

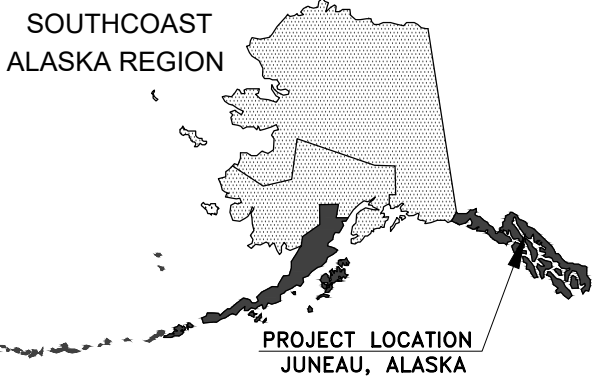
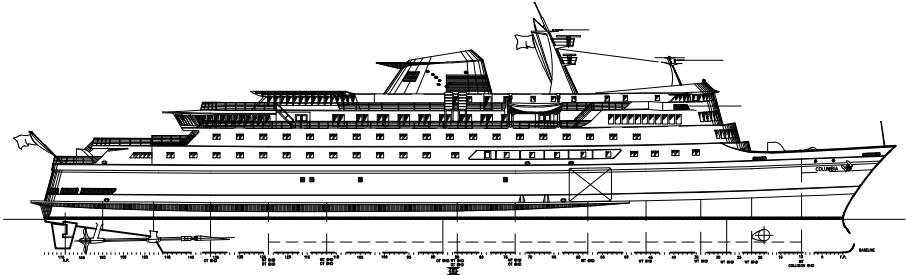
STATE OF ALASKA

DEPARTMENT OF TRANSPORTATION

& PUBLIC FACILITIES

CASCADE POINT TERMINAL

PROJECT NO: HSHWY00015



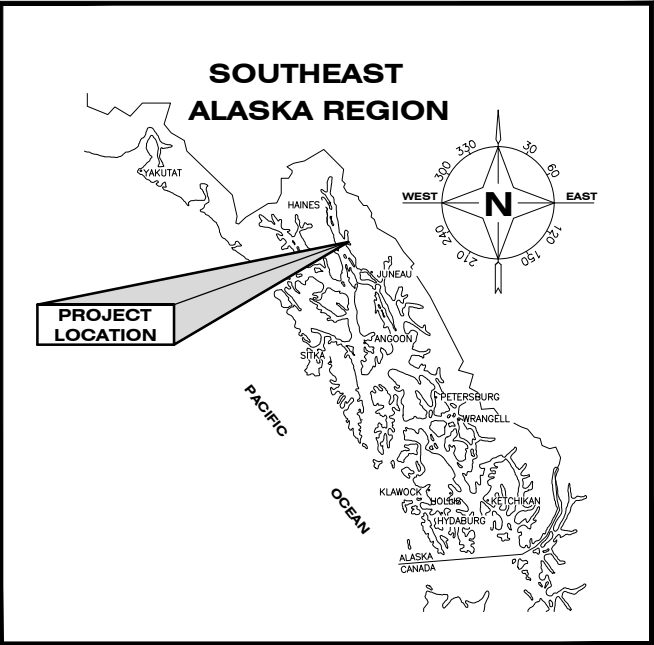
TIDAL DATA	
EHW	+24.5
HTL	+23.2'
MHW	+15.4'
MLLW	0.0'
ELW	-5.5'

SHEET NUMBER	SHEET TITLE
0001	TITLE SHEET
0002	SURVEY CONTROL
0003	EXISTING CONDITIONS
0004	OVERALL SITE PLAN
0005	POTENTIAL GOLDBELT DEVELOPMENT SITE PLAN
1000	GENERAL NOTES AND ABBREVIATIONS
1001	CIVIL SHEET LAYOUT SCHEMATIC
1002	QUANTITY AREA PLAN
1003	CIVIL ESTIMATE OF QUANTITIES
1100	ROAD TYPICAL SECTIONS
1101	ROAD PLAN & PROFILE
1102	ROAD PLAN & PROFILE
1103	ROAD PLAN & PROFILE
1104	ROAD PLAN & PROFILE
1105	ROAD PLAN & PROFILE
1106	ROAD PLAN & PROFILE
1200	STAGING AREA SITE PLAN
1201	STAGING AREA SITE SECTIONS
1202	STAGING AREA SITE SECTIONS
1203	STAGING AREA SITE SECTIONS
1204	STAGING AREA GRADING & DRAINAGE PLAN
1205	LAYOUT TABLES
1206	STAGING AREA DETAILS
1207	STAGING AREA DETAILS
1208	STAGING AREA DETAILS
1209	STAGING AREA SIGNING & STRIPING PLAN
1210	SIGNING & STRIPING DETAILS
1211	STAGING AREA FENCING PLAN
1212	FENCING DETAILS
1300	CAUSEWAY SITE SECTIONS
1301	CAUSEWAY LOADING RAMP TYPICAL SECTION
1302	CAUSEWAY PLAN & PROFILE
1303	CAUSEWAY PLAN & PROFILE
1304	WALKWAY LAYOUT PLAN
1305	RUBBLE MOUND TYPICAL SECTION
1306	RUBBLE MOUND PLAN & PROFILE
1307	CAUSEWAY FENCING & GUARDRAIL PLAN

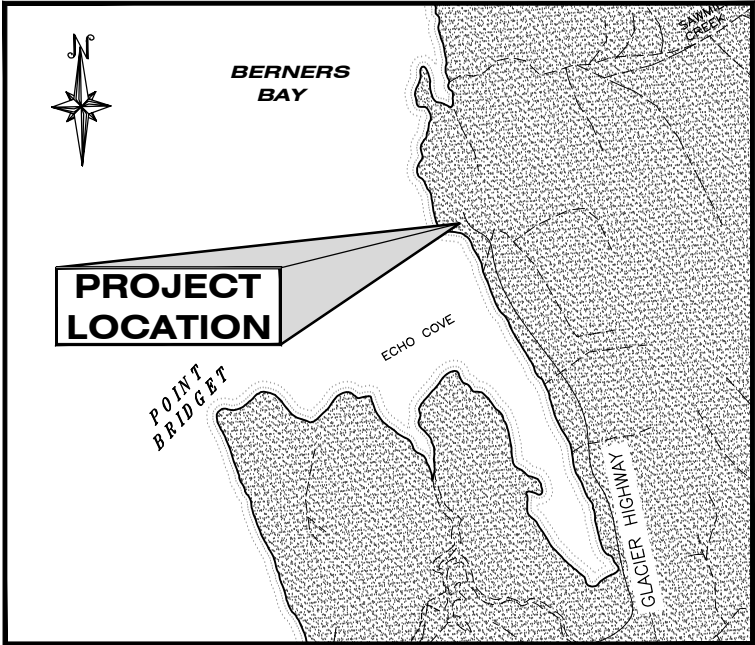
SHEET NUMBER	SHEET TITLE
2000	GENERAL UTILITY PLAN
2001	UTILITY SHEET LAYOUT SCHEMATIC
2100	UTILITY PLAN & PROFILE
2101	UTILITY PLAN & PROFILE
2102	UTILITY PLAN & PROFILE
2103	UTILITY PLAN & PROFILE
2104	UTILITY PLAN & PROFILE
2200	WATER TREATMENT PLANT UTILITY PLAN
2300	STAGING AREA UTILITY PLAN
2301	STAGING AREA UTILITY DETAILS
2302	STAGING AREA UTILITY DETAILS
2400	MARINE OUTFALL PLAN & PROFILE
2401	MARINE OUTFALL DETAILS
2402	MARINE OUTFALL DETAILS
3001	MECHANICAL PIPING SYMBOL & ABBREVIATIONS
3002	FUEL PIPING SEQUENCE OF OPERATIONS
3101	FLOW DIAGRAM TANKS
3102	FLOW DIAGRAM DISTRIBUTION PIPNG
3103	FLOW DIAGRAM DAY TANKS & SUPPORT FACILITIES
3104	FLOW DIAGRAM MARINE DISPENSER
3105	SITE PIPING PLAN
3106	ENLARGED TANK AREA PIPING PLAN
3107	UPLANDS PIPING PLAN TO BLDG #1
3108	UPLANDS PIPING PLAN TO BLDG #2
3109	UPLANDS PIPING PLAN TO BLDG #3
3110	UPLANDS PIPING PLAN & DETAIL
3111	UPLANDS PIPING PLAN TO MARINE DISPENSER
3112	CATHODIC PROTECTION PLAN
3114	CP SYSTEM DETAILS
3201	HYDRAULIC PIPING DETAILS
3203	HYDRAULIC PIPING DETAILS
4000	MARINE PLAN
4001	MARINE PILE SCHEDULE
4100	BRIDGE PLAN & ELEVATION
4101	ACF MOORING LAYOUT
4102	ACF BERTHING ELEVATIONS
4103	LECONTE BERTHING ELEVATIONS
4104	LECONTE MOORING LAYOUT
4105	BRIDGE SUPPORT FLOAT
4106	BRIDGE TYPICAL SECTIONS
4107	PEDESTRIAN BRIDGE
4200	RESTRAINT & 6-FT FLOATING FENDER DOLPHINS
4201	10-FT FLOATING FENDER DOLPHIN
4202	GUIDE DOLPHIN
5101	TICKETING BUILDING SCHEDULES & TYPES
5102	TICKETING BUILDING COLUMN LAYOUT WITH CANOPY
5103	TICKING BUILDING FLOOR PLAN
5104	TICKETING BUILDING MEZZANINE FLOOR PLAN
5106	TICKETING BUILDING ROOF PLAN
5107	TICKETING BUILDING EXTERIOR ELEVATION
5108	TICKETING BUILDING EXTERIOR ELEVATION
5109	TICKETING BUILDING EXTERIOR ELEVATION
5110	TICKETING BUILDING EXTERIOR ELEVATION
5111	TICKETING BUILDING BUILDING SECTIONS
5112	TICKETING BUILDING BUILDING SECTIONS
5113	TICKETING BUILDING REFLECTED CEILING PLAN
5201	UTILITY BUILDING FIRST FLOOR PLAN
5202	UTILITY BUILDING SECOND FLOOR PLAN
5203	UTILITY BUILDING ROOF PLAN
5204	UTILITY BUILDING EXTERIOR ELEVATIONS
5205	UTILITY BUILDING EXTERIOR ELEVATIONS
5206	UTILITY BUILDING BUILDING SECTION
5207	UTILITY BUILDING BUILDING SECTION
5301	GENERATOR BUILDING FIRST FLOOR PLAN
5302	GENERATOR BUILDING ROOF PLAN
5303	GENERATOR BUILDING EXTERIOR ELEVATIONS
5304	GENERATOR BUILDING EXTERIOR ELEVATIONS
5305	GENERATOR BUILDING BUILDING SECTION
5306	GENERATOR BUILDING BUILDING SECTIONS
5401	WATER TREATMENT BUILDING FLOOR PLAN
5402	WATER TREATMENT BUILDING ROOF PLAN
5403	WATER TREATMENT BUILDING EXTERIOR ELEVATIONS

SHEET NUMBER	SHEET TITLE
5404	WATER TREATMENT BUILDING EXTERIOR BUILDING ELEVATIONS
5405	WATER TREATMENT BUILDING BUILDING SECTIONS
6001	STRUCTURAL GENERAL NOTES
6002	STANDARD FOUNDATION DETAILS
6003	STANDARD FRAMING DETAILS
6100	TICKETING BUILDING FOUNDATION PLAN
6101	TICKETING BUILDING MEZZANINE
6102	TICKETING BUILDING CANOPY FRAMING PLAN
6103	TICKETING BUILDING ROOF FRAMING PLAN
6200	UTILITY BUILDING FOUNDATION PLAN
6201	UTILITY BUILDING MEZZANINE FRAMING PLAN
6202	UTILITY BUILDING ROOF FRAMING PLAN
6300	GENERATOR BUILDING FOUNDATION PLAN
6301	GENERATOR BUILDING ROOF FRAMING PLAN
6400	WALKWAY FOUNDATION PLAN
6401	WALKWAY FRAMING PLAN
6410	WALKWAY FOUNDATION DETAILS
6411	WALKWAY FRAMING SECTIONS
7001	LEGEND AND ABBREVIATIONS GENERATOR BUILDING
7002	SITE PLAN GENERATOR BUILDING
7311	BUILDING PLAN - LIGHTING GENERATOR BUILDING
7321	BUILDING PLAN - POWER GENERATOR BUILDING
7361	SINGLE LINE DIAGRAM GENERATOR BUILDING
7111	FERRY TERMINAL - LIGHTING
7121	FERRY TERMINAL - POWER
7311	STORAGE SHED - LIGHTING
7321	STORAGE SHED - POWER
8000	MECHANICAL SYMBOL LEGEND & ABBREVIATIONS
8101	SCHEDULES TICKETING BUILDING
8110	UNDERFLOOR PLAN TICKETING BUILDING
8111	FLOOR PLAN TICKETING BUILDING
8112	MEZZANINE PLAN - PLUMBING TICKETING BUILDING
8140	DIAGRAMS TICKETING BUILDING
8201	SCHEDULES UTILITY BUILDING
8210	UNDERFLOOR PLAN UTILITY BUILDING
8211	FIRST FLOOR PLAN UTILITY BUILDING
8212	SECOND FLOOR PLAN UTILITY BUILDING
8240	DIAGRAMS UTILITY BUILDING
8301	SCHEDULES GENERATOR BUILDING
8311	FLOOR PLAN GENERATOR BUILDING
8340	DIAGRAMS GENERATOR BUILDING
8401	SCHEDULES WATER TREATMENT BUILDING
8411	FLOOR PLAN - PLUMBING WATER TREATMENT BUILDING
9001	PROCESS, SYMBOLS, LEGENDS, & ABBREVIATIONS
9201	PROCESS WATER TREATMENT EQUIPMENT PLAN
9202	PROCESS SEWAGE TREATMENT EQUIPMENT PLAN
9301	PROCESS WATER TREATMENT P&ID
9302	PROCESS WATER TREATMENT P&ID
9303	PROCESS DOSING CHEMICALS P&ID
9304	PROCESS SEWAGE TREATMENT P&ID
9305	PROCESS SEWAGE TREATMENT P&ID
9401	PROCESS PRELIMINARY PROCESS FLOW DIAGRAM

USE THESE PLANS IN CONJUNCTION WITH THE STATE OF ALASKA STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, 2020 EDITION AND THE PROJECT SPECIAL PROVISIONS.



VICINITY MAP



SITE MAP

PLANS DEVELOPED BY:
PND ENGINEERS, INC.
9360 GLACIER HWY, STE. 100
JUNEAU, ALASKA 99801
(907)-586-2093
CAN: AECC250



STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
6860 GLACIER HIGHWAY, JUNEAU, AK 99801
(907) 465-1763

APPROVED:

REGIONAL PRECONSTRUCTION ENGINEER
KIRK MILLER, P.E.

