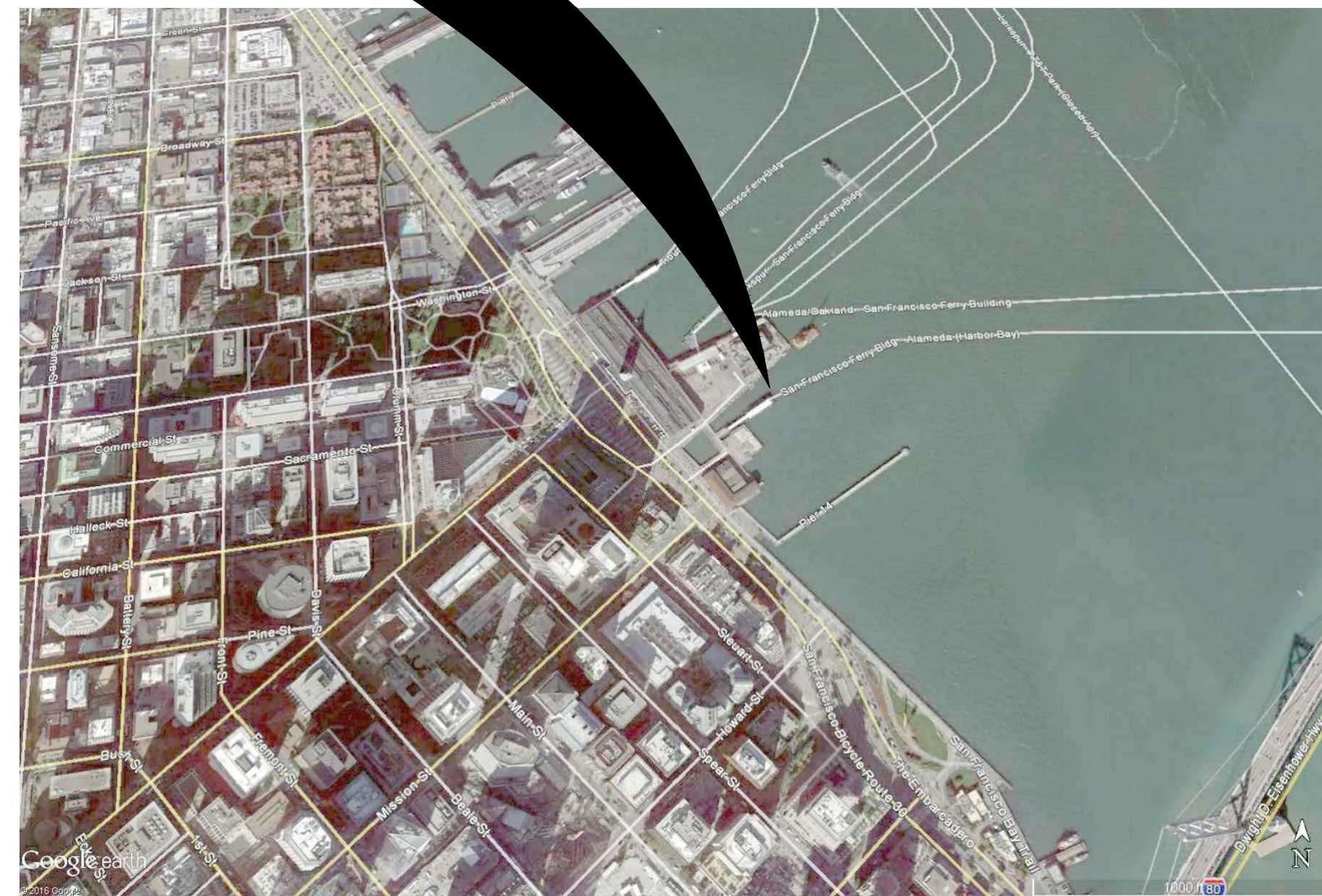


# WATER EMERGENCY TRANSPORTATION AUTHORITY DOWNTOWN SF FERRY TERMINAL EXPANSION PROJECT PHASE 2 NEW GANGWAYS AND FLOATS

PROJECT LOCATION



**Owner**

WETA  
Water Emergency Transportation Authority  
Pier 9, Suite 111, The Embarcadero  
San Francisco, CA 94111

**Construction Manager / Design/Build Contractor**

Power Engineering Construction Co.  
1501 Viking Street, Suite 200  
Alameda, CA 94501

**Structural Engineer**

Liftech Consultants Inc.  
344 20th Street, Suite 360  
Oakland, CA 94612

**Geotechnical Engineer**

ENGEO  
2010 Crow Canyon Place, Suite 250  
San Ramon, CA 94583

**Corrosion Protection**

Corpro  
20991 Cabot Blvd.  
Hayward, CA 94545

**Design/Build Subcontractor**

**Mechanical**

Larratt Bros.  
338 No. Canal Street Suite 21  
South San Francisco, CA 94080

**Electrical**

Con J Franke Electric Inc.  
317 N. Grant Street  
Stockton, CA 95202

**Floats & Gangway Fabricator**

Conrad Industries  
1501 Front Street  
Morgan City, LA 70381

**Marine Safety**

Maritime Technical Services LLC  
Novato, CA 94947

**Industrial Design Safety (OSHA)**

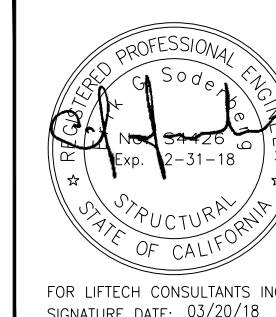
Louis H. Felthouse Architect Inc.  
150 Executive Park Blvd., Suite 4300  
San Francisco, CA 94134

**Float Movable Platform Lift System**

Bay Ship & Yacht  
2900 Main Street  
Alameda, CA 94501

REVISIONS					
NO.	DATE	DESCRIPTION	BY	CHKD	APRD
0	10/6/17	ISSUE FOR CONSTRUCTION	AH	CAM/LMO	ES
1	11/6/17	GENERAL REVISIONS	AH	CAM/LMO	ES
2	3/20/18	GENERAL REVISIONS	AH	CAM/AB	ES

**FOR CONSTRUCTION**



DESIGNED BY:  
CAM/ARS/TS  
DRAWN BY:  
AH  
CHECKED BY:  
LMO/ES

PROJECT  
SOUTH BASIN DOWNTOWN FERRY TERMINAL EXPANSION  
SAN FRANCISCO, CA  
SHEET  
TITLE SHEET

DATE 10/06/17  
SHEET OF  
DRAWING NO. G0.1  
JOB NO. 2196

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	SHEET NUMBER	DRAWING NUMBER	SHEET TITLE		SHEET NUMBER	DRAWING NUMBER	SHEET TITLE
<b>GENERAL</b>				<b>GANGWAY</b>	50	S0.4	DESIGN CRITERIA AND GENERAL NOTES - 4
	1	G0.1	TITLE SHEET		51	S1.1	GANGWAY - FLOOR FRAMING PLAN AND ELEVATION
	2	G0.2	DRAWING INDEX		52	S1.2	GANGWAY - ROOF AND CEILING FRAMING PLAN
	3	G0.3	SYMBOLS AND ABBREVIATIONS		53	S1.3	GANGWAY DETAILS - 1
	4	G0.4	SITE CONTEXT PLAN		54	S1.4	GANGWAY DETAILS - 2
	5	G0.5	CODE EXITING DIAGRAM		55	S1.5	GANGWAY DETAILS - 3
	6	G0.6	CODE COMPLIANCE DIAGRAM		56	S1.6	GANGWAY DETAILS - PIER END
	7	G1.1	PROJECT NOTES		57	S1.7	GANGWAY DETAILS - FLOAT END
	8	G2.1	FLOAT AND GANGWAY SITE PLAN		58	S1.8	GANGWAY TRANSITION PLATE - PIER END
	9	G2.2	GANGWAY FLOOR PLAN AND ELEVATION		59	S1.9	GANGWAY TRANSITION PLATE - FLOAT END
	10	G2.3	FLOAT ARRANGEMENT - PLAN AND ELEVATIONS		60	S1.10	GANGWAY SUPPORT AT PIER ARRANGEMENT
	11	G2.4	FLOAT AND GANGWAY MOTIONS - 1		61	S1.11	GANGWAY SUPPORT AT PIER DETAILS - 1
	12	G2.5	FLOAT AND GANGWAY MOTIONS - 2		62	S1.12	GANGWAY SUPPORT AT PIER DETAILS - 2
	13	G2.6	PIER AND GANGWAY MOTIONS		63	S1.13	GANGWAY SUPPORT AT FLOAT ARRANGEMENT
	14	G2.7	FLOAT AND GANGWAY MOTIONS		64	S1.14	GANGWAY SUPPORT AT FLOAT DETAILS
	15	G2.8	FIXED AND MOVABLE RAMP SYSTEM		65	S1.15	GANGWAY SUPPORT BRACKET
<b>ARCHITECTURAL</b>				<b>FLOAT</b>	66	S2.1	FLOAT GENERAL ARRANGEMENT
<b>GENERAL</b>	16	A0.1	ARCHITECTURAL GENERAL NOTES, SYMBOLS, AND ABBREVIATIONS		67	S2.2	FLOAT STRUCTURAL ARRANGEMENT
<b>GANGWAY</b>					68	S2.3	FLOAT SECTIONS - 1
	17	A1.0	GANGWAY ARCHITECTURAL FLOOR PLAN AND SECTION		69	S2.4	FLOAT SECTIONS - 2
	18	A1.1	GANGWAY ELEVATION AT WHARF (DESIGN HIGH WATER)		70	S2.5	FLOAT SECTIONS - 3
	19	A1.2	GANGWAY SECTION-ELEVATION AT FLOAT (DESIGN HIGH WATER)		71	S2.6	FLOAT TYPICAL DETAILS
	20	A1.3	GANGWAY SECTION-ELEVATION AT FLOAT (DESIGN LOW WATER)		72	S2.7	FLOAT GANGWAY SUPPORT DETAILS
	21	A1.4	GANGWAY ENLARGED PARTIAL PLAN AND SECTION		73	S2.8	FLOAT FENDER SUPPORT ELEVATIONS AND DETAILS
	22	A1.5	GANGWAY PARTIAL ELEVATION AND DETAILS		74	S2.9	FLOAT GUIDE PILE COLLAR
	23	A1.6	GANGWAY RAILING DETAILS -1		75	S2.10	FLOAT MISCELLANEOUS DETAILS - 1
	24	A1.7	GANGWAY RAILING DETAILS - 2		76	S2.11	FLOAT MISCELLANEOUS DETAILS - 2
<b>FLOAT</b>				<b>CANOPY</b>	77	S2.12	POST SUPPORT LOCATIONS
	25	A2.1	FLOAT REFERENCE PLAN		78	S2.13	POST SUPPORT DETAILS - 1
	26	A2.2	FLOAT CANOPY ROOF PLAN		79	S2.14	POST SUPPORT DETAILS - 2
	27	A2.3	PLATFORM 1 SECTION-ELEVATION		80	S3.1	FLOAT CANOPY PLANS
	28	A2.4	FLOAT ENLARGED PLAN 1		81	S3.2	FLOAT CANOPY TYPICAL SECTIONS
	29	A2.5	FLOAT ENLARGED PLAN 2		82	S3.3	FLOAT CANOPY ELEVATIONS
	30	A2.6	FLOAT ENLARGED PLAN 3		83	S3.4	FLOAT CANOPY DETAILS - 1
	31	A2.7	FLOAT PLATFORM AND RAMP SECTION - ELEVATIONS - 1		84	S3.5	FLOAT CANOPY DETAILS - 2
	32	A2.8	FLOAT PLATFORM AND RAMP SECTION - ELEVATIONS - 2				
	33	A2.9	FLOAT PLATFORM AND RAMP SECTION - ELEVATIONS - 3	<b>PLATFORMS AND RAMP</b>	85	S4.1	FLOAT RAMPS FRAMING PLAN AND SECTION
	34	A2.10	FLOAT PLATFORM AND RAMP SECTION-DESIGN HIGH WATER		86	S4.2	FLOAT RAMPS FRAMING SECTIONS
	35	A2.11	FLOAT GLAZED ENCLOSURE DETAILS		87	S4.3	NOT USED
	36	A2.12	FLOAT CANOPY BIRD DETERRENT AND GUTTER DETAILS - 1		88	S4.4	FLOAT RAMPS FRAMING DETAILS AND SECTIONS - 2
	37	A2.13	FLOAT CANOPY BIRD DETERRENT AND GUTTER DETAILS - 2		89	S4.5	FLOAT RAMPS FRAMING DETAILS AND SECTIONS - 3
	38	A2.14	FLOAT CANOPY BIRD DETERRENT AND GUTTER DETAILS - 3		89	S4.6	MOVABLE PLATFORM PLANS
	39	A2.15	FLOAT CANOPY GUTTER DETAILS		90	S4.7	MOVABLE PLATFORM DETAILS
	40	A2.16	FLOAT MOVABLE RAMP RAILING DETAILS		91	S4.8	PLATFORM 6 AND RAMP E LAYOUT
	41	A2.17	FLOAT PLATFORM AND FIXED RAMP RAILING DETAILS	<b>PILES</b>	92	S5.1	PILING
	42	A2.18	FLOAT GUARDRAIL DETAILS		93	S5.2	PILING DETAILS
	43	A2.19	FLOAT GUARDRAIL TRANSITIONAL PANEL DETAILS	<b>HYDRAULIC</b>	17029-10		HYDRAULIC SCHEMATIC
	44	A2.20	FLOAT GUARDRAIL GATE DETAILS		17029-30		HYDRAULIC ARRANGEMENT - 1 OF 2
	45	A2.21	FLOAT STAIR AND LADDER SECTIONS AND ELEVATIONS		17029-31		HYDRAULIC ARRANGEMENT - 2 OF 2
	46	A2.22	FLOAT STAIR AND LADDER SECTIONS AND ELEVATIONS				
<b>STRUCTURAL</b>							
<b>GENERAL</b>	47	S0.1	DESIGN CRITERIA AND GENERAL NOTES - 1				
	48	S0.2	DESIGN CRITERIA AND GENERAL NOTES - 2				
	49	S0.3	DESIGN CRITERIA AND GENERAL NOTES - 3				
				<b>APPENDIX</b>	170357		BAY DESIGN AND ENGINEERING RAMPS AND PLATFORMS

NO.	DATE	DESCRIPTION	BY	CHKD	APRD
0	10/6/17	ISSUE FOR CONSTRUCTION	AH	CAM/LMO	ES
1	11/6/17	GENERAL REVISIONS	AH	CAM/LMO	ES
2	3/20/18	GENERAL REVISIONS	AH	CAM/AB	ES

**FOR CONSTRUCTION**



DESIGNED BY:	CAM/ARS/TS
DRAWN BY:	AH
CHECKED BY:	LMO/ES

PROJECT	SOUTH BASIN DOWNTOWN FERRY TERMINAL EXPANSION SAN FRANCISCO, CA
SHEET	DRAWING INDEX

DATE	10/06/17
SHEET	OF
DRAWING NO.	G0.2
JOB NO.	2196

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**ABBREVIATIONS**

A.C.	ASPHALTIC CONCRETE/ACRES	EXP	EXPANSION	N	NORTH	T/TRD	TREAD
ACCES.	ACCESSIBLE	EXPO	EXPOSED	(N)	NEW	TBC	TO BE CONFIRMED
ACOUS	ACOUSTICAL	(E)/EX	EXISTING	N.I.C.	NOT IN CONTRACT	TBR	TO BE REMOVED
AD	AREA DRAIN	EXT	EXTERIOR	NO OR #	NUMBER	TC/TOC	TOP OF CURB/TOP OF CONCRETE
ADJ	ADJUSTABLE/ADJUSTMENT	FA	FIRE ALARM	NOM	NOMINAL	TD	TRENCH DRAIN
AFC	AUTOMATIC FARE COLLECTION	FD	FLOOR DRAIN	N.T.S.	NOT TO SCALE	TEL	TELEPHONE
A.F.F.	ABOVE FLOOR FINISH	FDN	FOUNDATION	NW	NORTHWEST	TG	TOP OF GRANITE
AFM	ADD FARE MACHINE	F.F.	FINISHED FLOOR	O.A.	OVERALL	TH	THRESHOLD
AGGR	AGGREGATE	FFE	FINISH FLOOR ELEVATION	OBS	OBSCURE	THK	THICK
ALUM	ALUMINUM	FEC	FIRE EXTINGUISHER CABINET	O.C.	ON CENTER	T.L.	TRAFFIC LIGHT
ALT	ALTERNATE	F.G.	FINISH GRADE	O.D.	OUTSIDE DIAMETER	TOP	TOP OF PAVEMENT
AP	ACCESS PANEL	FH	FLATHEAD/FIRE HYDRANT	OFCI	OWNER FURNISHED CONTRACTOR INSTALLED	T.R.	TRASH RECEPTACLE
APPROX	APPROXIMATE	FHC	FIRE HOSE CABINET	OFD	OVER FLOW DRAIN	TW	TOP OF WALL OR TREE WELL TYPICAL
ARCH	ARCHITECTURAL	FIN.	FINISH	OFOI	OWNER FURNISHED OWNER INSTALLED	UNF	UNFINISHED
ASPH	ASPHALT	FIXT	FIXTURE	OPNG	OPENING	U.O.N.	UNLESS OTHERWISE NOTED
AVG	AVERAGE	FL	FLOOR	OPP.	OPPOSITE	VERT.	VERTICAL
B.C.	BOTTOM OF CURB	FLASH	FLASHING	P.A.	PLANTED AREA	VEST	VESTIBULE
BD	BOARD	FLUOR	FLUORESCENT	PC	PRECAST CONCRETE	VIF	VERIFY IN FIELD
BM	BEAM	F.O.	FACE OF	PEN.	PENETRATING	W	WEST
BTWN	BETWEEN	FOB	FACE OF BUILDING	PERF	PERFORATED	W/	WITH
BITUM	BITUMINOUS	F.O.C.	FACE OF CONCRETE OR FACE OF CURB	PL	PLATE	WAP	WIRELESS APPLICATION PROTOCOL
BKG	BACKING	F.O.F.	FACE OF FINISH	PLUMB	PLUMBING	WD	WOOD
BLDG	BUILDING	FUT	FUTURE	PR	PAIR	WIN	WINDOW
BLK	BLOCK	FRBRD	FREEBOARD	PRCST	PRE-CAST	WM	WATER METER
BLKG	BLOCKING	FPRF	FIREPROOF	PROJ	PROJECT	W/O	WITHOUT
BOC	BOTTOM OF CONCRETE	FT	FOOT OR FEET	PT	PRESSURE-TREATED	W.P.	WATERPROOF
BOT	BOTTOM	FTG	FOOTING	PTD.	PAINTED	W/ SPC	WITH SPECIAL COATING
BOS	BOTTOM OF STEEL	FV	FIRE VAULT	PTFE	POLYTETRAFLUOROETHYLENE	WT	WEIGHT
B.R.	BICYCLE RACK	GA.	GAUGE	PVC	POLYVINYL CHLORIDE	WWF	WELDED WIRE FABRIC
BS	BOTTOM OF SLOPE	GAL	GALLON	PVMT.	PAVEMENT		
B.W.	BOTTOM OF WALL	GALV	GALVANIZED	R	RADIUS OR RISERS		
CAB	CABINET	GC	GENERAL CONTRACTOR	RCP	REFLECTED CEILING PLAN		
CB	CATCH BASIN	GL	GLASS	RD	ROOF DRAIN		
C CONC	COLOR CONCRETE	GND	GROUND	REF.	REFERENCE		
CCTV	CLOSED-CIRCUIT TELEVISION	GP	GROUND PLANE	REINF	REINFORCED		
CEM	CEMENT	GR/GD	GRADE	REQ'D	REQUIRED		
CF	CUBIC FEET	GSF	GROSS SQUARE FEET	RESIL	RESILIENT		
C.I.	CAST IRON	GV	GRANITE VENEER	REV	REVISION		
C.	CURB INLET	H	HIGH	R.O.	ROUGH OPENING		
CI	CONSTRUCTION JOINT	H.B.	HOSE BIBB	ROFD	ROOF OVERFLOW DRAIN		
C.I.P.	CAST IN PLACE	HDWE	HARDWARE	ROW	RIGHT OF WAY		
CL	CENTERLINE	H.I.D.	HIGH-INTENSITY DISCHARGE	RWL	RAIN WATER LEADER		
CLKG	CAULKING	HORIZ.	HORIZONTAL	S	SOUTH/SLOPE		
CLR	CLEAR	H.P.	HIGH POINT	SAD	SEE ARCHITECTURAL DRAWINGS		
C.O.	CLEAN OUT	HT.	HEIGHT OR HIGH	SAN	SANITARY SEWER		
COL	COLUMN	HR	HOUR	SC	SLIP CRITICAL		
CONC.	CONCRETE	HSS	HOLLOW STRUCTURAL SECTION	SCHED	SCHEDULE		
COND	CONDITION	I.D.	INSIDE DIAMETER	SECT/SEC	SECTION		
CONN.	CONNECTION	IE	INERT ELEVATION	SED	SEE ELECTRICAL DRAWINGS		
CONST/CONSTR	CONSTRUCTION	IN	INCHES	SEP	SEPARATION		
CONT.	CONTINUOUS	INFO	INFORMATION	SF/SQFT	SQUARE FEET		
CTR	CENTER	INT	INTERIOR	SHT	SHEET		
CTRL	CONTROL	INTR	INTERMEDIATE	SIM	SIMILAR		
CSK	COUNTER SUNK SCREW	INV	INVERT	SJ	SCORE JOINT		
CTSK	COUNTERSUNK	JB	JUNCTION BOX	SLV	SHORT LEG VERTICAL		
CY	CUBIC YARD	JT(S)	JOINT(S)	S.M.S.	SHEET METAL SCREW		
DBL	DOUBLE	L/LP	LOW POINT OR LENGTH	SMRD	SEE MOVABLE RAMP DRAWINGS		
DET	DETAIL	LA	LANDSCAPE ARCHITECT	SPC	SPECIAL COATING		
DEPT	DEPARTMENT	LC	LANDSCAPE CONTRACTOR	SPEC	SPECIFICATION		
DF	DOUGLAS FIR/DRINKING FOUNTAIN	L.F.	LIGHT FIXTURE/LINEAL FEET	SPKR	SPEAKER		
DIA	DIAMETER	LLV	LONG LEG VERTICAL	SQ	SQUARE		
DIAG	DIAGONAL	LT	LIGHT	SS/	STAINLESS STEEL		
DIM	DIMENSION	LTG	LIGHTING	ST STL	SEE STRUCTURAL DRAWINGS		
DIR	DIRECTORY	LWP	LOWER WORKING POINT	SSD	SEE STRUCTURAL DRAWINGS		
DN	DOWN	MAX.	MAXIMUM	STA	STATION		
D.P.	DIMENSION POINT	M.B.	MACHINE BOLT	STD	STANDARD		
DR	DOOR	MECH.	MECHANICAL	STL	STEEL		
DS	DOWNSPOUT	MEMB	MEMBRANE	STRL/	STRUCTURAL		
DWG	DRAWING	MIN	MINIMUM	STRUCT			
E	EAST	MTL	METAL	SW	SOUTHWEST		
EA	EACH	MFR	MANUFACTURER	SWK	SIDEWALK		
E.B.	EXPANSION BOLT	MH	MANHOLE	SYM	SYMMETRICAL		
EJ	EXPANSION JOINT	MHW	MEAN HIGH WATER				
EL	ELEVATION	MIN.	MINIMUM				
ELEC.	ELECTRICAL	MISC	MISCELLANEOUS				
EMER	EMERGENCY	MLW	MEAN LOW WATER				
ENAM	ENAMELED	M.O.	MASONRY OPENING				
ENCL	ENCLOSURE	MTD	MOUNTED				
EQ.	EQUAL						
EQPT	EQUIPMENT						
EW	EACH WAY						

**SYMBOLS**

DIRECTIONAL NORTH ARROW		OR	
COLUMN LINES			
SECTION IDENTIFICATION LETTER			
DRAWING WHERE SECTION IS TAKEN			
DRAWING WHERE SECTION IS SHOWN			
SECTION IDENTIFICATION LETTER			
DRAWING WHERE SECTION IS TAKEN			
DRAWING WHERE SECTION IS SHOWN			
DETAIL IDENTIFICATION NUMBER			
DRAWING WHERE DETAIL IS TAKEN			
DRAWING WHERE DETAIL IS SHOWN			
SECTION IDENTIFICATION LETTER			
DRAWING WHERE SECTION IS TAKEN			
DRAWING WHERE SECTION IS SHOWN			
WINDOW TYPE			
WORK POINT, CONTROL POINT, OR DATUM POINT			
DIMENSION POINT			
NEW SPOT ELEVATION		45.5	
EXISTING SPOT ELEVATION		(45.5)	
EXISTING SPOT ELEVATION, TOP OF WALL		TW 55.2	
EXISTING SPOT ELEVATION, TOP OF CURB		TC 55.2	
EXISTING SPOT ELEVATION, TOP OF PAVING		TP 55.2	
MATCH LINE			
CENTER LINE			
PROPERTY LINE			
SQUARE			
CHANNEL			
ANGLE			
AT			
DIAMETER OR ROUND			
PERPENDICULAR			
POUND OR NUMBER			

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0	10/6/17	ISSUE FOR CONSTRUCTION	AH	CAM/LMO ES
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**FOR CONSTRUCTION**

San Francisco Bay Ferry  
 WATERSIDE EMERGENCY TRANSPORTATION AUTHORITY  
 Pier 9, Suite 111, The Embarcadero  
 San Francisco, CA 94111 • (415) 291-3377

**POWER**  
 ENGINEERING CONSTRUCTION CO.

**Liftech**  
 LIFTECH CONSULTANTS INC.

REGISTERED PROFESSIONAL ENGINEER  
 CIVIL  
 STATE OF CALIFORNIA  
 No. 42563  
 Exp. 12-31-18

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DRAWN BY:	AH
CHECKED BY:	LMO/ES

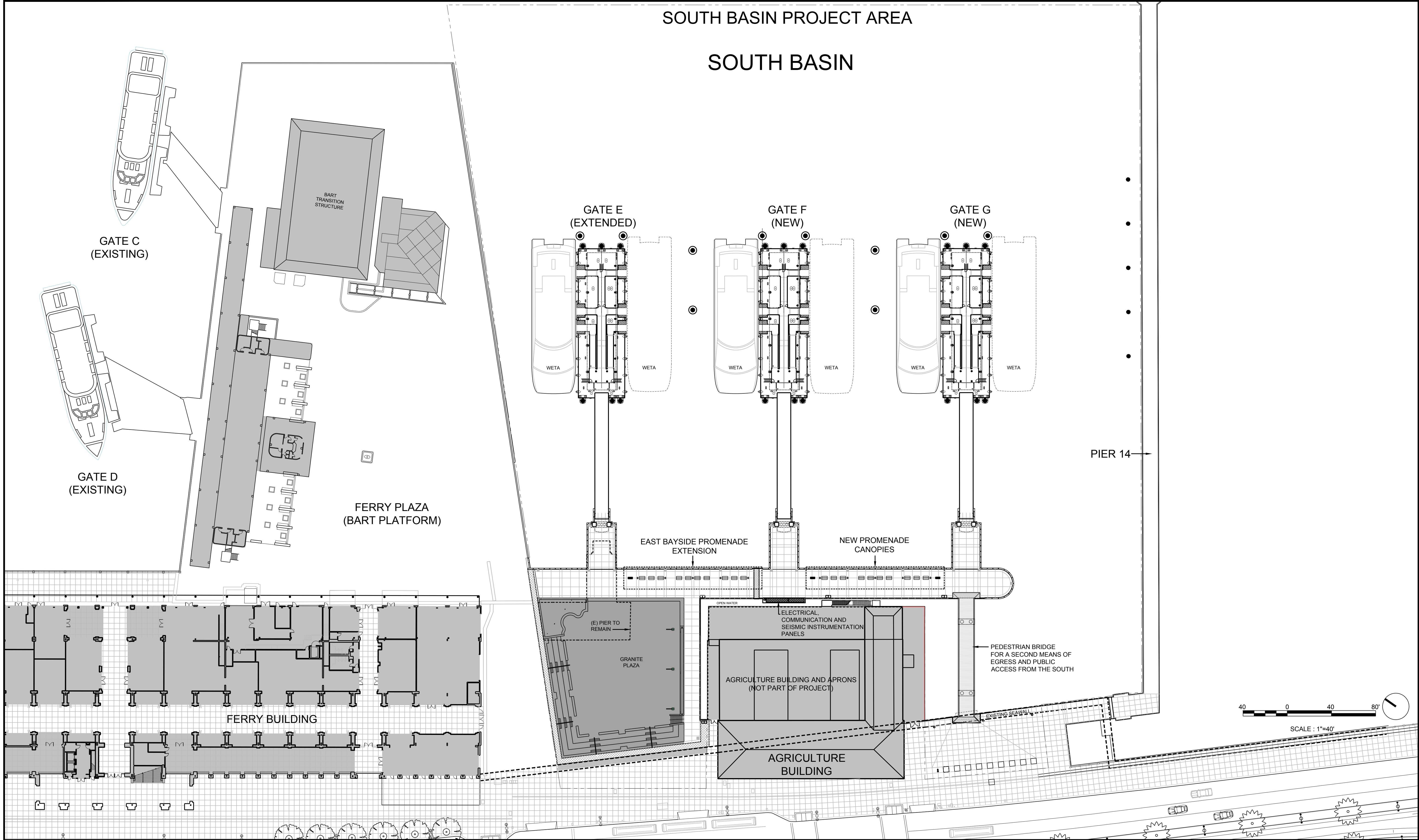
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SHEET	
DRAWING NO.	G0.3
JOB NO.	2196

DATE	10/06/17
SHEET	OF
DRAWING NO.	G0.3
JOB NO.	2196

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SOUTH BASIN PROJECT AREA

SOUTH BASIN



REVISIONS NO.	DATE	DESCRIPTION	BY	CHKD	APRD
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1	11/6/17	GENERAL REVISIONS	AH	CAM/LMO	ES
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**San Francisco Bay Ferry**  
 WATER EMERGENCY TRANSPORTATION AUTHORITY  
 Pier 9, Suite 111, The Embarcadero  
 San Francisco, CA 94111 • (415) 291-3377

