	PLUMBING FIXTURE	E SCI	HEDI	JLE					PI	PE MA	TERIA	L SCHEDU	LE	
T. 0				CONNEC	CTION SIZ	ZE:						PRESSURE	SHUT-OFF	
TAG	SPECIFICATION	WASTE	TRAP	VENT	CW	HW	ELEC.	SERVICE	PIPE M/ & WE	ATERIAL EIGHT	TYPE OF JOINTS	FITTINGS MATERIAL	RATINGS PSI-SwP	VALVE
WC	WATERCLOSET: (ADA) AMERICAN STANDARD "MADERA" 3043.001, 16-1/2" HIGH RIM, (1.28 GPF), FLOOR MOUNTED, ELONGATED BOWL, SIPHON JET, 1-1/2" TOP SPUD, WHITE VITREOUS CHINA. SLOAN WES 111-1.6/1.1, (1.6/1.1 GPF), MANUAL REDUCE AND DUAL FLUSH,	3"	INT.	2"	1"	-	_	COLD WATER ABV GROUND	COPPE	R L TUBE	SOLDERED	CAST BRONZE/ WROUGHT COPPER	125	BALL GATE CHECK
1	POLISHED CHROME FINISH, INCLUDES ANGLE STOP WITH BACK-FLOW PROTECTION. BEMIS PLASTIC SEAT MODEL 2L2155T, ELONGATED, OPEN FRONT, STAIN & CHEMICAL RESISTANT.							HOT WATER ABV GROUND	СОРРЕГ	R L TUBE SOLDERED		CAST BRONZE/ WROUGHT COPPER	125	BALL CHECK
	LAVATORY: AMERICAN STANDARD "LUCERNE" 0355.012, WALL MOUNTED, WHITE VITREOUS CHINA, 4" CENTERS, FRONT OVERFLOW, SELF-DRAINING DECK, CONCEALED ARM SUPPORT.							VENT	NO-HUB (	CAST IRON	NO-HUB	N/A	N/A	N/A
L 1	CHICAGO FAUCET MODEL 3600-E2805AB, DECK MOUNTED METERING FAUCET, 4" CENTERS, ECONO-FLO NON-AERATING LAMINAR SPRAY 0.5 GPM (10 SEC MIN RUN TIME). PROVIDE ASSE 1070 APPROVED TMV SET TO 110°. ON ADA COMPLIANT PROVIDE TRUEBRO LAV GUARD PER ADA CODE 4.19.4. 1/4 TURN 1/2" LOOSE KEY ANGLE STOPS W/ 1/2" O.D. BRASS FLEXIBLE SUPPLIES AND	2"	INT.	1-1/2"	1/2"	1/2"	-	WASTE, SOIL & ROOF DRAINS BELOW GRADE	SCHEDU	LE 40 ABS	SOLVENT- WELD	ABS	N/A	N/A
	BRASS WALL ESCUTCHEONS.  LAVATORY: AMERICAN STANDARD "DECLYN" 0321.026, WALL MOUNTED, WHITE VITREOUS CHINA, 4" CENTERS, FRONT							WASTE, SOIL & ROOF DRAINS ABOVE GRADE	NO-HUB (	CAST IRON	NO-HUB	N/A	N/A	N/A
$\binom{L}{2}$	OVERFLOW, SELF-DRAINING DECK, WALL HANGER. CHICAGO FAUCET MODEL 3600-E2805AB, DECK MOUNTED METERING FAUCET, 4" CENTERS, ECONO-FLO NON-AERATING LAMINAR SPRAY 0.5 GPM (10 SEC MIN RUN TIME). PROVIDE ASSE 1070 APPROVED	2"	INT.	1-1/2"	1/2"	1/2"	-	CONDENSATE	СОРРЕГ	R L TUBE	SOLDERED	BRONZE	125	N/A
	TMV SET TO 110°. ON ADA COMPLIANT PROVIDE TRUEBRO LAV GUARD PER ADA CODE 4.19.4. 1/4 TURN 1/2" LOOSE KEY ANGLE STOPS W/ 1/2" O.D. BRASS FLEXIBLE SUPPLIES AND BRASS WALL ESCUTCHEONS.							FUEL GAS		0, BLACK 0, BLACK	SCREWED WELDED	MALL. IRON STEEL WELD	150 150	SQR HEAD COCK
	EXAM & NURSE SINK: ELKAY LUSTERTONE MODEL LRAD191950PD, STAINLESS STEEL, DROP-IN MOUNT, 5" DEPTH, SINGLE COMPARTMENT, SINGLE HOLE, PERFECT DRAIN AT REAR CENTER. CHICAGO FAUCET MODEL 50-E2805-5ABCP WITH 0.5 GPM							NOTE: ALL EXPOS	SED FUEL GAS F	PIPING SHALL BE	PRIME AND PA	AINTED, COORDINATE COLO	R WITH ARCHITECT	
(S)	AERATOR, SINGLE HOLE, 5-1/4" RIGID SWING NECK. PROVIDE ASSE 1070 APPROVED TMV SET TO 120. ON ADA COMPLIANT PROVIDE TRUEBRO LAV GUARD PER ADA CODE 4.24.6. 1/4 TURN 1/2" LOOSE KEY ANGLE STOPS W/ 1/2" O.D. BRASS FLEXIBLE SUPPLIES AND BRASS WALL ESCUTCHEONS.	2"	1-1/2"	1-1/2"	1/2"	1/2"	-		PIF	PIPE INSULATION SCHEDULE				
WHA 1	WATER HAMMER ARRESTOR: MIFAB MWH-A INSTALLED ON ALL QUICK CLOSING VALVES AND ALL VALVES WHICH CLOSE WITH THE FLOW OF FLUID, OR ON HEADERS SERVING MORE THAN ONE FIXTURE, PROVIDED WITH 12" X 12" ACCESS PANEL.	-	-	-	1-1/4"	-	-	TEMPERATURE	CONDUCTIVITY RANGE (IN BTU-IN/HR	INSULATION MEAN RATING TEMPERATUR		PIPE \$	SIZE (IN. DIA>)	4 to < 8   8 AND
(HB)	HOSE BIBB: (RECESSED WALL) ZURN NARROW WALL HYDRANT MODEL Z-1350 STAINLESS STEEL BOX W/ LOCKING DOOR, BRONZE BODY & INTERIOR PARTS WITH VACUUM BREAKER AND KEY	-	-	-	3/4"	-	-		PER SQFT/°F)	E (°F)		REQUIRED INSU	LATION THICKNESS	LARGER (IN.)
	OPERATED CONTROL VALVE.  ROOF DRAIN: JAY R SMITH MODEL 1310 COATED CAST IRON ROOF							SPACE HEATING, SYSTEMS	HOT WATER SY	STEMS (STEAM,	STEAM CONDE	NSATE AND HOT WATER) AN	ND SERVICE WATER	RHEATING
RD 1	DRAIN WITH COMBINED FLASHING CLAMP AND GRAVEL STOP WITH POLYETHYLENE DOME, BOTTOM OUTLET. SEE PLANS FOR SIZE.	VARIES	-	-	-	-	-	105° - 140°	0.22 - 0.28	100°	INCHES R-VALUE	1.0 1.5 R-7.7 R-12.5	1.5 R-11	1.5 1.5 R-9 R-8
	OVERFLOW DRAIN: JAY R SMITH MODEL 1310-WD COATED CAST IRON ROOF DRAIN WITH COMBINED FLASHING CLAMP AND GRAVEL STOPS WITH POLYETHYLENE DOME, 2" SOLID WATER DAM, BOTTOM OUTLET. SEE PLANS FOR SIZE.	VARIES	-	-	-	-			IICK CORRUGATI	ED ALUMINUM J		ALL BE COVERED. COVER O E VALVE STEM EXTENSIONS		
DF	DRINKING FOUNTAIN: ELKAY VRCTLDDMWSK VANDAL-RESISTANT WALL MOUNTED, HI-LO DUAL BUBBLER DRINKING WATER								CAI	_ GREI	EN GE	NERAL NO	TES	
1	FOUNTAIN W/ BOTTLE FILLING STATION, STAINLESS STEEL BASIN W/ INTEGRAL DRAIN STRAINER, VANDAL-RESISTANT BUBBLER, FRONT PUSH BUTTON. ACCESSIBLE & LEAD FREE.	2"	1-1/4"	1-1/2"	1/2"	-	-	GALLONS		NK-TYPE WATE	R CLOSETS SHA	LY WITH 2022 CAL-GREEN 5.3 ALL BE CERTIFIED TO THE P E TOILETS.		
									N-RESIDENTIAL L 0.5 GALLONS PE			MPLY WITH 2022 CAL-GREEN	N 5.303.3.4.1 AND SI	HALL NOT
								1.8 GALL	ONS PER MIN AT	60 PSI. KITCHE	N FAUCETS MAY	PLY WITH 2022 CAL-GREEN S Y TEMPORARILY INCREASE NT 60 PSI AND MUST DEFAU	THE FLOW ABOVE	THE MAXIMUM

1.	THE TOTAL INSTALLATION SHALL COMPLY WITH ANY REQUIREMENTS OF THE LEGALLY CONSTITUTED AUTHORITIES HAVING JURISDICTION INCLUDING 2022 CBC (CALIFORNIA BUILDING CODE), 2022 CAL GREEN REQUIREMENTS AND 2022 CMC/CPC (CALIFORNIA MECHANICAL AND PLUMBING CODE).

GENERAL NOTES

VISIT THE SITE PRIOR TO BID AND SHALL THOROUGHLY FAMILIARIZE THEMSELVES WITH THE EXISTING CONDITIONS UNDER WHICH THEY WILL BE REQUIRED TO WORK. INDICATED DIMENSIONS ARE APPROXIMATE AND ARE GIVEN FOR

BEFORE PROCEEDING WITH THE WORK, CAREFULLY CHECK AND VERIFY DIMENSIONS, SIZES, REQUIRED CLEARANCES AND SHALL ASSUME FULL RESPONSIBILITY FOR THE FITTING OF EQUIPMENT AND MATERIALS HEREIN REQUIRED TO OTHER PARTS OF THE WORK OF OTHER TRADES.

THE DRAWINGS ARE ESSENTIALLY DIAGRAMMATIC TO THE EXTENT THAT OFESETS, BENDS, SPECIAL FITTINGS AND LOCATIONS ARE NOT EXACTLY LOCATED. IN THE PREPARATION OF THESE DOCUMENTS, CERTAIN ASSUMPTIONS ARE MADE REGARDING EXISTING CONDITIONS. SOME OF THESE ASSUMPTIONS MAY NOT BE VERIFIABLE WITHOUT EXPENDING ADDITIONAL SUMS OF MONEY OR DESTROYING OTHERWISE ADEQUATE OR SERVICEABLE PORTIONS OF EXISTING BUILDINGS AND/OR EQUIPMENT. THEREFORE, THE ENGINEER SHALL NOT BE HELD RESPONSIBLE FOR ANY

CHANGES OR ADDITIONAL COSTS INCURRED DUE TO EXISTING CONDITIONS. COMPLY WITH CONTRACT DOCUMENTS IN LAYING OUT WORK AND EQUIPMENT. COORDINATE THE WORK OF THIS SECTION WITH THE WORK OF OTHER TRADES AND JOB CONDITIONS.

THE INSTALLATION OF ACCESS PANELS OR OTHER INDICATING EQUIPMENT OR SPECIALTIES REQUIRING READING. ADJUSTMENT, INSPECTION, REPAIRS, REMOVAL OR REPLACEMENT SHALL BE CONVENIENTLY LOCATED WITH REFERENCE TO THE FINISHED BUILDING. EQUIPMENT AND FIXTURES INSTALLED UNDER THIS CONTRACT SHALL BE HUNG OR ANCHORED IN ACCORDANCE WITH

THE INTENT OF THE DRAWINGS AND SPECIFICATIONS IS TO CONSTRUCT THE PROJECT IN ACCORDANCE WITH TITLE 24, CALIFORNIA CODE OF REGULATIONS.

WHERE MATERIAL IS SHOWN ON THE DRAWINGS BUT NOT SPECIFIED, IT SHALL BE OF THE SAME TYPE AND QUALITY AS EXISTING MATERIAL.

TEST SYSTEM(S) IN ACCORDANCE WITH REQUIREMENTS OF THE GOVERNING AUTHORITIES. CLEANOUTS SHALL BE INSTALLED WHERE READILY ACCESSIBLE AND LOCATED AS PER CODE REQUIREMENTS. COORDINATE CLEANOUT LOCATIONS WITH EQUIPMENT CABINETS, ETC. AND THE ARCHITECT PRIOR TO ANY

PAVED AREAS WHICH ARE EXCAVATED AND/OR DAMAGED BY OPERATIONS SHALL BE PATCHED AND REPAIRED. IN ADDITION, RESTORE TO ORIGINAL PLANTED AREAS DAMAGED BY OPERATIONS.

CONNECTIONS TO EXISTING SERVICES SHALL BE MADE SUCH THAT INTERRUPTION TIME WILL BE AS SHORT AS POSSIBLE. GIVE THE OWNERS REPRESENTATIVE SUFFICIENT NOTICE OF SUCH INTERRUPTIONS AND THE ACTUAL SHUT-DOWN TIME SHALL BE AT A TIME DESIGNATED BY THE OWNERS REPRESENTATIVE.

WHEN REQUIRED BY THE AUTHORITY HAVING JURISDICTION, POTABLE WATER SYSTEMS SHALL BE DISINFECTED AND FLUSHED PRIOR TO USE BY WATER-CHLORINATION SOLUTION AND HAVE BACTERIOLOGICAL EXAMINATION MADE BY AN APPROVED AGENCY PER 2022 CPC SEC. 609.10 AND AS PRESCRIBED IN AWWA C651. METHODS OF CLEANING/ DISINFECTING FOR NEW OR REPAIR PIPING AS DESCRIBED IN C651 OR NFPA 24.

PLUMBING PIPE, FITTINGS AND FIXTURES USED TO CONVEY OR DISPENSE WATER FOR HUMAN CONSUMPTION SHALL COMPLY WITH AB 1953.

ANY SUBSTITUTION MADE AFFECTING THE STRUCTURAL, ACCESS OR FIRE & SAFETY PORTIONS OF THE PROJECT SHALL BE SUBMITTED TO DSA FOR REVIEW AND APPROVAL AS REQUIRED BY 2022 CBC PART 1 SECTION 4-338. A CCD

SHUT-OFF VALVES SHALL BE PROVIDED IN MAIN BRANCHES, RUNS TO RISERS AND WHERE INDICATED ON DRAWINGS. UNLESS SPECIFICALLY SHOWN ON THESE DRAWINGS, NO STRUCTURAL MEMBER SHALL BE CUT, DRILLED NOR NOTCHED WITHOUT PRIOR AUTHORIZATION IN WRITING BY THE STRUCTURAL ENGINEER OF RECORD AND DSA

## ANCHORAGE AND BRACING NOTES

#### MEP COMPONENT ANCHORAGE NOTE

FIXTURE UNITS

- 95

- - 1.5

104.5

NUMBER FIXTURE UNIT TOTAL

1 WC 5 5

mhyhhhhh ,

5 | S | 1 | 5 multiple of the state of the st

EXISTING

DEMO

TOTAL FIXTURE UNITS

TOTAL G.P.M.

RATE, BUT NOT TO EXCEED 2.2 GALLONS PER MINUTE AT 60 PSI, AND MUST DEFAULT TO A MAXIMUM FLOW RATE OF

PLUMBING SIZING FORM

PIPE SIZE IS BASED ON CHART A 105.1(1) @ 3.0 P.S.I. / 100 FT.

FIXTURE UNITS ARE BASED ON TABLE A 103.1(2) FROM APPENDIX A

VELOCITY FOR COLD WATER PIPING LESS THAN 8 FT. PER SECOND

<u>VELOCITY FOR HOTWATER PIPING LESS THAN 5 FT. PER SECOND</u>

MAXIMUM SIZE FOR HOT WATER PIPING SHALL BE 1-1/2"

PIPE SIZE SCHEDULE

F. TANK | F. VALVE | GPM | VELOCITY |

5 0 4.8 3.0

24 0 17 4.5

158 64 56 6.0

380 250 100 7.5

1750 | 1750 | 230 | 8.0

1.8 2.5

10 4.0

27 5.0

160 8.0

1.8 GALLONS PER MINUTE AT 60 PSI.

FIXTURE UNITS

13 0

850 800

1-1/4"

1-1/2"

2-1/2"

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

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

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.

COMPONENTS WEIGHING LESS THAN 20 POUNDS, OR IN THE CASE OF DISTRIBUTED SYSTEMS, LESS 5 POUNDS

THE FOLLOWING MECHANICAL AND THE 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.

PER FOOT, WHICH ARE SUSPENDED FROM A ROOF OR FLOOR OR HUNG FROM A WALL. THE ANCHORAGE OF 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 2022 CBC, SECTIONS 1617A.1.24, 1617A.1.25 AND 1617A.1.26.

THE METHOD OF SHOWING BRACING AND ATTACHMENTS TO THE STRUCTURE FOR THE IDENTIFIED DISTRIBUTION SYSTEM ARE AS NOTED BELOW. WHEN BRACING AND ATTACHMENTS ARE BASED ON A PREAPPROVED INSTALLATION GUIDE (E.G., HACI 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 DISTRIBUTING 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 HCAI PRE-APPROVAL (OPM #) # OPM-0043

SYMBOL	ABBREVIATIONS	DESCRIPTION
DETAIL No. SHEET No.		DETAIL REFERENCE
		SECTION REFERENCE
STACK RISER ID. No.		PLUMBING STACK OR RISER REFERENCE
EQUIPMENT ID. No.		EQUIPMENT REFERENCE
	CW HW	EXISTING PIPE OR EQUIPMENT TO BE REMOVED  COLD WATER  HOT WATER
	HWR -	HOT WATER RETURN POP-OFF DRAIN LINE OR HIDDEN WATER LINE
CWV————————————————————————————————————	S or W CWV RD/OD SD	SOIL or WASTE BELOW GRADE (or FLOOR)  COMBINATION WASTE AND VENT  ROOF & OVERFLOW DRAIN ABOVE & BELOW GRADE (or FLOOR)  STORM DRAIN
	S or W V	SOIL or WASTE ABOVE GRADE (or FLOOR) PLUMBING VENT
COND SEC COND	COND SEC COND G	CONDENSATE DRAIN SECONDARY CONDENSATE DRAIN GAS LOW PRESSURE
—— MPG —————————————————————————————————	MPG BV SOV	GAS MEDIUM PRESSURE  BALL VALVE  SHUT OFF VALVE
—— <del>1</del> 3	SOV or GC	SHUT OFF VALVE OR GAS COCK ON RISER
	CV PRV PTR	SWING CHECK VALVE PRESSURE REDUCING VALVE PRESSURE-TEMPERATURE RELIEF VALVE
——————————————————————————————————————	RPBFP DN	REDUCED PRESSURE BACKFLOW PREVENTER PIPE DOWN
——————————————————————————————————————	UP DN	PIPE UP TEE DOWN
— ю с—	UP	TEE UP PIPE RISER & PIPE DROP (UP AND DOWN)
	FCO WCO CO	FLOOR CLEANOUT  WALL CLEANOUT  CLEANOUT PLUG
- <b>—</b> Ф	COTG	YARD CLEANOUT or CLEANOUT TO GRADE  CAP ON END OF PIPE
<del></del>	HB WHA & TP	HOSE BIBB WITH VACUUM BREAKER WATER HAMMER ARRESTOR & TRAP PRIMER
——————————————————————————————————————	CS GR	CIRCUIT SETTER GAS REGULATOR

GAS COCK (or GAS STOP)

POINT OF CONNECTION

POINT OF DEMOLITION

AMERICAN GAS ASSOCIATION

AMERICAN DISABILITY ACT

INVERT ELEVATION

UNLESS OTHER NOTED

VENT THROUGH ROOF

PLUMBING FIXTURE UNIT

BELOW FINISH FLOOR

CONDENSATE CLEAN OUT

SHEET NAME

ROUGH IN CONNECT

ACCESS PANEL

ABOVE

BELOW

CONNECTION

**EXISTING** 

NEW

DOWN

**TYPICAL** 

WITH

PLUMBING SHEET INDEX

PLUMBING REMODEL FLOOR PLAN - WASTE, VENT & COND

PLUMBING REMODEL FLOOR PLAN - CW, HW & GAS

CONTINUATION

P.O.D.

