

ORE PENINSULA REDEVELOPMENT

SKAGWAY, ALASKA

30% DESIGN - NOT FOR CONSTRUCTION

JUNE 17, 2022



PROJECT TEAM

KPFF CONSULTING ENGINEERS – PROJECT MANAGEMENT,
CIVIL AND STRUCTURAL ENGINEERING

ANCHOR QEA – DREDGING, PERMITTING, AND
ENVIRONMENTAL ENGINEERING

HART CROWSER – GEOTECHNICAL ENGINEERING

BLUE COAST – COASTAL ENGINEERING

GLOSTEN – COASTAL ENGINEERING & NAVAL ARCHITECTURE

RESPEC – SURVEY, ELECTRICAL, UPLAND CIVIL

TIDAL DATUM

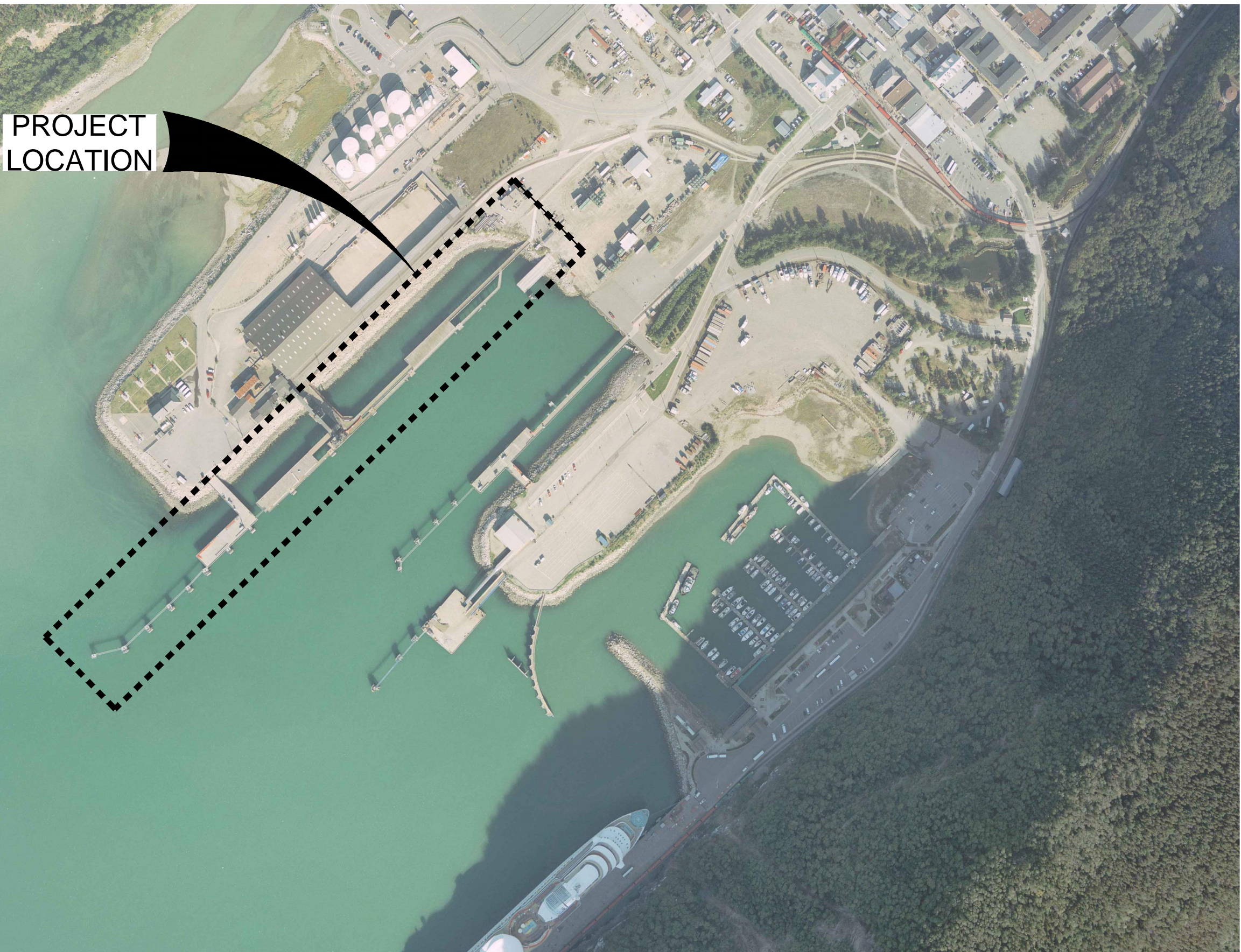
HIGHEST OBSERVED WATER LEVEL (HOWL) = 24.14’

MEAN HIGHER HIGH WATER (MHHW) = 16.73’

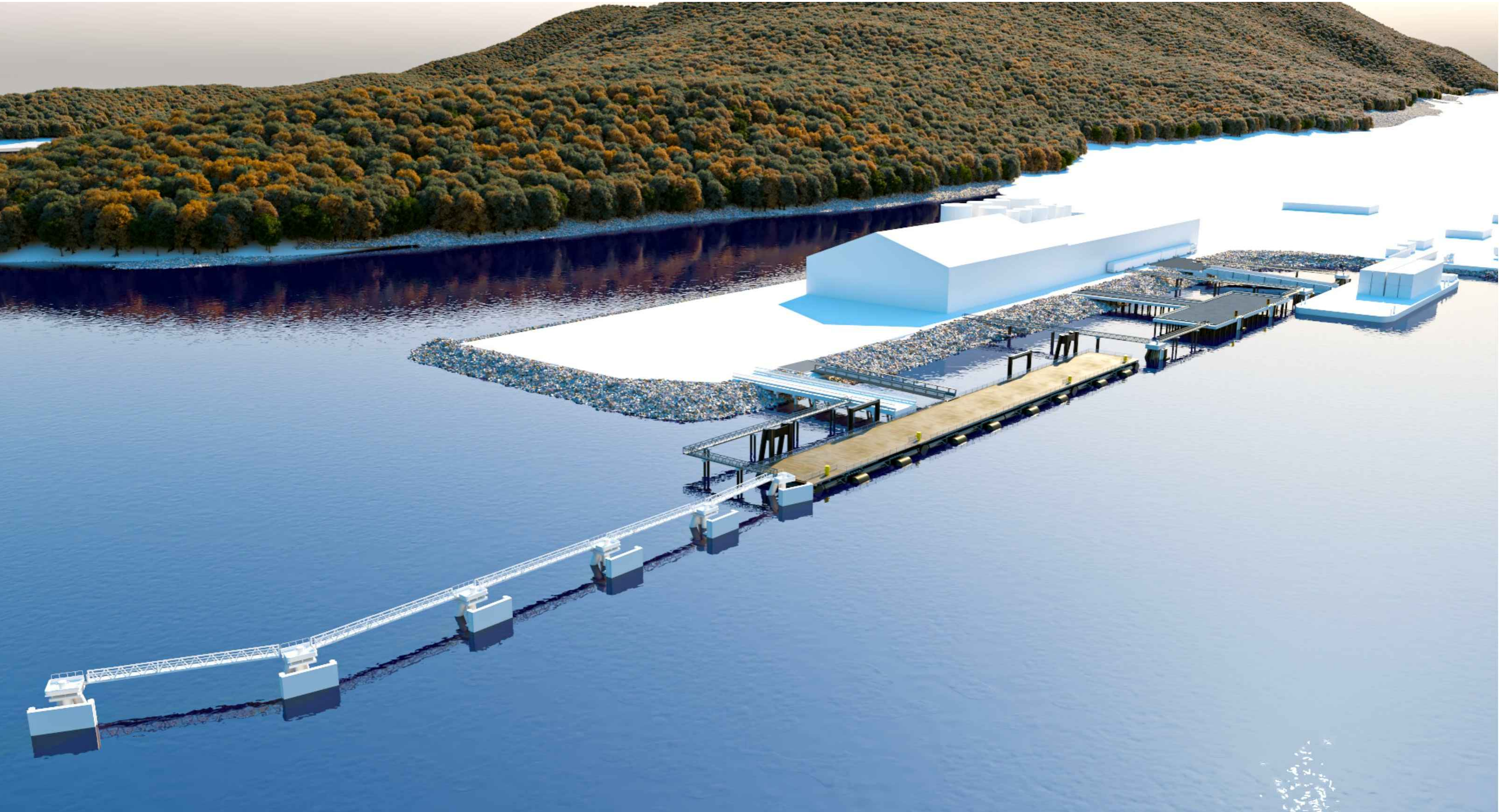
MEAN HIGH WATER (MHW) = 15.73’

MEAN LOWER LOW WATER (MLLW) = 0.00’

LOWEST OBSERVED WATER LEVEL (LOWL) = -6.10’



PROJECT LOCATION
NTS



Plotted: Jun 17, 2022 - 2:28pm
M:\2021\2100135 Skagway Ore Peninsula Multi-Use Dock\Drawings\Current\2100135_G1.00 Cover Sheet.dwg

kpff

1601 5th Avenue, Suite 1300
Seattle, Washington 98101
(206) 382-0600 Fax (206) 382-0500

NO.	DATE	BY	REVISION



ORE PENINSULA REDEVELOPMENT
SKAGWAY, ALASKA

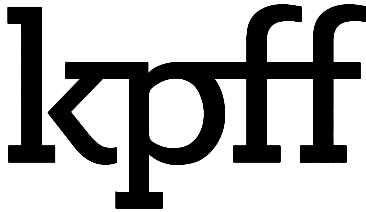
TITLE SHEET AND VICINITY MAP

DRAWN: JH	PROJECT NO.: 2100135
DESIGN: ED	SCALE: AS SHOWN
CHECKED: RR	DATE: 6/17/2022
DRAWING NO.	G1.00
SHEET NO.	OF

30% DESIGN - NOT FOR CONSTRUCTION


Plotted: Jun 17, 2022 - 5:45pm
M:\2021\2100135 Skagway Ore Peninsula Multi-Use Dock Drawings\Current\2100135_G2.00 Sheet Index.dwg
dyu Layout: G2.00

SHEET INDEX			SHEET INDEX			SHEET INDEX		
GENERAL			STRUCTURAL			STRUCTURAL		
01	G1.00	TITLE SHEET AND VICINITY MAP	35	S1.00	STRUCTURAL NOTES	84	S5.50	DOLPHIN PILE SCHEDULE
02	G2.00	SHEET INDEX	36	S1.01	STRUCTURAL NOTES	FLOAT		
03	G3.00	SYMBOLS AND ABBREVIATIONS	37	S1.02	STRUCTURAL NOTES, SPECIAL INSPECTIONS AND ABBREVIATIONS	85	F1.00	FLOAT PLAN
04	G3.01	GENERAL, DEMOLITION AND TESC NOTES	38	S2.00	STRUCTURAL SITE PLAN	86	F1.10	FLOAT DESIGN CRITERIA
05	G4.00	CIVIL GENERAL NOTES	39	S2.01	[RESERVED FOR ENLARGED SITE PLANS]	87	F1.11	FLOAT DETAILS
06	G5.00	SURVEY CONTROL	40	S2.02	[RESERVED FOR ENLARGED SITE PLANS]	MARINE SERVICE PLATFORM		
07	G6.00	SITE ACCESS	41	S3.00	CRUISE DOCK FLOAT AND ACCESS TRESTLE PLANS	88	SM1.00	MARINE SERVICE PLATFORM FEATURE PLAN
08	G7.00	EXISTING CONDITIONS SITE PLAN	42	S3.01	PILE PLAN	89	SM1.01	MARINE SERVICE PLATFORM PILE AND PILE CAP PLAN
09	G8.00	OVERALL SITE PLAN	43	S3.10	CRUISE DOCK FLOAT SECTIONS – RANGE OF MOTION	90	SM1.10	MARINE SERVICE PLATFORM SECTIONS
DEMOLITION			44	S3.20	CRUISE DOCK FLOAT ACCESS TRESTLE SECTIONS	91	SM1.11	MARINE SERVICE PLATFORM SECTIONS
10	D1.00	DEMO EXTENTS FOR OVERALL SITE	45	S3.21	CRUISE DOCK FLOAT ACCESS TRESTLE DETAILS	92	SM1.12	MARINE SERVICE PLATFORM DETAILS
11	D1.01	DEMO AND TESC PLAN	46	S3.22	CRUISE DOCK FLOAT ACCESS TRESTLE DETAILS	93	SM1.13	MARINE SERVICE PLATFORM DETAILS
12	D2.00	TESC DETAILS	47	S3.30	CRUISE DOCK TRESTLE PILE SCHEDULE	94	SM1.20	MARINE SERVICE PLATFORM PILE SCHEDULE
13	D3.00	DEMOLITION	48	S3.40	CRUISE DOCK ACCESS RAMP PLAN AND ELEVATION	NORTH BERTH EXTENSION		
14	D4.00	ORE LOADER DEMOLITION ELEVATIONS	49	S3.41	CRUISE DOCK ACCESS RAMP SECTION	95	NE1.00	NORTH BERTH EXTENSION DREDGE PLAN
15	D4.01	ORE LOADER DEMOLITION DETAILS – 1	50	S3.42	CRUISE DOCK ACCESS RAMP	96	NE1.01	NORTH BERTH EXTENSION DREDGE SECTION AND DETAIL
16	D4.02	ORE LOADER DEMOLITION DETAILS – 2	51	S3.43	CRUISE DOCK ACCESS RAMP	97	NE1.02	NORTH BERTH EXTENSION DREDGE SECTION AND DETAIL
17	D4.03	ORE LOADER DEMOLITION DETAILS – 3	52	S3.44	CRUISE DOCK ACCESS RAMP	98	NE1.10	NORTH BERTH EXTENSION SLOPE PROTECTION PLAN
18	D4.04	ORE LOADER DEMOLITION DETAILS – 4	53	S3.45	CRUISE DOCK ACCESS RAMP	99	NE1.11	NORTH BERTH EXTENSION SLOPE PROTECTION SECTIONS AND DETAIL
19	D4.10	DEMOLITION DETAILS – 1	54	S3.50	CRUISE DOCK FLOAT GUIDE PILE SECTIONS	100	NE1.12	NORTH BERTH EXTENSION SLOPE PROTECTION SECTIONS AND DETAIL
20	D4.11	DEMOLITION DETAILS – 2	55	S3.51	CRUISE DOCK FLOAT GUIDE PILE SECTIONS	MECHANICAL		
21	D4.12	DEMOLITION DETAILS – 3	56	S4.00	RORO RAMP AND ACCESS TRESTLE PLANS	101	MX.XX	RORO RAMP HYDRAULICS
UTILITY			57	S4.01	RORO RAMP ACCESS TRESTLE SURFACE FEATURES PLAN	CATHODIC PROTECTION		
22	C1.00	UPLAND UTILITIES	58	S4.02	RORO RAMP ACCESS TRESTLE PILE AND PILE CAP PLAN	102	CP1.00	GALVANIC CATHODIC PROTECTION SYSTEM
23	U1.00	OVERALL UTILITY PLAN	59	S4.10	RORO RAMP SECTION – RANGE OF MOTION	ELECTRICAL		
24	U2.00	FLOAT UTILITY PLAN	60	S4.20	RORO RAMP ACCESS TRESTLE SECTIONS	103	E0.00	LEGEND, ABBREVIATIONS
25	U2.10	FLOAT UTILITY SECTION	61	S4.21	RORO RAMP ACCESS TRESTLE SECTIONS	104	E1.00	ELECTRICAL SITE PLAN – EXISTING
26	U3.00	RORO RAMP UTILITY PLAN	62	S4.22	RORO RAMP ACCESS TRESTLE DETAILS	105	E2.00	OVERALL ELECTRICAL SITE PLAN
27	U3.10	RORO RAMP UTILITY SECTION	63	S4.23	RORO RAMP ACCESS TRESTLE DETAILS	106	E2.10	CRUISE DOCK ELECTRICAL PLAN
28	U4.00	MARINE SERVICES PLATFORM UTILITY PLAN	64	S4.30	RORO RAMP ACCESS TRESTLE PILE SCHEDULE	107	E2.20	MARINE SERVICE PLATFORM, FUEL HEADER, AND RO/RO RAMP PLAN
29	U4.10	MARINE SERVICES PLATFORM UTILITY SECTION	65	S4.40	RORO RAMP PLAN AND ELEVATION	108	E3.10	CRUISE DOCK LIGHTING PLAN
30	U5.20	UTILITY DETAILS – 1	66	S4.41	RORO RAMP SECTION	109	E3.20	MARINE SERVICE PLATFORM, FUEL HEADER, AND RO/RO RAMP PLAN – LIGHTING
31	U5.21	UTILITY DETAILS – 2	67	S4.42	RORO RAMP	110	E3.30	LUMINAIRE SCHEDULE & DETAILS
32	U6.00	FUEL LINE PLAN	68	S4.43	RORO RAMP			
33	U6.10	FUEL LINE SECTION	69	S4.44	RORO RAMP			
34	U6.20	FUEL LINE DETAIL	70	S4.45	RORO RAMP			
			71	S4.50	RORO RAMP GUIDE PILES			
			72	S5.00	DOLPHIN PLAN – DOLPHIN REINFORCEMENT			
			73	S5.01	DOLPHIN PLAN – TYPICAL DOLPHIN, FUEL HEADER, AND CATWALKS			
			74	S5.10	SOUTH DOLPHIN REINFORCEMENT SECTIONS			
			75	S5.11	SOUTH DOLPHIN REINFORCEMENT SECTIONS			
			76	S5.12	SOUTH DOLPHIN REINFORCEMENT DETAILS			
			77	S5.13	SOUTH DOLPHIN REINFORCEMENT DETAILS			
			78	S5.20	TYPICAL DOLPHIN PLAN AND ELEVATION			
			79	S5.21	TYPICAL DOLPHIN PLAN AND ELEVATION			
			80	S5.30	FUEL HEADER PLATFORM PLAN			
			81	S5.31	FUEL HEADER DETAILS			
			82	S5.40	CATWALK SECTIONS AND DETAILS			
			83	S5.41	CATWALK SUPPORTS SECTIONS AND DETAILS			



1601 5th Avenue, Suite 1300
Seattle, Washington 98101
(206) 382-0600 Fax (206) 382-0500

NO.	DATE	BY	REVISION



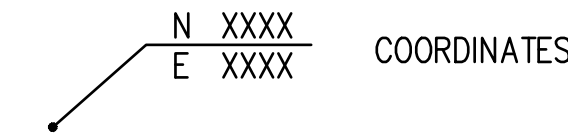
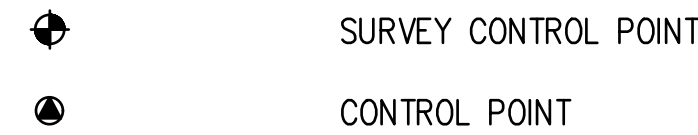
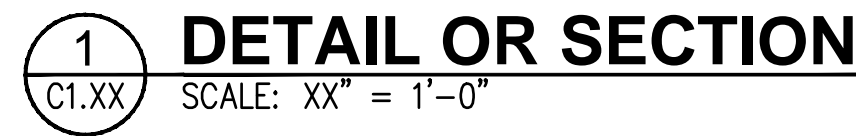
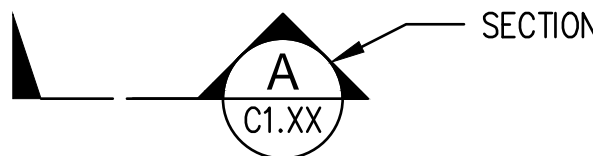
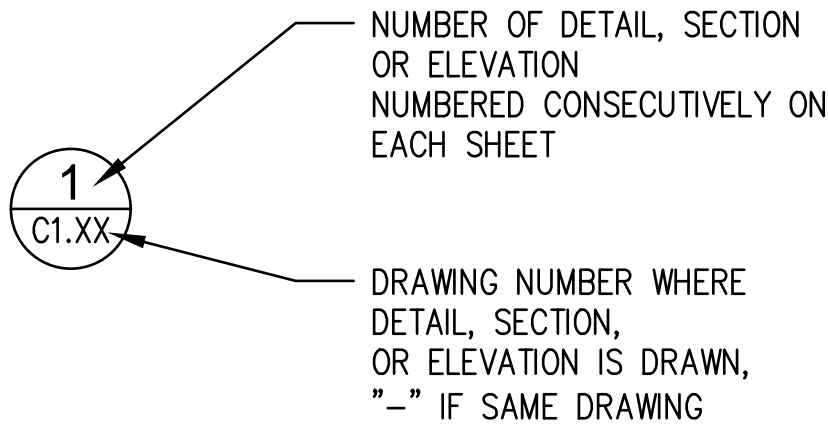
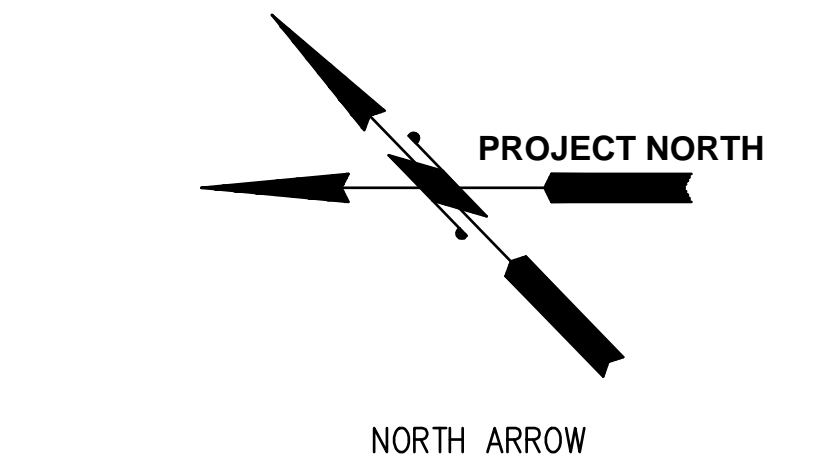
ORE PENINSULA REDEVELOPMENT
SKAGWAY, ALASKA

SHEET INDEX

DRAWN: JH	PROJECT NO.: 2100135
DESIGN: ED	SCALE: AS SHOWN
CHECKED: RR	DATE: 6/17/2022
DRAWING NO.	G2.00
SHEET NO.	OF

30% DESIGN - NOT FOR CONSTRUCTION

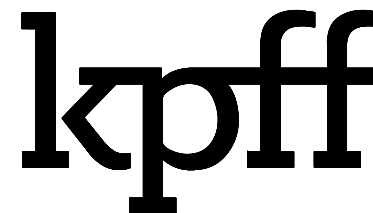
SYMBOLS



	WATER LINE
	AIR LINE
	SEWER LINE
	STORM LINE
	RAIL LINE
	POWER LINE
	FENCE
	PROPERTY BOUNDARY
	LOT BOUNDARY
	EDGE OF PIER
	NATURAL GAS LINE
	STORM DRAIN
	POWER LINE
	R.O.W CENTERLINE
	SURVEYED WATER UTILITY SURFACE FEATURE
	SURVEYED POWER UTILITY SURFACE FEATURE
	BULKHEAD WALL
	CATCH BASIN
	CATCH BASIN (SURVEYED)
	MANHOLE/VAULT
	LIGHT POLE
	SS OR SD MANHOLE
	GAS VALVE
	WATER VALVE
	HYDRANT
	FIRE PROTECTION LINE
	DOMESTIC WATER LINE
	FUEL LINE

ABBREVIATIONS

#	NUMBER	GAL	GALLON	PG	PERFORMANCE GRADE
Ø	DIAMETER	GALV	GALVANIZED	Ph	PHASE
@	AT	GPM	GALLON PER MINUTE	PL	PLATE
(E)	EXISTING	H	HORIZONTAL	PLLC	PROFESSIONAL LIMITED LIABILITY COMPANY
AASHTO	AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS	HAZ	HAZARDOUS	PO	POST OFFICE (BOX)
AC	ACRE	HDPE	HIGH DENSITY POLYETHYLENE	PROP	PROPOSED
ACI	AMERICAN CONCRETE INSTITUTE	HDS	HYDRODYNAMIC SEPERATOR	PSF	POUNDS PER SQUARE FOOT
ACP	ASBESTOS CONCRETE PIPE OR ASPHALTIC CONCRETE PAVEMENT	HI-VIS	HIGH VISIBILITY	PSI	POUNDS PER SQUARE INCH
ADDL	ADDITIONAL	HMA	HOT MIX ASPHALT	PVC	POLYVINYL CHLORIDE
ADJ	ADJACENT	HORIZ	HORIZONTAL	PWR	POWER
AISC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION	HOWL	HIGHEST OBSERVED WATER LEVEL	QDSC	QUICK DISCONNECT SUBMERSIBLE COUPLING
ALIGN	ALIGNMENT	HP	HORSEPOWER	QTS	QUALITY ASSUARANCE FOR THICKNESS ADJUSTMENT
APPROX	APPROXIMATE	HRC	HEADED REINFORCEMENT CORPORATION	Qty	QUANTITY
ASCE	AMERICAN SOCIETY OF CIVIL ENGINEERS	HSS	HOLLOW STRUCTURAL SECTION	R	RECORD
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS	HV	HIGH VISIBILITY	REF	REFERENCE
AVE	AVENUE	IBC	INTERNATIONAL BUILDING CODE	REINF	REINFORCED
AVG	AVERAGE	ICBO	INTERNATIONAL CONFERENCE OF BUILDING OFFICIALS	REV	REVISION
AWS	AMERICAN WELDING SOCIETY	ICC	INTERNATIONAL CODE COUNCIL	R.O.W.	RIGHT OF WAY
B/O	BOTTOM OF WALL	ID	IDENTIFICATION OR INTERNAL DIAMETER	RD	ROOF DRAIN
B/W	BETWEEN	IE	INVERT	RPM	ROTATIONS PER MINUTE
BLDG	BUILDING	IN	INCH	RT	RIGHT
BMP	BEST MANAGEMENT PRACTICE	INC	INCORPORATED	S	SANITARY SEWER OR SOUTH
BOT	BOTTOM	JARPA	JOINT AQUATIC RESOURCES PERMIT APPLICATION	SDMH	STORM DRAIN MANHOLE
BP	BURIED POWER	JT	JOINT	SEC	SECOND
BTW	BETWEEN	K-FT	KILOPOUND-FEET	S.E.	STRUCTURAL ENGINEER
BW	BOTTOM OF WALL	KSI	KILO-POUND PER SQUARE INCH	SCH	SCHEDULE
CB	CATCH BASIN	L/S	LITER PER SECOND	SCH40	SCHEDULE 40
CCTV	CLOSED-CIRCUIT TELEVISION	LB	POUND	SD	STORM DRAIN
CDC	CENTER FOR DISEASE CONTROL AND PREVENTION	LF	LINEAR FOOT	SE	SOUTHEAST
CDF	CONTROLLED DENSITY FILL	LL	LIVE LOAD	SF	SQUARE FEET
CDS	CONTINUOUS DOPAMINERGIC STIMULATION	LLC	LIMITED LIABILITY COMPANY	SHT	SHEET
CESCL	CERTIFIED EROSION AND SEDIMENT CONTROL LEAD	LOC	LOCATION	SIM	SIMILAR
CESF	CHITOSAN-ENHANCED SAND FILTRATION	LOWL	LOWEST OBSERVED WATER LEVEL	SMC	SEATTLE MUNICIPAL CODE
CF	CUBIC FOOT	LRFD	LOAD AND FACTORED RESISTANCE DESIGN	SPA	SPACED
CFS	CUBIC FEET PER SECOND	LS	LIFT STATION	SP	SPACING
CG	CENTER OF GRAVITY	LT	LEFT	SPC	STORM PREDICTION CENTER
CJ	CONSTRUCTION JOINT	LWD	LARGE WOODY DEBRIS	SPEC	SPECIFICATION
CJP	COMPLETE JOINT PENETRATION	MAINT	MAINTENANCE	SPU	SEATTLE PUBLIC UTILITY
CL	CENTERLINE	ME	MAXIMUM	SQFT	SQUARE FEET
CLR	CLEARANCE	MFR	MATCH EXISTING	SS	SANITARY SEWER
CMF	CORRUGATED METAL PIPE	MH	MANUFACTURER	SSMH	SANITARY SEWER MANHOLE
CONC	CONCRETE	MHHW	MEAN HIGHER HIGH WATER	ST	STEAM LINE
CONN	CONNECTION	MHW	MEAN HIGH WATER	ST.	STREET
CONT	CONTINUE(D)	MIL	MILLIMETER	STA	STATION
COS	CITY OF SEATTLE	MIN	MINIMUM	STD	STANDARD
CRSI	CONCRETE REINFORCING STEEL INSTITUTE	ML	MUDLINE	STM	STEAM
CSBC	CRUSHED SURFACING BASE COURSE	MLLW	MEAN LOWER LOW WATER	SW	SOUTHWEST
CSGP	CONSTRUCTION STORMWATER GENERAL PERMIT	MLW	MEAN LOW WATER	SWDS	STORMWATER DETENTION SYSTEM
CSTC	CRUSHED SURFACING TOP COURSE	MOD	MODIFIED	SWPPP	STORM WATER POLLUTION PREVENTION PLAN
CSWGP	CONSTRUCTION STORMWATER GENERAL PERMIT	MSP	MANUAL OF STANDARD PRACTICE	T/	TOP OF
CY	CUBIC YARD	MUTCD	MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES	T/O	TOP OF
DD	DRY DOCK	N	NORTH OR NORTHING	TC	TELECOMMUNICATIONS
DEG	DEGREE	N/A	NOT APPLICABLE	TEMP	TEMPORARY
DEMO	DEMOLITION	NAD83	NORTH AMERICAN DATUM OF 1983	TESC	TEMPORARY EROSION AND SEDIMENT CONTROL
DI	DUCTILE IRON	NAVD	NORTH AMERICAN VERTICAL DATUM	TW	TOP OF WALL
DIA	DIAMETER	NC	NORMALLY CLOSED	TYP	TYPICAL
DIP	DUCTILE IRON PIPE	NDPES	NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM	UFC	UNIFORM FACILITIES CRITERIA
DMP	DEMOLITION MANAGEMENT PLAN	NE	NORTHEAST	UHMW	ULTRA HIGH MOLECULAR WEIGHT POLYETHYLENE
DTL	DETAIL	NEC	NATIONAL ELECTRICAL CODE	UNC	UNIFIED NATIONAL COARSE
DWG	DRAWING	NFPA	NATIONAL FIRE PROTECTION ASSOCIATION	UNO	UNLESS OTHERWISE NOTED
DWT	DEADWEIGHT TONNAGE	NG	NATURAL GAS	US	UNITED STATES
E	EAST OR EASTING OR ELECTRICAL	NIC	NOT IN CONTRACT	USDA	UNITED STATES DEPARTMENT OF AGRICULTURE
EA	EACH	NO.	NUMBER	USEPA	UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
EL	ELEVATION	NOAA	NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION	V	VOLT OR VERTICAL
ELEV	ELEVATION	NOV.	NOVEMBER	VERT	VERTICAL
EPA	ENVIRONMENTAL PROTECTION AGENCY	NRD	NATURAL RESOURCE DAMAGES	VFD	VARIABLE FREQUENCY DESIGN
EQ	EQUAL	NTS	NOT TO SCALE	VIF	VERIFY IN FIELD
ETC	ET CETERA	NW	NORTHWEST	VP	VICE PRESIDENT
EX	EXISTING	O	OYGEN	W/	WITH
EXIST	EXISTING	O.D.	OUTER DIAMETER	W	WEST OR WATER
EXP	EXPANSION	OC	ON CENTER	WA	WASHINGTON
EXT	EXTENSION	OHWL	ORDINARY HIGH WATER LINE	WABO	WASHINGTON ASSOCIATION OF BUILDING OFFICIALS
f'c	COMPRESSIVE STRENGTH OF CONCRETE AT 28 DAYS	OHWM	ORDINARY HIGH WATER MARK	WDFW	WASHINGTON DEPARTMENT OF FISH AND WILDLIFE
FDC	FIRE DEPARTMENT CONNECTION	OPP	OPPOSITE	WHS	WELDED HEADED STUD
FF	FINISHED FLOOR	OWN	OTHERWISE NOTED	WP	WORKING POINT
FG	FINISHED GRADE	OXY	OXYGEN	WQ	WATER QUALITY
FL	FLANGE	P	POWER	WSDOT	WASHINGTON DEPARTMENT OF TRANSPORTATION
FM	FORCEMAIN	P.E.	PROFESSIONAL ENGINEER	WT.	WEIGHT
FO	FIBER OPTIC	PC	PRESTRESSED CONCRETE	WWHM	WESTERN WASHINGTON HYDROLOGY MODEL
FT	FOOT	PCB	POLYCHLORINATED BIPHENYLS	XS	EXTRA STRONG
Fy	YIELD STRENGTH	PCF	POUNDS PER CUBIC FOOT	YR	YEAR
GAC	GRANULAR ACTIVATED CARBON	PDA	PILE DRIVING ANALYZER	YRS	YEARS
		PE	POLYETHYLENE		



1601 5th Avenue, Suite 1300
Seattle, Washington 98101
(206) 382-0600 Fax (206) 382-0500

NO.	DATE	BY	REVISION



ORE PENINSULA REDEVELOPMENT
SKAGWAY, ALASKA

SYMBOLS AND ABBREVIATIONS

DRAWN: JH	PROJECT NO.: 2100135
DESIGN: ED	SCALE: AS SHOWN
CHECKED: RR	DATE: 6/17/2022
DRAWING NO.	G3.00
SHEET NO.	OF

Plotted: Jun 17, 2022 - 2:40pm
M:\2021\2100135 Skagway Ore Peninsula Multi-Use Dock\Drawings\Current\2100135_G4-00 Civil General Notes.dwg
Layout: 04-00

GENERAL CIVIL NOTES:

1. DATUM:

A. VERTICAL DATUM:
MEAN LOWER LOW WATER (MLLW=0.0') U.S. SURVEY FEET, BASED ON THE NOAA/NOS TIDAL BENCH MARK LIST: 9452400 SKAGWAY, TAIYA INLET, ALASKA PUBLISHED 05/02/2014. THIS TIDAL DATUM IS BASED ON THE 2007-2011 TIDAL EPOCH

B. HORIZONTAL DATUM:
ALASKA STATE PLANE, ZONE 1, NAD83, IN U.S. SURVEY FT
4. SURVEY: TOPOGRAPHIC SURVEY AND SURVEY CONTROL PROVIDED BY RESPEC.
5. BATHYMETRIC SURVEY: SOUNDINGS ARE IN U.S. SURVEY FEET AND ARE MINUS UNLESS OTHERWISE INDICATED. BATHYMETRY WAS COLLECTED BY HUGHES & ASSOCIATES ON APRIL 6-7, 2022. SOUNDINGS WERE COLLECTED USING A R2SONIC 2022 MULTIBEAM ECHOSOUNDER OPERATING AT 400 KHZ. SOUND VELOCITY THROUGH THE WATER COLUMN WAS DETERMINED WITH A VALEPORT SWIFT SOUND VELOCITY PROBE. POSITION AND VESSEL ORIENTATION WERE MEASURED USING AN APPLANIX POS MV SYSTEM. RTK CORRECTIONS WERE BROADCAST FROM A LOCAL BASE STATION OCCUPYING "SH-D 2000". DATA WAS COLLECTED ANDPROCESSED USING HYPACK 2022 SOFTWARE. HORIZONTAL AND VERTICAL CONTROL WAS SURVEYED USING RTK GNSS EQUIPMENT AND TECHNIQUES.
6. EXISTING STRUCTURES:

A. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS OF EXISTING STRUCTURES THAT MAY IMPACT THE WORK.

B. CONTRACTOR SHALL COORDINATE WITH THE ENGINEER, IF THERE ARE ANY CONFLICTS BETWEEN PROPOSED WORK AND EXISTING STRUCTURES TO REMAIN ON-SITE.
7. UTILITIES:

A. CONTRACTOR SHALL PROTECT-IN-PLACE ALL UTILITIES THAT ARE NOT INDICATED FOR DEMOLITION.

B. THE LOCATIONS OF EXISTING FEATURES AND UTILITIES SHOWN ON THE DRAWINGS ARE APPROXIMATE. ADDITIONAL UTILITIES NOT SHOWN IN THESE DRAWINGS MAY BE PRESENT. THE CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS OF ALL UTILITIES ENCOUNTERED IN THE FIELD SHALL BE RECOVERED ON THE CONTRACTOR'S RECORD DRAWINGS. CONTACT LOCAL UTILITY COMPANIES PRIOR TO ANY/ ALL EXCAVATIONS AT THE FOLLOWING TELEPHONE NUMBERS: 811 AT LEAST 48 HOURS PRIOR TO CONSTRUCTION.
15. TRAFFIC CONTROL:

A. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY TRAFFIC CONTROL REQUIRED DURING THE PROJECT. ALL TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
9. IN WATER WORK:

A. CONTRACTOR SHALL COORDINATE IN-WATER WORK SUCH THAT BARGES AND EQUIPMENT REMAINS ON THE PROJECT SITE TO THE MAXIMUM EXTENT FEASIBLE. WHEN WORK IS DONE OR MACHINERY IS STAGED OUTSIDE PROPERTY LIMITS, THE OWNER SHALL BE GIVEN 1 WEEK NOTICE FOR COORDINATION WITH ADJACENT PROPERTIES.

B. ALL IN-WATER WORK TO BE CONDUCTED IN ACCORDANCE WITH WATER QUALITY MANAGEMENT AND PROTECTION PLAN, AND ALL IN-WATER WORK PERMIT REQUIREMENTS.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADHERING TO ALL APPLICABLE LOCAL, STATE, AND FEDERAL CODES, PERMITS AND SAFETY REQUIREMENTS.
11. PROPERTY DISTURBED DURING CONSTRUCTION THAT IS NOT IDENTIFIED FOR DEMOLITION SHALL BE RESTORED TO ITS PRE-CONSTRUCTION CONDITION OR BETTER AT NO ADDITIONAL COST TO THE OWNER UNLESS OTHERWISE INDICATED IN THE DRAWINGS OR SPECIFICATIONS.

12. EROSION CONTROL & STORM WATER POLLUTION PREVENTION PLAN (SWPPP)

12.1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTROLLING EROSION AND SEDIMENT DURING CONSTRUCTION AND SHALL UTILIZE STATE OF ALASKA BEST MANAGEMENT PRACTICES THROUGHOUT THE WORK. ALL SURFACES THAT ARE DAMAGED BY EROSION SHALL BE RE-GRADED BY THE CONTRACTOR PRIOR TO PERFORMING ANY MEANS OF STABILIZATION. THE CONTRACTOR SHALL PREPARE A STORM WATER POLLUTION PREVENTION PLAN (SWPPP) IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND SUBMIT THE SWPPP TO THE ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION AND ENGINEER.
- 12.2. THE CONTRACTOR SHALL INSTALL TEMPORARY DEVICES CONSISTING OF BUT NOT LIMITED TO STRAW BALES, FILTER FABRIC FENCES, SILT CURTAIN OR BOOM, ETC. TO PREVENT SILT-LADEN DEWATERING EFFLUENT AND OTHER CONSTRUCTION RUNOFF FROM ENTERING ADJACENT STREAMS OR WATER BODIES. THE CONTRACTOR IS RESPONSIBLE FOR THE QUALITY OF THE DEWATERING EFFLUENT AND OTHER CONSTRUCTION RUNOFF THAT ENTERS ADJACENT STREAMS OR WATER BODIES AND IS THEREFORE RESPONSIBLE FOR VIOLATIONS AND PENALTIES RESULTING FROM CONSTRUCTION OPERATIONS. THE CONTRACTOR SHALL IMPLEMENT AN EROSION AND SEDIMENT CONTROL PLAN PER SECTIONS 01560 AND 01570 OF THE CONTRACT DOCUMENTS AND IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL LAW.
13. THE CONTRACTOR SHALL PREPARE A HAZARDOUS MATERIAL CONTROL PLAN (HMCP) FOR THE HANDLING, STORAGE, CLEAN-UP AND DISPOSAL OF PETROLEUM AND OTHER HAZARDOUS SUBSTANCES. THE CONTRACTOR SHALL LIST AND GIVE LOCATIONS AND ESTIMATED QUANTITIES OF ALL HAZARDOUS MATERIALS,INCLUDING FIELD OFFICE MATERIALS, TO BE USED ON-SITE. THE PLAN SHALL PROVIDE DETAILS FOR STORING THESE MATERIALS AS WELL AS DISPOSING OF WASTER PETROLEUM PRODUCTS AND OTHER HAZARDOUS MATERIALS GENERATED BY THE PROJECT.
- 13.1. THE HMCP SHALL DETAIL PROCEDURES FOR CONTAINMENT AND CLEANUP OF HAZARDOUS SUBSTANCES INCLUDING A LIST OF THE TYPES AND QUANTITIES OF EQUIPMENT AND MATERIALS AVAILABLE ON-SITE TO BE USED IN THE EVENT OF A SPILL.
- 13.2. THE HMCP SHALL PROVIDE DETAILS FOR PREVENTION, CONTAINMENT, CLEAN-UP AND DISPOSAL OF SOIL AND WATER CONTAINMENT BY ACCIDENTAL SPILLS, AS WELL AS UNEXPECTED CONTAMINATED SOIL AND WATER ENCOUNTERED DURING CONSTRUCTION.
14. MATCH EXISTING FINISH GRADES AT PROJECT LIMITS AND WHERE REQUIRED TO MATCH AT EXISTING ROADS. ALL EXISTING ASPHALT CONCRETE MATERIALS TO BE REMOVED SHALL BE DELIVERED TO XXXXX. ALL OTHER REMOVED MATERIALS THAT ARE NOT SUITABLE FOR REUSE ON THE PROJECT SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND PROPERLY DISPOSED OF AT AN APPROVED SITE.
15. GRADING AND ALIGNMENT OF PIPING AND FINAL SURFACING MATERIALS ARE SUBJECT TO MINOR REVISIONS BY THE ENGINEER TO FIT SITE CONDITIONS ENCOUNTERED AND PROVIDE ADEQUATE DRAINAGE.

GENERAL UTILITY NOTES:

1. NOT ALL FITTINGS AND VARIOUS PLUMBING APPURTENANCES ARE SHOWN. CONTRACTOR SHALL USE INDUSTRY STANDARD PRACTICES TO ACHIEVE ALL CONNECTIONS NOT SPECIFIED CONSISTENT WITH APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS PER THE ENGINEER'S DIRECTION (INCIDENTAL).
2. PIPE SYSTEMS ARE ELABORATE AND SHALL REQUIRE MINOR CHANGES IN ELEVATION OR DIRECTION NOT SPECIFICALLY CALLED OUT IN THE PLANS. IN THESE INSTANCES THE CONTRACTOR SHALL SWEEP PIPE OR USE 45° OR LESS ELBOWS TO ACHIEVE REQUIRED PIP POSITIONS UNLESS OTHERWISE APPROVED BY THE ENGINEER.
3. LENGTHS OF UNISTRUT VARY. CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING LENGTHS AS REQ'D. DAMAGE TO STRUT COATINGS SHALL BE REPAIRED PER THE SPECIFICATIONS.
4. ELEC. CONDUIT SHALL BE ATTACHED TO UNISTRUT IN MANY INSTANCES & MAY NOT BE SHOWN HERE. UTILITY CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH ELECTRICAL AS REQ'D AND PROVIDING ADEQUATE LENGTHS OF STRUT AT ALL LOCATIONS. SEE ELEC. DRAWINGS.
5. REFERENCES TO BRASS OR BRONZE PIP OR FITTINGS SHALL BE TAKEN TO MEAN RED BRASS OR BRONZE IN ALL CASES, EITHER MATERIAL IS ACCEPTABLE.

FIRE PROTECTION NOTES

1. CODES AND DESIGN CRITERIA:

A. FIRE PROTECTION SYSTEM MAINTENANCE SHALL CONFORM TO NFPA 10, 25, 13, 72, AND 204.

B. PORTABLE FIRE EXTINGUISHERS WILL BE SELECTED, INSTALLED AND MAINTAINED IN ACCORDANCE WITH NFPA. MAXIMUM SPACING BETWEEN FIRE EXTINGUISHERS SHALL NOT EXCEED 75 FEET.

C. FIRE DEPARTMENT CONNECTIONS WILL BE PROVIDE TO ALL DOCK FACILITIES. THE DRY STANDPIPE SYSTEM WILL BE DESIGNED IN ACCORDENCE WITH NFPA.

SLOPE PROTECTION NOTES

1. DREDGING SHALL BE DONE VIA MECHANICAL METHODS. HYDRAULIC DREDGING WILL NOT BE PERMITTED.
2. WHERE FILTER FABRIC IS IDENTIFIED IN PLANS, PRODUCT SHALL BE PER SPECIFICATIONS AND SHALL BE A WOVEN GEOSYNTHETIC.

VIBRATION MONITORING NOTES

1. BUILDINGS:

A. GEOTECHNICAL ENGINEER SHALL INSTRUMENT BUILDING WITH VIBRATION MONITORS AT 40 FT INTERVALS WHERE PILE EXTRACTION AND INSTALLATION WILL OCCUR WITHIN 60 FT OF THE BUILDING.

B. CONTRACTOR SHALL RECORD SURVEY ELEVATIONS AT 40 FT INTERVALS ALONG THE LENGTH OF THE BUILDING WHERE PILE EXTRACTION AND PILE INSTALLATION WILL OCCUR WITHIN 60 FT OF THE BUILDING.



1601 5th Avenue, Suite 1300
Seattle, Washington 98101
(206) 382-0600 Fax (206) 382-0500



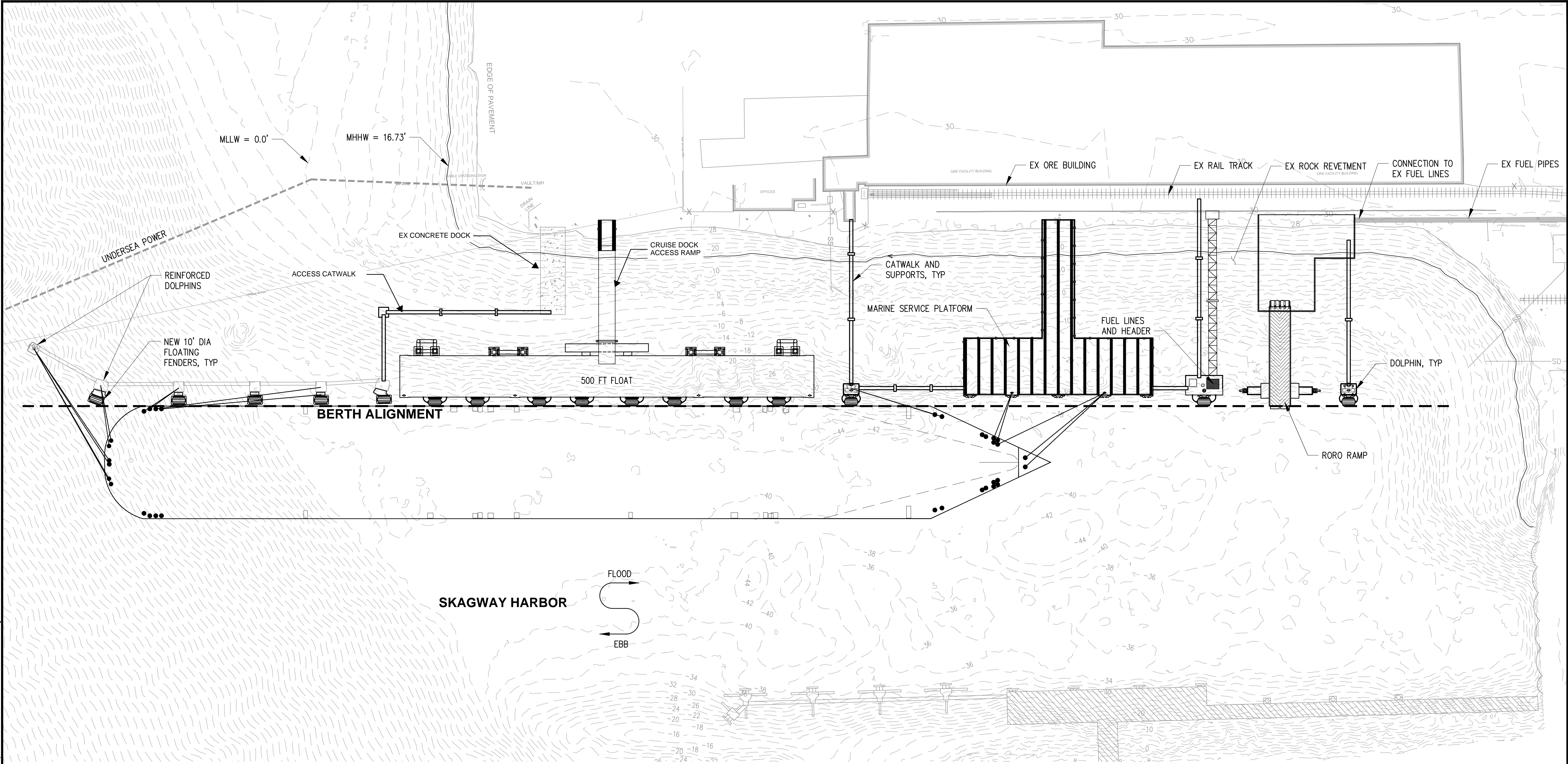
ORE PENINSULA REDEVELOPMENT
SKAGWAY, ALASKA

CIVIL GENERAL NOTES

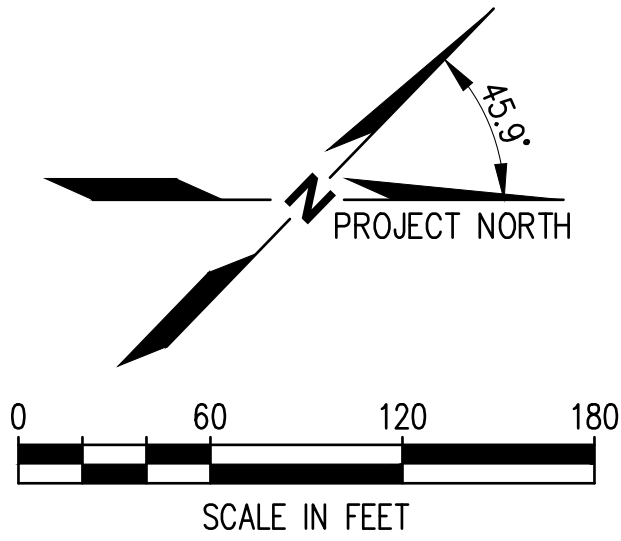
DRAWN: JH	PROJECT NO.: 2100135
DESIGN: ED	SCALE: AS SHOWN
CHECKED: RR	DATE: 6/17/2022
DRAWING NO.	G4.00
SHEET NO.	OF

30% DESIGN - NOT FOR CONSTRUCTION

Plotted: Jun 17, 2022 - 2:53pm
M:\2021\2100135 Skagway Ore Peninsula Multi-Use Dock\Drawings\Current\2100135_G8.00 Overall Site Plan.dwg



OVERALL SITE PLAN
SCALE: 1" = 60'



kpff

1601 5th Avenue, Suite 1300
Seattle, Washington 98101
(206) 382-0600 Fax (206) 382-0500

NO.	DATE	BY	REVISION

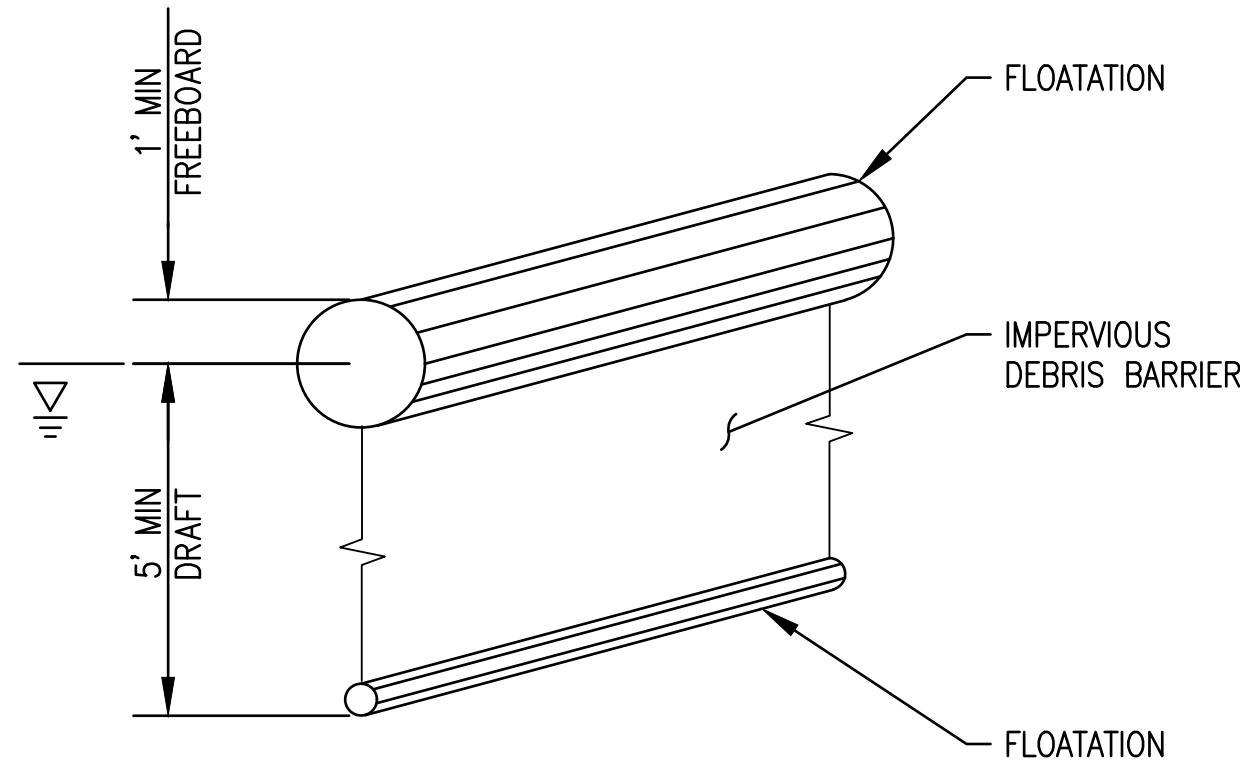


ORE PENINSULA REDEVELOPMENT
SKAGWAY, ALASKA

OVERALL SITE PLAN

DRAWN: JH	PROJECT NO.: 2100135
DESIGN: ED	SCALE: AS SHOWN
CHECKED: RR	DATE: 6/17/2022
DRAWING NO.	G8.00
SHEET NO.	OF

30% DESIGN - NOT FOR CONSTRUCTION

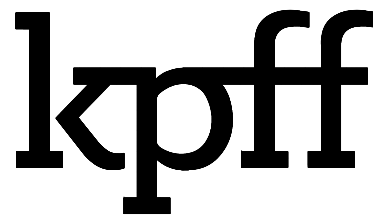


1 DEBRIS BOOM
D1.00 NTS

NOTES

- 1. CONTRACTOR TO ADJUST TESC MEASURES TO MINIMIZE IMPACT TO HARBOR OPERATIONS DURING EACH CONSTRUCTION PHASE.
- 2. CONTRACTOR TO PROVIDE ANCHORING AS REQUIRED TO PREVENT BOOM FROM FLOATING OUTSIDE PROJECT LIMITS, LOCATE AS NEEDED FOR IN WATER/OVER WATER WORK.