DATE

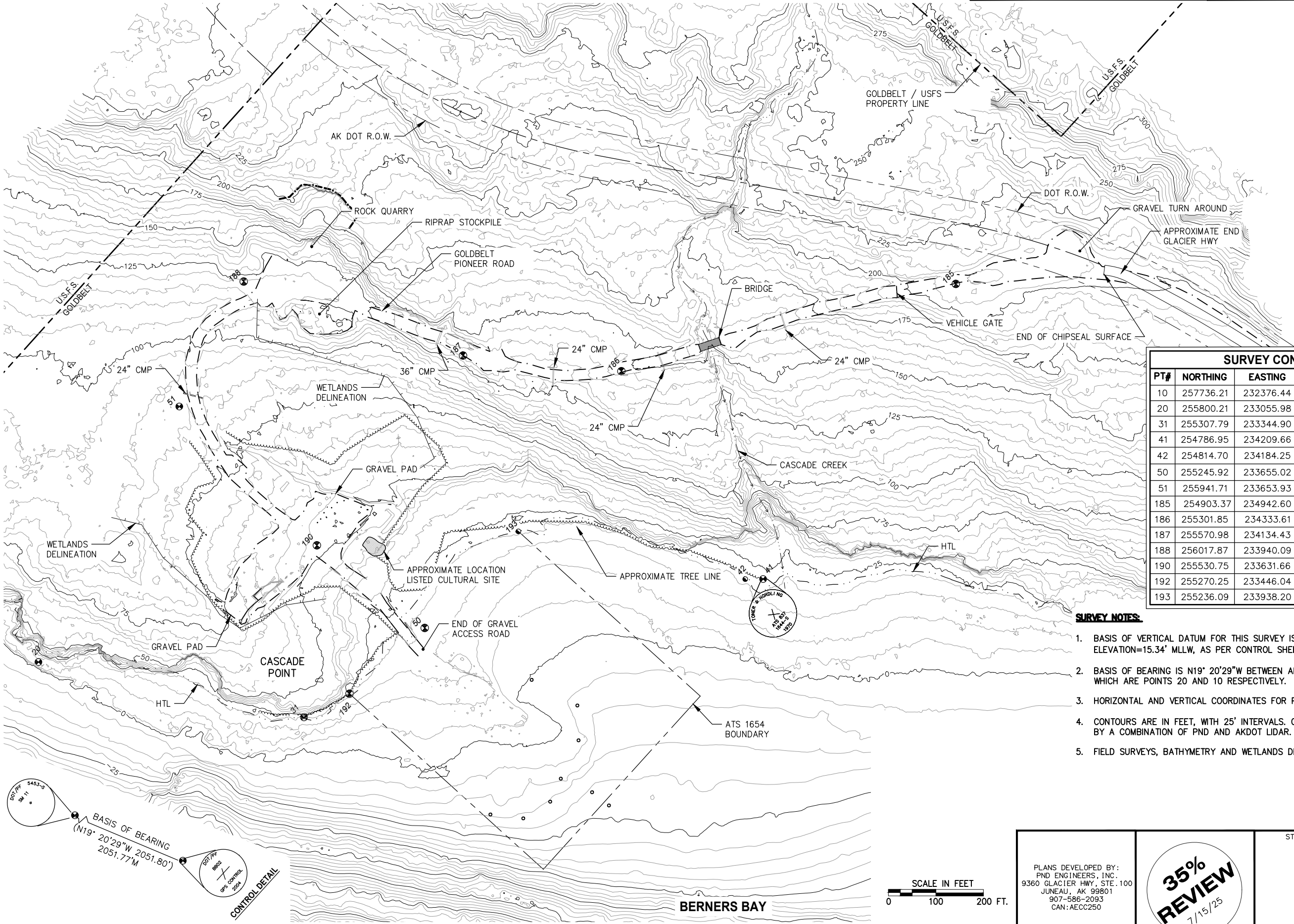
CONCUR:

REGIONAL DIRECTOR
CHRISTOPHER GOINS, CM, P.E.

DATE

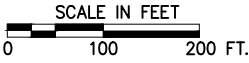
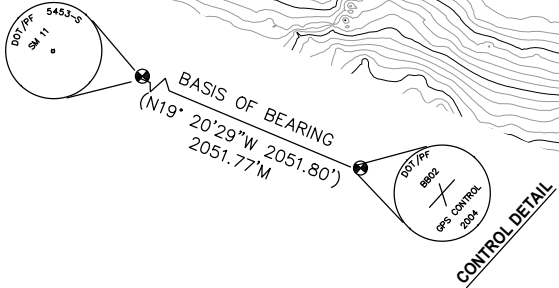
FILE N:\23xxx\232045 Cascade Point Ferry Terminal\G. Drawings\CIVIL\0003 Existing Conditions.dwg DATE 7/14/2025 15:53 LAYOUT 0002 DESIGNED CHECKED DRAFTED

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	0002	161



SURVEY CONTROL SUMMARY TABLE				
PT#	NORTHING	EASTING	ELEV. (FT)	DESCRIPTION
10	257736.21	232376.44	29.85	FND 2" ALCAP
20	255800.21	233055.98	15.34	FND MON
31	255307.79	233344.90	23.64	FND MON 3" BC
41	254786.95	234209.66	23.13	FND MON
42	254814.70	234184.25	21.01	FND #5 REBAR W/YPC
50	255245.92	233655.02	18.30	FND #5 REBAR W/YPC
51	255941.71	233653.93	89.30	FND 2" ALCAP
185	254903.37	234942.60	208.05	DOT MON 2.5" BB
186	255301.85	234333.61	147.19	DOT MON 2.5" BB
187	255570.98	234134.43	137.54	DOT MON 2.5" BB
188	256017.87	233940.09	116.52	DOT MON 2.5" BB
190	255530.75	233631.66	52.91	DOT MON 2.5" BB
192	255270.25	233446.04	23.73	FND MON BC
193	255236.09	233938.20	22.26	ATS MON

- SURVEY NOTES:**
- BASIS OF VERTICAL DATUM FOR THIS SURVEY IS CONTROL POINT 20, BRASS CAP 'BB02' ELEVATION=15.34' MLLW, AS PER CONTROL SHEET FOR THE JUNEAU ACCESS ROAD PROJECT.
 - BASIS OF BEARING IS N19° 20'29"W BETWEEN AKDOT CONTROL MONUMENTS 'BB02' AND 'SM11,' WHICH ARE POINTS 20 AND 10 RESPECTIVELY.
 - HORIZONTAL AND VERTICAL COORDINATES FOR POINTS 10 & 20 WERE SUPPLIED BY AKDOT.
 - CONTOURS ARE IN FEET, WITH 25' INTERVALS. CONTOURS OUTSIDE EXISTING ROADWAY PROVIDED BY A COMBINATION OF PND AND AKDOT LIDAR.
 - FIELD SURVEYS, BATHYMETRY AND WETLANDS DELINEATION PERFORMED BETWEEN 1998-2023.



PLANS DEVELOPED BY:
PND ENGINEERS, INC.
9360 GLACIER HWY, STE. 100
JUNEAU, AK 99801
907-586-2093
CAN:AECC250

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7/15/25

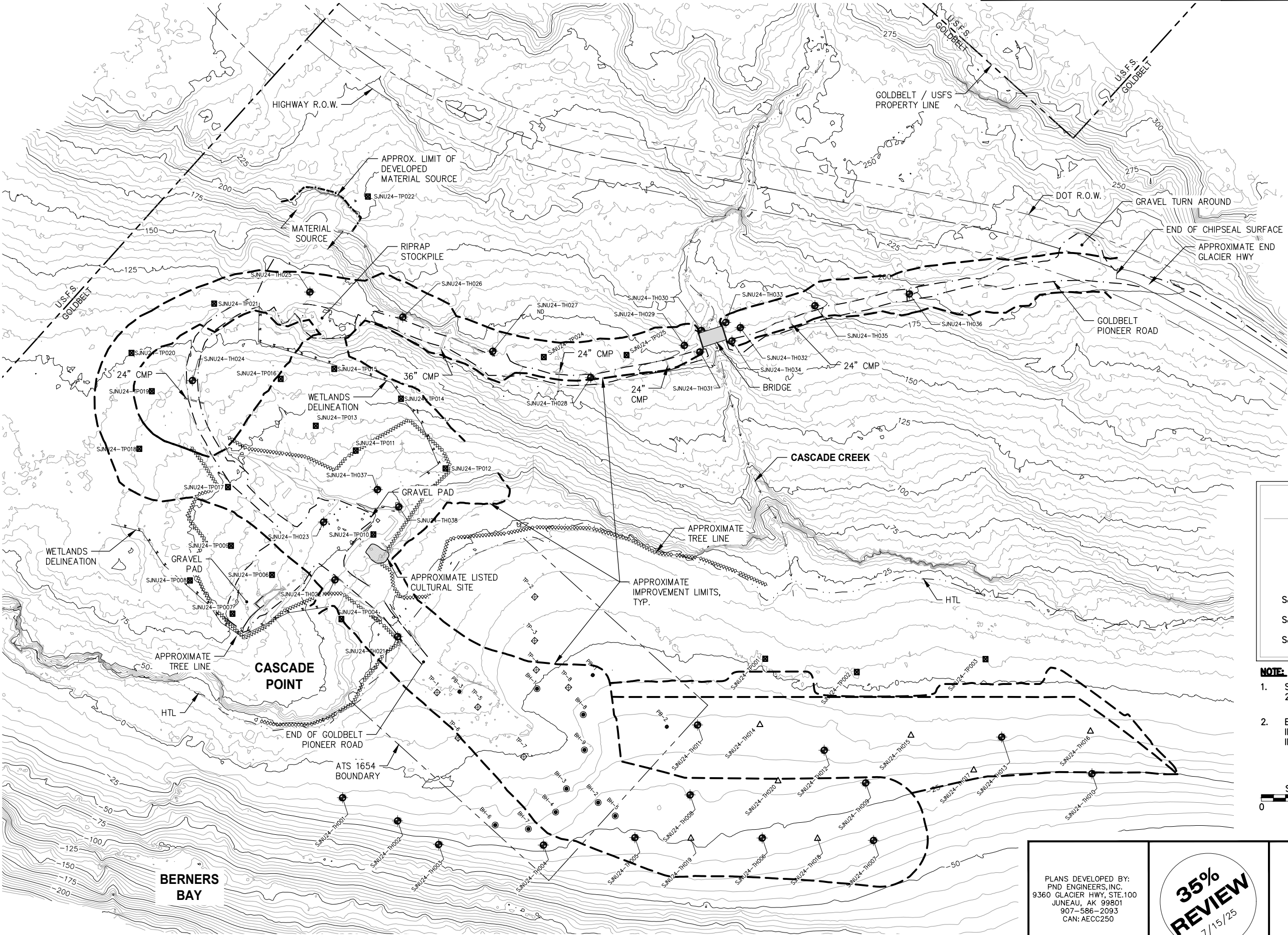
STATE OF ALASKA DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
6860 GLACIER HIGHWAY, JUNEAU, AK 99801
(907) 465-1763

**JNU CASCADE POINT
FERRY TERMINAL**

SURVEY CONTROL

FILE N:\23\230045 Cascade Point Ferry Terminal\G. Drawings\CIVIL\0003 Existing Conditions.dwg DATE 7/15/2025 10:08 LAYOUT 0003 DESIGNED CHECKED DRAFTED

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	0003	161



LEGEND OF GEOTECHNICAL SITE INVESTIGATIONS

BH-# ● BOREHOLE (2006)

PB-# ● DRILLED PROBE (2005)

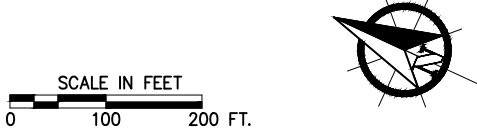
TP-# □ TEST PIT (2013)

SJNU24-TH-0XX ● BOREHOLE (2024)

SJNU24-TH-0XX △ TEST PROBE (2024)

SJNU24-TP-0XX □ TEST PIT (2024)

- NOTE:**
- SEE PND GEOTECHNICAL DATA REPORT DATED 2025 FOR SOIL DATA.
 - EXISTING CONDITIONS AT TIME OF GEOTECHNICAL INVESTIGATION SHOWN ALONG WITH APPROXIMATE IMPROVEMENTS LIMITS.



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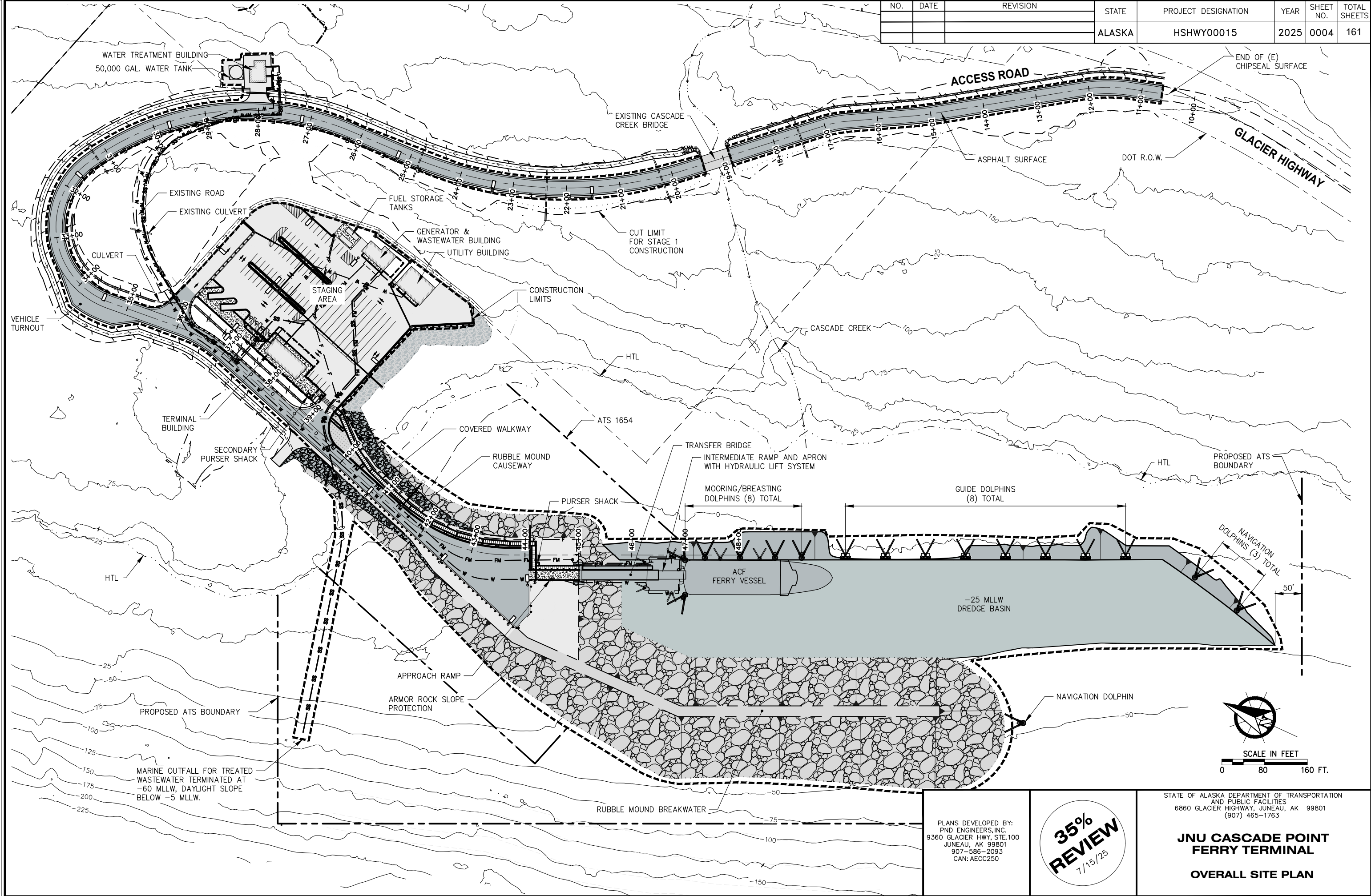
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**JNU CASCADE POINT
FERRY TERMINAL**
**EXISTING CONDITIONS
& GEOTECHNICAL SAMPLING
LOCATIONS**