CONN

ADA

(TYP)

U.O.N.

VTR

B.F.F.

R.I.C.

CCO

PLUMBING LEGENDS NOTES & SCHEDULES

PLUMBING DEMOLITION FLOOR PLAN PLUMBING DEMOLITION ROOF PLAN

PLUMBING ROOF PLAN PLUMBING DETAILS

PLUMBING DETAILS CONT.

PLUMBING REMODEL FOUNDATION PLAN

PLUMBING DEMOLITION FOUNDATION PLAN

EXISTING PIPING TO BE DEMOLISHED

----I CCO

SHEET NUMBER

P1-1.0

P1-2.0

P1-2.3

PD-1.2

PLUMBING LEGEND SYMBOLS

412 E. Vanderbilt Way

RUHNAU

CLARKE ARCHITECTS

San Bernardino, CA 92408 Phone: 909.890.3700 Fax: 909.890.3770 Email: cadd@designwesteng.com DESIGN WEST ENGINEERING MECHANICAL · ELECTRICAL · ENERGY CONSULTANTS

**RUHNAUCLARKE.COM** 

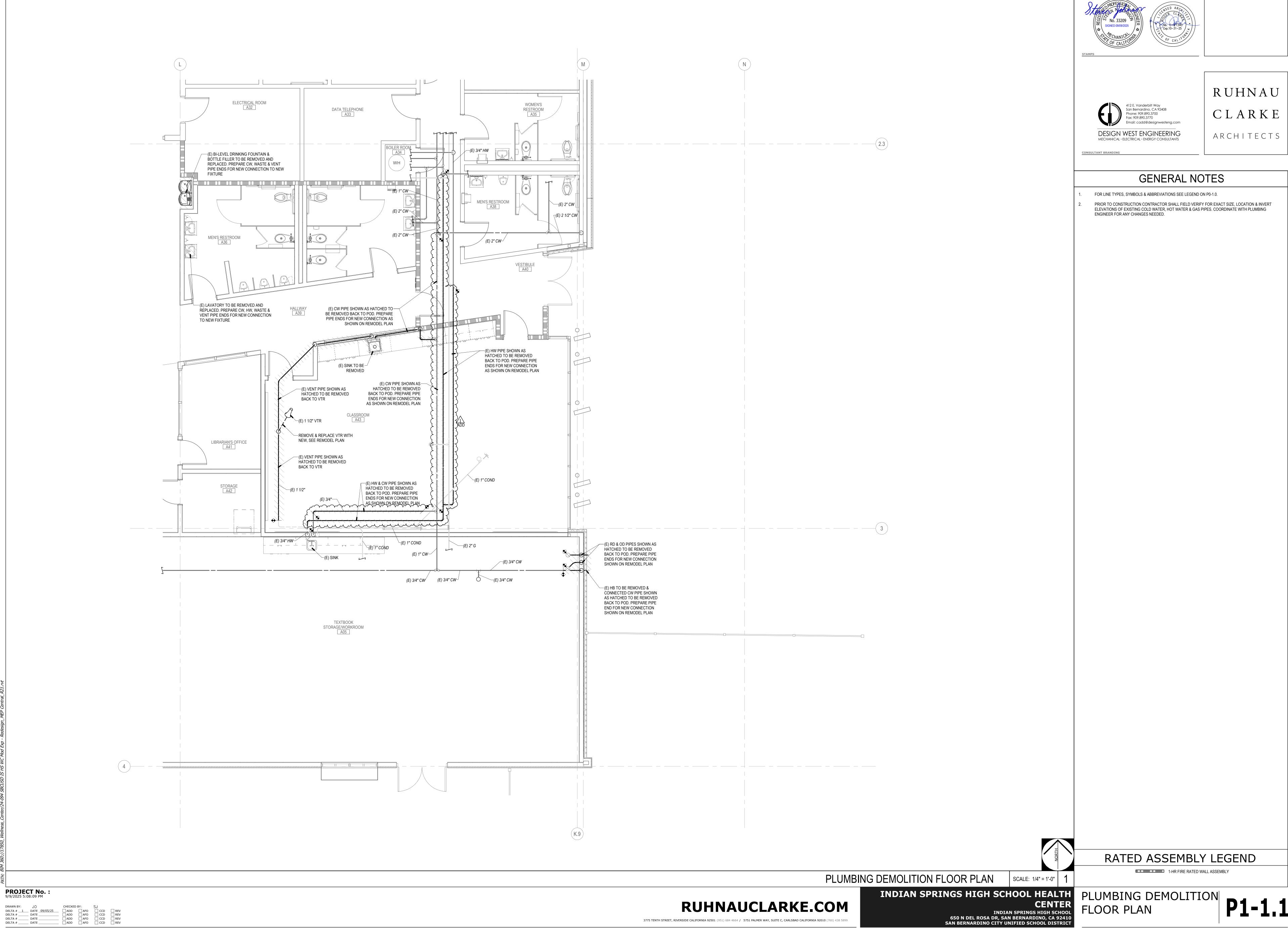
INDIAN SPRINGS HIGH SCHOOL HEALTH

INDIAN SPRINGS HIGH SCHOOL

650 N DEL ROSA DR, SAN BERNARDINO, CA 92410

SAN BERNARDINO CITY UNIFIED SCHOOL DISTRIC

PLUMBING LEGENDS NOTES & SCHEDULES



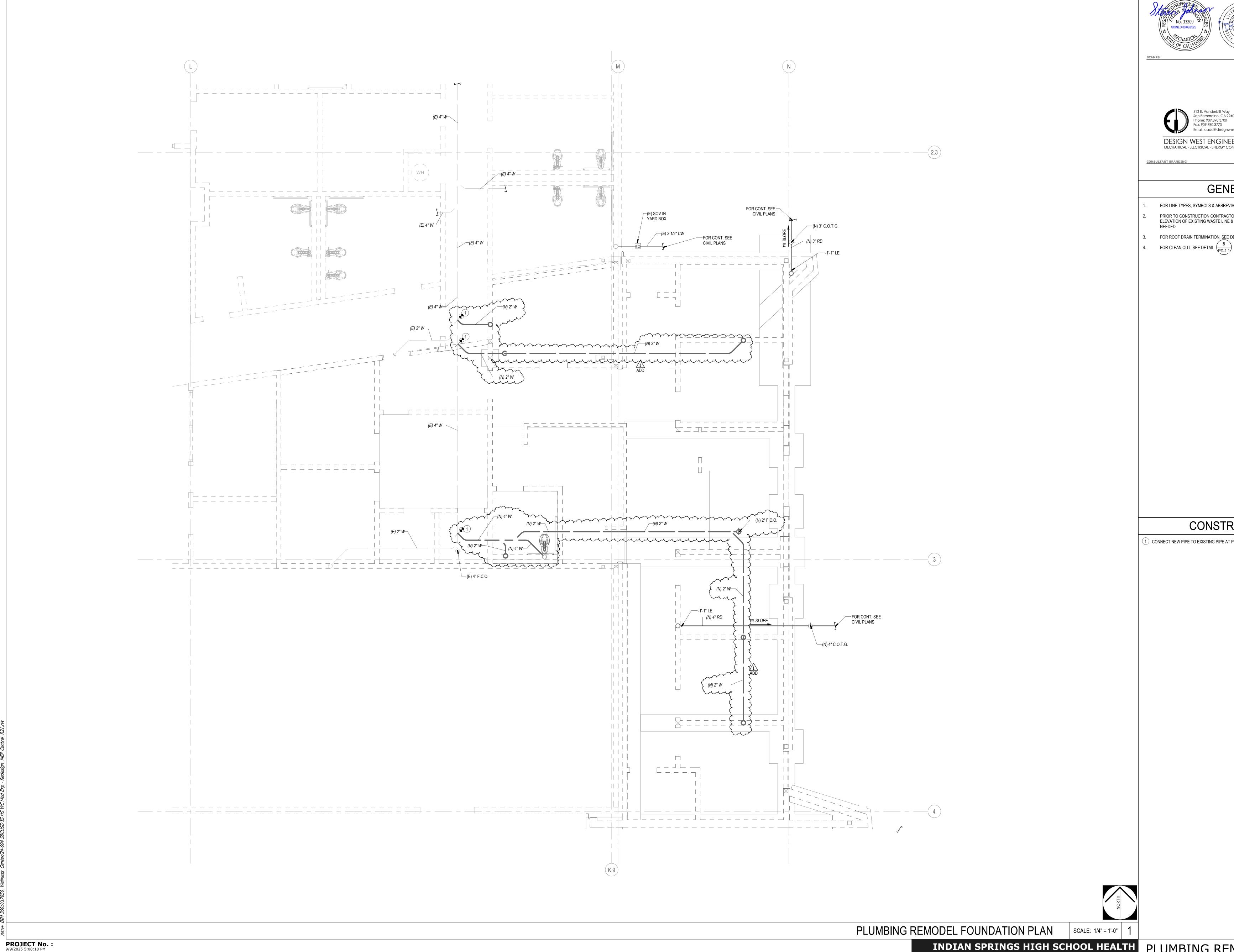


**GENERAL NOTES** 

FOR LINE TYPES, SYMBOLS & ABBREVIATIONS SEE LEGEND ON P0-1.0. PRIOR TO CONSTRUCTION CONTRACTOR SHALL FIELD VERIFY FOR EXACT SIZE, LOCATION & INVERT ELEVATIONS OF EXISTING COLD WATER, HOT WATER & GAS PIPES. COORDINATE WITH PLUMBING

RATED ASSEMBLY LEGEND

1-HR FIRE RATED WALL ASSEMBLY



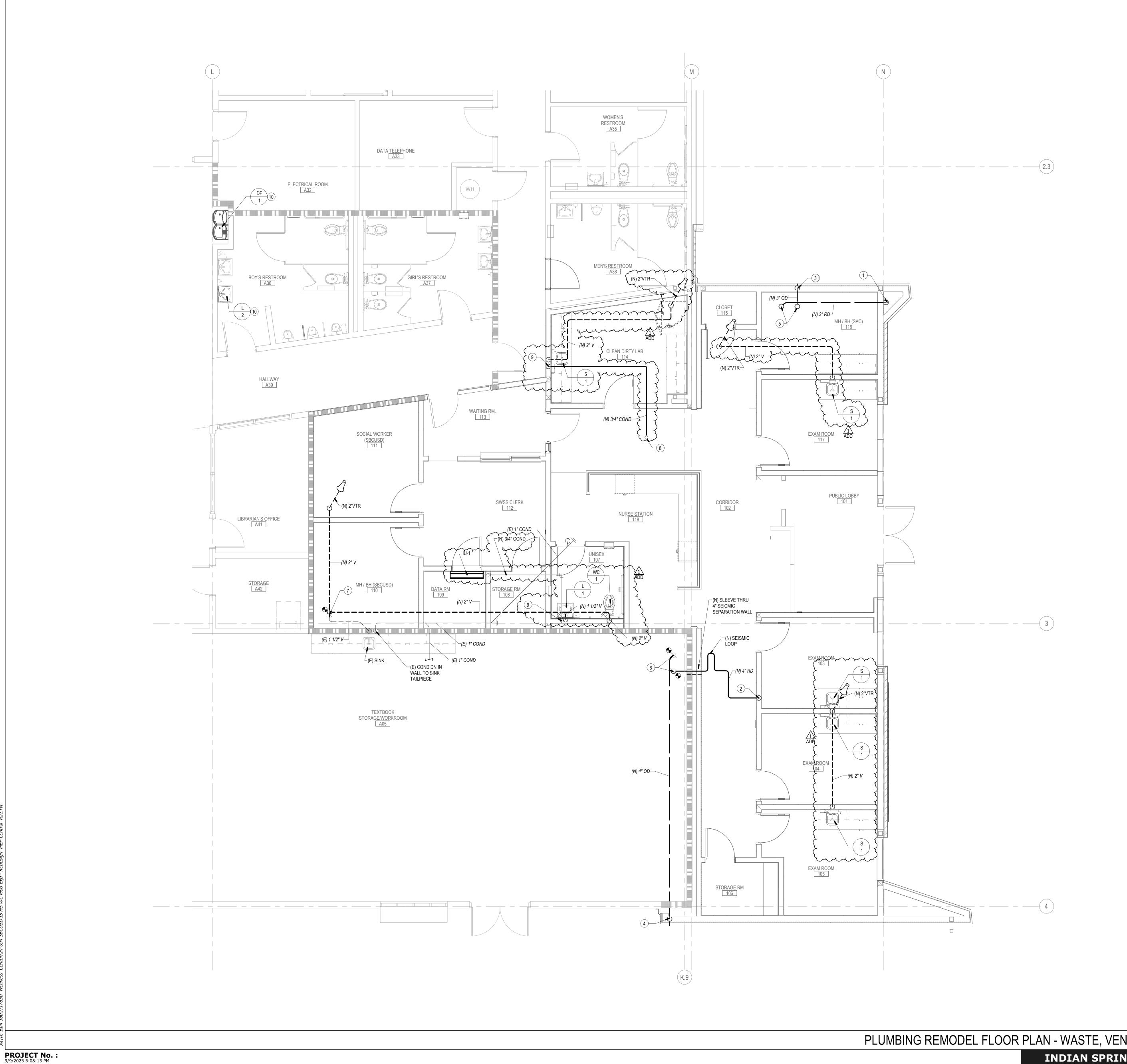


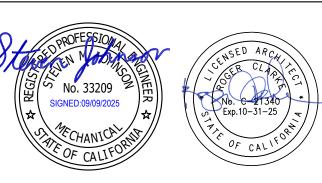
#### **GENERAL NOTES**

- FOR LINE TYPES, SYMBOLS & ABBREVIATIONS SEE LEGEND ON P0-1.0. PRIOR TO CONSTRUCTION CONTRACTOR SHALL FIELD VERIFY FOR EXACT SIZE, LOCATION & INVERT

# CONSTRUCTION NOTES

(1) CONNECT NEW PIPE TO EXISTING PIPE AT P.O.C. FIELD VERIFY FOR EXACT LOCATION OF CONNECTION.





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RUHNAU CLARKE ARCHITECTS

DESIGN WEST ENGINEERING MECHANICAL \* ELECTRICAL \* ENERGY CONSULTANTS

#### **GENERAL NOTES**

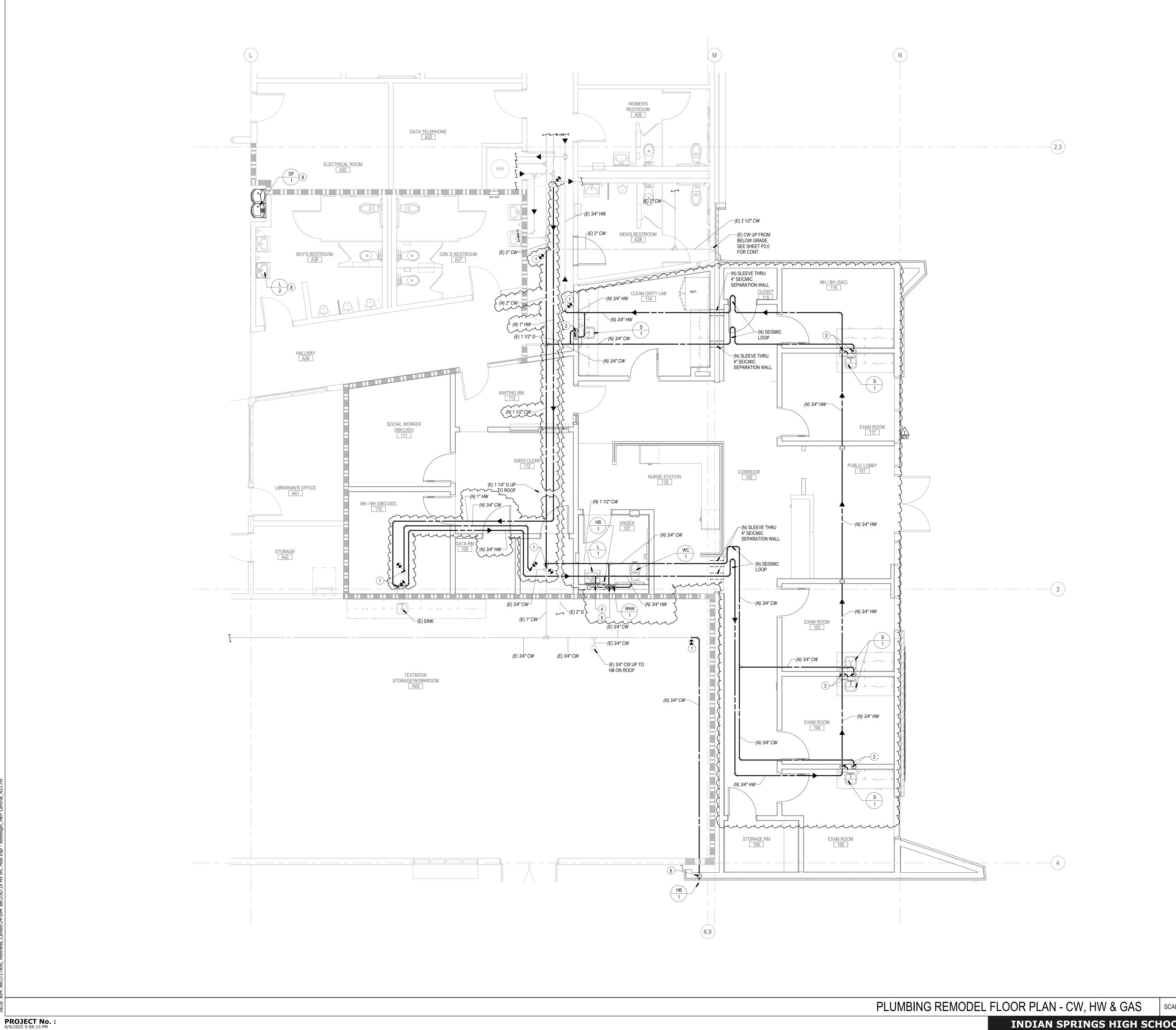
- FOR LINE TYPES, SYMBOLS & ABBREVIATIONS SEE LEGEND ON P0-1.0.
- CONTRACTOR SHALL PATCH FLOORS, WALLS & CEILINGS TO MATCH NEW CONSTRUCTION PER ARCHITECTS
- ROOF DRAIN & PIPES ARE BASED ON TABLE 1103.2 @ 3" OF RAIN FALL PER HOUR W/ 1/8" PIPE SLOPE. FOR PIPE SUPPORT, SEE DETAIL 1
- 5. FOR CONDENSATE TERMINATION, SEE DETAIL 8
- 6. FOR PIPE THRU 4" SEICMIC SEPARATION, SEE DETAIL 9
- FOR ROOF & OVERLOW DRAIN TERMINATION, SEE DETAIL 4
- 8. FOR CLEANOUT MOUNTING, SEE DETAIL 5
- FOR VENT THRU ROOF, SEE DETAIL
- 10. FOR PIPE THRU RATED WALL, SEE DETAIL igspace
- FOR CONDENSATE CONNECTION TO INDOOR UNIT, SEE DETAIL

# **CONSTRUCTION NOTES**

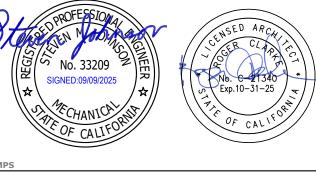
- 1) NEW 3" RD DN IN WALL CAVITY TO BELOW GRADE, , SEE SHEET P1-2.0 FOR CONT.
- 2) NEW 4" RD DN IN WALL TO BELOW FLOOR, SEE SHEET P1-2.0 FOR CONT.
- NEW 3" OD DN IN WALL AND DAYLIGHT @ + 6" A.F.G. EXTEND 1" BEYOND FACE OF WALL & TERMINATE WITH
- 4 NEW 4" OD DN IN WALL AND DAYLIGHT @ + 6" A.F.G. EXTEND 1" BEYOND FACE OF WALL & TERMINATE WITH DOWNSPOUT COVER
- 5 NEW 3" RD & OD DN FROM ROOF TO ABOVE CEILING
- (6) CONNECT NEW 4" RD & OD TO EXISTING AT P.O.C. FIELD VERIFY FOR EXACT LOCATION OF CONNECTION.
- (7) CONNECT NEW 1-1/2" V TO EXISTING AT P.O.C. FIELD VERIFY FOR EXACT LOCATION OF CONNECTION.
- (8) 3/4" COND DN FROM AC UNIT ON ROOF 9 3/4" COND DN IN WALL TO SINK TAILPIECE
- (10) CONNECT NEW FIXTURE TO EXISTING PIPING. REWORK EXISTING PIPING (AS NEEDED) FOR CONNECTION TO

RATED ASSEMBLY LEGEND 1-HR FIRE RATED WALL ASSEMBLY

PLUMBING REMODEL FLOOR PLAN - WASTE, VENT & COND









**GENERAL NOTES** 

FOR LINE TYPES, SYMBOLS & ABBREVIATIONS SEE LEGEND ON P0-1.0. ROUTE HOT WATER LOOP AS CLOSE AS POSSIBLE TO ALL FIXTURES.

