PIKNIK AMPHITHEATER

STEAMBOAT SPRINGS, COLORADO

GENERAL NOTES:

MISCELLANEOUS:

THESE PLANS WERE DESIGNED FOR THE FINISHED PRODUCT. SHORING, STAGING, AND ORDER OF OPERATION ARE OUTSIDE THE SCOPE OF OUR SERVICES. THEREFORE, CONTRACTOR IS RESPONSIBLE FOR STABILITY OF THE STRUCTURE AND ITS COMPONENTS DURING CONSTRUCTION.

SHOP DRAWING AND SUBMITTALS, WHERE REQUIRED, WILL DEMONSTRATE HOW THE CONTRACTOR PROPOSED TO CONFORM TO THE INFORMATION GIVEN AND THE DESIGN CONCEPT EXPRESSED IN THE CONTRACTOR DOCUMENTS FOR THOSE PORTIONS OF WORK. WHEN FORWARDING SUBMITTALS TO THE ENGINEER, THE CONTRACTOR REPRESENTS THAT THEY:

- A. REVIEWED AND APPROVED THE SUBMITTAL
- B. DETERMINED AND VERIFIED MATERIALS, FIELD MEASUREMENTS, AND FIELD CONSTRUCTION
- C. CHECKED AND COORDINATED THE INFORMATION IN THE SUBMITTAL WITH THE CONTRACT

CONTRACTOR SHALL VERIFY ALL DIMENSIONS WITH ARCHITECTURAL AND METAL BUILDING

PROJECT NO:

NORTHWEST COLORADO CONSULTANTS, INC. MARCH 13, 2020

FOUNDATION SOILS			
FOOTINGS - BEARING CONDITIONS	DESCRIPTION		
MAXIMUM ALLOWABLE PRESSURE	3000 psf		
MINIMUM DEAD LOAD REQUIRED	NONE		
DESIGN EARTH PRESSURE	55 pcf (EFP)		
FROST DEPTH	48 INCHES		

- WE REQUIRE AN OPEN-HOLE OBSERVATION BE PERFORMED BY A REPRESENTATIVE OF A QUALIFIED GEOTECHNICAL ENGINEER. OPEN-HOLE OBSERVATIONS ARE TO VERIFY THAT THE SOIL CONDITIONS ARE CONSISTENT WITH THOSE DESCRIBED IN THE REFERENCED SOILS
- SOILS CONDITIONS INCONSISTENT WITH THE SOILS REPORT MAY REQUIRE ADDITIONAL EVALUATION OR A FOUNDATION REDESIGN, AND SHOULD BE BROUGHT TO THE ATTENTION OF
- ALL FOOTINGS, PADS, OR PIERS (EXCEPT INTERIOR BASEMENT PADS) SHALL BE A MINIMUM OF 30" (IN) BELOW GRADE, OR PER LOCAL CODE, AND SHOULD BEAR UPON UNDISTURBED NATIVE SOILS OR STRUCTURAL FILL ACCEPTABLE TO THE GEOTECHNICAL ENGINEER.
- ALL OTHER RECOMMENDATIONS CONTAINED IN THE SOILS REPORT PERTAINING TO BACKFILL, DRAINAGE, ETC. SHOULD BE INCORPORATED INTO THE DESIGN OF THIS PROJECT.
- WE RECOMMEND FOUNDATION WALLS NOT BE BACKFILLED FOR A MINIMUM OF EIGHT DAYS AFTER PLACEMENT OF CONCRETE. PRIOR TO BACKFILLING, WE RECOMMEND DAMP-PROOFING FOR ALL FOUNDATION WALLS THAT RETAIN EARTH AND ENCLOSE INTERIOR SPACES AS
- ALL FLOOR SYSTEMS SHOULD BE IN PLACE BEFORE BACKFILLING AGAINST ANY FOUNDATION WALL, OR AS AN ALTERNATIVE ADEQUATELY BRACE THE FOUNDATION.
- BACKFILL PER THE SOILS REPORT.

