

60'

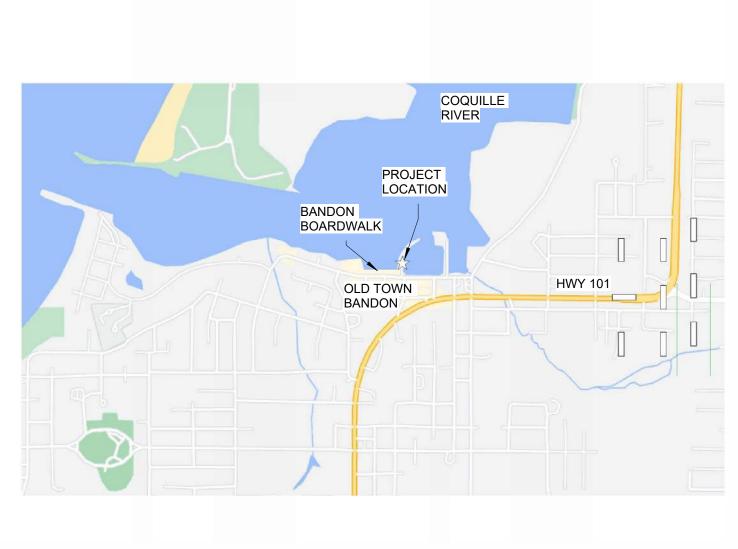
120'

0' 15' 30'

# **HIGH DOCK BUILDING**

## COLOR SCHEDULE







VERTICLE DATUM - NAVD 1988 PREPARED BY: TROY RAMBO, LS 2865

LEGEND STORM DRAIN L.P., LIGHT POLE C.C. CURB CUT



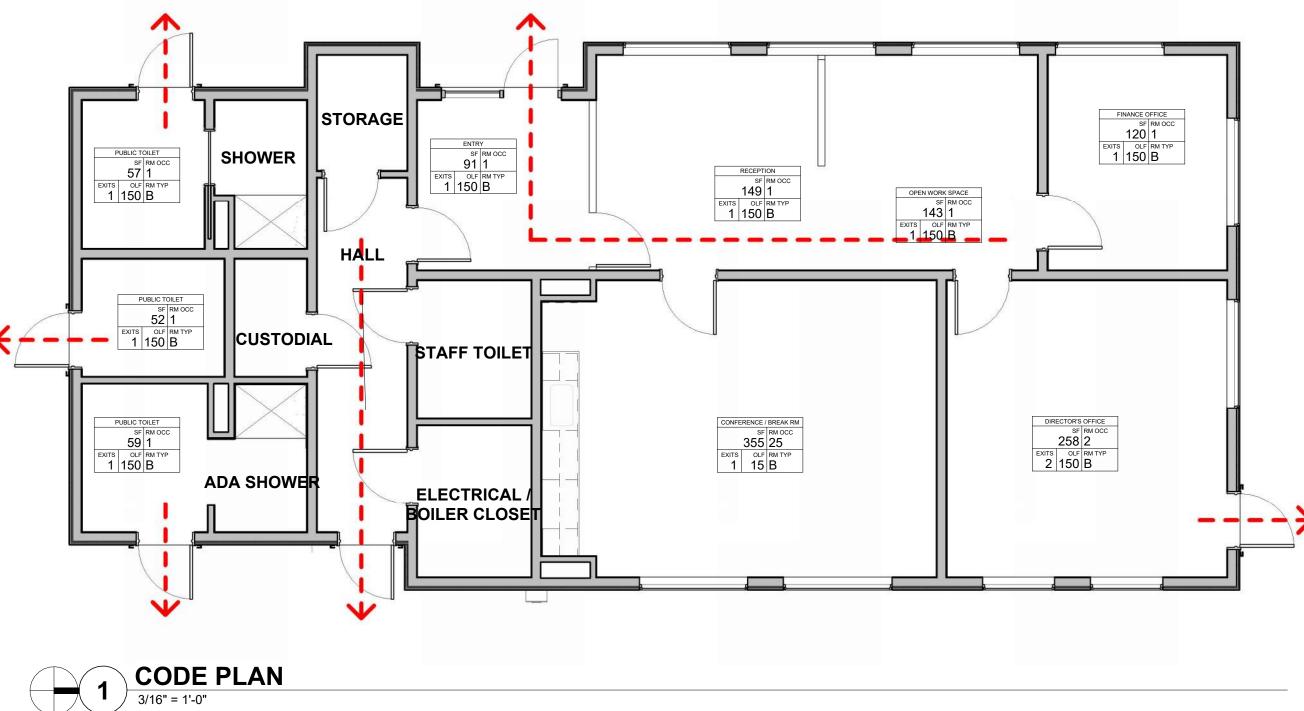
### ABBREVIATIONS

@ AB AC ACC ACT AD ADD ADJ AFF AHU AL ALT AP APPROX ARCH ASPH	ANGLE AT ANCHOR BOLT ACOUSTIC ACCESS ACOUSTIC CEILING TILE ACOUSTIC CEILING PANEL AREA DRAIN ADDITIONAL ADJUSTABLE ABOVE FINISH FLOOR AIR HANDLING UNIT ALUMINUM ALTERNATE ACCESS PANEL APPROXIMATE ARCHITECTURAL ASPHALT
BB BD BF BFC BG BIT BLCG BLKG BLKT BM BLK BOT BRG BRKR BRK BRKT BS BSMT BTWN	BOND BEAM BOARD BOTH FACES BELOW FINISH CEILING BUMPER GUARD BITUMINOUS BUILDING BLOCKING BLANKET BEAM/BENCH MARK BLOCK BOTTOM BEARING BREAKER BRICK BRACKET BACK SPLASH BASEMENT BETWEEN
CAB CER CFCI CG CH CJ CLG CLO CLR COL CONB CMU CONC CONF CONN CONST CONT CONT CONT CONT CONT CONT CONT CON	CABINET CERAMIC CONTRACTOR FURNISHED, CONTRACTOR INSTALLED CORNER GUARD COAT HOOK CAST IN PLACE CONTROL JOINT/CONSTRUCTION JOINT CEILING CLOSET/CLOSURE CLEAR COLUMN COMBINATION COMBINATION CONCRETE MASONRY UNIT CONCRETE CONFERENCE CONFERENCE CONTRUCTION CONTINUOUS CONTRACTOR CORRIDOR CARPET COAT RACK/CURTAIN ROD CASING CERAMIC TILE CENTER/COUNTER COUNTERSUNK CABINET UNIT HEATER COLD WATER
D DBL DET DF DIA DIAG DIM DIR DIV DM DN DO DR DR DR DR DR DR DR DR DR DR DR DR DR	DEPTH DOUBLE DETAIL DRINKING FOUNTAIN DIAMETER DIAGONAL DIMENSION DIRECTION DIVISION DE-MOUNTABLE PARTITION DOWN DETTO DOOR DRAWER DOWNSPOUT DRAWING DOWEL DEFORMED WELDED STUD
EA EC EF EH EJ ELEC ELEV EMBER ENT EQUIP ES ESR ETR EVC EW EXC EXP EXPF EXT	EACH ELECTRICAL CONTRACTOR EACH FACE ELECTRICAL HEATER/EXHAUST HOOD EXPANSION JOINT ELEVATION ELEVATION ELECTRICAL ELEVATOR/ELEVATION EMBEDDED EMERGENCY ENTRANCE EQUAL EQUIPMENT EMERGENCY SHOWER ELASTOMERIC SHEET ROOFING EXISTING TO REMAIN ELASTIC VINYL COATING EACH WAY ELECTRIC WATER COOLER EXCAVATE EXPANSION EXPOSED EXPLOSION PROOF EXTERIOR

A V D D E E C H C I N I L R G P R S T G U R G	FIELD ADJUSTABLE FIELD VERIFY FLOOR DRAIN FOUNDATION FIRE EXTINGUISHER FIRE EXTINGUISHER CABINET FIRE HOSE CABINET FIRE HOSE CABINET FINISH FIXTURE FLEXIBLE FLOOR FLOORING FACE OF STUD FIREPROOF/FIRE PROTECTION FIRE RETARDANT FULL SIZE/FULL SCALE FEET FOOTING FURRING
GA GALV GB GC GEN GFCI GFRG GFRG GLB GMU GWB GYP	GAUGE GALLON GALVANIZED GRAB BAR GENERAL CONTRACTOR GENERAL GOVERNMENT FURNISHED, CONTRACTOR INSTALLED GOVERNMENT FURNISHED, GOVERNMENT INSTALLED GLASS FIBER REINFORCED CONCRETE GLASS FIBER REINFORCED GYPSUM GLASS GLUE LAM BEAM GLAZED MASONRY UNIT GYPSUM WALL BOARD GYPSUM
I IDBD IDCP IDWD IDWE IK IM IP IR IR IR IT IVAC IWS	HEIGHT HARDBOARD HANDICAPPED HARDWOOD HARDWARE HOOK HOLLOW METAL HIGH POINT HANDRAIL HEIGHT HEATING VENTILATION AND AIR CONDITIONING HEAD WELDED STUDS
D MP NFO NSUL NT PW RF	INSIDE DIAMETER INSULATED METAL PANEL INCHES INFORMATION INSULATION INTERIOR INSULATED PLENUM WALL INSULATED ROOF FILL
AN S ST T	JANITOR JANITOR SINK JOIST JOINT
D 0	KNOCKED DOWN KNOCK-OUT / KNEE OPENING
AB B BS D G G F G G T K R L H L V S H T G V R W C	LENGTH LABORATORY LAMINATED POUND POUNDS LINEAR DIFFUSER LANDING LINEAR FOOT LONG LIGHT LOCKER LONG LEG HORIZONTAL LONG LEG VERTICAL LONG IEG VERTICAL LONG SLOTTED HOLE LIGHTING LOUVER LIGHTWEIGHT CONCRETE
IACH IAN IAR IAS IATL IAS IBW IDO IECH IETZ IFR IISC ILDG IPIS ITD ITG	MACHINE MANUAL MARBLE MASONRY MATERIAL MAXIMUM MACHINE BOLT MASONRY BEARING WALL MECHANICAL CONTRACTOR MEDIUM DENSITY OVERLAY MECHANICAL MEMBRANE METAL MEZZANINE MANUFACTURER MINIMUM MIRROR MISCELLANEOUS MARK METAL LATH MOLDING MASONRY OPENING METAL PARTITION MACHINE SCREW MOUNTED MOUNTING

	ABBR	REVIATIONS ABOVE	ARE FOR ARCHITECTURAL SHEETS ONLY.
NA NIC NO NOM NS NTS NWC	NOT APPLICABLE NOT IN CONTRACT NUMBER NOMINAL NON-SHRINK NOT TO SCALE NORMAL WEIGHT CONCRETE	T & B TB TBR TCP TD TDW TEMP TER TER TEX	TOP AND BOTTOM TACKBOARD/TOWEL BAR TO BE REMOVED THIN COAT PLASTER TOWEL DISPENSER TOWEL DISPENSER AND WASTE TEMPERATURE/TEMPERED TERRAZZO TEXTURE
OA OC OFCI OFF OPNG OPP OZ	OVERALL ON CENTER OUTSIDE DIAMETER/OVERFLOW DRAIN OWNER FURNISHED, CONTRACTOR INSTALLED OFFICE OPENING OPPOSITE OUNCE	TEX TFC T & G THK TOB TOC TOD TOF TOG TOJ	TROWELED FLOOR COVERING TONGUE AND GROOVE THICK TOP OF BEAM TOP OF CURB/TOP OF CONCRETE TOP OF DECK/TOP OF DUCT ELEVATION TOP OF FOOTING TOP OF GRATE TOP OF JOIST
PART PC PCC PCPL PDWR PH PL	PARTITION PIECE PRECAST CONCRETE PORTLAND CEMENT PLASTER PAPER TOWEL DISPENSER & WASTE RECEPTACLE PHILLIPS HEAD/PHASE PLATE/PROPERTY LINE	TOP TOS TOW TPG TPH TRAN TRANS TS	TOP OF PIPE ELEVATION TOP OF SLAB/TOP OF STEEL TOP OF WALL TOPPING TOILET PAPER HOLDER TRANSOM TRANSVERSE TUBE STEEL
PLAM PLAS PLBG PLYWD PM PNL PNLG	PLASTIC LAMINATE PLASTER PLUMBING PLYWOOD PROTECTED METAL PANEL PANELING	TWS TYP UG UNO UR	THREADED WELDED STUD TYPICAL UNDERGROUND UNLESS NOTED OTHERWISE URINAL
POL PR PRE FAB PRE FIN PSF PSI PT PTM PVC	POLISHED PAIR PREFABRICATED PRE-FINISHED POUNDS PER SQUARE FOOT POUNDS PER SQUARE INCH POINT/PAINT PAINT TO MATCH POLYVINYL CHLORIDE	V VB VCT VERT VEST VOL VWC	VINYL VINYL BASE VINYL COMPOSITION TILE VERTICAL VESTIBULE VOLUME VINYL WALL COVERING
QT QTY	QUARRY TILE QUANTITY	W W/ WAF	WIDE FLANGE STEEL BEAM WITH WELDED ANGLE FRAME
RAD RAH RB RC RCP RD REC REF REINF REL REM REQD RES RET RI RM RO RT RUB	RADIUS ROOFTOP AIR HANDLING UNIT RUBBER BASE REINFORCED CONCRETE REFLECTED CEILING PLAN ROOF DRAIN RECESSED REFERENCE REINFORCING RELOCATE REMAINDER REQUIRED RESILIENT RETURN ROUGH IN ROOM ROUGH OPENING RUBBER TILE RUBBER	WAF WC WD WDW WF WG W/O WP WPFG WR WRB WSCT WSTP WTR WWF	WELDED ANGLE FRAME WATER CLOSET WOOD WINDOW WIDE FLANGE WIRE GLASS WITHOUT WEATHERPROOF WATERPROOFING WASTE RECEPTACLE WEATHER RESTISTANT BARRIER WAINSCOT WEATHERSTRIP WATER WELDED WIRE FABRIC
SA SAMF SAT SAWRB SB SC SCF SCHD SD SE SECT SF SG SGL SH SECT SF SG SGL SHD SHT SIM SJ SLV SM SNV SOG SPR SQ SR ST STD STL STO STRU SUSP SV	SELF ADHERED SELF ADHERED MEMBRANE FLASHING STANDARD AGGREGATE TOPPING SELF ADHESIVE WEATHER RESTISTANT BARRIER SOIL BEARING SEAMLESS COATING SPECIAL CONCRETE FINISH SCHEDULE SOAP DISPENSER SHELF EDGE SECTION SAND FLOAT SUPPLY AIR GRILLE SINGLE SHELF SHOWER DOOR SHEET SIMILAR STEEL JOIST SHORT LEG VERTICAL SMOOTH SANITARY NAPKIN DISPENSER SANITARY NAPKIN VENDER SLAB ON GRADE SPECIFICATION SPRINKLER SQUARE SHOWER ROD STAINLESS STEEL STREET STANDARD STEEL STORAGE STRUCTURAL/STRUCTURE SUSPENDED SHEET VINYL		PUBLIC TOILET       SHOWER       SHOWER       SHOWER       SHOWER       PUBLIC TOILET       SHOWER       HALL       PUBLIC TOILET       ST FIN OCC       SET FIN OCC       ST FIN OCC       ST FIN OCC       SHOWER       HALL       PUBLIC TOILET       ST FIN OCC       ST FIN OCC
SYM	SYMMETRICAL		PUBLIC TOILET 59 RM OCC 59 I EXITS OLF RM TYP 1 150 B ADA SHOWER

			1		1	
NO.	ROOM NAME	AREA	TYPE	OLF	OCC. LOAD	EXITS
1	ENTRY	91 SF	В	150	1	1
2	RECEPTION	149 SF	В	150	1	1
3	OPEN WORK SPACE	143 SF	В	150	1	1
4	FINANCE OFFICE	120 SF	В	150	1	1
5	DIRECTOR'S OFFICE	258 SF	В	150	2	2
6	CONFERENCE / BREAK RM	355 SF	В	15	25	1
8	STAFF TOILET	49 SF	В	150	1	1
12	PUBLIC TOILET	57 SF	В	150	1	1
14	PUBLIC TOILET	52 SF	В	150	1	1
15	PUBLIC TOILET	59 SF	В	150	1	1
16	ADA SHOWER	39 SF			0	
17	MECH. ATTIC	Not			0	
		Placed				
TOTA	L OCCUPANTS:				35	



# **CODE SUMMARY**

#### APPLICABLE CODES: 2022 Oregon Structural Specialty Code (2021 IBC) Energy Code: ANSI/ASHRAE/IES Standard 90.1-2019

CONSTRUCTION TYPES (Table 601): Type VB, non-sprinklered

BUILDING AREA (Gross Sq. Ft.): Offices: 1,502 sq. ft. Public restrooms: <u>332 sq. ft.</u> Total: 1,834 sq. ft.

OCCUPANCY CLASSIFICATIONS (Chapter 3): Business

#### ALLOWABLE AREA & HEIGHT:

Type VB, non-sprinklered, Occupancy B Height (Table 504.3): Allowable: 40 feet Actual: 21.5 feet; OK Stories (Table 504.4): Allowable: 2 story Actual: 1 story; OK Area (Table 506.2): Allowable: 9,000 sq. ft. Actual: 1,834 sq. ft.; OK

#### TRAVEL DISTANCE MAXIMUM (Table 1017.2): Occupancy B:

200 ft.; OK

#### PLUMBING FIXTURES REQUIRED (Table 2902.1): Total occupant load: 35

- Required: 1 toilet per 25; 2 total
  - 1 lavatory per 40; 1 total 0 drinking fountains required
  - Actual:
    - 4 toilets (single-user); OK 4 lavatories (single-user); OK

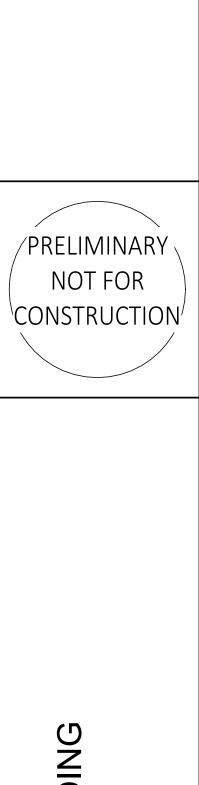
#### INSULATION MINIMUMS (Energy Code C402.2.6 & Table 5.5-4):

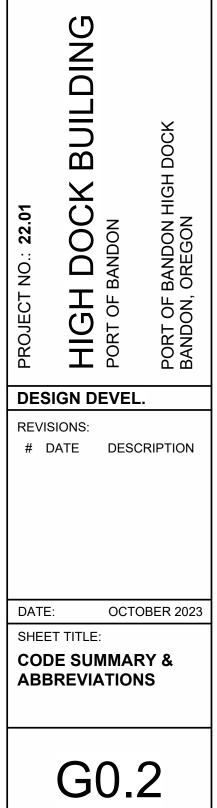
Roof Walls Radiant-heated slab

R-30 rigid R-13 batts & R-3.8 rigid R-3.5 rigid under slab R-20 rigid for 24" at perimeter

#### OCCUPANCY SCHEDULE

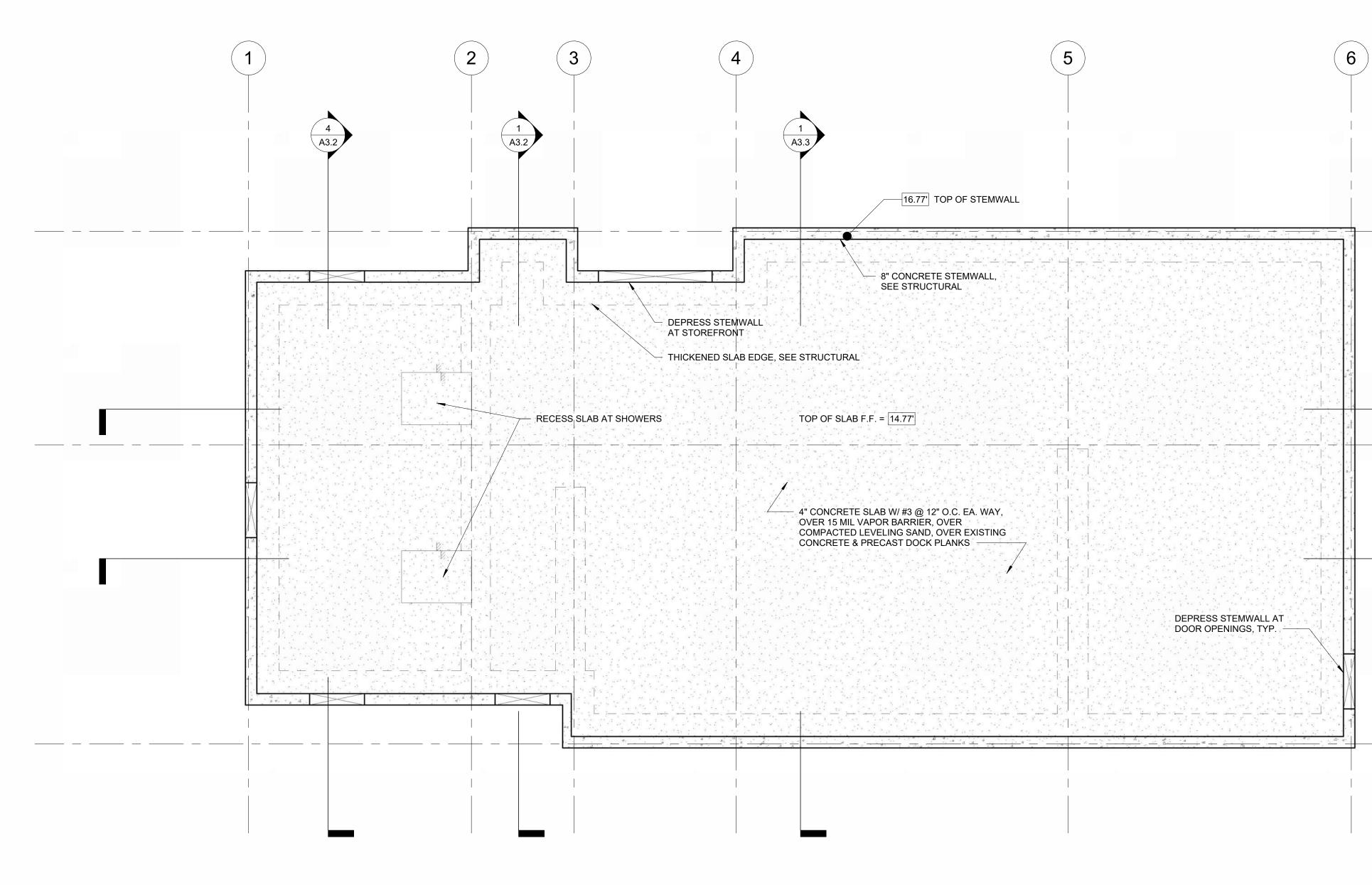






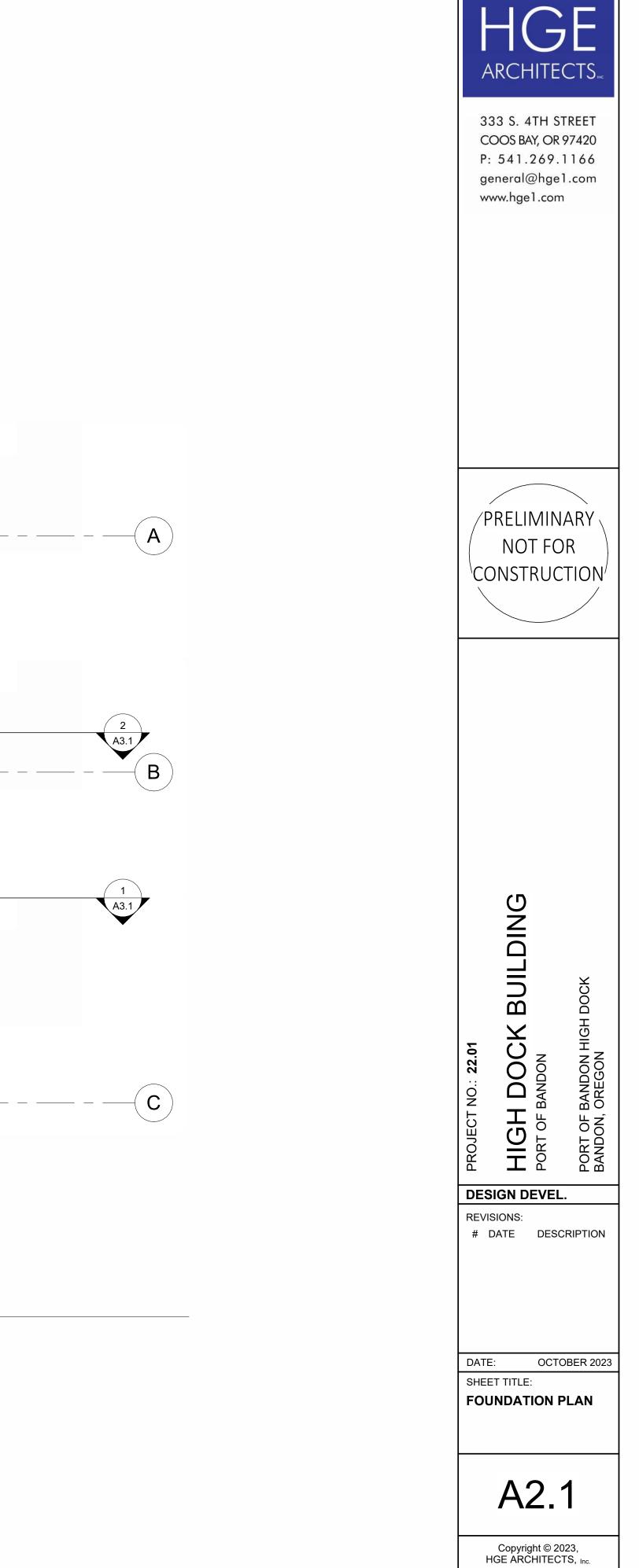
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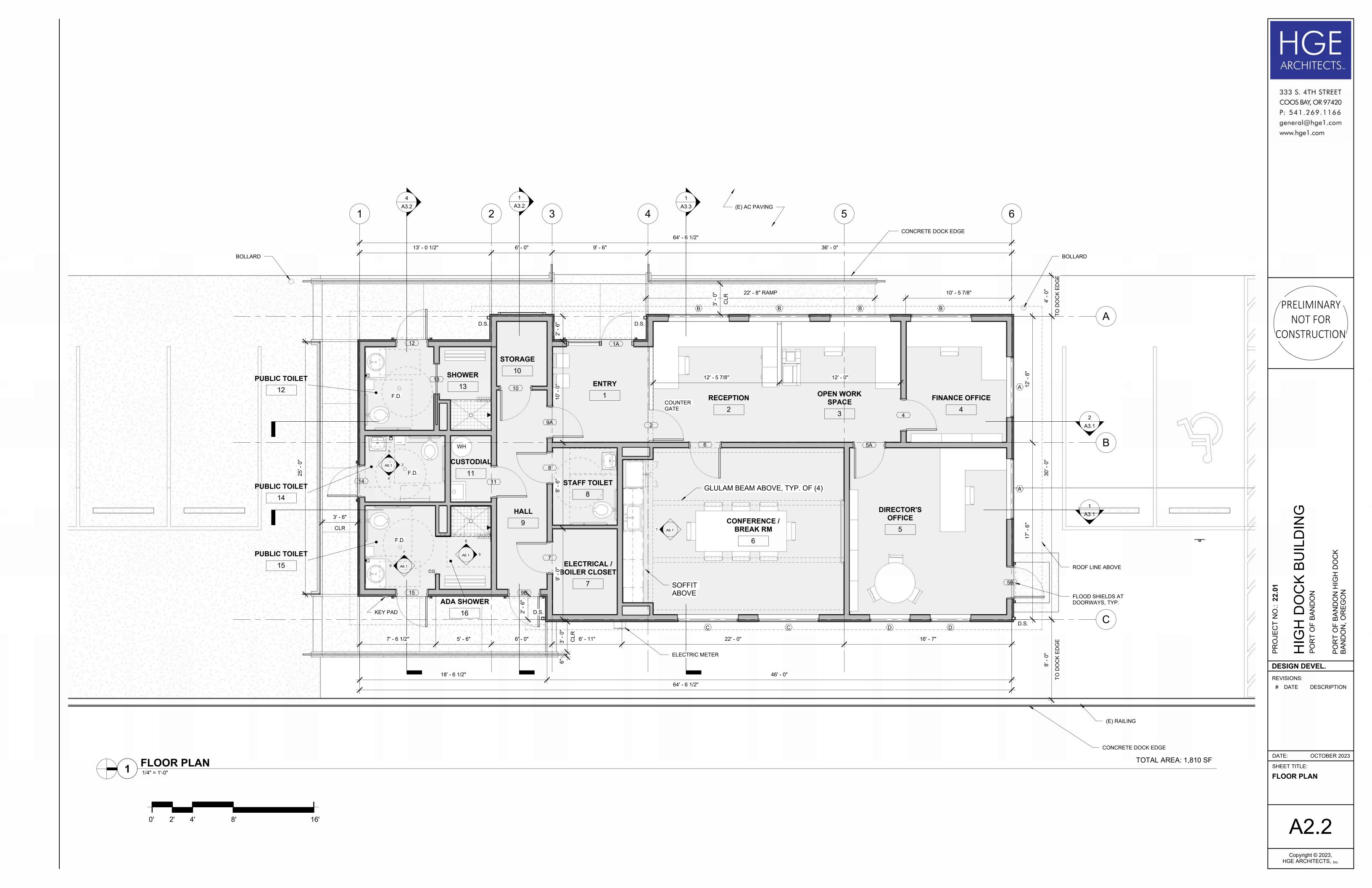


