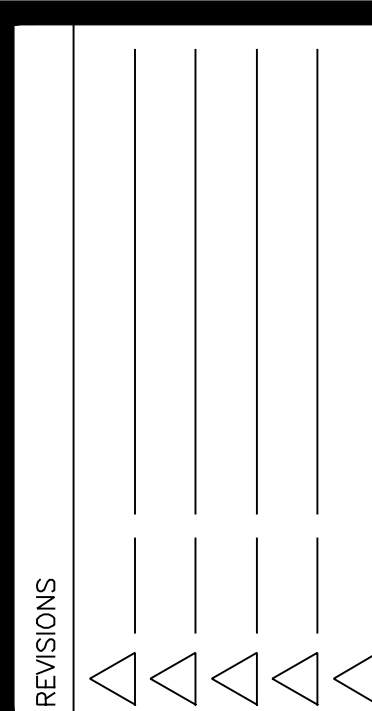


DATE: AUGUST 24, 2022

**MODERNIZATION AT CORCORAN HIGH SCHOOL SCIENCE BUILDING**  
1100 LETTIS AVE., CORCORAN, CA. 93212  
CORCORAN UNIFIED SCHOOL DISTRICT  
1520 PATTERSON AVE., CORCORAN, KINGS COUNTY, CA. 93212



**MANGINI** ARCHITECTURE  
INGENUITY  
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TITLE  
COVER SHEET,  
SHEET INDEX,  
VICINITY MAP

**G1**

PROJECT **1751a**

# MODERNIZATION AT CORCORAN HIGH SCHOOL SCIENCE BUILDING

1100 LETTIS AVE., CORCORAN, CA, 93212

## CORCORAN UNIFIED SCHOOL DISTRICT

1520 PATTERSON AVE., CORCORAN, KINGS COUNTY, CA, 93212

PROJECT TRACKING NUMBER: 63891-35

### 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	FIN.	FINISH	P.O.C.	POINT OF CONNECTION
L.	ANGLE	FL.	FLOOR	PR.	PAIR
@	AT	FLASH.	FLASHING	PRCST.	PRECAST
C	CENTERLINE	F.O.C.	FACE OF CONCRETE	PREFIN.	PREFINISHED
Ø	DIAMETER	F.O.F.	FACE OF FINISH	PROJ.	PROJECT
#	FOUND OR NUMBER	F.O.M.	FACE OF MASONRY	PT.	POINT
(E)	EXISTING	F.O.P.	FACE OF PLYWOOD	P.T.D.	PAPER TOWEL DISPENSER
(N)	NEW	F.O.S.	FACE OF STUDS	P.O.T.R.	COMBINATION PAPER TOWEL DISPENSER AND RECEPTACLE
		FRWF.	FIRE PROOF	P.T.R.	PARTITION
A.B.	ANCHOR BOLT	F.R.P.	FIBER REINFORCED PANEL	P.T.R.	PAPER TOWEL RECEPTACLE
A/C	AIR CONDITIONING	F.R.T.	FIRE RETARDANT TREATED		
A.C.	ASPHALT CONCRETE	FT.	FOOT OR FEET		
ACQUST.	ACOUSTICAL	FTG.	FOOTING		
A.D.	AREA DRAIN	FURR.	FURRING		
ADJ.	ADJUSTABLE	FUT.	FUTURE		
AGG.	AGGREGATE				
ALUM.	ALUMINUM	G.	GAS	R.	RADIUS
ALT.	ALTERNATE	GA.	GAGE	R.A.	RETURN AIR
APPROX.	APPROXIMATE	GALV.	GALVANIZED	R.B.	RUBBER BASE
ARCH.	ARCHITECTURAL (OR ARCHITECT)	G.B.	GRAB BAR	R.D.	ROOF DRAIN
ASPH.	ASPHALT	G.I.	GALVANIZED IRON	REF.	REFERENCE
AUTO.	AUTOMATIC	GND.	GROUND	REFR.	REFRIGERATOR
		GR.	GRADE	REINF.	REINFORCED
		GYP.	GYPNUM	REQ.	REQUIRED
				RESIL.	RESILIENT
				RM.	ROOM
				R.O.	ROUGH OPENING
				R.O.W.	RIGHT OF WAY
				R.O.W.	REDWOOD
				RWL.	RAIN WATER LEADER
				S.	SOUTH
				S.A.	SUPPLY AIR
				S.C.	SOLID CORE
				S.C.D.	SEAT COVER DISPENSER
				SCHED.	SCHEDULE
				S.D.	STORM DRAIN
				S.DSP.	SOAP DISPENSER
				SECT.	SECTION
				S.F.	SQUARE FOOT (FEET)
				SH.	SHelf
				SHR.	SHOWER
				SHT.	SHEET
				SHGT.	SHEATHING
				SHR.	SIMLAR
				S.M.S.	SHEET METAL SCREW
				S.N.D.	SANITARY NAPKIN DISPOSAL
				S.N.V.	SANITARY NAPKIN VENDOR
				S.O.V.	SHUT OFF VALVE
				SPEC.	SPECIFICATIONS
				SG.	SQUARE
				ST.	STAINLESS STEEL
				S.S.	SERVICE SINK
				S.T.	SELF TAPPING
				STA.	STATION
				STD.	STANDARD
				STL.	STEEL
				STOR.	STORAGE
				STRUCT.	STRUCTURAL
				SUSP.	SUSPENDED
				SHEET VINYL	SHEET VINYL
				S.V.	SQUARE YARD
				SYM.	SYMMETRICAL
				T.B.	TOWEL BAR
				T.C.	TERMINAL CABINET
				TEL.	TELEPHONE
				TEMP.	TEMPERED
				TERR.	TERRAZO
				T&G.	TONGUE AND GROOVE
				THK.	THICK
				T.P.D.	TOILET PAPER DISPENSER
				T.O.M.	TOP OF MASONRY
				T.P.L.	TOP OF PLATE
				T.O.S.	TOP OF STEEL
				TREAD.	TREAD
				T.R.	TOP SET RUBBER
				T.V.	TELEVISION
				T.W.	TOP OF WALL
				TYP.	TYPICAL
				UNF.	UNFINISHED
				UNCL.	UNLESS OTHERWISE NOTED
				URN.	URNAL
				V.B.	VINYL BASE
				V.C.T.	VINYL COMPOSITION TILE
				VCTB	VINYL COVERED TACKBOARD
				VWC	VINYL WALLCOVERING
				VERT.	VERTICAL
				VEST.	VESTIBULE
				W.	WEST
				W.	WITH
				W.C.	WATER CLOSET
				WWF	WELDED WIRE FABRIC
				WOOD	WOOD
				W/O	WITHOUT
				WP.	WATERPROOF
				W.R.	WATER RESISTANT
				W.S.	WOOD SCREW
				WBCST.	WAINSCOT
				WT.	WEIGHT

### CONSULTANTS

ARCHITECT GILBERT BARENG MANGINI ASSOCIATES, INC. 4320 W. MINERAL KING AVENUE, VISALIA, CA 93291 PHONE: 559.627.0530 FAX: 559.627.1926	C-33544
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MECHANICAL ENGINEER RYAN CARLSON LAWRENCE ENGINEERING GROUP 7084 N. MAPLE AVENUE, SUITE 101, FRESNO, CA 93720 PHONE: 559.431.0101 FAX: 559.733.1362	M-34846
ELECTRICAL ENGINEER STEVEN K. EASTHAM ROSE SING EASTHAM AND ASSOCIATES INC. 131 S. DUNWORTH STREET, VISALIA, CA 93292 PHONE: 559.733.2671 FAX: 559.733.0372	E-18786

### PROJECT SCOPE

THE WORK INCLUDES ALTERATIONS AND REHABILITATION TO (1) EXISTING CLASSROOM BUILDING.

### DEFERRED APPROVALS

INSTALLATION OF DEFERRED APPROVAL ITEMS SHALL NOT BE STARTED UNTIL THE CONTRACTORS 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.

- NONE

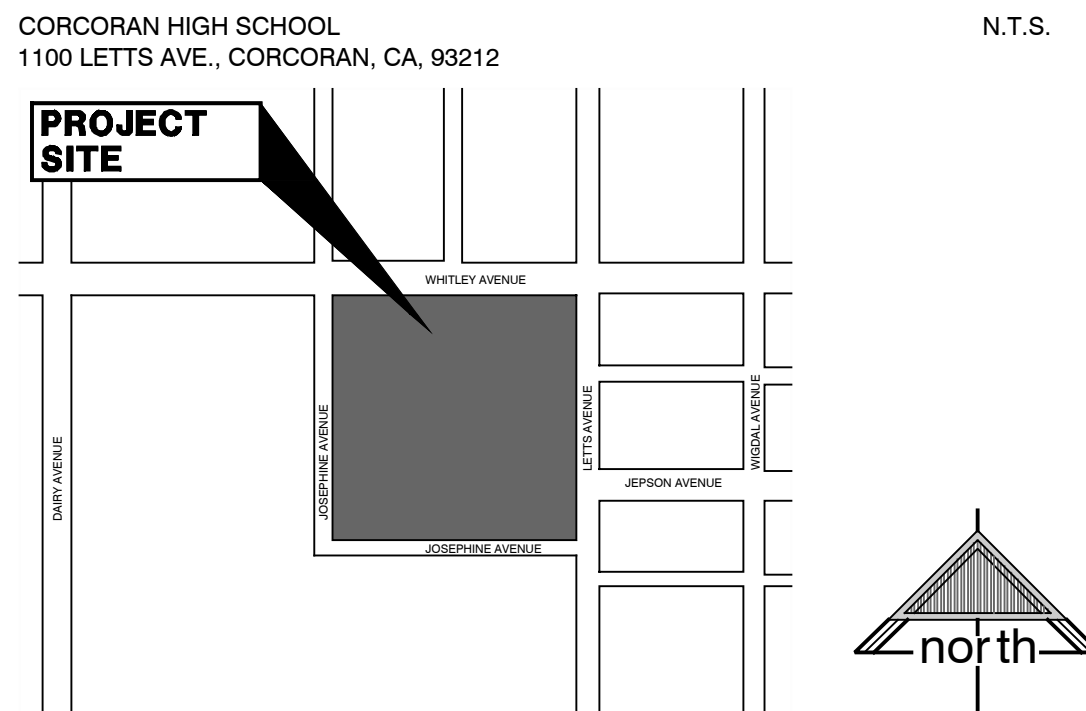
### APPLICABLE CODES

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

- 2022 BUILDING STANDARDS ADMINISTRATIVE CODE, PART 1, TITLE 24 CCR.
- 2019 CALIFORNIA BUILDING CODE (CBC), PART 2, TITLE 24 CCR.
- 2019 CALIFORNIA ELECTRICAL CODE (CEC), PART 3, TITLE 24 CCR.
- 2019 CALIFORNIA MECHANICAL CODE (CMC), PART 4, TITLE 24 CCR.
- 2019 CALIFORNIA PLUMBING CODE (CPC), PART 5, TITLE 24 CCR.
- 2019 CALIFORNIA ENERGY CODE (CEC), PART 6, TITLE 24 CCR.
- 2019 CALIFORNIA FIRE CODE, PART 9, TITLE 24 CCR.
- 2019 CALIFORNIA GREEN BUILDING STANDARDS CODE (CALGREEN), PART 11, TITLE 24 CCR.
- 2019 CALIFORNIA REFERENCED STANDARDS, PART 12, TITLE 24 CCR.
- TITLE 19 CCR, PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS.
- 2016 NFPA 72 NATIONAL FIRE ALARM AND SIGNALING CODE, (CA AMENDED)
- 2016 NFPA 80 STANDARD FOR FIRE DOORS AND OTHER OPENING PROTECTIVES.
- 2016 NFPA 13 STANDARD FOR THE INSTALLATION OF SPRINKLER SYSTEMS, (CA AMENDED)
- 2017 NFPA 17A STANDARD FOR WET CHEMICAL EXTINGUISHING SYSTEMS.
- 2016 NFPA 14 STANDARD FOR THE INSTALLATION OF STANDPIPE AND HOSE SYSTEMS, (CA AMENDED)
- 2016 NFPA 20 STANDARD FOR THE INSTALLATION OF STATIONARY PUMPS FOR FIRE PROTECTION.
- 2016 NFPA 24 STANDARD FOR THE INSTALLATION OF PRIVATE FIRE SERVICE MAINS AND THEIR APPURTENANCES, (CA AMENDED)
- 2015 NFPA 2001 STANDARD ON CLEAN AGENT FIRE EXTINGUISHING SYSTEMS, (CA AMENDED)

REFERENCE CODE SECTION FOR NFPA STANDARDS - 2019 CBC (SFM) CHAPTER 35. SEE CHAPTER 35 FOR STATE OF CALIFORNIA AMENDMENTS TO NFPA STANDARDS.

### VICINITY MAP



### SYMBOL LEGEND

DOOR NUMBER		KEYNOTE	
FRAME TYPE		FINISH MATERIAL	
WALL ASSEMBLY			
ELEVATION NUMBER		DETAIL NUMBER	
INTERIOR ELEVATION		SHEET NUMBER	
SHEET NUMBER			
BLDG. SECTION NUMBER			
SHEET NUMBER			

### GENERAL NOTES

- 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.
- CHANGES TO THE APPROVED DRAWINGS AND SPECIFICATIONS SHALL BE MADE BY AN ADDENDUM OR A CONSTRUCTION CHANGED DOCUMENT (CCD) APPROVED BY THE DIVISION OF THE STATE ARCHITECT, AS REQUIRED BY SECTION 4-338, PART 1, TITLE 24, CCR.
- A 'DSA CERTIFIED' CLASS 3 PROJECT INSPECTOR EMPLOYED BY THE DISTRICT (OWNER) AND APPROVED BY THE DSA SHALL PROVIDE CONTINUOUS INSPECTION OF THE WORK. THE DUTIES OF THE INSPECTOR ARE DEFINED IN SECTION 4-342, PART 1, TITLE 24, CCR.
- A DSA ACCEPTED TESTING LABORATORY DIRECTLY EMPLOYED BY THE DISTRICT (OWNER) SHALL CONDUCT ALL THE REQUIRED TESTS AND INSPECTIONS FOR THE PROJECT.
- GRADING PLANS, DRAINAGE IMPROVEMENTS, ROAD AND ACCESS REQUIREMENTS, AND ENVIRONMENTAL HEALTH CONSIDERATIONS SHALL COMPLY WITH ALL LOCAL ORDINANCES.
- THE INTENT OF THESE DRAWINGS AND SPECIFICATIONS IS THAT THE WORK OF THE ALTERATION, REHABILITATION OR RECONSTRUCTION IS TO BE IN ACCORDANCE WITH TITLE 24, CCR. SHOULD ANY EXISTING CONDITIONS SUCH AS DETERIORATION OR NON-COMPLYING CONSTRUCTION BE DISCOVERED WHICH IS NOT COVERED BY THE CONTRACT DOCUMENTS WHEREIN THE FINISHED WORK WILL NOT COMPLY WITH TITLE 24, CCR, A CONSTRUCTION CHANGE DOCUMENT (CCD), OR A SEPARATE SET OF PLANS AND SPECIFICATIONS, DETAILING AND SPECIFYING THE REQUIRED WORK SHALL BE SUBMITTED TO AND APPROVED BY DSA BEFORE PROCEEDING WITH THE WORK. (SECTION 4-317 (c), PART 1, TITLE 24, CCR).
- 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.
- 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.



IDENTIFICATION STAMP  
DIV. OF THE STATE ARCHITECT  
APP: 02-120394 INC:  
REVIEWED FOR  
SS ☒ FLS ☒ ACS ☒  
DATE: 05/01/2023



DATE: AUGUST 24, 2022

**MODERNIZATION AT  
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1100 LETTS AVE., CORCORAN, CA. 93212  
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TITLE  
OVERALL  
SITE PLAN

**SD1**

PROJECT **1751a**

DSA PR-1501

DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE STATEMENT:

THE POT IDENTIFIED IN THESE CONSTRUCTION DOCUMENTS IS COMPLIANT WITH CURRENT APPLICABLE CALIFORNIA BUILDING CODE ACCESSIBILITY PROVISIONS FOR PATH OF TRAVEL REQUIREMENTS FOR ALTERATIONS AND STRUCTURAL REPAIRS, AS PART OF THE DESIGN OF THIS PROJECT, THE POT WAS EXAMINED AND ANY ELEMENTS, COMPONENTS OR PORTION OF THE POT THAT WERE DETERMINED TO BE NONCOMPLIANT (1) HAVE BEEN IDENTIFIED AND 2) THE CORRECTIVE WORK NECESSARY TO BRING THEM INTO COMPLIANCE HAS BEEN INCLUDED WITHIN THE SCOPE OF THIS PROJECTS WORK THROUGH DETAILS, DRAWINGS AND SPECIFICATIONS INCORPORATED INTO THESE CONSTRUCTION DOCUMENTS. ANY NONCOMPLIANT ELEMENTS, COMPONENTS OR PORTION OF THE POT THAT WILL NOT BE CORRECTED BY THIS PROJECT BASED ON VALUATION THRESHOLD LIMITATIONS OR A FINDING OF UNREASONABLE HARDSHIP ARE SO INDICATED IN THESE CONSTRUCTION DOCUMENTS.

DURING CONSTRUCTION, IF POT ITEMS WITHIN THE SCOPE OF THE PROJECT REPRESENTED AS CODE COMPLIANT ARE FOUND TO BE NONCONFORMING BEYOND REASONABLE CONSTRUCTION TOLERANCES THEY SHALL BE BROUGHT INTO COMPLIANCE WITH THE CBC AS A PART OF THIS PROJECT BY MEANS OF A CONSTRUCTION CHANGE DOCUMENT\* (FORM DSA 140).

### SITE PLAN LEGEND:

	EXISTING BUILDING WITH WORK		PROPERTY LINE
	EXISTING BUILDING WITH NO WORK		ACCESSIBLE PATH OF TRAVEL PER THIS APPLICATION
	ACCESSIBLE TOILETS		EXISTING ACCESSIBLE PATH OF TRAVEL PER DSA #02-117217, 02-117140, & 02-120393
	EXISTING CONCRETE TO REMAIN, PROTECT		EXISTING 20' WIDE FIRE LANE
	EXISTING LANDSCAPE TO REMAIN, PROTECT		(E) FH (E) FIRE HYDRANT

### SITE PLAN NOTES:

- 1 ACCESSIBLE PATH OF TRAVEL :  
PATH OF TRAVEL (P.O.T.) AS VERIFIED BY THE ARCHITECT IS:  
- A COMMON BARRIER FREE ACCESSIBLE ROUTE AT LEAST 48" WIDE WITHOUT ANY ABRUPT VERTICAL CHANGES EXCEEDING 1/2" BEVELED AT 1:2 MAXIMUM SLOPE, EXCEPT THAT LEVEL CHANGES DO NOT EXCEED 1/4" VERTICAL.  
- THE PATH SURFACE IS SLIP RESISTANT, STABLE, FIRM, AND SMOOTH.  
- PASSING SPACES AT LEAST 60" x 60" ARE LOCATED NOT MORE THAN 200' APART (11B-403.5.3).  
- CONTINUOUS GRADIENTS HAVE 60" LEVEL AREAS NOT MORE THAN 400' APART (11B-403.7).  
- CROSS-SLOPE DOES NOT EXCEED 2%.  
- SLOPE IN THE DIRECTION OF TRAVEL IS 5% OR LESS UNLESS OTHERWISE INDICATED AS A RAMP.  
- MAINTAIN P.O.T. FREE OF OVERHANGING OBSTRUCTIONS TO 80" MINIMUM, PROTRUDING OBJECTS GREATER THAN 4" PROJECTION FROM WALL OR EDGE AND 21" ABOVE FINISH GRADE (11B-307.4).

- 2A ACCESSIBLE PARKING :  
AT PARKING LOT:  
23 PARKING STALLS = 1 ACCESSIBLE STALL, PER CBC TABLE 11B-208.2, DSA# 02-116520  
(1) VAN ACCESS, STALL PROVIDED (THEREFORE OKAY)  
PARKING LOT APPROVED UNDER 2016 CBC.

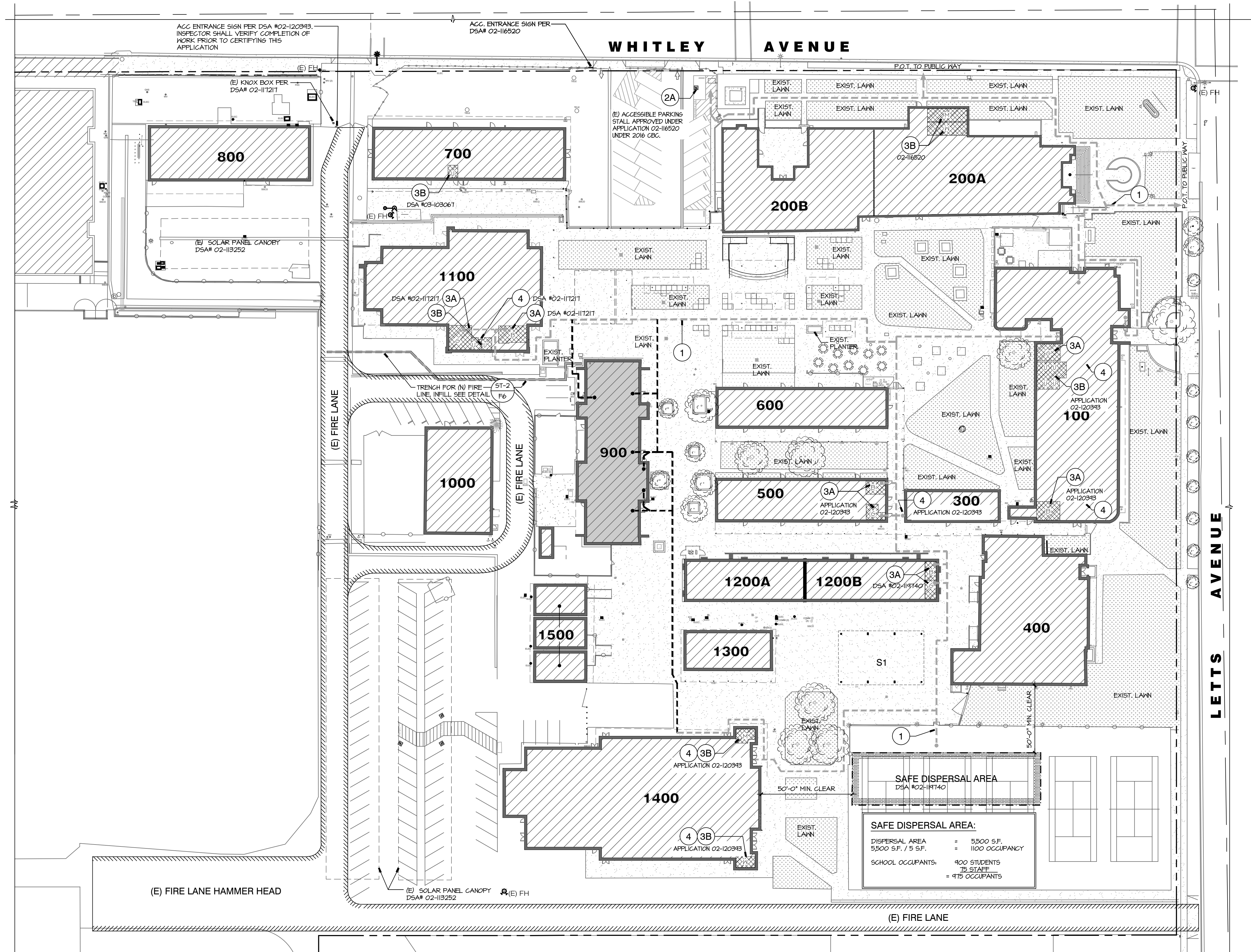
- 3A ACCESSIBLE STUDENT TOILET:  
ACCESSIBLE BOYS (B) AND GIRLS (G) STUDENT TOILET. SEE SITE PLAN FOR DSA APPLICATION NUMBER.  
STUDENT TOILET FACILITIES IN BUILDING 1100 SERVE BUILDING 900.

- 3B ACCESSIBLE STAFF TOILET:  
ACCESSIBLE MEN (M), WOMEN (W) AND UNISEX STAFF (U) TOILET. SEE SITE PLAN FOR DSA APPLICATION NUMBER.  
STAFF TOILET FACILITIES IN BUILDING 1100 SERVE BUILDING 900.

- 4 ACCESSIBLE DRINKING FOUNTAIN:  
ACCESSIBLE HI - LO DRINKING FOUNTAIN. SEE SITE PLAN FOR DSA APPLICATION NUMBER.  
DRINKING FACILITIES IN BUILDING 1100 SERVE BUILDING 900.

### BUILDING SUMMARY

BLDG.	DESCRIPTION	OCCUP. TYPE	CONSTR. TYPE	AREA (S.F.)	D.S.A. #	MOD.	FIRE SPRINKLERED
100	ADMINISTRATION & CLASSROOM	E	III-A	24,117 (2 STORY)	2510	65446 02-115812 03-103067	NO
200A	AUDITORIUM	A-1	III-A	11,392	2571	02-116520	YES
200B	CLASSROOMS	E	III-A	8,141	2571	65446 02-115812	NO
300	CLASSROOMS	E	III-A	1,776	2572	65446 02-115812 03-103067	NO
400	SMALL GYM	A-3	III-A	9,244	2570	-	NO
500	CLASSROOMS	E	V-B	4,233	5293	6781 48848	NO
600	CLASSROOMS	E	V-B	3,975	5293	6781	NO
100	ART / ROTC	E	V-B	5,800	14634	03-103067	NO
800	WELDING SHOP	E	V-B	4,863	31941	03-103067	NO
900	SCIENCE	E	V-B	6,300	40318	-	YES THIS APPLICATION
1000	AG SHOP	E-1	V-B	4,161	6702	03-103067	NO
1100	GTE CLASSROOMS	A-3, B, E	V-B	9,714	02-117217	-	YES
1200A	CLASSROOMS	E	V-B	2,880	02-119140	-	NO
1200B	CLASSROOMS	E	V-B	3,200	02-119140	-	NO
1300	CLASSROOMS	E	V-B	2,100	03-102021	-	NO
1400	LARGE GYM	A-4	III-A	16,222	20675	-	NO
1500	RELOCATABLE CLASSROOMS	E	V-B	2,880	56065	-	NO
S1	SHADE STRUCTURE	A-3	II-B	2,560	02-119140	-	NO



## OVERALL SITE PLAN

1" = 40'-0"





— 100 —

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INGENUITY

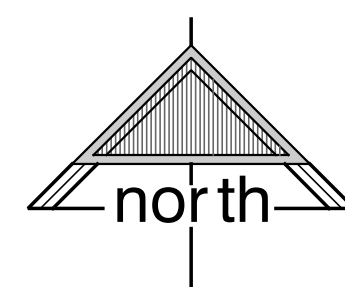
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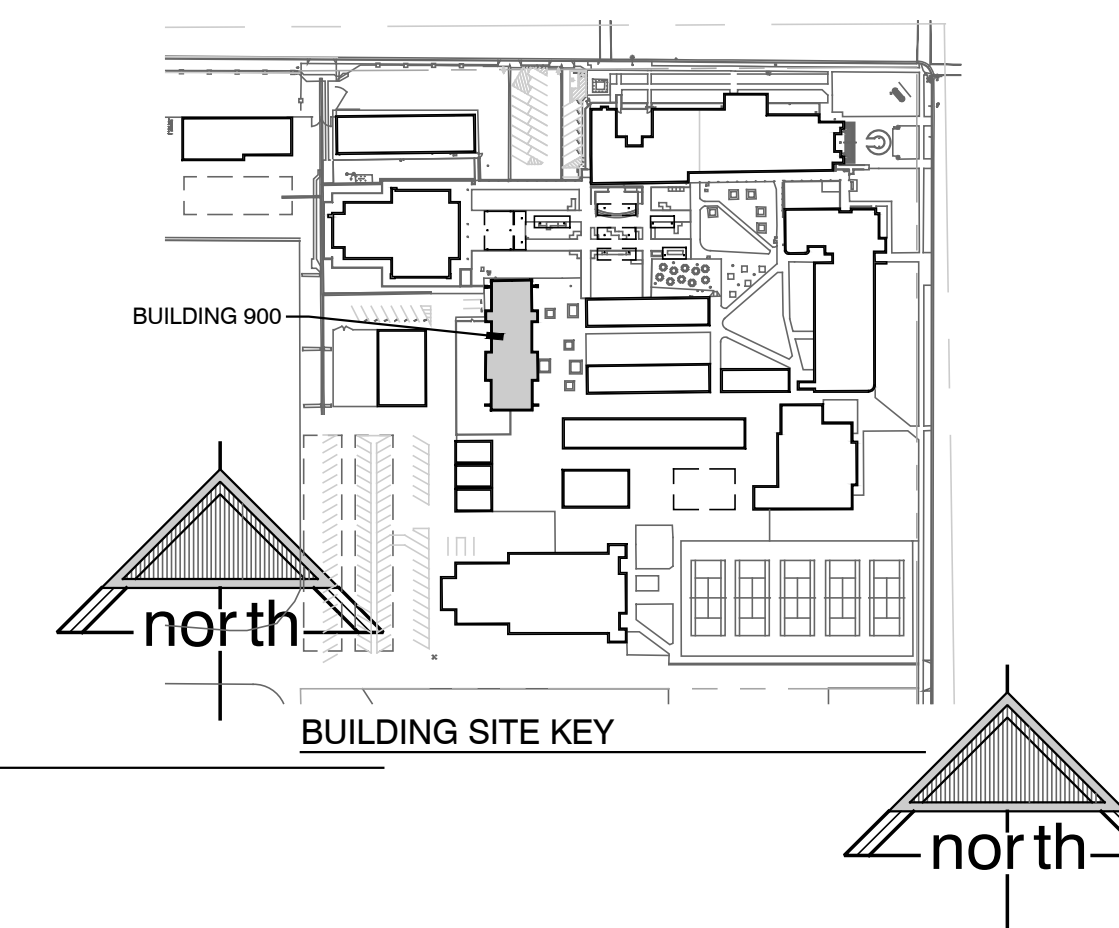
## A1

PROJECT 1751a

SCALE 1/8" = 1'-0"



# BUILDING 900 DEMOLITION FLOOR PLAN

$$\overline{SCAF} \cap B^* = \emptyset$$


(D1) REMOVE (E) FLOORING & BASE, PREP FOR (N) FLOORING & BASE PER FLOOR PLAN.

(D2) REMOVE (E) WALL FINISHES TO EXPOSE STUD FRAMING & SHEAR WALL WHERE OCCURS, PREP FOR (N) WALL FINISH O/E (E) STUD FRAMING & SHEAR WALL. REFER TO STRUCTURAL DRAWINGS FOR SHEAR WALL LOCATIONS.

(D3) (E) WALL FINISHES TO REMAIN, PROTECT. U.O.N. PREP FOR PAINT.

(D4) REMOVE (E) EMERGENCY SHOWER, COORDINATE W/ PLUMBING DRAWINGS. PREP FOR SLAB REPAIR AT REMOVED SHOWER.

(D5) REMOVE (E) BASE CABINETS, COUNTERTOP, & SINK.

(D6) REMOVE (E) MARKER BOARD.

(D7) REMOVE (E) DOOR & HARDWARE, FRAME TO REMAIN. PREP FOR (N) DOOR & HARDWARE IN (E) FRAME PER FLOOR PLAN.

(D8) REMOVE (E) DOOR & WINDOW ASSEMBLY IN ITS ENTIRETY, PREP FOR (N) DOOR, DOOR & WINDOW, OR STUD INFILL PER FLOOR PLAN.

(D9) (E) FIRE ALARM CONTROL PANEL & DATA, THIS WALL. COORDINATE W/ ELECTRICAL DRAWINGS.

(D10) REMOVE (E) CABINETS & SHELVING.

(D11) REMOVE (E) FUME HOOD, COORDINATE W/ MECHANICAL & PLUMBING DRAWINGS.

(D12) REMOVE (E) BUILT-IN TEACHER'S DESK, COORDINATE W/ PLUMBING & ELECTRICAL DRAWINGS.

(D13) REMOVE (E) BUILT-IN STUDENT DESKS, COORDINATE W/ PLUMBING & ELECTRICAL DRAWINGS.

(D14) REMOVE (E) PLUMBING TRENCH, COORDINATE W/ PLUMBING DRAWINGS, PREP FOR CEMENT INFILL.

(D15) REMOVE (E) FLOOR SINKS, COORDINATE W/ PLUMBING DRAWINGS.

(D16) REMOVE (E) FIRE EXTINGUISHER CABINET.

(D17) TEMPORARILY REMOVE (E) SMART BOARD MONITOR & PREP FOR REINSTALL PER FLOOR PLAN.

(D18) REMOVE (E) WALL AS REQUIRED FOR NEW OPENING PER FLOOR PLAN.

(D19) E ROOF ACCESS LADDER TO REMAIN, PROTECT.

(D20) LOCATION OF (E) IDF, COORDINATE W/ ELECTRICAL DRAWINGS.

(D21) PREPARE AREA FOR (N) FIRE SPRINKLER RISER & CHAIN LINK FENCE ENCLOSURE.

(D22) REMOVE PORTION OF (E) PLYWOOD SHEAR WALL, THIS SIDE ONLY, AS REQUIRED TO INSTALL (N) ELECTRICAL / PLUMBING / INSULATION. COORDINATE (N) PLYWOOD SHEAR WALL INSTALL WITH STRUCTURAL DWGS. WHERE OCCURS.

(D23) SAW CUT (E) CONCRETE SLAB AS REQUIRED FOR (N) PLUMBING, SEE SHEET 00-PLUMBING DRAWINGS.

(D24) REMOVE (E) DOOR & FRAME IN ITS ENTIRETY, PREP FOR STUD INFILL PER FLOOR PLAN.



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REVISIONS	

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(818) 707-1235

TITLE  
BUILDING 900  
CODE SUMMARY &  
EXIT ANALYSIS

**A2**

PROJECT **1751a**

**ADSA**

**810**

## FIRE & LIFE SAFETY SITE CONDITIONS SUBMITTAL

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

To facilitate the Division of the State Architect's (DSA) fire and life safety plan review of project site conditions, DSA requires the design professional to provide the following information at time of project submittal for projects consisting of construction of a new campus, conversion of an existing building, addition to existing buildings, and for site alternate design means for fire department emergency vehicle access, and fire suppression water supply. Information associated with compliance items 1 through 9 below is to be provided for all project types indicated above. Information associated with items 1 through 9 is to be completed when an alternate means is utilized. Acknowledgment by the school district and signature from the Local Fire Authority (LFA) is only required when an alternate design means is being requested.

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

For additional information refer to the instructions at the end of this form and DSA Policy FC-09-07: Fire Flow for Buildings.

PROJECT INFORMATION		
School District/Owner:	CORCORAN JOINT UNIFIED SCHOOL DISTRICT	
Project Name/School:	CORCORAN HIGH SCHOOL	
Project Address:	1100 LETTS AVE. CORCORAN, CA 93212	

FIRE & LIFE SAFETY INFORMATION		
1. Has a fire hydrant flow test been performed within the past 12 months? (If yes, provide a copy of the test data.)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
2. Was the fire hydrant water flow test performed as part of this LFA review?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
3. Is the project located within a designated fire hazard severity zone (FHSZ) as established by Cal Fire? (If yes, indicate FHSZ classification below.)	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Refer to the following website for FHSZ locations: <a href="http://gis.fire.ca.gov/FHSZ/">http://gis.fire.ca.gov/FHSZ/</a>	Moderate <input type="checkbox"/>	High <input type="checkbox"/>
Very High <input type="checkbox"/>		
Without exception, Area (A) is not acceptable. If any exceptions are required, project design must meet the requirements of CBC Chapter 7-11.	WFA <input type="checkbox"/>	

CONDITION MEANS AND METHODS RESOLUTION		ALTERNATE ACCEPTED	
4. Emergency vehicle access roadways do not meet CBC requirements.	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
5a. Acceptable Alternative: Emergency vehicle and personnel access as proposed by the project architect is acceptable for providing fire suppression and protection of life and property.	<input checked="" type="checkbox"/>		
5b. Fire Hydrants: Number and spacing does not meet CBC requirements.	<input type="checkbox"/>		
5c. Acceptable Alternative: Number of fire hydrants and spacing as proposed by the project architect is acceptable for the suppression and protection of life and property.	<input checked="" type="checkbox"/>		
5d. Fire Hydrants: Water flow and pressure are less than CBC minimums.	<input type="checkbox"/>		
5e. Acceptable Alternative: Fire assistance flow and pressure is acceptable for providing fire suppression and protection of life and property.	<input type="checkbox"/>		
5f. Location of the department (engine or fire) serving the site meets CBC requirements.	<input type="checkbox"/>		
5g. Acceptable Alternative: The location of fire department connection serving the fire sprinkler system and/or standpipe system is acceptable for providing fire suppression and protection of life and property.	<input type="checkbox"/>		

School District Acceptance of Acceptable Design Alternates:  
By signing this form, the school district acknowledges and accepts the proposed design as an alternative to California Building Code (CBC) and California Fire Code (CFC) minimum requirements, as indicated by one or more of the conditions indicated at Items 4a, 5a, 5b, or 5c, for providing fire and life safety protection of life and property.

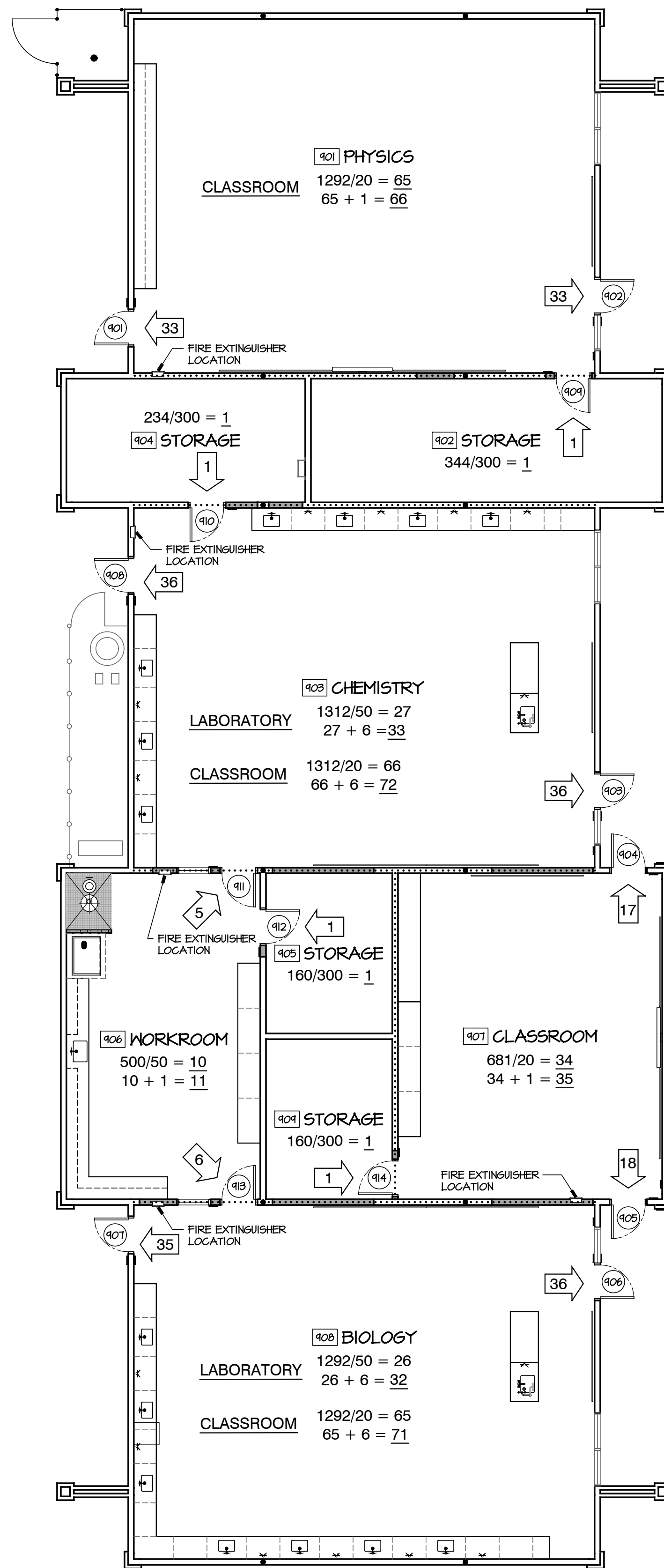
Accepted by: Charles Price Title: Chief Business Officer  
Signature: Chloe Price Date: 04/27/23

LOCAL FIRE AUTHORITY (LFA) INFORMATION		
LFA Agency Name:	KINGS COUNTY FIRE DEPARTMENT	
LFA Review Official:	AARON PARREIRA	
Title:	FIRE MARSHAL	Work Phone: (859) 852-2885
Work Email:	AARON.PARREIRA@CO.KINGS.CA.US	

LFA Reviewer's signature: D. Aaron Parreira Date: 04/27/23

5a. The location of this proposed fire hydrant is acceptable by Kings County Fire Department.

DSA (DSA 810, revised 4/20/04) DIVISION OF THE STATE ARCHITECT DEPARTMENT OF GENERAL SERVICES STATE OF CALIFORNIA Page 2 of 4



EXIT ANALYSIS									
CALCULATED OCCUPANTS OF PRIMARY SPACES WITH ACCESSORY OCCUPANTS EXITING THROUGH CBC 1004.1		NUMBER OF REQUIRED EXITS CBC 1005.3.1	NUMBER OF PROVIDED EXITS	EGRESS WIDTH PER OCCUPANT SERVED CBC 1005.1	EGRESS WIDTH		# OF OCC. THROUGH EXIT		
					REQUIRED EXIT WIDTH	EXIT WIDTH PROVIDED			DOOR #
BUILDING 900									
ROOM 901 - PHYSICS	E-OCC.	66	2 EXITS PROVIDED	0.2' PER OCC. CBC 1005.3.2	EXIT 1 33	33 x 0.2' = 6.6'	36'	902	
		66 > 50 = 16	2 EXITS REQ.		EXIT 2 33	33 x 0.2' = 6.6'	36'	901	
ROOM 903 - CHEMISTRY	E-OCC.	72	2 EXITS PROVIDED	0.2' PER OCC. CBC 1005.3.2	EXIT 1 33	33 x 0.2' = 6.6'	36'	903	
		72 > 50 = 22	2 EXITS REQ.		EXIT 2 33	33 x 0.2' = 6.6'	36'	906	
ROOM 907 - CLASSROOM	E-OCC.	35	2 EXITS PROVIDED	0.2' PER OCC. CBC 1005.3.2	EXIT 1 17	17 x 0.2' = 3.4'	36'	904	
		35 < 50 = 15	1 EXIT REQ.		EXIT 2 18	18 x 0.2' = 3.6'	36'	905	
ROOM 908 - BIOLOGY	E-OCC.	71	2 EXITS PROVIDED	0.2' PER OCC. CBC 1005.3.2	EXIT 1 36	36 x 0.2' = 7.2'	36'	906	
		71 > 50 = 21	2 EXITS REQ.		EXIT 2 35	35 x 0.2' = 7.0'	36'	907	

### CODE SUMMARY

**BUILDING 900:**

**1. OCCUPANCY GROUP:**  
CBC CHAPTER 3 E OCCUPANCY  
TOTAL BUILDING OCCUPANT LOAD.....244 OCCUPANTS

**2. AREA**  
CBC TABLE 506  
(E) BLDG. 900:  
AREA - GROUP E OCCUPANCY.....6,300 SF  
OVERHANG AREA.....1,280 SF  
TOTAL BLDG AREA WITH OVERHANG.....7,580 SF  
ALLOWABLE AREA - GROUP E.....9,500 SF  
TOTAL AREA < ALLOWABLE AREA, 7,580 SF < 9,500 SF  
THEREFORE OK

ADDITIONALLY, BUILDING 900 WILL BE FULLY SPRINKLERED, THUS HAVING AN ALLOWABLE AREA OF 38,000 SF

**3. TYPE OF CONSTRUCTION**  
CBC CHAPTER 6  
TYPE VB

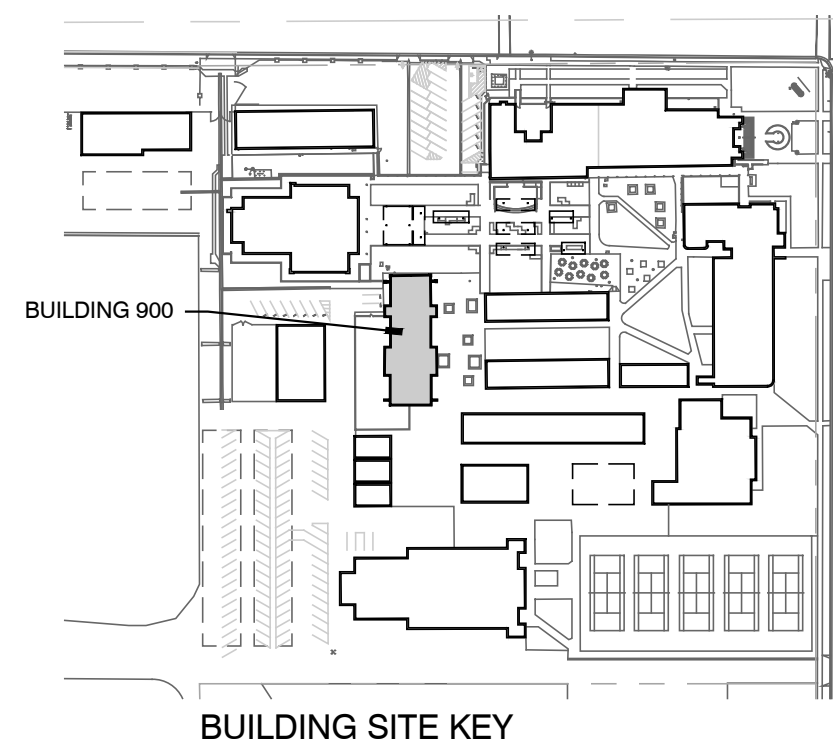
**4. SEPARATION OF OCCUPANCIES**  
CBC 508.3  
NOT APPLICABLE

**5. BUILDING HEIGHT**  
CBC TABLE 504.3  
ALLOWABLE BUILDING HEIGHT = 40'-0"  
ACTUAL BUILDING HEIGHT = 17'-0"

**6. NUMBER OF STORES**  
CBC TABLE 504.4  
ALLOWABLE NUMBER OF STORES = 2  
ACTUAL NUMBER OF STORES = 1

**7. FIRE SPRINKLERS**  
(E) BUILDING IS NOT SPRINKLERED BUT WILL BE FULLY SPRINKLERED AS PART OF THE PROJECT.  
PER 903.2.3 GROUP-E WILL REQUIRE SPRINKLERS IN ROOMS OR AREAS WITH SPECIAL HAZARDS SUCH AS LABORATORIES, THUS BUILDING WILL NEED TO BE FULLY SPRINKLERED

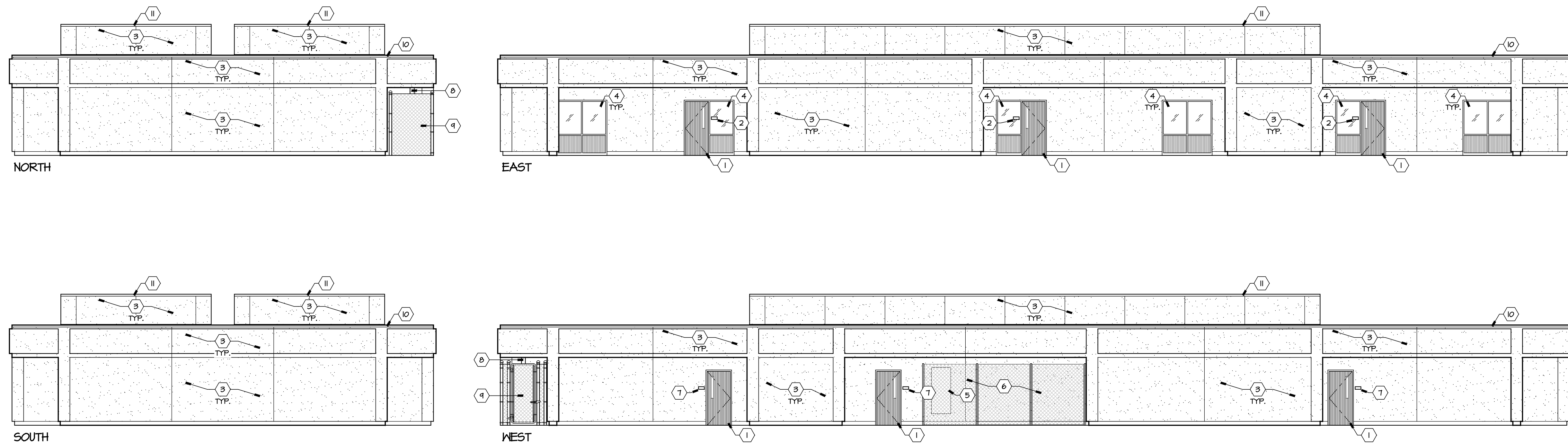
**8. FIRE RESISTANCE RATING FOR EXTERIOR WALLS BASED ON FIRE SEPARATION DISTANCE**  
CBC TABLE 602  
FIRE SEPARATION DISTANCE = 10' ≤ X < 30', TYPE VB, GROUP E: NO RATING REQUIRED







REVISIONS	
1	
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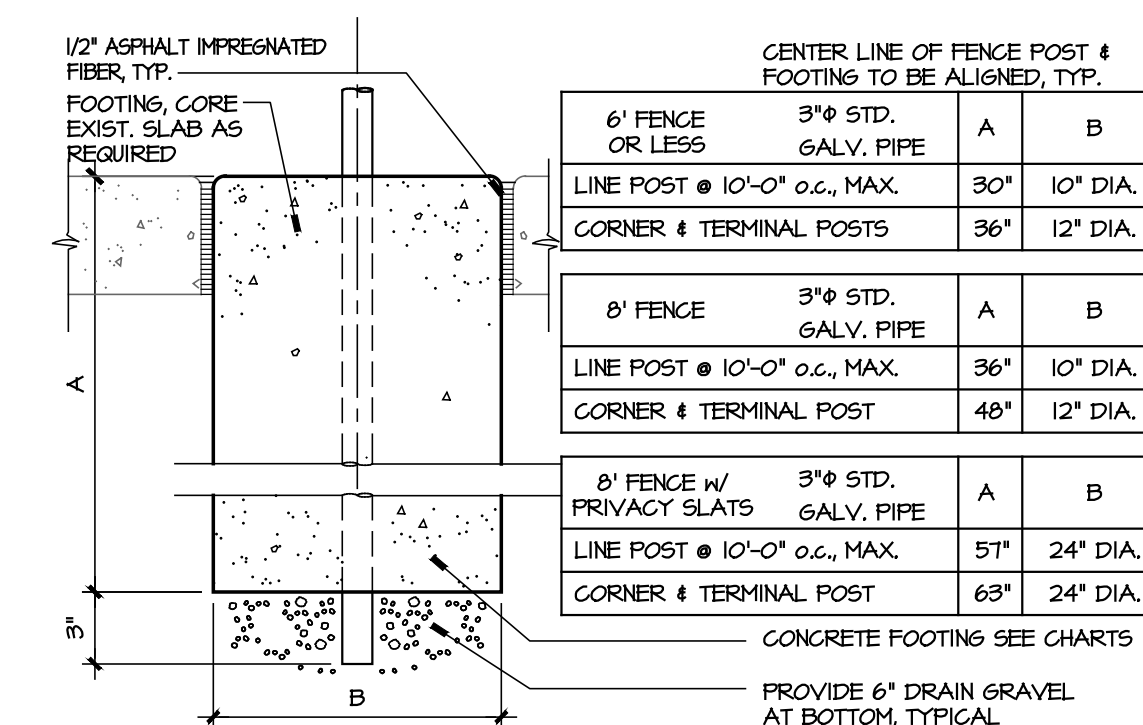


EXTERIOR ELEVATION KEY NOTES, THIS SHEET ONLY:

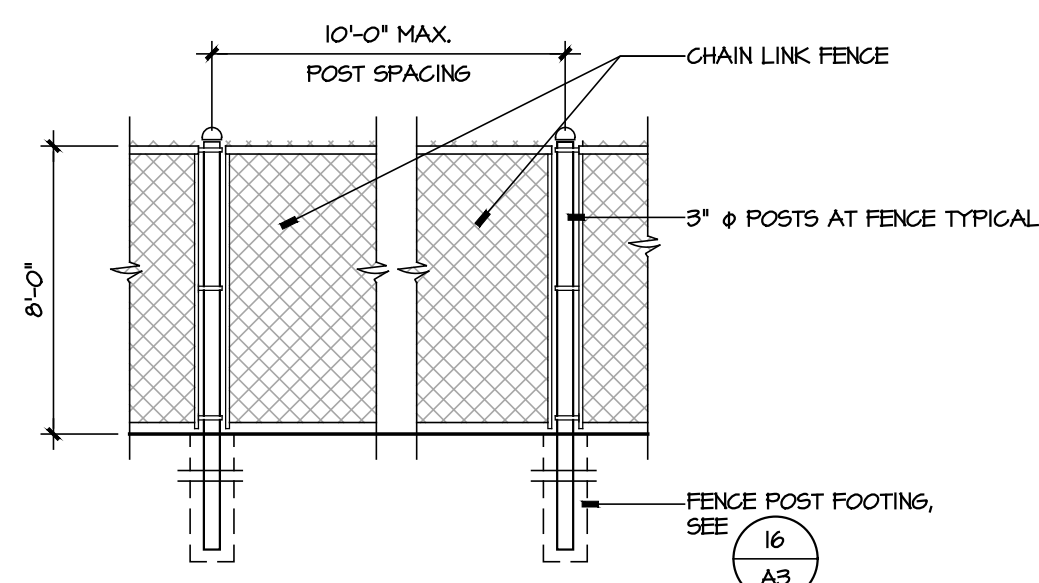
- |   |   |
|---|---|
| 1 (N) DOOR IN (E) FRAME PER DOOR SCHEDULE.                    | 7 ROOM SIGN, SEE DOOR SCHEDULE.   |
| 2 (E) ROOM SIGN TO REMAIN, PROTECT.                           | 8 FIRE SPRINKLER RISER, COORDINATE WITH FIRE PROTECTION DWGS.                                     |
| 3 (E) CEMENT PLASTER WALL FINISH TO REMAIN, PROTECT.          | 9 5'-10" SQUARE x 8'-0" HIGH CHAIN LINK FENCE ENCLOSURE. REFER TO DETAILS                         |
| 4 (E) WINDOW TO REMAIN, PROTECT. PAINT FRAME AND METAL PANEL. | 10 REMOVE (E) GAP FLASHING AS REQUIRED FOR RE-ROOF. INSTALL (N) PRE FINISHED 24 GA. CAP FLASHING. |
| 5 (E) ELECTRICAL PANELS.                                      | 11 (E) GAP FLASHING TO REMAIN, PROTECT.   |
| 6 (E) CHAIN LINK FENCE AT EQUIPMENT YARD.                     |   |

**BUILDING 900  
EXTERIOR ELEVATIONS**

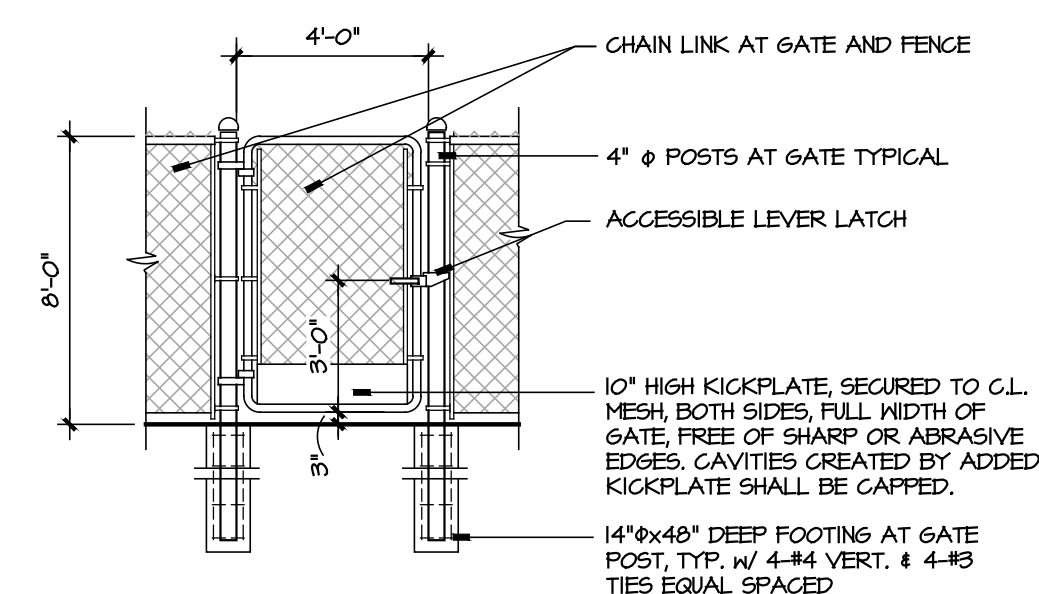
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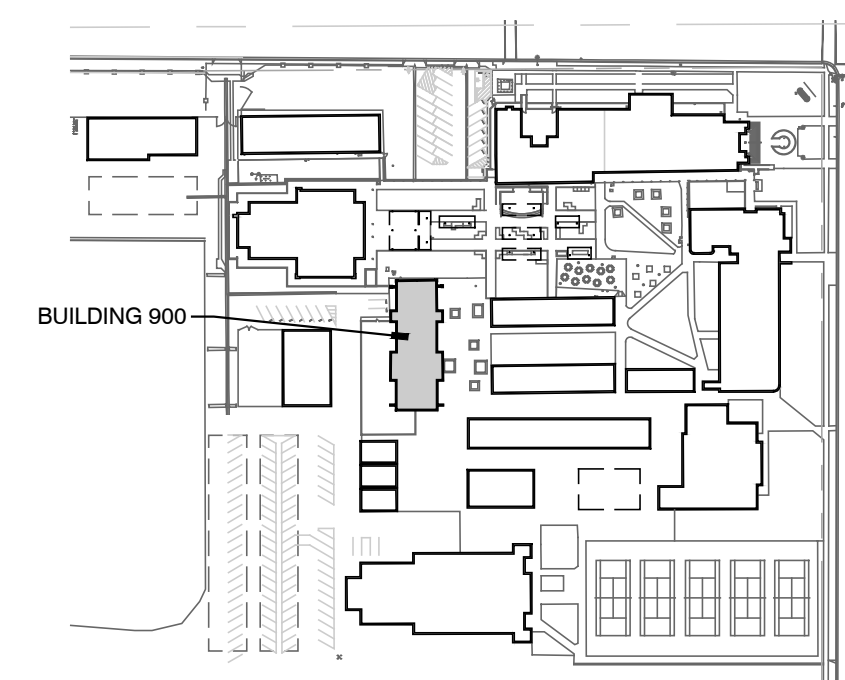
**16 C.L. FENCE POST FOOTING**  
1 1/2" = 1'-0"



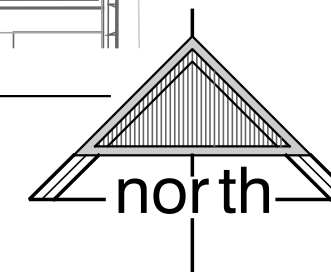
**11 TYPICAL C.L. FENCE ELEV.**  
SCALE: 1/4" = 1'-0"



**6 ACCESSIBLE C.L. GATE**  
1/4" = 1'-0"



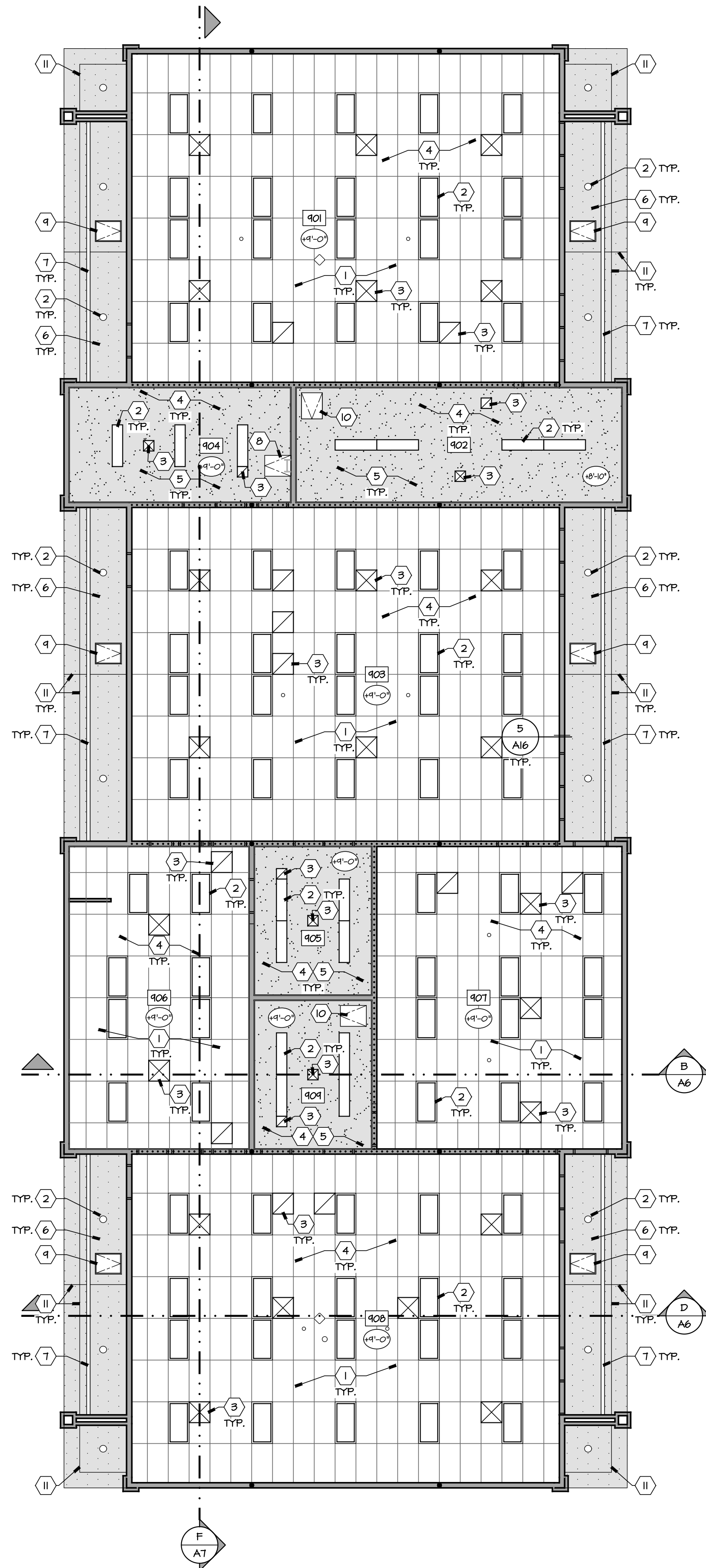
BUILDING SITE KEY







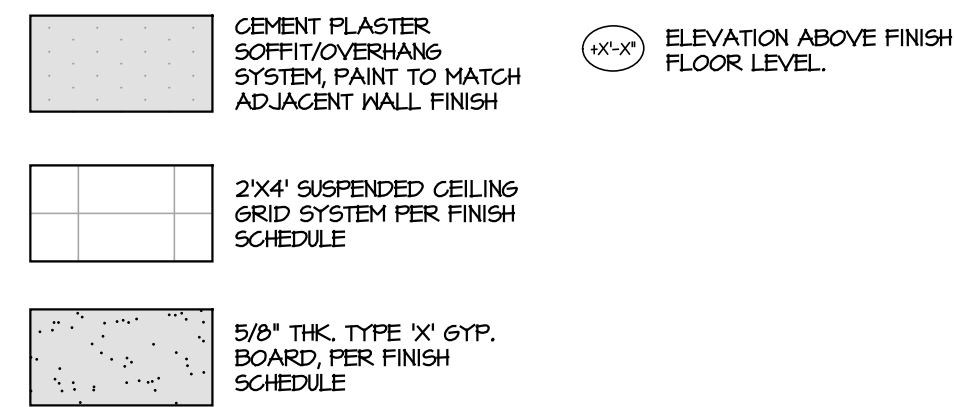
REVISIONS	



**BUILDING 900  
REFLECTED CEILING PLAN**

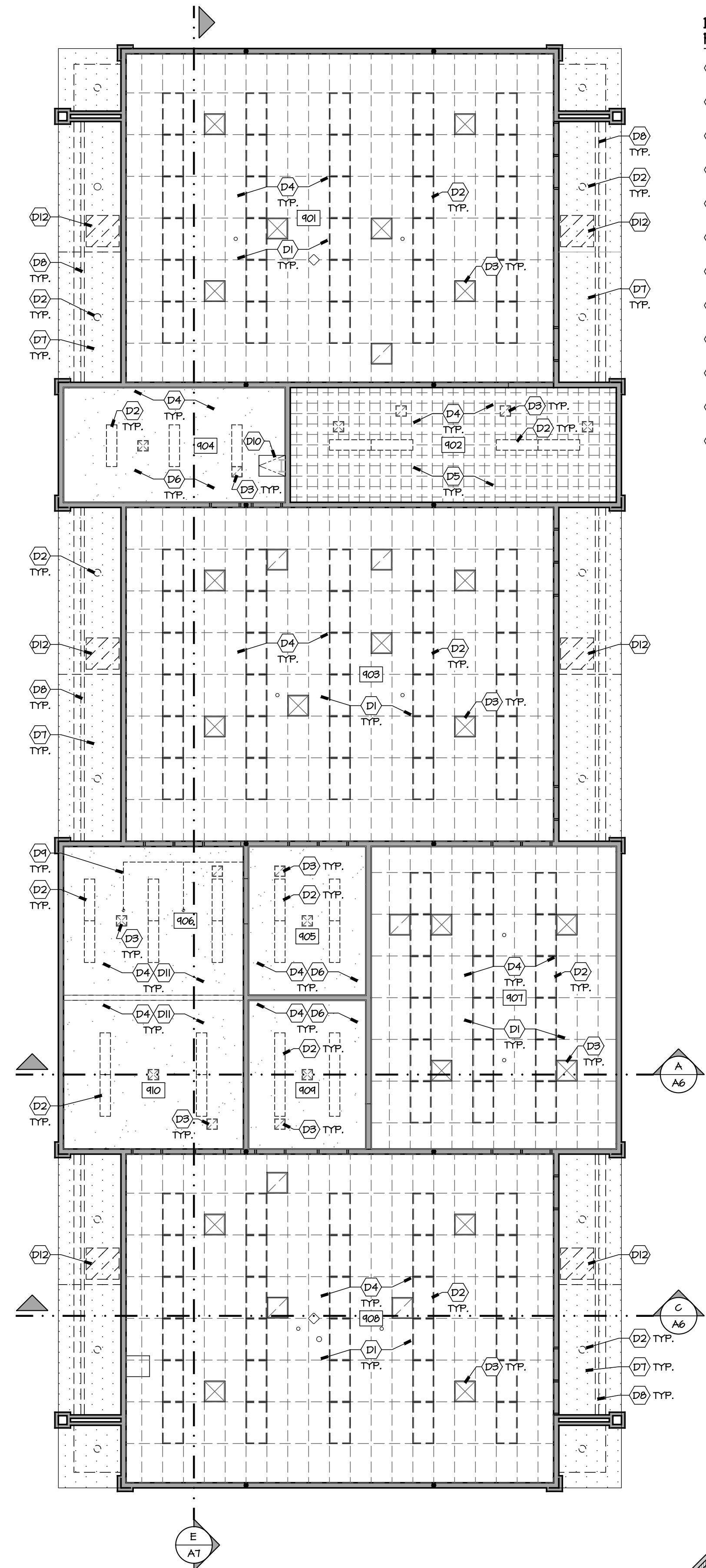
SCALE 1/8" = 1'-0"

**REFLECTED CEILING PLAN LEGEND:**



**REFLECTED CEILING PLAN KEY NOTES THIS SHEET ONLY:**

1. SUSPENDED CEILING SYSTEM GRID & PANELS, SEE DETAIL 6/A15
2. LIGHT FIXTURE, COORDINATE W/ ELECTRICAL DRAWINGS.
3. MECHANICAL REGISTER, COORDINATE W/ MECHANICAL DRAWINGS.
4. R-30 BATT INSULATION AT ROOF LINE, SEE SECTIONS.
5. 5/8" TYPE 'X' GYP. BD. CEILING O/ (E) FRAMING.
6. PLASTER SOFFIT, SEE DETAIL 20/A14
7. 4" CONTINUOUS VENT ATTACHED TO JOISTS, PAINT SAME COLOR AS PLASTER.
8. (E) ACCESS LADDER & ROOF HATCH.
9. 30"x24" SOFFIT ACCESS HATCH, SEE DETAIL 11/A15
10. 30"x24" ATTIC ACCESS HATCH, SEE DETAIL 11/A15
11. PLASTER CRACK CONTROL JOINT

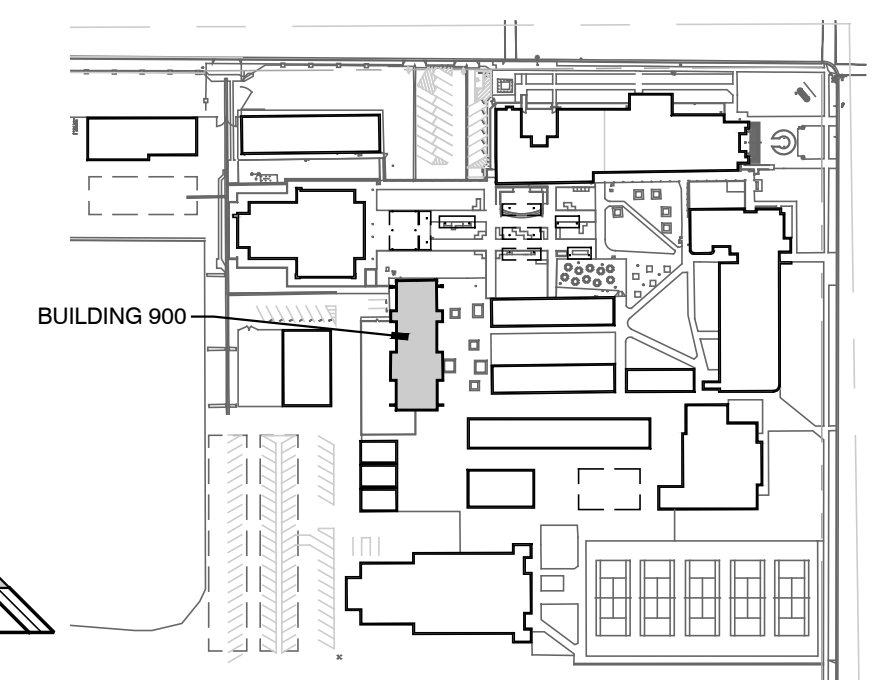


**BUILDING 900  
DEMO REF. CEILING PLAN**

SCALE 1/8" = 1'-0"

**DEMOLITION  
REFLECTED CEILING PLAN KEY NOTES, THIS SHEET ONLY:**

- (D1) REMOVE (E) SUSPENDED T-BAR CEILING SYSTEM IN ITS ENTIRETY.
- (D2) REMOVE (E) LIGHT FIXTURES, COORDINATE W/ ELECTRICAL DRAWINGS.
- (D3) REMOVE (E) MECHANICAL REGISTER, COORDINATE W/ MECHANICAL DRAWINGS.
- (D4) REMOVE (E) BATT INSULATION AT CEILING LINE.
- (D5) REMOVE (E) 12"x12" GLUE-UP TILE & BACKING TO EXPOSE CEILING FRAMING.
- (D6) REMOVE (E) GYP. BD. CEILING TO EXPOSE CEILING FRAMING.
- (D7) REMOVE (E) PLASTER & FURRING STRIPS, PROTECT SOFFIT FRAMING, PREP FOR (N) CEMENT PLASTER.
- (D8) REMOVE (E) CONTINUOUS VENTILATING SCREED.
- (D9) REMOVE (E) WATER LINE & SPRINKLER HEADS, COORDINATE W/ PLUMBING DRAWINGS.
- (D10) (E) ACCESS LADDER & ROOF HATCH TO REMAIN, PROTECT.
- (D11) REMOVE (E) GYP. BD. CEILING AND FRAMING, PREP FOR (N) CEILING PER REFLECTED CEILING PLAN.
- (D12) PREP AREA FOR (N) SOFFIT ACCESS HATCH PER REFLECTED CEILING PLAN.



**BUILDING SITE KEY**

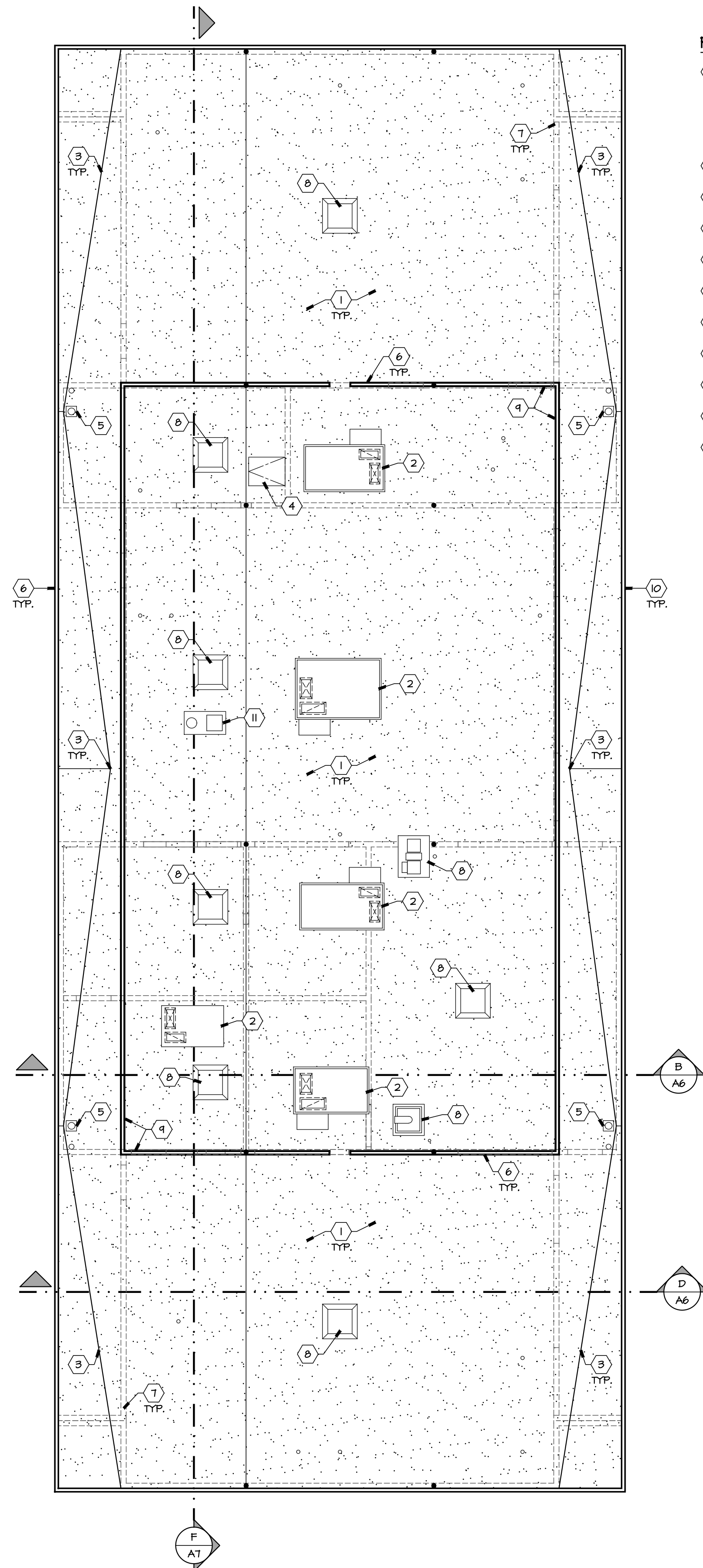




REVISIONS

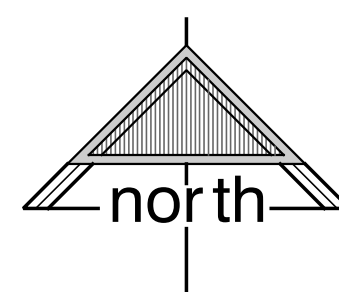
ROOF PLAN KEY NOTES, THIS SHEET ONLY:

- 1 CLASS 'A' BUILT-UP ROOFING SYSTEM w/ (E) PLYWOOD ROOF DECK, PATCH PLYWOOD DECK AS REQUIRED AT REMOVED EQUIPMENT FOR (N) ROOFING. FOR TYPICAL ROOF ASSEMBLY, SEE DETAIL. (14) (22) (A15)
- 2 (N) MECHANICAL UNIT, COORDINATE W/ MECHANICAL DRAWINGS.
- 3 (E) BUILT-UP CRICKET FRAMING, PROVIDE (N) BUILT-UP ROOFING.
- 4 (E) ROOF HATCH TO REMAIN, PROTECT.
- 5 (E) ROOF DRAIN W/ NEW DEBRIS SCREEN.
- 6 (E) PARAPET CAP FLASHING TO REMAIN, PROTECT.
- 7 DASHED LINES DENOTE WALL LINES BELOW, TYP.
- 8 (E) ATTIC VENT TO REMAIN, PROTECT.
- 9 PAINT INSIDE FACE OF MECHANICAL SCREEN.
- 10 CONTINUOUS 24 GA. METAL COPING, SEE DETAIL. (21) (A15)
- 11 EXHAUST FAN, COORDINATE W/ MECHANICAL DRAWINGS & DETAIL. (A) (H4)



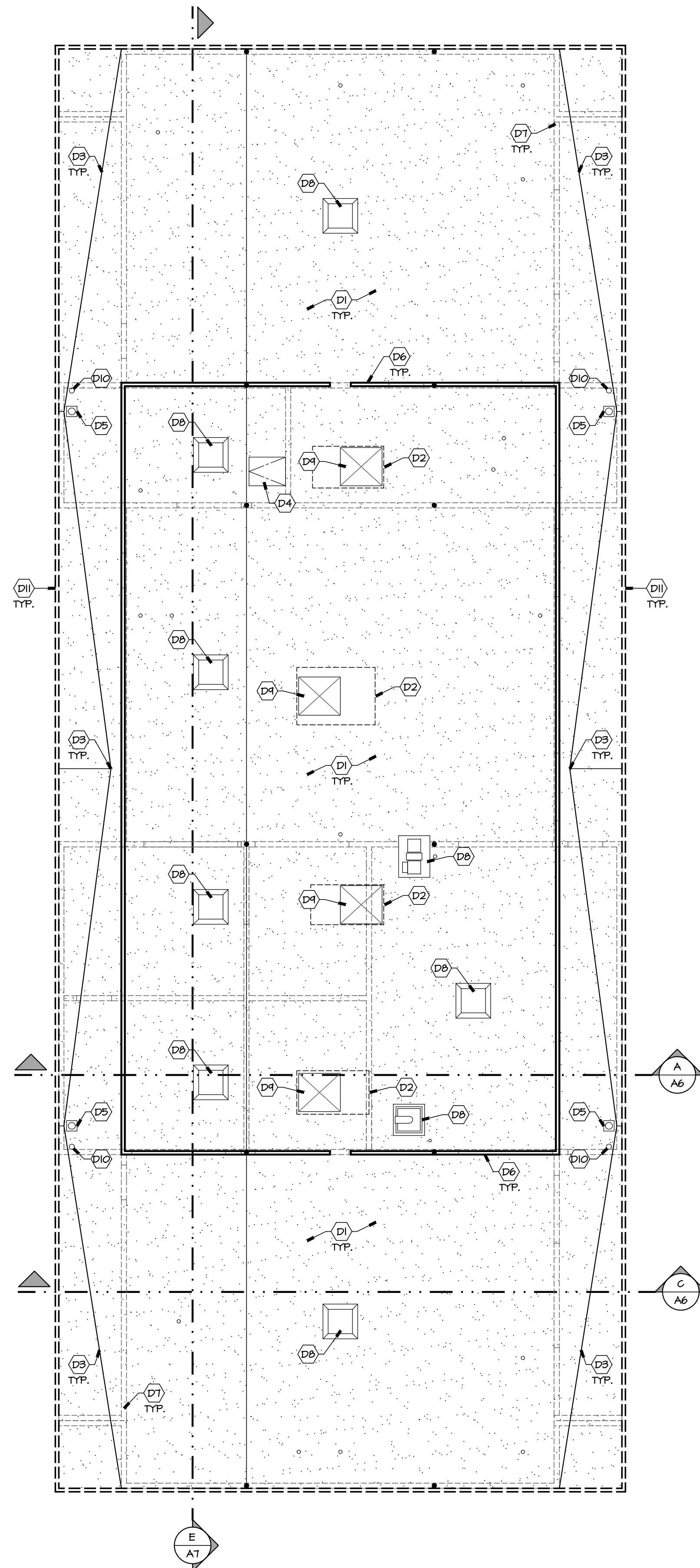
BUILDING 900  
ROOF PLAN

SCALE 1/8" = 1'-0"



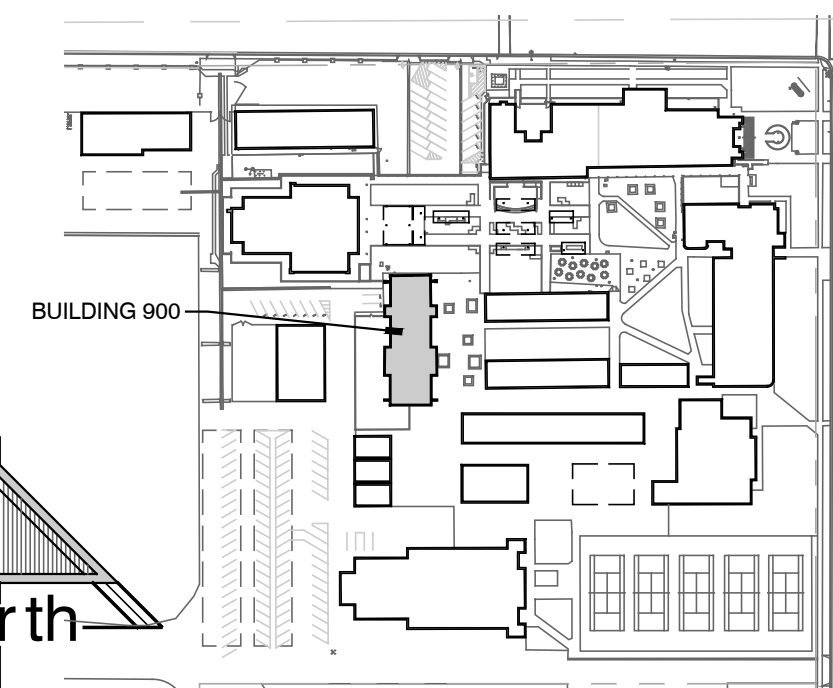
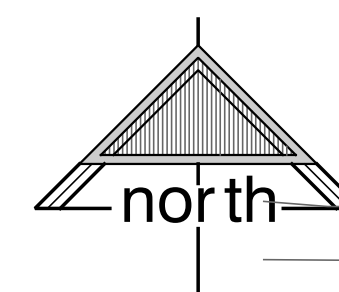
DEMOLITION ROOF PLAN KEY NOTES, THIS SHEET ONLY:

- D1 REMOVE (E) BUILT-UP ROOFING TO EXPOSE PLYWOOD SHEATHING. PREP FOR (N) ROOFING PER ROOF PLAN.
- D2 REMOVE (E) MECHANICAL UNITS & CURB, SEE MECHANICAL DRAWINGS.
- D3 (E) CRICKET FRAMING TO REMAIN, PROTECT.
- D4 (E) ROOF HATCH TO REMAIN, PROTECT.
- D5 (E) ROOF DRAIN TO REMAIN, PROTECT. REMOVE DEBRIS SCREEN AS REQUIRED FOR RE-ROOF.
- D6 (E) PARAPET CAP FLASHING TO REMAIN, PROTECT.
- D7 DASHED LINES DENOTE WALL LINES BELOW, TYP.
- D8 (E) ATTIC VENT TO REMAIN, PROTECT.
- D9 (E) OPENINGS IN ROOF FOR MECHANICAL EQUIPMENT TO REMAIN, PROTECT.
- D10 (E) ROOF OVERFLOW TO REMAIN, PROTECT.
- D11 REMOVE (E) CAP FLASHING, PREP OR (N) PER ROOF PLAN.

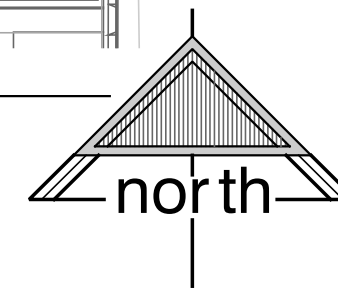


BUILDING 900  
DEMOLITION ROOF PLAN

SCALE 1/8" = 1'-0"



BUILDING SITE KEY







**MODERNIZATION AT  
CORCORAN HIGH SCHOOL  
SCIENCE BUILDING**  
1100 LETTS AVE., CORCORAN, CA. 93212



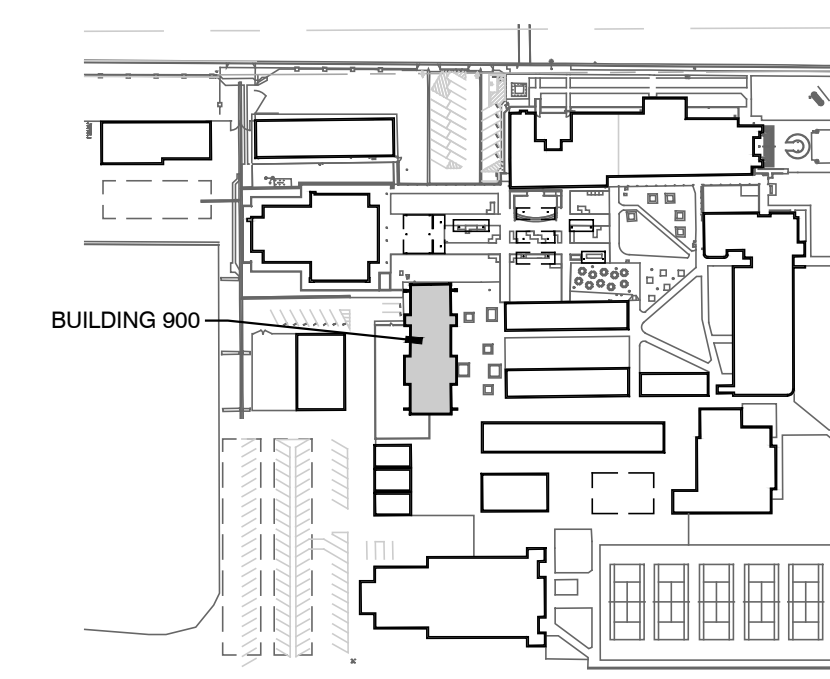
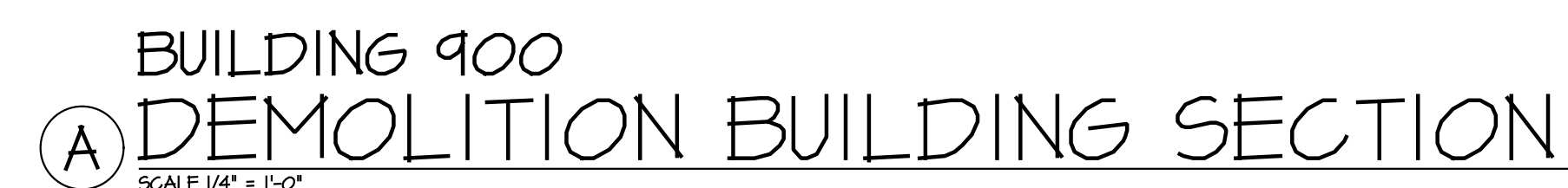
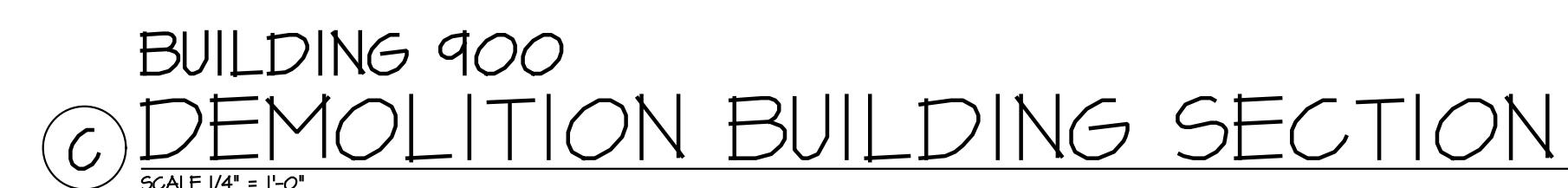
ACCEPTED MANUSCRIPT

**MANGINI** | ARCHITECTURE  
INGENUITY

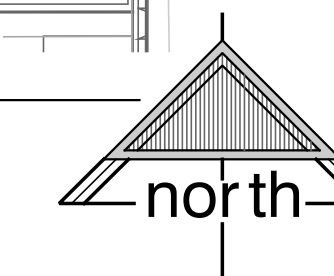
McCLAIN BARENG MORRELLI SCOTT

MANGINI ASSOCIATES INC.  
1320 West Mineral King Avenue  
www.mangini.us  
(559) 627-0530 *Office*

**A6**

PROJECT **1751a**

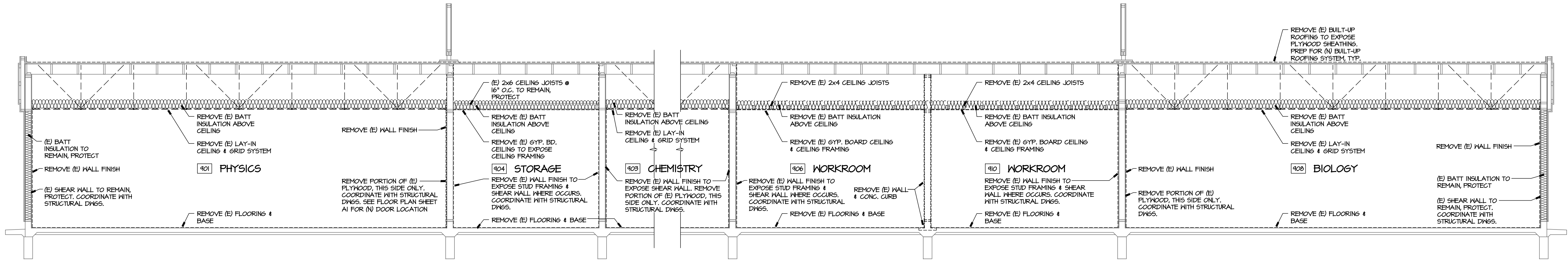
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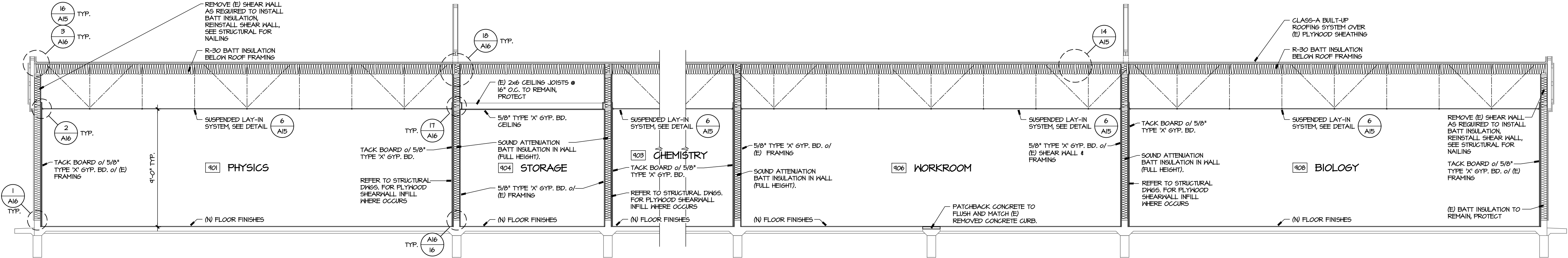




REVISIONS

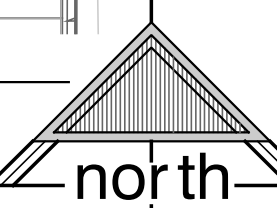
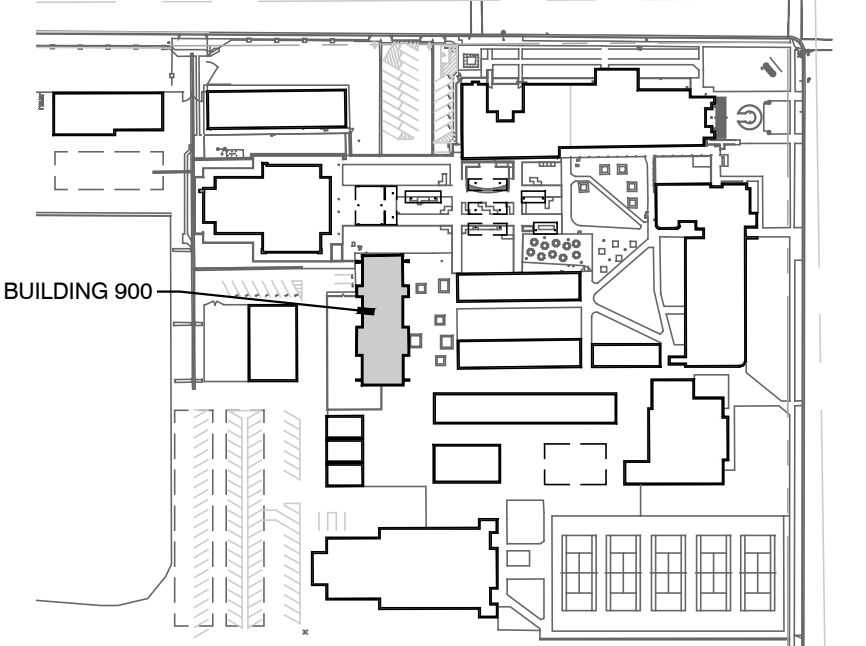


BUILDING 900  
**E** DEMOLITION BUILDING SECTION  
SCALE 1/4" = 1'-0"

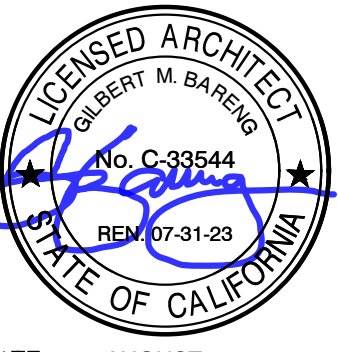
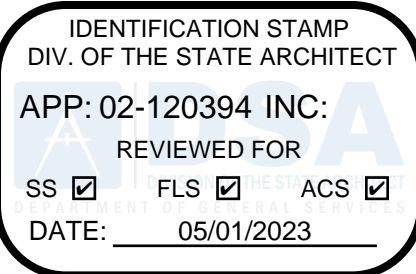


BUILDING 900  
**F** BUILDING SECTION  
SCALE 1/4" = 1'-0"

NOTE: WHEN SHEAR WALL SHEATHING IS REMOVED IT IS TO BE REINSTALLED, SEE STRUCTURAL FOR ADDITIONAL INFO.







DATE: AUGUST 24, 2022

**MODERNIZATION AT  
CORCORAN HIGH SCHOOL  
SCIENCE BUILDING**  
1100 LETTS AVE., CORCORAN, CA. 93212  
CORCORAN UNIFIED SCHOOL DISTRICT  
1520 PATTERSON AVE., CORCORAN, KINGS COUNTY, CA. 93212



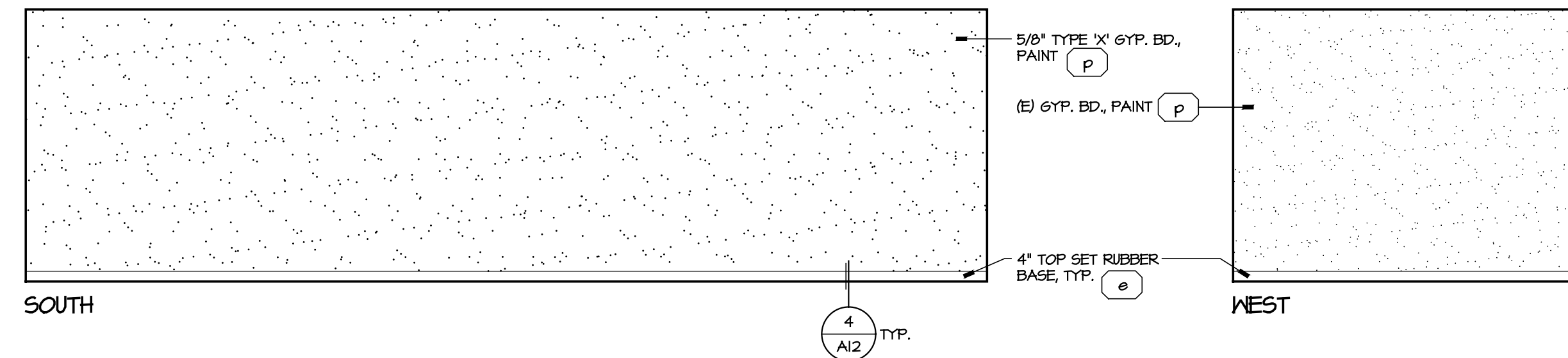
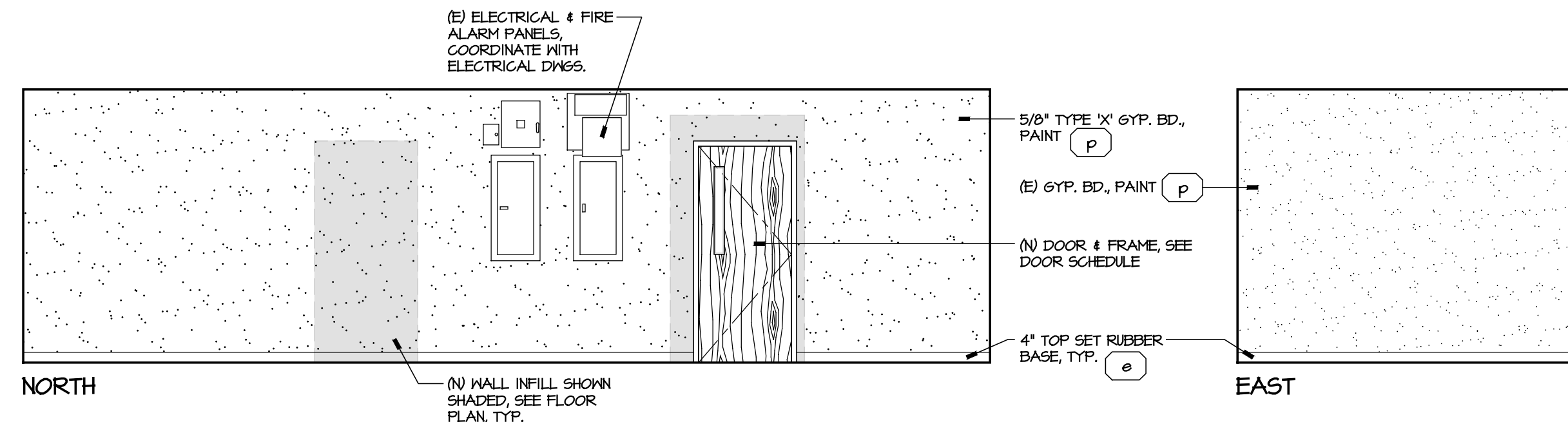
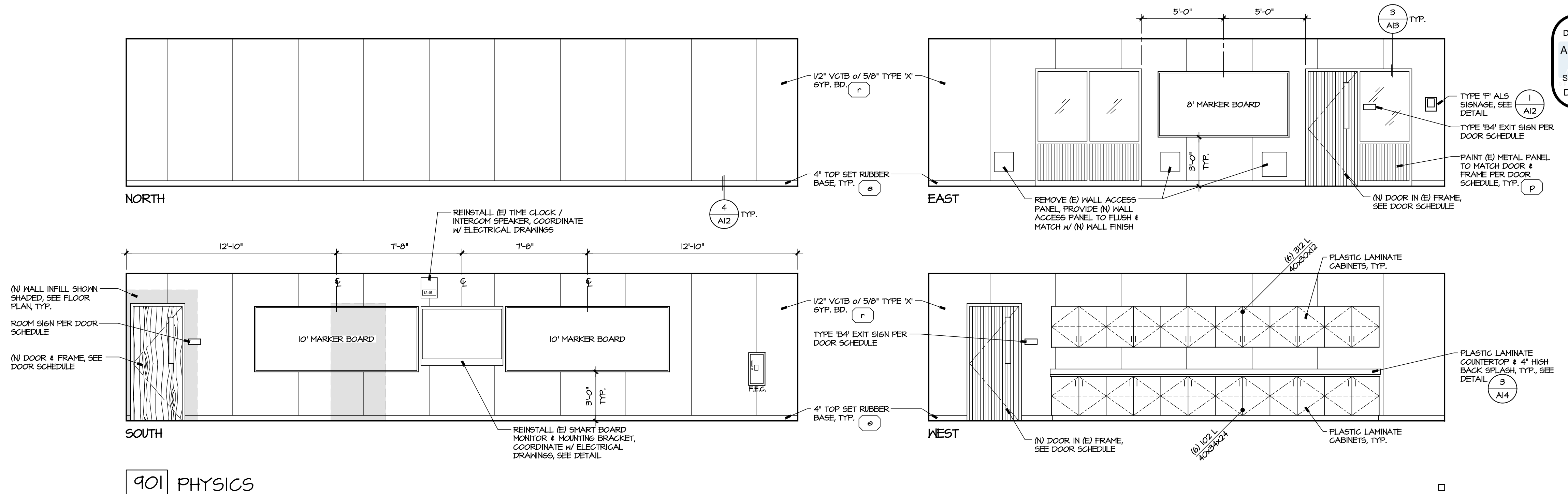
REVISIONS

**MANGINI**  
ARCHITECTURE  
INGENUITY  
McLAIN BARENG MORRELLI SCOTT  
MANGINI ASSOCIATES INC.  
4320 West Mineral King Avenue  
Visalia, California 93271  
www.manginius.com  
(559) 627-0530 Office  
(559) 627-1260 Fax

TITLE  
BUILDING 900  
INTERIOR ELEVATIONS

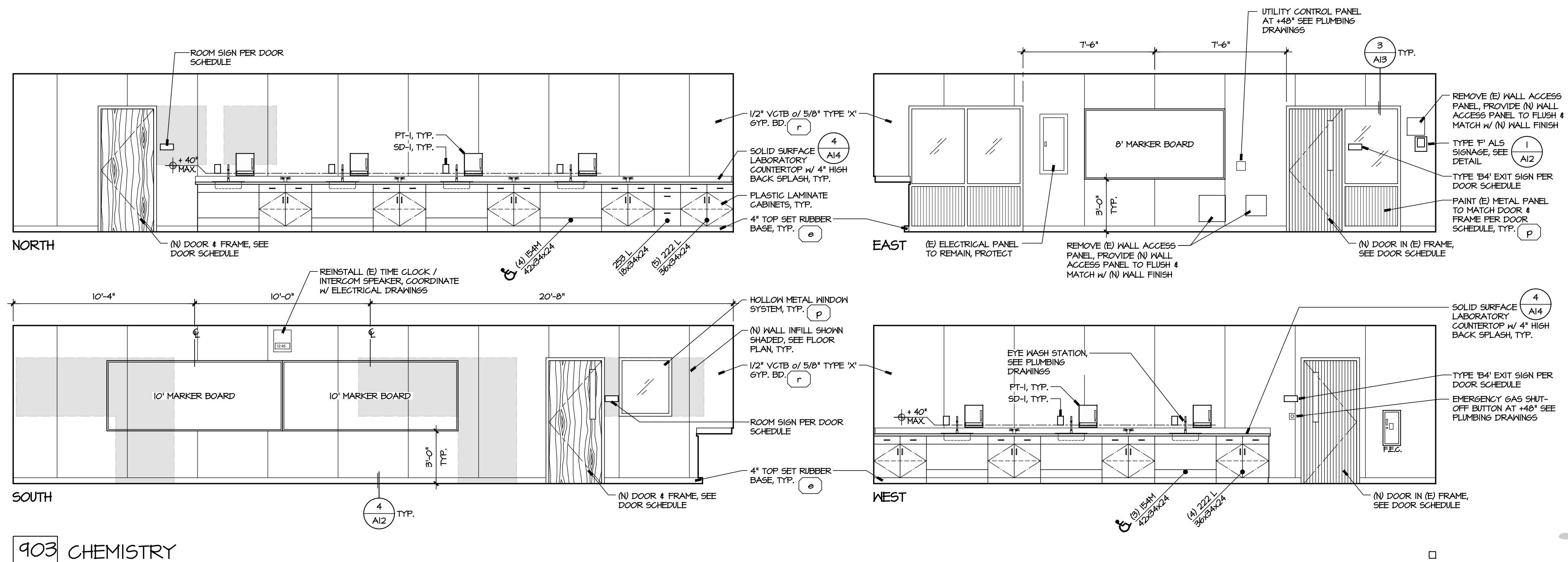
**A8**

PROJECT **1751a**



**TYPICAL NOTES :**

- FOR TYPICAL COUNTERTOP AND BACKSPLASH SEE DETAIL U.0.N.
- FOR TYPICAL CABINET ANCHORAGE SEE DETAILS
- REFER TO SPECIFICATIONS FOR TOILET ACCESSORY ABBREVIATIONS.
- ANY ACCESSORIES SHOWN N.I.C. SHALL BE PROVIDED BY OWNER AND INSTALLED BY CONTRACTOR. CONTRACTOR TO PROVIDE SOLID BLOCKING & INSTALLATION AT LOCATION SHOWN AS REQUIRED.
- REFER TO FINISH SCHEDULE SHEETS FOR DESIGNATION OF WALL FINISHES.
- = MATERIAL DEFINITION, REFER TO SHEETS A12.
- FOR TYPICAL GYPSUM BOARD EDGE SEE DETAIL
- ANY DISCREPANCY BETWEEN THE LOCATION OF DEVICES, FIXTURES, ETC., SHOWN HERE AND ON ANY PLUMBING, ELECTRICAL OR MECHANICAL SHEETS ARE TO BE BROUGHT TO THE ATTENTION OF THE ARCHITECT PRIOR TO LAYOUT.
- = A.D.A. ACCESSIBLE, SEE CABINET DETAIL
- FOR SIGN TEXT REFER TO DOOR SCHEDULE. FOR TYPES AND LOCATION SEE DETAIL
- FOR MARKER BOARD BLOCKING & ATTACHMENT SEE DETAILS
- FOR TV & SMART BOARD MONITOR MOUNTING BRACKET BLOCKING & ATTACHMENT SEE DETAILS
- FOR TYPICAL FIRE EXTINGUISHER CABINET (F.E.C.) MOUNTING, SEE DETAILS

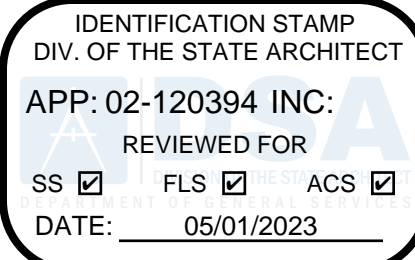


**903 CHEMISTRY**

**BUILDING 900  
INTERIOR ELEVATIONS**

SCALE 1/4" = 1'-0"





DATE: AUGUST 24, 2022

**MODERNIZATION AT  
CORCORAN HIGH SCHOOL  
SCIENCE BUILDING**  
1100 LETTS AVE., CORCORAN, CA. 93212  
CORCORAN UNIFIED SCHOOL DISTRICT  
1520 PATTERSON AVE., CORCORAN, KINGS COUNTY, CA. 98212



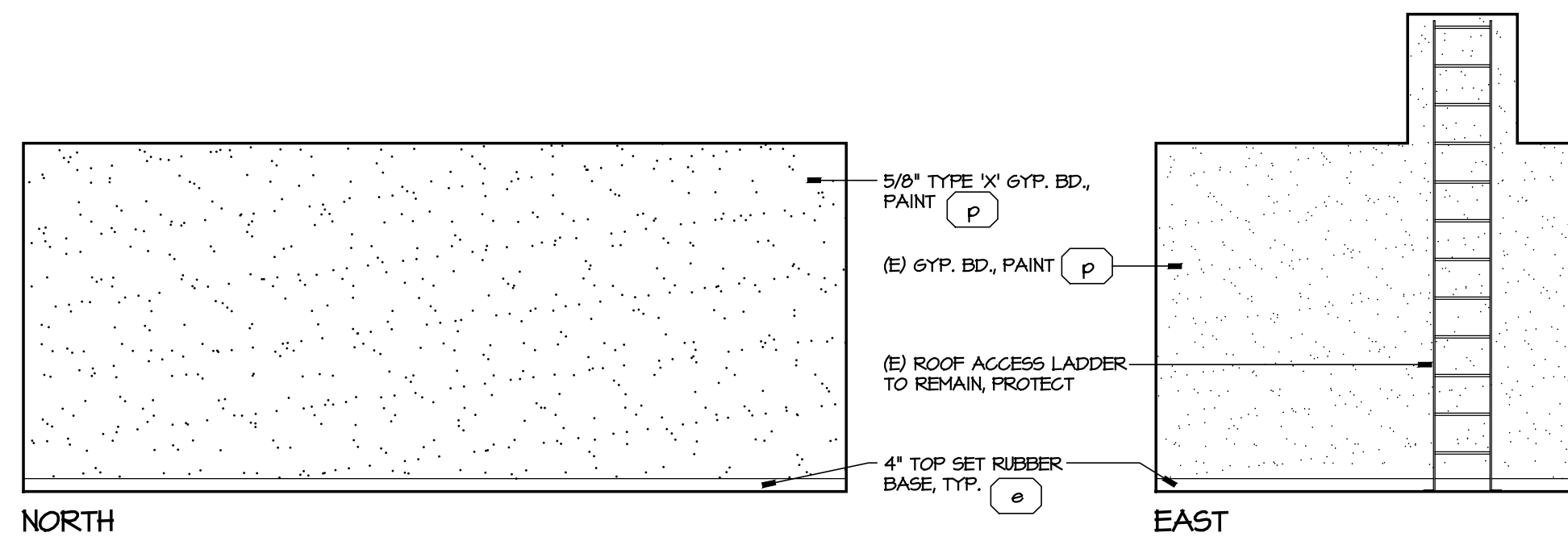
REVISIONS

**MANGINI**  
ARCHITECTURE  
INGENUITY  
McLAIN BARENG MORRELLI SCOTT  
www.mangini.us  
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4320 West Mineral King Avenue  
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(559) 627-1326 Fax

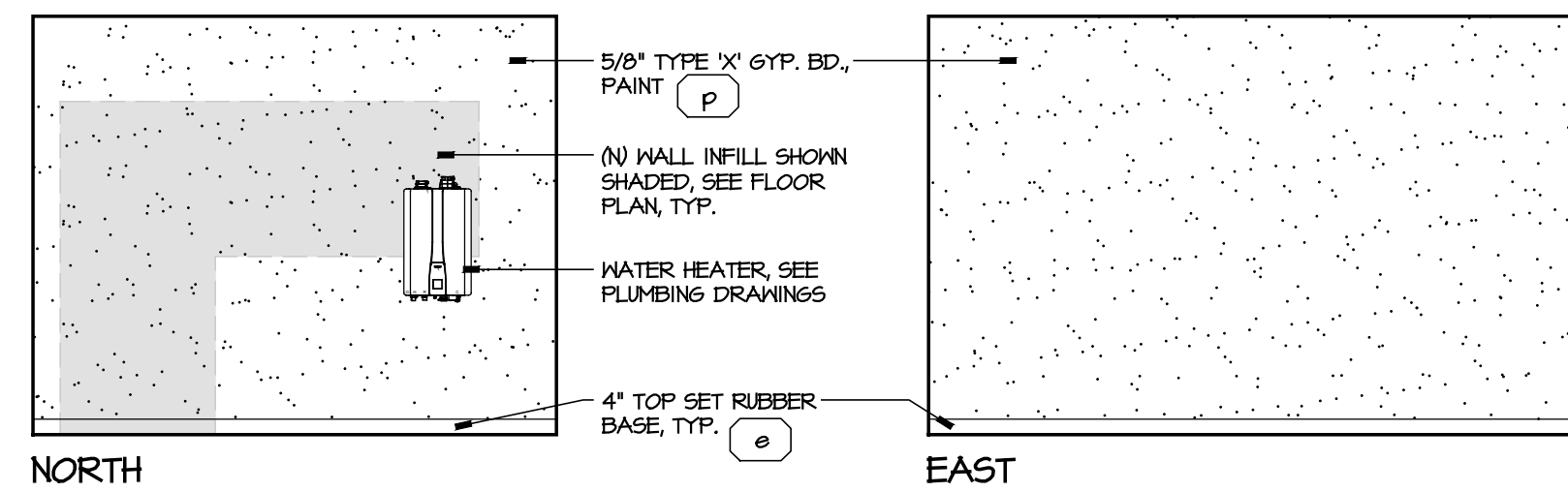
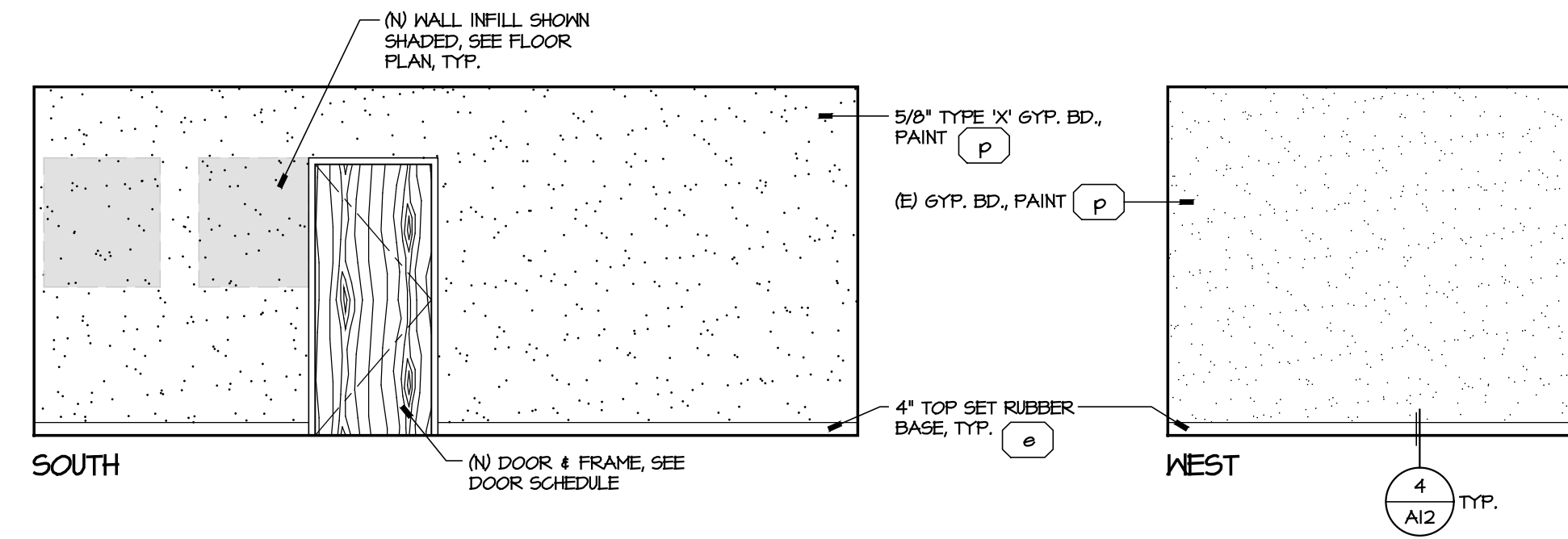
TITLE  
BUILDING 900  
INTERIOR ELEVATIONS

A9

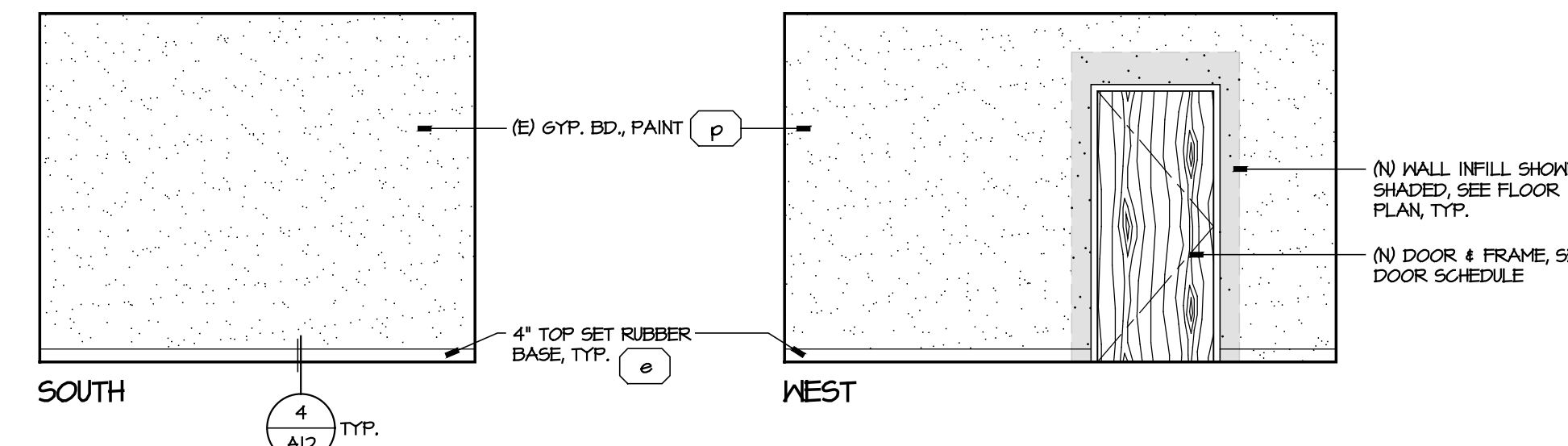
PROJECT 1751a



904 STORAGE

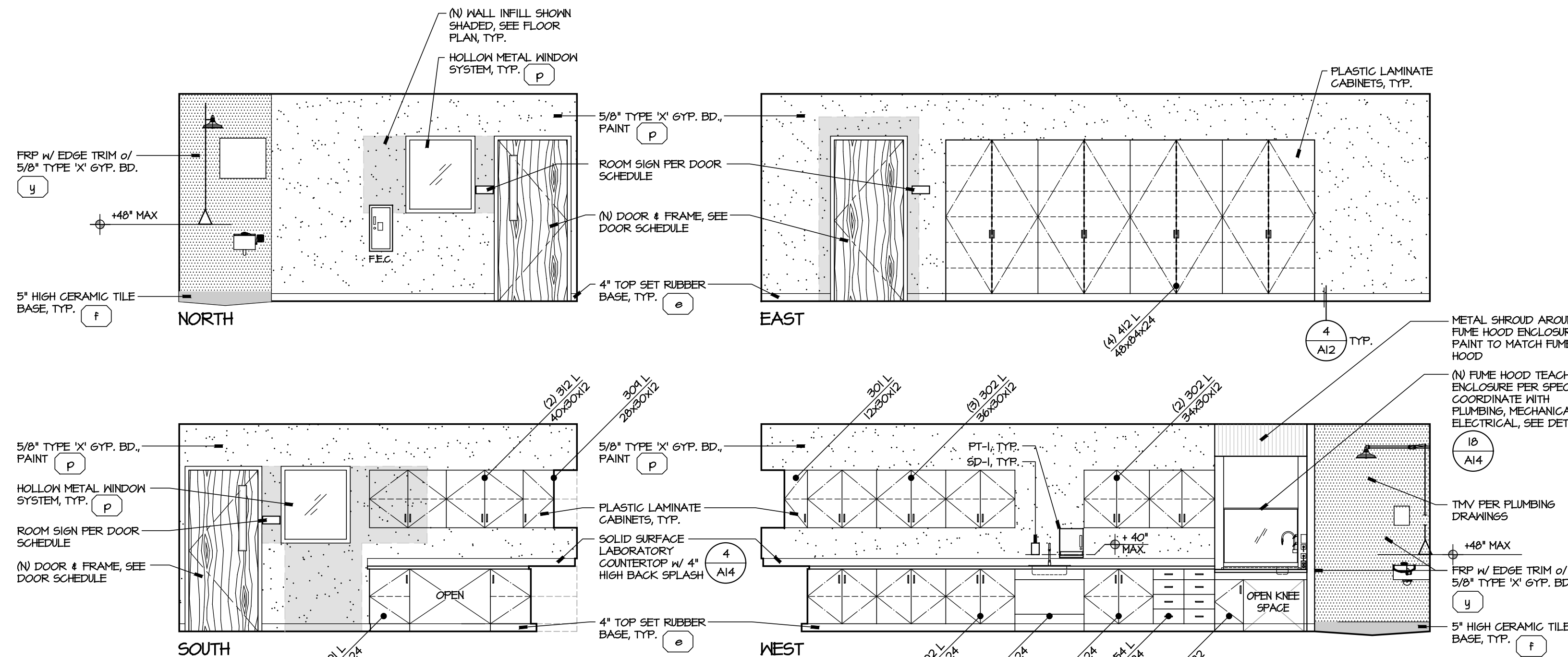


905 STORAGE



TYPICAL NOTES :

- FOR TYPICAL COUNTERTOP AND BACKSPLASH SEE DETAIL UOJL
- FOR TYPICAL CABINET ANCHORAGE SEE DETAILS
- REFER TO SPECIFICATIONS FOR TOILET ACCESSORY ABBREVIATIONS.
- ANY ACCESSORIES SHOWN N.L.C. SHALL BE PROVIDED BY OWNER AND INSTALLED BY CONTRACTOR. CONTRACTOR TO PROVIDE SOLID BLOCKING & INSTALLATION AT LOCATION SHOWN AS REQUIRED.
- REFER TO FINISH SCHEDULE SHEETS FOR DESIGNATION OF WALL FINISHES.
- (P) = MATERIAL DEFINITION, REFER TO SHEETS A12
- FOR TYPICAL GYPSUM BOARD EDGE SEE DETAIL
- ANY DISCREPANCY BETWEEN THE LOCATION OF DEVICES, FIXTURES, ETC., SHOWN HERE AND ON ANY PLUMBING, ELECTRICAL OR MECHANICAL SHEETS ARE TO BE BROUGHT TO THE ATTENTION OF THE ARCHITECT PRIOR TO LAYOUT.
- (A) = A.D.A. ACCESSIBLE, SEE CABINET DETAIL
- FOR SIGN TEXT REFER TO DOOR SCHEDULE. FOR TYPES AND LOCATION SEE DETAIL
- FOR MARKER BOARD BLOCKING & ATTACHMENT SEE DETAILS
- FOR TV & SMART BOARD MONITOR MOUNTING BRACKET BLOCKING & ATTACHMENT SEE DETAILS
- FOR TYPICAL FIRE EXTINGUISHER CABINET (F.E.C.) MOUNTING, SEE DETAILS



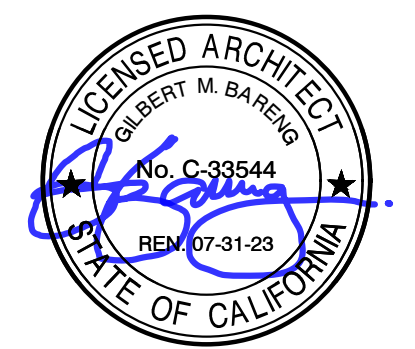
906 WORKROOM

BUILDING 900  
INTERIOR ELEVATIONS

SCALE 1/4" = 1'-0"



IDENTIFICATION STAMP  
DIV. OF THE STATE ARCHITECT  
APP: 02-120394 INC:  
REVIEWED FOR  
SS ☒ FLS ☒ ACS ☒  
DATE: 05/01/2023



DATE: AUGUST 24, 2022

**MODERNIZATION AT  
CORCORAN HIGH SCHOOL  
SCIENCE BUILDING**  
1100 LETTS AVE., CORCORAN, CA. 93212  
CORCORAN UNIFIED SCHOOL DISTRICT  
1520 PATTERSON AVE., CORCORAN, KINGS COUNTY, CA. 93212



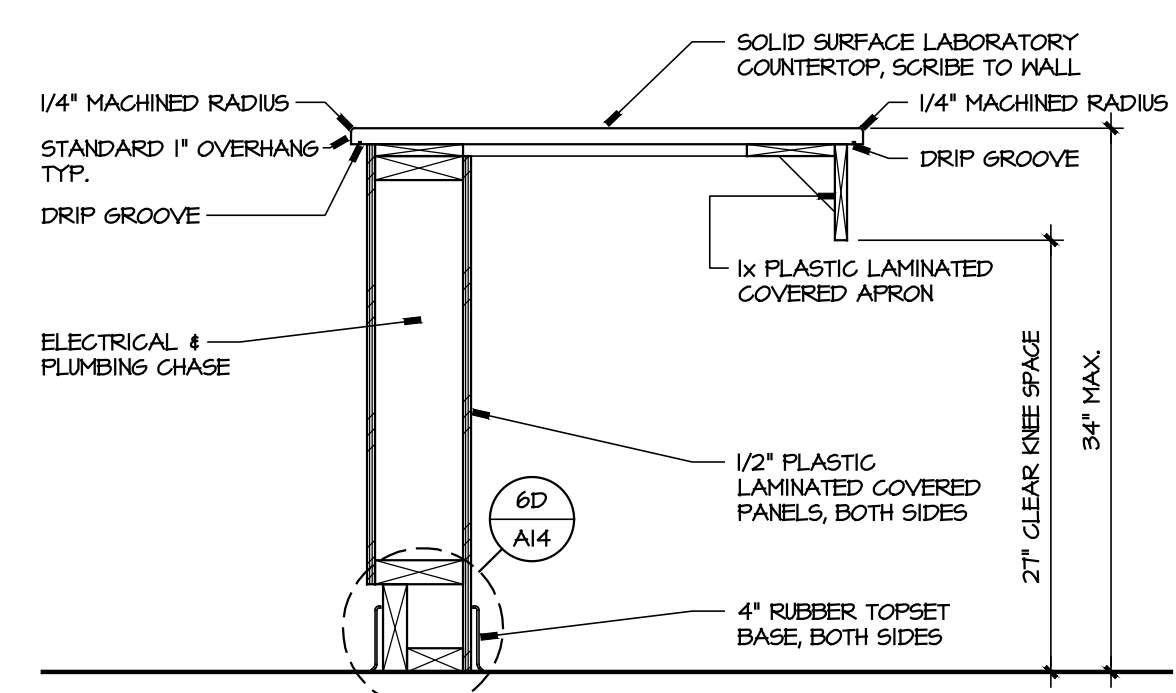
REVISIONS

**MANGINI**  
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McLAIN BARENG MORRELLI SCOTT  
www.mangini.us  
MANGINI ASSOCIATES INC.  
4320 West Mineral King Avenue  
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(559) 627-1260 Fax

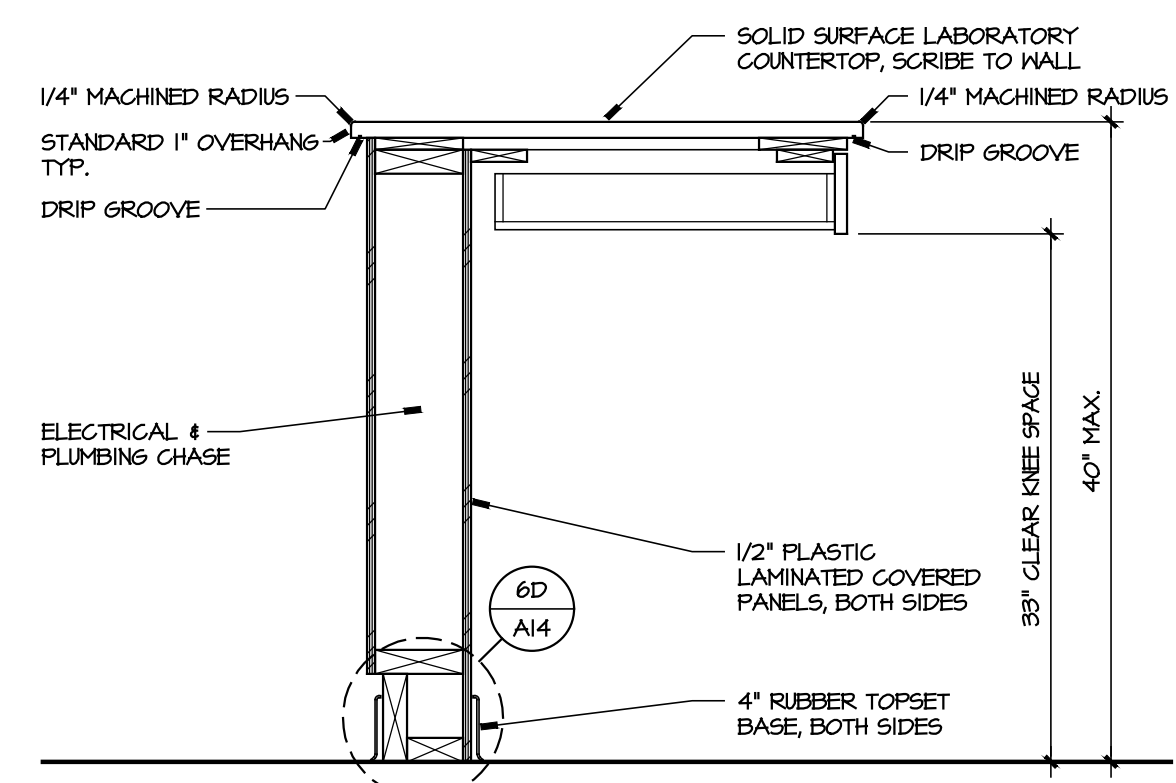
TITLE  
BUILDING 900  
INTERIOR ELEVATIONS

**A10**  
PROJECT 1751a

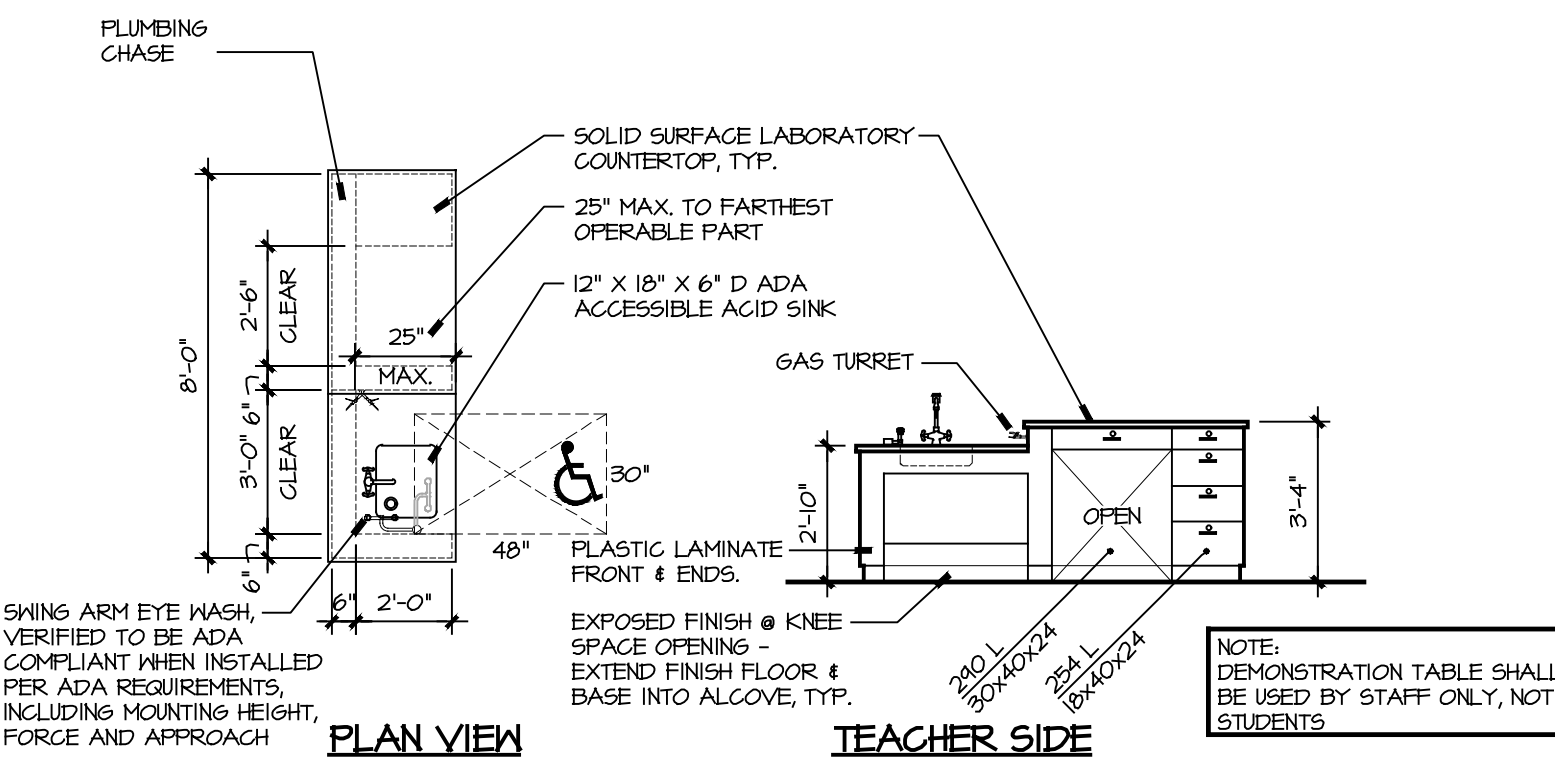
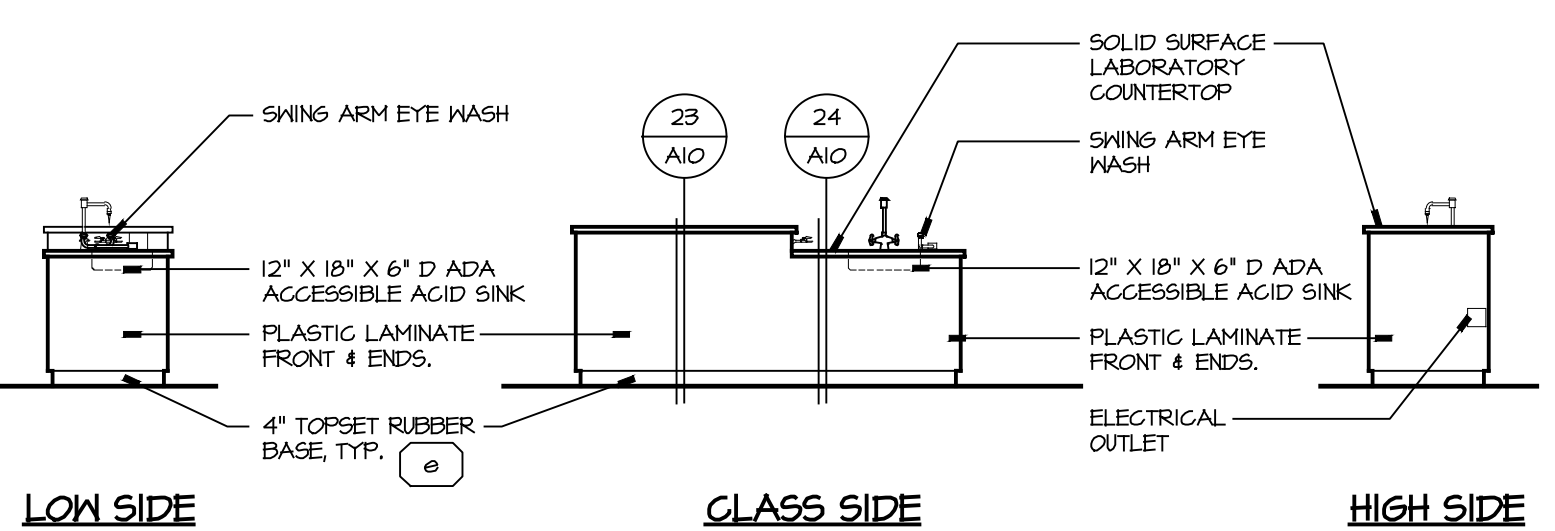
- TYPICAL NOTES :**
- FOR TYPICAL COUNTERTOP AND BACKSPLASH SEE DETAIL UO/A.
  - FOR TYPICAL CABINET ANCHORAGE SEE DETAILS 6 A14.
  - REFER TO SPECIFICATIONS FOR TOILET ACCESSORY ABBREVIATIONS.
  - ANY ACCESSORIES SHOWN N.L.C. SHALL BE PROVIDED BY OWNER AND INSTALLED BY CONTRACTOR. CONTRACTOR TO PROVIDE SOLID BLOCKING & INSTALLATION AT LOCATION SHOWN AS REQUIRED.
  - REFER TO FINISH SCHEDULE SHEETS FOR DESIGNATION OF WALL FINISHES.
  - 8 = MATERIAL DEFINITION, REFER TO SHEETS A12.
  - FOR TYPICAL GYPSUM BOARD EDGE SEE DETAIL 15 A14.
  - ANY DISCREPANCY BETWEEN THE LOCATION OF DEVICES, FIXTURES, ETC., SHOWN HERE AND ON ANY PLUMBING, ELECTRICAL OR MECHANICAL SHEETS ARE TO BE BROUGHT TO THE ATTENTION OF THE ARCHITECT PRIOR TO LAYOUT.
  - ADA ACCESSIBLE, SEE CABINET DETAIL 1 A14.
  - FOR SIGN TEXT REFER TO DOOR SCHEDULE. FOR TYPES AND LOCATION SEE DETAIL 5 A14.
  - FOR MARKER BOARD BLOCKING & ATTACHMENT SEE DETAILS 10 A14.
  - FOR TYPICAL FIRE EXTINGUISHER CABINET (F.E.C.) MOUNTING, SEE DETAILS 13 A15.