CONCRETE:

			
CONCR	ETE MATERIAL DESIGN	N PROPERTIES	
USE	STRENGTH (f 'c)	MAXIMUM W/C RATIO	AIR ENTRAINMENT
FOUNDATIONS	4,000	0.45	5-8%
INTERIOR FLATWORK (SEE NOTE BELOW)	3,500	N/A	NONE
EXTERIOR FLATWORK	4,500	0.45	5-8%
REI	NFORCING DESIGN PR	OPERTIES	
SIZE	GRADE	FINISH	
#3 - #11	60	BLACK	
WWF	75	BLACK	

- READY-MIXED CONCRETE SHALL COMPLY WITH ASTM C94 STANDARD SPECIFICATION FOR READY-MIXED CONCRETE.
- CEMENT TYPE II, ASTM C150.
- AGGREGATES: PER ASTM C33
- ALL CONCRETE SHALL BE DESIGNED, MIXED AND PLACED IN ACCORDANCE WITH ACI 301 SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS.
- COLD WEATHER CONCRETING REQUIREMENTS PER ACI 306R: "COLD WEATHER CONCRETING" SHALL BE STRICTLY ADHERED TO WHEN THE AMBIENT TEMPERATURE IS 40°F OR BELOW.
- HOT WEATHER CONCRETE PRODUCTION, DELIVERY, PLACING, CURING, TESTING AND INSPECTION SHALL BE IN ACCORDANCE WITH ACI 305R - HOT WEATHER
- INTERIOR SLAB CONCRETE SHALL HAVE A MAXIMUM SHRINKAGE LIMIT OF 0.04 PERCENT AS DETERMINED BY ASTM C157
- CONTRACTOR SHALL PROVIDE MIX DESIGN SUBMITTALS FOR APPROVAL 30 DAYS PRIOR TO USE
- IF POWER TROWEL IS INTENDED FOR USE ON EXTERIOR CONCRETE FLATWORK, CONTACT CTL THOMPSON FOR MIX DESIGN UPDATE.

ANCHOR BOLTS:

ANCHORS			
DIAMETER	GRADE	EMBEDMENT	PROJECTION
1/2"	A307	8 INCHES	11/2" MIN.
5/8"	F1554 GR. 36	8 INCHES	11/2" MIN.
3/4"	F1554 GR. 36	10 INCHES	11/2" MIN.
1"	F1554 GR. 36	18 INCHES	2" MIN.

 FOUNDATION ANCHOR BOLTS SHALL CONFORM TO ASTM A325 AND BE 1/2" (IN) DIAMETER BY 10" (IN) LONG SPACED AT 4'-0" MAXIMUM AND 12" (IN) FROM CORNERS AND SPLICES, U.N.O. USE ENGINEERED SILL PLATE MATERIAL.

	STEEL DESIGN	I PROPERTIES	
TYPE	GRADE	YIELD	FINISH
PLATE/ANGLE	A36	36,000	PRIMER COAT
HSS	A500 GR B	46,000	PRIMER COAT
BEAM/COLUMN (W-SHAPE)	A992	50,000	PRIMER COAT
CHANNEL	A36	36,000	PRIMER COAT
ROUND COLUMNS	A500	42,000	PRIMER COAT
	CONNEC	CTIONS	
WELDS	GRADE 70		
BOLTS	A325, UNLESS	A325, UNLESS NOTED OTHERWISE	
GROUT BED	5000 PSI, NON	5000 PSI, NON-SHRINK	

- ALL WELDS SHALL BE PRE-QUALIFIED WITH ULTIMATE STRENGTH OF 70 KSI, AS DEFINED BY ANSI/AWX D1.1, ORD1.3, LATEST EDITION.
- ALL MISCELLANEOUS WELDS (FIELD OR SHOP) SHALL BE MINIMUM SIZE FILLET ALL AROUND IN ACCORDANCE WITH AISC. WELDING OF CONTINUOUS MEMBERS SHALL BE A MINIMUM OF 2 INCHES OF 3/16 INCH FILLET STITCH WELDS AT 12 INCHES O.C. STAGGERED EACH SIDE, UNLESS
- COLUMN BASE PLATES, CAP PLATES AND STIFFENER PLATES SHALL BE WELDED ALL AROUND. CONNECTIONS NOT DETAILED ON THE DRAWINGS SHALL BE SELECTED FROM TABLE II PART 4 OF THE MANUAL OF STEEL CONSTRUCTION OF THE AISC. TABLE III IN PART 4 MAY BE USED IN COMBINATION WITH TABLE II. ELECTRODES FOR ALL FIELD AND SHOP WELDING SHALL BE
- ALL GROUT USED UNDER STEEL COLUMN BASE PLATES SHALL BE OF NON-SHRINKABLE TYPE AND SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 5000 PSI.
- THE STEEL SUPPLIER SHALL PROVIDE SHOP DRAWINGS TO GENERAL CONTRACTOR AND TO THE ENGINEER TO VERIFY DESIGN INTENT.

