SAWPA

LOBBY REMODEL AND ACCESSIBLE UPGRADES

LOBBY REMODEL AND ADA UPGRADES

Jack Panichapan, AIA

PRINCIPAL-IN-CHARGE

SANTA ANA WATERSHED PROJECT AUTHORITY

LOBBY REMODEL AND ADA UPGRADES

PROJECT NO. 3816

11615 STERLING AVE,
RIVERSIDE, CA 92503

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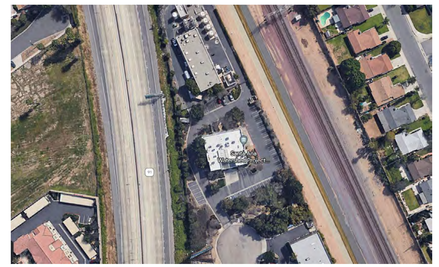

LOCATION MAP (NOT TO SCALE)

CITY OF RIVERSIDE

REVIEWED BY :

DATE:

COMMENT :

LICENSED ARCHITECT JONGKWANG PANICHAPAN NO. C-29044 EXP. 11-30-23 STATE OF CALIF. GENERAL

architecture planning interior

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DESIGN DEVELOPMENT — DATE: 21 OCT 2024
ADDENDUM #5 — DATE: 21 OCT 2024

JOB NO.: 3903 | CHECKED BY: AR. VIET | DRAWN BY: AR. CHINTAN
SCALE: 1/8" = 1'-0"

COVER SHEET

SAWPA

SANTA ANA WATERSHED PROJECT AUTHORITY

CV-1

GENERAL NOTES

1. THESE PLANS AND SPECIFICATIONS ARE THE PROPERTY OF SAWPA AND ARE NOT TO BE USED FOR OTHER PROJECTS WITHOUT THE PERMISSION OF THE ARCHITECT.

2. THESE NOTES APPLY TO ALL DRAWINGS, UNLESS NOTED OTHERWISE. ANY OMISSIONS OR CONFLICTS BETWEEN THE VARIOUS ELEMENTS OF THE DRAWINGS AND/OR GENERAL NOTES ARE TO BE BROUGHT TO THE ATTENTION OF THE OWNER/CLIENT'S REPRESENTATIVE BEFORE PROCEEDING WITH ANY WORK SO INVOLVED.

3. ALL DRAWINGS AND SPECIFICATIONS ARE CONSIDERED TO BE PART OF THE CONTRACT DOCUMENTS. THE CONTRACT DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE, UNLESS OTHERWISE SHOWN. THEY DO NOT INDICATE METHOD OF CONSTRUCTION. CONTRACTOR IS TO SUPERVISE AND DIRECT THE WORK UNDER HIS CONTRACT AND SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES. OBSERVATION VISITS TO THE SITE BY FIELD REPRESENTATIVES OF THE OWNER/CLIENT AND / OR HIS CONSULTANTS ARE NOT TO INCLUDE INSPECTIONS OF REQUIRED FOR SAME, WHICH ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. ANY SUPPORT SERVICES PERFORMED BY THE OWNER/CLIENT'S REPRESENTATIVE AND / OR HIS CONSULTANTS DURING CONSTRUCTION ARE TO BE DISTINGUISHED FROM CONTINUOUS AND DETAILED INSPECTION SERVICES WHICH ARE FURNISHED BY OTHERS. THESE SUPPORT SERVICES PERFORMED BY THE OWNER/CLIENT'S REPRESENTATIVE AND / OR HIS CONSULTANTS, WHETHER OF MATERIAL OR WORK, AND WHETHER PERFORMED PRIOR TO, DURING OR AFTER COMPLETION OF CONSTRUCTION ARE PERFORMED SOLELY FOR THE PURPOSE OF ASSISTING IN QUALITY CONTROL AND IN ACHIEVING GENERAL CONFORMANCE WITH DESIGN CONCEPT AND CONTRACT DRAWINGS AND SPECIFICATIONS AND THEREFORE, THEY DO NOT GUARANTEE CONTRACTORS PERFORMANCE AND ARE NOT TO BE CONSTRUED AS SUPERVISION OF CONSTRUCTION.

4. CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH ALL EXISTING CONDITIONS TO BE REMOVED, RELOCATED OR REMAIN INTACT AND HOW THE NEW CONSTRUCTION RELATES TO THE SITE CONDITION.

5. THE CONTRACTOR SHALL EXAMINE THE JOB SITE. CONFIRM ALL UTILITY LOCATIONS, SIZES, PRESSURES, ETC.. AND PROTECT, RELOCATE, CONNECT OR REMOVE ALL NECESSARY FOR TOTAL PROJECT COMPLETION. VERIFY ALL DIMENSIONS AND SATISFY HIMSELF AS TO THE EXISTING CONDITIONS UNDER WHICH HE WILL BE OBLIGATED TO OPERATE. NOTIFY THE OWNER/CLIENT'S REPRESENTATIVE OF ANY AND ALL DISCREPANCIES PRIOR TO COMMENCING WORK.

6. ALL CONTRACTORS AND SUBCONTRACTORS SHALL FAMILIARIZE THEMSELVES WITH THE CONTENTS OF ALL THE DRAWING AND ALL SPECIFICATION SECTIONS, REGARDLESS OF THEIR LICENSE CLASSIFICATION. NO REQUEST FOR CHANGE ORDER WILL BE CONSIDERED BASE UPON INFORMATION FOUND IN ONE AREA OF THE PLANS OR SPECIFICATIONS, AND NOT THE OTHER. INFORMATION FOUND IN ONE PART OF THE PLANS SHALL BE DEEMED TO BE IN ALL SECTIONS.

7. ALL SYMBOLS AND ABBREVIATIONS USED ON THE DRAWINGS ARE CONSIDERED TO BE CONSTRUCTION STANDARDS. IF CLARIFICATION IS REQUIRED THE CONTRACTOR SHALL NOTIFY THE ARCHITECT PRIOR TO PROCEEDING WITH THE WORK.

8. THE CONTRACT DOCUMENTS AND SPECIFICATIONS REPRESENT THE FINISH STRUCTURE. THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT THE STRUCTURE AND SAFETY OF WORKMEN DURING CONSTRUCTION. SUCH MEASURES SHALL INCLUDE BUT NOT BE LIMITED TO, BRACING, SHORING FOR LOADS DUE TO CONSTRUCTION EQUIPMENT, ETC. OBSERVATION VISITS TO THE SITE BY THE OWNER/CLIENT'S REPRESENTATIVE OR OWNER/CLIENT'S STRUCTURAL ENGINEER SHALL NOT INCLUDE INSPECTION OF THE ABOVE ITEMS AND DOES NOT IN ANY WAY RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITIES FOR THE ABOVE UNLESS NOTED.

9. DO NOT SCALE DRAWINGS. PRINTED DIMENSIONS HAVE PRECEDENCE OVER SCALED DRAWINGS AND LARGE SCALE OVER SMALL. DIMENSIONS SHOWN ARE TO THE FACE OF WALL FRAMING (CMU, STUD) UNLESS OTHERWISE NOTED.

10. ALL DIMENSIONS AND THE SITE CONDITIONS SHALL BE VERIFIED BY THE CONTRACTOR AT THE JOB SITE PRIOR TO BID SUBMITTAL, START OF SHOP DRAWINGS, START OF CONSTRUCTION, AND/OR FABRICATION OF MATERIALS. IF DISCREPANCIES ARE ENCOUNTERED, OR CONDITIONS DEVELOP NOT COVERED BY THE CONTRACT DOCUMENTS, THE OWNER/CLIENT'S REPRESENTATIVE SHALL BE NOTIFIED FOR CLARIFICATION.

11. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY BUILDING BACKING SLEEVES, FRAMING FOR LIGHT FIXTURES, ELECTRICAL LIGHTS, A/C EQUIPMENT, DRAPERY, CEILING TRACKS, PLUMBING EQUIPMENT, COUNTERS, HANDRAILS, AND ALL OTHER ITEMS REQUIRING BACKING SUPPORT.

12. ANYONE SUPPLYING LABOR AND MATERIALS TO THE PROJECT IS TO CAREFULLY EXAMINE ALL SUBSURFACES TO RECEIVE WORK. ANY CONDITIONS DETRIMENTAL TO WORK TO BE REPORTED IN WRITING TO OWNER/CLIENT'S REPRESENTATIVE & PROJECT ARCHITECT PRIOR TO BEGINNING WORK. COMMENCEMENT OF WORK IMPLIES ACCEPTANCE OF SUBSURFACES.

13. REFER TO ARCHITECTURAL, PLUMBING, MECHANICAL AND ELECTRICAL DRAWINGS FOR DEPRESSED SLABS, CURBS, FINISHES, TEXTURES, CLIPS, GROUNDS, ETC., NOT SHOWN ON STRUCTURAL DRAWINGS.

14. PROVIDE OPENINGS AND SUPPORTS FOR MECHANICAL EQUIPMENT, DUCTS, PIPING, VENTS, ETC, AS REQUIRED. REFER TO ARCHITECTURAL AND MECHANICAL DRAWINGS FOR ADDITIONAL OPENINGS AND EQUIPMENT NOT SHOWN ON STRUCTURAL DRAWINGS. ALL SUSPENDED EQUIPMENT AND MATERIALS TO BE INSTALLED WITH APPROVED LATERAL BRACING. VERIFY SIZES AND LOCATIONS OF ALL MECHANICAL EQUIPMENT BEFORE CONSTRUCTION OF ANY BASES OR PADS TO SUPPORT SUCH EQUIPMENT. VERIFY ALL PLUMBING AND EQUIPMENT SIZES BEFORE BEGINNING CONSTRUCTION OF CABINETS.

15. NOTIFY OWNER/CLIENT'S REPRESENTATIVE 24 HOURS PRIOR TO PLACING CONCRETE.

16. NOTED FINISH FLOOR ELEVATIONS ARE TO THE TOP OF CONCRETE FLOOR SLAB. WHERE FLOORS ARE SLOPED FOR DRAINAGE, THE HIGH POINT OF FINISH FLOOR IS (+ OR -) 0'- 0" UNLESS NOTED OTHERWISE, AND IS AT THE PERIMETER OF THE ROOM. STANDARD SLOPE IS 1/4" PER FOOT (MINIMUM = 3/16" PER FOOT; MAXIMUM = 5/16" PER FOOT). SUB-SLABS DEPRESSED FOR TILE FLOOR FINISH TO BE SLOPED TO DRAIN AND MAINTAIN SLAB THICKNESS INDICATED ON THE STRUCTURAL DRAWINGS.

17. SOILS AND FOUNDATIONS INFORMATION BORING LOCATIONS, TEST RESULTS ARE INCLUDED IN THE PROJECT GEOTECHNICAL INVESTIGATION REPORT.

18. NOTIFY THE OWNER/CLIENT'S REPRESENTATIVE IF ANY CONDITIONS EXIST WHICH WILL PREVENT THE COMPLETION OF WORK IN A PROFESSIONAL AND SATISFACTORY MANNER AS WELL AS ANY AND ALL ADDITIONAL WORK TO BE PERFORMED BEFORE STARTING WORK ALL NOTIFICATIONS SHALL BE IN WRITING.

19. ALL CONTRACTORS AND SUB-CONTRACTORS SHALL OBTAIN A CITY BUSINESS LICENSE. APPLICANTS (DEVELOPER/CONTRACTOR) SHALL REQUEST A STANDARD SUB-CONTRACTOR FORM FROM BLDG. DIV. PRIOR TO BLDG PERMIT ISSUANCE. THEY SHALL COMPLETE AND SUBMIT THE FORM TO THE BUSINESS LICENSE DIV. BEFORE RELEASING THE CERTIFICATE OF OCCUPANCY.

CODE (GENERAL)

1. IT IS THE RESPONSIBILITY OF ANYONE SUPPLYING LABOR OR MATERIALS OR BOTH TO BRING TO THE ATTENTION OF THE OWNER/CLIENT'S REPRESENTATIVE AND PROJECT ARCHITECT ANY DISCREPANCIES OR CONFLICTS BETWEEN THE CODE REQUIREMENTS AND THE DRAWINGS BEFORE PROCEEDING WITH WORK.

2. CONTRACTOR SHALL COMPLY FULLY WITH THE LATEST EDITION OF THE CALIFORNIA BUILDING CODE, ALL LAWS AND ORDINANCES PERTINENT TO ALL WORK OF THIS PROJECT. IN CASE OF ANY CONFLICT WHEREIN THE METHOD OR STANDARDS OF INSTALLATION OR THE MATERIALS SPECIFIED DO NOT EQUAL OR EXCEED THE REQUIREMENTS OF THE LAWS OR ORDINANCES. THE LAWS OR ORDINANCES SHALL GOVERN.

3. ALL WORK SHALL COMPLY WITH TITLE 24 OF THE CODE OF REGULATIONS AND THE CALIFORNIA BUILDING CODE LATEST EDITION (INDICATED ON THESE SHEETS WITH CBC AMENDMENTS, AND ALL OTHER LOCAL OR STATE AGENCIES HAVING JURISDICTION OVER THIS PROJECT).

ACCESSIBILITY NOTES

1. AT ABRUPT CHANGES IN LEVELS NOT EXCEEDING 1/2", BEVEL WITH A SLOPE NO GREATER THAN 1:2 EXCEPT AT LEVEL CHANGES NOT EXCEEDING 1/4" MAY BE VERTICAL PER CBC SECTION 1133B.7.4 AND FIGURE 11B-25, 11B-26A, 11B-32 AND 11B-29.
2. ABRUPT CHANGES IN LEVEL ALONG ANY ACCESSIBLE ROUTE EXCEEDING 1/2" SHALL COMPLY WITH THE REQUIREMENTS FOR CURB RAMPS PER CBC SECTION 1127B.5.
3. WHEN THE SLOPE IN THE DIRECTION OF TRAVEL OF ANY WALK EXCEEDS 1 UNIT VERTICAL TO 20 UNITS HORIZONTAL IT SHALL COMPLY WITH THE PROVISIONS OF CBC SECTION 1133B.5 AND 1133B.7.3 AS A PEDESTRIAN RAMP.
4. WALK AND SIDEWALK SURFACE CROSS SLOPES SHALL NOT EXCEED 1/4" PER FOOT PER CBC SECTION 1133B.7.1.3
5. WALKS SHALL BE PROVIDED WITH A LEVEL AREA NOT LESS THAN 60" BY 60" AT A DOOR OR GATE THAT SWINGS TOWARD THE WALK AND NOT LESS THAN 48" WIDE BY 44" DEEP AT A DOOR OR GATE THAT SWINGS AWAY FROM THE WALK PER CBC SECTION 1133B.7.5.
6. WALKS SHALL EXTEND A MINIMUM OF 24" TO THE SIDE OF THE STRIKE EDGE OF A DOOR OR GATE THAT SWINGS TOWARD THE WALK PER CBC SECTION 1133B.7.5.

WATERPROOFING COMMENTS

1. THERE IS A HEIGHTENED CONCERN IN THE CONSTRUCTION INDUSTRY ABOUT THE INTRUSION OF WATER INTO BUILDINGS AND THE RESULTING MOLD THAT DEVELOPS SUBSEQUENTLY. THE OWNER/CLIENT HAS MADE A DILIGENT ATTEMPT TO SPECIFICALLY DETAIL THE PROJECT TO STOP THIS WATER FROM ENTERING THROUGH PENETRATIONS INTO THE BUILDNG. HOWEVER, ALL OF THESE AVENUES WHICH ALLOW THE INTRUSION OF WATER INTO THE BUILDING MAY NOT HAVE BEEN OBSERVED DURING DESIGN. DURING THE COURSE OF YOUR CONSTRUCTION OF THE BUILDNG, THE OWNER/CLIENT'S REPRESENTATIVE ASKS TO BE ADVISED IMMEDIATELY OF ANY QUESTIONABLE CONDITIONS THAT MAY OCCUR WITH RESPECT TO THE PERCEIVED WATER-TIGHTNESS OF THE STRUCTURE. ONCE A BUILDING SUFFERS A BREACH, AND MOLD DEVELOPS, A BUILDING CAN BECOME UNTENABLE, AND CORRECTIONS COSTLY. WE ASK THAT THE CONSTRUCTION TEAM BE DILIGENT IN THEIR CONSTRUCTION EFFORTS TO HELP INSURE THAT, THE BUILDING THAT WE TURN OVER AS A TEAM, WILL BE AS WATERTIGHT AS WE CAN MAKE IT. YOU, THE CONTRACTOR, WILL BE THE LAST HANDS ON THE PROJECT, AND WE ARE CERTAINLY AVAILABLE TO DISCUSS WITH YOU, YOUR CONSTRUCTABILITY IDEAS TO KEEP THIS PROJECT WATERTIGHT.

LIFE SAFETY

1. POST ROOM CAPACITY SIGN AS PROVIDED BY THE LOCAL FIRE DEPARTMENT IN EACH CLASSROOM, ASSEMBLY ROOM OR SIMILAR PURPOSED ROOM HAVING AN OCCUPANT LOAD OF 50 OR MORE.

2. PORTABLE FIRE EXTINGUISHERS TO BE PROVIDED IN CABINETS LOCATED WITHIN SEVENTY-FIVE (75) FOOT TRAVEL DISTANCE TO ALL PORTIONS OF THE BUILDING ON EACH FLOOR AND AS SHOWN ON PLANS.

3. INTERIOR FINISHES TO COMPLY WITH CHAPTERS 7 AND 8, AND GLASS AND GLAZING TO COMPLY WITH CHAPTER 24 OF THE CBC AND ALL OTHER APPLICABLE CODES AND REGULATIONS GOVERNING THE PLACE OF THE BUILDING.

4. "PENETRATIONS OF FIRE RESISTIVE WALLS, FLOOR -CEILINGS AND ROOF-CEILING SHALL BE PROTECTED AS REQUIRED IN CBC SECTION 713".

5. CONTRACTOR SHALL MAINTAIN THE RATING OF ALL PENETRATING WALLS AND SHALL APPLY FIRESTOP AND FIREPROOFING, AT HIS EXPENSE, WHENEVER ANY PENETRATION ARE MADE...ETC. FIRESTOP AND FIREPROOFING MATERIAL SHALL BEAR U.L. LISTING NUMBER DEPICTING WALL TYPE COMPOSITION AND FIRE RATED MATERIAL LIMITATIONS. SUBMIT PROPOSED FIRESTOP FIREPROOFING METHOD FOR APPROVAL PRIOR TO APPLICATION IN THE FIELD.

6. EVERY EXIT DOOR SHALL BE OPENABLE FROM THE INSIDE WITHOUT THE USE OF A KEY OR ANY SPECIAL KNOWLEDGE OR EFFORT. SPECIAL LOCKING DEVICES SHALL BE OF AN APPROVED TYPE.

7. PANIC HARDWARE SHALL BE PROVIDED ON EXIT DOORS SERVING ROOMS, CORRIDORS OR STAIRWAYS HANDLING AN OCCUPANT CAPACITY OF 50 OR MORE PERSONS.

8. ANY DECORATIONS (DRAPES, CURTAINS, SHADES, ETC.) USE SHALL BE NON-COMBUSTIBLE OR FLAME-PROOF IN AN APPROVED MANNER, TO COMPLY WITH FIRE MARSHALL BUILDING CODE REQUIREMENTS.

9. ALL EXIT SIGNS OR ILLUSTRATED ON PLANS ARE TO BE ILLUMINATED PER CURRENT ELECTRICAL CODE AND SHALL BE CEILING OR WALL MOUNTED. THE EMERGENCY SYSTEM PROVIDES FOR A LIGHTING VALUE OF ONE-FOOT-CANDLE AT FLOOR LEVEL EXIT LIGHTING AND CAC, AND UBC CHAPTER 10. SIGNS SHALL HAVE 6" LETTERS ON CONTRASTING BACKGROUND.

FIRE SAFETY DURING CONSTRUCTION

ALTERATIONS AND DEMOLITION FOR REMODEL PROJECTS:

1. IMPAIRMENTS TO ANY FIRE PROTECTION SYSTEM SHALL BE IN ACCORDANCE WITH 2022 CFC, SECTION 901. 2022 CFC, SECTION 1408.6
2. COVER OR REMOVE SMOKE DETECTORS DURING ALTERATION WHEN REQUIRED BY THE FIRE MARSHAL. HEAT DETECTORS MAY BE SUBSTITUTED FOR SMOKE DETECTORS DURING ALTERATIONS. NFPA 72-2016, SECTION 17.7.1.11
3. MAINTAIN REQUIRED EXITS. WHEN TEMPORARY CONSTRUCTION BARRIERS ARE PROVIDED, EXIT CORRIDORS SERVING BEDRIDDEN PATIENTS SHALL HAVE THEIR REQUIRED WIDTH REDUCED TO NOT LESS THAN 6 FEET. 2022 CFC, SECTION 1411.2
4. TEMPORARY EXITS SHALL BE REVIEWED BY FIRE MARSHAL. 2022 CFC, SECTION 1411.2
5. MAINTAIN FIRE-RESISTANCE RATING OF FIRE- RESISTANCE-RATED CONSTRUCTION AND MAINTAIN OPENING PROTECTIVES IN AN OPERATIVE CONDITION. 2022 CFC, SECTION 703.1 AND 703.2.
6. PLASTIC FILM WHEN USED FOR DUST PROTECTION SHALL BE FLAME RESISTANT. TITLE 19, DIVISION 1, CHAPTER 1, SUBCHAPTER 1, ARTICLE 3, SECTION 3.08
7. HOT WORK OPERATIONS INCLUDING CUTTING, WELDING AND GRINDING SHALL BE IN ACCORDANCE WITH 2022 CFC, CHAPTER 26. 2022 CFC, SECTION 1404.6.

FIRE PREVENTION

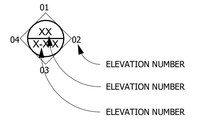
1. EXIT DOORS SHALL SWING IN THE DIRECTION OF EXIT TRAVEL WHEN SERVING ANY HAZARDOUS AREA OR WHEN SERVING AN OCCUPANT LOAD OF 50 OR MORE.
2. EXIT DOORS SHALL BE OPERABLE FROM THE INSIDE WITHOUT THE USE OF A KEY OR ANY SPECIAL KNOWLEDGE OR EFFORT (2022 CBC 1010.9).
3. EXCEPTION: THIS REQUIREMENT SHALL NOT APPLY TO EXTERIOR EXIT DOORS IN A GROUP "B" OCCUPANCY IF THERE IS A VISIBLE, DURABLE SIGN ON OR ADJACENT TO THE DOOR STATING "THIS DOOR TO REMAIN UNLOCKED WHEN THIS SPACE IS OCCUPIED". THE LETTERS SHALL BE NOT LESS THAN 1 INCH HIGH ON A CONTRASTING BACKGROUND. THE LOCKING DEVICE MUST BE A TYPE THAT WILL BE READILY DISTINGUISHABLE AS LOCKED.
4. PANIC HARDWARE, WHEN INSTALLED, SHALL COMPLY WITH ALL APPLICABLE BUILDING CODE REQUIREMENTS. THE ACTIVATING MEMBER SHALL BE MOUNTED AT A HEIGHT OF NOT LESS THAN 30 INCHES NOR MORE THAN 44 INCHES ABOVE THE FLOOR. THE UNLATCHING FORCE SHALL NOT EXCEED 15 POUNDS WHEN APPLIED IN THE DIRECTION OF EXIT TRAVEL.
5. THE MEANS OF EGRESS, INCLUDING THE EXIT DISCHARGE SHALL BE ILLUMINATED AT ALL TIMES THE BUILDING SPACE SERVED BY THE MEANS OF EGRESS IS OCCUPIED. THE MEANS OF EGRESS ILLUMINATION LEVEL SHALL NOT BE LESS THAN 1 FOOT CANDLE (11 LUX) AT THE WALKING SURFACE LEVEL (2022 CBC 1008.1, 1008.2, AND 1008.3).
6. EXIT ILLUMINATION SHALL COMPLY WITH 2022 CBC SECTION 1008 AND 1013.
7. EXIT SIGNS SHALL BE INSTALLED AT REQUIRED EXIT DOORWAYS AND WHERE OTHERWISE NECESSARY TO CLEARLY INDICATE THE DIRECTION OF EGRESS WHEN THE EXIT SERVES AN OCCUPANT LOAD OF 50 OR MORE.
8. EXCEPTION: MAIN EXTERIOR EXIT DOORS WHICH OBVIOUSLY AND CLEARLY ARE IDENTIFIABLE AS EXITS NEED NOT BE SIGNED WHEN APPROVED BY THE BUILDING OFFICIAL.
9. WHEN NECESSARY, THE FINAL LOCATION AND QUANTITY OF EXIT SIGNS SHALL BE DETERMINED BY THE FIRE DEPARTMENT PRIOR TO CONSTRUCTION OF ANY WORK.
10. THE COLOR AND DESIGN OF LETTERING, ARROWS AND OTHER SYMBOLS ON EXIT SIGN SHALL BE IN HIGH CONTRAST WITH THEIR BACKGROUND (3/4" X 6" LETTERS MIN.).
11. ALL RATED CORRIDOR DOORS SHALL HAVE A THRESHOLD WITH A SMOKE AND DRAFT SEAL AT HEAD AND JAMBS.
12. INTERIOR WALL AND CEILING FINISHES SHALL BE NON-COMBUSTIBLE OR HAVE A FLAME SPREAD INDEX OF 0 TO 25; SMOKE-DEVELOPED INDEX 0-450.
13. ALL DRAPES, HANGING CURTAINS, AND OTHER DECORATIVE MATERIALS SHALL BE TREATED AND MAINTAINED IN A FLAME RETARDANT CONDITION.
14. FIRE DAMPERS OR DOORS SHALL BE PROVIDED WHERE AIR DUCTS PENETRATE FIRE RATED WALLS OR CEILINGS AS PER 2022 CBC SECTION 716.
15. EXTEND/MODIFY FIRE/LIFE SAFETY SYSTEMS AS REQUIRED.
16. EXTEND FIRE SPRINKLERS SYSTEMS AS REQUIRED.
17. FIRE SPRINKLER/OR LIFE SAFETY PLANS MUST BE SUBMITTED TO THE CITY FOR REVIEW AND APPROVAL PRIOR TO BUILDING PERMIT ISSUANCE.
18. FIRE SPRINKLER SYSTEM PLAN MUST BE REVISED AND APPROVED BY THE CITIES FIRE DEPARTMENT PRIOR TO THE INSTALLATION OR MODIFICATION OF SPRINKLER SYSTEMS.
19. A PORTABLE FIRE EXTINGUISHER WITH A MINIMUM 2A10BC RATING SHALL BE PROVIDED EVERY 75' OF TRAVEL DISTANCE FROM ANY POINT WITHIN THE AREA DEFINED AS SCOPE OF WORK PER THESE PLANS PROVIDE FIRE EXTINGUISHERS AS REQUIRED BY FIRE DEPARTMENT FIELD INSPECTOR.
20. ALL EMERGENCY LIGHTING SOURCES SHALL EMIT A MINIMUM VALUE OF ONE FOOT CANDLE MEASURED AT FLOOR LEVEL.
21. PROVIDE EMERGENCY NOTIFICATION SYSTEM FOR THE HEARING AND VISUAL IMPAIRED PER A.D.A. REQUIREMENTS.

ABBREVIATIONS

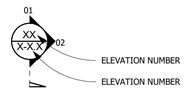
@	AT	HT	HEIGHT
AB	ANCHOR BOLT	HVAC	HEATING VENTILATION AIR CONDITION
AC	ASPHALTIC CONCRETE		
	ACOUST ACOUSTICAL	HP	HIGH POINT
ADJ	ADJUSTABLE	ID	INSIDE DIAMETER
AFF	ABOVE FINISH FLOOR	INCL	INCLUDING
AL	ALUMINUM	INT	INTERIOR
ANOD	ANODIZED	LP	LOW POINT
AP	ACCESS PANEL	L	LONG (LENGTH)
ARCH	ARCHITECT (URAL)	LAM	LAMINATED
BD	BOARD	LAV	LAVATORY
BEL	BELOW	LBL	LABEL
BET	BETWEEN	LH	LEFT HAND
BLDG	BUILDING	LW	LIGHTWEIGHT
BLK(G)	BLOCKING	MAS	MASONRY
B	BOTTOM	MAX	MAXIMUM
BRG	BEARING	MB	MACHINE BOLT
BS	BOTH SIDES	MECH	MECHANICAL
BUL	BULLETIN	MED	MEDUIM
BUR	BUILT UP ROOFING	MET	METAL
CB	CATCH BASIN	MFR	MANUFACTURER
CEM	CEMENT	MISC	MISCELLANEOUS
CFCI	CONTRACTOR FURBISHED CONTRACTOR INSTALLED	MO	MASONRY OPENING
		MTL	MATERALS
CI	CAST IRON	NAT	NATURAL
CJ	CEILING JOIST	(N)	NEW
CL	CENTERLINE	NIC	NOT IN CONTRACT
CLG	CEILING	N	NORTH
CLR	CLEARANCE	O.C.	ON CENTER(S)
COL	COLUMN	OD	OUTSIDE DIAMETER
CONC	CONCRETE	OFCI	OWNER FURBISHED CONTRACTOR INSTALLED
CONST	CONSTRUCTION		
CONT	CONTINOUS OR CONTINUE	OFOI	OWNER FURBISHED OWNER INSTALLED
CONTR	CONTRACTOR		
D	DEEP (DEPTH)	OPNG	OPENING
DF	DRINKING FOUNTAIN	OPP	OPPOSITE
DIAG	DIAGONAL	OH	OVERHANG
DIAM	DIAMETER	PLAS	PLASTER, PLASTIC
DIM	DIMENSION	PSF	POUNDS PER SQUARE FOOT
DN	DOWN	PSI	POUNDS PER SQUARE INCH
DR	DOOR	PVC	POLYVINYL
DS	DOWNSPOUT	R	RISER
DTL	DETAIL	RAD	RADIUS
DWG	DRAWING	RD	ROOF DRAIN
E	EAST	REF	REFERENCE
EA	EACH	REFL	REFLECTED
EL	ELEVATION	REINF	REINFORCED
ELECT	ELECTRIC(AL)	REQD	REQUIRED
EMER	EMERGENCY	REV	REVISION
EQ	EQUAL	RH	RIGHT HAND
WEX	ELECTRICAL WATER COOLER	RM	ROOM
EX	EXHAUST	RO	ROUGH OPENING
(E)	EXISTING	S	SOUTH
EXP	EXPOSED	SC	SOLID CORE
EXT	EXTERIOR	SEC	SECTION
FD	FLOOR DRAWN	SF	SQUARE FOOT (FEET)
FE(C)	FIRE EXTINGUISHER CABINET	SL	SKY LIGHT
FFE	FINISH FLOOR ELEVATION	SIM	SIMILAR
FHC	FIRE HOSE CABINET	SPEC	SPECIFICATIONS
FIN	FINISH(ED)	SQ	SQUARE
FJ	FLOOR JOIST	SYM	SYMMETRICAL
FLR	FLORRINGS	T	TREAD, TOP
FOC	FACE OF CONCRETE	TE	TELEPHONE
FOF	FACE OF FINISH	(T)	TEMPERED
FOM	FACE OF MASONRY	T&G	TONGUE & GROOVE
FOS	FACE OF STUDS	TOP	TOP OF PARAPET
FTG	FOOTING	TOS	TOP OF SLAB
GA	GAUGE	TS	TOP OF STEEL
GI	GALVANIZED IRON	TW	TOP OF WALL
GL	GLASS, GLAZING	TYP	TYPICAL
GLB	GLUE LAMINATED BEAM	U.N.O	UNLESS NOTED OTHERWISE
GYP	GYPSUM	UR	URINAL
GWB	GYPSUM WHITE BOARD	VERT	VERTICAL
H	HIGH (HEIGHT)	VG	VERTICAL GRAIN
HB	HOSE BIBB	VIN	VINYL
HC	HOLLOW CORE	W	WEST, WIDTH, WIDE
HDR	HEADER	WC	WATER CLOSET
HDW	HARDWARE	WP	WATER PROOFING
HM	HOLLOW METAL	WR	WATER REPELLENT
HOR	HORIZONTAL		

SYMBOLS LEGEND

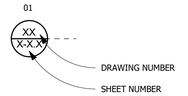
INTERIOR ELEVATION BUBBLE



BUILDING SECTION BUBBLE



DETAIL REFERENCE BUBBLE



WALL TYPE MARK

DOOR TYPE MARK

WINDOW TYPE MARK

KEYNOTE/GRIDLINE MARK

WORKING POINT

APPLICABLE CODES

1.	CALIFORNIA BUILDING CODE	2022
2.	CALIFORNIA ELECTRICAL CODE	2022
3.	CALIFORNIA MECHANICAL CODE	2022
4.	CALIFORNIA PLUMBING CODE	2022
5.	ENERGY (TITLE 24 - 6)	2022 STANDARDS
6.	CALIFORNIA FIRE CODE	2022
7.	NFPA 101	2022 EDITION
8.	CalGREEN	CURRENT EDITION

REFER TO SHEET CV-1 FOR A LIST OF ADDITIONAL APPLICABLE CODES.

PROJECT DESCRIPTION

1. LOBBY REMODEL (SECURITY LOBBY)
2. ACCESSIBLE UPGRADES (LOBBY, EXTERIOR PAVING RESURFACE, SIGNAGE, TOILET ROOM)
3. MINOR MECHANICAL, PLUMBING AND ELECTRICAL

CODE ANALYSIS

PROJECT ADDRESS: 11615 STERLING AVE, RIVERSIDE, CA 92503

CONSTRUCTION TYPE: VA - NON RATED
(BASED ON UNIFORM BUILDING CODE 1988)

OCCUPANCY: B

OCCUPANCY ANALYSIS :

	AREA	OCCUPANT LOAD	TOTAL OCCUPANT
GROUND FLOOR	5,400	1/100	54
SECOND FLOOR	4,930	1/100	49
TOTAL	**10,330 S.F.**		**103**

TOTAL FLOOR AREA: 10,330 SF.
SPRINKLER BUILDING: SPRINKLED
NUMBER OF STORIES: 2

EXITING ANALYSIS :

GROUND FLOOR		SECOND FLOOR	
OCCUPANT LOAD	54	OCCUPANT LOAD	49
EXIT REQUIRED	2	EXIT REQUIRED	2
EXIT PROVIDED	3	EXIT PROVIDED	2

DEFERRED APPROVALS: FIRE SPRINKLERS / FIRE ALARM

PROJECT ADDRESS

11615 STERLING AVE, RIVERSIDE, CA 92503

DESIGN/BUILD COORDINATION

- CONTRACTOR SHALL SUBMIT DESIGN/BUILD WORK FOR REVIEW. DESIGN/BUILD WORK MAY REQUIRE SEPARATE APPROVAL BY LOCAL GOVERNING JURISDICTION. CONTRACTOR SHALL PROMPTLY SUBMIT AND OBTAIN REQUIRED APPROVALS FOR THIS WORK.
- EXTERIOR ACCESSIBILITY IMPROVEMENTS TO BE UNDER SEPARATE PERMIT REFERENCE #GP-2024-07972 WITH CIVIL ENGINEERING DRAWINGS.

CONSTRUCTION COORDINATION/SCHEDULING

1. THE GENERAL CONTRACTOR SHALL COORDINATE ACCESS TO AND FROM THE SITE WITH THE SAWPA REPRESENTATIVE.

DEFERRED SUBMITTALS

CONTRACTOR TO SUBMIT ANY ALTERATIONS AND/OR CHANGES TO:

1. DESIGN/BUILD FIRE ALARM
2. DESIGN/BUILD FIRE SPRINKLER MODIFICATIONS
3. PROVIDE AND INSTALL ALL NEW FIRE SPRINKLER HEADS
4. USE QUICK RESPONSE CONCEALED HEADS, AND PROVIDE BRACKET AND SEISMIC BRACING PER NFPA

ALL MODIFICATIONS SHALL BE SUBMITTED CONCURRENTLY WITH OWNER AND DESIGN TEAM FOR REVIEW AND APPROVAL IN ADDITION TO FIRE MARSHAL REVIEW AND APPROVAL.

ADDITIVE ALTERNATES

LICENSED ARCHITECT PANICHAPAN NO. C-23944 EXP. 11-30-23 STATE OF CALIFORNIA

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Gillis + Panichapan Architects, Inc.
2900 BRISTOL STREET COSTA MESA CALIFORNIA 92626
SUITE G-205 TEL (714) 668-4260
FAX (714) 668-4265

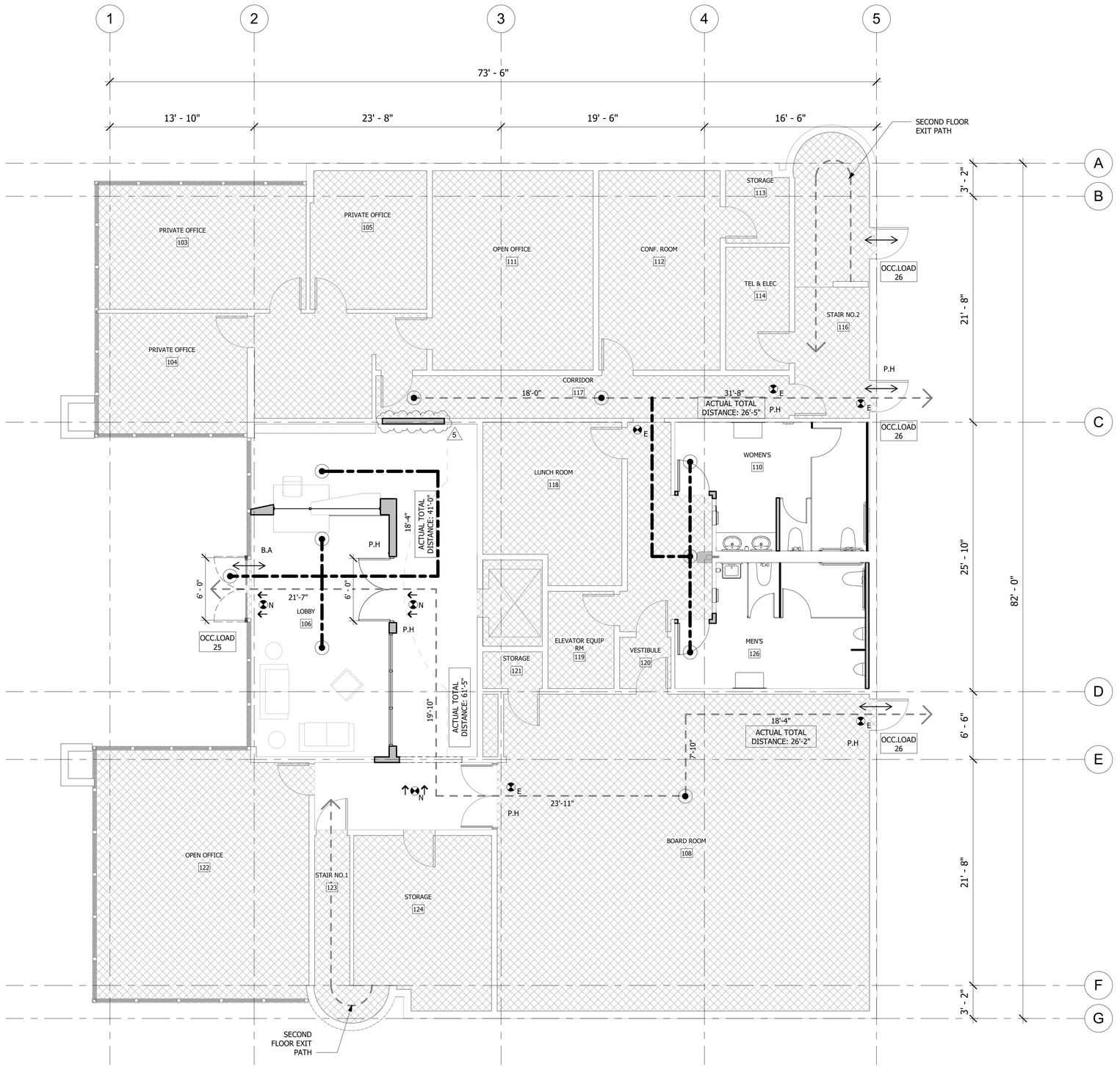
DESIGN DEVELOPMENT — DATE: 21 OCT 2024
ADDENDUM #5 — DATE: 21 OCT 2024

JOB NO.: 3903 — CHECKED BY: AR. VIET — DRAWN BY: AR. CHINTAN
SCALE: As indicated

TITLE SHEET

SAWPA
SANTA ANA WATERSHED PROJECT AUTHORITY

T-1



1 A-1.1 ACCESSIBLE / EXITING FLOOR PLAN
3/16" = 1'-0"

CODE ANALYSIS

PROJECT ADDRESS: 11615 STERLING AVE, RIVERSIDE, CA 92503

CONSTRUCTION TYPE: VA - NON RATED
(BASED ON UNIFORM BUILDING CODE 1988)

OCCUPANCY: B

OCCUPANCY ANALYSIS :

	AREA	OCCUPANT LOAD	TOTAL OCCUPANT
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TOTAL	**10,330 S.F.**		**103**

TOTAL FLOOR AREA: 10,330 SF.
SPRINKLER BUILDING: SPRINKLED
NUMBER OF STORIES: 2

EXITING ANALYSIS :

GROUND FLOOR		SECOND FLOOR	
OCCUPANT LOAD	54	OCCUPANT LOAD	49
EXIT REQUIRED	2	EXIT REQUIRED	2
EXIT PROVIDED	3	EXIT PROVIDED	2

DEFERRED APPROVALS: FIRE SPRINKLERS / FIRE ALARM

LIFE SAFETY LEGEND:

T.D. = XX' — TRAVEL DISTANCE = __ FEET
PATH OF TRAVEL SYMBOL

N — NEW EXIT SIGN

E — EXISTING EXIT SIGN

P.H — PANIC HARDWARE

B.A — BREAK AWAY SWING DOOR

ACCESSIBLE LEGEND:

C — PATH OF ACCESSIBLE TRAVEL FROM MAIN ENTRANCE TO REMODELED/ MODIFACTION

P.H. DOOR HARDWARE EXIT NOTES:

1. ALL EXITS ARE TO BE OPERABLE FROM INSIDE WITHOUT THE USE OF A KEY OR SPECIAL KNOWLEDGE.

LEGEND:

AREA NOT A PART OF WORK

OCCUPANCY CALCULATION:

EGRESS WIDTH CALCULATION FOR OFFICE BUILDING

PROJECT INFORMATION:

BUILDING TYPE: OFFICE BUILDING
TOTAL OCCUPANT LOAD: 103 PEOPLE
NUMBER OF EXITS: 4
EXIT WIDTH PROVIDED: 6' WIDTH AT MAIN ENTRANCE, 3' WIDTH AT SECONDARY ENTRANCES

EGRESS WIDTH CALCULATION:

DETERMINE OCCUPANT LOAD PER EXIT:

TOTAL OCCUPANTS: 103
NUMBER OF EXITS: 4
OCCUPANTS PER EXIT:
103 OCCUPANTS
4 EXITS = 25.75 OCCUPANTS (ROUND UP TO 26 OCCUPANTS PER EXIT)

CALCULATE REQUIRED EGRESS WIDTH:
CBC 1005.3.1 REQUIRES 0.15 INCHES PER OCCUPANT FOR NON-STAIRWAY EGRESS COMPONENTS.

REQUIRED WIDTH PER EXIT:
26 OCCUPANTS × 0.15 INCHES/OCCUPANT = 3.75 INCHES

26 OCCUPANTS × 0.15 INCHES/OCCUPANT = 3.75 INCHES
CONVERT TO FEET: 3.75 INCHES ÷ 12 INCHES/FOOT = 0.3125 FEET

COMPARE REQUIRED WIDTH TO PROVIDED WIDTH:

REQUIRED WIDTH PER EXIT: 0.3125 FEET (3.75 INCHES)
PROVIDED WIDTH AT MAIN EXIT: 6 FEET (72 INCHES)

CONCLUSION:
THE REQUIRED EGRESS WIDTH FOR EACH EXIT SERVING 26 OCCUPANTS IS 0.3125 FEET ((3.75 INCHES). THE PROVIDED WIDTH OF 6 FEET (72 INCHES) AT MAIN EXIT EXCEEDS THE REQUIRED WIDTH. THEREFORE, THE EXITS ARE MORE THAN ADEQUATE FOR THE OCCUPANT LOAD, ENSURING COMPLIANCE WITH CBC 1005.

COMPLIANCE STATEMENT:
THE PROVIDED EGRESS WIDTH OF ALL EXITS FOR AN OCCUPANT LOAD OF 103 PEOPLE, DISTRIBUTED ACROSS THREE EXITS, MEETS THE REQUIREMENTS SET FORTH IN THE CALIFORNIA BUILDING CODE (CBC) 1005. EACH EXIT COMFORTABLY EXCEEDS THE REQUIRED EGRESS WIDTH, ENSURING SAFE AND EFFICIENT EVACUATION IN CASE OF AN EMERGENCY.

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LICENSED ARCHITECT PANICHAPAN NO. C-23944 EXP: 11-30-23 STATE OF CALIFORNIA

architecture planning interior

Gillis + Panichapan Architects, Inc.
2900 BRISTOL STREET COSTA MESA CALIFORNIA 92626
FAX (714) 668-4265 SUITE G-205 TEL (714) 668-4260

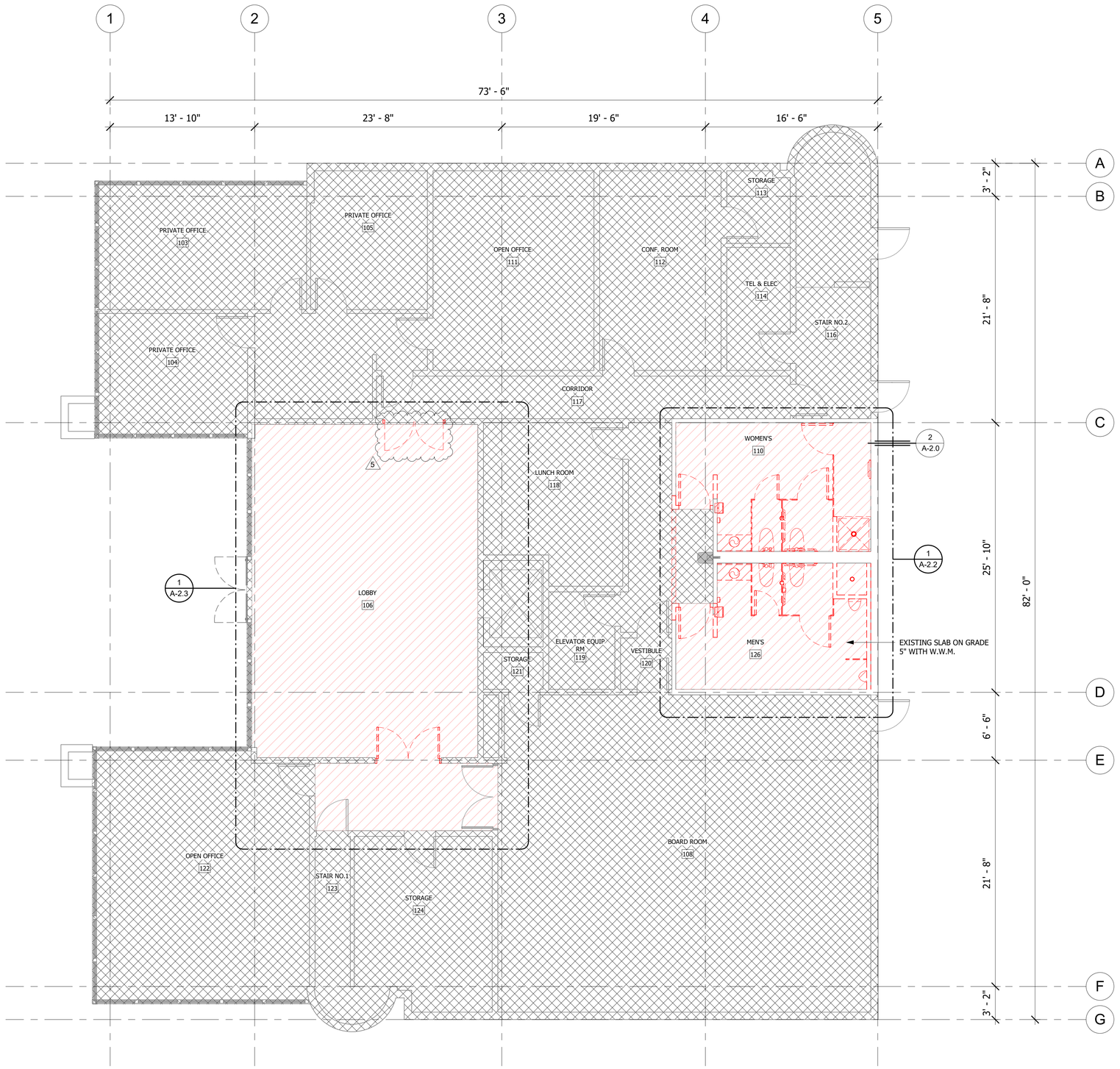
DESIGN DEVELOPMENT — DATE: 21 OCT 2024
ADDENDUM #5 — DATE: 21 OCT 2024

JOB NO.: 3903 | CHECKED BY: Checker | DRAWN BY: Author
SCALE: As indicated

EXITING PLAN

SAWPA
SANTA ANA WATERSHED PROJECT AUTHORITY

A-1.1



1 A-2.0 DEMOLITION FIRST FLOOR PLAN
3/16" = 1'-0"

GENERAL DEMOLITION NOTES:

1. REMOVE ITEMS INDICATED FOR DEMOLITION AND PROTECT ADJACENT SYSTEMS AND FINISHES TO REMAIN.
2. WHERE REMOVAL OF ITEMS NOTED FOR DEMOLITIONS AFFECTS THE ADJACENT SURFACE OR SYSTEM, CAREFULLY REMOVE/CUT THE ADJACENT FINISH FOR EASE OF PATCHING AND REPAIR.
3. DEMOLITION MAY REQUIRED REMOVAL OF SURROUNDING ITEMS ALSO TO BE REMOVED TO BE ABLE TO INSTALL SUPPORT (HEADER STUDS/JAMB STUDS, ETC.) FOR TYPICAL INSTALLATION OF THE NEW ITEM.
4. IF DEMOLITION AFFECTS THE RATING OF THE LIFE/SAFETY SYSTEMS, PROVIDE A TEMPORARY SYSTEM UNTIL THE PERMANENT ITEM/SYSTEM CAN BE INSTALLED (DOORS AND WALLS).
5. LIFE/SAFETY SYSTEMS ARE TO BE IN WORKING CONDITION DURING DEMOLITION WHILE THE BUILDING IS OCCUPIED. EXIT ROUTES, SIGNAGE AND ILLUMINATION IS TO BE PER CODE DURING CONSTRUCTION.

GENERAL NOTES:

1. SEAL AND PROTECT EXISTING CEILING AND WALLS FROM DAMAGE AND DEBRIS DURING STRUCTURAL RETROFIT.
2. AFTER RETROFIT, REMAINING EXISTING WALLS TO BE PATCHED AND REPAINTED. PATCH AND REPAIR FLOOR SURFACE AND BASE AFFECTED FROM THE RETROFIT.
3. TELECOM ROOM: GC RESPONSIBLE TO CARRY CONTRACT TO PROTECT THE CRITICAL EQUIPMENT.
4. GENERATOR ROOM: IF GENERATOR SHUTS DOWN CONTRACTOR IS TO PROVIDE TEMPORARY POWER.
5. SECURITY EQUIPMENT: SAWPA IS RESPONSIBLE FOR RELOCATION AND MODIFICATION OF ALL SECURITY EQUIPMENT.
6. REMOVAL OF ANY LIGHTING FIXTURES AS A RESULT OF SEISMIC WORK TO BE PLACED BACK IN ORIGINAL CONDITION AND IN WORKING ORDER.
7. ALL CEILING TILE AND GRID TO BE REPLACED BY GC IF DAMAGED OR MARRED AS A RESULT OF SEISMIC WORK.
8. PROVIDE PROTECTION AND VENTILATION OF ELECTRICAL PANELS AND CLOSETS WITHIN FOOTPRINT OF WORK.
9. GC TO PROTECT ELECTRICAL CLOSETS WHERE SEISMIC SCOPE EXISTS.
10. GC TO PATCH/PAINT TO MATCH EXISTING WALL SURFACES IMPACTED BY SEISMIC WORK (EXPOSED BEAMS, COLUMNS, STRUCTURAL ELEMENTS ARE TO BE FINISHED TO MATCH EXISTING SURFACE).

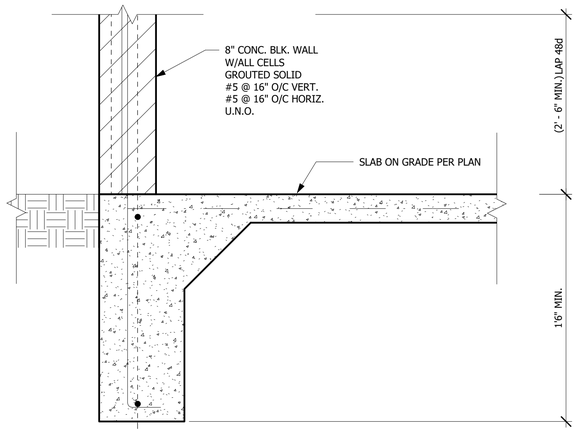
FLOOR PLAN LEGEND

HATCH INDICATING AREA TO BE DEMOLISHED

EXISTING WALL TO BE DEMOLISHED/RELOCATED

EXISTING DOOR,HARDWARE, & FRAME TO BE DEMOLISHED

EXISTING DOOR,HARDWARE, & FRAME TO REMAIN



2 A-2.0 EXISTING FOUNDATION DETAIL (FOR REFERENCE ONLY)
3/4" = 1'-0"

N

LICENSED ARCHITECT PANICHAPAN NO. C-23944 EXP. 11-30-23 STATE OF CALIFORNIA

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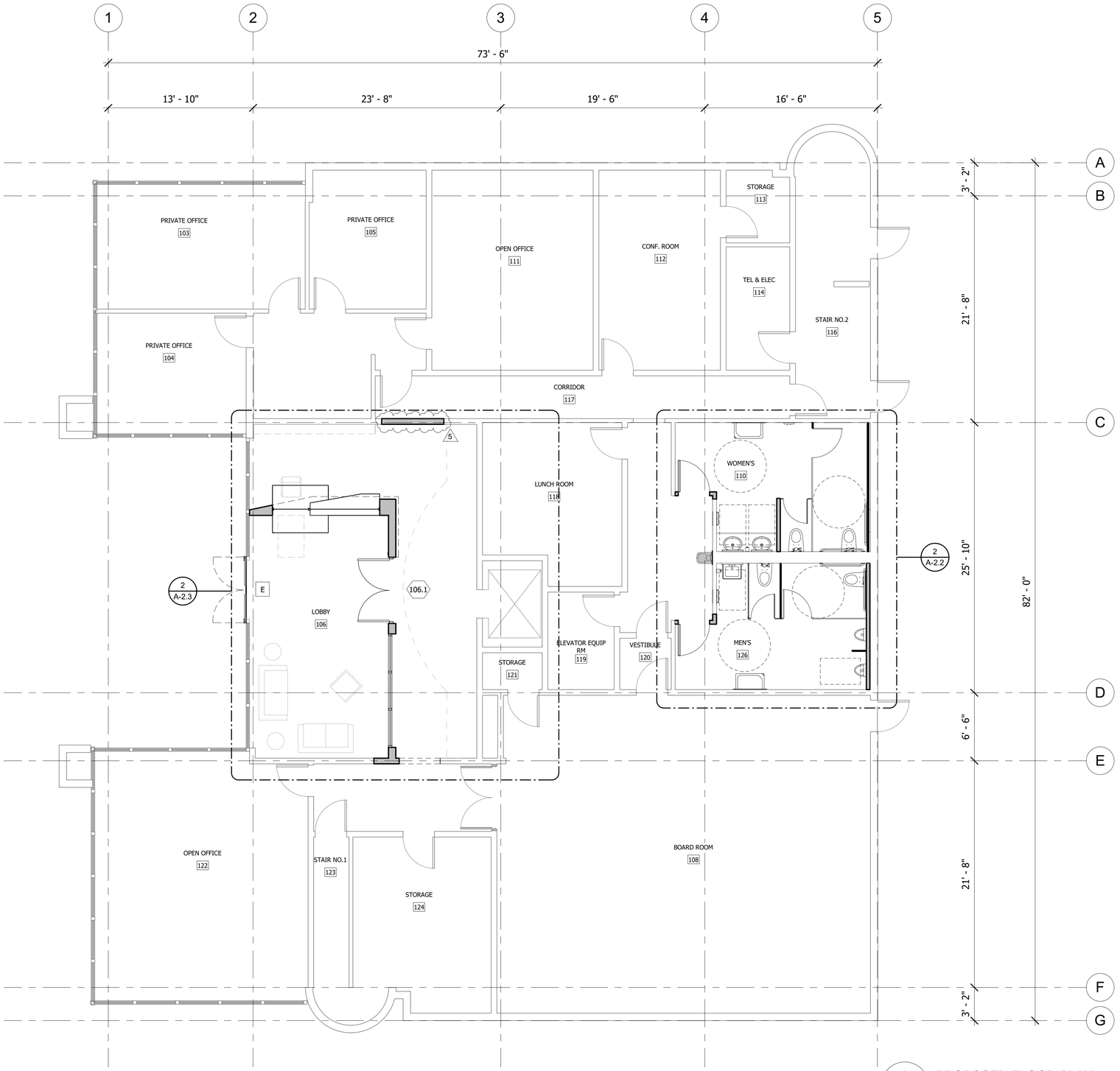
SUITE G-205

DESIGN DEVELOPMENT
ADDENDUM #5
DATE: 21 OCT 2024
DATE: 21 OCT 2024
JOB NO.: 3903
CHECKED BY: Checker
DRAWN BY: Author
SCALE: As indicated

DEMO FLOOR PLAN

SAWPA
SANTA ANA WATERSHED PROJECT AUTHORITY

A-2.0



1 A-2.1 PROPOSED FLOOR PLAN

3/16" = 1'-0"

GENERAL NOTES:

1. SEAL AND PROTECT EXISTING CEILING AND WALLS FROM DAMAGE AND DEBRIS DURING STRUCTURAL RETROFIT.
2. AFTER RETROFIT, REMAINING EXISTING WALLS TO BE PATCHED AND REPAINTED. PATCH AND REPAIR FLOOR SURFACE AND BASE AFFECTED FROM THE RETROFIT.
3. TELECOM ROOM: GC RESPONSIBLE TO CARRY CONTRACT TO PROTECT THE CRITICAL EQUIPMENT.
4. GENERATOR ROOM: IF GENERATOR SHUTS DOWN CONTRACTOR IS TO PROVIDE TEMPORARY POWER.
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8. PROVIDE PROTECTION AND VENTILATION OF ELECTRICAL PANELS AND CLOSETS WITHIN FOOTPRINT OF WORK.
9. GC TO PROTECT ELECTRICAL CLOSETS WHERE SEISMIC SCOPE EXISTS.
10. GC TO PATCH/PAINT TO MATCH EXISTING WALL SURFACES IMPACTED BY SEISMIC WORK (EXPOSED BEAMS, COLUMNS, STRUCTURAL ELEMENTS ARE TO BE FINISHED TO MATCH EXISTING SURFACE).

FLOOR PLAN LEGEND

- EXISTING WALL TO REMAIN
- RESTROOM TOILET PARTITION WALL
- NEW STUD WALL / FURRING
- EXISTING DOOR,HARDWARE, & FRAME TO REMAIN

N

LICENSED ARCHITECT PANICHAPAN NO. C-23944 EXP. 11-30-23 STATE OF CALIFORNIA

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DESIGN DEVELOPMENT — DATE: 21 OCT 2024
ADDENDUM # 5 — DATE: 21 OCT 2024

JOB NO.: 3903 | CHECKED BY: Checker | DRAWN BY: Author
SCALE: As indicated

PROPOSED FLOOR PLAN

SAWPA
SANTA ANA WATERSHED PROJECT AUTHORITY

A-2.1

GENERAL NOTES:

1. SEAL AND PROTECT EXISTING CEILING AND WALLS FROM DAMAGE AND DEBRIS DURING WORK.
2. AFTER RETROFIT, REMAINING EXISTING WALLS TO BE PATCHED AND REPAINTED. PATCH AND REPAIR FLOOR SURFACE AND BASE AFFECTED FROM WORK.
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5. GC TO PROTECT ELECTRICAL CLOSETS WHERE WORK EXISTS.
6. GC TO PATCH/PAINT TO MATCH EXISTING WALL SURFACES IMPACTED BY WORK (EXPOSED BEAMS, COLUMNS, STRUCTURAL ELEMENTS ARE TO BE FINISHED TO MATCH EXISTING SURFACE).