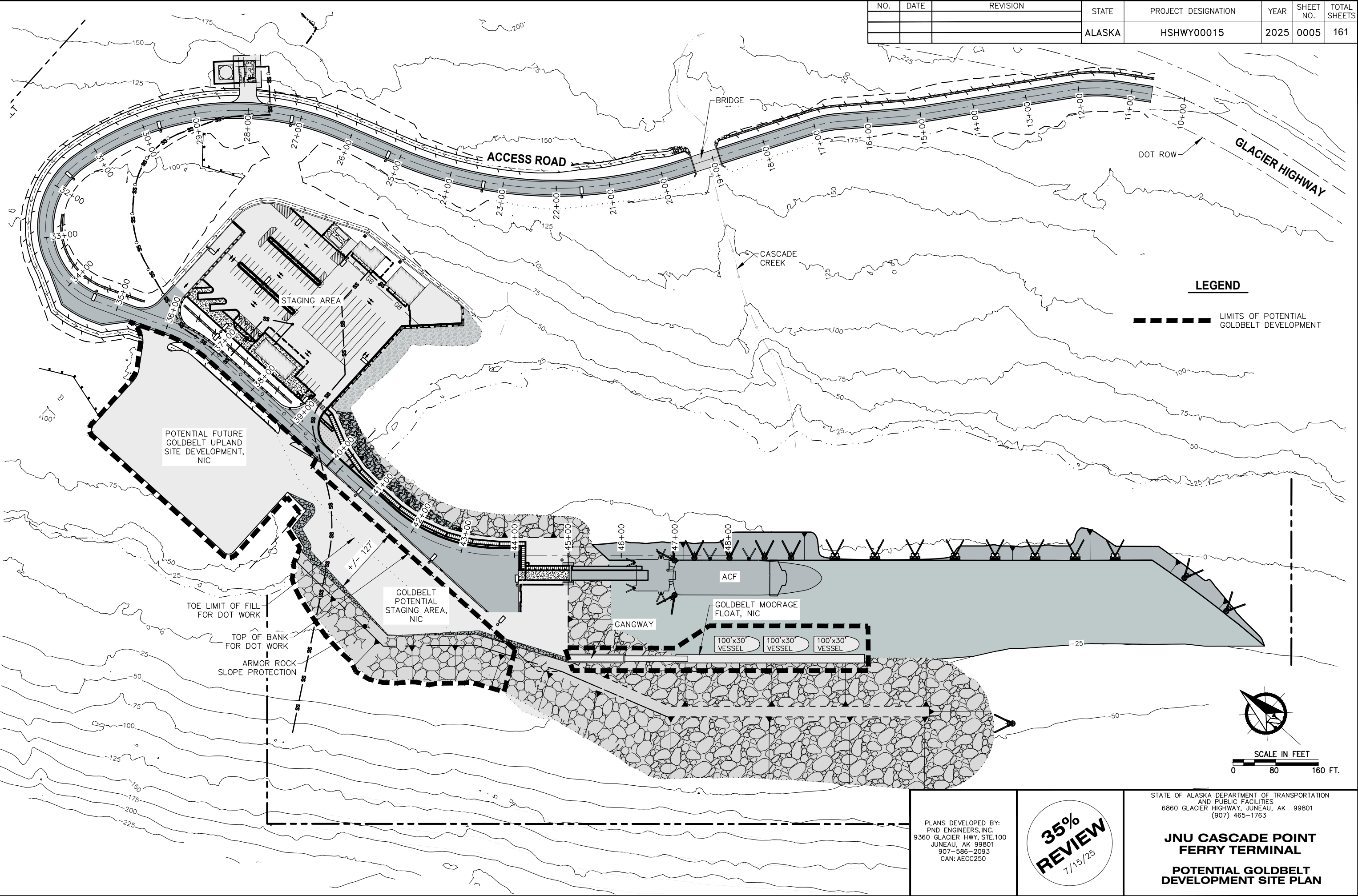
FILE N:\23xxx\232045 Cascade Point Ferry Terminal\G. Drawings\CIVIL\002 Overall Site Plan.dwg DATE 7/14/2025 15:28 LAYOUT 12 DESIGNED CHECKED DRAFTED

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	0004	161



FILE N:\23xxx\232045 Cascade Point Ferry Terminal\G. Drawings\CIVIL\100X Overall Site Plan + Goldbelt.dwg DATE 7/15/2025 9:00 LAYOUT PLAN DESIGNED CHECKED DRAFTED

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	0005	161



LEGEND

----- LIMITS OF POTENTIAL GOLDBELT DEVELOPMENT



SCALE IN FEET
0 80 160 FT.

PLANS DEVELOPED BY:
PND ENGINEERS, INC.
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907-586-2093
CAN: AECC250

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**JNU CASCADE POINT
FERRY TERMINAL**

**POTENTIAL GOLDBELT
DEVELOPMENT SITE PLAN**

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	SHHWY00015	2025	1000	161

ROADWAY

	EXISTING	PROPOSED
EDGE OF PAVEMENT		
LIMIT OF CUT SLOPE & FILL SLOPE		
GRAVEL EDGE		
CONCRETE CURB & GUTTER		
CONCRETE CURB CUT		
BRIDGE		
GUARDRAIL		
END & PARALLEL END SECTIONS		
FENCE		
RETAINING WALL		
FLAT BOTTOM DITCH		
RIPRAP		
PROJECT LIMITS		

PAVEMENT MARKINGS

	PROPOSED
TRAFFIC PROJECT CENTERLINE	
8" & 4" WHITE SOLID STRIPE	
4" WHITE STRIPE	
4" YELLOW STRIPE	
2' CROSSWALK OR STOPBAR	
LADDER CROSSWALK LAYOUT 2' WIDE RUNGS WITH 2' SPACES ALIGNED TO AVOID TIRE PATHS	

UTILITIES

	EXISTING	PROPOSED
STORM DRAIN		
STORM DRAIN MANHOLE, CLEANOUT		
CURB INLET CATCH BASIN FIELD INLET CATCH BASIN		
PIPE CULVERT WITH END SECTION		
SANITARY SEWER		
FORCE MAIN SEWER		
WTP OVERFLOW LINE		
SANITARY SEWER MANHOLE, CLEANOUT		
WATER		
RAW WATER		
NON POTABLE WATER		
FIRE HYDRANT		
VALVE		
TANKS (ABOVE GROUND, UNDERGROUND)		

TOPOGRAPHY

	EXISTING	PROPOSED
WETLANDS		
TREELINE (EDGE OF VEGETATION)		
CONTOUR, MAJOR OR MINOR		
DRAINAGE FLOW		
CREEK (CENTERLINE)		
EDGE OF WATER		

RIGHT-OF-WAY

	RECOVERED	SET THIS PROJECT
FEDERAL GOV'T SURVEY MONUMENT		
GOV'T CONTROL STATION		
PRIMARY MONUMENT (BRASS/AL CAP)		
MISC SECONDARY CORNER		
PRIMARY CENTERLINE MONUMENT		
SECONDARY CENTERLINE MONUMENT		
RANDOM CONTROL MONUMENT		
PRIMARY GPS CONTROL POINT		
HORIZONTAL CONTROL POINT		
SECONDARY CONTROL POINT		
VERTICAL BENCHMARK		
TEMPORARY BENCHMARK		
TOWNSHIP AND RANGE LINES		
SECTION LINE		
1/4 SECTION LINE		
1/16 SECTION LINE		
CORPORATE or CITY LIMITS		
EXISTING RIGHT-OF-WAY		
PROJECT RIGHT-OF-WAY LINE		
EXISTING PROPERTY LINE		

ABBREVIATIONS

APPROX	APPROXIMATELY
BFS	BEGIN FULL SUPER
BNC	BEGIN NORMAL CROWN
C	CENTERLINE
CY	CUBIC YARD
E	EAST, EASTING
ENC	END NORMAL CROWN
ELEV	ELEVATION
FT	FOOT, FEET
H	HORIZONTAL
IE	INVERT ELEVATION
IN	INCH, INCHES
L	LENGTH OF CURVE
LCL	LEFT OF CENTERLINE
LC	LEVEL CURVE
LT	LEFT
LVC	LENGTH OF VERTICAL CURVE
MAX	MAXIMUM
MIN	MINIMUM
N	NORTH, NORTHING
NO.	NUMBER
NTS	NOT TO SCALE
OC	ON CENTER
PC	POINT OF CURVATURE
POT	POINT ON TANGENT
PST	PERFORATED STEEL TUBE
PT	POINT OF TANGENCY
PVI	POINT OF VERTICAL INTERSECTION
R	RADIUS
R/W	RIGHT OF WAY
RCL	RIGHT OF CENTERLINE
RT	RIGHT
S	SOUTH
SQFT	SQUARE FOOT
STA	STATION
T	TANGENT
TYP	TYPICAL
V	VERTICAL
VPC	VERTICAL POINT OF CURVATURE
VPI	VERTICAL POINT OF INTERSECTION
VPT	VERTICAL POINT OF TANGENCY
W	WEST
Ø	DIAMETER

REFERENCE LEGEND

VIEW TITLE		VIEW NAME
DRAWING TITLE/ SUBTITLE		DRAWING TITLE
		SECTION OR ELEVATION VIEW
		DETAIL CALLOUT
		DETAIL TAG
		ADDITIONAL SHEET CALLOUT

IN VIEW TITLE:

- * SHEET NUMBER WHERE THE CALLOUT CUT IS MADE OR DASH MARK WHEN ON THE SAME SHEET
- ** SHEET NUMBER WHERE DETAIL IS LOCATED WHEN ON A DIFFERENT SHEET OR DASH MARK WHEN ON THE SAME SHEET

DESIGN DESIGNATIONS	
FUNCTIONAL CLASS	MINOR ARTERIAL – SMALL URBAN AREA
ADT (20XX)	
ADT (20XX)	
DHV (20XX)	
PERCENT TRUCKS (T)	
DIRECTIONAL SPLIT (D)	
DESIGN SPEED (V)	25 MPH
DESIGN ESALS (20 YEARS)	

NOTE: TABLE WILL BE FILLED OUT AT LATER DATE BASED ON AKDOT PROVIDED TRAFFIC ANALYSIS AS PART OF THE CONDITIONAL USE PERMIT

PROJECT SUMMARY	
WIDTH OF PAVEMENT	24–134 FT
LENGTH OF PAVING	3367.00
LENGTH OF PROJECT	4159.00

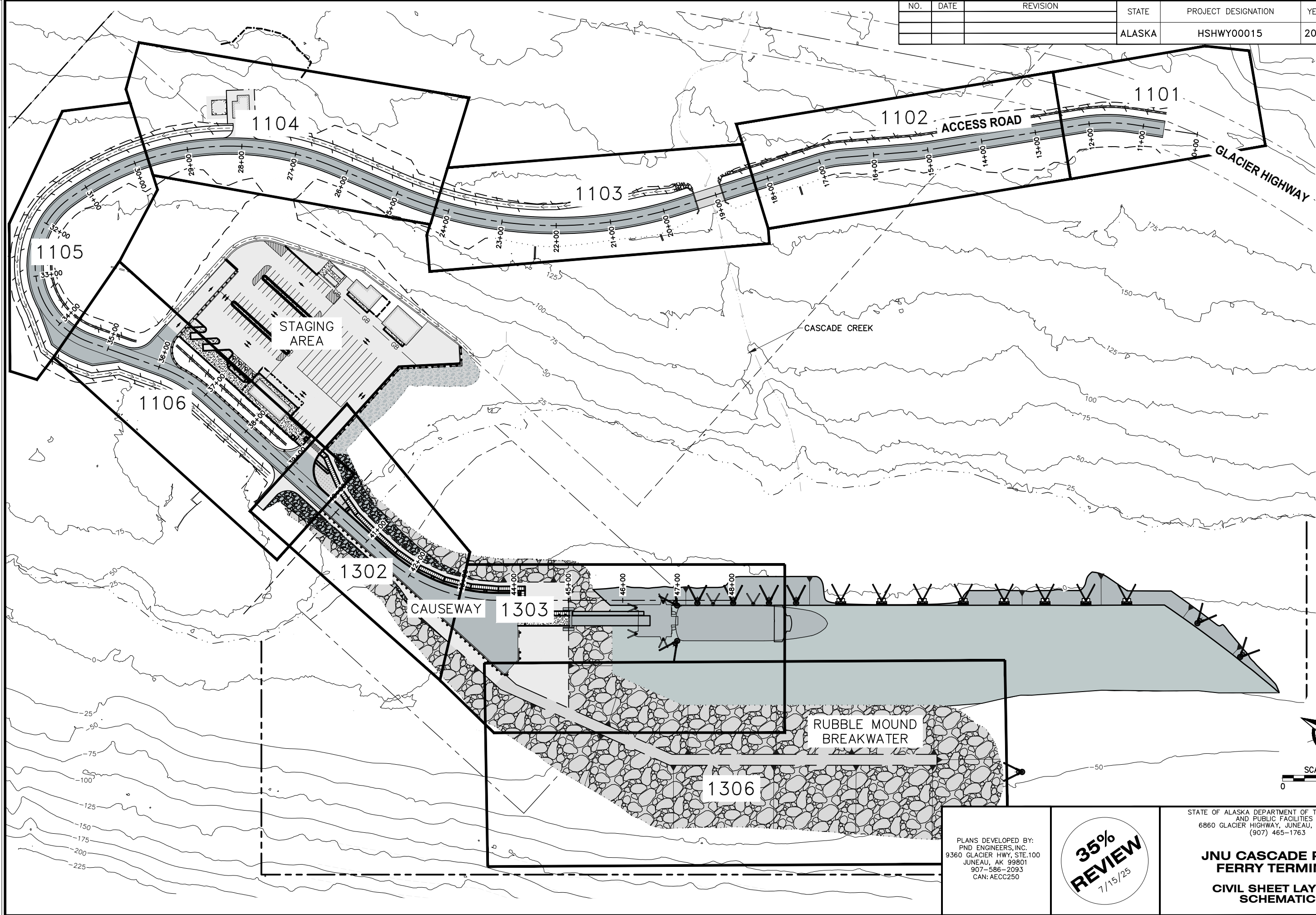
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AND PUBLIC FACILITIES
6860 GLACIER HIGHWAY, JUNEAU, AK 99801
(907) 465-1763