- ALL FRAMING SHALL BE IN ACCORDANCE WITH THE PROVISIONS OF 2018 IBC. ALL CONNECTIONS OR MEMBERS NOT SHOWN ARE PER CODE OR THE GENERAL CONTRACTOR/OWNER. ALL MANUFACTURED WOOD PRODUCTS SHALL BE INSTALLED PER THE MANUFACTURERS SPECIFICATIONS. REFER TO THE CODE FOR ADDITIONAL REQUIREMENTS.
- ALL DIMENSIONAL LUMBER SHALL BE HEM FIR #2 OR BETTER UNLESS NOTED ON THE PLAN. ALL LAMINATED VENEER LUMBER (LVL) IS 13/4" THICK x DEPTH SHOWN ON PLANS AND SHALL HAVE AN ALLOWABLE FLEXURAL STRESS FB = 2600 PSI AND MODULUS OF ELASTICITY OF E = 1.9x10E6 PSI OR BETTER. ALL LAMINATED STRAND LUMBER (LSL) IS 13/4" THICK BY DEPTH SHOWN ON PLANS AND SHALL HAVE AN ALLOWABLE FLEXURAL STRESS FB = 2325 PSI AND MODULUS OF ELASTICITY OF E = 1.55x10E6 PSI OR BETTER. GLUED LAMINATED LUMBER SHALL HAVE AN ALLOWABLE FLEXURAL STRESS FB = 2400 PSI AND MODULUS OF ELASTICITY OF E = 1.8x10E6 PSI OR BETTER.
- ROOF SHEATHING SHALL BE 15/32" ($\frac{32}{16}$ SPAN RATING) O.S.B. OR BETTER WITH 8D @ 6" ON-CENTER EDGES, 12" ON-CENTER FIELD, OVER ENGINEERED TRUSSES BY OTHERS. FOR TRUSS ATTACHMENT AND BRACING REFER TO THE TRUSS MANUFACTURERS
- DIMENSIONAL LUMBER RAFTERS ARE HEM-FIR #2 UNLESS NOTED OTHERWISE.
- ALL WOOD IN CONTACT WITH CONCRETE SHALL BE PRESSURE TREATED OR REDWOOD. PROVIDE SOLID BLOCKING TO TRANSMIT ALL POINT LOADS CONTINUOUS TO THE FOUNDATION AS NECESSARY.
- IF THERE ARE 20 PERCENT OF OVERDRIVEN NAILS IN SHEATHING, THEN SHEATHING MUST BE RENAILED WITH PROPER GUN PRESSURE NOT TO BREAK SURFACE OF SHEATHING.

LIGHT GAUGE STEEL FRAMING NOTES

 ALL FRAMING SHALL BE IN ACCORDANCE WITH THE PROVISIONS OF GOVERNING CODE. ALL CONNECTIONS OR MEMBERS NOT SHOWN ARE PER CODE OR THE GENERAL

- REFER TO TABLES ON SHEET S-530 FOR STUD AND TRACK SIZING AND MINIMUM GAGE. CLIP ANGLES AND STRAPS SHALL BE OF SAME GAUGE AS STUD MATERIAL, UNLESS NOTED
- SIDING AND ROOFING SHALL BE PER THE ARCHITECT. CONNECT PER MANUFACTURERS SPECIFICATIONS.

- SCREWS TO BE SELF DRILLING, TAPPING SCREWS. SCREWS MUST MEET THE STANDARD
- CONNECT STUDS TO TRACKS WITH (2) #8 SCREWS (1 PER FLANGE). CONNECT JOISTS TO RIM TRACK WITH (2) #8 SCREWS (1 PER FLANGE).

BOX BEAMS:

• ALL BOX BEAMS SHALL CONSIST OF TWO C-SECTIONS. INSULATION SHALL BE PER THE

STEEL JOISTS AND DECK:

- INSTALL JOISTS IN ACCORDANCE WITH SECTION 6 OF THE STEEL JOIST INSTITUTE'S STANDARD SPECIFICATION SJI 200.
- UNLESS NOTED OTHERWISE, JOIST MANUFACTURER IS RESPONSIBLE FOR DETERMINING REQUIRED NUMBER AND LOCATION OF BRIDGING ROWS.

