

DEMOLITION PLAN KEYED NOTES

- (1) G.C. TO REMOVE 10 SEATS (EACH SIDE), SALVAGE, AND
- 2 REMOVE FLOOR FINISHES AS REQUIRED WITHIN LIMITS SHOWN DOWN TO CONCRETE BELOW AND PREPARE FOR NEW CONCRETE PLACEMENT OVER (E) CONCRETE TIERS TO REMAIN. CARPET CUT LINE TO OCCUR NO GREATER THAN 2" OUTSIDE OF NEW CONCRETE PLACEMENT LIMITS TO ALLOW FOR BATTEN TRIM COVERING OF DEMOLISHED FINISHES TO NEW CARPET AT WALLS ABOVE. SEE DETAIL A/S1.1 FOR MORE INFORMATION.
- (3) DEMOLISH WALLS AS REQUIRED FOR NEW DOOR OPENINGS. G.C. TO VERIFY FRAMING ABOVE (BEAM OR BEARING WALL) AND PROVIDE SHORING AS NECESSARY TO INSTALL NEW FRAMING IF REQUIRED. CUT FINISHES TIGHT TO NEW DOOR OPENING SO THAT NEW METAL CASING WILL COVER DEMOLITION LINE AT NEW DOORS WITHOUT SUBSTANTIAL
- PROVIDE GYPCRETE LAYER OVER (E) SLAB TO PROVIDE LEVEL TRANSITION FROM LOBBY TO (N) SLAB AT NEW RESTROOM (SEE STRUCTURAL DETAILS FOR MORE
- (5) APPROXIMATE TRENCH LINE FOR NEW UTILITIES (BORE UNDER SLAB AT TILE FINISH IN LOBBY) SEE PLUMBING PLANS FOR MORE INFORMATION. ALL TRENCH PATCH WORK TO MATCH EXISTING FINISHES.
- REMOVE BENCH IN LOBBY, SALVAGE, AND DELIVER TO OWNER.
- 7 REMOVE FINISHES AT INTERIOR FACE OF (E) WALL IN RESTROOM UP TO ROPE TILE TRANSITION LEVEL (PER INTERIOR ELEVATIONS) AND PREPARE TO RECEIVE TILE FINISH. (SEE RESTROOM FINISH DETAIL ON SHEET A1.3) DEMOLISH OR CUT BACK THICKENED WALL SECTION BELOW (E) LEDGE ON (E) WALL AS REQ'D AND REBUILD WITH MINIMUM 2x4 FRAMING IN ORDER TO PROVIDE FLUSH WALL FACE TO CEILING.

SPECIAL NOTE: DEMOLITION PLAN IS SIMILAR AT ALTERNATE - UNISEX RESTROOM #2.

TRENCH PREPARATION FOR NEW WASTE AND SUPPLY LINES FROM BATHROOM TO (E) LATERAL AT SIDEWALK TO BE PROVIDED BY OWNER, PLUMBER TO INSTALL NEW LINES IN TRENCH PROVIDED AND THEN OWNER TO PROVIDE ALL TRENCH BACKFILL, COMPACTION, AND FINISHES PER CONTRACT DRAWINGS

CODE REVIEW NARRATIVE:

THE SCOPE OF THIS PROJECT INCLUDES VOLUNTARY UPGRADES IN ORDER TO REMOVE ARCHITECTURAL BARRIERS AND INCREASE ADA ACCESSIBILITY. THE OWNER IS VOLUNTARILY PROVIDING ADA ACCESSIBLE RESTROOMS ON THE GROUND FLOOR WHERE NONE EXISTED BEFORE. BECAUSE ALL UPGRADES ARE VOLUNTARY AND CONSIST OF ADA IMPROVEMENTS, NO FURTHER CODE REVIEW IS REQUIRED BEYOND CODE COMPLIANCE OF ACCESSIBILITY FEATURES IN THE RESTROOMS THEMSELVES.

KEY PLAN NOTES

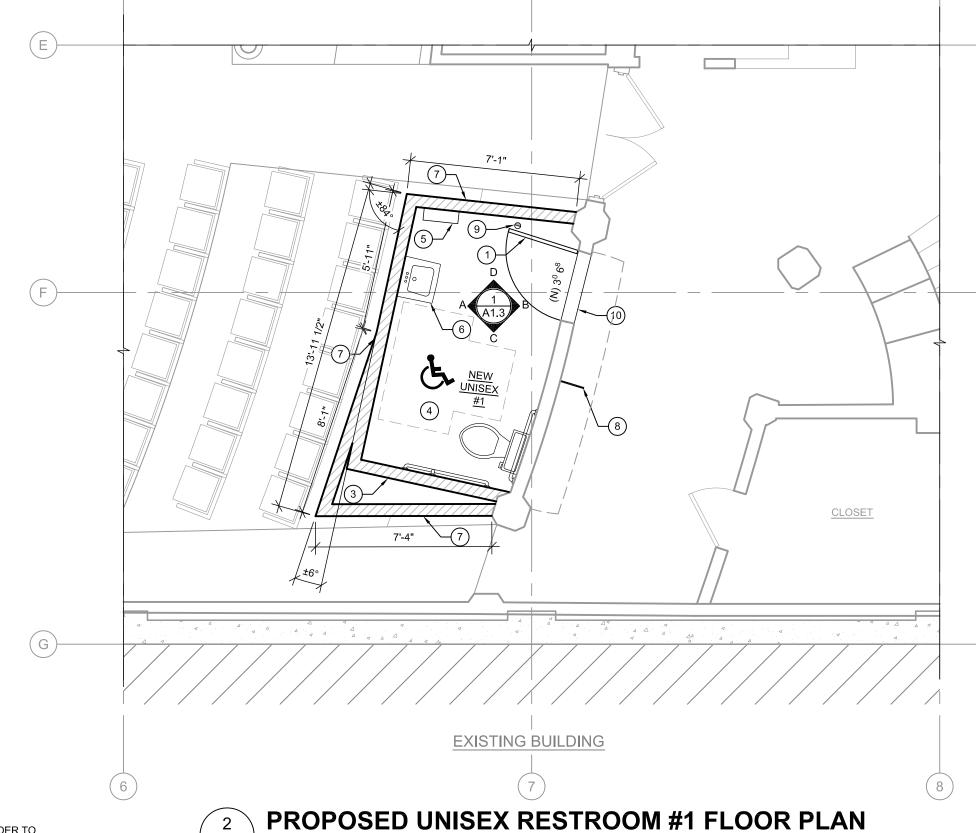
- 1 AT THIS LOCATION G.C. TO REMOVE CABINET BACK TO CORNER AS ILLUSTRATED ON PLAN AND IN ELECTRICAL PLANS AND ELEVATIONS.
- PROVIDE NEW DOORS AND CABINET FACE AT LIMITS OF CABINETRY DEMOLITION. PROVIDE ALL NECESSARY ALTERATIONS TO COUNTERTOP, BACKSPLASH, AND CABINETRY IN ORDER TO MATCH (E) FINISHES AND FUNCTIONALITY. PROVIDE FRP PANEL OR SIMILAR FINISH TO MATCH EXISTING AT LIMITS OF DEMOLITION AT WALL. VERIFY PANEL CLEARANCES WITH ELECTRICAL ENGINEER/ELECTRICIAN PRIOR TO CONSTRUCTION.
- SEE MECHANICAL PLANS FOR LOCATION OF 8" EXHAUST VENT IN CORNER OF PROJECTION ROOM (ABOVE). G.C. TO PROVIDE NEW FRAMED BOX-OUT AROUND VENT AND MATCH ADJACENT FINISHES. (1/2" GYP WITH TAPE, TEXTURE, AND PAINT AT A MINIMUM)
- COORDINATE STAGING AREA AT REAR OF BUILDING WITH OWNER PRIOR TO CONSTRUCTION. ALL ACCESS MUST BE MAINTAINED DURING CONSTRUCTION FOR FIRE AND LIFE-SAFETY REASONS AND FOR DELIVERY ACCESS TO REAR OF ADJACENT BUILDINGS.

PROJECT NOTES:

GENERAL INFORMATION:

- VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION. NOTIFY ENGINEER WHERE DISCREPANCIES OCCUR.
- G.C. SHALL COORDINATE ALL NON-BID ITEMS (INTERIOR FINISH COLORS ETC.) W/ OWNER PRIOR TO CONSTRUCTION IF NOT SPECIFIED IN THESE
- 3. G.C. SHALL PROVIDE ALL APPROPRIATE BACKING, FASTENERS, AND CONCRETE FASTENERS AS REQUIRED FOR BATHROOM ACCESSORIES AND OTHER MISCELLANEOUS ITEMS.
- G.C. TO COORDINATE INSTALLATION OF ALL UTILITIES W/ RESPECTIVE SUPPLIERS/SUBCONTRACTORS PRIOR TO CONSTRUCTION, TYPICAL.
- VERIFY (E) UTILITY LAYOUT, AND SAWCUT FOR (N) UTILITIES AS REQUIRED.
- G.C. SHALL PROVIDE FULLY FURNISHED AND FINISHED RESTROOM FACILITY. G.C. TO COORDINATE WITH OWNER FOR COLOR SELECTION WHERE REQUIRED.
- 7. G.C. TO IDENTIFY AND REMEDIATE HAZARDOUS MATERIALS.
- 8. SEE ADDITIONAL NOTES ON PLAN SET FOR FURTHER INFORMATION.
- G.C. TO PROVIDE MATERIAL SUBMITTALS FOR ALL FINISHES PRIOR TO START OF CONSTRUCTION. FOR ALL FINISHES THAT REQUIRE FIELD PAINTING, STAINING, OR OTHER MODIFICATION OF INSTALLED FEATURES, G.C. TO SUBMIT MOCK-UP OF FINAL PRODUCT PRIOR TO FINAL APPROVAL AND INSTALLATION.
- SAMPLES SHALL BE SUBMITTED IN A TIMELY MANNER IN ORDER TO ALLOW OWNER ADEQUATE TIME FOR REVIEW AND APPROVAL, G.C. TO ALLOW A MINIMUM OF 1 WEEK FOR REVIEW AFTER SUBMITTAL.

SPECIAL NOTE: G.C. TO TAKE ALL NECESSARY STEPS/PRECAUTIONS IN ORDER TO PROTECT ALL FEATURES OF EXISTING BUILDING THAT ARE TO REMAIN IN AREAS OF CONSTRUCTION AND ALL FEATURES IN OTHER AREAS. PROTECT ALL FEATURES FROM DAMAGE DUE TO MATERIALS STORAGE AND HANDLING AS WELL AS ACCESS.



PROPOSED UNISEX RESTROOM #2 FLOOR PLAN - ALTERNATE

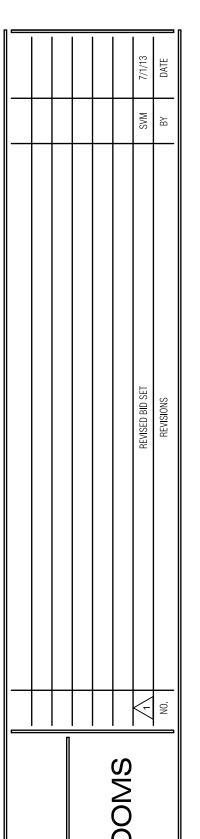
RESTROOM PLAN KEYED NOTES

- (1) (N) SOLID WOOD CORE DOOR, SEE INTERIOR ELEVATIONS. PROVIDE WEATHER STRIPPING AT DOOR FOR SOUND TRANSMISSION MITIGATION.
- (N) WALL W/ STAGGERED 2x4 STUDS @ 8" O.C. (2 WALLS AT 16" O.C. - SEE STRUCTURAL) WITH DOUBLE LAYER OF 1/2" TYPE X GYPSUM BOARD EACH SIDE AND "FIBERGLAS PINK" OR APPROVED EQUAL ACOUSTIC INSULATION (COMPLETELY FILL CAVITY) TYP. SEE DETAILS AND INTERIOR ELEVATIONS FOR MORE INFORMATION.
- (3) AT DOUBLE WALL LOCATIONS PROVIDE 2x6 @ 16" O.C. SINGLE STUD WALLS WHERE SHOWN W/ FINISHES AS STATED ABOVE ON OUTSIDE FACE ONLY (FILL CAVITY WITH INSULATION AS STATED IN NOTE 2) G.C. OPTION - G.C. MAY PROVIDE SINGLE LAYER OF 1/2" GYP OR OTHER APPROVED MEANS OF KEEPING INSULATION TIGHT ON HIDDEN WALL FACES AND LEAVE CAVITY BETWEEN WALLS EMPTY.
- (4) TILE OVER CONCRETE FLOOR, SEE INTERIOR ELEVATIONS.
- (5) COMBINATION TRASH RECEPTACLE/TOWEL DISPENSER. (SEE INTERIOR ELEVATIONS)
- 6 NEW PLUMBING FIXTURE, TYP. SEE PLUMBING PLANS.
- (7) AT EXTERIOR SIDES OF NEW WALLS, PROVIDE RED PATTERNED CARPET TO MATCH (E) OVER PORTION OF WALL - GLUED (MATCH ELEVATION OF FINISHES ON CONCESSION WALL). RUN SEAMS VERTICAL ON WALL TO MATCH (E) AT EXTERIOR OF CONCESSION WALL. AT BTM. OF WALL AND AT TOP OF CARPET PROVIDE PAINTED BATTEN TO MATCH EXISTING AT CONCESSION WALL, PROVIDE SKIM COAT FINISH TO MATCH (E) CONCESSION WALL ABOVE CARPET LEVEL TO CEILING. PROVIDE SAMPLE OF CARPET, MOCK UP OF TEXTURED FINISH AND MOCK UP OF BATTEN WITH PAINT FOR APPROVAL PRIOR TO CONSTRUCTION.
- (8) PROVIDE NEW PERPENDICULAR OVERHEAD RESTROOM SIGN AT (E) WALL BETWEEN RESTROOMS AS SHOWN (COORDINATE COLOR WITH OWNER PRIOR TO CONSTRUCTION).
- 9 PROVIDE NEW FLOOR-MOUNTED DOOR STOP WITH RUBBER BUMPER AT APPROXIMATE LOCATIONS SHOWN ON PLAN. (DOOR TO STOP CLEAR OF WALL)
- (10) PROVIDE NEW ALUMINUM TRANSITION (BLACK) AT BTM. OF DOOR AT THRESHOLD. PROVIDE TRANSITION WIDTH SUFFICIENT TO COVER ENTIRE THRESHOLD SO THAT EACH TILE FINISH IS NOT SEEN FROM THE OPPOSITE SIDE OF THE DOOR (MIN. 10").