NEW OR REPAIRED POTABLE WATER SYSTEMS SHALL BE DISINFECTED PRIOR TO USE, ACCORDING TO THE METHOD SET IN SECTION 609.9 OF THE CPC.

CONTRACTOR SHALL PATCH FLOORS, WALLS & CEILINGS TO MATCH NEW CONSTRUCTION PER ARCHITECTS

SHUT-OFF VALVES SHALL BE PROVIDED ON ALL MAIN BRANCHES, RUNS TOO RISERS AND WHERE SHOWN

ON DRAWING. LOCATE SHUT-OFF VALVES OVER T-BAR CEILING WHEN POSSIBLE. PROVIDE ACCESS PANELS WHEN SHUT-OFF VALVES ARE LOCATED OVER HARD LID CEILINGS.

FOR PIPE SUPPORT, SEE DETAIL

FOR HOSE BIB, SEE DETAIL 2

FOR WATER HAMMER ARRESTOR, SEE DETAIL 7

FOR PIPE THRU RATED WALL, SEE DETAIL

# **CONSTRUCTION NOTES**

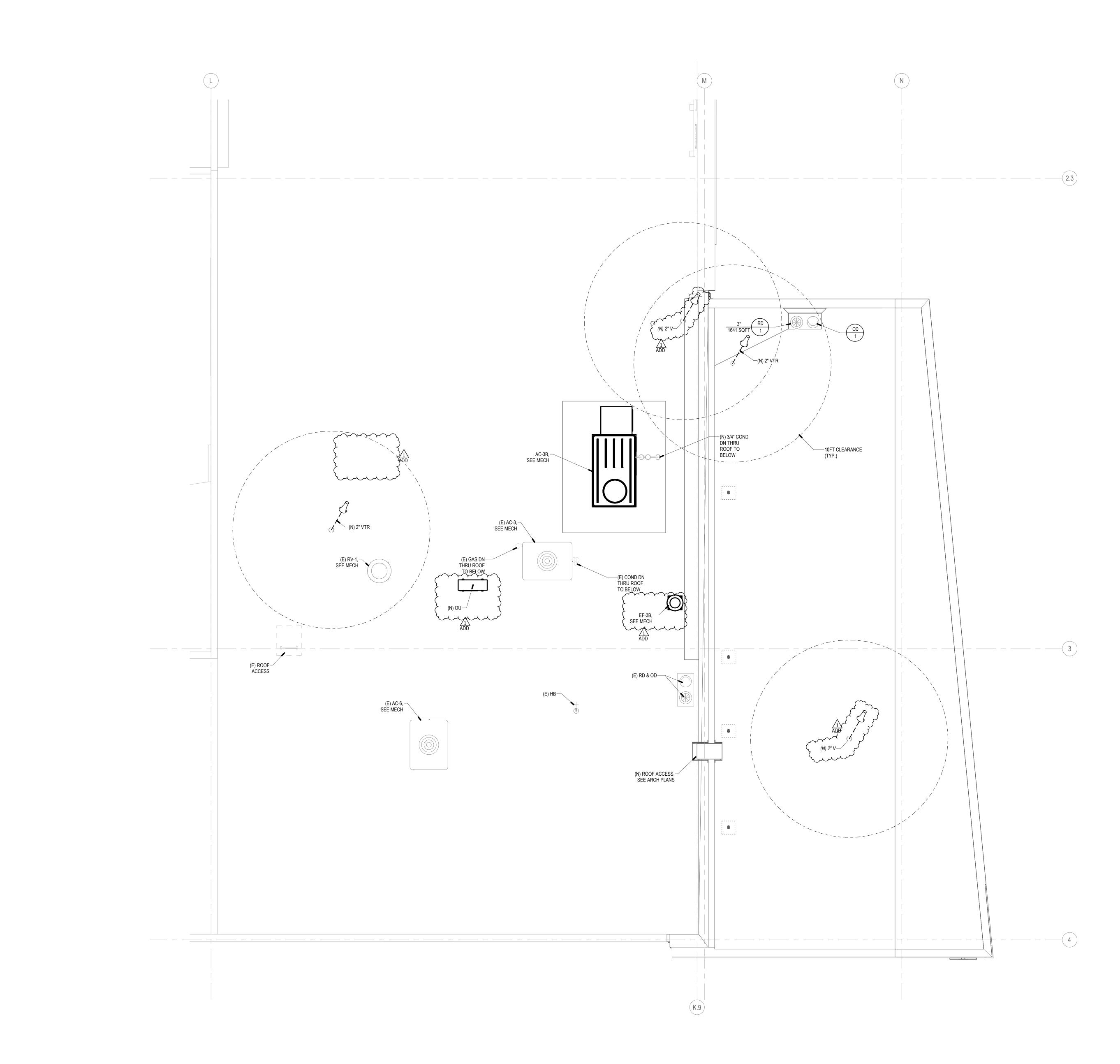
1) connect new pipe to existing pipe at p.o.c. field verify for exact location of connection. 2 NEW 3/4" CW & HW DN IN WALL TO PLUMBING FIXTURE

3 NEW 3/4" CW & HW DN IN WALL TO PLUMBING FIXTURES 4 NEW 3/4" HW DN IN WALL TO PLUMBING FIXTURE 5 NEW 1-1/2" CW DN IN WALL TO FULLSIZE HEADER WITH SOV ON RISER BEHIND A.P. 

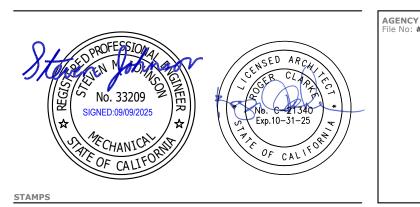
RATED ASSEMBLY LEGEND 1-HR FIRE RATED WALL ASSEMBLY

INDIAN SPRINGS HIGH SCHOOL HEALTH
CENTER
INDIAN SPRINGS HIGH SCHOOL
SAN DEL ROSA DR, SAN BERNARDINO, CA 92410
SAN BERNARDINO CITY UNIFIED SCHOOL DISTRICT

PLUMBING REMODEL
FLOOR PLAN - CW, HV
& GAS FLOOR PLAN - CW, HW P1-2.2 & GAS



**PROJECT No.:** 9/9/2025 5:08:16 PM





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**GENERAL NOTES** 

FOR LINE TYPES, SYMBOLS & ABBREVIATIONS SEE LEGEND ON P0-1.0.

ALL VENTING SHALL HAVE A MIN. OF 10' CLEARANCE FROM ANY FORCED AIR INLET W/ A MIN. OF 3' CLEARANCE ABOVE & A MIN OF 4' CLEARANCE FROM ANY PROPERTY LINE EXCEPT A PUBLIC WAY PER CPC SEC. 906.

ROOF DRAIN & PIPES ARE BASED ON TABLE 1103.2 @ 3" OF RAIN FALL PER HOUR W/ 1/8" PIPE SLOPE.

FOR ROOF DRAIN, SEE DETAIL 3

FOR VENT THRU ROOF, SEE DETAIL 6

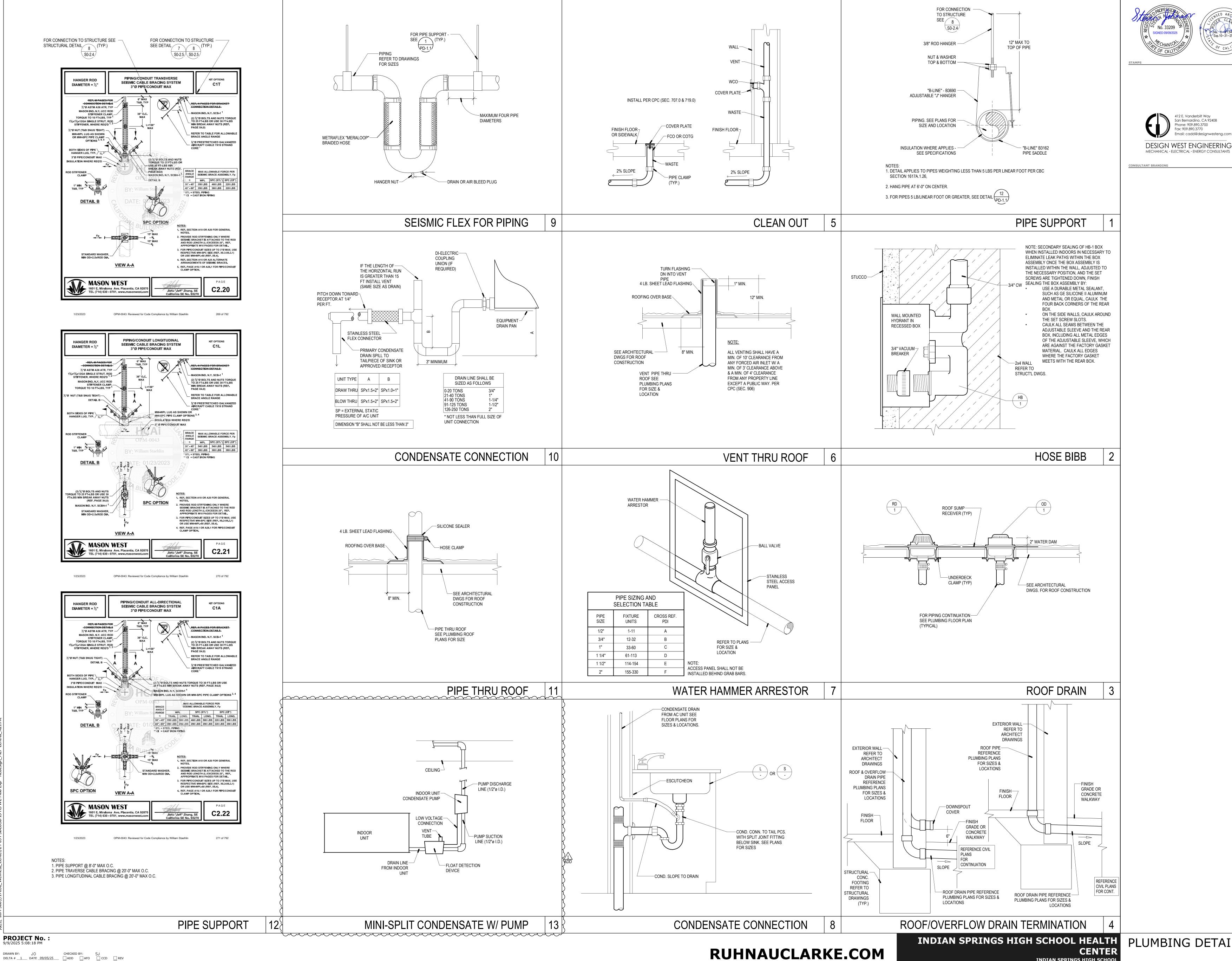
6. FOR CONDENSATE CONNECTION, SEE DETAIL 10

FOR PIPE THRU ROOF, SEE DETAIL 11

PLUMBING ROOF PLAN

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INDIAN SPRINGS HIGH SCHOOL HEALTH CENTER PLUMBING ROOF PLAN



GENCY APPROVAL e No: ######A##-#######

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RUHNAU CLARKE ARCHITECTS

**INDIAN SPRINGS HIGH SCHOOL** 650 N DEL ROSA DR, SAN BERNARDINO, CA 92410

SAN BERNARDINO CITY UNIFIED SCHOOL DISTRICT

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PLUMBING DETAILS

#### LUMINAIRE NOTES

- EQUALS SHALL BE CONSIDERED UPON SUBMITTAL REVIEW AND APPROVAL. PLEASE NOTE THAT IF AN ALTERNATE IS CONSIDERED:
  - THE CONTRACTOR IS COMPLETELY AND SOLELY RESPONSIBLE FOR ALL ASPECTS OF THE SUBSTITUTION INCLUDING UPDATING CONSTRUCTION DOCUMENTS, OBTAINING APPROVALS AND PERMITS FROM LOCAL AUTHORITY, AND COORDINATING WITH ALL TRADES TO ENSURE CHANGES TO AFFECTED BUILDING SYSTEM ARE ACCOUNTED FOR AND ACCEPTABLE TO THE ENGINEERING TEAM. CONTRACTOR SHALL ENSURE SUBSTITUTED EQUIPMENT MEETS OR EXCEEDS DESIGN INTENT REGARDING RATINGS, PERFORMANCE, DIMENSIONAL CLEARANCES, PHYSICAL DIMENSIONS (MAX/MIN), WEIGHT LIMITATIONS, AND OTHER ASPECTS, PROVING SUBSTITUTION IS SUITABLE TO THE APPLICATION. ENGINEERS WILL REVIEW THE RATING AND PERFORMANCE OF SUBSTITUTED EQUIPMENT ONLY AND WILL NOT ASSUME RESPONSIBILITY FOR SUBSTITUTION AT ANY LEVEL.
- IF CONTRACTOR CANNOT MAKE SUBSTITUTED EQUIPMENT WORK IN THIS PROJECT, CONTRACTOR SHALL REVERT TO REQUIREMENTS OF PERMITTED CONSTRUCTION DOCUMENTS AT THEIR EXPENSE.
- IT IS UNDERSTOOD BY ALL PARTIES THAT ANY SUBSTITUTIONS OF SPECIFIED PRODUCTS ARE DONE FOR THE PURPOSE OF COST SAVINGS TO THE OWNER. THEREFORE, ANY MATERIAL SUBSTITUTION OR DEVIATIONS PROPOSED BY THE CONTRACTOR SHALL BE INCLUDED WITH THE INITIAL BID AND SHALL SHOW A LINE ITEMS CREDIT TO THE OWNER FOR EACH SUBSTITUTION IN LIEU OF SPECIFIED PRODUCTS.
- CONTRACTOR SHALL PROVIDE A POINT BY POINT PHOTOMETRIC STUDY FOR ALL AREAS WHERE ALTERNATE FIXTURES ARE SUBMITTED. LIGHT LEVELS WILL BE REVIEWED FOR COMPLIANCE WITH PROJECT
- THE FIXTURE SCHEDULE INDICATES GENERAL DESCRIPTION OF LIGHTING FIXTURES AND MANUFACTURERS CATALOG NUMBERS. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO DETERMINE THE CORRECT CEILING CONFIGURATION AND PROVIDE THE FIXTURES WITH ALL NECESSARY TRIMS AND MOUNTING HARDWARE SO THAT BOTH THE CEILING SYSTEM AND THE FIXTURE CONSTRUCTION MATCHES. PROVIDE SEISMIC HANGERS AS
- 3. IT SHALL BE CONTRACTORS RESPONSIBILITY TO VERIFY THE EXACT LOCATION OF ALL LIGHTING FIXTURES AND TYPE OF CEILING WITH ARCHITECTURAL REFLECTED CEILING PLAN PRIOR TO ANY WORK. SEE ARCHITECTURAL REFLECTED CEILING PLAN PRIOR TO ANY WORK. SEE ARCHITECTURAL ELEVATION DRAWING FOR MOUNTING HEIGHTS OF WALL MOUNTED FIXTURES.
- 4. A JUNCTION BOX MUST BE PROVIDED WITH ALL EXIT LIGHTS CONNECTED TO MORE THAN ONE SET OF CONDUCTORS UNLESS THE EXIT LIGHT FIXTURE IS FURNISHED WITH AN APPROVED OUTLET BOX FOR THROUGH
- 5. A COMPLETE TITLE 24 COMPLIANT LIGHTING CONTROL SYSTEM SHALL BE PROVIDED TO CONTROL ALL INTERIOR AND EXTERIOR LIGHTING SYSTEMS. REFER TO LIGHTING CONTROL DIAGRAMS, SCHEDULES AND DETAILS.
- BATTERY PACK EMERGENCY TEST SWITCHES SHALL BE INTEGRAL TO LIGHT FIXTURE. COORDINATION OF SWITCH LOCATION IS REQUIRED WITH DESIGN TEAM IF INTEGRAL INSTALLATION IS NOT POSSIBLE.
- FIXTURES DESIGNATED AS EMERGENCY SHALL BE SUPPLIED WITH INTEGRAL BATTERY PACK CAPABLE OF POWERING TWO T8 LAMPS FOR 90 MINUTES WITH A TOTAL LIGHT OUTPUT OF 1100 LUMENS OR ONE F13 BIAX FOR 90 MINUTES WITH A TOTAL LIGHT OUTPUT OF 520 LUMENS.
- PROVIDE ALL REQUIRED MOUNTING HARDWARE ANCHORAGE AND SUPPORTS TO INSTALL LIGHTING FIXTURES.
- 9. PROVIDE SWIVEL BASE AND STEMS. LENGTHS AS REQUIRED TO MOUNT THE PENDANT MOUNTED FIXTURES. THE INSTALLATION SHALL COMPLY WITH TITLE 24 SEISMIC AND APPLICABLE UBC REQUIREMENTS.
- 10. THE CONTRACTOR SHALL PROVIDE A COMPLETE AND OPERABLE LIGHTING SYSTEM AS PART OF THIS BUILDING CONTRACT.
- 11. SUSPENSION SYSTEM FOR LIGHT FIXTURES WHICH HAVE PASSED SHAKING TABLE TESTS APPROVED BY THE OFFICE OF THE STATE OF ARCHITECT, OR WHICH, AS INSTALLED, ARE FREE TO SWING A MINIMUM OF 45' FROM THE VERTICAL IN ALL DIRECTIONS WITHOUT CONTACTING OBSTRUCTIONS. SHALL BE ASSUMED TO COMPLY WITH THE LATERAL FORCE REQUIREMENTS FOR SECTION 2305, PART 2, TITLE 24, CCR. UNLESS OF THE CABLE TYPE FREE SWING SUSPENSION SYSTEM SHALL HAVE A SAFETY WIRE OR CABLE ATTACHED TO THE FIXTURE AND STRUCTURE AT EACH SUPPORT CAPABLE OF SUPPORTING FOUR TIMES THE SUPPORTED LOAD.
- 12. FOR SUSPENDED AND SURFACE MOUNTED LIGHT FIXTURES, THE PRODUCT OF ICP NEED NOT EXCEED 12 FOR ANY VALUE OF 1.
- 13. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THAT THE FIXTURE BALLAST OR DRIVER VOLTAGE MATCHES THE CIRCUIT VOLTAGE SUPPLYING FIXTURE PRIOR TO ORDERING.
- 14. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY BALLAST/DRIVER DIMMING CONFIGURATION IS COMPATIBLE WITH CONTROLS BEING PROVIDED PRIOR TO ORDERING FIXTURES. EX. 2 WIRE, 3 WIRE, 4 WIRE,
- 15. LED LIGHT FIXTURES SHALL BE IN ACCORDANCE WITH IES, NFPA, UL, AS SHOWN ON THE DRAWINGS, AND AS SPECIFIED.
- 16. LED LIGHT FIXTURES SHALL BE REDUCTION OF HAZARDOUS SUBSTANCES (ROHS)-COMPLIANT.
- 17. LED DRIVERS SHALL INCLUDE THE FOLLOWING FEATURES UNLESS OTHERWISE INDICATED: MINIMUM EFFICIENCY: 85% AT FULL LOAD.
- MINIMUM OPERATING AMBIENT TEMPERATURE: -20 DEG C. (-4 DEG F.) INPUT VOLTAGE: 120 - 277V (±10%) AT 60 HZ., UNLESS OTHERWISE INDICATED.
- INTEGRAL SHORT CIRCUIT, OPEN CIRCUIT, AND OVERLOAD PROTECTION. POWER FACTOR: >=0.95.
- TOTAL HARMONIC DISTORTION: <=20%.</li> COMPLY WITH FCC 47 CFR PART 15.
- 18. LED MODULES SHALL INCLUDE THE FOLLOWING FEATURES UNLESS OTHERWISE INDICATED:
- COMPLY WITH IES LM-79 AND LM-80 REQUIREMENTS. MINIMUM CRI 80 AND COLOR TEMPERATURE 4000K UNLESS OTHERWISE SPECIFIED IN LUMINAIRE SCHEDULE.
  - MINIMUM RATED LIFE: 50,000 HOURS PER IES L70.
- LIGHT OUTPUT LUMENS AS INDICATED IN THE LUMINAIRE SCHEDULE.
- 19. 23. LED DOWNLIGHTS: HOUSING, LED DRIVER, AND LED MODULE SHALL BE PRODUCTS OF THE SAME MANUFACTURER.
- 20. 24. LED TROFFERS: LED DRIVERS, MODULES, AND REFLECTOR SHALL BE ACCESSIBLE, SERVICEABLE, AND REPLACEABLE FROM BELOW THE CEILING. HOUSING, LED DRIVER, AND LED MODULE SHALL BE PRODUCTS OF THE SAME MANUFACTURER.
- 21. ALL FIXTURES MOUNTED OUTDOORS SHALL BE LISTED FOR WET LOCATION.
- 22. ALL REMOTE DRIVERS SHALL BE CONCEALED ABOVE CEILING OR PLACED IN A REMOTE LOCATION WHEN ATTIC SPACE IS NOT AVAILABLE.