STEEL DECK SHALL CONFORM TO ASTM A653 SPECIFICATIONS AND SHALL BE GALVANIZED ON THE TOP SURFACE AND PAINTED ON THE BOTTOM SURFACE.

- STEEL DECK FASTENERS:
- 1.DECK TO JOIST / SIDE SUPPORT CONNECTIONS: SIMPSON XM #12 X1 1/4" SCREWS OR #12
- 2.PANEL TO PANEL SIDELAP CONNECTIONS: #10 TEK SCREWS
- DECK SUPPLIER SHALL BE A MEMBER OF THE STEEL DECK INSTITUTE
- STEEL DECK SIZE SHALL BE PER PLAN.
- INSTALL DECK PER SECTION 3.3 OF THE STEEL DECK INSTITUTE SHORT FORM
- AREAS REQUIRING THE DECK TO BE LAID IN SINGLE SPANS SHALL REQUIRE APPROVAL BY
- PROVIDE STEEL EDGE ANGLE AT ALL EDGES PER TYPICAL DETAILS.
- PROVIDE 4x4x¼" STEEL ANGLE AT ALL RTU LOCATIONS INDICATED ON PLAN, U.N.O. REFER TO
- PROVIDE 3x3x1/4" SUPPORT ANGLES FOR ALL DECK PENETRATIONS LARGER THAN 6" Ø .

DESIGN LOADING AND

DESIGN CRITERIA			
Referenced Design Codes:	2018 IBC, ASCE 7-16		
	ACI 318-14, 2018 NDS		
		Risk Category	
Roof Loads:			
Roof Dead Load*	25	psf	
Roof Live Load	20	psf	
Ground Snow Load	92	psf	
Flat Roof Snow Load	77.28	psf	
Snow Exposure Factor	1.0		
Snow Importance Factor	1.0		
Snow Thermal Factor	1.2		
* Note: A solar panel system with			
dead load of 6.75psf has been			
included in the Roof Dead Load			
Stage Loads:			
Stage Dead Load	15	psf	
Stage Live Load (Uniform)	100	psf	
Equipment Loads:			
The structure has not been designed	for any	additoinal	
equipment laods at this time.	a for ally	additomal	
Wind Loads:			
Design Wind Speed	115	mph	
Wind Spood Type	Vult	-	
Wind Speed Type			
Wind Exposure	С		
	C 0.18	(Enclosed)	
Wind Exposure	_	(Enclosed)	
Wind Exposure	_	(Enclosed)	
Wind Exposure Internal Pressure Coefficient	_	(Enclosed)	
Wind Exposure Internal Pressure Coefficient Seismic Loads:	0.18	(Enclosed) , 0.333	
Wind Exposure Internal Pressure Coefficient Seismic Loads: Acceleration Parameters Short Period (g) (S _S & S _{DS})	0.18	, 0.333	
Wind Exposure Internal Pressure Coefficient Seismic Loads: Acceleration Parameters Short Period (g) (S _S & S _{DS}) One Second (g) (S ₁ & S _{D1})	0.18	,	
Wind Exposure Internal Pressure Coefficient Seismic Loads: Acceleration Parameters Short Period (g) (S _S & S _{DS}) One Second (g) (S ₁ & S _{D1}) Seismic Importance Factor	0.18 0.585 0.102 1	, 0.333	
Wind Exposure Internal Pressure Coefficient Seismic Loads: Acceleration Parameters Short Period (g) (S _s & S _{Ds}) One Second (g) (S ₁ & S _{D1})	0.18 0.585 0.102	, 0.333	

Basic Resistance System

Design Base Shear

Response Coefficients

Response Mod. Coeff.