TOILET AND WASHROOM ACCESSORIES:

01 RECESSED TOILET SEAT COVER & TOILET TISSUE DISPENSER -BOBRICK B-3474

02 PARTITION MOUNTED TOILET SEAT COVER & TOILET TISSUE DISPENSER - BOBRICK B-347

03 SURFACE MOUNTED TOILET SEAT COVER & TOILET TISSUE DISPENSER - BOBRICK B-3479

04 RECESSED TOILET SEAT COVER, SANITARY NAPKIN DISPOSAL & TOILET TISSUE DISPENSER - BOBRICK B-3574

05 PARTITION MOUNTED TOILET SEAT COVER, SANITARY NAPKIN DISPOSAL & TOILET TISSUE DISPENSER - BOBRICK B-357

06 MIRROR - BOBRICK B-290

07 PAPER TOWEL/WASTE RECEPTACLE - BOBRICK B-3944 W/ B-29744 PAPER TOWEL DISPENSER

08 GRAB BAR - BOBRICK B-6806

GENERAL DEMOLITION NOTES:

1. REMOVE ITEMS INDICATED FOR DEMOLITION AND PROTECT ADJACENT SYSTEMS AND FINISHES TO REMAIN.
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FLOOR PLAN LEGENDS

EXISTING WALL TO REMAIN

RESTROOM TOILET PARTITION WALL

EXISTING DOOR,HARDWARE, & FRAME TO BE DEMOLISHED

EXISTING DOOR,HARDWARE, & FRAME TO REMAIN

EXISTING WALL TO BE DEMOLISHED/RELOCATED

DEMO KEYNOTES:

LEGEND : XX

01 EXISTING DRINKING FOUNTAIN TO STAY IN SAME PLACE AND TO BE ADJUSTED BY HEIGHT BY 1/2" TO PROVIDE ACCESSIBILITY COMPLIANCE .

02 DEMO THE WALL.

03 DEMO THE TOILET.

04 DEMO THE GRAB BAR.

05 DEMO THE VANITY AND LAVATORY.

06 DEMO THE DRYER.

07 DEMO THE DIAPER CHANGING TABLE.

08 DEMO URINAL.

09 REMOVE AND REPLACE EXISTING CONCRETE SLAB ON GRADE FOR NEW WASTE LINES (TYPICAL).

10 DEMO AND RELOCATE THE RESTROOM DOORS TO MAINTAIN A MINIMUM 44" OF CLEARANCE IN FRONT OF THE EXISTING DRINKING FOUNTAIN

11 EXISTING FLOOR DRAIN

12 PATCH AND REPAIR ENTIRE GYP. BD CEILING, MODIFY OR PROVIDE NEW CLG SUPPORT FRAMING AS REQUIRED NEW RECESSED LIGHT FIXTURES.

PROPOSED RESTROOM KEYNOTES:

LEGEND

01 NEW FLOOR MOUNT WATER CLOSET, SEE PLUMBING

02 NEW SINK, SEE PLUMBING

03 NEW GRAB BAR

04 NEW MIRROR

05 NEW TOILET PAPER/SEAT COVER DISPENSER

06 NEW PAPER TOWEL DISPENSER/WASTE RECEPTACLE

07 NEW SOAP DISPENSER

08 NEW TILE WAINSCOT (SOME WALLS FULL HIGHT REFER TO ELEVATION)

09 NEW FLOOR DRAIN, SEE PLUMBING

10 NEW FLOOR FINISH

11 TOILET PARTITIONS

12 METAL COVED BASE.

13 NEW URINAL, SEE PLUMBING.

14 EXISTING DRINKING FOUNTAIN TO STAY IN SAME PLACE AND TO BE ADJUSTED BY HEIGHT BY 1/2" TO PROVIDE ACCESSIBILITY COMPLIANCE .

15 URINAL SCREEN

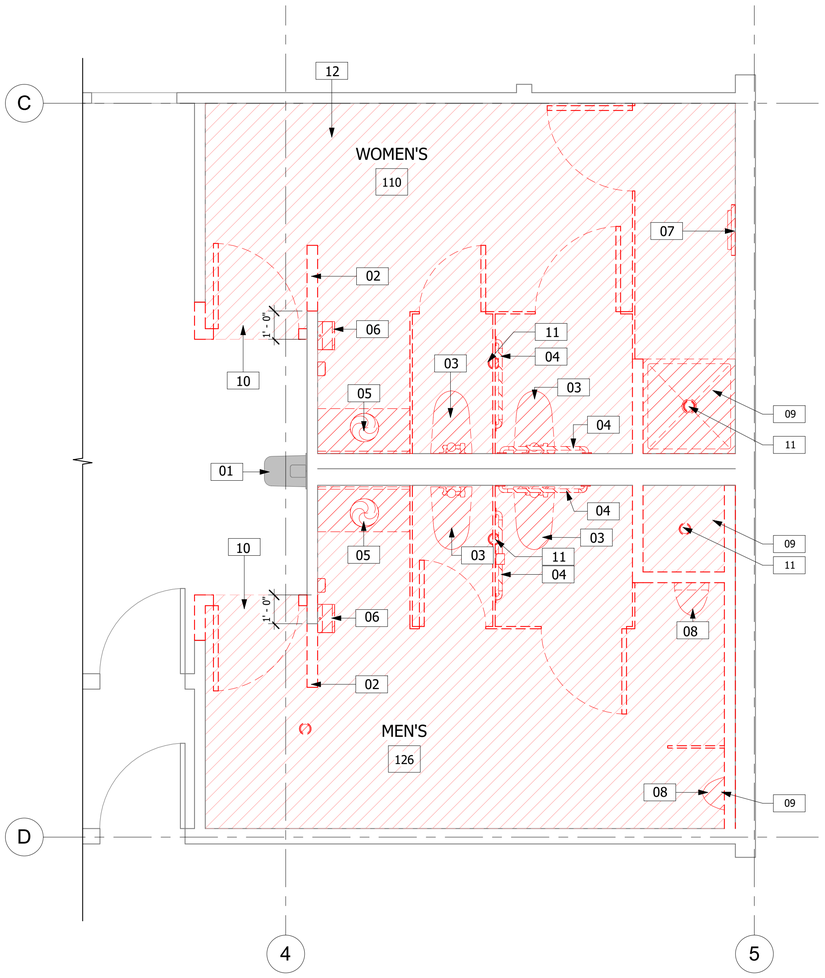
16 NEW GYPBOARD FINISH TO MATCH WITH EXISTING.

17 UNDER COUNTER PANEL (ADA)

18 DIAPER CHANGING TABLE

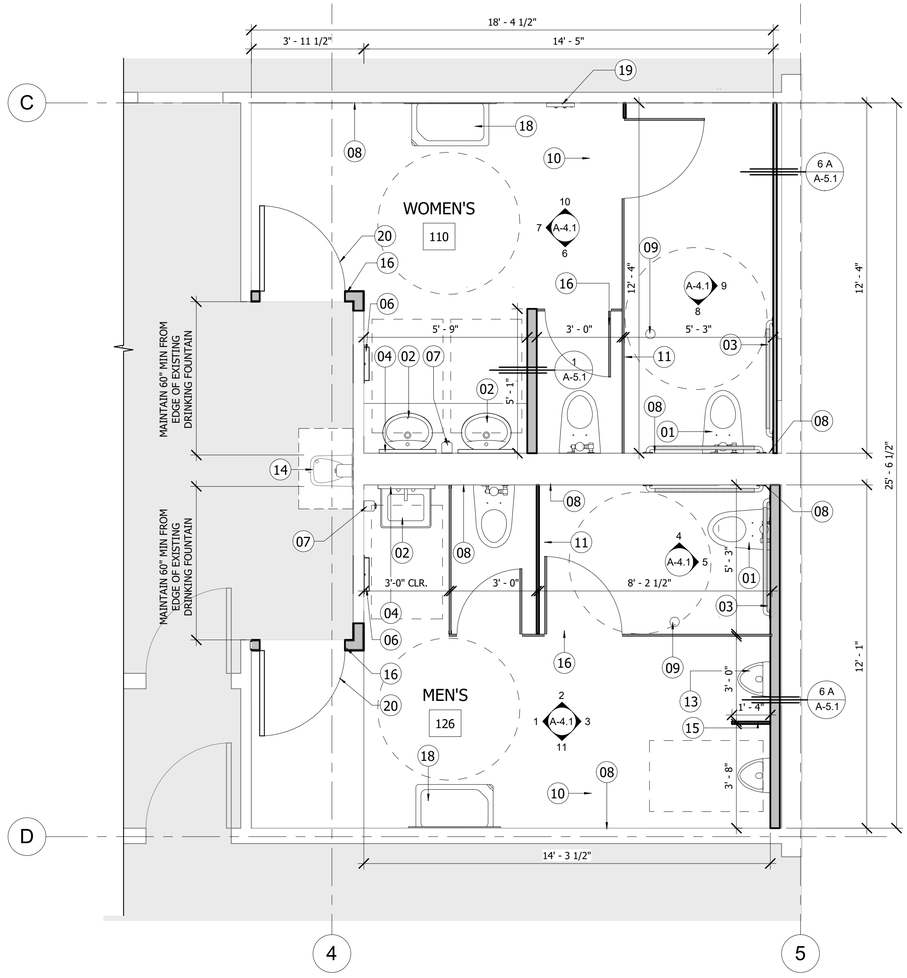
19 SANITARY NAPKIN DISPENSOR VENDOR

20 RESTROOM RELOCATED DOOR.



1 A-2.2 ENLARGED DEMOLITION FLOOR PLAN

3/8" = 1'-0"



2 A-2.2 ENLARGED PROPOSED FLOOR PLAN

3/8" = 1'-0"

N

LICENSED ARCHITECT PANICHAPAN CONKLIN OF CALIFORNIA NO. C-23944 EXP. 11-30-23

architecture planning interior

Gillis + Panichapan Architects, Inc.

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DESIGN DEVELOPMENT
ADDENDUM #5

DATE: 21 OCT 2024
DATE: 21 OCT 2024

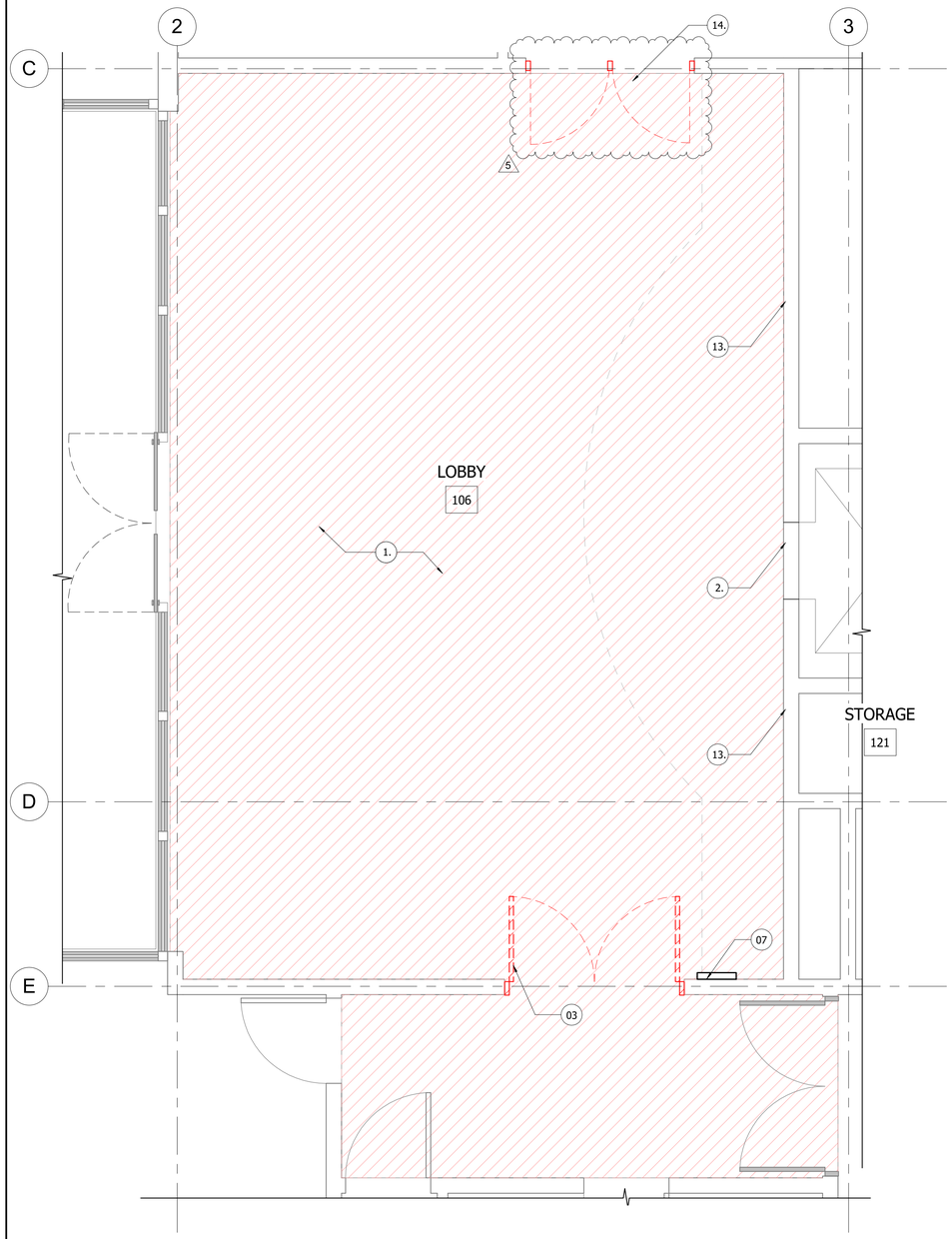
JOB NO.: 3903
SCALE: As indicated

CHECKED BY: VIC
DRAWN BY: CHINTAN

ENLARGED RESTROOM PLANS

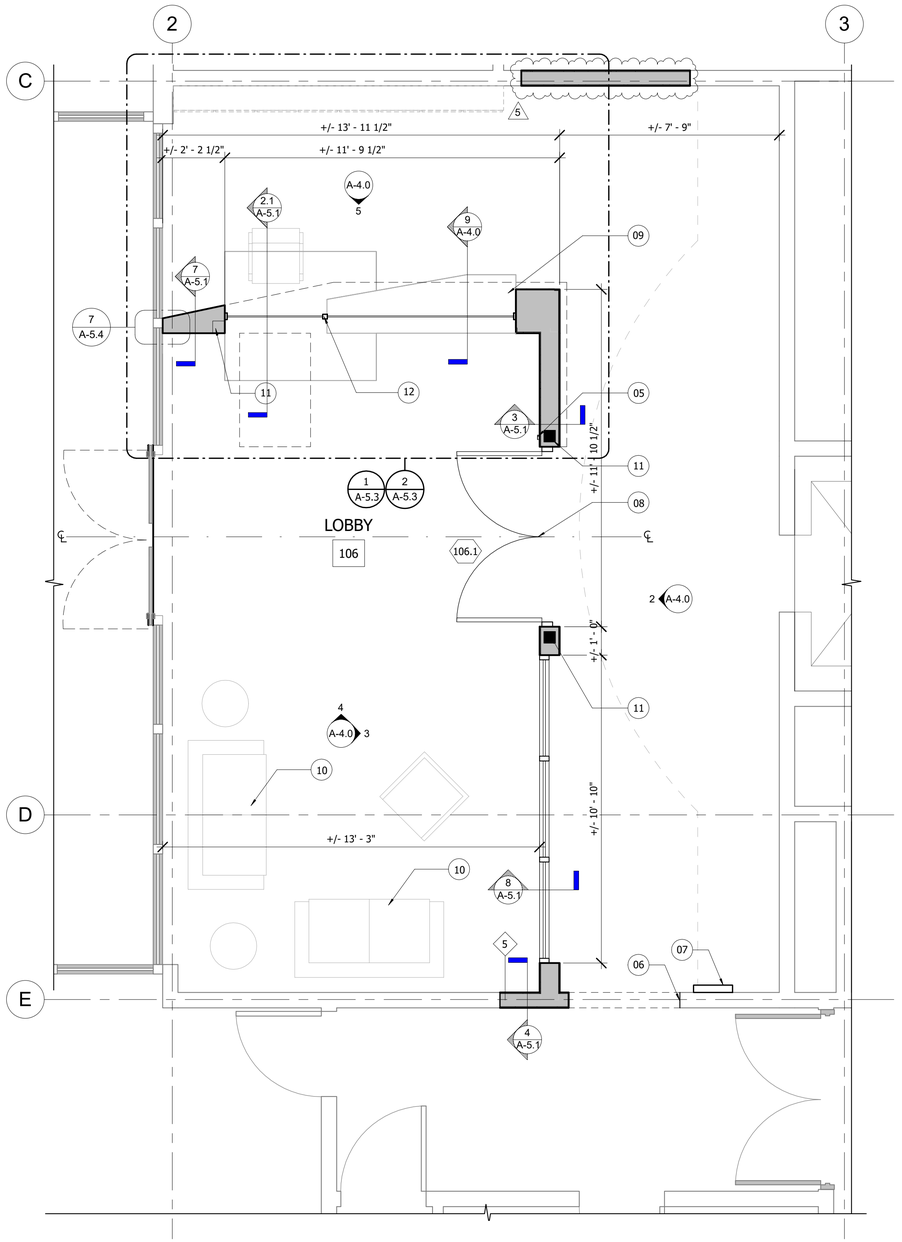
SAWPA
SANTA ANA WATERSHED PROJECT AUTHORITY

A-2.2



1 A-2.3 ENLARGED DEMO LOBBY PLAN

3/8" = 1'-0"



2 A-2.3 ENLARGED PROPOSED LOBBY PLAN

3/8" = 1'-0"

N

FLOOR PLAN LEGEND

HATCH INDICATING AREA TO BE DEMOLISHED

EXISTING WALL TO BE DEMOLISHED/RELOCATED

EXISTING DOOR,HARDWARE, & FRAME TO BE DEMOLISHED

EXISTING DOOR,HARDWARE, & FRAME TO REMAIN

GENERAL NOTES:

1. SEAL AND PROTECT EXISTING CEILING AND WALLS FROM DAMAGE AND DEBRIS DURING STRUCTURAL RETROFIT.
2. AFTER RETROFIT, REMAINING EXISTING WALLS TO BE PATCHED AND REPAINTED. PATCH AND REPAIR FLOOR SURFACE AND BASE AFFECTED FROM THE RETROFIT.
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10. GC TO PATCH/PAINT TO MATCH EXISTING WALL SURFACES IMPACTED BY SEISMIC WORK (EXPOSED BEAMS, COLUMNS, STRUCTURAL ELEMENTS ARE TO BE FINISHED TO MATCH EXISTING SURFACE).

KEYNOTES:

01 EXISTING TILE FLOOR TO BE DEMOLISHED.

02 EXISTING ELEVATOR DOOR TO BE PROTECTED.

03 EXISTING DOOR TO BE DEMOLISHED.

04 PARTITION WALL TO BE DEMOLISHED. PATCH AND REPAIR EXISTING.

05 WALL MOUNTED CARD READER (GC TO COORDINATE WITH SAWPA IT/ SECURITY TEAM)

06 NEW GYPBOARD FINISH TO MATCH WITH EXISTING

07 PLAQUE SHALL REMAIN PROTECT IN PLACE

08 DOOR TO BE CENTERED AND ALIGNED ON EXISTING LOBBY EXTERIOR DOOR OPENING

09 PUSH BUTTON FOR DOOR (UNDER THE TABLE)

10 FREE STANDING FURNITURE ARE SHOWN CONCEPTUALLY (N.I.C)

11 NEW 5" X 5" STEEL STRUCTURAL COLUMN (REFER TO STRUCTURAL DRAWINGS 01/S1.0)

12 NEW 2" X 2" STEEL STRUCTURAL COLUMN (REFER TO STRUCTURAL DRAWINGS 01/S1.0)

13 EXISTING WALL MURAL TO BE PROTECTED.

14 EXISTING DOOR TO BE DEMOED.

LICENSED ARCHITECT PANICHAPAN NO. C-23944 EXP: 11-30-23 STATE OF CALIFORNIA

architecture planning interior

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DESIGN DEVELOPMENT DATE: 21 OCT 2024
ADDENDUM #5 DATE: 21 OCT 2024

JOB NO.: 3903 CHECKED BY: Checker DRAWN BY: Author
SCALE: As indicated

LOBBY ENLARGED PLAN

SAWPA

SANTA ANA WATERSHED PROJECT AUTHORITY

A-2.3

NOTES

A. MAXIMUM EFFORT TO OPERATE DOORS APPLIED AT RIGHT ANGLES TO HINGED DOORS OR AT CENTER PLANE, PER T-24 SECTION 1004.5.1 WILL BE:

a) ≤ 5 LB. AT EXTERIOR DOORS (PER CBC SECTION 1133B.2.5)
b) ≤ 5 LB. AT INTERIOR DOORS
c) ≤ 15 LB. WHERE FIRE DOORS ARE REQUIRED.

B. ALL DOORS SHALL COMPLY WITH CBC TITLE 24, SECTION 1008

C. ALL DOOR HARDWARE SHALL BE LEVER TYPE, PUSH-PULL ACTIVATING BARS OR PANIC HARDWARE (PER CBC 1133B.2.5.2)

D. BOTTOM OF DOOR TO BE SMOOTH AND UNINTERRUPTED, TO ALLOW DOOR TO BE OPENED BY WHEELCHAIR FOOTREST, PER CBC SECTION 1133B.2.6

E. PROVIDE SIGN AT MAIN EXIT DOORS INDICATING: "THIS DOOR MUST REMAIN UNLOCKED WHEN BUILDING IS OCCUPIED" PER CBC 1008.1.9.3. ALL OTHER DOORS SHALL BE OPENABLE FROM INSIDE WITHOUT THE USE OF A KEY OR ANY SPECIAL KNOWLEDGE OR EFFORT.

G. ALL HOLLOW METAL DOORS STILES AND TOP RAILS SHALL BE 5 MINIMUM. (U.N.O.)

H. ALL ALUMINUM DOORS STILES AND TOP RAILS SHALL BE 5" U.N.O. ALL GLASS TYPES AND THICKNESS SHALL COMPLY WITH CBC TABLE 2403.2.1

I. SEE SPECIFICATIONS AND DOOR SCHEDULE FOR DOOR HARDWARE.

DOOR SIGNAGE LEGEND: (SEE 13/A-5-401)

D1-TOILET ROOM SIGNAGE "MEN"
D2-TOILET ROOM SIGNAGE "WOMEN"
D3-TOILET ROOM SIGNAGE "UNISEX"

WALL SIGNAGE LEGEND: (SEE 13/A-5-401, AND 02/A-6-106)

W1-VERIFY ROOM NAME WITH OWNER
W2 TOILET ROOM SIGNAGE "MEN"
W3 TOILET ROOM SIGNAGE "WOMEN"
W4-TOILET ROOM SIGNAGE "UNISEX"
W5-ACCESSIBLE ENTRANCE SIGN

ALL EXTERIOR DOORS SHALL COMPLY WITH CBC SECTION 708A, AND SECTION 708A.3, ITEM 1 OR ITEM 41

DOOR ABBREVIONS :

AL	ALUMIN
AN	ANODIZ
FF	FACTORY FINISH
HM	HOLLOW
MT	METAL
PL	PLASTIC LAMINATE
PT	PAINT
PR	PAIR
SC	SOLID C
TG	TEMPERED GLAZING
WD	WOOD

HARDWARE TYPES:

ALL FUNCTIONS TO BE VERIFIED BY OWNER PRIOR TO DESIGN. ALL DOORS TO HAVE FREE EXIT LEVER OR PANIC DEVICE

HT-A: ENTRY DOOR WITH PANIC DEVICE (ELECTRONIC/CARD READER)

HT-B: EXTERIOR DOOR, STORAGE LOCK (KEYED)

HT-C: OFFICE DOOR: LOCK (KEYED)

HT-D: TOILET (PRIVATE): PRIVACY LOCK WITH INDICATOR

HT-E: TOILET (PUBLIC): PUSH/PULL DEVICE

HT-F: STORAGE: LOCK (KEYED)

HT-G: EXTERIOR/EXIT: KEYED LOCK DOGGED DOWN PANIC DEVICE.

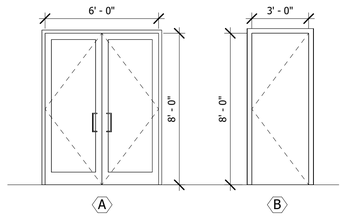
HT-H: INTERIOR PASSAGE WITH LATCH

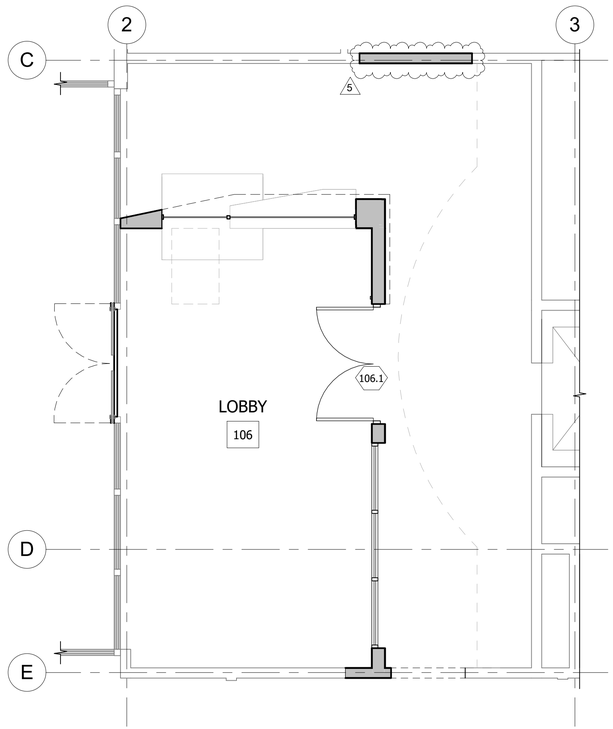
HT-I: INTERIOR/EXIT: KEYED LOCK WITH DOGGED DOWN PANIC DEVICE.

1. EXIT DOORS SHALL BE READILY OPENABLE FROM THE EGRESS SIDE WITHOUT THE USE OF A KEY, SPECIAL KNOWLEDGE OR EFFORT.(CBC 1008.1.8)
2. THERE SHALL BE A LEVEL AND CLEAR FLOOR OR LANDING ON EACH SIDE OF DOOR. THE LEVEL AREA SHALL HAVE A LENGTH IN THE DIRECTION OF DOOR SWING OF AT LEAST 60" AND THE LENGTH OPPOSITE THE DIRECTION OF DOOR SWING OF 48" AS MEASURED AT RIGHT ANGLES TO THE PLANE OF THE DOOR IN THE CLOSED POSITION. (CBC 11B-404.2.4.4)
3. MAXIMUM DOOR EFFORT TO OPERATE DOORS SHALL NOT EXCEED 5 POUNDS FOR EXTERIOR DOORS AND 5 POUNDS FOR INTERIOR DOORS, SUCH PULL OR PUSH EFFORT BEING APPLIED AT RIGHT ANGLES TO HINGED DOORS AND AT THE CENTER PLANE OF SLIDING OR FOLDING DOORS. COMPENSATING DEVICES OR AUTOMATIC DOOR OPERATORS MAY BE UTILIZED TO MEET THE ABOVE STANDARDS. WHEN FIRE DOORS ARE REQUIRED, THE MAXIMUM EFFORT TO OPERATE THE DOOR MAY BE INCREASED TO THE MINIMUM ALLOWABLE BY THE APPROPRIATE ADMINISTRATIVE AUTHORITY, NOT TO EXCEED 15 POUNDS. (CBC 11B-404.2.9)
4. DOOR HANDLES, PULLS, LATCHES, LOCKS AND OTHER OPERATING DEVICES ON DOORS REQUIRED TO BE ACCESSIBLE BY CHAPTER 11A OR CHAPTER 11B SHALL NOT REQUIRE TIGHT GRASPING, TIGHT PINCHING OR TWISTING OF THE WRIST TO OPERATE. (CBC 1010.1.8.1)
5. HAND-ACTIVATED DOOR OPENING HARDWARE SHALL BE CENTERED BETWEEN 34" AND 44" ABOVE THE FLOOR. (CBC 11B-404.2.7 AND 11B-309.4)
6. THE BOTTOM 10" OF ALL DOORS EXCEPT AUTOMATIC AND SLIDING SHALL HAVE A SMOOTH, UNINTERRUPTED SURFACE TO ALLOW THE DOOR TO BE OPENED BY A WHEELCHAIR FOOTREST WITHOUT CREATING A TRAP OR HAZARDOUS CONDITION. WHERE NARROW FRAME DOORS ARE USED, A 10" HIGH SMOOTH PANEL SHALL BE INSTALLED ON THE PUSH SIDE OF THE DOOR, WHICH WILL ALLOW THE DOOR TO BE OPENED BY A WHEELCHAIR FOOTREST WITHOUT CREATING A TRAP OR HAZARDOUS CONDITION. (CBC 11B-404.2.10)

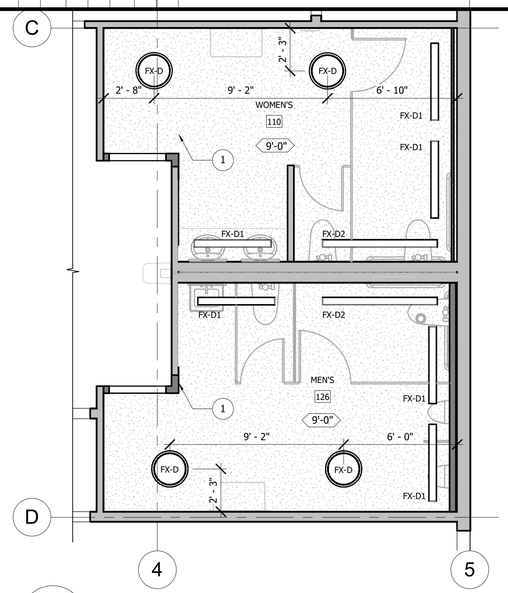
DOOR SCHEDULE1

DOOR TAG	NEW/EXISTING	LOCATION	WIDTH	HEIGHT	TYPE	FIRE RATING	HARDWARE SET	THICKNESS	CORE	DOOR - FINISH	FRAME - FINISH	Frame Material	DOOR MATERIAL	DOOR SIGNS	ROOM SIGNS	HEAD	JAMB	THRES HOLD	PANIC HARDWARE	VISION GLAZING	CLOSER	ELECTRIFIED HARDWARE	THRESHOLD	LOUVER	CARD READER	REMARK
106.1	N		3' - 0"	8' - 0"																						
106.7			3' - 11"	7' - 0"																					X	
106.9	N		3' - 0"	8' - 0"																						
106.10	N		3' - 0"	8' - 0"																						
106.11			3' - 0"	7' - 0"																						
106.12			3' - 0"	7' - 0"																						

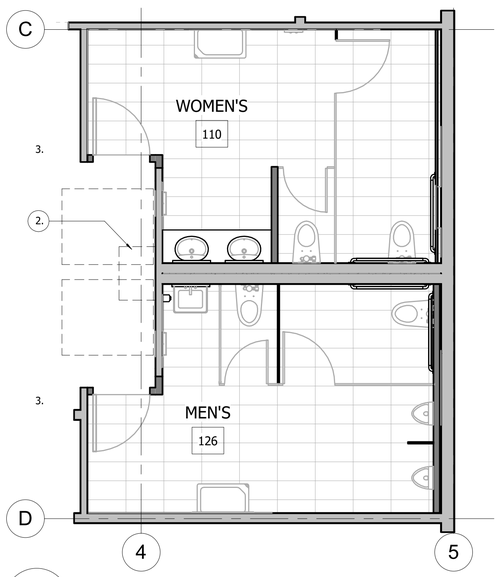




1 A-2.4 LOBBY KEY PLAN FOR DOORS
1/4" = 1'-0"



2 A-2.4 REFLECTED CEILING PLAN RESTROOMS
1/4" = 1'-0"



3 A-2.4 PROPOSED FINISH PLAN RESTROOM
1/4" = 1'-0"

FINISHES SPECIFICATIONS:

WALL COVERINGS:

1. WALL TILE (GENERAL): DAL TILE UNITY COLOR BODY, AVORIO P400 POLISHED, 12" X 24" SIZE W/ 1/8" MAX. CBP #10 ANTIQUE WHITE GROUT, SEALED AFTER INSTALLATION. INSTALL HORIZONTALLY.
2. WALL TILE (@ SINKS): DAL TILE COLOR WAVE CLASSIC SOLIDS GLASS MOSAIC WALL TILE, OAK MOSS CW16, 1" X 1" SIZE W/ 1/8" MAX. CBP #370 DOVE GREY NON-SANDED GROUT WITH FAE GRT RELEASE, SEALED AFTER INSTALLATION.
3. TILE TRIM (OUTSIDE CORNERS): SCHULTER SYSTEMS METAL TRIM PROFILE QUADEC-AE, SATIN ALUMINUM, PROVIDE MATCHING TRIM PIECES.
4. TILE TRIM (INSIDE CORNERS): SCHULTER SYSTEMS METAL COVE PROFILE DILEX-AHK-AE, SATIN ALUMINUM, PROVIDE MATCHING TRIM PIECES.

FLOOR COVERINGS:

1. FLOOR TILE (GENERAL): EMSER PORCELAIN FLOOR TILE, MOTION, COLOR: DRIFT, 12" X 24" SIZE W/ 1/8" MAX. ANTIQUE WHITE GROUT, SEALED AFTER INSTALLATION.

BASE:

1. BASE @ RESTROOMS/SHOWERS: SCHULTER SYSTEMS METAL COVE PROFILE DILEX-AHK-AE, SATIN ALUMINUM, PROVIDE MATCHING TRIM PIECES.
2. RESILIENT BASE: BURKE 4" RUBBER BASE 523 BLACK-BROWN. PROVIDE STRAIGHT AT CARPET, COVE AT RESILIENT. PROVIDE PRE-MOLDED CORNERS AT OUTSIDE CORNERS.

FINISH SCHEDULE

NO.	NAME	FLOOR: CARPET TILE	FLOOR: FLOOR TILE	FLOOR: SHEET VINYL	FLOOR: VCT	FLOOR: MAT	FLOOR: SEALED CONCRETE	BASE: RESILIENT WALL BASE	BASE: METAL COVE	WCT: FRP	WCT: CERAMIC WALL TILE	WALL: GYP. BOARD	WALL: TILE	CEILING: ACCOUSTICAL TILE	CEILING: GYPSUM BOARD	CEILING: OPEN/PAINTED	LEGEND
126.0	RESTROOMS_MEN																**GENERAL NOTE:** 1. ALL WALL AND CEILING SURFACES TO BE PAINTED EXCEPT WHEN NOTED. (REFER TO SPECIFICATIONS FOR EXCEPTIONS) 2. INDICATES APPLICABLE FINISH, SEE REMARKS FOR ADDITIONAL COMMENTS
110.0	RESTROOMS_WOMEN																

FINISH FLOOR PLAN LEGENDS

TILE @ RESTROOMS
(THIN SET TILE @ FIELD W/ MORTAR
SET TILE FLOOR DRAINS

KEY NOTES :

1. NEW 5/8" GYP.BD.CLG (TYP.) AT TOILET ROOM
2. PATCH AND REPAIR FLOOR TO MATCH WITH THE EXISTING FLOOR
3. INSTALL AN DOOR PULL 34" TO 44" HIGH.

GENERAL NOTES:

1. SEAL AND PROTECT EXISTING CEILING AND WALLS FROM DAMAGE AND DEBRIS DURING WORK.
2. AFTER RETROFIT, REMAINING EXISTING WALLS TO BE PATCHED AND REPAINTED. PATCH AND REPAIR FLOOR SURFACE AND BASE AFFECTED FROM WORK.
3. ALL CEILING TILE AND GRID TO BE REPLACED BY GC IF DAMAGED OR MARRED AS A RESULT OF WORK.
4. PROVIDE PROTECTION AND VENTILATION OF ELECTRICAL PANELS AND CLOSETS WITHIN FOOTPRINT OF WORK.
5. GC TO PROTECT ELECTRICAL CLOSETS WHERE WORK EXISTS.
6. GC TO PATCH/PAINT TO MATCH EXISTING WALL SURFACES IMPACTED BY WORK (EXPOSED BEAMS, COLUMNS, STRUCTURAL ELEMENTS ARE TO BE FINISHED TO MATCH EXISTING SURFACE).

LEGEND :

DRYWALL CEILING.

NO CEILING INDICATION:

NO ANTICIPATED ARCHITECTURAL REPAIR IN THIS AREA

X'-X"	HEIGHT OF EXISTING FINISH CEILING
OPEN	OPEN TO STRUCTURE- NO EXISTING FINISH CEILING
	EXISTING WALL TO BE DEMOLISHED
	EXISTING WALL TO REMAIN
	NEW WALL
FX-D1	4 ' LINEAR SURFACE MOUNTED LED FIXTURE
FX-D2	6 ' LINEAR SURFACE MOUNTED LED FIXTURE
FX-D	24" LED RECESSED DOWNLIGHT

N

LICENSED ARCHITECT PANICHAPAN NO. C-23944 EXP. 11-30-23 STATE OF CALIFORNIA

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DESIGN DEVELOPMENT
ADDENDUM #5
DATE: 21 OCT 2024
DATE: 21 OCT 2024
JOB NO.: 3903
CHECKED BY: Checker
DRAWN BY: Author
SCALE: As indicated

RCP & FINISH FLOOR PLAN & DOOR SCHEDULE

SAWPA
SANTA ANA WATERSHED PROJECT AUTHORITY

A-2.4

GENERAL NOTES:

1. SEAL AND PROTECT EXISTING CEILING AND WALLS FROM DAMAGE AND DEBRIS DURING WORK.
2. AFTER RETROFIT, REMAINING EXISTING WALLS TO BE PATCHED AND REPAINTED. PATCH AND REPAIR FLOOR SURFACE AND BASE AFFECTED FROM WORK.
3. ALL CEILING TILE AND GRID TO BE REPLACED BY GC IF DAMAGED OR MARRED AS A RESULT OF WORK.
4. PROVIDE PROTECTION AND VENTILATION OF ELECTRICAL PANELS AND CLOSETS WITHIN FOOTPRINT OF WORK.
5. GC TO PROTECT ELECTRICAL CLOSETS WHERE WORK EXISTS.
6. GC TO PATCH/PAINT TO MATCH EXISTING WALL SURFACES IMPACTED BY WORK (EXPOSED BEAMS, COLUMNS, STRUCTURAL ELEMENTS ARE TO BE FINISHED TO MATCH EXISTING SURFACE).

LEGEND :

DRYWALL CEILING.

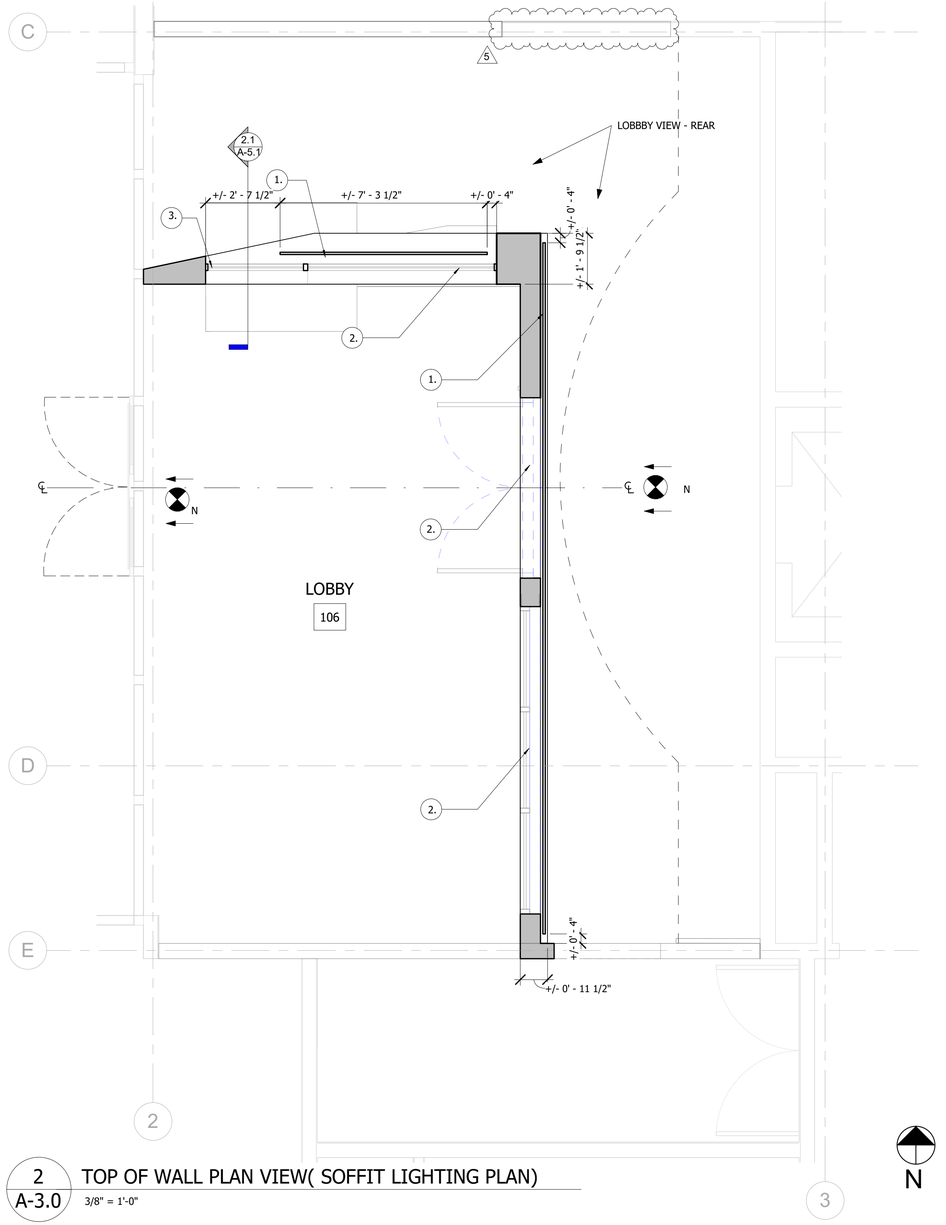
NO CEILING INDICATION:

NO ANTICIPATED ARCHITECTURAL REPAIR IN THIS AREA

X'-X"	HEIGHT OF EXISTING FINISH CEILING
OPEN	OPEN TO STRUCTURE- NO EXISTING FINISH CEILING
	EXISTING WALL TO BE DEMOLISHED
	EXISTING WALL TO REMAIN
	NEW WALL
	LINEAR SURFACE MOUNTED LED FIXTURE
	24" LED RECESSED DOWNLIGHT

1. SURFACE LED ACCENT STRIP AT SOFFIT
2. DOOR/WINDOW SHOWN BELOW
3. SEALED HARDWOOD CAP TO MATCH

1 / A-3.0 LOBBY VIEW- REAR
1/2" = 1'-0"



2 / A-3.0 TOP OF WALL PLAN VIEW(SOFFIT LIGHTING PLAN)
3/8" = 1'-0"

DESIGNED ARCHITECT PANICHAPAN LICENSED ARCHITECT NO. C-23944 EXP. 11-30-23 STATE OF CALIFORNIA

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DESIGN DEVELOPMENT — DATE: 21 OCT 2024
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SCALE: As indicated

LOBBY SOFFIT DETAIL

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A-3.0

WALL COVERINGS:

1. KOROSEAL - WALLCOVERINGS INTERLOOM PRUSSIAN - NM21-19
2. CLEAR ADONIZED STOREFRONT SYSTEM
3. DAL TILE - ENGINEERED STONE OQ34 - ROCKY MOUNTAIN
4. WILSONART - PLASTIC LAMINATE WALNUT HEIGHTS - 7965
5. SHERWIN WILLIAMS - PAINT EIDER WHITE SW 7014
6. SHERWIN WILLIAMS - ACCENT PAINT LAZY GRAY SW 6254
7. HARDWOOD CAP TO MATCH PROPOSED PLASTIC LAMINATE FINISH

FLOOR COVERINGS:

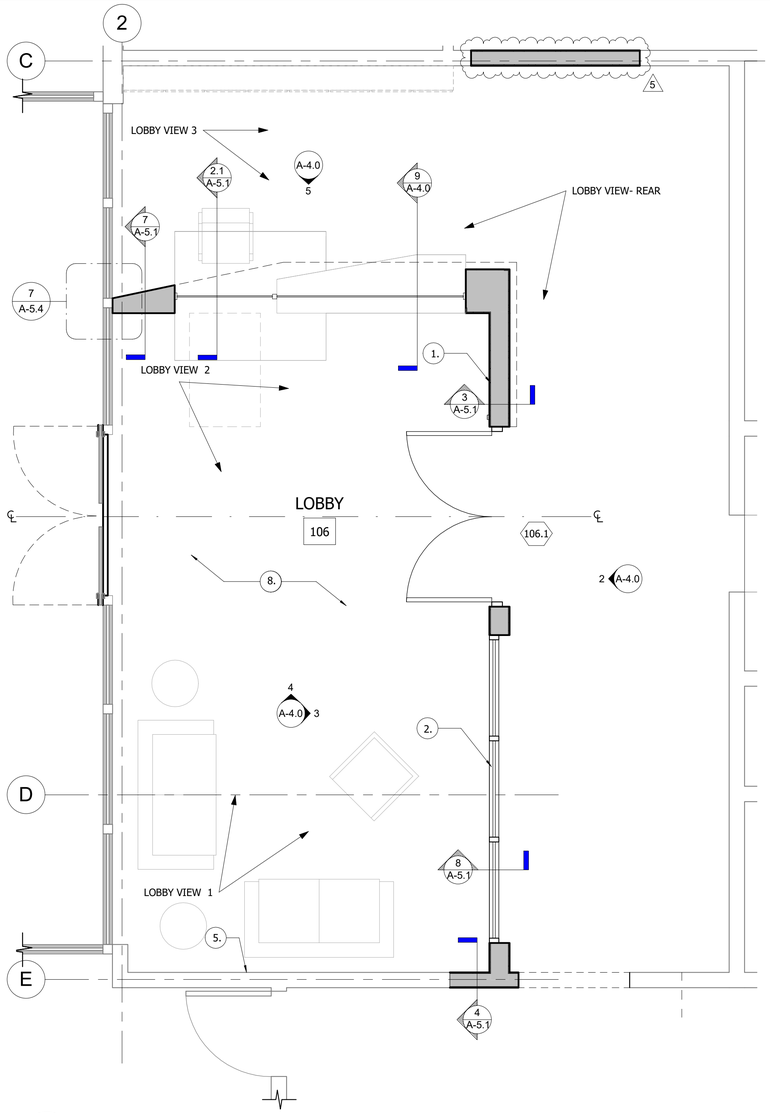
8. DAL TILE - TILE FLOORING REVOTILE STONE LOOK GRAPHITE RV61

BASE:

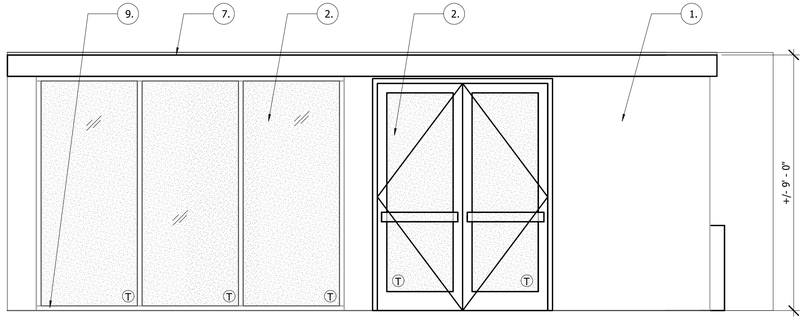
9. ROPPE - RUBBER BASE 193 BLACK BROWN

KEY NOTES :

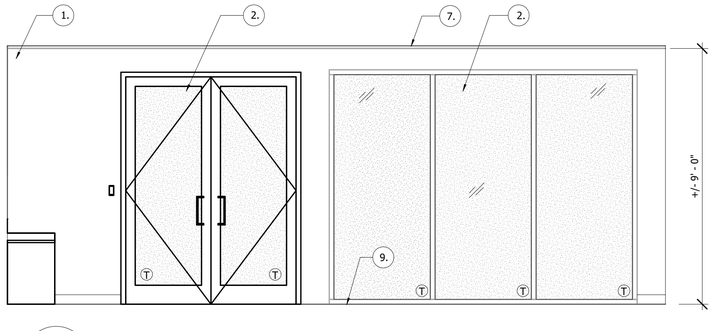
T TEMPERED GLAZING



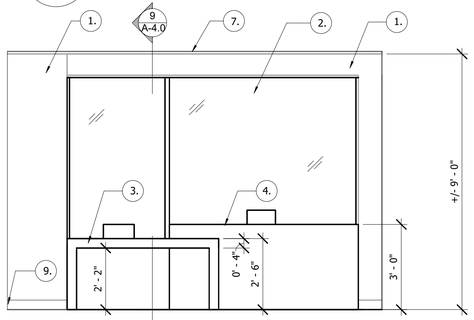
1 A-4.0 PROPOSED LOBBY FINISH PLAN
3/8" = 1'-0"



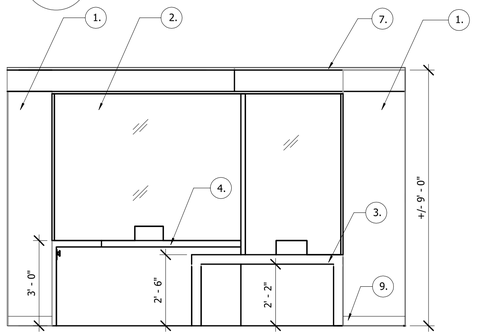
2 A-4.0 ELEVATION 1 - NEW LOBBY WALL
3/8" = 1'-0"



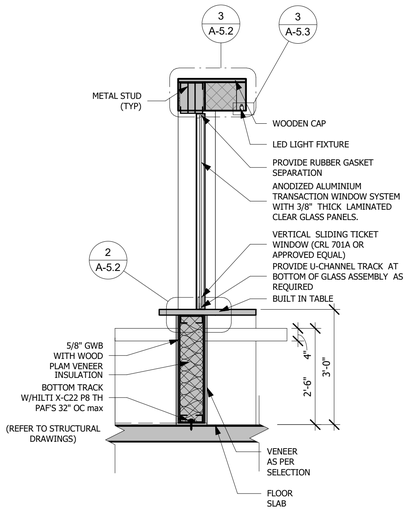
3 A-4.0 ELEVATION 2 - NEW LOBBY WALL
3/8" = 1'-0"



4 A-4.0 ELEVATION 3 - NEW LOBBY WALL
3/8" = 1'-0"

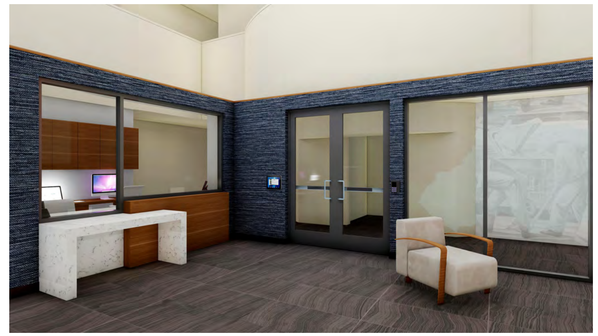


5 A-4.0 ELEVATION 4 - NEW LOBBY WALL
3/8" = 1'-0"



9 A-4.0 DETAIL SECTION-
1/2" = 1'-0"

6 A-4.0 LOBBY VIEW-3



7 A-4.0 LOBBY VIEW-2

8 A-4.0 LOBBY VIEW -1

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INTERIOR ELEVATION

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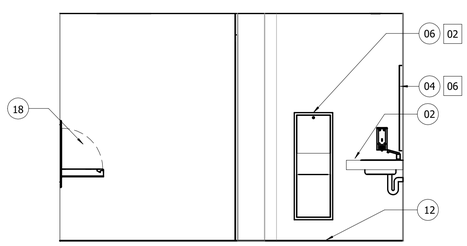
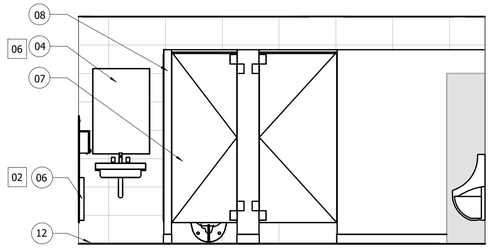
A-4.0



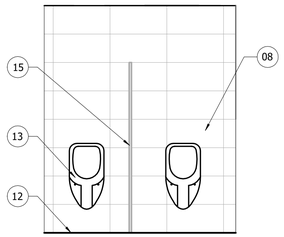
1 A-4.1 PROPOSED RESTROOM : MEN

3/8" = 1'-0"



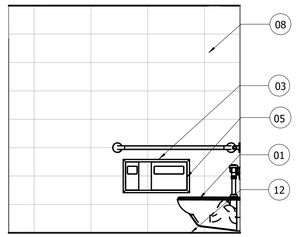
2 A-4.1 PROPOSED RESTROOM : MEN

3/8" = 1'-0"



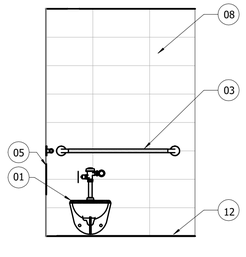
3 A-4.1 PROPOSED RESTROOM : MEN

3/8" = 1'-0"



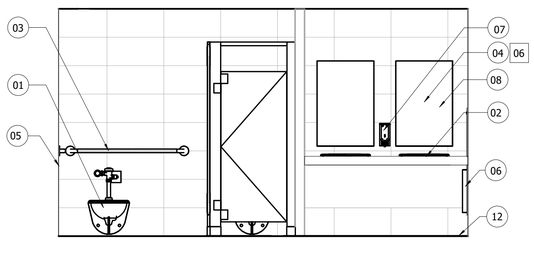
4 A-4.1 PROPOSED RESTROOM : MEN

3/8" = 1'-0"



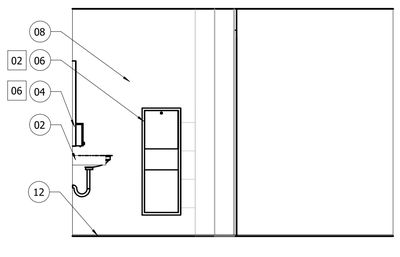
5 A-4.1 PROPOSED RESTROOM : MEN

3/8" = 1'-0"



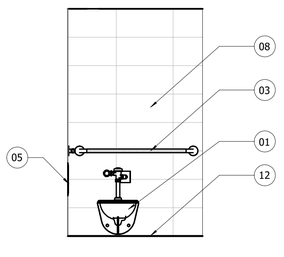
6 A-4.1 PROPOSED RESTROOM : WOMEN

3/8" = 1'-0"



7 A-4.1 PROPOSED RESTROOM : WOMEN

3/8" = 1'-0"



8 A-4.1 PROPOSED RESTROOM : WOMEN

3/8" = 1'-0"

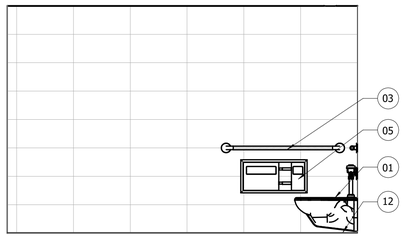
KEYNOTES:

LEGEND

01	NEW FLOOR MOUNT WATER CLOSET, SEE PLUMBING
02	NEW SINK, SEE PLUMBING
03	NEW GRAB BAR
04	NEW MIRROR
05	NEW TOILET PAPER/SEAT COVER DISPENSER
06	NEW PAPER TOWEL DISPENSER/WASTE RECEPTACLE
07	NEW SOAP DISPENSER
08	NEW TILE WAINSCOT (SOME WALLS FULL HIGHT REFER TO ELEVATION)
09	NEW FLOOR DRAIN, SEE PLUMBING
10	NEW FLOOR FINISH
11	TOILET PARTITIONS, REFER TO MOODBOARD SET
12	METAL COVED BASE.
13	NEW URINAL, SEE PLUMBING.
14	NEW BOTTLE FILLER, REFER TO MOODBOARD SET
15	URINAL SCREEN
16	NEW GYPBOARD FINISH TO MATCH WITH EXISTING.
17	UNDER COUNTER PANEL (ADA)
18	DIAPER CHANGING TABLE
19	SANITARY NAPKIN DISPENSOR VENDOR

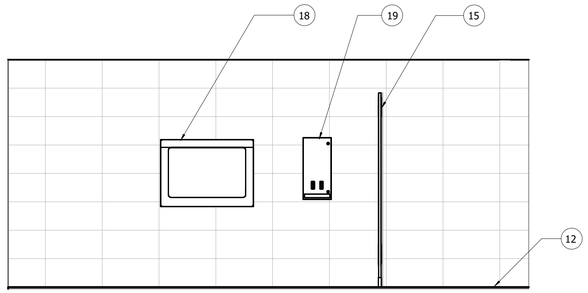
TOILET AND WASHROOM ACCESSORIES:

01	RECESSED TOILET SEAT COVER & TOILET TISSUE DISPENSER -BOBRICK COPY
02	PARTITION MOUNTED TOILET SEAT COVER & TOILET TISSUE DISPENSER - BOBRICK B-347
03	SURFACE MOUNTED TOILET SEAT COVER & TOILET TISSUE DISPENSER - BOBRICK B-3479
04	RECESSED TOILET SEAT COVER, SANITARY NAPKIN DISPOSAL & TOILET TISSUE DISPENSER - BOBRICK B-3091/B-3092
05	PARTITION MOUNTED TOILET SEAT COVER, SANITARY NAPKIN DISPOSAL & TOILET TISSUE DISPENSER - BOBRICK B-357
06	MIRROR - BOBRICK B-290
07	PAPER TOWEL/WASTE RECEPTACLE - BOBRICK B-3944 W/ B-29744 PAPER TOWEL DISPENSER (ELECTONIC)
08	GRAB BAR - BOBRICK B-6806
09	SOAP DISPENSER -



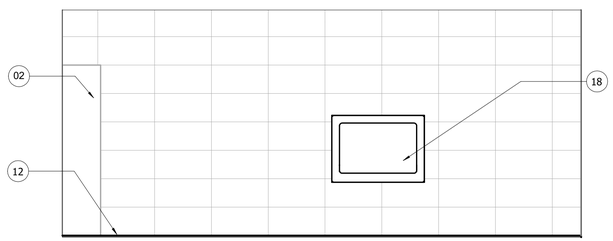
9 A-4.1 PROPOSED RESTROOM : WOMEN

3/8" = 1'-0"



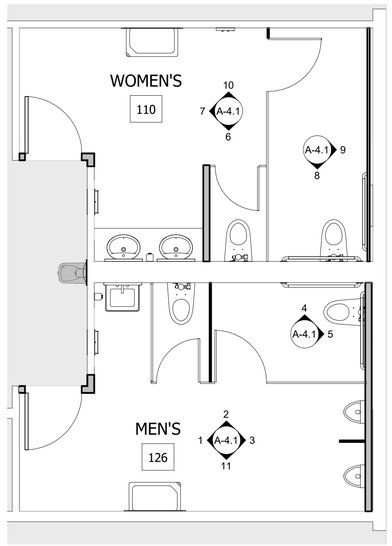
10 A-4.1 PROPOSED RESTROOM : WOMEN

3/8" = 1'-0"



11 A-4.1 PROPOSED RESTROOM : MEN

3/8" = 1'-0"



12 A-4.1 KEYPLAN

1/4" = 1'-0"

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DESIGN DEVELOPMENT
ADDENDUM #5

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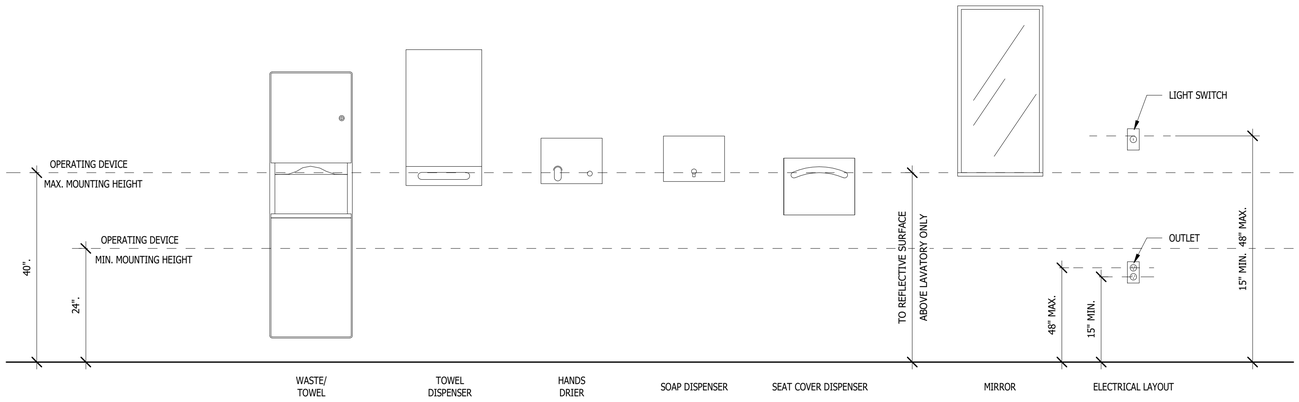
INTERIOR ELEVATIONS

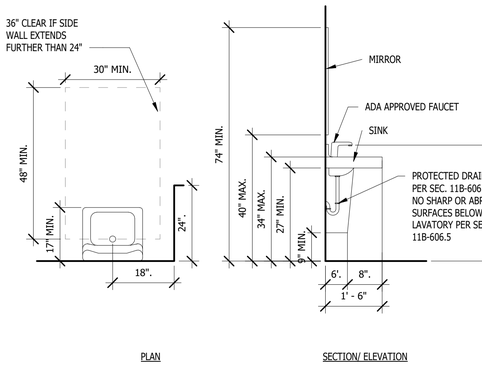
SAWPA
SANTA ANA WATERSHED PROJECT AUTHORITY

A-4.1



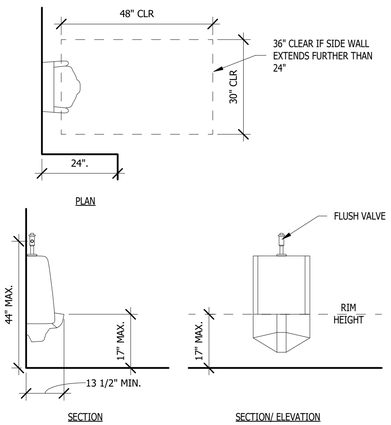
1 A-5.0 CALDAG TOILET ACCESSORIES DIMENSIONS & CLEARANCES

3/4" = 1'-0"



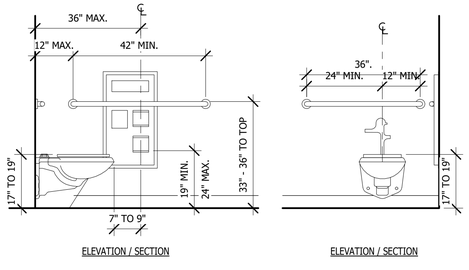
2 A-5.0 ACCESSIBLE SINK/LAVATORY SIM.

