105-140	0.22 - 0.28	100	1.0 in or R-7.7	1.5 in or R-12.5	1.5 in or R-11	2.0 in or R-16

E. ADDITIONAL REMARKS

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

F. DOMESTIC HOT WATER EQUIPMENT

This table is used to demonstrate compliance with mandatory equipment requirements in §110.1 and §110.3. Compliance with prescriptive requirements in §140.5(c) / §170.2(d) must also be demonstrated and with §141.0 / §180.1/ §180.2 for addition and alteration scopes.

Equipment Schedule: Water Heating Efficiency and Standby Loss

01		02		03		04		
System Name	WH-1 Bradford White LE25ST3-3	Space type	Nonresidential	Exception to §140.5(c)/§170.2(d)2B			Capacity-weighted Average Efficiency %	
05	06	07	08	09	10	11	12	13
Name or Item Tag	Quantity	System Status	Equipment Type	Volume (gal)	Rated Input Capacity (Btu/h)	Rated Efficiency	Minimum Efficiency Required	Maximum Standby Loss
WH-1 Bradford White LE25ST3-3	1	New/ Addition	Electric Storage	55	15,355	0.93	Must meet Federal Minimum Requirements	Must meet Federal Minimum Requirements

[1]FOOTNOTE: In systems >= 1MMBtu/h with multiple units, gas water heaters with input capacity > 100,000 Btu/h may meet 90% Et requirements via an input capacity-weighted average.

[2]FOOTNOTE: Compliant equipment may be found in the Modernized Appliance Efficiency Database System (MAEDBS) on the Energy Commission website: https://cacertappliances.energy.ca.gov/Pages/Search/AdvancedSearch.aspx

A. GENERAL INFORMATION

01	Project Location (city)	Sanger	02	Climate Zone	13
03	Occupancy Types Within Project (select all that apply):				
● Office ● All Other Occupancies					

B. PROJECT SCOPE

This table includes domestic water heating systems that are within the scope of the permit application and are demonstrating compliance using the prescriptive paths outlined in §140./ §170.2(d) and §141.0(a)/§180.1, or §141.0(b)2N / §180.2 for additions or alterations. Solar water heating systems are documented on the NRCC-SAB compliance document. Combined hydronic water heating systems are documented on the NRCC-MCH compliance document.

01	02	03	
My project consists of (check all that apply):	System Type [1,2]	System Components	
☒ New system (DHW system being installed for the first time)	Serving Nonresidential or MF/Hotel/Motel Common use area	☒ Equipment	☒ Distribution	☒ Controls
☐ System Alteration (equipment, distribution or controls)		☐ Equipment	☐ Distribution	☐ Controls

[1]FOOTNOTES: Point of use water heaters, or other non-central systems used to serve nonresidential spaces, are considered individual systems.
[2] Dwelling units refers to hotel/motel guest rooms and units in a multifamily residential occupancy.
[3] DHW systems serving 2 or more dwelling units are considered "Central Systems" for multifamily and hotel/motel occupancies

C. COMPLIANCE RESULTS

Table C will indicate if the project data input into the compliance document is compliant with water heating requirements. 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
Domestic Hot Water Equipment	Distribution Systems	Controls	Pool/Spa	**Compliance Results**
Table F	Table G	Table H	Table J	
Yes	Yes	Yes		COMPLIES

D. EXCEPTIONAL CONDITIONS

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

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name: Brent Yang	Documentation Author Signature: Brent Yang
Company: Lawrence Engineering Group	Signature Date: 2026-08-05
Address: 4910 E Clinton Way, Suite 101	CEA/AEA/ECC Certification Identification (if applicable):
City/State/Zip: Fresno CA 93727	Phone: (559) 431-0101

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 builder provides to the building owner at occupancy.

Responsible Person Name: Ryan W. Carlson	Responsible Person Signature: Ryan W. Carlson
Responsible Person Scope:	
Company: Lawrence Engineering Group	Date Signed: 2026-08-05
Address: 4910 E. Clinton Way, Suite 101	License: M34846
City/State/Zip: Fresno CA 93727	Phone: (559) 431-0101

DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION

Selections have been made based on information provided in this document. If any selection have been changed by permit applicant, an explanation should be included in Table E. Additional Remarks. These documents must be provided to the building inspector during construction and can be found online

Form/Title
NRCI-PLB-E - Must be submitted for all buildings

DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

There are no forms required for this project.

DECLARATION OF REQUIRED CERTIFICATES OF VERIFICATION

There are no forms required for this project.

DOMESTIC HOT WATER CONTROLS - §110.3, §120.9, §160.4(d), §170.2(d), §180.1(b)3

This table is used to demonstrate compliance with control requirements in §110.3 for all occupancies. For nonresidential occupancies, compliance is demonstrated with requirements in §120.9. For multifamily residential and hotel/motel occupancies, compliance is also demonstrated with requirements in §160.4(d) / §170.2(d).

System Name			
	Yes	Not Applicable	Requirement
01	☒	☐	Construction documents require manufacturer certification that service water-heating systems are equipped with automatic temperature controls capable of adjusting temperature settings per §110.3(a).
02	☐	☒	Systems with capacity > 167,000 BTUH equipped with outlet temperature controls per §110.3(c)1 unless covered by California Plumbing Code 613.0.
03	☐	☒	Controls for circulating pumps or electrical heat trace systems are capable of automatically turning off the system per §110.3(c)2 unless systems serves healthcare facility.
04	☐	☒	For recirculation systems serving multiple dwelling units, design includes a mechanical or digital thermostatic master mixing valve on each distribution supply and return loop per §170.2(d) or §180.1(b)3 for additions.
05	☐	☒	For recirculation systems serving individual dwelling units, design includes manual on/off controls as specified in Reference Appendix RA4.4.9 per §170.2(d).
06	☐	☒	Combustion air positive shut-off shall be provided per §120.9(a) & §160.4(d) on all newly installed commercial boilers as follows: • Boilers with input capacity >= 2.5 MMBtu/h, in which the boiler is designed to operate with a nonpositive vent static pressure • Boilers where one stack serves two or more boilers with a total combined input capacity per stack of 2.5 MMBtu/h.
07	☐	☒	Boiler combustion air fans with motor >= 10 hp shall meet one of the following for newly installed boilers per §120.9(b) & §160.4(d)2: • The fan motor shall be driven by a variable speed drive OR • The fan motor shall include controls that limit the fan motor demand to <=30% of the total design wattage at 50% of the design air volume.
08	☐	☒	Newly installed boilers with an input capacity (d:gte/] 5MMBtu/h and a steady state full-load combustion efficiency < 90% shall maintain excess (stack-gas) oxygen concentrations <= 5% by volume on a dry basis over firing rates of 20-100%. Combustion air volume shall be controlled with respect to firing rate or flue gas oxygen concentration. Use of a common gas and combustion air control linkage or jack shaft is prohibited per §120.9(c) & §160.4(d)3.

APPROVALS

LICENSED ARCHITECT JAMES R. MORRELL No. C-31128 Exp. 05-31-27 STATE OF CALIFORNIA

DATE: 07/21/2026

ADMIN SERVICES REMODEL AT SANGER UNIFIED BUSINESS PARK 2

SANGER UNIFIED SCHOOL DISTRICT
1254 COMMERCE AVE, SANGER, CA 93657

Reviewed for Code Compliance
08/24/2026
CSG CONSULTANTS, INC.

REVISIONS

REGISTERED PROFESSIONAL ENGINEER RYAN W. CARLSON No. M34846 Exp. 6-30-28 MECHANICAL STATE OF CALIFORNIA

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(559) 627.1926 Fax

TITLE MECHANICAL T24

M6.2

PROJECT 25041

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FIXTURE SCHEDULE

FIXTURE SYMBOL (3-A-31): 3 = CIRCUIT NUMBER, A = FIXTURE TYPE, 31 = FIXTURE WATTAGE

TYPE	WATTS	LAMPS	VOLT	MANUFACTURER	CATALOG NO.	MOUNT	NOTES	APPROX. WEIGHT #
A	31	L.E.D.	120-277V	LITHONIA	2BLT2-40L-ADPT-EZ1-LP840-N100-LATC	FLUSH T-BAR	PER #1/E5.2	12
AE	31	L.E.D.		LITHONIA	2BLT2-40L-ADPT-EZ1-LP840-N100-E10WLCP-LATC	FLUSH T-BAR	PER #1/E5.2 (1)	14
B	39	L.E.D.		LITHONIA	2BLT4-48L-ADPT-EZ1-LP840-N100-LATC	FLUSH T-BAR	PER #1/E5.2	23
BE	39	L.E.D.		LITHONIA	2BLT4-48L-ADPT-EZ1-LP840-N100-E10WLCP-LATC	FLUSH T-BAR	PER #1/E5.2 (1)	25
C	31	L.E.D.		LITHONIA	2BLT4-40L-ADPT-EZ1-LP840-N100-LATC	FLUSH T-BAR	PER #1/E5.2	23
CE	31	L.E.D.		LITHONIA	2BLT4-40L-ADPT-EZ1-LP840-N100-E10WLCP-LATC	FLUSH T-BAR	PER #1/E5.2 (1)	25
D	35	L.E.D.		LITHONIA	STL4-40L-EZ1-LP840-N100	SURFACE	PER #2/E5.2	13
DE	35	L.E.D.		LITHONIA	STL4-40L-EZ1-LP840-N100-E10WLCP	SURFACE	PER #2/E5.2 (1)	15
E	11	L.E.D.		LITHONIA	BLWP4-15L-ADPT-EZ1-LP840-N100	SUSPEND	PER #3/E5.2	13
EE	11	L.E.D.		LITHONIA	BLWP4-15L-ADPT-EZ1-LP840-N100-E10WLCP	SUSPEND	PER #3/E5.2 (1)	15
F	23	L.E.D.		LITHONIA	LDN6-40/20-L06-AR-LSS-HVOLT-EZ1-NPS80EZ	RECESSED	PER #3/E5.2	9
FE	23	L.E.D.		LITHONIA	LDN6-40/20-L06-AR-LSS-HVOLT-EZ1-NPS80EZ-E10WCP	RECESSED	PER #3/E5.2	11
X	2	L.E.D.	120-277V	LITHONIA	LE-S-W-1-R-EL-N-SD	SURFACE	SINGLE FACE EXIT SIGN WITH EMERGENCY BATTERY AND SELF-DIAGNOSTICS	5

FIXTURE SCHEDULE NOTES:

(1) LIGHT FIXTURE SHALL BE EQUIPPED WITH AN EMERGENCY BATTERY PACK TO OPERATE THE L.E.D. DRIVER AT 1.0 WATTS OF CONSTANT POWER IN THE EMERGENCY MODE FOR A MINIMUM OF 90 MINUTES. PULL UNSWITCHED CIRCUIT TO EMERGENCY BATTERY PACK. REFER TO LIGHTING PLANS FOR EXACT LOCATIONS AND DETAIL PER #4/E5.2 FOR WIRING REQUIREMENTS.

ELECTRICAL SYMBOLS NOTES:

(A) REFER TO FIRE ALARM DEVICES ELEVATION, DETAIL #2/E2.2 FOR RESPECTIVE MOUNTING HEIGHTS.

(B) AT EXTERIOR LOCATIONS, PROVIDE WEATHER-RESISTANT/TAMPER-RESISTANT G.F.C.I. DUPLEX RECEPTACLES, LEVITON #G5362-WTW OR EQUAL. AT DAMP LOCATIONS, PROVIDE A DIECAST WEATHERPROOF LOCKABLE COVER, RACO #5028-0 OR EQUAL. AT WET LOCATIONS, PROVIDE A DIECAST WEATHERPROOF 'WHILE-IN-USE' LOCKABLE COVER, EXTRA-DUTY RATED, RED DOT #CKSUV OR EQUAL.

(C) DUPLEX RECEPTACLE SHALL HAVE PRINTED WORDING 'CONTROLLED' AND THE SPECIFIC SYMBOL ⏻ ON THE FACE OF THE RECEPTACLE. LEVITON #5362-2PE OR EQUAL.

(D) ACUITY CONTROLS #CAT 5e * J1 OR EQUAL. * ASTERISK INDICATES LENGTH OF CABLE. CABLES ARE AVAILABLE IN 6', 1, 2, 5, 10, 15, 30', AND 50' LENGTHS.

(E) 'nLIGHT' ENABLED LIGHT FIXTURE PER FIXTURE SCHEDULE ON SHEET #EG1.1.

(F) ACUITY CONTROLS #nWSX-PDT-WH OR EQUAL. PROVIDE A DECORATOR STYLE STAINLESS STEEL WALLPLATE.

(G) ACUITY CONTROLS #nWSXA-PDT-LV-DX-WH OR EQUAL. PROVIDE A DECORATOR STYLE STAINLESS STEEL WALLPLATE.

(H) ACUITY CONTROLS #nPODMA-DX-WH OR EQUAL. PROVIDE A DECORATOR STYLE STAINLESS STEEL WALLPLATE.

(J) ACUITY CONTROLS #nPODMA-2P-DX-WH OR EQUAL. PROVIDE A DECORATOR STYLE STAINLESS STEEL WALLPLATE.

(K) ACUITY CONTROLS #nPODMA-4P-DX-WH OR EQUAL. PROVIDE A DECORATOR STYLE STAINLESS STEEL WALLPLATE.

(L) ACUITY CONTROLS #nPP20-PL OR EQUAL. CONNECT TO THE SAME 120V 'UNSWITCHED' RECEPTACLE CIRCUIT, AS THE POWER/RELAY PACK CONTROLS.

(M) ACUITY CONTROLS #nCM-PDT-10-RJB OR EQUAL.

(N) ACUITY CONTROLS #nCM-PDT-10-ADCX-RJB OR EQUAL.

(P) ACUITY CONTROLS #nWSXA-PDT-LV-WH OR EQUAL. PROVIDE A DECORATOR STYLE STAINLESS STEEL WALLPLATE.

(Q) ACUITY CONTROLS #nPODMA-WH OR EQUAL. PROVIDE A DECORATOR STYLE STAINLESS STEEL WALLPLATE.

(R) ACUITY CONTROLS #nECY-MVOLT-BAC-ADR-ENC-GFNX OR EQUAL. REFER TO DETAIL #7/E5.2 FOR ADDITIONAL INFORMATION.

(W) (S) ACUITY CONTROLS #nBRG-8-KIT OR EQUAL. REFER TO DETAIL #8/E5.2 FOR ADDITIONAL INFORMATION. PROVIDE A 4' SQ. x 2 1/8' DEEP OUTLET BOX FOR MOUNTING OF NETWORK INTERFACE BRIDGE AND POWER SUPPLY.

(T) ACUITY CONTROLS #nGWY2-GFX AND 150ma POWER SUPPLY #PS150 OR EQUAL.

ELECTRICAL SYMBOLS
ALL DIMENSIONS TO CENTER OF BOX, U.O.N.

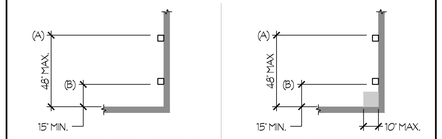
	3-	CIRCUIT NUMBER (3-A-31)
	-A-	FIXTURE TYPE (3-A-31)
	-31	FIXTURE WATTAGE (3-A-31)
	⊕	HOME RUN 3/4"C - MIN. (PANEL A, CIRCUIT #3)
	(——)	CONDUIT RUN IN WALL OR ATTIC (1/2"C - 2 #12 AWG THWN + 1 #12 GND)
	(— · —)	CONDUIT RUN IN FLOOR OR UG (1/2"C - 2 #12 AWG THWN + 1 #12 GND)
	-#-	ANY CONDUIT RUN - 1/2"C - 3 #12 AWG THWN + 1 #12 GND
	-##-	" " - 3/4"C - 4 #12 AWG THWN + 1 #12 GND
	-###-	" " - 3/4"C - 5 #12 AWG THWN + 1 #12 GND
	-####	" " - 1"C - 6 #12 AWG THWN + 1 #12 GND
	—⊐	CONDUIT STUB - CAPPED AND LABELED.
	(1)	ELECTRICAL KEYNOTE #1, REFER TO NOTES ON SAME SHEET.
	U.O.N.	UNLESS OTHERWISE NOTED
	W.P.	WEATHERPROOF
	▭	TERMINAL CABINET (SIZE AS SHOWN)
	▬	ELECTRICAL PANELBOARD
	⏚	DUPLEX RECEPTACLE IN WALL (+15" MIN. TO BOTTOM OF BOX)
	⏚	QUADRUPLEX RECEPTACLE IN FLUSH FLOOR BOX
	⏚	QUADRUPLEX RECEPTACLE IN WALL (+15" MIN. TO BOTTOM OF BOX)
(B)	⏚	G.F.C.I. DUPLEX RECEPTACLE IN WALL (+15" MIN. TO BOTTOM OF BOX)
(C)	⏚	'CONTROLLED' DUPLEX RECEPTACLE IN WALL (+15" MIN. TO BOTTOM OF BOX)
	⊠	EXIT LIGHT, CEILING MOUNTED
	◘	RECESSED MOUNTED LIGHT FIXTURE IN CEILING
	▭	LIGHT FIXTURE
(D)	-- C5 --	NETWORK CABLE - GATEGORY 5e CABLE, LENGTH AS REQUIRED
(E)	▭	LIGHT FIXTURE WITH 'nLIGHT' EMBEDDED CONTROLS
	EM ◘ / EM ◪	RECESSED MOUNTED LIGHT FIXTURE EQUIPPED WITH EMERGENCY BATTERY PACK
	EM ▭	LIGHT FIXTURE EQUIPPED WITH EMERGENCY BATTERY PACK
	$	LIGHT SWITCH (+4'-0" MAX. TO TOP OF BOX, U.O.N.)
(F)	(S)	OCCUPANCY SENSOR WALL SWITCH, LINE VOLTAGE (+4'-0" MAX. TO TOP OF BOX, U.O.N.)
(G)	DD	OCCUPANCY SENSOR WALL SWITCH (DUAL TECHNOLOGY) WITH ON/OFF SWITCH AND RAISE/LOWER DIMMING CONTROL, (+4'-0" MAX. TO TOP OF BOX, U.O.N.)
(H)	D	ON/OFF SWITCH WITH RAISE/LOWER DIMMING CONTROL (+4'-0" MAX. TO TOP OF BOX, U.O.N.)
(J)	D2	ON/OFF SWITCH WITH RAISE/LOWER DIMMING CONTROL (TWO CHANNELS) (+4'-0" MAX. TO TOP OF BOX, U.O.N.)
(K)	D4	ON/OFF SWITCH WITH RAISE/LOWER DIMMING CONTROL (FOUR CHANNELS) (+4'-0" MAX. TO TOP OF BOX, U.O.N.)
(L)	PPR	LOW VOLTAGE POWER/RELAY PACK FOR RECEPTACLE CONTROLS MOUNTED IN ACCESSIBLE ATTIC SPACE, U.O.N.
(M)	OS	360° OCCUPANCY SENSOR (DUAL TECHNOLOGY), CEILING MOUNTED
(N)	OSP	360° OCCUPANCY SENSOR (DUAL TECHNOLOGY) WITH AUTOMATIC DIMMING CONTROL PHOTOCELL, CEILING MOUNTED
(P)	OS	OCCUPANCY SENSOR WALL SWITCH, LOW VOLTAGE (+4'-0" MAX. TO TOP OF BOX, U.O.N.)
(Q)	S	ON/OFF SWITCH (+4'-0" MAX. TO TOP OF BOX, U.O.N.)
(R)	NLC	NETWORK LIGHTING CONTROLLER
(S)	BRG	NETWORK INTERFACE BRIDGE WITH POWER SUPPLY
(T)	GFX	GRAPHIC WALLPOD WITH POWER SUPPLY
	J	JUNCTION BOX EQUIPPED WITH BLANK COVER
	J	JUNCTION BOX EQUIPPED WITH BLANK COVER AND FLEX CONNECTION
		MOTOR
		HEAVY-DUTY FUSED SAFETY SWITCH
	$m	MOTOR RATED NON-FUSED DISCONNECT SWITCH
	RM	ADDRESSABLE RELAY MODULE
(A)	V 15	FIRE ALARM VISUAL STROBE, 15 CANDELA, CEILING MOUNTED
	V 30	FIRE ALARM VISUAL STROBE, 30 CANDELA, CEILING MOUNTED
	AV 15	FIRE ALARM HORN/15 CANDELA VISUAL STROBE (WALL MOUNTED)
	AV 30	FIRE ALARM HORN/30 CANDELA VISUAL STROBE (WALL MOUNTED)
	AV 15	FIRE ALARM HORN/15 CANDELA VISUAL STROBE (CEILING MOUNTED)
	AV 30	FIRE ALARM HORN/30 CANDELA VISUAL STROBE (CEILING MOUNTED)
	E, (E)	SUBSCRIPT DENOTES EXISTING SHALL REMAIN
	R, (R)	SUBSCRIPT DENOTES EXISTING SHALL BE REMOVED
	—EP—	DENOTES EXISTING FEEDER, BRANCH CIRCUITING AND/OR HOMERUN SHALL REMAIN
	—ER—	DENOTES EXISTING FEEDER, BRANCH CIRCUITING AND/OR HOMERUN SHALL BE REMOVED

TITLE 24, PART 6

THE CALIFORNIA ENERGY EFFICIENCY STANDARDS FOR NONRESIDENTIAL BUILDINGS HAS BEEN REVIEWED AND THE BUILDING DESIGN DESCRIBED ON THESE PAGES IS IN SUBSTANTIAL CONFORMANCE.

CODE, RULES AND REGULATIONS

ALL WORK AND MATERIALS SHALL COMPLY WITH THE LATEST REGULATIONS OF THE STATE FIRE MARSHAL, CALIFORNIA CODE OF REGULATIONS, SERVING UTILITY COMPANIES AND OTHER APPLICABLE STATE ORDINANCES. NOTHING IN THESE PLANS OR SPECIFICATIONS IS TO BE CONSTRUED AS TO PERMIT WORK NOT CONFORMING TO THESE CODES. WHERE WORK OF A HIGHER DEGREE IS INDICATED IN THE PLANS OR SPECIFICATIONS THIS REQUIREMENT SHALL GOVERN.



(A) TOP OF OUTLET BOX FOR RECEPTACLES, SWITCHES AND CONTROLS.