**POWER**  
 ENGINEERING CONSTRUCTION CO.

**Liftech**  
 LIFTECH CONSULTANTS INC.

FOR LIFTECH CONSULTANTS INC.  
 SIGNATURE DATE: 01/20/18

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CAM/ARS/TS  
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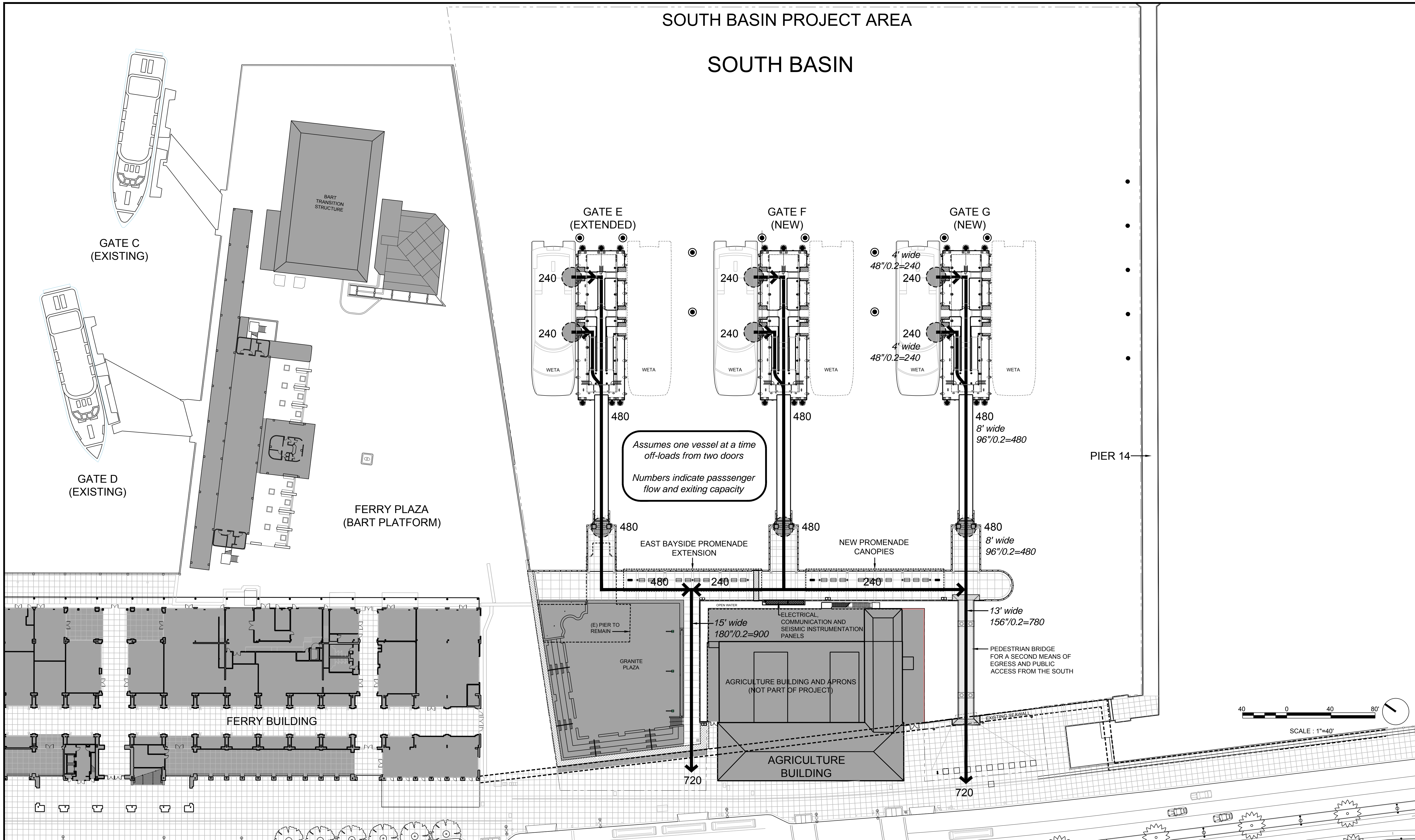
PROJECT  
**SOUTH BASIN DOWNTOWN FERRY TERMINAL EXPANSION**  
 SAN FRANCISCO, CA  
 SHEET  
**G0.4**  
 SITE CONTEXT PLAN

DATE  
10/06/17  
 SHEET  
OF  
 DRAWING NO.  
**G0.4**  
 JOB NO.  
2196

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SOUTH BASIN PROJECT AREA

SOUTH BASIN



**FOR CONSTRUCTION**

**San Francisco Bay Ferry**  
 WATER EMERGENCY TRANSPORTATION AUTHORITY  
 Pier 9, Suite 111, The Embarcadero  
 San Francisco, CA 94111 • (415) 291-3377

**POWER**  
 ENGINEERING CONSTRUCTION CO.

**Liftech**  
 LIFTECH CONSULTANTS INC.

FOR LIFTECH CONSULTANTS INC.  
 SIGNATURE DATE: 03/20/18

DESIGNED BY: CAM/ARS/TS  
 DRAWN BY: AH  
 CHECKED BY: LMO/ES

PROJECT: SOUTH BASIN DOWNTOWN FERRY TERMINAL EXPANSION  
 SAN FRANCISCO, CA

SHEET: CODE EXITING DIAGRAM

DATE: 10/06/17  
 SHEET: OF  
 DRAWING NO.: G0.5  
 JOB NO.: 2196

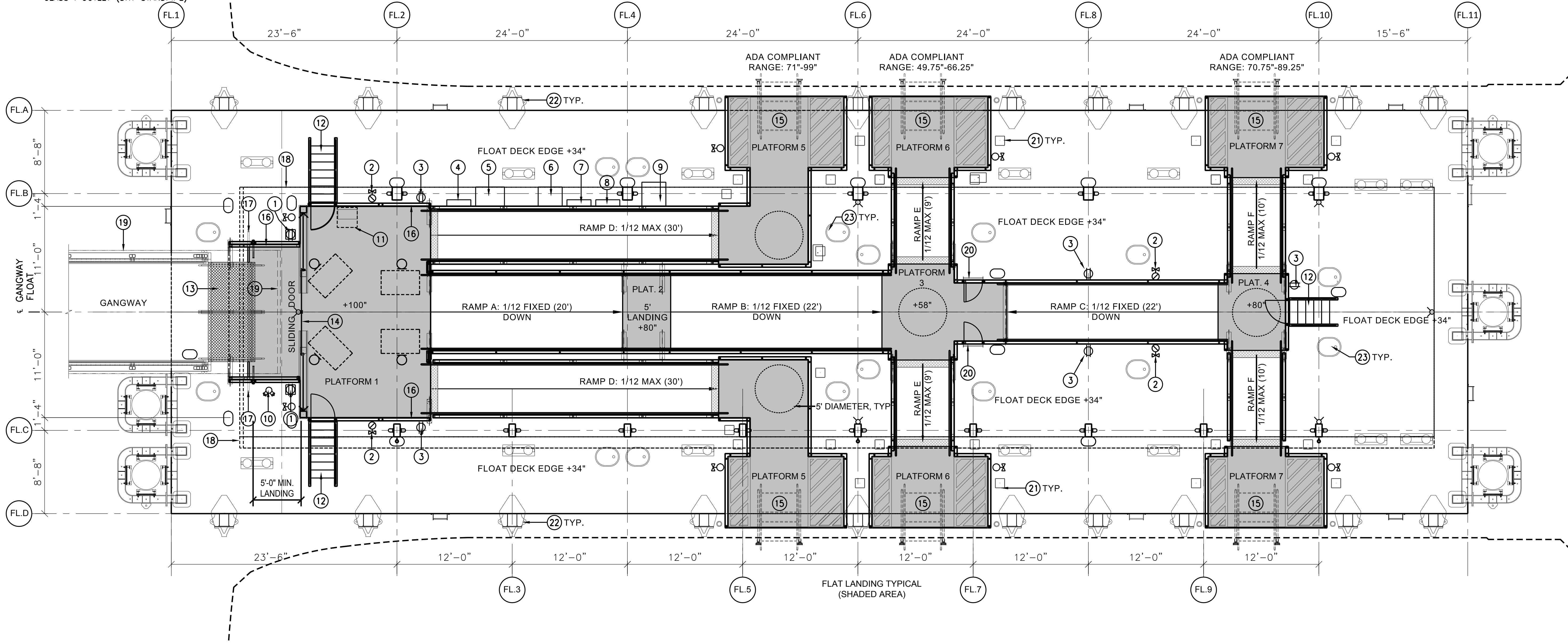
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**FLOAT PLAN KEYED SHEET NOTES**

- |                                                               |                                                                                                                                                                                                         |                                                                                 |
|---------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|
| 1. SHORE POWER                                                | 11. COMMUNICATIONS CABINET BELOW PLATFORM 1                                                                                                                                                             | 16. 42" HIGH TYPE 316L STAINLESS STEEL GUARDRAIL WITH HARDWOOD CAP, TYP. U.O.N. |
| 2. HOSE BIB                                                   | 12. SERVICE ACCESS STAIR TO DECK LEVEL                                                                                                                                                                  | 17. SLIDE AWAY GUARDRAIL PANEL                                                  |
| 3. ELECTRICAL OUTLET                                          | 13. STAINLESS STEEL TRANSITION PLATE WITH SLIPNOT COATING, GUARDRAIL AND HANDRAIL, S.S.D.                                                                                                               | 18. OUTLINE OF FLOAT CANOPY ABOVE                                               |
| 4. PANEL "LF"                                                 | 14. AUTOMATIC SLIDING DOORS AND FIXED SIDELITES: TYPE 316 ST. STL. CLAD SLIDING BIPART DOOR, 8'-0" CLEAR OPENING WITH BREAKAWAY FOR EGRESS, WIRED FOR ACTIVATING MODE AND DECKHAND OPERATIONAL CONTROL. | 19. OUTLINE OF GANGWAY CANOPY ABOVE                                             |
| 5. INVERTER                                                   | 15. OWNER PROVIDED BROW RAMP                                                                                                                                                                            | 20. SERVICE ACCESS LADDER TO DECK LEVEL                                         |
| 6. BATTERY CABINET                                            |                                                                                                                                                                                                         | 21. GUIDE, LIFT, COUNTERWEIGHT TUBE, S.S.D.                                     |
| 7. PANEL "ELF"                                                |                                                                                                                                                                                                         | 22. FENDER, TYP. S.S.D.                                                         |
| 8. LIGHTING CONTROL PANEL "LCP"                               |                                                                                                                                                                                                         | 23. DECK HATCH, S.S.D.                                                          |
| 9. TRANSFORMER "ETLF"                                         |                                                                                                                                                                                                         |                                                                                 |
| 10. FIRE DEPARTMENT CONNECTION CLASS 1 OUTLET (DRY STANDPIPE) |                                                                                                                                                                                                         |                                                                                 |

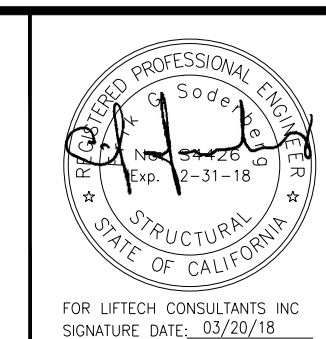
**CODE COMPLIANCE NOTES:**

- ALL MOVABLE AND FIXED RAMPS AND LEVEL PLATFORMS AND LANDINGS PROVIDE FOR EMBARKING AND DISEMBARKING PASSENGERS AND ARE TO HAVE:
  - GUARDRAILS AND HANDRAILS TO MEET ALL CBC AND ADA REQUIREMENTS. GUARDRAIL SHALL BE CAPABLE OF SUPPORTING 50 POUND PER LINEAR FOOT LIVE LOAD APPLIED HORIZONTALLY AT RIGHT ANGLES TO THE TOP RAIL. HANDRAILS SHALL BE CAPABLE OF SUPPORTING 250 POUND POINT LOAD IN ANY DIRECTION AT ANY POINT ON THE RAIL.
  - ALL GUARDRAILS HEIGHT TO BE 42" FROM WALKING SURFACE.
  - TOP HANDRAIL HEIGHT TO BE AT 34" MIN.-38" MAX. ABOVE WALKING SURFACE.
  - ALL RAMP HANDRAIL EXTENSIONS TO BE 12".
  - WALKING SURFACE TO COMPLY WITH A MINIMUM STATIC COEFFICIENT OF FRICTION OF 0.8 AS DETERMINED BY MEASUREMENT WITH THE NBS BRUNGRABER TESTER ON CLEAN SURFACE UNDER WET CONDITIONS AND A MINIMUM DYNAMIC COEFFICIENT OF FRICTION OF 0.6 AS DETERMINED BY MEASUREMENT WITH BOT 3000 ACUTEST (WET) PER ANSI A137.1.
- ALL SERVICE ACCESS STAIRS TO DECK LEVEL ONLY PROVIDE OCCASIONAL DECK HAND AND MAINTENANCE PERSONNEL ACCESS. THE DECK AREAS ARE NOT CUSTOMARILY OCCUPIED AND PUBLIC ACCESS IS NOT ALLOWED. THE SERVICE STAIRS TO COMPLY WITH FEDERAL OSHA STANDARDS AND ANY APPLICABLE CBC 2013 PROVISIONS. SERVICE ACCESS GATES TO BE CLOSED DURING EMBARKATION AND DISEMBARKATION.
- FOR GUARDRAILS, HANDRAILS AND GATES TO SERVICE ACCESS STAIR, SEE ENLARGED PLANS AND DETAILS
- GANGWAY SLOPE ACCESSIBLE RANGE (1:12 OR LESS): LOWEST OBSERVED TIDE (-2.06 MLLW) TO HIGHEST OBSERVED TIDE +50 YEAR SEA LEVEL RISE (12.36 MLLW)



REVISIONS NO.	DATE	DESCRIPTION	BY	CHKD	APRD
0	10/6/17	ISSUE FOR CONSTRUCTION	AH	CAM/LMO	ES
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2	3/20/18	GENERAL REVISIONS	AH	CAM/AB	ES

**FOR CONSTRUCTION**



DESIGNED BY: CAM/ARS/TS	PROJECT SOUTH BASIN DOWNTOWN FERRY TERMINAL EXPANSION SAN FRANCISCO, CA	DATE 10/06/17
DRAWN BY: AH	SHEET	SHEET OF
CHECKED BY: LMO/ES	DRAWING NO. <b>G0.6</b>	
SHEET <b>CODE COMPLIANCE DIAGRAM</b>		JOB NO. 2196

\\s21582188\Drawings\Current\G0.6 CODE COMPLIANCE DIAGRAM.dwg 3/20/2018 10:38 AM ahm.hoff@liftech.com

**PROJECT NOTES**

**PROJECT REFERENCES**

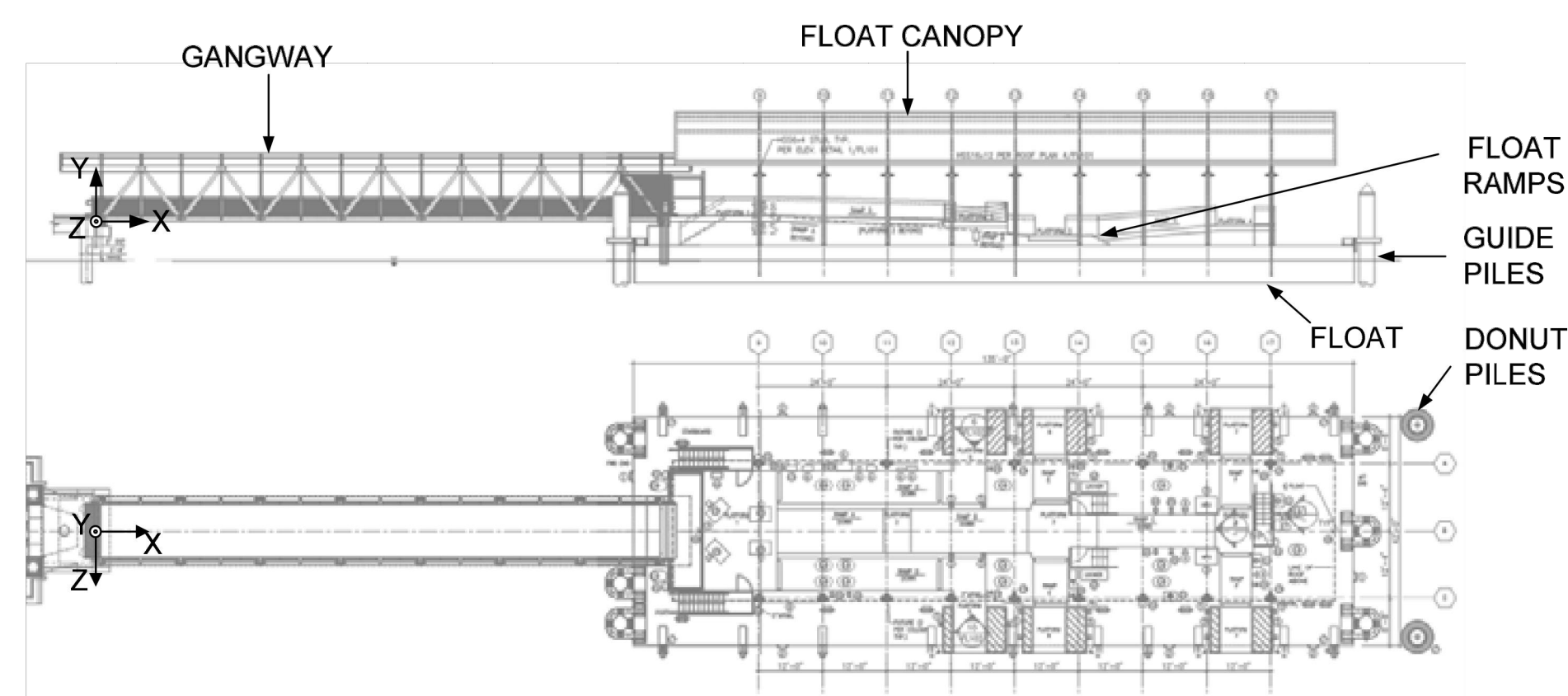
Documents for Downtown San Francisco Ferry Terminal Expansion Project Construction Manager at Risk Agreement (Phase Two Amendment):

- A. Simpson Gumpertz & Heger Float and Gangway Design Criteria, April 7, 2017
- B. Appendix 19 Gangway and Float Package Bid Drawings, April 3, 2017
- C. Appendix 20 Technical Specifications, June 13, 2017

Other:

- D. Argonautics Marine Engineering, Inc., Pile Loads and Motions WETA SF Downtown Ferry Float, June 14, 2017

**TERMS**



**DATUM**  
Elevations are North American Vertical Datum of 1988 (NAVD 88) unless otherwise noted.

**WATER LEVEL**

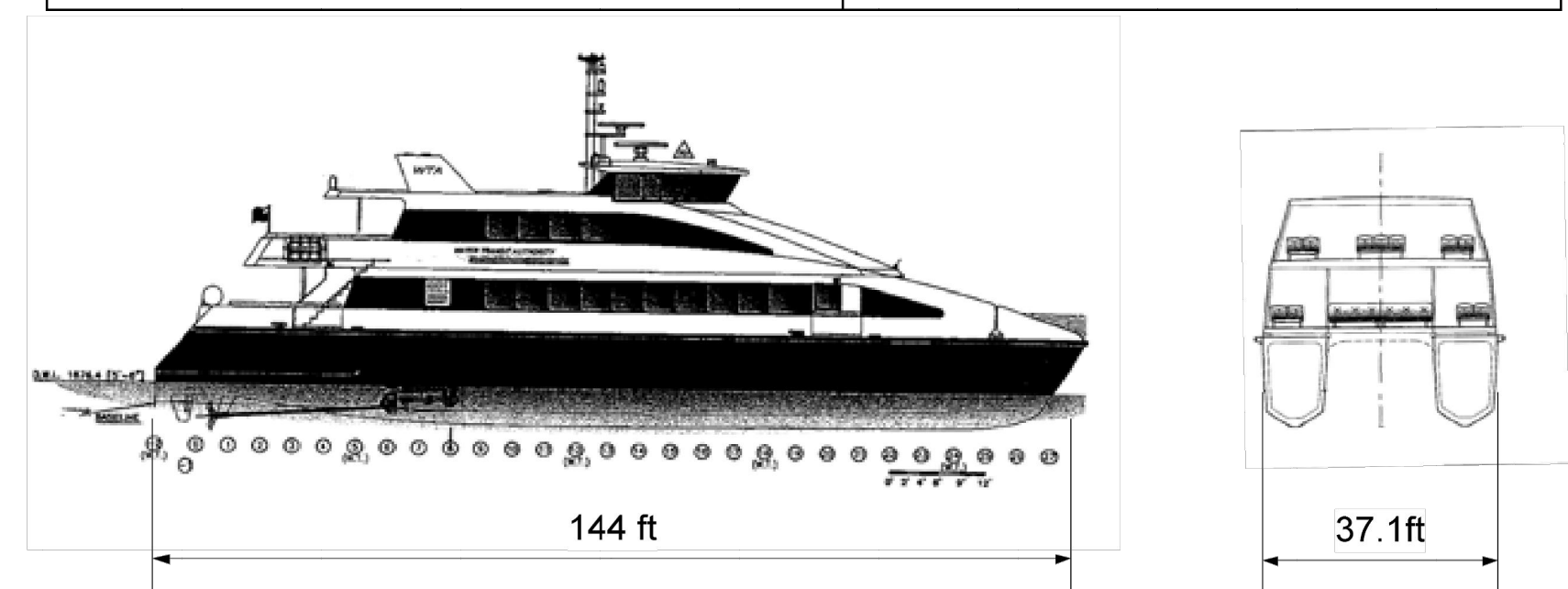
Design (REF. A)

Level	Elev. (ft) NAVD 88	Elev. (ft) MLLW
Lowest Observed Tide (Design Low Water)	-2.04	-2.06
Mean Lower Low Water (MLLW)	0.02	0.00
Mean Low Water (MLW)	1.14	1.12
Mean High Water (MHW)	5.66	5.64
Highest Observed Tide	9.22	9.20
Design 50 yr Sea Level Rise (SLR)	$\Delta = 3.17$	$\Delta = 3.17$
Highest Observed Tide + SLR (Design High Water)	12.38	12.36

See NOAA site, Datums for 9414317, Pier 22 1/2, San Francisco, CA and SGH email "FW: WETA DFTX SF, Datum, 2196" dated 6/29/17

**VESSEL DATA (REF. A)**

Vessel	WETA Central Bay Design Vessel
Length Overall, L	144 ft
Beam	37.1 ft
Maximum Displacement	225 LT, 229 tonne
Draft	5.3 ft
Maximum Hull Rub Rail Force	25 kips



**GENERAL (REF. A)**

Design Life: 50 Years  
Occupancy Category (CBC): IV  
Facility Type: Essential facility intended to remain operational after design loading.

**SAFETY DESIGN REQUIREMENTS**

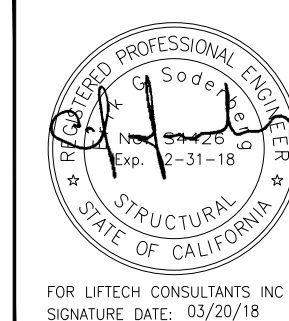
Safety equipment is shown on the drawings in accordance with the owner's bid drawings. The owner shall verify the adequacy of the safety design including, but not limited to, safety ladders, life rings, warning stripes, fire extinguishers, spill response and safety equipment, and navigation lights.

**MEANS, METHODS, AND JOBSITE SAFETY**

At all times, the Contractor shall be solely and completely responsible for means, methods, sequences, and procedures of work, and conditions of the jobsite including safety of persons and property, and for all necessary independent engineering review of these conditions. The Engineer's jobsite review is not intended to include review of the adequacy of the Contractor's safety measures.

NO.	DATE	DESCRIPTION	BY	CHKD	APRD
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2	3/20/18	GENERAL REVISIONS	AH	CAM/AB	ES

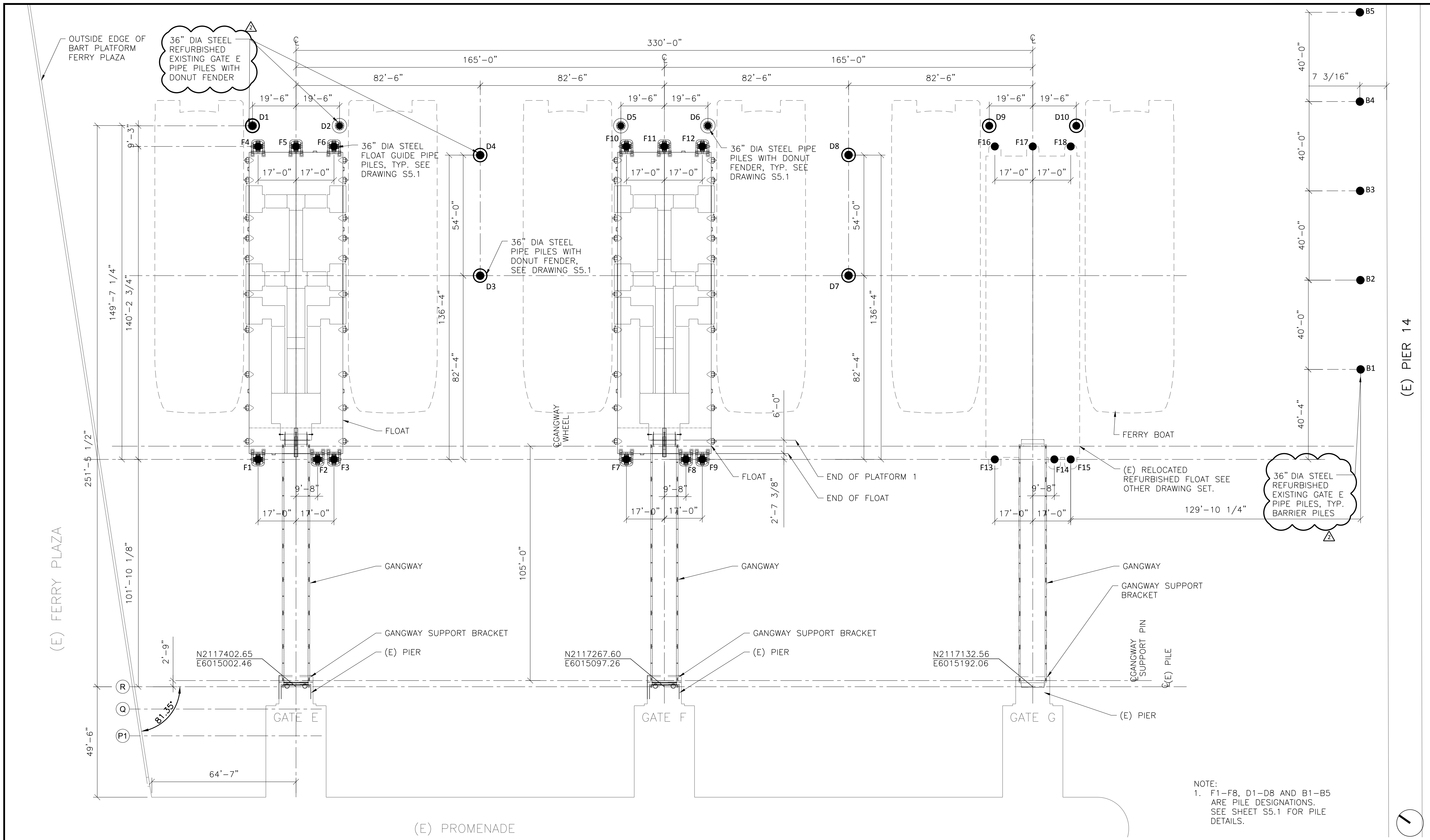
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DESIGNED BY: CAM/ARS/TS	PROJECT SOUTH BASIN DOWNTOWN FERRY TERMINAL EXPANSION SAN FRANCISCO, CA
DRAWN BY: AH	SHEET PROJECT NOTES
CHECKED BY: LMO/ES	

DATE	10/06/17
SHEET	OF
DRAWING NO.	G1.1
JOB NO.	2196

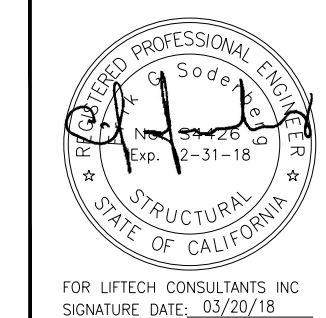
\\ms01\proj\2196\Draw\Current\General Notes\G1.1 PROJECT NOTES.dwg 3/20/2018 10:38 AM alwin.toffenaar



NOTE:  
 1. F1-F8, D1-D8 AND B1-B5 ARE PILE DESIGNATIONS. SEE SHEET S5.1 FOR PILE DETAILS.

REVISIONS NO.	DATE	DESCRIPTION	BY	CHKD	APRD
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2	3/20/18	GENERAL REVISIONS	AH	CAM/AB	ES

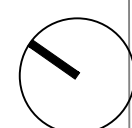
**FOR CONSTRUCTION**



DESIGNED BY: CAM/ARS/TS  
 DRAWN BY: AH  
 CHECKED BY: LMO/ES

PROJECT: SOUTH BASIN DOWNTOWN FERRY TERMINAL EXPANSION, SAN FRANCISCO, CA  
 SHEET: FLOAT AND GANGWAY SITE PLAN

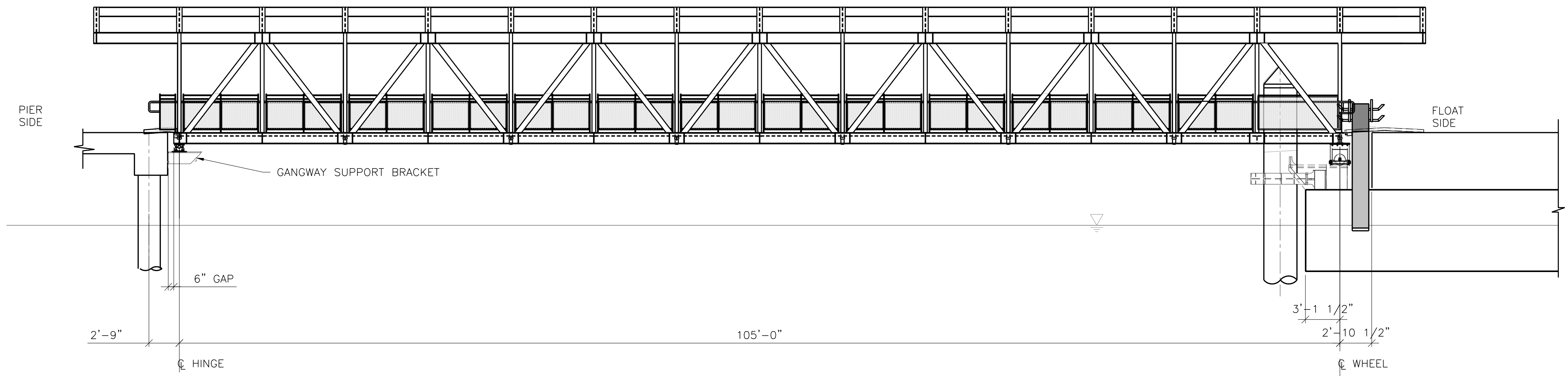
DATE: 10/06/17  
 SHEET: OF  
 DRAWING NO.: G2.1  
 JOB NO.: 2196



(E) PIER 14

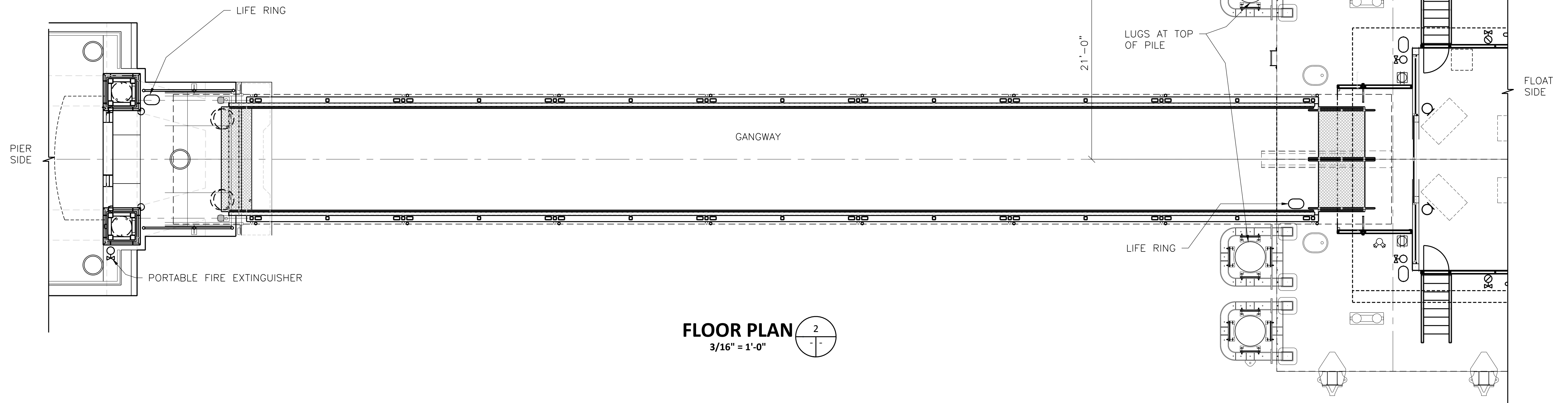
\\s0215821682.Dwg;Current;G2: FLOAT AND GANGWAY SITE PLAN.dwg 3/20/2018 10:37 AM ahm.hoff@earthlink.net





**ELEVATION** 1  
3/16" = 1'-0"

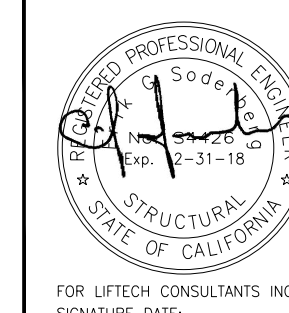
NOTE:  
FLOAT CANOPY AND GUARDRAILS NOT SHOWN FOR CLARITY.  
SEE ARCHITECTURAL DRAWINGS FOR DETAILS.