NOTE: G.C. TO PROVIDE ALL ADA SIGNAGE AS REQUIRED BY CODE INCLUDING BUT NOT LIMITED TO: ADA WALL PLACARD WITH BRAILLE INDENTIFICATION, GEOMETRIC DOOR SIGN, AND DOOR HARDWARE WITH OCCUPANCY INDICATOR (COORDINATE COLOR WITH OWNER PRIOR TO CONSTRUCTION)

ALTERNATE RESTROOM PLAN KEYED

- (1) (N) SOLID WOOD CORE DOOR, SEE INTERIOR ELEVATIONS. PROVIDE WEATHER STRIPPING AT DOOR FOR SOUND TRANSMISSION MITIGATION.
- (N) WALL W/ STAGGERED 2x4 STUDS @ 8" O.C. (2 WALLS AT 16" O.C. - SEE STRUCTURAL) WITH DOUBLE LAYER OF 1/2" TYPE X GYPSUM BOARD EACH SIDE AND "FIBERGLAS PINK" OR APPROVED EQUAL ACOUSTIC INSULATION (COMPLETELY FILL CAVITY) TYP. SEE DETAILS AND INTERIOR ELEVATIONS FOR MORE INFORMATION.
- (3) AT DOUBLE WALL LOCATIONS PROVIDE 2x6 @ 16" O.C. SINGLE STUD WALLS WHERE SHOWN W/ FINISHES AS STATED ABOVE ON OUTSIDE FACE ONLY (FILL CAVITY WITH INSULATION AS STATED IN NOTE 2) G.C. OPTION - G.C. MAY PROVIDE SINGLE LAYER OF 1/2" GYP OR OTHER APPROVED MEANS OF KEEPING INSULATION TIGHT ON HIDDEN WALL FACES AND LEAVE CAVITY BETWEEN WALLS EMPTY.
- (4) TILE OVER CONCRETE FLOOR, SEE INTERIOR ELEVATIONS.
- (5) COMBINATION TRASH RECEPTACLE/TOWEL DISPENSER. (SEE INTERIOR ELEVATIONS)
- (6) NEW PLUMBING FIXTURE, TYP. SEE PLUMBING PLANS.
- (7) AT EXTERIOR SIDES OF NEW WALLS, PROVIDE RED PATTERNED CARPET TO MATCH (E) OVER PORTION OF WALL - GLUED (MATCH ELEVATION OF FINISHES ON CONCESSION WALL). RUN SEAMS VERTICAL ON WALL TO MATCH (E) AT EXTERIOR OF CONCESSION WALL. AT BTM. OF WALL AND AT TOP OF CARPET PROVIDE PAINTED BATTEN TO MATCH EXISTING AT CONCESSION WALL. PROVIDE SKIM COAT FINISH TO MATCH (E) CONCESSION WALL ABOVE CARPET LEVEL TO CEILING. PROVIDE SAMPLE OF CARPET, MOCK UP OF TEXTURED FINISH AND MOCK UP OF BATTEN WITH PAINT FOR APPROVAL PRIOR TO CONSTRUCTION.
- (8) PROVIDE NEW PERPENDICULAR OVERHEAD RESTROOM SIGN AT (E) WALL BETWEEN RESTROOMS AS SHOWN (COORDINATE COLOR WITH OWNER PRIOR TO CONSTRUCTION).
- (9) PROVIDE NEW FLOOR-MOUNTED DOOR STOP WITH RUBBER BUMPER AT APPROXIMATE LOCATIONS SHOWN ON PLAN. (DOOR TO STOP CLEAR OF WALL)
- (10) PROVIDE NEW ALUMINUM TRANSITION (BLACK) AT BTM. OF DOOR AT THRESHOLD, PROVIDE TRANSITION WIDTH SUFFICIENT TO COVER ENTIRE THRESHOLD SO THAT EACH TILE FINISH IS NOT SEEN FROM THE OPPOSITE SIDE OF THE DOOR (MIN. 10").
- NOTE: G.C. TO PROVIDE ALL ADA SIGNAGE AS REQUIRED BY CODE INCLUDING BUT NOT LIMITED TO: ADA WALL PLACARD WITH BRAILLE INDENTIFICATION, GEOMETRIC DOOR SIGN, AND DOOR HARDWARE WITH OCCUPANCY INDICATOR (COORDINATE COLOR WITH OWNER PRIOR TO CONSTRUCTION).

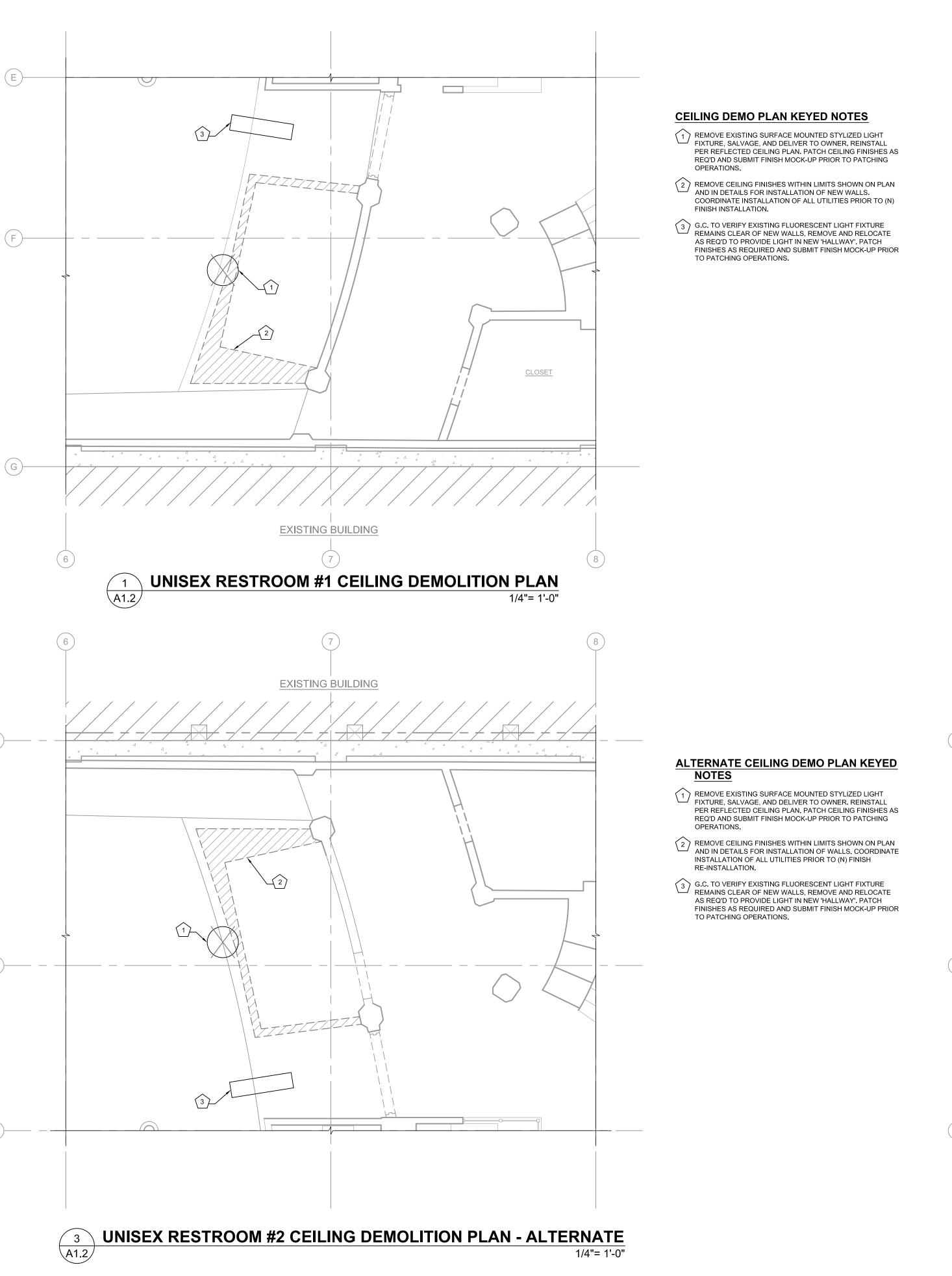


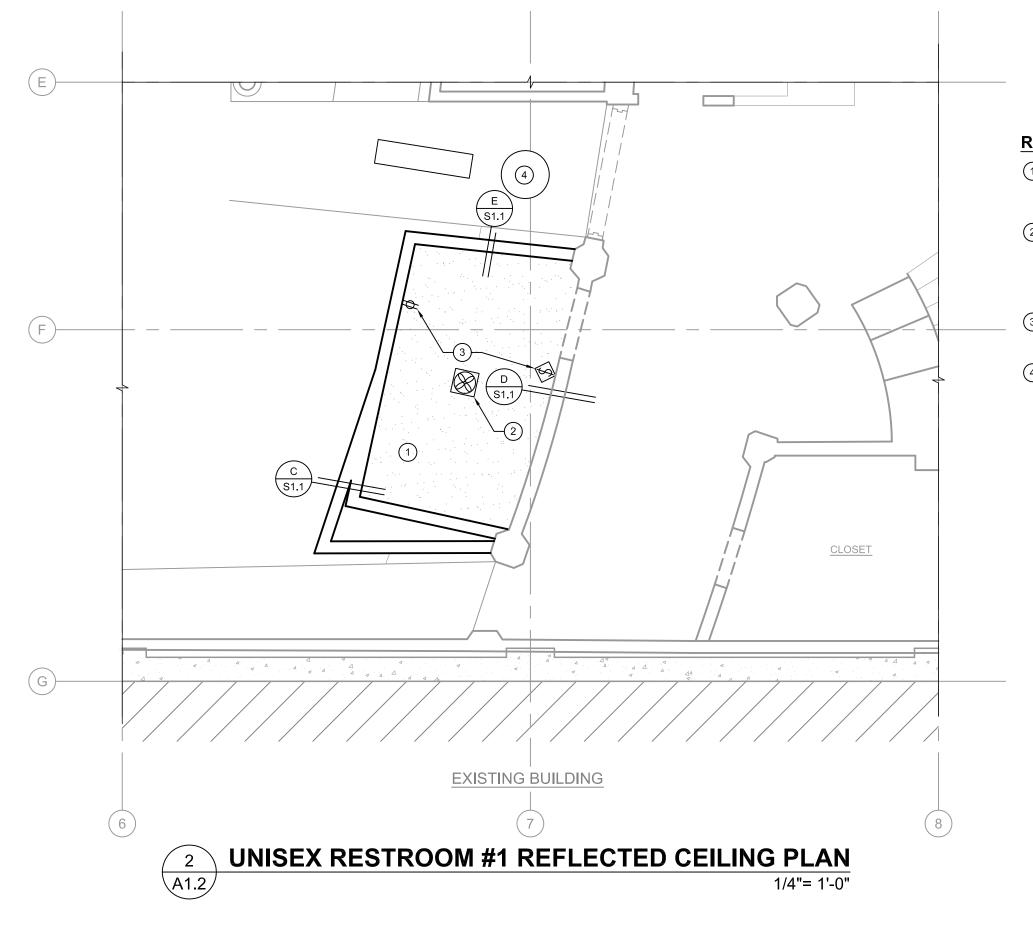
G-0586-13 PROJECT NO: CHECKED:

06-24-13

EXPIRES: 12/31/13

RESTROOM PLANS





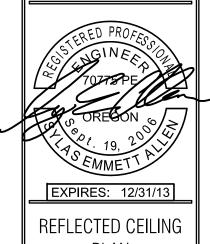
UNISEX RESTROOM #2 REFLECTED CEILING PLAN - ALTERNATE

REFLECTED CEILING PLAN KEYED NOTES

- 1) EXISTING CEILING AND FINISHES TO REMAIN. PLACE SINGLE LAYER OF OWENS-CORNING QUIET-ZONE ACOUSTICAL BATTS OR APPROVED EQUAL ABOVE CEILING. PAINT PER INTERIOR ELEVATIONS.
- 2 NEW EXHAUST FAN PER MECHANICAL DRAWINGS (FIELD PREP AND PAINT GRILLE TO MATCH CEILING COLOR 1 COAT PRIMER AND 2 COATS SATIN LATEX PAINT). MECHANICAL CONTRACTOR TO UTILIZE (E) RETURN AIR OPENING IN (E) CEILING FOR EXHAUST FAN. COORDINATE WITH MECHANICAL PLANS.
- 3 SWITCHING AND POWER PER ELECTRICAL PLANS. PROVIDE WHITE COLOR AT ALL COVERS AND FIXTURES FOR ELECTRICAL.
- 4 REINSTALL SALVAGED PERIOD LIGHTING FIXTURE AT LOCATION SHOWN (FINALIZE LAYOUT WITH OWNER PRIOR TO CONSTRUCTION)

ALTERNATE REFLECTED CEILING PLAN KEYED NOTES

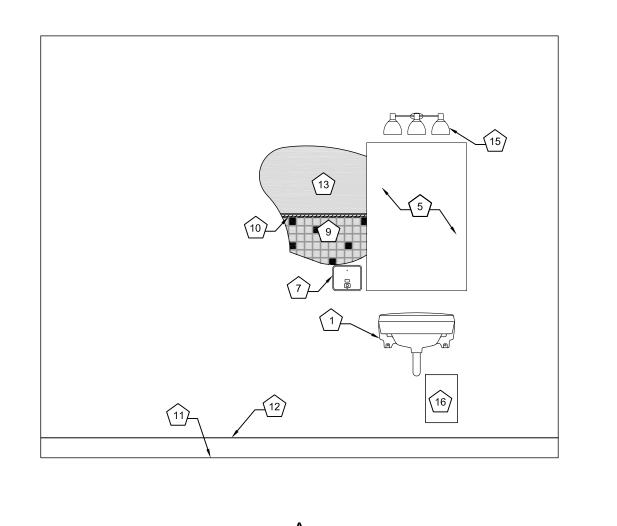
- 1 EXISTING CEILING AND FINISHES TO REMAIN. PLACE SINGLE LAYER OF OWENS-CORNING QUIET-ZONE ACOUSTICAL BATTS OR APPROVED EQUAL ABOVE CEILING. PAINT PER INTERIOR ELEVATIONS.
- 2 NEW EXHAUST FAN PER MECHANICAL DRAWINGS (FIELD PREP AND PAINT GRILLE TO MATCH CEILING COLOR 1 COAT PRIMER AND 2 COATS SATIN LATEX PAINT). MECHANICAL CONTRACTOR TO UTILIZE (E) RETURN AIR OPENING IN (E) CEILING FOR EXHAUST FAN. COORDINATE WITH MECHANICAL PLANS.
- 3 SWITCHING AND POWER PER ELECTRICAL PLANS. PROVIDE WHITE COLOR AT ALL COVERS AND FIXTURES FOR ELECTRICAL.
- 4 REINSTALL SALVAGED PERIOD LIGHTING FIXTURE AT LOCATION SHOWN (FINALIZE LAYOUT WITH OWNER PRIOR TO CONSTRUCTION)