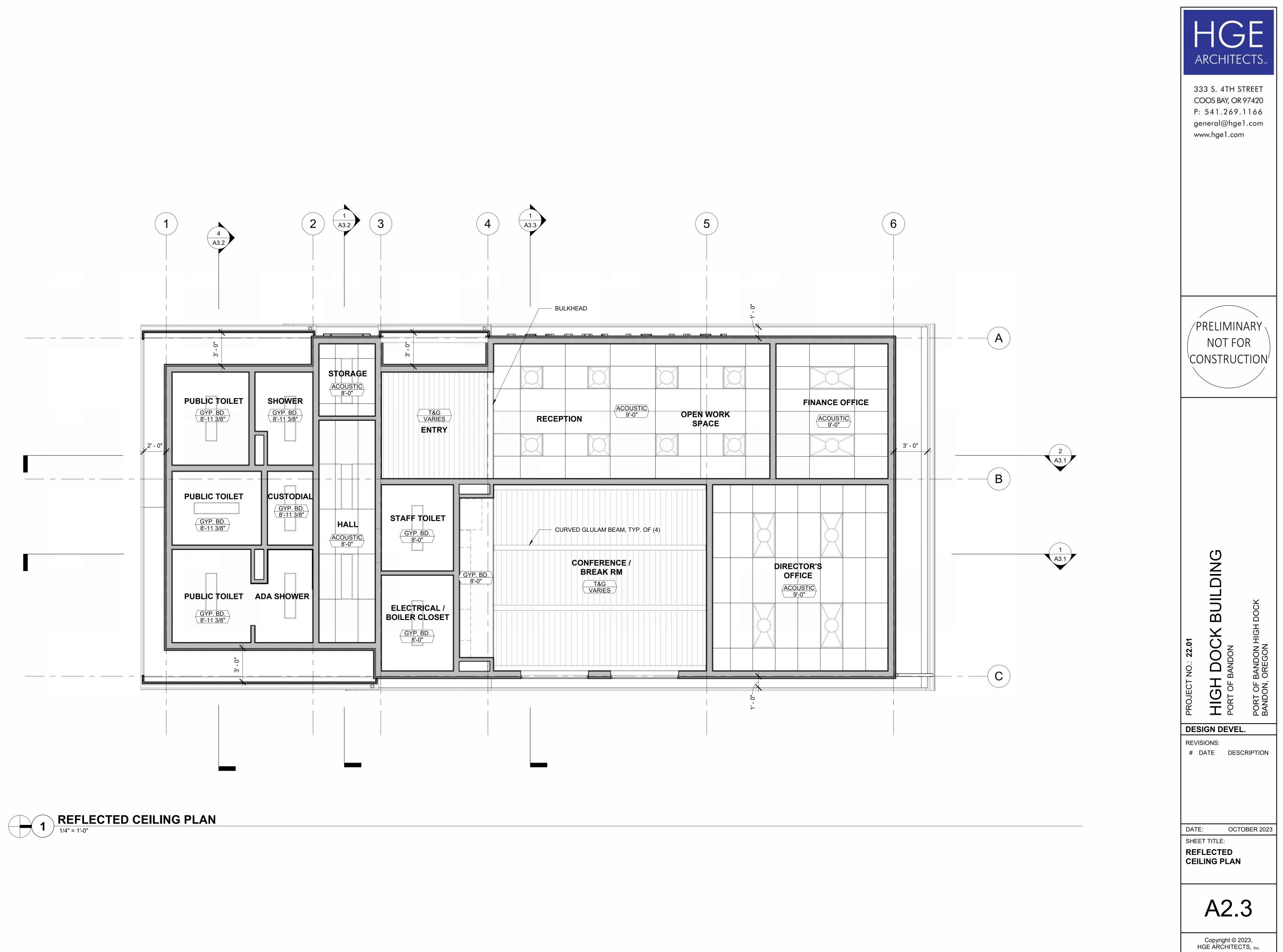




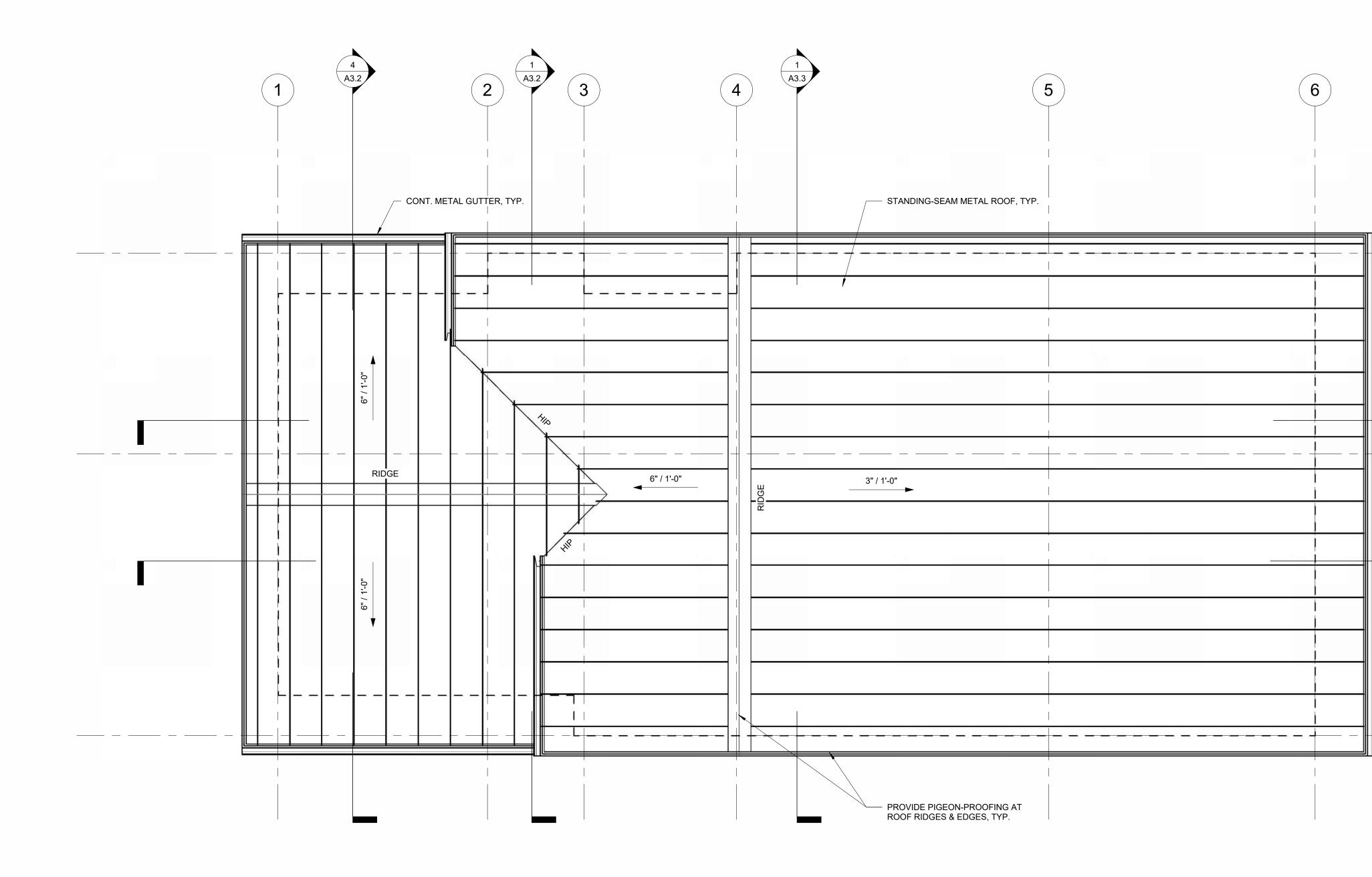


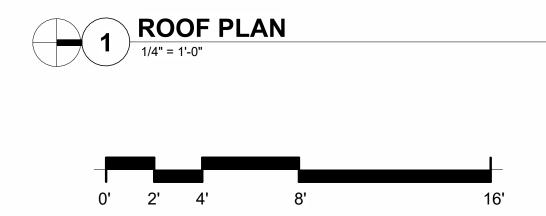


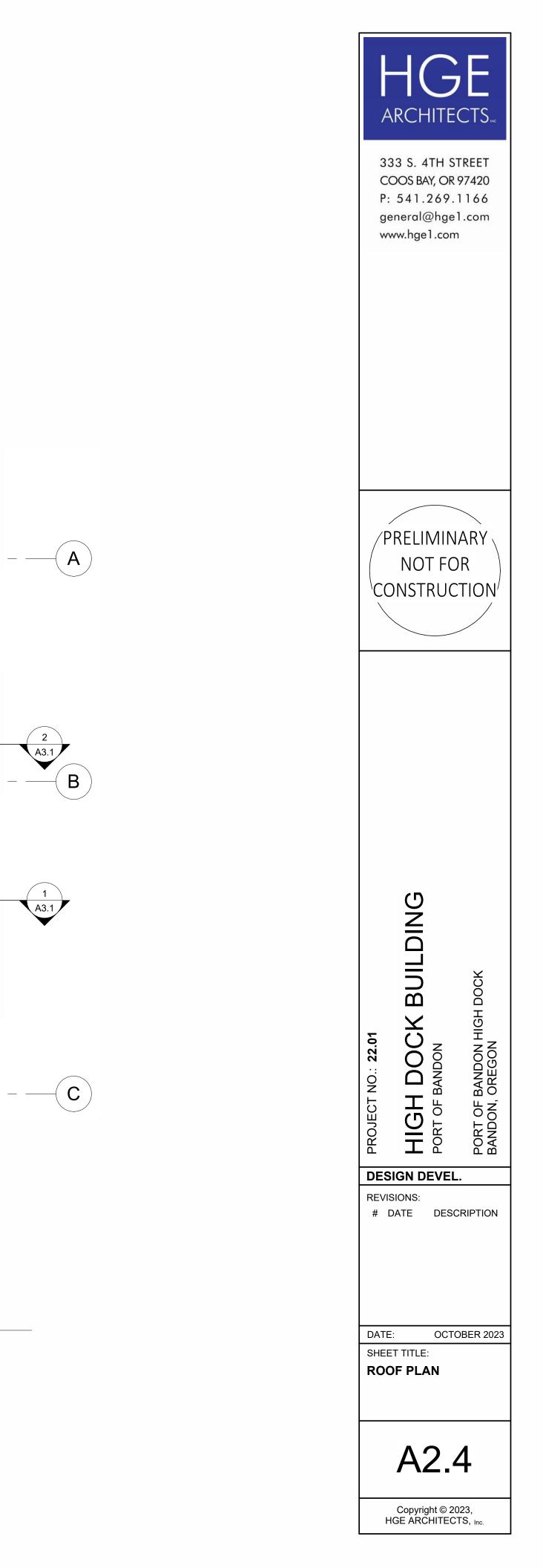


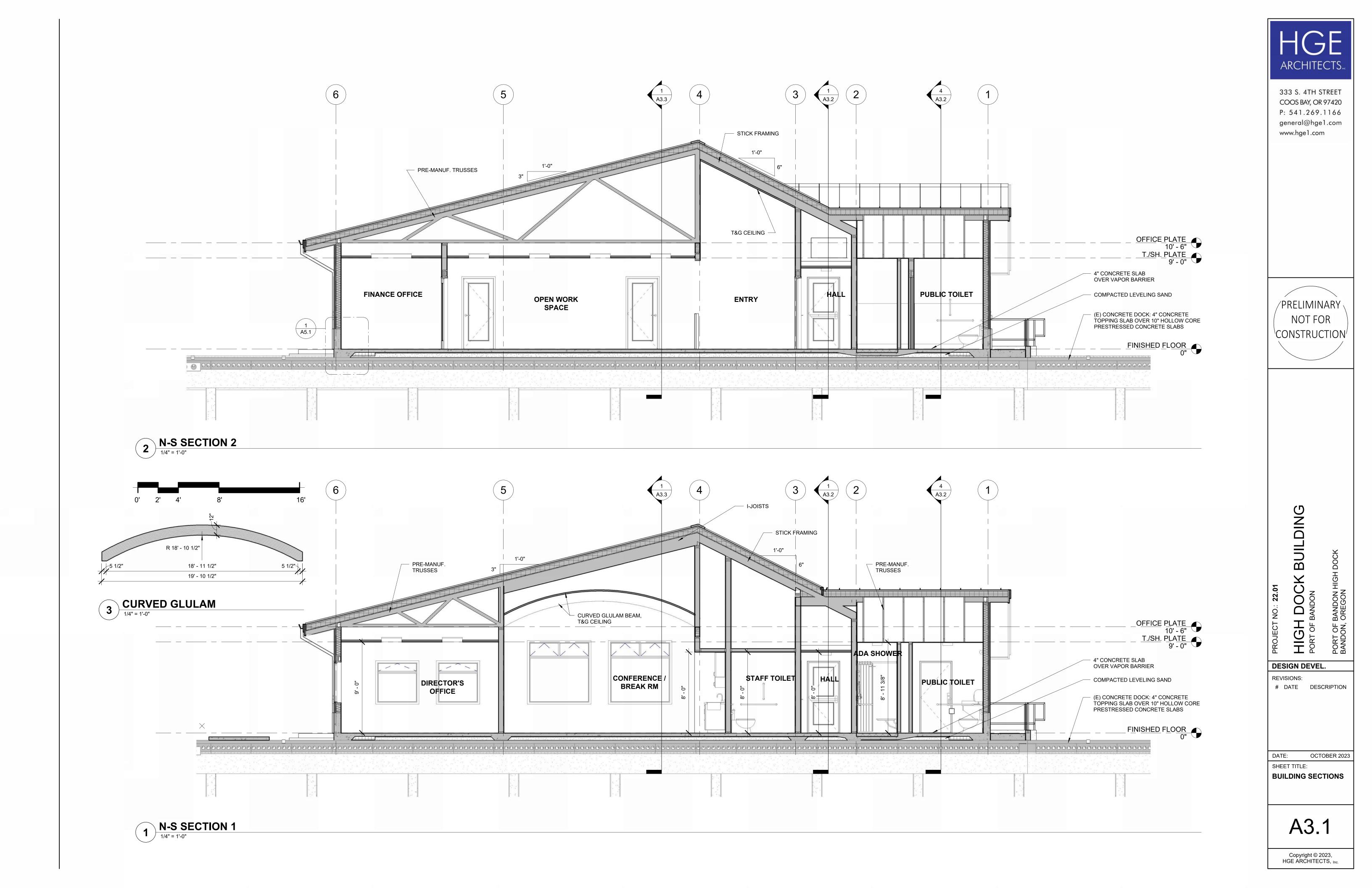


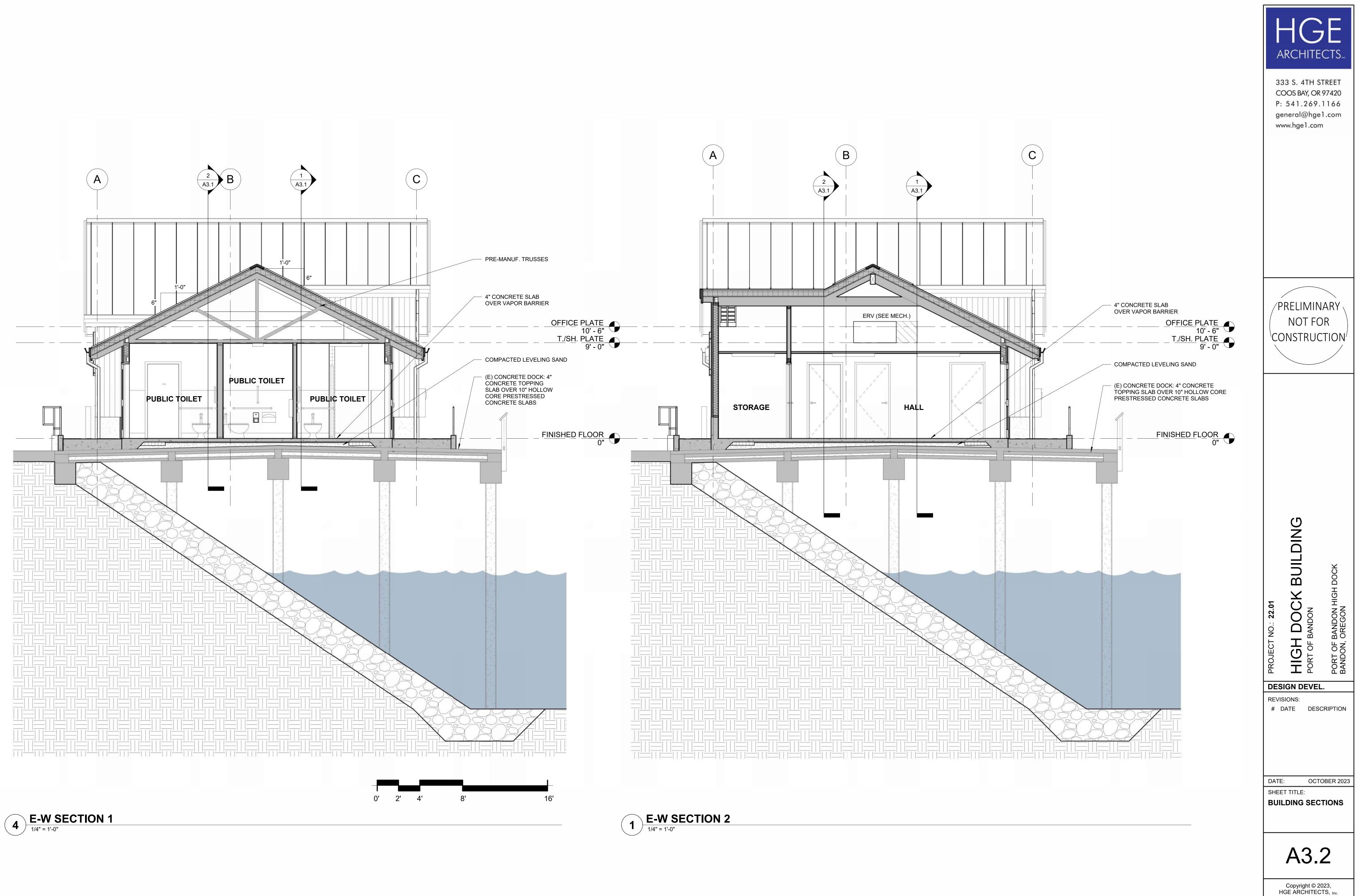


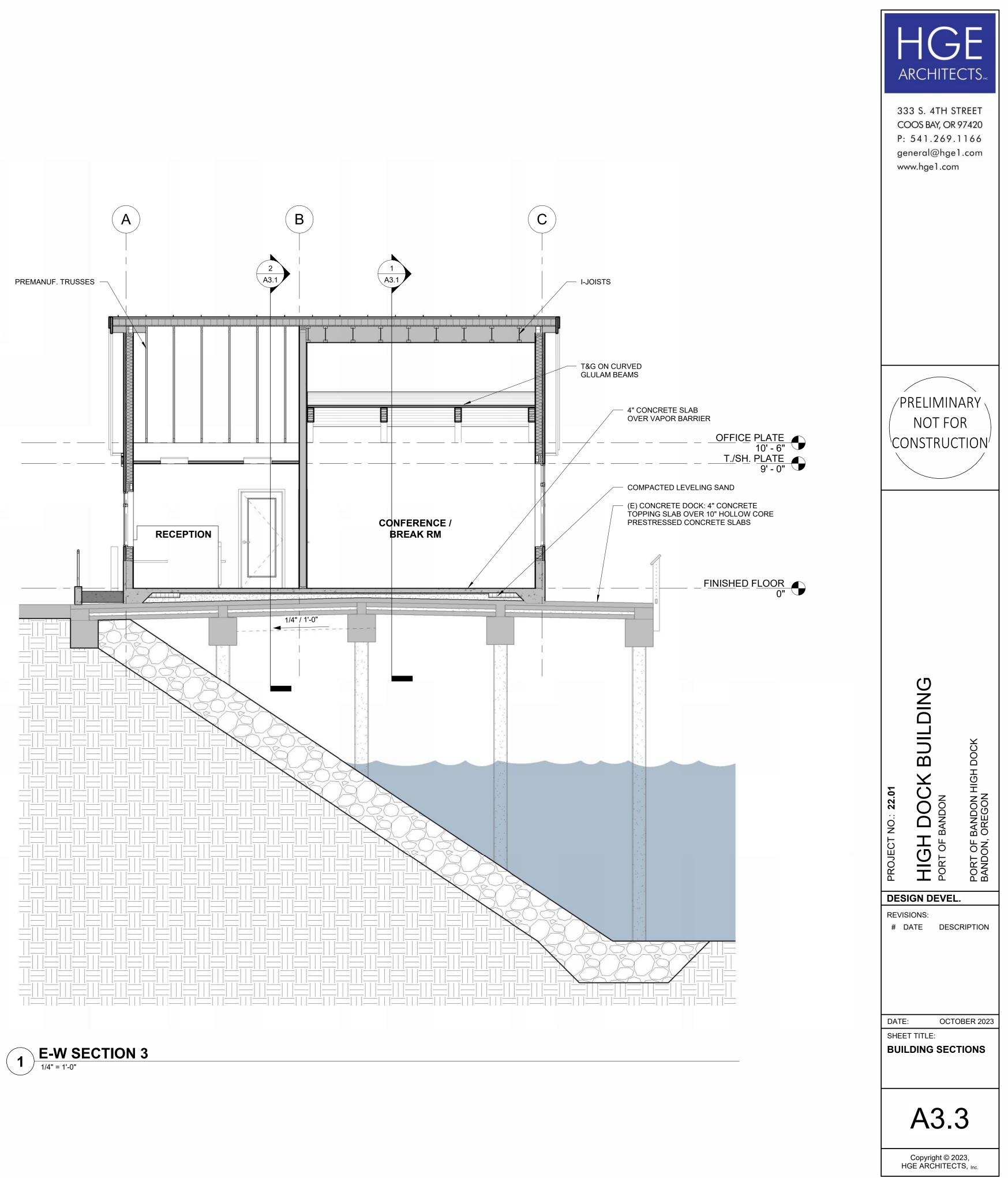




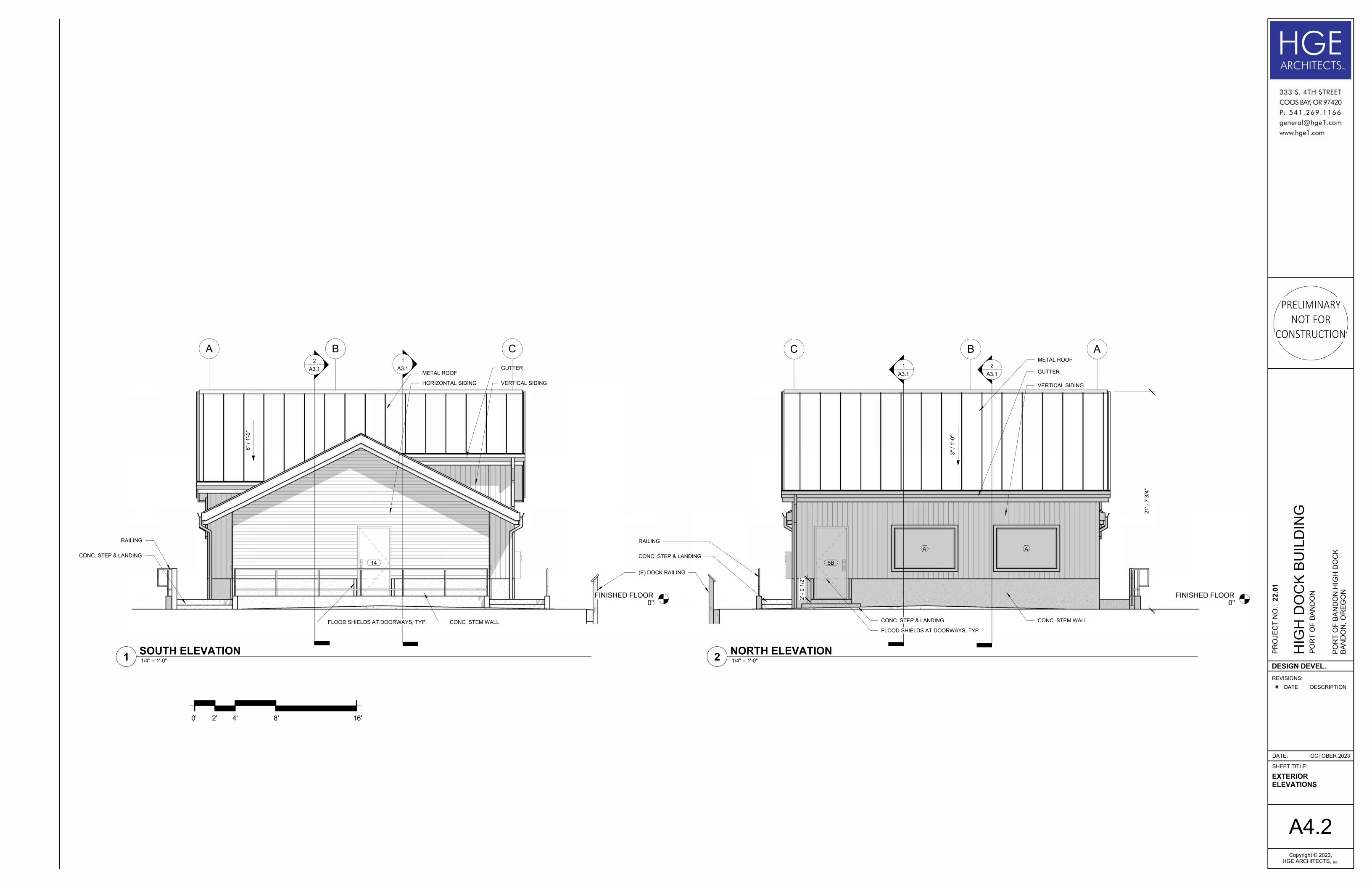


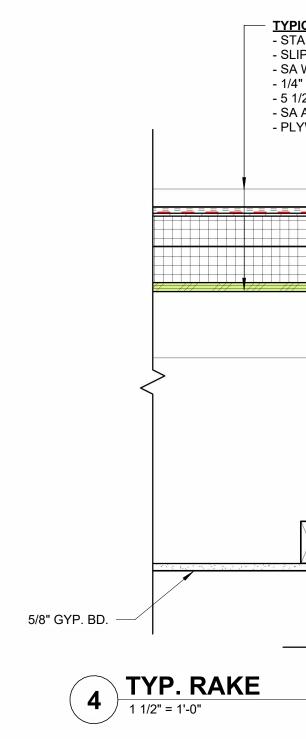


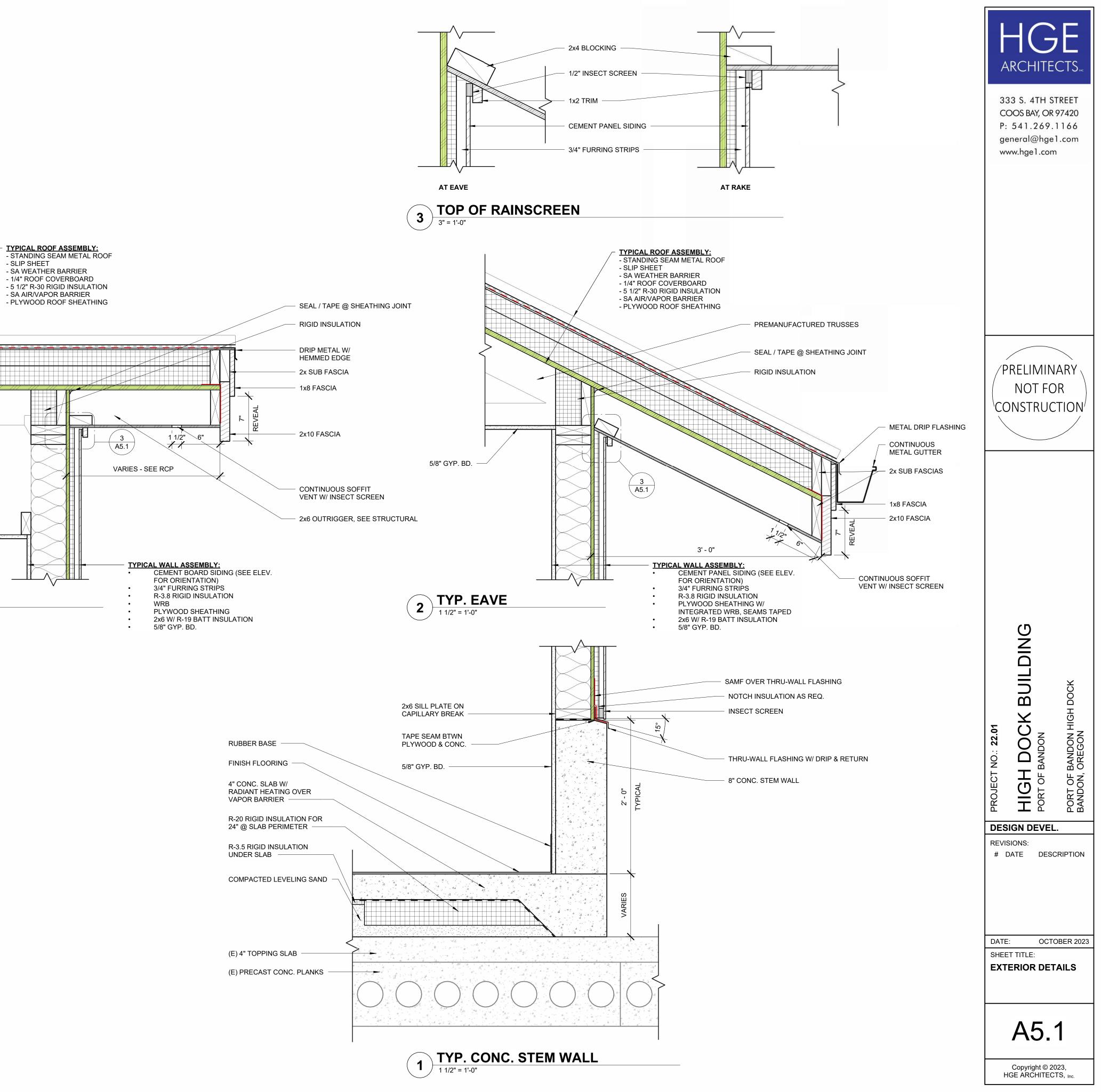




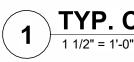




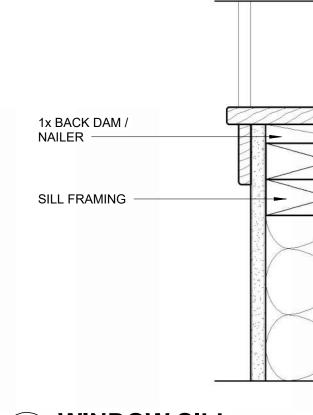




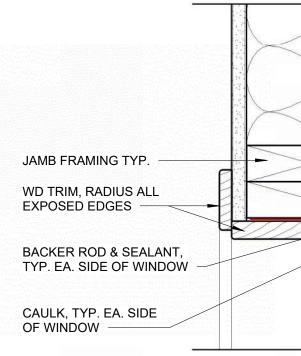
	2x6 SILL PLATE ON CAPILLARY BREAK	
RUBBER BASE	TAPE SEAM BTWN PLYWOOD & CONC.	
FINISH FLOORING	5/8" GYP. BD	
4" CONC. SLAB W/ RADIANT HEATING OVER VAPOR BARRIER		2' - 0" TYPICAL
R-20 RIGID INSULATION FOR 24" @ SLAB PERIMETER		
R-3.5 RIGID INSULATION UNDER SLAB		
COMPACTED LEVELING SAND		VARIES
(E) 4" TOPPING SLAB		
(E) PRECAST CONC. PLANKS		



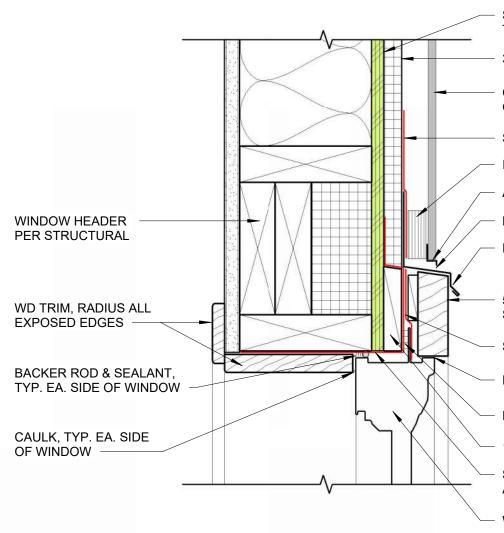
### 3 WINDOW SILL 3" = 1'-0"



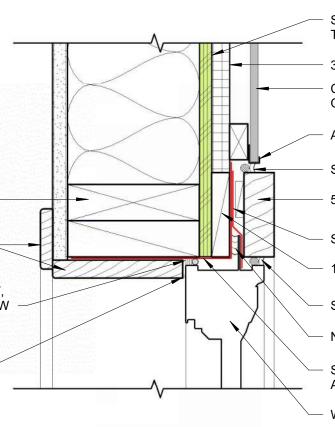








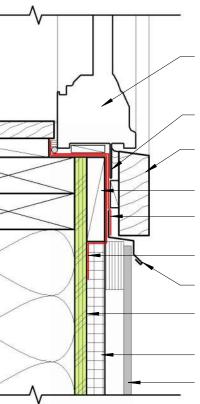
- SHEATHING W/ INTEGRATED WRB, TAPED AT SEAMS
  3/4" RIGID INSULATION
  CEMENT PANEL SIDING OVER 3/4" FURRING STRIPS
  SAMF OVER HEAD FLASHING
  INSECT SCREEN
  ALUM. Z STARTER TRIM
  KEEP CLEAR 1/4"
  HEAD FLASHING W/ DRIP & RETURN
  5/4 x 4 WD. TRIM, SHIM AS REQ.,
- SLOPE TOP - SAMF OVER NAIL FIN
- DO NOT SEAL
- NAIL FIN SET IN SEALANT
- 1x4 BLOCKING, SLOPE TOP
   SAMF, WRAP AROUND BLOCKING AND INTO ROUGH OPENING
   WINDOW, SEE SHEDULE



SHEATHING W/ INTEGRATED WRB, TAPED AT SEAMS
3/4" RIGID INSULATION
CEMENT PANEL SIDING OVER 3/4" FURRING STRIPS
ALUM. J-TRIM

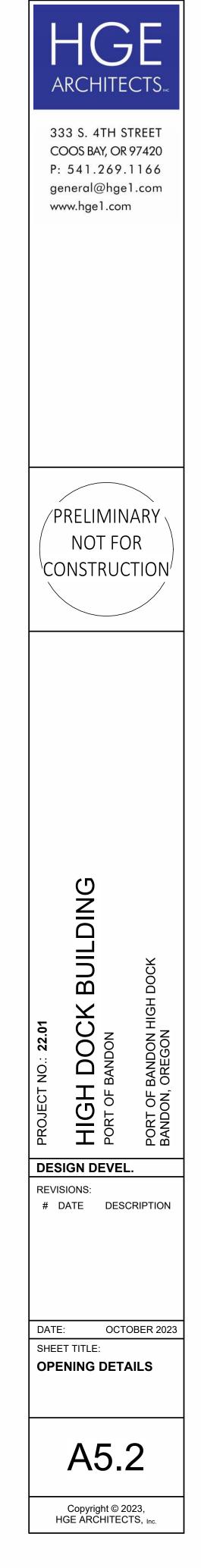
SEALANT OVER BACKER ROD
5/4 x 4 WD. TRIM, SHIM AS REQ.

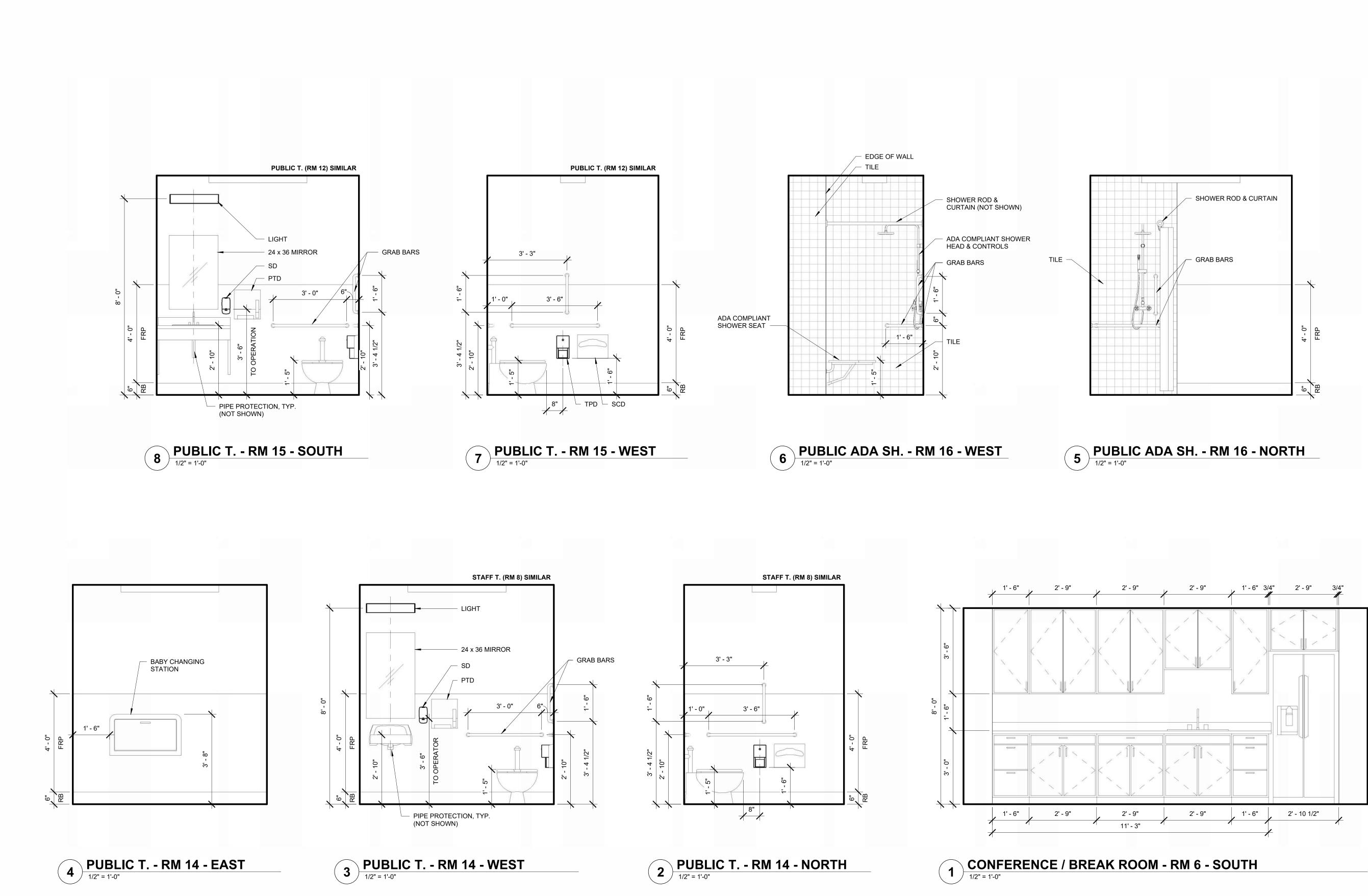
- SAMF OVER NAIL FIN
- 1x4 BLOCKING, SLOPE TOP
- SEALANT OVER BACKER ROD
- NAIL FIN SET IN SEALANT
  SAMF, WRAP AROUND BLOCKING
- AND INTO ROUGH OPENING

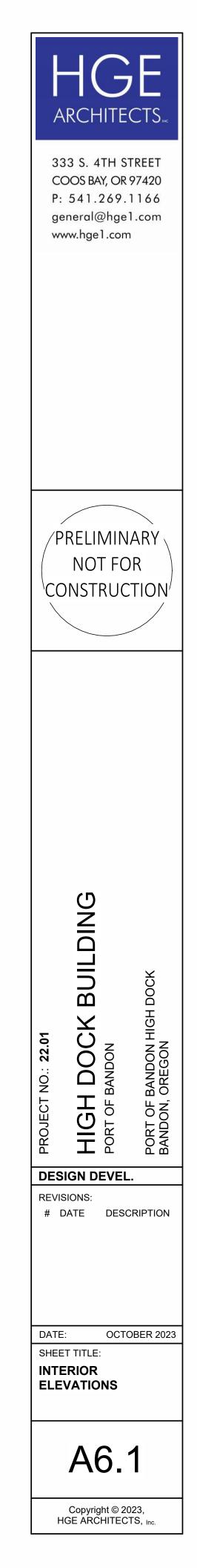


WINDOW, SEE SHEDULE

- DO NOT SEAL NAIL FIN @ SILL
- 5/4 x 4 WD. TRIM, SEAL @ TOP, SHIM AS REQ., SLOPE TOP
  1x4 BLOCKING
  SAMF OVER THRU-WALL FLASHING, WRAP INTO SILL
  SAMF, WRAP AROUND BLOCKING & UP BACK DAM
  THRU-WALL FLASHING W/ DRIP & RETURN
  SHEATHING W/ INTEGRATED WRB, TAPED AT SEAMS
- 3/4" RIGID INSULATION
- CEMENT PANEL SIDING
   OVER 3/4" FURRING STRIPS



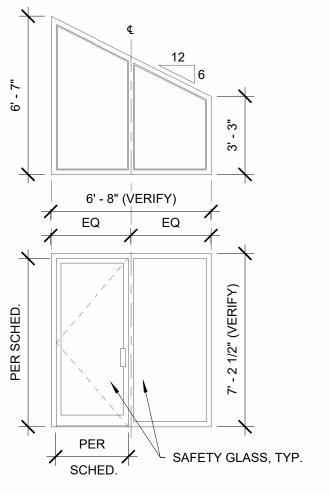


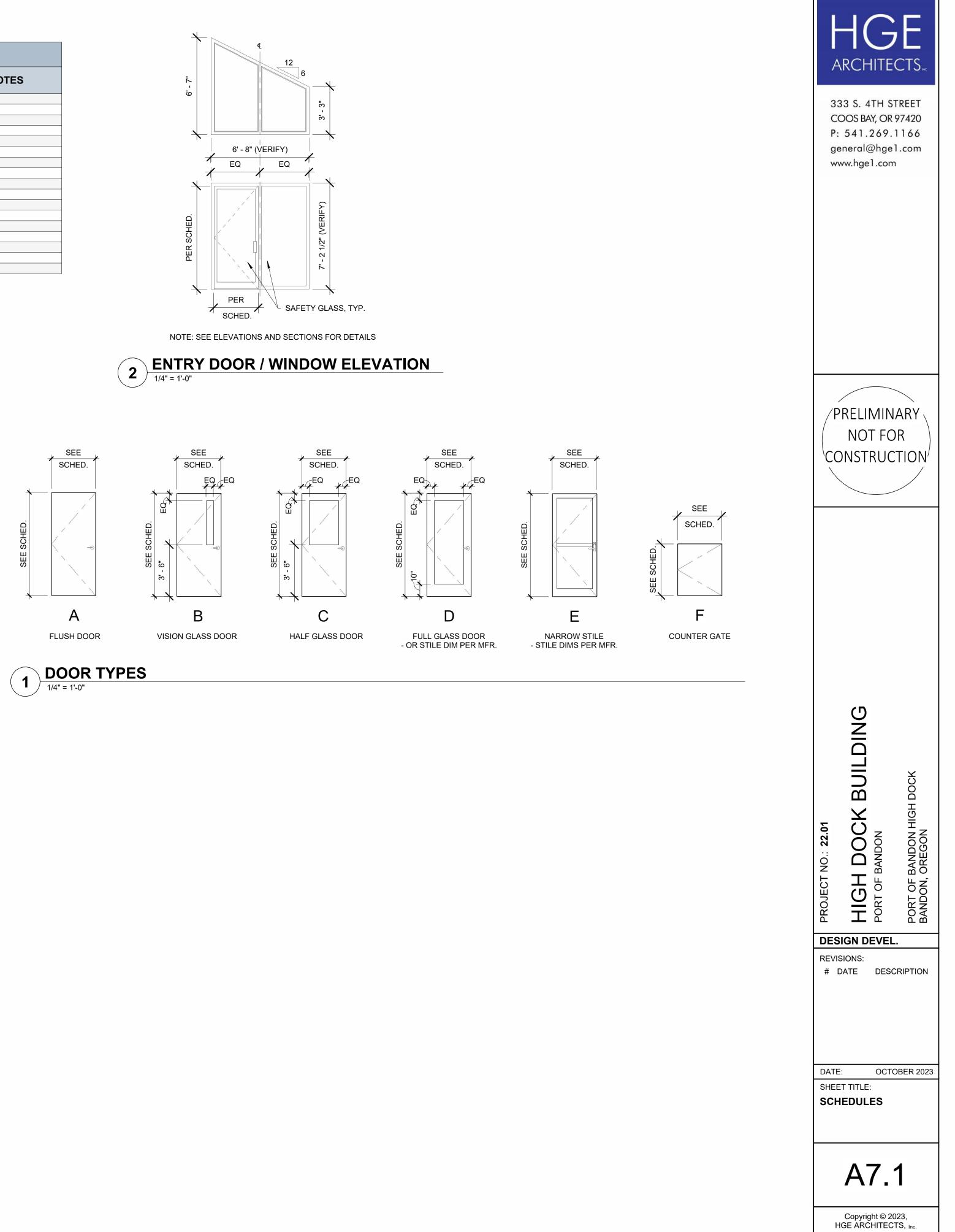


ROOM FINISH SCHEDULE										
ROOM NAME	ROOM NO.	FLOOR FINISH	BASE	NORTH WALL	EAST WALL	SOUTH WALL	WEST WALL	CEILING FINISH	CEILING HEIGHT	NOTES
ENTRY	1	LVT	RB	GYP. BD.	GYP. BD.	GYP. BD.	GYP. BD.	T&G	VARIES	
RECEPTION	2	LVT	RB	GYP. BD.	GYP. BD.	GYP. BD.	GYP. BD.	ACOUSTIC	9' - 0"	
OPEN WORK SPACE	3	LVT	RB	GYP. BD.	GYP. BD.	GYP. BD.	GYP. BD.	ACOUSTIC	9' - 0"	
FINANCE OFFICE	4	LVT	RB	GYP. BD.	GYP. BD.	GYP. BD.	GYP. BD.	ACOUSTIC	9' - 0"	
DIRECTOR'S OFFICE	5	LVT	RB	GYP. BD.	GYP. BD.	GYP. BD.	GYP. BD.	ACOUSTIC	9' - 0"	
CONFERENCE / BREAK RM	6	LVT	RB	GYP. BD.	GYP. BD.	GYP. BD.	GYP. BD.	T&G	VARIES	
ELECTRICAL / BOILER CLOSET	7	SEALED CONC.	RB	GYP. BD.	GYP. BD.	GYP. BD.	GYP. BD.	GYP. BD.	10' - 5 3/8"	
STAFF TOILET	8	LVT	RB	GYP. BD. & FRP	GYP. BD. & FRP	GYP. BD. & FRP	GYP. BD. & FRP	GYP. BD.	10' - 5 3/8"	
HALL	9	LVT	RB	GYP. BD.	GYP. BD.	GYP. BD.	GYP. BD.	ACOUSTIC	9' - 0"	
STORAGE	10	LVT	RB	GYP. BD.	GYP. BD.	GYP. BD.	GYP. BD.	ACOUSTIC	9' - 0"	
CUSTODIAL	11	SEALED CONC.	RB	GYP. BD. & FRP	GYP. BD. & FRP	GYP. BD. & FRP	GYP. BD. & FRP	GYP. BD.	8' - 11 3/8"	
PUBLIC TOILET	12	SEALED CONC.	RB	GYP. BD. & FRP	GYP. BD. & FRP	GYP. BD. & FRP	GYP. BD. & FRP	GYP. BD.	8' - 11 3/8"	
SHOWER	13	SEALED CONC.	RB	GYP. BD. & FRP	GYP. BD. & FRP	GYP. BD. & FRP	GYP. BD. & FRP	GYP. BD.	8' - 11 3/8"	
PUBLIC TOILET	14	SEALED CONC.	RB	GYP. BD. & FRP	GYP. BD. & FRP	GYP. BD. & FRP	GYP. BD. & FRP	GYP. BD.	8' - 11 3/8"	
PUBLIC TOILET	15	SEALED CONC.	RB	GYP. BD. & FRP	GYP. BD. & FRP	GYP. BD. & FRP	GYP. BD. & FRP	GYP. BD.	8' - 11 3/8"	
ADA SHOWER	16	SEALED CONC.	RB	GYP.BD & FRP, TILE	GYP. BD. & FRP	GYP. BD. & FRP, TILE	GYP. BD. & FRP, TILE	GYP. BD.	8' - 11 3/8"	
MECH. ATTIC	17									

	DOOR SCHEDULE									
DOOR NO.	ROOM NAME	SIZE (WxH)	TYPE	DOOR MATERIAL	FRAME MATERIAL	HARDWARE GROUP	THRESHOLD DETAIL	JAMB DETAIL	HEAD DETAIL	NOTES
1A	ENTRY	3' - 0" X 7' - 0"	E	HM / GLASS	HM					EXTERIOR
2	RECEPTION	3' - 0" X 3' - 6"	F	WD	WD					COUNTER GATE
4	FINANCE OFFICE	3' - 0" X 7' - 0"	С	WD / GLASS	HM					
5A	DIRECTOR'S OFFICE	3' - 0" X 7' - 0"	С	WD / GLASS	HM					
5B	DIRECTOR'S OFFICE	3' - 0" X 7' - 0"	A	HM	HM					EXTERIOR
6	CONFERENCE / BREAK RM	3' - 0" X 7' - 0"	С	WD / GLASS	HM					
7	ELECTRICAL / BOILER CLOSET	3' - 0" X 7' - 0"	A	WD	HM					
8	STAFF TOILET	3' - 0" X 7' - 0"	A	WD	HM					
9A	HALL	3' - 0" X 7' - 0"	A	WD	HM					
9B	HALL	3' - 0" X 7' - 0"	E	HM / GLASS	HM					EXTERIOR
10	STORAGE	3' - 0" X 7' - 0"	A	WD	HM					
11	CUSTODIAL	3' - 0" X 7' - 0"	A	WD	HM					
12	PUBLIC TOILET	3' - 0" X 7' - 0"	A	HM	HM					EXTERIOR
13	SHOWER	3' - 0" X 7' - 0"	A	HM	HM					LOCKING POCKET DOOR
14	PUBLIC TOILET	3' - 0" X 7' - 0"	A	HM	HM					EXTERIOR
15	PUBLIC TOILET	3' - 0" X 7' - 0"	A	HM	HM					EXTERIOR

	WINDOW SCHEDULE					
MARK	SIZE (WxH)	COUNT	ТҮРЕ	NOTES		
A	6' - 0" X 4' - 0"	2	FIXED			
В	6' - 0" X 4' - 0"	4	FIXED W/ DOUBLE AWNING TRANSOM	W/ INSECT SCREENS		
С	6' - 0" X 6' - 0"	2	FIXED W/ DOUBLE AWNING TRANSOM	W/ INSECT SCREENS		
D	4' - 0" X 4' - 0"	2	FIXED W/ SINGLE AWNING TRANSOM	W/ INSECT SCREEN		





# DRAWING INDEX

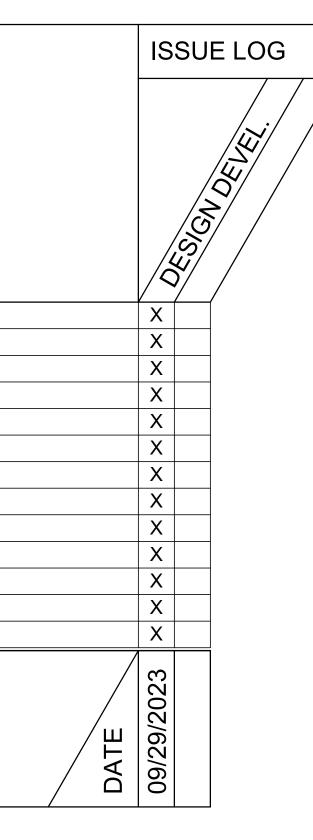
S0.1	DRAWING INDEX AND LIST OF ABBREVIATIONS
S0.2	GENERAL STRUCTURAL NOTES
S0.3	GENERAL STRUCTURAL NOTES
S0.4	GENERAL STRUCTURAL NOTES
S0.5	SPECIAL INSPECTIONS
S0.6	SPECIAL INSPECTIONS
S2.1	FOUNDATION PLAN
S2.4	ROOF FRAMING PLAN
S5.1	CONCRETE DETAILS
S7.1	WOOD DETAILS
S7.2	WOOD DETAILS
S7.3	WOOD DETAILS
S7.4	WOOD DETAILS