(B) BOTTOM OF OUTLET BOX FOR RECEPTACLES, SWITCHES AND CONTROLS.

1 ELECTRICAL RECEPTACLE, SWITCH AND CONTROL HEIGHTS

NTS

APPROVALS

LICENSED ARCHITECT JAMES R. MORRELL No. C-32128 EXP. 05-31-27 STATE OF CALIFORNIA

DATE: 07/21/2026

ADMIN SERVICES REMODEL AT SANGER UNIFIED BUSINESS PARK 2

SANGER UNIFIED SCHOOL DISTRICT
1254 COMMERCE AVE, SANGER, CA 93657

REVISIONS

Reviewed for Code Compliance
08/24/2025
CSG CONSULTANTS, INC.

MANGINI ARCHITECTURE INGENUITY
MANGINI ASSOCIATES INC.
4320 West Mineral King Avenue
Visalia, California 93291
www.manginiai.us
(559) 627.0530 Office
(559) 627.1926 Fax

TITLE
ELECTRICAL SYMBOLS CODES, NOTES AND FIXTURE SCHEDULE

EG1.1

PROJECT 25041

Rose Sing Eastham & Associates
Electrical Consultants
131 S. Dunworth - (559)733-2671
Visalia, California 93292-6705

REGISTERED PROFESSIONAL ENGINEER KIRK A. EASTHAM No. E-18786 Exp. 6/30/27 ELECTRICAL STATE OF CALIFORNIA

Z:\Drafting\Jobs\RSES\25000's\Sanger\25041 Admin Service Remodel\EG1.1.dwg DATE SAVED: 06/22/26 By: Nicole DATE PLOTTED: 07/14/26 JOB # 26-011-NC

APPROVALS

STATE OF CALIFORNIA
Indoor Lighting
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-E
This document is used to demonstrate compliance with requirements in §110.9, §110.12(c), §130.0, §130.1, §140.6 and §141.0(b)2 for indoor lighting scopes using the prescriptive path for nonresidential and hotel/motel occupancies. It is also used to document compliance with requirements in §160.5, §170.2(e) and §180.2(b)4 for indoor lighting scopes using the prescriptive path for multifamily occupancies. Multifamily includes dormitory and senior living facilities.	
Project Name: ADMIN SERVICES REMODEL AT SANGER UNIFIED BUSINESS PARK 2	**Report Page:** (Page 1 of 8)
Project Address: 1254 COMMERCE AVE	**Date Prepared:** 2026-06-22T07:53:54-04:00

A. GENERAL INFORMATION

01	Project Location (city)	SANGER	04 Total Conditioned Floor Area (ft²)	6,720
02	Climate Zone	13	05 Total Unconditioned Floor Area (ft²)	0
03	Occupancy Types Within Project (select all that apply):		06 # of Stories (Habitable Above Grade)	1
● Office				

B. PROJECT SCOPE

This table includes any lighting systems that are within the scope of the permit application and are demonstrating compliance using the prescriptive path outlined in §140.6 / §170.2(e) or §141.0(b)2 / §180.2(b)4 for alterations.

Scope of Work	Conditioned Spaces		Unconditioned Spaces	
01	02	03	04	05
My Project Consists of (check all that apply):	Calculation Method	Area (ft²)	Calculation Method	Area (ft²)
☒ New Lighting System	Area Category Method	6720	N/A	0
☐ New Lighting System - Parking Garage	N/A	0	N/A	0
Total Area of Work (ft²)	6720			

STATE OF CALIFORNIA
Indoor Lighting
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-E
Project Name: ADMIN SERVICES REMODEL AT SANGER UNIFIED BUSINESS PARK 2	**Report Page:** (Page 4 of 8)
	Date Prepared: 2026-06-22T07:53:54-04:00

H. INDOOR LIGHTING CONTROLS (Not including PAFs)

This table includes lighting controls for conditioned and unconditioned spaces.

Building Level Controls

01	02	03	
		Field Inspector	
		Pass	Fail
Mandatory Demand Response §110.12(c)	Shut-off controls §130.1(c) / §160.5(b)4C	☐	☐
Required >= 4,000W subject to multilevel	See Area/Space Level Controls (Column 8)		

Area Level Controls

04	05	06	07	08	09	10	11	12	
								Field Inspector	
Area Description	Complete Building or Area Category Primary Function Area	Manual Controls §130.1(a) /§160.5(b)4A	Multi-Level Controls §130.1(b) /§160.5(b)4B	Shut-Off Controls §130.1(c) //§160.5(b)4C	Primary/Sky lit Daylighting §130.1(d) /§160.5(b)4D	Secondary Daylighting §130.1(d) /§160.5(b)4D	Interlocked Systems §140.6(a)1/ §170.2(e)2A	Pass	Fail
CONFERENCE	Conference, Multipurpose and Meeting Area	Readily Accessible and located in the same space.	Dimmer	Occupancy Sensor	NA: Not daylit zone	NA: Not daylit zone	No	☐	☐
HALLWAY	Corridor	Readily Accessible and located in the same space.	Dimmer	Occupancy Sensor	NA: Not daylit zone	NA: Not daylit zone	No	☐	☐
ELEC	Electrical, Mechanical, or Telephone Room	Readily Accessible and located in the same space.	NA: Space <100SF	NA: Elec. equip. rm	NA: Not daylit zone	NA: Not daylit zone	No	☐	☐
BREAK RM	Lounge	Readily Accessible and located in the same space.	Dimmer	Occupancy Sensor	NA: Not daylit zone	NA: Not daylit zone	No	☐	☐

STATE OF CALIFORNIA
Indoor Lighting
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-E
Project Name: ADMIN SERVICES REMODEL AT SANGER UNIFIED BUSINESS PARK 2	**Report Page:** (Page 7 of 8)
	Date Prepared: 2026-06-22T07:53:54-04:00

U. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION

Selections have been made based on information provided in this document. If any selections have been changed by permit applicant, an explanation should be included in Table E. Additional Remarks. These documents must be provided to the building inspector during construction and can be found online

Form/Title
NRCI-LTI-E - Must be submitted for all buildings

V. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

Selections have been made based on information provided in this document. If any selections have been changed by the permit applicant, an explanation should be included in Table E. Additional Remarks. These documents must be provided to the building inspector during construction and any with "-A" in the form name must be completed through an Acceptance Test Technician Certification Provider (ATTCP). For more information visit: http://www.energy.ca.gov/title24/attcp/providers.html

Form/Title	Systems/Spaces To Be Field Verified
NRCA-LTI-02-A - Must be submitted for occupancy sensors and automatic time switch controls.	CONFERENCE; HALLWAY; BREAK RM; OFFICE <250 SQ. FT.; OFFICES > 250 SQ. FT.; LACTATION AND FIRE SPRINKLER RMS; RESTROOMS
NRCA-LTI-03-A - Must be submitted for daylight responsive controls.	OFFICES > 250 SQ. FT.
NRCA-LTI-04-A - Must be submitted for demand responsive lighting controls.	CONFERENCE; HALLWAY; ELEC; BREAK RM; OFFICE <250 SQ. FT.; OFFICES > 250 SQ. FT.; LACTATION AND FIRE SPRINKLER RMS; RESTROOMS

STATE OF CALIFORNIA
Indoor Lighting
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-E
Project Name: ADMIN SERVICES REMODEL AT SANGER UNIFIED BUSINESS PARK 2	**Report Page:** (Page 2 of 8)
	Date Prepared: 2026-06-22T07:53:54-04:00

C. COMPLIANCE RESULTS

If any cell on this table says "DOES NOT COMPLY" or "COMPLIES with Exceptional Conditions" refer to Table D. for guidance.

Lighting in conditioned and unconditioned spaces must not be combined for compliance per §140.6(b)1 /§170.2(e)	Allowed Lighting Power per §140.6(b) /§170.2(e) (Watts)					Adjusted Lighting Power per §140.6(a) /§170.2(e) (Watts)				Compliance Results
	01	02	03	04		05	06	07		08
	Complete Building §140.6(c)1	Area Category §140.6(c)2 /§170.2(e)4	Area Category Additional §140.6(c)2G / §170.2(e)4Av (+)	Total Allowed (Watts)		Total Designed (Watts)	Adjustments PAF Lighting Control Credits §140.6(a)2 /§170.2(e)1B (-)	Total Adjusted (Watts) *Includes Adjustments		**05 must be >= 08 §140.6 /§170.2(e)**
	(See Table I)	(See Table I)	(See Table J)			(See Table F)	(See Table P)			
Conditioned		4,003.65		4,003.65	≥	4,003		4003	=	COMPLIES
Unconditioned					=		0		=	
Controls Compliance (See Table H for Details)										COMPLIES
One-for-one Luminaire Alterations Compliance (See Table Q for Details)										

D. EXCEPTIONAL CONDITIONS

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

E. ADDITIONAL REMARKS

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

STATE OF CALIFORNIA
Indoor Lighting
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-E
Project Name: ADMIN SERVICES REMODEL AT SANGER UNIFIED BUSINESS PARK 2	**Report Page:** (Page 5 of 8)
	Date Prepared: 2026-06-22T07:53:54-04:00

H. INDOOR LIGHTING CONTROLS (Not including PAFs)

OFFICE <250 SQ. FT.	Office (<=250 square feet)	Readily Accessible and located in the same space.	Dimmer	Occupancy Sensor	NA: Not daylit zone	NA: Not daylit zone	No	☐ ☐
OFFICES > 250 SQ. FT.	Office (>250 square feet)	Readily Accessible and located in the same space.	Dimmer	Occupancy Sensor	Included	Included	No	☐ ☐
LACTATION AND FIRE SPRINKLER RMS	All Other Space Types	Readily Accessible and located in the same space.	Dimmer	Occupancy Sensor	NA: Not daylit zone	NA: Not daylit zone	No	☐ ☐
RESTROOMS	Restroom	Readily Accessible and located in the same space.	NA: Restrooms	Occupancy Sensor	NA: Not daylit zone	NA: Not daylit zone	No	☐ ☐
						13		
						Plan Sheet Showing Daylit Zones:		
						E1.5		

I. LIGHTING POWER ALLOWANCE: COMPLETE BUILDING OR AREA CATEGORY METHODS

Each area complying using the Complete Building or Area Category Methods per §140.6(b) are included in this table. Column 06 indicates if additional lighting power allowances per §140.6(c) or adjustments per §140.6(a) are being used .

Conditioned Spaces

01	02	03	04	05	06	
					Additional Allowance / Adjustment	
Area Description	Complete Building or Area Category Primary Function Area	Allowed Density (W/ft²)	Area (ft²)	Allowed Wattage (Watts)	Area CategoryPAF	PAF
CONFERENCE	Conference, Multipurpose and Meeting Area	0.75	508	381	No	No
HALLWAY	Corridor	0.4	700	280	No	No
ELEC	Electrical, Mechanical, or Telephone Room	0.4	100	40	No	No

STATE OF CALIFORNIA
Indoor Lighting
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-E
Project Name: ADMIN SERVICES REMODEL AT SANGER UNIFIED BUSINESS PARK 2	**Report Page:** (Page 8 of 8)
Project Address: 1254 COMMERCE AVE	**Date Prepared:** 2026-06-22T07:53:54-04:00

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name: Steve Eastham	Documentation Author Signature:
Company: Rose Sing Eastham	Signature Date: 26-04-08
Address: 131 S. DUNWORTH ST	CEA/AEA/ECC Certification Identification (if applicable):
City/State/Zip: VISALIA, CA 93292-6705	Phone: (559) 733 - 2671 EXT.101

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 builder provides to the building owner at occupancy.

Responsible Person Name: Steve Eastham	Responsible Person Signature:
Responsible Person Scope: ELECTRICAL	
Company: Rose Sing Eastham	Date Signed: 26-04-08
Address: 131 S. DUNWORTH ST	License: E18786
City/State/Zip: VISALIA, CA 93292-6705	Phone: (559) 733 - 2671 EXT.101

STATE OF CALIFORNIA
Indoor Lighting
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-E
Project Name: ADMIN SERVICES REMODEL AT SANGER UNIFIED BUSINESS PARK 2	**Report Page:** (Page 3 of 8)
	Date Prepared: 2026-06-22T07:53:54-04:00

F. INDOOR LIGHTING FIXTURE SCHEDULE

This table includes all planned permanent and portable lighting other than dwelling unit/ hotel/ motel room lighting. Multifamily dwelling unit and hotel/motel room lighting is documented in Table T. If using Table T to document lighting in multifamily common use areas providing shared provisions for living, eating, cooking or sanitation, those luminaires are not included here.

Designed Wattage: Conditioned Spaces

01	02	03	04	05	06	07	08	09	10	
									Field Inspector	
Name or Item Tag	Complete Luminaire Description	Modular (Track) Fixture	Small Aperture & Color Change [1]	Watts per luminaire[2]	How is Wattage determined	Total Number of Luminaires	Excluded per §140.6(a)3 / §170.2(e)2C	Design Watts	Pass	Fail
A/AE	L.E.D. 2x2, 4,000 LUMENS	No	NA	31	Mfr. Spec	18	No	558	☐	☐
B/BE	L.E.D. 2x4, 4,800 LUMENS	No	NA	39	Mfr. Spec	56	No	2,184	☐	☐
C/CE	L.E.D. 2x4, 4,000 LUMENS	No	NA	31	Mfr. Spec	12	No	372	☐	☐
D/DE	L.E.D. 1x4 SURFACE, 4,000 LUMENS	No	NA	35	Mfr. Spec	8	No	280	☐	☐
E/EE	L.E.D. 4' SUSPENEDED, 2,000 LUMENS	No	NA	11	Mfr. Spec	1	No	11	☐	☐
F/FE	L.E.D. DOWNLIGHT	No	NA	23	Mfr. Spec	26	No	598	☐	☐
							Total Designed Watts: CONDITIONED SPACES	4,003		

[1]*FOOTNOTE: Design Watts for small aperture and color changing luminaires which qualify per §140.6(a)4B /§170.2(e)2D is adjusted to be 75% /80% of their rated wattage. Table F automatically makes this adjustment, the permit applicant should enter full rated wattage in column 05.*

[2]*Authority Having Jurisdiction may ask for Luminaire cut sheets to confirm wattage used for compliance per §130.0(c) /§160.5(b). Wattage used must be the maximum rated for the luminaire, not the lamp.*

G. MODULAR LIGHTING SYSTEMS

This section does not apply to this project.

STATE OF CALIFORNIA
Indoor Lighting
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-E
Project Name: ADMIN SERVICES REMODEL AT SANGER UNIFIED BUSINESS PARK 2	**Report Page:** (Page 6 of 8)
	Date Prepared: 2026-06-22T07:53:54-04:00

I. LIGHTING POWER ALLOWANCE: COMPLETE BUILDING OR AREA CATEGORY METHODS

BREAK RM	Lounge	0.55	226	124.3	No	No
OFFICE <250 SQ. FT.	Office (<=250 square feet)	0.65	1,193	775.45	No	No
OFFICES > 250 SQ. FT.	Office (>250 square feet)	0.6	3,406	2,043.6	No	No
LACTATION AND FIRE SPRINKLER RMS	All Other Space Types	0.4	102	40.8	No	No
RESTROOMS	Restroom	0.65	490	318.5	No	No
		TOTALS:	6,725	4,003.65	See Tables J, or P for detail	

J. ADDITIONAL ALLOWANCE: AREA CATEGORY METHOD QUALIFYING LIGHTING SYSTEM

This section does not apply to this project.

P. POWER ADJUSTMENT: LIGHTING CONTROL CREDIT (POWER ADJUSTMENT FACTOR (PAF))

This section does not apply to this project.

Q. ONE-FOR-ONE LUMINAIRE ALTERATIONS

This section does not apply to this project.

R. 80% LIGHTING POWER FOR ALL ALTERATIONS - CONTROLS EXCEPTIONS

This section does not apply to this project.

S. DAYLIGHT DESIGN POWER ADJUSTMENT FACTOR (PAF)

This section does not apply to this project.

T. DWELLING UNIT LIGHTING

This section does not apply to this project.

LICENSED ARCHITECT JAMES R. MORALES No. C-32128 EXP. 05-31-27 STATE OF CALIFORNIA

DATE: 07/21/2026

ADMIN SERVICES REMODEL AT SANGER UNIFIED BUSINESS PARK 2
SANGER UNIFIED SCHOOL DISTRICT
1254 COMMERCE AVE, SANGER, CA 93657

REVISIONS

Reviewed for Code Compliance
08/24/2025
CSG CONSULTANTS, INC.

MANGINI ARCHITECTURE INGENUITY
MANGINI ASSOCIATES INC.
4320 West Mineral King Avenue
Visalia, California 93291
www.mangini.us
(559) 627.0630 Office
(559) 627.1926 Fax

TITLE
INDOOR LIGHTING COMPLIANCE

EG1.2

PROJECT 25041

LICENSED PROFESSIONAL ENGINEER KIRK ERIC EASTHAM No. E-18786 Exp. 6/30/27 ELECTRICAL STATE OF CALIFORNIA

Rose Sing Eastham & Associates
Electrical Consultants
131 S. Dunworth – (559)733–2671
Visalia, California 93292–6705

Z:\Drafting\Jobs\KSES\SCHOOLS\Sanger\25041 Admin Service Remodel\G1\2.dwg DATE SAVED: 04/08/26 BY: Nicole DATE PLOTTED: 07/14/26 JOB # 26-011-MC

STATE OF CALIFORNIA
Electrical Power Distribution
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE — **NRCC-ELC-E**

This document is used to demonstrate compliance with mandatory requirements in §130.5, for electrical systems in newly constructed nonresidential and hotel/motel occupancies and §160.6 and §160.9 for electrical systems in newly constructed multifamily occupancies. Additions and alterations to electrical service systems in nonresidential and hotel/motel occupancies will also use this document to demonstrate compliance per §141.0(a) or §141.0(b)2P for alterations. For multifamily addition or alterations compliance will be documented per §180.1(a) or §180.2 (b)4bii

Project Name:	ADMIN SERVICES REMODEL AT SANGER UNIFIED BUSINESS PARK 2	**Report Page:**	**(Page 1 of 6)**
Project Address:	1254 COMMERCE AVE	**Date Prepared:**	2026-05-18T10:02:57-04:00

A. GENERAL INFORMATION

01	Project Location (city)	SANGER	02	Climate Zone	13
			03	Occupancy Types Within Project:	

• Office

B. PROJECT SCOPE

This table includes electrical systems that are within the scope of the permit application.

01	02	03	04	05	06	07
Electrical Service Designation/ Description	Scope of Work [1]	Rating[2] (kVA)	Utility Provided Metering System Exception to §130.5(a)/§160.6(a)[3]	System subject to CA Elec Code Article 517 Exception to §130.5(a)and (b)	Demand Response Controls	Provides power to dwelling units/common living areas only in multifamily occupancy
NEW MAIN SWITCHBOARD	New electrical service equipment and meter	230.4	☒	☐	Where required, demand response controls must be specified which are capable of receiving and automatically responding to at least one standards based messaging protocol which enables demand response after receiving a demand response signal. Sections §120.2/§160.3, §130.1/§160.5, and §130.3/§160.5, and mechanical, indoor lighting, and sign lighting Certificate of Compliance documents will indicate when demand response controls are required.	☐

[1] FOOTNOTES: Adding only new feeders and branch circuits triggers Voltage Drop 130.5(c)/160.6(c), no other requirements from 130.5/160.6 are required.
[2] If common use areas in a multifamily are submetered, rating is for submeter size serving common use areas.
[3] Applicable if the utility company is providing a metering system that indicates instantaneous kW demand and kWh for a utility-defined period.

STATE OF CALIFORNIA
Electrical Power Distribution
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE — **NRCC-ELC-E**

Project Name:	ADMIN SERVICES REMODEL AT SANGER UNIFIED BUSINESS PARK 2	**Report Page:**	**(Page 2 of 6)**
		Date Prepared:	2026-05-18T10:02:57-04:00

C. COMPLIANCE RESULTS

Results in this table are automatically calculated from data input and calculations in Tables F through J. Note: If any cell on this table says "COMPLIES with Exceptional Conditions" refer to Table D. Exceptional Conditions for guidance or see applicable Table referenced below.

01		02		03		04	05	06
Service Electrical Metering §130.5(a)/ §160.6(a) (See Table F)	AND	Separation for Monitoring §130.5(b)/ §160.6(b) (See Table G)	AND	Voltage Drop §130.5(c)/ §160.6(c) (See Table H)	AND	Controlled Receptacles §130.5(d)/ §160.6(d) (See Table I)	Electric Ready §160.9 (See Table J)	**Compliance Results**
	AND	Yes	AND	Yes	AND	Yes		COMPLIES with Exceptional Conditions

D. EXCEPTIONAL CONDITIONS

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

Table B indicates the project is exempt from §130.5(a) Service Electrical Metering requirements because the utility company has provided the project a metering system that indicates instantaneous kW demand and kWh for a utility-defined period.

E. ADDITIONAL REMARKS

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

STATE OF CALIFORNIA
Electrical Power Distribution
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE — **NRCC-ELC-E**

Project Name:	ADMIN SERVICES REMODEL AT SANGER UNIFIED BUSINESS PARK 2	**Report Page:**	**(Page 3 of 6)**
		Date Prepared:	2026-05-18T10:02:57-04:00

G. SEPARATION OF ELECTRICAL CIRCUITS FOR ENERGY MONITORING

This table includes entirely new or complete replacement electrical power distribution systems to demonstrate compliance with §130.5(b)/§160.6(b). Any load types that are not included in the service do not need to be shown. For multifamily occupancies, submetered systems that provide power to dwelling units do not need to meet these separation requirements and therefore load types on those submetered systems also do not need to be shown.

