

		REVISIONS			
SYMB	REV	DESCRIPTION	DATE	CHANGE BY	APPROVAL
A	A	SHEET 1: GENERAL NOTE 5.D.iii. CHANGED TO GRADE C	5/6/15	/S/ RG SMITH	/S/ B MEACHAM
		GENERAL NOTE 5.E.iii CHANGED TO PATTERN B			

GENERAL NOTES

- GENERAL:**
 - THIS DRAWING PROVIDES DETAILS AND REQUIREMENTS FOR THE CONSTRUCTION OF (2) TOWERS, (1) BRIDGE AND MAKE-UP PIECES.
 - WHERE STANDARDS ARE NOTED IN THIS DRAWING, THE LATEST REVISION SHALL BE IN EFFECT UNLESS ADHERENCE TO A DEFINITE REVISION IS NECESSARY AND IS SPECIFIED.
 - WHERE REFERRED TO IN THIS DRAWING, THE ENGINEER OF RECORD (EOR) IS THE DESIGNATED PSNS & IMF CODE 2370.24 ENGINEERING POINT OF CONTACT.
- GENERAL ASSEMBLY, SHIPPING AND HANDLING INSTRUCTIONS:**
 - TOWERS, BRIDGE AND MAKE-UP PIECES SHALL BE FULLY ERRECTED AND ASSEMBLED TO THE EXTENT OF THIS DRAWING TO ENSURE PROPER FIT-UP BEFORE SHIPPING TO PSNS & IMF. FOR FIT-UP, THE BRIDGE SHALL NOT BE PERMANENTLY ATTACHED TO THE TOWERS WITH HARDWARE OR WELDING.
 - THE CONTRACTOR'S SURFACE(S) THAT IS USED FOR ERECTION, ASSEMBLY AND FIT-UP SHALL BE FLAT WITHIN ±1/4" OVER THE ENTIRE SURFACE AND ±1/4" OVER ANY 10' SPAN OF THAT SURFACE.
 - THE TOWERS AND BRIDGE ARE DESIGNED TO BE LIFTED INDIVIDUALLY. SEE SHEET 20 FOR LIFT SKETCHES. **DO NOT** LIFT ASSEMBLED STAIRS AND BRIDGE TOGETHER.
 - THE TOWERS AND BRIDGE SHALL BE SHIPPED INDIVIDUALLY WITH ALL ROOF/WALL PANELS ASSEMBLED AND SEALED. THE MAKE-UP PIECES (INCLUDING TRIM, DECK PLATE AND EXCESS INTERIOR WALL PANEL SYSTEM COMPONENTS) SHALL BE SHIPPED UNASSEMBLED. PSNS & IMF WILL ERECT THE COMPLETE ASSEMBLY ON SITE.
 - IF MAKE-UP PIECES ARE SHIPPED INSIDE OF THE TOWERS OR BRIDGE, THEY MUST BE PADDED AND SECURED IN A WAY THAT WILL PREVENT DAMAGE DURING SHIPMENT.
 - THE TOWERS AND BRIDGE SHALL BE INDIVIDUALLY COVERED WITH AN 8 mil (MIN) HEAT SHRINK CONSTRUCTION WRAP FOR SHIPMENT TO PSNS & IMF. THE CONSTRUCTION WRAP SHALL PROVIDE COMPLETE WEATHER PROTECTION TO THE INTERIOR SPACES OF THE TOWERS AND BRIDGE. DO NOT COVER LIFT POINTS WITH THE CONSTRUCTION WRAP.
 - SHIP TOWERS UPRIGHT SUPPORTED ON THEIR BASE PLATES. DO NOT SHIP TOWERS LAYING ON THEIR FRONT, REAR OR SIDES. SHIP BRIDGE UPRIGHT SUPPORTED ON ITS BRIDGE BEAMS. DO NOT SHIP BRIDGE LAYING ON ITS SIDES.
 - SHIPMENT OF TOWERS AND BRIDGE MAY REQUIRE THE USE OF A BARGE.
- DESIGN:** DESIGN LOADS ARE PER ASCE 7-10:
 - ROOF LIVE LOAD: 25 psf
 - ROOF UPLIFT LOAD: 44 psf
 - BASIC WIND SPEED: V=115 mph
- DIMENSIONAL REQUIREMENTS:**
 - DIMENSIONS UP TO 72" ARE SHOWN IN INCHES AND COMMON FRACTIONS. DIMENSIONS INCLUDING AND OVER 72" ARE SHOWN IN FEET – INCHES AND COMMON FRACTIONS.
 - DIMENSIONS LOCATING HSS MEMBERS ARE TO CENTERLINE OF TUBE UNLESS NOTED OTHERWISE. MEMBERS WILL BE LOCATED RELATIVE TO THE OVERALL STRUCTURE BY THE GRID LINE SYSTEM SHOWN ON SHEET 4. HSS COLUMNS AND PERIMETER BEAMS ARE CENTERED ON GRID LINES.
 - DIMENSIONS SHOWN IN PARENTHESES ARE PROVIDED FOR INFORMATION OR GUIDANCE. ACTUAL DIMENSIONS SHALL BE BASED ON THE FIELD FIT OF THE PART BEING ASSEMBLED.
 - MANUFACTURING TOLERANCES SHALL BE AS FOLLOWS, UNLESS NOTED OTHERWISE:
 - ± .030" FOR ALL MACHINED SURFACES
 - ± 1/8" FOR ALL DIMENSIONS FROM 0" TO 12"
 - ± 1/4" FOR ALL DIMENSIONS GREATER THAN 12"
 - ± 1° FOR ALL ANGLES
 - EXTERIOR PLANE OF STEEL FRAMING FOR MOUNTING ROOF/WALL PANELS TOLERANCES ARE AS FOLLOWS:
 - ± 1/8" IN 5 ft IN ANY DIRECTION ALONG PLANE OF FRAMING
 - ± 1/4" CUMULATIVE IN 20 ft IN ANY DIRECTION ALONG PLANE OF FRAMING
 - PLANE OF STEEL FRAMING SUPPORTING DECK PLATE:
 - ± 1/4" IN 10 ft IN ANY DIRECTION ALONG PLANE OF FRAMING
 - ± 1/4" OVER THE ENTIRE DECK
- MATERIAL REQUIREMENTS:**
 - NO SUBSTITUTIONS FOR MATERIAL OR THEIR SPECIFICATIONS IS ALLOWED WITHOUT WRITTEN AUTHORIZATION FROM THE PSNS & IMF EOR.
 - IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE MATERIAL QUANTITIES.
 - ALL MATERIAL SHALL BE MERCURY-FREE.
 - CARBON STEEL:** ALL FERROUS MATERIALS USED PER THIS DRAWING ARE CARBON STEEL UNLESS NOTED OTHERWISE. ALL CARBON STEEL MATERIAL PER THIS DRAWING SHALL MEET THE FOLLOWING SPECIFICATIONS:
 - ANGLE: ASTM A36
 - DOM TUBING: ASTM A513 TYPE 5, GRADE 1020/1026
 - HSS TUBING (RECT. AND SQUARE): ASTM A500 GRADE C
 - PLATE: ASTM A36
 - PLATE (1/2" ONLY, UNO): ASTM A572 GR. 50
 - SHEET: ASTM A1011
 - W-SHAPES: ASTM A992
 - WT-SHAPES: ASTM A36 OR ASTM A992
 - STAINLESS STEEL:** THE USE OF STAINLESS STEEL MATERIALS PER THIS DRAWING ARE DESIGNATED **SST**. EXPOSED STAINLESS STEEL SURFACES SHALL HAVE A NO. 4 SURFACE FINISH OR BETTER (NO. 6, 7 OR 8) CONFORMING TO ASTM A480 UPON DELIVERY TO PSNS & IMF. EXPOSED SURFACES INCLUDE HANDRAILS, MIDRAILS, STANCHIONS, GUARDRAILS, TOEBOARDS AND STAIR TREAD/RISER/NOSING TOP SURFACES AND SHALL BE UNPAINTED. ALL STAINLESS STEEL MATERIAL SHALL BE TYPE 304 OR 304L AND MEET THE FOLLOWING SPECIFICATIONS:
 - ANGLE: ASTM A276
 - PIPE: ASTM A312
 - FLOOR (DIAMOND) PLATE: ASTM A793, FLAT BACK, PATTERN B
 - SHEET: ASTM A240
 - COLD-FORMED STUD WALLS:** COLD-FORMED STUDS AND TRACK MATERIAL SHALL CONFORM TO ASTM A1003 AND HAVE A G40 COATING PER ASTM A653.
 - STUDS: DEPTH OF 2 1/2", FLANGE WIDTH OF 2" AND MATERIAL THICKNESS OF 35 mil
 - TRACK: FLANGE WIDTH OF 1 1/2", DEPTH AND THICKNESS TO SUIT STUDS
 - FASTENERS: STAINLESS STEEL MATERIAL, TYPE AND SIZE PER STUD WALL MANUFACTURER
 - ARCHITECTURAL:**
 - EXTERIOR SEALANT: PER ROOF/WALL PANEL MANUFACTURER
 - INTERIOR SEALANT: SILICONE ASTM C920 TYPE S, GRADE NS, CLASS 50, USE NT
 - FOAMED-IN-PLACE INSULATION: POLYURETHANE FOAM THAT IS A 2-PART SYSTEM COMBINING ISOCYANATE AND POLYOL; MUST BE NON-COMBUSTIBLE AND HAVE A FLAME SPREAD INDEX OF 0-25 AND SMOKE DEVELOPED INDEX OF 0-450 WHEN TESTED IN ACCORDANCE WITH ASTM E84 OR ANSI/UL 723.
 - EXTERIOR ROOF/WALL PANEL SYSTEM: PANELS, TRIM, SEALANT AND HARDWARE PER PANEL MANUFACTURER'S RECOMMENDED SPECIFICATIONS, SEE PARAGRAPH 7.

- INTERIOR WALL PANEL SYSTEM: PANELS, BATTEN ASSEMBLIES, SEALANT AND HARDWARE PER PANEL MANUFACTURER'S RECOMMENDED SPECIFICATIONS, SEE PARAGRAPH 7.
- FABRICATION REQUIREMENTS:**
 - UNLESS OTHERWISE SPECIFIED, FABRICATION AND ERECTION SHALL BE IN ACCORDANCE WITH THE AISC "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES", LATEST EDITION.
 - TYPICAL CONSTRUCTION DETAILS AND WELDS ARE TO BE USED FOR SIMILAR ITEMS.
 - BREAK ALL SHARP EDGES TO A 1/32" CHAMFER (MIN) AND REMOVE ALL WELD SPLATTER FROM EXPOSED SURFACES.
 - CORNERS MAY BE SNIPED TO CLEAR FILLETS OF PREVIOUSLY DEPOSITED WELDS AND EXISTING MATERIAL RADIUS. CLOSE THESE CHAMFERS BY WELDING WHERE POSSIBLE.
 - FOR DIAMOND PLATE STAIR TREAD/NOSING/RISER, RAISED DIAMOND PATTERN IS ON THE TOP SIDE (TREAD SURFACE) OF THE PLATE. GRIND OFF DIAMOND PATTERN AT LAPS BETWEEN NOSING AND RISERS FOR A CONTINUOUS MATING SURFACE.
 - CAP AND SEAL WELD ALL OPEN TUBE ENDS PER DETAIL 4 ON SHEET 14.
 - WELDING:
 - WELDING SHALL COMPLY WITH WELDING PROCEDURE AND PERFORMANCE REQUIREMENTS OF AWS D1.1 (FOR STEEL) AND AWS D1.6 (FOR STAINLESS STEEL).
 - WELD SYMBOLS SHOWN ARE IN ACCORDANCE WITH AWS A2.4.
 - VISUALLY INSPECT ALL WELDS IN ACCORDANCE WITH AWS D1.1 (FOR STEEL) AND AWS D1.6 (FOR STAINLESS STEEL) WITH THE FOLLOWING EXCEPTION: NO UNDERSIZED WELDS ARE ALLOWED AND NO POROSITY GREATER THAN 1/8" IS ALLOWED.
 - WELD SIZES SHOWN ARE THE MINIMUM ACCEPTABLE SIZES. THE MINIMUM BEVEL ANGLE ON ALL BEVEL WELDS SHALL BE 45° PER SINGLE BEVEL.
 - WELDS SHALL BE SEQUENCED TO MINIMIZE DISTORTION. WHERE DISTORTION DOES OCCUR, STRAIGHTENING PER AWS D1.1 (FOR STEEL) AND AWS D1.6 (FOR STAINLESS STEEL) SHALL BE PERFORMED TO ACHIEVE TOLERANCES OF THE DRAWING.
 - WELDS MAY BE GROUND FLAT FOR FIT-UP OF OTHER PIECES.
 - HSS-TO-HSS CONNECTIONS MUST BE FULLY WELDED. **DO NOT** USE BACKING PLATES WITH THESE CONNECTIONS.
 - ARCHITECTURAL REQUIREMENTS:**
 - ROOF/WALL PANELS, INSULATION AND TRIM ARE CONSIDERED ARCHITECTURAL FEATURES. THE ARCHITECTURAL FEATURES SHALL PROVIDE A WEATHERTIGHT AND INSULATING BOUNDARY TO THE EXTERIOR ELEMENTS.
 - EXTERIOR ROOF/WALL PANEL DESCRIPTION:
 - BRAND NAME OR EQUAL** – AN APPROVED MANUFACTURER IS KINGSPAN
 - BASIS OF DESIGN FOR ROOF PANELS IS KINGSPAN KINGZIP SERIES
 - BASIS OF DESIGN FOR WALL PANELS IS KINGSPAN KS42SL SHADOWLINE SERIES
 - PANEL THICKNESS: 2"
 - PANEL WIDTH: 42"
 - PANEL LENGTH: PER PANEL MANUFACTURER
 - PANEL COLOR: VERIFY WITH EOR BEFORE PURCHASE
 - ROOF PANEL JOINTS SHALL CONSIST OF A 2" VERTICAL SIDELAP, MECHANICALLY SEAMED, WITH FASTENERS AND THERMALLY BROKEN ATTACHMENT CLIP COMPLETELY CONCEALED WITHIN THE SIDE JOINT.
 - WALL PANEL JOINTS SHALL BE A DOUBLE TONGUE AND GROOVE INTERLOCKING RAINSCREEN JOINT WITH FASTENERS AND THERMALLY BROKEN ATTACHMENT CLIP COMPLETELY CONCEALED WITHIN THE SIDE JOINT.
 - EXTERIOR FACE: MATERIAL SHALL BE AZ50/GALVALUME/ZINCALUME PER ASTM A792, 24 GAUGE THICKNESS (MIN), 33 ksi YIELD STRENGTH (MIN), MANUFACTURER'S STANDARD PROFILE, STUCCO EMBOSSED TEXTURE, FACTORY APPLIED EXTERIOR FINISH WARRANTED FOR COASTAL ENVIRONMENT, COLOR TO BE CHOSEN BY PSNS & IMF EOR ONCE WALL PANEL SYSTEM IS SELECTED.
 - INTERIOR FACE: MATERIAL SHALL BE AZ50/GALVALUME/ZINCALUME PER ASTM A792, 24 GAUGE THICKNESS (MIN), 33 ksi YIELD STRENGTH (MIN), MANUFACTURER'S STANDARD PROFILE, STUCCO EMBOSSED TEXTURE, MANUFACTURER'S STANDARD FACTORY APPLIED INTERIOR FINISH WITH A TOTAL MINIMUM DRY FILM THICKNESS OF 1.0 mil INCLUDING PRIMER, COLOR SHALL BE WHITE.
 - INSULATING CORE: MINIMUM 88% CLOSED CELL STRUCTURE URETHANE MODIFIED (POLY)ISOCYANURATE CORE, 2.3 TO 2.6 pcf DENSITY, 15 psi SHEAR STRENGTH (MIN), 29 psi TENSILE STRENGTH (MIN), 14-23 psi COMPRESSIVE STRENGTH (MIN), SURFACE BURNING CHARACTERISTICS WHEN TESTED IN ACCORDANCE WITH ASTM E84 OR ANSI/UL 723 SHALL BE 0-25 FLAME SPREAD INDEX AND 0-450 SMOKE DEVELOPED INDEX.
 - ROOF PANEL FIRE CLASSIFICATION: FACTORY MUTUAL CLASS 1A MEETING FACTORY MUTUAL FM 4471.
 - WALL PANEL FIRE CLASSIFICATION: FACTORY MUTUAL CLASS 1 MEETING FACTORY MUTUAL FM 4880 OR FM 4881.
 - PANELS SHALL HAVE A MINIMUM R-VALUE OF 7.5 PER INCH THICKNESS WHEN TESTED IN ACCORDANCE WITH ASTM C518 AT A MEAN TEMPERATURE OF 75°F.
 - DESIGN SHALL BE VERIFIED BY REPRESENTATIVE STRUCTURAL TEST FOR WIND LOADS IN ACCORDANCE WITH ASTM E72 TO MEET L/240 (FOR ROOF) AND L/180 (FOR WALLS) DEFLECTION CRITERIA.
 - THERE SHALL BE NO UNCONTROLLED WATER LEAKAGE AT PRESSURES OF UP TO 20 psf WHEN TESTED IN ACCORDANCE WITH ASTM E331 AND ASTM E1646. TESTED ASSEMBLY MUST INCLUDE ENDLAP AND SIDELAP CONDITIONS.
 - AIR INFILTRATION SHALL NOT EXCEED 0.003 cfm/sf AT 6.24 psf (FOR ROOF) AND 0.001 cfm/sf AT 20 psf (FOR WALLS) AIR PRESSURE DIFFERENTIAL WHEN TESTED IN ACCORDANCE WITH ASTM E283 AND ASTM E1680. TESTED ASSEMBLY MUST INCLUDE ENDLAP AND SIDELAP CONDITIONS.
 - EXTERIOR ROOF/WALL PANEL SYSTEM SHALL BE PROVIDED BY A SINGLE MANUFACTURER TO ENSURE PROPER FIT-UP, MATCHING PANEL PROFILE, MATCHING COLOR AND MATCHING TRIM. MANUFACTURER SHALL HAVE A MINIMUM OF (5) YEARS EXPERIENCE IN THE PRODUCTION OF THESE PANELS.
 - EXTERIOR ROOF/WALL PANEL SYSTEM INSTALLER SHALL BE AUTHORIZED BY THE PANEL MANUFACTURER. INSTALLATION WORK SHALL BE SUPERVISED BY A PERSON HAVING A MINIMUM OF (5) YEARS EXPERIENCE INSTALLING INSULATED METAL ROOF AND WALL PANEL SYSTEMS. INSTALLATION SHALL BE IN ACCORDANCE WITH PANEL MANUFACTURER'S INSTRUCTIONS AND RECOMMENDATIONS.
 - INTERIOR WALL PANEL SYSTEM DESCRIPTION:
 - BRAND NAME OR EQUAL** – AN APPROVED MANUFACTURER IS PLASCORE
 - BASIS OF DESIGN IS PLASCORE L2550 LINER WALL PANEL SYSTEM
 - WALL PANELS SHALL HAVE AN ALUMINUM HONEYCOMB CORE FACED ON BOTH SIDES WITH ALUMINUM SHEET.
 - ALUMINUM FACINGS: 3000 SERIES ALUMINUM SHEET, 0.032" THICK
 - OVERALL PANEL THICKNESS: 1/4"
 - PANEL WIDTH: 4'
 - MINIMUM PANEL LENGTH: 8'
 - PANEL COLOR: WHITE
 - PANEL FINISH: THE FINISHED SIDES OF THE PANEL SHALL HAVE A MILL APPLIED EPOXY OR POWDER-COATED PAINT
 - SURFACE BURNING CHARACTERISTICS SHALL HAVE A FLAME SPREAD INDEX OF 0-25 AND SMOKE DEVELOPED INDEX OF 0-450 WHEN TESTED IN ACCORDANCE WITH ASTM E84 OR ANSI/UL 723.
 - PANELS SHALL BE MOUNTED AS SHOWN IN THIS DRAWING WITH MANUFACTURER SUPPLIED BATTEN ASSEMBLIES.
 - INTERIOR WALL PANEL SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH PANEL MANUFACTURER'S INSTRUCTIONS AND RECOMMENDATIONS.

GENERAL NOTES (CONTINUED ON SHEET 2)

DISTRIBUTION STATEMENT: N/A		
A.D.C. REVIEW		
SIGNATURE	DATE	
/S/ JM BYRNES	11-4-14	
CONCURRENCE		
CODE	SIGNATURE	DATE
/S/ SIGNATURE ON FILE		
APPROVAL		
SIGNATURE	DATE	
BRANCH SUPV. /S/ JM BYRNES	11-4-14	
ENGINEER /S/ RT WHEELER	11-4-14	
DESIGNED /S/ RT WHEELER	11-4-14	
DESIGNED (ELECTRICAL) /S/ DH DAILEY	11-4-14	
DRAWN /S/ RT WHEELER	11-4-14	
CHECKED /S/ MH SCHRODER	11-4-14	
CHECKED (ELECTRICAL) /S/ WL SPALINGER	10-30-14	
PUGET SOUND NAVAL SHIPYARD CODE 2370 ENGINEERING DIVISION		
NO DEVIATIONS SHALL BE MADE WITHOUT CODE 2370 APPROVAL		
DRAWING NO. 2370-1807		
TITLE WALKWAY TOWERS AND BRIDGE		
SCALE NTS	SHEET 1 OF 20	
REV. A		

DRAWING NO. 2370-1807 TITLE WALKWAY TOWERS AND BRIDGE REV. SHEET 1

GENERAL NOTES (CONTINUED FROM SHEET 1)

- G. FASTENERS ATTACHING ARCHITECTURAL FEATURES SHALL SCREW INTO HSS MEMBERS, ANGLE, OR BENT SHEET AS SHOWN IN THIS DRAWING. THERE SHALL BE NO EXPOSED FASTENERS IN THE INTERIOR OR EXTERIOR SPACES. FASTENERS SHALL BE PER PANEL MANUFACTURER'S SPECIFICATIONS.
 - H. EXPOSED TRIM EDGES MUST BE HEMMED.
 - I. DELIVERABLES: SEE PARAGRAPH 12 BELOW FOR REQUIRED DELIVERABLES PERTAINING TO ARCHITECTURAL FEATURES.
- 8. SEALANT REQUIREMENTS:**
- A. APPLICATION OF SEALANTS SHALL BE IN ACCORDANCE WITH ASTM C1193 AND SEALANT MANUFACTURERS' RECOMMENDATIONS.
 - B. EXTERIOR AND INTERIOR SEALANTS MUST BE COMPATIBLE WITH SUBSTRATES.
 - C. INTERIOR SEALANT SHALL HAVE A FLAME SPREAD INDEX OF 0-25 AND SMOKE DEVELOPED INDEX OF 0-450 WHEN TESTED IN ACCORDANCE WITH ASTM E84 OR ANSI/UL 723. MATCH INTERIOR SEALANT COLOR WITH ROOF/WALL PANEL INTERIOR FACE COLOR.
 - D. ALL INTERIOR GAPS AND CREVICES SHALL BE FILLED WITH INTERIOR SEALANT.
 - E. SURFACE PREPARATION SHALL BE IN ACCORDANCE WITH SEALANT MANUFACTURER'S RECOMMENDATIONS.
 - F. IF REQUIRED, PROVIDE POLYBUTYLENE OR ISOPRENE-BUTYLENE BASED PRESSURE SENSITIVE WEATHER RESISTANT TAPE TO CLOSE GAPS BETWEEN STRUCTURAL MEMBERS AND ARCHITECTURAL FEATURES.
 - G. PROVIDE NEOPRENE, BUTYL, POLYURETHANE OR POLYETHYLENE FOAM BACKSTOP FREE FROM OIL OR OTHER STAINING ELEMENTS AS RECOMMENDED BY SEALANT MANUFACTURER. PROVIDE 25% TO 33% OVERSIZED BACKING FOR CLOSED CELL AND 40% TO 50% OVERSIZED BACKING FOR OPEN CELL MATERIAL, UNLESS OTHERWISE INDICATED. MAKE BACKSTOP MATERIAL COMPATIBLE WITH SEALANT. DO NOT USE OAKUM AND OTHER TYPES OF ABSORPTIVE MATERIALS AS BACKSTOPS.
 - H. USE MASKING TAPE TO PROVIDE SMOOTH TRANSITIONS BETWEEN SEALANT AND ARCHITECTURAL FEATURES AND STRUCTURAL MEMBERS. REMOVE TAPE IMMEDIATELY AFTER TOOLING WITHOUT DISTURBING SEALANT.
 - I. APPLICATION OF SEALANT SHALL PRODUCE UNIFORM CROSS-SECTIONAL SHAPES AND DEPTHS RELATIVE TO THE JOINT WIDTH THAT ALLOWS OPTIMUM SEALANT MOVEMENT CAPABILITY. UPON COMPLETION OF APPLICATION, REMOVE REMAINING SMEARS AND STAINS AND LEAVE THE WORK IN A CLEAN AND NEAT CONDITION. TOOL AS NECESSARY.
- 9. PAINTING:**
- A. PAINT SYSTEM: *BRAND NAME OR EQUAL* – AN APPROVED MANUFACTURER IS PPG
 - B. BASIS OF DESIGN: THE PRIMER COAT SHALL BE PPG AMERCOAT 235 EPOXY COATING APPLIED TO A DFT OF 4-8 MILS (COLOR = RED OXIDE). THE TOP COAT SHALL BE PPG AMERCOAT PSX700SG POLYSILOXANE APPLIED TO A DFT OF 5-8 MILS (COLOR = HAZE GRAY).
 - C. PRIMER COAT SHALL BE TYPE V, CLASS 7 AND GRADE B & C CONFORMING TO MIL-PRF-23236D.
 - D. TOP COAT SHALL BE TYPE V & VI, CLASS 2 AND GRADE B & C CONFORMING TO MIL-PRF-24635E.
 - E. PAINT SYSTEM SHALL MEET CLASS "A" SURFACE BURNING CHARACTERISTICS HAVING A FLAME SPREAD INDEX OF 0-25 AND SMOKE DEVELOPED INDEX OF 0-450 WHEN TESTED IN ACCORDANCE WITH ASTM E84 OR ANSI/UL 723.
 - F. PAINT SHALL NOT CONTAIN LEAD, CHROMATES OR ANY OTHER HEAVY METALS.
 - G. ONLY CARBON STEEL (FERROUS) SURFACES SHALL BE PAINTED. FASTENERS, STAINLESS STEEL SURFACES, ROOF/WALL PANEL SYSTEM AND TRIM SHALL NOT BE PAINTED. THE EXCEPTION IS THE BIMETALLIC WELDS OF THE DECK PLATE, STAIRS AND HANDRAILS. SEE NOTE 9.H. CARBON STEEL SURFACES COVERED BY ROOF/WALL PANELS OR TRIM MUST BE PAINTED BEFORE ARCHITECTURAL FEATURES ARE ASSEMBLED.
 - H. ALL BIMETALLIC WELDS ON THE GUARDRAIL/HANDRAIL ASSEMBLIES AND STAIR TREADS MUST BE PAINTED. MASK OFF STAINLESS STEEL SURFACES JUST BEYOND THE HEAT AFFECTED ZONE OF THESE WELDS TO ACHIEVE A FINE TRANSITION BETWEEN PAINTED SURFACES AND UNPAINTED STAINLESS STEEL.
 - I. AT THE CONTRACTOR'S OPTION: THE UNDERSIDE SURFACE (NON-TREAD SIDE) OF STAINLESS STEEL STAIR TREADS/RISER/NOSING MAY BE PAINTED IN LIEU OF MASKING OFF STAINLESS STEEL SURFACES.
 - J. PREPARE SURFACES TO BE PAINTED BY DRY ABRASIVE BLASTING TO NEAR WHITE METAL PRIOR TO PAINTING.
- 10. ELECTRICAL REQUIREMENTS:**
- A. ALL ELECTRICAL WORK SHALL BE PERFORMED BY A QUALIFIED ELECTRICIAN (LICENSED IN THE STATE THAT THE WORK IS PERFORMED) IN ACCORDANCE WITH THE LATEST NATIONAL ELECTRIC CODE (NEC).
 - B. ALL ELECTRICAL EQUIPMENT SHALL BE UNDERWRITER'S LABORATORY (UL) LISTED AND APPROVED.
 - C. ALL WIRING AND CONNECTIONS TO EQUIPMENT SHALL FOLLOW MANUFACTURERS' DIRECTIONS.
 - D. ALL CIRCUITS MUST CARRY AN INDEPENDENT GROUNDING CONDUCTOR. CONDUIT RUNS DO NOT FULFILL THIS REQUIREMENT.
 - E. ADJACENT LIGHTS SHALL BE SUPPLIED USING ALTERNATING CIRCUITS.
 - F. SUPPORT CONDUIT PER NEC. MOUNT ELECTRICAL COMPONENTS ON STRUT CHANNEL AS NEEDED.
 - G. INSTALL STRUT CHANNEL WITH EXTERNALLY THREADED WELDED STUDS TO HSS MEMBERS. SIZE STUDS TO 3 TIMES (OR LESS THAN) HSS MEMBER WALL THICKNESS.
 - H. STRUT CHANNEL INSTALLATION SHALL BE ACCOMPLISHED BY WORKERS FAMILIAR WITH MANUFACTURER INSTALLATION INSTRUCTIONS. BEFORE WELDING STUDS, SET STRUT SYSTEM COMPONENTS INTO FINAL POSITION TRUE TO LINES, LEVEL AND PLUMB. FASTEN STRUT CHANNEL TO STUDS WITH APPROPRIATELY SIZED NYLON INSERT LOCKNUTS AND WASHERS. TIGHTEN ALL CONNECTIONS TO THEIR RECOMMENDED TORQUES.
 - I. WALL MOUNTED FIXTURES SHALL BE MOUNTED TO STUD WALL BACKING.
 - J. ALL BOXES IN THE TOWERS SHALL BE RECESSED IN THE INTERIOR WALL PANELS AND MOUNTED TO STUDS OR HSS.
 - K. DO NOT PENETRATE DECK PLATE FOR CONDUIT RUNS. THERE SHALL BE NO EXPOSED CONDUIT INSIDE THE TOWERS. CONDUIT WILL BE EXPOSED INSIDE THE BRIDGE.
 - L. ONCE ALL ELECTRICAL COMPONENTS ARE INSTALLED, CONNECT TEMPORARY POWER TO ONE FLANGED INLET TO ENSURE THAT THE SYSTEM AND ALL COMPONENTS FUNCTION PROPERLY.
 - M. ELECTRICAL COMPONENTS SHALL MEET THE FOLLOWING REQUIREMENTS:
 - i. INTERIOR CONDUIT: 3/4" EMT
 - ii. EXTERIOR CONDUIT: 3/4" RIGID
 - iii. CONDUCTORS: TYPE THHN OR THWN-2, 12 AWG (3 WIRES + 1 GROUND), STRANDED COPPER, 600 VAC, HEAT CAPACITY: 90°C, PHASING/COLOR CODING OF PHASED CIRCUITS SHALL BE A: BLACK, B: RED, NEUTRAL: WHITE, GROUND: GREEN; FIRE ALARM: 1 PAIR 16 AWG STRANDED TWISTED SHIELDED WIRE FOR ALARM CIRCUIT, 1 PAIR 14 AWG STRANDED TWISTED SHIELDED WIRE FOR ANNUNCIATOR
 - iv. EMERGENCY LIGHTS: MEETS UL 924, 2 ADJUSTABLE HEAD LED LIGHTS, FRONT OR SIDE MOUNT CONFIGURATION, STEEL HOUSING CONSTRUCTION, POWDER COATED
 - v. FLUORESCENT LIGHT FIXTURES: T8, 2 LAMP, 4 ft, BALLAST RATED FOR -20°F TO 105°F, VAPOR TIGHT, DIFFUSED NON-YELLOWING SHATTER PROOF POLYCARBONATE COVER, IP 65 RATED, STAINLESS STEEL LATCHING COMPONENTS
 - vi. BOXES: DIE CAST OR METALLIC, WEATHERPROOF BOX WITH BLANK WEATHERPROOF COVER UNLESS NOTED OTHERWISE
 - vii. SWITCH: TOGGLE, DOUBLE-POLE, 20 AMP RATED, INDUSTRIAL GRADE, MOUNT IN DIE CAST OR METALLIC 1-GANG OR 2-GANG WEATHERPROOF BOX WITH LOCKABLE WEATHERPROOF COVER
 - viii. FLANGED INLET: *BRAND NAME OR EQUAL* – AN APPROVED MANUFACTURER IS HUBBELL WIRING DEVICE-KELLEMS. BASIS OF DESIGN IS HUBBELL WIRING DEVICE-KELLEMS PART #HBL7408C. THE FLANGED INLET SHALL BE A 4-POLE, 4 WIRE NON-GROUNDING, 20 AMP, TWIST LOCK, MOUNT IN DIE CAST OR METALLIC 2-GANG WEATHERPROOF BOX WITH LOCKABLE WEATHERPROOF IN-USE COVER
 - ix. ADDRESSABLE THERMAL SENSOR: MEETS UL 521, 15%/MINUTE RATE-OF-RISE WITH 135°F FIXED TEMP, REQUIRED T O WORK WITH GAMEWELL FCI E3 PANEL
 - x. ADDRESSABLE PHOTOELECTRIC SMOKE DETECTOR: MEETS UL 217, REQUIRED TO WORK WITH GAMEWELL FCI E3 PANEL