**ISSUE LOG KEY:** 

' X 'ISSUED AS PART OF A SET

' - ' NOT A PART OF ISSUED SET

' \* ' FOR INFORMATION ONLY



# LIST OF ABBREVIATIONS

A.B.	ANCHOR BOLT	к	KIPS	STD.	STANDARD
ACI	AMERICAN CONCRETE INSTITUTE	KSF	KIPS PER SQUARE FOOT	STRUCT.	STRUCTURAL
ADD'L.	ADDITIONAL	KSI	KIPS PER SQUARE INCH	SYM.	SYMMETRICAL
AESS	ARCHITECTURALLY EXPOSED	LBS.	POUNDS	THRU	THROUGH
	STRUCTURAL STEEL	L.L.	LIVE LOAD	T&G	TONGUE AND GROOVE
AISC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION	LLH	LONG LEG HORIZONTAL	TRANS.	TRANSVERSE
ALT.	ALTERNATE	LLV	LONG LEG VERTICAL	TS	LIGHT GAUGE TUBE STEEL
ALUM.	ALUMINUM	LOC.	LOCATION	TYP.	TYPICAL
ARCH.	ARCHITECT / ARCHITECTURAL	LONG.	LONGITUDINAL	U.N.O.	UNLESS NOTED OTHERWISE
ASCE	AMERICAN SOCIETY OF CIVIL	LSL	LAMINATED STRAND LUMBER	U.T.	ULTRASONIC TESTING
405		LVF	LOW VELOCITY FASTENER	ULT.	ULTIMATE STRENGTH DESIGN LOAD LEVEL
ASD	ALLOWABLE STRENGTH DESIGN LOAD LEVEL	LVL	LAMINATED VENEER LUMBER	VERT.	VERTICAL
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS	MAX.	MAXIMUM	V.I.F.	VERIFY IN FIELD
AWS	AMERICAN WELDING SOCIETY	MBMA	METAL BUILDING MANUFACTURERS ASSOCIATION	w/	WITH
BLDG.	BUILDING	MECH.	MECHANICAL	WF	WIDE FLANGE
BOT.	BOILDING	MECH.	MECHANICAL, ELECTRICAL, PLUMBING	w/o	WITHOUT
BRBF	BUCKLING RESTRAINED BRACED		AND FIRE SAFETY	W.P.	WORK POINT
ылы	FRAME	MFR.	MANUFACTURER	WPS	WELDING PROCEDURE SPECIFICATION
C.G.	CENTER OF GRAVITY	MIN.	MINIMUM	WWF	WELDED WIRE FABRIC
C.I.P.	CAST IN PLACE	MISC.	MISCELLANEOUS		WELDED WIRE FADRIC
C.J.	CONTROL JOINT	MPH	MILES PER HOUR		
C.J.P.	COMPLETE JOINT PENETRATION	MPP	MASS PLYWOOD PANELS		
CL	CENTERLINE	MT	MAGNETIC PARTICLE TESTING		
CLR.	CLEAR	(N)	NEW		
CLT	CROSS LAMINATED TIMBER	N.I.C.	NOT IN CONTRACT		
CMU	CONCRETE MASONRY UNIT	NLT	NAIL LAMINATED TIMBER		
COL.	COLUMN	NOM.	NOMINAL		
CONC.	CONCRETE	NO.	NUMBER		
CONN.	CONNECTION	N.T.S.	NOT TO SCALE		
CONST.	CONSTRUCTION	0.C.	ON CENTER		
CONT.	CONTINUOUS	O.D.	OUTSIDE DIAMETER		
db	BAR DIAMETER	OPP.	OPPOSITE		
DBA	DEFORMED BAR ANCHOR	OSL	ORIENTED STRAND LUMBER		
DET.	DETAIL	OM1	OPEN WEB JOIST		
DIA., Ø	DIAMETER	PAF	POWDER ACTUATED FASTENER		
DIAG.	DIAGONAL	PART.	PARTITION		
D.L.	DEAD LOAD	P/C	PRECAST		
DLT	DOWEL LAMINATED TIMBER	PCF	POUNDS PER CUBIC FOOT		
DWG.	DRAWING	PERIM.	PERIMETER		
ELEC.	ELECTRICAL	PL	PLATE		
EL.	ELEVATION	PP	PARTIAL PENETRATION		
EQ.	EQUAL	PSF	POUNDS PER SQUARE FOOT		
EXIST., (E)	EXISTING	PSL	PARALLEL STRAND LUMBER		
EXP.	EXPANSION	PSI	POUNDS PER SQUARE INCH		
EXT.	EXTERIOR	P/T	POST-TENSIONED		
FDN.	FOUNDATION	P.T.	PRESSURE TREATED		
FIN.	FINISH	PVC	POLYVINYL CHLORIDE		
FLR.	FLOOR	R, RAD.	RADIUS		
FRT	FIRE RETARDANT TREATED	RCSC	RESEARCH COUNCIL ON STRUCTURAL CONNECTIONS		
FT.	FOOT	REF.	REFERENCE		
FTG.	FOOTING	RET.	RETURN		
GA.	GAUGE	REINF.	REINFORCING		
GALV.	GALVANIZED	REQ'D.	REQUIRED		
GL	GLULAM	REQ'MTS.	REQUIREMENTS		
HORIZ.		SCHED.	SCHEDULE		
HSS	HOLLOW STRUCTURAL STEEL	S.C.	SLIP CRITICAL		
IBC	INTERNATIONAL BUILDING CODE	SCL	STRUCTURAL COMPOSITE LUMBER		
I.D.		SIM.	SIMILAR		
IN.	INCHES	SLFS	SEISMIC FORCE RESISTING SYSTEM		
INT.	INTERIOR	S.O.G.	SLAB ON GRADE		
		SPEC.	SPECIFICATION		
		SQ.	SQUARE		
		55	STAINI ESS STEEL		

SSMA

SS

STAINLESS STEEL STEEL STUD MANUFACTURERS

ASSOCIATION

PROJECT NO.: 22.01	HIGH DOCK BUILDING	PORT OF BANDON	PORT OF BANDON HIGH DOCK BANDON, OREGON
DE	SIGN D	EVEL	
REV #	ISIONS: DATE	DESC	CRIPTION
DAT	E:	SEP	PT. 29, 2023
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/PRELIMINARY

NOT FOR

<sup>\</sup>CONSTRUCTION<sup>/</sup>

#### GENERAL

STRUCTURAL DRAWINGS ARE A PART OF THE CONTRACT DOCUMENTS AND ARE COMPLEMENTARY TO THE ARCHITECTURAL, MECHANICAL, ELECTRICAL, PLUMBING DRAWINGS, THE SPECIFICATIONS AND OTHER CONTRACT DOCUMENTS. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING THE REQUIREMENTS FROM THE CONTRACT DOCUMENTS INTO THEIR SHOP DRAWINGS AND WORK. AS REQUIRED BY THE GENERAL CONDITIONS, THE CONTRACTOR SHALL PROMPTLY REPORT TO THE ARCHITECT ANY ERRORS, INCONSISTENCIES, OR OMISSIONS IN THE CONTRACT DOCUMENTS DISCOVERED BY OR MADE KNOWN TO THE CONTRACTOR.

THE GENERAL STRUCTURAL NOTES SUPPLEMENT THE PROJECT SPECIFICATIONS. REFER TO THE PROJECT SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS. NOTES AND DETAILS ON THE STRUCTURAL DRAWINGS SHALL TAKE PRECEDENCE OVER THE GENERAL STRUCTURAL NOTES AND TYPICAL DETAILS. WHERE NO DETAILS ARE GIVEN, CONSTRUCTION SHALL BE AS SHOWN FOR SIMILAR WORK. WHERE CONFLICT EXISTS, THE MORE STRINGENT OR RESTRICTIVE REQUIREMENT SHALL GOVERN UNITL CLARIFICATION IS REQUESTED.

#### CODE REQUIREMENTS:

CONFORM TO THE 2022 OREGON STRUCTURAL SPECIALTY CODE (OSSC), BASED ON THE 2021 INTERNATIONAL BUILDING CODE (IBC).

#### **TEMPORARY CONDITIONS:**

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 UNTIL COMPLETION.

CONTRACTOR'S CONSTRUCTION AND/OR ERECTION SEQUENCES SHALL RECOGNIZE AND CONSIDER THE EFFECTS OF THERMAL MOVEMENTS OF STRUCTURAL ELEMENTS DURING THE CONSTRUCTION PERIOD.

EXCAVATIONS SHALL NOT REDUCE THE VERTICAL OR LATERAL SUPPORT FOR ANY FOUNDATION OF THIS PROJECT OR ANY ADJACENT STRUCTURE WITHOUT FIRST UNDERPINNING OR PROTECTING THE FOUNDATION AGAINST DETRIMENTAL LATERAL AND/OR VERTICAL MOVEMENT. REF. SUBMITTALS SECTION FOR CONTRACTOR'S DELEGATED DESIGN RESPONSIBILITY WHERE SUCH SUPPORT IS REQUIRED.

#### **EXISTING CONDITIONS:**

ALL EXISTING CONDITIONS, DIMENSIONS AND ELEVATIONS SHALL BE FIELD VERIFIED. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT OF ANY SIGNIFICANT DISCREPANCIES FROM CONDITIONS SHOWN ON THE DRAWINGS.

#### **ASSUMED FUTURE CONSTRUCTION:**

VERTICAL: NONE HORIZONTAL: NONE

#### **DESIGN CRITERIA**

DESIGN WAS BASED ON THE STRENGTH AND DEFLECTION CRITERIA OF THE OSSC. IN ADDITION TO THE DEAD LOADS, THE FOLLOWING LOADS AND ALLOWABLES WERE USED FOR DESIGN, WITH LIVE LOADS (L.L.) REDUCED PER OSSC:

	<b>GRAVITY SYSTEM CRITERIA</b>					
OCCUPANCY OR USE	UNIFORM LOAD	CONCENTRATED LOAD				
OFFICES	50 PSF L.L. + 15 PSF PARTITIONS, OR 80 PSF L.L. (INCLUDING PARTITIONS) WHICHEVER IS MORE CRITICAL FOR MEMBER DESIGN	2,000 LBS.				
ASSEMBLY AREAS, RETAIL	100 PSF L.L.	2,000 LBS.				
STORAGE (LIGHT)	125 PSF L.L.	2,000 LBS.				
LIBRARY (STACK ROOMS)	150 PSF L.L.	2,000 LBS.				
ROOF LIVE/SNOW LOAD	25 PSF L.L. (ALSO SEE SNO)	V LOAD CRITERIA BELOW)				
VERTICAL FLOOR DEFLECTION (CLADDING DESIGN)	0.75" OR L/360 WHICHEVER IS LESS LON	NG TERM DEAD LOAD PLUS LIVE LOAD				
VERTICAL FLOOR DEFLECTION (INTERIOR)	L/360 LIVE LOAD PER	OSSC TABLE 1604.3				
GRAVITY LOADING NOTES:	<ol> <li>LIVE LOADS REDUCED PER OSSC.</li> <li>MEMBERS DESIGNED FOR MORE CRITICAL OF UNIFORM OR CONCENTRATED LOAD.</li> </ol>					
	SNOW CRITERIA					
DESIGN ROOF SNOW LOAD	25 PSF MINIMUM IN ACC					
GROUND SNOW LOAD	Pg= 10 IN ACCORDANCE WIT					
FLAT ROOF SNOW LOAD	Pf = 11	PSF				
SNOW EXPOSURE FACTOR	Ce =	1.0				
SNOW LOAD IMPORTANCE FACTOR	ls =	1.0				
THERMAL FACTOR	Ct =	1.0				
	WIND CRITERIA					
RISK CATEGORY						
BASIC WIND SPEED	VULT = 94 MPH (3	/				
EXPOSURE CATEGORY	С					
GUST / INTERNAL PRESSURE	GCpi = +	-/- 0.18				
	SEISMIC CRITERIA					
RISK CATEGORY						
SEISMIC DESIGN CATEGORY	D					
SITE CLASS	D					
SEISMIC IMPORTANCE FACTOR	IE =	1.0				
MAPPED SPECTRAL ACCELERATION PARAMETERS	SS = 2.025	S1 = 0.963				
DESIGN SPECTRAL RESPONSE ACCELERATION PARAMETERS	SDS = 1.62	SD1 = XX				
ANALYSIS PROCEDURE	EQUIVALENT LATERAL FORCE	· ·				
	X DIRECTION (EAST / WEST)	Y DIRECTION (NORTH / SOUTH)				
SEISMIC FORCE RESISTING SYSTEM (SFRS)	WOOD SHEAR WALLS	WOOD SHEAR WALLS				
RESPONSE MODIFICATION FACTOR	R = 6.5	R = 6.5				
SEISMIC RESPONSE COEFFICIENT	Cs = XX	Cs = XX				
DESIGN BASE SHEAR	XXX KIPS	XXX KIPS				
REDUNDANCY FACTOR	rho = 1.0	rho = 1.0				
DESIGN INELASTIC STORY DRIFT	$\Delta = XX$	$\Delta = XX$				

#### SEISMIC FORCE-RESISTING SYSTEM

THE SEISMIC FORCE-RESISTING SYSTEM (SFRS) FOR THE COMPLETED STRUCTURE IS AS FOLLOWS:

PLYWOOD ROOF SHEATHING ACTS AS A DIAPHRAGM TO DISTRIBUTE LATERAL LOADS TO WOOD SHEAR WALLS.

REFER TO THE GENERAL STRUCTURAL NOTES AND SPECIFICATIONS FOR ADDITIONAL FABRICATING, INSTALLATION, TESTING AND INSPECTION REQUIREMENTS FOR MEMBERS THAT ARE PART OF THE SFRS.

#### STRUCTURAL OBSERVATIONS

THE STRUCTURAL ENGINEER OF RECORD (SEOR) WILL PERFORM STRUCTURAL OBSERVATIONS BASED ON THE REQUIREMENTS OF THE OSSC AT THE STAGES OF CONSTRUCTION LISTED BELOW. CONTRACTOR SHALL PROVIDE SUFFICIENT ADVANCED NOTICE AND ACCESS FOR THE SEOR TO PERFORM THESE OBSERVATIONS.

ITEM	COMMENTS
PRIOR TO FIRST CONCRETE POUR	AFTER REBAR PLACEMENT
DURING INITIAL WOOD FRAMING CONSTRUCTION	
AS REQUIRED TO ADDRESS STRUCTURAL ISSUES	

A FIELD REPORT WILL BE SUBMITTED TO THE BUILDING DEPARTMENT FOLLOWING EACH SITE VISIT.

STRUCTURAL OBSERVATION IS FOR THE GENERAL CONFORMANCE OF THE STRUCTURAL DRAWINGS AND DOES NOT ALLEVIATE ANY SPECIAL INSPECTION REQUIREMENTS.

#### **SPECIAL INSPECTIONS AND TESTING**

SPECIAL INSPECTION WILL BE PROVIDED BY THE OWNER BASED ON THE REQUIREMENTS OF THE OSSC AS SUMMARIZED IN THE SPECIAL INSPECTION AND TESTING PROGRAM ON SHEETS S00X-S00X. CONTRACTOR SHALL PROVIDE SUFFICIENT NOTICE AND ACCESS FOR THE SPECIAL INSPECTOR TO PERFORM THESE INSPECTIONS.

#### **SUBMITTALS**

SUBMIT SHOP DRAWINGS AND OTHER SUBMITTALS TO THE ARCHITECT AND ENGINEER PRIOR TO FABRICATION AND CONSTRUCTION OF STRUCTURAL ITEMS. IF THE SUBMITTALS DIFFER FROM OR ADD TO THE STRUCTURAL CONTRACT DOCUMENTS, THEY SHALL BEAR THE SEAL AND SIGNATURE OF A STRUCTURAL ENGINEER REGISTERED IN THE STATE OF OREGON. ANY CHANGES TO THE STRUCTURAL DRAWINGS SHALL BE SUBMITTED TO THE ARCHITECT AND ARE SUBJECT TO REVIEW AND ACCEPTANCE BY THE SEOR.

FIELD ENGINEERED DETAILS DEVELOPED BY THE CONTRACTOR THAT DIFFER FROM OR ADD TO THE STRUCTURAL DRAWINGS SHALL BEAR THE SEAL AND SIGNATURE OF A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF OREGON AND SHALL BE SUBMITTED TO THE ARCHITECT PRIOR TO CONSTRUCTION.

THE USE OF REPRODUCTIONS OR PHOTOCOPIES OF THE CONTRACT DRAWINGS SHALL NOT BE PERMITTED. WHEN CAD OR REVIT FILES ARE PROVIDED TO THE CONTRACTOR OR SUBCONTRACTORS, IT IS THE RESPONSIBILITY OF THE CONTRACTOR/SUBCONTRACTOR TO REMOVE ALL INFORMATION NOT DIRECTLY RELEVANT TO THE SCOPE OF THE SUBMITTAL AS WELL AS ALL REFERENCES TO OUTSIDE SOURCE FILES.

DELEGATED DESIGN SUBMITTALS SHALL INCLUDE DESIGN DRAWINGS AND CALCULATIONS FOR ITEMS THAT ARE DESIGNED BY OTHERS. DELEGATED DESIGN SUBMITTALS SHALL BEAR THE SEAL AND SIGNATURE OF A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF OREGON ON EVERY DRAWING SHEET AND ON THE CALCULATION COVER SHEET, AND SHALL BE SUBMITTED TO THE ARCHITECT AND ENGINEER PRIOR TO FABRICATION. CALCULATIONS AND DETAILS SHALL BE INCLUDED FOR ALL CONNECTIONS TO THE STRUCTURE, CONSIDERING LOCALIZED EFFECTS ON STRUCTURAL ELEMENTS. DESIGN SHALL BE BASED ON THE REQUIREMENTS OF THE OSSC AND AS NOTED UNDER "DESIGN CRITERIA"

SUBMITTALS AND DELEGATED DESIGN SUBMITTALS SHALL INCLUDE THE FOLLOWING:

ITEM	SUBMITTAL	DELEGATED DESIGN SUBMITTAL	COMMENTS
CONCRETE MIX DESIGNS	Х		
CONCRETE REINFORCEMENT	Х		
CONCRETE ANCHORAGES	Х		
EMBEDDED STEEL ITEMS	Х		
CONSTRUCTION JOINT LAYOUT	Х		
STRUCTURAL STEEL	X		
STEEL WELDING PROCEDURES	X		
GLUE-LAMINATED MEMBERS	X		
ENGINEERED WOOD I-JOISTS			
METAL PLATE CONNECTED WOOD TRUSSES	^	Х	
PENETRATIONS OF SLABS/DECKS, WALLS, ETC.	Х		REF. TABLE NOTE 3
SKYLIGHTS, CURTAIN WALL, WINDOW WALL AND OTHER CLADDING AND GLAZING SYSTEMS		х	
CANOPIES AND AWNINGS	Х		
METAL STAIRS, LADDERS, AND RAILINGS		Х	
ROOF TIE-OFF ANCHORS		Х	

#### TABLE NOTES:

2.

3

1. THE CONTRACTOR SHALL COORDINATE SEISMIC RESTRAINTS OF MECHANICAL, ELECTRICAL, PLUMBING, AND FIRE SAFETY EQUIPMENT AND ASSOCIATED DISTRIBUTION SYSTEMS WITH THE STRUCTURE. CONNECTIONS TO STRUCTURE AND PROVISIONS FOR SEISMIC MOVEMENTS SHALL CONFORM TO ASCE 7-16 CHAPTER 13, BE DESIGNED BY AN ENGINEER REGISTERED IN THE STATE OF OREGON, AND SHALL BE SUBMITTED TO THE ARCHITECT AND SEOR PRIOR TO FABRICATION. FOR RISK CATEGORY III AND IV BUILDINGS, THE SYSTEMS ENGINEER SHALL SPECIFY THE REQUIREMENTS FOR EQUIPMENT SEISMIC CERTIFICATION IN THE DEFERRED SUBMITTAL IN ACCORDANCE WITH OSSC SECTION 1705.13.4 AND ASCE 7-16 SECTION 13.2.2.

CONTRACTOR SHALL ENGAGE A PROFESSIONAL ENGINEER TO PREPARE AN ASSESSMENT OF ANY EXCAVATIONS THAT MAY REDUCE THE VERTICAL OR LATERAL SUPPORT OF AN EXISTING FOUNDATION AS REQUIRED BY OSSC SECTION 1803.5.7. THE ASSESSMENT SHALL BE SUBMITTED TO THE BUILDING DEPARTMENT AND SHALL INCLUDE DETAILS AND SEQUENCING FOR CONSTRUCTION OF ANY UNDERPINNING OR BRACING THAT IS REQUIRED.

CONTRACTOR SHALL COORDINATE AND SHOW ALL REQUIRED PENETRATIONS, WITH DIMENSIONS FOR MECHANICAL, ELECTRICAL, PLUMBING, FIRE PROTECTION, TECHNOLOGY AND OTHER SERVICES ON A SINGLE DRAWING FOR REVIEW AT EACH SLAB/DECK, STRUCTURAL WALL AND/OR BEAM

CONCRETE WORK SHALL CONFORM TO CHAPTER 19 OF THE OSSC. CONCRETE STRENGTHS SHALL BE VERIFIED BY STANDARD CYLINDER TESTS PER ASTM C39. CONCRETE MIX TO BE DESIGNED AND PROPORTIONED BY THE CONTRACTOR IN ACCORDANCE WITH ACI 318-19 CHAPTER 26, ACI 301-16 SECTION 4 AND THE FOLLOWING INFORMATION:

MIX TYPE	USE	f'c (PSI)	TEST AGE (DAYS)	MAX. W/CM RATIO	MAX. AGG. SIZE	ш	XPO CLA	SURI ASS	Ξ
А	MISC. INTERIOR CURBS, PADS, ETC.	3,000	28	N/A	1"	F0	S0	W0	C0
В	INTERIOR SLABS ON GRADE	4,000	28	N/A	1"	F0	S0	W0	C0
С	WALLS, COLUMNS AND BEAMS - EXPOSED TO WEATHER	4,500	28	0.45	3/4"	F1	S0	W0	C0

TABLE NOTES

- EXPOSURE CATEGORY "F" APPLIES TO LEVEL OF FREEZE THAW EXPOSURE.
- EXPOSURE CATEGORY "S" APPLIES TO LEVEL OF SULFATE EXPOSURE.
- AS MARINE ENVIRONMENT) AND CORROSIVE SOILS.
- ESTABLISH WATER-CEMENTITIOUS MATERIAL RATIO PER ACI 301-16 SECTION 4.
- FLOORS WITH MOISTURE SENSITIVE FLOOR COVERINGS.

PORTLAND CEMENT CONTENT MAY BE REPLACED WITH FLY ASH CONFORMING TO ASTM C618 (INCLUDING TABLE 2A) TYPE F OR TYPE C. SLAG CEMENT CONFORMING TO ASTM C989. AND SILICA FUME CONFORMING TO ASTM C1240 PROVIDED THAT THE MIX STRENGTH IS SUBSTANTIATED BY TEST DATA.

FOR MIX DESIGNS WITH f'c = 5,000 PSI OR LESS, SLAG CEMENT MAY BE SUBSTITUTED FOR FLY ASH AT A 1:1 RATIO WITHOUT TEST DATA. WHEN SLAG CEMENT IS SUBSTITUTED IN HIGHER STRENGTH MIXES OR AT A DIFFERENT RATIO, THE MIX STRENGTH MUST BE SUBSTANTIATED BY TEST DATA.

ALL CONCRETE SUBJECT TO EXPOSURE CLASSES F1, F2 OR F3 SHALL BE AIR ENTRAINED. AIR-ENTRAINING AGENTS SHALL CONFORM TO ASTM C260. THE AMOUNT OF ENTRAINED AIR SHALL BE ACCORDING TO ACI 318-19 TABLE 19.3.3.1 AS INDICATED BELOW WITH A FIELD TOLERANCE OF ± 1.5 PERCENT BY VOLUME. THE AMOUNT OF ENTRAINED AIR SHALL BE MEASURED IN THE FIELD AT THE DISCHARGE FROM THE TRUCK.

CONCRETE MIX AIR CONTENT						
MAX. AGGREGATE SIZE CONCRETE SUBJECT TO FREEZE/THAW CONCRETE SUBJECT TO CONCRETE SUBJECT TO FREEZE/THAW CONCRETE SUBJECT TO FREEZE/THAW CONCRETE SUBJECT SUBJE						
3/8"	6.0%	7.5%				
1/2"	5.5%	7.0%				
3/4"	5.0%	6.0%				
1"	4.5%	6.0%				
1-1/2"	4.5%	5.5%				
ANY WET-MIX SHOTCRETE	5.0%	6.0%				

A WATER-REDUCING ADMIXTURE CONFORMING TO ASTM C494 USED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS SHALL BE INCORPORATED IN CONCRETE MIX DESIGNS. 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 10".

### FORMWORK, SHORING AND RE-SHORING

FORMWORK, SHORING AND RE-SHORING DESIGN IS THE CONTRACTOR'S RESPONSIBILITY AND SHALL CONFORM TO ACI 347R-14 AND ACI 347.2-17. SHORING AND SUPPORTING FORMWORK SHALL NOT BE REMOVED FROM HORIZONTAL MEMBERS BEFORE CONCRETE STRENGTH IS AT LEAST 70 PERCENT OF DESIGN STRENGTH, AS DETERMINED BY FIELD CURED CYLINDERS. IN ADDITION. SHORING SHALL NOT BE REMOVED SOONER THAN THE FOLLOWING CUMULATIVE TIME PERIODS WITH SURROUNDING TEMPERATURE GREATER THAN OR EQUAL TO 50 DEGREES FAHRENHEIT:

ELEMENT	MINIMUM REMOVAL TIME	COMMENTS
WALLS, COLUMNS AND BEAM SIDES	12 HOURS	WHERE FORMS ALSO SUPPORT FORMWORK FOR SLABS OR SOFFITS, THE REMOVAL TIME OF THE LATTER GOVERNS.

WHERE NEW CONCRETE IS PLACED AGAINST EXISTING CONCRETE, THE EXISTING CONCRETE SURFACE SHALL BE CLEANED AND PREWETTED WITH STANDING WATER REMOVED AS INDICATED PER ACI 318-19 SECTION 26.5.6.2. JOINTS SHALL BE INTENTIONALLY ROUGHENED TO 1/4" AMPLITUDE WHERE INDICATED AS "ROUGHENED" IN THE DRAWINGS AND AT JOINTS IN MEMBERS THAT ARE PART OF THE SFRS UNLESS A SHEAR KEY IS SPECIFICALLY DETAILED.

PROVIDE 3/4" CHAMFERS ON ALL EXPOSED CONCRETE EDGES, UNLESS NOTED OTHERWISE.

### **CONCRETE MIX DESIGNS**

REF. ACI 318-19 TABLE 19.3.2.1 FOR ADDITIONAL MIX REQUIREMENTS SPECIFIC TO EXPOSURE CLASS.

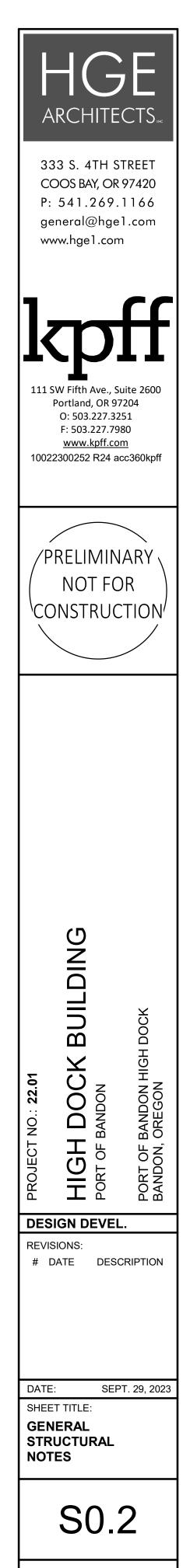
ALL CONCRETE MIXES TO BE NORMAL WEIGHT CONCRETE, U.N.O.

EXPOSURE CATEGORY "W" APPLIES TO REQUIRED LEVEL OF PERMEABILITY.

EXPOSURE CATEGORY "C" APPLIES TO CORROSIVE LOCATIONS - INCLUDING SURROUNDING ENVIRONMENT (SUCH

VERIFY WATER-CEMENTITIOUS MATERIAL RATIO WITH FLOOR COVERING MANUFACTURER FOR CONCRETE

REFERENCE SLABS EXPOSED TO VIEW GENERAL NOTES FOR ADDITIONAL MIX REQUIREMENTS.



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### CONCRETE REINFORCING STEEL

CONCRETE REINFORCEMENT SHALL BE AS LISTED BELOW. ASTM A615 REINFORCEMENT MAY BE SUBSTITUTED FOR ASTM A706 REINFORCEMENT PROVIDED THAT THE ACTUAL YIELD STRENGTH BASED ON MILL TESTS DOES NOT EXCEED Fy BY MORE THAN 18,000 PSI AND THE RATIO OF ACTUAL TENSILE STRENGTH TO ACTUAL YIELD STRENGTH IS NOT LESS THAN 1.25 AND THE ELONGATION REQUIREMENTS OF ASTM A706 ARE MET PER ACI 318-19 SECTION 20.2.2.5. MILL TESTS CERTIFICATIONS FOR SUBSTITUTED BARS SHALL BE SUBMITTED TO THE SPECIAL INSPECTOR AND SEOR PRIOR TO PLACEMENT. ASTM A706 REINFORCEMENT MAY BE SUBSTITUTED FOR ASTM A615 REINFORCEMENT.

REINFORCING LOCATION	MATERIAL GRADE
REINFORCING TO BE WELDED	ASTM A706 GRADE 60
ALL OTHER USES U.N.O.	ASTM A615 GRADE 60
SMOOTH WELDED WIRE FABRIC (WWF)	ASTM A1064

ALL REINFORCING STEEL SHALL BE SECURELY TIED IN PLACE WITH #16 ANNEALED IRON WIRE. BARS IN BEAMS AND SLABS SHALL BE SUPPORTED ON WELL-CURED CONCRETE BLOCKS OR APPROVED METAL OR PLASTIC CHAIRS, AS SPECIFIED BY THE CRSI MANUAL OF STANDARD PRACTICE, MSP-1, REINFORCING STEEL SHALL BE DETAILED IN ACCORDANCE WITH ACI MNL-66 "ACI DETAILING MANUAL". SHOP DRAWINGS SHALL INCLUDE ELEVATIONS OF ALL BEAMS, WALLS AND COLUMNS SHOWING BAR LOCATIONS.

REINFORCING BARS SHALL NOT BE BENT OR STRAIGHTENED IN THE FIELD WITHOUT APPROVAL OF THE SEOR. PREHEATING METHODS SHALL BE SUBMITTED TO THE SEOR FOR APPROVAL PRIOR TO BENDING OF BARS #6 OR LARGER.

LAP ALL REINFORCING BARS PER THE TYPICAL LAP SPLICE LENGTH SCHEDULES. EXCEPT AS NOTED ON DRAWINGS. USE LAP LENGTH FOR SMALLER BAR WHEN SPLICING DIFFERENT BAR SIZES. BARS SPLICED WITH NONCONTACT LAPS SHALL BE SPACED NO FARTHER THAN 1/5TH THE LAP LENGTH OR 6 INCHES. MECHANICAL SPLICES NOTED ON THE PLANS SHALL BE DAYTON SUPERIOR BAR-LOCK OR TAPER-LOCK COUPLERS (UES ER-319) OR APPROVED EQUAL WITH A CURRENT EVALUATION REPORT.

	TYP. WALL AND SLAB LAP SPLICE LENGTH SCHEDULE (IN.) - 60 KSI											
	WALL VERTICAL AND SLAB BOTTOM BARS				WALL HORIZONTAL AND SLAB 1				В ТОР ВА	RS		
BAR SIZE	3,000 PSI	4,000 PSI	5,000 PSI	6,000 PSI	7,000 PSI	≥ 8,000 PSI	3,000 PSI	4,000 PSI	5,000 PSI	6,000 PSI	7,000 PSI	≥ 8,000 PSI
#3	18	16	16	16	16	16	24	20	18	18	16	16
#4	30	26	24	22	20	18	38	34	30	28	26	24
#5	36	32	28	26	24	22	48	42	36	34	32	30
#6	44	38	34	32	28	28	56	50	44	40	38	36
#7	70	60	54	50	46	44	90	78	70	64	60	56
#8	86	74	68	62	56	54	112	98	88	80	74	70
#9	104	90	82	74	68	64	136	118	106	96	90	84
#10	126	108	98	88	82	78	162	142	126	116	106	100
#11	146	128	114	104	96	90	190	166	148	136	126	118

CONCRETE COVER						
USE	CLEAR COVER	MIN. CLEAR SPACING				
WALLS: INTERIOR FACES	3/4"	2db OR 1"				
CONCRETE EXPOSED TO EARTH OR WEATHER	1-1/2" (#5 AND SMALLER) 2" (#6 AND LARGER)	2db OR 1"				

#### **CONCRETE WALL REINFORCING**

CONCRETE WALL REINFORCEMENT TO BE AS FOLLOWS, U.N.O.:

WALL THICKNESS	HORIZONTAL	VERTICAL	LOCATION
6"	#4 @ 12" o.c.	#4 @ 12" o.c.	AT CL OF WALL
8"	#4 @ 10" o.c.	#4 @ 10" o.c.	AT CL OF WALL
10"	#4 @ 16" o.c.	#4 @ 16" o.c.	AT EACH FACE

#### CONCRETE REINFORCING DETAILS

CONTINUE HORIZONTAL WALL BARS THROUGH PILASTERS, COLUMNS AND INTERSECTING WALLS. AT SLAB AND WALL OPENINGS PROVIDE A MINIMUM OF TWO #5 BARS OVER, UNDER AND AT THE SIDES OF THE OPENINGS. EXTEND THESE BARS LAP DISTANCE OR A MINIMUM OF 2'-0" PAST THE OPENING. PROVIDE ONE #5x4'-0" FOR SINGLE-LAYER REINFORCING AND ONE #5x4'-0" EACH FACE FOR DOUBLE-LAYER REINFORCING PLACED DIAGONALLY AT EACH CORNER OF ALL OPENINGS. REFER TO TYPICAL DETAILS FOR DISPOSITION OF CORNER BARS AND BARS IN SMALL WALL SECTIONS. SLAB BARS SHALL BE HOOKED INTO WALLS. OR HOOKED DOWELS SHALL BE PROVIDED TO MATCH SLAB REINFORCING. PROVIDE (2) #4x4'-0" PLACED DIAGONALLY AT EACH RE-ENTRANT CORNER IN SLABS. PROVIDE HOOKED DOWELS FROM FOOTINGS TO MATCH VERTICAL WALL REINFORCING, UNLESS NOTED OTHERWISE. SHOP DRAWINGS SHALL INCLUDE ALL SPECIAL REINFORCEMENT LISTED ABOVE.

### **CONCRETE EMBEDMENTS**

HEADED SHEAR STUDS SHALL BE NELSON HEADED ANCHORS WITH FLUXED ENDS (ICC ESR-2856) OR APPROVED ALTERNATE. DEFORMED BAR ANCHORS (DBA) UP TO #6 BAR SHALL BE NELSON D6L A706 STUD WELDABLE REBAR, OR APPROVED ALTERNATE. STUDS AND DBA SHALL BE AUTOMATICALLY END-WELDED WITH THE MANUFACTURER'S STANDARD EQUIPMENT IN ACCORDANCE WITH THEIR RECOMMENDATIONS. REINFORCING STEEL SHALL BE WELDED TO STEEL PLATE OR SECTIONS WITH A CJP WELD OR ALL AROUND FILLET WELD AS INDICATED BELOW:

TYP. REINFORCING STEEL WELDING SCHEDULE							
BAR SIZE	FILLET WELD SIZE (IN.)	MIN. PLATE THICKNESS (IN.)					
#3	1/4	1/4					
#4	5/16	1/4					
#5	3/8	1/4					
#6	7/16	5/16					

TABLE NOTES:

- 1. ALL WELDED REBAR TO BE ASTM A706 GRADE 60.
- 2. ALL AROUND FILLET WELD USING E70 ELECTRODE OR PROVIDE CJP AT CONTRACTOR'S OPTION.

3. BARS TO BE ORIENTATED PERPENDICULAR TO PLATE.

4. PLATE TO BE GRADE 36 MINIMUM.

CAST-IN-PLACE ANCHOR BOLTS SHALL BE HEADED BOLTS CONFORMING TO ASTM F1554 GRADE 55. MEETING SUPPLEMENTAL REQUIREMENT S1 (WELDABLE) U.N.O.

NO LOADS OR WELDS SHALL BE PLACED ON EMBEDDED PLATES OR ANGLES FOR MINIMUM OF 7 DAYS AFTER CASTING.

SLEEVES, OPENINGS, CONDUIT, AND OTHER EMBEDDED ITEMS NOT SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE APPROVED BY THE STRUCTURAL ENGINEER BEFORE PLACING CONCRETE. CONDUITS EMBEDDED IN SLABS SHALL NOT BE LARGER IN OUTSIDE DIMENSION THAN ONE THIRD OF THE THICKNESS OF THE SLAB AND SHALL NOT BE SPACED CLOSER THAN THREE DIAMETERS ON CENTER.

VERIFY ALL BLOCK OUTS WITH ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND PLUMBING REQUIREMENTS.

U.N.O. NO LOADS OR WELDS SHALL BE PLACED ON EMBEDDED PLATES OR ANGLES FOR A MINIMUM OF 7 DAYS AFTER CASTING. ADHESIVE ANCHORS SHALL NOT BE INSTALLED FOR A MINIMUM OF 21 DAYS AFTER CASTING CONCRETE IN ACCORDANCE WITH ACI 318-19 SECTION 17.2.2.

### POST-INSTALLED CONCRETE ANCHORS

POST-INSTALLED CONCRETE ANCHORS SHALL BE THE FOLLOWING PRODUCTS, U.N.O.:

ТҮРЕ	
EXPANSION	HILTI KWIK BOLT TZ2 (ICC ESR-4266) HILTI KWIK BOLT 1 (IAPMO ER-678) SIMPSON STRONG-BOLT 2 (ICC ESR-3037) DEWALT POWER STUD: SD2 (ICC ESR-3502)
CONCRETE SCREW	SIMPSON TITEN HD (ICC ESR-3027) DEWLAUTHRCREVOBVIST(HOCCESR-2713)
ADHESIVE ANCHORS	HILTI HIT-RE 500 V3 (ICC ESR-3814) SIMPSON SET-XP (ICC ESR-2508) SIMPSON SET-3G (ICC ESR-4057)
	DEWALT PURE110+ (ICC ESR-3298)

ANCHORS SHALL BE INSTALLED IN STRICT CONFORMANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AND PRODUCT EVALUATION REPORTS. EMBEDMENTS SPECIFIED ON DRAWINGS ARE "EFFECTIVE" EMBEDMENTS. REFERENCE MANUFACTURER LITERATURE FOR CORRESPONDING ACTUAL EMBEDMENT DEPTHS. DO NOT CUT REINFORCING IN NEW OR EXISTING CONCRETE DURING INSTALLATION.

REQUESTS FOR ANCHOR SUBSTITUTIONS SHALL BE SUBMITTED TO THE SEOR IN WRITING ALONG WITH EVIDENCE OF EQUAL OR GREATER CAPACITY TO THE SPECIFIED CONNECTION.

ALL-THREAD ROD FOR ADHESIVE ANCHORS SHALL CONFORM TO ASTM F1554 GRADE 55, U.N.O. ANCHORS EXPOSED TO EARTH OR WEATHER SHALL BE PROTECTED FROM CORROSION BY HOT-DIP GALVANIZING OR USE OF STAINLESS STEEL. PERMANENTLY EXPOSED EMBEDDED PLATES AND ANGLES SHALL BE HOT-DIPPED GALVANIZED AFTER FABRICATION,

EXPANSION AND SCREW ANCHORS SHALL NOT BE REMOVED AND RESET. SCREW ANCHORS SHALL NOT BE INSTALLED IN HOLES PREVIOUSLY THREADED BY A PRIOR SCREW ANCHOR.

### STRUCTURAL STEEL

STRUCTURAL STEEL SHALL BE OF THE MATERIAL AND TYPE LISTED BELOW, U.N.O.:

STRUCTURAL STEEL				
SHAPE	MATERIAL GRADE			
PLATES WHERE NOTED	ASTM A572, GRADE 50			
CHANNELS, PLATES AND ANGLES, U.N.O.	ASTM A36			

DESIGN, DETAILING, FABRICATION, AND ERECTION SHALL BE IN ACCORDANCE WITH THE AISC 360, "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS" WITH "COMMENTARY" AND THE "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES", WITH THE FOLLOWING CLARIFICATIONS AND ADDITIONS:

- 1. CLARIFY SECTIONS 7.5.1 AND 7.5.3 AS FOLLOWS:
- EMBEDMENT LOCATION DRAWINGS SHALL BE SUBMITTED TO THE STRUCTURAL ENGINEER OF RECORD FOR INFORMATION ONLY. THE SEOR IS NOT RESPONSIBLE FOR THE APPROVAL OF EMBEDMENT LOCATION DRAWINGS.
- 2. ADD THE FOLLOWING PARAGRAPH TO SECTION 7.10.3:
- "THE ERECTOR SHALL HAVE THE SOLE RESPONSIBILITY FOR DETERMINING THE MEANS AND METHODS USED TO PROPERLY AND ADEQUATELY BRACE THE FRAMING DURING ERECTION."

BOLTS SHALL CONFORM TO THE ASTM AND RCSC SPECIFICATIONS FOR JOINTS USING HIGH STRENGTH BOLTS. BOLTS SHALL BE ASTM F3125 GRADE A325 AND GRADE A490 WHERE NOTED, AND SNUG-TIGHT UNLESS NOTED OTHERWISE.