1/2" = 1'-0"



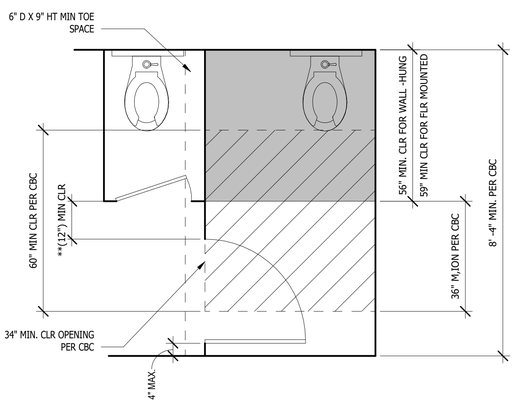
3 A-5.0 URINAL

1/2" = 1'-0"



4 A-5.0 WATER CLOSET

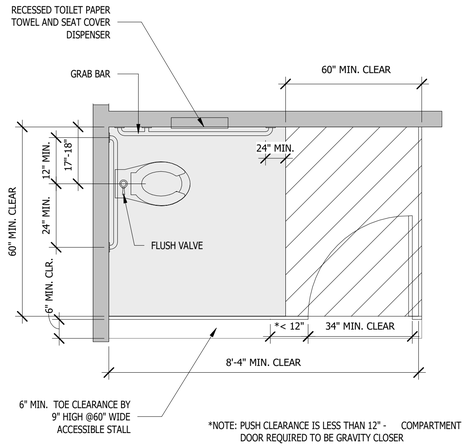
1/2" = 1'-0"



** IF THE COMPARTMENT DOOR HAS A CLOSER MECHANISM OTHER THAN A GRAVITY CLOSER, THEN THE STRIKE PUSH SIDE REQUIRES A 12" CLR DIMENSION AND THE OVERALL STALL DEPTH INCREASES TO 9' 3" PER CBC.

7 A-5.0 SIDE DOOR CONFIGURATIONS

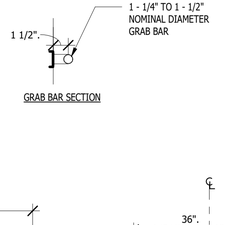
1/2" = 1'-0"



*NOTE: PUSH CLEARANCE IS LESS THAN 12" - COMPARTMENT DOOR REQUIRED TO BE GRAVITY CLOSER

8 A-5.0 MULTIPLE ACCESSIBLE STALL CONDITION

1/2" = 1'-0"



GRAB BAR SECTION

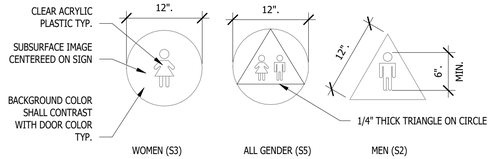
NOTE:

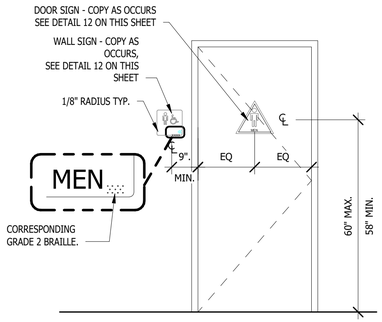
1. ATTACH SIGNS WITH SILICON ADHESIVE AND NON- CORROSIVE, VANDAL RESISTANT FLAT HEAD SCREWS.

2.. WHEN MOUNTING SIGN TO NON - OPAQUE MATERIAL, APPLY VINYL ADHESIVE BACKER; COLOR AND SIZE TO MATCH SIGNAGE.

3. TACTILE CHARACTER ON SIGNS TO BE LOCATED 48 IN. MIN. ABOVE THE FINISH FLOOR TO THE BASELINE OF THE LOWEST TACTILE CHARACTER AND 60 IN. MAX. ABOVE THE FINISH FLOOR TO THE BASELINE OF THE HIGHEST TACTILE CHARACTER.

DOOR SIGNS

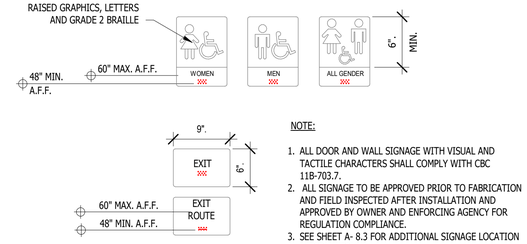




5 A-5.0 TOILET ROOM SIGNAGE

1/2" = 1'-0"

WALL SIGNS



NOTE:

1. ALL DOOR AND WALL SIGNAGE WITH VISUAL AND TACTILE CHARACTERS SHALL COMPLY WITH CBC 11B-703.7.
2. ALL SIGNAGE TO BE APPROVED PRIOR TO FABRICATION AND FIELD INSPECTED AFTER INSTALLATION AND APPROVED BY OWNER AND ENFORCING AGENCY FOR REGULATION COMPLIANCE.
3. SEE SHEET A- 8.3 FOR ADDITIONAL SIGNAGE LOCATION INFORMATION.

6 A-5.0 SIGNAGE DETAILS

1" = 1'-0"

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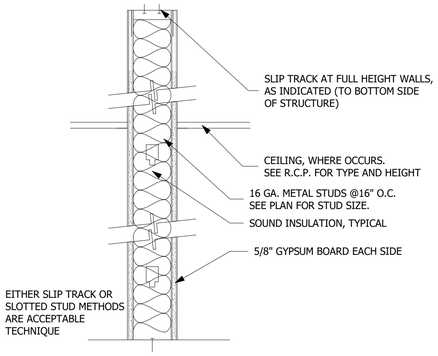
JOB NO.: 3803 | CHECKED BY: Checker | DRAWN BY: Author
SCALE: As indicated

DETAILS-I

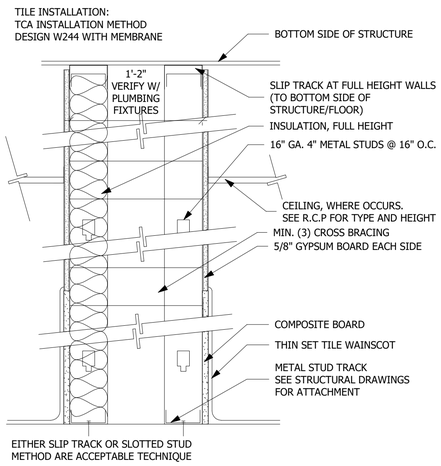
SAWPA
SANTA ANA WATERSHED PROJECT AUTHORITY

A-5.0



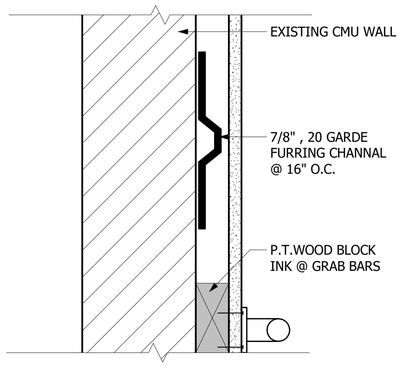
1 / A-5.1 TYP.INT.PARTITION 4" OR 6" OR 8"

1 1/2" = 1'-0"



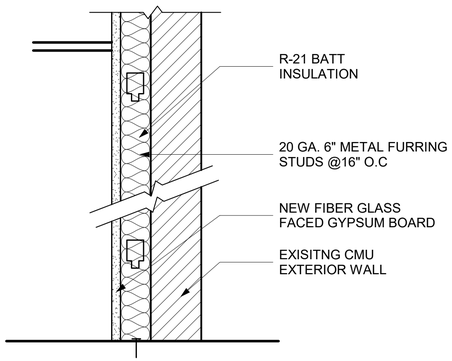
5 / A-5.1 PLUMBING WALL AT PARTITION

1 1/2" = 1'-0"



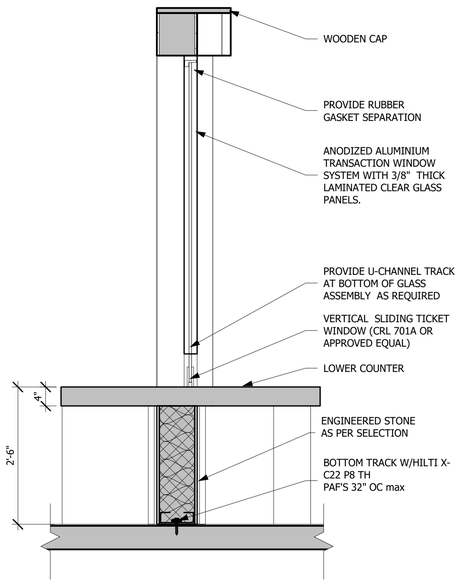
6 / A-5.1 FURRED WALL DETAIL 1

1" = 1'-0"



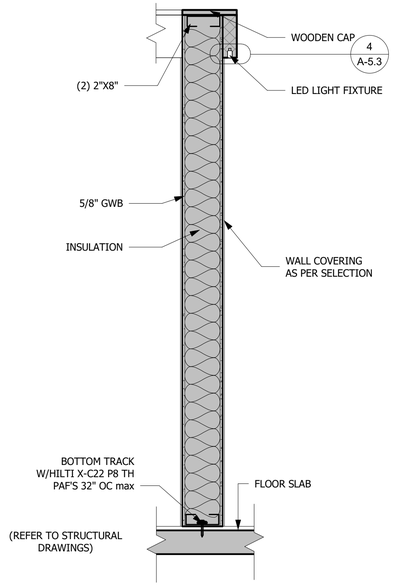
6 A / A-5.1 FURRED WALL DETAIL 2

1" = 1'-0"



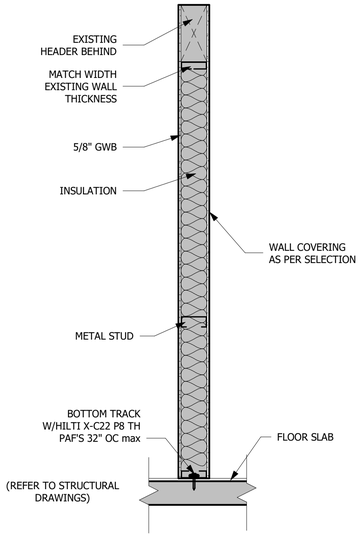
2.1 / A-5.1 DETAIL LOWER COUNTER SECTION

3/4" = 1'-0"



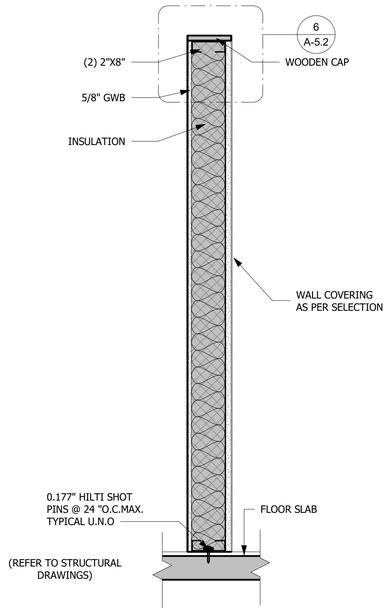
3 / A-5.1 DETAIL SECTION ,

3/4" = 1'-0"



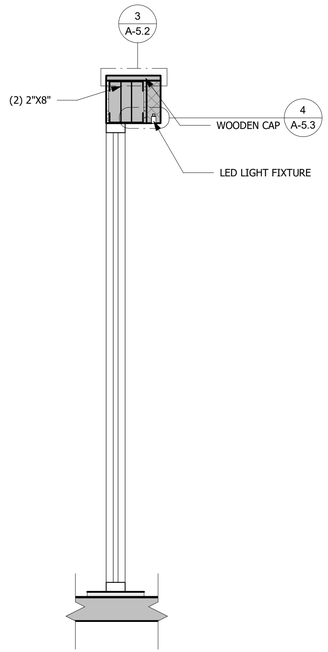
4 / A-5.1 DETAIL SECTION INFILL WALL

3/4" = 1'-0"



7 / A-5.1 DETAIL SECTION

3/4" = 1'-0"



8 / A-5.1 DETAIL SECTION.

3/4" = 1'-0"

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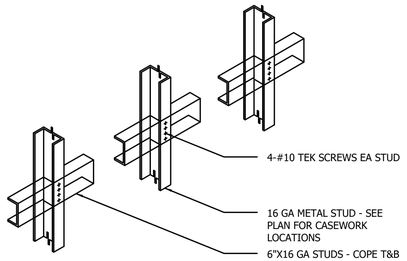
SCALE: As indicated

DETAILS-II

SAWPA
SANTA ANA WATERSHED PROJECT AUTHORITY

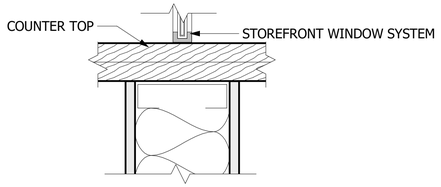
A-5.1



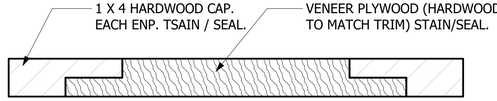
NOTE:

1. BACKING PLATE MUST EXTEND ACROSS A MINIMUM OF FOUR STUDS

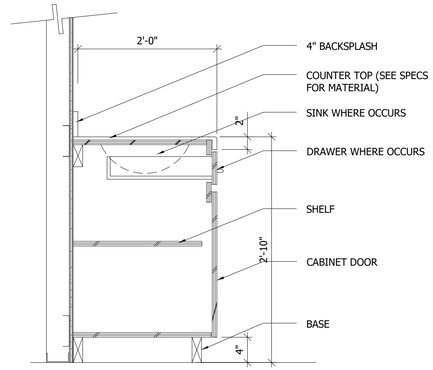
1 A-5.2 TYPICAL CASEWORK & GRAB BARS BACKING/SUPPORT_
1" = 1'-0"



2 A-5.2 TABLE TOP DETAIL
1 1/2" = 1'-0"



3 A-5.2 WOOD CAP
1 1/2" = 1'-0"



4 A-5.2 CASEWORK DETAIL_
1" = 1'-0"

5 A-5.2 DOOR (VISION PANEL)
1 1/2" = 1'-0"

6 A-5.2 DETAIL SECTION 1
3" = 1'-0"

7 A-5.2 SOLID SURFACE COUNTERTOP
1" = 1'-0"

8 A-5.2 IN WALL BRACKET
1" = 1'-0"

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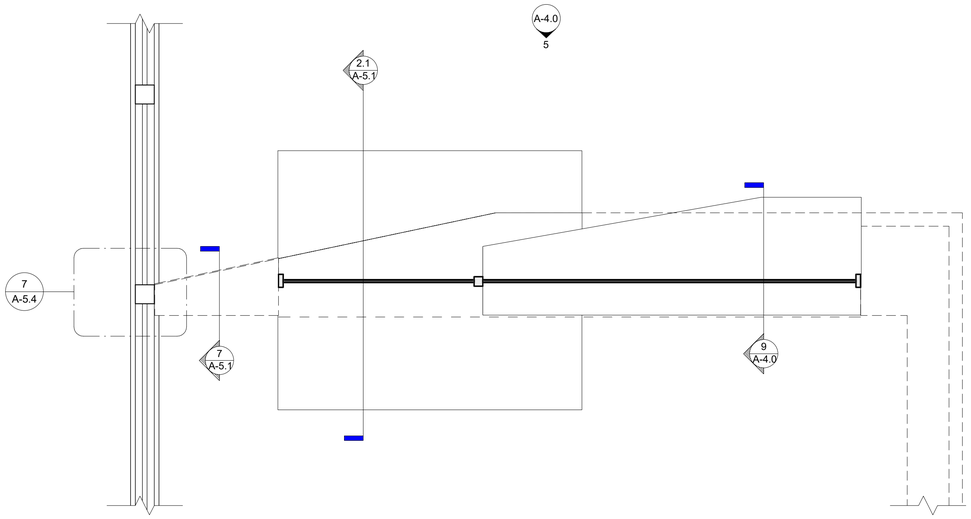
DETAIL - III

SAWPA
SANTA ANA WATERSHED PROJECT AUTHORITY

A-5.2

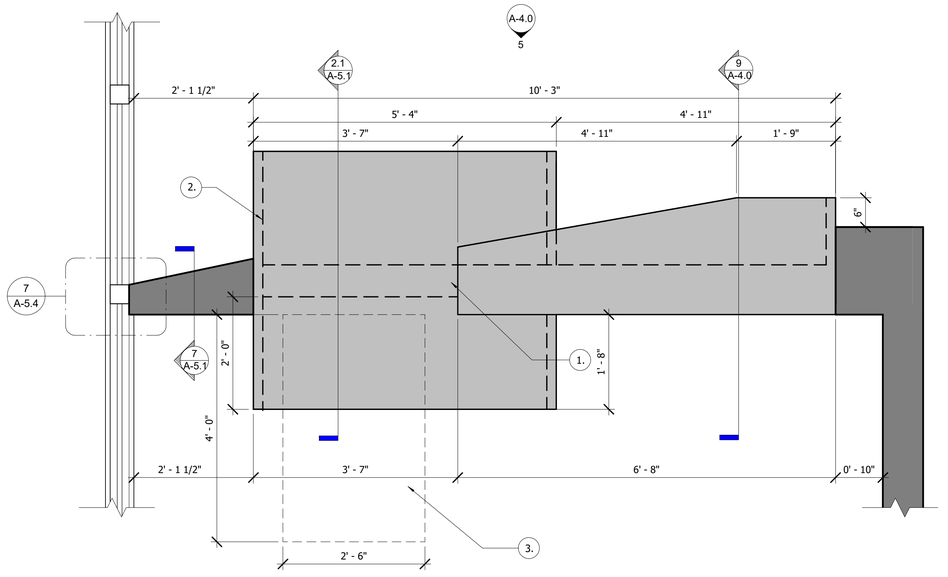


1 A-5.3 RECEPTION DESK - SOFFIT PROFILE

3/4" = 1'-0"

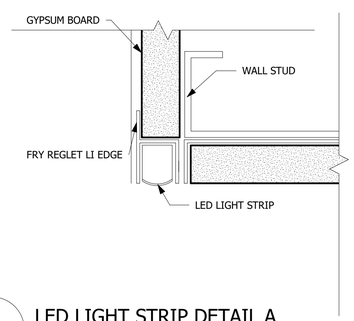
KEY NOTES :

1. TUBE STEEL COLUMN (SEE STRUCTURAL DRAWINGS)
2. DASHED LINE INDICATES TABLE SUPPORT BELOW
3. INDICATE AREA OF ACCESSIBLE COUNTER



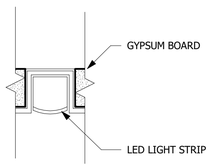
2 A-5.3 RECEPTION DESK - DESK SURFACE

3/4" = 1'-0"



3 A-5.3 LED LIGHT STRIP DETAIL A

1/2" = 1'-0"



4 A-5.3 LED LIGHT STRIP DETAIL B

1/2" = 1'-0"

5 A-5.3 DESK

1" = 40'-0"

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DESIGN DEVELOPMENT
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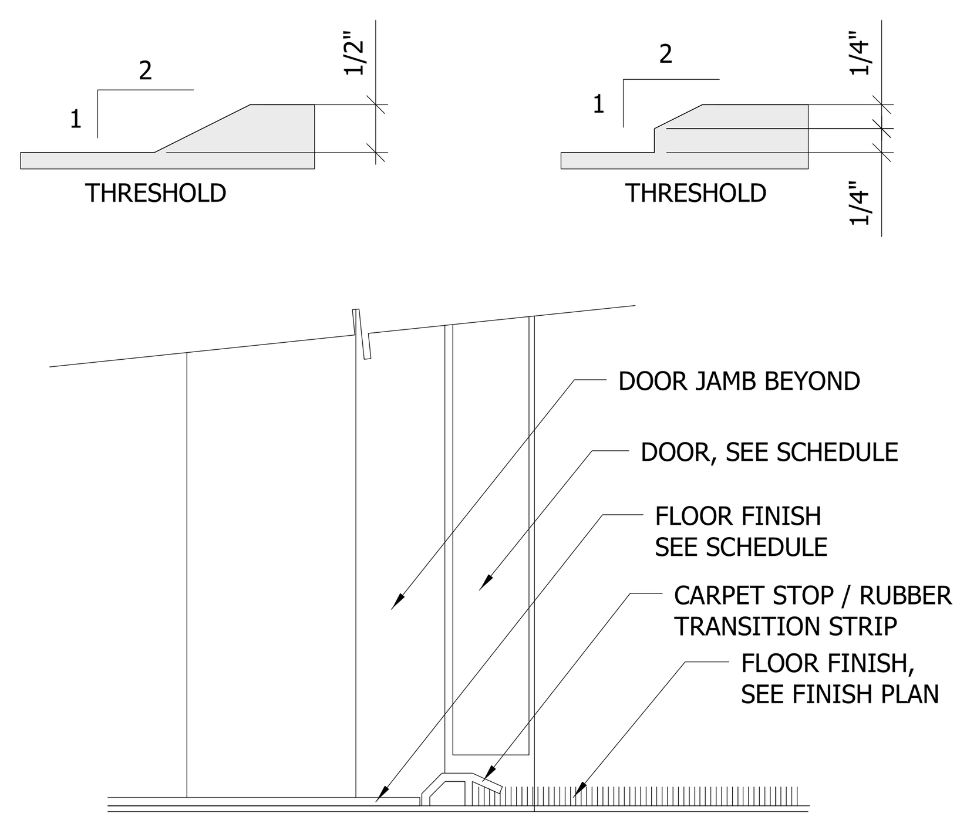
DETAIL - IV

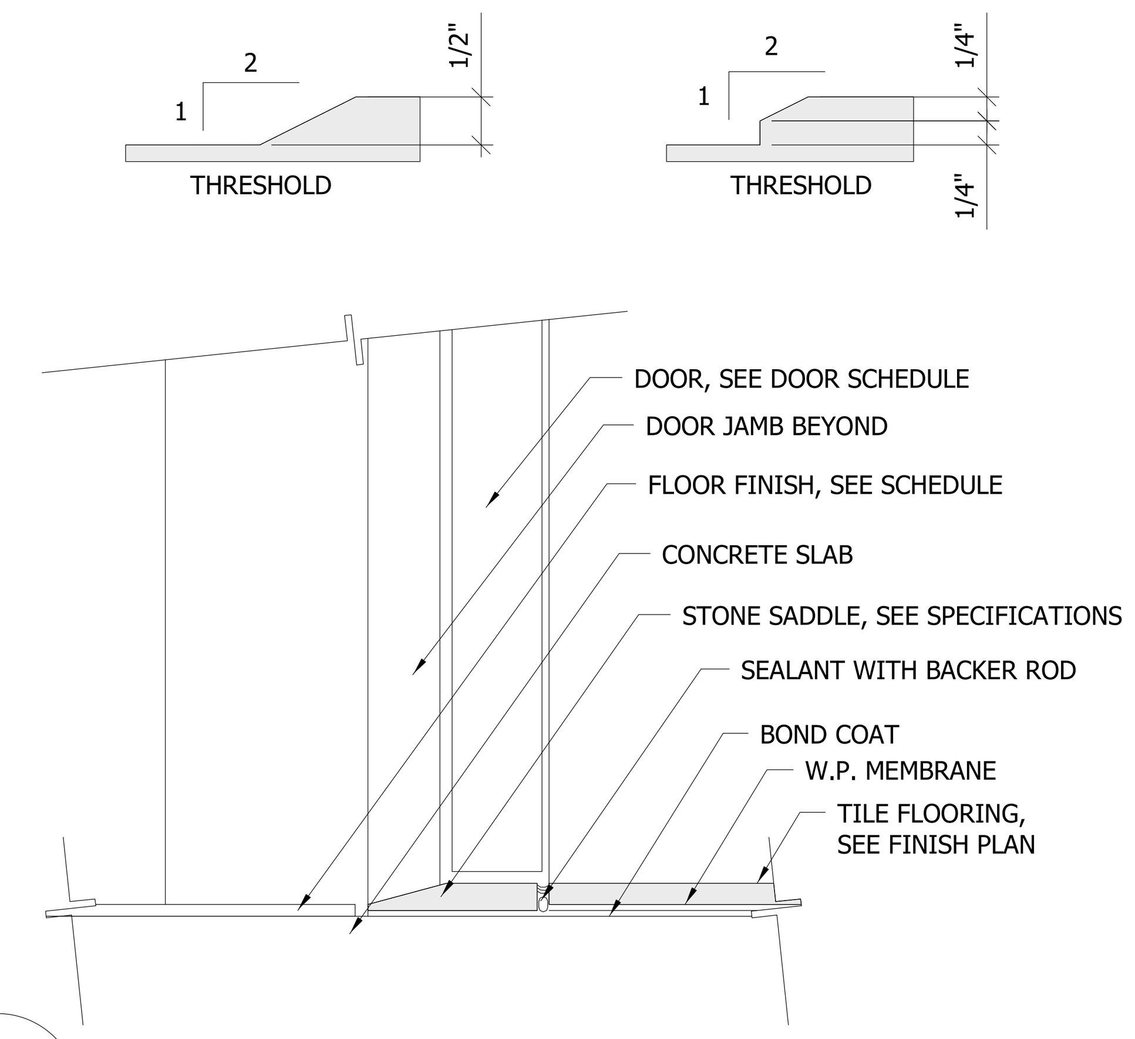
SAWPA
SANTA ANA WATERSHED PROJECT AUTHORITY

A-5.3



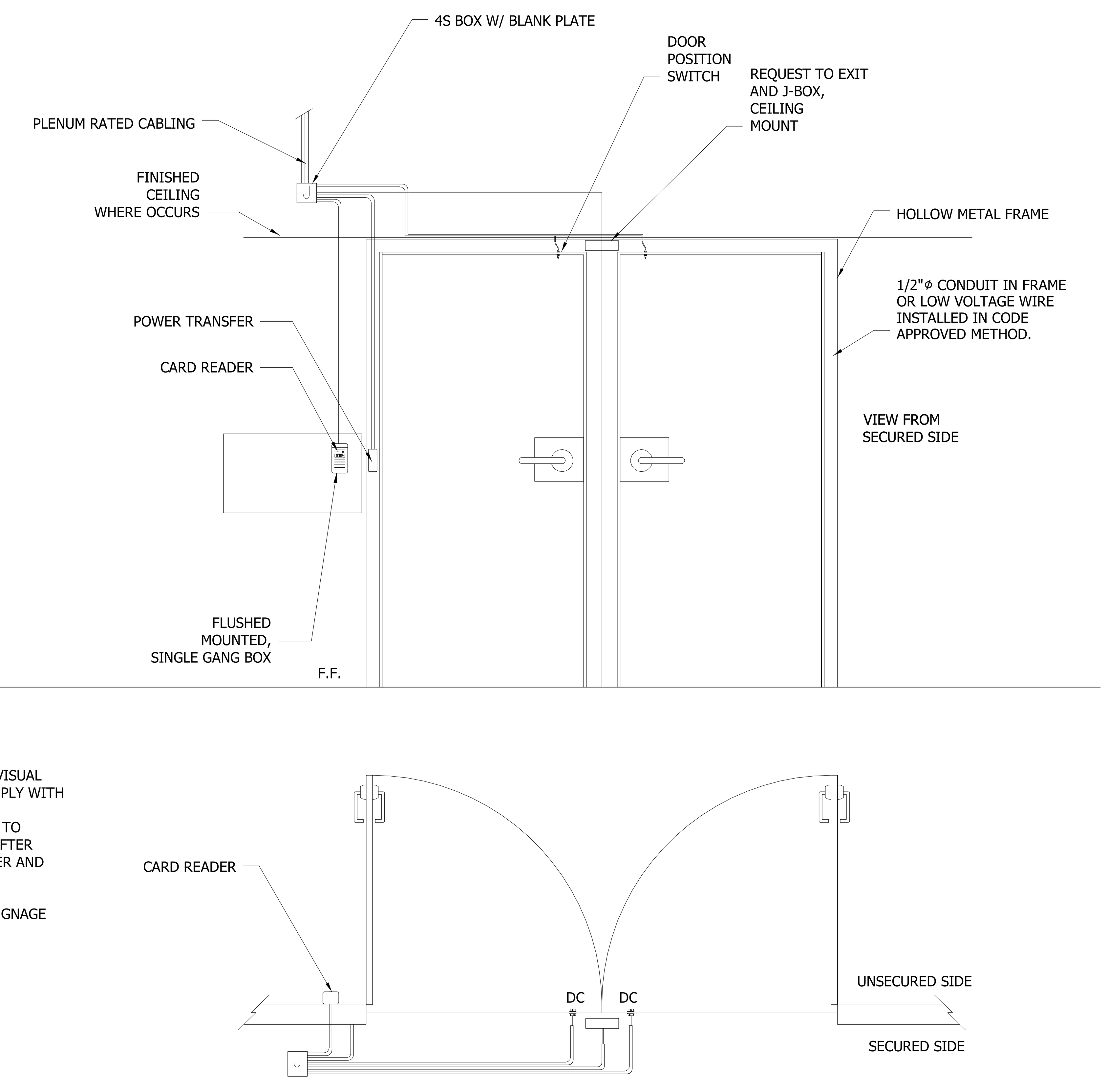
1 A-5.4 TRANSITION @ INTERIOR DOOR

3" = 1'-0"



2 A-5.4 THRESHOLD @ INTERIOR DOOR

3" = 1'-0"



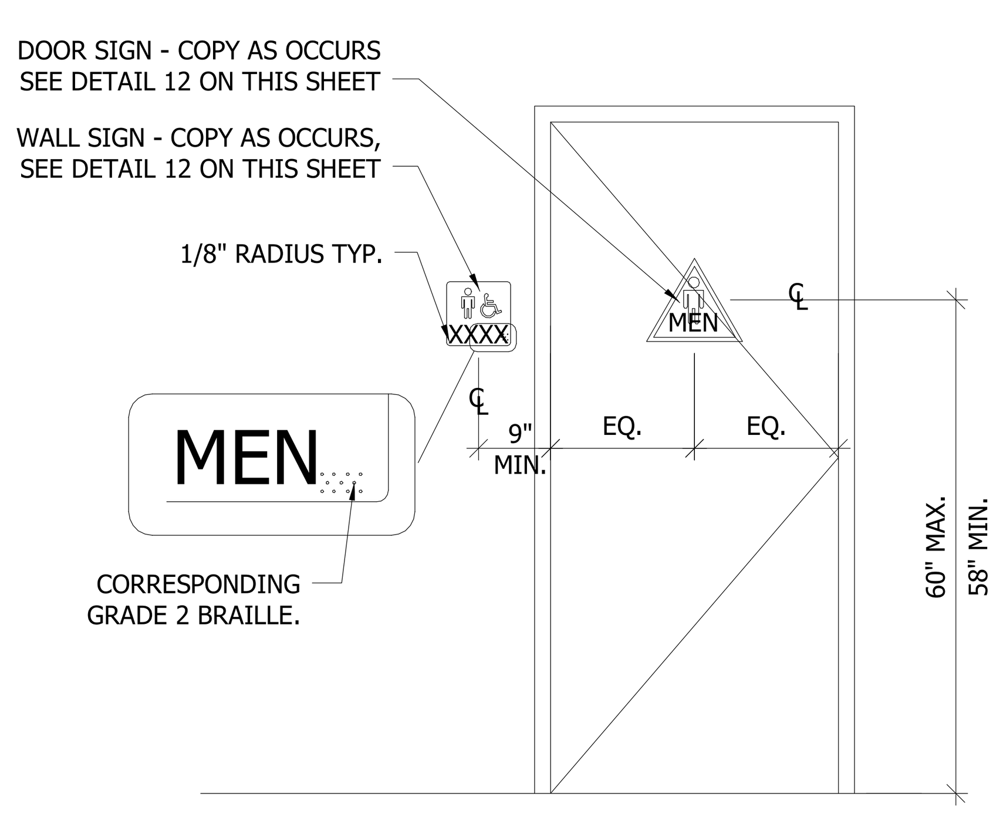
GENERAL NOTE:
CONDUIT RUNS ARE DIAGRAMMATIC. CONTRACTOR TO COORDINATE WITH
LOW VOLTAGE ACCESS CONTROL DESIGN/BUILD INSTALLING SUB-CONTRACTOR

6 A-5.4 CONDUIT @ DOORS W/ CARD READER/SECURITY CONTACTS

1/2" = 1'-0"

NOTE:

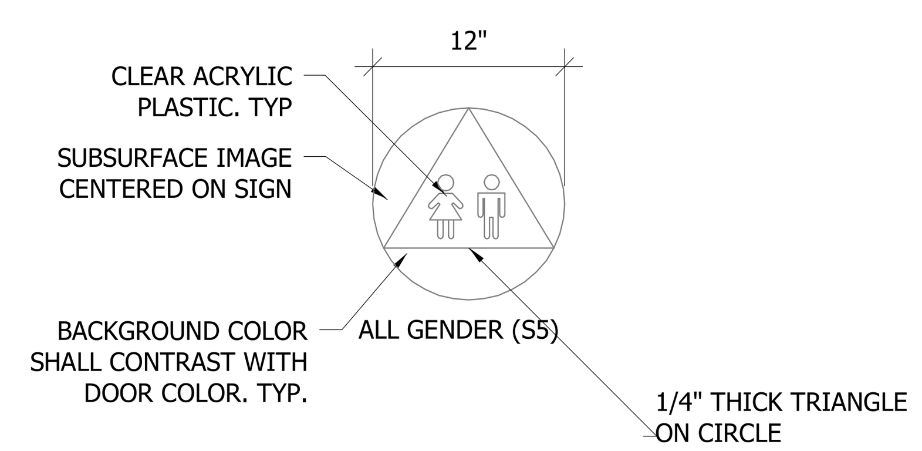
1. ATTACH SIGNS WITH SILICON ADHESIVE AND NON-CORROSIVE, VANDAL RESISTANT FLAT HEAD SCREWS
2. WHEN MOUNTING SIGN TO NON-OPAQUE MATERIAL, APPLY VINYL ADHESIVE BACKER; COLOR AND SIZE TO MATCH SIGNAGE.
3. TACTILE CHARACTERS ON SIGNS TO BE LOCATED 48 IN. MIN. ABOVE THE FINISH FLOOR TO THE BASELINE OF THE LOWEST TACTILE CHARACTER AND 60 IN. MAX. ABOVE THE FINISH FLOOR TO THE BASELINE OF THE HIGHEST TACTILE CHARACTER



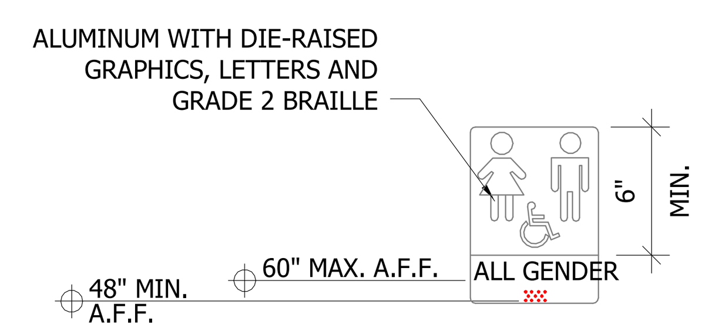
3 A-5.4 TOILET ROOM SIGNAGE (FOR REFERENCE)

1/2" = 1'-0"

DOOR SIGNS



WALL SIGNS

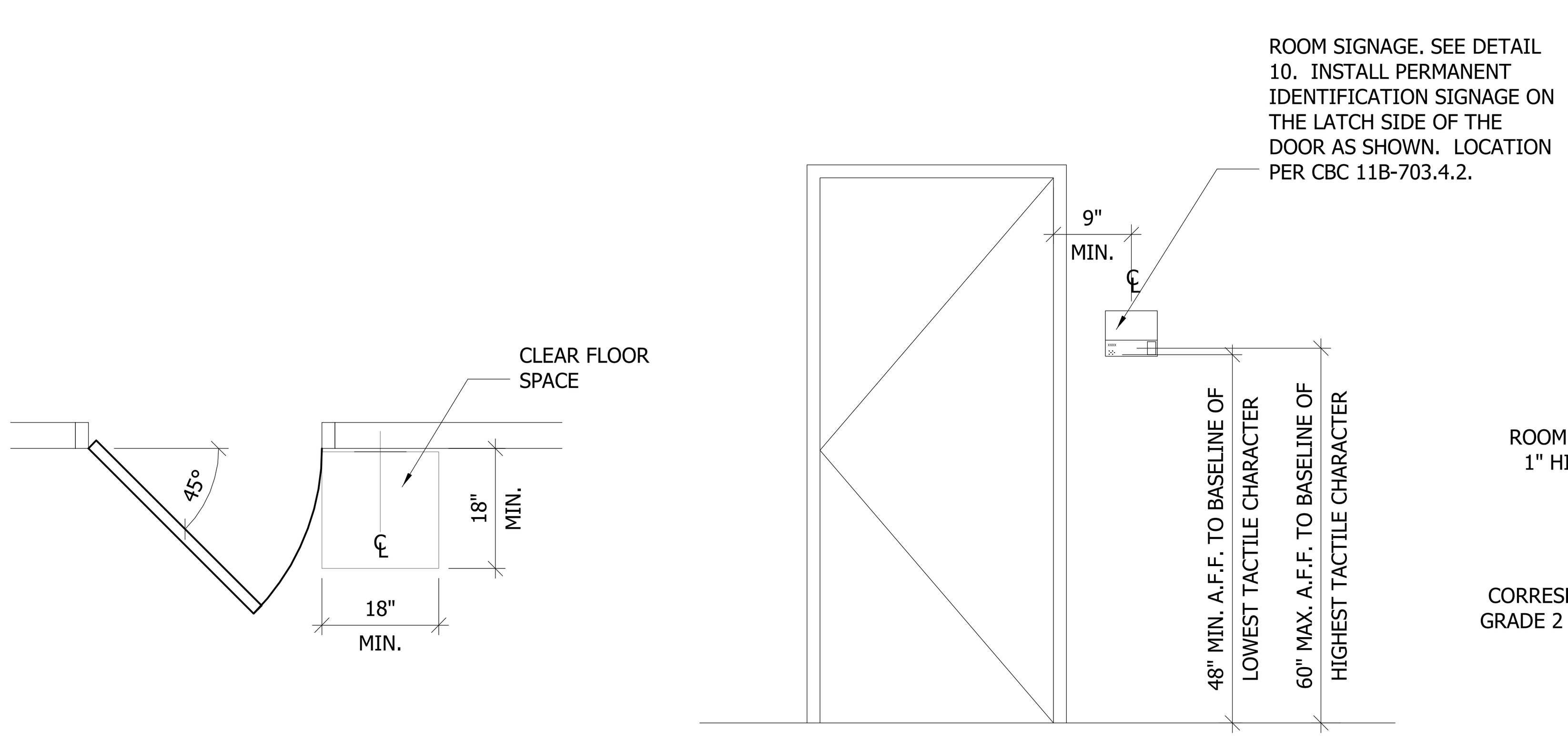


NOTE:

1. ALL DOOR AND WALL SIGNAGE WITH VISUAL AND TACTILE CHARACTERS SHALL COMPLY WITH CBC 11B-703.1 THRU 11B-703.7.
2. ALL SIGNAGE TO BE APPROVED PRIOR TO FABRICATION AND FIELD INSPECTED AFTER INSTALLATION AN APPROVED BY OWNER AND ENFORCING AGENCY FOR REGULATION COMPLIANCE.
3. SEE SHEET A-2.1b FOR ADDITIONAL SIGNAGE LOCATION INFORMATION.

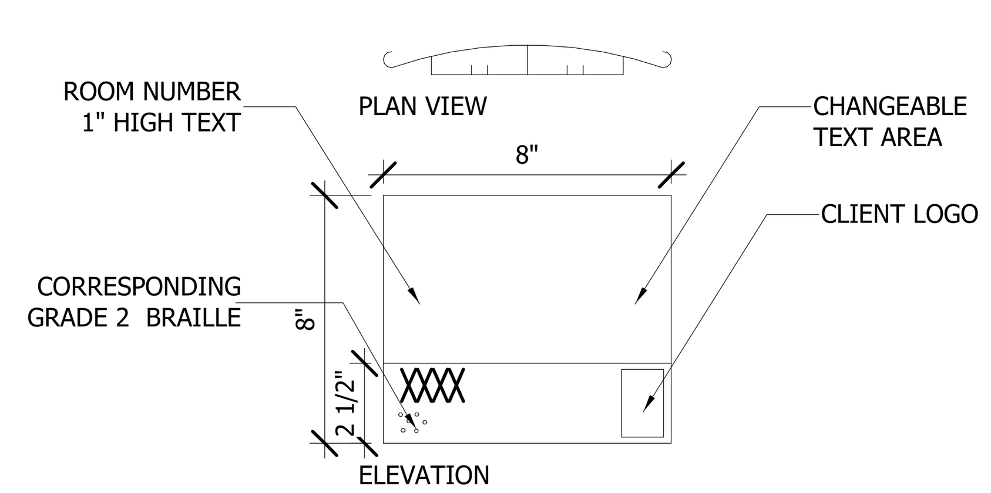
4 A-5.4 SIGNAGE DETAILS(REFERENCE)

1" = 1'-0"



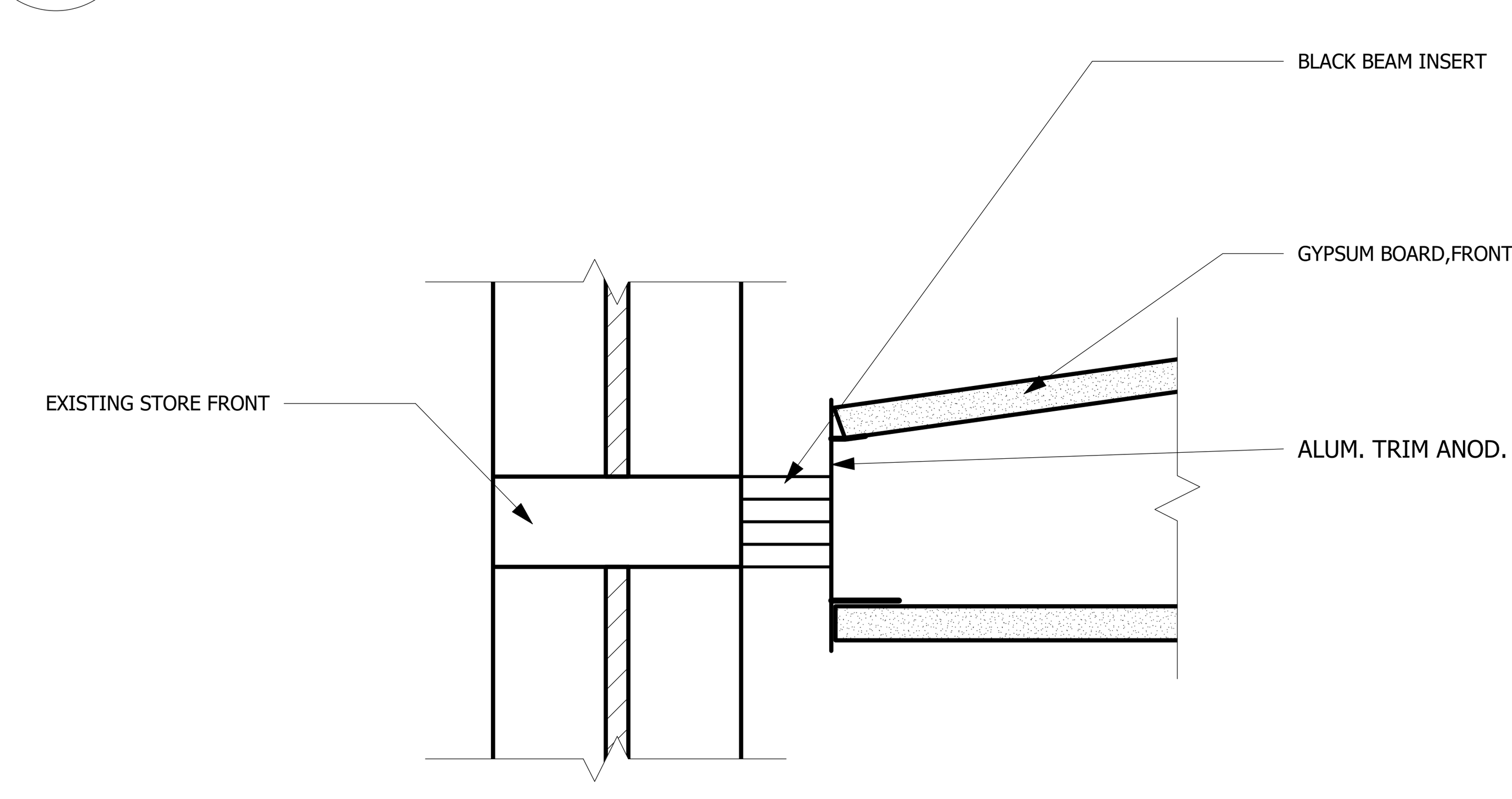
NOTE:

1. ALL WALL SIGNAGE WITH VISUAL AND TACTILE CHARACTERS SHALL COMPLY WITH CBC 11B-703.1 THRU 11B-703.7.
2. ALL SIGNAGE TO BE APPROVED PRIOR TO FABRICATION AND FIELD INSPECTED AFTER INSTALLATION AND APPROVED BY OWNER AND ENFORCING AGENCY FOR REGULATION COMPLIANCE.



5 A-5.4 ROOM SIGNAGE (FOR REFERENCE)

1/2" = 1'-0"



7 A-5.4 STOREFRONT DETAIL

1 1/2" = 1'-0"

LICENSED ARCHITECT
LONGKANACH PANICHAPAN
NO. C-29344
EXP. 11-30-23
STATE OF CALIFORNIA

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planning
interior

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DESIGN DEVELOPMENT DATE: 21 OCT 2024
ADDENDUM #5 DATE: 21 OCT 2024

JOB NO.: 3903
SCALE: As indicated
CHECKED BY: Checker
DRAWN BY: Author

DETAILS- V

SAWPA
SANTA ANA WATERSHED PROJECT AUTHORITY

A-5.4

GENERAL NOTES

1. ALL DRAWINGS ARE CONSIDERED TO BE PART OF THE CONTRACT DOCUMENT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REVIEW AND COORDINATION OF ALL DRAWINGS PRIOR TO ANY CONSTRUCTION, INCLUDING STRUCTURAL, PLUMBING, AIR CONDITIONING AND ELECTRICAL. ANY DISCREPANCIES THAT OCCUR SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO THE START OF CONSTRUCTION SO THAT A CLARIFICATION CAN BE ISSUED. ANY WORK PERFORMED IN CONFLICT WITH THE CONTRACT DOCUMENTS OR ANY CODE REQUIREMENTS SHALL BE CORRECTED BY THE CONTRACTOR AT HIS OWN EXPENSE, AND AT NO EXPENSE TO THE OWNER.
2. THESE DRAWINGS ARE DIAGRAMMATIC. THE LOCATION & ELEVATION OF ALL DUCTWORK AND PIPING IS APPROXIMATE AND SHALL BE VERIFIED AND COORDINATED WITH ALL OTHER TRADES, STRUCTURAL CONDITIONS AND BUILDING CONSTRUCTION PRIOR TO START OF INSTALLATION.
3. ALL SYMBOLS AND ABBREVIATIONS USED ON THE DRAWINGS ARE CONSIDERED TO BE CONSTRUCTION STANDARDS. IF CLARIFICATION IS REQUIRED, THE CONTRACTOR SHALL NOTIFY ENGINEER PRIOR TO PROCEEDING WITH THE WORK.
4. DO NOT SCALE DRAWINGS. ALL DIMENSIONS AND JOB SITE CONDITIONS SHALL BE VERIFIED BY THE CONTRACTOR AT THE JOB SITE PRIOR TO BID SUBMITTAL, START OF CONSTRUCTION AND/OR FABRICATION OF MATERIALS. VERIFY ALL EXISTING DUCTWORK, PIPING, ELEVATIONS, SIZES AND POINT OF CONNECTIONS PRIOR TO START OF WORK. IF DISCREPANCIES ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED FOR CLARIFICATION.
5. THE CONTRACTOR SHALL FURNISH ALL MATERIALS, LABOR, EQUIPMENT, TRANSPORTATION AND SERVICES NECESSARY FOR COMPLETION OF THE WORK. ALL MATERIALS AND WORK SHALL COMPLY WITH APPLICABLE CODES AND GOVERNING REGULATION AND MEET THE APPROVAL OF THE CITY AND STATE FIRE MARSHALL.
6. CONTRACTOR SHALL PROVIDE AND BE RESPONSIBLE FOR PROTECTION AND REPAIR OF ADJACENT EXISTING SURFACES AND AREAS WHICH MAY BE DAMAGED AS A RESULT OF DEMOLITION AND/OR NEW WORK.
7. VERIFY FINAL LOCATION OF THERMOSTATS WITH ARCHITECT AND/OR TENANT CONSTRUCTION COORDINATOR PRIOR TO ANY INSTALLATION WORK. MOUNT THERMOSTATS 4'-0" ABOVE FINISHED FLOOR UNLESS NOTED OTHERWISE.
8. CONTRACTOR SHALL PROVIDE RECORD/AS BUILT DOCUMENTS TO TENANT CONSTRUCTION COORDINATOR OR ARCHITECT AT COMPLETION OF CONSTRUCTION.
9. ALL DUCTWORK SHALL CONFORM TO CHAPTER 6 OF 2022 CMC. ALL DUCTWORK SHALL BE CONSTRUCTED, ERECTED, AND TESTED IN ACCORDANCE WITH THE MOST RESTRICTIVE OF REGULATIONS, PROCEDURES DETAILED IN THE ASHRAE HANDBOOK OF FUNDAMENTALS, OR THE APPLICABLE STANDARDS ADOPTED BY THE SHEET METAL AND AIR CONDITIONING CONTRACTORS NATIONAL ASSOCIATION (SMACNA).
10. ALL EQUIPMENT SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE EQUIPMENT MANUFACTURER'S RECOMMENDATIONS. PROVIDE ALL FITTINGS,TRANSITIONS, DAMPERS, VALVES, AND OTHER DEVICES REQUIRED FOR A COMPLETE WORKABLE INSTALLATION.
11. WRAP CONCEALED DUCTS WITH FIBERGLASS DUCT INSULATION WRAP (ALL SUPPLY DUCT TO HAVE VAPOR BARRIER). ALL NEW SUPPLY AND RETURN DUCT INSULATION WITHIN THE BUILDING TO HAVE MINIMUM 8.0 R-VALUE.
12. INSTALL DOUBLE WALL DUCTS FOR ALL EXPOSED OUTDOOR SUPPLY AND RETURN DUCTS WITH AT LEAST 8.0 R-VALUE INSULATION.
13. INSULATION APPLIED TO THE EXTERIOR SURFACE OF DUCTS LOCATED IN BUILDINGS SHALL HAVE A FLAME SPREAD OF NOT MORE THAN 25 AND SMOKE DEVELOPED RATING OF NOT MORE THAN 50 WHEN TESTED AS A COMPOSITE INSTALLATION INCLUDING INSULATION, FACING MATERIALS, TAPES AND ADHESIVES AS NORMALLY APPLIED.
14. ENTIRE INSTALLATION SHALL CONFORM TO THE REQUIREMENTS OF THE 2022 CALIFORNIA MECHANICAL CODE (C.M.C.), 2022 CALIFORNIA BUILDING CODE (C.B.C.) AND ALL OTHER APPLICABLE CODES AND REGULATIONS.
15. MANUFACTURER'S INSTALLATION INSTRUCTIONS SHALL BE MADE AVAILABLE TO THE INSPECTING AUTHORITIES.
16. AIR LEAKAGE TESTING SHALL BE PERFORMED BY SMACNA HVAC DUCT LEAKAGE TEST MANUAL.
17. LINE VOLTAGE WIRING, ALL CONDUIT, DISCONNECT SWITCHES AND FINAL CONNECTION BY ELECTRICAL CONTRACTOR. LOW VOLTAGE CONDUIT AND WIRING AND FINAL CONNECTION BY MECHANICAL CONTRACTOR.
18. THE TOTAL SYSTEM AIR BALANCE SHALL BE PERFORMED BY AN INDEPENDENT AGENCY CERTIFIED BY THE AABC OR NEBB. THIS WORK SHALL CONFORM TO AABC OR NEBB SPECIFICATIONS AS REFERRED TO IN THE NATIONAL STANDARDS.
19. ALL PIPING AND DUCT WORK SHALL BE INSULATED CONSISTENT WITH THE REQUIREMENTS OF SECTION 120 OF CALIFORNIA ENERGY CODE 2022.
20. PROVIDE GUIDE VANES FOR ALL RECTANGULAR DUCT ELBOWS.
21. AUTOMATIC SHUTOFFS:
PER SEC. 609 OF 2022 CMC WHEN REQUIRED, EACH SINGLE SYSTEM PROVIDING HEATING OR COOLING AIR IN EXCESS OF 2,000 CUBIC FEET PER MINUTE SHALL BE EQUIPPED WITH AN AUTOMATIC SHUTOFF. AUTOMATIC SHUTOFF SHALL BE ACCOMPLISHED BY INTERRUPTING THE POWER SOURCE OF THE AIR MOVING EQUIPMENT DEVICES WHICH WILL DETECT PRODUCTS OF COMBUSTION OTHER THAN HEAT AND WHICH COMPLY WITH THE UL 268A SHALL BE LABELED BY AN APPROVED AGENCY FOR AIR DUCT INSTALLATION AND SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS. SUCH DEVICES SHALL BE COMPATIBLE WITH THE OPERATING VELOCITIES, PRESSURES, TEMPERATURES AND HUMIDITY OF THE SYSTEM WHERE FIRE DETECTION OR ALARM SYSTEMS ARE PROVIDED FOR THE BUILDING, SMOKE DETECTORS SHALL BE SUPERVISED BY SUCH SYSTEMS.
22. FOR THE PURPOSE OF CLEARNESS AND LEGIBILITY, THE DRAWINGS ARE ESSENTIALLY DIAGRAMMATIC AND ALTHOUGH SIZES AND LOCATIONS OF EQUIPMENT IS DRAWN TO SCALE WHEREVER POSSIBLE, THE CONTRACTOR SHALL MAKE USE OF ALL DATA IN ALL OF THE CONTRACT DOCUMENTS AND VERIFY THIS INFORMATION BEFORE ORDERING, FABRICATING OR INSTALLATION OF ANY MATERIALS.
23. HVAC SYSTEM AND COMPONENTS WILL BE TESTED ,A ADJUSTED AND BALANCED IN ACCORDANCE WITH AABC'S NATIONAL STANDARDS FOR TOTAL SYSTEM BALANCE 7TH EDITION.
27. MECHANICAL MATERIAL STANDARD SHALL BE LISTED AND LABELING TO COMPLY WITH TABLE 1701.1. CMC 306.1 AND CMC 307.1.
28. ALL DIR DISTRIBUTION SYSTEM DUCTS AND PLENUMS, INCLUDING, BUT NOT LIMITED, BUILDING CAVITIES, MECHANICAL CLOSETS, AIR HANDLER BOXES AND SUPPORT PLATFORMS USED AS DUCTS AND PLENUMS, SHALL BE INSTALLED, SEALED AND INSULATED TO MEET THE REQUIREMENTS OF THE CMC SECTION 601.0, 602.0, 603.0, 604.0, AND 605.0 ANSI/SMACNA-006-2006 HVAC DUCT CONSTRUCTION STANDARDS, METAL AND FLEXIBLE, 3RD EDITION.
29. CONNECTIONS OF METAL DUCTS AND THE INNER CORE OF FLEXIBLE DUCTS SHALL BE MECHANICALLY FASTENED. OPENINGS SHALL BE SEALED WITH MASTIC TAPE, AEROSOL SEALANT OR OTHER DUCT CLOSURE SYSTEM THAT MEETS THE APPLICABLE REQUIREMENTS OF UL 181, UL 181A OR UL 181B. IF MASTIC OR TAPE IS USED TO SEAL OPENINGS GREATER THAN 1/4", THE COMBINATION OF MASTIC AND EITHER MESH OR TAPE SHALL BE USED.
30. PORTIONS OF SUPPLY AIR AND RETURN AIR DUCTS CONVEYING HEATED AND COOLED IAR LOCATED IN ONE OR MORE OF THE FOLLOWING SPACES SHALL BE INSULATED TO A MINIMUM INSTALLED LEVEL OR R-8:
    - 30.1. OUTDOORS OR;
    - 30.2. IN A SPACE BETWEEN THE ROOF AND IN INSULATED CEILING OR;
    - 30.3. IN A SPACE DIRECTLY UNDER A ROOF WITH FIXED VENTS OR OPENINGS TO THE OUTSIDE OR UNCONDITIONED SPACES OR;
    - 30.4. IN AN UNCONDITIONED CRAWLSPACE OR;
    - 30.5. IN OTHER UNCONDITIONED SPACES
31. ALL FACTORY FABRICATED DUCT SYSTEMS SHALL COMPLY WITH UL 181 FOR DUCTS AND CLOSURE SYSTEMS, INCLUDING COLLARS, CONNECTIONS, AND SPLICES, AND BE LABELED AS COMPLYING WITH UL 181.
32. FACTOR-MADE RIGID FIBERGLASS AND FLEXIBLE DUCTS FOR FIELD-FABRICATED DUCT SYSTEMS SHALL COMPLY WITH UL 181.
33. HEATING AND COOLING PIPING MATERIAL : COPPER
34. REFRIGERANT PIPING MATERIAL : COPPER.
35. CONDENSATE PIPING MATERIAL : COPPER.