- xi. 4-WIRE SELECTABLE OUTPUT WALL MOUNT HORN AND STROBE: MEETS UL 1971 AND UL 464, REQUIRED TO WORK WITH GAMEWELL FCI E3 PANEL

11. WEIGH AND LOAD TEST TOWERS AND BRIDGE:

- A. THE EXPECTED WEIGHT OF EACH TOWER AND BRIDGE ARE APPROXIMATELY 18,500 lbs AND 7,000 lbs RESPECTIVELY.
- B. THE LOAD TEST OF THE TOWERS SHALL TAKE PLACE PRIOR TO INSTALLATION OF THE ARCHITECTURAL PIECES. THIS WILL ALLOW FOR FULL ACCESS TO THE TOWER LIFT POINTS FOR MATERIAL AND WELD NDT. THE LOAD TEST OF THE BRIDGE MAY TAKE PLACE AFTER INSTALLATION OF ARCHITECTURAL PIECES SINCE THE LIFT POINTS WILL BE FULLY EXPOSED FOR TESTING.
- C. PRIOR TO AND FOLLOWING LOAD TEST, INSPECT EACH LIFT POINT AS FOLLOWS:
 - i. BASE MATERIAL: MAGNETIC PARTICLE TEST (MT) THE ACCESSIBLE PORTIONS OF THE SLING TUBE, RETAINER PLATE AND END PLATE PER AWS D1.1. VISUALLY INSPECT FOR DEFORMATION OR OBVIOUS DAMAGE SUCH AS CRACKED, DISTORTED OR CORRODED MATERIAL OR ANY DEFICIENCY THAT MAY AFFECT THE LIFTING CAPACITY OF THE LIFT POINTS.
 - ii. WELDS: MT THE ACCESSIBLE PORTIONS OF THE SLING TUBE, RETAINER PLATE AND END PLATE ATTACHMENT WELDS PER AWS D1.1.
- D. DISTRIBUTE WEIGHTS TO EACH OF THE TOWERS SO THAT THE WEIGHT OF THE LOAD TESTED TOWERS EQUALS 30,000 lbs (+1,000 lbs, -0 lbs). WEIGHTS SHALL NOT DAMAGE THE TOWERS. WEIGHTS MAY BE DISTRIBUTED ON THE LEVEL 1 DECK PLATE OR BOLTED TO THE BOTTOM OF THE BASE PLATES.
- C. DISTRIBUTE WEIGHTS TO THE BRIDGE SO THAT THE WEIGHT OF THE LOAD TESTED BRIDGE EQUALS 15,000 lbs (+500 lbs, -0 lbs). WEIGHTS SHALL NOT DAMAGE THE BRIDGE. WEIGHTS MAY BE EVENLY DISTRIBUTED ON THE DECK PLATE OR HANGED OFF THE ENDS OF THE BRIDGE BEAMS.
- D. SEPARATELY LOAD TEST EACH TOWER AND BRIDGE BY LIFTING EACH (IN ACCORDANCE WITH THE LIFT SKETCHES PROVIDED ON SHEET 20) WITH ATTACHED WEIGHTS AND HOLD FOR A MINIMUM OF 10 MINUTES. ENSURE NO SIGNS OF DAMAGE OR DEFORMATION ARE OBSERVED.
- E. AFTER LOAD TEST, REPEAT NDT IN PARAGRAPH 11.C.
- F. PROVIDE WRITTEN DOCUMENTATION THAT THE LOAD TEST AND NDT REQUIREMENTS WERE SATISFACTORILY PERFORMED. ENSURE DOCUMENTATION CLEARLY SPECIFIES PERFORMANCE OF "PRE" AND "POST" LOAD NDT'S, METHOD USED, ACCEPTANCE CRITERIA USED AND ITEMS (PIECES AND WELDS) THAT WERE INSPECTED.
- G. ATTACH LIFT POINT LABEL PLATES TO EACH TOWER AND BRIDGE LIFT POINTS AT THE LOCATIONS SHOWN ON SHEET 6. THE LABEL PLATES SHALL BE CLEARLY VISIBLE AND FREE FROM OBSTRUCTIONS. ATTACH TO EXTERIOR FACE OF WALL PANEL WITH DOUBLE-SIDED BONDING TAPE. THE LABEL PLATES SHALL BE MADE FROM ALUMINUM OR STAINLESS STEEL WITH 3/8" TALL (MIN) LASER CUT LETTERING AND CONTAIN THE FOLLOWING INFORMATION:

LIFT POINT
DWG 2370-1807
LIFT POINT GPS CAPACITY: (ENTER 5,000 FOR TOWERS OR 2,500 FOR BRIDGE) lbs (60° MIN. LIFT ANGLE)
TEST DATE: MM-DD-YYYY
PERIODIC TEST NOT REQUIRED

- H. SEPARATELY LIFT AND WEIGH EACH FULLY ASSEMBLED TOWER AND BRIDGE TO ±2% ACCURACY IN ACCORDANCE WITH THE LIFT SKETCHES PROVIDED ON SHEET 20.
- I. PROVIDE WRITTEN DOCUMENTATION OF THE MEASURED WEIGHT FOR EACH TOWER AND BRIDGE PRIOR TO SHIPMENT TO PSNS AND IMF.
- J. ATTACH A MEASURED WEIGHT LABEL PLATE TO EACH TOWER AND BRIDGE AT THE LOCATIONS SHOWN ON SHEET 6. THE LABEL PLATES SHALL BE CLEARLY VISIBLE AND FREE FROM OBSTRUCTIONS. ATTACH TO EXTERIOR FACE OF WALL PANEL WITH DOUBLE-SIDED BONDING TAPE. THE LABEL PLATES SHALL BE MADE FROM ALUMINUM OR STAINLESS STEEL WITH 1/2" TALL (MIN) LASER CUT LETTERING AND CONTAIN THE FOLLOWING INFORMATION:

(ENTER TOWER 1, TOWER 2 OR BRIDGE)
DWG 2370-1807
WEIGHT: (ENTER MEASURED WEIGHT)
MFR: (ENTER NAME OF CONTRACTOR)
YEAR: (ENTER YEAR BUILT)

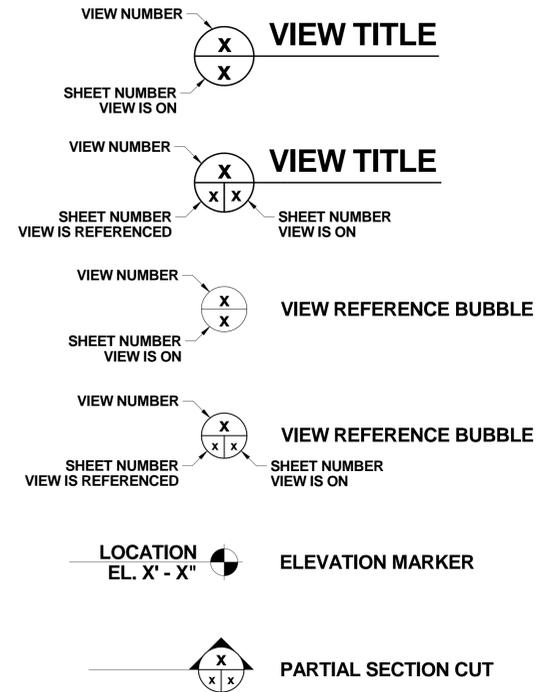
12. REQUIRED DELIVERABLES: ALL DELIVERABLES SHALL BE PROVIDED AFTER FABRICATION UNLESS OTHERWISE NOTED BELOW.

- A. SHIPMENT PLAN – PROVIDE THIS BEFORE BEGINNING FABRICATION
- B. FULLY ASSEMBLED TOWERS IN CONSTRUCTION WRAP PER THIS DRAWING (QTY 2)
- C. FULLY ASSEMBLED BRIDGE IN CONSTRUCTION WRAP PER THIS DRAWING (QTY 1)
- D. MAKE-UP DECK PLATE PER THIS DRAWING (QTY 2)
- E. MAKE-UP RIDGE TRIM PER EXTERIOR WALL PANEL MFR (QTY 2)
- F. MAKE-UP CORNER TRIM PER EXTERIOR WALL PANEL MFR (QTY 4)
- G. MAKE-UP INTERIOR WALL PANEL SYSTEM INCLUDING:
 - i. INTERIOR WALL PANELS: 4' X 8' SHEET (QTY 2)
 - ii. END-BATTEN ASSEMBLIES: 8' LENGTHS (QTY 11)
 - iii. GASKET MATERIAL: 100'
 - iv. FASTENERS FOR MOUNTING BATTEN ASSEMBLIES (QTY TO SUIT THE (11) 8' LENGTHS OF END-BATTENS)
- H. PRODUCT DATA AND MATERIAL SAFETY DATA SHEETS (MSDS) FOR ALL MATERIALS USED. THIS INCLUDES CERTIFICATION OF CONFORMANCE WITH FLAME SPREAD AND SMOKE GENERATION REQUIREMENTS AS REQUIRED FOR MATERIALS.
- I. STRUCTURAL:
 - i. SHOP DRAWINGS
 - ii. WELDER QUALIFICATIONS AND WELDING PROCEDURES
- J. ARCHITECTURAL (APPLIES TO BOTH EXTERIOR AND INTERIOR PANEL SYSTEMS):
 - i. MANUFACTURER AND INSTALLERS' QUALIFICATIONS
 - ii. PRODUCT DATA
 - iii. EXTERIOR ROOF/WALL PANEL SYSTEM COLOR SAMPLES – PROVIDE THIS BEFORE BEGINNING FABRICATION
 - iv. SHOP DRAWINGS INCLUDING LOCATION, LAYOUT AND DIMENSIONS OF PANELS, TRIM OR BATTENS AND FASTENERS
 - v. MANUFACTURER'S ERECTION INSTRUCTIONS
- K. ELECTRICAL SYSTEM:
 - i. ELECTRICAL INSTALLERS' QUALIFICATIONS
 - ii. SHOP DRAWINGS
- L. MEASURED WEIGHT OF THE TOWERS AND BRIDGE
- M. DOCUMENTATION OF THE LOAD TEST AND NDT (AS SPECIFIED IN PARAGRAPH 11.)

REFERENCES

- 1. AISC 303-10, CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES
- 2. AISC 360-10, SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS

SYMBOL LEGEND



ABBREVIATIONS

ADJ	- ADJUSTABLE
ASSY	- ASSEMBLY
B.O.	- BOTTOM OF
☉	- CENTERLINE
ENCL	- ENCLOSURE
ELEV or EL	- ELEVATION
GA.	- GAUGE
GR	- GRADE
NTS	- NOT TO SCALE
MAX	- MAXIMUM
MFR	- MANUFACTURER
MIN	- MINIMUM
O.C.	- ON CENTER
OPP	- OPPOSITE
PL	- PLATE
QTY	- QUANTITY
REQ'D	- REQUIRED
SCH	- SCHEDULE
SST	- STAINLESS STEEL
T.O.	- TOP OF
TYP	- TYPICAL
UNO	- UNLESS NOTED OTHERWISE

PUGET SOUND NAVAL SHIPYARD
CODE 2370
ENGINEERING DIVISION

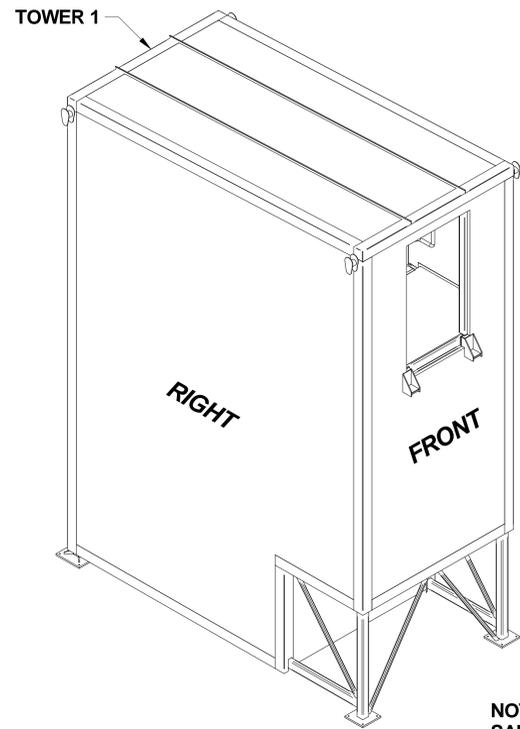
NO DEVIATIONS SHALL BE MADE
WITHOUT CODE 2370 APPROVAL

DRAWING NO. **2370-1807**

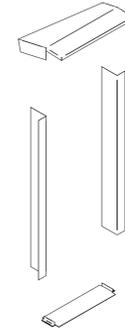
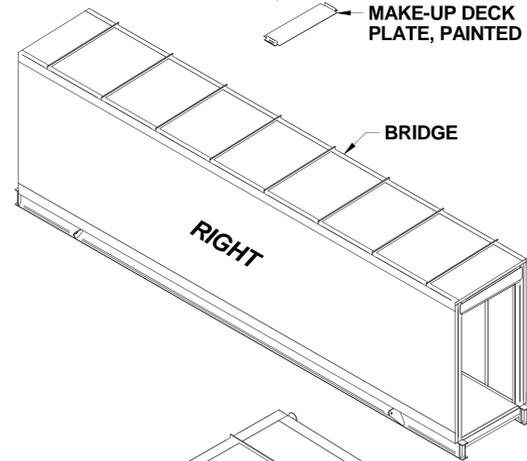
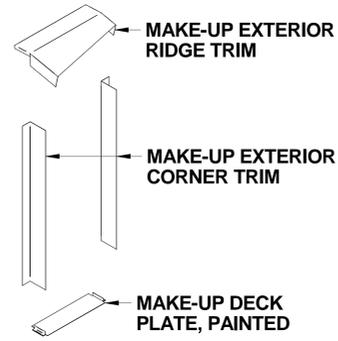
TITLE **WALKWAY TOWERS AND BRIDGE**

SCALE **NTS** SHEET **2** OF **20** REV. **A**

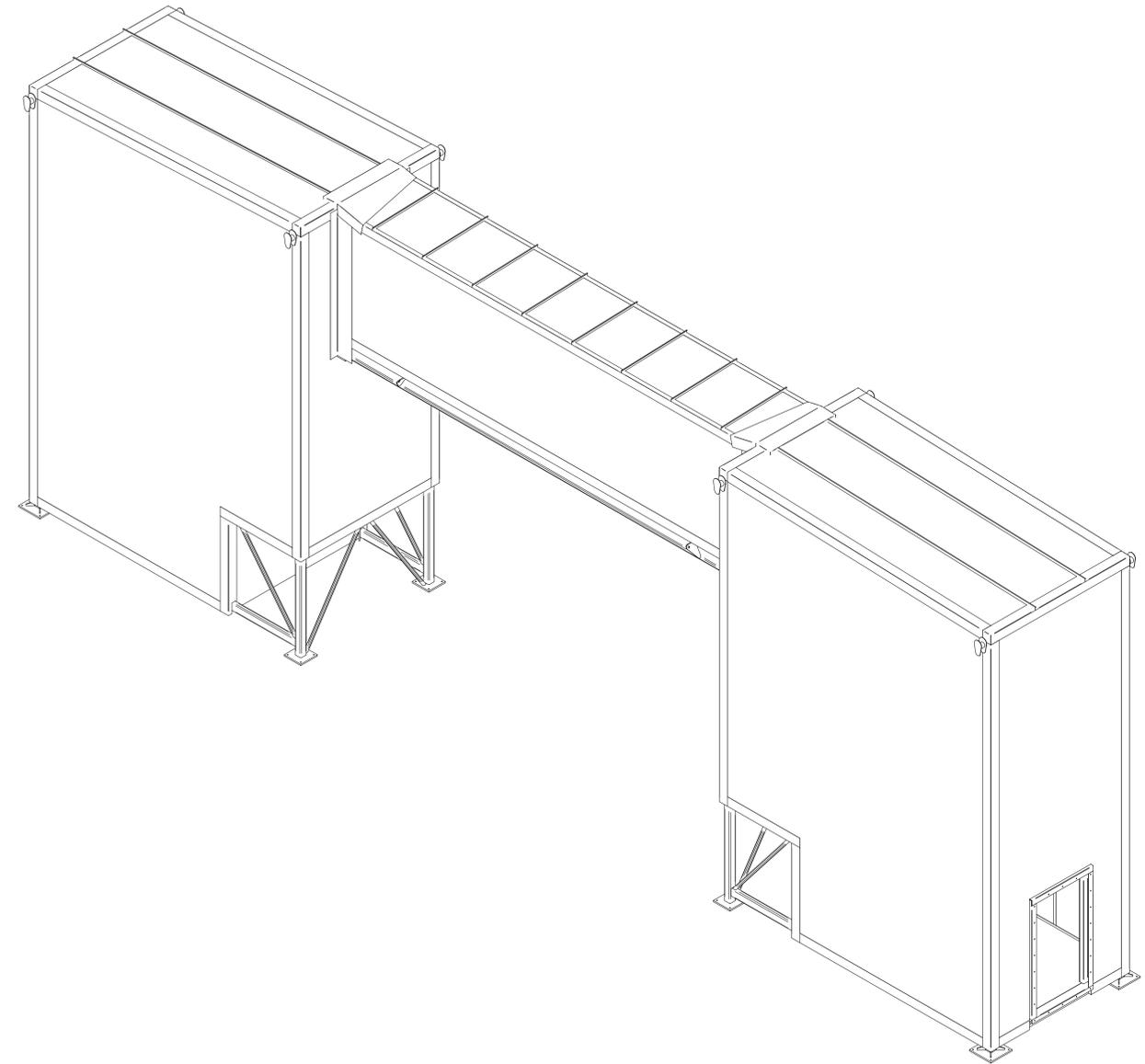
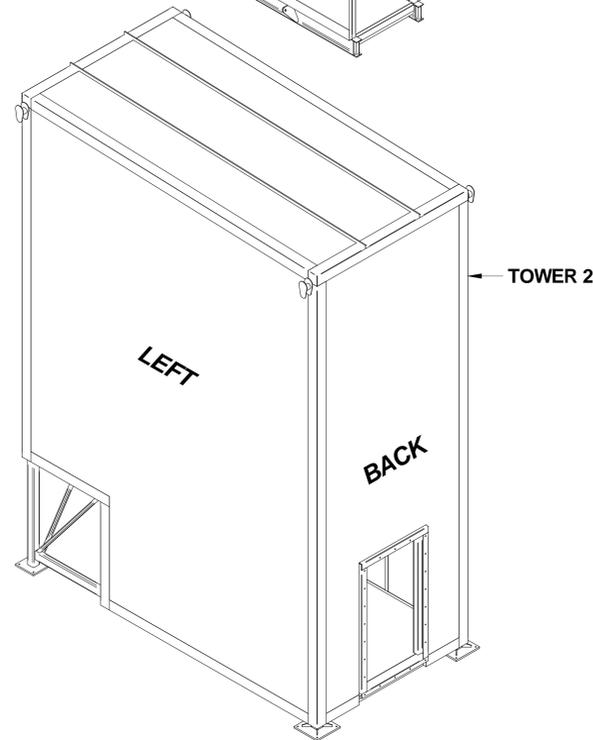
SHEET 2
WALKWAY TOWERS AND BRIDGE
2370-1807



NOTE: SHIP MAKE-UP
PIECES UNASSEMBLED.



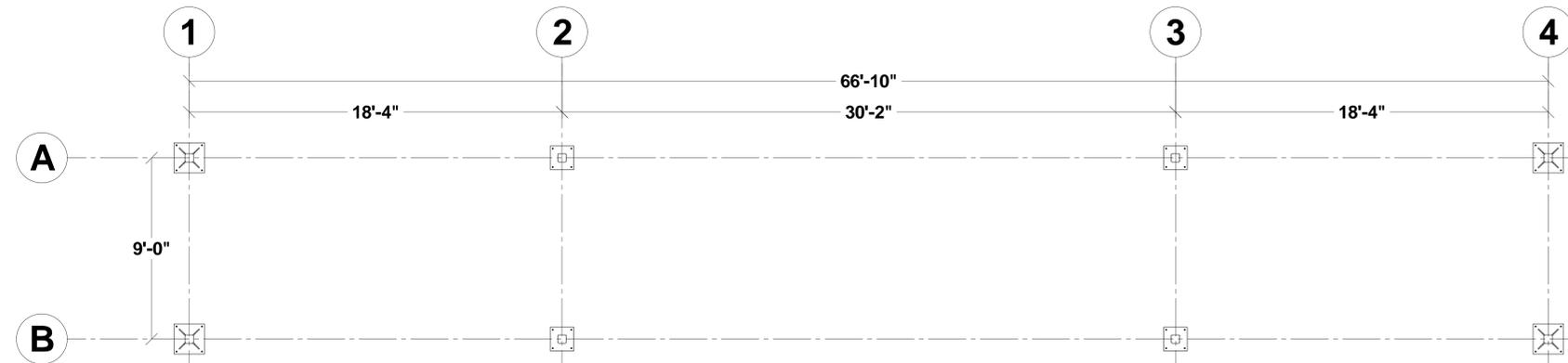
NOTE: TOWERS ARE THE
SAME UNLESS OTHERWISE
NOTED, ONLY THE TOWER
BETWEEN GRIDS 1 AND 2,
TOWER 1, IS DETAILED.