JNU CASCADE POINT
FERRY TERMINAL
GENERAL NOTES AND
ABBREVIATIONS

FILE N:\23xxx\232045 Cascade Point Ferry Terminal\G. Drawings\CIVIL\100X Sheet Layout Schematic.dwg DATE 7/15/2025 8:55 LAYOUT 12 DESIGNED CHECKED DRAFTED

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	1001	161



PLANS DEVELOPED BY:
PND ENGINEERS, INC.
9360 GLACIER HWY, STE.100
JUNEAU, AK 99801
907-586-2093
CAN: AECC250

**35%
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7/15/25

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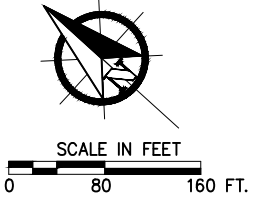
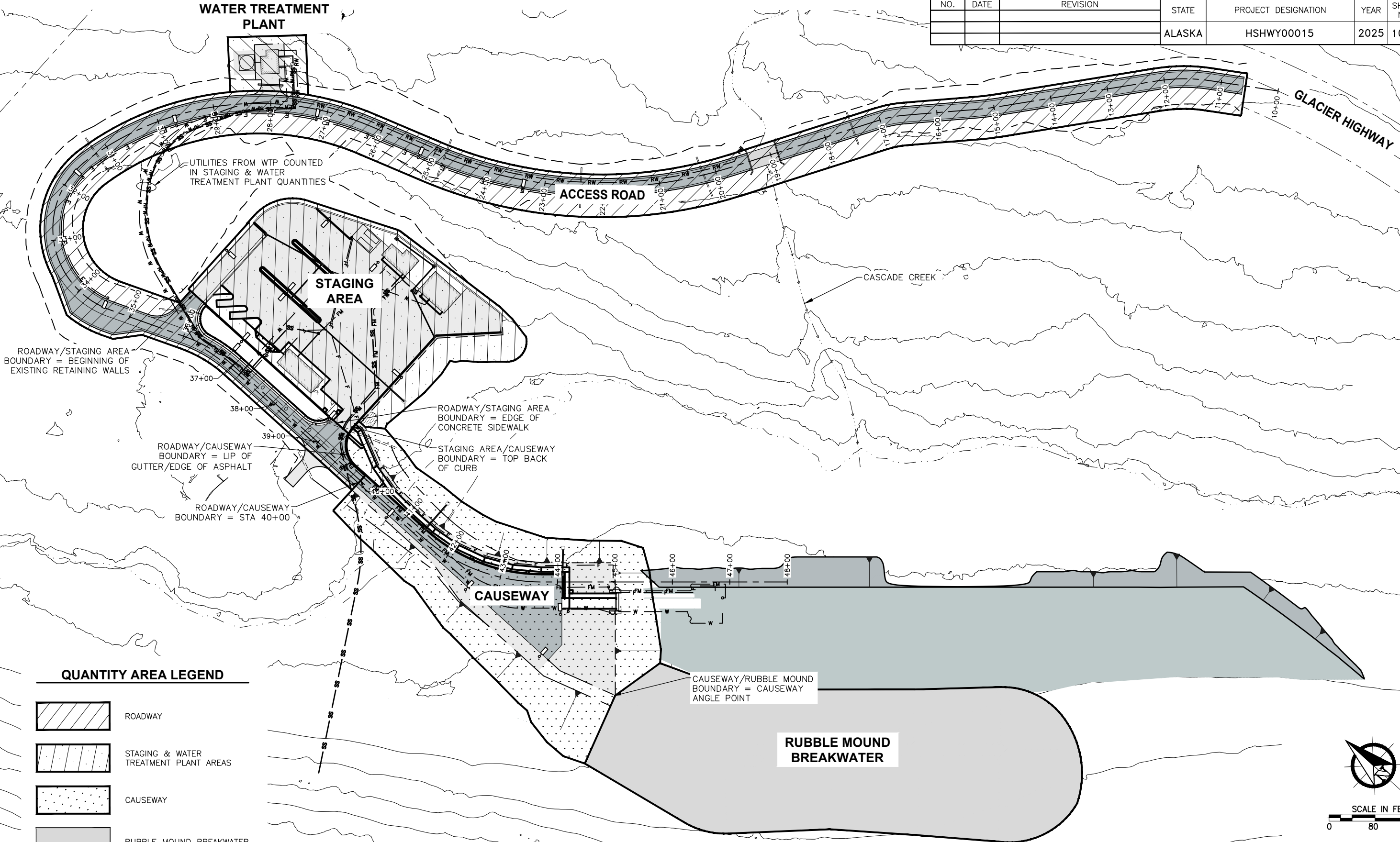
**JNU CASCADE POINT
FERRY TERMINAL**

**CIVIL SHEET LAYOUT
SCHEMATIC**

FILE N:\23xxx\232045 Cascade Point Ferry Terminal\G. Drawings\CIVIL\100X Estimate of Quantities.dwg DATE 7/15/2025 8:25 LAYOUT QUANTITY AREAS DESIGNED CHECKED DRAFTED

WATER TREATMENT PLANT

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	1002	161



PLANS DEVELOPED BY:
PND ENGINEERS, INC.
9360 GLACIER HWY, STE.100
JUNEAU, AK 99801
907-586-2093
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35%
REVIEW
7/15/25

STATE OF ALASKA DEPARTMENT OF TRANSPORTATION
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6860 GLACIER HIGHWAY, JUNEAU, AK 99801
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JNU CASCADE POINT
FERRY TERMINAL

QUANTITY AREA PLAN

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	1003	161

ROADWAY - ESTIMATE OF QUANTITIES			
ITEM NUMBER	PAY ITEM	PAY UNIT	QUANTITY
301.0001.00C1	AGGREGATE BASE COURSE, GRADING C-1	CUBIC YARD	1300
401.0006.00XX	HMA, TYPE X; CLASS X	SQUARE YARD	11000
603.0021.0024	CORRUGATED POLYETHYLENE PIPE 24 INCH	LINEAR FOOT	44

STAGING AREA & WATER TREATMENT PLANT AREA- ESTIMATE OF QUANTITIES			
ITEM NUMBER	PAY ITEM	PAY UNIT	QUANTITY
203.0005.000A	BORROW - SELECTED MATERIAL, TYPE A	CUBIC YARD	2500
204.0001.0000	STRUCTURE EXCAVATION	CUBIC YARD	9000
301.0001.00C1	AGGREGATE BASE COURSE, GRADING C-1	CUBIC YARD	1050
301.0001.00D1	AGGREGATE BASE COURSE, GRADING D-1	CUBIC YARD	180
401.0006.00XX	HMA, TYPE X; CLASS X	SQUARE YARD	10000
501.2011.000X	CONCRETE CLASS X	CUBIC YARD	50
603.0021.0012	CORRUGATED POLYETHYLENE PIPE 12 INCH	LINEAR FOOT	770
603.0021.0018	CORRUGATED POLYETHYLENE PIPE 18 INCH	LINEAR FOOT	40
604.0001.000X	STORM SEWER MANHOLE, TYPE X WITH OIL WATER SEPARATOR	EACH	1
604.0005.000X	INLET, TYPE X	EACH	8
606.0001.0000	W-BEAM GUARDRAIL	LINEAR FOOT	355
607.0003.0000	CHAIN LINK FENCE	LINEAR FOOT	125
607.0005.0000	DRIVE GATE	EACH	3
608.0001.0004	CONCRETE SIDEWALK, 4 INCHES THICK	SQUARE YARD	1,030
609.0001.0001	CURB, TYPE I	LINEAR FOOT	160
609.0002.0001	CURB AND GUTTER, TYPE I	LINEAR FOOT	914
615.0001.0000	STANDARD SIGN	EACH	7
618.0004.0000	SEEDING	SQUARE YARD	470
620.0002.0000	TOPSOIL	CUBIC YARD	50
626.0001.0000	SANITARY SEWER CONDUIT, GRAVITY, X INCH	LINEAR FOOT	55
626.0001.00XX	SANITARY SEWER CONDUIT, FORCE MAIN, X INCH	LINEAR FOOT	560
626.0001.00XX	WATER TREATMENT PLANT SEWER PRESSURE CONDUIT, X INCH	LINEAR FOOT	980
626.2002.0000	SANITARY SEWER LIFT STATION	EACH	1
627.0001.0000	OVERFLOW PRESSURE CONDUIT, X INCH	LINEAR FOOT	1000
	15,000 GALLON UNDERGROUND WASTEWATER TANK	EACH	1
	MARINE OUTFALL	LINEAR FOOT	510
627.0001.0000	HDPE POTABLE/FIRE WATER CONDUIT - X INCH, CLASS X	LINEAR FOOT	1600
627.0001.00XX	NON POTABLE WATER CONDUIT - X INCH, CLASS X	LINEAR FOOT	900
627.0001.00XX	RAW WATER CONDUIT - X INCH, CLASS X	LINEAR FOOT	980
627.0005.0000	FIRE HYDRANT INSTALLATION	EACH	2
627.0009.0000	GATE VALVE, X INCH	EACH	5
627.MF01.0001	RAW WATER INTAKE	EACH	1
	50,000 GALLON WATER STORAGE TANK	EACH	1
670.0001.0000	PAINTED TRAFFIC MARKINGS	LUMP SUM	ALL REQUIRED
	BELOW GROUND GALV. STEEL FUEL CONDUIT, X INCH, CLASS X	LINEAR FOOT	648

CAUSEWAY - ESTIMATE OF QUANTITIES			
ITEM NUMBER	PAY ITEM	PAY UNIT	QUANTITY
203.0005.000A	BORROW - SELECTED MATERIAL, TYPE A	CUBIC YARD	500
203.0005.000B	BORROW - SELECTED MATERIAL, TYPE B	CUBIC YARD	70,400
204.0001.0000	STRUCTURE EXCAVATION	CUBIC YARD	3,000
611.2007.0000	ARMOR CLASS A	CUBIC YARD	16,400
611.2007.0000	ARMOR CLASS B	CUBIC YARD	4,300
611.2007.0000	ARMOR CLASS C	CUBIC YARD	7,500
611.2007.0000	ARMOR CLASS D	CUBIC YARD	2,400
301.0001.00C1	AGGREGATE BASE COURSE, GRADING C-1	CUBIC YARD	560
301.0001.00D1	AGGREGATE BASE COURSE, GRADING D-1	CUBIC YARD	110
304.0001.000A	SUBBASE, GRADING A	CUBIC YARD	2,300
401.0006.00XX	HMA, TYPE X; CLASS X	SQUARE YARD	3,000
603.0021.0012	CORRUGATED POLYETHYLENE PIPE 12 INCH	LINEAR FOOT	100
604.0001.000X	STORM SEWER MANHOLE, TYPE X WITH OIL WATER SEPARATOR	EACH	2
606.0001.0000	W-BEAM GUARDRAIL	LINEAR FOOT	507
607.0003.0000	CHAIN LINK FENCE	LINEAR FOOT	596
607.0005.0000	DRIVE GATE	EACH	3
608.0001.0004	CONCRETE SIDEWALK, 4 INCHES THICK	SQUARE YARD	580
609.0002.0001	CURB AND GUTTER, TYPE I	LINEAR FOOT	535
611.0001.000X	RIPRAP, CLASS X	CUBIC YARD	800
626.0001.0000	SANITARY SEWER CONDUIT, FORCE MAIN, X INCH	LINEAR FOOT	760
626.2002.0000	SANITARY SEWER LIFT STATION	EACH	1
627.0001.0000	HDPE POTABLE/FIRE WATER CONDUIT, X INCH, CLASS X	LINEAR FOOT	770
627.0009.000X	GATE VALVE, X INCH	EACH	1
627.0005.0000	FIRE HYDRANT INSTALLATION	EACH	1
	ABOVE GROUND GALV. STEEL FUEL CONDUIT, X INCH, CLASS X	LINEAR FOOT	752
670.0001.0000	PAINTED TRAFFIC MARKINGS	LUMP SUM	ALL REQUIRED

RUBBLE MOUND BREAKWATER - ESTIMATE OF QUANTITIES			
ITEM NUMBER	PAY ITEM	PAY UNIT	QUANTITY
203.0005.000B	BORROW - SELECTED MATERIAL, TYPE B	TON	109,700
611.2007.0000	ARMOR CLASS A	CUBIC YARD	35,300
611.2007.0000	ARMOR CLASS B	CUBIC YARD	14,000
611.2007.0000	ARMOR CLASS C	CUBIC YARD	14,600
611.2007.0000	ARMOR CLASS D	CUBIC YARD	7,200

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**CIVIL ESTIMATE OF
QUANTITIES**

FILE N:\23xxx\232045 Cascade Point Ferry Terminal\G. Drawings\Civil\110X Typical Sections.dwg

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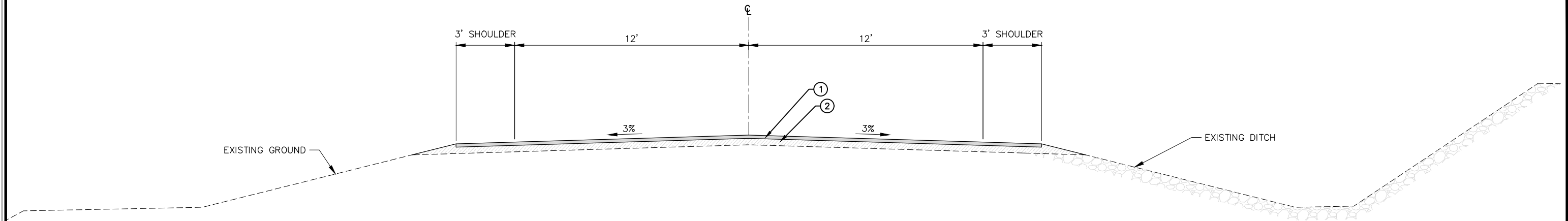
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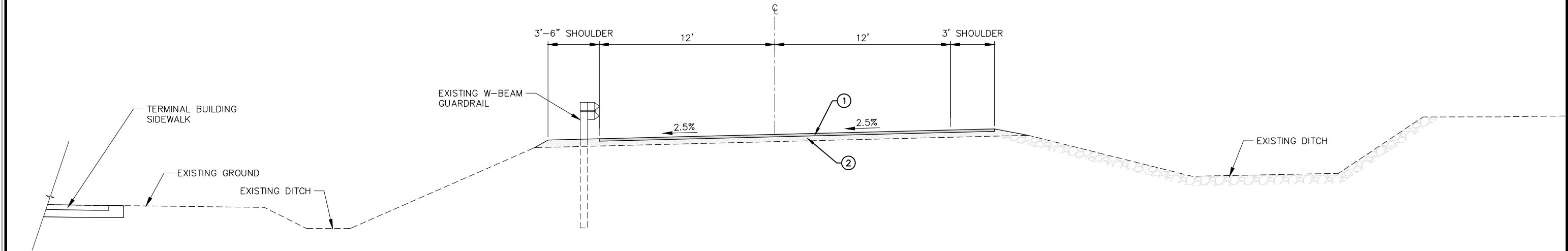
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NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	1100	161