WELDING SHALL CONFORM TO THE AWS CODES FOR ARC AND GAS WELDING IN BUILDING CONSTRUCTION. WELDING SHALL BE PERFORMED IN ACCORDANCE WITH A WELDING PROCEDURE SPECIFICATION (WPS) AS REQUIRED IN AWS D1.1 AND APPROVED BY THE STRUCTURAL ENGINEER. THE WPS VARIABLES SHALL BE WITHIN THE PARAMETERS ESTABLISHED BY THE FILLER-METAL MANUFACTURER.

WELDS SHALL BE MADE USING E70XX ELECTRODES AND SHALL BE 3/16" MINIMUM, UNLESS OTHERWISE NOTED. WELDING SHALL BE BY AWS CERTIFIED WELDERS.

PROVIDE WEEP HOLES AT EXTERIOR CLOSED SECTIONS WHERE MOISTURE MAY ACCUMULATE. LOCATE WEEP HOLES AT BOTTOM OF HORIZONTAL MEMBERS AT MIDSPAN UNLESS OTHER NOTED. LOCATE WEEP HOLES AT BOTTOM OF VERTICAL MEMBERS EXCEPT AT ROOF ASSEMBLIES. ALL WEEP HOLES TO BE APPROVED PRIOR TO FABRICATION.

NON-SHRINK GROUT USED UNDER BEARING AND BASE PLATES SHALL BE ASTM C 1107, FACTORY-PACKAGED, NONMETALLIC AGGREGATE GROUT, NONCORROSIVE, NONSTAINING, MIXED WITH WATER TO CONSISTENCY SUITABLE FOR APPLICATION AND A 30-MINUTE WORKING TIME. GROUT STRENGTH SHALL BE 8,000 PSI MINIMUM AT 28 DAYS.

DISSIMILAR METALS SHALL BE SEPARATED AS REQUIRED TO PREVENT GALVANIC CORROSION BY COMPLETELY COVERING CONTACT AREAS WITH HESKINS 3453 CORROSION PROTECTION TAPE OR APPROVED EQUAL MATERIAL.

### SAWN LUMBER

SAWN LUMBER SHALL CONFORM TO THE REQUIREMENTS AS INDICATED IN THE CURRENTLY ACCEPTED NATIONAL DESIGN SPECIFICATION (NDS) DESIGN VALUES FOR WOOD CONSTRUCTION AND CONFORMING TO THE WEST COAST LUMBER INSPECTION BUREAU OR WESTERN WOOD PRODUCTS ASSOCIATION GRADING RULES. LUMBER SHALL BE THE SPECIES, GRADE, AND MOISTURE CONTENT NOTED BELOW, U.N.O.:

USE	SPECIES AND GRADE	MOISTURE CONTENT
LUMBER 2" TO 4" THICK x 5" OR WIDER (JOISTS/RAFTERS)	DOUGLAS FIR-LARCH NO. 2 & BTR	MC 15, KD
LUMBER 2" TO 3" THICK x 4" TO 6" WIDE (STUDS)	DOUGLAS FIR-LARCH STUD	S-DRY, MC 15, KD
LUMBER 5x5 AND GREATER (BEAMS)	DOUGLAS FIR-LARCH NO. 1	MC 15, KD, S-DRY
LUMBER 5x5 AND GREATER (POSTS)	DOUGLAS FIR-LARCH NO. 1	S-DRY
T&G DECKING	DOUGLAS FIR-LARCH COMMERCIAL DEX	S-DRY, MC 15, KD

ALL LUMBER IN CONTACT WITH CONCRETE OR CMU SHALL BE PRESERVATIVE TREATED, UNLESS AN APPROVED MOISTURE BARRIER IS PROVIDED.

CUTTING AND NOTCHING OF JOISTS AND STUDS SHALL CONFORM TO THE TYPICAL WOOD DETAILS PROVIDED OR OSSC SECTIONS 2308.4.2.4, 2308.5.9 AND 2308.7.4 WHERE NO DETAILS ARE SPECIFIED.

### LUMBER FASTENERS AND ACCESSORIES

FRAMING ACCESSORIES INDICATED SHALL BE MANUFACTURED BY SIMPSON STRONG TIE (OR APPROVED EQUAL) AND OF THE SIZE AND TYPE SPECIFIED. ALL NAIL HOLES SHALL BE FILLED WITH STRUCTURAL FASTENERS, UNLESS NOTED OTHERWISE ON THE DRAWINGS AND FASTENERS SHALL BE INSTALLED FOLLOWING ALL MANUFACTURERS REQUIREMENTS. ACCESSORIES SHALL BE GALVANIZED UNLESS INDICATED OTHERWISE. PROVIDE G90 COATING EXCEPT WHERE IN CONTACT WITH PRESERVATIVE OR FIRE RETARDANT TREATED WOOD IN WHICH CASE G185 SHALL BE PROVIDED. SUBMIT SUBSTITUTION REQUESTS TO ARCHITECT FOR APPROVAL OUTLINING THE FRAMING ACCESSORIES BEING REPLACED AND THE SUBSTITUTED FRAMING ACCESSORIES. ALLOWABLE LOADS FOR THE SPECIFIED ACCESSORIES SHALL BE TABULATED ALONG WITH THE ALLOWABLE LOADS FOR THE SUBSTITUTED ACCESSORIES. SUBSTITUTION REQUESTS WILL ONLY BE APPROVED WHERE SUBSTITUTED PRODUCTS ARE CLEARLY DOCUMENTED TO HAVE EQUAL OR GREATER CAPACITY IN ALL DIRECTIONS.

ALL FRAMING NAILS SHALL BE THE SIZE AND QUANTITY INDICATED AND CONFORM TO ASTM F 1667, INCLUDING SUPPLEMENT 1, "STANDARD SPECIFICATION OF DRIVEN FASTENERS: NAILS, SPIKES, AND STAPLES" AND ICC-ES REPORT ESR-1539 "POWER-DRIVEN STAPLES AND NAILS". NAILS SHALL BE IDENTIFIED BY LABELS (ATTACHED TO THEIR CONTAINERS) THAT SHOW THE MANUFACTURER'S NAME AND ICC-ES REPORT NUMBER, NAIL SHANK DIAMETER AND LENGTH AND SHALL BE SUBMITTED TO THE ARCHITECT PRIOR TO FRAMING. NAILING NOT SHOWN SHALL BE AS INDICATED IN OSSC TABLE 2304.10.2 OR ICC ESR-1539. THE FOLLOWING NAIL SIZES SHALL BE USED WITH THE NAIL LENGTH DETERMINED BY MINIMUM PENETRATION INTO FRAMING MEMBER:

FRAMING NAILS						
NAIL TYPE	SHANK DIAMETER (IN.)	MINIMUM PENETRATION INTO FRAMING MEMBER (IN.)				
6d	0.113	1.125				
8d	0.131	1.375				
10d	0.148	1.5				
12d	0.148	1.5				
16d	0.148, 0.162	1.5, 1.625				

BOLTS AND LAG SCREWS SHALL CONFORM TO ANSI/ASME STANDARD B18.2.1. ALL BOLTS AND LAG SCREWS SHALL BE INSTALLED WITH STANDARD CUT WASHERS.

THE TERM "WOOD STRUCTURAL PANEL" REFERS TO A WOOD-BASED PANEL PRODUCT BONDED WITH A WATERPROOF ADHESIVE INCLUDING BOTH PLYWOOD AND ORIENTED STRAND BOARD (OSB), WOOD STRUCTURAL PANELS SHALL CONFORM TO U.S. DEPARTMENT OF COMMERCE VOLUNTARY PRODUCT STANDARDS PS1 OR PS2 FOR WOOD-BASED STRUCTURAL USE PANELS, OR APA PERFORMANCE STANDARD PRP-108 (ICC-ES ESR-2586). PANELS SHALL BE APA RATED SHEATHING OR APA RATED STURD-I-FLOOR, EXTERIOR OR EXPOSURE 1, OF THE THICKNESS AND SPAN RATING SHOWN ON THE DRAWINGS. PANELS SHALL BE STAMPED WITH THE APA TRADEMARK.

WOOD STRUCTURAL PANEL INSTALLATION SHALL BE IN CONFORMANCE WITH APA RECOMMENDATIONS. ALLOW 1/8" SPACING AT PANEL ENDS AND EDGES, UNLESS OTHERWISE INDICATED OR RECOMMENDED BY THE PANEL MANUFACTURER.

ALL ROOF SHEATHING AND FLOOR SHEATHING SHALL BE INSTALLED WITH FACE GRAIN OR STRENGTH AXIS PERPENDICULAR TO SUPPORTS, EXCEPT AS INDICATED ON THE DRAWINGS. ROOF SHEATHING SHALL EITHER BE BLOCKED, TONGUE-AND-GROOVE, OR HAVE EDGES SUPPORTED BY PLYCLIPS. WHERE BLOCKING IS SPECIFICALLY INDICATED ON THE DRAWINGS, T&G EDGES OR PLYCLIPS MAY NOT BE SUBSTITUTED. SHEATHING SHALL BE UNBLOCKED, EXCEPT AS INDICATED ON DRAWINGS. FLOOR SHEATHING SHALL BE FIELD GLUED TO THE FRAMING USING ADHESIVES MEETING APA SPECIFICATION AFG-01 OR ASTM D3498. TONGUE AND GROOVE PANELS SHALL ALSO BE GLUED AT THE T&G JOINT.

SHEAR WALL SHEATHING SHALL BE INSTALLED EITHER HORIZONTALLY OR VERTICALLY AND BE BLOCKED WITH 2x FRAMING AT ALL PANEL EDGES. NAILING NOT SHOWN SHALL BE AS INDICATED IN OSSC TABLE 2304.10.2.

### WOOD STRUCTURAL PANEL SHEAR WALLS

SHEAR WALL WOOD STRUCTURAL PANELS SHALL BE PLYWOOD OR OSB PANELS CONFORMING TO THE REQUIREMENTS FOR ITS TYPE SPECIFIED IN U.S. DOC PS1 OR PS2. SHEATHING SHALL BE APPLIED EITHER HORIZONTALLY OR VERTICALLY. SHEET SIZES SHALL BE 4x8 UNLESS AT BOUNDARIES OR FRAMING CHANGES.

NAIL HEADS SHALL BE DRIVEN FLUSH WITH SHEATHING. DO NOT PENETRATE SURFACE PLY WITH NAIL HEADS. IF NAIL HEADS ARE NOT FLUSH NOTIFY SEOR. CONTRACTOR IS RESPONSIBLE FOR ANY REPAIRS NECESSARY DUE TO OVER-PENETRATION OF NAILS.

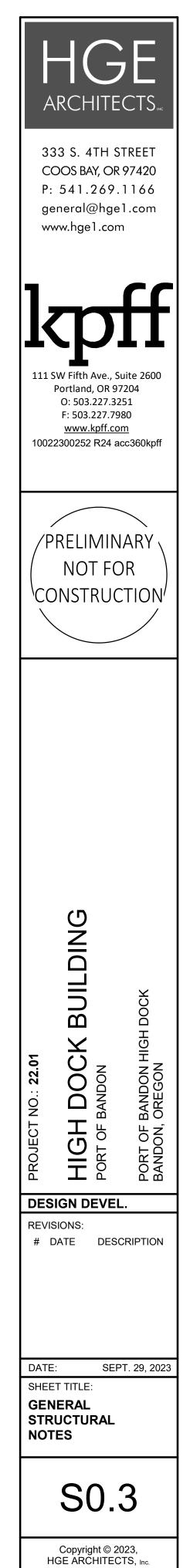
ALL SHEAR WALL PANEL SHEATHING EDGES SHALL BE BLOCKED. EDGE NAILS SHALL BE AT LEAST 3/8" FROM EDGES AND ENDS OF PANELS. STAGGER NAILING ON EDGES.

### 2x TONGUE-AND-GROOVE DECKING

TONGUE-AND-GROOVE DECK SHALL BE RANDOM LENGTH, LAID WITH WELL SCATTERED JOINTS. THE DISTANCE BETWEEN END JOINTS IN ADJACENT COURSES SHALL BE AT LEAST 2 FEET. JOINTS WITHIN 6 INCHES OF BEING IN LINE SHALL BE SEPARATED BY AT LEAST TWO INTERVENING COURSES. WHEN AN END JOINT OCCURS IN THE END BAY. THE NEXT PIECE IN THE SAME COURSE SHALL CONTINUE OVER THE FIRST INNER SUPPORT FOR AT LEAST 2 FEET. EACH BOARD SHALL BEAR ON AT LEAST ONE SUPPORT.

DECKING SHALL BE INSTALLED WITH TONGUES UP ON SLOPED OR PITCHED ROOFS AND WITH PATTERN FACES DOWN. EACH PIECE SHALL BE TOENAILED THROUGH THE TONGUE AT EACH SUPPORT WITH ONE 16d COMMON NAIL AND FACE NAILED AT EACH SUPPORT WITH ONE 16d COMMON NAIL. COURSES SHALL BE TOENAILED TO EACH OTHER WITH 8d COMMON NAILS AT INTERVALS NOT EXCEEDING 30 INCHES AND WITH ONE NAIL AT A DISTANCE NOT EXCEEDING 12 INCHES FROM EACH END OF EACH PIECE.

### WOOD STRUCTURAL PANELS



### **ENGINEERED WOOD I-JOISTS**

DESIGN OF THE WOOD I-JOIST SYSTEM SHALL BE THE CONTRACTOR'S RESPONSIBILITY. WOOD I-JOISTS SHALL BE OF THE SIZE AND TYPE SHOWN ON THE DRAWINGS, MANUFACTURED BY TRUS-JOIST OR AN APPROVED EQUAL, CONFORMING TO APA EWS STANDARD PRI-400, "PERFORMANCE STANDARD FOR APA EWS I-JOISTS" OR A CURRENT ICC-ES REPORT. ALTERNATES WILL BE CONSIDERED, PROVIDED THE ALTERNATE IS COMPATIBLE WITH THE LOAD CAPACITY, STIFFNESS, DIMENSIONAL, DIAPHRAGM NAILING, AND FIRE RATING REQUIREMENTS OF THE PROJECT.

CONTRACTOR SHALL PROVIDE BRIDGING IN CONFORMANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. ROOF JOISTS AND BRIDGING SHALL BE CAPABLE OF RESISTING THE WIND UPLIFT BELOW, UNLESS NOTED OTHERWISE ON THE DRAWINGS.

THE JOIST SUPPLIER SHALL VISIT THE JOB SITE AS REQUIRED TO VERIFY PROPER INSTALLATION OF JOISTS AND PROVIDE WRITTEN VERIFICATION TO THE ARCHITECT UPON COMPLETION.

IN ADDITION TO SELF WEIGHT, JOISTS SHALL BE DESIGNED FOR THE MINIMUM LOADS SPECIFIED BELOW AND ANY ADDITIONAL LOADS AS NOTED ON THE PLANS INCLUDING SNOW DRIFT, WIND, SEISMIC, MECHANICAL EQUIPMENT, ADDITIONAL LIVE OR DEAD LOADS.

ENGINEERED WOOD I-JOIST LOADING CRITERIA						
LOCATION	LOAD					
ROOF DEAD LOAD	15 PSF					
ROOF LIVE LOAD	25 PSF					
ROOF WIND UPLIFT (ULT.)	20 PSF (NOT LESS THAN 16 PSF NET UPLIFT)					

DESIGN SHALL CONFORM TO THE FOLLOWING MINIMUM DEFLECTION CRITERIA: L/480 (FLOOR LIVE LOAD), L/360 (FLOOR DEAD LOAD PLUS LIVE LOAD AND ROOF LIVE LOAD), AND L/240 (ROOF DEAD LOAD PLUS LIVE LOAD.)

#### METAL PLATE CONNECTED WOOD TRUSS SYSTEMS

DESIGN OF METAL PLATE CONNECTED WOOD TRUSSES SHALL BE THE CONTRACTOR'S RESPONSIBILITY. THE TRUSS DESIGN SHALL CONFORM TO THE DIMENSIONS AND LOADING REQUIREMENTS SHOWN IN THE ARCHITECTURAL AND STRUCTURAL PLANS. THE TRUSS DESIGN SHALL ALSO CONFORM TO THE REQUIREMENTS OF THE OSSC SECTION 2303.4 AND THE REQUIREMENTS GIVEN IN ANSI/TPI 1 "NATIONAL DESIGN STANDARD FOR METAL PLATE CONNECTED WOOD TRUSS CONSTRUCTION".

THE TRUSS MANUFACTURER SHALL PROVIDE SHOP DRAWINGS INDICATING LAYOUT OF ALL TRUSSES AND ANY DETAILING NECESSARY FOR DETERMINING FIT AND PLACEMENT IN THE STRUCTURE. THE SHOP DRAWINGS SHALL INDICATE THE FOLLOWING:

- SLOPE, DEPTH, SPAN, AND SPACING
- LOCATION OF ALL JOINTS AND SUPPORT LOCATIONS
- NUMBER OF PLIES IF GREATER THAN ONE - REQUIRED BEARING WIDTHS AT SUPPORT MEMBERS
- DESIGN LOADS AND THEIR LOCATIONS
- MAXIMUM REACTION FORCE AND DIRECTION
- METAL PLATE CONNECTOR TYPE, SIZE, THICKNESS OR GAGE, AND THE DIMENSIONED LOCATION OF EACH
- SIZE SPECIES AND GRADE OF EACH WOOD MEMBER
- ALL TRUSS TO TRUSS CONNECTIONS AND FIELD ASSEMBLY REQUIREMENTS
- CALCULATED DEFLECTION RATIO - MAXIMUM AXIAL TENSION AND COMPRESSION FORCES IN THE TRUSS MEMBERS - REQUIRED PERMANENT INDIVIDUAL TRUSS MEMBER RESTRAINT LOCATIONS AND THE METHOD AND DET.

- REQUIRED PERMANENT INDIVIDUAL TRUSS MEMBER RESTRAINT LOCATIONS AND THE METHOD AND DETAILS OF RESTRAINT/BRACING TO BE USED

MANUFACTURER SHALL DESIGN AND FURNISH ALL WOOD TRUSS COMPONENT TO COMPONENT CONNECTIONS NECESSARY TO TRANSMIT DESIGN LOADS, INCLUDING SEISMIC AND WIND LOADS, TO THE BEARING AND SHEAR WALL SUPPORTS. MANUFACTURER SHALL PROVIDE BRIDGING AS REQUIRED.

THE TRUSS SUPPLIER SHALL VISIT THE JOB SITE AS REQUIRED TO VERIFY PROPER INSTALLATION OF TRUSSES AND PROVIDE WRITTEN VERIFICATION TO THE ARCHITECT UPON COMPLETION.

TEMPORARY BRACING OF THE TRUSS SYSTEM DURING INSTALLATION AND CONSTRUCTION IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

TRUSSES SHALL BE DESIGNED FOR THE LOADS SPECIFIED BELOW AND ANY ADDITIONAL LOADS AS NOTED ON THE PLANS INCLUDING SNOW DRIFT, WIND, SEISMIC, MECHANICAL EQUIPMENT, AND ADDITIONAL LIVE OR DEAD LOADS.

METAL PLATE CONNECTED WOOD TRUSS LOADING CRITERIA					
LOCATION	TOP CHORD LOAD	BOTTOM CHORD LOAD			
ROOF DEAD LOAD	15 PSF	10 PSF			
ROOF SNOW LOAD	25 PSF	N/A			
ROOF LIVE LOAD	25 PSF	10 PSF			
ROOF WIND UPLIFT (ULT.)	20 PSF	N/A			

ROOF WIND NET UPLIFT PRESSURE RESULTING FROM LOAD COMBINATIONS NOT TO BE LESS THAN 16 PSF.

ROOF TRUSS BOTTOM CHORD LIVE LOAD NEED NOT BE CONSIDERED CONCURRENT WITH SNOW LOADING.

DESIGN SHALL CONFORM TO THE FOLLOWING MINIMUM DEFLECTION CRITERIA: L/480 (FLOOR LIVE LOAD), L/360 (FLOOR TOTAL LOAD), L/240 (ROOF LIVE LOAD), AND L/180 (ROOF TOTAL LOAD.)

### STRUCTURAL COMPOSITE LUMBER (SCL)

STRUCTURAL COMPOSITE LUMBER PRODUCTS SUCH AS LAMINATED VENEER LUMBER (LVL), PARALLEL STRAND LUMBER (PSL), AND LAMINATED STRAND LUMBER (LSL) SHALL BE OF THE SIZE AND TYPE SHOWN ON THE DRAWINGS. ALL STRUCTURAL COMPOSITE LUMBER PRODUCTS NOTED HERE SHALL HAVE A CURRENT ICC-ES REPORT.

MEMBERS SHALL HAVE THE FOLLOWING MINIMUM DESIGN PROPERTIES:

SCL MINIMUM PROPERTIES								
LUMBER TYPE	FLEXURAL STRESS, Fb (PSI)	MODULUS OF ELASTICITY (PSI)						
PSL	2,900	2,200,000						
LVL	2,600	2,000,000						
LSL HEADERS	2,325	1,550,000						
LSL STUDS	1,700	1,300,000						
LSL RIM BOARD	1,700	1,300,000						
LSL SILL PLATE (TREATED)	1,900	1,300,000						

FLEXURAL STRESS NOTED ABOVE ARE FOR A 12-INCH MEMBER. DEEPER MEMBERS SHALL BE DESIGNED FOR REDUCED STRESSES PER THE MANUFACTURER'S REQUIREMENTS.

#### **GLUED-LAMINATED MEMBERS**

GLUED-LAMINATED (GLULAM) MEMBERS SHALL BE FABRICATED IN CONFORMANCE WITH CURRENT ANSI STANDARD A190.1, AMERICAN NATIONAL STANDARD FOR STRUCTURAL GLUED LAMINATED TIMBER OR OTHER CODE- APPROVED DESIGN, MANUFACTURING AND/OR QUALITY ASSURANCE PROCEDURES. EACH MEMBER SHALL BEAR AN AITC OR APA-EWS IDENTIFICATION MARK OR BE ACCOMPANIED BY A CERTIFICATE OF CONFORMANCE. APA-EWS MARKS TO BE PLACED ON SURFACES NOT EXPOSED IN COMPLETED CONSTRUCTION. ONE COAT OF END SEALER SHALL BE APPLIED IMMEDIATELY AFTER TRIMMING IN EITHER THE SHOP OR IN THE FIELD.

GLULAM MEMBERS SHALL BE ARCHITECTURAL (AT EXPOSED CONDITIONS) AND INDUSTRIAL (AT HIDDEN CONDITIONS) APPEARANCE CLASSIFICATION, REFERENCE ARCHITECTURAL DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

GLULAM MEMBERS SHALL BE OF MINIMUM ALLOWABLE DESIGN PROPERTIES AS ESTABLISHED BY ASTM D3737:

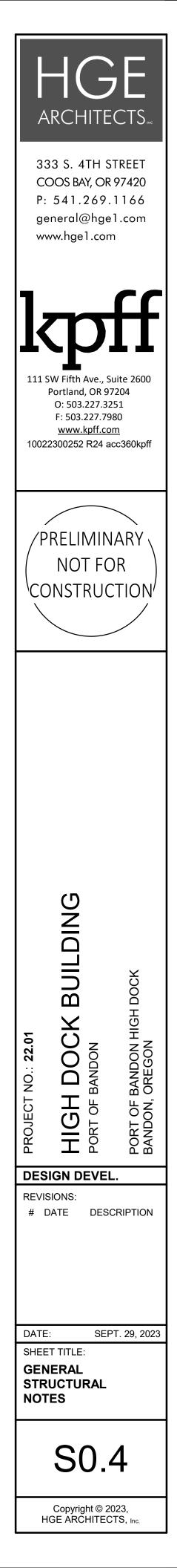
GLUED-LAMINATED BEAMS							
COMBINATION SYMBOL (SPECIES)	FLEXURAL STRESS, Fb (PSI)	HORIZONTAL SHEAR STRESS Fv (PSI)	COMPRESSION STRESS PERP TO GRAIN Fc,perp (PSI)	MODULUS OF ELASTICITY (PSI)			
24F-V4 (DF/DF) (SIMPLE SPAN)	+2,400 / -1,850	265	650	1,800,000			
24F-V8 (DF/DF) (CONTINUOUS OR CANTILEVER)	2,400	265	650	1,800,000			

REFERENCE SPECIFICATIONS FOR FABRICATION AND MILLING TOLERANCES FOR TIMBER SIZES, HOLES, AND CONNECTIONS. CONNECTIONS SHALL BE SHOP FABRICATED TO GREATEST EXTENT INCLUDING CUTTING TO LENGTH AND DRILLING HOLES.

NOTCHES, DAPS, HOLES, ETC. SHALL BE REPRESENTED ON SHOP DRAWINGS FOR REVIEW BY SEOR. FIELD NOTCHING AND BORING OF GLULAM MEMBERS IS NOT ALLOWED UNLESS APPROVED BY SEOR.

GLULAM PRODUCTS SHALL CONTAIN AVERAGE MOISTURE CONTENT OF 16% OR LESS AT TIME OF MANUFACTURE. REFERENCE SPECIFICATIONS FOR ALLOWED DIMENSIONAL TOLERANCES AT TIME OF MANUFACTURE.

SIMPLE SPAN GLULAM MEMBERS SHALL BE SUPPLIED TO THE PROJECT WITH STANDARD MILL CAMBER BETWEEN 3,500 AND 5,000 FOOT WITH TOLERANCES AS ALLOWED BY ANSI A190. MULTI-SPAN AND CANTILEVER BEAMS SHALL HAVE NO MILL CAMBER UNLESS NOTED OTHERWISE. CAMBER INDICATED ON THE DRAWINGS IS TOTAL CAMBER AND IS NOT IN ADDITION TO STANDARD MILL CAMBER.



#### STATEMENT OF SPECIAL INSPECTION NOTES:

- SPECIAL INSPECTIONS SHALL CONFORM TO SECTION 1705 OF THE 2019 OSSC, CONTRACT DOCUMENTS AND APPROV 1. REFER TO SPECIAL INSPECTION AND TESTING TABLES FOR PROJECT REQUIREMENTS.
- SPECIAL INSPECTIONS AND ASSOCIATED TESTING SHALL BE PERFORMED BY AN APPROVED ACCREDITED INDEPENDENT AGENCY MEETING 2. THE REQUIREMENTS OF ASTM E329 (MATERIALS). THE INSPECTION AND TESTING AGENCY SHALL FURNISH TO THE STRUCTURAL ENGINEER A COPY OF THEIR SCOPE OF ACCREDITATION. SPECIAL INSPECTORS SHALL BE APPROVED BY THE BUILDING OFFICIAL. WELDING INSPECTORS SHALL BE QUALIFIED PER SECTION 6.1.4.1(1) OF AWS D1.1.
- THE SPECIAL INSPECTOR SHALL OBSERVE THE INDICATED WORK FOR COMPLIANCE WITH THE APPROVED CONSTRUCTION DOCUMENTS. 3 ALL DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE CONTRACTOR FOR CORRECTION AND NOTED IN THE INSPECTION REPORTS.
- THE SPECIAL INSPECTOR AND GEOTECHNICAL ENGINEER SHALL FURNISH INSPECTION REPORTS FOR EACH INSPECTION TO THE BUILDING OFFICIAL, STRUCTURAL ENGINEER, ARCHITECT, CONTRACTOR, AND OWNER. THE SPECIAL INSPECTION AGENCY SHALL SUBMIT A FINAL REPORT STATING THAT THE WORK REQUIRING SPECIAL INSPECTION WAS INSPECTED AND IS IN CONFORMANCE WITH THE APPROVED CONSTRUCTION DOCUMENTS AND THAT ALL DISCREPANCIES NOTED IN THE INSPECTION REPORTS HAVE BEEN CORRECTED.
- QUALITY ASSURANCE (QA) IS REQUIRED FOR STRUCTURAL STEEL ITEMS PER AISC 360 AND 341 UNLESS SPECIFICALLY NOTED OTHERWISE. QUALITY CONTROL (QC) TO BE PROVIDED BY THE FABRICATOR, ERECTOR OR OTHER RESPONSIBLE CONTRACTOR AS APPLICABLE. CONTRACTOR AND SPECIAL INSPECTOR TO DOCUMENT QUALITY CONTROL AS REQUIRED IN AISC 360 SECTION N3 AND AISC 341 SECTION J2.

#### **INSPECTION TYPES:** 6

CONTINUOUS : THE FULL-TIME OBSERVATION OF WORK REQUIRING SPECIAL INSPECTION BY AN APPROVED SPECIAL INSPECTOR WHO IS PRESENT IN THE AREA WHERE THE WORK IS BEING PERFORMED.

PERIODIC : THE PART-TIME OR INTERMITTENT OBSERVATION OF WORK REQUIRING SPECIAL INSPECTION BY AN APPROVED SPECIAL INSPECTOR WHO IS PRESENT IN THE AREA WHERE THE WORK HAS BEEN OR IS BEING PERFORMED AND AT THE COMPLETION OF THE WORK.

OBSERVE : OBSERVE THESE FUNCTIONS ON A RANDOM, DAILY BASIS. OPERATIONS NEED NOT BE DELAYED PENDING OBSERVATIONS. PERFORM : INSPECTIONS SHALL BE PERFORMED PRIOR TO THE FINAL ACCEPTANCE OF THE ITEM.

- PERFORM INSPECTION PRIOR TO FINAL ACCEPTANCE OF THE ITEM FOR TEN WELDS TO BE MADE BY A GIVEN WELDER, WITH THE WELDER DEMONSTRATING UNDERSTANDING OF REQUIREMENTS AND POSSESSION OF SKILLS AND TOOLS TO VERIFY THESE ITEMS, THE PERFORM DESIGNATION OF THIS TASK SHALL BE REDUCED TO OBSERVE, AND THE WELDER SHALL PERFORM THIS TASK. SHOULD THE INSPECTOR DETERMINE THAT THE WELDER HAS DISCONTINUED PERFORMANCE OF THIS TASK, THE TASK SHALL BE RETURNED TO PERFORM UNTIL SUCH TIME AS THE INSPECTOR HAS RE-ESTABLISHED ADEQUATE ASSURANCE THAT THE WELDER WILL PERFORM THE INSPECTION TASKS LISTED.
- SPECIAL INSPECTION OF MECHANICAL POST INSTALLED ANCHORS SHALL BE IN STRICT CONFORMANCE WITH THE ICC REPORT AND MANUFACTURER'S INSTALLATION REQUIREMENTS. ANCHOR INSTALLERS SHALL BE QUALIFIED AS REQUIRED BY JURISDICTION REQUIREMENTS.
- INSPECTION REPORTS SHALL IDENTIFY NAMES OF INSTALLERS. •
- SPECIAL INSPECTOR SHALL PROVIDE DOCUMENTATION AT THE END OF ANCHOR INSTALLATIONS STATING THAT THE ANCHORS WERE • INSPECTED PER APPROVED ANCHOR EVALUATION REPORT.

#### **TESTING ABBREVIATIONS:**

NDT - NON-DESTRUCTIVE TESTING C.J.P. - COMPLETE JOINT PENETRATION MT - MAGNETIC PARTICLE TESTING **RBS - REDUCED BEAM SECTION** 

DOCUMENT (D): INDICATES CONTRACTOR AND SPECIAL INSPECTOR TO PROVIDE DOCUMENTATION IN ACCORDANCE WITH AISC 341. 10

#### **CONTRACTOR RESPONSIBILITY:**

EACH CONTRACTOR RESPONSIBLE FOR THE CONSTRUCTION OF THE MAIN WIND-OR SEISMIC-FORCE-RESISTING SYSTEM, DESIGNATED SEISMIC SYSTEM OR A WIND-OR SEISMIC-RESISTING COMPONENT LISTED THE TABLES SHALL SUBMIT A WRITTEN STATEMENT OF RESPONSIBILITY TO THE BUILDING OFFICIAL AND THE OWNER PRIOR TO THE COMMENCEMENT OF WORK ON THE SYSTEM OR COMPONENT. THE CONTRACTOR'S STATEMENT OF RESPONSIBILITY SHALL CONTAIN THE FOLLOWING:

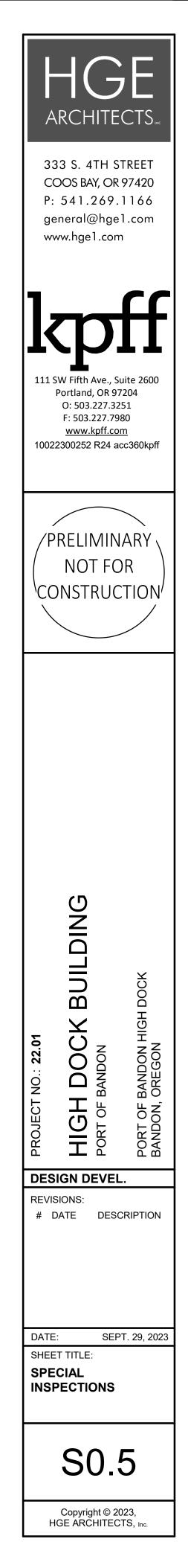
ACKNOWLEDGEMENT OF AWARENESS OF THE SPECIAL REQUIREMENTS CONTAINED IN THE STATEMENT OF SPECIAL INSPECTIONS.

- ACKNOWLEDGEMENT THAT CONTROL WILL BE EXERCISED TO OBTAIN CONFORMANCE WITH THE CONSTRUCTION DOCUMENTS APPROVED BY THE BUILDING OFFICIAL.
- 2. PROCEDURES FOR EXERCISING CONTROL WITHIN THE CONTRACTOR'S ORGANIZATION, THE METHOD AND FREQUENCY OF REPORTING AND DISTRIBUTION OF THE REPORTS.
- IDENTIFICATION AND QUALIFICATIONS OF THE PERSON(S) EXERCISING SUCH CONTROL AND THEIR POSITION(S) IN THE ORGANIZATION. 3

GENERAL - SPECIAL INSPECTIONS							
	OSSC CODE		FREQUENCY (NOTE 6)		DEMARKO		
SYSTEM OR MATERIAL	REFERENCE	STANDARD REFERENCE	CONTINUOUS	PERIODIC	REMARKS		
FABRICATORS	1705.10 1704.2.5				SPECIAL INSPECTION IS REQUIRED FOR STRUCTURAL LOAD-BEARING MEMBERS AND ASSEMBLIES FABRICATED ON THE PREMISES OF A FABRICATOR'S SHOP, SPECIAL INSPECTIONS SHALL BE PERFORMED DURING FABRICATION. PERFORMING SPECIAL INSPECTIONS IS NOT REQUIRED, WHERE FABRICATOR HAS BEEN APPROVED AS AN APPROVED FABRICATOR, PER SECTION 1704.2.5.1.		
DEFERRED SUBMITTALS				x	SPECIAL INSPECTION REQUIREMENTS FOR DEFERRED SUBMITTAL ITEMS, INCLUDING REQUIREMENTS FOR DESIGNATED SEISMIC SYSTEMS IN ACCORDANCE WITH OSSC SECTION 1705.12.4 IF APPLICABLE, TO BE SPECIFIED BY THE SYSTEM ENGINEER AND INCLUDED WITH DEFERRED SUBMITAL DOCUMENTS.		
SUBMITTALS TO THE BUILDING OFFICIAL	1704.5			х	CERTIFICATES OF COMPLIANCE, REPORTS OF PRE- CONSTRUCTION TESTS, OR REPORTS OF MATERIAL PROPERTIES SHALL BE SUBMITTED TO THE BUILDING OFFICIAL.		
POST INSTALLED MECHANICAL ANCHORS AND ADHESIVE ANCHORS IN HARDENED CONCRETE				Х			

		CODE OR	FREQUENCY (NOTE 6)		
SYSTEM OR MATERIAL	OSSC CODE REFERENCE	STANDARD REFERENCE	CONTINUOUS	PERIODIC	REMARKS
GENERAL	1705.3 1901.6	ACI 318: 26.13			SPECIAL INSPECTIONS OF CONCRETE SHALL CONFORM TO THE REQUIREMENTS OF SECTION 1705.3 OF THE IBC AND SECTION 26.13 OF ACI 318.
REINFORCING STEEL PLACEMENT	1901.5.2	ACI 318: CH. 20, 25.2, 25.3, 26.6.1-26.6.3, 26.13.3.3		x	REINFORCING TO COMPLY WITH ALL CODE PROTECTION, SPACING AND TOLERANCE LIMITS.
WELDING REINFORCING STEEL					
1. VERIFICATION OF WELDABILITY OF REINFORCING STEEL OTHER THAN ASTM A706	1705.3.1 1705.3.2	AWS D1.4		x	
2. INSPECT SINGLE-PASS FILLET WELDS, MAXIMUM 5/16" FILLET	1903.1 1903.2	ACI 318: 26.6.4		Х	
3. ALL OTHER REINFORCING STEEL WELDING,			х		
INSPECT ANCHORS/BOLTS CAST IN CONCRETE	-	ACI 318: 17.8.2		x	ALL CAST-IN-PLACE ANCHORS/BOLTS SHALL BE VISUALLY INSPECTED. REFERENCE STEEL INSPECTIONS FOR ADDITIONAL INSTALLATION, MATERIAL AND WELDING INSPECTIONS OF STEEL ITEMS EMBEDDED IN CONCRETE (HEADED STUDS, DBA's, ETC.)
VERIFYING USE OF REQUIRED MIX DESIGN(S)	1904.1 1904.2	ACI 318: CH. 19, 26.4.3, 26.4.4		x	
CONCRETE SPECIMENS FOR TESTING		ASTM C172 ASTM C31 ACI 318: 26.5, 26.12	Х		PRIOR TO CONCRETE PLACEMENT, FABRICATE CONCRETE SPECIMENS FOR TESTING. SEE THE CONCRETE TESTING TABLE FOR ADDITIONAL INFORMATION.
CONCRETE PLACEMENT		ACI 318: 26.5, 26.13.3.2(a)	Х		
CONCRETE CURING		ACI 318: 26.5.3 - 26.5.5, 26.13.3.3		x	VERIFY MAINTENANCE OF SPECIFIED CURING TEMPERATURES AND TECHNIQUES
VERIFICATION OF FORMWORK		ACI 318: 26.11.1.2(b), 26.13.3.3		х	SPECIAL INSPECTIONS APPLY TO SHAPE, LOCATIO AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED
REINFORCING STEEL MECHANICAL COUPLERS, TERMINATORS AND FORMSAVERS		ICC EVALUATION REPORTS		Х	

CONCRETE - TESTING							
SYSTEM OR MATERIAL	OSSC CODE REFERENCE	CODE OR STANDARD REFERENCE	FREQUENCY (NOTE 6)	REMARKS			
CONCRETE STRENGTH	1705.3	ASTM C39					
CONCRETE SLUMP	ASTM C172	ASTM C143	EACH 150 CY NOR LESS THAN EACH 5000 SF OF SLAB OR WALL PLACED EACH SHIFT	FABRICATE SPECIMENS AT TIME FRESH CONCRETE			
CONCRETE AIR CONTENT	ASTM C 31 ACI 318 26.12	ASTM C231		IS PLACED			
CONCRETE TEMPERATURE	ACI 318 26.5	ASTM C1064					



SYSTEM OR MATERI STEEL FABRICATION FABRICATION OF STRUCTURAL ELEM MATERIAL VERIFICATION OF STRUCTU COMPONENTS MATERIAL VERIFICATION OF HIGH STRE AND WASHERS MATERIAL VERIFICATION OF ANCHOR B THREADED RODS MATERIAL VERIFICATION OF WELD FILL STRUCTURAL STEEL WELDING

VERIFYING USE OF PROPER WPS'S VERIFYING WELDER QUALIFICATIONS

COMPLETE AND PARTIAL JOINT PENET WELDS MULTIPASS FILLET WELDS

SINGLE PASS FILLET WELDS GREATER PLUG AND SLOT WELDS

SINGLE PASS FILLET WELDS LESS THA

WELDING STAIR AND RAILING SYSTEMS

FASTENERS MARKED IN ACCORDANCE REQUIREMENTS

PROPER FASTENERS SELECTED FOR 1 (GRADE, TYPE, BOLT LENGTH, IF THREA EXCLUDED FROM THE SHEAR PLANE) PROPER BOLTING PROCEDURE SELEC DETAIL