Plotted: Jun 17, 2022 - 2:56pm d:\u Layout: D2.00
M:\2021\2100135 Skagway Ore Peninsula Multi-Use Dock\Drawings\Current\2100135_D2.00 TESC Details.dwg



1601 5th Avenue, Suite 1300
Seattle, Washington 98101
(206) 382-0600 Fax (206) 382-0500

NO.	DATE	BY	REVISION



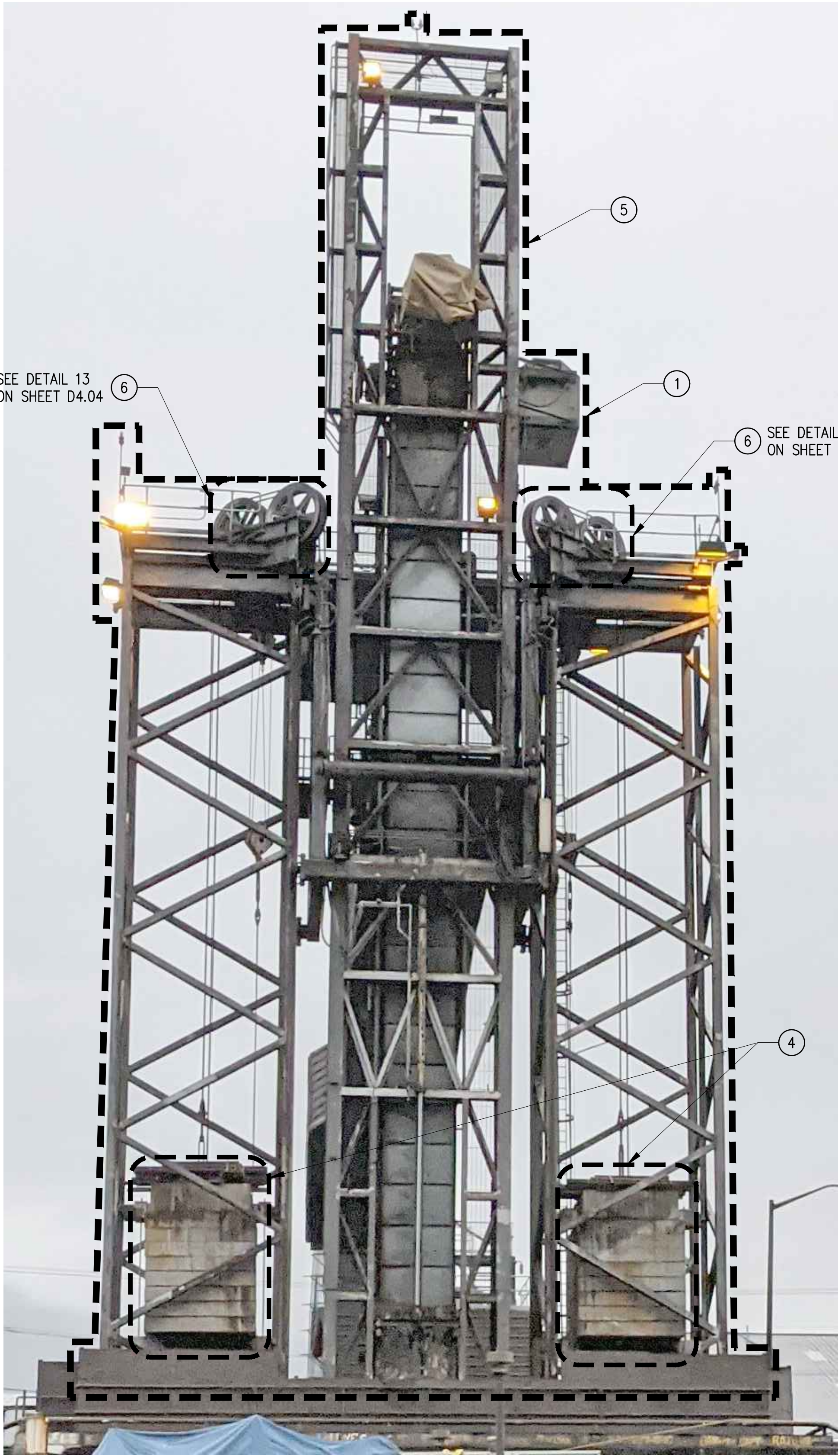
ORE PENINSULA REDEVELOPMENT
SKAGWAY, ALASKA

TESC DETAILS

DRAWN: JH	PROJECT NO.: 2100135
DESIGN: ED	SCALE: AS SHOWN
CHECKED: RR	DATE: 6/17/2022
DRAWING NO.	D2.00
SHEET NO.	OF

30% DESIGN - NOT FOR CONSTRUCTION

Plotted: Jun 17, 2022 - 3:33pm d:\u00212100135 Skagway Ore Peninsula Multi-Use Dock Drawings\Current\2100135_D4-00 Demolition Ore Loader.dwg
M:\2021\2100135 Skagway Ore Peninsula Multi-Use Dock Drawings\Current\2100135_D4-00 Demolition Ore Loader.dwg



KEY NOTES

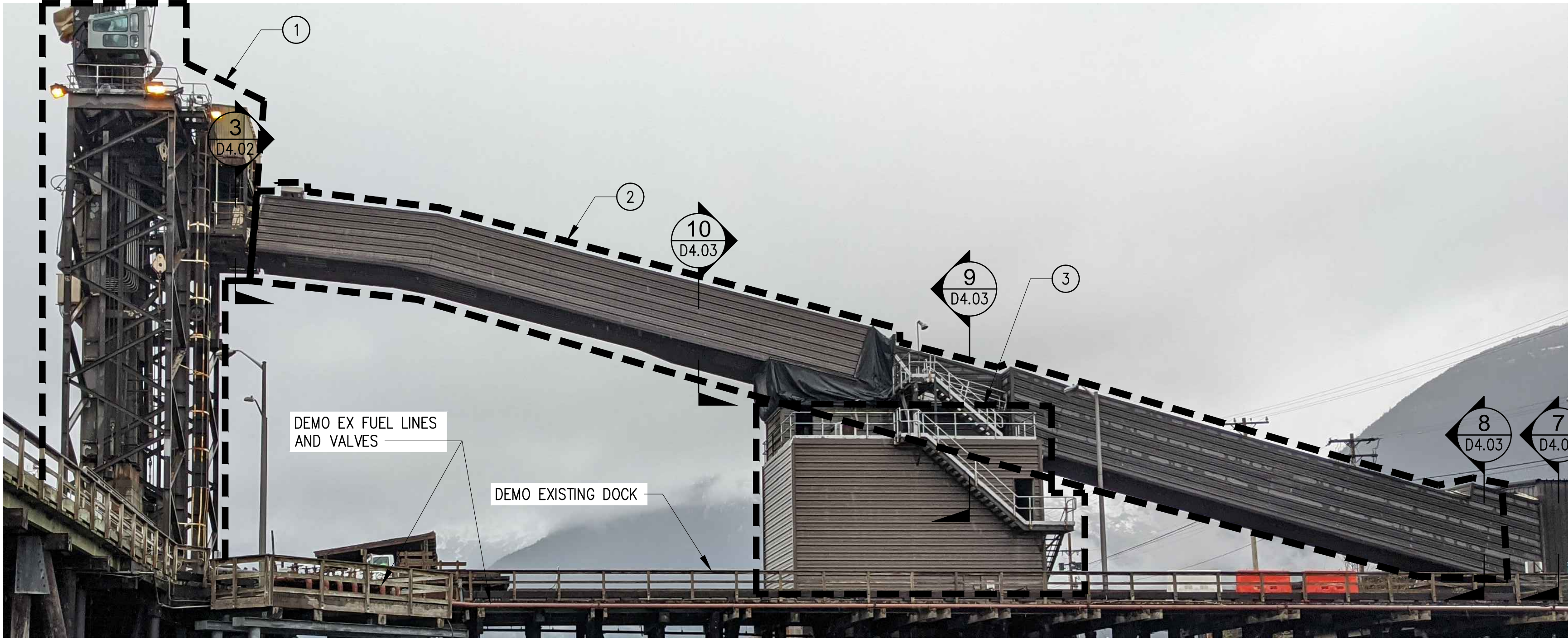
- ① ORE LOADER
- ② CONVEYOR NO. 2
- ③ CONVEYOR NO. 2, DRIVE TOWER
- ④ LOADING BOOM CONCRETE COUNTERWEIGHT
- ⑤ LOADING BOOM
- ⑥ LOADING BOOM HOIST COUNTERWEIGHT SHEAVES

LEGEND

DEMOLITION STRUCTURES

GENERAL DEMO NOTES

- 1. SEE SHEET D1.00 FOR PHOTO ORIENTATION AND LOCATION.
- 2. THE INTENT OF THE DEMOLITION PHOTOS ARE TO SHOW GENERAL SCOPE OF ITEMS TO BE REMOVED/DEMOLISHED. THE PHOTOS ARE FOR REFERENCE ONLY AND TO HIGHLIGHT ITEMS IN THE FOREGROUND TO BE REMOVED/DEMOLISHED. ITEMS IN THE BACKGROUND THAT ARE NOT IDENTIFIED MAY REQUIRE DEMOLITION, SEE DEMOLITION PLAN FOR EXTENTS OF WORK. THE CONTRACTOR SHALL VISIT THE SITE AND SURVEY THE SCOPE OF REMOVAL.
- 3. ALL PILES THAT ARE IDENTIFIED TO BE DEMOLISHED ARE TO BE FULLY EXTRACTED.
- 4. THE DEMOLITION BOUNDARY ILLUSTRATES APPROXIMATE EXTENTS OF DEMOLITION ABOVE THE WATER SURFACE AND GROUND. ADDITIONAL DEMOLITION IS REQUIRED BELOW GROUND AND WATER SURFACE.
- 5. UNLESS SPECIFICALLY NOTED OTHERWISE, DEMOLISH IS DEFINED AS COMPLETE DEMOLITION, REMOVAL, AND SATISFACTORY DISPOSAL OR RECYCLING.
- 6. CONTRACTOR SHALL PROTECT-IN-PLACE ALL STRUCTURES, UTILITIES AND OBJECTS NOT IDENTIFIED AS BEING DEMOLISHED ON THE PLANS. ANY DAMAGE TO ITEMS NOT BEING DEMOLISHED SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT THEIR EXPENSE.
- 7. PRIOR TO COMMENCING DEMOLITION ACTIVITIES, THE CONTRACTOR SHALL IMPLEMENT TEMPORARY EROSION AND SEDIMENTATION CONTROL (TESC). NO DEMOLITION MATERIAL OR DEBRIS SHALL BE ALLOWED TO ENTER THE WATER.



P2 PHOTO

ELEVATION VIEW – SIDE OF LOADER AND CONVEYOR

kpff

1601 5th Avenue, Suite 1300
Seattle, Washington 98101
(206) 382-0600 Fax (206) 382-0500

NO.	DATE	BY	REVISION



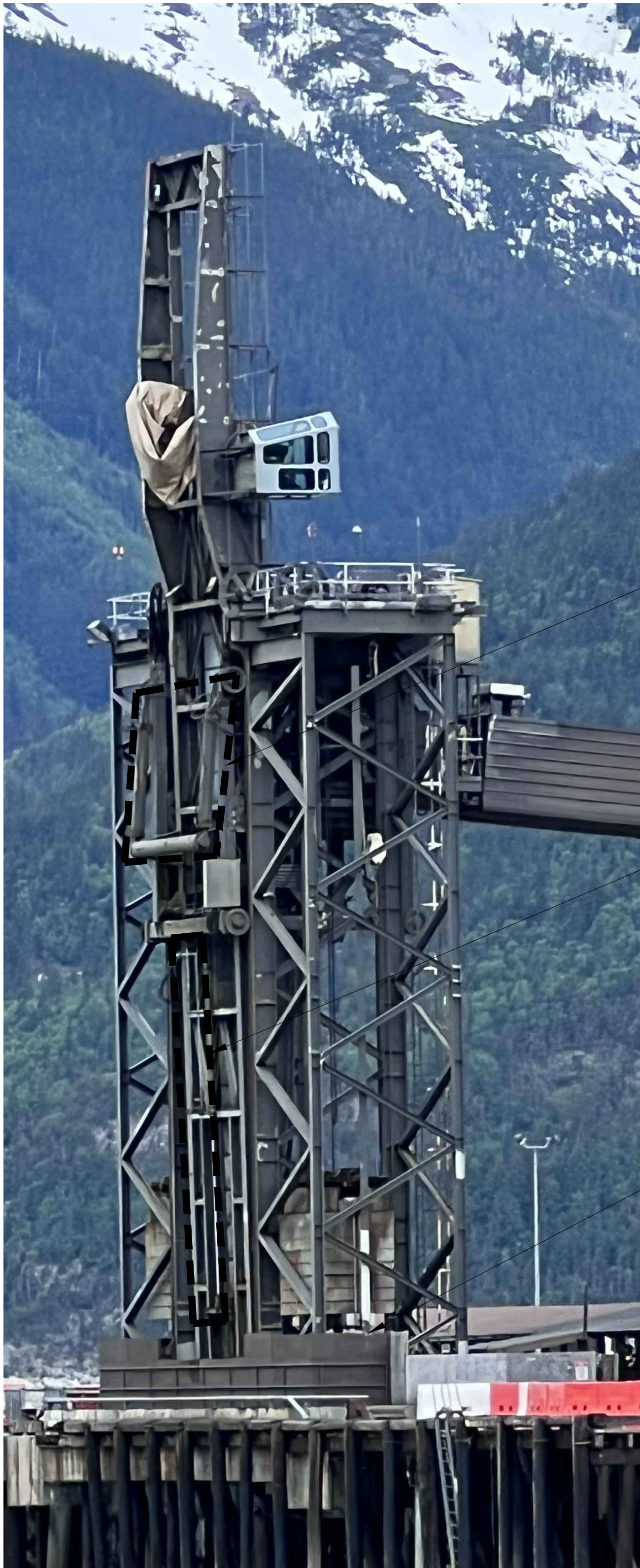
ORE PENINSULA REDEVELOPMENT
SKAGWAY, ALASKA

ORE LOADER DEMOLITION ELEVATIONS

DRAWN: JH	PROJECT NO.: 2100135
DESIGN: ED	SCALE: AS SHOWN
CHECKED: RR	DATE: 6/17/2022
DRAWING NO.	D4.00
SHEET NO.	OF

30% DESIGN - NOT FOR CONSTRUCTION

Plotted: Jun 17, 2022 - 3:36pm
M:\2021\2100135 Skagway Ore Peninsula Multi-Use Dock Drawings\Current\D4.01 Demolition Ore Loader Details - 1.dwg



P13 PHOTO
ELEVATION VIEW – SHIP LOADER



P14 PHOTO
ELEVATION VIEW – BACK OF SHIP LOADER

- KEY NOTES**
- ① HYDRAULIC CYLINDERS
 - ② HYDRAULIC POWER UNIT ROOM
 - ③ LOADING BOOM HOISTING EQUIPMENT
 - ④ LOADING BOOM COUNTERWEIGHT SHEAVES

LEGEND

— — — — — DEMOLITION STRUCTURES

kpff

1601 5th Avenue, Suite 1300
Seattle, Washington 98101
(206) 382-0600 Fax (206) 382-0500

NO.	DATE	BY	REVISION



ORE PENINSULA REDEVELOPMENT
SKAGWAY, ALASKA

DEMOLITION ORE LOADER DETAILS - 1

DRAWN: JH	PROJECT NO.: 2100135
DESIGN: ED	SCALE: AS SHOWN
CHECKED: RR	DATE: 6/17/2022
DRAWING NO.	D4.01
SHEET NO.	OF

30% DESIGN - NOT FOR CONSTRUCTION



3
D4.00

DEMO CONVEYOR NO. 2 FROM
HYDRAULIC POWER UNIT ROOM



4
D4.01

DEMO HYDRAULIC POWER UNIT



5
D4.01

DEMO SHIP LOADER
BOOM CONTROL PANEL



6
D4.01

DEMO SHIP LOADER BOOM
CONTROL JUNCTION BOX

kpff

1601 5th Avenue, Suite 1300
Seattle, Washington 98101
(206) 382-0600 Fax (206) 382-0500

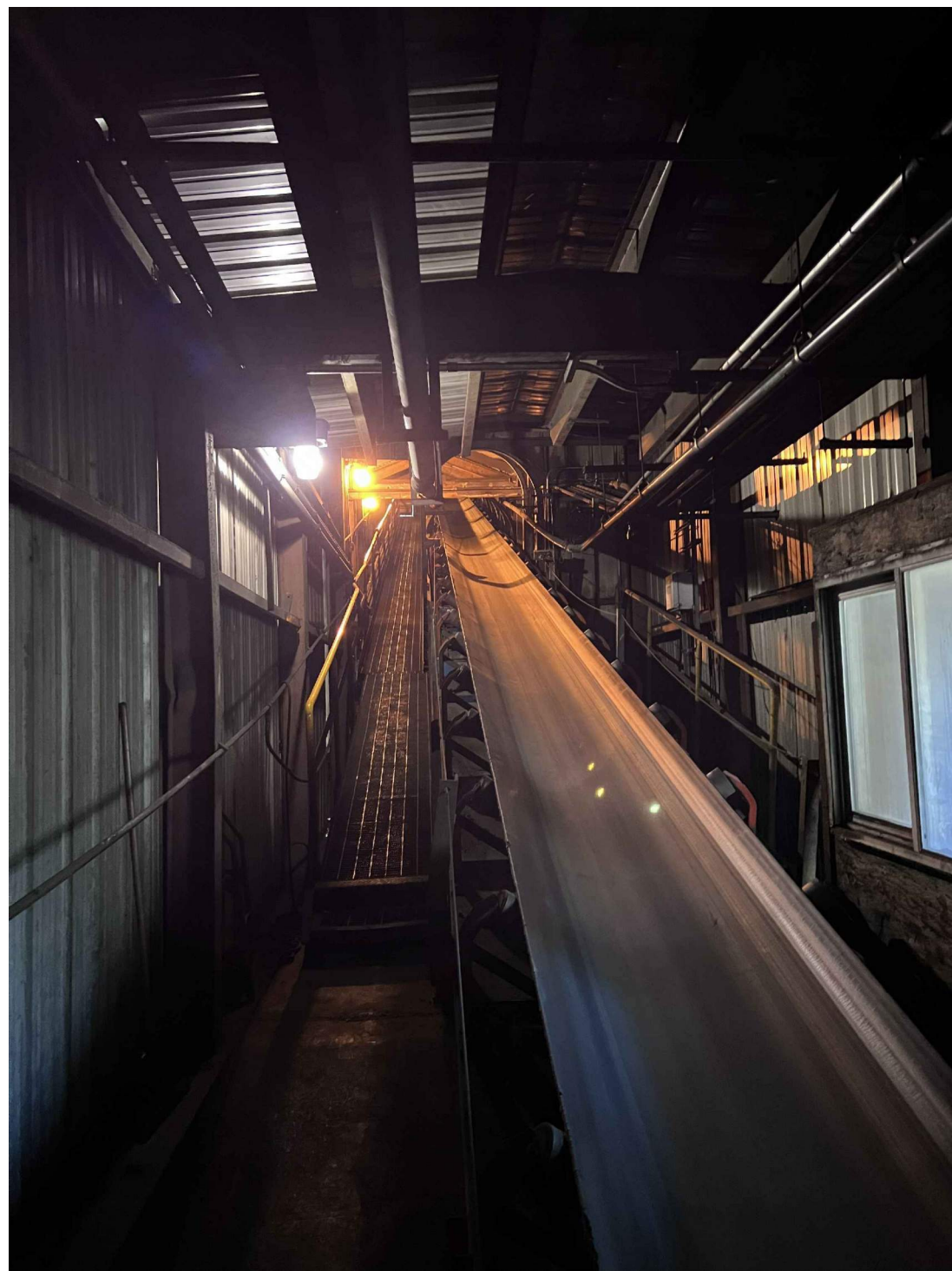
NO.	DATE	BY	REVISION



ORE PENINSULA REDEVELOPMENT
SKAGWAY, ALASKA

ORE LOADER DEMOLITION DETAILS - 2

DRAWN: JH	PROJECT NO.: 2100135
DESIGN: ED	SCALE: AS SHOWN
CHECKED: RR	DATE: 6/17/2022
DRAWING NO.	D4.02
SHEET NO.	OF



7 DEMO CONVEYOR NO. 2



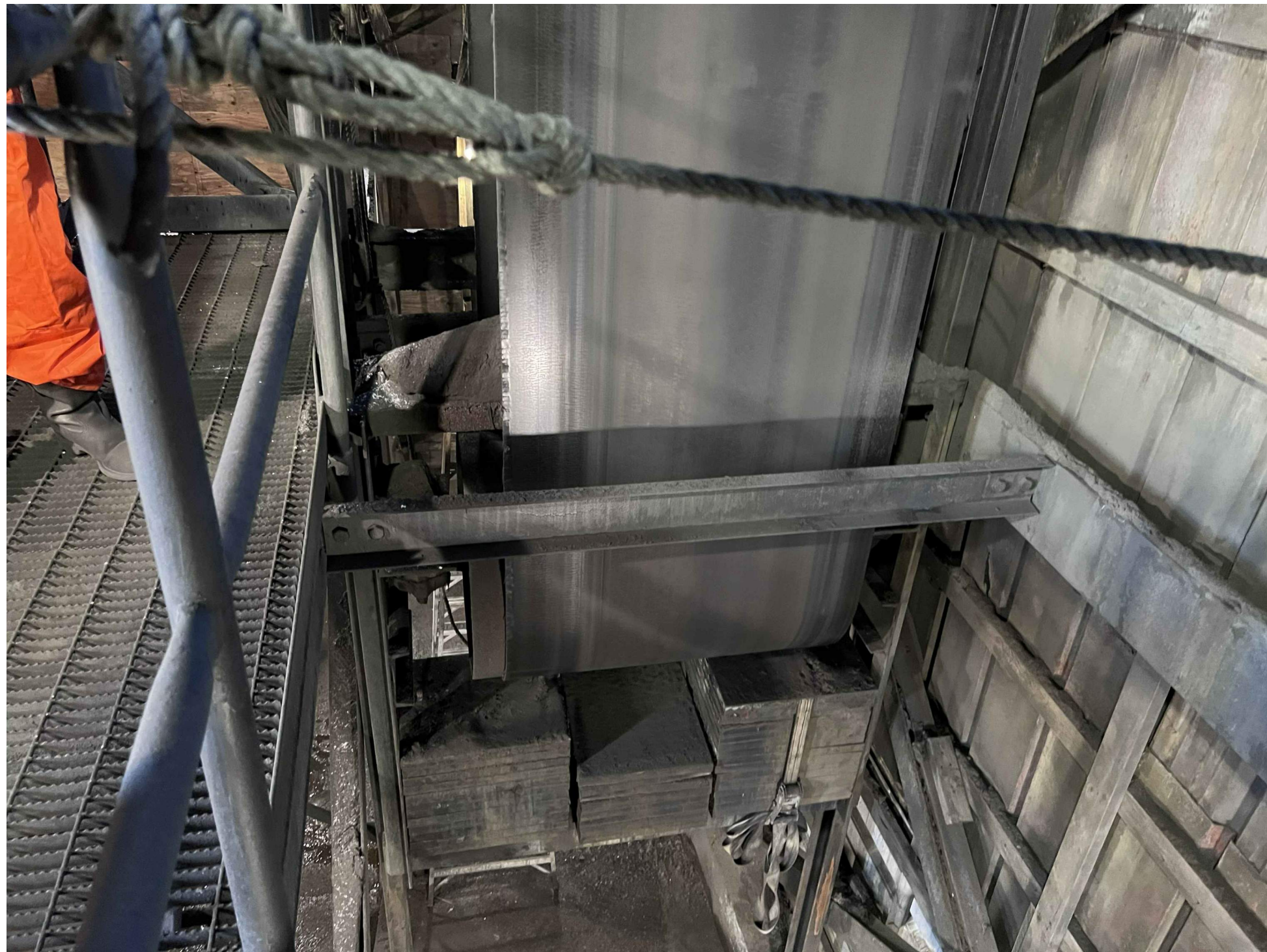
8 DEMO CONVEYOR NO. 2



9 DEMO CONVEYOR NO. 2 DRIVE



9 DEMO CONVEYOR NO. 2
COUNTERWEIGHT TENSIONER



9 DEMO CONVEYOR NO. 2
COUNTERWEIGHT TENSIONER



10 DEMO CONVEYOR NO. 2

Plotted: Jun 17, 2022 - 3:42pm
M:\2021\2100135 Skagway Ore Peninsula Multi-use Dock Drawings\Current\Drawings\Current\4.03 ORE LOADER DEMOLITION DETAILS - 3.dwg

kpff

1601 5th Avenue, Suite 1300
Seattle, Washington 98101
(206) 382-0800 Fax (206) 382-0500

NO.	DATE	BY	REVISION

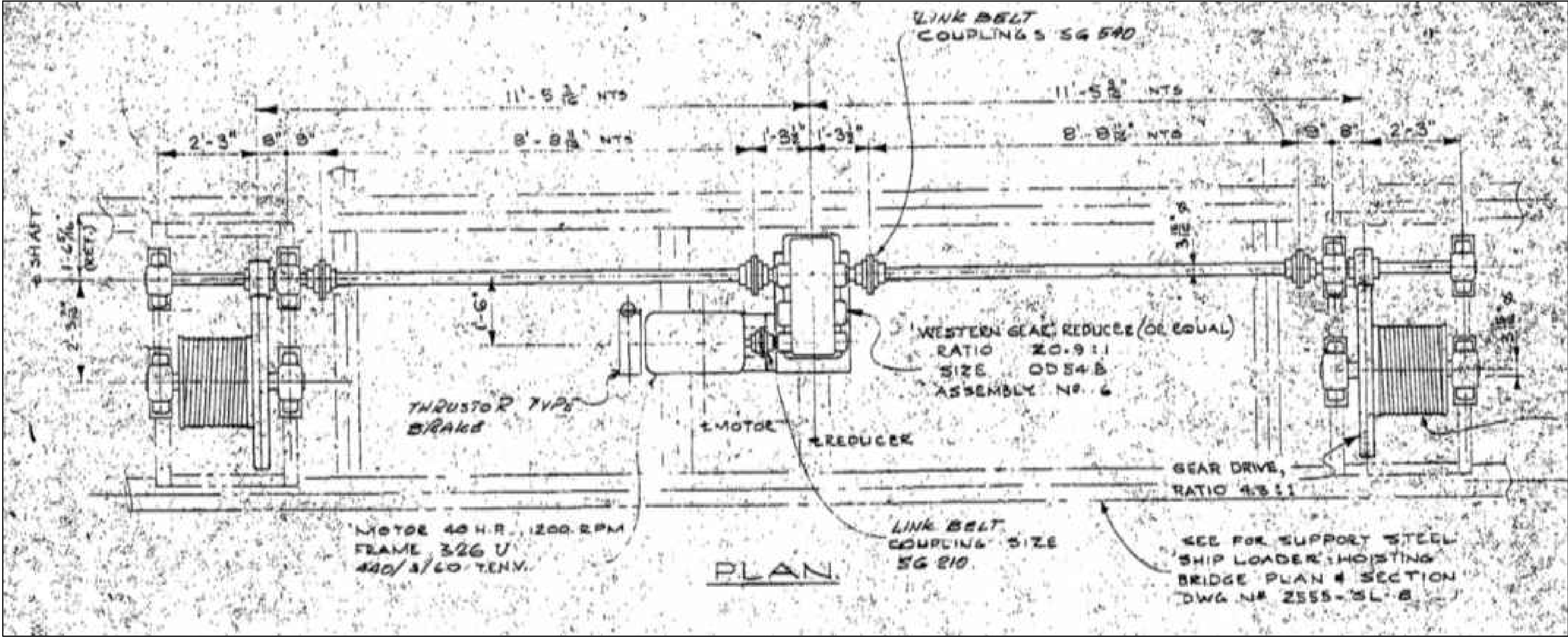


**ORE PENINSULA REDEVELOPMENT
SKAGWAY, ALASKA**

ORE LOADER DEMOLITION DETAILS - 3

DRAWN: JH	PROJECT NO.: 2100135
DESIGN: ED	SCALE: AS SHOWN
CHECKED: RR	DATE: 6/17/2022
DRAWING NO.	D4.03
SHEET NO.	OF

30% DESIGN - NOT FOR CONSTRUCTION



11 DEMO LOADING BOOM HOIST EQUIPMENT



12 DEMO LOADING BOOM HOIST MOTOR AND GEAR REDUCER



13 DEMO LOADING BOOM HOIST COUNTERWEIGHT SHEAVES AT HOIST PLATFORM



14 DEMO LOADING BOOM HOIST COUNTERWEIGHT SHEAVES AT SHIPLOADER BASE

Plotted: Jun 17, 2022 - 3:46pm
M:\2021\2100135 Skagway Ore Peninsula Multi-Use Dock Drawings\Current\D4.04 ORE LOADER DEMOLITION DETAILS - 4.dwg

kpff

1601 5th Avenue, Suite 1300
Seattle, Washington 98101
(206) 382-0600 Fax (206) 382-0500

NO.	DATE	BY	REVISION



ORE PENINSULA REDEVELOPMENT
SKAGWAY, ALASKA

ORE LOADER DEMOLITION DETAILS - 4

DRAWN: JH	PROJECT NO.: 2100135
DESIGN: ED	SCALE: AS SHOWN
CHECKED: RR	DATE: 6/17/2022
DRAWING NO.	D4.04
SHEET NO.	OF

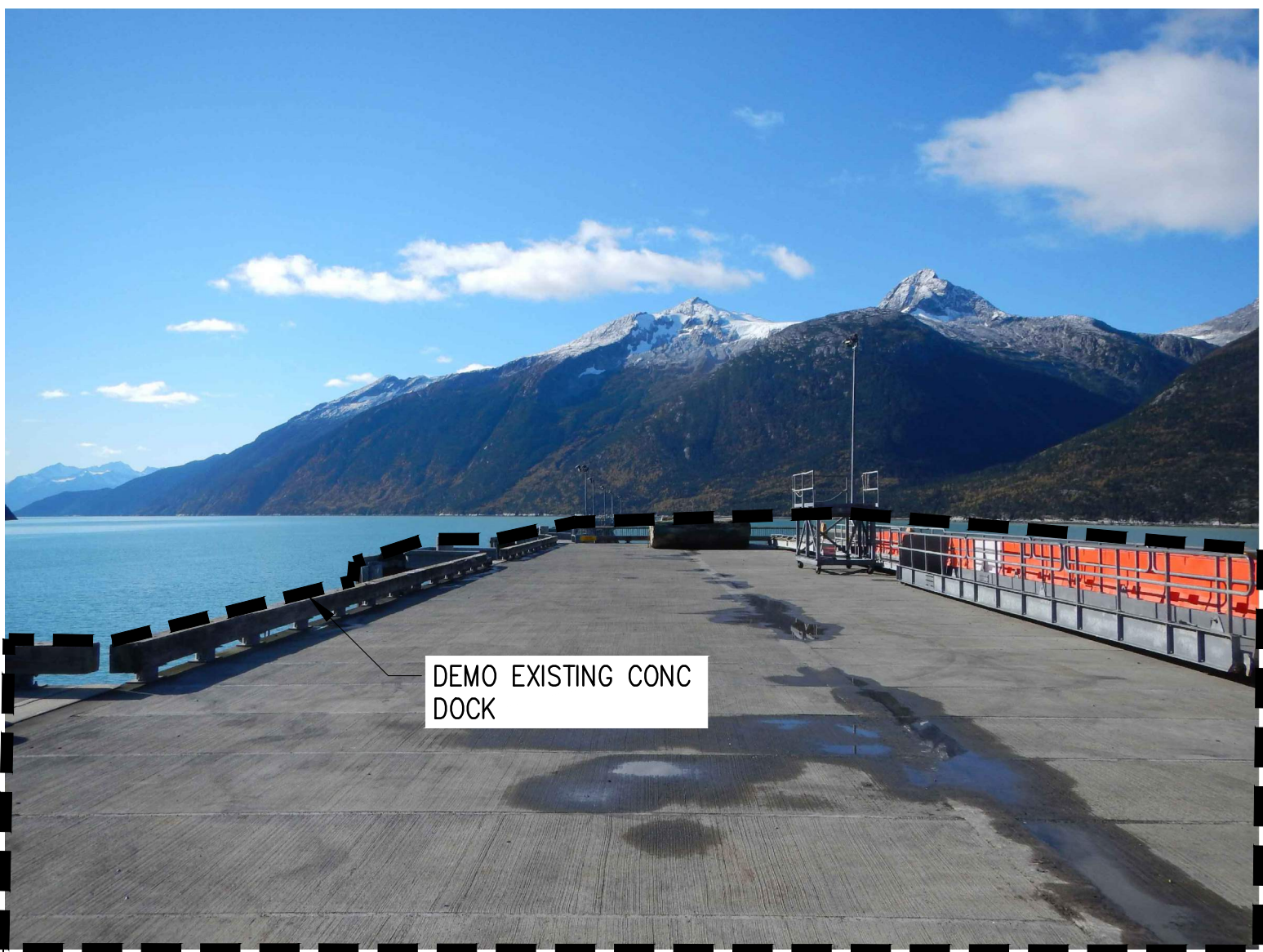
30% DESIGN - NOT FOR CONSTRUCTION

Plotted: Jun 17, 2022 - 3:47pm
M:\2021\2100135 Skagway Ore Peninsula Multi-Use Dock Drawings\Current\2100135_D4.10 Demolition Details.dwg
dvw Layout: D4.10



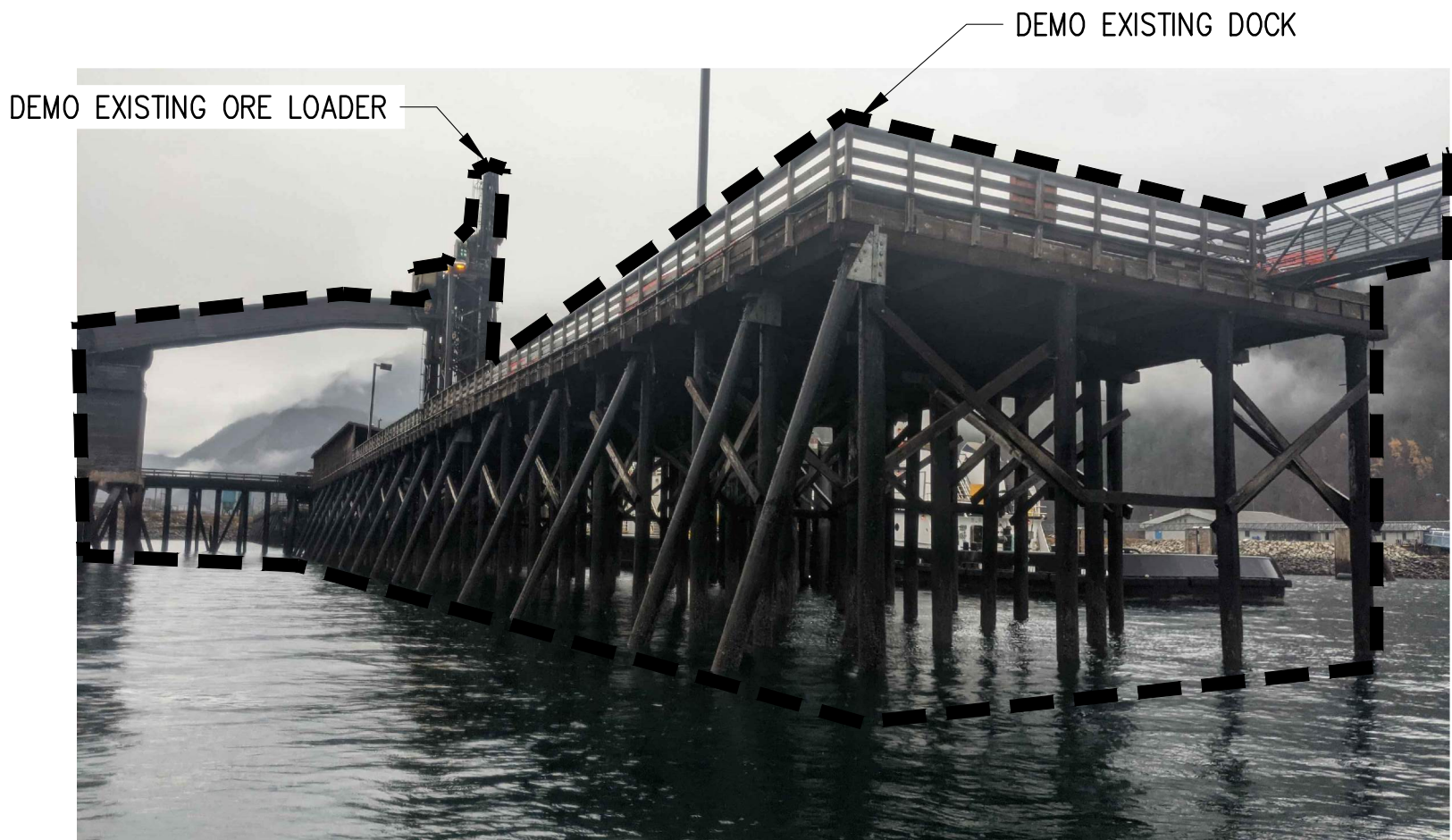
P3 PHOTO

EXISTING CATWALK AND DOLPHINS



P4 PHOTO

EXISTING CONC DOCK



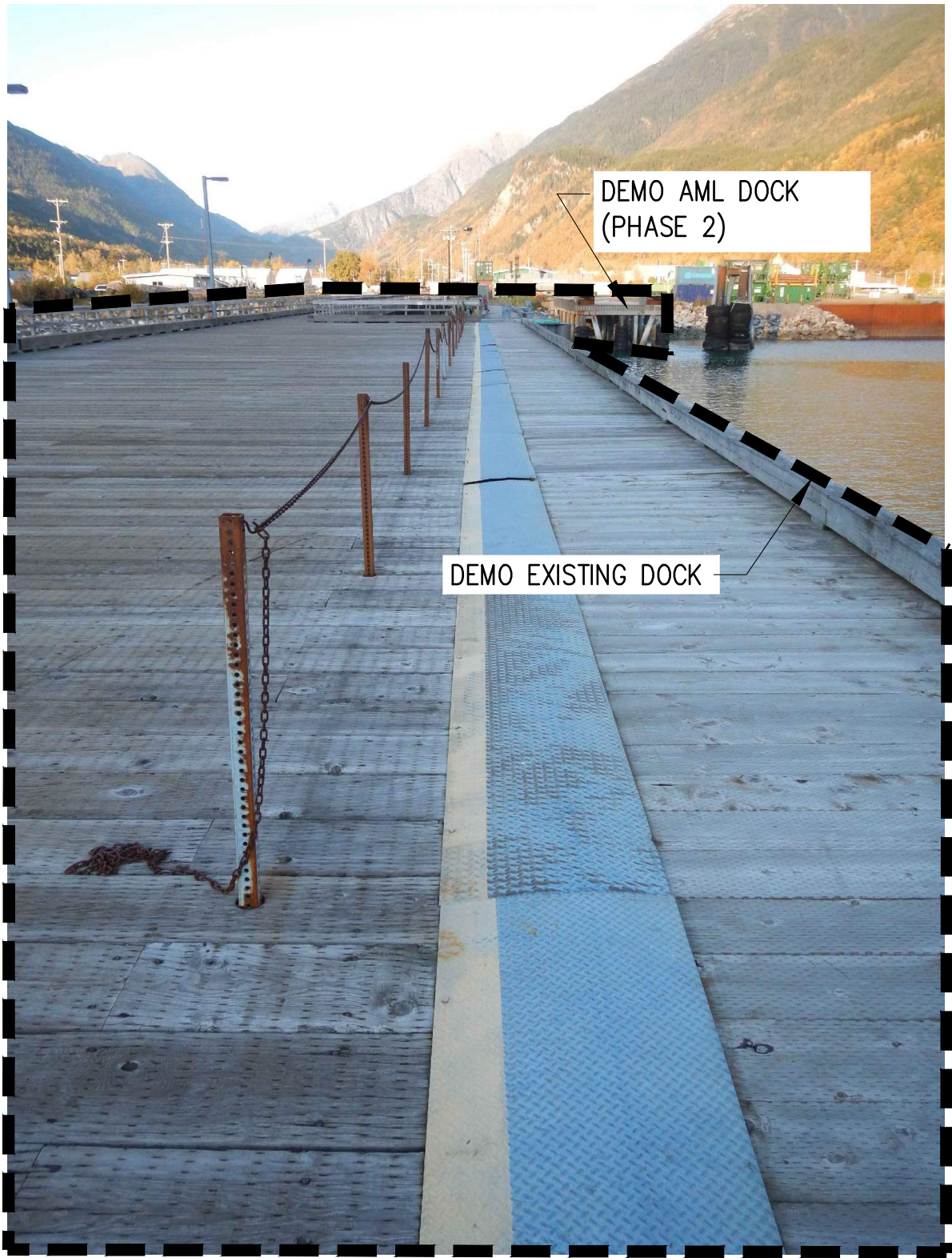
P5 PHOTO

EXISTING TIMBER DOCK AND ORE LOADER



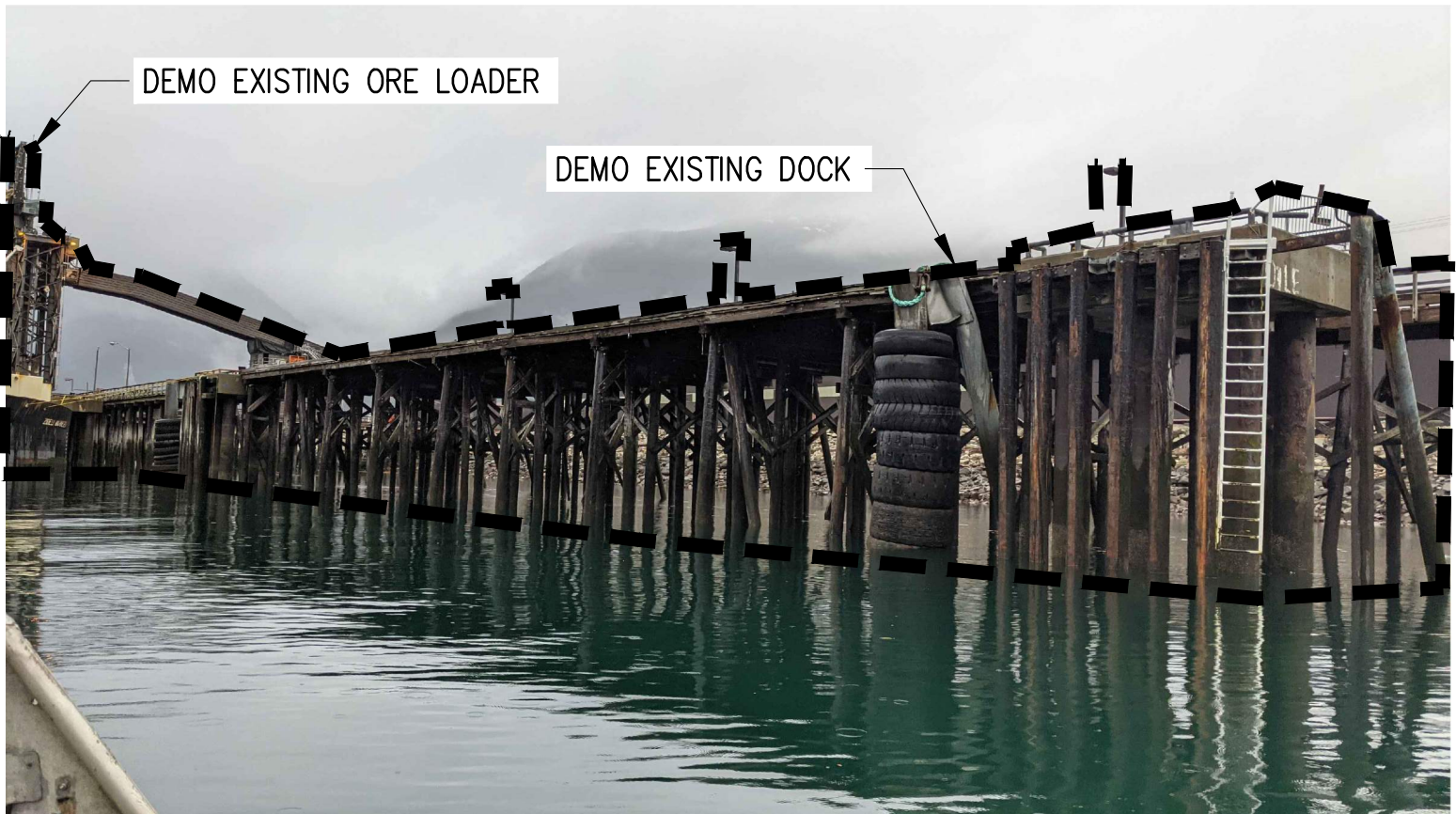
P6 PHOTO

ORE LOADER PILES



P7 PHOTO

EXISTING TIMBER DOCK



P8 PHOTO

EXISTING TIMBER DOCK AND ORE LOADER

GENERAL DEMO NOTES

1. SEE SHEET D1.00 FOR PHOTO ORIENTATION AND LOCATION.
2. THE INTENT OF THE DEMOLITION PHOTOS ARE TO SHOW GENERAL SCOPE OF ITEMS TO BE REMOVED/DEMOLISHED. THE PHOTOS ARE FOR REFERENCE ONLY AND TO HIGHLIGHT ITEMS IN THE FOREGROUND TO BE REMOVED/DEMOLISHED. ITEMS IN THE BACKGROUND THAT ARE NOT IDENTIFIED MAY REQUIRE DEMOLITION, SEE DEMOLITION PLAN FOR EXTENTS OF WORK. THE CONTRACTOR SHALL VISIT THE SITE AND SURVEY THE SCOPE OF REMOVAL.
3. ALL PILES THAT ARE IDENTIFIED TO BE DEMOLISHED ARE TO BE FULLY EXTRACTED.
4. THE DEMOLITION BOUNDARY ILLUSTRATES APPROXIMATE EXTENTS OF DEMOLITION ABOVE THE WATER SURFACE AND GROUND. ADDITIONAL DEMOLITION IS REQUIRED BELOW GROUND AND WATER SURFACE.
5. UNLESS SPECIFICALLY NOTED OTHERWISE, DEMOLISH IS DEFINED AS COMPLETE DEMOLITION, REMOVAL, AND SATISFACTORY DISPOSAL OR RECYCLING.
6. CONTRACTOR SHALL PROTECT-IN-PLACE ALL STRUCTURES, UTILITIES AND OBJECTS NOT IDENTIFIED AS BEING DEMOLISHED ON THE PLANS. ANY DAMAGE TO ITEMS NOT BEING DEMOLISHED SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT THEIR EXPENSE.
7. PRIOR TO COMMENCING DEMOLITION ACTIVITIES, THE CONTRACTOR SHALL IMPLEMENT TEMPORARY EROSION AND SEDIMENTATION CONTROL (TESC). NO DEMOLITION MATERIAL OR DEBRIS SHALL BE ALLOWED TO ENTER THE WATER.

LEGEND

----- DEMOLITION STRUCTURES

kpff

1601 5th Avenue, Suite 1300
Seattle, Washington 98101
(206) 382-0600 Fax (206) 382-0500

NO.	DATE	BY	REVISION



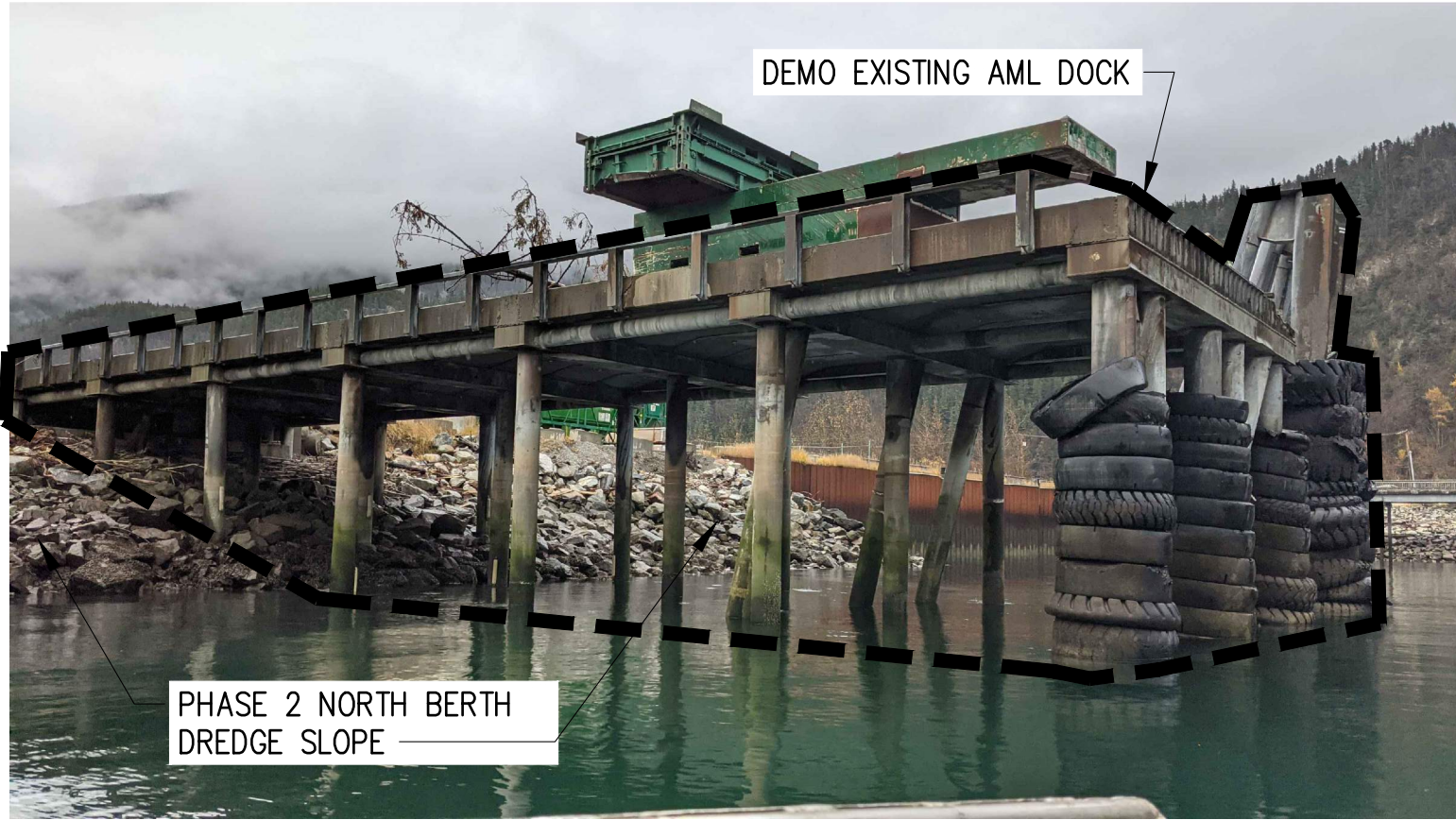
ORE PENINSULA REDEVELOPMENT
SKAGWAY, ALASKA

DEMOLITION DETAILS - 1

DRAWN: JH	PROJECT NO.: 2100135
DESIGN: ED	SCALE: AS SHOWN
CHECKED: RR	DATE: 6/17/2022
DRAWING NO.	D4.10
SHEET NO.	OF

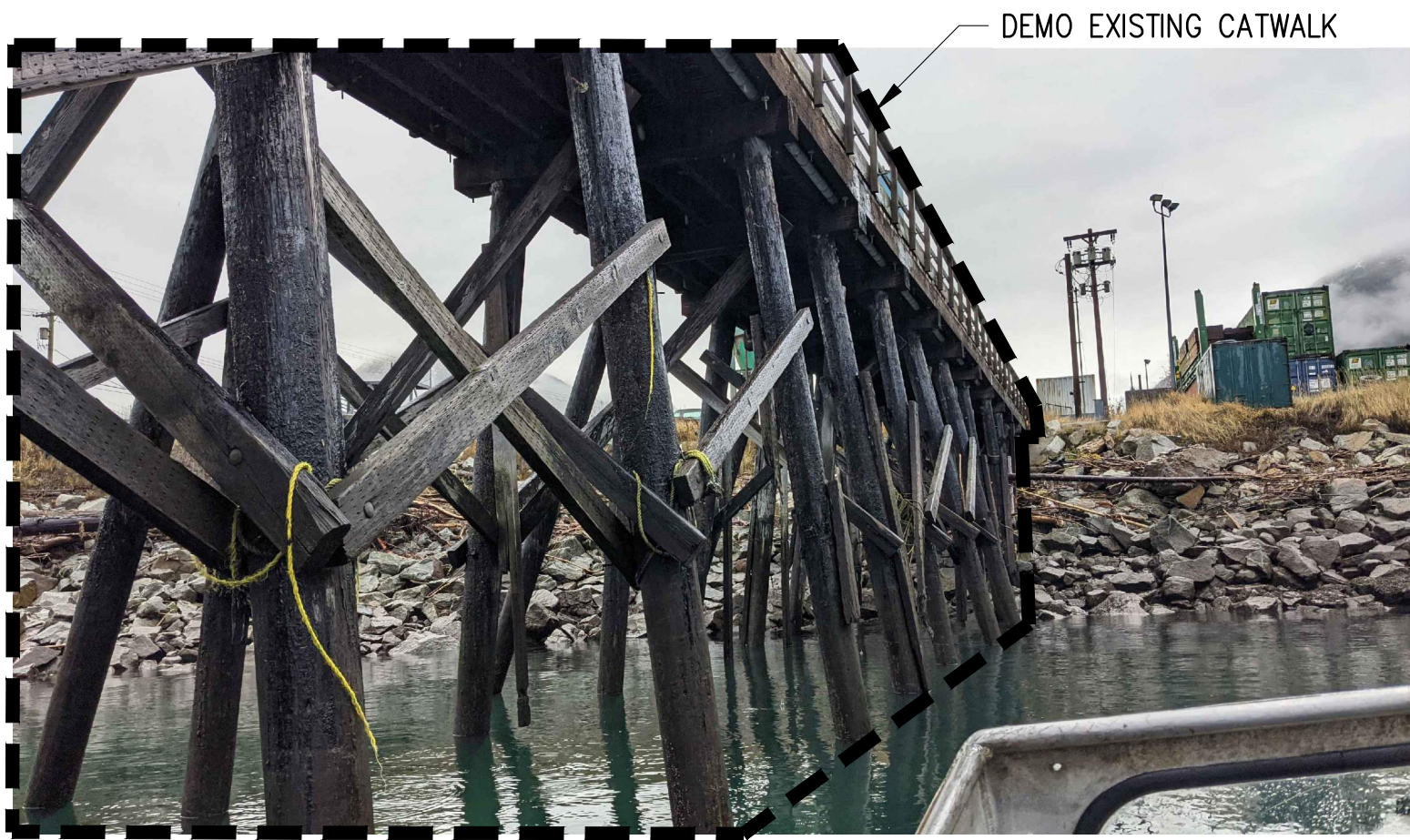
30% DESIGN - NOT FOR CONSTRUCTION

Plotted: Jun 17, 2022 - 3:49pm
M:\2021\2100135 Skagway Ore Peninsula Multi-Use Dock Drawings\Current\2100135_D4.11 Demolition Details.dwg



P9 PHOTO

EXISTING AML DOCK



P10 PHOTO

EXISTING STRUCTURE ADJACENT TO AML DOCK

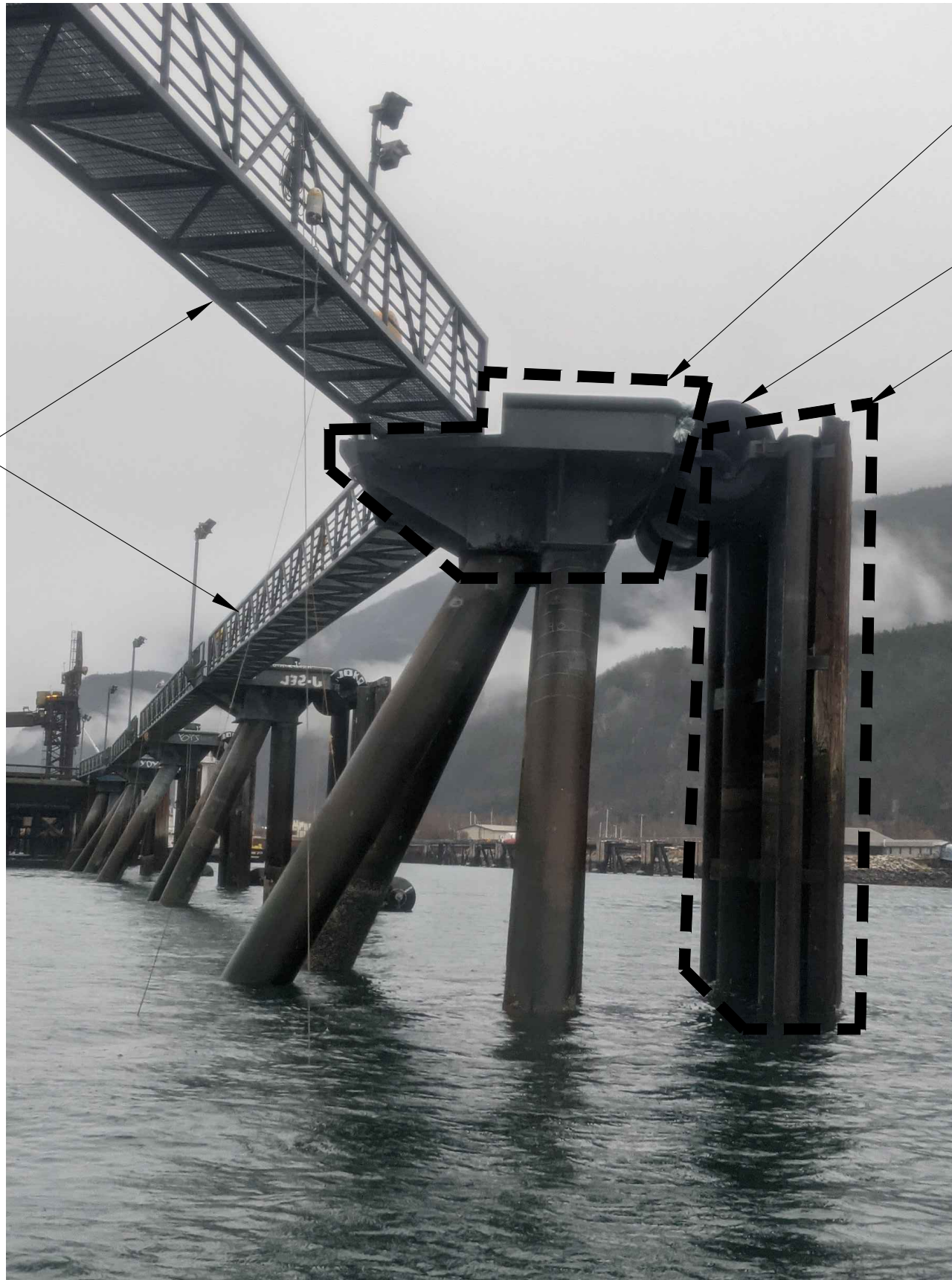


PHOTO 11

EXISTING DOLPHIN B

DEMOLISH EXISTING
DOLPHIN CAP, GRIND
OFF AT EXISTING PILE
TOP, PROTECT PILES

SALVAGE FENDERS

DEMOLISH EXISTING
FENDER PANELS AND
SUPPORT PILES



PHOTO 12

EXISTING DOLPHIN B

GENERAL DEMO NOTES

1. SEE SHEET D1.00 FOR PHOTO ORIENTATION AND LOCATION.
2. THE INTENT OF THE DEMOLITION PHOTOS ARE TO SHOW GENERAL SCOPE OF ITEMS TO BE REMOVED/DEMOLISHED. THE PHOTOS ARE FOR REFERENCE ONLY AND TO HIGHLIGHT ITEMS IN THE FOREGROUND TO BE REMOVED/DEMOLISHED. ITEMS IN THE BACKGROUND THAT ARE NOT IDENTIFIED MAY REQUIRE DEMOLITION, SEE DEMOLITION PLAN FOR EXTENTS OF WORK. THE CONTRACTOR SHALL VISIT THE SITE AND SURVEY THE SCOPE OF REMOVAL.
3. ALL PILES THAT ARE IDENTIFIED TO BE DEMOLISHED ARE TO BE FULLY EXTRACTED.
4. THE DEMOLITION BOUNDARY ILLUSTRATES APPROXIMATE EXTENTS OF DEMOLITION ABOVE THE WATER SURFACE AND GROUND. ADDITIONAL DEMOLITION IS REQUIRED BELOW GROUND AND WATER SURFACE.
5. UNLESS SPECIFICALLY NOTED OTHERWISE, DEMOLISH IS DEFINED AS COMPLETE DEMOLITION, REMOVAL, AND SATISFACTORY DISPOSAL OR RECYCLING.
6. CONTRACTOR SHALL PROTECT-IN-PLACE ALL STRUCTURES, UTILITIES AND OBJECTS NOT IDENTIFIED AS BEING DEMOLISHED ON THE PLANS. ANY DAMAGE TO ITEMS NOT BEING DEMOLISHED SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT THEIR EXPENSE.
7. PRIOR TO COMMENCING DEMOLITION ACTIVITIES, THE CONTRACTOR SHALL IMPLEMENT TEMPORARY EROSION AND SEDIMENTATION CONTROL (TESC). NO DEMOLITION MATERIAL OR DEBRIS SHALL BE ALLOWED TO ENTER THE WATER.

LEGEND

--- DEMOLITION STRUCTURES

kpff

1601 5th Avenue, Suite 1300
Seattle, Washington 98101
(206) 382-0600 Fax (206) 382-0500

NO.	DATE	BY	REVISION



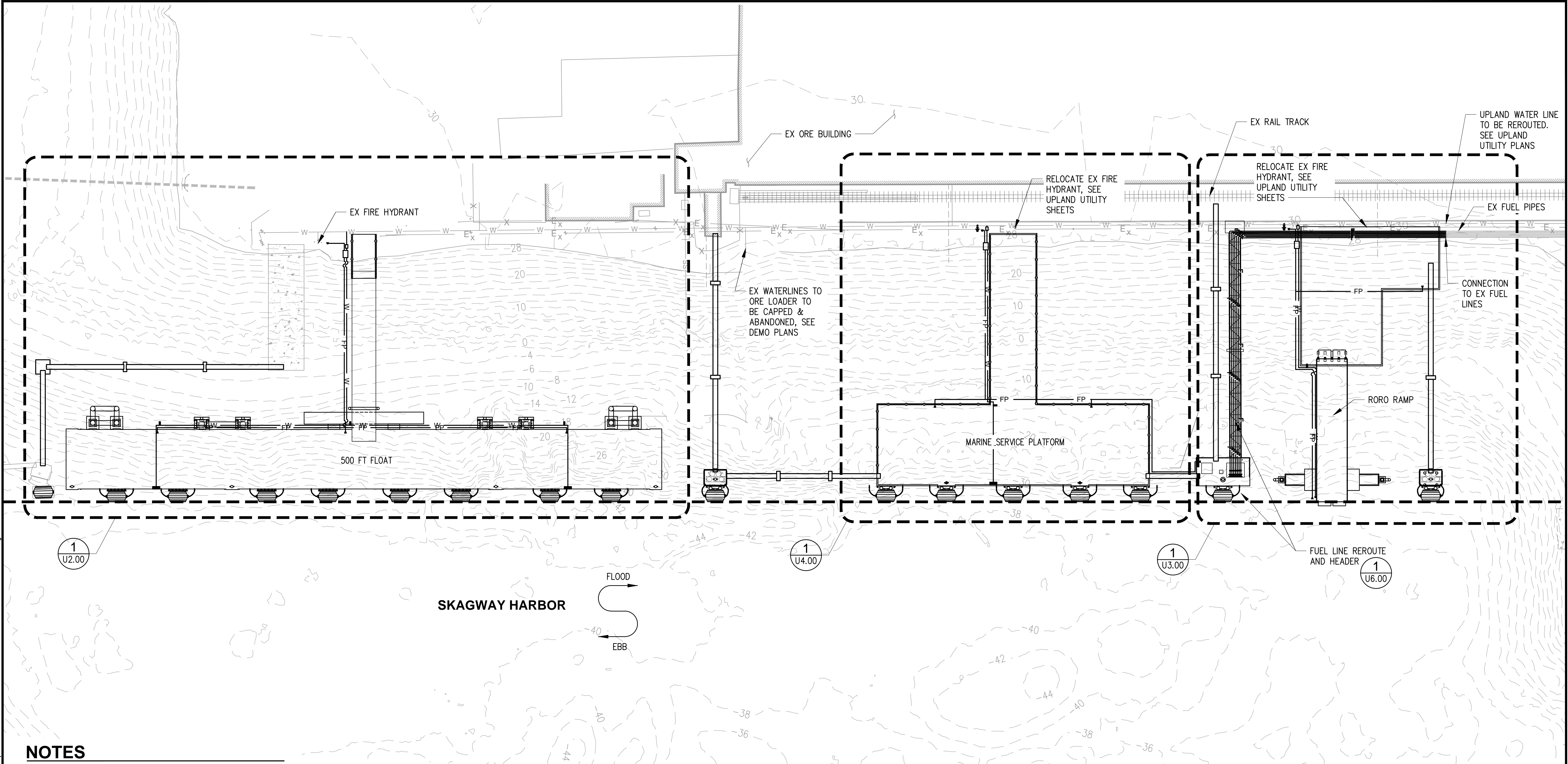
ORE PENINSULA REDEVELOPMENT
SKAGWAY, ALASKA

DEMOLITION DETAILS - 2

DRAWN: JH	PROJECT NO.: 2100135
DESIGN: ED	SCALE: AS SHOWN
CHECKED: RR	DATE: 6/17/2022
DRAWING NO.	D4.11
SHEET NO.	OF

30% DESIGN - NOT FOR CONSTRUCTION

Plotted: Jun 17, 2022 - 3:54pm
M:\2021\2100135 Skagway Ore Peninsula Multi-Use Dock Drawings\Current\2100135_U1.00 Water & Fire Utilities Overall Site Plan.dwg
dva Layout: U1.00



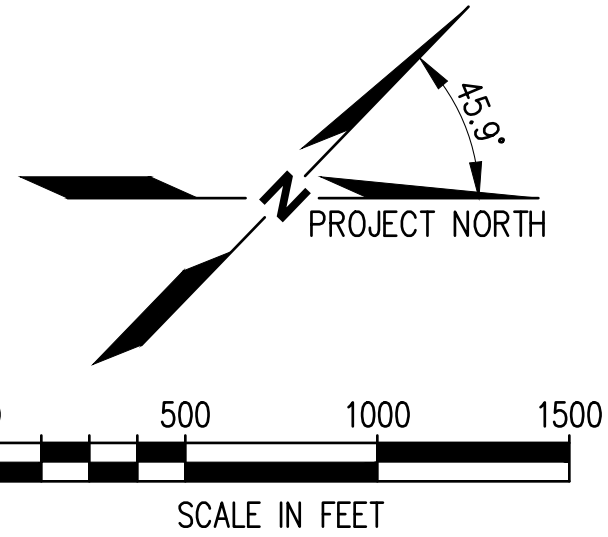
NOTES

1. UPLAND CIVIL CURRENTLY IN DEVELOPMENT.
2. ELECTRICAL DESIGN CURRENTLY IN DEVELOPMENT. SEE ELECTRICAL PLANS FOR CURRENT PROPOSED VESSEL AND DOCK POWER SERVICE LINES.