**FLOOR PLAN** 2  
3/16" = 1'-0"

REVISIONS NO.	DATE	DESCRIPTION	BY	CHKD	APRD

**FOR CONSTRUCTION**



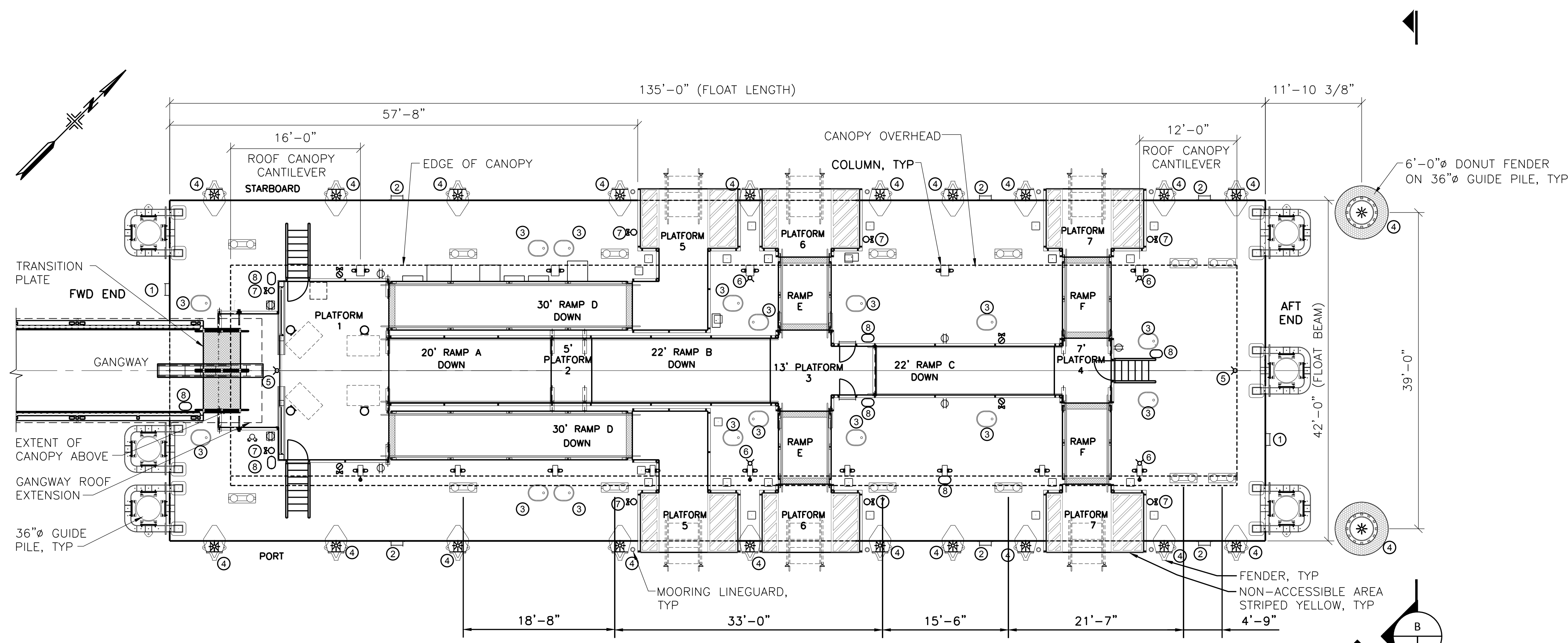
DESIGNED BY:  
DRAWN BY:  
CHECKED BY:

PROJECT  
**SOUTH BASIN DOWNTOWN FERRY TERMINAL EXPANSION  
SAN FRANCISCO, CA**

SHEET  
**GANGWAY FLOOR PLAN AND ELEVATION**

DATE 10/06/17  
SHEET OF  
DRAWING NO. **G2.2**  
JOB NO. 2196

\\sfs2\021682\Draw\Current\G22 - Gangway Floor Plan and Elevation.dwg 3/20/2018 10:37 AM Brian Hofigaur

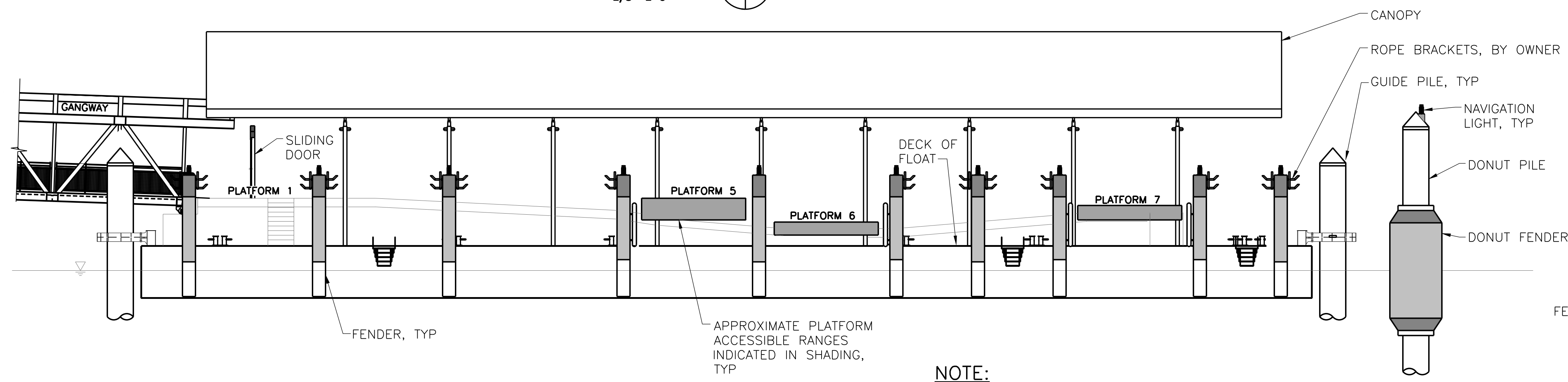


- LEGEND – APPURTENANCES**
- ① – PERMANENT SAFETY LADDER (2)
  - ② – UP-N-OUT SAFETY LADDER (6)
  - ③ – DECK HATCH
  - ④ – NAVIGATION LIGHT
  - ⑤ – SECURITY CAMERA OPERATIONS MONITORING
  - ⑥ – SECURITY CAMERA INCIDENT MONITORING
  - ⑦ – PORTABLE FIRE EXTINGUISHER (8)
  - ⑧ – LIFE RING (7)

**NOTE:**  
GUARDRAILS NOT SHOWN FOR CLARITY.

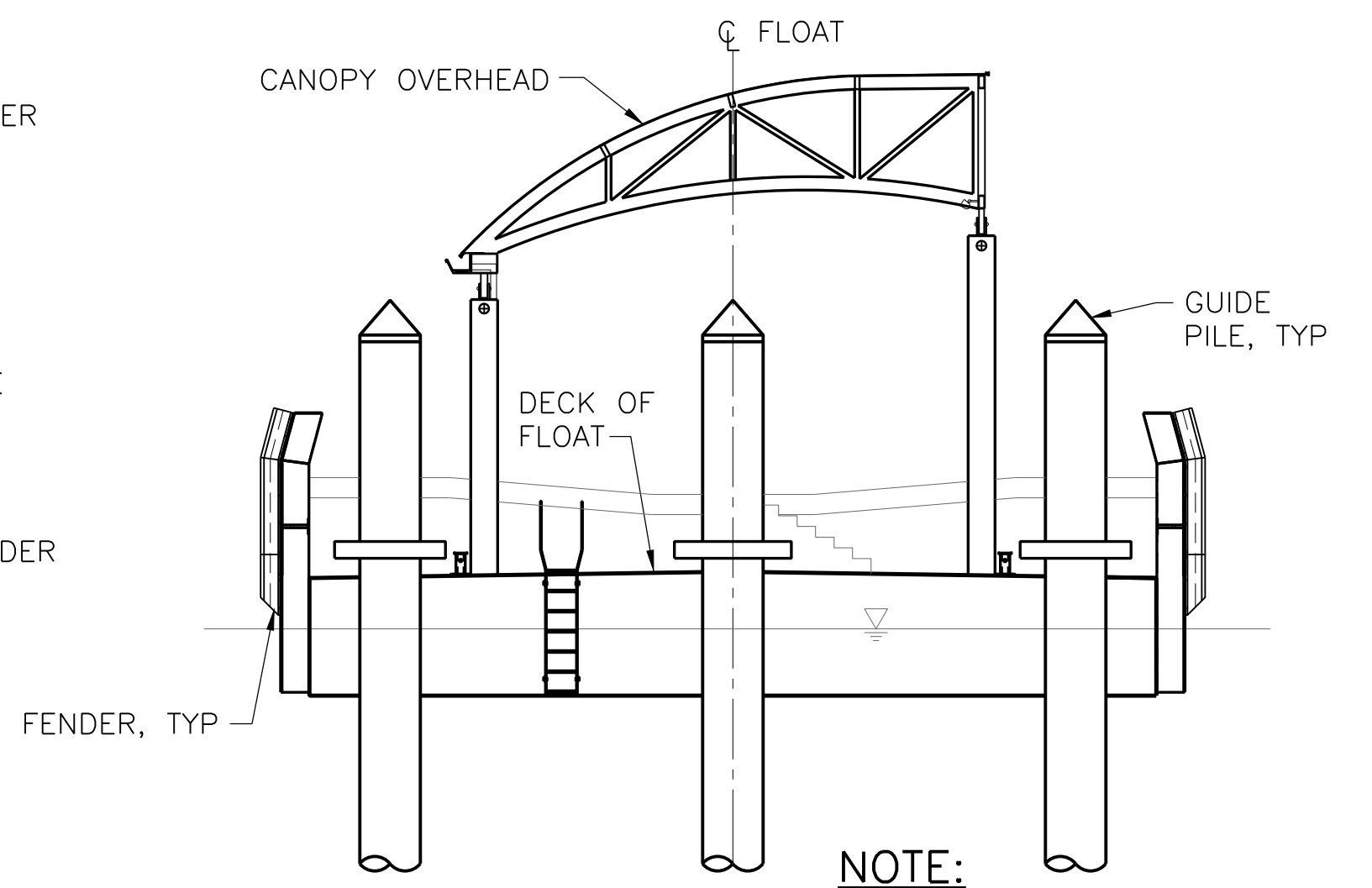
**FLOAT PLAN**  
1/8"=1'-0"

**NOTE:**  
1. FOR DOOR REQUIREMENTS SEE SPECIFICATIONS.



**NOTE:**  
FLOAT GUARDRAILS NOT SHOWN FOR CLARITY

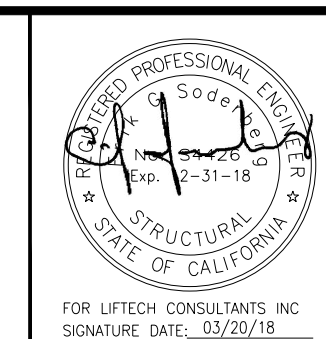
**FLOAT ELEVATION**  
1/8"=1'-0"



**NOTE:**  
GUARDRAILS NOT SHOWN FOR CLARITY.

**FLOAT SIDE ELEVATION**  
1/8"=1'-0"

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CAM/ARS/TS

DRAWN BY:  
AH

CHECKED BY:  
LMO/ES

PROJECT  
SOUTH BASIN DOWNTOWN FERRY TERMINAL EXPANSION  
SAN FRANCISCO, CA

SHEET  
FLOAT ARRANGEMENT -  
PLAN AND ELEVATIONS

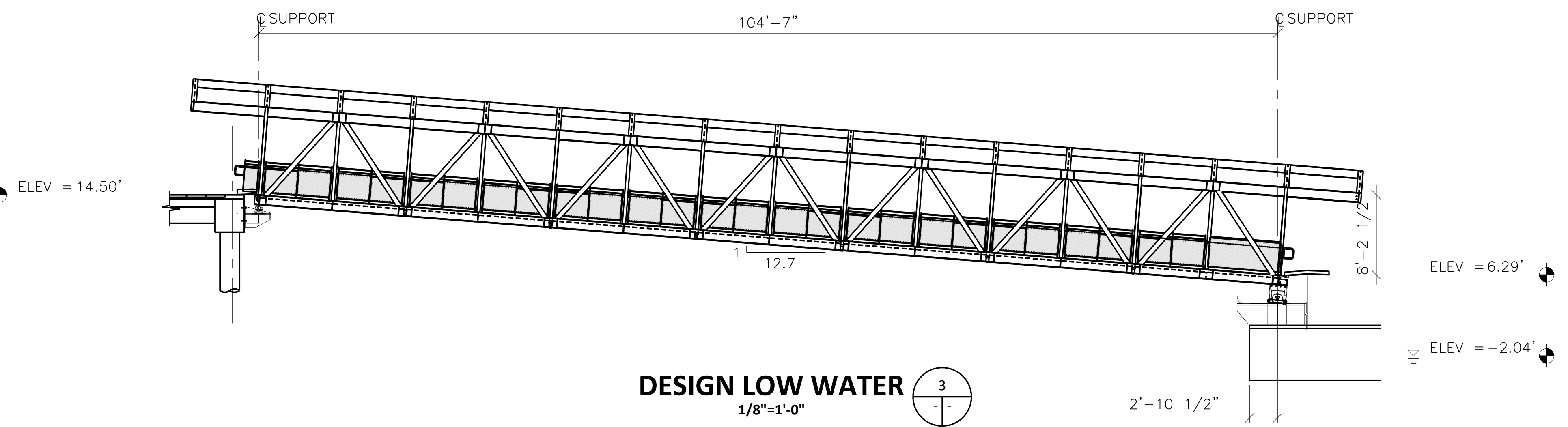
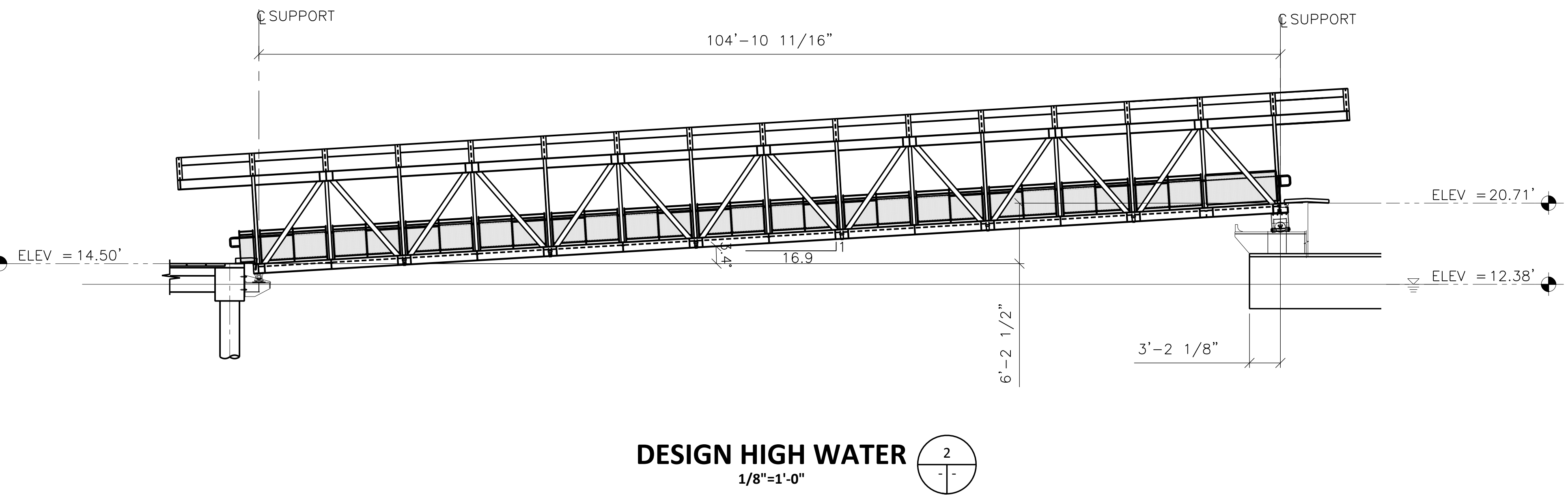
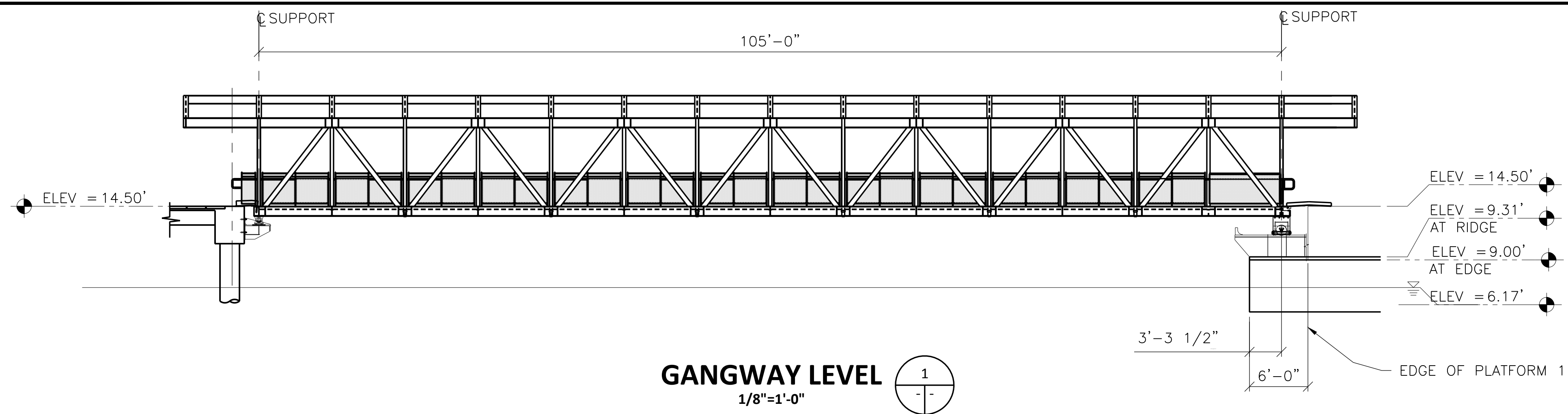
DATE  
10/06/17

SHEET  
OF

DRAWING NO.  
G2.3

JOB NO.  
2196

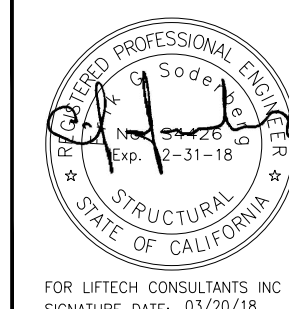
**FOR CONSTRUCTION**



- NOTES:  
 1. DIMENSIONS SHOWN AT THE CENTERLINE OF THE GANGWAY EXCEPT AS NOTED.  
 2. FOR PLAN DISPLACEMENTS SEE DRAWING G2.7  
 3. ELEVATIONS SHOWN ARE RELATIVE TO NAVD 88.

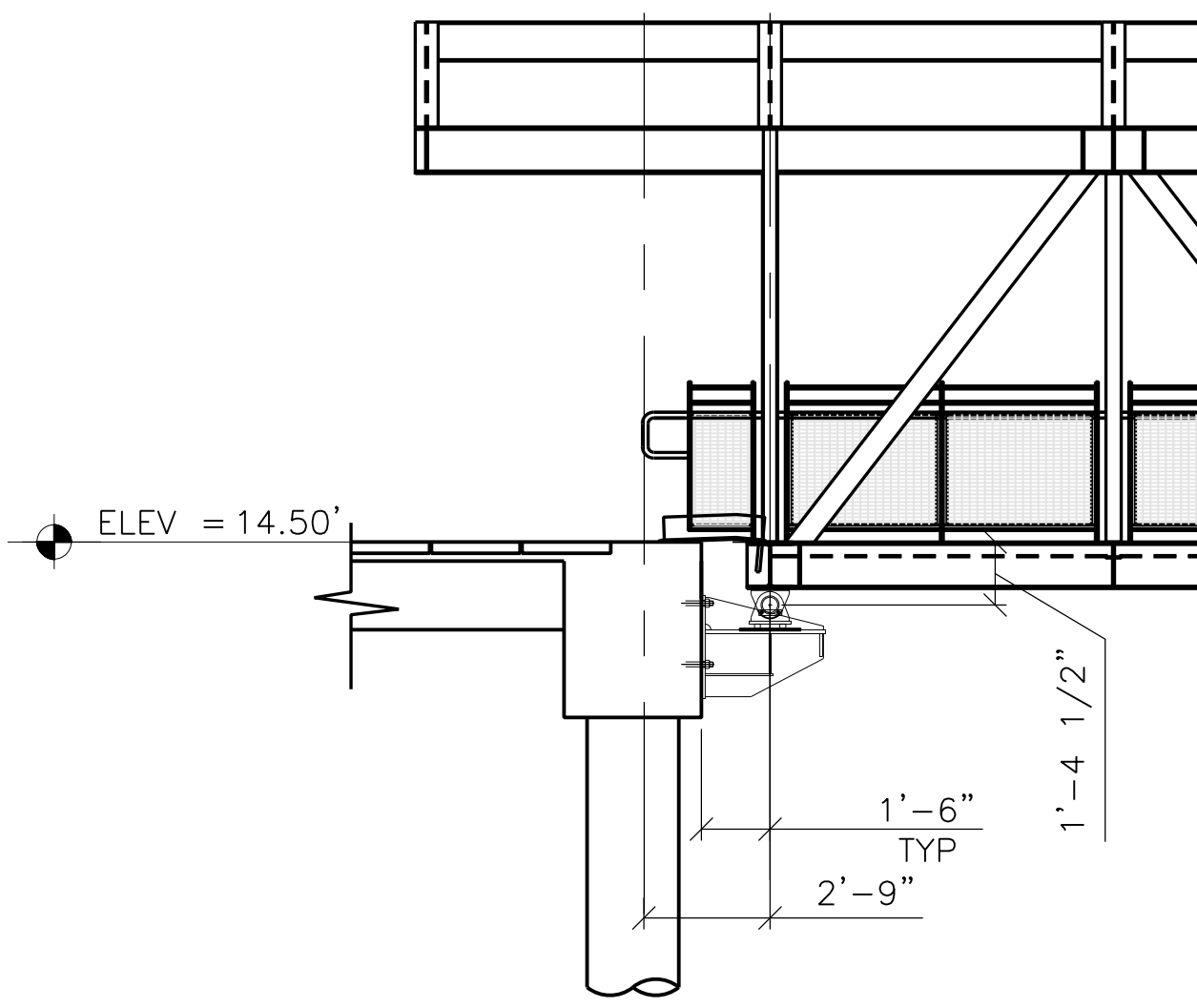
REVISIONS NO.	DATE	DESCRIPTION	BY	CHKD	APRD
0	10/6/17	ISSUE FOR CONSTRUCTION	AH	CAM/LMO	ES
1	11/6/17	GENERAL REVISIONS	AH	CAM/LMO	ES
2	3/20/18	GENERAL REVISIONS	AH	CAM/AB	ES

**FOR CONSTRUCTION**

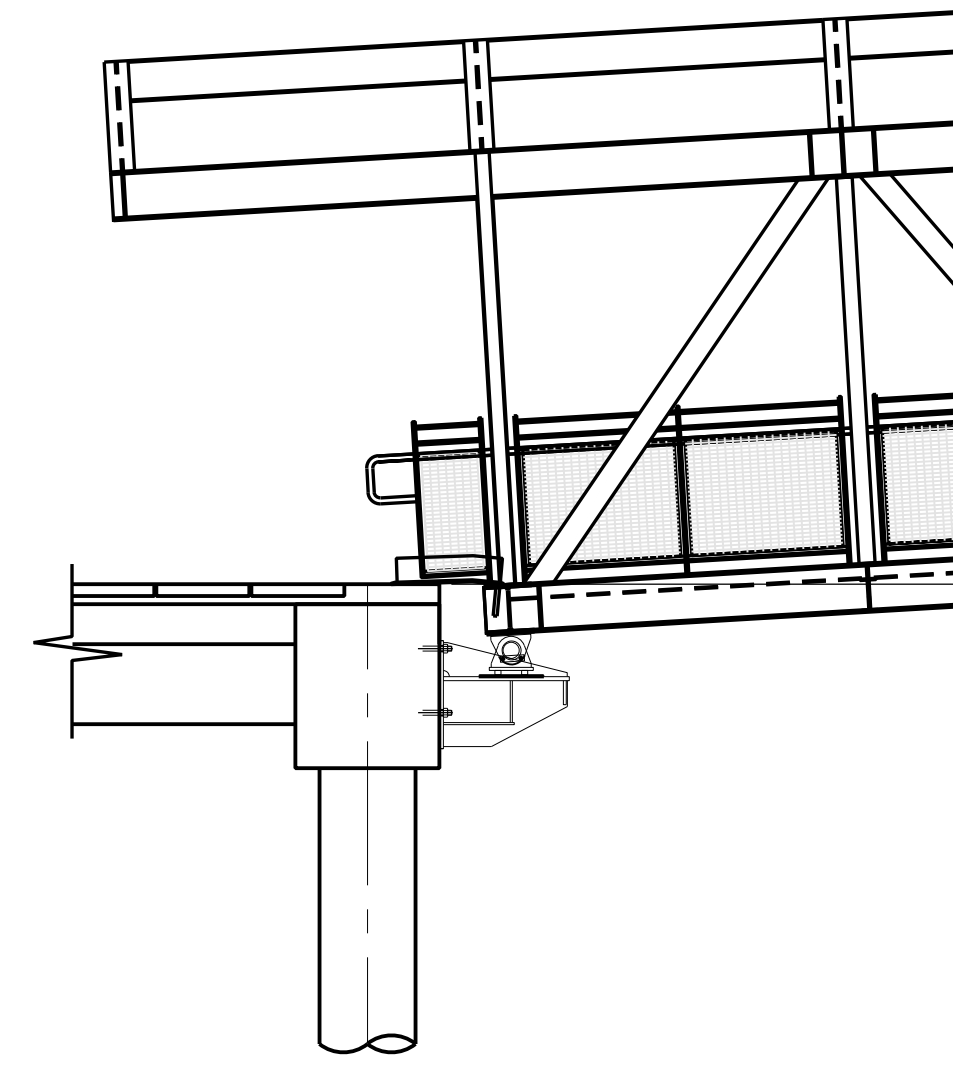


DESIGNED BY: CAM/ARS/TS	PROJECT SOUTH BASIN DOWNTOWN FERRY TERMINAL EXPANSION SAN FRANCISCO, CA	DATE 10/06/17
DRAWN BY: AH	SHEET FLOAT AND GANGWAY MOTIONS - 1	SHEET OF
CHECKED BY: LMO/ES		DRAWING NO. G2.4
		JOB NO. 2196

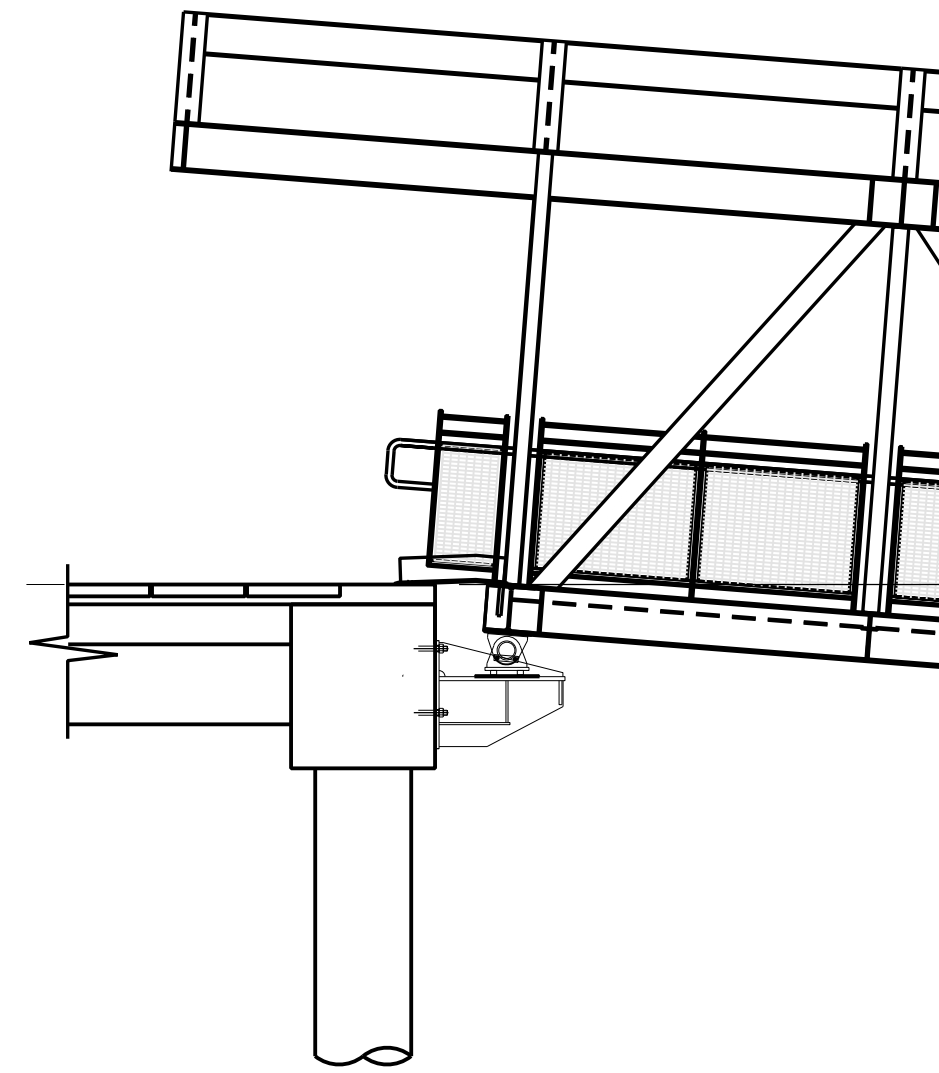
\\s21\2168\Drawings\G2.4 FLOAT AND GANGWAY MOTIONS - 1.dwg 3/20/2018 10:39 AM ahm halfhour



**GANGWAY LEVEL**  
1/4"=1'-0"



**DESIGN HIGH WATER**  
1/8"=1'-0"

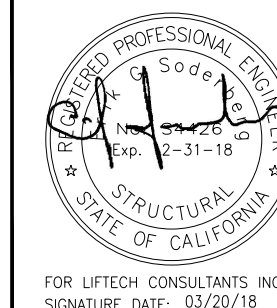


**DESIGN LOW WATER**  
1/8"=1'-0"



REVISIONS NO.	DATE	DESCRIPTION	BY	CHKD	APRD
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2	3/20/18	GENERAL REVISIONS	AH	CAM/AB	ES