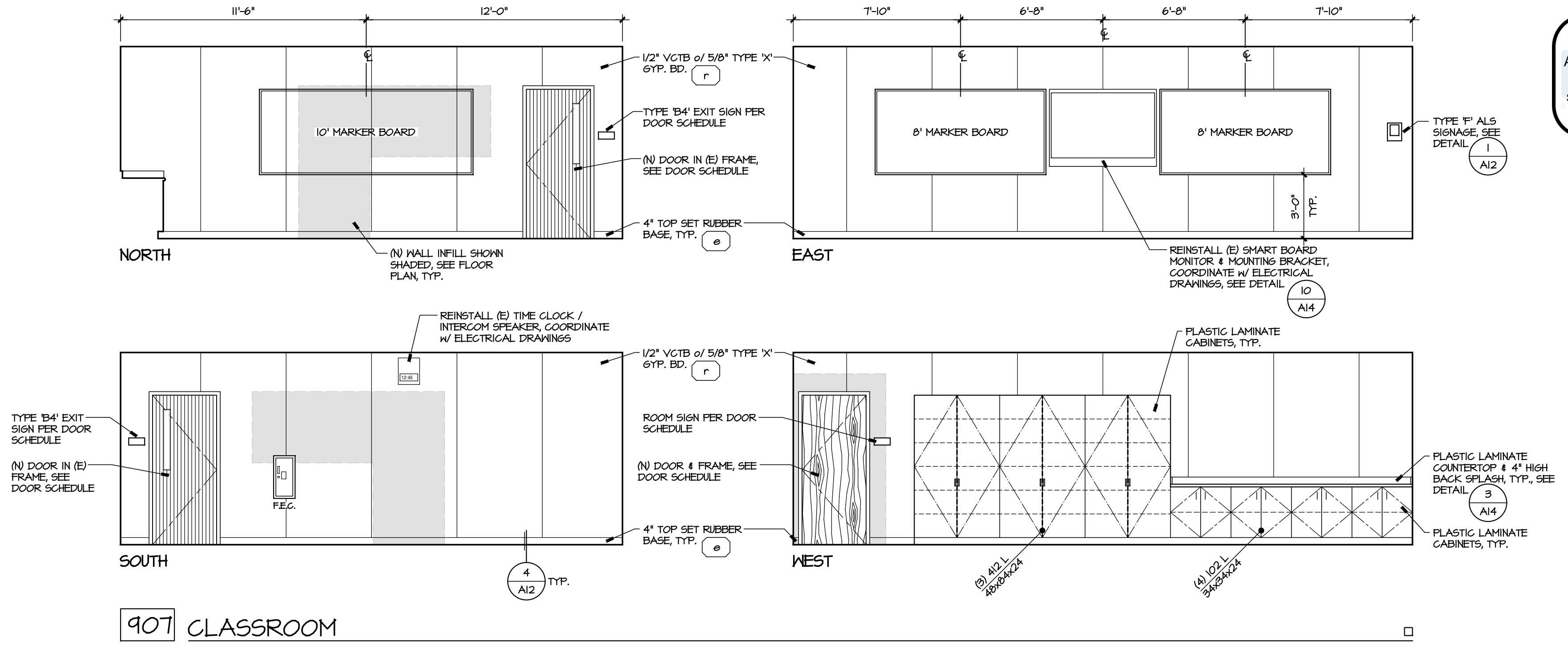
**24** TABLE SECTION  
SCALE 1" = 1'-0"



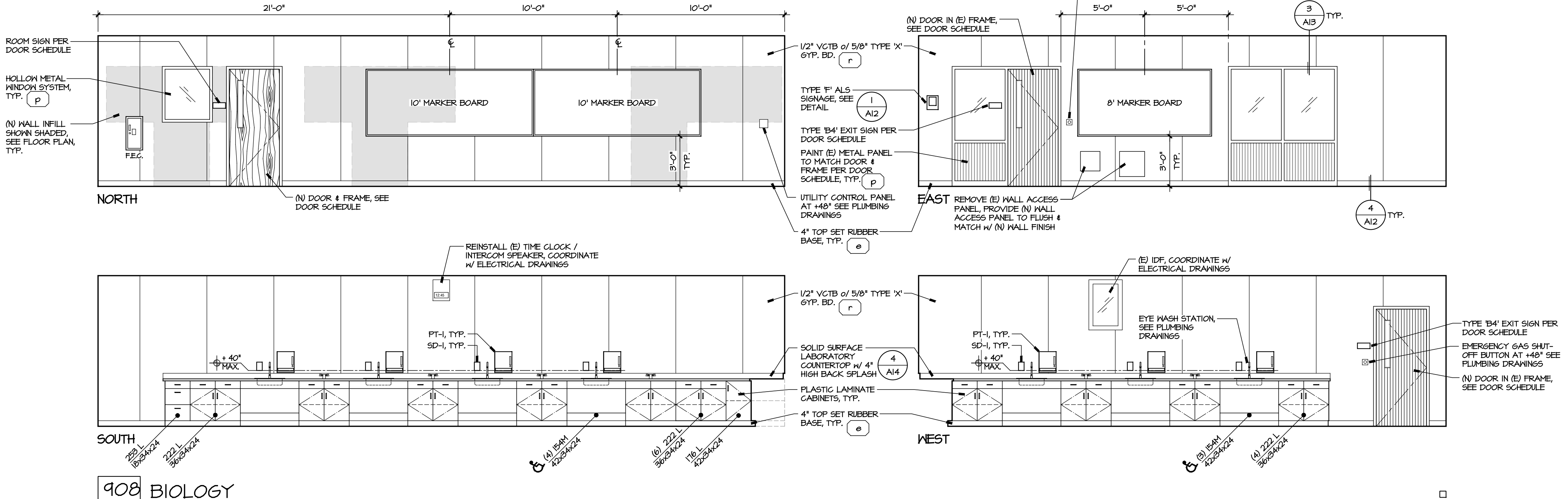
**23** TABLE SECTION  
SCALE 1" = 1'-0"



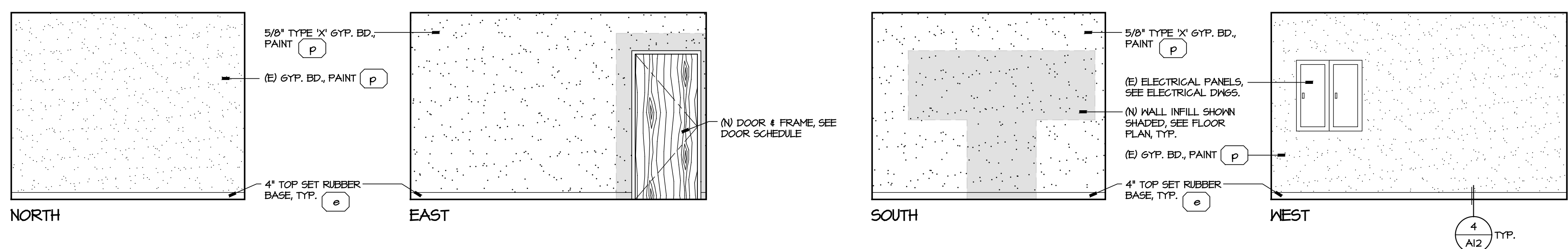
**21** TEACHER DEMONSTRATION TABLE  
1/4" = 1'-0"



**907** CLASSROOM



**908** BIOLOGY





**909** STORAGE

**BUILDING 900  
INTERIOR ELEVATIONS**  
SCALE 1/4" = 1'-0"



INTERIOR ROOM FINISH SCHEDULE																																			
BLDG.	ROOM NUMBER & NAME		FLOOR	BASE	WAINSCOT	WALLS				CEILING		REMARKS:	COUNTER TOPS	MILLWORK																					
						NORTH	EAST	SOUTH	WEST	MAT'L.	HEIGHT			LOWER	UPPER																				
BUILDING "900"	901	PHYSICS	11	u	21	e	-	-	43	r	43	r	43	r	51	a	4'-0"		61	m	71	k	71	k											
	902	STORAGE	11	u	21	e	-	-	42	p	41	p	42	p	41	p	52	q	4'-0"		-	-	-	-	-										
	903	CHEMISTRY	11	u	21	e	-	-	43	r	43	r	43	r	43	r	51	a	4'-0"		62	JJ	71	k	-	-									
	904	STORAGE	11	u	21	e	-	-	42	p	41	p	42	p	41	p	52	q	4'-0"		-	-	-	-	-										
	905	STORAGE	11	u	21	e	-	-	42	p	42	p	41	p	41	p	52	q	4'-0"		-	-	-	-	-										
	906	WORKROOM	11	u	21	e	-	-	42	p	42	p	42	p	42	p	51	a	4'-0"		62	JJ	71	k	71	k									
	907	CLASSROOM	11	u	21	e	-	-	42	p	42	p	42	p	42	p	51	a	4'-0"		61	m	71	k	-	-									
	908	BIOLOGY	11	u	21	e	-	-	43	r	43	r	43	r	43	r	51	a	4'-0"		62	JJ	71	k	-	-									
	909	STORAGE	11	u	21	e	-	-	41	p	42	p	42	p	41	p	52	q	4'-0"		-	-	-	-	-										
FINISHES																		MATERIALS																	
a	REFER TO SPECIFICATIONS FOR MATERIAL / COLOR DESIGNATION																	s	PACIFIC CLAY PRODUCTS'   COASTAL SERIES THIN BRICK # 5510																
b	MATCH EXISTING EXTERIOR BODY COLOR - 'SHERWIN WILLIAM' - TINDERBOX																	t	METAL SALES'   OLD ZINC GREY (#124)																
c	MATCH EXISTING "BLUE" TRIM - 'CORCORAN H.S. BLUE'																	u	'MOHANK' GRP   VIVID STEP STONE 112" X 24"   #CRT06 5414 'CARRARA STONE'																
d	MATCH EXTERIOR BODY COLOR - 'SHERWIN WILLIAM'-CREAM'																	v	NOT USED																
e	ROPPE' #P140 STEEL GRAY																	w	METAL SALES'   REGAL BLUE (#B5)																
f	'DAL TILE'   KEYSTONE 2"x2"   #B200 'SUEDE GRAY SPECKLE' w/ COVE BASE DETAIL - #BBSA BUILD-UP BASE																	x	NOT USED																
g	'DAL TILE'   COLOR WHEEL CLASSIC 4"x4" NAVY #K104 w/ CUSTOM BUILDING PRODUCTS GROUT COLOR #546 CAPE GRAY																	y	'CRANE COMPOSITES'   FRP- WHITE #B5																
h	'DAL TILE'   COLOR WHEEL CLASSIC 4"x4" DESERT GRAY #X114 w/ CUSTOM BUILDING PRODUCTS GROUT COLOR #546 CAPE GRAY																	z	METAL SALES'   SNOWDRIFT WHITE (#B1)																
i	'DAL TILE'   COLOR WHEEL CLASSIC 4"x4" ARTIC WHITE #O190 w/ CUSTOM BUILDING PRODUCTS GROUT COLOR #546 CAPE GRAY																	aa	'SHERWIN WILLIAMS'   LOYAL BLUE # SW 6510																
j	'DAL TILE'   COLOR WHEEL CLASSIC 4"x4" GALAXY #1469 w/ CUSTOM BUILDING PRODUCTS GROUT COLOR #546 CAPE GRAY																	bb	'SHERWIN WILLIAMS'   GRAY CLOUDS # SW 7050																
k	'DAL TILE'   COLOR WHEEL CLASSIC 4"x4" GALAXY #1469 w/ CUSTOM BUILDING PRODUCTS GROUT COLOR #546 CAPE GRAY																	cc	'SHERWIN WILLIAMS'   WESTCHESTER GRAY # SW 2049																
l	WILSONART' #1112-30 PINNACLE WALNUT																	dd	'CRANE COMPOSITES'   FRP-FTBB BEADED FINISH   COTTON WHITE #130																
m	WILSONART' #4441-30 RAM COTTON																	ee	'SCHLUTER COVE' #DILEX-AHK- w/ RUBBER BASE (e), NO TOEKICK																
n	'ASI ACCURATE PARTITIONS'   BLACK CONFETTI #4217   (HDPE) SOLID PLASTIC																	ff	'DAL-TILE' MOSAIC TILE BLEND   #CK00 TROPICAL THUNDER   BLOCK RANDOM   BRICK JOINT w/ #546 CAPE GRAY																
o	'SHERWIN WILLIAMS'   MATCH KELLY MOORE #K15717 WOODWARD PARK																	gg	'AMERIPOLISH'   COLOR GRAY																
p	'SHERWIN WILLIAMS'   #SW165 GOSSAMER VEIL																	hh	'MOHANK'   SHAPE & FLOW COLLECTION FLUX FOUNDATION   #FT305-154 CHANNEL																
q	'SHERWIN WILLIAMS'   CEILING BRIGHT WHITE # SW 7007																	jj	'SOLID SURFACE LAB'   COLOR BLACK																
r	'CHATFIELD CLARKE'   GRP 2 TYPE 1- COLOR SPRITE																																		
EXTERIOR FINISHES																																			
CEMENT PLASTER WALLS (INFILL & PATCHWORK)																	b																		
CEMENT PLASTER SOFFIT (PATCHWORK)																	b																		
WINDOW & DOOR FRAME																	c																		
HOLLOW METAL DOOR																	c																		
MISC. METAL RAILINGS & TRIMS																	c																		

																	FLOOR										CEILINGSS									
																	10 EXIST. FLOOR TO REMAIN										50 EXIST. TO REMAIN - PROTECT									
																	11 LUXURY VINYL TILE (LVT)										51 2"x4" ACOUSTICAL LAY-IN									
																	12 2" SG. CERAMIC MOSAIC TILE										52 5/8" TYPE 'X' GYPSUM BD., PAINT									
																	BASE										COUNTERTOPS									
																	20 EXIST. TO REMAIN										60 EXIST. TO REMAIN									
																	21 4" RUBBER TOPSET										61 PLASTIC LAMINATE COUNTERTOP									
																	22 5" H. x 2"x2" COVED CERAMIC MOSAIC TILE										62 SOLID SURFACE LABORATORY (1" THICK)									
																	WAINSCOT										MILLWORK									
																	30 FIBER REINFORCED PANEL (FRP) of GYPSUM BOARD										70 EXIST. TO REMAIN									
																											71 PLASTIC LAMINATED FACED CABINETS									
																	WALLS																			
																	40 EXIST. TO REMAIN																			
																	41 SEMI-GLOSS ENAMEL of EXISTING GYPSUM BOARD																			
																	42 SEMI-GLOSS ENAMEL of 5/8" TYPE 'X' GYPSUM BOARD																			
																	43 1/2" VINYL COVERED TACK BOARD of 5/8" TYPE 'X' GYPSUM BOARD																			
																											FINISH SCHEDULE NOTES									
																	1. CEILING HEIGHTS NOTED ON THIS SCHEDULE ARE FROM THE FLOOR BELOW IN THAT ROOM. THIS IS FOR THE PURPOSE OF ESTIMATING & DETERMINING INSTALLATION REQUIREMENTS.										8. FOR CABINET LAYOUT, VERIFY DIMENSIONS IN FIELD. DIMENSIONS NOTED ON DRAWINGS ARE NOMINAL - PROVIDE FILLERS & END UNITS INCLUDING TOP OF CABINET AS REQUIRED FOR PROPER OPERATION AND CLOSING OF VOID SPACES.									
																	2. REFER TO FLOOR PLANS, REFLECTED CEILING PLANS AND INTERIOR ELEVATIONS FOR EXTENT AND LOCATION OF INTERIOR FINISHES.										9. PAINT METAL DOOR AND WINDOW FRAMES. PAINT METAL DOOR INTERIOR FACE, EXTERNAL FACE, AND ALL EDGES. WHERE INTERIOR AND EXTERIOR COLORS ARE DIFFERENT, PAINT EDGES TO MATCH THE SIDE TO WHICH THE DOOR OPENS.									
																	3. REFER TO EXTERIOR ELEVATIONS FOR EXTENT AND LOCATION OF EXTERIOR FINISHES.										10. PROTECT UNFINISHED CONCRETE FLOORS FROM DAMAGE DURING CONSTRUCTION - PREPARE FOR FINISH / SEALING BY HIGH PRESSURE WATER OR BEAD BLASTING AS REQUIRED TO REMOVE STAINS AND RESIDUE. GET APPROVAL OF ARCHITECT OR OWNER BEFORE SEALING. (TAKE EXTRA CARE WITH OCCUPIABLE ROOMS)									
																	4. REFER TO SPECIFICATIONS FOR METHOD OF APPLICATION AND MATERIALS DESCRIPTION.										11. FINISH COLORS ARE SHOWN THIS: 									
																	5. WHERE MORE THAN ONE FINISH OR COLOR DESIGNATION OCCURS IN A BOX REFER TO THE APPROPRIATE PLAN OR INTERIOR ELEVATION FOR THE EXTENT AND DESIGNATION OF FINISH.										12. WHERE MORE THAN ONE COLOR IS SHOWN THE DESIGNATION IS: 									
																	6. ALL GYP. BD. SHALL BE 5/8" THICK TYPE 'X' UNLESS OTHERWISE NOTED.										13. AT ALL VINYL COVERED TACKBOARD EDGES, PROVIDE TACKBOARD MANUFACTURED TRIM									
																	7. REFER TO "INTERIOR ELEVATION NOTES" ON INTERIOR ELEVATION SHEETS FOR LOCATION IN THE DRAWINGS OF TYPICAL DETAILS.																			

APPROVALS

FILE # 16-H1      APPLICATION # 02-120394

IDENTIFICATION STAMP

DIV. OF THE STATE ARCHITECT

APP: 02-120394 INC:

REVIEWED FOR

SS ☒    FLS ☒    ACS ☒

DATE: 05/01/2023

LICENSED ARCHITECT

ROBERT M. BARENG

No. C-33544

REM 07-31-23

STATE OF CALIFORNIA

DATE: AUGUST 24, 2022

MODERNIZATION AT

CORCORAN HIGH SCHOOL

SCIENCE BUILDING

1100 LETTS AVE., CORCORAN, CA. 93212

CORCORAN UNIFIED SCHOOL DISTRICT

1520 PATTERSON AVE., CORCORAN, KINGS COUNTY, CA. 98212

REVISIONS

ARCHITECTURE

INGENUITY

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McLAIN BARENG MORRELLI SCOTT

MANGINI ASSOCIATES INC.

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Visalia, California 93291

(559) 627-0530 Office

(559) 627-1320 Fax

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TITLE

FINISH SCHEDULE

A11

PROJECT 1751a









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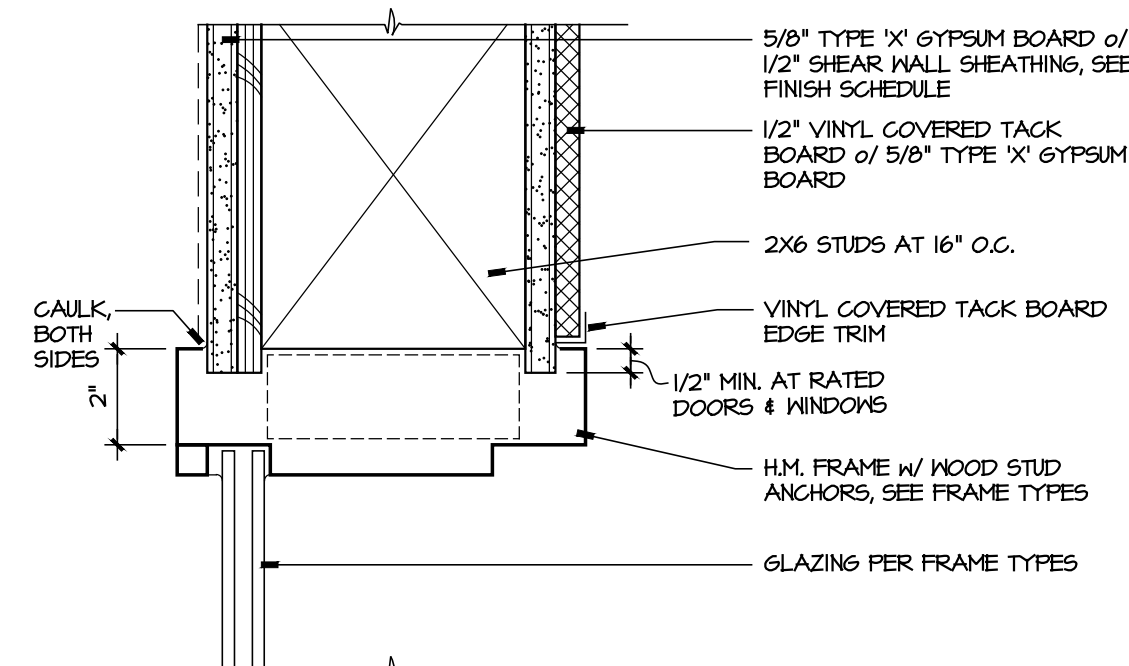
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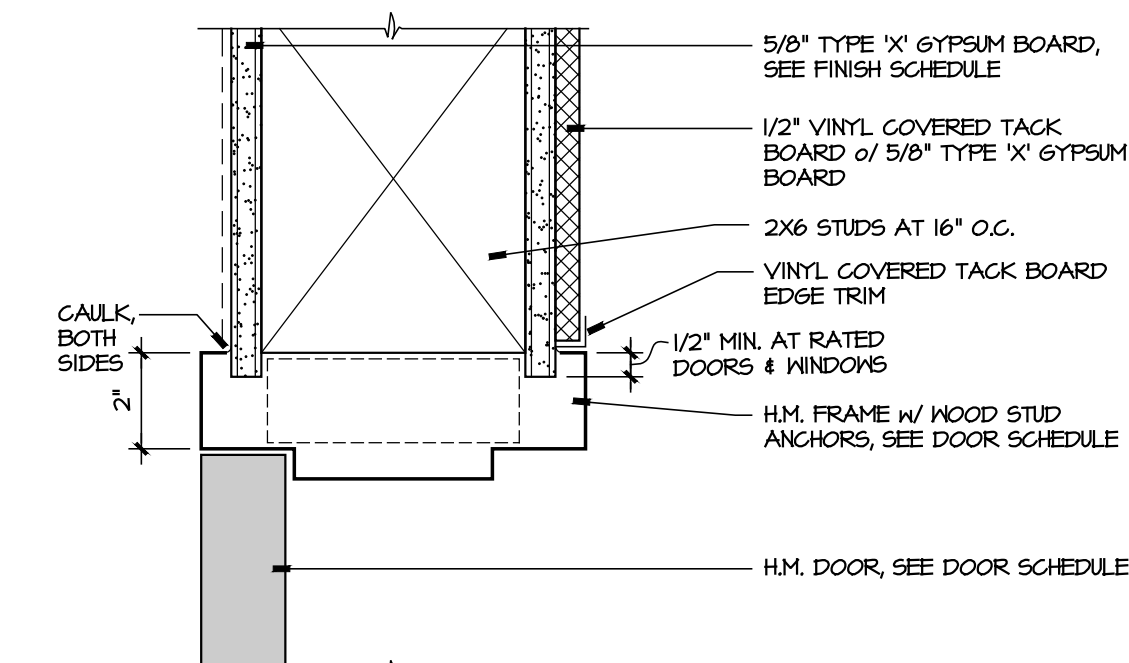
TITLE  
FRAME DETAILS

**A13**

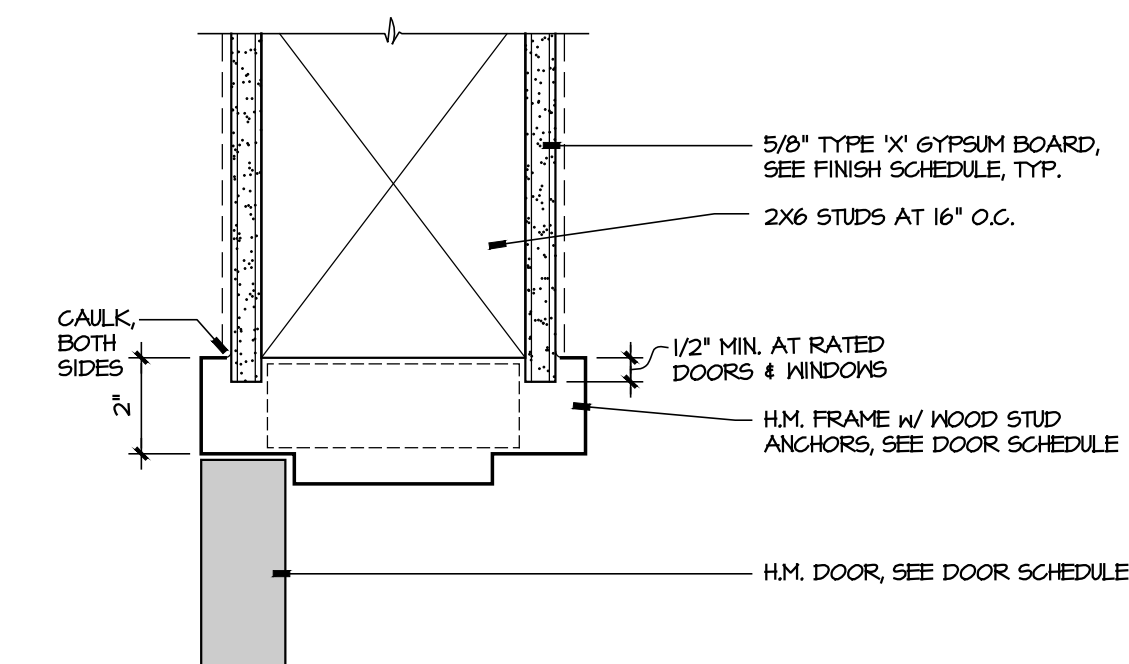
PROJECT **1751a**



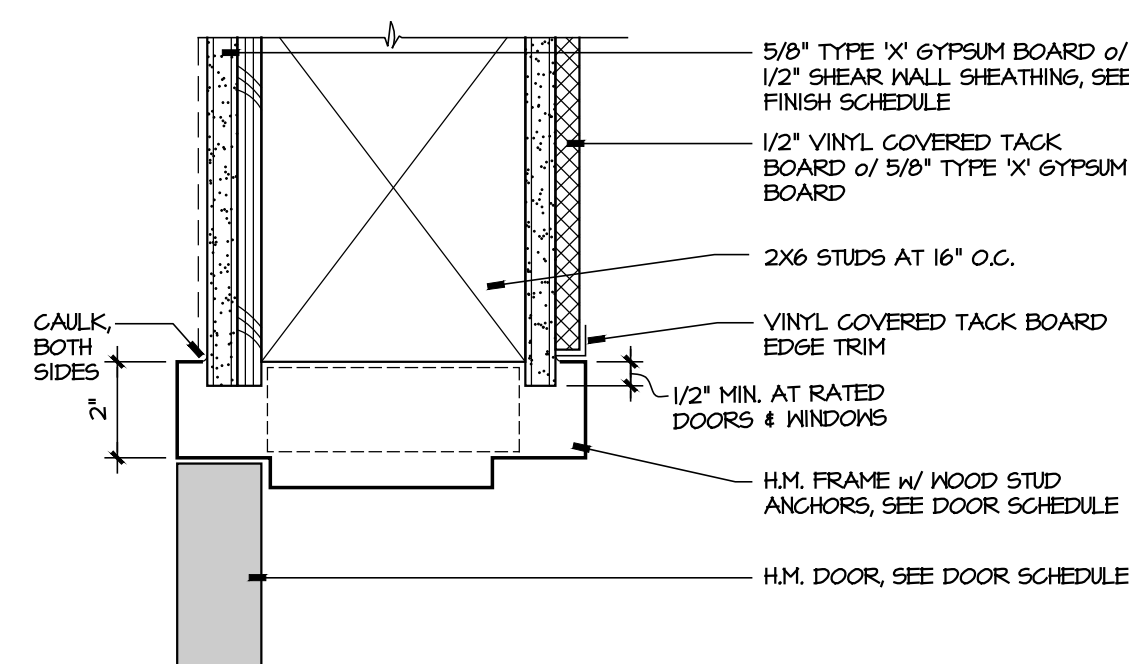
**10 WINDOW HEAD (JAMB & SILL SIMILAR)**  
SCALE: 3/8" = 1'-0"



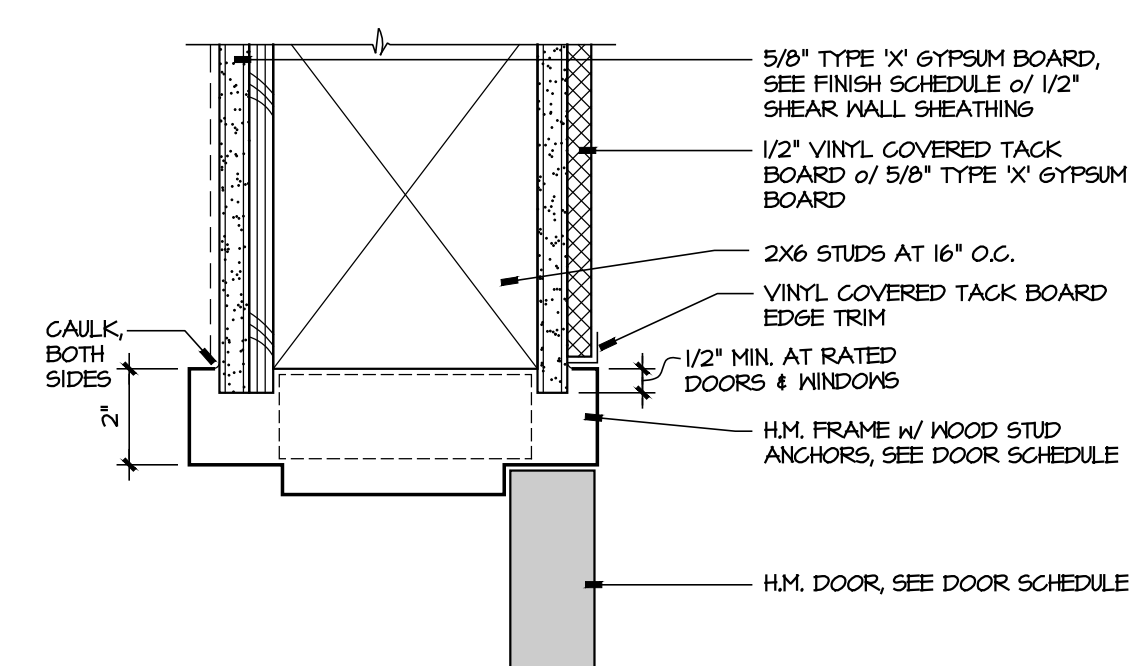
**9 DOOR HEAD (JAMB SIMILAR)**  
SCALE: 3/8" = 1'-0"



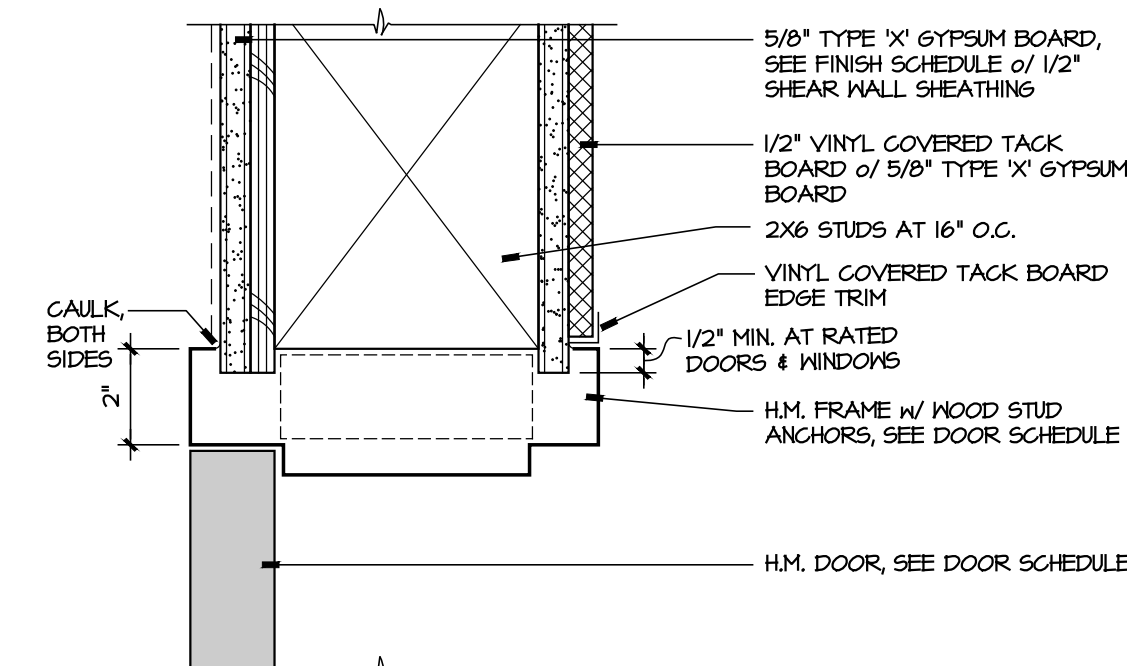
**8 DOOR HEAD (JAMB SIMILAR)**  
SCALE: 3/8" = 1'-0"



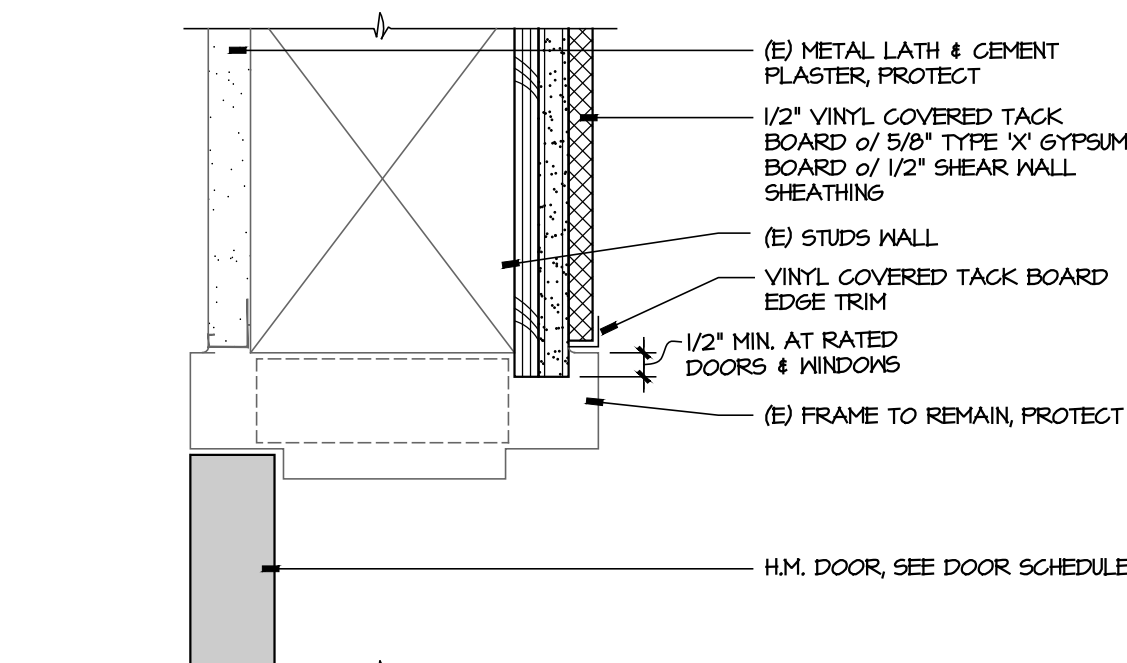
**7 DOOR HEAD (JAMB SIMILAR)**  
SCALE: 3/8" = 1'-0"



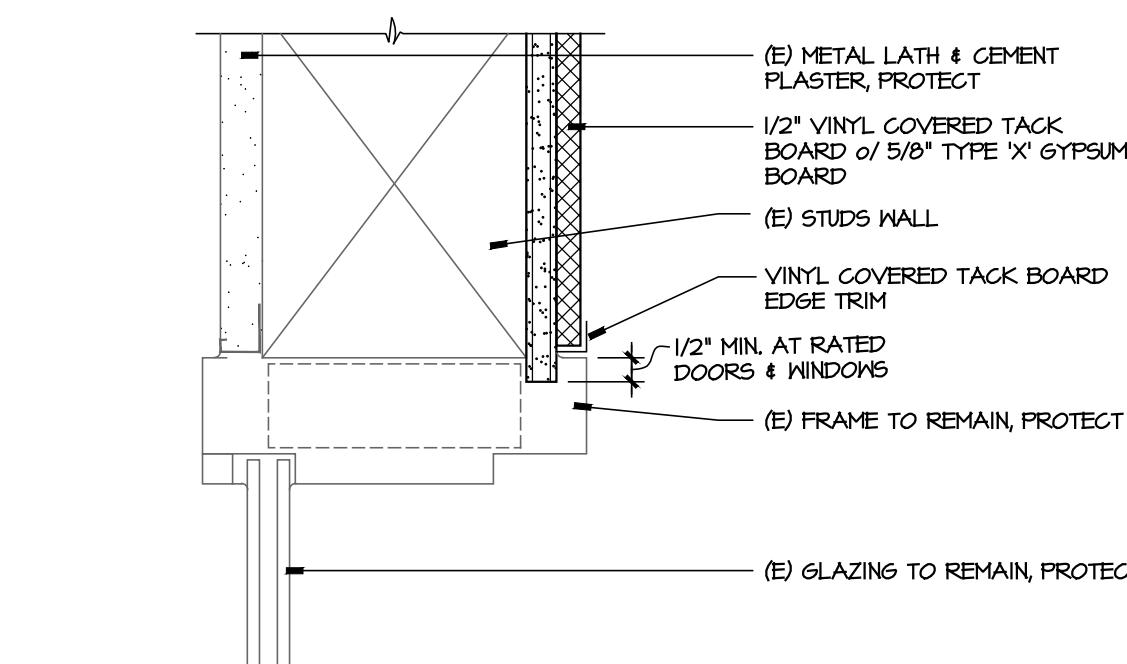
**6 DOOR HEAD (JAMB SIMILAR)**  
SCALE: 3/8" = 1'-0"



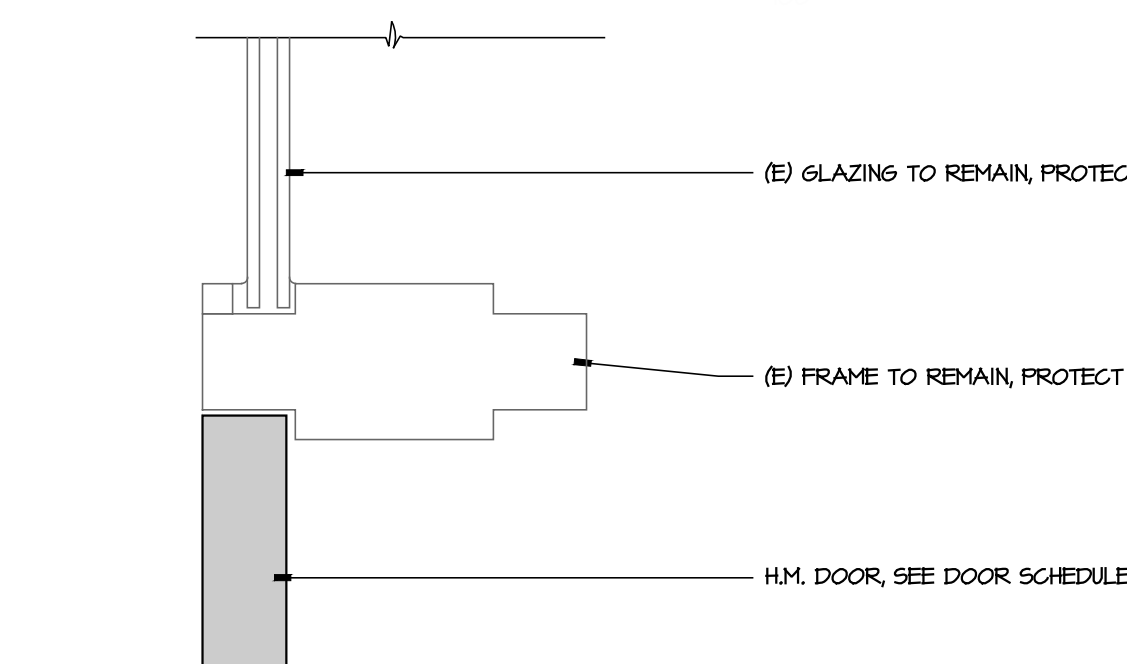
**5 DOOR HEAD (JAMB SIMILAR)**  
SCALE: 3/8" = 1'-0"



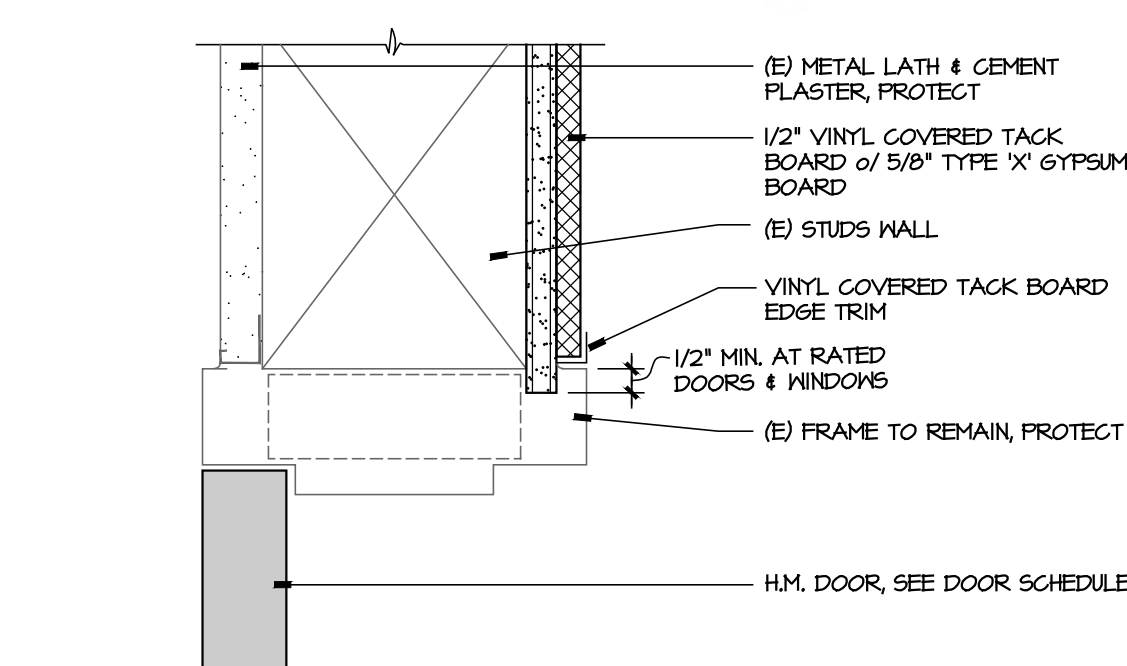
**4 DOOR HEAD (JAMB SIMILAR)**  
SCALE: 3/8" = 1'-0"



**3 WINDOW HEAD (JAMB SIMILAR)**  
SCALE: 3/8" = 1'-0"



**2 DOOR JAMB**  
SCALE: 3/8" = 1'-0"

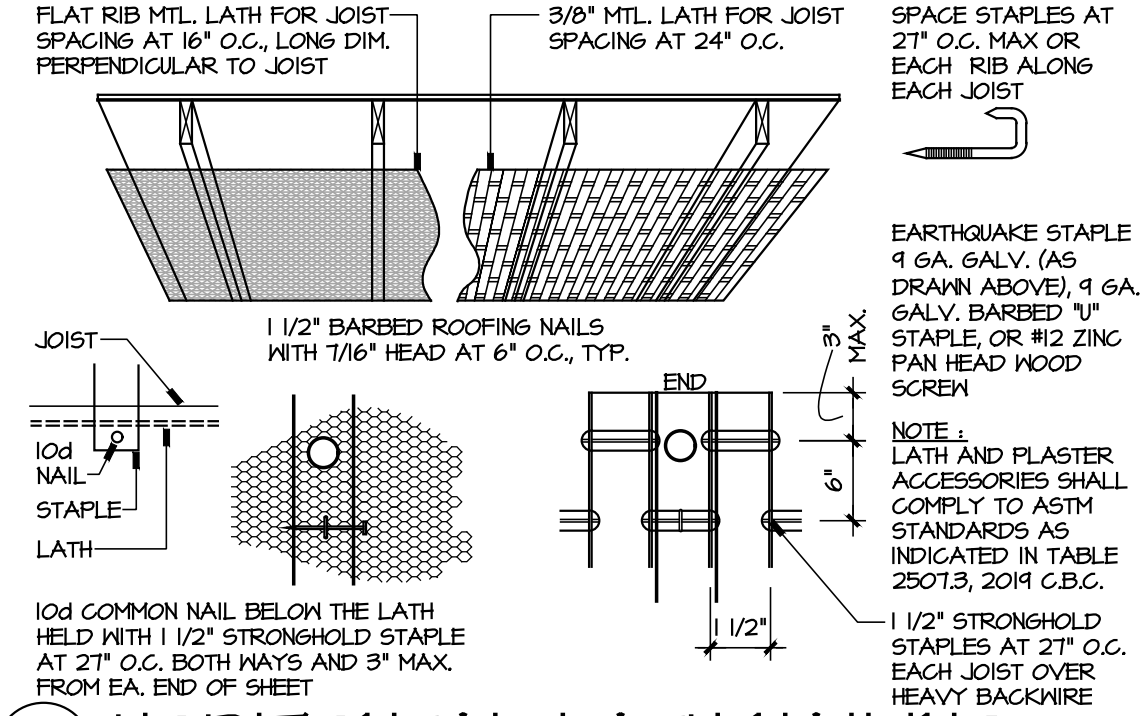


**1 DOOR HEAD (JAMB SIMILAR)**  
SCALE: 3/8" = 1'-0"

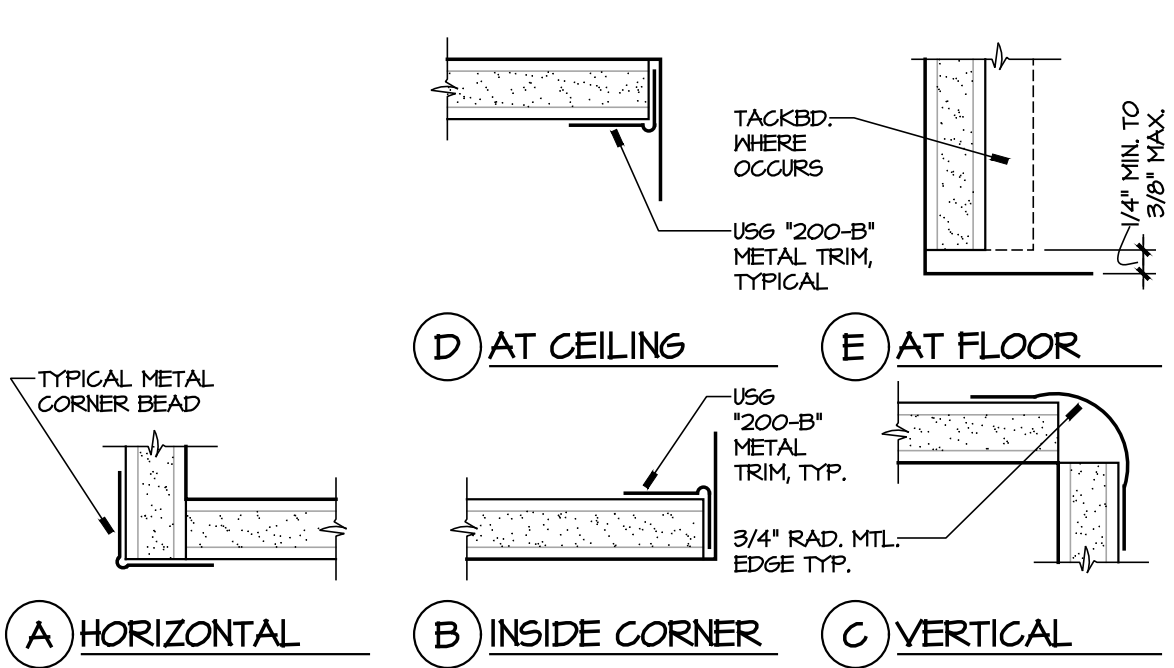




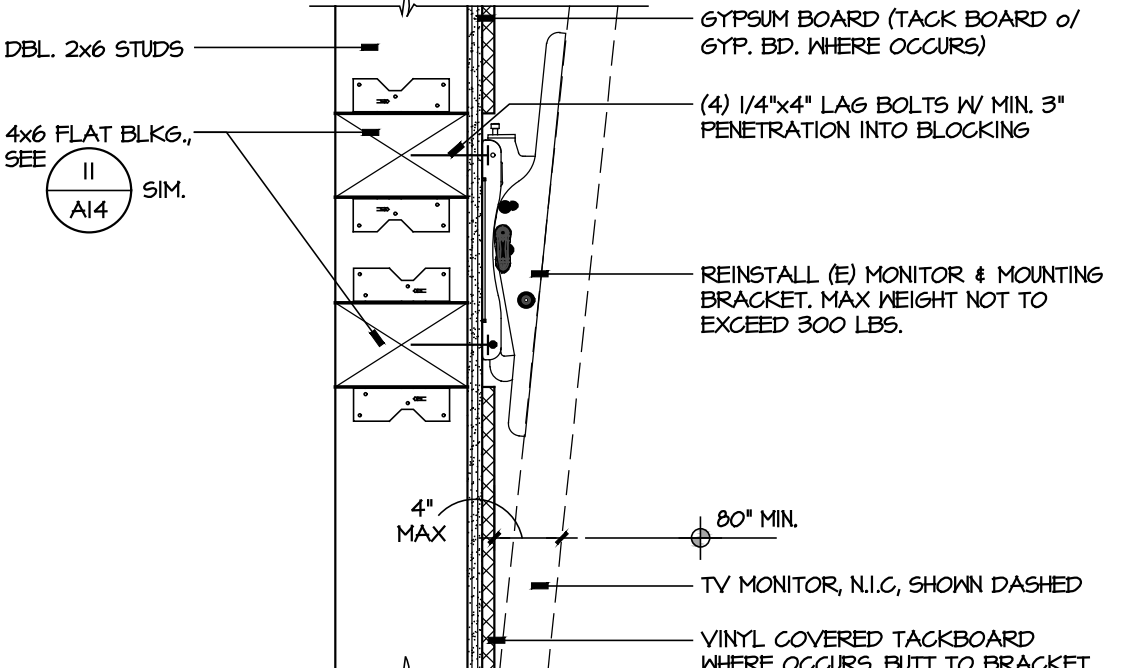
REVISIONS



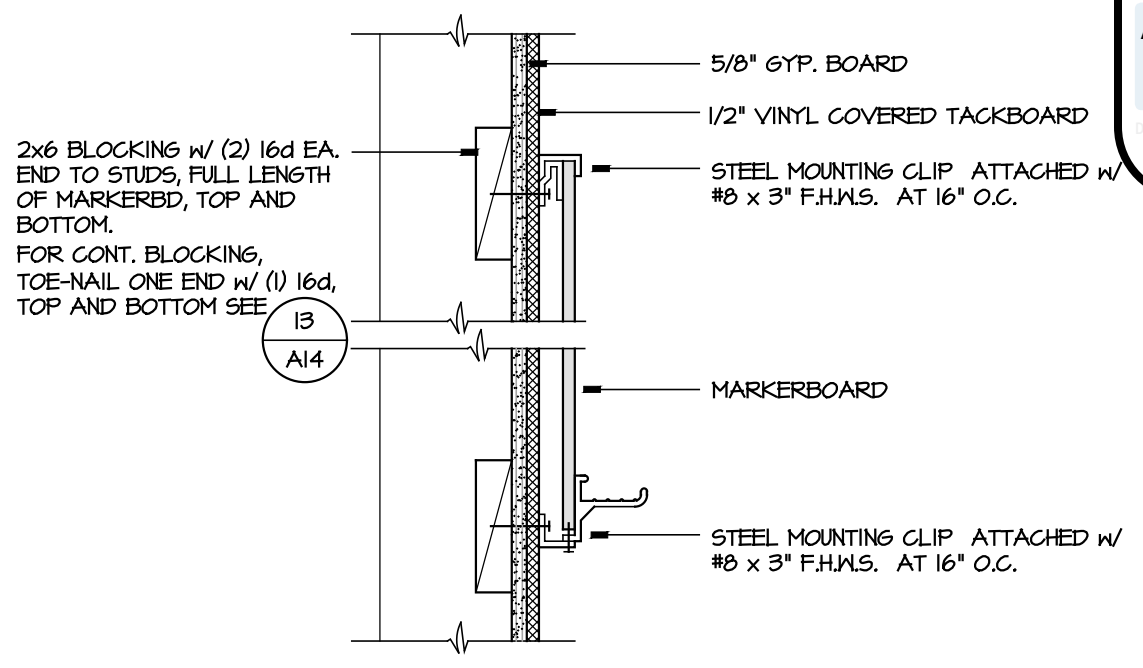
20 HORIZONTAL LATH NAILING  
SCALE: 1 1/2" = 1'-0"



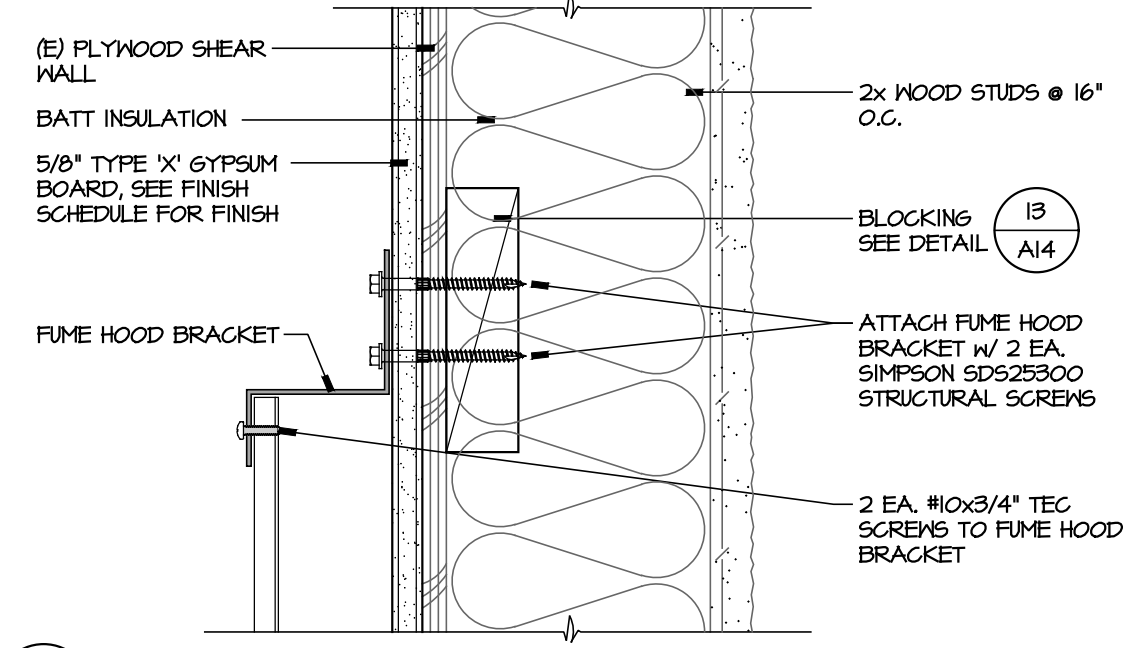
15 TYP. GYP. METAL EDGES  
N.T.S.



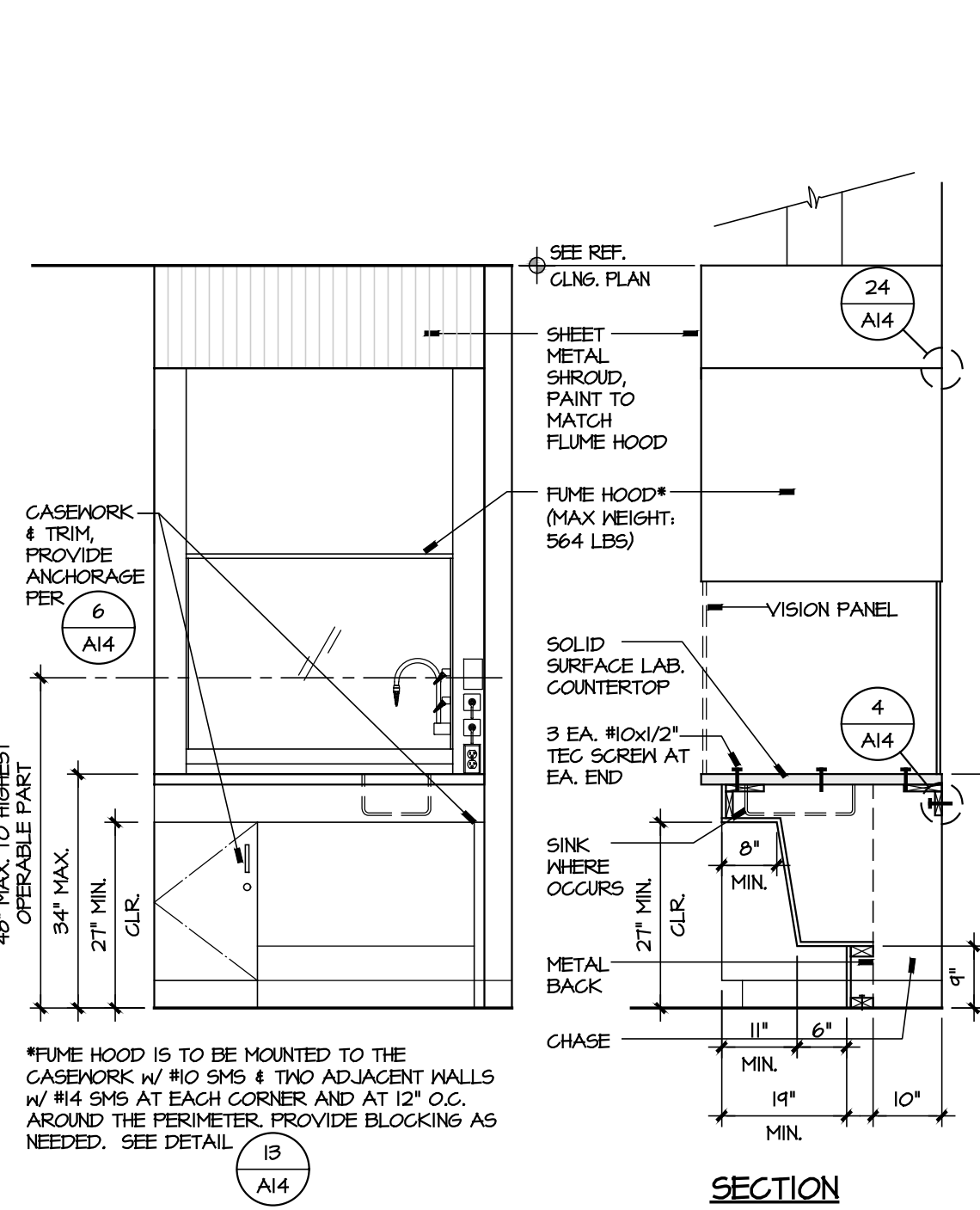
10 T.V. MOUNTING BRACKET  
SCALE: 1 1/2" = 1'-0"



5 MARKERBD. ATTACHMENT  
SCALE: 1 1/2" = 1'-0"



24 FUME HOOD ANCHORAGE  
SCALE: 3" = 1'-0"



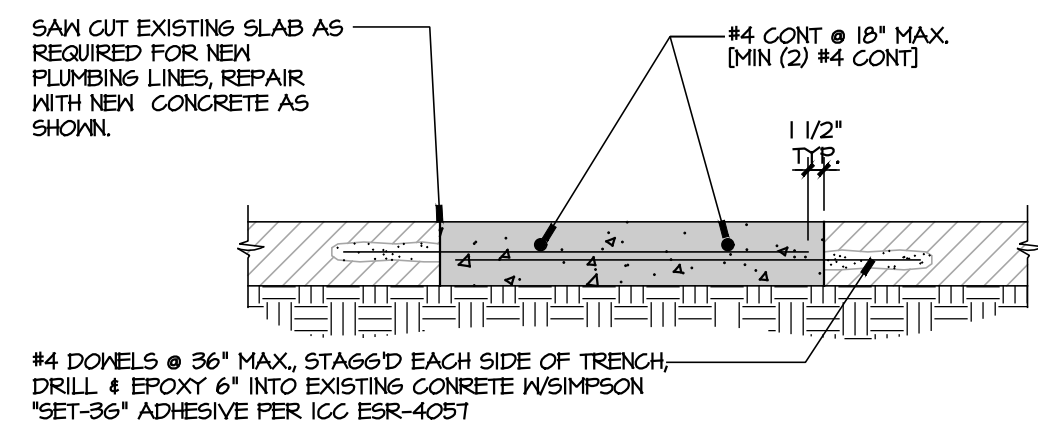




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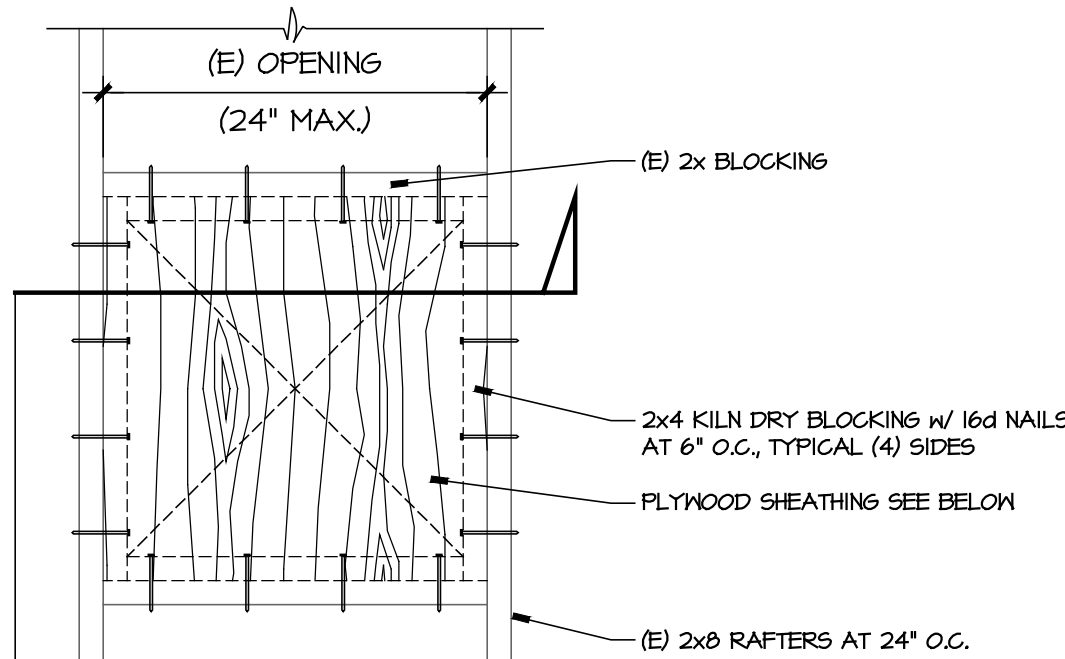
## 25 RATED WALL

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



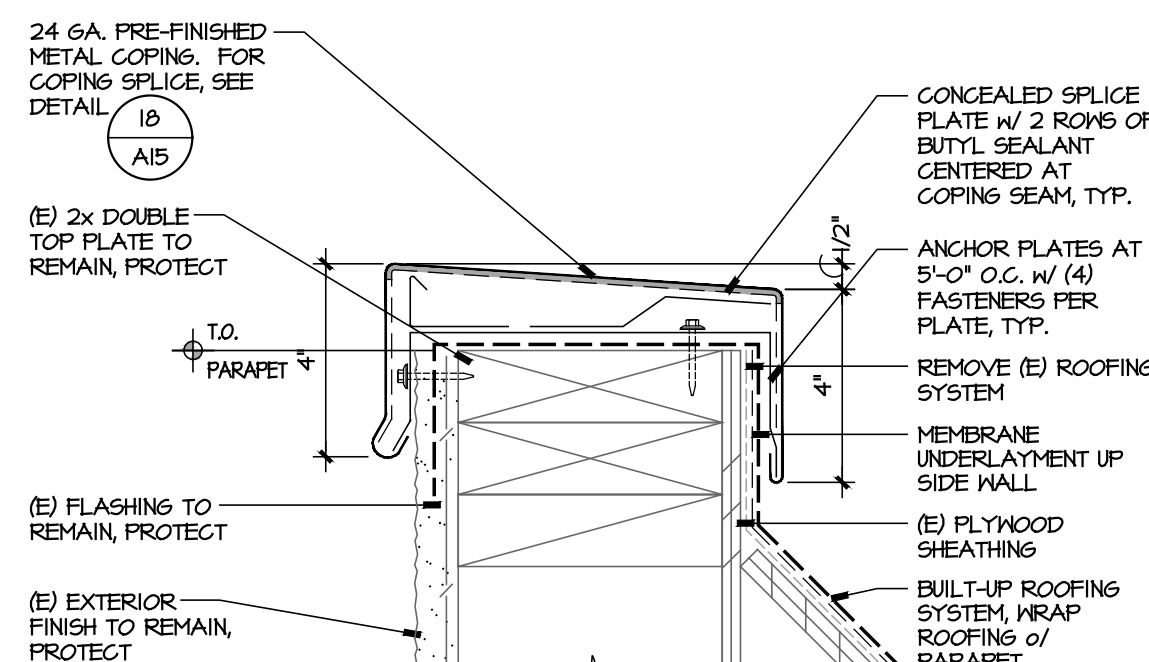
## 24 EXIST. CONC. SLAB IN-FILL

NTS



## 22 INFILL AT SMALL OPENINGS

SCALE: 1" = 1'-0"

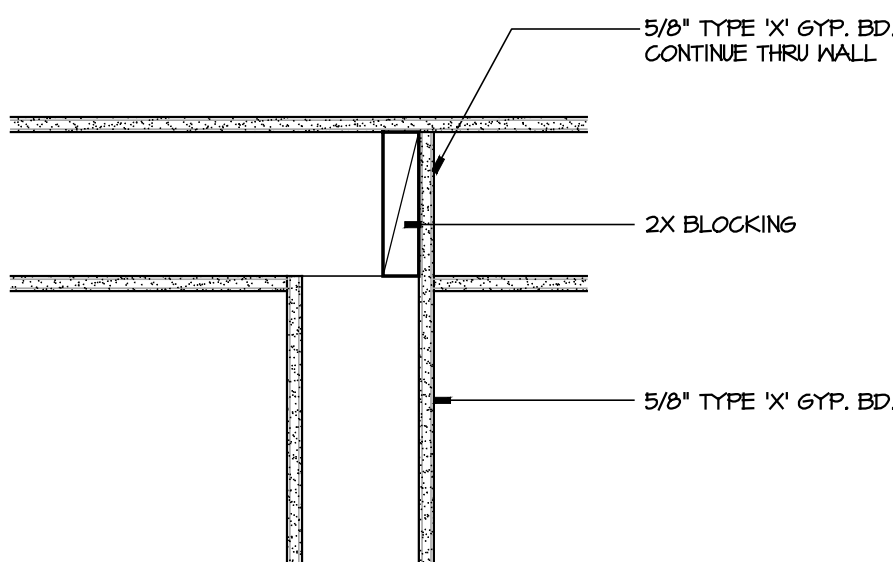


## 21 COPING @ PARAPET WALL

SCALE: 3" = 1'-0"

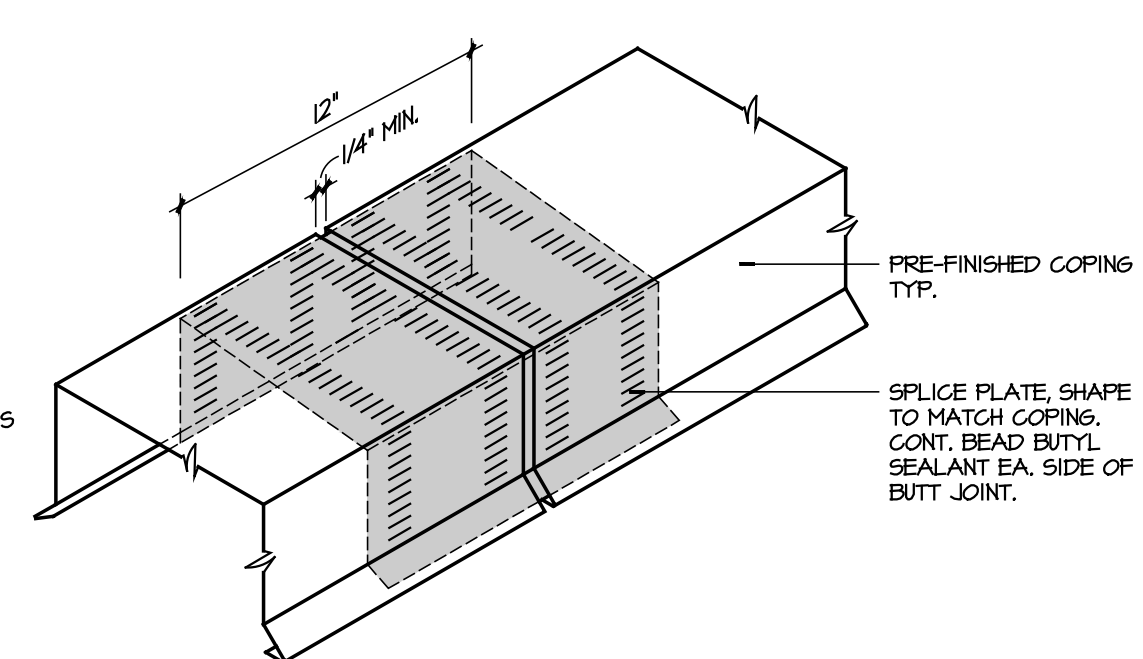
## 20 RATED WALL AT NON RATED INTERSECTION

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



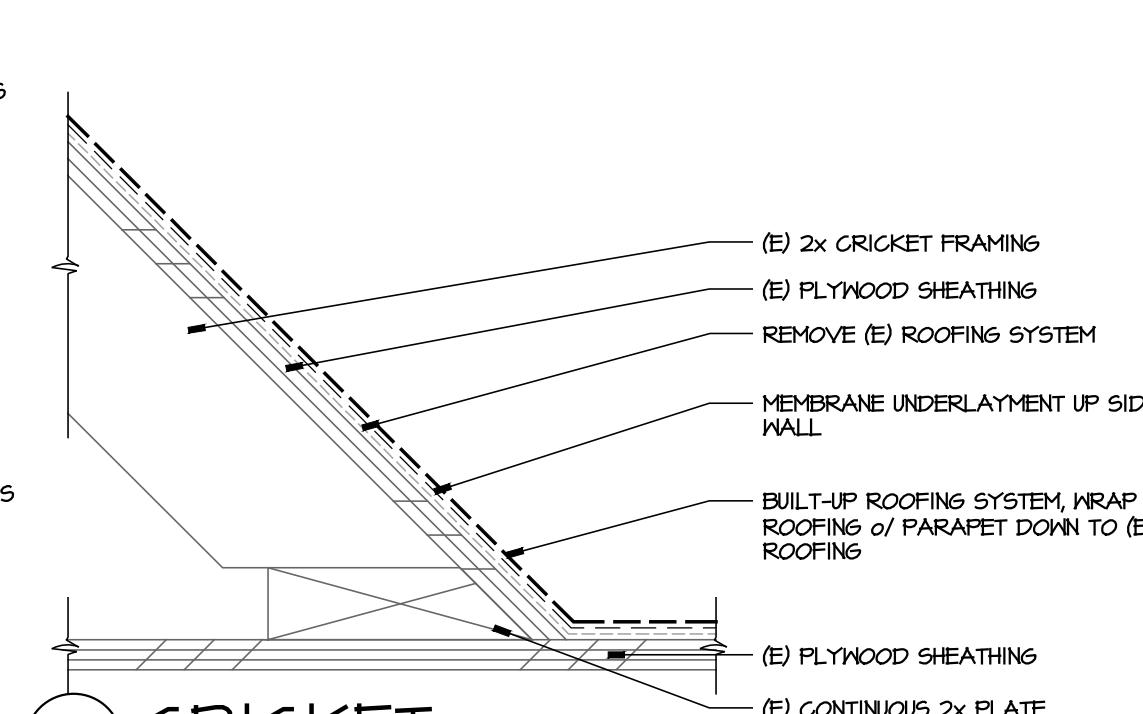
## 19 RATED WALL INTERSECTION

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



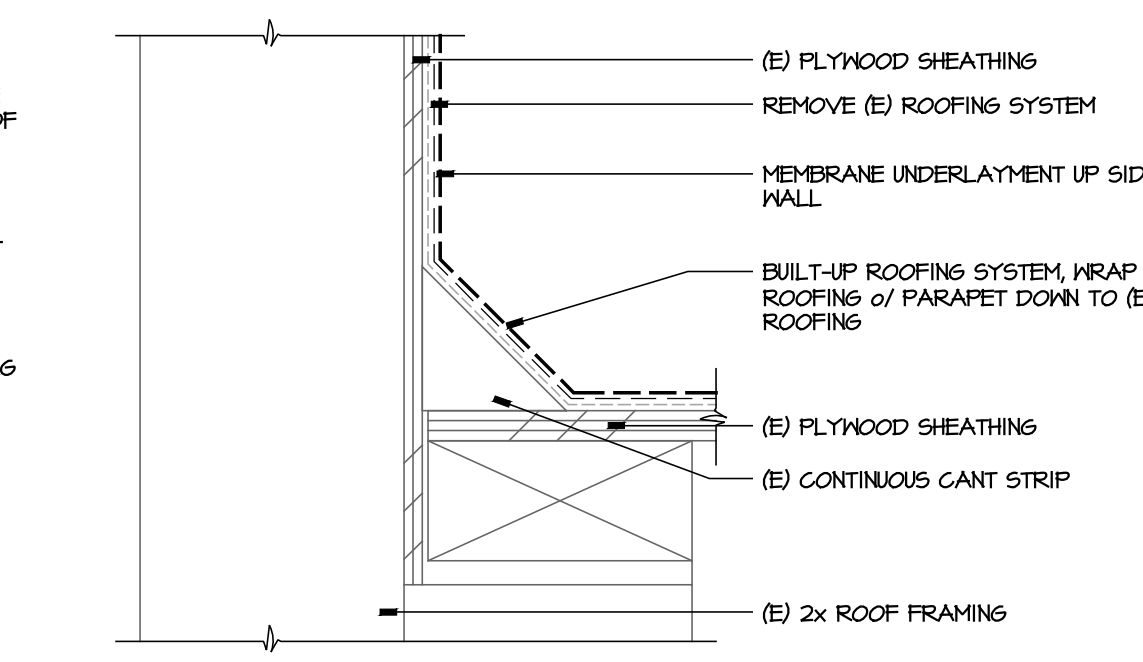
## 18 TYPICAL COPING SPLICE

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



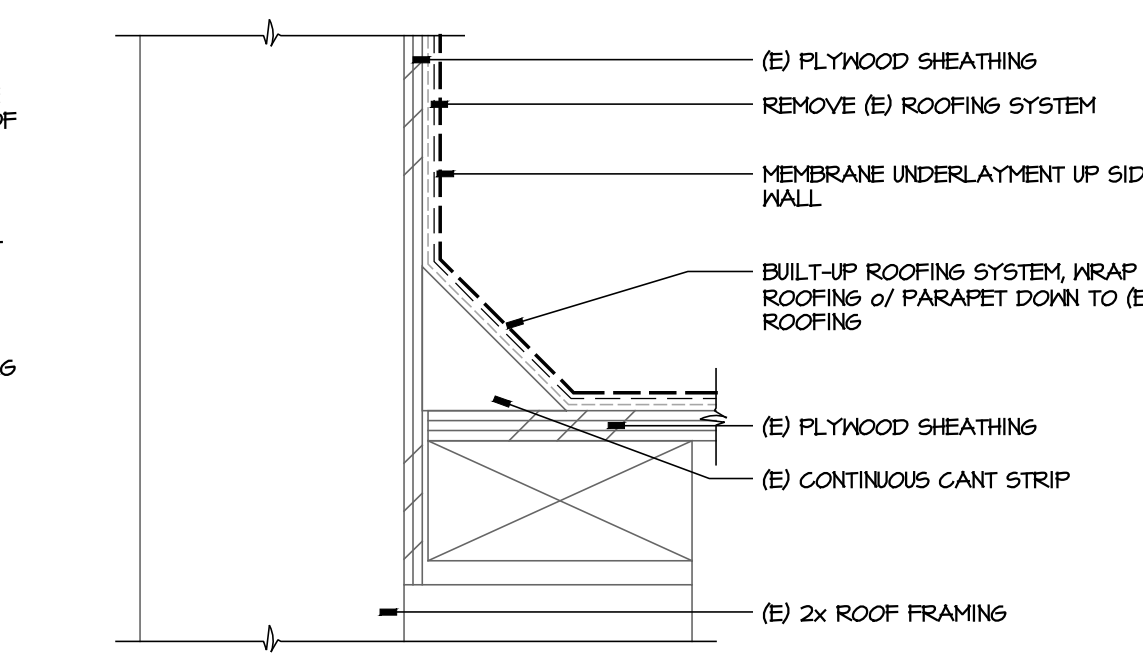
## 17 CRICKET

SCALE: 3" = 1'-0"



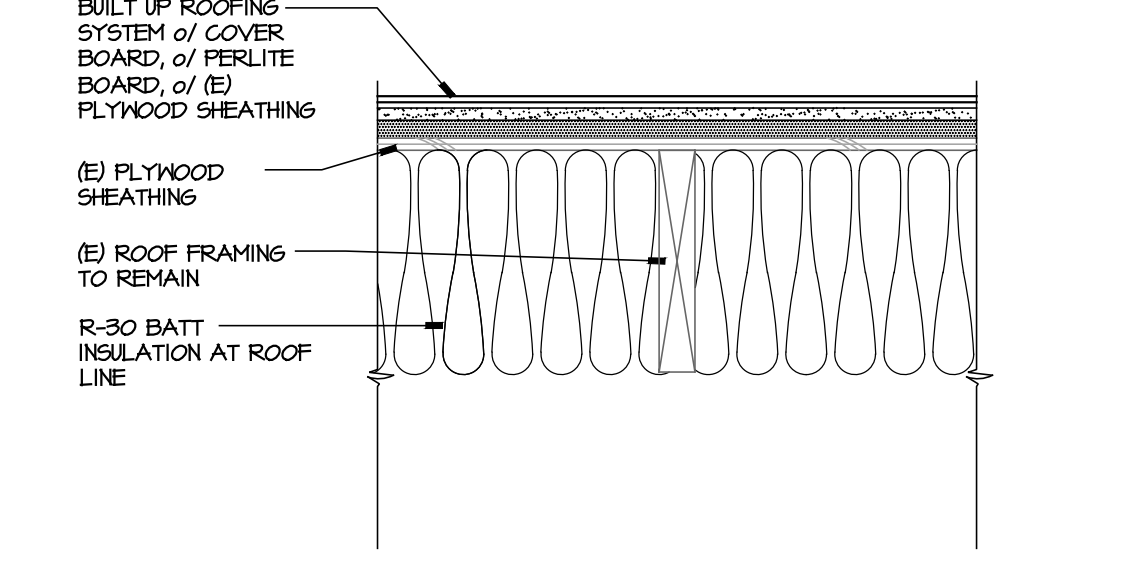
## 16 CANT

SCALE: 3" = 1'-0"



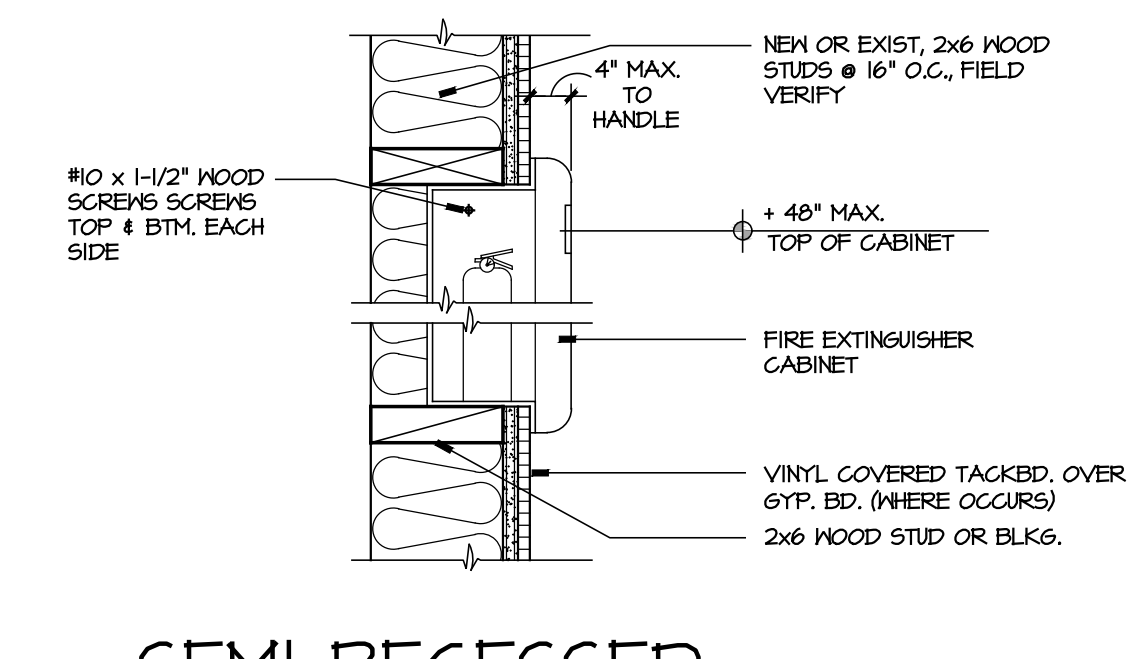
## 15 1-HR RATED INTERIOR WALL

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



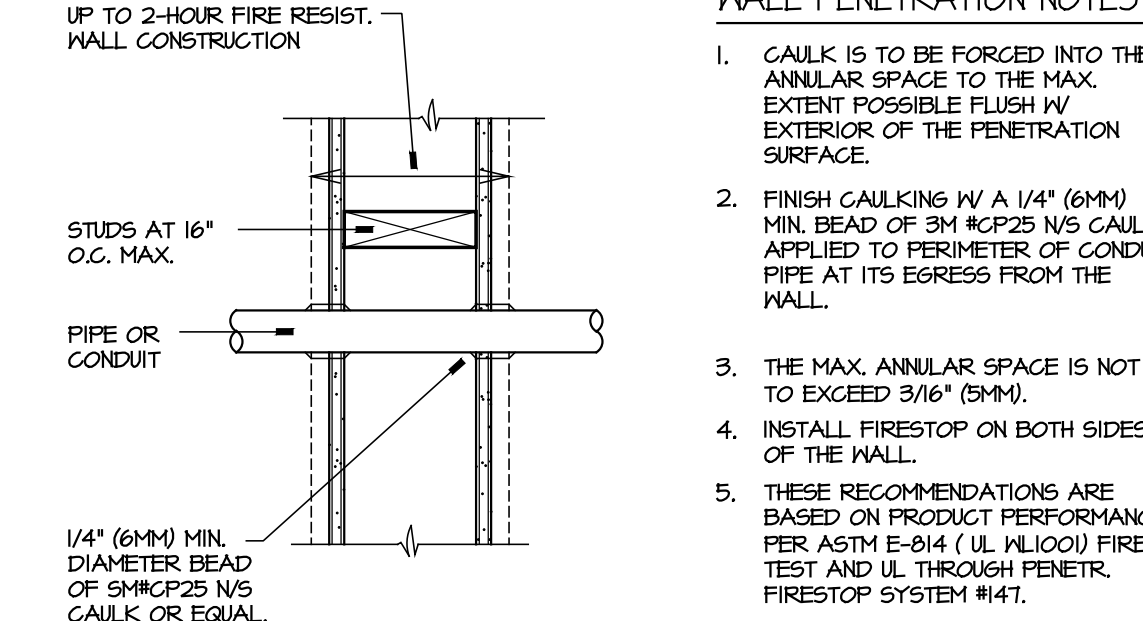
## 14 ROOF ASSEMBLY

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



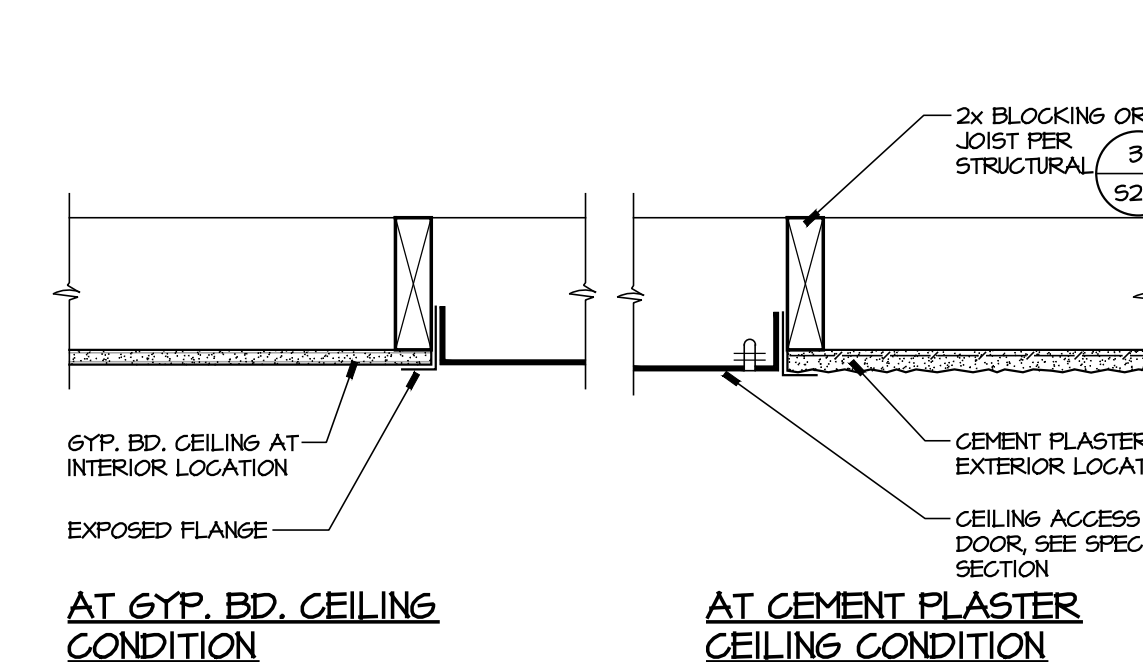
## 13 SEMI RECESSED FIRE EXTINGUISHER CABINET

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



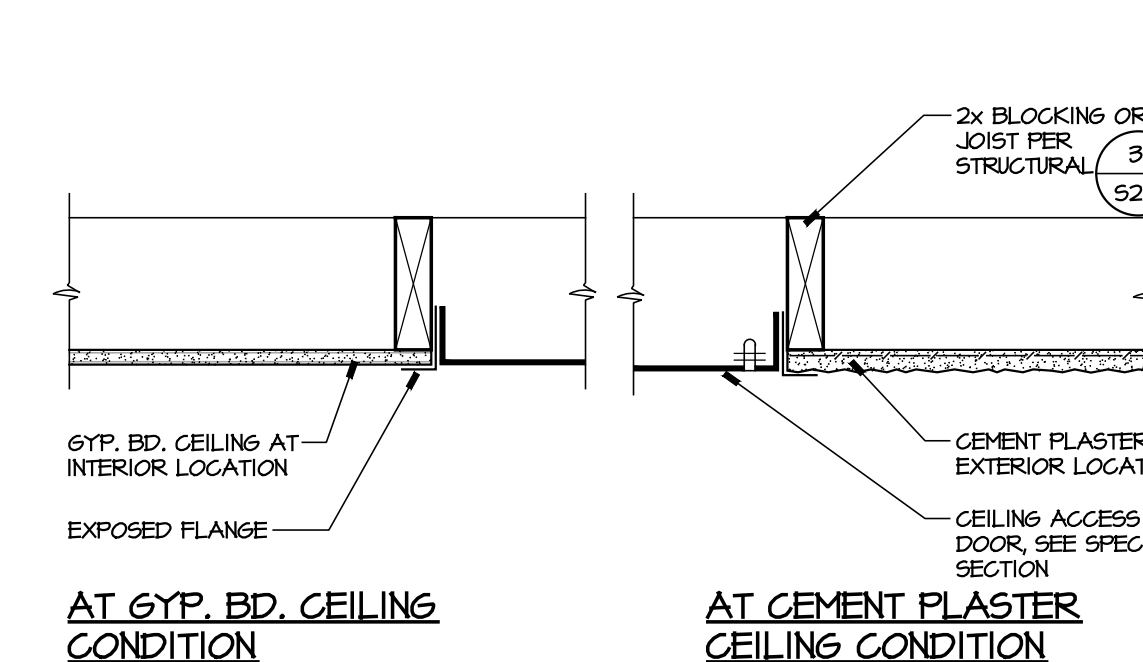
## 12 PENETRATION THRU WALL

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



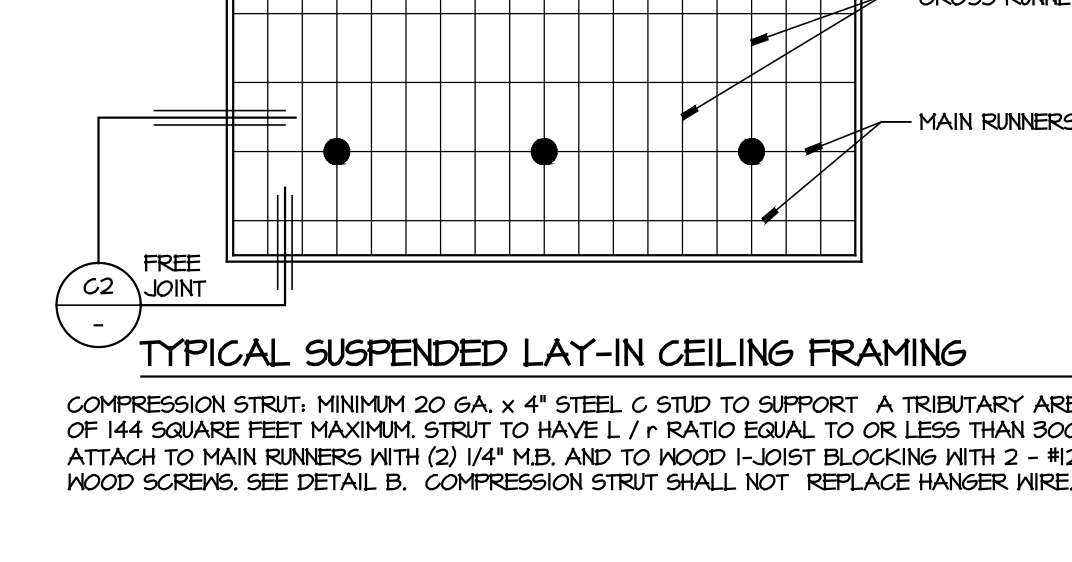
## 11 ATTIC ACCESS DOOR

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



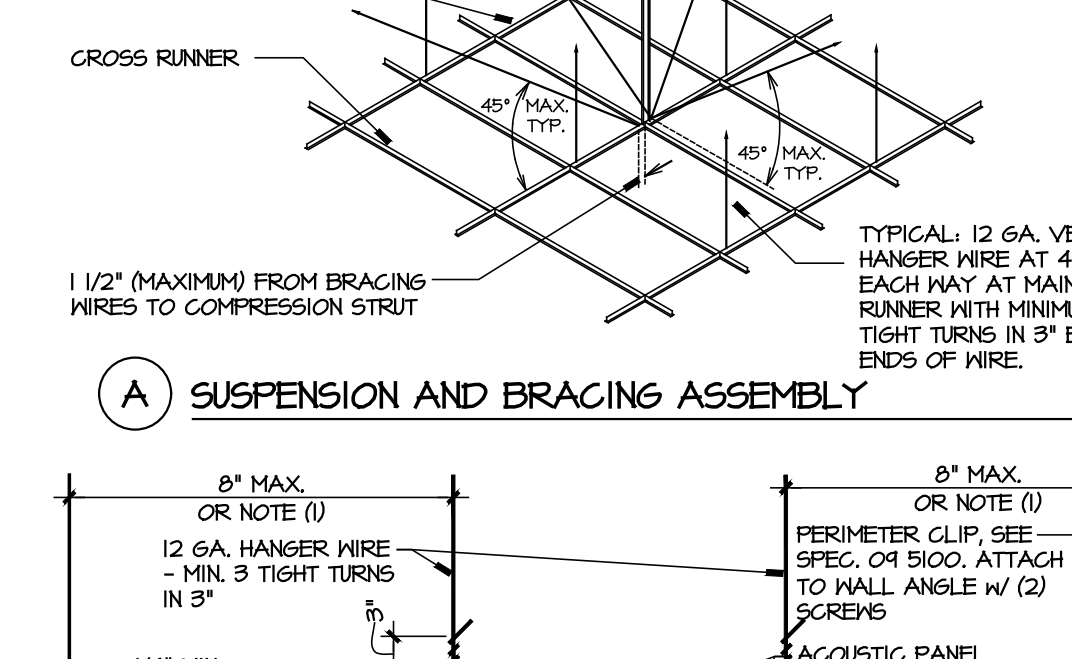
## 10 TYPICAL SUSPENDED LAY-IN CEILING FRAMING

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



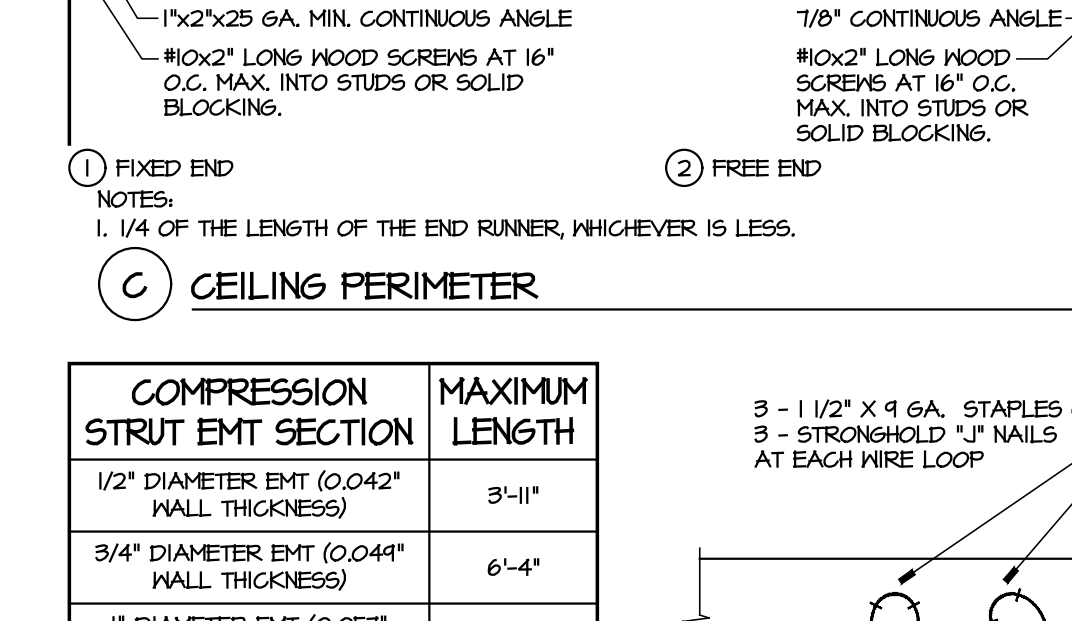
## 9 SUSPENSION AND BRACING ASSEMBLY

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



## 8 CEILING PERIMETER

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



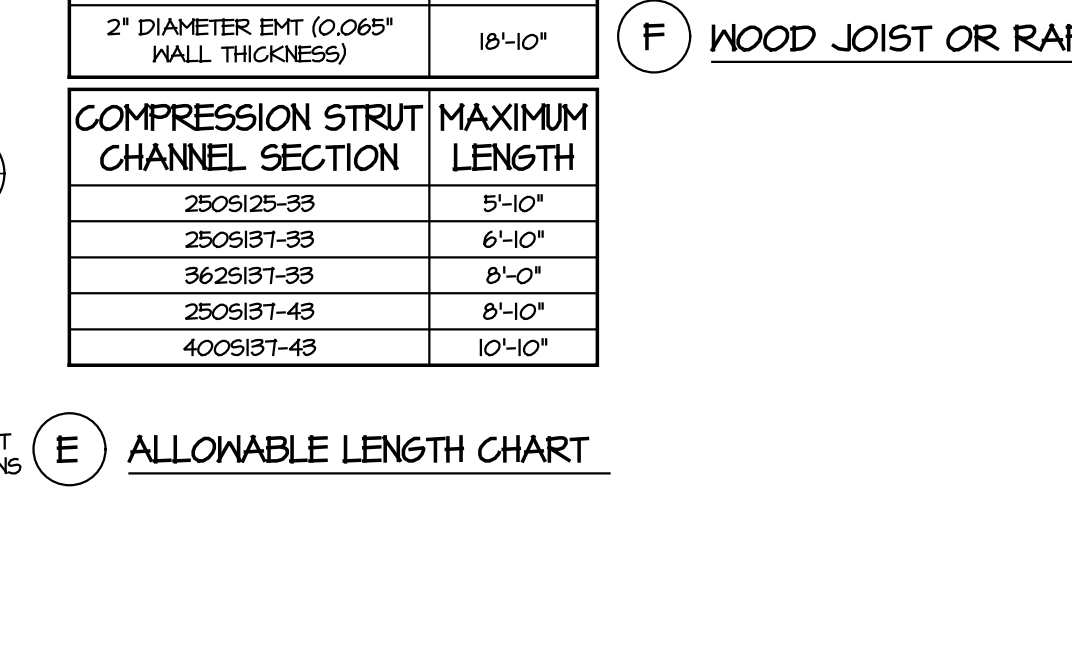
## 7 COMPRESSION STRUT MAXIMUM LENGTH

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

COMPRESSION STRUT EMT SECTION	MAXIMUM LENGTH
1/2" DIAMETER EMT (0.042" WALL THICKNESS)	3'-11"
3/4" DIAMETER EMT (0.044" WALL THICKNESS)	6'-4"
1" DIAMETER EMT (0.051" WALL THICKNESS)	9'-4"
1 1/4" DIAMETER EMT (0.065" WALL THICKNESS)	12'-4"
1 1/2" DIAMETER EMT (0.065" WALL THICKNESS)	14'-4"
2" DIAMETER EMT (0.065" WALL THICKNESS)	18'-10"

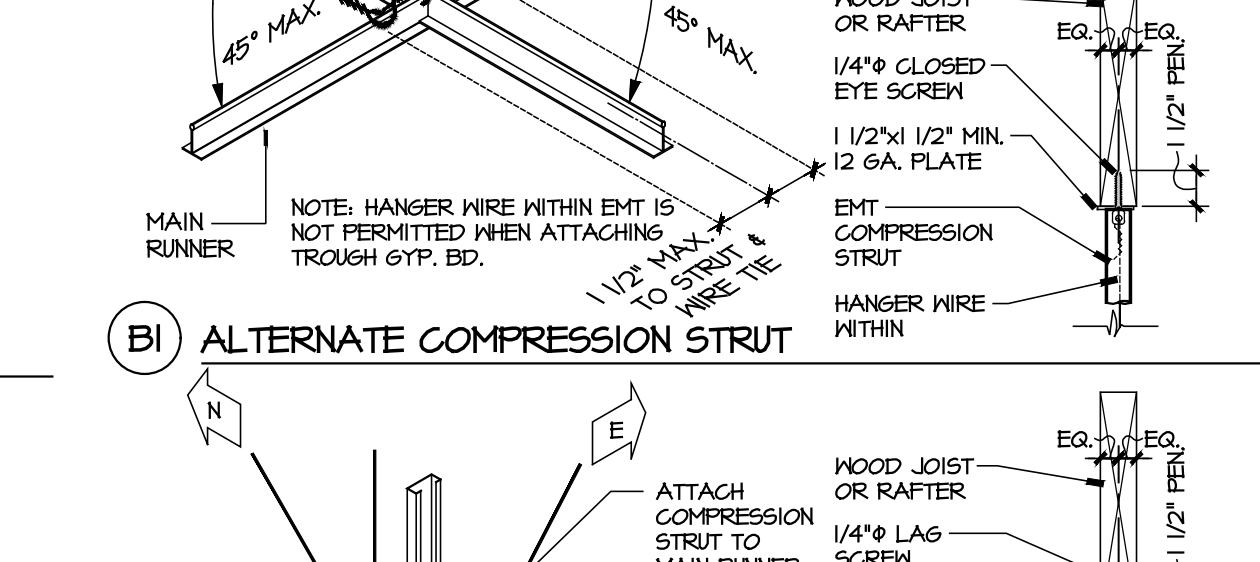
## 6 TYPICAL SUSPENDED CEILING DETAILS

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



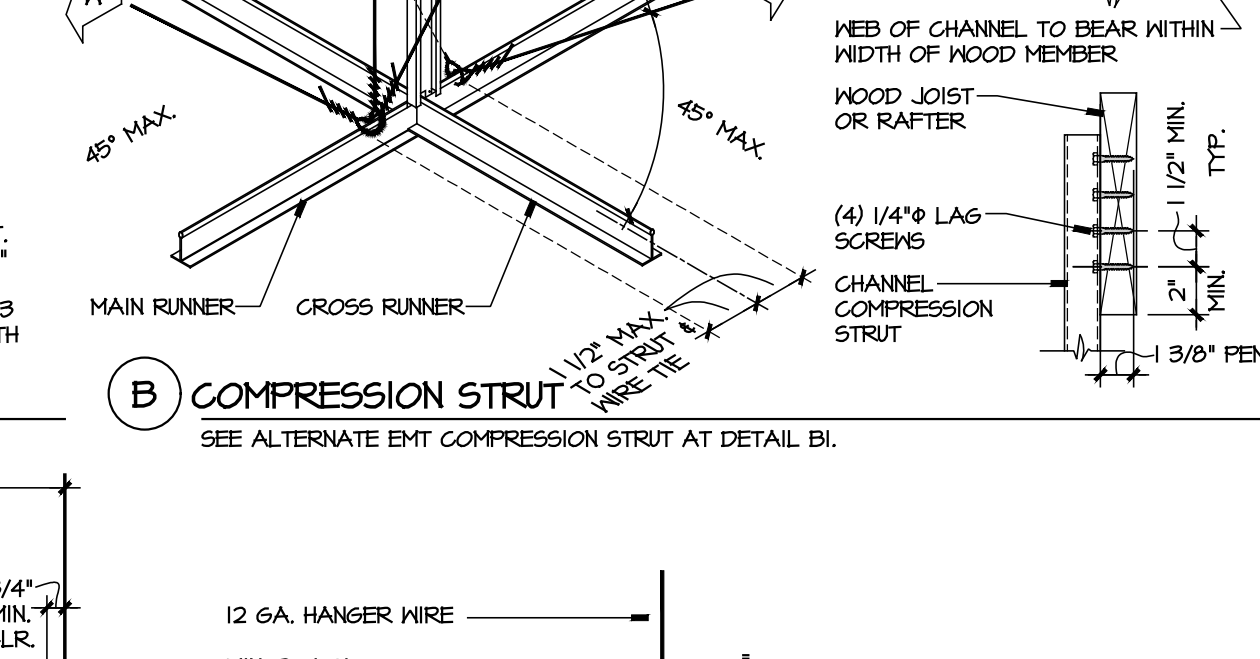
## 5 ALTERNATE COMPRESSION STRUT

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



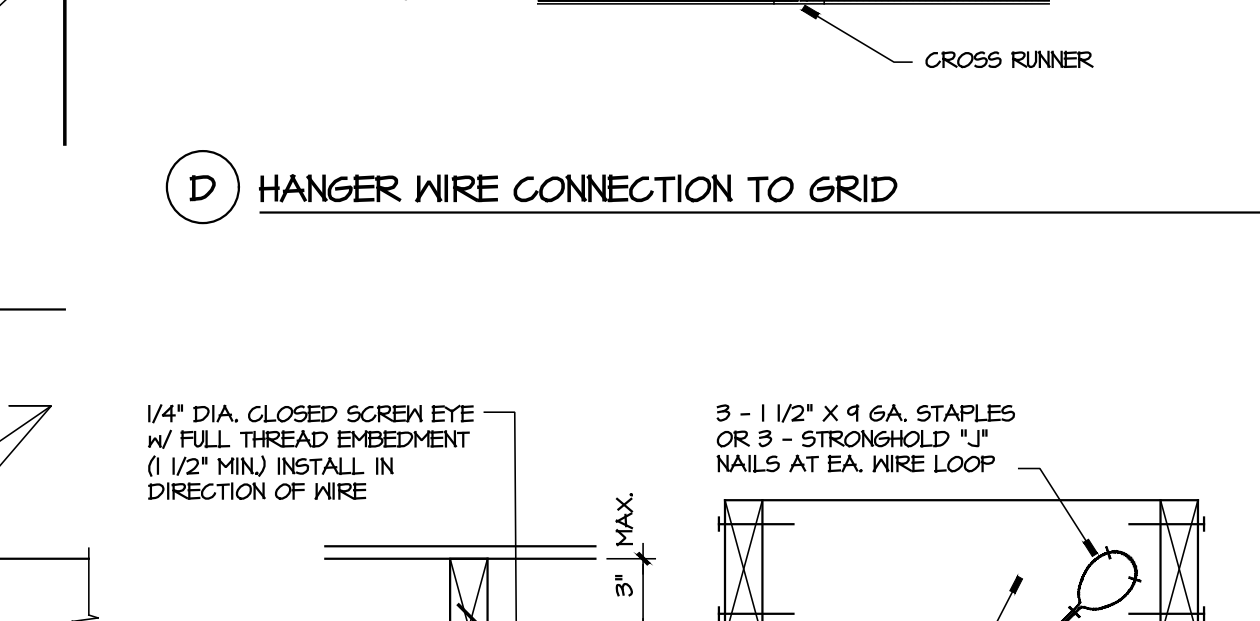
## 4 COMPRESSION STRUT

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



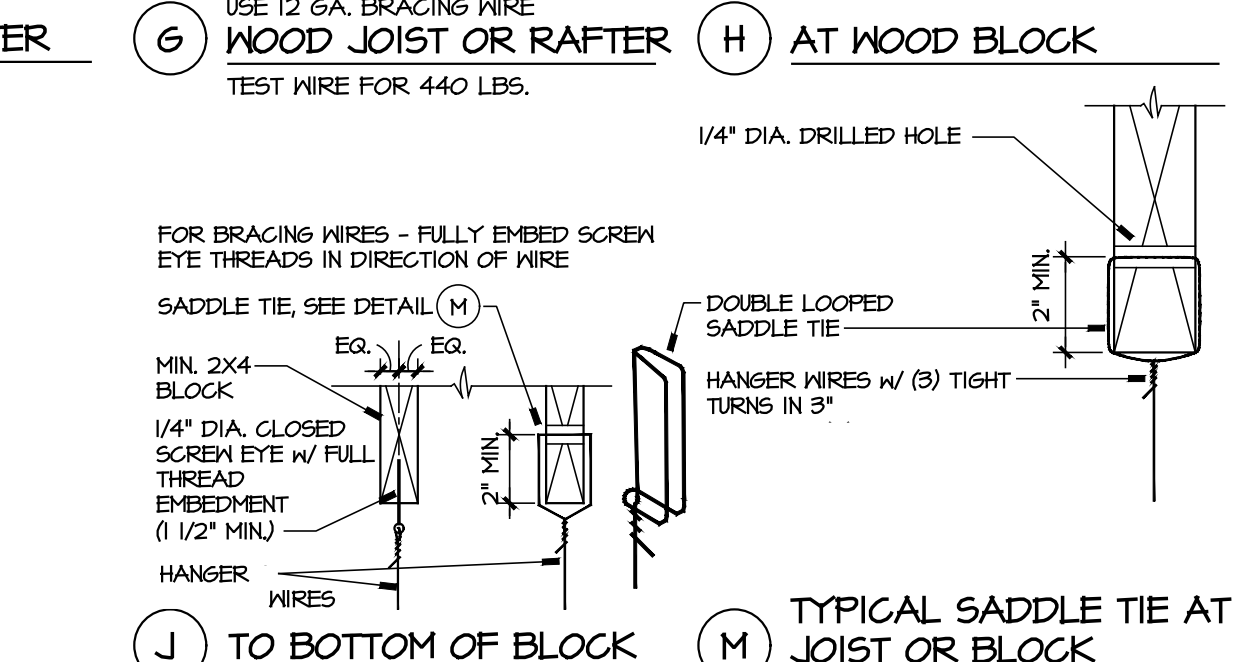
## 3 HANGER WIRE CONNECTION TO GRID

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

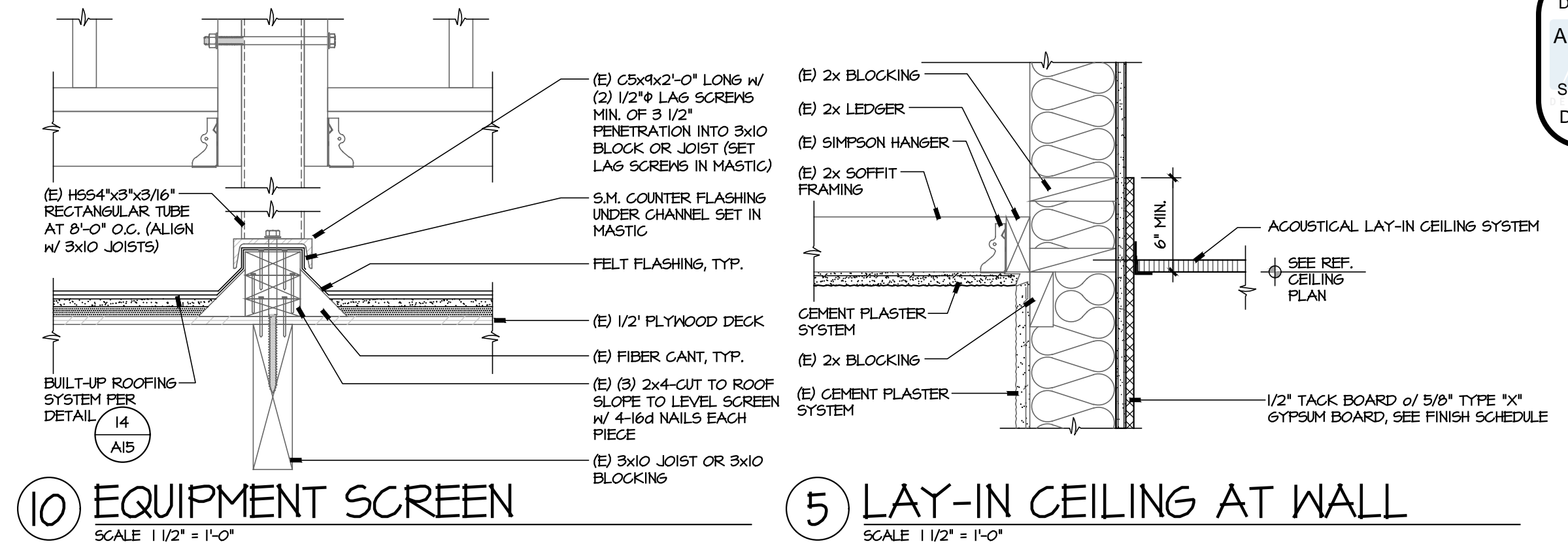


## 2 WOOD JOIST OR RAFTER

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

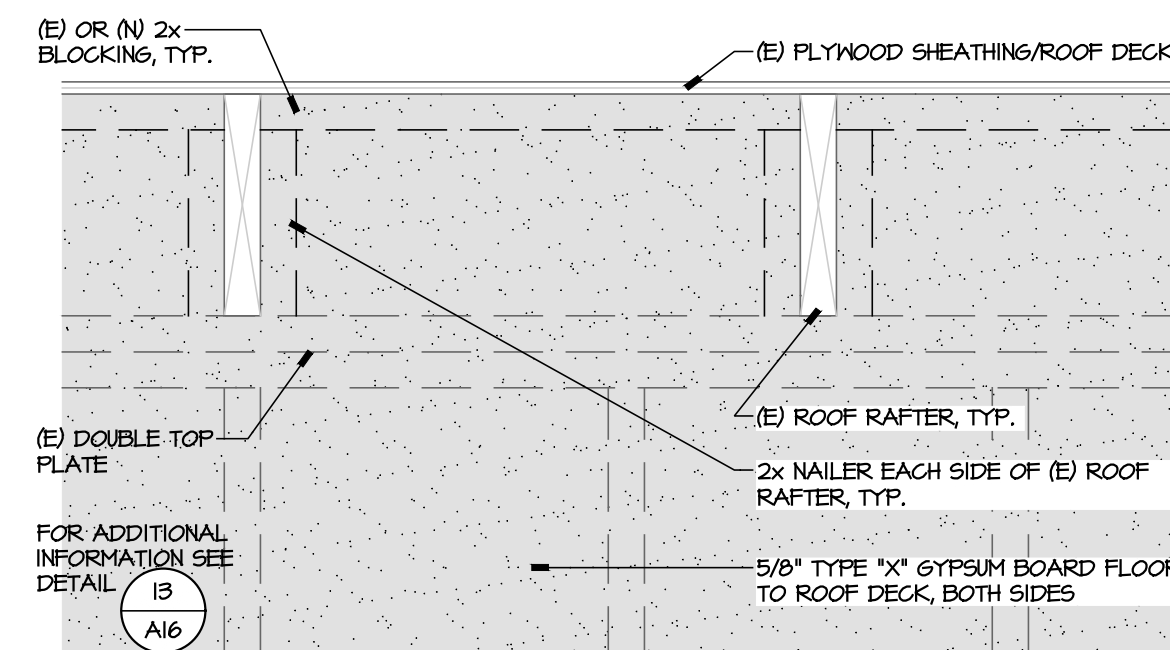






5 LAY-IN CEILING AT WALL  
SCALE 1 1/2" = 1'-0"

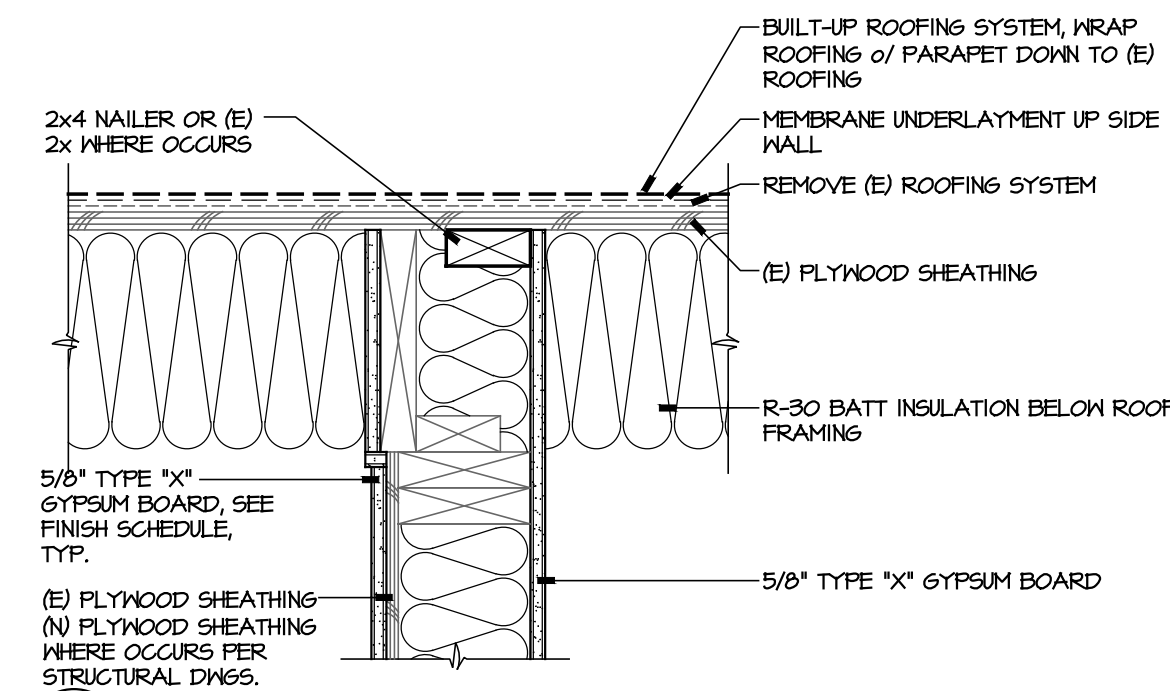
10 EQUIPMENT SCREEN  
SCALE 1 1/2" = 1'-0"