MANDATORY NOTES (CEC 2022)

1. ALL RECIRCULATED AIR OR OUTDOOR AIR SUPPLIED TO OCCUPIABLE SPACES IS FILTERED (MINIMUM MERV 13 BEFORE PASSING THROUGH ANY AIR CONDITIONING COMPONENT; THE LESSER OF THE MINIMUM RATE OF OUTDOOR AIR REQUIRED BY SEC. 120.1(C), OR THREE COMPLETE AIR CHANGES SHALL BE SUPPLIED TO THE ENTIRE BUILDING DURING THE ONE-HOUR PERIOD IMMEDIATELY BEFORE THE BUILDING IS NORMALLY OCCUPIED 120.1(D)(2).
2. ALL MECHANICAL VENTILATION AND SPACE-CONDITIONING SYSTEMS SHALL BE DESIGNED WITH DUCTWORK, DAMPERS, AND CONTROLS WHICH ALLOWS OUTSIDE AIR RATES TO BE OPERATED AT THE LARGER OF (1) THE MINIMUM LEVELS SPECIFIED IN SECTION 120.1(C)3 OR (2) THE RATE REQUIRED FOR MAKE- UP OF EXHAUST SYSTEMS THAT ARE REQUIRED FOR AN EXEMPT OR COVERED PROCESS, FOR CONTROL OF ODORS, OR FOR THE REMOVAL OF CONTAMINANTS WITHIN THE SPACE. MEASURED OUTSIDE AIR RATES OF CONSTANT AND VARIABLE VOLUME MECHANICAL VENTILATION SYSTEMS SHALL BE WITHIN 10% OF OUTSIDE AIR RATE SHOWN ON TABLE 120.1-A. 120.1 (F) (1)/ 120.1 (F) (2)
3. THE THERMOSTATIC CONTROLS FOR HVAC SYSTEMS SHALL BE CAPABLE OF BEING SET LOCALLY OR REMOTELY BY TO CONTROL COMFORT HEATING DOWN TO 55 °F OR LOWER AND COOLING UP TO 85°F OR HIGHER. THE THERMOSTATIC CONTROLS SHALL BE CAPABLE OF PROVIDING A DEAD BAND RANGE OF AT LEAST 5 °F WITHIN WHICH HEATING AND COOLING ENERGY TO THE ZONE IS SHUT OFF OR REDUCE TO A MINIMUM. 120.2 (A) (B)
4. OUTDOOR AIR SUPPLY AND EXHAUST EQUIPMENT SHALL BE INSTALLED WITH DAMPERS THAT AUTOMATICALLY CLOSE UPON FAN SHUTDOWN. 120.2 (F).
5. AIR DISTRIBUTION SYSTEM DUCTS AND PLENUMS, INCLUDING, BUT NOT LIMITED TO, BUILDING CAVITIES, MECHANICAL CLOSETS, AIR-HANDLER BOXES AND SUPPORT PLATFORMS USED AS DUCTS OR PLENUMS, SHALL BE INSTALLED, SEALED AND INSULATED TO MEET THE REQUIREMENTS OF CHAPTER 6 CMC CODE AND ANSI/SMACNA -006-2006 HVAC DUCT CONSTRUCTION STANDARDS METAL AND FLEXIBLE. SUPPLY-AIR DUCTS CONVEYING HEATED OR COOLED AIR SHALL BE INSULATED TO A MINIMUM INSTALLED LEVEL OF R-6 (R-8 IN UNCONDITIONED SPACE), UNLESS DUCTS ARE IN CONDITIONED SPACE. 120.4 (A)
6. FLEXIBLE DUCTWORK INSTALLATION SHALL COMPLY WITH SECTION 603.4 OF CMC 2022.
7. SHUTOFF AND RESET CONTROLS FOR SPACE CONDITIONING SYSTEM SHALL COMPLY WITH SECTION 120.2(E) OF CALIFORNIA ENERGY CODE 2022.
8. DUCT SYSTEMS USED WITH BLOWER TYPE EQUIPMENT WHICH ARE PORTIONS OF A HEATING, COOLING, ABSORPTION, EVAPORATIVE COOLING OR OUTDOOR AIR VENTILATION SYSTEM SHALL BE SIZED IN ACCORDANCE WITH CHAPTER 17 OF THE CALIFORNIA MECHANICAL CODE.
9. ALL APPLIANCES DESIGNED TO BE IN A FIXED POSITION SHALL BE SECURELY FASTENED IN PLACE IN ACCORDANCE WITH THE MANUFACTURES INSTALLATION INSTRUCTIONS. SUPPORTS FOR APPLIANCES SHALL BE DESIGNED AND CONSTRUCTED TO RESIST HORIZONTAL AND VERTICAL LOADS WITHIN THE STRESS LIMITATIONS OF THE CBC. CMC 303.4.
10. ALL MATERIALS EXPOSED WITHIN DUCTS AND PLENUMS INCLUDING ANY ABOVE CEILING RETURN AIR PLENUM SHALL BE NONCOMBUSTIBLE OR SHALL HAVE A FLAME SPREAD INDEX NOT TO EXCEED TWENTY-FIVE (25) AND A SMOKE DEVELOPED INDEX NOT TO EXCEED THEN FIFTY (50) WHEN TESTED AS A COMPOSITE PRODUCT IN ACCORDANCE WITH ASTM E 84 OR UL 723 AND SHALL COMPLY WITH ALL REQUIREMENTS OF THE 2022 CMC SECTION 602.2.
11. INSTALLATION OF DUCTS SHALL BE IN ACCORDANCE WITH SECTION 603.0 OF THE 2022 CMC.
    - ALL DUCTWORK FOR HEATING AND COOLING SYSTEM OR EVAPORATIVE COOLING SYSTEM SHALL BE CONDUCTED THROUGH DUCT SYSTEMS CONSTRUCTED OF METAL AS SET FORTH IN THE SMACNA HVAC DUCT CONSTRUCTION STANDARD - METAL AND FLEXIBLE. FACTORY MADE AIR DUCTS SHALL BE APPROVED FOR THE USE INTENDED OR SHALL COMPLY WITH THE 2022 CMC REFERENCED STANDARDS CHAPTER 17.
    - JOINTS AND SEEMS FOR DUCT SYSTEMS SHALL COMPLY WITH SMACNA HVAC DUCT CONSTRUCTION STANDARD - METAL AND
    - FLEXIBLE. JOINTS OF DUCTS SYSTEMS SHALL BE MADE SUBSTANTIALLY AIRTIGHT BY MEANS OF TAPES, MASTICS, GASKETING, OR OTHER
    - CRIMP JOINTS FOR ROUND DUCTS SHALL HAVE A CONTACT LAP OF NOT LESS THAN 1-1/2" AND SHALL BE MECHANICALLY FASTENED BY
    - MEANS OF NOT LESS THAN 3 SHEET-METALS SCREWS EQUALLY SPACED AROUND THE JOINT, OR AN EQUIVALENT FASTENING METHOD.
    - DUCTS SHALL BE SUPPORTED AT EACH CHANGE OF DIRECTION AND IN ACCORDANCE WITH SMACNA HVAC DUCT CONSTRUCTION STANDARD -
    - METAL AND FLEXIBLE
12. DUCTS AND PLENUMS SHALL COMPLY WITH SECTION 120.4 OF THE 2022 CALIFORNIA BUILDING ENERGY EFFICIENCY STANDARDS.
    - PORTIONS OF SUPPLY-AIR AND RETURN-AIR DUCTS CONVEYING HEATED OR COOLED AIR LOCATED IN ONE OR MORE OF THE FOLLOWING SPACES SHALL BE INSULATED TO A MINIMUM INSTALLED LEVEL OF R-8
        - a. OUTDOORS; OR
        - b. IN A SPACE BETWEEN THE ROOF AND AN INSULATED CEILING; OR
        - c. IN A SPACE DIRECTLY UNDER A ROOF WITH FIXED VENTS OR OPENINGS TO THE OUTSIDE OR UNCONDITIONED SPACES; OR
        - d. IN AN UNCONDITIONED CRAWLSPACE; OR
        - e. IN OTHER UNCONDITIONED SPACES.
    - PORTIONS OF SUPPLY-AIR DUCTS THAT ARE NOT IN ONE OF THESE SPACES, INCLUDING DUCTS BURIED IN CONCRETE SLAB, SHALL BE INSULATED TO A MINIMUM INSTALLED LEVEL OF R-4.2 (OR ANY HIGHER LEVEL REQUIRED BY CMC SECTION 605.1□ OR BE ENCLOSED IN DIRECTLY CONDITIONED SPACE.
    - ALL FACTORY-FABRICATED DUCT SYSTEMS SHALL COMPLY WITH UL 181 FOR DUCTS AND CLOSURE SYSTEMS, INCLUDING COLLARS, CONNECTIONS, AND SPLICES, AND BE LABELED AS COMPLYING WITH UL 181.
    - FACTOR-MADE RIGID FIBERGLASS AND FLEXIBLE DUCTS FOR FIELD- FABRICATED DUCT SYSTEMS SHALL COMPLY WITH UL 181.

COMMISSIONING AND AIR BALANCING REQUIREMENTS

1. CONTRACTOR IS RESPONSIBLE FOR COMPLETE COMMISSIONING OF THE HVAC SYSTEM AND PROVIDE FINAL AIR BALANCING REPORT IN COMPLIANCE WITH THE DESIGN INTENT.
2. CONTRACTOR SHALL ENGAGE AABC, TABB OR NEBB CERTIFIED AIR BALANCER TO BALANCE THE HVAC SYSTEM IN ENTIRETY AND PROVIDE A CERTIFIED FINAL AIR BALANCE FOR MECHANICAL ENGINEER OF RECORD'S REVIEW AND COMMENT.
3. CONTRACTOR SHALL PROVIDE ALL WARRANTY PAPERS TO THE CLIENT AT THE COMPLETION OF THE JOB.
4. CONTRACTOR SHALL PROVIDE MINIMUM 1 HR OF TRAINING ON SYSTEM MAINTENANCE AND CONTROLS TO THE CLIENT BEFORE HANDING OVER THE SYSTEM.
5. CONTRACTOR SHALL PROVIDE FINAL AS-BUILT DRAWINGS OF THE SYSTEM WITH ANY CHANGES MADE IN THE FIELD DURING INSTALLATION.

SHOP DRAWINGS REQUIREMENTS

1. CONTRACTOR SHALL PROVIDE COMPLETE SHOP DRAWINGS FOR ALL HVAC BEFORE INSTALLATION.
2. ALL DUCTING AND PIPING LOCATIONS AND LAYOUTS SHALL BE FIELD VERIFIED TO CONFIRM THEIR INSTALLATION BEFORE CONSTRUCTION STARTS.
3. THIS DRAWINGS ARE SCHEMATIC ONLY AND SHALL NOT BE USED FOR THE PURPOSE OF THE SHOP DRAWINGS OR RECORD DRAWINGS.
4. IT IS CONTRACTOR'S RESPONSIBILITY TO GENERATE CLEAN AND CLEAR SHOP DRAWINGS AS WELL AS RECORD DRAWINGS AFTER THE INSTALLATION IS COMPLETE.
5. ANY DESIGN CHANGE SHALL BE COORDINATED WITH THE ENGINEER OF RECORD AND SHALL BE APPROVED BY THE OWNER BEFORE CONSTRUCTION.

MANDATORY NONRESIDENTIAL CALGREEN REQUIREMENTS

SECTION 5.410 - BUILDING MAINTENANCE AND OPERATION

5.410.4 TESTING AND ADJUSTING. TESTING AND ADJUSTING OF SYSTEMS SHALL BE REQUIRED FOR BUILDINGS LESS THAN 10,000 SQUARE FEET. APPLIES TO NEW SYSTEMS SERVING ADDITIONS OR ALTERATIONS.

5.410.4.2 SYSTEMS. DEVELOP A WRITTEN PLAN OF PROCEDURES FOR TESTING AND ADJUSTING SYSTEMS. SYSTEMS TO BE INCLUDED FOR TESTING AND ADJUSTING SHALL INCLUDE, AS APPLICABLE TO THE PROJECT, THE SYSTEMS LISTED IN SECTION 5.410.4.2.

5.410.4.3 PROCEDURES. PERFORM TESTING AND ADJUSTING PROCEDURES IN ACCORDANCE WITH APPLICABLE STANDARDS ON EACH SYSTEM AS DETERMINED BY THE ENFORCING AGENCY.

5.410.4.3.1 HVAC BALANCING. BEFORE A NEW SPACE-CONDITIONING SYSTEM SERVING A BUILDING OR SPACE IS OPERATED FOR NORMAL USE, BALANCE IN ACCORDANCE WITH THE PROCEDURES DEFINED BY NATIONAL STANDARDS LISTED IN SECTION 5.410.4.3.1 OR AS APPROVED BY THE ENFORCING AGENCY.

5.410.4.4 REPORTING. AFTER COMPLETION OF TESTING, ADJUSTING AND BALANCING, PROVIDE A FINAL REPORT OF TESTING SIGNED BY THE INDIVIDUAL RESPONSIBLE FOR PERFORMING THESE SERVICES.

5.410.4.5 OPERATION AND MAINTENANCE (O & M) MANUAL. PROVIDE THE BUILDING OWNER WITH DETAILED OPERATING AND MAINTENANCE INSTRUCTIONS AND COPIES OF GUARANTIES/WARRANTIES FOR EACH SYSTEM PRIOR TO FINAL INSPECTION.

5.410.4.5.1 INSPECTIONS AND REPORTS. INCLUDE A COPY OF ALL INSPECTION VERIFICATIONS AND REPORTS REQUIRED BY THE ENFORCING AGENCY.

SECTION 5.504 POLLUTANT CONTROL

5.504.1 TEMPORARY VENTILATION. IF THE HVAC SYSTEM IS USED DURING CONSTRUCTION, USE RETURN AIR FILTERS WITH A MERV OF 13, BASED ON ASHRAE 52.2-1999, OR AN AVERAGE EFFICIENCY OF 30% BASED ON ASHRAE 52.1-1992. REPLACE ALL FILTERS IMMEDIATELY PRIOR TO OCCUPANCY.

5.504.3 COVERING OF DUCT OPENINGS AND PROTECTION OF MECHANICAL EQUIPMENT DURING CONSTRUCTION. AT THE TIME OF ROUGH INSTALLATION AND DURING STORAGE ON THE CONSTRUCTION SITE AND UNTIL FINAL STARTUP OF THE HEATING, COOLING AND VENTILATING EQUIPMENT, ALL DUCT AND OTHER RELATED AIR DISTRIBUTION COMPONENT OPENINGS SHALL BE COVERED WITH TAPE, PLASTIC, SHEET METAL OR OTHER METHODS ACCEPTABLE TO THE ENFORCING AGENCY TO REDUCE THE AMOUNT OF DUST, WATER AND DEBRIS WHICH MAY ENTER THE SYSTEM.

5.504.5.3 FILTERS. IN MECHANICALLY VENTILATED BUILDINGS, PROVIDE REGULARLY OCCUPIED AREAS OF THE BUILDING WITH AIR FILTRATION MEDIA FOR OUTSIDE AND RETURN AIR THAT PROVIDES AT LEAST A MERV OF 13. MERV 13 FILTERS SHALL BE INSTALLED PRIOR TO OCCUPANCY, AND RECOMMENDATIONS FOR MAINTENANCE WITH FILTERS OF THE SAME VALUE SHALL BE INCLUDED IN THE OPERATION AND MAINTENANCE MANUAL.

SECTION 5.506 INDOOR AIR QUALITY

5.506.1 OUTSIDE AIR DELIVERY. FOR MECHANICALLY OR NATURALLY VENTILATED SPACES IN BUILDINGS, MEET THE MINIMUM REQUIREMENTS OF SECTION 120.1 OF THE CALIFORNIA ENERGY CODE AND CHAPTER 4 OF CCR, TITLE 8 OR THE APPLICABLE LOCAL CODE, WHICHEVER IS MORE STRINGENT.

5.506.2 CARBON DIOXIDE (CO2) MONITORING. FOR BUILDINGS OR ADDITIONS EQUIPPED WITH DEMAND CONTROL VENTILATION, CO2 SENSORS AND VENTILATION CONTROLS SHALL BE SPECIFIED AND INSTALLED IN ACCORDANCE WITH THE REQUIREMENTS OF THE CALIFORNIA ENERGY CODE, CCR, SECTION 120(C)(4).

SECTION 5.508 - OUTDOOR AIR QUALITY

5.508.1 OZONE DEPLETION AND GLOBAL WARMING REDUCTIONS. INSTALLATIONS OF HVAC, REFRIGERATION AND FIRE SUPPRESSION EQUIPMENT SHALL COMPLY WITH SECTIONS 5.508.1.1 AND 5.508.1.2.

5.508.1.1 CFCS. INSTALL HVAC AND REFRIGERATION EQUIPMENT THAT DOES NOT CONTAIN CFCS.

5.508.1.2 HALONS. INSTALL FIRE SUPPRESSION EQUIPMENT THAT DOES NOT CONTAIN HALONS.

SHEET INDEX

SHT.NO.	DESCRIPTION
M-0.1	MECHANICAL GENERAL NOTES & LEGEND
M-2.1	MECHANICAL EXISTING GROUND FLOOR PLAN
M-2.2	MECHANICAL EXISTING SECOND FLOOR PLAN
M-3.1	MECHANICAL PROPOSED GROUND FLOOR PLAN
M-3.2	MECHANICAL PROPOSED SECOND FLOOR PLAN

ABBREVIATIONS

A	AIR
ABV	ABOVE
AC	AIR CONDITIONING UNIT
AD	ACCESS DOOR, AIR DRYER
ADA	AMERICANS WITH DISABILITIES ACT
AFF	ABOVE FINISHED FLOOR
AHU	AIR HANDLING UNIT
AI	ANALOG INPUT
AO	ANALOG OUTPUT
AP	ACCESS PANEL
ARCH	ARCHITECTURAL
ASHP	AIR SOURCE HEAT PUMP
BAS	BUILDING AUTOMATION SYS
BDD	BACKDRAFT DAMPER
BFP	BACKFLOW PREVENTER
BLW	BELOW
BLDG	BUILDING
BMS	BUILDING MANAGEMENT SYS
BOD	BOTTOM OF DUCT, BASIS OF DESIGN
BTU	BRITISH THERMAL UNIT
BTUH	BRITISH THERMAL UNITS PER HOUR
CC	COOLING COIL
CD	CONDENSATE DRAIN
CFM	CUBIC FEET PER MINUTE
CH	CHILLER
CHW	CHILLED WATER RETURN
CHWS	CHILLED WATER SUPPLY
CLNG	CEILING
CO	CARBON MONOXIDE
CO2	CARBON DIOXIDE
CRAC	COMPUTER ROOM AIR CONDITIONER
CT	COOLING TOWER
CW	COLD WATER
CWR	CONDENSER WATER RETURN
CWS	CONDENSER WATER SUPPLY
Cx	COMMISSIONING
CxA	COMMISSIONING AUTHORITY
D	DEMOLISH, REMOVE
DAT	DISCHARGE AIR TEMPERATURE
DB	DRY BULB TEMPERATURE, DECIBELS
DDC	DIRECT DIGITAL CONTROL
DEG,°	DEGREES
DEH	DEHUMIDIFIER
DI	DIGITAL INPUT
DIA,ø	DIAMETER
DO	DIGITAL OUTPUT
DP	DIFFERENTIAL PRESSURE
DV	DIGITAL VALVE
DX	DIRECT EXPANSION
EA	EXHAUST AIR
EAT	ENTERING AIR TEMPERATURE
EF	EXHAUST FAN
EFF	EFFICIENCY
EJ	EXPANSION JOINT
E	EXISTING
ESP	EXTERNAL STATIC PRESSURE
ET	EXPANSION TANK
EWB	ENTERING WET BULB TEMP
EWT	ENTERING WATER TEMPERATURE
°F	DEGREES FAHRENHEIT
FSD	COMBINATION FIRE/SMOKE DAMPER
FD	FLOOR DRAIN, FIRE DAMPER
FLR	FLOOR
FLA	FULL LOAD AMPS
FLEX	FLEXIBLE
FPM	FEET PER MINUTE
FPS	FEET PER SECOND
FT,'	FOOT, FEET
FT HD	FEET OF HEAD
GAL	GALLON, GALLONS
GPH	GALLONS PER HOUR
GPM	GALLONS PER MINUTE
H	HEIGHT
H2O	WATER
HB	HOSE BIB
HP	HORSEPOWER
HTG	HEATING
HUM	HUMIDIFIER
HWR	HOT WATER RETURN
HWS	HOT WATER SUPPLY
HX	HEAT EXCHANGER
HZ	HERTZ (CYCLES PER SECOND)
ID	INSIDE DIAMETER
IN,"	INCH, INCHES
IN WG	INCHES OF WATER GAUGE
ISOL	ISOLATION
KW	KILOWATTS
L	LENGTH, LONG
LAT	LEAVING AIR TEMPERATURE
LBS	POUNDS
LBS/HR	POUNDS PER HOUR
LRA	LOAD RATED AMPS
LWT	LEAVING WATER TEMPERATURE
MBH	THOUSAND BRITISH THERMAL UNITS PER HOUR
MCA	MINIMUM CIRCUIT AMPACITY
MOD	MOTOR OPERATED DAMPER
MECH	MECHANICAL
MFR	MANUFACTURER
N/A	NOT APPLICABLE
NC	NORMALLY CLOSED, NOISE CRITERIA
NIC	NOT IN CONTRACT
NFPA	NATIONAL FIRE PROTECTION AGENCY
NTS	NOT TO SCALE
OA	OUTSIDE AIR
OAT	OUTSIDE AIR TEMPERATURE
%	PERCENT
PD	PRESSURE DROP
PLBG	PLUMBING
PNEU	PNEUMATIC
PRV	PRESSURE REDUCING VALVE
PS	PRESSURE SWITCH
PSI	POUNDS PER SQUARE INCH
RA	RETURN AIR
REF	REFRIGERANT
RH	RELATIVE HUMIDITY
RLA	RATED LOAD AMPS
RPM	REVOLUTIONS PER MINUTE
SA	SUPPLY AIR
SAT	SATURATED, SUPPLY AIR TEMPERATURE
SD	SMOKE DETECTOR, SMOKE DAMPER
SF	SUPPLY FAN, SQUARE FEET
SOO	SEQUENCE OF OPERATION
SP	STATIC PRESSURE
SQ FT	SQUARE FOOT, SQUARE FEET
STD	STANDARD
TEMP	TEMPERATURE, TEMPORARY
TSP	TOTAL STATIC PRESSURE
TYP	TYPICAL
UC	UNDERCUT DOOR
UH	UNIT HEATER
V	VOLTS, VENT
VAV	VARIABLE AIR VOLUME
VD	VOLUME DAMPER
VEL	VELOCITY
VENT	VENTILATION
VFD	VARIABLE FREQUENCY DRIVE
VRF	VARIABLE REF FLOW
W	WIDTH, WIDE
W/	WITH
W/O	WITHOUT
WB	WET BULB TEMPERATURE
WH	WATER HEATER
WPD	WATER PRESSURE DROP
WSHP	WATER SOURCE HEAT PUMP
WT	WEIGHT
ZN	ZONE

MECHANICAL LEGEND

RECTANGULAR DUCT
ROUND DUCT
LINED DUCT
RECTANGULAR TO RECTANGULAR
ROUND TO RECTANGULAR
ROUND TO ROUND
VANED ELBOW
RADIUS ELBOW
SUPPLY DUCT TURNING UP AND DOWN
RETURN DUCT TURNING UP AND DOWN
EXHAUST DUCT TURNING UP AND DOWN
DUCT CAP
45 DEGREE TAP
CONICAL TAP
FLEXIBLE DUCT
FLEXIBLE CONNECTION
MANUAL VOLUME DAMPER
SMOKE DETECTOR
MOTORIZED DAMPER
BACKDRAFT DAMPER
FIRE DAMPER EXISTING AND NEW
COMBINATION FIRE/SMOKE DAMPER EXISTING AND NEW
DUCT CONTINUATION
PIPE CONTINUATION
EXISTING HVAC
HVAC TO BE DEMOLISHED

SUPPLY AIR FLOW
RETURN/EXHAUST AIRFLOW
RETURN/EXHAUST AIRFLOW
CEILING DIFFUSER - SUPPLY
CEILING REGISTER - RETURN
CEILING REGISTER - EXHAUST
ROUND DIFFUSER
SIDEWALL DIFFUSER - SUPPLY
SIDEWALL DIFFUSER - RETURN/EXHAUST
UNDERCUT
DOOR LOUVER
THERMOSTAT
HUMIDISTAT
CO2 SENSOR
POINT OF CONNECTION
POINT OF DEMOLITION
PROPOSED SHEET KEYNOTE
DEMOLITION SHEET NOTES
EQUIPMENT TAG

APPLICABLE CODES

BUILDING OCCUPANCY CLASSIFICATION:
THE CONSTRUCTION OF THIS PROJECT SHALL CONFORM TO THE REQUIREMENTS OF:

2022 CALIFORNIA BUILDING CODE (CBC)

2022 CALIFORNIA ELECTRICAL CODE (CEC)

2022 CALIFORNIA MECHANICAL CODE (CMC)

2022 CALIFORNIA PLUMBING CODE (CPC)

2022 CALIFORNIA ENERGY CODE (CEnC)

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HITEN SHETH
No. M33789
Exp. 3-31-24

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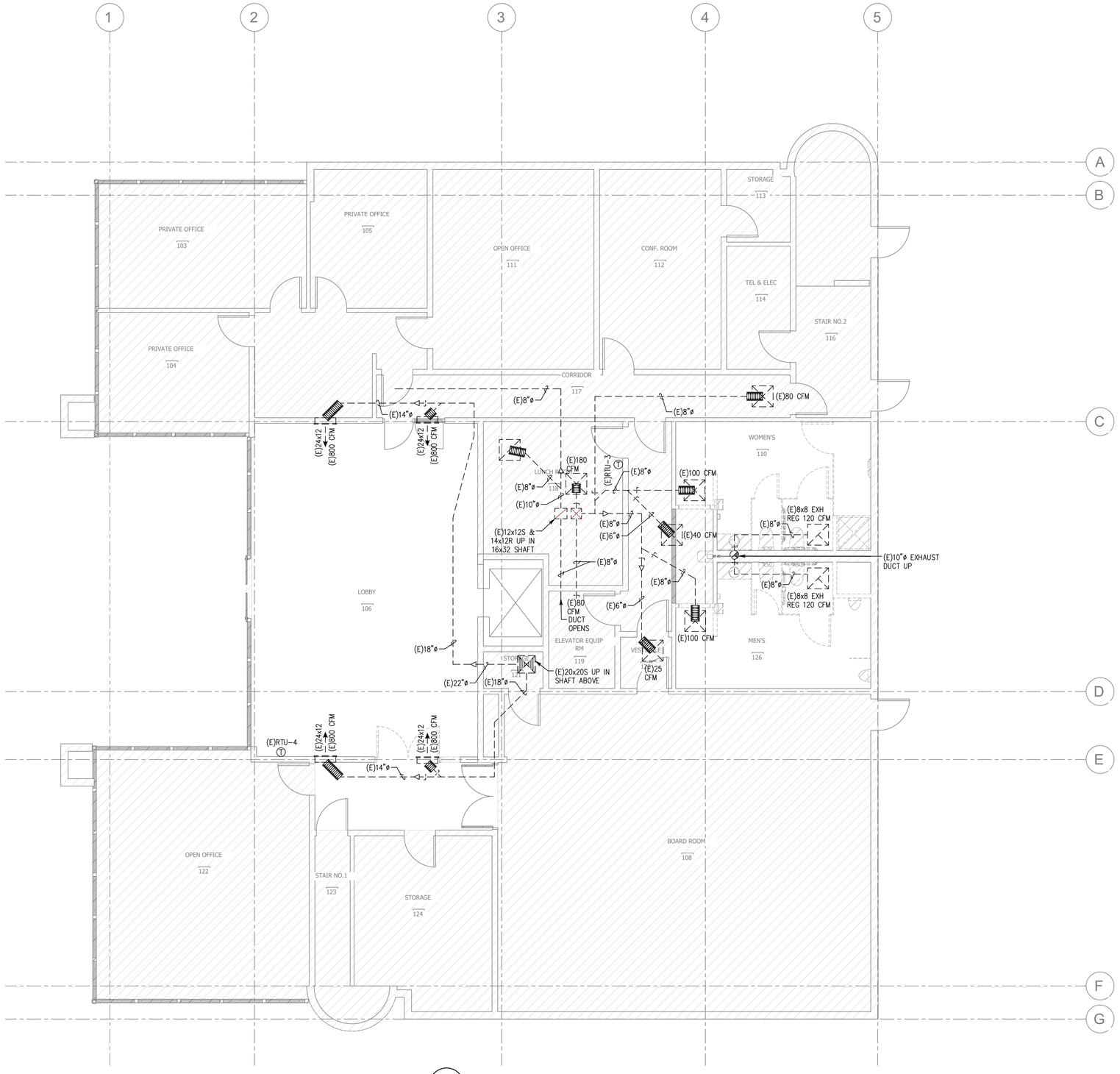
JOB NO.: 3903
DRAWN BY: HS
CHECKED BY: HS
SCALE: As indicated

MECHANICAL GENERAL NOTES & LEGEND

SAWPA
SANTA ANA WATERSHED PROJECT AUTHORITY

M-0.1



1 / M-2.1 MECHANICAL EXISTING GROUND FLOOR PLAN
3/16" = 1'-0"

REGISTERED PROFESSIONAL ENGINEER
No. M 30796
EXP. 12-24
MECHANICAL
STATE OF CALIFORNIA

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MECHANICAL EXISTING GROUND FLOOR PLAN

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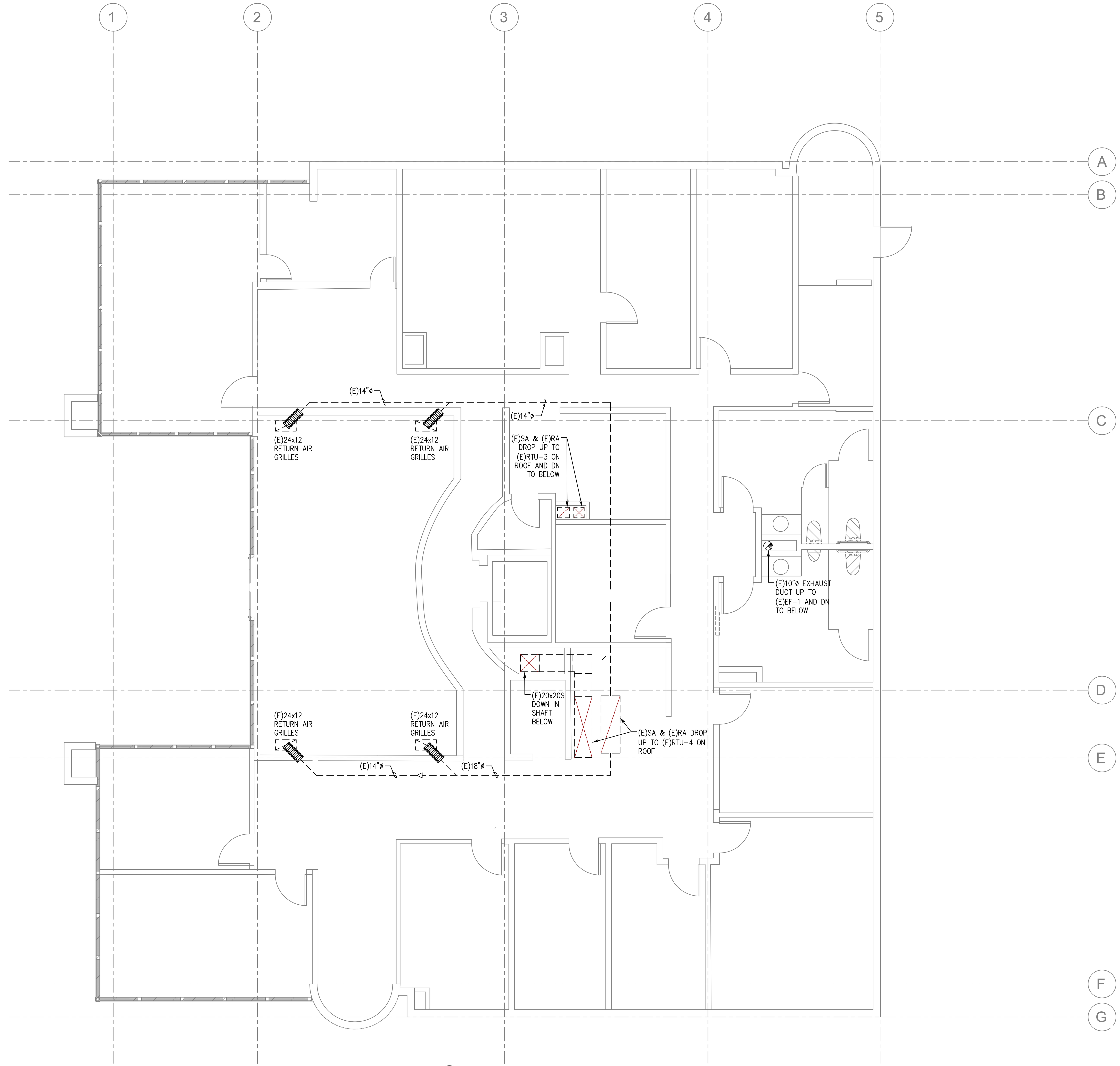

1
M-2.2
MECHANICAL EXISTING SECOND FLOOR PLAN
3/16" = 1'-0"

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MECHANICAL EXISTING SECOND FLOOR PLAN

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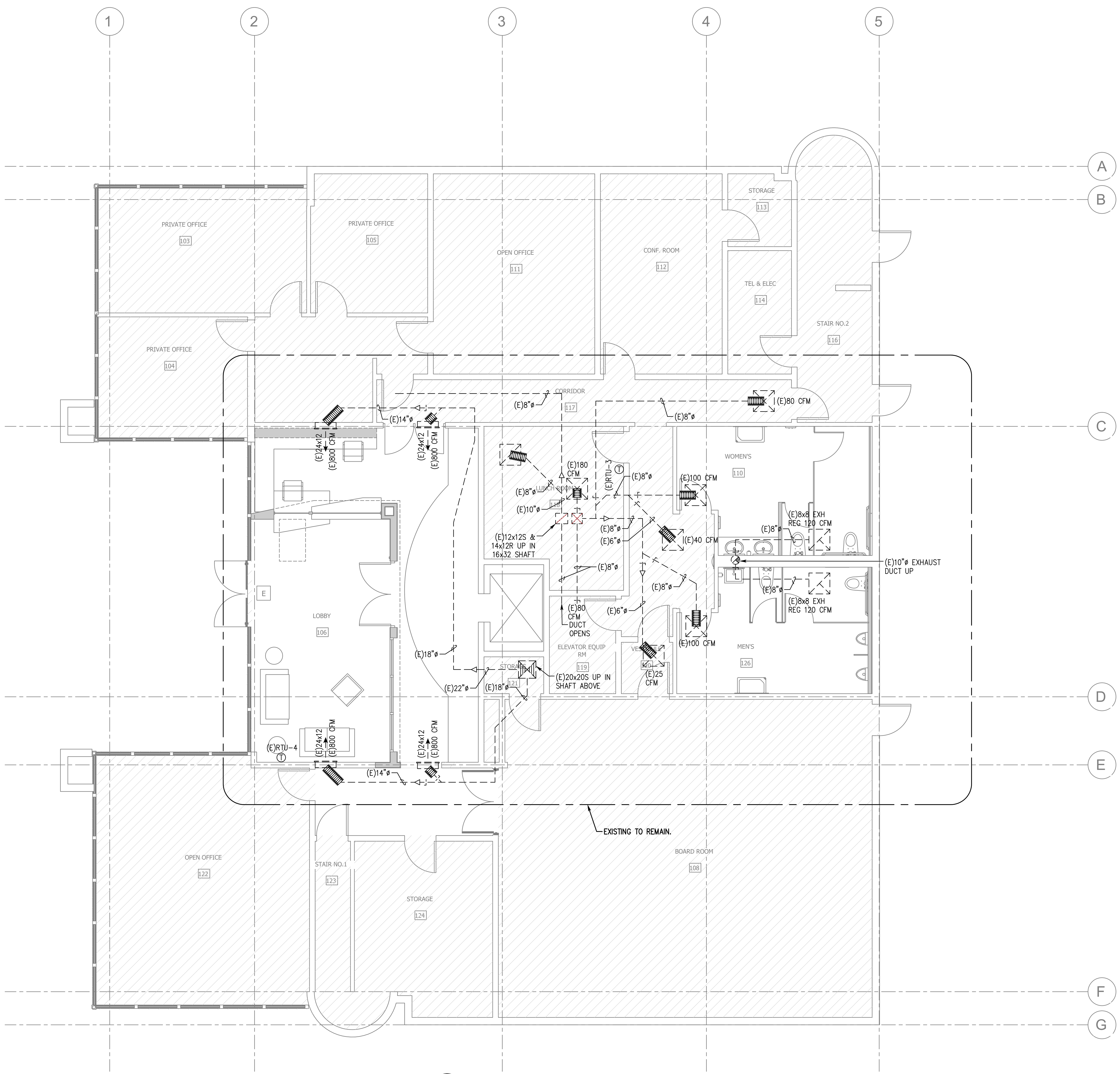
M-2.2



1 M-3.1 MECHANICAL PROPOSED GROUND FLOOR PLAN
3/16" = 1'-0"

REGISTERED PROFESSIONAL ENGINEER HITEN SHETH No. M33789 STATE OF CALIFORNIA MECHANICAL

GP architecture planning interior

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MECHANICAL PROPOSED GROUND FLOOR PLAN

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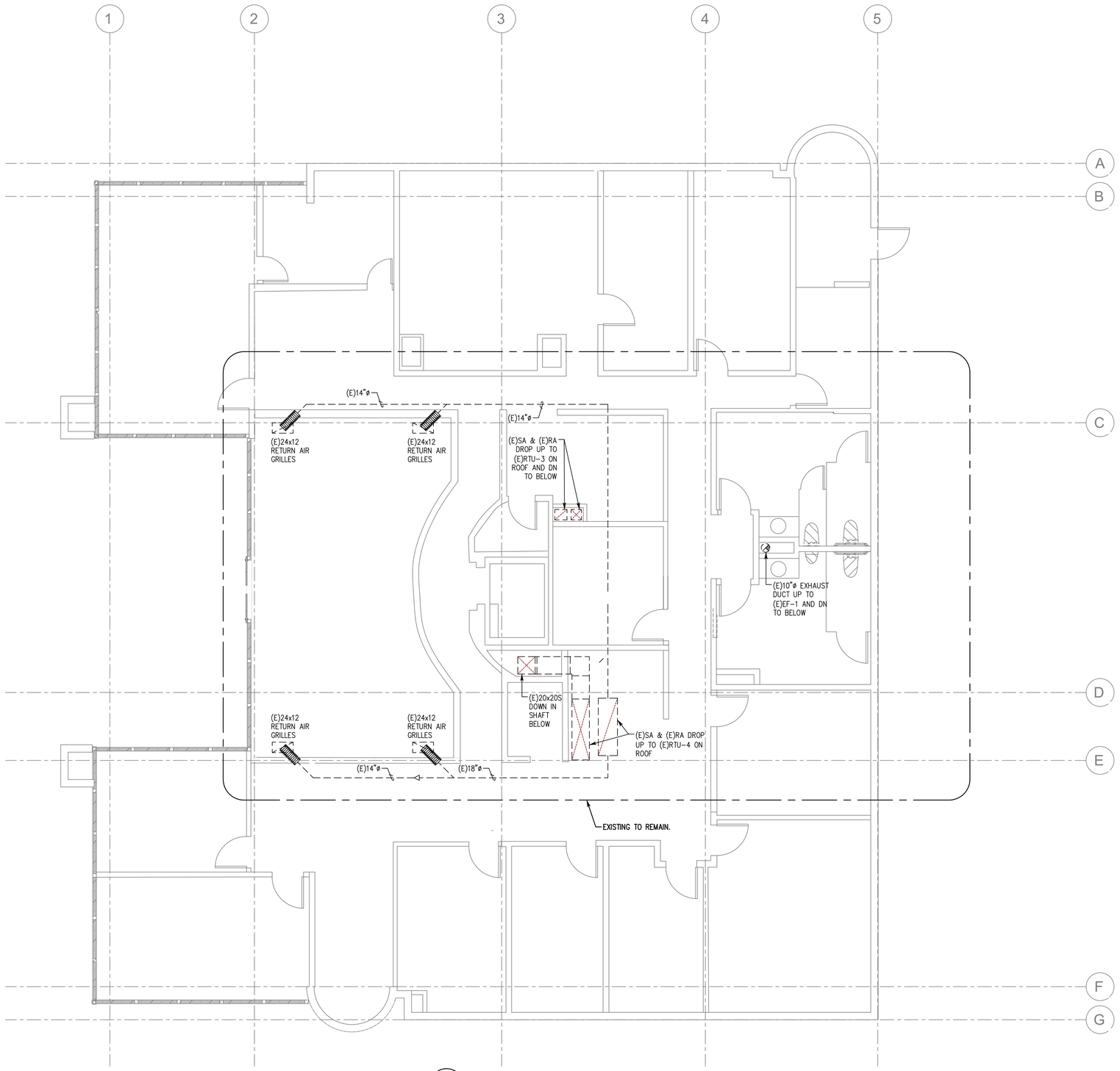
M-3.1



1 M-3.2 MECHANICAL PROPOSED SECOND FLOOR PLAN
3/16" = 1'-0"

REGISTERED PROFESSIONAL ENGINEER
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No. M 30796
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MECHANICAL PROPOSED SECOND FLOOR PLAN

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M-3.2

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SYMBOLS LIST

F — FIRE ALARM PULL STATION. MOUNT AT +48 INCHES UNLESS OTHERWISE NOTED.

F — FIRE ALARM PULL STATION, VISUAL STROBE LIGHT AND HORN. MOUNT PULL STATION AT +48 INCHES. MOUNT HORN AND LIGHT AT +80 INCHES ABOVE HIGHEST FLOOR LEVEL IN ROOM OR 6 INCHES BELOW CEILING, WHICHEVER IS LOWER.VISUALS SHALL BE 30 CANDELA (75 CD ON AXIS) U.N.O. 15 CD OR 110 CD DEVICES SHALL BE PROVIDED AS PER NFPA 72.

FATC — FIRE ALARM TERMINAL CABINET.

FACP — FIRE ALARM CONTROL PANEL, "FACP". REFER TO SPECIFICATIONS.

SD — PHOTOELECTRIC TYPE SMOKE DETECTOR MOUNTED ON CEILING OR WALL PER DRAWINGS. ASTERISK (*) ADJACENT INDICATES RELAY BASED AND LISTED FOR DOOR CONTROL.

CONDUIT RUN, CONCEALED IN CEILING, WALLS OR UNDER FLOORS.

CONDUIT RUN EXPOSED.

CONDUIT RUN UNDERGROUND.

CONDUIT STUBBED OUT AND CAPPED. PULL LINE IN PLACE.

X / XX — REFERENCE DETAIL NUMBER. "X" INDICATES DETAIL NUMBER AND "X.X" INDICATES SHEET NUMBER.

CROSS LINES ON CONDUIT RUNS INDICATE NUMBER OF #10 CURRENT CARRYING CONDUCTORS CONTAINED THEREIN. TWO #10 AND ONE #10 GROUND WIRE ARE INDICATED WHEN CROSS LINES ARE NOT SHOWN. NUMERALS ADJACENT TO CROSS LINES ON CONDUIT RUNS INDICATE SIZE OF CONDUCTORS IN LIEU OF #10. ALL CONDUITS SHALL CONTAIN ONE GROUND WIRE SIZED PER C.E.C. TABLE 250-95, BUT NOT SMALLER THAN #10.

B-1,3 — CONDUIT HOMERUN TO PANELBOARD. LETTER AND NUMERALS INDICATE ELECTRICAL PANEL AND CIRCUIT NUMBER.

ISOLATED GROUND WIRE. RUN IN ADDITION TO REGULAR GROUND WIRE.

SURFACE MOUNTED BRANCH CIRCUIT PANELBOARD.

RECESSED BRANCH CIRCUIT PANELBOARD.

P1 — PANEL DESIGNATION.

RECESSED COMMUNICATION TERMINAL CABINET. REFER TO DRAWINGS AND SPECIFICATIONS.

SURFACE MOUNTED COMMUNICATION TERMINAL CABINET. REFER TO DRAWINGS AND SPECIFICATIONS.

J — JUNCTION BOX IN ACCESSIBLE CEILING SPACE OR FLUSH IN WALL WITH BLANK COVER PLATE TO MATCH DEVICE PLATES.

DUPLEX GROUNDING TYPE RECEPTACLE, 20 AMP, 125 VOLT, 2 POLE, 3 WIRE.

DUPLEX GROUND FAULT INTERRUPTING TYPE RECEPTACLE, 20 AMP, 125 VOLT, 2 POLE, 3 WIRE.

TWO DUPLEX GROUNDING TYPE RECEPTACLES IN 4S BOX, 20 AMP, 125 VOLT, 2 POLE, 3 WIRE.

FLUSH FLOOR MOUNTED DUPLEX GROUNDING TYPE RECEPTACLE, 20 AMP, 125 VOLT, 2 POLE, 3 WIRE.

IG — ANY RECEPTACLE INDICATED WITH"IG" ADJACENT SHALL BY ISOLATED GROUND TYPE WITH INDIVIDUAL GROUND WIRE TO PANELBOARD.

IG — DEDICATED RECEPTACLE INDICATED WITH"IG" ADJACENT SHALL BY ISOLATED GROUND TYPE WITH INDIVIDUAL GROUND WIRE TO PANELBOARD.

COMBINATION MAGNETIC MOTOR STARTER AND NON-FUSED DISCONNECT SWITCH.

F — COMBINATION MAGNETIC MOTOR STARTER AND FUSED DISCONNECT SWITCH.

SINGLE PHASE FRACTIONAL OR INTEGRAL HORSEPOWER MOTOR.

T — TRANSFORMER, PRIMARY & SECONDARY VOLTAGE AND KVA RATING AS NOTED. TYPE AND CONFIGURATION AS SPECIFIED. PROVIDE DRY TYPE, COPPER WOUND, WALL OR BOX MOUNTED UNLESS NOTED OTHERWISE.

E — EQUIPMENT WITH "E" ADJACENT IS EXISITNG TO REMAIN.

R — EQUIPMENT WITH "R" ADJACENT IS EXISTING TO BE COMPLETELY DISCONNECTED AND REMOVED.

HP RATED SWITCH

Sa^3k — SWITCH. LOWER CASE LETTER AT BOTTOM INDICATES OUTLETS CONTROLLED. CAPITAL SUPERSCRIPT INDICATES SWITCH TYPE.

NO SUPERSCRIPT	–	SINGLE POLE SWITCH
2	–	DOUBLE POLE
3	–	THREE WAY
4	–	FOUR WAY
I	–	ILLUMINATED HANDLE
K	–	KEYED SWITCH
LC	–	LOCKABLE COVER
M	–	MANUAL MOTOR STARTER WITH THERMAL OVERLOAD PROTECTION
MC	–	MOMENTARY CONTACT
D	–	LOW VOLTAGE DIMMER SWITCH

100AF / 70AT 3P — MOLDED CASE CIRCUIT BREAKER. "AF" INDICATES AMPERE FRAME, "AT" INDICATES AMPERE TRIP RATING AND NUMBER OF POLES AS INDICATED. SUBSCRIPT INDICATES TYPE.

NO SUBSCRIPT	THERMAL MAGNETIC
NA	NON-AUTOMATIC
MO	MAGNETIC ONLY
CL	CURRENT LIMITING
SS	SOLID STATE
EM	ELECTRONIC METERING PACKING

DRAW-OUT TYPE CIRCUIT BREAKER.

100AS / 90FU 3P — FUSED SWITCH. "AS" INDICATED AMPERE SWITCH RATING, "AFU" INDICATES AMPERE FUSE RATING, NUMBER OF POLES AS INDICATED.

VOLTAGE TRANSFORMER. FLOOR MOUNTD, COPPER WOUND, DRY TYPE UNLESS SPECIFIED OTHERWISE.

CURRENT TRANSFORMERS, "C.T.s"

POTENTIAL TRANSFORMER, P.T.s".

M — UTILITY METER SOCKET, WITH C.T.s, CLIPS, ETC., PER SERVING UTILITY COMPANY.

GROUND, "GRD".

COMBINATION VOICE/DATA OUTLET. 4S BOX WITH 2 GANG RING AND PLATE. ENGRAVE PLATE "VOICE" AND "DATA" OVER RESPECTIVE JACKS. VERIFY TYPE OF JACK WITH SYSTEM SUPPLIER. CONTRACTOR SHALL RUN 1"C.O MIN. FROM DATA JACK TO MAIN IDF ROOM. COORDINATE CABLING REQUIREMENTS WITH AV CONSULTANT.

X — PANEL NAME.

FD-SD — FIRE AND SMOKE DAMPER

SURFACE MOUNTED EMERGENCY LIGHTING UNIT WITH 90 MIN. EMERGENCY BATTERY PACK. REFER TO LIGHTING FIXTURE SCHEDULE.

GFI — "GROUND FAULT INTERRUPTER"

GFP — GROUND FAULT PROTECTION DEVICE.

GFS — GROUND FAULT SENSOR.

TELEPHONE TERMINAL BACKBOARD "TTB". 3/4 INCH SANDED AND PAINTED CPX PLYWOOD, 4' X 8' UNLESS NOTED OTHERWISE.

WALL POWER IN-FEED JUNCTION BOX FOR WORKSTATIONS FOR POWER AND TELEPHONE/DATA. SINGLE GANG TELEPHONE BOX. PROVIDE 1-1/2"CONDUIT AND STUB-UP AT +6" ABOVE CEILING WITH A SUPER FLEX CONDUIT., UNLESS OTHERWISE NOTED. VERIFY LOCATION WITH FURNITURE CONTRACTOR.

S — WALL MOUNTED OCCUPANCY SENSOR +42"AFF,U.O.N. (SINGLE MANUAL ON/OFF DIMMER SWITCH)

S_db — WALL MOUNTED OCCUPANCY SENSOR +42"AFF,U.O.N. (DOUBLE MANUAL ON/OFF DIMMER SWITCH)

OS — CEILING MOUNTED OCCUPANCY SENSOR

DL — CEILING MOUNTED DAYLIGHT SENSOR

FLOOR MOUNTED COMBINATION RECEPTACLE & TELE/DATA

HALF-SWITCHED DUPLEX RECEPTACLE

J — JUNCTION BOX FLUSH IN FLOOR

100AS — NON-FUSED DISCONNECT SWITCH. "AS" INDICATES SWITCH AMPERE RATING.

100AS / 60AFU F — FUSED DISCONNECT SWITCH. "AS" INDICATES SWITCH AMPERE RATING. "AFU" INDICATES FUSE AMPERE RATING.

ABBREVIATIONS

AF	AMPERE FRAME RATING OF CIRCUIT BREAKERS
AFF	ABOVE FINISHED FLOOR
AFU	AMPERE FUSE RATING
AIC	AMPS INTERRUPTING CAPACITY RATING (RMS SYMMETRICAL)
AM	AMMETER
AMP, A	AMPERES
AS	AMPERE SWITCH RATING
AT	AMPERE TRIP RATING OF BREAKER
AWG	AMERICAN WIRE GAUGE
BKR	BREAKER
C.	CONDUIT
CAB	CABINET
CC	CENTER TO CENTER
CKT	CIRCUIT
C.O.	CONDUIT ONLY
CU	COPPER
DWG	DRAWING
E	EXISTING
FF	FINISHED FLOOR
FLEX	FLEXIBLE
FLUOR	FLUORESCENT
FUT	FUTURE
GND	GROUND
HZ	HERTZ
J.B.	JUNCTION BOX
k	THOUSAND (KILO)
kV	KILOVOLTS
kW	KILOWATTS
kVA	KILOVOLT AMPERES
kWH	KILOWATT-HOURS
LT, LTS	LIGHT, LIGHTS
LTG	LIGHTING
MAX	MAXIMUM
MCB	MAIN CIRCUIT BREAKER
MCC	MOTOR CONTROL CENTER
MCM	THOUSAND CIRCULAR MILS
MT, MTD, MTG	MOUNT, MOUNTED, MOUNTING
NO, NOS	NUMBER, NUMBERS
NTS	NOT TO SCALE
OC	ON CENTER
PNL	PANEL
PNLBD	PANELBOARD
PRI	PRIMARY
PWR	POWER
R	REMOVED
REC	RECEPTACLE
RECPTS	RECEPTACLES
REQD	REQUIRED
SW	SWITCH
SYS	SYSTEM
SYM	SYMMETRICAL
TEMP	TEMPERATURE
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
W	WIRE
WP	WEATHERPROOF
XFMR	TRANSFORMER
ZD	ZONE DAMPER

APPLICABLE CODES

BUILDING OCCUPANCY CLASSIFICATION:

THE CONSTRUCTION OF THIS PROJECT SHALL CONFORM TO THE REQUIREMENTS OF:

2022 BUILDING STANDARD ADMINISTRATIVE CODE

2022 CALIFORNIA BUILDING CODE (CBC)

2022 CALIFORNIA ELECTRICAL CODE (CEC)

2022 CALIFORNIA MECHANICAL CODE (CMC)

2022 CALIFORNIA PLUMBING CODE (CPC)

2022 CALIFORNIA ENERGY CODE

2022 CALIFORNIA FIRE CODE (CFC),

FIRE ALARM PERMIT NOTE

CONTRACTOR SHALL PROVIDE AND SUBMIT FIRE ALARM SAFETY CONSTRUCTION DOCUMENTS FOR ALL AGENCY PLAN CHECK REQUIREMENTS. APPROVAL SHALL BE OBTAINED PRIOR TO THE INSTALLATION OF THE SYSTEM.INTERCONNECTING WIRING AND CONDUIT SIZES ARE NOT INDICATED. CONTRACTOR SHALL BE RESPONSIBLE FOR PREPARING RACEWAY, WIRING PLANS, VOLTAGE DROP CALCULATION AND COMPLETE ONE LINE DIAGRAM OF THE SYSTEM.

CONTRACTOR SHALL PROVIDE AS PART OF FIRE ALARM SYSTEM:

* CONSTRUCTION DOCUMENT AND SHOP DRAWINGS.
* SUBMIT AND SECURE FIRE MARSHAL APPROVAL.
* FIELD TO VERIFY EXISTING FIRE ALARM DEVICES. ADD AND/OR RELOCATE EXISTING DEVICES TO COMPLY TO NEW SPACE CONFIGURATION.

SCOPE OF WORK

EXISTING RESTROOM TO BE REMODELED TO NEW WITH ALL NEW POWER AND LIGHTING.
EXISTING LOBBY ARE TO BE REMODELED TO ADD NEW RECEPTION AREA.

DEMOLITION GENERAL NOTES

1. ELECTRICAL CONTRACTOR SHALL INVESTIGATE PROJECT SITE TO DETERMINE ALL CONDITIONS WHICH MAY AFFECT THE EXECUTION OF HIS WORK. E SHALL THOROUGHLY FAMILIARIZE HIMSELF WITH THESE EXISTING CONDITIONS, AND BY SUBMITTING A BID ACCEPTS CONDITIONS UNDER WHICH HE WILL BE REQUIRED TO PERFORM HIS WORK. HE SHALL BE RESPONSIBLE FOR DE-ENERGIZING CIRCUITS IN DEMOLITION AREAS TO ENSURE A SAFE CONDITION. MAINTAIN ELECTRICAL SERVICE TO THE EXISTING EQUIPMENT, SERVICES AND CIRCUITS AS REQUIRED. SCHEDULING OF SERVICE OUTAGES SHALL BE COORDINATED WITH ARCHITECT AND OWNER.
2. FOR ALL COMMUNICATION OUTLETS PROVIDE DOUBLE GANG BACK BOX WITH SINGLE GANG PLASTER RING. PROVIDE 1" CONDUIT TO 6" ABOVE ACCESSIBLE CEILING WITH 90° BEND AND CONDUIT BUSHING UNLESS OTHERWISE NOTED ON DRAWINGS. FOR NON-ACCESSIBLE CEILINGS, ROUTE CONDUIT TO NEAREST ACCESSIBLE CEILING SPACE OR TO NEAREST COMMUNICATION CLOSET. PROVIDE BLANK COVER PLATES FOR ALL UNUSED BOXES.
3. PANELBOARD NAME AND CIRCUITS NUMBER ARE BASED ON AS-BUILTS DRAWINGS. CONTRACTOR SHALL FIELD-VERIFY, AS REQUIRED.
4. IN GENERAL, THE DEMOLITION PLAN SHOWS ALL EXISTING EQUIPMENT TO BE REMOVED; HOWEVER, ELECTRICAL EQUIPMENT, WHETHER SHOWN ON THIS DRAWINGS OR NOT THAT IS LOCATED IN REMOVED WALLS, FLOORS OR CEILINGS, SHALL BE REMOVED UNLESS OTHERWISE NOTED. ELECTRICAL CONTRACTOR SHALL DISCONNECT AND REMOVE ALL EXISTING ELECTRICAL MATERIAL WHICH WILL NOT BE REUSED. UNUSED CONDUITS SHALL BE CUT OFF AND PLUGGED FLUSH WITH SURFACES. EXISTING MATERIAL WHICH IS NOT TO BE REUSED OR IS NOT REQUIRED TO BE RETAINED BY OWNER SHALL BE REMOVED FROM SITE.
5. DISCONNECT AND REMOVE CIRCUITING BACK TO SOURCE OR NEAREST POINT PRACTICAL TO MAINTAIN ELECTRICAL CONTINUITY OF REMAINING DEVICES, EXTEND CONDUIT AND CONDUCTORS AS NECESSARY TO MAINTAIN CIRCUIT INTEGRITY.
6. IT SHALL BE THE ELECTRICAL CONTRACTOR'S RESPONSIBILITY TO DISCONNECT AND REMOVE ALL EXISTING LIGHTING FIXTURES, RECEPTACLES, ELECTRICAL EQUIPMENT, ETC., AFFECTED BY THE REMODELED AREA. THIS WILL INCLUDE REROUTING, OR THE EXTENSION OF EXISTING CONDUIT AND FEEDERS WHERE NECESSARY TO MAINTAIN THE CONTINUITY OF EXISTING EQUIPMENT REMAINING.
7. EXISTING CONDUIT FEEDS UP THROUGH FLOOR SHALL BE CUT OFF AND PLUGGED FLUSH WITH FLOOR WHERE EXISTING WALL, ETC., IS REMOVED. REMOVE CONDUCTORS FROM THIS POINT BACK TO LAST OUTLET REMAINING IN SERVICE.
3. WHERE EXISTING CIRCUITING IS DISTURBED BY DEMOLITION WORK, THE CONTRACTOR SHALL REWORK AND/OR EXTEND EXISTING CIRCUITING AS REQUIRED TO MAINTAIN CONTINUITY TO ALL REMAINING LOADS AFFECTED BY CIRCUIT.
4. IT SHALL BE THE RESPONSIBILITY FOR THIS CONTRACTOR TO MAINTAIN CONTINUITY OF ALL ELECTRICAL SYSTEMS, EQUIPMENT, ETC., REMAINING IN OPERATION WHICH ARE BEING FED BY AN ABANDONED OUTLET. MAINTAINING CONTINUITY SHALL CONSIST OF REROUTING CONDUIT, WIRING, ETC., AS REQUIRED.
5. ALL ELECTRICAL FIXTURES, OUTLETS, DEVICES, ETC., THAT ARE REMOVED, SHALL BE REMOVED COMPLETELY, INCLUDING CONDUIT AND WIRING BACK TO THE LAST FIXTURE, OUTLET, DEVICE, ETC., REMAINING IN SERVICE.
6. EXISTING CIRCUITS WHICH ARE REMOVED AND NOT REUSED SHALL BE IDENTIFIED ON THE PANEL SCHEDULE AS "SPARE".
7. THE ELECTRICAL CONTRACTOR SHALL COORDINATE WITH THE OWNER PRIOR TO REMOVAL OF EXISTING ELECTRICAL EQUIPMENT, AND TURN OVER REMOVED EQUIPMENT THAT THE OWNER REQUESTS IN AN "AS- FOUND" CONDITION. EQUIPMENT THAT IS TO BE TURNED OVER SHALL BE BOXED AND TAGGED TO IDENTIFY THE SPECIFIC EQUIPMENT.
8. EXISTING CONDUIT MAY BE REUSED IF ADEQUATELY SIZED, PUT IN NO CASE SHALL EXISTING CONDUCTORS BE REUSED.
9. IN SOME INSTANCES, IT MAY BE NECESSARY FOR THE ELECTRICAL CONTRACTOR TO TEMPORARILY RELOCATE, REROUTE, ETC., EXISTING ELECTRICAL EQUIPMENT. THIS SHALL BE DONE SO THAT THE SYSTEMS IN ALL PHASES (THOSE COMPLETED AND THOSE YET TO BEGIN), ARE IN COMPLETE, OPERABLE, CONDITION AS CONSTRUCTION PROCEEDS THROUGH EACH PHASE.
10. ALL ABANDONED OUTLETS INCLUDING LIGHT, RECEPTACLES, TELEPHONE, ETC., SHALL BE COVERED AND PATCHED TO MATCH THE FINISH OF SURROUNDING WALL OR CEILING TO THE SATISFACTION OF THE OWNER.
11. ALL LIGHTING FIXTURES REMOVED TO ACCOMPLISH DEMOLITION WORK SHALL BE REINSTALLED SIMILAR TO NEW WORK.
12. WHERE EXISTING WALL TO BE REMOVED AND THERE ARE EXISTING CONDUIT FEEDS IN THESE WALL, IT IS THE CONTRACTOR'S RESPONSIBILITY TO DISCONNECT AND REMOVE THESE CONDUITS, AFFECTED BY THE REMODELED AREA. THIS WILL INCLUDE REROUTING WITH NEW CONDUITS AND WIRES (MATCH EXISTING), J-BOXES AND EXTENSION OF EXISTING CONDUITS WHERE NECESSARY TO MAINTAIN THE CONTINUITY OF EXISTING EQUIPMENT REMAINING.