1 ACCESS ROAD TYPICAL SECTION
BOP TO STA 18+86 (BRIDGE) & STA 19+40 TO STA 35+30

PAVEMENT DETAIL REFERENCE	
①	2"t. HOT MIX ASPHALT, TYPE II; CLASS B,
②	4"t. AGGREGATE BASE COURSE, GRADING C-1



2 ACCESS ROAD TYPICAL SECTION
STA 35+30 TO STA 39+26 (CAUSEWAY)

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**ROAD TYPICAL
SECTIONS**

FILE N:\23xxx\232045 Cascade Point Ferry Terminal\G. Drawings\CIVIL\110X Road Plans and Profiles.dwg

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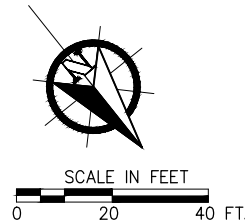
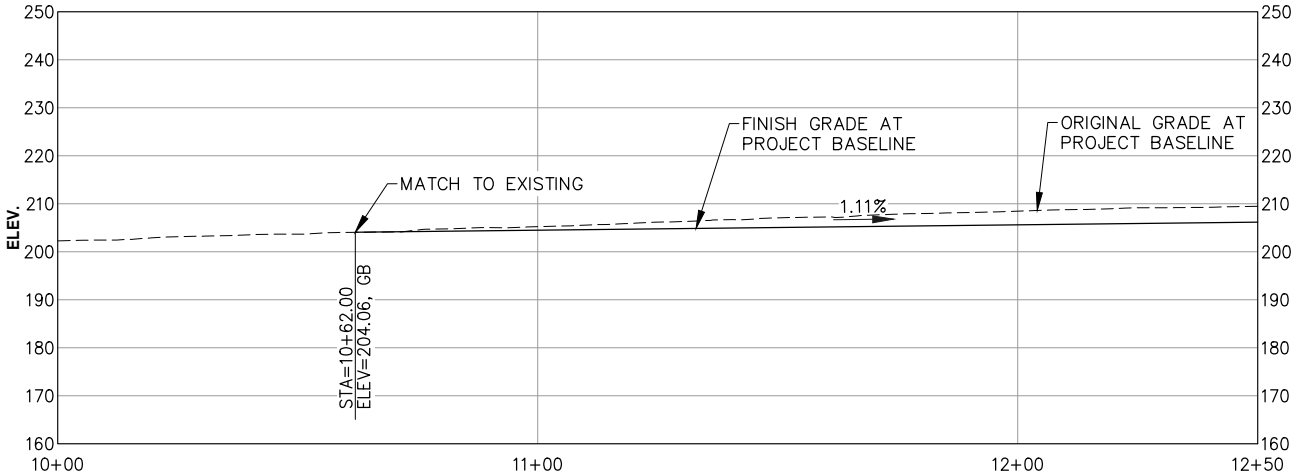
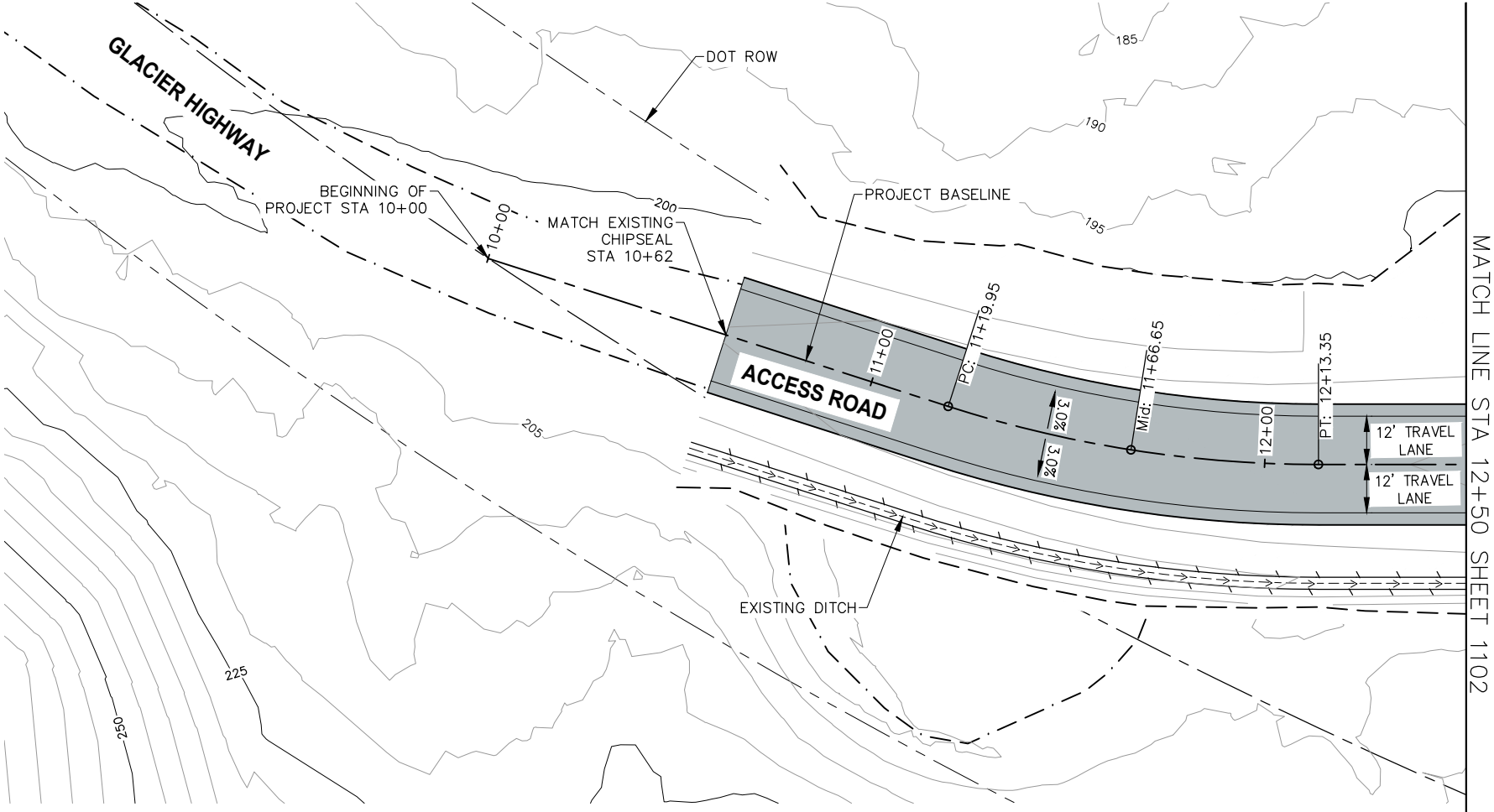
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NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	1101	161