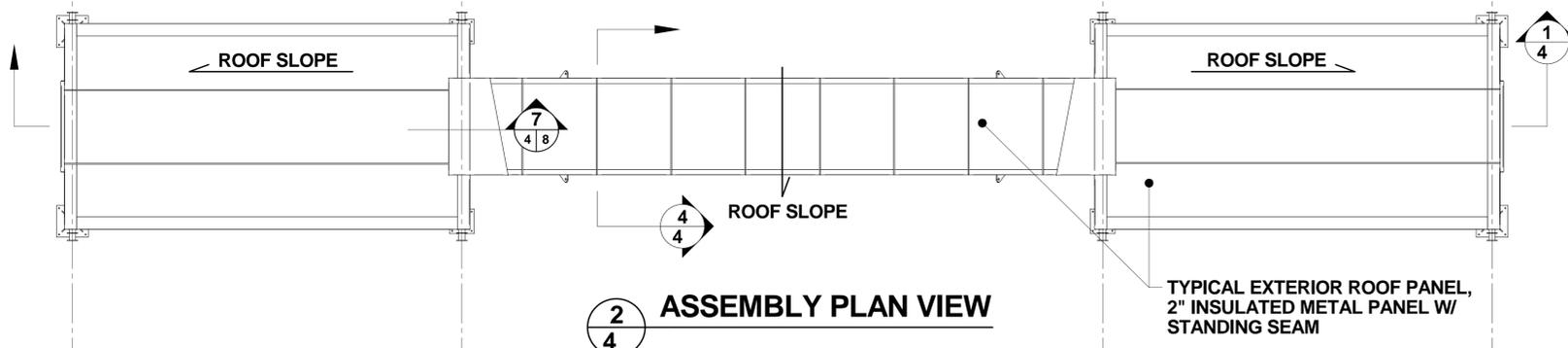
1 DISASSEMBLED TOWERS AND BRIDGE

2 ASSEMBLED TOWERS AND BRIDGE

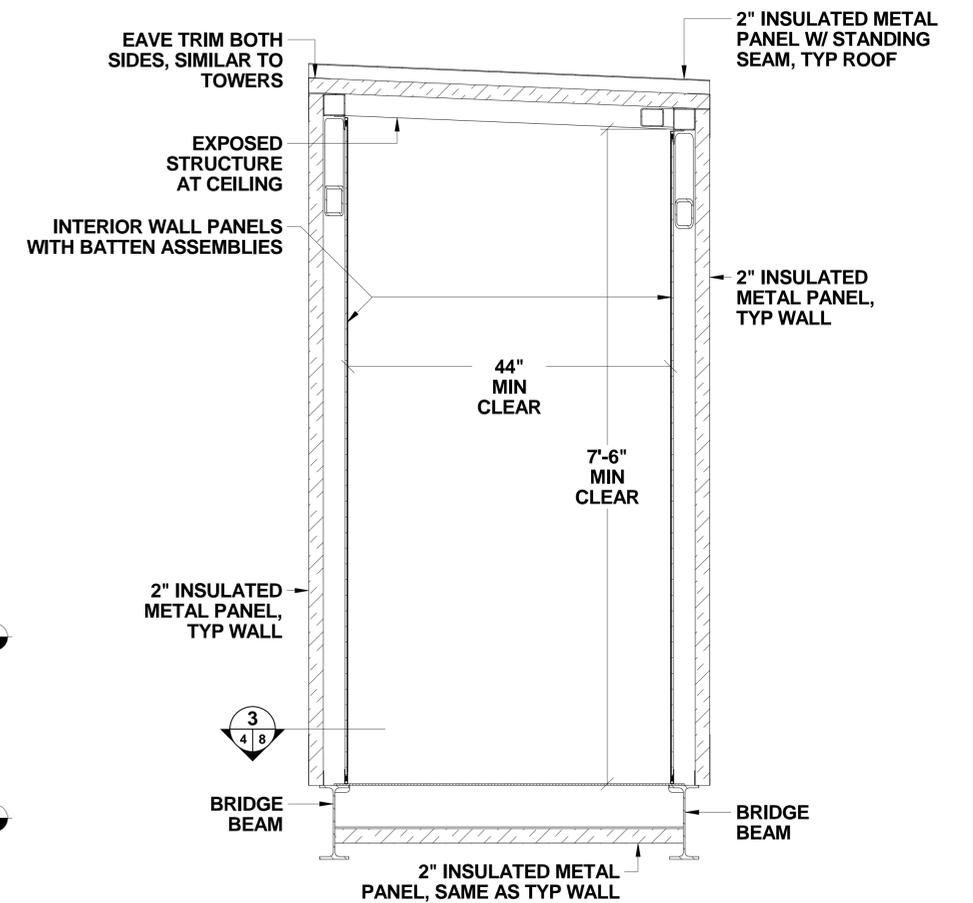
PUGET SOUND NAVAL SHIPYARD CODE 2370 ENGINEERING DIVISION		
NO DEVIATIONS SHALL BE MADE WITHOUT CODE 2370 APPROVAL		
DRAWING NO. 2370-1807		
TITLE WALKWAY TOWERS AND BRIDGE		
SCALE NTS	SHEET 3 OF 20	REV. A



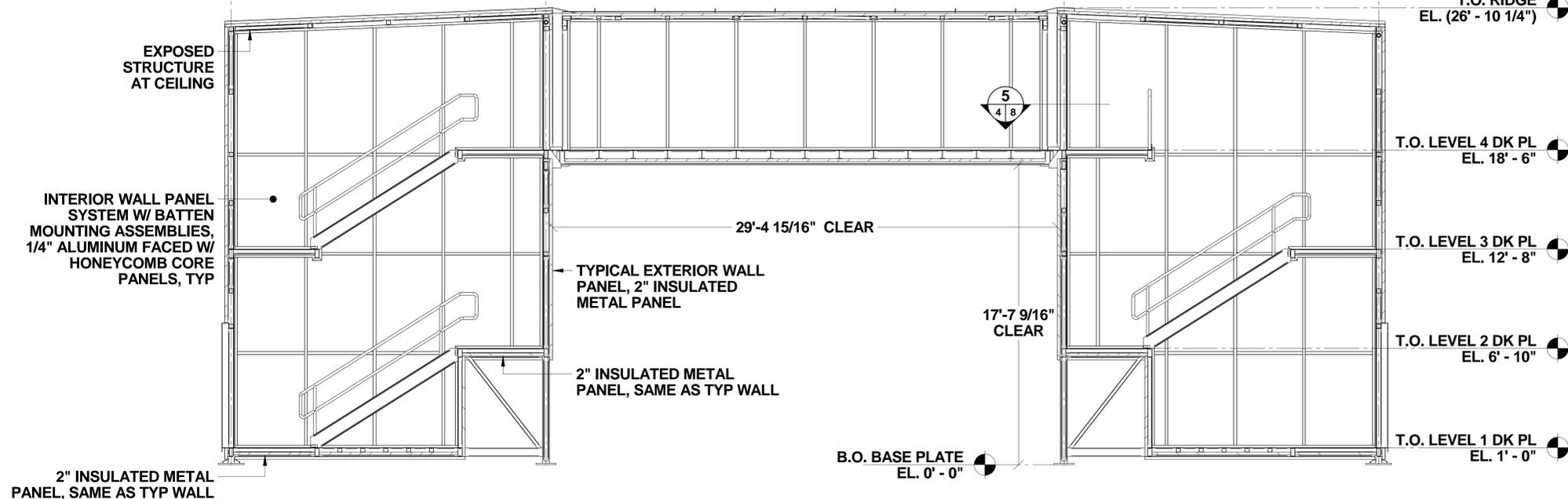
3 BASE PLATE PLAN VIEW
 4 NOTE: BASE PLATES AND COLUMNS ARE CENTERED ON GRID LINES.



2 ASSEMBLY PLAN VIEW



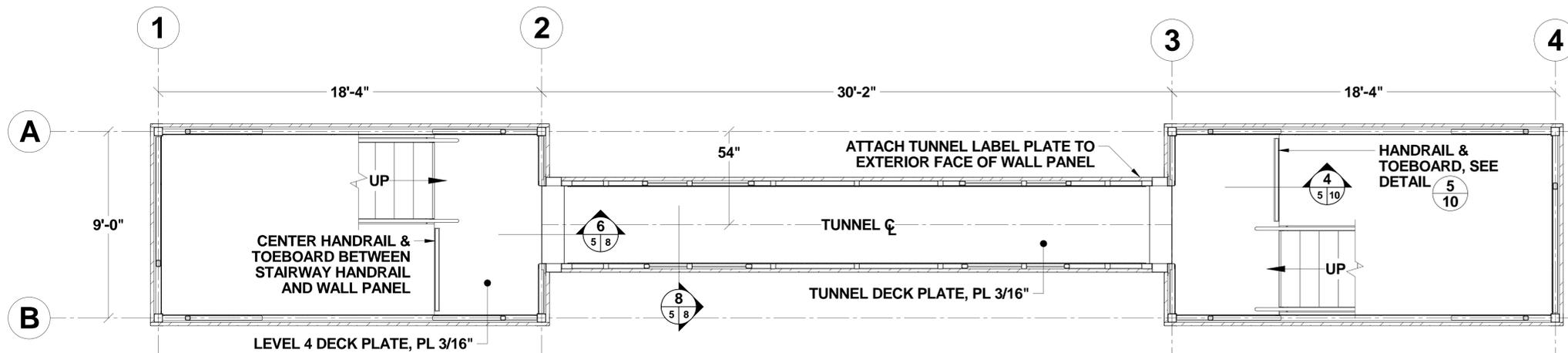
4 BRIDGE SECTION ELEVATION



1 ASSEMBLY SECTION ELEVATION

PUGET SOUND NAVAL SHIPYARD CODE 2370 ENGINEERING DIVISION		
NO DEVIATIONS SHALL BE MADE WITHOUT CODE 2370 APPROVAL		
DRAWING NO.	2370-1807	
TITLE	WALKWAY TOWERS AND BRIDGE	
SCALE	NTS	SHEET 4 OF 20
REV.	A	

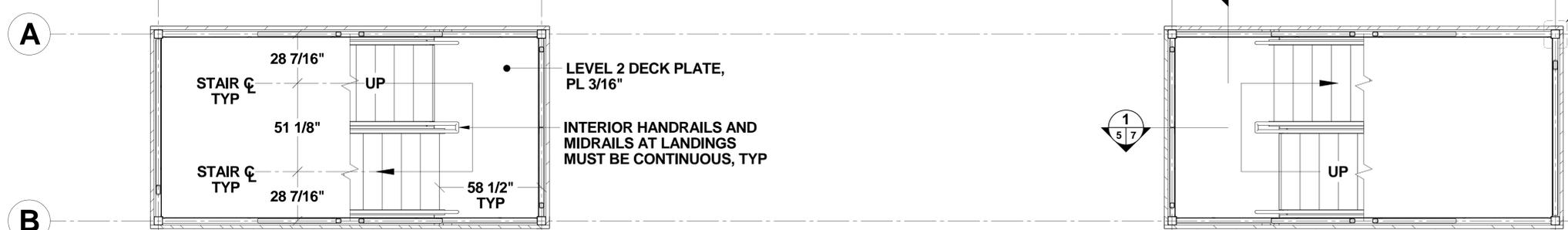
DWG. NO. 2370-1807
 TITLE WALKWAY TOWERS AND BRIDGE
 REV. SHEET A 4



4
5 LEVEL 4 PLAN



3
5 LEVEL 3 PLAN



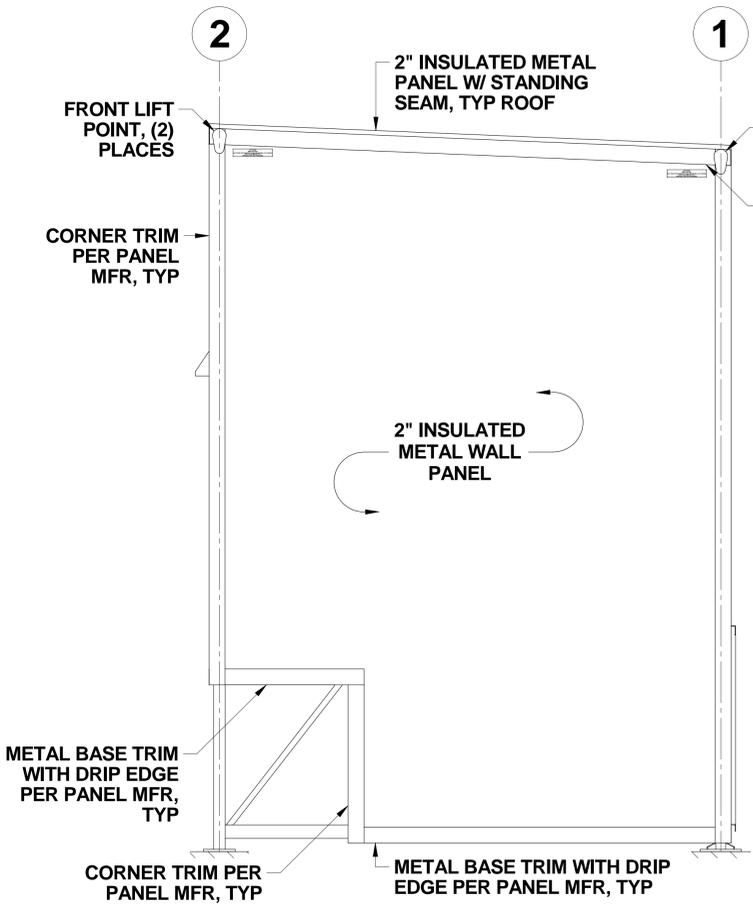
2
5 LEVEL 2 PLAN



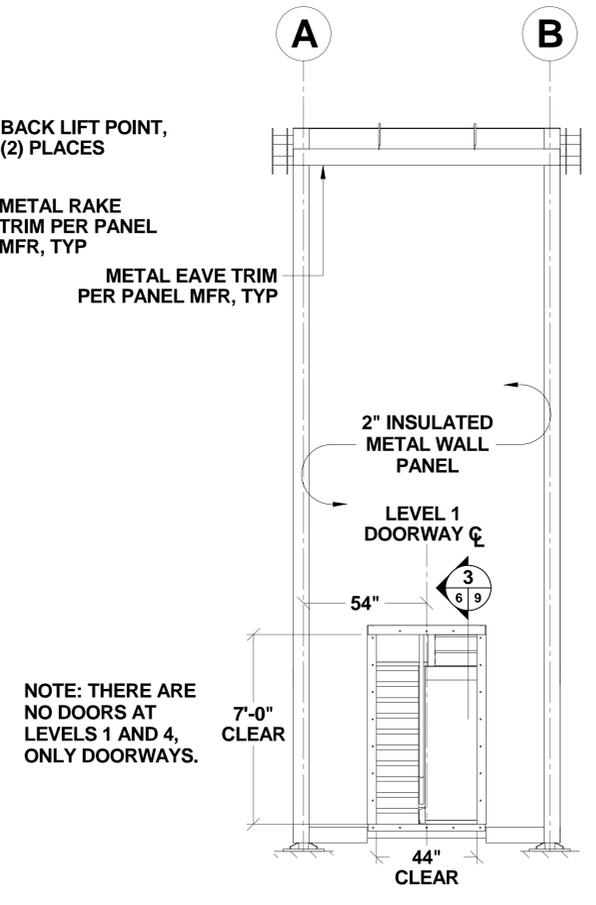
1
5 LEVEL 1 PLAN

PUGET SOUND NAVAL SHIPYARD CODE 2370 ENGINEERING DIVISION		
NO DEVIATIONS SHALL BE MADE WITHOUT CODE 2370 APPROVAL		
DRAWING NO.	2370-1807	
TITLE	WALKWAY TOWERS AND BRIDGE	
SCALE	NTS	SHEET 5 OF 20
REV.	A	

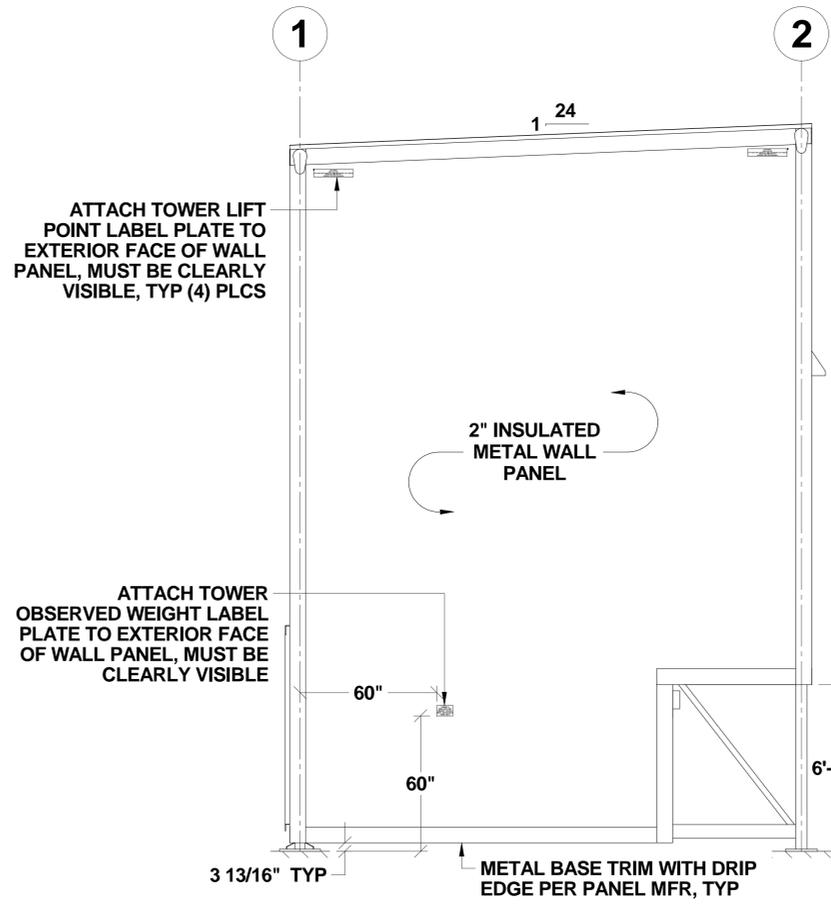
REV. SHEET
A 5
 WALKWAY TOWERS AND BRIDGE
 2370-1807



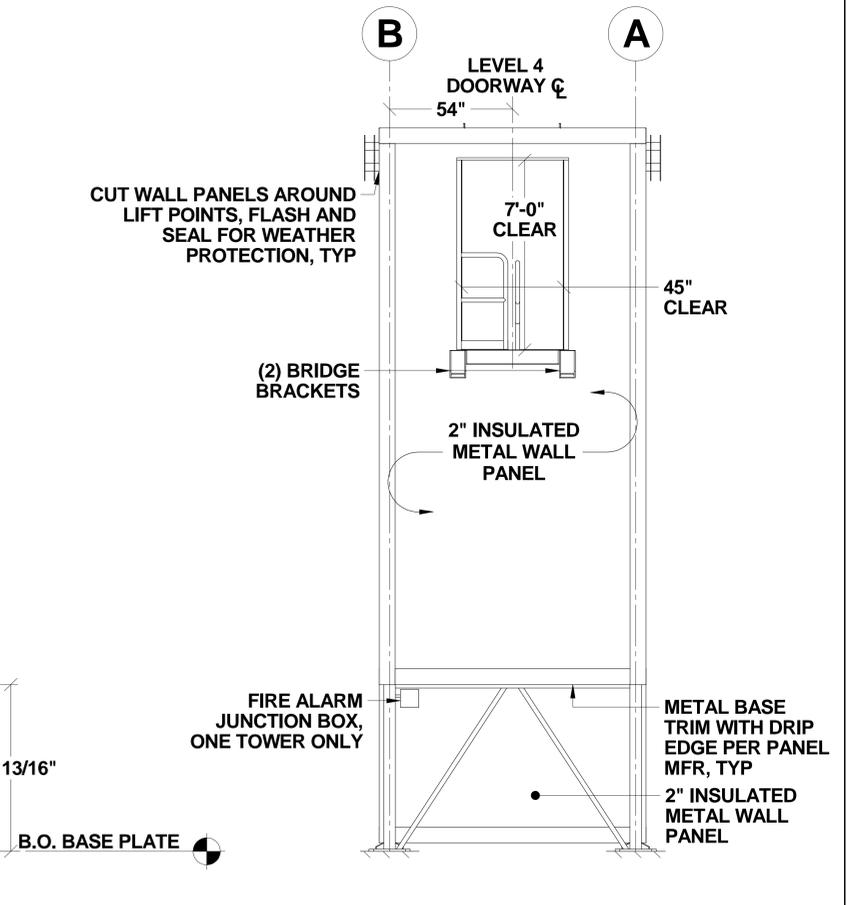
2
6 TOWER LEFT ELEVATION



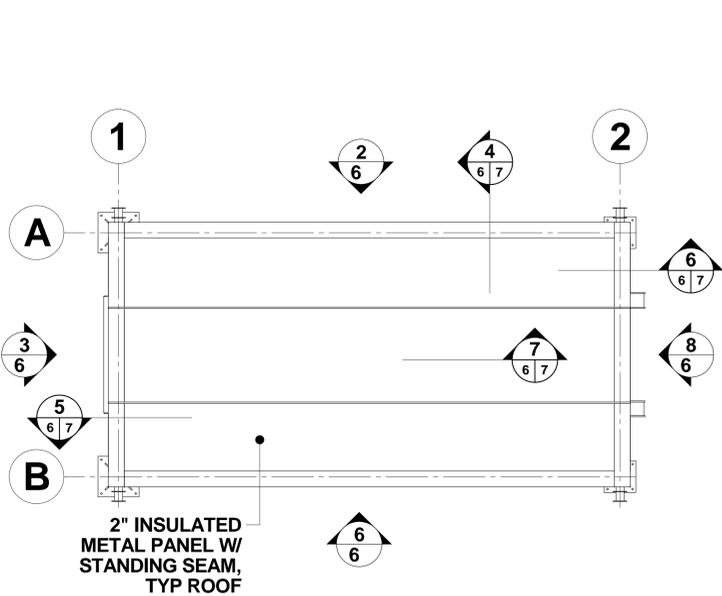
3
6 TOWER BACK ELEVATION



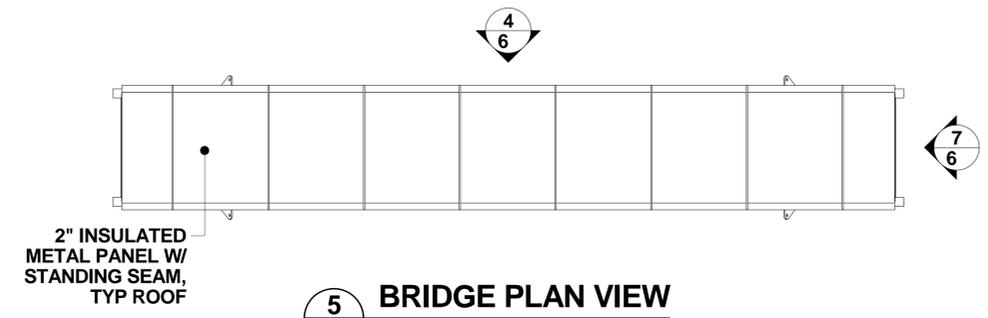
6
6 TOWER RIGHT ELEVATION



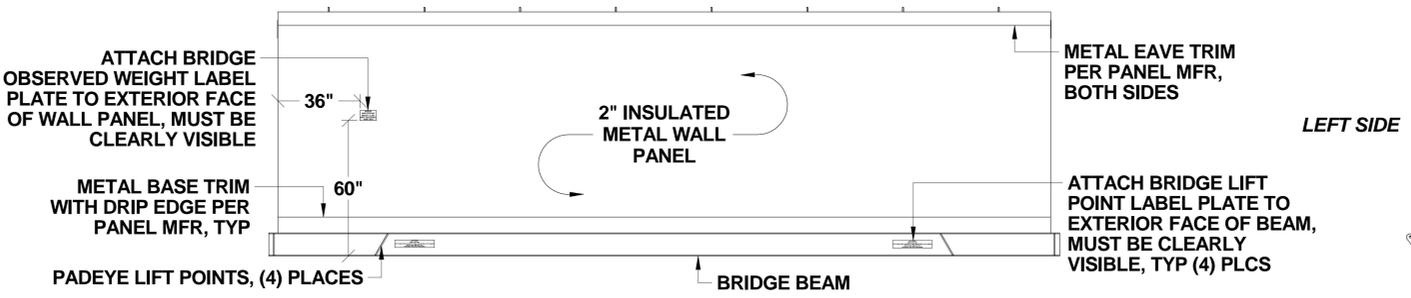
8
6 TOWER FRONT ELEVATION



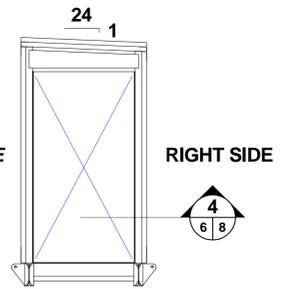
1
6 TOWER PLAN VIEW
IN WAY OF ARCHITECTURE



5
6 BRIDGE PLAN VIEW



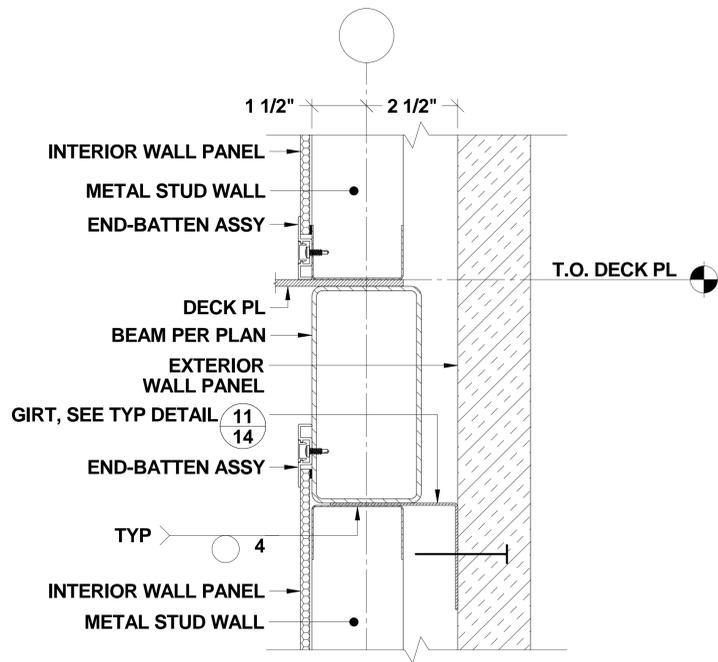
4
6 BRIDGE LEFT ELEVATION



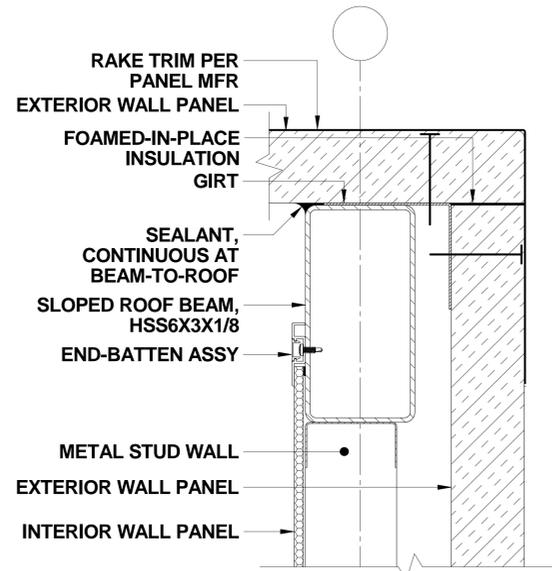
7
6 BRIDGE FRONT ELEVATION

PUGET SOUND NAVAL SHIPYARD CODE 2370 ENGINEERING DIVISION		
NO DEVIATIONS SHALL BE MADE WITHOUT CODE 2370 APPROVAL		
DRAWING NO. 2370-1807		
TITLE WALKWAY TOWERS AND BRIDGE		
SCALE	NTS	REV. A
SHEET 6 OF 20		

DWG. NO. 2370-1807
 TITLE WALKWAY TOWERS AND BRIDGE
 REV. SHEET A 6

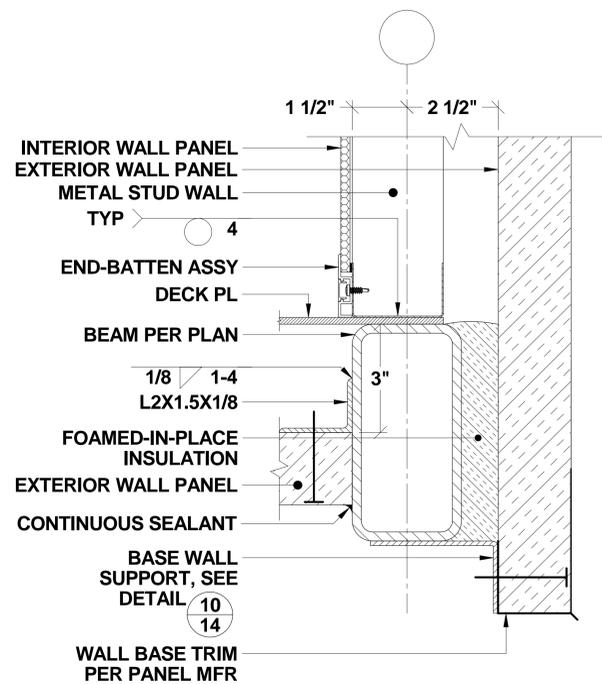


2 TYP TOWER WALL SECTION
5/7 IN WAY OF LEVELS 2, 3 OR 4 DECK PLATES

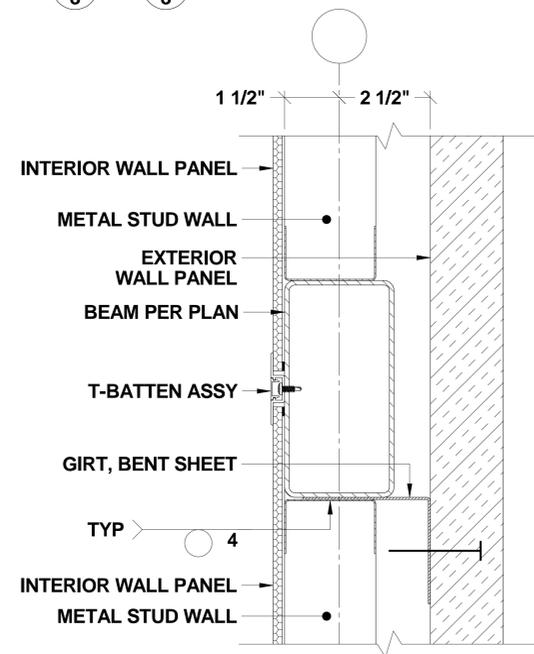


4 TYP TOWER WALL SECTION
6/7 IN WAY OF LEFT AND RIGHT WALLS AT ROOF

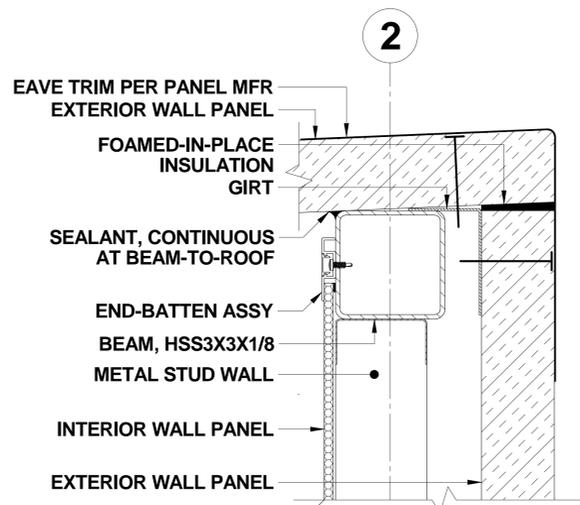
FOR INFORMATION NOT SHOWN, SEE TYP BATTEN ASSEMBLIES ON DETAILS **1** AND **2**.