LEGEND

- FP FIRE PROTECTION LINE
- W DOMESTIC WATER LINE
- F 6" FUEL LINE

1 UPLAND UTILITY SITE PLAN
SCALE: 1" = 500'



kpff

1601 5th Avenue, Suite 1300
Seattle, Washington 98101
(206) 382-0600 Fax (206) 382-0500

NO.	DATE	BY	REVISION

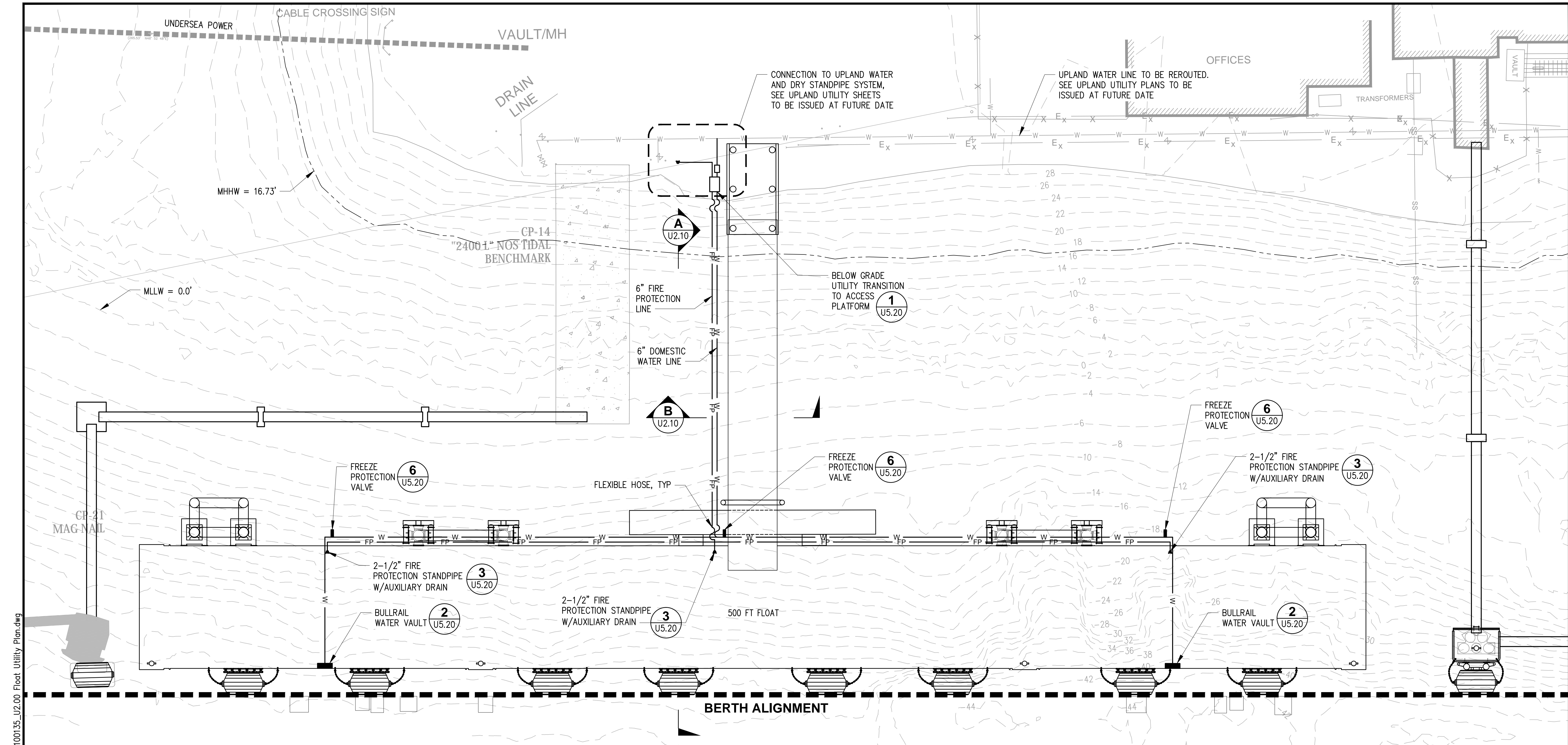


ORE PENINSULA REDEVELOPMENT
SKAGWAY, ALASKA

OVERALL UTILITY PLAN

DRAWN: JH	PROJECT NO.: 2100135
DESIGN: ED	SCALE: AS SHOWN
CHECKED: RR	DATE: 6/17/2022
DRAWING NO.	U1.00
SHEET NO.	OF

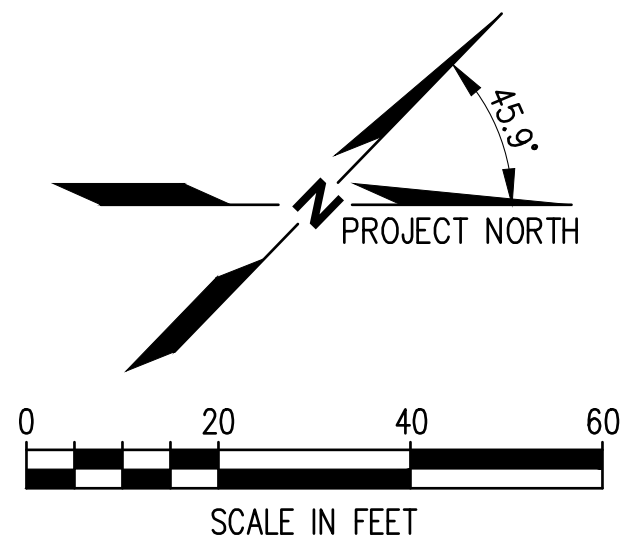
30% DESIGN - NOT FOR CONSTRUCTION



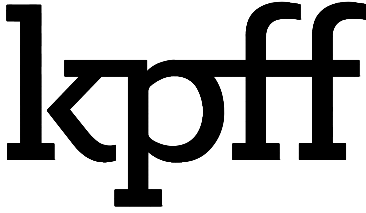
LEGEND

- FP 6" FIRE PROTECTION LINE
- W 6" DOMESTIC WATER LINE

1 **FLOAT UTILITY SITE PLAN**
U1.00 SCALE: 1" = 20'



Plotted: Jun 17, 2022 - 3:55pm
M:\2021\2100135 Skagway Ore Peninsula Multi-Use Dock Drawings\Current\2100135_U2.00 Float Utility Plan.dwg
dyu Layout: U2.00



1601 5th Avenue, Suite 1300
Seattle, Washington 98101
(206) 382-0600 Fax (206) 382-0500

NO.	DATE	BY	REVISION

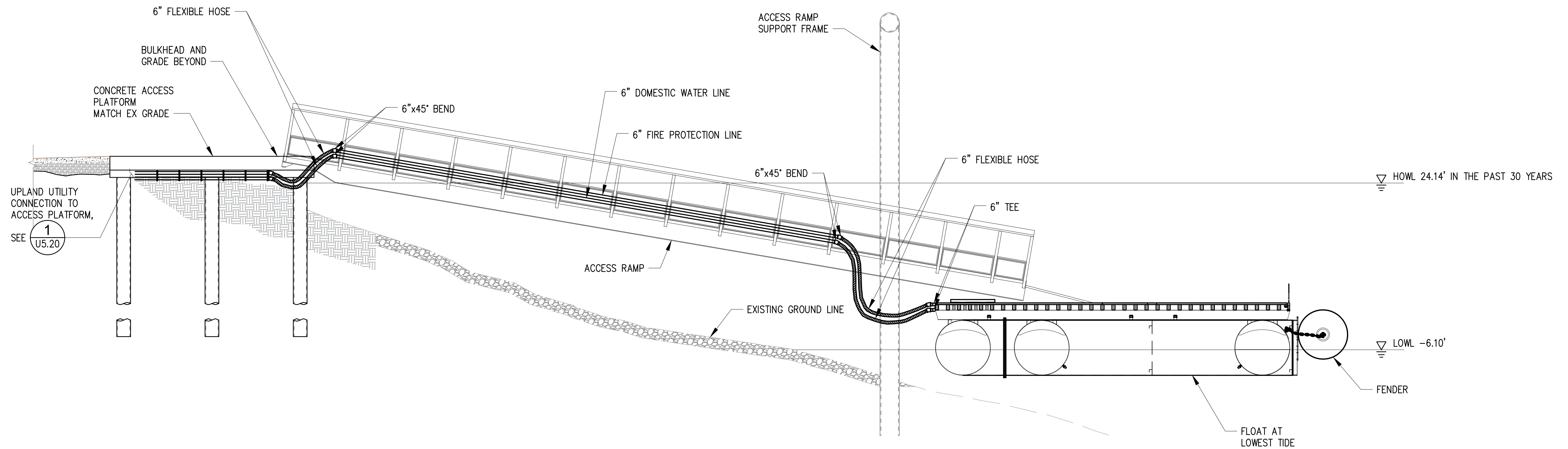


ORE PENINSULA REDEVELOPMENT
SKAGWAY, ALASKA

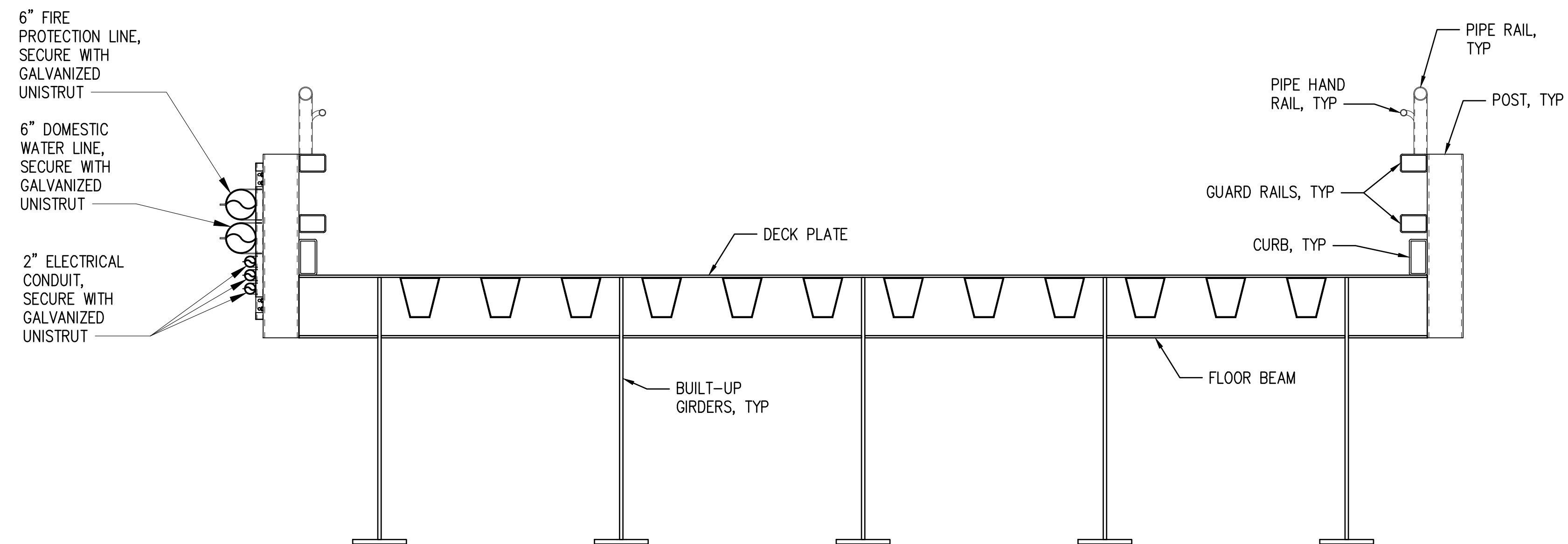
FLOAT UTILITY PLAN

DRAWN: JH	PROJECT NO.: 2100135
DESIGN: ED	SCALE: AS SHOWN
CHECKED: RR	DATE: 6/17/2022
DRAWING NO.	U2.00
SHEET NO.	OF

30% DESIGN - NOT FOR CONSTRUCTION



A
U2.00
CRUISE DOCK ACCESS RAMP FLEXIBLE HOSE CONNECTION
SCALE: NTS



B
U2.00
CRUISE DOCK ACCESS RAMP CONDUIT SUPPORTS
SCALE: NTS

kpff

1601 5th Avenue, Suite 1300
Seattle, Washington 98101
(206) 382-0600 Fax (206) 382-0500

NO.	DATE	BY	REVISION



ORE PENINSULA REDEVELOPMENT
SKAGWAY, ALASKA

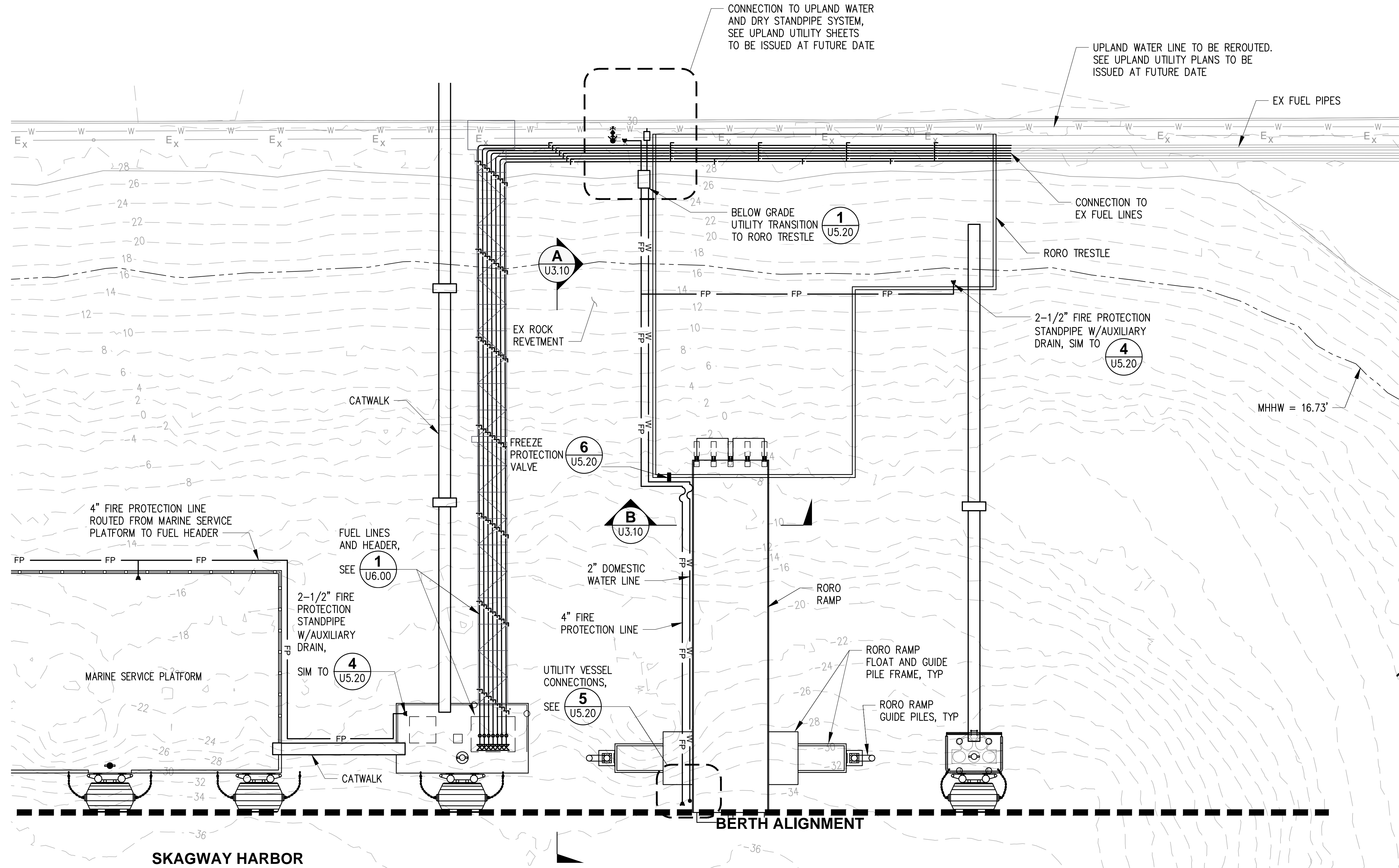
FLOAT UTILITY SECTION

DRAWN: JH	PROJECT NO.: 2100135
DESIGN: ED	SCALE: AS SHOWN
CHECKED: RR	DATE: 6/17/2022
DRAWING NO.	U2.10
SHEET NO.	OF

30% DESIGN - NOT FOR CONSTRUCTION

Plotted: Jun 17, 2022 - 3:58pm
M:\2021\2100135 Skagway Ore Peninsula Multi-Use Dock Drawings\Current\2100135_U2.10 Float Utility Section.dwg
Layout: U2.10

Plotted: Jun 17, 2022 - 4:00pm
M:\2021\2100135 Skagway Ore Peninsula Multi-Use Dock\Drawings\Current\2100135_U3.00 Roro Ramp Utility Plan.dwg

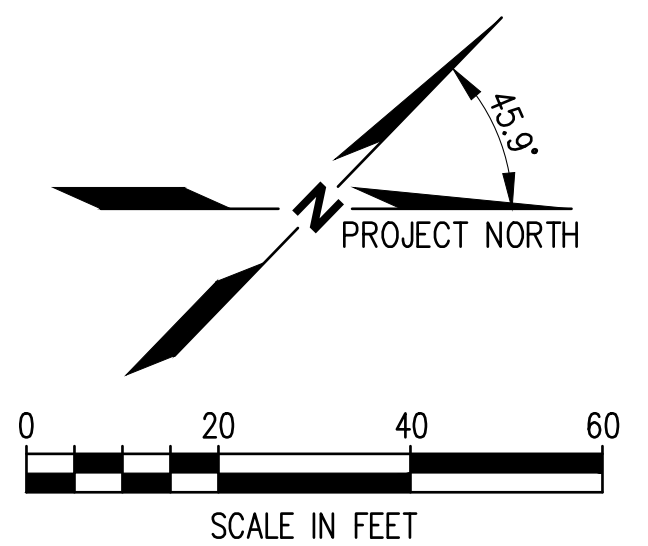


LEGEND

FP	4" FIRE PROTECTION LINE
W	2" DOMESTIC WATER LINE
F	6" FUEL LINE

1 RORO RAMP UTILITY SITE PLAN

SCALE: 1" = 20'



kpff

1601 5th Avenue, Suite 1300
Seattle, Washington 98101
(206) 382-0600 Fax (206) 382-0500

NO.	DATE	BY	REVISION



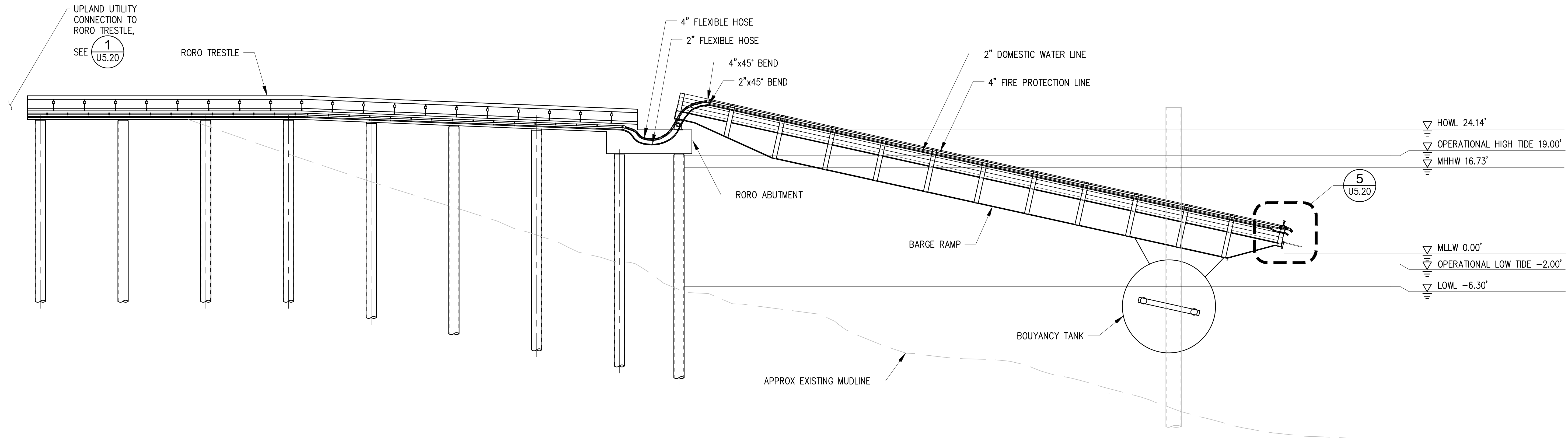
ORE PENINSULA REDEVELOPMENT
SKAGWAY, ALASKA

RORO RAMP UTILITY PLAN

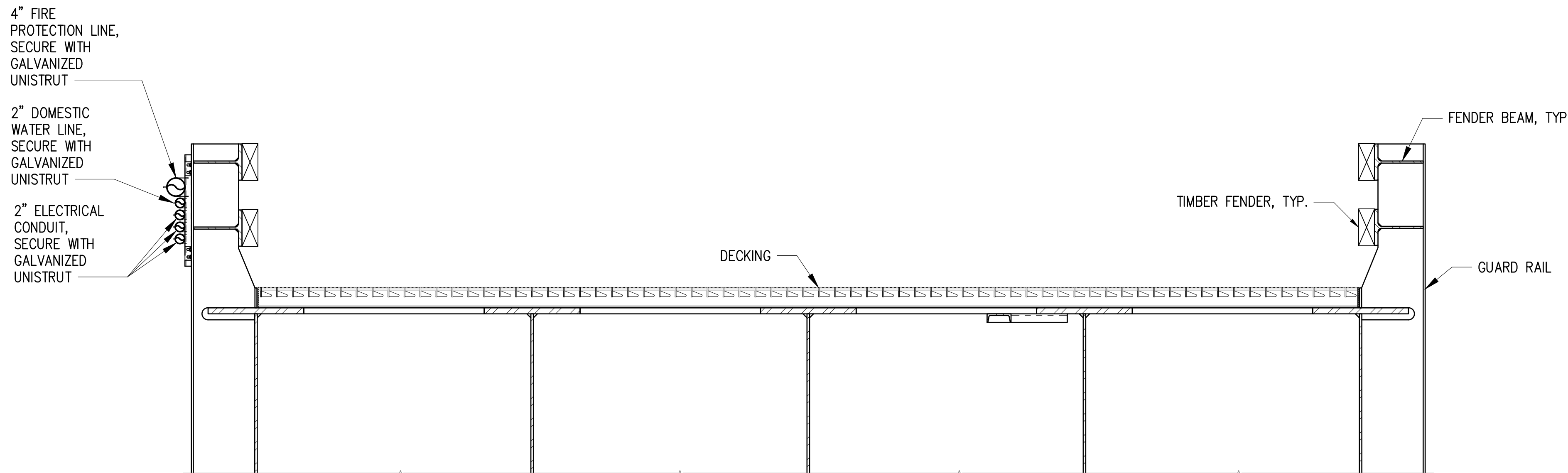
DRAWN: JH	PROJECT NO.: 2100135
DESIGN: ED	SCALE: AS SHOWN
CHECKED: RR	DATE: 6/17/2022
DRAWING NO.	U3.00
SHEET NO.	OF

30% DESIGN - NOT FOR CONSTRUCTION

Plotted: Jun 17, 2022 - 4:03pm
M:\2021\2100135 Skagway Ore Peninsula Multi-Use Dock\Drawings\Current\2100135_U3.10 Roro Ramp Utility Section.dwg
Layout: U3.10



A
U3.00
RORO RAMP FLEXIBLE HOSE CONNECTION
SCALE: NTS



B
U3.00
RORO RAMP CONDUIT SUPPORTS
SCALE: NTS

kpff

1601 5th Avenue, Suite 1300
Seattle, Washington 98101
(206) 382-0600 Fax (206) 382-0500

NO.	DATE	BY	REVISION



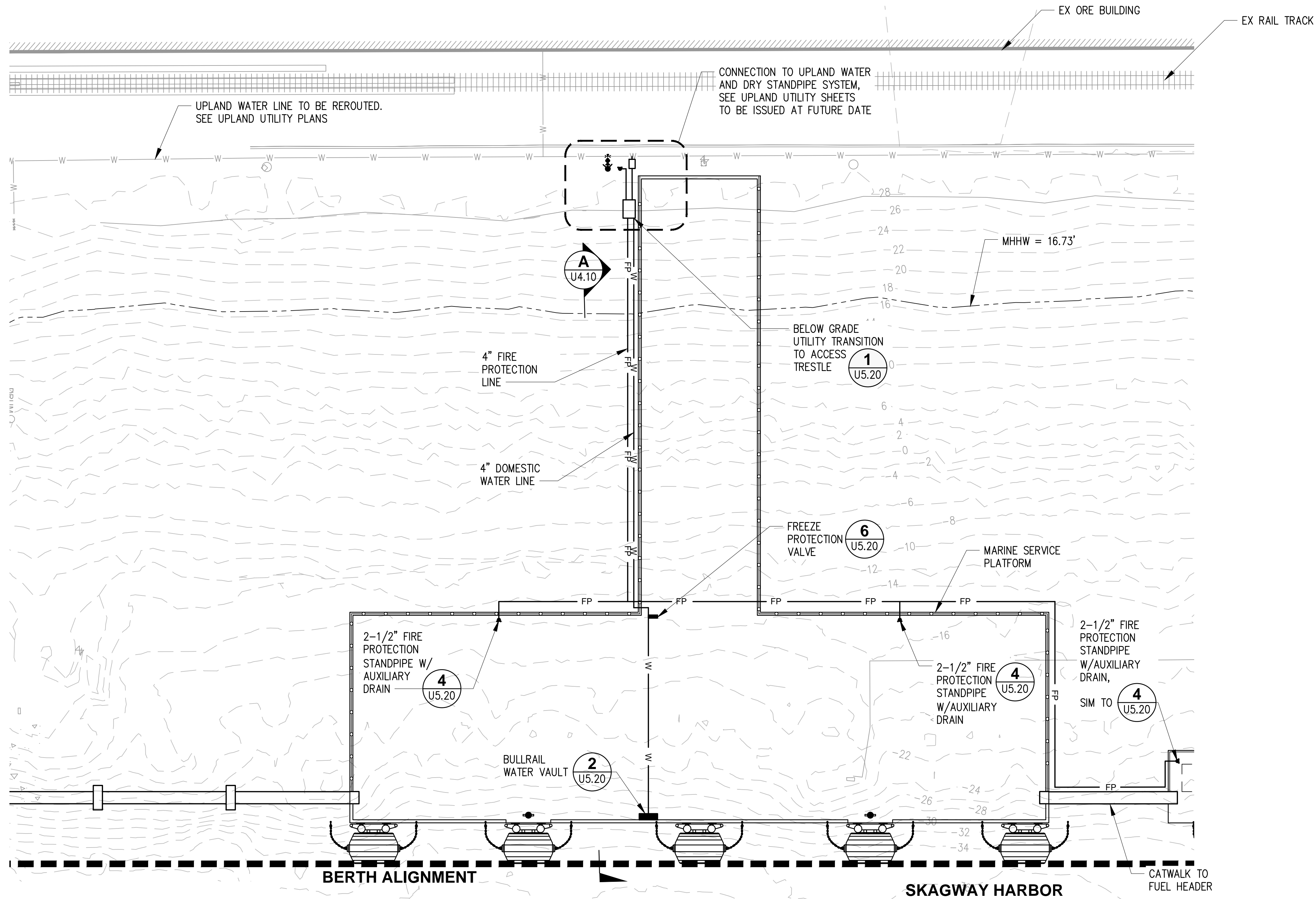
ORE PENINSULA REDEVELOPMENT
SKAGWAY, ALASKA

RORO RAMP UTILITY SECTION

DRAWN: JH	PROJECT NO.: 2100135
DESIGN: ED	SCALE: AS SHOWN
CHECKED: RR	DATE: 6/17/2022
DRAWING NO.	U3.10
SHEET NO.	OF

30% DESIGN - NOT FOR CONSTRUCTION

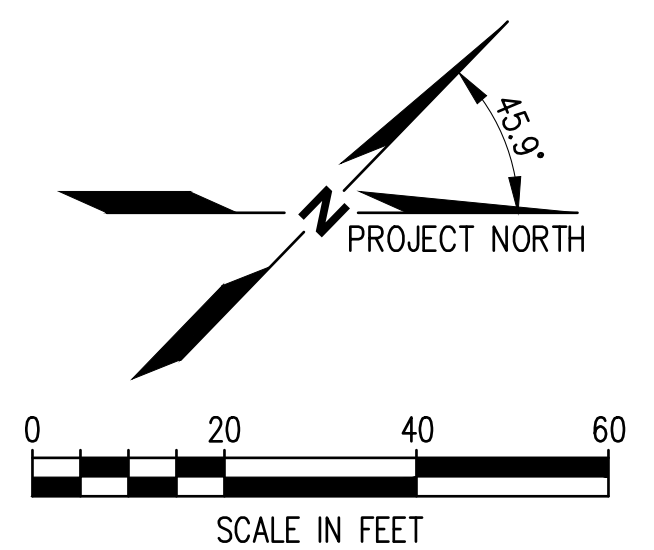
Plotted: Jun 17, 2022 - 4:05pm
M:\2021\2100135 Skagway Ore Peninsula Multi-Use Dock Drawings\Current\2100135_U4.00 Marine Services Platform Utility Plan.dwg
Layout: U4.00



LEGEND

— FP — 4" FIRE PROTECTION LINE
— W — 4" DOMESTIC WATER LINE

1 **MARINE SERVICES PLATFORM UTILITY SITE PLAN**
U1.00 SCALE: 1" = 20'



kpff

1601 5th Avenue, Suite 1300
Seattle, Washington 98101
(206) 382-0600 Fax (206) 382-0500

NO.	DATE	BY	REVISION



ORE PENINSULA REDEVELOPMENT
SKAGWAY, ALASKA

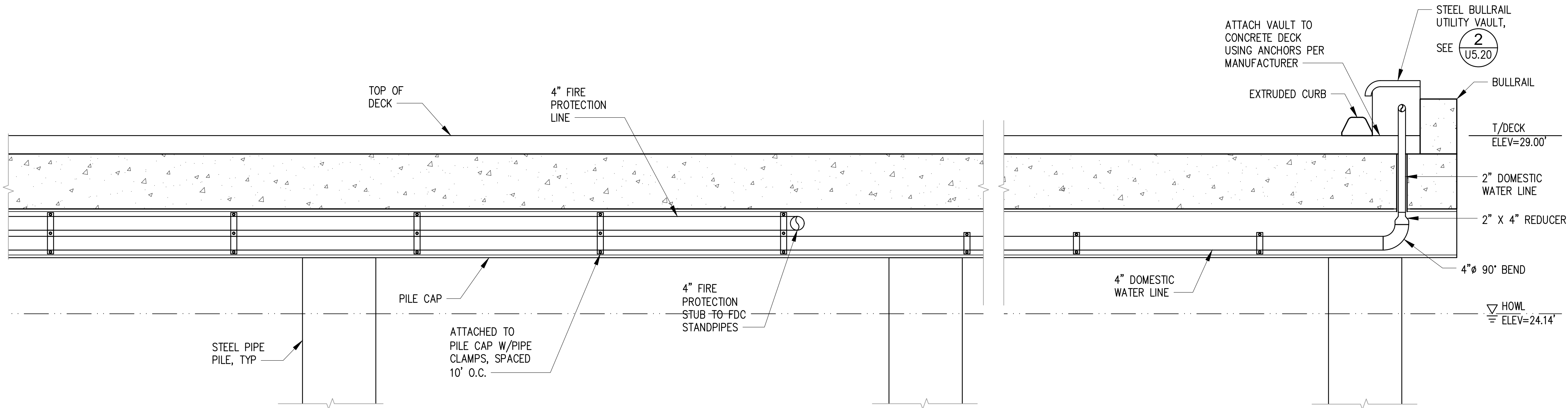
MARINE SERVICES PLATFORM
UTILITY PLAN

DRAWN: JH	PROJECT NO.: 2100135
DESIGN: ED	SCALE: AS SHOWN
CHECKED: RR	DATE: 6/17/2022
DRAWING NO.	U4.00
SHEET NO.	OF

30% DESIGN - NOT FOR CONSTRUCTION

Plotted: Jun 17, 2022 - 4:05pm
M:\2021\2100135 Skagway Ore Peninsula Multi-Use Dock\Drawings\Current\2100135_U4.10 Marine Services Platform Utility Section.dwg

UPLAND UTILITY
CONNECTION TO
ACCESS TRESTLE,
SEE
1
U4.20



MARINE SERVICES PLATFORM UTILITY ROUTING SECTION
SCALE: NTS

kpff

1601 5th Avenue, Suite 1300
Seattle, Washington 98101
(206) 382-0600 Fax (206) 382-0500

NO.	DATE	BY	REVISION



ORE PENINSULA REDEVELOPMENT
SKAGWAY, ALASKA

MARINE SERVICES PLATFORM
UTILITY SECTION

DRAWN: JH	PROJECT NO.: 2100135
DESIGN: ED	SCALE: AS SHOWN
CHECKED: RR	DATE: 6/17/2022
DRAWING NO.	U4.10
SHEET NO.	OF

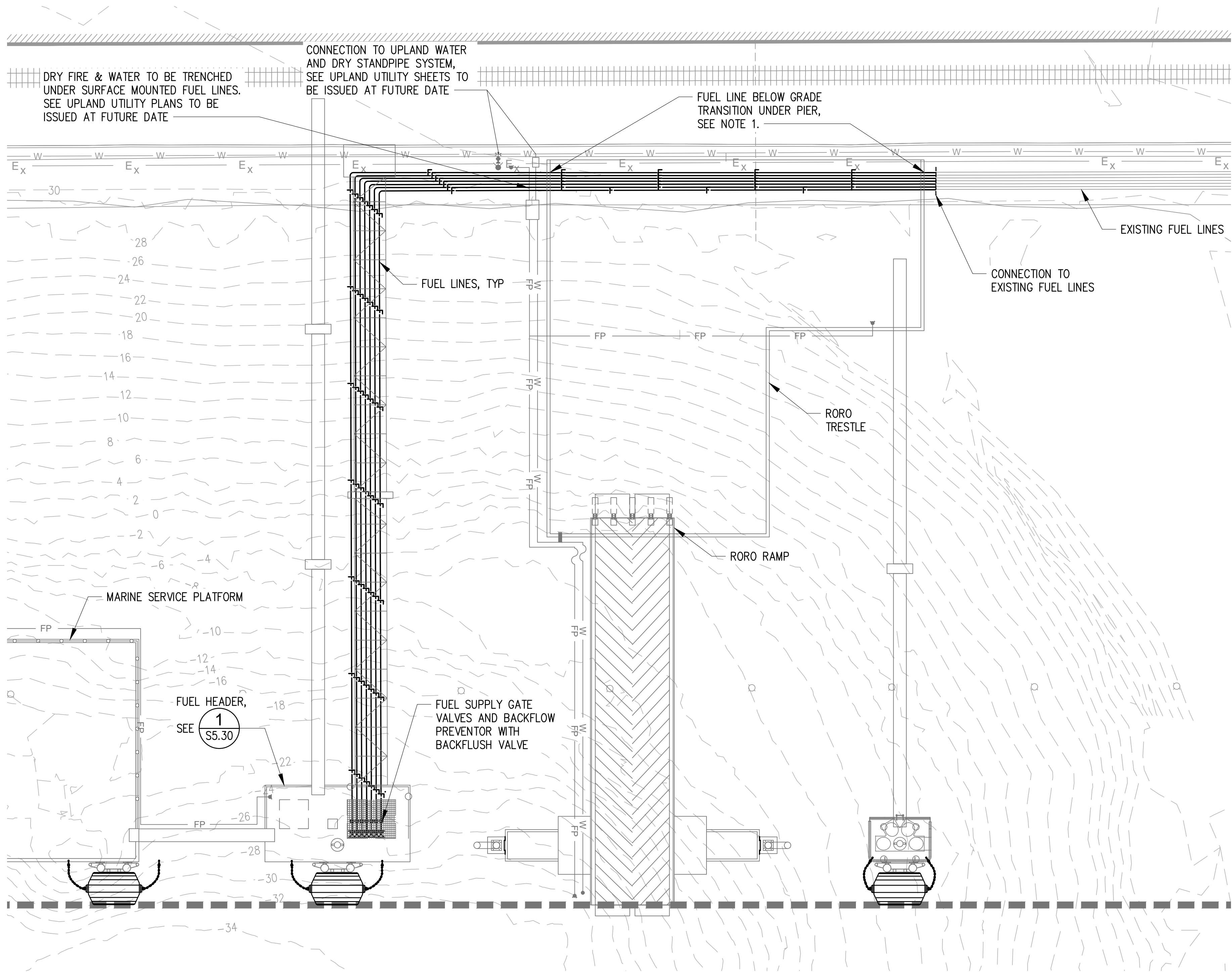
30% DESIGN - NOT FOR CONSTRUCTION



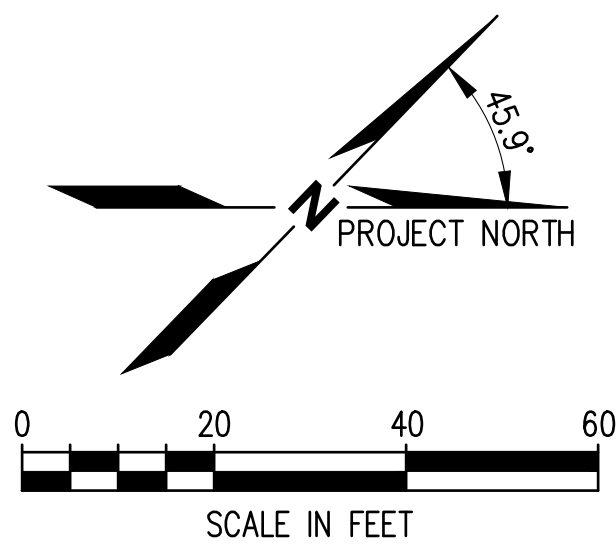
-
- 2 1/2" BRASS
ANGLE VALVE
- HPHA40-45NH/CAP
- 2'-6"
- 2 1/2" SCH.40
GALVANIZED PIPE RISER
- SECURE STANDPIPE TO
WITHSTAND FORCES
DETAILED IN NFPA 36
- GALVANIZED
CARBON STEEL
RISER CLAMP
- COMPRESSIBLE
ETHAFOAM
PAD
- CORE HOLE,
SEE NOTE 5
- J-HANGER
PIPE SUPPORT
- 2-1/2" 90° ELBOW
- 4" x 2 1/2"
REDUCER
- 6"x6"x4" TEE
- 6" FIRE
PROTECTION LINE

- MARINE SERVICE PLATFORM**
STANDPIPE SECTION
- U3.00 U4.00 SCALE: NTS





1 FUEL LINE PLAN
SCALE: 1" = 20'



NOTES

- ALL STEEL FUEL PIPE TRANSITIONS FROM ABOVE AND BELOW GROUND SHALL HAVE FLANGED FITTING WITH NYLON WASHERS. CATHODIC PROTECTION DETAILS WILL BE PROVIDED IN NEXT SUBMITTAL.
- EXISTING FUEL LINE SHALL BE CUT AND REMOVED IN ACCORDANCE WITH THE UTILITY DEMOLITION SPECIFICATIONS.

kpff

1601 5th Avenue, Suite 1300
Seattle, Washington 98101
(206) 382-0600 Fax (206) 382-0500

NO.	DATE	BY	REVISION



ORE PENINSULA REDEVELOPMENT
SKAGWAY, ALASKA

FUEL LINE
PLAN

DRAWN: JH	PROJECT NO.: 2100135
DESIGN: ED	SCALE: AS SHOWN
CHECKED: RR	DATE: 6/17/2022
DRAWING NO.	U6.00
SHEET NO.	OF

30% DESIGN - NOT FOR CONSTRUCTION

Plotted: Jun 17, 2022 - 4:10pm
M:\2021\2100135 Skagway Ore Peninsula Multi-Use Dock Drawings\Current\2100135_S1.00 Structural Notes.dwg
dyu Layout: S1.00

GENERAL NOTES

- THESE NOTES CONTAIN GENERAL INFORMATION AND ARE NOT COMPLETE FOR CONSTRUCTION PURPOSES. THE CONTRACTOR SHALL VERIFY INFORMATION GIVEN HERE AND OTHER DOCUMENTS AND BRING ANY CONFLICTS TO THE ATTENTION OF THE ENGINEER.
- SHOP DRAWINGS AND MATERIAL SPECIFICATIONS SHALL BE SUBMITTED TO THE ENGINEER PRIOR TO ANY FABRICATION OR CONSTRUCTION FOR ALL STRUCTURAL ITEMS.
- DESIGN DRAWINGS AND CALCULATIONS OR SHOP DRAWINGS, FOR THE DESIGN AND FABRICATION OF ITEMS THAT ARE DESIGNED BY OTHERS SHALL BEAR THE SEAL AND SIGNATURE OF THE ALASKA STATE REGISTERED PROFESSIONAL ENGINEER WHO IS RESPONSIBLE FOR THE DESIGN AND SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW PRIOR TO FABRICATION SUBMITTED CALCULATIONS ARE FOR INFORMATION ONLY AND WILL NOT BE STAMPED OR RETURNED.
- CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS BEFORE COMMENCING ANY DEMOLITION. CONTRACTOR SHALL PROVIDE ADEQUATE SHORING AND BRACING OF ALL STRUCTURAL MEMBERS, EXISTING CONSTRUCTION AND SOIL EXCAVATIONS, AS REQUIRED, AND IN A MANNER SUITABLE TO THE WORK SEQUENCE. TEMPORARY SHORING AND BRACING SHALL NOT BE REMOVED UNTIL ALL FINAL CONNECTIONS HAVE BEEN COMPLETED IN ACCORDANCE WITH THE DRAWINGS AND MATERIALS HAVE ACHIEVED DESIGN STRENGTH. NO REINFORCING BARS IN EXISTING CONSTRUCTION SHALL BE CUT UNLESS DIRECTED TO BY THE ENGINEER OR AS SHOWN ON THE DRAWINGS.

CODES AND STANDARDS

- ALL METHODS AND MATERIALS SHALL CONFORM TO THE INTERNATIONAL BUILDING CODE (IBC) 2012 EDITION AS AMENDED AND ADOPTED BY THE STATE OF ALASKA.
- AMERICAN SOCIETY OF CIVIL ENGINEERS "SEISMIC DESIGN OF PIERS AND WHARVES" ASCE 61-14 (ASCE)
- AMERICAN SOCIETY OF CIVIL ENGINEERS "MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES" ASCE 7-16 (ASCE).
- REINFORCED CONCRETE WORK SHALL CONFORM TO THE REQUIREMENTS OF ACI 301-10 "SPECIFICATIONS FOR STRUCTURAL CONCRETE" AND ACI 318-14 "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE" (AISC).
- STRUCTURAL AND MISCELLANEOUS STEEL FABRICATION AND ERECTION SHALL CONFORM TO THE AISC 360-16 "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES" (AISC).
- AMERICAN WELDING SOCIETY "STRUCTURAL WELDING CODE-REINFORCING STEEL INCLUDING METAL INSERTS AND CONNECTIONS IN REINFORCED CONCRETE CONSTRUCTION" AWS D1.4-2017.
- AMERICAN WELDING SOCIETY "STRUCTURAL WELDING-STEEL" AWS D1.1-2015.
- AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS LRFD BRIDGE DESIGN SPECIFICATIONS, 9TH EDITION (AASHTO).

GEOTECHNICAL REPORT

SEE THE GEOTECHNICAL REPORT PRELIMINARY GEOTECHNICAL RECOMMENDATIONS FOR SKAGWAY ORE PENINSULA DOCK AND TRANSFER BRIDGE, SKAGWAY, ALASKA PREPARED BY HART CROWSER, DATED 2022-03-08 FOR COMPLETE INFORMATION. EARTHWORK MATERIAL BACKFILL AND COMPACTION SHALL BE IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE GEOTECHNICAL REPORT.

CORROSION

EPOXY COATINGS ARE ASSUMED TO HAVE A 15 YEAR SERVICE LIFE, UNO.

FOLLOWING THE ASSUMED SERVICE LIFE OF EPOXY COATINGS, MEMBERS ARE ASSUMED TO EXPERIENCE 0.003 IN/YEAR OF CORROSION LOSS IN THE SPLASH ZONE.

RORO RAMP AND CRUISE DOCK ACCESS RAMP EPOXY COATINGS SHALL BE MAINTAINED FOR THE LIFE OF RESPECTIVE STRUCTURES.

SITE WAVE CRITERIA

50-YEAR RETURN PERIOD: Hs=6.9 FT,
Tp1=4.5 sec, Tp2=5.0 sec, Tp3=5.5 sec

100-YEAR RETURN PERIOD: Hs=7.5 FT,
Tp1=4.6 sec, Tp2=5.1 sec, Tp3=5.6 sec

DREDGE

DESIGN ASSUMES A FUTURE DREDGE DEPTH OF -45.00' MLLW.

CONCRETE

CONCRETE WORK SHALL CONFORM TO ALL REQUIREMENTS OF ACI 318-14, "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE" CHAPTER 19 OF THE IBC AND ACI 301-10, "SPECIFICATIONS FOR STRUCTURAL CONCRETE". FORMWORK SHALL BE DESIGNED IN ACCORDANCE WITH THE ACI "MANUAL OF CONCRETE PRACTICE", LATEST EDITION. REINFORCING STEEL SHALL BE DETAILED AND PLACED IN ACCORDANCE WITH THE ACI "MANUAL OF CONCRETE PRACTICE", LATEST EDITION. REINFORCING STEEL SHALL BE SUPPORTED AS SPECIFIED BY THE CRSI MANUAL OF STANDARD PRACTICE.

CONTRACTOR SHALL NOTIFY THE ENGINEER AT LEAST 24 HOURS PRIOR TO PLACING CONCRETE.

ALL EXPOSED CORNERS SHALL BE CHAMFERED 3/4" UNLESS OTHERWISE NOTED ON DRAWINGS.

CONSTRUCTION JOINTS IN BEAMS, JOISTS, OR SLABS ARE TO BE LOCATED BETWEEN THE 1/4 POINT AND CENTERLINE OF SPAN, OR AS DIRECTED BY THE ENGINEER. ALL CONSTRUCTION JOINTS SHALL BE SHOWN ON SHOP DRAWINGS AND ARE SUBJECT TO THE APPROVAL OF THE ENGINEER.

DO NOT PLACE OR CUT HOLES IN CONCRETE WITHOUT PRIOR APPROVAL OF THE ENGINEER.

NO PIPES OR CONDUIT SHALL BE EMBEDDED IN SLABS OR WALLS UNLESS APPROVED BY AND COORDINATED WITH THE ENGINEER. ALUMINUM CONDUITS SHALL NOT BE PLACED IN CONCRETE.

CURING
MAINTAIN CONCRETE TEMPERATURE AT OR ABOVE 50°F FOR THE FIRST 6 DAYS AFTER PLACEMENT. AFTER 6 DAYS, WITH ADDITIONAL CURING TIME AS DEFINED BELOW, CONCRETE TEMPERATURE MAY BE MAINTAINED BETWEEN 32°F AND 50°F.

CURING OPERATIONS SHALL BE UNINTERRUPTED UNTIL THE REQUIRED CONCRETE PROPERTIES, STRENGTH, AND DURABILITY HAVE DEVELOPED OR UNTIL THERE IS REASONABLE ASSURANCE THESE PROPERTIES WILL BE ACHIEVED AFTER THE CURING OPERATIONS HAVE BEEN TERMINATED.

CURING OPERATIONS MAY BE TERMINATED AFTER BOTH OF THE FOLLOWING CONDITIONS ARE SATISFIED:

- THE CONCRETE HAS CURED FOR:
 - AT LEAST 7 DAYS.
 - AT LEAST 10 DAYS WHEN FLY ASH OR GROUND GRANULATED BLAST FURNACE SLAG IN EXCESS OF 10 PERCENT BY WEIGHT OF THE PORTLAND CEMENT ARE USED IN THE MIX. ADD ONE ADDITIONAL DAY OF CURING TO THE REQUIREMENTS DEFINED ABOVE, FOR EACH DAY OR PORTION OF A DAY THE CONCRETE TEMPERATURE FALLS BELOW 50°F DURING THE CURING PERIOD.
- THE COMPRESSIVE STRENGTH FROM INFORMATIONAL FIELD TESTS REACHES THE FOLLOWING:
 - 70% OF THE SPECIFIED COMPRESSIVE STRENGTH IF POST CURING CONCRETE TEMPERATURE IS EXPECTED TO REMAIN AT OR ABOVE 50°F UNTIL 100% OF THE SPECIFIED COMPRESSIVE STRENGTH IS ATTAINED.
 - 100% OF THE SPECIFIED COMPRESSIVE STRENGTH, IF POST CURING CONDITIONS ARE EXPECTED TO ALLOW THE CONCRETE TEMPERATURE TO FALL BELOW 50°F BEFORE 100% OF THE SPECIFIED COMPRESSIVE STRENGTH IS ATTAINED.

NONSHRINK GROUT
NONSHRINK GROUT SHALL HAVE MINIMUM F'c = 5,000 PSI

NONSHRINK GROUT SHALL BE IN ACCORDANCE WITH ASTM C 1107, GRADE C

REINFORCING STEEL
DEFORMED BARS

ASTM A 615, GRADE 60

MINIMUM LAP SPlice LENGTH SCHEDULE		
BAR SIZE	f'c = 5,000 psi	
	TOP BARS	OTHER BARS
#4	2'-5"	1'-11"
#5	3'-0"	2'-4"
#6	3'-8"	2'-10"
#7	5'-3"	4'-1"
#8	6'-0"	4'-8"
#9	6'-9"	5'-3"
#10	7'-8"	5'-11"
#11	8'-6"	6'-6"

SCHEDULE NOTES:

- TOP BARS ARE DEFINED AS ANY HORIZONTAL BAR PLACED SUCH THAT MORE THAN 12" OF FRESH CONCRETE IS CAST IN THE MEMBER BELOW THE BAR IN ANY SINGLE POUR.
- STAGGER ALL LAP SPICES IN ADJACENT BARS BY ONE LAP LENGTH MINIMUM.
- NO MORE THAN 50% OF THE REINFORCING BARS IN ANY LAYER SHALL BE SPLICED AT ONE LOCATION.
- INCREASE LAP SPlice LENGTH OF EPOXY-COATED BARS BY 50%.

AT THE CONTRACTOR'S OPTION AND WITH THE ENGINEER'S APPROVAL, HEADED DEFORMED BARS MAY BE USED IN LIEU OF REINFORCING BARS SHOWN WITH STANDARD 90 OR 180 DEGREE HOOKS AND MECHANICAL SPLICES MAY BE USED IN LIEU OF LAP SPLICES. USE OF HEADED DEFORMED BARS IS TO CONFORMANCE WITH ACI 318 SECTION 18.2.7 AND REQUIRES SUBMITTAL OF AN ICC-ES OR IAPMO UES REPORT VALID FOR THE 2015 IBC.

REINFORCING STEEL SHALL HAVE PROTECTION AS FOLLOW, UNLESS NOTED OTHERWISE:

CONCRETE COVER			
EXPOSURE	MEMBER	REINFORCEMENT	COVER
CAST AGAINST AND PERMANENTLY IN CONTACT WITH GROUND	ALL	ALL	3"
EXPOSED TO WEATHER OR IN CONTACT WITH GROUND	ALL	#6 AND LARGER #5 AND SMALLER	2" 1 1/2"
NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND	SLABS, JOISTS, AND WALLS BEAMS, COLUMNS, AND PEDESTALS	#14 AND #18 #11 AND SMALLER	1 1/2" 3/4"
		ALL	1 1/2"

WELDING OF REINFORCING, WHERE APPROVED BY THE ENGINEER, SHALL BE PERFORMED USING LOW HYDROGEN ELECTRODES AND PREHEATEDIN ACCORDANCE WITH AWS D1.4, REINFORCING STEEL WELDING CODE. WELDERS AND WELDING PROCEDURES SHALL BE QUALIFIED IN ACCORDANCE WITH AWS D1.4. MATERIALS SHALL CONFORM TO THE FOLLOWING:

REINFORCING BARS TO BE WELDED ASTM A 706, GRADE 60, LOW ALLOY
WELDING ELECTRODES E80XX

ALL REINFORCEMENT SHALL BE EQUALLY SPACED WITHIN EACH MEMBER UNLESS NOTED OTHERWISE.

CONCRETE MIXTURES
CONCRETE MIXTURES SHALL CONFORM TO THE FOLLOWING REQUIREMENTS:

CONCRETE MIXTURES					
f'c (PSI)	TEST AGE (DAYS)	EXPOSURE CLASS			
5,000	28	F3	S3	W1	C2

CONCRETE MIXTURES SHALL CONFORM TO THE MOST STRINGENT REQUIREMENTS FOR EXPOSURE CLASSES SPECIFIED IN THE TABLE ABOVE AND ACI 318 TABLE 19.3.2.1.

WATER-REDUCING ADMIXTURES MAY BE INCORPORATED IN CONCRETE MIX DESIGNS, BUT SHALL CONFORM TO ASTM C 494, AND BE USED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. CALCIUM CHLORIDE OR OTHER WATER-SOLUBLE CHLORIDE ADMIXTURES SHALL NOT BE USED.

CONCRETE CONT'D

WATER/CEMENTITIOUS MATERIALS RATIO SHALL BE MEASURED BY WEIGHT AND SHALL BE BASED ON THE TOTAL CEMENTITIOUS MATERIAL. WATER/CEMENTITIOUS MATERIALS RATIO AND WATER CONTENT SHALL BE DETERMINED BY THE SUPPLIER BASED ON STRENGTH REQUIREMENTS AND SHALL NOT EXCEED THE MAXIMUM WATER/CEMENTITIOUS MATERIAL RATIO AND/OR WATER CONTENT IF SHOWN ABOVE OR IN ACI 318 TABLE 19.3.2.1 FOR THE EXPOSURE CLASSES LISTED.

FIELD-MEASURED SLUMP SHALL CONFORM TO THE SUBMITTED CONCRETE MIX DESIGN. TOLERANCE OF SLUMP SHALL CONFORM TO ASTM C 94.

ALL CONCRETE SUBJECT TO EXPOSURE CLASSES F1, F2 OR F3 SHALL BE AIR ENTRAINED. AIR-ENTRAINING AGENTS SHALL CONFORM TO ASTM C 260. THE AMOUNT OF ENTRAINED AIR SHALL BE ACCORDING TO ACI 318 TABLE 19.3.3.1 WITH A FIELD TOLERANCE OF ±1.5 PERCENT BY VOLUME. THE AMOUNT OF ENTRAINED AIR SHALL BE MEASURED IN THE FIELD AT THE DISCHARGE FROM THE TRUCK.

THE CONTRACTOR SHALL SUBMIT CONCRETE MIX DESIGNS FOR APPROVAL 2 WEEKS PRIOR TO PLACING ANY CONCRETE. THE MIX DESIGN SHALL BE IN CONFORMANCE WITH ACI 318, CHAPTER 19. THE SUBMITTAL SHALL INDICATE WHERE EACH CONCRETE MIX IS TO BE USED ON THE PROJECT, AS WELL AS THE MAXIMUM AGGREGATE SIZE OF EACH MIX. COARSE AGGREGATE SHALL BE 3/4" NOMINAL AND CONFORM TO ASTM C33.

ANCHORS

POST-INSTALLED ANCHORS
PROVIDE POST-INSTALLED ANCHORS PER THE FOLLOWING SCHEDULE UNLESS NOTED OTHERWISE:

ANCHORS IN CONCRETE	
ANCHOR TYPE	APPROVED ANCHOR(S)
ADHESIVE	HILTI HAS THREADED ROD IN HIT-RE 500 V3
MECHANICAL	HILTI KWIK BOLT TZ

USE OF ALTERNATE PRODUCTS, OR OF POST-INSTALLED ANCHORS AT LOCATIONS NOT SHOWN IN THESE DRAWINGS, IS SUBJECT TO THE APPROVAL OF THE ENGINEER. SUBMIT PROPOSED ANCHORS TO THE ENGINEER WITH AN ICC-ES OR IAPMO UES REPORT VALID FOR THE 2018 IBC. SUBMITTED ICC-ES AND IAPMO UES REPORTS SHALL DEMONSTRATE THAT THE ANCHORS ARE SUITABLE FOR USE IN CRACKED CONCRETE OR UNCRACKED, FULLY GROUTED REINFORCED CONCRETE MASONRY UNITS. WHERE ANCHORS RESIST SEISMIC LOADS, SUBMITTED ICC-ES AND IAPMO UES REPORTS SHALL DEMONSTRATE THAT THE ANCHORS ARE SUITABLE FOR THE RESISTANCE OF SEISMIC LOADS.

INSTALL ALL ANCHORS PER MANUFACTURER'S RECOMMENDATIONS.