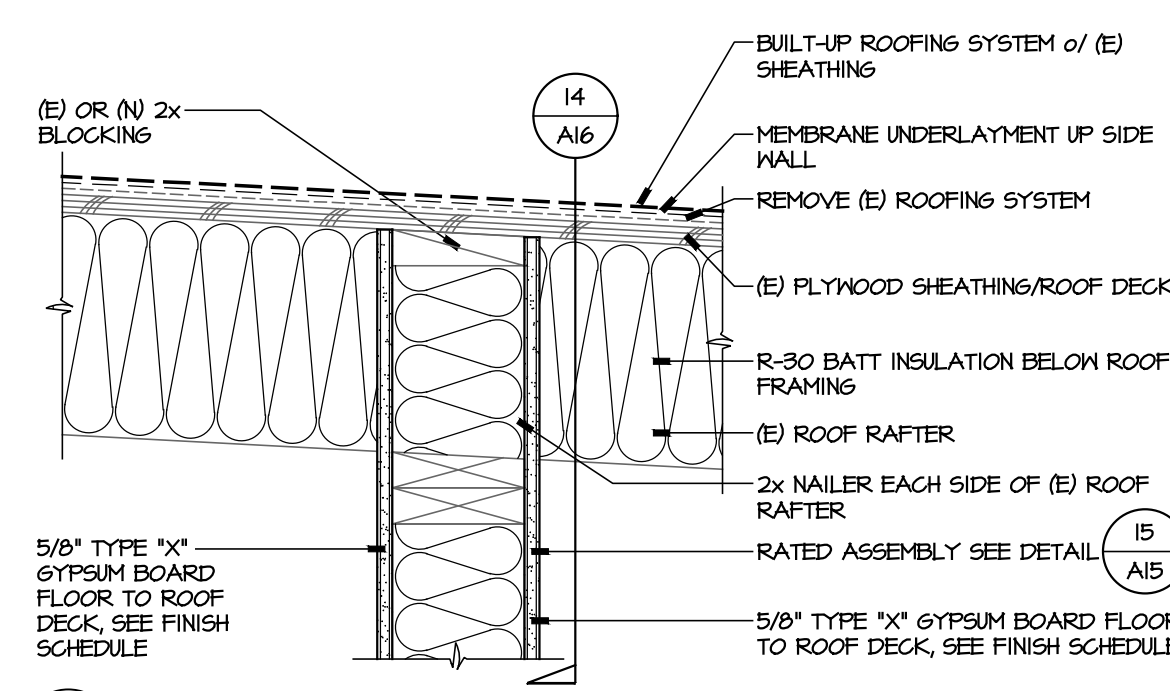
14 RATED WALL AT ROOF  
SCALE 1 1/2" = 1'-0"

9 CEMENT PLASTER SOFFIT  
SCALE 1 1/2" = 1'-0"

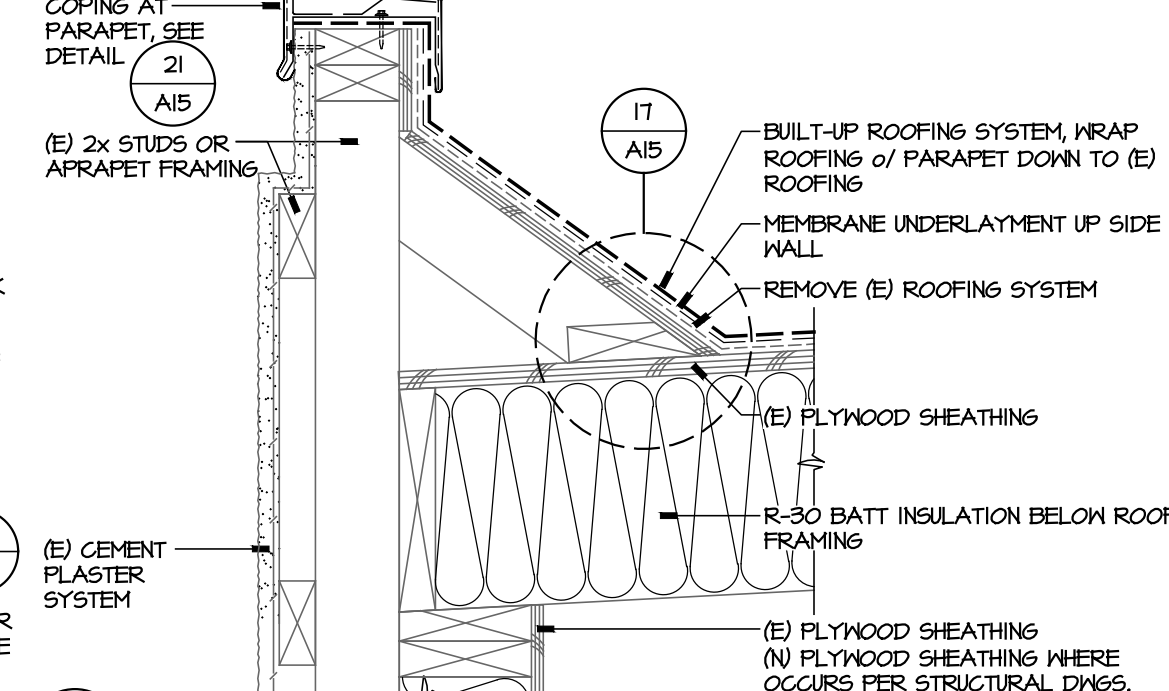
#### 4 EXTERIOR BASE



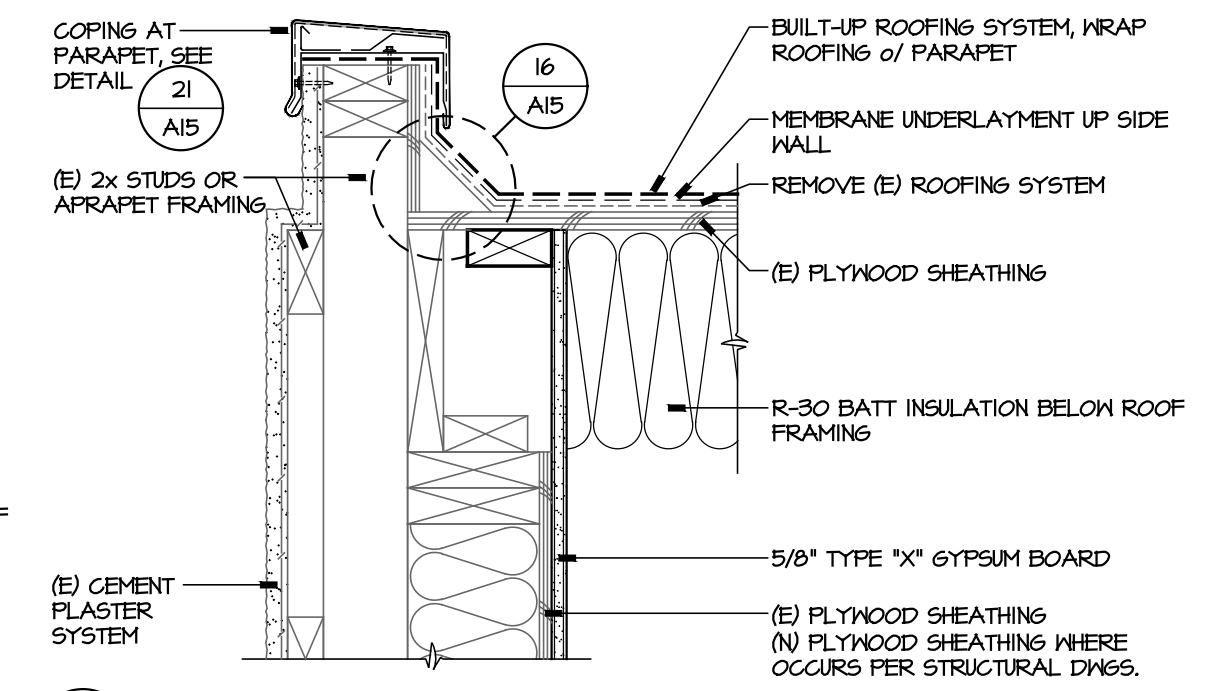
18 ROOF AT WALL  
SCALE 1 1/2" = 1'-0"



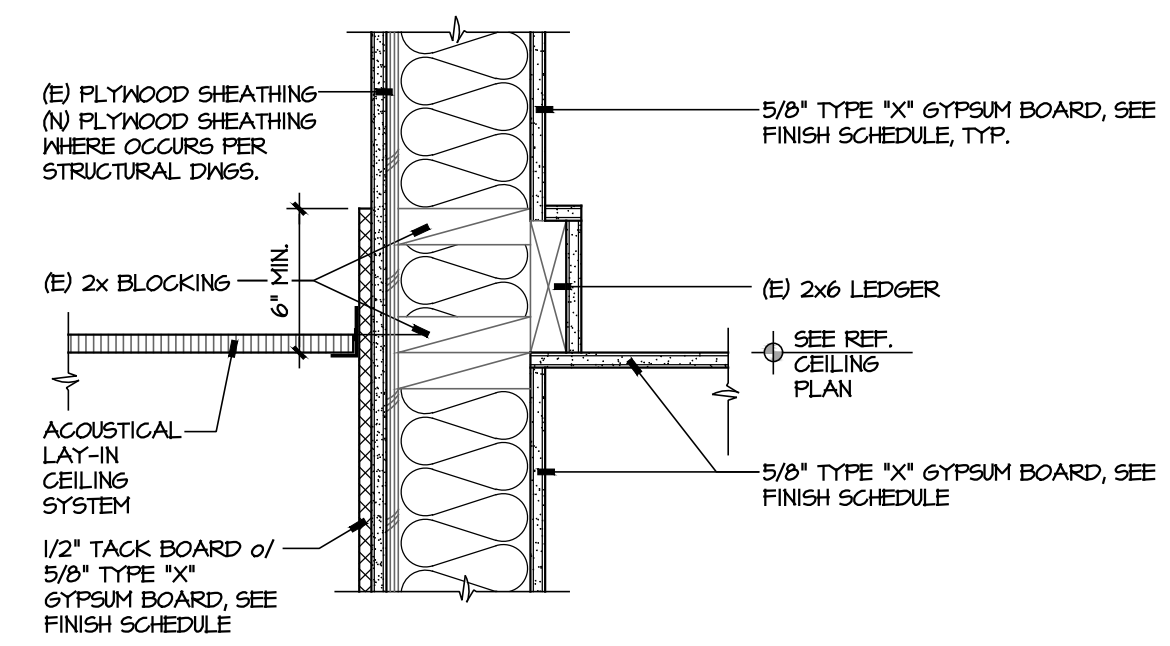
13 ROOF AT RATED WALL  
SCALE 1 1/2" = 1'-0"



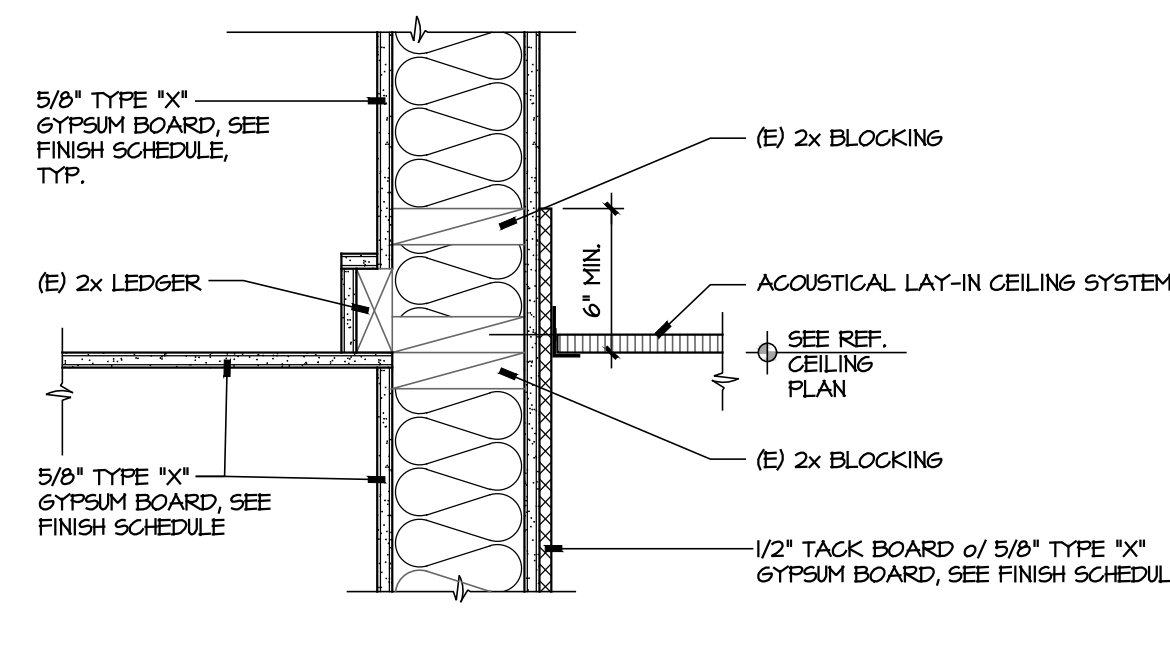
8 ROOF AT PARAPET  
SCALE 1/2" = 1'-0"



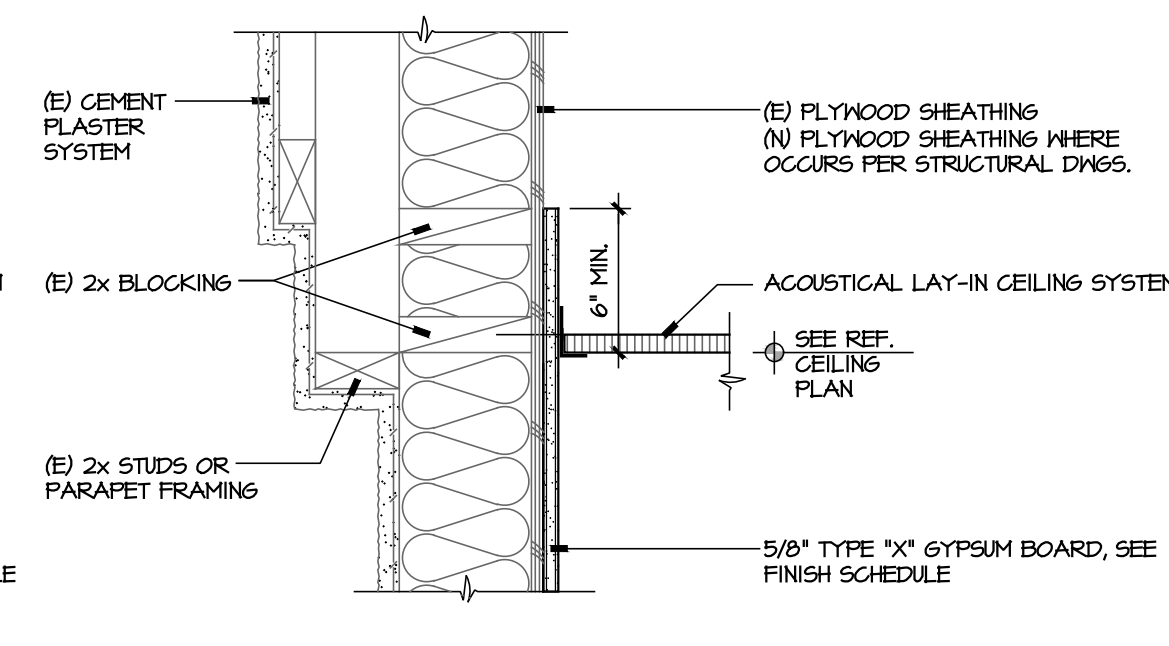
③ ROOF AT PARAPET  
SCALE 1 1/2" = 1'-0"



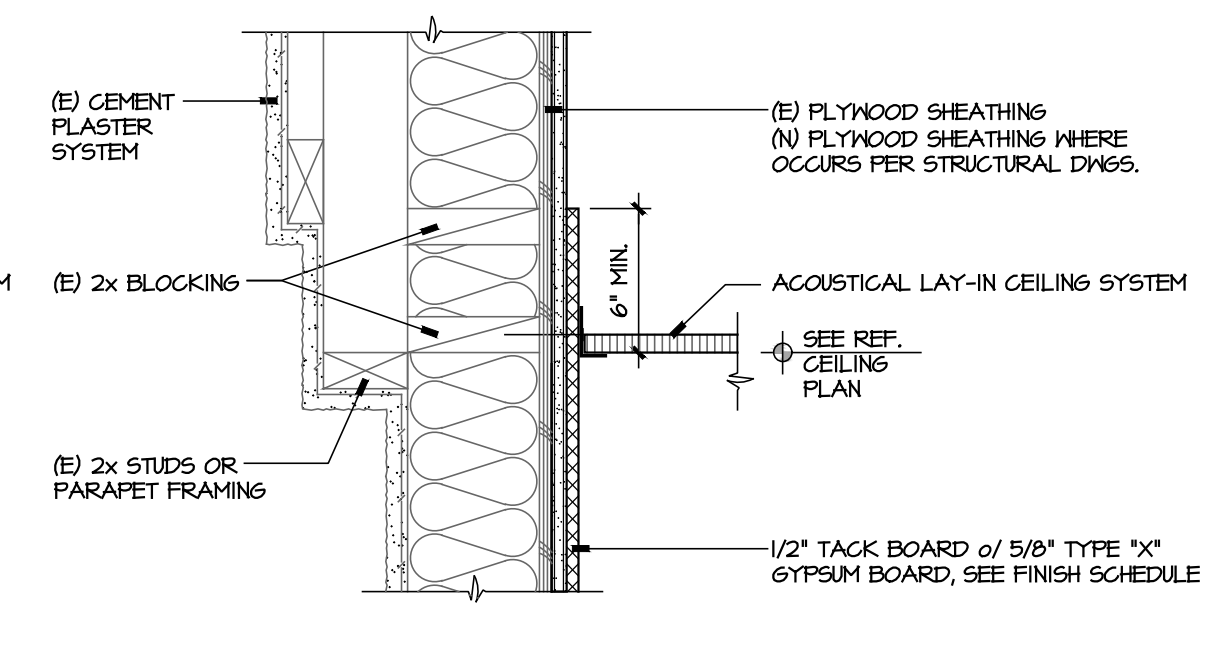
17 CEILING AT WALL  
SCALE 1/2" = 1'-0"



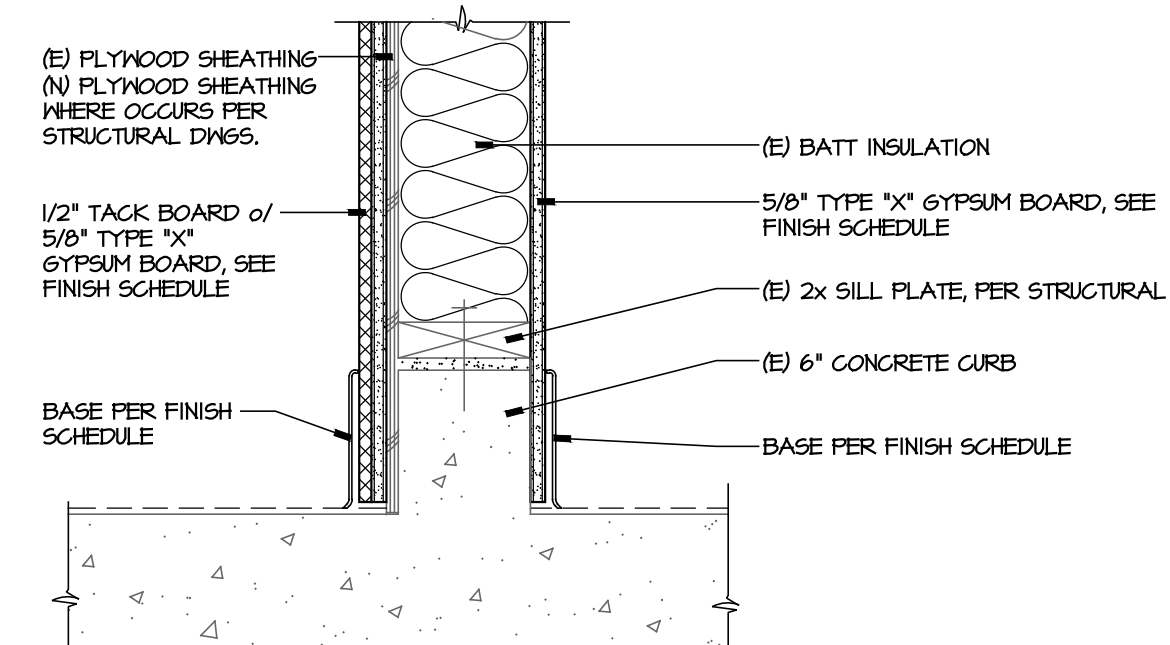
12 CEILING AT WALL  
SCALE 1/2" = 1'-0"



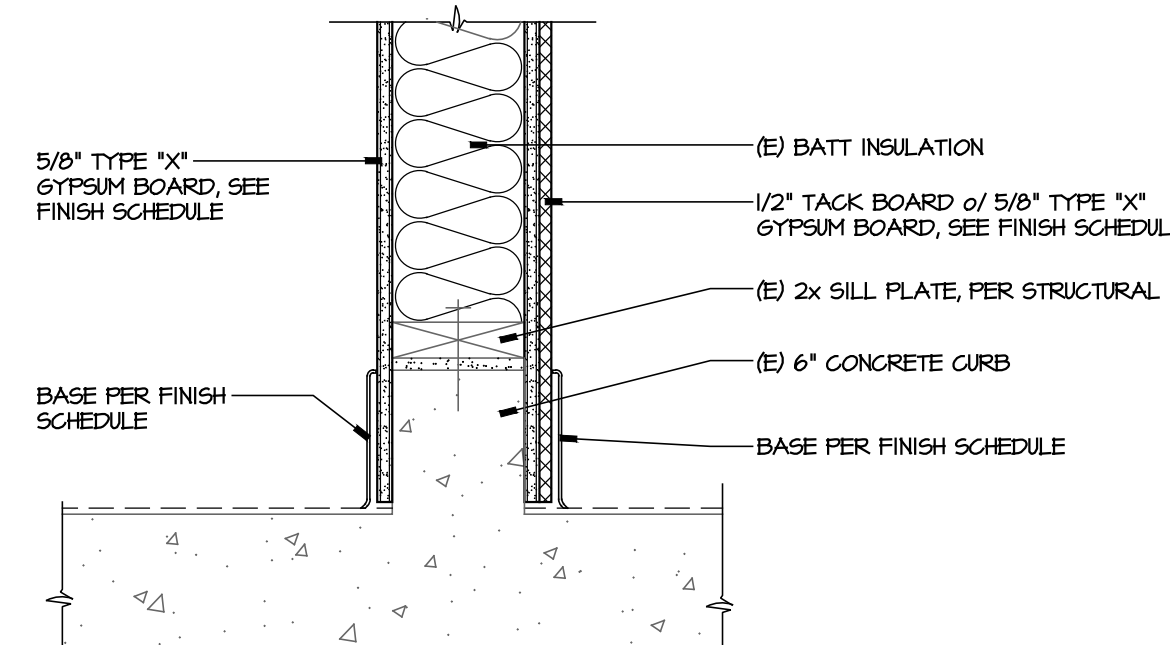
⑦ LAY-IN CEILING AT WALL  
SCAFF 1 1/2" = 1'-0"



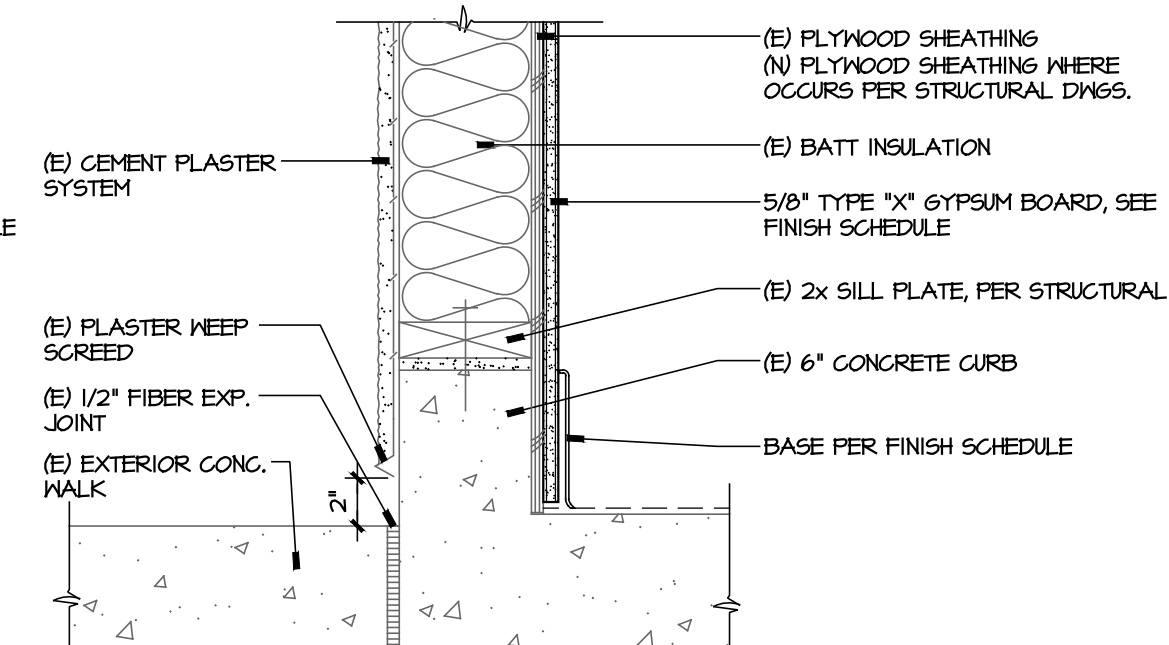
② LAY-IN CEILING AT WALL  
SCALE 1 1/2" = 1'-0"



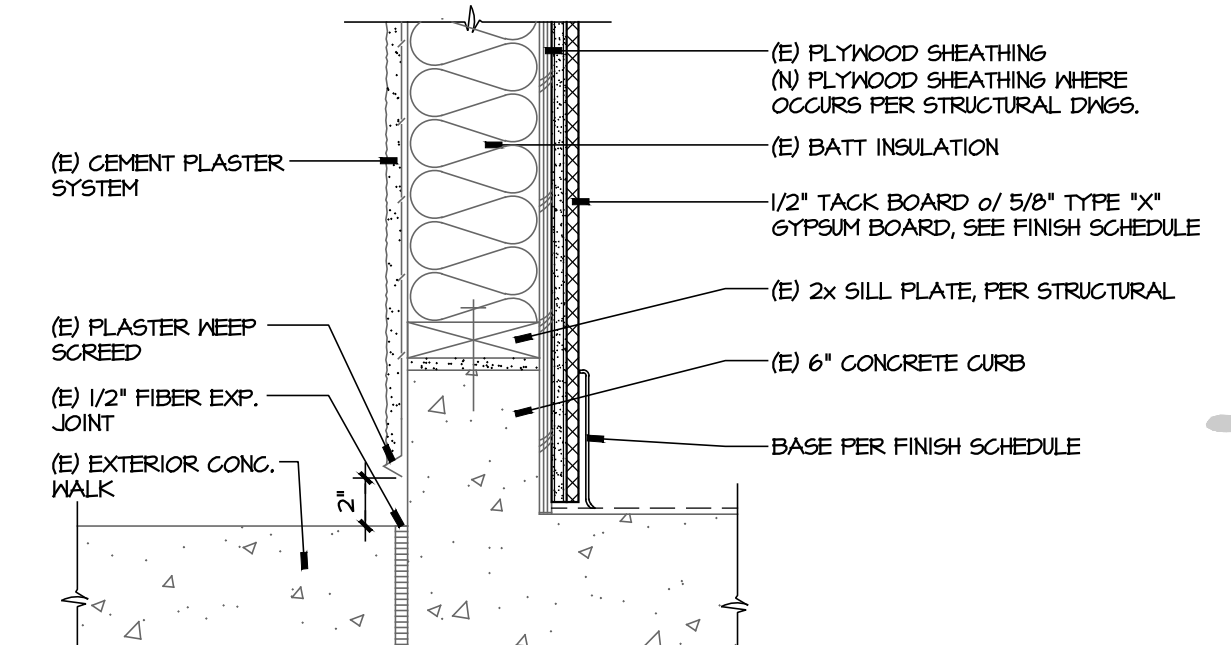
16 INTERIOR BASE



II INTERIOR BASE  
SCALE 1/4" = 1'-0"



6 EXTERIOR BASE  
SCALE 1/2" = 1'-0"



1 EXTERIOR BASE  
SCALE 1 1/2" = 1'-0"



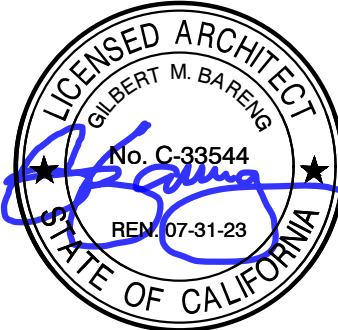
GENERAL NOTES

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE WORK OF ALL TRADES AND SHALL VERIFY ALL DIMENSIONS, CONDITIONS AND ELEVATIONS BEFORE STARTING WORK. ALL DISCREPANCIES SHALL BE CALLED TO THE ATTENTION OF THE ENGINEER AND SHALL BE RESOLVED BEFORE PROCEEDING WITH THE WORK. ALL WORK SHALL BE PERFORMED IN A WORKMANLIKE MANNER IN ACCORDANCE WITH ACCEPTED CONSTRUCTION PRACTICES.
2. NOTES AND DETAILS ON THESE DRAWINGS SHALL TAKE PRECEDENCE OVER THESE GENERAL NOTES.
3. THE DETAILS ON THESE DRAWINGS SHALL APPLY IN ALL CASES UNLESS SPECIFICALLY SHOWN OTHERWISE. WHERE CONDITIONS ARE NOT SPECIFICALLY INDICATED, DETAILS OF A CHARACTER SIMILAR TO THOSE SHOWN SHALL BE USED, SUBJECT TO REVIEW.
4. FOR OPENINGS NOT SHOWN AND/OR DETAILED ON THE STRUCTURAL DRAWINGS AND WHICH PENETRATE STRUCTURAL ELEMENTS, OBTAIN APPROVAL FROM THE ENGINEER AND DSA BEFORE PROCEEDING WITH WORK.
5. FRAME OPENINGS AND SUPPORT MISCELLANEOUS EQUIPMENT AS DETAILED ON THE DRAWINGS. WHERE NO DETAILS ARE PROVIDED, OBTAIN APPROVAL FROM THE ENGINEER AND DSA BEFORE PROCEEDING WITH WORK.
6. IT IS THE INTENTION OF THESE DRAWINGS TO SHOW THE COMPLETED INSTALLATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TEMPORARY BRACING, SHORING, TIES, FRAMEWORK, ETC. AS REQUIRED TO COMPLETE THE INSTALLATION IN ACCORDANCE WITH THESE DRAWINGS AND PROJECT SPECIFICATIONS.
7. THE CONTRACTOR SHALL USE ADEQUATE NUMBERS OF SKILLED WORKMEN WHO ARE THOROUGHLY TRAINED AND EXPERIENCED IN THE NECESSARY CRAFTS AND WHO ARE COMPLETELY FAMILIAR WITH THE SPECIFIED REQUIREMENTS AND METHODS NEEDED FOR PROPER PERFORMANCE OF THE WORK.
8. CONSTRUCTION CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONSTRUCTION CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY, THAT THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND CONSTRUCTION CONTRACTOR FURTHER AGREES TO INDEMNIFY AND HOLD DESIGN PROFESSIONAL HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF DESIGN PROFESSIONAL.
9. DESIGN DATA:  
GOVERNING CODE.....2019 CALIFORNIA BUILDING CODE (C.B.C.)  
DESIGN LOADS:  
ROOF DEAD LOAD .....19 PSF (MAIN ROOF), 21 PSF (EXTERIOR ROOF)  
WALL DEAD LOAD .....19 PSF  
ROOF LIVE LOAD .....20 PSF (REDUCIBLE)  
RISK CATEGORY .....II  
WIND LOAD .....94 MPH ULTIMATE (3-SEC GUST), EXP. C  
INTERNAL PRESSURE COEFFICIENT, GCpi = +/-0.18  
SEISMIC LOAD .....DESIGN CATEGORY D, R=6.5, Ia = 1.0, SITE CLASS D  
Sa = 0.779, Si = 0.282, Sps = 0.623, Spt = N/A  
Cs = 0.096

SPECIAL INSPECTION NOTES

1. INSPECTORS SHALL SUBMIT THEIR REPORTS DIRECTLY TO THE ENFORCEMENT AGENCY WITH COPIES TO THE ARCHITECT, STRUCTURAL ENGINEER, GENERAL CONTRACTOR, DSA AND OWNER.
2. APPROVAL BY THE INSPECTOR DOES NOT MEAN APPROVAL OF FAILURE TO COMPLY WITH THE PLANS OR SPECIFICATIONS. ANY WORK TO BE DONE OR ANY MATTER RELATIVE THERETO THAT IS NOT SUFFICIENTLY DETAILED OR EXPLAINED ON THESE PLANS, THE CONTRACTOR SHALL CONTACT THE ARCHITECT FOR SUCH FURTHER EXPLANATIONS AS MAY BE NECESSARY.
3. IN ACCORDANCE WITH 2019 C.B.C. SECTIONS 110 AND 1704.2, THE OWNER SHALL EMPLOY A SPECIAL INSPECTOR WHO SHALL PROVIDE SPECIAL INSPECTION DURING CONSTRUCTION ON THE FOLLOWING TYPES OF WORK:  
A. EXPANSION BOLT, SCREW ANCHOR AND ADHESIVE ANCHORS: INSTALLATION TO VERIFY INSTALLATION IN ACCORDANCE WITH APPLICABLE ICG REPORTS NOTED ON NOTE SHEET OR DETAILS.

IDENTIFICATION STAMP  
DIV. OF THE STATE ARCHITECT  
APP: 02-120394 INC:  
REVIEWED FOR  
SS ☒ FLS ☒ ACS ☒  
DATE: 05/01/2023



DATE: AUGUST 24, 2022

**MODERNIZATION AT  
CORCORAN HIGH SCHOOL  
SCIENCE BUILDING**  
1100 LETTS AVE., CORCORAN, CA. 93212  
CORCORAN UNIFIED SCHOOL DISTRICT  
1520 PATTERSON AVE., CORCORAN, KINGS COUNTY, CA. 93212



REVISIONS

△	_____
△	_____
△	_____
△	_____
△	_____

ARCHITECTURE  
**MANGINI** | INGENUITY  
McLAIN BARENG MORRELLI SCOTT  
www.mangini.us  
MANGINI ASSOCIATES INC.  
1520 West Milpitas Avenue  
Milpitas, California 95035  
Office: (950) 627-1526  
Fax: (950) 627-1526

TITLE  
STRUCTURAL  
NOTES

**S0.1**

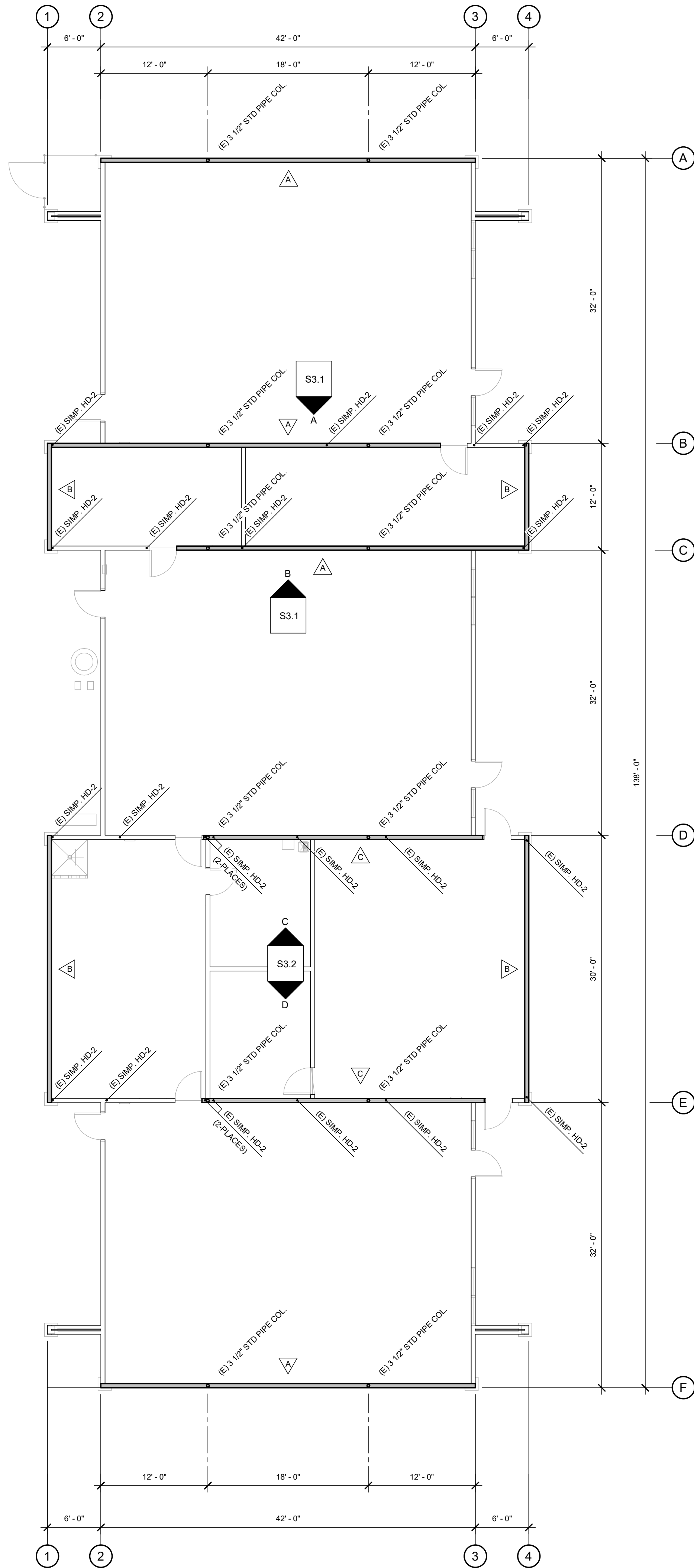
PROJECT **1751a**

LANE ENGINEERS INC.  
CIVIL • STRUCTURAL • SURVEYING  
979 North Blackstone Street  
Tulare, California 93274  
559.688.5763  
www.laneengineers.com





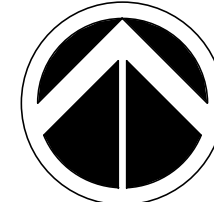
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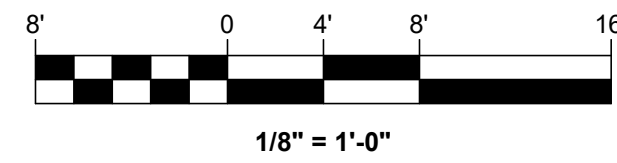
SHEARWALL LAYOUT PLAN

1/8" = 1'-0"

NORTH



GRAPHIC SCALE



SHEARWALL LAYOUT LEGEND AND SCHEDULE

SYMBOL LEGEND

△ DESIGNATES NEW/EXISTING PLWD. SHEARWALL SIDE. (TYP. U.N.O. - SEE SHEARWALL SCHEDULE, THIS SHEET AND DETAIL 42/ST.1 FOR ADD'L. INFO.

X DESIGNATES DETAIL NO.

XX.X DESIGNATES SHEET NO.

SHEARWALL SCHEDULE

NEW SHEARWALL: FIELD VERIFY THE FOLLOWING 2x6 STUDS AT 16" O.C. W/ 2x CONT. SILL PLATE W/ 5/8" DIA. x 12" A.B. AT 48" O.C. INSTALL (N) 1/2" C-D EXT. PLYWOOD W/ 8d AT 6" O.C. BNDYS. AND EDGES AND 8d AT 12" O.C. FIELD.

NEW SHEARWALL: FIELD VERIFY THE FOLLOWING 2x6 STUDS AT 16" O.C. W/ 2x CONT. SILL PLATE W/ 5/8" DIA. x 12" A.B. AT 48" O.C. INSTALL (N) 1/2" C-D EXT. PLYWOOD W/ 8d AT 6" O.C. EDGES AND 8d AT 4" O.C. BNDYS AND 8d AT 12" O.C. FIELD.

EXIST. SHEARWALL: FIELD VERIFY THE FOLLOWING 2x6 STUDS AT 16" O.C. W/ 2x CONT. SILL PLATE W/ 5/8" DIA. x 12" A.B. AT 48" O.C. W/ 1/2" C-D EXT. PLYWOOD W/ 8d AT 4" O.C. BNDYS. AND EDGES AND 8d AT 12" O.C. FIELD.

NOTE: VERIFY DEMOLITION SCOPE WITH ARCH. DWGS. PRIOR TO REMOVING EXISTING PLWD. SHEATHING.

APPROVALS  
FILE # 16-H1 APPLICATION # 02-120394

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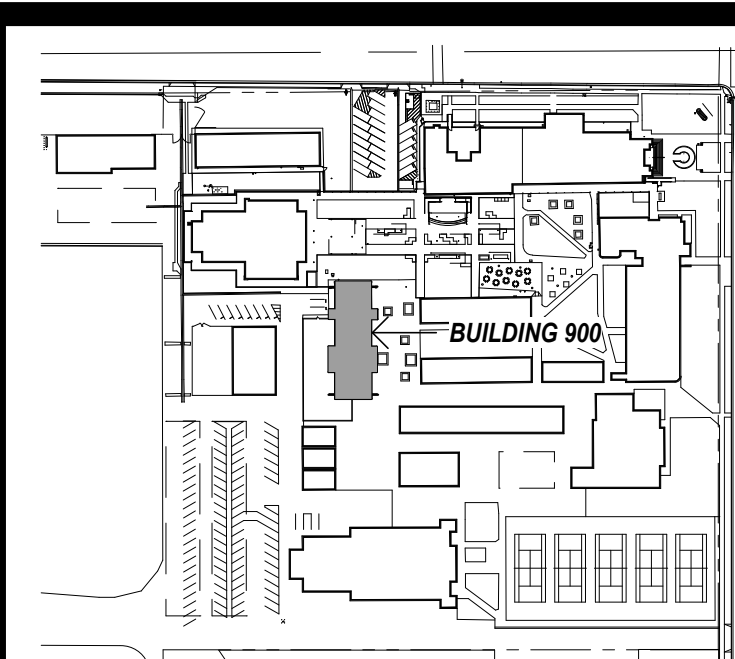


DATE: AUGUST 24, 2022

MODERNIZATION AT  
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SCIENCE BUILDING  
1100 LETTS AVE., CORCORAN, CA. 93212  
CORCORAN UNIFIED SCHOOL DISTRICT  
1520 PATTERSON AVE., CORCORAN, KINGS COUNTY, CA. 93212



REVISIONS



KEY MAP

LANE ENGINEERS INC.  
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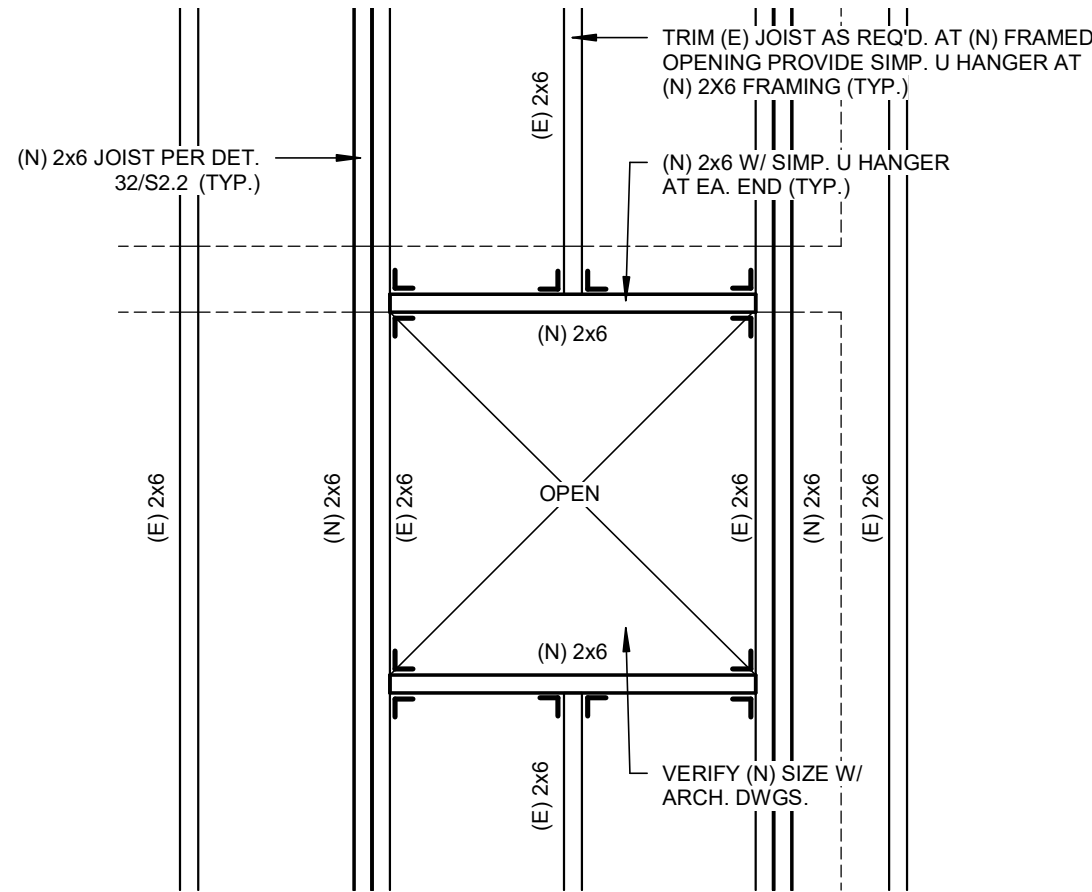
TITLE  
SHEARWALL  
LAYOUT PLAN

S2.1

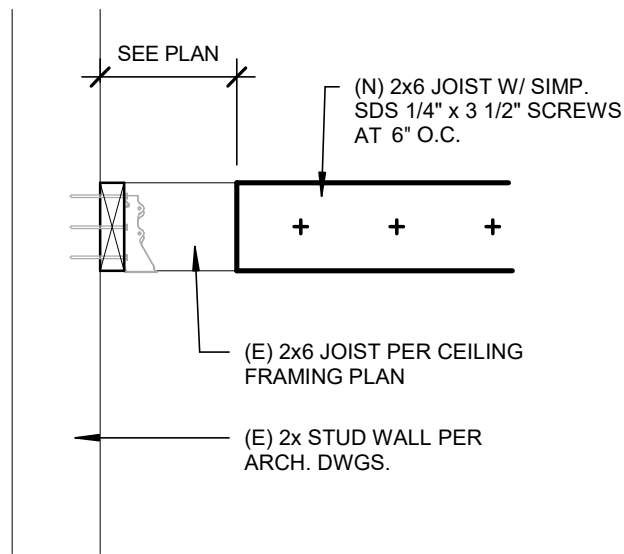
PROJECT 1751a



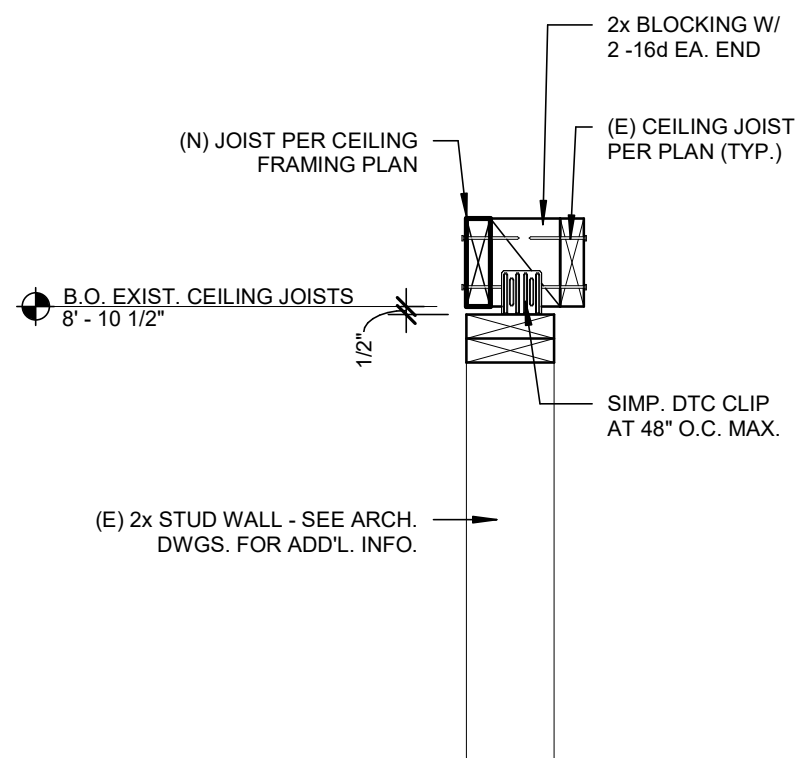
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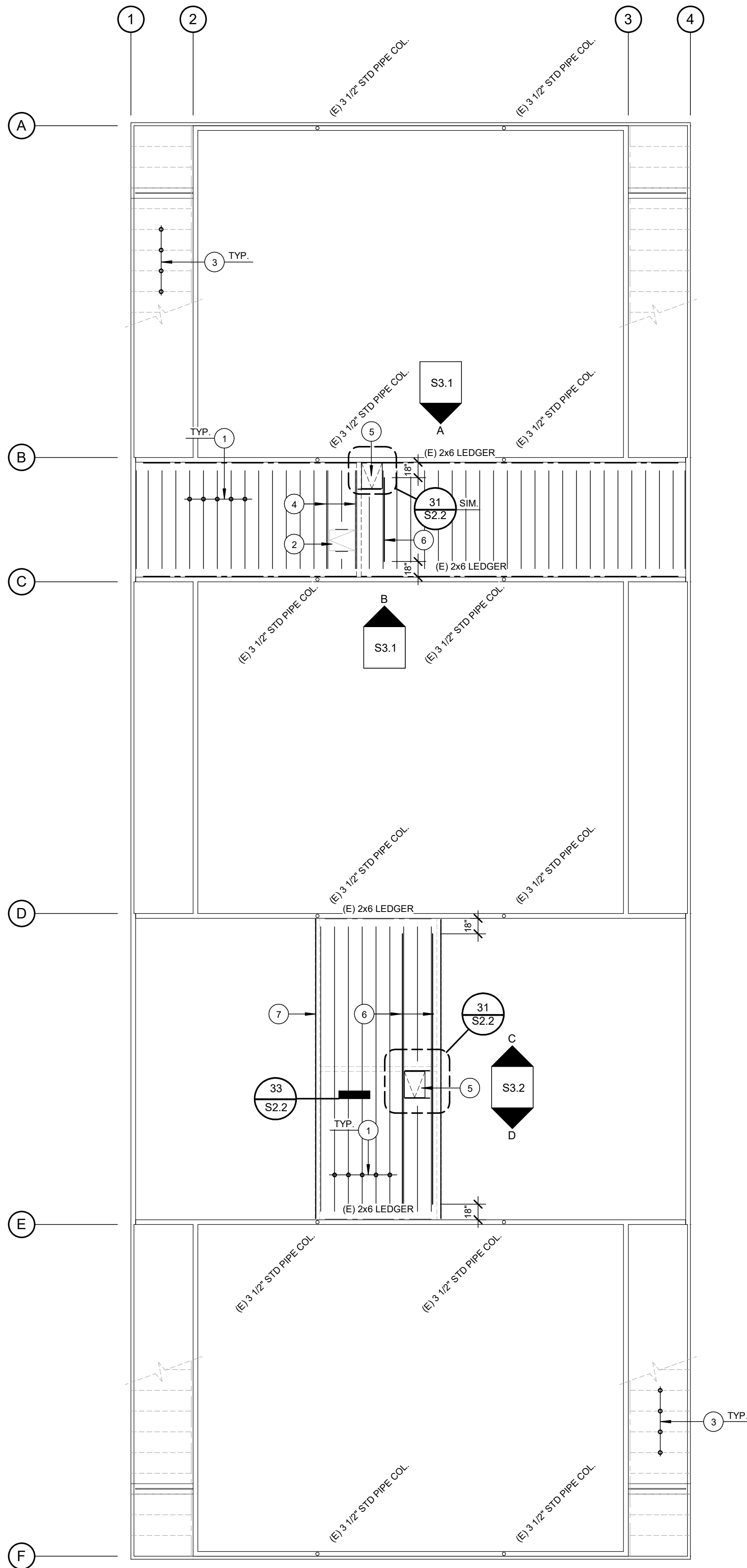
FRAMING DETAIL 3/4" = 1'-0" 31



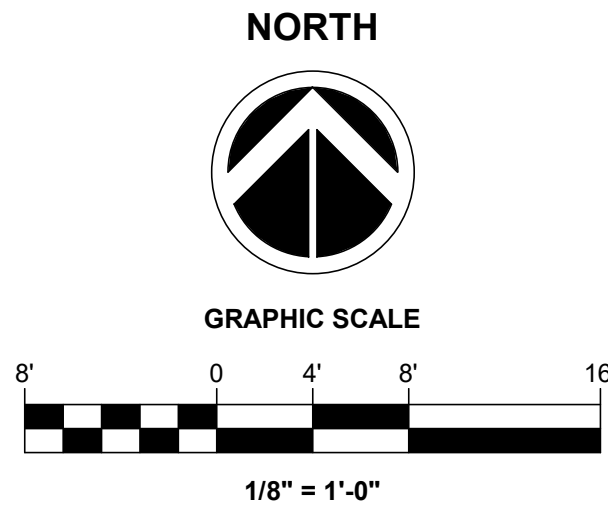
FRAMING DETAIL 1" = 1'-0" 32



FRAMING DETAIL 1" = 1'-0" 33



CEILING FRAMING PLAN 1/8" = 1'-0"



CEILING FRAMING KEYNOTES	
MARK	DESCRIPTION
1	EXISTING 2x6 CEILING JOISTS AT 16" O.C.
2	EXISTING ROOF ACCESS OPENING TO REMAIN
3	EXISTING 2x SOFFIT FRAMING AT 24" O.C. (NOT ALL FRAMING MEMBERS SHOWN FOR CLARITY)
4	EXISTING DBL. JOIST
5	NEW FRAMED OPENING FOR ACCESS HATCH PER DET. 31/S2.2
6	NEW 2x6 JOIST AT NEW FRAMED OPENING FOR CEILING ACCESS HATCH PER DET. 32/S2.2
7	NEW 2x6 JOIST ATOP EXIST. 2x STUD WALL PER DET. 33/S2.2 W/ SIMP. HUG HANGER AT ENDS

APPROVALS  
FILE # 16-H1 APPLICATION # 02-120394

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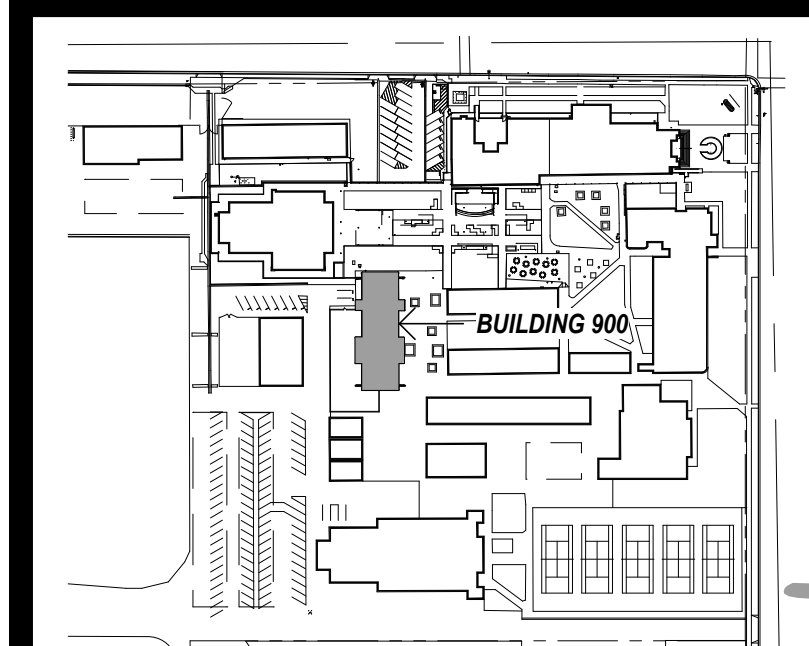
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CORCORAN UNIFIED SCHOOL DISTRICT  
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REVISIONS	

**MANGINI ARCHITECTURE**  
ARCHITECTURE  
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www.mangini.us  
MANGINI ASSOCIATES INC.  
1520 West Mills Avenue  
Visalia, California 93251  
Office  
(559) 627-1526 Fax



**KEY MAP**  
1/8" = 1'-0"

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TITLE  
CEILING FRAMING PLAN  
**S2.2**  
PROJECT **1751a**



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SEE DETAIL 1/619, 1&2/625 (DSA #40318) FOR EXISTING COLLECTOR AND SPLICE CONNECTION (TYP. ALONG GRIDLINES 1 AND 4). NO NEW CONSTRUCTION NEEDED

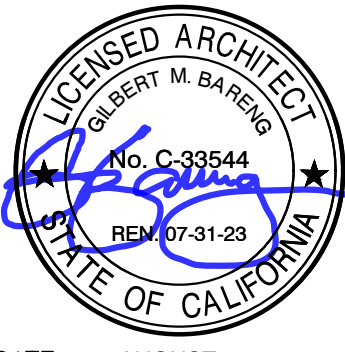
ROOF FRAMING PLAN

1/8" = 1'-0"

ROOF FRAMING KEYNOTES	
MARK	DESCRIPTION
1	(E) 1/2" C-DX PLYWOOD SHEATHING W/ 84 COMMON AT 6" O.C. (ALL PANEL EDGES) AND 12" O.C. (FIELD)
2	(E) 2x10 ROOF JOIST AT 24" O.C. (TYP. THROUGHOUT)
3	(E) 2x SCREEN WALL (POST NOT SHOWN). SEE DETAIL 1/620 (APP #40318) FOR ADD'L INFO
4	(E) 3x10 BLK.G. AT EQUIPMENT SCREEN. SEE DETAIL 1/621 & 2/621 (APP# 40318) FOR (E) BLK.G
5	(E) BEAM SPLICE
6	(N) MECH'L. UNIT PER MECH'L. DWGS.
7	(N) 2x10 AT (N) MECH. UNIT PER DET. 32/S7.1
8	(N) EXHAUST FAN (PER MECH'L. DWGS.) ATOP (N) PLATFORM FRAMING SEE DET. 24/S7.1

APPROVALS  
FILE # 16-H1 APPLICATION # 02-120394

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**MANGINI** ARCHITECTURE  
ARCHITECTURE  
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2420 WEST KINGS AVENUE  
VANDERBILT, CALIFORNIA 93251  
Office  
(559) 627-1226 Fax

TITLE  
ROOF FRAMING  
PLAN

**S2.3**

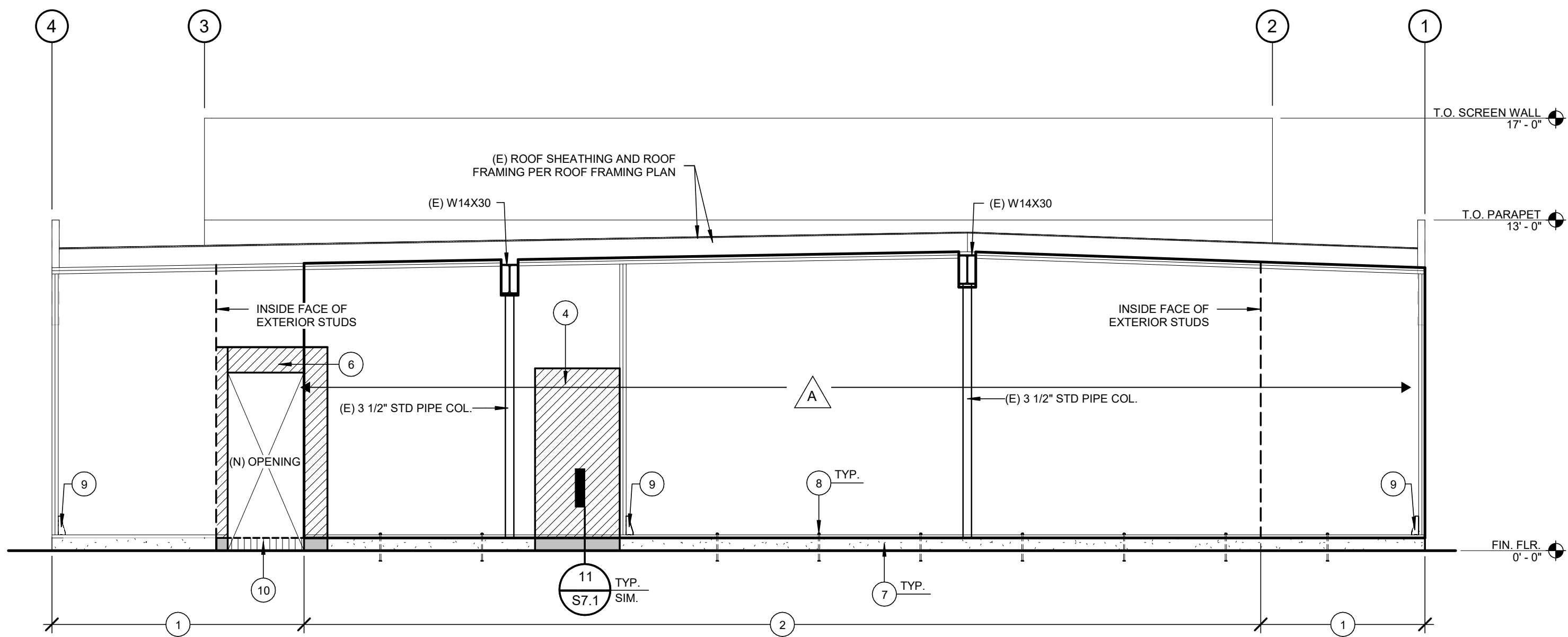
PROJECT **1751a**

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559-688-3363  
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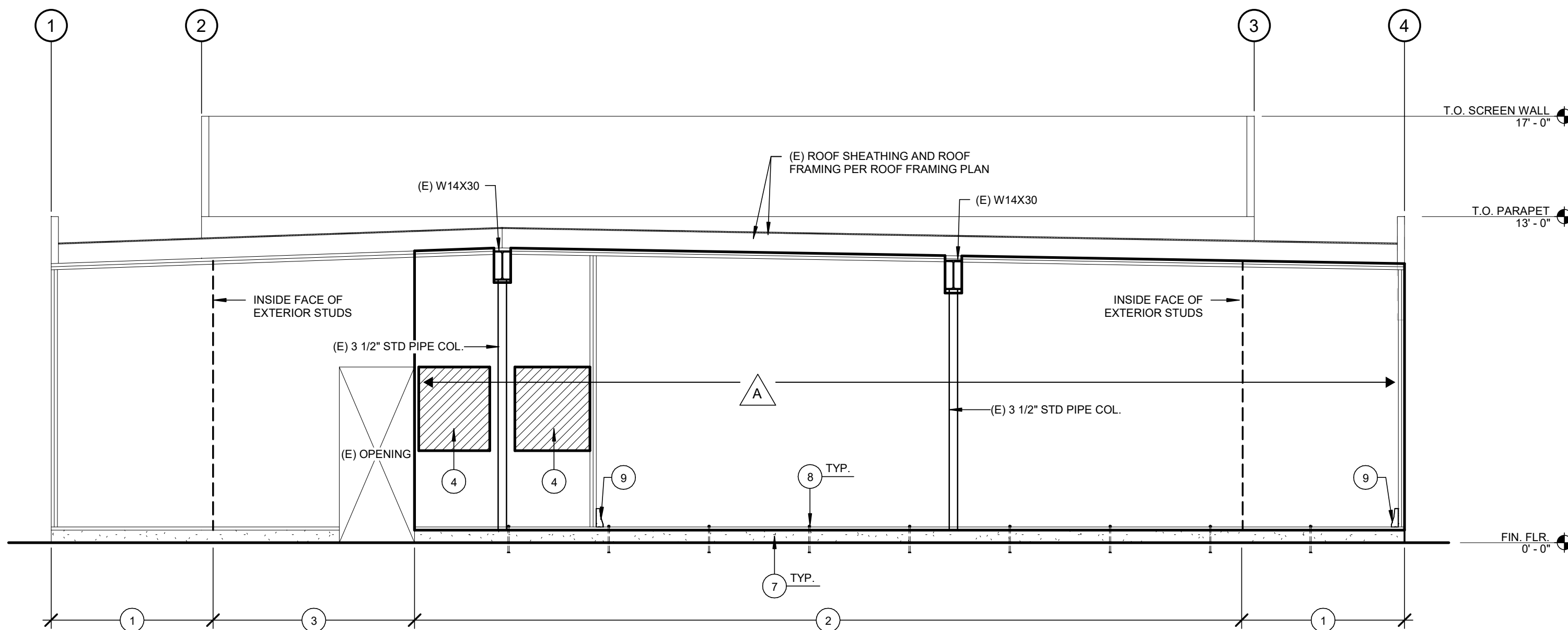
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**SHEARWALL ELEV. A - AT GRID LINE "B"**

1/4" = 1'-0"

NOTE: ANCHOR BOLTS AND HOLDOWNS  
OUTSIDE OF SHEARWALL IDENTIFIED ON  
ELEVATION MAY NOT BE SHOWN

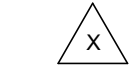


**SHEARWALL ELEV. B - AT GRID LINE "C"**

1/4" = 1'-0"

NOTE: ANCHOR BOLTS AND HOLDOWNS  
OUTSIDE OF SHEARWALL IDENTIFIED ON  
ELEVATION MAY NOT BE SHOWN

**LEGEND**



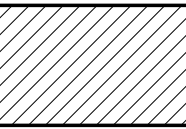
PLYWD. SHEARWALL - SHEARWALL SCHEDULE, SHEET S2.1.



(N) CONC. CURB - SEE DETAIL 11/S7.1 FOR ADD'L. INFO.



SAWCUT AND REMOVE (E) CONC. CURB AS REQ'D. VERIFY  
LOCATION AND SIZE OF CUT-OUT WITH ARCH'L. DWGS.



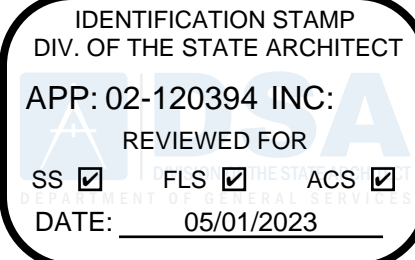
(N) 2x STUD WALL IN-FILL.

**NOTE:**

VERIFY LOCATION AND SIZE OF ALL OF ALL PROPOSED  
OPENINGS WITH ARCH'L. DWGS.

**SHEARWALL ELEVATION KEYNOTES - SHEETS S3.1 AND S3.2**

MARK	DESCRIPTION
1	EXISTING PLYWD. SHEATHING TO REMAIN. SEE SHEARWALL SCHEDULE FOR ADD'L. INFO.
2	REMOVE PORTION OF PLYWD. SHEARWALL TO EXPOSE EXISTING STUDS PER ARCH. AND ELECTRICAL DWGS. AND REPLACE W/ NEW PLYWD SHEATHING. - SEE SHEARWALL SCHED. FOR ADD'L. INFO.
3	REMOVE EXIST. PLYWD. SHEATHING TO EXPOSE EXISTING STUDS PER ARCH. AND ELECTRICAL DWGS. INSTALL PLYWD. SHEATHING PER KEYNOTE "2" FOR FINISHING PURPOSES
4	NEW 2x IN-FILL FRAMING PROVIDE PLYWD. SHEATHING AND NAILING PER SHEARWALL SCHEDULE. SEE DET. 12/S7.1 FOR ADD'L. INFO.
5	NEW 2x IN-FILL FRAMING AT 16" O.C. MAX. INSTALL (N) PLYWD. SHEATHING TO MATCH (E) PLYWD. SHEATHING THICKNESS
6	NEW 6x10 HEADER W/ SIMP. HUC HANGER AT EA. END TO EXIST. STUD WALL FRAMING
7	EXISTING 6" HIGH CONC. CURB
8	EXISTING 2x CONT. SILL PLATE. SEE SHEARWALL SCHED. FOR ANCHOR BOLT SIZE AND SPACING
9	EXISTING SIMP. HOLDOWN PER SHEARWALL LAYOUT PLAN
10	SAWCUT EXIST. CONC. CURB AS REQ'D FOR NEW OPENING. SEE ARCH. DWGS. FOR ADD'L. INFO.



DATE: AUGUST 24, 2022

**MODERNIZATION AT  
CORCORAN HIGH SCHOOL  
SCIENCE BUILDING**  
1100 LETTS AVE., CORCORAN, CA. 93212  
CORCORAN UNIFIED SCHOOL DISTRICT  
1520 PATTERSON AVE., CORCORAN, KINGS COUNTY, CA. 93212



REVISIONS	

**MANGINI ARCHITECTURE**  
ARCHITECTURE  
McLAIN BARENG MORRELLI SCOTT  
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Visalia, California 93291  
(559) 627-1226 Fax

TITLE  
**SHEARWALL  
ELEVATIONS**

**S3.1**

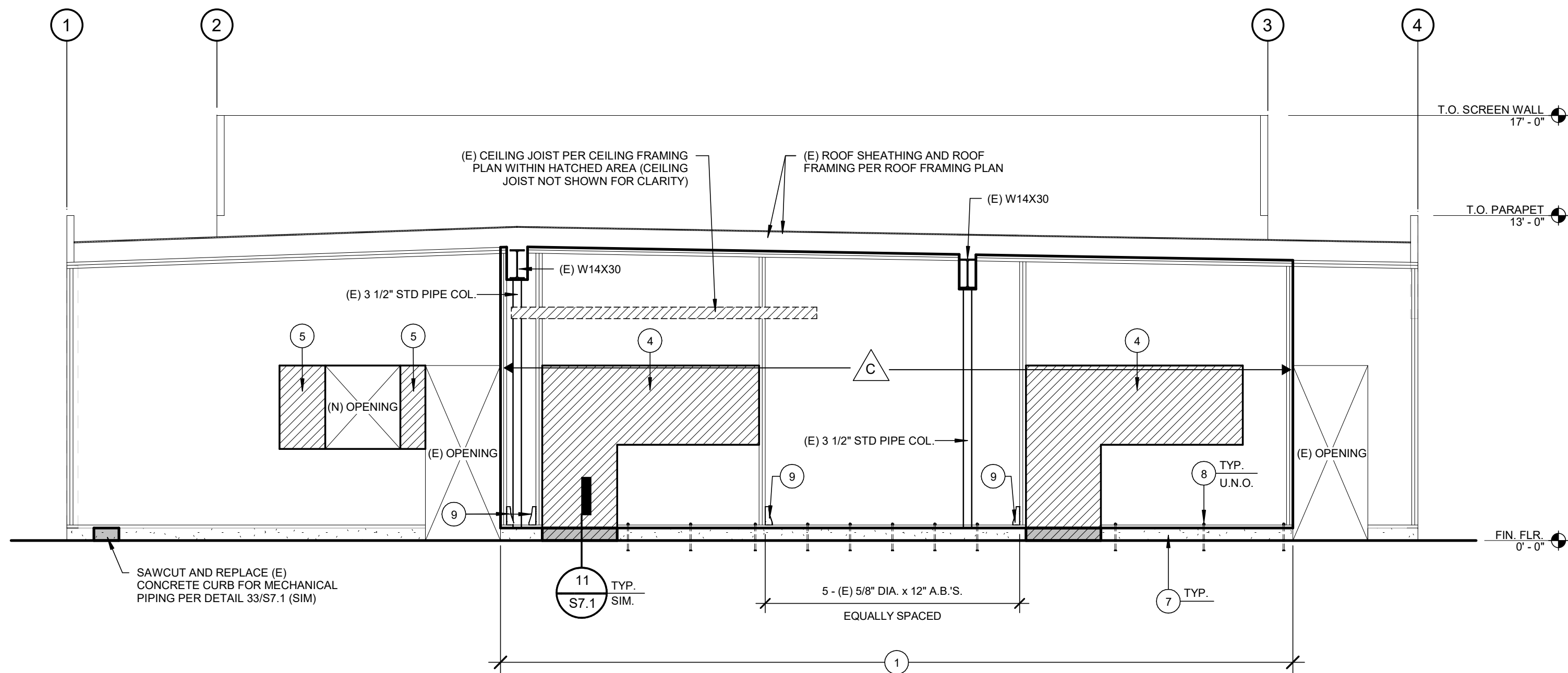
PROJECT **1751a**

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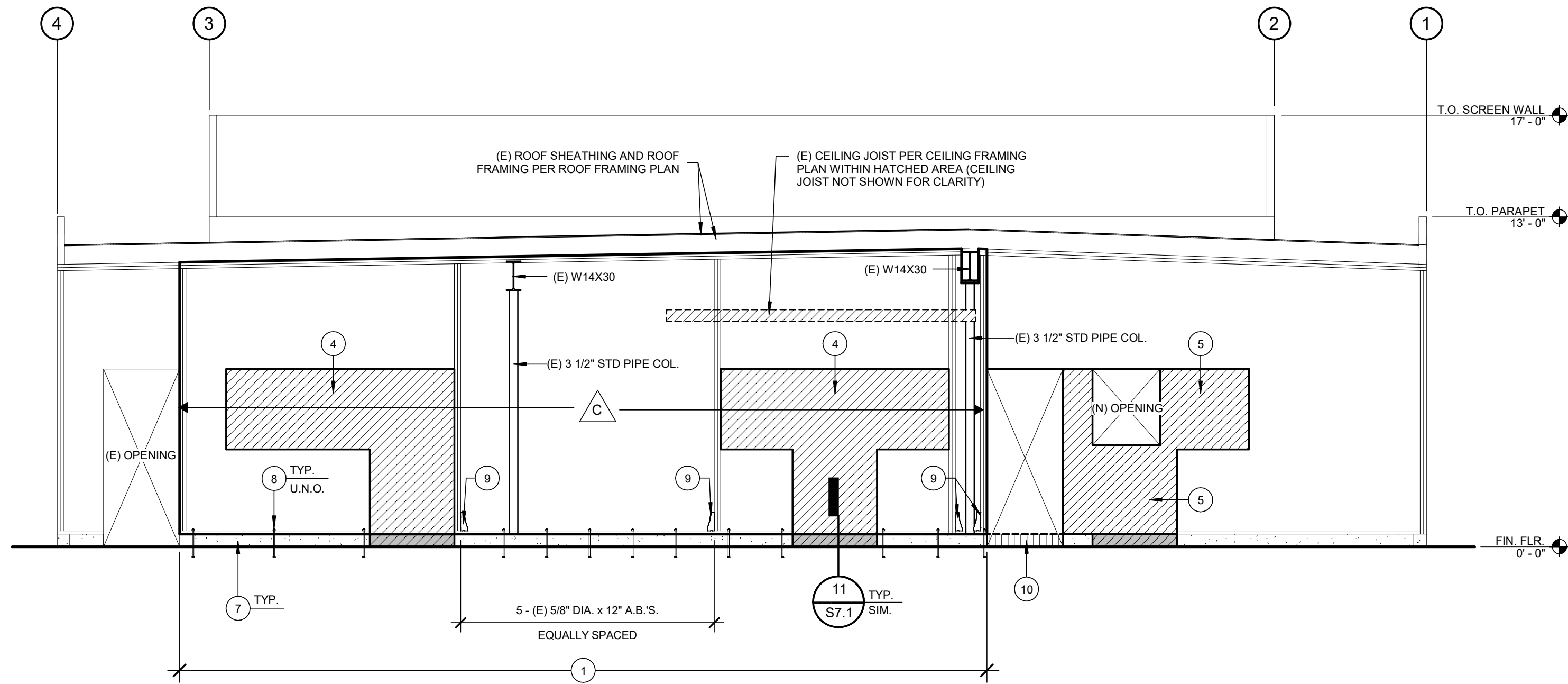
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SHEARWALL ELEV. C - AT GRID LINE "D"

1/4" = 1'-0"

NOTE: ANCHOR BOLTS AND HOLDOWNS  
OUTSIDE OF SHEARWALL IDENTIFIED ON  
ELEVATION MAY NOT BE SHOWN



SHEARWALL ELEV. D - AT GRID LINE "E"

1/4" = 1'-0"

NOTE: ANCHOR BOLTS AND HOLDOWNS  
OUTSIDE OF SHEARWALL IDENTIFIED ON  
ELEVATION MAY NOT BE SHOWN

LEGEND

- (X) PLYWD. SHEARWALL - SHEARWALL SCHEDULE, SHEET S2.1.
- (N) CONC. CURB - SEE DETAIL 11/S7.1 FOR ADD'L. INFO.
- SAWCUT AND REMOVE (E) CONC. CURB AS REQ'D. VERIFY LOCATION AND SIZE OF CUT-OUT WITH ARCH'L. DWGS.
- (N) 2x STUD WALL IN-FILL.

NOTE:  
VERIFY LOCATION AND SIZE OF ALL OF ALL PROPOSED  
OPENINGS WITH ARCH'L. DWGS.

SHEARWALL ELEVATION KEYNOTES - SHEETS S3.1 AND S3.2

MARK	DESCRIPTION
1	EXISTING PLYWD. SHEATHING TO REMAIN. SEE SHEARWALL SCHEDULE FOR ADD'L. INFO.
2	REMOVE PORTION OF PLYWD. SHEARWALL TO EXPOSE EXISTING STUDS PER ARCH. AND ELECTRICAL DWGS. AND REPLACE W/ NEW PLYWD SHEATHING. - SEE SHEARWALL SCHED. FOR ADD'L. INFO.
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7	EXISTING 6" HIGH CONC. CURB
8	EXISTING 2x CONT. SILL PLATE. SEE SHEARWALL SCHED. FOR ANCHOR BOLT SIZE AND SPACING
9	EXISTING SIMP. HOLDOWN PER SHEARWALL LAYOUT PLAN
10	SAWCUT EXIST. CONC. CURB AS REQ'D FOR NEW OPENING. SEE ARCH. DWGS. FOR ADD'L. INFO.

IDENTIFICATION STAMP  
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APP: 02-120394 INC:  
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DATE: AUGUST 24, 2022

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REVISIONS
1
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8
9
10

ARCHITECTURE  
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TITLE  
SHEARWALL  
ELEVATIONS

**S3.2**

PROJECT **1751a**

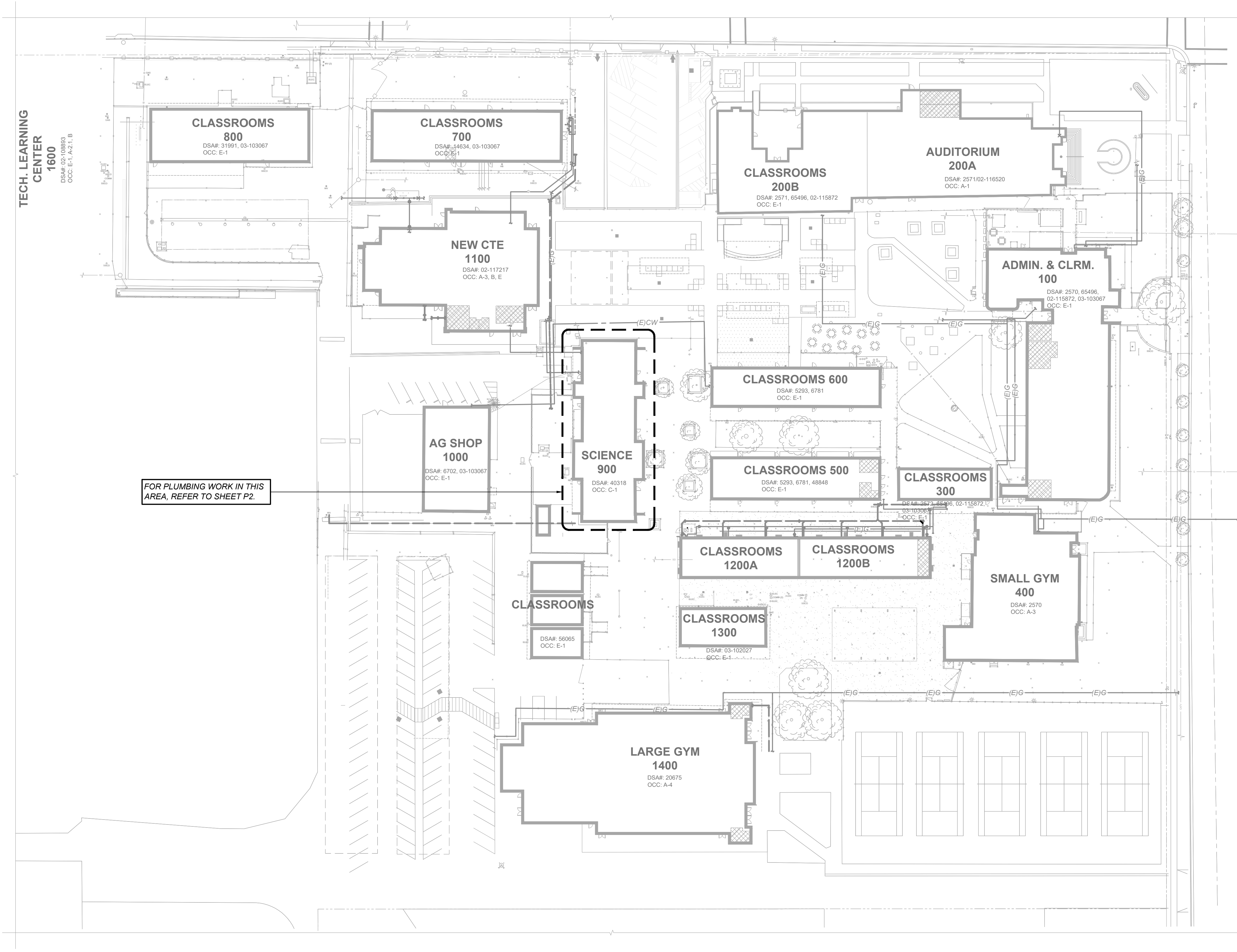
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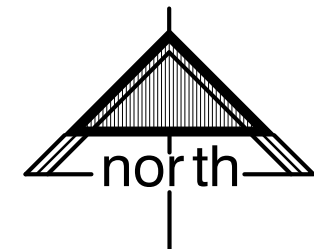






OVERALL PLUMBING SITE PLAN

SCALE: 1"=40'-0"



GENERAL PLUMBING NOTES:

- THE INTENT OF THE DRAWINGS AND SPECIFICATIONS IS TO CONSTRUCT THE BUILDING IN ACCORDANCE WITH THE 2019 EDITION OF TITLE 24, CALIFORNIA CODE OF REGULATIONS. SHOULD ANY CONDITIONS DEVELOP NOT COVERED BY THE CONTRACT DOCUMENTS WHEREIN THE FINISHED WORK WOULD NOT COMPLY WITH SAID TITLE 24, CALIFORNIA CODE OF REGULATIONS, A CHANGE ORDER DETAILING AND SPECIFYING THE REQUESTED WORK SHALL BE SUBMITTED TO AND APPROVED BY DSA BEFORE PROCEEDING WITH THE WORK.
- 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  
2019 CALIFORNIA BUILDING CODE, PART 2, TITLE 24 CCR  
2019 CALIFORNIA ELECTRICAL CODE, PART 3, TITLE 24 CCR  
2019 CALIFORNIA MECHANICAL CODE, PART 4, TITLE 24 CCR  
2019 CALIFORNIA PLUMBING CODE, PART 5, TITLE 24 CCR  
2019 CALIFORNIA FIRE CODE, PART 9, TITLE 24 CCR

NFPA 101 2018 EDITION  
OSHA - OCCUPATIONAL SAFETY AND HEALTH ACT

- 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.
- 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.
- MEP COMPONENT ANCHORAGE AND SYSTEM BRACING NOTE:**  
Applicable Code: 2019 CBC

**MEP Component Anchorage Note**

All mechanical, plumbing, and electrical components shall be anchored and installed per the details on the DSA-approved construction documents. The following components shall be anchored or braced to meet the force and displacement requirements prescribed in the 2019 CBC Sections 1617A.1.18 through 1617A.1.28 and ASCE 7-16 Chapters 13, 26, and 30:

- All permanent equipment and components.
- Temporary, movable or mobile equipment that is permanently attached (e.g. hard wired) to the building utility services such as electricity, gas or water. "Permanently attached" shall include all electrical connections except plugs for 110/220 volt receptacles having a flexible cable.
- Temporary, movable or mobile equipment which is heavier than 400 pounds or has a center of mass located 4 feet or more above the adjacent floor or roof level that directly support the component is required to be restrained in a manner approved by DSA.

The following mechanical and electrical components shall be positively attached to the structure but need not demonstrate design compliance with the references noted above. These components shall have flexible connections provided between the component and associated ductwork, piping, and conduit. Flexible connections must allow movement in both transverse and longitudinal directions:

- Components weighing less than 400 pounds and having a center of mass located 4 feet or less above the adjacent floor or roof level that directly support the component.
- Components weighing less than 20 pounds, or in the case of distributed systems, less than 5 pounds per foot, which are suspended from a roof or floor or hung from a wall.

The anchorage of all mechanical, electrical and plumbing components shall be subject to the approval of the design professional in general responsible charge or structural engineer delegated responsibility and acceptance by DSA. The project inspector will verify that all components and equipment have been anchored in accordance with the above requirements.

**Piping, Ductwork, and Electrical Distribution System Bracing Note**

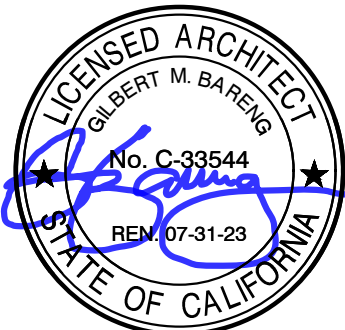
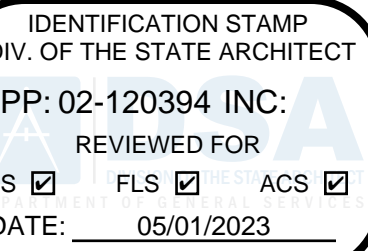
Piping, ductwork, and electrical distribution systems shall be braced to comply with the forces and displacements prescribed in ASCE 7-16 Section 13.3 as defined in ASCE 7-16 Sections 13.6.5, 13.6.6, 13.6.7, 13.6.8; and 2019 CBC, Sections 1617A.1.24, 1617A.1.25 and 1617A.1.26.

The method of showing bracing and attachments to the structure for the identified distribution system are as noted below. When bracing and attachments are based on a preapproved installation guide (e.g., OSHPD OPM for 2013 CBC or later), copies of the bracing system installation guide or manual shall be available on the jobsite prior to the start of and during the hanging and bracing of the distribution systems. The Structural Engineer of Record shall verify the adequacy of the structure to support the hanger and brace loads.

Mechanical Piping (MP), Mechanical Ducts (MD), Plumbing Piping (PP), Electrical Distribution Systems (E):

- MP ☐ MD ☐ PP ☐ E ☐ Option 1: Detailed on the approved drawings with project specific notes and details.  
MP ☐ MD ☐ PP ☒ E ☐ Option 2: Shall comply with the applicable OSHPD Pre-Approval (OPM #) #OPM404-13 MASON WEST, SEISMIC RESTRAINT GUIDELINES FOR SUSPENDED DISTRIBUTION SYSTEMS.

- BRACE ALL PIPING 3" DIAMETER AND GREATER; USE  $I_p=1.0$  FOR SEISMIC DESIGN CALCULATIONS. EXCEPTION: NATURAL GAS PIPING 1" DIAMETER AND GREATER, USE  $I_p=1.5$  FOR SEISMIC DESIGN CALCULATIONS.
- PENETRATIONS THROUGH FIRE RATED WALLS, FLOOR/CEILING, AND ROOF/CEILING ASSEMBLIES SHALL BE SEALED USING AN APPROVED SYSTEM CAPABLE OF PREVENTING THE PASSAGE OF FLAMES AND HOT GASES WHEN SUBJECTED TO THE REQUIREMENTS OF THE TEST STANDARD SPECIFIC TO FIRE STOPS PER 2019 CBC SECTION 714. THIS INCLUDES EXISTING PIPE AND CONDUIT THROUGH NEW ASSEMBLIES. CUSTOM DESIGNED SYSTEMS WHICH COMBINE COMPONENTS FROM DIFFERENT APPROVED SYSTEMS BUT HAVE NOT BEEN TESTED AS A COMPLETE ASSEMBLY WILL NOT BE ACCEPTABLE. FOR FIRE STOPS FOR PIPE PENETRATIONS SEE SPECIFICATIONS AND SHEET P15.
- FIELD VERIFY THE EXACT LOCATION, DEPTH AND SIZE OF ALL NEW POINTS OF CONNECTION TO EXISTING UTILITIES PRIOR TO COMMENCING NEW UTILITY WORK.
- 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.



DATE: AUGUST 24, 2022

**MODERNIZATION AT CORCORAN HIGH SCHOOL SCIENCE BUILDING**  
1100 LETTS AVE., CORCORAN, CA. 93212  
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1520 PATTERSON AVE., CORCORAN, KINGS COUNTY, CA. 93212



REVISIONS

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(559) 627-0530 Office  
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Visalia, California 93291  
(559) 627-1520 Fax

TITLE  
OVERALL PLUMBING  
SITE PLAN

**P1**

PROJECT **1751a**



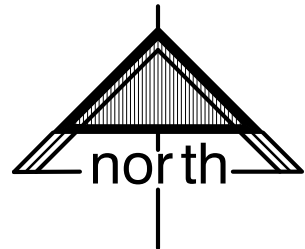
**LAWRENCE**  
ENGINEERING GROUP  
7084 N. Maple Ave., Suite 101 Fresno, CA 93720  
(559) 431-0101 22035 FAX (559) 431-1362



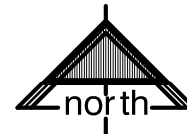
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BUILDING 900  
PLUMBING DEMOLITION PLAN

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



BUILDING KEY PLAN



**LAWRENCE**  
ENGINEERING GROUP  
7084 N. Maple Ave., Suite 101  
(559) 431-0101  
Fresno, CA 93720  
FAX (559) 431-1342

TITLE  
BUILDING 900  
PLUMBING  
DEMOLITION  
PLAN

P2

PROJECT 1751a

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
	LOW PRESSURE NATURAL GAS	G
	2 PSI GAS	2#G
	5 PSI GAS	5#G
	LIQUIFIED PETROLEUM GAS	LPG
	GAS SERVICE MAIN BY THE LOCAL GAS UTILITY	GSM
	CONDENSATE DRAIN	CD
	RAIN WATER LEADER	RWL
	OVERFLOW DRAIN	OD
	STORM DRAIN	SD
	INDIRECT WASTE	IW
	ACID WASTE	AW
	ACID VENT	AV
	ACID VENT RISER	AVR
	ACID VENT THRU ROOF	AVTR
	FIRE PROTECTION LINE	F
	EXISTING PIPING	(E)
	EXISTING	(E)
	NEW	(N)
	ABOVE CEILING	ABV CLG
	BELOW FLOOR	BEL FLR
	BELOW GRADE	BEL GR
	BELOW FINISH FLOOR	BFF
	INVERT ELEVATION	I.E.
	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	-
	GAS PRESSURE REGULATOR	GPR
	CHECK VALVE	-
	PLUG VALVE	-
	BALL VALVE	-
	REDUCER	-
	FLOW LINE	FL
	UNION	-
	RELIEF VALVE	-
	BALANCING VALVE	-
	PRESSURE GAUGE	-
	THERMOMETER	-
	FORCE MAIN	FM

FOR PLUMBING DEMO WORK IN  
THIS AREA, REFER TO SHEET P3  
AND P5.

FOR PLUMBING DEMO WORK IN  
THIS AREA, REFER TO SHEET P4  
AND P6.

APPROVALS  
FILE # 16-H1 APPLICATION # 02-120394

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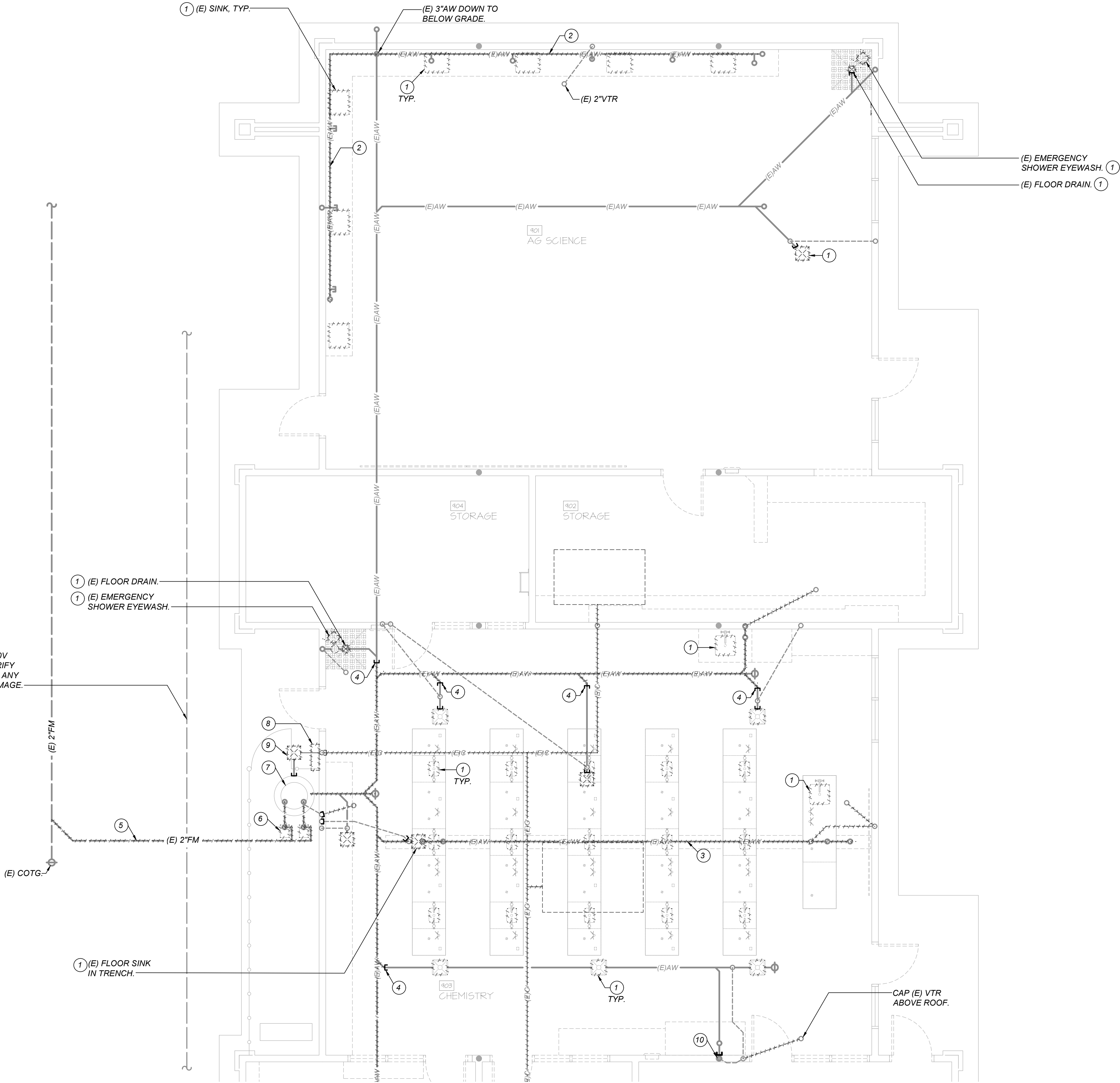
TITLE  
BUILDING 900  
PLUMBING  
DEMOLITION  
PLAN

P2

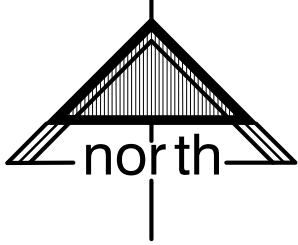
PROJECT 1751a



(E) UNDERGROUND 200A 480V FEEDER. POTHOLE AND VERIFY EXACT LOCATION PRIOR TO ANY NEW SITE WORK. AVOID DAMAGE.



**BUILDING 900**  
**ENLARGED PLUMBING DEMOLITION PLAN - WASTE, VENT, & CONDENSATE**  
SCALE: 1/4" = 1'-0"



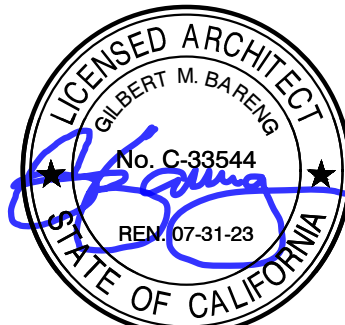
**BUILDING KEY PLAN**



**LAWRENCE**  
**ENGINEERING GROUP**  
7084 N. Maple Ave., Suite 101  
(559) 431-0101  
Fresno, CA 93720  
(559) 431-1342

- KEYNOTES: (THIS SHEET ONLY)**
- 1 DEMO (E) FIXTURE SHOWN HATCHED. REMOVE EXPOSED UNUSED PIPING AND CAP REMAINING PIPE BEHIND FINISHED SURFACES.
  - 2 (E) 3"AW AND 2"AV MANIFOLD TO BE REMOVED. CAP REMAINING PIPING BEHIND FINISHED FLOOR OR CEILING.
  - 3 (E) 3"AW IN TRENCH TO BE REMOVED.
  - 4 CAP (E) AW BELOW FLOOR AND ABANDON PIPE IN PLACE.
  - 5 REMOVE 2"FM BELOW GRADE SHOWN HATCHED.
  - 6 REMOVE FLOOR MOUNTED PUMPS, ASSOCIATED PIPING AND CONTROLS. CAP ANY PIPING BEHIND FINISHED SURFACES.
  - 7 EXISTING WET WELL TO BE ABANDONED. INFILL WET WELL WITH CONCRETE AND MAKE FLUSH WITH (E) GRADE.
  - 8 EXISTING LIFT STATION CONTROL PANEL AND WIRING TO BE REMOVED. COORDINATE WITH ELECTRICAL.
  - 9 (E) FLOOR SINK TO BE REMOVED. PATCH CONCRETE TO MATCH EXISTING.
  - 10 DISCONNECT (E) HOOD AND CAP ANY REMAINING PIPING BEHIND FINISHED SURFACES.

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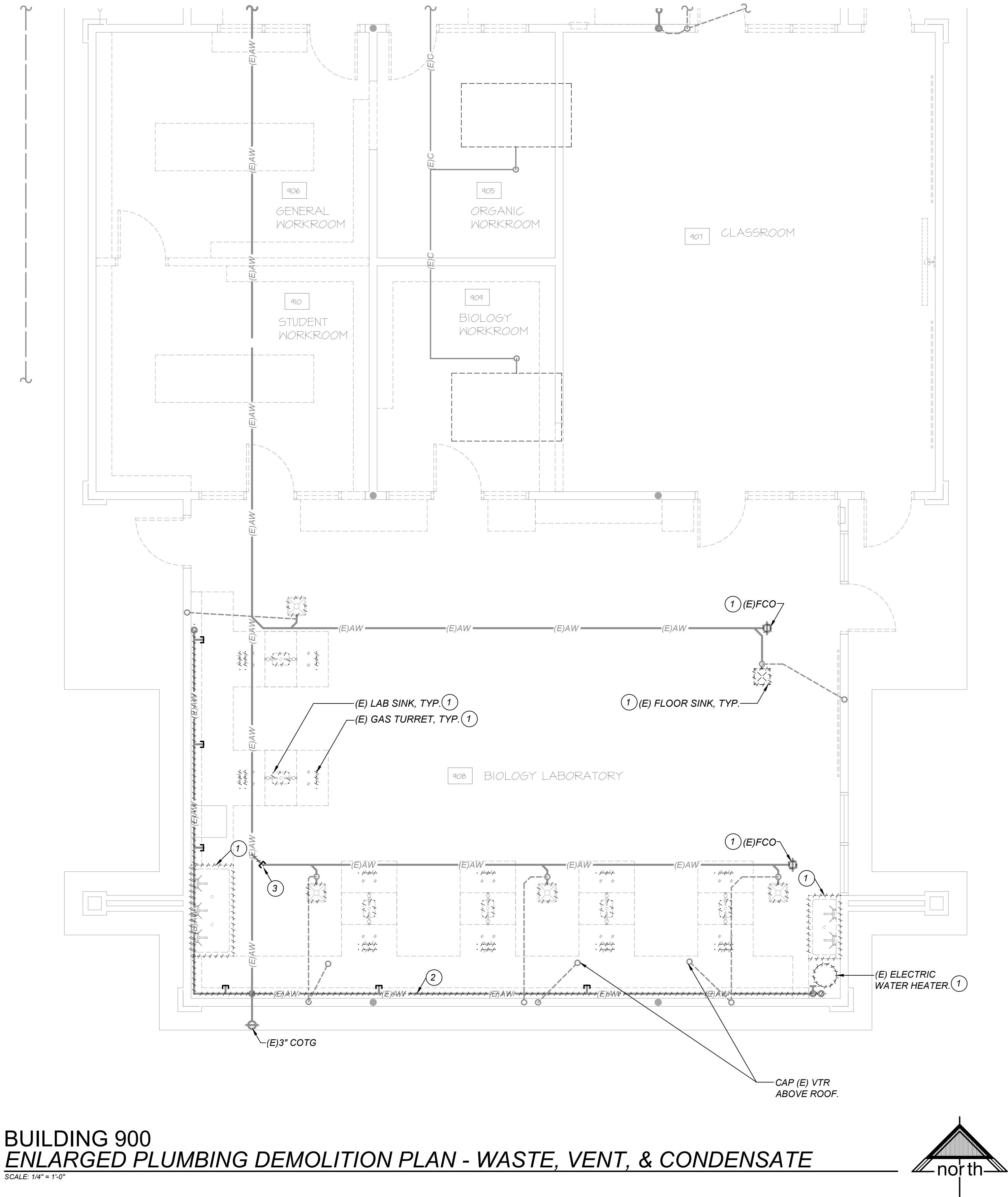
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ENLARGED  
PLUMBING  
DEMOLITION PLAN  
**P3**

PROJECT **1751a**





**BUILDING 900**  
**ENLARGED PLUMBING DEMOLITION PLAN - WASTE, VENT, & CONDENSATE**  
SCALE: 1/4" = 1'-0"

KEYNOTES: (THIS SHEET ONLY)

- 1 DEMO (E) FIXTURE SHOWN HATCHED. REMOVE EXPOSED UNUSED PIPING AND CAP REMAINING PIPING BEHIND FINISHED SURFACES.
- 2 (E) 3"AW AND 2"AV MANIFOLD TO BE REMOVED. CAP REMAINING PIPING BEHIND FINISHED FLOOR OR CEILING.
- 3 CAP (E) AW BELOW FLOOR AND ABANDON PIPE IN PLACE.

APPROVALS

FILE # 16-H1 APPLICATION # 02-120394

IDENTIFICATION STAMP  
DIV. OF THE STATE ARCHITECT  
APP: 02-120394 INC:  
REVIEWED FOR  
SS ☒ FLS ☒ ACS ☒  
DATE: 05/01/2023



DATE: AUGUST 24, 2022

**MODERNIZATION AT  
CORCORAN HIGH SCHOOL  
SCIENCE BUILDING**  
1100 LETTS AVE., CORCORAN, CA. 93212  
CORCORAN UNIFIED SCHOOL DISTRICT  
1520 PATTERSON AVE., CORCORAN, KINGS COUNTY, CA. 98212



REVISIONS

**MANGINI** | ARCHITECTURE  
INGENUITY  
McLAIN BARENG MORRELLI SCOTT  
MANGINI ASSOCIATES INC.  
4320 West Mineral King Avenue  
Visalia, California 93291  
www.mangini.us  
(559) 627-0530 Office  
(559) 627-1526 Fax

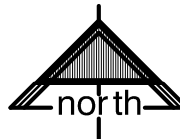
TITLE  
BUILDING 900  
ENLARGED  
PLUMBING  
DEMOLITION PLAN

**P4**

PROJECT **1751a**

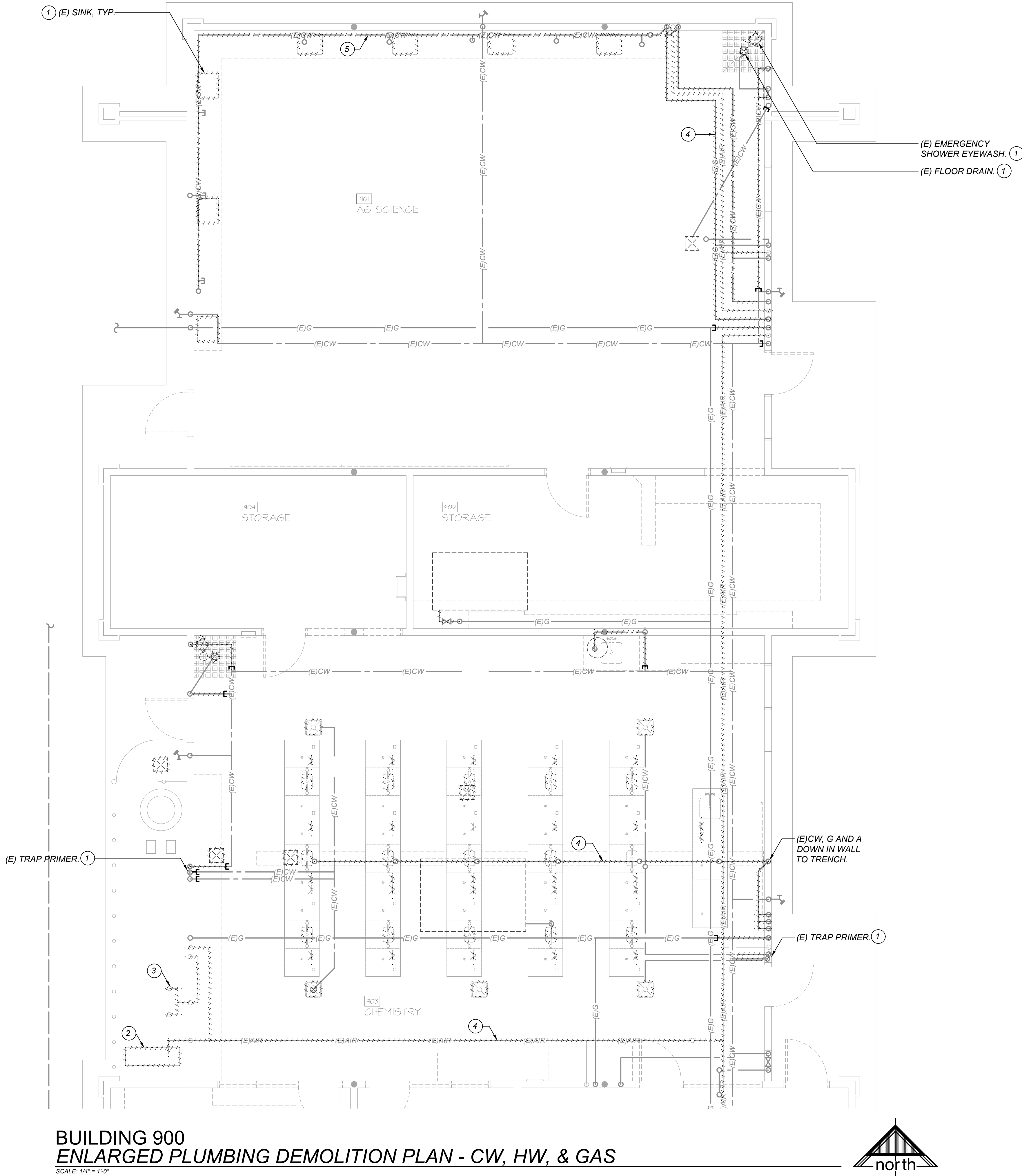


**BUILDING KEY PLAN**

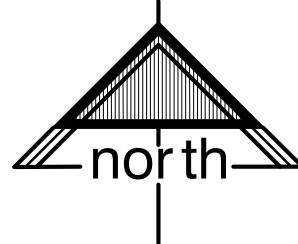


**LAWRENCE**  
ENGINEERING GROUP  
7084 N. Maple Ave., Suite 101  
(559) 421-0101  
Fresno, CA 93720  
FAX (559) 451-1342

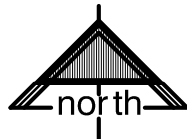




**BUILDING 900**  
**ENLARGED PLUMBING DEMOLITION PLAN - CW, HW, & GAS**  
SCALE: 1/4" = 1'-0"



**BUILDING KEY PLAN**



**MANGINI** ARCHITECTURE  
INGENUITY  
McLAIN BARENG MORRELLI SCOTT  
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(559) 627-0530 Office  
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TITLE  
BUILDING 900  
ENLARGED  
PLUMBING  
DEMOLITION PLAN

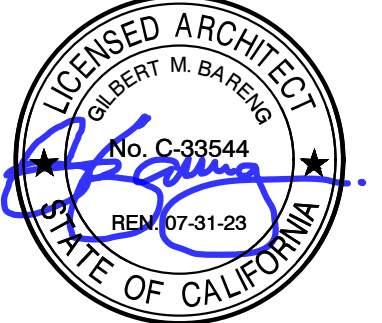
**P5**

PROJECT **1751a**

REVISIONS



**MODERNIZATION AT  
CORCORAN HIGH SCHOOL  
SCIENCE BUILDING**  
1100 LETTS AVE., CORCORAN, CA. 93212  
CORCORAN UNIFIED SCHOOL DISTRICT  
1520 PATTERSON AVE., CORCORAN, KINGS COUNTY, CA. 98212



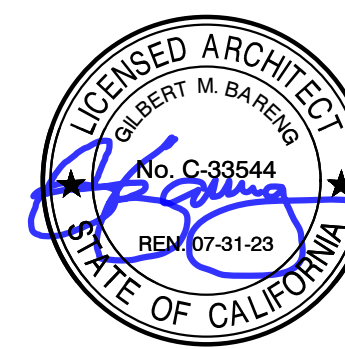
DATE: **AUGUST 24, 2022**

- KEYNOTES: (THIS SHEET ONLY)**
- 1 DEMO (E) FIXTURE SHOWN HATCHED REFER TO PLUMBING PLAN FOR REPLACEMENT FIXTURE. OTHERWISE, CAP UNUSED PIPING BEHIND FINISHED SURFACES.
  - 2 (E) AIR COMPRESSOR AND ASSOCIATED PIPING TO BE REMOVED.
  - 3 (E) OXYGEN TANKS AND ASSOCIATED PIPING TO BE REMOVED.
  - 4 PIPING SHOWN HATCHED TO BE REMOVED, TYP.
  - 5 REMOVE (E) CW, AIR, AND G MANIFOLD ON WALL.

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DATE: 05/01/2023



- ① DEMO (E) FIXTURE SHOWN HATCHED REFER TO PLUMBING PLAN FOR REPLACEMENT FIXTURE. OTHERWISE, CAP UNUSED PIPING BEHIND FINISHED SURFACES.
- ② DISCONNECT GAS FROM H/C UNIT ON ROOF. CAP AND PREPARE FOR CONNECTION TO NEW UNIT.
- ③ PIPING SHOWN HATCHED TO BE REMOVED, TYP.
- ④ REMOVE (E) CW, AIR, AND G MANIFOLD ON WALL.