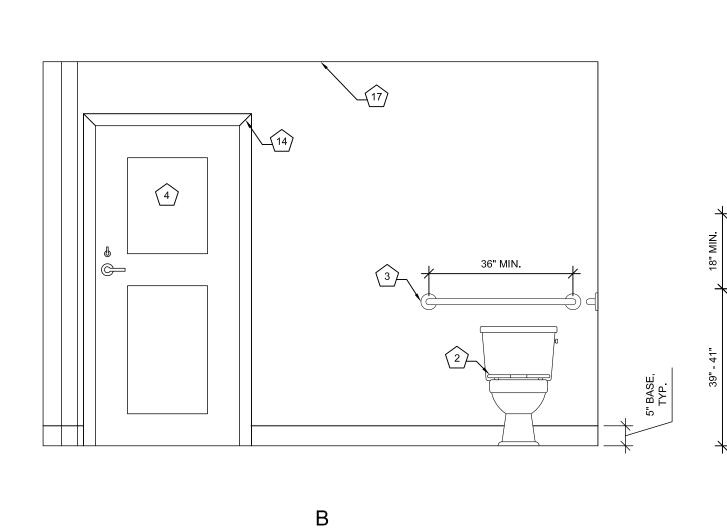


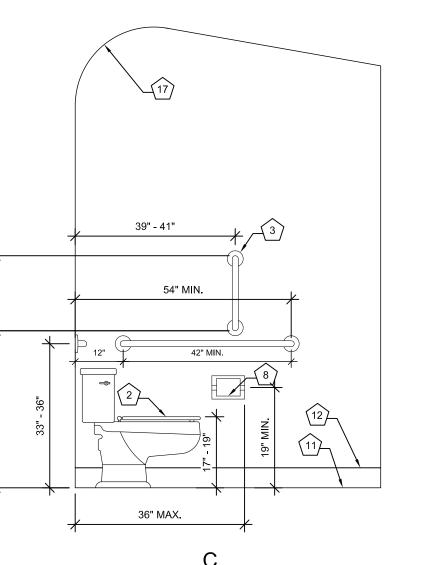
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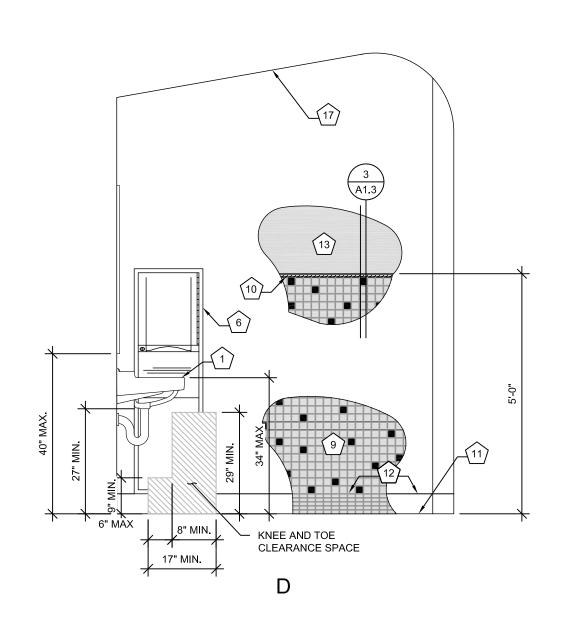
REFLECTED CEILING PLAN

A1.2

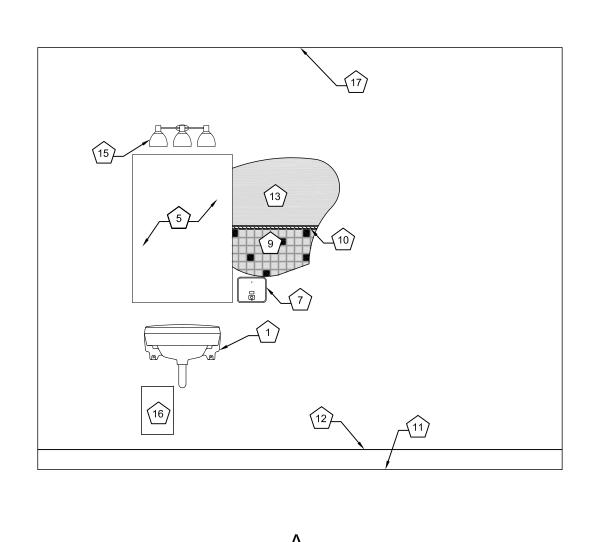


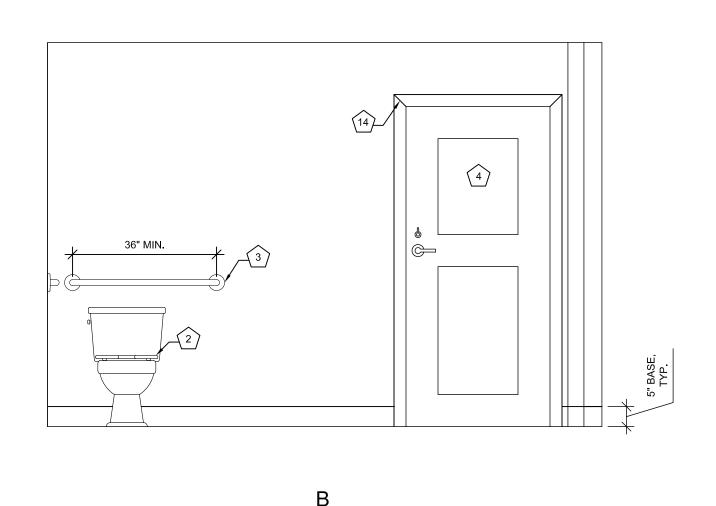


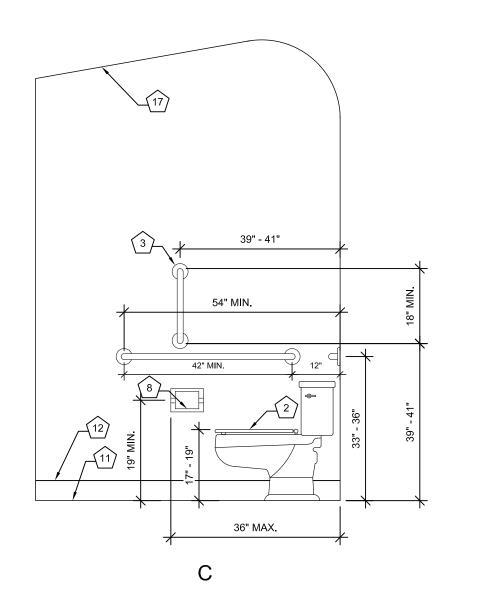


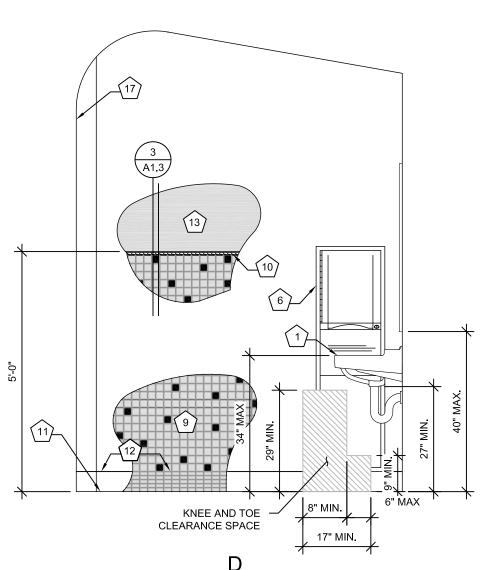




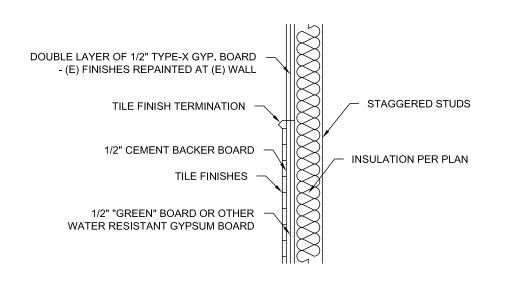








UNISEX BATHROOM #2 INTERIOR ELEVATION - ALTERNATE



RESTROOM FINISH DETAIL
1"= 1'-0"

- GENERAL INTERIOR ELEVATION NOTES:
- AMERICAN STANDARD WALL-MOUNT LAVATORY PER PLUMBING PLANS (PROVIDE WHITE INSULATED TRAP AND HOT WATER COVERS, TYP.)
- 2 AMERICAN STANDARD TOILET PER PLUMBING PLANS

 3 BOBRICK OR APPROVED EQUAL 1-1/2" O.D. STAINLESS STEEL GRAB BARS AS SHOWN WITH NON-SLIP SURFACE

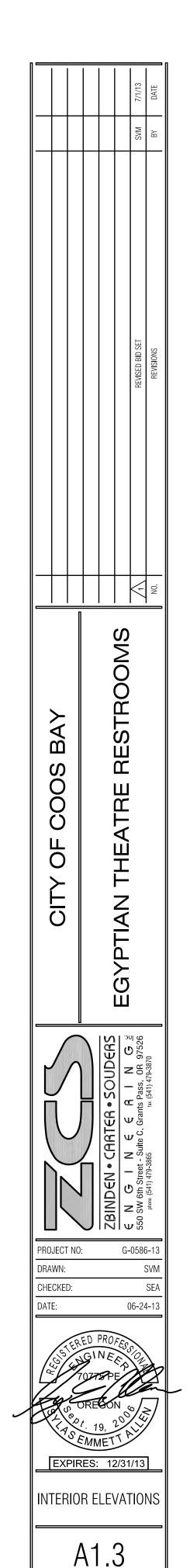
AND CONCEALED FLANGE MOUNTING

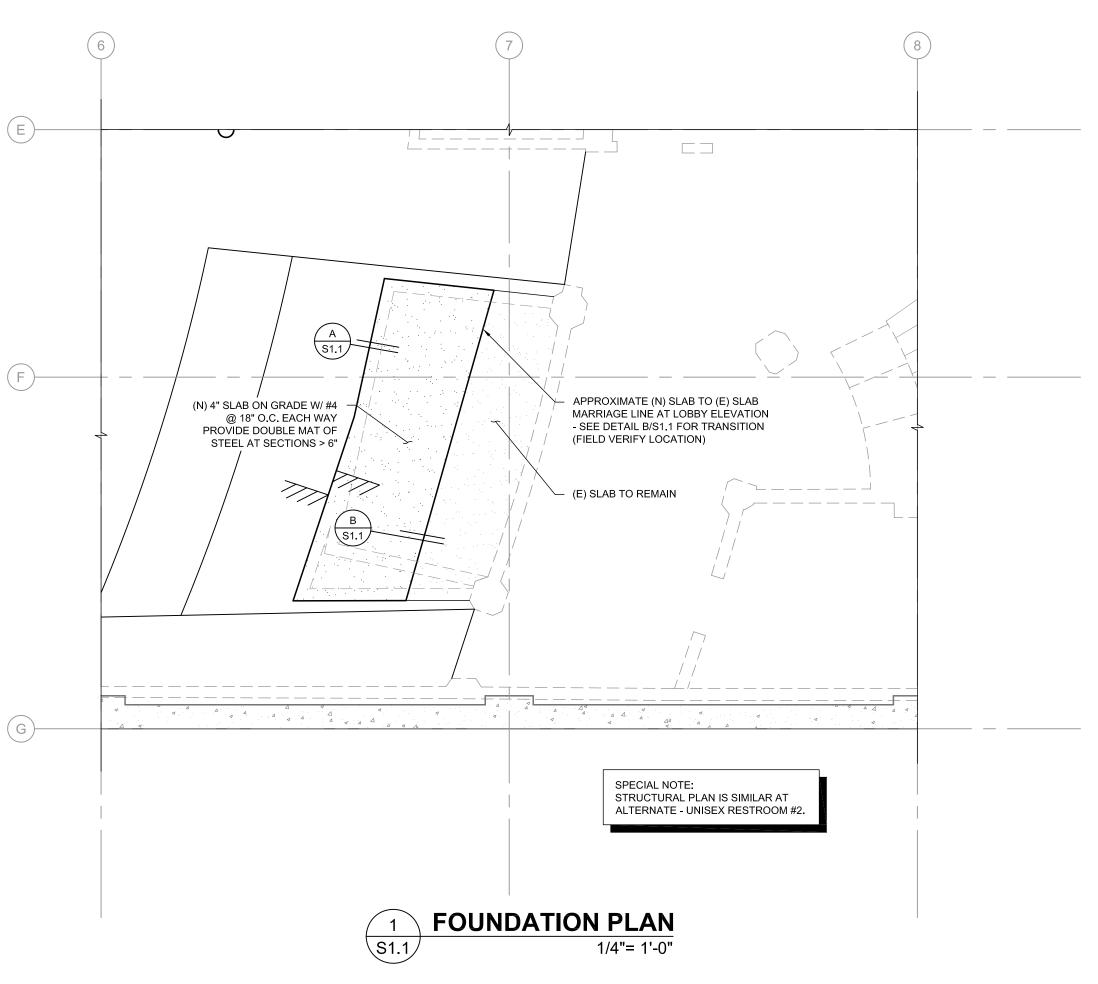
- JELD-WEN MODEL 0028 2-PANEL DOOR OR APPROVED EQUAL SOLID WOOD CORE DOOR PAINT GOLD TO MATCH OTHER LOBBY DOORS. PROVIDE MINIMUM 20 MINUTE RATED ASSEMBLY. HARDWARE TO BE L-SERIES MORTISE LOCK AS MANUFACTURED BY SCHLAGE LOCKS, WITH LEVER HANDLE AND EZ TURN TOGGLE BOLT WITH BRONZE FINISH TO MATCH (E) HARDWARE. PROVIDE OCCUPANCY INDICATOR. PROVIDE METAL DOOR FRAME (BLACK FACTORY FINISH) WITH METAL CASING ON RESTROOM SIDE (SEE NOTE 14 FOR FINISH) AND METAL CASING (BLACK FACTORY FINISH) ON LOBBY SIDE. LAP CASING OVER FINISHES AT EACH SIDE AND FIELD VERIFY WALL WIDTH FOR FRAME ORDERING. MANUFACTURER TO BE CECO DOORS OR APPROVED EQUAL.
- TEMPERED GLASS FRAME-LESS MIRROR (DELETE TILE AS REQUIRED TO INSTALL MIRRORS AND SET TIGHT INTO TILE CAVITY AT WALL)
- 6 BOBRICK B-3942 SEMI-RECESSED CONVERTIBLE PAPER TOWEL DISPENSER/WASTE RECEPTACLE OR APPROVED EQUAL. INSTALL PER MANUFACTURER'S SPECIFICATIONS, (MUST MEET ALL ADA REQUIREMENTS)
- 7 BOBRICK B-4063 STAINLESS STEEL RECESSED SOAP DISPENSER OR APPROVED EQUAL (PLACEMENT PER ADA STANDARDS)
- 8 BOBRICK B-663 STAINLESS STEEL RECESSED TOILET TISSUE DISPENSER OR APPROVED EQUAL