CONNECTING ELEMENTS< INCLUDING 1 FAYING SURFACE CONDITION AND HOL SPECIFIED, MEET APPLICABLE REQUIR

PRE-INSTALLATION VERIFICATION TEST INSTALLATION PERSONNEL OBSERVED FOR FASTENER ASSEMBLIES AND MET

PROPER STORAGE PROVIDED FOR BOL AND OTHER FASTENER COMPONENTS INSPECTION TASKS AFTER BOLTING

DOCUMENT ACCEPTANCE OR REJE CONNECTIONS

SYSTEM OR MATE

FABRICATION OF PREFABRICATED S

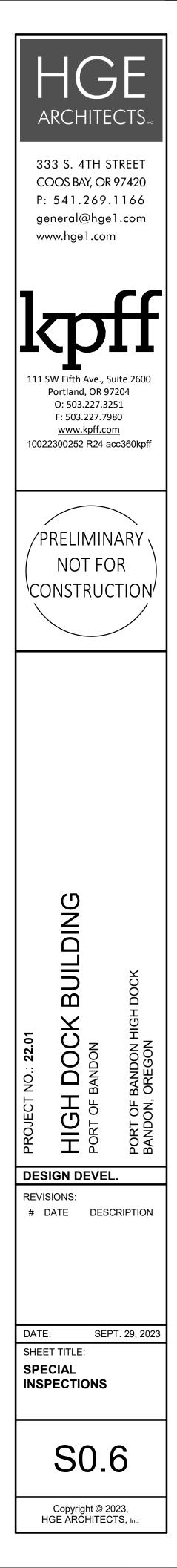
PREFABRICATED WOOD SHEAR PANE

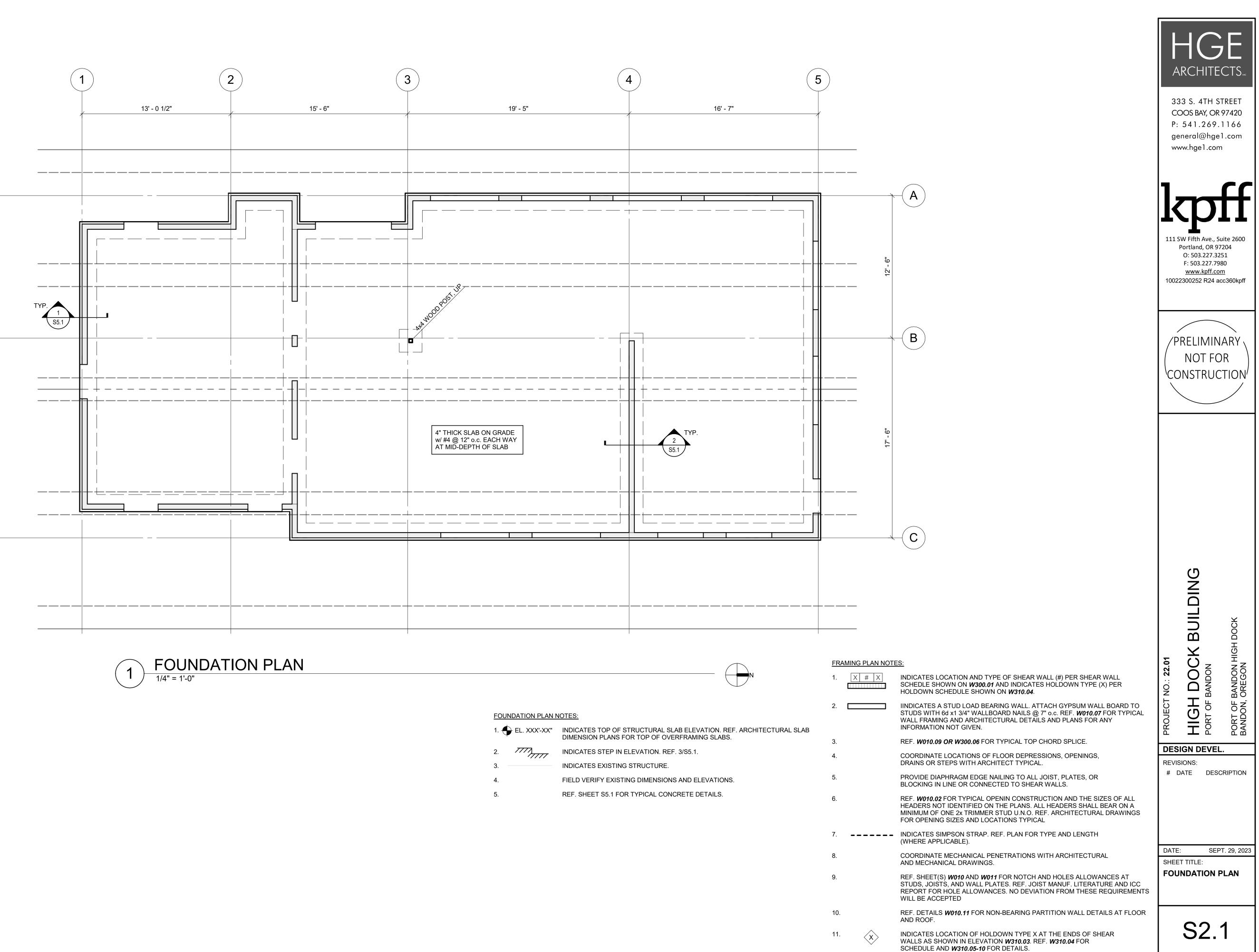
CONNECTIONS FOR DIAPHRAGM CHC BRACING, AND SHEAR WALL ANCHOF

FASTENING OF DIAPHRAGM AND SHE WITH EDGE NAILING < 4"

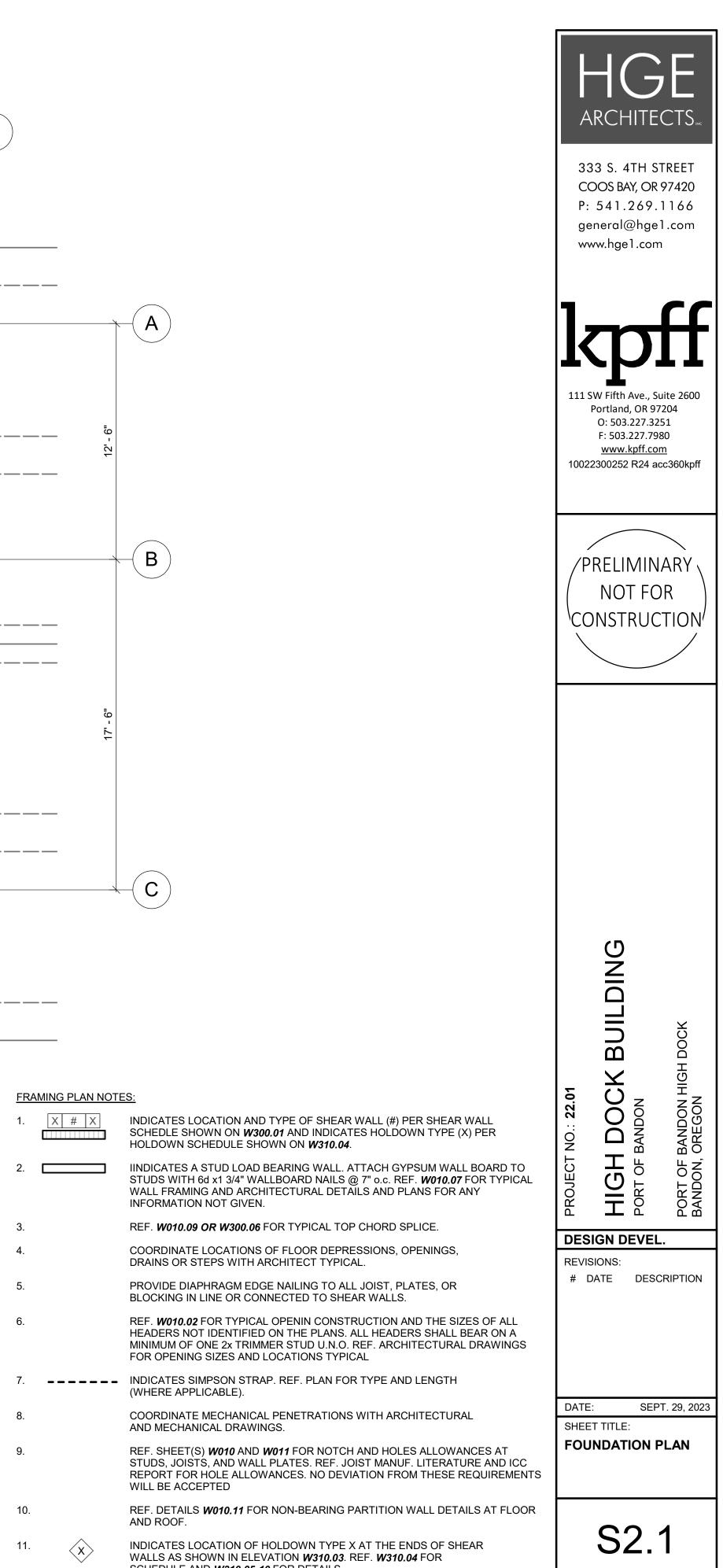
	ST	EEL - SPECIAL II	NSPECTIONS			
	OSSC CODE	CODE OR	INSPECTION (N	OTES 5 AND 6)		
RIAL	REFERENCE	STANDARD REFERENCE	CONTINUOUS/ PERFORM	PERIODIC/ OBSERVE	REMARKS	
EMENTS	1704.2.5.1	AISC 360		Х	REFER TO INSPECTION OF FABRICATOR REQUIREMENTS	
CTURAL STEEL	1505.2.1 2203.1 TABLE 1705.2	ASTM A6 ASTM STANDARDS SPECIFIED IN CONSTRUCTION DOCUMENTS AISC 360 A3.1 AISC 360 N3.2		Х	CERTIFIED MILL TEST REPORTS	
RENGTH BOLTS, NUTS,	1705.2.1.2 AISC 360 N5 TABLE 1705.2-2	AISC 360 A3.3 AISC 360 N3.2 ASTM STANDARDS SPECIFIED IN CONSTRUCTION DOCUMENTS RCSC 2.1		Х	MANUFACTURER'S CERTIFIED TEST REPORTS	
BOLTS AND		AISC 360 A3.4 AISC 360 N3.2 ASTM STANDARDS SPECIFIED IN CONSTRUCTION DOCUMENTS		Х	MANUFACTURER'S CERTIFIED TEST REPORTS	
LLER METALS	1705.2.1.1 TABLE 1705.2-5	AISC 360 A3.5 AISC 360 N3.2 APPLICABLE AWS A5 DOCUMENTS		Х	MANUFACTURER'S CERTIFIED TEST REPORTS	
	1705.2.1	AISC 360 N3.2			RETAIN A RECORD OF WELDING PROCEDURE	
	AWS D1.1	AWS D1.1		Х	SPECIFICATIONS RETAIN A RECORD OF QUALIFICATION CARDS	
TRATION GROOVE		AWS D1.1	x	~		
		AWS D1.1 CLAUSE	Х			
R THAN 5/16"	TABLE 1705.2-6	6	Х		ALL WELDS VISUALLY INSPECTED PER AWS D1.16.9	
			Х			
IAN OR EQUAL TO 5/16"				Х		
MS	1705.2(2.5)	AWS D1.1 CLAUSE 6		Х	ALL WELDS VISUALLY INSPECTED PER AWS D1.1 6.9	
E WITH ASTM				Х		
THE JOINT DETAIL EADS ARE TO BE				Х		
CTED FOR JOINT				Х		
G THE APPROPRIATE DLE PREPARATION, IF REMENTS				Х		
STING BY ED AND DOCUMENTED THODS USED				Х		
OLTS, NUTS, WASHERS S				Х		
G						
JECTION OF BOLTED	1705.2.1.2 TABLE 1705.2-2	AISC 360 TABLE N5.6-3	Х			

	WO				
TERIAL		CODE OR	FREQUENCY	(NOTE 6)	REMARKS
IERIAL	OSSC CODE REFERENCE	STANDARD REFERENCE	CONTINUOUS	PERIODIC	REWARKS
	WOOD - REQU	JIRED STRUCTURAL	SPECIAL INSPECTION	ONS	
STRUCTURAL ELEMENTS	1705.5			Х	REFER TO INSPECTION OF FABRICATOR REQUIREMENTS
NELS	1705.5 1704.2.5	ICC EVALUATION REPORT		Х	SPECIAL INSPECTIONS APPLY TO HOLDOWN ANCHOR SIZE AND PLACEMENT, INCLUDING EMBEDMENT LENGTH, SPACING, AND EDGE DISTANCE
	WOOD - REQ	UIRED SEISMIC RESIS	STANCE INSPECTIO	NS	
HORDS, COLLECTORS, ORAGE AND HOLDOWNS	1705.12.2			х	ALL FASTENERS/CONNECTIONS VISUALLY
HEAR WALL SHEATHING	1705.12.2			х	FOR WOOD SHEAR WALLS, SHEAR PANELS, AND DIAPHRAGMS. THIS INCLUDES NAILING, BOLTING, ANCHORING AND OTHER FASTENING TO OTHER COMPONENTS IN THE SEISMIC FORCE RESISTING SYSTEM







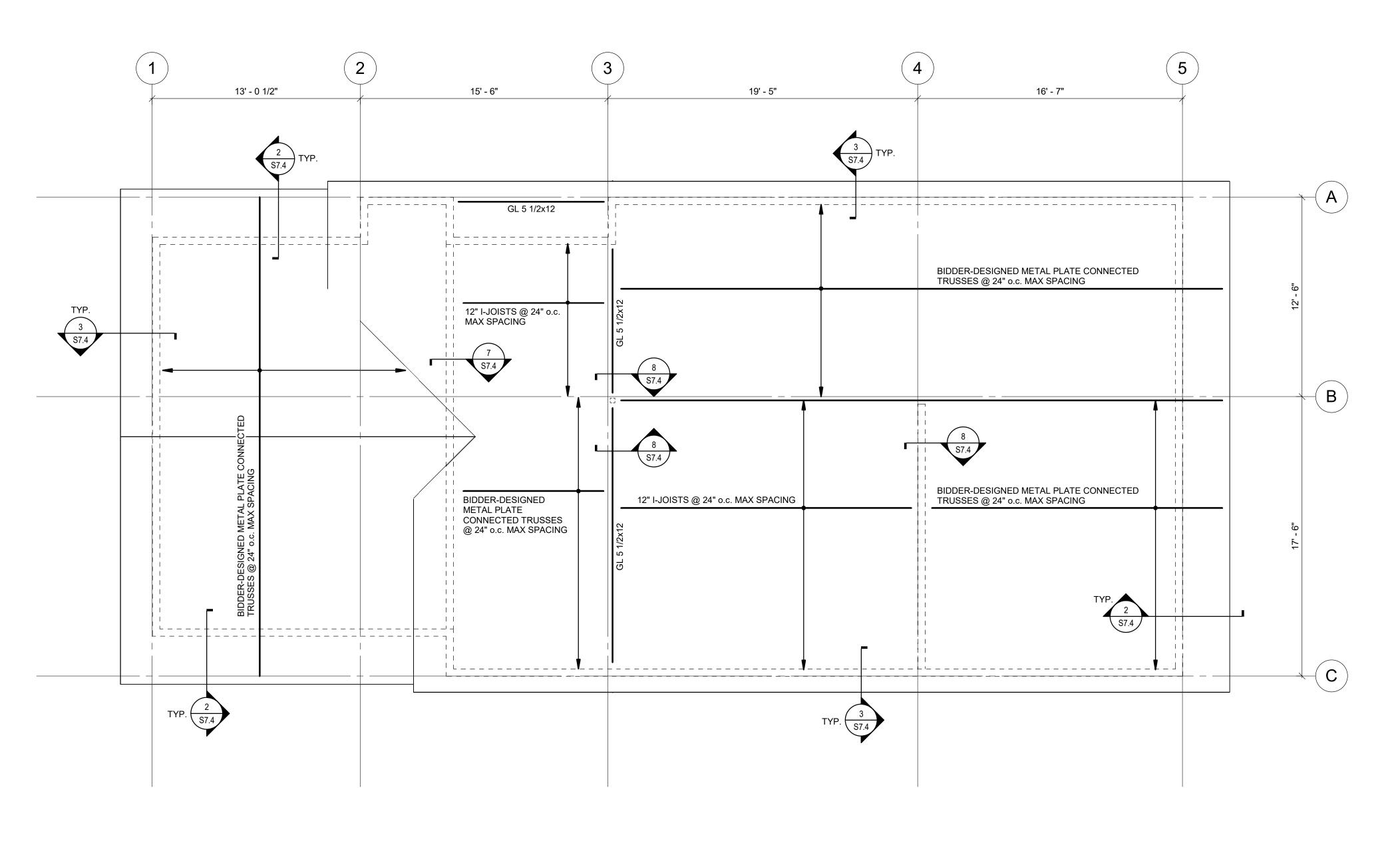


1. 🔶 EL. XXX'-XX"	INDICATES TOP OF STRUCTURAL SLAB ELEVATION. REF. ARCHITECTURAL SLAB DIMENSION PLANS FOR TOP OF OVERFRAMING SLABS.
2. 7777	INDICATES STEP IN ELEVATION. REF. 3/S5.1.
3	INDICATES EXISTING STRUCTURE.
4.	FIELD VERIFY EXISTING DIMENSIONS AND ELEVATIONS.
5.	REF. SHEET S5.1 FOR TYPICAL CONCRETE DETAILS.

12.

REF. ARCH. DRAWINGS FOR ALL DIMENSIONS NOT SHOWN ON FRAMING PLANS.

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ROOF FRAMING PLAN NOTES:		
1.		INDICATES ROOF RIDG
2.		INDICATES ROOF VALL
3.		REF. W010.09 OR W300
4.	D - X	INDICATES SPAN DIRE
5.	Top of Sheathing El. XX'-XX"	INDICATES TOP OF SHI
6.		INDICATES EXTENT OF TRUSS SUPPLIER.
7.		REF. ARCH. DRAWINGS
8.		PROVIDE DIAPHRAGM I BLOCKING IN LINE OR (
9.		INDICATES SIMPSON S (WHERE APPLICABLE).
10.		INDICATES BEARING O
11.		COORDINATE MECHAN AND MECHANICAL DRA



DGE LINE.

LEY LINE.

00.06 FOR TYPICAL TOP CHORD SPLICE.

ECTION OF SHEATHING. REF. W010.01 FOR

HEATHING ELEVATION.

F TRUSS OVER-FRAMING TO BE PROVIDED BY

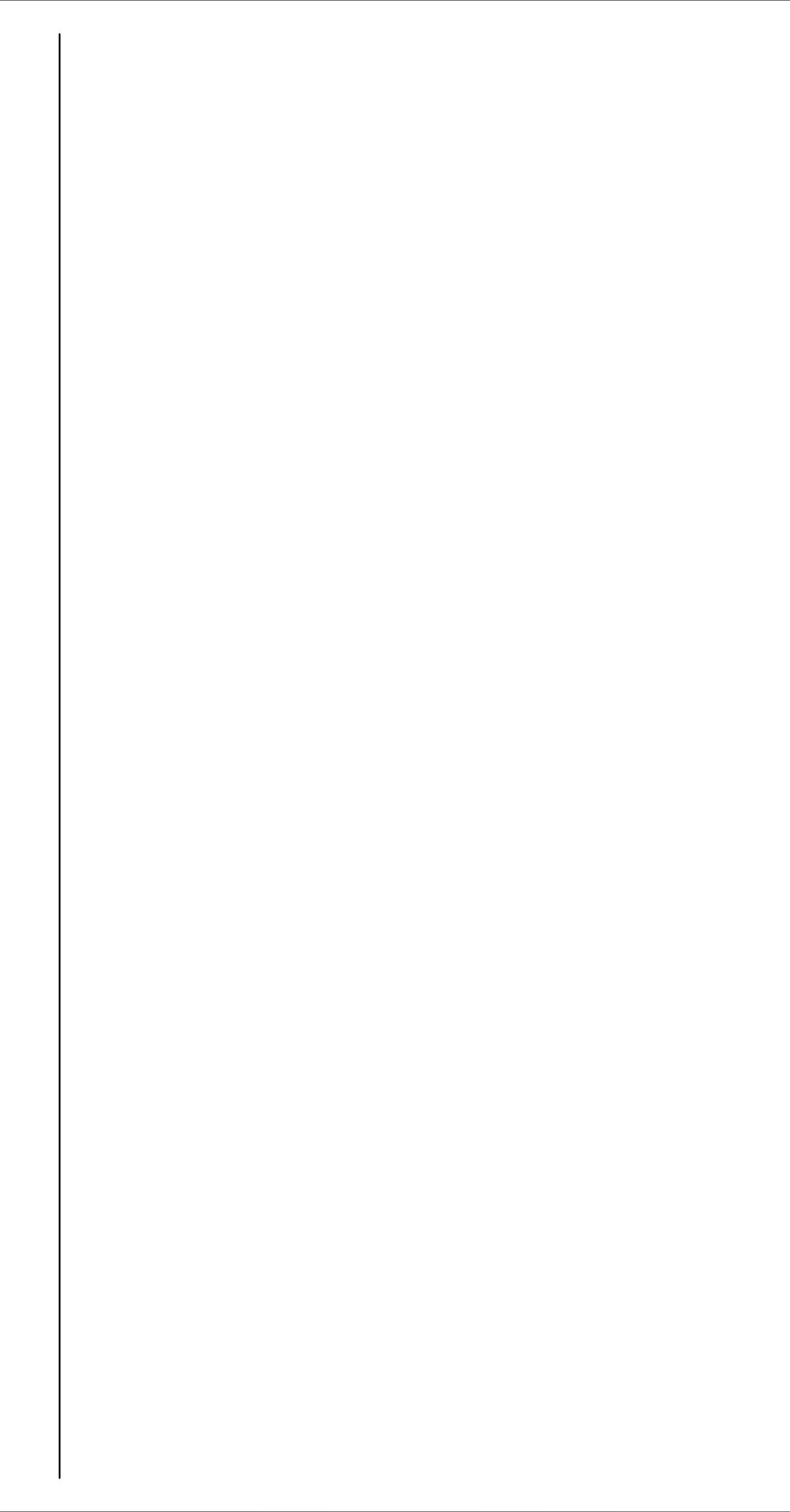
GS FOR ALL DIMENSIONS NOT NOTED.

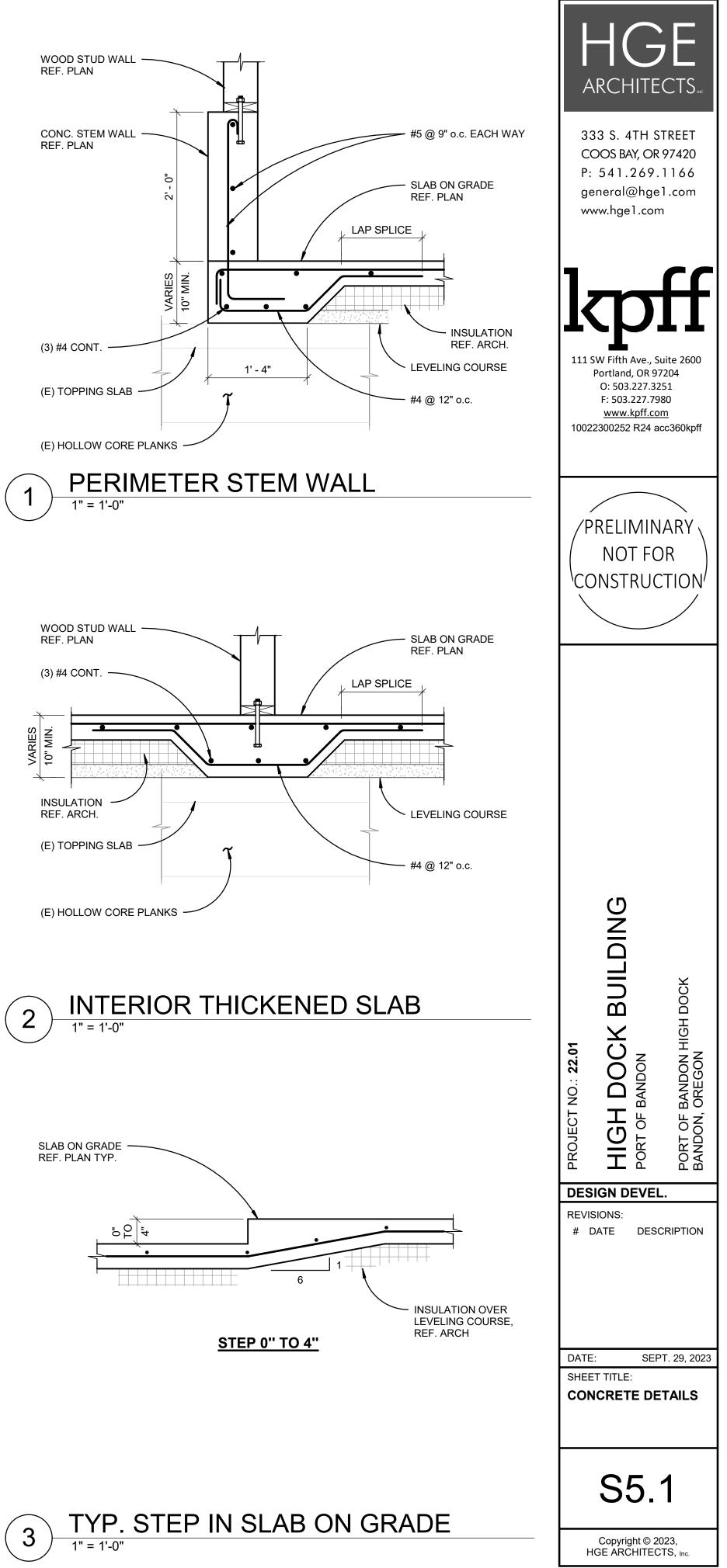
I EDGE NAILING TO ALL JOISTS, PLATES, OR R CONNECTED TO SHEAR WALLS.

STRAP. REF. PLAN FOR TYPE AND LENGTH

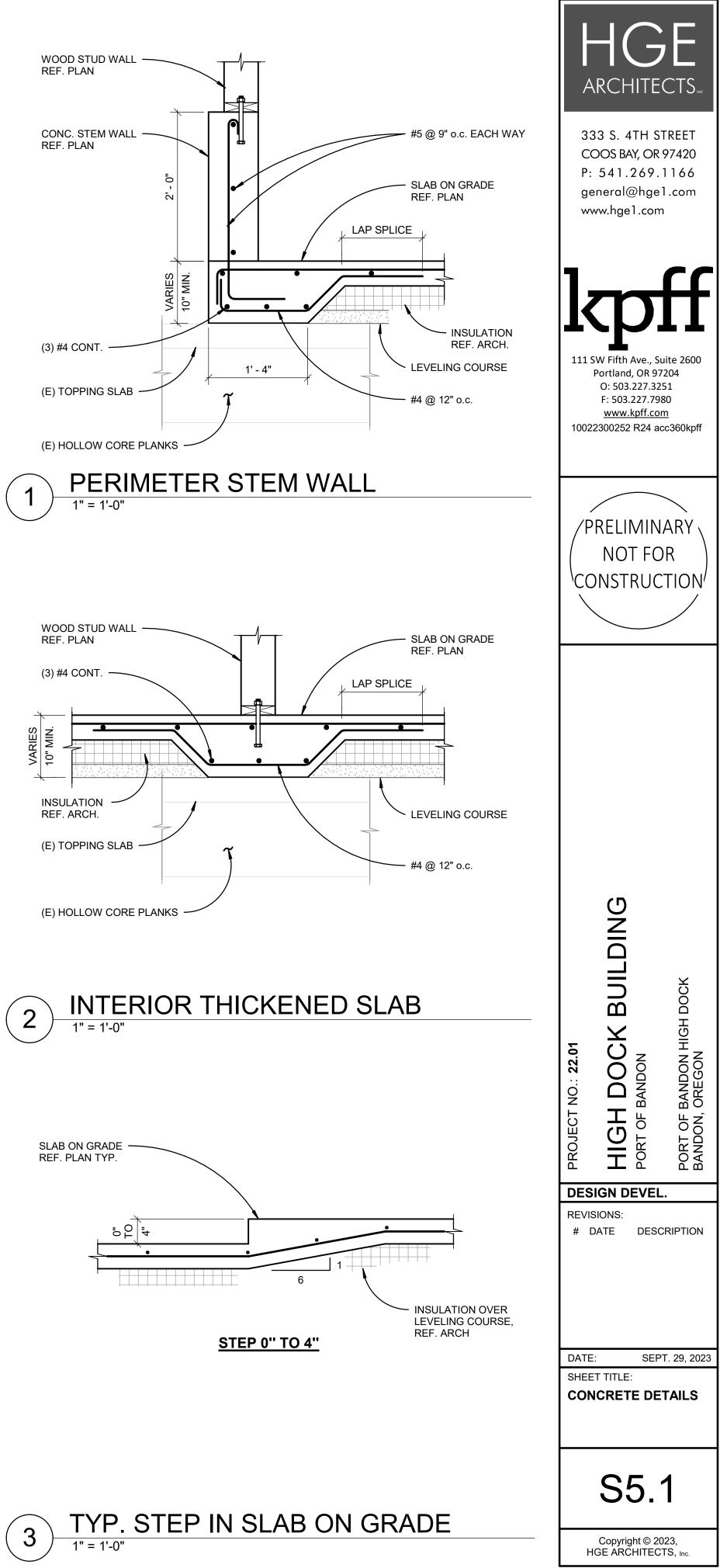
OR SHEAR WALL BELOW. ANICAL PENETRATIONS WITH ARCHITECTURAL RAWINGS.

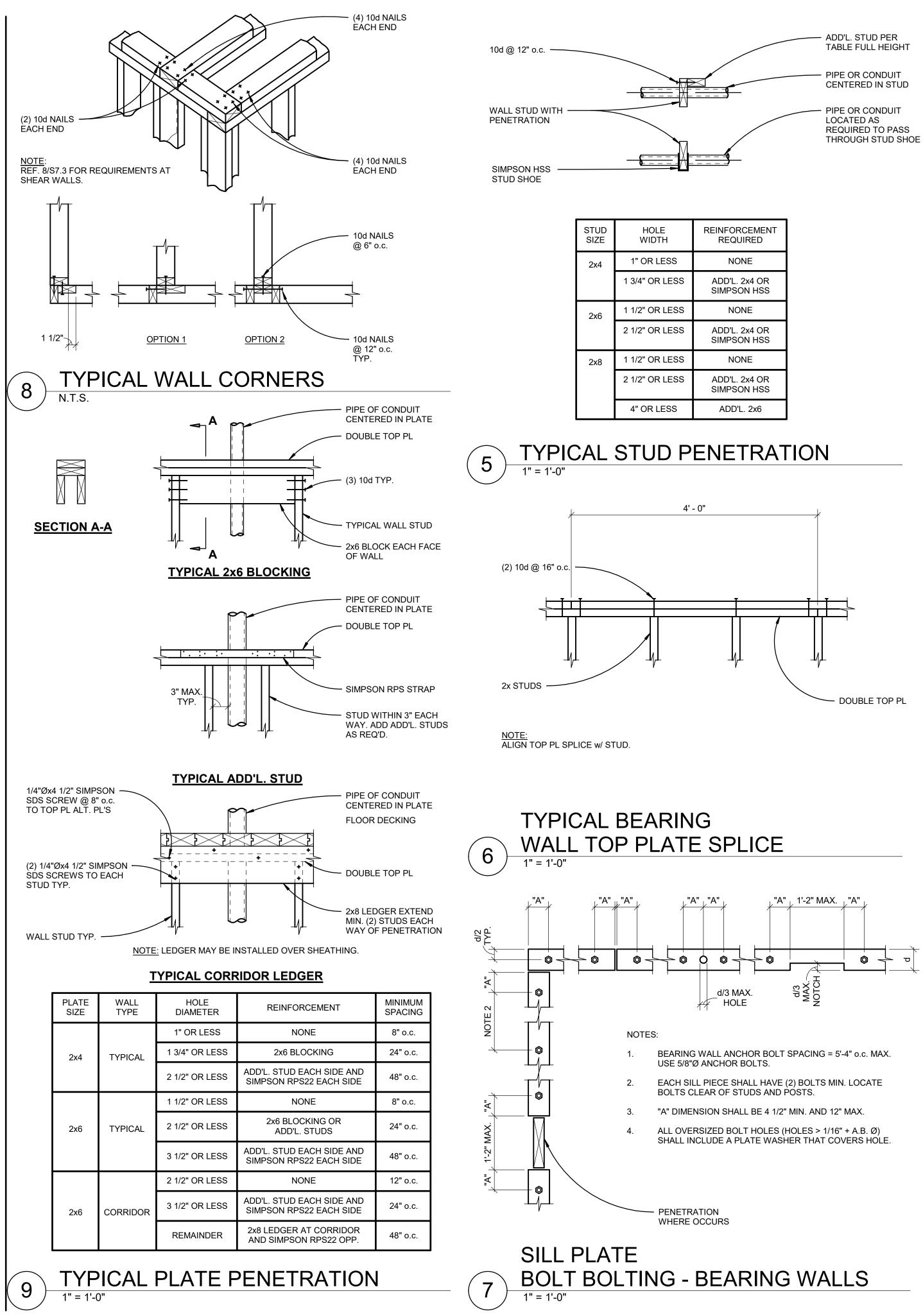
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	W Fifth Ave., 5 Portland, OR 9 O: 503.227.3 F: 503.227.7 www.kpff.cd	97204 9251 980 <u>om</u>
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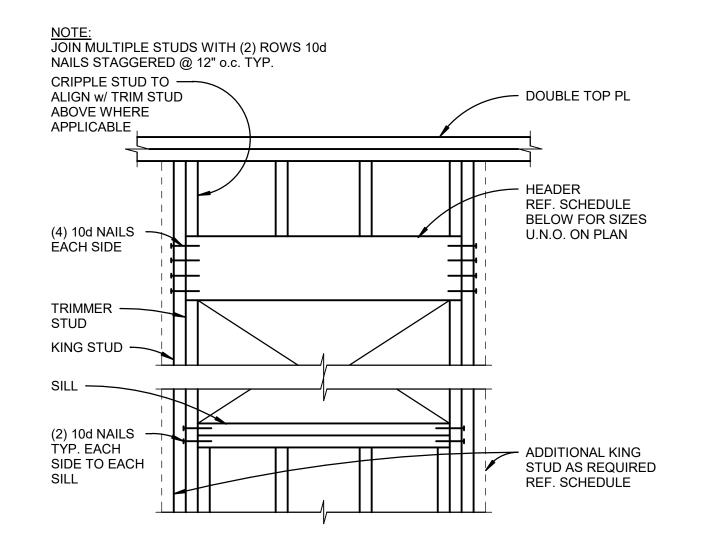












V	VALL OPEN	ING SCHI	EDULES	
	LOAD BE		LS	
OPENING WIDTH	HEADER	SILL	TRIMMER	KING
0'-0" TO 4'-0"	(2) 2x6	(2) 2x	(1) 2x	(1) 2x
4'-1" TO 6'-0"	(2) 2x6	(2) 2x	(1) 2x	(2) 2x
6'-1" TO 8'-0"	(2) 2x8	(2) 2x	(2) 2x	(2) 2x
8'-1" AND LARGER	REF. PLAN	(2) 2x	(2) 2x	REF. PLAN
	NON-LOAD	BEARING W	ALLS	
OPENING WIDTH	HEADER	SILL	TRIMMER	KING
0'-0" TO 4'-0"	(2) 2x4	(2) 2x	(1) 2x	(1) 2x
4'-1" TO 6'-0"	(2) 2x4	(2) 2x	(1) 2x	(1) 2x
6'-1" TO 8'-0"	(2) 2x6	(2) 2x	(1) 2x	(2) 2x
8'-1" AND LARGER	8'-1" AND LARGER REF. PLAN			

WALL OPENING DETAIL

WOOD DIAPHRAGM SCHEDULE					
TYPE	THICKNESS (SPAN RATING)	EDGE NAILING	FIELD NAILING	BLOCKING	NOTES
D-1	5/8" (19/32")	10d @ 6"o.c.	10d @ 12"o.c.	NONE	

EDGE -NAILING

FRAMING ·

EDGE NAIL -ALONG SHEAR WALL OR DRAG STRUT REF. PLAN

BEARI	NG
WALL	OF

NOT	<u>ES</u> :
1.	PF A[
2	P/ FF UI BL
3.	N
4.	0

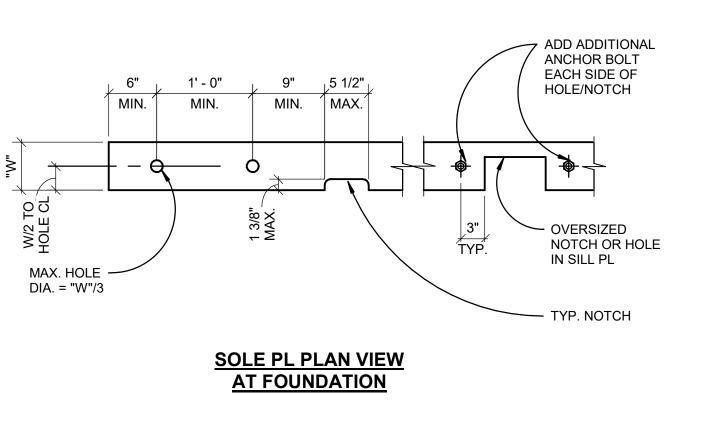


MAX. HOLE DIAMETER = "W"/3 **RIM JOIST** 

<u>N(</u>	<u>DTE</u>
1.	
2.	
3.	

2



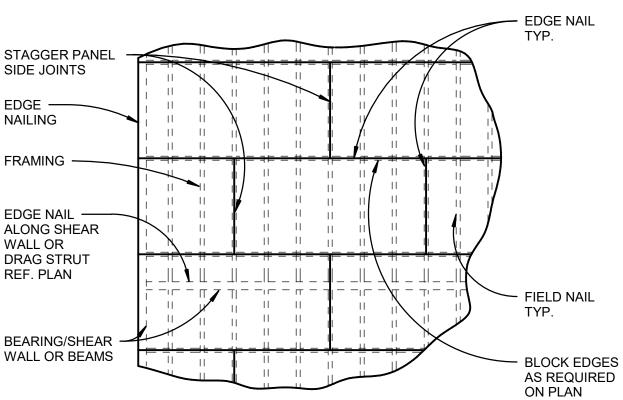


#### NOTES:

3

N.T.S

- "W" DENOTES WIDTH OF WOOD MEMBER
- WHERE NOTCH OR HOLE IS GREATER THAN NOTED, PROVIDE ADDITIONAL ANCHOR BOLT 2. EACH SIDE.
- WHERE BOLT IS LESS THAN 1" CLR. FROM EDGE, PROVIDE ADDITIONAL ANCHOR BOLT. 3.
- ALL OVERSIZED BOLT HOLES (HOLES GREATER THAN 1/16" + ANCHOR BOLT DIA.) 4. SHALL BE FILLED w/ EPOXY FOR TIGHT FIT
- ALL HOLES TO BE DRILLED, NOT SAWN.
- ALL NOTCHES TO HAVE CORNERS PREDRILLED.



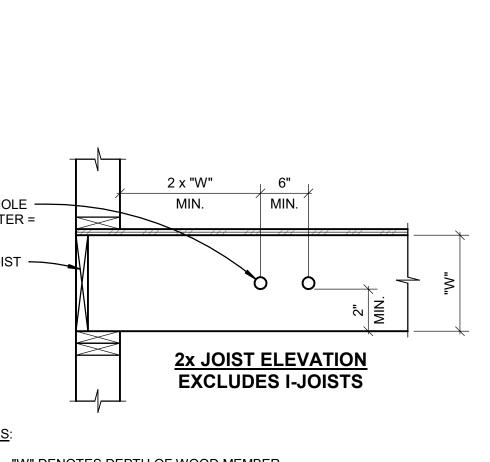
PROVIDE 1/8" GAP AT ALL PANEL JOINTS. REF. GENERAL STRUCTURAL NOTES FOR ADDITIONAL INFORMATION.

ANELS SHALL NOT BE LESS THAT 4'-0"x8'-0" EXCEPT AT BOUNDARIES AND CHANGES IN FRAMING WHERE MINIMUM PANEL DIMENSION SHALL BE 24" UNLESS ALL EDGES OF JNDERSIZED PANELS ARE SUPPORTED BY AND FASTENED TO FRAMING MEMBERS OR LOCKING.

NAILS SHALL BE LOCATED AT LEAST 3/8" FROM THE EDGES OF PANELS.

OSB IS NOT PERMITTED TO BE USED FOR ROOFS.

# WOOD DIAPHRAGM SCHEDULE



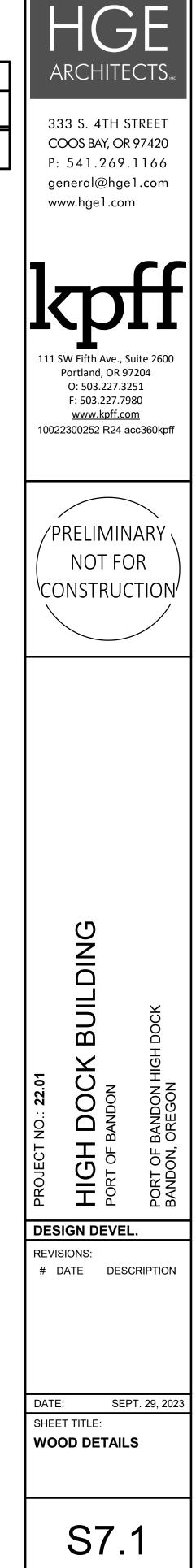
"W" DENOTES DEPTH OF WOOD MEMBER.

ALL HOLES TO DRILLED, NOT SAWN.

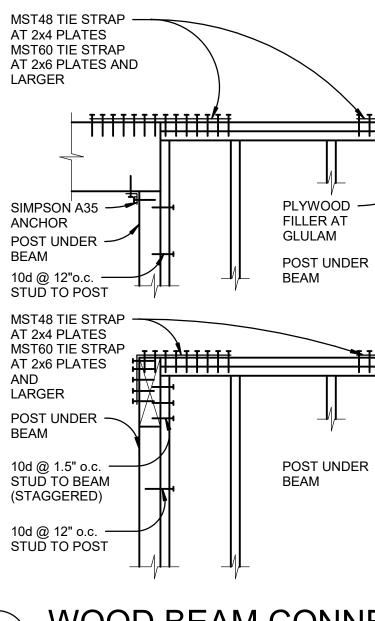
NOTCHING OF JOISTS NOT PERMITTED.