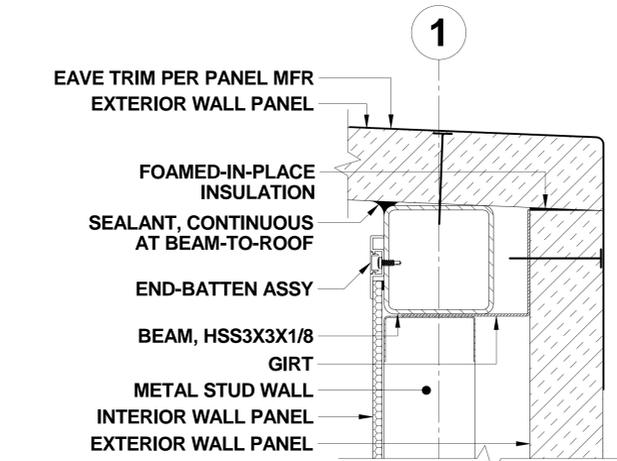
1 TYP TOWER WALL SECTION
5/7 IN WAY OF BASE WALL SUPPORT
FOR CONDUIT IN WAY OF BASE WALL SUPPORT, SEE DETAIL



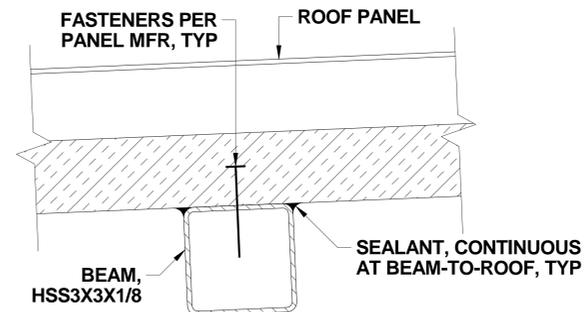
3 TYP TOWER WALL SECTION
5/7 IN WAY OF PERIMTER BEAMS WITHOUT DECK PLATE



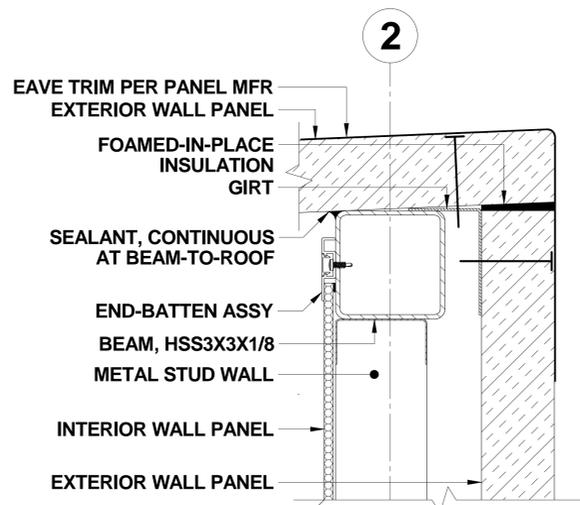
6 TYP TOWER ROOF SECTION
6/7 IN WAY OF FRONT WALL



5 TYP TOWER ROOF SECTION
6/7 IN WAY OF BACK WALL



7 TYP TOWER ROOF SECTION
6/7 IN WAY OF ROOF BEAM



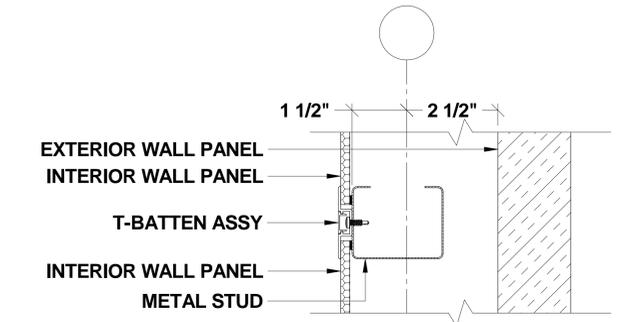
2 TYP TOWER ROOF SECTION
6/7 IN WAY OF ROOF BEAM

NOTE: EXTERIOR TRIM DEPICTED IN THIS DRAWING IS SHOWN FOR GUIDANCE. FINAL TRIM ARRANGEMENT SHALL BE BY THE ROOF/WALL PANEL MANUFACTURER. FINAL TRIM MUST PROVIDE ADEQUATE WEATHER PROTECTION.

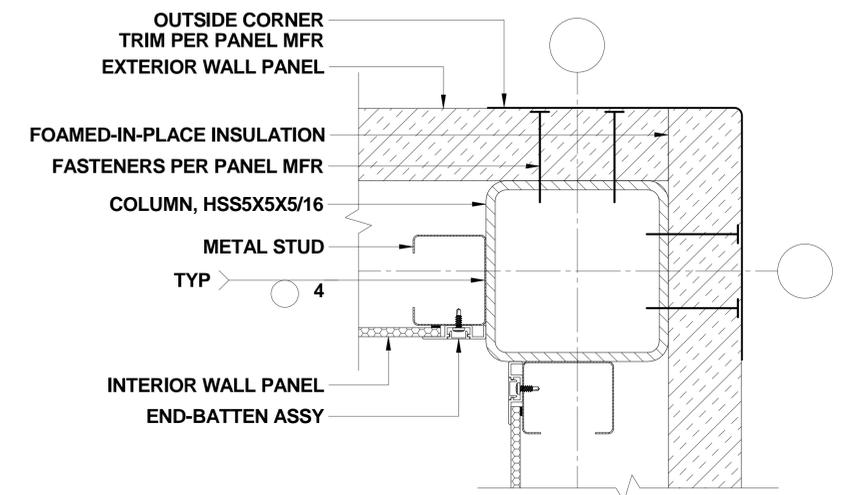
NOTE: BATTEN MOUNTING ASSEMBLIES FOR INTERIOR WALL PANELS SHALL BE BY INTERIOR WALL PANEL MANUFACTURER.

NOTE: INTERIOR WALL PANELS IN THE TOWERS ARE MOUNTED ON AN INFILL COLD-FORMED METAL STUD WALL SPACED 24\"/>

NOTE: THERE ARE NO INTERIOR WALL PANELS ON THE CEILINGS OR ON THE UNDERSIDE OF DECK STRUCTURE.

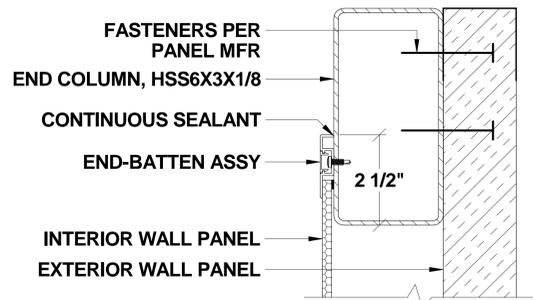


9 TYP T-BATTEN VERTICAL ASSY
7 IN WAY OF TOWER METAL STUD

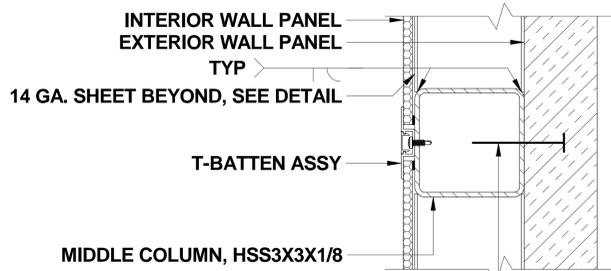


8 TYP TOWER WALL SECTION PLAN
5/7 IN WAY OF COLUMN

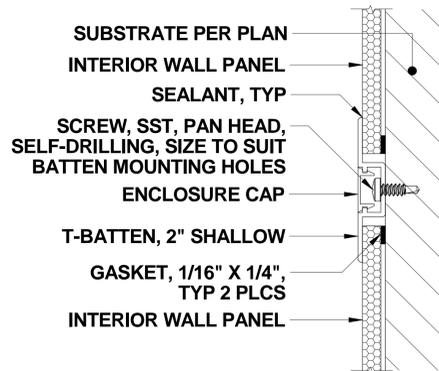
PUGET SOUND NAVAL SHIPYARD CODE 2370 ENGINEERING DIVISION		
NO DEVIATIONS SHALL BE MADE WITHOUT CODE 2370 APPROVAL		
DRAWING NO.	2370-1807	
TITLE	WALKWAY TOWERS AND BRIDGE	
SCALE	NTS	SHEET 7 OF 20
REV.	A	



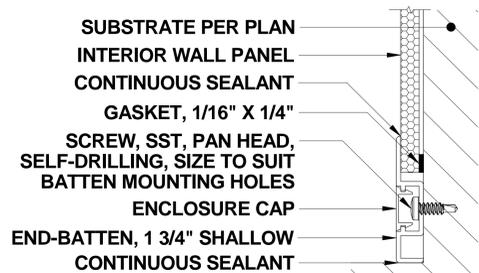
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6/8 **TYP BRIDGE WALL SECTION PLAN**
IN WAY OF END COLUMN



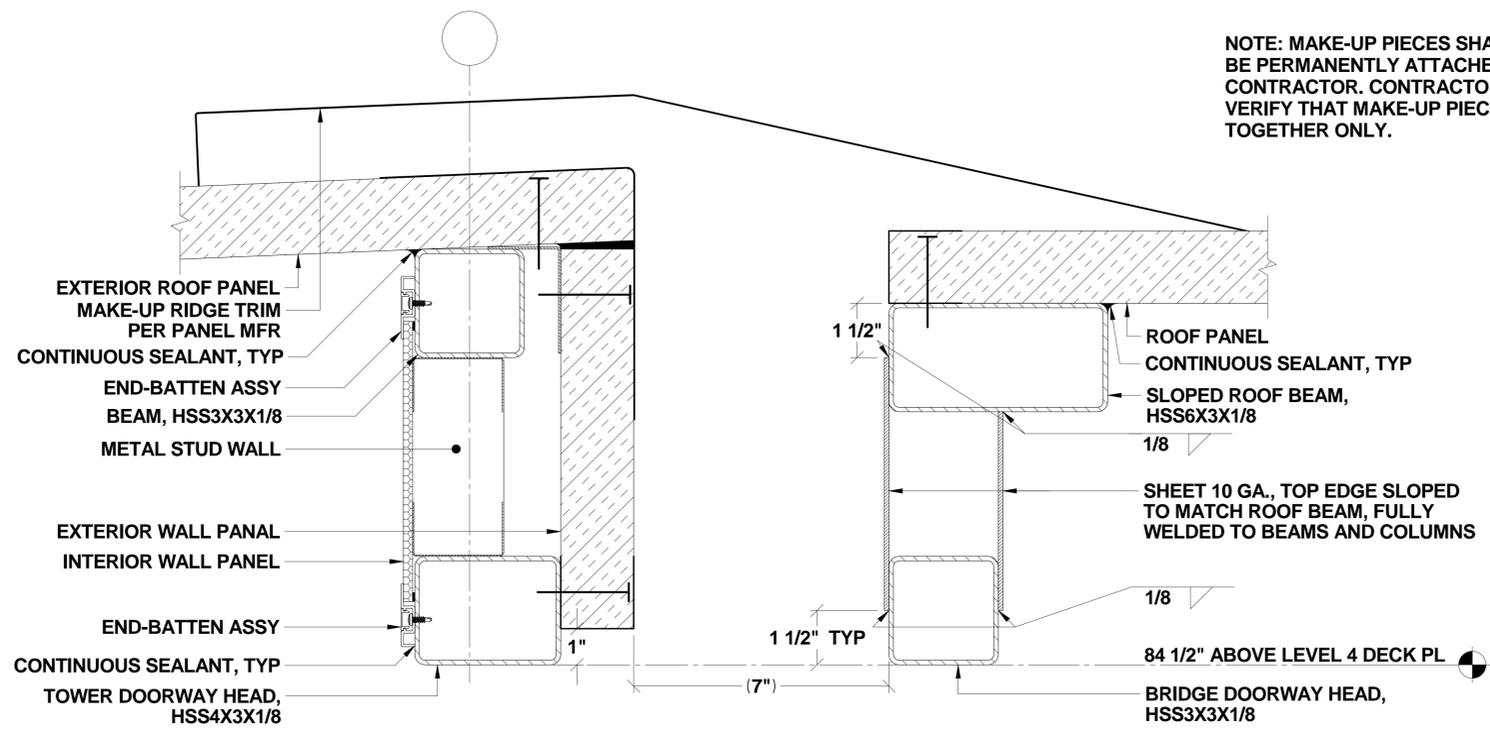
3
4/8 **TYP BRIDGE WALL SECTION PLAN**
IN WAY OF MIDDLE COLUMN



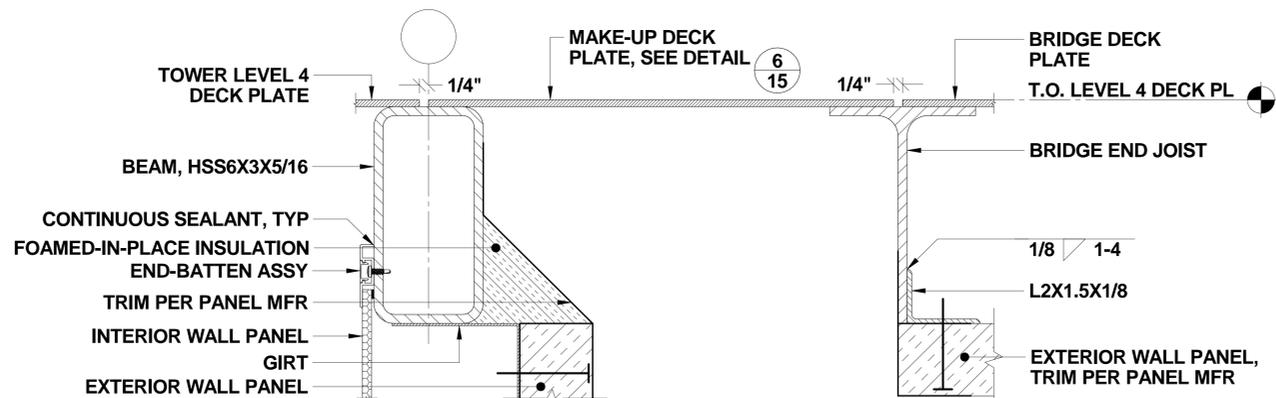
2
8 **TYP T-BATTEN ASSY**



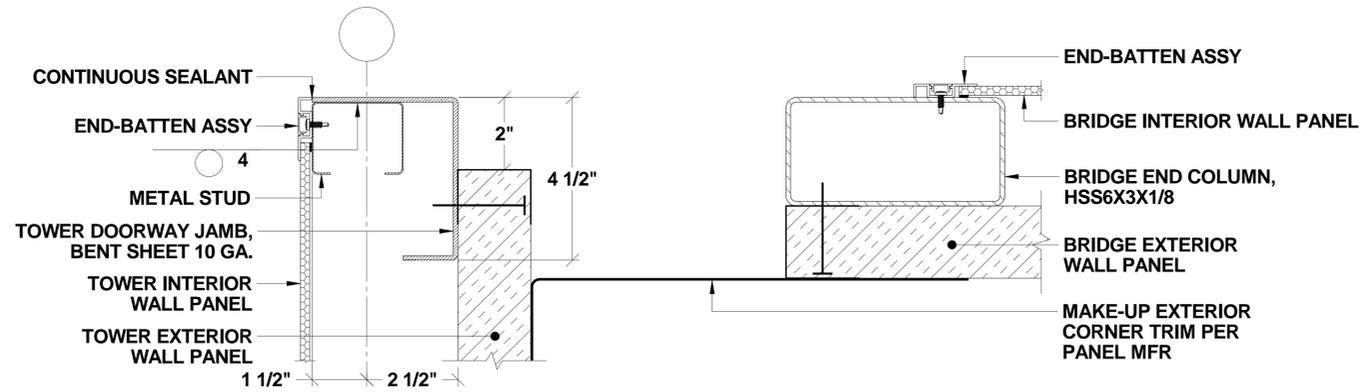
1
8 **TYP END-BATTEN ASSY**



7
4/8 **BRIDGE-TO-TOWER HEAD**

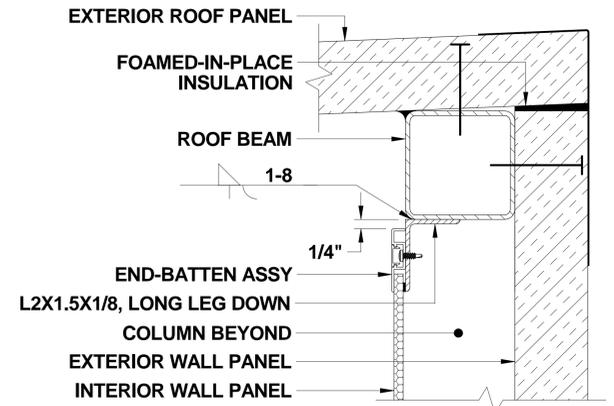


6
5/8 **BRIDGE-TO-TOWER SILL**

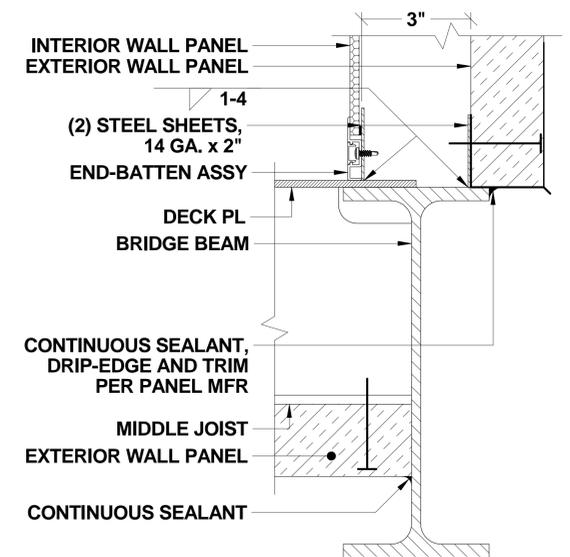


5
4/8 **BRIDGE-TO-TOWER JAMB**

NOTE: MAKE-UP PIECES SHALL NOT BE PERMANENTLY ATTACHED BY CONTRACTOR. CONTRACTOR SHALL VERIFY THAT MAKE-UP PIECES FIT TOGETHER ONLY.



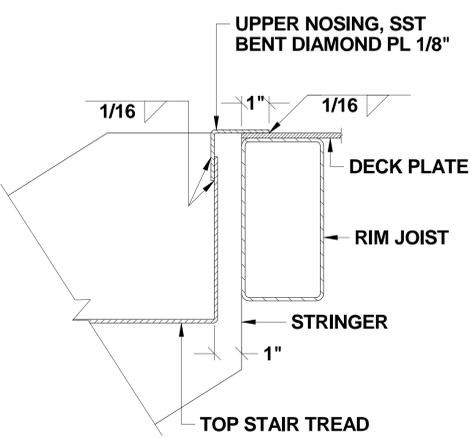
9
8 **TYP BRIDGE WALL SECTION**
IN WAY OF ROOF



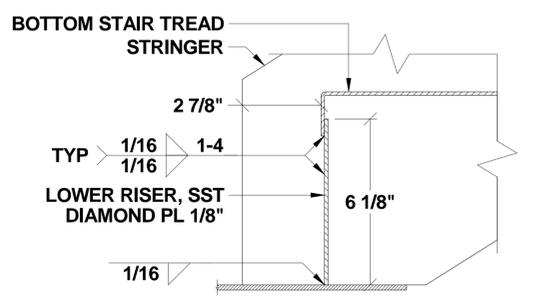
8
5/8 **TYP BRIDGE WALL SECTION**
IN WAY OF DECK PLATE

PUGET SOUND NAVAL SHIPYARD CODE 2370 ENGINEERING DIVISION		
NO DEVIATIONS SHALL BE MADE WITHOUT CODE 2370 APPROVAL		
DRAWING NO. 2370-1807		
TITLE WALKWAY TOWERS AND BRIDGE		
SCALE NTS	SHEET 8 OF 20	REV. A