ADHESIVES SHALL NOT BE INSTALLED PRIOR TO THE CONCRETE REACHING AN AGE OF 21 DAYS AS REQUIRED BY ACI 318.

kpff

1601 5th Avenue, Suite 1300
Seattle, Washington 98101
(206) 382-0600 Fax (206) 382-0500

NO.	DATE	BY	REVISION



ORE PENINSULA REDEVELOPMENT
SKAGWAY, ALASKA

STRUCTURAL NOTES

DRAWN: JH	PROJECT NO.: 2100135
DESIGN: ED	SCALE: AS SHOWN
CHECKED: RR	DATE: 6/17/2022
DRAWING NO.	S1.00
SHEET NO.	OF

30% DESIGN - NOT FOR CONSTRUCTION

STRUCTURAL STEEL

STEEL MATERIALS	
WIDE FLANGE SHAPES (W AND WT)	ASTM A 992
PLATES (PL), BARS	ASTM A 36 TYP
	ASTM A 572 GRADE 50 WHERE NOTED
ANGLES (L), CHANNELS (C AND MC)	ASTM A 36
STRUCTURAL TUBES (HSS)	ASTM A 500, GRADE C
STEEL PIPE	ASTM A 53, GRADE B
STEEL PIPE PILES	ASTM A 252, GRADE 3 (MOD), Fy = 50 ksi UNO
STRUCTURAL BOLTS	ASTM F 3125, GRADE A 325
ANCHOR RODS	ASTM F 1554, GRADE 55, UNO
THREADED RODS	ASTM A 36, UNO
WELDING ELECTRODES	E70XX, TYP
HEADED SHEAR STUDS	ASTM A 108
CHAINS	GRADE 100

STRUCTURAL STEEL DESIGN, FABRICATION AND ERECTION SHALL CONFORM TO THE REQUIREMENTS OF IBC CHAPTER 22. ALL MEMBERS ARE TO BE ERECTED WITH NATURAL MILL CAMBER OR INDUCED CAMBER UP, UNLESS OTHERWISE NOTED ON THE PLANS. SUBSTITUTION OF MEMBER SIZES OR STEEL GRADE WILL NOT BE ALLOWED WITHOUT PRIOR APPROVAL BY THE ENGINEER.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ERECTION AIDS AND JOINT PREPARATIONS THAT INCLUDE, BUT ARE NOT LIMITED TO, ERECTION ANGLES, LIFT HOLES AND OTHER AIDS, WELDING PROCEDURES, REQUIRED ROOT OPENINGS, ROOT FACE DIMENSIONS, GROOVE ANGLES, BACKING BARS, COPES, SURFACE ROUGHNESS VALUES, AND UNEQUAL PARTS.

BEAMS AND JOISTS SHALL BE EQUALLY SPACED IN A BAY UNLESS NOTED OTHERWISE ON PLAN.

WELDING
ALL WELDING SHALL BE IN CONFORMANCE WITH AISC AND AWS STANDARDS, AND SHALL BE PERFORMED BY AWS CERTIFIED WELDERS, CERTIFIED FOR WELDS MADE. ONLY WELDS THAT ARE PREQUALIFIED, AS DEFINED BY AWS, OR QUALIFIED BY TESTING SHALL BE USED. SHOP DRAWINGS SHALL SHOW ALL WELDING WITH AWS A2.4 SYMBOLS. WELDS SHOWN ON THE DRAWINGS ARE MINIMUM SIZES. INCREASE WELD SIZE TO AWS MINIMUM SIZES BASED ON THICKNESS. MINIMUM WELD SIZE SHALL BE 3/16-INCH, UNLESS NOTED OTHERWISE. THE WELDS SHOWN ARE FOR THE FINAL CONNECTIONS. FIELD WELD SYMBOLS ARE SHOWN WHERE FIELD WELDS ARE REQUIRED BY THE STRUCTURAL DESIGN. WHERE FIELD WELD IS NOT INDICATED, THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING IF A WELD SHOULD BE SHOP OR FIELD-WELDED IN ORDER TO FACILITATE THE STRUCTURAL STEEL ERECTION.

GALVANIZING
STRUCTURAL STEEL AND CONNECTIONS WHICH ARE EXPOSED TO WEATHER AND NOT TO BE PAINTED AS WELL AS PLATES AND OTHER STEEL ITEMS EMBEDDED IN CONCRETE SHALL BE HOT-DIPPED GALVANIZED AFTER FABRICATION IN COMPLIANCE WITH ASTM A123 GR 100 OR ASTM A153 AS APPLICABLE.

ALL GALVANIZING AT FIELD WELDS AND WHERE THE ORIGINAL COATING IS DAMAGED SHALL BE REPAIRED ACCORDING TO ASTM A780, METHOD A1 USING ZINC WELD STICK.

COATINGS
CLEAN, PREPARE, AND SHOP PRIME STRUCTURAL STEEL MEMBERS IN ACCORDANCE WITH SSPC STANDARDS SP-10.

ALL STEEL INCLUDING GALVANIZED STEEL, SHALL BE COATED WITH THE FOLLOWING PAINT SYSTEM OR APPROVED EQUAL:
1ST COAT: 7 MILS OF CARBOGUARD 890
2ND COAT: 7 MILS OF CARBOGUARD 890
3RD COAT: 2 MILS OF CARBOTHANE 134 (COLOR PER OWNER)

EPOXY COATING SHALL EXTEND TO 10’ BELOW THE MUDLINE.

PILING

PILES SHALL BE DRIVEN TO THE MINIMUM TIP ELEVATIONS AND REQUIRED GEOTECHNICAL CAPACITIES INDICATED ON THE DRAWINGS.

PILE HAMMER AND DRIVING PLAN SHALL BE APPROVED BY ENGINEER. PILE DRIVING METHODS SHALL ALIGN WITH THE RECOMMENDATIONS OF THE GEOTECHNICAL ENGINEER AND PROJECT PERMITS. SEE SPECIFICATIONS.

FENDER PILES SHALL BE DRIVEN WITH 1% OF VERTICAL ALIGNMENT AND WITHIN 3 INCHES OF FINAL HORIZONTAL POSITION.

BACKUP PILES SHALL BE DRIVEN WITHIN 5% OF VERTICAL ALIGNMENT AND WITHIN 2 FEET OF FINAL HORIZONTAL POSITION.

PILES HITTING OBSTACLES AND MISALIGNED PILES OUTSIDE SPECIFIED TOLERANCES SHALL BE PULLED BY THE CONTRACTOR WITH A VIBRATORY HAMMER AND REDRIVEN AT NO ADDITIONAL COST TO THE OWNER.

ALL PILE CUTOFFS BECOME PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE SITE.

PILE INSTALLATION SHALL BE CONTINUOUSLY MONITORED BY THE GEOTECHNICAL ENGINEER.

UHMW

ALL ULTRA HIGH MOLECULAR WEIGHT (UHMW) POLYETHYLENE COMPONENTS SHALL BE MANUFACTURED FROM VIRGIN POLYETHYLENE MATERIAL, BE UV STABILIZED, AND SHALL BE PARTIALLY OR FULLY CROSSLINKED. UHMW COMPONENTS SHALL BE BLACK IN COLOR AND SUITABLE FOR MARINE ENVIRONMENTS UNLESS NOTED OTHERWISE.



1601 5th Avenue, Suite 1300
Seattle, Washington 98101
(206) 382-0600 Fax (206) 382-0500

NO.	DATE	BY	REVISION



ORE PENINSULA REDEVELOPMENT
SKAGWAY, ALASKA

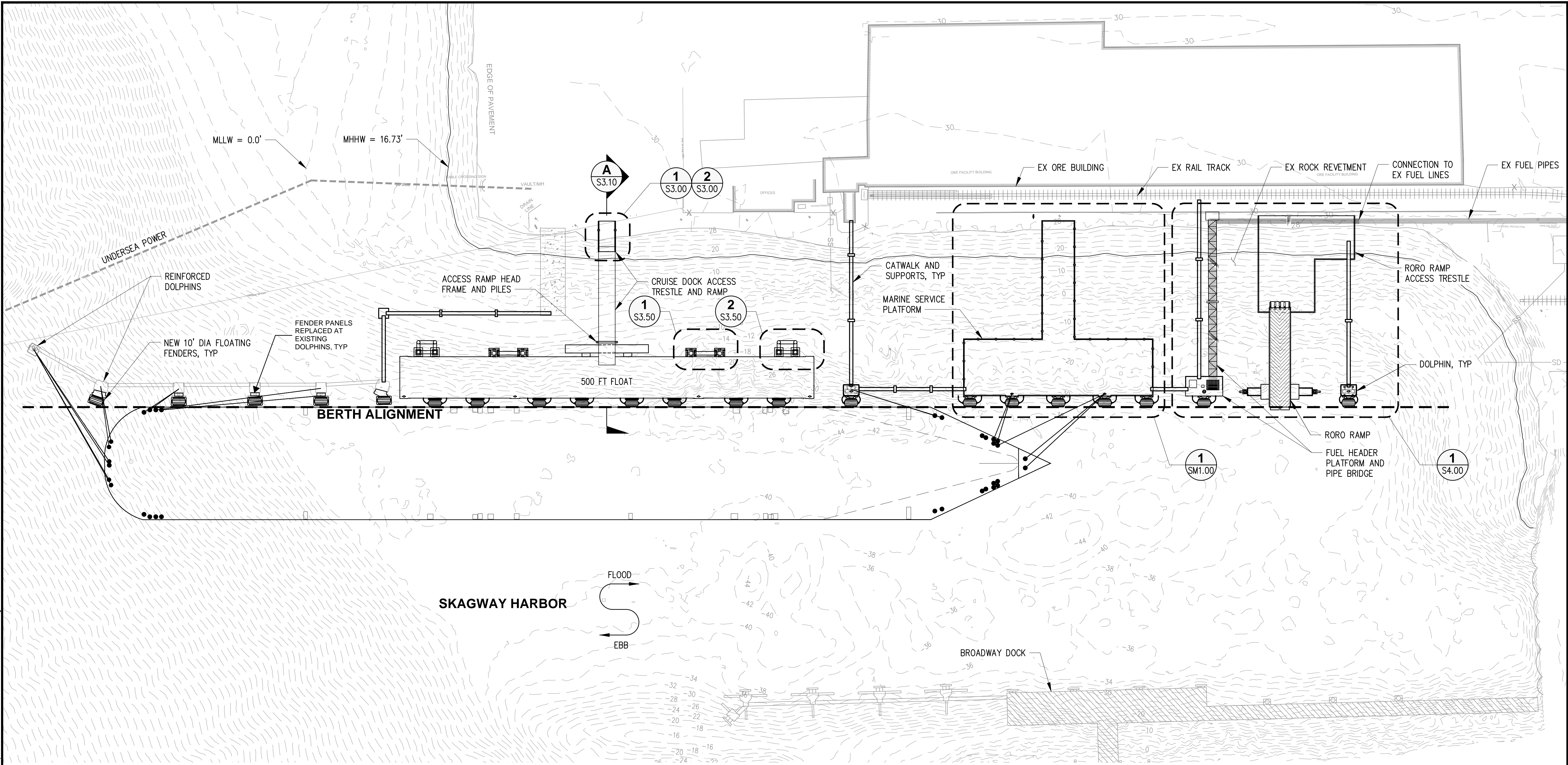
STRUCTURAL NOTES

DRAWN: JH	PROJECT NO.: 2100135
DESIGN: ED	SCALE: AS SHOWN
CHECKED: RR	DATE: 6/17/2022
DRAWING NO.	S1.01
SHEET NO.	OF

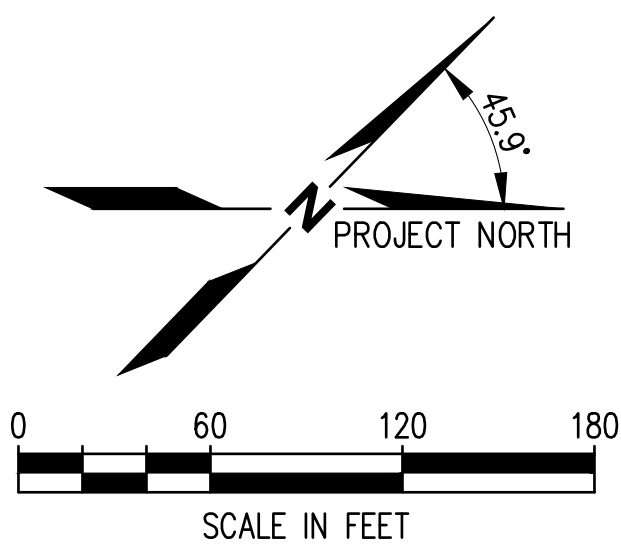
Plotted: Jun 17, 2022 - 4:11pm
M:\2021\2100135 Skagway Ore Peninsula Multi-use Dock Drawings\Current\2100135_S1.01 Structural Notes.dwg
dyu Layout: S1.01

30% DESIGN - NOT FOR CONSTRUCTION

Plotted: Jun 17, 2022 - 5:44pm
M:\2021\2100135 Skagway Ore Peninsula Multi-Use Dock\Drawings\Current\2100135_S2.00 Structural Site Plan.dwg



1 **STRUCTURAL SITE PLAN**
SCALE: 1" = 60'



kpff

1601 5th Avenue, Suite 1300
Seattle, Washington 98101
(206) 382-0600 Fax (206) 382-0500

NO.	DATE	BY	REVISION



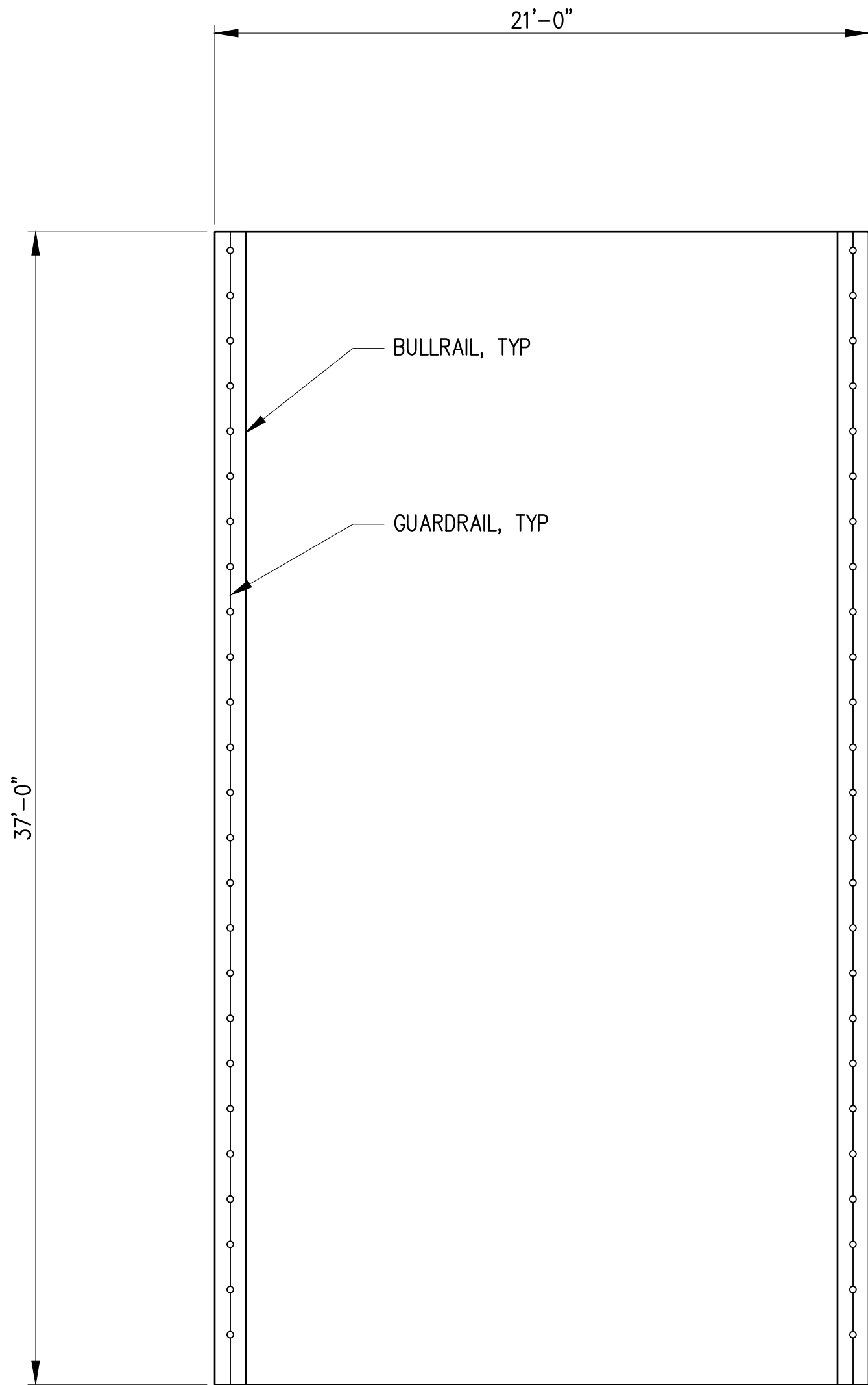
ORE PENINSULA REDEVELOPMENT
SKAGWAY, ALASKA

STRUCTURAL SITE PLAN

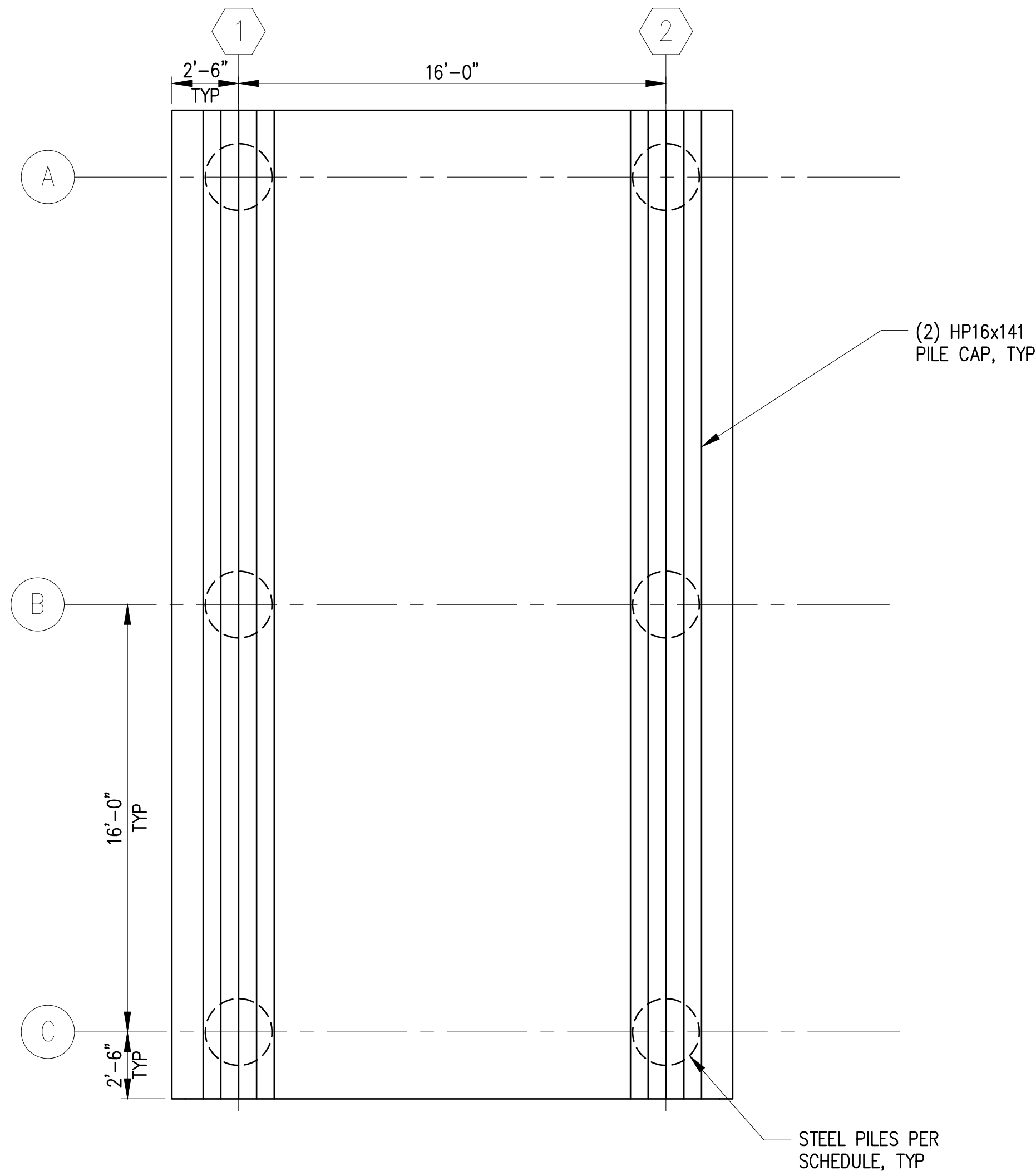
DRAWN: JH	PROJECT NO.: 2100135
DESIGN: ED	SCALE: AS SHOWN
CHECKED: RR	DATE: 6/17/2022
DRAWING NO.	S2.00
SHEET NO.	OF

30% DESIGN - NOT FOR CONSTRUCTION

Plotted: Jun 17, 2022 - 4:12pm
M:\2021\2100135 Skagway Ore Peninsula Multi-Use Dock Drawings\Current\2100135_S3.00 Cruise Dock Float & Access Trestle Plan.dwg
dyu Layout: S3.00

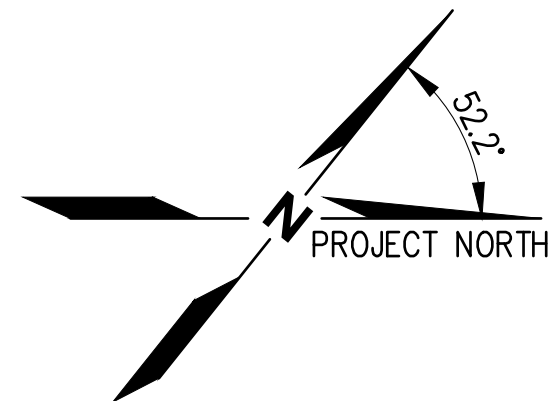


1 ACCESS TRESTLE SURFACE FEATURE PLAN
SCALE: 1/4" = 1'-0"



2 ACCESS TRESTLE PILE PLAN
SCALE: 1/4" = 1'-0"

PILE SCHEDULE							
PILE #	GRID	GRID	PILE TYPE	OD	WALL THICK	T/PILE	PILE TIP
1	A	1	STEEL PIPE	24"	3/4"	25.00	-85.00
2	B	1	STEEL PIPE	24"	3/4"	25.00	-85.00
3	C	1	STEEL PIPE	24"	3/4"	25.00	-85.00
4	A	2	STEEL PIPE	24"	3/4"	25.00	-85.00
5	B	2	STEEL PIPE	24"	3/4"	25.00	-85.00
6	C	2	STEEL PIPE	24"	3/4"	25.00	-85.00



kpff
1601 5th Avenue, Suite 1300
Seattle, Washington 98101
(206) 382-0600 Fax (206) 382-0500

NO.	DATE	BY	REVISION

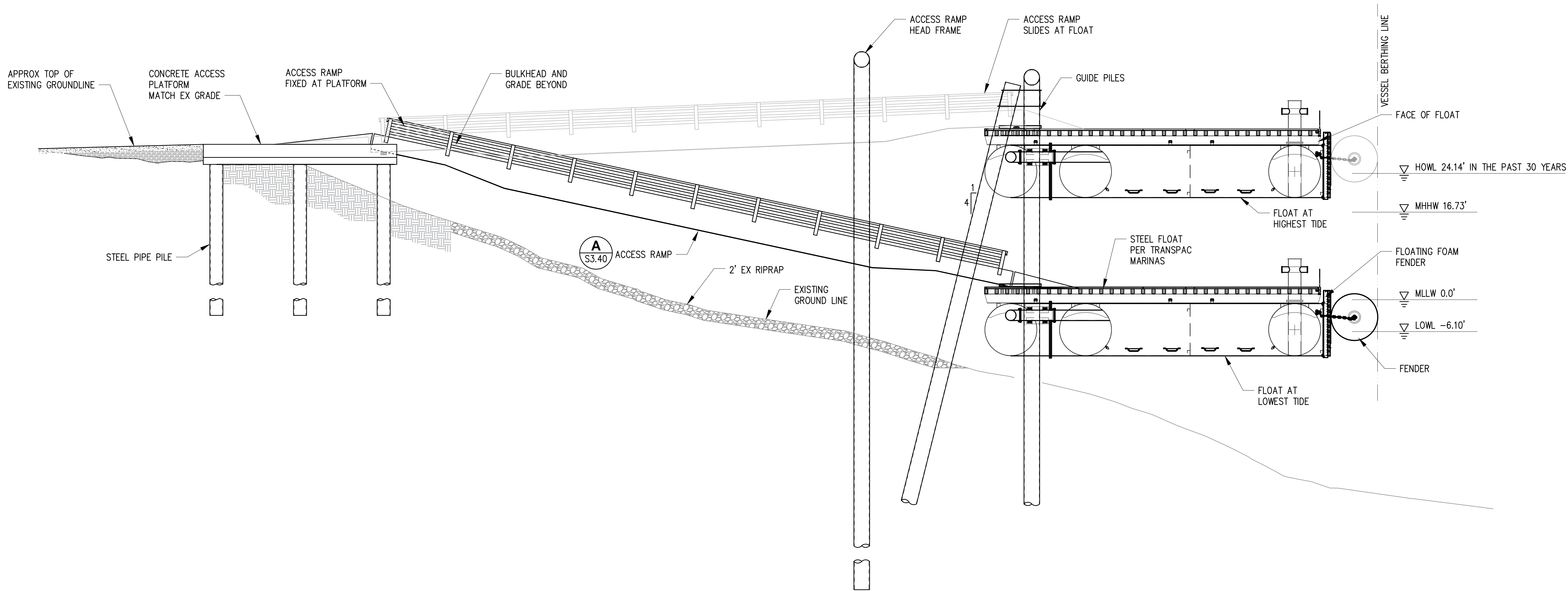


**ORE PENINSULA REDEVELOPMENT
SKAGWAY, ALASKA**

CRUISE DOCK ACCESS TRESTLE PLAN

DRAWN: JH	PROJECT NO.: 2100135
DESIGN: ED	SCALE: AS SHOWN
CHECKED: RR	DATE: 6/17/2022
DRAWING NO.	S3.00
SHEET NO.	OF

Plotted: Jun 17, 2022 - 4:14pm
M:\2021\2100135 Skagway Ore Peninsula Multi-use Dock Drawings\Current\2100135_S3.10 Cruise Dock Float & Access Trestle Range Of Motion.dwg
dyu Layout: S3.10



CRUISE DOCK FLOAT SECTION
SCALE: 1" = 10'

kpff

1601 5th Avenue, Suite 1300
Seattle, Washington 98101
(206) 382-0600 Fax (206) 382-0500

NO.	DATE	BY	REVISION



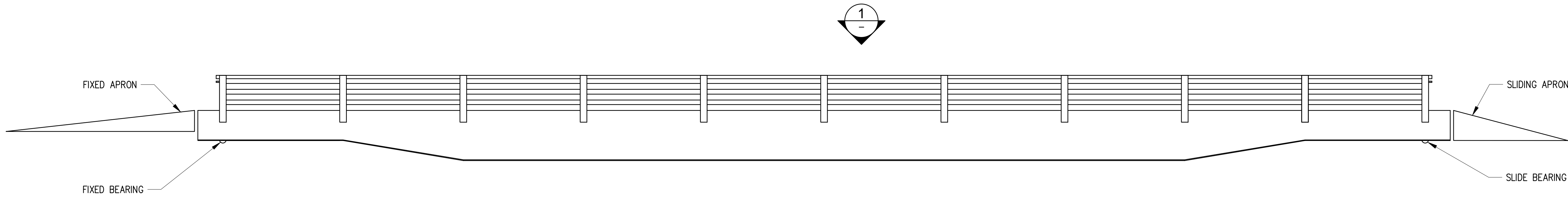
**ORE PENINSULA REDEVELOPMENT
SKAGWAY, ALASKA**

**CRUISE DOCK FLOAT SECTIONS
RANGE OF MOTION**

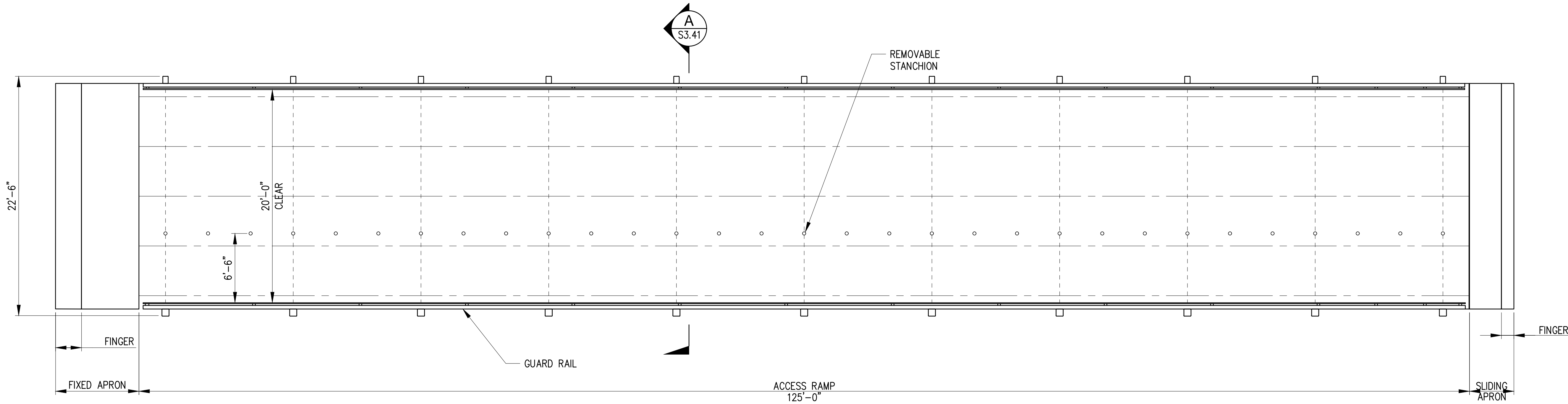
DRAWN: JH	PROJECT NO.: 2100135
DESIGN: ED	SCALE: AS SHOWN
CHECKED: RR	DATE: 6/17/2022
DRAWING NO.	S3.10
SHEET NO.	OF

30% DESIGN - NOT FOR CONSTRUCTION

Plotted: Jun 17, 2022 - 4:14pm
M:\2021\2100135 Skagway Ore Peninsula Multi-Use Dock\Drawings\Current\2100135_S3.40 Cruise Dock Access Ramp Plan & Elevation.dwg
dyu Layout: S3.40



ELEVATION
SCALE: 3/16" = 1'-0"



PLAN
SCALE: 3/16" = 1'-0"

kpff

1601 5th Avenue, Suite 1300
Seattle, Washington 98101
(206) 382-0600 Fax (206) 382-0500

NO.	DATE	BY	REVISION



ORE PENINSULA REDEVELOPMENT
SKAGWAY, ALASKA

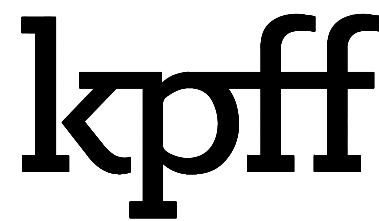
CRUISE DOCK ACCESS RAMP
PLAN AND ELEVATION

DRAWN: JH	PROJECT NO.: 2100135
DESIGN: ED	SCALE: AS SHOWN
CHECKED: RR	DATE: 6/17/2022
DRAWING NO.	S3.40
SHEET NO.	OF

30% DESIGN - NOT FOR CONSTRUCTION

Plotted: Jun 17, 2022 - 4:17pm
M:\2021\2100135 Skagway Ore Dock\Drawings\Current\2100135_S3.41 Cruise Dock Access Ramp Section.dwg

dyu Layout: S3.41



1601 5th Avenue, Suite 1300
Seattle, Washington 98101
(206) 382-0600 Fax (206) 382-0500

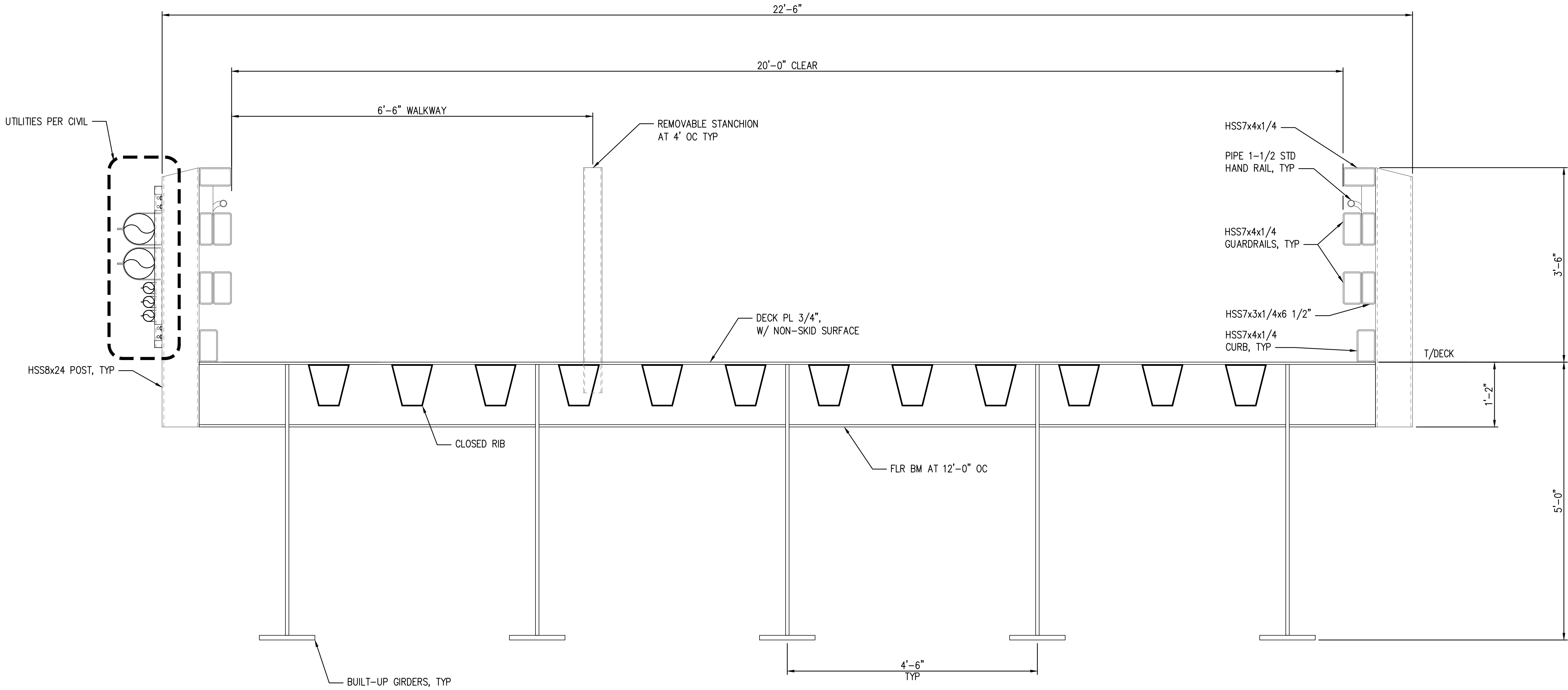
NO.	DATE	BY	REVISION



ORE PENINSULA REDEVELOPMENT
SKAGWAY, ALASKA

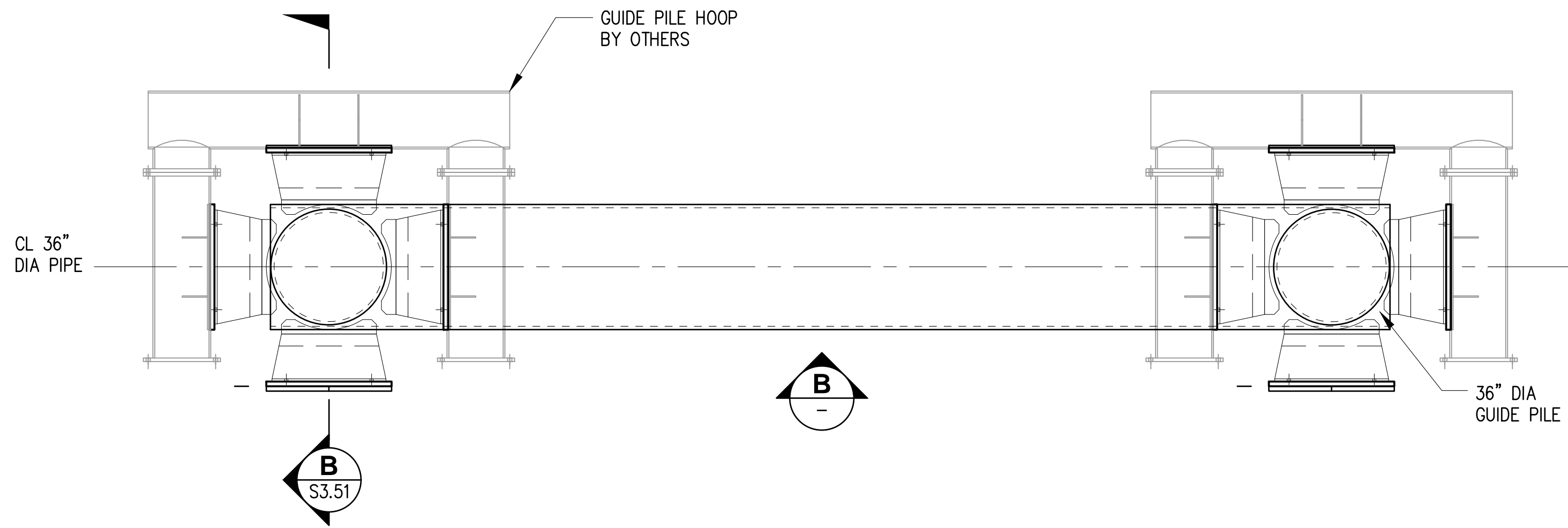
CRUISE DOCK ACCESS RAMP
SECTION

DRAWN: JH	PROJECT NO.: 2100135
DESIGN: ED	SCALE: AS SHOWN
CHECKED: RR	DATE: 6/17/2022
DRAWING NO.	S3.41
SHEET NO.	OF

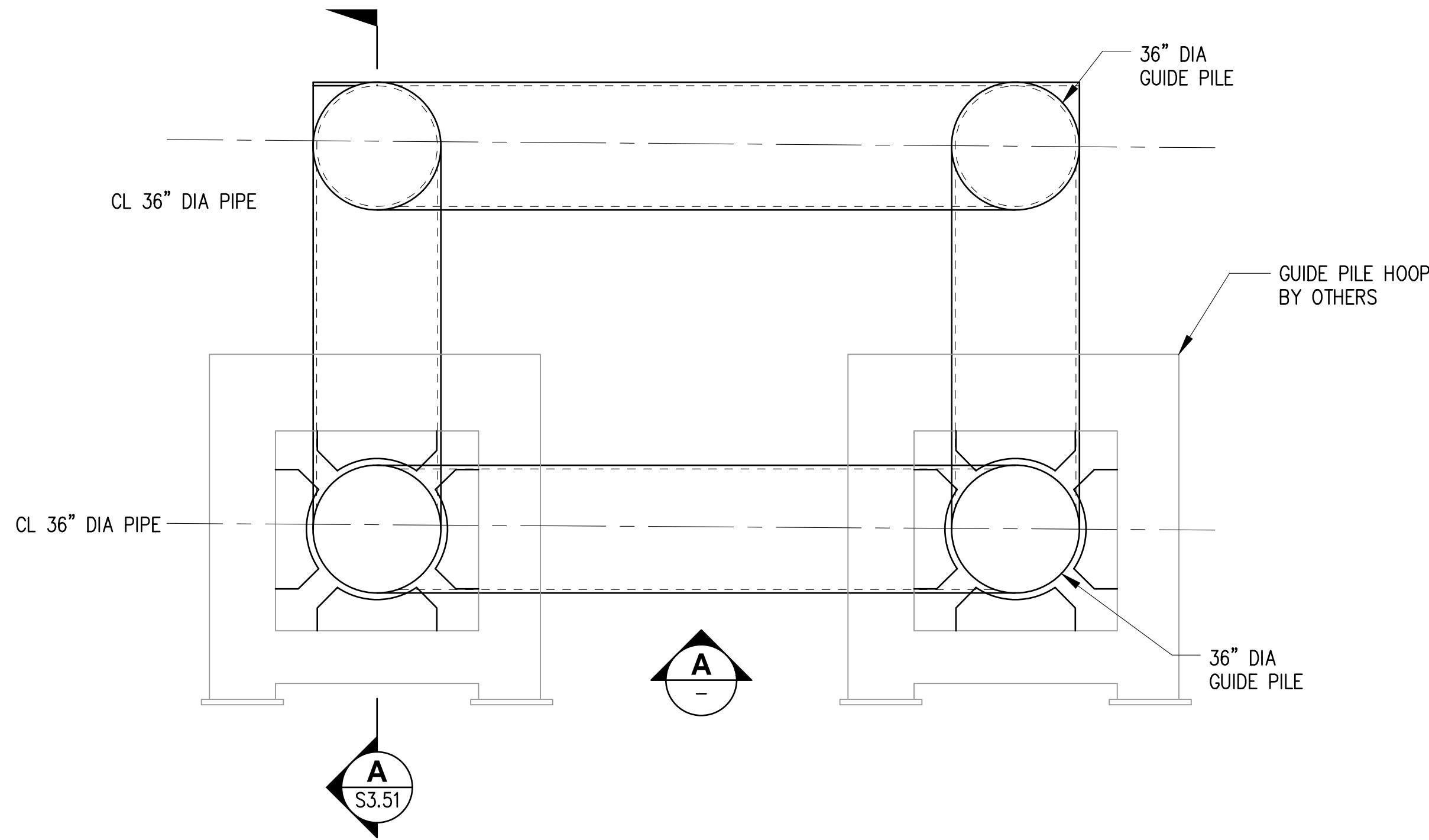


SECTION
SCALE: 1" = 1'-0"

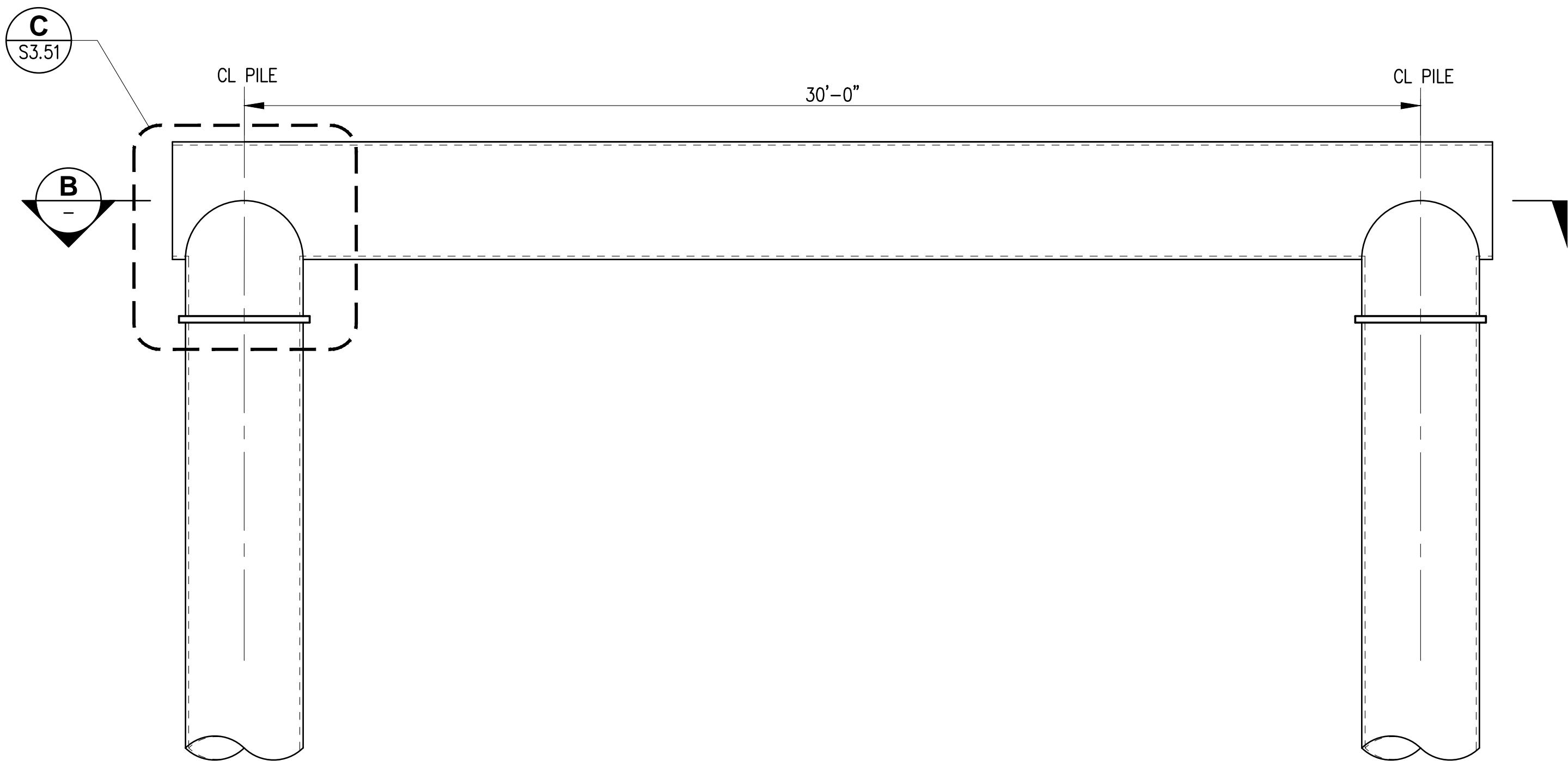
30% DESIGN - NOT FOR CONSTRUCTION



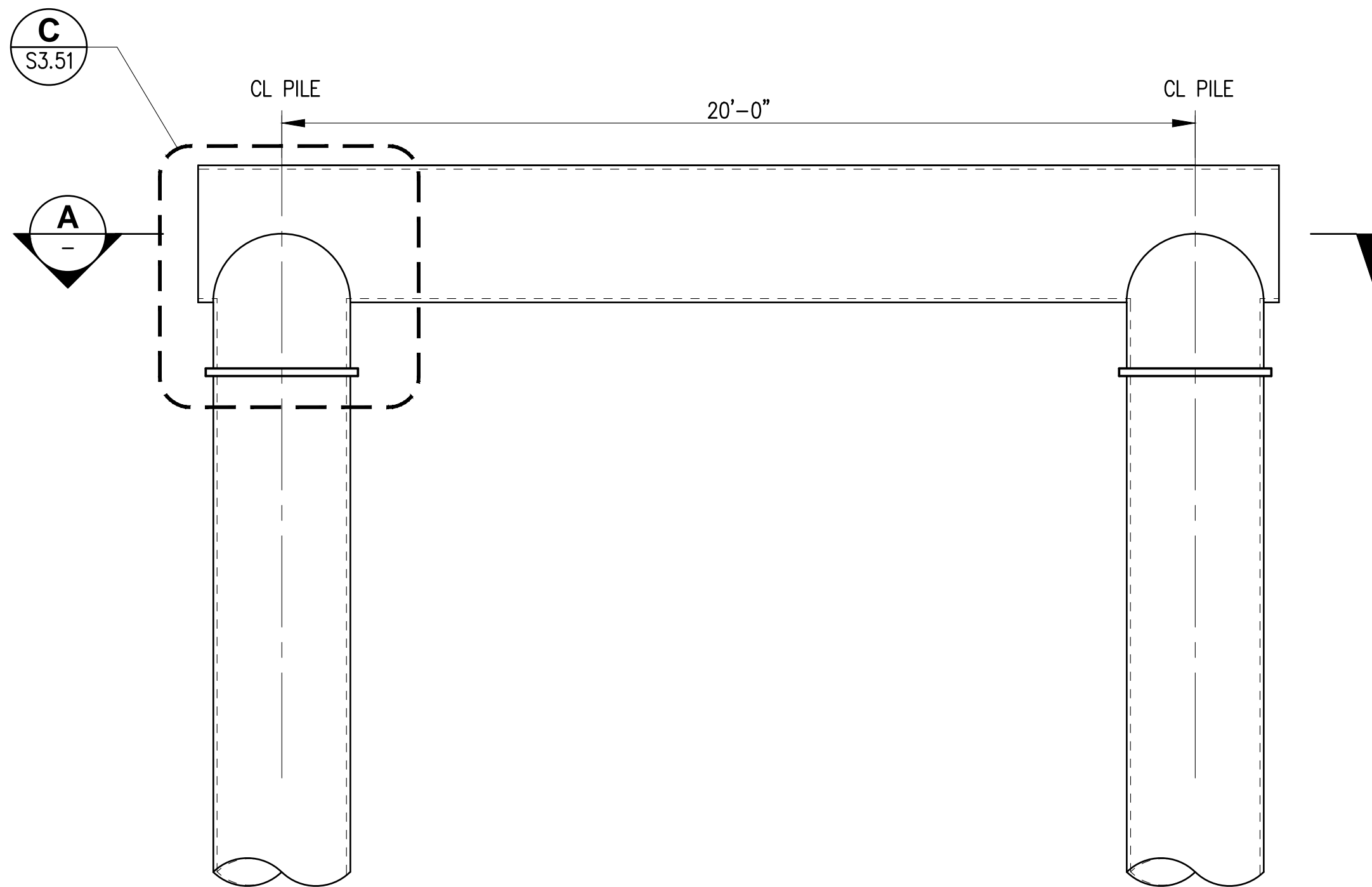
1 GUIDE PILE FRAME 1 PLAN VIEW
SCALE: NTS



2 GUIDE PILE FRAME 2 PLAN VIEW
SCALE: NTS



A GUIDE PILE FRAME 1
SCALE: NTS



B GUIDE PILE FRAME 2
SCALE: NTS

kpff

1601 5th Avenue, Suite 1300
Seattle, Washington 98101
(206) 382-0600 Fax (206) 382-0500

NO.	DATE	BY	REVISION



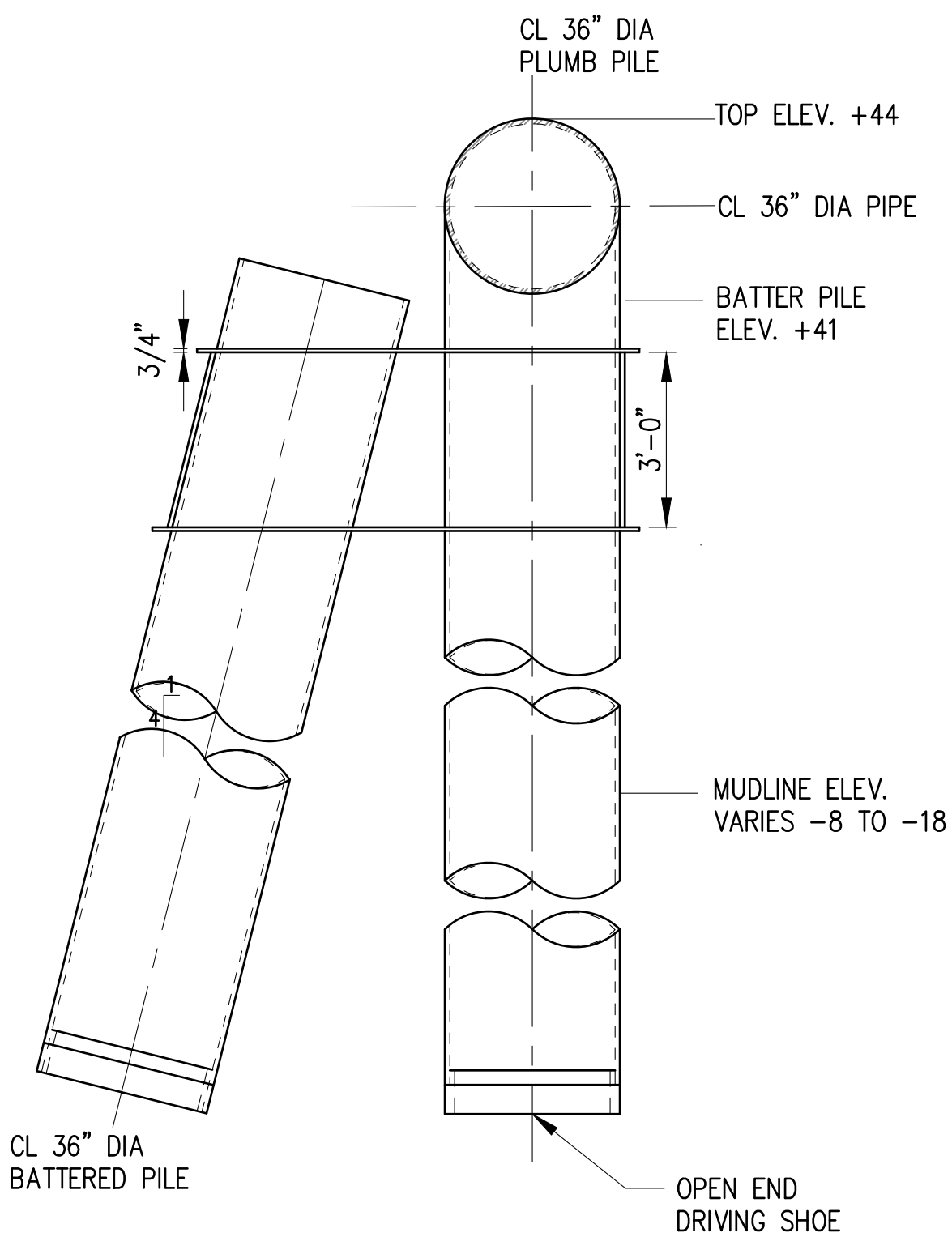
ORE PENINSULA REDEVELOPMENT
SKAGWAY, ALASKA

CRUISE DOCK FLOAT GUIDE PILES
SECTIONS

DRAWN: JH	PROJECT NO.: 2100135
DESIGN: ED	SCALE: AS SHOWN
CHECKED: RR	DATE: 6/17/2022
DRAWING NO.	S3.50
SHEET NO.	OF

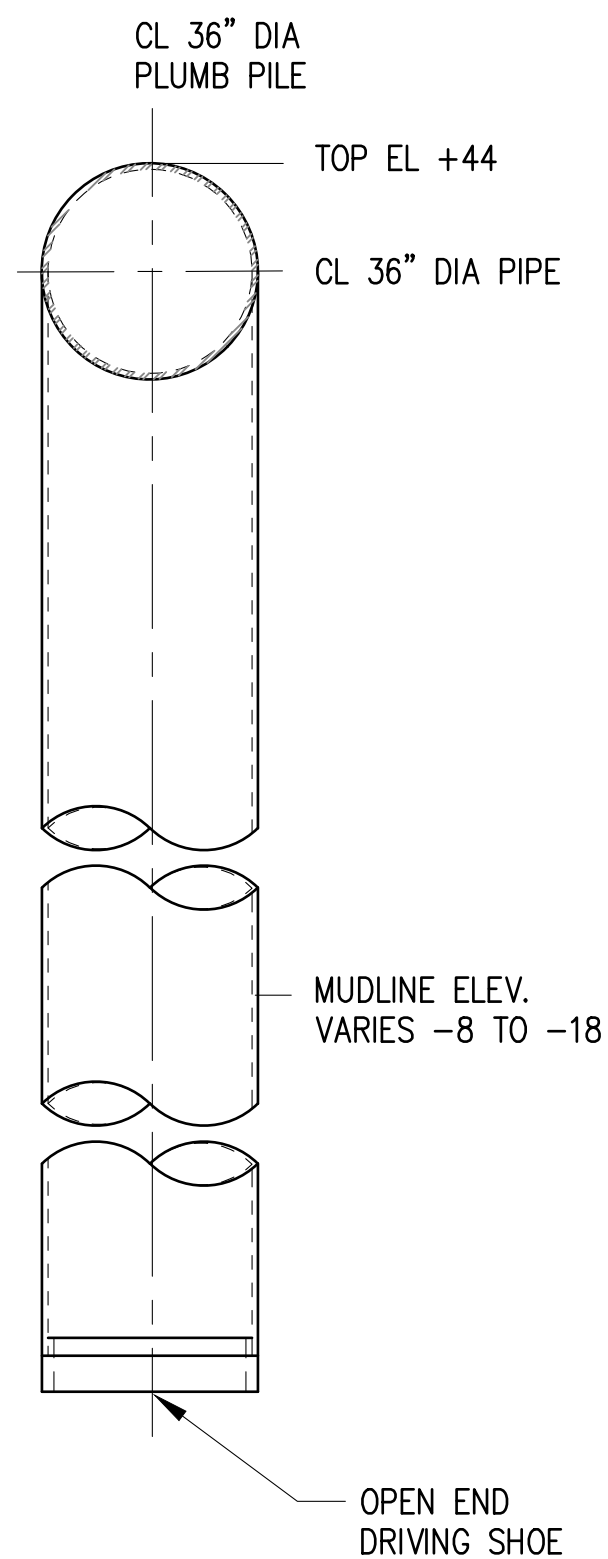
30% DESIGN - NOT FOR CONSTRUCTION

Plotted: Jun 17, 2022 - 4:32pm d:\u Layout: S3.50
M: \2021\2100135 Skagway Ore Peninsula Multi-use Dock Drawings\Current\2100135_S3.50-S3.51 Cruise Dock Float Guide Piles.dwg



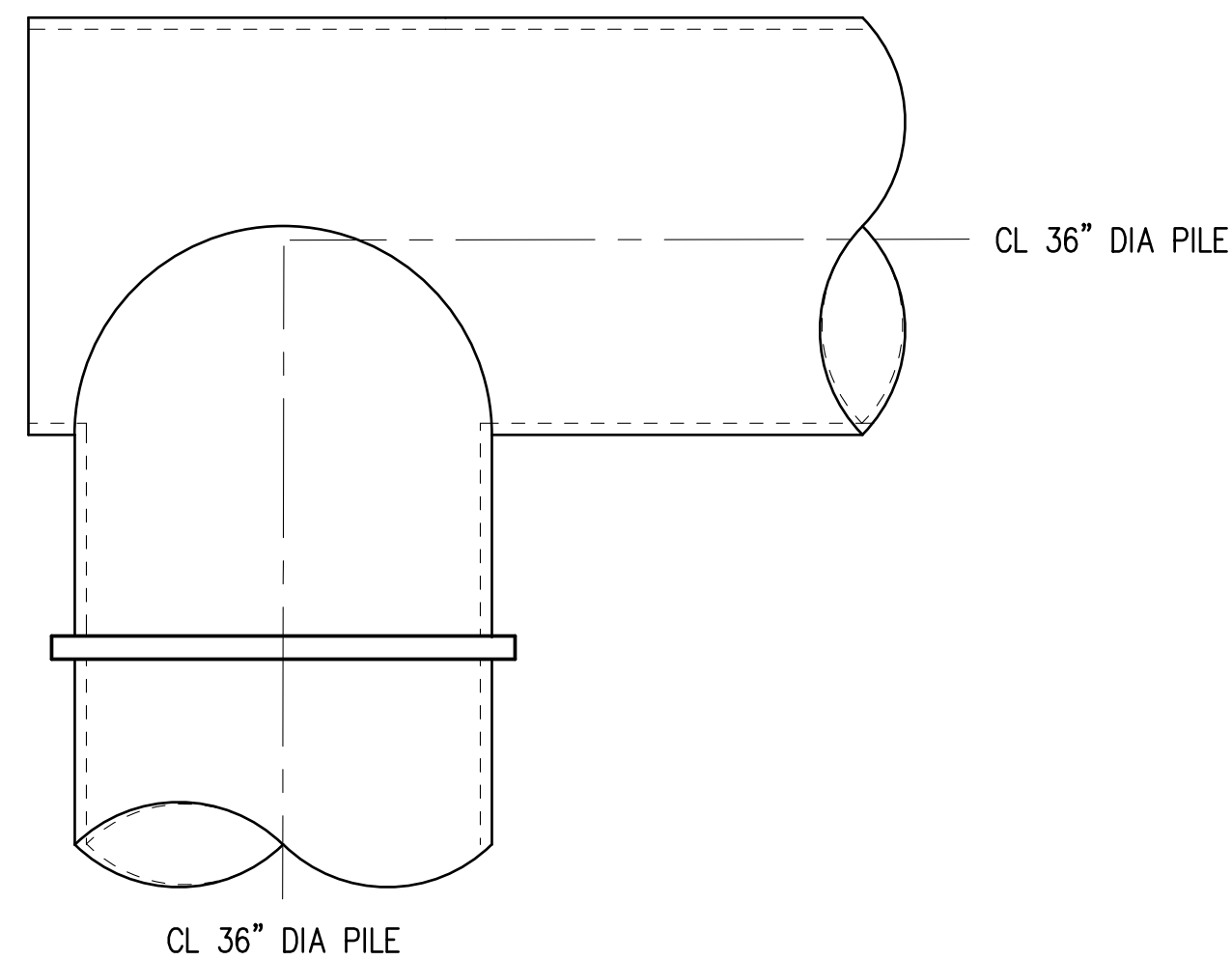
A
S3.50

PLUMB / BATTERED PILES SECTION
SCALE: NTS



B
S3.50

PLUMB PILE SECTION
SCALE: NTS



C
S3.51

PLUMB PILE / CROSSBEAM CONNECTION
SCALE: NTS

kpff

1601 5th Avenue, Suite 1300
Seattle, Washington 98101
(206) 382-0600 Fax (206) 382-0500