		LIGHTING CONTROLS SEQUE	NCE OF OPE	RATIONS	
IGHT CONTROLS SHALL F	PERFORM AS FO	LOWS:			
ZONE	DELAY TO OFF (MIN)	ON/OFF METHOD	TECHNOLOGY	DAYLIGHTING	NOTES
RESTROOMS	5	AUTO ON/AUTO OFF	DUAL	N/A	
OFFICE	10	AUTO ON TO 50%/MANUAL ON TO 100%/AUTO OFF	DUAL	DIM TO ALLOW 30 FC ON WORK SURFACE	
CONFERENCE ROOM	15	AUTO ON/AUTO OFF	DUAL	DIM TO ALLOW 35 FC ON WORK SURFACE	TUNE FOR NOISE DO NO
NURSES STATION	15	AUTO ON/AUTO OFF	DUAL	N/A	TUNE FOR NOISE, DO N LOCATE NEAR AIR VEN
CORRIDORS	15	TIME CLOCK ON/OFF, DIM TO 50% AFTER DELAY	DUAL	DIM TO ALLOW 10 FC ON WORK SURFACE	LOCATE NEAR AIR VEN
.OBBY	15	AUTO ON/AUTO OFF	DUAL	DIM TO ALLOW 20 FC ON WORK SURFACE	-
XAM ROOM	15	AUTO ON/AUTO OFF	DUAL	DIM TO ALLOW 40 FC ON WORK SURFACE	
EXTERIOR LIGHTING	10	PHOTOCELL ON/TIME CLOCK OFF, DIM TO 50% AFTER DELAY	INFRARED	N/A	N/A

**PROJECT No.:** 9/10/2025 1:38:25 PM

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INDIAN SPRINGS HIGH SCHOOL HEALTH LUMINAIRE SCHEDULE

RUHNAU

CLARKE

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DESIGN WEST ENGINEERING

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Documentation Software: EnergyPro

Compliance ID: EnergyPro-4473-0925-4519

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M. ADDITIONAL LIGHTING ALLOWANCE: TAILORED FLOOR AND TASK LIGHTING

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance

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CONSULTANT BRANDING

ARCHITECTS

PROJECT No. :

G. MODULAR LIGHTING SYSTEMS

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CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance

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Schema Version: rev 20220101

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Compliance ID: EnergyPro-4473-0925-4519

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Compliance ID: EnergyPro-4473-0925-4519

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RATED ASSEMBLY LEGEND

1-HR FIRE RATED WALL ASSEMBLY

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#### AIR WIRELESS COMMUNICATION FROM LOCAL DEVICES REACHING THE NLIGHT AIR ADAPTER. 3. FOR OPTIMAL PERFORMANCE INSTALL THE NLIGHT AIR ADAPTER VERTICALLY IN A CENTRAL LOCATION, SUCH AS IN A CORRIDOR OR A SPACE WITH LITTLE OBSTRUCTION BETWEEN THE ADAPTER AND THE RECEIVING DEVICES IN ITS INITIAL BROADCAST RANGE. San Bernardino, CA 92408 Phone: 909.890.3700 4. THE NLIGHT AIR ADAPTER CABLE WILL ALLOW FOR MOUNTING UP TO 15' FROM THE NLIGHT Fax: 909.890.3770 5. IF SITE CONDITIONS PREVENT UNOBSTRUCTED ACCESS, CONTACT LOCAL ACUITY BRANDS

LOCAL REP LOCATOR: https://www.acuitybrands.com/support/how-to-buy

ACUITY BRANDS TECH SUPPORT: (800) 535-2465

NETWORKED DESIGN NOTES:

ECLYPSE.

REPRESENTATIVE OR TECHNICAL SUPPORT.

1. THE RELIABILITY OF ALL WIRELESS SIGNALS ARE HEAVILY DEPENDANT ON DEVICE LOCATION.

2. PHYSICAL OBJECT INTERFERENCE (ESPECIALLY METAL AND LARGE BARRIERS) CAN INHIBIT NLIGHT

# nLight AIR System Notes:

- 1. INITIAL NETWORKED NLIGHT AIR DEVICES SHOULD BE LOCATED WITHIN 100 FEET OF AN NLIGHT AIR ADAPTER IN INDOOR APPLICATIONS, UNLESS A SITE SURVEY HAS BEEN DONE TO CONFIRM OTHERWISE.
- 2. FOR MAXIMUM RANGE, THE NLIGHT AIR ADAPTER, WHICH IS USED FOR NETWORK COMMUNICATION, SHOULD BE MOUNTED IN AN OPEN INDOOR AREA (SUCH AS A CORRIDOR) AND SHOULD NOT BE LOCATED IN AN ENCLOSED SPACE (SUCH AS AN ELECTRICAL CLOSET).
- 3. A MAXIMUM 1,000-FOOT, LINE-OF-SIGHT DISTANCE SHOULD BE USED FOR OUTDOOR APPLICATIONS WHERE LINE OF SIGHT IS AVAILABLE BETWEEN THE NLIGHT AIR ADAPTER AND DEVICES RECEIVING AN INITIAL BROADCAST. 4. AN NLIGHT ECLYPSE WITH CONNECTED NLIGHT AIR ADAPTER CAN SUPPORT 750 DEVICES TOTAL. STANDALONE NLIGHT AIR GROUPS CAN CONTAIN UP TO 128 NLIGHT AIR DEVICES, AND ALL DEVICES SHOULD BE LOCATED WITHIN A MAXIMUM OF 1,000 FEET CLEAR LINE-OF-SIGHT OF EACH DEVICE WITHIN THE GROUP.
- 5. SOME CEILING MOUNTED NLIGHT AIR SENSORS WILL REQUIRE A CONNECTION TO A POWER SUPPLY OR NLIGHT AIR POWERPACK FOR LOW VOLTAGE POWER. SEE THE RCMS SPECIFICATION SHEETS FOR MORE INFORMATION. BATTERY POWERED SENSORS ARE AVAILABLE FOR INDOOR APPLICATIONS (RCMSB SENSORS). SEE THE RCMSB SPECIFICATION SHEETS FOR MORE INFORMATION.
- 6. SOME BATTERY POWERED NLIGHT AIR SWITCHES AND CEILING MOUNTED SENSORS (RPODB AND RCMSB SERIES) INCLUDE AN INTERNAL BATTERY, RATED FOR A 10-YEAR LIFE EXPECTANCY. LINE-VOLTAGE POWERED SWITCHES ARE AVAILABLE. SEE THE RPOD SPECIFICATION SHEET FOR MORE INFORMATION ON AVAILABLE OPTIONS.
- 7. NLIGHT AIR DEVICES MUST BE PROGRAMMED THROUGH THE CLAIRITY PRO MOBILE APPLICATION BEFORE THEY CAN BE CONTROLLED OR NETWORKED TO AN NLIGHT ECLYPSE WITH CORRESPONDING NLIGHT AIR ADAPTER.

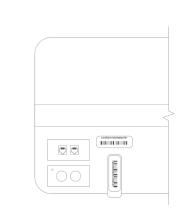
# ARP INTENC08 NLT 8FCR/8SPR DTC

CAT5 CABLE TO DIGITAL nLIGHT DEVICES -

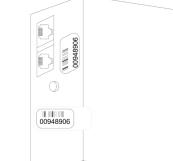
TERMINATOR or CAT5 TO ANOTHER DIGITAL

NLIGHT DEVICE IF REQUIRED

nDTC GUI TOUCH SCREEN



BAR CODE ON NLIGHT ENABLED FIXTURE



BAR CODE ON NLIGHT DEVICE

ARP w/ DTC

(8 RELAY ENCLOSURE SHOWN)

\* NLIGHT RELAY PANELS VARY FROM

4,8,12,16,32,48 RELAY INTERIOR.

BARCODE INSTRUCTIONS:

EVERY NLIGHT ENABLED DEVICE (INCLUDING NLIGHT EANABLED FIXTURES) IS FURNISHED WITH (1) PERMANENTLY ADHERED ID TAG AND (1) MATCHING, PARTIALLY ADHERED ID TAG TO BE PLACED ON THE RISER DIAGRAM SHEET PROVIDED AS PART OF AN NLIGHT SUBMITTAL.DURING INSTALLATION AND PRIOR TO FACTORY STARTUP, CONTRACTOR SHALL PLACE EACH ID TAG BELOW EACH CORRESPONDING DEVICE SHOWN ON RISER DIAGRAM TO FACILITATE FACTORY STARTUP. FAILURE TO COMPLY MAY RESULT IN STARTUP DELAYS AND ADDITIONAL COSTS AT THE CONTRACTOR'S EXPENSE. DO NOT PLACE DEVICE ID STICKERS ON FLOOR PLAN UNLESS REQUIRED TO EXECUTE NFLOORPLAN SERVICES, REFERENCE NFLOORPLAN SERVICE NOTES ON THIS SHEET FOR SPECIFIC REQUIREMENTS.

LOAD (a) FIXTURE TYPE A1

(see plans for qty)

LOAD (b)

FIXTURE TYPE A1

(see plans for qty)

LOAD (c) FIXTURE TYPE A1

(see plans for qty)

LOAD (d)

FIXTURE TYPE A2

(see plans for qty)

LOAD (e) FIXTURE TYPE A2

(see plans for qty)

'un momentation de la contraction de la contract

THE SMALL BARCODE LABELS INCLUDED WITH ALL NLIGHT DEVICES AND NLIGHT ENABLED FIXTURES MUST BE PLACED ON A PRINTED PLAN BY THE INSTALLER PRIOR TO ONSITE SYSTEM STARTUP THE BARCODE INDICATES THE UNIQUE ID OF EACH NLIGHT DEVICE. THIS ID IS USED DURING SYSTEM STARTUP TO PROGRAM DEVICES WITH THE CORRECT GROUPINGS AND SETTINGS. WITHOUT THIS, SYSTEM STARTUP WILL REQUIRE ADDITIONAL DAYS ON THE JOB TO LOCATE DEVICE IDS.

- 1. PRINT A PLAN OF THE INSTALLATION AREA TO A MINIMUM D SIZE (24 X 36 ). THE PLAN MAY BE A REFLECTED CEILING PLAN, LIGHTING PLAN, OR ELECTRICAL PLAN, SO LONG AS ALL DEVICES CAN BE
- LOCATED BY THE FIELD SUPPORT ENGINEER. 2. PLACE THE SMALL BARCODE LABEL (0.875 LONG) FROM EACH LUMINAIRE AND DEVICE ON THE
- FLOORPLAN, THE LARGE BARCODE LABEL (1,25 LONG) CAN BE USED ON THE OUTSIDE OF ANY HOUSING OR JUNCTION BOX THAT OBSCURES THE ID NUMBER SHOWN ON THE DEVICE ITSELF.
- 3. SAVE THE PLAN AT THE JOB SITE, AND HAND OVER TO ACUITY FIELD SUPPORT ENGINEER OR OTHER PERSONNEL RESPONSIBLE FOR ONSITE SYSTEM STARTUP. IT IS ALSO ACCEPTABLE TO PROVIDE THE BARCODE PLAN AS SCANNED PDF FILES, EMAILED TO YOUR LOCAL LIGHTING AGENCY IF YOU DO NOT KNOW YOUR LOCAL LIGHTING AGENCY. PLEASE REACH OUT TO TECH SUPPORT AT 1 (800) 535-2465, OPTION 1 FOR NLIGHT. THEY WILL BE ABLE TO IDENTIFY YOUR LOCAL REP.
- 4. DRAW ON PLAN ANY LOCATION CHANGES FOR A FIXTURE OR DEVICES, IF DIFFERENT THAN SHOWN

# NLIGHT BARCODE INSTRUCTIONS

NLIGHT-ENABLED NLIGHT-ENABLED NLIGHT-E

FIXTURE

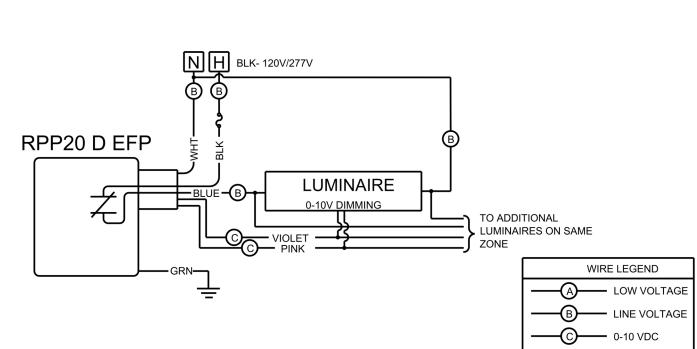
NLIGHT-ENABLED NLIGHT-ENABLED NLIGHT-ENABLED

FIXTURE FIXTURE (EM) FIXTURE

NLIGHT-ENABLED NLIGHT-ENABLED

FIXTURE (EM)