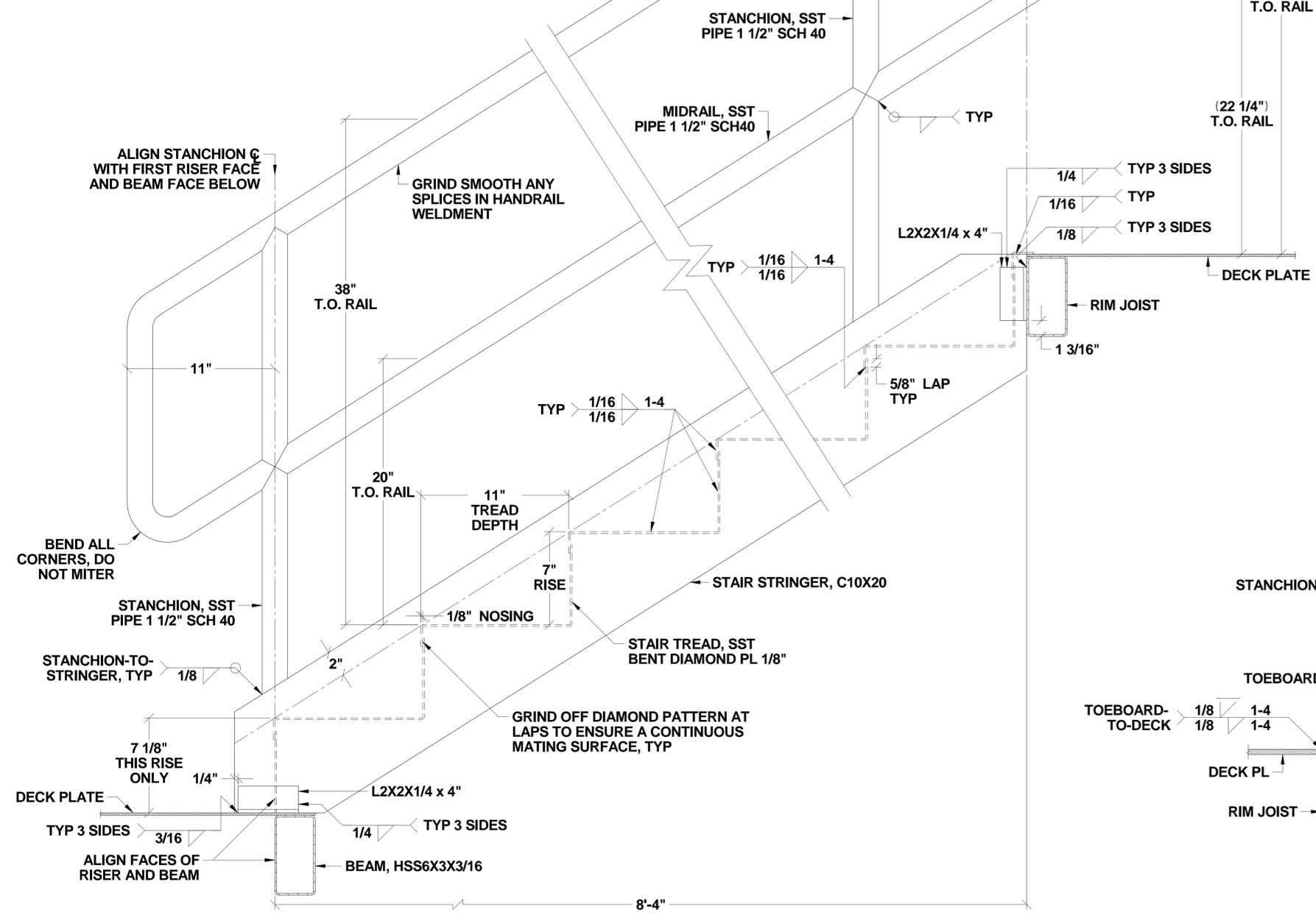
REV. SHEET **A** 8
TITLE **WALKWAY TOWERS AND BRIDGE**
DWG. NO. **2370-1807**



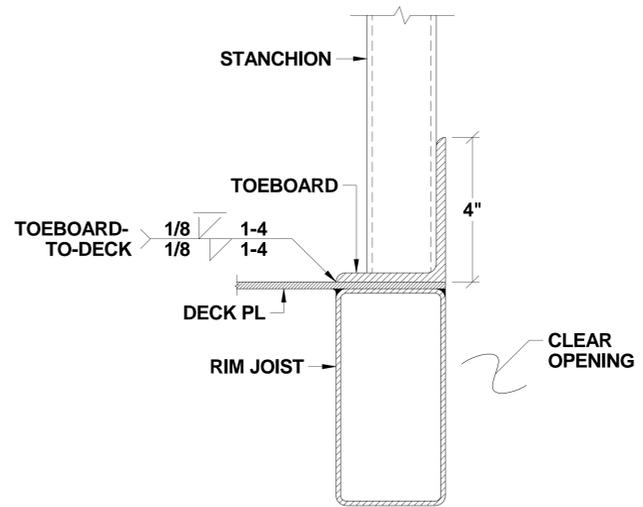
2 TYP UPPER NOSING SECTION
5/10



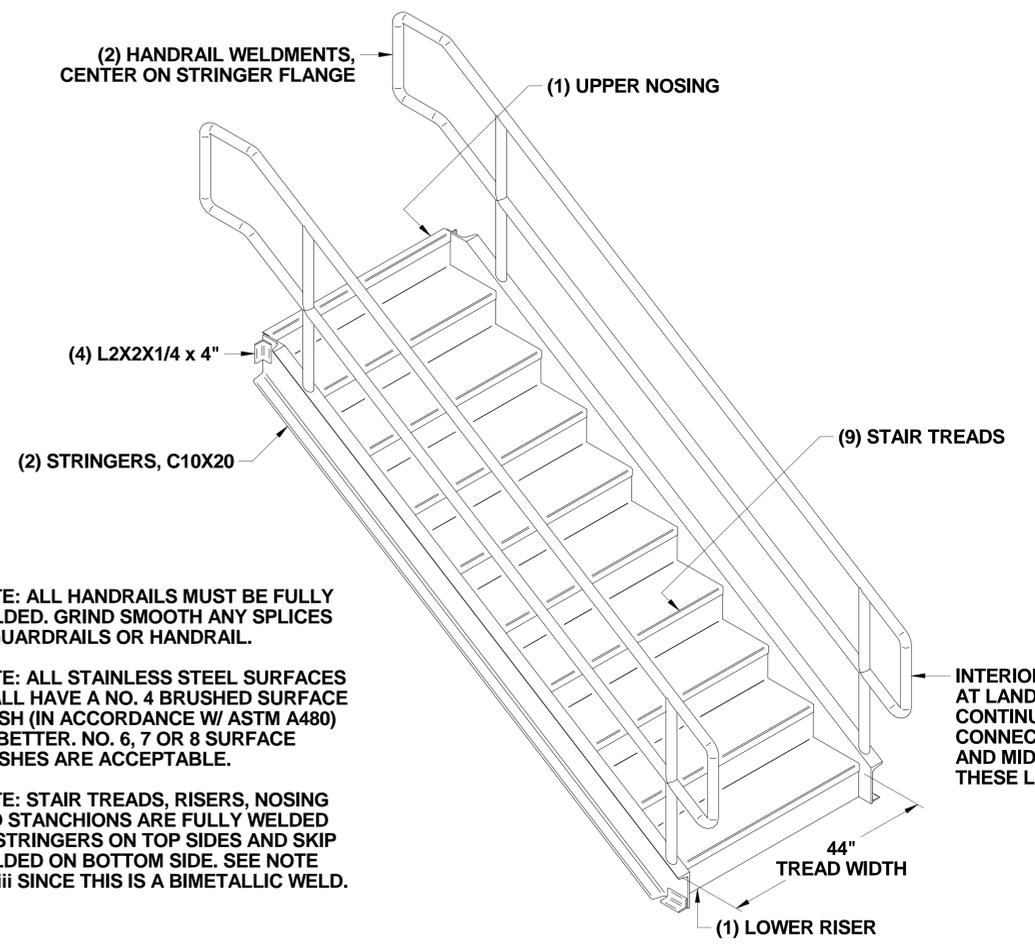
3 TYP LOWER RISER SECTION
5/10



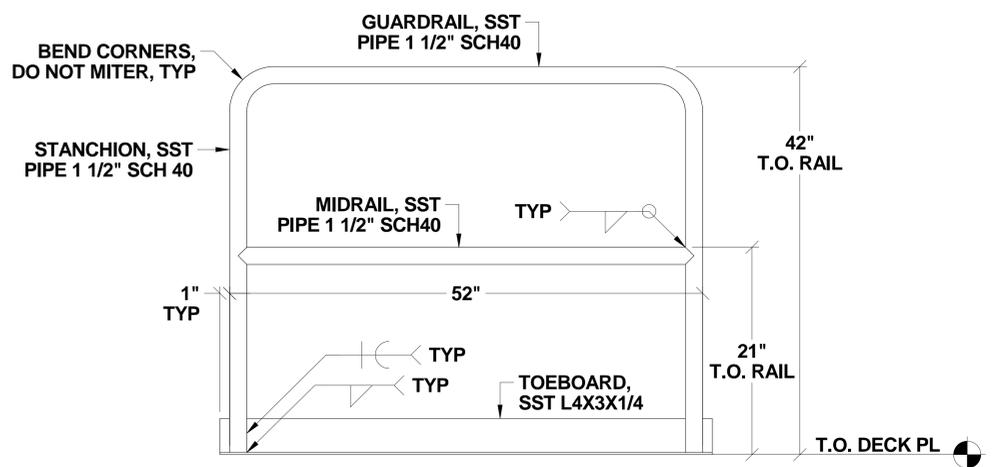
1 TYP STAIRWAY ELEVATION
5/10



4 TOEBOARD SECTION ELEVATION
5/10



6 TYP STAIRWAY ASSEMBLY ISO
5/10



5 L4 GUARDRAIL ASSEMBLY
5/10

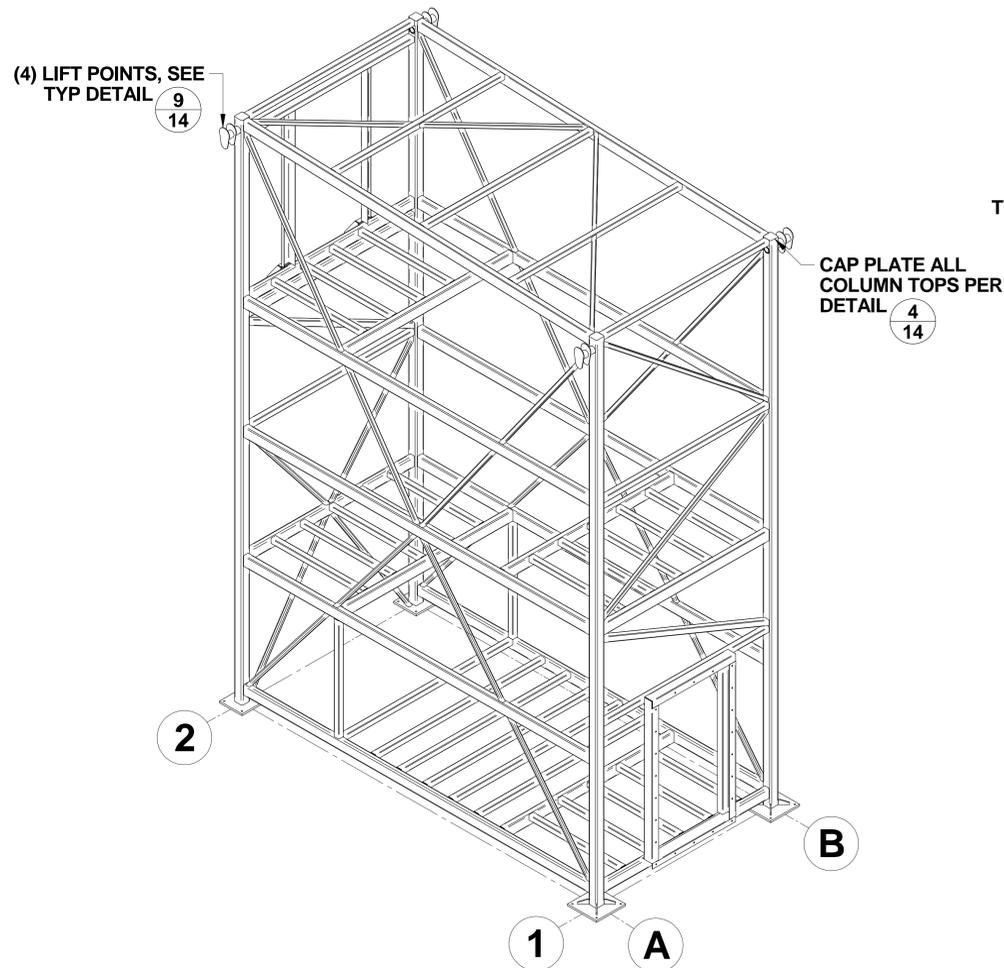
NOTE: ALL HANDRAILS MUST BE FULLY WELDED. GRIND SMOOTH ANY SPLICES IN GUARDRAILS OR HANDRAIL.

NOTE: ALL STAINLESS STEEL SURFACES SHALL HAVE A NO. 4 BRUSHED SURFACE FINISH (IN ACCORDANCE W/ ASTM A480) OR BETTER. NO. 6, 7 OR 8 SURFACE FINISHES ARE ACCEPTABLE.

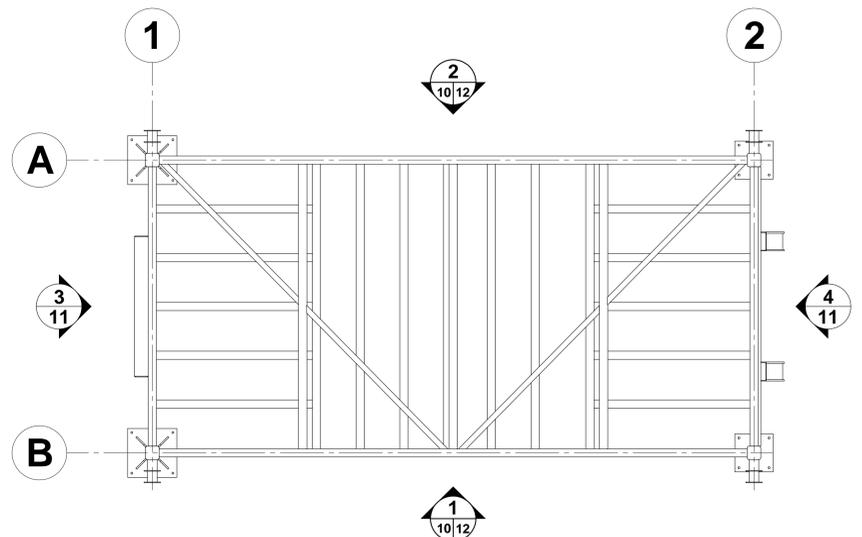
NOTE: STAIR TREADS, RISERS, NOSING AND STANCHIONS ARE FULLY WELDED TO STRINGERS ON TOP SIDES AND SKIP WELDED ON BOTTOM SIDE. SEE NOTE 6.H.iii SINCE THIS IS A BIMETALLIC WELD.

PUGET SOUND NAVAL SHIPYARD CODE 2370 ENGINEERING DIVISION		
NO DEVIATIONS SHALL BE MADE WITHOUT CODE 2370 APPROVAL		
DRAWING NO.	2370-1807	
TITLE	WALKWAY TOWERS AND BRIDGE	
SCALE	NTS	SHEET 10 OF 20
REV.	A	

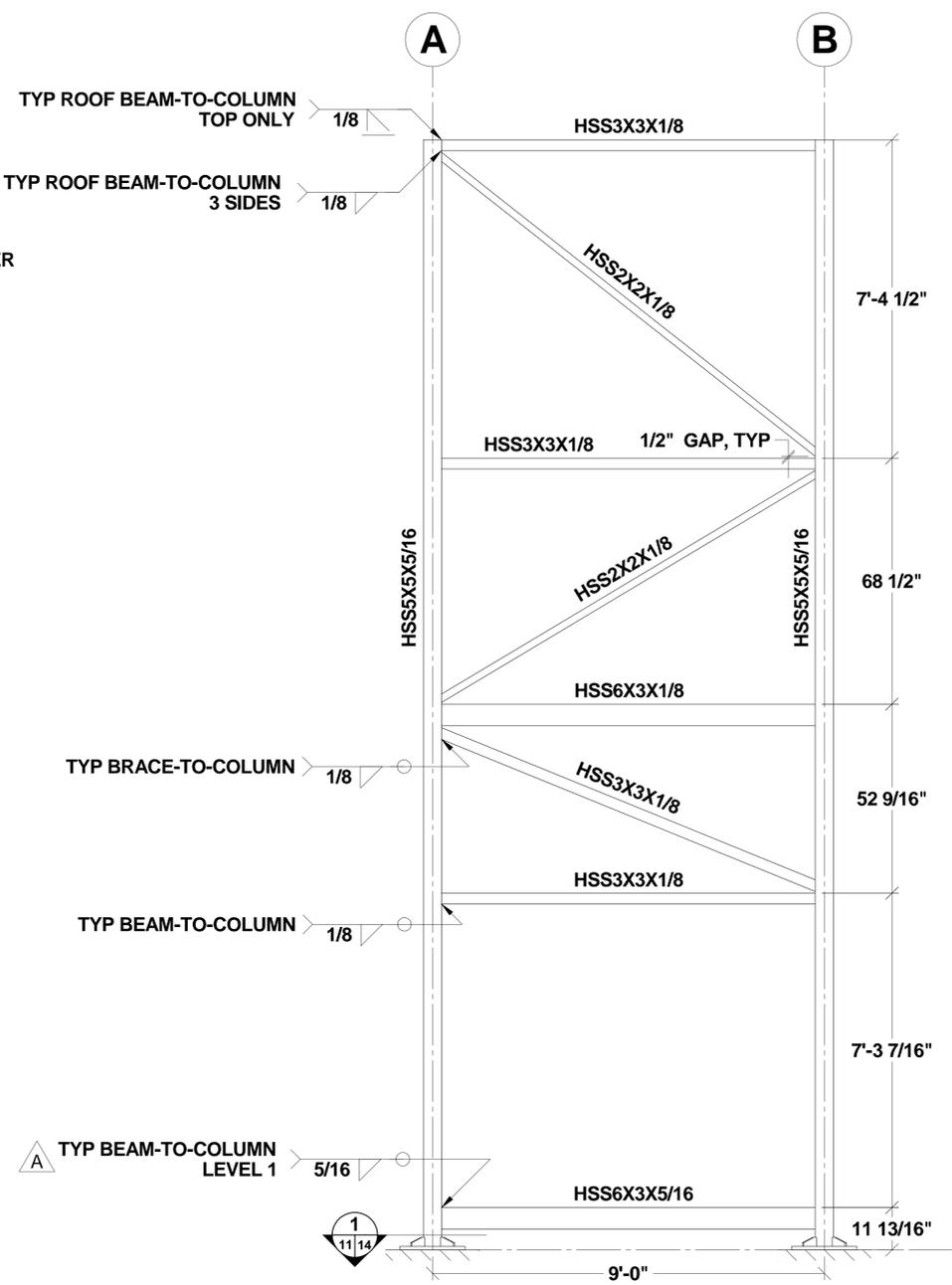
REV. SHEET A 10
 WALKWAY TOWERS AND BRIDGE
 2370-1807



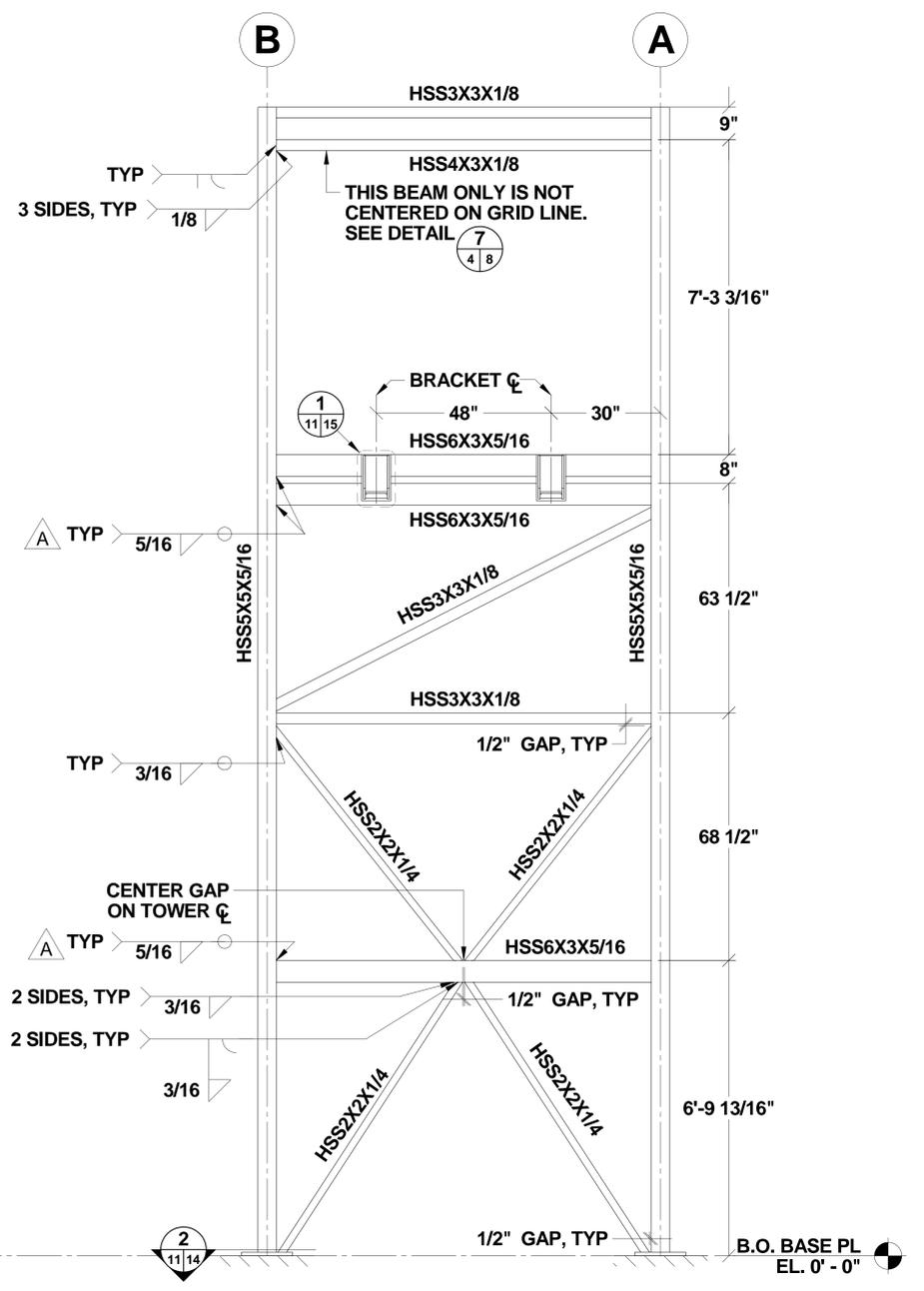
$\frac{2}{11}$ TOWER FRAME ISO



$\frac{1}{11}$ TOWER FRAME PLAN VIEW



$\frac{3}{11}$ TOWER FRAME AT GRID 1 ELEVATION



$\frac{4}{11}$ TOWER FRAME AT GRID 2 ELEVATION

NOTE: BEAMS, COLUMNS AND VERTICAL BRACES ARE CENTERED ON GRIDLINES.

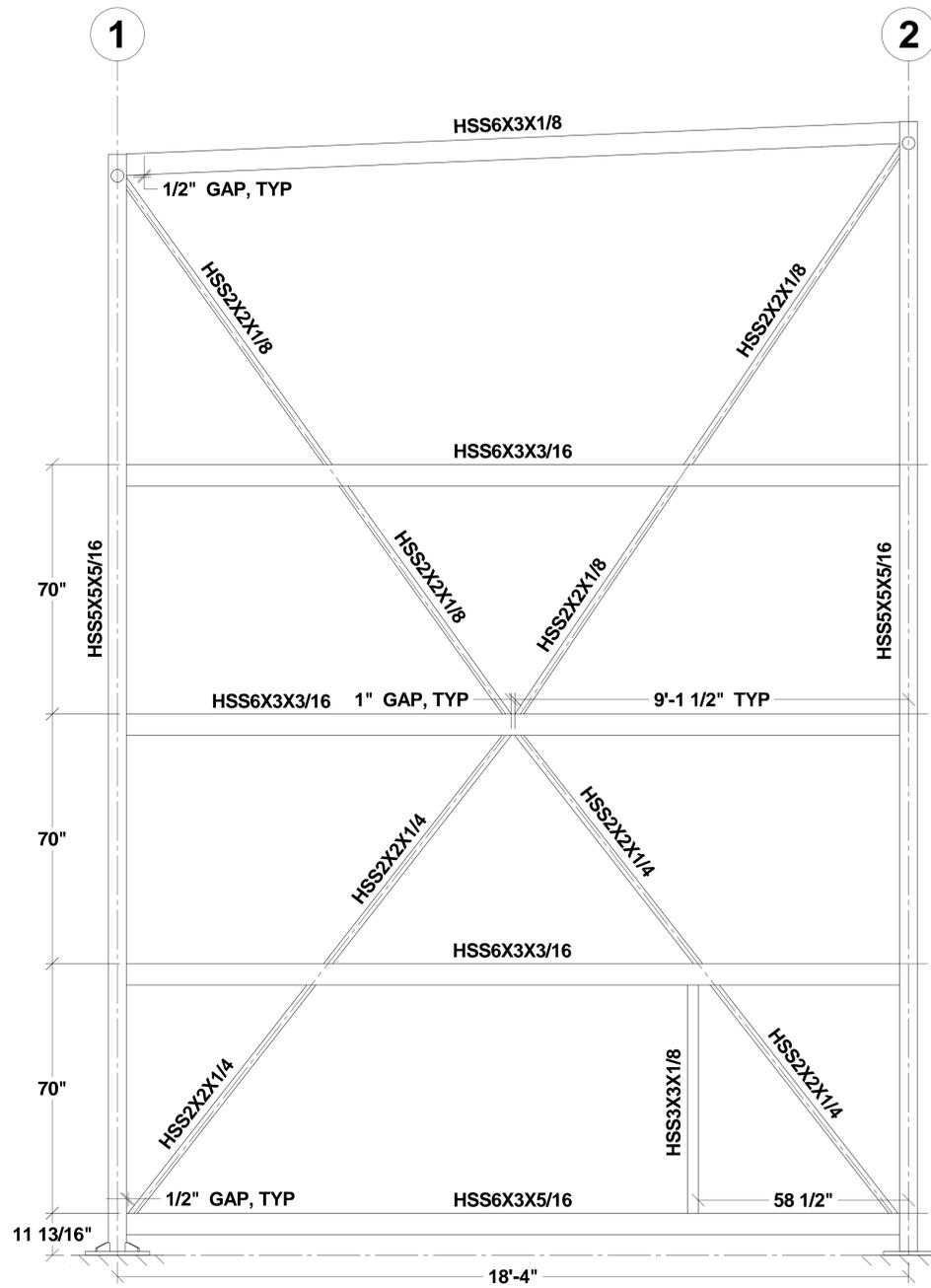
NOTE: VERTICAL DIMENSIONS IN ELEVATION VIEWS ARE TO T.O. BEAMS

NOTE: ALL HSS-TO-HSS CONNECTIONS MUST BE FULLY WELDED. WRAP WELDS AROUND ALL CORNERS OF BEAM, BRACE AND COLUMN CONNECTIONS.

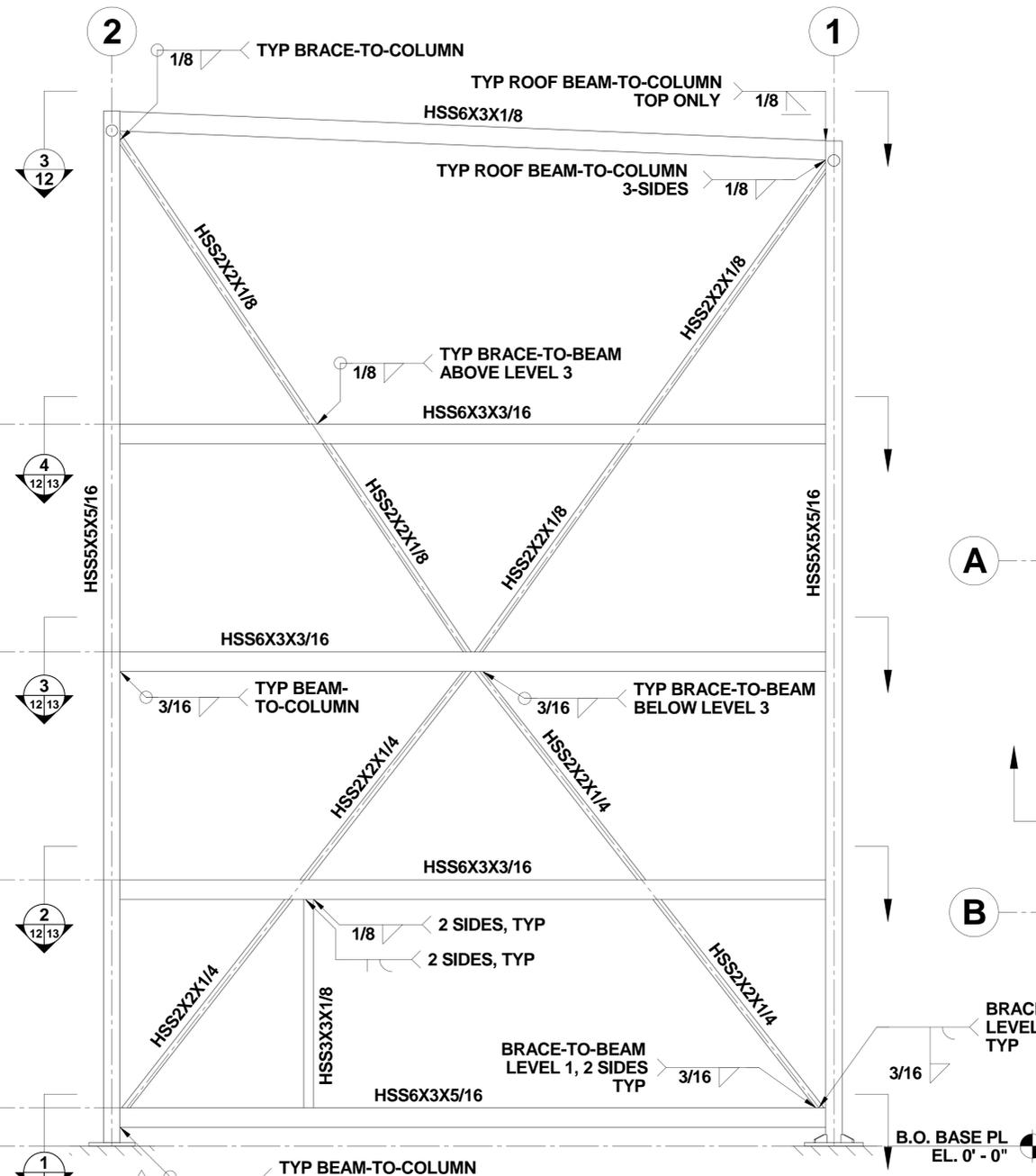
NOTE: LIFT POINTS AND DOORWAY ROUGH FRAMING ARE NOT SHOWN IN ELEVATIONS.