01	02	03	04	05	
Load Type per Table 130.5-B [1]	Minimum Required Separation of Load per Table 130.5-B	Compliance Method[2]	Location of Requirements in Construction Documents	Field Inspector	
				Pass	Fail
NEW MAIN SWITCHBOARD					
HVAC systems and components	All HVAC in aggregate	Method 3: Branch circuits serve load types individually & provisions for adding future branch curcuit monitoring	E1.3	☐	☐
Lighting including exit, egress and exterior	All lighting in aggregate	Method 3: Branch circuits serve load types individually & provisions for adding future branch curcuit monitoring	E1.4	☐	☐
Plug Loads and appliances less than 25kVA	All plug loads in aggregate Groups of plug loads exceeding 25 kVA connected load in an area less than 5000 sf	Method 3: Branch circuits serve load types individually & provisions for adding future branch curcuit monitoring	E1.2	☐	☐

STATE OF CALIFORNIA
Electrical Power Distribution
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CERTIFICATE OF COMPLIANCE — **NRCC-ELC-E**

Project Name:	ADMIN SERVICES REMODEL AT SANGER UNIFIED BUSINESS PARK 2	**Report Page:**	**(Page 4 of 6)**
		Date Prepared:	2026-05-18T10:02:57-04:00

G. SEPARATION OF ELECTRICAL CIRCUITS FOR ENERGY MONITORING

This table includes entirely new or complete replacement electrical power distribution systems to demonstrate compliance with §130.5(b)/§160.6(b). Any load types that are not included in the service do not need to be shown. For multifamily occupancies, submetered systems that provide power to dwelling units do not need to meet these separation requirements and therefore load types on those submetered systems also do not need to be shown.

01	02	03	04	05	
Load Type per Table 130.5-B [1]	Minimum Required Separation of Load per Table 130.5-B	Compliance Method[2]	Location of Requirements in Construction Documents	Field Inspector	
				Pass	Fail

** NOTES: If "Other*" is selected under Compliance Method above, please indicate how compliance has been achieved in the space provided below.*

[1] FOOTNOTES: For each separate load type, up to 10% of the connected load may be of any type.
[2] Method 1: Switchboards/ motor control centers/ panelboard loads disaggregated for each load type.
Method 2: Switchboards/ motor control centers/ panelboard supply other distribution equipment with loads disaggregated for each load type.
Method 3: Branch circuits serve load types individually and provisions for adding future branch circuit monitoring.
Method 4: Complete metering system measures and reports loads by type.
See Chapter 8 of the Nonresidential Compliance Manual for more detail on Compliance Methods.

H. VOLTAGE DROP

This table includes entirely new or complete replacement electrical power distribution systems, or alterations that add, modify or replace both feeders and branch circuits to demonstrate compliance with §130.5(c)/ §160.6(c). For alterations, only the altered circuits must demonstrate compliance per §141.0(b)2Pii/ §180.2(b)4Bvii.c.

01	02			03	04	05	
Electrical Service Designation/Description	Combined Voltage Drop on Installed Feeder/Branch Circuit Conductors Compliance Method			Location of Voltage Drop Calculations[1]	Sheet Number for Voltage Drop Calculations in Construction Documents	Field Inspector	
						Pass	Fail
NEW MAIN SWITCHBOARD	☒	Voltage drop less than 5%	☐	Permitted by CA Elec Code (Exception to 130.5(c))*	In construction documents	E3.1	☐	☐

** NOTES: If "Permitted by CA Elec Code *" is selected under Compliance Method above, please indicate where the exception applies in the space provided below.*

[1] FOOTNOTES: Voltage drop calculations may be attached to the permit application outside the construction documents if allowed by the Authority Having Jurisdiction. Select "attached" if applicable. If calculations will be the responsibility of the installing contractor, select "Contractor Responsible".

I. CIRCUIT CONTROLS FOR 120-VOLT RECEPTACLES AND CONTROLLED RECEPTACLES

This table includes entirely new or complete replacement electrical power distribution systems to demonstrate compliance with §130.5(d)/ §160.6(d).. Both controlled and uncontrolled receptacles must be provided in office areas, lobbies, conference rooms, kitchen areas in office spaces, copy rooms and hotel/motel guest rooms.

STATE OF CALIFORNIA
Electrical Power Distribution
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE — **NRCC-ELC-E**

Project Name:	ADMIN SERVICES REMODEL AT SANGER UNIFIED BUSINESS PARK 2	**Report Page:**	**(Page 5 of 6)**
		Date Prepared:	2026-05-18T10:02:57-04:00

I. CIRCUIT CONTROLS FOR 120-VOLT RECEPTACLES AND CONTROLLED RECEPTACLES

01	02	03	04	05	06	07	
Room name or Description	Location/ Type of Controlled Receptacles[1,2]	Shut-Off Controls	Demand Responsive Controls	Permanent Marking Will be Used	Location of Requirements in Construction Documents	Field Inspector	
						Pass	Fail
OFFICES	Within 6ft of uncontrolled receptacle	Occupancy Sensor	Included w capabilities per §110.12(e)	☒	E1.2	☐	☐
CONFERENCE ROOM	Within 6ft of uncontrolled receptacle	Occupancy Sensor	Included w capabilities per §110.12(e)	☒	E1.2	☐	☐

** NOTES: If "Other*" is selected under Shut-Off Controls above, please indicate how compliance has been achieved in the space provided below.*

[1] FOOTNOTES: Receptacles dedicated to refrigerators and water dispensers in kitchens, located a minimum of 6ft above the floor specifically for clocks, network copiers, fax machines, A/V and data equipment other than personal computers in copy rooms, circuits rated more than 20 Amps, or connected to a UPS that are intended to be in continuous use and are marked to differentiate them from other receptacles or circuits are excepted from the requirements..
[2] Plug-in strips and other plug-in devices shall not be used to comply with the requirements of section §130.5(d)

K. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION

Selections have been made based on information provided in this document. If any selection have been changed by permit applicant, an explanation should be included in Table E. Additional Remarks. These documents must be provided to the building inspector during construction and can be found online

Form/Title
NRCI-ELC-E - Must be submitted for all buildings

L. 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 any with "-A" in the form name must be completed through an Acceptance Test Technician Certification Provider (ATTCP). For more information visit: http://www.energy.ca.gov/title24/attcp/providers.html

Form/Title	Systems/Spaces To Be Field Verified
NRCA-LTI-04-A - Must be submitted for demand response controls.	

STATE OF CALIFORNIA
Electrical Power Distribution
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE — **NRCC-ELC-E**

Project Name:	ADMIN SERVICES REMODEL AT SANGER UNIFIED BUSINESS PARK 2	**Report Page:**	**(Page 6 of 6)**
Project Address:	1254 COMMERCE AVE	**Date Prepared:**	2026-05-18T10:02:57-04:00

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name: Steve Eastham	Documentation Author Signature:
Company: Rose Sing Eastham	Signature Date: 26-04-08
Address: 131 S. DUNWORTH ST	CEA/AEA/ECC Certification Identification (if applicable):
City/State/Zip: VISALIA, CA 93292-6705	Phone: (559) 733 - 2671 EXT.101

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 builder provides to the building owner at occupancy.

Responsible Person Name: Steve Eastham	Responsible Person Signature:
Responsible Person Scope: ELECTRICAL	
Company: Rose Sing Eastham	Date Signed: 26-04-08
Address: 131 S. DUNWORTH ST	License: E18786
City/State/Zip: VISALIA, CA 93292-6705	Phone: (559) 733 - 2671 EXT.101

LICENSED ARCHITECT JAMES R. MORALES No. C-31128 EXP. 05-31-27 STATE OF CALIFORNIA

DATE: 07/21/2026

ADMIN SERVICES REMODEL AT SANGER UNIFIED BUSINESS PARK 2

SANGER UNIFIED SCHOOL DISTRICT
1254 COMMERCE AVE, SANGER, CA 93657

Reviewed for Code Compliance
08/24/2025
CSG CONSULTANTS, INC.

REVISIONS

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Visalia, California 93291
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(559) 627.0533 Office
(559) 627.1926 Fax

TITLE
ELECTRICAL POWER DISTRIBUTION COMPLIANCE

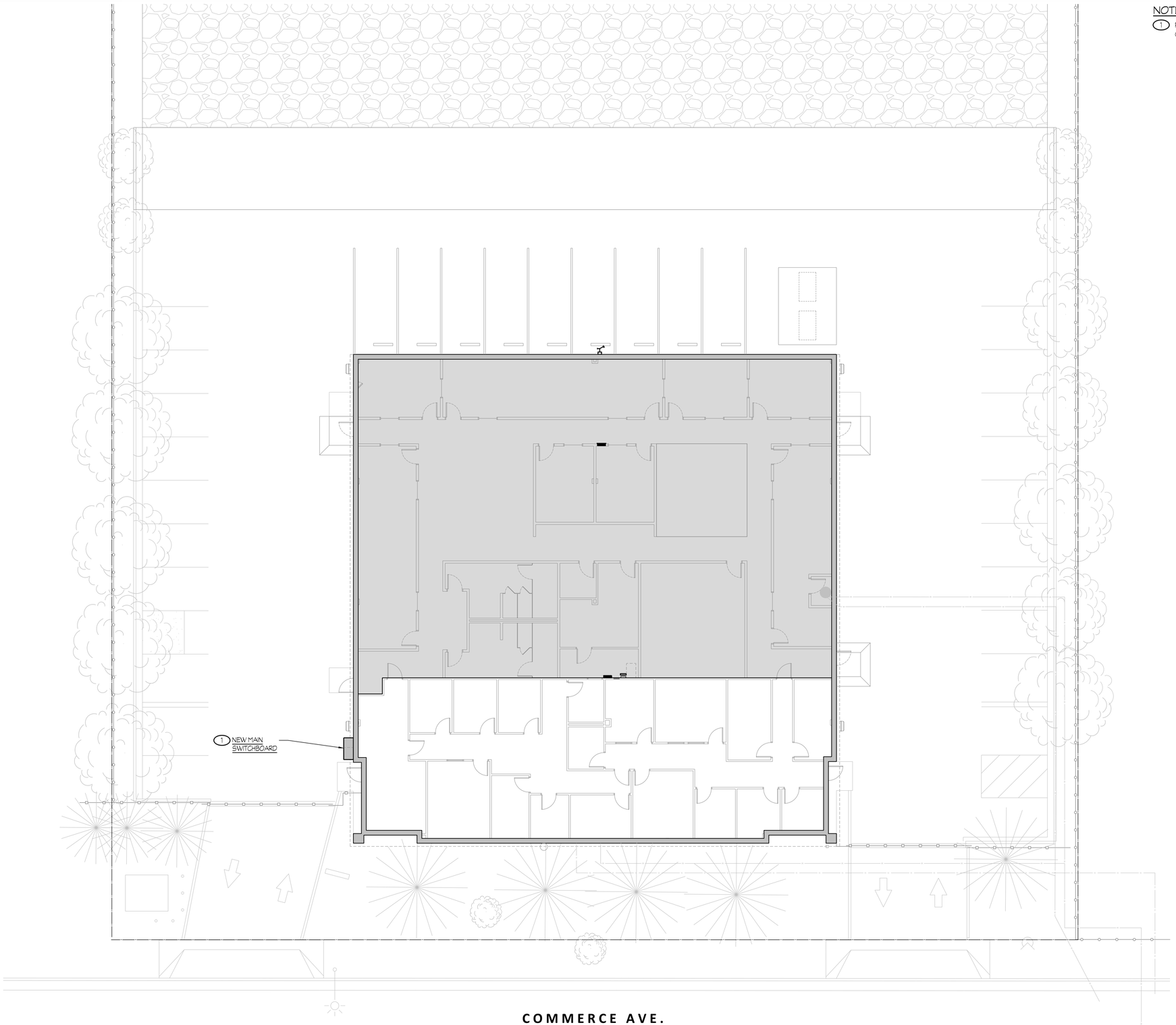
EG1.3

PROJECT 25041

Rose Sing Eastham & Associates
Electrical Consultants
131 S. Dunworth – (559)733–2671
Visalia, California 93292–6705

REGISTERED PROFESSIONAL ENGINEER KIRK A. EASTHAM No. E-18786 Exp. 6/30/27 ELECTRICAL STATE OF CALIFORNIA

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SITE ELECTRICAL PLAN

SCALE: 10" = 1'-0"

NOTES (THIS SHEET ONLY):

1. REPLACE EXISTING MAIN SERVICE BOARD IN SAME LOCATION. CONTRACTOR SHALL COORDINATE WITH UTILITY FOR SHUTDOWN AND RECONNECTION REQUIREMENTS.

APPROVALS

LICENSED ARCHITECT JAMES R. MORRELL No. C-32128 EXP. 05-31-27 STATE OF CALIFORNIA

DATE: 07/21/2026

ADMIN SERVICES REMODEL AT SANGER UNIFIED BUSINESS PARK 2

SANGER UNIFIED SCHOOL DISTRICT
1254 COMMERCE AVE, SANGER, CA 93657

Reviewed for Code Compliance
08/24/2026
CSG CONSULTANTS, INC.

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(559) 627-1926 Fax

TITLE
SITE ELECTRICAL PLAN

ES1.1

PROJECT 25041

Rose Sing Eastham & Associates
Electrical Consultants
131 S. Dunworth – (559)733-2671
Visalia, California 93292-6705

REGISTERED PROFESSIONAL ENGINEER KIRK EASTHAM No. E-18786 Exp. 6/30/27 ELECTRICAL STATE OF CALIFORNIA

north

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DEMOLITION NOTES (THIS SHEET ONLY):

(D1) TYPICAL OF EXISTING WIRING DEVICES LOCATED ON EXISTING WALL TO REMAIN, KEYNOTED WITH SUBSCRIPT 'R', U.O.N.:
DISCONNECT AND REMOVE EXISTING WIRING DEVICE AND OUTLET BOX. PULL-OUT EXISTING 'IDLE' CONDUCTORS. REMOVE THE EXISTING 'IDLE' CONDUIT OR SURFACE RACEWAY AS REQUIRED TO CLEAR WAY FOR NEW CONSTRUCTION. ANY UNDERGROUND CONDUITS SHALL BE REMOVED TO BE FLUSH WITH THE TOP OF EXISTING CONCRETE SLAB.

(D2) EXISTING PANEL 'A' TO REMAIN. PROTECT IN PLACE. REFER TO DEMOLITION/EXISTING ONE LINE DIAGRAM, DETAIL #1/E3.1 AND EXISTING PANEL 'A' SCHEDULE, SHEET #E4.1 FOR ADDITIONAL INFORMATION.

(D3) DISCONNECT AND REMOVE EXISTING PANEL.

(D4) REPLACE EXISTING MAIN SWITCHBOARD IN SAME LOCATION. COORDINATE WITH UTILITY AND OWNER FOR SHUTDOWN REQUIREMENTS. REFER TO DEMOLITION/EXISTING ONE LINE DIAGRAM, DETAIL #1/E3.1 FOR EXISTING MAIN SWITCHBOARD INFORMATION.

ROOM LEGEND

#	ROOM NAME	CEILING HEIGHT	#	ROOM NAME	CEILING HEIGHT
1	LARGE OFFICE	+9'-0"	13A	OPEN OFFICE	+11'-0"
2	OFFICE	+9'-0"	13B	OPEN OFFICE	+11'-0"
3	LARGE OFFICE	+9'-0"	14	LACTATION	+9'-0"
4	OFFICE	+9'-0"	15	UTILITY	+9'-0"
5	OFFICE	+9'-0"	16	FIRE RISER	OPEN
6	LARGE OFFICE	+9'-0"	16A	HALLWAY	+10'-0"
7	OFFICE	+9'-0"	16B	HALLWAY	+10'-0"
8	OFFICE	+9'-0"	16C	HALLWAY	+10'-0"
9	CONFERENCE ROOM	+9'-0"	16D	HALLWAY	+10'-0"
10	BREAK ROOM	+9'-0"	16E	HALLWAY	+10'-0"
11	MEN	+9'-0"	16F	HALLWAY	+10'-0"
12	WOMEN	+9'-0"	16G	HALLWAY	+10'-0"

NOTES (THIS SHEET ONLY):

(1) REFER TO NEW ONE LINE DIAGRAM, DETAIL #2/E3.1 FOR NEW WORK AT NEW MAIN SWITCHBOARD 'MSB'.

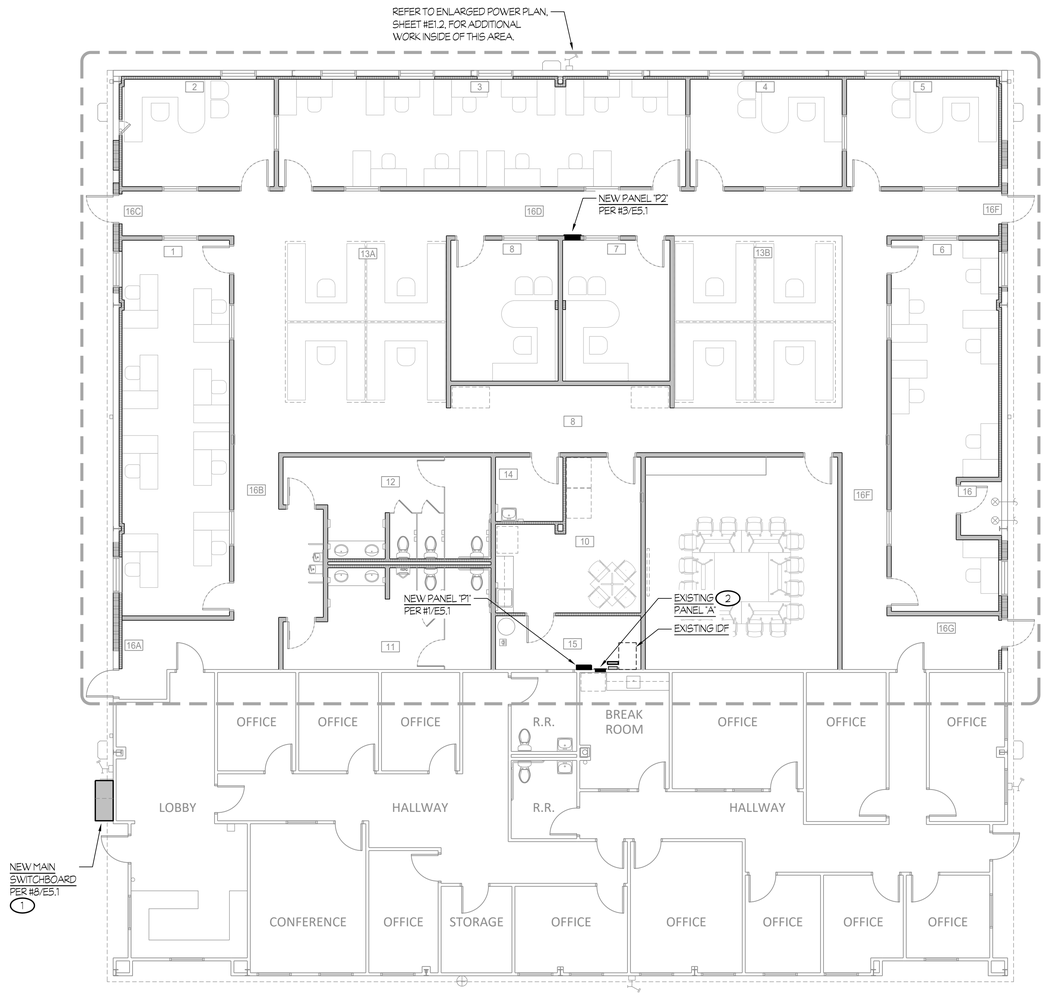
(2) REFER TO NEW ONE LINE DIAGRAM, DETAIL #1/E3.1 FOR RECONNECTION OF EXISTING PANEL 'A' AT NEW MAIN SWITCHBOARD.



DEMOLITION POWER PLAN

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

north



POWER PLAN

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

north

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Visalia, California 93292-6705

REGISTERED PROFESSIONAL ENGINEER — KIRK A. KIRK — No. E-18786 — Exp. 6/30/27 — ELECTRICAL — STATE OF CALIFORNIA

APPROVALS

LICENSED ARCHITECT — JAMES R. MORRELL — No. C-35128 — EXP. 05-31-27 — STATE OF CALIFORNIA

DATE: 07/21/2026

ADMIN SERVICES REMODEL AT
SANGER UNIFIED BUSINESS PARK 2
SANGER UNIFIED SCHOOL DISTRICT
1254 COMMERCE AVE, SANGER, CA 93657

Reviewed for Code Compliance
08/24/2026
CSG CONSULTANTS, INC.