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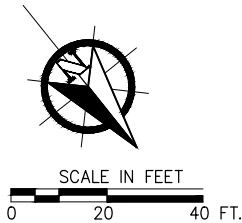
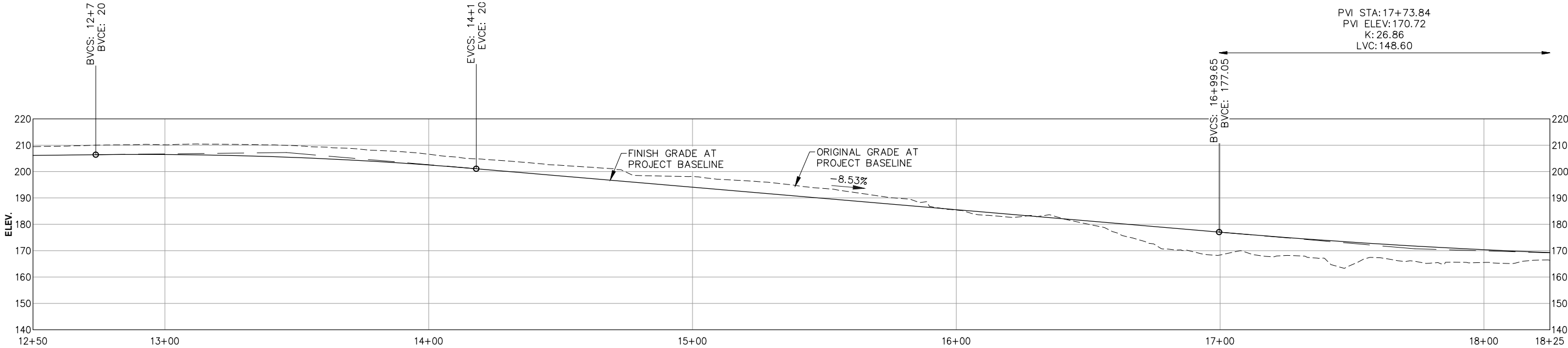
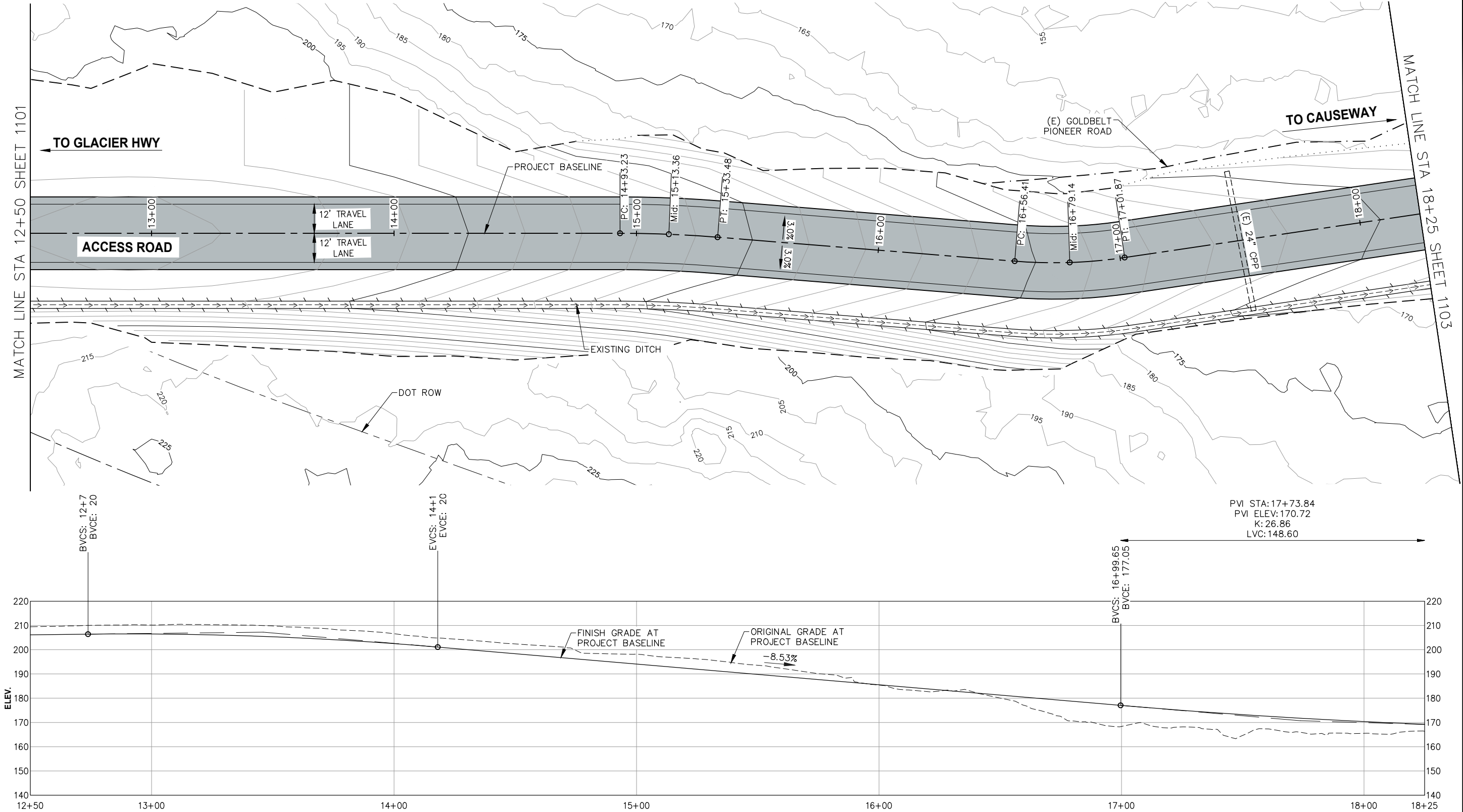
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NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
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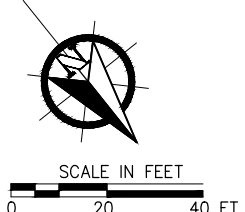
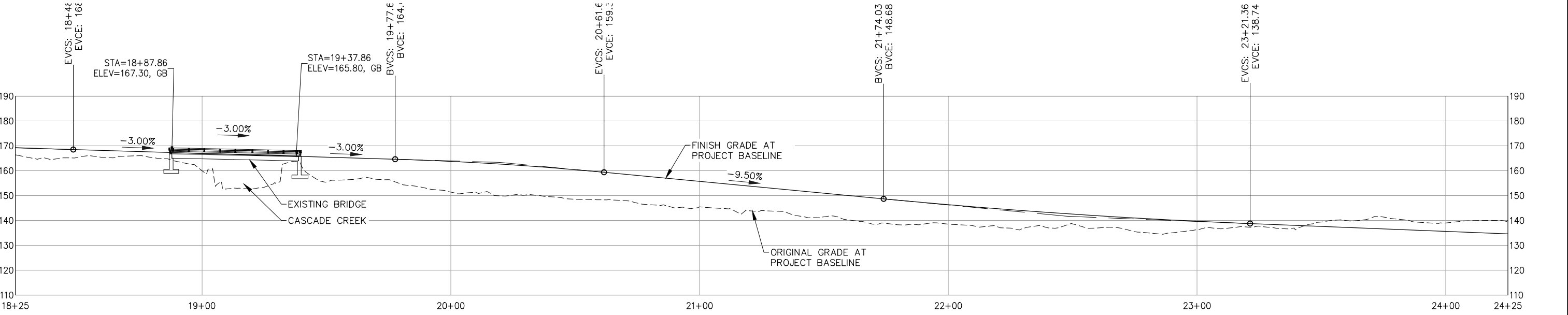
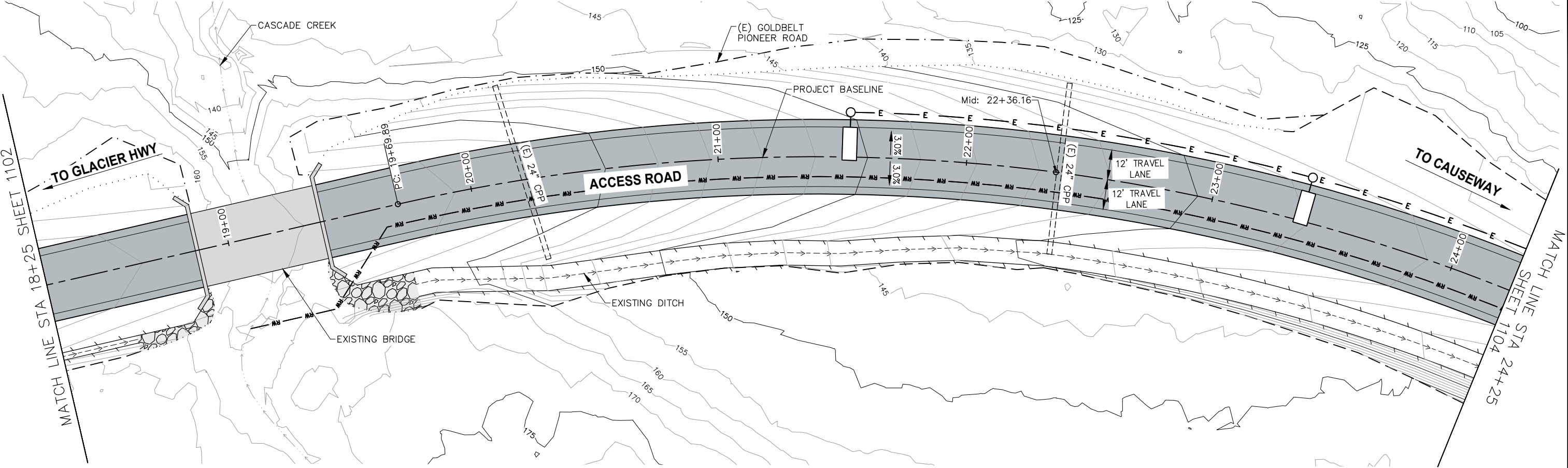
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NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
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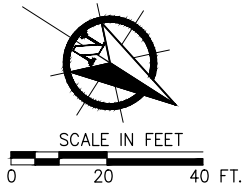
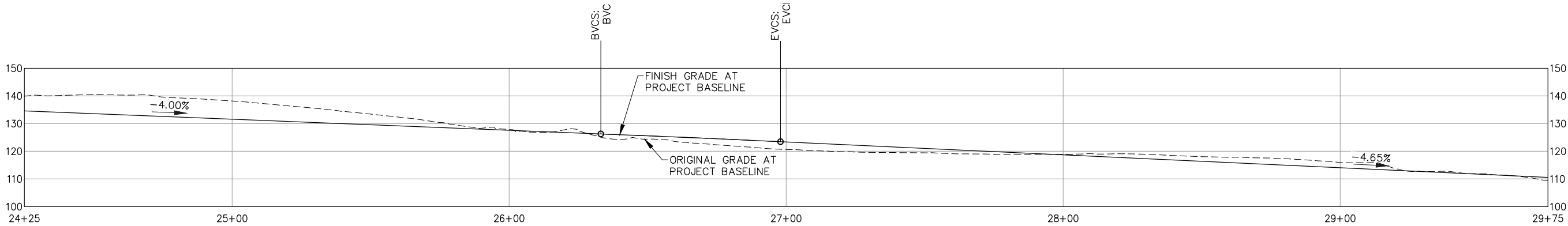
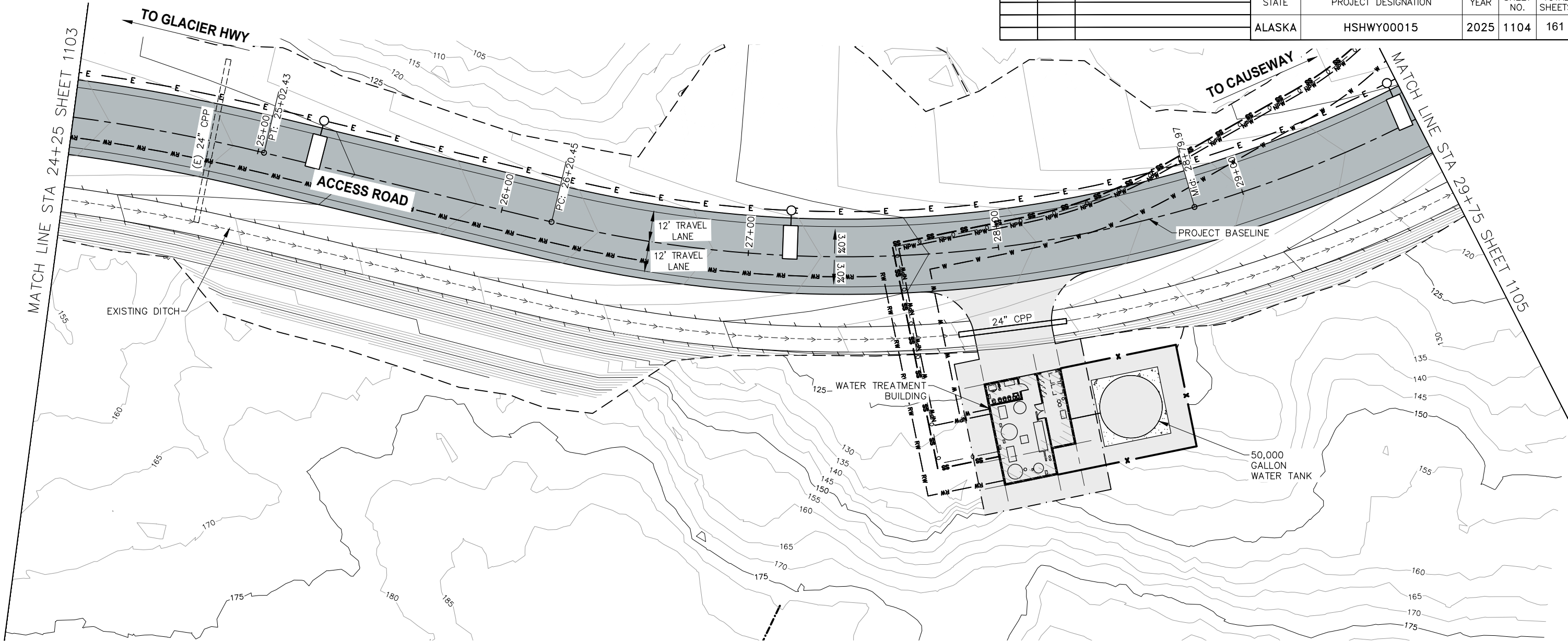
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NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
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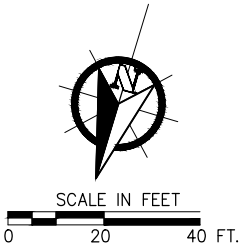
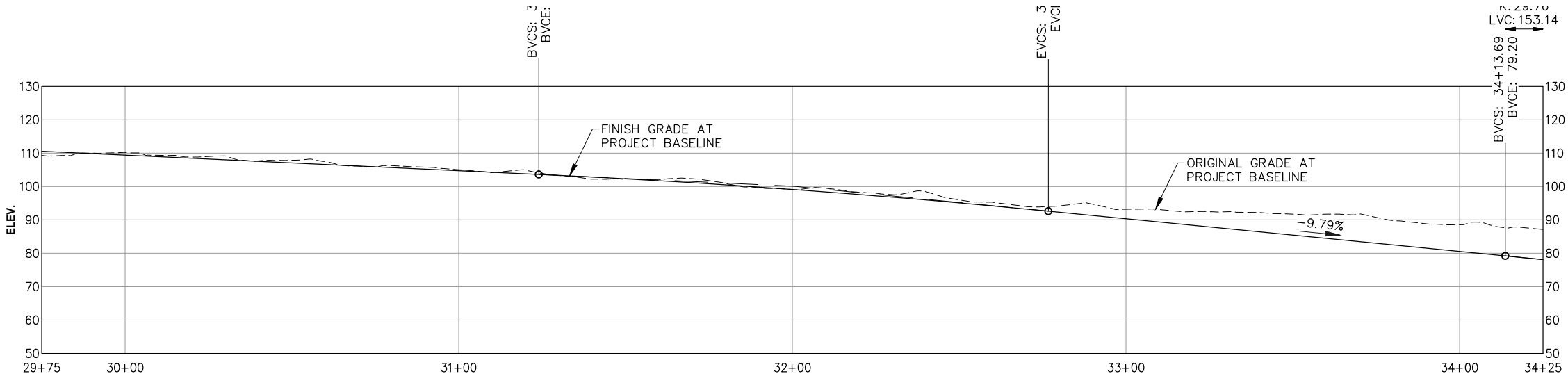
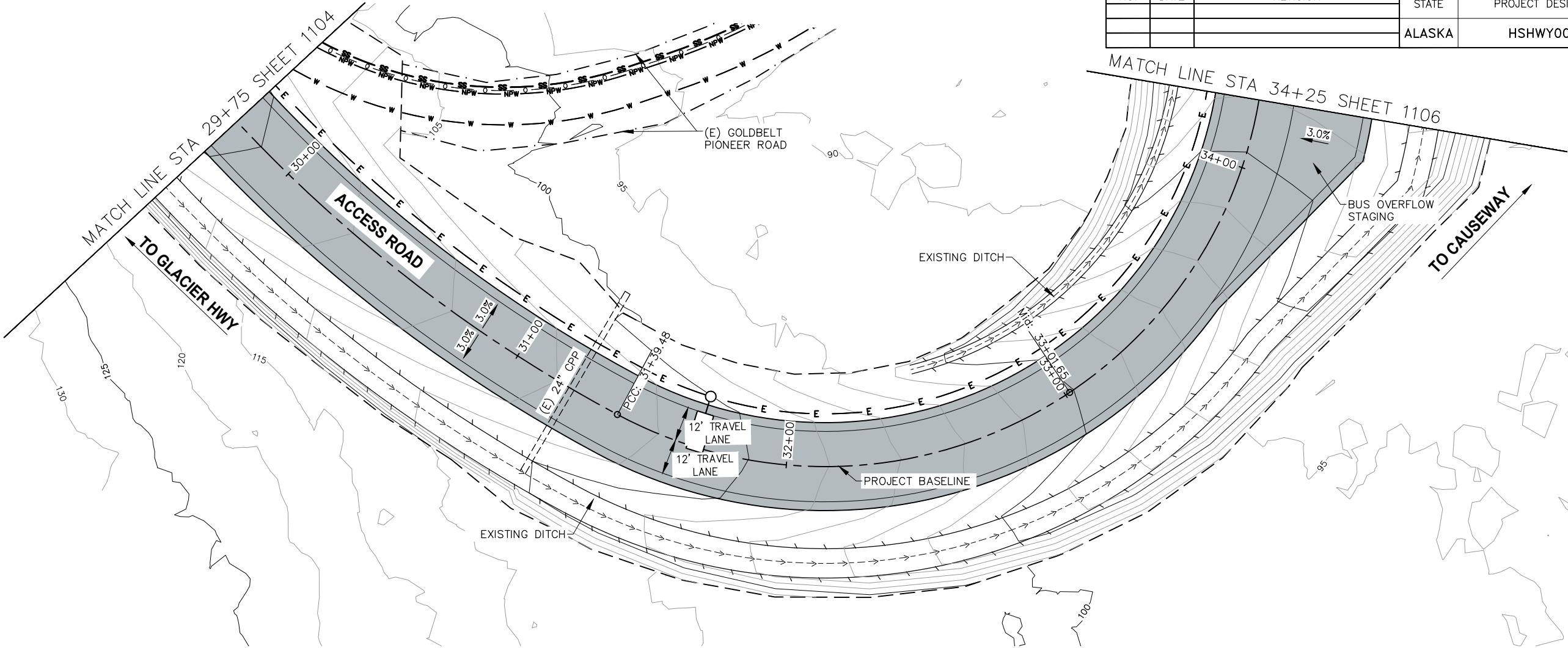
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			ALASKA	HSHWY00015	2025	1105	161



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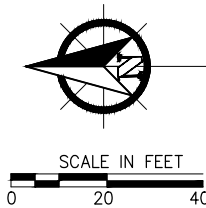
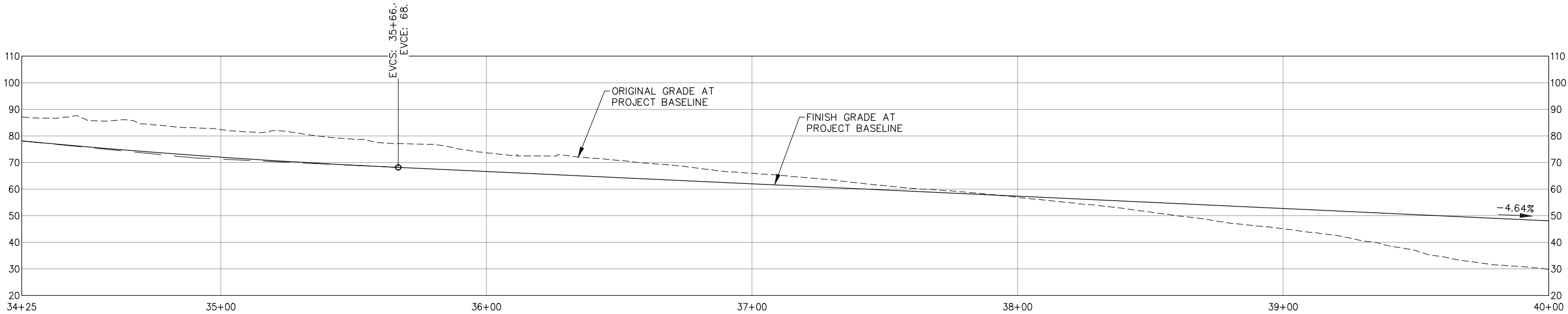
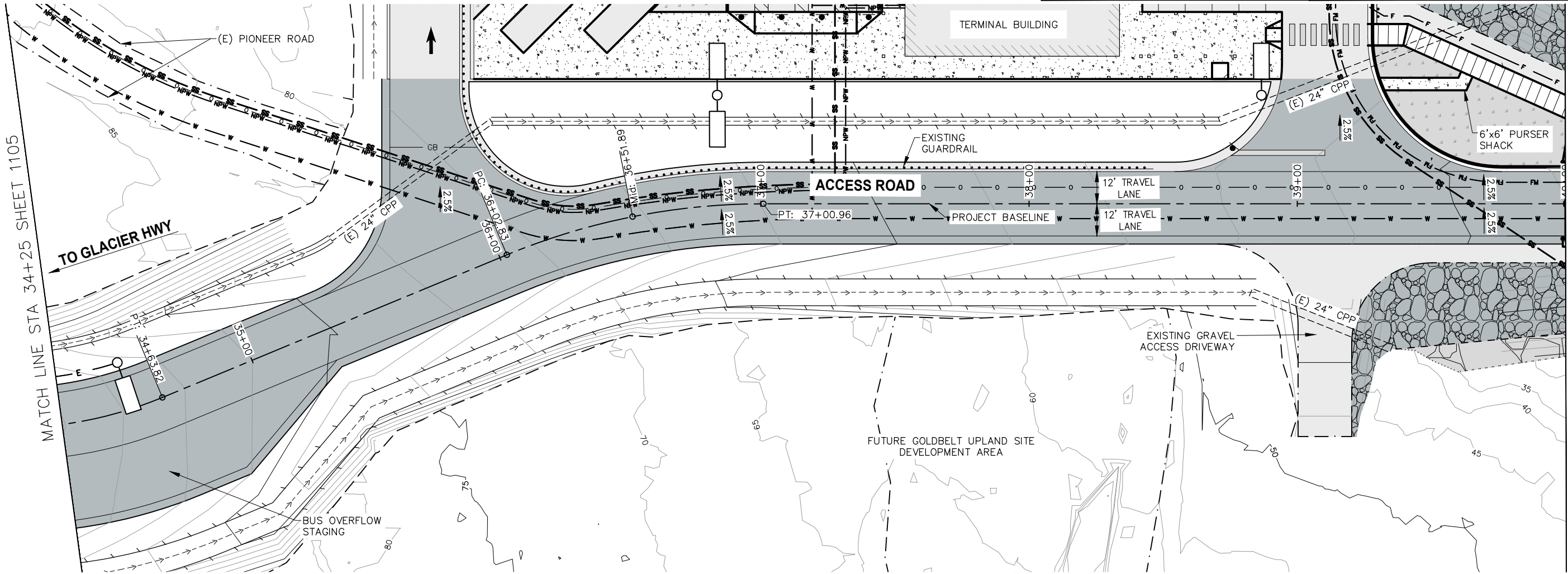
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NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	1106	161