DATE: AUGUST 24, 2022

**MODERNIZATION AT  
CORCORAN HIGH SCHOOL  
SCIENCE BUILDING**  
11100 LETTS AVE., CORCORAN, CA. 93212

**CORCORAN UNIFIED SCHOOL DISTRICT**  
1520 PATTERSON AVE., CORCORAN, KINGS COUNTY, CA. 93212



REVISIONS	
△	_____
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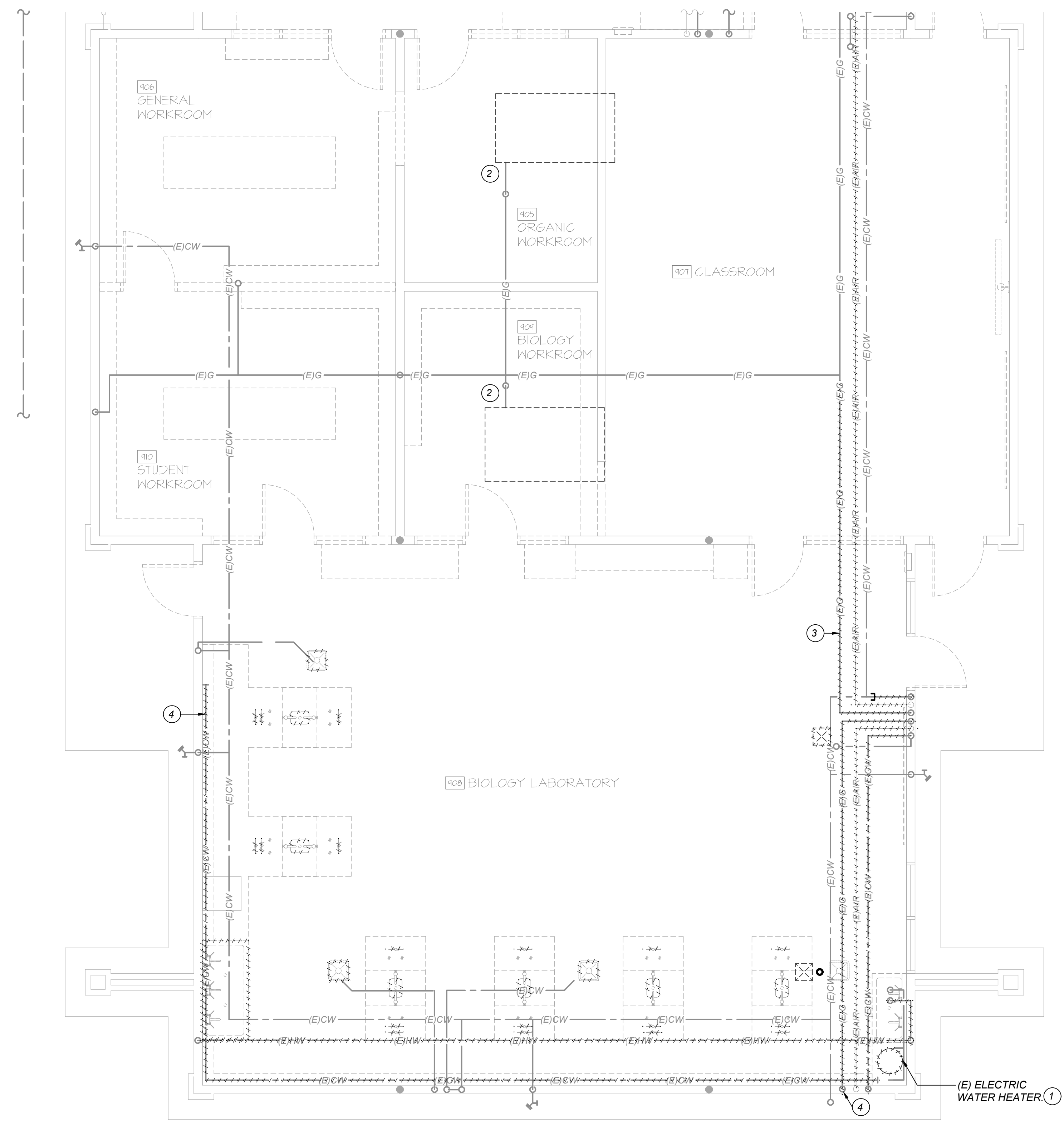
**MANGINI** | ARCHITECTURE  
INGENUITY

**McLAIN BARENG MORRELLI SCOTT**

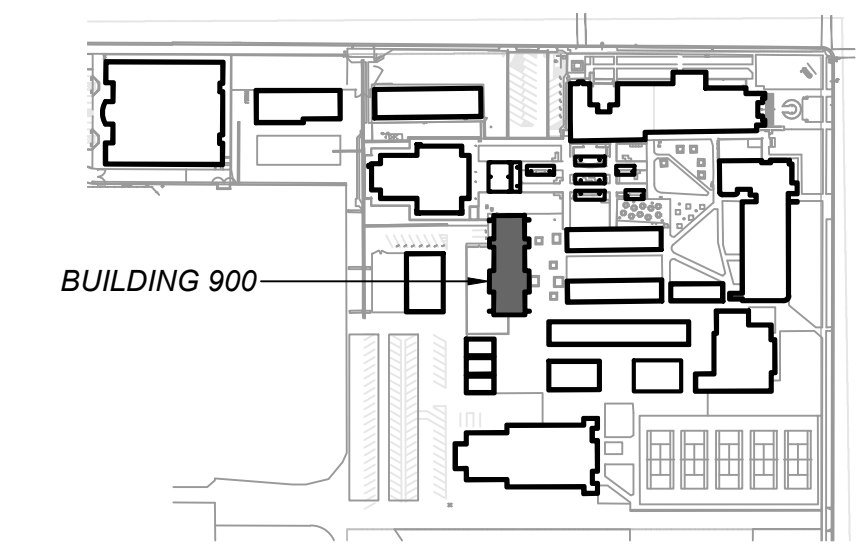
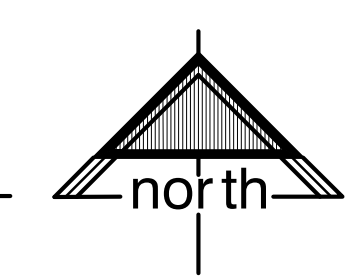
**MANGINI ASSOCIATES INC.**  
4320 West Mineral King Avenue  
Vanilla, California 93291

**www.mangini.us**  
(559) 627 0630 Office  
(559) 627 1926 fax

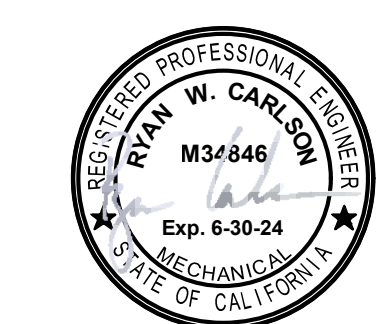
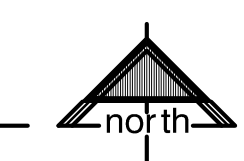
TITLE  
BUILDING 900  
ENLARGED  
PLUMBING  
DEMOLITION PLAN  
  
**P6**  
  
PROJECT **1751a**



**BUILDING 900**  
***ENLARGED PLUMBING DEMOLITION PLAN - CW, HW, & GAS***  
SCALE: 1/4" = 1'-0"



BUILDING KEY PLAN



 **LAWRENCE**  
ENGINEERING GROUP

7084 N. Maple Ave., Suite 101  
(559) 431-0101 22035

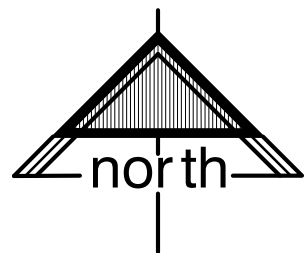
Fresno, CA 93720  
FAX (559) 431-1362



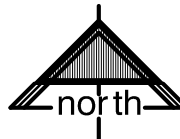
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BUILDING 900  
PLUMBING PLAN

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



BUILDING KEY PLAN



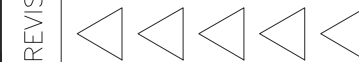
TITLE  
BUILDING 900  
PLUMBING PLAN

P7

PROJECT 1751a

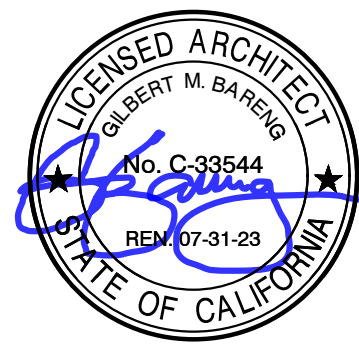
ARCHITECTURE  
INGENUITY  
**MANGINI**  
McLAIN BARENG MORRELLI SCOTT  
MANGINI ASSOCIATES INC.  
4320 West Mineral King Avenue  
Visalia, California 93291  
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REVISIONS



**MODERNIZATION AT  
CORCORAN HIGH SCHOOL  
SCIENCE BUILDING**  
1100 LETTIS AVE., CORCORAN, CA. 93212  
CORCORAN UNIFIED SCHOOL DISTRICT  
1520 PATTERSON AVE., CORCORAN, KINGS COUNTY, CA. 93212

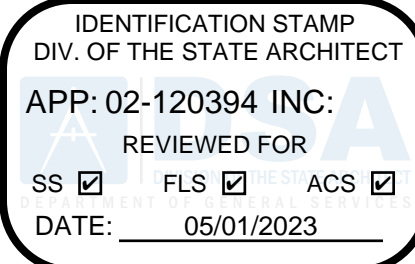
DATE: AUGUST 24, 2022



IDENTIFICATION STAMP  
DIV. OF THE STATE ARCHITECT  
APP: 02-120394 INC:  
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SS ☒ FLS ☒ ACS ☒  
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APPROVALS  
FILE # 16-H1 APPLICATION #  
02-120394





DATE: AUGUST 24, 2022

KEYNOTES: (THIS SHEET ONLY)

- 1 NOT USED.
- 2 CONNECT (N) AV TO (E) AVTR.
- 3 INSTALL ISLAND VENTING AT TEACHER SINK. REFER TO DETAIL F/P13.
- 4 4"AW SHALL RUN BELOW FOOTING. FOOTING SHALL NOT BE MODIFIED. FIELD VERIFY ACTUAL DEPTH REQUIRED. I.E. = 4.5' ± BEL. F.F.
- 5 CONNECT (N) 2"FM TO TOP (E) 2"FM BELOW GRADE.
- 6 REFER TO DETAIL H/P13 FOR LIFT STATION.
- 7 REFER TO DETAIL J/P13 FOR ACID NEUTRALIZATION TANK. INSTALL BELOW 4" THICK REINFORCED CONCRETE SLAB FOR PEDESTRIAN TRAFFIC AREA.
- 8 CONNECT CONDENSATE DRAIN TO H/C UNIT ON ROOF WITH TRAP. REFER TO DETAIL B/P13, TYP.
- 9 LIFT STATION ALARM PANEL MOUNTED ON WALL. COORDINATE EXACT LOCATION WITH ELECTRICAL.
- 10 POWER, AND CONTROL WIRING IN ELECTRICAL CONDUIT BELOW GRADE TO CONTROL PANEL. COORDINATE WITH ELECTRICAL.
- 11 SAWCUT, REMOVE, AND PATCH BACK CONCRETE.
- 12 FOR COTG., SEE DETAIL A/P13.

**MODERNIZATION AT  
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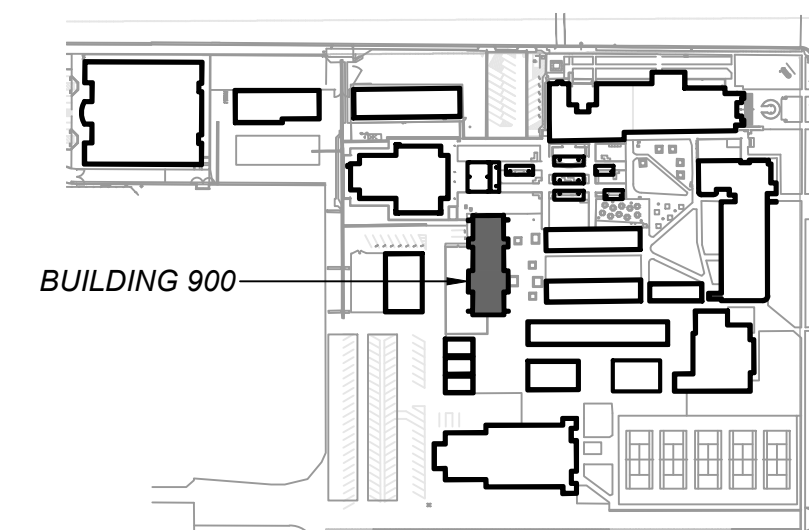
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**MANGINI** | ARCHITECTURE  
INGENUITY  
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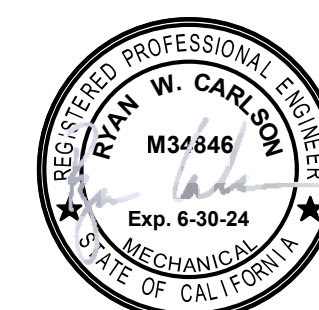
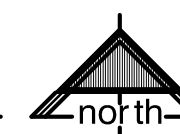
TITLE  
BUILDING 900  
ENLARGED  
PLUMBING PLAN

**P8**

PROJECT **1751a**



BUILDING KEY PLAN



**LAWRENCE  
ENGINEERING GROUP**  
7084 N. Maple Ave., Suite 101  
(559) 431-0101  
Fresno, CA 93720  
(559) 431-1342

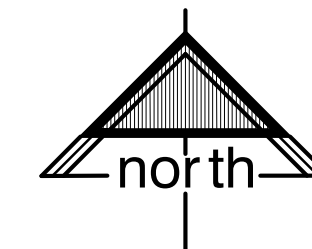
(E) UNDERGROUND 200A 480V FEEDER. POT HOLE AND VERIFY EXACT LOCATION PRIOR TO ANY NEW SITE WORK. AVOID DAMAGE.

FIELD COORDINATE EXACT LOCATION OF LIFT STATION AND NEUTRALIZATION TANK.

8" THICK REINFORCED CONCRETE SLAB ABOVE LIFT STATION AND NEUTRALIZATION TANK. SLAB SHALL EXTEND 18" MIN. BEYOND FOOTPRINT OF BASIN/TANK. REFER TO DETAIL J/P13, SIMILAR.

**BUILDING 900  
ENLARGED PLUMBING PLAN - WASTE, VENT & CONDENSATE**

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





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DATE: AUGUST 24, 2022

KEYNOTES: (THIS SHEET ONLY)

- 1 CONNECT (N) AW TO (E) AW PIPE BELOW FLOOR.
- 2 CONNECT (N) AV TO (E) AVTR.
- 3 INSTALL ISLAND VENTING AT TEACHER SINK. REFER TO DETAIL F/P13.
- 4 2"AW AND 1-1/2"AV FOR LAB SINK, TYPICAL.
- 5 2"AW AND 1-1/2"AV FOR FLOOR DRAIN.
- 6 2"AW AND 2"V FOR FLOOR SINK.
- 7 1-1/2" CONDENSATE DRAIN DOWN IN WALL TO FLOOR SINK WITH FULL AIR GAP.
- 8 CONNECT CONDENSATE DRAIN TO H/C UNIT ON ROOF WITH TRAP. REFER TO DETAIL B/P13, TYP.
- 9 2"AW AND 1-1/2"AV FOR FUME HOOD.
- 10 SAWCUT, REMOVE, AND PATCH BACK CONCRETE.
- 11 FOR PIPE AT EXISTING FOOTING, REFER TO DETAIL 33/S7.1, TYP.

**MODERNIZATION AT  
CORCORAN HIGH SCHOOL  
SCIENCE BUILDING**  
1100 LETTS AVE., CORCORAN, CA. 93212  
CORCORAN UNIFIED SCHOOL DISTRICT  
1520 PATTERSON AVE., CORCORAN, KINGS COUNTY, CA. 93212



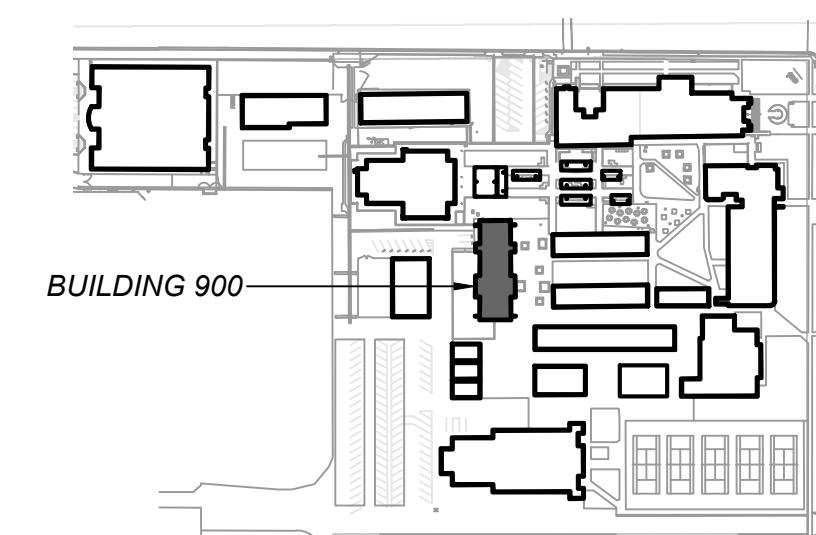
REVISIONS

**MANGINI** | ARCHITECTURE  
INGENUITY  
McLAIN BARENG MORRELLI SCOTT  
MANGINI ASSOCIATES INC.  
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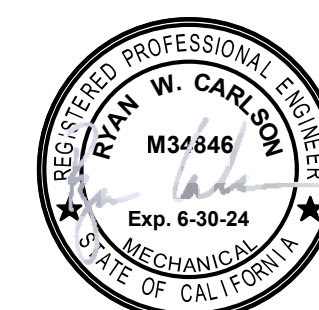
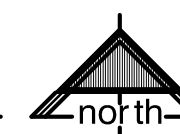
TITLE  
BUILDING 900  
ENLARGED  
PLUMBING PLAN

**P9**

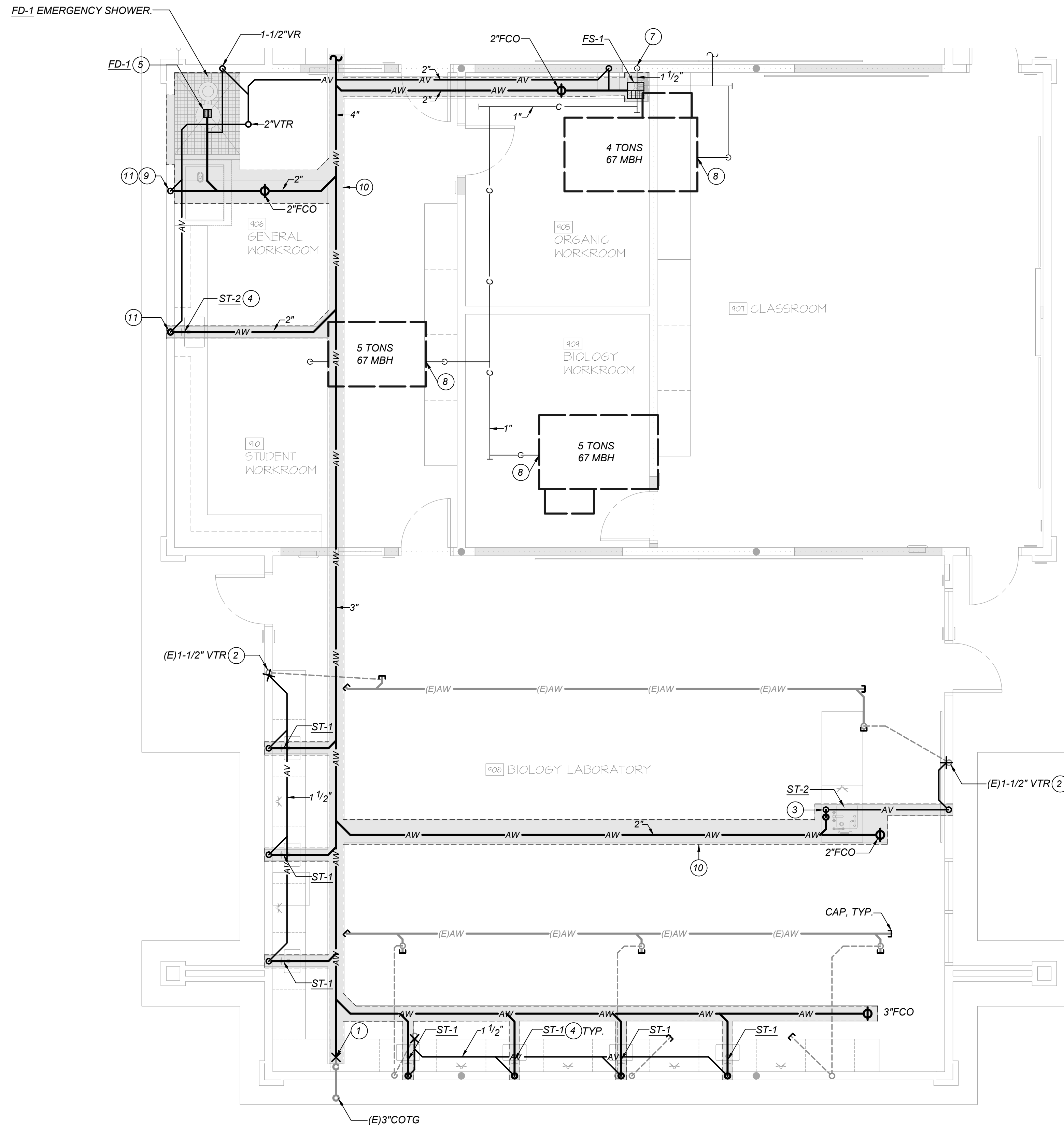
PROJECT **1751a**



BUILDING KEY PLAN

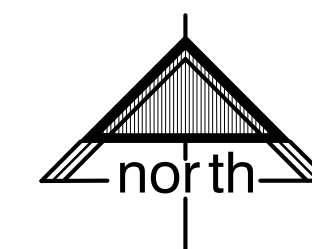


**LAWRENCE**  
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7084 N. Maple Ave., Suite 101  
(559) 421-0101  
Fresno, CA 93720  
(559) 451-1342



**BUILDING 900  
ENLARGED PLUMBING PLAN - WASTE, VENT & CONDENSATE**

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





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DATE: 05/01/2023



DATE: AUGUST 24, 2022

KEYNOTES: (THIS SHEET ONLY)

- 1 CONNECT (N) GAS TO (E) GAS RISER ABOVE ROOF. EXTEND PIPING ABOVE ROOF AS REQUIRED TO CONNECT TO H/C UNIT WITH SOV AND DIRT LEG. REFER TO DETAIL D/P13, TYP.
- 2 GAS VALVE SIGN ON WALK, REFER TO DETAIL E/P13.
- 3 1/2"G DOWN IN WALL FOR GAS TURRET, TYP.
- 4 3/4"CW, AND 3/4"HW DOWN IN WALL TO BELOW FLOOR FOR TEACHER STATION SINK.
- 5 1/2"CW DOWN FOR STUDENT SINK, TYP.
- 6 CONNECT (N) 3/4"G TO (E) 2-1/2"G ABOVE CEILING.
- 7 UTILITY CONTROL PANEL RECESSED IN WALL. COORDINATE WITH ELECTRICAL.
- 8 GAS SOLENOID VALVE INSTALLED ABOVE ACCESSIBLE T-BAR CEILING.
- 9 HOSE BIBB ON ROOF. REFER TO DETAIL C/P14.
- 10 1/2"G UP FROM BEL. FLR. INSIDE PIPE SLEEVE. SLEEVE END SHALL EXTEND UP +6" MIN. ABV. FIN. FLR. SLEEVE END SHALL REMAIN OPEN. PROVIDE ACCESS PANEL FOR INSPECTION OF SLEEVE END.
- 11 1/2"G DN. IN PIPE SLEEVE TO BEL. FLR. SLEEVE SHALL EXTEND FROM BEL. FLR. UP IN WALL TO ABV. CLG. SLEEVE END SHALL REMAIN OPEN.
- 12 1/2"CW AND 1/2"HW DOWN FOR THERMOSTATIC MIXING VALVE. CONNECT TEPID WATER SUPPLY FROM MIXING VALVE TO SINK FAUCET WITH EMERGENCY EYEWASH. THIS FAUCET IS SUPPLIED TEPID WATER FOR NORMAL USE.

**MODERNIZATION AT CORCORAN HIGH SCHOOL SCIENCE BUILDING**  
1100 LETTS AVE., CORCORAN, CA. 93212  
CORCORAN UNIFIED SCHOOL DISTRICT  
1520 PATTERSON AVE., CORCORAN, KINGS COUNTY, CA. 93212



REVISIONS	

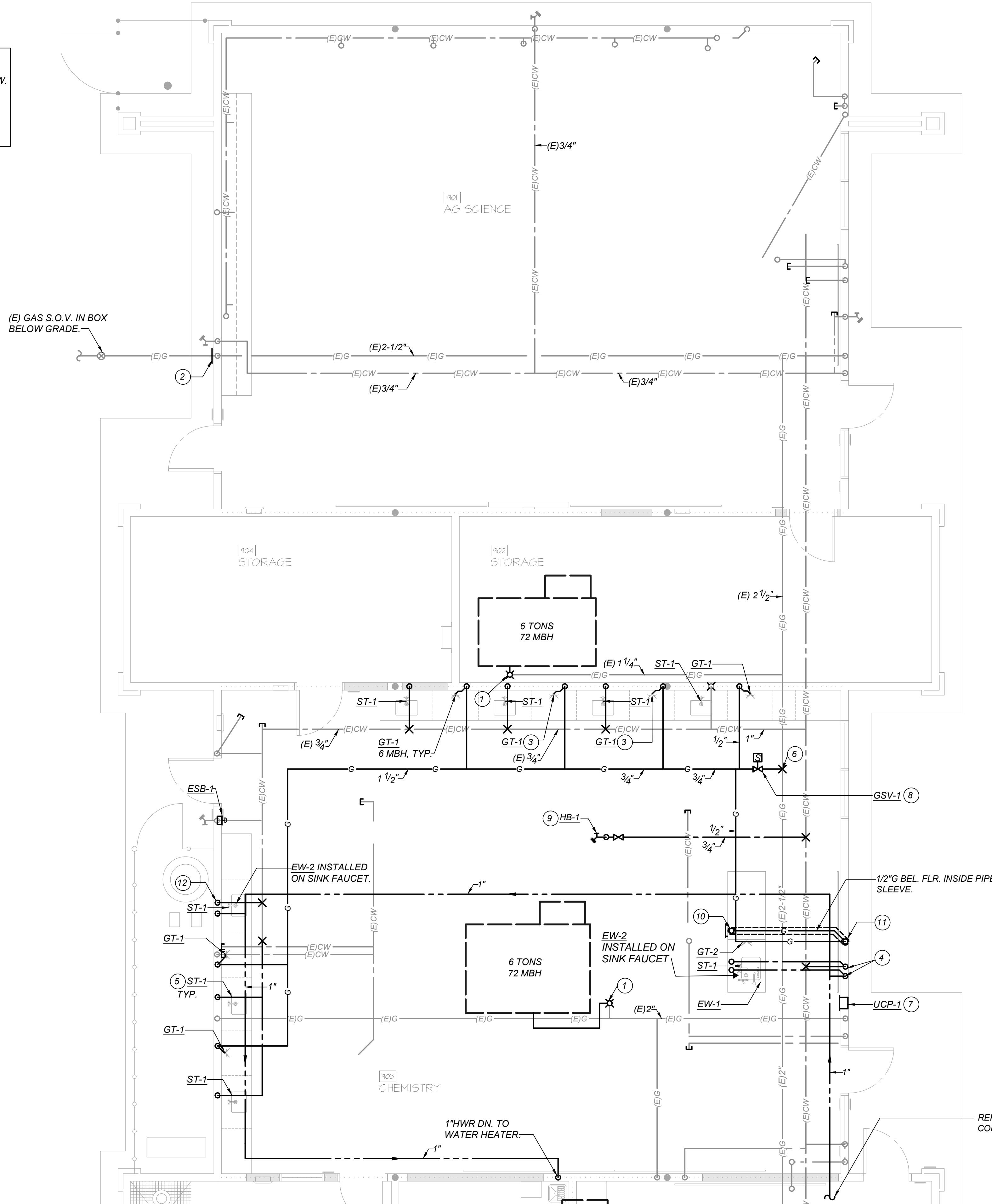
**MANGINI** ARCHITECTURE  
INGENUITY  
McLAIN BARENG MORRELLI SCOTT  
MANGINI ASSOCIATES INC.  
4320 West Mineral King Avenue  
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TITLE  
BUILDING 900  
ENLARGED  
PLUMBING PLAN

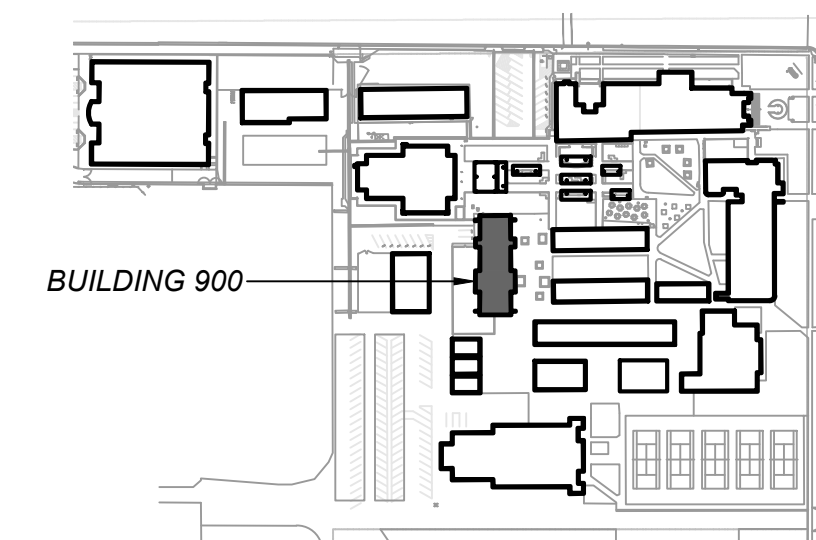
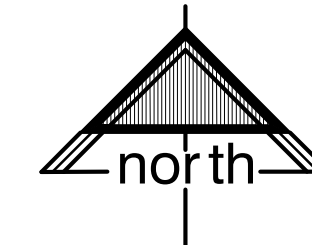
**P10**

PROJECT **1751a**

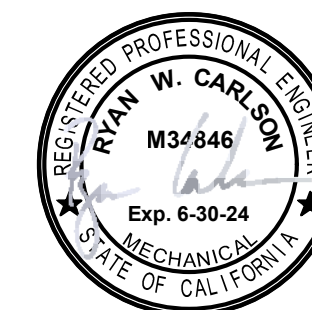
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GAS PIPE SIZED PER 2019 CPC TABLE 1215.2(1) USING 550 FEET ROW.  
540 FEET TOTAL DEVELOPED LENGTH FROM GAS METER TO FURTHEST APPLIANCE.  
634 CFH TOTAL CONNECTED LOAD.



**BUILDING 900  
ENLARGED PLUMBING PLAN - CW, HW, & GAS**  
SCALE: 1/4" = 1'-0"



**BUILDING KEY PLAN**



**LAWRENCE  
ENGINEERING GROUP**  
7084 N. Maple Ave., Suite 101  
(559) 431-0101  
Fresno, CA 93720  
FAX (559) 431-1362



IDENTIFICATION STAMP  
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DATE: 05/01/2023



DATE: AUGUST 24, 2022

**MODERNIZATION AT  
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1100 LETTS AVE., CORCORAN, CA. 93212  
CORCORAN UNIFIED SCHOOL DISTRICT  
1520 PATTERSON AVE., CORCORAN, KINGS COUNTY, CA. 93212



REVISIONS

ARCHITECTURE  
INGENUITY  
**MANGINI**  
McLAIN BARENG MORRELLI SCOTT  
www.mangini.us  
MANGINI ASSOCIATES INC.  
4320 West Mineral King Avenue  
Visalia, California 93271  
(559) 627-0530 Office  
(559) 627-1526 Fax

TITLE  
BUILDING 900  
ENLARGED  
PLUMBING PLAN

**P11**

PROJECT **1751a**

**KEYNOTES: (THIS SHEET ONLY)**

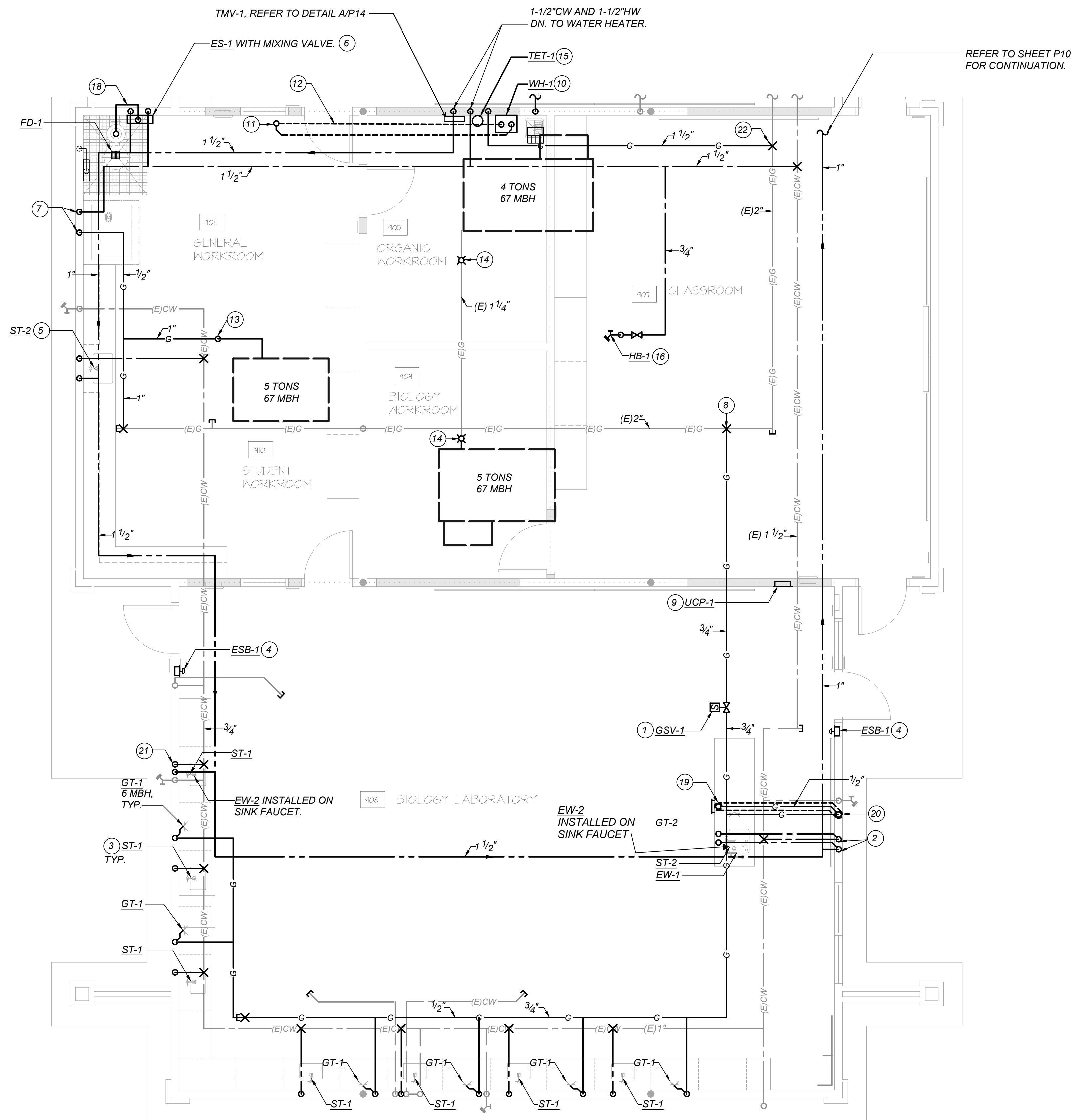
- 1 GAS SOLENOID VALVE INSTALLED ABOVE ACCESSIBLE T-BAR CEILING.
- 2 1/2"G, 3/4"CW, AND 3/4"HW DOWN IN WALL TO BELOW FLOOR FOR TEACHER STATION SINK.
- 3 1/2"CW DOWN FOR STUDENT SINK, TYP.
- 4 COORDINATE EMERGENCY STOP BUTTON WITH ARCHITECTURAL ELEVATIONS.
- 5 1/2"CW AND 1/2"HW DOWN FOR WORKROOM SINK.
- 6 1-1/2"CW AND 1"HW DOWN FOR THERMOSTATIC MIXING VALVE. 2" TEPID WATER FROM MIXING VALVE TO EMERGENCY SHOWER EYEWASH. REFER TO DETAIL G/P13.
- 7 1/2"CW AND 1/2"G DOWN FOR FUME HOOD.
- 8 CONNECT (N) 3/4"G TO (E) 2"G ABOVE CEILING.
- 9 UTILITY CONTROL PANEL RECESSED IN WALL. COORDINATE WITH ELECTRICAL.
- 10 INSTANTANEOUS GAS WATER HEATER MOUNTED ON WALL. REFER TO DETAILS A/P14 AND B/P14.
- 11 CONCENTRIC VENT/INTAKE UP THRU ROOF. MAINTAIN 10 FEET CLEARANCE FROM ANY OSA INTAKE.
- 12 OFFSET 3" CPVC VENT AND 3" CPVC INTAKE PIPING ABOVE CEILING.
- 13 (N) 1"G UP THRU ROOF AND CONNECT TO H/C UNIT WITH SOV AND DIRT LEG. REFER TO DETAIL D/P13.
- 14 CONNECT (N) GAS TO (E) GAS RISER ABOVE ROOF. EXTEND PIPING ABOVE ROOF AS REQUIRED TO CONNECT TO H/C UNIT WITH SOV AND DIRT LEG. REFER TO DETAIL D/P13, TYP.
- 15 THERMAL EXPANSION TANK ON WALL. REFER TO DETAIL A/P14.
- 16 HOSE BIBB ON ROOF. REFER TO DETAIL C/P14.
- 17 1-1/2"CW AND 1"HW FOR EMERGENCY SHOWER MIXING VALVE.
- 18 2" TEPID WATER FROM MIXING VALVE TO EMERGENCY SHOWER, SHOWN OFFSET FOR CLARITY.
- 19 1/2"G UP FROM BEL. FLR. INSIDE PIPE SLEEVE. SLEEVE END SHALL EXTEND UP +6" MIN. ABV. FIN. FLR. SLEEVE END SHALL REMAIN OPEN. PROVIDE ACCESS PANEL FOR INSPECTION OF SLEEVE END.
- 20 1/2"G DN. IN PIPE SLEEVE TO BEL. FLR. SLEEVE SHALL EXTEND FROM BEL. FLR. UP IN WALL TO ABV. CLG. SLEEVE END SHALL REMAIN OPEN.
- 21 1/2"CW AND 1/2"HW DOWN FOR THERMOSTATIC MIXING VALVE. CONNECT TEPID WATER SUPPLY FROM MIXING VALVE TO SINK FAUCET WITH EMERGENCY EYEWASH. THIS FAUCET IS SUPPLIED TEPID WATER FOR NORMAL USE.
- 22 CONNECT (N) 1-1/2"G TO (E) 2"G ABOVE CEILING.

**GAS PIPE SIZING NOTE:**

GAS PIPE SIZED PER 2019 CPC TABLE 1215.2(1) USING 550 FEET ROW.

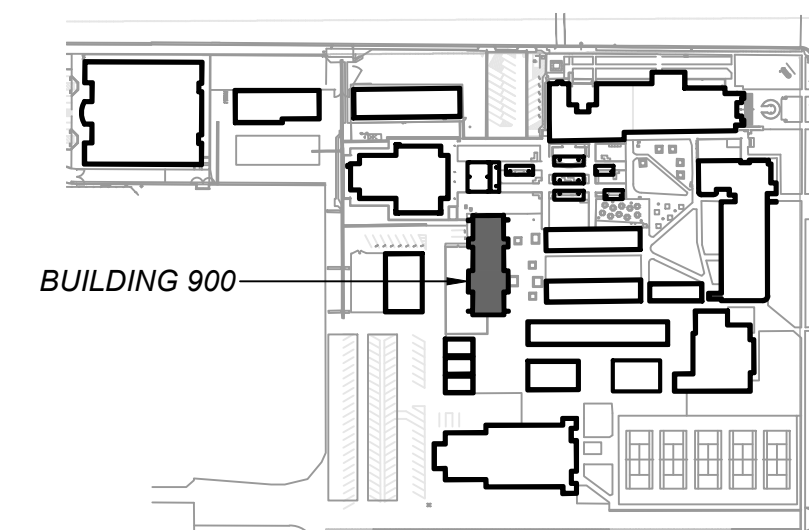
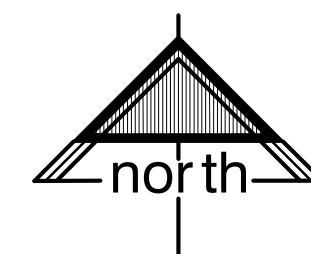
540 FEET TOTAL DEVELOPED LENGTH FROM GAS METER TO FURTHEST APPLIANCE.

634 CFH TOTAL CONNECTED LOAD.

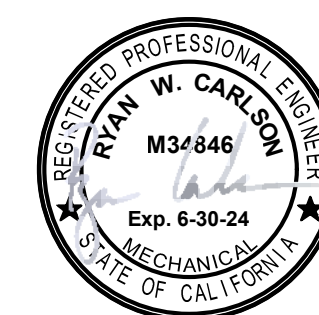


**BUILDING 900  
ENLARGED PLUMBING PLAN - CW, HW, & GAS**

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



**BUILDING KEY PLAN**









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PLUMBING FIXTURE AND EQUIPMENT SCHEDULE						
MARK	FIXTURE	CONNECTION SIZES				DESCRIPTION
		S or W	V	CW	HW	
<u>EW-2</u>	EYEWASH	-	-	1/2"	1/2"	<p>HAWS #7620 "EYEPD" FAUCET-MOUNTED EYEWASH, LEAD FREE, STAINLESS STEEL CONSTRUCTION WITH POLISHED FINISH, 0.9 GPM FLOW CONTROL, (4) ADDITIONAL FAUCET ADAPTORS, ANSI Z358.1 COMPLIANT. INSTALL OPTIONAL 1 GPM LAMINAR FLOW FAUCET OUTLET.</p> <p>HAWS #9201EW "AXION" THERMOSTATIC MIXING VALVE, SET OUTLET TEMPERATURE TO 75°F.</p>

PLUMBING FIXTURE AND EQUIPMENT SCHEDULE						
MARK	FIXTURE	CONNECTION SIZES				DESCRIPTION
		S or W	V	CW	HW	
<u>WH-1</u>	WATER HEATER	-	3"	3/4"	3/4"	<p>NAVIENT # NPE-240A2 INSTANTANEOUS WATER HEATER, NATURAL GAS FIRED, 199,000 BTUH MAX. GAS DEMAND, 0.95 UNIFORM ENERGY FACTOR, 5.8 GPM AT 67°F TEMPERATURE RISE, INDOOR INSTALLATION, FURNISH WITH 3" CPVC EXHAUST PORTS, BUILT IN 0.5 GALLON BUFFER TANK AND RECIRCULATION PUMP. WEIGHT: 100 LBS</p> <p>ELECTRICAL: 120V, 1Ø, 200W (MAX 2A)</p> <p>ACCESSORIES:</p> <p>#3009323A PLUMB EASYVALVE SET (3/4") WITH RELIEF VALVE.</p> <p>#GXXX001322 NEUTRALIZER KIT.</p> <p>IPEX SYSTEM 636 CPVC-FGV CONCENTRIC VENT KIT.</p>
<u>TET-1</u>	THERMAL EXPANSION TANK	-	-	3/4"	-	<p>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. WT. 52 LBS.</p>
<u>LS-1</u>	LIFT STATION	4"	3"	-	-	<p>(QTY. 2) WEIL #1601 WASTEWATER PUMPS FOR DUPLEX INSTALLATION, SIZED FOR 24 GPM AT 13 FT HEAD, 1150 RPM, 0.5 HP, 5.63" IMPELLER, MOISTURE SENSOR AND TEMPERATURE LIMITER, STAINLESS STEEL LIFTING CABLE ELECTRICAL REQUIRED: (2) 0.5 HP, 208V, 1 PH, 12.6 FLA EACH.</p> <p>WEIL #W-8151-D-063 DUPLEX ALTERNATING PUMP CONTROL PANEL, HIGH WATER ALARM SYSTEM, PUMP TEST SWITCHES, LOCKABLE PANEL DISCONNECT, TWO LOCKABLE PUMP DISCONNECTS, #8100K7224D MOISTURE SENSOR AND TEMPERATURE LIMIT CIRCUITS.</p> <p>WEIL #8233K1014 TETHERED LEVEL CONTROLS, 4 SWITCHES FOR DUPLEX WITH ALARM CONFIGURATION. #314.399.00 MOUNTING BRACKET AND #303.935.103 MOUNTING PIPE, 40 FT CORD (CONTRACTOR SHALL VERIFY REQUIRED CORD LENGTH AND PROVIDE APPROPRIATE CORD LENGTH).</p> <p>TOPP INDUSTRIES #FB36X096, 36" INSIDE DIAMETER FIBERGLASS BASIN x 96" DEEP, ANTI-FLOAT FLANGE, #C36HSS SINGLE HATCH STEEL ROUND BASIN COVER. TANK SHALL BE PROVIDED WITH ALL REQUIRED FLEXIBLE BOOTS, COUPLINGS, FLANGES, GROMMETS FOR A COMPLETE SEALED SYSTEM.</p> <p>ALL INSTALLATION SHALL BE PER MANUFACTURERS RECOMMENDATIONS. SUBMIT SHOP DRAWING OF LIFT STATION ASSEMBLY FOR REVIEW PRIOR TO INSTALLATION.</p> <p>DANFOSS 2" MODEL 745 SWING CHECK VALVE. ONE FOR EACH PUMP.</p> <p>WATTS 2" SIZE, SERIES 406NRSRW NON-RISING STEM, RESILIENT WEDGE, FLANGED GATE VALVE. ONE FOR EACH PUMP. INSTALL DOWNSTREAM OF THE CHECK VALVE.</p> <p>TOPP INDUSTRIES #C36HSS STEEL ROUND COVER. NO DISCHARGE FLANGES NEEDED.</p>
<u>NT-1</u>	NEUTRALIZATION TANK	4"	2"	-	-	<p>STREIM "LAB BASIN" #LB-125 POLYETHYLENE NEUTRALIZATION TANK, 4" INLET/OUTLET 3" VENT CONNECTION, RISERS AS REQUIRED TO GRADE. PROVIDE LIMESTONE WITH 90%+ CALCIUM CARBONATE AND FILL TANK WITH MANUFACTURER RECOMMENDED AMOUNT. COMPOSITE TRAFFIC RATED COVER WITH 16,000 LBS MAX. LOAD CAPACITY.</p>
<u>WHS-1</u>	WATER HEATER SOFTENER	-	-	-	-	<p>NAVIENT PEAKFLOW "A" SCALE PREVENTION WATER TREATMENT SYSTEM #GPWC310001AC001.</p> <p>PROVIDE WITH PEAKFLOW "A" REPLACEMENT MEDIA.</p> <p>10 GPM MAX FLOWRATE.</p> <p>UNIT SIZE: 22.5"x5.5" MAX WEIGHT= 20 LBS. 1" INLET &amp; OUTLET</p> <p>REFER TO DETAIL A/P14 AND D/P14</p>
<u>TMV-1</u>	THERMOSTATIC MIXING VALVE (108F)	-	-	-	-	<p>BRADLEY #S59-3045-R-S-B-P-0 HIGH LOW THERMOSTATIC MIXING VALVE, (OR LEONARD EQUAL), 19GPM @10PSI PD, ROUGH BRASS, STANDARD RANGE THERMOSTAT, SET AT 108 DEGREES F., WALL MOUNTING BRACKET, PIPED ASSEMBLY WITH INLET AND OUTLET SHUTOFF.</p>

PLUMBING FIXTURE AND EQUIPMENT SCHEDULE						
MARK	FIXTURE	CONNECTION SIZES				DESCRIPTION
		S or W	V	CW	HW	
<u>FS-1</u>	FLOOR SINK	-	-	-	-	<p>JAY R. SMITH #3100-12, (OR MIFAB OR ZURN EQUAL) 8-1/2"x8-1/2" x6" DEEP WITH ANCHOR FLANGE, DOME BOTTOM STRAINER &amp; NICKEL BRONZE RIM WITH HALF GRATE. SEE DWGS. FOR SIZE. INSTALL FLUSH WITH FINISH FLOOR. PROVIDE TRAP PRIMER CONNECTION WHERE APPLICABLE.</p>
<u>FD-1</u> 	FLOOR DRAIN	2"	1-1/2"	1/2"	-	<p>JAY R. SMITH #2005-P050-HP (OR MIFAB OR ZURN EQUAL) DUCO CAST IRON BODY WITH 5" SQUARE NICKEL BRONZE STRAINER AND TRAP PRIMER CONNECTION.</p>
<u>ES-1</u> 	EMERGENCY SHOWER	2"	1-1/2"	1-1/2"	1"	<p>HAWS #8309WC, (OR BRADLEY EQUAL) CBC ACCESS COMPLIANT, FREE STANDING COMBINATION DRENCH SHOWER &amp; EYE/FACE WASH, 20 GPM SHOWER AND 3.7 GPM EYE/FACE WASH, #8127FC STAINLESS STEEL SHOWER-HEAD W/ PULL ROD, STAINLESS STEEL EYE/FACE BOWL WITH SPRAY HEADS AND DUST COVERS, STAY OPEN VALVE WITH PUSH FLAG HANDLE. SECURE FLOOR FLANGE TO FLOOR W/ THREE 1/2"Ø HILTI KWIK BOLT KB-TZ2 CONCRETE ANCHORS WITH 2" MIN. EMBEDMENT, EQUALLY SPACED AROUND 8"Ø BOLT CIRCLE. ICC-ES ESR-4266.</p> <p>BRADLEY #S19-2350-C-B-P EMERGENCY FIXTURE THERMOSTATIC MIXING VALVE WITH CHROME FINISH, WALL MOUNTING BRACKET, AND PIPED ASSEMBLY WITH INLET AND OUTLET SHUTOFF VALVE.</p>
<u>GT-1</u> 	GAS TURRET	-	-	-	-	<p>CHICAGO #982-VR909AGVCP (OR T&amp;S BRASS OR ZURN EQUAL) DECK MOUNT TURRET WITH TWO VANDAL RESISTANT BALL VALVES WITH SERRATED HOSE NOZZLES AT 90° FROM EACH OTHER, AND WITH INLET SHANK, LOCKNUT AND WASHER, 5 LB MAX. OPENING FORCE.</p>
<u>GT-2</u> 	GAS TURRET	-	-	-	-	<p>CHICAGO #987-909CAGCP (OR T&amp;S BRASS OR ZURN EQUAL) WALL MOUNTED TURRET, DUAL VALVE WITH Y-PATTERN WALL FLANGE, BUILT IN CHECK VALVE, SEPARATED NOZZLE, BLUE "GAS" INDEX, POLISHED CHROME FINISH, 5 LB MAX. OPENING FORCE.</p>
<u>ST-1</u> 	SINK TRIM (STUDENTS)	-	-	1/2"	-	<p>CHICAGO #LWS1-A13-E (OR T&amp;S BRASS OR ZURN EQUAL) 6" RIGID/SWING GOOSE-NECK FAUCET WITH VACUUM BREAKER SPOUT, SERRATED TIP AND WRISTBLADE HANDLE.</p>
<u>ST-2</u> 	SINK TRIM (TEACHER)	-	-	1/2"	1/2"	<p>CHICAGO #LWM1-A13-E (OR T&amp;S BRASS OR ZURN EQUAL) 6" RIGID/SWING GOOSE-NECK FAUCET WITH VACUUM BREAKER SPOUT, SERRATED TIP AND WRISTBLADE HANDLES.</p>
<u>ESB-1</u>	EMERGENCY STOP BUTTON	-	-	-	-	<p>AMERICAN GAS SAFETY #AGS-EGOTW, EMERGENCY GAS SHUT-OFF BUTTON, TWIST RESET, FLUSH MOUNTED WITH CLEAR PROTECTIVE COVER.</p>
<u>UCP-1</u>	UTILITY CONTROL PANEL	-	-	-	-	<p>AMERICAN GAS SAFETY #AGS1000SI, UTILITY CONTROL PANEL, KEY LOCK FOR AUTHORITY CONTROL, PANEL MOUNTED PANIC BUTTON, FLUSH MOUNTING BRACKET #AGSFMK. ELECTRICAL INPUT: 120V, 60HZ, 3A</p>
<u>GSV-1</u>	GAS SOLENOID VALVE	-	-	-	-	<p>AMERICAN GAS SAFETY #MERLIN1023, 3/4" SOLENOID GAS VALVE, NORMALLY CLOSED, GAS PRESSURE 2PSI MAX., ELECTRICAL POWER FROM PANEL UCP-1: 120V, 60HZ, 0.160A</p>
<u>EW-1</u>	EYEWASH	-	-	1/2"	1/2"	<p>GUARDIAN #G1805 OR #G1805LH EMERGENCY EYEWASH, DECK MOUNTED AUTOFLOW 90° SWIVEL, FLIP TOP DUST COVERS, IN-LINE STRAINER, POLISHED CHROME PLATED BRASS CONSTRUCTION. PROVIDE RIGHT-HAND MOUNTING (#G1805) OR LEFT-HAND MOUNTING (#G1805LH) TO MATCH SINK LAYOUT INDICATED ON ARCHITECTURAL PLANS. INSTALL #G6024-1R1 THERMOSTATIC MIXING VALVE IN RECESS MOUNTED STAINLESS STEEL CABINET, FACTORY SET AT 85°F, SOLID DOOR WITH KEYED LOCK, RIGHT HINGE, BOTTOM INLETS/TOP OUTLET, AND EMERGENCY EYEWASH SIGN.</p>
<u>HB-1</u>	HOSE BIBB	-	-	3/4"	-	<p>WOODFORD #Y24 (OR MIFAB EQUAL) ROUGH BRONZE STANDPIPE HOSE VALVE WITH NON-REMOVABLE VACUUM BREAKER, AND OPTIONAL LOOSE TEE KEY HANDLE WITH MODEL 34HD.</p>



APPROVALS

FILE # 16-H1 APPLICATION # 02-120394

IDENTIFICATION STAMP

DIV. OF THE STATE ARCHITECT

APP: 02-120394 INC:

REVIEWED FOR

SS ☒ FLS ☒ ACS ☒

DATE: 05/01/2023

LICENSED ARCHITECT

JOSEPH M. BARENG

No. C-33544

REM 07-31-23

STATE OF CALIFORNIA

DATE: AUGUST 24, 2022

MODERNIZATION AT

CORCORAN HIGH SCHOOL

SCIENCE BUILDING

1100 LETTS AVE., CORCORAN, CA. 93212

CORCORAN UNIFIED SCHOOL DISTRICT

1520 PATTERSON AVE., CORCORAN, KINGS COUNTY, CA. 93212

REVISIONS

ARCHITECTURE

INGENUITY

MANGINI

McLAIN BARENG MORRELLI SCOTT

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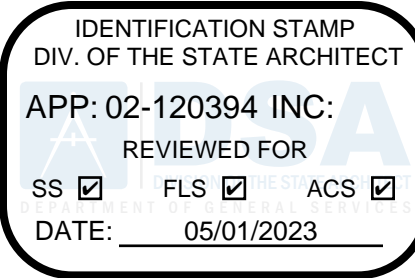
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PLUMBING SCHEDULES

P12

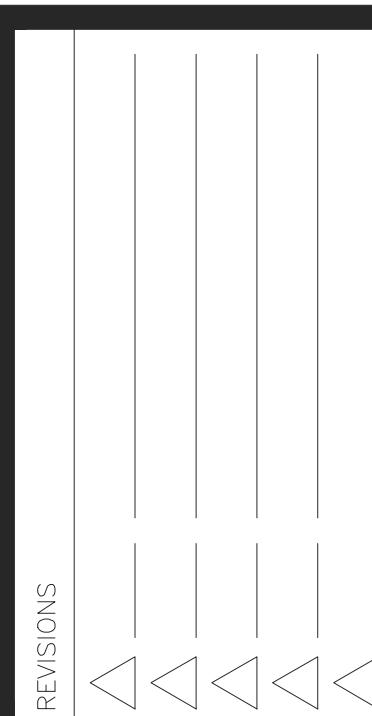
PROJECT 1751a





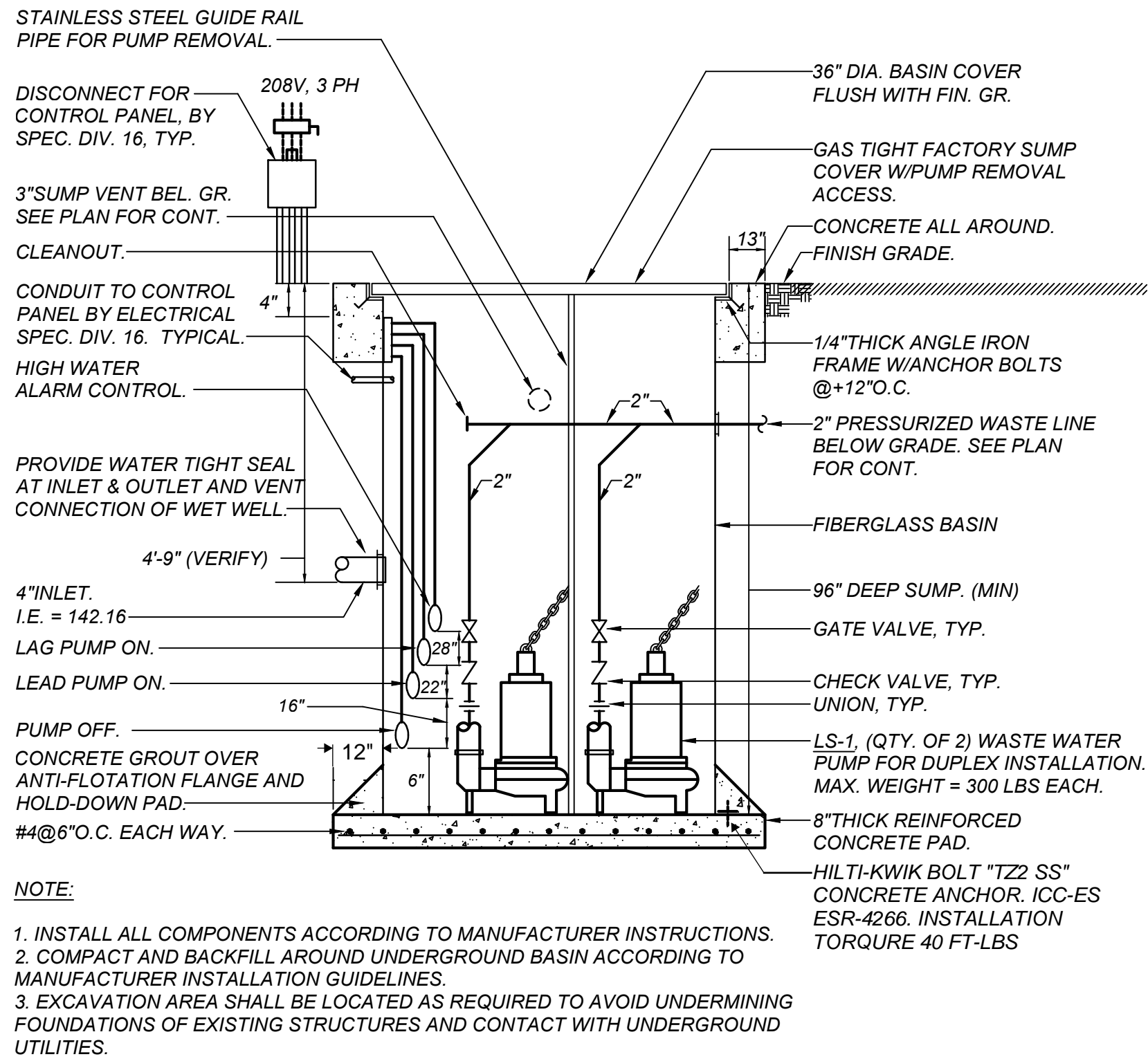
DATE: AUGUST 24, 2022

**MODERNIZATION AT  
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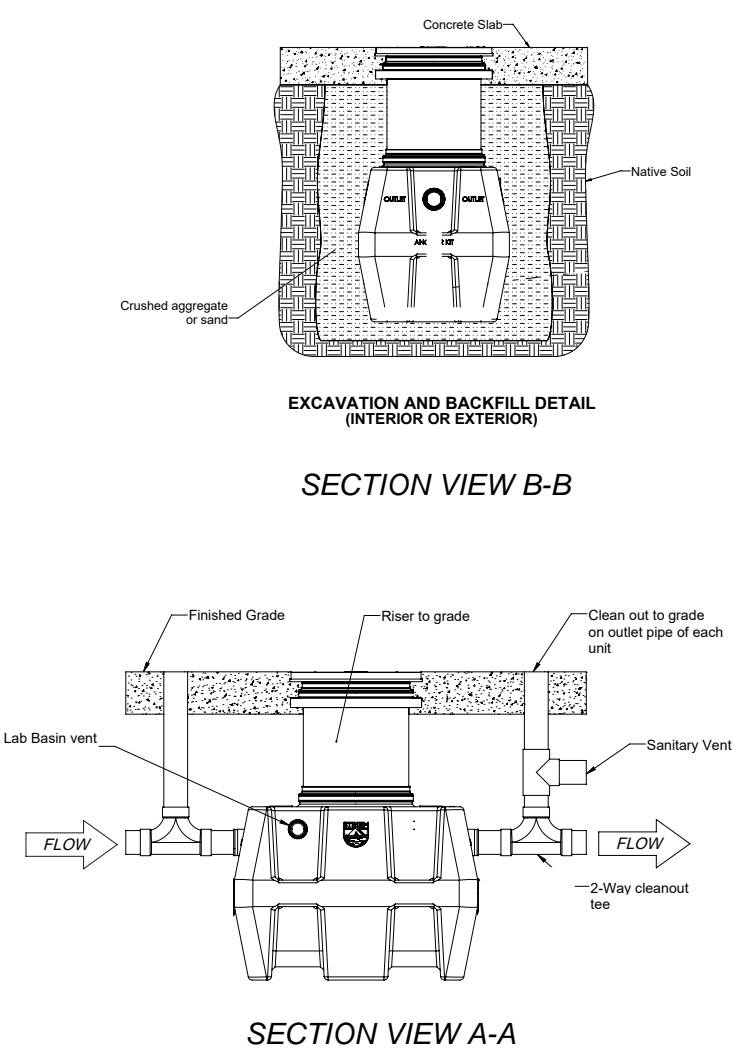
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PLUMBING  
DETAILS  
**P13**  
PROJECT **1751a**



### SEWER LIFT STATION DETAIL

SCALE: NONE

H  
P13



### NOTES:

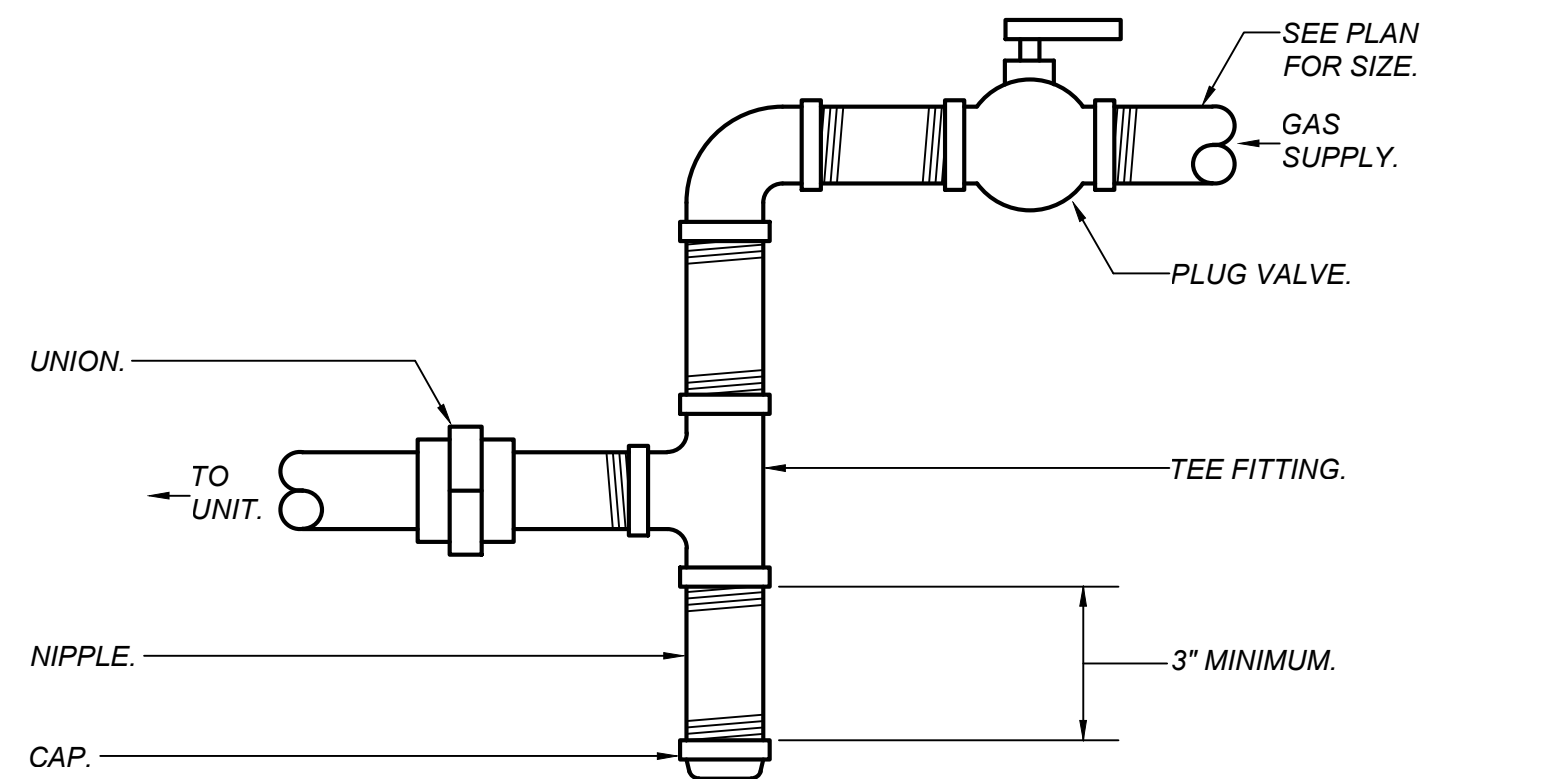
#### BACKFILLING & FINISHED CONCRETE SLAB

- 1 Preparation of sub grade
- 2 Stabilize and compact sub grade to 95% proctor.
- 3 Before backfilling and pouring of slab, secure cover and risers (if used) to the unit.
- 4 Place 6" aggregate base under slab. Aggregate should be 3/4" size rock, or sand, with no fines.
- 5 Backfill using crushed aggregate material approximately 3/4" size rock, or sand, with no fines.
- 6 Thickness of concrete around cover to be determined by specifying engineer. If traffic loading is required the concrete slab dimensions shown are for guideline purposes only.
- 7 Concrete to be 28 day compressive strength to 4000 PSI with  $6 \pm 1\%$  air entrainment.
- 8 NO. 4 rebar (1/2") grade 60 steel per ASTM A615; connected with tie wire.
- 9 Rebar to be 2 1/2" from edge of concrete.
- 10 Rebar spacing 12" grid. 4" spacing around access opening.
11. REFER TO MANUFACTURER INSTALLATION INSTRUCTIONS FOR ADDITIONAL INFORMATION. INSTALL ACCORDING TO MANUFACTURER INSTRUCTIONS.

### NEUTRALIZATION TANK DETAIL

SCALE: NONE

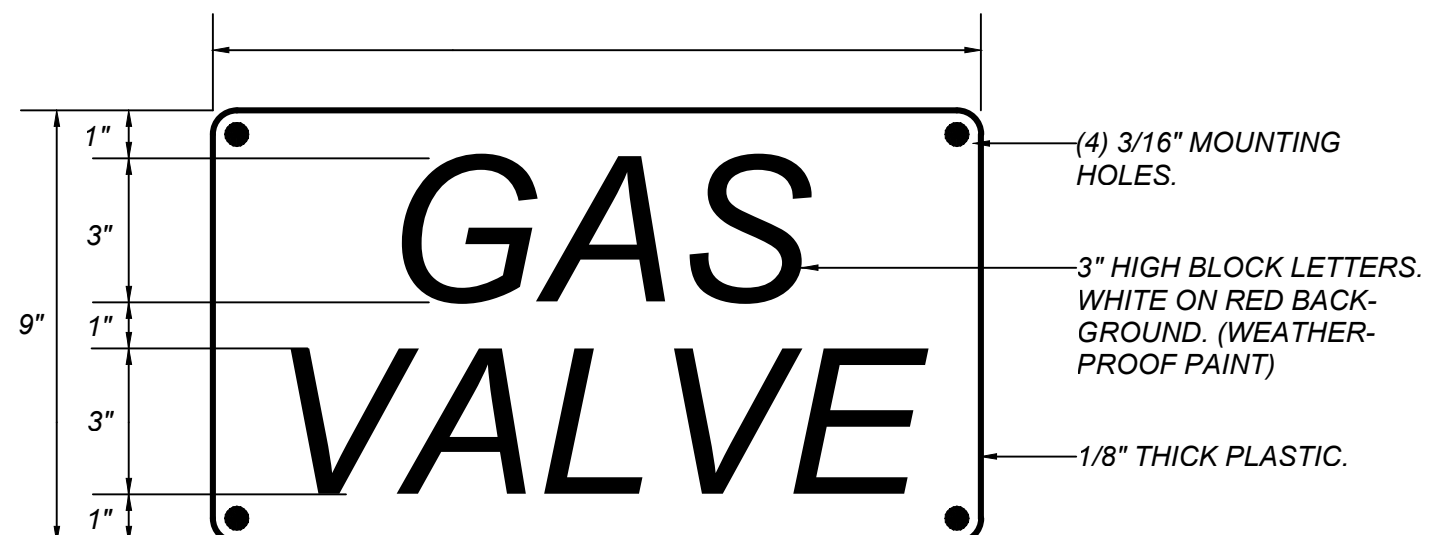
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P13



### GAS PIPING DIRT LEG DETAIL

SCALE: NONE

D  
P13

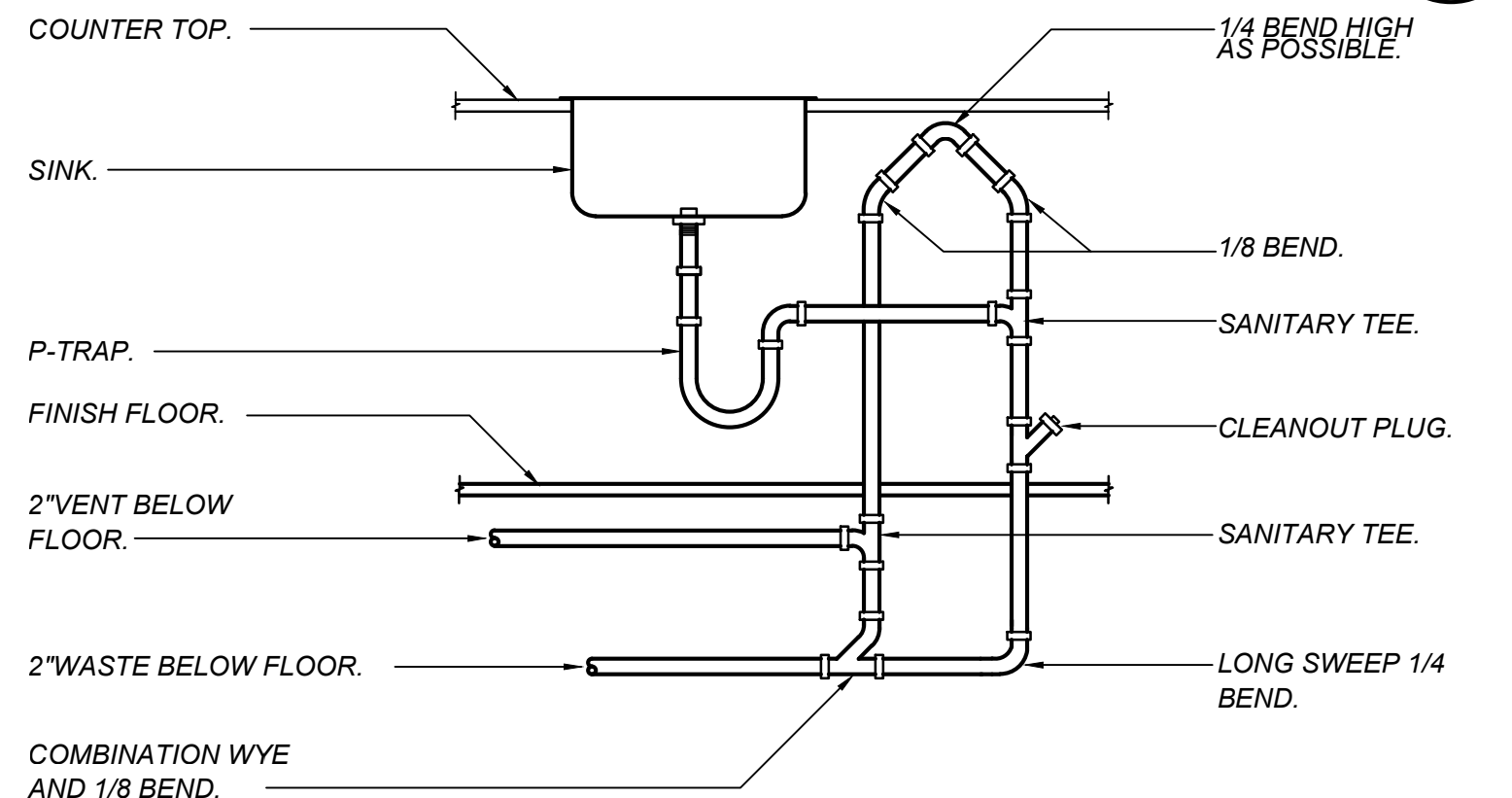


NOTE:  
SIGN TO BE CONSPICUOUSLY LOCATED ON  
EXTERIOR WALL ABOVE BUILDING GAS SHUT-OFF  
VALVE AS INDICATED ON FLOOR PLAN.

### GAS VALVE SIGN DETAIL

SCALE: NONE

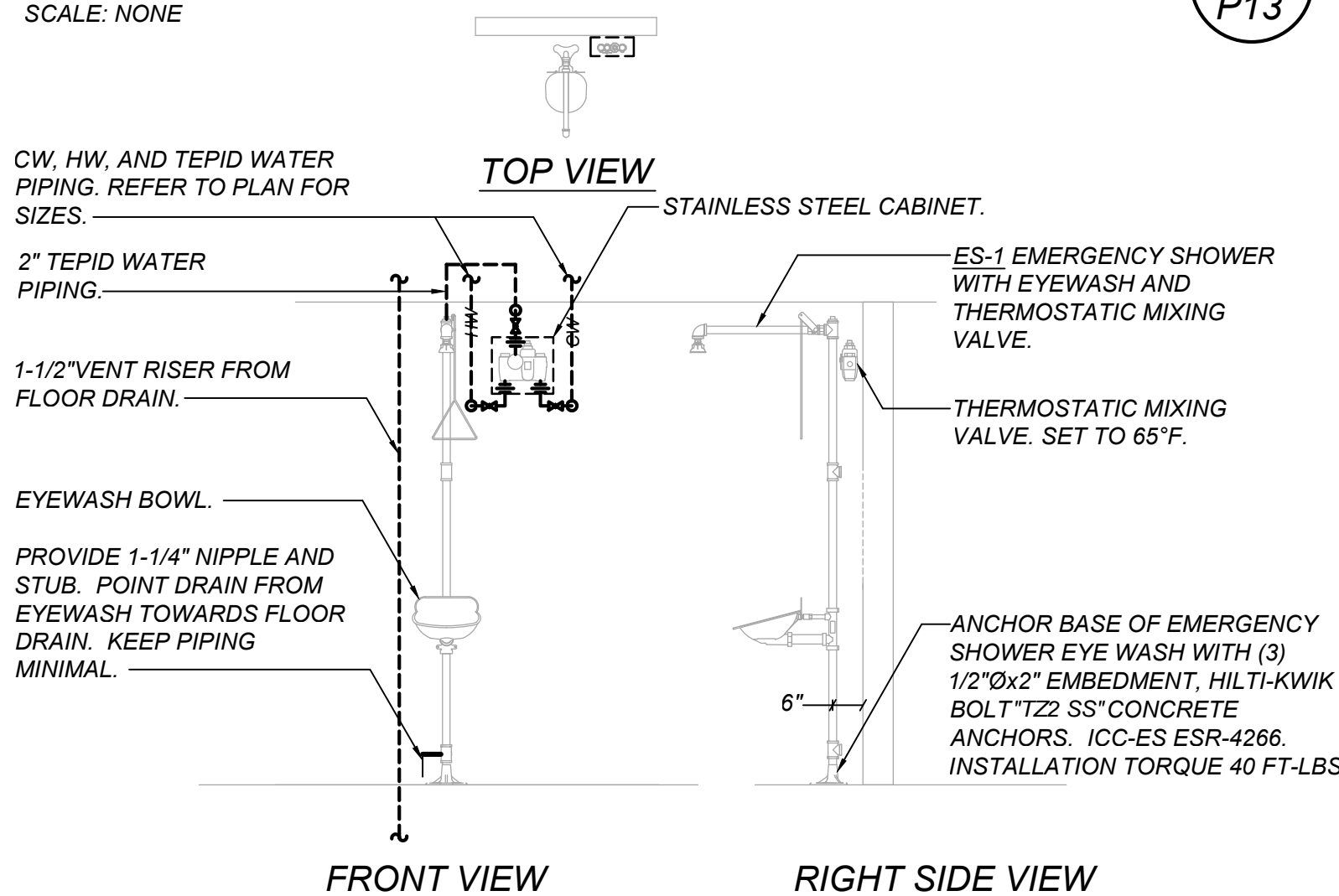
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### ISLAND VENT DETAIL

SCALE: NONE

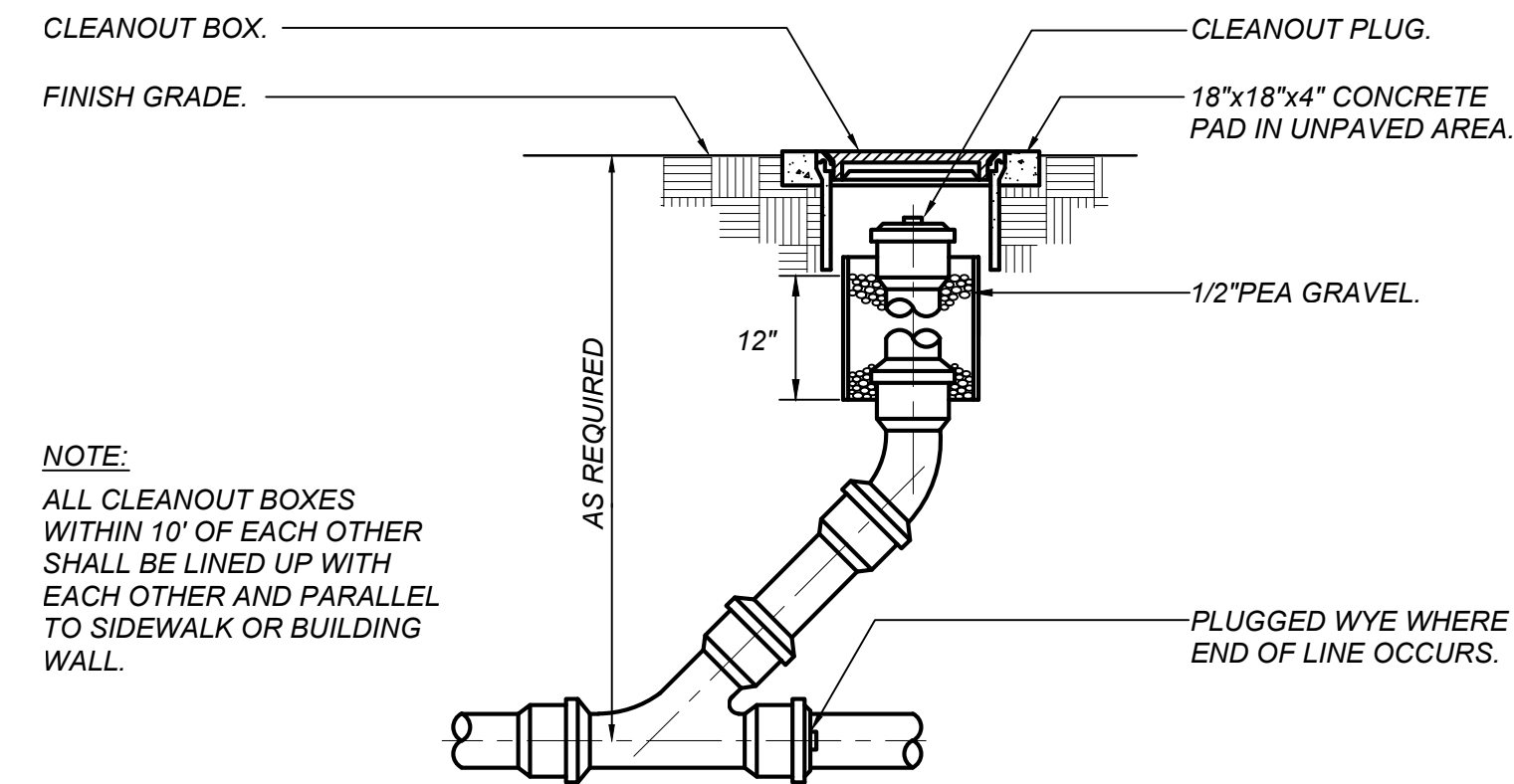
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### COMBINATION EMERGENCY SHOWER EYEWASH WITH TMV

SCALE: NONE

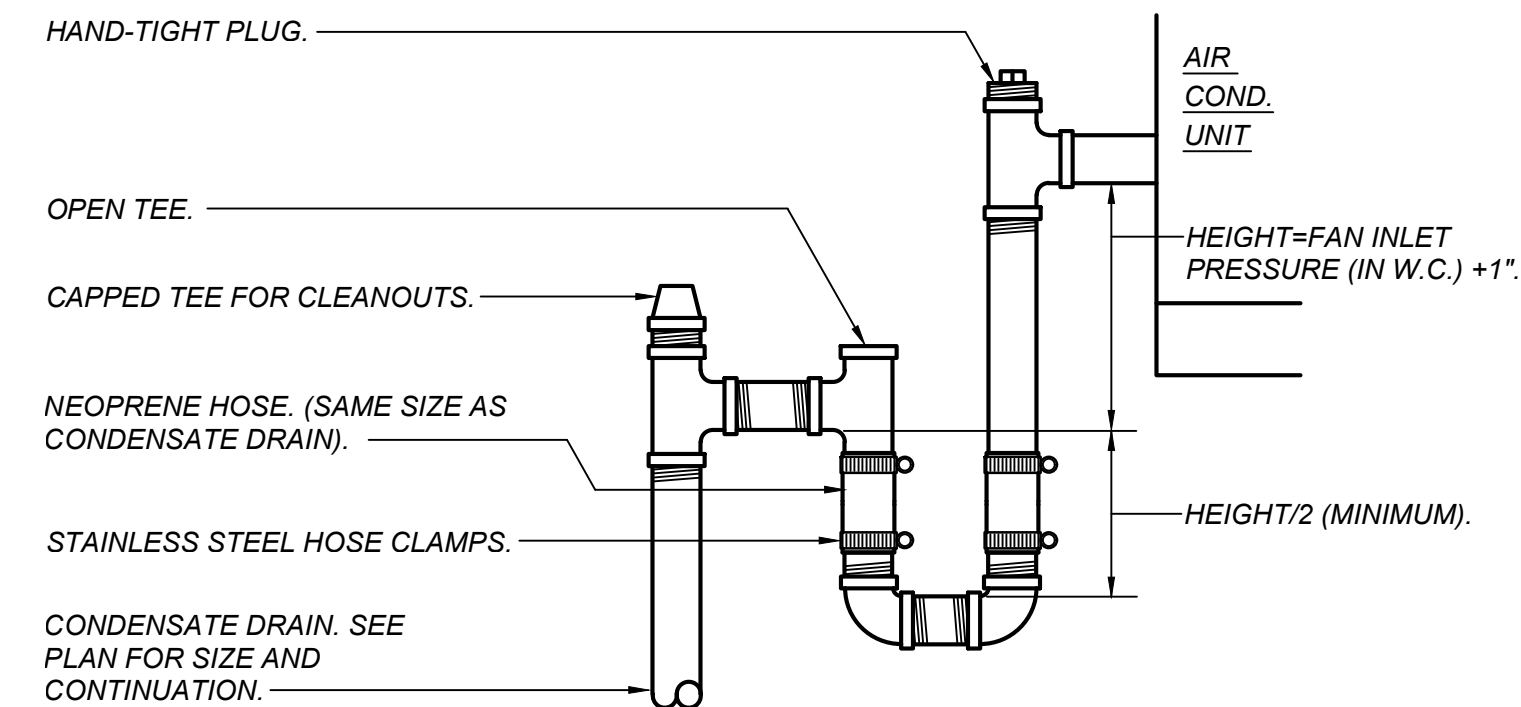
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### CLEANOUT TO GRADE DETAIL

SCALE: NONE

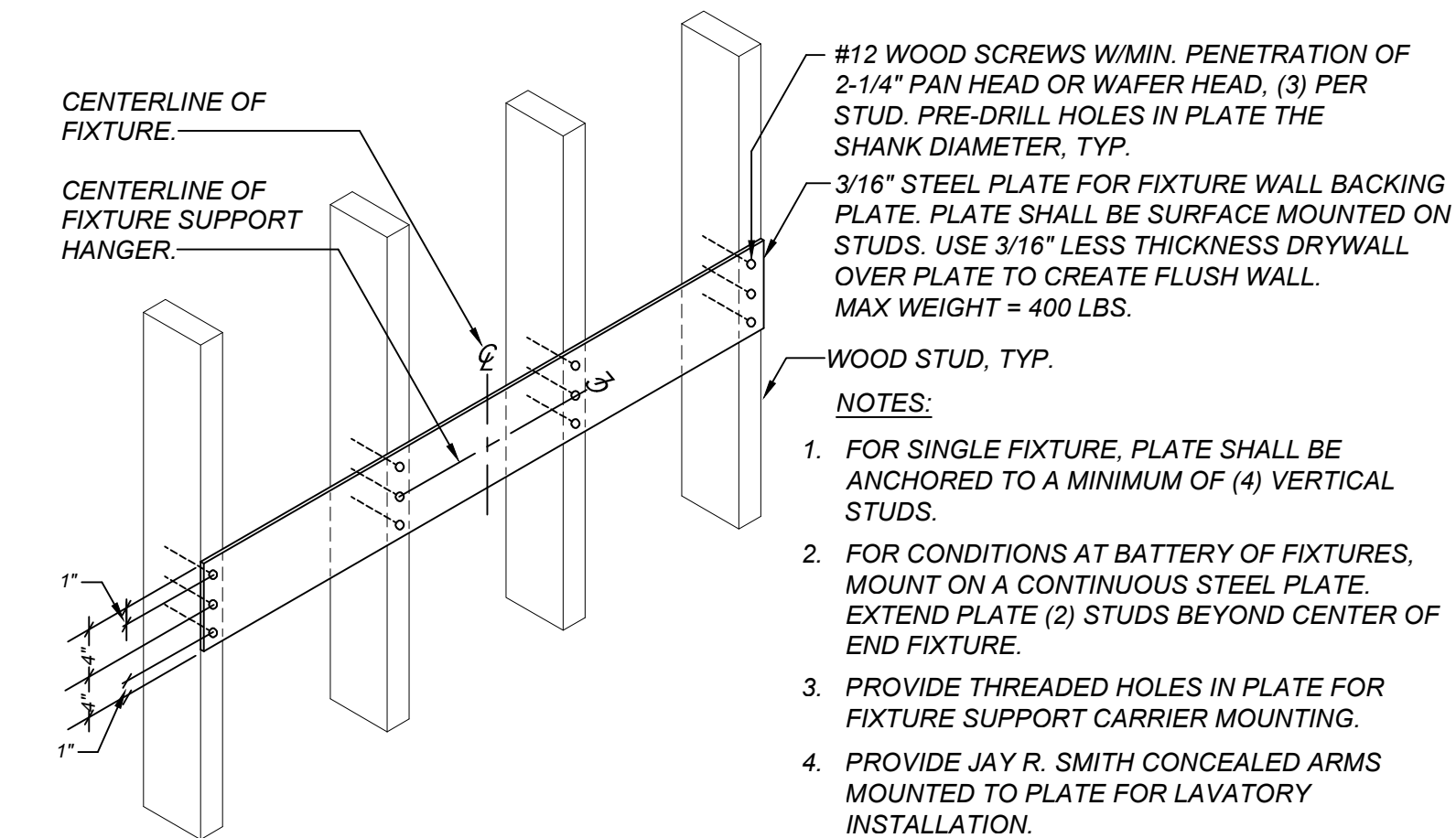
A  
P13



### CONDENSATE DRAIN CONNECTION DETAIL

SCALE: NONE

B  
P13



### WOOD STUD WALL

### FIXTURE SUPPORT BACKING PLATE DETAIL

SCALE: NONE

C  
P13



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REVISIONS

**MANGINI** ARCHITECTURE  
INGENUITY

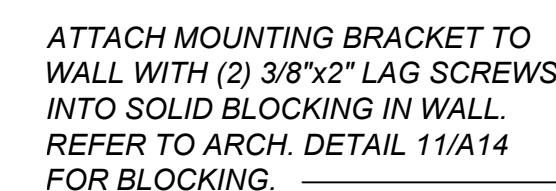
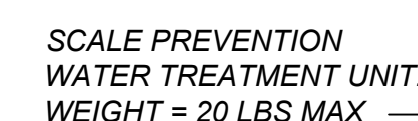
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**MANGINI ASSOCIATES INC.**  
34320 West Mineral King Avenue  
/salia, California 93291

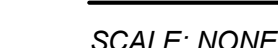
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TITLE  
PLUMBING  
DETAILS

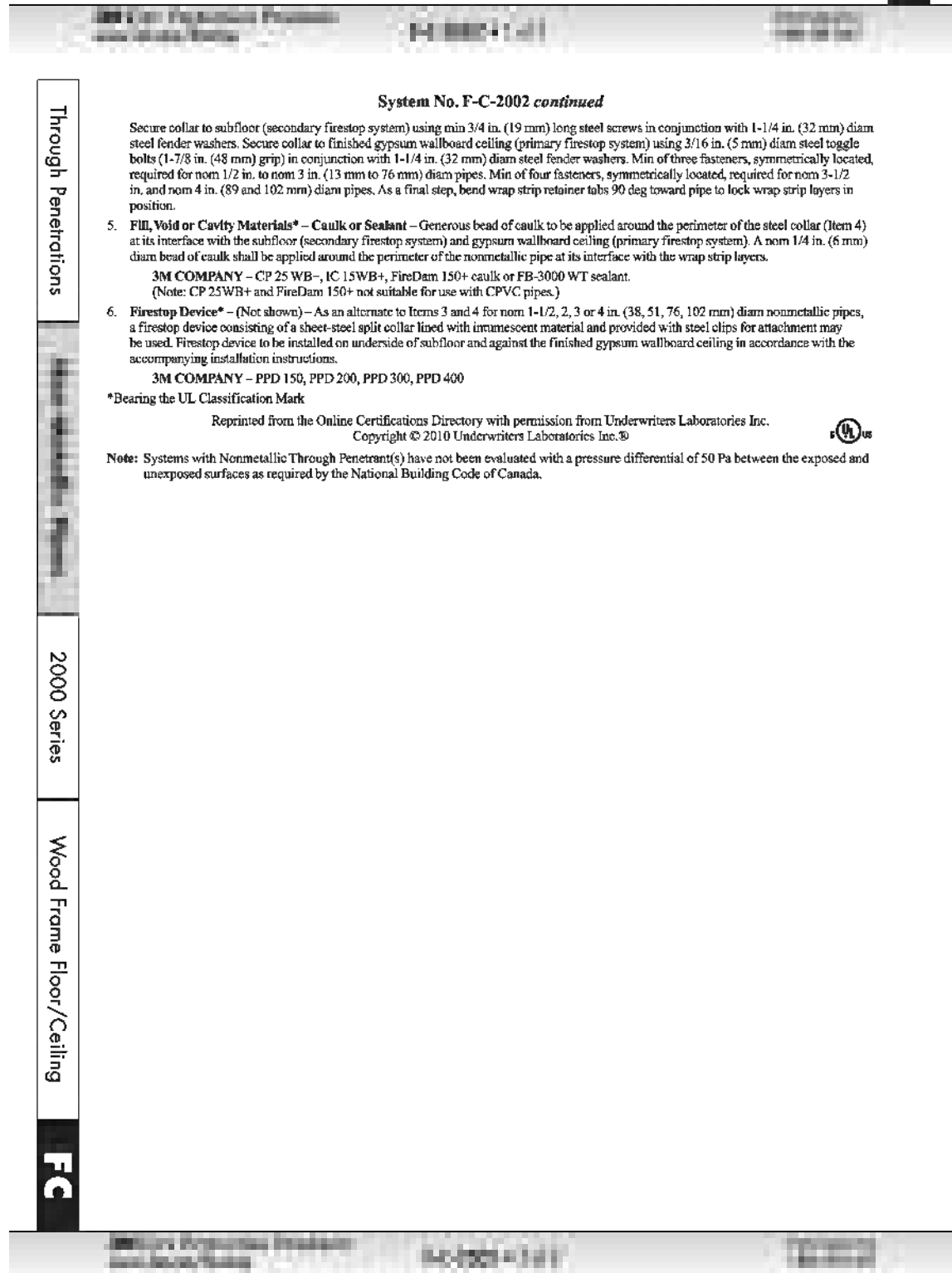
## P14

PROJECT **1751a**

SCALE: NONE



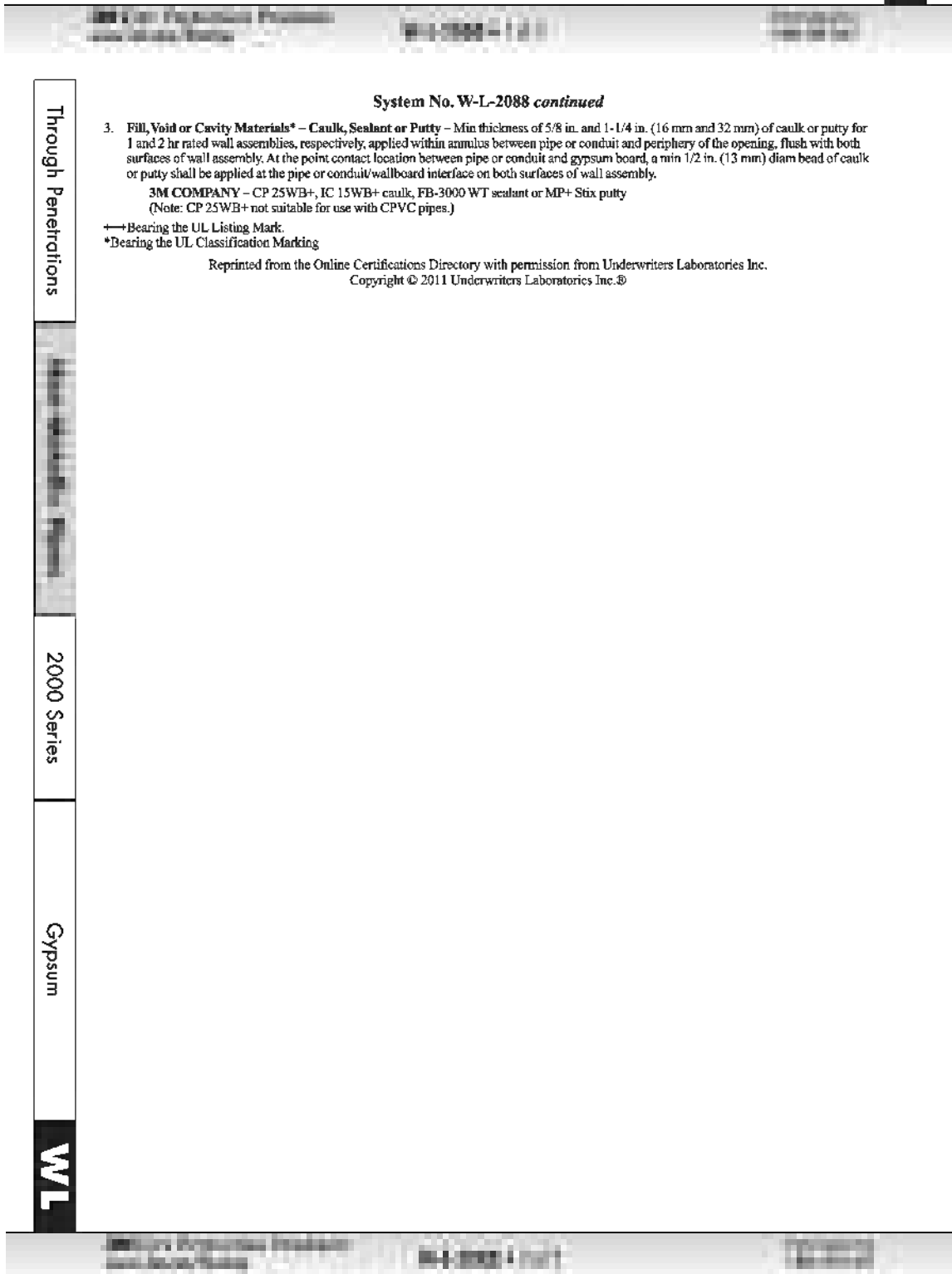




## FIRE STOPPING DETAIL

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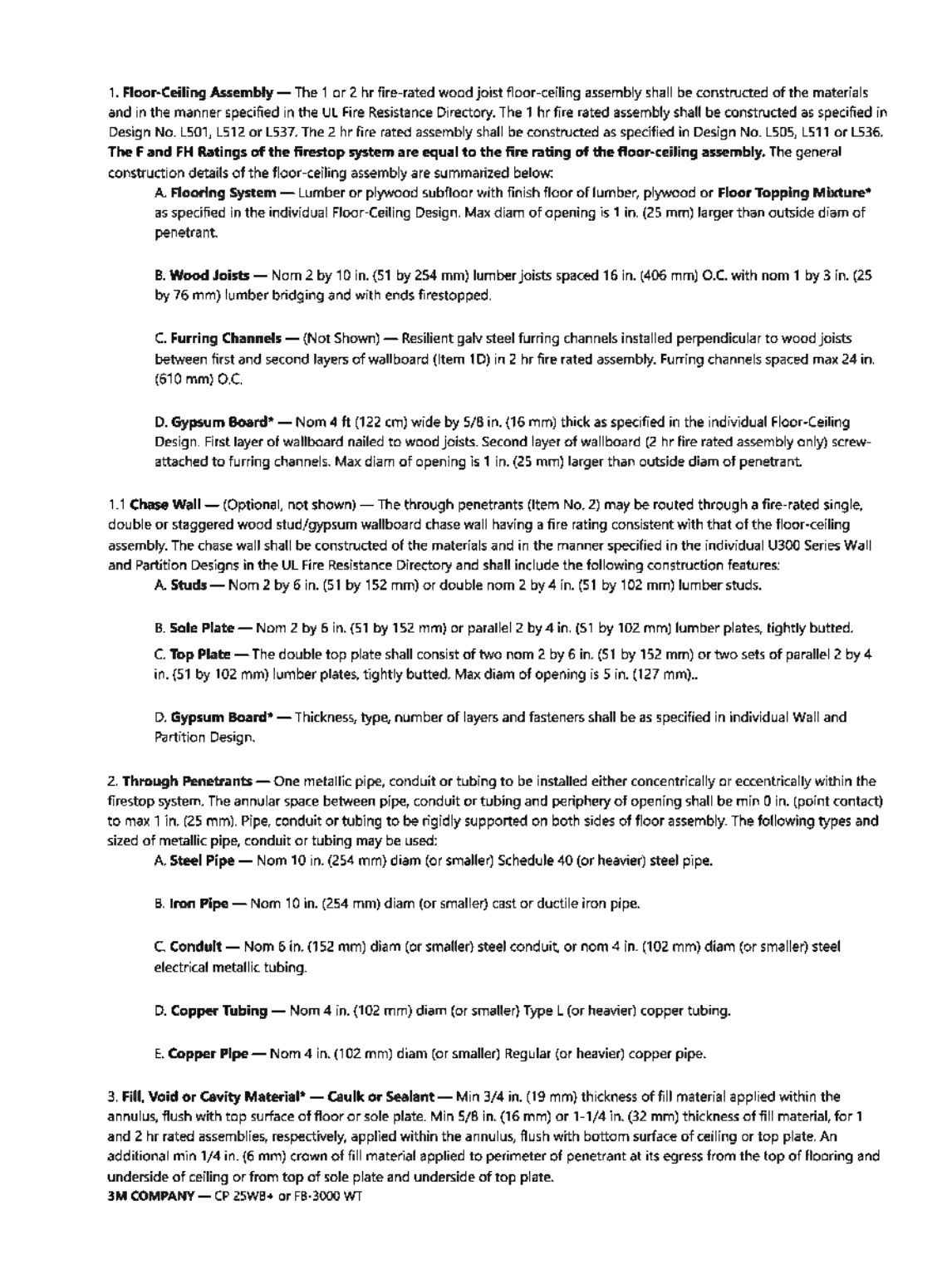
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P15



## FIRE STOPPING DETAIL

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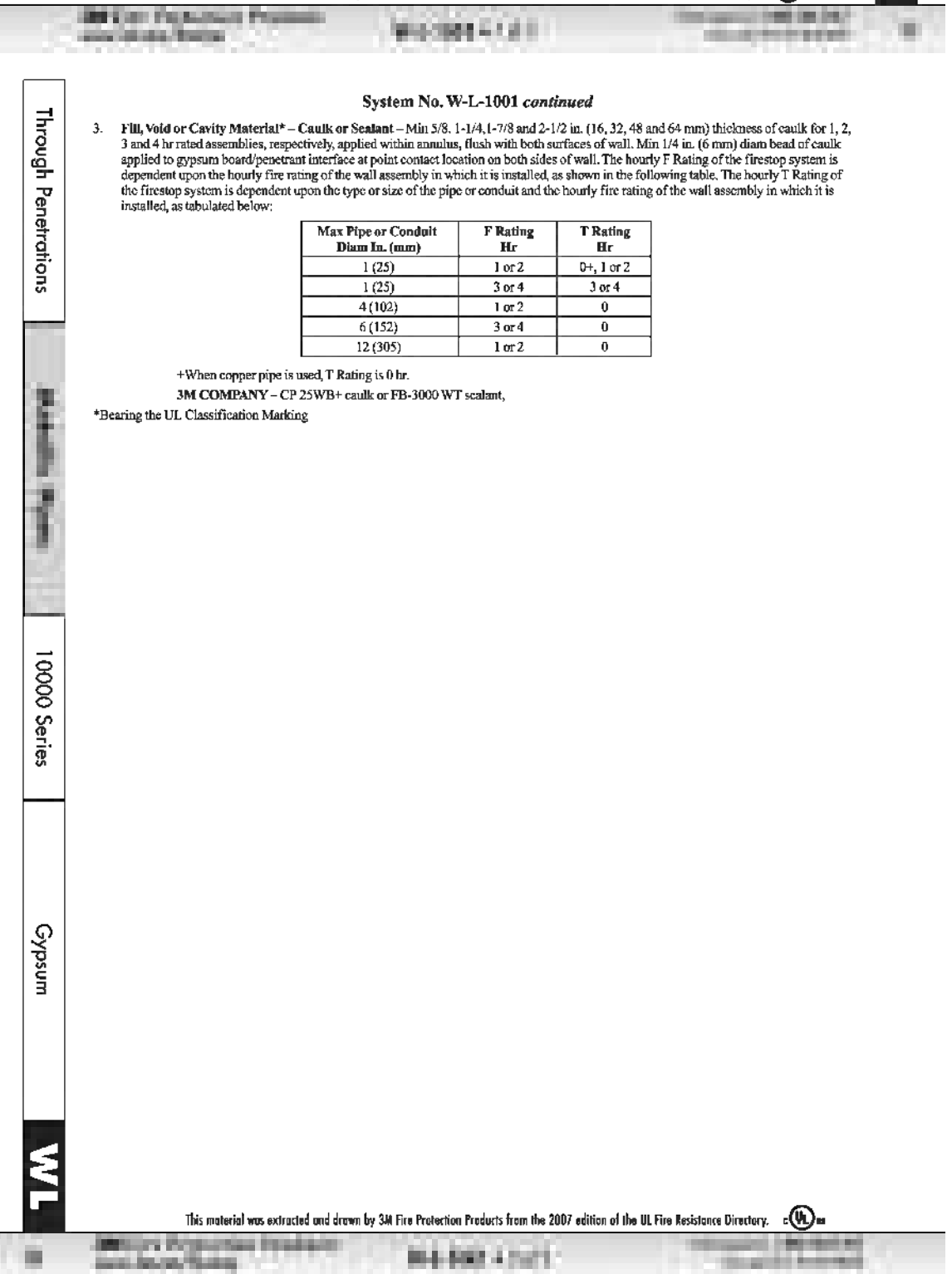
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P15



## FIRE STOPPING DETAIL

SCALE: NONE

C  
P15



## FIRE STOPPING DETAIL

SCALE: NONE

B  
P15



## FIRE STOPPING DETAIL

SCALE: NONE

A  
P15



REVISIONS

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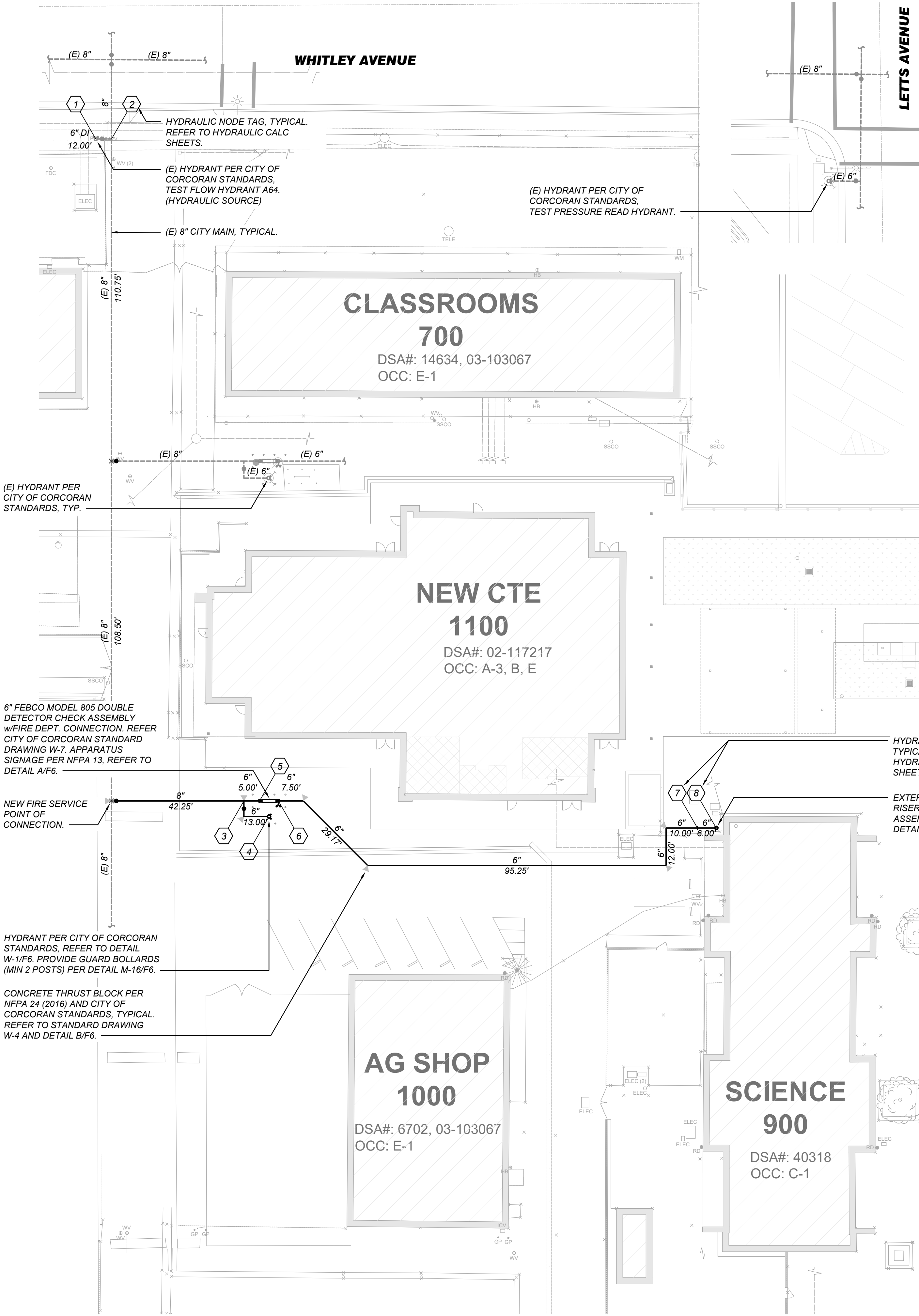
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## FIRE PROTECTION SITE PLAN

SCALE: 1" = 20'-0"



**KINGS COUNTY  
FIRE DEPARTMENT**  
280 Campus Drive, Hanford, CA 93230  
P (559) 852-2881 • F (559) 852-8261  
"Promote, Preserve and Protect Public Safety"  
Clay Smith, Fire Chief

Good Morning,

The hydrant information on Whitley Avenue and Josephine Avenue are as follows:

**Test Date: 04/27/22 @ 3:00pm**  
**Hydrant: A64**  
**Static: 44 PSI**  
**Residual: 40 PSI**  
**Flow: 1356 GPM**

Thank you,

D. Aaron Parreira  
Kings County Fire Department  
Fire Marshal/Battalion Chief  
559-852-2885

### SITE UNDERGROUND PLAN NOTES

1. THE UNDERGROUND PIPING PLAN AS SHOWN, IS INTENDED FOR CROSS-REFERENCING WITH THE HYDRAULIC CALCULATION SHEETS. VERIFY LOCATION OF EXISTING UNDERGROUND PIPING IN FIELD PRIOR TO ADDING ANY NEW CONNECTIONS.
2. THE UNDERGROUND FIRE PIPING INSTALLATION CONTRACTOR SHALL COORDINATE WITH APPLICABLE PLUMBING, CIVIL, LANDSCAPE, AND MECHANICAL PIPING PLANS PRIOR TO INSTALLATION.
3. ALL UNDERGROUND PIPE LENGTHS INDICATED ON PLANS REFLECT TOTAL PIPE LENGTH (CENTER TO CENTER) WITH NO TAKEOUT FOR FITTINGS.
4. ALL APPLICABLE UNDERGROUND FIRE SERVICE PIPING SHALL BE MANUFACTURED IN ACCORDANCE WITH NFPA 24 TABLE 24.10.1.1.1 AND SHALL BE EQUIPPED WITH A SUITABLE MAGNETIC LOCATION TAPE INSTALLED APPROPRIATELY TO THE TOP OF THE PIPING.

### APPLICABLE SPECIFICATIONS

1. THE CONTRACTOR IS RESPONSIBLE TO ADHERE TO ALL APPLICABLE SPECIFICATIONS PERTINENT TO THE PROJECT, INCLUDING:

CITY OF CORCORAN STANDARDS AND SPECIFICATIONS  
DIVISION OF THE STATE ARCHITECT INFORMATION BULLETINS, INTERPRETATIONS AND ADDENDA.

### GENERAL NOTES

SPRINKLER SYSTEM DESIGNED IN ACCORDANCE WITH NFPA 13 (2016), CFC/CBC (2019), DIVISION OF THE STATE ARCHITECT - DEPARTMENT OF GENERAL SERVICES, AND CITY OF CORCORAN STANDARDS. ALL WORK TO BE DONE IN ACCORDANCE WITH THESE PLANS AND ALL NATIONAL, STATE, AND LOCAL CODES.

THESE DRAWINGS ARE SCHEMATIC IN NATURE, AND ARE NOT INTENDED TO REFLECT FINAL, COORDINATED (AMONGST THE TRADES), INSTALLATION PLANS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FURNISH AND INSTALL ALL ITEMS REQUIRED FOR A COMPLETE, ACCEPTABLE WORKING INSTALLATION, WHETHER SHOWN OR NOT SHOWN, APPLICABLE TO ALL CITED CODES AND STANDARDS. AT TIME OF DESIGN FINAL, COORDINATED STRUCTURAL, MECHANICAL, PLUMBING, ELECTRICAL, AND SPECIAL EQUIPMENT PLANS WERE NOT AVAILABLE. IT SHALL BE THE RESPONSIBILITY OF THE SPRINKLER INSTALLATION CONTRACTOR TO COORDINATE WITH ALL TRADES.

CONTRACTOR TO REVIEW FOR BID, SCHEMATIC SYSTEM PLANS AS DESIGNED BY ENGINEER. ANY ALTERNATE PROPOSED DESIGN CHANGES OR REVISIONS BY CONTRACTOR, ARE TO BE SUBMITTED IN WRITTEN FORMAT, REVIEWED AND RESPONDED TO, BY ENGINEER PRIOR TO BIDDING. AFTER AWARD OF BID, ALL DEVIATIONS FROM THE ORIGINAL DESIGN INTENTION SHALL BE CLOUDED AND NOTED ON CONTRACTOR ISSUED SHOP DRAWINGS TO ENGINEER, WHICH HAVE BEEN COORDINATED AMONGST THE TRADES, FOR REVIEW AND APPROVAL BY ENGINEER.

GENERAL CONTRACTOR IS SOLELY RESPONSIBLE FOR INSURING ALL SUB-CONTRACTOR'S COORDINATE SHOP DRAWINGS PRIOR TO ORDERING OR INSTALLATION OF ANY EQUIPMENT, DEVICE, MATERIAL, ETC. SUBMISSION OF SHOP DRAWINGS TO THE ENGINEER CONSTITUTES THAT THE DRAWINGS SUBMITTED HAVE BEEN COORDINATED AMONGST THE TRADES. FAILURE TO COORDINATE ALL SHOP DRAWINGS AMONGST THE TRADES, FOR REVIEW AND APPROVAL BY ENGINEER, WILL NOT CONSTITUTE A CHANGE ORDER TO THE OWNER, FOR UNIDENTIFIED FIELD COORDINATION ISSUES.

ANY DESIGN REVISIONS OR DEVIATIONS THAT ARISE FROM COORDINATION OF INSTALLATION METHODS AND MEANS AMONGST THE TRADES DURING CONSTRUCTION, SHALL BE PROVIDED TO THE ARCHITECT BY RFI, DETAILING COORDINATION ISSUE AND PROPOSED SOLUTION. ONCE REVIEWED AND APPROVED BY ENGINEER, THE DESIGN REVISIONS OR DEVIATIONS SHALL BE COORDINATED IN THE FIELD AMONGST THE IMPACTED TRADES, AND SHOWN ON THE AS-BUILTS. A COMPLETE, ACCURATE SET OF AS-BUILTS SHALL BE MAINTAINED ONSITE DURING CONSTRUCTION, AND ARE TO BE ISSUED TO ARCHITECT AND ENGINEER UPON COMPLETION, INSPECTION, AND TESTING OF INSTALLATION.

CONTRACTOR TO PROVIDE SIX (6) SETS OF THE FOLLOWING:

- A. FULLY COORDINATED AMONGST THE TRADES INSTALLATION SHOP DRAWINGS, INCLUDING ALL PIPE CUT LENGTHS, FITTINGS, HANGERS, BRACES, SPRINKLERS WITH LEGEND, HYDRAULIC AND SEISMIC CALCULATIONS, AND PRODUCT SUBMITTAL.
- B. BOUND SUBMITTAL TO INCLUDE COVER PAGE, PIPING, HARDWARE, AND MATERIALS (INCLUDING FIRE STOPPING). COVER PAGE TO INCLUDE PROJECT NAME, SPRINKLER CONTRACTOR, GENERAL CONTRACTOR, ARCHITECT, AND DATE SUBMITTED FOR REVIEW.

ALL ITEMS REQUIRED BY NFPA 13 (2016) CHAPTER 23 (FOR WORKING DRAWINGS) SHALL BE PROVIDED ON THE SHOP DRAWINGS. SUBMITTALS ARE IN ADDITION TO, AND NOT IN LIEU OF, THIS REQUIREMENT.

CLEVIS TYPE HANGERS SHALL BE INSTALLED AT TOP OF RISER, AND AS SHOWN ON RISER DETAILS. LOOP TYPE HANGERS ARE ACCEPTABLE IN ALL OTHER AREAS.

FINAL INSTALLATION SPACING FOR SPRINKLER SYSTEM PIPING AND SPRINKLERS, MAY VARY WITH FIELD COORDINATION ISSUES. ALL VARIANCES TO COMPLY WITH LISTING OF SPRINKLERS, NFPA 13 (2016), CFC/CBC (2019), DIVISION OF THE STATE ARCHITECT - DEPARTMENT OF GENERAL SERVICES, AND CITY OF CORCORAN REQUIREMENTS.

ALL HANGERS, THREADED ROD, BRACING COMPONENTS AND HARDWARE, SHALL BE HOT DIPPED GALVANIZED - OR FACTORY COATED GALVANIZED - FOR ALL EQUIPMENT AND COMPONENTS IN EXTERIOR APPLICATIONS. ALL FASTENERS USED (IE BOLTS - NUTS / WASHERS) TO BE STAINLESS STEEL.

SPRINKLERS ARE TO BE LOCATED CENTER TILE (OR AS SHOWN) ACCORDING TO INDUSTRY STANDARDS AND PRACTICES.

LOCATION OF SEISMIC BRACING AND HANGERS ARE SCHEMATIC IN NATURE AND INTENDED TO SHOW APPROXIMATE LOCATIONS. SPRINKLER CONTRACTOR SHALL BE RESPONSIBLE FOR SHOWING THE EXACT LOCATION OF SEISMIC RESTRAINTS ON SUBMITTED COORDINATED AMONGST THE TRADES SHOP DRAWINGS, AND FINAL AS-BUILTS.

SUBMITTED SHOP DRAWINGS SHALL DESIGNATE THE TYPE AND LOCATION OF EACH BRACE, HANGER OR RESTRAINT, AND SHALL BE ACCOMPANIED BY A DETAIL WITH LEGEND, AND CALCULATIONS (IF APPLICABLE) IN ACCORDANCE WITH NFPA 13 (2016), CFC/CBC (2019), AND THE APPROPRIATE SEISMIC DESIGN CRITERIA FOR THE PROJECT.

ANY SUBSTITUTION OF "FLEXIBLE" TYPE PIPING IN LIEU OF "RIGID" PIPE, OR ANY CHANGES TO SIZE, MANUFACTURER, OR LENGTHS OF "FLEXIBLE" TYPE PIPING WILL REQUIRED RE-SUBMITTAL OF PIPING PLANS, PRODUCT DATA SHEETS, AND HYDRAULIC CALCULATIONS TO DIVISION OF THE STATE ARCHITECT - DEPARTMENT OF GENERAL SERVICES (FIRE LIFE SAFETY) FOR REVIEW AND APPROVAL.

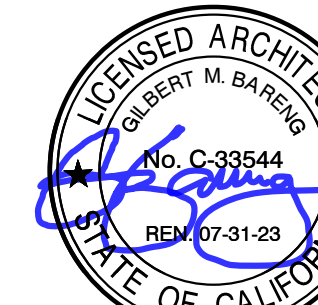
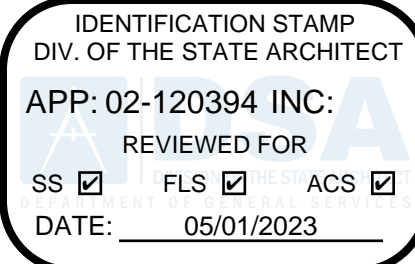
SHOP DRAWINGS THAT HAVE NOT BEEN COORDINATED AMONGST THE TRADES UTILIZING THE MOST CURRENT 2D/3D FILES, WILL NOT BE ACCEPTED FOR REVIEW.

ELECTRONIC (DIGITAL) SUBMITTAL IN PDF FORMAT IS ACCEPTABLE, IF PREPARED IN ACCORDANCE WITH SPECIFICATION 2105 00, SECTION (1-10, A, 5). SUBMITTALS NOT CONFORMING TO THE SPECIFICATION WILL NOT BE REVIEWED.

### SITE PIPING SPECIFICATIONS

PIPING TO BE AS FOLLOWS:

1. UNDERGROUND SITE PIPING SHALL BE DR18 PVC UPSTREAM OF THE FIRE DEPARTMENT CONNECTION PER LOCAL AUTHORITY HAVING JURISDICTION REQUIREMENTS, AND SHALL BE DR14 PVC DOWNSTREAM OF THE FIRE DEPARTMENT CONNECTION.
2. UNDERGROUND PIPING INSTALLATION TO MEET REQUIREMENTS OF NFPA 13 (2016), NFPA 24 (2016), CBC/CFC (2019), DIVISION OF THE STATE ARCHITECT - DEPARTMENT OF GENERAL SERVICES, AND CITY OF CORCORAN REQUIREMENTS.
3. ALL PIPE TO BE INSTALLED 36" MIN. BELOW GRADE, OR AS APPLICABLE TO LOCATION, AS PER NFPA 13 (2016), NFPA 24 (2016), CBC/CFC (2019), DIVISION OF THE STATE ARCHITECT - DEPARTMENT OF GENERAL SERVICES, AND CITY OF CORCORAN REQUIREMENTS.
4. ALL THRUST BLOCKS & RESTRAINING GLANDS TO BE POURED IN PLACE AND SIZED IN ACCORDANCE TO NFPA 13 (2016), NFPA 24 (2016), CBC/CFC (2019), DIVISION OF THE STATE ARCHITECT - DEPARTMENT OF GENERAL SERVICES, AND CITY OF CORCORAN REQUIREMENTS.
5. UNDERGROUND PIPING RISING UP AT BASE OF RISER SHALL BE A STAINLESS STEEL, SINGLE PIECE IN-BUILDING RISER, LISTED FOR FIRE PROTECTION USE.
6. ALL MECHANICAL JOINT FITTINGS SHALL BE COATED WITH A NON-OXIDIZING, CORROSIVE PROHIBITING COATING, AND WRAPPED WITH 2 MIL POLY WRAP.
7. ALL UNDERGROUND PIPING, COATED / WRAPPED FITTINGS, VALVES, DETECTION WIRE LOCATION AND TYPE, ETC TO BE INSPECTED BY ONSITE IOR BEFORE BACKFILL.
8. PER NFPA 24 §6.2.9(1)(a), THE POST INDICATOR VALVE MINIMUM DISTANCE TO BUILDING SHALL NOT BE LESS THAN THE HEIGHT OF THE EXTERIOR WALL FACING THE POST INDICATOR VALVE.



DATE: AUGUST 24, 2022

**MODERNIZATION AT  
CORCORAN HIGH SCHOOL**  
1100 LETTS AVE., CORCORAN, CA. 93212



REVISIONS

**MANGINI**  
ARCHITECTURE  
INGENUITY  
McLAIN BARENG MORRELL SCOTT  
www.mangini.us  
MANGINI ASSOCIATES INC.  
4320 West Mineral King Avenue  
Visalia, California 93271  
(559) 627-0530 Office  
(559) 627-1526 Fax

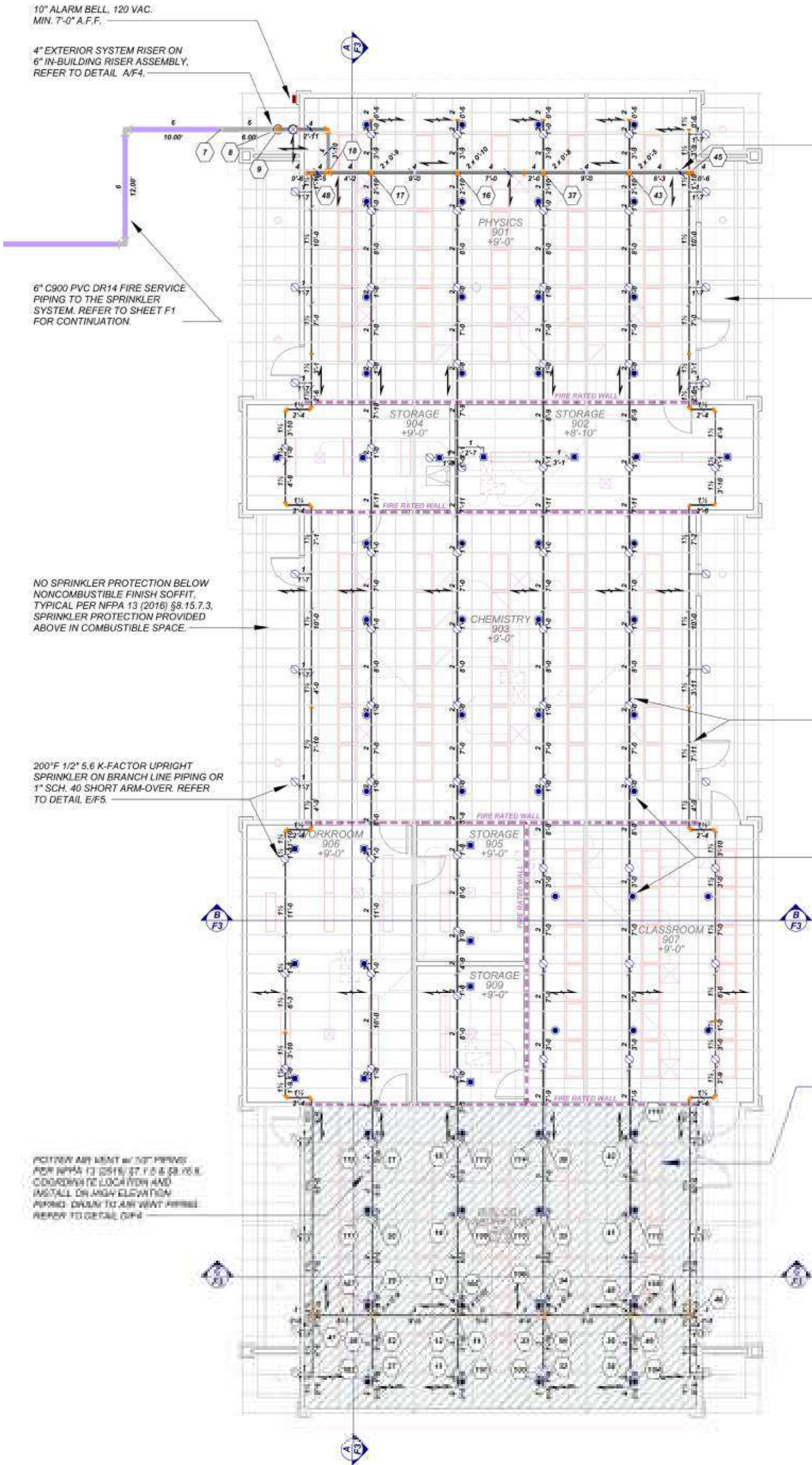
TITLE  
FIRE PROTECTION  
SITE PLAN

**F1**  
PROJECT **1751**

**LAWRENCE**  
ENGINEERING GROUP  
7084 N. Maple Ave., Suite 101  
(559) 431-0101 21173  
Fresno, CA 93720  
FAX (559) 431-1362







Sprinkler Legend									
Symbol	Manufacturer	SIN	Model	Quantity	K-Factor	Type	Size	Response	Note
	Victaulic	V3406	V34	54	8	Pendent	3/4"	Quick	Chrome 155°F
	Victaulic	V3406	V34	17	8	Pendent	3/4"	Quick	Chrome 155°F
	Victaulic	V2704	V27	95	5.6	Upright	1/2"	Quick	Brass 200°F
	Victaulic	V2704	V27	1	5.6	Upright	1/2"	Quick	Brass 200°F
				Total = 167					

MAIN PIPING HANGER, TYPICAL.  
REFER TO DETAILS C/F7 & D/F7.