Analysis Procedure

Wood Frame

Equivalent Lateral

17.82 K

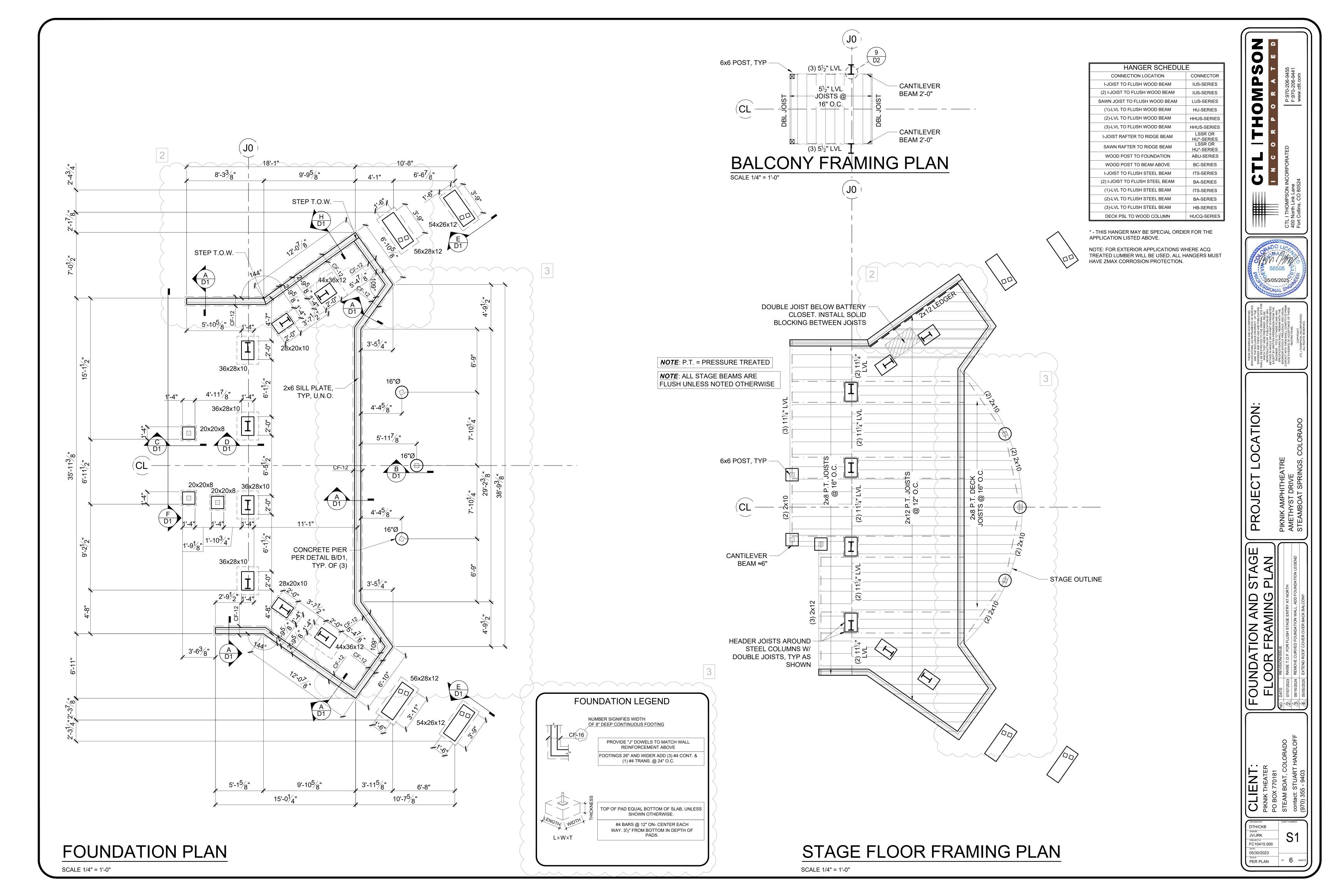
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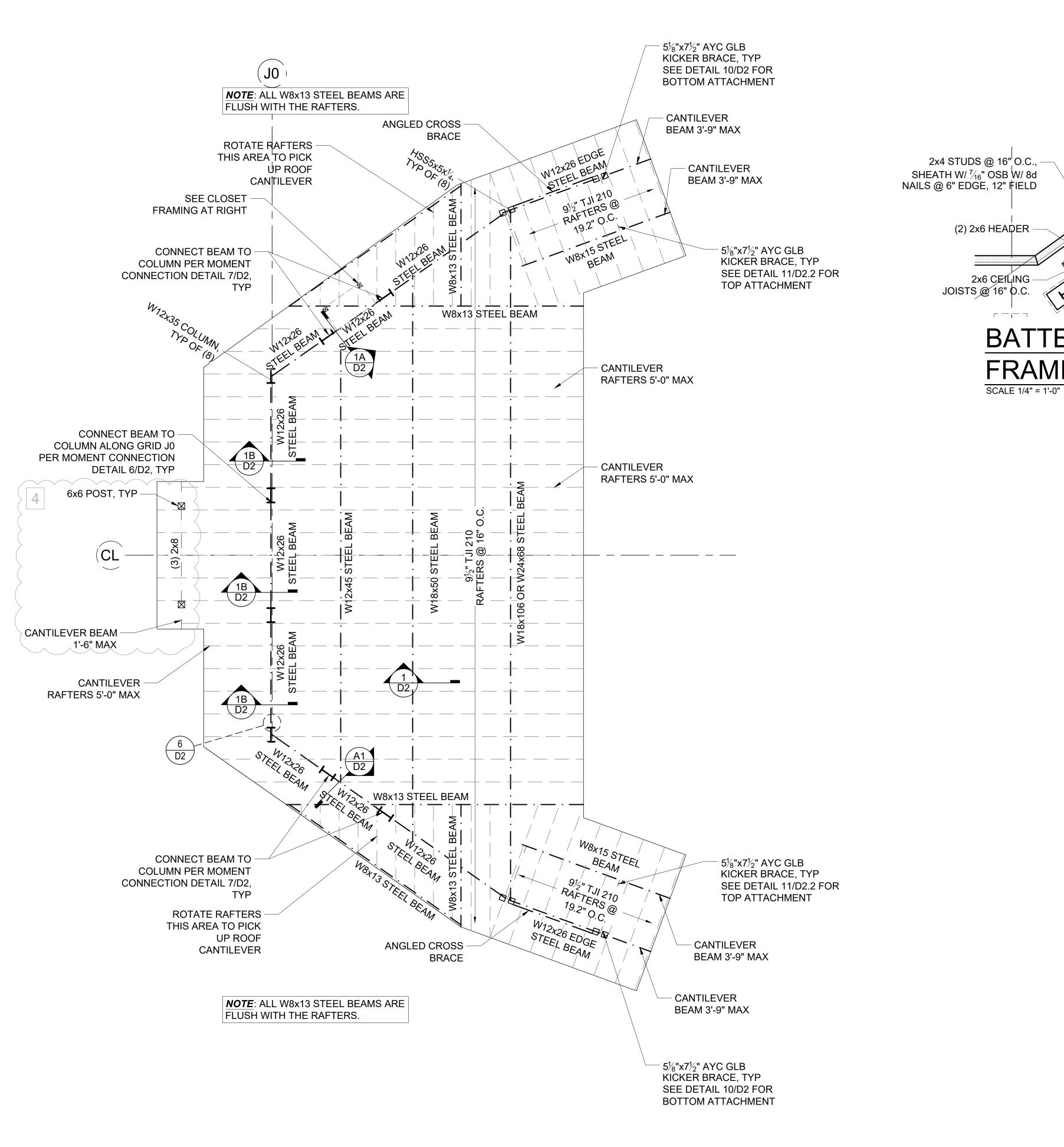