SHEET INDEX

REGISTERED PROFESSIONAL ENGINEER — MONITA VERMA — No. 19676 — Exp. 07-31-24 — ELECTRICAL — STATE OF CALIFORNIA

architecture planning interior

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DRAWN BY: MV
CHECKED BY: MV
SCALE: As indicated

ELECTRICAL SYMBOL LIST AND ABBREVIATIONS

SAWPA
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E-0.1

PART 1 – GENERAL

A. SCOPE–SEE SHEET E–0.1 FOR PROJECT SCOPE OF WORK.

B. CODES, REGULATIONS AND STANDARDS

1. THE INSTALLATION SHALL COMPLY WITH APPLICABLE LOCAL AND STATE CODES AND ORDINANCES, WITH THE REGULATIONS OF THE LATEST ADOPTED EDITION OF THE FOLLOWING CODES AND WITH THE REQUIREMENTS OF THE POWER AND TELEPHONE COMPANIES FURNISHING SERVICES TO THIS INSTALLATION.

2. THE FOLLOWING INDUSTRY STANDARDS, SPECIFICATIONS AND CODES ARE MINIMUM REQUIREMENTS:

    a. NEMA–NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION STANDARDS

    b. CEC–CALIFORNIA ELECTRICAL CODE

    c. UL–UNDERWRITER LABORATORIES INCORPORATED STANDARDS

    d. ANSI–AMERICAN NATIONAL STANDARDS INSTITUTE

    e. IEEE–INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS

    f. NESC–NATIONAL ELECTRICAL SAFETY CODE

    g. TITLE 24–CALIFORNIA ENERGY COMMISSION

C. INSPECTION OF SITE

1. 1.PRIOR TO SUBMITTING A BID FOR ELECTRICAL WORK, THE ELECTRICAL CONTRACTOR SHALL VISIT THE SITE OF THE PROPOSED CONSTRUCTION AND SHALL THOROUGHLY ACQUAINT HIMSELF WITH EXISTING UTILITIES AND WORKING CONDITIONS TO BE ENCOUNTERED, ETC. ALLOWANCE WILL NOT BE MADE FOR NON–COMPLIANCE WITH THIS CONDITION AFTER BIDDING.

D. GENERAL WORKMANSHIP

1. ALL WORK SHALL BE EXECUTED AND FINISHED IN A PRACTICAL MANNER AND SHALL PRESENT A NEAT AND WORKMANLIKE APPEARANCE WHEN COMPLETED.

2. ALL WORK MUST BE ACCEPTABLE TO THE OWNER. WHERE A DETAILED METHOD OF INSTALLING THE WORK IS NOT SPECIFIED OR INDICATED, INSTALL WORK AS DIRECTED BY THE OWNER.

E. RELATED WORK BY OTHERS

1. 1.ELECTRICAL DRAWINGS IDENTIFY UTILITY SERVICE REQUIREMENTS FOR POWER, TELEPHONE, AND CABLE TV WITHIN AND UP TO FIVE FEET OUTSIDE THE BUILDING. UTILITY ELECTRICAL SERVICE TRANSFORMER(S), WHERE SHOWN ON THE SITE PLAN, ARE FOR INFORMATION ONLY AND INDICATE THE PREFERRED POINT OF SERVICE. UTILITY CONDUIT SYSTEMS, PULLBOXES, AND OTHER STRUCTURES, WHERE SHOWN ON THE SITE PLAN, ARE ALSO FOR INFORMATION ONLY AND INDICATE THE PREFERRED ROUTING. THE ELECTRICAL CONTRACTOR SHALL REFER TO UTILITY SERVICE DRAWINGS FOR ACTUAL UTILITY SERVICE REQUIREMENTS FOR THIS PROJECT. UTILITY SYSTEMS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE APPROVED UTILITY SERVICE DRAWINGS. IT SHALL BE THE ELECTRICAL CONTRACTOR'S RESPONSIBILITY TO CONTACT AND FOLLOW–UP WITH ALL UTILITY COMPANIES TO OBTAIN BOTH PRELIMINARY AND FINAL DESIGN DRAWINGS FOR THIS PROJECT.

    a. THE ELECTRICAL CONTRACTOR SHALL COORDINATE THE INSTALLATION OF THE ELECTRICAL SERVICE ENTRANCE, MEET ALL POWER COMPANY REQUIREMENTS AND SHALL PAY ALL UTILITY COMPANY CHARGES.

    b. THE LOCAL TELEPHONE COMPANY WILL FURNISH AND INSTALL ALL TELEPHONE WIRING AND EQUIPMENT AND WILL MAKE ALL FINAL TELEPHONE CONNECTIONS. THE ELECTRICAL CONTRACTOR SHALL COORDINATE THE INSTALLATION OF THE TELEPHONE SERVICE ENTRANCE, MEET ALL TELEPHONE REQUIREMENTS AND SHALL PAY ALL UTILITY COMPANY CHARGES.

    c. THE ELECTRICAL CONTRACTOR SHALL COORDINATE THE INSTALLATION OF THE CABLE SERVICE ENTRANCE, MEET ALL CABLE COMPANY REQUIREMENTS AND SHALL PAY ALL UTILITY COMPANY CHARGES.

F. COOPERATION WITH OTHER CONTRACTORS

1. COOPERATE WITH THE OTHER TRADES SO THAT THE INSTALLATION OF THE ELECTRICAL OUTLETS AND EQUIPMENT WILL BE PROPERLY COORDINATED. CONDUIT, FIXTURES, AND OTHER EQUIPMENT LOCATIONS SHALL BE CHECKED WITH THE OTHER TRADES TO AVOID CONFLICT WITH THE PIPING, DUCTWORK, STEEL, BEAMS, OR OTHER OBSTRUCTIONS.

2. CAREFULLY CHECK THE LOCATIONS OF THE OUTLET BOXES AND DETERMINE THAT THEY HAVE NOT BEEN DISTURBED DURING THE INSTALLATION OF MATERIALS OF OTHER TRADES.

3. COORDINATE THE LOCATION OF TRENCHES AND CONDUITS FOR UTILITY SERVICES AND OTHER DISCIPLINES WITH THE GENERAL CONTRACTOR.

G. MECHANICAL AND ELECTRICAL COORDINATION

1. 1.ANY DEVICE WHICH CARRIES THE FULL LOAD CURRENT OF THE ELECTRICALLY DRIVEN MACHINERY, AS OPPOSED TO THE CONTROL OF INSTRUMENTATION CURRENT IN THE HOLDING COIL, IS A POWER CIRCUIT AND IS THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR. CONTROL OR INSTRUMENTATION CIRCUITS CONNECTING HOLDING COILS TO THE CONTROL SYSTEM AS SPECIFIED BY THE MECHANICAL ENGINEER ARE THE RESPONSIBILITY OF THE MECHANICAL CONTRACTOR.

2. THE POWER CIRCUIT IS DEFINED AS ALL DEVICES NECESSARY TO OPERATE, AND AS REQUIRED BY CODE TO PROTECT AND SERVICE THE UNIT, INCLUDING BRANCH CIRCUIT PROTECTIVE DEVICES, DISCONNECTS, MAGNETIC MOTOR STARTERS WITH RUNNING OVERLOAD AND SINGLE PHASING PROTECTION, MAGNETIC CONTACTORS, ETC.

3. THE CONTROL OR INSTRUMENTATION CIRCUIT IS DEFINED AS ALL DEVICES NECESSARY TO INTERFACE THE ELECTRICAL POWER CIRCUIT WITH THE CONTROL SYSTEM AS SPECIFIED BY THE MECHANICAL ENGINEER INCLUDING CONDUIT, BOXES, CONDUIT FITTINGS, CONDUCTORS, ELECTRIC–PNEUMATIC SWITCHES, PNEUMATIC–ELECTRIC SWITCHES, ELECTRICAL AND PNEUMATIC RELAYS, PNEUMATIC TUBING, ETC.

4. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE 120V DUPLEX RECEPTACLES WITHIN 25 FEET OF ALL ROOF MOUNTED EQUIPMENT, PER CEC 210.63.

H. DRAWINGS

1. THE DRAWINGS INDICATE THE GENERAL ARRANGEMENT AND LOCATIONS OF THE ELECTRICAL WORK. INFORMATION PRESENTED ON THESE DRAWINGS ARE AS ACCURATE AS PLANNING CAN DETERMINE, BUT FIELD VERIFICATION OF ALL DIMENSIONS, LOCATIONS, LEVELS, ETC., TO SUIT FIELD CONDITIONS IS REQUIRED. REVIEW ALL ARCHITECTURAL, STRUCTURAL AND MECHANICAL DRAWINGS AND ADJUST ALL WORK TO MEET THE REQUIREMENTS OF CONDITIONS SHOWN. THE ARCHITECTURAL DRAWINGS SHALL TAKE PRECEDENCE OVER ALL OTHER DRAWINGS. DISCREPANCIES BETWEEN DIFFERENT PLANS, OR BETWEEN DRAWINGS AND SPECIFICATIONS, OR REGULATIONS AND CODES GOVERNING THE INSTALLATION SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER IN WRITING BEFORE THE DATE OF BID OPENING. WHERE DISCREPANCIES OR CONFLICTS OCCUR, THE BID SHALL REFLECT THE MOST STRINGENT REQUIREMENTS. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE TO FIELD MEASURE AND CONFIRM MOUNTING HEIGHTS AND LOCATION OF ELECTRICAL EQUIPMENT WITH RESPECT TO COUNTERS, ETC. DO NOT SCALE DISTANCES OFF THE ELECTRICAL DRAWINGS. USE ACTUAL BUILDING DIMENSIONS.

2. 2.UPON COMPLETION OF THE WORK UNDER THESE DRAWINGS AND SPECIFICATIONS, THE ELECTRICAL CONTRACTOR SHALL PROVIDE THE OWNER WITH A COMPLETE SET OF MARKED–UP ELECTRICAL DRAWINGS SHOWING THE "AS–BUILT" CONDITION OF THE WORK. BOND PRINTS OF THE DRAWINGS REQUIRED WILL BE FURNISHED BY THE OWNER, FOR THIS PURPOSE.

3. ALL OPERATING INSTRUCTIONS, PARTS LISTS AND SPARE PARTS FOR MATERIAL AND EQUIPMENT FURNISHED AND/OR INSTALLED BY THE ELECTRICAL CONTRACTOR SHALL BE TURNED OVER TO THE OWNER (THREE COPIES).

I. SHOP DRAWINGS AND APPROVALS

1. SUBMITTALS SHALL CONSIST OF DETAILED SHOP DRAWINGS, SPECIFICATIONS, BLOCK WIRING DIAGRAMS, "CATALOG CUTS" AND DATA SHEETS CONTAINING PHYSICAL AND DIMENSIONAL INFORMATION, PERFORMANCE DATA, ELECTRICAL CHARACTERISTICS, MATEIRALS USED IN FABRICATION, AND MATERIAL FINISH. CLEARLY INDICATE BY ARROWS OR BRACKETS PRECISELY WHAT IS BEING SUBMITTED ON AND THOSE OPTIONAL ACCESSORIES WHICH ARE INCLUDED AND THOSE WHICH ARE EXCLUDED.

2. EACH SUBMITALL SHALL BE ACCOMPANIED SHALL BEAR A STAMP STATING THAT THE SUBMITTAL HAS BE THOROUGHLY REVIEWED BY THE CONTRACTOR AND IS IN FULL COMPLIANCE WITH THE REQUIREMENTS OF CONTRACT DOCUMENTS. COVER LETTERS SHALL LIST IN FULL THE ITEMS AND DATA SUBMITTED. FAILURE TO COMPLY WITH THIS REQUIREMENTS SHALL CONSTITUTE GROUNDS FOR REJECTION OR DATA.

3. THE CONTRACTOR SHALL SUBMIT DETAILED DRAWINGS OF ALL ELECTRICAL EQUIPMENT AND GENERATOR ROOMS, YARDS, AND UTILITY AREAS. MINIMUM SCALE: 1/4"=1'–0".

4. AS PART OF THE EQUIPMENT SUBMITTALS, THE MANUFACTURER SHALL PROVIDE ANCHORAGE CALCULATIONS FOR FLOOR AND WALL MOUNTED ELECTRICAL EQUIPMENT. STRUCTURAL CALCULATIONS SHALL BE PREPARED AND SIGNED BY REGISTERED STRUCTURAL ENGINEER IN CALIFORNIA.

5. ALL RESUBMITTALS SHALL INCLUDE A COVER LETTER THAT LISTS THE ACTION TAKEN AND REVISIONS MADE TO EVERY DRAWING AND EQUIPMENT DATA SHEET IN RESPONSE TO SUBMITALL REVIEW COMMENTS. FAILURE TO INCLUDE THIS COVER LETTER WILL CONSTITUTE REJECTION OF THE RESUBMITTAL PACKAGE.

6. CONTRACTOR SHALL SUBMIT SHORT CIRCUIT AND COORDINATION STUDIES SIGNED BY A REGISTERED ELECTRICAL ENGINEER. STUDIES SHALL BE PERFORMED IN ACCEPTANCE WITH IEEE GUIDELINES. CONTRACTOR SHALL BE SUBMITTED FOR ARCHITECT–ENGINEER REVIEW PRIOR TO ORDERING AND INSTALLING ANY EQUIPMENT. CONTRACTOR SHALL ENSURE THAT THE ACTUAL FEEDER LENGTHS MATCH STUDIES (REVISE STUDIES IF NECESSARY). SERVICE EQUIPMENT MARKINGS AS REQUIRED PER CEC 110.24 SHALL BE BASED ON CONTRACTOR SUBMITTED STUDIES.

7. SUBMIT CONDUITS; FITTINGS; OUTLET PULL AND JUNCTION BOXES; WIRES; WIRING DEVICES; LIGHTING FIXTURES; LAMPS; BALLASTS; SAFETY SWITCHES; FUSES; TRANSFORMERS; PANELBOARDS; SWITCHBOARDS; CIRCUIT BREAKERS; LIGHTING CONTROL SYSTEM/DEVICES; AND FIRE ALARM SYSTEMS.

J. SUBSTITUTIONS

1. ALL REQUESTS FOR SUBSTITUTIONS SHALL CONFORM TO THE GENERAL REQUIREMENTS AND PROCEDURE OUTLINED IN DIVISION 1.

2. WHERE ITEMS ARE NOTED AS "OR EQUAL", A PRODUCT OF EQUAL DESIGN, CONSTRUCTION AND PERFORMANCE WILL BE CONSIDERED.

3. SUBSTITUTIONS SHALL BE EQUAL, IN THE OPINION OF THE OWNER'S REPRESENTATIVE, TO THE SPECIFIED PRODUCT.

4. THE BURDEN OF PROOF OF EQUALITY OF A PROPOSED SUBSTITUTION FOR A SPECIFIED ITEM SHALL BE UPON THE ELECTRICAL CONTRACTOR. ELECTRICAL CONTRACTOR SHALL SUPPORT ITS REQUEST WITH SUFFICIENT TEST DATA, PHOTOMETRIC ANALYSIS, DETAILED BREAKDOWN DEFINING COST SAVINGS, AND OTHER MEANS TO PERMIT THE ARCHITECT AND/OR ENGINEER TO MAKE A FAIR AND EQUITABLE DECISION ON THE MERITS OF THE PROPOSED SUBSTITUTION. ANY ITEM BY A MANUFACTURER OTHER THAN THOSE SPECIFIED, OR OF BRAND NAME OR MODEL NUMBER WILL BE CONSIDERED A SUBSTITUTION. THE ARCHITECT AND/OR ENGINEER WILL BE THE SOLE JUDGE OF WHETHER OR NOT THE SUBSTITUTION IS EQUAL IN QUALITY, UTILITY, AND ECONOMY TO THAT SPECIFIED.

5. APPROVAL OF A SUBSTITUTION SHALL NOT RELIEVE ELECTRICAL CONTRACTOR FROM RESPONSIBILITY FOR COMPLIANCE WITH ALL REQUIREMENTS OF THE CONTRACT DOCUMENTS. ELECTRICAL CONTRACTOR SHALL BEAR THE EXPENSE FOR ANY CHANGES IN OTHER PARTS OF THIS WORK OR OTHER WORK CAUSED BY THE PROPOSED SUBSTITUTION.

6. IF ARCHITECT AND/OR ENGINEER REJECTS ELECTRICAL CONTRACTOR'S SUBSTITUTE ITEM ON THE FIRST SUBMITTAL, ELECTRICAL CONTRACTOR MAY MAKE ONLY ONE ADDITIONAL REQUEST FOR SUBSTITUTION IN THE SAME CATEGORY.

K. GUARANTEE & TESTING

1. GUARANTEE ALL MATERIAL FURNISHED AND ALL WORKMANSHIP PERFORMED FOR A PERIOD OF ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE OF THE WORK. ANY DEFECTS DEVELOPING WITHIN THIS PERIOD, TRACEABLE TO MATERIAL FURNISHED AS A PART OF THIS SECTION OR WORKMANSHIP PERFORMED HEREUNDER, SHALL BE CORRECTED AS NECESSARY AT NO COST TO THE OWNER.

2. SYSTEM SHALL BE TESTED FOR PROPER OPERATION. IF TESTS SHOW THAT WORK IS DEFECTIVE, ELECTRICAL CONTRACTOR SHALL MAKE CORRECTIONS AS NECESSARY AT NO COST TO THE OWNER.

L. LABELING

1. PROVIDE ENGRAVED NAME PLATES ON SWITCHBOARDS, PANEL BOARDS, DISCONNECT SWITCHES, MOTOR CONTROL CENTERS, TRANSFORMERS, ETC., INDICATING EQUIPMENT DESIGNATED (OR DESIGNATION OF EQUIPMENT SERVED) AND VOLTAGE.

M. NOT USED.

N. MATERIALS

1. ALL MATERIALS SHALL BE NEW AND OF QUALITY AS SPECIFIED ON THE PLANS OR SPECIFICATIONS AND MUST CARRY THE UNDERWRITER'S LABORATORIES APPROVAL COVERING THE PURPOSE FOR WHICH THEY ARE USED, IN ADDITION TO MEETING ALL REQUIREMENTS OF THE CURRENT APPLICABLE CODES AND REGULATIONS.

2. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING EQUIPMENT WHICH IS DAMAGED DUE TO INCORRECT FIELD WIRING PROVIDED UNDER THIS SECTION OR FACTORY WIRING IN EQUIPMENT PROVIDED UNDER THIS SECTION.

O. STORAGE AND HANDLING OF MATERIAL

1. DELIVER MATERIALS AND EQUIPMENT TO THE PROJECT IN THE MANUFACTURER'S ORIGINAL, UNOPENED, LABELED CONTAINERS. PROTECT AGAINST MOISTURE, TAMPERING, OR DAMAGE FROM IMPROPER HANDLING OR STORAGE. ELECTRICAL CONTRACTOR SHALL PROTECT AND BE RESPONSIBLE FOR ANY DAMAGE TO WORK OR MATERIALS UNTIL FINAL ACCEPTANCE BY THE OWNER, AND SHALL MAKE GOOD WITHOUT COST TO THE OWNER, ANY DAMAGE OR LOSS THAT MAY OCCUR DURING THIS PERIOD.

2. ARRANGE FOR TIMELY DELIVERY OF MATERIALS AND EQUIPMENT TO THE JOBSITE IN ORDER TO MINIMIZE THE LENGTH OF TIME BETWEEN DELIVERY AND INSTALLATION.

3. ARRANGE FOR TIMELY DELIVERY OF OWNER SUPPLIED MATERIALS AND EQUIPMENT TO THE JOBSITE IN ORDER TO MINIMIZE THE LENGTH OF TIME BETWEEN DELIVERY AND INSTALLATION

4. COVER AND PROTECT ANY MATERIAL WHICH MAY BE AFFECTED BY THE WEATHER WHILE IN TRANSIT OR STORED AT THE PROJECT SITE. ANY MATERIAL FOUND DEFECTIVE OR NOT INSTALLED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS MAY BE REJECTED BY THE ENGINEER.

5. NO ELECTRICAL WORK SHALL BE INSTALLED IN AREAS WHERE OTHER TRADE'S WORK MIGHT CAUSE PHYSICAL DAMAGE TO WIRES, CONDUIT, EQUIPMENT, BOXES OR FITTINGS UNTIL THE OTHER TRADE'S WORK HAS BEEN COMPLETED. ANY EQUIPMENT OR MATERIALS WHICH BECOME DAMAGED SHALL BE REMOVED AND REPLACED AT NO EXTRA COST TO THE OWNER.

P. CLEAN–UP

1. KEEP THE PREMISES FREE FROM ACCUMULATION OF WASTE MATERIALS, OR RUBBISH CAUSED BY EMPLOYEES OR WORK UNDER THIS DIVISION OF THE SPECIFICATIONS. AT THE COMPLETION OF THE WORK, REMOVE ALL SURPLUS MATERIALS, TOOLS, ETC., AND LEAVE THE PREMISES "BROOM–CLEAN".

Q. EXCAVATION, CUTTING AND FITTING

1. PERFORM THE EXCAVATION, CUTTING, FITTING, REPAIRING AND FINISHING OF THE WORK NECESSARY FOR THE INSTALLATION OF ELECTRICAL EQUIPMENT HOWEVER, NO CUTTING OF THE WORK OF OTHER TRADES OR OF ANY STRUCTURAL MEMBER SHALL BE DONE WITHOUT THE CONSENT OF THE ARCHITECT.

R. NOT USED.

PART 2 – PRODUCTS AND EXECUTION

A. CONDUIT

1. ALL WIRING SHALL BE INSTALLED IN LISTED METALLIC CONDUIT EXCEPT AS PERMITTED BELOW. GRC MAY BE USED IN ALL AREAS. IMC MAY BE USED IN INDOOR LOCATIONS NOT IN CONTACT WITH EARTH. EMT MAY BE USED IN INDOOR LOCATIONS NOT IN CONTACT WITH EARTH, NOT IN CONCRETE SLABS OR WALLS AND NOT SUBJECT TO DAMAGE. PVC MAY BE USED IN OR BELOW CONCRETE AND DIRECT BURIED IN EARTH. FLEXIBLE STEEL CONDUIT SHALL BE USED FOR INDOOR FINAL CONNECTIONS TO MECHANICAL EQUIPMENT NOT TO EXCEED 36", AND RECESSED REMOVABLE FLUORESCENT LIGHT FIXTURES NOT TO EXCEED 72". LIQUID–TIGHT FLEXIBLE STEEL CONDUIT SHALL BE FOR OUTDOOR FINAL CONNECTIONS TO EQUIPMENT NOT TO EXCEED 36".

2. WHERE THE CONDUIT ENTERS OUTLET BOXES, FIXTURES OR CABINETS, FIRMLY FASTEN BY DOUBLE LOCKNUTS AND BUSHINGS (GRC AND IMC ONLY). FIRMLY FASTEN CONDUIT TO THE BUILDING CONSTRUCTION. RUN EXPOSED CONDUIT PARALLEL TO THE BUILDING LINES, SUPPORTED BY APPROPRIATE HANGERS.

3. COVER METALLIC CONDUIT IN CONTACT WITH EARTH OR FILL WITH POLYETHYLENE TAPE SPIRAL WRAPPED, 1/2" LAPPED TO PROVIDE DOUBLE THICKNESS. TAPE SHALL BE SCOTCH NO. 50 TAPE. CONDUIT AND DUCTS NOT UNDER BUILDINGS AND FEEDER DUCTS SHALL BE INSTALLED PER CEC 300.5, EXCEPT THAT THE BENDS IN CONDUIT LARGER THAN 1" IN DIAMETER SHALL BE MADE WITH GALVANIZED STEEL CONDUIT TREATED AS NOTED ABOVE. MAKE JOINTS WITH COMPOUND TO BE WATERTIGHT.

4. CONDUIT SIZES SHALL BE AS REQUIRED BY CODE AND AS INDICATED OR SPECIFIED ON DRAWINGS. NO CONDUIT SMALLER THAN 3/4 INCH TRADE SIZE SHALL BE USED.

5. PENETRATION THROUGH FLOOR SLABS WHERE SUBJECT TO DAMAGE SHALL BE IN WRAPPED RIGID STEEL. SCHEDULE 40 PVC ELBOWS AND PENETRATIONS MAY BE USED IN SLAB ON GRADE WHERE PENETRATIONS OCCUR IN PROTECTED AREAS (WALLS, ELECTRICAL ROOMS, ETC.).

6. CONDUITS AND OUTLETS SHALL BE CONCEALED WITHIN THE BUILDING STRUCTURE, EXCEPT THAT CERTAIN MOTOR AND LIGHTING FEEDER CONDUITS MAY BE RUN EXPOSED IN CERTAIN AREAS AS INDICATED ON THE DRAWINGS. CONDUIT SHOWN TO BE INSTALLED IN CABINETS, COUNTERS, AND CASEWORK SHALL BE RUN AS DIRECTED BY THE ARCHITECT.

7. ALL CONDUIT SERVING ROOF MOUNTED EQUIPMENT AND DEVICES INCLUDING HVAC EQUIPMENT, GFCI MAINTENANCE RECEPTACLES AND DUCT TYPE SMOKE DETECTORS SHALL BE ROUTED IN THE CEILING SPACE. CONDUIT SHALL PENETRATE ROOF AT EQUIPMENT LOCATIONS ONLY. NO CONDUIT SHALL BE INSTALLED HORIZONTALLY ACROSS ROOF SURFACE.

8. FLEXIBLE METALLIC AND NON–METALLIC CONDUIT SYSTEMS SHALL HAVE A CODE SIZED COPPER GROUND CONDUCTOR. INCREASE CONDUIT SIZE AS REQUIRED.

9. FLEXIBLE METAL CONDUIT/CUT–IN BOXES FOR LOW VOLTAGE SYSTEMS (TEL/DATA) MAY BE USED IN WALL CAVITIES PROVIDED THE INSTALLATION COMPLIES WITH CEC ARTICLE 348. ALL CONDUIT FOR LOW VOLTAGE WIRING SYSTEMS IN NEW WALL PARTITIONS SHALL BE EMT. FLEXIBLE METAL CONDUIT FOR THESE SYSTEMS IS NOT ACCEPTABLE IN NEW WALLS.

10. ALL EMPTY CONDUIT SYSTEMS SHALL HAVE A 200 POUND TEST PULL CORD INSTALLED TO FACILITATE INSTALLATION OF FUTURE WIRE.

B. FITTINGS

1. EMT–FITTINGS AND CONDUIT BODIES SHALL BE STEEL, MALLEABLE IRON OR DIE CAST COMPRESSION OR SET SCREW TYPE.

2. IMC AND GRC–SHALL BE STEEL OR MALLEABLE IRON TYPE AND SHALL ENGAGE A MINIMUM OF FIVE (5) THREADS.

C. OUTLET, PULL AND JUNCTION BOXES

1. PULL AND/OR JUNCTION BOXES SHALL BE INSTALLED WHEREVER SHOWN ON THE DRAWINGS OR AS REQUIRED BY CODE.

2. EACH SWITCH, LIGHT, RECEPTACLE OR OTHER OUTLET SHALL BE PROVIDED WITH A CODE GAUGE, GALVANIZED STEEL OUTLET BOX. JUNCTION AND PULLBOXES SHALL BE CODE GAUGE, GALVANIZED STEEL. OUTLET BOXES SHALL BE OF THE ONE PIECE, KNOCKOUT TYPE, IN GENERAL 4–INCH SQUARE, 2 1/8–INCH WITH PLASTER RING. PLASTER RINGS SHALL BE SET TO PROVIDE NOT MORE THAN 1/8" FROM WALL SURFACE TO RING. IN NO CASE SHALL PLASTER RING PROJECT BEYOND SURFACE OF WALL. SINGLE GANG RINGS SIMILAR TO STEEL CITY 52050 SHALL BE USED FOR 4" BOXES IN UNFINISHED BRICK. NUMBER 180 BOXES MAY BE USED FOR UNFINISHED MASONRY FLUSH WALL OUTLETS. CENTER ALL OUTLET BOXES IN BLOCK COURSE.

3. BOXES INSTALLED IN POURED CEMENT FLOORS SHALL BE FLUSH TYPE CAST IRON WITH WATERTIGHT GASKETED COVERS, GRAY METALLIC FINISH. WHERE BOXES ARE INSTALLED IN FLOORS WITH TILE OR CARPET FLOOR COVERING, COVERS SHALL BE OF THE RECESSED TYPE TO ACCOMMODATE THE FLOOR COVERING.

4. BOXES INSTALLED FOR THE ALARM, COMPUTER AND SECURITY SYSTEM SHALL BE PROVIDED WITH APPROPRIATE COVERPLATES.

5. PULL BOXES SHALL BE THE TYPES, SIZE AND DESIGN AS APPROVED BY THE CEC FOR THE CLASS OF INSTALLATION REQUIRED.

6. PULL BOXES AND OUTLET BOXES SHALL BE SIZED BY THE ELECTRICAL CONTRACTOR AS REQUIRED BY THE CEC BASED ON NUMBER OF CONDUCTORS, YOKES, STRAPS, ETC., USED IN THE INSTALLATION.

D. WIRE

1. MATCH BUILDING STANDARDS IF APPLICABLE IN AN EXISTING BUILDING CONDITION, UNLESS OTHERWISE FOLLOW THE SPECIFICATIONS BELOW.

2. CONDUCTOR SIZES SHOWN ON THE DRAWINGS ARE BASED ON COPPER WIRE. UNLESS OTHERWISE SPECIFIED, ALL WIRE SHALL BE 75 DEGREE C TYPE THWN OR XHHW. ALL BRANCH CIRCUIT AND FEEDER WIRING SHALL BE COPPER.

3. WIRES SHALL BE MARKED WITH COLOR TO SIMPLIFY CIRCUIT IDENTIFICATION. UNLESS OTHERWISE REQUIRED BY LOCAL ORDINANCES, IDENTIFICATION SHALL BE AS FOLLOWS:

    a. 120/208V AND 120/240V
        - PHASE A: BLACK.
        - PHASE B: RED.
        - PHASE C: BLUE
        - NEUTRAL: WHITE.
        - GROUND: GREEN

    b. 277/480V
        - PHASE A: BROWN.
        - PHASE B: ORANGE.
        - PHASE C: YELLOW
        - NEUTRAL: GRAY.
        - GROUND: GREEN

4. THE WIRE SHALL BE #12 AWG UNLESS OTHERWISE INDICATED.

5. NO WIRE SHALL BE INSTALLED IN THE CONDUIT SYSTEM UNTIL THE CONDUIT SYSTEM IS COMPLETE. USE U.L. APPROVED LUBRICANT TO FACILITATE THE INSTALLATION OF THE CONDUCTORS IN THE CONDUIT SYSTEM.

6. CONDUCTORS NO. 10 AWG AND SMALLER SHALL BE SOLID. CONDUCTORS LARGER THAN NO. 10 AWG SHALL BE STRANDED.

7. NOT USED.

8. HOME RUN SHALL BE DEFINED AS THE PORTION OF THE CIRCUIT FROM THE PANEL TO THE FIRST DEVICE

E. WIRING DEVICES

1. SWITCHES: WALL SWITCHES SHALL BE SPECIFICATION GRADE AC SILENT TYPE SWITCHES 20A, 120 – 277 VOLT. HUBBELL 1221 (SP), 1222 (DP), 1223 (3–WAY) AND 1224 (4–WAY). DIMMERS SHALL BE SPECIFICATION GRADE WITH PRESET SLIDE CONTROL. COLOR SHALL BE AS APPROVED BY THE ARCHITECT/OWNER. MATCH BUILDING STANDARD (IF EXISTING).

2. RECEPTACLES: DUPLEX TYPE OUTLETS SHALL BE HEAVY DUTY, SPECIFICATION GRADE NEMA 5–20R, 20A, 120V GROUNDED TYPE EQUAL TO HUBBELL ISOLATED GROUND OUTLETS SHALL BE EQUAL TO HUBBELL IG5362. SPECIAL APPLICATION RECEPTACLES SHALL BE AS INDICATED ON PLANS AND VERIFIED WITH EQUIPMENT SUPPLIER. COLOR SHALL BE AS APPROVED BY THE ARCHITECT/OWNER. MATCH BUILDING STANDARD (IF EXISTING).

3. WEATHERPROOF RECEPTACLES: COVERS SHALL BE HUBBELL WPFS26 WITH 5362 DUPLEX OUTLET OR EQUAL.

4. GFCI RECEPTACLES: SHALL BE HUBBELL GF5362. GFCI RECEPTACLES SHALL BE USED IN ALL OUTDOOR APPLICATIONS AS WELL AS THOSE PLACED WITHIN 6' OF WATER SOURCE AND ALL OTHER CEC REQUIRED LOCATIONS.

5. MOUNTING HEIGHTS: SWITCHES – +48 INCHES. RECEPTACLES – +18 INCHES COMMUNICATION DEVICES – +18 INCHES. FIRE ALARM DEVICES – AS REQUIRED BY ADA, NFPA 72 OR AUTHORITY HAVING JURISDICTION. ALL MOUNTING HEIGHTS ARE TO CENTERLINE OF DEVICE.

6. DEVICE PLATES SHALL BE EQUAL TO SIERRA SMOOTH–LINE PLASTIC WALL PLATES COLOR SHALL BE AS APPROVED BY THE ARCHITECT/OWNER. MATCH BUILDING STANDARD (IF EXISTING).

7. IN ALL CASES, SWITCHES CONTROLLING LIGHTING ARE TO BE LOCATED ON THE STRIKE SIDE OF DOORS. LOCATIONS INDICATED FOR SWITCHES AND OUTLETS ARE APPROXIMATE. OWNER MAY MAKE MINOR RELOCATIONS AT NO ADDITIONAL CHARGE.

F. LIGHTING FIXTURES

1. COORDINATE THE FINAL LOCATION OF FIXTURES SHOWN DIAGRAMMATICALLY ON THE DRAWINGS WITH OTHER TRADES IN ORDER TO AVOID INTERFERENCES. RELOCATE FIXTURES AS REQUIRED AS PART OF THE WORK UNDER THIS DIVISION IF NEW LOCATION IS WITHIN A FIVE FOOT RADIUS OF LOCATION SHOWN.

2. PROVIDE ALL LIGHTING FIXTURES, WIRED AND CONNECTED. THE DRAWINGS INDICATE THE FIXTURES FOR EACH LOCATION. ELECTRICAL CONTRACTOR SHALL VERIFY FIXTURE LOCATIONS, MOUNTING REQUIREMENTS AND U.L. LABELING OF ALL FIXTURES PRIOR TO ORDERING. INCLUDE ALL ACCESSORIES NEEDED FOR A COMPLETE INSTALLATION INCLUDING MOUNTING CLIPS, PLASTER FRAMERS, HANGERS AND HARDWARE IN BASE BID. PROVIDE LAMPS FOR ALL FIXTURES. VERIFY CEILING CONSTRUCTION BEFORE ORDERING RECESSED UNITS.

3. ADJUSTABLE FIXTURES SHALL BE LOCATED AND PROPERLY AIMED AS DIRECTED BY THE ARCHITECT OR THE LIGHTING DESIGNER.

4. SUPPORT RECESSED FIXTURES FROM CEILING STRUCTURAL SUPPORT PER ADOPTED BUILDING CODES.

5. ALL FIXTURES TO BEAR THE UL LABEL. ALL OUTDOOR FIXTURES SHALL BE U.L. LABELED FOR WET OR DAMP LOCATION AS DEFINED BY CEC ARTICLE 100.

G. LAMPS

1. LAMPS SHALL BE BY THE SAME MANUFACTURER. LAMPS SHALL BE MANUFACTURED BY GE, PHILLIPS OR USHIO.

H. NOT USED

I. SAFETY SWITCHES

1. SAFETY SWITCHES SHALL BE GENERAL DUTY TYPE, 250 VOLT FOR 208 VOLT EQUIPMENT AND HEAVY DUTY TYPE, 600 VOLT FOR 480 VOLT EQUIPMENT. SAFETY SWITCHES SHALL HAVE THE NUMBER OF POLES REQUIRED. WIRE TERMINATIONS SHALL BE LISTED AS SPECIFIED BY THE CEC. SAFETY SWITCHES FOR AIR CONDITIONING USE SHALL BE OF THE FUSIBLE TYPE WHERE RECOMMENDED BY EQUIPMENT MANUFACTURER. FUSIBLE SWITCHES SHALL ACCEPT CLASS 'R' FUSES ONLY AND WILL REJECT ALL OTHER TYPES. THE SWITCH SIZE, NUMBER OF POLES AND VOLTAGE RATING SHALL BE AS REQUIRED BY CODE AND AS INDICATED ON THE DRAWINGS. WHERE OUTSIDE THE BUILDING, THE SWITCHES SHALL BE TYPE NEMA 3R WEATHERPROOF. ALL SWITCHES SHALL BE LOCKABLE.

2. PROVIDE DYMO–TAPE TAG INSIDE COVER OF EACH FUSIBLE SWITCH, INDICATING SIZE AND TYPE OF FUSES PROVIDED.

J. FUSES

1. FUSES SHALL BE DUAL ELEMENT TIME DELAY TYPE, AS MANUFACTURED BY BUSSMAN MFG. COMPANY, OR AS INDICATED OR REQUIRED BY THE EQUIPMENT SUPPLIED.

2. PROVIDE TWO (2) SETS OF THREE (3) SPARE FUSES FOR EACH SIZE AND TYPE PROVIDED ON THIS PROJECT. INSTALL FUSES IN A HINGED DOOR, SHEET METAL STORAGE CABINET EQUIPPED WITH CLIPS OR CUBICLES, EACH MARKED WITH THE SIZE AND TYPE OF FUSE STORED THEREIN. PROVIDE NAMEPLATE "SPARE FUSES." INSTALL IN LOCATION AS DIRECTED BY OWNER.

K. NOT USED

L. NOT USED.

M. NOT USED.

N. SYSTEM GROUNDING

1. GROUNDING SHALL COMPLY WITH REQUIREMENTS OF ARTICLE 250. ALL EXPOSED NONCURRENT–CARRYING METALLIC PARTS OF ELECTRICAL EQUIPMENT, METALLIC RACEWAY SYSTEMS, METALLIC CABLE ARMOR, GROUNDING CONDUCTOR OF NONMETALLIC SHEATHED CABLES, GROUNDING CONDUCTOR IN NONMETALLIC RACEWAYS, AND GROUNDED CONDUCTORS OF THE WIRING SYSTEM SHALL BE GROUNDED.

2. THE GROUNDED CONDUCTOR (NEUTRAL) OF THE WIRING SYSTEM SHALL BE CONNECTED TO THE SYSTEM GROUNDING CONDUCTOR AT A SINGLE PLACE IN EACH SYSTEM BY REMOVABLE BONDING JUMPERS, SIZED ACCORDING TO THE APPLICABLE PROVISIONS OF THE NEC. THE GROUNDED CONDUCTOR (NEUTRAL) TO THE GROUNDING CONDUCTOR CONNECTION SHALL BE LOCATED IN THE ENCLOSURE FOR THE SYSTEM'S OVERCURRENT PROTECTION OR WHERE OTHERWISE INDICATED ON THE PLANS OR SPECIFICATIONS.

3. GROUND BUS SEPARATE FROM THE NEUTRAL BUS SHALL BE PROVIDED IN ALL SWITCHBOARDS AND PANELBOARDS. GROUND BUS SHALL BE RETORQUED (CHECKED) PRIOR TO ENERGIZING EQUIPMENT PER MANUFACTURER'S RECOMMENDATIONS.

4. GROUND BUSES AND NEUTRAL BUSES IN ALL DISTRIBUTION PANELS, SWITCHBOARDS, PANELBOARDS AND THOSE PROVIDED IN ANY EQUIPMENT SHALL BE ISOLATED EXCEPT WHERE REQUIRED TO BE CONNECTED AS SPECIFIED ABOVE FOR THE SERVICE ENTRANCE AND IN TRANSFORMER TERMINAL COMPARTMENTS.

5. WHEN INDICATED ON THE DRAWINGS, EQUIPMENT GROUNDING CONDUCTORS SHALL BE EXTENDED FROM THE GROUND BUS IN THE DISTRIBUTION EQUIPMENT TO THE RECEPTACLE, FIXTURE OR DEVICE LUGS WHERE THEY ARE PROVIDED. WHEN NOT PROVIDED, THEY SHALL BE CONNECTED TO EQUIPMENT ENCLOSURES. THE CONNECTIONS SHALL BE ARRANGED SUCH THAT REMOVAL OF THE RECEPTACLE, THE EQUIPMENT GROUND CONDUCTORS, OR THE GROUND JUMPERS FROM GROUND BUSING SHALL NOT AFFECT THE GROUND SYSTEM.

6. RACEWAYS MAY NOT BE USED AS A GROUNDING CONDUCTOR FOR POWER AND LIGHTING CIRCUITS. EVERY CONDUIT SUPPLYING POWER AND LIGHTING CIRCUITS SHALL HAVE A SEPARATE CODE SIZED GREEN GROUND WIRE INSTALLED IN THE CONDUIT TO ENSURE A CONTINUOUS GROUNDING PATH.

7. IN INACCESSIBLE LOCATIONS MAKE CONNECTIONS BY EXOTHERMIC WELD PROCESS.

8. IN ACCESSIBLE LOCATIONS, CONNECTIONS SHALL BE MADE WITH APPROVED BOLTED BRONZE GROUNDING DEVICES.

O. EQUIPMENT CONNECTIONS

1. ALL MOTORS SHALL BE WIRED TO CONFORM WITH MANUFACTURER'S RECOMMENDATIONS AND WITH APPLICABLE CODES. FURNISH NECESSARY MATERIALS, SUCH AS WIRE, CONDUIT, FITTINGS, ETC. REQUIRED TO CONNECT HOWEVER, MOTORS, CONTROLS, ETC. SHALL BE FURNISHED BY THE SUPPLIER OF THE DRIVEN EQUIPMENT. VERIFY EQUIPMENT LOCATION AND SIZES WITH THE TRADE SUPPLYING THE MOTOR BEFORE INSTALLING THE CONDUIT OR OUTLETS.

2. FINAL CONNECTION TO ALL HVAC OR MOTOR LOADS FROM LOAD SIDE OF DISCONNECT SHALL BE MADE USING COPPER WIRE ONLY, ALUMINUM WIRE NOT ACCEPTABLE.

P. COMMUNICATION SYSTEMS

1. FOR ALL COMMUNICATION OUTLETS PROVIDE DOUBLE GANG BACK BOX WITH SINGLE GANG PLASTER RING. PROVIDE 1" CONDUIT TO 6" ABOVE ACCESSIBLE CEILING WITH 90° BEND AND CONDUIT BUSHING UNLESS OTHERWISE NOTED ON DRAWINGS. FOR NON–ACCESSIBLE CEILINGS, ROUTE CONDUIT TO NEAREST ACCESSIBLE CEILING SPACE OR TO NEAREST COMMUNICATION CLOSET. PROVIDE BLANK COVER PLATES FOR ALL UNUSED BOXES.

2. PROVIDE 3/4" FIRE RATED PLYWOOD FOR TELEPHONE TERMINAL BACKBOARD AND PAINT TO MATCH WALL SURFACE. REFER TO DRAWINGS FOR DIMENSIONS OF BACKBOARD.

3. PROVIDE #6 AWG CU GROUND WIRE FROM EQUIPMENT BACKBOARD TO BUILDING SERVICE GROUND.

R. LIGHTING CONTROL

1. FURNISH AND INSTALL LIGHTING CONTROL PANELS, OVERRIDE SWITCHES, TIME SWITCHES, PHOTOCELLS AND CONTACTORS REQUIRED FOR LIGHTING CONTROL AS INDICATED ON THE DRAWINGS. LIGHTING CONTROL PANEL AND ALL ASSOCIATED COMPONENTS SHALL CONFORM TO ADOPTED ENERGY CODES.

S. FIRE ALARM SYSTEM

1. FIRE ALARM IS NOT SHOWN ON THESE DRAWINGS. FIRE ALARM IS REQUIRED AS A PART OF THE CONTRACTOR'S SCOPE OF WORK. CONTRACTOR SHALL ENGAGE THE SERVICES OF A STATE LICENSED FIRE ALARM CONTRACTOR FOR THE DESIGN AND INSTALLATION OF A COMPLETE AND OPERABLE FIRE ALARM SYSTEM THAT COMPLIES WITH ALL NFPA, CEC AND LOCAL ORDINANCES AND REQUIREMENTS APPROVED BY AUTHORITY HAVING JURISDICTION. SYSTEM DESIGN AND INSTALLATION SHALL BE COMPATIBLE WITH EXISTING SHELL BUILDING AND APPROVED BY LANDLORD PRIOR TO BID. MANUFACTURER OF FIRE ALARM SYSTEM SHALL BE THE SAME MANUFACTURER AS THE SHELL BUILDING UNLESS OTHERWISE APPROVED BY LANDLORD AND AUTHORITY HAVING JURISDICTION. INCLUDE ALL COSTS IN BASE BID.

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SCALE: As indicated

ELECTRICAL SPECIFICATIONS

SAWPA
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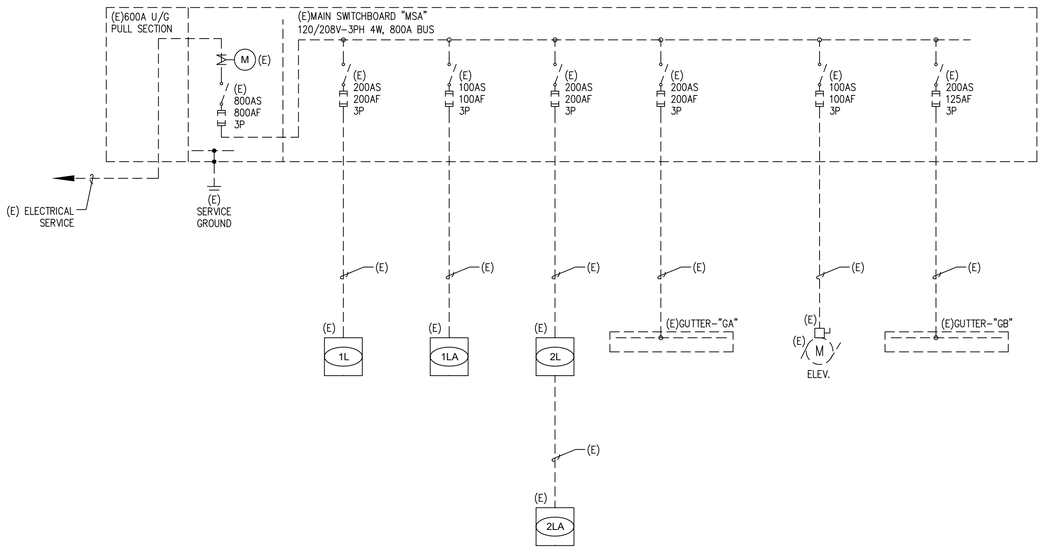
E-0.2



SINGLE LINE DIAGRAM

EXISITING SWITCHBOARD "MSA"

VOLTAGE: 208 / 120 | PHASE: 3 | WIRE: 4
BUS AMPS: 800 A | DEVICE AMPS: 800 A | MCB | NEMA: 1
A.I.C RATING: 65,000 A | MOUNTING: PAD

LOCATION DESCRIPTION	LOAD (kVA)	TRIP POLE	#	PH	#	TRIP POLE	LOAD (kVA)	LOCATION DESCRIPTION
EXISTING PANEL-1L	14.670	200/3	1	A	2	100/3	4.960	EXISTING PANEL-1LA
	15.155		3	B	4		4.000	
	14.675		5	C	6		3.600	
EXISTING PANEL-2L	17.036	200/3	7	A	8	200/3	15.000	EXISTING GUTTER-GA
	13.540		9	B	10		15.000	
	12.460		11	C	12		15.000	
EXISTING ELEVETOR	9.330	100/3	13	A	14	200/3	8.330	EXISTING GUTTER-GB
	9.330		15	B	16		8.330	
	9.330		17	C	18		8.330	

PANEL LOAD ANALYSIS

Phase A Connected Load	69.326	kVA	TOTAL CONNECTED LOAD	198.08	kVA	549.8 AMPS
Phase B Connected Load	65.355	kVA	TOTAL DEMAND LOAD	189.91	kVA	527.1 AMPS
Phase C Connected Load	63.395	kVA				

PANEL SCHEDULE NOTES:

1. U.N.O ALL CIRCUITS TO REMAIN EXISTING WITH EXISTING CIRCUIT BREAKER.
2. ALL NEW CIRCUIT BREAKERS INSTALLED IN EXISTING PANEL "1LA" SHALL MATCH THE HIGHEST EXISTING AIC RATED CIRCUIT BREAKER WITHIN THAT BOARD. INSPECTOR TO VERIFY HIGHEST AIC RATING AT THE SITE.
3. CONTRACTOR SHALL VERIFY EXISTING PANEL RATING AND ALL EXISTING LOAD TYPE & WATTAGE AND SUBMIT COMPLETE PANEL DIRECTORY FOR EEOR TO REVIEW BEFORE COMMENCEMENT OF ANY NEW WORK.
4. AFTER EEOR APPROVAL, PROVIDE AND PLACE COMPLETE PANEL DIRECTORY ON THE EXISTING PANEL.

EXISTING PANEL '1LA'

VOLTAGE: 208 / 120 | PHASE: 3 | WIRE: 4
BUS AMPS: 100 A | DEVICE AMPS: 100 A | MLO | NEMA: 1
MOUNTING: SURFACE

CKT WIRE	LOCATION DESCRIPTION	LOAD (kVA)	LOAD TYPE	TRIP POLE	#	PH	#	TRIP POLE	LOAD TYPE	LOAD (kVA)	LOCATION DESCRIPTION	CKT WIRE
EXISTING	OFFICE RECEPTACLE	0.900	B	20/1	1	A	2	20/1	B	0.900	OFFICE RECEPTACLE	EXISTING
EXISTING	OFFICE RECEPTACLE	0.900	B	20/1	3	B	4	20/1	B	0.900	OFFICE RECEPTACLE	EXISTING
EXISTING	OFFICE RECEPTACLE	1.080	B	20/1	5	C	6	20/1	B	0.540	OFFICE RECEPTACLE	EXISTING
EXISTING	OFFICE RECEPTACLE	1.440	B	20/1	7	A	8	20/1	B	1.080	OFFICE RECEPTACLE	EXISTING
3/4"C-2#12CU & 12G	RECEPTION RECEPTACLE ❶	0.900	B	20/1	9	B	10	20/1	B	0.800	REFRIGERATOR	EXISTING
3/4"C-2#12CU & 12G	LOBBY CONV. RECEPTACLE ❶	1.080	B	20/1	11	C	12	20/1	B	0.900	OFFICE RECEPTACLE	EXISTING
3/4"C-2#12CU & 12G	RESTROOM RECEPTACLE ❷	0.540	B	20/1	13	A	14	20/1	H	0.100	LOBBY DOOR ❷	3/4"C-2#12CU & 12G
3/4"C-2#12CU & 12G	AUTOMATIC FLUSH VALVE ❷	0.500	B	20/1	15	B	16				SPACE	-
-	SPACE				17	C	18				SPACE	-
-	SPACE				19	A	20				SPACE	-
-	SPACE				21	B	22				SPACE	-
-	SPACE				23	C	24				SPACE	-

PANEL LOAD ANALYSIS

Load Type	DESCRIPTION	Conn. kVA	Demand kVA	CEC 2022 REFRENCE	Load Type	DESCRIPTION	Conn. kVA	Demand kVA	CEC 2022 REFRENCE
A	Lighting	0.00	0.00	CEC Table 220.42	E	Heating	0.00	0.00	CEC Article 220.60
B	Receptacles	12.46	11.23	CEC Table 220.44	F	Largest Motor	0.00	0.00	CEC Article 220.18(A)
C	Kitchen Equipment	0.00	0.00	CEC Table 220.56	G	Other Motors	0.00	0.00	CEC Article 220.18(A)
D	Air-Conditioning	0.00	0.00	CEC Table 220.60	H	Other Loads	0.10	0.10	CEC Article 220.14(A)

Phase A Connected Load	4.960	kVA	Notes:	TOTAL CONNECTED LOAD	12.56	kVA	34.9 AMPS
Phase B Connected Load	4.000	kVA	1. NEW LOAD AT EXISTING SPARE C.B	TOTAL DEMAND LOAD	11.33	kVA	31.4 AMPS
Phase C Connected Load	3.600	kVA	2. NEW LOAD WITH NEW C.B				

EXISTING PANEL '2LA'

VOLTAGE: 208 / 120 | PHASE: 3 | WIRE: 4
BUS AMPS: 100 A | DEVICE AMPS: 100 A | MLO | NEMA: 1
MOUNTING: SURFACE

CKT WIRE	LOCATION DESCRIPTION	LOAD (kVA)	LOAD TYPE	TRIP POLE	#	PH	#	TRIP POLE	LOAD TYPE	LOAD (kVA)	LOCATION DESCRIPTION	CKT WIRE
EXISTING	OFFICE RECEPTACLE	1.440	B	20/1	1	A	2	20/1	B	1.000	OFFICE RECEPTACLE	EXISTING
EXISTING	OFFICE RECEPTACLE	1.260	B	20/1	3	B	4	20/1	B	0.875	OFFICE RECEPTACLE	EXISTING
EXISTING	OFFICE RECEPTACLE	1.260	B	20/1	5	C	6	20/1	B	0.920	OFFICE RECEPTACLE	EXISTING
EXISTING	OFFICE RECEPTACLE	1.080	B	20/1	7	A	8	30/2	B	1.400	COPIER RECEPTACLE	EXISTING
EXISTING	OFFICE RECEPTACLE	1.080	B	20/1	9	B	10		B	1.400		
EXISTING	OFFICE RECEPTACLE	0.900	B	20/1	11	C	12	20/1	B	1.080	OFFICE RECEPTACLE	EXISTING
-	SPARE			20/1	13	A	14				SPACE	-
-	SPARE			20/1	15	B	16				SPACE	-
-	SPARE			20/1	17	C	18				SPACE	-
-	SPACE				19	A	20				SPACE	-
-	SPACE				21	B	22				SPACE	-

PANEL LOAD ANALYSIS

Load Type	DESCRIPTION	Conn. kVA	Demand kVA	CEC 2022 REFRENCE	Load Type	DESCRIPTION	Conn. kVA	Demand kVA	CEC 2022 REFRENCE
A	Lighting	0.00	0.00	CEC Table 220.42	E	Heating	0.00	0.00	CEC Article 220.60
B	Receptacles	13.70	11.85	CEC Table 220.44	F	Largest Motor	0.00	0.00	CEC Article 220.18(A)
C	Kitchen Equipment	0.00	0.00	CEC Table 220.56	G	Other Motors	0.00	0.00	CEC Article 220.18(A)
D	Air-Conditioning	0.00	0.00	CEC Table 220.60	H	Other Loads	0.00	0.00	CEC Article 220.14(A)

Phase A Connected Load	4.920	kVA	Notes:	TOTAL CONNECTED LOAD	13.70	kVA	38.0 AMPS
Phase B Connected Load	4.615	kVA		TOTAL DEMAND LOAD	11.85	kVA	32.9 AMPS
Phase C Connected Load	4.160	kVA					

EXISTING PANEL '1L'

VOLTAGE: 208 / 120 | PHASE: 3 | WIRE: 4
BUS AMPS: 200 A | DEVICE AMPS: 200 A | MLO | NEMA: 1
MOUNTING: SURFACE

CKT WIRE	LOCATION DESCRIPTION	LOAD (kVA)	LOAD TYPE	TRIP POLE	#	PH	#	TRIP POLE	LOAD TYPE	LOAD (kVA)	LOCATION DESCRIPTION	CKT WIRE
EXISTING	OFFICE LIGHTING EXITS	1.260	B	20/1	1	A	2	20/1	B	1.260	OFFICE RECEPTACLE	EXISTING
EXISTING	OFFICE LIGHTING	1.080	B	20/1	3	B	4	20/1	B	1.080	OFFICE RECEPTACLE	EXISTING
EXISTING	OFFICE LIGHTING	1.500	B	20/1	5	C	6	20/1	B	1.260	OFFICE RECEPTACLE	EXISTING
EXISTING	OFFICE LIGHTING	1.080	B	20/1	7	A	8	20/1	B	1.080	OFFICE RECEPTACLE	EXISTING
EXISTING	OFFICE LIGHTING	0.300	B	20/1	9	B	10	20/1	B	0.800	OFFICE DISHWASHER	EXISTING
EXISTING	OFFICE LIGHTING	1.500	B	20/1	11	C	12	20/1	B	1.500	OFFICE COFFEE	EXISTING
EXISTING	WOMEN'S RESTROOM LIGHTING ❶	0.150	B	20/1	13	A	14	20/1	B	0.850	OFFICE DISPOSAL	EXISTING
EXISTING	OFFICE LIGHTING	0.700	G	20/1	15	B	16	20/1	B	1.260	RESTROOM RECEPTACLE	EXISTING
EXISTING	OFFICE LIGHTING ❶	0.300	G	20/1	17	C	18	20/1	B	1.500	OFFICE MICROWAVE	EXISTING
EXISTING	MEN'S RESTROOM LIGHTING ❶	0.150	B	20/1	19	A	20	20/1	H	0.500	HAND DRYER-WOMEN'S RR ❶	3/4"C-2#12CU & 12G
EXISTING	OFFICE LIGHTING ❶	1.400	B	20/1	21	B	22	20/1	G	0.700	DRINKING FOUNTAIN	EXISTING
EXISTING	PIV	1.080	B	15/1	23	C	24	20/1	H	0.500	HAND DRYER-MEN'S RR ❶	3/4"C-2#12CU & 12G
EXISTING	TIME CLOCK CONTROL	1.080	H	15/1	25	A	26	20/1	B	1.260	OFFICE RECEPTACLE	EXISTING
EXISTING	TLELEPHONE	1.080	B	15/1	27	B	28	20/1	B	1.360	OFFICE RECEPTACLE	EXISTING
-	SPACE				29	C	30	20/1	B	0.300	OFFICE PROJ. SCREEN	EXISTING
-	SPACE				31	A	32	20/1	A	1.500	EXTER COLUMN LIGHTING	EXISTING
-	SPACE				33	B	34	20/2	A	1.035	SITE LIGHTING	EXISTING
-	SPACE				35	C	36		A	1.035		
EXISTING	WH-1	4.000	H	50/2	37	A	38	20/1	A	0.500	EXTER. BOLLARDS	EXISTING
		4.000	H		39	B	40	20/1	B	0.360	OFFICE RECEPTACLE	EXISTING
		4.000	H		41	C	42	20/1	B	0.200	OFFICE RECEPTACLE	EXISTING

PANEL LOAD ANALYSIS

Load Type	DESCRIPTION	Conn. kVA	Demand kVA	CEC 2022 REFRENCE	Load Type	DESCRIPTION	Conn. KVA	Demand kVA	CEC 2022 REFRENCE
A	Lighting	4.07	5.09	CEC Table 220.42	E	Heating	0.00	0.00	CEC Article 220.60
B	Receptacles	24.65	17.33	CEC Table 220.44	F	Largest Motor	0.00	0.00	CEC Article 220.18(A)
C	Kitchen Equipment	0.00	0.00	CEC Table 220.56	G	Other Motors	1.70	1.70	CEC Article 220.18(A)
D	Air-Conditioning	0.00	0.00	CEC Table 220.60	H	Other Loads	14.08	14.08	CEC Article 220.14(A)

Phase A Connected Load	14.670	kVA	Notes:	TOTAL CONNECTED LOAD	44.50	kVA	123.5 AMPS
Phase B Connected Load	15.155	kVA	1. NEW LOAD ADDITION TO EXISTING CIRCUI	TOTAL DEMAND LOAD	38.19	kVA	106.0 AMPS
Phase C Connected Load	14.675	kVA					

EXISTING PANEL '2L'

VOLTAGE: 208 / 120 | PHASE: 3 | WIRE: 4
BUS AMPS: 200 A | DEVICE AMPS: 200 A | MLO | NEMA: 1
MOUNTING: SURFACE

CKT WIRE	LOCATION DESCRIPTION	LOAD (kVA)	LOAD TYPE	TRIP POLE	#	PH	#	TRIP POLE	LOAD TYPE	LOAD (kVA)	LOCATION DESCRIPTION	CKT WIRE
EXISTING	OFFICE RECEPTACLE	1.260	B	20/1	1	A	2	20/1	A	1.000	OFFICE LIGHTING	EXISTING
EXISTING	OFFICE RECEPTACLE	1.080	B	20/1	3	B	4	20/1	A	0.875	OFFICE LIGHTING	EXISTING
EXISTING	OFFICE COPIER	1.500	B	20/1	5	C	6	20/1	A	0.920	OFFICE LIGHTING	EXISTING
EXISTING	OFFICE RECEPTACLE	1.080	B	20/1	7	A	8	20/1	A	1.400	OFFICE LIGHTING	EXISTING
EXISTING	OFFICE RECEPTACLE	0.300	B	20/1	9	B	10	20/1	A	1.400	OFFICE LIGHTING	EXISTING
EXISTING	HAND DRYER	1.500	B	20/1	11	C	12	20/1	A	0.750	OFFICE LIGHTING	EXISTING
EXISTING	HAND DRYER	1.500	B	20/1	13	A	14	20/1	A	1.386	OFFICE LIGHTING	EXISTING
EXISTING	EDF	0.700	G	20/1	15	B	16	20/1	A	1.340	CORRIDOR NL	EXISTING
EXISTING	EDF	0.300	G	20/1	17	C	18	20/1	A	1.500	CORRIDOR NL	EXISTING
EXISTING	MICROWAVE	1.500	B	20/1	19	A	20	20/1	A	0.750	LOBBY LIGHTING	EXISTING
EXISTING	COFFEE	1.000	B	20/1	21	B	22	20/1	A	0.750	LOBBY LIGHTING	EXISTING
EXISTING	OFFICE RECEPTACLE	1.080	B	20/1	23	C	24	20/1	H	0.200	TIME CLOCK CONTROL	EXISTING
EXISTING	OFFICE RECEPTACLE	1.080	B	20/1	25	A	26	20/1	B	0.360	ROOF RECEPTACLE	EXISTING
EXISTING	OFFICE RECEPTACLE	1.080	B	20/1	27	B	28	20/1	G	0.400	EF-1	EXISTING
-	SPARE			20/1	29	C	30	20/1	A	0.550	OFFICE LIGHTNG	EXISTING
-	SPACE				31	A	32	20/1	A	0.800	LOBBY LIGHTING	EXISTING
-	SPACE				33	B	34	20/1			SPARE	-
-	SPACE				35	C	36	20/1			SPARE	-
-	SPACE				37	A	38			4.920		
-	SPACE				39	B	40	100/3		4.615	EXISTING PANEL "2LA"	EXISTING
-	SPACE				41	C	42			4.160		

PANEL LOAD ANALYSIS

Load Type	DESCRIPTION	Conn. kVA	Demand kVA	CEC 2022 REFRENCE	Load Type	DESCRIPTION	Conn. KVA	Demand kVA	CEC 2022 REFRENCE
A	Lighting	13.42	16.78	CEC Table 220.42	E	Heating	0.00	0.00	CEC Article 220.60
B	Receptacles	14.32	12.16	CEC Table 220.44	F	Largest Motor	0.00	0.00	CEC Article 220.18(A)
C	Kitchen Equipment	0.00	0.00	CEC Table 220.56	G	Other Motors	1.40	1.40	CEC Article 220.18(A)
D	Air-Conditioning	0.00	0.00	CEC Table 220.60	H	Other Loads	0.20	0.20	CEC Article 220.14(A)

Phase A Connected Load	17.036	kVA	Notes:	TOTAL CONNECTED LOAD	43.04	kVA	119.5 AMPS
Phase B Connected Load	13.540	kVA		TOTAL DEMAND LOAD	42.38	kVA	117.6 AMPS
Phase C Connected Load	12.460	kVA					

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JOB NO.: 3903
DRAWN BY: MV
CHECKED BY: MV
SCALE: As indicated

SINGLE LINE DIAGRAM AND PANEL SCHEDULES

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E-0.3

LIGHTING FIXTURE SCHEDULE

TYPE	DESCRIPTION	FINISH	LAMP(S)	MANUFACTURER & NO.	LUMENS/WATTS
FX-D 17	LED RECESSED LIGHT PROVIDE 90MINS BATTERY BACKUP OF THE LIGHTS MARKED WITH "EM"	VERIFY WITH ARCHITECT	LED	EAGLE LIGHTING #EE11-L17-ZE-UNV-35K	70.58 LM/W
FX- 6.4 W/FT "FX-D1" WITH 4' LENGTH "FX-D2" WITH 6' LENGTH	LINEAR LED LIGHT	VERIFY WITH ARCHITECT	LED	FINELITE #HP-X-SM-D-X-S-830-F-120	56 LM/W
FX-D4 5.03 W/FT	STRIP LED LIGHT	VERIFY WITH ARCHITECT	LED	BL LIGHTING #BL NEONVIEW	85 LM/W
X –	NEW LED EXIT SIGN (WITH 90MINS BATTERY BACKUP) TO MATCH EXISTING BUILDING EXIT SIGN	–	–	–	-
X1 11	EMERGENCY BUG LIGHT-WALL MOUNTED WITH 90MINS BATTERY BACKUP	–	LED	LITHONIA LIGHTING #ELM6L OR APPROVED EQUAL	-
EX 35	EXISTING PENDANT LIGHT	–	–	–	-
EX 32	EXISTING 2X4 LIGHT	–	–	–	-

TYPE-"FX-D"

EAGLE LED

Architectural Outdoor

PROJECT:
TYPE:
PO#: QTY:
COMMENTS:

The classic design of flush mount fixture lighting makes these popular in a wide variety of areas—indoor walkways, closets, laundry rooms and most residential areas are just a few places that they excel in

FEATURES

- ADA Compliant
- Energy Star Listed (EE11, EE14)
- Steel Mounting Pan w/ Hi-Reflectance White Powder Coat Finish
- Luminous White Acrylic Diffuser
- Mounts Directly to 4" Junction Box (By Others)
- CSA Listed Damp Location Wall and Ceiling
- LED Light Fixture
- L70 > 50,000 hours
- Meets FCC Part 15, Class B (consumer) Limit
- THD:<20%
- Mounting Hardware Included
- Optional Perforated Decorative Ring
- Optional Internal Motion Sensor
- Optional **Battery Back up**

FINISHES

Antique Copper, Antique Silver, Matte Silver, Textured Black, Textured Bronze, Sand, Bronze Mist, Textured White, Swedish Steel

For RAL Colors & Custom Match - Contact Teron Lighting Inc.