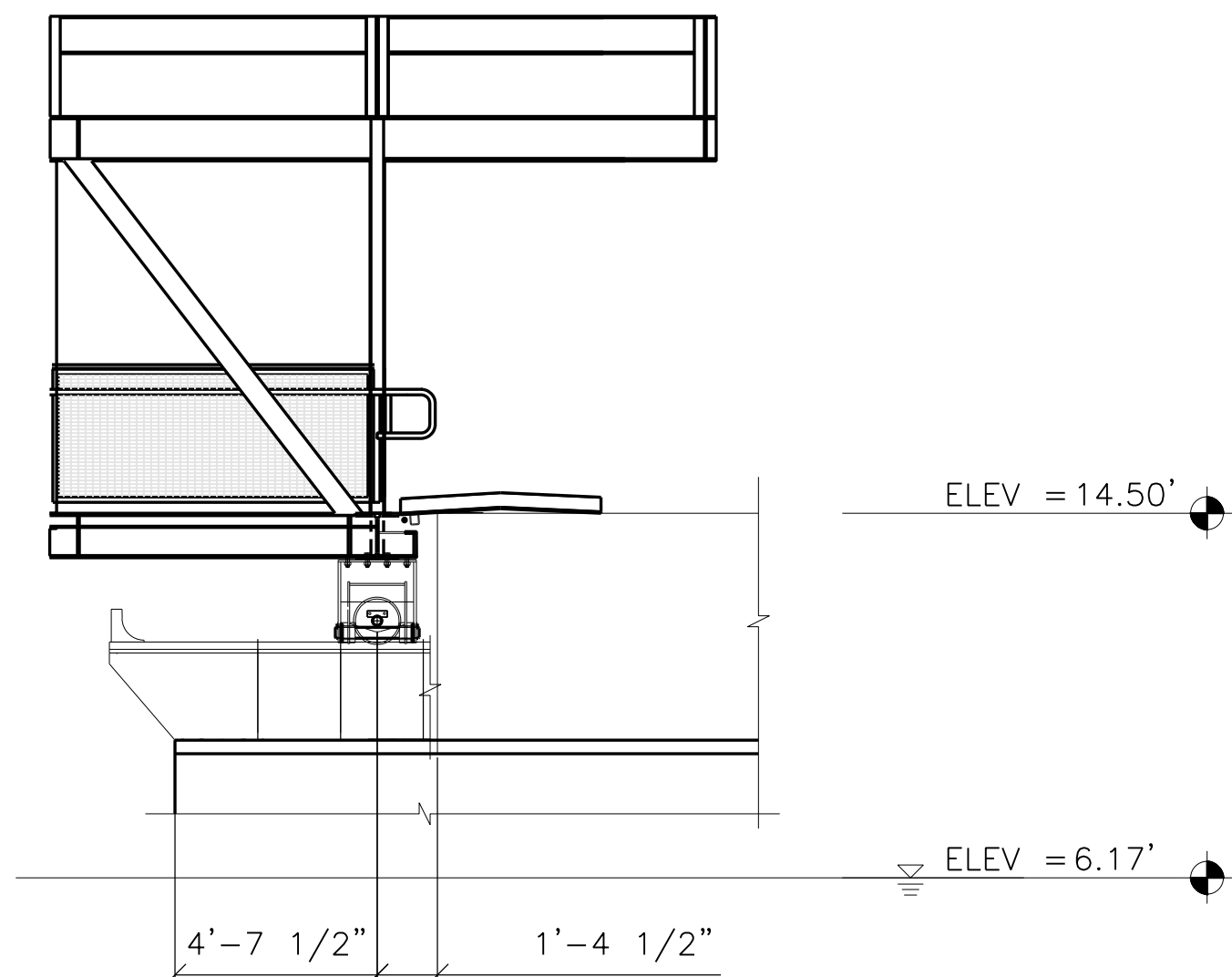
**FOR CONSTRUCTION**



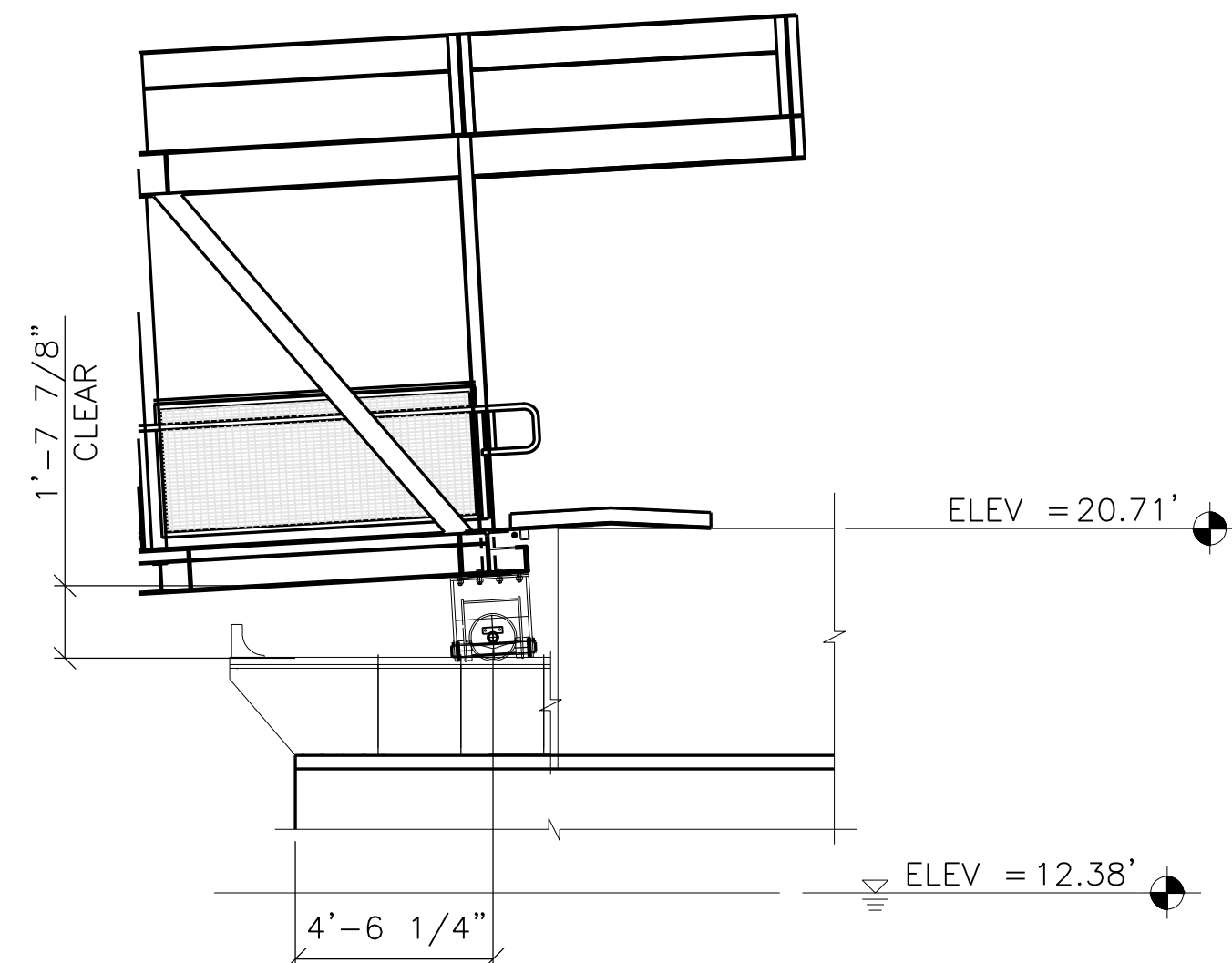
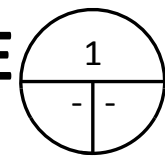
DESIGNED BY:  
CAM/ARS/TS  
DRAWN BY:  
AH  
CHECKED BY:  
LMO/ES

PROJECT  
**SOUTH BASIN DOWNTOWN FERRY TERMINAL EXPANSION  
SAN FRANCISCO, CA**  
SHEET  
**FLOAT AND GANGWAY  
MOTIONS - 2**

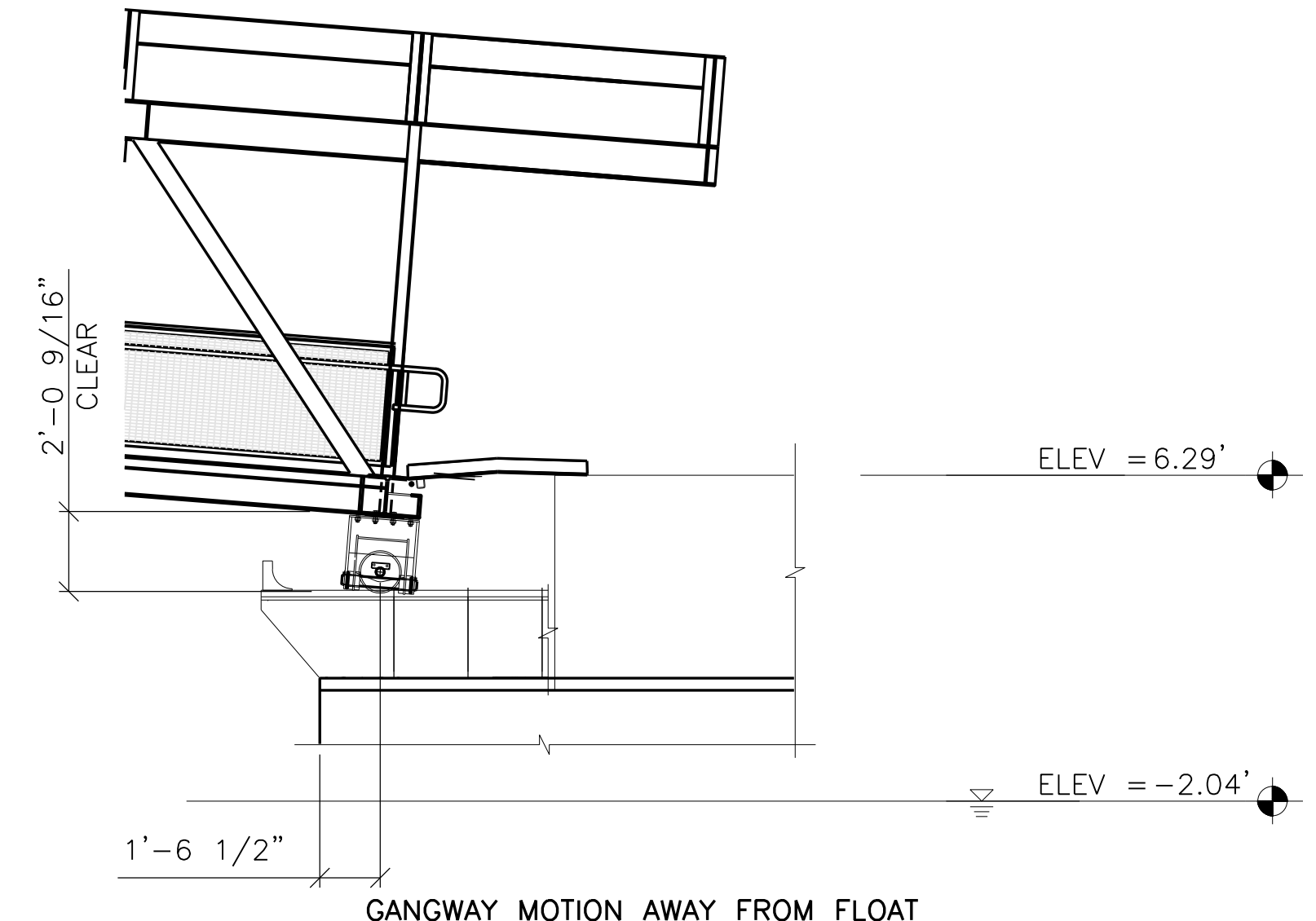
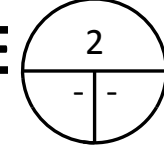
DATE  
10/06/17  
SHEET  
OF  
DRAWING NO.  
**G2.5**  
JOB NO.  
2196



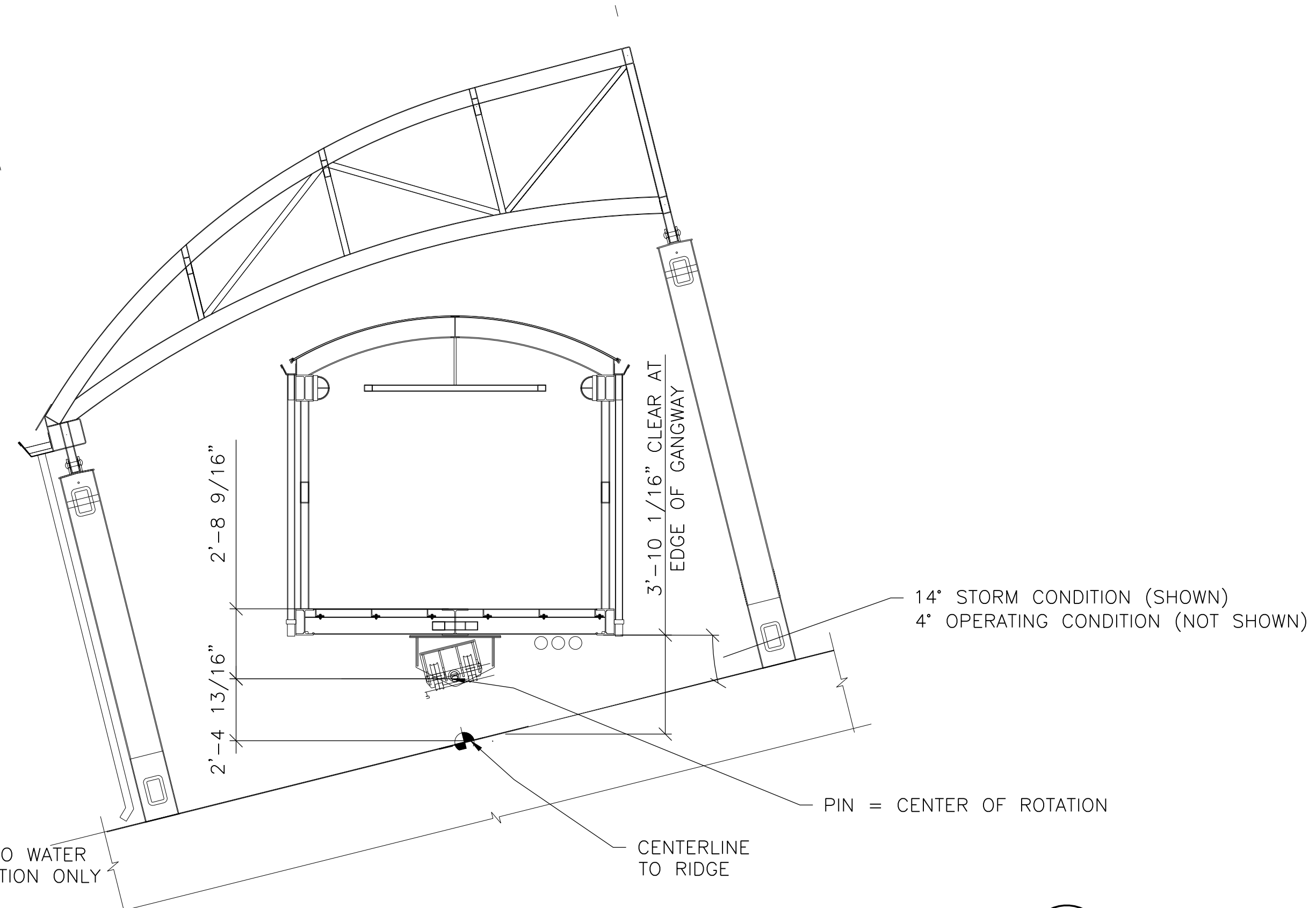
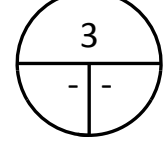
**GANGWAY LEVEL DURING DESIGN EARTHQUAKE**  
1/4"=1'-0"



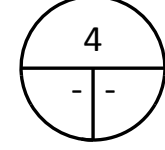
**DESIGN HIGH WATER DURING DESIGN EARTHQUAKE**  
1/4"=1'-0"



**DESIGN LOW WATER DURING DESIGN EARTHQUAKE**  
1/4"=1'-0"

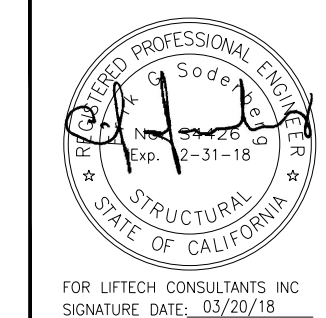


**FLOAT AT MAXIMUM ROTATION DURING DESIGN STORM**  
1/4"=1'-0"



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**FOR CONSTRUCTION**

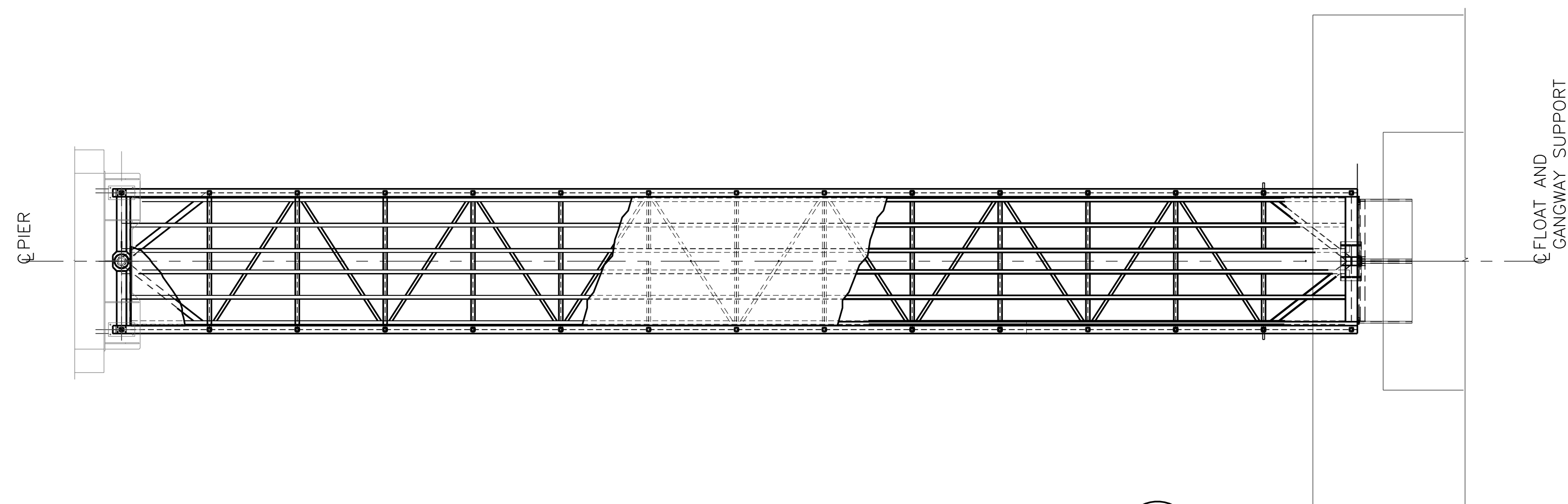


DESIGNED BY: CAM/ARS/TS  
DRAWN BY: AH  
CHECKED BY: LMO/ES

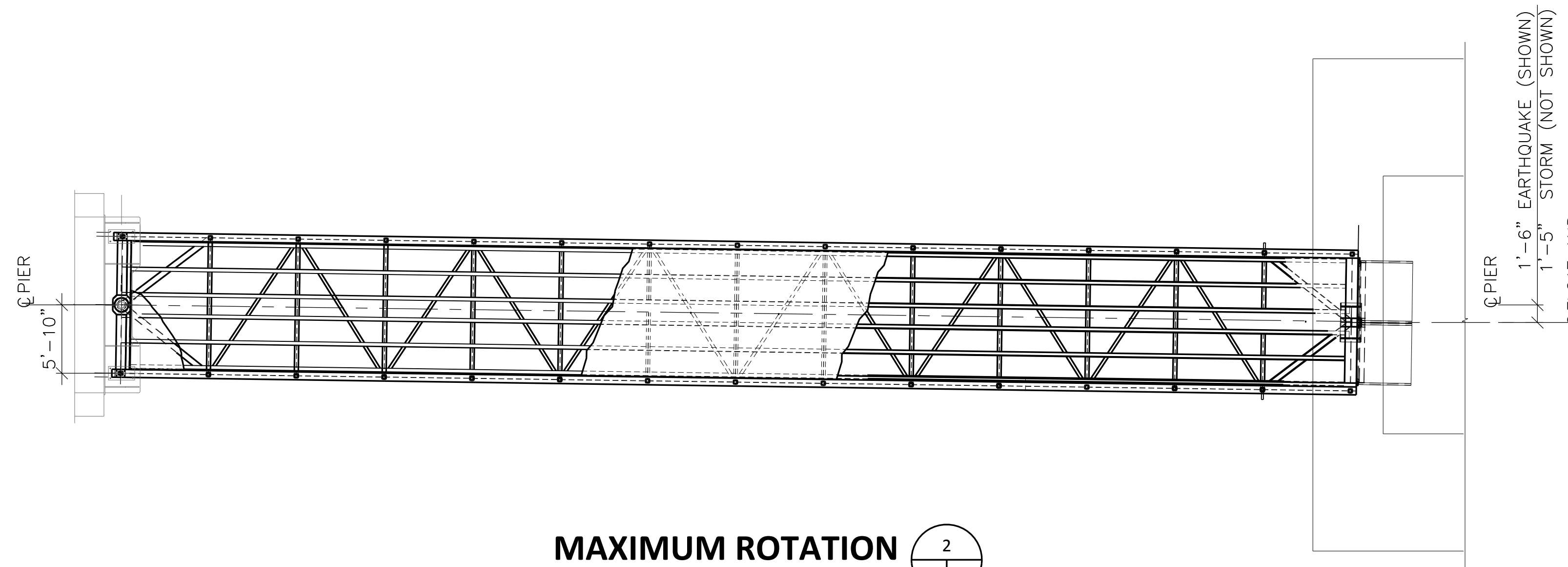
PROJECT: SOUTH BASIN DOWNTOWN FERRY TERMINAL EXPANSION  
SAN FRANCISCO, CA  
SHEET: PIER AND GANGWAY MOTIONS

DATE: 10/06/17  
SHEET: OF  
DRAWING NO.: G2.6  
JOB NO.: 2196

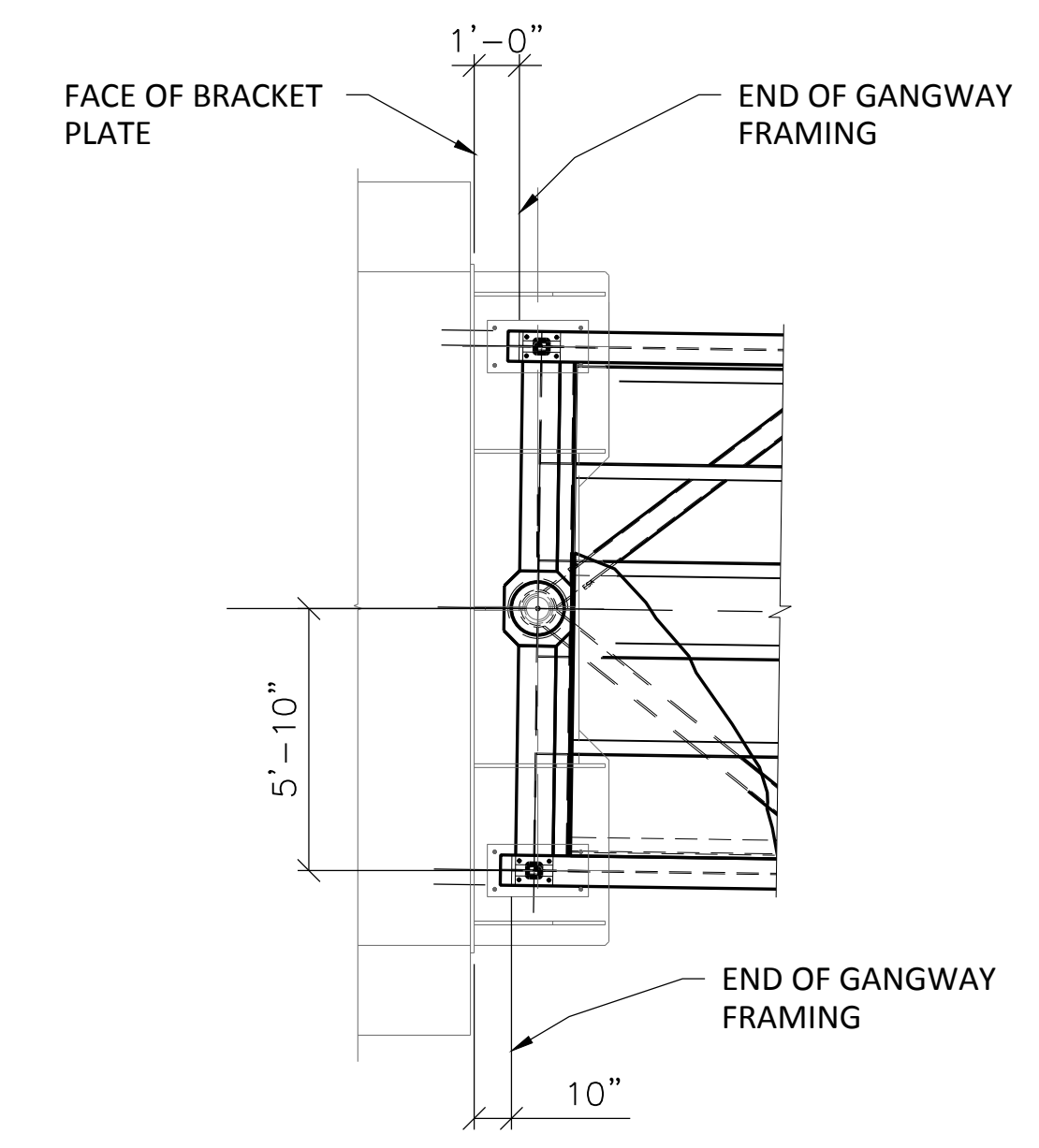
\\s215821682\Draw\Curren\G2.1 FLOAT AND GANGWAY MOTIONS - 1.dwg 3/20/2018 10:41 AM arn.hoffman



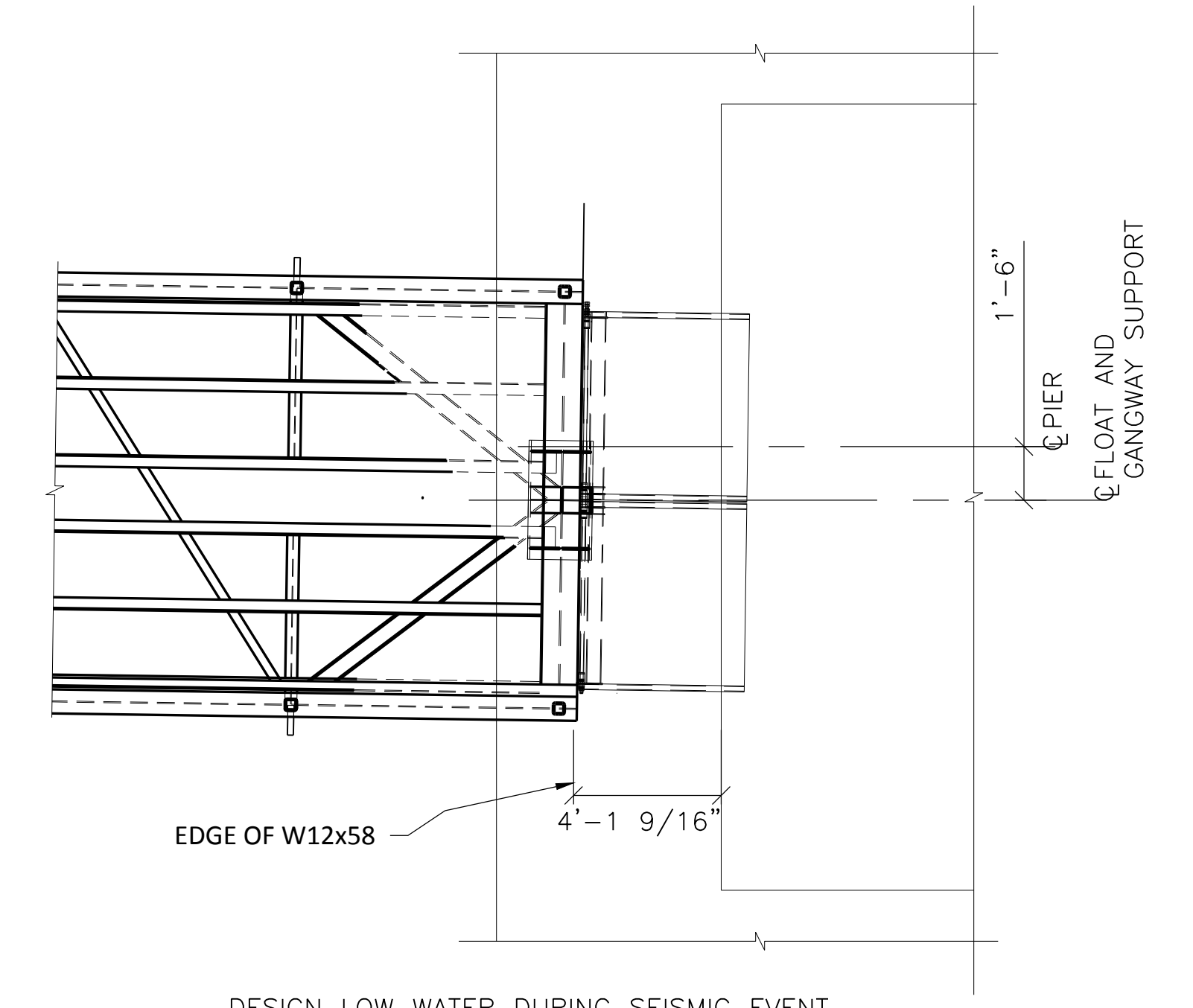
**GANGWAY LEVEL DURING DESIGN EARTHQUAKE**  
1/8"=1'-0" (1)



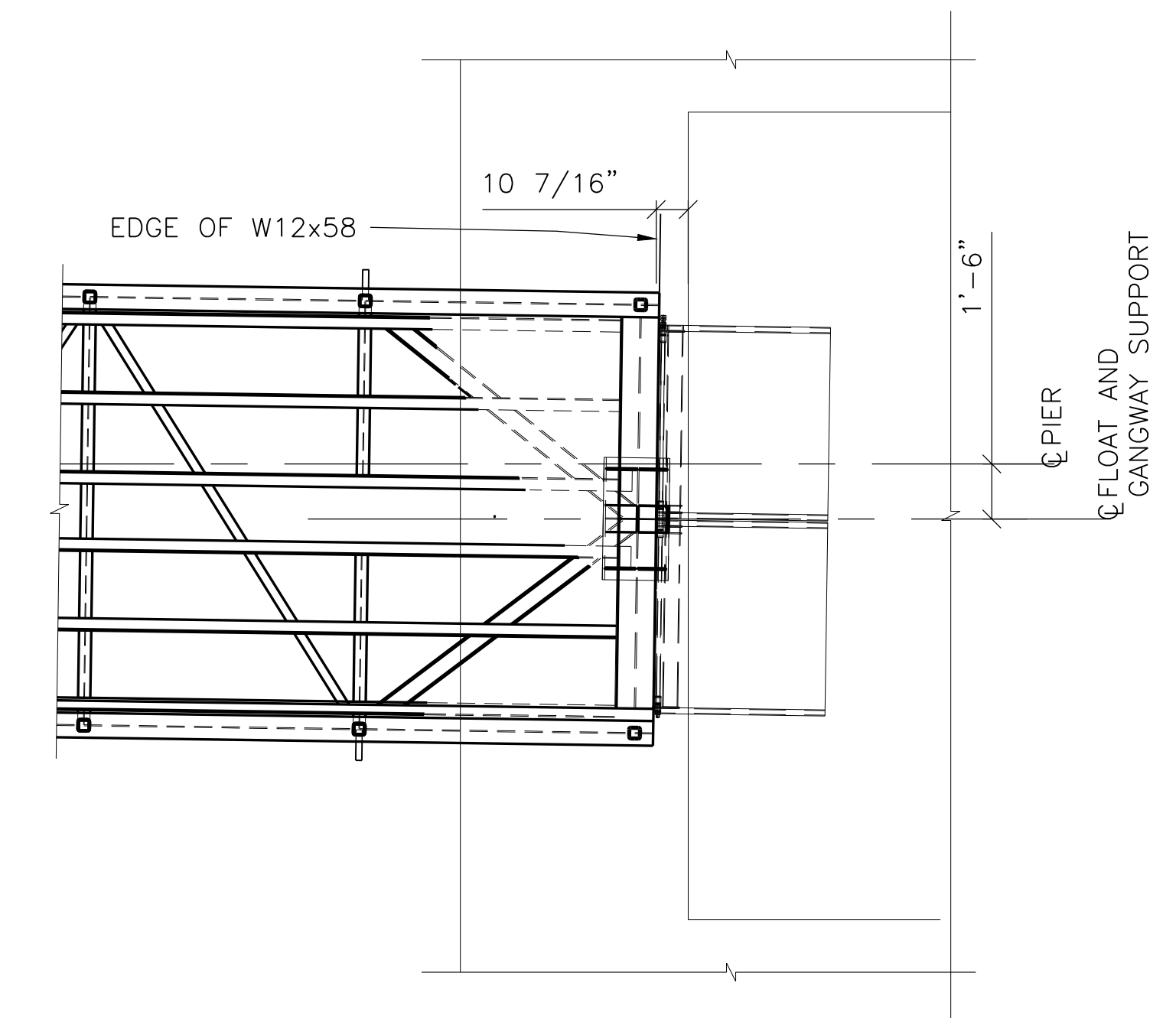
**MAXIMUM ROTATION**  
1/8"=1'-0" (2)