NO SPRINKLER PROTECTION BELOW  
NONCOMBUSTIBLE FINISH SOFFIT.  
TYPICAL PER NFPA 13 (2016) §8.15.7.3.  
SPRINKLER PROTECTION PROVIDED  
ABOVE IN COMBUSTIBLE SPACE.

BRANCH LINE HANGER, TYPICAL.  
REFER TO DETAIL A/F7.

PENDENT SPRINKLER ON FLEXIBLE  
SPRINKLER FITTING, TYP. REFER TO  
DETAILS A/F5 AND C/F5.

REMOTE AREA 1  
ORD. HAZARD II

Hydraulic Information	
Remote Area 1	
OCCUPANCY CLASSIFICATION	Ordinary Group II
DENSITY (gpm/ft <sup>2</sup> )	0.20 for (280,000) (Actual 120,000)
TOTAL FLOOR STREAMS	1765.00
TOTAL HEADS FLOWING	18
K-FACTOR	8
TOTAL WATER REQUIRED	638.37
TOTAL PRESSURE REQUIRED	35.438
BASE (at RISER) (psi)	368.37
BASE (at RISER) (psi)	27.208
SAFETY MARGIN (psi)	+7.879 (17.6%)
PER NFPA 13 (2016) §11.2.3.3.1, WATER SUPPLY REQUIREMENTS FOR SPRINKLER SYSTEM SHALL BE BASED UPON THE ROOM THAT CREATES THE GREATEST DEMAND. THE ROOM SHALL MEET NFPA 13 (2016) §11.2.3.3.3 & §11.2.3.3.3.1 REQUIREMENTS AND HAVE A MINIMUM 0.20 GPM/FT <sup>2</sup> DENSITY WITHIN THE ROOM.	

SPRINKLER SYSTEM NOTES

- SYSTEM DESIGN:
- SYSTEM SHALL BE DESIGNED TO CONFORM WITH NFPA 13 (2016), CBC/CBC (2019), DIVISION OF THE STATE ARCHITECT - DEPARTMENT OF GENERAL SERVICES, CITY OF CORCORAN AND KINGS COUNTY FIRE DEPARTMENT.
  - SYSTEM TO BE AN AUTOMATIC, WET TYPE SPRINKLER SYSTEM.
  - SPRINKLER DISCHARGE DENSITY FOR THIS PROJECT SHALL BE IN ACCORDANCE WITH NFPA 13 (2016) §11.2.1.2.4 WITH DENSITY CURVES IN ACCORDANCE WITH FIGURE 11.2.3.1.1.
    - LIGHT HAZARD OCCUPANCY SHALL INCLUDE ALL OFFICE, CORRIDOR, DINING, CONCEALED ATTIC SPACES, RESTROOMS, AND SIMILAR AREAS. LIGHT HAZARD OCCUPANCY SHALL HAVE A DESIGN DENSITY OF 0.10 GPM/FT<sup>2</sup> OVER A MINIMUM REMOTE AREA OF 1500 FT<sup>2</sup>.
    - ORDINARY HAZARD GROUP I (OH1) SHALL FOOD SERVICE AREAS AND SIMILAR AREAS. OH1 OCCUPANCY SHALL HAVE A DENSITY OF 0.15 GPM/FT<sup>2</sup> OVER A MINIMUM REMOTE AREA OF 1500 FT<sup>2</sup>.
    - ORDINARY HAZARD GROUP II (OH2) SHALL INCLUDE AUTOMOTIVE WORKSHOP AREAS, STORAGE ROOMS, JANITOR CLOSETS, MECHANICAL ROOMS, AND SIMILAR AREAS. OH2 OCCUPANCY SHALL HAVE A DESIGN DENSITY OF 0.20 GPM/FT<sup>2</sup> OVER A MINIMUM REMOTE AREA OF 1500 FT<sup>2</sup>.
  - POINT OF SERVICE SHALL BE AT THE 8" SUPPLY MAIN AS SHOWN.
  - PER NFPA 13 (2016) §8.6.4.1.2(1) UPRIGHT SPRINKLER DEFLECTORS SHALL BE INSTALLED WITHIN THE HORIZONTAL PLANES OF 1" TO 6" BELOW THE STRUCTURAL MEMBERS AND A MAXIMUM OF 22" BELOW THE CEILING/ROOF DECK.
  - PER NFPA 13 (2016) §9.3.6.5 BRANCH LINE RESTRAINT SHALL NOT BE REQUIRED WHERE BRANCH LINES ARE SUPPORTED BY RODS LESS THAN 6" IN LENGTH WHEN MEASURED BETWEEN THE TOP OF THE PIPE TO THE POINT OF ATTACHMENT TO THE BUILDING STRUCTURE.
  - FIRE SPRINKLER ALARM SYSTEM SHALL BE DESIGNED, INSTALLED AND PERMITTED BY OTHERS, AND IS NOT IN THE SCOPE OF WORK. FLOW DETECTOR AND TAMPER RESISTANT VALVES WILL BE SUPPLIED AND INSTALLED BY FIRE SPRINKLER CONTRACTOR AND WIRED BY ALARM CONTRACTOR.
  - SPRINKLER SYSTEM SHALL BE SINGLE ZONE (SEE RISER DETAIL).
  - FIRE SPRINKLER PIPING SHALL BE AS FOLLOWS (UNLESS NOTED OTHERWISE ON PLANS):
    - PIPING 2-1/2" AND LARGER SHALL BE SCH.10 BLACK STEEL WITH ROLLED FITTINGS, RISER TO BE SCH.10 GALVANIZED STEEL PIPE.
    - PIPING 2" AND LESS SHALL BE SCH.40 BLACK STEEL.
  - ALL HANGERS, BRACES, AND RESTRAINTS SHALL BE INSTALLED IN ACCORDANCE WITH NFPA 13 (2016), CBC/CFC (2019), DIVISION OF THE STATE ARCHITECT - DEPARTMENT OF GENERAL SERVICES, CITY OF CORCORAN FIRE REQUIREMENTS.
  - PROVIDE CAGE-TYPE SPRINKLER HEAD GUARDS TO ALL SPRINKLERS, TO MINIMIZE CHANCE OF MECHANICAL DAMAGE TO SPRINKLER HEADS WHEN APPLICABLE.
  - IF DESIGN OR MATERIALS DIFFER FROM THAT SPECIFIED HEREIN, SUPPLEMENTAL ENGINEERING DESIGN, SUBMITTAL, AND REVIEW SHALL BE REQUIRED.
  - MICROBIAL INDUCED CORROSION WILL NOT BE A FACTOR FOR THIS SYSTEM.
  - ACCEPTANCE TEST IN ACCORDANCE WITH NFPA 13 (2016), CBC/CFC (2019), DIVISION OF THE STATE ARCHITECT - GENERAL SERVICES DEPARTMENT, CITY OF CORCORAN, AND CITY OF CORCORAN FIRE DEPARTMENT REQUIREMENTS.
  - HYDRAULIC CALCULATIONS SHALL BE TO THE STREET CONNECTION, ACCORDING TO LOCAL FIRE PREVENTION DISTRICT WATER CURVE DETERMINATIONS AND OR TESTING PROCEDURES.

SPRINKLER LEGEND	
SYMBOL	DESCRIPTION
	LATERAL SEISMIC BRACE (PERPENDICULAR)
	LONGITUDINAL SEISMIC BRACE (PARALLEL)
	4-WAY SEISMIC BRACE (PARALLEL/PERPENDICULAR)
	LINE RESTRAINT
	PIPE HANGERS
	PENDENT SPRINKLER ON 1" DROP
	UPRIGHT SPRINKLER ON BRANCH LINE
	SEISMIC SEPARATION ASSEMBLY
	HYDRAULIC NODE
	FIRE PIPING
	EXISTING FIRE PIPING

IDENTIFICATION STAMP  
DIV. OF THE STATE ARCHITECT  
APP: 02-120394 INC:  
REVIEWED FOR  
SS ☒ FLS ☒ ACS ☒  
DATE: 05/01/2023



DATE: AUGUST 24, 2022

**MODERNIZATION AT  
CORCORAN HIGH SCHOOL**  
1100 LETTS AVE., CORCORAN, CA. 93212

CORCORAN UNIFIED SCHOOL DISTRICT  
1520 PATTERSON AVE., CORCORAN, KINGS COUNTY, CA. 93212



REVISIONS	

**MANGINI** | ARCHITECTURE  
INGENUITY  
McLAIN BARENG MORRELL SCOTT  
MANGINI ASSOCIATES INC.  
4320 West Mineral King Avenue  
Visalia, California 93221  
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(559) 627-0530 Office  
(559) 627-1520 Fax

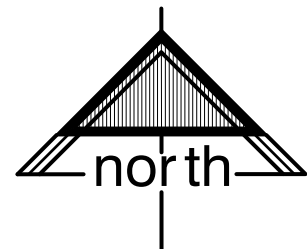
TITLE  
BLDG. 900  
FIRE PROTECTION  
PLAN

**F2**

PROJECT **1751**

**FIRE PROTECTION PLAN**

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



**LAWRENCE  
ENGINEERING GROUP**  
7084 N. Maple Ave., Suite 101  
(559) 431-0101 21173  
Fresno, CA 93720  
FAX (559) 431-1362





18 January 2023 8:26 AM P:\2022\22035 Corcoran HS Modernization BLDG 900\Drawings\F\3 - SECTION DRAWINGS.dwg bot

IDENTIFICATION STAMP  
DIV. OF THE STATE ARCHITECT  
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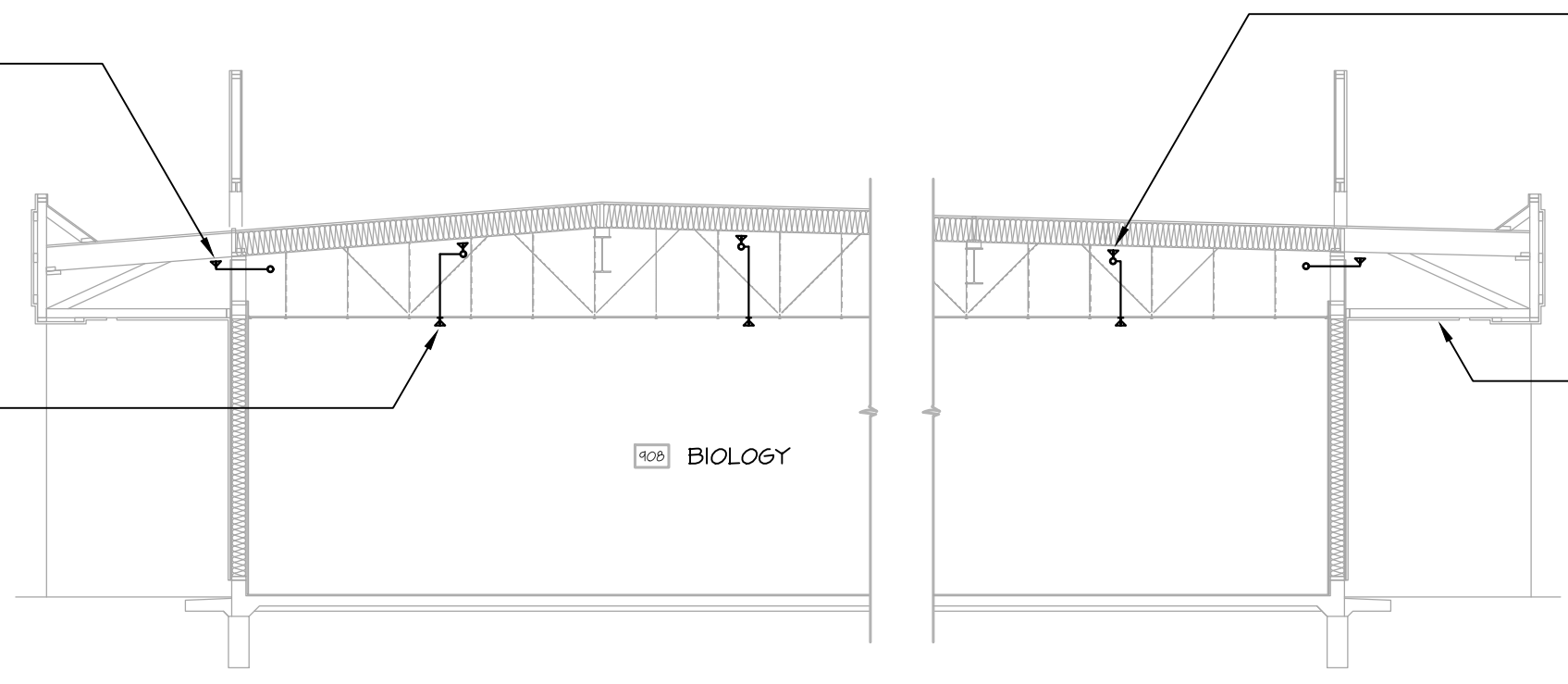
TITLE  
SECTION DRAWINGS

**F3**

PROJECT **1751**

200°F 1/2" QR UPRIGHT  
SPRINKLER ON 1" SCH. 40  
THREADED ARM-OVER.

155°F 3/4" 8.0K-FACTOR QR  
PENDENT SPRINKLER ON 1"  
THREADED SPRINKLER  
DROP, TYPICAL.



200°F 1/2" QR UPRIGHT SPRINKLER  
ON SCH. 10 GROOVED/WELDED  
OUTLET BRANCH LINE.

T-BAR CEILING  
+9'-0" A.F.F.

NO SPRINKLER PROTECTION PER  
NFPA 13 (2016) §8.15.7.3,  
CONCEALED COMBUSTIBLE SPACE  
SPRINKLER ABOVE EXTERIOR  
SOFFIT w/ NONCOMBUSTIBLE  
EXPOSED FINISH.

FINISHED FLOOR  
+0'-0"

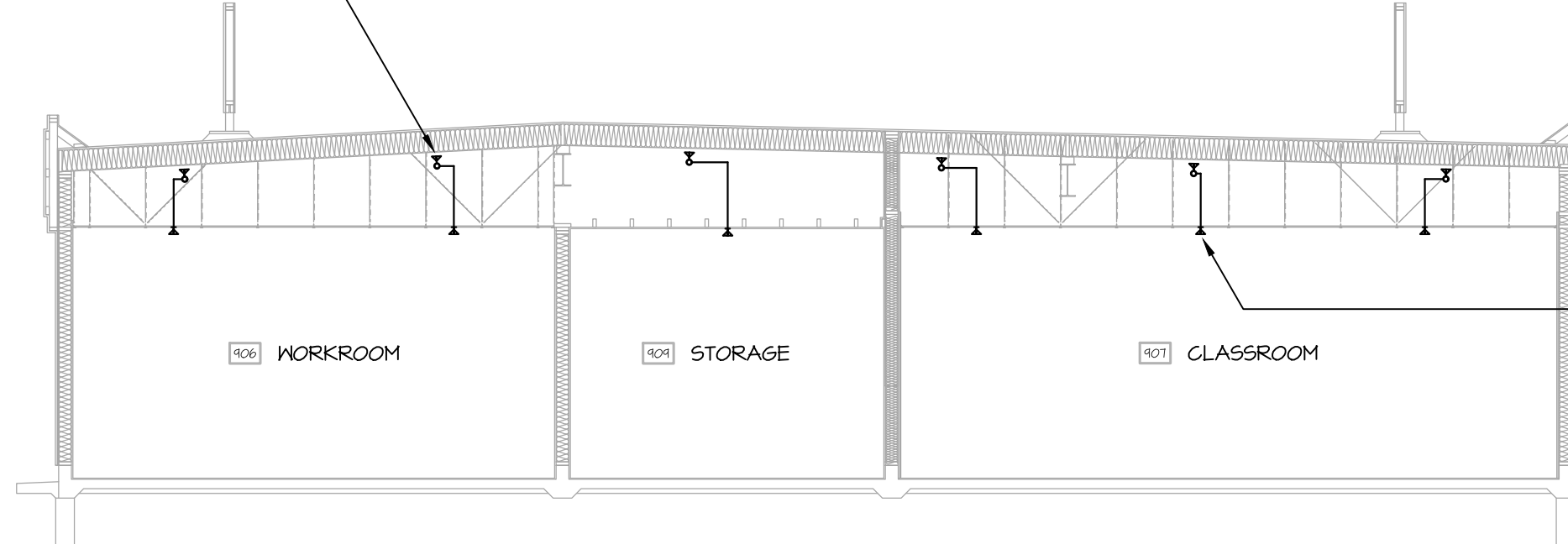
**BUILDING SECTION**

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

FSS102

C  
F3

200°F 1/2" QR UPRIGHT SPRINKLER  
ON SCH. 10 GROOVED/WELDED  
OUTLET BRANCH LINE.



T-BAR CEILING  
+9'-0" A.F.F.

155°F 3/4" 8.0K-FACTOR QR  
PENDENT SPRINKLER ON 1"  
THREADED SPRINKLER DROP,  
TYPICAL.

FINISHED FLOOR  
+0'-0"

**BUILDING SECTION**

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

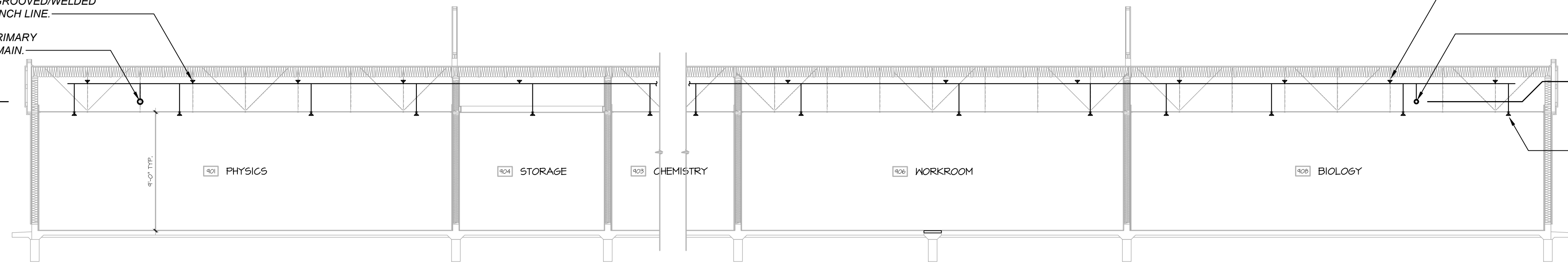
FSS102

B  
F3

200°F 1/2" QR UPRIGHT SPRINKLER  
ON SCH. 10 GROOVED/WELDED  
OUTLET BRANCH LINE.

4" SCH. 10 PRIMARY  
SPRINKLER MAIN.

4" Ø PRIMARY MAIN  
+9'-9" A.F.F.



200°F 1/2" QR UPRIGHT SPRINKLER  
ON SCH. 10 GROOVED/WELDED  
OUTLET BRANCH LINE.

3" SCH. 10 SECONDARY  
SPRINKLER MAIN.

3" Ø SECONDARY MAIN  
+9'-10" A.F.F.

T-BAR CEILING  
+9'-0" A.F.F.

155°F 3/4" 8.0K-FACTOR QR  
PENDENT SPRINKLER ON 1"  
THREADED SPRINKLER DROP,  
TYPICAL.

FINISHED FLOOR  
+0'-0"

**BUILDING SECTION**

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

FSS102

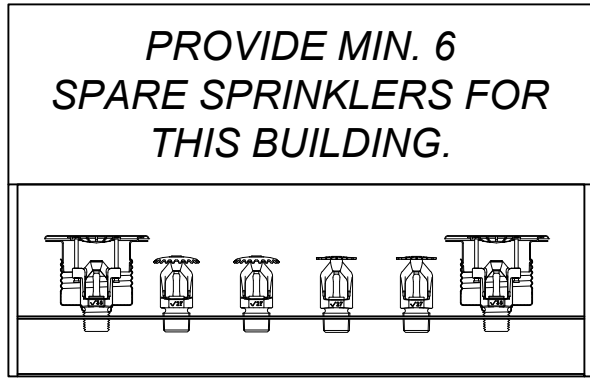
A  
F3

**LAWRENCE  
ENGINEERING GROUP**

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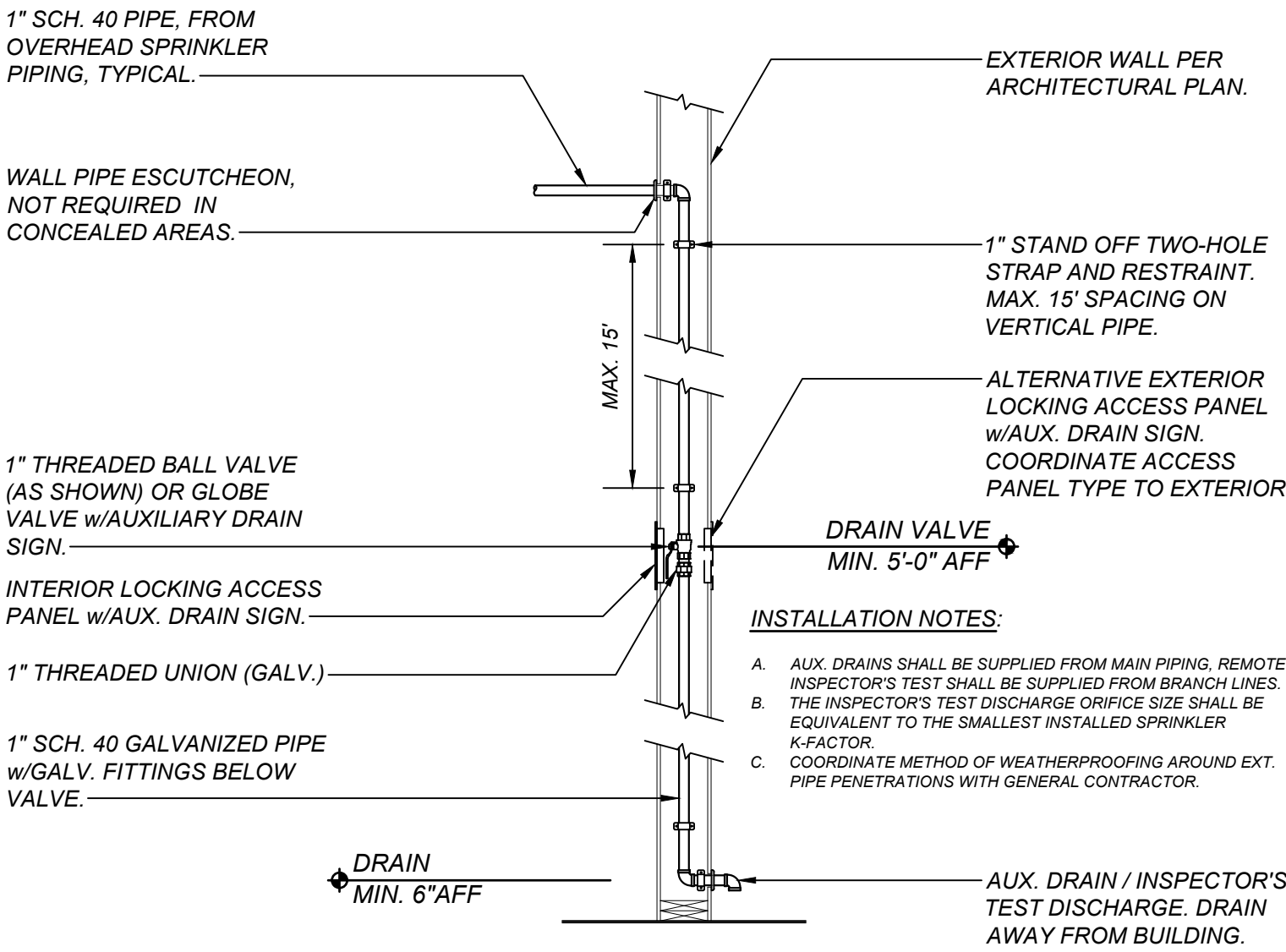
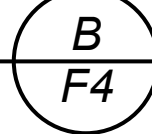
SPARE HEAD BOX NOTES:

- PER NFPA 13 (2016) §6.2.9.3 THE SPRINKLERS SHALL BE KEPT IN A CABINET LOCATED WHERE THE TEMPERATURE TO WHICH THEY ARE SUBJECTED WILL AT NO TIME EXCEED THE MAXIMUM CEILING TEMPERATURES SPECIFIED IN TABLE 6.2.5.1 FOR EACH OF THE SPRINKLERS WITHIN THE CABINET.
- THE SPARE HEAD CABINET SHALL BE PLACED IN A SECURE LOCATION, PREFERABLY FASTENED TO A WALL ABOVE 5'-0" A.F.F. LOCATION SHALL BE COORDINATED BY THE OWNER.
- PER NFPA 13 (2016) §6.2.9.5 THE STOCK OF SPARE SPRINKLERS SHALL INCLUDE ALL TYPES AND RATINGS INSTALLED AND SHALL BE AS FOLLOWS:
  - FOR PROTECTED FACILITIES HAVING UNDER 300 SPRINKLERS — NO FEWER THAN SIX SPRINKLERS.
  - FOR PROTECTED FACILITIES HAVING 300 TO 1000 SPRINKLERS — NO FEWER THAN 12 SPRINKLERS.
  - FOR PROTECTED FACILITIES HAVING OVER 1000 SPRINKLERS — NO FEWER THAN 24 SPRINKLERS.
  - A MINIMUM OF TWO SPRINKLERS OF EACH TYPE AND TEMPERATURE RATING SHOULD BE PROVIDED.
- PER NFPA 13 (2016) §6.2.9.6 ONE SPRINKLER WRENCH AS SPECIFIED BY THE SPRINKLER MANUFACTURER SHALL BE PROVIDED IN THE CABINET FOR EACH TYPE OF SPRINKLER INSTALLED TO BE USED FOR THE REMOVAL AND INSTALLATION OF SPRINKLERS IN THE SYSTEM. ONE SPRINKLER WRENCH DESIGN CAN BE APPROPRIATE FOR MANY TYPES OF SPRINKLERS AND SHOULD NOT REQUIRE MULTIPLE WRENCHES OF THE SAME DESIGN.
- PER NFPA 13 (2016) §6.2.9.7 A LIST OF THE SPRINKLERS INSTALLED IN THE PROPERTY SHALL BE POSTED IN THE SPRINKLER CABINET. THE LIST SHALL INCLUDE THE FOLLOWING:
  - SPRINKLER IDENTIFICATION NUMBER (SIN) IF EQUIPPED; OR THE MANUFACTURER, MODEL, ORIFICE, DEFLECTOR TYPE, THERMAL SENSITIVITY, AND PRESSURE RATING.
  - GENERAL DESCRIPTION.
  - QUANTITY OF EACH TYPE TO BE CONTAINED IN THE CABINET.
  - ISSUE OR REVISION DATE OF THE LIST.

SPARE HEAD BOX DETAIL

SCALE: NONE

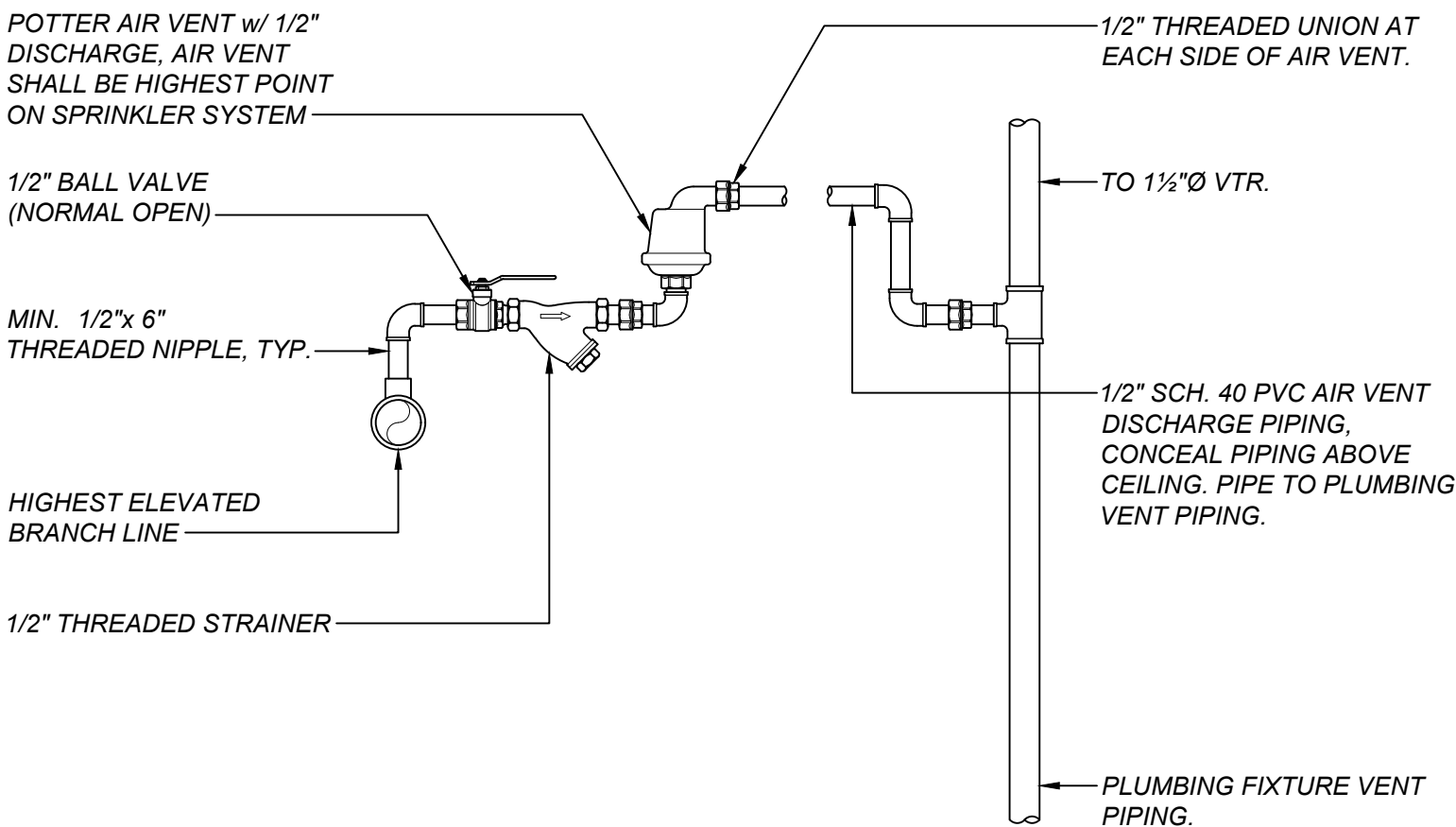
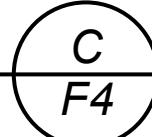
FRM010



CONCEALED AUXILIARY DRAIN DETAIL/  
REMOTE INSPECTOR'S TEST

SCALE: NONE

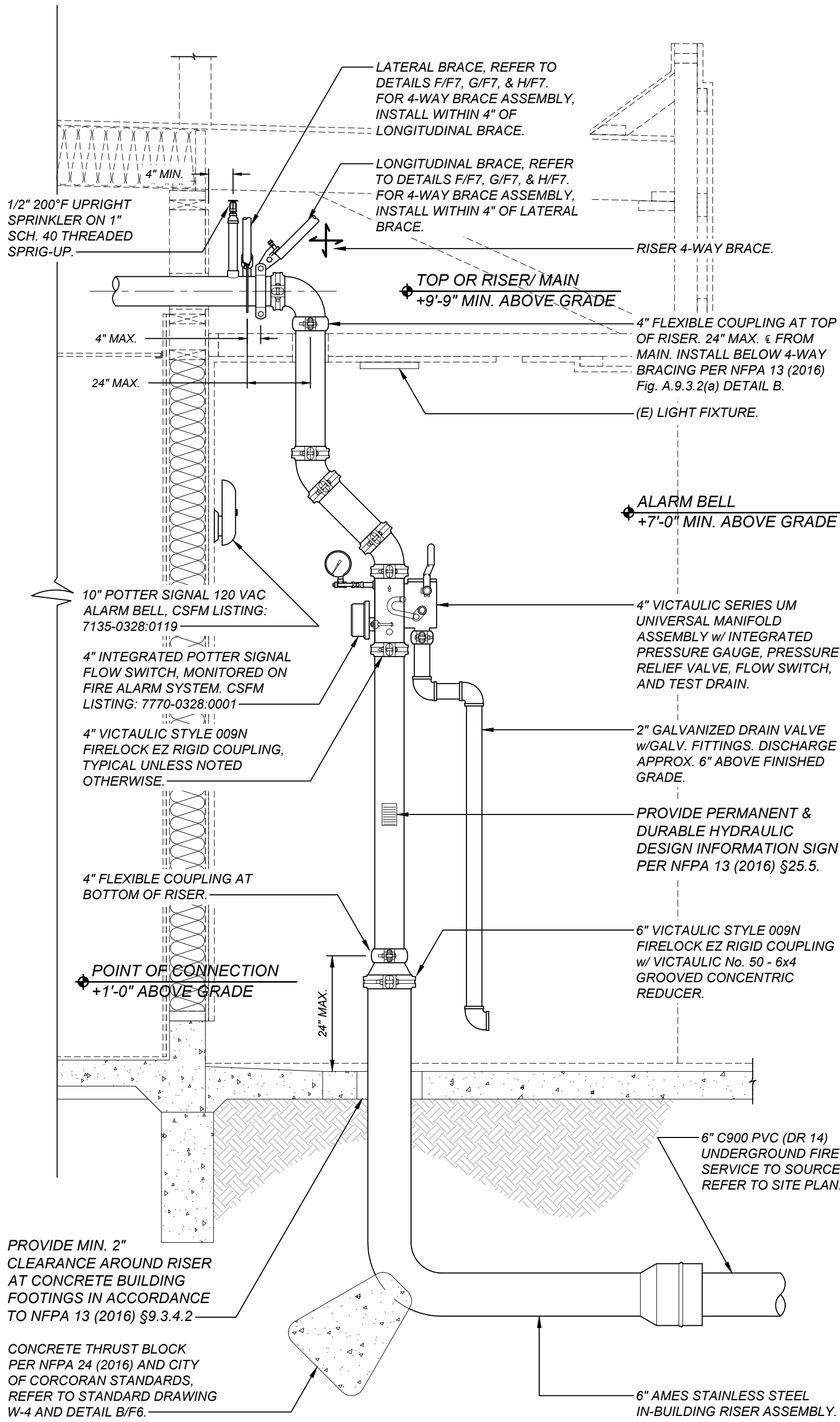
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POTTER AIR VENT

SCALE: NONE

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PROVIDE MIN. 2" CLEARANCE AROUND RISER AT CONCRETE BUILDING FOOTINGS IN ACCORDANCE TO NFPA 13 (2016) §9.3.4.2

CONCRETE THRUST BLOCK PER NFPA 24 (2016) AND CITY OF CORCORAN STANDARDS. REFER TO STANDARD DRAWING W-4 AND DETAIL B/F6.

TITLE 19 ARTICLE 906 (A). A LABEL OF THE SELF-ADHESIVE TYPE SHALL BE PLACED ON THE FIRE DEPARTMENT CONNECTION OR ON THE RISER FOR FIRE SPRINKLER SYSTEM WITH THE DATE OF SERVICE AND/OR DATE INSTALLATION WAS PERFORMED AND LICENSE NUMBER OF PERSON PERFORMING SERVICE WORK.



RISER NOTES:

- EACH RISER DETAIL IS A SCHEMATIC REPRESENTATION OF THE RISER(S). ORIENTATION OF FITTINGS, VALVES, GAUGES, AND OTHER DEVICES HAVE BEEN MODIFIED FOR ILLUSTRATION PURPOSES AND MAY VARY IN ACTUAL INSTALLATION.
- PER NFPA 13 (2016) §9.3.2.3.1 - A FLEXIBLE COUPLING SHALL BE INSTALLED WITHIN 24" OF THE TOP AND BOTTOM OF ALL RISERS. RISERS LESS THAN 3 FT IN LENGTH MAY OMIT FLEX COUPLINGS. ONE FLEX COUPLING IS ADEQUATE FOR RISERS 3' TO 7' IN LENGTH.
- PER NFPA 13 (2016) §9.3.5.8.3 - WHEN A FOUR-WAY BRACE AT THE TOP OF A RISER IS ATTACHED ON THE HORIZONTAL PIPING, IT SHALL BE WITHIN 24" OF THE CENTERLINE OF THE RISER AND THE LOADS FOR THAT BRACE SHALL INCLUDE BOTH THE VERTICAL AND HORIZONTAL PIPE.
- PER NFPA 13 (2016) §25.5 - THE INSTALLING CONTRACTOR SHALL IDENTIFY A HYDRAULICALLY DESIGNED SPRINKLER SYSTEM WITH A PERMANENTLY MARKED WEATHERPROOF METAL OR RIGID PLASTIC SIGN SECURED WITH CORROSION RESISTANT WIRE, CHAIN, OR OTHER APPROVED MEANS.
- PER NFPA 13 (2016) §25.6.1 - THE INSTALLING CONTRACTOR SHALL PROVIDE A GENERAL INFORMATION SIGN USED TO DETERMINE SYSTEM DESIGN BASIS AND INFORMATION RELEVANT TO THE INSPECTION, TESTING, AND MAINTENANCE REQUIREMENTS REQUIRED BY NFPA 25.
- LOCATION OF 2" SYSTEM DRAIN TO BE COORDINATED WITH GENERAL CONTRACTOR. DRAIN PIPE AND FITTINGS SHALL BE GALV.

RISER DETAIL:  
4" SYSTEM RISER ON 6" IN-BUILDING RISER (EXT)

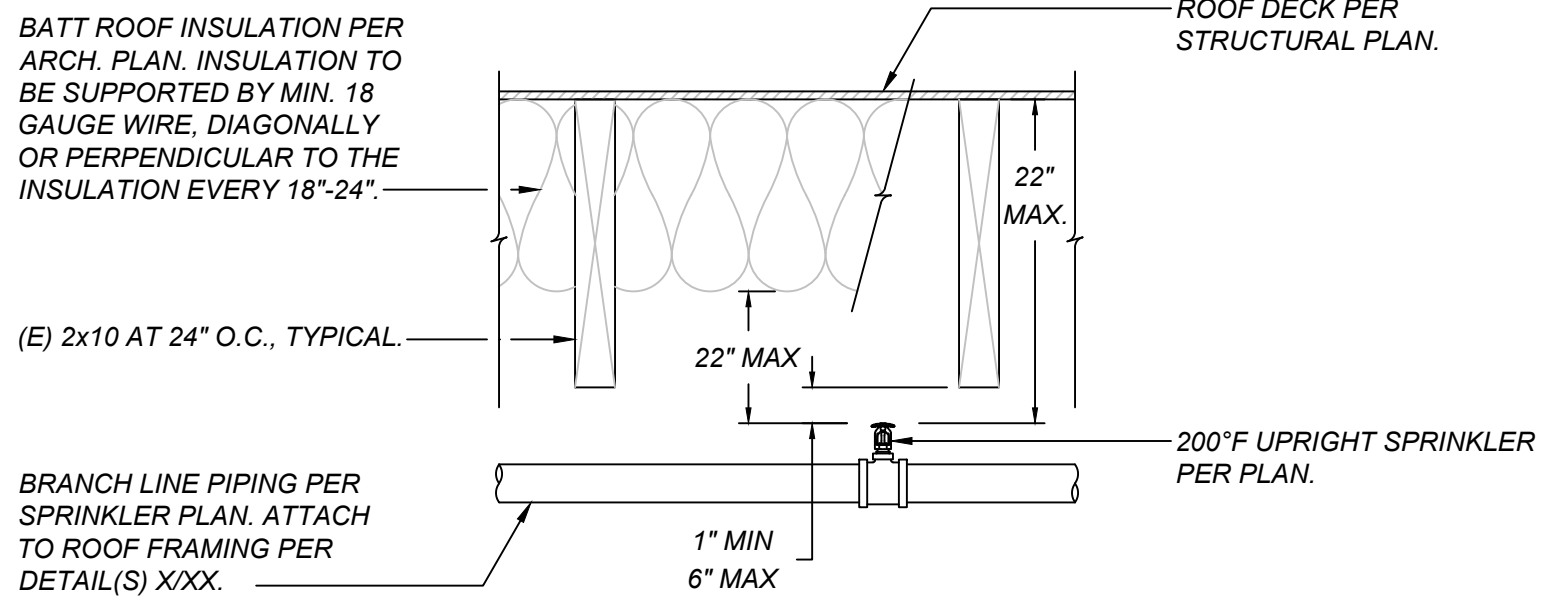
SCALE: NONE

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REVISIONS





#### INSTALLATION NOTES:

- INSTALLATION OF SPRINKLER HEAD SHALL BE IN ACCORDANCE TO NFPA 13 (2016) §8.6.4.1.2(1): OBSTRUCTED CONSTRUCTION, IN WHICH SPRINKLER DEFLECTORS SHALL BE A MINIMUM 1" TO A MAXIMUM 6" FROM THE HORIZONTAL PLANE BELOW STRUCTURAL MEMBERS AND A MAXIMUM 22" BELOW THE CEILING/ROOF DECK.
- PER NFPA 13 (2016) §8.5.4.1.3, WHEN INSULATION IS INSTALLED DIRECTLY AGAINST UNDERSIDE OF THE CEILING OR ROOF STRUCTURE, THE DEFLECTOR DISTANCE SHALL BE MEASURED FROM THE BOTTOM OF THE INSULATION. INSTALLATION OF THE INSULATION SHALL COMPLY WITH NFPA 13 §8.5.4.1.3.1 & 8.5.4.1.3.2.
- PER NFPA 13 (2016) §8.3.1.3 UPRIGHT SPRINKLERS FRAME ARMS SHALL BE INSTALLED PARALLEL TO THE BRANCH LINE AND §8.5.4.2, SPRINKLER DEFLECTORS SHALL BE ALIGNED PARALLEL TO CEILINGS AND ROOFS.

### UPRIGHT SPRINKLER & BRANCH LINE INSTALLATION AT 2x ROOF FRAMING

SCALE: NONE

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#### NOTES:

- WALL ASSEMBLY - THE 1 OR 2 HR FIRE-RATED GYPSUM WALLBOARD/STUD WALL ASSEMBLY SHALL BE CONSTRUCTED OF THE MATERIALS AND IN THE MANNER SPECIFIED IN THE INDIVIDUAL U300 OR U400 SERIES WALL AND PARTITION DESIGNS IN THE UL FIRE RESISTANCE DIRECTORY AND SHALL INCLUDE THE FOLLOWING CONSTRUCTION FEATURES:
  - STUDS - WALL FRAMING MAY CONSIST OF EITHER WOOD STUDS OR STEEL CHANNEL STUDS. WOOD STUDS TO CONSIST OF NOMINAL 2"x4" LUMBER SPACED 16" OC. STEEL STUDS TO BE MIN. 2-1/2" WIDE AND SPACED MAX. 24" OC. WHEN STEEL STUDS ARE USED AND THE DIAMETER OF OPENING EXCEEDS THE WIDTH OF STUD CAVITY, THE OPENING SHALL BE FRAMED ON ALL SIDES USING LENGTHS OF STEEL STUD INSTALLED BETWEEN THE VERTICAL STUDS AND SCREW-ATTACHED TO THE STEEL STUDS AT EACH END. THE FRAMED OPENING IN THE WALL SHALL BE 4"-6" WIDER AND 4"-6" HIGHER THAN THE DIAMETER OF THE PENETRATING ITEM SUCH THAT, WHEN THE PENETRATING ITEM IS INSTALLED IN THE OPENING, A 2"-3" CLEARANCE IS PRESENT BETWEEN THE PENETRATING ITEM AND THE FRAMING ON ALL FOUR SIDES.
  - GYPSUM BOARD - 5/8" THICK, 4' WIDE WITH SQUARE OR TAPERED EDGES. THE GYPSUM BOARD TYPE, THICKNESS, NUMBER OF LAYERS, FASTENER TYPE AND SHEET ORIENTATION SHALL BE AS SPECIFIED IN THE INDIVIDUAL U300 OR U400 SERIES DESIGN IN THE UL FIRE RESISTANCE DIRECTORY. MAX DIAMETER OF OPENING IS 32-1/4" FOR STEEL STUD WALLS. MAX. DIAMETER OF OPENING IS 14-1/2" FOR WOOD STUD WALLS. THE F RATING OF THE FIRESTOP SYSTEM IS EQUAL TO THE FIRE RATING OF THE WALL ASSEMBLY.
- THROUGH-PENETRANTS - ONE METALLIC PIPE, CONDUIT OR TUBING TO BE INSTALLED EITHER CONCENTRICALLY OR ECCENTRICALLY WITHIN THE FIRESTOP SYSTEM. THE ANNULAR SPACE SHALL BE MIN. 0" TO MAX 2-1/4" PIPE MAY BE INSTALLED WITH CONTINUOUS POINT CONTACT. PIPE, CONDUIT OR TUBING MAY BE INSTALLED AT AN ANGLE NOT GREATER THAN 45° FROM PERPENDICULAR. PIPE, CONDUIT OR TUBING TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF WALL ASSEMBLY. THE FOLLOWING TYPES AND SIZES OF METALLIC PIPES, CONDUITS OR TUBING MAY BE USED:
  - STEEL PIPE - NOMINAL 30"Ø (OR SMALLER) SCHEDULE 10 (OR HEAVIER) STEEL PIPE.
  - IRON PIPE - NOMINAL 30"Ø (OR SMALLER) CAST OR DUCTILE IRON PIPE.
  - CONDUIT - NOMINAL 4"Ø (OR SMALLER) STEEL ELECTRICAL METALLIC TUBING OR 6 IN. DIAMETER STEEL CONDUIT.
  - COPPER TUBING - NOMINAL 6"Ø (OR SMALLER) TYPE L (OR HEAVIER) COPPER TUBING.
  - COPPER PIPE - NOMINAL 6"Ø (OR SMALLER) REGULAR (OR HEAVIER) COPPER PIPE.
- FILL, VOID OR CAVITY MATERIAL HILTI FS-ONE SEALANT - MIN. 5/8" THICKNESS OF FILL MATERIAL APPLIED WITHIN THE ANNULUS, FLUSH WITH BOTH SURFACES OF WALL. AT THE POINT OF CONTINUOUS CONTACT LOCATIONS BETWEEN PIPE AND WALL, A MIN. 1/2"Ø BEAD OF FILL MATERIAL SHALL BE APPLIED AT THE PIPE WALL INTERFACE ON BOTH SURFACES OF WALL.

#### PIPE CLEARANCE NOTES:

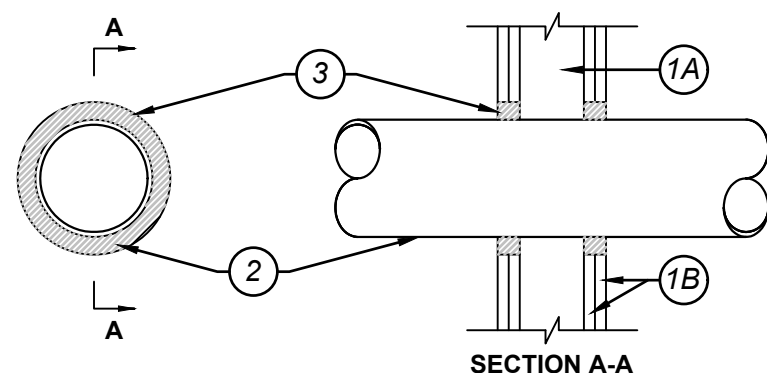
PER NFPA 13 (2016) 9.3.4.1 - CLEARANCE SHALL BE PROVIDED AROUND ALL PIPING EXTENDING THROUGH WALLS, FLOORS, PLATFORMS, AND FOUNDATIONS, INCLUDING DRAINS, FIRE DEPARTMENT CONNECTIONS, AND OTHER AUXILIARY PIPING.

PER NFPA 13 (2016) 9.3.4.2 - WHERE PIPE PASSES THROUGH HOLES IN PLATFORMS, FOUNDATIONS, WALLS, OR FLOORS, THE HOLES SHALL BE SIZED SUCH THAT THE DIAMETER OF THE HOLES IS NOMINALLY 2" LARGER THAN THE PIPE FOR PIPE 1" NOMINAL TO 3-1/2" NOMINAL AND 4" LARGER THAN THE PIPE FOR PIPE 4" NOMINAL AND LARGER.

PER NFPA 13 (2016) 9.3.4.4 - NO CLEARANCE SHALL BE REQ'D FOR PIPING PASSING THROUGH GYPSUM BOARD OR EQUALLY FRANGIBLE CONSTRUCTION THAT IS NOT REQ'D TO HAVE A FIRE RESISTANCE RATING.

### SYSTEM NO. W-L-1054

F RATINGS - 1 AND 2 HR (SEE ITEMS 1 AND 3)  
T RATING - 0 HR  
L RATING AT AMBIENT - LESS THAN 1 CFM/SQ FT  
L RATING AT 400 F-4 CFM/SQ FT



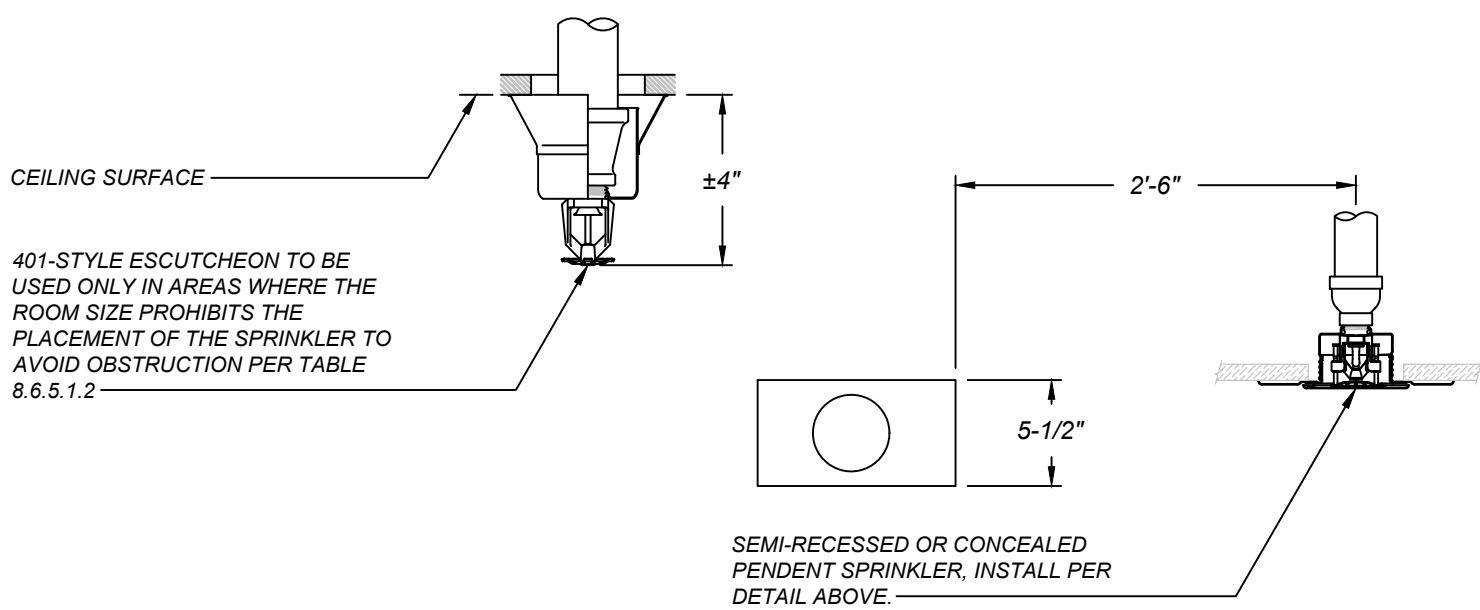
### HILTI FS-ONE FIRE RATED PENETRATION

SCALE: NONE

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THIS DETAIL IS TO BE USED FOR AVOIDING OBSTRUCTIONS PRESENTED BY SURFACE MOUNTED LIGHTING IN GYPBOARD CEILINGS. SPRINKLER SPACING TO BE IN ACCORDANCE WITH NFPA 13 (2016) FOR PARTICULAR HAZARD, AND TYPE OF SPRINKLER WHERE OBSTRUCTION OCCURS. DETAIL AS SHOWN IS FOR STANDARD SPRAY PENDENT SPRINKLER, WITH PRESSURES FROM 15 PSI TO 100 PSI ONLY. IF EXTENDED COVERAGE OR SPECIAL LISTED SPRINKLERS ARE USED, REFER TO APPROPRIATE NFPA 13 (2016) TABLE FOR THE SPECIFIC REQUIREMENTS FOR EACH SPECIFIC TYPE OF SPRINKLER.



NFPA 13 (2016) TABLE 8.6.5.1.2 POSITIONING OF SPRINKLERS TO AVOID OBSTRUCTIONS TO DISCHARGE	
DISTANCE FROM SPRINKLERS TO SIDE OF OBSTRUCTION	MAX. ALLOWABLE DISTANCE OF DEFLECTOR ABOVE BOTTOM OF OBSTRUCTION
2' TO LESS THAN 2'-6"	5'-1/2"

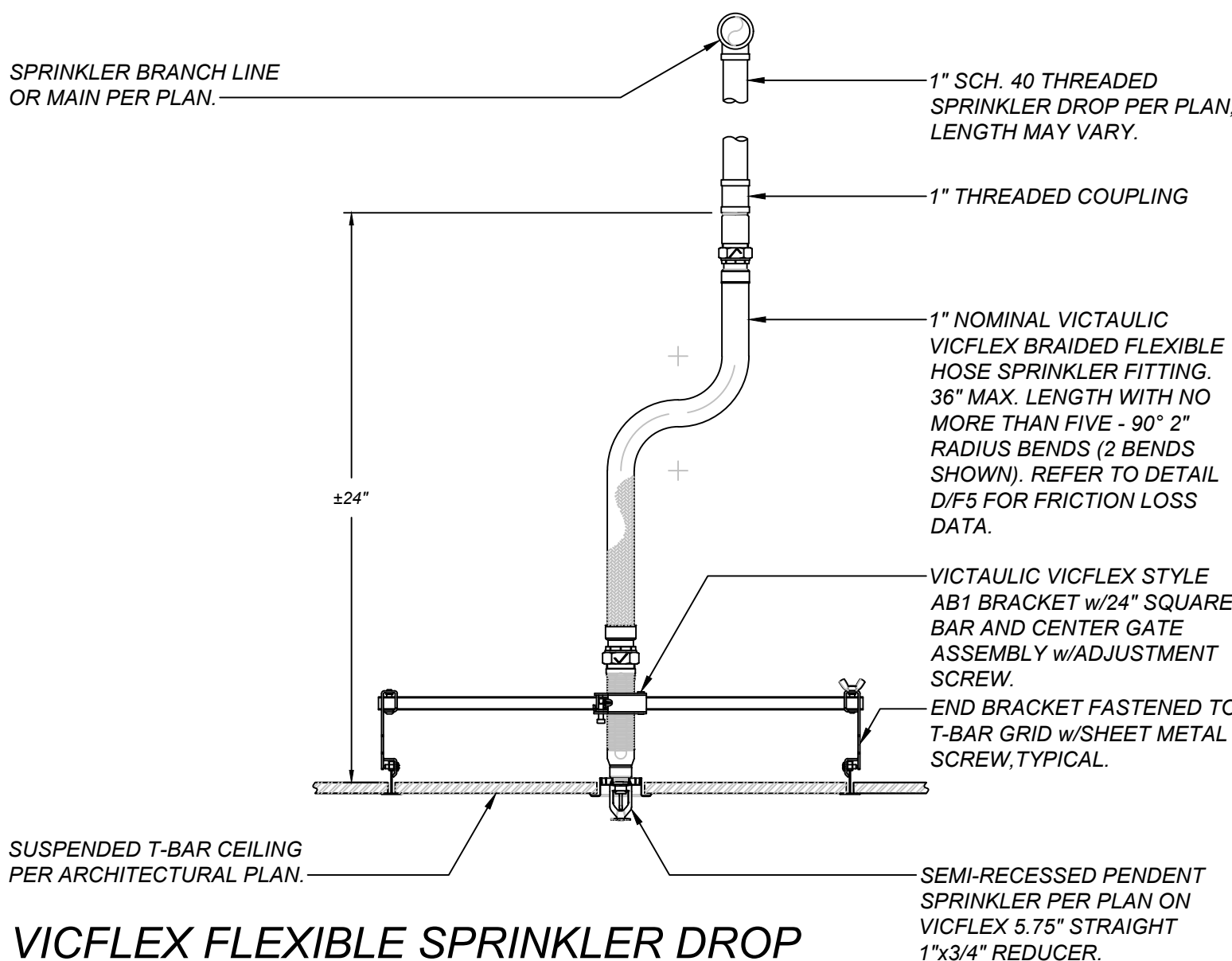
COORDINATE ALL CONCEALED PENDENT SPRINKLERS W/ CURRENT LIGHT LAYOUT AND TYPES. AN AREAS W/ SURFACE MOUNTED LIGHT FIXTURES, UTILIZE OBSTRUCTION SPACING PER NFPA 13 (2016). IF SIZE OF ROOM PROHIBITS SPACING REQUIREMENTS TO BE MET, UTILIZE ST-1E 401 ESCUTCHEON W/ PENDENT SPRINKLER OF SAME TEMPERATURE, K-FACTOR, AND DESIGN CRITERIA.

### SPRINKLER HEAD OBSTRUCTION DETAIL

SCALE: NONE

FSSXXX

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### VICFLEX FLEXIBLE SPRINKLER DROP w/SEMI-RECESSED PENDENT SPRINKLER

SCALE: NONE

FSSXXX

C  
F5

SERIES AH2/AH2-CC VICTAULIC VICFLEX - FRICTION LOSS DATA (UL)								
LENGTH IN INCHES	OUTLET SIZE	1 - 90° BEND	2 - 90° BEND	3 - 90° BEND	4 - 90° BEND	5 - 90° BEND	6 - 90° BEND	7 - 90° BEND
31"	1/2"	11.0'	13.0'	15.0'	16.0'	N/A	N/A	N/A
	3/4"	12.0'	14.0'	19.0'	20.0'	N/A	N/A	N/A
36"	1/2"	14.0'	16.0'	18.0'	19.0'	21.0'	N/A	N/A
	3/4"	17.0'	19.0'	21.0'	22.0'	23.0'	N/A	N/A
48"	1/2"	18.0'	19.0'	21.0'	23.0'	25.0'	27.0'	32.0'
	3/4"	21.0'	24.0'	26.0'	28.0'	31.0'	33.0'	37.0'
60"	1/2"	21.0'	24.0'	27.0'	30.0'	32.0'	35.0'	40.0'
	3/4"	23.0'	25.0'	27.0'	29.0'	32.0'	34.0'	40.0'
72"	1/2"	27.0'	29.0'	31.0'	34.0'	37.0'	40.0'	43.0'
	3/4"	26.0'	28.0'	30.0'	33.0'	37.0'	40.0'	44.0'

#### INSTALLATION NOTES:

- ALL VICTAULIC VICFLEX FLEXIBLE SPRINKLER HOSE FITTINGS AND ANCHORING COMPONENTS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER GUIDELINES.
- PER NFPA 13 (2016) §9.2.1.3.3.3, THE MAXIMUM UNSUPPORTED LENGTH FOR FLEXIBLE HOSE SPRINKLER FITTINGS SHALL NOT EXCEED 6 FEET.
- PER NFPA 13 (2016) §9.2.1.3.3.4, WHERE FLEXIBLE SPRINKLER HOSE FITTINGS ARE USED TO CONNECT SPRINKLERS TO BRANCH LINES IN SUSPENDED CEILINGS, A LABEL LIMITING RELOCATION OF THE SPRINKLER SHALL BE PROVIDED ON THE ANCHORING COMPONENT.

### VICFLEX FLEXIBLE SPRINKLER DROP FRICTION LOSS DATA AND INSTALLATION NOTES

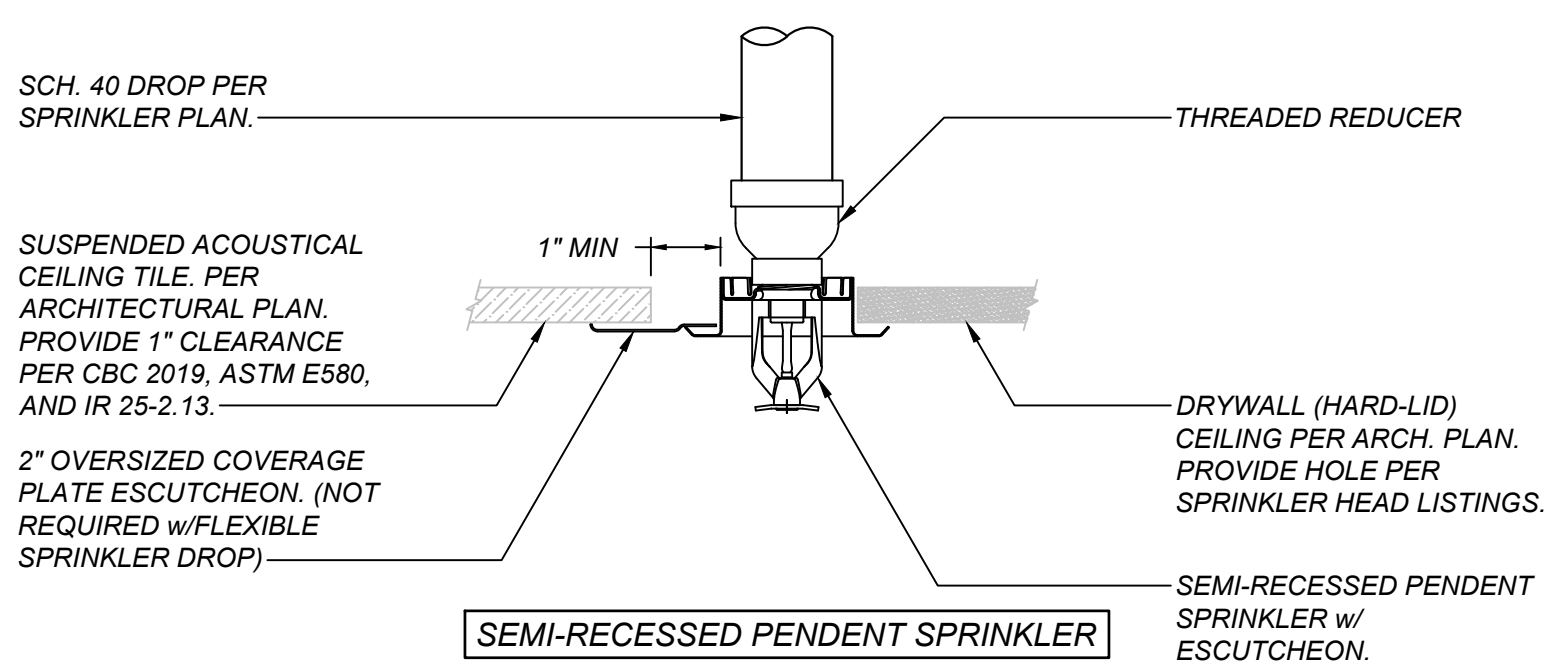
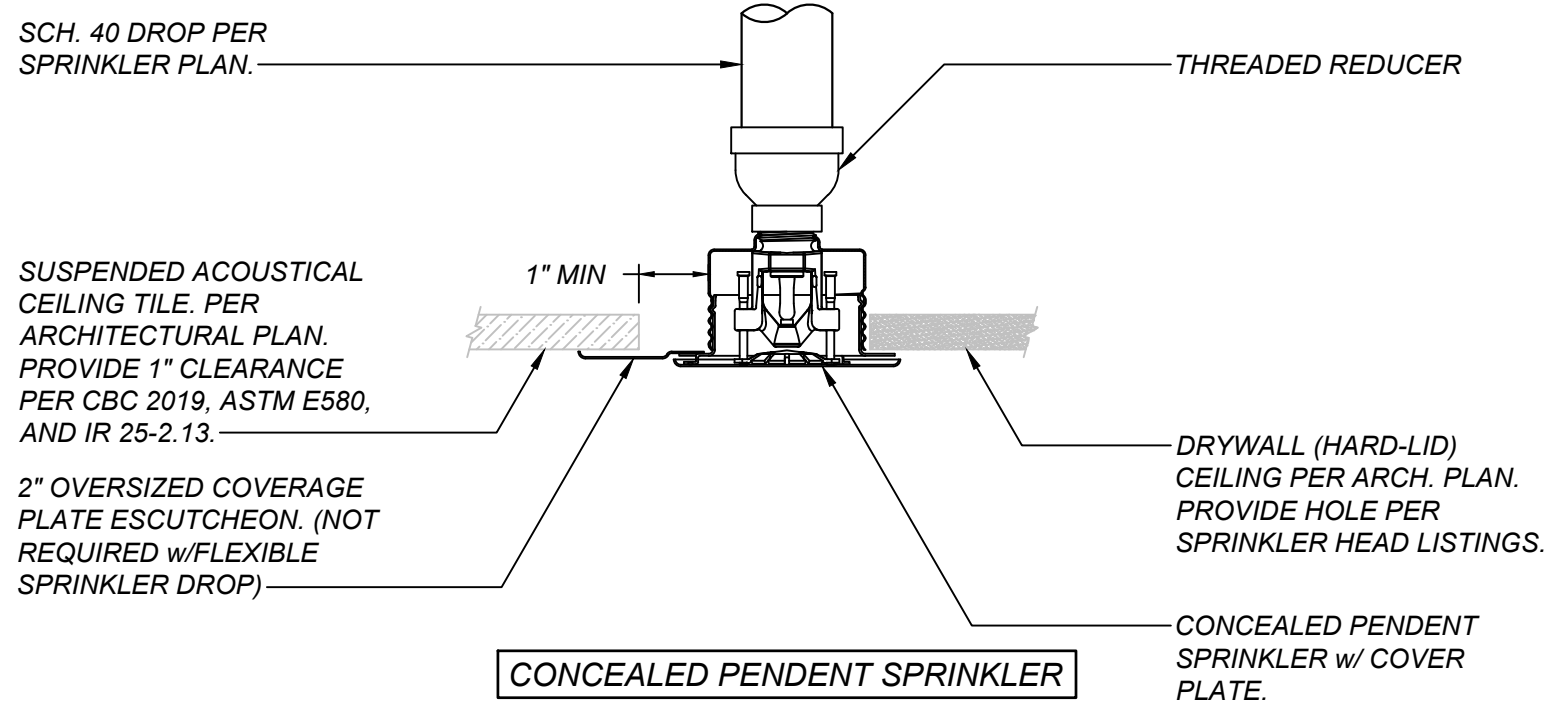
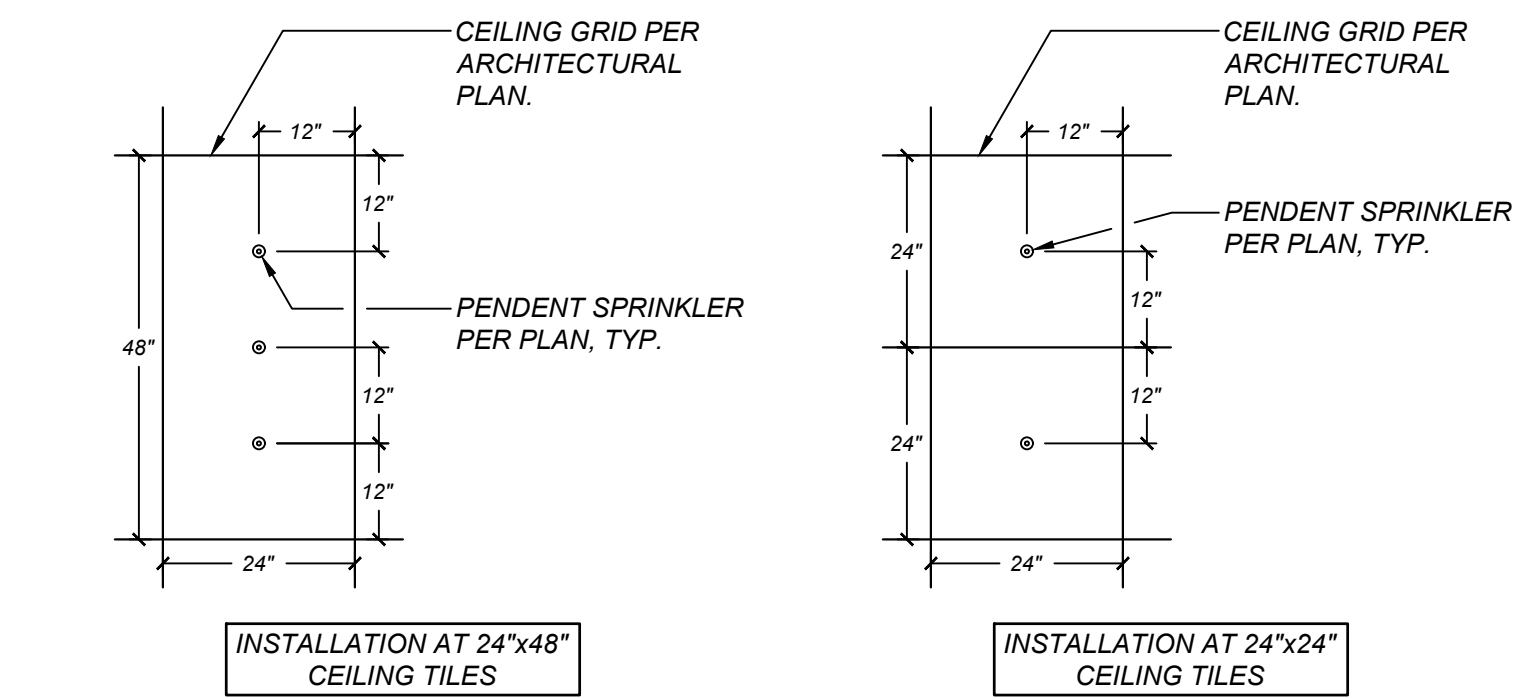
SCALE: NONE

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#### INSTALLATION NOTES:

- PENDENT SPRINKLER HEADS INSTALLED WITHIN SUSPENDED CEILING TILES SHALL BE POSITIONED "CENTER OF TILE" AS INDICATED PER PROJECT SPECIFICATIONS. HOWEVER, SPRINKLER SPACING SHALL NOT EXCEED THE MAXIMUM SPRINKLER SPACING PER NFPA 13 (2016) §8.6.3.1, §8.6.3.2, §8.6.3.2.4.1 §8.8.3.1, §8.8.3.2 AND FIRE SPRINKLER MANUFACTURER LISTINGS.
- PENDENT SPRINKLER HEADS INSTALLED IN DRY-WALL CEILINGS SHALL BE POSITIONED PER PLAN, ALIGNED WITH LIGHTING, AUDIO, AND OTHER CEILING FEATURES. HOWEVER, SPRINKLER SPACING SHALL NOT EXCEED MAXIMUM NFPA 13 REQUIREMENTS AND FIRE SPRINKLER MANUFACTURER LISTINGS.

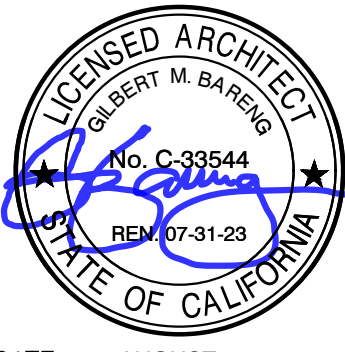
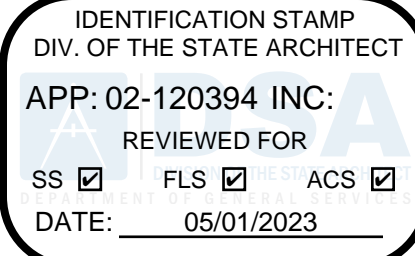


### SPRINKLER HEAD INSTALLATION DETAIL

SCALE: NONE

FSSXXX

A  
F5



DATE: AUGUST 24, 2022

**MODERNIZATION AT  
CORCORAN HIGH SCHOOL**  
1100 LETTS AVE., CORCORAN, CA. 93212

CORCORAN UNIFIED SCHOOL DISTRICT  
1520 PATTERSON AVE., CORCORAN, KINGS COUNTY, CA. 93212



REVISIONS

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(951) 627-0530 Office  
(951) 627-1326 Fax  
Vista, California 92081

TITLE  
INSTALLATION  
DETAILS

**F5**

PROJECT 1751

**LAWRENCE  
ENGINEERING GROUP**  
7084 N. Maple Ave., Suite 101  
(559) 431-0101 21173  
Fresno, CA 93720  
FAX (559) 431-1362





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DIV. OF THE STATE ARCHITECT  
APP: 02-120394 INC:  
REVIEWED FOR  
SS ☒ FLS ☒ ACS ☒  
DATE: 05/01/2023



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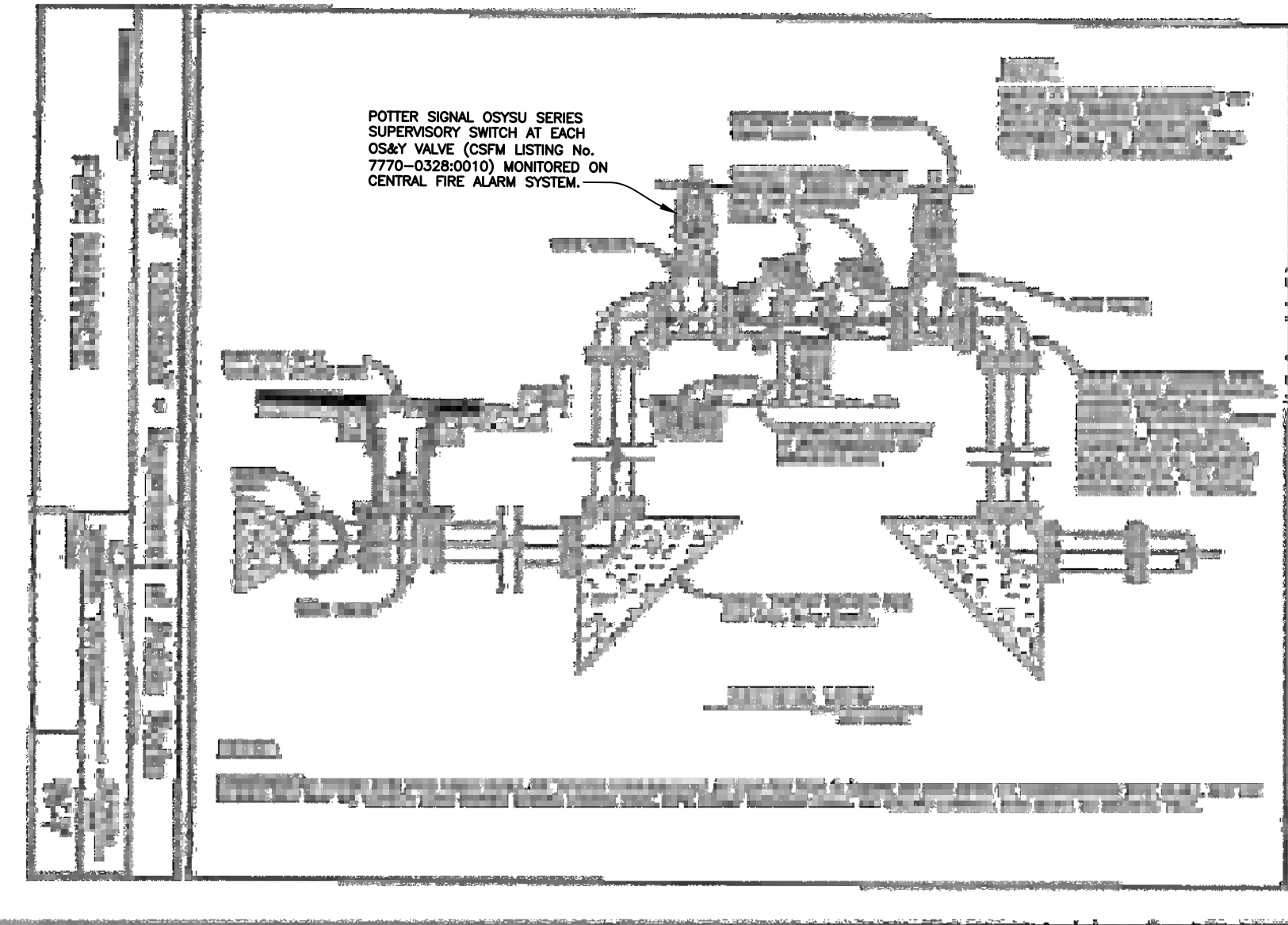
TITLE  
SITE DETAILS

**F6**

PROJECT 1751

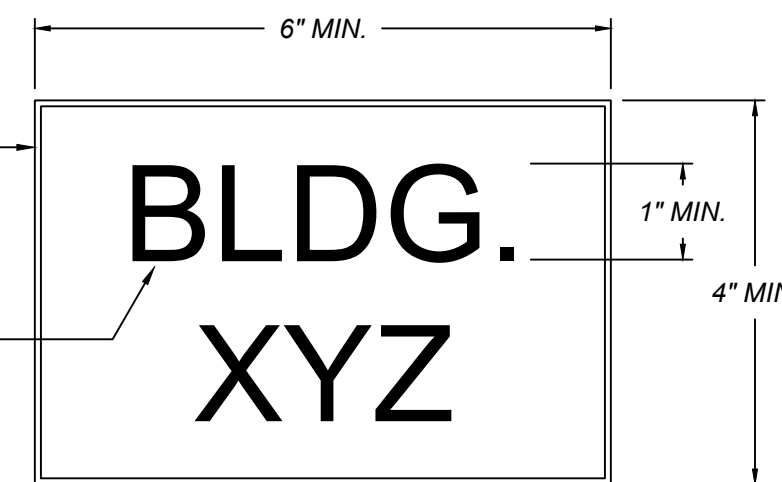


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WEATHERPROOF METAL OR RIGID  
PLASTIC SIGN, ATTACHED WITH  
CORROSIVE RESISTANT WIRE OR  
CHAIN OR OTHER APPROVED  
METHOD.

MIN. 1" WHITE LETTERING  
HEIGHT W/MIN. 1/4" STROKE, ON  
RED BACKGROUND, TYPICAL.



INSTALLATION NOTES:

- PER NFPA 13 (2016) TABLE A.6.9 SPRINKLER SYSTEM SIGNAGE SUMMARY, SYSTEM CONTROL VALVES AND FIRE DEPARTMENT CONNECTIONS SHALL HAVE IDENTIFICATION SIGNAGE. IDENTIFICATION SIGNS SHALL BE INSTALLED AT A MINIMUM 18" ABOVE FINISH GRADE MEASURED FROM THE BOTTOM EDGE OF THE SIGN.
- PER NFPA 13 (2016) §8.16.1.1.8 IDENTIFICATION SIGNS ON CONTROL VALVES SHALL BE PROVIDED AT EACH VALVE TO INDICATE ITS FUNCTION AND WHAT IT CONTROLS.
- PER NFPA 13 (2016) §8.17.2.4.7 (CFC 2019 §912.5) EACH FIRE DEPARTMENT CONNECTION TO SPRINKLER SYSTEMS SHALL BE DESIGNATED BY A SIGN HAVING RAISED OR ENGRAVED LETTERS AT LEAST 1-INCH IN HEIGHT ON PLATE OR FITTING READING SERVICE DESIGN.
- WHEN SYSTEM DEMANDS ARE GREATER THAN 150PSI, THE SIGN SHALL INDICATE THE PRESSURE REQUIRED AT THE INLETS TO DELIVER THE GREATEST SYSTEM DEMAND.
- WHERE LOCAL JURISDICTION REQUIRES ADDRESS OR BUILDING IDENTIFICATION ON POST INDICATOR VALVES AND/OR FIRE DEPARTMENT CONNECTIONS, IDENTIFICATION MARKING CAN BE PAINTED DIRECTLY ON THE APPARATUS IN LIEU OF SIGNAGE. VERIFY REQUIREMENT WITH LOCAL JURISDICTION REGARDING MINIMUM LETTERING HEIGHT AND PAINT COLOR REQUIREMENTS.

SITE APPARATUS SIGNAGE

SCALE: NONE

FSS101

A  
F6

INSTALLATION NOTES:

- INSTALLATION OF UNDERGROUND FIRE SERVICE PIPING SHALL BE DONE IN ACCORDANCE TO NFPA 24 AND LOCAL STANDARD REQUIREMENTS.
- CONCRETE THRUST BLOCKS SHALL BE INSTALLED AT ALL ELBOWS, TEES, CROSSES, AND PLUGS.
- CONCRETE THRUST BLOCKS SHALL BE POURED AGAINST UNDISTURBED EARTH. CONTACT WITH FITTINGS SHALL BE MADE ON THE BODY OF THE FITTING ONLY AND NOT ON THE BELL OR FLANGE ENDS.
- WHERE THRUST BLOCKING MAY BE IMPRACTICAL DUE TO SITE CONDITIONS, IMPLEMENTATION OF A RESTRAINED JOIST SYSTEM AS LISTED IN NFPA 24 §10.6.2 MAY BE USED IN LIEU OF CONCRETE THRUST BLOCKS.
- BACKFILL TRENCH PER DETAIL ST-2/F6.

REQUIRED HORIZONTAL BEARING BLOCK AREA

PIPE DIA.	TEE/PLUGS	90°-BEND	45°-BEND	22½°-BEND	11½°-BEND
3-INCH	2.6 R²	2.6 R²	1.4 R²	0.7 R²	0.4 R²
4-INCH	3.8 R²	3.8 R²	2.1 R²	1.0 R²	0.5 R²
6-INCH	7.9 R²	7.9 R²	4.3 R²	2.2 R²	1.1 R²
8-INCH	13.6 R²	13.6 R²	7.4 R²	3.8 R²	1.9 R²
10-INCH	20.5 R²	20.5 R²	11.1 R²	5.7 R²	2.8 R²
12-INCH	29.0 R²	29 R²	15.7 R²	8.0 R²	4.0 R²
14-INCH	39.0 R²	39 R²	21.1 R²	10.8 R²	5.4 R²

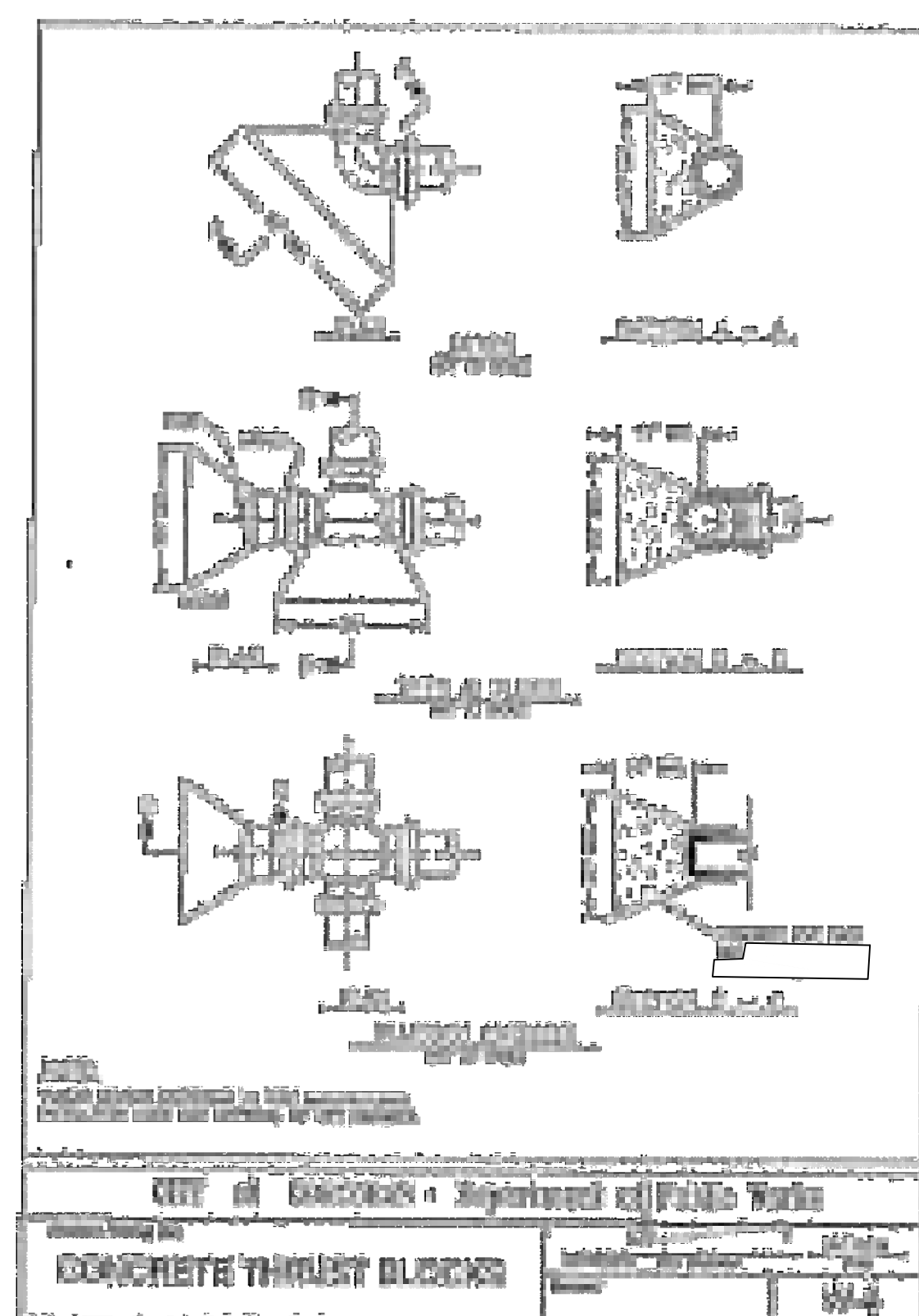
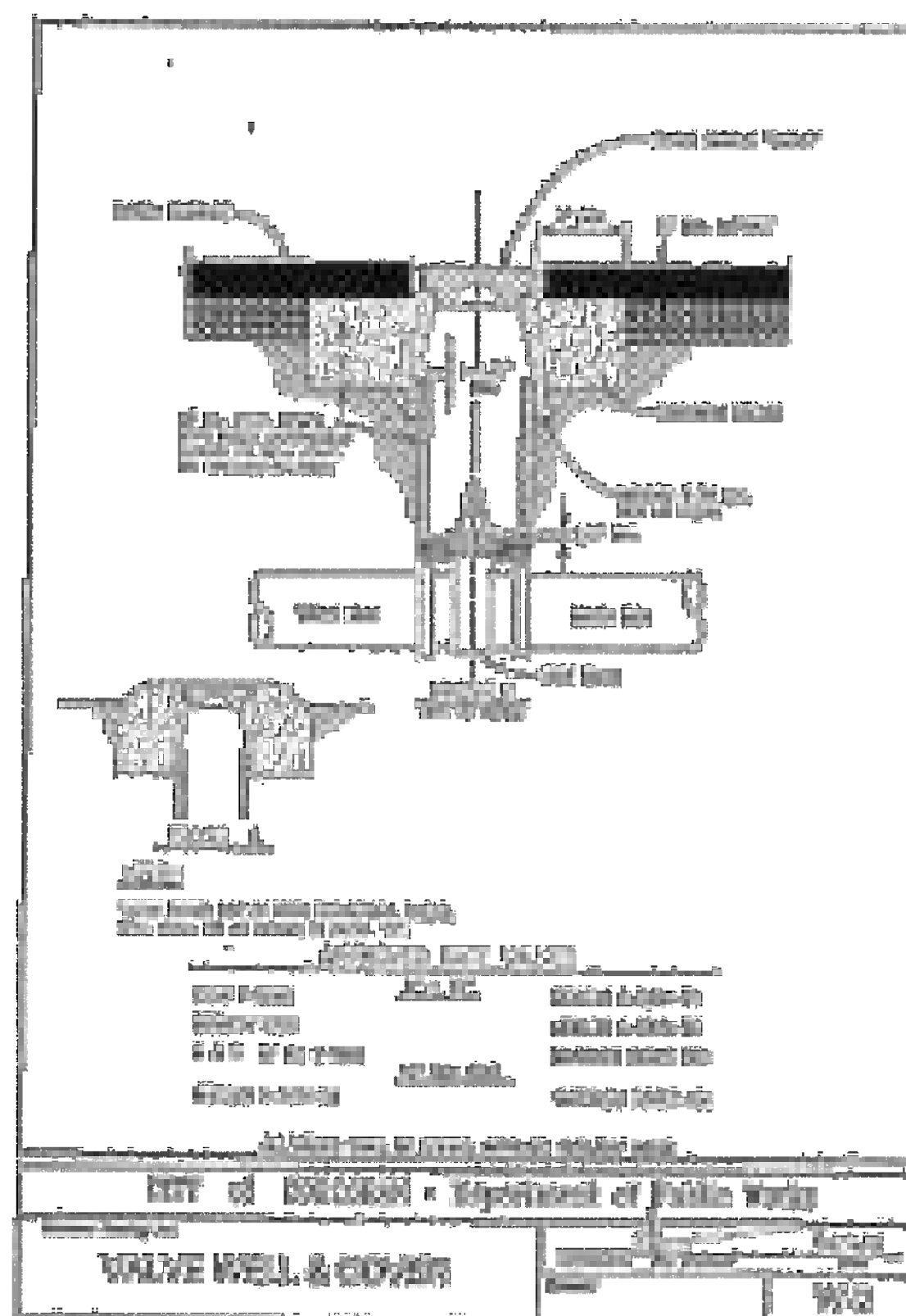
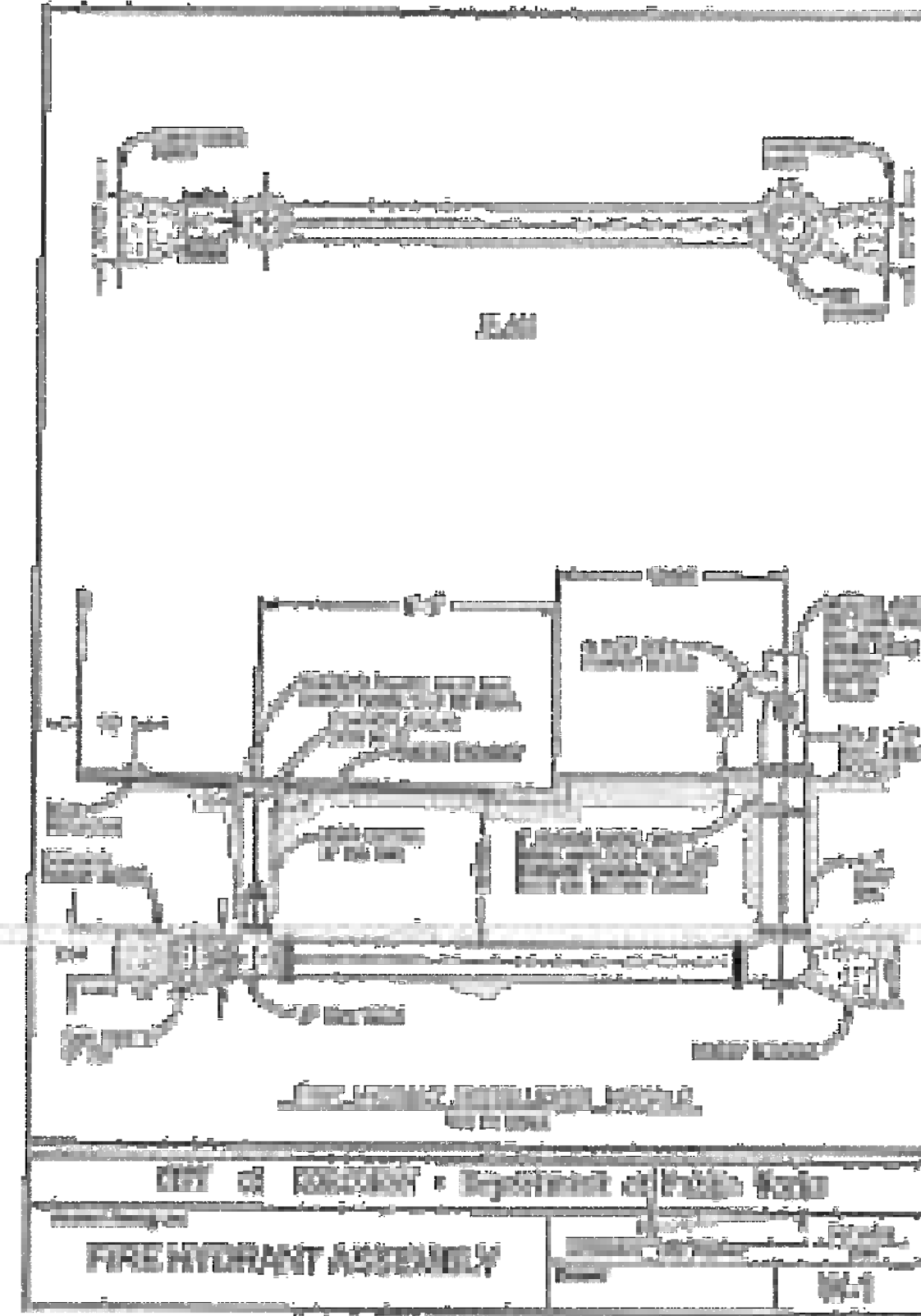
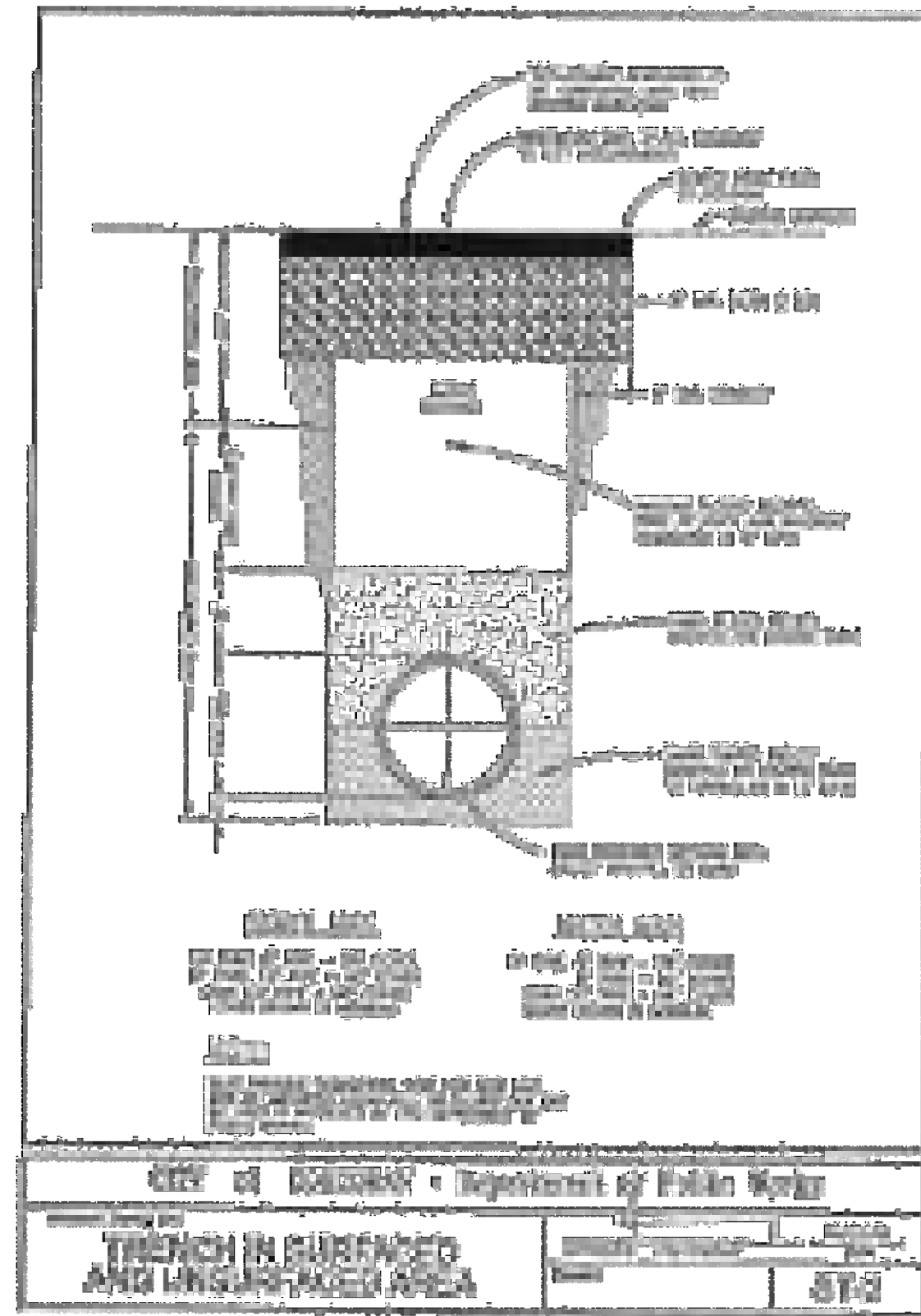
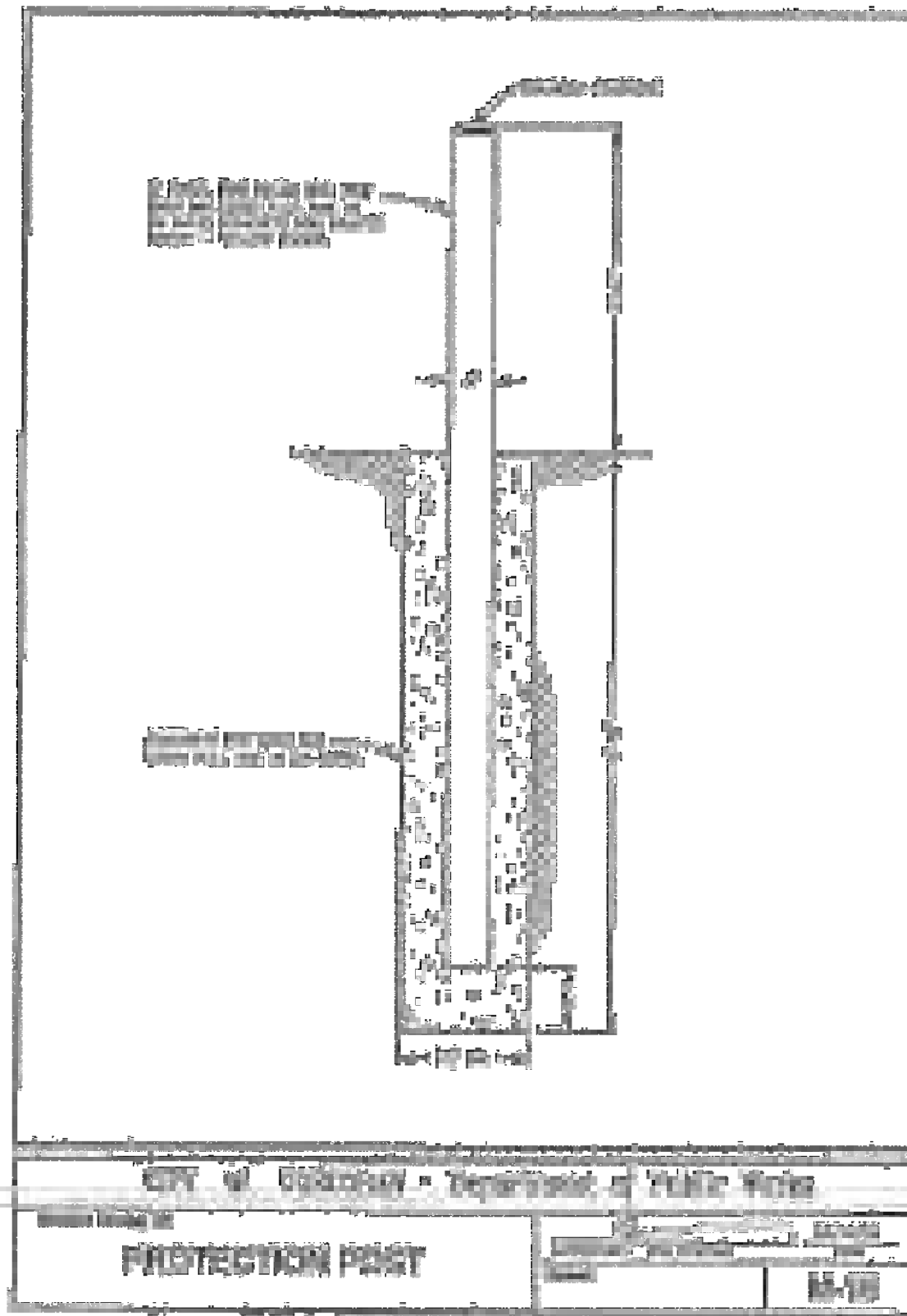
INFORMATION ABOVE BASED ON NFPA 24 TABLE A.10.6.1(b) - MIN. HORIZONTAL BEARING LOAD: 1500lb/R²

CONCRETE THRUST BLOCK LOAD BEARING TABLE

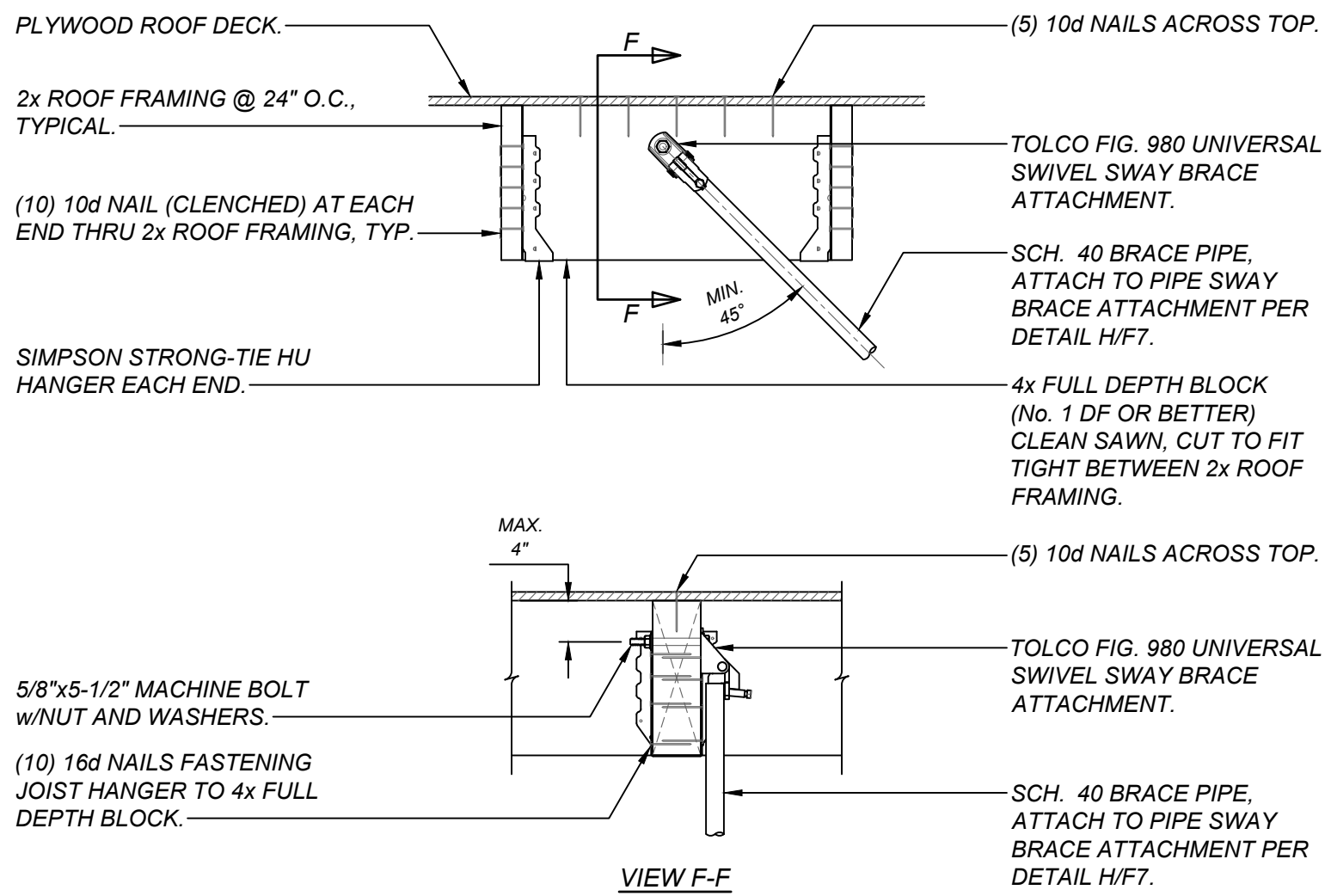
SCALE: NONE

FSS101

B  
F6





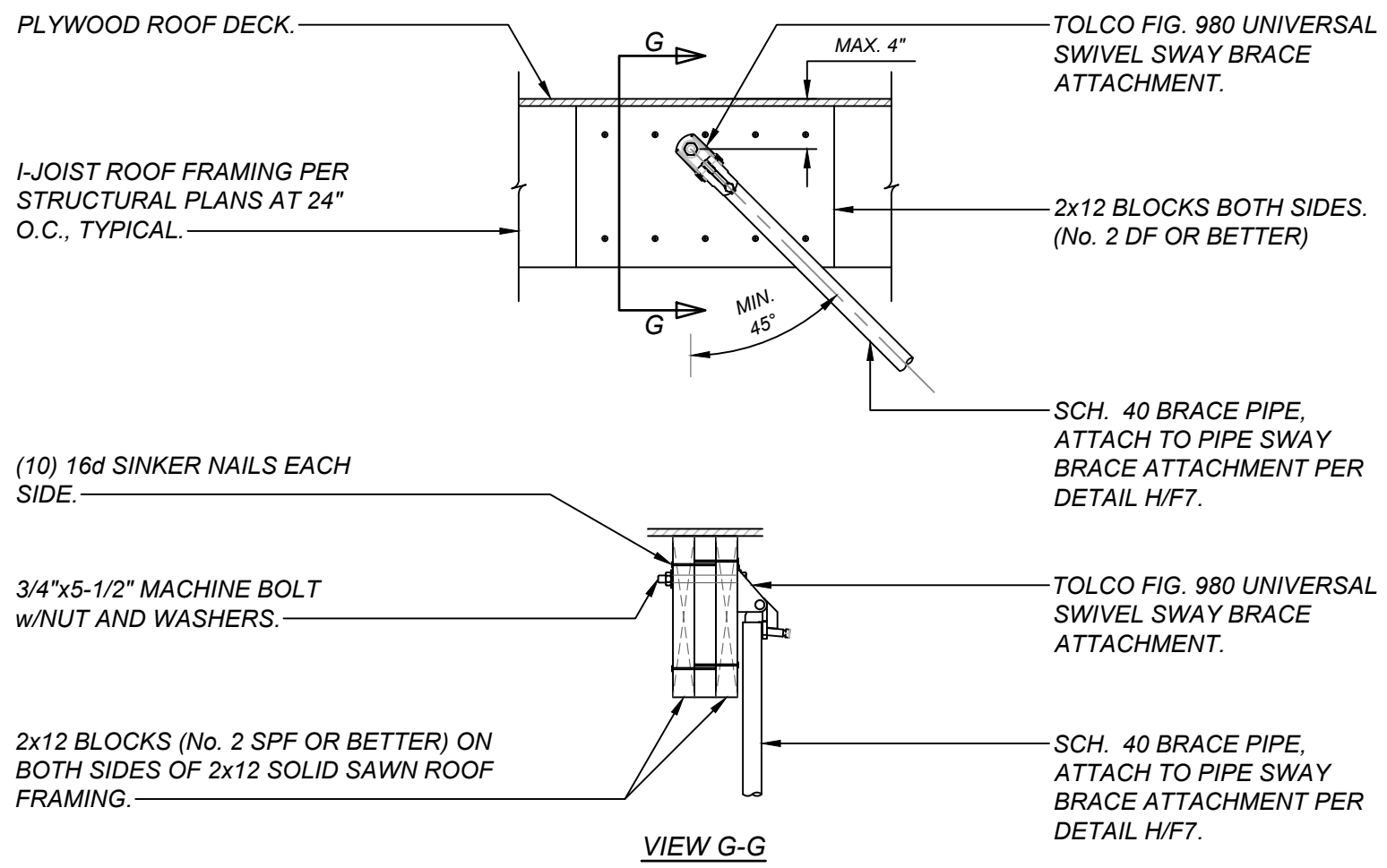


### UPPER SEISMIC BRACING ATTACHMENT TO 2x SOLID SAWN ROOF FRAMING (PERPENDICULAR FORCES)

SCALE: NONE

FSS003

F  
F7

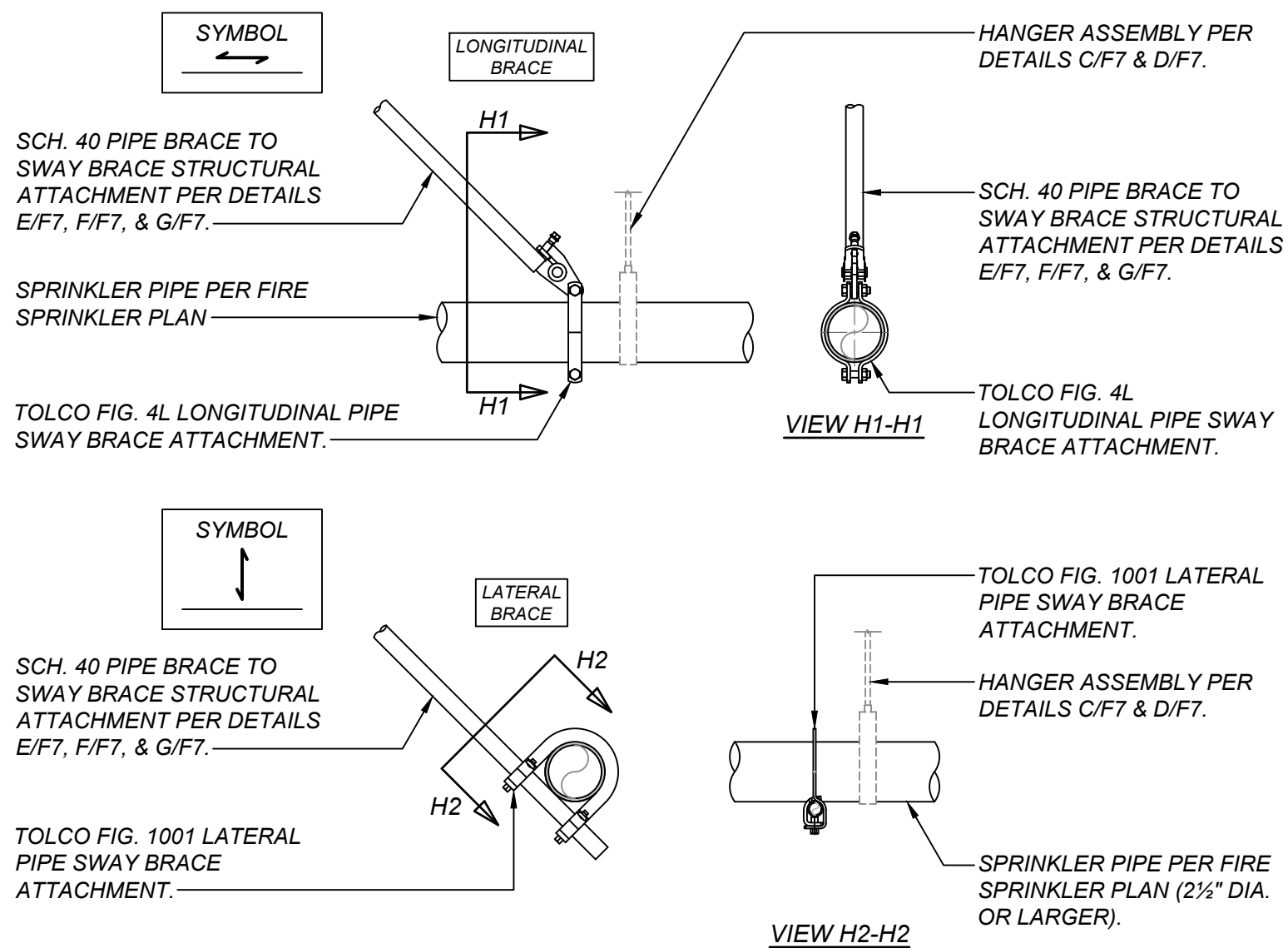


### UPPER SEISMIC BRACING ATTACHMENT TO 2x SOLID SAWN ROOF FRAMING (PARALLEL FORCES)

SCALE: NONE

FSS003

G  
F7

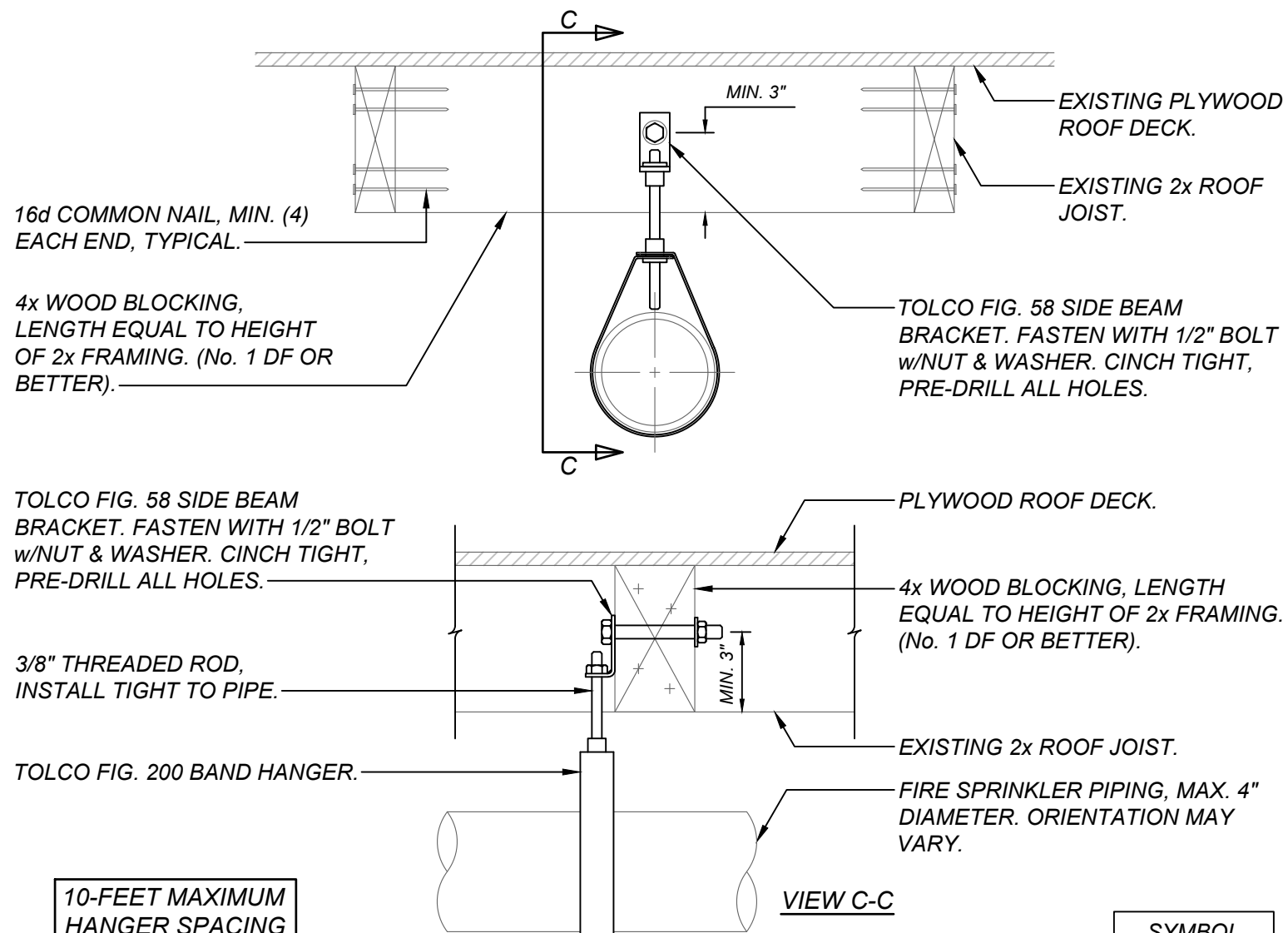


### SEISMIC BRACING ATTACHMENT AT SPRINKLER MAIN PIPING

SCALE: NONE

FSS003

H  
F7

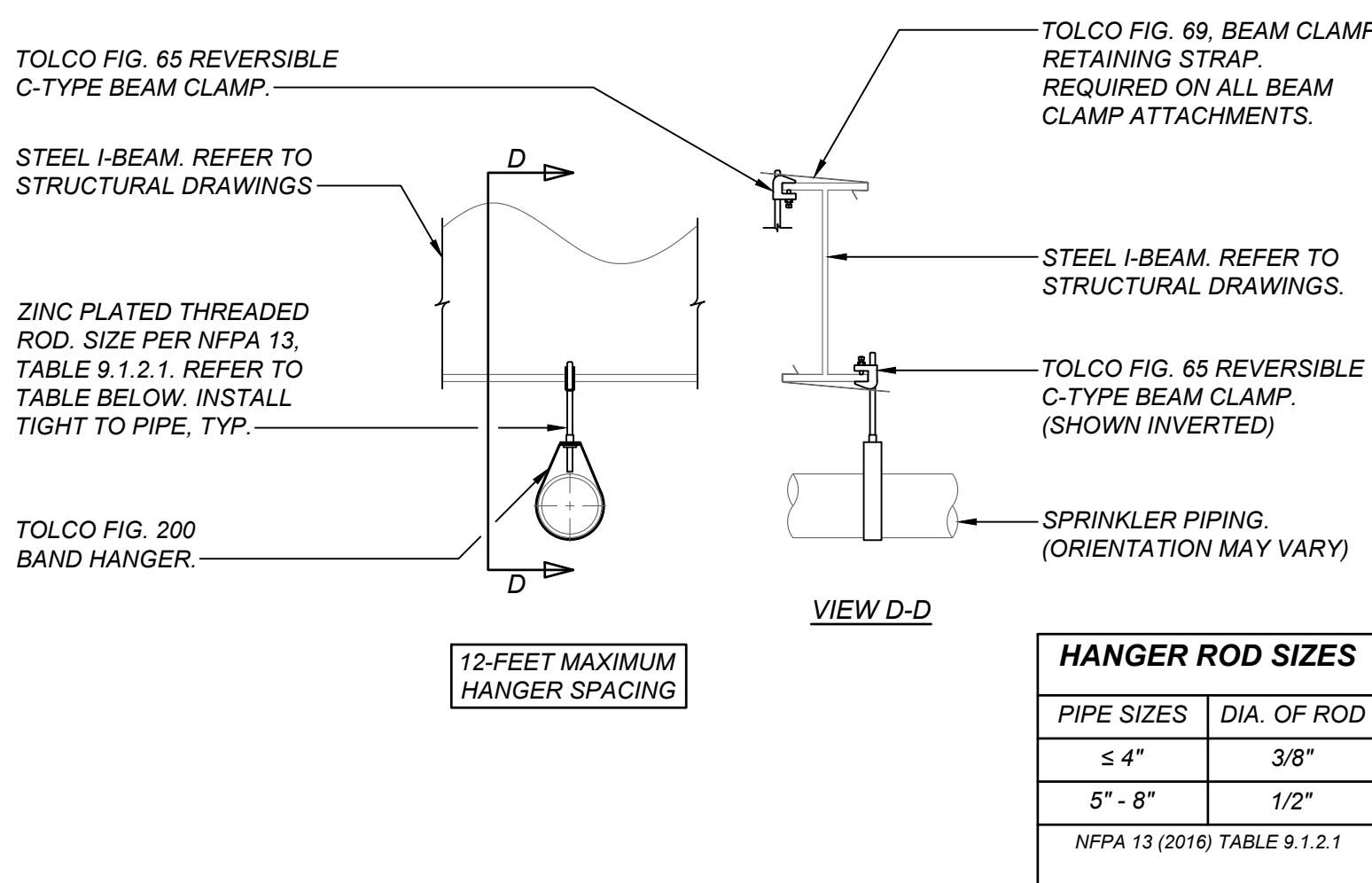


### SPRINKLER MAIN HANGER SUPPORT AT 2x ROOF FRAMING (4" MAX. PIPE DIAMETER)

SCALE: NONE

FSSXX03-03.20

C  
F7

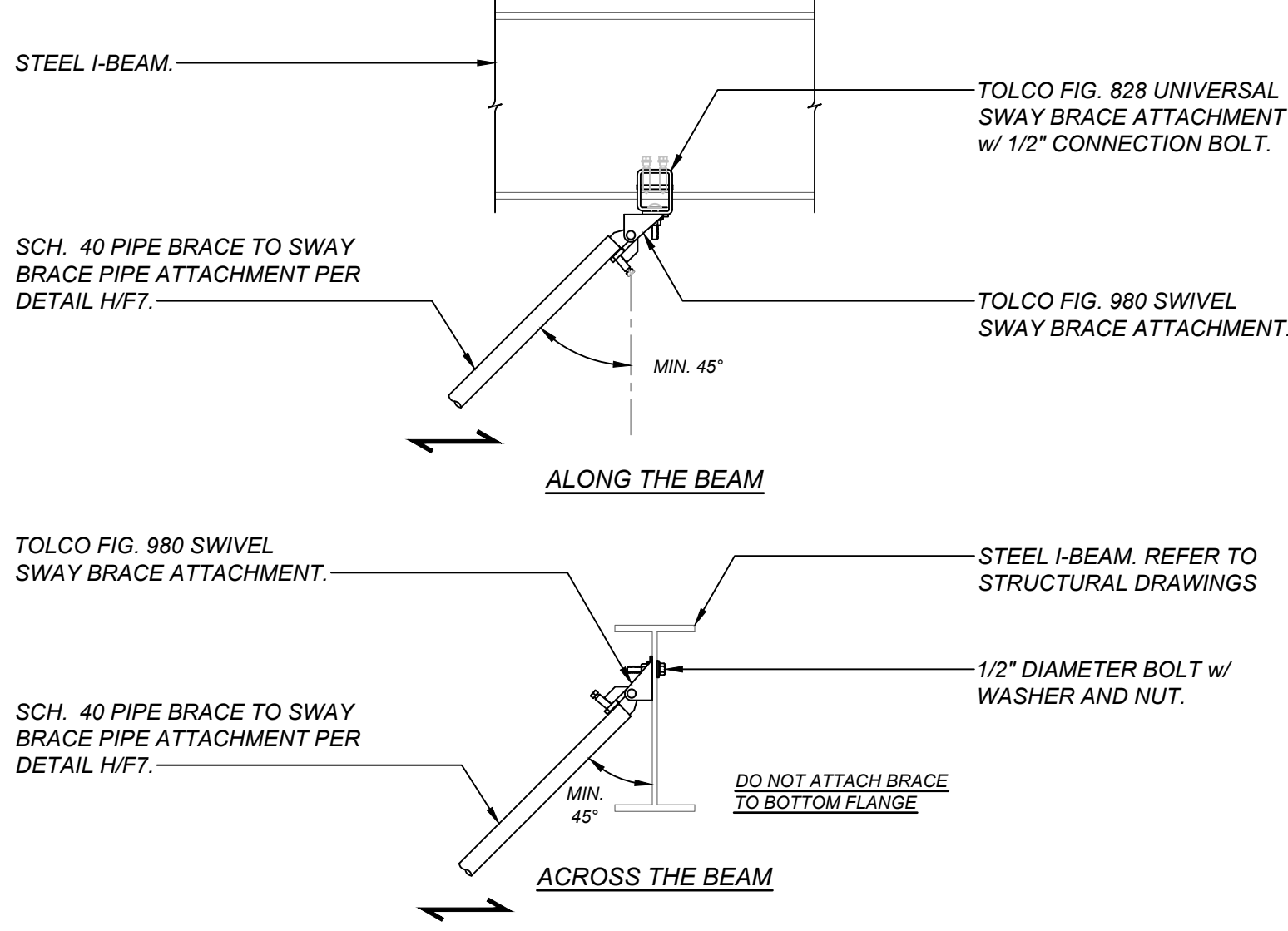


### SPRINKLER PIPE HANGER SUPPORT AT STEEL I-BEAM

SCALE: NONE

FSS301-03.20

D  
F7

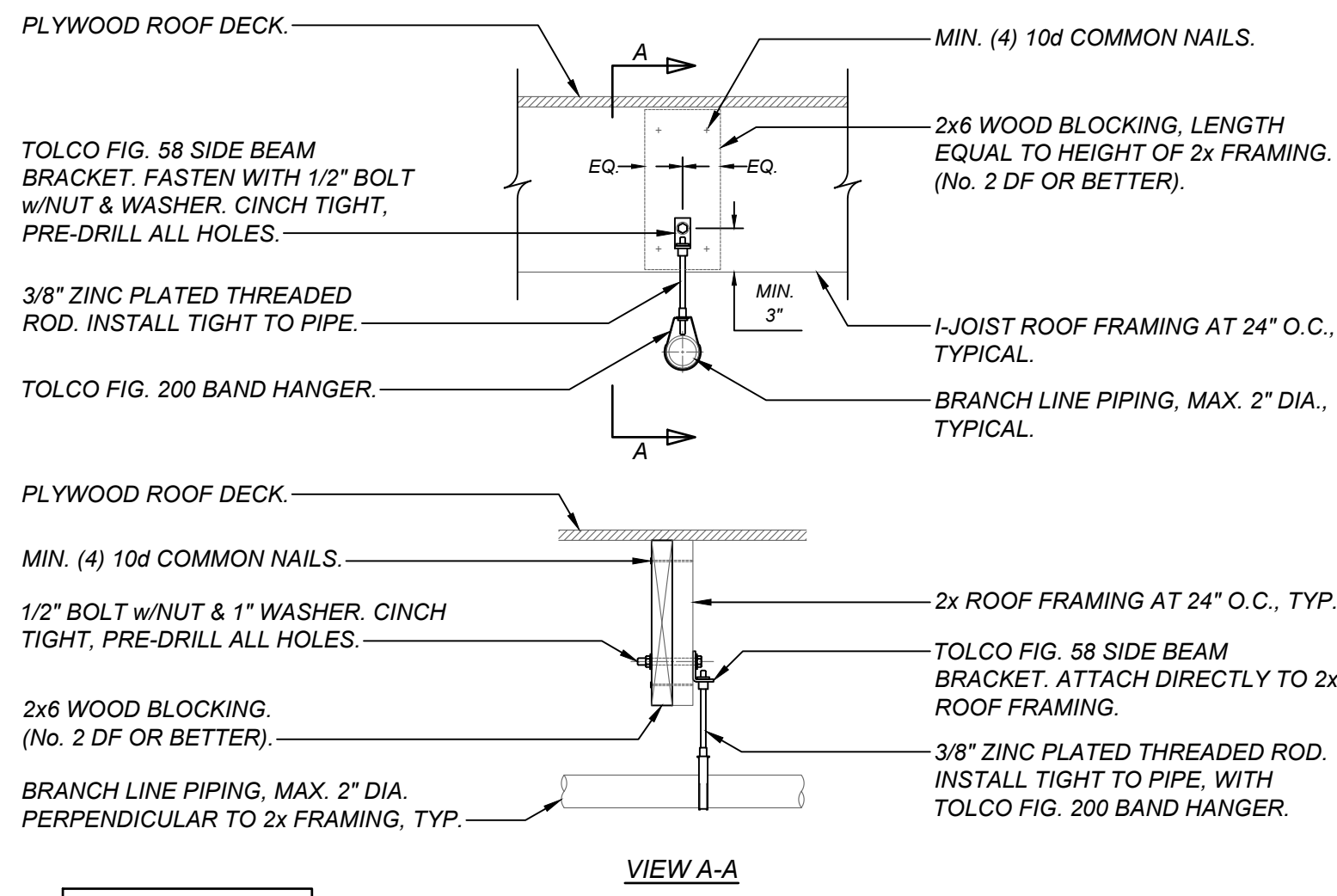


### SWAY BRACE STRUCTURAL ATTACHMENT TO STEEL I-BEAM

SCALE: NONE

FSS007

E  
F7

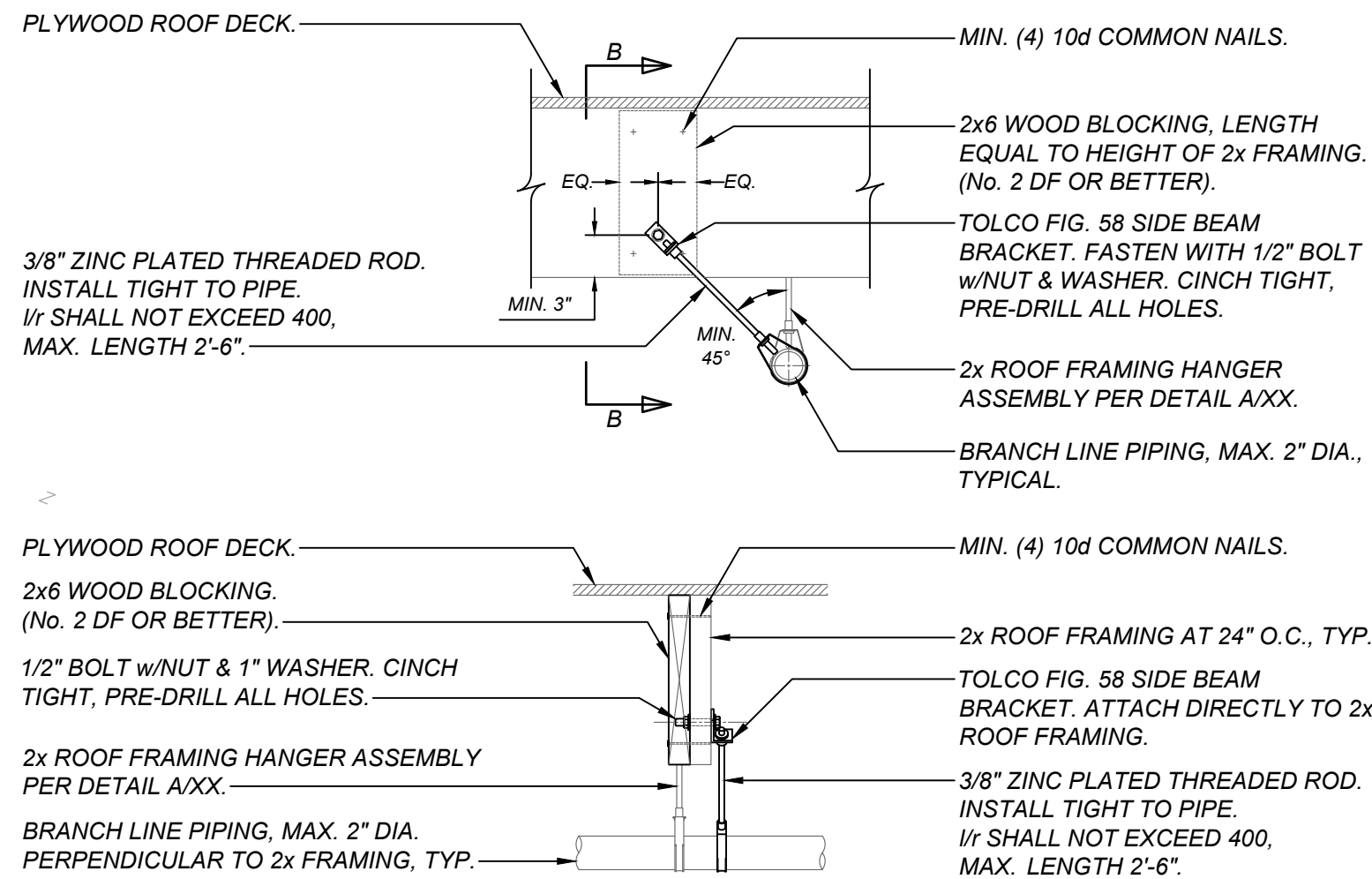


### BRANCH LINE HANGER SUPPORT AT 2x ROOF FRAMING (2" MAX. PIPE DIAMETER)

SCALE: NONE

FSS201-11.19

A  
F7



### BRANCH LINE RESTRAINT AT 2x ROOF FRAMING

SCALE: NONE

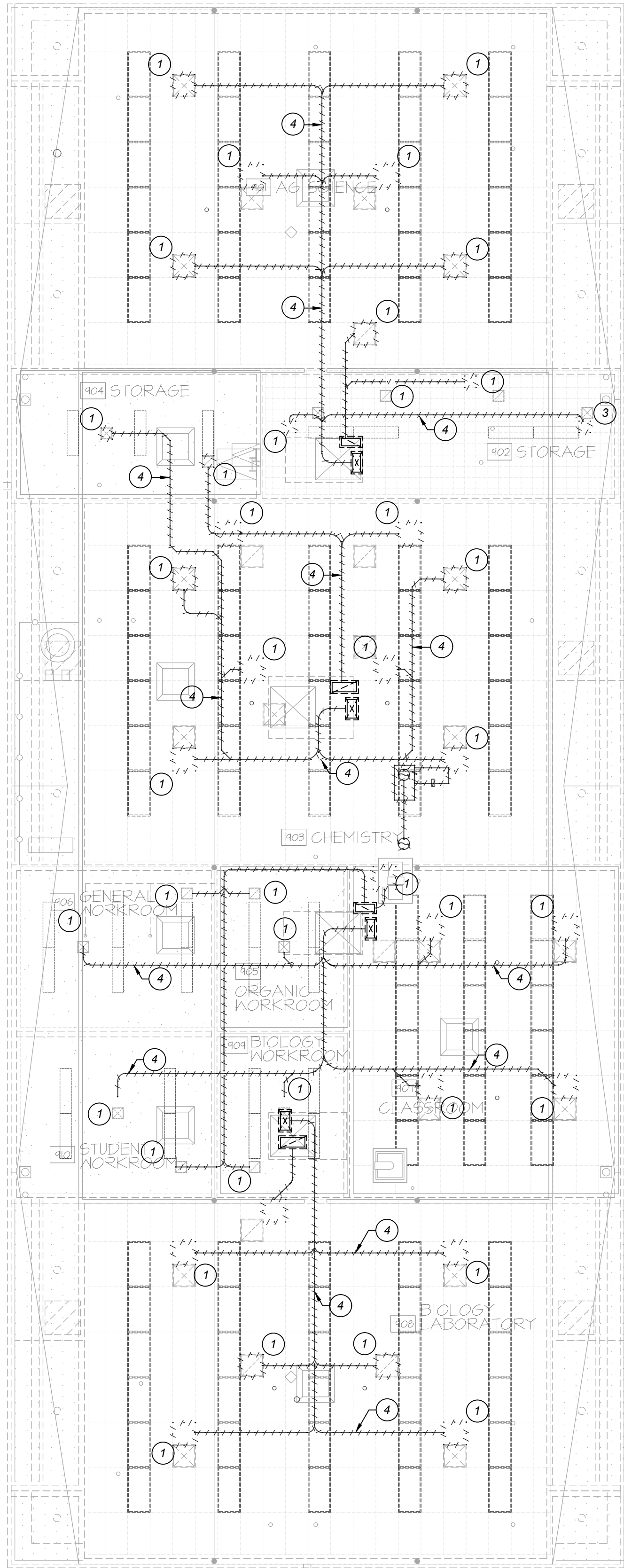
FSS102-11.19

B  
F7

MAX. SPACING OF BRANCH LINE RESTRAINTS				
PIPE DIA. (INCHES)	SEISMIC COEFFICIENT - C <sub>p</sub>			
	C <sub>p</sub> ≤ 0.50	0.50 < C <sub>p</sub> ≤ 0.71	0.71 < C <sub>p</sub> ≤ 1.40	C <sub>p</sub> ≥ 1.40
1	43-FT	36-FT	26-FT	22-FT
1 1/4	46-FT	39-FT	27-FT	24-FT
1 1/2	49-FT	41-FT	29-FT	25-FT
2	53-FT	45-FT	31-FT	27-FT