NO.	DATE	BY	REVISION



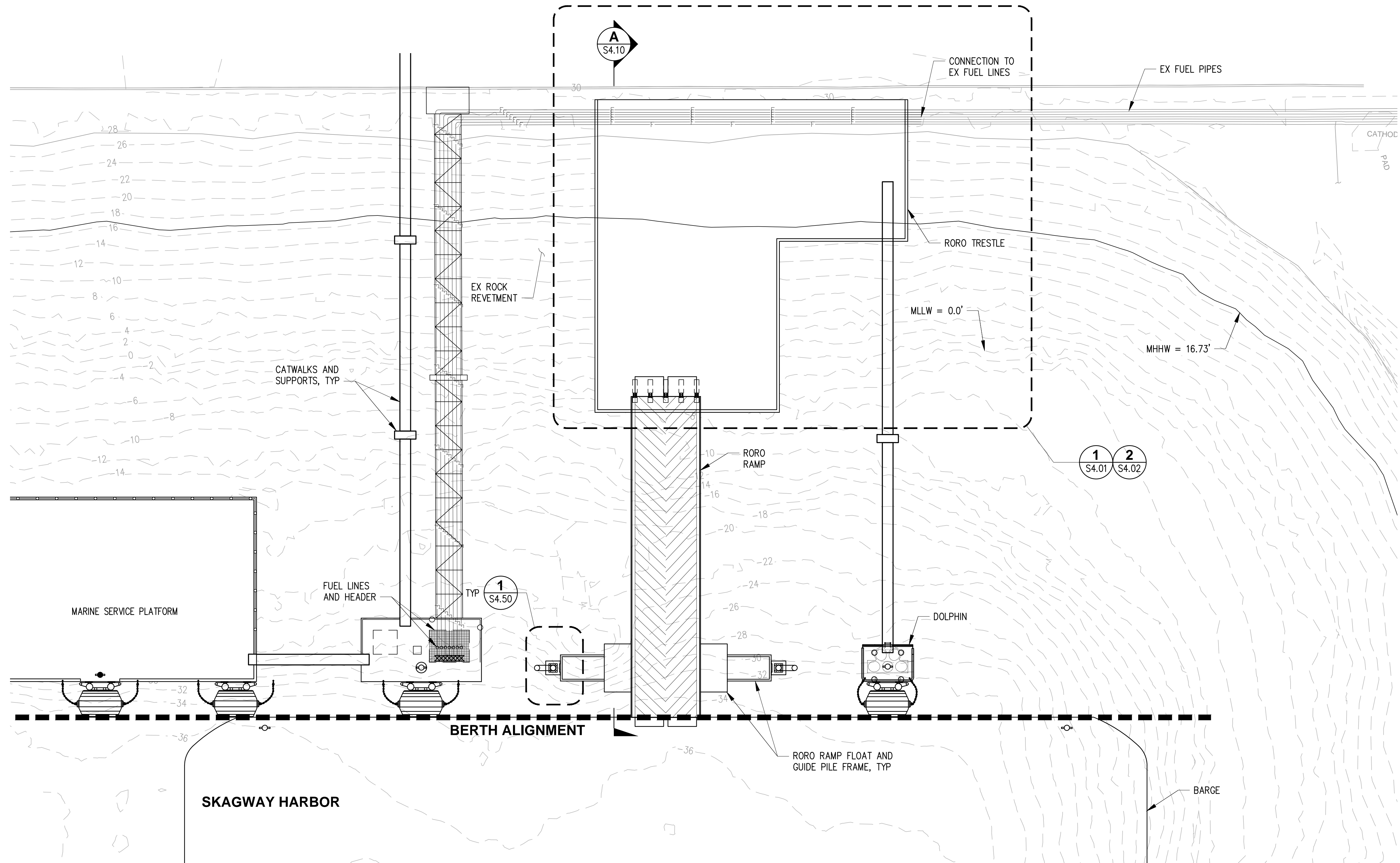
ORE PENINSULA REDEVELOPMENT
SKAGWAY, ALASKA

CRUISE DOCK FLOAT GUIDE PILES
SECTIONS

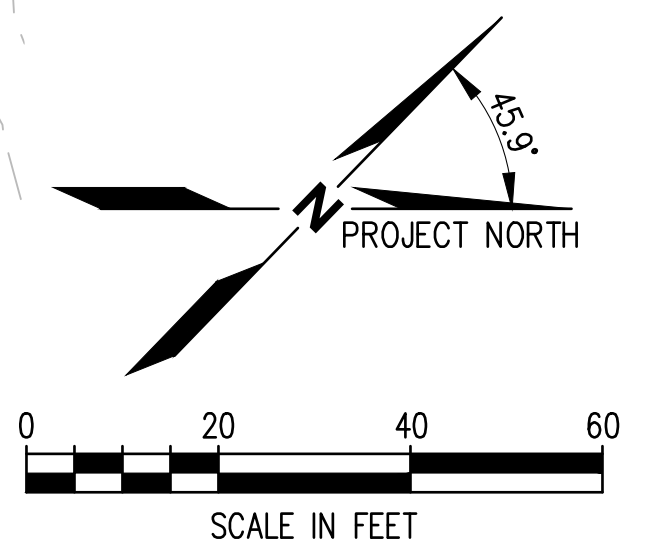
DRAWN: JH	PROJECT NO.: 2100135
DESIGN: ED	SCALE: AS SHOWN
CHECKED: RR	DATE: 6/17/2022
DRAWING NO.	S3.51
SHEET NO.	OF

30% DESIGN - NOT FOR CONSTRUCTION

Plotted: Jun 17, 2022 - 4:38pm
M:\2021\2100135 Skagway Ore Peninsula Multi-Use Dock\Drawings\Current\2100135_S4.00 Roro Ramp & Access Trestle Plan.dwg
Layout: S4.00



1 RORO RAMP AND FUEL LINE ENLARGED PLAN
SCALE: 1" = 20'



kpff

1601 5th Avenue, Suite 1300
Seattle, Washington 98101
(206) 382-0600 Fax (206) 382-0500

NO.	DATE	BY	REVISION



ORE PENINSULA REDEVELOPMENT
SKAGWAY, ALASKA

RORO RAMP AND ACCESS TRESTLE PLANS

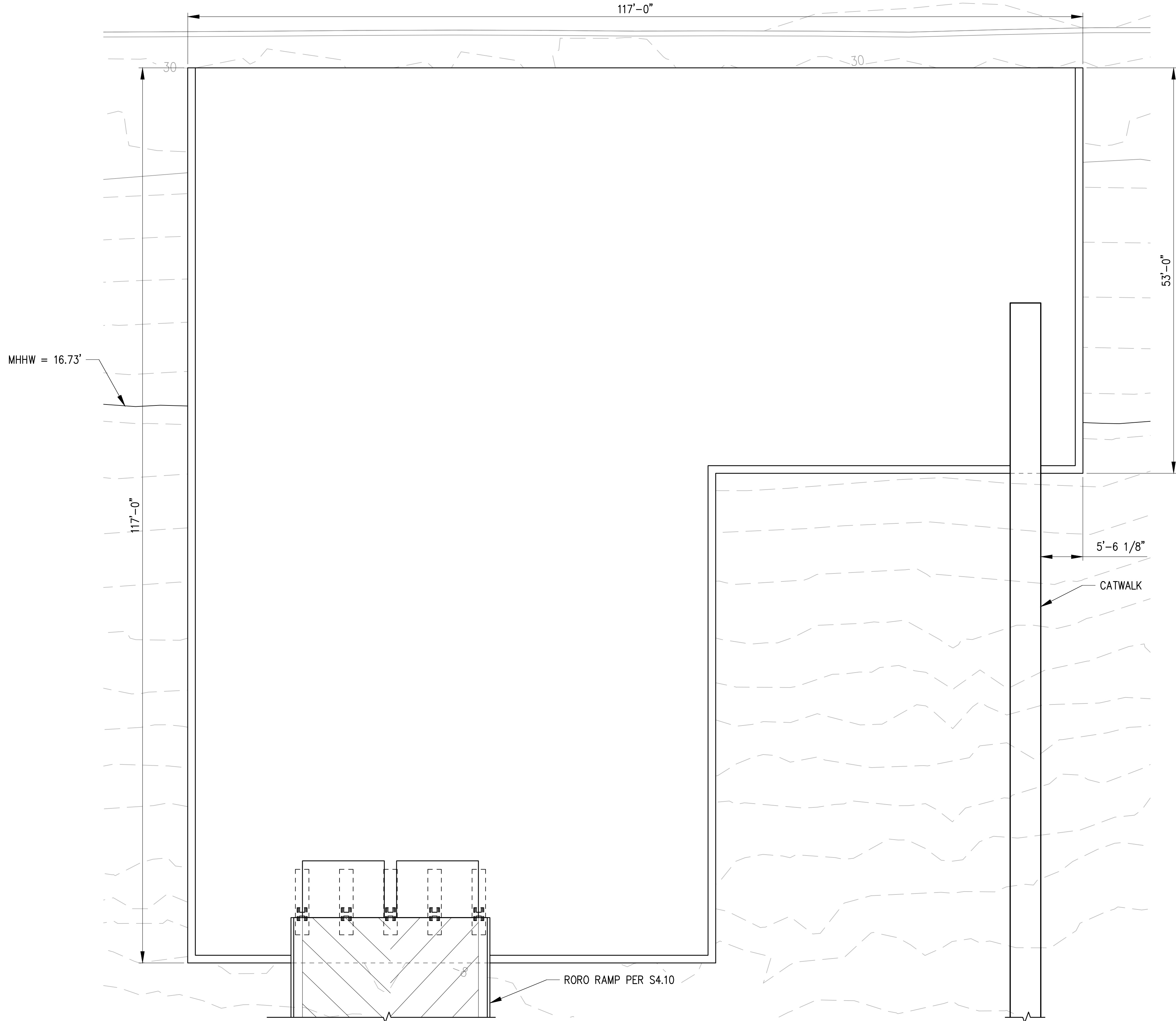
DRAWN: JH	PROJECT NO.: 2100135
DESIGN: ED	SCALE: AS SHOWN
CHECKED: RR	DATE: 6/17/2022
DRAWING NO.	S4.00
SHEET NO.	OF

30% DESIGN - NOT FOR CONSTRUCTION

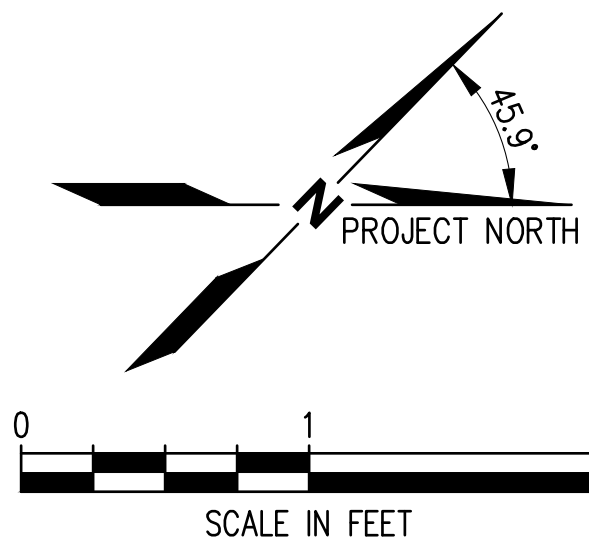
Plotted: Jun 17, 2022 - 4:42pm
M:\2021\2100135 Skagway Ore Peninsula Multi-Use Dock\Drawings\Current\2100135_S4.01 Roro Ramp Access Trestle Surf Feat Plan.dwg

NOTES

1. UTILITIES NOT SHOWN FOR CLARITY, SEE CIVIL



1 SURFACE FEATURES PLAN
S4.00 SCALE: 1-1/2" = 1'-0"



kpff

1601 5th Avenue, Suite 1300
Seattle, Washington 98101
(206) 382-0600 Fax (206) 382-0500

NO.	DATE	BY	REVISION



ORE PENINSULA REDEVELOPMENT
SKAGWAY, ALASKA

RORO RAMP ACCESS TRESTLE
SURFACE FEATURES PLAN

DRAWN: JH	PROJECT NO.: 2100135
DESIGN: ED	SCALE: AS SHOWN
CHECKED: RR	DATE: 6/17/2022
DRAWING NO.	S4.01
SHEET NO.	OF

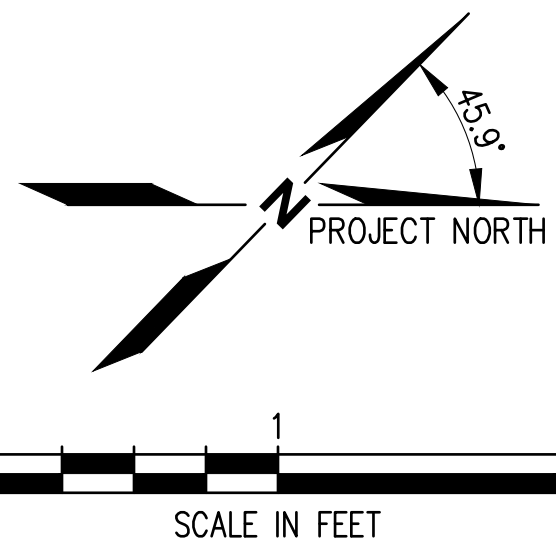
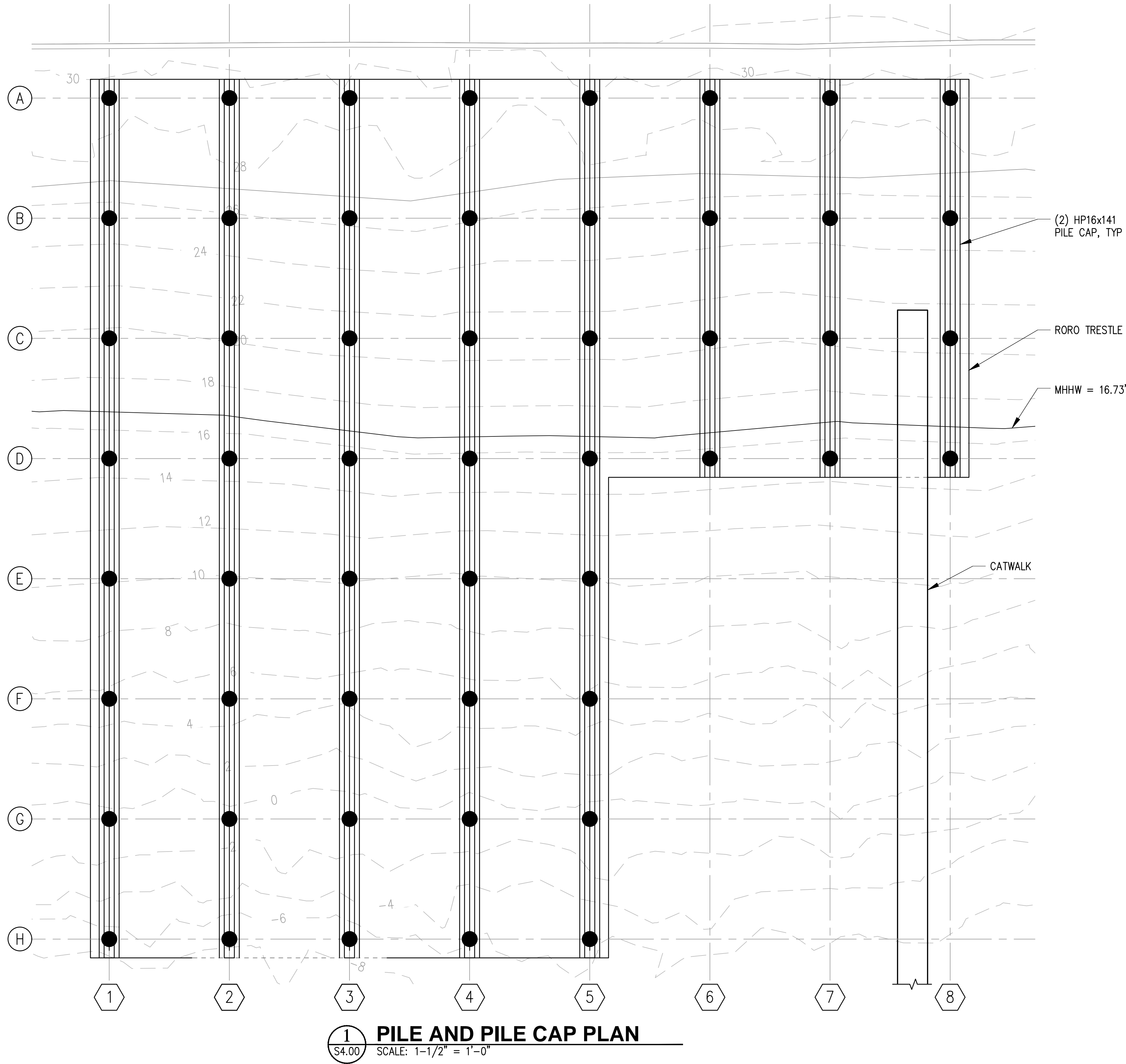
Plotted: Jun 17, 2022 - 4:43pm
M:\2021\2100135 Skagway Ore Peninsula Multi-Use Dock\Drawings\Current\2100135_S4.02 RoRo Ramp Access Trestle Pile Plan.dwg

NOTES

1. UTILITIES NOT SHOWN FOR CLARITY, SEE CIVIL

LEGEND

- STEEL PIPE PILE, SEE S4.30 FOR PILE SCHEDULE



kpff

1601 5th Avenue, Suite 1300
Seattle, Washington 98101
(206) 382-0600 Fax (206) 382-0500

NO.	DATE	BY	REVISION



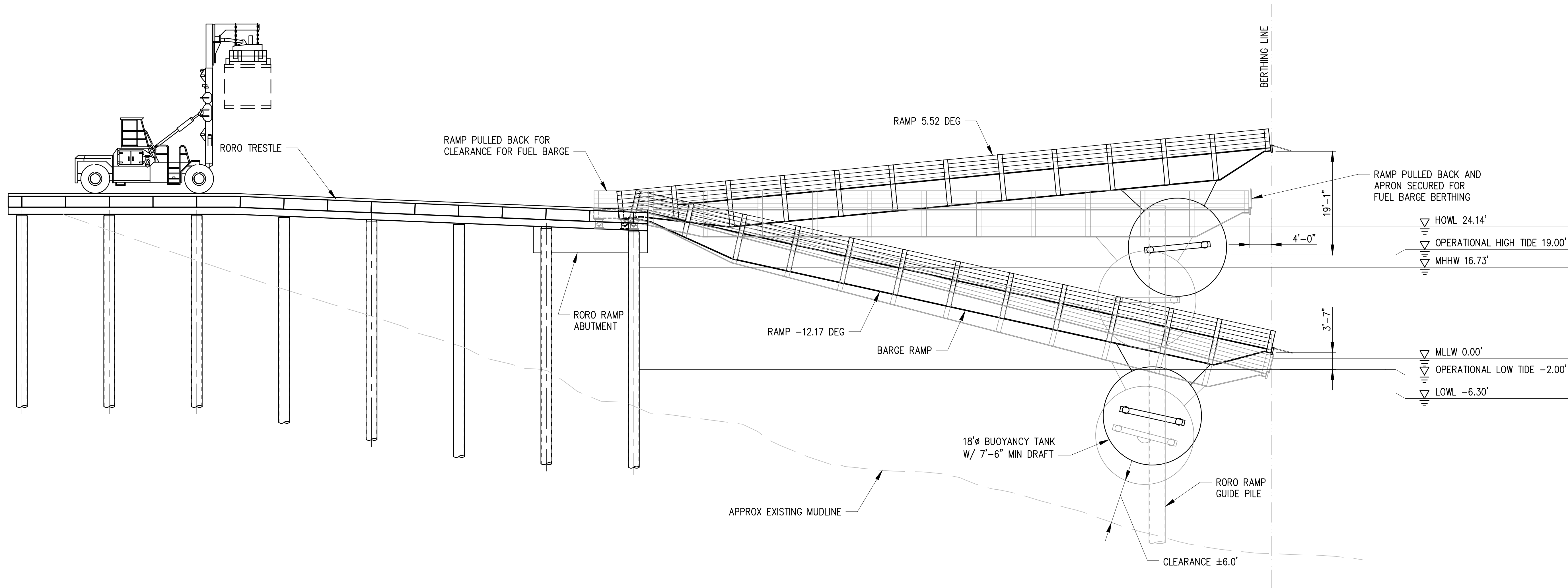
ORE PENINSULA REDEVELOPMENT
SKAGWAY, ALASKA

RORO RAMP ACCESS TRESTLE
PILE AND PILE CAP PLAN

DRAWN: JH	PROJECT NO.: 2100135
DESIGN: ED	SCALE: AS SHOWN
CHECKED: RR	DATE: 6/17/2022
DRAWING NO.	S4.02
SHEET NO.	OF

30% DESIGN - NOT FOR CONSTRUCTION

Plotted: Jun 17, 2022 - 4:45pm
M:\2021\2100135 Skagway Ore Peninsula Multi-Use Dock\Drawings\Current\2100135_S4.10 Roro Ramp & Access Trestle Range Of Motion.dwg
Layout: S4.10



RORO RAMP NOTES

- RORO RAMP PROVIDES ACCESS TO BARGES WITH DECK HEIGHTS RANGING FROM +1.6' MLLW TO +38' MLLW.
- AT A TIDE OF 19.00' MLLW THE RAMP CAN BE RAISED TO APPROXIMATELY 38' MLLW.
- DESIGN VEHICLES FOR THE RO-RO RAMP INCLUDE:
 - SVETRUCK CONTAINER HANDLING FORKLIFT
 - MANITWOC 4100W SERIES 2 CRANE TRAVEL (W/CAR BODY WEIGHTS REMOVED)
 - HL-93 TRUCKS
- RAMP ANGLES RANGE FROM +5.52 DEGREES TO -12.17 DEGREES. DURING OPERATIONS TIDES OF +19.00' TO -2.00' MLLW.
- HYDRAULIC SLIDE SYSTEM AT ABUTMENT PROVIDES APPROXIMATELY 5' OF HORIZONTAL MOVEMENT TO PROVIDE CLEARANCE FOR FUEL BARGE BERTHING.

RORO RAMP SECTION
SCALE: 1" = 10'



kpff

1601 5th Avenue, Suite 1300
Seattle, Washington 98101
(206) 382-0600 Fax (206) 382-0500

NO.	DATE	BY	REVISION



**ORE PENINSULA REDEVELOPMENT
SKAGWAY, ALASKA**

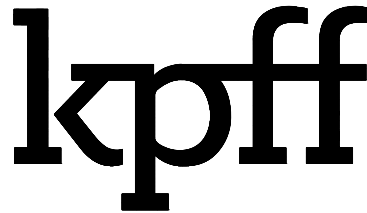
**RORO RAMP SECTION
RANGE OF MOTION**

DRAWN: JH	PROJECT NO.: 2100135
DESIGN: ED	SCALE: AS SHOWN
CHECKED: RR	DATE: 6/17/2022
DRAWING NO.	S4.10
SHEET NO.	OF

30% DESIGN - NOT FOR CONSTRUCTION

Plotted: Jun 17, 2022 - 4:46pm
M:\2021\2100135 Skagway Ore Peninsula Multi-Use Dock\Drawings\Current\2100135_S4.30 RoRo Ramp & Access Trestle Pile Schedule.dwg

PILE SCHEDULE							
PILE #	GRID	GRID	PILE TYPE	OD	WALL THICK	T/PILE	PILE TIP
1	A	1	STEEL PIPE	24"	3/4"	25.00	-85.00
2	A	2	STEEL PIPE	24"	3/4"	25.00	-85.00
3	A	3	STEEL PIPE	24"	3/4"	25.00	-85.00
4	A	4	STEEL PIPE	24"	3/4"	25.00	-85.00
5	A	5	STEEL PIPE	24"	3/4"	25.00	-85.00
6	A	6	STEEL PIPE	24"	3/4"	25.00	-85.00
7	A	7	STEEL PIPE	24"	3/4"	25.00	-85.00
8	A	8	STEEL PIPE	24"	3/4"	25.00	-85.00
9	A	1	STEEL PIPE	24"	3/4"	25.00	-85.00
10	B	2	STEEL PIPE	24"	3/4"	25.00	-85.00
11	B	3	STEEL PIPE	24"	3/4"	25.00	-85.00
12	B	4	STEEL PIPE	24"	3/4"	25.00	-85.00
13	B	5	STEEL PIPE	24"	3/4"	25.00	-85.00
14	B	6	STEEL PIPE	24"	3/4"	25.00	-85.00
15	B	7	STEEL PIPE	24"	3/4"	25.00	-85.00
16	B	8	STEEL PIPE	24"	3/4"	25.00	-85.00
17	C	1	STEEL PIPE	24"	3/4"	25.00	-85.00
18	C	2	STEEL PIPE	24"	3/4"	25.00	-85.00
19	C	3	STEEL PIPE	24"	3/4"	25.00	-85.00
20	C	4	STEEL PIPE	24"	3/4"	25.00	-85.00
21	C	5	STEEL PIPE	24"	3/4"	25.00	-85.00
22	C	6	STEEL PIPE	24"	3/4"	25.00	-85.00
23	C	7	STEEL PIPE	24"	3/4"	25.00	-85.00
24	C	8	STEEL PIPE	24"	3/4"	25.00	-85.00
25	D	1	STEEL PIPE	24"	3/4"	25.00	-85.00
26	D	2	STEEL PIPE	24"	3/4"	25.00	-85.00
27	D	3	STEEL PIPE	24"	3/4"	25.00	-85.00
28	D	4	STEEL PIPE	24"	3/4"	25.00	-85.00
29	D	5	STEEL PIPE	24"	3/4"	25.00	-85.00
30	D	6	STEEL PIPE	24"	3/4"	25.00	-85.00
31	D	7	STEEL PIPE	24"	3/4"	25.00	-85.00
32	D	8	STEEL PIPE	24"	3/4"	25.00	-85.00
33	E	1	STEEL PIPE	24"	3/4"	25.00	-85.00
34	E	2	STEEL PIPE	24"	3/4"	25.00	-85.00
35	E	3	STEEL PIPE	24"	3/4"	25.00	-85.00
36	E	4	STEEL PIPE	24"	3/4"	25.00	-85.00
37	E	5	STEEL PIPE	24"	3/4"	25.00	-85.00
38	F	1	STEEL PIPE	24"	3/4"	25.00	-85.00
39	F	2	STEEL PIPE	24"	3/4"	25.00	-85.00
40	F	3	STEEL PIPE	24"	3/4"	25.00	-85.00
41	F	4	STEEL PIPE	24"	3/4"	25.00	-85.00
42	F	5	STEEL PIPE	24"	3/4"	25.00	-85.00
43	G	1	STEEL PIPE	24"	3/4"	25.00	-85.00
44	G	2	STEEL PIPE	24"	3/4"	25.00	-85.00
45	G	3	STEEL PIPE	24"	3/4"	25.00	-85.00
46	G	4	STEEL PIPE	24"	3/4"	25.00	-85.00
47	G	5	STEEL PIPE	24"	3/4"	25.00	-85.00
48	H	1	STEEL PIPE	24"	3/4"	25.00	-85.00
49	H	2	STEEL PIPE	24"	3/4"	25.00	-85.00
50	H	3	STEEL PIPE	24"	3/4"	25.00	-85.00
51	H	4	STEEL PIPE	24"	3/4"	25.00	-85.00
52	H	5	STEEL PIPE	24"	3/4"	25.00	-85.00



1601 5th Avenue, Suite 1300
Seattle, Washington 98101
(206) 382-0600 Fax (206) 382-0500

NO.	DATE	BY	REVISION



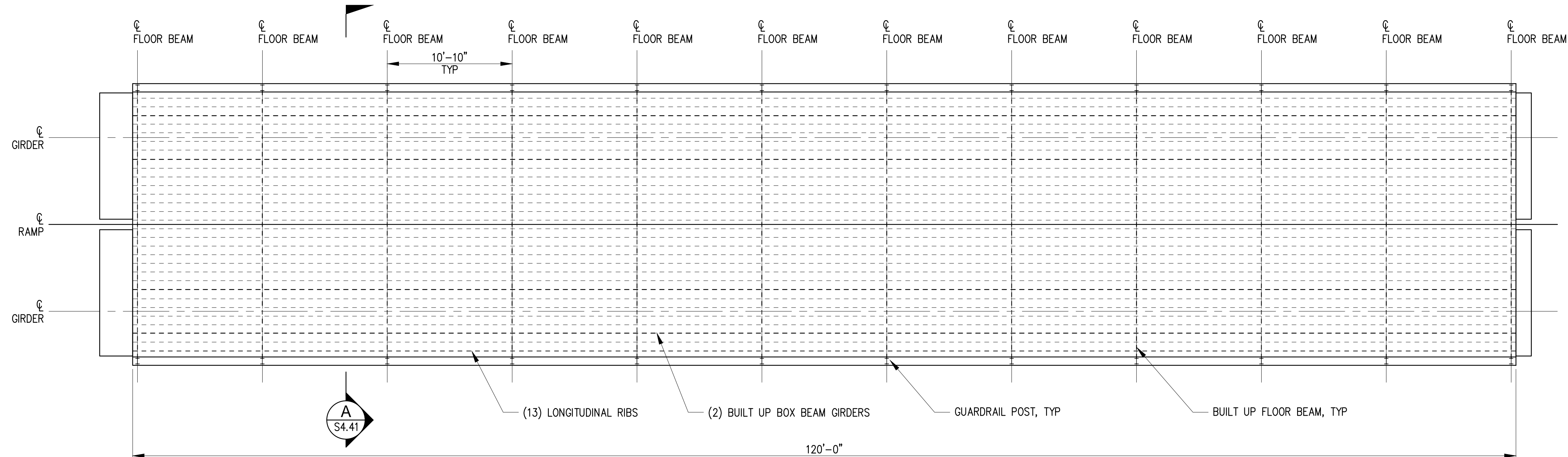
ORE PENINSULA REDEVELOPMENT
SKAGWAY, ALASKA

RORO RAMP ACCESS TRESTLE
PILE SCHEDULE

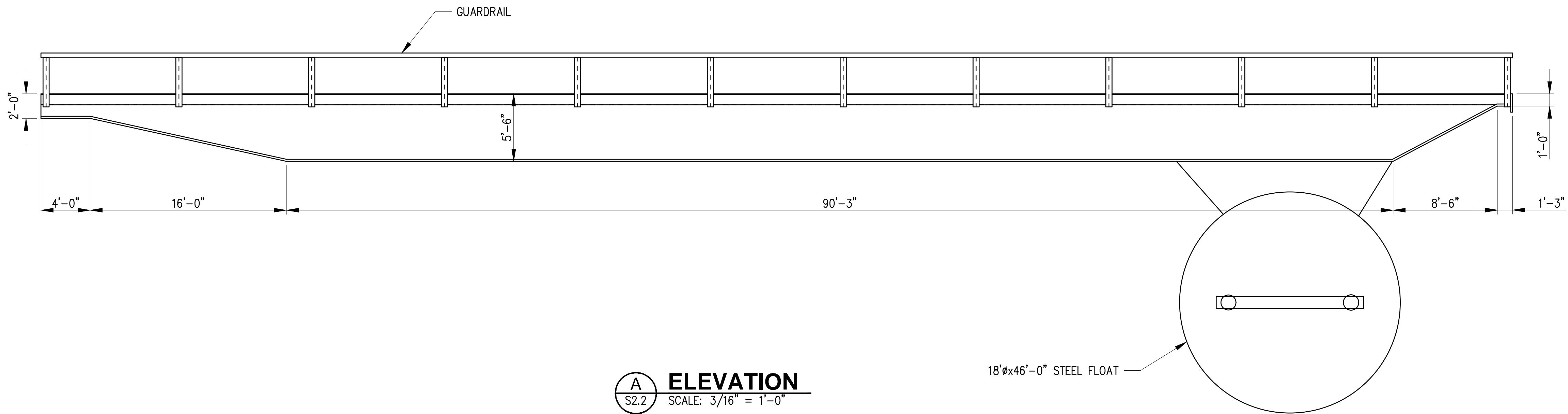
DRAWN: JH	PROJECT NO.: 2100135
DESIGN: ED	SCALE: AS SHOWN
CHECKED: RR	DATE: 6/17/2022
DRAWING NO.	S4.30
SHEET NO.	OF

30% DESIGN - NOT FOR CONSTRUCTION

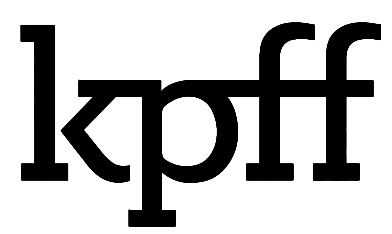
Plotted: Jun 17, 2022 - 4:47pm
M:\2021\2100135 Skagway Ore Peninsula Multi-Use Dock\Drawings\Current\2100135_S4.40 Roro Ramp Plan & Elevation.dwg
dyu Layout: S4.40



1 PLAN
S2.1 SCALE: 3/16" = 1'-0"



A ELEVATION
S2.2 SCALE: 3/16" = 1'-0"



1601 5th Avenue, Suite 1300
Seattle, Washington 98101
(206) 382-0600 Fax (206) 382-0500

NO.	DATE	BY	REVISION



ORE PENINSULA REDEVELOPMENT
SKAGWAY, ALASKA

RORO RAMP
PLAN AND ELEVATION

DRAWN: JH	PROJECT NO.: 2100135
DESIGN: ED	SCALE: AS SHOWN
CHECKED: RR	DATE: 6/17/2022
DRAWING NO.	S4.40
SHEET NO.	OF

30% DESIGN - NOT FOR CONSTRUCTION

Plotted: Jun 17, 2022 - 4:48pm
M:\2021\2100135 Skagway Ore Peninsula Multi-Use Dock\Drawings\Current\2100135_S4.41 Roro Ramp Section.dwg

Layout: S4.41

dyu

kpff

1601 5th Avenue, Suite 1300
Seattle, Washington 98101
(206) 382-0600 Fax (206) 382-0500

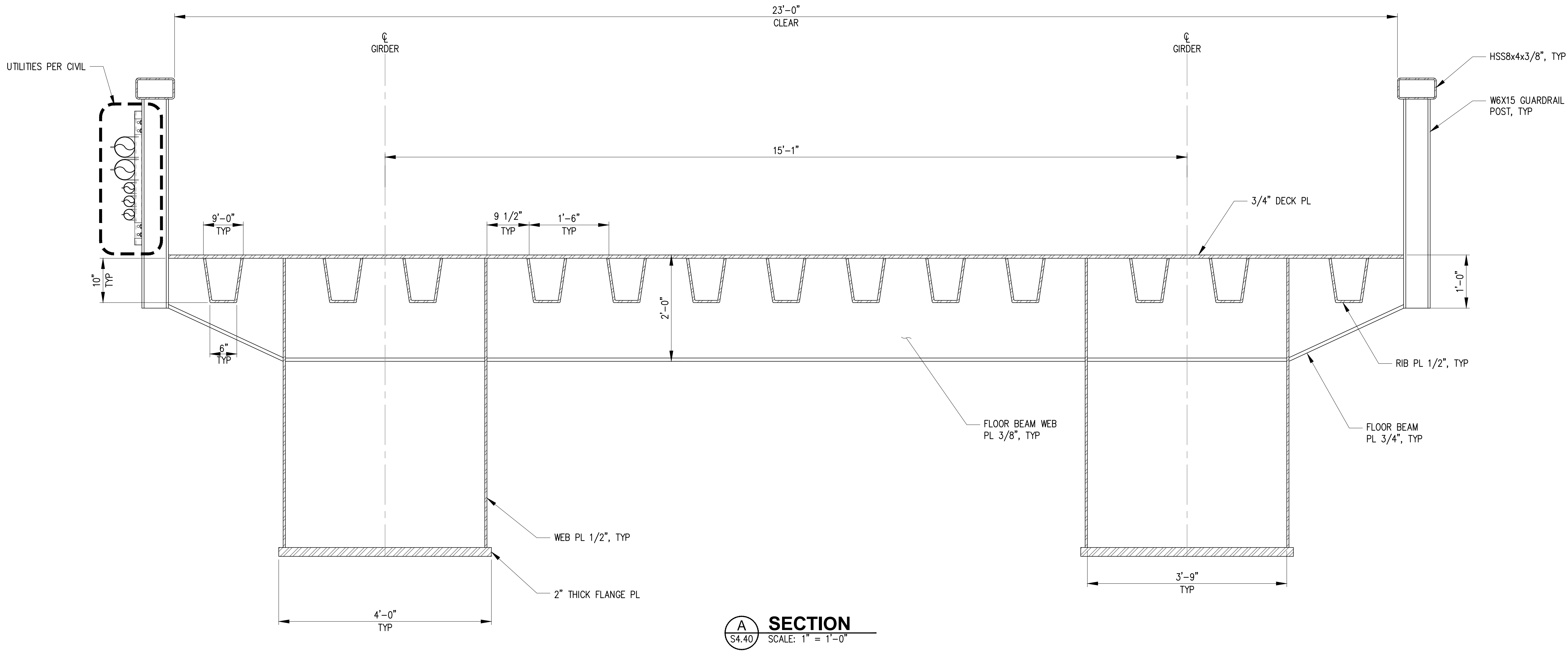
NO.	DATE	BY	REVISION



ORE PENINSULA REDEVELOPMENT
SKAGWAY, ALASKA

RORO RAMP
SECTION

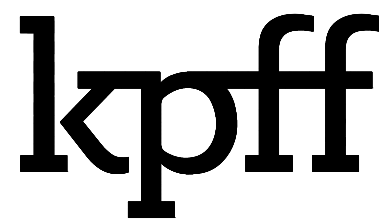
DRAWN: JH	PROJECT NO.: 2100135
DESIGN: ED	SCALE: AS SHOWN
CHECKED: RR	DATE: 6/17/2022
DRAWING NO.	S4.41
SHEET NO.	OF



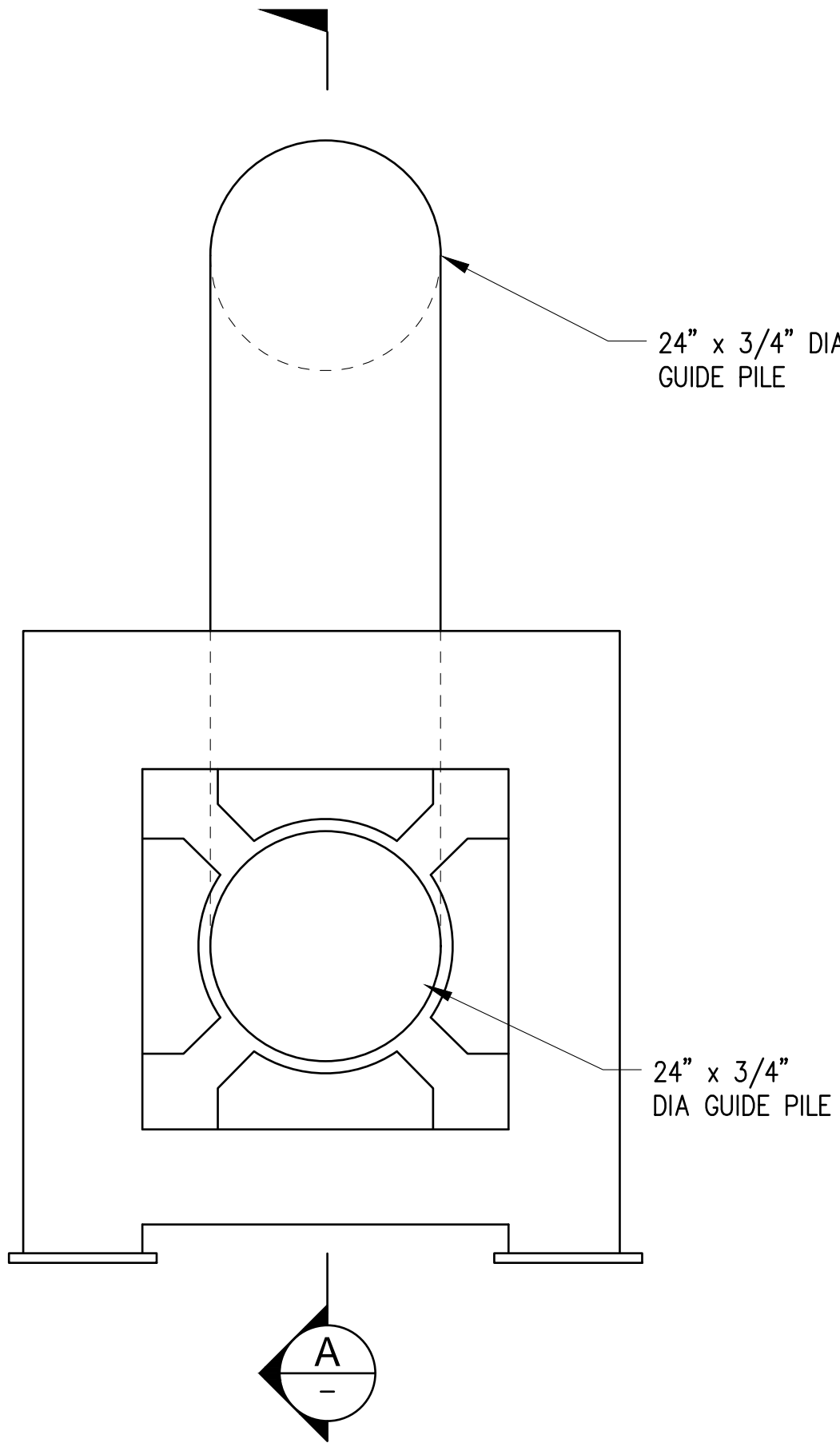
SECTION
SCALE: 1" = 1'-0"

30% DESIGN - NOT FOR CONSTRUCTION

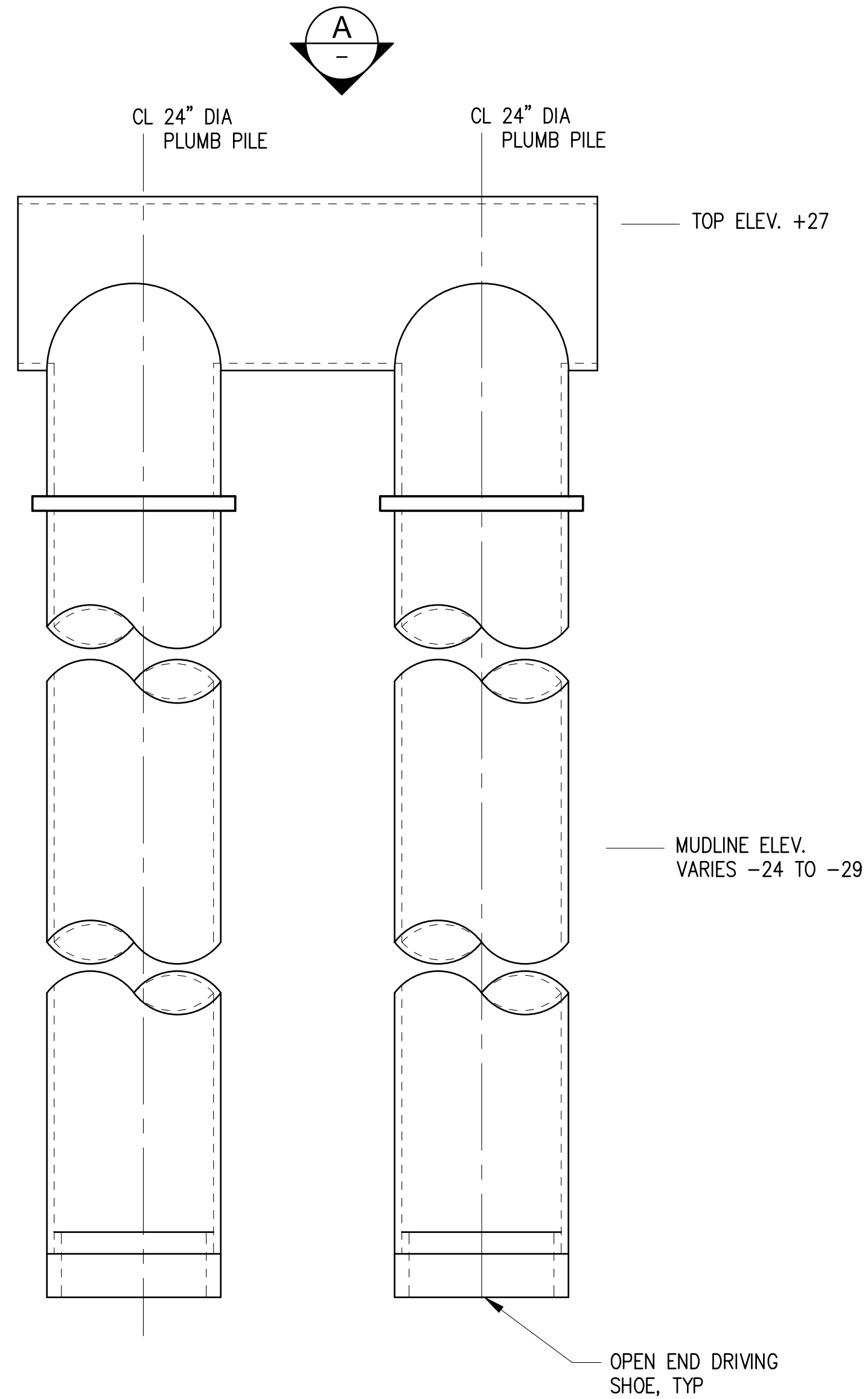
Plotted: Jun 17, 2022 - 5:01pm
M:\2021\2100135 Skagway Ore Peninsula Multi-use Dock\Drawings\Current\2100135_S4.50 Roro Ramp Guide Piles.dwg



1601 5th Avenue, Suite 1300
Seattle, Washington 98101
(206) 382-0600 Fax (206) 382-0500

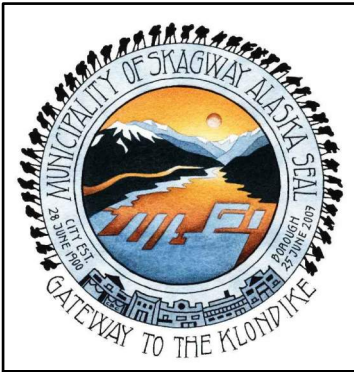


1 **GUIDE PILE PLAN**
S4.00 SCALE: 3/4" = 1'-0"



A **GUIDE PILE FRAME**
SCALE: 3/4" = 1'-0"

NO.	DATE	BY	REVISION



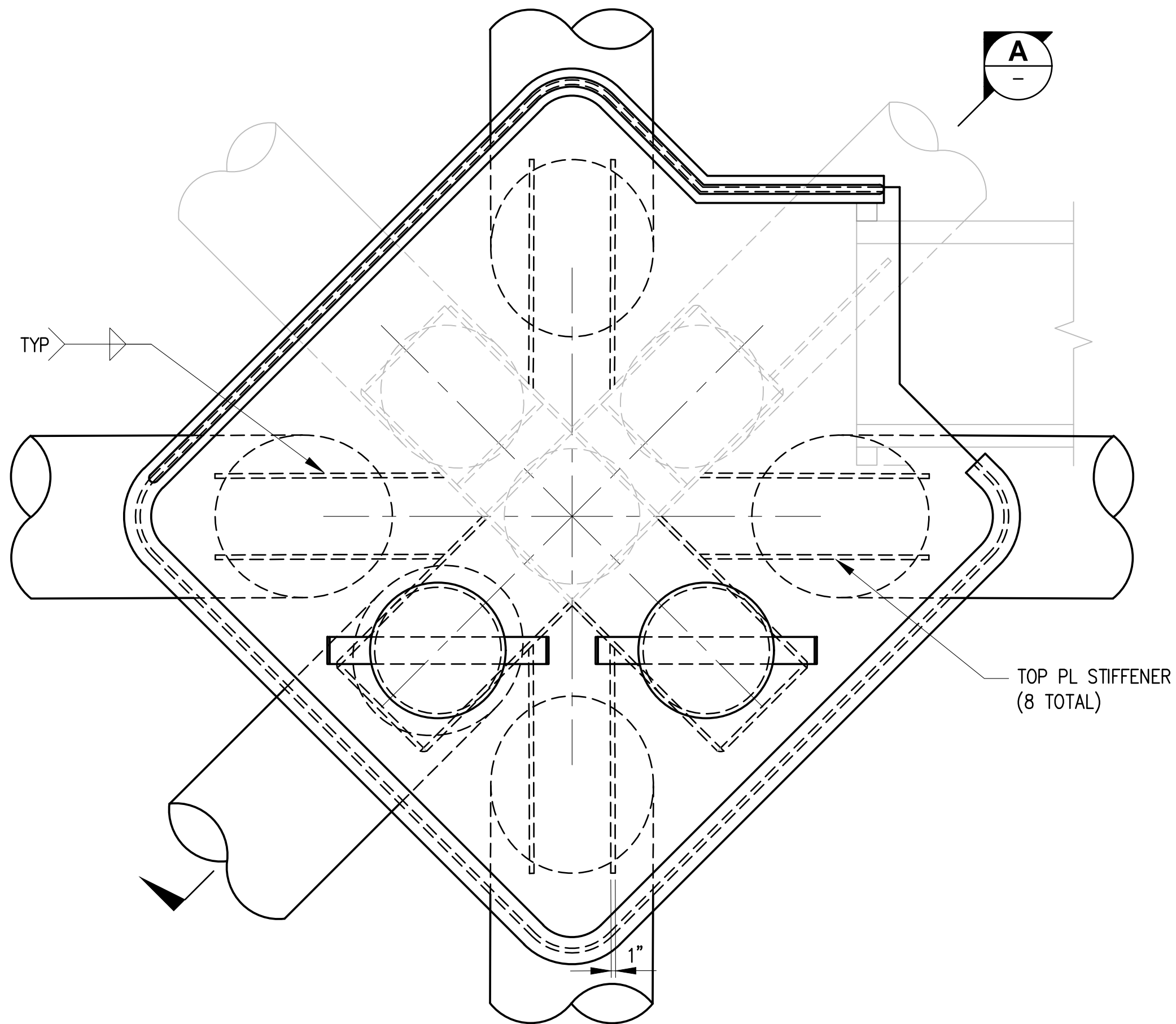
ORE PENINSULA REDEVELOPMENT
SKAGWAY, ALASKA

RORO RAMP GUIDE PILES

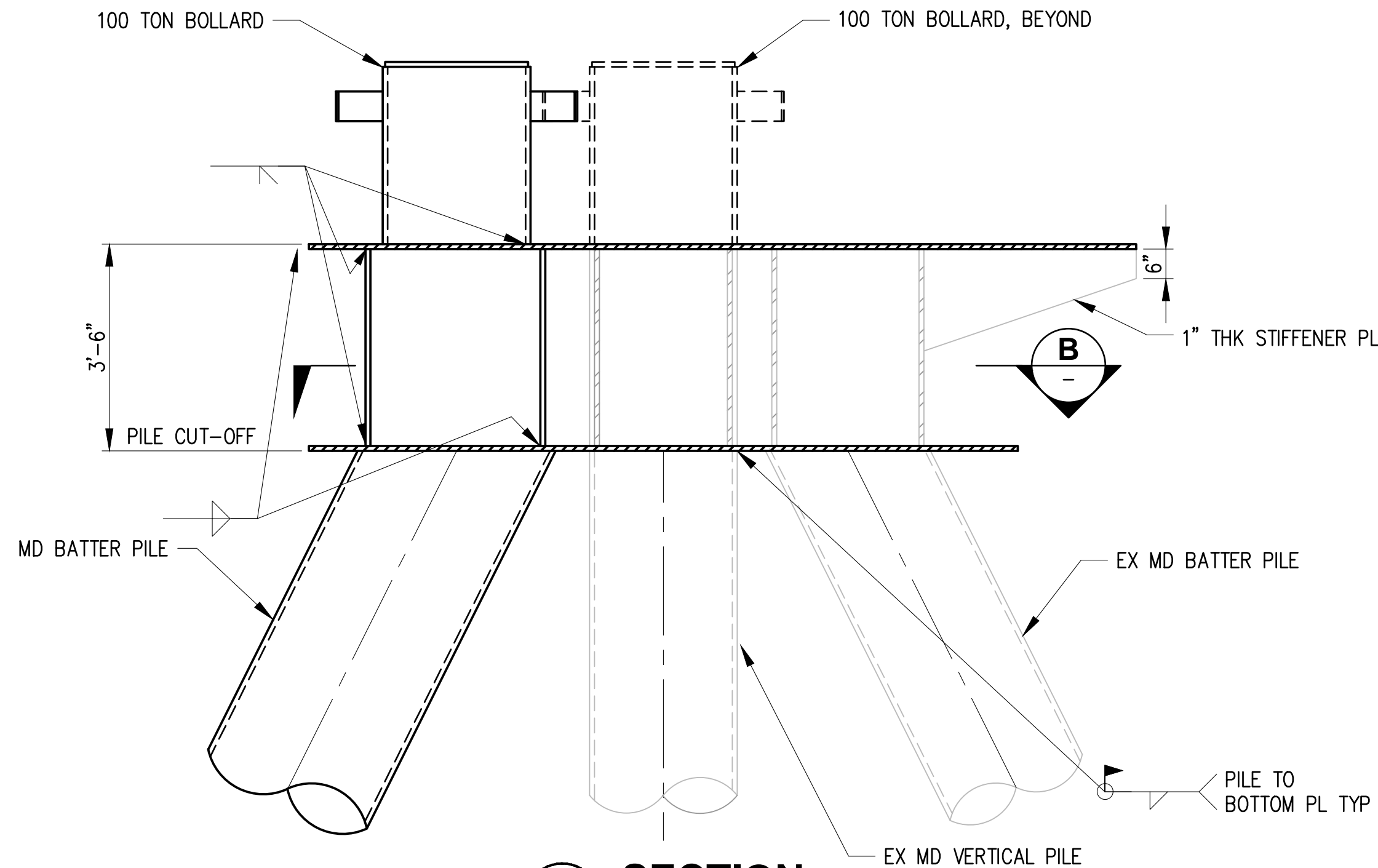
DRAWN: JH	PROJECT NO.: 2100135
DESIGN: ED	SCALE: AS SHOWN
CHECKED: RR	DATE: 6/17/2022
DRAWING NO.	S4.50
SHEET NO.	OF

30% DESIGN - NOT FOR CONSTRUCTION

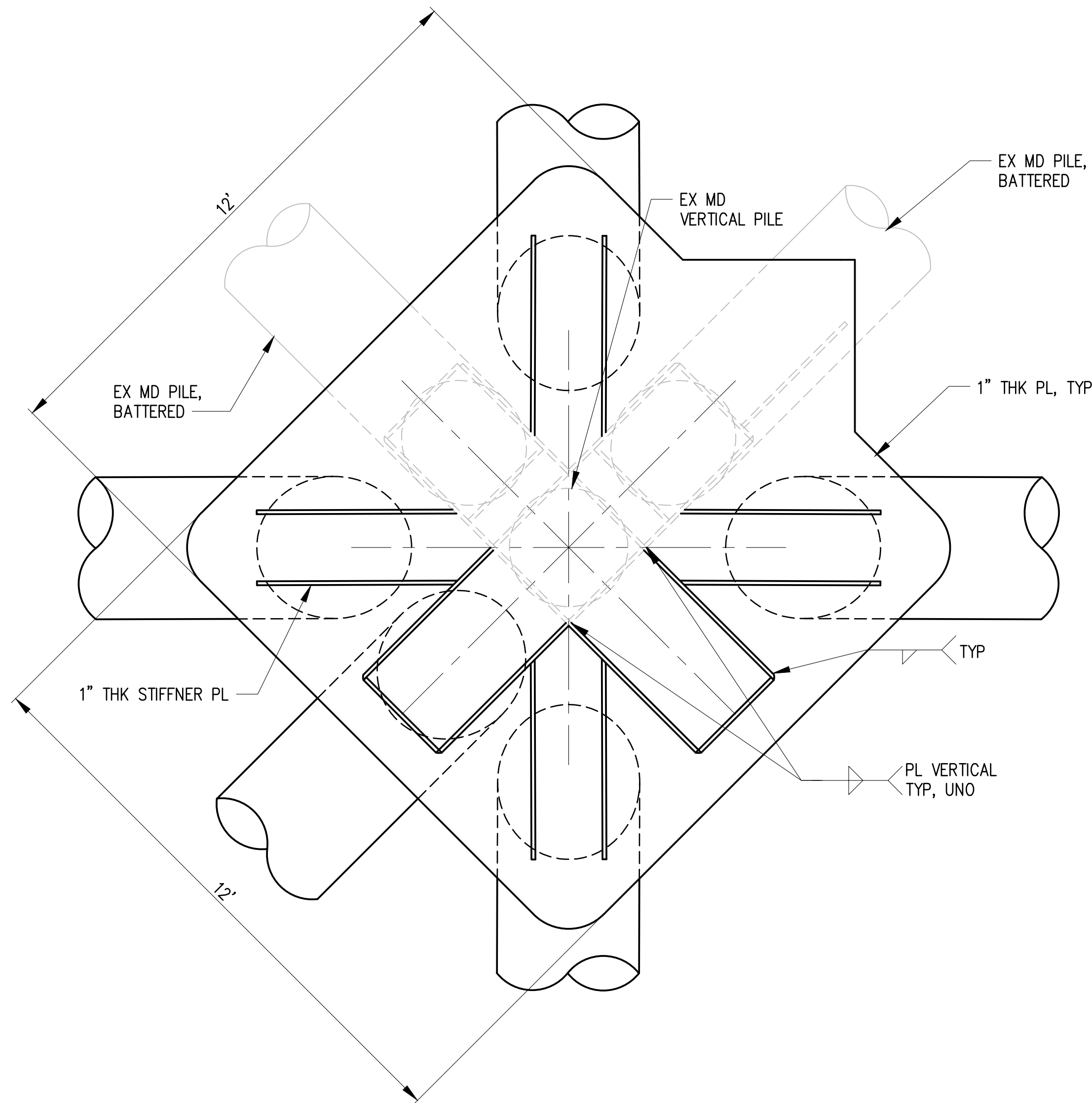
Plotted: Jun 17, 2022 - 5:02pm
M: \2021\2100135 Skagway Ore Peninsula Multi-Use Dock Drawings\Current\2100135_S5.10 South Dolphin Reinforcement Sections.dwg
Layout: S5.10



1 MOORING DOLPHIN DETAIL
SCALE: 6"=1'-0"



A SECTION
SCALE: 6"=1'-0"



B BOTTOM PLATE DETAIL
SCALE: 6"=1'-0"

NOTES

- REFURBISHED DOLPHIN DESIGN CAPACITY IS 200 TONS.

kpff

1601 5th Avenue, Suite 1300
Seattle, Washington 98101
(206) 382-0600 Fax (206) 382-0500