**EXTREME HORIZONTAL GAP**  
1/4"=1'-0" (3)



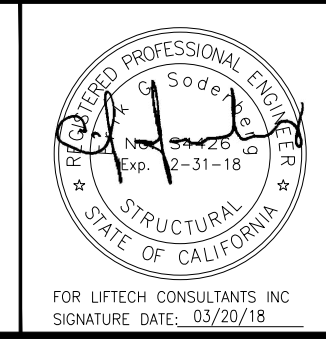
**MAXIMUM HORIZONTAL GAP**  
1/4"=1'-0" (4)



**MINIMUM HORIZONTAL GAP**  
1/4"=1'-0" (5)

REVISIONS					
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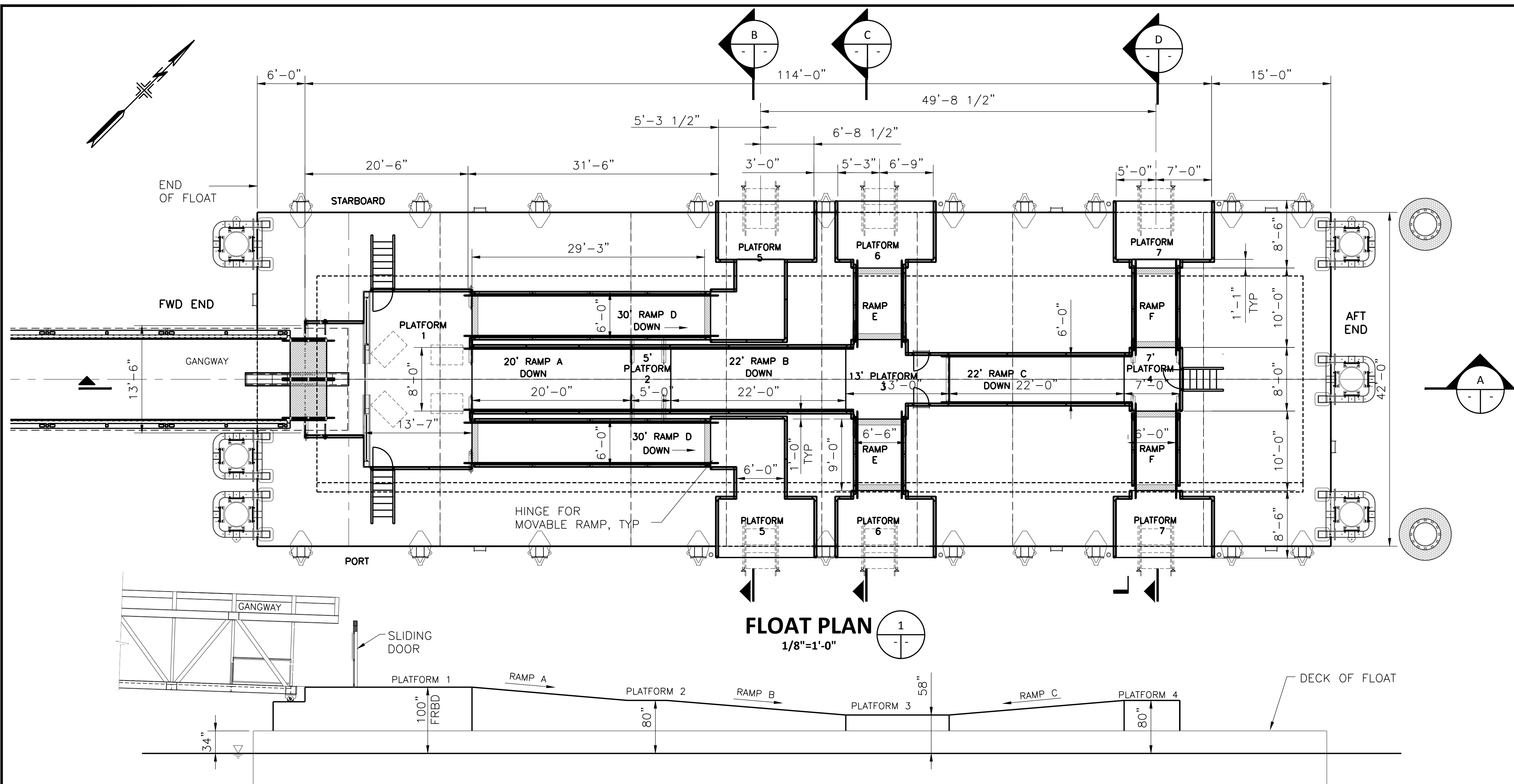
**FOR CONSTRUCTION**



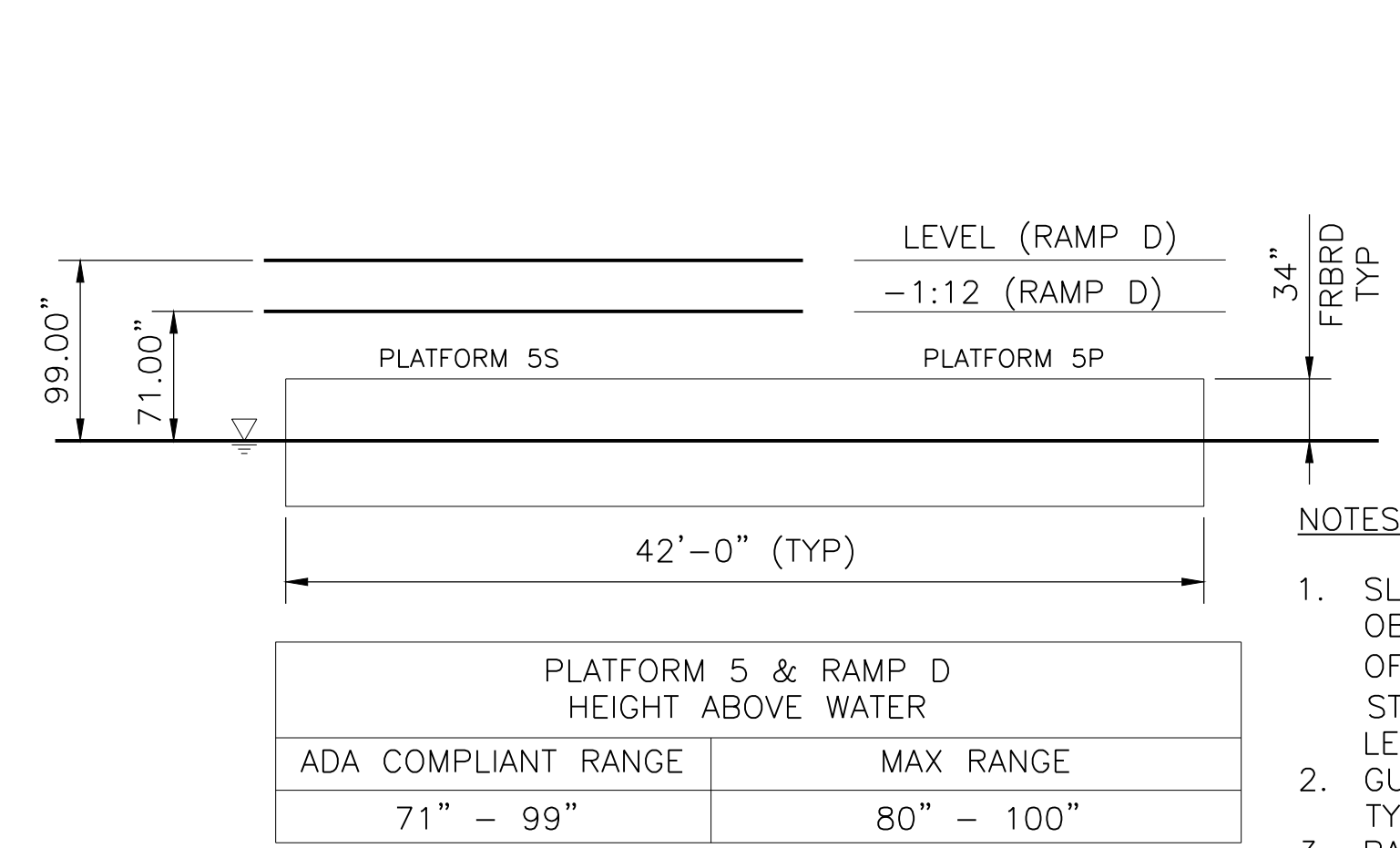
DESIGNED BY: CAM/ARS/TS	PROJECT SOUTH BASIN DOWNTOWN FERRY TERMINAL EXPANSION SAN FRANCISCO, CA	DATE 10/06/17
DRAWN BY: AH	SHEET <b>G2.7</b>	SHEET OF
CHECKED BY: LMO/ES		DRAWING NO. G2.7
<b>FLOAT AND GANGWAY MOTIONS</b>		JOB NO. 2196

Map031962196.dwg/Current/G2.7 FLOAT AND GANGWAY MOTION PLANS.dwg 3/20/2018 10:42 AM awwm hof@pacifi

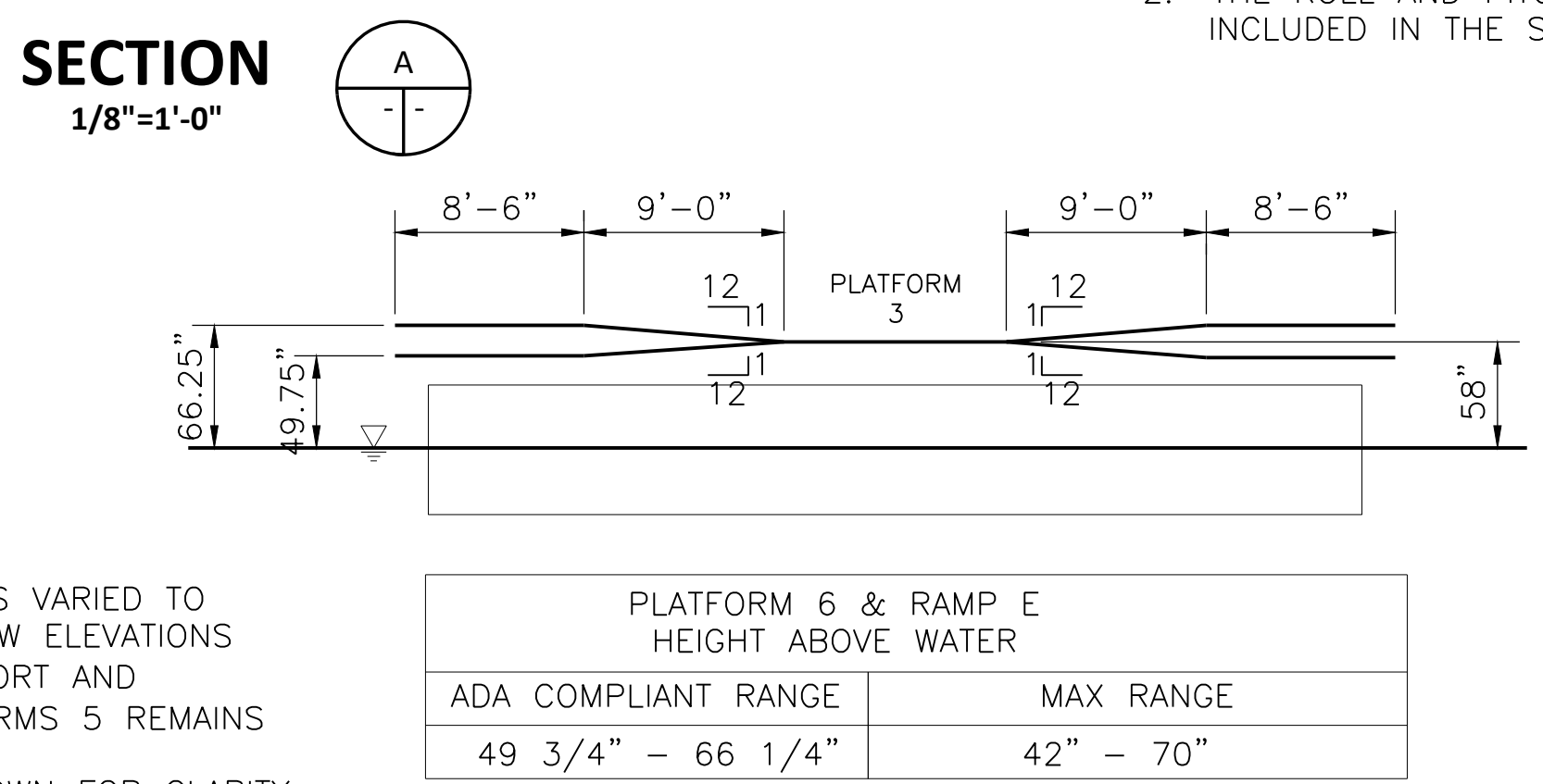
RAMP AND PLATFORM SCHEDULE		
RAMP OR PLATFORM	HEIGHT ABOVE WATER (FRBD)	MAXIMUM SLOPE (V:H)
1	100"	-
A	-	1:12
2	80"	-
B	-	1:12
3	58"	-
C	-	1:12
4	80"	-
D	100" & VARIES	1:12 MAX
5	71" - 99"	-
E	58" & VARIES	1:12 MAX
F	80" & VARIES	1:12 MAX
6	49 3/4" - 66 1/4"	-
7	70 3/4" - 89 1/4"	-



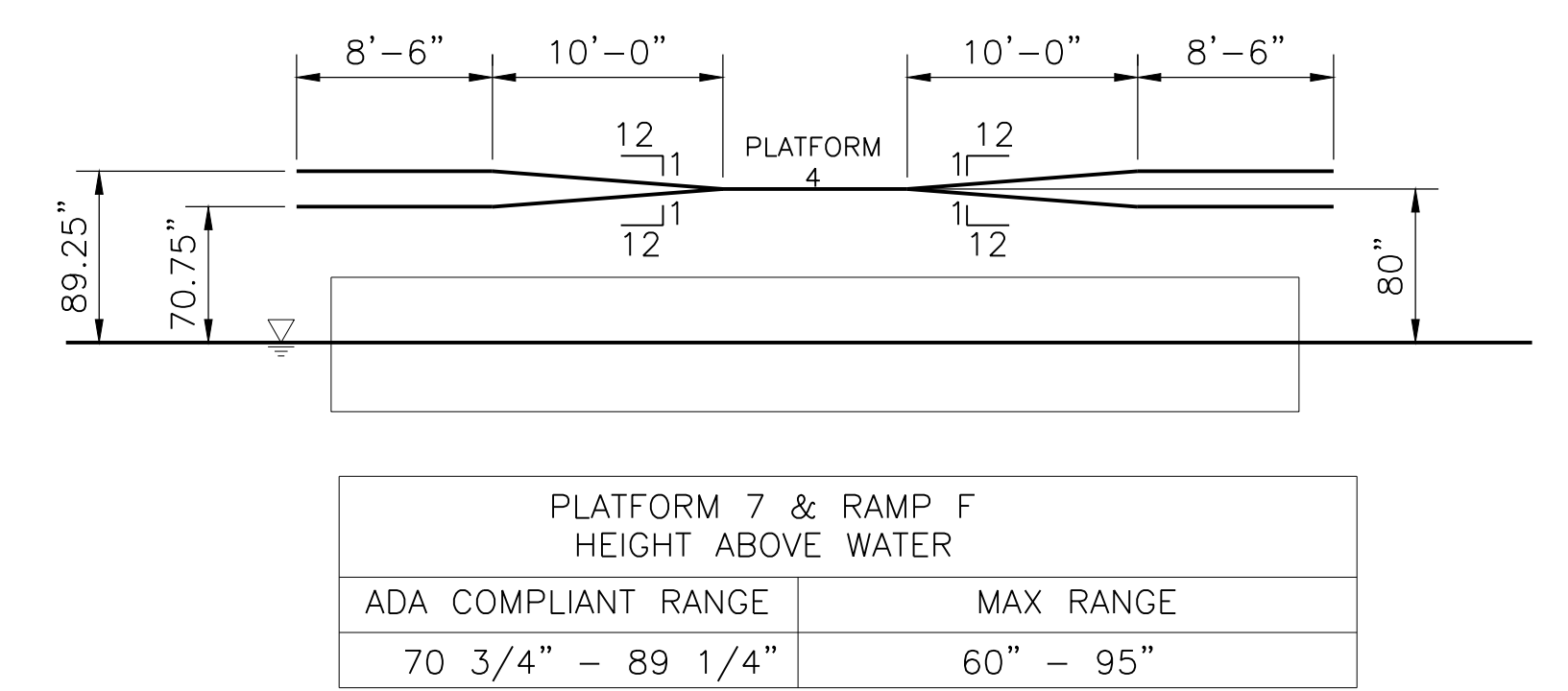
NOTE:  
 1. STAIRS AND GUARDRAILS NOT SHOWN FOR CLARITY.  
 2. THE ROLL AND PITCH OF THE FLOAT ARE NOT INCLUDED IN THE SLOPES SHOWN



**SECTION - PLATFORM 5**  
1/8"=1'-0"



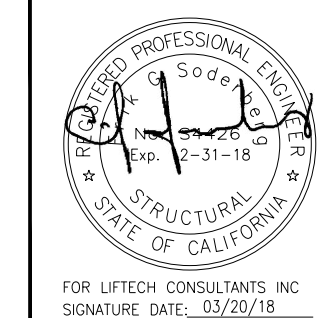
**SECTION - PLATFORM 6**  
1/8"=1'-0"



**SECTION - PLATFORM 7**  
1/8"=1'-0"

- NOTES:
- SLOPE OF RAMP D IS VARIED TO OBTAIN HIGH AND LOW ELEVATIONS OF PLATFORMS 5 (PORT AND STARBOARD). PLATFORMS 5 REMAINS LEVEL.
  - GUARDRAILS NOT SHOWN FOR CLARITY, TYP.
  - RAMP B NOT SHOWN.
  - SEE EMAILS FROM ROMA TO LIFTECH DATED 7/4/17 AND POWER TO LIFTECH DATED 7/7/17 REGARDING RAMP LEVELS.

REVISIONS NO.	DATE	DESCRIPTION	BY	CHKD	APRD
0	10/6/17	ISSUE FOR CONSTRUCTION	AH	CAM/LMO	ES
1	11/6/17	GENERAL REVISIONS	AH	CAM/LMO	ES
2	3/20/18	GENERAL REVISIONS	AH	CAM/AB	ES



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DRAWN BY: AH	SHEET	SHEET 1 OF
CHECKED BY: LMO/ES	DRAWING NO. G2.8	JOB NO. 2196
FIXED AND MOVABLE RAMP SYSTEM		

**FOR CONSTRUCTION**

**DESIGN CRITERIA**

**SPECIFICATIONS**

**Primary**

ABS	American Bureau of Shipping, <i>Rules for Building and Classing Steel Vessels 2011</i> . Houston, TX: American Bureau of Shipping, 2011.
ABS	American Bureau of Shipping, <i>Shipbuilding and Repair Quality Standard for Hull Structures during Construction 2007</i> . Houston, TX: American Bureau of Shipping, 2007.
CBC	International Code Council and the California Building Standards Commission, <i>2016 California Building Code, California Code of Regulations</i> . Sacramento, CA: CBSC, 2016.

**Secondary**

AISC	American Institute of Steel Construction, <i>Steel Construction Manual, 14<sup>th</sup> Edition</i> . Chicago, IL: American Institute of Steel Construction, 2014.
ASCE	American Society of Civil Engineers, <i>ASCE/SEI Standard 7-10, Minimum Design Loads for Buildings and Other Structures</i> . Reston, VA: American Society of Civil Engineers, 2010.
AWS	American Welding Society, <i>AWS D1.1/D1.1M:2015, Structural Welding Code – Steel, 23<sup>rd</sup> Edition</i> . Miami, FL: American Welding Society, 2015.
ABS	American Bureau of Shipping, <i>Rules for Materials and Welding (Part 2) 2003</i> . Houston, TX: American Bureau of Shipping, 2003.

**REFERENCES (INFORMATION ONLY – NOT CRITERIA)**

AASHTO	American Association of State Highway and Transportation Officials, Inc., <i>AASHTO LRFD Bridge Design Specifications</i> , 5th Edition. Washington, DC: AASHTO, 2010.
ACE	Army Corp of Engineers, <i>Coastal Engineering Manual</i> , Washington D.C.: US Army Corp of Engineers, 2008.
MIL	MIL-HDBK-1026/4A Mooring Design, Department of Defense Handbook, Washington, D.C., 1999.
MOTEMS	International Code Council and the California Building Standards Commission, <i>Notice of Proposed Action, Marine Oil Terminals in 2001 California Building Code, California Code of Regulations, Title 24, Part 2, Vol. 2</i> . CBSC, 2001.
PIANC	Working Group 33 of the Maritime Navigation Commission, <i>Guidelines for the Design of Fender Systems: 2002</i> . Brussels, Belgium: International Navigation Association, 2002.

**BASIC LOADS**

**General Load Definitions**

D Dead Load – Weight of Fixed Structure and Components

**Live Loads**

- LU Uniform Loads from People and Equipment
- LC Concentrated Loads
- LB Vessel Berthing
- LM Mooring Loads

**Environment Loads Excluding Wind**

- EW Waves
- EM Marine Growth
- EC Current

A Accidental Load  
Concurrent flooding of any two barge compartments

W Wind Loads per ASCE

All structures but float design:

$$q_z G_f = 0.00256 K_z K_{zt} K_d V^2 G \text{ (psf)}$$

- Basic wind speed, V 115 mph, 3-s gust, at 33 ft
- Risk Category IV
- Directionality factor,  $K_d$  0.85
- Topographic factor,  $K_{zt}$  1.0
- Exposure category D
- Velocity pressure coef.,  $K_z$   $K_z = 2.01 (z/700)^{0.17}$
- Structure height, z in feet
- Gust effect factor, G 0.85

S Earthquake Loads

**Individual Load Definitions**

**Stairs**

- L LU Stair Uniform Load = 100 psf
- LC Stair Conc. Load on One Tread = 300 lbs

**Railings / Guardrails (REF. A)**

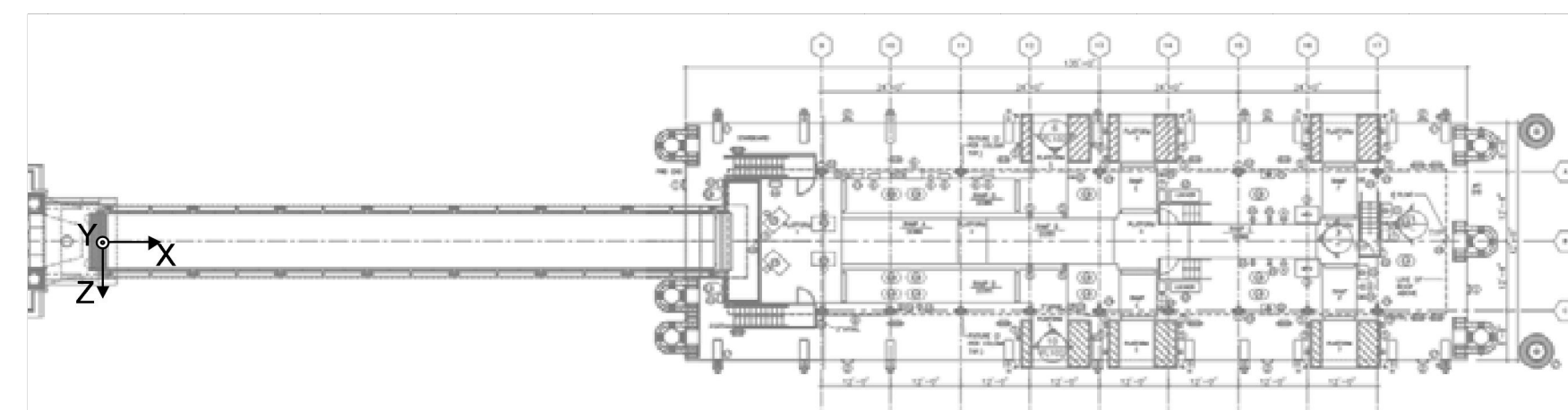
- L LU Lateral Load of 50 PLF
- LC Uniform Load of 50 PLF or a Conc. Lateral Load of 200 lbs on handrail,

**Gangway Loads (REF. A)**

L Live Loads - Individual Non-concurrent Loads:

- LU 100 psf on walking surfaces and 20 psf on roof
- LC 650 lbs at any location between the guard rails

S Wharf acceleration: (REF. A, note: different axes orientation)  
Gangway connections and gangway structure designed to be elastic in D.E. earthquake. Float design controlled by E and W loads.



DE Design Earthquake = 2/3 MCE

Load Comb.	X	Y <sup>1</sup>	Z
1.0Z	0.68g	0.3g	0.89g
1.0X	0.74g	0.3g	0.28g
1.0Z+0.3X	0.9g	0.3g	0.97g
0.3Z+1.0X	0.95g	0.3g	0.55g

MCE MCE, Maximum Considered Earthquake

Load Comb.	X	Y <sup>1</sup>	Z
1.0Z	0.86g	0.38g	1.14g
1.0X	0.93g	0.38g	0.36g
1.0Z+0.3X	1.14g	0.38g	1.25g
0.3Z+1.0X	1.19g	0.38g	0.7g

Note: 1. Vertical acceleration based on WETA South San Francisco Ferry Terminal Project

E, W Design displacements and rotations.

Condition	Direction	Wharf	Float <sup>2</sup>	Total (SRSS)
Normal Ops	Longitudinal,	0"	2"	1"
	Transverse,	0"	<3"	<3"
	Rotation about Long. Axis	0°	4°	4°
E, W	Longitudinal	0"	4"	4"
	Transverse	0"	17"	17"
	Rotation about Long. Axis	0°	14°	14°
S (MCE)	Longitudinal	15"	<6"	<16"
	Transverse	17"	<6"	<18"
	Rotation about Long. Axis	0°	Does not Control	

**Notes:**

- Displacements and rotations are in each direction. Normal Operating and E,W design load motions are provided by Argonautics (see Project Reference D). S (MCE): Wharf motion provided by WETA, Float motion estimated by Liftech.
- Float displacements include an additional 2" of movement in each direction due to gap between pile collar and pile. Gap between gangway and float will also change up to 4" due to change in water levels and gangway rotation.
- See calculations for relative movements between components. Design utilities for 1.5 times this movement.

**Canopy Loads**

- L Live Loads
- LU 20 psf on Roof
- LC, LI, LM, LT Not applicable

E, L Relative Displacement and Rotation of the Supports

**Ramp Loads (Fixed and Movable on Float)**

- L Live Loads - Individual Non-concurrent Loads:
- LU 100 psf uniform load on walking surfaces
- LC 650 lbs at any location between the railings

**Donut Loads**

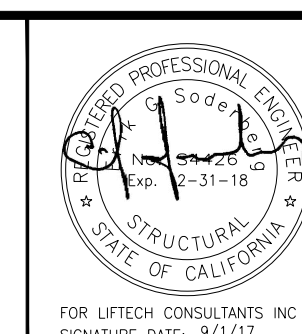
The donut fender design load is based on a WETA specified performance criteria. See "Other Design Requirements" this sheet.

**Float Loads**

- D Dead Loads
  - Steel Float
  - Permanent Ballast
  - Structures Supported on the Deck
  - Permanent Equipment Supported on the Deck
  - Hydrostatic Pressure
- LU Uniform Loads on deck of: 40 psf
- LC Concentrated Loads on deck of: 650 lbs at any location
- LB Vessel Berthing Design Condition:
  - Fender support load of 100 kips at 3'-6" above deck
  - 25 kips at 7'-0" above deck
  - Friction load in any direction based on  $\mu=0.25$
  - Berthing and mooring loads not applied concurrently.

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		JOB NO. 2196

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LM Mooring Loads

Guide Pile Collars: 150 kips (LRFD) based on Argonautics M.E. Inc. Analysis. Friction load in any direction based on  $\mu=0.25$

Bitt Load: 50 kips in any horizontal direction combined with 25 kips vertical

Mooring Loads on Fenders:

The fender supports on the float have mooring line design load of 76 kips at shackle connection any direction and designed to fit 30 t shackles. Only one mooring connection loaded at a time.

EM Marine growth load of 5 psf on submerged surfaces

E, W Environmental and Wind Loads

DESIGN CONDITION	Site	
	GATE F	GATE G
Directions	N	N
Wind Load (1-hr average)	30.7 knots	30.7 knots
Current	4.3 ft/sec	4.3 ft/sec
Wave Ht (Hs)	3.3 ft	3.8 ft
Wave Peak Period (Tp)	3.5 sec	3.5 sec
Boat Wake/Wave	3.0 ft	3.0 ft

Operating Conditions – for transition plate rotation

Wind load (3-sec gust)	85 mph
Current	-nil-
Wave height (Hs)	1.0 ft
Wave period	2.7 s
Boat wake	1.0 ft
Wave height incl. wake	1.4 ft

LOAD COMBINATIONS

Load Combinations are in accordance with the CBC specification.

OTHER DESIGN REQUIREMENTS

1. Capacity Based Design

- a. Berthing, Mooring, and Pile Guide Hardware: The nominal strength of the connection to the float structure will be designed to exceed the nominal strength of the component by a factor of 1.3.
- b. Float Freeboard: 2.83 feet with unfactored design dead loads  
2.5 feet with full ramp live load

2. Float Stability:

- a. The float must be stable with concurrent flooding of any two compartments combined with dead, live, and wind loads. See Calculations.
- b. Float shall not heel more than 2 degrees under live load on one half of the float width.
- c. Damage Freeboard 3 in min w/ free flooding.

3. Fenders (Ref A)

a. Donut Fender

- i. Fender shall be MFI Ocean Guard Foam-Filled Donut fender, 6.6 ft dia x 16.9 ft x 3 ft pile, AHC Capacity or approved equal. Reaction = 22.6 k/ft at 60% compression  
Energy Absorption = 9 kip-ft/ft at 60% compression

- ii. Vessel Design Approach Velocity: 0.45 ft/s

b. Float Fenders:

Speed: 1.5 fps perpendicular to fender  
Incidence angle: 15 degrees  
Berthing point fore of midship: Length / 4

Fentek Arch Type AN 300 or approved equal

GENERAL NOTES

GENERAL

The Project Specifications, which are a separate document, are an integral part of the construction documents. The Project Specifications take precedence over the General Notes. See structural drawings for other requirements.