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(559) 627-0530 Office
(559) 627-1926 Fax

TITLE
POWER PLANS

E1.1

PROJECT 25041

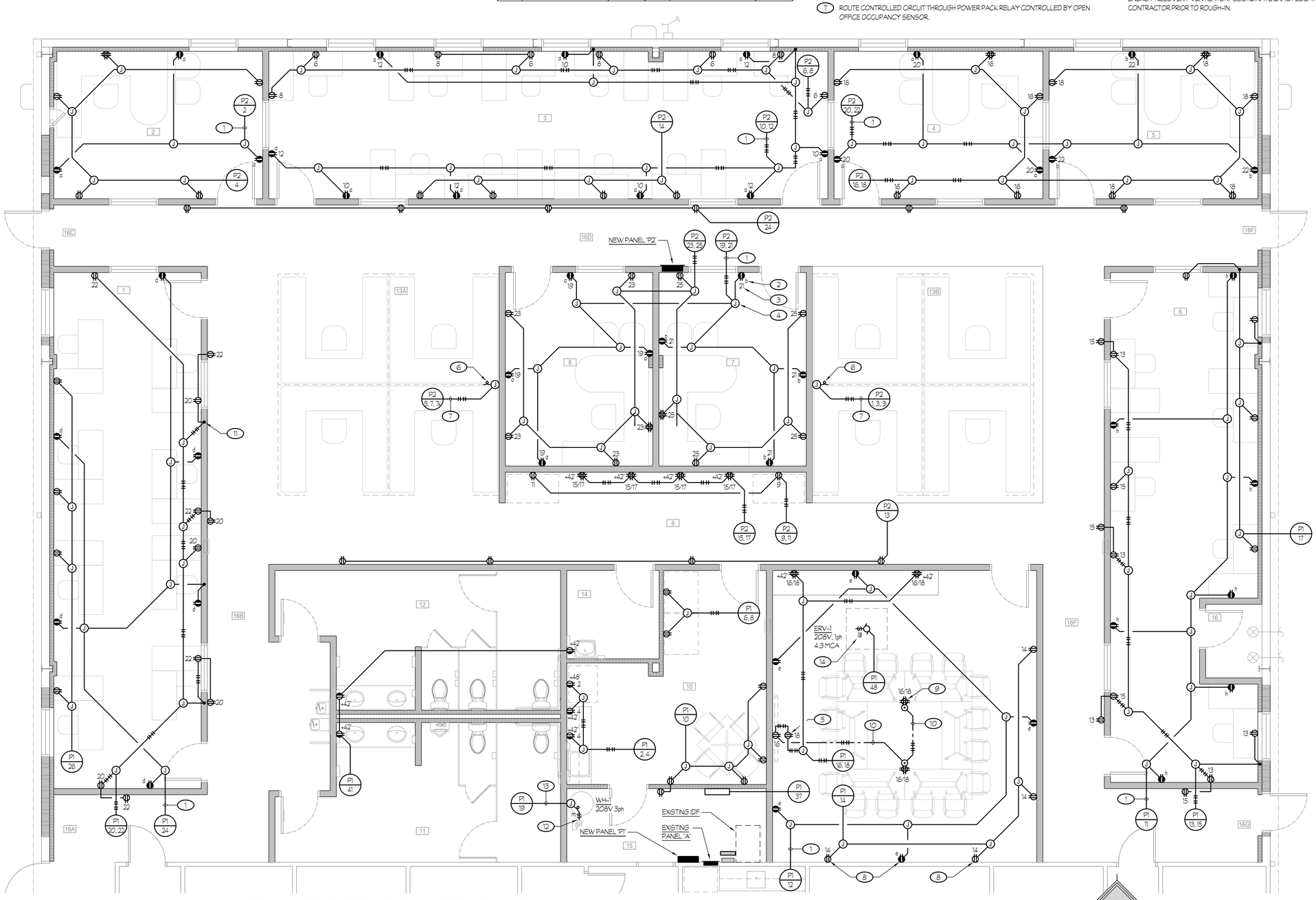
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APPROVALS

ROOM LEGEND					
#	ROOM NAME	CEILING HEIGHT	#	ROOM NAME	CEILING HEIGHT
1	LARGE OFFICE	+9'-0"	13A	OPEN OFFICE	+11'-0"
2	OFFICE	+9'-0"	13B	OPEN OFFICE	+11'-0"
3	LARGE OFFICE	+9'-0"	14	LACTATION	+9'-0"
4	OFFICE	+9'-0"	15	UTILITY	+9'-0"
5	OFFICE	+9'-0"	16	FIRE RISER	OPEN
6	LARGE OFFICE	+9'-0"	16A	HALLWAY	+10'-0"
7	OFFICE	+9'-0"	16B	HALLWAY	+10'-0"
8	OFFICE	+9'-0"	16C	HALLWAY	+10'-0"
9	CONFERENCE ROOM	+9'-0"	16D	HALLWAY	+10'-0"
10	BREAK ROOM	+9'-0"	16E	HALLWAY	+10'-0"
11	MEN	+9'-0"	16F	HALLWAY	+10'-0"
12	WOMEN	+9'-0"	16G	HALLWAY	+10'-0"

NOTES (THIS SHEET ONLY):

1. ROUTE CIRCUIT THROUGH RESPECTIVE ROOM RECEPTACLE RELAY PACK. SEE SHEET #E1.5 FOR POWER RELAY PACK LOCATION.
2. DENOTES CORRESPONDING POWER RELAY PACK THAT CONTROL ROOM DEVICES. SEE SHEET #E1.5 FOR CORRESPONDING NOMENCLATURE AND POWER RELAY PACK LOCATION.
3. NUMBER BY DEVICE DENOTES CIRCUIT DEVICE IS TO BE CONNECTED ON, TYPICAL.
4. DENOTES JUNCTION BOX IN ACCESSIBLE ATTIC SPACE. TYPICAL, U.O.N..
5. FLUSH MOUNT DUPLEX RECEPTACLE BEHIND THE TELEVISION AT +66" A.F.F.. VERIFY EXACT LOCATION PRIOR TO ROUGH-IN.
6. CONNECT POWER SECTION OF MODULAR FURNITURE. COORDINATE EXACT POINT OF CONNECTION WITH EQUIPMENT SUPPLIER PRIOR TO ROUGH-IN.
7. ROUTE CONTROLLED CIRCUIT THROUGH POWER PACK RELAY CONTROLLED BY OPEN OFFICE OCCUPANCY SENSOR.
8. CUT AND PATCH WALL AS REQUIRED TO FLUSH IN NEW JUNCTION BOX AND CONCEAL CONDUIT IN WALL AS SHOWN.
9. REFER TO DETAIL #5/E5.1 FOR FLOOR BOX REQUIREMENTS. COORDINATE EXACT LOCATION WITH GENERAL CONTRACTOR PRIOR TO ROUGH-IN. TYPICAL FOR FLOOR BOX LOCATIONS SHOWN.
10. SAWCUT AND PATCH EXISTING CONCRETE SLAB AS REQUIRED.
11. SYMBOL ⟵ DENOTES RUN CONDUIT DOWN INSIDE WALL.
12. PROVIDE MOTOR RATED DISCONNECT SWITCH AND CONNECT ELECTRIC WATER HEATER 'WH-1', 208V 3ph, AS REQUIRED.
13. 3/4"C - 3 #10 + 1 #10 GND.
14. PROVIDE A MOTOR RATED NON-FUSED DISCONNECT SWITCH AND MOUNT ONTO ENERGY RECOVERY VENTILATOR. COORDINATE EXACT LOCATION WITH MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN.



ENLARGED POWER PLAN

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

north

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REGISTERED PROFESSIONAL ENGINEER PETER K. KIRK No. E-18786 Exp. 6/30/27 ELECTRICAL STATE OF CALIFORNIA

LICENSED ARCHITECT JAMES R. MORRELL No. C-35128 EXPIRATION: 05-31-27 STATE OF CALIFORNIA

DATE: 07/21/2026

ADMIN SERVICES REMODEL AT
SANGER UNIFIED BUSINESS PARK 2

SANGER UNIFIED SCHOOL DISTRICT
1254 COMMERCE AVE, SANGER, CA 93657

Reviewed for Code Compliance
08/24/2026
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REVISIONS

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TITLE
ENLARGED POWER PLAN

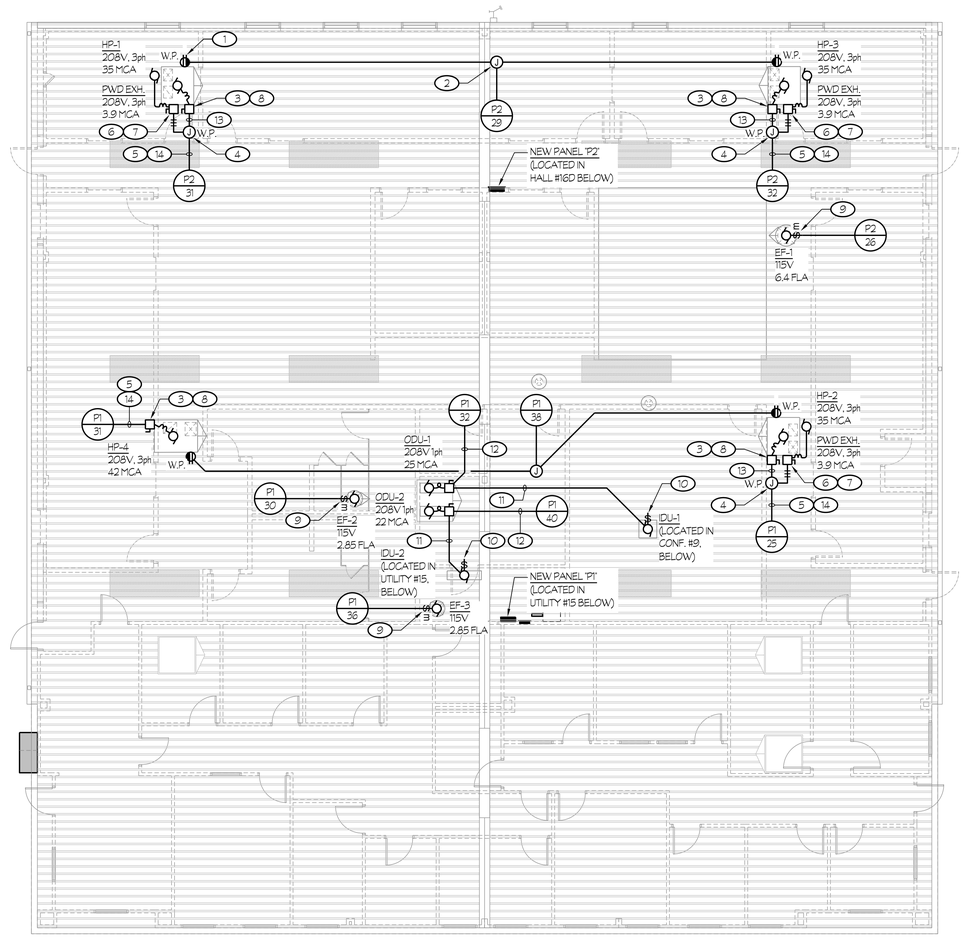
E1.2

PROJECT 25041

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NOTES (THIS SHEET ONLY):

1. PROVIDE G.F.C.I. DUPLEX RECEPTACLE INSIDE A WEATHERPROOF OUTLET BOX WITH LOCKABLE WEATHERPROOF 'WHILE-IN-USE' COVER (RED-DOT #OKSUV, OR EQUAL) AND MOUNT ONTO HVAC UNIT. COORDINATE EXACT LOCATION WITH MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN. TYPICAL OF 4.
2. MOUNT JUNCTION BOX IN ACCESSIBLE ATTIC SPACE BELOW, TYPICAL, U.O.N..
3. PROVIDE AND ENGRAVED NAMEPLATE: 'HP DISCONNECT'.
4. PROVIDE A NEW N3R SCREW COVER CAN (8' SQ. x 4' DP.) AND LOCATE AT WHERE THE BRANCH CIRCUIT ROUTES UP THRU THE ROOF.
5. TYPICAL AT ALL H.V.A.C. EQUIPMENT:
   ROUTE BRANCH CIRCUITING UP THRU OPENING OF ROOF CURB AND THEN THRU UNIT TO DISCONNECT SWITCH. PROVIDE LIQUIDTIGHT FLEXIBLE METALLIC CONDUIT INSIDE UNIT FOR ROUTING OF CONDUCTORS.
6. PROVIDE A 30A, 250V, 3-POLE, HEAVY-DUTY RATED, FUSED SAFETY SWITCH AND MOUNT ONTO H.V.A.C. UNIT. PROVIDE FUSES PER MANUFACTURER RECOMMENDATIONS. COORDINATE EXACT LOCATION WITH MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN.
7. PROVIDE ENGRAVED NAMEPLATE: 'POWERED EXHAUST'.
8. PROVIDE A 60A, 250V, 3-POLE, HEAVY-DUTY RATED, FUSED SAFETY SWITCH AND MOUNT ONTO H.V.A.C. UNIT. PROVIDE FUSES PER MANUFACTURER RECOMMENDATIONS. COORDINATE EXACT LOCATION WITH MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN.
9. PROVIDE A MOTOR RATED NON-FUSED DISCONNECT SWITCH AND MOUNT ONTO EXHAUST FAN. COORDINATE EXACT LOCATION WITH MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN.
10. PROVIDE A 3-POLE, SINGLE-THROW MANUAL MOTOR STARTING SWITCH, WITHOUT OVERLOAD PROTECTION, (LEVITON #MS303) AS A DISCONNECTING MEANS.
11. 3/4"C - 4 #14.
12. 3/4"C - 2 #10 + 1 #10 GND.
13. 3/4"C - 3 #10 + 1 #10 GND.
14. 1"C - 3 #8 + 1 #8 GND.



ROOF ELECTRICAL PLAN

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

north

APPROVALS

LICENSED ARCHITECT
JAMES R. MORRELL
No. C-32128
EXP. 05-31-27
STATE OF CALIFORNIA

DATE: 07/21/2026

ADMIN SERVICES REMODEL AT
SANGER UNIFIED BUSINESS PARK 2

SANGER UNIFIED SCHOOL DISTRICT
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TITLE
ROOF
ELECTRICAL PLANS

E1.3

PROJECT 25041

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Electrical Consultants
131 S. Dunworth - (559)733-2671
Visalia, California 93292-6705

REGISTERED PROFESSIONAL ENGINEER
KIRK EASTHAM
No. E-18786
Exp. 6/30/27
ELECTRICAL
STATE OF CALIFORNIA

Z:\Drafing\Jobs\RSES\SCHOOLS\Sanger\25041 Admin Service Remodel\E1.3.dwg DATE SAVED: 07/14/26 BY: Nicole DATE PLOTTED: 07/14/26 JOB # 26-011-NC

DEMOLITION NOTES (THIS SHEET ONLY):

(D1) TYPICAL OF ALL EXISTING LIGHT FIXTURES, KEYNOTED WITH SUBSCRIPT 'R' : DISCONNECT AND REMOVE EXISTING LIGHT FIXTURE. REMOVE EXISTING 'IDLE' JUNCTION/OUTLET BOXES, CONDUIT AND CONDUCTORS TO CLEAR WAY FOR NEW CONSTRUCTION.

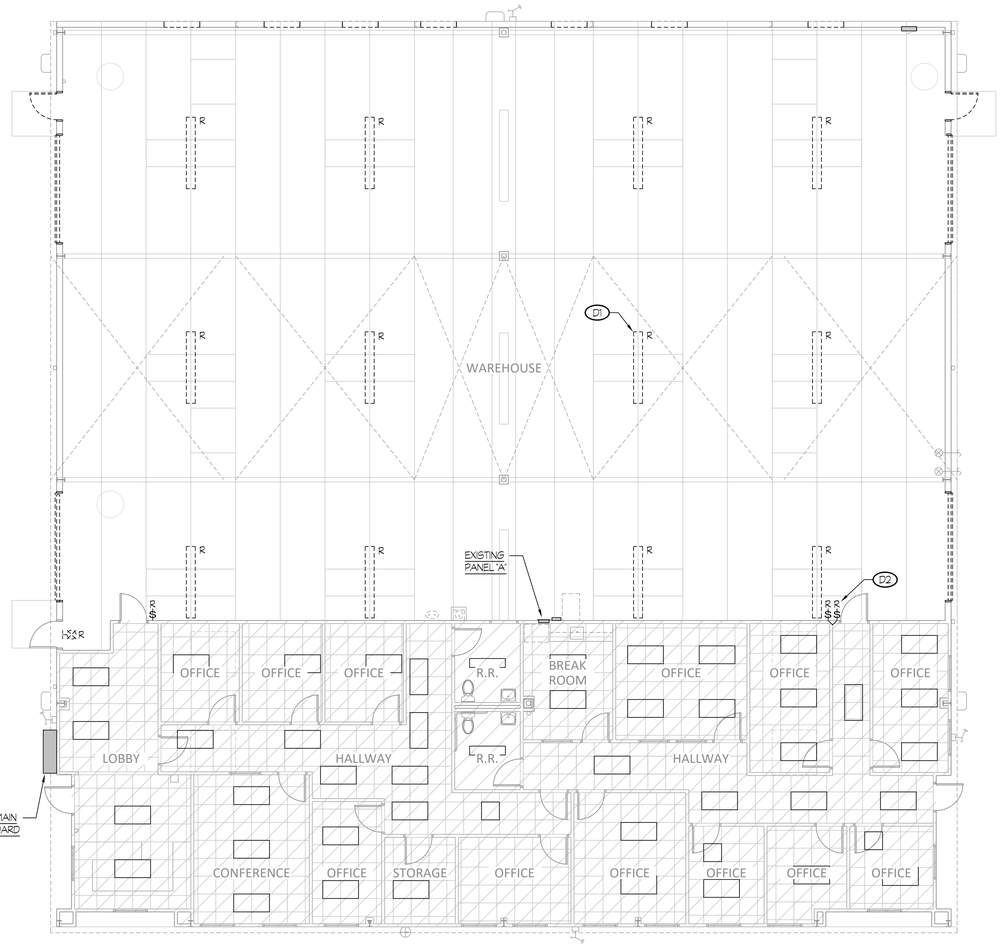
(D2) TYPICAL OF ALL EXISTING LIGHT SWITCHES KEYNOTED WITH SUBSCRIPT 'R' : DISCONNECT AND REMOVE EXISTING LIGHT SWITCH. AT EXISTING STUD WALLS, REMOVE OUTLET BOX, CONDUIT AND CONDUCTORS AS REQUIRED TO CLEAR WAY FOR NEW CONSTRUCTION. ANY UNDERGROUND CONDUITS SHALL BE REMOVED TO BELOW THE EXISTING FINISH FLOOR.

ROOM LEGEND					
#	ROOM NAME	CEILING HEIGHT	#	ROOM NAME	CEILING HEIGHT
1	LARGE OFFICE	+9'-0"	13A	OPEN OFFICE	+11'-0"
2	OFFICE	+9'-0"	13B	OPEN OFFICE	+11'-0"
3	LARGE OFFICE	+9'-0"	14	LACTATION	+9'-0"
4	OFFICE	+9'-0"	15	UTILITY	+9'-0"
5	OFFICE	+9'-0"	16	FIRE RISER	OPEN
6	LARGE OFFICE	+9'-0"	16A	HALLWAY	+10'-0"
7	OFFICE	+9'-0"	16B	HALLWAY	+10'-0"
8	OFFICE	+9'-0"	16C	HALLWAY	+10'-0"
9	CONFERENCE ROOM	+9'-0"	16D	HALLWAY	+10'-0"
10	BREAK ROOM	+9'-0"	16E	HALLWAY	+10'-0"
11	MEN	+9'-0"	16F	HALLWAY	+10'-0"
12	WOMEN	+9'-0"	16G	HALLWAY	+10'-0"

NOTES (THIS SHEET ONLY):

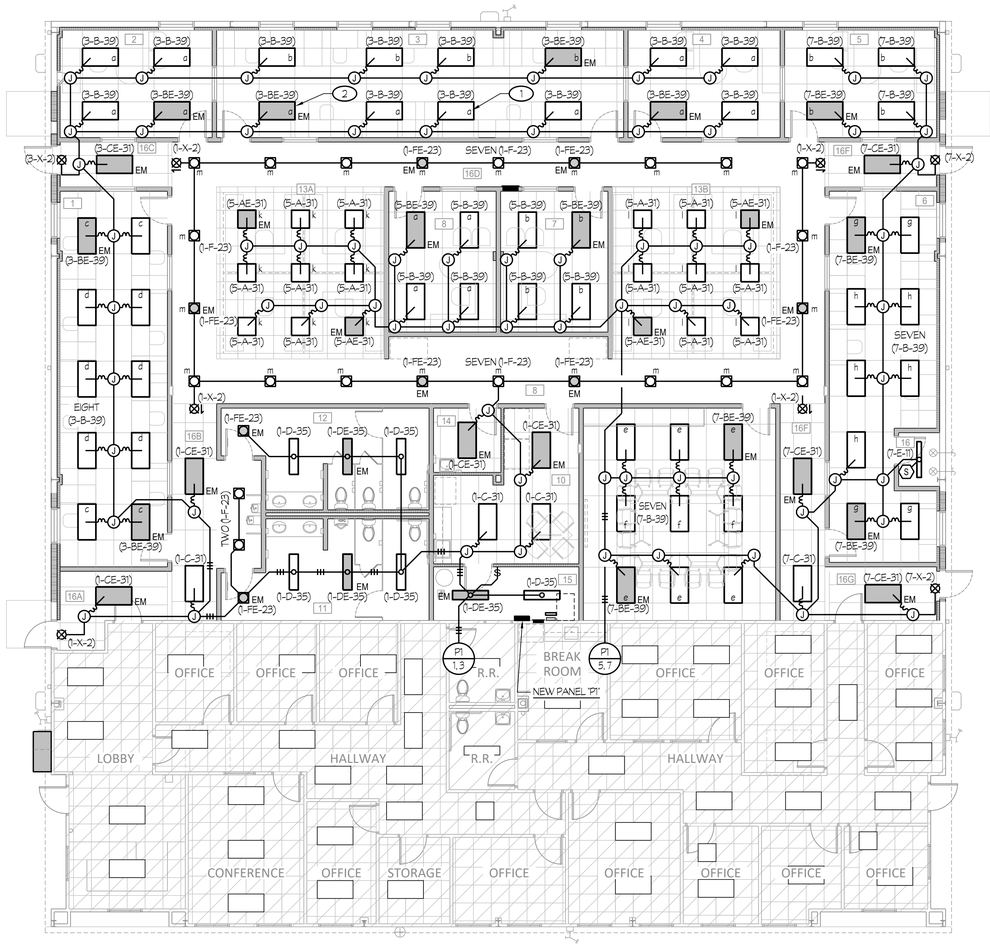
(1) LOWER CASE LETTER DENOTES CONTROLLING SWITCH, TYPICAL.

(2) SYMBOL EM DENOTES L.E.D. LIGHT FIXTURE EQUIPPED WITH AN EMERGENCY BATTERY PACK. CONNECT PER DETAIL #4/E5.2.



DEMOLITION LIGHTING PLAN

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



LIGHTING PLAN

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

APPROVALS

LICENSED ARCHITECT JAMES R. MORRELL No. C-32128 EXP. 05-31-27 STATE OF CALIFORNIA

DATE: 07/21/2026

ADMIN SERVICES REMODEL AT SANGER UNIFIED BUSINESS PARK 2

SANGER UNIFIED SCHOOL DISTRICT
1254 COMMERCE AVE, SANGER, CA 93657

Reviewed for Code Compliance
08/24/2025
CSG CONSULTANTS, INC.