NO.	DATE	BY	REVISION



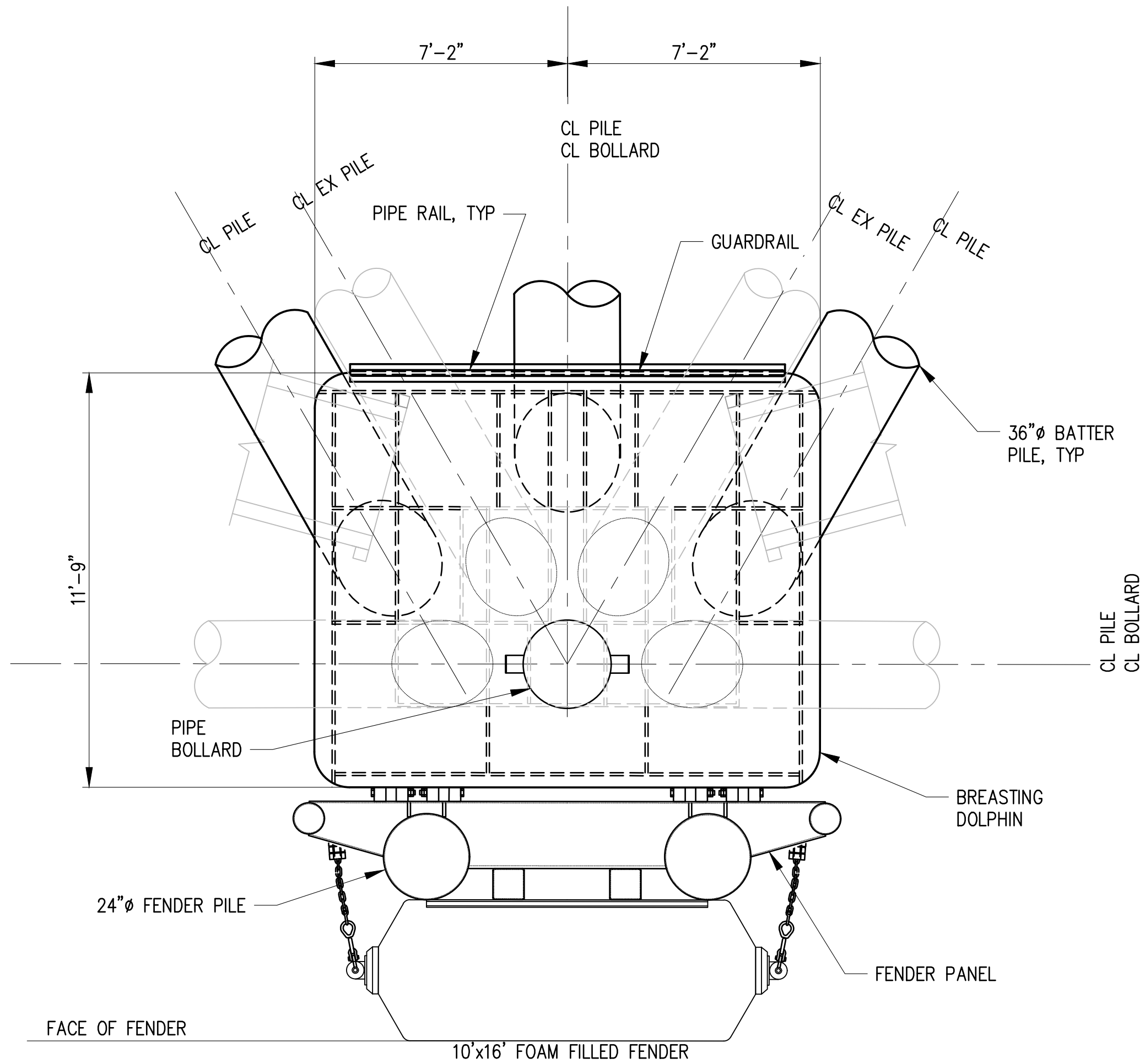
ORE PENINSULA REDEVELOPMENT
SKAGWAY, ALASKA

SOUTH DOLPHIN REINFORCEMENT
SECTIONS

DRAWN: JH	PROJECT NO.: 2100135
DESIGN: ED	SCALE: AS SHOWN
CHECKED: RR	DATE: 6/17/2022
DRAWING NO.	S5.10
SHEET NO.	OF

30% DESIGN - NOT FOR CONSTRUCTION

Plotted: Jun 17, 2022 - 5:03pm
M:\2021\2100135 Skagway Ore Peninsula Multi-Use Dock\Drawings\Current\2100135_S5.11 South Dolphin Reinforcement Sections.dwg
dvtu Layout: S5.11



1 MOORING DOLPHIN B PLAN
S2.1 SCALE: 1" = 3'

kpff

1601 5th Avenue, Suite 1300
Seattle, Washington 98101
(206) 382-0600 Fax (206) 382-0500

NO.	DATE	BY	REVISION



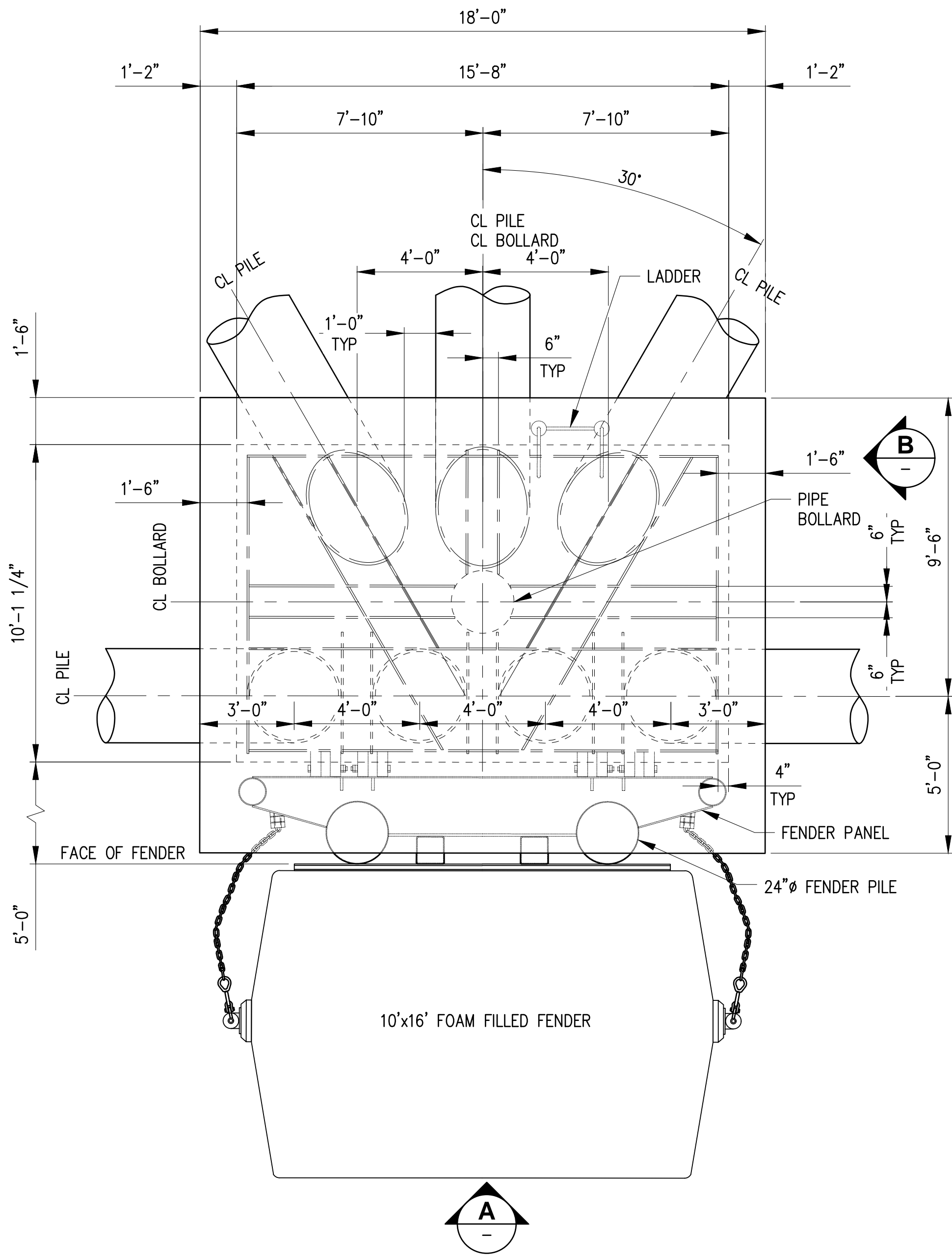
ORE PENINSULA REDEVELOPMENT
SKAGWAY, ALASKA

SOUTH DOLPHIN REINFORCEMENT
SECTIONS

DRAWN: JH	PROJECT NO.: 2100135
DESIGN: ED	SCALE: AS SHOWN
CHECKED: RR	DATE: 6/17/2022
DRAWING NO.	S5.11
SHEET NO.	OF

30% DESIGN - NOT FOR CONSTRUCTION

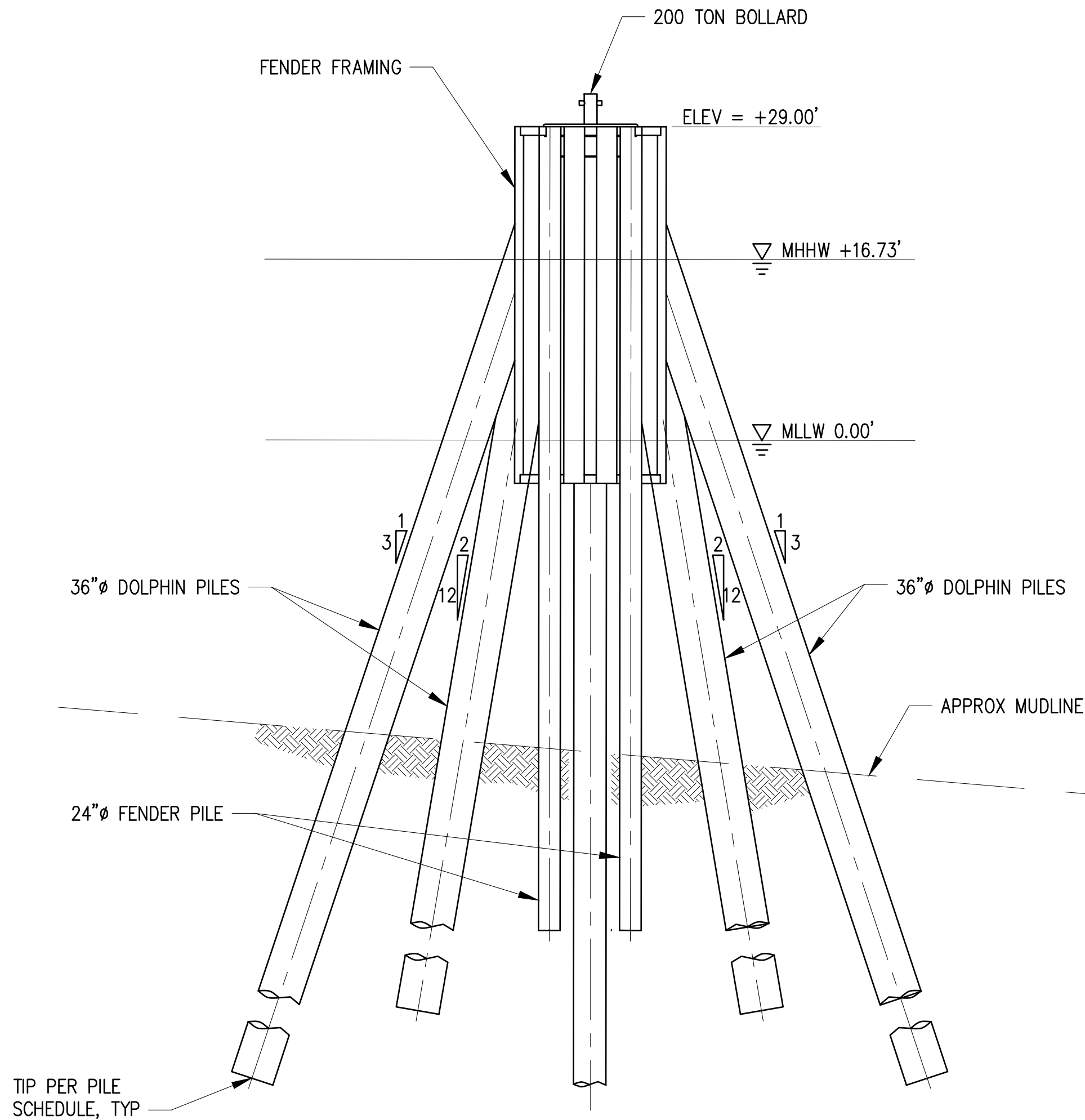
Plotted: Jun 17, 2022 - 5:04pm
M:\2021\2100135 Skagway Ore Peninsula Multi-use Dock Drawings\Current\2100135_S5.20 Typical Dolphin Plan & Elevation.dwg



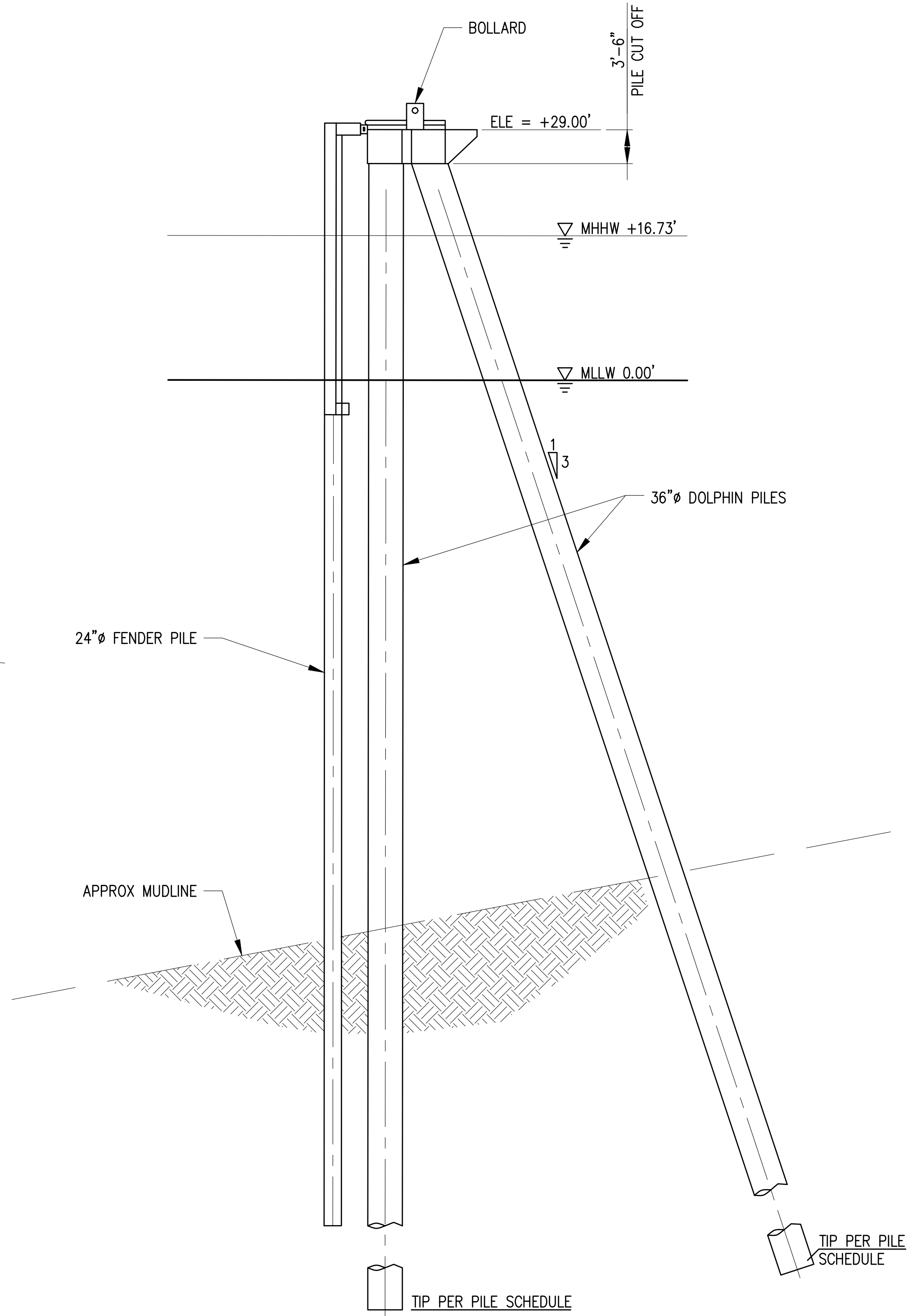
1 MOORING DOLPHIN PLAN
S2.1 SCALE: 1" = 3'

NOTES

1. UTILITIES NOT SHOWN FOR CLARITY, SEE CIVIL



A FRONT ELEVATION
SCALE: 1" = 10'



B SIDE ELEVATION
SCALE: 1" = 10'

kpff

1601 5th Avenue, Suite 1300
Seattle, Washington 98101
(206) 382-0600 Fax (206) 382-0500

NO.	DATE	BY	REVISION



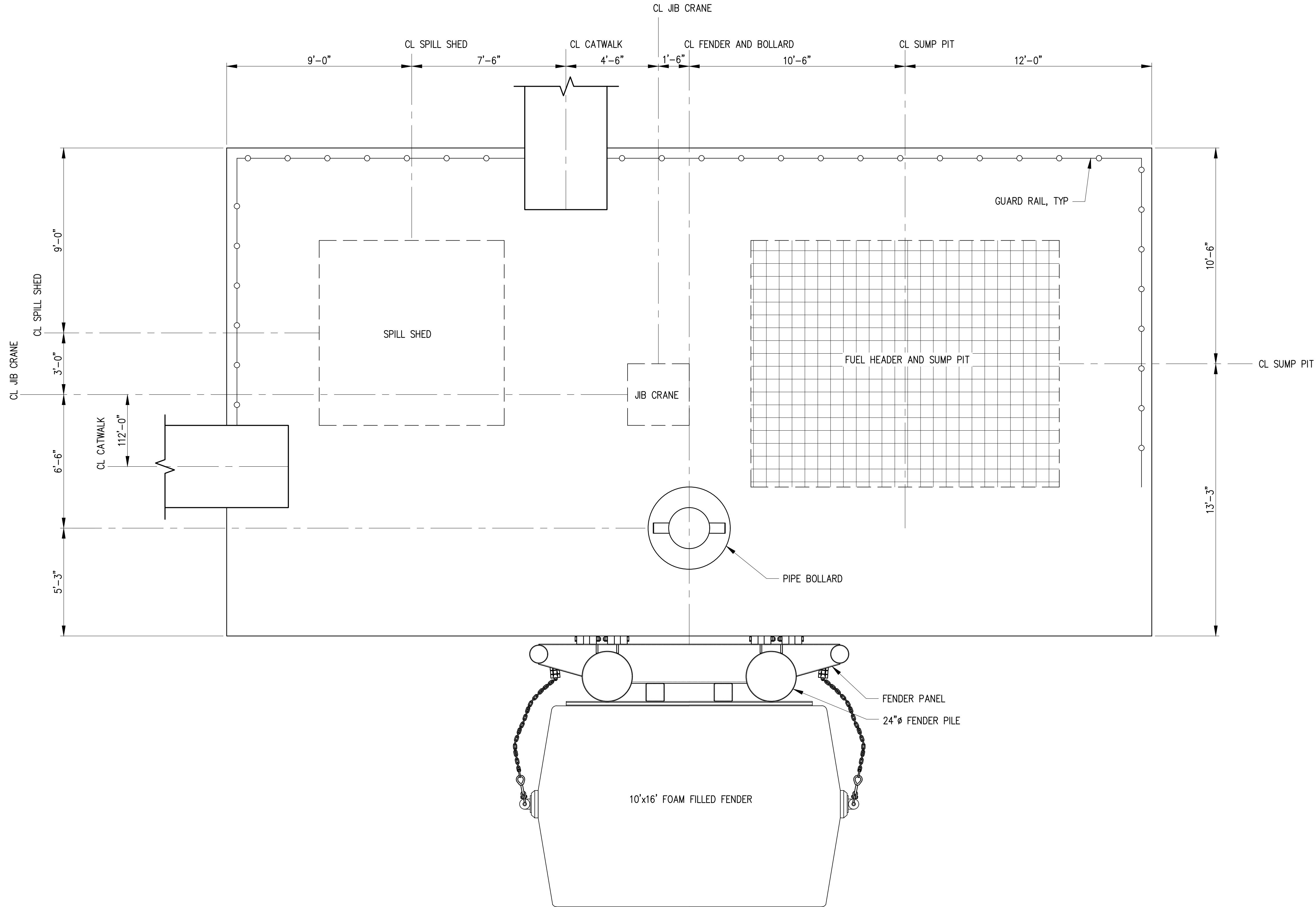
**ORE PENINSULA REDEVELOPMENT
SKAGWAY, ALASKA**

**TYPICAL DOLPHIN
PLAN AND ELEVATION**

DRAWN: JH	PROJECT NO.: 2100135
DESIGN: ED	SCALE: AS SHOWN
CHECKED: RR	DATE: 6/17/2022
DRAWING NO.	S5.20
SHEET NO.	OF

30% DESIGN - NOT FOR CONSTRUCTION

Plotted: Jun 17, 2022 - 5:07pm d:\u Layout: S5.30
M:\2021\2100135 Skagway Ore Peninsula Multi-Use Dock\Drawings\Current\2100135_S5.30 Fuel Header Sections.dwg



1 **FUEL HEADER PLATFORM PLAN**
SCALE: 3/8" = 1'-0"

kpff

1601 5th Avenue, Suite 1300
Seattle, Washington 98101
(206) 382-0600 Fax (206) 382-0500

NO.	DATE	BY	REVISION



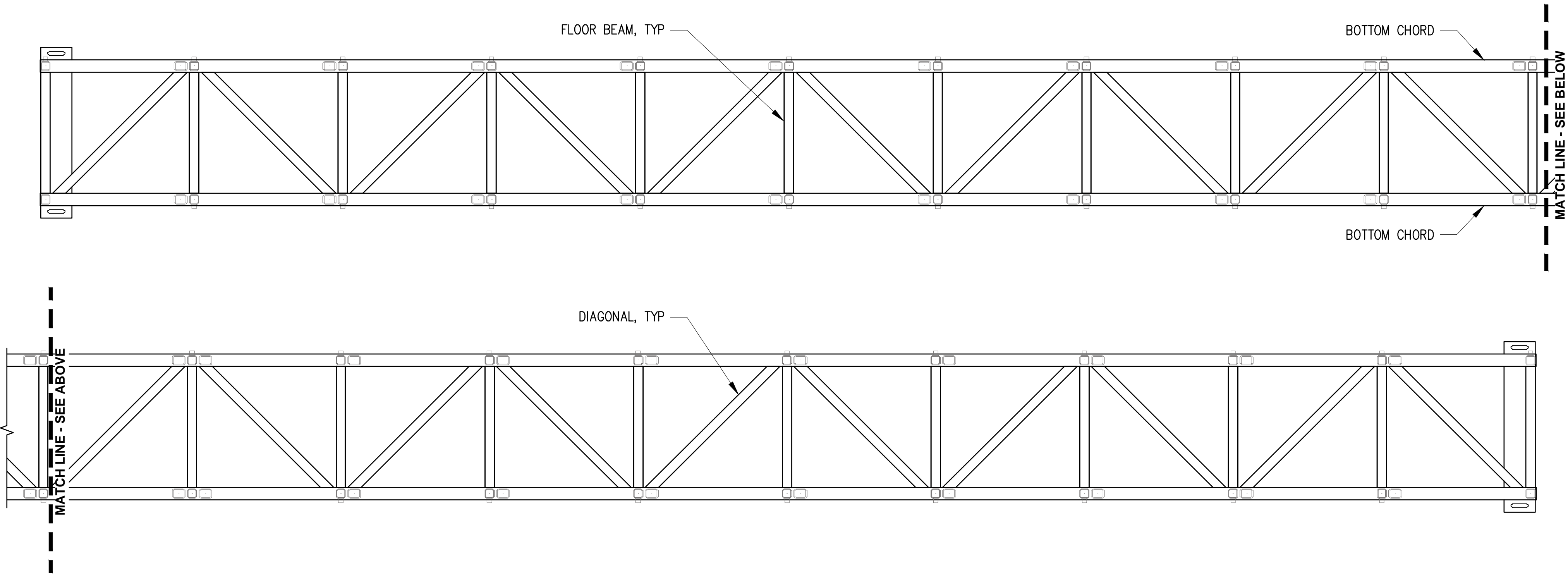
ORE PENINSULA REDEVELOPMENT
SKAGWAY, ALASKA

FUEL HEADER PLATFORM
PLAN

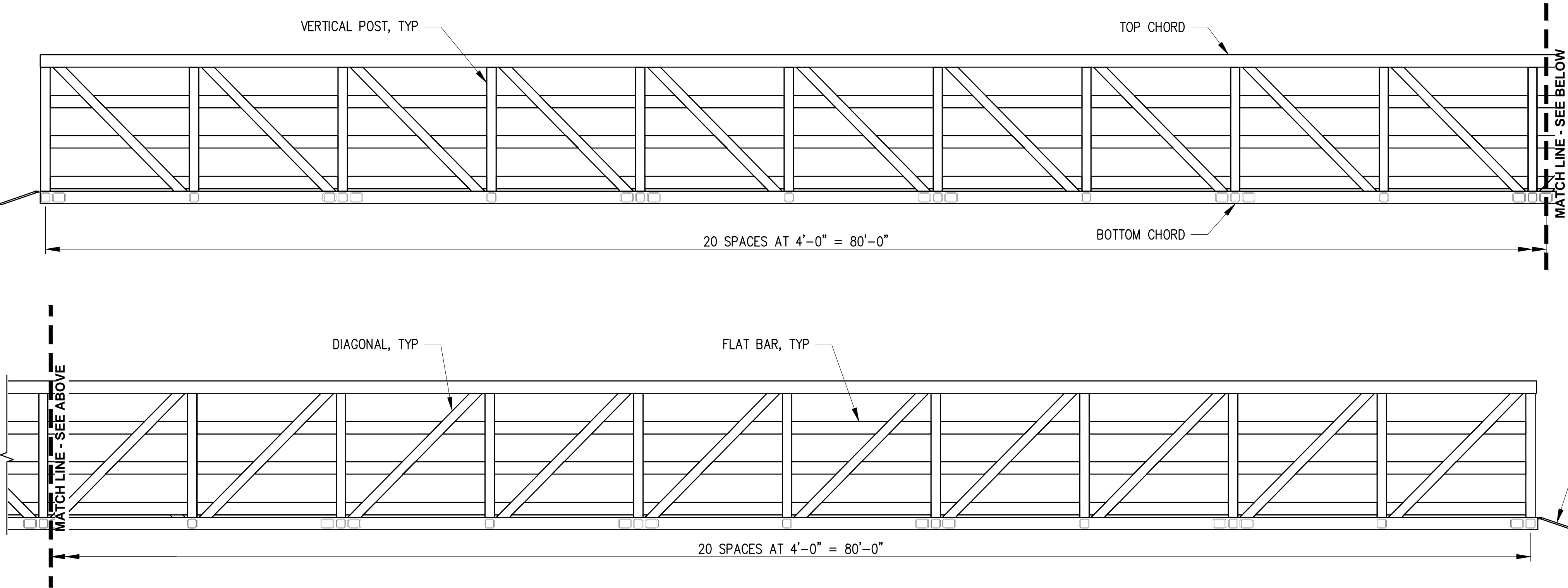
DRAWN: JH	PROJECT NO.: 2100135
DESIGN: ED	SCALE: AS SHOWN
CHECKED: RR	DATE: 6/17/2022
DRAWING NO.	S5.30
SHEET NO.	OF

30% DESIGN - NOT FOR CONSTRUCTION

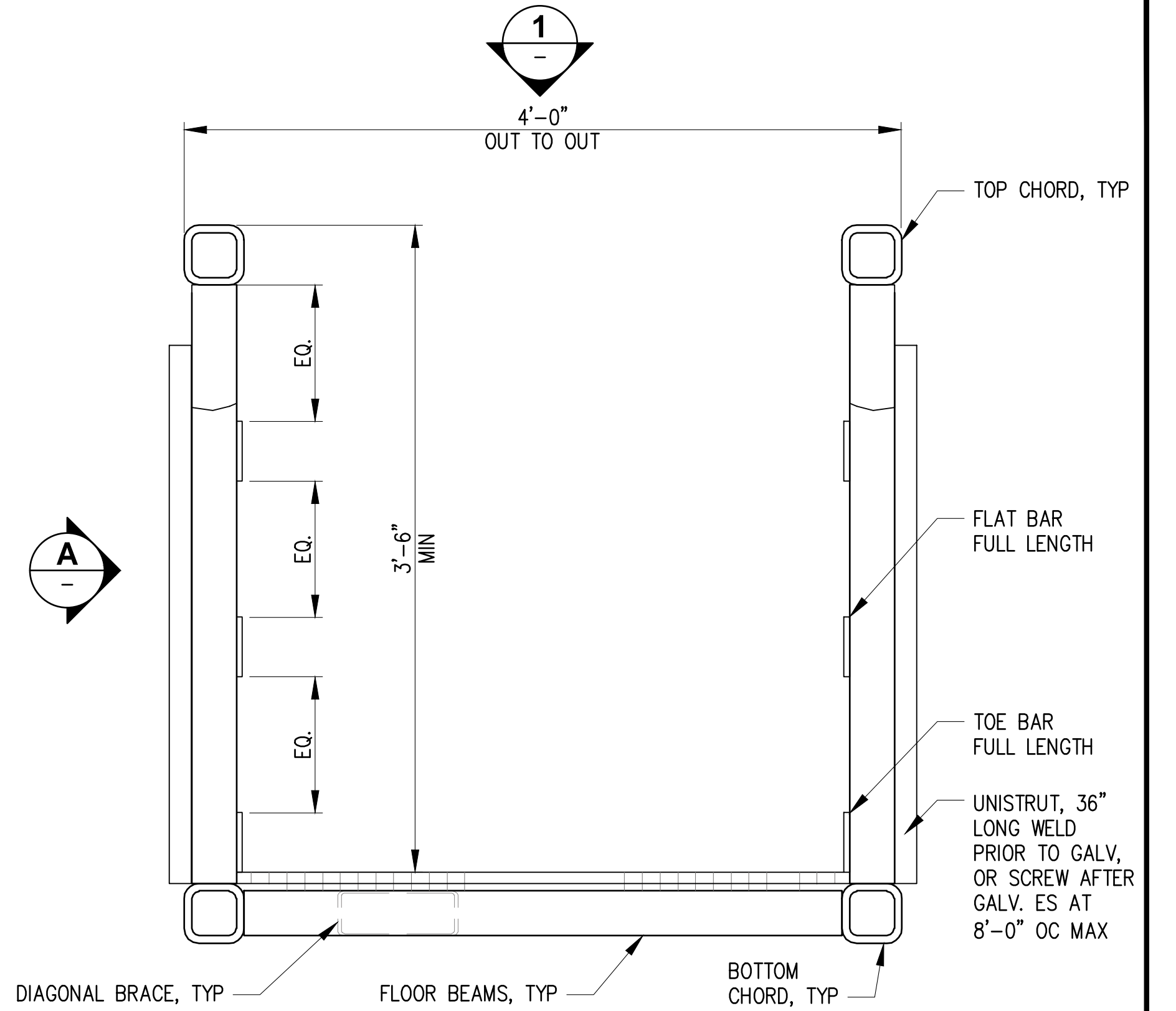
Plotted: Jun 17, 2022 - 5:09pm dnu Layout: S5.40
M:\2021\2100135 Skagway Ore Peninsula Multi-use Dock Drawings\Current\2100135_S5.40 Catwalk Sections & Details.dwg



1 CATWALK FLOOR PLAN
SCALE: 1/2"=1'-0"



A CATWALK ELEVATION
SCALE: 1/2"=1'-0"



B CATWALK SECTION
SCALE: 1-1/2"=1'-0"

NOTES

1. THE CATWALKS ARE CONTRACTOR DESIGNED FOLLOWING IBC 2018 REQUIREMENTS. CATWALKS SHALL BE ALUMINUM. THE DESIGN, FABRICATION AND ERECTION OF THE CATWALK SHALL CONFORM TO THE OVERALL LAYOUT AND DIMENSIONS SHOWN ON THE DRAWINGS. CONTRACTOR SHALL VERIFY IN THE FIELD ALL DIMENSIONS AND ELEVATIONS.
2. SPANS, WIDTHS AND HEIGHTS SHALL BE AS INDICATED ON THE DRAWINGS. THE CATWALK SHALL BE CAMBERED TO ACCOUNT FOR THE CATWALK'S DEAD LOAD DEFLECTION.
3. SELF WEIGHT, UNIFORM LIVE LOADING OF 40 POUNDS PER SQUARE FOOT. MAXIMUM DEFLECTION UNDER THESE LOADS SHALL NOT EXCEED L/360. THE DECK AND STRUCTURAL COMPONENTS SHALL ALSO BE DESIGNED TO SUPPORT A CONCENTRATED LOAD OF 400 POUNDS ON A 1 FOOT BY 1 FOOT AREA.
4. DESIGN SHALL BE BASED ON WIND LOADS OF 130 MPH WITH EXPOSURE D IN ACCORDANCE WITH IBC 2018 REQUIREMENTS.
5. CATWALK MANUFACTURER SHALL PROVIDE TRANSITION RAMPS BETWEEN CATWALKS AND AT CATWALK ENDS.
6. THESE PLANS REPRESENT A POSSIBLE DESIGN LAYOUT. CONTRACTOR SHALL SUBMIT PLANS AND CALCULATIONS FOR CATWALKS STAMPED BY AN ALASKA STATE LICENSED ENGINEER.

kpff

1601 5th Avenue, Suite 1300
Seattle, Washington 98101
(206) 382-0600 Fax (206) 382-0500

NO.	DATE	BY	REVISION



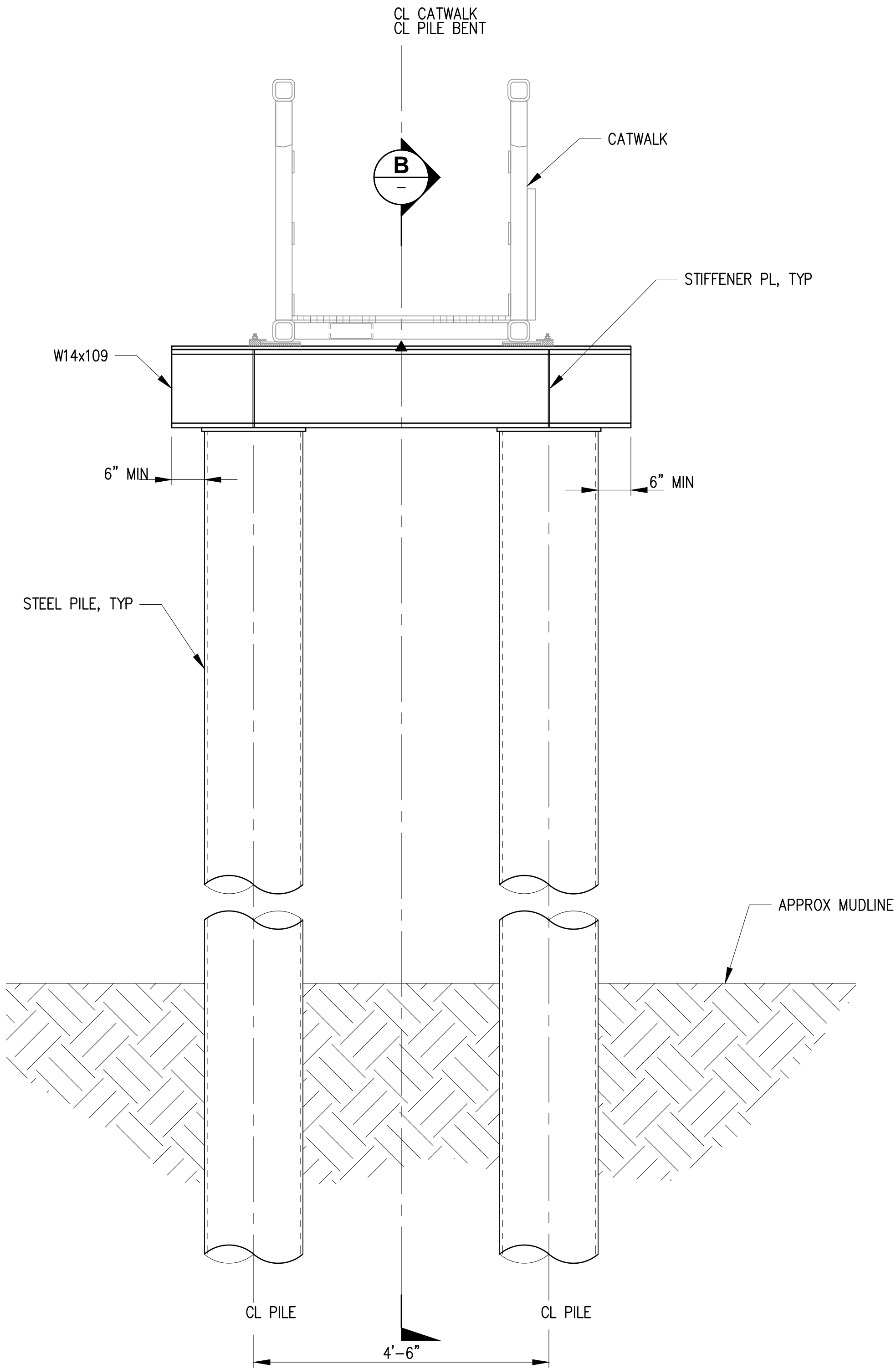
ORE PENINSULA REDEVELOPMENT
SKAGWAY, ALASKA

CATWALK
SECTIONS AND DETAILS

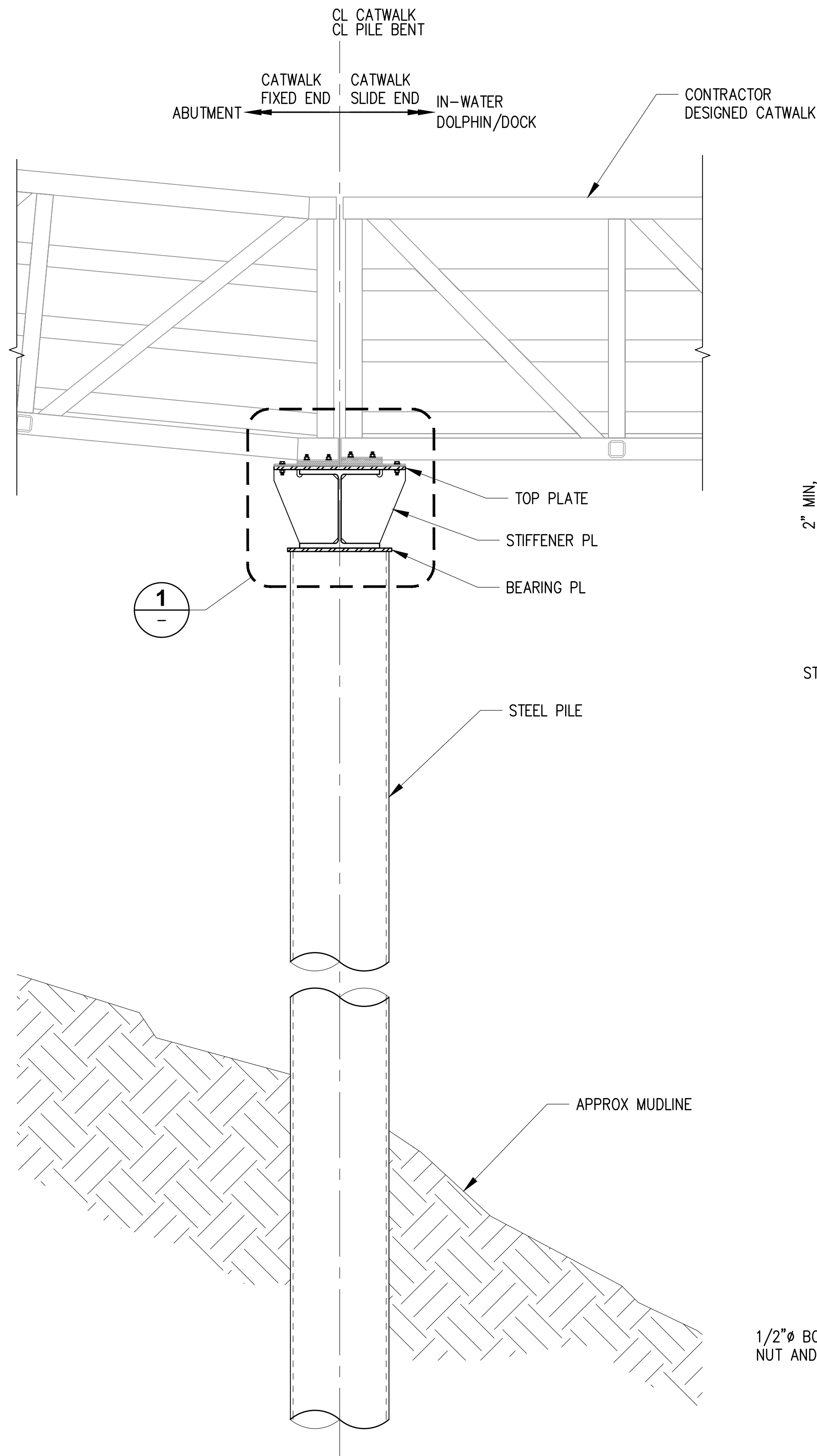
DRAWN: JH	PROJECT NO.: 2100135
DESIGN: ED	SCALE: AS SHOWN
CHECKED: RR	DATE: 6/17/2022
DRAWING NO.	S5.40
SHEET NO.	OF

30% DESIGN - NOT FOR CONSTRUCTION

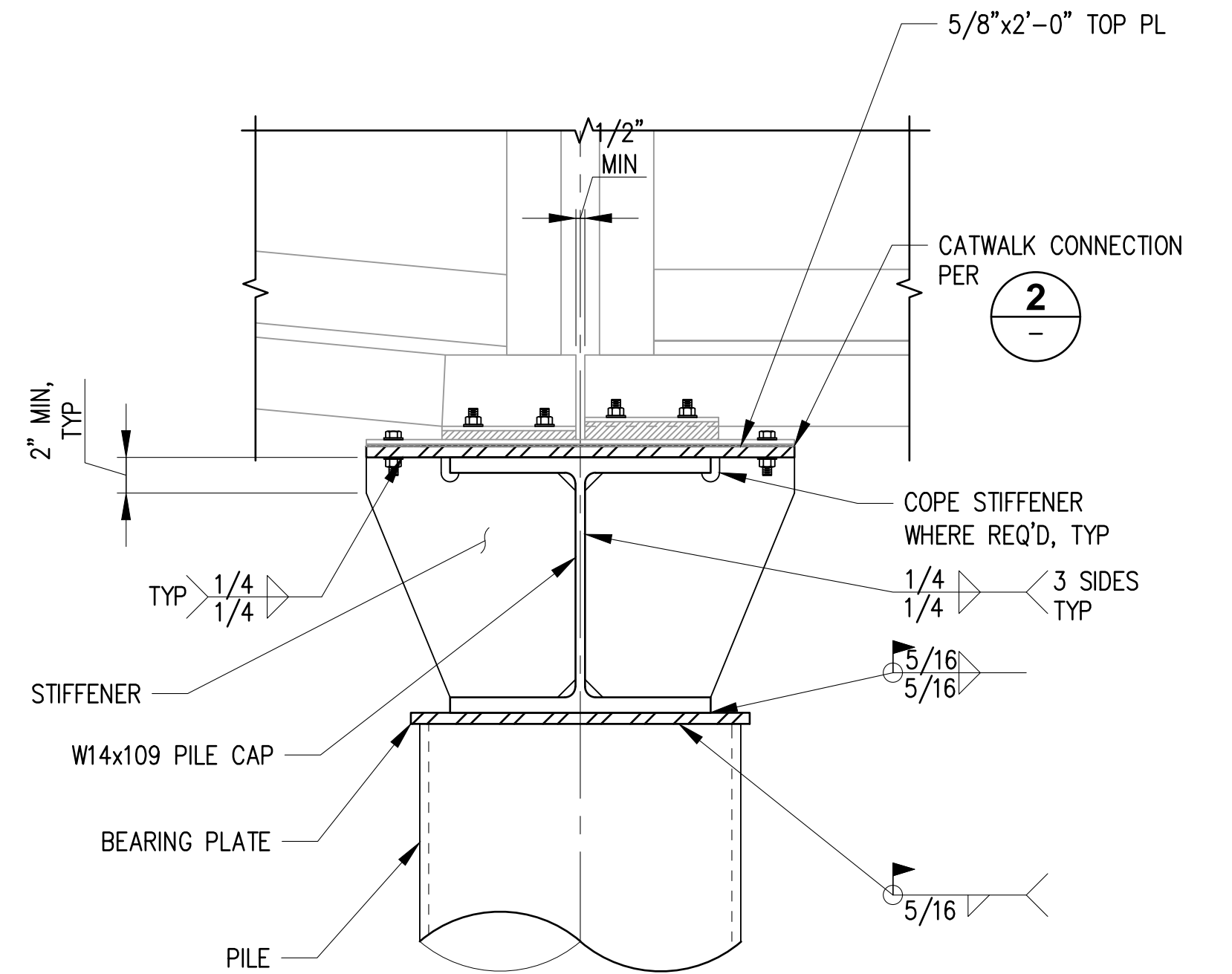
Plotted: Jun 17, 2022 - 5:12pm dyl Layout: S5.41
M:\2021\2100135 Skagway Ore Peninsula Multi-use Dock Drawings\Current\2100135_S5.41 Catwalk Supports Sections & Details.dwg



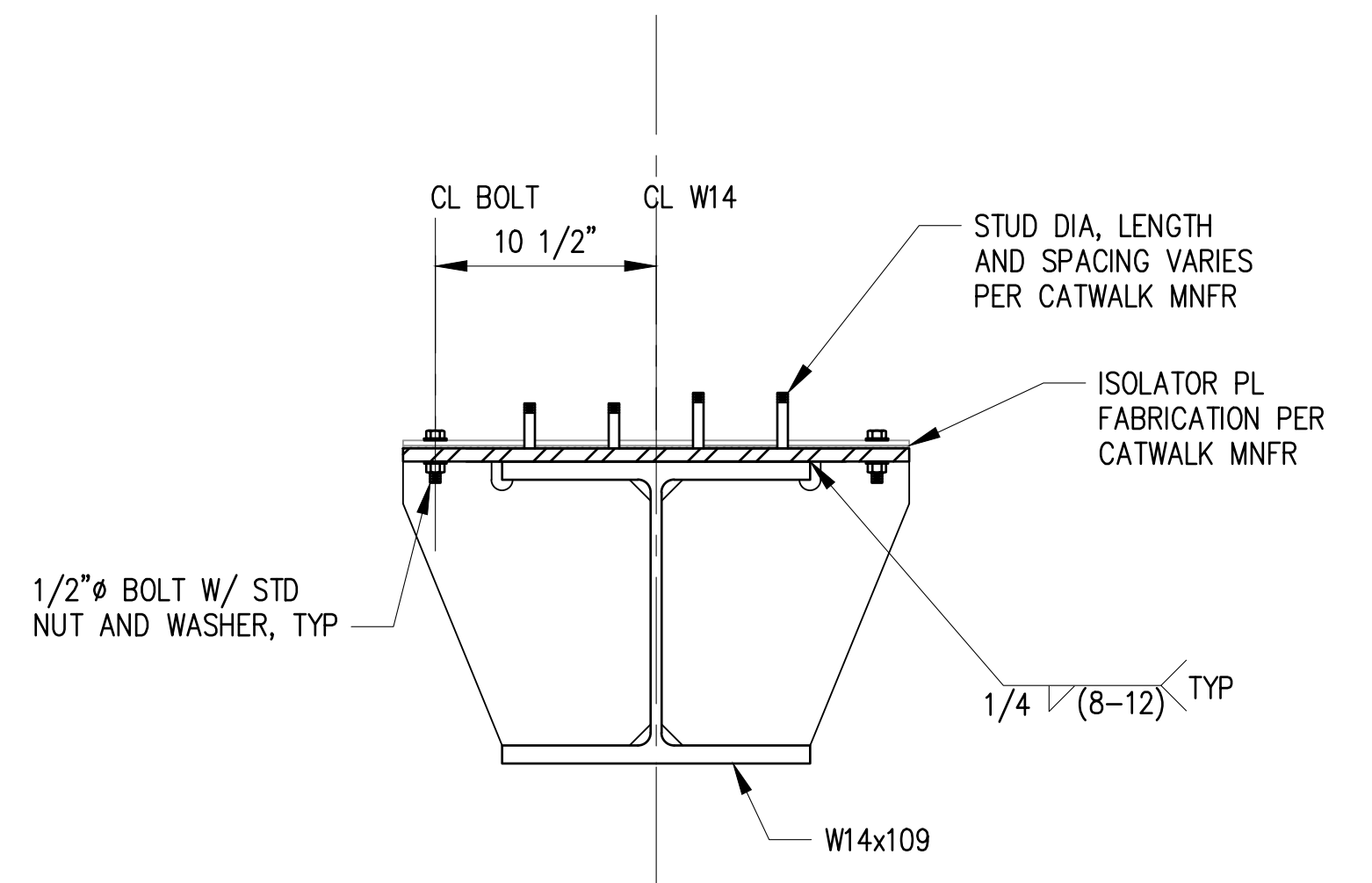
A CATWALK SUPPORT BENT
SCALE: $\frac{3}{4}'' = 1'-0''$



B CATWALK SUPPORT BENT SECTION
SCALE: $\frac{3}{4}'' = 1'-0''$



1 DETAIL
SCALE: $1 \frac{1}{2}'' = 1'-0''$



2 DETAIL
SCALE: $1 \frac{1}{2}'' = 1'-0''$

kpff

1601 5th Avenue, Suite 1300
Seattle, Washington 98101
(206) 382-0600 Fax (206) 382-0500

NO.	DATE	BY	REVISION



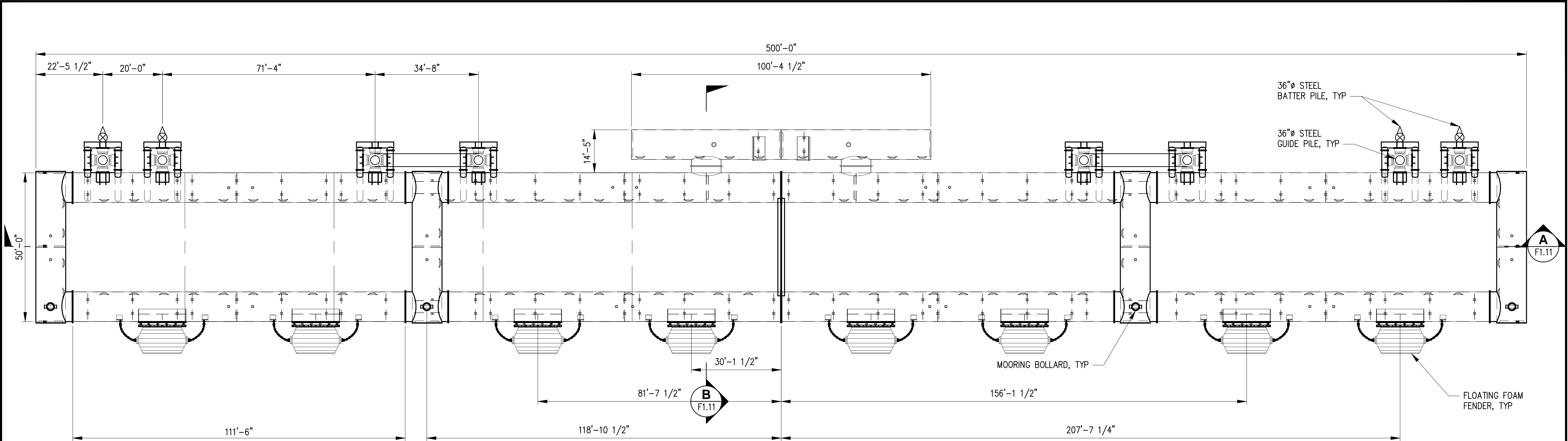
ORE PENINSULA REDEVELOPMENT
SKAGWAY, ALASKA

CATWALK SUPPORT
SECTIONS AND DETAILS

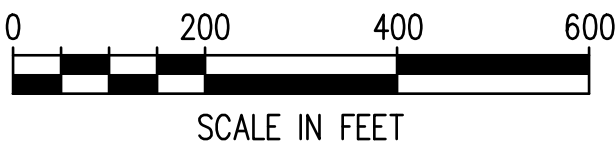
DRAWN: JH	PROJECT NO.: 2100135
DESIGN: ED	SCALE: AS SHOWN
CHECKED: RR	DATE: 6/17/2022
DRAWING NO.	S5.41
SHEET NO.	OF

30% DESIGN - NOT FOR CONSTRUCTION

Plotted: Jun 12, 2022 - 9:33am dnu Layout: F1.00
M:\2021\2100135 Skagway Ore Peninsula Multi-Use Dock\Drawings\Current\2100135_F1.00 Float Plan.dwg



1 STEEL FLOAT PLAN VIEW
F1.11 SCALE: 1" = 200'



kpff

1601 5th Avenue, Suite 1300
Seattle, Washington 98101
(206) 382-0600 Fax (206) 382-0500

NO.	DATE	BY	REVISION



ORE PENINSULA REDEVELOPMENT
SKAGWAY, ALASKA

FLOAT PLAN

DRAWN: JH	PROJECT NO.: 2100135
DESIGN: ED	SCALE: AS SHOWN
CHECKED: RR	DATE: 6/20/2022
DRAWING NO.	F1.00
SHEET NO.	XX OF XX

30% DESIGN - NOT FOR CONSTRUCTION

Plotted: Jun 16, 2022 - 5:49pm
M:\2021\2100135 Skagway Ore Dock\Drawings\Current\2100135_F1.10 Float Design Criteria.dwg
dvt Layout: F1.10

FLOAT SYSTEM PERFORMANCE REQUIREMENTS

PROVIDE FLOAT UNITS AND CONNECTIONS CAPABLE OF WITHSTANDING DESIGN LOADING CRITERIA INDICATED BELOW:

1. FLOAT UNITS SHALL BE CAPABLE OF SUPPORTING ALL DESIGN LOAD COMBINATIONS THROUGHOUT ENTIRE TIDAL RANGE.

2. FREEBOARD:

A. DEAD LOAD FREEBOARD: 4'-8"

B. THE FREEBOARD UNDER ALL DEAD LOADS SHALL NOT BE MORE THAN 2 INCH BELOW OR MORE THAN 1 INCH ABOVE THE SPECIFIED FREEBOARD AFTER ONE YEAR OF OPERATION. DEAD LOADS SHALL CONSIST OF THE FLOAT SYSTEM, RUBSTRIPS, BULLRAIL, PILE RESTRAINT GUIDES, TRANSITION PLATES, AND ALL OTHER ATTACHED APPURTENANCES.

3. UNIFORM LIVE LOAD:

A. 90 PSF UNIFORM LIVE LOAD LL(U) (FOR DESIGN OF STRUCTURES)

B. FOR FLOATATION THE FLOAT SHALL CONSIDER 40PSF LIVE LOAD OVER THE ENTIRE FLOAT OR 1/4 OF THE FLOAT WITH 90PSF IN ANY LOCATION.

4. LIVE LOAD:

A. 18 KIP AXLE FORKLIFT LOAD

B. EMERGENCY AMBULANCE TYPE III VEHICLE 16,000 LB AXLE LOAD

C. 4000 LB POINT LOAD

D. VEHICLE LOAD = AASHTO H10 TRUCK

E. FREEBOARD UNDER DL + POINT LL TO BE 6 FEET MINIMUM.

F. CROSS SLOPE SHALL NOT EXCEED 2%.

5. SNOW LOAD:

60 PSF

6. WIND LOAD:

40 MPH 30 SECOND DURATION WIND SPEED (WITH CRUISE SHIP DOCKED)

140 MPH 3 SECOND GUST WITH NO CRUISE SHIP AND NO LIVE LOAD ON FLOAT

7. CURRENT LOAD:

1.5 FT/SEC CURRENT SPEED

8. SITE WAVE CONDITIONS

	50 YRP	100 YRP
ONE-HOUR AVERAGE WIND SPEED (KTS)	59.61	63.76
ACES SIGNIFICANT WAVE HEIGHT (FT)	6.89	7.49
ACES WAVE MODAL PERIOD (SEC)	4.98	5.09

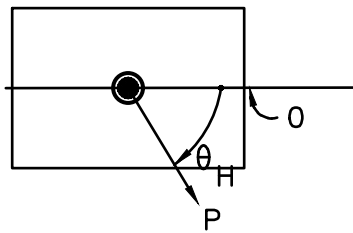
9. BERTHING LOAD:

FENDER PANELS AND FLOAT STRUCTURE SHALL ACCOMMODATE A FENDER REACTION UP TO 450 KIPS

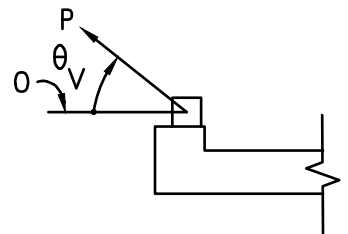
10. UTILITY LOADS:

A. WORK WITH THE SITE DESIGNER TO ESTABLISH UTILITY LOADING AS DESIGN PROGRESSES ON THE OVERALL PROJECT.
11. THE FLOAT MANUFACTURER SHALL PROVIDE FOUR LIFE PRESERVERS AND FOUR FIRE EXTINGUISHERS WITH THE FLOAT SYSTEM. THESE ITEMS SHALL BE LOCATED AND MOUNTED TO THE FLOATS IN SUCH MANNER THAT THEY DO NOT INTRUDE UPON THE FUNCTIONALITY OF THE FLOATING DOCK.
12. MOORING BOLLARDS SHALL BE RATED FOR 150 TONS SAFE WORKING LOAD. MOORING BOLLARDS SHALL BE DESIGNED WITH A LOAD FACTOR OF 1.6 PER UFC 4-152-01 DESIGN PIERS AND WHARVES 2017.

PLAN:



ELEVATION:



LOCATION	RATED CAPACITY P	RANGE OF HORIZONTAL ANGLE θ_H	RANGE OF VERTICAL ANGLE θ_V
BOLLARDS ON FLOAT	150 TONS	0° TO 180°	0° TO +60°

13. STABILITY REQUIREMENTS:

A. FLOAT METACENTRIC HEIGHT SHALL BE 2'-0" MIN. UNDER ALL LOADING CONDITIONS
14. PILE HOOPS AND PILES:

A. PILE HOOPS SHALL BE EXTERNAL TO THE FLOATS.

B. PILE HOOPS SHALL HAVE A REMOVABLE BOLTED PORTION SUCH THAT THE FLOATS MAY BE DETACHED FROM THE SYSTEM AND MOVED.

C. THE PILES SHALL BE LOCATED TO ONE SIDE OF THE FLOATS TO MAXIMIZE THE UNOBSTRUCTED TRAVEL PATH. COORDINATE WITH ENGINEER ON FINAL PILE LOCATION.

D. PILE HOOPS SHALL HAVE ADJUSTABLY TO ACCOMMODATE UP TO 6" OF PILE TOLERANCE IN ANY DIRECTION. MAXIMUM SPACE BETWEEN PILES AND BEARINGS SHALL BE 1.5" AFTER SHIMS ARE PLACED.

E. PILE HOOPS SHALL HAVE UHMW PADS TO CONTACT THE PILES. THE PADS SHALL BE REMOVABLE IN A MANNER THAT DOES NOT REQUIRE HANDLING OR TOOLS WORK TO OCCUR BETWEEN THE PILE AND THE PAD. THE UHMW PADS SHALL HAVE A MINIMUM OF 1.5" OF WEAR THICKNESS AVAILABLE.

F. THE MOS'S NAVAL ARCHITECT, GLOSTEN ASSOCIATES, WILL MODEL THE FLOAT AND DETERMINE FLOAT MOVEMENTS DURING STORM CONDITIONS THE FLOAT MANUFACTURE WILL WORK WITH THE MOS TO FINALIZE PILE HOOP DESIGN TO ACCOMMODATE THEM MOVEMENTS. IT MAY BE THAT FENDERS INSIDE THE PILE HOOPS IS NEEDED.