- 9 TILE WAINSCOT WALL FINISH FIELD TILE IS AMERICAN OLEAN UNGLAZED CERAMIC MOSAICS 2"x2" (CAPPUCCINO A78) ACCENT TILE IS DAL-TILE GLAZED 2"x2" (BLACK 6421). PLACE 75% FIELD, 25% ACCENT. (TYP.) RANDOM PATTERN
- TRIM TILE FINISH DAL-TILE 1'x6" ROPE LINER (BLACK GLOSS) (TYP.)
- TILE FLOOR FINISH AMERICAN OLEAN UNGLAZED CERAMIC MOSAICS 2"x2" (CAPPUCCINO A78) (TYP.)
- TILE COVE/TRANSITION AMERICAN OLEAN UNGLAZED CERAMIC MOSAICS 2"x1" (CAPPUCCINO A78) (TYP.)
- TEXTURED AND PAINTED WALL AND CEILING FINISH SKIM COAT TO MATCH (E) CEILING AT (N) WALLS (SUBMIT TEXTURE MOCK-UP PRIOR TO CONSTRUCTION FOR APPROVAL). PAINT 1 COAT PRIMER AND 2 FINISH COATS OF SATIN LATEX KELLY MOORE (SPANISH SAND 231) OR APPROVED EQUAL. (TYP.)
- PAINTED CASING FINISH 1COAT PRIMER SUITABLE FOR METAL SUBSTRATE AND 2 FINISH COATS OF SEMI-GLOSS LATEX KELLY MOORE (SPANISH SAND) OR APPROVED EQUAL. (TYP.) (G.C. TO PREP METAL FOR RE-FINISH IN
- LIGHT FIXTURE PER ELECTRICAL PLANS (OIL-RUBBED BRONZE FINISH)
- POINT OF USE WATER HEATER SEE PLUMBING PLANS\
- PAINT ALL (E) FINISHES TO REMAIN (CEILING AND TRANSITION AND (E) WALL ABOVE TILE) TO MATCH NEW WALL FINISHES ABOVE TILE.

NOTE: ALL SHEET METAL VISIBLE THROUGH SUPPLY AND EXHAUST GRILLS TO BE PAINTED FLAT BLACK

NOTE: TILE BOND COAT TO BE LATICRETE 4237. PROVIDE 1/2" THICK CEMENT BACKER BOARD AT WAINSCOT. PROVIDE REINFORCED CRACK ISOLATION TAPE TO SPAN CONSTRUCTION JOINTS AND OTHER CRACKS AT CONCRETE SLABS. PROVIDE MATTE GROUT SEALER AS RECOMMENDED BY MAN. WITH POLYMER MODIFIED GROUT





PROJECT STRUCTURAL NOTES (COOS BAY, OREGON)

GENERAL INFORMATION:

- 1. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING THE REQUIREMENTS FROM THESE DRAWINGS INTO THEIR SHOP DRAWINGS AND WORK. NOTES AND DETAILS ON THE STRUCTURAL DRAWINGS SHALL TAKE PRECEDENCE OVER THE GENERAL NOTES AND TYPICAL DETAILS. 2. THE STRUCTURE IS DESIGNED TO FUNCTION AS A UNIT UPON COMPLETION. THE CONTRACTOR IS
- RESPONSIBLE FOR FURNISHING ALL TEMPORARY BRACING AND/OR SUPPORT THAT MAY BE REQUIRED AS THE RESULT OF THE CONTRACTOR'S CONSTRUCTION METHODS AND/OR SEQUENCES ALL EXISTING CONDITIONS, DIMENSIONS AND ELEVATIONS SHALL BE FIELD VERIFIED. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY SIGNIFICANT DISCREPANCIES FROM
- CONDITIONS SHOWN ON THE DRAWINGS. 4. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CONSTRUCTION MEANS AND METHODS. RESPONSIBILITY SHALL INCLUDE BUT IS NOT LIMITED TO DEMOLITION AND
- CONSTRUCTION MEANS AND METHODS, TECHNIQUES, SEQUENCING, AND SAFETY REQUIRED TO COMPLETE CONSTRUCTION. 5. UNLESS OTHERWISE NOTED, MATERIAL AND DESIGN SPECIFICATIONS CITED HEREIN SHALL BE
- THOSE CONFORMING WITH THE VERSION OF THE APPLICABLE SPECIFICATIONS OR CODE MOST RECENTLY ADOPTED BY THE PERMITTING AUTHORITY. 6. ALL FEATURES OF CONSTRUCTION NOT FULLY SHOWN SHALL BE OF THE SAME TYPE AND CHARACTER AS SHOWN FOR SIMILAR CONDITIONS, SUBJECT TO REVIEW BY THE STRUCTURAL

OR INSTALLED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.

ENGINEER OF RECORD. 7. ALL PRODUCTS AND MATERIALS USED BY THE CONTRACTOR SHALL BE APPLIED, PLACED, ERECTED

CODE REQUIREMENT:

1. CONFORM TO THE 2010 OREGON STRUCTURAL SPECIALTY CODE (OSSC), BASED ON THE 2009

DESIGN CRITERIA:

- 1. THE FOLLOWING WORK IS SUBJECT TO SPECIAL INSPECTIONS AS DESCRIBED IN SECTION 1704 OF
- CAST-IN-PLACE CONCRETE 2. DESIGN IS BASED ON THE STRENGTH AND DEFLECTION CRITERIA OF THE OSSC.

SPECIAL INSPECTION:

1. SPECIAL INSPECTIONS WILL BE PROVIDED BY THE OWNER BASED ON THE REQUIREMENTS OF THE OSSC. CONTRACTOR SHALL PROVIDE SUFFICIENT NOTICE AND ACCESS FOR THE SPECIAL INSPECTOR TO PERFORM THESE INSPECTIONS.

DIVISION 06 - WOOD, PLASTICS AND COMPOSITES

FRAMING LUMBER:

- 1. ALL FRAMING LUMBER SHALL BE DOUGLAS FIR-LARCH AND SHALL BE GRADED UNDER THE MOST RECENTLY ADOPTED RULES OF THE WEST COAST LUMBER INSPECTION BUREAU (WCLIB). ALL BEAMS AND JOISTS SHALL BE NO. 2 MINIMUM, UNLESS INDICATED OTHERWISE ON THE PLANS.
- ALL STUDS AND BLOCKING SHALL BE NO. 2.
- 4. ALL LUMBER IN CONTACT WITH CONCRETE OR EXPOSED SHALL BE PRESSURE TREATED IN ACCORDANCE WITH AWPA STANDARD C-2 AND SHALL BEAR THE AWPA QUALITY MARK.

NAILING AND FASTENERS:

- NAILING INDICATED ON PLANS AND DETAILS ARE "COMMON" NAILS. MINIMUM FRAMING NAILING SHALL CONFORM TO OSSC TABLE 2304.9.1 SEE DETAILS FOR ADDITIONAL TYPICAL NAILING REQUIREMENTS. SUBSTITUTION OF NAILS OTHER THAN "COMMON" IS NOT PERMITTED WITHOUT PRIOR APPROVAL
- 2. POWER DRIVEN NAILS OTHER THAN "COMMON" NAILS MAY BE USED IF DATA IS SUBMITTED AND APPROVED PRIOR TO USE.
- 3. JOIST HANGERS, HOLDOWNS AND OTHER FRAMING ACCESSORIES ARE REFERRED TO ON PLANS BY PARTICULAR TYPE AS MANUFACTURED BY SIMPSON COMPANY, SAN LEANDRO, CA. ALL HARDWARE IS TO BE FASTENED PER MANUFACTURER'S SPECIFICATIONS, U.N.O.
- 4. ALL PLATES AND LEDGERS SHALL BE ANCHORED WITH A MINIMUM OF THREE FASTENERS PER

DIVISION 03 - CONCRETE

1. CONCRETE WORK SHALL CONFORM TO CHAPTER 19 OF THE OSSC. CONCRETE STRENGTH SHALL BE AS FOLLOWS:

- 2. VERIFY WATER/CEMENT RATIO WITH FLOOR COVERING MANUFACTURER FOR CONCRETE FLOORS WITH MOISTURE SENSITIVE FLOOR COVERINGS, AND VERIFY COORDINATE WITH PROJECT
- 3. FLY ASH CONFORMING TO ASTM C618 (INCLUDING TABLE 2A) TYPE F, MAY BE USED TO REPLACE UP TO 20% OF THE CEMENT CONTENT, PROVIDED THAT THE MIX STRENGTH IS SUBSTANTIATED BY TEST
- 4. THE CONTRACTOR SHALL SUBMIT CONCRETE MIX DESIGNS, ALONG WITH TEST DATA COMPLIANT WITH OSSC SECTION 1905, A MINIMUM OF TWO WEEKS PRIOR TO PLACING CONCRETE. NO WATER MAY BE ADDED TO CONCRETE IN THE FIELD UNLESS SPECIFICALLY APPROVED IN WRITING BY THE CONCRETE SUPPLIER IN CONJUNCTION WITH THE CONCRETE MIX DESIGN.
- 5. A WATER-REDUCING ADMIXTURE CONFORMING TO ASTM C494, USED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS, SHALL BE INCORPORATED IN CONCRETE DESIGN MIXES. A HIGH-RANGE WATER-REDUCING (HRWR) ADMIXTURE CONFORMING TO ASTM C494, TYPE F OR G, MAY BE USED IN CONCRETE MIXES PROVIDING THAT THE SLUMP DOES NOT EXCEED 8". AN AIR-ENTRAINING AGENT CONFORMING TO ASTM C260 SHALL BE USED IN CONCRETE MIXES FOR EXTERIOR HORIZONTAL SURFACES EXPOSED TO WEATHER. THE AMOUNT OF ENTRAINED AIR SHALL BE 5% +/- 1% BY VOLUME.

CONCRETE CAST IN PLACE:

- CONCRETE SHALL HAVE A MAXIMUM SLUMP OF 4" WITHOUT THE USE OF ADMIXTURES AS NOTED. 2. CONCRETE MATERIALS, FORM WORK, MIXING, PLACING AND CURING SHALL CONFORM WITH THE
- SPECIFICATIONS CONTAINED IN THE A.C.I. "MANUAL OF CONCRETE PRACTICE".
- 3. AT AREAS OF DEPRESSIONS FOR SLABS AND BEAMS, PROVIDE MINIMUM THICKNESS OF DEPTH AS FOR ADJACENT AREAS, UNLESS NOTED OTHERWISE.
- 4. BOND NEW CONCRETE TO EXISTING CONCRETE WITH "WELD-CRETE", AS MANUFACTURED BY LARSON PRODUCTS CORPORATION, OR APPROVED, AS MINIMUM, EXISTING CONCRETE SURFACES SHALL BE ROUGHENED BY CHIPPING TO A MINIMUM 1/4" AMPLITUDE TO EXPOSE COARSE AGGREGATE. PREPARATION AND APPLICATION IS TO BE IN STRICT ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

CONCRETE REINFORCING STEEL:

- 1. REINFORCING STEEL SHALL CONFORM TO ASTM A615, GRADE 60 FOR DEFORMED BARS UNLESS OTHERWISE NOTED. REINFORCING STEEL TO BE WELDED SHALL CONFORM TO ASTM A706.
- REINFORCING STEEL SHALL BE SECURELY TIED IN PLACE WITH #16 ANNEALED IRON WIRE. 2. BARS IN SLABS SHALL BE SUPPORTED ON WELL CURED CONCRETE BLOCKS OR APPROVED METAL CHAIRS, AS SPECIFIED BY THE CRSI MANUAL OF STRANDED PRACTICE, MSP-1. REINFORCING STEEL SHALL BE DETAILED IN ACCORDANCE WITH THE "ACI MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES", ACI 315. LAP ALL REINFORCING BARS PER THE TYPICAL LAP SPLICE LENGTH SCHEDULE, EXCEPT AS NOTED.

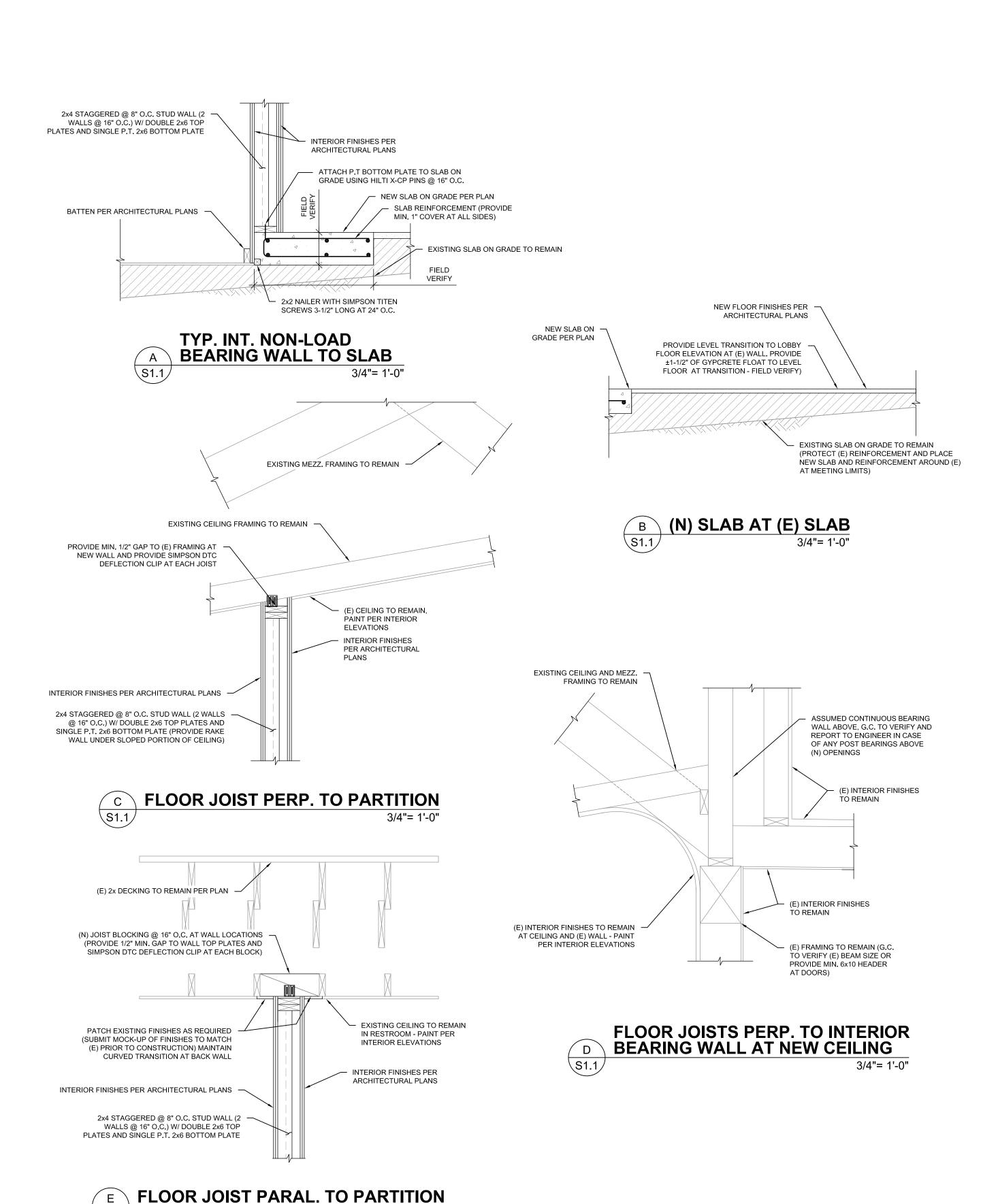
TYPICAL LAP SPLICE LENGTH SCHEDULE

A. DIMENSIONS ARE IN INCHES.

- B. FOR TOP BARS, MULTIPLY LAP LENGTH ABOVE BY 1.3. TOP BARS ARE HORIZONTAL BARS WITH
- MORE THAN 12" OF CONCRETE CAST BELOW THE BARS. C. REINFORCING STEEL SHALL HAVE PROTECTION AS FOLLOWS:

<u>USE</u> SLAB BARS:

- 3. ALL REINFORCING STEEL SHALL BE TIED 100% ALONG ALL PERIMETER EDGES AND 50%FIELD. 4. REINFORCING (MINIMUM UNLESS NOTED OTHERWISE ON PLANS)
- A. PLACE TWO (2) NO. 4x OPENING DIMENSIONS PLUS 4'-0" EACH SIDE OF ALL OPENINGS AND TWO (2) NO. 4x4'-0" DIAGONAL BARS AT EACH CORNER OF ALL SLAB OPENINGS GREATER THAN 1'-6"
- 6. ALL REINFORCING STEEL SHALL BE DETAILED, FABRICATED AND PLACED IN ACCORDANCE WITH A.C.I. DETAILING MANUAL 315.
- A. ALL REINFORCING STEEL SHALL BE ACCURATELY AND SECURELY PLACED. B. REINFORCING SHALL NOT BE BENT OR DISPLACED FOR THE CONVENIENCE OF OTHER TRADES, UNLESS APPROVED BY THE STRUCTURAL ENGINEER.
- 7. REINFORCEMENT BARS SHALL NOT BE TACK WELDED, WELDED, HEATED OR CUT, UNLESS INDICATED ON THE CONTRACT DOCUMENTS OR APPROVED BY THE STRUCTURAL ENGINEER OF RECORD.



BA

G-0586-13

06-24-13

STRUCTURAL PLANS

AND DETAILS

PROJECT NO:

DRAWN:

CHECKED:

DUCT & FITTING SYMBOLS			HVAC SYMBOLS & ABBREVIATIONS		GENERAL SYMBOLS		
DOUBLE LINE	SINGLE LINE	DESCRIPTION	 	DUCT WITH INTERNAL	©	CAP FOR FUTURE	
SA -		SUPPLY AIR	1	ACOUSTICAL INSULATION		POINT OF NEW CONNECTION	
RA -		RETURN AIR	AD A	ACCESS DOOR	٨	REVISION NUMBER	
					$\stackrel{\swarrow}{\boxtimes}$	POINT OF CONTINUATION	
P OSA P -		OUTSIDE AIR	FSD ,	VOLUME DAMPER	$\langle XX \rangle$	EQUIPMENT TAG EQUIPMENT NUMBER	
EA		EXHAUST AIR ECONOMIZER RELIEF AIR	FD FD	COMBINATION FIRE / SMOKE DAMPER	(XX) (XX)	SECTION (LETTER) OR DETAIL (NUMERICAL) DESIGNATION	
FRA F			1	VERTICAL FIRE DAMPER		SHEET NUMBER	
12x12	12x12	RECTANGULAR DUCT SIZE FIRST NUMBER INDICATES VISIBLE DIMENSION AND SECOND NUMBER INDICATES	FD	VERTICAL FIRE DAMPER	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	SECTION DESIGNATION SHEET NUMBER	
		HIDDEN DIMENSION. ALL DIMENSIONS ARE INCHES.		MOTORIZED DAMPER	GPM X"	PIPE SIZE AND FLOW TAG	
12"ø 9	12"ø	ROUND DUCT DIAMETER	BD L			GENERAL BREAK LINE BREAK	
{ 48×18ø }	48x18ø	FLAT OVAL DUCT	1 1 	BACKDRAFT DAMPER	A >	DUCTWORK FITTING TYPE SEE HIGH PRESSURE FABRICATED	
	\triangle	SUPPLY DUCT UP		OPPOSED BLADE DAMPER	√1>—►	FITTING CONSTRUCTION DETAILS KEYED NOTES	
$\bigotimes \square$	\otimes - \boxtimes -	OR SECTION		PARALLEL BLADE DAMPER	Œ>	EXISTING	
		SUPPLY DUCT DOWN OR SECTION AWAY		FLEXIBLE DUCT CONNECTION	R	RELOCATED	
		RETURN OR OSA	~~~~	FLEXIBLE DUCT	PIPF	SYMBOLS	
	\bigcirc - \square -	DUCT UP OR SECTION		DIRECTION OF AIRFLOW	<u> </u>	STWIDOLS	
		RETURN OR OSA		SUPPLY DIFFUSER	——R——	REFRIGERANT PIPING	
		DUCT DOWN OR SECTION			NG	NATURAL GAS PIPING	
	\otimes - \boxtimes -	EXHAUST DUCT UP OR SECTION		RETURN GRILLE	CWS	CHILLED WATER SUPPLY	
				EXHAUST GRILLE	— — CWR— —	CHILLED WATER RETURN	
		EXHAUST DUCT DOWN OR SECTION		PRESSURE RELIEF GRILLE		CONDENSATE DRAIN PIPING	
	_		₽	WALL OR DUCT	HWS	HOT WATER SUPPLY	
}		TRANSITION	1—1	REGISTER OR GRILLE	— — HWR— —	HOT WATER RETURN	
SQR	— □	SQUARE TO ROUND TRANSITION	V or [LINEAR DIFFUSER		DIRECTION OF FLOW	
		HANSIHON	Ш			CHANGE IN SIZE	
	\neg	FLANGED TAKEOFF (RECTANGULAR DUCT)		FILTER	——————————————————————————————————————	PIPE DOWN PIPE UP	
±4± ├──-	ı	LATERAL HIGH EFFICIENCY	AD	CEILING ACCESS DOOR		TEE DOWN	
		TAKE—OFF FITTING W / VD (SQR TO RND TAKEOFF				TEE UP	
TAT	VD ON	FROM RECTANGULAR MAIN) BRANCH DUCT	①	TEMPERATURE GAUGE		CAP	
		CONICAL 90° TAKE—OFF (ROUND / OVAL DUCT)	P	PRESSURE GAUGE	 	PIPE UNION	
, <u>1</u>	l	(NOONS / OWL BOOT)	(F) XX -	— OUTLET / INLET TAG — AIRFLOW, CFM		GATE VALVE	
	\longrightarrow	45° LATERAL TAKE-OFF	XXX	PREFIX (F) INDICATES		BALL VALVE	
, , , , , , , , , , , , , , , , , , ,		(ROUND / OVAL DUCT)		A FIRE RATED GRILLE, REGISTER, OR DIFFUSER	¥	PRESSURE GAUGE	
R R	- (DUCT SLOPE UP (RISE)	\wedge	HUMIDISTAT OR	Ψ	TEMPERATURE GAUGE GAUGE	
			<u>∕ H \</u>	HUMIDITY SENSOR		PRESSURE REDUCING VALVE	
→ D →	-) -) 	DUCT SLOPE DOWN (DROP)	T	THERMOSTAT OR TEMP SENSOR		PRESSURE & TEMPERATURE GAUGE PORT BALANCING VALVE	
<u> </u>		END CAP	D	DUCT SMOKE DETECTOR		PUMP	
	L		SD	SMOKE DETECTOR		GLOBE VALVE	
A A A A A A A A A A A A A A A A A A A		RECTANGULAR MITERED ELBOW W/ TURNING VANES	SP	STATIC PRESSURE SENSOR	<u> </u>	CHECK VALVE	
·	I		\wedge		*	SAFETY RELIEF VALVE	
	No. of the last of	RECTANGULAR TEE — 90° MITERED ELBOWS	ES\	CARBON DIOXIDE SENSOR EMERGENCY SWITCH		TWO WAY CONTROL VALVE	
	A A A	90° MITERED ELBOWS W/ TURNING VANES	_E2/	EMENGENCT SWITCH		THREE WAY CONTROL VALVE	
						STRAINER	
1		90° OR 45° LONG RADIUS				STEAM CONDENSATE TRAP	
R X	R ×	ELBOW, R=1.5 DIA OR WIDTH (ROUND OR RECTANGULAR DUCT)					

GENERAL NOTES

- 1. CONTRACTOR TO SECURE, MAINTAIN, AND PAY FOR ALL REQUIRED LICENSES AND INSPECTIONS FOR DURATION OF WORK UNLESS DIRECTED OTHERWISE.
- 2. ALL DUCTWORK SHALL BE GALVANIZED STEEL, ROUND OR RECTANGULAR. SUPPORT PER SMACNA DUCT CONSTRUCTION STANDARDS AND INSTALL IN CONFORMANCE TO MECHANICAL CODES. EXHAUST AIR DUCTS SHALL BE CONSTRUCTED TO +1" PRESSURE STANDARD. SEAL ALL DUCTS TO CLASS "B" STANDARDS.
- PROVIDE TURNING VANES FOR ALL SUPPLY AIR AND RETURN AIR RECTANGULAR ELBOWS.
- 4. FLEXIBLE DUCTS SHALL BE INSULATED NONMETALLIC, FORM "NM-1L', MAXIMUM LENGTH OF 5'-0" AT DIFFUSER OR GRILLE CONNECTION. BUTTERFLY BALANCING OR DAMPERS WHERE SHOWN OR REQUIRED, ROUND OR RECTANGULAR, GALVANIZED SHEET METAL, WITH EXTERNAL INDICATING QUADRANT AND SETSCREW.
- 5. SHEET METAL DUCT SIZES SHOWN ARE NET CLEAR INSIDE DIMENSIONS. WHEN INTERNAL INSULATION IS REQUIRED, DUCT SIZE SHALL BE INCREASED TO PROVIDE NET CLEAR DIMENSIONS INDICATED.
- MECHANICALLY FASTEN CONNECTIONS BETWEEN METAL DUCTS AND THE INNER CORE OF FLEXIBLE DUCTS. ALL JOINTS, LONGITUDINAL AND TRANSVERSE SEAMS, AND CONNECTIONS IN DUCTWORK, SHALL BE SECURELY FASTENED AND SEALED WITH

- WELDS, GASKETS, MASTICS (ADHESIVES), MASTIC-PLUS-EMBEDDED-FABRIC SYSTEMS, OR TAPES IN ACCORDANCE WITH UL 181A OR UL 181B.
- 7. ALL EXHAUST AIR DUCTWORK SHALL BE INSULATED FROM THE AIR OUTLET TO 20 FEET IN WITH 1-1/2" THICK, 3/4 LB. DENSITY, FIBERGLASS DUCT WRAP FACED WITH OUTER FOIL BLANKET, MINIMUM INSTALLED R-VALUE 3.5.
- 8. MOTORIZED OUTDOOR AIR AND EXHAUST AIR DAMPERS SHALL HAVE A MAXIMUM LEAKAGE RATE OF 4 CFM / SF AT 1.0" W.G. EXCEPT FOR FACTORY BUILT PACKAGED SYSTEMS, WHICH MAY HAVE A LEAKAGE NOT TO EXCEED 20 CFM / SF AT 1.0" W.G.
- 9. TEST THE OPERATION OF MECHANICAL SYSTEMS AND EQUIPMENT FOR COMPLIANCE WITH CONTRACT CONDITIONS. MEASURE AIR QUANTITIES WITH CALIBRATED DEVICES CAPABLE OF MEASURING AIR QUANTITIES ON A CONTINUOUS BASIS AND DISPLAYING THAT QUANTITY ON A READILY ACCESSIBLE DISPLAY DEVICE. ADJUST ALL DAMPERS, DRIVES, MOTORS, AND OTHER ADJUSTABLE ITEMS TO DELIVER DESIGN QUANTITIES IN ACCORDANCE WITH NEBB PROCEDURAL STANDARDS (2005) OR AABC NATIONAL STANDARDS (2002). PROVIDE ALL NECESSARY BELTS, SHEAVES, ETC. PROVIDE BALANCE REPORT TO OWNER AND ENGINEER.
- 10. CONTRACTOR SHALL SUPPLY ALL REQUIRED STARTERS. DISCONNECTS AND POWER WIRING BY ELECTRICAL CONTRACTOR.