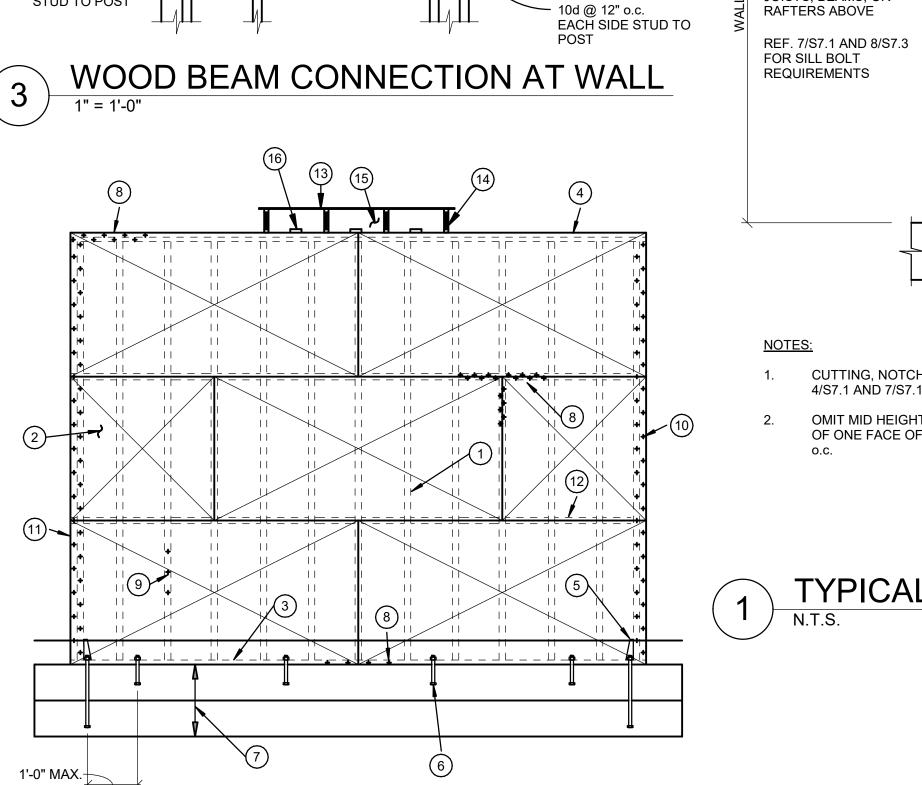
HOLES TO BE LOCATED IN MIDDLE 1/3 OF DEPTH "W".

#### HOLES AT SOLID SAWN JOISTS N.T.S.



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10d @ 1.5" o.c.

10d @ 12" o.c.

10d @ 1.5" o.c.

STUD TO BEAM

(STAGGERED)

EACH SIDE

TO POST

EACH SIDE STUD

EACH SIDE STUD TO

BEAM (STAGGERED)

#### SHEAR WALL ELEVATION NOTES:

- 1. TYPICAL WALL STUDS.
- 2 REF. SHEAR WALL SCHEDULE SW300.01 FOR ADDITIONAL REQUIREMENTS.
- 3. P.T. SILL PLATE, REF. **SW300.04**.
- DOUBLE TOP PLATE, REF. SW300.06 FOR TOP CHORD SPLICE DETAIL.
- HOLDOWN ANCHOR, REF. SCHEDULE SW310.04.
- ANCHOR BOLTS. 6.

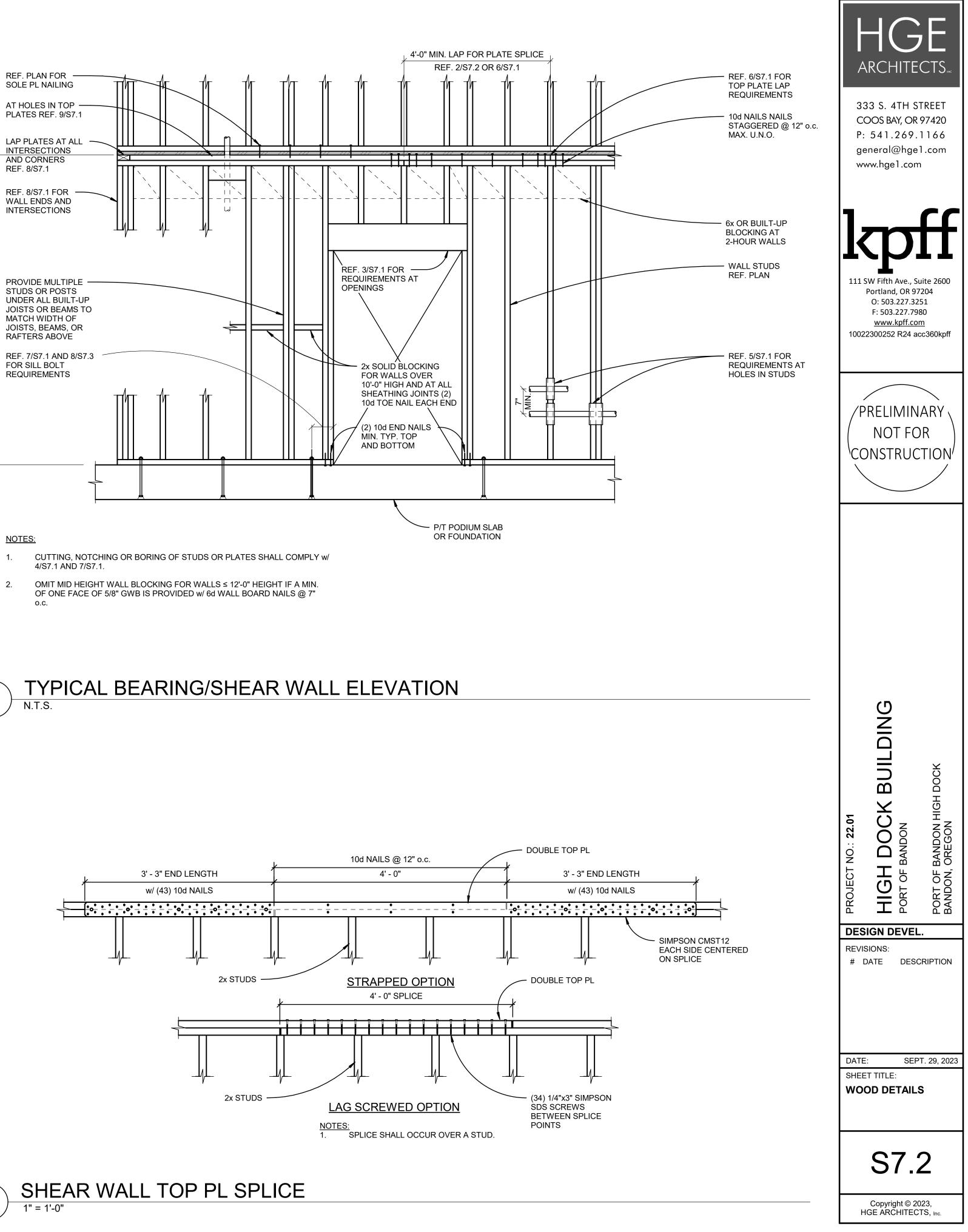
5

- FOUNDATION, STEMWALL OR THICKENED SLAB.
- EDGE NAILING REF. SHEAR WALL SCHEDULE.
- INTERMEDIATE SUPPORT NAILING REF. SHEAR WALL SCHEDULE.
- 10. PROVIDE EDGE NAILING TO EACH HOLDOWN POST. WHERE HOLDOWN POST CONSISTS OF BUILT UP MEMBERS, PROVIDE STAGGERED NAILING TO EACH PIECE.
- 11. HOLDOWN POST.
- 12. ALL SHEATHING EDGES ARE TO BLOCKED. REF. SHEAR WALL SCHEDULE FOR FRAMING THICKNESS AT ADJOINING PANEL EDGES.
- 13. ROOF SHEATHING.
- 14. ROOF RAFTER OR TRUSS.
- 15. BLOCKING.
- 16. "SHEAR CLIP" PER SHEAR WALL SCHEDULE.







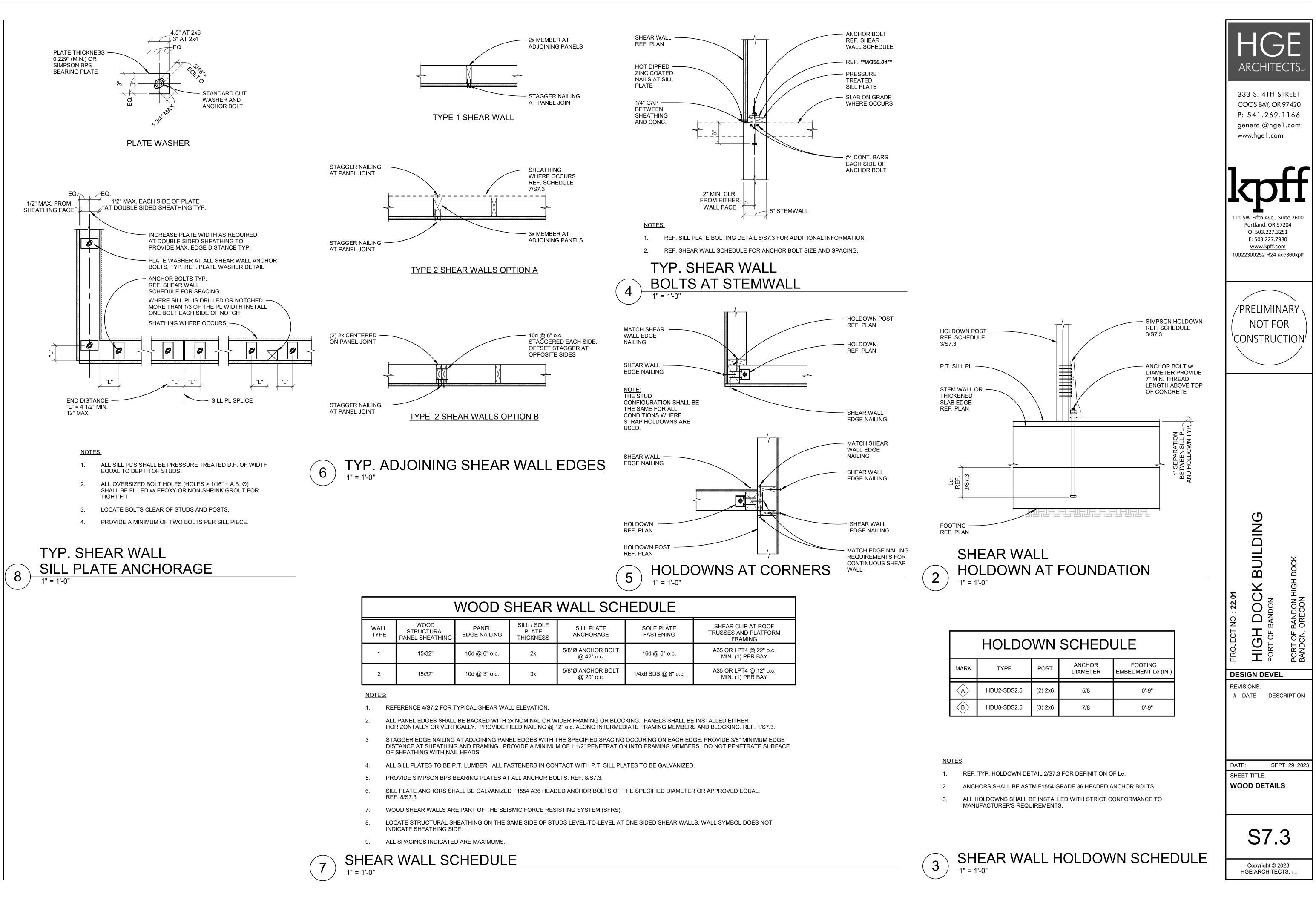




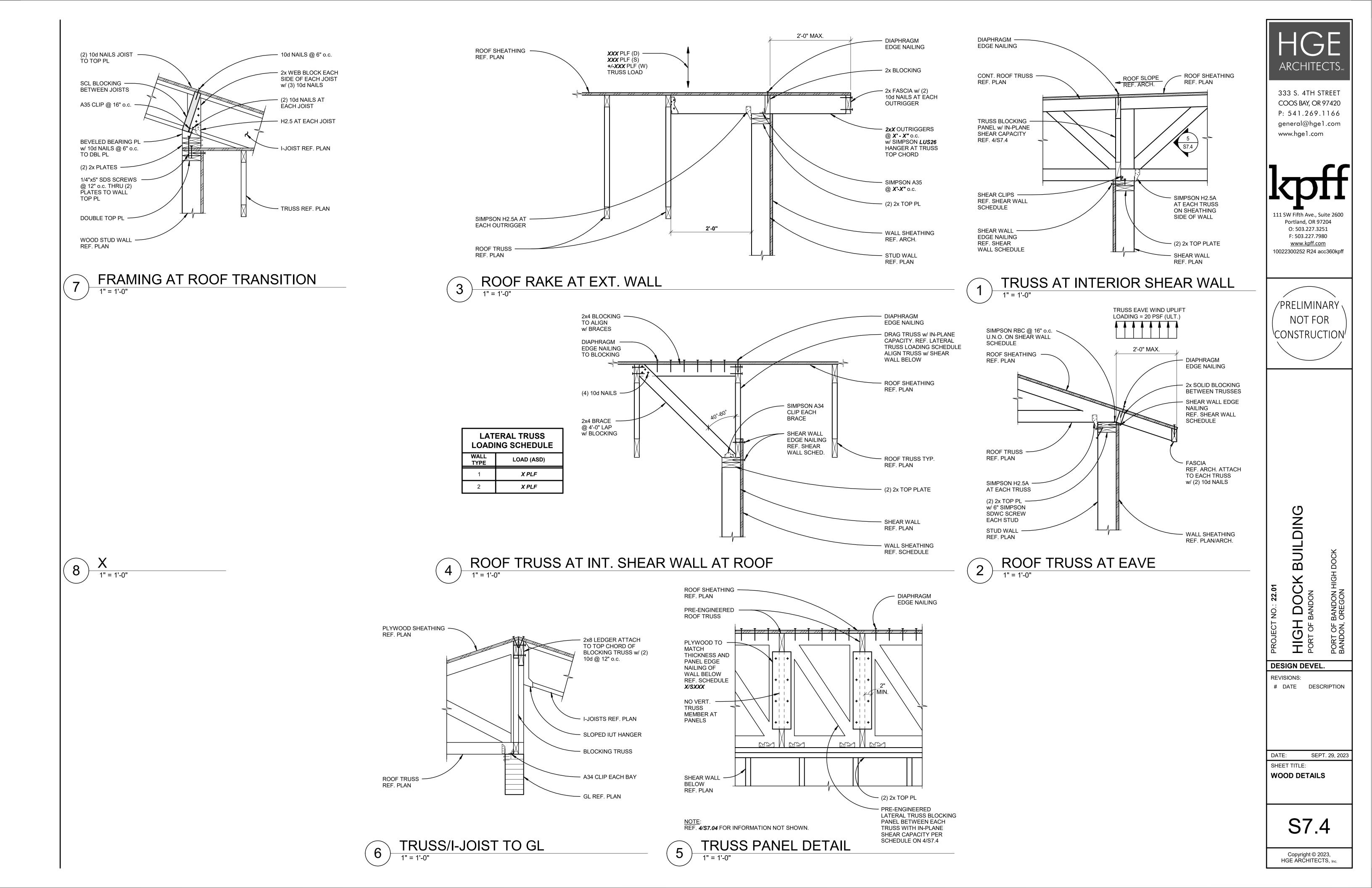
# **TYPICAL BEARING/SHEAR WALL ELEVATION**

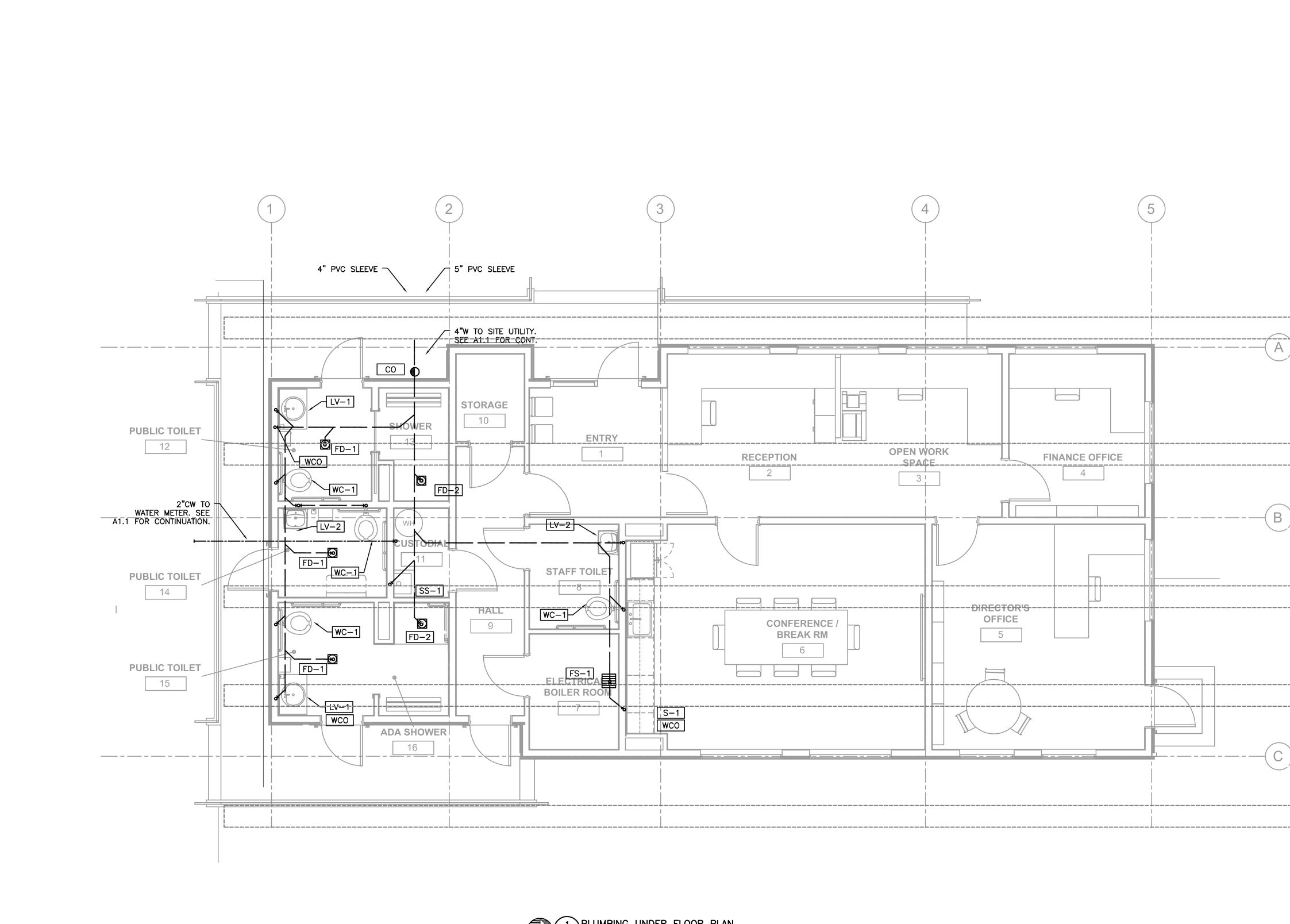
# CUTTING, NOTCHING OR BORING OF STUDS OR PLATES SHALL COMPLY w/ 4/S7.1 AND 7/S7.1.

OMIT MID HEIGHT WALL BLOCKING FOR WALLS ≤ 12'-0" HEIGHT IF A MIN.

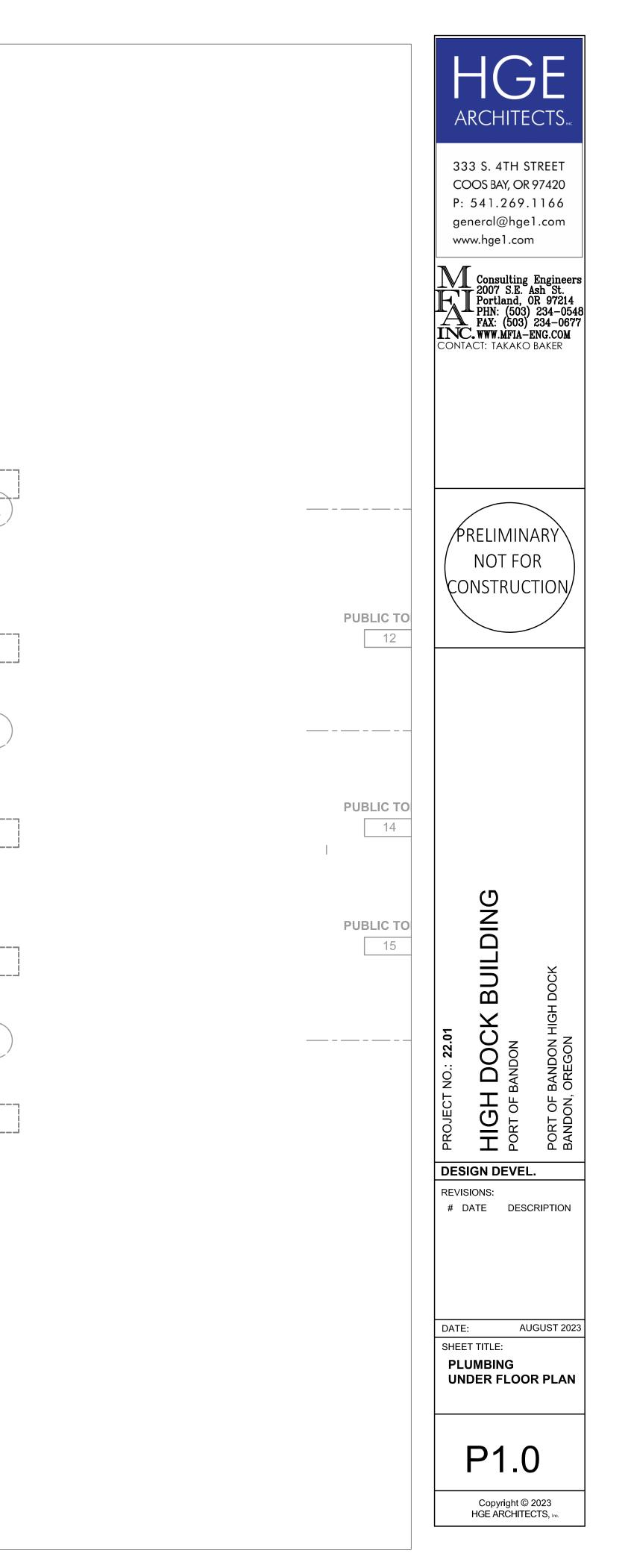


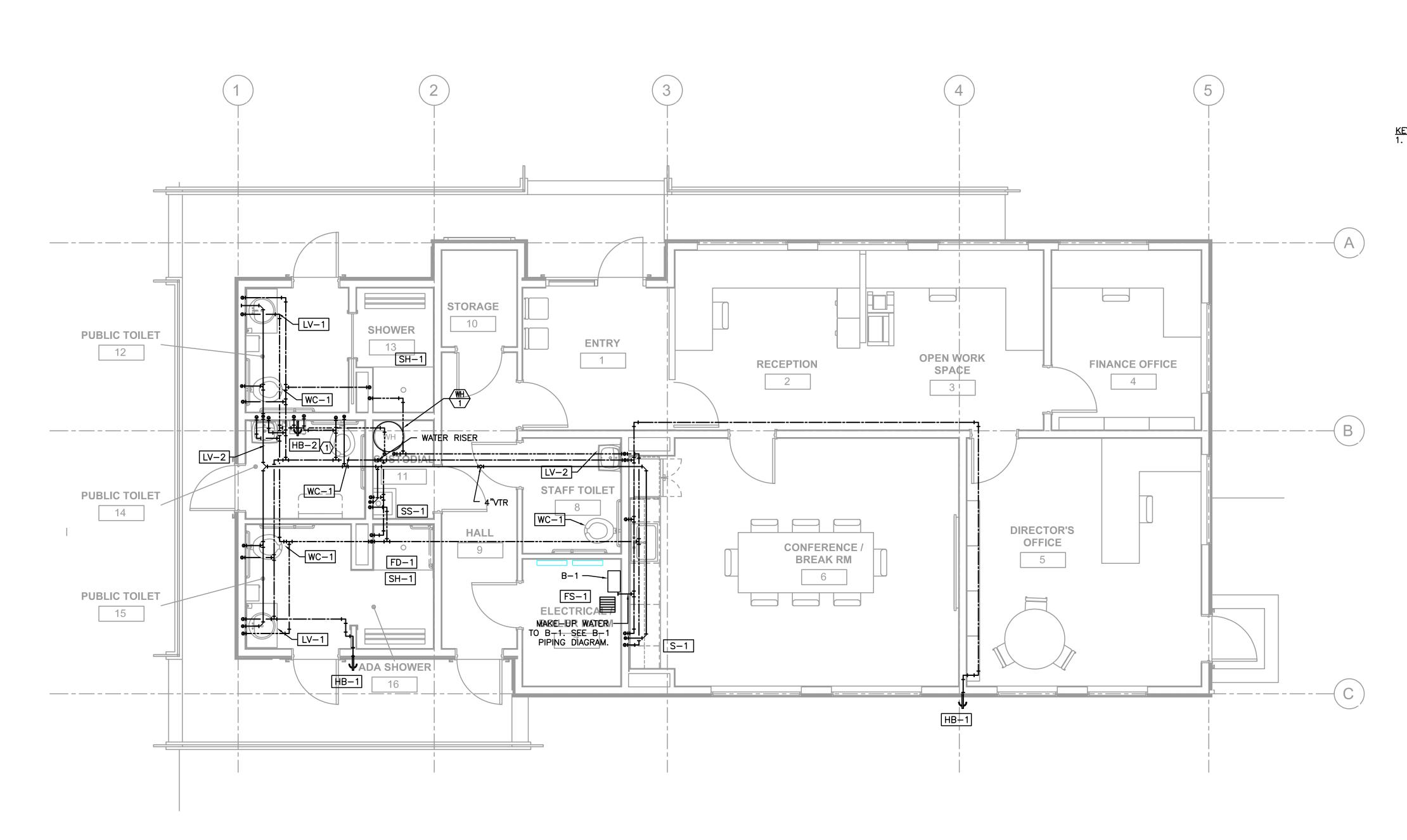
	WOOD SHEAR WALL SCHEDULE					
IG	PANEL EDGE NAILING	SILL / SOLE PLATE THICKNESS	SILL PLATE ANCHORAGE	SOLE PLATE FASTENING	SHEAR CLIP AT ROOF TRUSSES AND PLATFORM FRAMING	
	10d @ 6" o.c.	2x	5/8"Ø ANCHOR BOLT @ 42" o.c.	16d @ 6" o.c.	A35 OR LPT4 @ 22" o.c. MIN. (1) PER BAY	
	10d @ 3" o.c.	3x	5/8"Ø ANCHOR BOLT @ 20" o.c.	1/4x6 SDS @ 8" o.c.	A35 OR LPT4 @ 12" o.c. MIN. (1) PER BAY	

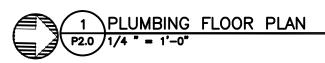




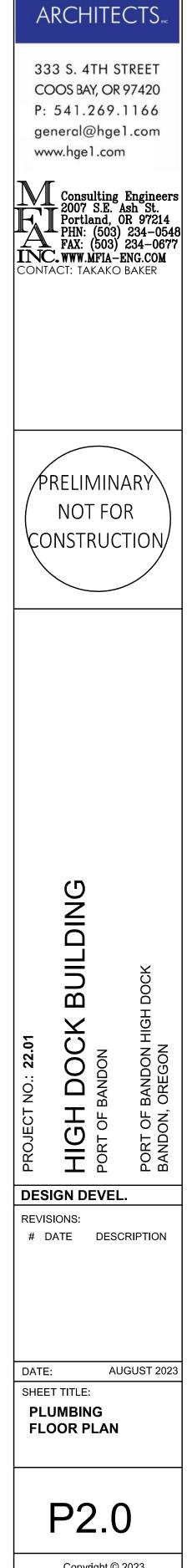
1 PLUMBING UNDER FLOOR PLAN P1.0 1/4 \* = 1'-0\*