LINE DRAWING

LINE DRAWING NOT TO SCALE

14" FIXTURE BACK BOX OFFSET 2 1/8"
19" FIXTURE BACK BOX OFFSET 1 3/8"
3 1/4" 3 1/2" 4 3/8"
11" 14" 19"

TERONLIGHTING.COM
33 DONALD DR, FAIRFIELD, OH 45014
P: 513.858.6004 F: 513.858.6038
E: SALES@TERONLIGHT.COM

BUY AMERICAN SINCE 1979

REV 03/09/2023

SEND CUT-SHEET

We reserve the right to revise the design components of any product due to parts availability or change in UL standards, without assuming any obligation or liability to modify any products previously manufactured, and without notice.

TYPE-"FX-D"

EAGLE LED

Architectural Outdoor

Fixture Core

PRODUCT CODE	TRIM	SOURCE/WATTAGE	DIMMING DRIVER
EE11 - Eagle 11" EE14 - Eagle 14" EE19 - Eagle 19"	(Blank) - No Trim PRF - Perforated Trim	L13.5 - 13.5W L17.0 - 17.0W L20.5 - 20.5W L30.0 - 30.0W (EE19 ONLY) L37.5 - 37.5W (EE19 ONLY)	ZE - 0-10V Dimming ZE - 0-10V Dimming ZE - 0-10V Dimming ZE - 0-10V Dimming ZE - 0-10V Dimming

ORDER INFO

Aesthetics & Options

VOLTAGE	FINISH	COLOR TEMP	OPTIONS
UNV - 120/277V (50 / 60Hz)	AC - Antique Copper AS - Antique Silver BT - Bronze Mist WH - Gloss White (Standard) SM - Matte Silver SN - Sand SW - Swedish Steel TB - Textured Black BZ - Textured Bronze TW - Textured White	30K - 3000K Color Temp 35K - 3500K Color Temp 40K - 4000K Color Temp 50K - 5000K Color Temp	MSI - Internal Motion Sensor F - Fused STC12-WH - 12" Stem and Canopy Kit STC24-WH - 24" Stem and Canopy Kit STC36-WH - 36" Stem and Canopy Kit TP - Tamper-Proof Screw Set WLL - LED High Lumen Lens WPL - White Polycarbonate SPD – Surge Protection Device BB - Back Box*** EB/BB - Battery Backup 5.1W (Back Box Required)***

ORDER INFO

Actual production units may vary from the values reported here by up to +/-10%

PERFORMANCE (DELIVERED LUMEN NO TRIM)

WATTAGE	3000K	LUMEN/WATT	3500K	LUMEN/WATT	4000K	LUMEN/WATT	5000K	LUMEN/WATT
13.5	1072	71	1072	71	1104	74	1115	74
17.0	1364	72	1384	71	1405	74	1419	75
20.5	2478	109	2478	109	1689	74	1706	75
30.0	3353	101	3353	101	3457	104	3488	105
37.5	3847	92	3847	92	3962	95	4002	96

ELECTRICAL DATA

WATTAGE	120V	208V	240V	277V	347V	480V
13.5	0.13	0.07	0.06	0.05	N/A	N/A
17.0	0.16	0.09	0.08	0.07	N/A	N/A
20.5	0.19	0.11	0.09	0.08	N/A	N/A
30.0	0.28	0.16	0.14	0.12	N/A	N/A
37.5	0.35	0.2	0.17	0.15	N/A	N/A

REPLACEMENT PART	PART NO	NOTES
LENS LED Driver	Consult Factory	***Not CSA Damp Location Listed for Wall Mount, Not available in EE11

Don't see the configuration you are looking for? Call us today at (513) 858-6004

REV 03/09/2023

TERONLIGHTING.COM
33 DONALD DR, FAIRFIELD, OH 45014
P: 513.858.6004 F: 513.858.6038
E: SALES@TERONLIGHT.COM

We reserve the right to revise the design components of any product due to parts availability or change in UL standards, without assuming any obligation or liability to modify any products previously manufactured, and without notice.

TYPE-"FX-D1" WITH 4' LENGTH, "FX-D2" WITH 6' LENGTH

FINELITE® Better Lighting

HPX Product Family

The High Performance 2.5" Aperture (HPX) is a patented LED linear luminaire with a square micro profile and internal driver design. This line of light luminaire delivers excellent performance, and is equipped with a unique LED configuration for superior illumination. Output can be enhanced with advanced optical options. Available in Pendant and Surface Mount, HPX can be tailored from 2' to 12' sections in 1' increments. HPX Pendants includes Knuckle options to create unique geometric shapes.

This product is enrolled in the International Living Future Institute (ILFI) Declare 2.0 Program and is third-party verified with options achieving **Red List Approved** and **Red List Declared** status.

CROSS SECTIONS

Indirect/Direct, Direct, Surface Mount, Knuckle

STANDARD KNUCKLES *

KNUCKLES WITH ENDCAP

TYPE-"FX-D4"

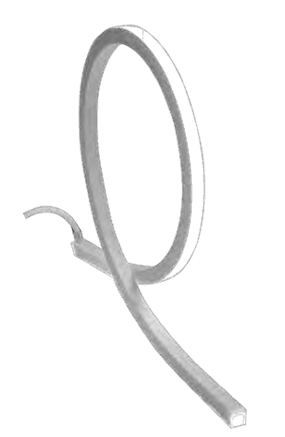
BL LIGHTING SINCE 1986

SPECIFICATIONS - A01 -

BL neonVIEW — Diffused, Flexible, Linear LED Lighting, 24VDC, Constant Voltage

BRIGHT SIDE SI L4 — High Output Side Light, Silicone, Vertical Bend

Printed Nov.4.2023



Certification

IP68, 0-10V, ELV, MLV, Bluetooth, LOW, cULus LISTED

Lighting

2200K 2700K 3000K 3500K 4000K 5700K

Lamp	LED, SMD 5050
LED's Per Foot	42 LEDs/ft (140 LEDs/m)
Power	* 5.03 W/FT
Beam Angle	120°
Average Life	50,000 Hours
Lumens	* 366-427 lm/FT
Efficacy	* 73-85 lm/W

Electrical

Control	0-10V, MLV, ELV, Bluetooth
Input Voltage	24VDC
Max Input Current	4.12A (White)
Connections	18AWG, Copper Conductors
Operating Temperature	-40°F to 122°F (-40°C to 50°C)
Circuit	Class 2

Mechanical

Housing Construction	Injection Moulded White Silicone
Cutting Increments	1.97" (50mm)
Maximum Run Length	* 18'0.5"
Medial Bend Radius	15.75" (400mm)
Environmental	IP68(Seamless Injection)
Mounting	Clip, Track

Accessories

NVS BRSL	** Factory installed termination kit
NVS BRSL JC	Factory installed jumper cable
NVSLBR CP	Surface Mounting Clip
NVSLBR CH	Surface Mounting Channel
NVSLBR RCP	Recessed Mounting Clip
NVSLBR RCH	Recessed Mounting Channel

* Please refer to the performance table on the following page

**Multiple Lead Orientation options available

PROJECT | CLIENT | TYPE

Solid State Lighting is sensitive to power fluctuations. Surge protection is highly recommended for all LED lighting products and should be on a designated circuit to protect against premature failure. Lack of surge protection may void your warranty

For more information, please download the BL LIGHTING catalogue

BL LIGHTING. ILLUMINATE EVERYTHING
111 - 8838 Heather St. Vancouver, BC. Canada. V6P 3S8

blighting.com

TYPE-"FX-D4"

SPECIFICATIONS - A02 -

BL neonVIEW — Diffused, Flexible, Linear LED Lighting, 24VDC, Constant Voltage

BRIGHT SIDE SI L4 — High Output Side Light, Silicone, Vertical Bend

Printed Nov.4.2023

Performance

CCT	Load	Lumens	Efficacy	Max. Length	Cutting Increments
2200K	5.03 W/FT	366 lm/FT	73 lm/W	18 ft 0.5 in	1.97 in (50mm)
2700K	5.03 W/FT	396 lm/FT	79 lm/W	18 ft 0.5 in	1.97 in (50mm)
3000K	5.03 W/FT	396 lm/FT	79 lm/W	18 ft 0.5 in	1.97 in (50mm)
3500K	5.03 W/FT	427 lm/FT	85 lm/W	18 ft 0.5 in	1.97 in (50mm)
4000K	5.03 W/FT	427 lm/FT	85 lm/W	18 ft 0.5 in	1.97 in (50mm)
5700K	5.03 W/FT	396 lm/FT	79 lm/W	18 ft 0.5 in	1.97 in (50mm)

Ordering

Product Name	CCT	Lead Orientation	Mounting Accessories
BL neonVIEW BR SL SI L4	22 = 2200K 27 = 2700K 30 = 3000K 35 = 3500K 40 = 4000K 57 = 5700K	NVS BRSL BC = Back Lead NVS BRSL EC = End Lead NVS BRSL RC = Right Side Lead NVS BRSL LC = Left Side Lead	NVBRSL CP = Mounting Clip NVBRSL CH = Mounting Channel NVBRSL RCP = Recessed Mounting Clip NVBRSL RCH = Recessed Mounting Channel

TYPE-"X1"

LITHONIA LIGHTING®

Catalog Number | Notes | Type X1

FEATURES & SPECIFICATIONS

QUANTUM® — Contemporary Commercial LED Emergency Light

ELM4L 640 Lumens

ELM6L 1100 Lumens

LITHIUM IRON PHOSPHATE NICKEL CADMIUM

MOUNTING

Gillis + Panichapan Architects, Inc. — architecture planning interior
2900 BRISTOL STREET COSTA MESA CALIFORNIA 92626
SUITE G-205 TEL (714) 668-4260 FAX (714) 668-4265

REGISTERED PROFESSIONAL ENGINEER — MONITA VERMA — No. E19876 — Exp. 3-31-24 — ELECTRICAL — STATE OF CALIFORNIA

JOB NO.: 3903
DRAWN BY: MV
CHECKED BY: MV
SCALE: As indicated

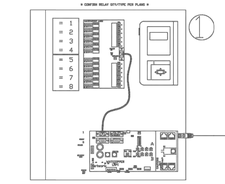
LIGHTING FIXTURE SCHEDULE

SAWPA
SANTA ANA WATERSHED PROJECT AUTHORITY

H2S Engineers Inc.
Mechanical and Electrical Engineers
4095 E La Palma Ave, Suite F, Anaheim, CA 92807
Ph: (714) 321.3068
E-mail: hsheth@h2sengineers.com
www.h2sengineers.com

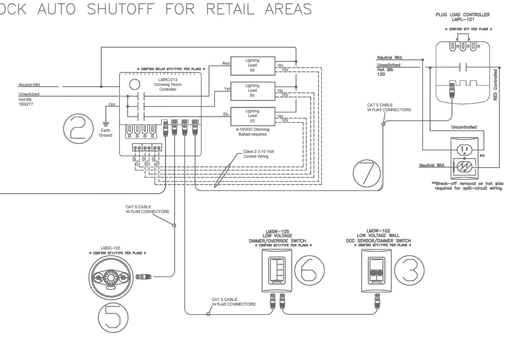
E-0.4

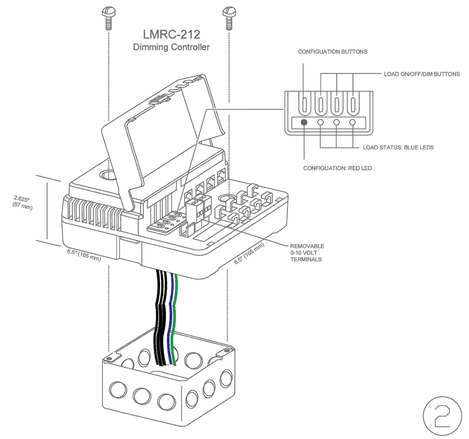
LMCP–8
8 RELAY
LIGHTING CONTROL PANEL



TIME CLOCK AUTO SHUTOFF

TIME CLOCK AUTO SHUTOFF FOR RETAIL AREAS



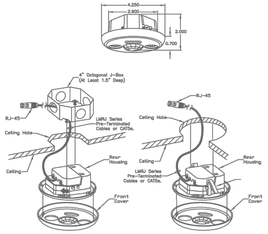


2

LMDW-102
2 Button low voltage
wall occupancy sensor
ON/RAISE
OFF/LOWER

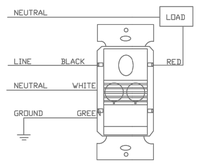
3

LMDC 100
Ceiling Mt
Occ Sensor



5

DSW 100
LINE VOLTAGE
SINGLE POLE WALL OCC SENSOR
FOR RESTROOMS



8

LIGHTING CONTROL DIAGRAM

H2S Engineers Inc.
Mechanical and Electrical Engineers
4095 E La Palma Ave, Suite F, Anaheim, CA 92807
Ph: (714) 321.3868
E-mail: hsheth@h2sengineers.com
www.h2sengineers.com

REGISTERED PROFESSIONAL ENGINEER
MONITA VERMA
No. 19675
Exp. 31-24
ELECTRICAL
STATE OF CALIFORNIA

Gillis + Panichapan Architects, Inc.
architecture
planning
interior
2900 BRISTOL STREET COSTA MESA CALIFORNIA 92626
FAX (714) 668-4265 SUITE G-205 TEL (714) 668-4260

JOB NO.: 3903
DRAWN BY: MV
CHECKED BY: MV
SCALE: As indicated

SAWPA
SANTA ANA WATERSHED PROJECT AUTHORITY

E-0.5

STATE OF CALIFORNIA
Indoor Lighting
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-LTI-E
This document is used to demonstrate compliance with requirements in 110.9, 110.12(c), 130.0, 130.1, 140.6 and 141.0(b)2 for indoor lighting scopes using the prescriptive path for nonresidential and hotel/motel occupancies. It is also used to document compliance with requirements in 160.5, 170.2(e) and 180.2(b)4 for indoor lighting scopes using the prescriptive path for multifamily occupancies. Multifamily includes dormitory and senior living facilities.		
Project Name: SANTA ANA WATERSHED PROJECT AUTHORITY	**Report Page:**	**(Page 1 of 8)**
Project Address: 11615 STERLING AVEENUE	**Date Prepared:**	04-11-2023

A. GENERAL INFORMATION

01	Project Location (city)	RIVERSIDE	04	Total Conditioned Floor Area (ft²)	1,221
02	Climate Zone	10	05	Total Unconditioned Floor Area (ft²)	0
03	Occupancy Types Within Project (select all that apply):		06	# of Stories (Habitable Above Grade)	1

● Support Areas ● All Other Occupancies

B. PROJECT SCOPE

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

Scope of Work	Conditioned Spaces		Unconditioned Spaces	
01	02	03	04	05
My Project Consists of (check all that apply):	Calculation Method	Area (ft²)	Calculation Method	Area (ft²)
☐ New Lighting System				
☐ New Lighting System - Parking Garage				
☒ Altered Lighting System	Area Category Method	1221	Area Category Method	0
Total Area of Work (ft²)	1221		0	

STATE OF CALIFORNIA
Indoor Lighting
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-LTI-E
Project Name: SANTA ANA WATERSHED PROJECT AUTHORITY	**Report Page:**	**(Page 2 of 8)**
	Date Prepared:	04-11-2023

C. COMPLIANCE RESULTS

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

Lighting in conditioned and unconditioned spaces must not be combined for compliance per 140.6(b)1 / 170.2(e)	Allowed Lighting Power per 140.6(b) / 170.2(e) (Watts)						Adjusted Lighting Power per 140.6(a) / 170.2(e) (Watts)				Compliance Results
	01	02	03	04		05	06	07		08	09
	Complete Building 140.6(c)1	Area Category 140.6(c)2 / 170.2(e)4	Area Category Additional 140.6(c)2G / 170.2(e)4Av (+)	Tailored 140.6(c)3 / 170.2(e)4B (+)	=	**Total Allowed** (Watts)	≥ Total Designed (Watts)	Adjustments PAF Lighting Control Credits 140.6(a)2 / 170.2(e)1B (-)	=	**Total Adjusted** (Watts) *Includes Adjustments	**05 must be >= 08 140.6 / 170.2(e)**
	(See Table I)	(See Table I)	(See Table J)	(See Table K)			(See Table F)	(See Table P)			
Conditioned		818.7	0		=	819	≥ 817	0	=	817	COMPLIES
Unconditioned					=		≥		=		
Controls Compliance (See Table H for Details)											COMPLIES
Rated Power Reduction Compliance (See Table Q for Details)											

D. EXCEPTIONAL CONDITIONS

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

E. ADDITIONAL REMARKS

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

STATE OF CALIFORNIA
Indoor Lighting
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-LTI-E
Project Name: SANTA ANA WATERSHED PROJECT AUTHORITY	**Report Page:**	**(Page 3 of 8)**
	Date Prepared:	04-11-2023

F. INDOOR LIGHTING FIXTURE SCHEDULE

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

Designed Wattage: Conditioned Spaces

01	02	03	04	05	06	07	08	09	10	
Name or Item Tag	Complete Luminaire Description	Modular (Track) Fixture	Small Aperture & Color Change[1]	Watts per luminaire[2]	How is Wattage determined	Total Number of Luminaires	Excluded per 140.6(a)3 / 170.2(e)2C	Design Watts	Field Inspector	
									Pass	Fail
EXISTING-2X4	EXISTING-2x4	No	NA	32	Mfr. Spec	2	No	64	☐	☐
EXISTING-PENDANT	EXISTING-PENDANT	No	NA	35	Mfr. Spec	8	No	280	☐	☐
FX-D	FX-D	No	NA	17	Mfr. Spec	4	No	68	☐	☐
FX-D1	FX-D1	No	NA	25.6	Mfr. Spec	6	No	153.6	☐	☐
FX-D2	FX-D2	No	NA	38.4	Mfr. Spec	2	No	76.8	☐	☐
FX-D4	FX-D4	No	NA	5	Mfr. Spec	35	No	175	☐	☐
						Total Designed Watts: CONDITIONED SPACES		817		

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

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

G. MODULAR LIGHTING SYSTEMS

This section does not apply to this project.

STATE OF CALIFORNIA
Indoor Lighting
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-LTI-E
Project Name: SANTA ANA WATERSHED PROJECT AUTHORITY	**Report Page:**	**(Page 4 of 8)**
	Date Prepared:	04-11-2023

H. INDOOR LIGHTING CONTROLS (Not including PAFs)

This table includes lighting controls for conditioned and unconditioned spaces.

Building Level Controls

01	02	03	
		Field Inspector	
		Pass	Fail
Mandatory Demand Response 110.12(c)	Shut-off controls 130.1(c) / 160.5(b)4C	☐	☐
NA < 4,000W subject to multilevel	Whole Building Auto Time Switch	☐	☐

Area Level Controls

04	05	06	07	08	09	10	11	12	
Area Description	Complete Building or Area Category Primary Function Area	Manual Area Controls 130.1(a) / 160.5(b)4A	Multi-Level Controls 130.1(b) / 160.5(b)4B	Shut-Off Controls 130.1(c) // 160.5(b)4C	Primary/Skylit Daylighting 130.1(d) / 160.5(b)4D	Secondary Daylighting 130.1(d) / 160.5(b)4D	Interlocked Systems 140.6(a)1/ 170.2(e)2A	Field Inspector	
								Pass	Fail
RESTROOM (MEN'S/WOMEN'S)	Restroom	Readily Accessible	Dimmer	Occupancy Sensor	NA: General Ltg < 120W	NA: General Ltg < 120W	No	☐	☐
RECEPTION	Lounge	Readily Accessible	Dimmer	Auto. Time Switch	NA: General Ltg < 120W	NA: General Ltg < 120W	No	☐	☐
LOBBY	Main Entry Lobby	Readily Accessible	Dimmer	Auto. Time Switch	NA: General Ltg < 120W	NA: General Ltg < 120W	No	☐	☐
CORRIDOR	Corridor	Readily Accessible	Dimmer	Auto. Time Switch	NA: General Ltg < 120W	NA: General Ltg < 120W	No	☐	☐
					13				
					Plan Sheet Showing Daylit Zones:				

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

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

Conditioned Spaces

STATE OF CALIFORNIA
Indoor Lighting
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-LTI-E
Project Name: SANTA ANA WATERSHED PROJECT AUTHORITY	**Report Page:**	**(Page 5 of 8)**
	Date Prepared:	04-11-2023

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

01	02	03	04	05	06	
Area Description	Complete Building or Area Category Primary Function Area	Allowed Density (W/ft²)	Area (ft²)	Allowed Wattage (Watts)	Additional Allowance / Adjustment	
					Area Category	PAF
RESTROOM	Restroom	0.65	422	274.3	No	No
RECEPTION	Lounge	0.55	99	54.4	No	No
LOBBY	Main Entry Lobby	0.7	700	490	No	No
		TOTALS:	1,221	818.7	See Tables J, or P for detail	

J. ADDITIONAL ALLOWANCE: AREA CATEGORY METHOD QUALIFYING LIGHTING SYSTEM

This section does not apply to this project.

K. TAILORED METHOD GENERAL LIGHTING POWER ALLOWANCE

This section does not apply to this project.

L. ADDITIONAL LIGHTING ALLOWANCE: TAILORED WALL DISPLAY

This section does not apply to this project.

M. ADDITIONAL LIGHTING ALLOWANCE: TAILORED FLOOR AND TASK LIGHTING

This section does not apply to this project.

N. ADDITIONAL LIGHTING ALLOWANCE: TAILORED DECORATIVE /SPECIAL EFFECTS

This section does not apply to this project.

STATE OF CALIFORNIA
Indoor Lighting
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-LTI-E
Project Name: SANTA ANA WATERSHED PROJECT AUTHORITY	**Report Page:**	**(Page 6 of 8)**
	Date Prepared:	04-11-2023

O. ADDITIONAL LIGHTING ALLOWANCE: TAILORED VERY VALUABLE MERCHANDISE

This section does not apply to this project.

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

This section does not apply to this project.

Q. RATED POWER REDUCTION COMPLIANCE FOR ONE-FOR-ONE ALTERATIONS

This section does not apply to this project.

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

This section does not apply to this project.

S. DAYLIGHT DESIGN POWER ADJUSTMENT FACTOR (PAF)

This section does not apply to this project.

T. DWELLING UNIT LIGHTING

This section does not apply to this project.

U. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION

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

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

STATE OF CALIFORNIA
Indoor Lighting
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-LTI-E
Project Name: SANTA ANA WATERSHED PROJECT AUTHORITY	**Report Page:**	**(Page 7 of 8)**
	Date Prepared:	04-11-2023

V. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

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

Form/Title	Systems/Spaces To Be Field Verified
NRCA-LTI-02-A - Must be submitted for occupancy sensors and automatic time switch controls.	Whole Building Time Switch; RESTROOM (MEN'S/WOMEN'S); RECEPTION; LOBBY; CORRIDOR;

STATE OF CALIFORNIA
Indoor Lighting
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-LTI-E
Project Name: SANTA ANA WATERSHED PROJECT AUTHORITY	**Report Page:**	**(Page 8 of 8)**
Project Address: 11615 STERLING AVEENUE	**Date Prepared:**	04-11-2023

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

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

Documentation Author Name:	Documentation Author Signature:
Company: H2S Engineers Inc.	Signature Date: 2023-11-04
Address:	CEA/ HERS Certification Identification (if applicable):
City/State/Zip:	Phone:

RESPONSIBLE PERSON'S DECLARATION STATEMENT

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

1. The information provided on this Certificate of Compliance is true and correct.
2. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer)
3. The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.
4. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.
5. I will ensure that a completed signed copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a completed signed copy of this Certificate of Compliance is required to be included with the documentation the building provides to the building owner at occupancy.

Responsible Designer Name:	Responsible Designer Signature:
MONITA VERMA	
Company: H2S ENGINEERS INC.	Date Signed: 2023-11-04
Address: 1124 N BOATSWAIN CIRCLE	License: E19876
City/State/Zip: ANAHEIM CA 92801	Phone: 7142900718

REGISTERED PROFESSIONAL ENGINEER
MONITA VERMA
No. 19876
Exp. 9-30-24
MECHANICAL
STATE OF CALIFORNIA

architecture planning interior
Gillis + Panichapan Architects, Inc.
2900 BRISTOL STREET COSTA MESA CALIFORNIA 92626
FAX (714) 668-4265 TEL (714) 668-4260

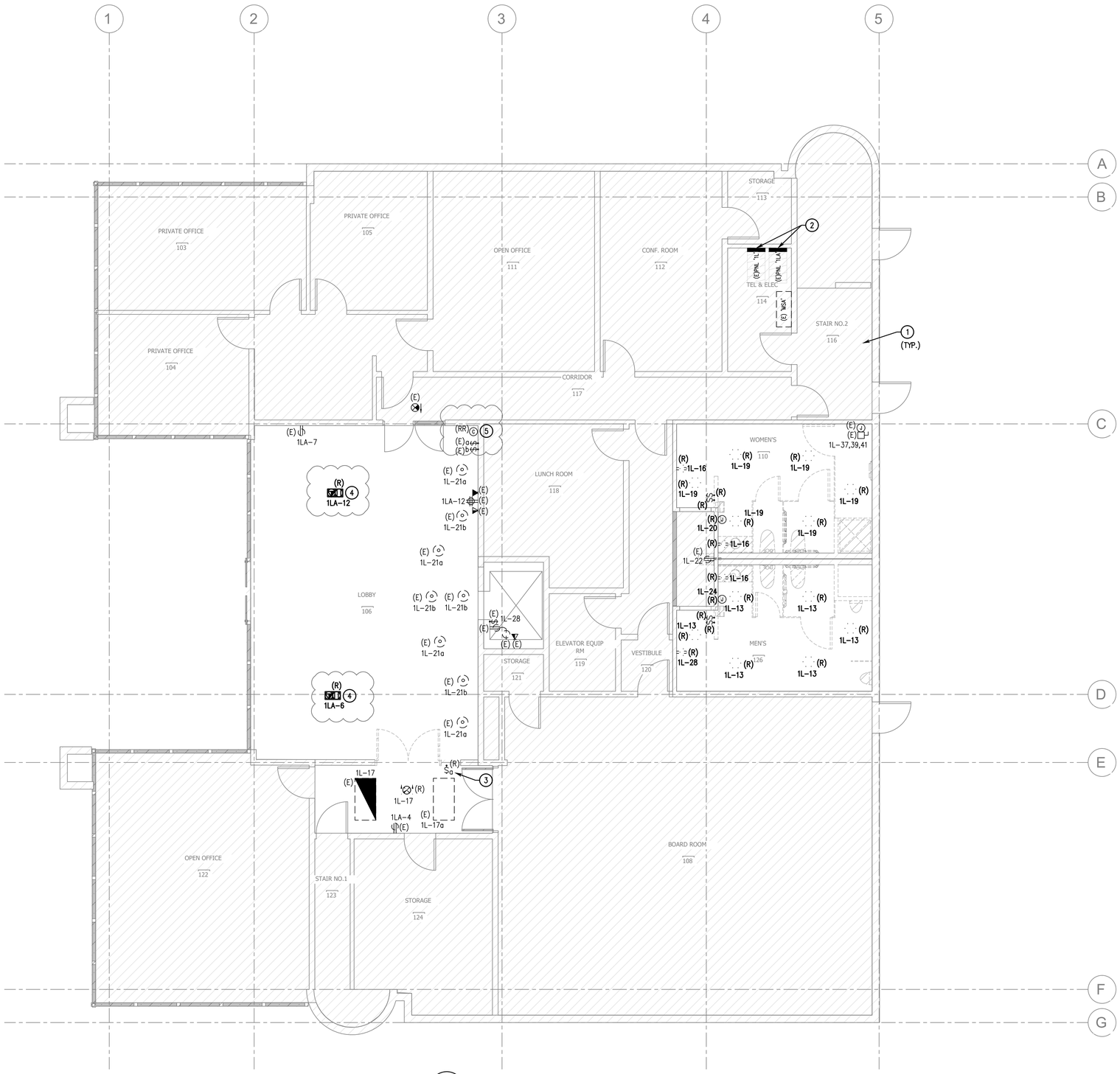
JOB NO.: 3903
DRAWN BY: MV
CHECKED BY: MV
SCALE: As indicated

T-24 COMPLIANCE FORMS

SAWPA
SANTA ANA WATERSHED PROJECT AUTHORITY

H2S Engineers Inc.
Mechanical and Electrical Engineers
4095 E La Palma Ave, Suite F, Anaheim, CA 92807
Ph: (714) 321.3068
E-mail: hsheth@h2sengineers.com
www.h2sengineers.com

E-0.6



1 E-2.1 OVERALL DEMOLITION FLOOR PLAN
SCALE: 1/8" = 1'-0"

SHEET NOTES

1. HATCH AREA NOT IN SCOPE OF WORK, ALL EXISTING ELECTRICAL FIXTURES TO REMAIN.
2. EXISTING PANEL TO REMAIN. DISCONNECT & REMOVE DEMOLISH LOAD–MARKED AS "R" FROM THE EXISTING CIRCUIT BREAKER. CONTRACTOR TO ENSURE CIRCUIT CONTINUITY OF OTHER EXISTING NEARBY FIXTURES.
3. DISCONNECT AND REMOVE EXISTING CONTROL FOR THIS SPACE.
4. DISCONNECT AND REMOVE EXISTING OUTLET AND PROVIDE A BLANK–PLATE.
5. DISCONNECT AND RELOCATE EXISTING CAMERA. SEE SHEET E–4.1 FOR NEW LOCATION. PULL NEW CABLE FROM EXISTING HEAD–END EQUIPMENT AS REQUIRED.

GENERAL NOTES

1. FIXTURES DENOTES (R) – FIXTURES TO BE REMOVED.
2. FIXTURES DENOTES (E) – FIXTURES TO BE REMAIN EXISTING.
3. ELECTRICAL CONTRACTOR SHALL INVESTIGATE PROJECT SITE TO DETERMINE ALL CONDITIONS WHICH MAY AFFECT THE EXECUTION OF HIS WORK. E SHALL THOROUGHLY FAMILIARIZE HIMSELF WITH THESE EXISTING CONDITIONS, AND BY SUBMITTING A BID ACCEPTS CONDITIONS UNDER WHICH HE WILL BE REQUIRED TO PERFORM HIS WORK. HE SHALL BE RESPONSIBLE FOR DE–ENERGIZING CIRCUITS IN DEMOLITION AREAS TO ENSURE A SAFE CONDITION. MAINTAIN ELECTRICAL SERVICE TO THE EXISTING EQUIPMENT, SERVICES AND CIRCUITS AS REQUIRED. SCHEDULING OF SERVICE OUTAGES SHALL BE COORDINATED WITH ARCHITECT AND OWNER.
4. FOR ALL COMMUNICATION OUTLETS PROVIDE DOUBLE GANG BACK BOX WITH SINGLE GANG PLASTER RING. PROVIDE 1" CONDUIT TO 6" ABOVE ACCESSIBLE CEILING WITH 90° BEND AND CONDUIT BUSHING UNLESS OTHERWISE NOTED ON DRAWINGS. FOR NON–ACCESSIBLE CEILINGS, ROUTE CONDUIT TO NEAREST ACCESSIBLE CEILING SPACE OR TO NEAREST COMMUNICATION CLOSET. PROVIDE BLANK COVER PLATES FOR ALL UNUSED BOXES.
5. PANELBOARD NAME AND CIRCUITS NUMBER ARE BASED ON AS–BUILTS DRAWINGS. CONTRACTOR SHALL FIELD–VERIFY, AS REQUIRED.
6. IN GENERAL, THE DEMOLITION PLAN SHOWS ALL EXISTING EQUIPMENT TO BE REMOVED; HOWEVER, ELECTRICAL EQUIPMENT, WHETHER SHOWN ON THIS DRAWINGS OR NOT THAT IS LOCATED IN REMOVED WALLS, FLOORS OR CEILINGS, SHALL BE REMOVED UNLESS OTHERWISE NOTED. ELECTRICAL CONTRACTOR SHALL DISCONNECT AND REMOVE ALL EXISTING ELECTRICAL MATERIAL WHICH WILL NOT BE REUSED. UNUSED CONDUITS SHALL BE CUT OFF AND PLUGGED FLUSH WITH SURFACES. EXISTING MATERIAL WHICH IS NOT TO BE REUSED OR IS NOT REQUIRED TO BE RETAINED BY OWNER SHALL BE REMOVED FROM SITE.
7. DISCONNECT AND REMOVE CIRCUITING BACK TO SOURCE OR NEAREST POINT PRACTICAL TO MAINTAIN ELECTRICAL CONTINUITY OF REMAINING DEVICES, EXTEND CONDUIT AND CONDUCTORS AS NECESSARY TO MAINTAIN CIRCUIT INTEGRITY.
8. IT SHALL BE THE ELECTRICAL CONTRACTOR'S RESPONSIBILITY TO DISCONNECT AND REMOVE ALL EXISTING LIGHTING FIXTURES, RECEPTACLES, ELECTRICAL EQUIPMENT, ETC., AFFECTED BY THE REMODELED AREA. THIS WILL INCLUDE REROUTING, OR THE EXTENSION OF, EXISTING CONDUIT AND FEEDERS WHERE NECESSARY TO MAINTAIN THE CONTINUITY OF EXISTING EQUIPMENT REMAINING.
9. EXISTING CONDUIT FEEDS UP THROUGH FLOOR SHALL BE CUT OFF AND PLUGGED FLUSH WITH FLOOR WHERE EXISTING WALL, ETC., IS REMOVED. REMOVE CONDUCTORS FROM THIS POINT BACK TO LAST OUTLET REMAINING IN SERVICE.
10. WHERE EXISTING CIRCUITING IS DISTURBED BY DEMOLITION WORK, THE CONTRACTOR SHALL REWORK AND/OR EXTEND EXISTING CIRCUITING AS REQUIRED TO MAINTAIN CONTINUITY TO ALL REMAINING LOADS AFFECTED BY CIRCUIT.
11. IT SHALL BE THE RESPONSIBILITY FOR THIS CONTRACTOR TO MAINTAIN CONTINUITY OF ALL ELECTRICAL SYSTEMS, EQUIPMENT, ETC., REMAINING IN OPERATION WHICH ARE BEING FED BY AN ABANDONED OUTLET. MAINTAINING CONTINUITY SHALL CONSIST OF REROUTING CONDUIT, WIRING, ETC., AS REQUIRED.
12. ALL ELECTRICAL FIXTURES, OUTLETS, DEVICES, ETC., THAT ARE REMOVED, SHALL BE REMOVED COMPLETELY, INCLUDING CONDUIT AND WIRING BACK TO THE LAST FIXTURE, OUTLET, DEVICE, ETC., REMAINING IN SERVICE.
13. EXISTING CIRCUITS WHICH ARE REMOVED AND NOT REUSED SHALL BE IDENTIFIED ON THE PANEL SCHEDULE AS "SPARE".
14. THE ELECTRICAL CONTRACTOR SHALL COORDINATE WITH THE OWNER PRIOR TO REMOVAL OF EXISTING ELECTRICAL EQUIPMENT, AND TURN OVER REMOVED EQUIPMENT THAT THE OWNER REQUESTS IN AN "AS– FOUND" CONDITION. EQUIPMENT THAT IS TO BE TURNED OVER SHALL BE BOXED AND TAGGED TO IDENTIFY THE SPECIFIC EQUIPMENT.
15. IN SOME INSTANCES, IT MAY BE NECESSARY FOR THE ELECTRICAL CONTRACTOR TO TEMPORARILY RELOCATE, REROUTE, ETC., EXISTING ELECTRICAL EQUIPMENT. THIS SHALL BE DONE SO THAT THE SYSTEMS IN ALL PHASES (THOSE COMPLETED AND THOSE YET TO BEGIN), ARE IN COMPLETE, OPERABLE, CONDITION AS CONSTRUCTION PROCEEDS THROUGH EACH PHASE.
16. ALL ABANDONED OUTLETS INCLUDING LIGHT, RECEPTACLES, TELEPHONE, ETC., SHALL BE COVERED AND PATCHED TO MATCH THE FINISH OF SURROUNDING WALL OR CEILING TO THE SATISFACTION OF THE OWNER.
17. ALL LIGHTING FIXTURES REMOVED TO ACCOMPLISH DEMOLITION WORK SHALL BE REINSTALLED SIMILAR TO NEW WORK.
18. WHERE EXISTING WALL TO BE REMOVED AND THERE ARE EXISTING CONDUIT FEEDS IN THESE WALL, IT IS THE CONTRACTOR'S RESPONSIBILITY TO DISCONNECT AND REMOVE THESE CONDUITS, AFFECTED BY THE REMODELED AREA. THIS WILL INCLUDE REROUTING WITH NEW CONDUITS AND WIRES (MATCH EXISTING), J–BOXES AND EXTENSION OF EXISTING CONDUITS WHERE NECESSARY TO MAINTAIN THE CONTINUITY OF EXISTING EQUIPMENT REMAINING.

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DATE: 31 OCT 2023
JOB NO.: 3903
DRAWN BY: MV
CHECKED BY: MV
SCALE: As indicated

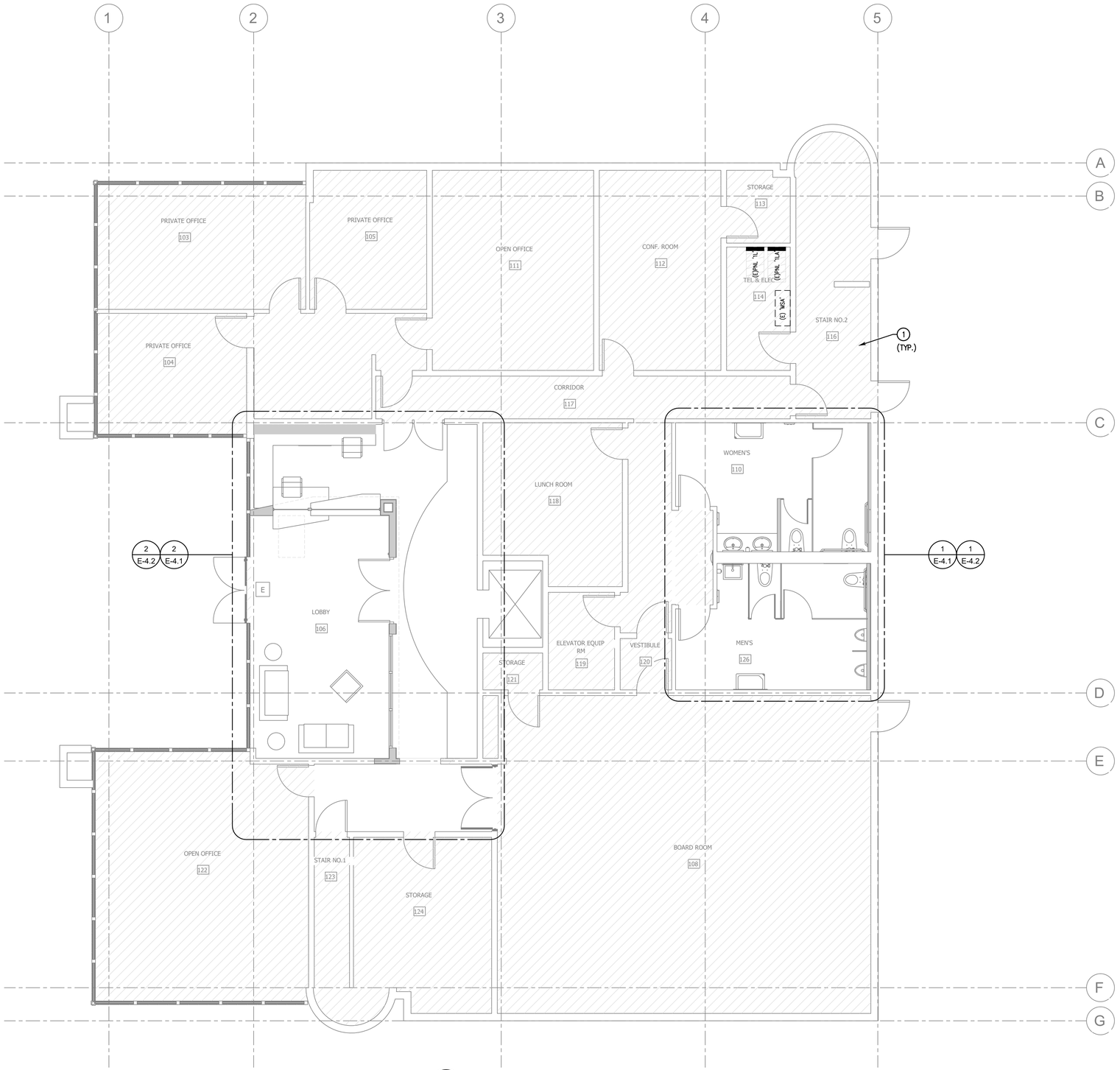
OVERALL DEMOLITION FLOOR PLAN

SAWPA
SANTA ANA WATERSHED PROJECT AUTHORITY

E-2.1

SHEET NOTES

1. HATCH AREA NOT IN SCOPE OF WORK, ALL EXISTING ELECTRICAL FIXTURES TO REMAIN.



1 / E-3.1 OVERALL PROPOSED FLOOR PLAN
SCALE: 1/16" = 1'-0"

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OVERALL PROPOSED FLOOR PLAN

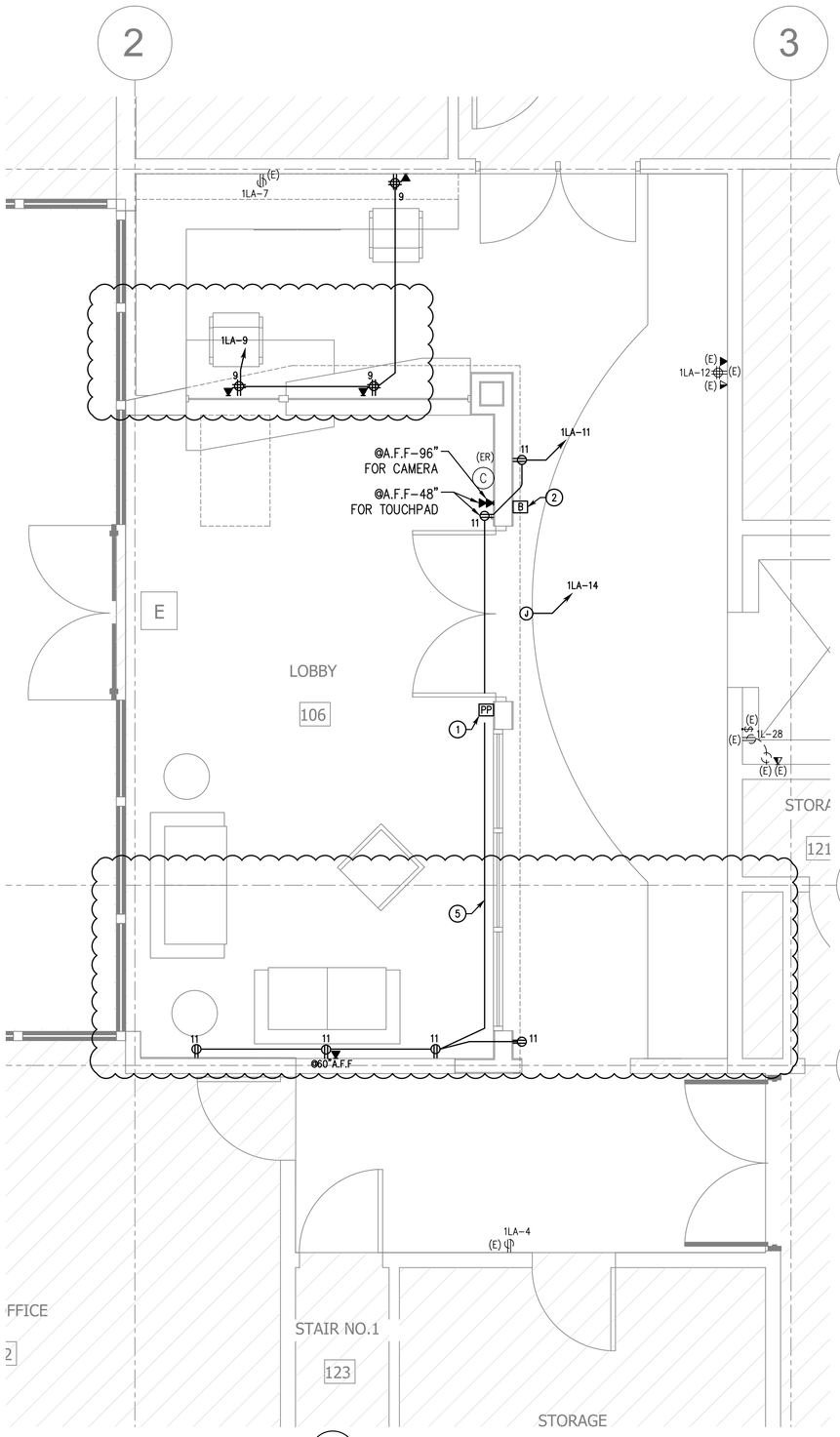
SAWPA

SANTA ANA WATERSHED PROJECT AUTHORITY

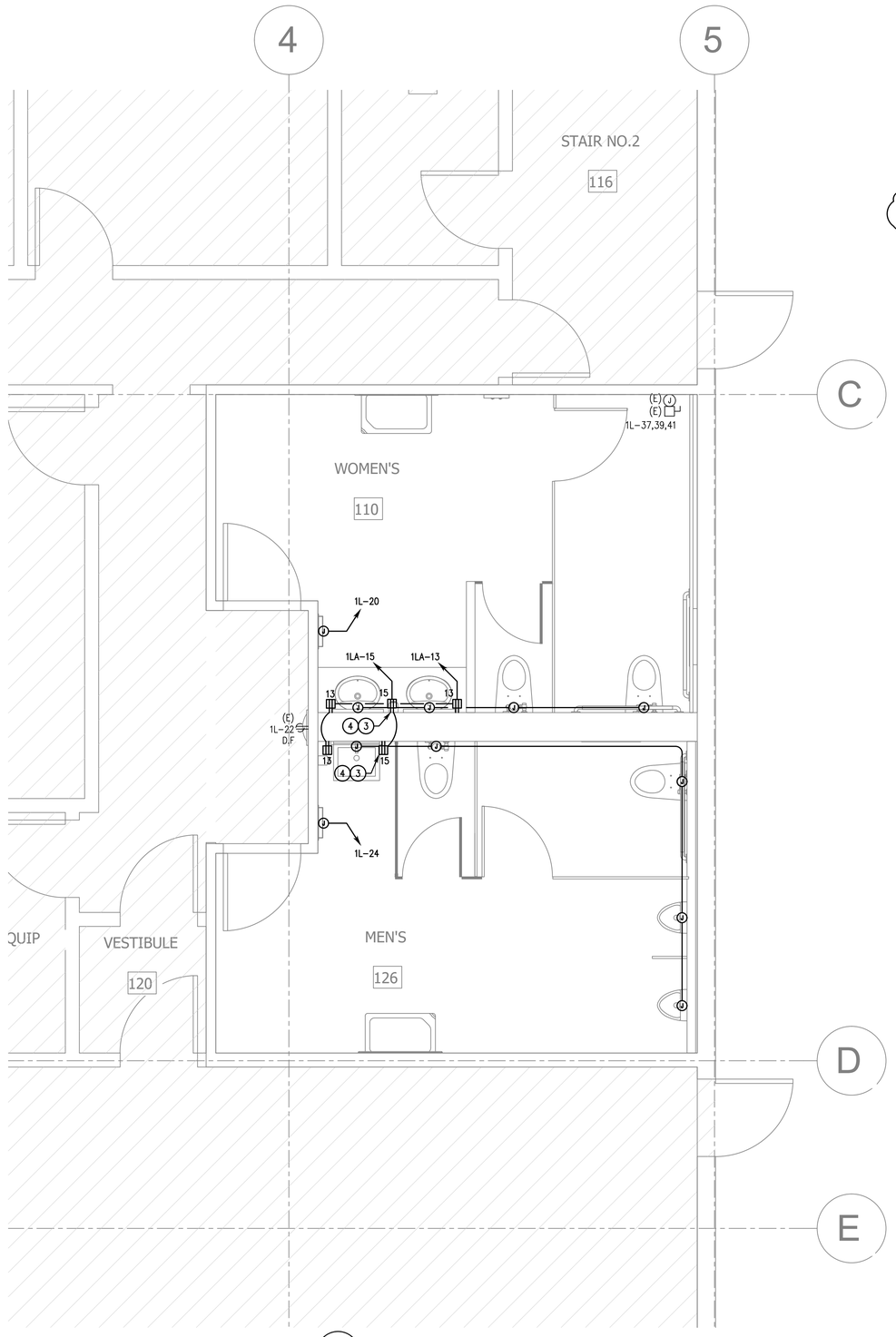
E-3.1

SHEET NOTES

1. PROXIMITY PAD POWERED BY A THIN WIRE THAT RUNS ACROSS THE TOP OF THE NEW WALL FROM A P.O.C IN THE CEILING IN THE ADJACENT CONFERENCE ROOM. CONTRACTOR TO CONFIRM EXACT REQUIREMENTS WITH OWNER AT SITE.
2. INSTALL PUSH BUTTON TO ALLOW VSITORS TO EXIT WITHOUT PROXIMITY CARD. POWERED BY A THIN WIRE. CONTRACTOR TO CONFIRM EXACT REQUIREMENTS WITH OWNER AT SITE.
3. PROVIDE WALL RECEPTACLE BELOW FOR 120V AC TRANSFORMER FOR LAVATORY FAUCET AND SOAP DISPENSER. CONCEAL FROM VIEW.
4. JUNCTION BOX FOR AUTOMATIC FLUSH SENSOR, 120V AC TRANSFORMER FOR FLUSH VALVE. ROUTE 1/2" CONDUIT CONCEALED IN WALLS FROM TRANSFORMER TO DEVICE FOR LOW VOLTAGE WIRE.
5. RUN POWER CONDUIT IN THE 9' WALL. ALSO, PROVIDE (2) 3/4" CONDUITS FOR LOW VOLTAGE.



2 E-4.1 ENLARGED PROPOSED POWER PLAN - LOBBY
3/8" = 1'-0"



1 E-4.1 ENLARGED PROPOSED POWER PLAN - RESTROOM
3/8" = 1'-0"

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ENLARGED PROPOSED POWER PLAN

SAWPA
SANTA ANA WATERSHED PROJECT AUTHORITY

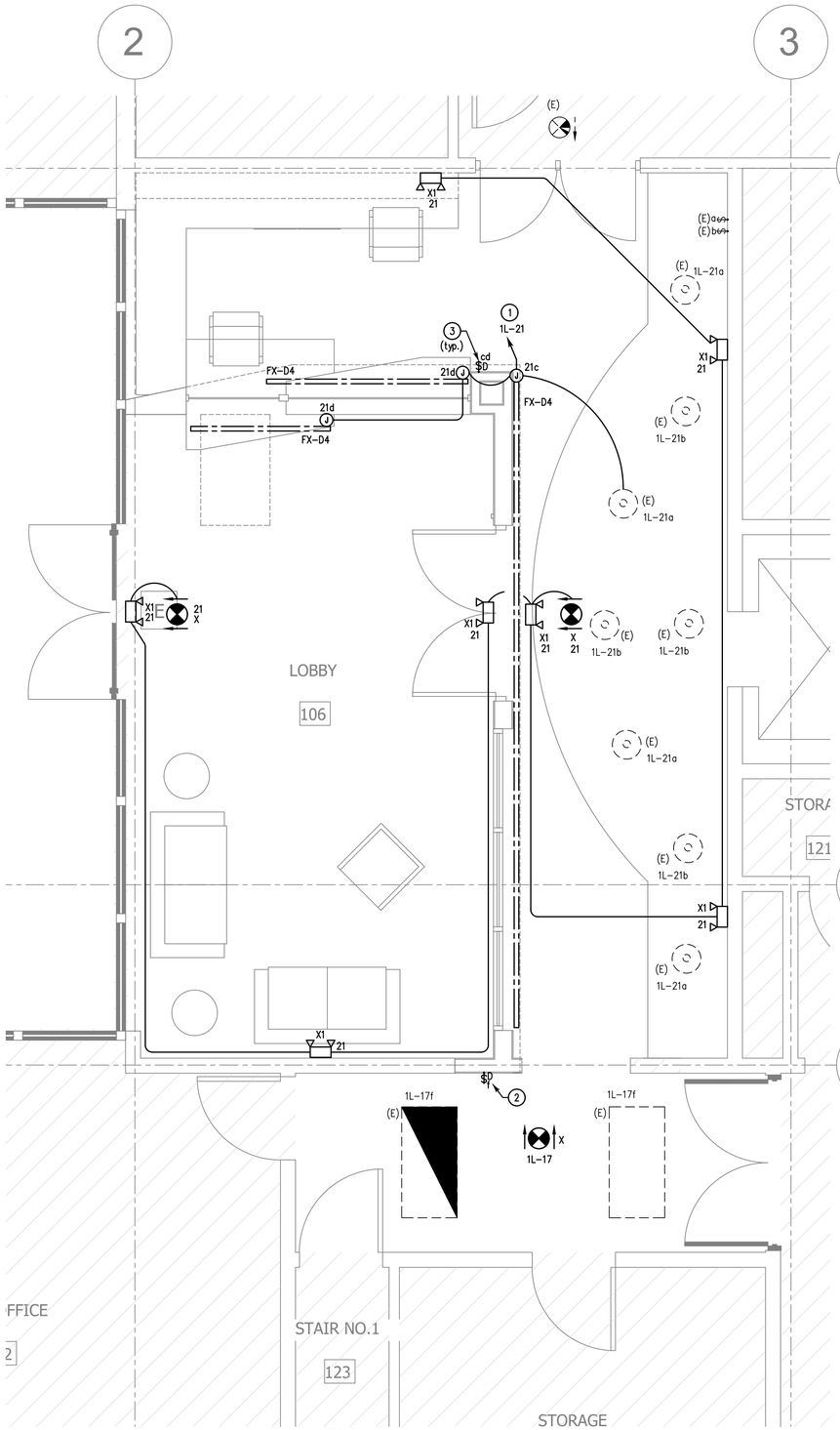
E-4.1

SHEET NOTES

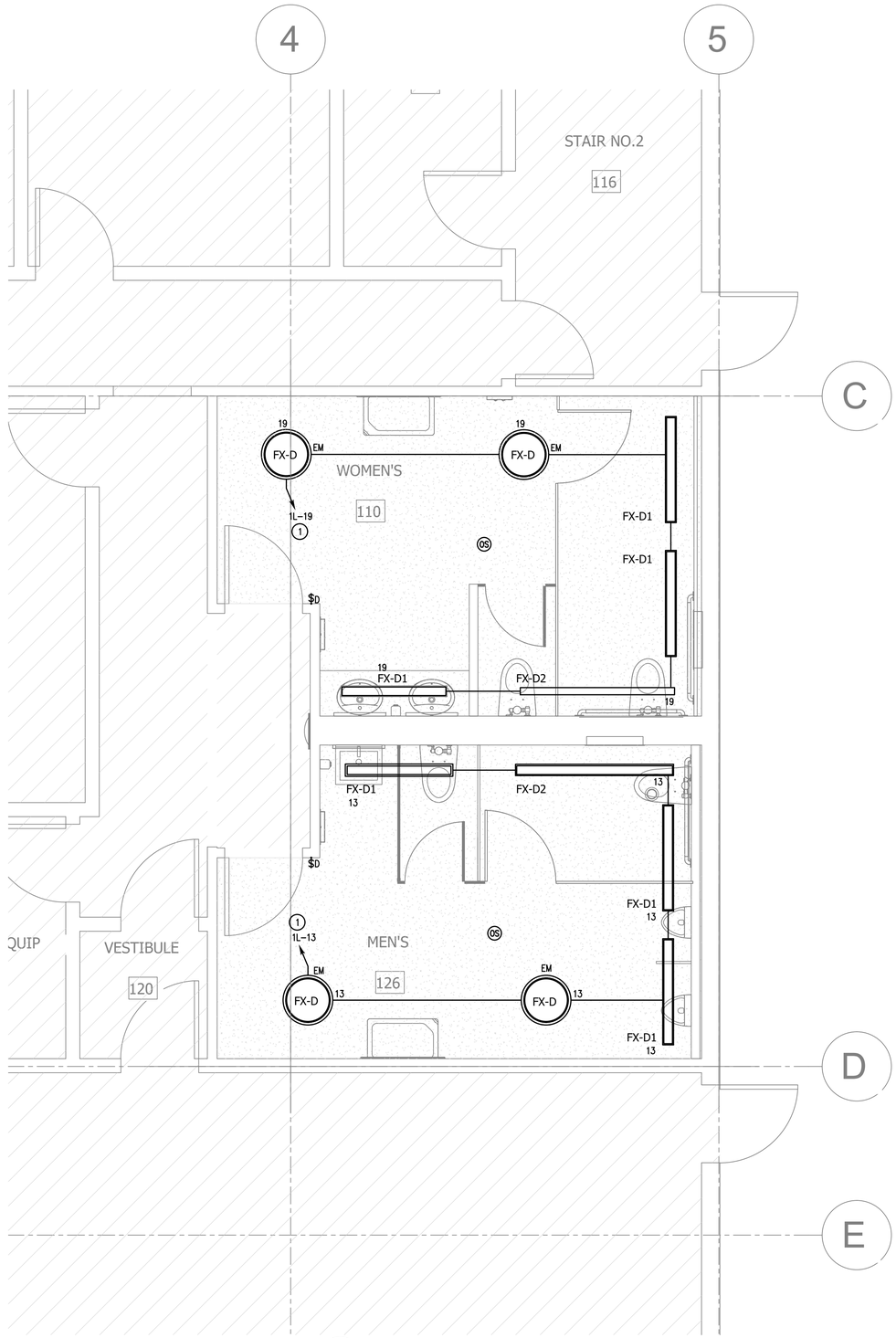
1. TO OTHER EXISTING NEARBY LIGHTS IN THE SAME CIRCUIT.
2. NEW CONTROL FOR EXISTING LIGHTS.
3. LOW VOLTAGE DIMMER SWITCH. REFER TO LIGHTING CONTROL DIAGRAM ON SHEET E0.5 FOR ADDITIONAL INFORMATION.