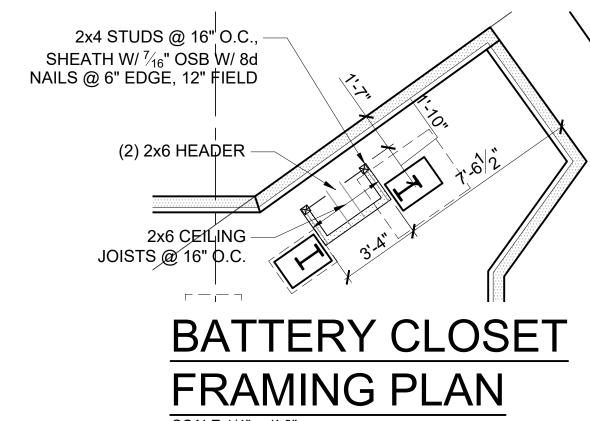


DTH/CKB JV/JRK FC10415.000 05/30/2023

PER PLAN







ROOF FRAMING PLAN

SCALE 1/4" = 1'-0"

NOTE: SOLAR PANEL ATTACHMENT SHALL BE BY OTHERS. THESE PLANS ARE FOR THE ROOF FRAMING UP TO THE ROOF SHEATHING

OCATION: PROJECT PLAN **FRAMING** ROOF DTH/CKB JV/JRK PROJECT# FC10415.000 05/30/2023 SCALE: PER PLAN

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OMPS