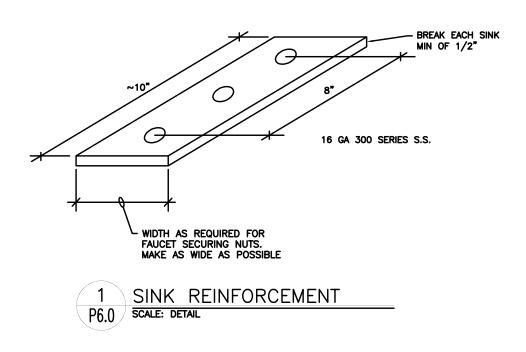




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		LEGEND	
AFF	•••••	ABOVE FINISHED FLOOR	
ARCH		ARCHITECTURAL	
B.G.	••••••	BELOW GRADE	
BTU		BRITISH THERMAL UNIT	
CAP.	••••••		
C.I. COMP.	••••••	COMPARTMENT	<b>──+</b> ∧ <b>─</b> ──
COMF.		CONTINUATION	<b>V</b> /\
CU.	••••••		
DF		DRINKING FOUNTAIN	
DI	•••••	DEIONIZED (WATER)	
DIA.	••••••		—V
ELEV. EWC		ELEVATION ELECTRIC WATER COOLER	•
FD		FLOOR DRAIN	— AV —
FDC		FIRE DEPARTMENT CONNECTION	
F.F.	•••••	FINISH FLOOR	
FLG.	••••••	FLANGE	
FT G	••••••	FOOT / FEET	
GA.		GAS GAUGE	
GALV.	••••••	GAUGE GALVANIZED	
GPM		GALLONS PER MINUTE	
G.V.	•••••	GATE VALVE	
HP	••••••	HORSEPOWER	
HR. I.E.		HOUR	
kW		INVERT ELEVATION KILOWATT	
LAV	••••••	LAVATORY	
LBS	•••••	POUNDS	
MAX.	••••••	MAXIMUM	
MBH MIN.		THOUSANDS OF BTUS PER HOUR	
MIN. M.J.			—— GW——
N.I.M.	•••••	MECHANICAL JOINT NOT IN MECHANICAL	
0S&Y	••••••	OUTSIDE STEM & YOKE	
PROT.	••••••	PROTECTION	
PRV	••••••	PRESSURE REDUCING VALVE	
PSI, PSIG P/T		POUNDS PER SQUARE INCH	
REQ'D	•••••	PRESSURE / TEMPERATURE REQUIRED	
RPBP	••••••	REDUCED PRESSURE BACKFLOW PR	EVENTER
RPM	••••••	REVOLUTIONS PER MINUTE	
TYP.		TYPICAL	
		URINAL	
VTR WC		VENT THROUGH ROOF WATER CLOSET	
			▶
			ال
	$\overline{\mathbf{v}}$		
$\leftarrow$		EQUIPMENT MARK NUMBER	<b>1</b>
```````````````````````````````````````	<u>^^</u> /		
Γ	XXX	FIXTURE MARK	- <b></b>
			<b>-e-</b>
	(E) ·····	EXISTING	
			•• <b>6</b> 0 ······
	<#>→	NOTE	-🛪-
	<u> </u>		
		CONNECT TO EXISTING	0R-10
	Τ	CAP	-65-
	-♣	TEE	- <b>N</b> F
	L	ELBOW	
		-	



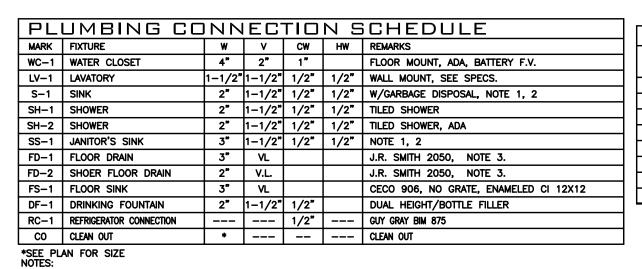
COLD WATER
HOT WATER
HOT WATER RECIRC
HOT WATER HEAT TRACED
ELOW GRADE WASTE
BELOW GRADE ACID WASTE
ENT
CID VENT
RAIN DRAIN
OVERFLOW RAIN DRAIN
FIRE DEPARTMENT CONNECTION
OMPRESSED AIR
PROCESS HOT WATER
PROCESS COLD WATER
JM
ATURAL GAS
RE WATER
GREASE WASTE
· · · · · · · · · · · · · · · · · · ·
SURE/TEMP RELIEF VALVE
ERFLY VALVE
PRESSURE REGULATING VALVE
JUNNEUNUN

CONNECTION TTOM CONNECTION TURNED UP, PIPE TURNED DOWN E VALVE

L VALVE ANCING VALVE

ECK VALVE ON

UBLE CHECK ASSEMBLY

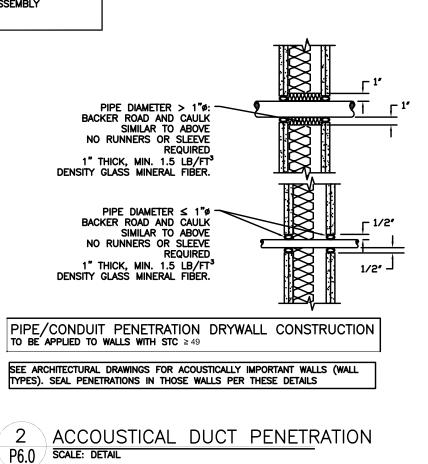


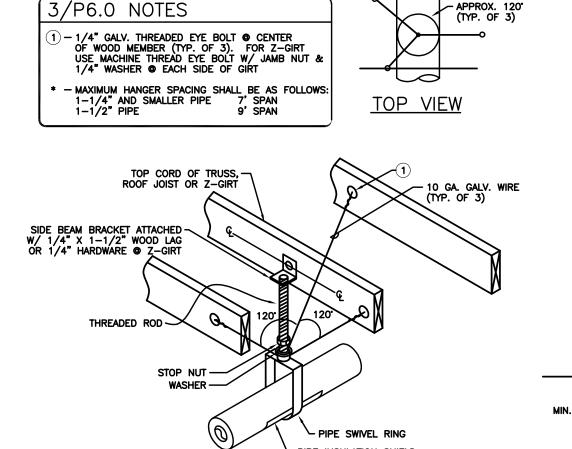
ELECTRIC WATER HEA	TERS
MARK NUMBER	
FUEL	ELECTRIC
CAPACITY (GAL)	55 GAL
KW	10 KW
RECOVERY CAP. 🛛 100F TR (GPH)	41
ELECTRICAL (V/PH)	208/1
DESIGN WEIGHT (LBS)	950
BASIS OF DESIGN: BRADFORD WHITE	LE 255T3-3

SUN MARK NUMBEF SYSTEM TYPE FLOW RJ HEAD (F MOTOR POWER

DOMESTIC HV	RECIRC PUMPS					
MARK NUMBER	RP 1					
SERVICE	PHW RECIRC					
TYPE	CIRC					
CONTROLLED BY	AQUASTAT					
ARRANGEMENT	IN-LINE					
FLOW RATE (GPM)	1.25					
HEAD (FT)	12					
MOTOR HP	90 WATTS					
POWER (V/PH)	120/1					
RPM	3600RPM					
DESIGN WEIGHT (LBS)	6 LBS					

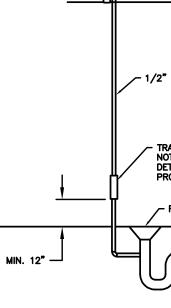
	DOMESTI		SERVICE		SANIT	ARY WASTE SE	ERVICE
NUMBER	WATER	TOTAL	TOTAL CW	TOTAL HW		DRAINAGE	TOTAL
OF FIXTURES	FIXTURE	WSFU	FIXTURE	FIXTURE		FIXTURE	DFU
	UNITS		UNITS	UNITS		UNITS	
1	0.5	0.5	0.5	0		0.5	0.5
1	3	3	2.25	2.25		2	2
5	1	5	3.75	3.75		1	5
2	3	6	4.5	4.5		3	6
1	0	0	0	0		100	100
2						1	2
5	2.5	12.5	12.5	0		4	20
1	2.5	2.5	2.5	0			
0		0					0
18		29.5	26	10.5			135.5
Water	Demand	20	GPM		Wast	4"	
	NUMBER OF FIXTURES 1 1 5 2 1 2 5 1 2 5 1 0 0 <b>18</b>	NUMBER         WATER           OF FIXTURES         FIXTURE           1         0.5           1         3           5         1           2         3           1         0           2            5         2.5           1         2.5           0         2.5	NUMBER         WATER         TOTAL           OF FIXTURES         FIXTURE         WSFU           UNITS         0.5         0.5           1         0.5         0.5           1         3         3           5         1         5           2         3         6           1         0         0           2             5         2.5         12.5           1         2.5         2.5           0         0         0           18         29.5	OF FIXTURES         FIXTURE         WSFU         FIXTURE           UNITS         0.5         0.5         0.5           1         0.5         0.5         0.5           1         3         3         2.25           5         1         5         3.75           2         3         6         4.5           1         0         0         0           2              5         2.5         12.5         12.5           1         2.5         2.5         2.5           0         0         0            5         2.5         12.5         12.5           1         2.5         2.5         2.5           0         0            18         29.5         26	NUMBER         WATER         TOTAL         TOTAL CW         TOTAL HW           OF FIXTURES         FIXTURE         WSFU         FIXTURE         FIXTURE         FIXTURE           1         0.5         0.5         0.5         0           1         3         3         2.25         2.25           5         1         5         3.75         3.75           2         3         6         4.5         4.5           1         0         0         0         0           2              5         2.5         12.5         12.5         0           1         2.5         2.5         2.5         0           1         2.5         2.5         2.5         0           1         2.5         2.5         2.5         0           1         2.5         2.5         2.5         0           1         2.5         2.5         0         0           1         2.5         2.5         2.5         0           1         2.5         2.5         2.5         0           0         0         0         0<	NUMBER         WATER         TOTAL         TOTAL CW         TOTAL HW           OF FIXTURES         FIXTURE         WSFU         FIXTURE         FIXTURE         FIXTURE           1         0.5         0.5         0.5         0           1         3         3         2.25         2.25           5         1         5         3.75         3.75           2         3         6         4.5         4.5           1         0         0         0         0           2              5         2.5         12.5         12.5         0           1         2.5         2.5         2.5         0           1         2.5         2.5         2.5         0           1         2.5         2.5         0         0           1         2.5         2.5         0         0           1         2.5         2.5         0         0           1         2.5         2.5         0         0           1         2.5         2.5         0         0           1         2.5         2.5         2.6 <td>NUMBER         WATER         TOTAL         TOTAL CW         TOTAL HW         DRAINAGE           OF FIXTURES         FIXTURE         WSFU         FIXTURE         UNITS         UNITS         UNITS         UNITS         UNITS         UNITS         1         0         0         0.5         2         2         2         2         1         1         1         1         0         0         0         0.5         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1<!--</td--></td>	NUMBER         WATER         TOTAL         TOTAL CW         TOTAL HW         DRAINAGE           OF FIXTURES         FIXTURE         WSFU         FIXTURE         UNITS         UNITS         UNITS         UNITS         UNITS         UNITS         1         0         0         0.5         2         2         2         2         1         1         1         1         0         0         0         0.5         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1 </td





- PIPE INSULATION SHIELD

3 NON-SEISMIC PIPE SUPPORT P6.0 SCALE: DETAIL



4 TRAP PRIMER P6.0 NOT TO SCALE

NP PU	MP
R	SP 1
A	ELEVATOR
	SUMP
RATE (GPM)	50
(FT H2O)	15
(HP)	1/2 HP
(V/PH)	120/1

/ 1/2" CW IN WALL

TRAP PRIMER VALVE NOTE: LOCATION TO BE DETERMINED BY CONTRACTOR. PROVIDE ACCESS PANEL.

FINISHED FLOOR

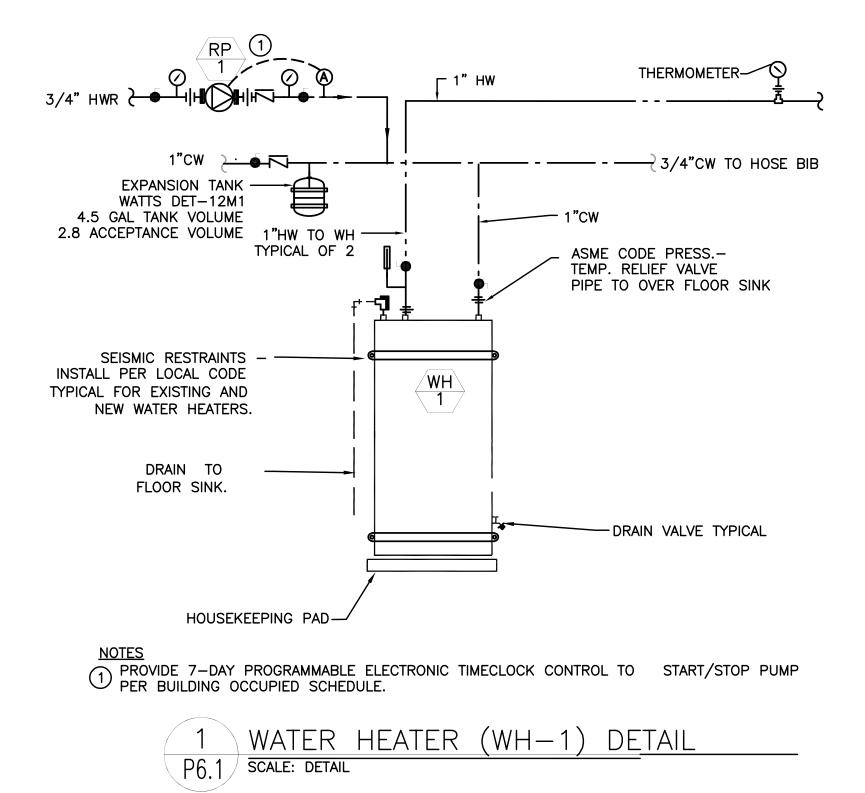
- FLOOR DRAIN

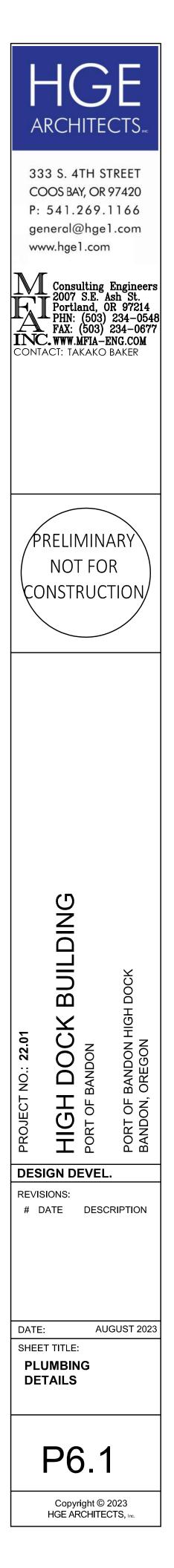


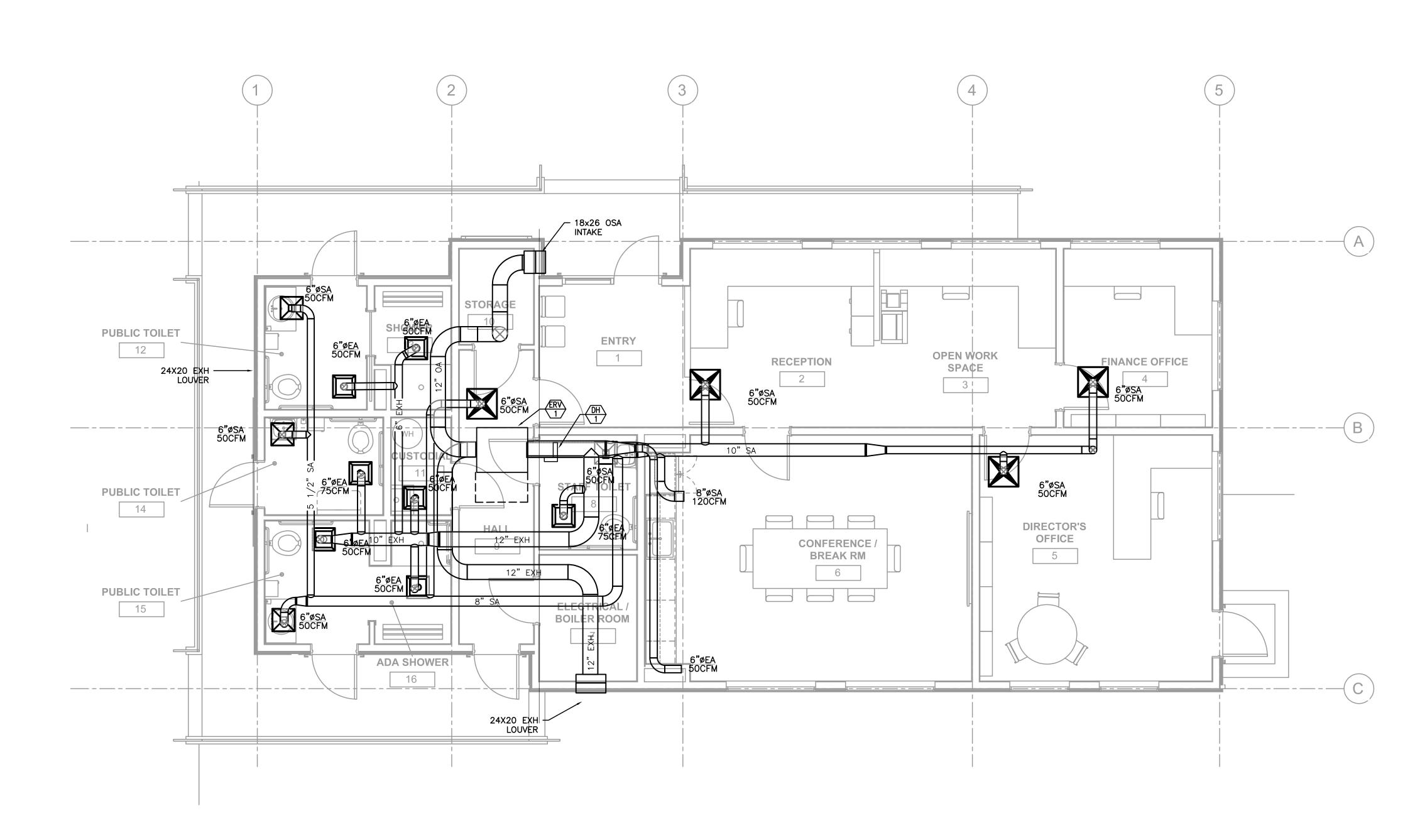
333 S. 4TH STREET COOS BAY, OR 97420 P: 541.269.1166 general@hge1.com www.hgel.com

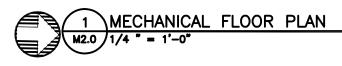
Consulting Engineers 2007 S.E. Ash St. Portland, OR 97214 PHN: (503) 234-0548 FAX: (503) 234-0677 INC. WWW.MFIA-ENG.COM CONTACT: TAKAKO BAKER /PRELIMINARY NOT FOR CONSTRUCTION BUILDING PORT OF BANDON HIGH DOCK BANDON, OREGON HIGH DOCK FORT OF BANDON 5 22 NO PROJECT DESIGN DEVEL. **REVISIONS:** # DATE DESCRIPTION AUGUST 2023 DATE: SHEET TITLE: PLUMBING LEGEND, DETAILS AND SCHEDULES P6.0

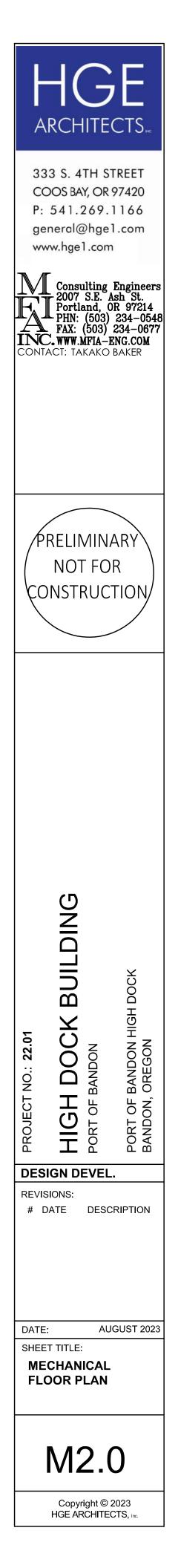
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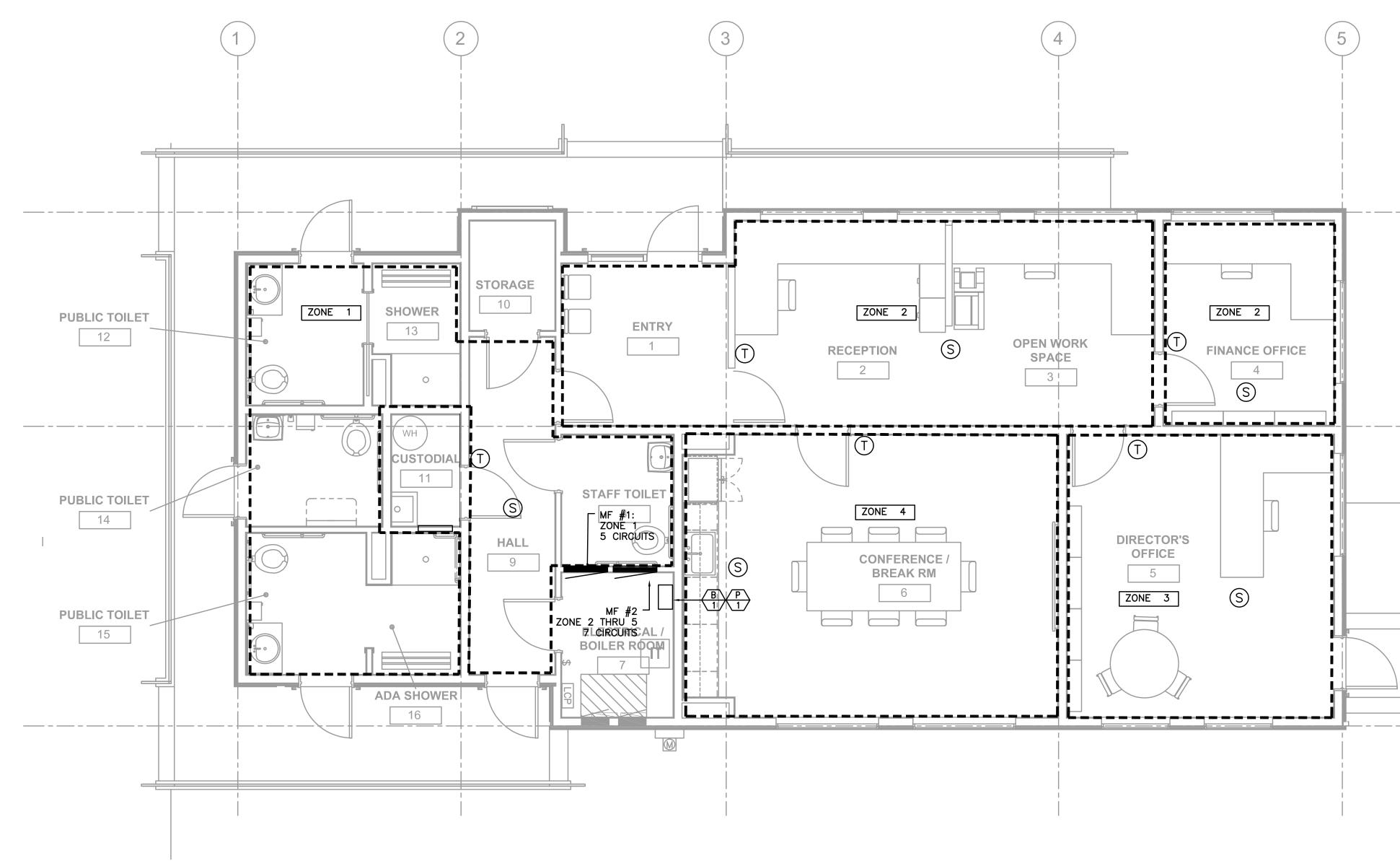






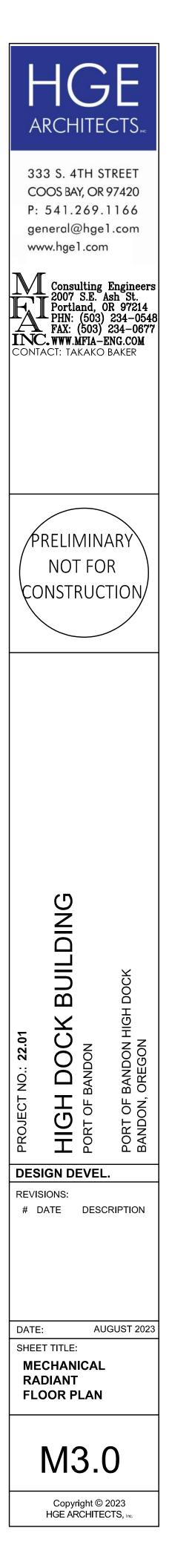


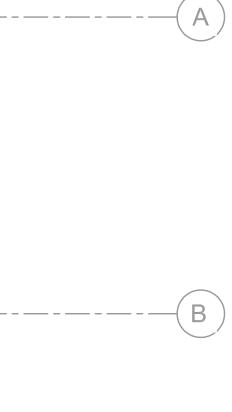


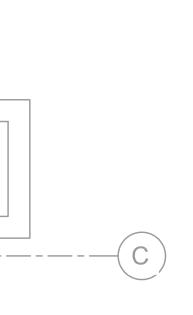


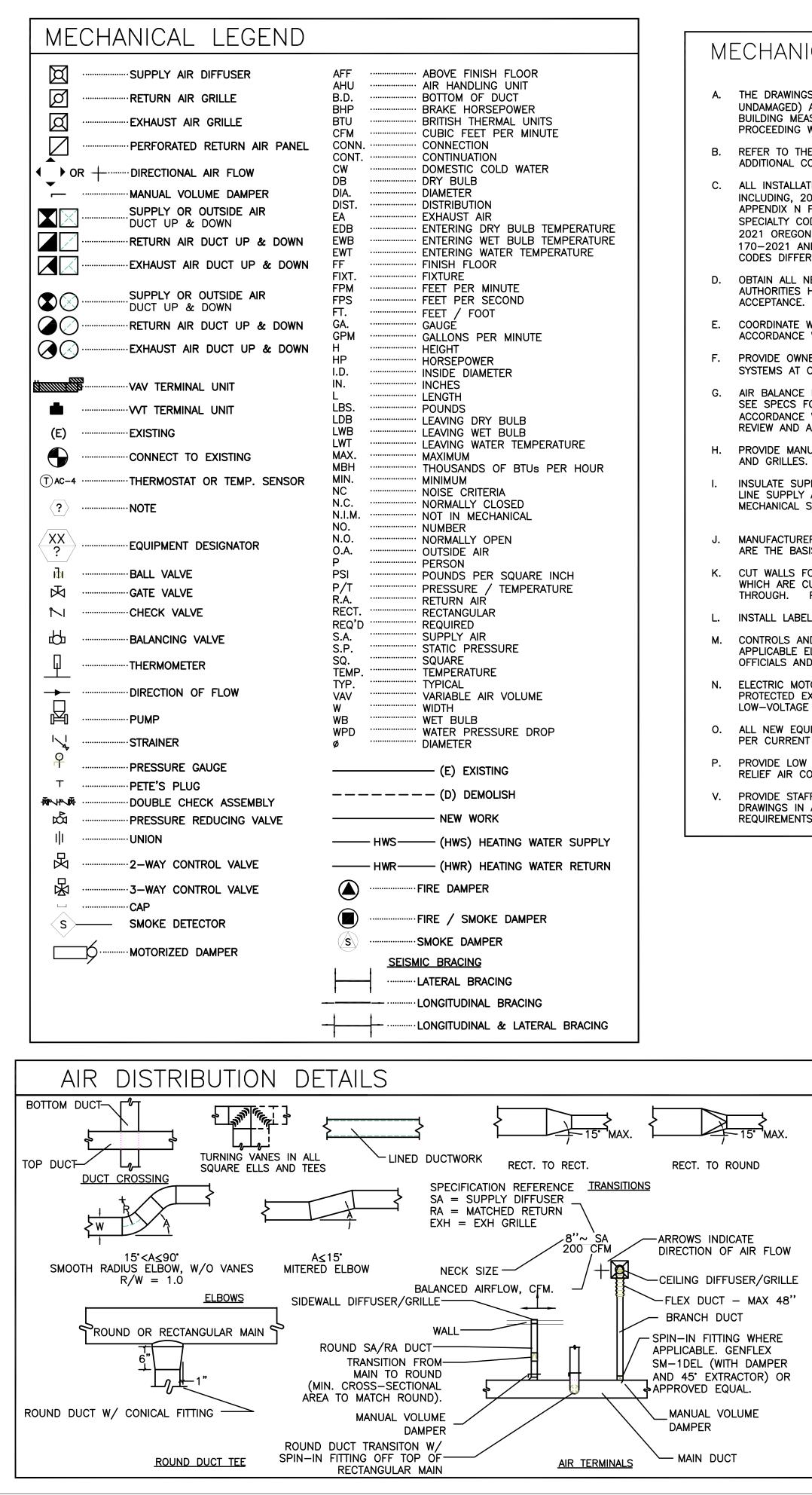


1 MECHANICAL RADIANT FLOOR PLAN M3.0 1/4 " = 1'-0"









### MECHANICAL GENERAL NOTES

A. THE DRAWINGS ARE DIAGRAMMATIC. PROVIDE ALL MATERIAL (NEW AND UNDAMAGED) AND LABOR FOR A COMPLETE AND OPERABLE SYSTEM. VERIFY ALL BUILDING MEASUREMENTS DIMENSIONS AND EQUIPMENT LOCATIONS BEFORE PROCEEDING WITH ANY OF THE WORK.

REFER TO THE MECHANICAL SPECIFICATIONS FOR MATERIALS, EQUIPMENT, AND ADDITIONAL CONSTRUCTION INSTRUCTIONS NOT COVERED BY THESE PLANS.

ALL INSTALLATIONS SHALL COMPLY WITH APPLICABLE FEDERAL AND STATE CODES INCLUDING, 2022 OREGON STRUCTURAL SPECIALTY CODE (OSSC) INCLUDING APPENDIX N FOR OREGON FIRE CODE REGULATIONS, 2021 OREGON PLUMBING SPECIALTY CODE (OPSC), 2022 OREGON MECHANICAL SPECIALTY CODE (OMSC), 2021 OREGON ENERGY EFFICIENCY SPECIALTY CODE (OEESC), ASHRAE STANDARD 170-2021 AND NATIONAL FIRE PROTECTION ASSOCIATION (NFPA). WHERE TWO CODES DIFFER THE MORE STRICT OF THE TWO SHALL BE FOLLOWED.

OBTAIN ALL NECESSARY PERMITS AND INSPECTIONS REQUIRED BY THE GOVERNING AUTHORITIES HAVING JURISDICTION. SUBMIT ALL CERTIFICATES PRIOR TO

COORDINATE WITH OTHER CRAFTS AS REQUIRED TO COMPLETE WORK IN ACCORDANCE WITH CONSTRUCTION SCHEDULE.

F. PROVIDE OWNER INSTRUCTION BY QUALIFIED PERSONNEL ON EQUIPMENT AND SYSTEMS AT OWNER'S REQUEST.

AIR BALANCE DIFFUSERS AND GRILLES TO THE CFM INDICATED ON FLOOR PLANS. SEE SPECS FOR REQUIREMENTS. TESTING AND BALANCING SHALL BE IN ACCORDANCE WITH OWNER GUIDELINES. SUBMIT TAB REPORT FOR ENGINEER'S REVIEW AND APPROVAL.

H. PROVIDE MANUAL BALANCING DAMPERS ON BRANCH DUCTS SERVING DIFFUSERS

INSULATE SUPPLY AIR, OUTSIDE AIR AND RETURN AIR DUCTWORK OR INTERNALLY LINE SUPPLY AIR AND RETURN AIR DUCTWORK AS SHOWN ON PLANS AND PER MECHANICAL SPECIFICATIONS.

MANUFACTURERS AND MODEL NUMBERS LISTED IN THE EQUIPMENT SCHEDULES ARE THE BASIS OF DESIGN.

CUT WALLS FOR PROPER EQUIPMENT, DUCT OR PIPE INSTALLATION. FILL HOLES WHICH ARE CUT OVERSIZED FOR A TIGHT FIT AROUND OBJECTS PASSING THROUGH. PATCH AND SEAL FINISHES TO MATCH NEW OR EXISTING FINISHES.

L. INSTALL LABELS ON ALL MECHANICAL EQUIPMENT.

CONTROLS AND WIRING SHALL MEET ALL ELECTRICAL REQUIREMENTS OF APPLICABLE ELECTRICAL SPECIFICATIONS AND REQUIREMENTS OF OWNER, BUILDING OFFICIALS AND EQUIPMENT SUPPLIERS OF EQUIPMENT INSTALLED ON PROJECT.

ELECTRIC MOTORS SHALL HAVE BUILT-IN THERMAL OVERLOAD PROTECTION OR BE PROTECTED EXTERNALLY WITH SEPARATE THERMAL OVERLOAD DEVICES, WITH LOW-VOLTAGE RELEASE OR LOCK OUT AS REQUIRED.

ALL NEW EQUIPMENT, PIPING, CONDUIT, AND DUCTWORK SHALL BE INSTALLED PER CURRENT OREGON SEISMIC CODE REQUIREMENTS.

PROVIDE LOW LEAK AUTOMATIC DAMPERS ON OUTSIDE AIR, EXHAUST AIR AND RELIEF AIR CONTROL DAMPERS WHERE THESE ARE INDICATED.

PROVIDE STAFF TRAINING, OPERATION AND MAINTENANCE MANUALS AND RECORD DRAWINGS IN ACCORDANCE WITH SPECS. SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

#### BOILER

MARK		В		NOTE	c
NUMBER		1		NOTE	2
ТҮРЕ		WALL	HUNG		-
FUEL		ELEC	RIC		
KW INPUT		11.3	кw		
ENTERING WATER TEMP. (DEG. F.)					
LEAVING WATER TEMP. (DEG. F.)					
MIN. FLOW RATE (GPM)		2			
DESIGN FLOW RATE (GPM)		35	0		
PRESS DROP (FT. H20)					
VENT DIA. (IN.)					
VOLTAGE/PH/A		208/1/	54.1A		
OPERATING WEIGHT (LBS)		80	)		
BASIS OF DESIGN: ELECTRO INDUST	RIES	EB-M	S-15		
3					
PUMP SC	HEDU	LES			
MARK	1	<b>&gt;</b>	NOT	FS	
NUMBER	:	1			
SERVICES	RADIAN	T FLOOR			
ТҮРЕ					
FLOW RATE (GPM)					
HEAD (FT)					
MOTOR HP	3,	/4			
RPM					
EFFICIENCY					
SHAFT GROUNDING					
VFD / EC MOTOR					
POLYPROPYLENE GLYCOL (%)					
VOLTAGE/PH	12	0/1			

NUM	1BER
CLIN	1ATE ZONE
LOC	ATION
S	TOTAL CF
υ	EXTERNA
Р	DISCHARC
р	
L	
Y	FILTER
	SMOKE DI
Е	TOTAL CF
х	EXTERNA
н	
А	DISCHARC
U	
S	FILTER
Т	SMOKE DI
Н	SUMMER
Е	SUMMER
А	SUMMER
Т	Total effic
Е	WINTER C
х	WINTER F
С	WINTER L
н	Total Effic
Е	POWER
L	FLA (amp
Е	
С	
Т	
	ATION TYP
OPE	RATING W
DACI	

BASIS OF DESIG

ENERGY

MARK

NOTES: 1 PROVIDE DUCT HEATERS IN THE DISCHARGE DUCT, SEE DUCT HEATER SCHEDULE.

#### ELECTRIC DUCT HEATERS $\left< \frac{DH}{1} \right>$ MARK NUMBER SERVICE ERV-1 TYPE DUCT MOUNT OUTPUT (120V/1) 2 KW CONTROL DAT SENSOR DISCHRAGE AIR TEMP SET POINT 68F ELECTRICAL (V/PH) 208/1 9.62A AMPS

NOTES:

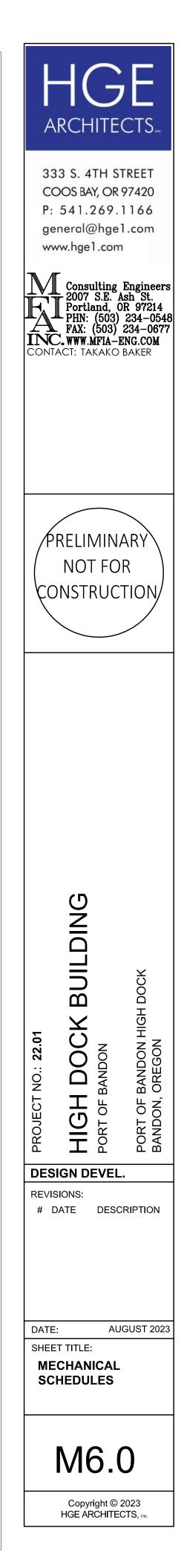
DESIGN WEIGHT (LBS)

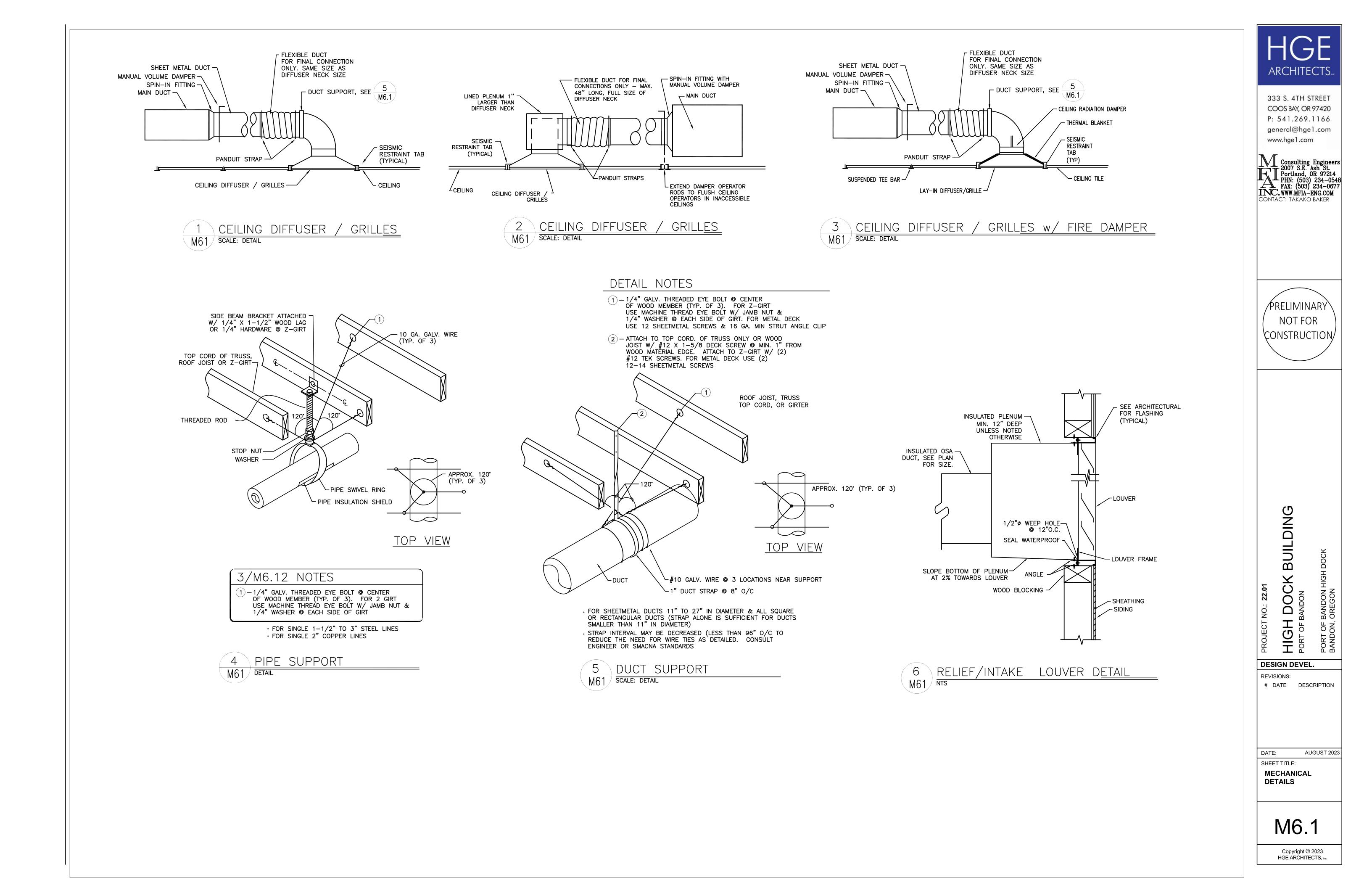
BASIS OF DESIGN:

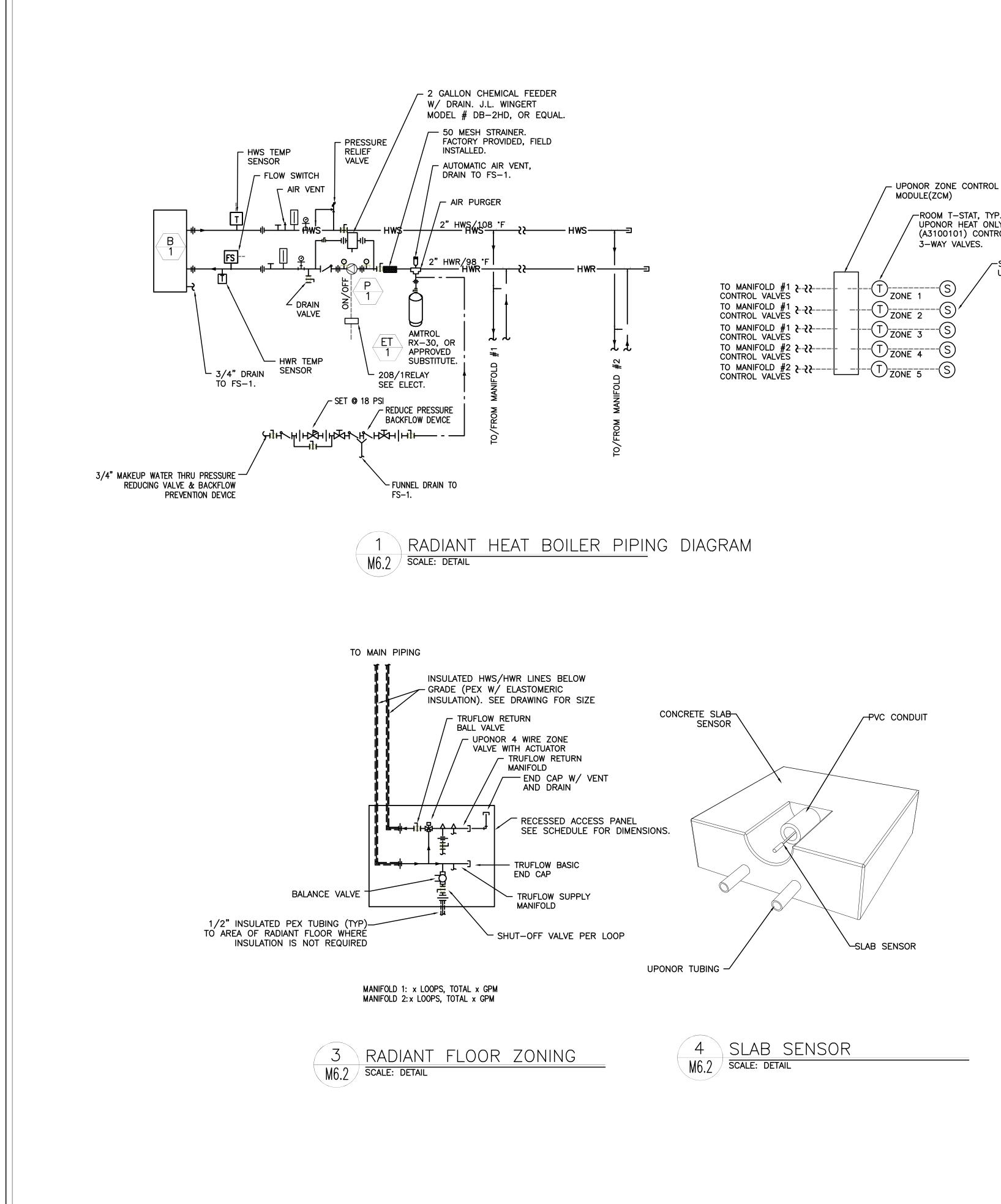
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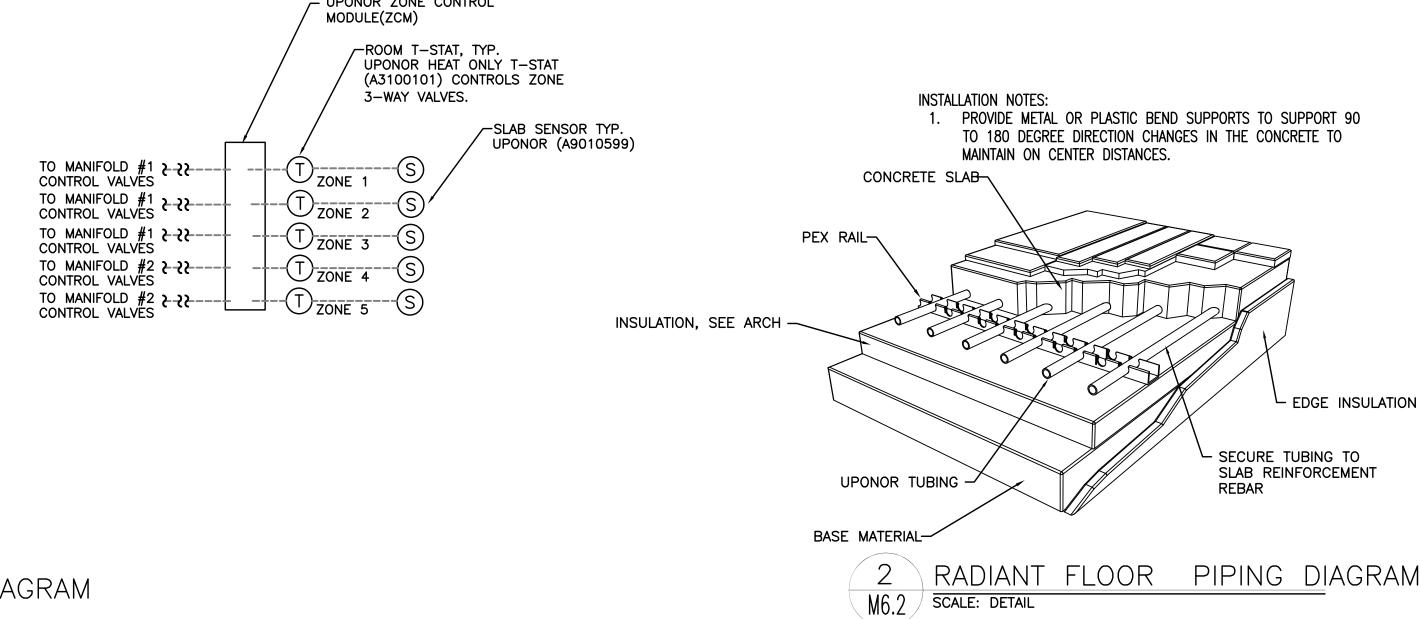
<b>VENTILATION AII</b>	R SCHEDI	JLE - ER	V-1							
ROOM NUMBER	AREA (SQ. FT.)	OCCUPANT	NUMBER OF	OUTSIDE AIR	OUTSIDE AIR	OUTSIDE AIR	DESIGN	ZONE	DESIGN	DESIGN
AND NAME		LOAD	OCCUPANTS	REQUIREMENT	REQUIREMENT	REQUIRED (CFM)	OUTSIDE AIRE	OSA	OUTSIDE AIR	EXHAUST AIR
		(#/1000 SQ. FT.)		(CFM/P)	(CFM/SQ FT.)		(CFM)	(CFM)	(CFM)	(CFM)
	Az		Pz	Rp	Ra	Vbz	Ez	Voz	Vpz	
FINANCE OFFICE 4	122	5	1	5	0.06	12	1.0	12	50	0
<b>OPEN WORK 2/RECEPTION 3</b>	290	5	2	5	0.06	27	1.0	27	50	0
DIRECTOR'S OFFICE 5	255	5	2	5	0.06	25	1.0	25	50	0
CONFERENCE/BREAK ROOM 6	366	50	19	5	0.06	117	1.0	117	120	50
STAFF TOILET 8	50	0	0	0	0	0	1.0	0	50	75
PUBLIC TOILET 12	50	0	0	0	0	0	1.0	0	50	100
PUBLIC TOILET 14	50	0	0	0	0	0	1.0	0	50	75
PUBLIC TOILET 15	50	0	0	0	0	0	1.0	0	50	100
CUSTODIAL 11	50	0	0	0	0	0	1.0	0	0	50
HALL 9	100	0	0	0	0.06	6	1.0	6	50	0
TOTAL	1383		24			187.98		187.98	520	450
								Vou	Vps	

<b>RECOVERY UNIT</b>	SCHEDULE
	ERV
	1
	4C
	1ST FLOOR
1	520
SP. ("H20)	0.7"
E DIRECTION	HORIZONTAL