GENERAL NOTES

1. LIGHT FIXTURES SHOWN WITH "EM" ARE PROVIDED WITH INTEGRALLY MOUNTED BATTERY BACK-UP FOR 90MIN OF ILLUMINATION UNDER NORMAL POWER LOSS.



2 / E-4.2 ENLARGED PROPOSED LIGHTING PLAN - LOBBY
3/8" = 1'-0"



1 / E-4.2 ENLARGED PROPOSED LIGHTING PLAN - RESTROOM
3/8" = 1'-0"

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ENLARGED PROPOSED LIGHTING PLAN

SAWPA
SANTA ANA WATERSHED PROJECT AUTHORITY

E-4.2

GENERAL NOTES

1. NOTE: FOR THE PURPOSE OF CLEARNESS AND LEGIBILITY, THE DRAWINGS ARE ESSENTIALLY DIAGRAMMATIC AND ALTHOUGH SIZES AND LOCATIONS OF EQUIPMENT ARE DRAWN TO SCALE WHEREVER POSSIBLE, THE CONTRACTOR SHALL MAKE USE OF ALL DATA IN ALL OF THE CONTRACT DOCUMENTS AND VERIFY THIS INFORMATION PRIOR TO ORDERING, FABRICATING OR INSTALLING ANY MATERIALS.
2. CONTRACTOR SHALL COORDINATE ALL WORK SHOWN ON THESE DRAWINGS AND SPECIFICATIONS WITH ALL DISCIPLINES AND TRADES PRIOR TO SUBMITTAL OF BID AND INSTALLATION OF SYSTEM.
3. THE PLUMBING CONTRACTOR SHALL GUARANTEE ALL MATERIALS & LABOR (INCLUDING THE COMPLETE PLUMBING SYSTEM) FOR A PERIOD OF ONE YEAR FROM WRITTEN ACCEPTANCE BY THE OWNER. ANY DEFECTS IN MATERIALS & OR LABOR FOUND WITHIN THE GUARANTEE PERIOD SHALL BE REMEDIED OR REPAIRED BY THIS CONTRACTOR IN A TIMELY FASHION, AT NO COST TO THE OWNER.
4. ALL PLUMBING FIXTURE LOCATIONS (WATER CLOSETS, LAVATORIES ETC.) ARE DIAGRAMMATIC & CONTRACTOR SHALL REFER TO ARCHITECTURAL DRAWINGS FOR ADA COMPLIANT FIXTURES, EXACT LOCATIONS, MOUNTING HEIGHTS & COLOR.
5. ANY DEVIATIONS FROM THE DRAWINGS OR SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AND ENGINEER PRIOR TO INSTALLATION.
6. CONTRACTOR SHALL VISIT SITE PRIOR TO SUBMITTAL OF BID AND FAMILIARIZE HIMSELF WITH EXISTING CONDITIONS. SUBMITTAL OF BID WILL VERIFY THAT THE CONTRACTOR HAS VISITED THE SITE.
7. PIPING SHALL BE INSTALLED PARALLEL TO BUILDING LINES AND SUPPORTED AND ANCHORED AS REQUIRED TO FACILITATE EXPANSION AND CONTRACTION. THE INSTALLATION SHALL MEET ALL CONSTRUCTION CONDITIONS AND ALLOW FOR THE INSTALLATION OF OTHER TRADES.
8. TRAP PRIMERS FOR FLOOR DRAINS AND FLOOR SINKS AND WATER HAMMER ARRESTORS TO BE INSTALLED AS PER THE LISTED PLUMBING CODE AND THE LATEST EDITION OF THE AMERICAN SOCIETY OF SANITARY ENGINEERING (ASSE 1010) SIZING AND INSTALLATION REQUIREMENTS.
9. ALL VALVES, TRAP PRIMERS, WATER HAMMER ARRESTORS OR OTHER EQUIPMENT SHOWN IN WALLS OR ABOVE NON-ACCESSIBLE CEILINGS SHALL BE INSTALLED BEHIND AN ACCESS PANEL.
10. ALL SERVICE WATER HEATING EQUIPMENT TO BE IN COMPLIANCE WITH THE STATE ENERGY CODE.
11. ALL ITEMS PROJECTING THROUGH THE ROOF SHALL BE FLASHED THROUGH CURBS OR PIPE SEALS A MINIMUM OF 12" ABOVE THE ROOF. THE PIPE CURBS AND SEALS SHALL BE INSTALLED BY THE ROOFING CONTRACTOR. ENSURE THAT AMPLE BOOT OPENINGS ARE PROVIDED TO ACCOMMODATE ANY ELECTRICAL CONDUIT PENETRATIONS REQUIRED FOR POWER.
12. CONTRACTOR TO REFER TO PLUMBING FIXTURE SCHEDULE FOR INDIVIDUAL WASTE, VENT & WATER CONNECTION SIZES AT EACH PLUMBING FIXTURE.
13. ALL CLEANOUTS SHALL BE INSTALLED WHERE READILY ACCESSIBLE AND LOCATED AS PER CODE REQUIREMENTS. THE CONTRACTOR SHALL COORDINATE ALL CLEAN OUT LOCATIONS WITH EQUIPMENT, MILLWORK, ETC., PRIOR TO INSTALLATION.
14. ALL PLUMBING FIXTURE VENTS TO TERMINATE A MINIMUM OF 12 INCHES FROM ANY VERTICAL SURFACE AND 10'-0" FROM OR 3'-0" ABOVE ANY MECHANICAL EQUIPMENT OUTSIDE AIR INTAKE.
15. ALL VALVES, UNIONS, ETC. TO BE SAME SIZE AS CONNECTED SUPPLY LINE UNLESS OTHERWISE NOTED ON DRAWINGS.
16. UNIONS SHALL BE PROVIDED AND INSTALLED AFTER EACH SCREW-TYPE VALVE AND PRIOR TO EQUIPMENT CONNECTIONS.
17. ALL UNDERGROUND METALLIC PIPE AND FITTINGS SHALL BE PROTECTED IN ACCORDANCE WITH THE SOILS ENGINEER'S RECOMMENDATIONS.
18. NO PIPING SHALL BE DIRECTLY EMBEDDED IN CONCRETE, MASONRY WALLS, OR CONCRETE FOOTINGS.
19. THE PLUMBING CONTRACTOR SHALL COORDINATE ALL REQUIREMENTS FOR ALL POINTS OF CONNECTION WITH THE GENERAL CONTRACTOR AND OTHER TRADES PRIOR TO START OF WORK.
20. VERIFY EXACT LOCATIONS, DEPTH AND SIZE OF ALL PIPING TO WHICH CONNECTIONS ARE REQUIRED. COORDINATE ALL CONNECTIONS WITH SITE CONDITIONS AND SITE UTILITY CONTRACTOR/ REPRESENTATIVE.
21. ALL HORIZONTAL PIPING LINES EXTENDED AND CONNECTED TO EQUIPMENT SHALL BE RUN AT THE HIGHEST POSSIBLE ELEVATIONS AND NOT LESS THAN 6" ABOVE THE FLOOR TO PROVIDE CLEARANCE FOR CLEANING.
22. ALL CUTTING OF EXISTING PAVING, WALKS AND/OR FLOORS SHALL UTILIZE MACHINE SAW CUTTING EQUIPMENT. HOLES FOR PIPES IN CONCRETE WALLS OR FLOORS SHALL UTILIZE CORE DRILLING EQUIPMENT. COORDINATE WITH ARCHITECTURAL DETAILS FOR FLOOR CUTTING AND PATCHING.
23. THE PLUMBING CONTRACTOR IS TO PROVIDE ALL ADDITIONAL STEEL, HANGER MATERIALS, RODS AND CLAMPS AS REQUIRED FOR COORDINATION WITH WORK OF OTHER TRADES.
24. PIPING LAYOUT IS SCHEMATIC ONLY, EXACT ROUTING AND INSTALLATION OF PIPES TO BE COORDINATED WITH THE BUILDING STRUCTURE AND THE WORK OF OTHER CONTRACTORS.
25. NO LIQUID TRANSMISSION PLUMBING PIPING SHALL BE INSTALLED ABOVE ELECTRICAL SWITCH GEAR, EQUIPMENT, OR PANELS. MAKE ADJUSTMENTS NECESSARY TO REROUTE PIPING FOR ACTUAL INSTALLATION OF ELECTRIC EQUIPMENT.
26. WHENEVER FOUNDATION WALLS, EXTERIOR WALLS, ROOFS, ETC. ARE PENETRATED FOR THE INSTALLATION OF PLUMBING SYSTEMS, THEY SHALL BE PATCHED TO MATCH EXISTING CONSTRUCTION AND SEALED WEATHER TIGHT.
27. PLUMBING CONTRACTOR SHALL BE ON SITE AND PRESENT AT THE DATE OF TURNOVER.
28. ALL EXTERIOR EXPOSED WATER PIPING SHALL BE INSULATED AND PVC JACKETED. SEAL JACKET PER MANUFACTURER'S REQUIREMENTS.
29. LABEL ALL SHUT-OFF VALVES ABOVE THE CEILING AND IN THE WALL WITH ACCESS DOORS.
30. ALL PIPE, PIPE FITTINGS, TRAPS, FIXTURE MATERIAL AND DEVICES USED IN THE PLUMBING SYSTEM SHALL BE LISTED OR THIRD PARTY CERTIFIED BY AN APPROVED LISTING AGENCY AND SHALL CONFORM TO APPLICABLE RECOGNIZED STANDARDS REFERENCED IN THE 2022 CALIFORNIA PLUMBING CODE.
31. THE LEAD CONTENT OF THE PIPES, PIPE OR PLUMBING FITTINGS AND FIXTURES INTENDED TO CONVEY OR DISPENSE WATER FOR HUMAN CONSUMPTION SHALL BE IN ACCORDANCE WITH SECTION 116875 OF THE HEALTH AND SAFETY CODE.
32. FLOOR AND TRENCH DRAINS SHALL BE IN ACCORDANCE WITH ASME A112.6.3A. FLOOR SINKS SHALL BE IN ACCORDANCE WITH ASME A112.6.7A.
33. GENERAL CONTRACTOR TO VERIFY PRESSURE ON SITE EARLY TO VERIFY IF BOOSTER PUMPS ARE REQUIRED.
34. EACH VENT SHALL RISE VERTICALLY TO A POINT NOT LESS THAN SIX(6) INCHES ABOVE THE FLOOD LEVEL RIM OF THE FIXTURE SERVED BEFORE OFFSETTING HORIZONTALLY OR BEFORE BEING CONNECTED TO ANY OTHER VENT.

ABBREVIATIONS

A	AIR
ABV	ABOVE
AD	ACCESS DOOR, AREA DRAIN
ADA	AMERICANS WITH DISABILITIES ACT
AFF	ABOVE FINISHED FLOOR
AP	ACCESS PANEL
ARCH	ARCHITECTURAL
BD	BIDET
BFP	BACKFLOW PREVENTER
BLW	BELOW
BLDG	BUILDING
BMS	BUILDING MANAGEMENT SYS
BOD	BASIS OF DESIGN
BT	BATHTUB
BTU	BRITISH THERMAL UNIT
BTUH	BRITISH THERMAL UNITS PER HOUR
CD	CONDENSATE DRAIN
CCO	CEILING CLEANOUT
CFH	CUBIC FEET PER HOUR
CHW	CHILLED WATER RETURN
CHWS	CHILLED WATER SUPPLY
CLNG	CEILING
CO	CARBON MONOXIDE
CS	COMPARTMENT SINK
CO2	CARBON DIOXIDE
CP	CIRCULATING PUMP
CR	COMPUTER ROOM
AC	AIR CONDITIONER
CT	COOLING TOWER
CW	COLD WATER
CWR	CONDENSER WATER RETURN
CWS	CONDENSER WATER SUPPLY
Cx	COMMISSIONING
CxA	COMMISSIONING
	AUTHORITY
D	DEMOLISH, REMOVE
DEG,°	DEGREES
DIA,ø	DIAMETER
DN	DOWN
DW	DISH WASHER
EFF	EFFICIENCY
EJ	EJECTOR DISCHARGE
FD	FLOOR DRAIN
ET	EXPANSION TANK
E	EXISTING
ET	EXPANSION TANK
EX	EXISTING
°F	DEGREES FAHRENHEIT
FCO	FLOOR CLEANOUT
FD	FLOOR DRAIN
FS	FLOOR SINK
FLR	FLOOR
FLEX	FLEXIBLE
FPM	FEET PER MINUTE
FPS	FEET PER SECOND
FT,'	FOOT, FEET
FT HD	FEET OF HEAD
G	GAS
GAL	GALLON, GALLONS
GI	GREASE INTERCEPTOR
GPH	GALLONS PER HOUR
GPM	GALLONS PER MINUTE
GR	GAS RANGE
GW	GREASE WASTE
GWH	GAS WATER HEATER
H	HEIGHT
HB	HOSE BIB
HS	HAND SINK
HW	HOT WATER
HWR	HOT WATER RETURN
HB	HOSE BIB
HP	HORSEPOWER
HTG	HEATING
HX	HEAT EXCHANGER
HZ	HERTZ (CYCLES PER SECOND)
ID	INSIDE DIAMETER
IN,"	INCH, INCHES
IN WG	INCHES OF WATER GAUGE
IV	ISOLATION VALVE
IWH	INSTANTANEOUS WATER HEATER
KS	KITCHEN SINK
KW	KILOWATTS
L	LENGTH, LONG
LAV	LAVATORY
MBH	THOUSAND BRITISH THERMAL UNITS PER HOUR
MECH	MECHANICAL
MFR	MANUFACTURER
MS	MOP SINK
N/A	NOT APPLICABLE
NC	NORMALLY CLOSED
NIC	NOT IN CONTRACT
NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
OD	OVERFLOW DRAIN
%	PERCENT
PD	PUMP DISCHARGE PRESSURE DROP
PLBG	PLUMBING
PNEU	PNEUMATIC
PRV	PRESSURE REDUCING VALVE
PSI	POUNDS PER SQUARE INCH
RD	ROOF DRAIN
SF	SQUARE FEET
SH	SHOWER
SOO	SEQUENCE OF OPERATION
SP	STATIC PRESSURE
SQ FT	SQUARE FOOT, SQUARE FEET
STD	STANDARD
TEMP	TEMPERATURE, TEMPORARY
TP	TRAP PRIMER
TSP	TOTAL STATIC
	PRESSURE
TYP	TYPICAL
UR	URINAL
V	VENT
W	WIDTH, WIDE
WC	WATER CLOSET
WCO	WALL CLEANOUT
WM	WASHING MACHINE, WATER METER
W/	WITH
W/O	WITHOUT
EWH	ELECTRIC WATER HEATER
WPD	WATER PRESSURE DROP
WSHP	WATER SOURCE HEAT PUMP
WT	WEIGHT
ZN	ZONE

GREEN BUILDING CODE REQUIREMENTS

(NOT ALL NOTES MAY APPLY)

1. PROJECTS WHICH DISTURB LESS THAN ONE ACRE OF LAND SHALL PREVENT THE POLLUTION OF STORM WATER RUNOFF FROM THE CONSTRUCTION ACTIVITIES THROUGH ONE OR MORE OF THE FOLLOWING MEASURES (SECTION 5.106.1):

A) BEST MANAGEMENT PRACTICES (BMP). PREVENT THE LOSS OF SOIL THROUGH WIND OR WATER EROSION BY IMPLEMENTING AN EFFECTIVE COMBINATION OF EROSION AND SEDIMENT CONTROL AND GOOD HOUSEKEEPING BMP. SEE SECTION 5.106.1.2 FOR SPECIFICS.

B) LOCAL ORDINANCE.

2. THE SITE GRADING OR A DRAINAGE SYSTEM WILL MANAGE ALL SURFACE WATER FLOWS TO KEEP WATER FROM ENTERING BUILDINGS. CGBC SECTION 5.106.10.

3. LANDSCAPE IRRIGATION SYSTEMS SHALL BE DESIGNED TO PREVENT SPRAY ON STRUCTURES. EXTERIOR ENTRIES SUBJECT TO FOOT TRAFFIC OR WIND-DRIVEN RAIN SHALL BE DESIGNED TO PREVENT WATER INTRUSION INTO THE BUILDING. CGBC SECTION 5.407.2.2.1.

4. THE CONTRACTOR MUST SUBMIT TO THE ENGINEERING DEPARTMENT OR OTHER AGENCY THAT REGULATES CONSTRUCTION WASTE MANAGEMENT A WASTE MANAGEMENT PLAN THAT OUTLINES THE ITEMS LISTED IN CGBC SECTION 5.408.1.1.

5. A MINIMUM OF 65% OF CONSTRUCTION WASTE IS TO BE RECYCLED. CGBC SECTION 5.408.1.3 DOCUMENTATION SHALL BE PROVIDED TO THE ENFORCING AGENCY WHICH DEMONSTRATES COMPLIANCE. CGBC SECTION 5.408.1.4.

6. 100% OF TREES, STUMPS, ROCKS, AND ASSOCIATED VEGETATION AND SOILS PRIMARILY FROM THE CONSTRUCTION WILL BE REUSED OR RECYCLED. CGBC SECTION 5.408.3.

7. AN IDENTIFIED, READILY ACCESSIBLE AREA SHALL BE PROVIDED THAT SERVES THE ENTIRE BUILDING FOR COLLECTING RECYCLING, SUCH AS PAPER, CARDBOARD, GLASS, PLASTICS, METALS, ETC. CGBC SECTION 5.410.1.

8. A BUILDING "SYSTEMS MANUAL" AS LISTED IN CGBC SECTION 5.410.2.5 SHALL BE DELIVERED TO THE BUILDING OWNER OR REPRESENTATIVE AND THE FACILITIES OPERATOR. THE "SYSTEMS MANUAL" SHALL CONTAIN THE REQUIRED FEATURES LISTED IN CGBC SECTION 5.410.2.5.1.

9. DURING CONSTRUCTION, ENDS OF DUCT OPENINGS ARE TO BE SEALED, AND MECHANICAL EQUIPMENT IS TO BE COVERED. CGBC SECTION 5.504.3.

10. VOC'S MUST COMPLY WITH THE LIMITATIONS LISTED IN SECTION 5.504.4 AND TABLES 4.504.1, 5.504.4.1, 5.504.4.2, 5.504.4.3 AND 5.504.4.5 FOR: ADHESIVES, SEALANTS, PAINTS AND COATINGS, CARPET AND COMPOSITION WOOD PRODUCTS. CGBC 5.504.4.

11. WHERE OUTDOOR AREAS ARE PROVIDED FOR SMOKING, SUCH AREAS ARE PROHIBITED WITHIN 25' OF BUILDING ENTRIES, WINDOWS AND OUTDOOR AIR INTAKES. SIGNAGE SHALL BE POSTED TO INFORM OCCUPANTS OF THE PROHIBITIONS. CGBC SECTION 5.504.7.

12. WALL AND FLOOR ASSEMBLIES SEPARATING TENANT SPACES (AND TENANT SPACES FROM PUBLIC SPACES) SHALL HAVE AN STC OF AT LEAST 40. CGBC SECTION 5.507.4.3.

13. WALL AND ROOF ASSEMBLIES EXPOSED TO NOISE SOURCES SHALL HAVE AN STC RATING OF AT LEAST 50, WITH EXTERIOR WINDOWS HAVING A MINIMUM STC OF 40 IN THE FOLLOWING LOCATIONS, PER CGBC SECTION 5.507.4.1:
A) WITHIN THE 65 CNEL NOISE CONTOUR OF A FREEWAY, RAILROAD OR INDUSTRIAL SOURCE, AS DETERMINED BY THE JURISDICTION'S NOISE ELEMENT OF THE GENERAL PLAN.

B) WITHIN THE 65 CNEL NOISE CONTOUR OF AN AIRPORT.

14. INSTALLATIONS OF HVAC, REFRIGERATION AND FIRE SUPPRESSION SYSTEMS WILL NOT CONTAIN CFC'S OR HALONS, PER CGBC 5.508.1.

15. FOR NEW BUILDINGS, SHOW ON THE SITE UTILITY PLAN SEPARATE SUB-METERS PER CGBC SECTION 5.303.1 FOR THE FOLLOWING:
(A) EACH LEASED OR OWNED SPACE THAT CONSUMES MORE THAN 100 GAL/DAY
(B) TENANT SPACES CONTAINING LAUNDRY, CLEANERS, RESTAURANT, MEDICAL/DENTAL OFFICE, LABORATORY OR BEAUTY/BARBER SHOPS.

16. THE FOLLOWING MAXIMUM FIXTURE FLOW RATES FROM TABLE 5.303.2.3 AND SECTION 5.303.3, AS SHOWN BELOW. REVISE GENERAL NOTES, PLUMBING PLANS, ETC. TO MATCH. CGBC 5.303.

MAXIMUM FIXTURE FLOW RATES	
FIXTURE TYPE	MAXIMUM FLOW RATE
LAVATORY FAUCETS-NONRESIDENTIAL	0.5 GPM @60 PSI
KITCHEN FAUCETS	1.8 GPM @ 60 PSI
METERING FAUCETS	0.2 GALLONS/CYCLE
WATER CLOSETS	1.28 GALLONS/FLUSH
URINALS	0.125 GALLONS/FLUSH

17. A WATER BUDGET SHALL BE DEVELOPED FOR LANDSCAPE IRRIGATION USE THAT CONFORMS TO THE LOCAL WATER EFFICIENT LANDSCAPE ORDINANCE. WHERE NO LOCAL ORDINANCE EXISTS, SHOW COMPLIANCE WITH THE CALIFORNIA DEPARTMENT OF WATER RESOURCES MODEL WATER EFFICIENT LANDSCAPE ORDINANCE. SEE SECTIONS 492.5 THROUGH 492.9, 492.10 AND 492.11 OF THE STATE ORDINANCE AT HTTTP: //WWW.WATER.CA.GOV/WATERUSEEFFICIENCY/DOCS/WATERORDSEC492.CFM.

18. FOR NEW WATER SERVICE (OR ADDITIONS/ALTERATIONS WITH > 1,000 SQUARE FEET OF CUMULATIVE LANDSCAPED AREA), SEPARATE SUBMETERS OR METERING DEVICES SHALL BE INSTALLED FOR OUTDOOR POTABLE WATER USE. ALSO, IRRIGATION CONTROLLERS AND SENSORS SHALL BE INSTALLED. CGBC SECTIONS 5.304.2 AND 5.304.3.

19. MECHANICALLY VENTILATED BUILDINGS SHALL PROVIDE REGULARLY OCCUPIED AREAS WITH AIR FILTRATION MEDIA FOR OUTSIDE AND RETURN AIR THAT PROVIDES AT LEAST A MINIMUM EFFICIENCY REPORTING VALUE (MERV) OF 13. MERV 13 FILTERS SHALL BE INSTALLED PRIOR TO OCCUPANCY, AND RECOMMENDATIONS FOR MAINTENANCE WITH FILTERS OF THE SAME VALUE SHALL BE INCLUDED IN THE OPERATION AND MAINTENANCE MANUAL. CGBC SECTION 5.504.5.3. EXCEPTION: EXISTING MECHANICAL EQUIPMENT.

20. PRIOR TO FINAL INSPECTION THE LICENSED CONTRACTOR, ARCHITECT OR ENGINEER IN RESPONSIBLE CHARGE OF THE OVERALL CONSTRUCTION MUST PROVIDE TO THE BUILDING DEPARTMENT OFFICIAL WRITTEN VERIFICATION THAT ALL APPLICABLE PROVISIONS FROM THE GREEN BUILDING STANDARDS CODE HAVE BEEN IMPLEMENTED AS PART OF THE CONSTRUCTION. CGBC SECTION 102.3.

APPLICABLE CODES

2022 CALIFORNIA BUILDING CODE

2022 CALIFORNIA ELECTRICAL CODE

2022 CALIFORNIA MECHANICAL CODE

2022 CALIFORNIA PLUMBING CODE

2022 CALIFORNIA FIRE CODE

2022 CALIFORNIA ENERGY CODE.

2022 CALIFORNIA GREEN BUILDING CODE.

PLUMBING LEGEND

SYMBOL	ABBREVIATION	DESCRIPTION
	CP	RECIRCULATION PUMP
	AAV	AUTOMATIC AIR VENTING
	U	UNION
	WHA	WATER HAMMER ARRESTER WITH ACCESS PANEL
	TP	TRAP PRIMER WITH ACCESS PANEL
		PIPE UP
		PIPE DOWN
	FCO	FLOOR CLEAN OUT
	GCO	GRADE CLEAN OUT
	SCO	2-WAY SERVICE CLEAN OUT
	WCO/CCO	WALL CLEAN OUT/ CEILING CLEAN OUT
	HB	HOSE BIBB
	POC	POINT OF CONNECTION
	FD	FLOOR DRAIN
	AP	ACCESS PANEL
XXX		TEXT
XXX		ARROW MULTI LEADER
XXX		DOT MULTI LEADER
XXX		LOOP MULTI LEADER
	POD	POINT OF DISCONNECTION
1		NEW KEYNOTE ARROW
1		NEW KEYNOTE LOOP
1 / 1		EQUIPMENT TAG
1		DEMOLITION KEYNOTE ARROW
1		DEMOLITION KEYNOTE LOOP
	FFE	FINISHED FLOOR ELEVATION
	IE	INVERT ELEVATION
1	FU	FIXTURE UNIT
S=2%		SLOPE DIRECTION

PLUMBING LEGEND

SYMBOL	ABBREVIATION	DESCRIPTION
	S	SANITARY WASTE
	V	SANITARY VENT
	CW	DOMESTIC COLD WATER
	HW	DOMESTIC HOT WATER
	HWR	DOMESTIC HOT WATER RETURN
G	G	LOW PRESSURE GAS
MPG	MPG	MEDIUM PRESSURE GAS (5 PSI)
CD	CD	CONDENSATE DRAIN
SD	S	STORM DRAIN
OD	OD	OVERFLOW STORM DRAIN
	VTR	VENT THRU ROOF
	SOV	VERTICAL SHUT-OFF VALVE
	SOV	SHUT-OFF VALVE
	PRV	PRESSURE REDUCING VALVE
		PRESSURE GAUGE
		THERMOMETER
	BAV	BALL VALVE
	CV	CHECK VALVE
	BV	BALANCING VALVE
		GAS COCK
	TMV	THERMOSTATIC MIXING VALVE
		SHUTOFF VALVE IN YARD BOX
		SHUTOFF VALVE IN YARD BOX -SITE PLAN
		FLOW DIRECTION
		FLOOR SINK
		CONTINUATION
		TRAP
	IWH	INSTANTENEOUS WATER HEATER

PIPE INSULATION THICKNESS

CALIFORNIA ENERGY CODE 2022 TABLE 120.3-A

FLUID OPERATING TEMPERATURE (°F)	INSULATION CONDUCTIVITY			NOMINAL PIPE DIAMETER (IN INCHES)				
	CONDUCTIVITY (Btu · in /h · ft² · °F)	MEAN RATING TEMPERATURE (°F)		< 1	1 TO < 1.5	1.5 TO < 4	4 TO < 8	8 AND LARGER
SPACE HEATING AND SERVICE WATER HEATING SYSTEMS (STEAM, CONDENSATE, REFRIGERANT, SPACE HEATING, SERVICE HOT WATER)				MINIMUM PIPE INSULATION REQUIRED (THICKNESS IN INCHES OR R-VALUE)				
105–140	0.22–0.28	100	INCHES	1.0	1.5	1.5	1.5	1.5
			R-VALUE	R-7.7	R-12.5	R-11	R-9	R-8

PIPING MATERIALS

SYSTEM TYPE	DESCRIPTION
DOMESTIC WATER PIPE	A: COPPER TUBING: ASTM B88, TYPE L, HARD DRAWN. 1. FITTINGS: ASME B16.18, CAST COPPER ALLOY OR ASTM B16.22, WROUGHT COPPER AND BRONZE. 2. MECHANICAL PRESS SEALED FITTINGS: NSF/ANSI 61, DOUBLE PRESSED TYPE AND UTILIZING EPDM SEALING ELEMENT. 3. JOINTS: ASTM B32, ALLOY GRADE Sb5 TIN-ANTIMONY, OR ALLOY GRADE Sn95 TIN-SILVER, LEAD FREE SOLDER AWS A5.8 CLASSIFICATION BCuP-3 OR BCuP-4 SILVER BRAZED.
SANITARY SEWER PIPE	A: CAST IRON PIPE: CISPI 301, HUBLESS, SERVICE EIGHT 1. FITTINGS: CAST IRON, CISPI 301 2. JOINTS: CISPI 310, NEOPRENE GASKETS AND STAINLESS STEEL CLAMP AND SHIELD ASSEMBLIES.
VENT PIPE(PLASTIC)	1. BELOW AND ABOVE GRADE INSIDE BUILDING SCHEDULE 40 PVC ASTM D2665. UNDERGROUND INSTALLATION MUST COMPLY WITH ASTM-D2321.

SHEET INDEX

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GENERAL NOTES, LEGEND, & SHEET INDEX

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VALVES SCHEDULE

MARK	MAKE	MODEL	SERVICE	LOCATION	QTY	TYPE	FLOW GPM	PIPE SIZE	VALVE SIZE	REMARKS
TMV-1	CASH ACME	HEATGUARD 145LF SERIES	DOMESTIC HOT WATER TEMPERING	RESTROOM LAVATORY	2	POINT-OF-USE	0.5 MIN - 5.5 MAX	¾"	-	POINT-OF-USE THERMOSTATIC MIXING VALVE SERVING PUBLIC LAVATORIES. SET AT 120°F. CERTIFIED TO ASSE 1017, ASSE 1070 AND CSA B125.3

EXISTING FIXTURE UNIT CALCULATION

FIXTURES		F.U. EACH		TOTAL F.U.	
		WASTE	WATER	WASTE	WATER
EXISTING WATER CLOSET	3	4.0	3.0	12.0	9.0
EXISTING LAVATORY	2	1.0	1.0	2.0	2.0
EXISTING URINAL	1	2.0	5.0	2.0	5.0
EXISTING DISHWASHER	1	2.0	2.0	2.0	2.0
EXISTING SINK	1	2.0	2	2.0	2.0
			TOTAL FIXTURE UNITS	20.0	20.0

FIXTURE UNIT CALCULATION FOR NEW FIXTURES

FIXTURES		F.U. EACH		TOTAL F.U.	
		WASTE	WATER	WASTE	WATER
WATER CLOSET (FLUSH VALVE)	4	4.0	15.0	16.0	60.0
LAVATORY	3	1.0	1.0	3.0	3.0
URINAL (WATER LESS TYPE)	2	2.0	–	4.0	–
BOTTLE	1	2.0	1	2.0	1.0
FLOOR DRAIN	2	2.0	–	4.0	–
			TOTAL FIXTURE UNITS	29.0	64.0

NOTE: FLUSHOMETER VALVES FIXTURE UNIT IS BASE ON 2022 CPC TABLE 610.10

TOTAL FIXTURE UNIT CALCULATION

FIXTURES	TOTAL F.U. WASTE	TOTAL F.U. WATER
EXISTING FIXTURES	20.0	20.0
NEW FIXTURES	4.0	64.0
TOTAL FIXTURE UNITS	24.0	84.0
EQUIVALENT FLOW RATE (GPM)		64

DOMESTIC WATER PIPE SIZING CHART

PIPE SIZES	FIXTURE UNITS		
	HOT WATER	COLD WATER FLUSH TANK	COLD WATER FLUSH VALVE
½"	1	1	0
¾"	7	7	0
1"	16	18	0
1¼"	28	34	5
1½"	46	66	20
2"	119	245	124
2½"	245	455	329

BASE ON 5.0 PSI ALLOWABLE FRICTION LOSS / 100 FT OF PIPE AND AT 8 F.P.S (CW) 5 F.P.S. (HW)

PLUMBING EQUIPMENT SCHEDULE

MARK	FIXTURE/ EQUIPMENT	PIPING CONNECTION: SOIL OR WASTE	VENT	COLD WATER	HOT WATER	DESCRIPTION
WC-1	WATER CLOSET FLUSH VALVE	4"	2"	1½"	–	"SLOAN" MODEL WETS 2020.1411, ST-2029 WATER CLOSET AND ECOS 111 FLUSHOMETER; WHITE VITREOUS CHINA, ELONGATED BOWL, FLOOR MOUNTED, PROVIDE WITH "SLOAN" TOILET SEAT WITH OPEN FRONT. FLUSH VOLUME: 1.28 GPF (4.8 LPF), INFRARED SENSOR WITH MULTIPLE-FOCUSED, LOBULAR SENSING FIELDS FOR HIGH AND LOW TARGET DETECTION.
L-1	WOMEN'S LAVATORY	2"	1½"	¾"	¾"	"KOHLER" MODEL: K-2214-0 UNDERMOUNT LAVATORY, VITREOUS CHINA, RECTANGULAR BASIN WITH CURVED BOTTOM, WITH OVERFLOW DRAIN, PROVIDE WITH FAUCET; "SLOAN" EAF-100, POLISHED CHROME FINISH, INFRARED SENSOR TYPE, IN A 0.35 GPM SETTING.
L-2	MEN'S LAVATORY	2"	1½"	¾"	¾"	"SLOAN" MODEL: SS-3806-STG WALL HUNG LAVATORY, VITREOUS CHINA. PROVIDE WITH FAUCET; "SLOAN" EAF-100, POLISHED CHROME FINISH, INFRARED SENSOR TYPE, IN A 0.35 GPM SETTING.
(E)S	EXISTING SINK	–	–	–	–	EXISTING SINK
UR-1	WATER FREE URINAL	2"	1½"	–	–	"SLOAN" MODEL WES-4000 VITREOUS CHINA WATER FREE URINAL, 2" NPT OUTLET FLANGE & UNI-COUPLER KIT, NOMINAL DIMENSIONS: 14" X 15⅜" X 22⅝".
FD-1	FLOOR DRAIN	2"	1½"	½" TPL	–	"WATTS" PRONTO FD-1190-PR EPOXY COATED CAST IRON FLOOR DRAIN WITH ANCHOR FLANGE, REVERSIBLE CLAMPING COLLAR WITH PRIMARY AND SECONDARY WEEPHOLES, POST-POUR ADJUSTABLE ROUND HEEL PROOF STAINLESS STEEL STRAINER WITH INTEGRATED BUBBLE LEVEL, LEVELING SHIMS, AND NO HUB (STANDARD) OUTLET
TP-1	TRAP PRIMER	–	–	–	–	WATTS LFTP300-DR PRESSURE DROP ACTIVATED LEAD FREE, BRASS TRAP PRIMER WITH EPDM SEALS, INTEGRAL AIR GAP, AND ½" SWEAT OR NPT THREADED CONNECTIONS. OPERATING PRESSURE 25 PSI-125 PSI. TESTED AND APPROVED IN CONFORMANCE WITH ASSE STANDARD 1018. SPECIFY MODEL LFTP300-DU-DR FOR DISTRIBUTION UNIT.
BF-1	BOTTLE FILLER	2"	1½"	½"	–	APPROVED BY OWNER/ARCHITECT.
WCO, FCO, COTG, CO	CLEAN OUTS	–	–	–	–	WALL CLEAN OUT: "WATTS" MODEL: CO-590-RD FLOOR CLEANOUT: "WATTS" MODEL: CO-200-RX MUST BE FLUSHED TO SURFACE. CLEAN OUT TO GRADE: "WATTS" MODEL: CO-1190-PR MUST BE FLUSHED TO SURFACE. CLEAN OUT: "WATTS" MODEL: CO6

NOTES:

ALL FIXTURES TO BE WHITE AND TRIM TO BE POLISHED CHROME FINISH UNLESS NOTED OTHERWISE.

PROVIDE BRASSCRAFT HEAVY PATTERN ANGLE STOPS FOR ALL FIXTURES IN PUBLIC AREAS AND BRASSCRAFT SPEEDWAY STOPS AT ALL OTHER LOCATIONS.

FIXTURES AND TRIM SHALL BE AS NOTED OR EQUAL, COMPLY WITH CALIFORNIA LEED PLUMBING CODE AND APPROVED BY OWNER.

ALL HANDICAP LAVATORIES & SINKS SUPPLY AND DRAIN PIPES SHALL BE INSULATED OR OTHERWISE BE CONFIGURED TO PROTECT AGAINST CONTACT. PROTECTORS, INSULATORS, OR BOTH SHALL COMPLY WITH ASME A112.18.9. 403.3

FIXTURES AND FITTINGS THAT ARE INTENDED TO DELIVER POTABLE WATER FOR HUMAN CONSUMPTION SHALL BE LEAD FREE.

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CALCULATIONS & SCHEDULES

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SHEET NOTES

1. EXISTING PLUMBING FIXTURES TO BE REMOVE AND DEMOLISHED.

1 P-2.1 OVERALL DEMOLITION PLAN
3/16" = 1'-0"

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OVERALL DEMOLITION PLAN

SAWPA
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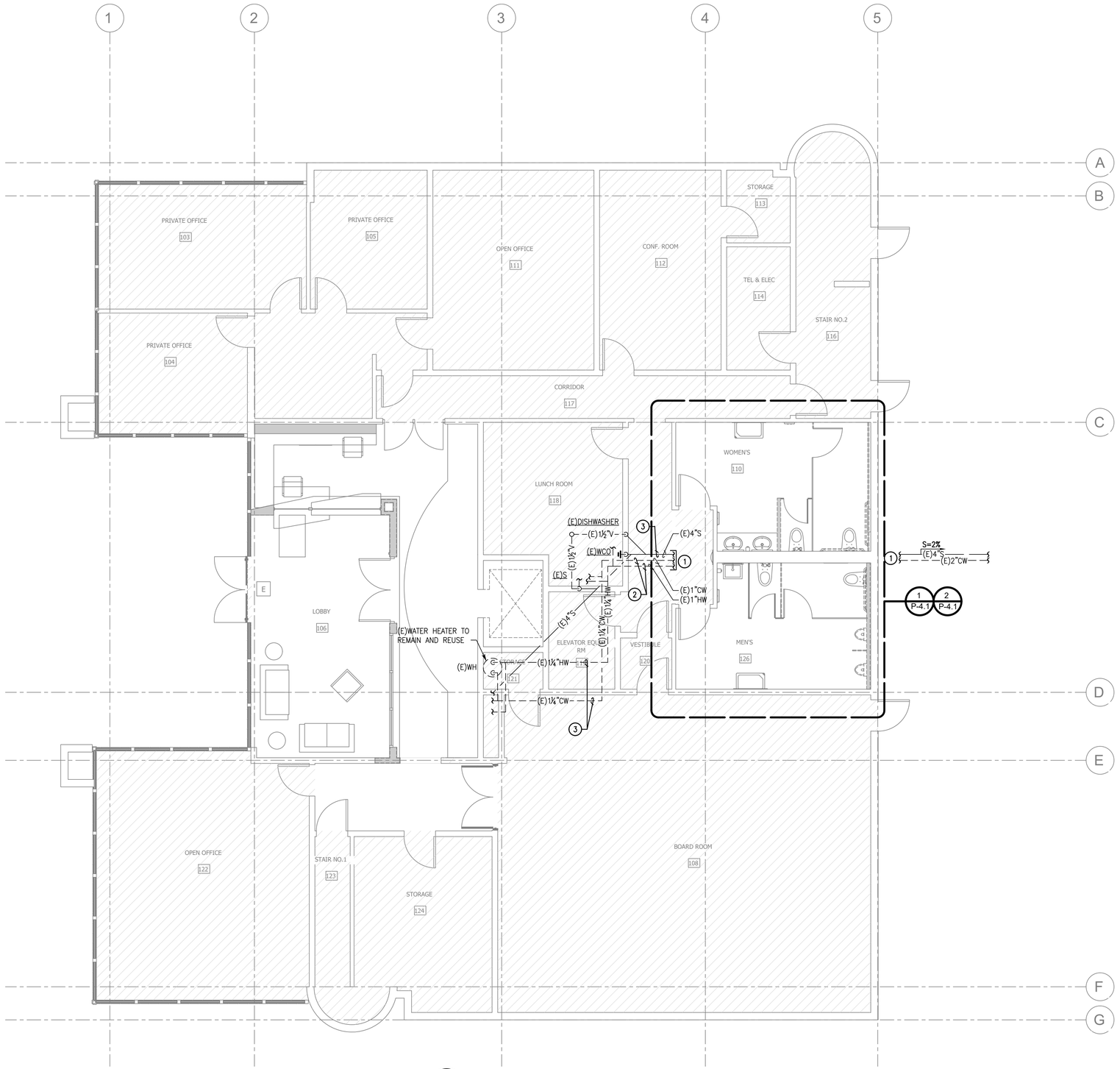
P-2.1



1 P-3.1 OVERALL PROPOSED PLAN
3/16" = 1'-0"

SHEET NOTES

1. SEE SHEET P4.1 FOR CONTINUATION.
2. PIPING BELOW GRADE.
3. PIPING AT HIGH LEVEL INSIDE CEILING SPACE.

GENERAL SHEET NOTES

1. DRAWINGS ARE ESSENTIALLY DIAGRAMMATIC AND ARE NOT INTENDED TO INDICATE NECESSARY OFFSETS OF PIPING, FITTING & APPURTENANCES THAT HAVE TO BE REMOVED, CAPPED OR REROUTED.
2. FOR CLARITY, NOT ALL EXISTING WORK IS SHOWN ON PLANS. CONTRACTOR SHALL FIELD VERIFY EXISTING UTILITIES, LOCATION, SIZE, INVERT ELEVATIONS, PRESSURE AND AVAILABILITY PRIOR TO START ON ANY WORK.
3. ALL WALL, FOOTING AND FLOOR PENETRATION SHALL BE CAULKED WITH FIRE PROOF IN AND APPROVED MANNER BY CALIFORNIA BUILDING CODE.
4. DEMOLISH/ REMOVE & PATCH EXISTING MATERIALS, ITEMS, OR FINISHES AS NECESSARY TO PERFORM NEW WORK WHERE INDICATED. PATCH EXISTING WALL/FLOOR TO MATCH ADJACENT MATERIALS/FINISHES.
5. ALL VENTS SHALL BE MIN. 10" AWAY FROM AC UNIT AIR INTAKE.
6. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATION OF PLUMBING FIXTURES.
7. ALL SEWER LINES RUN @ SLOPES LESS THAN 2% ARE SUBJECT TO FIELD APPROVAL OF PLUMBING INSPECTOR.
8. WASTE PIPE SIZES THAT ARE 3 INCHES OR SMALLER SHALL BE EVALUATED AT 2% SLOPE.

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OVERALL PROPOSED PLAN

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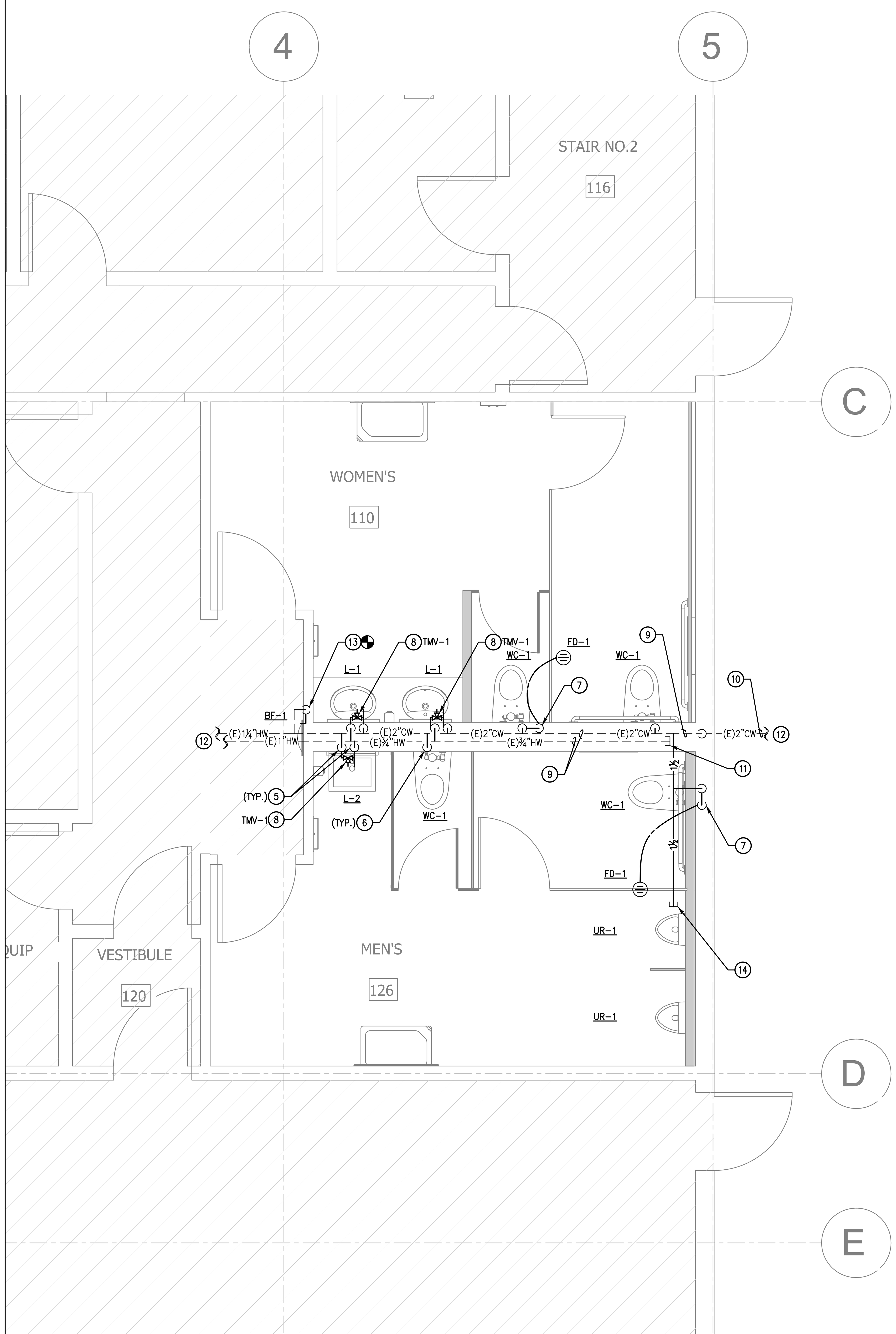
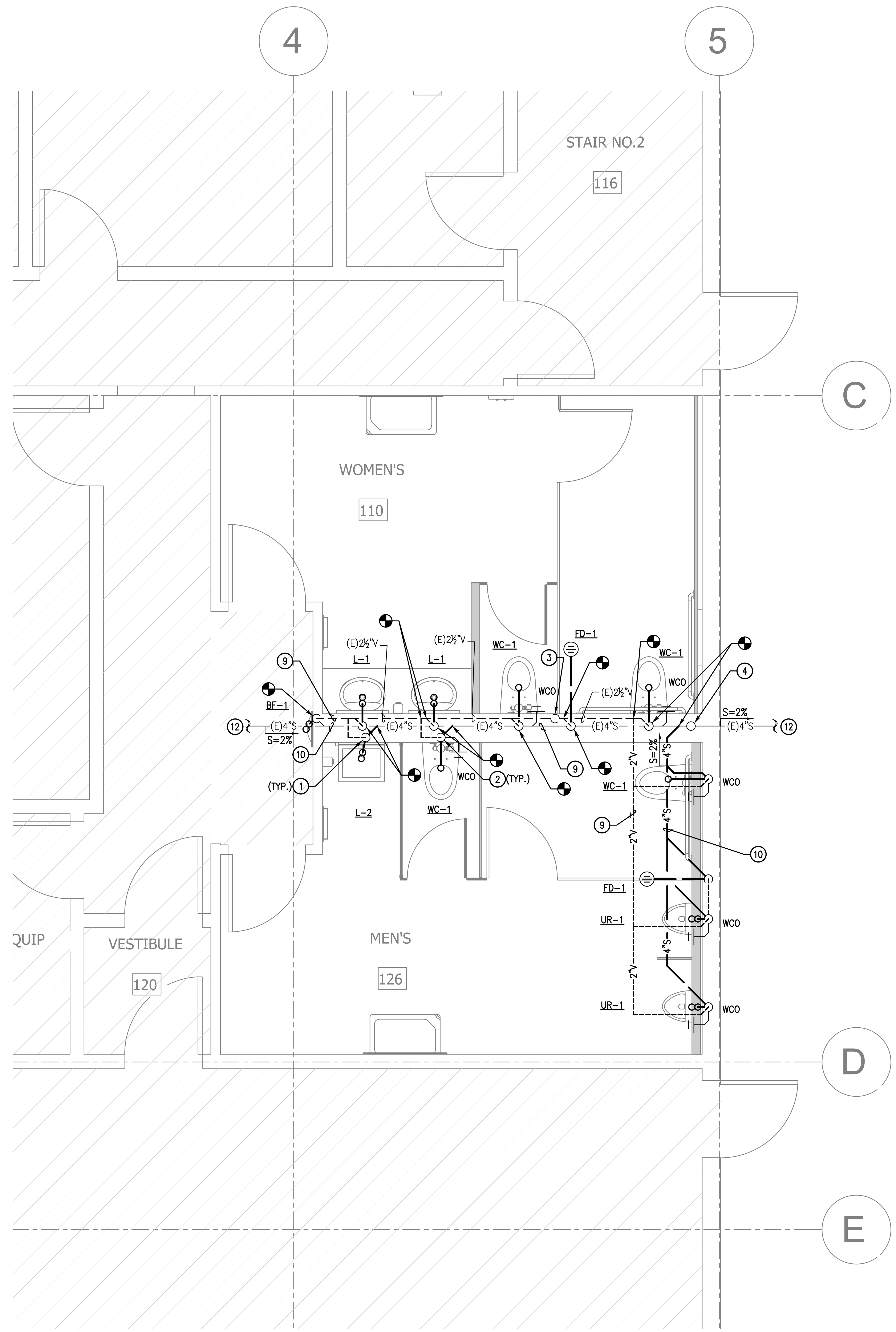


2
P-4.1
ENLARGED PROPOSED PLAN - RESTROOM HOT & COLD WATER
3/8" = 1'-0"



1
P-4.1
ENLARGED PROPOSED PLAN - RESTROOM WASTE & VENT
3/8" = 1'-0"

SHEET NOTES

1. 2" WASTE DOWN, 1½" VENT UP.
2. 4" WASTE DOWN, 2" VENT UP.
3. EXISTING 2½" VENT TO SECOND FLOOR ABOVE TO REMAIN AND REUSE.
4. EXISTING 4" WASTE FROM SECOND FLOOR ABOVE DOWN TO BELOW GRADE TO REMAIN AND REUSE.
5. ½" HOT & COLD WATER TO SUPPLY PLUMBING FIXTURES.
6. 1½" COLD WATER TO SUPPLY FLUSH VALVE WATER CLOSET.
7. ½" COLD WATER DOWN TO TRAP PRIMER. RUN ½" TRAP PRIMER LINE BELOW GRADE TO FLOOR DRAIN/FLOOR SINK TAILPIECE.
8. THERMOSTATIC MIXING VALVE BELOW LAVATORY COUNTER SET AT 120°F.
9. PIPING AT HIGH LEVEL INSIDE CEILING SPACE.
10. PIPING BELOW FLOOR/GRADE.
11. PROVIDE END CAP.
12. SEE SHEET P3.1 FOR CONTINUATION.
13. NEW BOTTLE FILLER TO CONNECT TO EXISTING ½" COLD WATER IN WALL.
14. 1½" COLD WATER STUB OUT AT HIGH LEVEL FOR FUTURE USE.

GENERAL SHEET NOTES

1. DRAWINGS ARE ESSENTIALLY DIAGRAMMATIC AND ARE NOT INTENDED TO INDICATE NECESSARY OFFSETS OF PIPING, FITTING & APPURTENANCES THAT HAVE TO BE REMOVED, CAPPED OR REROUTED.
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ENLARGED PROPOSED PLAN

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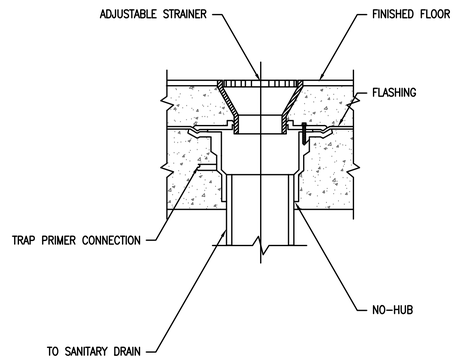
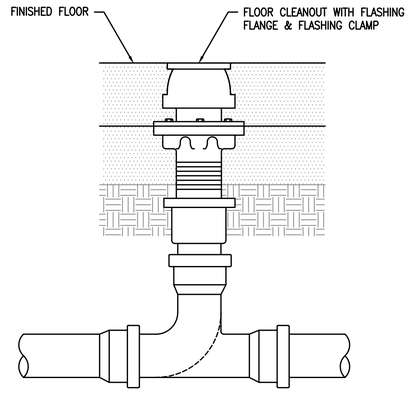
SANTA ANA WATERSHED PROJECT AUTHORITY

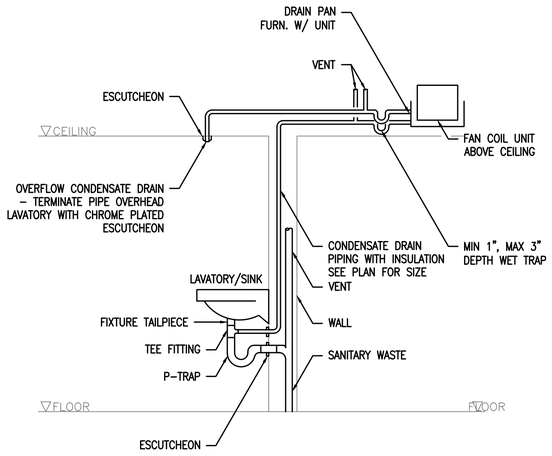
P-4.1



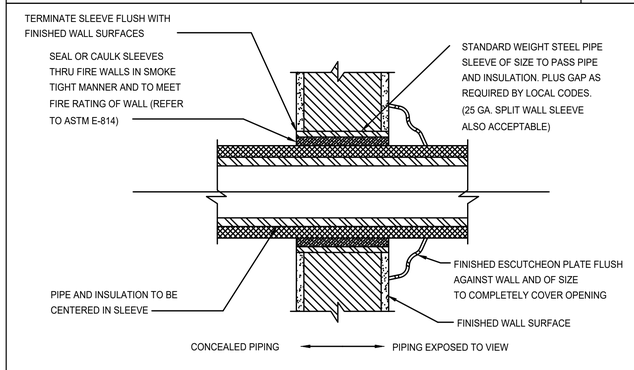
FLOOR DRAIN DETAIL 6
SCALE: NONE



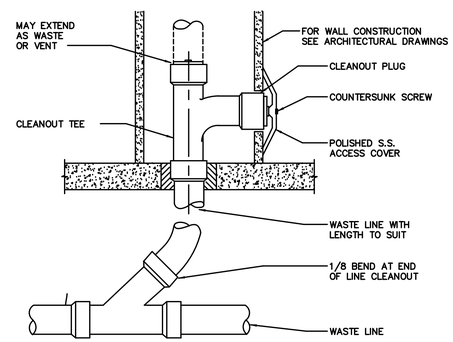
FLOOR CLEAN OUT 4
SCALE: NONE



CEILING MOUNTED CONDENSATE DRAIN DETAIL 2
SCALE: NONE



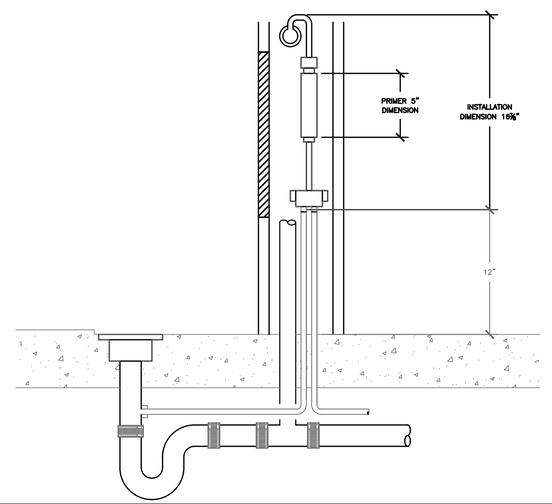
PIPING THRU WALL 5
SCALE: NONE



WALL CLEAN OUT 3
SCALE: NONE

GENERAL NOTES:

1. TRAP PRIMER VALVE SHOULD BE MOUNTED ONE FOOT ABOVE FINISHED FLOOR FOR EVERY 20 FEET OF PRIMER LINE.
2. PROVIDE MOUNTING BRACKETS AS REQUIRED.