<u>HVAC ABBREVIATIONS</u>								
ACFM	ACTUAL AIR — CUBIC FEET PER MINUTE	FLA	FULL LOAD AMPS	OC .	ON CENTER			
ACH	AIR CHANGES PER HOUR	FLR	FLOOR	OA or OSA	OUTSIDE AIR			
AD AFF	ACCESS DOOR ABOVE FINISH FLOOR	FOB FOT	FLAT ON BOTTOM FLAT ON TOP	OMSC OSSC	2010 OREGON MECHANICAL SPECIALTY CODE 2010 OREGON STRUCTURAL SPECIALTY CODE			
AFF AHU	ABOVE FINISH FLOOR AIR HANDLING UNIT	FPM	FEET PER MINUTE	0550	2010 OREGON STRUCTURAL SPECIALIT CODE			
AL	ALUMINUM	FSD	COMBINATION FIRE / SMOKE DAMPER	PBD	PARALLEL BLADE DAMPER			
AP	ACCESS PANEL	F3D	COMBINATION FIRE / SMOKE DAMPER	PSI	POUNDS PER SQUARE INCH			
ARCH	ARCHITECT OR ARCHITECTURAL	GALV	GALVANIZED STEEL	PT	PRESSURE / TEMPERATURE PLUG			
ATD	AIR TRANSFER DUCT	GC	GENERAL CONTRACTOR	PVC	POLYVINYL CHLORIDE			
		GM	GAS METER	1 40	TOETVIIVE ONEONIBE			
BD	BACKDRAFT DAMPER	GPM	GALLONS PER MINUTE	RA	RETURN AIR			
BLDG	BUILDING	GRD	GRILLES, REGISTERS, DIFFUSERS	RECT	RECTANGULAR			
ВМ	BEAM			RPM	REVOLUTIONS PER MINUTE			
BOD	BOTTOM OF DUCT	Н	HUMIDISTAT	REQ'D	REQUIRED			
BOP	BOTTOM OF PIPE	HDPE	HUGH-DENSITY POLYETHYLENE					
BOS	BOTTOM OF STEEL	HEPA	HIGH EFFICIENCY PARTICULATE AIR	SA	SUPPLY AIR			
BTU	BRITISH THERMAL UNIT	HP	MOTOR HORSEPOWER	SCFM	STANDARD AIR — CUBIC FEET PER MINUTE			
CDV	CLOTUES DRYER VENT	HVAC	HEATING, VENTING, AND CONDITIONING	SEC	SECTION			
CFH	CLOTHES DRYER VENT CUBIC FEET PER HOUR	HPW	HEAT PUMP WATER RETURN	SF or SQ FT				
CFM	CUBIC FEET PER MINUTE	HPWR HPWS	HEAT PUMP WATER RETURN HEAT PUMP WATER SUPPLY	SIM	SIMILAR			
CLG	CEILING	пгиз	HEAT FUMP WATER SUPPLY	SM SMACNA	SHEET METAL AND AIR CONDITIONING			
CONSTR	CONSTRUCTION	LB(S)	POUND, POUNDS	SMACNA	SHEET METAL AND AIR CONDITIONING CONTRACTORS NATIONAL ASSOCIATION			
CV	CONSTRAINT VOLUME	LAT	LEAVING AIR TEMPERATURE	SP	STATIC PRESSURE			
- '		LWT	LEAVING WATER TEMPERATURE	SPEC	SPECIFICATION OR SPECIFIED			
DB	DRY BULB		EL/WING W/WEIN FEMILEIWHONE	SS	STAINLESS STEEL			
DIA	DIAMETER	MA	MIXED AIR	STD	STANDARD			
DN	DOWN	MAX	MAXIMUM					
DWG	DRAWING	MBH	THOUSAND BTU PER HOUR	T	THERMOSTAT			
DX	DIRECT EXPANSION (REFRIGERATION)	MC	MECHANICAL CONTRACTOR	TC	TEMPERATURE CONTROLS			
		MCA	MINIMUM CIRCUIT CAPACITY	TEMP	TEMPERATURE			
EA	EXHAUST AIR	MECH	MECHANICAL	TOS	TOP OF STEEL			
EAT	ENTERING AIR TEMPERATURE	MFR	MANUFACTURER	TYP	TYPICAL			
EC .	ELECTRICAL CONTRACTOR	MIN	MINIMUM					
ELEV ERA	ELEVATION ECONOMIZER RELIEF AIR	MOCP	MAXIMUM OVERCURRENT PROTECTION	UNO	UNLESS NOTED OTHERWISE			
ESP	EXTERNAL STATIC PRESSURE	NO	NODMALLY OLOCED	\/^\/	VARIABLE AIR VOLUME			
EWT	ENTERING WATER TEMPERATURE	NC NG	NORMALLY CLOSED NATURAL GAS	VAV VD	VARIABLE AIR VOLUME VOLUME DAMPER			
EXH	EXHAUST	NIC	NOT IN CONTRACT	VFD	VARIABLE FREQUENCY DRIVE			
2/01	2.4	NO	NORMALLY OPEN	VID	VARIABLE TREGOLITOT DIVIVE			
F	FAHRENHEIT	NTS	NOT TO SCALE	WB	WET BULB			
FC	FLEXIBLE CONNECTION	1110		W/	WITH			
FD	FIRE DAMPER	OBD	OPPOSED BLADE DAMPER	WG	WATER GAUGE			

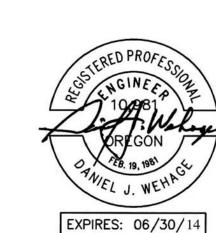
DRAWING LIST

M-1 MECHANICAL LEGEND, NOTES & ABBREVIATIONS M-2 HVAC PLAN & EQUIPMENT SCHEDULES

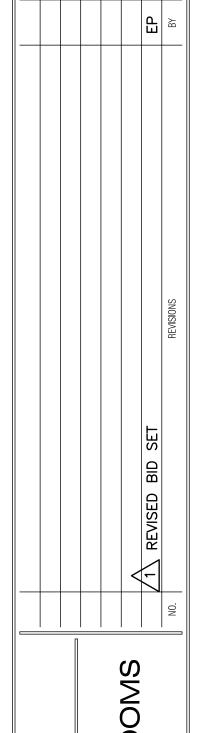
M-3 HVAC PLANS & SECTION - 1 M-3.1 HVAC PLANS & SECTION - 2

NOTE: ABBREVIATIONS AND SYMBOLS ARE ARCSINE ENGINEERING STANDARDIZED SYMBOL LEGENDS. AS SUCH, ALL SYMBOLS SHOWN MAY NOT APPEAR ON

OR WITHIN THIS SET OF CONTRACT DOCUMENTS.







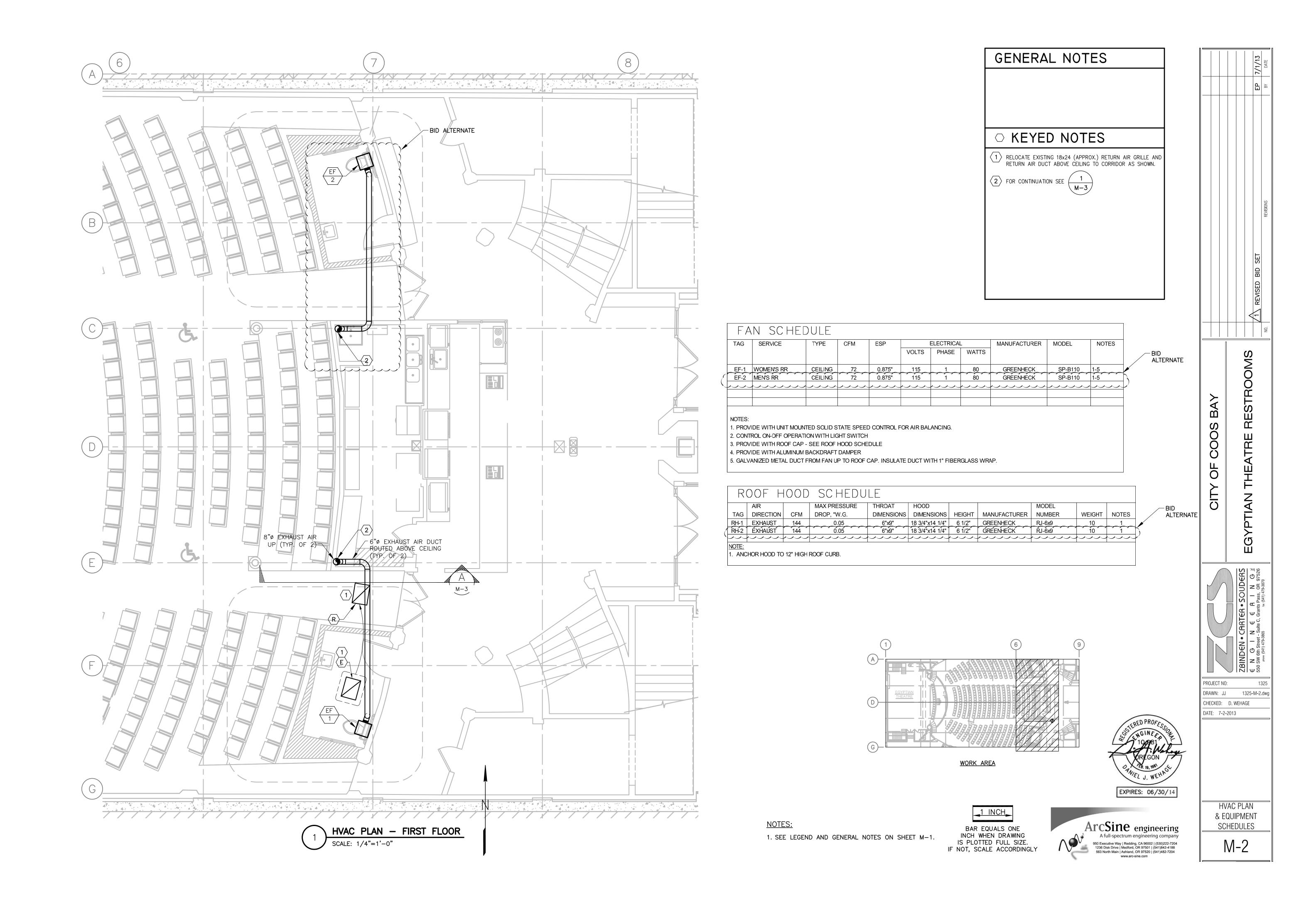
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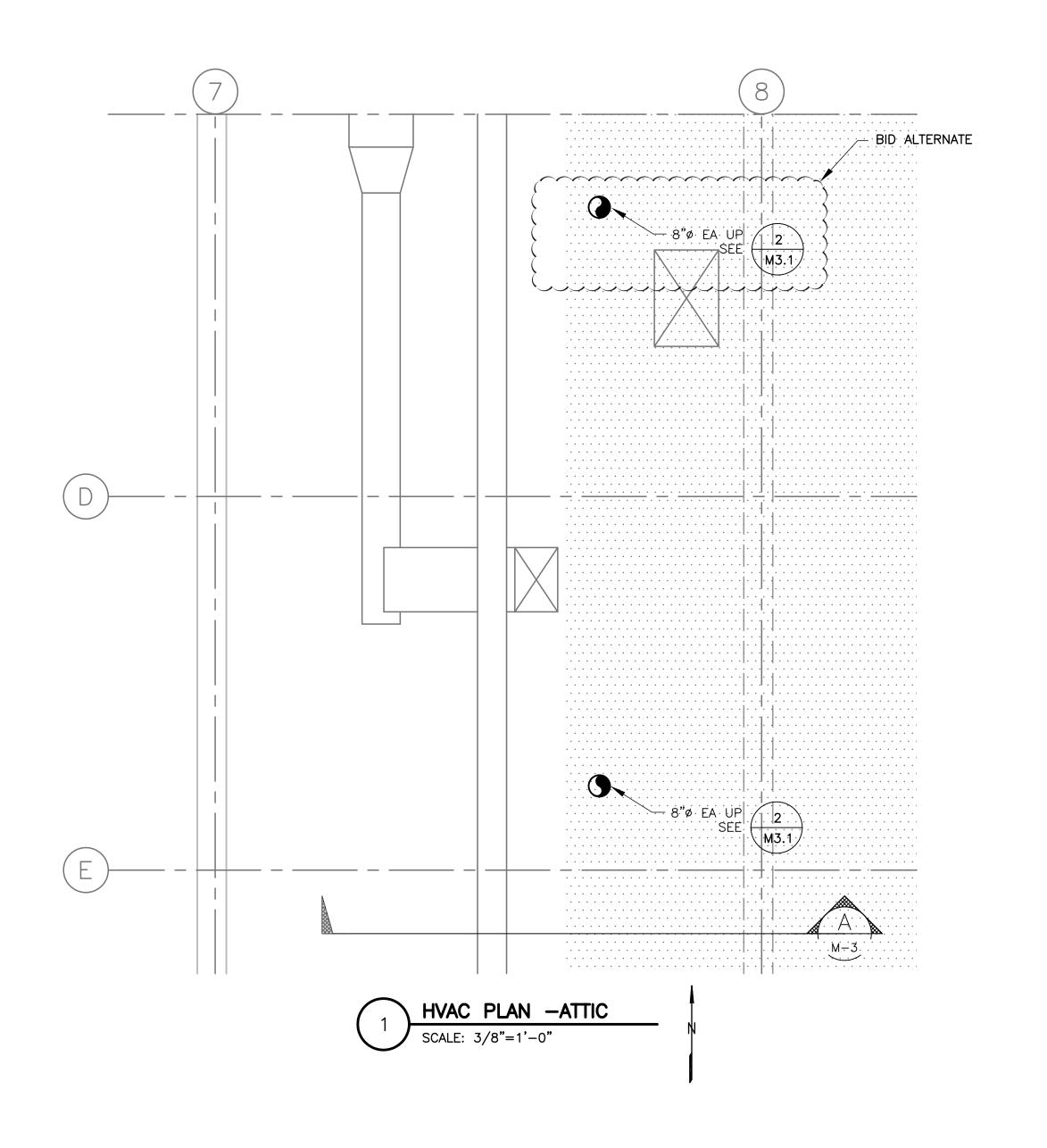