	1" MERV 8
TECTOR	N
1	450
SP. ("H20)	0.7"
E DIRECTION	HORIZONTAL
	1" MERV 8
TECTOR	N
PSA (° F DB/WB)	70/62
RA(° F DB/WB)	75/62
AT (° F DB/WB)	73.5/62.6
ency	Note 3
SA (° F DB/WB)	30.9/28
۹(°FDB/WB)	70/58
T (° F DB/WB)	58.4/48.5
ency %	62.30%
	208/1
	6.3A
E	SPRING
IGHT (LBS)	285
N: AMERICAN ALDES	F1100L-Fi-EC

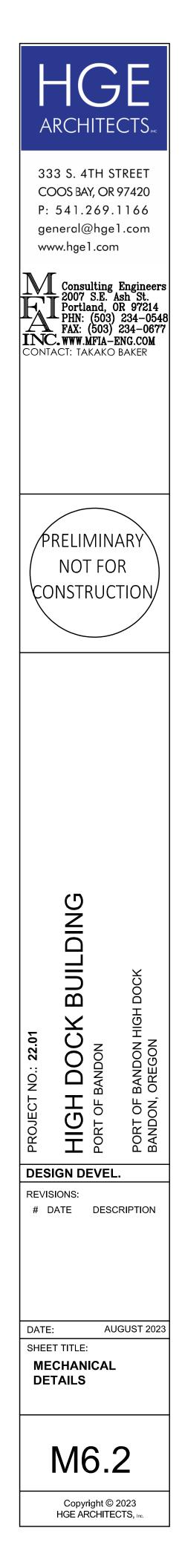








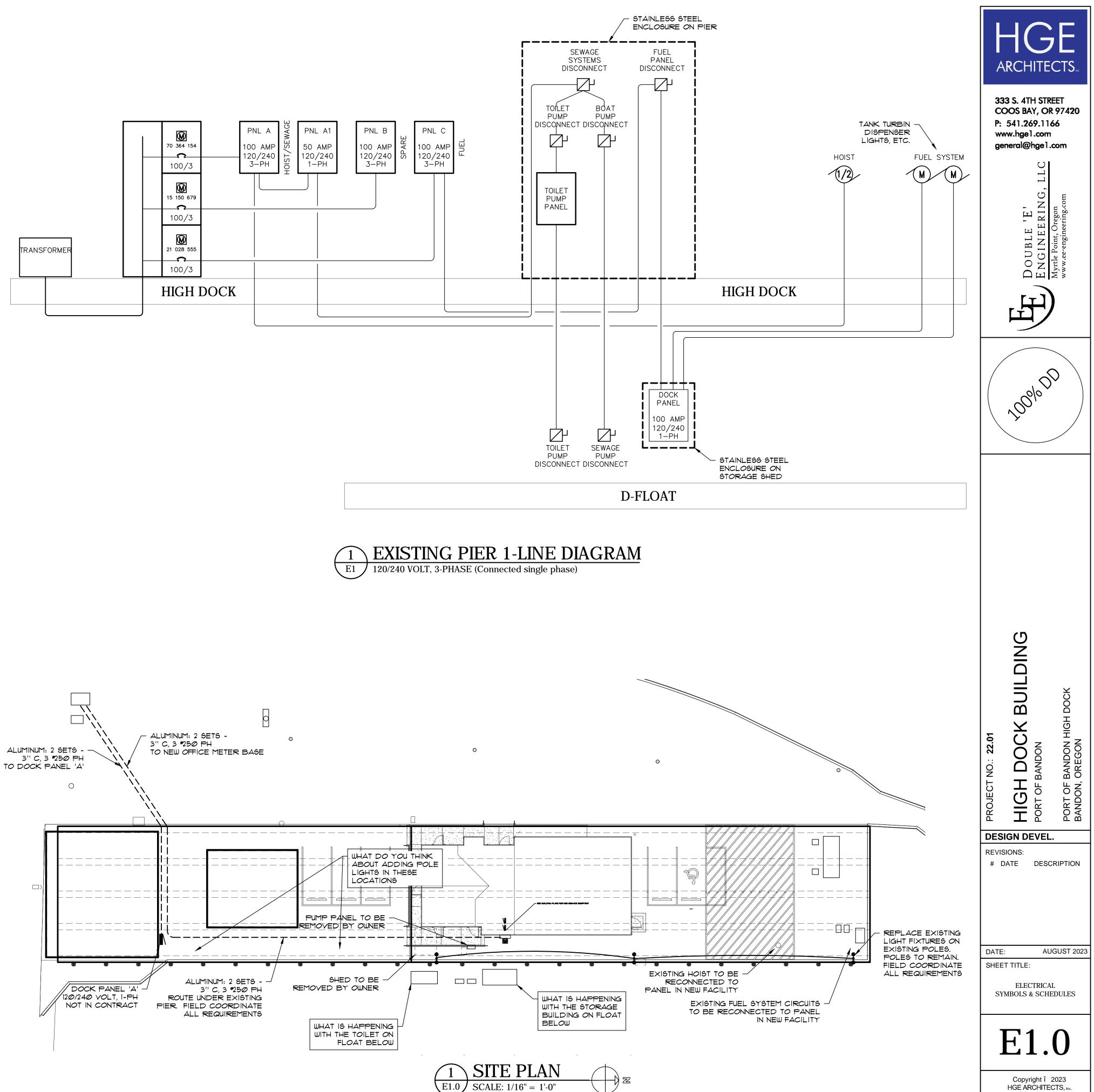
### PIPING DIAGRAM

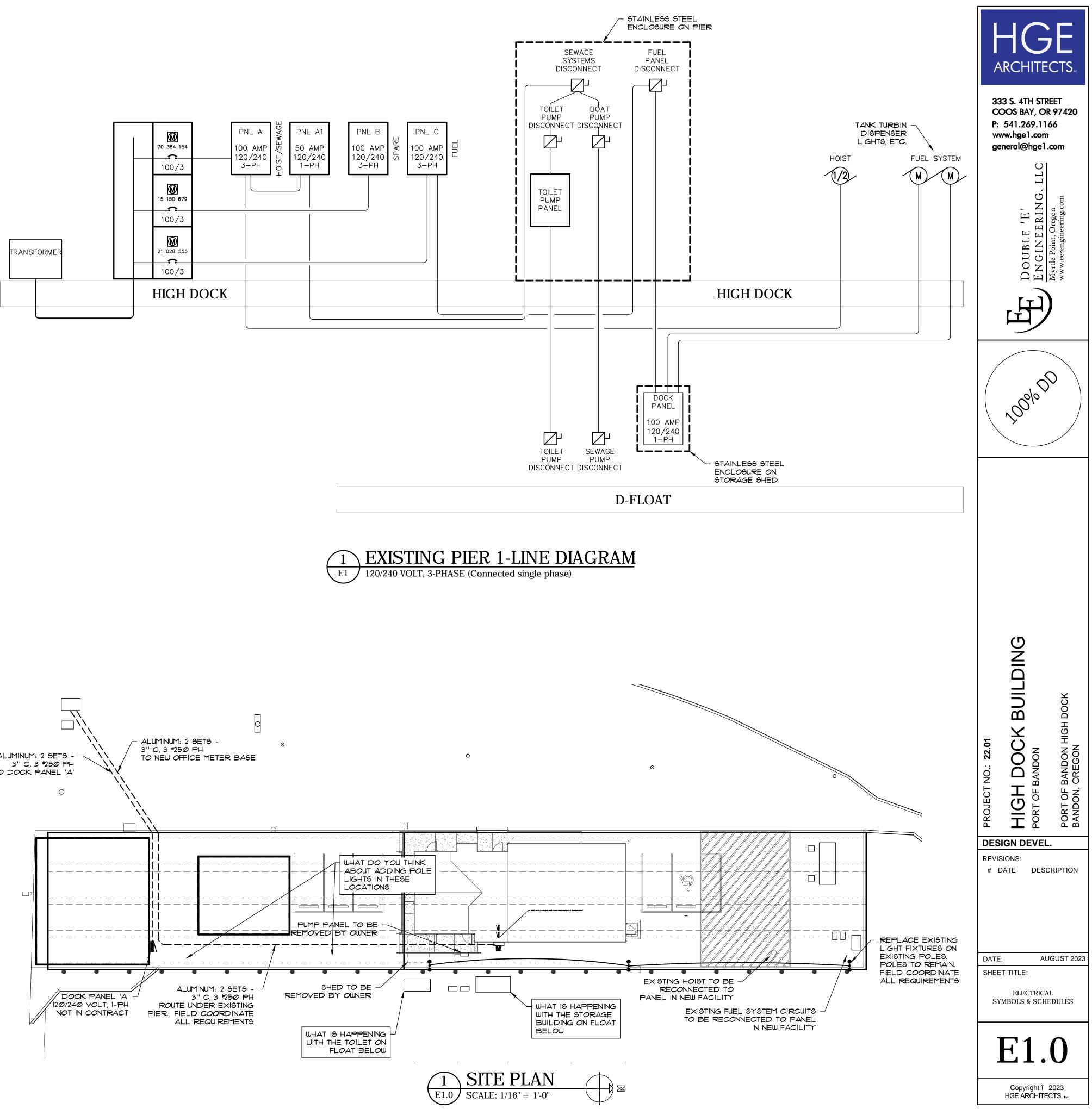


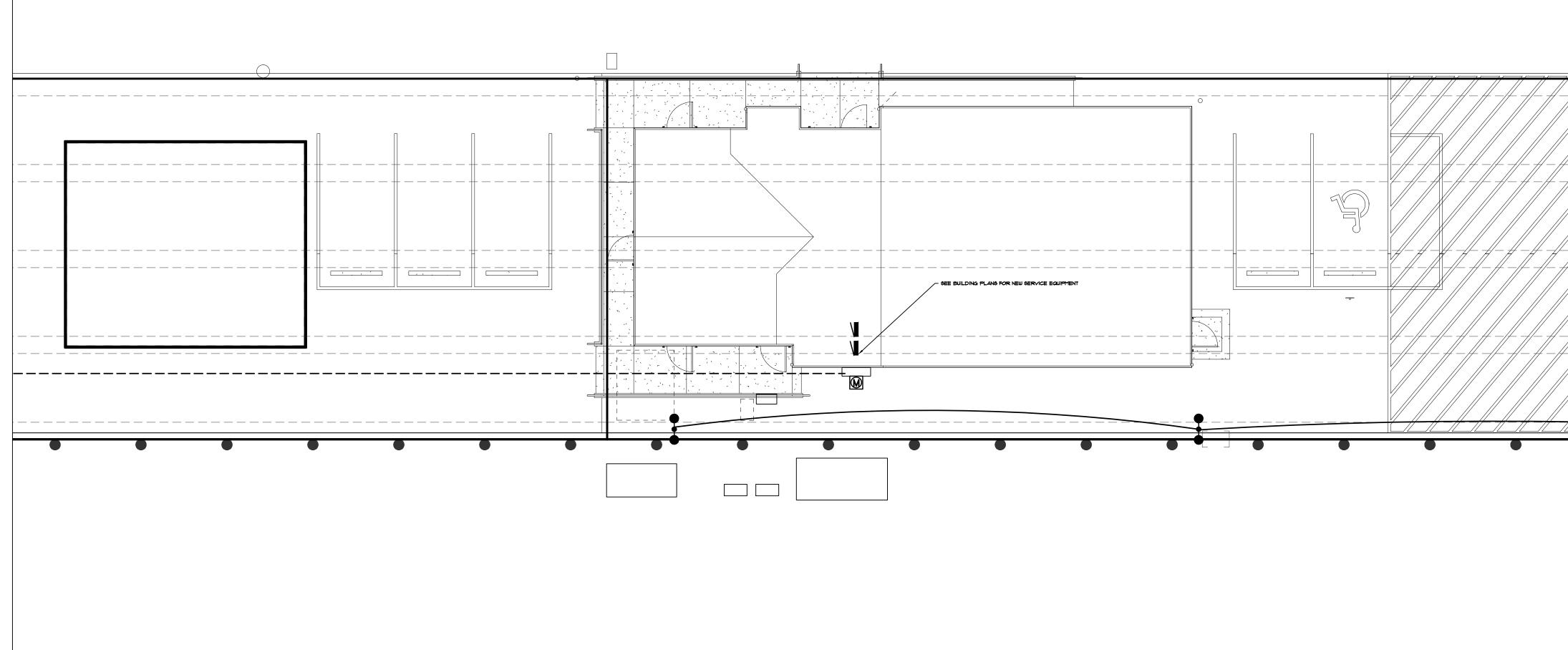
SYMBOLS	ONELINE DIAGRAM	NOTES	SYMBOLS	LIGHT FIXTURES	NOTES
	MOLDED CASE CIRCUIT BREAKER	NOILS		WHEN ADDED TO LIGHT FIXTURE SYMBOL-	NULS
w	TRANSFORMER		╽┝────	INDICATES WALL OR BRACKET MOUNTED LIGHT FIXTURE SURFACE OR PENDANT MOUNTED LIGHT FIXTURE OUTLET.	
m			FD_2.	(NUMBER INDICATES CIRCUIT , CAPITAL LETTER	
XII.			l O a	INDICATES FIXTURE TYPE , LOWER CASE LETTER INDICATES SWITCHING CONTROL , TYPICAL FOR ALL	
E	CURRENT TRANSFORMER(S)			LIGHT FIXTURES	
	METER, TYPE AS NOTED		Ø	RECESSED CEILING LIGHT FIXTURE	
÷	GROUND		<b>D</b>	RECESSED WALL WASHER , UNSHADED SIDE INDICATES	
⊡ <sub>N</sub>	NEUTRAL BUS				
2	MOTOR WITH MOTOR NUMBER (SEE EQUIPMENT SCHEDULE)				
Ð	COMBINATION FIRE SMOKE DAMPER	2>	] [	FLUORESCENT STRIP LIGHT FIXTURE SINGLE FACE EXIT SIGN WITH NUMBER OF DIRECTIONAL	
$\langle \mathbf{x} \rangle$	EQUIPMENT NUMBER (SEE EQUIPMENT SCHEDULE)		<u></u>	ARROUG AS SHOUN , CEILING MOUNTED . SOLID QUADRANT INDICATES FACE.	
D	NON-FUSED DISCONNECT SWITCH FUSED DISCONNECT SWITCH (FUSES SIZED PER		SYMBOLS	SWITCHES	NOTES
Ъ	EQUIPMENT MANUFACTURERS RECOMMENDATIONS UNO.)		\$	SINGLE POLE LIGHT SWITCH	+ 46"
<b>叉</b>	COMBINATION MOTOR STARTER / FUSED DISCONNECT		<b>\$</b> 3	THREE WAY LIGHT SWITCH	+ 46"
H	ADA DOOR OPERATOR		<b>\$</b> M	MOTOR RATED SWITCH	+ 46"
	BRANCH CIRCUIT PANELBOARD		Wc Ww	OCCUPANCY SENSOR - C=CEILING W=WALL MOUNTED	
	MISCELLANEOUS PANEL AS NOTED		P P	PHOTOELECTRIC SWITCH	
 ********	MAIN OR SUB DISTRIBUTION PANELBOARD				
<u> </u>	TRANSFORMER		SYMBOLS	SECURITY	NOTES
		,		SECURITY CAMERA, PROVIDE J-BOX WITH CAT 6 CABLE	$\bigcirc$
SYMBOLS	RACEWAYS	NOTES		ELECTRONICALLY CONTROLLED LOCK	
J	BRANCH CIRCUIT INSTALLED CONCEALED FROM FINISH		◆	DOOR POSITION SWITCH	
$\bigwedge$	SPACES . PROVIDE GROUND CONDUCTOR AS INDICATED IN PANEL SCHEDULE . GROUND CONDUCTOR NOT		M	MOTION DETECTOR (OMNI DIRECTIONAL)	
1	INCLUDED IN HASH MARK INDICATION .		CR	CARDREADER	+ 44''
1	BRANCH CIRCUIT INSTALLED IN OR BELOW FLOOR . PROVIDE GROUND CONDUCTOR AS INDICATED IN PANEL		AB	ACCESS BUTTON	+ 44''
	SCHEDULE . GROUND CONDUCTOR NOT INCLUDED IN			·	
	HASH MARK INDICATION . BRANCH CIRCUIT HOME RUN TO PANEL , HASH MARKS		SYMBOLS	AUDIO / VISUAL	NOTES
HH LA	INDICATES NUMBER OF CONDUCTORS . PROVIDE			CEILING SPEAKER	
	GROUND CONDUCTOR AS INDICATED IN PANEL SCHEDULE, GROUND CONDUCTOR NOT INCLUDED IN		нS	WALL MOUNTED SPEAKER	+ 80"
حير حيرا	HASH MARK INDICATION .		<u>  +</u> <u>S</u> ⊲	WALL MOUNTED SPEAKER HORN	+ 80"
	LOW VOLTAGE EMPTY CONDUIT WITH PULL STRING - 34" UNO			TELEVISION (VIDEO) OUTLET	+ 18''
			. IR	INTERCOM REQUEST STATION (SPEAKER & PUSH BUTTON)	+ 44''
JU	JUNCTION BOX , 4" SQUARE UNLESS OTHERWISE NOTED 4" CONDUIT SLEEVE WITH BUSHINGS AT BOTH ENDS .		SYMBOLS	FIRE ALARM	NOTES
c	LOCATE AT 6" ABOVE ACCESSIBLE CEILING .			MANUAL PULL STATION	+ 44''
	FIRESTOP WITH UL APPROVED SYSTEM .			COMBINATION VISUAL / AUDIBLE ALARM	+ 80" AFTB
<b></b>	CONDUIT STUB-OUT, CAP & MARK WITH APPROVED MARKER			VISUAL STROBE ALARM	+ 80" AFTB
<b></b>	CONDUIT, UP			PHOTOELECTRIC SMOKE DETECTOR (CEILING NOUNTED UNO)	
	CONDUIT, DOWN			IONIZATION SMOKE DETECTOR (CEILING MOUNTED UNO)	
SYMBOLS	RECEPTACLES	NOTES	ן 🗇	MAGNETIC DOOR HOLDER	
SIMBOLS	WHEN ADDED TO A SYMBOL , INDICATES OUTLET	NUIES	H	HEAT DETECTOR (CEILING MOUNTED, 135" UNO)	
٠	MOUNTED WITH BOTTOM OF OUTLET AT 2" ABOVE			1	
0	COUNTER TOP OR BACK SPLASH UNO. DUPLEX CONVENIENCE OUTLET	+ 18''	SYMBOLS	ABBREVIATIONS	NOTES
		+ 18"	AIC		
•				AMPERE	
•	DUPLEX OUTLET CONNECTED TO EMERGENCY CIRCUIT	+ 18"	c	CONDUIT	
	DOUBLE DUPLEX CONVENIENCE OUTLET	+ 18''	EC	EMPTY CONDUIT (WITH PULL-IN LINE)	
<u>()</u>	SINGLE PHASE SPECIAL PURPOSE OUTLETS, AS NOTED	+ 18'' UNO	ELEC	ELECTRICAL	
<u></u>	THREE PHASE SPECIAL PURPOSE OUTLETS, AS NOTED		FAAP	FIRE ALARM ANNUNCIATOR PANEL	
8 8 3	FLUSH FLOOR OUTLET AS SHOWN		FACP	FIRE ALARM CONTROL PANEL	
		Notes	G, GND	GROUND	
SYMBOLS	TELEPHONE / DATA	NOTES	GEN	GENERATOR	
•	WITH BOTTOM OF OUTLET AT 2" ABOVE COUNTER TOP OR		GFI	GROUND FAULT CIRCUIT INTERRUPTER TYPE	
			н <del>р</del>	HORSEPOWER	
▲2	TELE/DATA, PROVIDE CABLES AS SHOWN	+ 18"	lG	ISOLATED GROUND	
	W ADDED TO SYMBOL INDICATES WALL MOUNTED	+ 60" 1	MECH	MECHANICAL	
■ ■ 2			MFGR	MANUFACTURER	
	TELEPHONE TERMINAL BOARD , 8" HIGH (WIDTH AS SHOWN) , ${}^{3}_{4}$ " FIRE RESISTIVE PLYWOOD WITH * 6 CU GND		NEC	NATIONAL ELECTRIC CODE	
	WIRELESS ACCESS PORT, PROVIDE (1) CAT6a CABLES	<u>^</u>	NL	NIGHT LIGHT	24 HOUR 'OF
				OWNER FURNISHED CONTRACTOR INSTALLED	
				OWNER FURNISHED OWNER INSTALLED	
			PB	PULL BOX	
NO	TES		PNL	PANEL	
<u> </u> Δ	SYMBOLS MAY NOT APPLY DIRECTLY TO THIS JOB.		PWR	POWER	
		. <del></del>		SYSTEM	
2. ALL	. MOUNTING HEIGHTS SHOWN ARE TO CENTERLINE OF DEVIC	£.	SYS		
3. ALL	MOUNTING HEIGHTS ARE TYPICAL ON PLANS,		T T		
			TTB	TELEPHONE TERMINAL BOARD	
KE`	YED NOTES		ŤYP	TYPICAL	
			UNO	UNLESS NOTED OTHERWISE	
<1>P	ROVIDE I'' CONDUIT FROM OUTLET BOX TO ACCESSIBLE LO BOVE CEILING, UNLESS NOTED OTHERWISE, TERMINATE CO		×	VOLT	
~ ^	LE LE VELENIA, MILLOU NUILU UIHERWIJE, IERTIINAIE UU		VP	VANDAL PROOF	
в	LUE INSULATED BOX CONNECTORS AND LABEL SYSTEM, SE		Ŷ		
B	LUE INSULATED BOX CONNECTORS AND LABEL SYSTEM, SE PECIFICATIONS FOR ADDITIONAL INFORMATION . ROUTE CA ABLE(5) TO DATA RACK		<u>۲</u>	WATT	

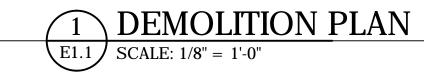
#### PROJECT NOTES

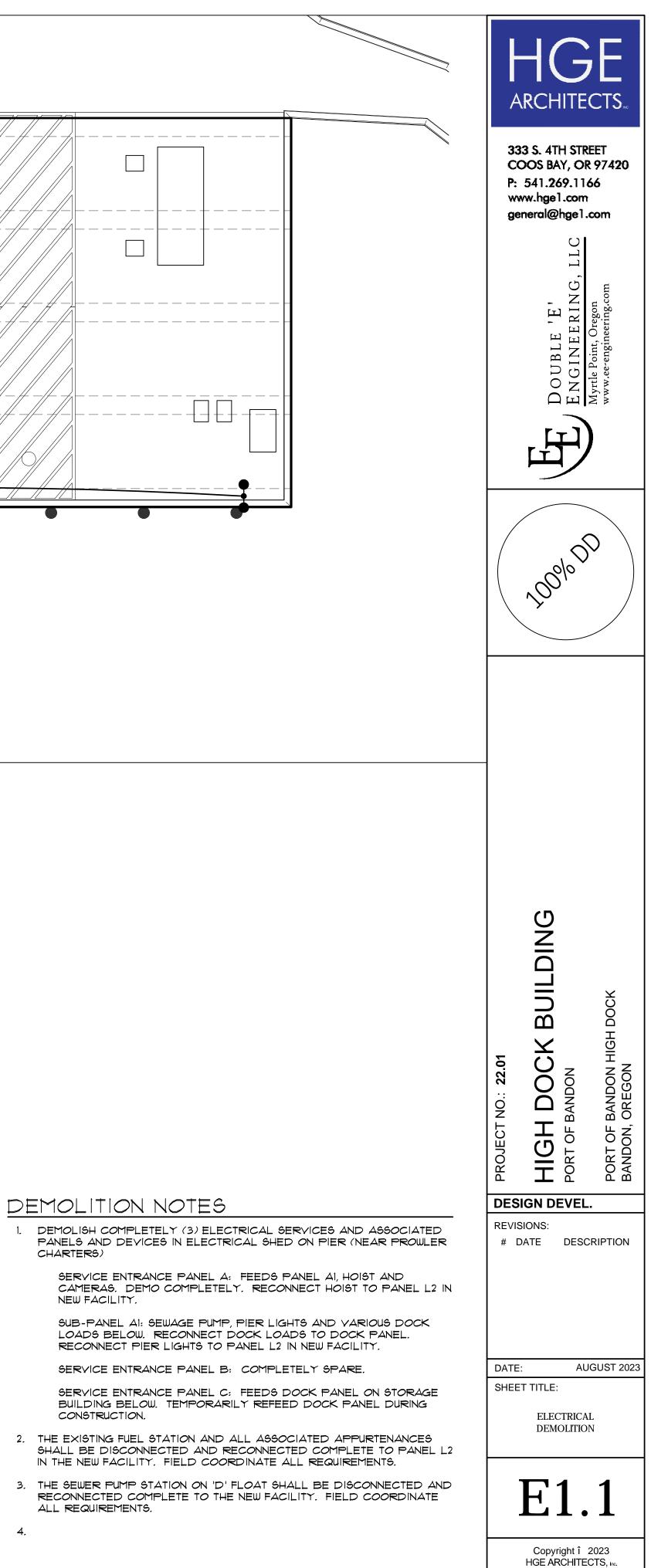
- 1. THE BUILDING LOCATION IS DESIGNATED AS BEING IN A FLOOD PLAIN. THE EXTERIOR WALL IS DESIGNED AS AN APPROXIMATELY 24-INCH STEM WALL TO DEAL WITH THIS DESIGNATION. RECEPTACLES LOCATED IN EXTERIOR WALLS SHALL BE MOUNTED ABOVE THE STEM WALL TO AVOID ISSUES WITH THE FLOOD PLAIN. FIELD COORDINATE MOUNTING HEIGHT.
- 2. CT ENCLOSURE, METER BASE AND ANY OTHER SERVICE ENTRANCE ELECTRICAL ENCLOSURES LOCATED OUTSIDE SHALL BE STAINLESS STEEL IN ACCORDANCE WITH THE CITY OF BANDON POWER DEPARTMENT'S STANDARDS.
- 3. THE EXISTING FUEL STATION SHALL BE DISCONNECTED AND RECONNECTED COMPLETE TO THE NEW FACILITY. FIELD COORDINATE ALL REQUIREMENTS.
- 4. THE SEWER PUMP STATION ON 'D' FLOAT SHALL BE DISCONNECTED AND RECONNECTED COMPLETE TO THE NEW FACILITY. FIELD COORDINATE ALL REQUIREMENTS.
- 5. ALL WIRING SHALL BE IN CONDUIT OR SHALL BE MC CABLE NO NON-METALLIC SHEATHED CABLE (ROMEX) SHALL NOT BE PERMITTED.



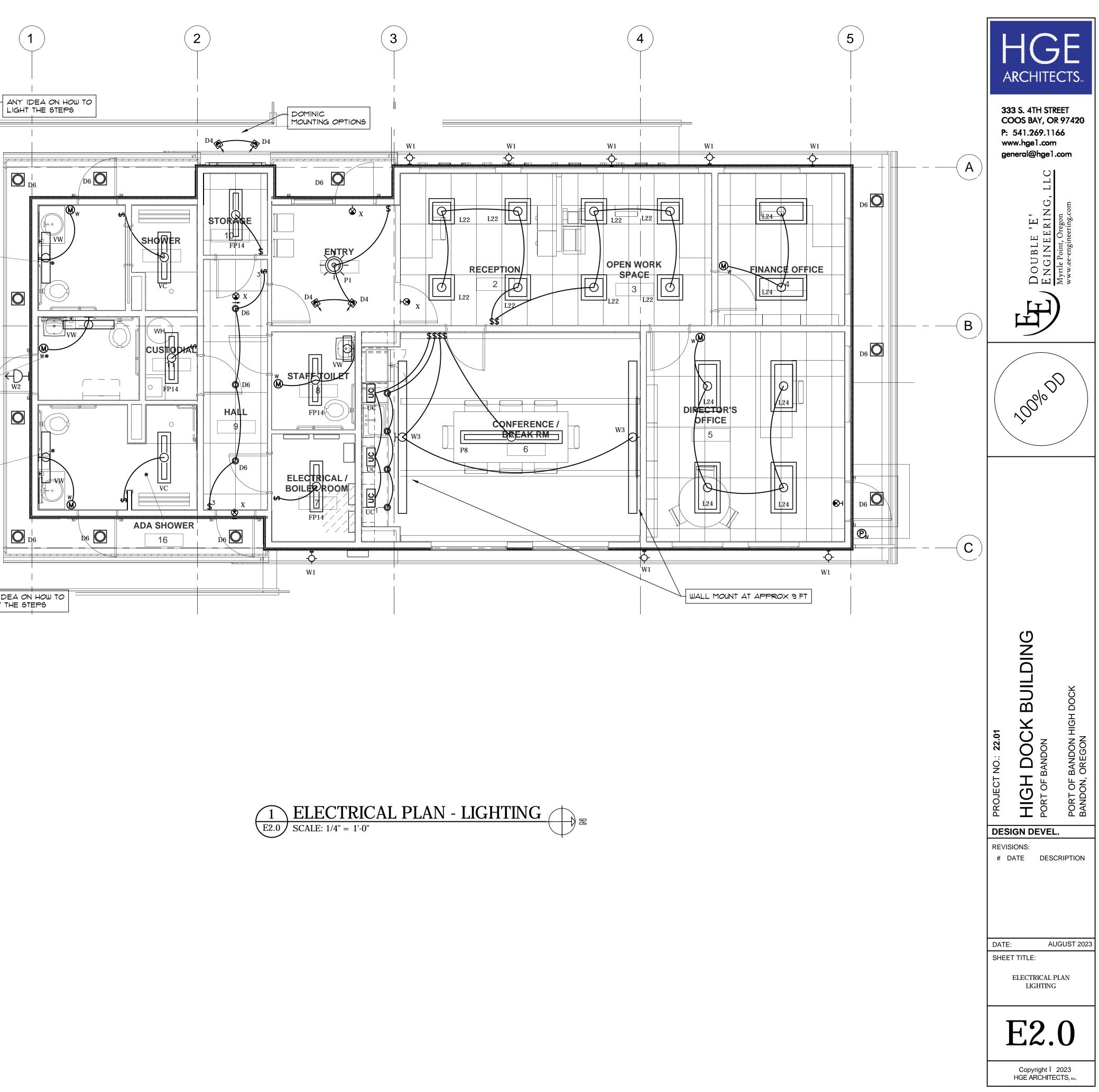




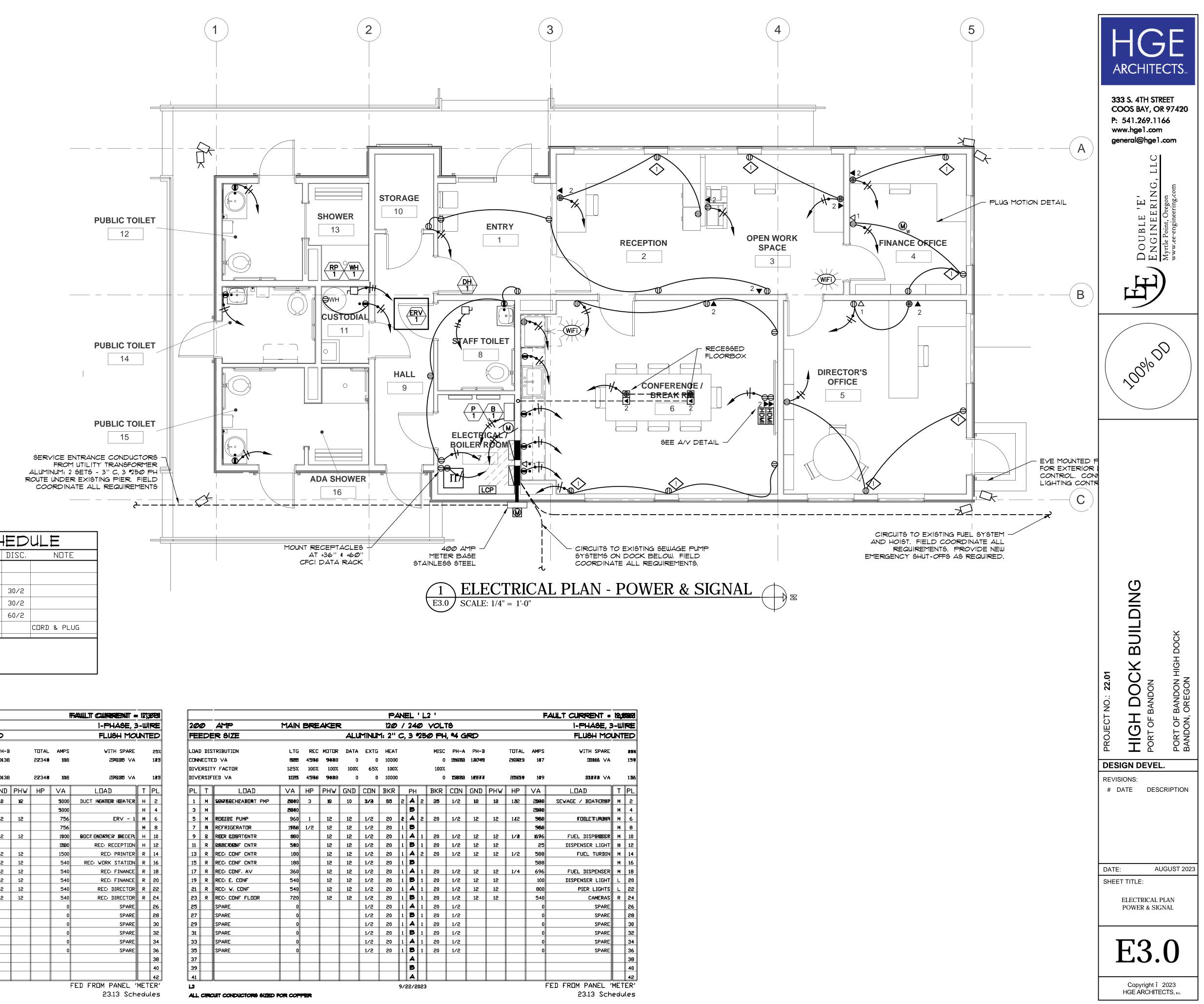




			PUBLIC TOILET		
			12		
					Ę
		XTURE	SCHEDULE		
ЧЕ	MANUFACTURER		DESCRIPTION		
)4	ALPHABET NU4-RA-XTM19-20LM-35K-83-D50-120-		4" LED ADJUSTABLE DOWNLIGHT COLD-ROLLED STEEL, ACRYLIC LENS		
	-DIM10-NC-WH-WH	MOUNTING: FINISH:	RECESSED - CEILING WHITE TRIM, WHITE BEZEL		
)6		LAMPS: TYPE:	LED 1700 LUMEN 35K 26 WATTS 6" LED RECESSED DDWNLIGHT		
D6E	LDN6 35/2000 L06 AR LD MVOLT		SELF FLANGED, CLEAR DIFFUSE     15       RECESSED - VERIFY CEILING TYPE     15		
		D6E: LAMPS:	ADD EMERGENCY BATTERY PACK LED 3500K, 2000 LUMENS, 23 WATTS		
22	LITHONIA 2VTL2 33L ADPT EZ1 LP835 N80		2' X 2' RECESSED LED TROFFER DIE-FORMED 22 GAUGE, PRIMED COLD ROLLED STEEL		
		DIFFUSER: MOUNTING: CONTROLS:	LINEAR PRISMATIC WITH TRIM RINGS RECESSED IN GRID CAT5 LDW-VOLTAGE DIMMING CONTROL		
24			LED 3,500K, 3,300 LUMEN, 26.3 WATTS		
24	2VTL4 40L ADPT EZ1 LP835 N80	HEUSING: DIFFUSER:	DIE-FORMED 22 GAUGE, PRIMED COLD ROLLED STEEL		-
			RECESSED IN GRID CAT5 LOW-VOLTAGE DIMMING CONTROL		
P1		LAMPS:	LED, 82 CRI, 3,500K, 4,000 LUMEN (33.2 WATTS)	ANY IDI LIGHT T	
PI	CPANL 1X4 24/33/44LM 35K M4 2X2CFMK	HDUSING: FINISH:	1 X 4 LED FLAT PANEL		
		MOUNTING: LAMPS:	WHITE POLYESTER COATING SURFACE - CEILING LED, 82 CRI, 3,500K, 3,300 LUMEN (20/28/39 WATTS)		
P1			NAUTICAL PENDANT CEILING PENDANT - SINGLE-STEM		
		FINISH:	VERIFY WITH ARCHITECT ARCHITECTURAL BRONZE - FROSTED		
<u>,8</u>	FINELITE	LAMPS: TYPE:	20W LED A19 LAMP - WARM WHITE 8-FOOT LED PENDANT		
0	S12 LED ID 8'-3E-S/H-835-FTD- 120V-DC-FA-CE-C4-	HEUSING: MEUNTING:	DIE-FORMED STEEL SUSPENDED FROM CEILING VERIFY WITH ARCHITECT		
			DUAL SWITCHING UP / DOWN LED 7200 LUMEN 3500K 60 WATTS		
P	BREWARD CASTING SEURCE: HAVEN DECK & MARINE	TYPE: HOUSING:	DUUBLE PAGDDA LIGHT EXTRUDED / CAST ALUMINUM - NATURAL		
			EXISTING POLE VERIFY WITH DWNER		
IC	KELVIX UCxx-3040-010V-120277-WH		UNDER CABINET LIGHT SURFACE – UNDER CABINET		
	VERIFY LENGTH WITH CASEWORK PRIOR TO ORDERING	FINISH: CONTROL:	WHITE CONTROL WITH SEPARATE WALL SWITCH		
′C	KENALL – MILLENIUM STRETCH		LED , 3,500 K, 20 WATTS CEILING / WALL CORNER LINEAR LED		
-	MLRS12-48-R-MW-PP-1-45L35K- $-DCC-1-DV-FS$		WHITE - POLYCARBONATE LENS SURFACE - WALL		
W	KENALL – MILLENIUM STRETCH		LED 3500K, 4600 LUMENS, 50 WATTS RDUGH SERVICE - VANITY LIGHT		
	MLRS5V-48-SP-MW-PP-1-45L35K- -DCC-1-DV-FS	TRIM: MOUNTING:	WHITE - POLYCARBONATE LENS SURFACE - WALL		
/1			LED 3500K, 4200 LUMENS, 50 WATTS NAUTICAL WALL SCENCE		
		HOUSING: FINISH:	DIE-CAST ALUMINUM DARK BRONZE		
			SURFACE - WALL LED, 3,000K, 4500 LUMEN (35 WATTS)		
/2	LITH⊡NIA WDGE2LED P4 30K 80CRI VW MV⊡LT		LED WALL PACK DIE-CAST ALUMINUM		
	DDBXD		DARK BREINZE SURFACE - WALL		
/3	FINELITE	LAMPS:	LED, 3,000K, 4500 LUMEN (35 WATTS) 12-FOOT LED WALL MOUNTED		
-	S12 LED WM ID-DCD-12'-2E-S-835-FTD-120 120V-SC-SUR-CE-DBD				
<1	LITHONIA - ECBR LED M6		LED 5600 LUMEN 3500K 43 WATTS LED EXIT SIGN WITH EMERGENCY LIGHT BAR		
-		HOUSING: FINISH:	THERMOPLASTIC OR POLYCARBONATE WHITE HOUSING WITH RED LETTERS		
		MOUNTING: LAMPS:	FIELD VERIFY MOUNTING		
		BATTERY	NI-CAD BATTERY		







	MECHANI	CAL EQI	liph	1EN	VT S	CH	IED	ULE
ID	DESCRIPTION	LOCATION	HP/k	<va< th=""><th>VOLT</th><th>PH</th><th>DISC.</th><th>NDTE</th></va<>	VOLT	PH	DISC.	NDTE
B-1	BDILER	ELECTRICAL RM	11.0	КW	240	1		
P-1	BOILER PUMP	ELECTRICAL RM	3/4	HP	120	1		
ERV-1	ENERGY RECOVERY	ATTIC	1512	W	240	1	30/2	
DH-1	DUCT HEATER	ATTIC	2.0	КW	240	1	30/2	
WH-1	WATER HEATER	JANITOR ROOM	10.0	КW	240	1	60/2	
RCP-1	RECIRC, PUMP	JANITOR ROOM	90	W	120	1		CORD & PLUG
			1		1		1	

### KEYED NOTES

1 MOTOR RATED SWITCH

								<b>P</b> /	<u>4</u> N		<u>' L</u>	<u>_1 '</u>					Ħ	FAULLIT CUIRRELENT	<u>: 12)</u>	Æ
201	0	AMP	MAIN	BRE		2		120	1	24	Ø	VOLI	19					1-PHASE, 3	3-W	IR
E	ED	ER SIZE				ALU	Minur	1: 2"	C	, 3 (	25	io ph	, <b>*</b> 4 G	RD				Flush Mo	UNT	ret
	) DIS		LTG	REC	MOTOR	DATA	EXTG	HEAT				MISC	PH-A	PH-B		TOTAL	AMPS	WITH SPARE		2
:ONN	ECT	ED VA	0	6180	43368	0	0	23000				0	13912	1130438		22348	108	23749. <b>3</b> 5 VA		1
I∕E	RSI	Y FACTOR	125%	100%	100%	100%	% 65% 100% 100%													
DI∨E	RSIF	TIED VA	0	6180	4368	0	0	<b>a</b> 3000				0	13912	1130438		2 <b>2</b> 34 <b>8</b>	108	2349.85 VA		1
۶L	Т	LOAD	VA	HP	PHW	GND	CON	BKR		PH		BKR	CON	GND	PHW	HP	VA	LOAD	Т	P
1	н	BOILER B-1	5500		6	10	3/4	60	2	A	2	60	3/2	18	162		5000	DUCT HNEASTHER HUEATER	н	i
3	н		5500							B							5000		н	1.
5	м	BOILER PUMP P-1	1656	3/4	12	12	1/2	20	1	A	г	20	1/2	12	12		756	ER∨ - 1	м	
7	R	RECIRC PUMP	1366	1/2	12	12	1/2	20	1	ß							756		м	
9	R	REC: ADA SHOWER	180		12	12	1/2	20	1	A	2	20	1/2	12	12		1900	BEICIT EINETARTERY BRECEPI	н	1
11	R	REC: PUBLIC TOILET	180		12	12	1/2	20	1	В							170/200	REC: RECEPTION	н	1
13	R	REC: SHOWER	180		12	12	1/2	20	1	A	1	20	1/2	12	12		1500	REC: PRINTER	R	1
15	R	REC: HALL / TOILET	720		12	12	1/2	20	1	В	1	20	1/2	12	12		540	REC: WORK STATION	R	1
17	R	REC: DATA RACK	360		12	12	1/2	20	1	A	1	20	1/2	12	12		540	REC: FINANCE	R	1
19		SPARE	0				1/2	20	1	В	1	20	1/2	12	12		540	REC: FINANCE	R	a
21		SPARE	0				1/2	20	1	A	1	20	1/2	12	12		540	REC: DIRECTOR	R	2
23		SPARE	0				1/2	20	1	В	1	20	1/2	12	12		540	REC: DIRECTOR	R	2
25		SPARE	0				1/2	20	1	A	1	20	1/2				0	SPARE		la
27		SPARE	0				1/2	20	1	В	1	20	1/2				0	SPARE	<u> </u>	2
29		SPARE	0				1/2	20	1	A	1	20	1/2				0	SPARE	1	3
31		SPARE	0				1/2	20	1	В	1	20	1/2				0	SPARE	1	3
33		SPARE	0				1/2	20	1	A	1	20	1/2				0	SPARE	<b> </b>	3
35		SPARE	0				1/2	20	1	1 -	1	20	1/2				0	SPARE	┣—	3
37		-								<b>A</b>									╟—	3
39										B									/──	4
41		<u> </u>								A								ED FROM PANEL '	L	4

ALL CIRCUIT CONDUCTORS SIZED FOR COPPER

		PANEL ' L2 '													F	AULT CURRENT =	12,1			
AMP	MAIN BREAKER 120 / 240 VOLTS													1-PHASE, 3-WIR						
er size		ALUMINUM: 2" C, 3 250 PH, 44 GRD													FLUSH MOUNTE					
	LTG	REC	MOTOR	DATA	EXTG	HEAT				MISC	PH-A	PH-B		TOTAL	AMPS	WITH SPARE		8		
ED VA	825	4590	<b>943</b> 8	0	0	10000				0	12628	1207419		21499129	1 <b>9</b> 7	<b>131066</b> VA		1		
Y FACTOR	125%	100%	100%	100%	65%	100%				100%										
IED VA	1035	4 <b>5%</b> 8	<b>948</b> 8	0	0	10000				0	1538783	12077		25659	199	<b>B3273</b> VA		1:		
LOAD		HP	PHW	GND		BKR		PH		BKR		GND	PHW	HP	VA	LOAD	Т	P		
SARWING BEHZABERT PMP	5040	3	160	10	3/2	85	2	A	2	25	1/2	18	18	1.82	25688		м	2		
	5040							B							2588		м			
REIDIRC PUMP	960	1	12	12	1/2	20	8	A	г	20	1/2	12	12	1/12	568	FOELETURUNN	м	e		
REFRIGERATOR	1976	1/2	12	12	1/2	20	1	B							568		м	E		
REECR COUNTIONTR	880		12	12	1/2	20	1	A	1	20	1/2	12	12	1/2	1696	FUEL DISPENDISR	м	1		
REGERATION F CNTR	580		12	12	1/2	20	1	B	1	20	1/2	12	12		25	DISPENSER LIGHT	м	1		
REC: CONF CNTR	180		12	12	1/2	20	1	A	г	20	1/2	12	12	1/2	588	FUEL TURBIN	м	1		
REC: CONF CNTR	180		12	12	1/2	20	1	B							588		м	1		
REC: CONF. A∨	360		12	12	1/2	20	1	A	1	20	1/2	12	12	1/4	696	FUEL DISPENSER	м	1		
REC: E. CONF	540		12	12	1/2	20	1	B	1	20	1/2	12	12		100	DISPENSER LIGHT	L	2		
REC: W. CONF	540		12	12	1/2	20	1	A	1	20	1/2	12	12		800	PIER LIGHTS	L	2		
REC: CONF FLOOR	720		12	12	1/2	20	1	Ð	1	20	1/2	12	12		540	CAMERAS	R	2		
SPARE	o				1/2	20	1	A	1	20	1/2				O	SPARE		2		
SPARE	0				1/2	20	1	B	1	20	1/2				0	SPARE		2		
SPARE	0				1/2	20	1	A	1	20	1/2				0	SPARE		з		
SPARE	0				1/2	20	1	B	1	20	1/2				0	SPARE		3		
SPARE	0				1/2	20	1	A	1	20	1/2				0	SPARE		3		
SPARE	0				1/2	20	1	8	1	20	1/2				0	SPARE		3		
								A										3		
								B										4		
								A										4		