TRAP PRIMER DETAIL 1
SCALE: NONE

REGISTERED PROFESSIONAL ENGINEER
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JOB NO.: 3903
DRAWN BY: HS
CHECKED BY: HS
SCALE: As indicated

PLUMBING DETAILS

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www.h2sengineers.com

P-5.0

PLUMBING HOT & COLD WATER RISER DIAGRAM 2
SCALE: NTS

PLUMBING WASTE & VENT RISER DIAGRAM 1
SCALE: NTS

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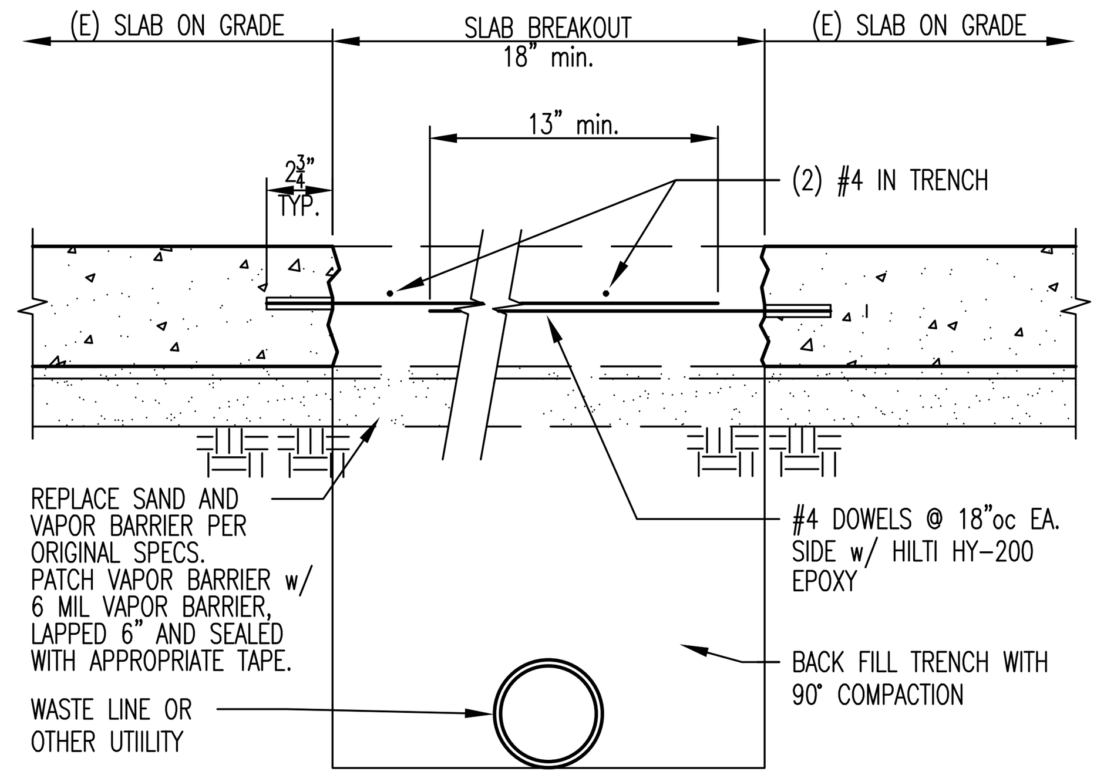
SCALE: As indicated

SAWPA
SANTA ANA WATERSHED PROJECT AUTHORITY

PLUMBING RISER DIAGRAM

P-6.0



SLAB REPLACEMENT at UTILITY TRENCH

1

1-2 230805

LIGHT GAUGE STEEL FRAMING

1. ALL STUDS AND TRACK DESIGNATIONS ARE BASED ON PRODUCTS MANUFACTURED BY THE CURRENT MEMBERS OF THE STEEL STUD MANUFACTURERS ASSOCIATION (SSMA)(ICC ESR-3064P/LARR 25529). ALTERNATES MAY BE SUBMITTED WHICH EQUAL OR EXCEED THE PROPERTIES OF THE SPECIFIED MEMBER WHEN APPROVED BY THE ENGINEER.
2. FRAMING SHALL BE MANUFACTURED FROM STEEL CONFORMING TO ASTM A1003 GRADE 33 TYPE H or GRADE 50.
3. ALL FRAMING SHALL BE GALVANIZED OR PAINTED CARBON SHEET STEEL. TOUCH UP ALL WELDS AND DAMAGED AREAS WITH APPROVED ZINC-RICH GALVANIZING TOUCH UP PAINT FOR GALVANIZED PRODUCTS, PAINT FOR CARBON SHEET PRODUCTS.
4. ALL CONNECTIONS SHALL BE WITH SELF DRILLING SCREWS OR WELDING. SCREWS OR WELDING SHALL BE OF SUFFICIENT SIZE TO INSURE STRENGTH OF THE CONNECTION. WELDING SHALL BE IN ACCORDANCE WITH (AWS) D1.3, STRUCTURAL WELDING CODE – SHEET STEEL. WELDS SHALL BE OF THE SIZE SHOWN ON THE DETAILS. UNLESS NOTED OTHERWISE, THE EFFECTIVE THROAT SIZE OF THE WELD NEED NOT EXCEED THE THICKNESS OF THE PARENT MATERIAL. IN NO CASE SHALL WELDS BE LESS THAN 1/16".
5. FABRICATION AND ERECTION SHALL BE IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
6. SSMA PRODUCT INDENTIFICATION CODE ARE DEFINED AS FOLLOWS:

   DDD S WWW-TTT (EX: 600S162-54 = 6"x1 5/8" STUD, 54 MILS)

DDD = MEMBER DEPTH	350 = 3 1/2"
	362 = 3 5/8"
	400 = 4"
	550 = 5 1/2"
	600 = 6"
	800 = 8"
	1000 = 10"
	1200 = 12"
S = STYLE	S = STUD OR JOIST
	T = TRACK
WWW = MEMBER WIDTH	125 = 1 1/4"
	137 = 1 3/8"
	162 = 1 5/8"
	200 = 2"
	250 = 2 1/2"

7. METAL FRAMING CONNECTORS SHALL BE THOSE MANUFACTURED BY SIMPSON STRONG-TIE, AS SPECIFIED ON PLANS. CONNECTORS BY MANUFACTURERS OTHER THAN SIMPSON MAY BE USED PROVIDED:
   a) CONNECTORS MEET OR EXCEED THE CAPACITY OF THE SPECIFIED SIMPSON COUNTERPARTS
   b) CONNECTORS ARE APPROVED FOR USE IN A CURRENT ICBO EVALUATION REPORT VERIFICATION THAT CAPACITY OF HARDWARE BY ALTERNATE MANUFACTURERS MEETS OR EXCEEDS CAPACITY OF SPECIFIED SIMPSON HARDWARE SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. FASTENERS FOR ALL CONNECTORS SHALL BE AS SPECIFIED BY THE MANUFACTURER FOR FULL CAPACITY OF THE HARDWARE.
7. UNLESS NOTED OTHERWISE, 54-mil, 68-mil AND 97-mil STEEL MEMBERS SHALL BE 50 KSI. ALL OTHER LIGHT GAUGE STEEL MEMBERS SHALL BE 33 KSI.
8. SCREWS USED FOR STEEL ATTACHMENTS SHALL BE ONE OF THE FOLLOWING:
   a) GRABBER SELF-DRILLING SCREWS, JOHN WAGNER ASSOCIATES, INC. GRABBER DIVISION, CONCORD, CA (ICBO #ER-5280/LARR #25509))
   b) DARTS SCREWS, COMPASS INTERNATIONAL, INC., ANAHEIM, CA (ICBO #ER-5202 / LARR #25294) ALTERNATIVES MAY BE USED PROVIDED THAT THE SCREWS ARE APPROVED FOR USE IN A CURRENT CITY OF LA RESEARCH REPORT AND THE SCREW CAPACITIES MEET OR EXCEED THE VALUES LISTED BY THE SSMA.
9. OPENINGS IN STUD/JOIST WEBS OTHER THAN THE STANDARD HOLES PUNCHED BY THE MANUFACTURER ARE PROHIBITED UNLESS SPECIFICALLY DESIGNED AND DETAILED BY THE ENGINEER.
10. WELDING OF LIGHT GAUGE STEEL MUST BE PERFORMED BY A WELDER CERTIFIED FOR LIGHT GAUGE WELDING. ALL FIELD WELDING SHALL HAVE INSPECTION BY A REGISTERED DEPUTY INSPECTOR.
11. ALL FRAMING COMPONENTS SHOULD BE CUT SQUARELY FOR ATTACHMENT TO PERPENDICULAR MEMBERS OR AS REQUIRED FOR ANY ANGULAR FIT AGAINST AN ABUTTING MEMBER.
12. SCREW SHALL BE SUFFICIENT LENGTH TO ENSURE PENETRATION INTO STEEL STUD BY AT LEAST 3 FULL DIAMETER THREADS.

TESTS AND INSPECTIONS

1. INSPECTION BY A REGISTERED DEPUTY INSPECTOR IS REQUIRED FOR THE MATERIALS LISTED BELOW. THE EXTENT OF SUCH INSPECTION SHALL CONFORM TO SECTION 1704 OF THE INTERNATIONAL BUILDING CODE.
2. AN AFFIDAVIT SHALL BE ISSUED TO THE ARCHITECT/ENGINEER AND THE BUILDING DEPARTMENT AT THE COMPLETION OF EACH TYPE OF WORK STATING WHETHER THE WORK WAS IN CONFORMANCE WITH THE APPROVED PLANS AND SPECIFICATIONS.
3. CONTRACTOR IS RESPONSIBLE FOR OBTAINING REQUIRED DEPUTY INSPECTIONS. DEPUTY INSPECTORS SHALL BE APPROVED BY THE OWNER.

SPECIAL INSPECTIONS
(only checked items are required)

MATERIAL	INSPECTION TYPE		NOTES
	CONTINUOUS	PERIODIC	
STRUCTURAL STEEL - Section 1705.2			
Structural Steel Material		☒	c
Weld Filler Material		☒	d
Welding - Groove Welds	☒		
Welding - Single Pass Fillet Welds less than or equal to 5/16"		☒	
Welding - All other fillet welds	☒		
Reinforcing Steel (rebar)		☒	e
Steel Frame Joint Details		☒	
High Strength Bolting		☒	f

NOTES:
c. VERIFY MATERIAL VIA IDENTIFICATION MARKINGS & MILL TEST REPORTS.
d. VERIFY MATERIAL VIA IDENTIFICATION MARKINGS & MANUFACTURER'S CERTIFICATION OF COMPLIANCE.
e. VERIFY WELDABILITY OF REINFORCEMENT OTHER THAN ASTM A706 BARS.
f. INSPECTION OF HIGH STRENGTH BOLTS IN SNUG-TIGHT CONNECTIONS IN ACCORDANCE WITH AISC 360, SECTION M2.5.

GENERAL

1. ALL CONSTRUCTION AND WORKMANSHIP SHALL CONFORM TO THE 2022 CALIFORNIA BUILDING CODE (CBC).
2. THESE NOTES SHALL BE USED IN CONJUNCTION WITH THE PLANS AND ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AND THE ENGINEER.
3. CONTRACTOR MUST CHECK DIMENSIONS, FRAMING CONDITIONS, AND SITE CONDITIONS BEFORE STARTING WORK. ARCHITECT AND THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY OF ANY DISCREPANCIES OR POSSIBLE DEFICIENCIES.
4. CONDITIONS NOT SPECIFICALLY DETAILED SHALL BE CONSTRUCTED AS SPECIFIED IN TYPICAL DETAILS FOR THE RESPECTIVE MATERIALS.
5. THE DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE. ALL BRACING, TEMPORARY SUPPORTS, SHORING, ETC. IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR. OBSERVATION VISITS TO THE JOB SITE BY THE ARCHITECT AND THE ENGINEER DO NOT INCLUDE INSPECTION OF CONSTRUCTION PROCEDURES. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR ALL CONSTRUCTION METHODS AND FOR SAFETY CONDITIONS AT THE WORKSITE. THESE VISITS SHALL NOT BE CONSTRUED AS CONTINUOUS AND DETAILED INSPECTIONS.
6. DESIGN, MATERIALS, EQUIPMENT, AND PRODUCTS OTHER THAN THOSE DESCRIBED BELOW OR INDICATED ON THE DRAWINGS MAY BE CONSIDERED FOR USE, PROVIDED PRIOR APPROVAL IS OBTAINED FROM THE OWNER, ARCHITECT, THE ENGINEER, AND THE APPLICABLE GOVERNING CODE AUTHORITY.

DESIGN CRITERIA

WIND ANALYSIS (N/A, INTERIOR STRUCTURE)
WIND EXPOSURE: 'C'
WIND SPEED: '96 MPH' , 3 SEC. GUST K_{zt}= 1.0
K_z= .85
RISK CATEGORY: II

SEISMIC PARAMETERS
SITE CLASS: 'D'
SEISMIC DESIGN CATEGORY: 'D'
RISK CATEGORY: II
SEISMIC IMPORTANCE FACTOR: 1.0

F_a	= 1.2	F_v	= 1.7
S_S	= 1.5	S_1	= 0.6
S_{DS}	= 1.2	S_{D1}	= 0.68

BUILDING DESIGN LOADS

INTERIOR PARTITION LOADING:
F_{DL} = 5 PSF
INTERIOR LATERAL LOADING = 5 PSF

REINFORCING STEEL

1. REINFORCING STEEL SHALL CONFORM TO ASTM A615 OR A706, GRADE 40 FOR SIZES #3 AND GRADE 60 FOR SIZES #4 AND LARGER.
2. WELDING OF REINFORCING STEEL SHALL CONFORM TO AWS D1.4-11 USING PROPER LOW HYDROGEN ELECTRODES. ALL BARS TO BE WELDED SHALL CONFORM TO ASTM A706.
3. ALL BARS IN MASONRY SHALL BE LAPPED A MINIMUM OF 40 BAR DIAMETERS (2'-0" min.) AT ALL SPLICES UNLESS NOTED OTHERWISE.
4. ALL BARS IN CONCRETE SHALL BE LAPPED PER THE LAP SPLICE SCHEDULE AT ALL SPLICES UNLESS NOTED OTHERWISE.
5. SPLICES OF HORIZONTAL REBAR IN WALLS AND FOOTINGS SHALL BE STAGGERED 4'-0" MINIMUM.
6. DOWELS FOR WALLS AND COLUMNS SHALL BE THE SAME SIZE AND SPACING AS THE WALL/COLUMN REINFORCING UNLESS NOTED OTHERWISE.
7. ALL BENDING OF REINFORCING STEEL SHALL CONFORM TO THE LATEST EDITION OF THE CALIFORNIA BUILDING CODE.

CONCRETE –

1. ALL CONCRETE SHALL ATTAIN A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS.
2. AGGREGATES SHALL BE NATURAL SAND AND ROCK CONFORMING TO ASTM C33.
3. CEMENT SHALL BE PORTLAND CEMENT CONFORMING TO ASTM C-150, TYPE I OR II, LOW ALKALI, OR AS REQUIRED TO SATISFY SITE SOIL CONDITIONS AS DETERMINED BY THE PROJECT SOILS ENGINEER. FOR SLAB-ON-GRADE MINIMUM WATER CEMENT RATIO TO BE 0.50.
4. THE FOLLOWING MINIMUM CLEAR DISTANCES BETWEEN REINFORCING STEEL AND FACE OF CONCRETE SHALL BE MAINTAINED UNLESS NOTED OTHERWISE:

   SLABS ON GRADE — CENTER OF SLAB

5. REFER TO ARCHITECTURAL DRAWINGS FOR REVEALS, AREAS OF TEXTURED CONCRETE OR SPECIAL FINISHES, ITEMS REQUIRED TO BE CAST INTO THE CONCRETE, CURBS AND SLAB DEPRESSIONS.

STRUCTURAL STEEL

1. ALL FABRICATION AND ERECTION SHALL CONFORM TO THE LATEST EDITION OF THE AISC MANUAL OF STEEL CONSTRUCTION.
2. ALL WELDING SHALL BE DONE BY CERTIFIED WELDERS. ALL FIELD WELDING SHALL HAVE CONTINUOUS INSPECTION BY A REGISTERED DEPUTY INSPECTOR.
3. ALL FULL PENETRATION GROOVE WELDS SHALL BE ULTRASONICALLY TESTED (UT) FOR THE EXTENT REQUIRED PER THE CURRENT EDITION OF THE CALIFORNIA BUILDING CODE.
4. PLATE SHALL CONFORM TO ASTM A992, GRADE 50.
   ALL SQUARE AND RECTANGULAR HSS SECTIONS SHALL CONFORM TO ASTM A1085 or ASTM A500. GRADE 'C' (50 KSI)
   ALL ROUND HSS SECTIONS SHALL CONFORM TO ASTM A1085 or ASTM A500, GRADE 'C' (46 KSI)
   ALL OTHER STRUCTURAL STEEL SHALL CONFORM TO ASTM A36.
5. ANCHOR BOLTS SHALL CONFORM TO ASTM F1554 GRADE 36 UNLESS NOTED OTHERWISE ON THE PLANS OR DETAILS. HEADED STUD ANCHORS CONFORM TO ASTM A108 UNLESS NOTED OTHERWISE ON PLANS OR DETAILS
6. STEEL TO STEEL BOLTED CONNECTIONS SHALL BE WITH ASTM A325N BOLTS U.N.O. UNFINISHED BOLTS SHALL CONFORM TO ASTM A307 GRADE A UNLESS NOTED OTHERWISE ON THE PLANS OR DETAILS. THREADED ROD SHALL CONFORM TO ASTM A36 UNLESS NOTED OTHERWISE ON THE PLANS OR DETAILS.
7. ALL WELDING ELECTRODES SHALL CONFORM TO AWS E70XX.
8. UNLESS SPECIFICALLY DETAILED, NO STRUCTURAL STEEL MEMBER SHALL BE DRILLED, CUT OR MODIFIED IN ANY WAY WITHOUT THE PRIOR WRITTEN CONSENT OF THE STRUCTURAL ENGINEER. BOLT HOLES, WHEN PERMITTED, SHALL BE DRILLED A MAXIMUM OF 1/16" OVER THE DIAMETER OF THE THREADED FASTENER; FLAME CUTTING IS NOT PERMITTED.
9. THE FABRICATOR AND ERECTOR SHALL REVIEW THE CONTRACT DOCUMENTS PRIOR TO PRODUCING SHOP DRAWINGS. IF ANY CONFLICTS ARE FOUND AGAINST THE REQUIREMENTS OF ANY SAFETY REGULATIONS, THE FABRICATOR SHALL NOTIFY THE STRUCTURAL ENGINEER PRIOR TO PRODUCING SHOP DRAWINGS.

REGISTERED PROFESSIONAL ENGINEER
RICHARD A. SUZUKI
No. 4971
Exp. 9/30/2022
STRUCTURAL
STATE OF CALIFORNIA

DATE SIGNED: 8/8/2023

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LICENSED ARCHITECT
LONGKAVACH PANICHAPAN
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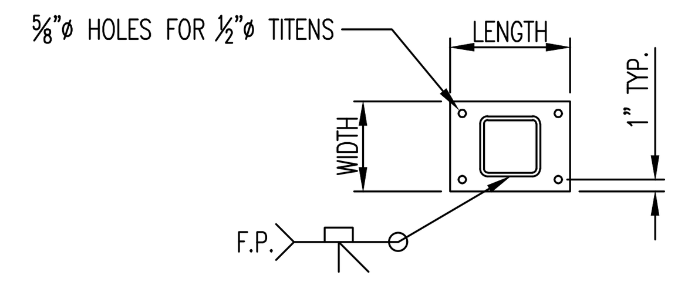
90% PROGRESS

DATE: 07/31/2023
JOB NO.: 3903/DC23115
DRAWN BY: DCSE
CHECKED BY: RS
SCALE: AS NOTED

STRUCTURAL GENERAL NOTES
SANTA ANA WATERSHED PROJECT AUTHORITY

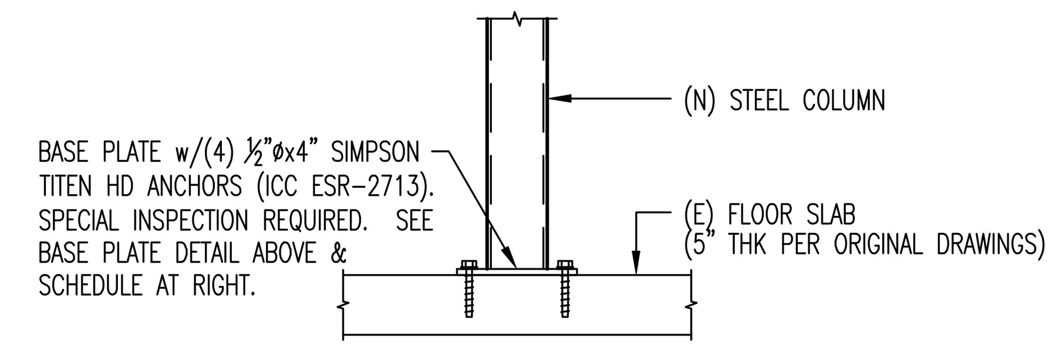
SN-1



BASE PLATE DETAIL

BASE PLATE SCHEDULE

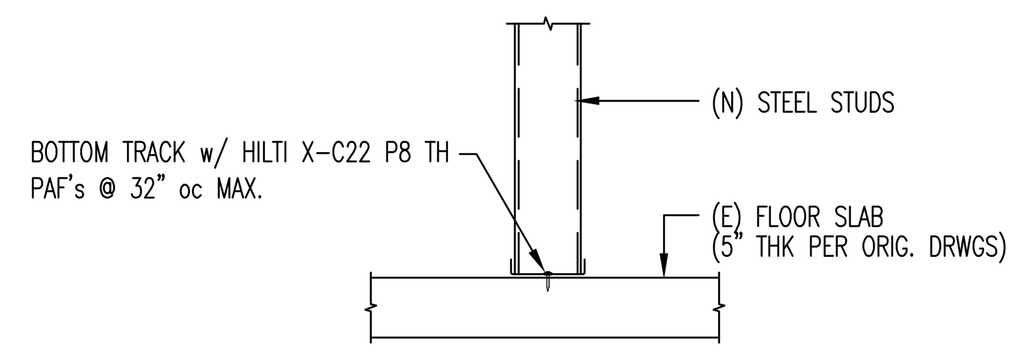
COLUMN	WIDTH	HEIGHT	THK.
HSS 5x5	7½"	10"	½"
HSS 2x2	6"	6"	⅜'



COLUMN BASE

1

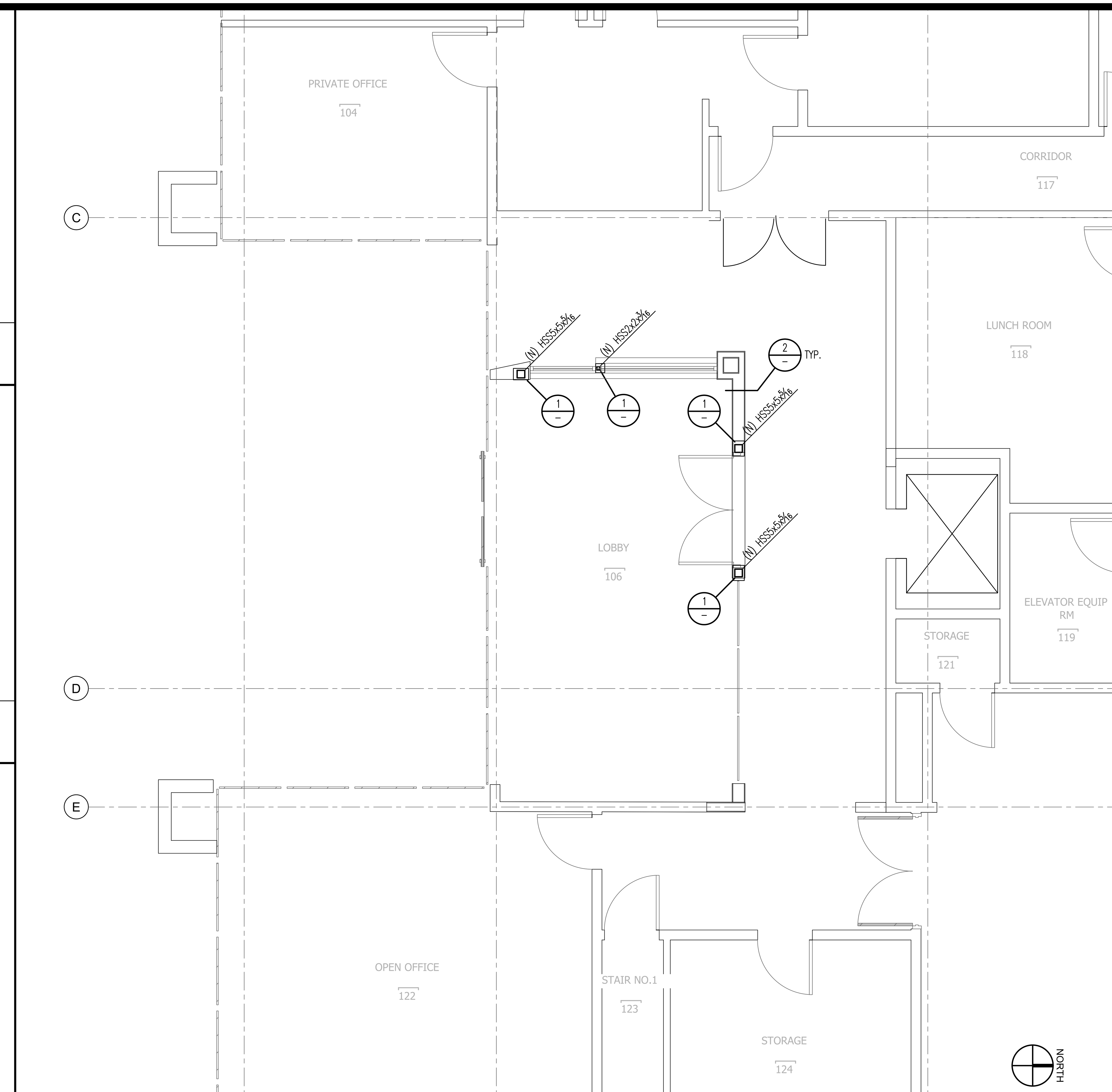
1-1 230805



WALL TO SLAB

2

1-2 230805



PARTIAL SLAB PLAN

1/4"=1'-0" 01

REGISTERED PROFESSIONAL ENGINEER
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90% PROGRESS

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DRAWN BY: DCSE
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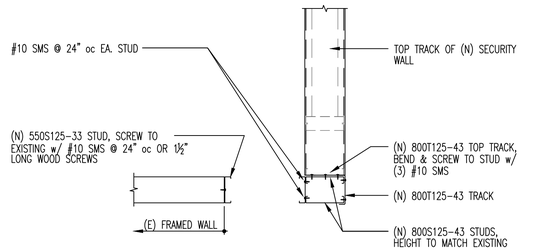
SCALE: AS NOTED

CLUBHOUSE FRAMING PLAN

SANTA ANA WATERSHED PROJECT AUTHORITY

S1.0

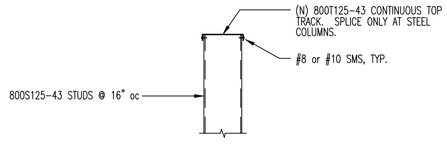


PLAN VIEW

TOP OF WALL

5

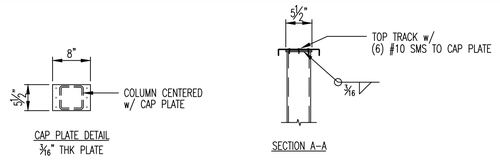
2-2 230806



TOP OF WALL

1

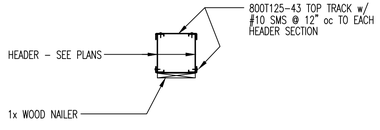
2-1 230806



TOP OF COLUMN

2

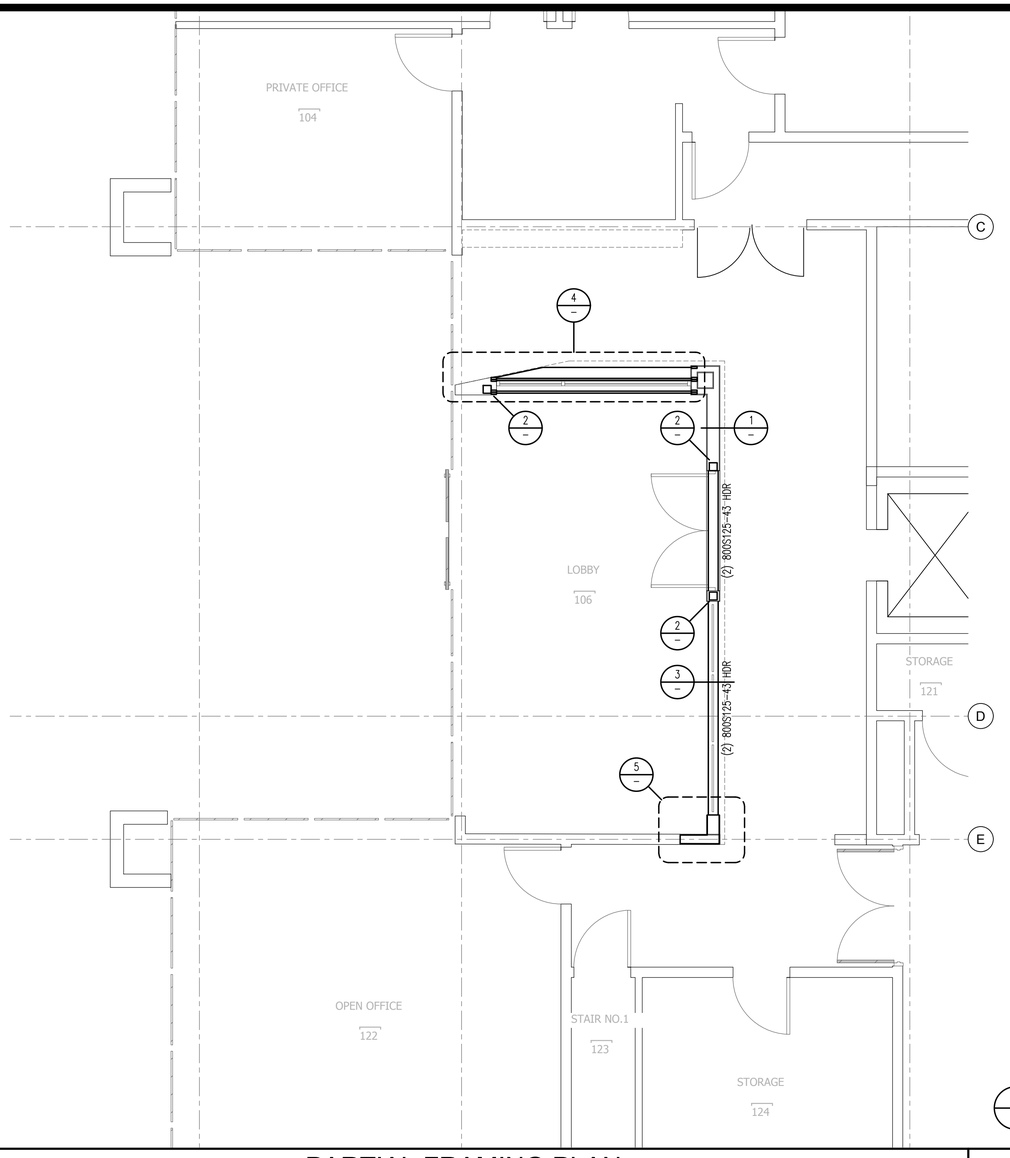
2-2 230806



HEADER

3

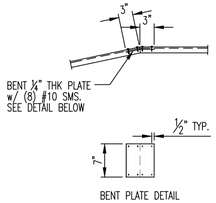
2-3 230807



PARTIAL FRAMING PLAN

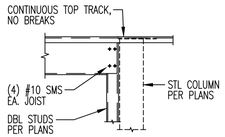
1/4"=1'-0"

01



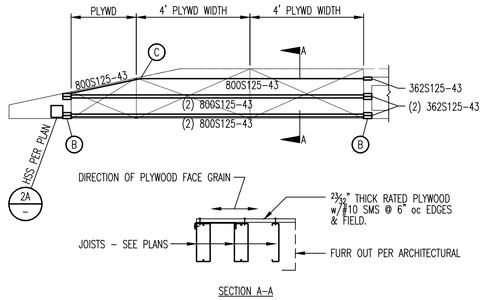
C

JOIST SPLICE



B

JOIST TO STUDS



SECTION A-A

TOP OF WALL

4

4 230807

FRAMING NOTES

1. SEE SHEETS SN-1 FOR GENERAL NOTES
2. SECURITY WALL STUDS: 800S125-43 @ 16" oc U.N.O.
   OTHER WALL STUDS: 550S125-33 @ 16" oc UN.O.
3. TOP TRACK GAUGE TO MATCH STUDS U.N.O.

REGISTERED PROFESSIONAL ENGINEER
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Exp. 9/30/2023
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90% PROGRESS

DATE:	07/31/2023
JOB NO.:	3903/DC23115
DRAWN BY:	DCSE
CHECKED BY:	RS
SCALE:	AS NOTED

CLUBHOUSE FRAMING PLAN

SANTA ANA WATERSHED PROJECT AUTHORITY

S2.0

ENTRANCE IMPROVEMENT PLAN

1 [ ] All grading shall conform to the Riverside Municipal Code, Title 17 and the current City adopted edition of the California Building Code.

2 [ ] All provisions of the preliminary soils report prepared by ____N/A____________________, dated ____________N/A________ shall be complied with during grading operations. City Business Tax Certif. No. ____N/A_____, Exp. Date ___N/A_____.

3 [ ] This plan is for grading purposes only and is not to be used for the purpose of constructing on-site or off-site improvements. Issuance of a permit based on this plan does not constitute approval of driveway locations or sizes, parking lot structural sections or layout, ADA-related requirements, building locations or foundations, walls, curbing, off-site drainage facilities or other items not related directly to the basic grading operation. On-site improvements shall be constructed from approved building permit plans. Off-site improvements shall be constructed from plans approved for this purpose by the Public Works Department.

4 [ ] Certification from the registered (civil engineer/architect/landscape architect) stating that the grading has been completed per the approved plan, and a compaction report from the soil engineer for fill areas are required prior to building permits being issued.

5 [ ] Contractor is responsible for erosion, dust and temporary drainage control during grading operations.

a. All manufactured slopes in excess of 5 feet in vertical height are to be protected from erosion during rough grading operations and, thereafter, until installation of final groundcover. (See landscape plans for final groundcover).

b. All slope protection swales to be constructed at the same time as banks are graded.

c. The developer and his contractor are responsible for implementation and maintenance of the erosion control measures shown on this plan and SWPPP and also to provide any additional erosion control measures (e.g., hydroseeding, mulching of straw, gravel-bagging, diversion ditches, retention basins, etc.) dictated by field conditions to prevent erosion and/or the introduction of dirt, mud or debris into existing public streets and/or onto adjacent properties during any phase of construction operations. Special attention shall be given to additional erosion control measures noted above during the period October 1 to May 31.

d. After a rainstorm, all silt and debris shall be removed from check berms and check dams. Silt and debris shall be removed from City of Riverside streets. This requirement shall remain in effect until city acceptance of this project.

6 [ ] Any on-site retaining walls shown on this plan that are under 3 feet in height and support a surcharge or that are over 3 feet in height require separate review, approval and a building permit from the Building and Safety Division, Community Development Department. Any necessary retaining walls on the perimeter of this site shall be in place and approved by the building inspector prior to issuance of the grading permit. Approved sequenced grading with 1 1/2:1 maximum slopes to within 2 feet of the adjacent property line may be acceptable to allow for issuance of a grading permit prior to completion of any necessary perimeter retaining walls. (If no retaining walls are shown on the plan, do not put this note on plan.)

7 [ ] Any improvements constructed in the public right-of-way will require a separate construction permit and inspection from the Public Works Department.

8 [ ] Any walls, fences, structures and/or appurtenances adjacent to this project are to be protected in place. If grading operations damage or adversely affect said items in any way, the contractor and/or developer is responsible for working out an acceptable solution to the satisfaction of the affected property owner(s).

9 [ ] The contractor/developer is responsible for ensuring that retaining walls do not interfere with provision of utilities.

10 [ ] It is the grading contractor's responsibility to ensure that adequate compaction has been attained on the entire grading site, including fill areas outside the building pads and on all fill slopes.

11 [ ] It is the soil engineer's responsibility to observe and perform compaction tests during the grading to evaluate the preparation of the natural ground surface to receive the fill and the compaction attained in the fill, including fill areas outside the building pads and on all fill slopes.

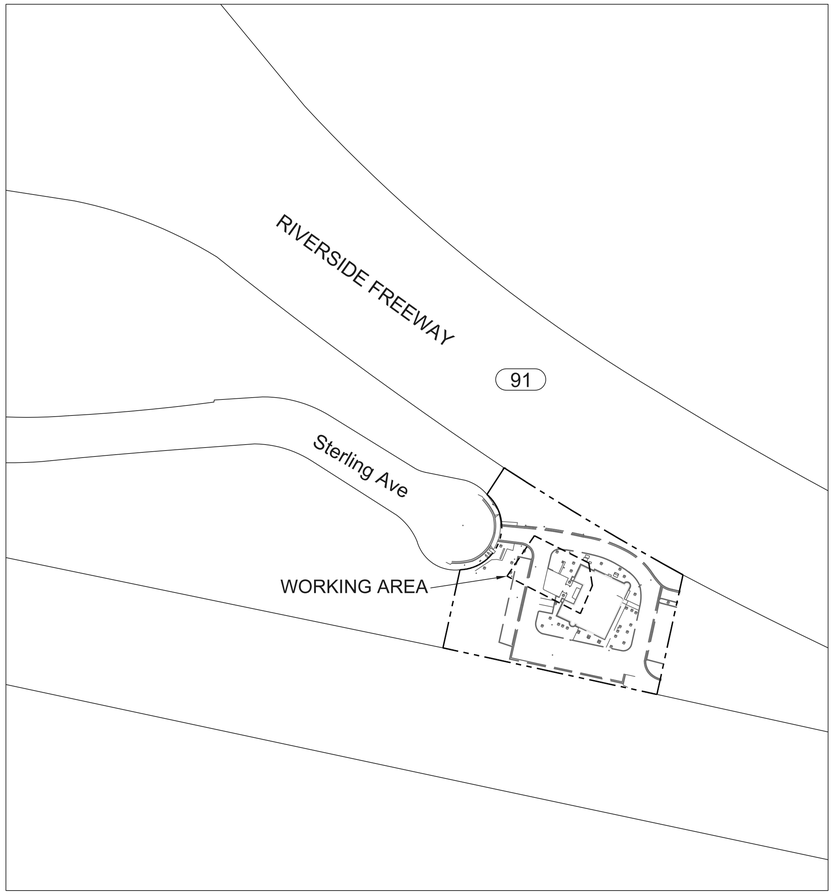
12 [ ] Earthwork quantities are shown for grading permit purposes only, and the City of Riverside is not responsible for their accuracy.

13 [ ] For grading of areas of 1 acre or more, a Storm Water Pollution Prevention Plan (SWPPP) shall be kept on-site and made available upon request of a representative of the Regional Water Quality Control Board (RWQCB) - Santa Ana Region and/or the City of Riverside.

14 [ ] Grading operations shall be limited to between the hours of 7 a.m. and 7 p.m. on weekdays and between 8 a.m. and 5 p.m. on Saturdays. No grading will be permitted on Sunday or federal holidays. (Riverside Municipal Code, 7.35.010, Ordinance No. 6273)

CONSTRUCTION NOTES:

① CONSTRUCT MAX 24"-HIGH PLANTER WALL, SEE SHEET 3 FOR DETAILS
② CONSTRUCT 12"-CONCRETE CURB PER SPPWC STD PLAN 120-2, SEE SHEET 3 FOR DETAILS
③ INSTALL TRUNCATED DOMES, SEE SHEET 3 FOR DETAILS
④ CONSTRUCT 4"-PCC PAVEMENT, SEE SHEET 3 FOR DETAILS



KEY MAP

SCALE: 1"=100'

VICINITY MAP

NO SCALE

ABBREVIATIONS:

AC	Asphalt Concrete
C/B	Catch Basin
CBW	Concrete Block Wall
CL	Center Line
CLF	Chain Link Fence
CONC.	Concrete
D/A	Driveway Appron
EP	Edison Pole
EX.	Existing
FF	Finished Floor Elevation
FG	Finished Grade
FH	Fire Hydrant
FL	Flow Line Elevation
FS	Finished Surface
GV	Gas Valve
HP	High Point
INV.	Invert Elevation
MIN.	Minimum
NTS	Not To Scale
PCC	Portland Cement Concrete
P/L	Property Boundary Line
PM	Parking Meter
PVMT.	Pavement
RW	Retaining Wall
SMH	Sewer Manhole
S/W	Sidewalk
STA	Station
STD	Standard
SHT	Sheet
TBR	To Be Removed
TC	Top of Curb Elevation
TG	Top of Grate Elevation
TW	Top of Wall Elevation
Hr	Retaining Height
Hv	Height of Retaining Wall
WF	Wooden Fence
WM	Water Meter

LEGEND:

(100.25)	.... Existing Elevation
— — 101 — —	.... Ex. Ground Contour Line
----o----o----	.... Chain Linked Fence
⌐	...... Ex. Structure
o—☼	.... Street Light
—S—	.... Sewer Line
—w—	.... Water Line
10"	.... Ex. Tree, Diameter
➜ ➜	...... ADA Path of Travel

Earthwork Quantities:

Cut__4_____(cy), Fill including 15%shrinkage___8_____(cy)
Total Cut and Fill ____12_______ (cy)
Import___4______(cy)

CUT AND FILL AMOUNT IS ESTIMATED ONLY. ACTUALLY AMOUNT MAY VARY DUE TO OTHER UNKNOWN FACTORS. (SITE CONDITION, SOIL ENGINEER' S RECOMMENDATION)

SCOPE OF WORK:

- RECONSTRUCT PAVEMENT SLOPE TO MEET ADA REQUIREMENTS INCLUDING ADD ADA RAMP

SHEET INDEX

811 Know what's below. Call before you dig.

BENCHMARK

B.M. No. E2-J3
Elevation (ft) : (696.956)
Location Description : P.K. Nail and City Engineer Tag in the Northwesterly curb return of Magnolia Av. and Pierce St.

PLANS PREPARED UNDER THE SUPERVISION OF:
07/23/2024
GUAN WANG, P.E.79702

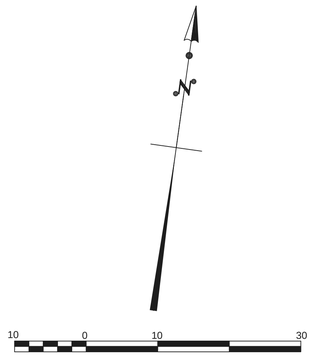
GUAN WANG
No. 79702
EXP. 09-30-24

TRITECH ENGINEERING GROUP

SUBDIVISION
LAND SURVEY
CIVIL ENGINEERING
& DESIGN

135 N. SAN GABRIEL BLVD.
SAN GABRIEL, CA 91775
TEL: (626) 570-1918
EMAIL: info@tritechengineer.com

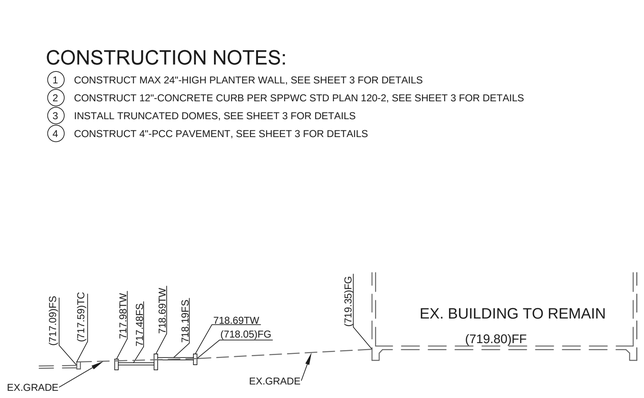
ENTRANCE IMPROVEMENT PLAN
SCALE: 1"=20'
DATE: 07/23/2024
APN# : 132-020-049
DRAWN BY: SMITH
REVISED:
11615 Sterling Ave.
Riverside, CA 92503
SHEET 1 OF 4
JOB NO.
220612



SCALE 1" = 10'

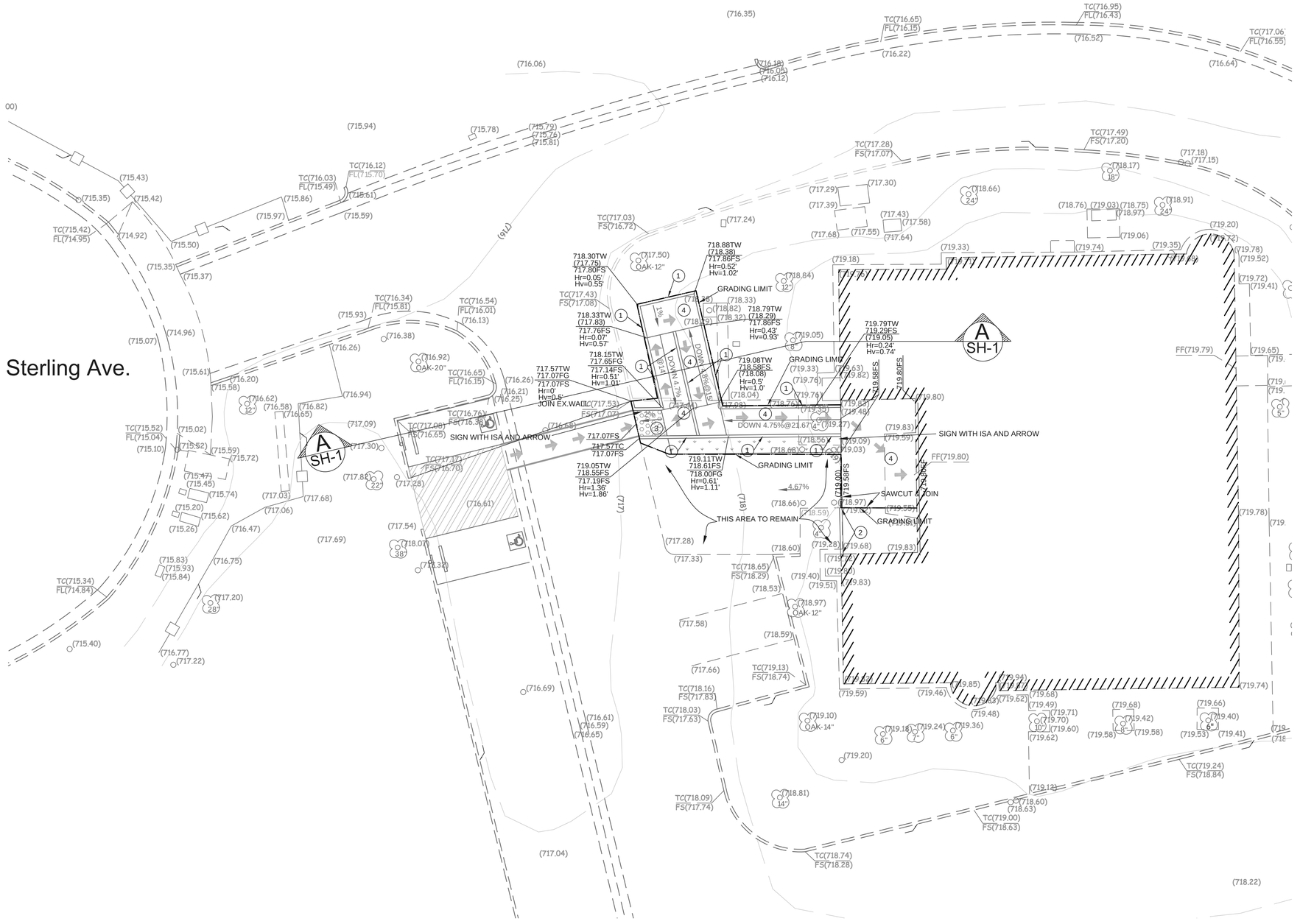
CONSTRUCTION NOTES:

1. CONSTRUCT MAX 24"-HIGH PLANTER WALL, SEE SHEET 3 FOR DETAILS
2. CONSTRUCT 12"-CONCRETE CURB PER SPPWC STD PLAN 120-2, SEE SHEET 3 FOR DETAILS
3. INSTALL TRUNCATED DOMES, SEE SHEET 3 FOR DETAILS
4. CONSTRUCT 4"-PCC PAVEMENT, SEE SHEET 3 FOR DETAILS



SECTION A

SCALE: 1"=10'



BENCHMARK

B.M. No. E2-J3
Elevation (ft) : (696.956)
Location Description : P.K. Nail and City Engineer Tag in the Northwesterly curb return of Magnolia Av. and Pierce St.

PLANS PREPARED UNDER THE SUPERVISION OF:

GUAN WANG, P.E.79702 — 07/23/2024

REGISTERED PROFESSIONAL ENGINEER — GUAN WANG — No. 79702 EXP. 09-30-24 CIVIL — STATE OF CALIFORNIA

TRITECH ENGINEERING GROUP

SUBDIVISION
LAND SURVEY
CIVIL ENGINEERING
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ENTRANCE IMPROVEMENT PLAN

SCALE: 1"=20'	APN# : 132-020-049	DRAWN BY: SMITH
DATE: 07/23/2024		REVISED:

11615 Sterling Ave.
Riverside, CA 92503

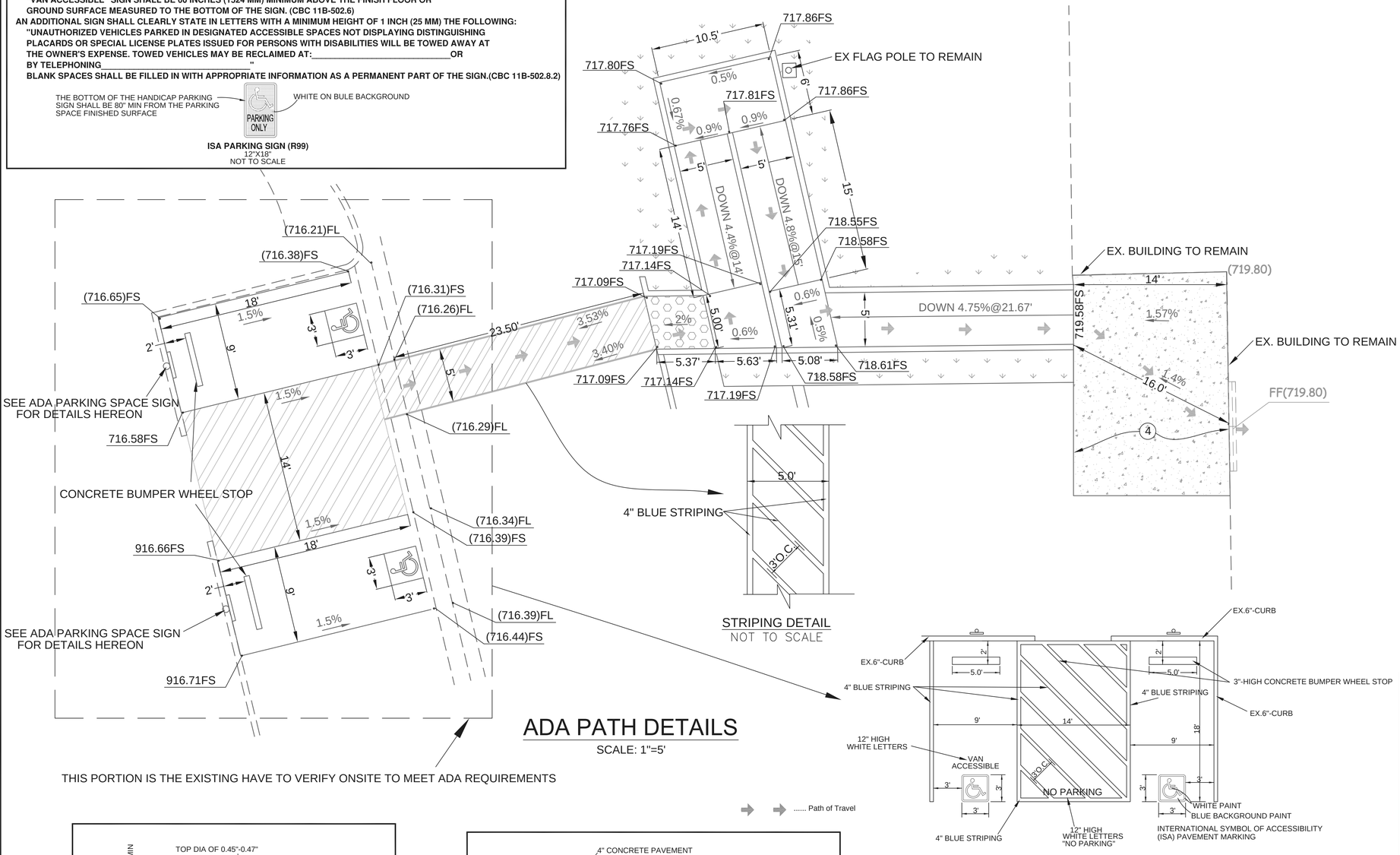
SHEET 2 OF 4

JOB NO. 220612

ADA PARKING SPACE SIGN :

ADA PARKING SPACE IDENTIFICATION SIGNS SHALL INCLUDE THE INTERNATIONAL SYMBOL OF ACCESSIBILITY (ISA) COMPLYING WITH SECTION 11B-703.7.2.1 IN WHITE ON A BLUE BACKGROUND.
AN ADDITIONAL SIGN BELOW THE ISA SIGN SHALL STATE "MINIMUM FINE $250" (CBC 11B-502.6.2)
AN ADDITIONAL SIGN BELOW THE "MINIMUM FINE $250" SIGN SHALL STATE "VAN ACCESSIBLE" (CBC 11B-502.6) "VAN ACCESSIBLE" SIGN SHALL BE 60 INCHES (1524 MM) MINIMUM ABOVE THE FINISH FLOOR OR GROUND SURFACE MEASURED TO THE BOTTOM OF THE SIGN. (CBC 11B-502.6)
AN ADDITIONAL SIGN SHALL CLEARLY STATE IN LETTERS WITH A MINIMUM HEIGHT OF 1 INCH (25 MM) THE FOLLOWING: "UNAUTHORIZED VEHICLES PARKED IN DESIGNATED ACCESSIBLE SPACES NOT DISPLAYING DISTINGUISHING PLACARDS OR SPECIAL LICENSE PLATES ISSUED FOR PERSONS WITH DISABILITIES WILL BE TOWED AWAY AT THE OWNER'S EXPENSE. TOWED VEHICLES MAY BE RECLAIMED AT:_____OR BY TELEPHONING_____."
BLANK SPACES SHALL BE FILLED IN WITH APPROPRIATE INFORMATION AS A PERMANENT PART OF THE SIGN.(CBC 11B-502.8.2)

ISA PARKING SIGN (R99)
12"X18"
NOT TO SCALE



ADA PATH DETAILS

SCALE: 1"=5'

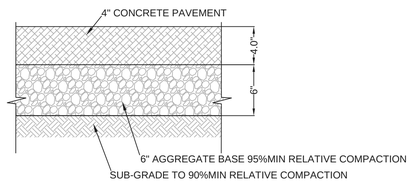
..... Path of Travel

DETECTABLE WARNING SURFACES SHALL BE YELLOW AND APPROXIMATE FS 33538 OF SAE AMS-STD-595A. (CBC 11B-705.1.1.3.1)

TRUCKTED DOMES

USE PRODUCT APPROVED BY DSA PER ARCH PLAN

3



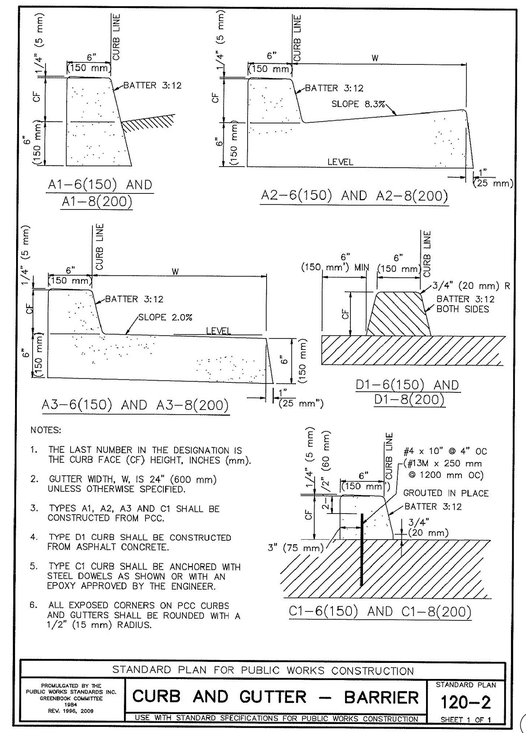
CONCRETE PAVEMENT DETAIL

NOT TO SCALE

4

CONSTRUCTION NOTES:

1. CONSTRUCT MAX 24"-HIGH PLANTER WALL, SEE SHEET 2 FOR DETAILS
2. CONSTRUCT 12"-CONCRETE CURB PER SPPWC STD PLAN 120-2, SEE SHEET 2 FOR DETAILS
3. INSTALL TRUNCATED DOMES, SEE SHEET 2 FOR DETAILS
4. CONSTRUCT 4"-PCC WALKWAY, SEE SHEET 2 FOR DETAILS



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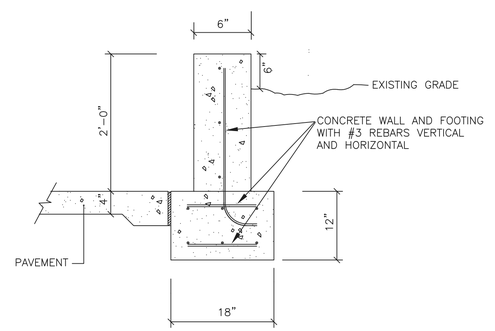

MAX 24"-HIGH CONCRETE PLANTER WALL DETAIL

NOT TO SCALE

1

Know what's below. Call before you dig.

BENCHMARK
B.M. No. E2-J3
Elevation (ft) : (696.956)
Location Description : P.K. Nail and City Engineer Tag in the Northwesterly curb return of Magnolia Av. and Pierce St.

PLANS PREPARED UNDER THE SUPERVISION OF:
GUAN WANG, P.E.79702 07/23/2024
REGISTERED PROFESSIONAL ENGINEER GUAN WANG No. 79702 EXP. 09-30-24 CIVIL STATE OF CALIFORNIA

TRITECH ENGINEERING GROUP

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ENTRANCE IMPROVEMENT PLAN

SCALE: 1"=20'	DETAILS	DRAWN BY: SMITH
DATE: 07/23/2024		REVISED:

11615 Sterling Ave.
Riverside, CA 92503

SHEET 3 OF 4 | JOB NO. 220612

TOPOGRAPHIC MAP

STATE HIGHWAY ROUTE 91

R=4033.94' L=291.22'

S 22° 21' 37" E

WAIVER OF VEHICULAR AND PEDESTRIAN ACCESS CONVEYED BY DEEDS RECORDED JANUARY 28, 1959 AS INSTRUMENT NO. 6546 AND RECORDED JULY 31, 1958 AS INSTRUMENT NO. 54927 O.R. RIVERSIDE COUNTY PER PARCEL MAP NO. 27909, P.M.B. 184-9-10.

44.29'

S 01° 39' 24" E

20' WIDE WATER LINE EASEMENT PER PARCEL MAP NO. 27909, P.M.B. 184-9-10

R=560.00' L=143.85'

STERLING AVENUE

℄

BLANKET PUBLIC UTILITY EASEMENT PER PARCEL MAP NO. 27909, P.M.B. 184-9-10

S 22° 21' 46" E

111.78'

N 67° 38' 23" E

306.00'

171.02'

EX. BUILDING
TOP OF ROOF ELE. (755.22')

AREA = 31,774 S.F.

SCALE: 1"=10'

LEGEND:

- (100.25) ..... Existing Elevation
- 101 ..... Ex. Ground Contour Line
- ..... Chain Link Fence
- ..... Wrought Iron Fence
- ..... Wood Fence
- ..... Ex. Structure
- ..... Street Light
- ..... Ex. Tree, Diameter
- ..... Palm Tree
- ..... Retaining Wall
- ..... Fire Hydrent
- ..... Center Line
- ..... Mail Box

ABBREVIATIONS:

AC..... Asphalt Concrete
CONC..... Concrete
C.B.W..... Block Wall
BW..... Bottom of Wall Elevation
D/A..... Driveway Appron
DWY..... Driveway
EP..... Existing Pavement
EX..... Existing
FF..... Finish Floor Elevation
FH..... Fire Hydrant
FL..... Flow Line Elevation
PP..... Power Pole
PW..... Plant Wall
RW..... Retaining Wall
ST LGHT PB..... Street Light pull box
TC..... Top of Curb Elevation
TW..... Top of Wall Elevation
W.I.F..... Wrought Iron Fence
WM..... Water Meter
WW..... Walk Way

NOTE:

1. BOUNDARIES SHOWN PER FILED RECORD DATA. DIMENSIONS TO BE ADDED UPON VERIFICATION BY SEPARATELY FILED RECORD OF SURVEY.
2. TRITECH IS NOT RESPONSIBLE FOR ANY ITEMS THAT MAY BE OMITTED FROM THIS MAP DUE TO DENSE BRUSH, PARKED AUTOMOBILES, OR OTHER OBSTRUCTIONS AT TIME OF SURVEY. HARDSCAPE W/O SURVEY DATA IS APPROXIMATELY SHOWN..

BASIS OF BEARINGS:

THE BEARINGS SHOWN HEREON ARE BASED ON N 87° 31' 14" E OF THE CENTERLINE OF STERLING AVENUE, AS SHOWN IN PARCEL MAP NO. 27909, P.M.B. 184-9-10.

LICENSED LAND SURVEYOR
SHAHRIAR KHALILI SABAHI
LS 8766
EXP. 12/31/24
STATE OF CALIFORNIA

LEGAL DESCRIPTION:

PARCEL 1, OF PARCEL MAP NO. 27909, IN THE CITY OF RIVERSIDE, COUNTRY OF RIVERSIDE, STATE OF CALIFORNIA, AS PER MAP RECORDED IN BOOK 184, PAGES 9 AND 10 OF PARCEL MAPS AND A PORTION OF PARCEL 1 OF PARCEL MAP NO. 23652, AS PER MAP RECORDED IN BOOK 173, PAGES 23 AND 24 OF PARCEL MAPS, BOTH IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

BENCH MARK INFO.

B.M. NO. E2-J3

ELEVATION (FT) : (696.956)

LOCATION DESCRIPTION : PK NAIL AND CITY ENGINEER TAG IN THE NORTHWESTERLY CURB RETURN OF MAGNOLIA AV. AND PIERCE ST.

TRITECH ENGINEERING GROUP

SUBDIVISION
LAND SURVEY
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135 N. SAN GABRIEL BLVD.
SAN GABRIEL, CA 91775
TEL: (626) 570-1918
EMAIL: info@tritechengineer.com

TOPOGRAPHIC MAP		
SCALE: 1"=10'	APN# : 132-020-049	DRAWN BY: Rohan
DATE: 07/23/2024		REVISED: C.M.
11615 STERLING AVENUE, RIVERSIDE, CA 92503		
SHEET 4 OF 4		JOB NO. 220612