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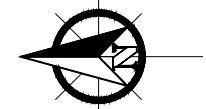
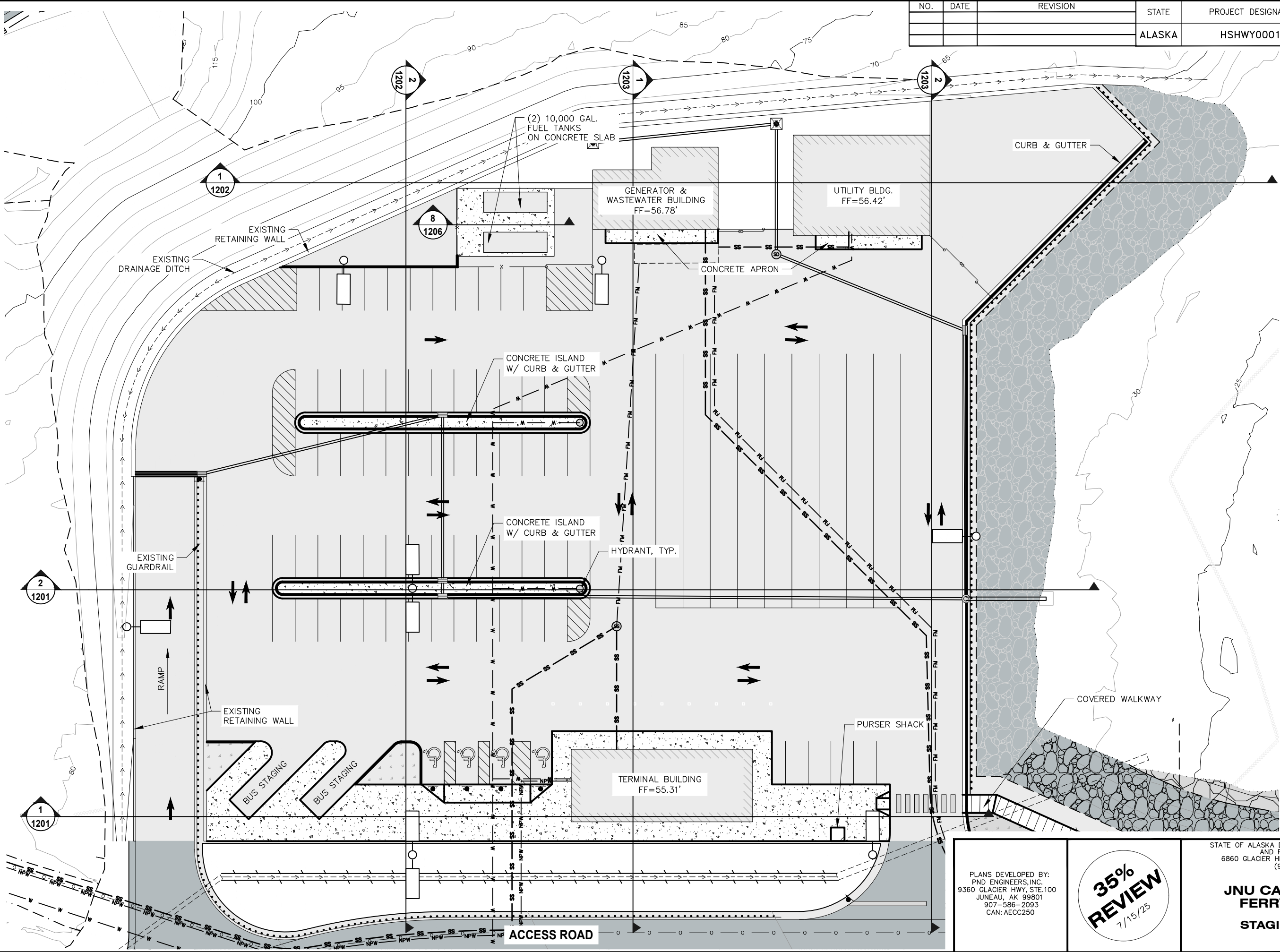
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SEE SHEET 1302 FOR CAUSEWAY PLAN & PROFILE
MATCH LINE STA 40+00

FILE N:\23xxx\232045 Cascade Point Ferry Terminal\G. Drawings\CIVIL\120X Staging Area Site Sections.dwg DATE 7/14/2025 15:16 LAYOUT 12 (4) DESIGNED CHECKED DRAFTED

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	1200	161



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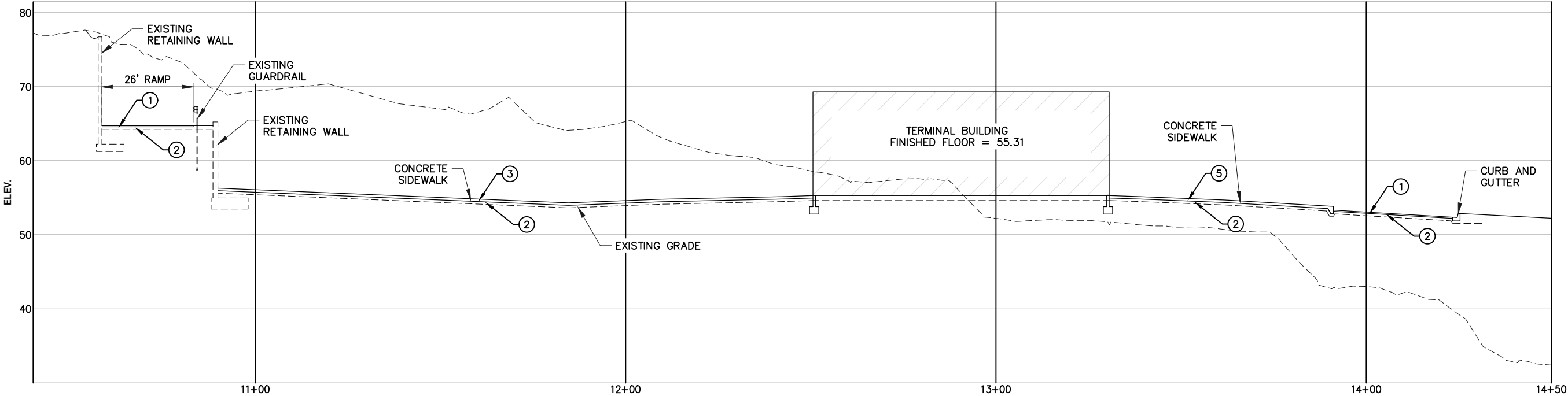
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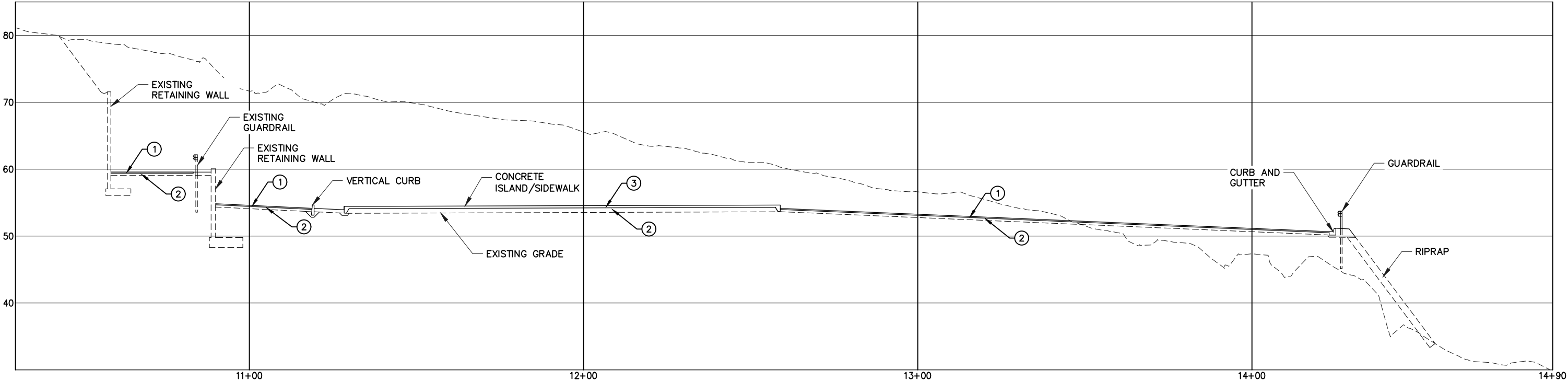
**STAGING AREA SITE
PLAN**

FILE N:\23\23045 Cascade Point Ferry Terminal\G. Drawings\CIVIL\120X Staging Area Site Sections.dwg DATE 7/14/2025 15:16 LAYOUT 12 DESIGNED CHECKED DRAFTED

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	1201	161



1 SITE SECTION



2 SITE SECTION

MATERIAL DESIGNATIONS	
SYMBOL	MATERIAL DESCRIPTION
①	2" t. HOT MIX ASPHALT, TYPE II, CLASS B
②	4" t. AGGREGATE BASE COURSE, GRADING D-1
③	4" t. CONCRETE SIDEWALK

PLANS DEVELOPED BY:
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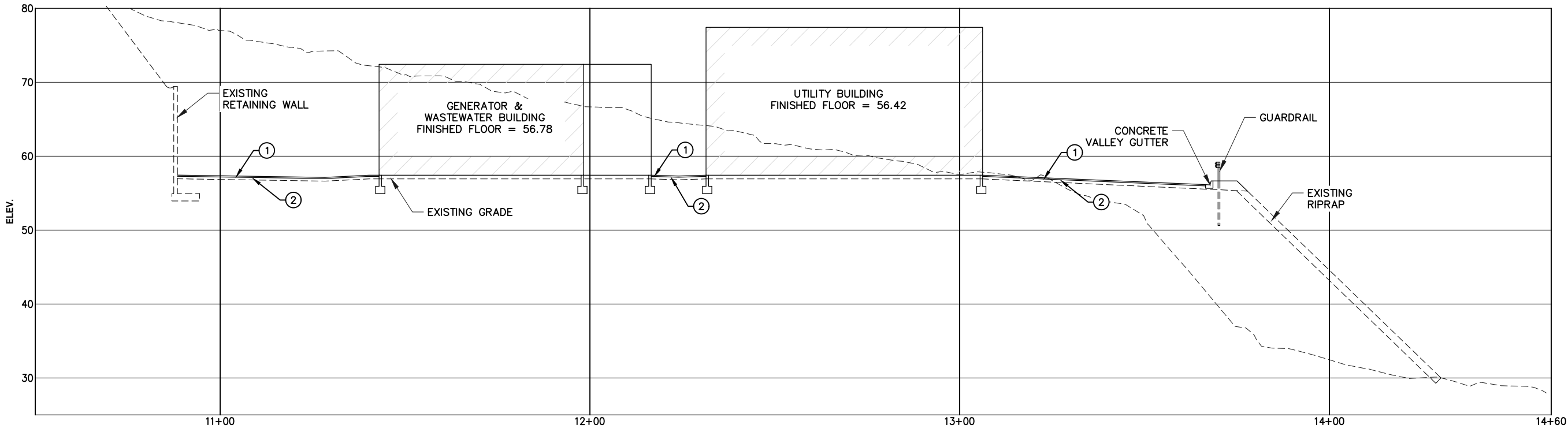
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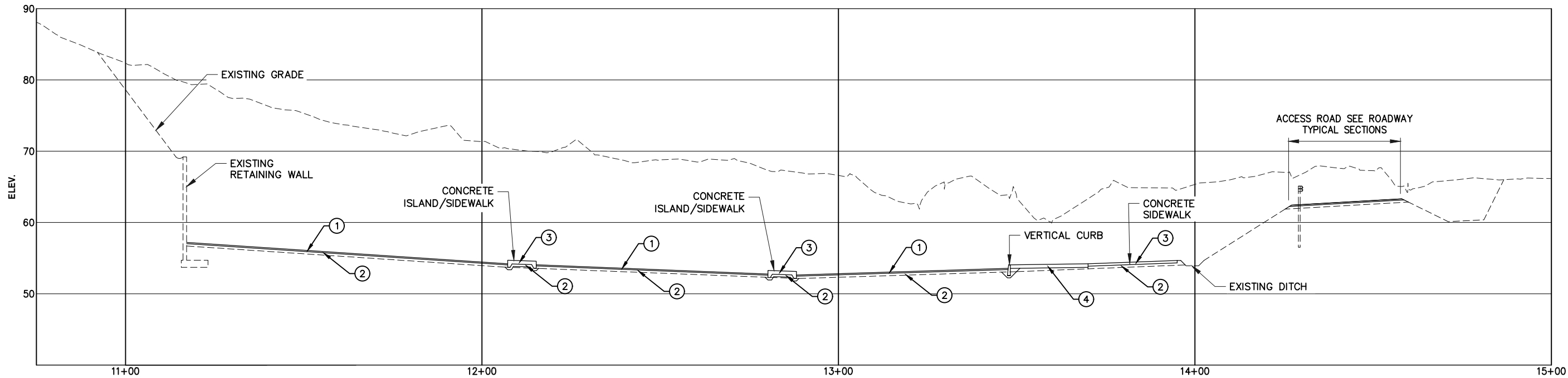
JNU CASCADE POINT
FERRY TERMINAL
STAGING AREA SITE
SECTIONS