PUGET SOUND NAVAL SHIPYARD CODE 2370 ENGINEERING DIVISION		
NO DEVIATIONS SHALL BE MADE WITHOUT CODE 2370 APPROVAL		
DRAWING NO. 2370-1807		
TITLE WALKWAY TOWERS AND BRIDGE		
SCALE NTS	SHEET 11 OF 20	REV. A

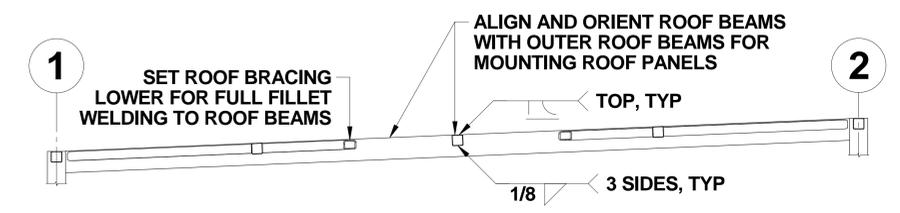
REV. SHEET A 11
 TITLE WALKWAY TOWERS AND BRIDGE
 DWG. NO. 2370-1807



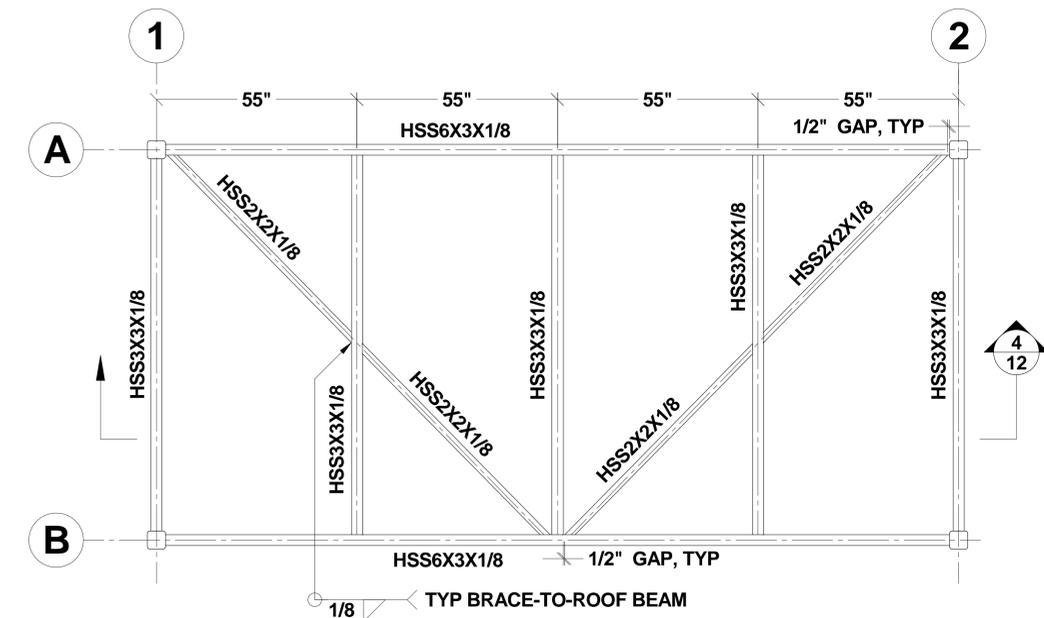
1
11/12 TOWER FRAME AT GRID B ELEVATION



2
11/12 TOWER FRAME AT GRID A ELEVATION



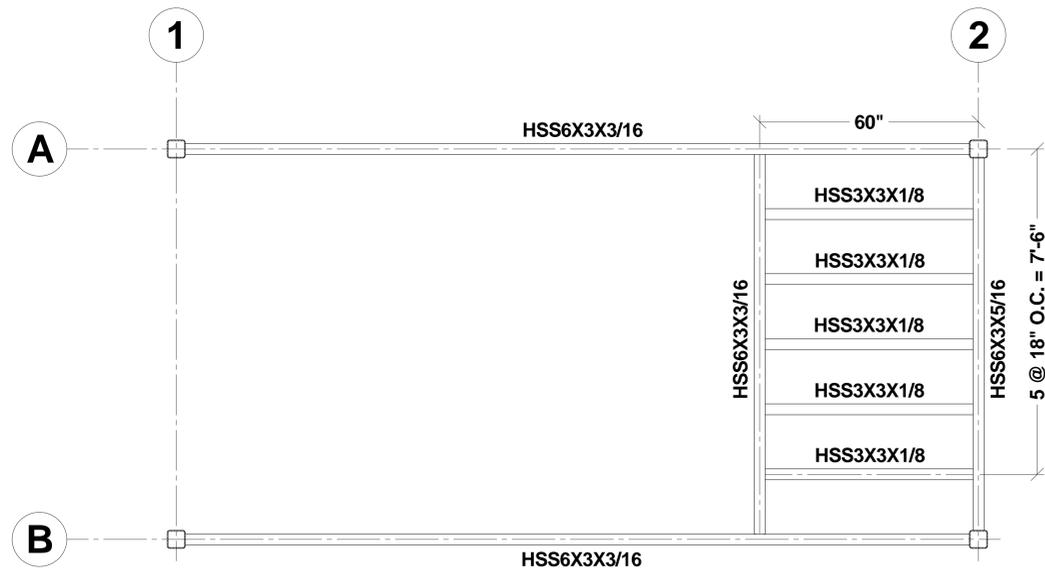
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12 TOWER ROOF FRAMING SECTION



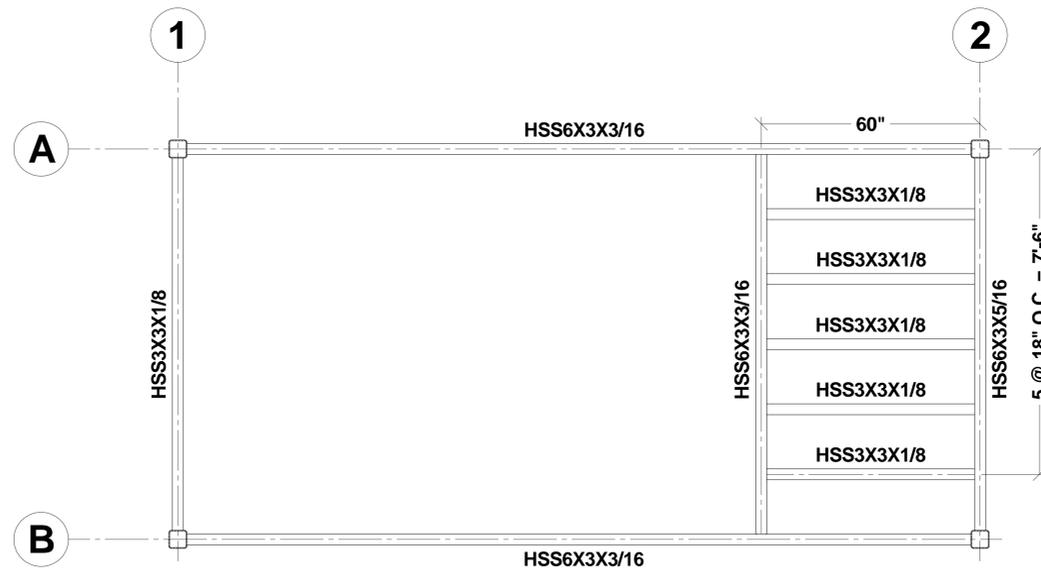
3
12 TOWER ROOF FRAMING PLAN

PUGET SOUND NAVAL SHIPYARD CODE 2370 ENGINEERING DIVISION		
NO DEVIATIONS SHALL BE MADE WITHOUT CODE 2370 APPROVAL		
DRAWING NO. 2370-1807		
TITLE WALKWAY TOWERS AND BRIDGE		
SCALE NTS	SHEET 12 OF 20	REV. A

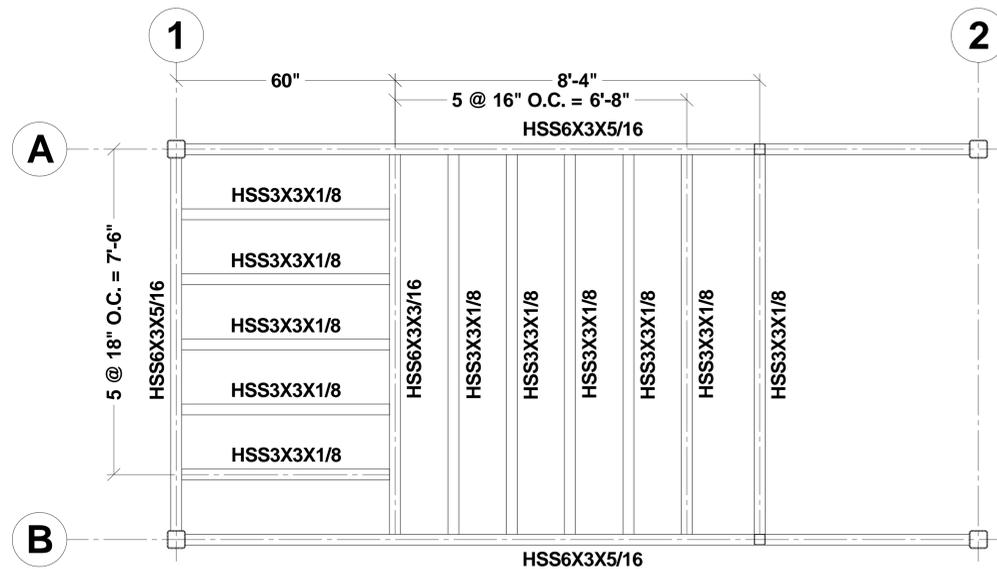
REV. SHEET
 TITLE
 WALKWAY TOWERS AND BRIDGE
 A 12
 DWG. NO.
 2370-1807



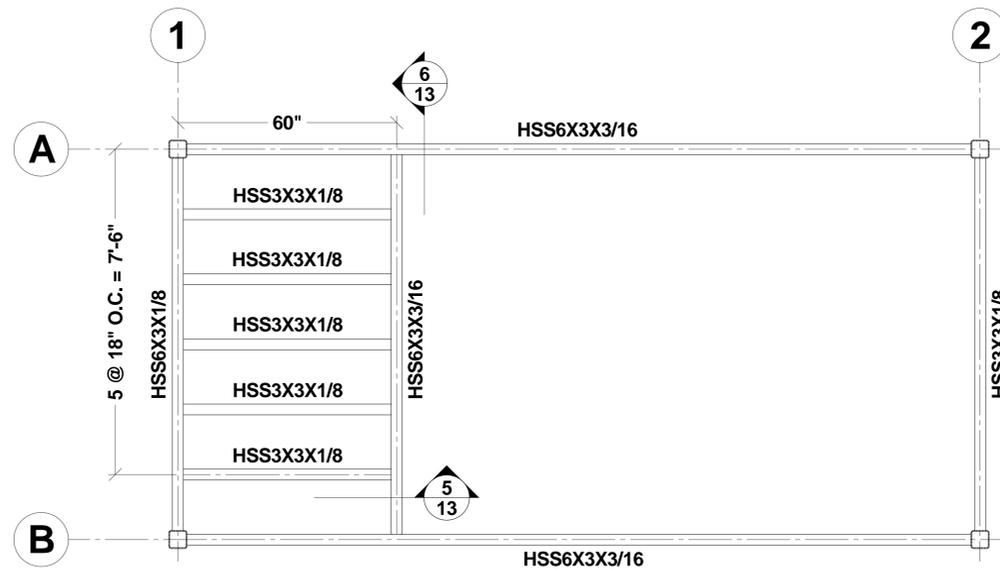
2 TOWER LEVEL 2 FLOOR FRAMING PLAN
 NOTE: BRACES NOT SHOWN FOR CLARITY. SEE ELEVATION VIEWS FOR DETAILS NOT SHOWN.



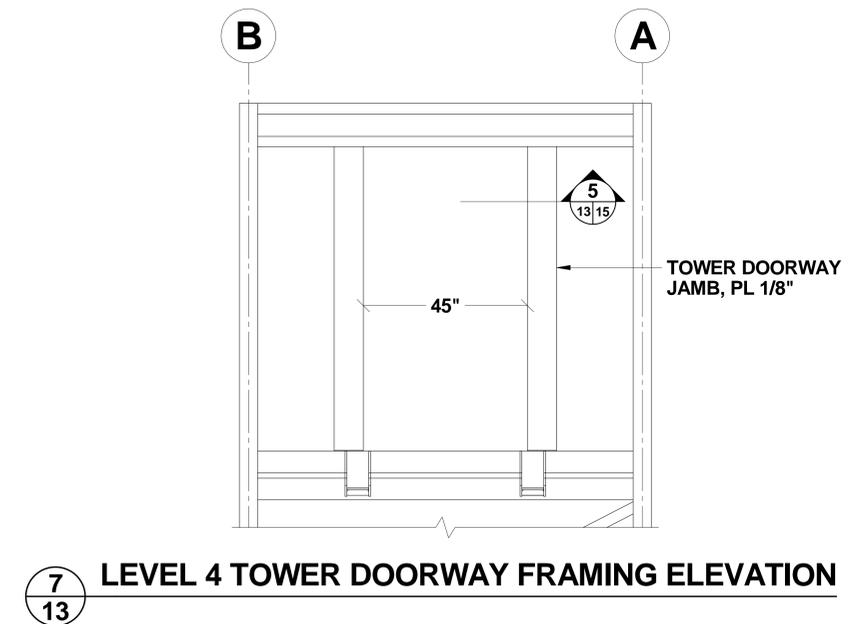
4 TOWER LEVEL 4 FLOOR FRAMING PLAN
 NOTE: BRACES NOT SHOWN FOR CLARITY. SEE ELEVATION VIEWS FOR DETAILS NOT SHOWN.



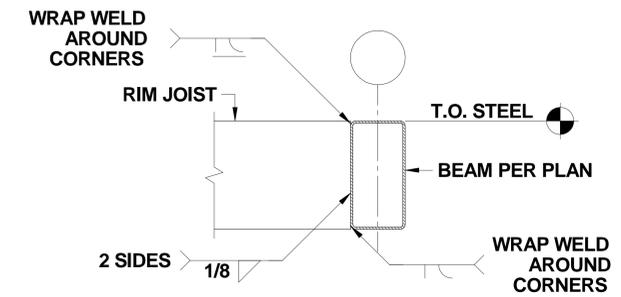
1 TOWER LEVEL 1 FLOOR FRAMING PLAN
 NOTE: BRACES NOT SHOWN FOR CLARITY. SEE ELEVATION VIEWS FOR DETAILS NOT SHOWN.



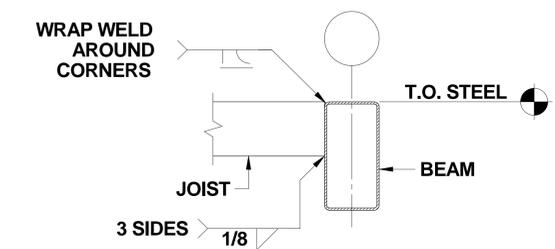
3 TOWER LEVEL 3 FLOOR FRAMING PLAN
 NOTE: BRACES NOT SHOWN FOR CLARITY. SEE ELEVATION VIEWS FOR DETAILS NOT SHOWN.



7 LEVEL 4 TOWER DOORWAY FRAMING ELEVATION



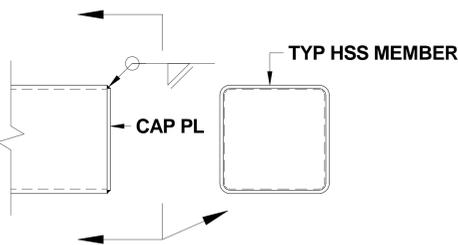
6 TYP TOWER RIM JOIST-TO-BEAM DETAIL



5 TYP TOWER JOIST-TO-BEAM DETAIL

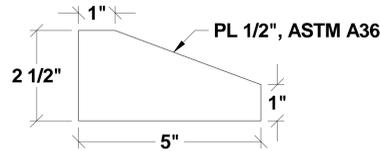
PUGET SOUND NAVAL SHIPYARD CODE 2370 ENGINEERING DIVISION		
NO DEVIATIONS SHALL BE MADE WITHOUT CODE 2370 APPROVAL		
DRAWING NO. 2370-1807		
TITLE WALKWAY TOWERS AND BRIDGE		
SCALE NTS	SHEET 13 OF 20	REV. A

NOTE: CAP PLATE THICKNESS IS EQUAL TO OR 1/8" LESS THAN MEMBER WALL THICKNESS.



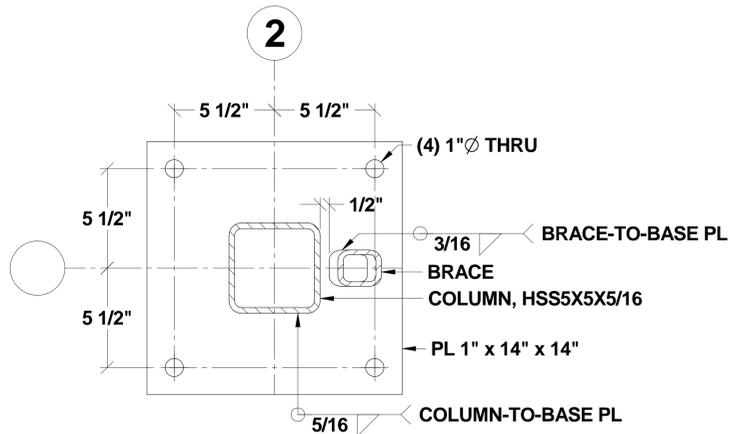
4 TYP CAP & SEAL WELD

NOTE: ALL HSS MEMBERS WITH OPEN ENDS ARE CAPPED AND SEAL WELDED.



3 TYP BASE PLATE STIFFENER

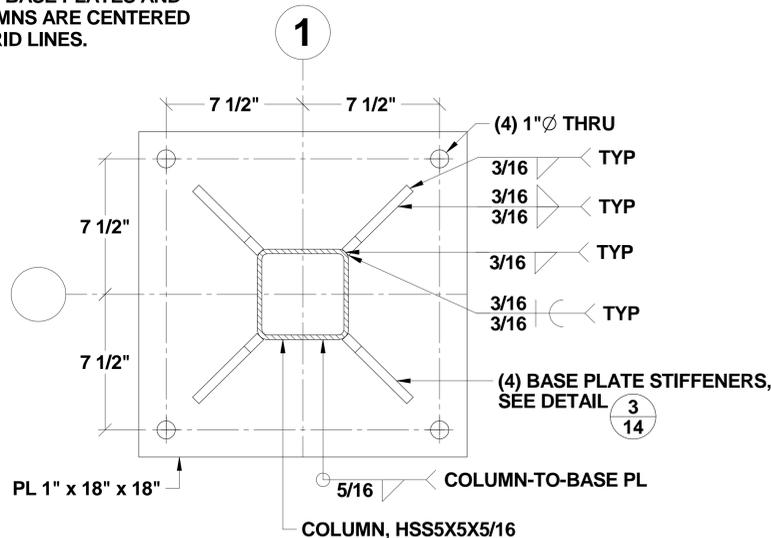
2



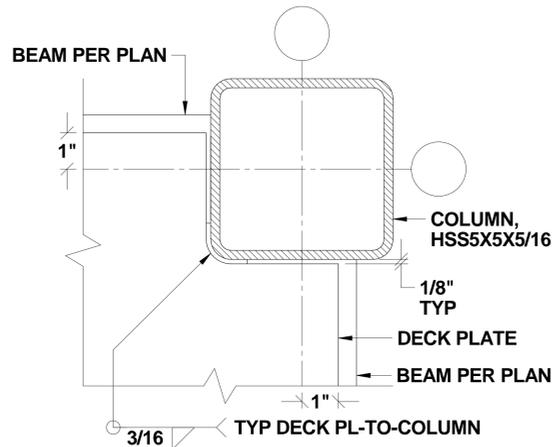
2 COLUMN 2A & 2B BASE PLATE DETAIL

NOTE: BASE PLATES AND COLUMNS ARE CENTERED ON GRID LINES.

1

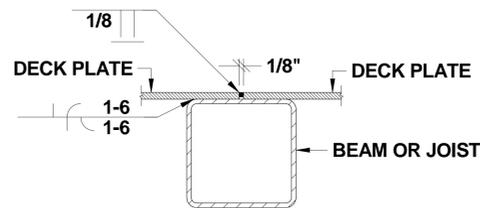


1 COLUMN 1A & 1B BASE PLATE DETAIL



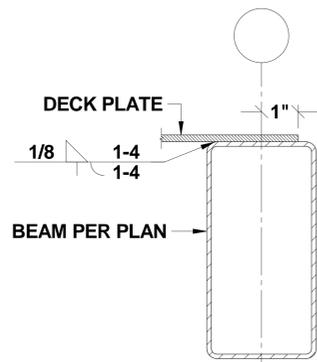
8 TYP DECK PLATE PLAN

IN WAY OF COLUMN



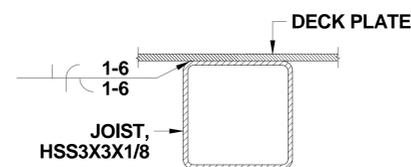
7 TYP DECK PLATE SPLICE

NOTE: CENTER DECK PLATE SPLICES OVER BEAMS OR JOISTS.

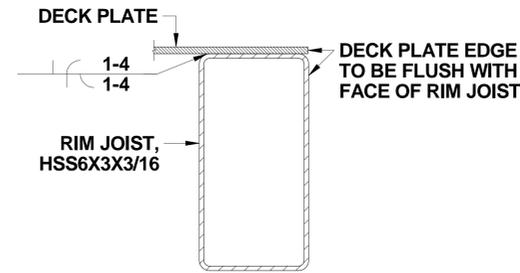


6 TYP DECK PL-TO-BEAM DETAIL

IN WAY OF BUILDING PERIMETER

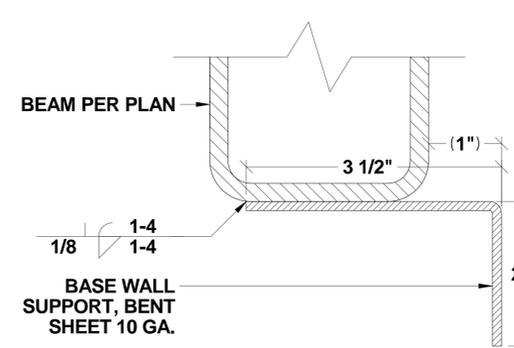


5 TYP DECK PL-TO-JOIST DETAIL

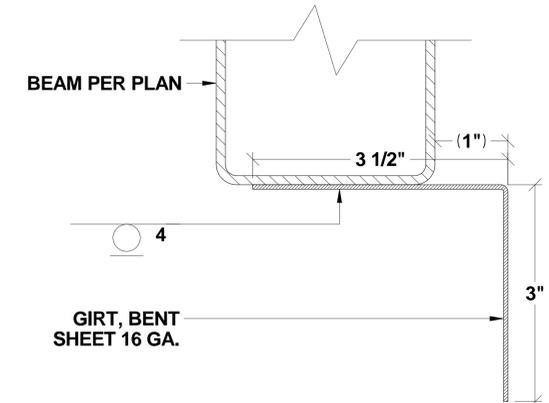


12 TYP DECK PL-TO-BEAM DETAIL

IN WAY OF RIM JOIST

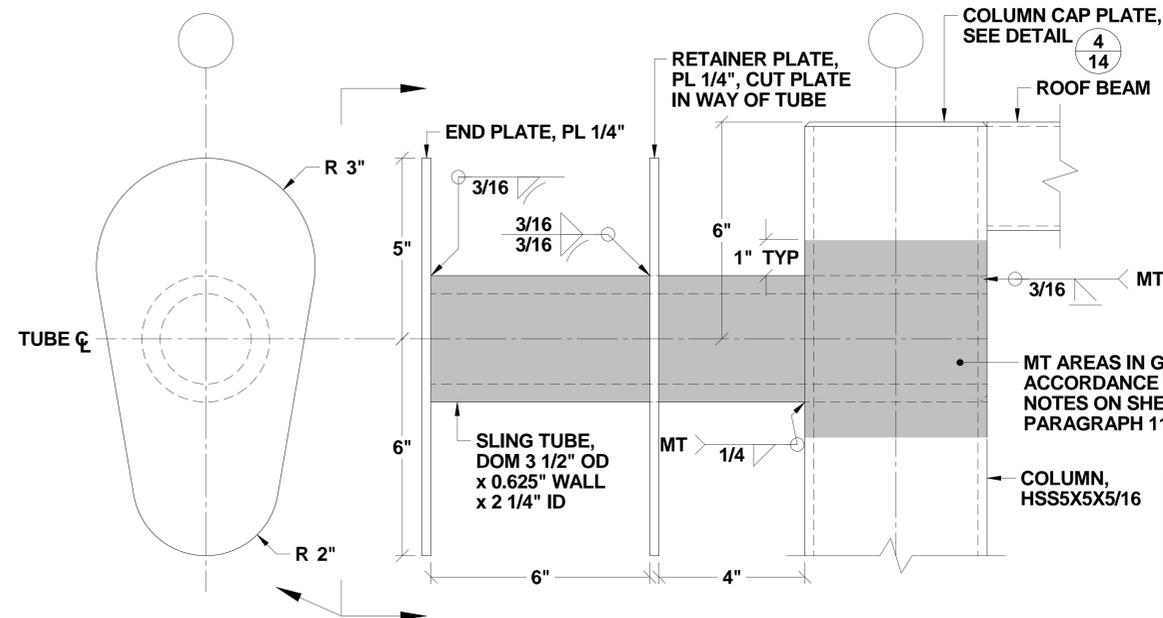


10 TYP TOWER BASE WALL SUPPORT



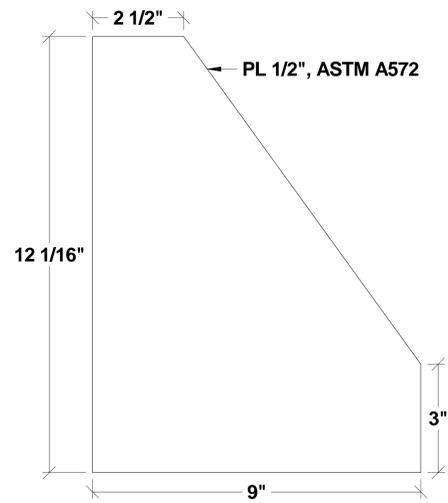
11 TYP TOWER GIRT DETAIL

NOTE: BASE WALL SUPPORT AND GIRT ALIGNMENT RELATIVE TO BEAMS MAY DIFFER BASED ON THE PLANE OF FRAMING REQUIREMENTS IN GENERAL NOTE 4.E.