MAXIMUM SWAY BRACE SPACING		
BASED ON DETAILS ON THIS SHEET ONLY		
PIPE DIA.	ORIENTATION OF BRACE	MAX. SPACING
4"	LATERAL	18'-0"
4"	LONGITUDINAL	40'-0"
3"	LATERAL	18'-0"
3"	LONGITUDINAL	40'-0"



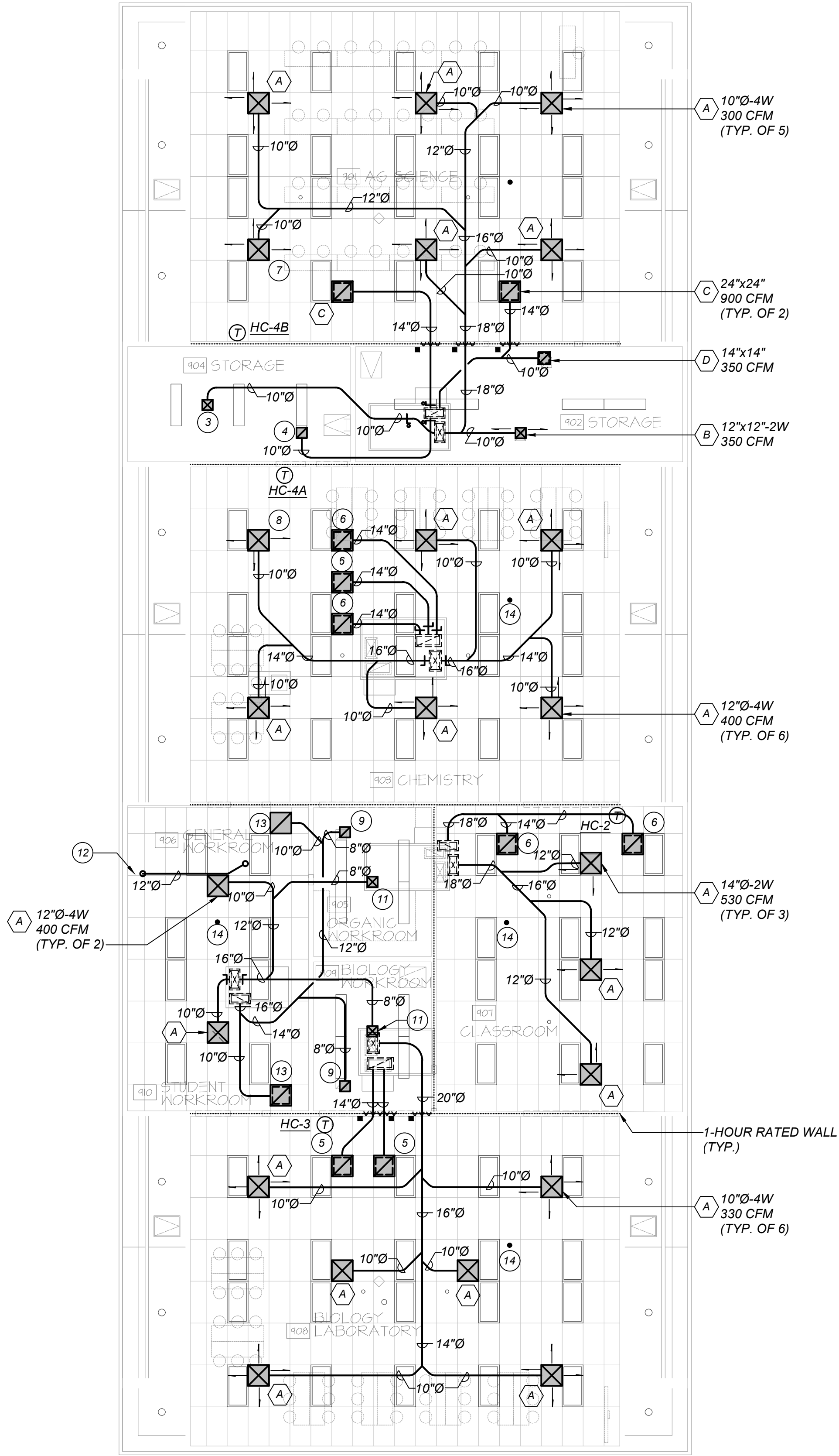


HVAC DEMOLITION PLAN

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

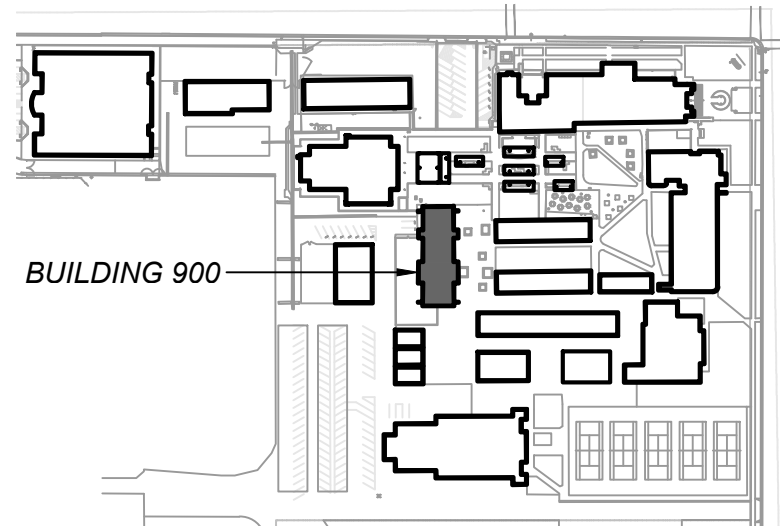
DEMO KEYNOTES: (THIS SHEET ONLY)

- 1 REMOVE (E) CEILING GRILLE & ASSOCIATED DUCTWORK.
- 2 NOT USED.
- 3 REMOVE (E) WALL THERMOSTAT. FIELD VERIFY LOCATION.
- 4 REMOVE (E) DUCTWORK ABOVE CEILING AS INDICATED.



HVAC PLAN

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



BUILDING KEY PLAN



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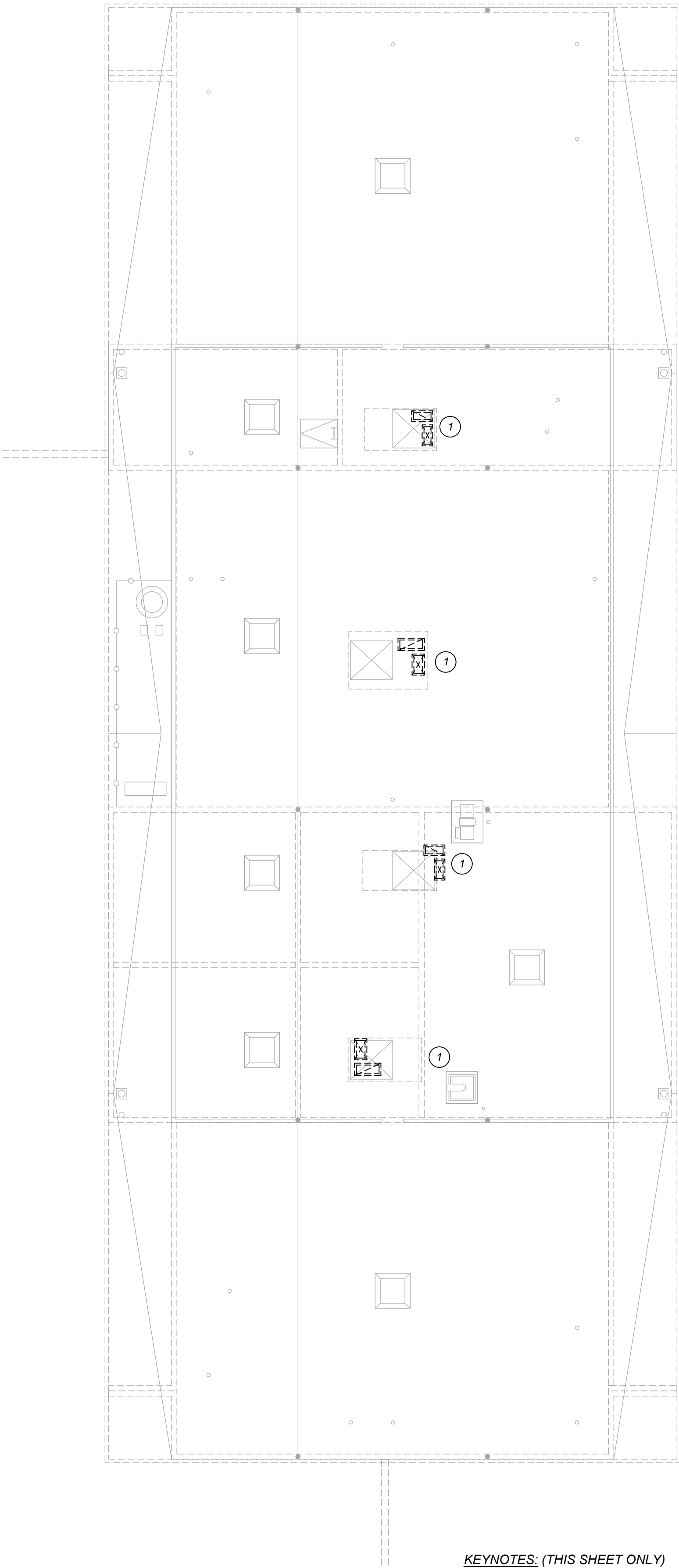
TITLE  
BUILDING 900  
HVAC DEMO AND  
HVC PLAN

**M1**

PROJECT **1751a**

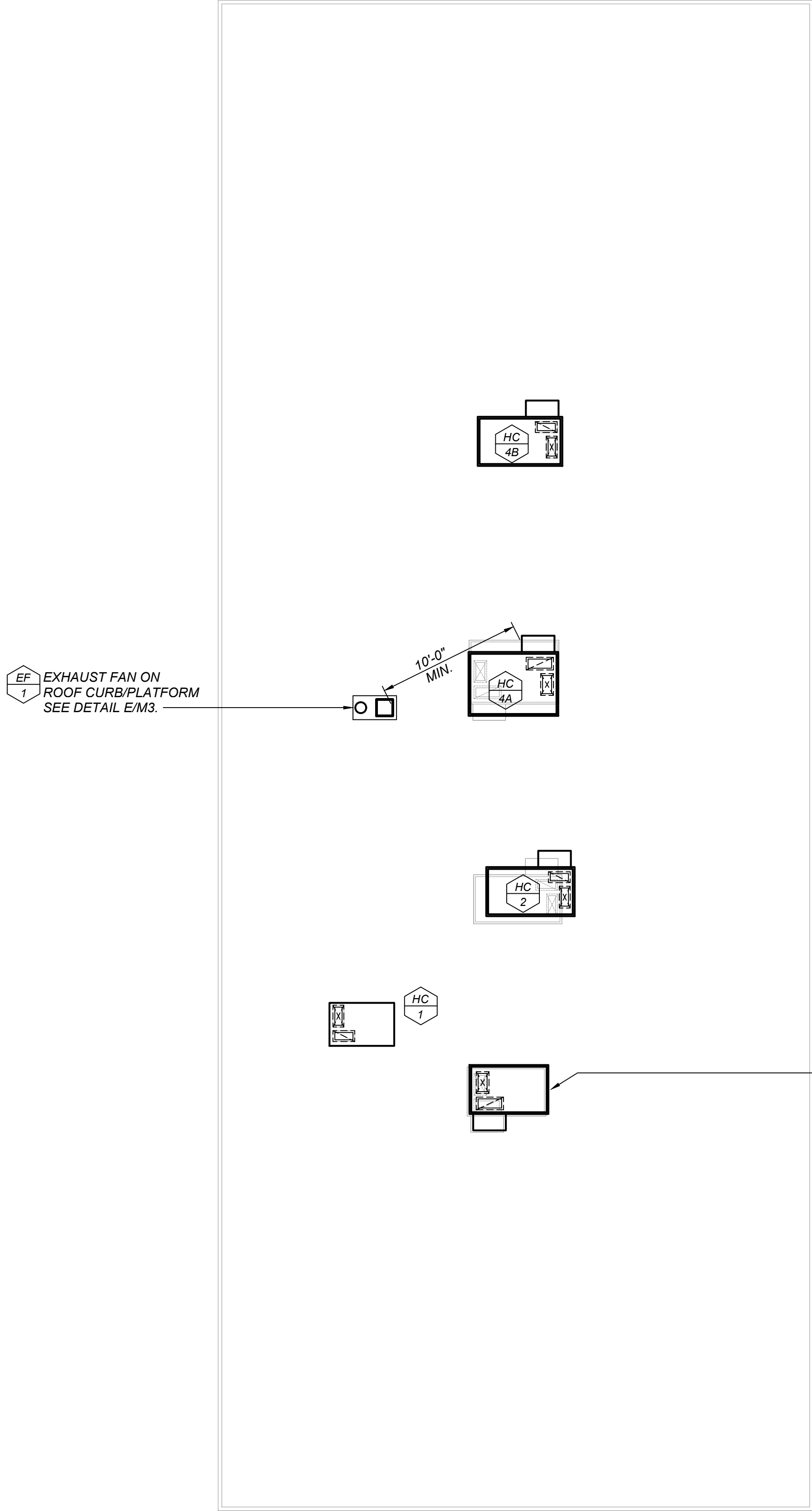


P:\2022\22035 Corcoran HS Modernization BLDG 900\4-Drawings\4 M\2 BLDG 900 ROOF.dwg gurdavo 20 April 2023 11:39 AM

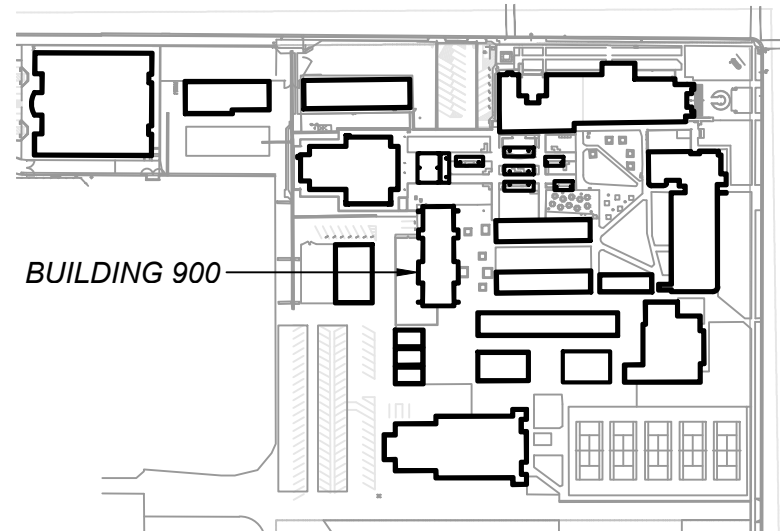


KEYNOTES: (THIS SHEET ONLY)  
① REMOVE (E) H/C UNIT, CURB/PLATFORM & DUCT DROPS. ROOF OPENING TO BE REVISED.

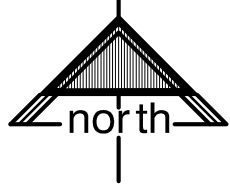
**BUILDING 900 DEMOLITION ROOF PLAN**  
SCALE: 1/8" = 1'-0"



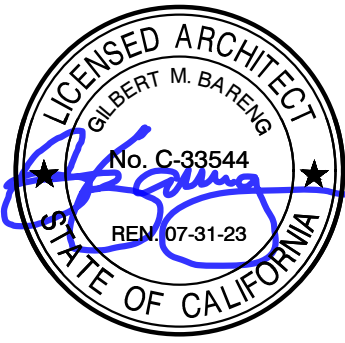
**BUILDING 900 ROOF PLAN**  
SCALE: 1/8" = 1'-0"



**BUILDING KEY PLAN**



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TITLE  
BUILDING 900  
HVAC ROOF DEMO  
PLAN

**M2**

PROJECT **1751a**







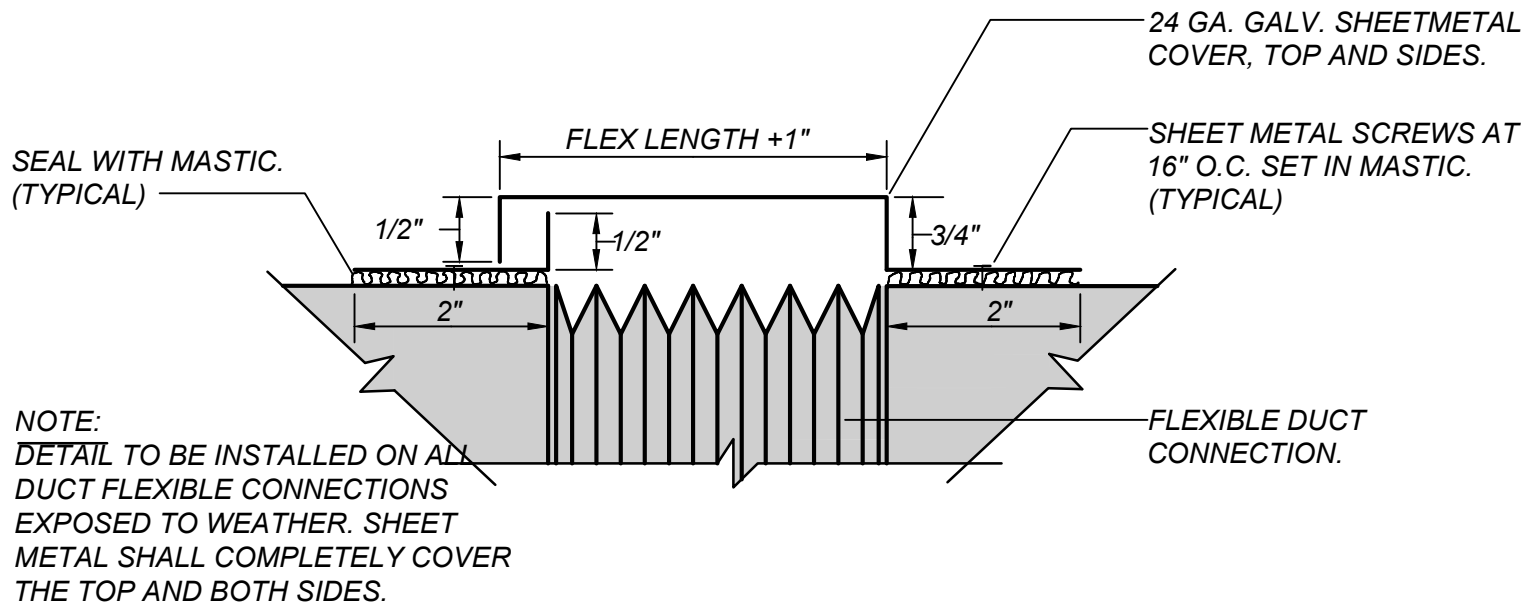
GENERAL NOTES:

- THE INTENT OF THE DRAWING AND SPECIFICATIONS IS TO CONSTRUCT THE BUILDING IN ACCORDANCE WITH THE 2019 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 DSA PRIOR TO COMMENCEMENT OF THE WORK. DOCUMENTS SHALL BE PREPARED AND SUBMITTED TO DSA IN COMPLIANCE WITH DSA INTERPRETATION OF REGULATION IR A-6.
- 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 INTERFERENCE 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.
- 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.
- ALL MECHANICAL, PLUMBING, AND ELECTRICAL COMPONENTS SHALL BE ANCHORED AND INSTALLED PER THE DETAILS ON THE DSA 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 2019 CBC, SECTIONS 1617A.1.18 THROUGH 1617A.1.26 AND ASCE 7-16 CHAPTERS 13, 26 AND 30.
  - ALL PERMANENT EQUIPMENT AND COMPONENTS.
  - TEMPORARY OR MOVABLE EQUIPMENT THAT IS PERMANENTLY ATTACHED (E.G. HARD WIRED) TO THE BUILDING UTILITY SERVICES SUCH AS ELECTRICITY, GAS OR WATER.
  - MOVABLE EQUIPMENT WHICH IS STATIONED IN ONE PLACE FOR MORE THAN 8 HOURS AND HEAVIER THAN 400 POUNDS ARE REQUIRED TO BE ANCHORED WITH TEMPORARY ATTACHMENTS.

THE ATTACHMENT OF THE FOLLOWING MECHANICAL AND ELECTRICAL COMPONENTS SHALL BE POSITIVELY ATTACHED TO THE STRUCTURE, BUT NEED NOT BE DETAILED ON THE PLANS. THESE COMPONENTS SHALL HAVE FLEXIBLE CONNECTIONS PROVIDED BETWEEN THE COMPONENT AND ASSOCIATED DUCTWORK, PIPING, AND CONDUIT.

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

FOR THOSE ELEMENTS THAT DO NOT REQUIRE DETAILS ON THE APPROVED DRAWINGS, THE INSTALLATION SHALL BE SUBJECT TO THE APPROVAL OF THE STRUCTURAL ENGINEER OF RECORD AND THE DSA DISTRICT STRUCTURAL ENGINEER. THE PROJECT INSPECTOR WILL VERIFY THAT ALL COMPONENTS AND EQUIPMENT HAVE BEEN ANCHORED IN ACCORDANCE WITH ABOVE REQUIREMENTS.
- PENETRATIONS THROUGH FIRE RATED WALLS, FLOOR/CEILING, AND ROOF/CEILING ASSEMBLIES SHALL BE SEALED USING AN APPROVED SYSTEM CAPABLE OF PREVENTING THE PASSAGE OF FLAMES AND HOT GASES WHEN SUBJECTED TO THE REQUIREMENTS OF THE TEST STANDARD SPECIFIC TO FIRE STOPS PER 2019 CBC SECTION 714. THIS INCLUDES EXISTING PIPE AND CONDUIT THROUGH NEW ASSEMBLIES. CUSTOM DESIGNED SYSTEMS WHICH COMBINE COMPONENTS FROM DIFFERENT APPROVED SYSTEMS BUT HAVE NOT BEEN TESTED AS A COMPLETE ASSEMBLY WILL NOT BE ACCEPTABLE. FOR FIRE STOPS FOR PIPE PENETRATIONS SEE SPECIFICATIONS.
- 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.
- SA DUCTWORK SHALL BE 1" PRESSURE CLASS, AND] RA & EA DUCTWORK SHALL 1" PRESSURE CLASS UNLESS OTHERWISE NOTED.
- A DSA CERTIFIED PROJECT INSPECTOR (CLASS 3) EMPLOYED BY THE DISTRICT & APPROVED BY DSA SHALL PROVIDE CONTINUOUS INSPECTION OF THE WORK. THE DUTIES OF THE INSPECTOR ARE DEFINED IN SECTION 4-338, PART 1, TITLE 24, CCR.
- A DSA ACCEPTED TESTING LABORATORY DIRECTLY EMPLOYED BY THE DISTRICT SHALL CONDUCT ALL THE REQUIRED TESTS AND INSPECTIONS FOR THE PROJECT.
- MANUFACTURED SUPPORT FRAMES AND CURBS USING HOT ROLLED OR COLD-FORMED STEEL FOR MECHANICAL EQUIPMENT WEIGHING LESS THAN 2000# SHALL BE EXEMPT FROM SPECIAL INSPECTIONS AND TESTING. SEE DSA-103 FORM.
- SEE DETAIL C/M4 FOR FIRE / SMOKE DAMPER.

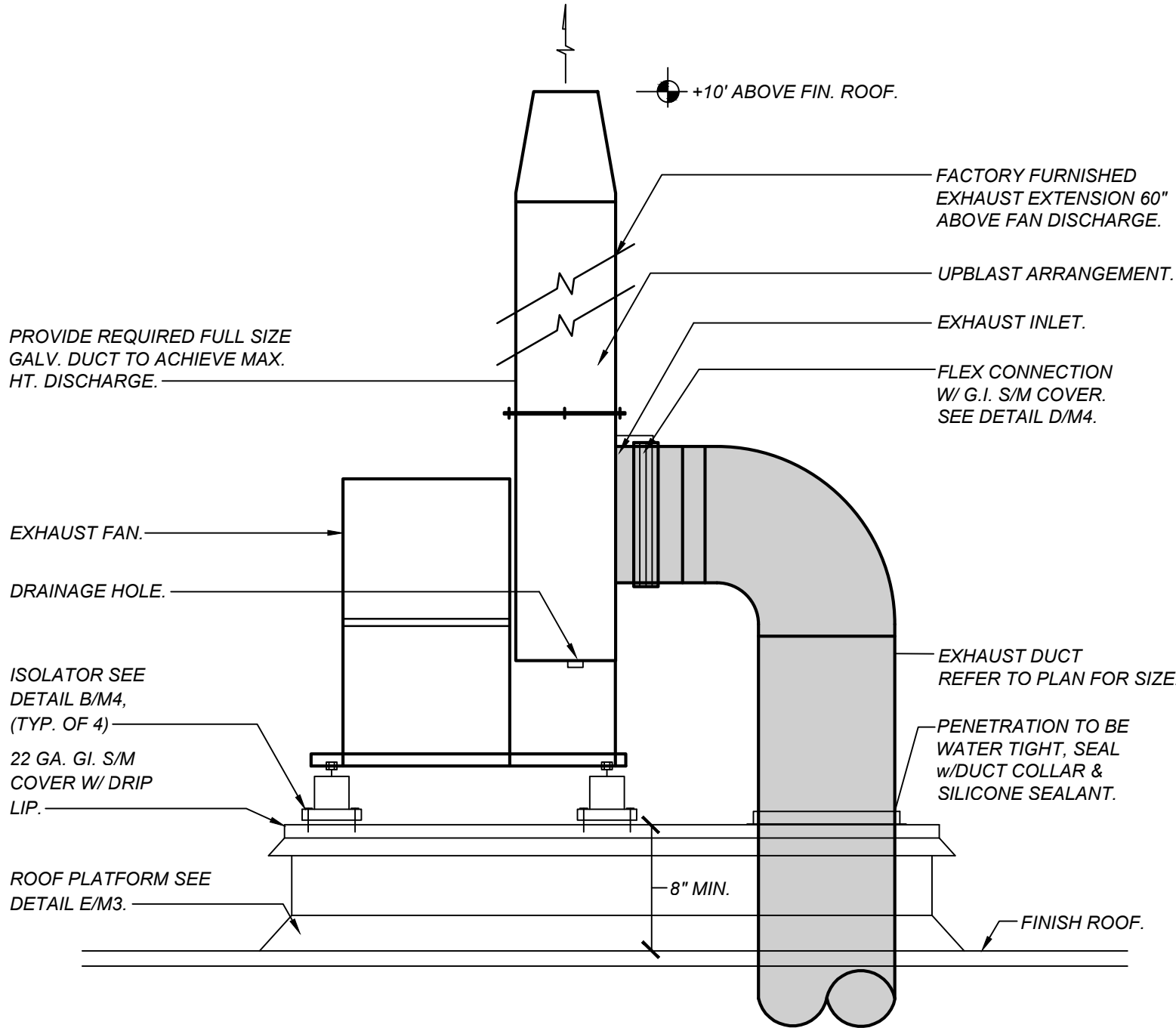


SHEET METAL WEATHER COVER FOR FLEXIBLE DUCT CONNECTION DETAIL

SCALE: NONE

D  
M4

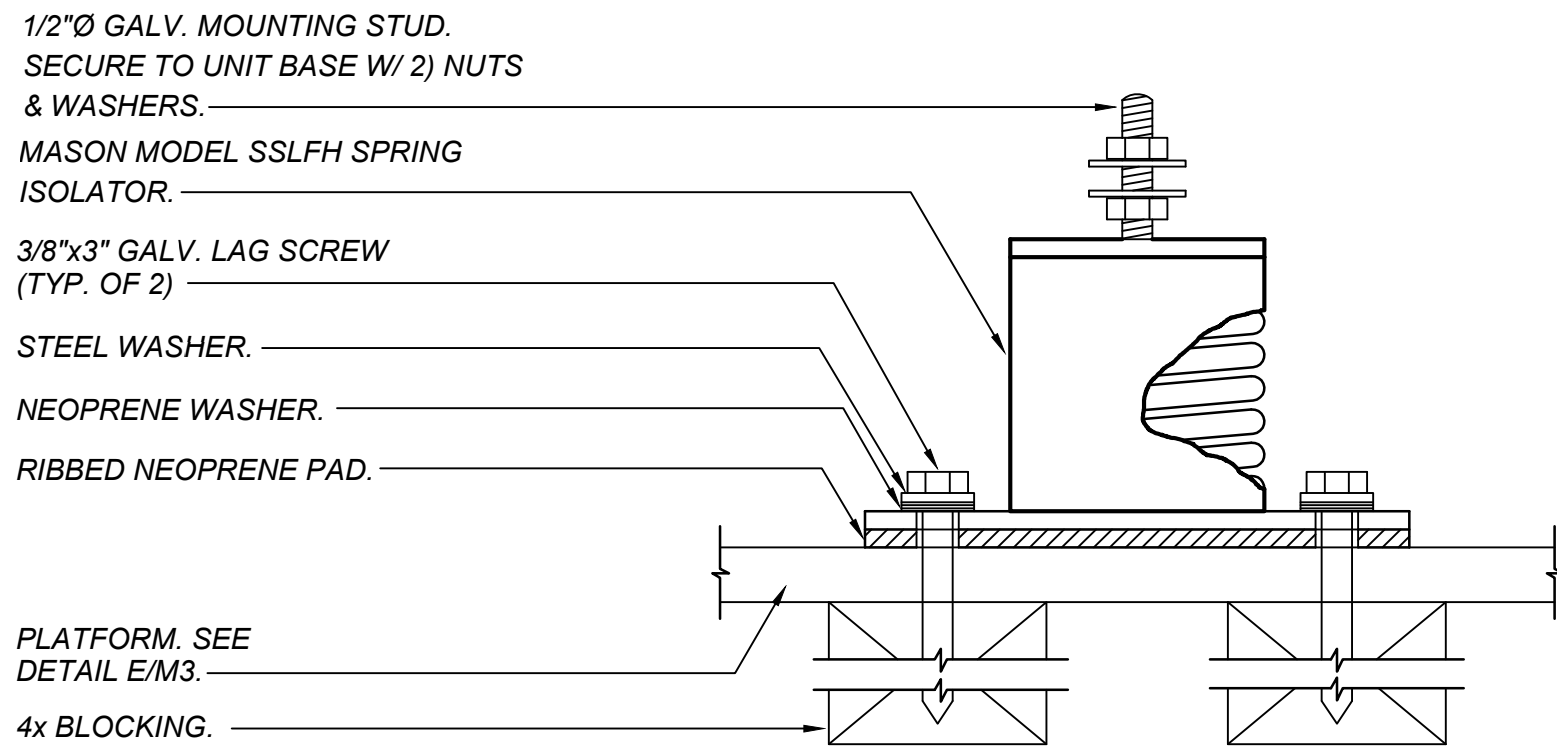
AIR CONDITIONING LEGEND		
SYMBOL	ITEM	ABBR
	ROUND DUCT	Ø
	FLAT OVAL DUCT	
	SHEET METAL DUCT	—
	ACOUSTIC LINING FOR DUCT OR GRILLES	(L)
	DUCT W/EXT INSULATION & GALV. SM SUNSHIELD	—
	SUPPLY AIR DUCT DROP	—
	RETURN AIR DUCT DROP	—
	EXHAUST DUCT AIR DROP	—
	SUPPLY AIR DUCT RISE	—
	RETURN AIR DUCT RISE	—
	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
	FIRE/SMOKE DAMPER WITH ACCESS PANEL	F/SD
	CUBIC FEET OF AIR PER MINUTE	CFM
	THERMOSTAT @ +4'-0" TOP OF BOX	T'STAT
	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)
	DUCT SMOKE DETECTOR	SD
	AUDIBLE/VISUAL ALARM	A/VA
	BYPASS TIMER	BPT



SCIENCE HOOD EXHAUST FAN MOUNTING DETAIL

SCALE: NONE

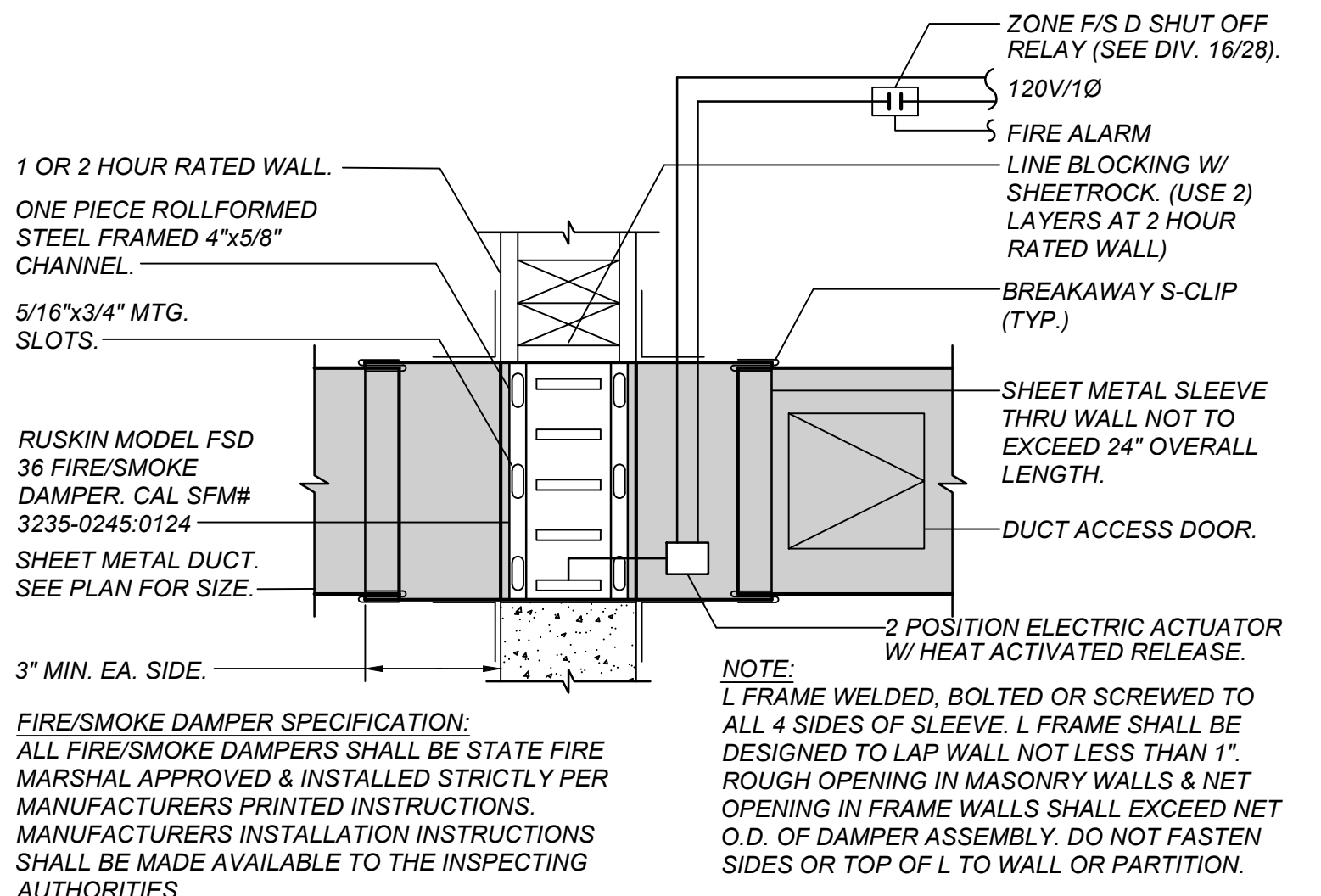
A  
M4



SPRING ISOLATOR ON PLATFORM DETAIL

SCALE: NONE

B  
M4



FIRE/SMOKE DAMPER AT WALL DETAIL

SCALE: NONE

C  
M4



APPROVALS

FILE # 16-H1 APPLICATION # 02-120394

IDENTIFICATION STAMP

DIV. OF THE STATE ARCHITECT

APP: 02-120394 INC:

REVIEWED FOR

SS ☒ FLS ☒ ACS ☒

DATE: 05/01/2023

LICENSED ARCHITECT

JOSEPH M. BARENG

No. C-33544

RENEW 07-31-23

STATE OF CALIFORNIA

DATE: AUGUST 24, 2022

MODERNIZATION AT

CORCORAN HIGH SCHOOL

SCIENCE BUILDING

1100 LETTS AVE., CORCORAN, CA. 93212

CORCORAN UNIFIED SCHOOL DISTRICT

1520 PATTERSON AVE., CORCORAN, KINGS COUNTY, CA. 93212

REVISIONS

ARCHITECTURE

INGENUITY

MANGINI

McLAIN BARENG MORRELLI SCOTT

www.mangini.us

(559) 627-0530 Office

(559) 627-1326 Fax

MANGINI ASSOCIATES INC.

4320 West Mineral King Avenue

Visalia, California 93291

TITLE

DETAILS, NOTES

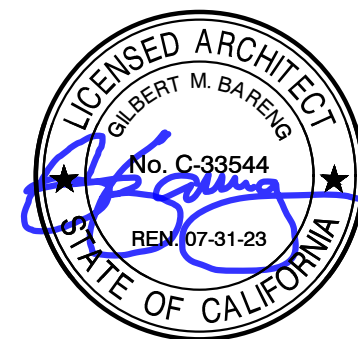
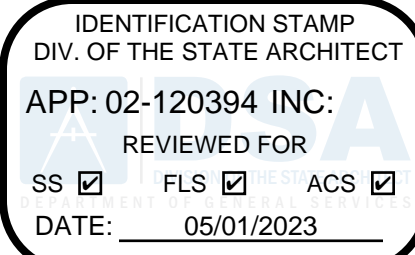
AND

LEGEND

M4

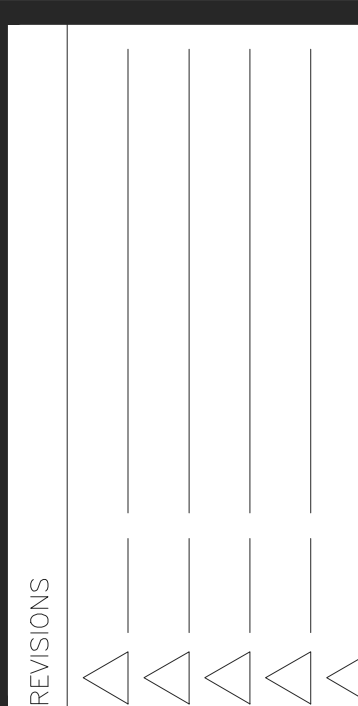
PROJECT 1751a





DATE: AUGUST 24, 2022

MODERNIZATION AT  
CORCORAN HIGH SCHOOL  
SCIENCE BUILDING  
1100 LETTS AVE., CORCORAN, CA. 93212  
CORCORAN UNIFIED SCHOOL DISTRICT  
1520 PATTERSON AVE., CORCORAN, KINGS COUNTY, CA. 98212



ARCHITECTURE  
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TITLE TITLE 24

M5

PROJECT 1751a

## BUILDING ENERGY ANALYSIS REPORT

### PROJECT:

Building 900 Modernization  
1520 Patterson Ave  
Corcoran , CA 93212

### Project Designer:

Mangini Associates Inc.  
4320 West Mineral King Avenue  
Visalia , CA 93291  
559-627-0530

### Report Prepared by:

Creighton Whaley  
Lawrence Engineering Group  
7084 North Maple Ave., Suite 101  
Fresno, CA 93720  
(559) 431-0101

### Job Number:

22035

### Date:

8/1/2022

The EnergyPro computer program has been used to perform the calculations summarized in this compliance report. This program has approval and is authorized by the California Energy Commission for use with both the Residential and Nonresidential 2019 Building Energy Efficiency Standards. This program developed by EnergySoft Software - www.energysoft.com

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Form PRF-01-E Certificate of Compliance	3
Form NRCC-PLB-E Domestic Water Heating System	15

Project Name:	Building 900	NRCC-PRF-01-E	Page 2 of 12
Project Address:	1520 Patterson Ave Corcoran 93212	Calculation Date/Time:	10/27, Mon, Aug 01, 2022
Input File Name:	22035 Building 900 Mod_V8.3_08.01.2022.cbd13x		

### C1. COMPLIANCE RESULTS FOR PERFORMANCE COMPONENTS (Annual TOV Energy Use, kWh/ft<sup>2</sup>-yr)

#### COMPLIES

Energy Component	Standard Design (TDV)	Proposed Design (TDV)	Compliance Margin (TDV) <sup>1</sup>
Space Heating	13.43	9.75	11.36
Space Cooling	112.52	78.68	33.84
Indoor Fans	222.44	166.78	-44.29
Heat Rejection	--	--	--
Pumps & Misc.	--	--	--
Domestic Hot Water	17.17	12.70	4.47
Indoor Lighting	40.01	40.01	--
<b>ENERGY STANDARDS COMPLIANCE TOTAL</b>	<b>307.27</b>	<b>301.87</b>	<b>5.40 (1.8%)</b>

<sup>1</sup> Notes: The number in parenthesis following the Compliance Margin in column 4, represents the Percent better than Standard.

### C2. RESULTS FOR 'ABOVE CODE' QUALIFICATIONS<sup>1</sup>

Miscellaneous Energy Component	Standard Design (TDV)	Proposed Design (TDV)	Compliance Margin (TDV) <sup>1</sup>
Receptacle	72.74	72.74	--
Process	180.17	180.17	--
Other Ltg	--	--	--
Process Motors	--	--	--
<b>COMPLIANCE TOTAL PLUS MISCELLANEOUS COMPONENTS</b>	<b>560.18</b>	<b>554.78</b>	<b>5.4 (1.8%)</b>

<sup>1</sup> Notes: This table is used to document compliance with programs OTHER THAN Title 24 Part 6, if applicable.

Project Name:	Building 900	NRCC-PRF-01-E	Page 2 of 12
Project Address:	1520 Patterson Ave Corcoran 93212	Calculation Date/Time:	10/27, Mon, Aug 01, 2022
Input File Name:	22035 Building 900 Mod_V8.3_08.01.2022.cbd13x		

### A. GENERAL INFORMATION

1 Project Location (city)	Corcoran	8 Standards Version	Compliance2019
2 CA Zip Code	93212	9 Compliance Software (version)	EnergyPro 8.3
3 Climate Zone	13	10 Weather File	LEMOORE_747020_CZ2010.epw
4 Total Conditioned Floor Area in Scope	6,199 ft <sup>2</sup>	11 Building Orientation (deg)	(N) 0 deg
5 Total Unconditioned Floor Area	0 ft <sup>2</sup>	12 Permitted Scope of Work	ExistingAdditionAndAlteration
6 Total # of Stories (Habitable Above Grade)	1	13 Building Type(s)	Nonresidential
7 Total # of dwelling units	0	14 Gas Type	NaturalGas

### B. PROJECT SUMMARY

Table Instructions: 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 permit application.

Building Components Complying via Performance				Building Components Complying Prescriptively			
Envelope (see Table G)	<input checked="" type="checkbox"/> Performance	Covered Process: Commercial Kitchens	<input checked="" type="checkbox"/> Not Included	<input checked="" type="checkbox"/> Performance	Indoor Lighting (Unconditioned) \$140.6	NRCC-LTG-E	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).
	<input checked="" type="checkbox"/> Not Included						
Mechanical (see Table H)	<input checked="" type="checkbox"/> Performance	Covered Process: Computer Rooms	<input checked="" type="checkbox"/> Not Included	<input checked="" type="checkbox"/> Performance	Outdoor Lighting \$140.7	NRCC-LTG-E	Mandatory Measures: Electrical power systems, commissioning, solar ready elevator and escalator requirements are mandatory and should be shown on the NRCC form listed if applicable (i.e. compliance will not be shown on the NRCC-PRF-E).
	<input checked="" type="checkbox"/> Not Included		<input checked="" type="checkbox"/> Not Included	<input checked="" type="checkbox"/> Performance	Sign Lighting \$140.8	NRCC-LTG-E	
Domestic Hot Water (see Table I)	<input checked="" type="checkbox"/> Performance	Covered Process: Laboratory Exhaust	<input checked="" type="checkbox"/> Not Included	<input checked="" type="checkbox"/> Performance			Electrical Power Distribution \$110.11
	<input checked="" type="checkbox"/> Not Included		<input checked="" type="checkbox"/> Not Included	<input checked="" type="checkbox"/> Performance			
Lighting (Indoor Conditioned, see Table N)	<input checked="" type="checkbox"/> Performance			<input checked="" type="checkbox"/> Not Included			Commissioning \$120.8
	<input checked="" type="checkbox"/> Not Included			<input checked="" type="checkbox"/> Performance			Solar Ready \$110.10
Solar Thermal Water Heating (see Table I)	<input checked="" type="checkbox"/> Performance			<input checked="" type="checkbox"/> Not Included			
	<input checked="" type="checkbox"/> Not Included			<input checked="" type="checkbox"/> Performance			

CA Building Energy Efficiency Standards- 2019 Nonresidential Compliance Report Version: NRCC-PRF-01-E-12092021-6844 Report Generated at: 2022-08-01 10:27:45

Project Name:	Building 900	NRCC-PRF-01-E	Page 5 of 12
Project Address:	1520 Patterson Ave Corcoran 93212	Calculation Date/Time:	10/27, Mon, Aug 01, 2022
Input File Name:	22035 Building 900 Mod_V8.3_08.01.2022.cbd13x		

### G3. OPAQUE SURFACE ASSEMBLY SUMMARY

1 Surface Name	2 Surface Type	3 Area (ft <sup>2</sup> )	4 Framing Type	5 Cavity R-Value	6 Continuous R-Value	7 Units	8 Value	9 Description of Assembly Layers	10 U-Factor
22035 Wall11	ExteriorWall	4935	Wood	19	NA	U-Factor	0.065	Stucco - 7/8 in. Vapor permeable felt - 1/8 in. Wood framed wall, 16in. OC, 7.25in., R-15 Gypsum Board - 1/2 in.	E

<sup>1</sup> Status: N = New, A = Altered, C = Existing

### G4. OPAQUE DOOR SUMMARY

1 Assembly Name	2 Overall U-Factor	3 Status
Metal Door26	0.700	E

### G5. FENESTRATION ASSEMBLY SUMMARY

1 Fenestration Assembly Name / Tag or I.D.	2 Fenestration Type / Product Type / Frame Type	3 Certification Method <sup>1</sup>	4 Assembly Method	5 Area ft <sup>2</sup>	6 Overall SHGC	7 Overall VT	8 U-Factor	9 Status
22035 Window	Vertical fenestration FixedWindow	NRFC Rated	Site-built	200	0.30	0.30	0.42	E

<sup>1</sup> Newly installed fenestration that have a certified NFRC label Certificate or use the U-factor values listed in Table 110.6.4 and Table 110.6.6. Center of Glass (COG) values are for the glass only, determined by the manufacturer, and are shown for ease of reference. The U-factor values are calculated per Nonresidential Appendix NAB and are used to the assembly.  
<sup>2</sup> Status: N = New, A = Altered, C = Existing

CA Building Energy Efficiency Standards- 2019 Nonresidential Compliance Report Version: NRCC-PRF-01-E-12092021-6844 Report Generated at: 2022-08-01 10:27:45

Project Name:	Building 900	NRCC-PRF-01-E	Page 7 of 12
Project Address:	1520 Patterson Ave Corcoran 93212	Calculation Date/Time:	10/27, Mon, Aug 01, 2022
Input File Name:	22035 Building 900 Mod_V8.3_08.01.2022.cbd13x		

### H3. EXHAUST FAN SUMMARY

1 System ID	2 Zone Name	3 Qty	4 CFM	5 Motor BHP	6 Power Per Flow (W/dm)	7 Total Static Pressure (in. H <sub>2</sub> O)	8 U-Factor
Z5 909 Biology21	Z-25 909 Biology	1	2,000	0.250	0.125	0.52	N
Z2 903M1	Z-22 903	1	2,400	0.530	0.182	0.86	N
Z1 901-902 90450	Z-21 901-902 904	1	2,400	0.530	0.182	0.86	N

<sup>1</sup> Status: N = New, A = Altered, C = Existing

### H4. Wet System Equipment (boilers, chillers, cooling towers, etc.)

This Section Does Not Apply

### H5. PUMPS

This Section Does Not Apply

### H6. SYSTEM SPECIAL FEATURES

1 System Name	2 Equipment Type	3 Window Interlocks per §140.4(n)	4 Other Special Features and Controls
HC 1	SZAC	NA	Zones With CO2 Sensor Vent. Control Differential Drybulb Economizer
HC 2	SZAC	NA	Zones With CO2 Sensor Vent. Control Differential Drybulb Economizer
HC 3	SZAC	NA	Zones With CO2 Sensor Vent. Control Differential Drybulb Economizer
HC 4A	SZAC	NA	Zones With CO2 Sensor Vent. Control Differential Drybulb Economizer
HC 4B	SZAC	NA	Zones With CO2 Sensor Vent. Control Differential Drybulb Economizer
Undefined Plant1 - SHW	Service Hot Water, Primary Only	NA	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-PRF-E.

CA Building Energy Efficiency Standards- 2019 Nonresidential Compliance Report Version: NRCC-PRF-01-E-12092021-6844 Report Generated at: 2022-08-01 10:27:45

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Project Address:	1520 Patterson Ave Corcoran 93212	Calculation Date/Time:	10/27, Mon, Aug 01, 2022
Input File Name:	22035 Building 900 Mod_V8.3_08.01.2022.cbd13x		

### G1. ENVELOPE GENERAL INFORMATION (conditioned spaces only)

1 Opaque Surfaces & Orientation	2 Total Gross Surface Area (ft <sup>2</sup> )	3 Total Fenestration Area (ft <sup>2</sup> )	4 Window to Wall Ratio (%)
North-Facing <sup>1</sup>	825 ft <sup>2</sup>	0 ft <sup>2</sup>	0.0%
East-Facing <sup>2</sup>	1,650 ft <sup>2</sup>	200 ft <sup>2</sup>	12.1%
South-Facing <sup>3</sup>	825 ft <sup>2</sup>	0 ft <sup>2</sup>	0.0%
West-Facing <sup>4</sup>	1,639 ft <sup>2</sup>	0 ft <sup>2</sup>	0.0%
Total	4,899 ft <sup>2</sup>	200 ft <sup>2</sup>	04.0%
Roof	6,199 ft <sup>2</sup>	0 ft <sup>2</sup>	0.0%

Notes:

<sup>1</sup> North-Facing is oriented to within 45 degrees of true north, including 45°00'00" east of north (NE), but excluding 45°00'00" west of north (NW).

<sup>2</sup> East-Facing is oriented to within 45 degrees of true east, including 45°00'00" south of east (SE), but excluding 45°00'00" north of east (NE).

<sup>3</sup> South-Facing is oriented to within 45 degrees of true south, including 45°00'00" west of south (SW), but excluding 45°00'00" east of south (SE).

<sup>4</sup> West-Facing is oriented to within 45 degrees of true west, including 45°00'00" north of due west (NW), but excluding 45°00'00" south of west (SW).

### G3. OPAQUE SURFACE ASSEMBLY SUMMARY

1 Surface Name	2 Surface Type	3 Area (ft <sup>2</sup> )	4 Framing Type	5 Cavity R-Value	6 Continuous R-Value	7 Units	8 Value	9 Description of Assembly Layers	10 U-Factor
Slab On Grade9	Underground Floor	6199	NA	0	NA	F-Factor	0.73	Slab Type - UnheatedSlabOnGrade Insulation Orientation - None Insulation R-Value = 90	E
22035 Wall11	InteriorWall	20	Wood	19	NA	U-Factor	0.063	Stucco - 7/8 in. Vapor permeable felt - 1/8 in. Wood framed wall, 16in. OC, 7.25in., R-15 Gypsum Board - 1/2 in.	E
22035 Roof13	Roof	6199	Wood	30	NA	U-Factor	0.035	Asphalt shingles - 1/4 in. Vapor permeable felt - 1/8 in. Plywood - 1/2 in. Air - Ceiling - 3/4 in. Wood framed roof, 16in. OC, 9.25in., R-30 Gypsum Board - 1/2 in.	N

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Project Name:	Building 900	NRCC-PRF-01-E	Page 6 of 12
Project Address:	1520 Patterson Ave Corcoran 93212	Calculation Date/Time:	10/27, Mon, Aug 01, 2022
Input File Name:	22035 Building 900 Mod_V8.3_08.01.2022.cbd13x		

### H1. DRY SYSTEM EQUIPMENT (furnaces, air handling units, heat pumps, VRF, economizers, etc.)

1 Equipment Name	2 Equipment Type	3 Qty	4 Total Heating Output (kBtu/h)	5 Supp Heat Output (kBtu/h)	6 Efficiency Unit	7 Efficiency	8 Total Cooling Output (kBtu/h)	9 Efficiency Unit	10 Efficiency	11 Efficiency	12 Economizer Type (if present)	13 U-Factor
HC 1	SZAC (PackagedPhase)	1	34	0	AFUE	81.0	33	SEER/EER	17.00/16.10	DifferentialDrybulb	N	
HC 2	SZAC (PackagedPhase)	1	34	0	AFUE	81.0	33	SEER/EER	17.00/16.10	DifferentialDrybulb	N	
HC 3	SZAC (PackagedPhase)	1	34	0	AFUE	81.0	33	SEER/EER	17.00/16.10	DifferentialDrybulb	N	
HC 4A	SZAC (PackagedPhase)	1	59	0	AFUE	81.0	60	SEER/EER	15.00/13.00	DifferentialDrybulb	N	
HC 4B	SZAC (PackagedPhase)	1	59	0	AFUE	81.0	60	SEER/EER	15.00/13.00	DifferentialDrybulb	N	

<sup>1</sup> Status: N = New, A = Altered, C = Existing

### H2. FAN SYSTEMS SUMMARY

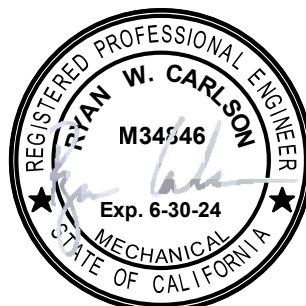
1 Name or Item Tag	2 Qty	3 Design OA CFM	4 CFM	5 Modeling Method	6 Power bhp	7 Power Units	8 Control	9 CFM	10 Modeling Method	11 Power bhp	12 Power Units	13 Control	14 U-Factor
HC 1	1	651	1050	BrakeHorsePower	0.520	bhp	ConstantVolume	NA	NA	NA	NA	NA	N
HC 2	1	529	1000	BrakeHorsePower	1.020	bhp	ConstantVolume	NA	NA	NA	NA	NA	N
HC 3	1	498	2000	BrakeHorsePower	1.330	bhp	ConstantVolume	NA	NA	NA	NA	NA	N
HC 4A	1	659	2400	BrakeHorsePower	1.790	bhp	ConstantVolume	NA	NA	NA	NA	NA	N
HC 4B	1	730	2400	BrakeHorsePower	1.790	bhp	ConstantVolume	NA	NA	NA	NA	NA	N

<sup>1</sup> Status: N = New, A = Altered, C = Existing

### H3. EXHAUST FAN SUMMARY

1 System ID	2 Zone Name	3 Qty	4 CFM	5 Motor BHP	6 Power Per Flow (W/dm)	7 Total Static Pressure (in. H <sub>2</sub> O)	8 U-Factor
Z3 905 909-9103	Z-23 905 909-910	1	800	0.240	0.262	1.24	N
Z4 907 Classroom22	Z-24 907 Classroom	1	2,000	0.250	0.109	0.52	N

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LAWRENCE  
ENGINEERING GROUP  
7084 N. Maple Ave., Suite 101  
(559) 431-0101  
22035  
Fresno, CA 93720  
FAX (559) 431-1342



Registration Number:	Registration Date/Time:	Registration Provider: Energysoft
CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance	Report Version: 2019.1.003 Schema Version: rev 20200601	Report Generated: 2022-08-01 10:31:12

Registration Number:	Registration Date/Time:	Registration Provider: Energysoft
CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance	Report Version: 2019.1.003 Schema Version: rev 20200601	Report Generated: 2022-08-01 10:31:12

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CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance	Report Version: 2019.1.003 Schema Version: rev 20200601	Report Generated: 2022-08-01 10:31:12

DATE: AUGUST 24, 2022



REVISIONS					
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**MANGINI** | ARCHITECTURE  
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	TITLE 24
	M6
PROJECT	1751a





Registration Number:	Registration Date/Time:	Registration Provider: Energysoft
CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance	Report Version: 2019.1.003 Schema Version: rev 20200601	Report Generated: 2022-08-01 10:31:12

Registration Number:	Registration Date/Time:	Registration Provider: Energysoft
CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance	Report Version: 2019.1.003 Schema Version: rev 20200601	Report Generated: 2022-08-01 10:31:12

The seal is circular with the text "LICENSED ARCHITECT" at the top, "GILBERT M. BARENG" in the center, "No. C-33544" below the name, "REN. 07-31-23" below the number, and "STATE OF CALIFORNIA" at the bottom. A blue ink signature is written across the seal.

**MODERNIZATION AT  
CORCORAN HIGH SCHOOL  
SCIENCE BUILDING**  
1100 LETTS AVE., CORCORAN, CA. 93212



REVISIONS	
△	_____
△	_____
△	_____
△	_____
△	_____

**MANGINI** | ARCHITECTURE  
INGENUITY

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

TITLE

TITLE 24

M7

PROJECT 1751a





ELECTRICAL SYMBOLS NOTES:

- (A) REFER TO FIRE ALARM DEVICES ELEVATION, DETAIL #2/E2.6 FOR RESPECTIVE MOUNTING HEIGHTS.
- (B) AT EXTERIOR LOCATIONS, PROVIDE WEATHER-RESISTANT TYPE G.F.C.I. DUPLEX RECEPTACLES, LEVITON #65362-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, RED DOT #CK-SUV OR EQUAL.
- (C) ACUTY CONTROLS #CAT 56 • J1 OR EQUAL. \* ASTERISK INDICATES LENGTH OF CABLE. CABLES ARE AVAILABLE IN 6', 1, 2, 5, 10, 15, 30', AND 50' LENGTHS.
- (D) LIBERTY WIRE CABLE, INC #18-2C-LVB OR EQUAL.
- (E) "LIGHT" ENABLED LIGHT FIXTURE PER FIXTURE SCHEDULE ON SHEET #EG1.2.
- (F) ACUTY CONTROLS #WXSX-PDT-LV-DX-WH OR EQUAL. PROVIDE A DECORATOR STYLE STAINLESS STEEL WALLPLATE.
- (G) ACUTY CONTROLS #PDM1A-DX-WH OR EQUAL. PROVIDE A DECORATOR STYLE STAINLESS STEEL WALLPLATE.
- (H) ACUTY CONTROLS #PDM1A-4P-DX-WH OR EQUAL. PROVIDE A DECORATOR STYLE STAINLESS STEEL WALLPLATE.
- (J) ACUTY CONTROLS #HC1-PDT-10-RJB OR EQUAL.
- (K) ACUTY CONTROLS #HC1-PDT-10-ADCX-RJB OR EQUAL.
- (L) ACUTY CONTROLS #PDM1A-WH OR EQUAL. PROVIDE A DECORATOR STYLE STAINLESS STEEL WALLPLATE.

ELECTRICAL SYMBOLS	
ALL DIMENSIONS TO CENTER OF BOX, U.O.N.	
3-	CIRCUIT NUMBER (3-A-38)
-A-	FIXTURE TYPE (3-A-38)
-38	FIXTURE WATTAGE (3-A-38)
	HOME RUN 3/4" - MIN. (PANEL A, CIRCUIT #3)
	CONDUIT RUN IN WALL OR ATTIC (1/2" - 2 #12 AWG THWN + 1 #12 GND)
	CONDUIT RUN IN FLOOR OR UG (1/2" - 2 #12 AWG THWN + 1 #12 GND)
	ANY CONDUIT RUN - 1/2" - 3 #12 AWG THWN + 1 #12 GND
	3/4" - 4 #12 AWG THWN + 1 #12 GND
	1/2" - 3/4" - 5 #12 AWG THWN + 1 #12 GND
	1" - 1C - 6 #12 AWG THWN + 1 #12 GND
	CONDUIT STUB - CAPPED AND LABELED.
	ELECTRICAL KEYNOTE #1, REFER TO NOTES ON SAME SHEET.
U.O.N.	UNLESS OTHERWISE NOTED
W.P.	WEATHERPROOF
	TERMINAL CABINET (SIZE AS SHOWN)
	ELECTRICAL PANEL BOARD
	DUPLEX RECEPTACLE IN WALL (45" MIN. TO BOTTOM OF BOX)
	QUADRUPLEX RECEPTACLE IN WALL (45" MIN. TO BOTTOM OF BOX)
	G.F.C.I. DUPLEX RECEPTACLE IN WALL (45" MIN. TO BOTTOM OF BOX)
	TWO G.F.C.I. DUPLEX RECEPTACLES IN A COMMON OUTLET BOX (45" MIN. TO BOTTOM OF BOX, U.O.N.)
	EMERGENCY LIGHT FIXTURE
	EXIT LIGHT, CEILING MOUNTED
	WALL MOUNTED LIGHT FIXTURE (MOUNT AS SHOWN)
	LIGHT FIXTURE
--CS--	NETWORK CABLE - CATEGORY 5e CABLE, LENGTH AS REQUIRED
--DC--	0-10V DIMMING CONTROL CABLE, LENGTH AS REQUIRED
	LIGHT FIXTURE WITH "LIGHT" EMBEDDED CONTROLS
	LIGHT FIXTURE EQUIPPED WITH EMERGENCY BATTERY PACK
	LIGHT SWITCH (44"-0" MAX. TO TOP OF BOX, U.O.N.)
	OCCUPANCY SENSOR WALL SWITCH (DUAL TECHNOLOGY) WITH ON/OFF SWITCH AND RAISE/LOWER DIMMING CONTROL, (44"-0" MAX. TO TOP OF BOX, U.O.N.)
	ON/OFF SWITCH WITH RAISE/LOWER DIMMING CONTROL (44"-0" MAX. TO TOP OF BOX, U.O.N.)
	ON/OFF SWITCH WITH RAISE/LOWER DIMMING CONTROL (FOUR CHANNELS) (44"-0" MAX. TO TOP OF BOX, U.O.N.)
	360° OCCUPANCY SENSOR (DUAL TECHNOLOGY), CEILING MOUNTED
	360° OCCUPANCY SENSOR (DUAL TECHNOLOGY) WITH AUTOMATIC DIMMING CONTROL PHOTOCELL, CEILING MOUNTED
	ON/OFF SWITCH (44"-0" MAX. TO TOP OF BOX, U.O.N.)
	JUNCTION BOX EQUIPPED WITH BLANK COVER
	JUNCTION BOX EQUIPPED WITH BLANK COVER AND FLEX CONNECTION
	MOTOR
	HEAVY-DUTY FUSED SAFETY SWITCH
	ADDRESSABLE SMOKE DETECTOR MOUNTED ON CEILING
	ADDRESSABLE SMOKE/CARBON MONOXIDE DETECTOR
	ADDRESSABLE MONITOR MODULE
	ADDRESSABLE DUAL MONITOR MODULE
	ADDRESSABLE RELAY MODULE
	ADDRESSABLE SUPERVISED CONTROL MODULE
	FIRE ALARM VISUAL STROBE, 75 CANDELA, CEILING MOUNTED
	FIRE ALARM SPEAKER/15 CANDELA VISUAL STROBE (CEILING MOUNTED)
	FIRE ALARM SPEAKER/30 CANDELA VISUAL STROBE (CEILING MOUNTED)
	FIRE ALARM SPEAKER/75 CANDELA VISUAL STROBE (CEILING MOUNTED)
	FIRE ALARM EXTERIOR SPEAKER IN WALL
	FIRE ALARM SPEAKER (CEILING MOUNTED)
	WATERFLOW SWITCH AT FIRE SPRINKLER RISER
	TAMPER SWITCH AT DOUBLE DETECTOR CHECK ASSEMBLY
	ELECTRIC BELL (FOR FIRE SPRINKLER RISER)
	FIRE/SMOKE DAMPER BY DIVISION 23
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

DIVISION OF THE STATE ARCHITECT  
APPLICABLE CODES AND STANDARDS

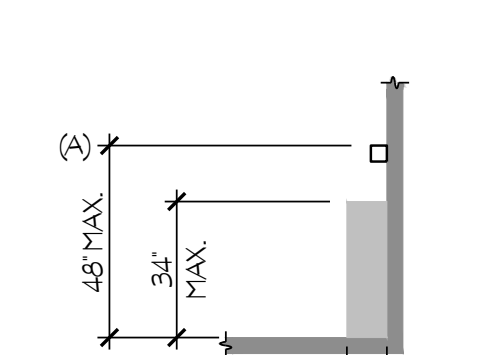
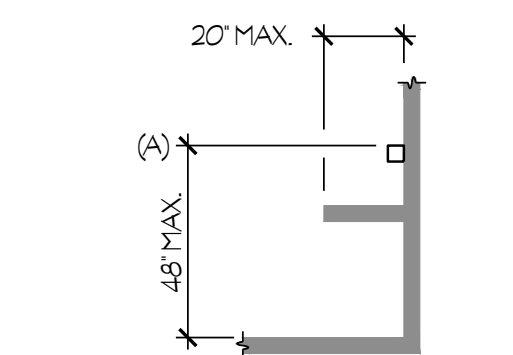
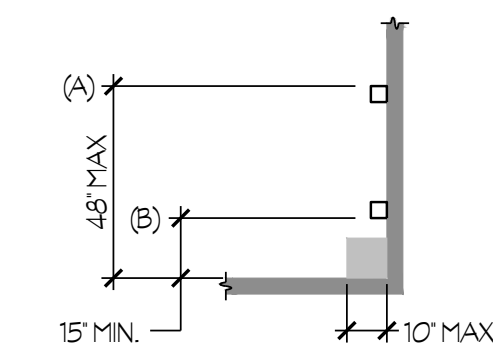
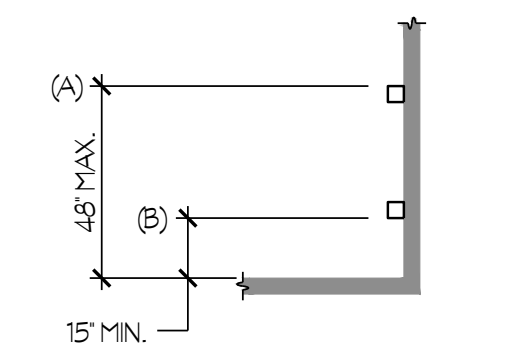
CODES:

- 2022 CALIFORNIA ADMINISTRATIVE CODE, PART 1, TITLE 24 C.C.R.
- 2019 CALIFORNIA BUILDING CODE (C.B.C.), PART 2, TITLE 24 C.C.R. (2018 INTERNATIONAL BUILDING CODE, VOLUMES 1 AND 2 WITH 2019 CALIFORNIA AMENDMENTS)
- 2019 CALIFORNIA ELECTRICAL CODE (C.E.C.), PART 3, TITLE 24 C.C.R. (2017 NATIONAL ELECTRICAL CODE WITH 2019 CALIFORNIA AMENDMENTS)
- 2019 CALIFORNIA MECHANICAL CODE (C.M.C.), PART 4, TITLE 24 C.C.R. (2018 UNIFORM MECHANICAL CODE WITH 2019 CALIFORNIA AMENDMENTS)
- 2019 CALIFORNIA PLUMBING CODE (C.P.C.), PART 5, TITLE 24 C.C.R. (2018 UNIFORM PLUMBING CODE WITH 2019 CALIFORNIA AMENDMENTS)
- 2019 CALIFORNIA ENERGY CODE (CEC), PART 6, TITLE 24 C.C.R.
- 2019 CALIFORNIA FIRE CODE (C.F.C.), PART 9, TITLE 24 C.C.R. (2018 INTERNATIONAL FIRE CODE WITH 2019 CALIFORNIA AMENDMENTS)
- 2019 CALIFORNIA REFERENCED STANDARDS CODE (C.R.S.C.), PART 12, TITLE 24 C.C.R.

TITLE 19, C.C.R. PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS.

STANDARDS AND GUIDES:

- NFPA 72 - NATIONAL FIRE ALARM CODE, 2016 EDITION (CALIFORNIA AMENDED)
- NFPA 720 - STANDARD FOR THE INSTALLATION OF CARBON MONOXIDE (CO) DETECTION WARNING EQUIPMENT, 2015 EDITION
- ADAAG - AMERICANS WITH DISABILITIES ACT, ACCESSIBILITY GUIDELINES
- UL 38 - MANUAL ACTUATED SIGNALING BOXES, 2005 EDITION
- UL 268 - SMOKE DETECTORS FOR FIRE PROTECTIVE SIGNALING SYSTEMS, 2009 EDITION
- UL 268A - SMOKE DETECTORS FOR DUCT APPLICATIONS, 2009 EDITION
- UL 464 - AUDIBLE SIGNAL APPLIANCES, 2003 EDITION
- UL 521 - HEAT DETECTORS FOR FIRE PROTECTIVE SIGNALING SYSTEMS, 1999 EDITION (WITH REVISIONS THROUGH JULY 2005)
- UL 864 - CONTROL UNITS FOR FIRE PROTECTIVE SIGNALING SYSTEMS, 2014 EDITION



- (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

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.

SEISMIC ANCHORAGE REQUIREMENTS

MECHANICAL, ELECTRICAL AND PLUMBING ANCHORAGE NOTE

ALL MECHANICAL, PLUMBING AND ELECTRICAL COMPONENTS SHALL BE ANCHORED AND INSTALLED PER THE DETAILS ON THE DSA APPROVED CONSTRUCTION DOCUMENTS. THE FOLLOWING COMPONENTS SHALL BE ANCHORED OR BRACED TO MEET THE FORCE AND DISPLACEMENT REQUIREMENTS PRESCRIBED IN THE 2019 CBC, SECTIONS 1617A.1.18 THROUGH 1617A.1.26 AND ASCE 7-16 CHAPTERS 13, 26 AND 30.

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

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

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

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

PIPING, DUCTWORK, AND ELECTRICAL DISTRIBUTION SYSTEM BRACING NOTE

PIPING, DUCTWORK, AND ELECTRICAL DISTRIBUTION SYSTEMS SHALL BE BRACED TO COMPLY WITH THE FORCES AND DISPLACEMENTS PRESCRIBED IN ASCE 7-16 SECTION 13.3 AS DEFINED IN ASCE 7-16 SECTIONS 13.6.5, 13.6.6, 13.6.7, 13.6.8 AND 2019 CBC, SECTIONS 1617A.1.24, 1617A.1.25, AND 1617A.1.26.

THE METHOD OF SHOWING BRACING AND ATTACHMENTS TO THE STRUCTURE FOR THE IDENTIFIED DISTRIBUTION SYSTEM ARE AS NOTED BELOW. WHEN BRACING AND ATTACHMENTS ARE BASED ON A PREAPPROVED INSTALLATION GUIDE (e.g., OSHPD OPM FOR 2013 CBC OR LATER), COPIES OF THE BRACING SYSTEM INSTALLATION GUIDE OR MANUAL SHALL BE AVAILABLE ON THE JOBSITE PRIOR TO THE START OF AND DURING THE HANGING AND BRACING OF THE DISTRIBUTION SYSTEMS. THE STRUCTURAL ENGINEER OF RECORD SHALL VERIFY THE ADEQUACY OF THE STRUCTURE TO SUPPORT THE HANGER AND BRACE LOADS.

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

MP ☐ MD ☐ PP ☐ E ☐ - OPTION 1: DETAILED ON THE APPROVED DRAWINGS WITH PROJECT SPECIFIC NOTES AND DETAILS.

MP ☐ MD ☐ PP ☐ E ☒ - OPTION 2: SHALL COMPLY WITH THE APPLICABLE OSHPD PRE-APPROVAL (OPM#) #0052-13.

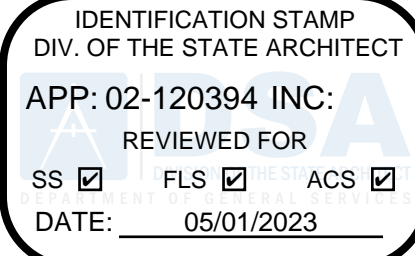
FIRE SAFETY DURING CONSTRUCTION AND DEMOLITION

THE SCHOOL DISTRICT SHALL PROVIDE A ON-SITE FIRE WATCH IN THE EVENT THAT THE EXISTING FIRE ALARM SYSTEM IS IMPAIRED AND/OR INTERRUPTED DURING CONSTRUCTION PER CALIFORNIA FIRE CODE, SECTION 3304, ARTICLE 3304.5.

COMPLETE AUTOMATIC FIRE ALARM SYSTEM  
PLAN SUBMITTAL

THE FIRE ALARM SYSTEM SHOWN ON THESE PLANS HAS BEEN SUBMITTED AND APPROVED BY THE DIVISION OF THE STATE ARCHITECT. ANY SUBSTITUTION OF THE FIRE ALARM SYSTEM SHALL BE RESUBMITTED TO THE ARCHITECT FOR REVIEW AND APPROVAL. THE CONTRACTOR SHALL PAY ANY ADDITIONAL FEES THAT ARE INCURRED DUE TO THIS SUBSTITUTION.

THE FIRE ALARM SYSTEM SHALL BE A TOTAL (COMPLETE) AUTOMATIC HEAT AND SMOKE DETECTION SYSTEM, PER C.F.C. SECTION 907.2.3.6, AND SHALL COVER EVERY ROOM AND/OR AREA. UPON THE ACTIVATION OF ANY INITIATION DEVICE THE FIRE ALARM SYSTEM SHALL ALERT ALL OCCUPANTS AND TRANSMIT THE ALARM, SUPERVISORY, AND TROUBLE SIGNALS TO AN APPROVED SUPERVISING STATION (C.F.C. SECTION 907.2.3.5).



DATE: AUGUST 24, 2022

**MODERNIZATION AT  
CORCORAN HIGH SCHOOL  
SCIENCE BUILDING**  
1100 LETTS AVE., CORCORAN, CA 93212  
CORCORAN UNIFIED SCHOOL DISTRICT  
1520 PATTERSON AVE., CORCORAN, KINGS COUNTY, CA. 93212



REVISIONS				

ARCHITECTURE  
INGENUITY  
**MANGINI**  
McLAIN BARENG MORRELLI SCOTT  
www.mmgini.us  
MANGINI ASSOCIATES INC.  
4320 West Mineral King Avenue  
Visalia, California 93221  
(559) 627-0530 Office  
(559) 627-1520 Fax

TITLE  
ELECTRICAL  
SYMBOLS, CODES  
AND NOTES

**EG1.1**

PROJECT **1751a**

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





7) LIGHT FIXTURE SHALL BE EQUIPPED WITH AN EMERGENCY BATTERY PACK TO OPERATE THE L.E.D. DRIVER AT 10 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 #3/ES.1 FOR WIRING REQUIREMENTS.

DATE: AUGUST 24, 2022



REVIEWS	
△	_____
△	_____
△	_____
△	_____
△	_____

TITLE
FIXTURE SCHEDULE
<b>EG1.2</b>
PROJECT <b>1751a</b>



STATE OF CALIFORNIA <b>Indoor Lighting</b> WECCLTH (Enforce 10/20)	CALIFORNIA ENERGY COMMISSION NRCC-LTH-E											
<b>CERTIFICATE OF COMPLIANCE</b>												
Project Name: MODERNIZATION AT CORCORAN HIGH SCHOOL - BLDG 900 Project Address: 1100 LETTIS AVE	Report Page: Page 2 of 6 Date Prepared: 8-24-22											
<b>Controls Compliance (See Table H for Details)</b>												
<b>Rated Power Reduction Compliance (See Table Q for Details)</b>												
<i>This table is data-filled with uneditable comments because of selections made or data entered in tables throughout the form.</i>												
<i>No exceptional conditions apply to this project.</i>												
<i>This table includes remarks made by the permit applicant to the Authority Having Jurisdiction.</i>												
<i>Table Instructions: Include all permanent designed lighting and all portable lighting in offices.</i>												
A/AE	L.E.D SURFACE TROFFER, 4,800L	■	■	■	38	Mfr. Spec <sup>2</sup>	80	■	■	■	■	■
B/BE	L.E.D SURFACE, 6,000L	■	■	■	53	Mfr. Spec <sup>2</sup>	7	■	■	■	■	■
C/CE	L.E.D SURFACE, 3,000L	■	■	■	27	Mfr. Spec <sup>2</sup>	8	■	■	■	■	■
<b>Total Designed Watts CONDITIONED SPACES:</b>										3,627		
<i><sup>1</sup> FOOTNOTE: Design Watts for small aperture and color changing luminaires which qualify per §140.6(a)(4) is adjusted to be 75% of their rated wattage. Table F automatically makes this adjustment, the permit applicant should enter full rated wattage in column 05.</i>												
<i><sup>2</sup> Authority Having Jurisdiction may ask for Luminaire cut sheets to confirm wattage used for compliance per §130.0(a) Wattage used must be the maximum rated for the luminaire, not the lamp.</i>												
<i>This Section Does Not Apply</i>												

CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance: <http://www.energy.ca.gov/title24/2019standards>

October 2020

[illegible]

STATE OF CALIFORNIA <b>Indoor Lighting</b> NRCC-LTIE (Issued 10/20)		CALIFORNIA ENERGY COMMISSION NRCC-LTIE	
<b>CERTIFICATE OF COMPLIANCE</b> Project Name: MODERNIZATION AT CORCORAN HIGH SCHOOL - BLDG 900 Project Address: 1100 LETTIS AVE		Report Page: NRCC-LTIE- Page 6 of 6 Date Prepared: 8-24-22	
I certify that this Certificate of Compliance documentation is accurate and complete			
Documentation Author Name: DONALD L. SING		Documentation Author Signature: <i>DONALD L. SING</i>	
Company: ROSE SING EASTHAM & ASSOCIATES		Signature Date: 8-24-22	
Address: 131 SOUTH DUNWORTH STREET		CEA/HERS Certification Identification (if applicable):	
City/State/Zip: VISALIA, CA 93292-6705		Phone: (559) 733-2671 EXT. 102	
<b>RESPONSIBLE PERSON'S DECLARATION STATEMENT</b> I certify the following under penalty of perjury, under the laws of the State of California:			
1. The information provided on this Certificate of Compliance is true and correct. 2. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer) 3. The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations. 4. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application. 5. I will ensure that a completed signed copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a completed signed copy of this Certificate of Compliance is required to be included with the documentation the building provides to the building owner at occupancy.			
Responsible Designer Name: STEVEN EASTHAM		Responsible Designer Signature: <i>Steven Eastham</i>	
Company: ROSE SING EASTHAM & ASSOCIATES		Date Signed: 8-24-22	
Address: 131 SOUTH DUNWORTH STREET		License: E18786	
City/State/Zip: VISALIA, CA 93292-6705		Phone: (559) 733-2671 EXT. 101	
_____			

DATE: AUGUST 24, 2022

REVISIONS	
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PROJECT 1751a

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

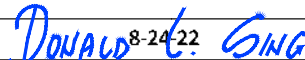


STATE OF CALIFORNIA		CALIFORNIA ENERGY COMMISSION	
<b>Electrical Power Distribution</b>			
NRCC-ELC-E (Created 01/20)		NRCC-ELC-E	
CERTIFICATE OF COMPLIANCE		Page 3 of 4	
Project Name:	MODERNIZATION AT CORCORAN HIGH SCHOOL	Report Page:	8-24-22
Project Address:	1100 LETTIS AVE	Date Prepared:	
<p>Table Instructions: Selections have been made based on information provided in previous tables of this document. If any selection needs to be changed, please explain why in Table E. Additional Remarks. These documents must be provided to the building inspector during construction and can be found online at <a href="https://www.energy.ca.gov/sites/default/files/2019-09/2019standards%20-%20compliance_documents/Nonresidential_Documents/NRCC/">https://www.energy.ca.gov/sites/default/files/2019-09/2019standards%20-%20compliance_documents/Nonresidential_Documents/NRCC/</a></p>			
<input type="radio"/> <input type="radio"/> NRCC-ELC-01-E - Must be submitted for all buildings.		<input type="checkbox"/> <input type="checkbox"/>	
<p>There are no Certificates of Acceptance applicable to electrical power distribution requirements.</p>			

STATE OF CALIFORNIA <b>Electrical Power Distribution</b> <small>NCCCELC-1 (Revised 01/05)</small>		CALIFORNIA ENERGY COMMISSION <small>NRCC-ELC-E</small>	
<b>CERTIFICATE OF COMPLIANCE</b>		<b>NRCC-ELC-E</b>	
Project Name: MODERNIZATION AT CORCORAN HIGH SCHOOL		Report Page: Page 4 of 4	
Project Address: 1100 LETTS AVE		Date Prepared: 8-24-22	

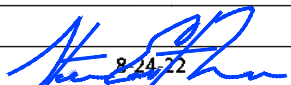
I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name: DONALD L. SING	Documentation Author Signature: 
Company: ROSE SING EASTHAM & ASSOCIATES	Signature Date: 8-24-22
Address: 131 SOUTH DUNWORTH STREET	CEA/ HERS Certification Identification (if applicable):
City/State/Zip: VISALIA, CA 93229-6705	Phone: (559) 733-2671 EXT. 102

**RESPONSIBLE PERSON'S DECLARATION STATEMENT**

I certify the following under penalty of perjury, under the laws of the State of California:

- The information provided on this Certificate of Compliance is true and correct.
- 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)
- 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.
- 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.
- 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 Designer Name: STEVEN EASTHAM	Responsible Designer Signature: 
Company: ROSE SING EASTHAM & ASSOCIATES	Date Signed: 8-24-22
Address: 131 SOUTH DUNWORTH STREET	License: E18786
City/State/Zip: VISALIA, CA 93229-6705	Phone: (559) 733-2671 EXT. 101

CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance: <a href="http://www.energy.ca.gov/titles24/2019standards">http://www.energy.ca.gov/titles24/2019standards</a>	January 2020
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**Rose Sing Eastham and Associates**  
Electrical Consultants  
131 S. Dunworth - (559)733-2671  
Visalia, California 93292-6705





DATE: AUGUST 24, 2022

**MODERNIZATION AT  
CORCORAN HIGH SCHOOL  
SCIENCE BUILDING**  
11100 LETTS AVE., CORCORAN, CA. 93212



## REVISIONS

**MANGINI**

ARCHITECTURE  
INGENUITY

McMLAIN BARENG MORRELLI SCOTT

**MANGINI ASSOCIATES INC.**  
34320 West Mineral King Avenue  
Van Nuys, California 91411  
[www.mangini.us](http://www.mangini.us)  
(559) 627-0530 Office  
(559) 627-1006 Fax

TITLE  
OUTDOOR  
LIGHTING  
COMPLIANCE

### EG2.3

PROJECT **1751a**

<b>STATE OF CALIFORNIA</b>		<b>CERTIFICATE OF COMPLIANCE</b>	
<b>Outdoor Lighting</b>		<b>NRCC-LTO-E [Created 01/21]</b>	
This document is used to demonstrate compliance with requirements in §110.9, §130.0, §130.2, §140.7, and §141.0(b)(2) for outdoor lighting scopes using the prescriptive path.		NRCC-LTO-E	
Project Name: MODERNIZATION AT CORCORAN HIGH SCHOOL		Report Page: 1 of 6	
Project Address: 1100 LETTS AVE		Date Prepared: 8-24-22	

<b>CORCORAN</b>		674
13		

<input type="checkbox"/> LZ-0: Very Low - Undeveloped Parkland	<input type="checkbox"/> LZ-2: Moderate - Rural Areas	<input type="checkbox"/> LZ-4: High - Must be reviewed by CA Energy Commission for Approval
<input type="checkbox"/> LZ-1: Low - Developed Parkland	<input type="checkbox"/> LZ-3: Moderately High - Urban Areas	

*Table Instructions: Include any outdoor lighting systems that are within the scope of the permit application and are demonstrating compliance using the prescriptive path outlined in §140.7 or §141.0(b)(2) for alterations.*

<input checked="" type="checkbox"/> New Lighting System	Must Comply with Allowances from §140.7.
<input type="checkbox"/> Altered Lighting System	Is your alteration increasing the connected lighting load (Watts)?
	<input type="radio"/> Yes <input checked="" type="radio"/> No

**FOOTNOTES:** % of Existing Luminares Being Altered = (Sum Total of Luminaires Being Added or Altered / Existing Luminaires within the Scope of the Permit Application) x 100

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

-	+	+	+	OR	=	>
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STATE OF CALIFORNIA

Outdoor Lighting

NRCC-LTO-E (1-2018) (01/23)

CERTIFICATE OF COMPLIANCE

Project Name: MODERNIZATION AT CORCORAN HIGH SCHOOL

Report Page: Page 2 of 6

Project Address: 1100 LETTS AVE

Date Prepared: 8-24-22

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

Total Hardscape Area in Table A does not match the areas entered in Table I. Please review for compliance.

A luminaire in Table F may be required to comply with Cutoff Requirements, but nothing has been selected in Table F. Column 09.

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

Table Instructions: For new or altered lighting systems demonstrating compliance with §140.7 (ie Table I has expanded for input), include all luminaires being installed and any existing luminaires remaining or being moved within the spaces covered by the permit application in the Table below. For altered lighting systems using the Existing Power method per §141.0(b)(2), (ie Table N has expanded for input), include only new luminaires being installed and replacement luminaires being installed as part of the project scope (ie, do not include existing luminaires remaining or existing luminaires being moved).

D	L.E.D. DOWNLIGHT	Linear	Mfr. Spec <sup>1</sup>	16	New	
F	L.E.D. WALL MTD	Linear	Mfr. Spec <sup>1</sup>	4	New	
P	AREA POLE LIGHT	Linear	Mfr. Spec <sup>1</sup>	1	New	
Total Designed Watts:						515

CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance: <http://www.energy.ca.gov/title24/2019standards>

January 2023

STATE OF CALIFORNIA

Outdoor Lighting

NRCC-LTO-E (Created 01/23)

CALIFORNIA ENERGY COMMISSION

NRCC-LTO-E

Page 2 of 24

CERTIFICATE OF COMPLIANCE

Project Name: MODERNIZATION AT CORCORAN HIGH SCHOOL

Report Page:

Project Address: 1100 121ST AVE

Date Prepared:

<sup>1</sup> FOOTNOTES: Authority Having Jurisdiction may ask for Luminaire cut sheets to confirm wattage used for compliance per §130.01c

<sup>2</sup> For linear luminaires, wattage should be indicated as W/ft instead of Watts/luminaire. Total linear feet for the luminaire should be indicated in column 05 instead of number of luminaires.

<sup>3</sup> Select "New" for new luminaires in a new outdoor lighting project or for added luminaires in an alteration. Select "Altered" for replacement luminaires in an alteration. Select "Existing to Remain" for existing luminaires within the project scope that are not being altered and are remaining. Select "Existing Reinstalled" for existing luminaires which are being removed and reinstalled as part of the project scope

This Section Does Not Apply

Table Instructions: Complete this table demonstrating compliance with controls requirements for all new or altered luminaires installed as part of the permit application. For alteration projects, luminaires which are existing to remain (ie untouched) and luminaires which are removed and reinstalled (wiring only) do not need to be included in this table even if they are within the spaces covered by the permit application.

When an option having a \* is selected, the notes section of this table must be completed. The lighting controls section of the Compliance Summary Table on the first page will show "DOES NOT COMPLY" if the notes are left blank. For each requirement in columns 02 through 04, do not leave the field blank, instead select NA or Exempt\* from the dropdown list to indicate not applicable or an exemption.

SERVICE YARD	Photocontrol	Yes	Yes			
BUILDING OVERHANG	Photocontrol	Yes	Yes			

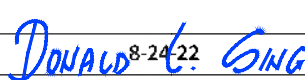
Table Continued

CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance: <http://www.energy.ca.gov/title24/2019standards>

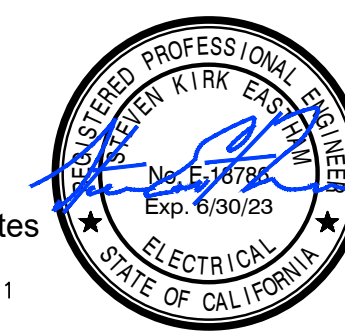
January 2023

[illegible]

STATE OF CALIFORNIA		CALIFORNIA ENERGY COMMISSION											
<b>Outdoor Lighting</b>													
NRCI-LTO-E (Created 01/23)		NRCI-LTO-E											
CERTIFICATE OF COMPLIANCE		Page 5 of 8-24-2											
Project Name: MODERNIZATION AT CORCORAN HIGH SCHOOL		Report Page:											
Project Address: 1100 LETTS AVE		Date Prepared:											
<p><i>Table Instructions: 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 5. Additional Remarks. These documents must be provided to the building inspector during construction and can be found online at <a href="https://www.energy.ca.gov/title24/2019standards/2019_compliance_documents/Nonresidential_Documents/NRCI/">https://www.energy.ca.gov/title24/2019standards/2019_compliance_documents/Nonresidential_Documents/NRCI/</a></i></p>													
<table border="1"> <tr> <td><input type="radio"/></td> <td><input type="radio"/></td> <td>NRCI-LTO-01-E - Must be submitted for all buildings.</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td><input type="radio"/></td> <td><input type="radio"/></td> <td>NRCI-LTO-02-E - Must be submitted for a lighting control system; or for an Energy Management Control System (EMCS), to be recognized for compliance.</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> </table>				<input type="radio"/>	<input type="radio"/>	NRCI-LTO-01-E - Must be submitted for all buildings.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	NRCI-LTO-02-E - Must be submitted for a lighting control system; or for an Energy Management Control System (EMCS), to be recognized for compliance.	<input type="checkbox"/>	<input type="checkbox"/>
<input type="radio"/>	<input type="radio"/>	NRCI-LTO-01-E - Must be submitted for all buildings.	<input type="checkbox"/>	<input type="checkbox"/>									
<input type="radio"/>	<input type="radio"/>	NRCI-LTO-02-E - Must be submitted for a lighting control system; or for an Energy Management Control System (EMCS), to be recognized for compliance.	<input type="checkbox"/>	<input type="checkbox"/>									
<p><i>Table Instructions: 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 must be completed through an Acceptance Test Technician Certification Provider (ATTCP). For more information visit: <a href="http://www.energy.ca.gov/title24/attcp/providers.html">http://www.energy.ca.gov/title24/attcp/providers.html</a></i></p>													
<table border="1"> <tr> <td><input type="radio"/></td> <td><input type="radio"/></td> <td>NRCA-LTO-02-A - Must be submitted for all outdoor lighting controls except for alterations where controls area added to ≤ 20 lumens/res.</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> </table>				<input type="radio"/>	<input type="radio"/>	NRCA-LTO-02-A - Must be submitted for all outdoor lighting controls except for alterations where controls area added to ≤ 20 lumens/res.	<input type="checkbox"/>	<input type="checkbox"/>					
<input type="radio"/>	<input type="radio"/>	NRCA-LTO-02-A - Must be submitted for all outdoor lighting controls except for alterations where controls area added to ≤ 20 lumens/res.	<input type="checkbox"/>	<input type="checkbox"/>									

STATE OF CALIFORNIA		CALIFORNIA ENERGY COMMISSION	
<b>Outdoor Lighting</b>		NRCC-LTO	
NRCC-104 (Rev. 01/21)		NRCC-LTO	
CERTIFICATE OF COMPLIANCE		Page 6 of 6	
Project Name: MODERNIZATION AT CORCORAN HIGH SCHOOL		Report Page:	8-24-22
Project Address: 1100 LETTS AVE		Date Prepared:	
I certify that this Certificate of Compliance documentation is accurate and complete			
Documentation Author Name: DONALD L. SING		Documentation Author Signature: 	
Company: ROSE SING EASTHAM & ASSOCIATES		Signature Date: 8-24-22	
Address: 131 SOUTH DUNWORTH STREET		CEA/ HERS Certification Identification (If applicable):	
City/State/Zip: VISALIA, CA 93292-6705		Phone: (559) 733-2671 EXT. 102	
<b>RESPONSIBLE PERSON'S DECLARATION STATEMENT</b>			
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 Designer Name: STEVEN EASTHAM		Responsible Designer Signature: 	
Company: ROSE SING EASTHAM & ASSOCIATES		Date Signed: 8-24-22	
Address: 131 SOUTH DUNWORTH STREET		License: E18786	
City/State/Zip: VISALIA, CA 93292-6705		Phone: (559) 733-2671 EXT. 101	

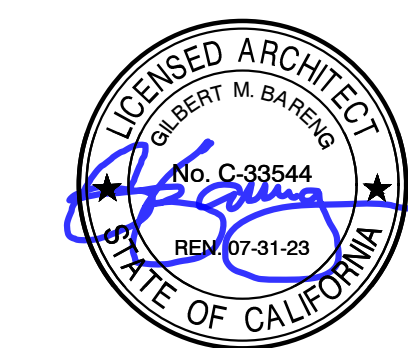
**Rose Sing Eastham and Associates**  
Electrical Consultants  
131 S. Dunworth - (559)733-2671  
Visalia, California 93292-6705





NOTES (THIS SHEET ONLY):

1. CONNECT TAMPER SWITCHES AT THE O.S.B.Y. VALVES LOCATED ON THE DOUBLE DETECTOR CHECK ASSEMBLY. RUN 1/2" LIQUIDTIGHT FLEXIBLE METALLIC CONDUIT WITH #214 INSIDE TO EACH TAMPER SWITCH AND PROVIDE AN END-OF-LINE RESISTOR (E.O.L.) AT EACH TAMPER SWITCH. SECURE CONDUIT TO PIPING WITH 1/2" WIDE STAINLESS STEEL STRAPPING. PROVIDE A TWO-DEVICE DIECAST WEATHERPROOF JUNCTION BOX WITH A BLANK GASKETED COVER AND MOUNT AT +6 A.F.G.. PROVIDE AN ADDITIONAL GALVANIZED RIGID STEEL CONDUIT, MINIMUM OF 24" LONG, WRAPPED WITH PVC TAPE TO SUPPORT WEATHERPROOF JUNCTION BOX. COORDINATE EXACT LOCATION WITH FIRE SPRINKLER CONTRACTOR PRIOR TO ROUGH-IN.
2. REFER TO BUILDING 900 - FIRE ALARM PLAN (INITIATION), SHEET #E110 FOR CONTINUATION
3. — — — EF — — — DENOTES THE APPROXIMATE LOCATION OF EXISTING FIRE ALARM FEEDERS AND/OR 'SPARE' CONDUITS. VERIFY EXACT LOCATION AT SITE.



DATE: AUGUST 24, 2022

**MODERNIZATION AT  
CORCORAN HIGH SCHOOL  
SCIENCE BUILDING**  
11100 LETTS AVE., CORCORAN, CA. 93212

**CORCORAN UNIFIED SCHOOL DISTRICT**  
15020 PATTERSON AVE. CORCORAN, KINGS COUNTY, CA. 93212



1

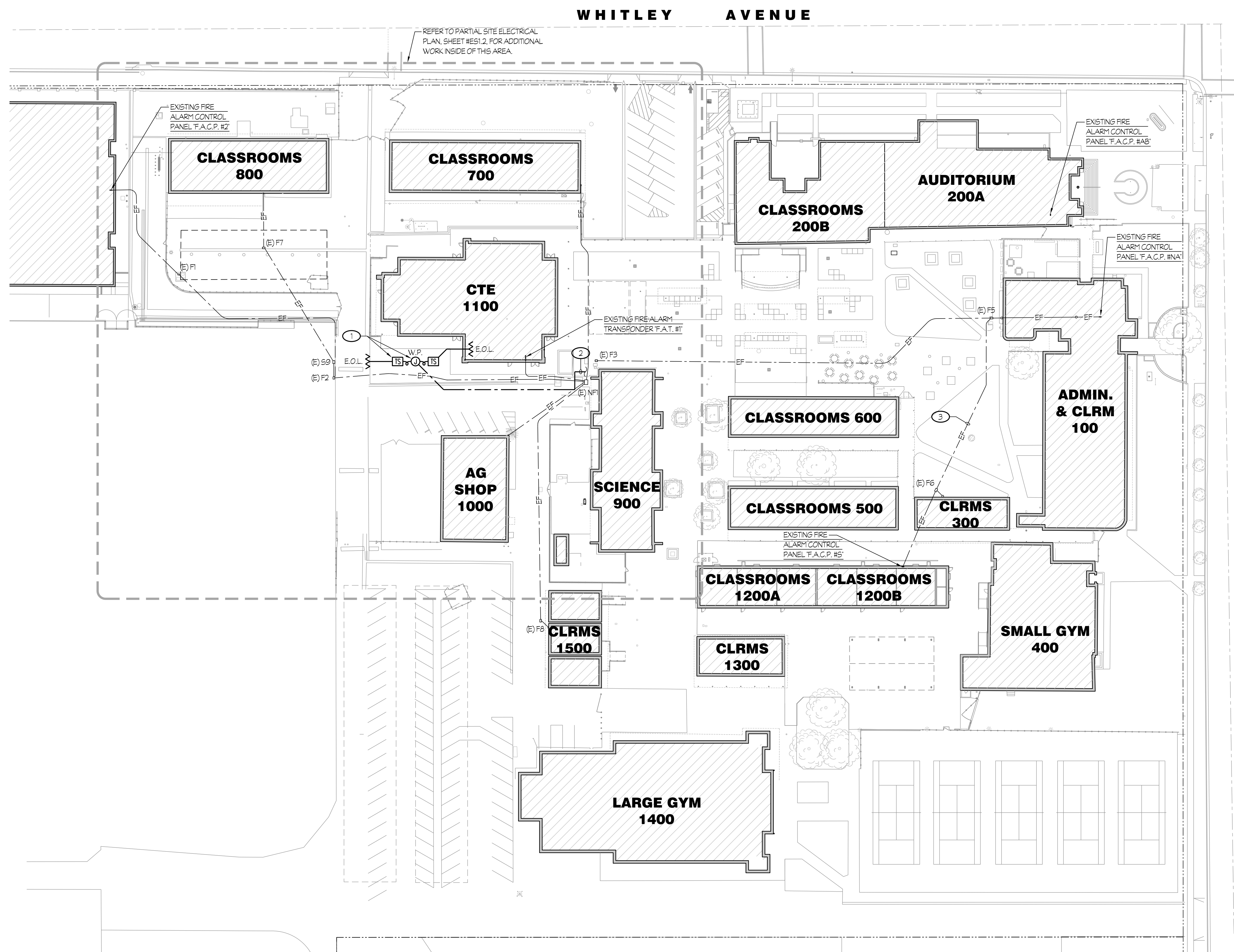
**MANGINI** | ARCHITECTURE  
INGENUITY

McLAIN BARENG MORRELLI SCOTT

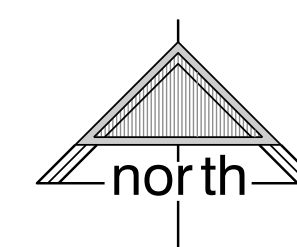
**MANGINI ASSOCIATES INC.**  
13270 West Mineral King Avenue  
Burbank, California 91502  
[www.mangini.us](http://www.mangini.us)  
(559) 627 0530 Office  
(559) 627 0236 Fax

TITLE  
SITE ELECTRICAL  
PLAN

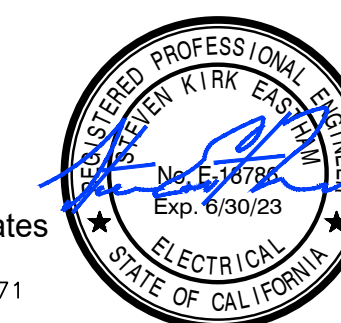
## ES1.1

PROJECT **1751a**

# SITE ELECTRICAL PLAN

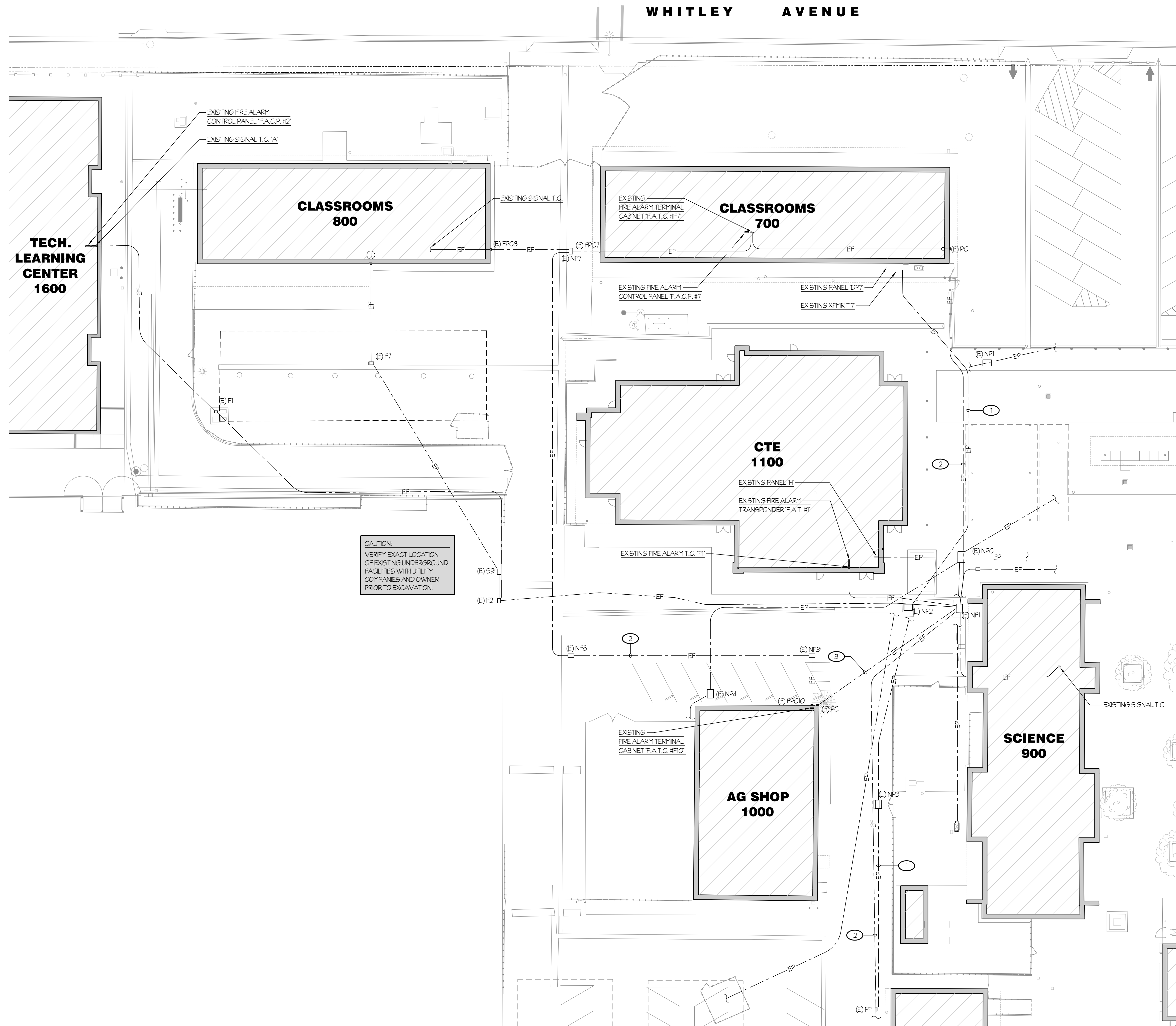
$$\bar{I} = 40 - 0.1$$


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





Z:\Drawing\Jobs\17510\ES1.2.dwg DATE: 04/12/23 BY: NSEA DATE PLOTTED: 04/12/23 JOB # 21-18201-05



- NOTES (THIS SHEET ONLY):
- 1 --- EP --- DENOTES THE APPROXIMATE LOCATION OF EXISTING UNDERGROUND POWER FEEDERS AND/OR SPARE CONDUITS. VERIFY EXACT LOCATION AT SITE.
  - 2 --- EF --- DENOTES THE APPROXIMATE LOCATION OF EXISTING UNDERGROUND FIRE ALARM FEEDERS AND/OR SPARE CONDUITS. VERIFY EXACT LOCATION AT SITE.
  - 3 REFER TO PARTIAL FIRE ALARM SYSTEM RISER DIAGRAM, DETAIL #1/E2.4, FOR ADDITIONAL WORK.

APPROVALS

FILE # 16-H1 APPLICATION # 02-120394

IDENTIFICATION STAMP  
DIV. OF THE STATE ARCHITECT  
APP: 02-120394 INC:  
REVIEWED FOR  
SS ☒ FLS ☒ ACS ☒  
DATE: 05/01/2023

LICENSED ARCHITECT  
ROBERT M. BARENG  
No. C-33544  
Exp. 07-31-23  
STATE OF CALIFORNIA

DATE: AUGUST 24, 2022

MODERNIZATION AT  
CORCORAN HIGH SCHOOL  
SCIENCE BUILDING  
1100 LETTS AVE., CORCORAN, CA 93212  
CORCORAN UNIFIED SCHOOL DISTRICT  
1520 PATTERSON AVE., CORCORAN, KINGS COUNTY, CA 93212

REVISIONS

ARCHITECTURE  
INGENUITY

**MANGINI**

McLAIN BARENG MORRELLI SCOTT  
MANGINI ASSOCIATES INC.  
4320 West Mineral King Avenue  
Visalia, California 93291  
www.mangini.us  
(559) 627-0530 Office  
(559) 627-1520 Fax

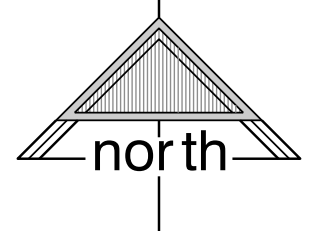
TITLE  
PARTIAL SITE  
ELECTRICAL PLAN

**ES1.2**

PROJECT **1751a**

PARTIAL SITE ELECTRICAL PLAN

1" = 20'-0"



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

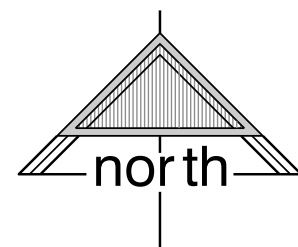




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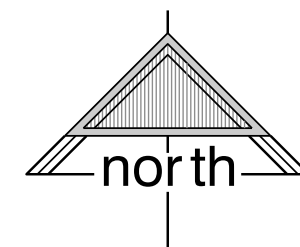
# BUILDING 900 DEMOLITION LIGHTING PLAN

1/8" = 1'-0"



# BUILDING 900 LIGHTING PLAN

1/8" = 1'-0"



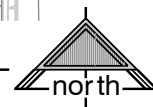
#	ROOM NAME
901	PHYSICS
902	STORAGE
903	CHEMISTRY
904	STORAGE
905	STORAGE
906	WORKROOM
907	CLASSROOM
908	BIOLOGY
909	STORAGE
910	WORKROOM

## WALL LEGEND

..... 1-HOUR RATED WALL, CONTINUOUS  
VERTICALLY FROM FLOOR TO  
BOTTOM OF ROOF FRAMING.