15. FLOAT UTILITIES

A. UTILITY ROUTING ON FLOATS ARE SCHEMATIC AND SHALL BE FINALIZED DURING DESIGN PROCESS
16. TRANSFER SPAN CONNECTION

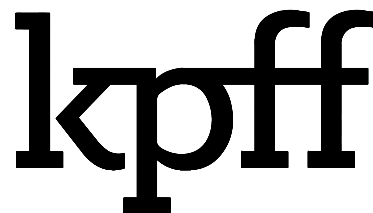
THE TRANSFER SPAN CONNECTION SHALL ACCOMMODATE THE DEAD, LIVE AND WIND LOADS OF THE TRANSFER SPAN.

DEAD LOAD165 KIPS (ACCOUNTS FOR HALF OF THE TRANSFER SPAN WEIGHT)

LIVE LOAD112 KIPS

(THESE LOADS ARE APPROXIMATE AND WILL BE FINALIZED DURING DESIGN)
17. FLOAT COATINGS AND CORROSION PROTECTION

THE EXTERNAL SURFACE OF THE STEEL PONTOON FLOAT SHALL HAVE A MULTI LAYER CORROSION PROTECTION SYSTEM. THE COATINGS SHALL INCLUDE SPRAY METALIZING, A ZINC PRIMER AND A MARINE EPOXY PAINT THE COATINGS SYSTEM SHALL BE SUBMITTED TO MOS REVIEW.



1601 5th Avenue, Suite 1300
Seattle, Washington 98101
(206) 382-0600 Fax (206) 382-0500

NO.	DATE	BY	REVISION



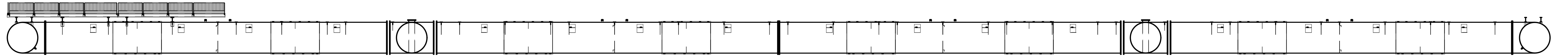
ORE PENINSULA REDEVELOPMENT
SKAGWAY, ALASKA

FLOAT DESIGN CRITERIA

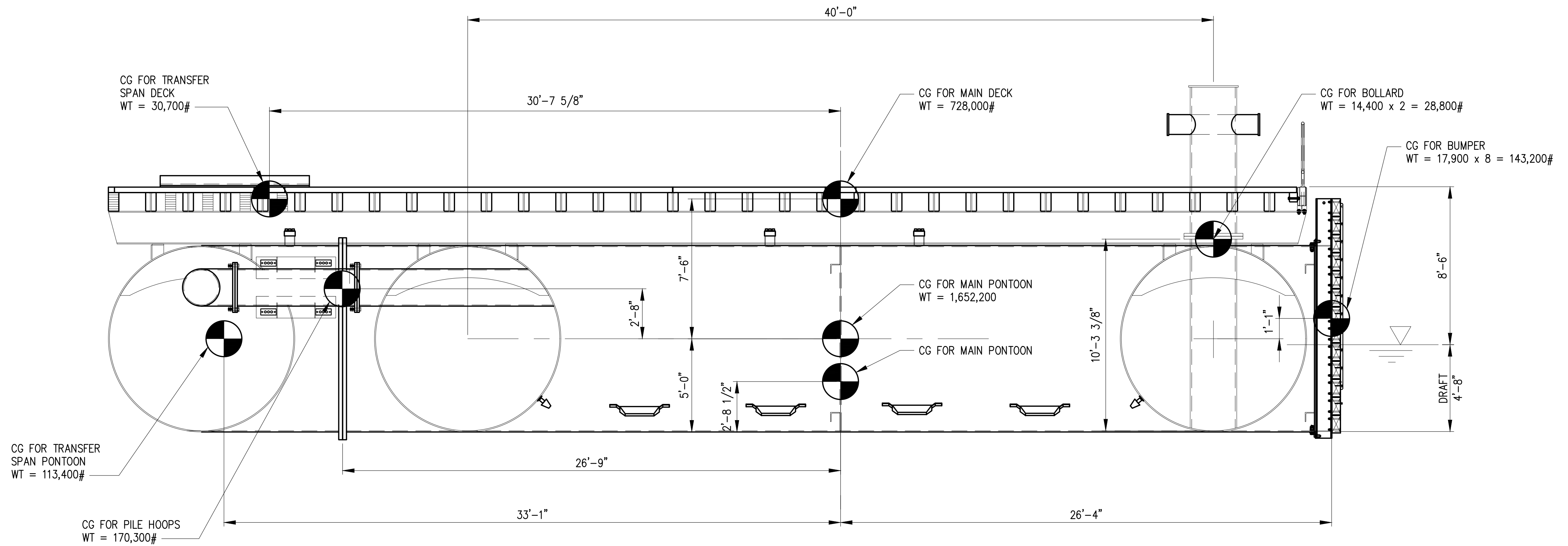
DRAWN: JH	PROJECT NO.: 2100135
DESIGN: ED	SCALE: AS SHOWN
CHECKED: RR	DATE: 6/17/2022
DRAWING NO.	F1.10
SHEET NO.	XX OF XX

30% DESIGN - NOT FOR CONSTRUCTION

Plotted: Jun 12, 2022 - 9:33am
M:\2021\2100135 Skagway Ore Peninsula Multi-Use Dock Drawings\Current\2100135_F1.11 Float Details.dwg



A **STEEL FLOAT SECTION**
SCALE: 1" = 200'



B **STEEL FLOAT SECTION**
SCALE: 1" = 40'

kpff

1601 5th Avenue, Suite 1300
Seattle, Washington 98101
(206) 382-0600 Fax (206) 382-0500

NO.	DATE	BY	REVISION



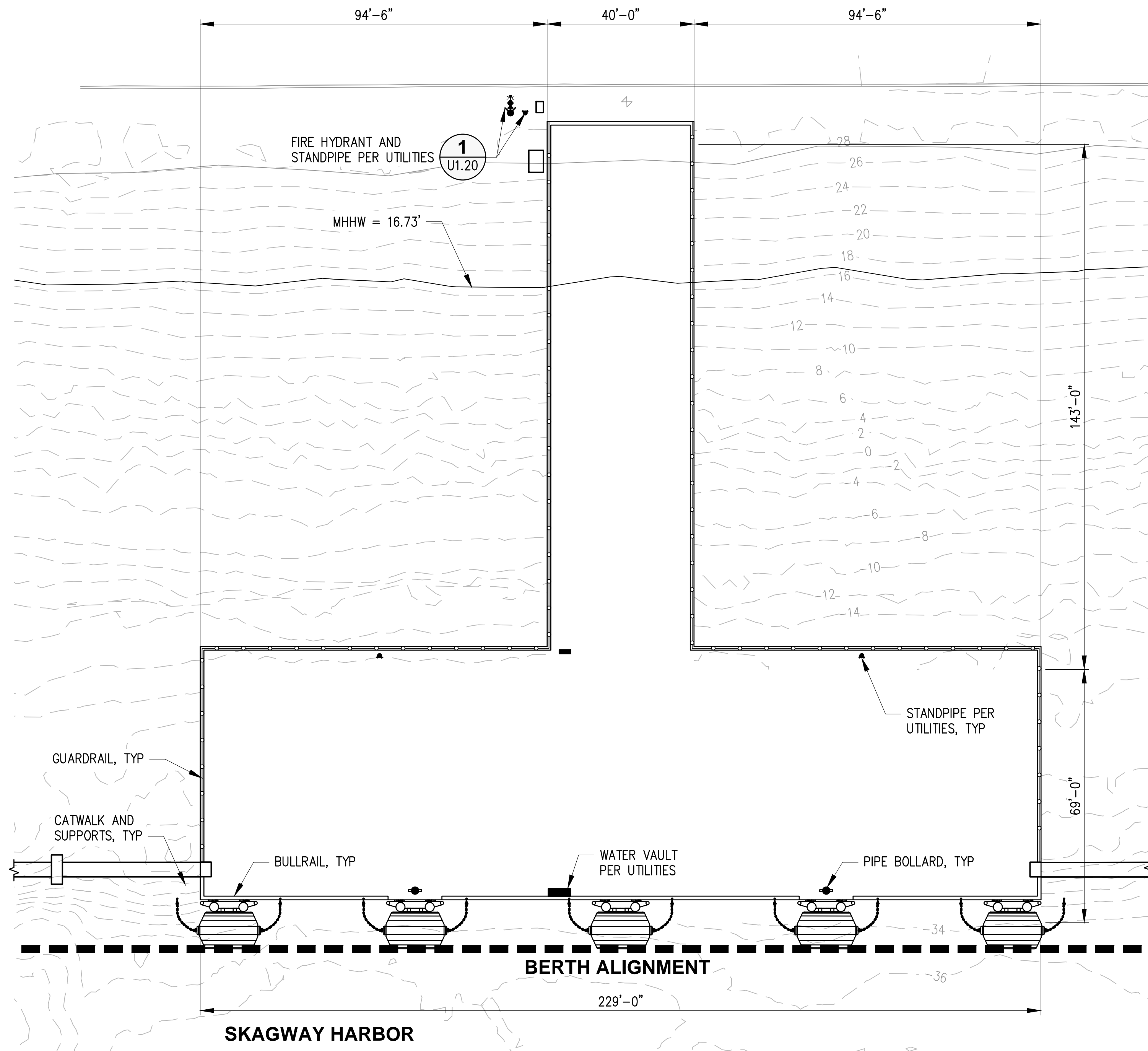
ORE PENINSULA REDEVELOPMENT
SKAGWAY, ALASKA

FLOAT DETAILS

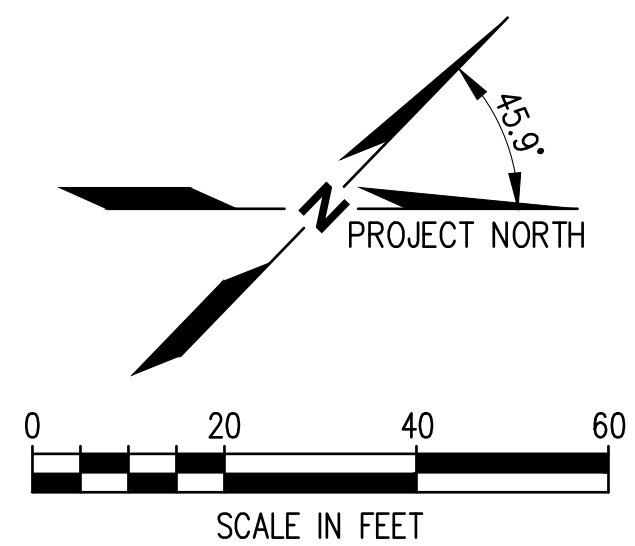
DRAWN: JH	PROJECT NO.: 2100135
DESIGN: ED	SCALE: AS SHOWN
CHECKED: RR	DATE: 6/20/2022
DRAWING NO.	F1.11
SHEET NO.	XX OF XX

30% DESIGN - NOT FOR CONSTRUCTION

Plotted: Jun 17, 2022 - 5:21pm
M:\2021\2100135 Skagway Ore Peninsula Multi-use Dock\Drawings\Current\2100135_SM1.00 MSP Surface Feature Plan.dwg
dyu Layout: SM1.00



1 SURFACE FEATURES PLAN
S2.00 SCALE: 1" = 20'



kpff

1601 5th Avenue, Suite 1300
Seattle, Washington 98101
(206) 382-0600 Fax (206) 382-0500

NO.	DATE	BY	REVISION



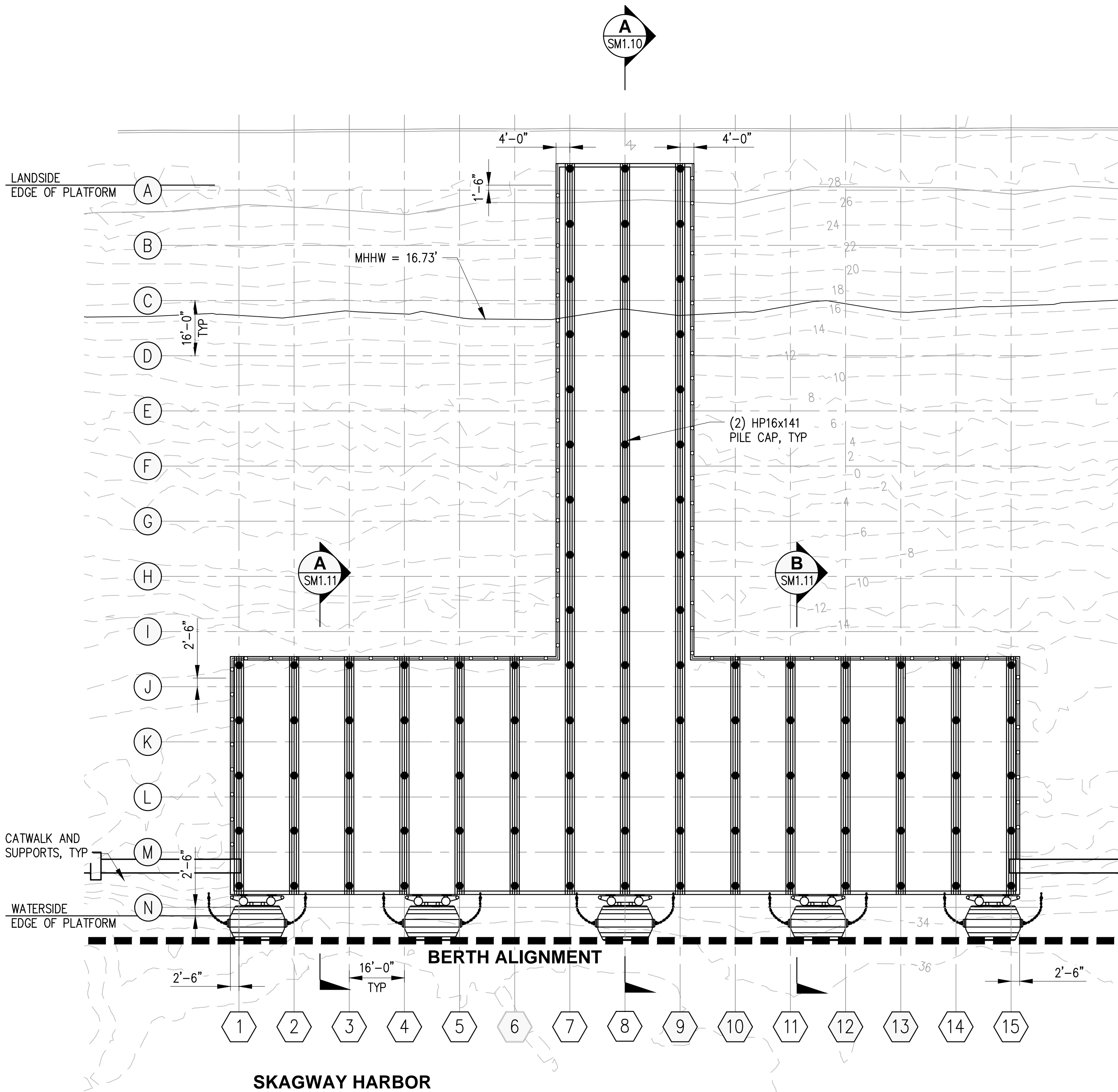
ORE PENINSULA REDEVELOPMENT
SKAGWAY, ALASKA

MARINE SERVICE PLATFORM
SURFACE FEATURE PLAN

DRAWN: JH	PROJECT NO.: 2100135
DESIGN: ED	SCALE: AS SHOWN
CHECKED: RR	DATE: 6/17/2022
DRAWING NO.	SM1.00
SHEET NO.	OF

30% DESIGN - NOT FOR CONSTRUCTION

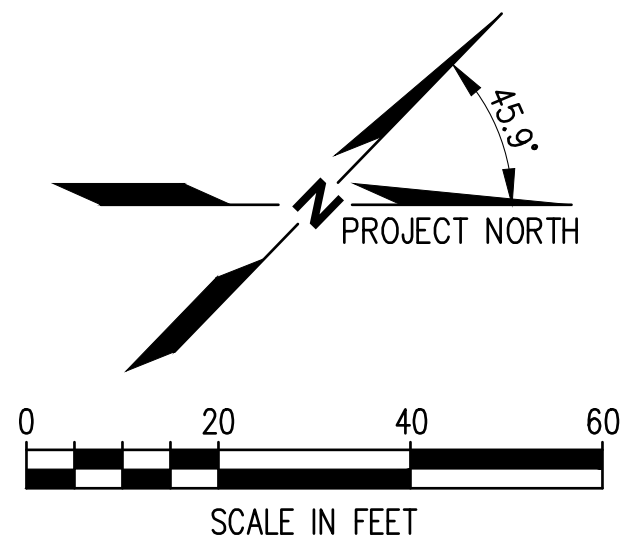
Plotted: Jun 17, 2022 - 5:22pm
M:\2021\2100135 Skagway Ore Peninsula Multi-use Dock\Drawings\Current\2100135_SM1.01 MSP Pile & Pile Cap Plan.dwg



1
S2.00 PILE AND PILE CAP PLAN
SCALE: 1" = 20'

LEGEND:

- STEEL PIPE PILE, SEE SM1.20 FOR PILE SCHEDULE



kpff

1601 5th Avenue, Suite 1300
Seattle, Washington 98101
(206) 382-0600 Fax (206) 382-0500

NO.	DATE	BY	REVISION

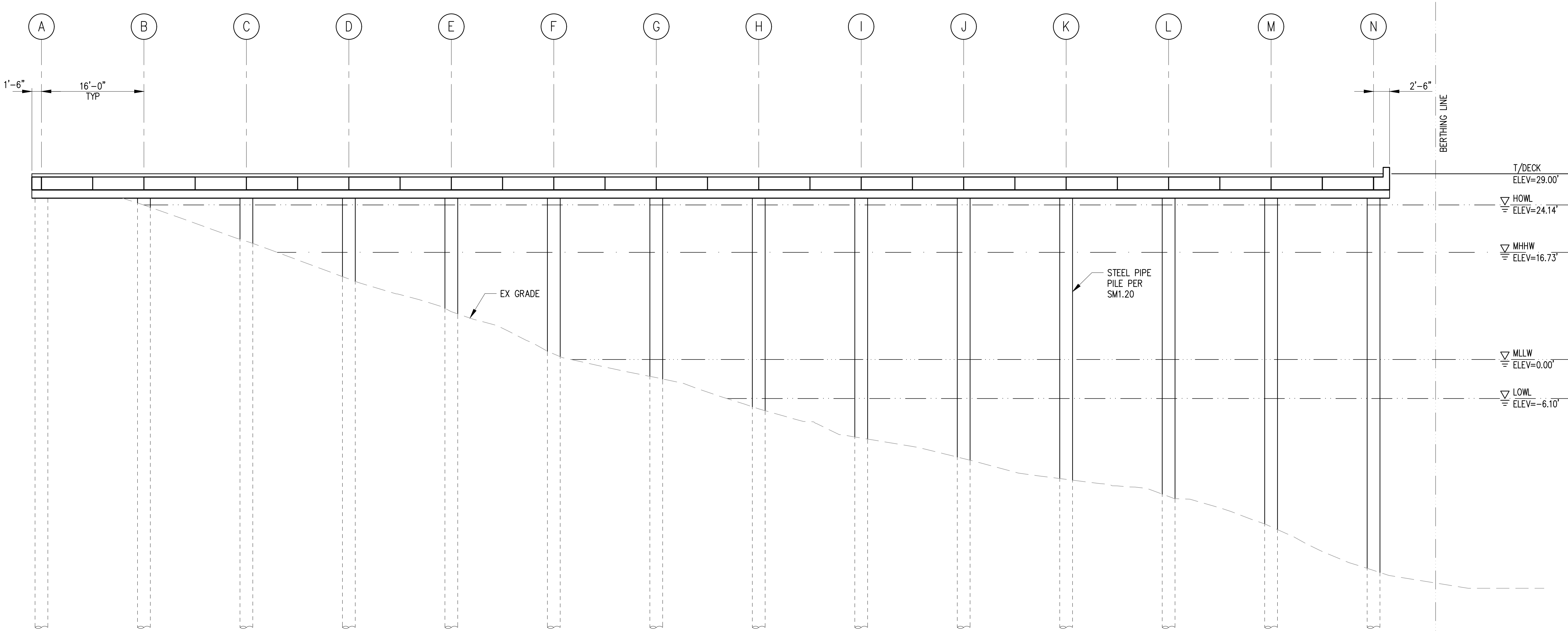


ORE PENINSULA REDEVELOPMENT
SKAGWAY, ALASKA

MARINE SERVICE PLATFORM
PILE AND PILE CAP PLAN

DRAWN: JH	PROJECT NO.: 2100135
DESIGN: ED	SCALE: AS SHOWN
CHECKED: RR	DATE: 6/17/2022
DRAWING NO.	SM1.01
SHEET NO.	OF

Plotted: Jun 17, 2022 - 5:23pm d:\u Layout: SM1.10
M:\2021\2100135 Skagway Ore Peninsula Multi-Use Dock\Drawings\Current\2100135_SM1.10 MSP Sections.dwg



A TYPICAL SECTION
SM1.01 SCALE: 1-1/2" = 1'-0"



NO.	DATE	BY	REVISION



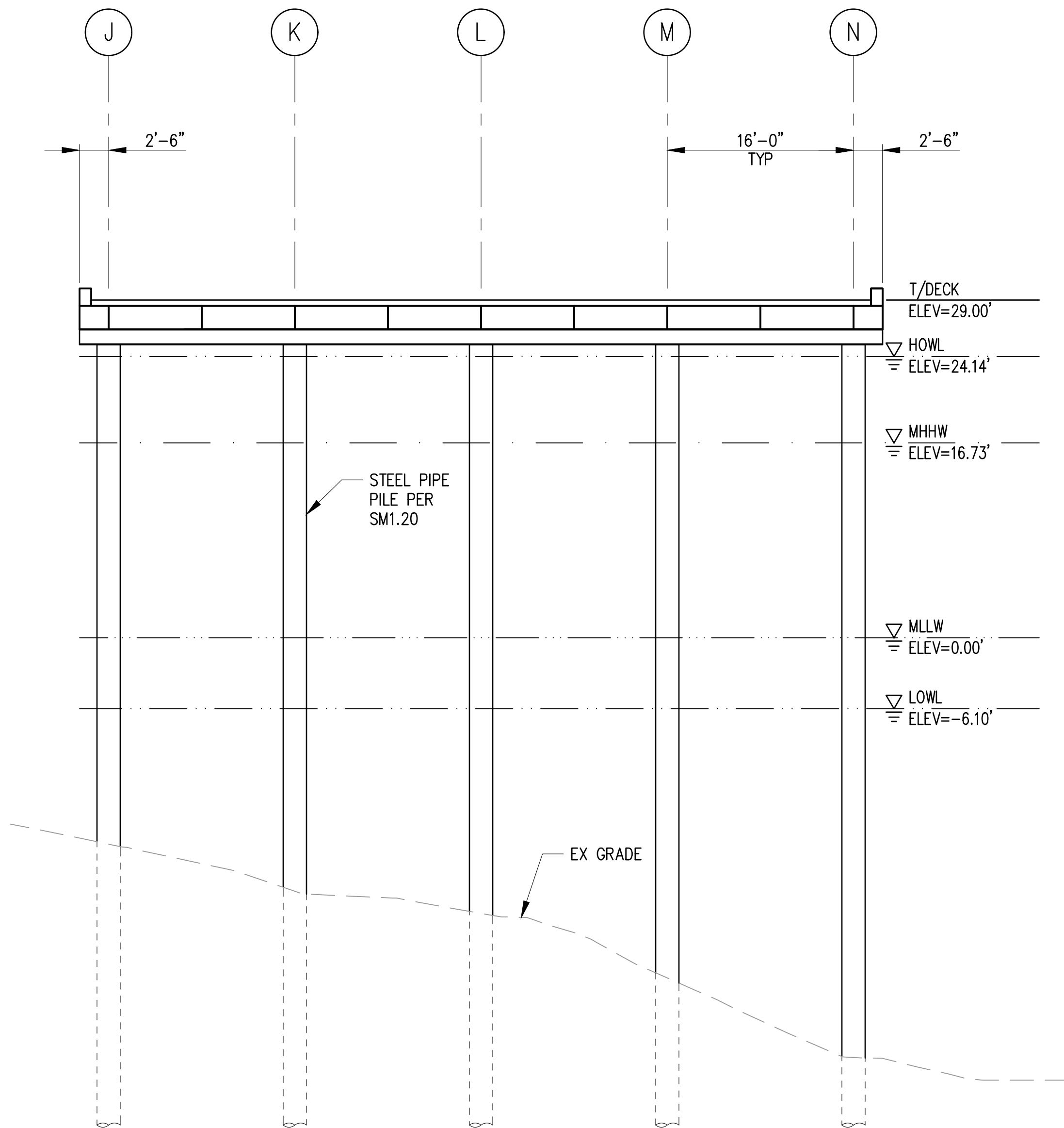
ORE PENINSULA REDEVELOPMENT
SKAGWAY, ALASKA

MARINE SERVICE PLATFORM
SECTIONS

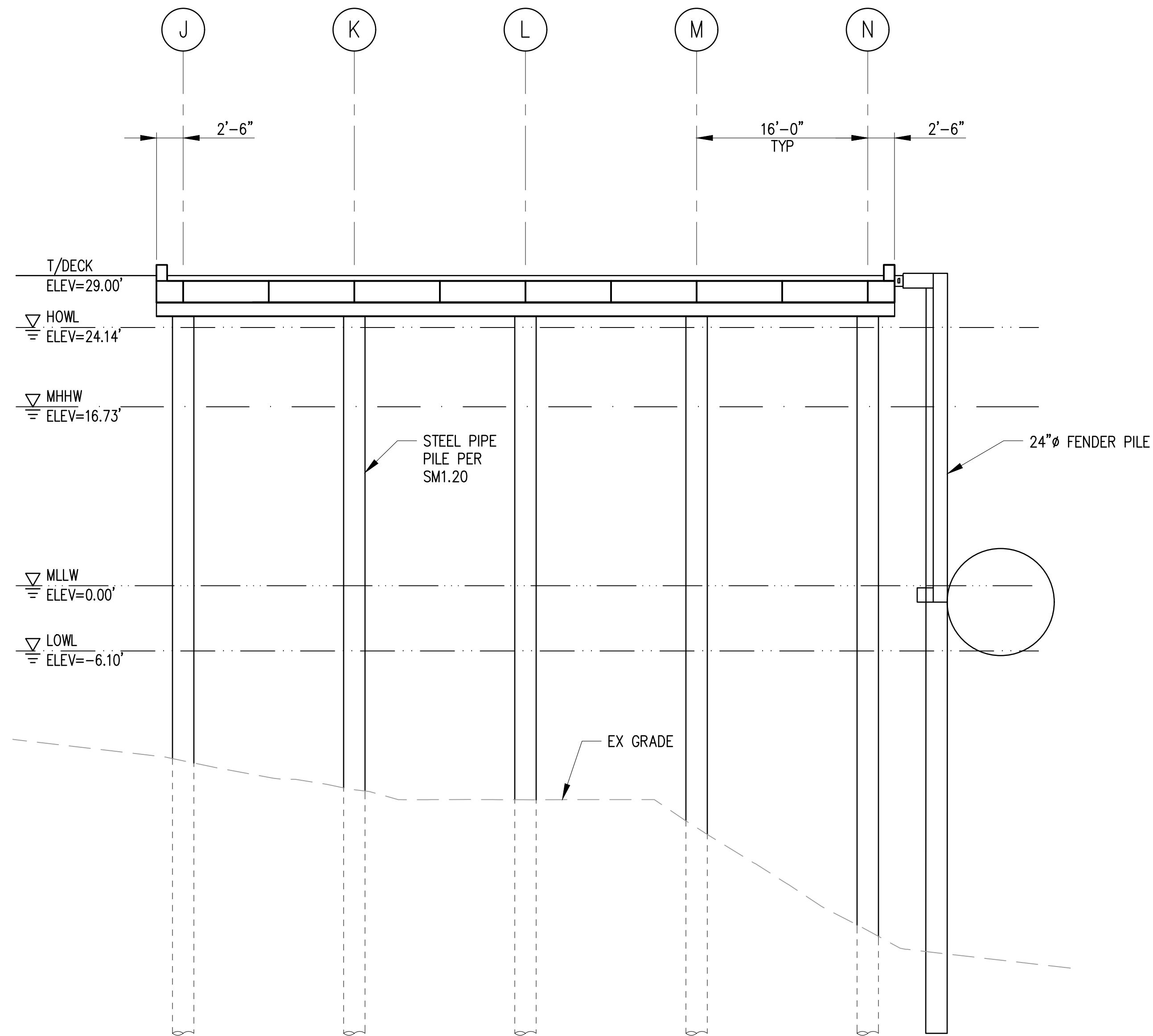
DRAWN: JH	PROJECT NO.: 2100135
DESIGN: ED	SCALE: AS SHOWN
CHECKED: RR	DATE: 6/17/2022
DRAWING NO.	SM1.10
SHEET NO.	OF

30% DESIGN - NOT FOR CONSTRUCTION

Plotted: Jun 17, 2022 - 5:25pm
M:\2021\2100135 Skagway Ore Peninsula Multi-use Dock\Drawings\Current\2100135_SM1.11 MSP Sections.dwg



A **TYPICAL SECTION**
SCALE: 1-1/2"=1'-0"



B **SECTION AT FENDER**
SCALE: 1-1/2"=1'-0"



kpff

1601 5th Avenue, Suite 1300
Seattle, Washington 98101
(206) 382-0600 Fax (206) 382-0500

NO.	DATE	BY	REVISION



ORE PENINSULA REDEVELOPMENT
SKAGWAY, ALASKA

MARINE SERVICE PLATFORM
SECTIONS

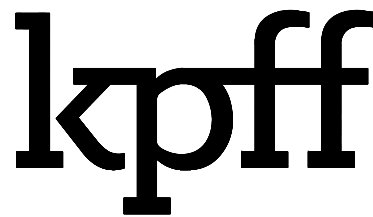
DRAWN: JH	PROJECT NO.: 2100135
DESIGN: ED	SCALE: AS SHOWN
CHECKED: RR	DATE: 6/17/2022
DRAWING NO. SM1.11	
SHEET NO. OF	

30% DESIGN - NOT FOR CONSTRUCTION

Plotted: Jun 17, 2022 - 5:26pm
M:\2021\2100135 Skagway Ore Peninsula Multi-use Dock Drawings\Current\2100135_SM1.20 MSP Pile Schedule.dwg
Layout: SM1.20
dnu
Multi-use Dock Drawings\Current\2100135_SM1.20 MSP Pile Schedule.dwg

PILE SCHEDULE							
PILE #	GRID	GRID	PILE TYPE	OD	WALL THICK	T/PILE	PILE TIP
1	A	7	STEEL PIPE	24"	3/4"	25.00	-85.00
2	A	8	STEEL PIPE	24"	3/4"	25.00	-85.00
3	A	9	STEEL PIPE	24"	3/4"	25.00	-85.00
4	B	7	STEEL PIPE	24"	3/4"	25.00	-85.00
5	B	8	STEEL PIPE	24"	3/4"	25.00	-85.00
6	B	9	STEEL PIPE	24"	3/4"	25.00	-85.00
7	C	7	STEEL PIPE	24"	3/4"	25.00	-85.00
8	C	8	STEEL PIPE	24"	3/4"	25.00	-85.00
9	C	9	STEEL PIPE	24"	3/4"	25.00	-85.00
10	D	7	STEEL PIPE	24"	3/4"	25.00	-85.00
11	D	8	STEEL PIPE	24"	3/4"	25.00	-85.00
12	D	9	STEEL PIPE	24"	3/4"	25.00	-85.00
13	E	7	STEEL PIPE	24"	3/4"	25.00	-85.00
14	E	8	STEEL PIPE	24"	3/4"	25.00	-85.00
15	E	9	STEEL PIPE	24"	3/4"	25.00	-85.00
16	F	7	STEEL PIPE	24"	3/4"	25.00	-85.00
17	F	8	STEEL PIPE	24"	3/4"	25.00	-85.00
18	F	9	STEEL PIPE	24"	3/4"	25.00	-85.00
19	G	7	STEEL PIPE	24"	3/4"	25.00	-85.00
20	G	8	STEEL PIPE	24"	3/4"	25.00	-85.00
21	G	9	STEEL PIPE	24"	3/4"	25.00	-85.00
22	H	7	STEEL PIPE	24"	3/4"	25.00	-85.00
23	H	8	STEEL PIPE	24"	3/4"	25.00	-85.00
24	H	9	STEEL PIPE	24"	3/4"	25.00	-85.00
25	I	7	STEEL PIPE	24"	3/4"	25.00	-90.00
26	I	8	STEEL PIPE	24"	3/4"	25.00	-90.00
27	I	9	STEEL PIPE	24"	3/4"	25.00	-90.00
28	J	1	STEEL PIPE	24"	3/4"	25.00	-90.00
29	J	2	STEEL PIPE	24"	3/4"	25.00	-90.00
30	J	3	STEEL PIPE	24"	3/4"	25.00	-90.00
31	J	4	STEEL PIPE	24"	3/4"	25.00	-90.00
32	J	5	STEEL PIPE	24"	3/4"	25.00	-90.00
33	J	6	STEEL PIPE	24"	3/4"	25.00	-90.00
34	J	7	STEEL PIPE	24"	3/4"	25.00	-90.00
35	J	8	STEEL PIPE	24"	3/4"	25.00	-90.00
36	J	9	STEEL PIPE	24"	3/4"	25.00	-90.00
37	J	10	STEEL PIPE	24"	3/4"	25.00	-90.00
38	J	11	STEEL PIPE	24"	3/4"	25.00	-90.00
39	J	12	STEEL PIPE	24"	3/4"	25.00	-90.00
40	J	13	STEEL PIPE	24"	3/4"	25.00	-90.00
41	J	14	STEEL PIPE	24"	3/4"	25.00	-90.00
42	J	15	STEEL PIPE	24"	3/4"	25.00	-90.00
43	K	1	STEEL PIPE	24"	3/4"	25.00	-105.00
44	K	2	STEEL PIPE	24"	3/4"	25.00	-105.00
45	K	3	STEEL PIPE	24"	3/4"	25.00	-105.00
46	K	4	STEEL PIPE	24"	3/4"	25.00	-105.00
47	K	5	STEEL PIPE	24"	3/4"	25.00	-105.00
48	K	6	STEEL PIPE	24"	3/4"	25.00	-105.00
49	K	7	STEEL PIPE	24"	3/4"	25.00	-105.00
50	K	8	STEEL PIPE	24"	3/4"	25.00	-105.00
51	K	9	STEEL PIPE	24"	3/4"	25.00	-105.00

PILE SCHEDULE							
PILE #	GRID	GRID	PILE TYPE	OD	WALL THICK	T/PILE	PILE TIP
52	K	10	STEEL PIPE	24"	3/4"	25.00	-105.00
53	K	11	STEEL PIPE	24"	3/4"	25.00	-105.00
54	K	12	STEEL PIPE	24"	3/4"	25.00	-105.00
55	K	13	STEEL PIPE	24"	3/4"	25.00	-105.00
56	K	14	STEEL PIPE	24"	3/4"	25.00	-105.00
57	K	15	STEEL PIPE	24"	3/4"	25.00	-105.00
58	L	1	STEEL PIPE	24"	3/4"	25.00	-105.00
59	L	2	STEEL PIPE	24"	3/4"	25.00	-105.00
60	L	3	STEEL PIPE	24"	3/4"	25.00	-105.00
61	L	4	STEEL PIPE	24"	3/4"	25.00	-105.00
62	L	5	STEEL PIPE	24"	3/4"	25.00	-105.00
63	L	6	STEEL PIPE	24"	3/4"	25.00	-105.00
64	L	7	STEEL PIPE	24"	3/4"	25.00	-105.00
65	L	8	STEEL PIPE	24"	3/4"	25.00	-105.00
66	L	9	STEEL PIPE	24"	3/4"	25.00	-105.00
67	L	10	STEEL PIPE	24"	3/4"	25.00	-105.00
68	L	11	STEEL PIPE	24"	3/4"	25.00	-105.00
69	L	12	STEEL PIPE	24"	3/4"	25.00	-105.00
70	L	13	STEEL PIPE	24"	3/4"	25.00	-105.00
71	L	14	STEEL PIPE	24"	3/4"	25.00	-105.00
72	L	15	STEEL PIPE	24"	3/4"	25.00	-105.00
73	M	1	STEEL PIPE	24"	3/4"	25.00	-115.00
74	M	2	STEEL PIPE	24"	3/4"	25.00	-115.00
75	M	3	STEEL PIPE	24"	3/4"	25.00	-115.00
76	M	4	STEEL PIPE	24"	3/4"	25.00	-115.00
77	M	5	STEEL PIPE	24"	3/4"	25.00	-115.00
78	M	6	STEEL PIPE	24"	3/4"	25.00	-115.00
79	M	7	STEEL PIPE	24"	3/4"	25.00	-115.00
80	M	8	STEEL PIPE	24"	3/4"	25.00	-115.00
81	M	9	STEEL PIPE	24"	3/4"	25.00	-115.00
82	M	10	STEEL PIPE	24"	3/4"	25.00	-115.00
83	M	11	STEEL PIPE	24"	3/4"	25.00	-115.00
84	M	12	STEEL PIPE	24"	3/4"	25.00	-115.00
85	M	13	STEEL PIPE	24"	3/4"	25.00	-115.00
86	M	14	STEEL PIPE	24"	3/4"	25.00	-115.00
87	M	15	STEEL PIPE	24"	3/4"	25.00	-115.00
88	N	1	STEEL PIPE	24"	3/4"	25.00	-115.00
89	N	2	STEEL PIPE	24"	3/4"	25.00	-115.00
90	N	3	STEEL PIPE	24"	3/4"	25.00	-115.00
91	N	4	STEEL PIPE	24"	3/4"	25.00	-115.00
92	N	5	STEEL PIPE	24"	3/4"	25.00	-115.00
93	N	6	STEEL PIPE	24"	3/4"	25.00	-115.00
94	N	7	STEEL PIPE	24"	3/4"	25.00	-115.00
95	N	8	STEEL PIPE	24"	3/4"	25.00	-115.00
96	N	9	STEEL PIPE	24"	3/4"	25.00	-115.00
97	N	10	STEEL PIPE	24"	3/4"	25.00	-115.00
98	N	11	STEEL PIPE	24"	3/4"	25.00	-115.00
99	N	12	STEEL PIPE	24"	3/4"	25.00	-115.00
100	N	13	STEEL PIPE	24"	3/4"	25.00	-115.00
101	N	14	STEEL PIPE	24"	3/4"	25.00	-115.00
102	N	15	STEEL PIPE	24"	3/4"	25.00	-115.00



1601 5th Avenue, Suite 1300
Seattle, Washington 98101
(206) 382-0600 Fax (206) 382-0500

NO.	DATE	BY	REVISION



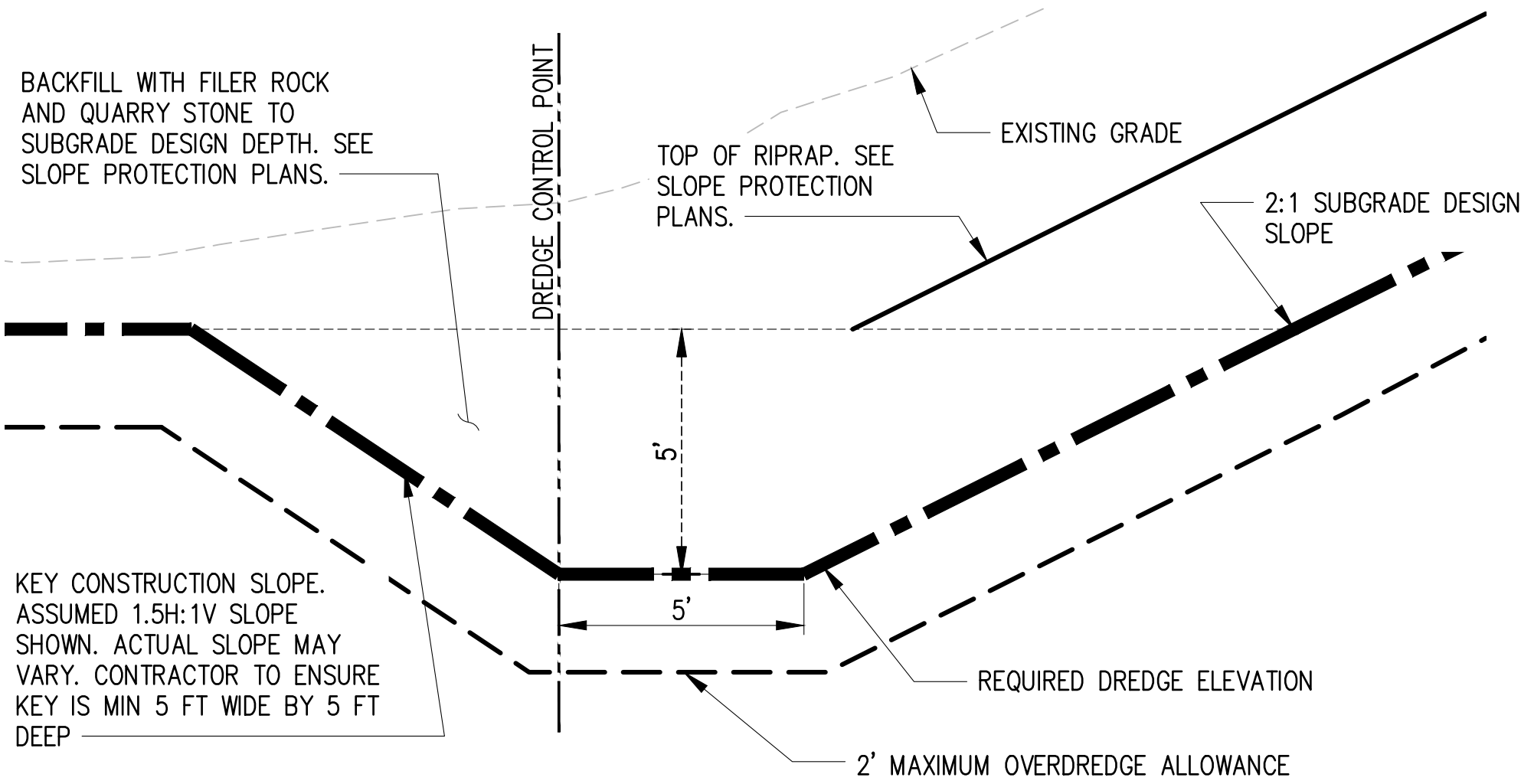
ORE PENINSULA REDEVELOPMENT
SKAGWAY, ALASKA

MARINE SERVICE PLATFORM
PILE SCHEDULE

DRAWN: JH	PROJECT NO.: 2100135
DESIGN: ED	SCALE: AS SHOWN
CHECKED: RR	DATE: 6/17/2022
DRAWING NO.	SM1.20
SHEET NO.	
	OF

30% DESIGN - NOT FOR CONSTRUCTION

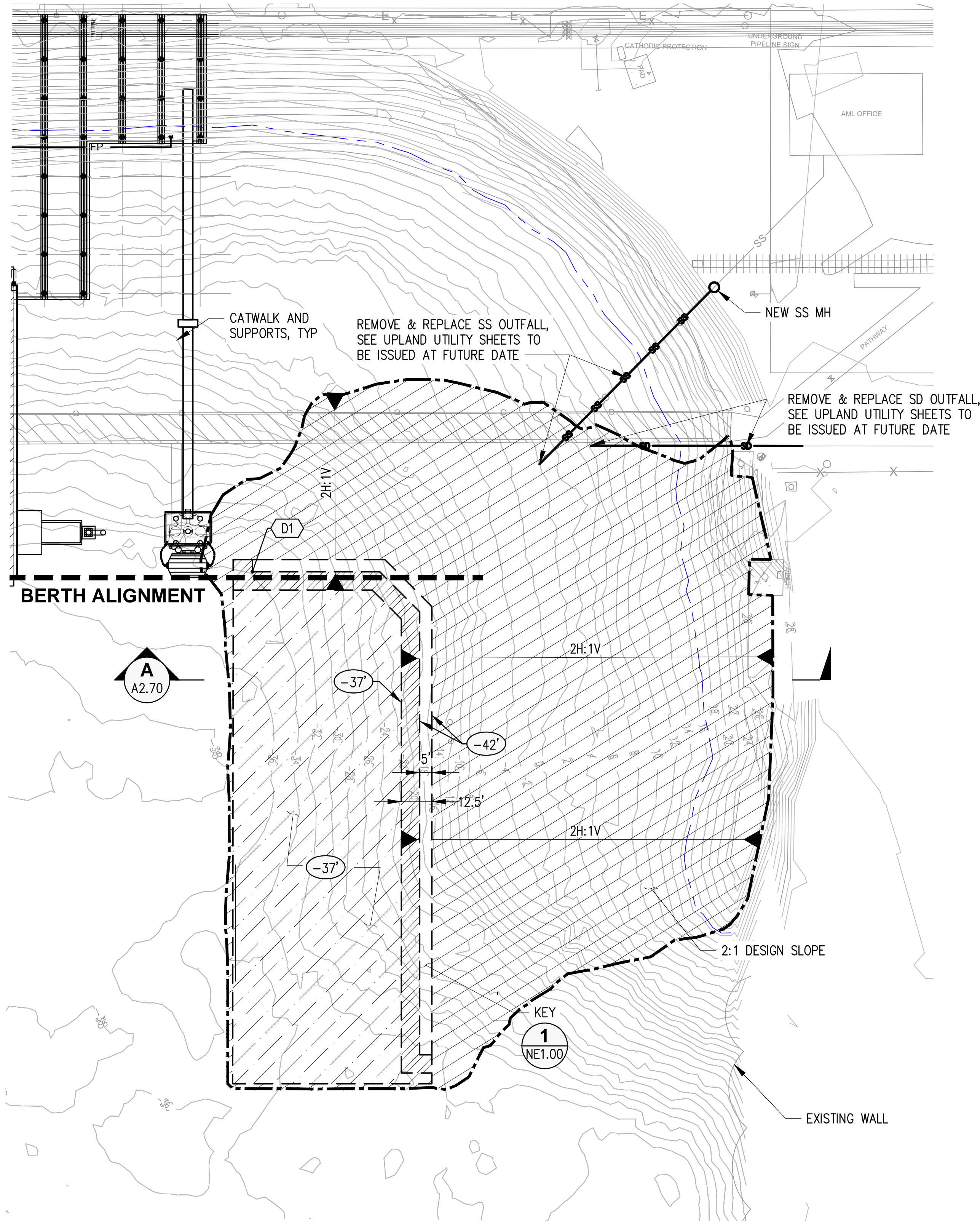
Plotted: Jun 17, 2022 - 5:29pm
M:\2021\2100135 Skagway Ore Peninsula Multi-Use Dock Drawings\Current\2100135_NE1.00 North Berth Extension Dredge Plan.dwg
Layout: NE1.00



1 TYPICAL KEY DREDGE DETAIL
NE1.00 SCALE: NTS

HORIZONTAL CONTROL

POINT ID	ALIGNMENT	STATION	OFFSET
D1			
D2			
D3			
D4			
D5			
D6			
D7			
D8			



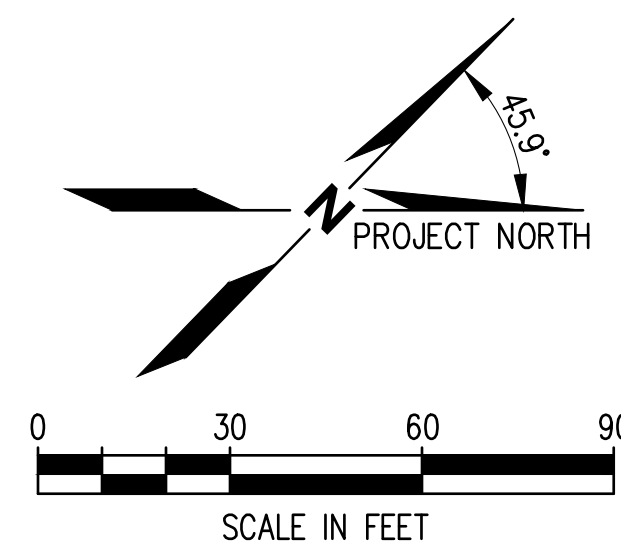
1 NORTH BERTH EXTENSION DREDGE PLAN
SCALE: 1" = 30'

DREDGE NOTES

- SEE SPECIFICATIONS FOR REQUIREMENTS ON SEQUENCING OF DREDGING, DEMO AND MATERIAL PLACEMENT WORK.
- CONTRACTOR SHALL DREDGE ALL SEDIMENT AND RIPRAP INDICATED ON THIS PLAN AND SECTIONS. DREDGING SHALL NOT EXTEND BEYOND LIMITS SHOWN.
- SEE SPECIFICATIONS FOR ADDITIONAL DREDGING AND DISPOSAL REQUIREMENTS.
- ELEVATIONS SHOWN ARE IN MLLW DATUM.
- SEE SHEET G4.00 FOR SURVEY AND ALIGNMENT LINE CONTROL
- PROPOSED DREDGE AREAS WILL REQUIRE SEDIMENT SAMPLING TO DETERMINE LEVELS OF CONTAMINATION.
- MAXIMUM OVERDREDGE ALLOWANCE OF 2'
- SOUNDINGS ARE IN U.S. SURVEY FEET AND ARE MINUS UNLESS OTHERWISE INDICATED. BATHYMETRY WAS COLLECTED BY HUGHES & ASSOCIATES ON APRIL 6-7, 2022.
- HORIZONTAL DATUM: ALASKA STATE PLANE, ZONE 1, NAD83, IN U.S. SURVEY FT

LEGEND

- CONTRACTOR SECURE WORK AREA
- EXISTING BATHYMETRIC CONTOUR
- DREDGE AREA (-37 MLLW REQUIRED DREDGE ELEVATION)
- DREDGE SLOPE (2H:1V SLOPE)
- KEY DREDGE TEMPORARY SLOPE AREA (ASSUMED 1.5H:1V)
- REQUIRED DREDGE ELEVATION
- DREDGE CONTROL POINTS, SEE HORIZ CONTROL TABLE
- DREDGE SLOPE GRADE BREAK
- APPROXIMATE EXISTING MHHW (EL +16.73')



kpff

1601 5th Avenue, Suite 1300
Seattle, Washington 98101
(206) 382-0600 Fax (206) 382-0500

NO.	DATE	BY	REVISION

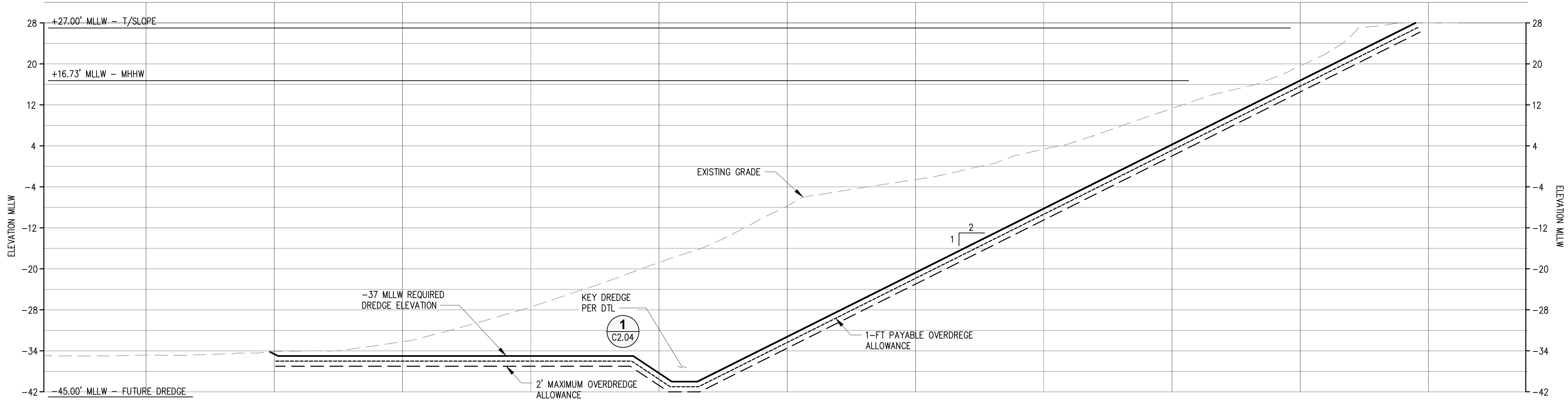


ORE PENINSULA REDEVELOPMENT
SKAGWAY, ALASKA

NORTH BERTH EXTENSION
DREDGE PLAN

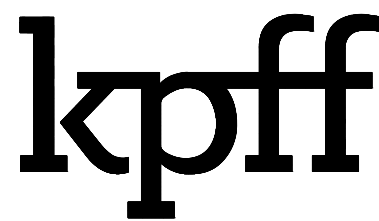
DRAWN: JH	PROJECT NO.: 2100135
DESIGN: ED	SCALE: AS SHOWN
CHECKED: RR	DATE: 6/17/2022
DRAWING NO.	NE1.00
SHEET NO.	OF

30% DESIGN - NOT FOR CONSTRUCTION



A
NE1.01
NORTH BERTH EXTENSION DREDGE SECTION
SCALE: 1" = 10'

Plotted: Jun 17, 2022 - 5:30pm
M:\2021\2100135 Skagway Ore Peninsula Multi-Use Dock\Drawings\Current\2100135_NE1.01 North Berth Extension Dredge Detail.dwg
Layout: NE1.01



1601 5th Avenue, Suite 1300
Seattle, Washington 98101
(206) 382-0600 Fax (206) 382-0500

NO.	DATE	BY	REVISION



ORE PENINSULA REDEVELOPMENT
SKAGWAY, ALASKA

NORTH BERTH EXTENSION
DREDGE SECTIONS AND DETAILS

DRAWN: JH	PROJECT NO.: 2100135
DESIGN: ED	SCALE: AS SHOWN
CHECKED: RR	DATE: 6/17/2022
DRAWING NO.	NE1.01
SHEET NO.	OF

30% DESIGN - NOT FOR CONSTRUCTION

Plotted: Jun 17, 2022 - 5:32pm
M:\2021\2100135 Skagway Ore Peninsula Multi-Use Dock\Drawings\Current\2100135_NE1.10 North Berth Extension Slope Protection Plan.dwg
Layout: NE1.10

kpff

1601 5th Avenue, Suite 1300
Seattle, Washington 98101
(206) 382-0600 Fax (206) 382-0500

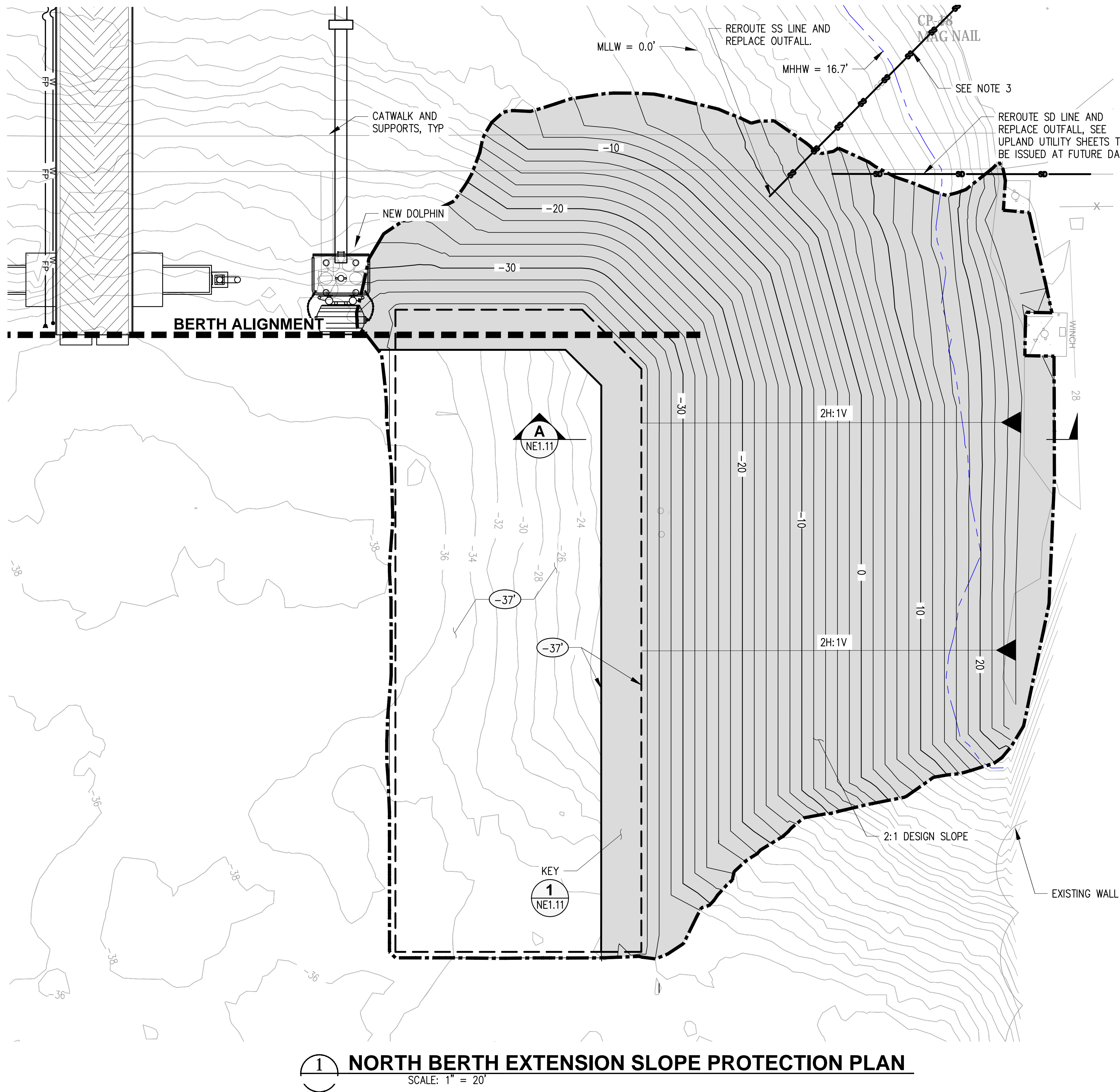
NO.	DATE	BY	REVISION



ORE PENINSULA REDEVELOPMENT
SKAGWAY, ALASKA

NORTH BERTH EXTENSION
SLOPE PROTECTION PLAN

DRAWN: JH	PROJECT NO.: 2100135
DESIGN: ED	SCALE: AS SHOWN
CHECKED: RR	DATE: 6/17/2022
DRAWING NO.	NE1.10
SHEET NO.	



NOTES

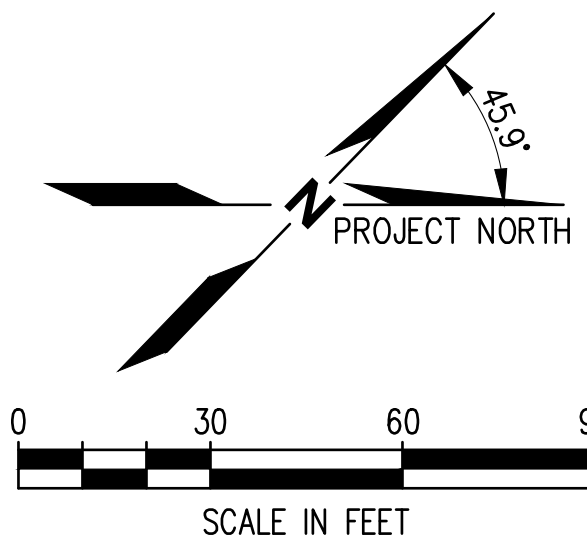
- SEE SHEET NE1.11 FOR TYPICAL SLOPE PROTECTION MATERIALS AND THICKNESSES.
- ELEVATIONS SHOWN ARE IN MLLW DATUM.
- OUTFALL MAY REQUIRE RECONSTRUCTION OR REROUTE
- SEE SHEET G4.01 FOR SURVEY AND ALIGNMENT LINE CONTROL.
- GRADES SHOWN ARE FINISH GRADE CONTOURS.