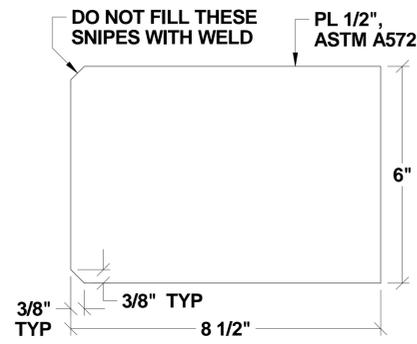


9 TYP TOWER LIFT POINT ELEVATION

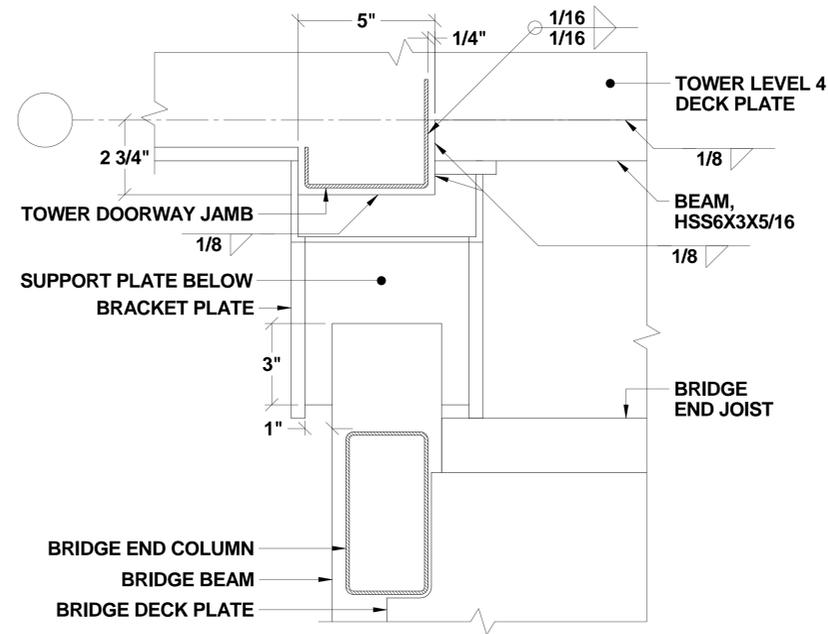
PUGET SOUND NAVAL SHIPYARD CODE 2370 ENGINEERING DIVISION		
NO DEVIATIONS SHALL BE MADE WITHOUT CODE 2370 APPROVAL		
DRAWING NO.	2370-1807	
TITLE	WALKWAY TOWERS AND BRIDGE	
SCALE	NTS	SHEET 14 OF 20
REV.	A	



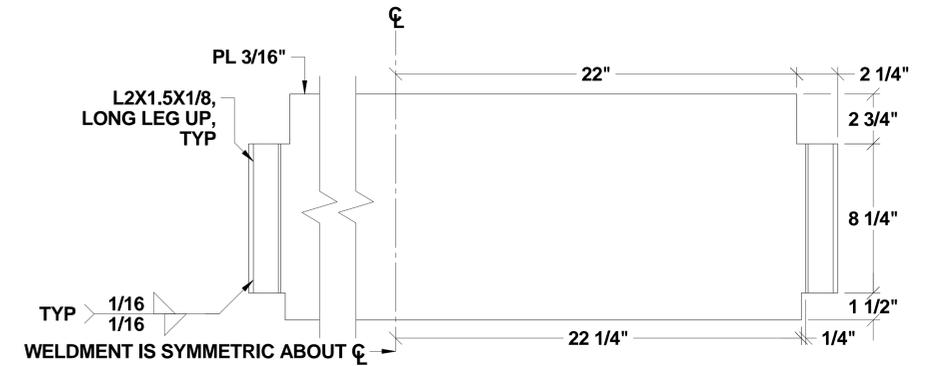
2
15 **BRACKET PLATE DETAIL**



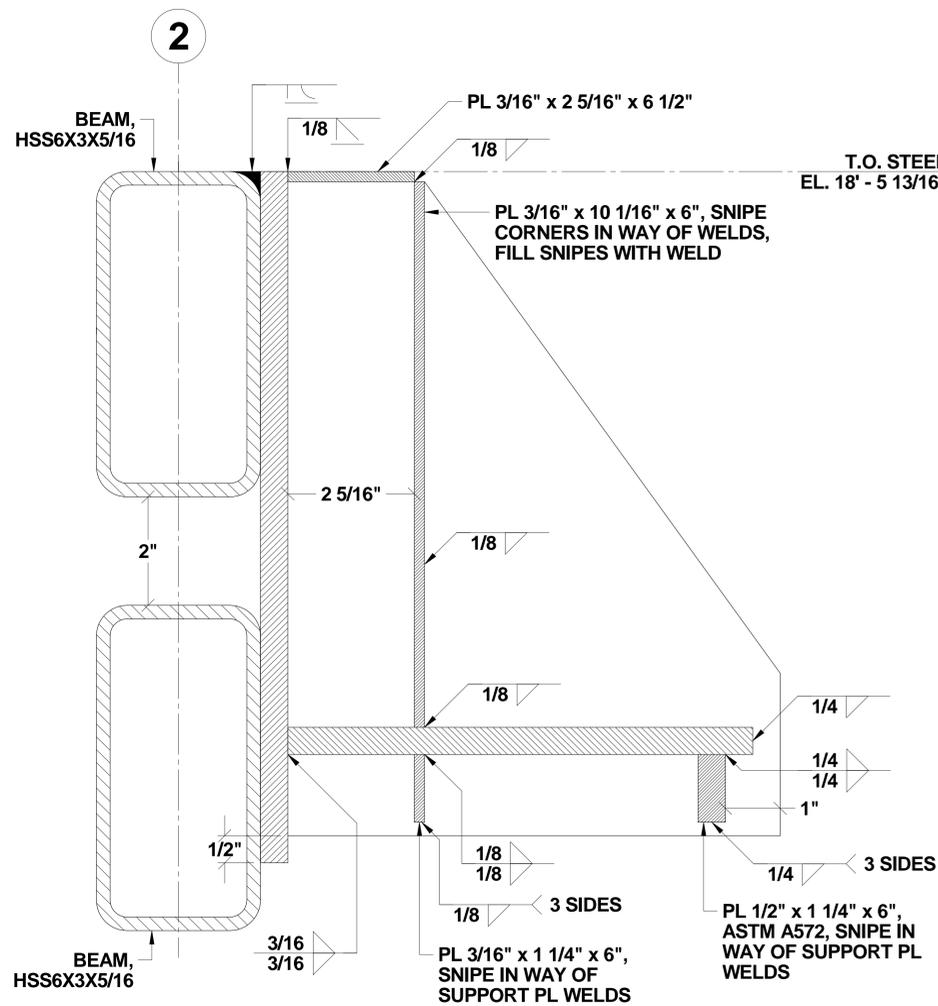
3
15 **SUPPORT PLATE DETAIL**



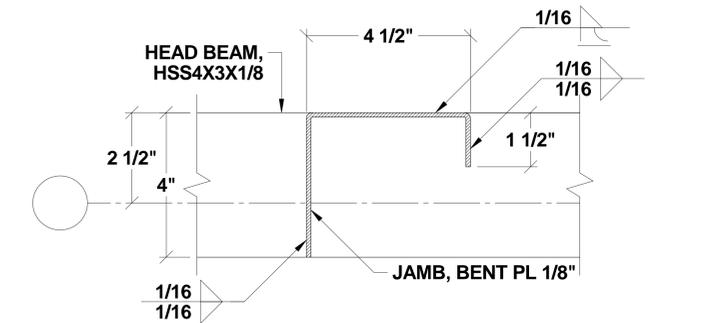
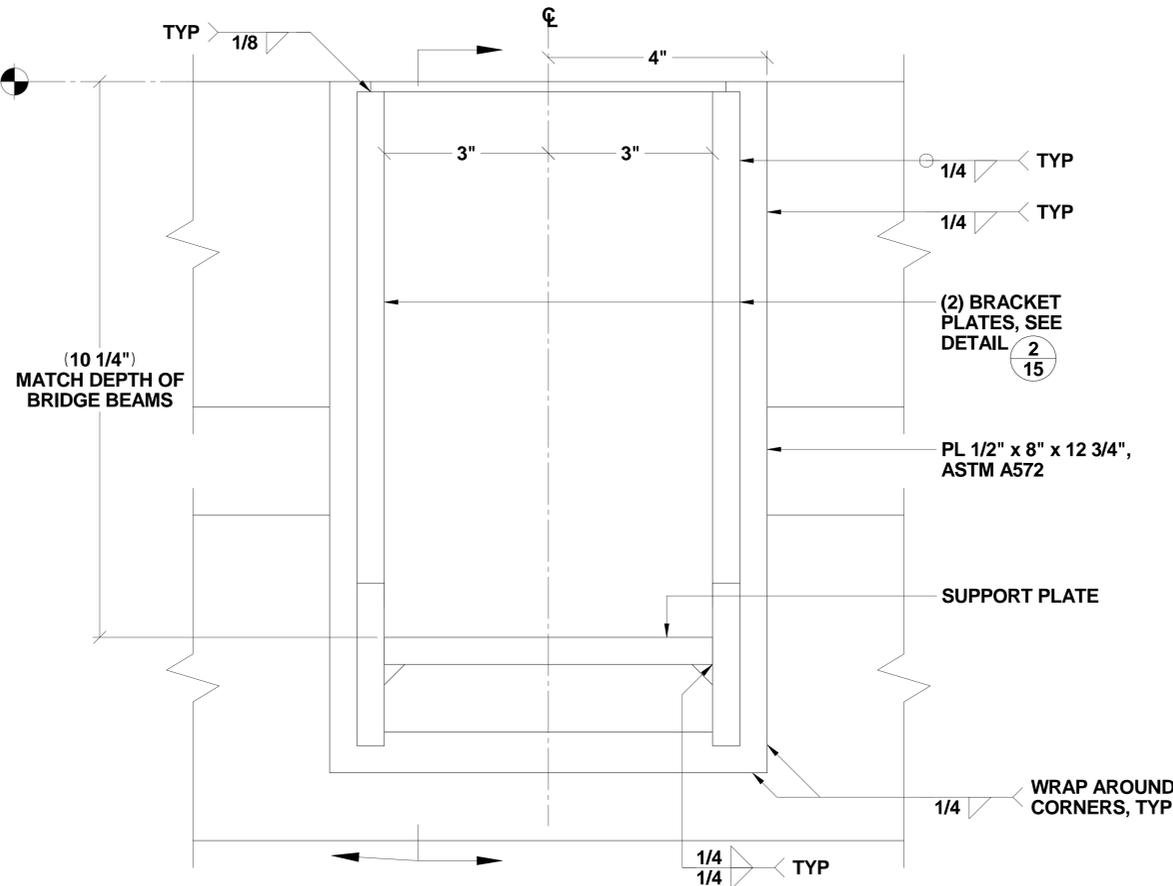
4
15 **TYP BRIDGE-TO-TOWER DETAIL PLAN**
ARCHITECTURAL AND MAKE-UP PIECES NOT SHOWN



6
15 **MAKE-UP DECK PLATE**
NOTE: THERE ARE (2) MAKE-UP DECK PLATES, (1) AT EACH END OF THE TOWER-TO-BRIDGE SILLS. FOR LOCATION, SEE LEVEL 4 SILL **6** 5/8.

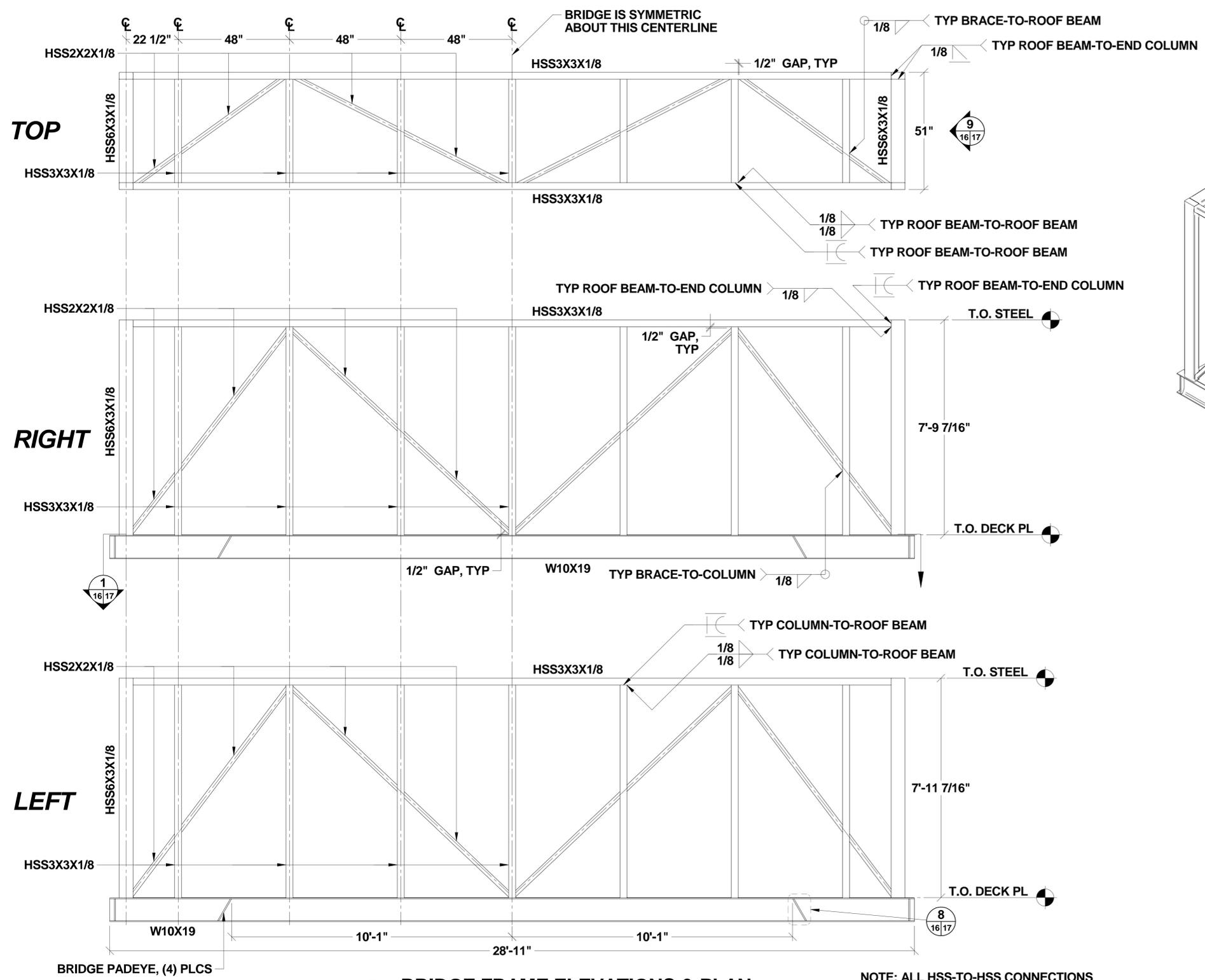


1
11/15 **TYP BRIDGE BRACKET DETAIL**



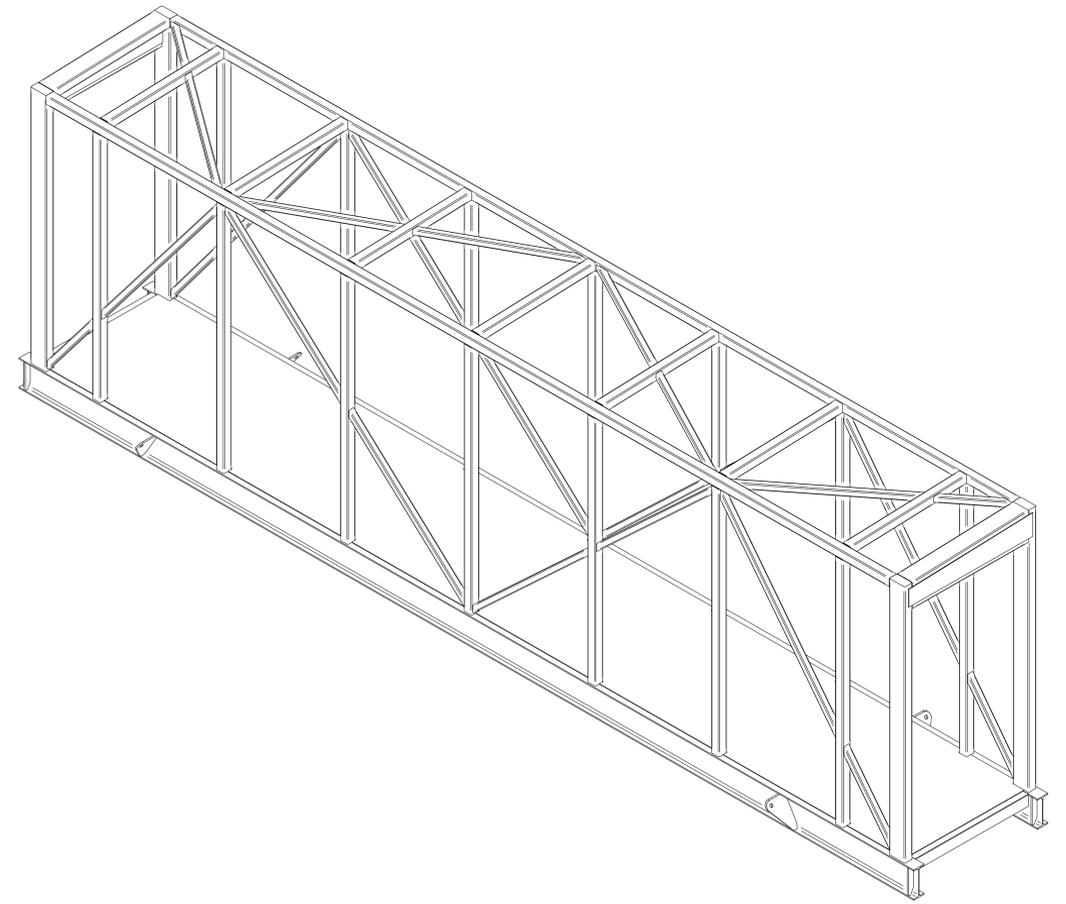
5
13/15 **TYP TOWER LEVEL 4 JAMB CONNECTION**

PUGET SOUND NAVAL SHIPYARD CODE 2370 ENGINEERING DIVISION		
NO DEVIATIONS SHALL BE MADE WITHOUT CODE 2370 APPROVAL		
DRAWING NO. 2370-1807		
TITLE WALKWAY TOWERS AND BRIDGE		
SCALE NTS	SHEET 15 OF 20	REV. A



1
16
BRIDGE FRAME ELEVATIONS & PLAN

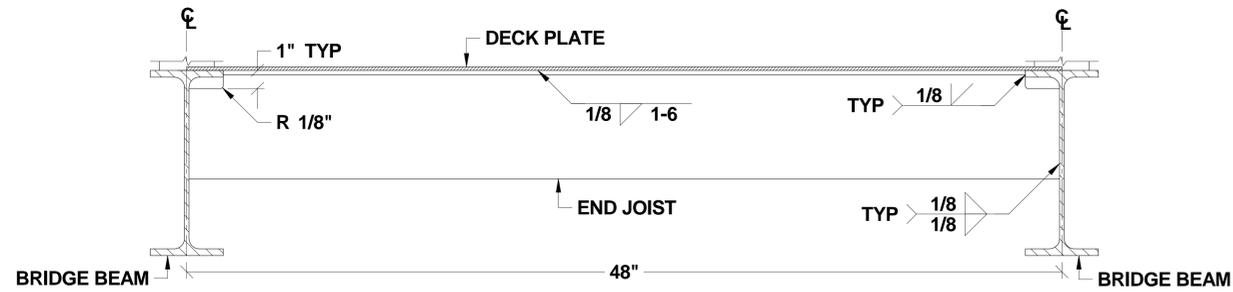
NOTE: ALL HSS-TO-HSS CONNECTIONS MUST BE FULLY WELDED. WRAP WELDS AROUND ALL CORNERS OF BEAM AND BRACE CONNECTIONS.



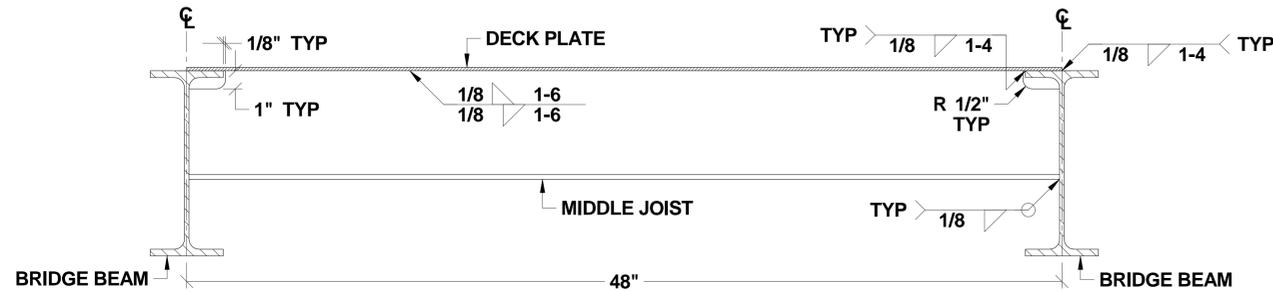
2
16
BRIDGE FRAME & DECK PL ISO

PUGET SOUND NAVAL SHIPYARD CODE 2370 ENGINEERING DIVISION		
NO DEVIATIONS SHALL BE MADE WITHOUT CODE 2370 APPROVAL		
DRAWING NO. 2370-1807		
TITLE WALKWAY TOWERS AND BRIDGE		
SCALE NTS	SHEET 16 OF 20	REV. A

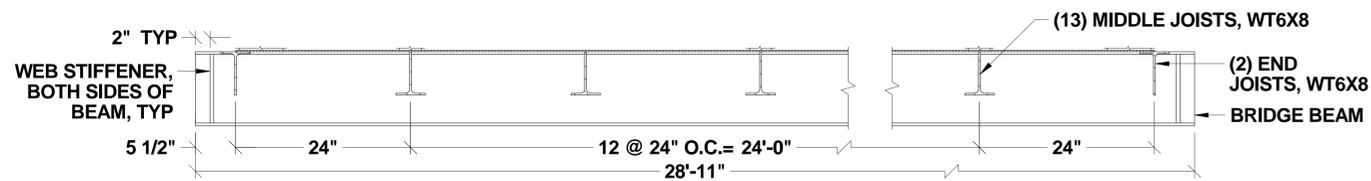
DWG. NO. 2370-1807
 TITLE WALKWAY TOWERS AND BRIDGE
 REV. SHEET A 16



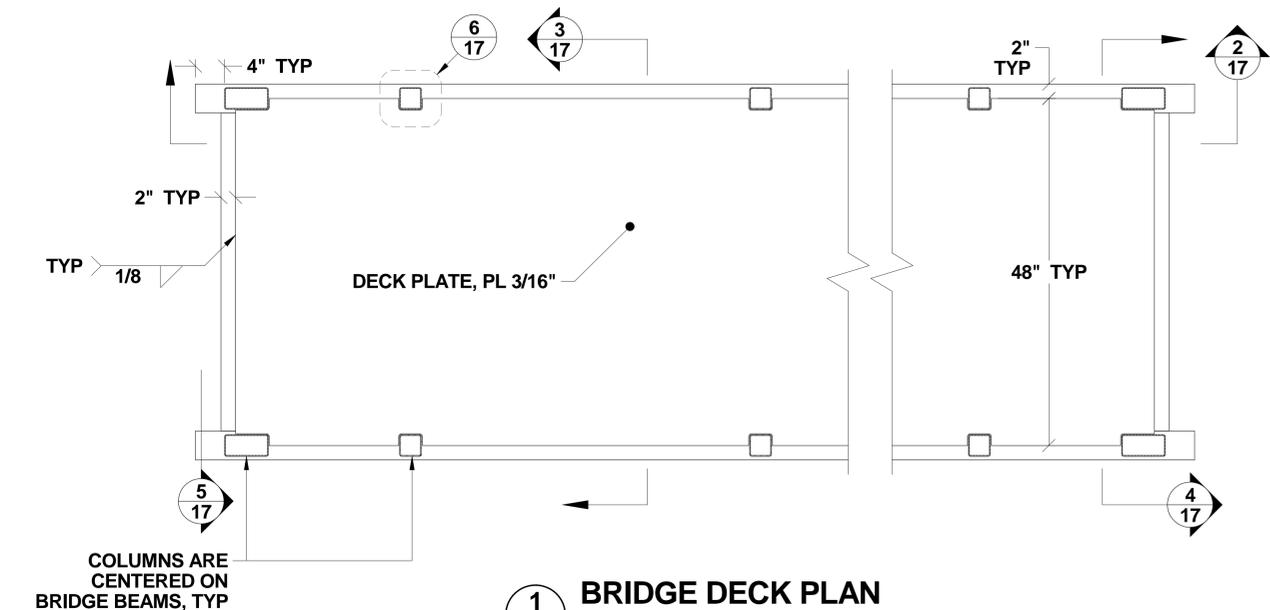
4
17 TYP BRIDGE DECK SECTION
IN WAY OF END JOIST



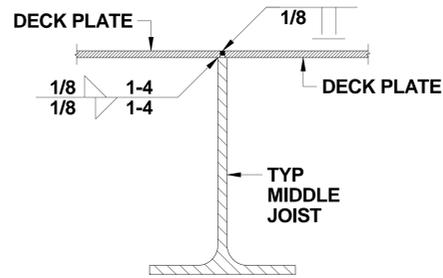
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17 TYP BRIDGE DECK SECTION
IN WAY OF MIDDLE JOIST



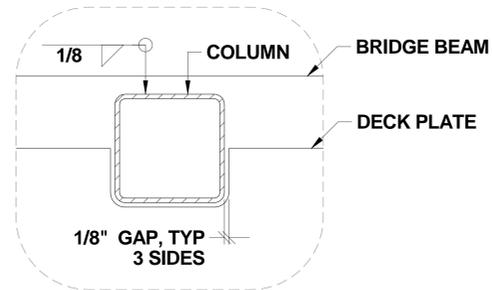
2
17 BRIDGE DECK SECTION



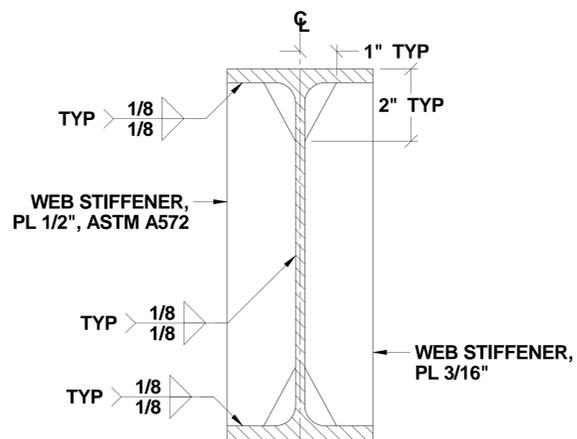
1
16/17 BRIDGE DECK PLAN



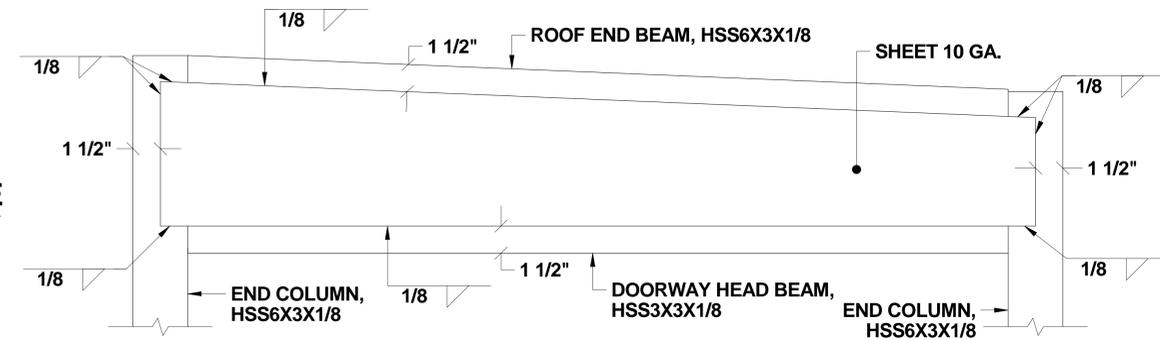
7
17 TYP BRIDGE DECK PL SPLICE



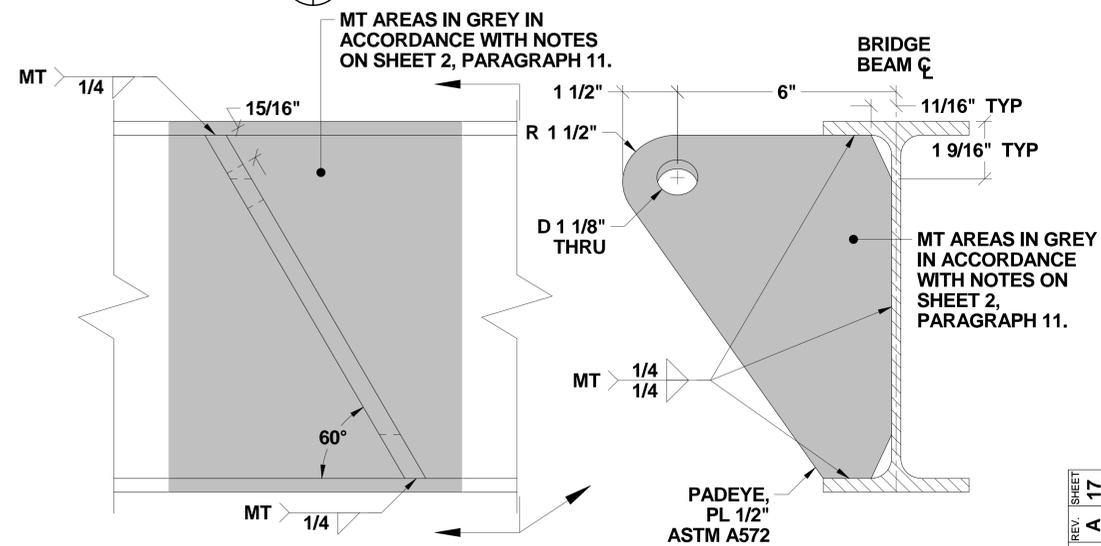
6
17 TYP COLUMN DETAIL
IN WAY OF DECK PLATE