REVISIONS

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TITLE
LIGHTING PLANS

E1.4

PROJECT 25041

Rose Sing Eastham & Associates
Electrical Consultants
131 S. Dunworth – (559)733-2671
Visalia, California 93292-6705

REGISTERED PROFESSIONAL ENGINEER KAREN K. KIRK No. E-18786 Exp. 6/30/27 ELECTRICAL STATE OF CALIFORNIA

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#	ROOM NAME	CEILING HEIGHT	#	ROOM NAME	CEILING HEIGHT
1	LARGE OFFICE	+9'-0"	13A	OPEN OFFICE	+11'-0"
2	OFFICE	+9'-0"	13B	OPEN OFFICE	+11'-0"
3	LARGE OFFICE	+9'-0"	14	LACTATION	+9'-0"
4	OFFICE	+9'-0"	15	UTILITY	+9'-0"
5	OFFICE	+9'-0"	16	FIRE RISER	OPEN
6	LARGE OFFICE	+9'-0"	16A	HALLWAY	+10'-0"
7	OFFICE	+9'-0"	16B	HALLWAY	+10'-0"
8	OFFICE	+9'-0"	16C	HALLWAY	+10'-0"
9	CONFERENCE ROOM	+9'-0"	16D	HALLWAY	+10'-0"
10	BREAK ROOM	+9'-0"	16E	HALLWAY	+10'-0"
11	MEN	+9'-0"	16F	HALLWAY	+10'-0"
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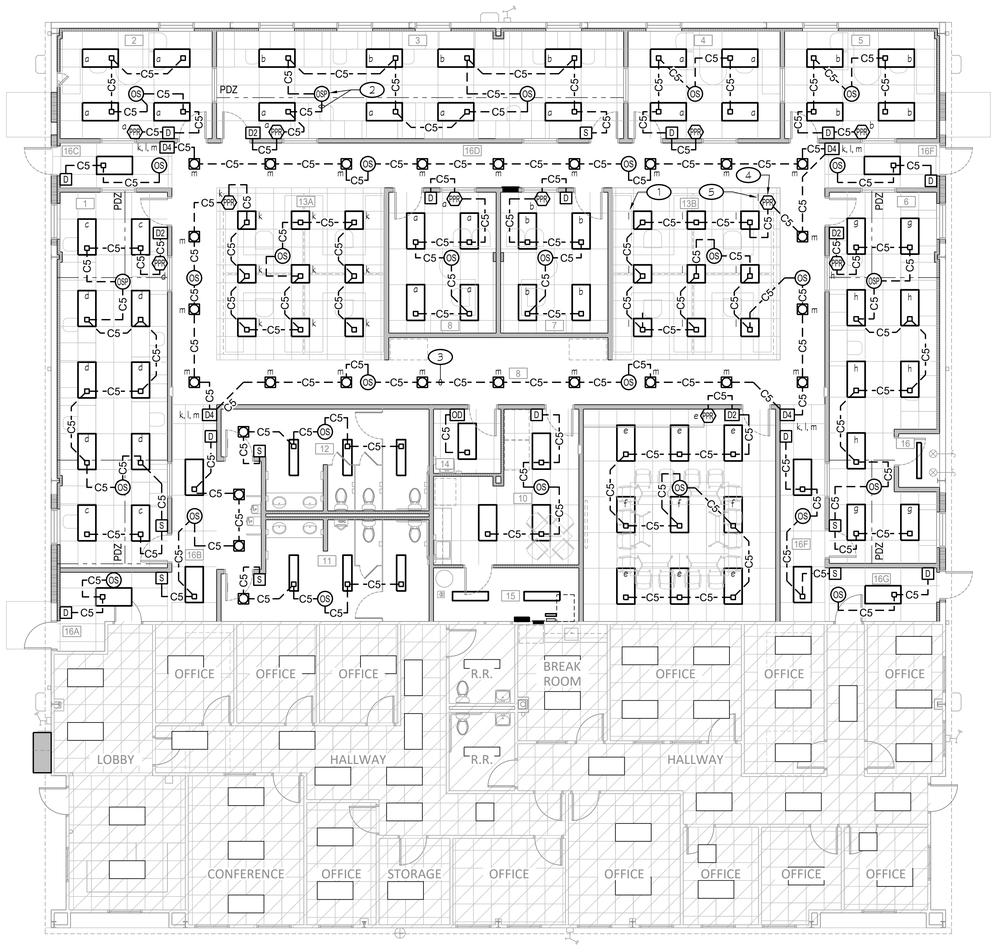
1. LOWER CASE LETTER DENOTES CONTROLLING SWITCH, TYPICAL.
2. REFER TO DETAIL #5/E5.2, FOR LOW VOLTAGE DEVICES AND LIGHTING CONTROL WIRING REQUIREMENTS, TYPICAL.
3. – – – C5 – – – DENOTES CAT. 5e CABLE. ELECTRICAL CONTRACTOR MAY USE PRETERMINATED CAT. 5e CABLING OR PROVIDE CAT. 5e CABLING, MODULAR JACKS ON EACH END AND TERMINATE THE MODULAR JACKS USING THE TIA/EIA-568-B.2 PIN-PAIR SPECIFICATION. ELECTRICAL CONTRACTOR SHALL PROVIDE CONDUIT AND OUTLET BOXES IN WALLS FOR ROUTING OF CABLING. CABLE MAY BE ROUTED IN FREE-AIR, WHEN LOCATED IN ACCESSIBLE ATTIC SPACE ABOVE T-BAR CEILINGS. AT GYPBOARD CEILINGS, PROVIDE A DOUBLE-GANG LOW VOLTAGE MOUNTING PLATE BRACKET, CADDY #MPLS2 OR EQUAL, AT THE RJ-45 JACKS (EMBEDDED CONTROLS) OF THE SURFACE MOUNTED LIGHT FIXTURES FOR PASSAGE OF CAT. 5e CABLING.
4. PROVIDE POWER RELAY PACK PER DETAIL #6/E5.2, MOUNT ABOVE T-BAR CEILING IN ACCESSIBLE ATTIC SPACE OR HIGH ON WALL ABOVE LIGHT SWITCH. ROUTE 120V RECEPTACLE POWER THROUGH CONTACTS. SEE KEYNOTE #1 ON SHEET #E1.2, FOR ADDITIONAL INFORMATION. TYPICAL, U.O.N..
5. DENOTES POWER RELAY PACK THAT CONTROL ROOM DEVICES. SEE CORRESPONDING NOMENCLATURE FOR CORRESPONDING RECEPTACLE POWER CIRCUIT ON POWER PLAN. TYPICAL, U.O.N..
6. TYPICAL OF NETWORK INTERFACE BRIDGE (SYMBOL BRG): LOCATE THE NETWORK INTERFACE BRIDGE IN THE ACCESSIBLE ATTIC SPACE ABOVE THE T-BAR CEILING. SURFACE MOUNT ON THE WALL AT A MINIMUM OF 12" ABOVE THE T-BAR CEILING. RUN 1'-2" C - 2 #12 TO NEAREST 'UNSWITCHED' LIGHTING CIRCUIT. RUN CAT. 5e CABLE BETWEEN ADJACENT NETWORK INTERFACE BRIDGES, WHERE APPLICABLE. REFER TO DETAIL #8/E5.2 FOR ADDITIONAL INFORMATION AND REQUIREMENTS.
7. SURFACE MOUNT THE NETWORK LIGHTING CONTROLLER 'NLC' AT +42" A.F.F.. LOCATE THE GRAPHIC WALLPOD ADJACENT TO THE NETWORK CONTROLLER. RUN 1'-0" C - ONE CAT. 5e PATCH CABLE, LENGTH AS REQUIRED, FROM THE 'NLC' TO THE PATCH PANEL IN THE MAIN CROSS-CONNECT LOCATED IN THE UTILITY ROOM. REFER TO DETAIL #7/E5.2 FOR ADDITIONAL INFORMATION AND REQUIREMENTS.



LIGHTING CONTROLS PLAN - AUTOMATED DEMAND RESPONSE

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

north



LIGHTING CONTROLS PLAN

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

north

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REGISTERED PROFESSIONAL ENGINEER – KIRK J. KIRK – No. E-18786 – Exp. 6/30/27 – ELECTRICAL – STATE OF CALIFORNIA

APPROVALS

LICENSED ARCHITECT – JAMES R. MORRELL – No. C-32128 – EXP. 05-31-27 – STATE OF CALIFORNIA

DATE: 07/21/2026

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TITLE
LIGHTING CONTROLS PLANS

E1.5

PROJECT 25041

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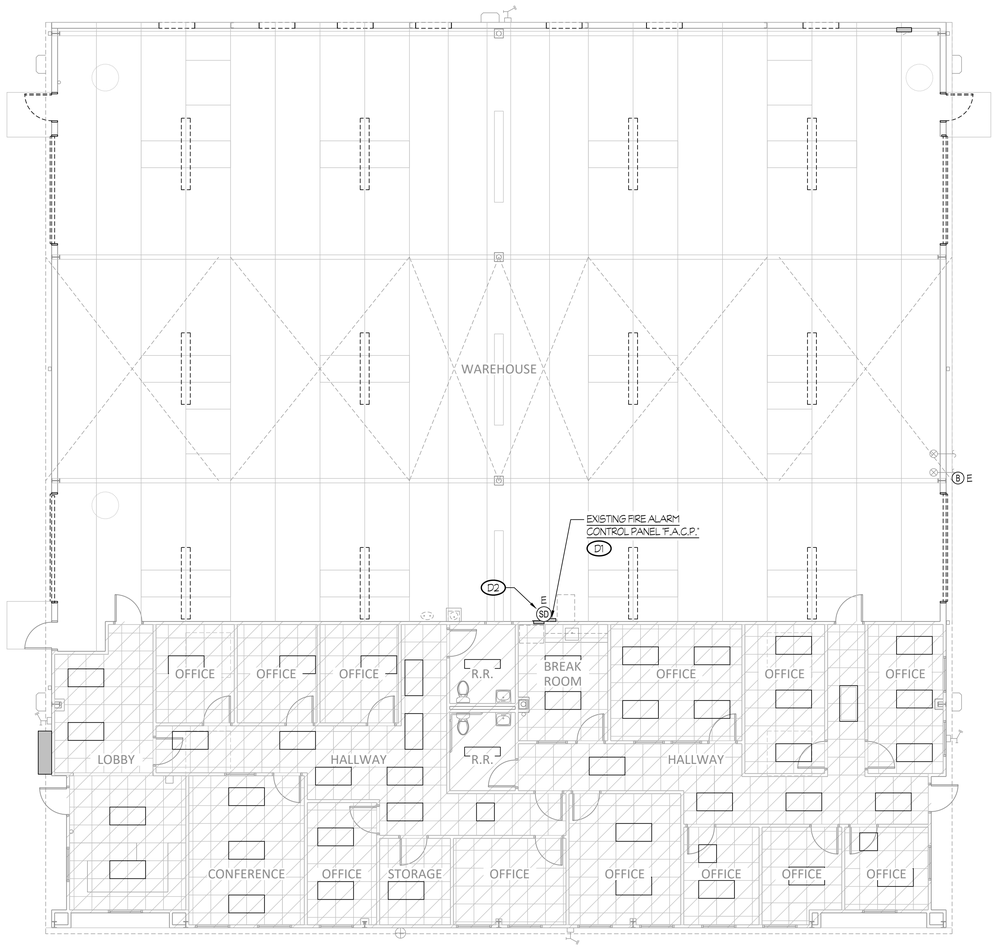
(D1) EXISTING FIRE ALARM CONTROL PANEL TO REMAIN. PROTECT IN PLACE.

(D2) EXISTING WALL MOUNTED SMOKE DETECTOR TO REMAIN. PROTECT IN PLACE.

ROOM LEGEND					
#	ROOM NAME	CEILING HEIGHT	#	ROOM NAME	CEILING HEIGHT
1	LARGE OFFICE	+9'-0"	13A	OPEN OFFICE	+11'-0"
2	OFFICE	+9'-0"	13B	OPEN OFFICE	+11'-0"
3	LARGE OFFICE	+9'-0"	14	LACTATION	+9'-0"
4	OFFICE	+9'-0"	15	UTILITY	+9'-0"
5	OFFICE	+9'-0"	16	FIRE RISER	OPEN
6	LARGE OFFICE	+9'-0"	16A	HALLWAY	+10'-0"
7	OFFICE	+9'-0"	16B	HALLWAY	+10'-0"
8	OFFICE	+9'-0"	16C	HALLWAY	+10'-0"
9	CONFERENCE ROOM	+9'-0"	16D	HALLWAY	+10'-0"
10	BREAK ROOM	+9'-0"	16E	HALLWAY	+10'-0"
11	MEN	+9'-0"	16F	HALLWAY	+10'-0"
12	WOMEN	+9'-0"	16G	HALLWAY	+10'-0"

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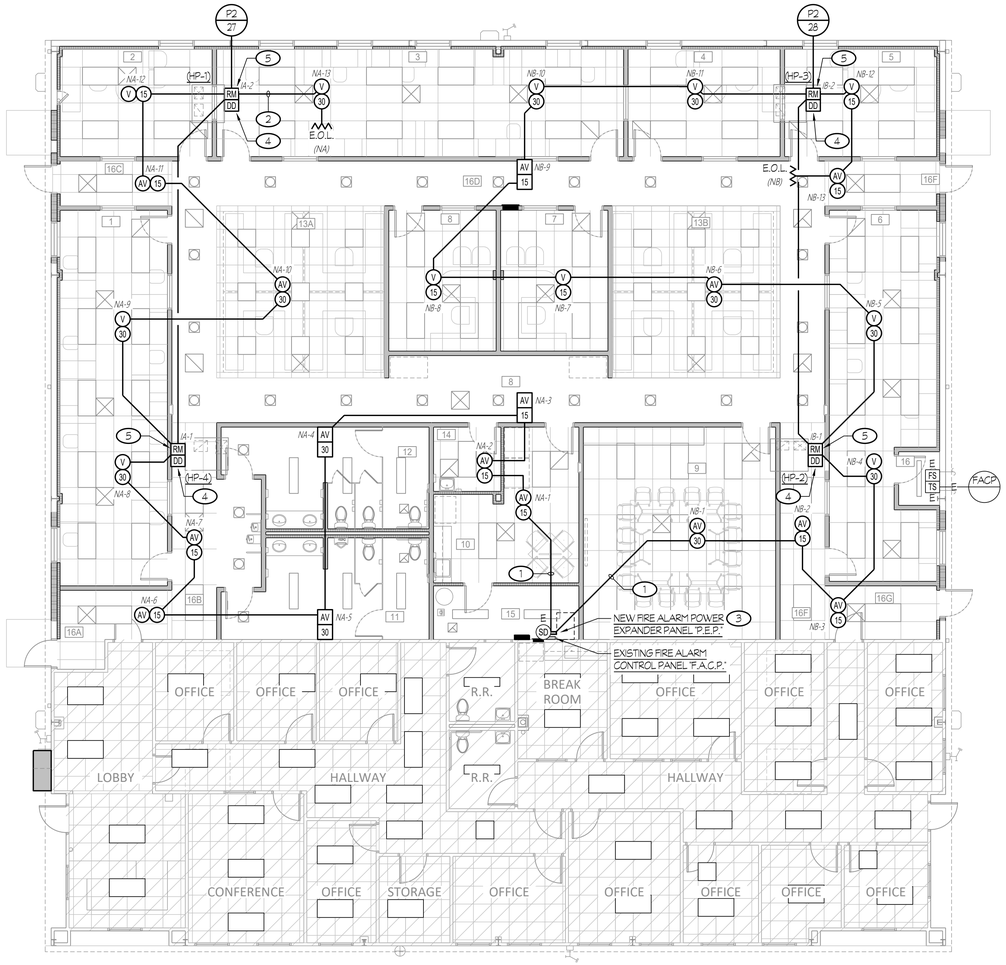
1. TYPICAL OF FIRE ALARM CIRCUITING BETWEEN FIRE ALARM DEVICES, U.O.N.: 3/4"C - TWO 'FA' CABLES, 2 #12.
2. 1/2"C - 2 #12.
3. INSTALL EXPANSION PANEL BELOW EXISTING FIRE ALARM CONTROL PANEL PER DETAIL #3/E2.2.
4. CONNECT 120V DUCT SMOKE DETECTOR. COORDINATE EXACT LOCATION WITH MECHANICAL CONTRACTOR.
5. PROVIDE A RELAY MODULE FOR 'UNIT SHUTDOWN' OF RESPECTIVE AC UNIT. FLUSH MOUNT IN T-BAR CEILING (OR GYPBOARD CEILING), U.O.N.. COORDINATE WITH MECHANICAL CONTRACTOR TO PROVIDE THE INTERCONNECTION CONDUIT/ CONDUCTORS AND ANY ADDITIONAL REQUIREMENTS . PROVIDE AN ENGRAVED NAMEPLATE: 'UNIT SHUTDOWN, HP-_'.



DEMOLITION FIRE ALARM PLAN

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

north



FIRE ALARM PLAN

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

north

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APPROVALS

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TITLE
FIRE ALARM PLANS

E1.6

PROJECT 25041

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FIRE ALARM SYSTEM SEQUENCE OF OPERATIONS

RESULT OF OPERATION ⇩	TYPE OF INITIATION		
	MANUAL PULL STATION	LOSS OF POWER	SHORT CIRCUIT/ GROUND FAULT
ANNUNCIATE ALARM AT FIRE ALARM CONTROL PANEL	YES	———	———
ANNUNCIATE TROUBLE AT FIRE ALARM CONTROL PANEL	———	YES	YES
ACTIVATE ALL AUDIBLE AND VISUAL ALARM SIGNALS	YES	———	———
TRANSFER TO BATTERY BACK-UP	———	YES	———
(1) CLOSE SMOKE/FIRE DAMPER	———	YES	———
ANNUNCIATE AT 24 HR. ATTENDED LOCATION	YES	YES	———
CENTRAL STATION FOR MONITORING (ALARM)	YES	———	———
CENTRAL STATION FOR MONITORING (TROUBLE)	———	YES	———

(1) THIS OPERATION SHALL BE ACCOMPLISHED BY UTILIZING THE TOTAL SMOKE COVERAGE SYSTEM TO ACTIVATE THE RESPECTIVE RELAY MODULE. THE CONTACTS SHALL BE PROGRAMMED TO 'OPEN', THUS DE-ENERGIZING THE 120V POWER TO THE ACTUATOR OF THE SMOKE/FIRE DAMPER OR 'OPENING' THE H.V.A.C. CONTROL CIRCUIT.

FIRE ALARM SYSTEM GENERAL NOTES

1. APPLICABLE STANDARD 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 TEST SHALL INCLUDE ALL INFORMATION PER NFPA 72 14.6.2.4 AND FIGURE 7.8.2(6) AND READ OUT VERIFICATION FORM FROM CENTER STATION.
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 MOUNTED AT 90" MINIMUM AND 100" MAXIMUM FROM FINISHED FLOOR AND NO CLOSER THAN 6" TO A HORIZONTAL STRUCTURE.
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 FOR A FIRE ALARM SIGNAL. AUDIBLE DEVICES SHALL ALSO SOUND A TEMPORAL CODE 4 PATTERN FOR A CARBON MONOXIDE SIGNAL. THE EXISTING FIRE ALARM CONTROL PANEL WILL PRODUCE/GENERATE BOTH SIGNALS.
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 CANDELA. VISIBLE DEVICES WITHIN 55' 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 CEILING, UNDER FLOORS AND IN WALLS IN A NEAT AND PROTECTED MANNER AS INDICATED ON DESIGN DOCUMENTS. EXPOSED CIRCUITS ARE ONLY PERMITTED WHEN NOTED AS EXPOSED ON DESIGN DOCUMENTS.
19. 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.
20. 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 PANELS/EXTENDERS.
21. THE INSTALLING CONTRACTOR SHALL PROVIDE A COMPLETED 'SYSTEM RECORD OF COMPLETION' PER NFPA 72, FIGURE 17.8.2.
22. FIRE ALARM CONTROL PANELS AND REMOTE ANNUNCIATORS SHALL BE INSTALLED WITH THEIR BOTTOMS MOUNTED AT 48" ABOVE THE FINISHED FLOOR.
23. 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.
24. THE INSTALLING CONTRACTOR SHALL PROVIDE SYSTEM PROGRAMMING FOR SUPERVISORY MONITORING PER CBC SECTION 907.6.2.
25. SUPERVISORY MONITORING SHALL BE TESTED AND VERIFIED AS SENDING CORRECT SIGNALS IN CONJUNCTION WITH FINAL ACCEPTANCE TEST.
26. OWNER SHALL BE RESPONSIBLE FOR ESTABLISHING A FIRE SYSTEM MONITORING CONTRACT OR PROVISIONS.
27. PROVIDE AN ENGRAVED NAMEPLATE INDICATING THE D.S.A. APPLICATION NUMBER, FILE NUMBER AND DATE OF INSTALLATION AT EACH FIRE ALARM CONTROL PANEL 'F.A.C.P.', AT EACH FIRE ALARM TRANSPONDER 'F.A.T.' AND AT EACH FIRE ALARM POWER EXPANDER PANEL 'P.E.P.'.
    - A. THE PRIMARY POWER SUPPLY TO EACH FIRE ALARM CONTROL PANEL 'F.A.C.P.', TO EACH FIRE ALARM TRANSPONDER 'F.A.T.' AND TO EACH FIRE ALARM POWER EXPANDER PANEL 'P.E.P.' SHALL BE IN ACCORDANCE WITH NFPA 72 10.6.5 AND AS FOLLOWS:
        - a) THE CIRCUIT BREAKER FEEDING THE RESPECTIVE PANEL SHALL BE LOCATED IN A LOCKED ROOM OR BEHIND A LOCKABLE DOOR AND BE READILY ACCESSIBLE TO AUTHORIZED PERSONNEL ONLY.
        - b) THE CIRCUIT BREAKER SHALL BE EQUIPPED WITH A LOCK-ON ACCESSORY. PAINT LOCK-ON ACCESSORY 'RED' IN COLOR.
        - c) THE CIRCUIT BREAKER SHALL HAVE AN ENGRAVED NAMEPLATE THAT IDENTIFIES IT AS A 'FIRE ALARM CIRCUIT'. THIS ENGRAVED NAMEPLATE SHALL HAVE WHITE LETTERS ON A RED BACKGROUND. MOUNT ONTO THE INTERIOR TRIM AND LOCATE ADJACENT TO CIRCUIT BREAKER WHERE POSSIBLE.
        - d) THE LOCATION OF THE CIRCUIT DISCONNECTING MEANS SHALL BE PERMANENTLY IDENTIFIED AT EACH FIRE ALARM CONTROL PANEL 'F.A.C.P.', AT EACH FIRE ALARM TRANSPONDER 'F.A.T.' AND AT EACH FIRE ALARM POWER EXPANDER PANEL 'P.E.P.'. PROVIDE AN ENGRAVED NAMEPLATE (WHITE LETTERS ON A RED BACKGROUND) WHICH INDICATES THIS.
    - B. ALL ENGRAVED NAMEPLATES SHALL BE ATTACHED TO THE FRONT OF THE RESPECTIVE ENCLOSURE WITH SCREWS OR RIVETS.
28. PROVIDE A COPY OF THE BATTERY CALCULATION AT EACH FIRE ALARM CONTROL PANEL 'F.A.C.P.', AT EACH FIRE ALARM TRANSPONDER 'F.A.T.' AND AT EACH FIRE ALARM POWER EXPANDER PANEL 'P.E.P.'. BATTERY CALCULATION SHALL CONTAIN INFORMATION AS NOTED ON SCHEDULES AND BE PLASTIC LAMINATED. MOUNT ONTO INSIDE FACE OF DOOR.