## BUILDING SITE KEY



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



ARCHITECTURE  
INGENUITY  
**MANGINI**  
McLAIN BARENG MORRELLI SCOTT  
www.mangini.us  
MANGINI ASSOCIATES, INC.  
4320 West Mineral King Avenue  
Visalia, California 93291  
(559) 627-1526 fax

TITLE  
BUILDING 900  
LIGHTING PLANS

**E1.1**

PROJECT **1751a**

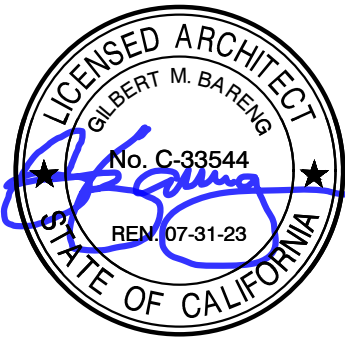
REVISIONS

1	
2	
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9	



**MODERNIZATION AT  
CORCORAN HIGH SCHOOL  
SCIENCE BUILDING**  
1100 LETTS AVE., CORCORAN, CA. 93212  
CORCORAN UNIFIED SCHOOL DISTRICT  
1520 PATTERSON AVE., CORCORAN, KINGS COUNTY, CA. 93212

DATE: AUGUST 24, 2022

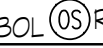
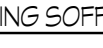


APPROVALS



FILE # 16-H1 APPLICATION # 02-120394

IDENTIFICATION STAMP  
DIV. OF THE STATE ARCHITECT  
APP: 02-120394 INC:  
REVIEWED FOR  
SS ☒ FLS ☒ ACS ☒  
DATE: 05/01/2023

## DEMOLITION NOTES (THIS SHEET ONLY):

- TYPICAL OF ALL 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. AT EXISTING SUSPENDED T-BAR CEILINGS BEING REMOVED, REMOVE EXISTING 'IDLE' HANGER WIRES WHICH USED TO SUPPORT EXISTING TROFFERS BEING REMOVED.
- 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.
- TYPICAL OF ALL EXISTING CEILING MOUNTED OCCUPANCY SENSORS (SYMBOL ); DISCONNECT AND REMOVE EXISTING OCCUPANCY SENSOR AND ITS RELATED POWER/CONTROLS CONDUIT AND CONDUCTORS OR CABLEING.
- DISCONNECT AND REMOVE THE EXISTING H.I.D. WALL PACK BEING REPLACED WITH A NEW L.E.D. WALL SCONCE. SALVAGE THE EXISTING OUTLET BOX AND CONDUIT FOR RE-USE PER THE ADJACENT LIGHTING PLAN.
- DISCONNECT AND REMOVE THE EXISTING H.I.D. WALL PACK ALONG WITH THE EXPOSED BRANCH CIRCUITING AND WEATHERPROOF OUTLET BOX EQUIPPED WITH A BLANK WEATHERPROOF PLATE. DISCONNECT AND REMOVE THE EXISTING BRANCH CIRCUITING ROUTING FROM THE WEATHERPROOF OUTLET BOX TO THE EXISTING RECESSED LIGHT FIXTURE IN THE ADJACENT SOFFIT. PATCH ANY 'IDLE' CONDUIT PENETRATIONS THRU THE EXTERIOR FASCIA AS REQUIRED.
- DISCONNECT AND REMOVE THE EXISTING WALL MOUNTED L.E.D. FLOODLIGHT, SUPPORT STRUCTURE, ADJACENT PHOTOCELL W.P. JUNCTION BOX AND ITS RELATED 120V BRANCH CIRCUITING FROM THE EXISTING W.P. JUNCTION BOX LOCATED TO THE WEST AND AT ±12' A.F.F..
- DISCONNECT AND REMOVE THE EXISTING SURFACE MOUNTED TIMECLOCK AND ITS RELATED BRANCH CIRCUITING.
- DISCONNECT AND REMOVE THE EXISTING LIGHT SWITCH, FLUSH MOUNTED IN THE EXISTING FRAME OF DOOR/WINDOW ASSEMBLY BEING REMOVED. REMOVE EXISTING BRANCH CIRCUITING UP TO RESPECTIVE LIGHT FIXTURE AS REQUIRED TO CLEAR WAY FOR NEW CONSTRUCTION.
- TYPICAL OF THE EXISTING RECESSED DOWNLIGHTS LOCATED IN THE EXISTING SOFFIT (SYMBOL ); DISCONNECT AND REMOVE THE EXISTING RECESSED DOWNLIGHT. PULL OUT THE EXISTING CONDUCTORS AND SALVAGE THE EXISTING 'IDLE' CONDUIT FOR RE-USE PER THE ADJACENT LIGHTING PLAN.

## NOTES (THIS SHEET ONLY):

- LIGHTING CONTROL PANEL SHALL BE EQUIPPED WITH AN OUTDOOR PHOTOCELL, FOUR 20A 1-POLE RELAYS AND A DIGITAL TIMECLOCK. FLUSH MOUNT BOTTOM AT ±42' A.F.F.. MOUNT PHOTOCELL ON ROOF AND RUN 1/2" - 3 #18 BETWEEN PHOTOCELL AND LIGHTING CONTROL PANEL. LIGHTING CONTROL PANEL SHALL BE AN ACUTY CONTROLS HARP-INTENCOB-NLT-4SPR-MVOLT-HLK-FM-DTC. PHOTOCELL SHALL BE AN ACUTY HARP-APS-OL. PUNCH THRU EXISTING ROOF, PROVIDE A NEW ROOF JACK AND SEAL AROUND ROOF PENETRATION AS REQUIRED.
- INTERCEPT THE EXISTING 'IDLE' CONDUIT, INSIDE OF THE ACCESSIBLE ATTIC SPACE WITH A NEW JUNCTION BOX. RUN 3/4" - 3 #12 + 1 #12 GND TO NEW LIGHTING CONTROL PANEL L.C.P. #9'. VERIFY THE EXACT LOCATION OF 'IDLE' CONDUIT AT THE SITE.
- TYPICAL OF EXISTING 'IDLE' CONDUIT (SYMBOL  EP , U.O.N.); EXISTING 'IDLE' CONDUIT SALVAGED DURING DEMOLITION. PICK-UP, EXTEND TO NEW TYPE 'D' FIXTURES AND PULL-IN NEW 3 #12 + 1 #12 GND. VERIFY THE EXACT LOCATION OF 'IDLE' CONDUIT AT THE SITE.
- EXISTING 'IDLE' CONDUIT SALVAGED DURING DEMOLITION. PICK-UP, EXTEND TO NEW TYPE 'D' FIXTURES AND PULL-IN NEW 2 #12 + 1 #12 GND. VERIFY THE EXACT LOCATION OF 'IDLE' CONDUIT AT THE SITE.
- MOUNT NEW TYPE 'F' FIXTURE AT EXISTING OUTLET BOX SALVAGED DURING DEMOLITION.
- LIGHT FIXTURES SHALL BE 'NIGHT LIGHTS' AND CONTROLLED 'DUSK ON TO DAWN OFF'.
- LIGHT FIXTURES SHALL BE CONTROLLED 'DUSK ON/TIME OFF'. COORDINATE THE TIME-OFF SCHEDULE WITH THE SCHOOL DISTRICT.
- 3/4" - 2 #12 + 1 #12 GND.
- PROVIDE AN 8" H x 8" W x 6" DP, NEMA 3R SCREW COVER CAN AND SEMI-FLUSH MOUNT AT ±18' A.F.F. TO THE CENTER. RUN THE EXTERIOR CONDUIT EXPOSED AND DOWN ON TOWARDS THE EXISTING CONCRETE MOW STRIP. TURN 90° AND RUN ON TOP OF THE MOW STRIP, PROVIDE AN 'LB' CONDUIT BODY AND THEN RUN DOWN TO A MINIMUM OF 24" BELOW THE EXISTING FINISH GRADE.

REFER TO BUILDING 900 - ENLARGED  
LIGHTING PLAN, SHEET #E1.2 AND  
BUILDING 900 - ENLARGED LIGHTING  
CONTROLS PLAN, SHEET #E1.4, FOR  
ADDITIONAL WORK INSIDE OF THIS AREA.

6 SIX (5-D-15)

7 TEN (5-D-15)

PANEL 1.0'


1 LIGHTING CONTROL  
PANEL L.C.P. #9'

REFER TO BUILDING 900 - ENLARGED  
LIGHTING PLAN, SHEET #E1.3 AND  
BUILDING 900 - ENLARGED LIGHTING  
CONTROLS PLAN, SHEET #E1.5, FOR  
ADDITIONAL WORK INSIDE OF THIS AREA.

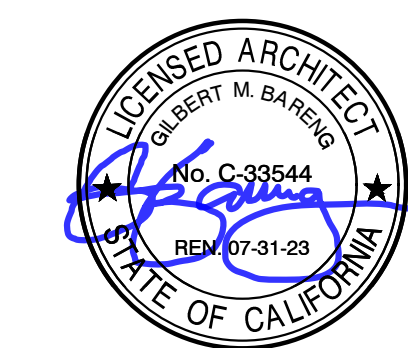
CAUTION:  
VERIFY EXACT LOCATION  
OF EXISTING UNDERGROUND  
FACILITIES WITH UTILITY  
COMPANIES AND OWNER  
PRIOR TO EXCAVATION.



NOTES (THIS SHEET ONLY):

- ① LOWER CASE LETTER DENOTES RESPECTIVE CONTROL ZONE, TYPICAL.
- ② SYMBOL  EM DENOTE LIGHT FIXTURE EQUIPPED WITH AN EMERGENCY BATTERY PACK. CONNECT PER DETAIL #3/ES1.
- ③ REFER TO BUILDING 900 - ENLARGED LIGHTING PLAN, SHEET #E1.3, FOR CONTINUATION.

IDENTIFICATION STAMP  
DIV. OF THE STATE ARCHITECT  
APP: 02-120394 INC:  
REVIEWED FOR  
SS ☒ FLS ☒ ACS ☒  
DATE: 05/01/2023



DATE: AUGUST 24, 2022

**MODERNIZATION AT  
CORCORAN HIGH SCHOOL  
SCIENCE BUILDING**  
11100 LETTIS AVE., CORCORAN, CA. 93212

CORCORAN UNIFIED SCHOOL DISTRICT  
1520 PATTERSON AVE., CORCORAN, KINGS COUNTY, CA. 93212



REVISIONS

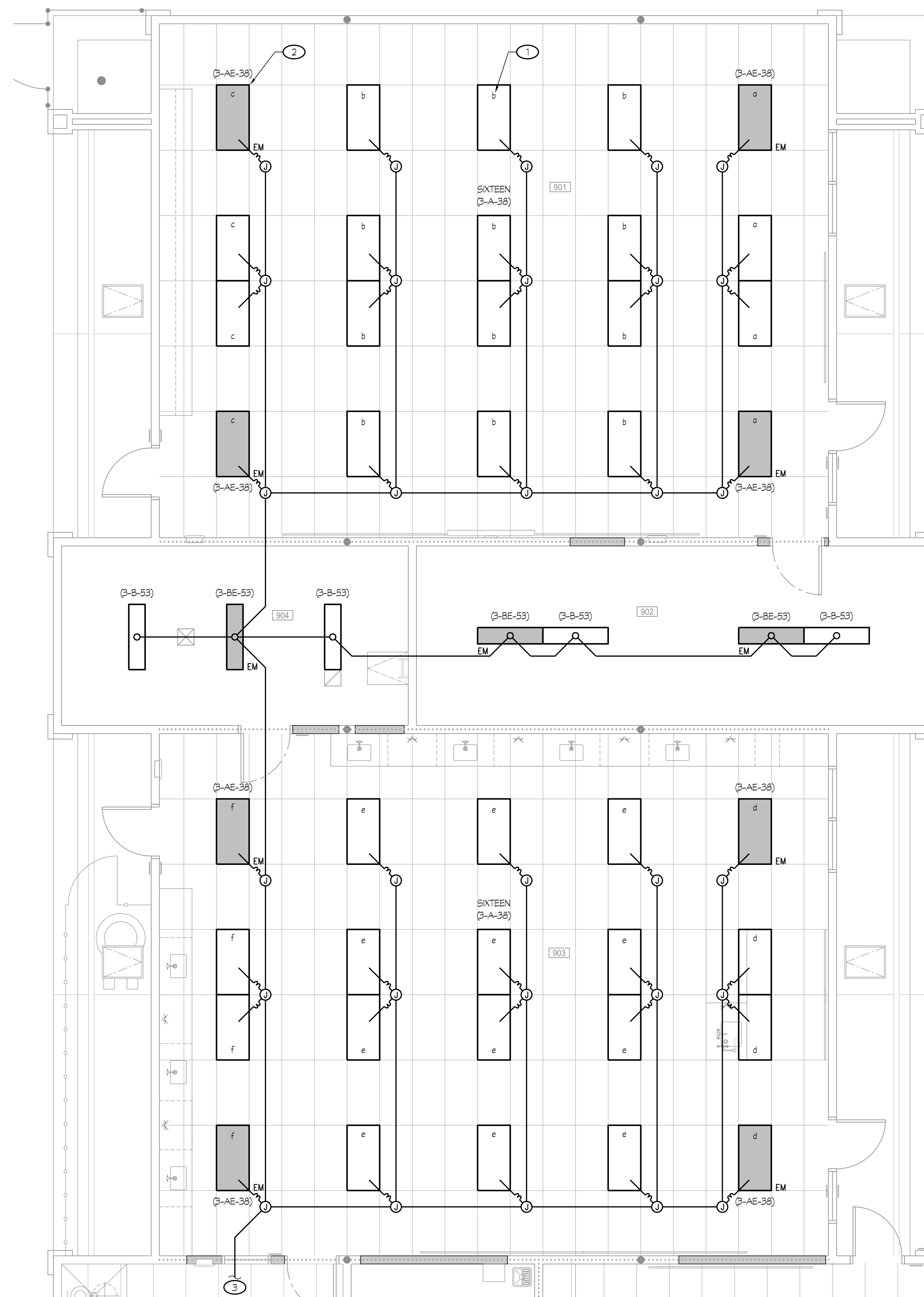
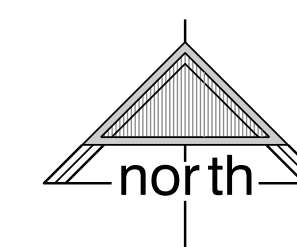
**MANGINI** | ARCHITECTURE  
INGENUITY

McLAIN BARENG MORRELLI SCOTT

**MANGINI ASSOCIATES INC.**  
4320 West Mineral King Avenue  
Van Nuys, California 91410  
[www.mangini.us](http://www.mangini.us)  
(818) 627 0530 Office  
(818) 627 0016 Fax

TITLE  
BUILDING 900  
ENLARGED  
LIGHTING PLAN

## E1.2

PROJECT **1751a**BUILDING 900  
ENLARGED LIGHTING PLAN
$$\frac{1}{4} = 1 - 3$$


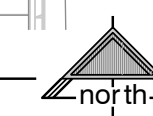
WALL LEGEND

..... 1-HOUR RATED WALL, CONTINUOUS  
VERTICALLY FROM FLOOR TO  
BOTTOM OF ROOF FRAMING.

ROOM LEGEND	
#	ROOM NAME
901	PHYSICS
902	STORAGE
903	CHEMISTRY
904	STORAGE



**BUILDING SITE KEY**




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





NOTES (THIS SHEET ONLY):

- ① LOWER CASE LETTER DENOTES RESPECTIVE CONTROL ZONE, TYPICAL.
- ② SYMBOL  EM DENOTE LIGHT FIXTURE EQUIPPED WITH AN EMERGENCY BATTERY PACK. CONNECT PER DETAIL #3/E5.1.
- ③ REFER TO BUILDING 900 - ENLARGED LIGHTING PLAN, SHEET #E1.2, FOR CONTINUATION.



DATE: AUGUST 24, 2022

**MODERNIZATION AT  
CORCORAN HIGH SCHOOL  
SCIENCE BUILDING**  
111100 LETTS AVE., CORCORAN, CA. 93212

CORCORAN UNIFIED SCHOOL DISTRICT  
1520 PATTERSON AVE., CORCORAN, KINGS COUNTY, CA. 93212



REVISIONS

**MANGINI**

McLAIN BARENG MORRELLI SCOTT

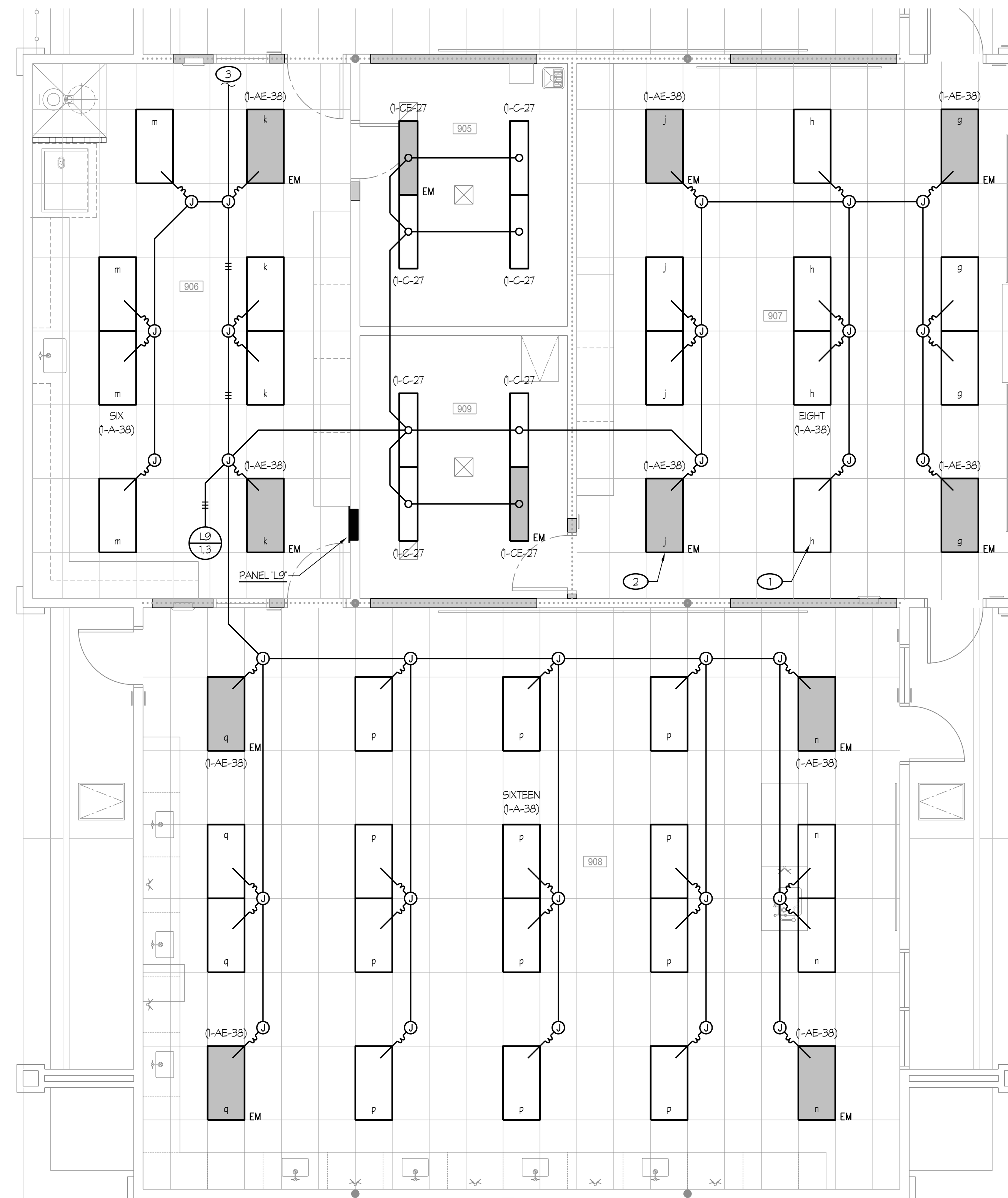
ARCHITECTURE  
INGENUITY

**MANGINI ASSOCIATES INC.**  
4320 West Mineral King Avenue  
Visalia, California 93291

**www.mangini.us**  
(559) 627 0830 Office  
(559) 627 1976 Fax

TITLE  
BUILDING 900  
ENLARGED  
LIGHTING PLAN

### E1.3

PROJECT **1751a**

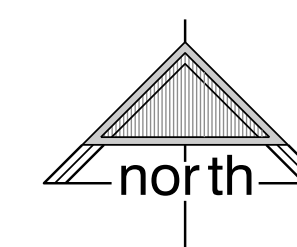
## WALL LEGEND

..... 1-HOUR RATED WALL, CONTINUOUS  
VERTICALLY FROM FLOOR TO  
BOTTOM OF ROOF FRAMING.

ROOM LEGEND	
#	ROOM NAME
905	STORAGE
906	WORKROOM
907	CLASSROOM
908	BIOLOGY
909	STORAGE



BUILDING SITE KEY

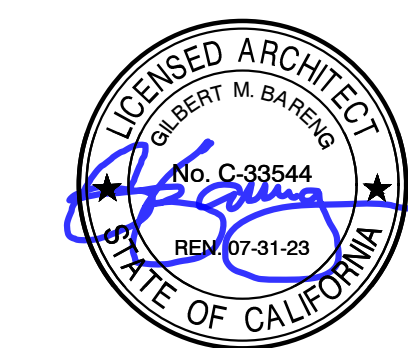
BUILDING 900  
ENLARGED LIGHTING PLAN
$$\overline{1/4} = 1 - O$$


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



NOTES (THIS SHEET ONLY):

- ① LOWER CASE LETTER DENOTES RESPECTIVE CONTROL ZONE, TYPICAL.
- ② — C5 — DENOTES CAT. 5e CABLE. ELECTRICAL CONTRACTOR MAY USE PRETERMINATED CAT. 5e CABLE OR PROVIDE CAT. 5e CABLEING. 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 ATTIC SPACE/CEILING AND IN WALLS FOR ROUTING OF CABLEING.



DATE: AUGUST 24, 2022

**MODERNIZATION AT  
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SCIENCE BUILDING**  
1100 LETTS AVE., CORCORAN, CA. 93212



REVISIONS

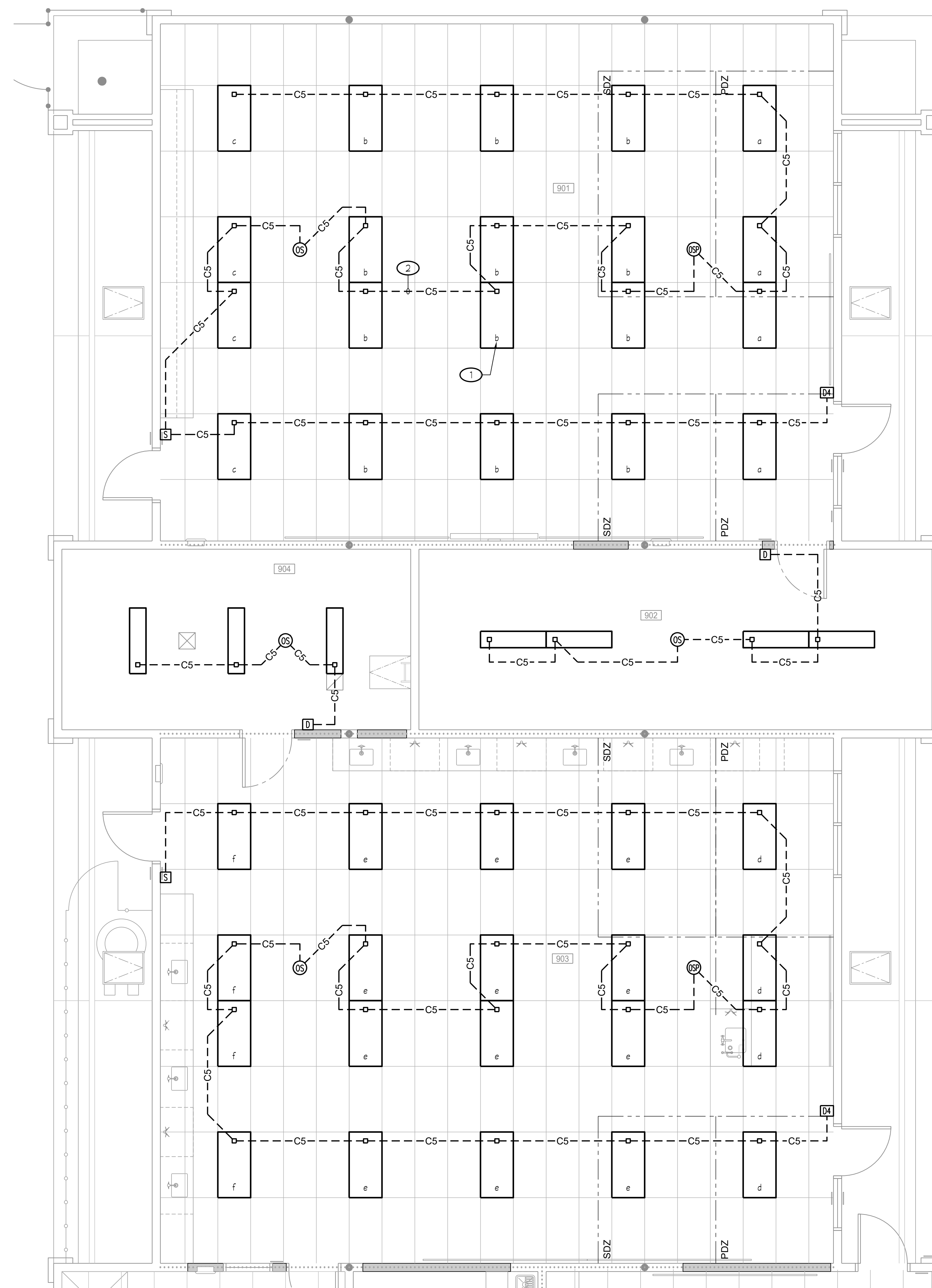
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INGENUITY

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4320 West Mineral King Avenue  
Van Nuys, California 91411  
[www.mangini.us](http://www.mangini.us)  
(818) 627 0530 Office  
(818) 627 0016 Fax

TITLE  
BUILDING 900  
ENLARGED  
LIGHTING  
CONTROLS PLAN

## E1.4

PROJECT **1751a**

## WALL LEGEND

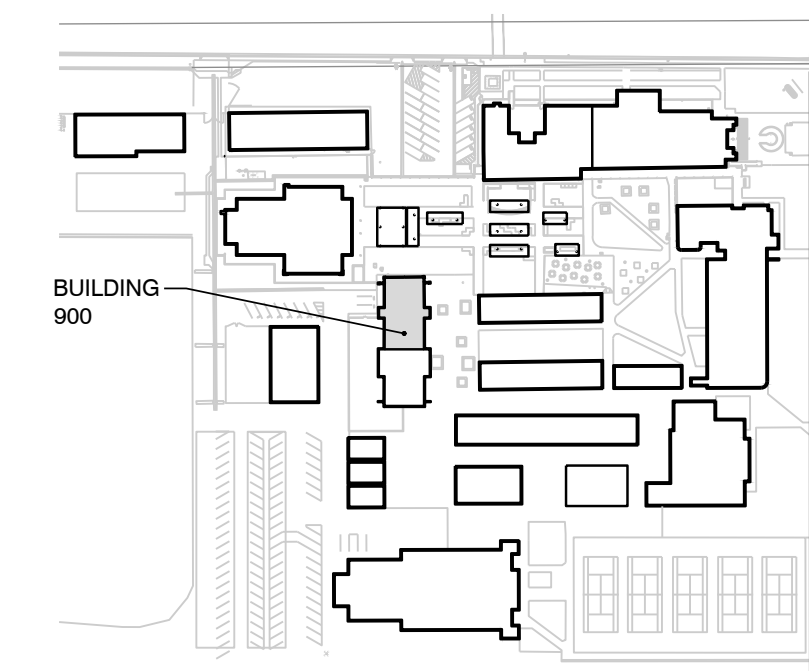
\*\*\*\*\* 1-HOUR RATED WALL, CONTINUOUS  
VERTICALLY FROM FLOOR TO  
BOTTOM OF ROOF FRAMING.

### DAYLIT ZONE LEGEND

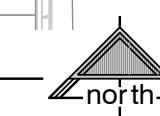
PDZ - DENOTES PRIMARY DAYLIT ZONE  
PDZ

SDZ - DENOTES "SECONDARY" DAYLIT ZONE  
SDZ

ROOM LEGEND	
#	ROOM NAME
901	PHYSICS
902	STORAGE
903	CHEMISTRY
904	STORAGE

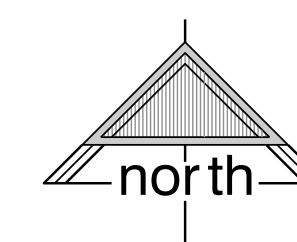


**BUILDING SITE KEY**



BUILDING 900  
ENLARGED LIGHTING CONTROLS PLAN

---

 $1/4^* = 1'-0$ 

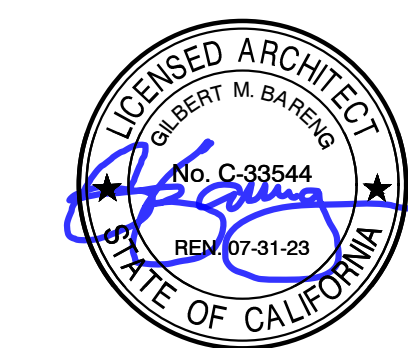
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Electrical Consultants  
131 S. Dunworth - (559)733-2671  
Visalia, California 93292-6705





NOTES (THIS SHEET ONLY):

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- ② — C5 — DENOTES CAT. 5e CABLE. ELECTRICAL CONTRACTOR MAY USE PRETERMINATED CAT. 5e CABLE OR PROVIDE CAT. 5e CABLEING, 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 ATTIC SPACE/CEILING AND IN WALLS FOR ROUTING OF CABLEING.



DATE: AUGUST 24, 2022

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1

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INGENUITY

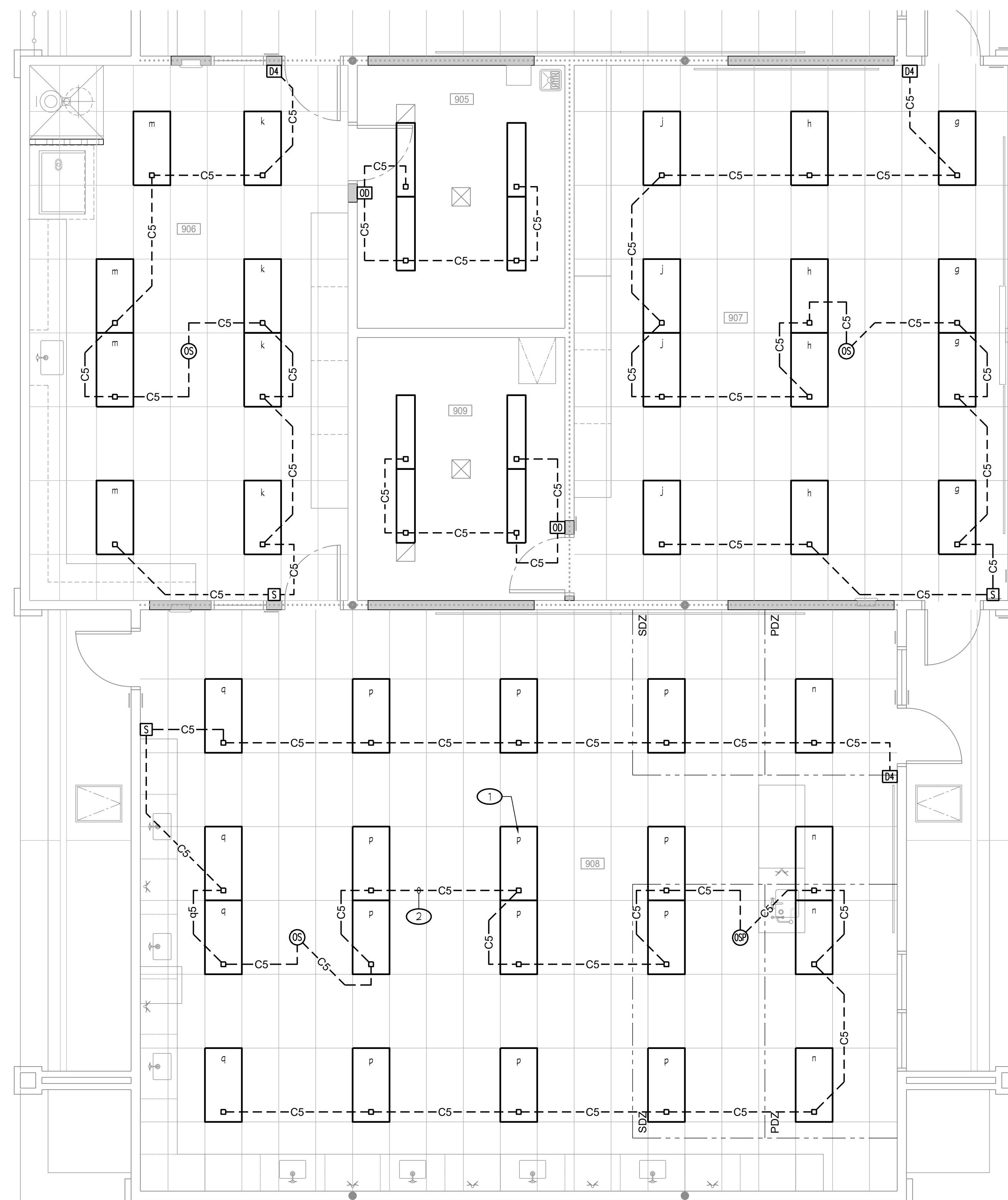
McLAIN BARENG MORRELLI SCOTT

**MANGINI ASSOCIATES INC.**  
13270 West Mineral King Avenue  
Northridge, California 91329  
[www.manginus.com](http://www.manginus.com)  
(559) 627-0530 Office  
(559) 627-1006 Fax

TITLE  
BUILDING 900  
ENLARGED  
LIGHTING  
CONTROLS PLAN

## E1.5

PROJECT 1751a



## WALL LEGEND

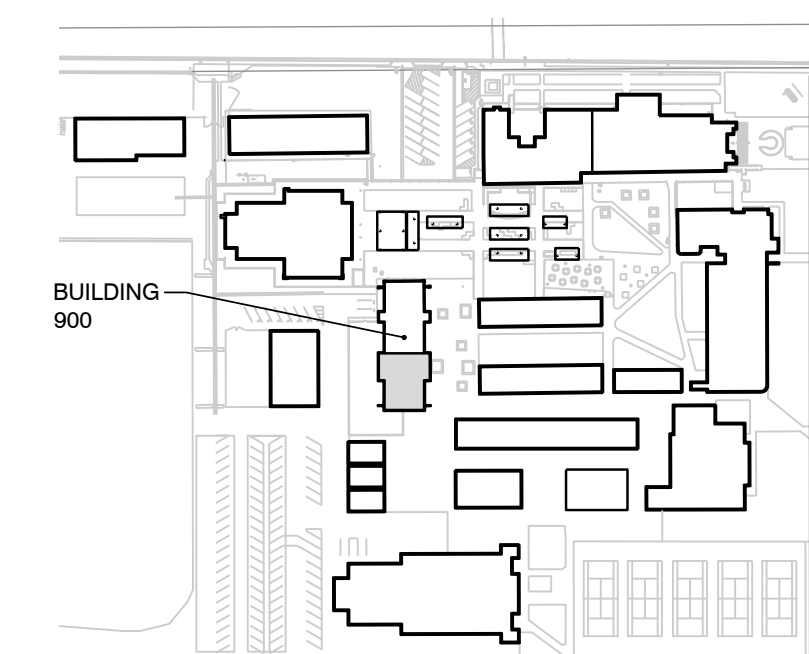
\*\*\*\*\* 1-HOUR RATED WALL, CONTINUOUS  
VERTICALLY FROM FLOOR TO  
BOTTOM OF ROOF FRAMING

### DAYLIT ZONE LEGEND

PDZ - DENOTES PRIMARY DAYLIT ZONE

SDZ - DENOTES "SECONDARY" DAY/LIT ZONE

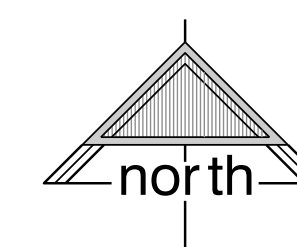
ROOM LEGEND	
#	ROOM NAME
905	STORAGE
906	WORKROOM
907	CLASSROOM
908	BIOLOGY
909	STORAGE



**BUILDING SITE KEY**



BUILDING 900  
ENLARGED LIGHTING CONTROLS PLAN

$$\overline{1/4^*} = 1'-0$$


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Visalia, California 93292-6705







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PROJECT **1751a**

**DISCONNECT AND REMOVE THE EXISTING DUPLEX RECEPTACLES MOUNTED HORIZONTALLY IN THE FACE OF THE INTEGRAL RAISED BACKSPLASH/UTILITY CHASE OF THE EPOXY COUNTERTOP AND BASE CABINETS BEING REMOVED. DISCONNECT AND REMOVE THE 'IDLE' BRANCH CIRCUITING, ALONG WITH ANY RESPECTIVE OUTLET BOXES, EXTENSIONS, ETC. FEEDING THESE DUPLEX RECEPTACLES FROM THE ADJACENT EXTERIOR WALL.**

D6 DISCONNECT EXISTING BRANCH CIRCUITING, ROUTING UP FROM FLUSH FLOOR BOX AND INTO THE BASE CABINETS OF THE LAB TABLES. PULL OUT 'IDLE' CONDUCTORS TO THE ADJACENT FLUSH FLOOR BOX OR IN THE 'HOMERUN' BACK TO EXISTING PANEL 'C'. SAWCUT THE EXISTING CONCRETE SLAB AS NECESSARY TO REMOVE THE FLUSH FLOOR BOX. PATCH AND INFILL CONCRETE SLAB PER DETAIL #11/E5.2

DISCONNECT AND REMOVE EXISTING UNDERCOUNTER ELECTRIC WATER HEATER BEING REMOVED. PULL OUT 'IDLE' CONDUCTORS BACK TO EXISTING PANEL 'B' (OR PANEL 'A'), RESPECTIVELY.

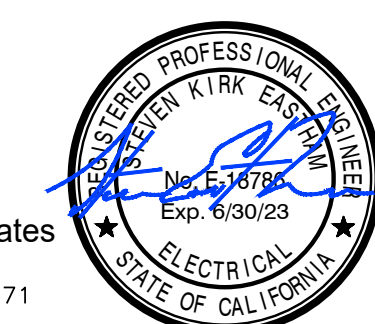
D74 DISCONNECT AND REMOVE THE EXISTING G.F.C.I. DUPLEX RECEPTACLES MOUNTED HORIZONTALLY IN THE FACEFRAME OF THE LAB TABLE/PENINSULA. DISCONNECT AND REMOVE THE 'IDLE' BRANCH CIRCUITING, ALONG WITH ANY RESPECTIVE OUTLET BOXES, EXTENSIONS, ETC., FEEDING THESE G.F.C.I. DUPLEX RECEPTACLES FROM THE ADJACENT EXTERIOR WALL.

**D20** DISCONNECT AND REMOVE THE EXISTING NEMA 1 SCREW COVER CAN, FLUSH MOUNTED INSIDE OF THE HALF-WALL STRUCTURE, ALONG WITH THE EXISTING UNDERGROUND FEEDER AND EXISTING ABOVEGROUND FEEDER (ROUTING THRU WALL STRUCTURE) TO EXISTING PANEL 'B' AS REQUIRED TO CLEAR WAY FOR NEW CONSTRUCTION. REMOVE ALL 'IDLE' UNDERGROUND CONDUITS TO BE FLUSH WITH THE TOP OF THE CONCRETE SLAB.

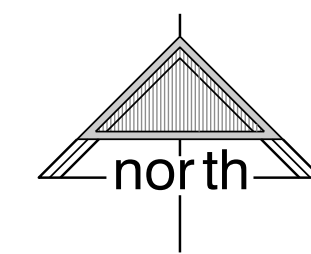
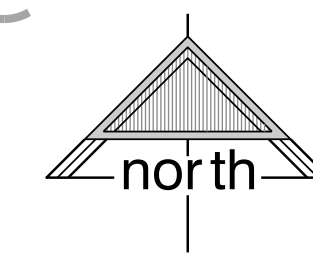
1. CONNECT UTILITY CONTROL PANEL "LCP-1", 120V 3A, LOCATED AT ±48" A.F.F., COORDINATE THE EXACT "POINT-OF-CONNECTION" WITH THE PLUMBING CONTRACTOR PRIOR TO ROUGH-IN.
2. CONNECT THE "EMERGENCY" GAS SHUT-OFF BUTTON. COORDINATE THE EXACT LOCATION WITH THE PLUMBING CONTRACTOR PRIOR TO ROUGH-IN.
3. CONNECT THE GAS SOLENOID VALVE LOCATED IN THE ACCESSIBLE ATTIC SPACE ABOVE THE T-BAR CEILING. COORDINATE THE EXACT LOCATION WITH THE PLUMBING CONTRACTOR PRIOR TO ROUGH-IN.
4. 1/2" C - ONE WEST PENN WIRE #220.
5. 1/2" C - 2 #14 + 1 #14 GND.
6. — — — EP — — — DENOTES THE APPROXIMATE LOCATION OF EXISTING "POWER FEEDERS AND/OR "SPARE" CONDUITS. VERIFY EXACT LOCATION AT SITE.
7. ROUTE NEW FEEDER (L9) THRU THE ACCESSIBLE ATTIC SPACE.
8. EXISTING DUPLEX RECEPTACLE SURFACE MOUNTED INSIDE OF THE BACKPAN OF THE EXISTING INTERFACIAT DISTRIBUTION TRANSFORMER. RECONNECT AS SHOWN.

### WALL LEGEND

.....	1-HOUR RATED WALL, CONTINUOUS VERTICALLY FROM FLOOR TO BOTTOM OF ROOF FRAMING.
-------	--



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$$\overline{1/8^* = 1'-0^*}$$

$$\overline{1/8^* = 1-0^*}$$




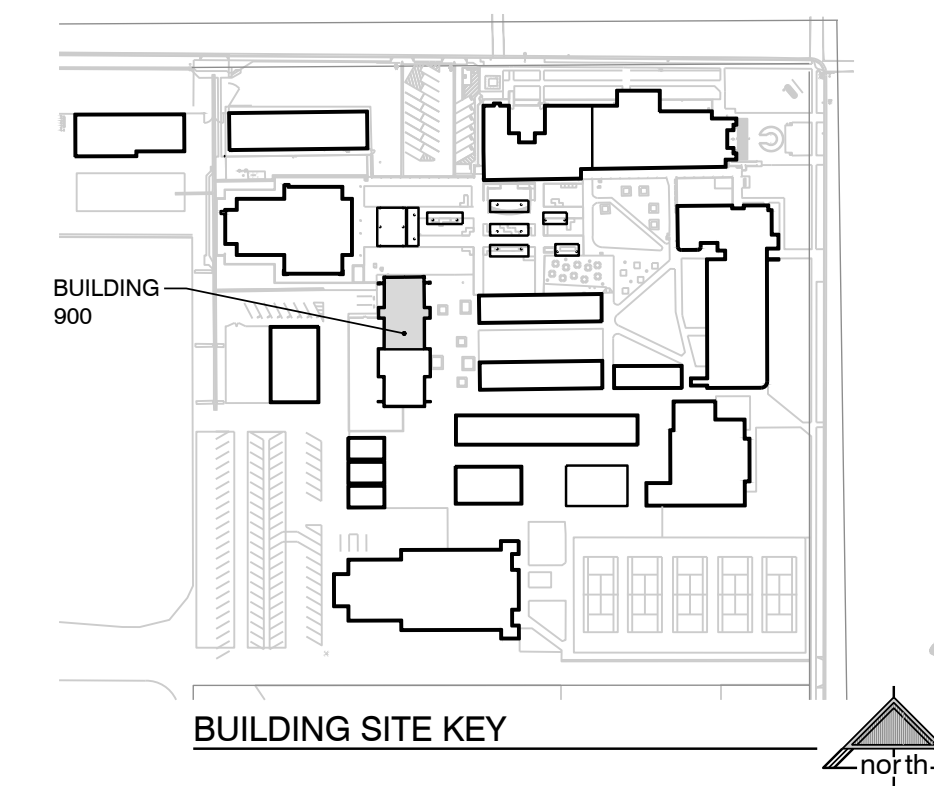
NOTES (THIS SHEET ONLY):

- 1 QUADRIplex RECEPTACLE FOR OWNER'S SMART BOARD MONITOR.
- 2 PROVIDE GROUND BUS BAR PER DETAIL #12/E5.2 AND SURFACE MOUNT IN THE ACCESSIBLE T-BAR CEILING.
- 3 SAWCUT AND PATCH EXISTING CONCRETE SLAB/CURB AS REQUIRED. REFER TO DETAIL #7/E5.2 AND DETAILS #35 AND #34/57.1 FOR ADDITIONAL INFORMATION/ REQUIREMENTS.
- 4 MOUNT ALL RECEPTACLES, SHOWN ABOVE CABINETS/COUNTERS, AT +43" A.F.F. TO CENTER.
- 5 REFER TO BLDG. 900 - ENLARGED POWER PLAN, SHEET #E1.8, FOR CONTINUATION.
- 6 PROVIDE A NEW WEATHER-RESISTANT G.F.C.I. DUPLEX RECEPTACLE EQUIPPED WITH A DIECAST WEATHERPROOF "WHILE-IN-USE" LOCKABLE COVER RED DOT HCSLUV OR EQUAL. MOUNT INSIDE EXISTING OUTLET BOX SALVAGED DURING DEMOLITION.
- 7 EXISTING BRANCH CIRCUITING. REMOVE EXISTING CONDUCTORS AND REPLACE WITH NEW 2 #12 + 1 #12 GND.
- 8 REFER TO THE PARTIAL SITE ELECTRICAL PLAN, SHEET #E51.2, FOR CONTINUATION.
- 9 — — — EP — — — DENOTES THE APPROXIMATE LOCATION OF EXISTING UNDERGROUND POWER FEEDER. VERIFY EXACT LOCATION AT SITE.
- 10 INTERCEPT THE EXISTING UNDERGROUND FEEDER, SALVAGED DURING DEMOLITION, WITH NEW PULL BOX NPB9. VERIFY EXACT LOCATION AT SITE. PROVIDE A NEW 90° ELBOW, COUPLING AND CONDUIT AS REQUIRED TO TURN UP INSIDE NEW PULL BOX. REFER TO DETAIL #5/E5.2 FOR PULL BOX REQUIREMENTS AND BOND THE STEEL CHECKER PLATE COVER PER DETAIL #6/E5.2.
- 11 300A 3-POLE 'SECONDARY' ENCLOSED CIRCUIT BREAKER IN A NEMA 3R ENCLOSURE, SURFACE MOUNT AT +42" A.F.F., TO THE CENTER AND MOUNT SIMILAR TO DETAIL #1/E5.2.
- 12 REFER TO ONE LINE DIAGRAM 1, DETAIL #1/E3.1, FOR FEEDER REQUIREMENTS.
- 13 SAWCUT AND PATCH EXISTING CONCRETE SLAB PER DETAIL #7/E5.2.
- 14 PROVIDE TWO 1" AND TWO 3/4" CONDUITS AND STUB INTO THE ACCESSIBLE ATTIC SPACE ABOVE THE T-BAR CEILING.
- 15 REFER TO BLDG. 900 POWER PLAN, ON SHEET #E1.6, FOR CONTINUATION.
- 16 CONNECT THE LIFT STATION CONTROL PANEL, 208V 1ph, TWO 1/2 H.P. PUMPS, COORDINATE THE EXACT LOCATION WITH THE PLUMBING CONTRACTOR PRIOR TO ROUGH-IN.
- 17 FLUSH MOUNT G.F.C.I. DUPLEX RECEPTACLES IN THE SIDE OF THE UPPER TABLE AND CENTER BETWEEN THE COUNTERTOP OF THE UPPER TABLE AT +40" A.F.F. AND THE COUNTERTOP OF THE LOWER TABLE AT +34" A.F.F.. COORDINATE THE EXACT LOCATION WITH THE GAS TURRET AND MAKE ARRANGEMENTS WITH CABINETY MANUFACTURER TO PROVIDE THE REQUIRED OPENING FOR THE RESPECTIVE CUT-IN BOX.
- 18 ROUTE BRANCH CIRCUITING THRU THE ELECTRICAL/PLUMBING CHASE.
- 19 FLUSH MOUNT G.F.C.I. DUPLEX RECEPTACLES IN THE SIDE OF THE TEACHER DEMONSTRATION TABLE AND AT THE END OF THE ELECTRICAL/PLUMBING CHASE.
- 20 PROVIDE TWO 1 1/2" CONDUITS (ONE CONDUIT FOR POWER CABLES TO TWO (2) 1/2 H.P. PUMPS AND ONE CONDUIT FOR THE CONTROL CABLES TO THE FOUR (4) FLOAT SWITCHES. COORDINATE THE EXACT POINT-OF-CONNECTION AT THE BASIN PRIOR TO ROUGH-IN AND PROVIDE WATERTIGHT SEALS (COMPATIBLE WITH FIBERGLASS BASIN) AS REQUIRED. PROVIDE CONDUIT SEALS, AT VERTICAL PORTION OF CONDUIT, BELOW THE LIFT STATION CONTROL PANEL.

### WALL LEGEND

..... 1-HOUR RATED WALL, CONTINUOUS  
VERTICALLY FROM FLOOR TO  
BOTTOM OF ROOF FRAMING.

ROOM LEGEND	
#	ROOM NAME
901	PHYSICS
902	STORAGE
903	CHEMISTRY
904	STORAGE



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APPROVALS	
FILE # 16-H1	APPLICATION 02-120394



DATE: AUGUST 24, 2022

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SCIENCE BUILDING**  
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INGENUITY

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Burbank, California 91502  
[www.mangini.us](http://www.mangini.us)  
(559) 627 0530 Office  
(559) 627 0236 Fax

TITLE  
BUILDING 900  
ENLARGED  
POWER PLAN

## E1.7

PROJECT **1751a**

2:\Draffing\Jobs\RSE\SO400LS\Corcoran\High School\Mod'n of Science Bldg. 900 - MA 1751a\E1.7.dwg DATE SAVED: 04/12/23 BY: Ncode DATE PLOTTED: 04/12/23 JOB #: 21-182.01-DS

TRANSFORMER TLO  
PER #4/E5.2

PANEL "H9"—  
PER #1/E5 2

# BUILDING 900 ENLARGED POWER PLAN

$$\overline{1/4^*} = 1'-0$$

north





NOTES (THIS SHEET ONLY):

1. QUADRIPLEX RECEPTACLE FOR OWNERS SMART BOARD MONITOR.
2. EXISTING BRANCH CIRCUITING. REMOVE EXISTING CONDUCTORS AND REPLACE WITH NEW 4 #12 + 1 #12 GND.
3. SAWCUT AND PATCH EXISTING CONCRETE SLAB/CURB AS REQUIRED. REFER TO DETAIL #7E5.2 AND DETAILS #B3 AND #B4/57.1 FOR ADDITIONAL INFORMATION/ REQUIREMENTS.
4. MOUNT ALL RECEPTACLES, SHOWN ABOVE CABINETS/COUNTERS, AT 44" A.F.F. TO CENTER.
5. PROVIDE A 30A 3-POLE ELECTRICALLY-OPERATED, MECHANICALLY-HELD LIGHTING CONTRACTOR WITH 120V COIL, TWO-WIRE CONTROL, ACCESSORY AND A NEMA 1 GENERAL PURPOSE ENCLOSURE (SQUARE D #SM62V02-R6 OR EQUAL) TO ACTIVATE EXHAUST FAN EF-1 VIA THE EXHAUST FAN SWITCH AT THE FUME HOOD. SURFACE MOUNT IN THE ACCESSIBLE ATTIC SPACE ABOVE THE T-BAR CEILING.
6. CONNECT THE JUNCTION BOX SUPPLIED WITH THE FUME HOOD, 120V. COORDINATE THE EXACT POINT-OF-CONNECTION WITH THE EQUIPMENT SUPPLIER PRIOR TO ROUGH-IN.
7. EXHAUST FAN SWITCH SUPPLIED WITH FUME HOOD AND PRE-WIRED TO JUNCTION BOX, KEYNOTE #6.
8. RUN 3/4" - 3 #12 + 1 #12 GND TO THE VARIABLE FREQUENCY DRIVE (VFD) AT EXHAUST FAN EF-1 ON ROOF. REFER TO BUILDING 900 - ROOF ELECTRICAL PLAN, SHEET #E1.11.
9. REFER TO BLDG. 900 - ENLARGED POWER PLAN, SHEET #E1.7, FOR CONTINUATION.
10. PROVIDE A NEW WEATHER-RESISTANT G.F.C.I. DUPLEX RECEPTACLE EQUIPPED WITH A DIECAST WEATHERPROOF WHILE-IN-USE LOCKABLE COVER RED DOT HCKSLV OR EQUAL. MOUNT INSIDE EXISTING OUTLET BOX SALVAGED DURING DEMOLITION.
11. EXISTING BRANCH CIRCUITING. REMOVE EXISTING CONDUCTORS AND REPLACE WITH NEW 2 #12 + 1 #12 GND.
12. REMOVE EXISTING WEATHERPROOF COVER AND REPLACE WITH A NEW DIECAST DIECAST WEATHERPROOF WHILE-IN-USE LOCKABLE COVER RED DOT HCKSLV OR EQUAL. MOUNT INSIDE EXISTING OUTLET BOX SALVAGED DURING DEMOLITION.
13. FLUSH MOUNT G.F.C.I. DUPLEX RECEPTACLES IN THE SIDE OF THE UPPER TABLE AND CENTER BETWEEN THE COUNTERTOP OF THE UPPER TABLE AT 40" A.F.F. AND THE COUNTERTOP OF THE LOWER TABLE AT 34" A.F.F. COORDINATE THE EXACT LOCATION WITH THE GAS TUBSET AND MAKE ARRANGEMENTS WITH CABINETRY MANUFACTURER TO PROVIDE THE REQUIRED OPENING FOR THE RESPECTIVE CUT-IN BOX.
14. ROUTE BRANCH CIRCUITING THRU THE ELECTRICAL/PLUMBING CHASE.
15. FLUSH MOUNT G.F.C.I. DUPLEX RECEPTACLES IN THE SIDE OF THE TEACHER DEMONSTRATION TABLE AT THE END OF THE ELECTRICAL/PLUMBING CHASE.

DATE: AUGUST 24, 2022

**MODERNIZATION AT  
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CORCORAN UNIFIED SCHOOL DISTRICT  
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REVISIONS

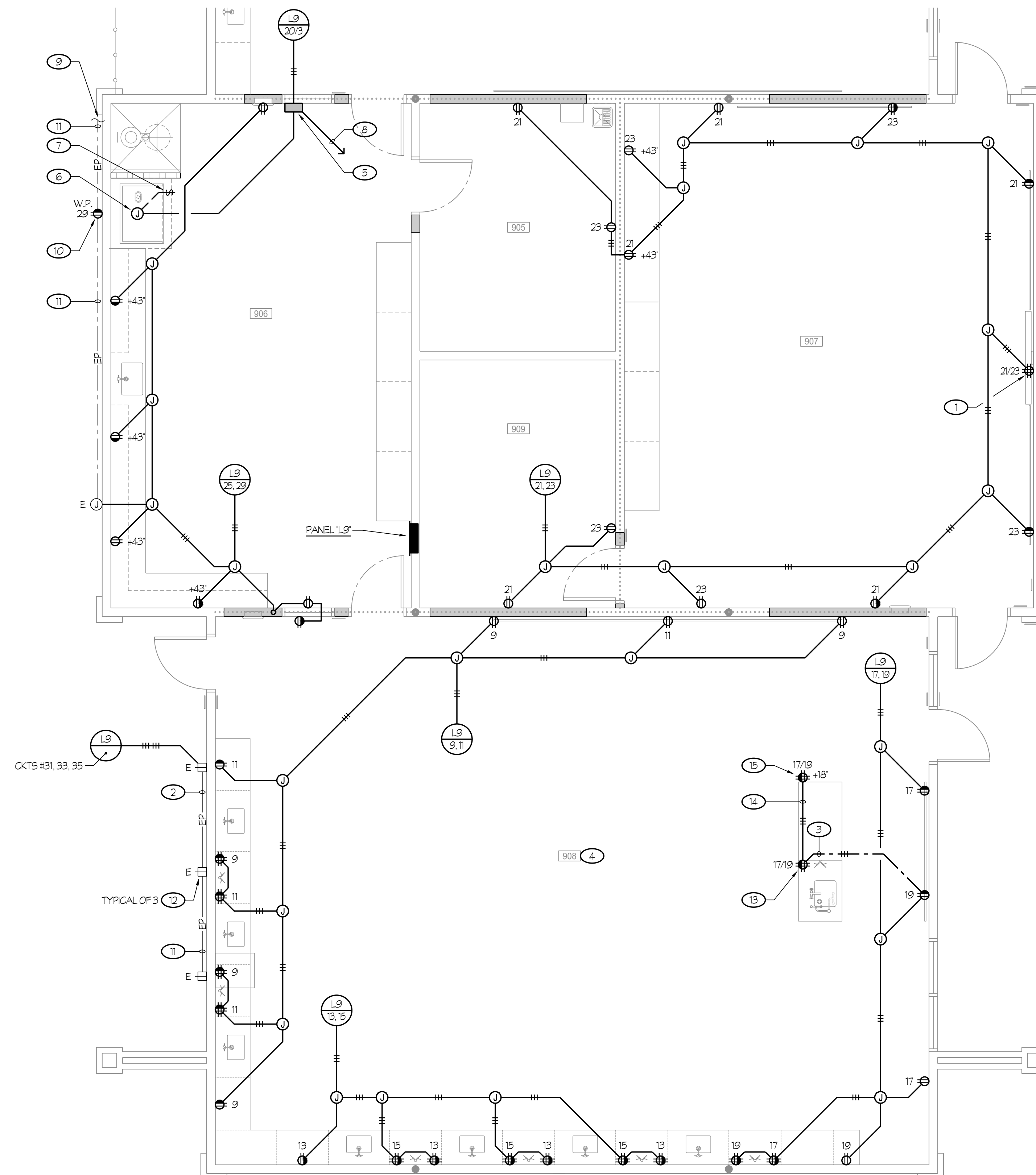
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INGENUITY

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(818) 627 0016 Fax

TITLE  
BUILDING 900  
ENLARGED  
POWER PLAN

### E1.8

PROJECT **1751a**

WALL LEGEND

\*\*\*\*\* 1-HOUR RATED WALL, CONTINUOUS  
VERTICALLY FROM FLOOR TO  
BOTTOM OF ROOF FRAMING.

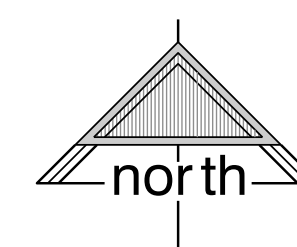
ROOM LEGEND	
#	ROOM NAME
905	STORAGE
906	WORKROOM
907	CLASSROOM
908	BIOLOGY
909	STORAGE



### BUILDING SITE KEY



# BUILDING 900 ENLARGED POWER PLAN

$$\frac{1}{4} = 1 - 3$$


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Visalia, California 93292-6705

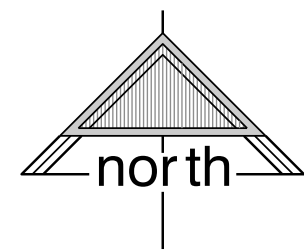




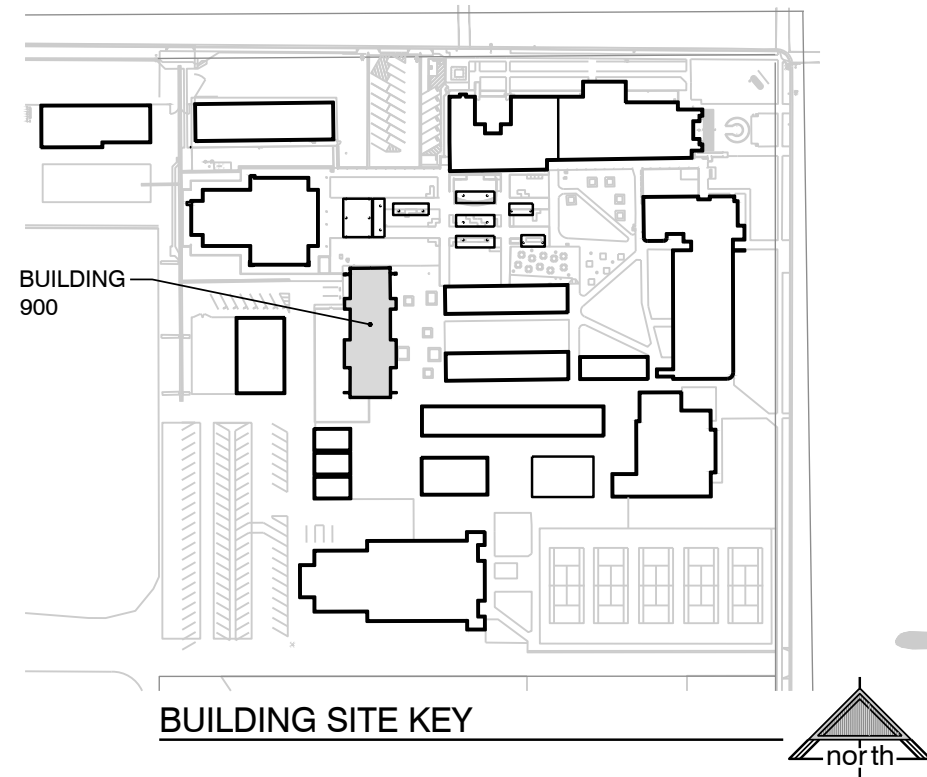
Z:\Drawing\Jobs\900\900-00005\Corcoran\High School\Main.dwg DATE: 01/12/23 BY: MDE DATE PLOTTED: 04/12/23 JOB # 21-18201-25

BUILDING 900  
DEMOLITION FIRE ALARM PLAN

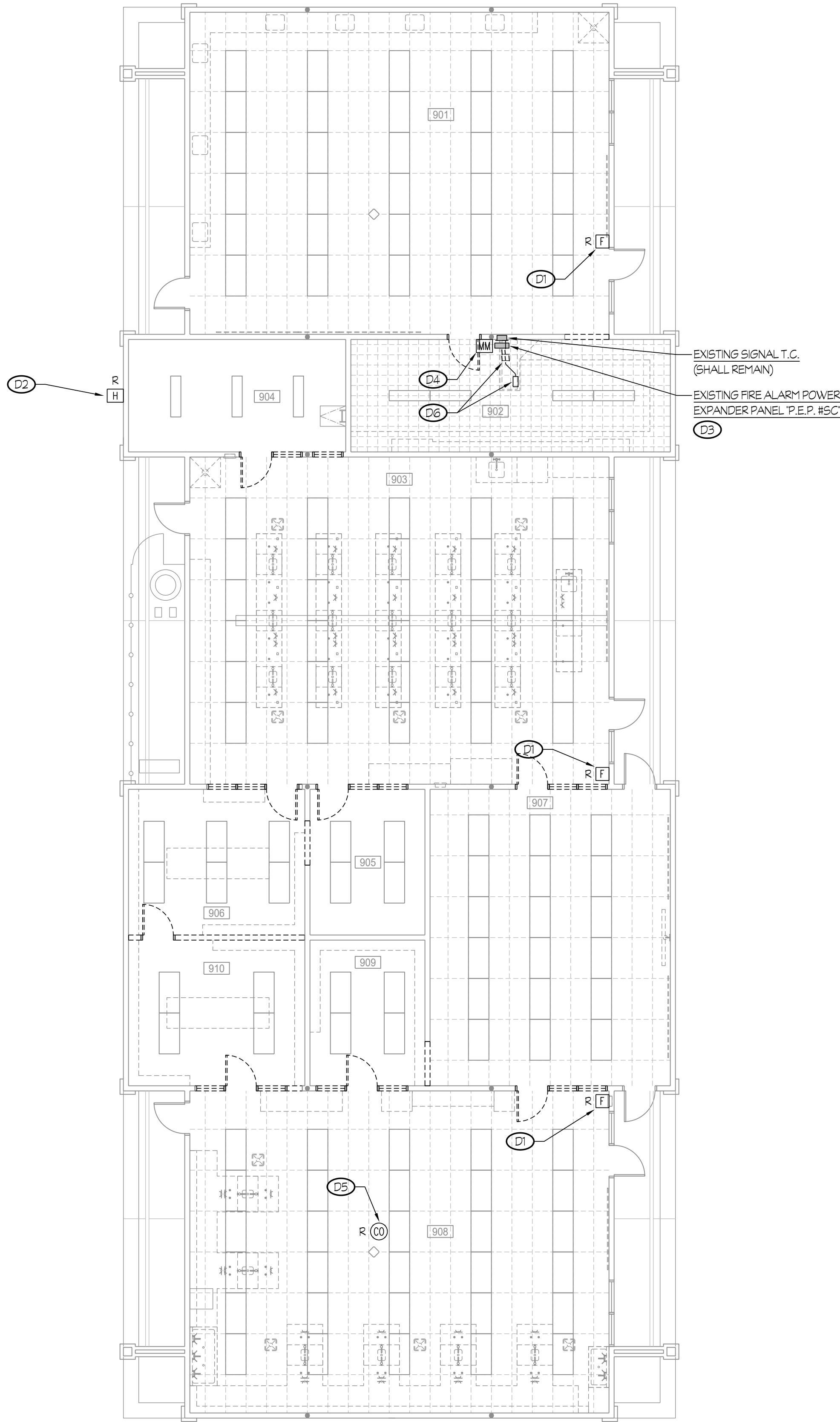
1/8" = 1'-0"



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



ROOM LEGEND	
#	ROOM NAME
901	PHYSICS
902	STORAGE
903	CHEMISTRY
904	STORAGE
905	STORAGE
906	WORKROOM
907	CLASSROOM
908	BIOLOGY
909	STORAGE
910	WORKROOM

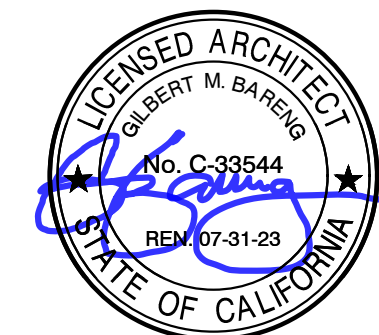


DEMOLITION NOTES (THIS SHEET ONLY):

- D1 DISCONNECT AND REMOVE THE EXISTING SURFACE MOUNTED MANUAL PULL STATION. REMOVE 'IDLE' CONDUCTORS, SURFACE METALLIC RACEWAY AND COMPATIBLE OUTLET BOX AS REQUIRED TO CLEAR WAY FOR NEW CONSTRUCTION.
- D2 DISCONNECT AND REMOVE THE EXISTING SURFACE MOUNTED EXTERIOR HORN AND WEATHERPROOF BACKBOX. REMOVE 'IDLE' CONDUCTORS, SURFACE METALLIC RACEWAY AND COMPATIBLE OUTLET BOX AS REQUIRED TO CLEAR WAY FOR NEW CONSTRUCTION.
- D3 DISCONNECT AND REMOVE THE EXISTING FIRE ALARM POWER EXPANDER PANEL 'P.E.P. #5C' EQUIPPED WITH AN ADDRESSABLE SUPERVISED CONTROL MODULE. SALVAGE AND RE-USE PER BLDG. 900 - FIRE ALARM PLANS, SHEET #E1.10.
- D4 DISCONNECT AND REMOVE THE EXISTING ADDRESSABLE MONITOR MODULE LOCATED ADJACENT TO FIRE ALARM POWER EXPANDER PANEL 'P.E.P. #5C'.
- D5 DISCONNECT AND REMOVE THE EXISTING CARBON MONOXIDE DETECTOR.
- D6 DISCONNECT AND REMOVE THE EXISTING NEMA1 SCREW COVER CAN, FLUSH MOUNTED INSIDE OF THE HALF-WALL STRUCTURE ALONG WITH THE EXISTING UNDERGROUND FIRE ALARM FEEDER/'SPARE' CONDUITS AND EXISTING ABOVEGROUND FIRE ALARM FEEDER/'SPARE' CONDUITS (ROUTING THRU WALL STRUCTURE) TO EXISTING SIGNAL T.C. AS REQUIRED TO CLEAR WAY FOR NEW CONSTRUCTION. REMOVE ALL 'IDLE' UNDERGROUND CONDUITS TO BE FLUSH WITH THE TOP OF THE CONCRETE SLAB.

APPROVALS  
FILE # 16-H1 APPLICATION # 02-120394

IDENTIFICATION STAMP  
DIV. OF THE STATE ARCHITECT  
APP: 02-120394 INC:  
REVIEWED FOR  
SS ☒ FLS ☒ ACS ☒  
DATE: 05/01/2023



DATE: AUGUST 24, 2022

**MODERNIZATION AT  
CORCORAN HIGH SCHOOL  
SCIENCE BUILDING**  
1100 LETTS AVE., CORCORAN, CA. 93212  
CORCORAN UNIFIED SCHOOL DISTRICT  
1520 PATTERSON AVE., CORCORAN, KINGS COUNTY, CA. 98212



REVISIONS	
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**MANGINI** | ARCHITECTURE  
INGENUITY  
McLAIN BARENG MORRELLI SCOTT  
MANGINI ASSOCIATES, INC.  
4320 West Mineral King Avenue  
Visalia, California 93291  
www.mangini.us  
(559) 627-0530 Office  
(559) 627-1526 Fax

TITLE  
BUILDING 900  
DEMOLITION  
FIRE ALARM PLAN

**E1.9**

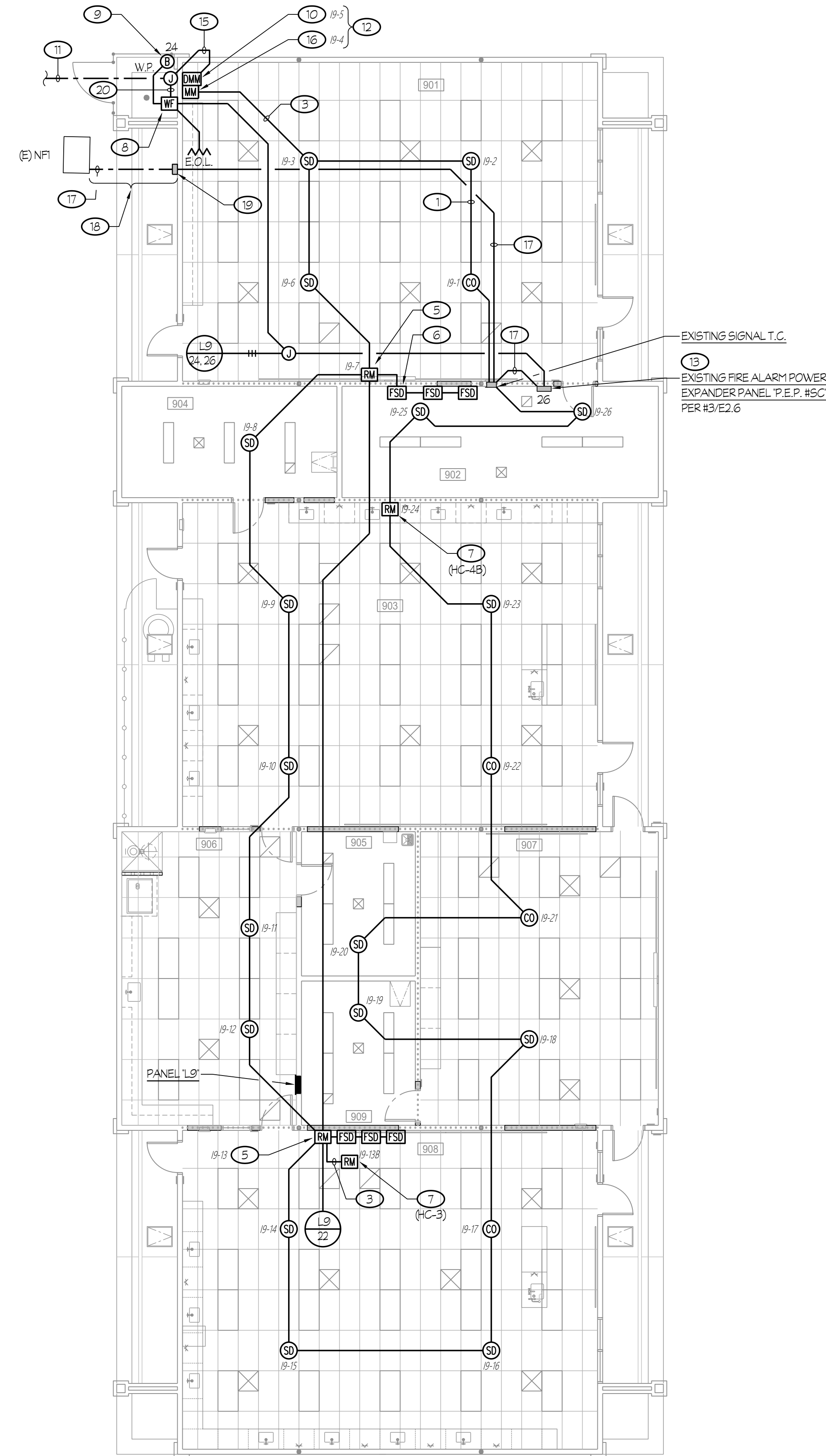
PROJECT **1751a**



NOTES (THIS SHEET ONLY):

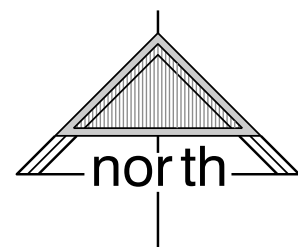
- 1 TYPICAL OF FIRE ALARM CIRCUITING BETWEEN ADDRESSABLE DEVICES (CONNECTED ONTO THE SIGNALING LINE CIRCUIT (SLC)) U.O.N. RUN 1/2" C - ONE 1" FA CABLE BETWEEN ADDRESSABLE DEVICES.
- 2 TYPICAL OF FIRE ALARM CIRCUITING BETWEEN NOTIFICATION APPLIANCES, U.O.N. RUN 3/4" C - ONE 1" FSP CABLE, 2 #12 BETWEEN NOTIFICATION APPLIANCES.
- 3 3/4" C - TWO 1" FA CABLES.
- 4 1/2" C - TWO 1" FSP CABLES.
- 5 PROVIDE A RELAY MODULE FOR CONTROL 120V POWER FOR FIRE/SMOKE DAMPERS. FLUSH MOUNT IN T-BAR CEILING, U.O.N. AND PROVIDE AN ENGRAVED NAMEPLATE: "FIRE/SMOKE DAMPERS".

- 6 TYPICAL OF ALL FIRE/SMOKE DAMPERS (SYMBOL FSD). CONNECT FIRE/SMOKE DAMPER IN ATTIC SPACE. COORDINATE EXACT LOCATION WITH MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN. PROVIDE A HORSEPOWER RATED TOGGLE SWITCH AS DISCONNECTING MEANS.
- 7 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, HC-".
- 8 CONNECT THE WATERFLOW SWITCH AT FIRE SPRINKLER RISER. COORDINATE EXACT LOCATION WITH FIRE SPRINKLER CONTRACTOR. RUN 1/2" L.F.M.C. - 2 #14 FROM THE WATERFLOW SWITCH TO THE WEATHER PROOF JUNCTION BOX.
- 9 CONNECT ELECTRIC BELL. ROUTE BRANCH CIRCUITING THRU THE WATERFLOW SWITCH. COORDINATE EXACT LOCATION WITH THE FIRE SPRINKLER CONTRACTOR PRIOR TO ROUGH-IN.
- 10 PROVIDE A DUAL MONITOR MODULE FOR SUPERVISION OF TAMPER SWITCHES AT THE 0.5 & Y. VALVES LOCATED ON THE DOUBLE CHECK DETECTOR/BACKFLOW PREVENTER ASSEMBLY. PROVIDE AN ENGRAVED NAMEPLATE: "TAMPER SWITCHES AT D.D.C.V.". RUN 3/4" C - TWO 1" FA CABLES, 2 #14 BETWEEN ADJACENT MONITOR MODULES.
- 11 3/4" C - 4 #14 TO TAMPER SWITCHES AT THE 0.5 & Y. VALVES LOCATED ON THE DOUBLE CHECK DETECTOR/BACKFLOW PREVENTER ASSEMBLY. REFER TO SITE ELECTRICAL PLAN, SHEET #E1.1, FOR CONTINUATION. ROUTE IN "COMMON" TRENCH AND SAWCUT WITH FIRE SPRINKLER PIPING.
- 12 FLUSH MOUNT DUAL MONITOR MODULES IN THE T-BAR CEILING.
- 13 NEW LOCATION OF EXISTING FIRE ALARM POWER EXPANDER PANEL "P.E.P. #5C" SALVAGED DURING DEMOLITION. MOUNT HIGH ON WALL AT CEILING.
- 14 STUB 1" C INTO ACCESSIBLE ATTIC SPACE ABOVE T-BAR CEILING.
- 15 3/4" C - 6 #14.
- 16 PROVIDE A MONITOR MODULE FOR SUPERVISION OF WATER FLOW SWITCH AT FIRE SPRINKLER RISER. COORDINATE EXACT LOCATION WITH FIRE SPRINKLER CONTRACTOR.
- 17 REFER TO THE PARTIAL FIRE ALARM SYSTEM RISER DIAGRAM - BUILDING 900, DETAIL #1/E2.4, FOR CONDUIT, CABLES AND CONDUCTOR REQUIREMENTS.
- 18 REMOVE ENTIRE PORTION OF EASTERLY CONCRETE MOW STRIP AT EXISTING PULL BOX "NFI" AND ENTIRE PORTION OF THE ADJACENT CONCRETE SIDEWALK (BETWEEN CONSTRUCTION OR CONTROL JOINTS) AS REQUIRED TO INSTALL NEW FIRE ALARM CONDUITS. REPLACE WITH NEW CONCRETE MOW STRIP AND SIDEWALK PER DETAIL #7/E5.2.
- 19 PROVIDE A NEW FIRE ALARM PULL CAN "FPCB" PER DETAIL #4/E2.6 AND SURFACE MOUNT HIGH ON WALL AT BOTTOM OF SOFFIT. RUN CONDUITS UP INTO SOFFIT, TURN 90° AND CONTINUE INTO ACCESSIBLE ATTIC SPACE ABOVE T-BAR CEILING. SEAL AROUND CONDUIT PENETRATIONS.
- 20 1/2" C - 2 #14.



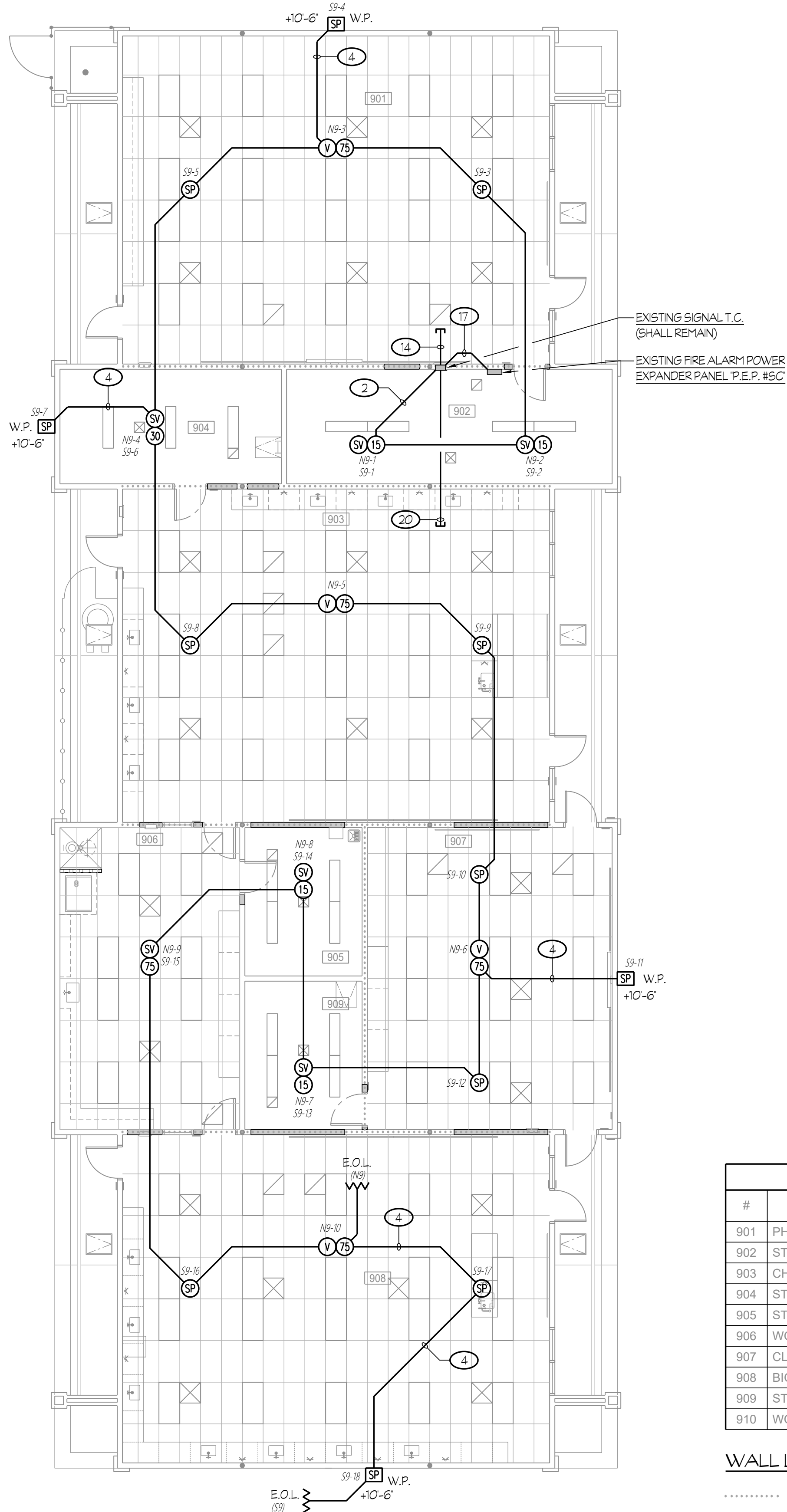
BUILDING 900  
FIRE ALARM PLAN - INITIATION

1/8" = 1'-0"



BUILDING 900  
FIRE ALARM PLAN - NOTIFICATION

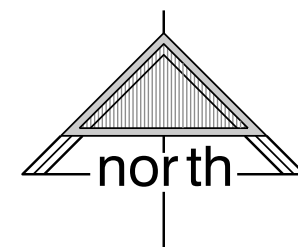
1/8" = 1'-0"



ROOM LEGEND	
#	ROOM NAME
901	PHYSICS
902	STORAGE
903	CHEMISTRY
904	STORAGE
905	STORAGE
906	WORKROOM
907	CLASSROOM
908	BIOLOGY
909	STORAGE
910	WORKROOM

WALL LEGEND

..... 1-HOUR RATED WALL, CONTINUOUS VERTICALLY FROM FLOOR TO BOTTOM OF ROOF FRAMING.



BUILDING SITE KEY

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



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Visalia, California 93291  
www.mangini.us  
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(559) 627-1520 Fax

TITLE  
BUILDING 900  
FIRE ALARM PLANS

**E1.10**

PROJECT **1751a**





REVISIONS

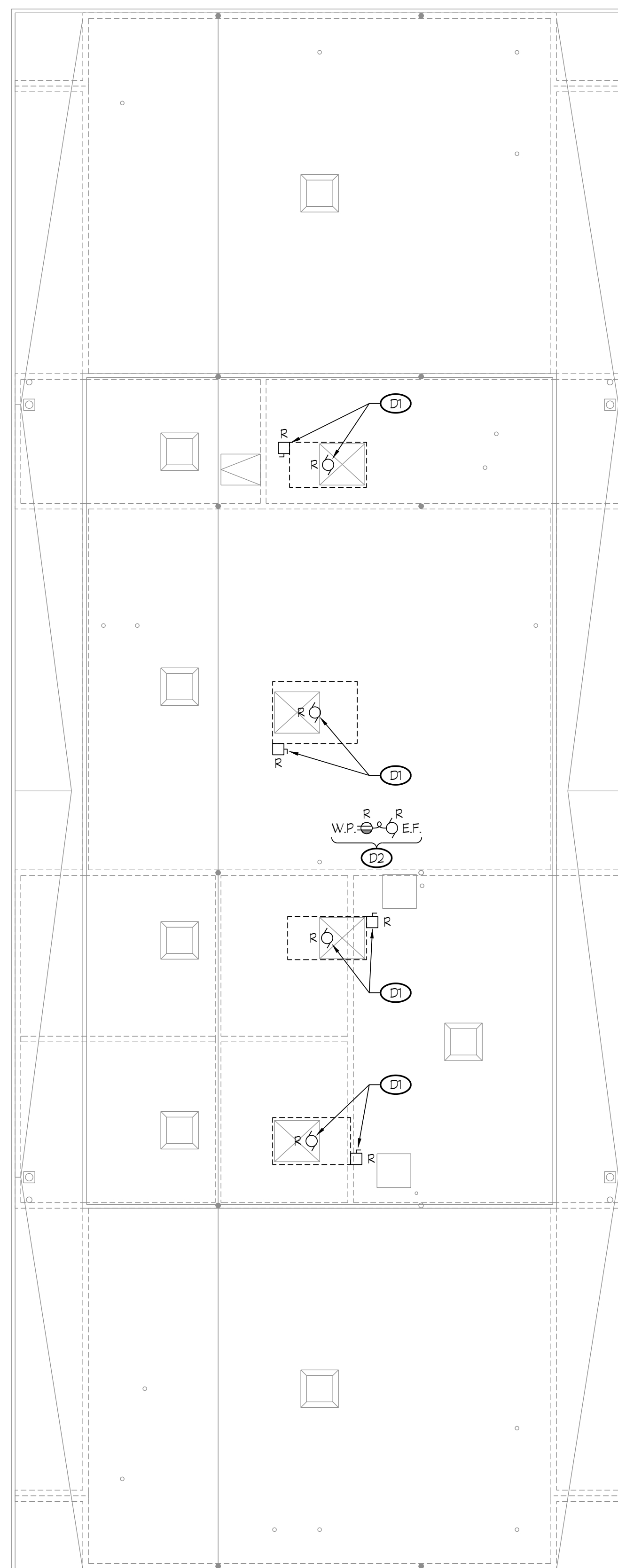
TITLE  
BUILDING 900  
ROOF ELECTRICAL  
PLANS

PROJECT **1751a**

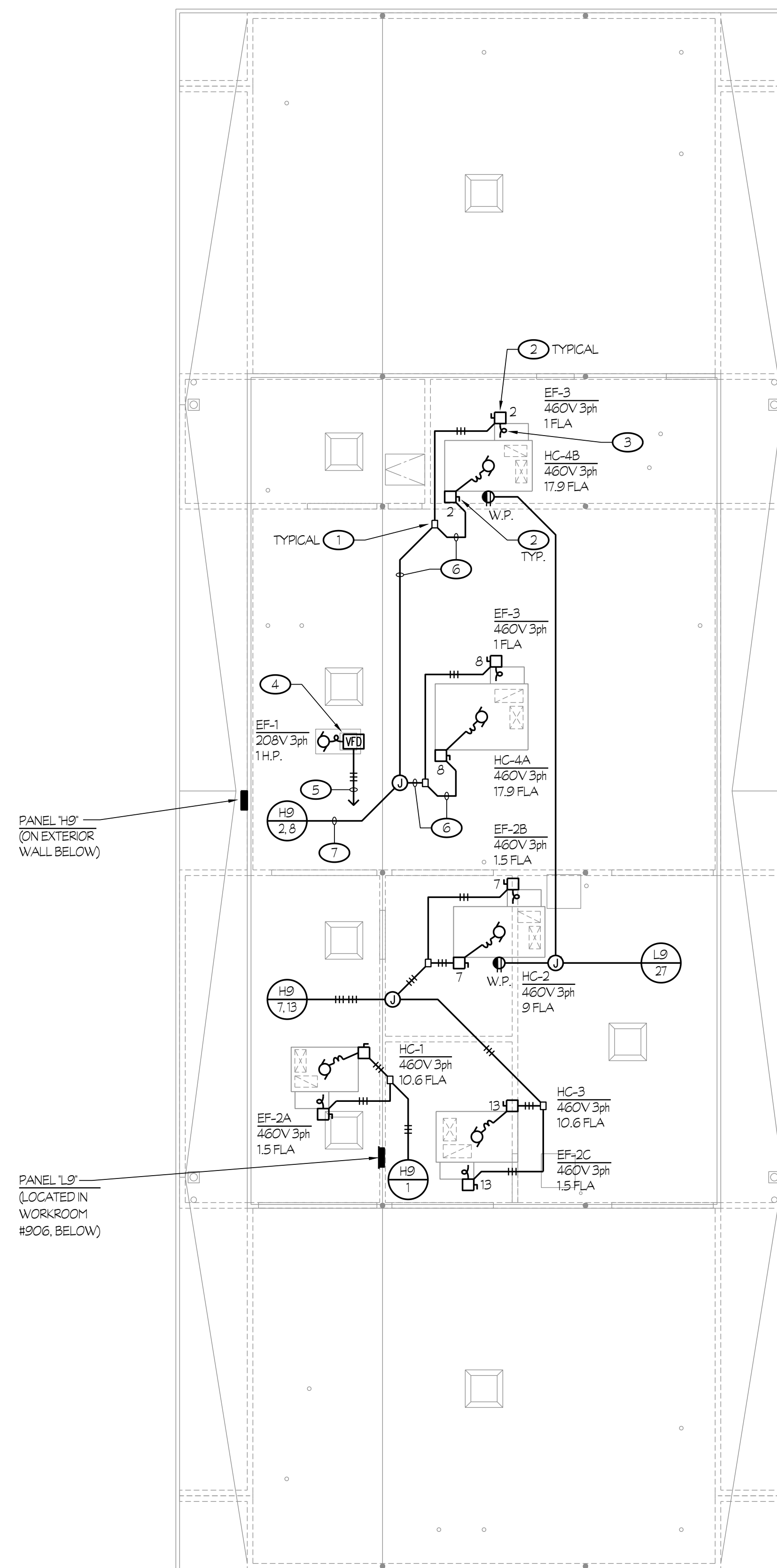
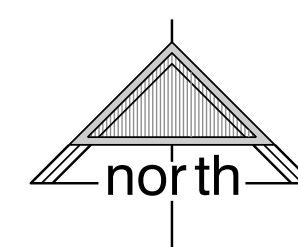
**D1** DISCONNECT EXISTING H.V.A.C. UNIT BEING REMOVED. DISCONNECT AND REMOVE EXISTING BRANCH CIRCUIT THRU THE EXISTING ROOF AND CONTINUING TO RESPECTIVE PANEL. REMOVE EXISTING "IDLE" ROOF JACK AND MAKE ARRANGEMENTS WITH THE GENERAL CONTRACTOR TO PATCH "IDLE" ROOF OPENING.

**D2** DISCONNECT AND REMOVE EXISTING WEATHERPROOF G.F.C.I. DUPLEX RECEPTACLE ALONG WITH THE BRANCH CIRCUIT TO THE EXISTING EXHAUST FAN BEING REMOVED. DISCONNECT AND REMOVE EXISTING G.F.C.I. DUPLEX RECEPTACLE AND WEATHER-RESISTANT G.F.C.I. DUPLEX RECEPTACLE. RECONNECT TO EXISTING BRANCH CIRCUIT CONDUCTORS. REPLACE EXISTING WEATHERPROOF COVER WITH A NEW DECA WEATHERPROOF "WHILE-IN-USE" LOCKABLE COVER, RED-DOT #KSLV OR EQUAL.

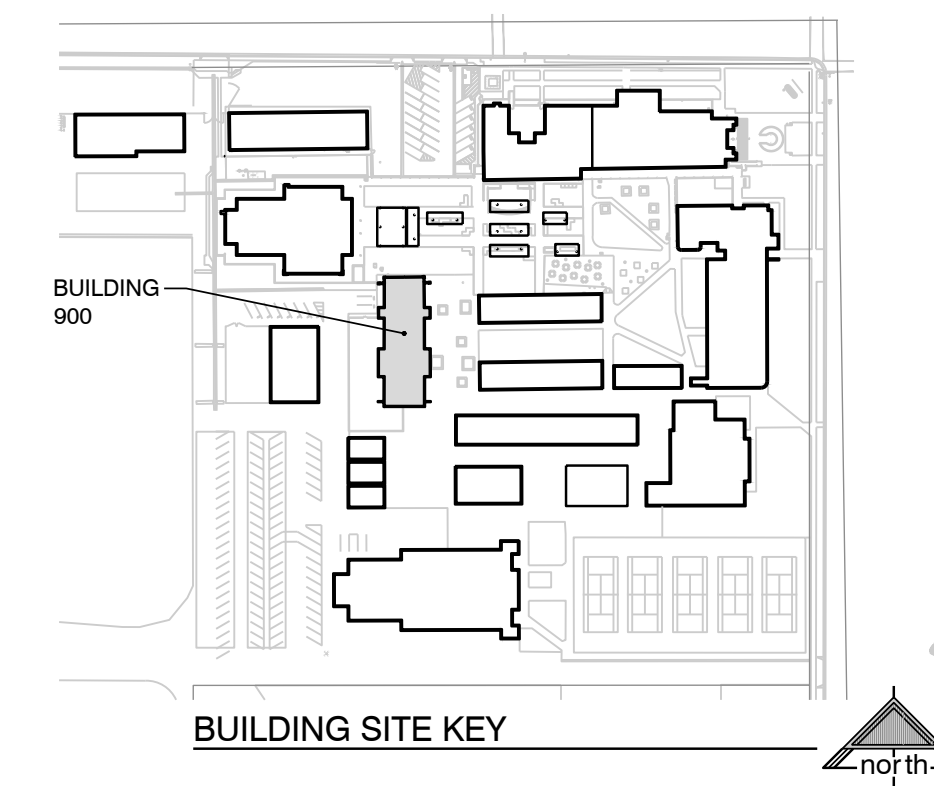
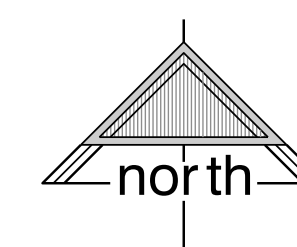
1. TYPICAL AT EACH HC UNIT EQUIPPED WITH A MODULATING POWER EXHAUST FAN. PROVIDE A 12" H X 12" W X 8" DP, NEMA 3R SCREW COVER CAN IN ORDER TO TAP THE RESPECTIVE 3-PHASE BRANCH CIRCUIT TO FEED BOTH THE HEAT/COOL UNIT AND THE MODULATING POWER EXHAUST FAN. SURFACE MOUNT ONTO THE HC UNIT AND COORDINATE EXACT LOCATION WITH THE MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN. THE ELECTRICAL CONTRACTOR MAY PROVIDE A 8" H X 8" W X 4" DP, NEMA 3R SCREW COVER CAN AT HEAT/COOL UNITS 1C-1, -2, -4A, AND -4B AT HIS OPTION.
2. CONNECT MODULATING POWER EXHAUST FAN. VERIFY EXACT LOCATION AT SITE.
3. TYPICAL AT EACH HC UNIT EQUIPPED WITH A MODULATING POWER EXHAUST FAN. PROVIDE ENGRAVED NAMEPLATES AT EACH DISCONNECT SWITCH: DISCONNECT FOR HC UNIT OR DISCONNECT FOR POWER EXHAUST. ATTACH NAMEPLATE TO FRONT OF RESPECTIVE DISCONNECT SWITCH.
4. VARIABLE FREQUENCY DRIVE PROVIDED BY MECHANICAL CONTRACTOR. COORDINATE THE EXACT LOCATION PRIOR TO ROUGH-IN.
5. RUN 3/4"C - 3 #12 + 1 #12 GND TO LIGHTING CONTACTOR LOCATED IN THE ACCESSIBLE ATTIC SPACE ABOVE THE T-BAR CEILING BELOW.
6. 3/4"C - 3 #10 + 1 #10 GND.
7. 1"C - 6 #10 + 1 #10 GND.



BUILDING 900  
DEMOLITION ROOF ELECTRICAL PLAN  
1/8" = 1'-0"



BUILDING 900  
ROOF ELECTRICAL PLAN  
1/8" = 1'-0"



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





Z:\Drawing\Jobs\02-120394\02-120394-Corcoran\High School\Notes.dwg DATE: 04/12/23 BY: Mclain DATE PLOTTED: 04/12/23 JOB # 21-16201-25

FIRE ALARM SYSTEM EQUIPMENT SPECIFICATIONS					
SYMBOL	DESCRIPTION	MODEL #	CSFM LISTING #	BACKBOX REQUIREMENTS (B)	MOUNTING HEIGHT (TO CENTER, U.O.N.)
(G) (E) (FACP) #1A	EXISTING FIRE ALARM CONTROL PANEL F.A.C.P. #1A	GAMWELL/F.C.I. #ILH-MB-E3	7165-1703-0125	INCLUDED	_____
	INTELLIGENT LOOP INTERFACE - MAIN BOARD	GAMWELL/F.C.I. #LCO-SLP			
	LCD TOUCHSCREEN ANNUNCIATOR DISPLAY	GAMWELL/F.C.I. #PM-9			
	120V POWER SUPPLY	GAMWELL/F.C.I. #N1-VGX-UTP			
	VOICE GATEWAY	GAMWELL/F.C.I. #AM-50-70			
(G) (E) (FACP) #17	50W DIGITAL AMPLIFIER, QTY. OF 4	GAMWELL/F.C.I. #E388-SD/ICC	7165-1703-0125	INCLUDED	_____
	ENCLOSURE WITH PLEXI-GLASS DOOR	GAMWELL/F.C.I. #E388-SD/ICC			
	EXISTING FIRE ALARM CONTROL PANEL F.A.C.P. #17	GAMWELL/F.C.I. #ILH-MB-E3			
	INTELLIGENT LOOP INTERFACE - MAIN BOARD	GAMWELL/F.C.I. #LCO-SLP			
	LCD TOUCHSCREEN ANNUNCIATOR DISPLAY	GAMWELL/F.C.I. #PM-9			
(C) (E) (FACP) #12	120V POWER SUPPLY	GAMWELL/F.C.I. #N1-VGX-UTP	7165-1703-0125	INCLUDED	_____
	VOICE GATEWAY	GAMWELL/F.C.I. #N1-VGX-UTP			
	50W DIGITAL AMPLIFIER, QTY. OF 4	GAMWELL/F.C.I. #AM-50-70			
	ENCLOSURE WITH PLEXI-GLASS DOOR	GAMWELL/F.C.I. #E388-SD/ICC			
	ENCLOSURE WITH PLEXI-GLASS DOOR	GAMWELL/F.C.I. #E388-SD/ICC			
(D) (E) (FACP) #AB	EXISTING FIRE ALARM CONTROL PANEL F.A.C.P. #AB	GAMWELL/F.C.I. #ILH-MB-E3	7165-1703-0125	_____	_____
(F) (E) (FACP) #5	EXISTING FIRE ALARM CONTROL PANEL F.A.C.P. #5	GAMWELL/F.C.I. #ILH-MB-E3	7165-1703-0125	_____	_____
	INTELLIGENT LOOP INTERFACE - MAIN BOARD	GAMWELL/F.C.I. #LCO-SLP			
	LCD TOUCHSCREEN ANNUNCIATOR DISPLAY	GAMWELL/F.C.I. #PM-9			
	120V POWER SUPPLY	GAMWELL/F.C.I. #N1-VGX-UTP			
	VOICE GATEWAY	GAMWELL/F.C.I. #N1-VGX-UTP			
(E) (E) (FAT) #1	50W DIGITAL AMPLIFIER, QTY. OF 2	GAMWELL/F.C.I. #AM-50-70	7165-1703-0125	_____	_____
	ENCLOSURE WITH PLEXI-GLASS DOOR	GAMWELL/F.C.I. #E388-SD/ICC			
	EXISTING FIRE ALARM TRANSponder	GAMWELL/F.C.I. #ILH-MB-E3			
	INTELLIGENT LOOP INTERFACE - MAIN BOARD	GAMWELL/F.C.I. #AM-50-70			
	50W 70V AUDIO AMPLIFIER	GAMWELL/F.C.I. #AM-50-70			
(E) (E) (LOC) #1	VOICE GATEWAY	GAMWELL/F.C.I. #N1-VGX-UTP	7165-1703-0125	_____	_____
	POWER SUPPLY	GAMWELL/F.C.I. #PM-9			
	ENCLOSURE WITH SOLID DOOR	GAMWELL/F.C.I. #E388-RC/INV			
	EXISTING LOCAL OPERATING CONSOLE	GAMWELL/F.C.I. #NGA			
	NETWORK GRAPHIC ANNUNCIATOR	GAMWELL/F.C.I. #N1-VGX-UTP			
(E) (E) (UFAC) #1	VOICE GATEWAY	GAMWELL/F.C.I. #N1-VGX-UTP	7300-1157-0136	INCLUDED	_____
	ENCLOSURE, "AA" SIZE	GAMWELL/F.C.I. #E388-RAA			
	EXISTING UNIVERSAL FIRE ALARM COMMUNICATOR PANEL	DIGITAL MONITORING PRODUCTS, DMP #DUALCOMNF			
	EXISTING FIRE ALARM POWER EXPANDER PANEL "P.E.P. #1"	GAMWELL/F.C.I. #HFFB/AOM-2SF			
	EXISTING FIRE ALARM POWER EXPANDER PANEL "P.E.P. #5C"	GAMWELL/F.C.I. #HFFB/AOM-2SF			
(H) (E) (PEP) #1	EXISTING FIRE ALARM POWER EXPANDER PANEL "P.E.P. #1"	GAMWELL/F.C.I. #HFFB/AOM-2SF	7315-1637-0102 7300-1703-0102	INCLUDED	_____
(E) (E) (PEP) #5C	EXISTING FIRE ALARM POWER EXPANDER PANEL "P.E.P. #5C"	GAMWELL/F.C.I. #HFFB/AOM-2SF	7315-1637-0102 7300-1703-0102	INCLUDED	PER DETAIL #3/E2.6

FIRE ALARM SYSTEM SEQUENCE OF OPERATIONS						
RESULT OF OPERATION ↓	TYPE OF INITIATION					
	AREA SMOKE DETECTOR, HEAT DETECTOR OR SMOKE/CO DETECTOR	CARBON MONOXIDE DETECTOR (1)	LOSS OF POWER	SHORT CIRCUIT/ GROUND FAULT	FIRE SPRINKLER RISER WATER FLOW SWITCH	TAMPER SWITCHES AT GATE VALVES ON BACKFLOW PREVENTER OR TAMPER SWITCH ON F.S.R.
ANNUNCIATE ALARM AT FIRE ALARM CONTROL PANEL	YES	_____	_____	_____	YES	_____
ANNUNCIATE TROUBLE AT FIRE ALARM CONTROL PANEL	_____	_____	YES	YES	_____	YES
ANNUNCIATE SUPERVISORY AT FIRE ALARM CONTROL PANEL	_____	YES	_____	_____	_____	_____
ACTIVATE ALL AUDIBLE AND VISUAL ALARM SIGNALS	YES	_____	_____	_____	YES	_____
TRANSFER TO BATTERY BACK-UP	_____	_____	YES	_____	_____	_____
ACTIVATE TEMPORAL PATTERN CODE 4, IN RESPECTIVE BUILDING	_____	YES	_____	_____	_____	_____
ANNUNCIATE AT 24 HR. ATTENDED LOCATION	YES	YES	YES	_____	YES	YES
CENTRAL STATION FOR MONITORING (ALARM)	YES	_____	_____	_____	YES	_____
CENTRAL STATION FOR MONITORING (TROUBLE)	_____	_____	YES	YES	_____	YES
CENTRAL STATION FOR MONITORING (SUPERVISORY)	_____	YES	_____	_____	_____	_____

(1) UPON DETECTION OF CARBON MONOXIDE, A SUPERVISORY SIGNAL SHALL ANNUNCIATE AT THE NETWORKED FIRE ALARM CONTROL PANELS F.A.C.P. AND AT THE NETWORK GRAPHIC ANNUNCIATOR, INSIDE OF THE EXISTING LOCAL OPERATING CONSOLE L.O.C., WHICH IS LOCATED IN THE ADMINISTRATION BUILDING.

FIRE ALARM SYSTEM EQUIPMENT SPECIFICATIONS					
SYMBOL	DESCRIPTION	MODEL #	CSFM LISTING #	BACKBOX REQUIREMENTS (B)	MOUNTING HEIGHT (TO CENTER, U.O.N.)
(SD)	ADDRESSABLE PHOTOELECTRIC SMOKE DETECTOR	GAMWELL/F.C.I. #ASD-PL3/B300-6	7272-1703-0501 7300-1653-0109	4" OCTAGONAL BOX x 2 1/8" DP. OR 4" SQUARE OUTLET BOX x 2 1/8" DP.	PER DETAIL #2/E2.6
(CO)	ADDRESSABLE PHOTOELECTRIC SMOKE/CARBON MONOXIDE DETECTOR	GAMWELL/F.C.I. #MCS-COF3/B300-6	7272-1703-0508 7300-1653-0109	4" OCTAGONAL BOX x 2 1/8" DP. OR 4" SQUARE OUTLET BOX x 2 1/8" DP.	PER DETAIL #2/E2.6
(MU)	ADDRESSABLE MONITOR MODULE	GAMWELL/F.C.I. #AMM-4F	7300-1703-0102	4" SQ. x 2 1/8" DP. OUTLET BOX	_____
(DM)	ADDRESSABLE DUAL MONITOR MODULE	GAMWELL/F.C.I. #AMM-21F	7300-1703-0107	4" SQ. x 2 1/8" DP. OUTLET BOX	_____
(RM)	ADDRESSABLE RELAY CONTROL MODULE	GAMWELL/F.C.I. #AOM-2RF	7300-1703-0102	4" SQ. x 2 1/8" DP. OUTLET BOX	_____
(SCM)	ADDRESSABLE SUPERVISED CONTROL MODULE	GAMWELL/F.C.I. #AOM-2SF	7300-1703-0102	4" SQ. x 2 1/8" DP. OUTLET BOX	_____
(VTS)	VISUAL STROBE, CEILING MOUNTED (CANDELA RATING AS NOTED)	SYSTEM SENSOR #SCWL	7125-1653-0504	4" SQ. x 2 1/8" DP. OUTLET BOX	PER DETAIL #2/E2.6
(SP) 30, 75	SPEAKER/STROBE, CEILING MOUNTED (CANDELA RATING AS NOTED)	SYSTEM SENSOR #SPSCWL-P	7320-1653-0505	4" SQ. x 2 1/8" DP. OUTLET BOX WITH 1 1/2" DP. BOX EXTENSION	PER DETAIL #2/E2.6
(SP)	INTERIOR SPEAKER, CEILING MOUNTED	SYSTEM SENSOR #SPOWL	7320-1653-0505	4" SQ. x 2 1/8" DP. OUTLET BOX WITH 1 1/2" DP. BOX EXTENSION	PER DETAIL #2/E2.6
(SP) W.P.	EXTERIOR SPEAKER, WALL MOUNTED	SYSTEM SENSOR #SPRK-R/#MWBB	7320-1653-0201	PROVIDE METAL WEATHERPROOF SURFACE BACKBOX	_____
(E.O.L.)	END OF LINE RESISTOR	_____	_____	_____	_____
(WF)	WATERFLOW SWITCH (AT FIRE SPRINKLER RISER)	PROVIDED BY OTHERS REFER TO DETAIL #W-7/F6	_____	_____	VERIFY EXACT LOCATION WITH FIRE SPRINKLER CONTR.
(TS)	TAMPER SWITCH (AT DOUBLE DETECTOR CHECK ASS'Y)	PROVIDED BY OTHERS REFER TO DETAIL #A/F4	_____	_____	VERIFY EXACT LOCATION WITH FIRE SPRINKLER CONTR.
(B)	ELECTRIC BELL (FOR FIRE SPRINKLER RISER)	PROVIDED BY OTHERS REFER TO DETAIL #A/F4	_____	WEATHERPROOF BACKBOX PROVIDED BY FIRE SPRINKLER CONTRACTOR	VERIFY EXACT LOCATION WITH FIRE SPRINKLER CONTR.
(FSD)	FIRE/SMOKE DAMPER	PROVIDED BY MECH. CONTRACTOR REFER TO DETAIL #CM4	_____	_____	VERIFY EXACT LOCATION WITH MECH. CONTR.
'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	_____	_____
'FSP' CABLE	FIRE ALARM SPEAKER CABLE (INDOORS)	WEST PENN #9945	7161-0859-0101	_____	_____
'SFSF' CABLE	FIRE ALARM SPEAKER CABLE (OUTDOORS)	WEST PENN #AQ224	7161-0859-0101	_____	_____

#### NOTES (FIRE ALARM SYSTEM EQUIPMENT SPECIFICATIONS):

- (A) END OF LINE RESISTORS FOR NOTIFICATION APPLIANCE CIRCUITS SHALL BE 3.9K OHM, 1/2 WATT.
- (B) VERIFY BACKBOX REQUIREMENTS WITH FIRE ALARM SYSTEM EQUIPMENT SUPPLIER PRIOR TO ROUGH-IN.
- (C) EXISTING FIRE ALARM EQUIPMENT WAS SUBMITTED IN D.S.A. APPLICATION NO. 02-108893, FILE NO. 16-2 AND WAS APPROVED ON AUGUST 16, 2007.
- (D) EXISTING FIRE ALARM EQUIPMENT WAS SUBMITTED IN D.S.A. APPLICATION NO. 02-116520, FILE NO. 16-H1 AND WAS APPROVED ON JULY 25, 2018.
- (E) EXISTING FIRE ALARM EQUIPMENT WAS SUBMITTED IN D.S.A. APPLICATION NO. 02-117217, FILE NO. 16-H1 AND WAS APPROVED ON JUNE 11, 2019.
- (F) EXISTING FIRE ALARM EQUIPMENT WAS SUBMITTED IN D.S.A. APPLICATION NO. 02-119740, FILE NO. 16-H1 AND WAS APPROVED ON DECEMBER 16, 2021.
- (G) EXISTING FIRE ALARM EQUIPMENT WAS SUBMITTED IN D.S.A. APPLICATION NO. 02-120393, FILE NO. 16-H1 AND WAS APPROVED ON \_\_\_\_\_.
- (H) TYPICAL FOR EXISTING FIRE ALARM POWER EXPANDER PANELS "P.E.P. #1A, 1B, 2B, 6, 7, 13 AND 14.

#### COMPLETE AUTOMATIC FIRE ALARM SYSTEM PLAN SUBMITTAL

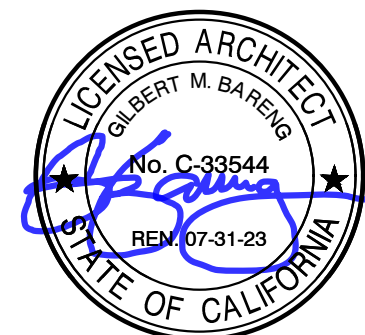
THE FIRE ALARM SYSTEM SHOWN ON THESE PLANS HAS BEEN SUBMITTED AND APPROVED BY THE DIVISION OF THE STATE ARCHITECT. ANY SUBSTITUTION OF THE FIRE ALARM SYSTEM SHALL BE RESUBMITTED TO THE ARCHITECT FOR REVIEW AND APPROVAL. THE CONTRACTOR SHALL PAY ANY ADDITIONAL FEES THAT ARE INCURRED DUE TO THIS SUBSTITUTION.

THE FIRE ALARM SYSTEM SHALL BE A TOTAL (COMPLETE) AUTOMATIC HEAT AND SMOKE DETECTION SYSTEM, PER C.F.C. SECTION 907.2.3.6, AND SHALL COVER EVERY ROOM AND/OR AREA. UPON THE ACTIVATION OF ANY INITIATION DEVICE THE FIRE ALARM SYSTEM SHALL ALERT ALL OCCUPANTS AND TRANSMIT THE ALARM, SUPERVISORY, AND TROUBLE SIGNALS TO AN APPROVED SUPERVISING STATION (C.F.C. SECTION 907.2.3.5).

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IDENTIFICATION STAMP  
DIV. OF THE STATE ARCHITECT  
APP: 02-120394 INC:  
REVIEWED FOR  
SS ☒ FLS ☒ ACS ☒  
DATE: 05/01/2023



DATE: AUGUST 24, 2022

**MODERNIZATION AT  
CORCORAN HIGH SCHOOL  
SCIENCE BUILDING**  
1100 LETTS AVE., CORCORAN, CA. 93212  
CORCORAN UNIFIED SCHOOL DISTRICT  
1520 PATTERSON AVE., CORCORAN, KINGS COUNTY, CA. 93212



REVISIONS					
1					
2					
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**MANGINI**  
ARCHITECTURE  
INGENUITY  
McLAIN BARENG MORRELLI SCOTT  
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(559) 627-1526 Fax

TITLE  
FIRE ALARM SYSTEM  
EQUIPMENT  
SPECIFICATIONS

**E2.1**

PROJECT **1751a**



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FIRE ALARM SYSTEM GENERAL NOTES	
1. APPLICABLE STANDARD NFPA 72, AS ADOPTED AND AMENDED IN CBC CHAPTER 35.	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.
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.	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.
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(a) AND READ OUT VERIFICATION FORM FROM CENTER STATION.	21. THE INSTALLING CONTRACTOR SHALL PROVIDE A COMPLETED 'SYSTEM RECORD OF COMPLETION' PER NFPA 72, FIGURE 17.8.2.
4. A STAMPED SET OF APPROVED FIRE ALARM DESIGN DOCUMENTS SHALL BE ON THE JOB SITE AND USED FOR INSTALLATION.	22. FIRE ALARM CONTROL PANELS AND REMOTE ANNUNCIATORS SHALL BE INSTALLED WITH THEIR BOTTOMS MOUNTED AT 48" ABOVE THE FINISHED FLOOR.
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.	23. MICROPHONES ASSOCIATED WITH EMERGENCY VOICE ALARM COMMUNICATION SYSTEMS (EVAC) SHALL BE ACCESSIBLE FOR USE, INSTALLED IN COMPLIANCE WITH CBC SECTIONS 11B-905 AND 11B-308.
6. DSA ARCHITECT/ENGINEER AND OWNER SHALL BE NOTIFIED A MINIMUM OF 48 HOURS PRIOR TO THE FINAL INSPECTION AND/OR TESTING.	24. THE INSTALLING CONTRACTOR SHALL PROVIDE SYSTEM PROGRAMMING FOR SUPERVISORY MONITORING PER CBC SECTION 901.6.2.
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.	25. SUPERVISORY MONITORING SHALL BE TESTED AND VERIFIED AS SENDING CORRECT SIGNALS IN CONJUNCTION WITH FINAL ACCEPTANCE TEST.
8. WALL MOUNTED VISIBLE NOTIFICATION DEVICES SHALL HAVE THEIR BOTTOMS MOUNTED AT 80" MINIMUM AND THEIR TOPS AT 98" MAXIMUM FROM FINISHED FLOOR.	26. OWNER SHALL BE RESPONSIBLE FOR ESTABLISHING A FIRE SYSTEM MONITORING CONTRACT OR PROVISIONS.
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.	27. PROVIDE AN ENGRAVED NAMEPLATE INDICATING THE D.S.A. APPLICATION NUMBER, FILE NUMBER AND DATE OF INSTALLATION AT THE RELOCATED FIRE ALARM POWER EXPANDER PANEL. P.E.P. #5C.
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 OCCUPABLE SPACE WITHIN THE BUILDING.	A. THE PRIMARY POWER SUPPLY TO THE RELOCATED FIRE ALARM POWER EXPANDER PANEL. P.E.P. #5C, SHALL BE IN ACCORDANCE WITH NFPA 72.10.6.5 AND AS FOLLOWS:
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.	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.
12. THE CONTRACTOR SHALL ADJUST/INSTALL ALL DEVICES TO MAXIMIZE PERFORMANCE AND TO MINIMIZE FALSE ALARMS.	b) THE CIRCUIT BREAKER SHALL BE EQUIPPED WITH A LOCK-ON ACCESSORY, 'RED IN COLOR', SPACE/AGE #ELOCK-FA OR EQUAL.
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.	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.
14. UNDERGROUND AND EXTERIOR CONDUITS TO HAVE WATER TIGHT FITTINGS AND WIRE TO BE APPROVED FOR WET LOCATIONS.	d) THE LOCATION OF THE CIRCUIT DISCONNECTING MEANS SHALL BE PERMANENTLY IDENTIFIED AT THE RELOCATED FIRE ALARM POWER EXPANDER PANEL. P.E.P. #5C. PROVIDE AN ENGRAVED NAMEPLATE (WHITE LETTERS ON A RED BACKGROUND) WHICH INDICATES THIS.
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.	B. ALL ENGRAVED NAMEPLATES SHALL BE ATTACHED TO THE FRONT OF THE RESPECTIVE ENCLOSURE WITH SCREWS OR RIVETS.
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.	28. PROVIDE A COPY OF THE BATTERY CALCULATION AT THE RELOCATED FIRE ALARM POWER EXPANDER PANEL. P.E.P. #5C. BATTERY CALCULATION SHALL CONTAIN INFORMATION AS NOTED ON SCHEDULES AND BE PLASTIC LAMINATED. MOUNT ONTO INSIDE FACE OF DOOR.
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.	

SIGNALING LINE CIRCUIT SCHEDULE

DESCRIPTION	PANEL	SLC
ADDRESSABLE/INITIATION DEVICES- BUILDING 900	F.A.C.P. #7	SLC#1

NOTIFICATION APPLIANCE CIRCUIT SCHEDULE

CIRCUIT	DESCRIPTION/LOCATION	PANEL
N9	VISUAL STROBES - BUILDING 900	P.E.P. #5C

SPEAKER CIRCUIT SCHEDULE

CIRCUIT	DESCRIPTION/LOCATION	PANEL
S9	SPEAKERS - BUILDING 900	F.A.C.P. #7

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.

SCHOOLS FIRE ALARM REQUIREMENTS

THE FIRE ALARM SYSTEM SHALL CONFORM TO CALIFORNIA BUILDING CODE, SECTION 907.2.3; CALIFORNIA ELECTRICAL CODE, ARTICLE 760 AND CALIFORNIA FIRE CODE, SECTION 907.2.3.

UPON COMPLETION OF THE INSTALLATION OF THE FIRE PROTECTIVE SIGNALING EQUIPMENT, A SATISFACTORY TEST OF THE ENTIRE SYSTEM SHALL BE MADE IN THE PRESENCE OF THE ENFORCING FIRE AGENCY, NFPA 72. IF TESTING RESULTS DETERMINE FIRE ALARM AUDIBILITY DOES NOT MEET 15db OVER AMBIENT NOISE LEVELS, ADDITIONAL FIRE ALARM SIGNALING DEVICES MAY BE REQUIRED BY THE ENFORCING FIRE AGENCY.

FIRE ALARM SYSTEM CERTIFICATION AND DESCRIPTION SHALL BE PROVIDED FOR TESTING AND A PLASTIC LAMINATED COPY SHALL REMAIN (WITH INSTRUCTIONS) AT THE FIRE ALARM CONTROL PANEL PER NFPA 72.

THE FIRE ALARM 'CERTIFICATE OF COMPLETION' FORM IN NFPA 72 SHALL BE COMPLETED, SIGNED AND SUBMITTED.

SCOPE OF WORK

- EXTEND THE EXISTING ADDRESSABLE FIRE ALARM SYSTEM WITH EMERGENCY VOICE/ALARM COMMUNICATIONS TO SCIENCE BLDG. 900 AS SHOWN ON THE DRAWINGS.
- PROVIDE ADDRESSABLE INITIATION DEVICES, NOTIFICATION APPLIANCES, CONDUIT, CABLING AND CONDUCTORS AS SHOWN ON THE DRAWINGS.

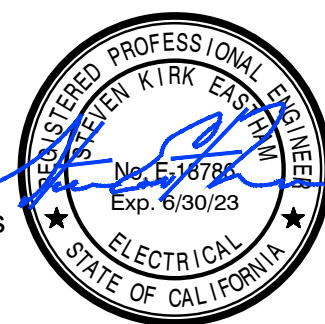
FIRE ALARM MONITORING NOTE

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 ULFV (CENTRAL STATION) OR ULUS (REMOTE AND PROPRIETARY) BY UNDERWRITERS LABORATORY (UL) OR SHALL COMPLY WITH THE REQUIREMENTS OF STANDARD FM 3071. SUPERVISION OF SYSTEM SHALL BE ARRANGED BY OWNER.

COMPLETE AUTOMATIC FIRE ALARM SYSTEM  
PLAN SUBMITTAL

THE FIRE ALARM SYSTEM SHOWN ON THESE PLANS HAS BEEN SUBMITTED AND APPROVED BY THE DIVISION OF THE STATE ARCHITECT. ANY SUBSTITUTION OF THE FIRE ALARM SYSTEM SHALL BE RESUBMITTED TO THE ARCHITECT FOR REVIEW AND APPROVAL. THE CONTRACTOR SHALL PAY ANY ADDITIONAL FEES THAT ARE INCURRED DUE TO THIS SUBSTITUTION.