5
17 TYP BRIDGE BEAM WEB STIFFENER
IN WAY OF ALL BRIDGE BEAM ENDS



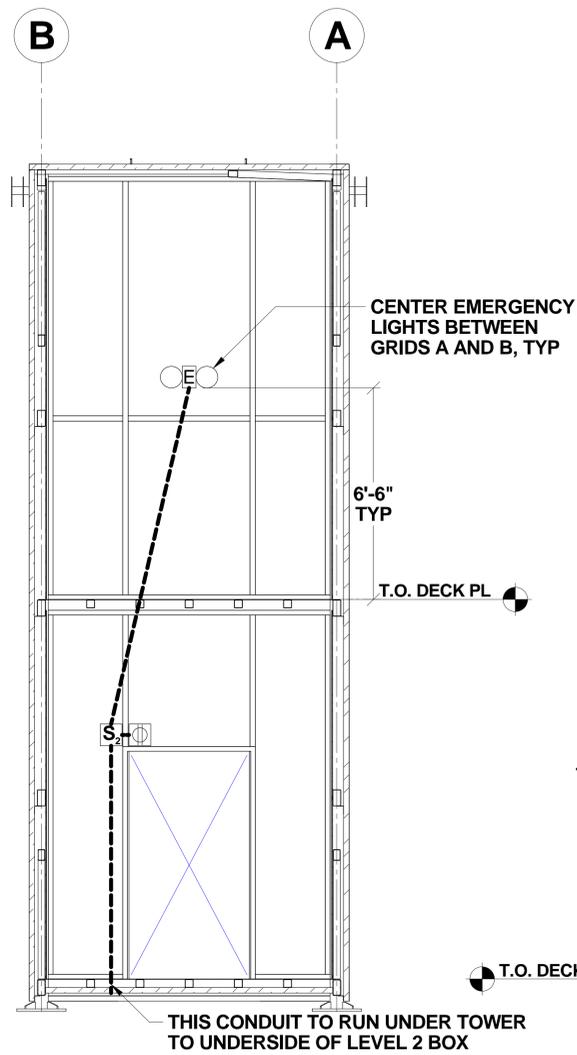
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16/17 BRIDGE END STRUCTURE



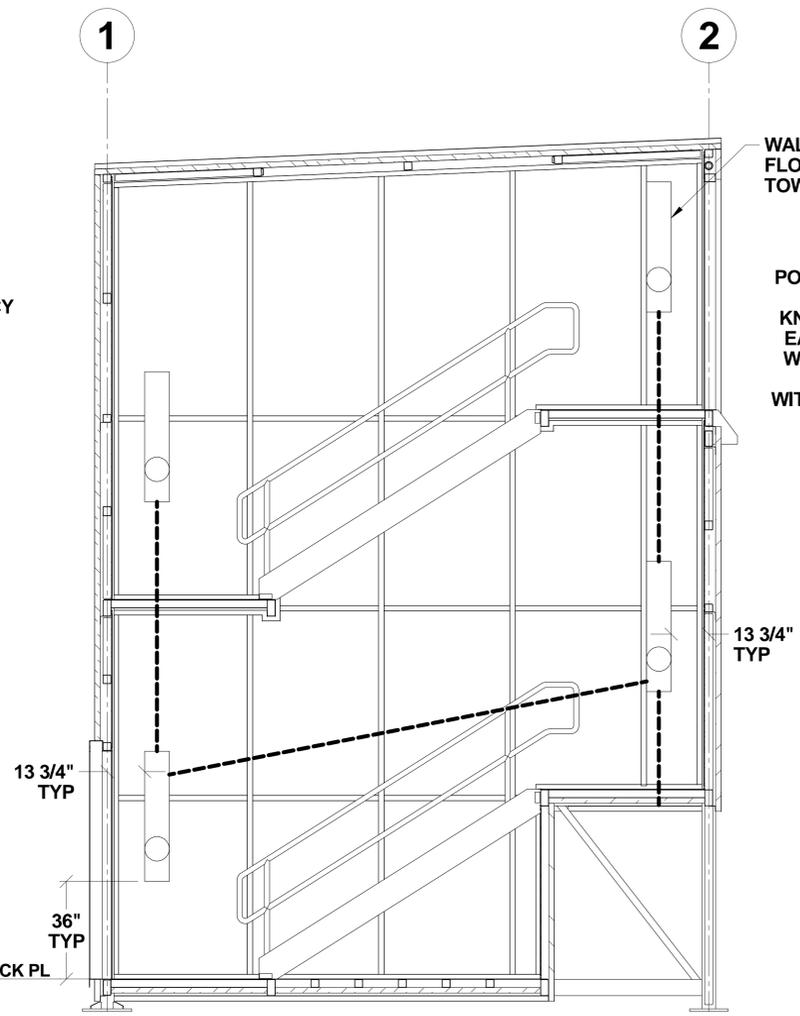
8
16/17 TYP BRIDGE PADEYE ELEVATION

PUGET SOUND NAVAL SHIPYARD CODE 2370 ENGINEERING DIVISION		
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TITLE WALKWAY TOWERS AND BRIDGE		
SCALE	NTS	REV. A
SHEET 17 OF 20		

DWG. NO. 2370-1807
 TITLE WALKWAY TOWERS AND BRIDGE
 REV. SHEET A 17



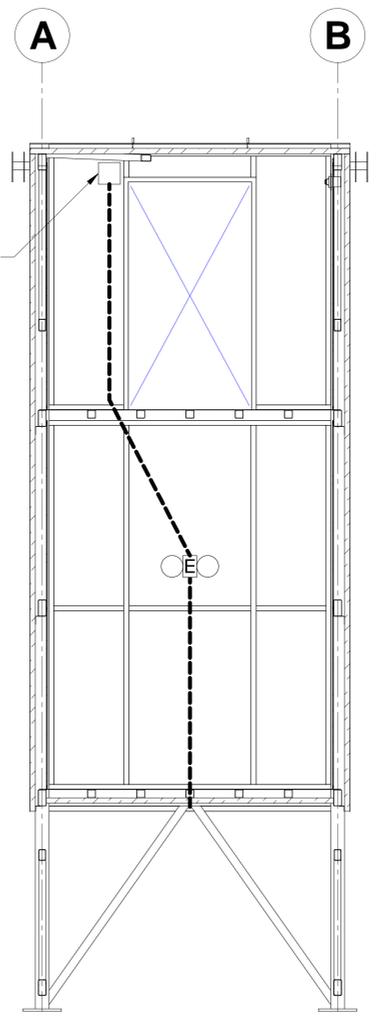
2
18 TOWER SECTION
IN WAY OF BACK WALL



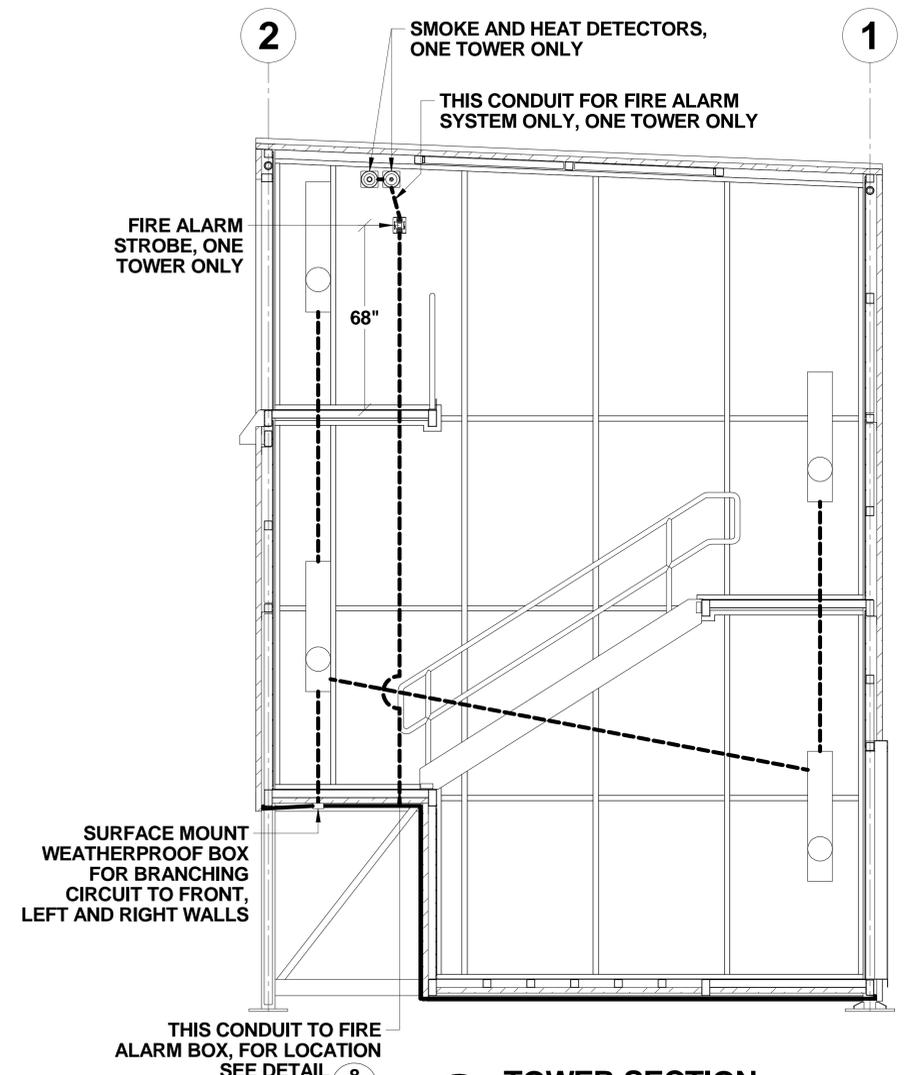
3
18 TOWER SECTION
IN WAY OF LEFT WALL

WALL MOUNT
FLOURESCENT LIGHTS IN
TOWERS VERTICALLY, TYP

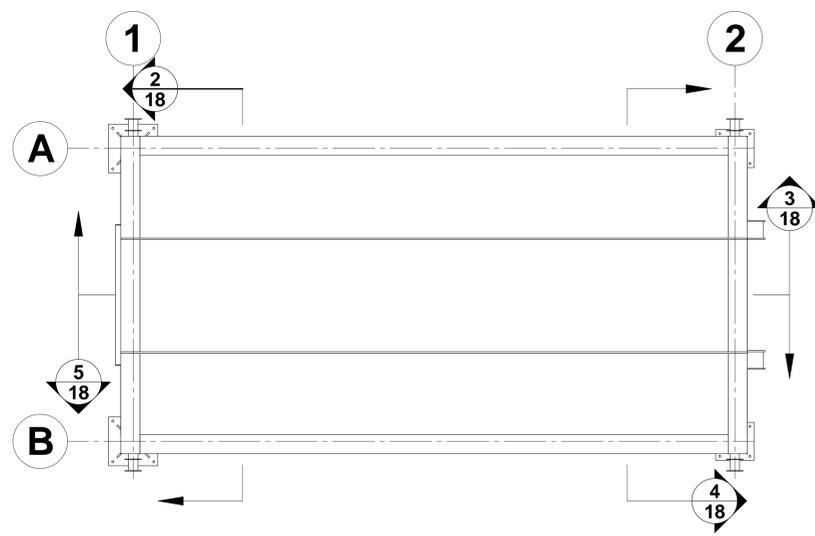
4-GANG BOX AND
POWDER-COATED COVER
WITH 3/4" THREADED
KNOCKOUT, LEAVE 8" OF
EACH CONDUCTOR, BOX
WILL BE CONNECTED BY
PSNS, ONLY CONNECT
WITH BOXES IN BRIDGE IN
ORDER TO TEST
ELECTRICAL SYSTEM



4
18 TOWER SECTION
IN WAY OF FRONT WALL



5
18 TOWER SECTION
IN WAY OF RIGHT WALL



1
18 TOWER PLAN VIEW
IN WAY OF ELECTRICAL

ELECTRICAL SYMBOL LEGEND

-  TWO HEAD EMERGENCY LIGHT
-  4 ft FLUORESCENT FIXTURE
-  2-GANG BOX
-  DOUBLE-POLE SWITCH
-  4-POLE, FLANGED INLET
-  CONDUIT, WALL MOUNTED
-  CONDUIT, INSIDE WALL CAVITY

NOTE: EXTERIOR CONDUIT SHALL BE 3/4" RIGID.
INTERIOR CONDUIT SHALL BE 3/4" EMT.

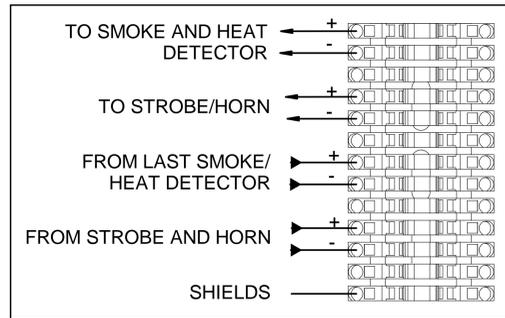
NOTE: ALL BOXES IN THE TOWERS SHALL BE RECESSED
IN INTERIOR WALL PANELS.

NOTE: EMERGENCY AND FLOURESCENT LIGHTS IN THE
TOWERS SHALL BE MOUNTED FLUSH WITH INTERIOR
WALL PANELS.

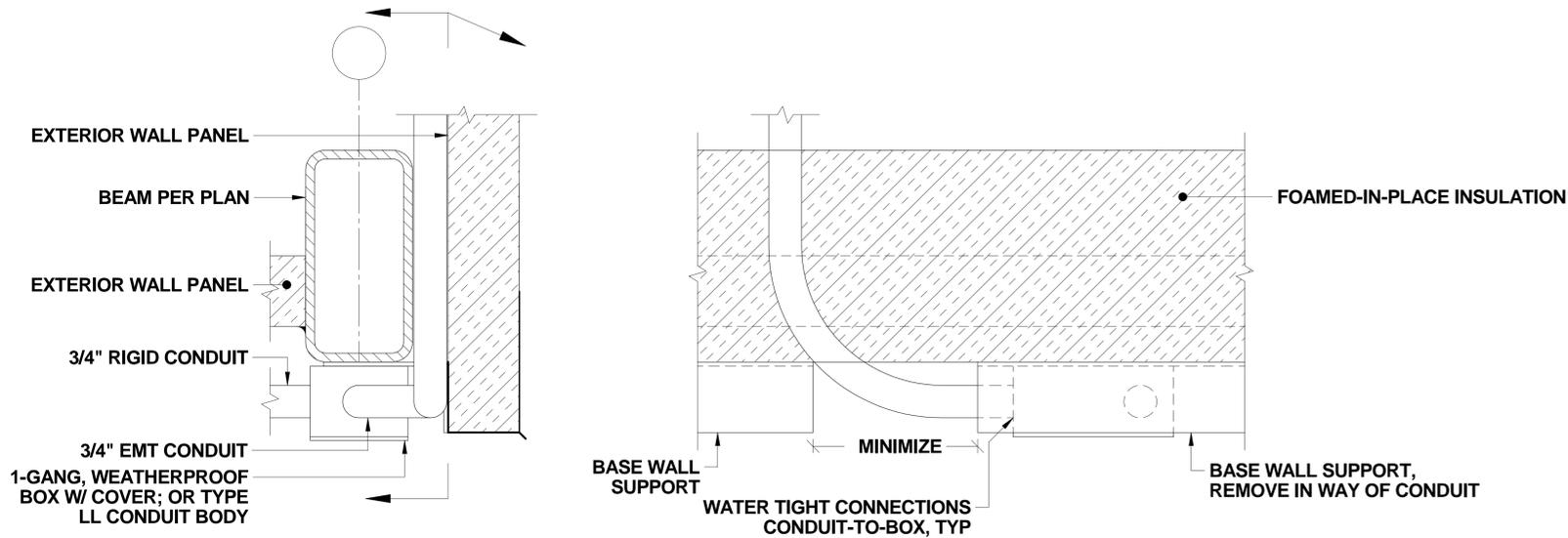
NOTE: FLOURESCENT LIGHTS ON LEFT AND RIGHT WALLS
ARE ON SEPERATE CIRCUITS.

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DRAWING NO. 2370-1807		
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SCALE NTS	SHEET 18 OF 20	REV. A

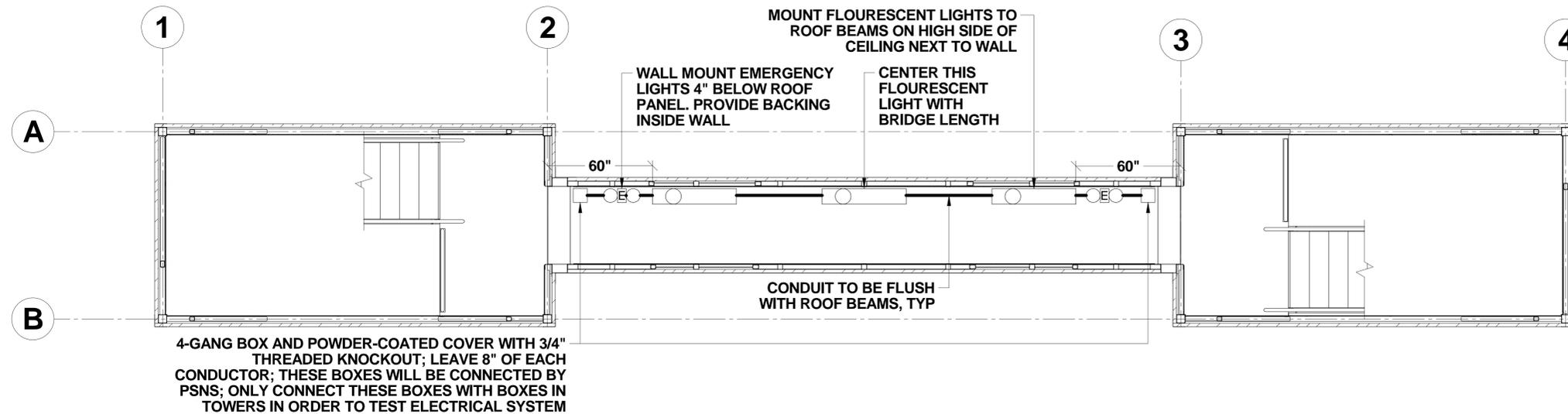
DWG. NO. 2370-1807
 TITLE WALKWAY TOWERS AND BRIDGE
 REV. SHEET A 18



3 **FIRE ALARM JUNCTION BOX**
 19 NOTE: FOR JUNCTION BOX LOCATION, SEE DETAIL **8**
6

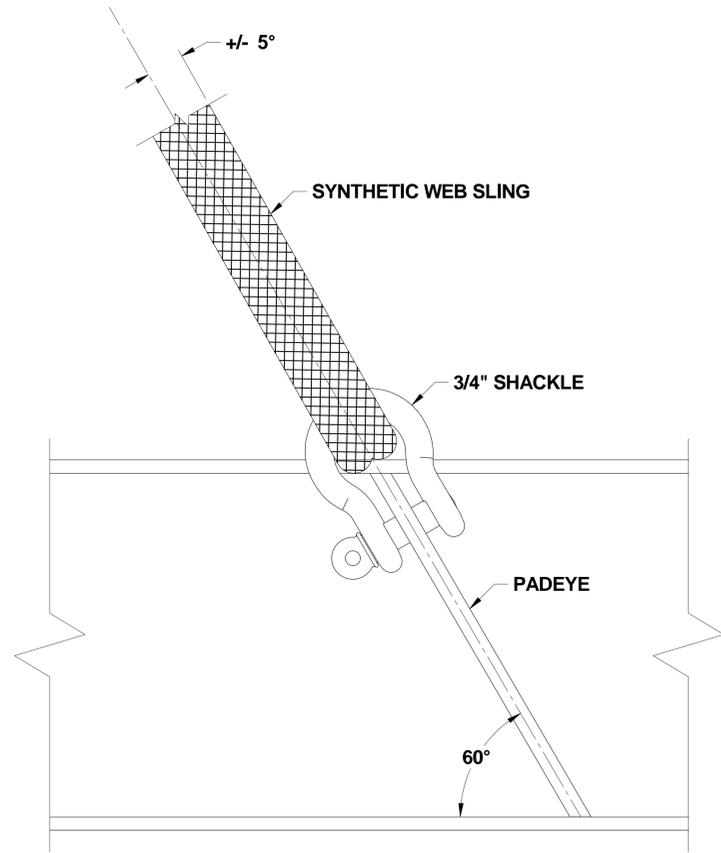


2 **TYP WALL SECTION**
 19 IN WAY OF CONDUIT

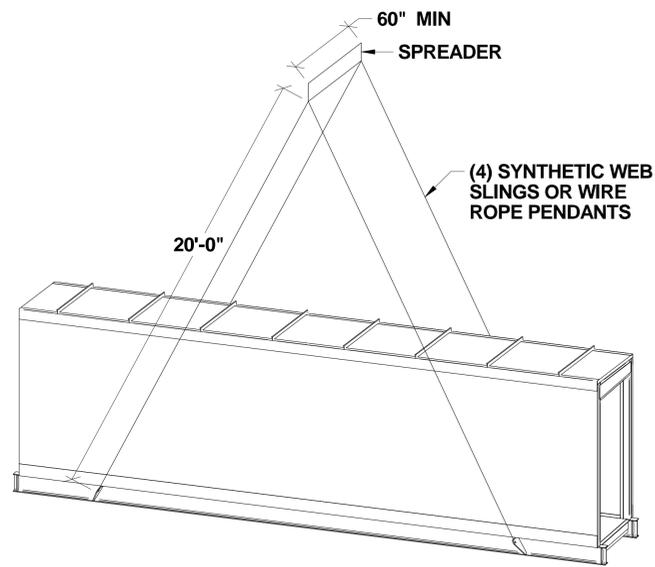


1 **LEVEL 4 ELECTRICAL PLAN**
 19 IN WAY OF BRIDGE

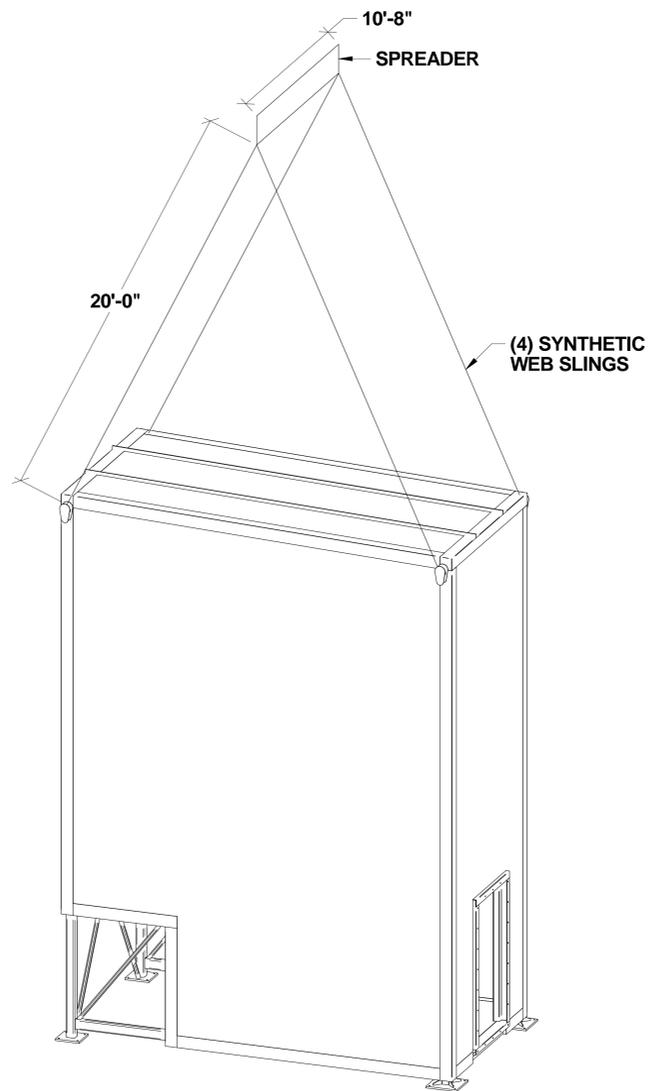
PUGET SOUND NAVAL SHIPYARD CODE 2370 ENGINEERING DIVISION		
NO DEVIATIONS SHALL BE MADE WITHOUT CODE 2370 APPROVAL		
DRAWING NO.	2370-1807	
TITLE	WALKWAY TOWERS AND BRIDGE	
SCALE	NTS	SHEET 19 OF 20
REV.	A	



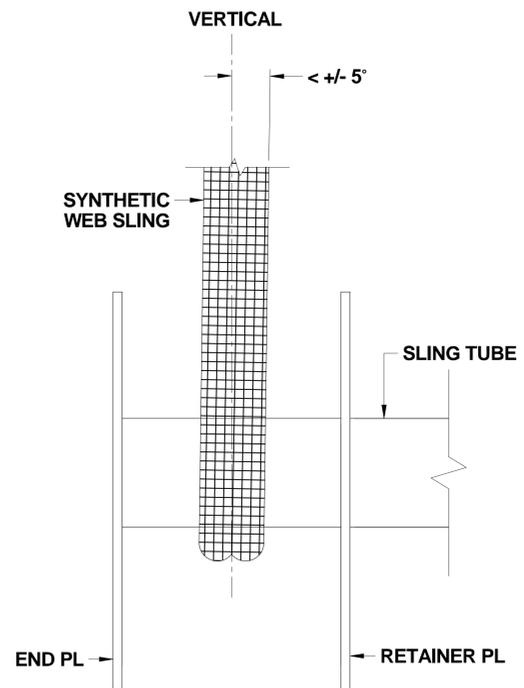
2
20 TYP BRIDGE LIFT POINT DETAIL



1
20 BRIDGE LIFT SKETCH



3
20 TOWER LIFT SKETCH



4
20 TYP TOWER LIFT POINT DETAIL

PUGET SOUND NAVAL SHIPYARD CODE 2370 ENGINEERING DIVISION		
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DRAWING NO. 2370-1807		
TITLE WALKWAY TOWERS AND BRIDGE		
SCALE NTS	SHEET 20 OF 20	REV. A