LCMMX673 

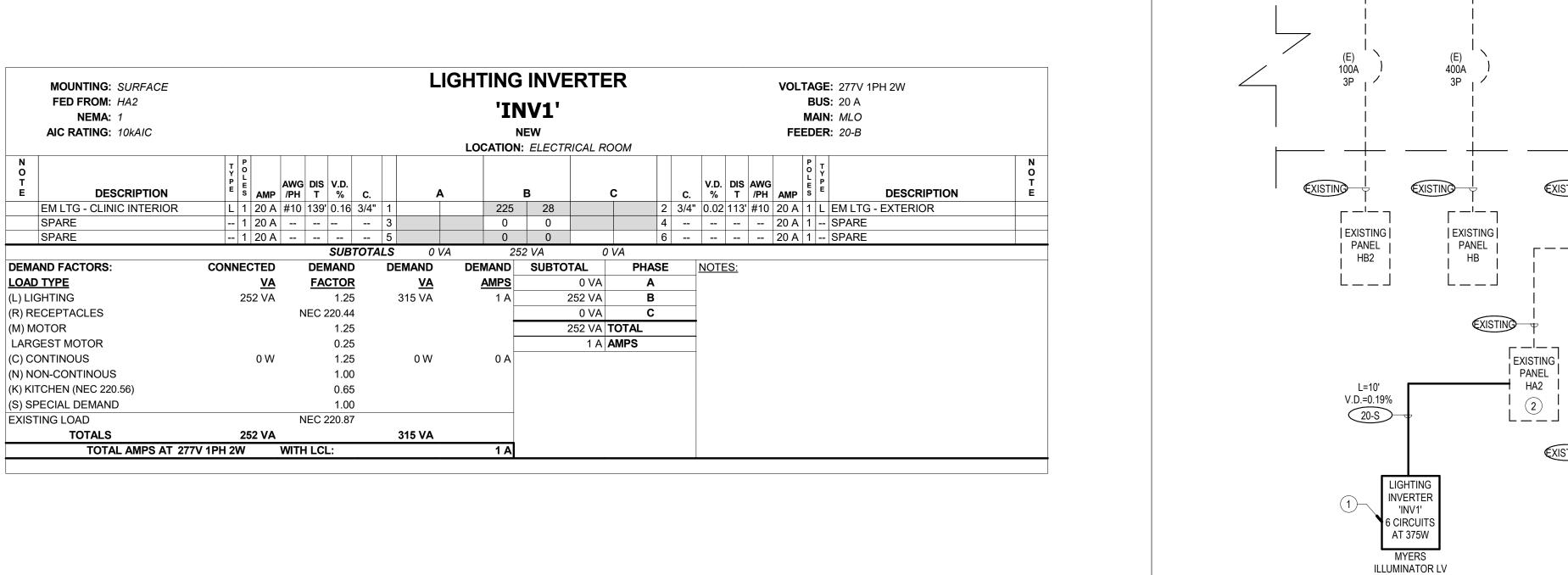


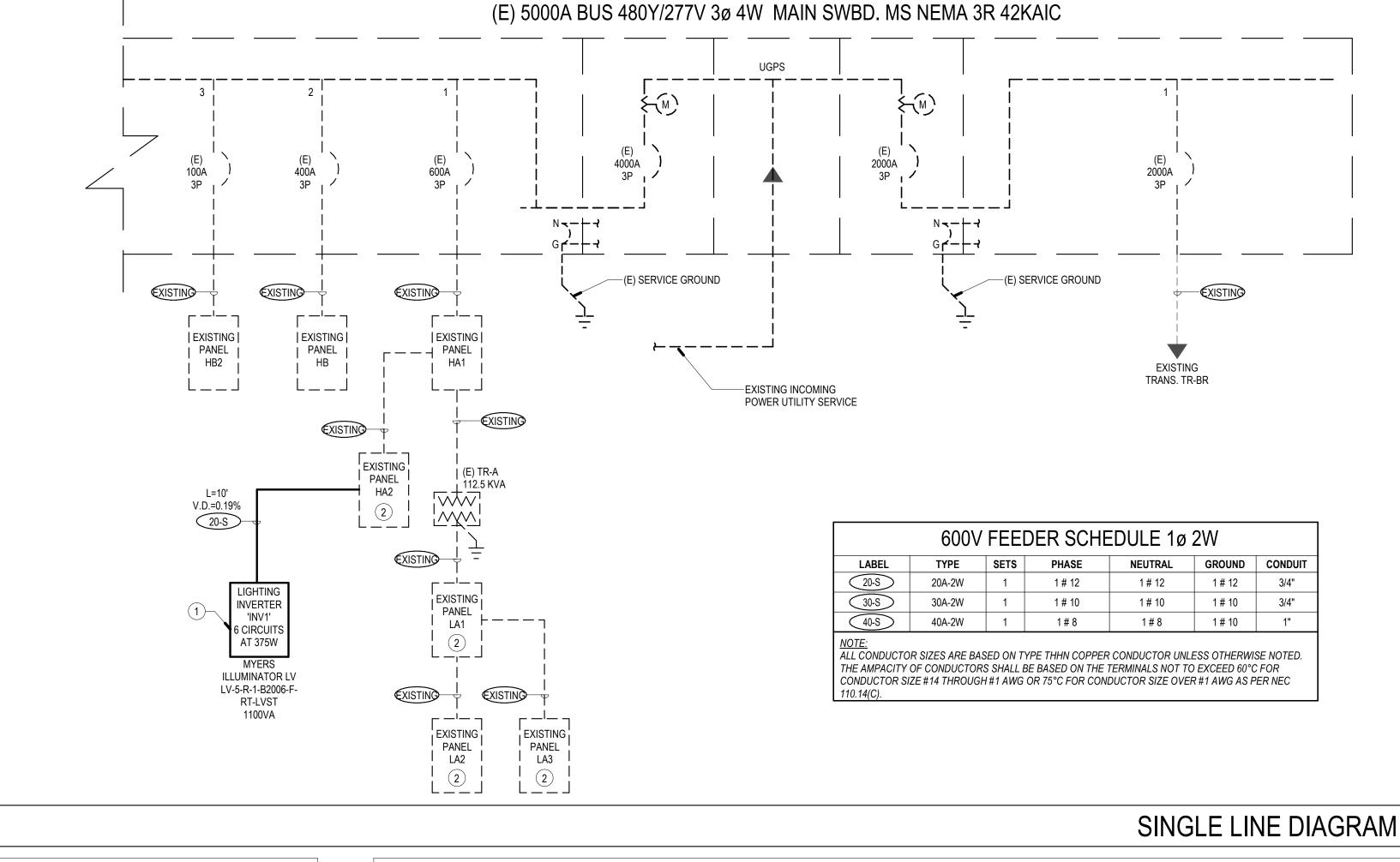
TYPICAL WIRING DIAGRAM: RPP20 D EFP

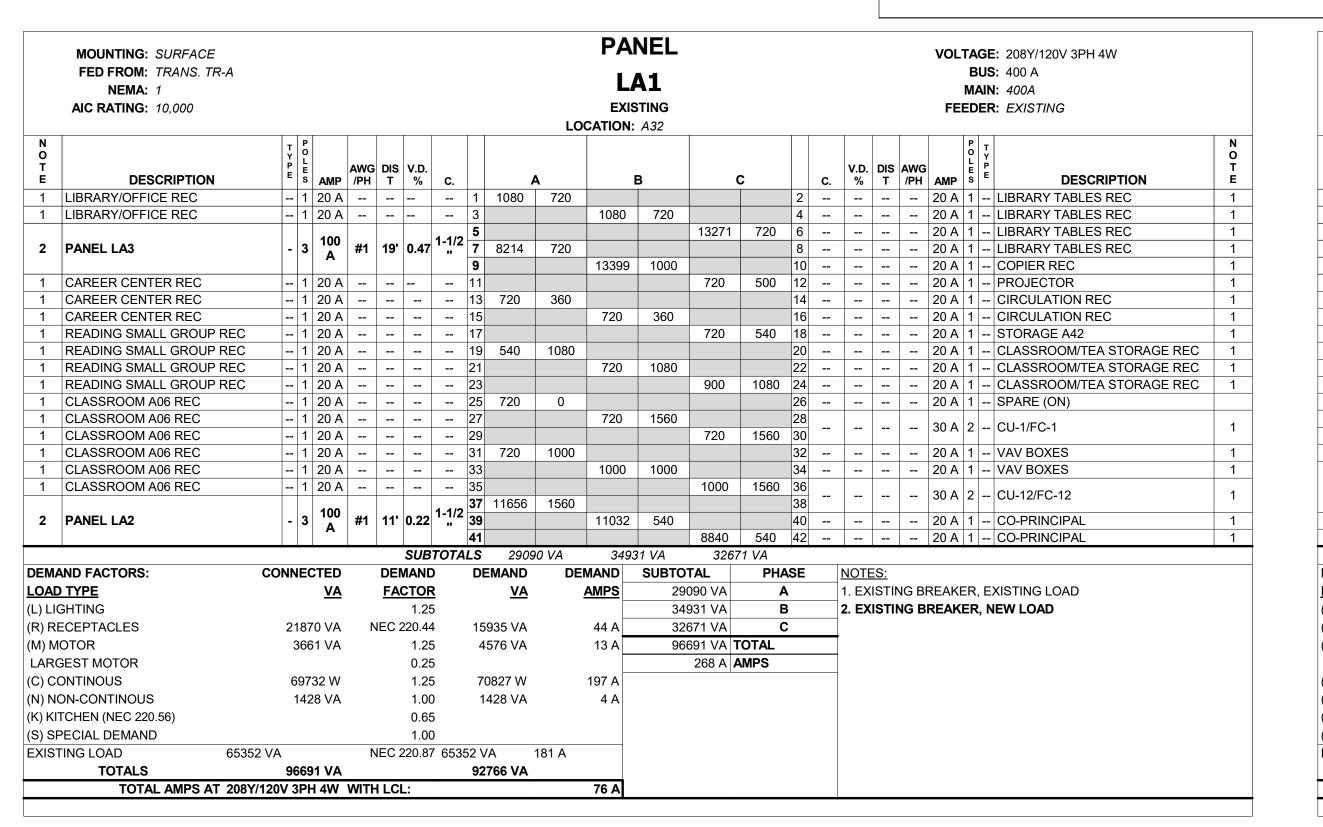
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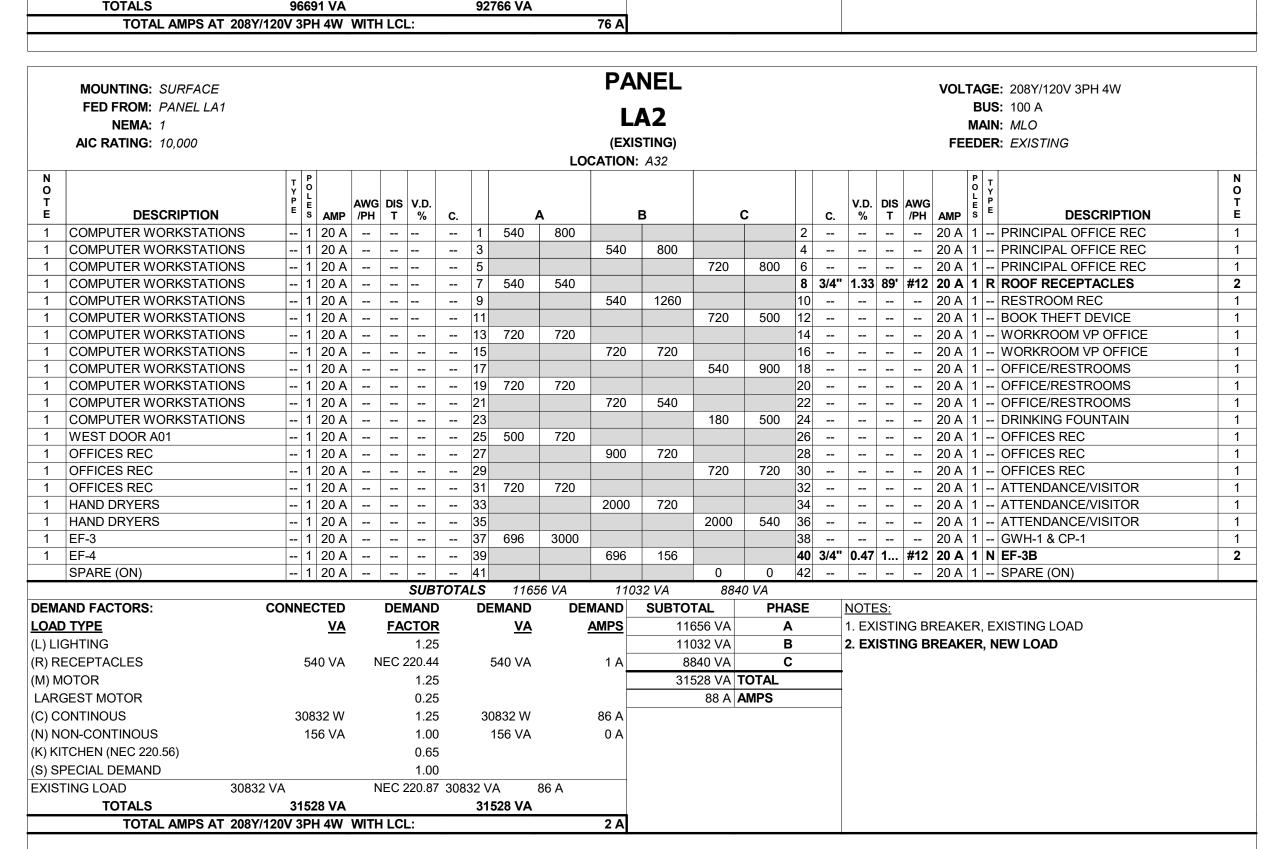
**INDIAN SPRINGS HIGH SCHOOL** 

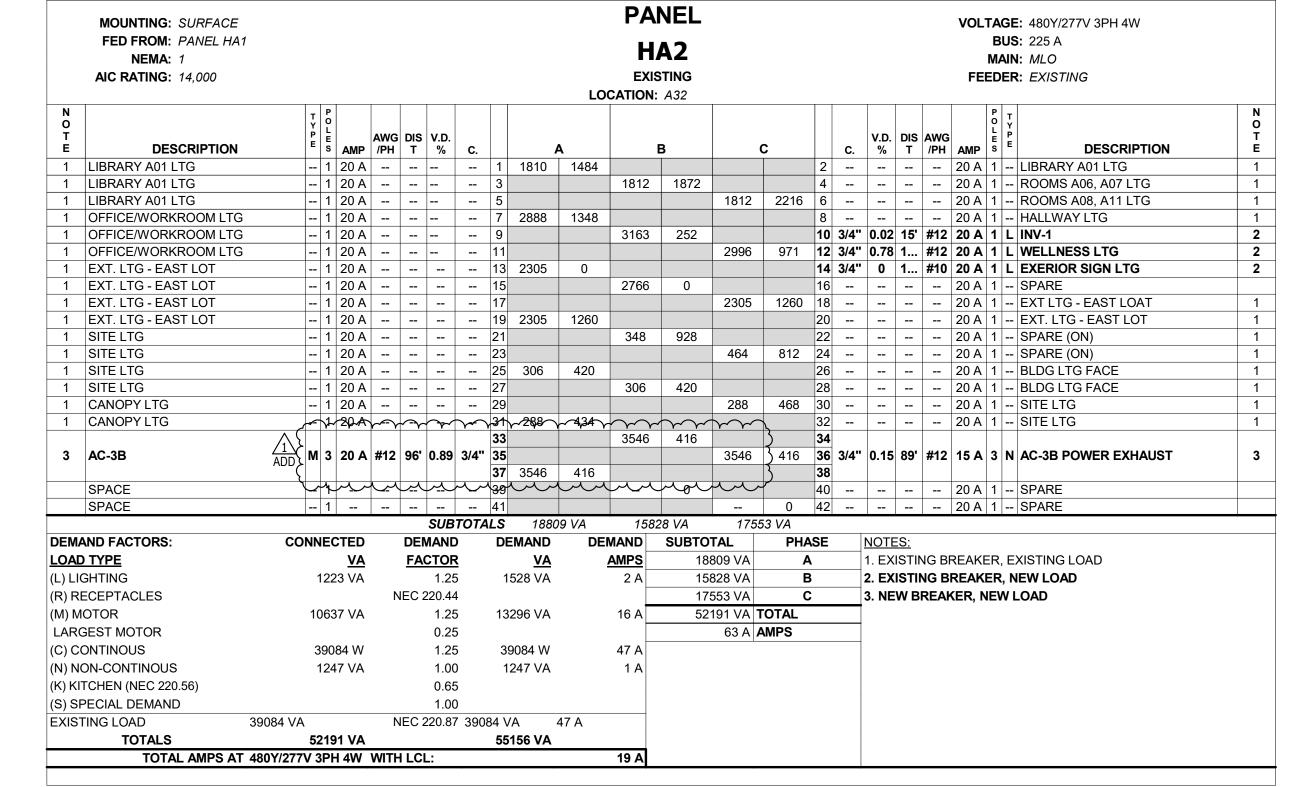
650 N DEL ROSA DR, SAN BERNARDINO, CA 92410











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MOUNTING: SURFACE							PA	NEL						vo	TAGE	∷ 208Y/120V 3PH 4W	
FED FROM: PANEL 'LA1'								4.2							BUS	<b>3:</b> 100 A	
NEMA: 1							L	<b>A3</b>							MAI	I: M.L.O.	
<b>AIC RATING</b> : 10,000							(EXIS	STING)						F	EDEF	R: EXISTING	
,						LO	CATION:	-									
N	тР														РТ	N	7
O	T O Y L	AVACC	DIE V D									\ <sub>V</sub> D	DIC AVA		O Y	0 T	
E DESCRIPTION	E   E   AI	MP /PH	DIS V.D. T %	c.		Α		В		3	C.	V.D.	DIS AW	G I AMF	SE	DESCRIPTION	
1 IRRIGATION	1 20			/	1000	540					2					BOOK SHELF A05 REC 1	7
~~ SPAREYON}~~~~	~~~~1/26	A~~~		~~	3	~~~	~~	V-540 V	~~	~~	<b>4~~</b>	<b>√</b> ~	~~~	v 20/	4-	BOOKSHELFAOSREC	$\vec{\uparrow}$
1 CAREER CENTER A08 REC	1 20			{					720					_		ROLLER-SHADE MOTORS 2	73
1 CAREER CENTER A08 REC	1 20	) A		7	7 720	1080					8 3/4"	1.59	53' #12	2 20 /	1 R	SOCIAL WORKER (SBCUSD) 111 2	7
1 CAREER CENTER A08 REC	1 20	O A		{	)		720	720			10 3/4"	1.42	71' #1	2 20 /	1 R	SWSS CLERK 112 REC 2	$\neg \rightarrow$
2 MH/BH (SBCUSD) 110 REC	R 1 20	0 A #12 6	66' 1.97 3	3/4" 1	1				1080	1440	12 3/4"	1.76	73' #1	2 20 /	1 R	DATA 109 REC 2	75
2 STORAGE 108 REC	R 1 20	0 A #12 8	80' 1.2 3	3/4" 1	<b>3</b> 540	540					14 3/4"	1.2	80' #12	2 20 /	1 R	NURSE STATION 118 REC 2	] ጚ
2 NURSE STATION 118 REC	R 1 20	0 A #12 9	93' 1.4 3	3/4" 1	5		540	860			16 3/4"	1.28	90' #1	2 20 /	1 R	UNISEX 107/NURSE STATION 118 2	]₹
2 WAITING RM 113 REC	R 1 20	O A #12 1	1 1.33	3/4"   1	7				1080							CLN DIRTY LAB 114/CLOSET 115 2	] 🕽
2 EXAM ROOM 117 REC	R 1 20	0 A #12 9	98' 1.47 3	3/4" 1	900	900					20 3/4"	1.29	86' #12	2 20 /	1 R	MH/BH (SAC) REC 2	_] }
2 PUBLIC LOBBY 101 REC	R 1 20	) A #12 1	1 1.55	3/4" 2	1		540	1080			22 3/4"	1.43	1 #12	2 20 /	1 R	EXAM ROOM 103 REC 2	_ ₹
2 EXAM ROOM 104 REC			1 1.56 3						1080	720		_		_		STORAGE ROOM 106 REC 2	_  ┤
2 EXAM ROOM 105 REC			1 1.74 3			1500						_		_		DATA 109 IDF RACK 2	
2 CLEAN DIRTY LAB 114 REF	RIG.   R   1   20	0 A #12 6	65' 1.35 3	3/4" 2	7		750	2880				1.28	65' #1	30 /	\ 1 C	DATA 109 IDF RACK 2	_  }
3 CLEAN DIRTY LAB 114 REF	RIG. R 2 40	ο Δ #8 #	58' 1.25	1" 2					3000	1831		1 49	73' #10	25 /	. 2 M	OU-1/IU-1 3	{
UPS			20	3	<b>1</b> 3000	1831					32						$\exists \langle \rangle$
SPARE (ON)	1 20			3			0	84	_	_						CONDENSATE PUMP FOR IU-1 2	-  ⅓
USPARE (ON)			~~~		5	<del>~~</del>			ron	non						SPARE(ON)	``` ک <u>ا</u>
SPARE (ON)	1   20			3		0					38			_		SPARE (ON)	_
SPARE (ON)	1 20			3			0	0			40			_		SPARE (ON)	_
SPARE (ON)	1 20	J A		4		74.144	074	( 4 ) ( 4	0	0	42			20 A	.   1	SPARE (ON)	_
	001115075		SUBT			71 VA		4 VA		7 <i>VA</i>	<b>&gt;</b> =	NOTE					4
EMAND FACTORS:	CONNECTE		DEMAND	ı	DEMAND		MAND	SUBTO		PHA	DE .	NOTE		DE 4.1		VIOTING LOAD	
OAD TYPE	7	<u>VA</u> <u>l</u>	FACTOR 1.05		<u>VA</u>	4	<u>AMPS</u>		271 VA	A						XISTING LOAD	
L) LIGHTING	040001		1.25		I F O 4 F \ / A		44.4		714 VA	В					•	IEW LOAD	
R) RECEPTACLES	21830 \		EC 220.44		15915 VA		44 A		267 VA	С		3. NE	N BREA	KER,	NEW	LOAD	
1) MOTOR	3661 \	VA	1.25		4576 VA		13 A	35	251 VA <b>T</b>								
ARGEST MOTOR			0.25						98 A	MPS							
C) CONTINOUS	8620		1.25		9715 W		27 A										
N) NON-CONTINOUS	1140 \	VA	1.00		1140 VA		3 A										
KITCHEN (NEC 220.56)			0.65														
S) SPECIAL DEMAND			1.00														
KISTING LOAD 4	240 VA	NE	EC 220.87	4240 \	/A	12 A											
TOTALS	35251 \	/A			1346 VA												

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#### **GENERAL NOTES**

REFER TO 'GENERAL NOTES' ON ELECTRICAL LEGENDS AND NOTES SHEET FOR WIRING METHODS, MATERIALS, AND REQUIREMENTS.

ALL NEW CIRCUIT BREAKERS, PANELBOARDS AND TRANSFORMERS SHALL BE OF THE SAME MANUFACTURER.

ALL PANELBOARDS SHALL BE FULLY RATED FOR THE AVAILABLE FAULT UNLESS OTHERWISE NOTED.

THE FEEDER LENGTHS SHOWN ON THESE DRAWINGS ARE FOR CALCULATION PURPOSES ONLY AND

CONTRACTOR SHALL UPDATE ALL MODIFIED PANEL DIRECTORIES OR CREATE A NEW TYPED DIRECTORY, IF ONE DOES NOT EXIST, IDENTIFYING EACH CIRCUIT AND INSTALLED CIRCUIT LOADS MOUNTED IN GLASS OR PLASTIC INSIDE DOOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR UPDATING DIRECTORIES TO INDICATE ALL NEW CIRCUITS AND ACTUAL AREA SERVED WHICH IS NOT

ALL SWITCHBOARDS, SWITCHGEAR AND PANELBOARDS AT OTHER THAN DWELLING UNITS SHALL BE LEGIBLY MARKED IN THE FIELD WITH THE MAXIMUM AVAILABLE FAULT CURRENT PER CEC 110.24. THE FIELD MARKING(S) SHALL INCLUDE THE DATE THE FAULT-CURRENT CALCULATION WAS PERFORMED AND BE OF SUFFICIENT DURABILITY TO WITHSTAND THE ENVIRONMENT INVOLVED. THE CALCULATION SHALL BE DOCUMENTED AND MADE AVAILABLE TO THOSE AUTHORIZED TO DESIGN. INSTALL. INSPECT OCCUR THAT AFFECT THE MAXIMUM AVAILABLE FAULT CURRENT AT THE SERVICE. THE MAXIMUM AVAILABLE FAULT CURRENT SHALL BE VERIFIED OR RECALCULATED AS NECESSARY TO ENSURE THE SERVICE EQUIPMENT RATINGS ARE SUFFICIENT FOR THE MAXIMUM AVAILABLE FAULT CURRENT AT

THE LINE TERMINALS OF THE EQUIPMENT. THE REQUIRED FIELD MARKING(S) IN 110.24(A) SHALL BE

ADJUSTED TO REFLECT THE NEW LEVEL OF MAXIMUM AVAILABLE FAULT CURRENT.