FIRE ALARM SYSTEM EQUIPMENT SPECIFICATIONS

	SYMBOL	DESCRIPTION	MODEL #	CSFM LISTING #	BACKBOX REQUIREMENTS (B)	MOUNTING HEIGHT (TO CENTER U.O.N.)
	FACP E	EXISTING FIRE ALARM CONTROL PANEL 'F.A.C.P.'	RESIDEO #VISTA-32FB	7165-1645-0123	———	———
	PEP	FIRE ALARM POWER EXPANDER PANEL 'P.E.P.'	HONEYWELL #HPF-PS	7315-1637:0505	4" SQ. x 2 1/8" DP. OUTLET BOX	PER DETAIL #3/E2.2
	RM	ADDRESSABLE RELAY MODULE	RESIDEO #410ISN	7300-1645:0147	4" SQ. x 2 1/8" DP. OUTLET BOX	———
	AV 15 30	HORN STROBE, 15 CANDELA WALL MOUNTED	SYSTEM SENSOR #P2RL	7135-1653:0503	4" SQ. x 2 1/8" DP. OUTLET BOX	PER DETAIL #2/E2.2
	V 15 30	VISUAL STROBE, CEILING MOUNTED (CANDELA RATING AS NOTED)	SYSTEM SENSOR #SCRL	7125-1653:0504	4" SQ. x 2 1/8" DP. OUTLET BOX	PER DETAIL #2/E2.2
	AV 15 30	HORN STROBE, CEILING MOUNTED (CANDELA RATING AS NOTED)	SYSTEM SENSOR #PC2RL	7135-1653:0503	4" SQ. x 2 1/8" DP. OUTLET BOX WITH 1 1/2" DP. BOX EXTENSION	PER DETAIL #2/E2.2
(A)	E.O.L.	END OF LINE RESISTOR	———	———	———	———
	'FA' CABLE	ADDRESSABLE FIRE ALARM CABLE (INDOORS)	WEST PENN #D990	7161-0859:0101	———	———
	'SFA' CABLE	ADDRESSABLE FIRE ALARM CABLE (OUTDOORS)	WEST PENN #AQ225	7161-0859:0101	———	———
	'RAP' CABLE	24 VDC POWER CABLE	WEST PENN #9945	7161-0859:0101	———	———

NOTES (FIRE ALARM SYSTEM EQUIPMENT SPECIFICATIONS):

(A) END OF LINE RESISTORS FOR CONVENTIONAL DEVICES CONNECTED TO ADDRESSABLE MONITOR MODULE DEVICES AND/OR ADDRESSABLE CONTROL MODULES SHALL BE 3.9K OHM, 1/2 WATT.

(B) VERIFY BACKBOX REQUIREMENTS WITH FIRE ALARM SYSTEM EQUIPMENT SUPPLIER PRIOR TO ROUGH-IN.

VOLTAGE DROP CALCULATIONS (OHM'S LAW)

VOLTAGE DROP = 2 (DC RESISTANCE AT 75°C FROM TABLE 8, C.E.C.) (LENGTH OF CIRCUIT / 1000) (CURRENT I)

PERCENT VOLTAGE DROP = VOLTAGE DROP / NOMINAL VOLTAGE x 100

1. NOTIFICATION APPLIANCE CIRCUIT 'NA':

AV 15 : 1 x 0.054 A = 0.054 A

AV 30 : 2 x 0.074 A = 0.148 A

V 15 : 2 x 0.041 A = 0.082 A

V 30 : 3 x 0.063 A = 0.189 A

AV 15 : 5 x 0.071 A = 0.355 A

AV 30 : 1 x 0.090 A = 0.090 A

0.864 A

VOLTAGE DROP = 2 (1.98) (240 / 1000) (0.918) = 0.87 V.D.

PERCENT VOLTAGE DROP = 0.87 / 24 x 100 = 3.6 %

2. NOTIFICATION APPLIANCE CIRCUIT 'NB':

AV 15 : 1 x 0.054 A = 0.054 A

V 15 : 4 x 0.041 A = 0.164 A

V 30 : 3 x 0.063 A = 0.189 A

AV 15 : 3 x 0.071 A = 0.213 A

AV 30 : 2 x 0.090 A = 0.180 A

0.800 A

VOLTAGE DROP = 2 (1.98) (220 / 1000) (0.800) = 0.70 V.D.

PERCENT VOLTAGE DROP = 0.70 / 24 x 100 = 2.9 %

FIRE ALARM LEVEL OF AUDIBILITY

ALARM INDICATING DEVICES OF A FIRE ALARM SYSTEM INTENDED TO ALERT ALL OCCUPANTS SHALL BE SO LOCATED AND UNOBSTRUCTED AS TO CAUSE A LEVEL OF AUDIBILITY OF NOT LESS THAN 15db ABOVE AMBIENT NOISE LEVELS MEASURED FOUR FEET ABOVE THE FLOOR INSIDE BUILDING.

AMBIENT NOISE LEVELS SHALL BE CONSTRUED TO MEAN THAT WHICH CAN NORMALLY BE EXPECTED TO EXIST WHEN THE FACILITY, BUILDING, ROOM OR AREA IS FUNCTIONING UNDER NORMAL OPERATIVE OR WORKING CONDITIONS.

THE FIRE ALARM SIGNAL SHALL COMPLY WITH THE CALIFORNIA EDUCATION CODE, SECTIONS 32000 AND 32004, AND BE A TEMPORAL PATTERN, CODE 3 AND THEN FOLLOWED BY ANY VOICE MESSAGES.

SCOPE OF WORK

1. PROVIDE A NEW AUTOMATIC FIRE ALARM SYSTEM WITH SUPPLEMENTAL MANUAL FIRE DETECTION.
2. PROVIDE A FIRE ALARM CONTROL PANEL, FIRE ALARM POWER EXPANDER PANEL, ADDRESSABLE INITIATION DEVICES, NOTIFICATION APPLIANCES, CONDUIT, CABLING AND CONDUCTORS AS SHOWN ON THE DRAWINGS.

FIRE ALARM MONITORING NOTE

AUTOMATIC FIRE ALARM SYSTEMS SHALL TRANSMIT THE ALARM, SUPERVISORY AND TROUBLE SIGNALS TO AN APPROVED SUPERVISING STATION IN ACCORDANCE WITH NFPA 72. THE SUPERVISING STATION SHALL BE LISTED AS EITHER UUFX (CENTRAL STATION) OR UUJS (REMOTE AND PROPRIETARY) BY UNDERWRITERS LABORATORY (UL) OR SHALL COMPLY WITH THE REQUIREMENTS OF STANDARD FM 3011. SUPERVISION OF SYSTEM AND LEASED TELEPHONE LINES SHALL BE ARRANGED BY OWNER.

FIRE ALARM RECORD DOCUMENTS CABINET NFPA 72, 7.7.2

- EVERY NEW FIRE ALARM SYSTEM SHALL PROVIDE A DOCUMENTATION CABINET, INSTALLED AT THE SYSTEM CONTROL PANEL OR OTHER APPROVED LOCATION.
- THE DOCUMENTATION CABINET SHALL BE PROMINENTLY LABELED, 'SYSTEM RECORD DOCUMENTS'.
- ALL RECORD AND TESTING DOCUMENTATION SHALL BE STORED IN THE CABINET.
- CONTENTS SHALL BE ACCESSIBLE BY AUTHORIZED PERSONNEL ONLY.
- WHERE CABINET IS INSTALLED IN A LOCATION OTHER THAN THE SYSTEM CONTROL UNIT, ITS LOCATION SHALL BE IDENTIFIED AT THE SYSTEM CONTROL UNIT.

SYSTEM DOCUMENTS AS APPLICABLE:

- RECORD DRAWINGS/AS-BUILTS.
- EQUIPMENT CUT SHEETS AND CA SFM LISTINGS.
- ALTERNATIVE MEANS AND METHODS.
- PERFORMANCE BASED DESIGN DOCUMENTATION (NFPA 72, 7.3.7).
- SYSTEM RECORD OF COMPLETION AND ANY SUPPLEMENTAL INSPECTION AND TESTING DOCUMENTATION (NFPA 72, 7.8.2).
- EMERGENCY RESPONSE PLAN (NFPA 72, 7.3.8.).
- EVALUATION DOCUMENTATION (NFPA 72, 7.3.9.).
- RISK ANALYSIS DOCUMENTATION (NFPA 72, 7.3.6).
- SOFTWARE AND FIRMWARE CONTROL DOCUMENTATION (NFPA 72, 23.2.2).

EXISTING FIRE ALARM CONTROL PANEL "F.A.C.P." BATTERY CALCULATION

DESCRIPTION	QUANTITY	SUPV. CURRENT EACH	SUPV. CURRENT SUB-TOTAL	ALARM CURRENT EACH	ALARM CURRENT SUB-TOTAL
CONTROL PANEL WITH DACT	1	0.14200	0.14200	0.18700	0.18700
EXISTING SMOKE DETECTOR	1	0.00030	0.00030	0.00650	0.00650
MANUAL PULL STATION	4	0.00030	0.00120	0.00150	0.00600
RELAY MODULE	4	0.00030	0.00120	0.00150	0.00600
15cd STROBE (CEILING)	6	—	—	0.04100	0.24600
30cd STROBE (CEILING)	6	—	—	0.06300	0.37800
HORN/15cd STROBE (CEILING)	8	—	—	0.07100	0.56800
HORN/30cd STROBE (CEILING)	3	—	—	0.09000	0.27000
HORN/15cd STROBE (WALL)	2	—	—	0.05400	0.10800
HORN/30cd STROBE (WALL)	2	—	—	0.07400	0.14800
	TOTALS		0.145		1.924

TOTAL ALARM CURRENT OF 1.924 x 0.250 (15 MINUTES) = 0.481 A.H.

TOTAL SUPERVISORY CURRENT OF 0.145 x 24 HOURS = 3.480 A.H.

TOTAL AMP HOURS REQUIRED 3.961 A.H.

x 1.25 SAFETY FACTOR

4.951 A.H.

PROVIDE 7.0 AMP HOUR BATTERIES

Rose Sing Eastham & Associates
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REGISTERED PROFESSIONAL ENGINEER — STEPHEN K. TRA — No. E-18786 Exp. 6/30/27 — ELECTRICAL — STATE OF CALIFORNIA

APPROVALS

LICENSED ARCHITECT — JAMES R. MORRELL — No. C-32128 — REN. 05-31-27 — STATE OF CALIFORNIA

DATE: 07/21/2026

ADMIN SERVICES REMODEL AT SANGER UNIFIED BUSINESS PARK 2

SANGER UNIFIED SCHOOL DISTRICT
1254 COMMERCE AVE, SANGER, CA 93657

Reviewed for Code Compliance
08/24/2026
CSG CONSULTANTS, INC.

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TITLE
FIRE ALARM SYSTEM SPECIFICATIONS, CODES AND NOTES

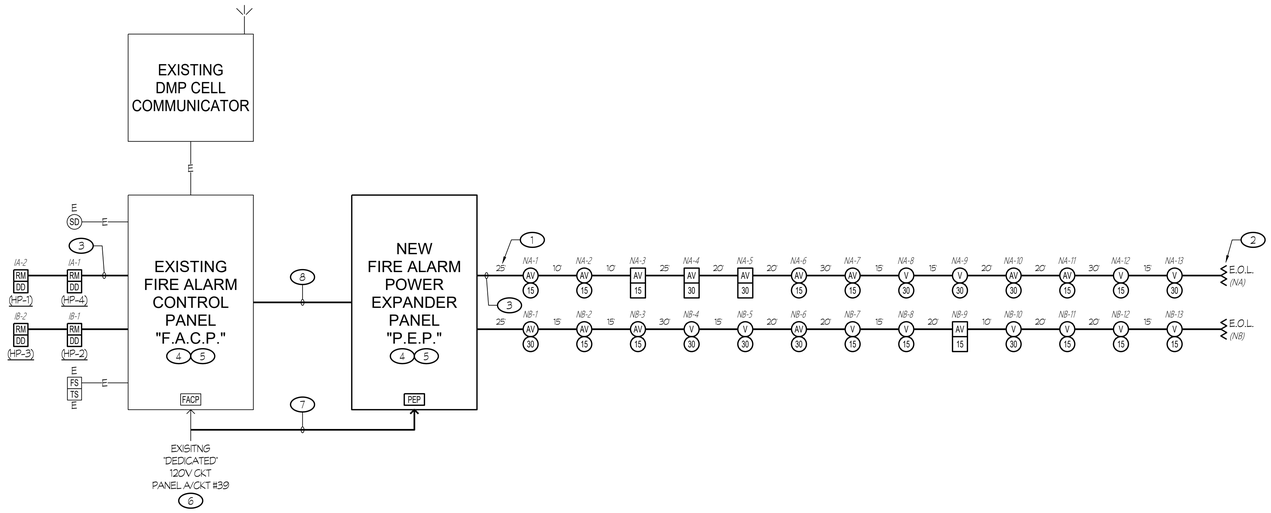
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PROJECT 25041

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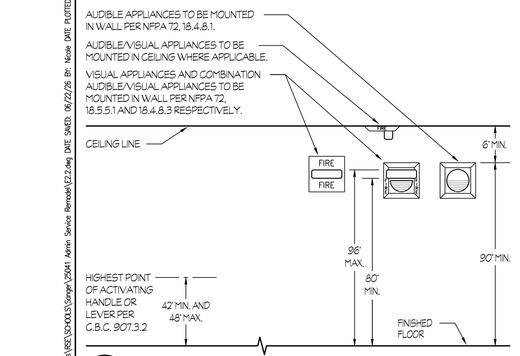
NOTES (THIS SHEET ONLY):

1. LENGTHS INDICATED WERE USED FOR CALCULATIONS/DESIGN PURPOSES ONLY AND BASED UPON THE 'DIAGRAMMATIC' LAYOUT SHOWN ON THE DRAWINGS. LENGTHS SHALL NOT BE USED FOR BIDDING.
2. DENOTES END OF LINE RESISTOR ON NOTIFICATION APPLIANCE CIRCUIT. RESISTORS SUPPLIED WITH CONTROL/EXPANDER PANELS AS REQUIRED. LOCATE RESISTORS AT END OF LINE APPLIANCES (CLASS 'B' WIRING). TYPICAL.
3. REFER TO RESPECTIVE FIRE ALARM PLANS, ON SHEETS #E1.6, FOR CONDUIT AND CABLING/CONDUCTOR REQUIREMENTS, TYPICAL.
4. PROVIDE A COPY OF THE BATTERY CALCULATION FOR THE 'RESPECTIVE' FIRE ALARM CONTROL PANEL 'F.A.C.P.' THE BATTERY CALCULATION SHALL CONTAIN INFORMATION (AS NOTED ON THESE PLANS) AND BE PLASTIC LAMINATED. MOUNT ONTO INSIDE FACE OF PANEL DOOR.
5. PROVIDE 'END-OF-LINE' RESISTORS AT ANY UNUSED OUTPUTS.
6. CIRCUIT BREAKER SHALL BE EQUIPPED WITH A LOCK-ON DEVICE, 'RED IN COLOR', SPACEAGE #ELOCK-FA OR EQUAL. PROVIDE AN ENGRAVED NAMEPLATE: 'FIRE ALARM - LEAVE ON', WHITE LETTERS ON A RED BACKGROUND.
7. 1/2"C - 2 #12 + 1 #12 GND.



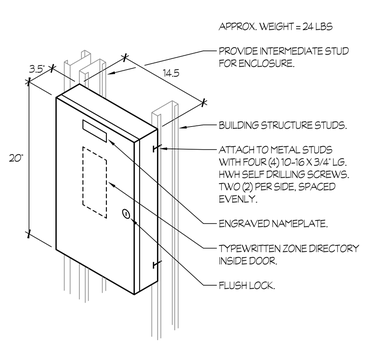
1 FIRE ALARM SYSTEM RISER DIAGRAM

NTS



2 FIRE ALARM DEVICES ELEVATION

NTS



3 FIRE ALARM POWER EXPANDER PANEL "P.E.P."

NTS

APPROVALS

LICENSED ARCHITECT JAMES R. MORRELL No. C-35128 Exp. 05-31-27 STATE OF CALIFORNIA

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TITLE
FIRE ALARM RISER SYSTEM DIAGRAM AND DETAILS

E2.2

PROJECT 25041

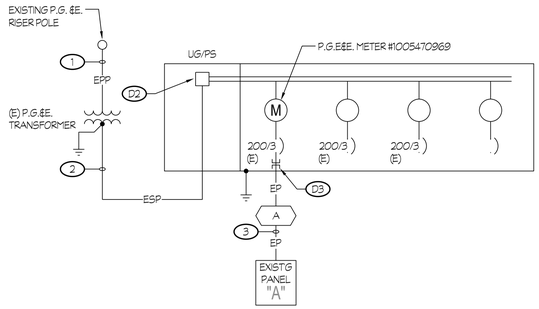
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REGISTERED PROFESSIONAL ENGINEER KEVIN KIRK EASTHAM No. E-18786 Exp. 6/30/27 ELECTRICAL STATE OF CALIFORNIA

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EXISTING MAIN SWITCHBOARD (D1)

120/208V, 3ph, 4W, 800A



1 DEMOLTION/EXISTING ONE LINE DIAGRAM

NTS

DEMOLITION ONE LINE DIAGRAM NOTES (THIS SHEET ONLY):

(D1) REPLACE EXISTING MAIN BOARD IN SAME LOCATION. COORDINATE WITH UTILITY AND OWNER FOR SHUTDOWN REQUIREMENTS .

(D2) COORDINATE WITH UTILITY FOR DISCONNECTION OF UTILITY FEED AND RECONNECTION TO NEW MAIN SERVICE BOARD.

(D3) DISCONNECT EXISTING FEED AND RECONNECT TO NEW BREAKER AS REQUIRED.

ONE LINE DIAGRAM NOTES (THIS SHEET ONLY):

(1) ——EPP—— DENOTES EXISTING P.G.&E. "PRIMARY" CONDUIT AND CONDUCTORS.

(2) ——ESP—— DENOTES EXISTING P.G.&E. "SECONDARY" CONDUIT AND CONDUCTORS.

(3) ——EP—— DENOTES EXISTING FEEDER TO REMAIN.

(4) COORDINATE WITH UTILITY AND OWNER FOR NEW MAIN SWITCHBOARD.

(5) RECONNECT EXISTING CONDUCTORS TO NEW BREAKER AS REQUIRED.

(6) 1 #2/0 BOND AND GROUND PER DETAIL #8/E5.1.

(7) PROVIDE LANDING LUGS PER P.G.&E. REQUIREMENTS.

(8) PROVIDE METERING FACILITIES PER P.G.&E. REQUIREMENTS.

(9) MAIN CIRCUIT BREAKER SHALL BE 100%RATED.

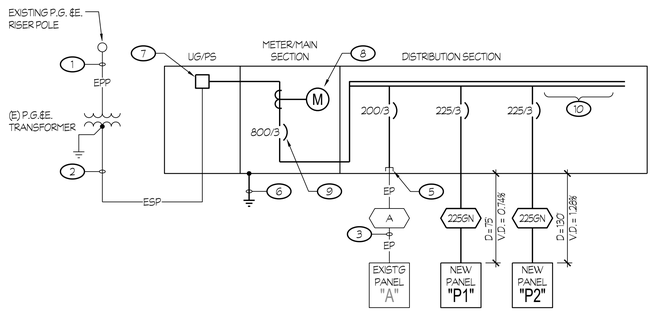
(10) PROVIDE SPACE FOR MINIMUM (2) 225/3 BREAKERS.

EXISTING FEEDER SCHEDULE:

(A) EXISTING 2"C - 4 #3/0 TWN CU.

NEW MAIN SWITCHBOARD (4)

120/208V, 3ph, 4W, 800A, 35 kAIC



2 NEW ONE LINE DIAGRAM

NTS

NEW FEEDER SCHEDULE:

(ALL UNDERGROUND CONDUCTORS, OF A 480/277V POWER SYSTEM, SHALL BE TYPE CU-XHHW-2. ALL OTHER CONDUCTORS, INCLUDING THE EQUIPMENT GROUNDING CONDUCTOR, SHALL BE CU-THWN-2 FOR #8 AWG OR LARGER AND CU-THWN FOR #10 AWG OR SMALLER).

(225GN) 2-1/2"C - 4 #4/0 + 1 #6 GND.

APPROVALS

LICENSED ARCHITECT JAMES R. MORRELL No. C-35128 EXP. 05-31-27 STATE OF CALIFORNIA

DATE: 07/21/2026

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TITLE
ONE LINE DIAGRAM

E3.1

PROJECT 25041

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REGISTERED PROFESSIONAL ENGINEER KIRK A. EASTHAM No. E-18786 Exp. 6/30/27 ELECTRICAL STATE OF CALIFORNIA

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120/208V, 3 PH, 4 W
200 A. BUSSING NO MAIN BKR.
42 CIRCUIT

EXISTING PANEL "A"

10K BREAKER A.I.C.
5 3/4" MAX. ENCL. DEPTH
FLUSH MOUNTING

CKT	BKR	LOAD: V.A. A	LOAD: V.A. B	LOAD: V.A. C	DESCRIPTION	DESCRIPTION	LOAD: V.A. C	LOAD: V.A. B	LOAD: V.A. A	BKR	CKT
1	40/2				C1	PHONE				20/1	2
3						WATER HEATER				20/1	4
5	40/2				C2	SPARE				20/1	6 (3)
7						EXISTING				15/1	8
9	20/1				LIGHTS	LIGHTS - MAIN ROOM				20/1	10
11	20/1				LIGHTS	LIGHTS - OFFICE				20/1	12
13	20/1				RECEPTS	AC3				45/3	14
15	20/1				RECEPT - ROOF						16
17	20/1				RECEPTS						18
19	20/1				RECEPTS	RECEPT - OFFICE				20/1	20
21	20/1				RECEPT - MICROWAVE	RECEPT - OFFICE				20/1	22
23	20/1				RECEPT - DISPOSAL	RECEPT - OFFICE				20/1	24
25	20/1				RECEPTS	RECEPT - OFFICE				20/1	26
27	20/1				RECEPTS	RECEPT - OFFICE				20/1	28
29	20/1				RECEPTS	EXISTING				20/1	30
(3) 31	20/1				SPARE	RECEPT - OFFICE				20/1	32
(3) 33	20/1				SPARE	CHARGER				30/3	34
35	20/1				RECEPTS						36
(3) 37	20/1				SPARE						38
39	20/1				FIRE ALARM	INTRUSION PANEL				125/2	40
41					SPACE						42

LOAD SUMMARY	A	B	C
CONNECTED LOAD (VA) :	0	0	0
25% LCL/LML (VA) :	0	0	0
TOTAL LOAD (VA) :	0	0	0
TOTAL LOAD (AMPS) :	0.0	0.0	0.0

TOTAL CALCULATED LOAD FOR PANEL: 0 VA

TYPICAL PANEL SCHEDULE NOTES:

(1) PROVIDE A LOCK-ON DEVICE AT THIS CIRCUIT BREAKER, 'RED IN COLOR', SPACEAGE #LOCK-FA OR EQUAL. PROVIDE AN ENGRAVED NAMEPLATE: 'FIRE ALARM CIRCUIT', WHITE LETTERS ON A RED BACKGROUND. MOUNT NAMEPLATE ONTO INTERIOR TRIM AND ADJACENT TO CIRCUIT BREAKER.