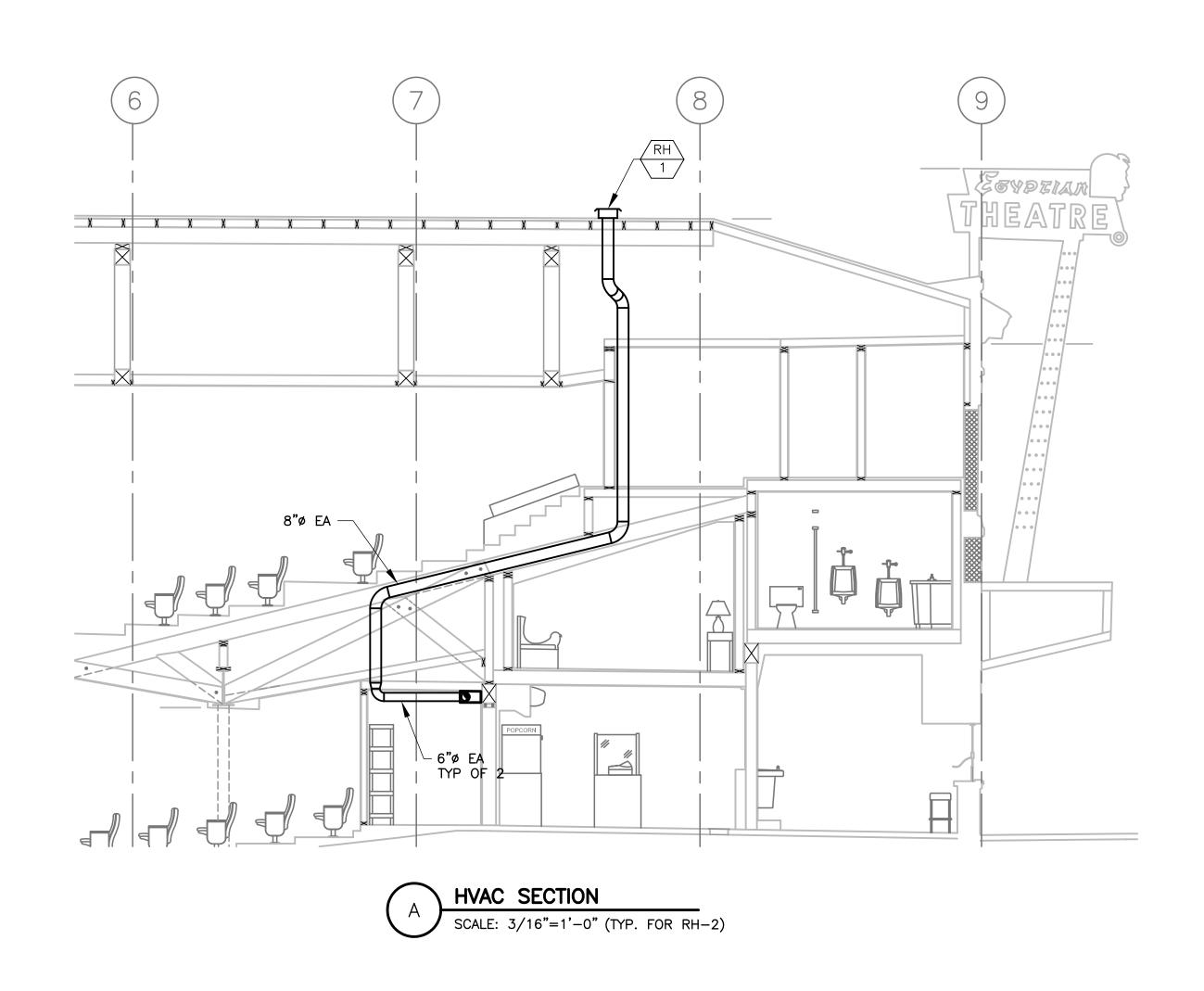
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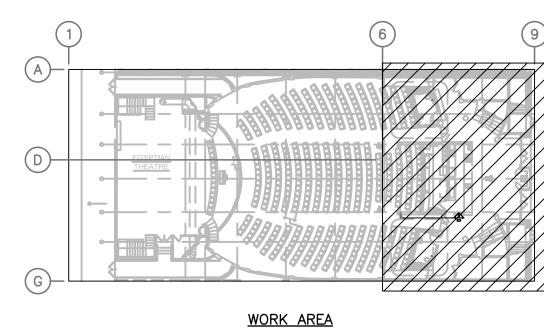
DATE: 7-2-2013

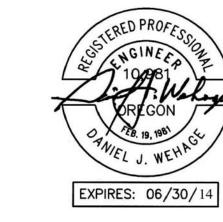
LEGEND, NOTES & ABBREVIATIONS











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HVAC PLANS & SECTION - 1

M-3

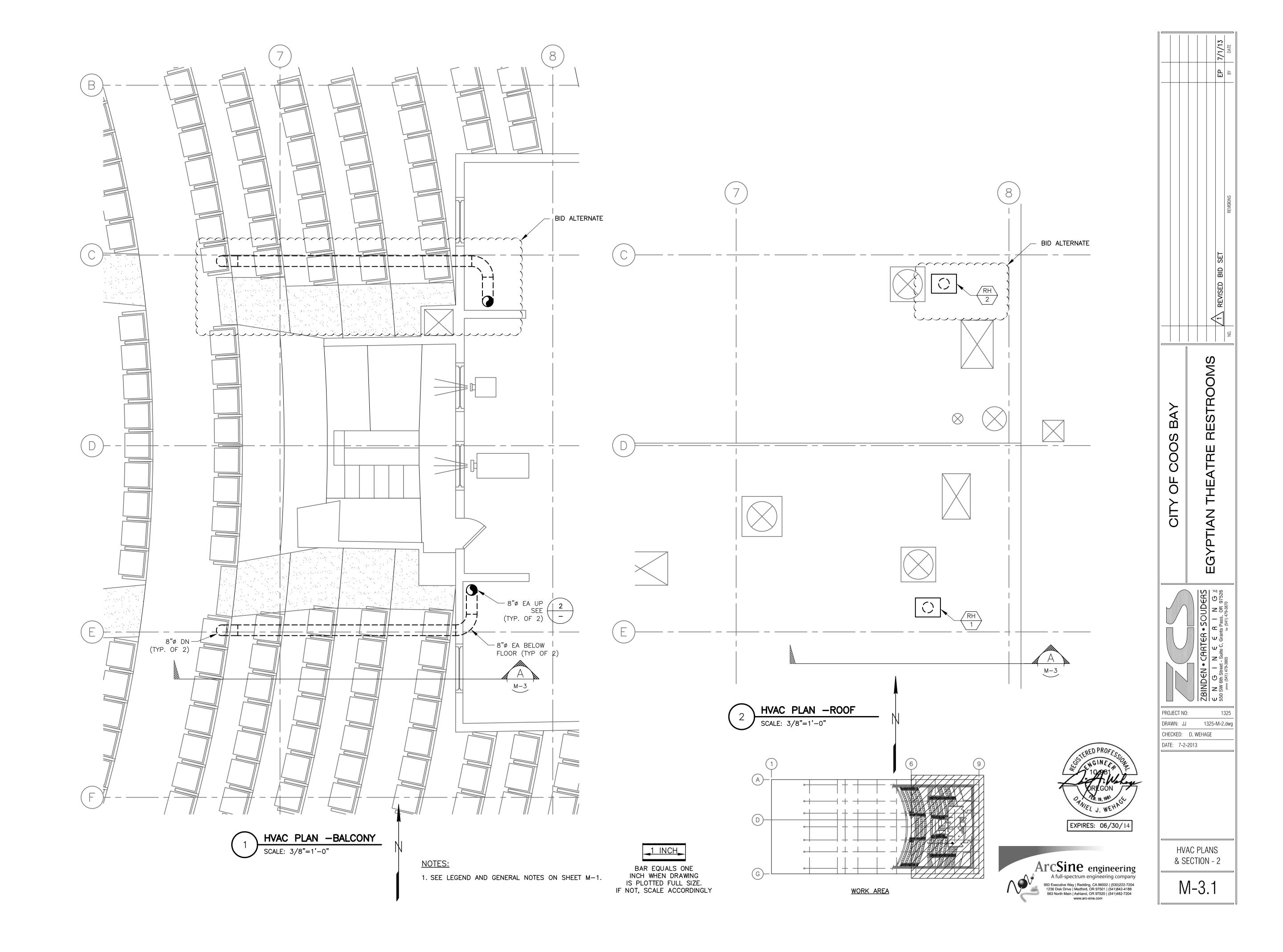
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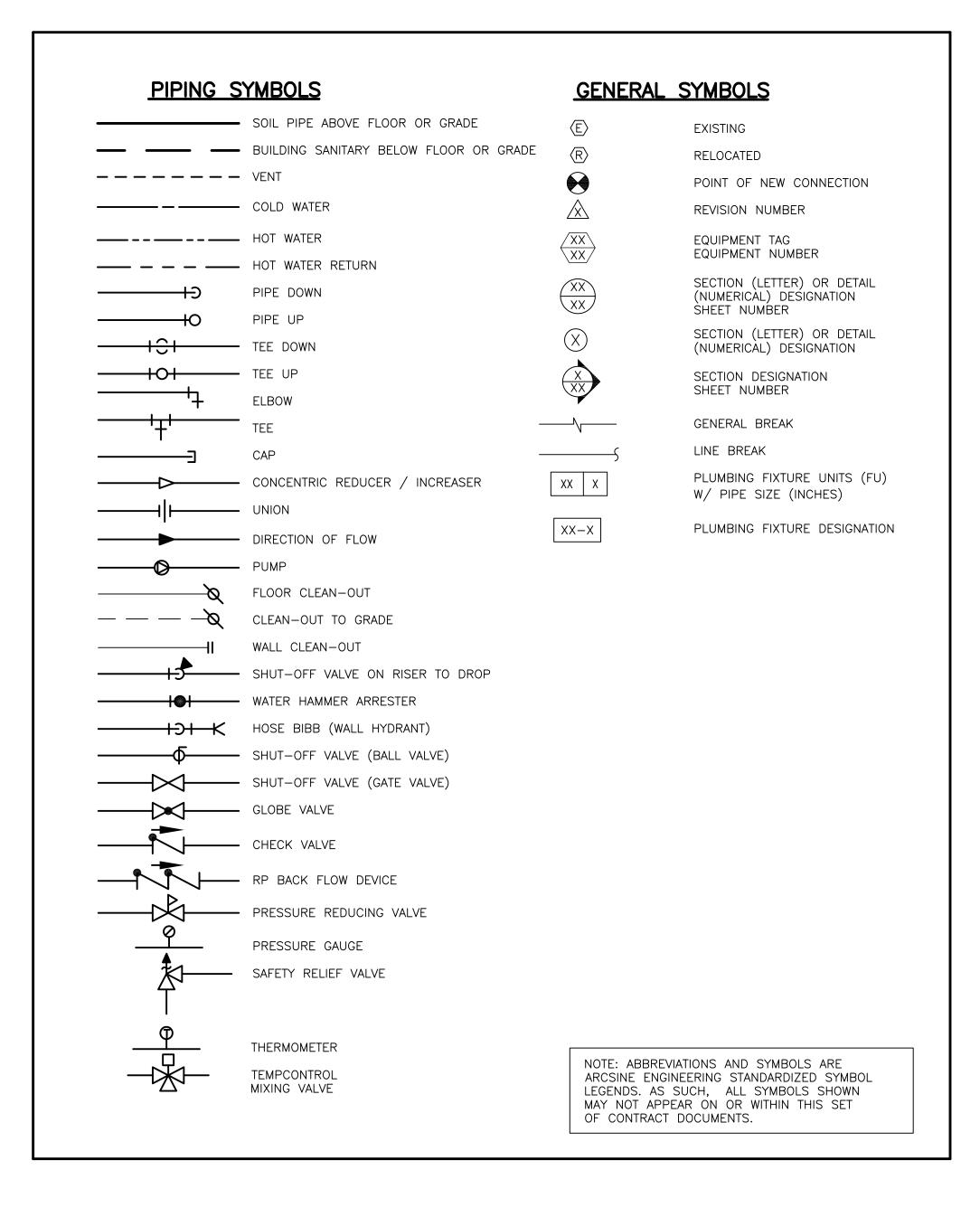
DATE: 7-2-2013



NOTES:

BAR EQUALS ONE
INCH WHEN DRAWING
IS PLOTTED FULL SIZE.
IF NOT, SCALE ACCORDINGLY 1. SEE LEGEND AND GENERAL NOTES ON SHEET M-1.





PLUMBING FIXTURE SCHEDULE

DESCRIPTION

L-1 | LAVATORY (WALL HUNG)

L-2 LAVATORY (WALL HUNG)

(FLOOR MOUNT)

(FLOOR MOUNT)

WC−1 | WATER CLOSET

WC−2 | WATER CLOSET

WH−1 | WATER HEATER

WH−2 | WATER HEATER

MINIMUM CONNECTION SIZE

CW

1/2"

1/2"

1/2

1/2"

1/4"

1/4"

HW

1/4"

WASTE | VENT

REMARKS

HAND TRIP LEVER

HAND TRIP LEVER

- ON ONE AND NOT THE OTHER BEING FURNISHED AND INSTALLED AS THOUGH
- 2. THE ENTIRE INSTALLATION SHALL CONFORM TO THE REQUIREMENTS OF THE MOST RECENTLY ADOPTED PLUMBING CODE, MECHANICAL CODE, BUILDING CODE AND ALL OTHER APPLICABLE CITY, COUNTY, AND STATE CODES AND REGULATIONS IN EFFECT AT THE DATE OF THE BID. CONFORM TO ANY CODES, RULES, REGULATIONS AND REQUIREMENTS THAT THE PROJECT OWNER ENGINEER AT ITS CURRENT HOURLY RATES.
- OBTAIN ALL INSPECTION APPROVALS ON PLUMBING WORK FROM REGULATING AGENCIES WHERE REQUIRED.

PROVIDE ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY TO CONSTRUCT

A COMPLETE, OPERATIONAL PLUMBING SYSTEM FOR THE ENTIRE PROJECT AS

SHOWN ON THESE DRAWINGS, INCLUDING ALL NECESSARY FEES AND PERMITS.

- 4. PRIOR TO FABRICATION AND INSTALLATION THE CONTRACTOR SHALL COORDINATE THE INSTALLATION OF ALL PLUMBING PIPING AND EQUIPMENT WITH MECHANICAL PIPING, EQUIPMENT, DUCTWORK, AND ALL OTHER TRADES INCLUDING BUT NOT LIMITED TO THE MECHANICAL CONTRACTOR, ELECTRICAL CONTRACTOR AND GENERAL CONTRACTOR. WHERE CONFLICTS MAY OCCUR, THEY SHALL BE RESOLVED PRIOR TO INSTALLATION.
- 5. THE DRAWINGS SHOW THE GENERAL DESIGN, ARRANGEMENTS AND THE EXTENT OF THE SYSTEM. IT SHALL BE THE WORK OF THE CONTRACTOR TO MAKE SUCH SLIGHT ALTERATIONS AS MAY BE NECESSARY TO MAKE THE SYSTEM COMPLETE AND OPERATIONAL IN ACCORDANCE WITH THE DESIGN INTENT. MAJOR DEVIATIONS SUCH AS CHANGES IN COMPONENT SIZES, WEIGHTS, QUANTITIES, OR MATERIAL REQUIRE PRIOR APPROVAL BY THE CONSULTING ENGINEER.
- CONTRACTORS AND SUB-CONTRACTORS SHALL CAREFULLY REVIEW THE CONSTRUCTION DOCUMENTS. INFORMATION REGARDING THE COMPLETE WORK IS DISPERSED THROUGHOUT THE DOCUMENT SET AND CANNOT BE ACCURATELY DETERMINED WITHOUT REFERENCE TO THE COMPLETE DOCUMENT SET.
- 7. SEE ARCHITECTURAL DRAWINGS FOR EXACT LOCATION OF ALL PLUMBING FIXTURES.
- 8. THE WORKING DRAWINGS ARE DIAGRAMMATIC. BECAUSE OF THE SMALL SCALE OF THE DRAWINGS, THEY DO NOT SHOW EVERY OFFSET, BEND OR ELBOW NECESSARY FOR THE COMPLETE INSTALLATION IN THE SPACE PROVIDED. ALL LOCATIONS FOR PLUMBING EQUIPMENT AND PIPING SHALL BE CHECKED AND COORDINATED WITH THE ARCHITECTURAL, MECHANICAL, STRUCTURAL AND ELECTRICAL DRAWINGS.
- 9. EXACT ROUTING OF WASTE, GAS, AND WATER SERVICE IS DEPENDENT ON LOCAL SITE CONDITIONS AND MODIFICATIONS IN EQUIPMENT CONNECTIONS. EXACT LOCATION OF EQUIPMENT MAY VARY DEPENDING ON LOCAL CODE, HEALTH DEPARTMENT AND CITY REQUIREMENTS.
- 10. DETAILS: THE CONTRACTOR IS RESPONSIBLE TO REVIEW AND USE WHERE APPROPRIATE ALL OF THE PLUMBING DETAILS SHOWN ON THE DRAWINGS. DETAILS MAY OR MAY NOT BE CALLED OUT ON THE DRAWINGS WITH SYMBOLS OR KEYED NOTES. ANY CHANGES RESULTING FROM FAILURE TO INSTALL THE PLUMBING SYSTEM WITHOUT USING THE INCLUDED DETAILS IS THE RESPONSIBILITY OF THE CONTRACTOR.
- 11. THE DRAWINGS HAVE BEEN PREPARED TO SUPPLEMENT EACH OTHER AND

857-E2805-665PSHCP METERING FAUCET. PROVIDE INSULATED PIPE COVERINGS.