NECESSARILY THE DESCRIPTION INDICATED ON THE BID DOCUMENTS. USE A COMPUTER OR

TYPEWRITER TO CREATE DIRECTORY; HANDWRITTEN DIRECTORIES ARE NOT ACCEPTABLE.

EQUIPMENT DATA AND CONFIGURATIONS SHOWN ON THE SINGLE LINE DIAGRAM PROVIDE GENERAL EQUIPMENT INFORMATION. CONTRACTOR SHALL REVIEW ELECTRICAL PLANS AND SPECIFICATIONS TO VERIFY ALL EQUIPMENT ASSOCIATED DESIGN INFORMATION. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL NECESSARY COMPONENTS REQUIRED FOR A COMPLETE AND OPERATIONAL INSTALLATION, ANY DISCREPANCIES BETWEEN DESCRIPTIONS, SPECIFICATIONS, AND EXISTING CONDITIONS ARE TO BE PRESENTED TO THE ENGINEER OF RECORD PRIOR TO COMPLETION OF THE BID PROCESS FOR CLARIFICATION. NO EQUIPMENT SHALL BE ORDERED UNTIL DISCREPANCIES ARE RESOLVED THROUGH A FORMAL RFI PROCESS.

GROUND ALL ELECTRICAL EQUIPMENT, BRANCH CIRCUITS, FEEDERS, PANEL AND DISTRIBUTION BOARDS, ELECTRICAL SERVICES, ETC. PER ADOPTED NEC ARTICLES 250.

ALL ELECTRICAL EQUIPMENT (I.E. SWITCHGEAR, TRANSFORMERS, DISTRIBUTION BOARDS, PANELBOARDS, DISCONNECT SWITCHES, ETC.) SHALL BE PROVIDED WITH A PHENOLIC NAMEPLATE WITH ENGRAVED LETTERS PER SPECIFICATIONS. ALL NAMEPLATES SHALL BE FASTENED WITH A MINIMUM OF TWO (2) MACHINE SCREWS. NO SELF ADHESIVE NAMEPLATES ARE ALLOWED.

ELECTRICAL CONTRACTOR TO INCLUDE IN BID ALL ASSOCIATED COSTS FOR THIRD PARTY TESTING OF ELECTRICAL EQUIPMENT, GROUND FAULT, CONDUCTORS, ETC.

CONTRACTOR SHALL FURNISH AND INSTALL MISSING FILLER PLATES IN PANELBOARD/SWITCHBOARD ALL CONDUCTOR TERMINATIONS SHALL BE TIGHTENED TO MANUFACTURER RECOMMENDATIONS

13. ALL ELECTRICAL EQUIPMENT SHALL BE IDENTIFIED WITH NAMEPLATES, REFER. TO SPECIFICATIONS. IN ADDITION, EACH DISCONNECT MUST BE MARKED TO IDENTIFY ITS PURPOSE AND INCLUDE

IDENTIFICATION OF CIRCUIT SOURCE THAT SUPPLIES DISCONNECTING MEANS. (110.22)

#### **CONSTRUCTION NOTES**

LIGHTING INVERTER TO BE A WALL MOUNTED 1.1kW UNIT WITH A 277V 1PH 2W INPUT AND 277V 1PH 2W OUTPUT. VERIFY EXACT MODEL NUMBER WITH MYERS REPRESENTATIVE PRIOR TO ORDERING.

(2) REFER TO PANEL SCHEDULE FOR ADDITIONAL LOADS CONNECTED TO THIS PANEL.

SAN BERNARDINO CITY UNIFIED SCHOOL DISTRICT

PANEL SCHEDULES

& PANEL SCHEDULES

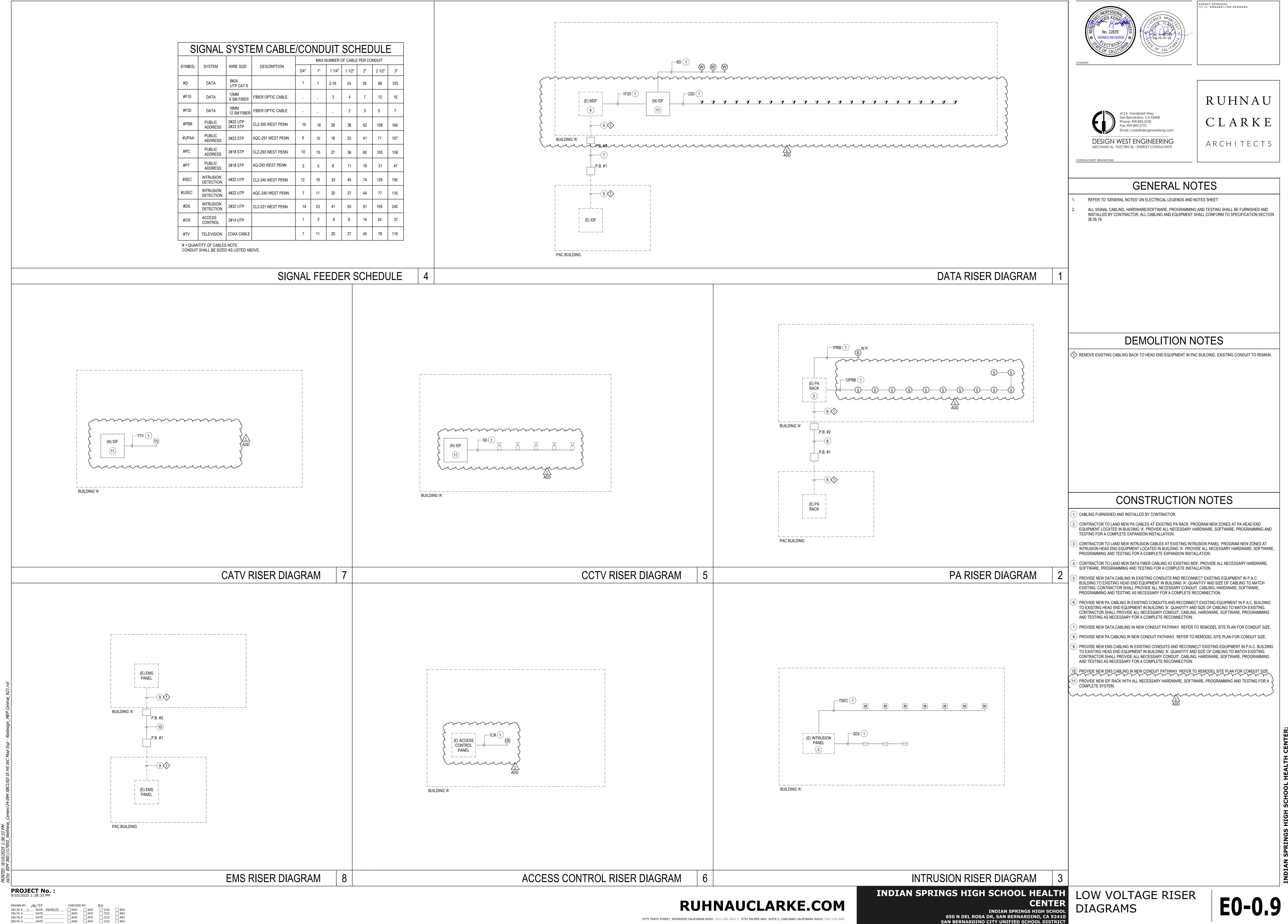
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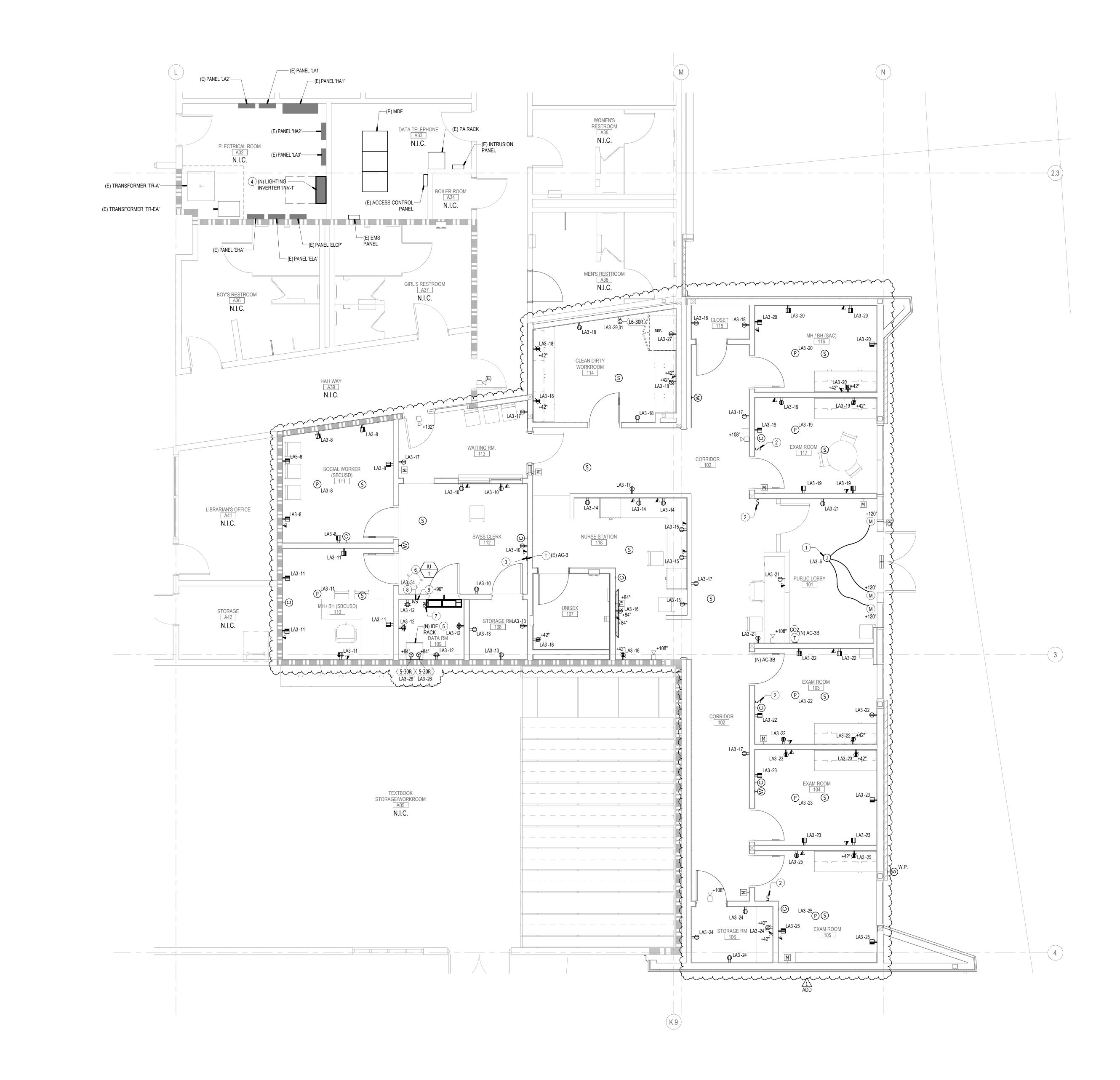
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TOTAL AMPS AT 208Y/120V 3PH 4W WITH LCL:

INDIAN SPRINGS HIGH SCHOOL HEALTH SINGLE LINE DIAGRAM CENTER INDIAN SPRINGS HIGH SCHOOL 650 N DEL ROSA DR, SAN BERNARDINO, CA 92410





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### **GENERAL NOTES**

REFER TO 'GENERAL NOTES' ON ELECTRICAL LEGENDS AND NOTES SHEET. COORDINATE POWER AND DATA DEVICE LOCATIONS, AND DEVICE PLATE COLOR WITH ARCHITECT

NO PIPING, DUCTS OR EQUIPMENT FOREIGN TO ELECTRICAL EQUIPMENT SHALL BE PERMITTED TO BE

ALL EXTERIOR ELECTRICAL EQUIPMENT SHALL BE NEMA 3R. FOR ANY FIRE WALL PENETRATIONS 2" AND UNDER:

REFER TO DETAIL: (AD-2.1)

# CONSTRUCTION NOTES

1) PROVIDE A DEDICATED 120VAC CIRCUIT FOR WINDOW ROLLER-SHADE MOTORS.

PROVIDE WALL SWITCH TO CONTROL ROLLER-SHADES IN THIS ROOM.

NEW LOCATION OF EXISTING THERMOSTAT. EXTEND CONDUIT AND LOW VOLTAGE CABLING AS NECESSARY FOR A COMPLETE RECONNECTION TO EXISTING ROOF AC UNIT. CONDUIT AND CABLING SIZES TO MATCH EXISTING.

4) PROVIDE LIGHTING INVERTER MOUNTED ON WALL.

REFER TO DETAIL: 5 PROVIDE IDF RACK ON WALL.

) INDOOR UNIT SHALL BE POWERED BY OUTDOOR UNIT. REFER TO MANUFACTURER'S SPECIFICATIONS FOR WIRING REQUIREMENTS.

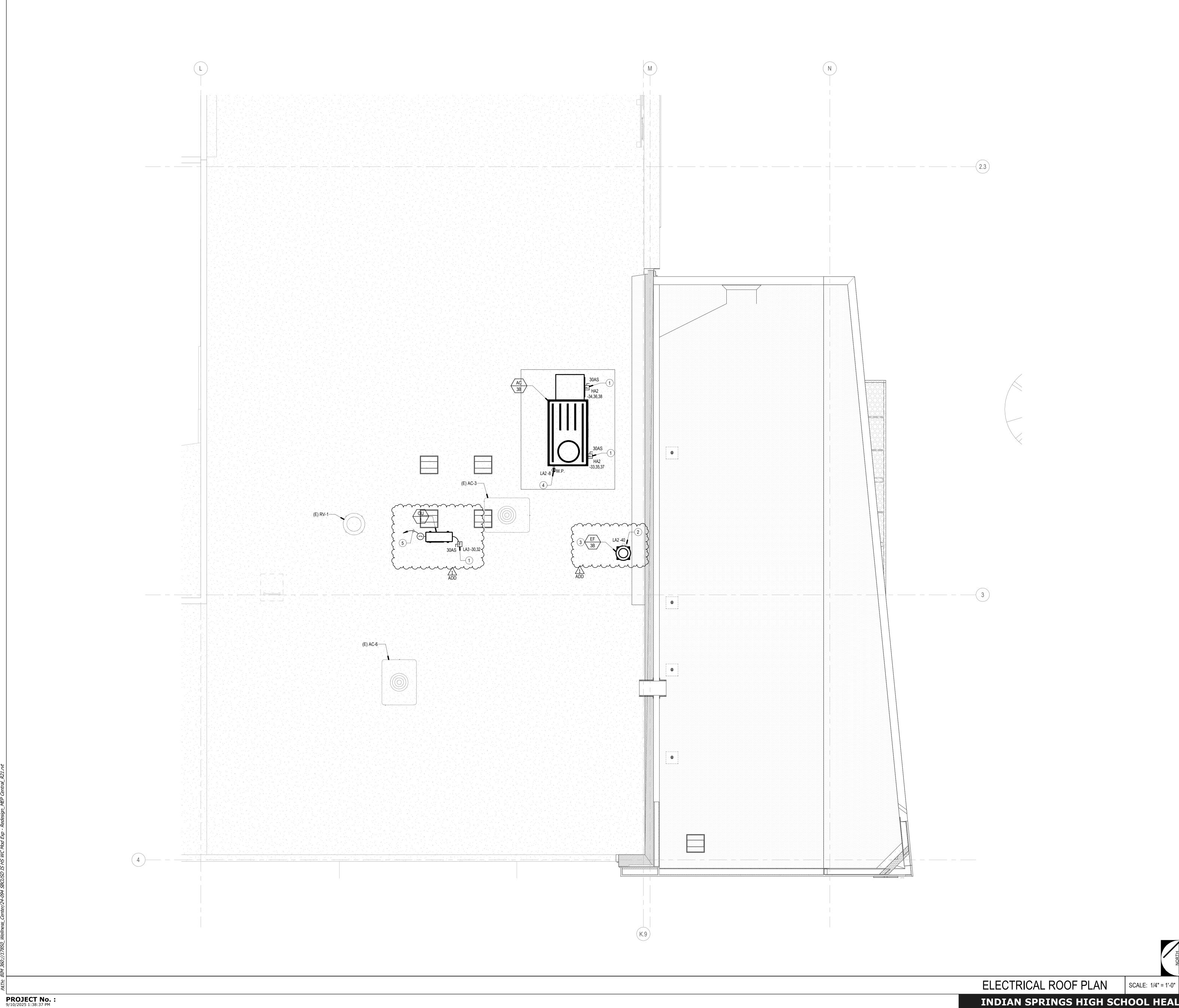
7 PROVIDE NEMA 1 208V 2P MOTOR RATED SNAP SWITCH. 8) PROVIDE A DEDICATED CIRCUIT FOR CONDENSATE PUMP.

(9) PROVIDE NEMA 1 120V 1P MOTOR RATED SNAP SWITCH.

RATED ASSEMBLY LEGEND 1-HR FIRE RATED WALL ASSEMBLY

POWER REMODEL FLOOR PLAN

PROJECT No.: 9/10/2025 1:38:36 PM







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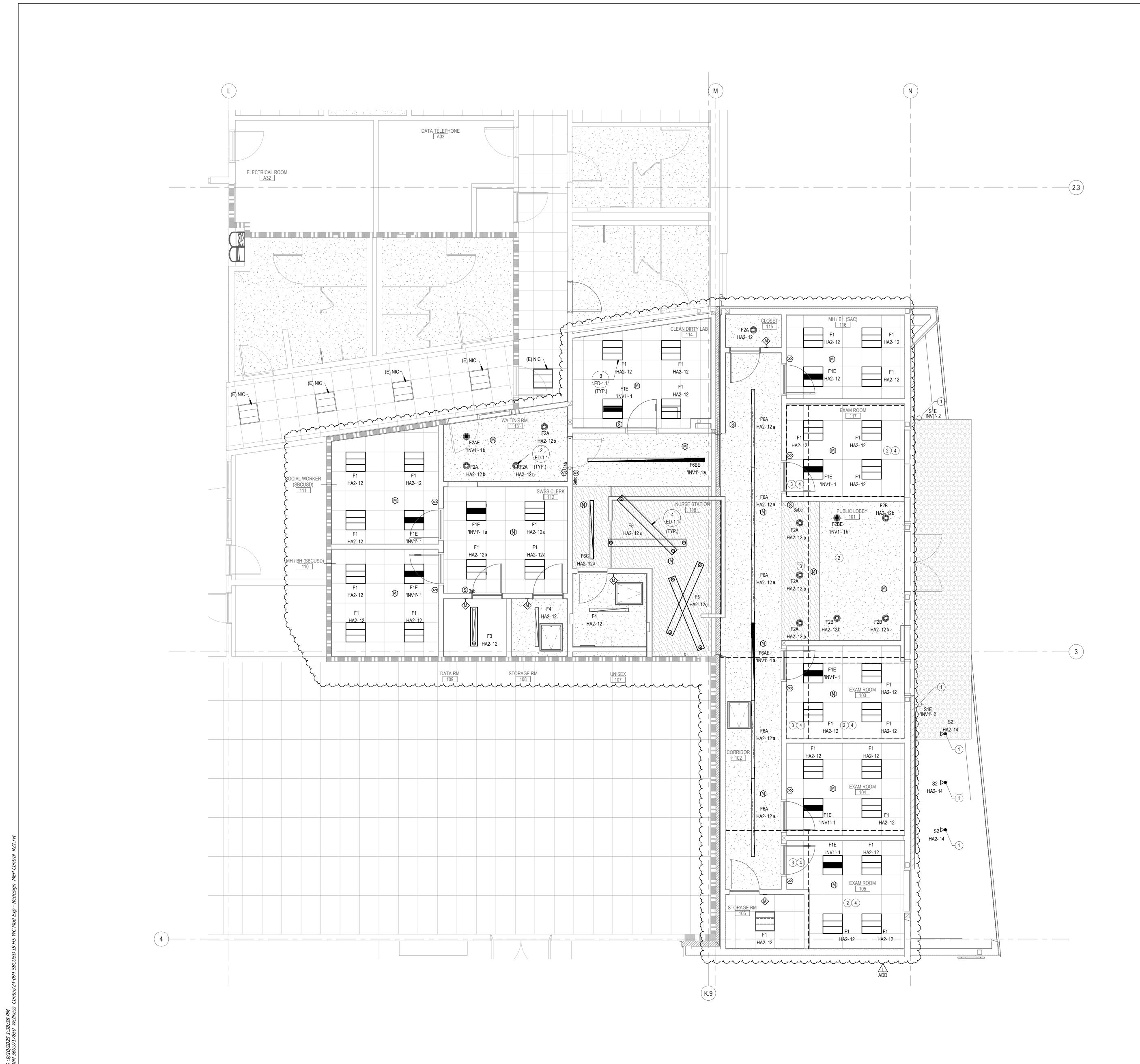
#### **GENERAL NOTES**

- 1. REFER TO 'GENERAL NOTES' ON ELECTRICAL LEGENDS AND NOTES SHEET.
- 2. ALL CONDUITS SHALL BE INSTALLED IN THE CEILING BELOW U.O.N.
- REFER TO MECHANICAL AND PLUMBING PLANS FOR THE EXACT LOCATION OF HVAC EQUIPMENT AND ADDITIONAL WIRING REQUIREMENTS.
- 4. PROVIDE DUCT DETECTOR/S.F.D. POWER AND CONNECTIONS AS INDICATED ON MECHANICAL DRAWINGS.
- 5. PROVIDE FLEXIBLE SEAL TYPE CONDUIT FOR CONNECTION TO ALL HVAC EQUIPMENT.
- 6. MOUNT ALL DISCONNECT SWITCHES INDEPENDENT OF THE HVAC UNIT.
- 7. ALL EXTERIOR ELECTRICAL EQUIPMENT SHALL BE NEMA 3R.
- 8. ALL EXTERIOR RECEPTACLE OUTLETS SHALL BE GFCI TYPE.
- 9. PROVIDE HEAVY DUTY DISCONNECT SWITCHES WITH DUAL ELEMENT FUSES TO MATCH MOTOR H.P.