(2) PROVIDE HANDLE TIES, BETWEEN ADJACENT CIRCUIT BREAKERS, TO COMPLY WITH C.E.C. 210.4 (B).

(3) DISCONNECT EXISTING LOAD FROM EXISTING CIRCUIT BREAKER AND RE-LABEL AS SPARE.

120/208V, 3 PH, 4 W
225 A. BUSSING NO MAIN BKR.
54 CIRCUIT

NEW PANEL "P1"

10K BREAKER A.I.C.
5 3/4" MAX. ENCL. DEPTH
SURF MOUNTING
(2)

CKT	BKR	LOAD: V.A. A	LOAD: V.A. B	LOAD: V.A. C	DESCRIPTION	DESCRIPTION	LOAD: V.A. C	LOAD: V.A. B	LOAD: V.A. A	BKR	CKT
1	20/1	1100			LIGHTS - R.R'S, BRK RM	RECEPT - BREAK RM			1000	20/1	2
3	20/1		1050		LIGHTS - N. & W. OFFICES	RECEPT - REFRIGERATOR		360		20/1	4
5	20/1			870	LIGHTS - CENTER OFFICES	RECEPT - VENDING MACH.	1000			20/1	6
7	20/1	1005			LIGHTS - CONF. RM, E. OFFICES	RECEPT - VENDING MACH.			1000	20/1	8
9	20/1		100		NWK LTG CNTRL PNL	RECEPT - BREAK RM		900		20/1	10
11	20/1			1260	CNTRL RECEPT - OFFICE 6	CNTRL RECEPT - CONF. RM	1080			20/1	12
13	20/1	900			RECEPT - OFFICE 6	RECEPT - CONFERENCE			720	20/1	14
15	20/1		900		RECEPT - OFFICE 6	RECEPT - CONFERENCE		900		20/1	16
17	20/1			720	RECEPT - OFFICE 6	RECEPT - CONFERENCE	1080			20/1	18
19	20/3	1670			ELEC. WTR HTR, WH-1	RECEPT - OFFICE 1			900	20/1	20
21			1670			RECEPT - OFFICE 1		900		20/1	22
23				1670		CNTRL RECEPT - OFFICE 1	900			20/1	24
25	50/3	4668			HP-2	RECEPT - OFFICE 1			720	20/1	26
27			4668			SPARE				20/1	28
29				4668		EXH. FAN, EF-2	345			20/1	30
31	60/3	5508			HP-4	ODU-1/IDU-1			3750	35/2	32
33			5508					3750			34
35				5508		EXH. FAN, EF-3	345			20/1	36
37	20/1	100			EMS PANEL	RECEPT - W.P. ON ROOF			360	20/1	38
39	20/1				SPARE	ODU-2/IDU-2		3300		35/2	40
41	20/1			540	RECEPT - RESTROOMS		3300				42
43	20/1				SPARE	SPARE				20/1	44
45	20/1				SPARE	SPARE				20/1	46
47	20/1				SPARE	ERV-1	645			20/2	48
49	20/1				SPARE				645		50
51	20/1				SPARE	SPARE				20/1	52
53	20/1				SPARE	SPARE				20/1	54

LOAD SUMMARY	A	B	C
CONNECTED LOAD (VA) :	24046	24006	23931
25% LCL/LML (VA) :	526	263	218
TOTAL LOAD (VA) :	24572	24269	24149
TOTAL LOAD (AMPS) :	204.8	202.2	201.2

TOTAL CALCULATED LOAD FOR PANEL: 72989 VA

120/208V, 3 PH, 4 W
225 A. BUSSING NO MAIN BKR.
54 CIRCUIT

NEW PANEL "P2"

10K BREAKER A.I.C.
5 3/4" MAX. ENCL. DEPTH
FLUSH MOUNTING
(2)

CKT	BKR	LOAD: V.A. A	LOAD: V.A. B	LOAD: V.A. C	DESCRIPTION	DESCRIPTION	LOAD: V.A. C	LOAD: V.A. B	LOAD: V.A. A	BKR	CKT
1	20/1	1000			MODULAR FURNITURE	CNTRL RECEPT - OFFICE 2			540	20/1	2
3	20/1		1000		MODULAR FURNITURE	RECEPT - OFFICE 2		1080		20/1	4
5	20/1			1000	MODULAR FURNITURE	RECEPT - OFFICE 3	720			20/1	6
7	20/1	1000			MODULAR FURNITURE	RECEPT - OFFICE 3			720	20/1	8
9	20/1		1000		RECEPT - PRINTER	CNTL RECEPT - OFFICE 3		720		20/1	10
11	20/1			1000	RECEPT - PRINTER	CNTRL RECEPT - OFFICE 3	900			20/1	12
13	20/1	720			RECEPT - OPEN WORK AREA	RECEPT - OFFICE 3			720	20/1	14
15	20/1		720		RECEPT - OPEN WORK AREA	RECEPT - OFFICE 4		1080		20/1	16
17	20/1			720	RECEPT - OPEN WORK AREA	RECEPT - OFFICE 5	1080			20/1	18
19	20/1	720			CNTRL RECEPT - OFFICE 8	CNTRL RECEPT - OFFICE 4			540	20/1	20
21	20/1		720		CNTRL RECEPT - OFFICE 7	CNTRL RECEPT - OFFICE 5		540		20/1	22
23	20/1			1080	RECEPT - OFFICE 8	RECEPT - HALLWAY	1080			20/1	24
25	20/1	1080			RECEPT - OFFICE 7	EXH. FAN, EF-1			770	20/1	26
(1) 27	20/1		100		RELAY MODULES	RELAY MODULES		100		20/1	28 (1)
29	20/1			360	RECEPT - W.P. ON ROOF	SPARE				20/1	30
31	50/3	4668			HP-1	HP-3			4668	50/3	32
33			4668					4668			34
35				4668			4668				36
37	20/1				SPARE	SPARE				20/1	38
39	20/1				SPARE	SPARE				20/1	40
41	20/1				SPARE	SPARE				20/1	42
43	20/1				SPARE	SPARE				20/1	44
45	20/1				SPARE	SPARE				20/1	46
47	20/1				SPARE	SPARE				20/1	48
49	20/1				SPARE	SPARE				20/1	50
51	20/1				SPARE	SPARE				20/1	52
53	20/1				SPARE	SPARE				20/1	54

LOAD SUMMARY	A	B	C
CONNECTED LOAD (VA) :	17146	16396	17276
25% LCL/LML (VA) :	0	0	0
TOTAL LOAD (VA) :	17146	16396	17276
TOTAL LOAD (AMPS) :	142.9	136.6	144.0

TOTAL CALCULATED LOAD FOR PANEL: 50818 VA

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REGISTERED PROFESSIONAL ENGINEER
KEVIN K. TRK
No. E18786
Exp. 6/30/27
ELECTRICAL
STATE OF CALIFORNIA

APPROVALS

LICENSED ARCHITECT
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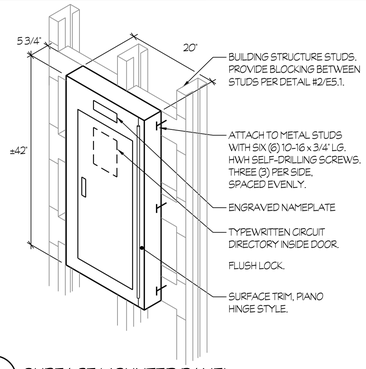
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TITLE
PANEL SCHEDULES

E4.1

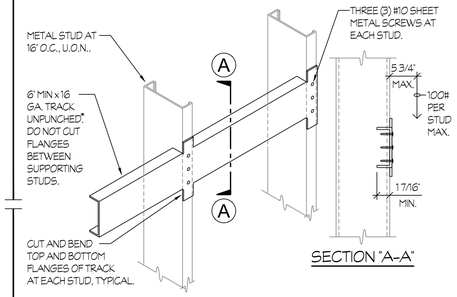
PROJECT 25041

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1 SURFACE MOUNTED PANEL

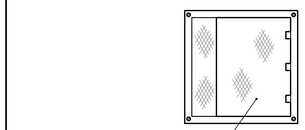
NTS



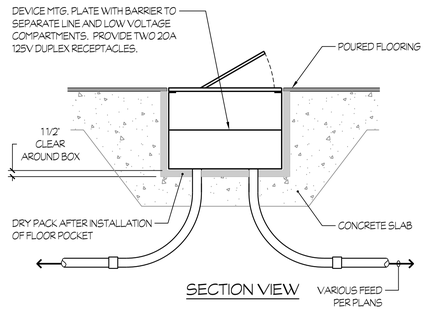
* ALTERNATE: USE 6" x 16 GA. PRE-NOTCHED TRACK SUCH AS CEMCO "NT" TRACK. FIELD CUT FLANGES AT ODD STUD SPACINGS. NOTCHES BETWEEN STUDS ARE NOT ALLOWED.

2 BLOCKING AT METAL STUDS

NTS



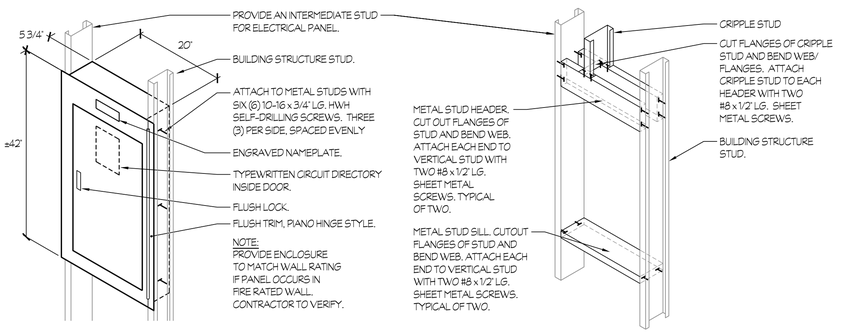
PLAN VIEW



SECTION VIEW

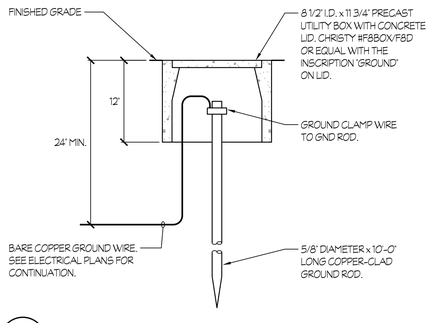
5 FLOOR BOX MOUNTING DETAIL

NTS



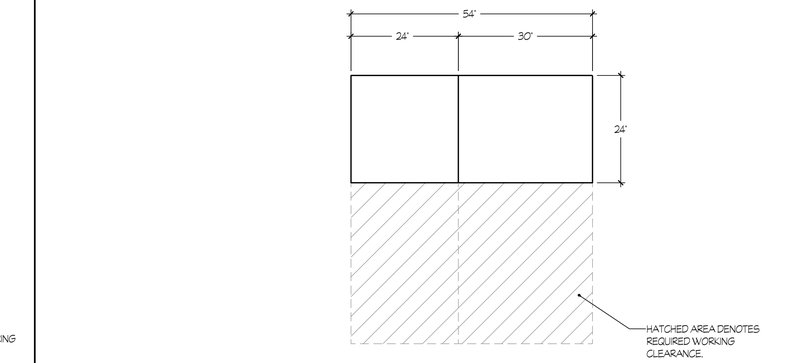
3 FLUSH MOUNTED PANEL

NTS

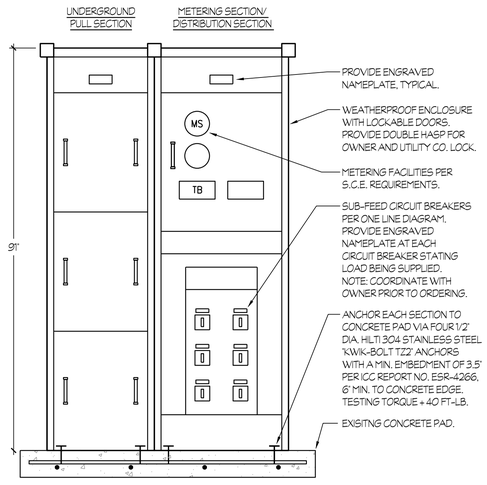


4 GROUND WELL DETAIL

NTS



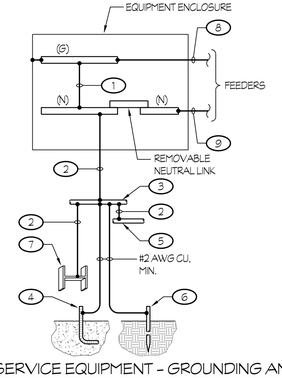
PLAN VIEW



FRONT VIEW

8 NEW MAIN SWITCHBOARD "MSB" MOUNTING

NTS



8 MAIN SERVICE EQUIPMENT - GROUNDING AND BONDING

NTS

NOTES (THIS DETAIL ONLY):

1. MAIN BONDING JUMPER PER C.E.C. 250.28.
2. FULL SIZE GROUNDING ELECTRODE CONDUCTOR PER C.E.C., TABLE 250.66.
3. METAL WATER PIPING PER C.E.C. 250.104.
4. CONCRETE ENCASED ELECTRODE PER C.E.C. 250.52 (A), (3).
5. OTHER ABOVEGROUND METALLIC PIPING SYSTEMS PER C.E.C. 250.104.
6. 5/8" DIA. ROD ELECTRODE PER C.E.C. 250.52 (A), (5) AND DETAIL #4/E5.1.
7. EXPOSED BUILDING STRUCTURAL STEEL PER C.E.C. 250.104.
8. EQUIPMENT GROUND CONDUCTOR PER FEEDER SCHEDULE.
9. NEUTRAL CONDUCTOR PER FEEDER SCHEDULE.

LEGEND:

(G) DENOTES THE GROUND BUS OR BAR

(N) DENOTES THE NEUTRAL BUS OR BAR

GENERAL NOTE:

ALL MATERIALS AND METHODS USED IN GROUNDING AND BONDING SHALL COMPLY WITH C.E.C. ARTICLE 250.

APPROVALS

LICENSED ARCHITECT JAMES R. MORRELL No. C-35128 EXP. 05-31-27 STATE OF CALIFORNIA

DATE: 07/21/2026

ADMIN SERVICES REMODEL AT SANGER UNIFIED BUSINESS PARK 2

SANGER UNIFIED SCHOOL DISTRICT
1254 COMMERCE AVE, SANGER, CA 93657

Reviewed for Code Compliance
08/24/2026
CSG CONSULTANTS, INC.

REVISIONS

MANGINI ARCHITECTURE INGENUITY
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TITLE
DETAILS

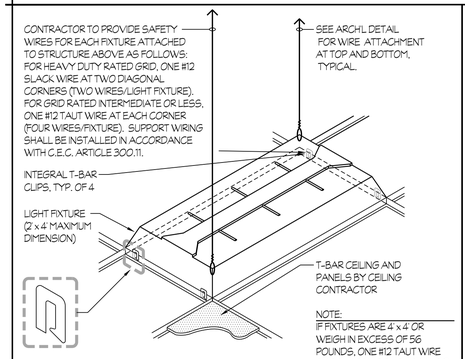
E5.1

PROJECT 25041

Rose Sing Eastham & Associates
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Visalia, California 93292-6705

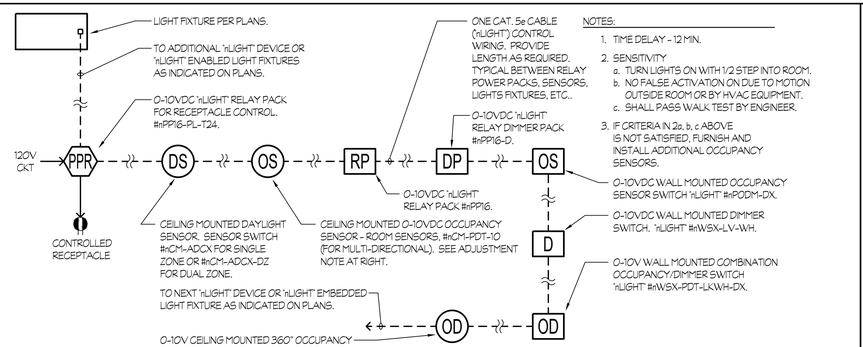
REGISTERED PROFESSIONAL ENGINEER KIRK A. EASTHAM No. E-18786 Exp. 6/30/27 ELECTRICAL STATE OF CALIFORNIA

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1 RECESSED FIXTURE MOUNTING

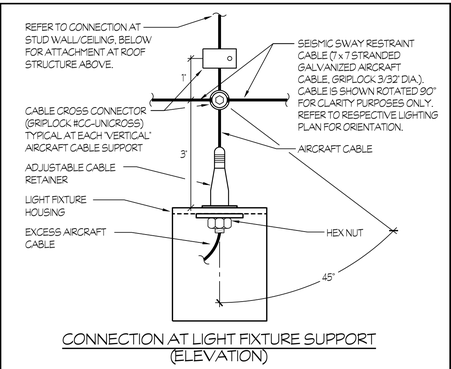
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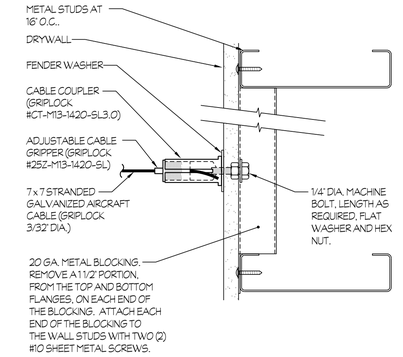
5 SENSOR SWITCH "nLIGHT" DEVICES WIRING DIAGRAM

(NOTE: ACTUAL SEQUENCE OD DEVICES IS TO BE PER PLANS)

NTS



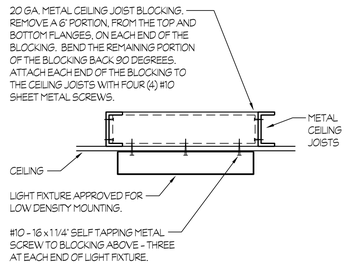
CONNECTION AT LIGHT FIXTURE SUPPORT
(ELEVATION)



CONNECTION AT METAL STUD WALL
(PLAN VIEW)

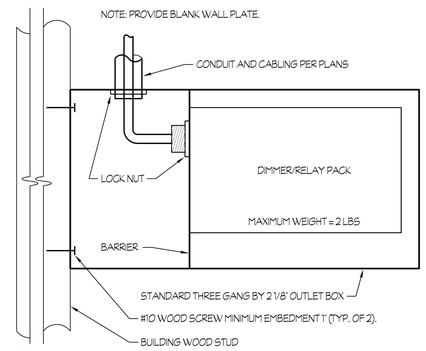
9 SEISMIC SWAY RESTRAINT

NTS



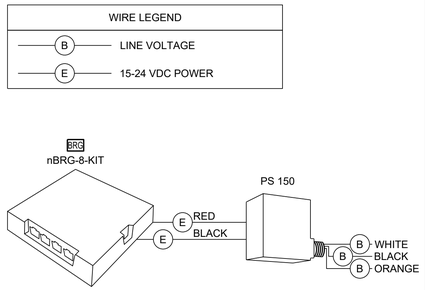
2 SURFACE FIXTURE MOUNTING

NTS



6 DIMMER/RELAY PACK MOUNTING

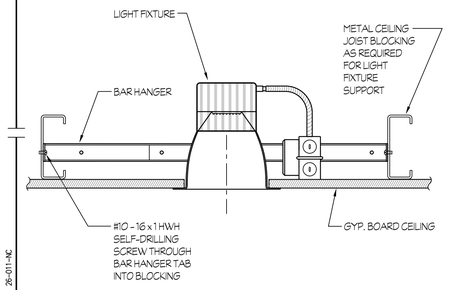
NTS



8 NETWORK INTERFACE BRIDGE KIT

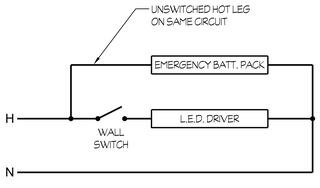
(WIRING DIAGRAM)

NTS



3 RECESSED DOWNLIGHT MOUNTING

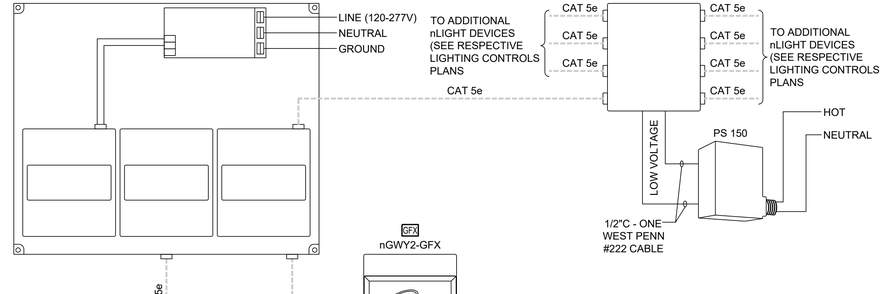
NTS



CONNECT LIGHT FIXTURE SO THAT THE L.E.D. DRIVER IS CONTROLLED BY THE WALL SWITCH AND THAT THE L.E.D. DRIVER IS ALSO CONNECTED TO THE EMERGENCY BATTERY PACK. LIGHT FIXTURE SHALL OPERATE DURING A POWER OUTAGE REGARDLESS OF THE POSITION OF THE WALL SWITCH.