All work shall conform to all applicable codes and ordinances including OSHA. All inspection, welding, workmanship, fabrication and tolerance requirements shall conform to the respective AISC and AWS codes. It is also acceptable to conform to ABS Guide for Shipbuilding and Repair Quality Standard for Hull Structures during Construction.

Contractor shall visit the site and verify that all existing conditions, elevations, dimensions, and construction are consistent with these drawings and notify the Owner of any discrepancies before proceeding with the work.

All code and specification are latest edition unless otherwise noted.

SPECIAL INSPECTION

Special inspection shall be provided in accordance with the requirements in IBC, Chapter 17, as follows:

Verification and Inspection	Continuous	Periodic
<b>Steel Construction</b>		
Material Verification of high-strength bolts, nuts, and washers. Identification markings to conform to ASTM standards specified in the approved construction documents. Manufacturer's certificate of compliance required.	___	X
Snug-tight joints	___	X
Pretensioned and slip-critical joints using turn-of-nut with matchmarking, twist-off bolt or direct tension indicator methods of installation.	___	X
Pretensioned and slip-critical joints using turn-of-nut without matchmarking or calibrated wrench methods of installation.	X	___
Material verification of structural steel – identification markings to conform to AISC 360. Manufacturer's certified test reports required.	___	X
Material verification of weld filler materials – identification markings to conform to AWS specification in the approved construction documents. Manufacturer's certificate of compliance required.	___	X
Material alignments, e.g., plate alignments to work points, out-of-straightness, out-of-plumb. Refer to AWS and AISC specifications. Contact Engineer if there are questions. Inspection at fit-up before welding is preferred.	___	X
Inspection of welding:		
1) Complete and partial joint penetration groove welds	X	___
2) Multipass fillet welds	X	___

3) Single-pass fillet welds $> \frac{5}{16}$ "	X	___
4) Plug and slot welds	X	___
5) Single-pass fillet welds $\leq \frac{5}{16}$ "	___	X
<b>Concrete Construction</b>		
Inspection of placed anchors before being cast in concrete	___	X
<b>Deep Foundation Elements</b>		
Verify element materials, sizes and lengths comply with the requirements.	X	___
Determine capacities of test elements and conduct additional load tests, as required.	X	___
Observe driving operations and maintain complete and accurate records for each element.	X	___
Verify placement locations and plumbness, confirm type and size of hammer, record number of blows per foot of penetration, determine required penetrations to achieve design capacity, record tip and butt elevations and document any damage to foundation element.	X	___

The Owner will retain the Special Inspector for the above inspections. Inspection reports shall be submitted to the Contractor, Owner, and Engineer.

STRUCTURAL OBSERVATION

Contractor shall notify the Owner and Engineer of the construction schedule and progress and prior to the following construction stages so that the Engineer may plan and perform a visual observation of the structures for general conformance to the approved construction documents:

- Initial fit-up of gangway and float main structures
- Near completion of gangway and float main structures
- Prior to pouring concrete for anchor and reinforcing steel review (wharf brackets)
- Installation of float walkways, pile collars, and fenders
- Completion of construction and installation

STRUCTURAL STEEL

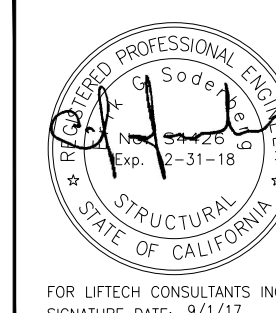
Workmanship

Work shall conform to the requirements of the ANSI/AISC 360 "Specification for Structural Steel Buildings", March 9, 2005, including current supplements and ANSI/AWS D1.1, "Structural Welding Code" including provisions applicable to cyclically loaded structures.

All steel members shall be made in an approved fabricator's shop. The approved fabricator shall submit the Certificate of Compliance to the building inspector prior to erection.

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**Material**

Structural steel shall conform to the following unless otherwise noted:

Plates other than walking surface	ASTM A572, Grade 50
Plate for walking surface	ASTM A36
Bar	ASTM A36
W Shapes and Tees	ASTM A992
Pipes	ASTM A53, Grade B
Pipes (Promenade Canopy)	API 5L, Grade B X52
HSS Tubes	ASTM A500, Grade B
Angles & Channels	ASTM A36
Bolts	ASTM F3125 A325-N
Anchor Bolts	ASTM F1554 Grade 55, galvanized per ASTM A123, A153, and A653
Nuts	ASTM A563, hot-dip galvanized in accordance with ASTM A153
Washers	ASTM F436, hot-dip galvanized in accordance with ASTM A153
Pins	ASTM A182 Type F61
Stainless Steel	
Tubes	ASTM A269 Grade 316L
Plate and bar	ASTM A666 Grade 316L
Angles	ASTM A240 Grade 316L
Bolts	ASTM F593
Nuts	ASTM F594
Washers	ASTM A240, Type 316

**Coatings**

ASTM F3125 A325 Type 1 bolts shall be hot dipped galvanized or cold galvanize coated to not less than one ounce per square foot conforming to ASTM A153 for hardware. Where exposed, they shall be of the same color and finish as the metal to which they are applied.

See Project Specifications for other requirements.

**Welding**

Welders and welding operators shall have current AWS certificates for the materials and processes being used. The Contractor shall maintain current files of these certificates and shall provide them to the Owner upon request.

Weld procedures shall be qualified in accordance with AWS D1.1. The Contractor shall maintain current files of weld procedure specifications and test results. The Contractor shall review planned weld procedures, weld test results, or both, and verify they are acceptable prior to welding.

Steel electrodes shall be in accordance with Table 3.1 of AWS D1.1 except E60xx rods shall not be used.

Stainless steel electrodes shall be in accordance with AWS D1.6.

Fillet welds that occur on opposite sides of a common plane shall be interrupted at the corner common to both welds unless otherwise noted. See Figure 1.

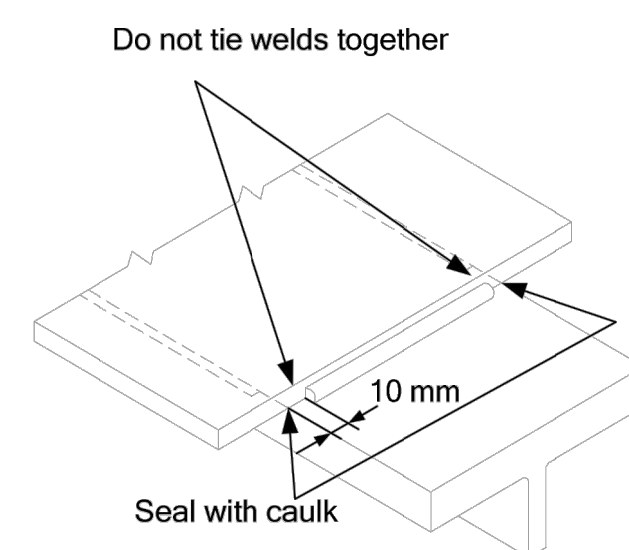


Figure 1 Fillet Welds on Opposite Sides of a Common Plane

**Weld Inspection**

All welds shall be visually inspected (VT). Additional nondestructive testing (NDT) shall be performed as indicated on the drawings. The Owner may perform NDT other than visual even though this inspection is not indicated on the drawings. It shall be the Contractor's responsibility to ensure that all welds meet the acceptance requirements of AWS D1.1, Section 6, "Inspection."

Weld inspectors performing non-visual NDT shall be certified in accordance with the current edition of the American Society for Nondestructive Testing (ASNT) Recommended Practice No. SNT-TC-1A. Inspectors shall be an NDT Level II inspector, or an NDT Level I inspector working under the supervision of an NDT Level II inspector.

The Contractor shall allow unrestricted access for inspection by the Owner or his representative.

**Bolts**

All bolted steel to steel connections shall have high strength bolting conforming to ASTM F3125 A325, hot-dip galvanized unless otherwise noted; and where exposed, shall be of the same color and finish as the metal to which applied.

**Drain Holes**

Drain holes, 1" diameter, shall be provided at all water traps.

**Bent Plates**

Bent plates shall have bend lines perpendicular to the direction of rolling. The plate temperature shall be at least 70° F at the time of bending. No sharp indentations, dents, or cracks will be allowed. The plate may be inspected by UT Methods.

**Non-Skid Coating**

Non-Skid steel coating shall be as noted in the Coatings section of the specification, section 09 97 13. Also SEE **STRUCTURAL STEEL FRAMING** Specification **SECTION 05 12 00.2.6**.

**CAULK**

Caulking shall be 100% silicone suitable for exterior use.

**SUBMITTALS**

See Project Specifications.

**FABRICATION NOTES****Dimensional Tolerance**

In addition to other tolerance requirements, members shall meet ANSI/AWS D1.1-2015, Section 5.23, dimensional tolerance requirements. Some of the more pertinent requirements are provided below. Refer to AWS D1.1 and AISC 303-10 for other requirements.

The maximum variation in straightness between any two points along the length of the unloaded member shall be 1/1000 the distance between the two points. Refer to Figure 2.

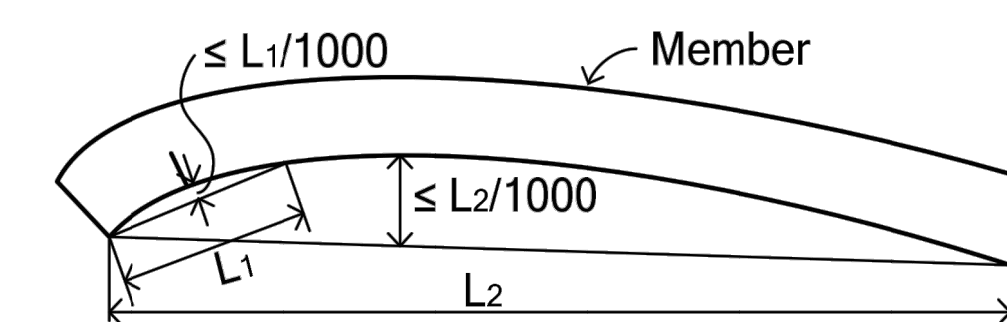


Figure 2 Unloaded Member Straightness Limits

The combined flange warpage and tilt shall not exceed 1% of the flange width or ¼", whichever is greater. Refer to Figure 3.

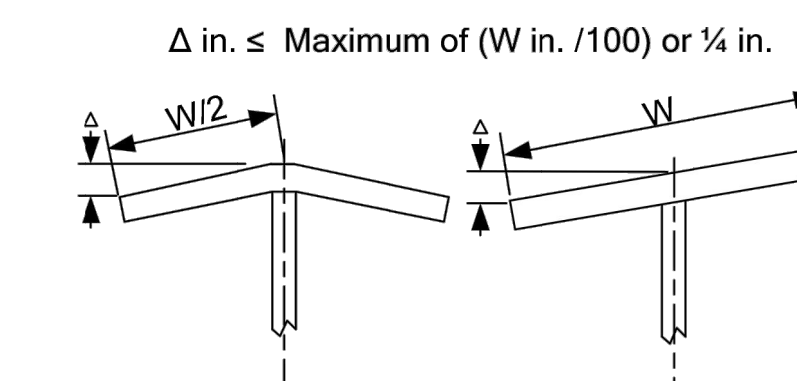


Figure 3 Plate Warpage Limits

In addition to AWS D1.1 requirements, webs and flanges shall meet the flatness requirements shown in Figure 4. Panels may be flattened or stiffened to meet these requirements. Obtain Engineer approval before adding stiffeners.

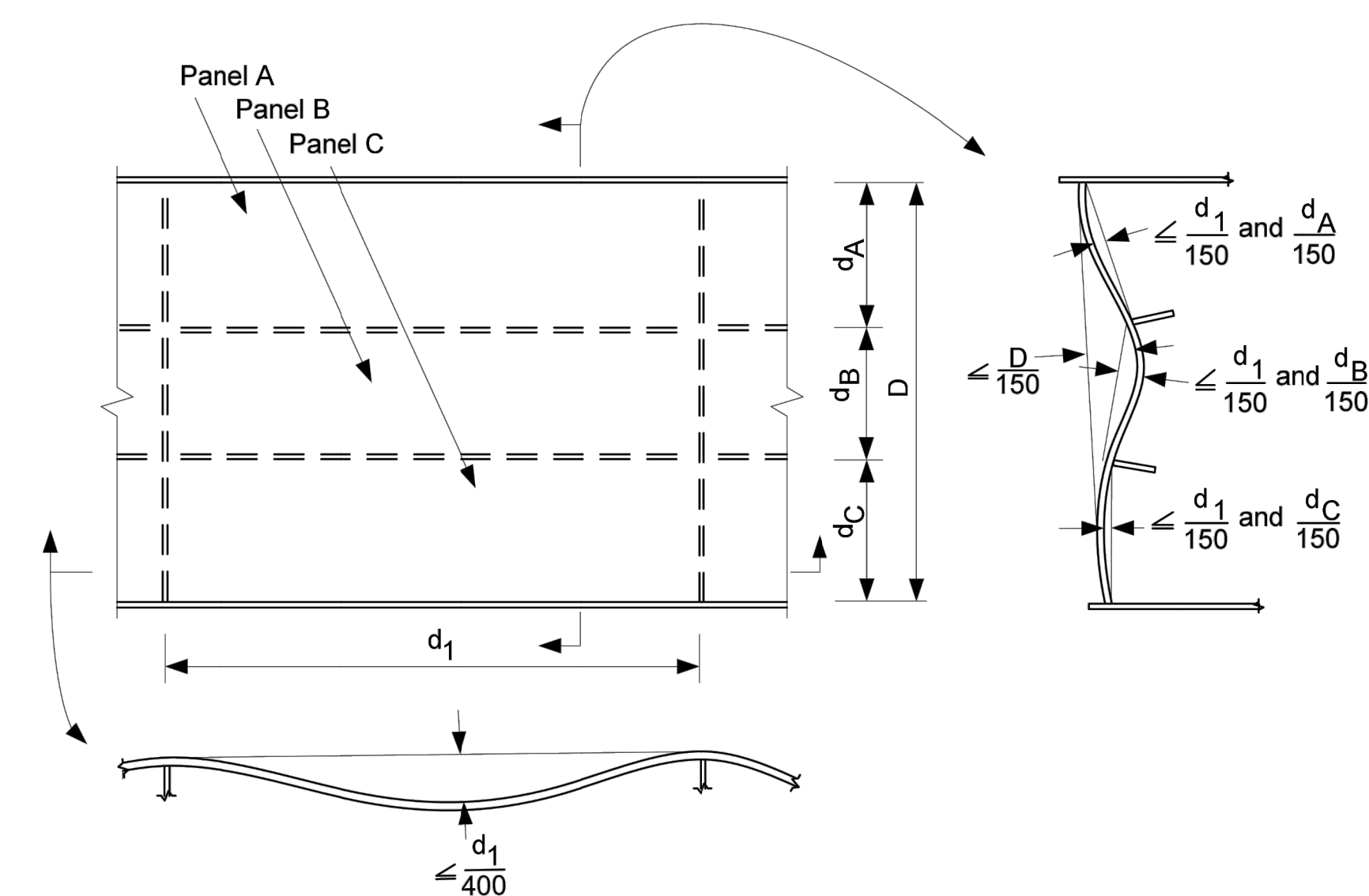
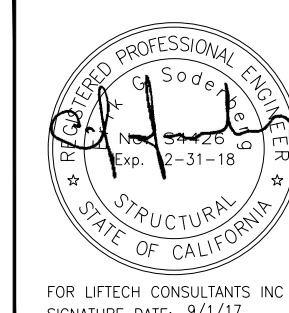


Figure 4 Plate Flatness Limits

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DESIGN CRITERIA AND GENERAL NOTES - 3

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The following figures show aligned and misaligned plates, and required alignment tolerances. Small misalignments can result in large, unacceptable localized stresses in the plates and their welds. The alignment requirements below are based on AWS 5.22.3. Report misalignments for other conditions to the Engineer for evaluation.

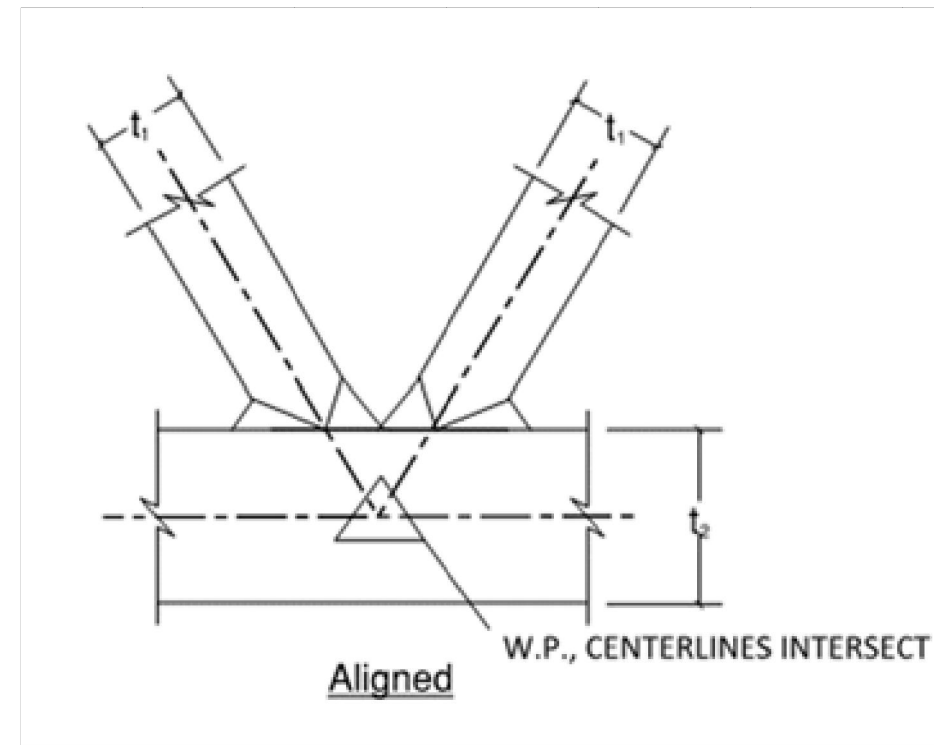


Figure 5 Aligned Plates

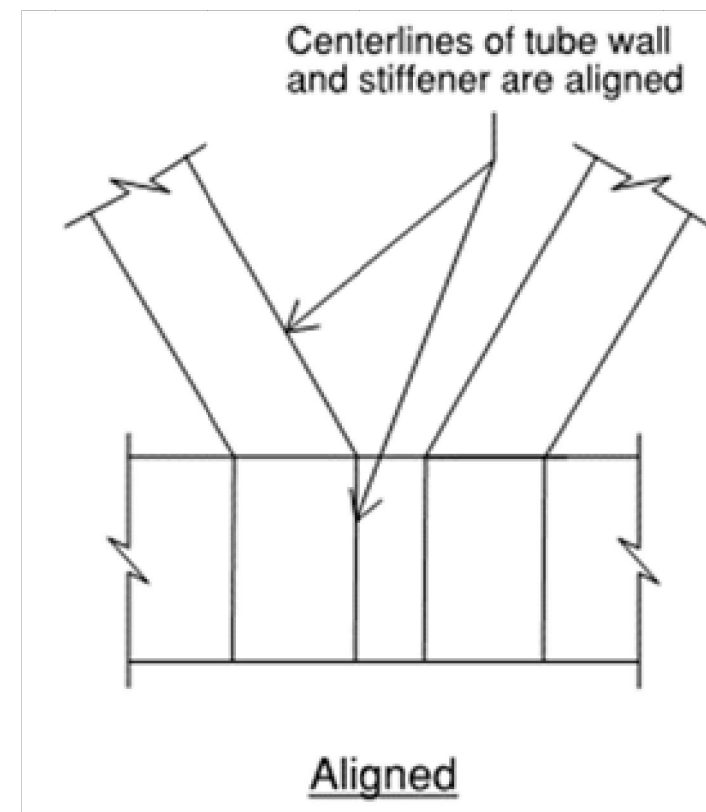


Figure 8 Aligned Plates

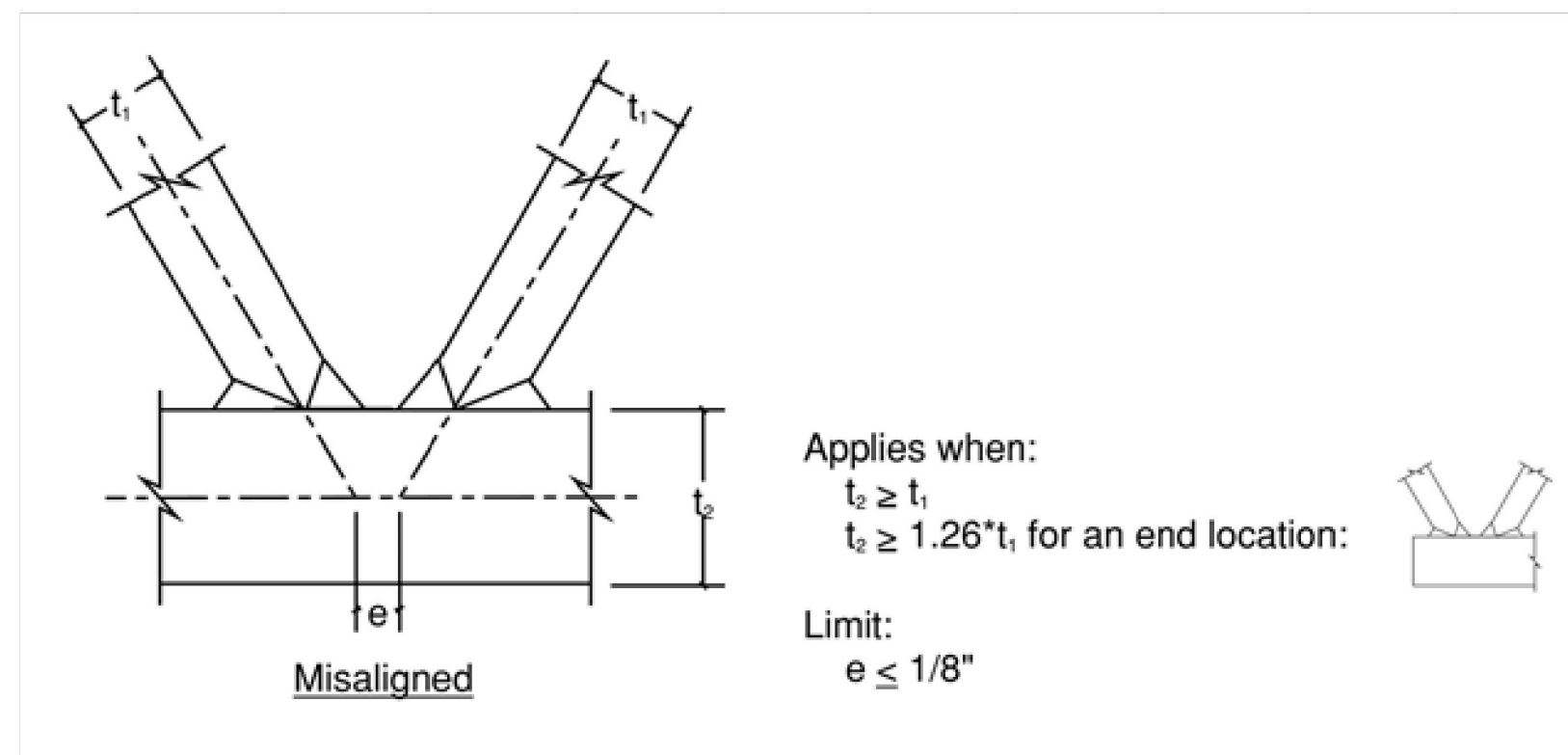


Figure 6 Misaligned Plates

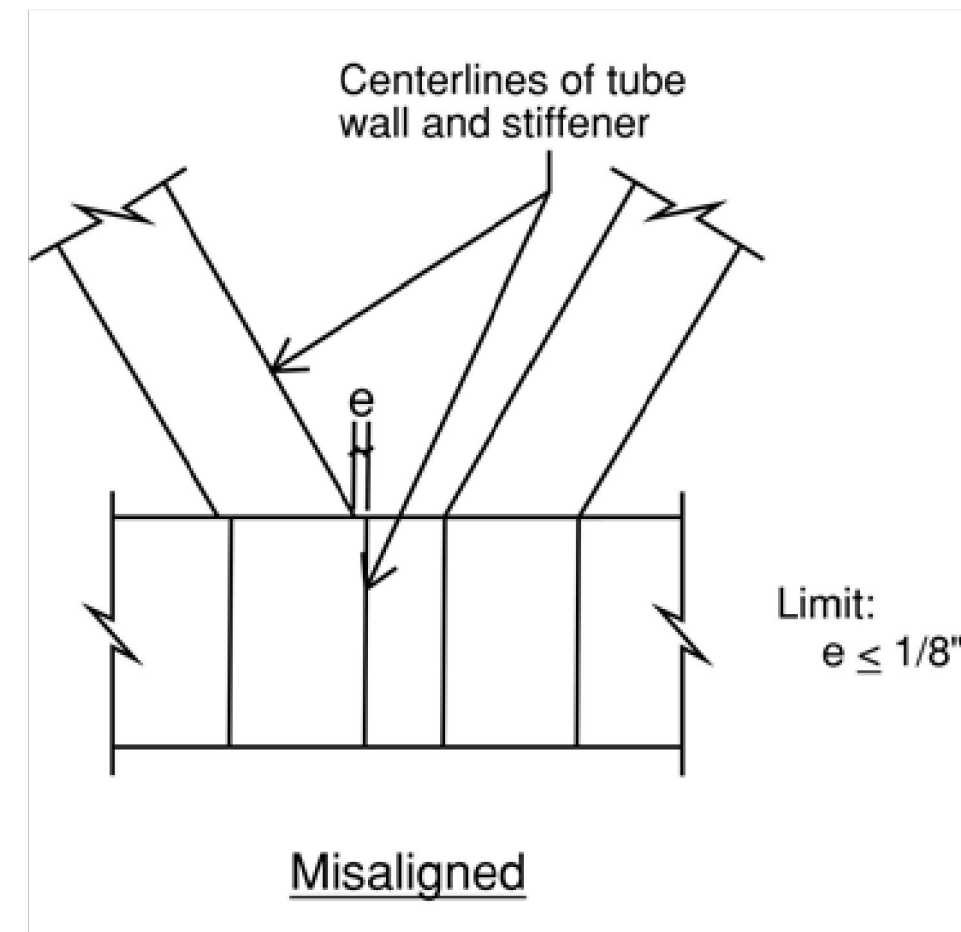


Figure 9 Misaligned Plates

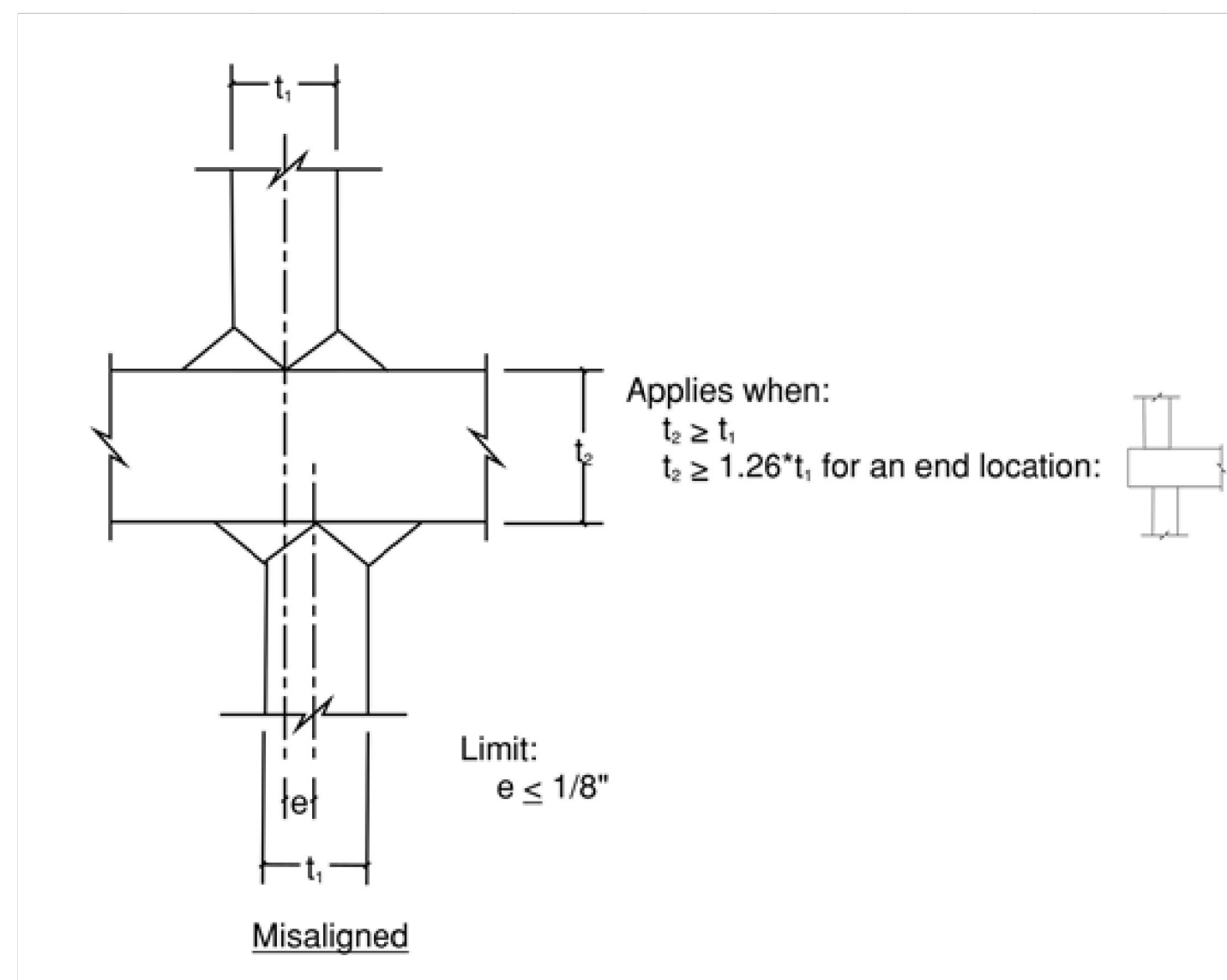
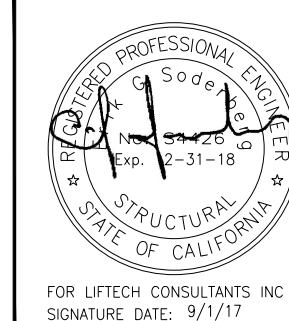


Figure 7 Misaligned Plates

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**1**  
Pile Properties, see sheet G2.1 for Locations