# **CONSTRUCTION NOTES**

- PROVIDE AND INSTALL H.D. WEATHERPROOF NEMA 3R RATED FUSED DISCONNECT MOUNTED ON UNISTRUT RACK. FUSING PER MECHANICAL EQUIPMENT MANUFACTURERS REQUIREMENTS. VERIFY EXACT LOCATION AND REQUIREMENTS WITH MECHANICAL CONTRACTOR.
- 2 PROVIDE 120V 1P NEMA 3R MOTOR RATED SNAP SWITCH.
- (3) EXHAUST FAN SHALL BE CONTROLLED BY LIGHT SWITCH IN RESTROOM BELOW.
- 4) PROVIDE WEATHER PROOF GFCI WORK OUTLET AS REQUIRED WITHIN 25'-0" OF MECHANICAL EQUIPMENT. EXTEND EXISTING RECEPTACLE CIRCUIT FROM NEAREST ROOF RECEPTACLE AS NECESSARY FOR A COMPLETE

REFER TO DETAIL: (9) (ED4:1) (5) PROVIDE 3/4" CONDUIT TO INDOOR UNIT WITH CONTROL WIRING. REFER TO MECHANICAL SPECIFICATIONS FOR WIRING REQUIREMENTS. 











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ARCHITECTS

#### **GENERAL NOTES**

- COORDINATE LIGHT FIXTURE LOCATIONS AND LIGHT SWITCH LOCATIONS, COLOR, AND STYLE WITH
- WHERE OCCUPANCY SENSORS ARE SHOWN ON PLANS. VERIFY WATTAGE AND COVERAGE OF PRODUCT PROVIDED IS ADEQUATE FOR SPACE TO BE CONTROLLED. COVERAGE IS TO BE ADJUSTED TO AVOID ACCIDENTAL ACTIVATION OUTSIDE OF AREA. VERIFY WIRING REQUIREMENTS TO ADDITIONAL SENSORS, ROOM CONTROLLERS, RELAY PACKS, ETC WITH PRODUCT BEING PROVIDED.

OCCUPANCY SENSORS SHALL NOT BE LOCATED WITHIN FOUR FEET OF ANY HVAC DIFFUSER.

- WHERE DAYLIGHT SENSORS ARE SHOWN ON PLANS, LOCATION SHOWN IS DIAGRAMMATICAL. VERIFY LOCATION IS PER MANUFACTURER RECOMMENDATIONS BASED ON TYPE OF SENSOR (OPEN/CLOSED LOOP). VERIFY WIRING REQUIREMENTS TO ADDITIONAL SENSORS, ROOM CONTROLLERS, RELAY PACKS, ETC WITH PRODUCT BEING PROVIDED.
- PROVIDE NON-SWITCHED 'HOT' POWER WIRE TO BATTERY PACK CHARGING/SENSOR IN FIXTURE. REFER TO LIGHTING CONTROL DETAILS FOR WIRING AND CONDUIT REQUIREMENTS. CONTRACTOR
- SHALL PROVIDE ALL WIRING AND CONDUITS REQUIRE BY MANUFACTURER TO FIXTURES AND
- FINAL MOUNTING LOCATIONS OF ALL OCCUPANCY AND PHOTOCELL DEVICES SHALL COORDINATED WITH MANUFACTURERS RECOMMENDATIONS AND FIELD ADJUSTED WITH REPRESENTATIVE AS

### **CONSTRUCTION NOTES**

- 1) ROUTE THROUGH nLIGHT SYSTEM FOR PHOTOCELL AND TIME CLOCK CONTROL. VERIFY SETTTINGS WITH DISTRICT MAINTENANCE PRIOR TO SYSTEM START UP.
- (2) PRIMARY DAYLIGHTING ZONE.
- 3 SECONDARY DAYLIGHTING ZONE.
- (4) TOTAL INSTALLED WATTS IN PRIMARY SIDELIT DAYLIT ZONE DOES NOT EXCEED 120 WATTS, THEREFORE, AUTOMATIC DAYLIGHTING CONTROLS ARE NOT REQUIRED. SECTION 130.1(D)2
- TOTAL INSTALLED WATTS IN SECONDARY SIDELIT DAYLIT ZONE DOES NOT EXCEED 120 WATTS, THEREFORE, AUTOMATIC DAYLIGHTING CONTROLS ARE NOT REQUIRED. SECTION 130.1(D)2

LIGHTING REMODEL PLAN

650 N DEL ROSA DR, SAN BERNARDINO, CA 92410 SAN BERNARDINO CITY UNIFIED SCHOOL DISTRICT

1-HR FIRE RATED WALL ASSEMBLY

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INDIAN SPRINGS HIGH SCHOOL HEALTH CENTER
INDIAN SPRINGS HIGH SCHOOL

LIGHTING REMODEL
PLAN

RATED ASSEMBLY LEGEND

**PROJECT No.:** 9/10/2025 1:38:38 PM







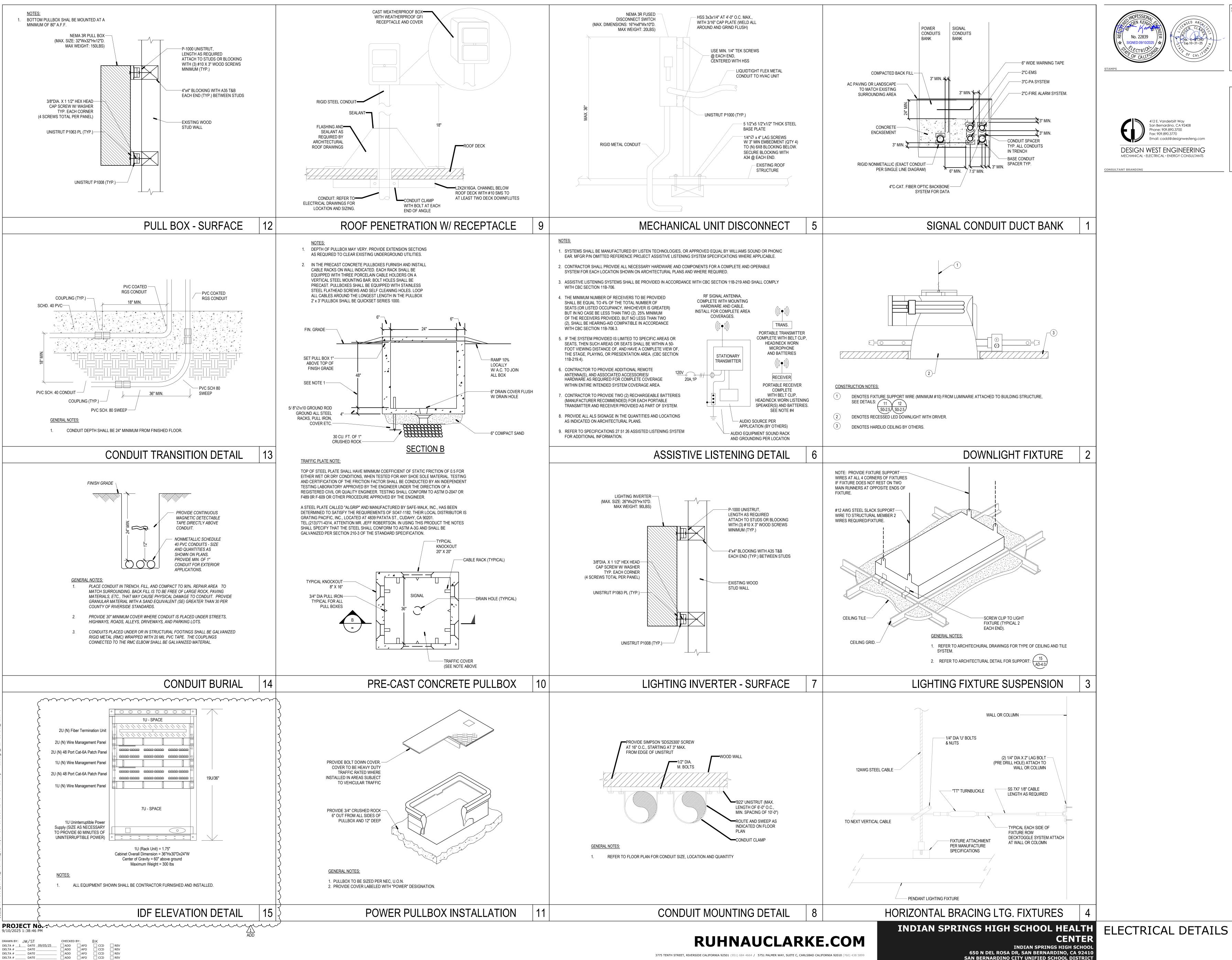
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INDIAN SPRINGS HIGH SCHOOL

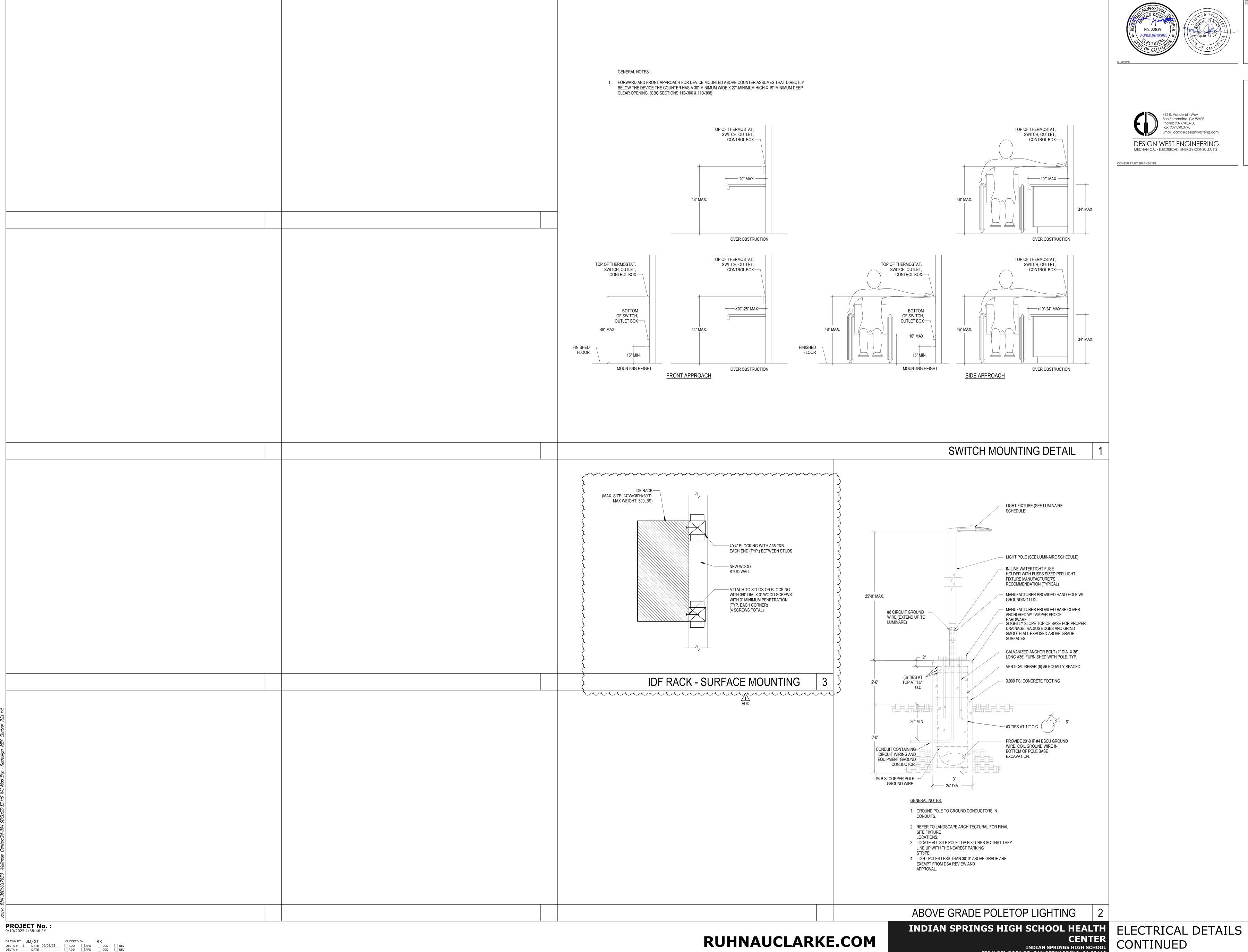
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PROJECT No. :

TO COMPLY WITH THESE CODES OR REGULATIONS.

CONTRACTOR SHALL BE SOLELY AND COMPLETELY RESPONSIBLE FOR ANY ADDITIONAL COSTS FOR MATERIAL OR LABOR

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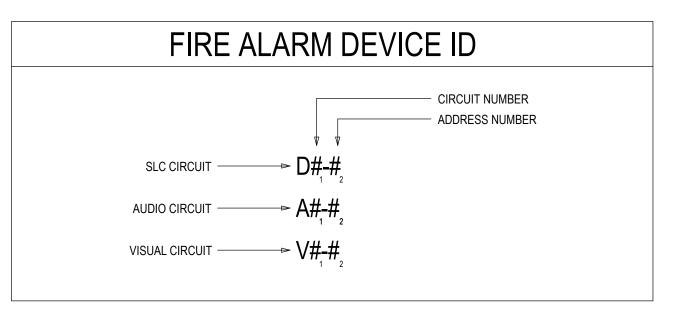
INDIAN SPRINGS HIGH SCHOOL HEALTH FIRE ALARM LEGENDS &

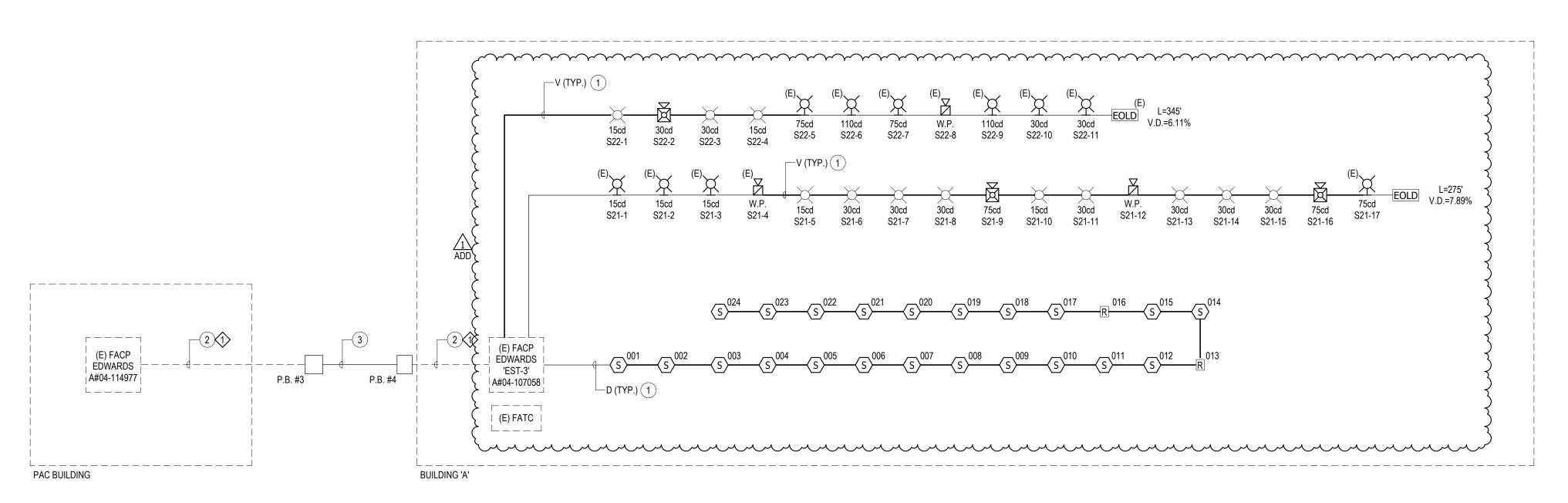
	FIRE A	LARM WIRING S	CHEDULE
TYPE	DESCRIPTION	MANUFACTURE/CATALOG #	PURPOSE
D	2 #16 UTP	INDOOR/WEST PENN NO. D990 OUTDOOR/WEST PENN NO. AQ225	SLC LOOP CIRCUIT
Н	2 #12 THHN/THWN, CU	VINYLON THHN/THWN-2	HORN CIRCUIT
V	2 #12 THHN/THWN, CU	VINYLON THHN/THWN-2	STROBE ALARM CIRCUIT
Р	2 #12 THHN/THWN, CU	VINYLON THHN/THWN-2	L.V. POWER CIRCUIT
N	2 #18 UTP	INDOOR/WEST PENN NO. D980 OUTDOOR/WEST PENN NO. AQ224	NETWORK CIRCUIT

NOTE: -NUMERAL ADJACENT TO CABLE TYPE INDICATES QUANTITY OF CABLES. -EXAMPLE: "3F" DENOTES 3 PAIR OF 2#12 CABLE

> -ALL CONDUIT IS 3/4" U.O.N. -ALL CABLES SHALL BE THHN /THWN (FOR UNDERGROUND)

-FIRE ALARM WIRES SHALL BE UNCOATED SOLID COPPER THHN/THWN. -FIRE ALARM CABLES SHALL BE FPLR TYPE SUITABLE FOR ENVIRONMENT. -REFER TO SPECIFICATIONS FOR NETWORK CABLES AND FOR WIRES COLOR CODE.





VOLTAGE DROP CALCS CIRCUIT 'FACP-S21'

FIRE ALARM RISER DIAGRAM

Location: BUILDING 'A'



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PERMANENTLY IDENTIFIED AT FAPS/FACP.