LEGEND

- CONTRACTOR SECURE WORK AREA
- EXISTING CONTOUR
- EXTENTS OF DREDGE, SEE SHEET C2.01
- APPROXIMATE EXISTING MHHW (EL. +16.7')
- SLOPE PROTECTION CONTROL POINT
- FINISH GRADE ELEVATION
- REVTMENT SLOPE
- RIPRAP SLOPE PROTECTION

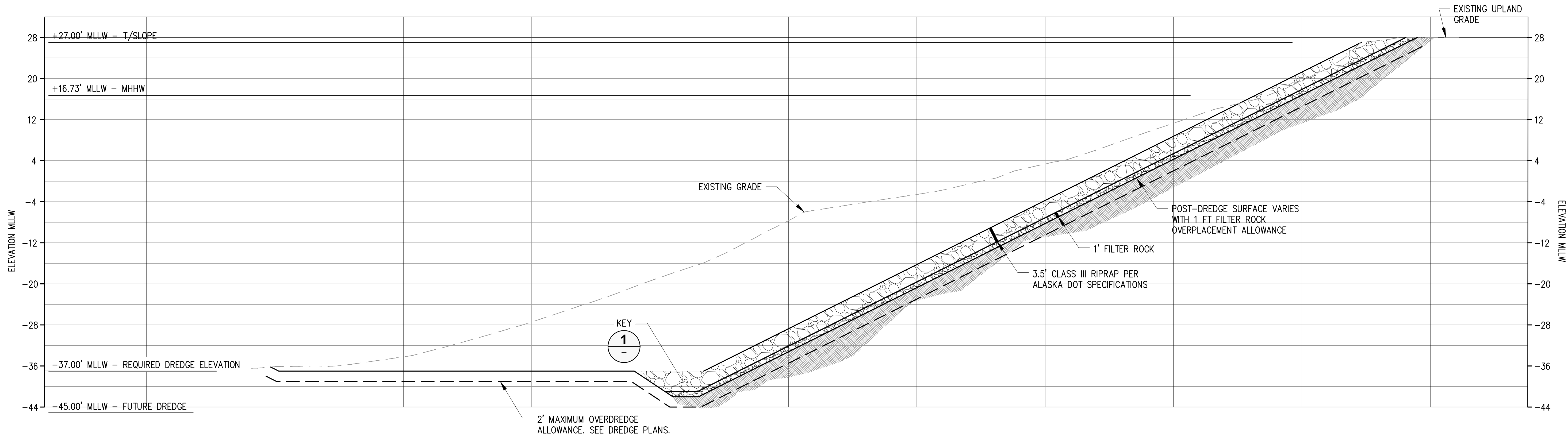
HABITAT FILL AND SLOPE PROTECTION CONTROL POINTS

POINT ID	STATION	OFFSET
S10		
S11		
S12		
S13		
S14		
S15		
S16		

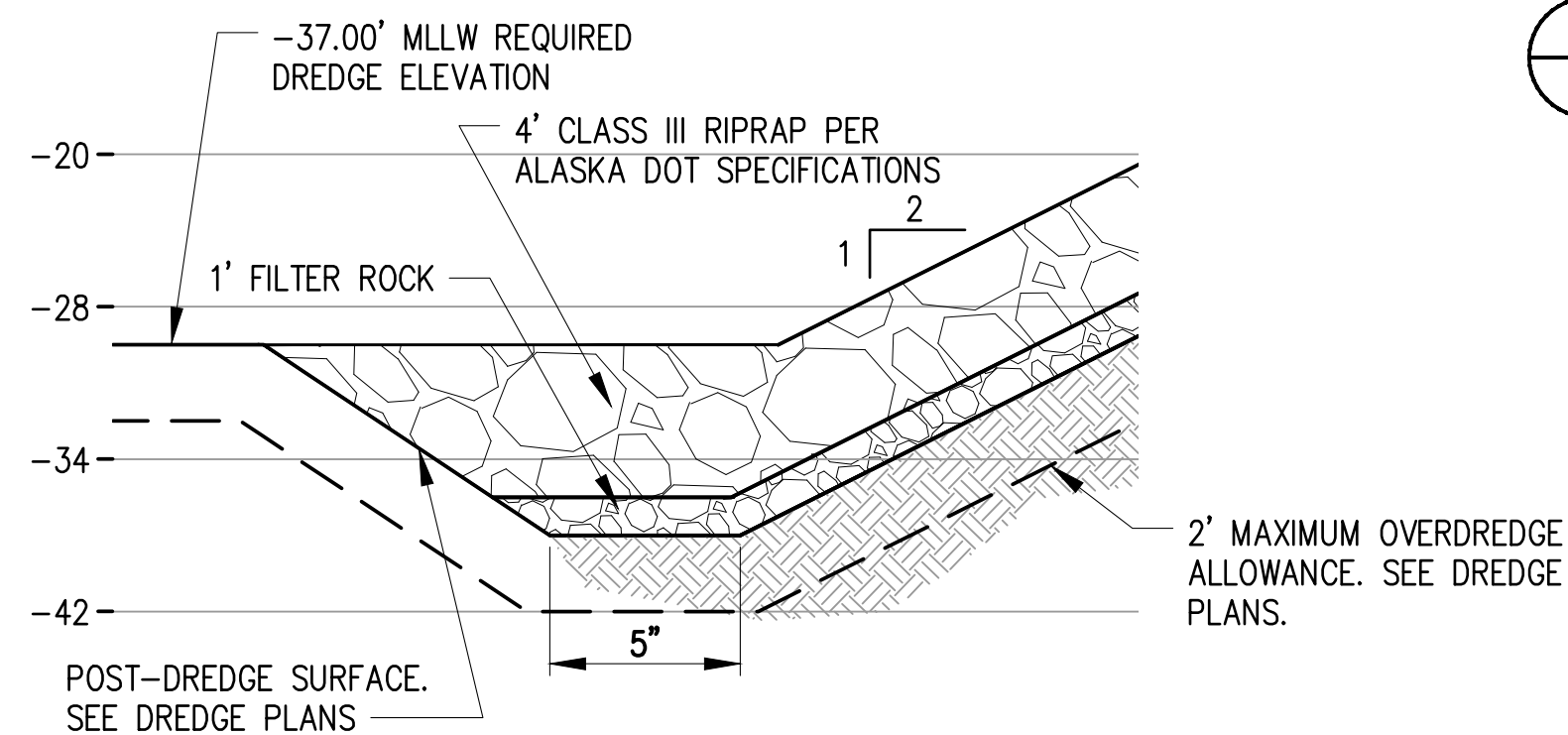


30% DESIGN - NOT FOR CONSTRUCTION

Plotted: Jun 17, 2022 - 5:33pm
M:\2021\2100135 Skagway Ore Peninsula Multi-Use Dock Drawings\Current\2100135_NE1.11 North Berth Extension Slope Protection Section & Details.dwg
Layout: NE1.11



A NORTH BERTH EXTENSION SLOPE PROTECTION & BACKFILL SECTION
SCALE: 1" = 10'



1 KEY BACKFILL DETAIL
SCALE: 1" = 5'



kpff

1601 5th Avenue, Suite 1300
Seattle, Washington 98101
(206) 382-0600 Fax (206) 382-0500

NO.	DATE	BY	REVISION



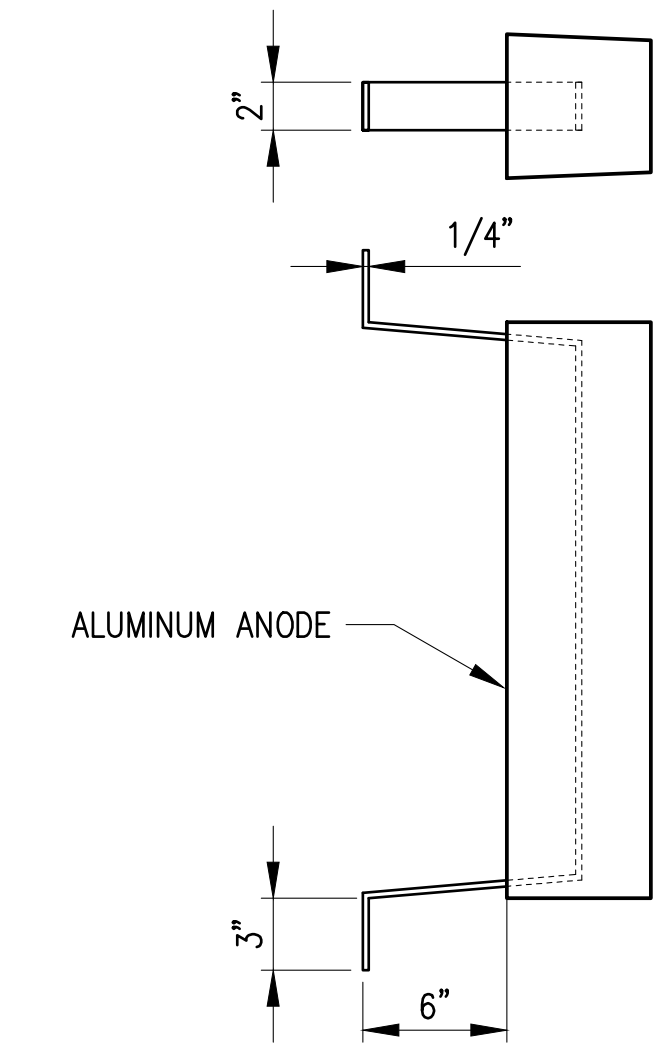
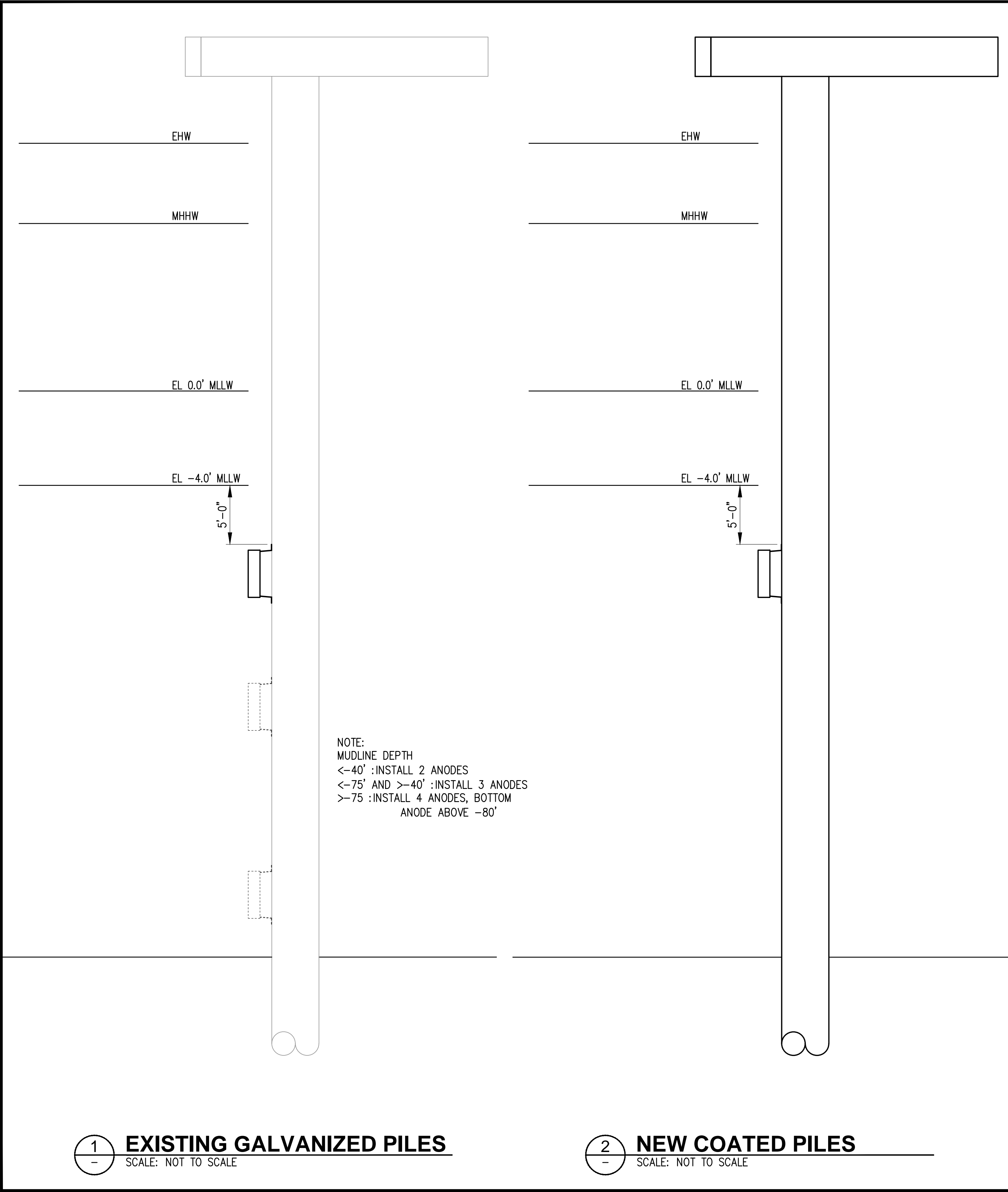
**ORE PENINSULA REDEVELOPMENT
SKAGWAY, ALASKA**

**NORTH BERTH EXTENSION
SLOPE PROTECTION SECTIONS AND DETAIL**

DRAWN: JH	PROJECT NO.: 2100135
DESIGN: ED	SCALE: AS SHOWN
CHECKED: RR	DATE: 6/17/2022
DRAWING NO.	NE1.11
SHEET NO.	OF

30% DESIGN - NOT FOR CONSTRUCTION

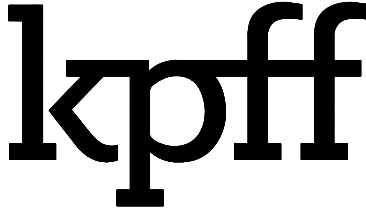
Plotted: Jun 17, 2022 - 5:34pm
M:\2021\2100135 Skagway Ore Peninsula Multi-use Dock Drawings\Current\2100135_CP1_00 Galvanic Cathodic Protection System.dwg
Layout: CP1.00



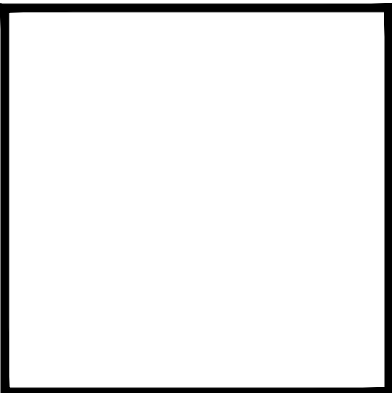
3 TYPICAL ANODE
SCALE: NOT TO SCALE

1 EXISTING GALVANIZED PILES
SCALE: NOT TO SCALE

2 NEW COATED PILES
SCALE: NOT TO SCALE



1601 5th Avenue, Suite 1300
Seattle, Washington 98101
(206) 382-0600 Fax (206) 382-0500



NO.	DATE	BY	REVISION



ORE PENINSULA REDEVELOPMENT
SKAGWAY, ALASKA

GALVANIC CATHODIC PROTECTION SYSTEM

DRAWN: JH	PROJECT NO.: 2100135
DESIGN: ED	SCALE: AS SHOWN
CHECKED: RR	DATE: 6/17/2022
DRAWING NO.	CP1.00
SHEET NO.	OF

30% DESIGN - NOT FOR CONSTRUCTION

Plotted: Jun 16, 2022 - 11:52am
N:\Projects\H252 - KPFF\07 Skagway Multi-Use Dock\Drawings\Working\E0.00.dwg

Peggy,Leslie Layout: E0.00



1601 5th Avenue, Suite 1300
Seattle, Washington 98101
(206) 382-0600 Fax (206) 382-0500



Juneau, AK
9109 Mendenhall Mall Rd. Ste. 4
Juneau, AK 99801
Phone: 907.780.6060
Fax: 907.586.3771
AECC163270



NO.	DATE	BY	REVISION



ORE PENINSULA MULTIUSE DOCK SKAGWAY, ALASKA

LEGEND, ABBREVIATIONS

DRAWN: REJ	PROJECT NO.: 2100135
DESIGN: BCH,AS,MW	SCALE: AS SHOWN
CHECKED: BCH,AS	DATE: 06/20/2022
DRAWING NO.	E0.00
SHEET NO.	XX OF XX

30% DESIGN - NOT FOR CONSTRUCTION

LEGEND

ABBREVIATIONS:

AFG	ABOVE FINISHED GRADE
C.O.	CONDUIT ONLY
EMT	ELECTRICAL METALLIC TUBING
GFI	GROUND FAULT INTERRUPTED
GFR	GROUND FAULT RELAY
HDG	HOT-DIPPED GALVANIZED
HR	HOME RUN
OC	ON CENTER
OHE	OVERHEAD ELECTRICAL
PE	PHOTOELECTRIC CELL
PVC	POLYVINYL CHLORIDE CONDUIT
RSC	RIGID STEEL CONDUIT
UGE	UNDERGROUND ELECTRICAL
UON	UNLESS OTHERWISE NOTED
WP	WEATHERPROOF
XFMR	TRANSFORMER

SHEET NOTE SYMBOLS:

(D)	DEMOLISH
(E)	EXISTING TO REMAIN
(N)	NEW
(R)	RELOCATE EXISTING
	DETAIL/SHEET CALLOUT
	SECTION/SHEET CALLOUT

POWER:

	JUNCTION BOX
	CONDULET
	MOTOR CONNECTION
	DISCONNECT

SERVICE EQUIPMENT:

	TRANSFORMER
	PANELBOARD
	MAIN DISTRIBUTION PANEL
	UTILITY POLE

LIGHTING:

	EXTERIOR FLOODLIGHT
	EXTERIOR WALL MOUNTED LUMINAIRE
	EXTERIOR POLE MOUNTED LUMINAIRE

LIGHTING CONTROLS:

LC	LIGHTING CONTACTOR
	PHOTOELECTRIC CELL

CONDUIT & CONDUCTORS:

	HOME RUN
	CONDUIT: 1/2" UONL
	UNGROUND ED CONDUCTORS (#12 AWG)
	NEUTRAL: #10 WITH DOT #12 OTHERWISE
	GROUND CONDUCTOR
	CONDUCTORS NOT SHOWN WHERE ONLY #12 NEUTRAL AND UNGROUNDED CONDUCTOR ARE REQUIRED
	CONDUIT UNDERGROUND
	FLEXIBLE CONDUIT

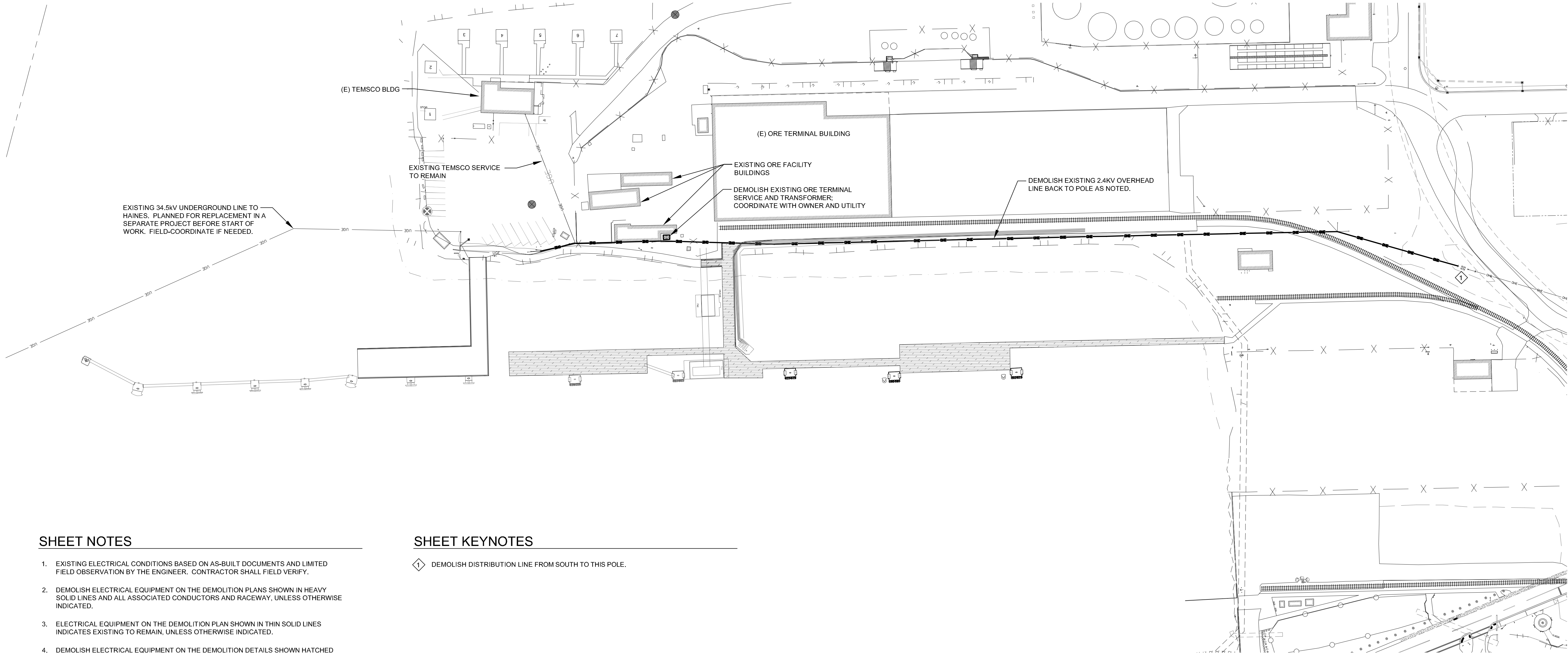
GENERAL ELECTRICAL NOTES

- COMPLY WITH NFPA 70, NATIONAL ELECTRICAL CODE 2017 EDITION; NECA 1, STANDARD FOR GOOD WORKMANSHIP IN ELECTRICAL CONSTRUCTION; AND NATIONAL ELECTRICAL SAFETY CODE.
- ELECTRICAL COMPONENTS, DEVICES, ASSEMBLIES, AND ACCESSORIES ARE REQUIRED TO BE LISTED AND LABELED AS DEFINED IN NFPA 70, ARTICLE 100, BY A TESTING AGENCY ACCEPTABLE TO AUTHORITIES HAVING JURISDICTION, AND MARKED FOR INTENDED USE.
- DRAWINGS SHOW THE GENERAL LOCATIONS OF THE ELECTRICAL FEATURES ONLY, UNLESS OTHERWISE INDICATED. MAKE MINOR RELOCATIONS AS REQUIRED FOR PROJECT CONDITIONS WHEN NECESSARY TO PRESENT SYMMETRICAL APPEARANCE OR TO AVOID INTERFERENCE WITH OTHER INSTALLATIONS.
- NEUTRAL CONDUCTORS SHALL NOT BE SHARED BETWEEN BRANCH CIRCUITS, UNLESS OTHERWISE INDICATED.
- PROVIDE INSULATED EQUIPMENT GROUNDING CONDUCTORS WITH ALL FEEDERS AND BRANCH CIRCUITS. TERMINATE EACH END ON SUITABLE LUG, BUS OR BUSHING. SIZE EQUIPMENT GROUNDING CONDUCTORS IN ACCORDANCE WITH NEC, UNLESS OTHERWISE INDICATED, BUT NOT SMALLER THAN NO. 12 AWG.
- MINIMUM CONDUCTOR SIZE FOR BRANCH CIRCUITS: NO. 12 AWG.
 - USE NO. 10 AWG MINIMUM FOR 15 OR 20 AMPERE, 120 VOLT BRANCH CIRCUITS LONGER THAN 65 FEET, BUT NOT GREATER THAN 100 FEET.
 - USE NO. 8 AWG MINIMUM FOR 15 OR 20 AMPERE, 120 VOLT BRANCH CIRCUITS LONGER THAN 100 FEET UNLESS OTHERWISE INDICATED.
 - USE NO. 10 AWG MINIMUM FOR 15 OR 20 AMPERE, 277 VOLT BRANCH CIRCUITS LONGER THAN 150 FEET UNLESS OTHERWISE INDICATED.
- OUTLET AND DEVICE BOXES FOR USE WITH EXPOSED RACEWAY SYSTEMS SHALL BE THREADED HUB, CAST METAL TYPE.

Plotted: Jun 16, 2022 - 11:52am
N:\Projects\H252 - KPFF\07 Skagway Multi-Use Dock\Drawings\Working\E1.00.dwg

Peggy,Leslie

Layout: E1.00

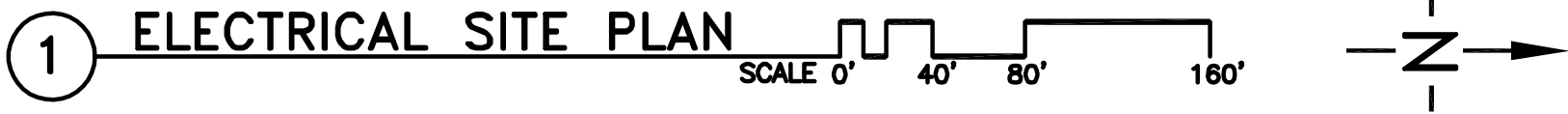


SHEET NOTES

- EXISTING ELECTRICAL CONDITIONS BASED ON AS-BUILT DOCUMENTS AND LIMITED FIELD OBSERVATION BY THE ENGINEER. CONTRACTOR SHALL FIELD VERIFY.
- DEMOLISH ELECTRICAL EQUIPMENT ON THE DEMOLITION PLANS SHOWN IN HEAVY SOLID LINES AND ALL ASSOCIATED CONDUCTORS AND RACEWAY, UNLESS OTHERWISE INDICATED.
- ELECTRICAL EQUIPMENT ON THE DEMOLITION PLAN SHOWN IN THIN SOLID LINES INDICATES EXISTING TO REMAIN, UNLESS OTHERWISE INDICATED.
- DEMOLISH ELECTRICAL EQUIPMENT ON THE DEMOLITION DETAILS SHOWN HATCHED AND ALL ASSOCIATED CONDUCTORS AND RACEWAY, UNLESS OTHERWISE INDICATED.
- RECONNECT AND LABEL EXISTING BRANCH CIRCUITS NOT BEING DEMOLISHED WHICH PASS THROUGH, OR CONNECT INTO, THE PROJECT AREA.
- RACEWAY MAY BE REUSED IN PLACE IF NOT RENDERED UNUSABLE DUE TO OTHER DEMOLITION AND COMPLIES WITH CONTRACT DOCUMENTS. REUSED RACEWAY SHALL BE IN LIKE-NEW, OR REPAIRED TO LIKE-NEW CONDITION BEFORE INSTALLING CONDUCTORS.
- SALVAGE SHALL MEAN REMOVE WITHOUT DAMAGE DURING DEMOLITION AND REUSE DURING NEW CONSTRUCTION.
- ELECTRICAL EQUIPMENT REMOVED AND DEEMED UNUSABLE BY THE OWNER SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND BE PROPERLY DISPOSED OF. EQUIPMENT DEEMED USABLE BY THE OWNER SHALL BE DELIVERED WITHOUT DAMAGE TO A LOCATION DESIGNATED BY THE OWNER, UNLESS OTHERWISE INDICATED.

SHEET KEYNOTES

- 1 DEMOLISH DISTRIBUTION LINE FROM SOUTH TO THIS POLE.



1601 5th Avenue, Suite 1300
Seattle, Washington 98101
(206) 382-0600 Fax (206) 382-0500



Juneau, AK
9109 Mendenhall Mall Rd. Ste. 4
Juneau, AK 99801
Phone: 907.780.6060
Fax: 907.586.3771
AECC163270

NO.	DATE	BY	REVISION

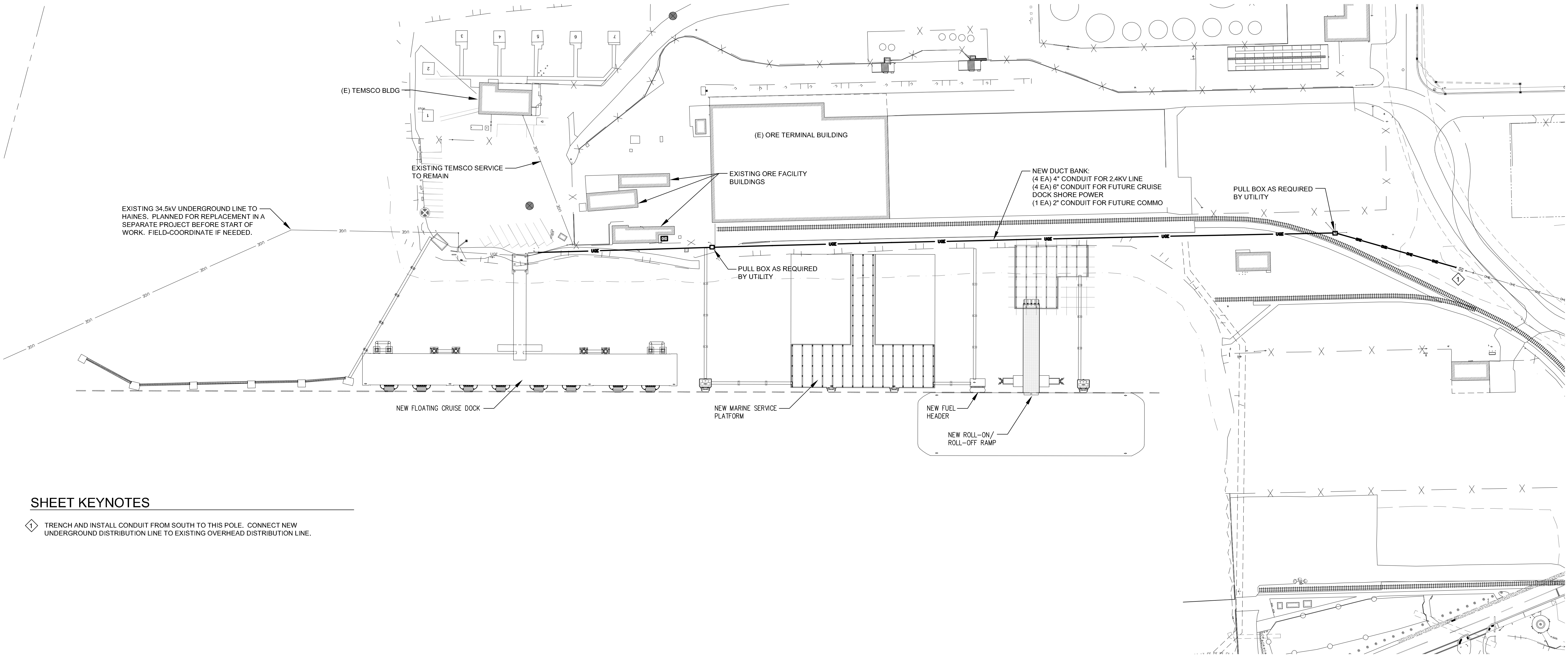


ORE PENINSULA MULTIUSE DOCK
SKAGWAY, ALASKA

ELECTRICAL SITE PLAN - EXISTING

DRAWN: REJ	PROJECT NO.: 2100135
DESIGN: BCH,AS,MW	SCALE: AS SHOWN
CHECKED: BCH,AS	DATE: 06/20/2022
DRAWING NO.	E1.00
SHEET NO.	XX OF XX

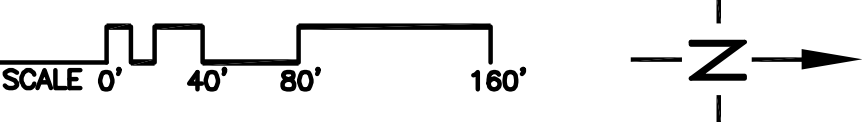
30% DESIGN - NOT FOR CONSTRUCTION



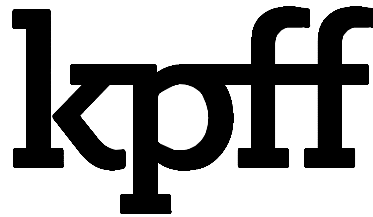
SHEET KEYNOTES

- 1 TRENCH AND INSTALL CONDUIT FROM SOUTH TO THIS POLE. CONNECT NEW UNDERGROUND DISTRIBUTION LINE TO EXISTING OVERHEAD DISTRIBUTION LINE.

1 OVERALL ELECTRICAL SITE PLAN



Plotted: Jun 16, 2022 - 11:51am
N:\Projects\H252 - KPFF\07 Skagway Multi-Use Dock\Drawings\Working\E2.00.dwg



1601 5th Avenue, Suite 1300
Seattle, Washington 98101
(206) 382-0600 Fax (206) 382-0500



Juneau, AK
9109 Mendenhall Mall Rd. Ste. 4
Juneau, AK 99801
Phone: 907.780.6060
Fax: 907.586.3771
AECC163270

NO.	DATE	BY	REVISION



ORE PENINSULA MULTIUSE DOCK
SKAGWAY, ALASKA

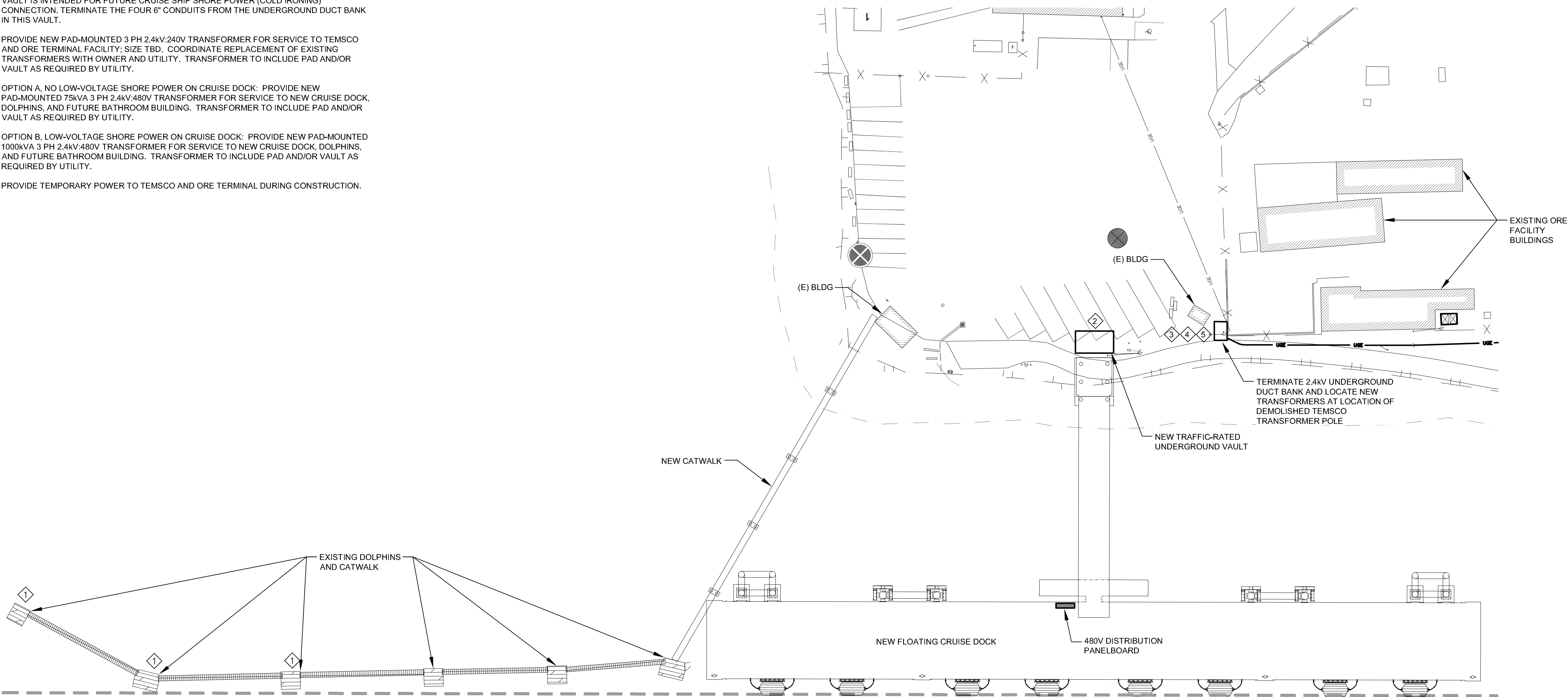
OVERALL ELECTRICAL SITE PLAN

DRAWN: REJ	PROJECT NO.: 2100135
DESIGN: BCH,AS,MW	SCALE: AS SHOWN
CHECKED: BCH,AS	DATE: 06/20/2022
DRAWING NO.	E2.00
SHEET NO.	XX OF XX

30% DESIGN - NOT FOR CONSTRUCTION

SHEET KEYNOTES

- 1
- PROVIDE 480V, 3PH POWER FOR POWERED CAPSTANS.
- 2
- VAULT IS INTENDED FOR FUTURE CRUISE SHIP SHORE POWER (COLD IRONING) CONNECTION. TERMINATE THE FOUR 6" CONDUITS FROM THE UNDERGROUND DUCT BANK IN THIS VAULT.
- 3
- PROVIDE NEW PAD-MOUNTED 3 PH 2.4kV/240V TRANSFORMER FOR SERVICE TO TEMSCO AND ORE TERMINAL FACILITY; SIZE TBD. COORDINATE REPLACEMENT OF EXISTING TRANSFORMERS WITH OWNER AND UTILITY. TRANSFORMER TO INCLUDE PAD AND/OR VAULT AS REQUIRED BY UTILITY.
- 4
- OPTION A, NO LOW-VOLTAGE SHORE POWER ON CRUISE DOCK: PROVIDE NEW PAD-MOUNTED 75kVA 3 PH 2.4kV-480V TRANSFORMER FOR SERVICE TO NEW CRUISE DOCK, DOLPHINS, AND FUTURE BATHROOM BUILDING. TRANSFORMER TO INCLUDE PAD AND/OR VAULT AS REQUIRED BY UTILITY.
- OPTION B, LOW-VOLTAGE SHORE POWER ON CRUISE DOCK: PROVIDE NEW PAD-MOUNTED 1000kVA 3 PH 2.4kV-480V TRANSFORMER FOR SERVICE TO NEW CRUISE DOCK, DOLPHINS, AND FUTURE BATHROOM BUILDING. TRANSFORMER TO INCLUDE PAD AND/OR VAULT AS REQUIRED BY UTILITY.
- 5
- PROVIDE TEMPORARY POWER TO TEMSCO AND ORE TERMINAL DURING CONSTRUCTION.

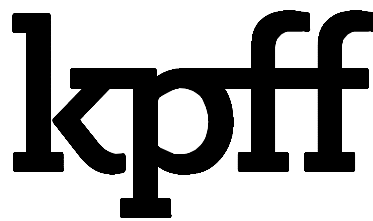


1 CRUISE DOCK ELECTRICAL PLAN

SCALE 0' 20' 40' 80'

N

Plotted: Jun 16, 2022 - 11:51am
N:\Projects\H252 - KPFF\07 Skagway Multi-Use Dock\Drawings\Working\E2.10.dwg



1601 5th Avenue, Suite 1300
Seattle, Washington 98101
(206) 382-0600 Fax (206) 382-0500



Juneau, AK
9109 Mendenhall Mall Rd. Ste. 4
Juneau, AK 99801
Phone: 907.780.6060
Fax: 907.586.3771
AECC163270

NO.	DATE	BY	REVISION



ORE PENINSULA MULTIUSE DOCK
SKAGWAY, ALASKA

CRUISE DOCK ELECTRICAL PLAN

DRAWN: REJ	PROJECT NO.: 2100135
DESIGN: BCH,AS,MW	SCALE: AS SHOWN
CHECKED: BCH,AS	DATE: 06/20/2022
DRAWING NO.	E2.10
SHEET NO.	XX OF XX

30% DESIGN - NOT FOR CONSTRUCTION

Plotted: Jun 16, 2022 - 11:51am
N:\Projects\H252 - KPFF\07 Skagway Multi-Use Dock\Drawings\Working\E2.20.dwg

Peggy Leslie Layout: E2.20

kpff

1601 5th Avenue, Suite 1300
Seattle, Washington 98101
(206) 382-0600 Fax (206) 382-0500



Juneau, AK
9109 Mendenhall Mall Rd. Ste. 4
Juneau, AK 99801
Phone: 907.780.6060
Fax: 907.586.3771
AECC163270

NO.	DATE	BY	REVISION

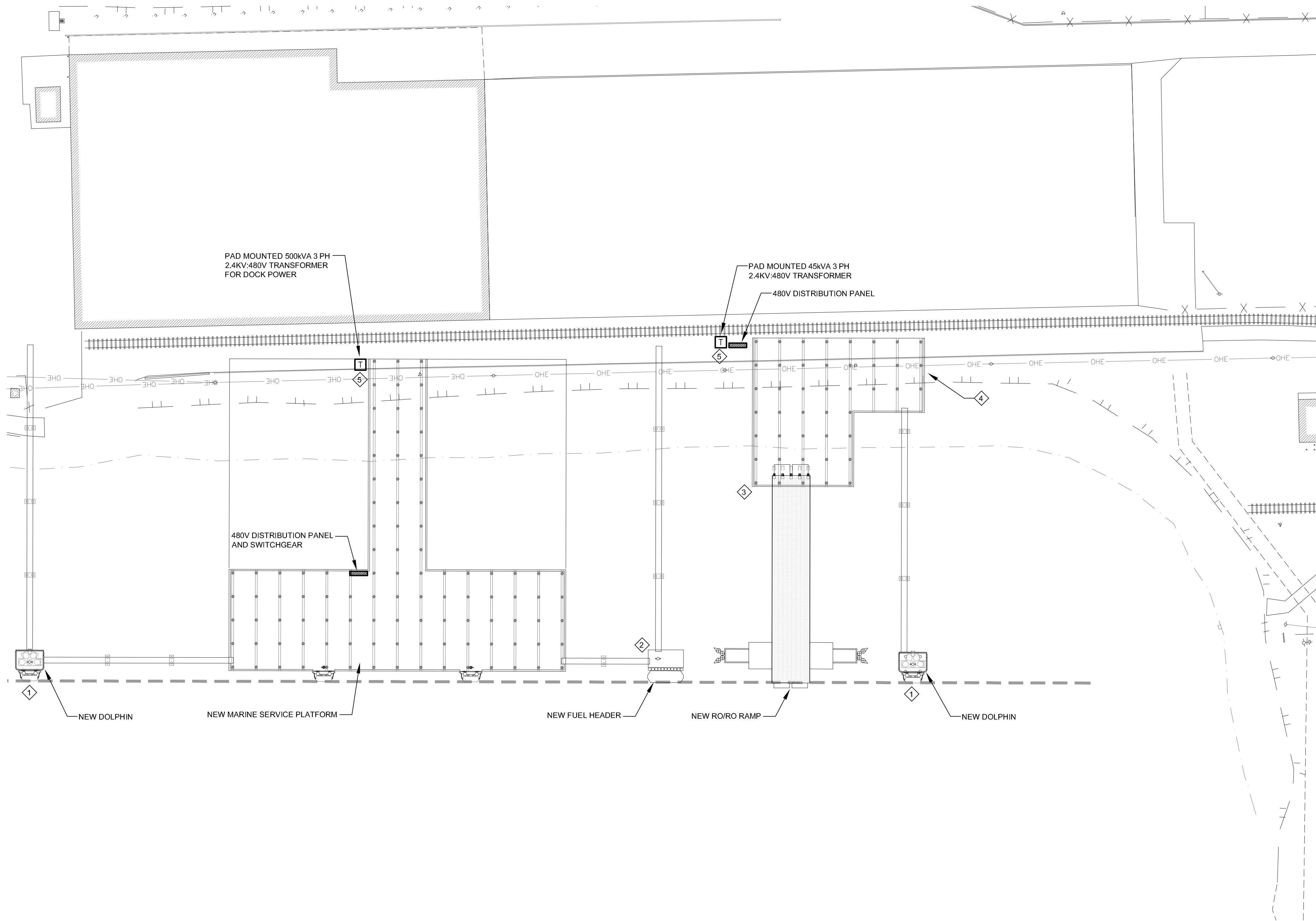


**ORE PENINSULA MULTIUSE DOCK
SKAGWAY, ALASKA**

**MARINE SERVICE PLATFORM, FUEL HEADER,
AND RO/RO RAMP PLAN**

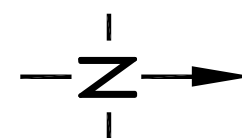
DRAWN: REJ	PROJECT NO.: 2100135
DESIGN: BCH,AS,MW	SCALE: AS SHOWN
CHECKED: BCH,AS	DATE: 06/20/2022
DRAWING NO.	E2.20
SHEET NO.	XX OF XX

30% DESIGN - NOT FOR CONSTRUCTION



1 ENLARGED PLAN

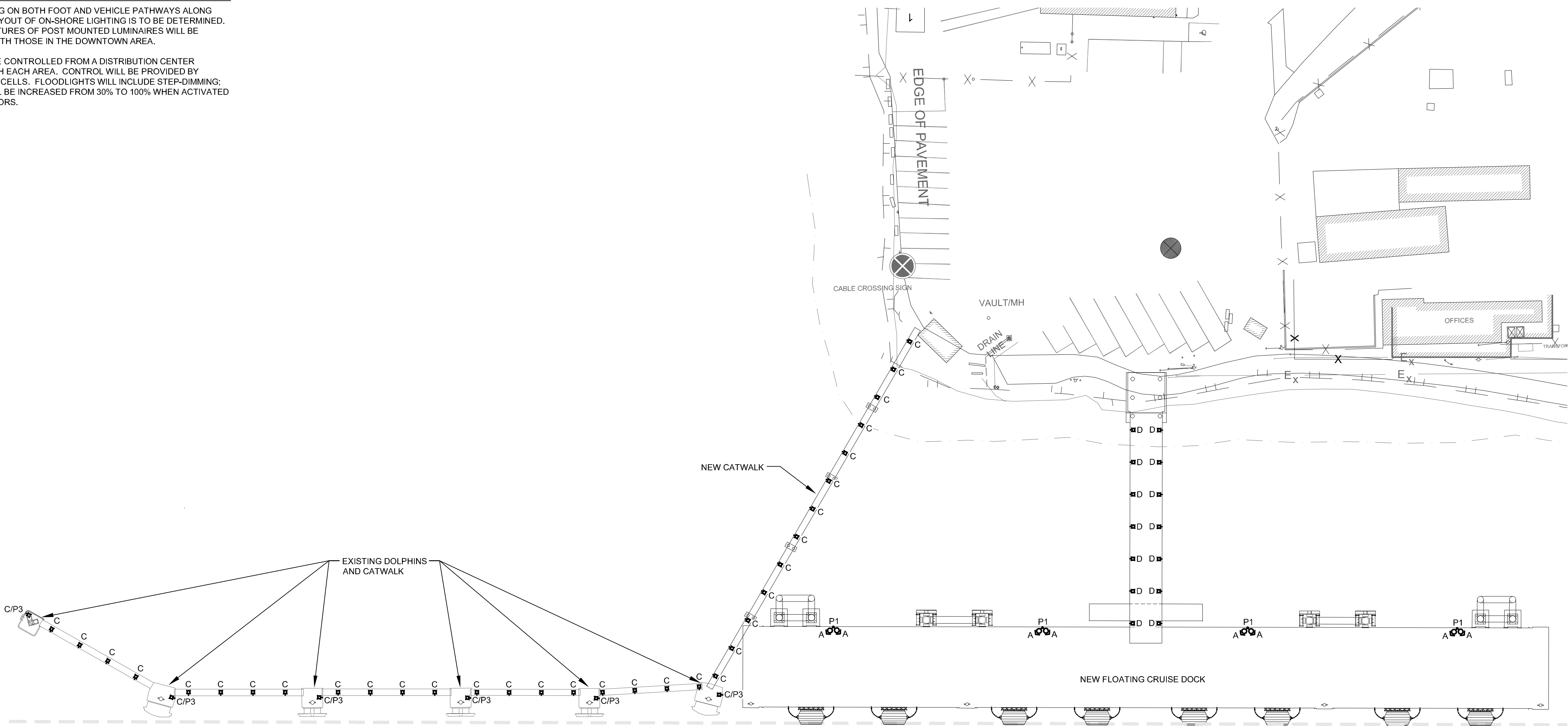
SCALE 0' 20' 40' 80'



SHEET KEYNOTES

- 1 PROVIDE 480V, 3PH POWER FOR POWERED CAPSTANS.
- 2 PROVIDE POWER TO FUEL HEADER EQUIPMENT AS NEEDED. EQUIPMENT TO BE DETERMINED.
- 3 HYDRAULIC SYSTEM ON RO/RO RAMP TBD. PROVIDE POWER AS NEEDED.
- 4 FUEL LINES TO BE BURIED UNDER RO/RO RAMP. PROVIDE POWER FOR CATHODIC PROTECTION.
- 5 TRANSFORMER TO INCLUDE PAD AND/OR VAULT AS REQUIRED BY UTILITY.

- SHEET NOTES:**
1. PROVIDE LIGHTING ON BOTH FOOT AND VEHICLE PATHWAYS ALONG SHORE. FINAL LAYOUT OF ON-SHORE LIGHTING IS TO BE DETERMINED. DESIGN AND FEATURES OF POST MOUNTED LUMINAIRES WILL BE COORDINATED WITH THOSE IN THE DOWNTOWN AREA.
 2. LIGHTING WILL BE CONTROLLED FROM A DISTRIBUTION CENTER ASSOCIATED WITH EACH AREA. CONTROL WILL BE PROVIDED BY PHOTOELECTRIC CELLS. FLOODLIGHTS WILL INCLUDE STEP-DIMMING; BRIGHTNESS WILL BE INCREASED FROM 30% TO 100% WHEN ACTIVATED BY MOTION SENSORS.



1 CRUISE DOCK LIGHTING PLAN

SCALE 0' 20' 40' 80'

N

Plotted: Jun 16, 2022 - 1:19pm
N:\Projects\H252 - KPFF\07 Skagway Multi-Use Dock\Drawings\Working\E3.10.dwg



1601 5th Avenue, Suite 1300
Seattle, Washington 98101
(206) 382-0600 Fax (206) 382-0500



Juneau, AK
9109 Mendenhall Mall Rd. Ste. 4
Juneau, AK 99801
Phone: 907.780.6060
Fax: 907.586.3771
AECC163270

NO.	DATE	BY	REVISION

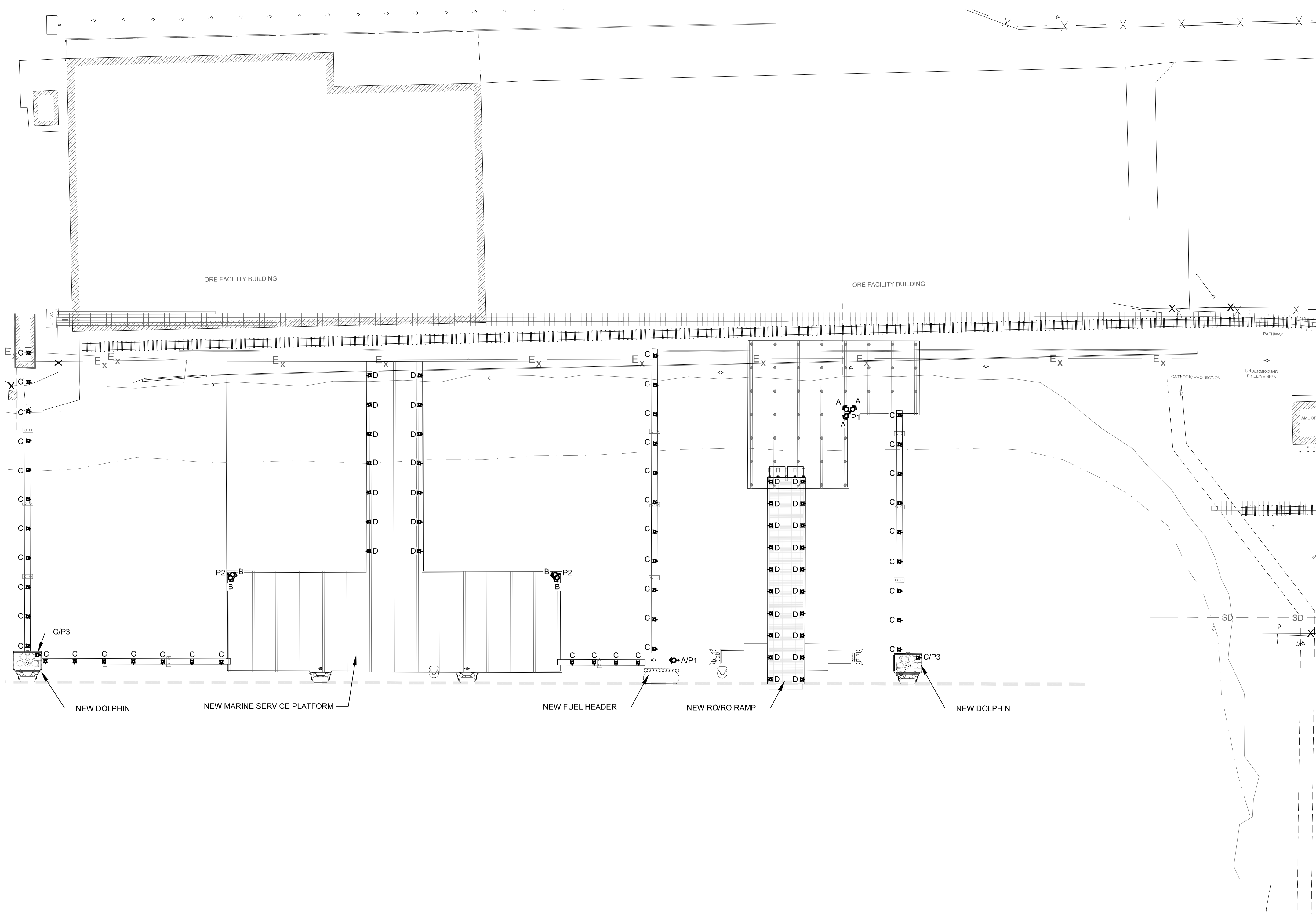


ORE PENINSULA MULTIUSE DOCK
SKAGWAY, ALASKA

CRUISE DOCK LIGHTING PLAN

DRAWN: PEL	PROJECT NO.: 2100135
DESIGN: BCH,AS,MW	SCALE: AS SHOWN
CHECKED: BCH,AS	DATE: 06/20/2022
DRAWING NO.	E3.10
SHEET NO.	XX OF XX

30% DESIGN - NOT FOR CONSTRUCTION



- SHEET NOTES:**
1. PROVIDE LIGHTING ON BOTH FOOT AND VEHICLE PATHWAYS ALONG SHORE. FINAL LAYOUT OF ON-SHORE LIGHTING IS TO BE DETERMINED. DESIGN AND FEATURES OF POST MOUNTED LUMINAIRES WILL BE COORDINATED WITH THOSE IN THE DOWNTOWN AREA.
 2. LIGHTING WILL BE CONTROLLED FROM A DISTRIBUTION CENTER ASSOCIATED WITH EACH AREA. CONTROL WILL BE PROVIDED BY PHOTOELECTRIC CELLS. FLOODLIGHTS WILL INCLUDE STEP-DIMMING; BRIGHTNESS WILL BE INCREASED FROM 30% TO 100% WHEN ACTIVATED BY MOTION SENSORS.

1 MARINE SERVICE PLATFORM, FUEL HEADER, AND RO/RO RAMP PLAN – LIGHTING

SCALE 0' 20' 40' 80'

N

Plotted: Jun 16, 2022 – 1:18pm
N:\Projects\H252 – KPFF\07 Skagway Multi-Use Dock\Drawings\Working\E3.20.dwg
PeggyLeslie Layout: E2.20





Juneau, AK
9109 Mendenhall Mall Rd. Ste. 4
Juneau, AK 99801
Phone: 907.780.6060
Fax: 907.586.3771
AECC163270

NO.	DATE	BY	REVISION



ORE PENINSULA MULTIUSE DOCK
SKAGWAY, ALASKA

**MARINE SERVICE PLATFORM, FUEL HEADER,
AND RO/RO RAMP PLAN - LIGHTING**

DRAWN: PEL	PROJECT NO.: 2100135
DESIGN: BCH,AS,MW	SCALE: AS SHOWN
CHECKED: BCH,AS	DATE: 06/20/2022
DRAWING NO.	E3.20
SHEET NO.	XX OF XX

30% DESIGN - NOT FOR CONSTRUCTION

Plotted: Jun 16, 2022 - 11:52am
N:\Projects\H252 - KPFF\07 Skagway Multi-Use Dock\Drawings\Working\E3.30.dwg

Peggy,Leslie

Layout: E3.30



1601 5th Avenue, Suite 1300
Seattle, Washington 98101
(206) 382-0600 Fax (206) 382-0500



Juneau, AK
9109 Mendenhall Mall Rd. Ste. 4
Juneau, AK 99801
Phone: 907.780.6060
Fax: 907.586.3771
AECC163270

NO.	DATE	BY	REVISION



ORE PENINSULA MULTIUSE DOCK
SKAGWAY, ALASKA

LUMINAIRE SCHEDULE & DETAILS

DRAWN: PEL	PROJECT NO.: 2100135
DESIGN: BCH,AS,MW	SCALE: AS SHOWN
CHECKED: BCH,AS	DATE: 06/20/2022
DRAWING NO.	E3.30
SHEET NO.	XX OF XX

30% DESIGN - NOT FOR CONSTRUCTION

LUMINAIRE SCHEDULE				
TYPE	DESCRIPTION	MANUFACTURER	LAMPS	REMARKS
A	POLE MOUNTED SMALL FLOOD, A360 DIE CAST ALUMINUM HOUSING, BOROSILICATE PRISMATIC GLASS, 6x5 WIDE FLOOD RECTANGLE DISTRIBUTION, INTEGRAL ELECTRONIC DRIVER, 120-277V, 27,200 LUMENS, TENON SLIPFITTER - KNUCKLE, FULL VISOR, ____ FINISH	HOLOPHANE PSLED P6 40K MVOLT 65 KM xxxx PSLEDFVxxxx	201W WHITE LED 4000K, CRI 70	MOUNT @ 30 FT ON POLE P1
B	POLE MOUNTED MEDIUM FLOOD, A360 DIE CAST ALUMINUM HOUSING, BOROSILICATE PRISMATIC GLASS, 3x3 SPOT DISTRIBUTION, INTEGRAL ELECTRONIC DRIVER, 120-277V, 38,000 LUMENS, TENON SLIPFITTER - KNUCKLE, FULL VISOR, ____ FINISH	HOLOPHANE PMLD P1 40K MVOLT 33 KM XXXX PSLEDFVXXXX	265W WHITE LED 4000K, CRI 70	MOUNT @ 50 FT ON POLE P2
C	RAIL AND POST MOUNTED VAPOR TIGHT MARINE ENVIRONMENT LED WITH A360 ALUMINUM HOUSING, BOROSILICATE GLASS GLOBE, A360 ALUMINUM GUARD, INTEGRAL ELECTRONIC DRIVER, 120-277V, 1769 LUMENS	AZZ AVP 20L2-U-HF-G-W-35 VGL100HRFRSTD 59030AMPG	20W WHITE LED 3500K, CRI 83	MOUNT TO CATWALK RAILING AND POLE P3 ON DOLPHINS, TYPICAL.
D	RAIL MOUNTED LED, CAST ALUMINUM HOUSING, DIFFUSED POLYCARBONATE LENS, INTEGRAL ELECTRONIC DRIVER, 120-277V, 1100 LUMENS	PHOENIX WF-10LED-DP-CD	9W WHITE LED 4000K	MOUNT TO RAILINGS WHERE SHOWN.
P1	30 FT HINGED CARBON STEEL POLE, INTERNAL WINCH, AND BULLHORN ADAPTER	MILLERBERND AHT-H-086-B-300-PT (4 EA) BR28 BULLHORN ADAPTER (1 EA) BR38 BULLHORN ADAPTER	--	
P2	50 FT HINGED CARBON STEEL POLE, INTERNAL WINCH, AND BULLHORN ADAPTER	MILLERBERND AHT-H-122-DB-500-PT (2 EA) BR28 BULLHORN ADAPTER	--	
P3	10 FT WOOD POST			