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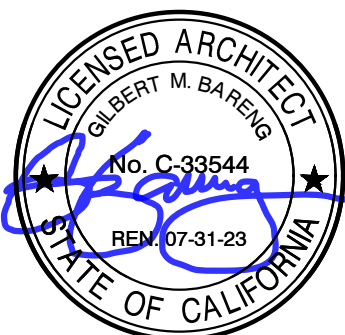


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APPROVALS

FILE # 16-H1 APPLICATION # 02-120394

IDENTIFICATION STAMP  
DIV. OF THE STATE ARCHITECT  
APP: 02-120394 INC:  
REVIEWED FOR  
SS ☒ FLS ☒ ACS ☒  
DATE: 05/01/2023



DATE: AUGUST 24, 2022

**MODERNIZATION AT  
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SCIENCE BUILDING**  
1100 LETTS AVE., CORCORAN, CA. 93212  
CORCORAN UNIFIED SCHOOL DISTRICT  
1520 PATTERSON AVE., CORCORAN, KINGS COUNTY, CA. 93212



REVISIONS

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3	
4	
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**MANGINI**  
ARCHITECTURE  
INGENUITY

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Visalia, California 93291  
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(559) 627-1526 Fax

TITLE  
FIRE ALARM SYSTEM  
CODES, NOTES  
AND SCHEDULES

**E2.2**

PROJECT **1751a**



**WANGINI** ARCHITECTURE  
INGENUITY

**McLAIN BARENG MORRELLI SCOTT**

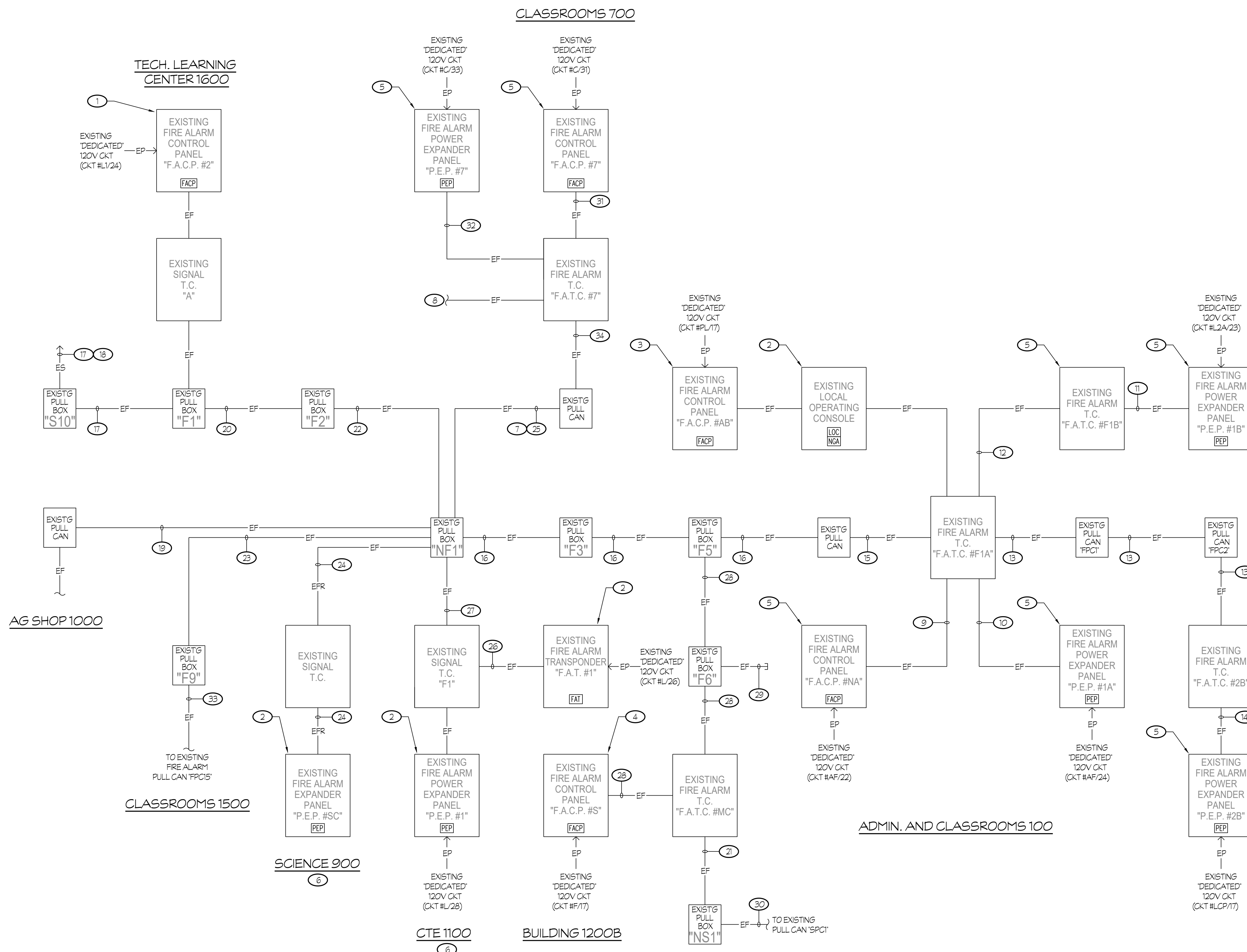
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(559) 627 1926 Fax

**E2.3**

PROJECT **1751a**

- (7) ——— EFF ——— DENOTES EXISTING FIRE ALARM FEEDER OR CIRCUIT SHALL REMAIN, UNLESS OTHERWISE NOTED.
- (8) REFER TO PARTIAL FIRE ALARM SYSTEM RISER DIAGRAM - BUILDING 900, DETAIL #1/E2 FOR CONTINUATION.
- (9) EXISTING 1 1/4" - FOUR 'NFA' CABLES (NETWORK); 1 1/4" - FOUR 'FA' CABLES (*SIC #1* AND *SIC #2*, CLASS A); 1 1/4" - FIVE 'FSP' CABLES (SPKR CKTS *S3A*, *S3B*, *S3C*, *S3D* AND *S3E* ); TWO 'SFSP' CABLES (SPKR CKTS *S2B* AND *S2B8* ); PLUS 1 1/4" (SPARE) EQUIPPED WITH A NYLON PULL STRING.
- (10) EXISTING 1" - TWO 'FA' CABLES (*SIC #1*, CLASS A), 6 #12 (NAC CKTS *N7A*, *N7B* AND *N7C* ); PLUS 1" (SPARE) EQUIPPED WITH A NYLON PULL STRING.
- (11) EXISTING 1" - TWO 'FA' CABLES (*SIC #2*, CLASS A), 4 #12 (NAC CKTS *N7D* AND *N7E* ); PLUS 1" (SPARE) EQUIPPED WITH A NYLON PULL STRING.
- (12) EXISTING 1 1/4" - TWO 'FA' CABLES (*SIC #2*, CLASS A), TWO 'FSP' CABLES (SPKR CKTS *S3D* AND *S3E* ); PLUS 1 1/4" (SPARE) EQUIPPED WITH A NYLON PULL STRING.
- (13) EXISTING 1 1/4" - TWO 'SFA' CABLES (*SIC #2*, CLASS A), TWO 'SFSP' CABLES (SPKR CKTS *S2B* AND *S2B8* ); PLUS 1 1/4" (SPARE) EQUIPPED WITH A NYLON PULL STRING.
- (14) EXISTING 1" - TWO 'FA' CABLES (*SIC #2*, CLASS A), 4 #12 (NAC CKTS *N7B* AND *N2B8* ); PLUS 1" (SPARE) EQUIPPED WITH A NYLON PULL STRING.
- (15) EXISTING 1 1/2" - FOUR 'NFA' CABLES (EXISTING NETWORK).
- (16) EXISTING 1 1/2' CONDUIT - TWO 'NFA' CABLES (NETWORK); PLUS AN EXISTING 1 1/2' CONDUIT - 50 PR. TELEPHONE CABLE.
- (17) EXISTING 2' CONDUIT - 50 PR. TELEPHONE CABLE.
- (18) TO EXISTING TELEPHONE BACKBOARD IN TELEPHONE/DATA ROOM OF TECH. LEARNING CENTER, BLDG. 1600.
- (19) EXISTING 1" - TWO 'SFA' CABLES (*SIC #2* FROM F.A.C.P. #2) AND 2 #12 (NAC CKT AT BLDG. 1000 FROM P.E.P. #5C).
- (20) EXISTING 1 1/2" - TWO 'NFA' CABLES (NETWORK), TWO 'SFA' CABLES (*SIC #2* FROM F.A.C.P. #2) AND 2 #12 (NAC CKT AT BLDG. 800 FROM P.E.P. #2).
- (21) EXISTING TWO 1 1/2" - FOUR 'SFA' CABLES (*SIC #1* AND *SIC #2*, CLASS A), SIX 'SFSP' CABLES (SPKR CKTS *S33*, *S44*, *S4B*, *S53*, *S56*, *S53*, *S54A* AND *S4B* ).
- (22) EXISTING 1 1/2" - TWO 'NFA' CABLES (NETWORK), TWO 'SFA' CABLES (*SIC #2* FROM F.A.C.P. #2) AND 2 #12 (NAC CKT AT BLDG. 1000 FROM P.E.P. #5C).
- (23) EXISTING 3/4" - TWO 'SFA' CABLES (*SIC #2* FROM F.A.C.P. #2), ONE 'SFSP' CABLE (SPKR CKT *S35* ).
- (24) ——— EFF ——— DENOTES TO DISCONNECT AND REMOVE THE EXISTING FIRE ALARM CONDUIT AND CONDUCTORS.
- (25) EXISTING 1" - TWO 'NFA' CABLES (NETWORK) TO EXISTING FIRE ALARM CONTROL PANEL F.A.C.P. #7.
- (26) EXISTING 3/4" - FOUR 'NFA' CABLES (NETWORK), ONE 'FSP' CABLE, ONE 'SFSP' CABLE (SPKR CKT *S35* ); PLUS 1" (SPARE).
- (27) EXISTING 1 1/2" - FOUR 'NFA' CABLES (NETWORK) AND TWO 'SFA' CABLES (*SIC #2* FROM F.A.C.P. #2), ONE 'SFSP' CABLE (SPKR CKT *S35* ); PLUS 1 1/2" (SPARE).
- (28) EXISTING 1 1/2" - TWO 'NFA' CABLES (NETWORK); PLUS 1 1/2" (SPARE).
- (29) EXISTING TWO 1 1/2" (SPARES) STUBBED UP ONTO THE NORTH ELEVATION OF EXISTING CLASSROOMS BLDG. 300.
- (30) EXISTING FIRE ALARM AND SIGNALS' CONDUITS, THREE 1 1/2" AND THREE 1". PULL-IN FOUR 'SFA' CABLES (*SIC #1* AND *SIC #2*, CLASS A), SIX 'SFSP' CABLES (SPKR CKTS *S33*, *S44*, *S4B*, *S53*, *S56*, *S53*, *S54A* AND *S4B* ) IN ONE OF THE 1 1/2" CONDUITS.
- (31) EXISTING 1 1/4" - TWO 'NFA' CABLES (NEW NETWORK FROM EXISTING FIRE ALARM TRANSPONDER F.A.T. #1 IN C.T.E. BLDG. 100), TWO 'FA' CABLES (*SIC #1*), TWO 'SFA' CABLES (*SIC #2*), 1 1/4" - ONE 'FSP' CABLE (SPKR CKT *S37* ), THREE 'SFSP' CABLES (SPKR CKTS *S3B* AND *S3D* ) PLUS 'FUTURE' SPKR CKT *S35* ; PLUS 1 1/4" (SPARE) EQUIPPED WITH A NYLON PULL STRING.
- (32) EXISTING 1" - TWO 'FA' CABLES (*SIC #1*, CLASS A), 6 #12 (NAC CKTS *N77*, *N7B* AND *N7D* ); PLUS 1" (SPARE) EQUIPPED WITH A NYLON PULL STRING.
- (33) EXISTING 1" - TWO 'SFA' CABLES (*SIC #2* FROM F.A.C.P. #2), ONE 'SFSP' CABLE (SPKR CKT *S35* ).
- (34) 1" - TWO 'NFA' CABLES (NEW NETWORK FROM EXISTING FIRE ALARM TRANSPONDER F.A.T. #1 IN C.T.E. BLDG. 100); PLUS 1" (SPARE) EQUIPPED WITH A NYLON PULL STRING TO FIRE ALARM TERMINAL CABINET F.A.T.C. #7F.



# 1 FIRE ALARM SYSTEM MAIN RISER DIAGRAM

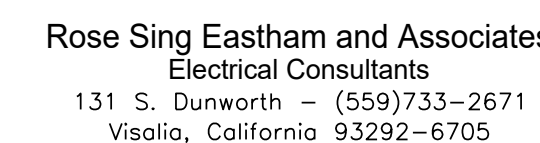
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18 11/4"C - TWO "SFA" CABLES (SIC #2, CLASS A), ONE "SFSP" CABLE (SPKR CKT "59"); PLUS 11/4"C (SPARE) EQUIPPED WITH A NYLON PULL STRING.

THE FIRE ALARM SYSTEM SHALL BE A TOTAL (COMPLETE) AUTOMATIC HEAT AND SMOKE DETECTION SYSTEM, PER C.F.C. SECTION 907.2.3.6, AND SHALL COVER EVERY ROOM AND/OR AREA. UPON THE ACTIVATION OF ANY INITIATION DEVICE THE FIRE ALARM SYSTEM SHALL ALERT ALL OCCUPANTS AND TRANSMIT THE ALARM, SUPERVISORY, AND TROUBLE SIGNALS TO AN APPROVED SUPERVISING STATION (C.F.C. SECTION 907.2.3.5).





Z:\Drawing\Jobs\062\000005\Corcoran\High School\Notes of Science Bldg. 900 - MW\_1750\02.5.dwg DATE: 04/12/23 BY: MARI DATE PLOTTED: 04/12/23 JOB # 21-18201-25

VOLTAGE DROP CALCULATIONS (OHMS LAW)				
VOLTAGE DROP = 2 $\left( \frac{\text{DC RESISTANCE AT 75°C FROM TABLE 8, C.E.C.}}{\left( \frac{\text{LENGTH OF CIRCUIT}}{1000} \right)} \right) \left( \frac{\text{CURRENT}}{1} \right)$				
PERCENT VOLTAGE DROP = $\frac{\text{VOLTAGE DROP}}{\text{NOMINAL VOLTAGE}} \times 100$				
1. NOTIFICATION APPLIANCE CIRCUIT "N9":				
$\textcircled{V}$ 75	:	4	x	0.111 A = 0.444 A
$\textcircled{V}$ 15	:	4	x	0.041 A = 0.164 A
$\textcircled{V}$ 30	:	1	x	0.063 A = 0.063 A
$\textcircled{V}$ 75	:	1	x	0.111 A = $\frac{0.111 \text{ A}}{0.782 \text{ A}}$
VOLTAGE DROP = 2 (1.98) $\left( \frac{365}{1000} \right)$ (0.782) = 11 V.D.				
PERCENT VOLTAGE DROP = $\frac{11}{24} \times 100 = 4.6\%$				

SPEAKER dB LOSS CALCULATION												
SPEAKER CIRCUIT	SPEAKER VOLTAGE	WIRE SIZE	RESISTANCE PER FOOT	FEET REQUIRED ON CIRCUIT	WIRE RESISTANCE	TOTAL WATTAGE OF SPEAKERS ON CIRCUIT	SPEAKER CURRENT (AMPS)	RESISTANCE OF SPEAKER LOAD	WIRE SIZE	ACTUAL VOLTAGE AT SPEAKER LOAD	ACTUAL WATTS AT SPEAKER LOAD	dB LOSS
S9	70	18	0.1278	470	6.01	22	0.31	222.73	18	68.162	20.860	-0.23

NOTE:  
CALCULATION IS BASED ON EACH OF THE 'INTERIOR' SPEAKERS TAPPED AT 1 WATT AND EACH OF THE 'EXTERIOR' SPEAKERS TAPPED AT 2 WATTS.

EXISTING FIRE ALARM CONTROL PANEL "F.A.C.P. #7" BATTERY CALCULATION					
DESCRIPTION	QUANTITY	STANDBY CURRENT		ALARM CURRENT	
		EACH	SUB-TOTAL	EACH	SUB-TOTAL
INTELLIGENT LOOP INTERFACE - MAIN BOARD	1	0.081	0.081	0.150	0.150
120V POWER SUPPLY	1	0.050	0.050	0.050	0.050
LCD TOUCHSCREEN ANNUN. DISPLAY	1	0.030	0.030	0.065	0.065
INTELLIGENT NETWORK INTERFACE	1	0.150	0.150	0.150	0.150
50W DIGITAL AUDIO AMPLIFIER	2	0.049	0.098	2.206	4.412
SMOKE DETECTOR	112	(A)			
ATTIC HEAT DETECTOR	5				
SMOKE/CO DETECTOR	10				
SMOKE DETECTOR	17	(A)			
SMOKE/CO DETECTOR	4				
MONITOR MODULE	1				
DUAL MONITOR MODULE	1				
RELAY MODULE	3				
TOTALS			0.379		4.827

TOTAL ALARM CURRENT OF 4.827 x 0.250 (15 MINUTES) = 1.207 A.H.  
TOTAL STANDBY CURRENT OF 0.379 x 24 HOURS = 9.096 A.H.  
TOTAL AMP HOURS REQUIRED = 10.303 A.H.  
x 1.2 SAFETY FACTOR  
12.364 A.H.

THEREFORE THE EXISTING 18.0 AMP HOUR BATTERIES ARE ADEQUATE.

EXIST'G FIRE ALARM POWER EXPANDER PANEL "P.E.P. #5C" BATTERY CALCULATION					
DESCRIPTION	QUANTITY	SUPV. CURRENT		ALARM CURRENT	
		EACH	SUB-TOTAL	EACH	SUB-TOTAL
EXPANDER PANEL	1	0.075	0.075	0.206	0.206
SUPERVISED CONTROL MODULE	1	0.0003	0.0003	0.0003	0.0003
75cd STROBE (CEILING)	4	---	---	0.111	0.444
(B) SPEAKER/15cd STROBE (CEILING)	4	---	---	0.041	0.164
(B) SPEAKER/30cd STROBE (CEILING)	1	---	---	0.063	0.063
(B) SPEAKER/75cd STROBE (CEILING)	1	---	---	0.111	0.111
TOTALS			0.075		0.988

TOTAL ALARM CURRENT OF 0.988 x 0.250 (15 MINUTES) = 0.247 A.H.  
TOTAL SUPERVISORY CURRENT OF 0.075 x 24 HOURS = 1.800 A.H.  
TOTAL AMP HOURS REQUIRED = 2.047 A.H.  
x 1.2 SAFETY FACTOR  
2.456 A.H.

THEREFORE THE EXISTING PROVIDE 7.0 AMP HOUR BATTERIES ARE ADEQUATE.

#### TYPICAL BATTERY CALCULATION NOTES:

- (A) THE CURRENT VALUES LISTED INCLUDES THE MAXIMUM NUMBER OF ADDRESSABLE DEVICES ON BOTH OF THE SIGNALING LINE CIRCUITS "S(LC)" (159 ADDRESSABLE DETECTORS AND 159 ADDRESSABLE MODULES PER SIGNALING LINE CIRCUIT "S(LC)").
- (B) THE CURRENT VALUES LISTED ARE FOR THE STROBES ONLY. THE SPEAKER CURRENT IS INCLUDED IN THE VALUES LISTED UNDER THE DIGITAL AUDIO AMPLIFIER.

#### AUTOMATIC FIRE SPRINKLER SYSTEM

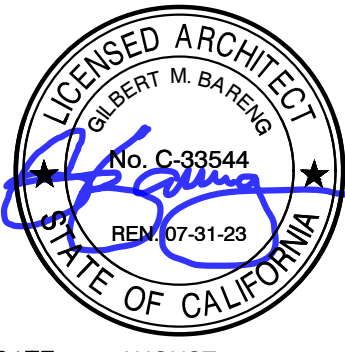
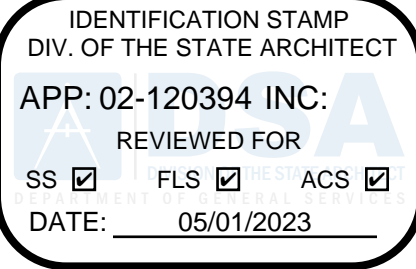
THIS BUILDING HAS AN AUTOMATIC FIRE SPRINKLER SYSTEM. HEAT DETECTORS HAVE BEEN OMITTED. IN CONCEALED ATTIC SPACES ABOVE CEILINGS AND SOFFITS. DUE TO THE AUTOMATIC FIRE SPRINKLER SYSTEM IS FULLY EQUIPPED IN THESE AREAS. C.F.C. 907.2.3.6.2.

#### COMPLETE AUTOMATIC FIRE ALARM SYSTEM PLAN SUBMITTAL

THE FIRE ALARM SYSTEM SHOWN ON THESE PLANS HAS BEEN SUBMITTED AND APPROVED BY THE DIVISION OF THE STATE ARCHITECT. ANY SUBSTITUTION OF THE FIRE ALARM SYSTEM SHALL BE RESUBMITTED TO THE ARCHITECT FOR REVIEW AND APPROVAL. THE CONTRACTOR SHALL PAY ANY ADDITIONAL FEES THAT ARE INCURRED DUE TO THIS SUBSTITUTION.

THE FIRE ALARM SYSTEM SHALL BE A TOTAL (COMPLETE) AUTOMATIC HEAT AND SMOKE DETECTION SYSTEM, PER C.F.C. SECTION 907.2.3.6, AND SHALL COVER EVERY ROOM AND/OR AREA. UPON THE ACTIVATION OF ANY INITIATION DEVICE THE FIRE ALARM SYSTEM SHALL ALERT ALL OCCUPANTS AND TRANSMIT THE ALARM, SUPERVISORY, AND TROUBLE SIGNALS TO AN APPROVED SUPERVISING STATION (C.F.C. SECTION 907.2.3.5).

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

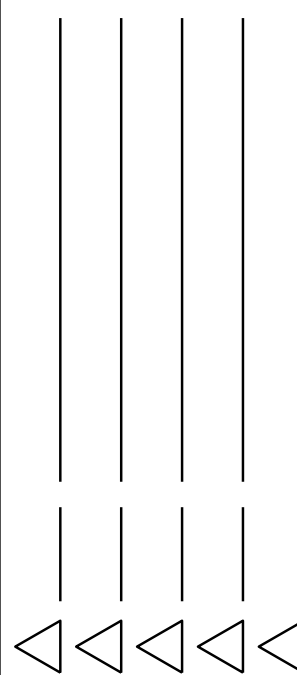


DATE: AUGUST 24, 2022

**MODERNIZATION AT  
CORCORAN HIGH SCHOOL  
SCIENCE BUILDING**  
1100 LETTS AVE., CORCORAN, CA. 93212  
CORCORAN UNIFIED SCHOOL DISTRICT  
1520 PATTERSON AVE., CORCORAN, KINGS COUNTY, CA. 93212



REVISIONS



ARCHITECTURE  
INGENUITY  
**MANGINI**  
McLAIN BARENG MORRELLI SCOTT  
www.mangini.us  
MANGINI ASSOCIATES INC.  
4320 West Mineral King Avenue  
Visalia, California 93291  
(559) 627-0530 Office  
(559) 627-1526 Fax

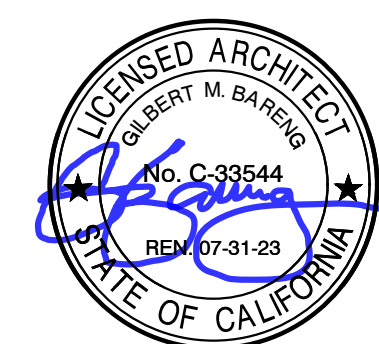
TITLE  
FIRE ALARM SYSTEM  
BATTERY, VOLTAGE  
DROPS AND SPEAKER  
dB LOSS CALCS

**E2.5**

PROJECT **1751a**



IDENTIFICATION STAMP  
DIV. OF THE STATE ARCHITECT  
APP: 02-120394 INC:  
REVIEWED FOR  
SS ☒ FLS ☒ ACS ☒  
DATE: 05/01/2023



DATE: AUGUST 24, 202

**MODERNIZATION AT  
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SCIENCE BUILDING**  
1100 LETTS AVE., CORCORAN, CA. 93212

CORCORAN UNIFIED SCHOOL DISTRICT  
15020 PATTERSON AVE. CORCORAN, KINGS COUNTY, CA. 93212



REVISIONS					
△					
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**MANGINI** | ARCHITECTURE  
INGENUITY

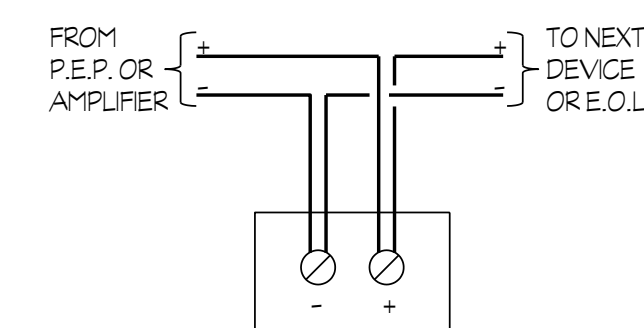
**MCLAIN BARENG MORRELLI SCOTT**

**www.mangini.us**  
(559) 627-0850 *Office*  
(559) 627-1936 *Fax*

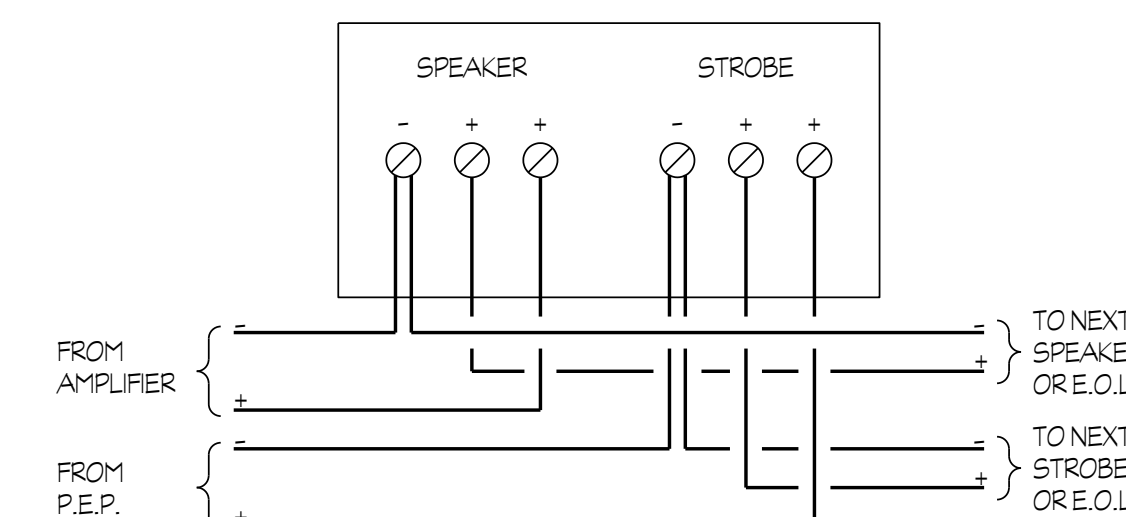
**MANGINI ASSOCIATES INC.**  
34320 West Mineral King Avenue  
Cala, California 93291

TITLE  
FIRE ALARM  
SYSTEM DETAILS

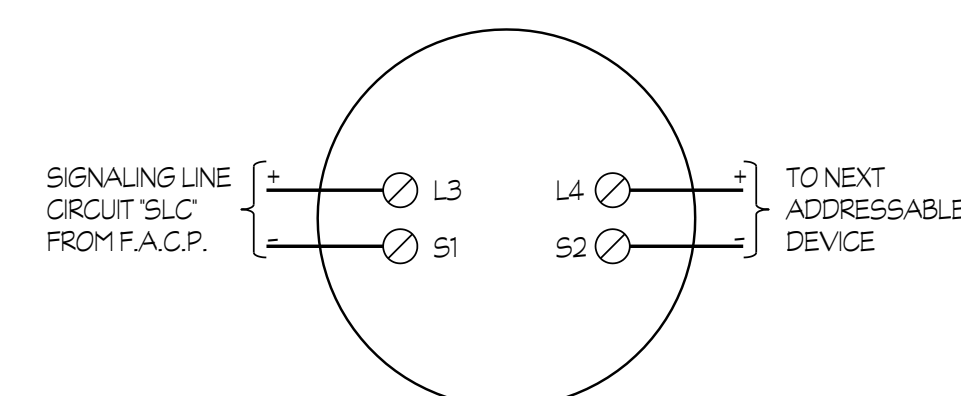
## E2.6

PROJECT **1751a**

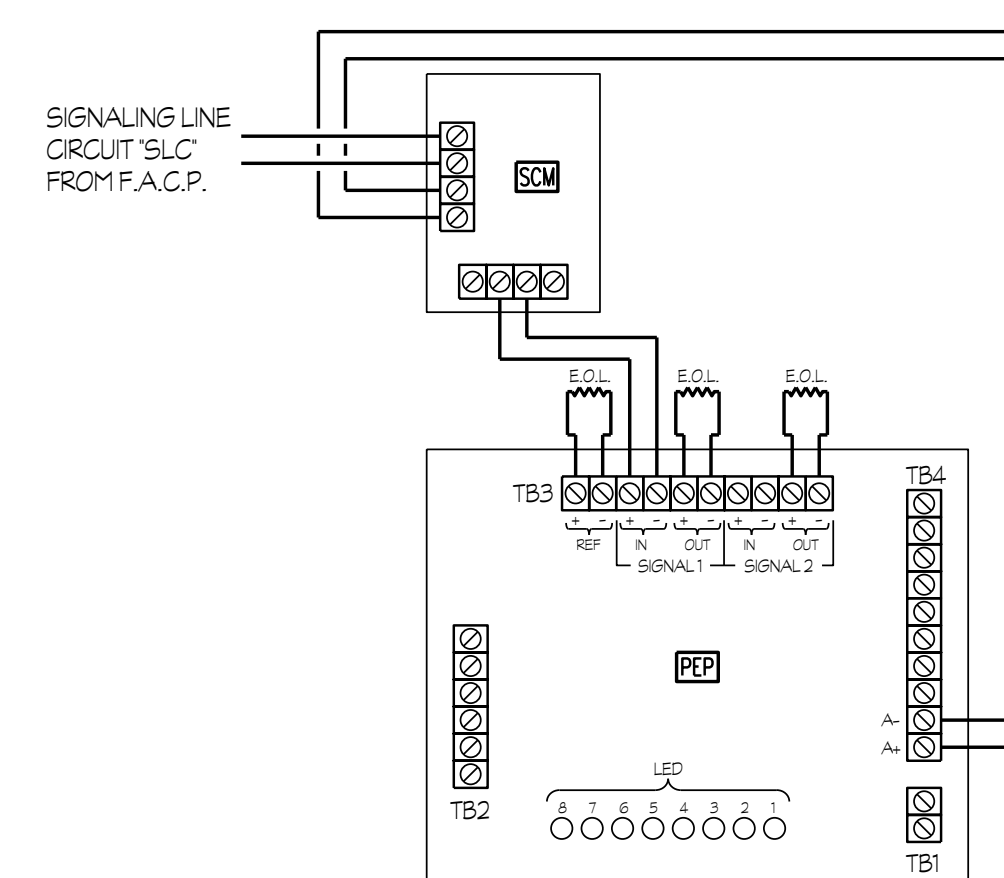
STROBE OR SPEAKER



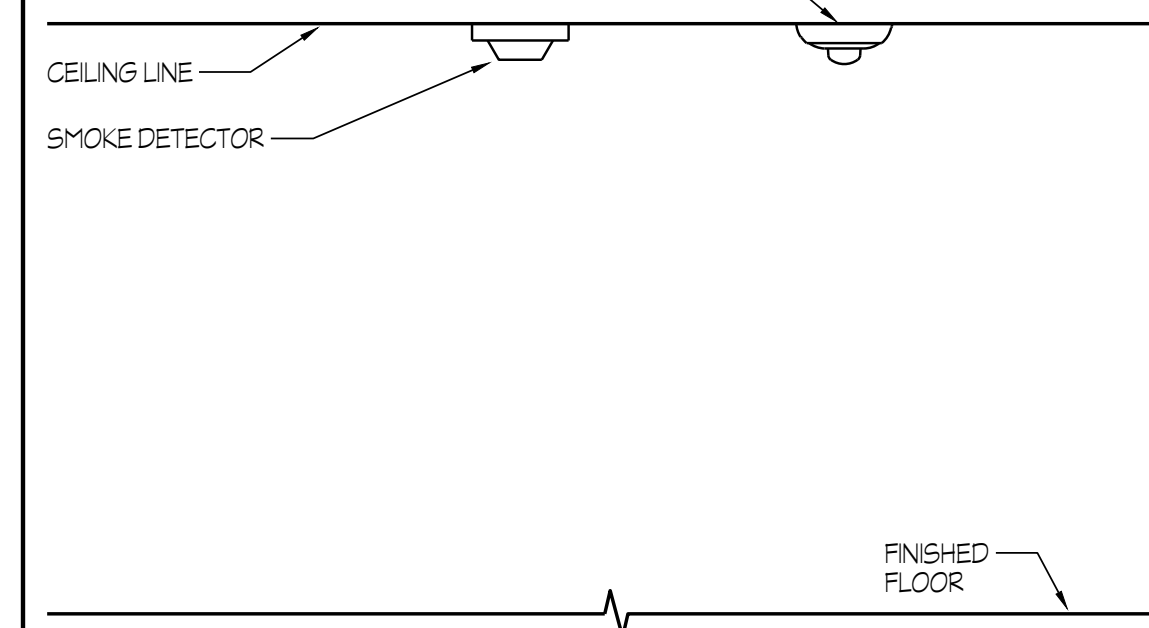
SPEAKER/STROBE



SMOKE, HEAT OR  
SMOKE/CARBON MONOXIDE DETECTOR

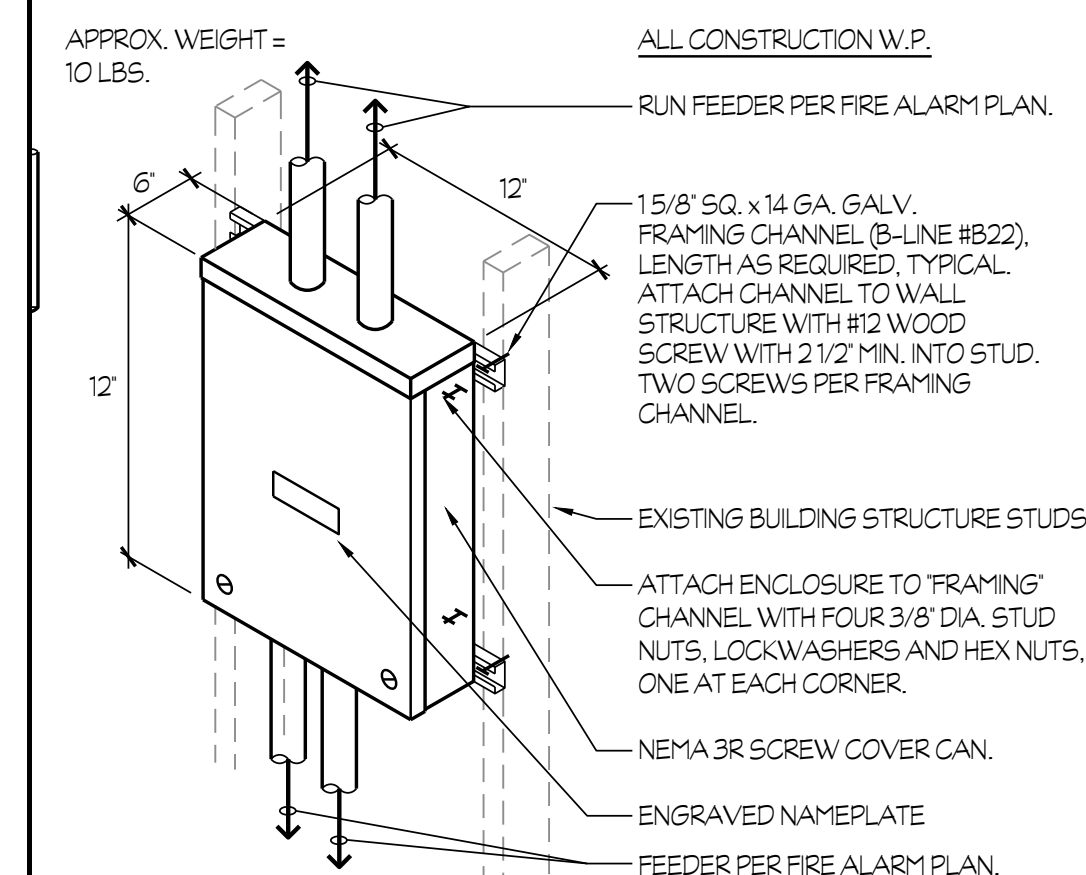
POWER EXPANDER PANEL 

## 1 FIRE ALARM EQUIPMENT WIRING DIAGRAMS

NT<sup>a</sup>

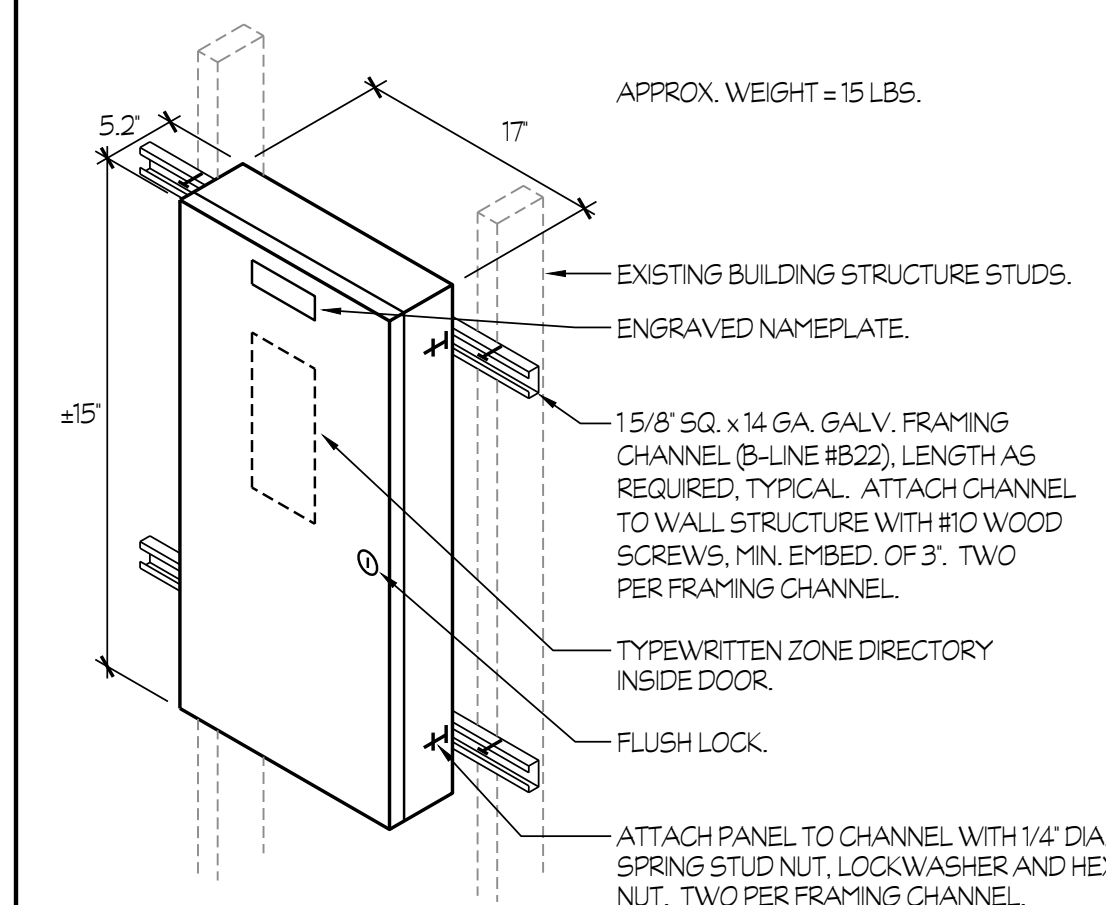
## 2 FIRE ALARM DEVICES ELEVATION

NTC



### 1 PULL CAN MOUNTING

NT:



3 EXISTING FIRE ALARM POWER  
EXPANDER PANEL "P.E.P. #SC" MOUNTING

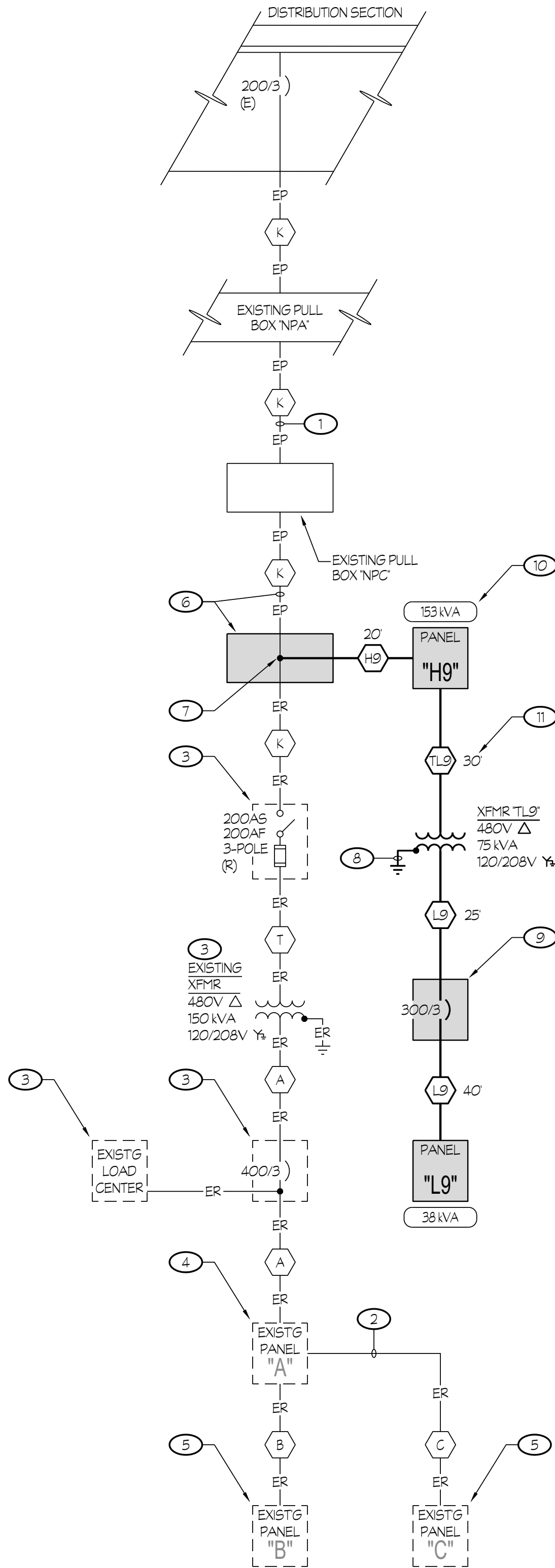
NTG

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Visalia, California 93292-6705





EXISTING MAIN SWITCHBOARD "MSB"  
480/277V, 3ph, 4W, 2000A  
SIEMENS/MURRAY SERIES "CM" SWBD



NOTES (THIS SHEET ONLY):

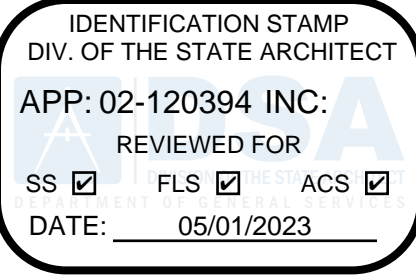
- 1 EP DENOTES EXISTING FEEDER TO REMAIN, UNLESS OTHERWISE NOTED.
- 2 ER DENOTES EXISTING FEEDER SHALL BE REMOVED.
- 3 DISCONNECT AND REMOVE EXISTING "PRIMARY" DISCONNECT SWITCH, 150 kVA DRY-TYPE TRANSFORMER, "SECONDARY" ENCLOSED CIRCUIT BREAKER AND LOAD CENTER.
- 4 DISCONNECT AND REMOVE EXISTING PANEL "A" WHICH CONSISTS OF TWO ENCLOSURES MOUNTED SIDE BY SIDE. THE LEFT-HAND ENCLOSURE CONTAINS THE 400/3 MAIN CIRCUIT BREAKER ALONG WITH THE 200/3 AND 125/3 SUB-FEED CIRCUIT BREAKERS. THE RIGHT-HAND ENCLOSURE CONTAINS THE 42 CIRCUIT PANELBOARD WITH VARIOUS BRANCH CIRCUIT BREAKERS. REMOVE ALL BRANCH CIRCUITS AS REQUIRED TO CLEAR WAY FOR NEW CONSTRUCTION.
- 5 DISCONNECT AND REMOVE EXISTING PANEL. REMOVE ALL BRANCH CIRCUITS AS REQUIRED TO CLEAR WAY FOR NEW CONSTRUCTION.
- 6 INTERCEPT EXISTING "DLE" FEEDER WITH NEW PULL BOX "NP9".
- 7 SPLICE EXISTING CONDUCTORS TO THE NEW CONDUCTORS WITH COMPRESSION CONNECTORS. ELECTRICAL CONTRACTOR SHALL PROVIDE COMPRESSION CONNECTORS WITH HEAVY-WALL HEAT SHRINK TUBING EQUIPPED WITH FACTORY APPLIED ADHESIVE/ SEALANT AS REQUIRED. ELECTRICAL CONTRACTOR SHALL ALSO FIELD VERIFY SIZE OF EXISTING FEEDER CONDUCTORS AND MATCH ACCORDINGLY.
- 8 BOND AND GROUND THE REMOTE BUILDING SUB-PANEL AND TRANSFORMER "T9" PER DETAILS #8/ES.2 AND #9/ES.2.
- 9 "SECONDARY" ENCLOSED CIRCUIT BREAKER IN A NEMA 3R ENCLOSURE.
- 10 NUMERALS INSIDE SYMBOL DENOTE CONNECTED LOAD PLUS 25% OF L.C.L.
- 11 LENGTHS INDICATED WERE USED FOR CALCULATION PURPOSES ONLY AND BASED UPON THE "DIAGRAMMATIC" LAYOUT SHOWN ON THE DRAWINGS. LENGTHS SHALL NOT BE USED FOR BIDDING.

EXISTING FEEDER SCHEDULE:

- |   |   |
|---|---|
| A | TWO 2 1/2" - 4 #4/O AL THW.             |
| B | 2 1/2" - 4 #3/O CU-THW.                 |
| C | 2" - 4 #1/O CU-THW.                     |
| K | EXISTING 3" - 4 #4/O AL THW + 1 #6 GND. |

NEW FEEDER SCHEDULE:

- |    |  |
|----|--|
| H9 | 3" - 3 #4/O AL THW.  |
| L9 | 3" - 4 #350 kmil + 1 #4 GND OR TWO 2" - 4 #1/O + 1 #4 GND IN EACH CONDUIT. |
| LS | 1 1/2" - 3 #1 + 1 #6 GND (CU-XHHW-2).                                      |



DATE: AUGUST 24, 2022

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REVISIONS	

**MANGINI** ARCHITECTURE  
INGENUITY  
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131 S. Dunworth - (559)733-2671  
Visalia, California 93292-6705

TITLE  
ONE LINE  
DIAGRAM

**E3.1**  
PROJECT **1751a**





TITLE

PANEL

SCHEDULES

**E4.1**

PROJECT **1751a**

PROJECT **1751a**

TOTAL LOAD:	ØA: 41,090 V.A.	ØB: 41,090 V.A.	ØC: 41,090 V.A.
L.C.L. x 25%	<u>9,775 V.A.</u>	<u>9,775 V.A.</u>	<u>9,775 V.A.</u>
	50,865 V.A.	50,865 V.A.	50,865 V.A.
	184 A	184 A	184 A

TOTAL LOAD:	ØA: 12,285 V.A.	ØB: 12,035 V.A.	ØC: 12,525 V.A.
L.C.L. x 25%	<u>450 V.A.</u>	<u>475 V.A.</u>	<u>155 V.A.</u>
	12,735 V.A.	12,510 V.A.	12,680 V.A.
	106 A	104 A	106 A

- (1) PROVIDE A LOCK-ON DEVICE AT THIS CIRCUIT BREAKER, 'RED IN COLOR', SPACEAGE #ELOCK-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) SUB-FEED CIRCUIT BREAKER.
- (4) PROVIDE A G.F.C.I. TYPE CIRCUIT BREAKER.
- (5) PROVIDE A LOCK-ON DEVICE AT THIS CIRCUIT BREAKER, 'RED IN COLOR', SPACEAGE #ELOCK-FA OR EQUAL AT THIS 'DEDICATED' CIRCUIT BREAKER.
- (6) PROVIDE A LOCK-ON ACCESSORY AT THIS CIRCUIT BREAKER. THIS CIRCUIT BREAKER FEEDS EITHER EMERGENCY LIGHT FIXTURES AND/OR EMERGENCY BATTERY PACKS WHICH PROVIDES THE EMERGENCY ILLUMINATION. PROVIDE AN ENGRAVED NAMEPLATE: 'FEEDS EMERG. LTGS.'. BLACK LETTERS ON A WHITE BACKGROUND.

**Rose Sing Eastham and Associates**  
Electrical Consultants  
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Visalia, California 93292-6705

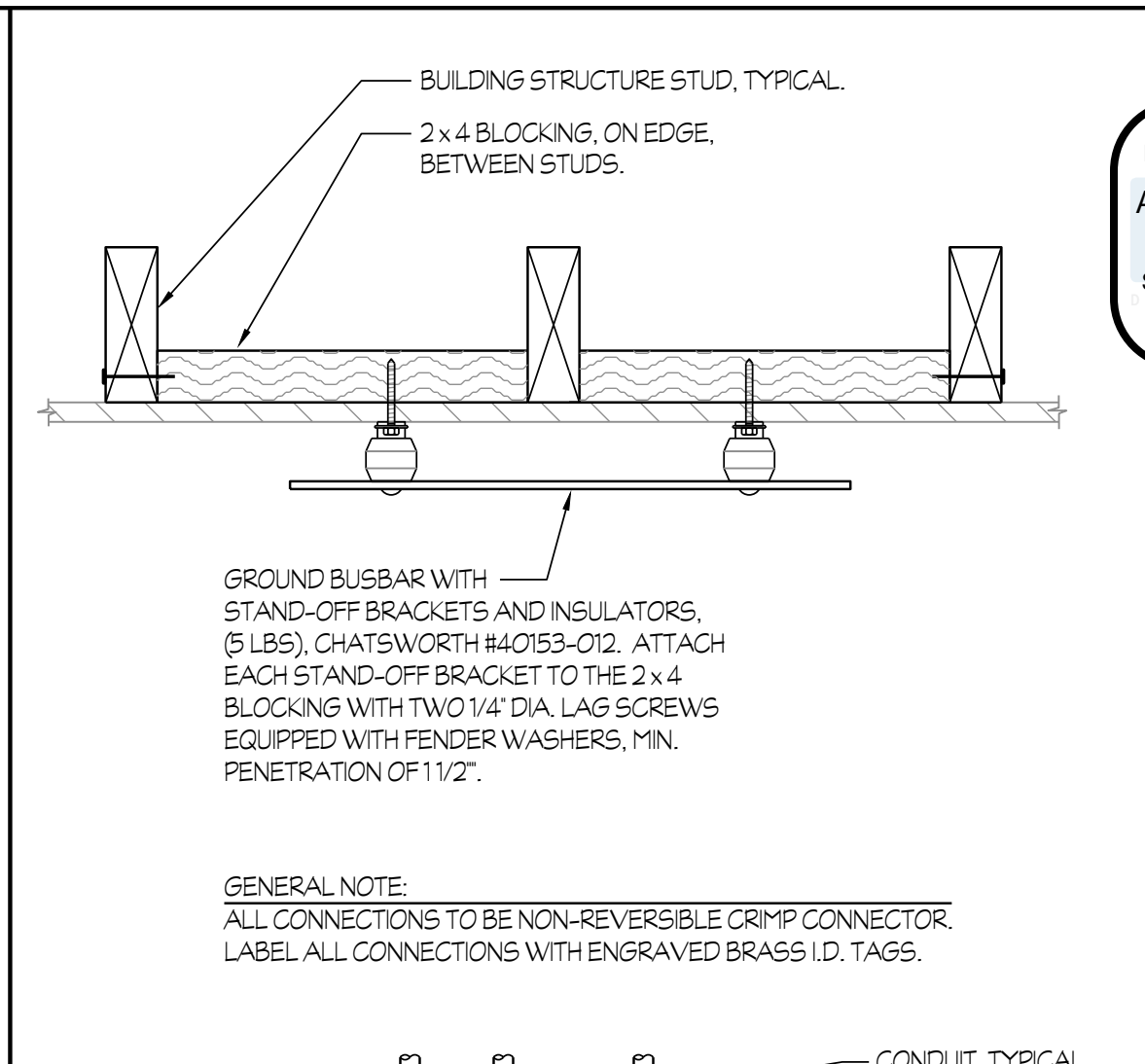
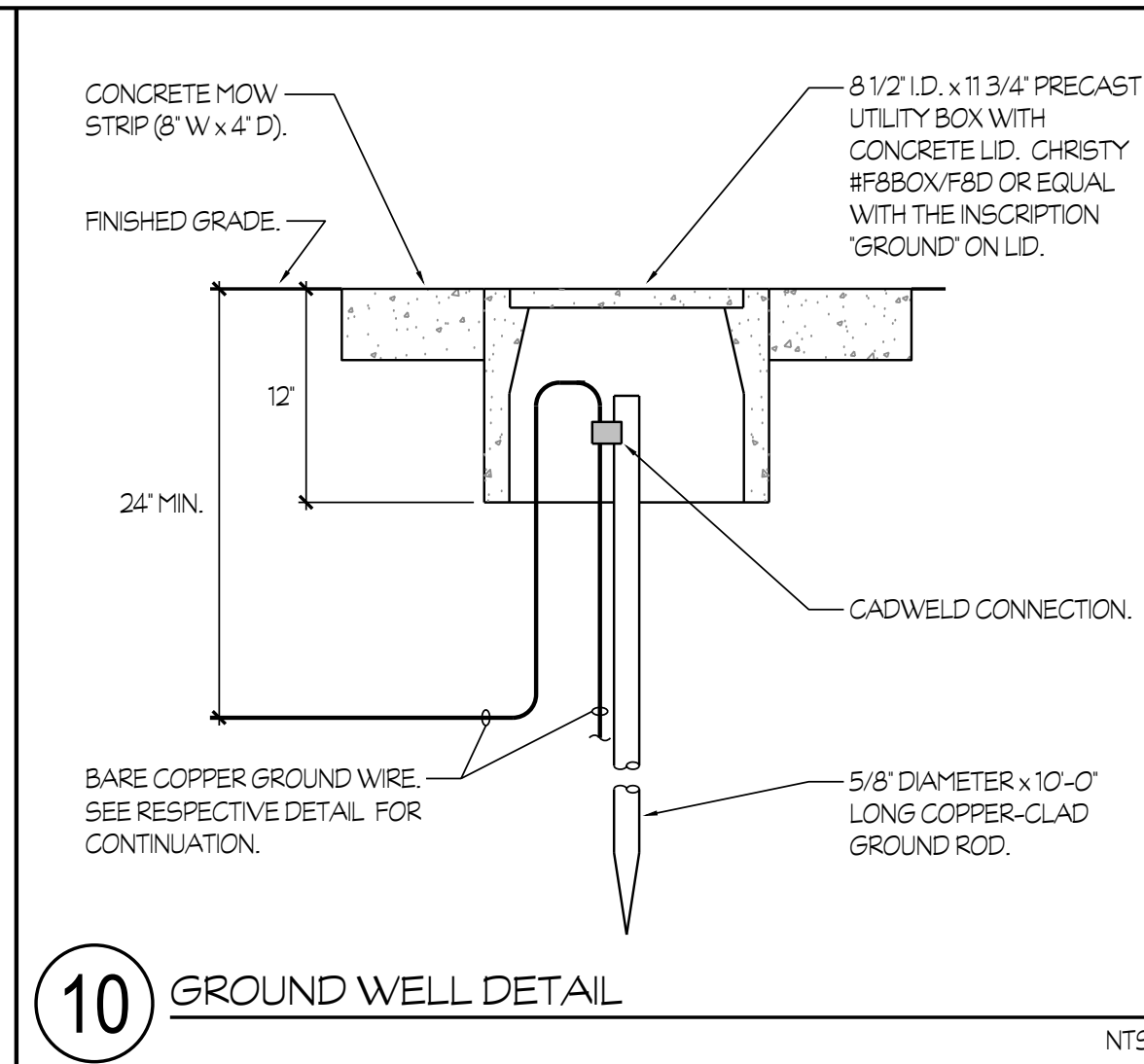
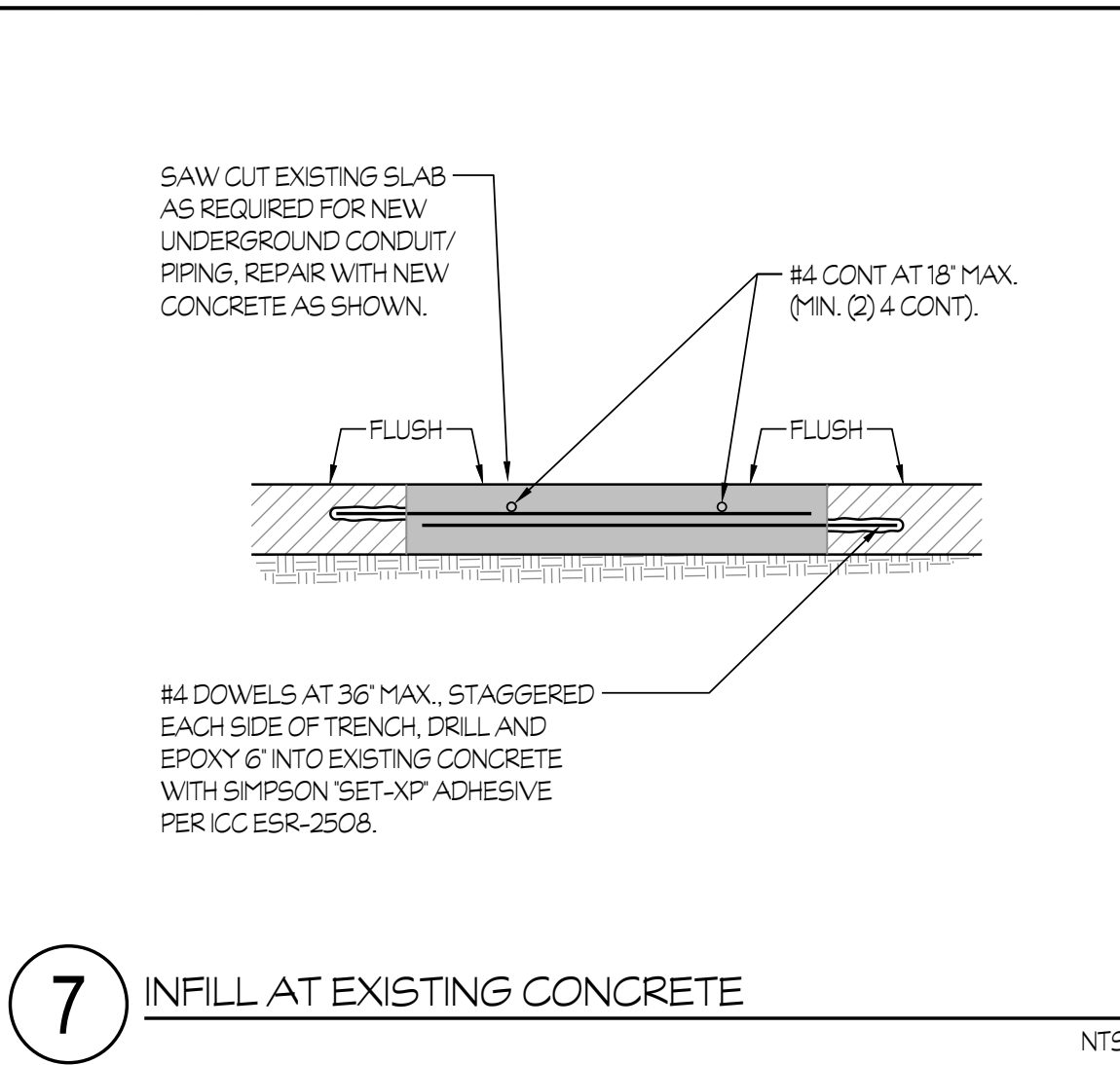
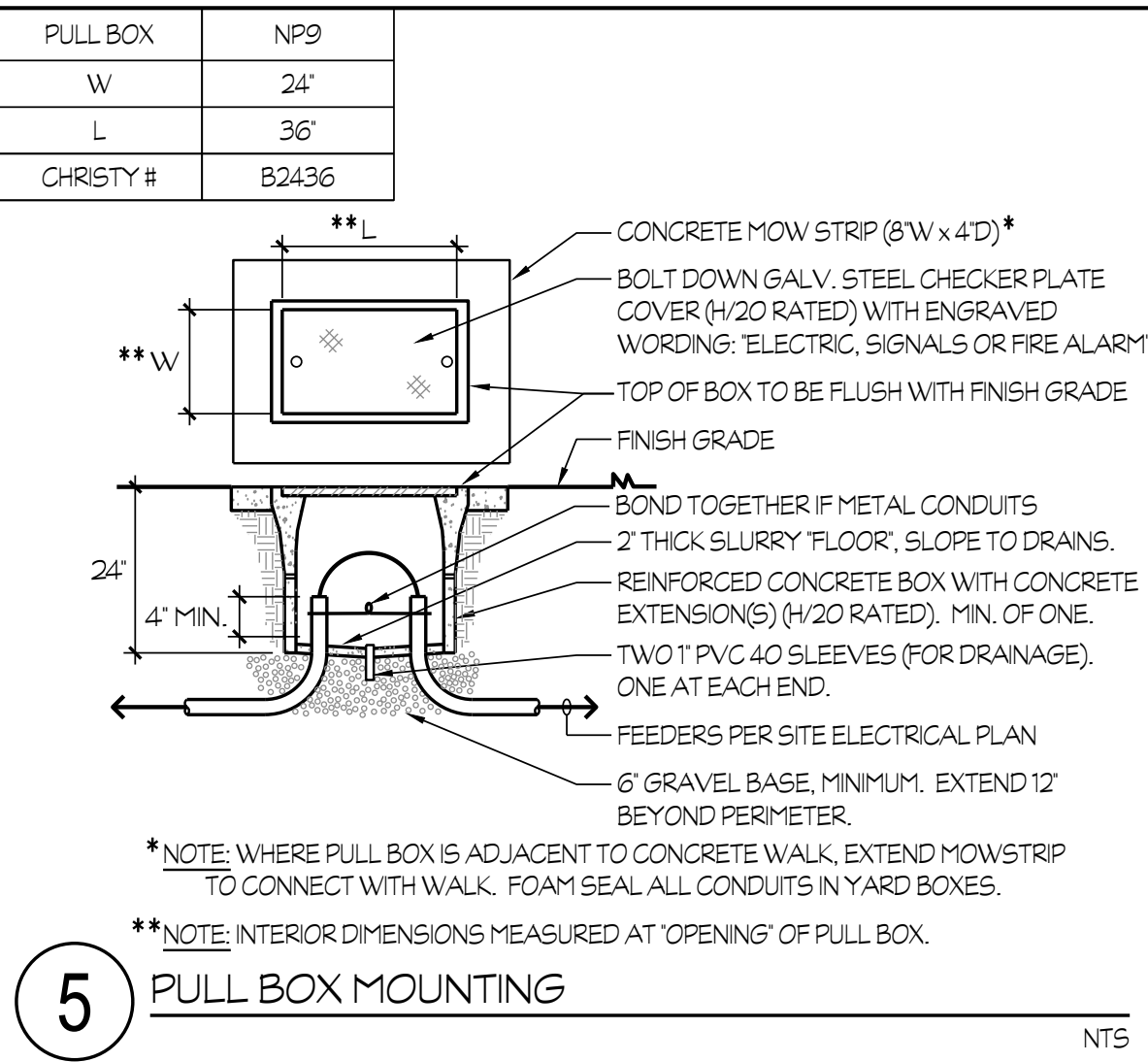
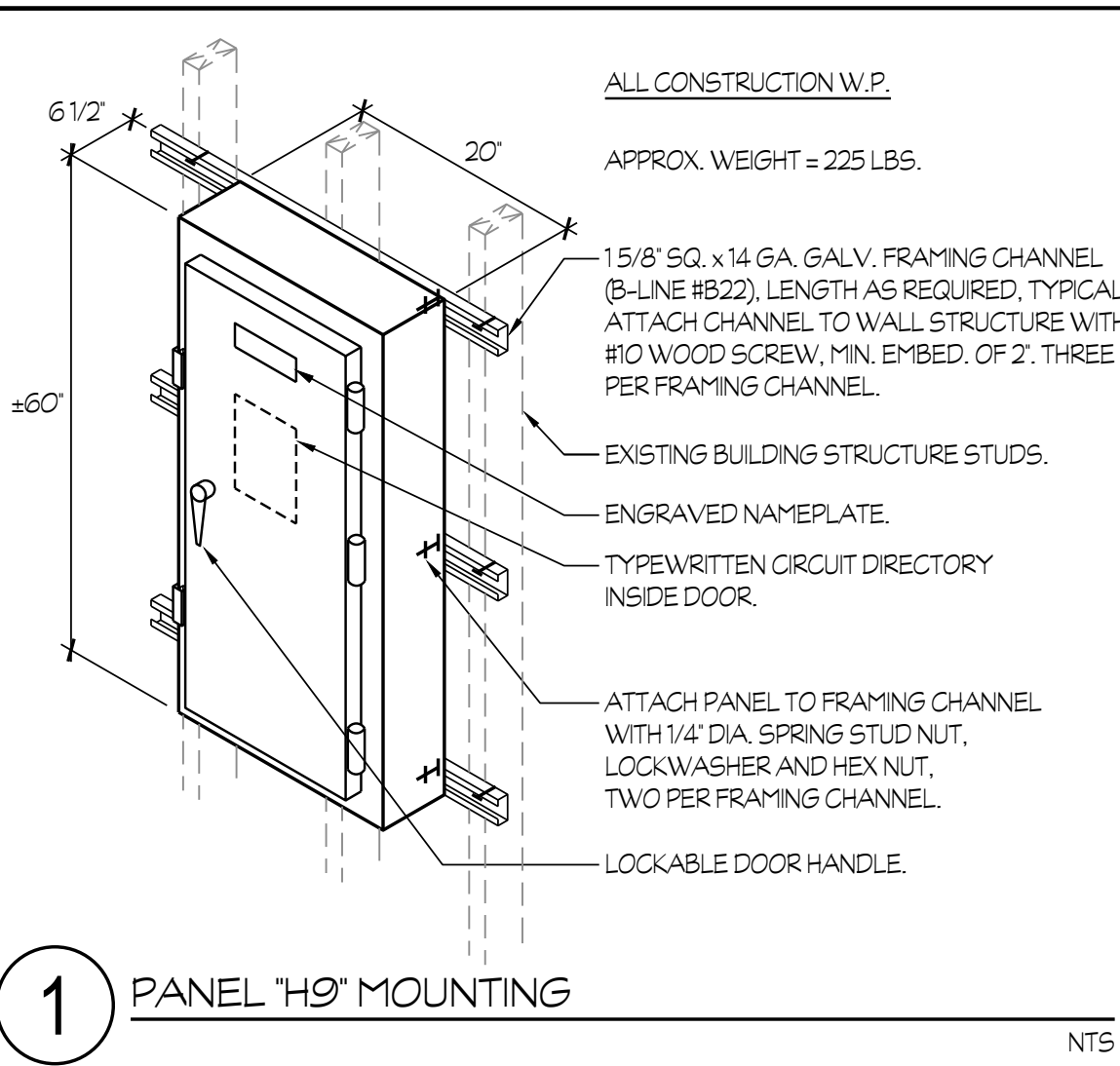








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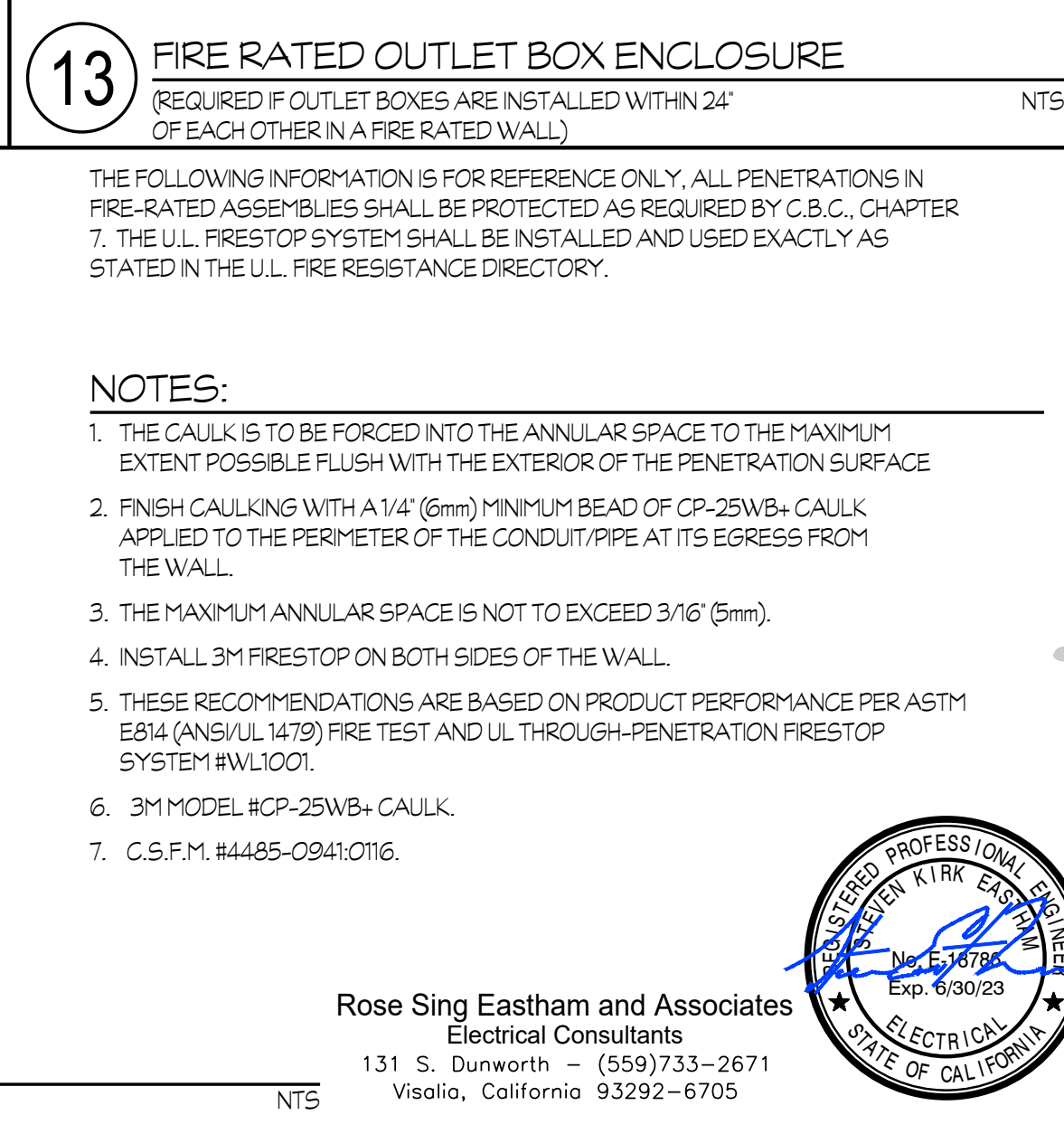
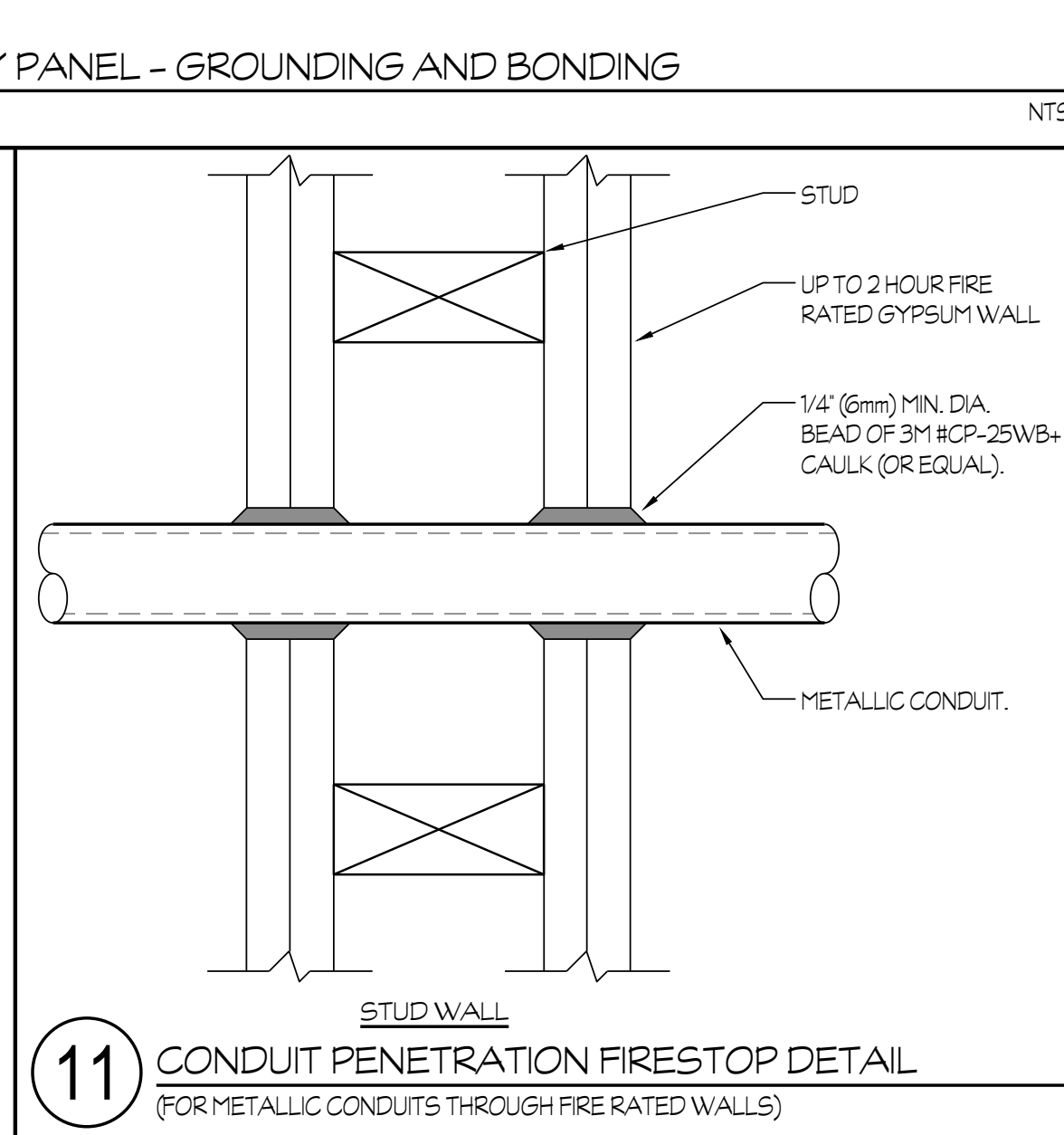
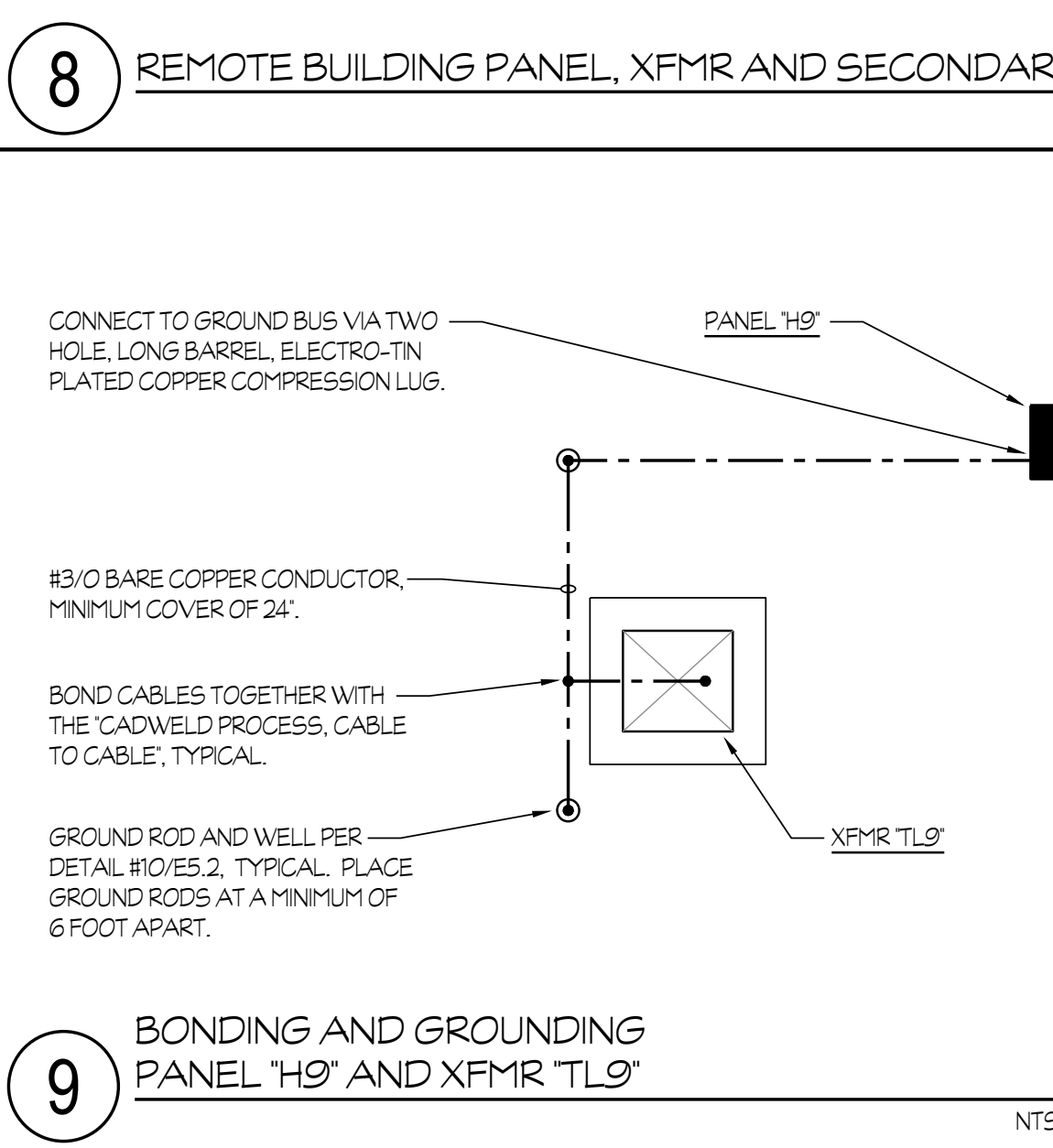
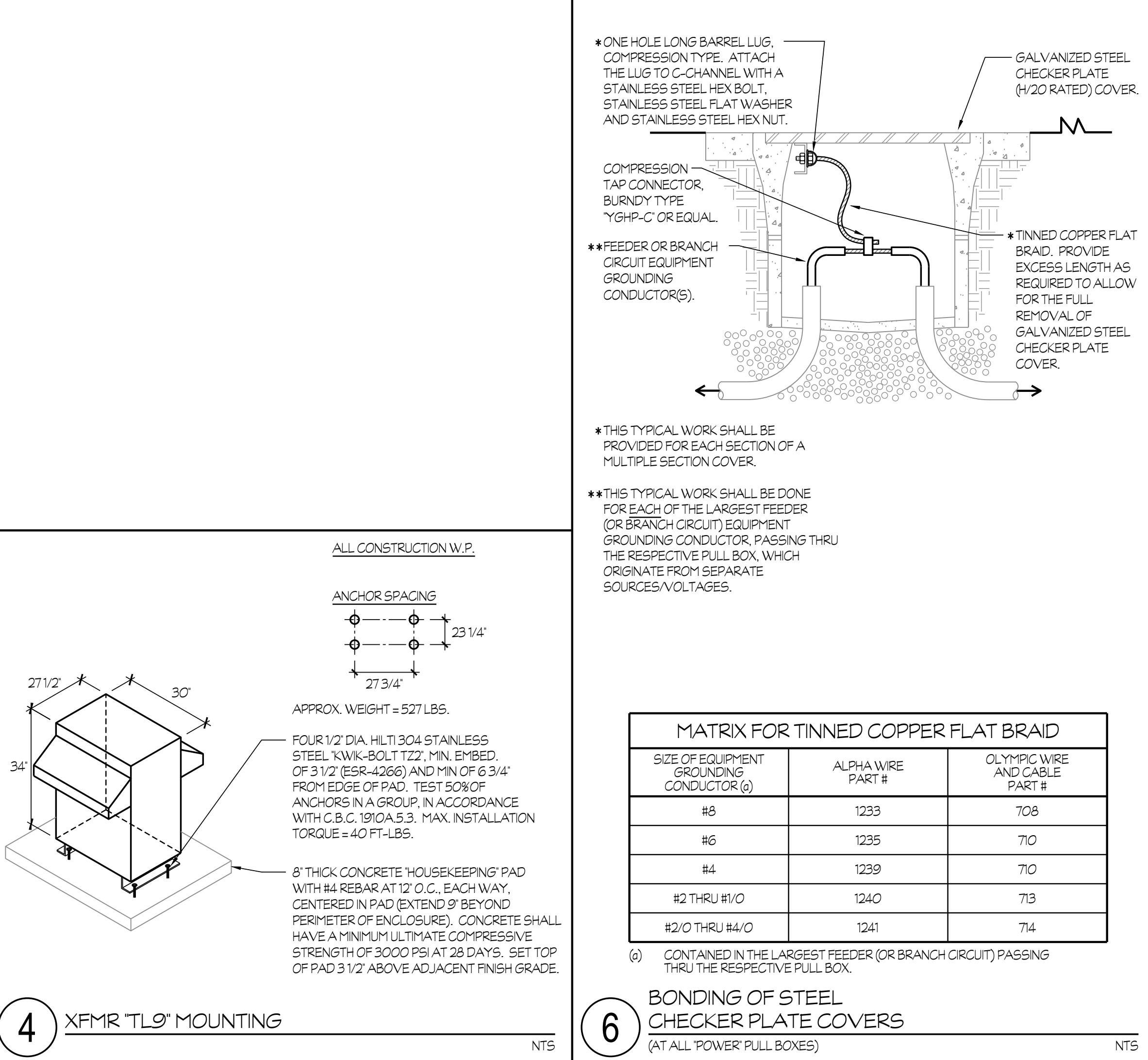
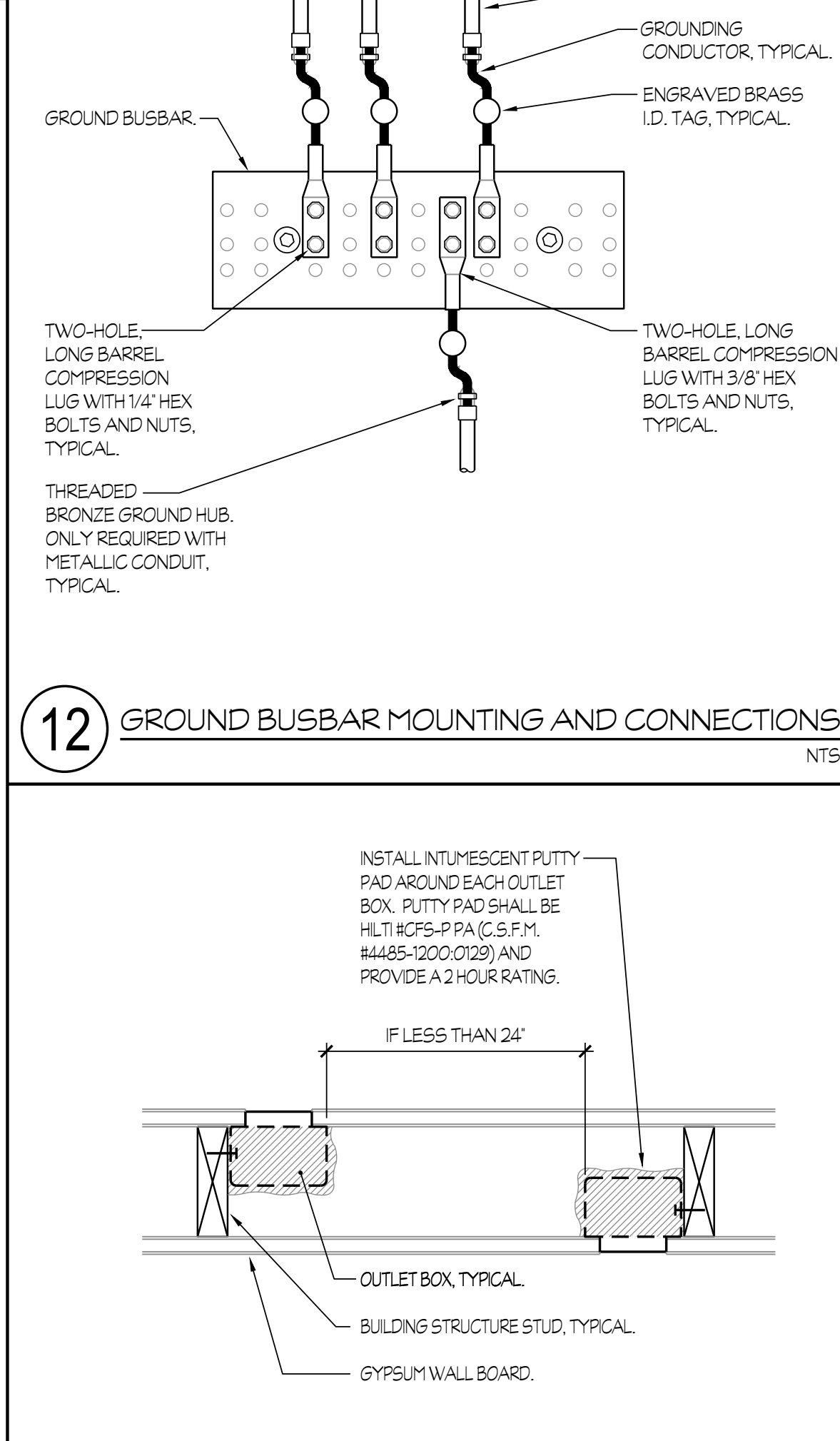
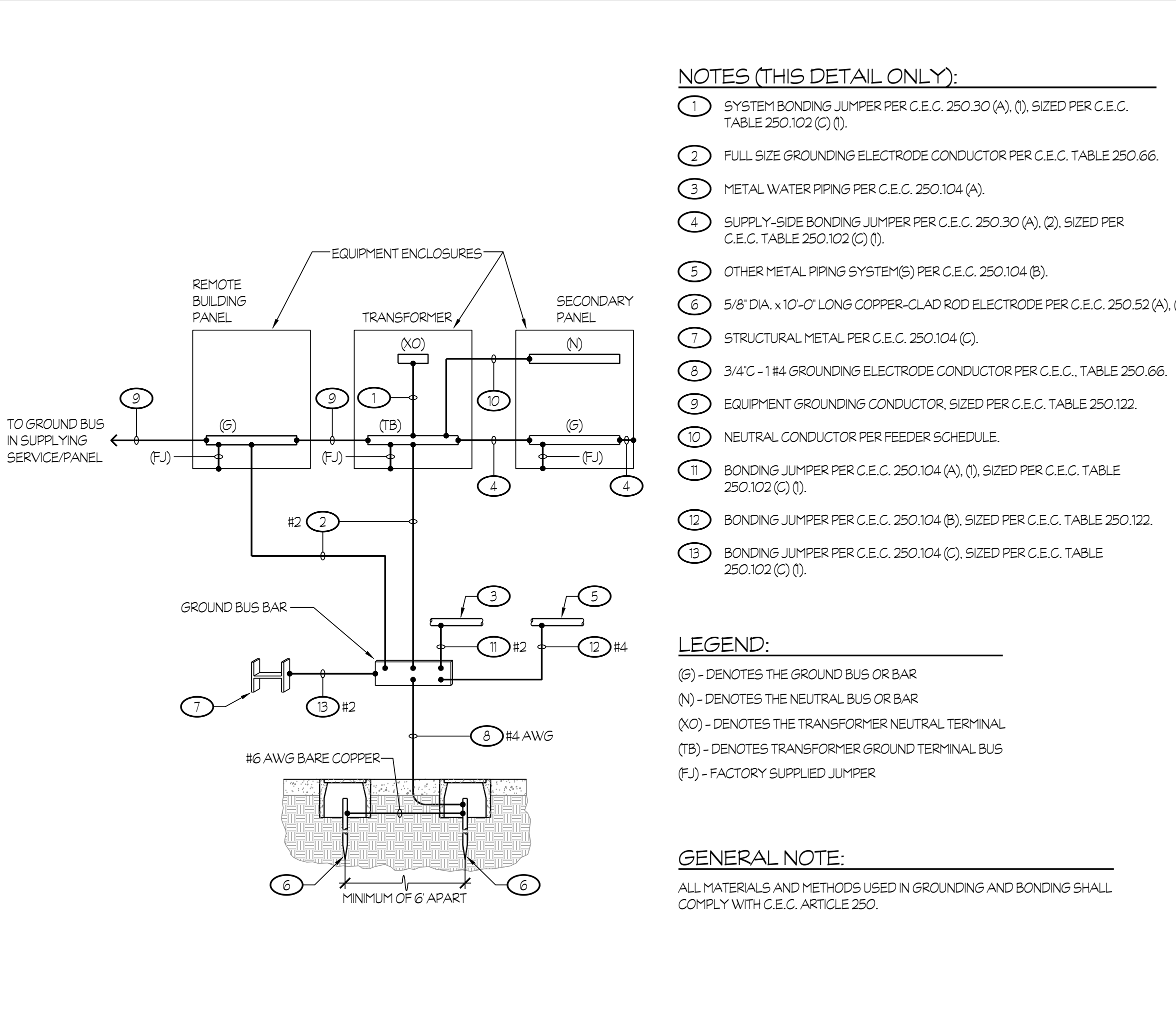
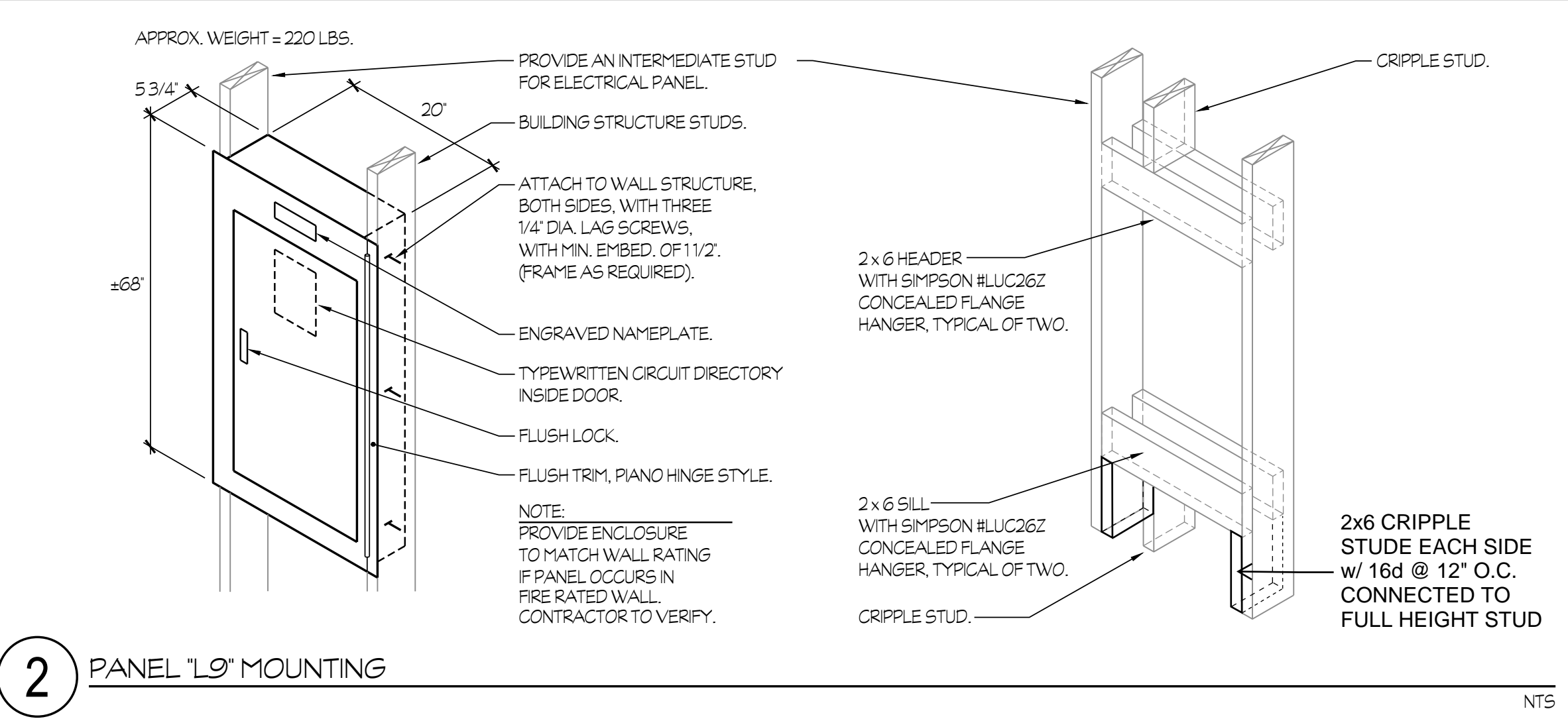


APPROVALS

FILE # 16-H1 APPLICATION # 02-120394

IDENTIFICATION STAMP  
DIV. OF THE STATE ARCHITECT  
APP: 02-120394 INC:  
REVIEWED FOR  
SS ☒ FLS ☒ ACS ☒  
DATE: 05/01/2023

LICENSED ARCHITECT  
No. C-33544  
RECEIVED  
STATE OF CALIFORNIA  
DATE: AUGUST 24, 2022



MODERNIZATION AT CORCORAN HIGH SCHOOL SCIENCE BUILDING

1100 LETTS AVE., CORCORAN, CA 93212

CORCORAN UNIFIED SCHOOL DISTRICT

1520 PATTERSON AVE., CORCORAN, KINGS COUNTY, CA 93212

REVISIONS

MANGINI ARCHITECTURE

INGENUITY

MCLAIN BARENG MORRELLI SCOTT

MANGINI ASSOCIATES INC.

www.mangini.us

(959) 627-0530 Office

(959) 627-1326 Fax

Visalia, California 93271

PROJECT

1751a

DETAILS

E5.2

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

REGISTERED PROFESSIONAL ELECTRICAL ENGINEER  
No. E51478  
Exp. 6/30/23  
STATE OF CALIFORNIA

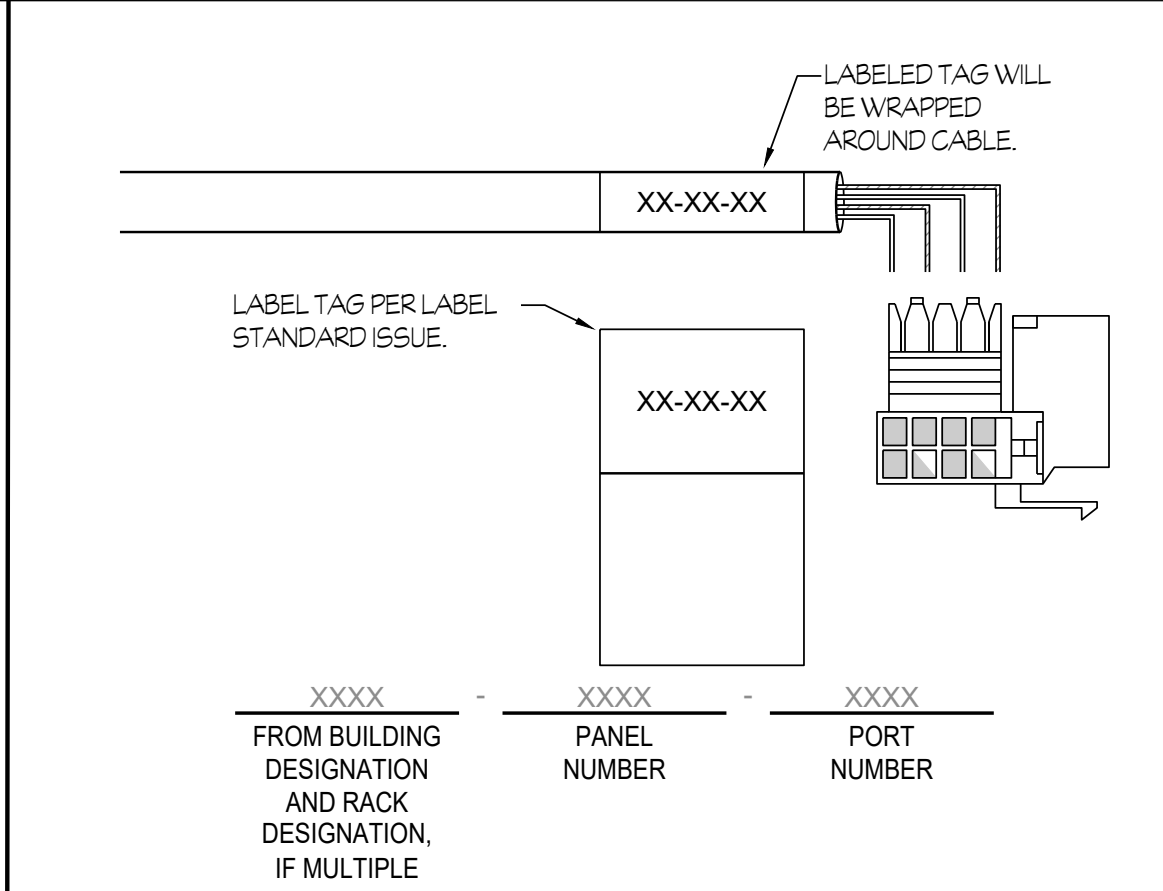


SIGNALS SYMBOLS	
ALL DIMENSIONS TO CENTER OF BOX, U.O.N.	
	ELECTRICAL KEYNOTE #1, REFER TO NOTES ON SAME SHEET.
U.O.N.	UNLESS OTHERWISE NOTED
W.P.	WEATHERPROOF
W.G.	WIRE GUARD
	TERMINAL CABINET (SIZE AS SHOWN)
	CONDUIT RUN IN WALL OR ATTIC
	CONDUIT RUN IN FLOOR OR UG
	CONDUIT STUB - CAPPED AND LABELED.
	HOME RUN CONDUIT TO NEAREST CROSS CONNECT OR SOUND EQUIPMENT RACK.
	CONDUIT SLEEVE
	HORIZONTAL CROSS-CONNECT
	INTRUSION ALARM PANEL
	DATA OUTLET IN CEILING FOR WIRELESS ACCESS POINT, TWO CAT6A CABLES
	COMBO TELEPHONE/DATA OUTLET IN WALL (48" U.O.N.), THREE CAT6 CABLES
	TELEVISION OUTLET, MOUNTED IN WALL (48" U.O.N.) # HDMI TO OUTPUTS PER 'AV'
	AUDIO/VISUAL INPUT IN WALL (48" U.O.N.) ONE HDMI TO INPUT
	IP CAMERA, 402' AFF, ONE CAT6 CABLE
	INTERCOM CLOCK/SPEAKER COMBO (48" U.O.N.), ONE CAT6 CABLE
	PUBLIC ADDRESS HORN, FLUSH MOUNTED IN WALL, U.O.N. (WEATHERPROOF), ONE CAT6 CABLE
	DATA OUTLET IN WALL (48" U.O.N.), ONE CAT6 CABLE OR # AS NOTED
	INTRUSION ALARM KEY PAD (48" U.O.N.)
	INTRUSION ALARM DOOR CONTACT IN DOOR FRAMING

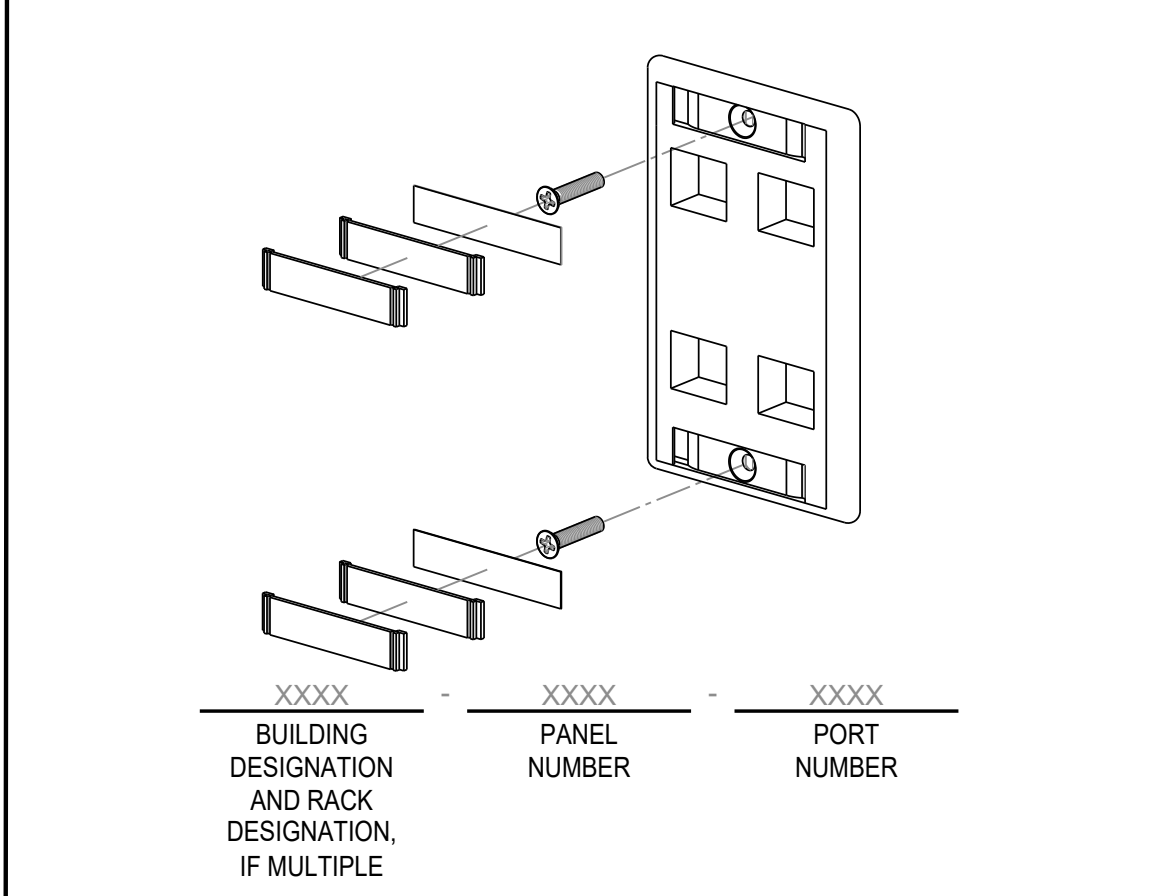
- ELECTRICAL SYMBOLS NOTES:**
- (A) ELECTRICAL CONTRACTOR SHALL PROVIDE A 5" SQUARE x 2 7/8" DEEP OUTLET BOX WITH SINGLE GANG RAISED RING, DEPTH AS REQUIRED. UNLESS OTHERWISE NOTED, RUN 1/4" C FROM OUTLET BOX AND STUB INTO ACCESSIBLE ATTIC SPACE ABOVE T-BAR CEILING. PROVIDE AN INSULATING BUSHING, BRIDGEPORT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

ASSISTIVE LISTENING SYSTEMS	
PROVIDE ASSISTIVE LISTENING AS REQUIRED BY CBC SECTIONS 11B.219 & 11B.706 AND ADA 706. REFER TO SYSTEM SPECIFICATIONS 27.5120 FOR CLASSROOMS SYSTEMS. REFER TO DETAIL DRAWINGS FOR INSTALLED SOLUTIONS. CLASSROOM SYSTEMS ARE TO BE PORTABLE 'BRIEFCASE' STYLE FOR USE WHEN REQUESTED BY USERS.	

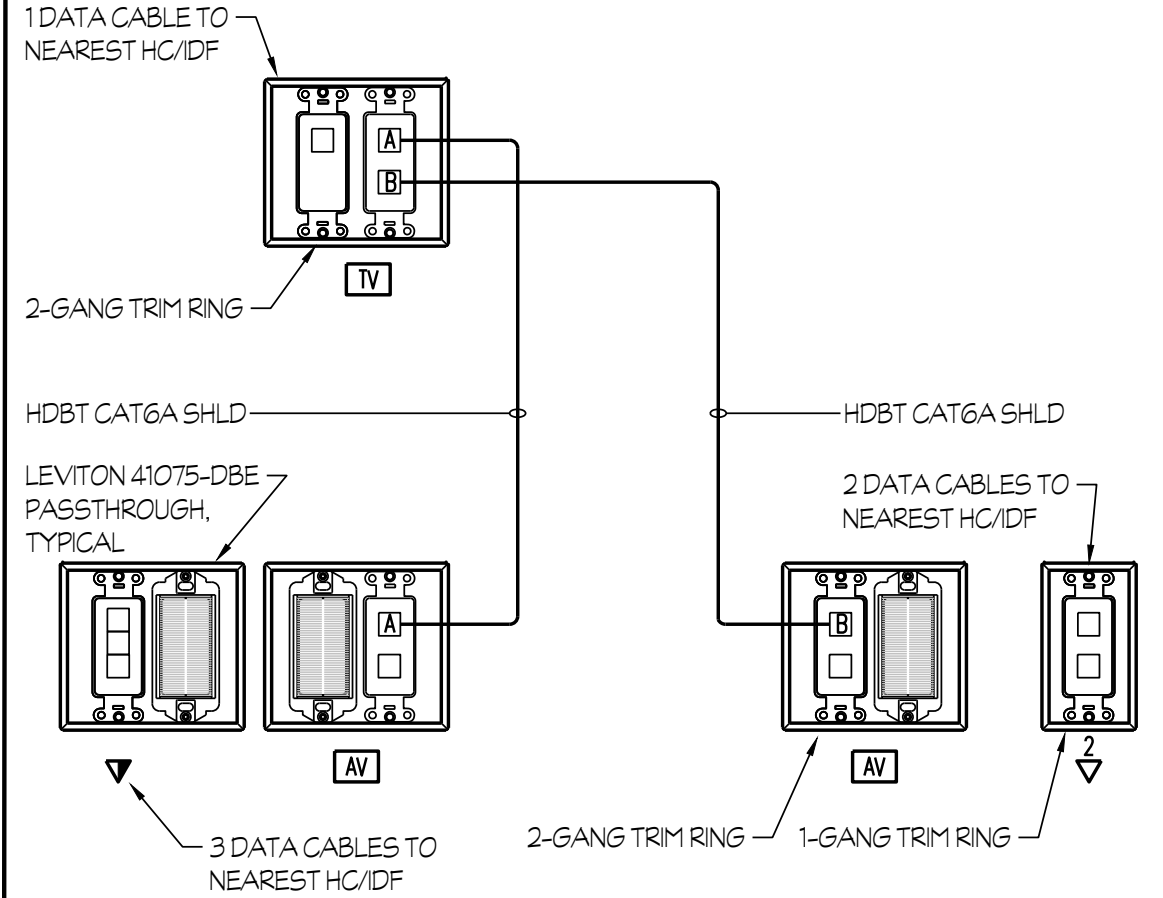
SIGNALS / TELECOMMUNICATIONS APPLICABLE CODES AND STANDARDS	
<b>CODES:</b>	
2019	CALIFORNIA BUILDING CODE (C.B.C.) (2018 INTERNATIONAL BUILDING CODE, VOLUMES 1 AND 2 WITH 2019 CALIFORNIA AMENDMENTS) ASSISTIVE LISTENING SYSTEMS SECTIONS 11B.219 AND 11B.706
2019	CALIFORNIA ELECTRICAL CODE (C.E.C.) (2017 NATIONAL ELECTRICAL CODE WITH 2019 CALIFORNIA AMENDMENTS)
<b>STANDARDS AND GUIDES:</b>	
NFPA 72 - NATIONAL FIRE ALARM CODE, 2016 EDITION (CALIFORNIA AMENDED)	
ADAAG - AMERICANS WITH DISABILITIES ACT, ACCESSIBILITY GUIDELINES ASSISTIVE LISTENING SYSTEMS SECTION 706	
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.	



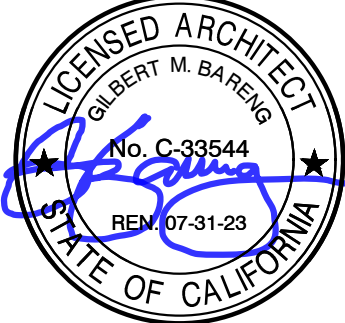
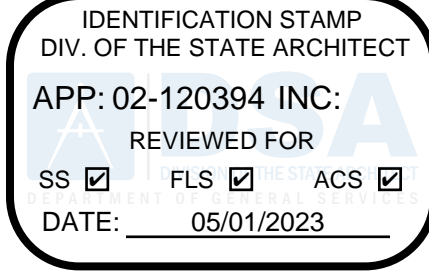
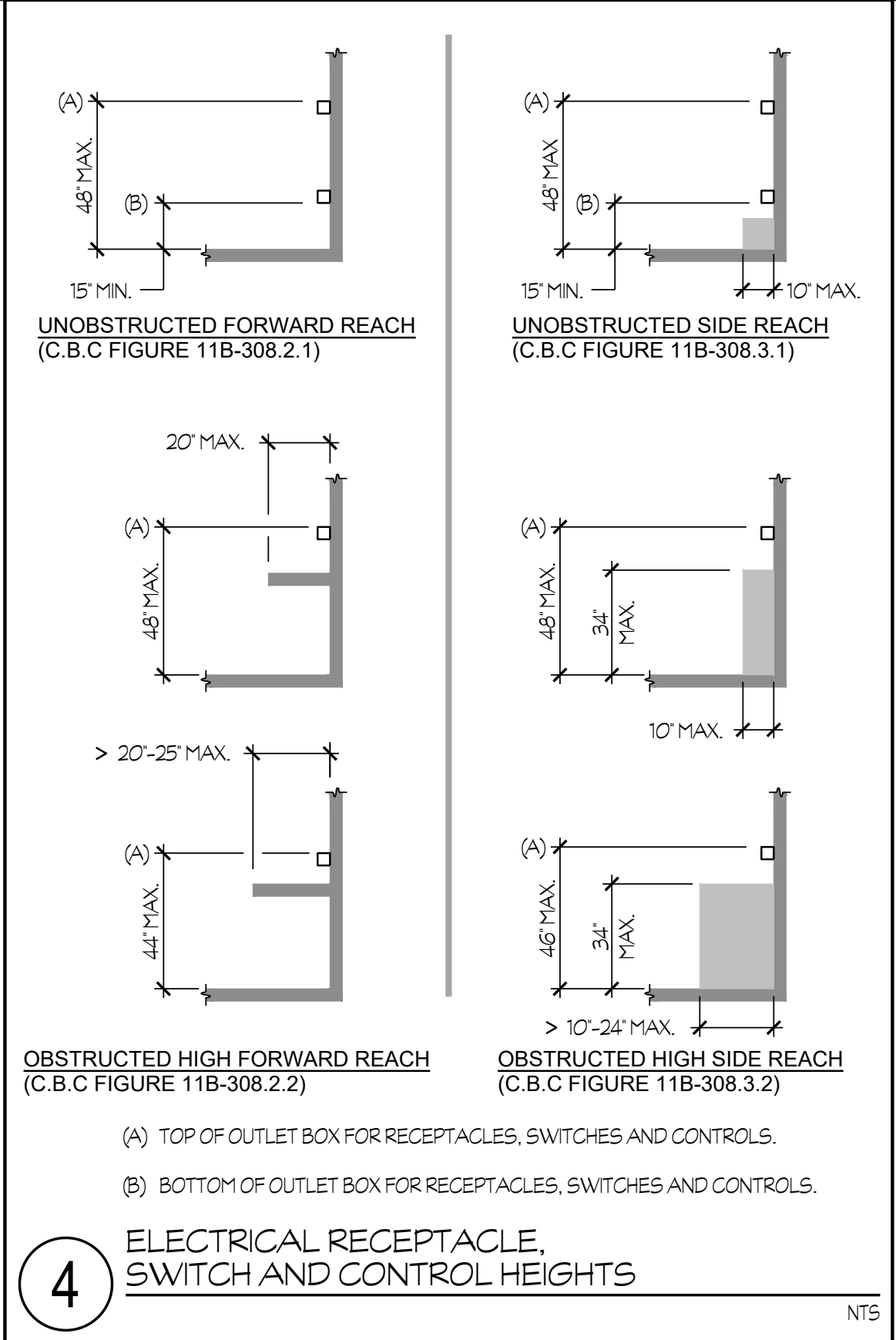
## 1 TYPICAL CABLE LINK IDENTIFIER LABELING FORMAT



## 2 TYPICAL DATA OUTLET IDENTIFICATION



## 3 POINT TO POINT HDBT FOR CLASSROOM AUDIO/VISUAL



**MODERNIZATION AT  
CORCORAN HIGH SCHOOL  
SCIENCE BUILDING**  
1100 LETTS AVE., CORCORAN, CA 93212  
CORCORAN UNIFIED SCHOOL DISTRICT  
1520 PATTERSON AVE., CORCORAN, KINGS COUNTY, CA. 93212



REVISIONS
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**MANGINI** ARCHITECTURE  
INGENUITY  
McLAIN BARENG MORRELLI SCOTT  
MANGINI ASSOCIATES INC.  
4320 West Mineral King Avenue  
Visalia, California 93291  
www.mangini.us  
(559) 627-0530 Office  
(559) 627-1526 Fax

TITLE  
SIGNALS SYMBOLS  
AND DETAILS

**TG1.1**

PROJECT **1751a**



NOTES (THIS SHEET ONLY):

1. TYPICAL OF EXISTING WIRING DEVICES, LOCATED IN WALLS TO REMAIN, KEYNOTED WITH SUBSCRIPT "RR, U.O.N.". DISCONNECT, REMOVE EXISTING WIRING, DEVICES AND REPLACE WITH NEW OR RETROFIT (E) DEVICE AS SPECIFIED.
2. WHERE EXISTING DEVICES ARE LOCATED IN SURFACE MOUNTED RACEWAYS AND WALLS ARE SCHEDULED FOR NEW FINISH, REMOVE RACEWAYS AND PROVIDE NEW CONCEALED NON-METALLIC ENT CONDUIT WITH LOW VOLTAGE TRIM RING.
3. EXISTING DATA CABINET TO REMAIN, REMOVE AND REPLACE SIGNAL WIRING FROM ALL DEVICES AND REPLACE WITH NEW TERMINATION HARDWARE, FIBER OPTICS, NETWORK EQUIPMENT SHALL REMAIN, NO WORK REQUIRED.
4. EXISTING INTRUSION ALARM PANEL TO BE UPGRADED, REMOVE INTERNAL BOARDS AND REPLACE WITH NEW. RECONNECT EXISTING AND NEW DEVICES AS SHOWN.
5. EXISTING INTERCOM SPEAKER/CLOCK COMBO TO BE REMOVED AND REPLACED, PROVIDE NEW CAT6 CABLING FROM NEAREST HC CABINET.
6. FLUSH MOUNT 5' SQ. X 27/8" DP. OUTLET BOX EQUIPPED WITH A BLANK COVER AND CENTER BETWEEN THE COUNTERTOP OF THE UPPER TABLE AT 440" A.F.F. AND THE COUNTERTOP OF THE LOWER TABLE AT 434" A.F.F.. COORDINATE THE EXACT LOCATION WITH THE GAS TURRET AND MAKE ARRANGEMENTS WITH CABINETRY MANUFACTURER TO PROVIDE THE REQUIRED OPENING FOR THE RESPECTIVE CUT-IN BOX.
7. FLUSH MOUNT G.F.C.I. DUPLEX RECEPTACLES IN THE SIDE OF THE TEACHER DEMONSTRATION TABLE AND AT THE END OF THE ELECTRICAL/PLUMBING CHASE.
8. PROVIDE A 1 1/4" EQUIPPED WITH A NYLON PLUG STRING) AND RUN TO NEAREST FULL HEIGHT WALL. TURN 90°, RUN UP INSIDE WALL AND STUB INTO THE ACCESSIBLE ATTIC SPACE ABOVE THE T-BAR CEILING. PROVIDE AN INSULATING BUSHING, BRIDGEPORT #TWB-54 OR EQUAL, AT STUB.
9. SAWCUT AND PATCH EXISTING CONCRETE SLAB/CURB AS REQUIRED. REFER TO DETAIL #7/ES 2 AND DETAILS #33 AND #34/571 FOR ADDITIONAL INFORMATION/REQUIREMENTS.



DATE: AUGUST 24, 2022

**MODERNIZATION AT  
CORCORAN HIGH SCHOOL  
SCIENCE BUILDING**  
1100 LETTS AVE., CORCORAN, CA. 93212



REVISIONS

**REVISIONS**

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**MANGINI** | ARCHITECTURE  
INGENUITY

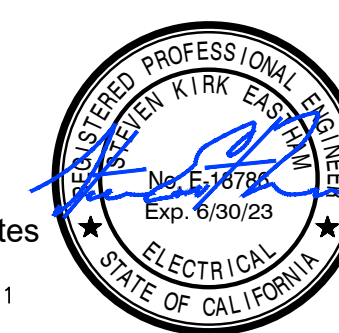
McLAIN BARENG MORRELLI SCOTT

[www.mangini.us](http://www.mangini.us)  
(559) 627 0530 Office  
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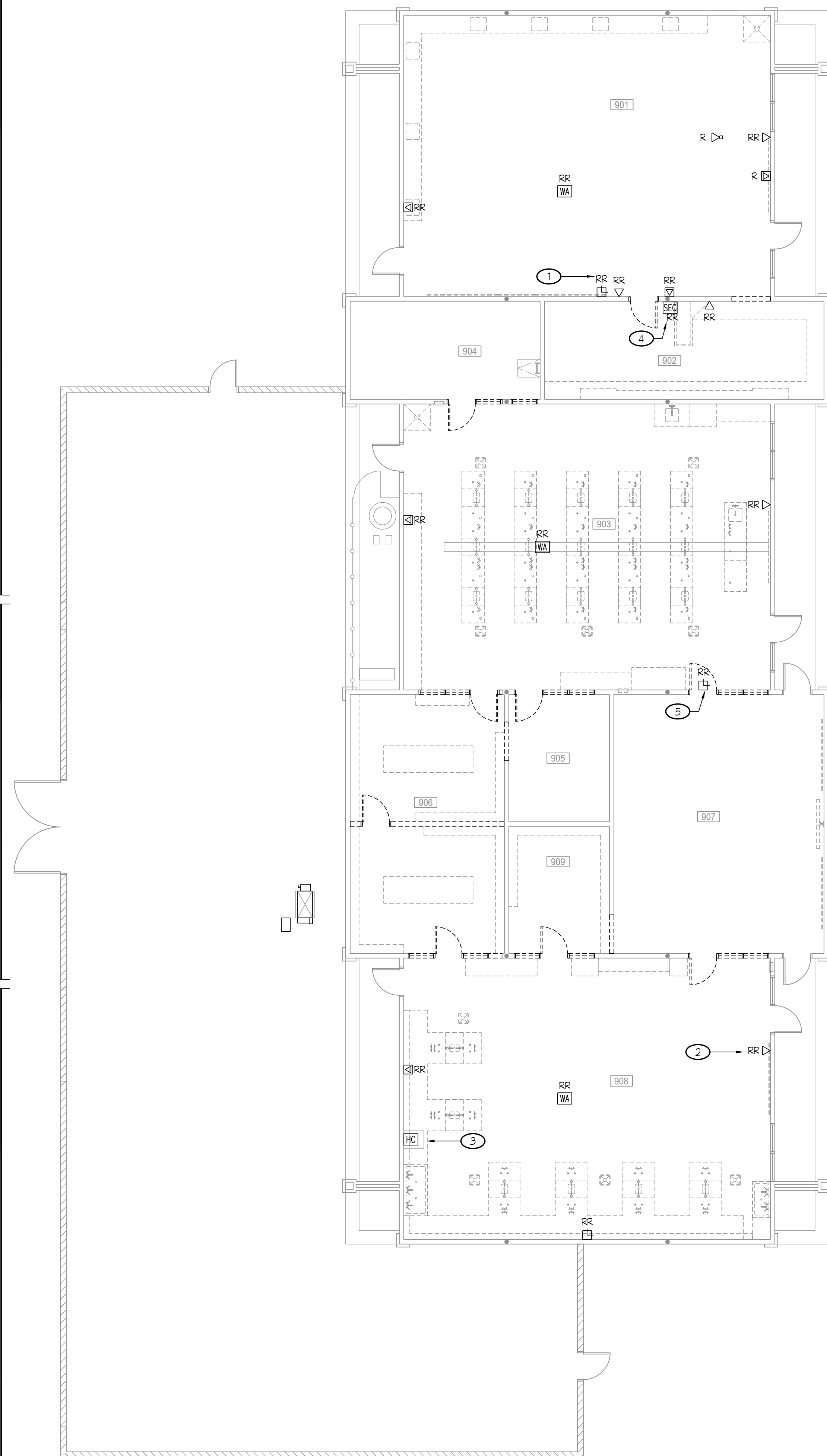
MANGINI ASSOCIATES INC.  
4320 West Mineral King Avenue  
Visalia, California 93291

TITLE  
BUILDING 900  
DEMO/NEW  
SIGNALS PLAN

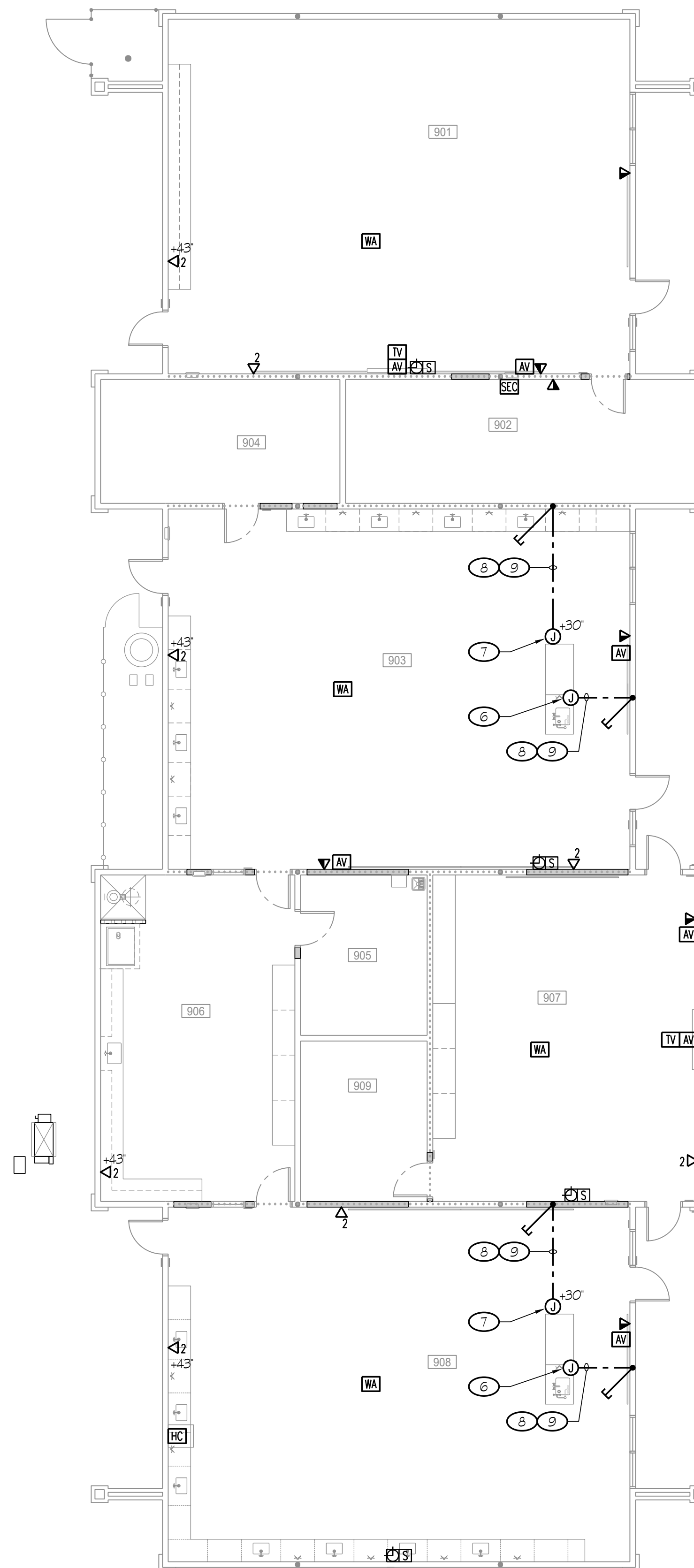
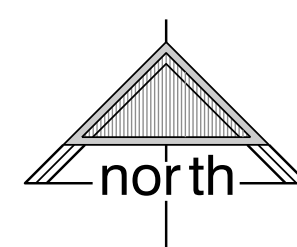
## T9.1

PROJECT **1751a**

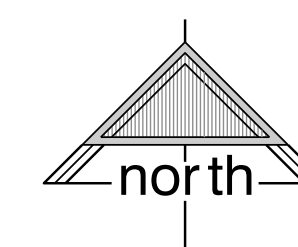
**Rose Sing Eastham and Associates**  
Electrical Consultants  
131 S. Dunworth - (559)733-2671  
Visalia, California 93292-6705



BUILDING 900 - DEMOLITION SIGNALS PLAN

$$\overline{1/8^* = 1-Q^*}$$


BUILDING 900 - NEW SIGNALS PLAN

$$\overline{1/8^*} = 1'-0'$$


ROOM LEGEND	
#	ROOM NAME
901	PHYSICS
902	STORAGE
903	CHEMISTRY
904	STORAGE
905	STORAGE
906	WORKROOM
907	CLASSROOM
908	BIOLOGY
909	STORAGE
910	WORKROOM

## WALL LEGEND

- ..... 1-HOUR RATED WALL, CONTINUOUS  
VERTICALLY FROM FLOOR TO  
BOTTOM OF ROOF FRAMING.