#### **GENERAL NOTES**

REFER TO 'FIRE ALARM NOTES' ON FIRE ALARM LEGENDS AND NOTES SHEETS.

- ALL STROBES AND SMOKE DETECTORS SHALL BE IDENTIFIED AS "FIRE ALARM CIRCUIT", PER NFPA 72
- NFPA 72 10.6.10.2.1. BATTERIES SHALL BE PROTECTED AGAINST EXCESSIVE CHARGING AND LOAD CURRENTS BY MEANS

STORAGE BATTERY CELLS SHALL BE INSULATED AGAINST GROUNDS FAULTS THAT MIGHT OCCUR, PER

OF AN OVERCURRENT DEVICE, PER NFPA 72 10.6.10.4. THE SECONDARY POWER SUPPLY SHALL AUTOMATICALLY PROVIDE POWER TO THE PROTECTED

PREMISES SYSTEM WITHIN 10 SECONDS AND THE SUPERVISING SYSTEM WITHIN 60 SECONDS OF

MARKING AND IDENTIFICATION FOR 'FIRE ALARM CIRCUIT'. LOCATION OF CIRCUIT BREAKER TO BE

**DEMOLITION NOTES** 

PRIMARY POWER FAILURE, TO MEET MINIMUM VOLTAGE REQUIREMENTS FOR OPERATION (PER NFPA PROVIDE A LISTED BREAKER LOCKING DEVICE FOR THE REMOTE POWER SUPPLY CIRCUIT BREAKER AND FIRE ALARM CONTROL UNIT, PER NFPA 72 10.6.5.4. PROVIDE CIRCUIT BREAKER WITH RED

REMOVE EXISTING CABLING BACK TO HEAD END EQUIPMENT IN PAC BUILDING. EXISTING CONDUIT TO REMAIN.

# **CONSTRUCTION NOTES**

(1) VERIFY WITH FIRE ALARM WIRING SCHEDULE FOR ALL FA CABLING REQUIREMENTS.

PROVIDE NEW FIRE ALARM CABLING IN EXISTING CONDUITS AND RECONNECT EXISTING EQUIPMENT IN P.A.C. BUILDING TO EXISTING HEAD END EQUIPMENT IN BUILDING 'A'. QUANTITY AND SIZE OF CABLING TO MATCH EXISTING. CONTRACTOR SHALL PROVIDE ALL NECESSARY CONDUIT, CABLING, HARDWARE, SOFTWARE, PROGRAMMING AND TESTING AS NECESSARY FOR A COMPLETE RECONNECTION.

3 ) PROVIDE NEW FIRE ALARM CABLING IN NEW CONDUIT PATHWAY. REFER TO REMODEL SITE PLAN FOR CONDUIT

			UNII	AMPS	SIZE			DROP	%
EXISTING 15cd WALL STROBE	3	24	0.059	0.177					
EXISTING 75cd WALL STROBE	1	24	0.152	0.152					
NEW 15cd CEILING STROBE	2	24	0.063	0.126					
NEW 30cd CEILING STROBE	7	24	0.168	1.176					
NEW 75cd CEILING HORN/STROBE	2	24	0.180	0.360					
EXISTING EXTERIOR HORN	1	24	0.040	0.040					
NEW EXTERIOR HORN	1	24	0.049	0.049					
TOTALS		24		2.080	#12	1.6550	275	1.89	7.89
STARTING VOL	TAGE =	20.4			1	VOLTAGE A	AT END O	F LINE =	18.5
			MINI	MUM VOLTAGE PE	R MANUFA	CTURER S	PECIFICA	TIONS =	16.0

QTY VOLTAGE AMPS PER TOTAL ALARM WIRE RES. DIST. VOLT

TYPE	QTY	SUPERVISO	RY CURRENT	ALARM CURRENT			
TIPE	QII	EACH TOTAL		EACH	TOTAL		
EXISTING FACP	1	1.362	1.362	5.647	5.647		
NEW SMOKE DETECTOR	22	0.000051	0.001122	0.000068	0.001496		
NEW RELAY MODULE	2	0.0001	0.0002	0.0001	0.0002		
NEW 15cd CEILING STROBE	4			0.063	0.252		
NEW 30cd CEILING STROBE	8			0.168	1.344		
NEW 30cd CEILING HORN/STROBE	1			0.101	0.101		
NEW 75cd CEILING HORN/STROBE	2			0.180	0.36		
NEW EXTERIOR HORN	1			0.049	0.049		
		TOTALS	1.363322		7.754696		
		TOTAL SUPERVISOR	RY CURRENT	1.363	А		
		SUPERVISORY STA	NDBY TIME	24.0 HRS			
		REQUIRED BATTER	Y (SUPERVISORY)	32.720 AH			
		TOTAL FIRE ALARM	CURRENT	7.755 A			
		FIRE ALARM STAND	BY TIME	0.0833 HRS			
		REQUIRED BATTER	Y (FIRE ALARM)	0.646 AH			
		TOTAL REQUIRED (I MARGIN)	WITH 25% SAFETY	41.707	АН		
		NEW BATTERY		50.0	АН		
		BATTERY REMAININ	G SPARE CAPACITY	8.293	ΔН		

DEVICE	QTY	VOLTAGE	AMPS PER	TOTAL ALARM	WIRE	RES.	DIST.	VOLT	
			UNIT	AMPS	SIZE			DROP	%
EXISTING 30cd WALL STROBE	2	24	0.082	0.164					
EXISTING 75cd WALL STROBE	2	24	0.152	0.304					
EXISTING 110cd WALL STROBE	2	24	0.191	0.382					
NEW 15cd CEILING STROBE	2	24	0.063	0.126					
NEW 30cd CEILING STROBE	1	24	0.168	0.168					
NEW 30cd CEILING HORN/STROBE	1	24	0.101	0.101					
EXISTING EXTERIOR HORN	1	24	0.040	0.040					
TOTALS	3	24		1.285	#12	1.6550	345	1.47	6.11
STARTING VOL	TAGE =	20.4				VOLTAGE A	AT END O	F LINE =	18.9

MINIMUM VOLTAGE PER MANUFACTURER SPECIFICATIONS = 16.0

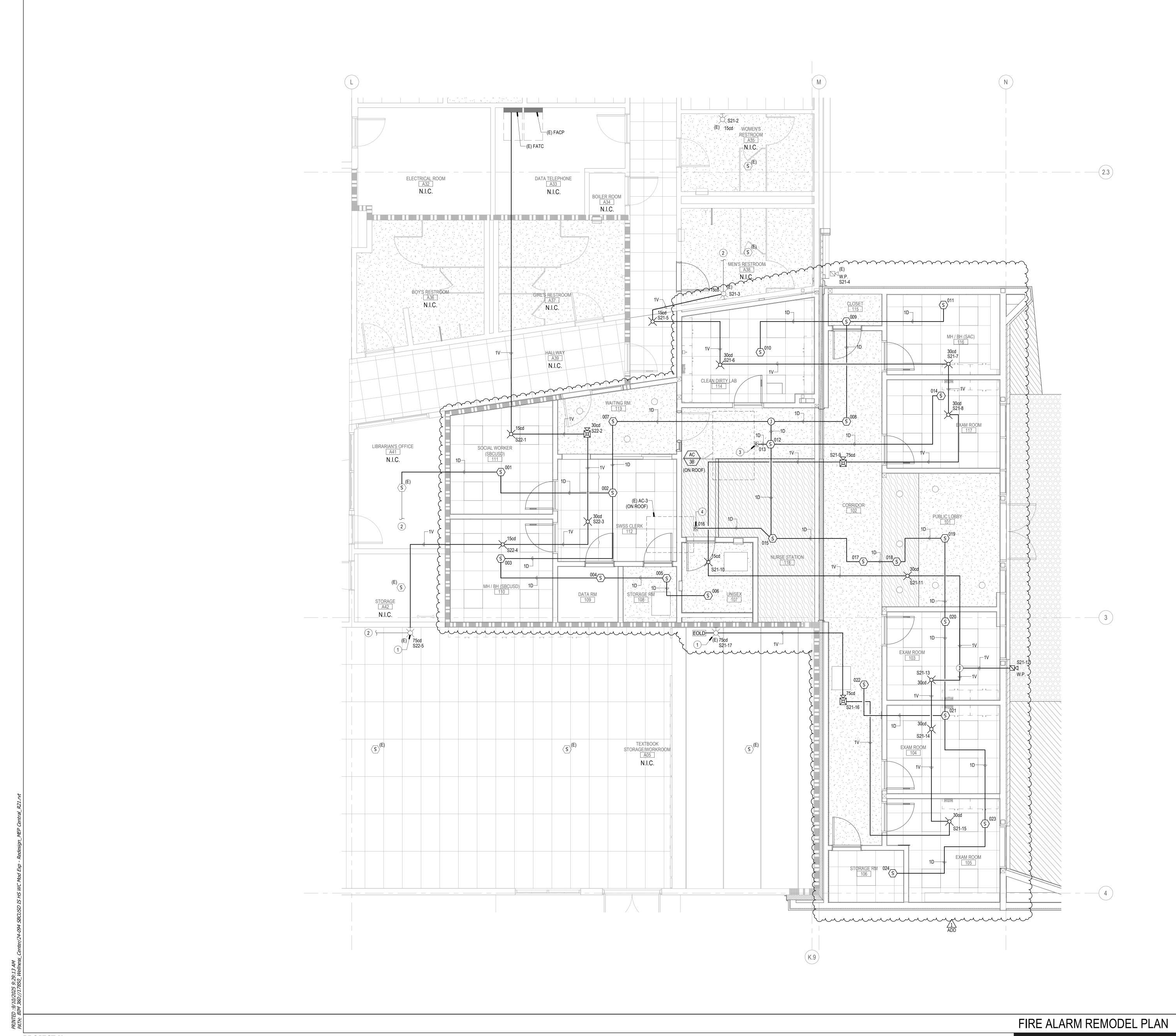
FIRE ALARM CALCULATIONS

INDIAN SPRINGS HIGH SCHOOL HEALTH FIRE ALARM RISER

DIAGRAM

**PROJECT No.:** 9/10/2025 9:29:10 AM

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# **GENERAL NOTES**

REFER TO 'GENERAL NOTES' ON FIRE ALARM LEGENDS AND NOTES SHEET. FOR ANY FIRE WALL PENETRATIONS 2" AND UNDER: REFER TO DETAIL: (14)
AD-2.1)

# **CONSTRUCTION NOTES**

- EXTEND EXISTING FIRE ALARM CIRCUIT TO EXISTING STROBE. PROVIDE ALL NECESSARY CABLING, CONDUIT, JUNCTION BOXES, PROGRAMMING AND TESTIN FOR A COMPLETE AND OPERABLE CIRCUIT. 2 EXISTING FIRE ALARM CIRCUIT TO REMAIN. REFER TO AS-BUILT DRAWINGS UNDER A#04-107058 FOR MORE INFORMATION.
- 3) PROVIDE RELAY MODULE FOR NEW HVAC UNIT SHUT-DOWN. REFER TO DETAIL:  $\frac{9}{60-11}$
- 4) PROVIDE RELAY MODULE FOR EXISTING HVAC UNIT SHUT-DOWN. REFER TO DETAIL: (9)

1-HR FIRE RATED WALL ASSEMBLY

RATED ASSEMBLY LEGEND

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INDIAN SPRINGS HIGH SCHOOL HEALTH CENTER
INDIAN SPRINGS HIGH SCHOOL
SON DEL ROSA DR. SAN BERNARDINO, CA 92410
SAN BERNARDINO CITY UNIFIED SCHOOL DISTRICT

FIRE ALARM REMODEL
PLAN



**GENERAL NOTES** 

CONSTRUCTION NOTES

FIRE PROTECTION HYDRAULIC REF PLAN

1/8" = 1'-0"

PIPE AFF 12' - 6 3/16"

PIPE AFF 11' - 0 3/4"

*E*2 1/2"ø 36' - 1"

ONLY.

FOR HYDRAULIC REFERENCE USE

PIPE AFF 13' - 10 3/16"

*E*1 1/2"ø 88' - 10"

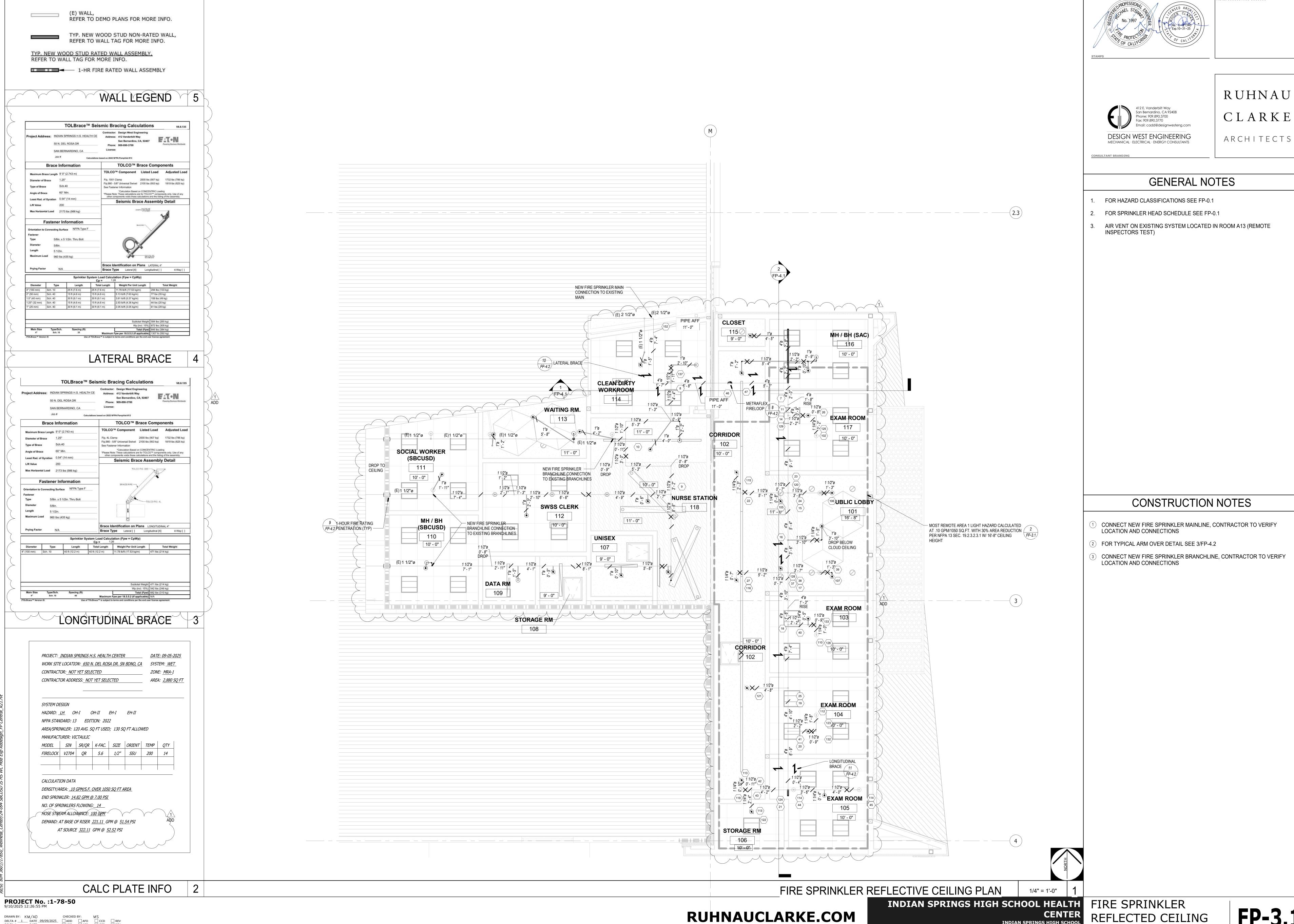
<u>E</u>1 1/2"ø 88' - 10"

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14' - 5 3/16"

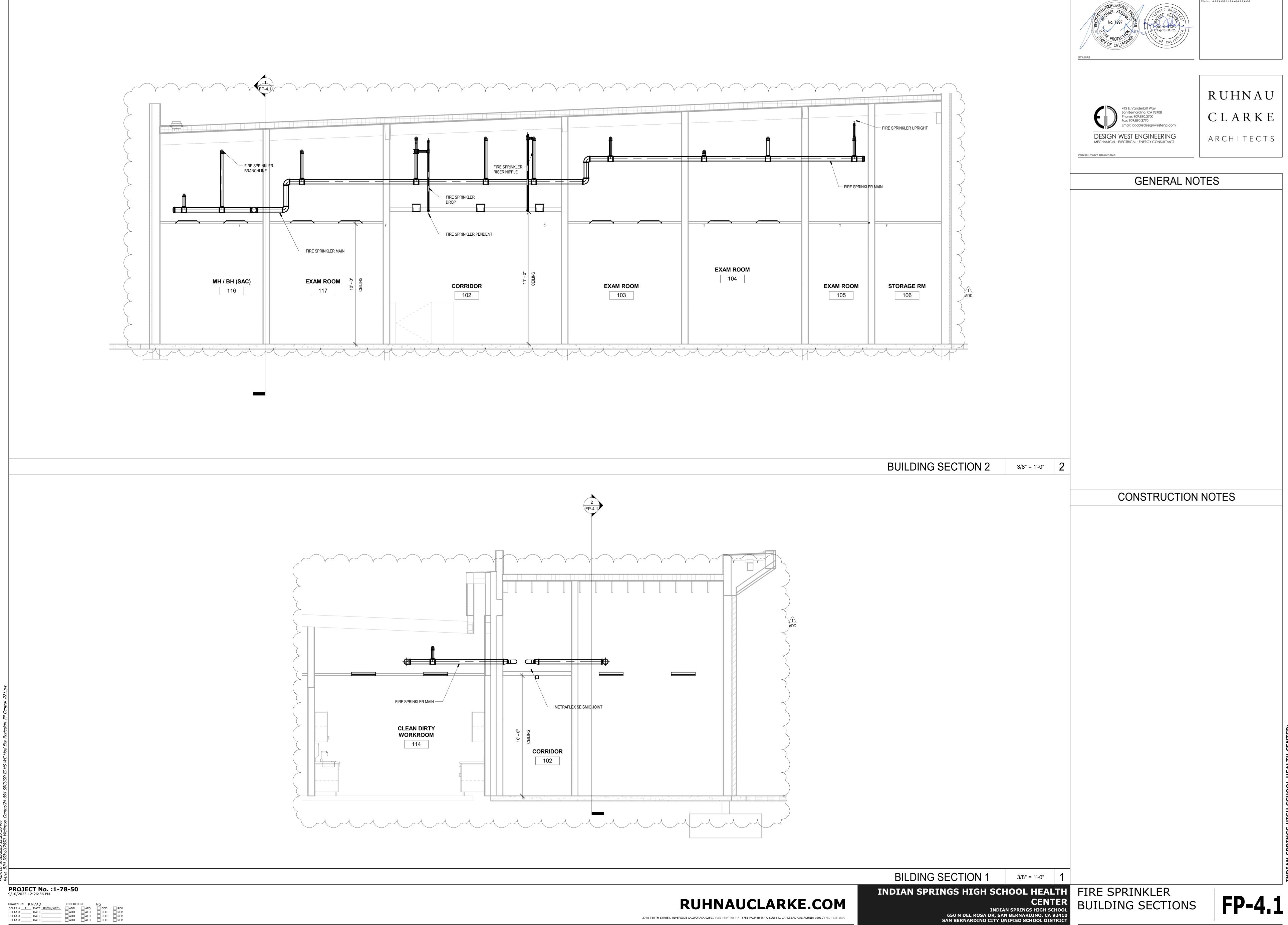
PIPE AFF

*E* 1 1/2"ø\_/ 0' - 5" RISE



CENTER

INDIAN SPRINGS HIGH SCHOOL
650 N DEL ROSA DR, SAN BERNARDINO, CA 92410
SAN BERNARDINO CITY UNIFIED SCHOOL DISTRICT



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