857-E2805-665PSHCP METERING FAUCET. PROVIDE INSULATED PIPE COVERINGS.

CONNECTIONS, 49°F WATER TEMPERATURE RISE AT 0.5 GPM FLOW RATE. MOUNT BELOW L-1.

CONNECTIONS, 49°F WATER TEMPERATURE RISE AT 0.5 GPM FLOW RATE. MOUNT BELOW L-2.

1/2" AMERICAN STANDARD ROXALYN LAVATORY MODEL 0195.073, W/ CONCEALED ARMS LAVATORY SUPPORT, J.R. SMITH 0700(-E). CHICAGO FAUCETS

1/2" AMERICAN STANDARD ROXALYN LAVATORY MODEL 0195.073, W/ CONCEALED ARMS LAVATORY SUPPORT, J.R. SMITH 0700(-E). CHICAGO FAUCETS

1/4" CHRONOMITE POINT OF USE WATER HEATER MODEL SR-30L, 3600W, 110/120V, 30A BREAKER SIZE, WT. 5 LB., 1/4" FEMALE NPT PIPE

CHRONOMITE POINT OF USE WATER HEATER MODEL SR-30L, 3600W, 110/120V, 30A BREAKER SIZE, WT. 5 LB., 1/4" FEMALE NPT PIPE

AMERICAN STANDARD CADET 2377.100 FLOOR MOUNTED ELONGATED BOWL W/ PRESSURE ASSIST TYPE TANK TOILET. OPEN SEAT, WHITE. LEFT

AMERICAN STANDARD CADET 2377.100 FLOOR MOUNTED ELONGATED BOWL W/ PRESSURE ASSIST TYPE TANK TOILET. OPEN SEAT, WHITE. RIGHT

GENERAL NOTES

- THEY SHALL BE INTERPRETED AS AN INTEGRAL UNIT WITH THE ITEMS SHOWN SHOWN AND CALLED OUT IN BOTH.
- 12. PREPARE 6 COPIES OF SUBMITTALS IN AN INDEXED. LABELED FOLDER CONTAINING FULL PERFORMANCE, MATERIAL AND INSTALLATION INFORMATION ABOUT ALL EQUIPMENT, PIPING, COMPONENTS AND ACCESSORIES TO BE USED. ARCSINE ENGINEERS WILL CHECK SUBMITTALS AT MOST TWICE. TIME SPENT ON SUBSEQUENT SUBMITTALS WILL BE BILLED TO THE CONTRACTOR BY THE
- 13. THE STRUCTURE SHOWN ON ALL DETAILS MAY OR MAY NOT PERTAIN TO A PORTION OR ANY PORTION OF THE BUILDING. COORDINATE MOUNTING REQUIREMENTS WITH ARCHITECTURAL AND STRUCTURAL DRAWINGS.
- 14. ANY PART OF THIS INSTALLATION THAT FAILS, IS UNFIT, OR BECOMES DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
- 15. IF CONTRACTOR ENCOUNTERS MATERIAL WHICH MAY CONTAIN ASBESTOS. IMMEDIATELY STOP WORK IN THIS AREA AND NOTIFY THE OWNER.
- 16. ALL EQUIPMENT SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE EQUIPMENT MANUFACTURER'S RECOMMENDATIONS. PROVIDE ALL FITTINGS, TRANSITIONS, VALVES, AND OTHER DEVICES AND ACCESSORIES REQUIRED FOR A COMPLETE, WORKABLE INSTALLATION.
- 17. EXISTING INTERIOR PIPING AND EQUIPMENT HAS BEEN LOCATED IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL VERIFY LOCATIONS, POINTS OF CONNECTION, PIPE SIZES AND PIPE ROUTING THROUGH EXISTING CONDITIONS PRIOR TO COMMENCING WORK.
- 18. THE CONTRACTOR SHALL PERFORM THE WORK IN A MANNER THAT WILL CAUSE A MINIMUM DISRUPTION TO BUILDING TENANT USE AND SHALL COORDINATE THE WORK WITH THE BUILDING OWNER'S REPRESENTATIVE.
- 19. THE CONTRACTOR IS RESPONSIBLE FOR PLUMBING EQUIPMENT CHECK-IN. SAFEKEEPING, AND DAMAGE.
- 20. ALL OPENINGS FOR PIPING THROUGH FIRE-RATED ENCLOSURES SHALL BE CAULKED AS REQUIRED BY CODE TO MAINTAIN FIRE RATING.
- 21. PIPE INSULATION (ABOVE GRADE):
- 22. HOT WATER: PROVIDE A MINIMUM OF 1" THICK INSULATION (CONDUCTIVITY NOT EXCEEDING 0.27 BTU/IN/HR-FT2-°F) ON ALL SERVICE HOT WATER AND HOT WATER RECIRCULATION PIPING.
- 23. COLD WATER: PROVIDE 1/2" THICK INSULATION ON PIPE INSTALLED ABOVE GRADE WITHIN THE BUILDING FOR CONDENSATION CONTROL.
- 24. LAVATORY AND SINK FAUCETS SHALL HAVE A FLOW RATE OF 0.5 GPM.
- 25. ANY SHUT DOWNS REQUIRED TO CONNECT TO ALL ACTIVE PIPING ARE TO BE COORDINATED WITH OWNER.
- 26. ALL VALVES CONCEALED IN CEILING OR WALLS SHALL BE PROVIDED WITH

- ACCESS PANELS. LOCATE ON "AS BUILT" DRAWINGS.
- 27. ALL UNDERGROUND SOIL AND WASTE PIPING TO A POINT 5'-0" OUT FROM BUILDING SHALL BE RUN AT A MINIMUM SLOPE OF 1/4" PER FT.
- 28. BELOW GRADE CW PIPING SHALL BE TYPE K COPPER OR PEX TUBING (TYPE "A"). ABOVE GRADE PIPING SHALL BE TYPE L COPPER OR PEX TUBING (TYPE "A"). SANITARY DRAIN AND VENT PIPING SHALL BE ABS-DWV FOR BELOW AND ABOVE GRADE PIPING.
- 29. LOCATE ALL PLUMBING VENTS AT LEAST 3 FEET ABOVE OR 10 FEET AWAY FROM ALL OUTSIDE AIR INTAKES INTO THE BUILDING.
- 30. SEE "PLUMBING FIXTURE SCHEDULE" FOR FIXTURE MAKE AND TYPE, AND SIZE OF INDIVIDUAL WASTE, VENT, AND DOMESTIC WATER PIPING TO FIXTURES.
- 31. ALL PLUMBING EQUIPMENT SHALL BE LISTED AND LABELED BY AN APPROVED TESTING AGENCY.
- 32. EQUIPMENT AND INSTALLATION SHALL MEET NATIONAL SANITATION FOUNDATION (NSF) STANDARDS, OR EQUIVALENT.
- 33. PROVIDE PROPER PROVISIONS FOR EXPANSION OR MOVEMENT OF ALL PIPING.
- 34. ALL PIPING SHALL BE SECURED BY DOUBLE NUTTING AT THE HANGER ROD ATTACHMENT TO THE STRUCTURE AND AT THE PIPE HANGER.
- 35. TWO OPERATING AND MAINTENANCE MANUALS SHALL BE PROVIDED IN HARD BACK LOOSE LEAF BINDERS. MANUALS SHALL CONTAIN PRODUCT CUT SHEETS AND OPERATING AND MAINTENANCE INSTRUCTIONS ON ALL EQUIPMENT.

ACCESSORIES, FIXTURES, VALVES, ETC., PROVIDED FOR THE PROJECT

- 36. UPON COMPLETION OF THE WORK, REMOVE ALL SURPLUS MATERIALS AND RUBBISH. MAKE ALL REQUIRED PATCHING AND REPAIRS OF OTHER TRADES' WORK DAMAGED BY THIS CONTRACTOR, AND LEAVE THE PREMISES IN A CLEAN ORDERLY CONDITION.
- 37. THE CONTRACTOR SHALL OPERATE THE SYSTEM AND DEMONSTRATE ALL ASPECTS TO THE ENGINEER AND/OR OWNER, TO PROVE ITS OPERATION.
- 38. THE CONTRACTOR SHALL GUARANTEE THE PLUMBING SYSTEM FOR A PERIOD OF ONE YEAR FROM THE DATE OF SUBSTANTIAL COMPLETION.
- 39. THE CONTRACTOR SHALL, DURING CONSTRUCTION, MAINTAIN A SET OF AS-BUILT REDLINED RECORD DRAWINGS AT THE PROJECT SITE. ALL CHANGES IN LAYOUT. ROUTING. EQUIPMENT, COMPONENTS, AND ACCESSORIES SHALL BE RECORDED. THE CONTRACTOR IS RESPONSIBLE FOR CONVERTING THE CONSTRUCTION REDLINE DRAWINGS INTO "AS BUILT" DRAWINGS USING AUTOCAD BACKGROUNDS PROVIDED BY THE ENGINEER. IF THE CONTRACTOR DOES NOT HAVE AUTOCAD DRAFTING CAPABILITIES, THE CONTRACTOR SHALL HIRE THE ENGINEER TO PRODUCE THE "AS BUILT" DRAWINGS FROM HIS FIELD REDLINES. COMPLETED AUTOCAD "AS BUILTS" SHALL BE GIVEN TO THE ARCHITECT/ENGINEER AFTER THE FINAL INSPECTION.

PLUMBING ABBREVIATIONS									
AD	ACCESS DOOR	DN	DOWN	HW	HOT WATER (POTABLE)	00	ON OFNITED	,	SQUARE FEET
AFF ARCH	ABOVE FINISH FLOOR ARCHITECT OR ARCHITECTURAL	DW DWG	DISHWASHER DRAWING	HWR	HOT WATER RETURN	OC OA/OSA	ON CENTER OUTSIDE AIR	SH SIM	SHOWER SIMILAR
				INT	INITIAL WORK TO BE DONE	OMSC	OREGON MECHANICAL SPECIALTY CODE	SPEC	SPECIFICATION OR SPECIFIED
BLDG BFF	BUILDING	ELEV ET	ELEVATION		LAVATORY	OPSC	OREGON PLUMBING SPECIALTY CODE	SRV	SAFETY RELIEF VALVE
Brr BM	BELOW FINISH FLOOR BEAM	EWT	EXPANSION TANK ENTERING WATER TEMPERATURE	L D(C)	LAVATORY	OSSC	OREGON STRUCTURAL SPECIALTY CODE	SS STD	STAINLESS STEEL STANDARD
BOP	BOTTOM OF PIPE	EWF	EYE WASH FOUNTAIN	LB(S)	POUND, POUNDS	PRV	PRESSURE RELIEF VALVE	טוט	STANDARD
BOS	BOTTOM OF STEEL	EWH	ELECTRIC WATER HEATER	MBH	THOUSAND BTU PER HOUR	PT	PRESSURE TANK	TOS	TOP OF STEEL
BTU	BRITISH THERMAL UNIT		ELEVIDI EL GONNEGTION	MC	MECHANICAL CONTRACTOR	PSI	POUNDS PER SQUARE INCH	TYP	TYPICAL
0.4	COMPRESSED AIR	FC	FLEXIBLE CONNECTION	MCA	MINIMUM CIRCUIT CAPACITY	PT	PRESSURE / TEMPERATURE PLUG		
CA CLG	COMPRESSED AIR CEILING	FLR FU	FLOOR FIXTURE UNITS	MECH	MECHANICAL	PVC	POLYVINYL CHLORIDE	U	URINAL
CO	CLEAN OUT	FUT	FUTURE WORK TO BE DONE	MFGR MIN	MANUFACTURER MINIMUM	RD	RAIN DRAIN	UNO	UNLESS NOTED OTHERWISE
CTG	CLEAN OUT TO GRADE	101	TOTOKE WORK TO BE BONE	MOCP	MAXIMUM OVERCURRENT PROTECTION	RDO	RAIN DRAIN RAIN DRAIN OVERFLOW	V	VENT
CONSTR	CONSTRUCTION	GC	GENERAL CONTRACTOR	IVIOCI	MAXIMOM OVERCONNEW TROTECTION	RECT	RECTANGULAR	•	
CW	COLD WATER (POTABLE)	GPM	GALLONS PER MINUTE	NC	NORMALLY CLOSED	REQ'D	REQUIRED	W/	WITH
DOW	DOMESTIC OF STREET WASHED	LID	HOSE BIBB	NG	NATURAL GAS	RPM	REVOLUTIONS PER MINUTE	WC	WATER CLOSET
DCW DF	DOMESTIC CLOTHES WASHER DRINKING FOUNTAIN	HB HP	MOTOR HORSEPOWER	NIC	NOT IN CONTRACT			WCO	WALL CLEAN OUT
DIA	DIAMETER	HR	HOUR	NO NTS	NORMALLY OPEN NOT TO SCALE	SAN	SANITARY DRAIN LINE	WH WHA	WATER HEATER WATER HAMMER ARRESTER
DIT	SUMETER.			IVIO	NOT TO SOALL			VVI I	WATER HAMIMEN ARRESTER

DRAWING LIST

- P-1 LEGEND, NOTES, ABBREVIATIONS & FIXTURE SCHEDULE
- P-2 UNDER FLOOR/FIRST FLOOR PLUMBING PLAN AND DETAILS
- P-3 PLUMBING DETAILS





ArcSine engineering A full-spectrum engineering company

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PROJECT NO: 1325-P-1.dwg DRAWN: JJ CHECKED: D. WEHAGE

DATE: 7-2-2013

LEGEND, NOTES, **ABBREVIATIONS &** FIXTURE SCHEDULE