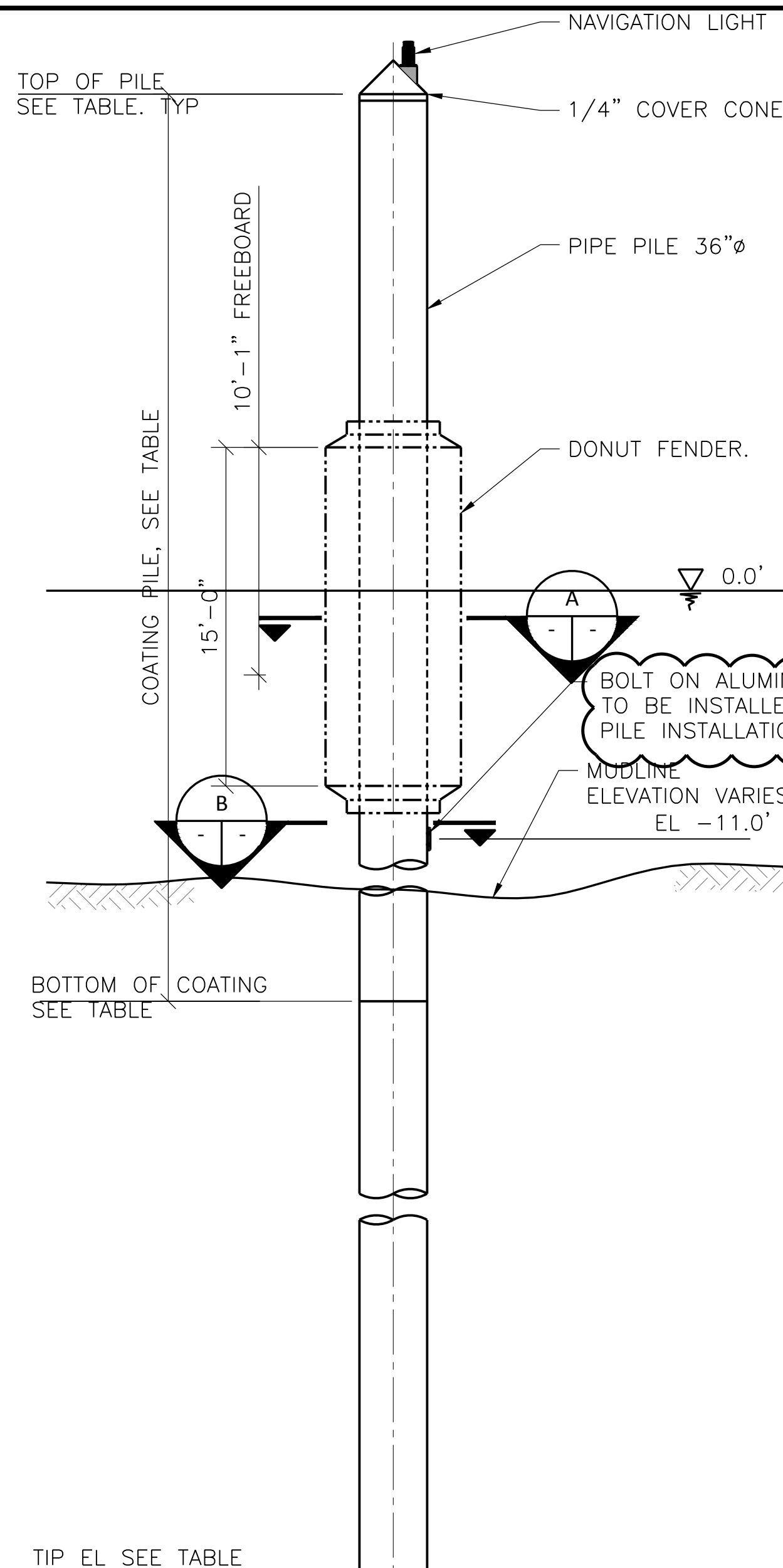
New or Refurbished Existing	Type and Location	Section & Material			Design Elevations, NAVD88				L, Lengths					Grind Welds Flush		
		OD in	t wall in	Fy Min <sup>7</sup> ksi	Top <sup>5</sup> ft	Tip ft	Design Mudline <sup>4</sup> ft	Coating Bottom <sup>2</sup> ft	L <sub>Design</sub> ft	L <sub>add Bott</sub> <sup>1</sup> ft	L <sub>add Top</sub> <sup>3</sup> ft	L <sub>Order</sub> ft	L <sub>coated</sub> <sup>2,3</sup> ft	Dist below Low Loading ft	Distance from Top End ft	
New	Float Guide F1-F18	36	1 1/4	60	22	-110	-10	-35	132	0	2	134	57	2	2	24
		36	1 1/4	60												
New	Donut D3, D5-D10	36	1	36	25	-100	-10	-35	125	0	2	127	60	10	2	37
		36	1	36												
Refurbished Existing	Donut D1, D2, D4	36	3/4	52	25	-88	-10	-35	113	0	2	115	60	10	2	17
		36	3/4	52												
Refurbished Existing	Barrier B1-B5	36	3/4	52	22	-91	-10	-35	113	0	2	115	57	No grinding required		
		36	3/4	52												

**Notes:**

- For overdriving
- Bottom of coating planned for 25' below design mudline. Includes 5' allowance for not driving pile to depth.
- Start coating 2' from top end of pile. Top 2' of pile will be clamped with the hammer and cut off after driving.
- Based on ENGEO LPILE analyses in 8-25-17 report showing mudline above -10
- Based on 12.38' NAVD88 Design High Water and:
- Existing piles: Upper 60' is 1" thick, Lower 55' is 3/4" thick. Refer to "Re: Re-Using Gate E Piles for Gate G" emails dated October 6, 2017 and October 9, 2017.
- Existing piles: Fy is 52 ksi based on M&N reporting that pile material specified as API 5L Grade X52. Refer to 10-9-17 email from Brian Shalk of Power.
- Pile weight differs from shown for existing piles due to varying wall thicknesses. See note 6.
- 40 kip design load for donut and barrier piles based on 25 kip allowable load on vessel x 1.6 load factor.
- Reused existing piles to be removed, inspected for defects, and repaired before reuse.
- Reused pile locations as directed by WETA/Power. See Power January 16, 2018 email.
- Fy = 36 ksi is acceptable but Fy = 50 ksi is preferred.

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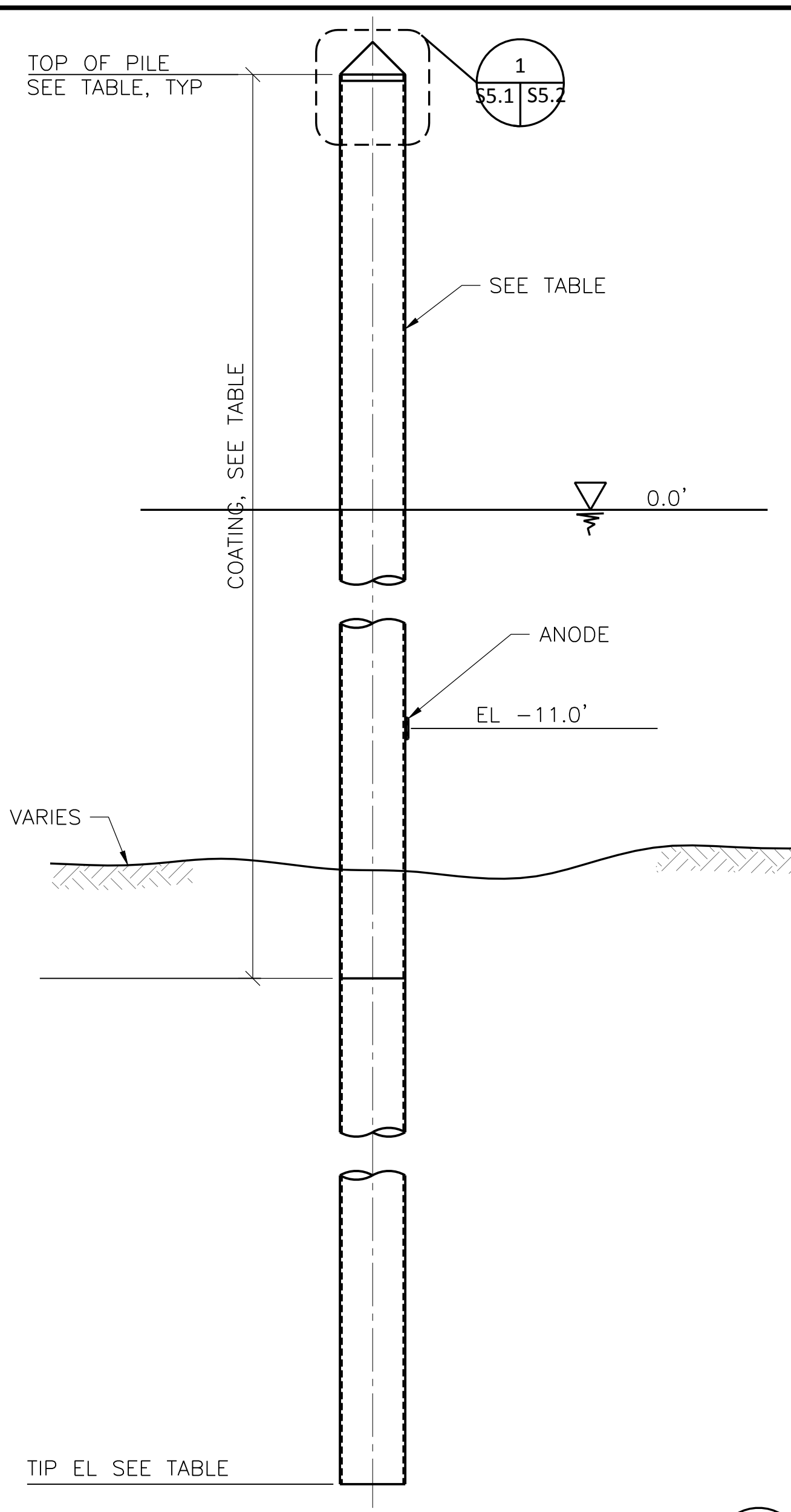
2



**DONUT FENDER PILE ELEVATION**

3/16" = 1'-0"

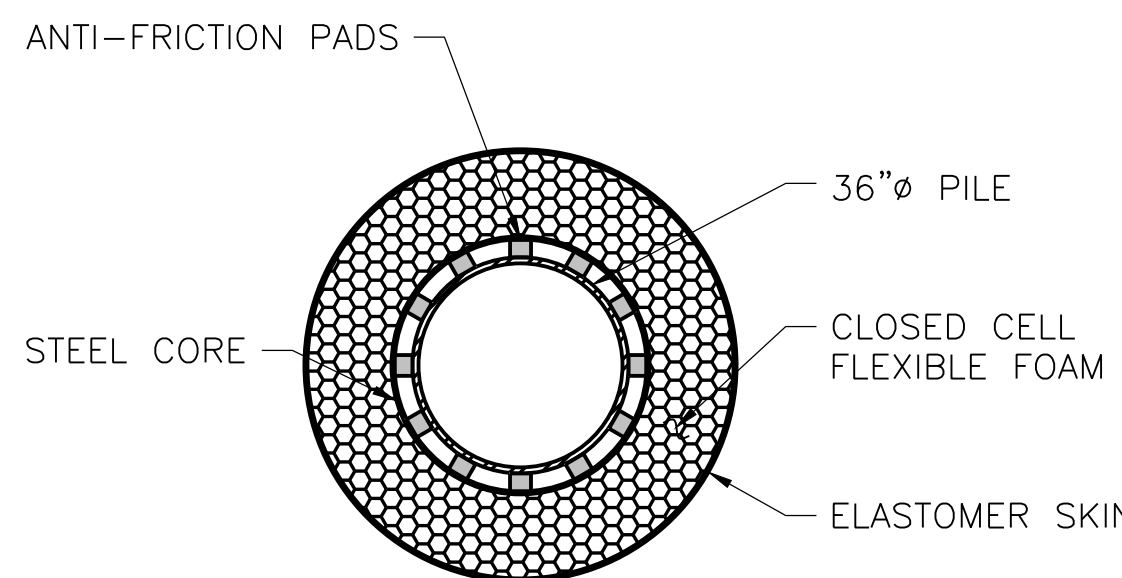
1  
62.1 S5.7



**FLOAT GUIDE AND BARRIER PILE ELEVATION**

3/16" = 1'-0"

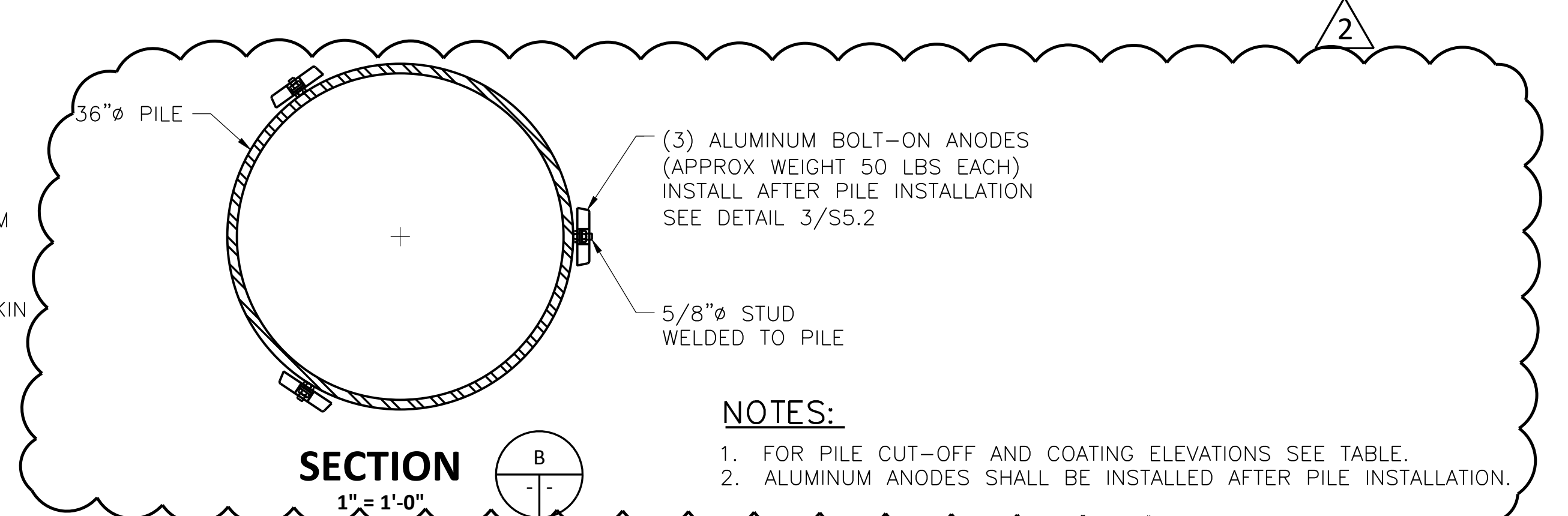
4  
62.1 S5.7



**SECTION A**

3/8" = 1'-0"

A



**SECTION B**

1" = 1'-0"

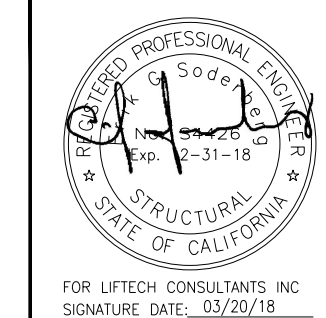
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**NOTES:**

- FOR PILE CUT-OFF AND COATING ELEVATIONS SEE TABLE.
- ALUMINUM ANODES SHALL BE INSTALLED AFTER PILE INSTALLATION.

REVISIONS NO.	DATE	DESCRIPTION	BY	CHKD	APRD
0	10/6/17	ISSUE FOR CONSTRUCTION	AH	CAM/LMO	ES
1	11/6/17	GENERAL REVISIONS	AH	CAM/LMO	ES
2	3/20/18	GENERAL REVISIONS	AH	CAM/AB	ES

**FOR CONSTRUCTION**



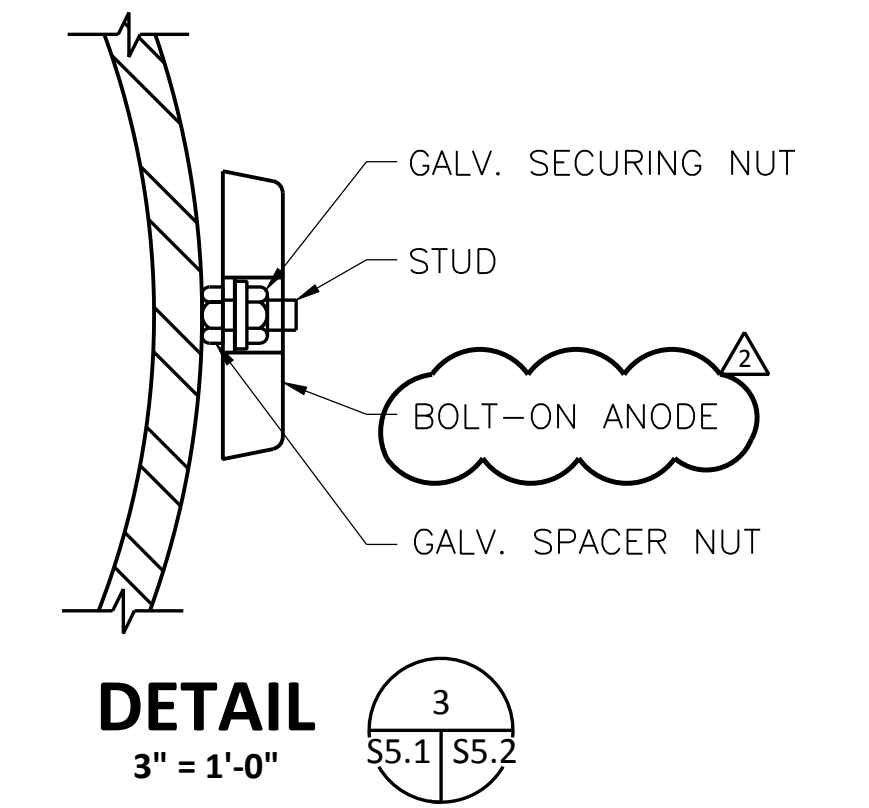
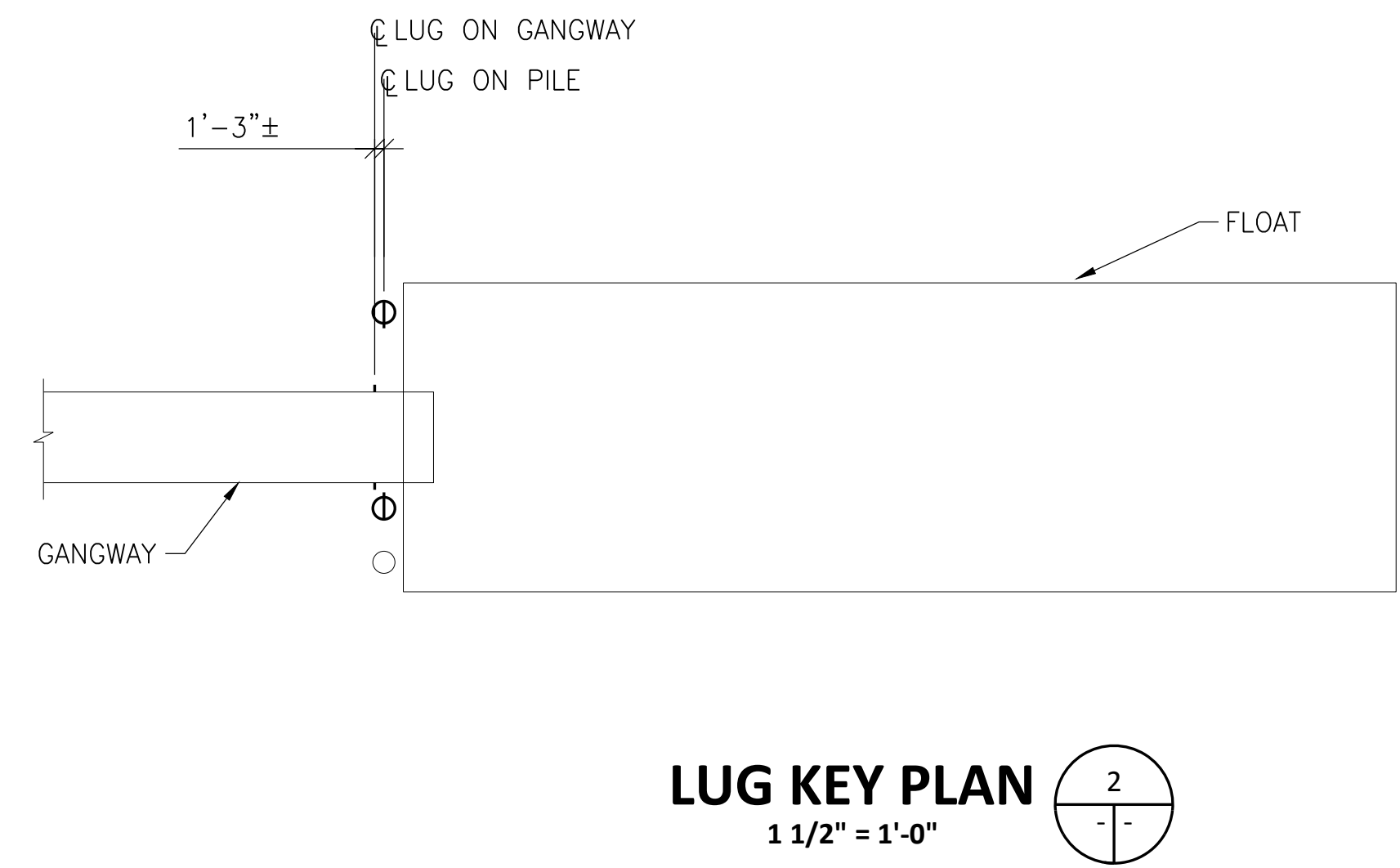
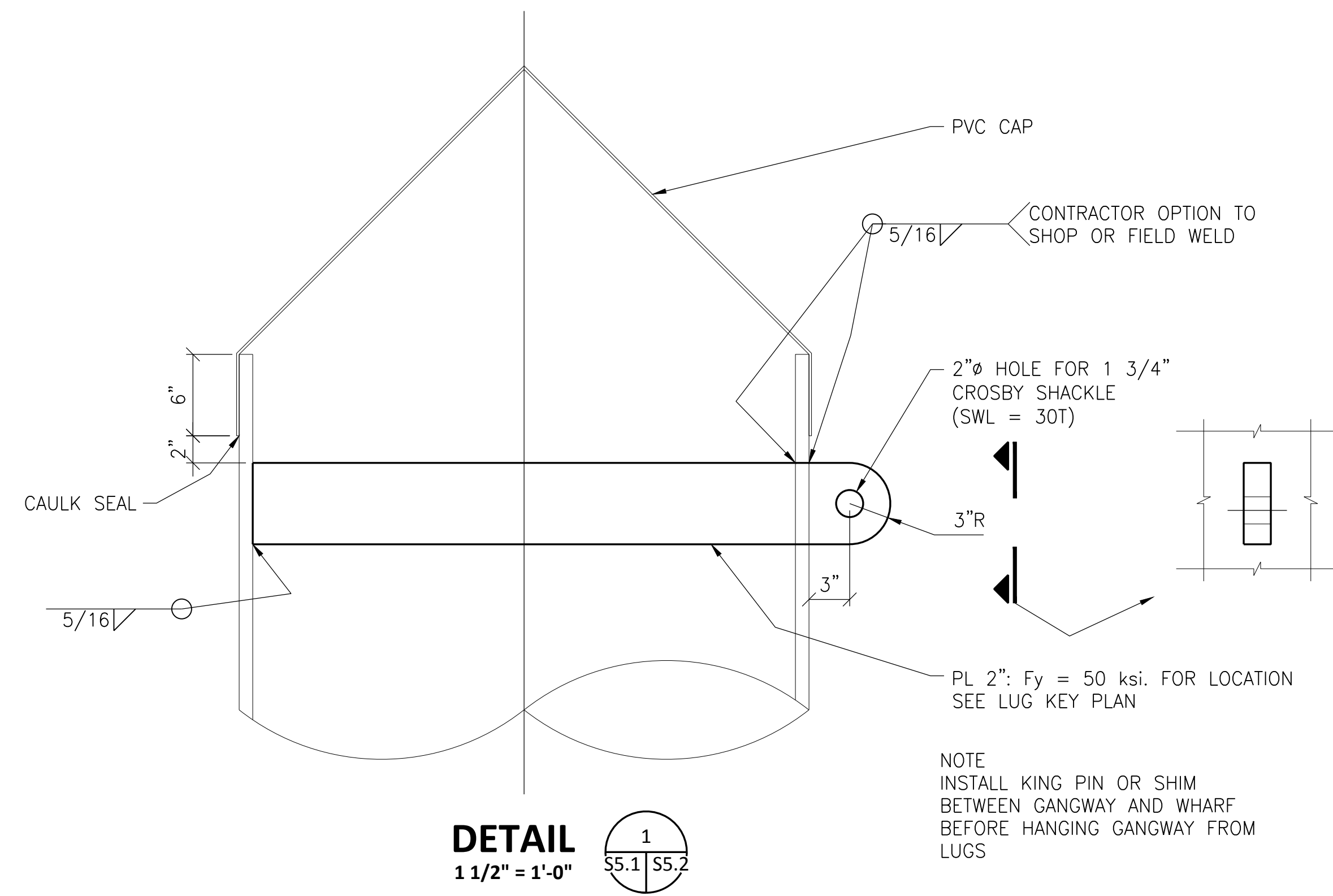
DESIGNED BY: CAM/ARS/TS  
DRAWN BY: AH  
CHECKED BY: LMO/ES

PROJECT: SOUTH BASIN DOWNTOWN FERRY TERMINAL EXPANSION, SAN FRANCISCO, CA  
SHEET: PILING

DATE: 10/06/17  
SHEET: OF  
DRAWING NO.: S5.1  
JOB NO.: 2196

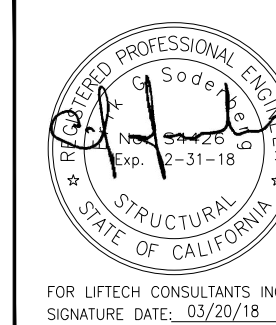
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REVISIONS					
NO.	DATE	DESCRIPTION	BY	CHKD	APRD
0	10/6/17	ISSUE FOR CONSTRUCTION	AH	CAM/LMO	ES
1	11/6/17	GENERAL REVISIONS	AH	CAM/LMO	ES
2	3/20/18	GENERAL REVISIONS	AH	CAM/AB	ES

**FOR CONSTRUCTION**



DESIGNED BY: CAM/ARS/TS	PROJECT SOUTH BASIN DOWNTOWN FERRY TERMINAL EXPANSION SAN FRANCISCO, CA	DATE 10/06/17
DRAWN BY: AH	SHEET	SHEET OF
CHECKED BY: LMO/ES	PILING DETAILS	DRAWING NO. S5.2
		JOB NO. 2196

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## **AGREEMENT FOR CONSULTING SERVICES**

This is an Agreement between the City of Berkeley, a Charter City organized and existing under the laws of the State of California ("City"), and \_\_\_\_\_ ("Consultant"), a California [corporation, partnership, joint venture], doing business at \_\_\_\_\_ who agree as follows:

### **RECITALS**

WHEREAS, this Agreement sets forth the terms and conditions under which City shall obtain and Consultant will provide the services identified in Appendix "A" attached hereto;

Now, THEREFORE, City and Consultant agree as follows:

#### **1. DEFINITIONS**

- 1.1 Where any word or phrase defined below, or a pronoun in place thereof, is used in any part of this Agreement, it shall have the meaning herein set forth.
  - 1.1.1 Agreement: This Agreement together with all attachments and appendices and other documents incorporated herein by reference.
  - 1.1.2 Project: Total design of \_\_\_\_\_ of which the Work performed under this Agreement may be whole or part.
  - 1.1.3 Project Manager: Person or persons designated by City and authorized to act on City's behalf with respect to this Agreement.
  - 1.1.4 Work: The work described in Appendix A "Scope of Services", and made a part of this Agreement.

#### **2. TERM OF THIS AGREEMENT**

- 2.1 This Agreement shall begin on \_\_\_\_\_ and end on \_\_\_\_\_. The City Manager of the City or his/her designee may extend the term of this Agreement by giving written notice.

#### **3. SERVICES CONSULTANT AGREES TO PERFORM**

Consultant agrees to perform the services provided for in Appendix "A", as authorized from time to time by City in writing, in the manner provided in this Agreement. Time is of the essence in the performance of this Agreement.

#### **4. COMPENSATION**

- 4.1 Compensation shall be due Consultant according to the Compensation Schedule established in Appendix "B", "Compensation for Services," in a total amount not to exceed \$\_\_\_\_\_. Consultant shall invoice its time at its ordinary billing rates.
- 4.2 City will not withhold the entire payment if a questioned amount is involved, but will issue payment in the amount of the total invoice less any questioned amount. Payment for questioned amount(s) will be made upon City's receipt of any requested documentation verifying the questioned amount(s) and City's determination that the questioned amount(s) is reimbursable under the terms of this Agreement.
- 4.3 Invoices furnished by Consultant under this Agreement must be in a form acceptable to City. All amounts paid by City to Consultant shall be subject to audit by City. Payment shall be made by City to Consultant at the address stated in Appendix "A".

5. QUALIFIED PERSONNEL; NO SUBCONSULTING

- 5.1 Work under this Agreement shall be performed only by competent personnel under the supervision of and in the employment of Consultant. Consultant will conform to the City's reasonable requests regarding assignment of personnel, but all personnel, including those assigned at City's request, shall be supervised by Consultant.
- 5.2 Consultant agrees that any personnel referred to in Appendix "A" will continue their assignments on the Project during the entire term of this Agreement, as described in Appendix "A."
- 5.3 Consultant is prohibited from subcontracting this Agreement or any part of it unless such subcontracting is approved by City in writing. Neither party shall, on the basis of this Agreement, contract on behalf of or in the name of the other party. An agreement made in violation of this provision shall confer no rights on any party and shall be null and void.

6. REPRESENTATIONS

- 6.1 Consultant represents that it is qualified to perform the Work and that it possesses the necessary licenses and/or permits required to perform the Work or will obtain such licenses and/or permits prior to time such licenses and/or permits are required.
- 6.2 Consultant represents that the Work shall be performed in a professional manner and shall conform to the standards of practice observed on similar, successfully completed projects by specialists in the Work to be provided. Consultant agrees that, if the Work is not so performed, in addition to all of its obligations under this Agreement and at law, Consultant shall re-perform or replace unsatisfactory Work at no additional expense to City.
- 6.3 The granting of any progress payment by City, or the receipt thereof by Consultant, or any inspection, review, approval or oral statement by any representative of City, or State certification, shall in no way waive or limit the certification obligations in this Paragraph or lessen the liability of Consultant to re-perform or replace unsatisfactory Work, including but not limited to cases where the unsatisfactory character of such work may not have been apparent or detected at the time of such payment, inspection, review or approval.
- 6.4 Nothing in this Paragraph shall constitute a waiver or limitation of any right or remedy, whether in equity or at law, which City or Consultant may have under this Agreement or any applicable law. All rights and remedies of City, whether under this Agreement or other applicable law, shall be cumulative.

7. INDEMNIFICATION BY CONSULTANT

- 7.1 General Liability. To the fullest extent permitted by law (including, without limitation, California Civil Code Sections 2782 and 2782.8), Consultant shall indemnify, defend and save harmless City from and against any and all claims, losses, costs, damages and expenses resulting from property damage, bodily injury or death (including reimbursement of reasonable attorneys' fees), to the extent arising out of the operations of Consultant, its subconsultants or anyone employed by them.
- 7.2 Professional Liability. Notwithstanding the foregoing or any other term(s) in this or any other agreement, with respect to Consultant's professional liability (as opposed to Consultant's operations covered by Commercial General Liability Insurance), to the fullest extent permitted by law (including, without limitation, California Civil Code Sections 2782 and 2782.8), Consultant shall indemnify and hold harmless City from any and all losses, costs, damages and expenses, (including the reimbursement of reasonable attorneys' fees), that arise out of, pertain to, or relate to the negligence, recklessness, or willful misconduct of the Consultant. In no event shall the cost to defend charged to Consultant exceed the Consultant's proportionate percentage of fault.