4 EMERGENCY BATTERY PACK WIRING DIAGRAM

NTS



BILL OF MATERIAL

QTY	PRODUCT #	DESCRIPTION
1	nADR	AUTOMATED DEMAND RESPONSE CLIENT INTERFACE
1	nECY-MVOLT-BAC-ADR-ENC-GFXK	NGATEWAY2 KIT CONSISTS OF A nECY CTRL UNIT, A nGWY2-GFX, ONE PS 150 (150 MA POWER SUPPLY), SENSORVIEW SOFTWARE. MAX DEVICES 1500
1	nBRG-8-KIT	BRIDGE-8 PORT WITH 150 MA POWER SUPPLY

7 AUTOMATED DEMAND RESPONSE CLIENT INTERFACE AND NETWORK INTERFACE CONTROLLER

(WIRING DIAGRAM)

NTS

APPROVALS

LICENSED ARCHITECT JAMES R. MORRELL No. C-35128 EXP. 05-31-27 STATE OF CALIFORNIA

DATE: 07/21/2026

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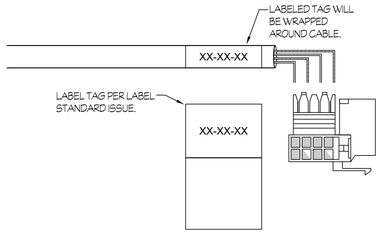
E5.2

PROJECT 25041

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Visalia, California 93292-6705

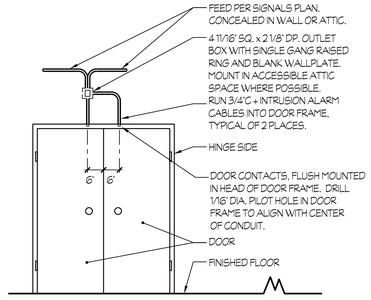
REGISTERED PROFESSIONAL ENGINEER PETER KIRK EASTHAM No. E-18786 Exp. 6/30/27 ELECTRICAL STATE OF CALIFORNIA

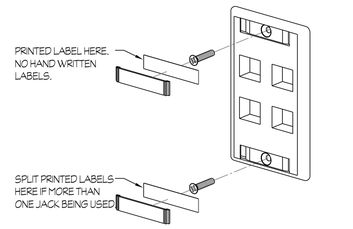
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1 CABLE LINK IDENTIFIER LABELING FORMAT

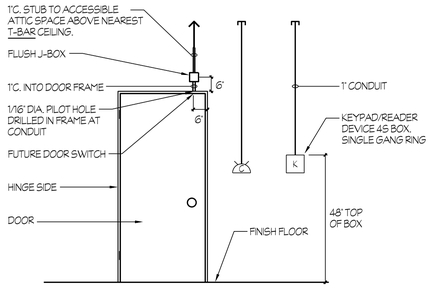
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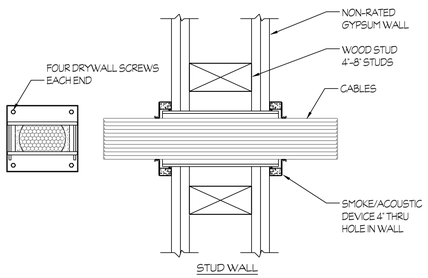
2 DATA OUTLET IDENTIFICATION MATRIX

NTS

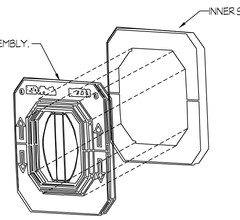


4 INTRUSION ALARM / ACCESS CONTROL DOOR ROUGH IN

NTS



STUD WALL



NOTES:

1. Cables – Aggregate cross-sectional area of cables in the sleeve to be 0% to max. 60% of the aggregate cross-sectional area of the sleeve. When there is no cable fill, device cover is to be tightly closed. Cables to be rigidly supported on both sides of the wall assembly.

2. Smoke/Acoustic Device – Device to be installed in accordance with the accompanying installation instructions.

3. STI FIRE STOP DEVICE # NEZDP233

3 SMOKE AND ACOUSTICAL PATHWAY THRU WALL KIT

NTS

ASSISTIVE LISTENING SYSTEMS

PROVIDE ASSISTIVE LISTENING AS REQUIRED BY CBC SECTIONS 11B.219 & 11B.706 AND ADA 706. REFER TO SPECIFICATIONS FOR CONFERENCE ROOM SYSTEMS. REFER TO DETAIL DRAWINGS FOR INSTALLED SOLUTIONS. CONFERENCE ROOM SYSTEMS ARE TO BE PORTABLE 'BRIEFCASE' STYLE FOR USE WHEN REQUESTED BY USERS.

SIGNALS / TELECOMMUNICATIONS APPLICABLE CODES AND STANDARDS

CODES:

2025 CALIFORNIA ELECTRICAL CODE (C.E.C.)

STANDARDS AND GUIDES:

NFPA 72 - NATIONAL FIRE ALARM CODE, (CALIFORNIA AMENDED)

ANSI/BICSI - TELECOMMUNICATIONS DISTRIBUTION METHODS MANUAL (TDMM), 13TH EDITION OR NEWER.

ANSI/BICSI 001-2017 - INFORMATION AND COMMUNICATION TECHNOLOGY SYSTEMS DESIGN AND IMPLEMENTATIONS BEST PRACTICES FOR EDUCATIONAL INSTITUTIONS AND FACILITIES.

ANSI/BICSI 005-2016 - ELECTRONIC SAFETY AND SECURITY (ESS) SYSTEM DESIGN AND IMPLEMENTATIONS BEST PRACTICES.

CABLE LEGEND/SPECIFICATIONS

	CABLE	MANUFACTURER/CATALOG NO.	DESCRIPTION/SYSTEM(S)
(1)	'D'	BERKTEK #10136342 'BLUE VOICE/DATA'	CAT. 6, 4 PAIR, 24 AWG COPPER
(1)	'D-WAP'	BERKTEK #11085549 'GREEN WIRELESS'	CAT. 6A, 4 PAIR, 24 AWG COPPER
	'PA'	WEST PENN #224	2 COND., 18 AWG
	'SP'	WEST PENN #227	2 COND., 12 AWG
	'AC'	WEST PENN #AC1822	MULTI. CONDUCTOR (ACCESS CONTROL)
	'IA2'	WEST PENN #220	2 COND., 22 AWG (DOOR CONTACT CABLE)
	'IA4'	WEST PENN #240	4 COND., 22 AWG (DEVICE W/POWER CABLE)

SIGNALS SYSTEM EQUIPMENT AND CABLE LEGEND NOTES:

(1) COPPER CABLING SHALL BE TESTED IN ACCORDANCE WITH TIA/EIA 568C-2.1. FIBER OPTIC CABLING SHALL BE TESTED IN ACCORDANCE WITH TIA/EIA 455A AND TIA/EIA 568-C.3. SUBMIT ALL TEST REPORTS TO OWNER.

SIGNALS SYMBOLS

ALL DIMENSIONS TO TOP OF BOX, U.O.N.

	U.O.N.	UNLESS OTHERWISE NOTED
	⟶	CONDUIT RUN IN WALL OR ATTIC
	⟶ · ⟶	CONDUIT RUN IN FLOOR OR UG
	▭	SMOKE/FIRE CABLE SLEEVE THRU WALL.
	⟶|	CONDUIT STUB - CAPPED AND LABELED.
	⟷	CONDUIT SLEEVE
(A)	◁	DATA OUTLET IN WALL (+18" U.O.N.)
	⊙◁	OUTLET IN FLUSH FLOOR BOX
	WA	DATA OUTLET IN CEILING WIRELESS ACCESS POINT (1 'D' CABLE)
	Ⓟ	INTERCOM PAGING CEILING SPEAKER
	Ⓢ	CEILING SPEAKER
(B)	KP	INTRUSION KEYPAD
	✕	INTRUSION ALARM DOOR CONTACT IN DOOR FRAMING
	MDF	EXISTING MAIN 'IT' CABINET

SIGNAL SYMBOLS NOTES:

(A) ELECTRICAL CONTRACTOR SHALL PROVIDE A 5" SQUARE x 2 7/8" DEEP OUTLET BOX WITH SINGLE GANG RAISED RING, DEPTH AS REQUIRED. UNLESS OTHERWISE NOTED, RUN 1-1/4"C FROM OUTLET BOX AND STUB INTO ACCESSIBLE ATTIC SPACE ABOVE T-BAR CEILING. PROVIDE AN INSULATING BUSHING, BRIDGEPORT #TWB-54 OR EQUAL, AT STUB.

(B) ELECTRICAL CONTRACTOR SHALL PROVIDE A 4-11/16" SQUARE x 2 1/8" DEEP OUTLET BOX WITH SINGLE GANG RAISED RING, DEPTH AS REQUIRED. UNLESS OTHERWISE NOTED, RUN 3/4"C FROM OUTLET BOX AND STUB INTO ACCESSIBLE ATTIC SPACE ABOVE T-BAR CEILING. PROVIDE AN INSULATING BUSHING, BRIDGEPORT #TWB-52 OR EQUAL, AT STUB.

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Visalia, California 93292-6705

REGISTERED PROFESSIONAL ENGINEER
KIRK EASTHAM
No. E-18786
Exp. 6/30/27
ELECTRICAL
STATE OF CALIFORNIA

APPROVALS

LICENSED ARCHITECT
JAMES R. MORRELL
No. C-34128
EXP. 05-31-27
STATE OF CALIFORNIA

DATE: 07/21/2026

ADMIN SERVICES REMODEL AT SANGER UNIFIED BUSINESS PARK 2

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TITLE
SIGNALS
DETAILS

TG1.1

PROJECT 25041

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SIGNAL GENERAL NOTES:

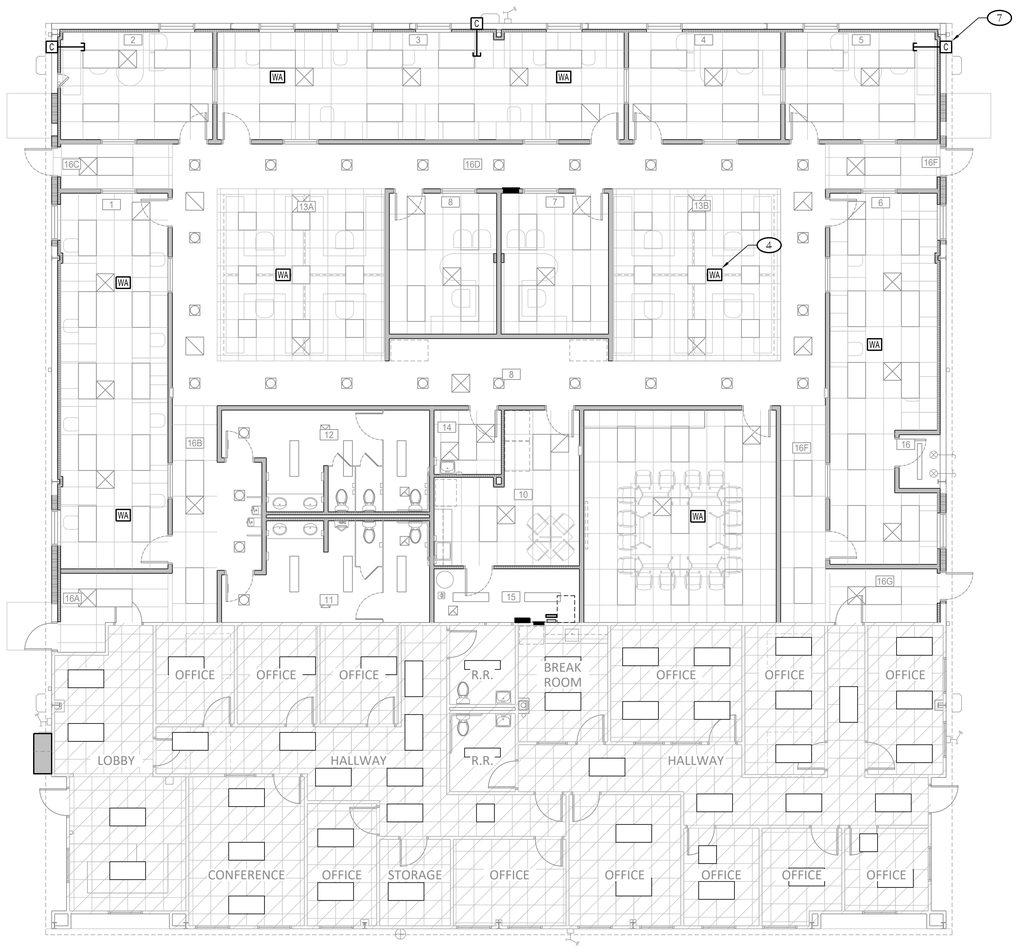
1. ROUTE ALL DATA/NETWORK CABLES TO MDF AND PROVIDE ADDITIONAL PATCH PANELS FOR TERMINATION OF ALL CABLES. COORDINATE EXACT TERMINATION POINT WITH OWNER REPRESENTATIVE PRIOR TO ROUGH-IN.

2. PROVIDE NECESSARY PATCH CABLES AT NETWORK RACK FOR CONNECTION TO OWNER PROVIDED NETWORK EQUIPMENT. COORDINATE WITH OWNER FOR NETWORK CONNECTION POINTS.

ROOM LEGEND					
#	ROOM NAME	CEILING HEIGHT	#	ROOM NAME	CEILING HEIGHT
1	LARGE OFFICE	+9'-0"	13A	OPEN OFFICE	+11'-0"
2	OFFICE	+9'-0"	13B	OPEN OFFICE	+11'-0"
3	LARGE OFFICE	+9'-0"	14	LACTATION	+9'-0"
4	OFFICE	+9'-0"	15	UTILITY	+9'-0"
5	OFFICE	+9'-0"	16	FIRE RISER	OPEN
6	LARGE OFFICE	+9'-0"	16A	HALLWAY	+10'-0"
7	OFFICE	+9'-0"	16B	HALLWAY	+10'-0"
8	OFFICE	+9'-0"	16C	HALLWAY	+10'-0"
9	CONFERENCE ROOM	+9'-0"	16D	HALLWAY	+10'-0"
10	BREAK ROOM	+9'-0"	16E	HALLWAY	+10'-0"
11	MEN	+9'-0"	16F	HALLWAY	+10'-0"
12	WOMEN	+9'-0"	16G	HALLWAY	+10'-0"

NOTES (THIS SHEET ONLY):

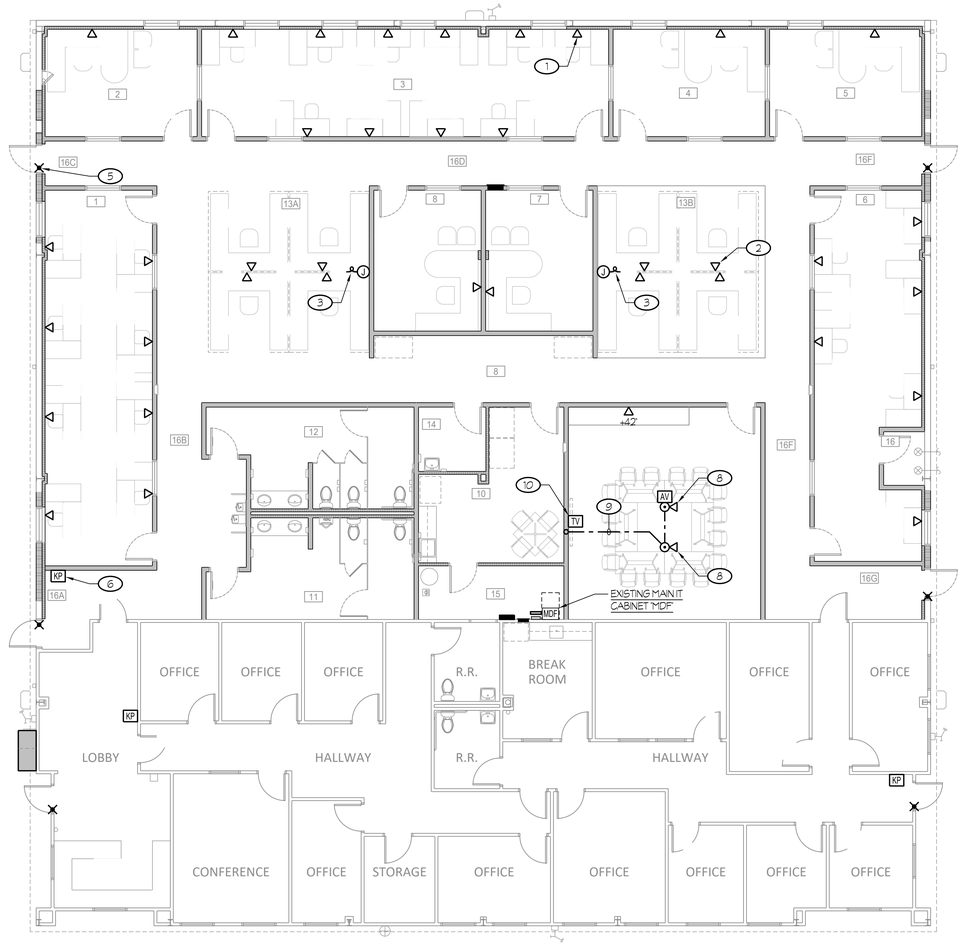
1. VOICE/DATA OUTLET. PROVIDE TWO 'D' CABLES AND JACKS, IN FOUR PORT SINGLE GANG PLATE. OUTLET BOX SHALL BE 5s TYPE 2 7/8' DEEP, 1G TRIM RING, ONE 1-1/4'C TO ACCESSIBLE CEILING SPACE. TYPICAL FOR DATA OUTLETS.
2. VOICE/DATA OUTLET WITHIN FURNITURE SYSTEM. COORDINATE WITH FURNITURE PROVIDER FOR COMPATIBLE JACKS AND COVER PLATE. PROVIDE TWO 'D' CABLES AND JACKS. ROUTE CABLES THROUGH FURNITURE SYSTEM RACEWAY TO WALL CONNECTION POINT AS REQUIRED. TYPICAL AT ALL VOICE/DATA OUTLETS WITHIN FURNITURE SYSTEM.
3. JUNCTION BOX SHALL BE 5s TYPE 2 7/8' DEEP, 1G TRIM RING, ONE 1-1/4'C TO ACCESSIBLE CEILING SPACE FOR ROUTING OF NETWORK CABLES.
4. CEILING GRID MOUNTED WIRELESS AP. PROVIDE TWO 'D-WAP' CABLES AND JACKS IN SURFACE BOX ABOVE GRID. LABEL GRID LOCATION AND OUTLET NUMBER ON GRID TEE. TYPICAL FOR 'WA' LOCATIONS.
5. INTRUSION DOOR CONTACT. PROVIDE ONE '1A2' CABLE, ONE 3/4'C TO ACCESSIBLE SPACE. COORDINATE ROUGH-IN WITH ALL TRADES. TYPICAL.
6. INTRUSION KEYPAD. PROVIDE SINGLE-GANG BACKBOX, CABLE PER MANUFACTURER REQUIREMENTS, AND ONE 3/4'C TO ACCESSIBLE SPACE AT EXISTING WALL LOCATIONS, ACCEPTABLE TO FISH CABLE WITHIN WALL CAVITY. TYPICAL.
7. CAMERA (FUTURE) WALL MOUNTED +/- 9'-0" AFF. PROVIDE WEATHERPROOF 4S BACKBOX AND ROUTE 1" CONDUIT INTO ACCESSIBLE CEILING SPACE FOR FUTURE CABLE ROUTING. SEAL ALL PENETRATIONS AS REQUIRED. TYPICAL.
8. REFER TO DETAIL #5/E5.1 FOR FLOOR BOX REQUIREMENTS. PROVIDE TWO CAT6 CABLES PER BOX AND HDMI INPUT OUTLET FOR CONNECTION TO WALL DISPLAY TV. PROVIDE HDMI CABLE TO WALL DISPLAY TV AS REQUIRED.
9. 1-1/2'C - FOUR CAT6 CABLES AND ONE HDMI CABLE. COORDINATE PATHWAY WITH UNDERSLAB POWER CONDUITS. ROUTE HDMI CABLE TO WALL DISPLAY TV AND ROUTE CAT6 CABLES TO MDF AS REQUIRED.
10. PROVIDE RECESSED ENTERTAINMENT BOX +/- 66' AFF IN COORDINATION WITH WALL DISPLAY TV MOUNTS, (LEVITON 47617-REB OR EQUAL). COORDINATE WITH ELECTRICAL CONTRACTOR FOR RECEPTACLE INSTALLATION WITHIN BOX. PROVIDE HDMI OUTLET FOR CONNECTION TO TV DISPLAY AND TWO RJ-45 OUTLETS WITHIN BOX. ROUTE TWO CAT6 CABLES TO MDF.



SIGNALS CEILING PLAN

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

north



SIGNALS PLAN

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

north

Rose Sing Eastham & Associates
Electrical Consultants
131 S. Dunworth - (559)733-2671
Visalia, California 93292-6705

REGISTERED PROFESSIONAL ENGINEER — PATRICK KIRK — No. E-18786 — Exp. 6/30/27 — ELECTRICAL — STATE OF CALIFORNIA

APPROVALS

LICENSED ARCHITECT — JAMES R. MORRELL — No. C-32128 — EXP. 05-31-27 — STATE OF CALIFORNIA

DATE: 07/21/2026

ADMIN SERVICES REMODEL AT
SANGER UNIFIED BUSINESS PARK 2

SANGER UNIFIED SCHOOL DISTRICT
1254 COMMERCE AVE, SANGER, CA 93657

Reviewed for Code Compliance
08/24/2026
CSG CONSULTANTS, INC.

REVISIONS

MANGINI ARCHITECTURE | INGENUITY
MANGINI ASSOCIATES INC.
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TITLE
SIGNALS PLANS

T1.1

PROJECT 25041

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