8. INDEPENDENT CONTRACTOR; PAYMENT OF TAXES AND OTHER EXPENSES

- 8.1 Consultant shall be deemed at all times to be an independent contractor and shall be wholly responsible for the manner in which Consultant performs the services required of Consultant by the terms of this Agreement. Consultant shall be liable for its acts and omissions, and those of its employees and its agents. Nothing contained herein shall be construed as creating an employment, agency or partnership relationship between City and Consultant.
- 8.2 Terms in this Agreement referring to direction from City shall be construed as providing for direction as to policy and the result of Consultant's Work only and not as to the means or methods by which such a result is obtained.
- 8.3 Except as expressly provided in this Agreement, nothing in this Agreement shall operate to confer rights or benefits on persons or entities not party to this Agreement.
- 8.4 Payment of any taxes, including California Sales and use Taxes, levied upon this Agreement, the transaction, or the services or goods delivered pursuant hereto, shall be the obligation of Consultant.

9. INSURANCE

- 9.1 Prior to the execution of this Agreement, Consultant shall furnish to City satisfactory proof that Consultant has taken out for the entire period covered by this Agreement, as further defined below, the following insurance in a form satisfactory to City and with an insurance carrier satisfactory to City, authorized to do business in California and rated by A. M. Best & Company A minus or better, financial category size seven (7) or better, which will protect those described below from claims described below which arise or are alleged to have arisen out of or result from the services of Consultant for which Consultant may be legally liable, whether performed by Consultant, or by those employed directly or indirectly by it, or by anyone for whose acts Consultant may be liable:
  - 9.1.1 Commercial general liability insurance, written on an "occurrence" basis, which shall provide coverage for bodily injury, death and property damage resulting from operations, products liability, blasting, explosion, collapse of buildings or structures, damage to underground structures and utilities, liability for slander, false arrest and invasion of privacy arising out of construction management operations, blanket contractual liability, broad form endorsement, a construction management endorsement, products and completed operations, personal and advertising liability, with per location limits of not less than \$2,000,000 general aggregate and \$2,000,000 each occurrence, subject to a deductible of not more than \$25,000 payable by Consultant.
  - 9.1.2 Business automobile liability insurance with limits not less than \$1,000,000 each occurrence including coverage for owned, non-owned and hired vehicles, subject to a deductible of not more than \$10,000 payable by Consultant.
  - 9.1.3 Full workers' compensation insurance for all persons whom Consultant may employ in carrying out Work contemplated under Contract, in accordance with Act of Legislature of State of California, known as "Workers' Compensation Insurance and Safety Act", approved May 26, 1913, and all Acts amendatory or supplemental thereto. Workers' compensation policy shall include Employer Liability Insurance with limits not less than \$1,000,000 each accident.
  - 9.1.4 Professional Liability Insurance, specific to this Project only, with limits not less than \$2,000,000 each claim with respect to negligent acts, errors or omissions in connection with professional services to be provided under this Agreement, and any deductible not to exceed \$50,000 each claim, with no exclusion for claims of one insured against another insured.



- 9.2 Insurance policies shall contain an endorsement containing the following terms:
- 9.2.1 Alameda County Transportation Commission, and its governing body, officers, employees and consultants as well as City, and its directors, officers, partners, representatives, employees, consultants, subconsultants and agents, shall be named as additional insureds, but only with respect to liability arising out of the activities of the named insured, and there shall be a waiver of subrogation as to each named and additional insured.
  - 9.2.2 The policies shall apply separately to each insured against whom claim is made or suit is brought except with respect to the limits of the company's liability.
  - 9.2.3 Written notice of cancellation, non-renewal or of any material change in the policies shall be mailed to City thirty (30) days in advance of the effective date thereof.
  - 9.2.4 Insurance shall be primary insurance and no other insurance or self-insured retention carried or held by any named or additional insured other than the Consultant shall be called upon to contribute to a loss covered by insurance for the named insured.
- 9.3 Certificates of Insurance and Endorsements shall have clearly typed thereon the title of the Contract, shall clearly describe the coverage and shall contain a provision requiring the giving of written notice described above in subparagraph 9.2.3.
- 9.4 At the time of making an application for an extension of time, Consultant shall submit evidence that insurance policies will be in effect during requested additional period of time.
- 9.5 Nothing herein contained shall be construed as limiting in any way the extent to which Consultant or any of its permitted subcontractors or subconsultants may be held responsible for payment of damages resulting from their operations.
- 9.6 If Consultant fails to maintain any required insurance, City may take out such insurance, and deduct and retain amount of premium from any sums due Consultant under this Agreement.
- 9.7 Consultant shall forward all insurance documents to, \_\_\_\_\_, Office of Capital Projects, 1947 Center Street, First Floor, Berkeley, CA 94704.

## 10. SUSPENSION OF WORK

City may, without cause, order Consultant, in writing, to suspend, delay or interrupt Work pursuant to this Agreement, in whole or in part, for such periods of time as City may determine, in its sole discretion. Suspension shall be effected by delivery to Consultant of a written notice of suspension specifying the extent to which performance of the Work under this Agreement is suspended, and the date upon which the suspension becomes effective, which shall be no less than seven (7) calendar days from the date the notice of suspension is delivered. Suspension of Work shall be treated as an excusable delay.

## 11. TERMINATION OF AGREEMENT FOR CAUSE

- 11.1 If at any time City believes Consultant may not be adequately performing its obligations under this Agreement or may fail to complete the Work as required by this Agreement, City may request from Consultant written assurances of performance and a written plan to correct observed deficiencies in Consultant's performance if written notice of the same is provided by City. Failure to provide written assurances constitutes grounds to declare a default under this Agreement.
- 11.2 Consultant shall be in default of this Agreement and City may, in addition to any other legal or equitable remedies available to City, terminate Consultant's right to proceed under the Agreement, for cause, should Consultant commit a breach of this Agreement and not cure such breach within ten (10) calendar days of the date of notice from City to Consultant demanding such cure; or, if such failure is curable but not curable within such ten (10) day period, within such period of time as is reasonably necessary to

accomplish such cure. (In order for Consultant to avail itself of this time period in excess of 10 calendar days, Consultant must provide City within the 10-day period a written plan acceptable to City to cure said breach, and then diligently commence and continue such cure according to the written plan.)

- 11.3 In the event a termination for cause is determined to have been made wrongfully or without cause, then the termination shall be treated as a termination for convenience, and Consultant shall have no greater rights than it would have had if a termination for convenience had been effected in the first instance. No other loss, cost, damage, expense or liability may be claimed, requested or recovered.

## 12. TERMINATION OF AGREEMENT FOR CONVENIENCE

12.1 City may terminate performance of the Work under the Agreement in accordance with this Paragraph in whole, or from time to time in part, whenever City shall determine that termination is in the best interest of City. Termination shall be effected by delivery to Consultant of notice of termination specifying the extent to which performance of the Work under the Agreement is terminated, and the date upon which termination becomes effective, which shall be no less than twenty-one (21) calendar days from the date the notice of termination is delivered. Consultant shall then be entitled to recover its costs expended up to that point plus a reasonable profit, but no other loss, cost, damage, expense or liability may be claimed, requested or recovered.

12.2 Except as provided in this Agreement, in no event shall City be liable for costs incurred by or on behalf of Consultant after the effective date of a notice of termination.

12.3 Termination under this provision shall not be construed as a waiver of any right or remedy otherwise available to City.

## 13. PROPRIETARY OR CONFIDENTIAL INFORMATION OF CITY

Consultant understands and agrees that, in the performance of the services under this Agreement or in the contemplation thereof, Consultant may have access to private or confidential information that may be owned or controlled by City and that such information may contain proprietary or confidential details, the disclosure of which to third parties may be damaging to City. Consultant agrees that all information disclosed by City to Consultant shall be held in confidence and used only in performance of the Agreement. Consultant shall exercise the same standard of care to protect such information as a reasonably prudent consultant would use to protect its own proprietary data.

## 14. NOTICES TO THE PARTIES

All notices to be given by the parties hereto shall be in writing and effective when served by depositing same in the United States Post Office, postage prepaid and addressed as follows:

To City:

**City of Berkeley**  
**Attn: NAME**  
**Title**  
**Department/Division**  
**Department Street Address**  
**Berkeley, California 94704**

**Email:**  
**Phone:**

To Consultant:

**Company Name**  
**Title**  
**Street Address**  
**City, State Zip Code**

**Attn: NAME**  
**Email:**  
**Phone:**

15. OWNERSHIP OF RESULTS/WORKS FOR HIRE

- 15.1 When this Agreement is terminated, Consultant agrees to return to City all documents, drawings, photographs and other written or graphic material, however produced, that it received from City, its contractors or agents, in connection with the performance of its services under this Agreement. All materials shall be returned in the same condition as received.
- 15.2 Any interest of Consultant or its subcontractors or subconsultants, in studies, reports, memoranda, computational sheets or other documents prepared by Consultant or its subcontractors or subconsultants in connection with services to be performed under this Agreement shall become the property of City. Consultant may, however, retain one copy for its files.
- 15.3 Any and all work, artwork, copy, posters, billboards, photographs, videotapes, audiotapes, systems designs, software, reports, designs, specifications, drawings, diagrams, surveys, source codes or any original works of authorship created by Consultant or its subcontractors or subconsultants in connection with services performed under this Agreement shall be works for hire as defined under Title 17 of the United States Code, and all copyrights in such works are the property of City. In the event that it is ever determined that any such works created by Consultant or its subcontractors or subconsultants under this Agreement are not works for hire under U.S. law, Consultant hereby assigns all copyrights to such works to City. With the prior written approval of City's Project Manager, Consultant may retain and use copies of such works for reference and as documentation of its experience and capabilities.

16. AUDIT AND INSPECTION OF RECORDS

- 16.1 Consultant shall maintain all drawings, specifications, calculations, cost estimates, quantity takeoffs, statements of costs and completion dates, schedules and all correspondence, internal memoranda, papers, writings, and documents of any sort prepared by or furnished to Consultant during the course of performing the Work and providing services with respect to the Project, for a period of at least three (3) years following final completion and acceptance of the Project, except that all such items pertaining to hazardous materials shall be maintained for at least thirty (30) years. All such records shall be available to City upon request at reasonable times and places. Monthly records of Consultant's personnel costs, consultant costs, and reimbursable expenses shall be kept on a generally recognized accounting basis, and shall be available to City upon request at reasonable times and places. Consultant shall not destroy any Project records until after advising City and allowing City to accept and store the records.
- 16.2 Consultant agrees to maintain and make available to City during business hours accurate books and accounting records relative to its activities under this Agreement. Consultant shall permit City to audit, examine and make copies, excerpts and transcripts from such books and records, and to make audits of all invoices, materials, payrolls, records or personnel and other data related to all other matters covered by this Agreement, whether funded in whole or in part under this Agreement. Consultant shall maintain such data and records in an accessible location and condition for a period of not less than five years after final payment under this Agreement or until after final audit has been resolved, whichever is later. The State of California, Alameda County and any federal agency having an interest in the subject of this Agreement shall have the same rights conferred upon City by this Paragraph.
- 16.3 The rights and obligations established pursuant to this Paragraph shall be specifically enforceable and survive termination of this Agreement.

17. DISPUTES

- 17.1 Should any question arise as to the meaning and intent of this Agreement, the question shall, prior to any other action or resort to any other legal remedy, be referred to the City's Project Manager and a principal of the Consultant who shall decide the true meaning and intent of the Agreement. Such referral may be initiated by written request from either party and a meeting between the City's Project Manager and principal of the Consultant shall take place within five days of the request.

17.2 Consultant shall continue its Work throughout the course of any and all disputes, and Consultant's failure to continue work during any and all disputes shall be considered a material breach of this Agreement, provided City continues to make payment to Consultant for undisputed work completed by Consultant. Consultant further agrees that should Consultant stop work due to a dispute or disputes, any and all claims, whether in law or in equity Consultant may have against City, their officers, agents, representatives, and employees, whether such claims are pending, anticipated or otherwise, shall be deemed to have been waived and forever barred.

18. AGREEMENT MADE IN CALIFORNIA/VENUE

18.1 This Agreement shall be deemed to have been executed in Alameda County. The formation, interpretation and performance of this Agreement shall be governed by the laws of the State of California, excluding its conflict of laws rules. Venue for all litigation relative to the formation, interpretation and performance of this Agreement shall be in Alameda County, California.

18.2 This Agreement shall be executed in duplicate. One duplicate original shall be retained by City and one duplicate original shall be given to Consultant.

19. CONFORMITY WITH LAW AND SAFETY

19.1 Consultant shall observe and comply with all applicable laws, ordinances, codes and regulations of governmental agencies, including federal, state, municipal and local governing bodies having jurisdiction over any or all of the scope of services, including all provisions of the Occupational Safety and Health Act of 1979 as amended, all California Occupational Safety and Health Regulations, the California Building Code, the American with Disabilities Act, any copyright, patent or trademark law and all other applicable federal, state, municipal and local safety regulations. All services performed by Consultant must be in accordance with these laws, ordinances, codes and regulations. Consultant's failure to comply with any laws, ordinances, codes or regulations applicable to the performance of the work hereunder shall constitute a breach of contract.

19.2 If a death, serious personal injury or substantial property damage occurs in connection with the performance of this Contract, Consultant shall immediately notify the City's Risk Manager by telephone. If any accident occurs in connection with this Contract, Consultant shall promptly submit a written report to City, in such form as the City may require. This report shall include the following information: 1) name and address of the injured or deceased person(s); 2) name and address of Consultant's subcontractor or subconsultant, if any; 3) name and address of Consultant's liability insurance carrier; and 4) a detailed description of the accident, including whether any of City's equipment, tools or materials were involved.

19.3 If a release of hazardous materials or hazardous waste that cannot be controlled occurs in connection with the performance of this Contract, Consultant shall immediately notify the Berkeley Police Department and the City's Health Protection office.

19.4 Consultant shall not store hazardous materials or hazardous waste within the City of Berkeley without a proper permit from the City.

20. SAFETY DATA SHEETS

20.1 To comply with the City's Hazardous Communication Program, Consultant agrees to submit Safety Data Sheets (SDS) for all "hazardous substances" Consultant intends to use in the performance of work under this Contract in any City facility. "Hazardous substances" are defined as those substances so designated by the Director of Industrial Relations pursuant to the Hazardous Substances Information and Training Act (Labor Code sec. 6360 *et seq.*). The SDS for all products must be submitted to the City before commencing work. The SDS for a particular product must be reviewed and approved by the City's Risk Manager before Consultant may use that product.

20.2 City will inform Consultant about hazardous substances to which it may be exposed while on the job site and protective measures that can be taken to reduce the possibility of exposure.



## 21. NON-DISCRIMINATION

Consultant hereby agrees to comply with the provisions of Berkeley Municipal Code ("B.M.C.") Chapter 13.26 as amended from time to time. In the performance of this Contract, Consultant agrees as follows:

- 21.1 Consultant shall not discriminate against any employee or applicant for employment because of race, color, religion, ancestry, national origin, age (over 40), sex, pregnancy, marital status, disability, sexual orientation or AIDS.
- 21.2 Consultant shall permit the City access to records of employment, employment advertisements, application forms, EEO-1 forms, affirmative action plans and any other documents which, in the opinion of the City, are necessary to monitor compliance with this non-discrimination provision. In addition, Consultant shall fill-out, in a timely fashion, forms supplied by the City to monitor this non-discrimination provision.
- 21.3 Consultant shall not deny benefits to any person on the basis of race, religious creed, color, national origin, ancestry, physical disability, mental disability, medical condition, genetic information, marital status, sex, gender, gender identity, gender expression, age, sexual orientation, or military and veteran status, nor shall they discriminate unlawfully against any employee or applicant for employment because of race, religious creed, color, national origin, ancestry, physical disability, mental disability, medical condition, genetic information, marital status, sex, gender, gender identity, gender expression, age, sexual orientation, or military and veteran status. The Consultant shall insure that the evaluation and treatment of employees and applicants for employment are free of such discrimination. Consultant shall comply with the provisions of the Fair Employment and Housing Act (Gov. Code §12900 et seq.), the regulations promulgated thereunder (Cal. Code Regs., tit. 2, §11000 et seq.), the provisions of Article 9.5, Chapter 1, Part 1, Division 3, Title 2 of the Government Code (Gov. Code §§11135-11139.5), and the regulations or standards adopted by the Conservancy to implement such article. The Consultant shall permit access by representatives of the Department of Fair Employment and Housing and the Conservancy upon reasonable notice at any time during the normal business hours, but in no case less than 24 hours' notice, to such of its books, records, accounts, and all other sources of information and its facilities as said Department or the California State Coastal Conservancy shall require to ascertain compliance with this clause. The Consultant shall give written notice of their obligations under this clause to labor organizations with which they have a collective bargaining or other agreement. (See Cal. Code Regs., tit. 2, §11105.)

## 22. CONFLICT OF INTEREST PROHIBITED

- 22.1 In accordance with Government Code section 1090, Berkeley City Charter section 36 and B.M.C. Chapter 3.64, neither Consultant nor any employee, officer, director, partner or member of Consultant, or immediate family member of any of the preceding, shall have served as an elected officer, an employee, or a City board, committee or commission member, who has directly or indirectly influenced the making of this Contract.
- 22.2 In accordance with Government Code section 1090 and the Political Reform Act, Government Code section 87100 *et seq.*, no person who is a director, officer, partner, trustee, employee or consultant of the Consultant, or immediate family member of any of the preceding, shall make or participate in a decision made by the City or a City board, commission or committee, if it is reasonably foreseeable that the decision will have a material effect on any source of income, investment or interest in real property of that person or Consultant.
- 22.3 Interpretation of this section shall be governed by the definitions and provisions used in the Political Reform Act, Government Code section 87100 *et seq.*, its implementing regulations, manuals and codes, Government Code section 1090, Berkeley City Charter section 36 and B.M.C. Chapter 3.64.

23. NUCLEAR FREE BERKELEY

Consultant agrees to comply with B.M.C. Chapter 12.90, the Nuclear Free Berkeley Act, as amended from time to time.

24. OPPRESSIVE STATES CONTRACTING PROHIBITION

24.1 In accordance with Resolution Nos. 59,853-N.S., 60,382-N.S., and 70,606-N.S., Contractor certifies that it has no contractual relations with, and agrees during the term of this Contract to forego contractual relations to provide personal services to, the following entities:

- (1) The governing regime in any Oppressive State.
- (2) Any business or corporation organized under the authority of the governing regime of any Oppressive State.
- (3) Any individual, firm, partnership, corporation, association, or any other commercial organization, including parent-entities and wholly-owned subsidiaries (to the extent that their operations are related to the purpose of its contract with the City), for the express purpose of assisting in business operations or trading with any public or private entity located in any Oppressive State.

24.2 Appendix A to Resolution Nos. 59,853-N.S., 60,382-N.S., and 70,606-N.S. designates the following as Oppressive States for the purposes of this contract: Tibet Autonomous Region and the provinces of Amdo, Kham, and U-Tsang; and Burma (Myanmar) shall be deemed oppressive states.

24.3 Consultant's failure to comply with this section shall constitute a default of this Contract and City may terminate this Contract pursuant to Section 12. In the event that the City terminates Consultant due to a default under this provision, City may deem Consultant a non-responsible bidder for five (5) years from the date this Contract is terminated.

25. SANCTUARY CITY CONTRACTING

Contractor hereby agrees to comply with the provisions of the Sanctuary City Contracting Ordinance, B.M.C. Chapter 13.105. In accordance with this Chapter, Contractor agrees not to provide the U.S. Immigration and Customs Enforcement Division of the United States Department of Homeland Security with any Data Broker or Extreme Vetting Services as defined herein:

a. "Data Broker" means either of the following:

- i. The collection of information, including personal information about consumers, from a wide variety of sources for the purposes of reselling such information to their customers, which include both private-sector business and government agencies;
- ii. The aggregation of data that was collected for another purpose from that for which it is ultimately used.

b. "Extreme Vetting" means data mining, threat modeling, predictive risk analysis, or other similar services. Extreme Vetting does not include:

- i. The City's computer-network health and performance tools;
- ii. Cybersecurity capabilities, technologies and systems used by the City of Berkeley Department of Information Technology to predict, monitor for, prevent, and protect technology infrastructure and systems owned and operated by the City of Berkeley from potential cybersecurity events and cyber-forensic based investigations and prosecutions of



illegal computer based activity.

26. RECYCLED PAPER FOR WRITTEN REPORTS

If Consultant is required by this Contract to prepare a written report or study, Consultant shall use recycled paper for said report or study when such paper is available at a cost of not more than ten percent more than the cost of virgin paper, and when such paper is available at the time it is needed. For the purposes of this Contract, recycled paper is paper that contains at least 50% recycled product. If recycled paper is not available, Consultant shall use white paper. Written reports or studies prepared under this Contract shall be printed on both sides of the paper whenever practical.

27. BERKELEY LIVING WAGE ORDINANCE

27.1 Consultant hereby agrees to comply with the provisions of the Berkeley Living Wage Ordinance, B.M.C. Chapter 13.27. If Consultant is currently subject to the Berkeley Living Wage Ordinance, as indicated by the Living Wage Certification form, attached hereto, Consultant will be required to provide all eligible employees with City mandated minimum compensation during the term of this Contract, as defined in B.M.C. Chapter 13.27, as well as comply with the terms enumerated herein. Consultant expressly acknowledges that, even if Consultant is not currently subject to the Living Wage Ordinance, cumulative contracts with City may subject Consultant to the requirements under B.M.C. Chapter 13.27 in subsequent contracts.

27.2 If Consultant is currently subject to the Berkeley Living Wage Ordinance, Consultant shall be required to maintain monthly records of those employees providing service under the Contract. These records shall include the total number of hours worked, the number of hours spent providing service under this Contract, the hourly rate paid, and the amount paid by Consultant for health benefits, if any, for each of its employees providing services under the Contract. Consultant agrees to supply City with any records it deems necessary to determine compliance with this provision. These records are expressly subject to the auditing terms described in Section 17.

27.3 If Consultant is currently subject to the Berkeley Living Wage Ordinance, Consultant shall include the requirements thereof, as defined in B.M.C. Chapter 13.27, in any and all subcontracts in which Consultant engages to execute its responsibilities under this Contract. All subcontractor or subconsultant employees who spend 25% or more of their compensated time engaged in work directly related to this Contract shall be entitled to a living wage, as described in B.M.C. Chapter 13.27 and herein.

27.4 If Consultant fails to comply with the requirements of this Section, the City shall have the rights and remedies described in this Section, in addition to any rights and remedies provided by law or equity.

27.5 Consultant's failure to comply with this Section shall constitute a material breach of the Contract, upon which City may terminate this Contract pursuant to Section 12. In the event that City terminates Consultant due to a default under this provision, City may deem Consultant a non-responsible bidder for not more than five (5) years from the date this Contract is terminated.

In addition, at City's sole discretion, Consultant may be responsible for liquidated damage in the amount of \$50 per employee per day for each and every instance of an underpayment to an employee. It is mutually understood and agreed that Consultant's failure to pay any of its eligible employees at least the applicable living wage rate will result in damages being sustained by the City; that the nature and amount of the damages will be extremely difficult and impractical to fix; that the liquidated damage set forth herein is the nearest and most exact measure of damage for such breach that can be fixed at this time; and that the liquidated damage amount is not intended as a penalty of forfeiture for Consultant's breach. City may deduct any assessed liquidated damages from any

payments otherwise due Consultant.

28. BERKELEY EQUAL BENEFITS ORDINANCE

- 28.1 Consultant hereby agrees to comply with the provisions of the Berkeley Equal Benefits Ordinance, B.M.C. Chapter 13.29. If Consultant is currently subject to the Berkeley Equal Benefits Ordinance, as indicated by the Equal Benefits Certification form, attached hereto, Consultant will be required to provide all eligible employees with City mandated equal benefits, as defined in B.M.C. Chapter 13.29, during the term of this contract, as well as comply with the terms enumerated herein.
- 28.2 If Consultant is currently or becomes subject to the Berkeley Equal Benefits Ordinance, Consultant agrees to provide the City with all records the City deems necessary to determine compliance with this provision. These records are expressly subject to the auditing terms described in Section 17 of this contract.
- 28.3 If Consultant fails to comply with the requirements of this Section, City shall have the rights and remedies described in this Section, in addition to any rights and remedies provided by law or equity.
- 28.4 Consultant's failure to comply with this Section shall constitute a material breach of the Contract, upon which City may terminate this contract pursuant to Sections 12. In the event the City terminates this contract due to a default by Consultant under this provision, the City may deem Consultant a non-responsible bidder for not more than five (5) years from the date this Contract is terminated.

In addition, at City's sole discretion, Consultant may be responsible for liquidated damages in the amount of \$50.00 per employee per day for each and every instance of violation of this Section. It is mutually understood and agreed that Consultant's failure to provide its employees with equal benefits will result in damages being sustained by City; that the nature and amount of these damages will be extremely difficult and impractical to fix; that the liquidated damages set forth herein is the nearest and most exact measure of damages for such breach that can be fixed at this time; and that the liquidated damage amount is not intended as a penalty or forfeiture for Consultant's breach. City may deduct any assessed liquidated damages from any payments otherwise due Consultant.

29. PREVAILING WAGES

Certain labor categories under this contract may be subject to prevailing wages as identified in the State of California Labor Code commencing with Sections 1720 et. seq. and 1770 et. seq. These labor categories, when employed for any "work performed during the design and preconstruction phases of construction including, but not limited to, inspection and land surveying work," constitute a "Public Work" within the definition of Section 1720(a)(1) of the California Labor Code requiring payment of prevailing wages. In performing its obligations under this contract, Consultant is solely responsible to determine which, if any, of the work is governed by a labor category pursuant to California Labor Code sections 1720 et. seq. and 1770 et. seq. and pay the pertinent prevailing wage. Consultant shall defend, indemnify and hold harmless City concerning any liability arising out of Labor Code section 1720 et. seq. and 1770 et. seq.

30. SETOFF AGAINST DEBTS

Consultant agrees that City may deduct from any payments due to Consultant under this Contract any monies that consultant owes City under any ordinance, contract or resolution for any unpaid taxes, fees, licenses, unpaid checks or other amounts.

31. CONSULTANTS TO SUBMIT STATEMENTS OF ECONOMIC INTEREST

The City's Conflict of Interest Code, Resolution No. 60,788-N.S., as amended, requires consultants who make a governmental decision or act in a staff capacity as defined in 2 Cal. Code of Regs. § 18700, as amended from time to time, to disclose conflicts of interest by filing a Statement of Economic Interest (Form 700). Consultants agree to file such statements with the City Clerk at the beginning of the contract period and upon termination of the Consultant's service.

32. CITY BUSINESS LICENSE, PAYMENT OF TAXES, TAX I.D. NUMBER

Consultant has obtained a City business license as required by B.M.C. Chapter 9.04, and its license number is written below; or, Consultant is exempt from the provisions of B.M.C. Chapter 9.04 and has written below the specific B.M.C. section under which it is exempt. Consultant shall pay all state and federal income taxes and any other taxes due. **Consultant certifies under penalty of perjury that the taxpayer identification number written below is correct.**

33. MISCELLANEOUS

33.1 The Agreement, and any written modification to the Agreement, shall represent the entire and integrated Agreement between the parties hereto regarding the subject matter of this Agreement and shall constitute the exclusive statement of the terms of the parties' Agreement. The Agreement, and any written modification to the Agreement, shall supersede any and all prior negotiations, representations or agreements, either written or oral, express or implied, that relate in any way to the subject matter of this Agreement or written modification, and the parties represent and agree that they are entering into this Agreement and any subsequent written modification in sole reliance upon the information set forth in the Agreement or written modification and the parties are not and will not rely on any other information.

33.2 Either party's waiver of any breach, or the omission or failure of either party, at any time, to enforce any right reserved to it, or to require performance of any of the terms, covenants, conditions or other provisions of this Agreement, including the timing of any such performance, shall not be a waiver of any other right to which any party is entitled, and shall not in any way affect, limit, modify or waive that party's right thereafter to enforce or compel strict compliance with every term, covenant, condition or other provision hereof, any course of dealing or custom of the trade or oral representations notwithstanding. This Agreement may not be modified, nor may compliance with any of its terms be waived, except by written instrument executed and approved by fully authorized representatives of City and the Consultant.

33.3 As between the parties to this Agreement: as to all acts or failures to act by either party to this Agreement, any applicable statute of limitations shall commence to run on the date of issuance by City's Project Manager of the final Certificate for Payment, or termination of this Agreement, whichever is earlier, except for latent defects, for which the statute of limitation shall begin running upon discovery of the defect and its cause.

33.4 Any provisions or portions thereof of this Agreement prohibited by, or made unlawful or unenforceable under any applicable law of any jurisdiction, shall as to such jurisdiction be ineffective without affecting other provisions or portions thereof of this Agreement. If the provisions of such applicable law may be waived, they are hereby waived to the end that this Agreement may be deemed to be a valid and binding agreement enforceable in accordance with its terms. If any provisions or portion thereof of this Agreement are prohibited by, or made unlawful or unenforceable under any applicable law and are therefore stricken or deemed waived, the remainder of this Agreement shall be interpreted to achieve the goals or intent of the stricken or waived provisions or portions thereof to the extent such interpretation is consistent with applicable law.

34. SEVERABILITY

- 34.1 If any part of this Agreement or the application thereof is declared invalid for any reason, such invalidity shall not affect the other provisions of this Agreement which can be given effect without the invalid provision or application, and to this end the provisions of this Agreement are declared to be severable.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement the day first mentioned above.

CITY OF BERKELEY

By: \_\_\_\_\_  
City Manager

Pre-approved as to form:  
CITY ATTORNEY  
10/2019

Registered on behalf  
of the City Auditor by: \_\_\_\_\_  
Finance Department

Attest by: \_\_\_\_\_  
City Clerk

By: \_\_\_\_\_  
NAME OF CONSULTANT

\_\_\_\_\_  
Printed name and title of signatory, if different from consultant name

Taxpayer Identification No. \_\_\_\_\_

Berkeley Business License No. \_\_\_\_\_

Incorporated: Yes \_\_\_ No \_\_\_

Certified Woman Business Enterprise: Yes \_\_\_ No \_\_\_

Certified Minority Business Enterprise: Yes \_\_\_ No \_\_\_

If yes, state ethnicity: \_\_\_\_\_

Certified Disadvantaged Business Enterprise: Yes \_\_\_ No \_\_\_

**EXHIBIT A**  
**SCOPE OF SERVICES**

**EXHIBIT B**

PAYMENT

**GENERAL:** Contract Not to Exceed amount is \$ #####. (Add any adtl. detailed payment narrative)

This Contract is not subject to the Alameda County Transportation Commission Local Business Contract Equity (LBCE) Project goals, however the City is required to report to Alameda County the portion of work completed by Local Business, Small Local Business, and Very Small Local Business Enterprises. As such, each invoice shall identify the name and address of each subcontractor reflected on the invoice, identifications of which, if any, of the subcontractors are LBE, SLBE and/or VSLBE subcontractor, the date of payment and the total dollar amount paid to each subcontractor; and the date of work performed by their own workforce along with the corresponding dollar value of the work tracked toward the LBCE Program.

**BILLING:** Consultant will submit invoices for services rendered, (Monthly, Qtrly or Completion of Project)

Consultant will charge for services on an hourly basis as follows:

Name	\$ ###/hour
Name	\$ ###/hour

**INVOICES:** Invoices must be fully itemized, and provide sufficient information for approving payment and audit. Invoices must be accompanied by receipt for services in order for payment to be processed. **Email invoices to Accounts Payable and cc' Project Manager email;** (List on invoice, Attn: Project Manager Name/Department) and reference the contract number.

City of Berkeley  
Accounts Payable  
P.O. Box 700  
Berkeley, CA 94710-700  
Email: [AccountsPayable@berkeleyca.gov](mailto:AccountsPayable@berkeleyca.gov)  
Phone: 510-981-7310

Payments: The City will make payment to the vendor within 30 days of receipt of a correct, approved and complete invoice.

# Field Work - Hydrographic Survey