FILE N:\23xxx\232045 Cascade Point Ferry Terminal\G. Drawings\Civil\120X Staging Area Site Sections.dwg DATE 7/14/2025 15:16 LAYOUT 12 (2) DESIGNED CHECKED DRAFTED

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	1202	161



1
-
SITE SECTION



2
-
SITE SECTION

MATERIAL DESIGNATIONS	
SYMBOL	MATERIAL DESCRIPTION
1	2" t. HOT MIX ASPHALT, TYPE II, CLASS B
2	4" t. AGGREGATE BASE COURSE, GRADING D-1
3	4" t. CONCRETE SIDEWALK
4	LANDSCAPING

PLANS DEVELOPED BY:
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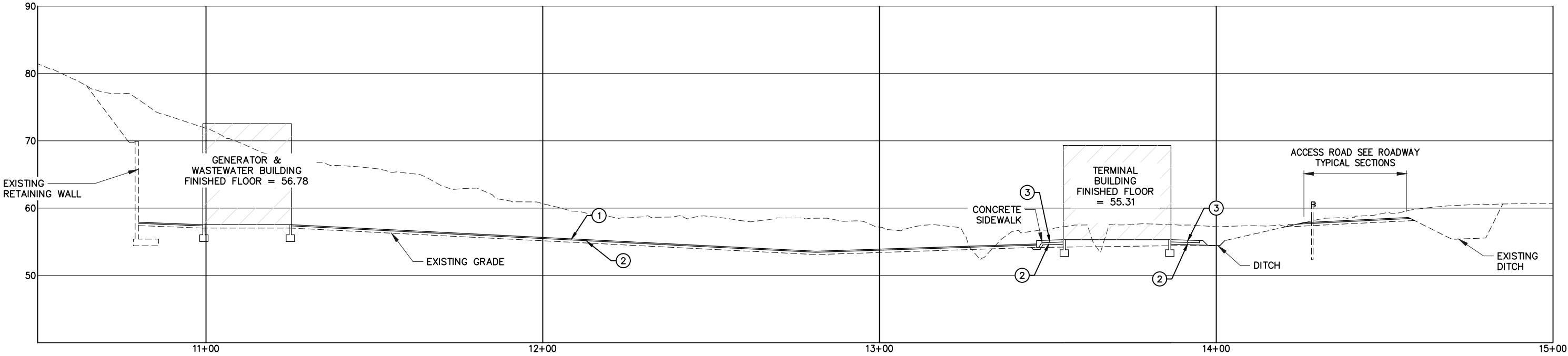
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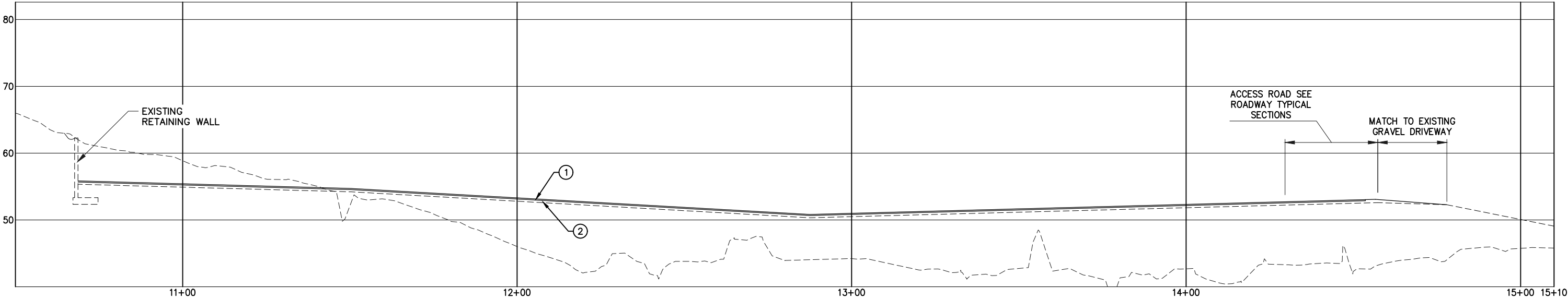
STAGING AREA SITE
SECTIONS

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NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	1203	161



1 SITE SECTION



2 SITE SECTION

MATERIAL DESIGNATIONS	
SYMBOL	MATERIAL DESCRIPTION
①	2" t. HOT MIX ASPHALT, TYPE II, CLASS B
②	4" t. AGGREGATE BASE COURSE, GRADING D-1
③	4" t. CONCRETE SIDEWALK

PLANS DEVELOPED BY:
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JUNEAU, AK 99801
907-586-2093
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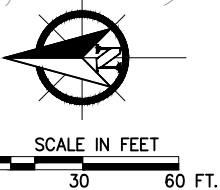
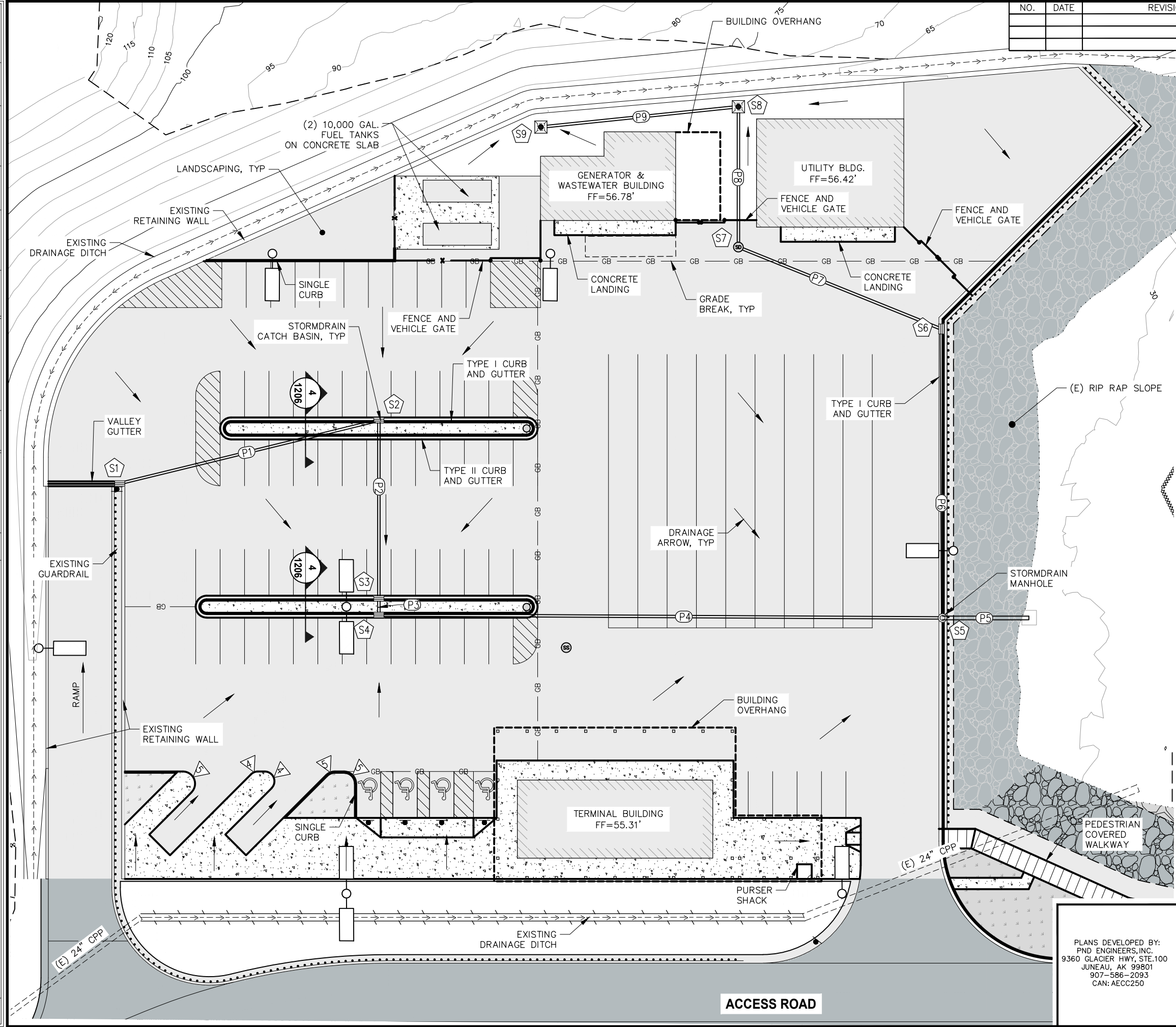


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STAGING AREA SITE
SECTIONS

FILE N:\23xxx\232045 Cascade Point Ferry Terminal\G. Drawings\CIVIL\120X Staging Area Grading Plan.dwg DATE 7/15/2025 9:06 LAYOUT 12 DESIGNED CHECKED DRAFTED

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	1204	161



STORM DRAIN PIPING							
PIPE DESIGNATION	NOMINAL Ø	LENGTH	FROM	IE	TO	IE	SLOPE
P1	12" CPEP	109.2	S1		S2		
P2	12" CPEP	73.0	S2		S3		
P3	12" CPEP	6.7	S3		S4		
P4	12" CPEP	230.8	S4		S5		
P5	18" CPEP	35.4	S5		OUTFALL		
P6	12" CPEP	118.3	S6		S5		
P7	12" CPEP	89.6	S7		S6		
P8	12" CPEP	57.5	S8		S7		
P9	12" CPEP	81.3	S9		S8		

STORM DRAIN STRUCTURES					
STRUCTURE DESIGNATION	LAYOUT POINT No.	RIM ELEVATION	NORTHING	EASTING	TYPE
S1	201				CB TYPE III
S2	202				CB TYPE III
S3	203				CB TYPE III
S4	204				CB TYPE III
S5	205				MH TYPE I
S6	206				CB TYPE III
S7	207				CB TYPE III
S8	208				CB TYPE III
S9	209				CB TYPE III

NOTE:
1. POINTS AND RIM ELEVATIONS FOR CURB INLETS REFERENCE THE EDGE OF AC PAVEMENT @ THE CENTER OF THE RIM.
2. SEE LAYOUT POINT TABLES ON SHEET 1205.

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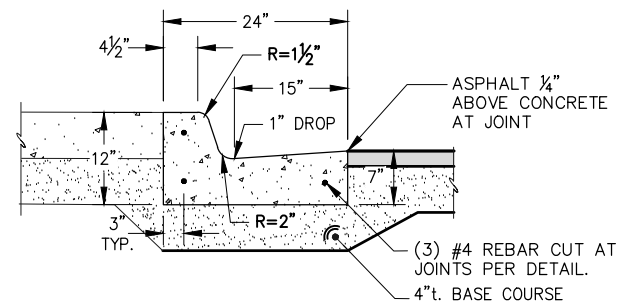
JNU CASCADE POINT
FERRY TERMINAL
STAGING AREA GRADING
& DRAINAGE PLAN

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	1205	161

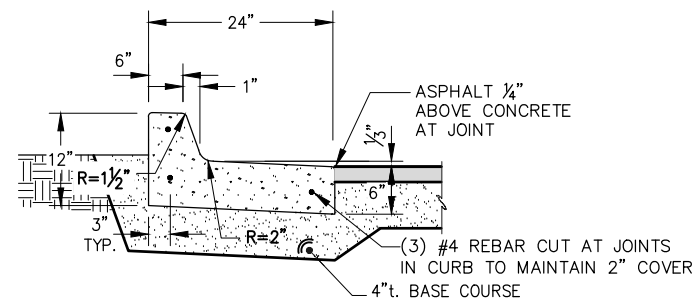
LAYOUT TABLE				
POINT No.	NORTHING	EASTING	ELEVATION	DESCRIPTION
101	255806.47	233666.75		EP
102	255780.47	233666.75		EP
103	255806.47	233831.11		EP
104	255780.46	233831.11		EP
105	255806.47	233842.96		EP/PC
106	255793.61	233886.47		EP
107	255759.15	233915.99		EP/PT
108	255775.14	233670.28		CONC
109	255775.14	233692.60		CONC
110	255775.14	233714.27		EP
111	255775.14	233781.11		EP
113	255756.66	233679.97		EP
114	255765.14	233688.46		EP
115	255747.86	233705.74		EP/PC
116	255751.49	233714.27		EP/PT
117	255723.52	233713.10		EP/PC
118	255720.69	233714.27		EP/PT
119	255717.86	233714.27		EP/PC
120	255715.03	233707.44		EP/PT
121	255734.03	233688.45		EP
122	255725.54	233679.97		EP
123	255692.70	233712.81		EP/PC
124	255689.16	233714.27		EP/PT
125	255685.43	233714.27		EP/PC
126	255680.43	233709.27		EP/PT
127	255680.43	233695.27		EP
128	255622.93	233695.28		EP
129	255622.93	233714.27		EP/GB
130	255622.93	233718.77		EP
131	255741.64	233777.27		EP
132	255746.14	233781.77		EP/PT
133	255741.64	233786.27		EP
136	255606.14	233854.78		EP/GB
137	255606.14	233781.61		EP/GB
139	255610.64	233777.28		EP/PC

LAYOUT TABLE				
POINT No.	NORTHING	EASTING	ELEVATION	DESCRIPTION
140	255610.64	233786.28		EP/PT
141	255731.64	233850.27		EP
143	255418.94	233923.12		EP
144	255606.14	233923.11		FG
145	255736.14	233854.77		EP/PT/GB
146	255731.64	233859.27		EP
147	255671.14	233850.27		CONC
149	255610.64	233850.28		EP/PC
150	255610.64	233859.28		EP/PT
151	255743.23	233923.11		EP/GB
152	255670.94	233923.11		EP
153	255664.94	233957.61		EP
154	255664.94	233928.11		EP
155	255621.73	233928.11		EP
156	255621.73	233957.61		EP
157	255599.31	233933.94		EP
158	255549.65	233933.94		EP
159	255506.63	233931.25		EP
160	255459.88	233931.25		EP
161	255456.23	233996.59		EP
162	255384.79	234002.71		EP
163	255362.06	233979.96		EP
164	255441.89	233900.19		EP
165	255606.14	233718.78		EP/GB
166	255680.43	233670.28		CONC
167	255623.93	233670.28		CONC
168	255525.93	233670.28		CONC
169	255525.93	233695.28		EP
170	255525.93	233718.78		EP
171	255489.98	233670.28		CONC
172	255489.93	233695.28		EP
173	255474.26	233670.28		EP
174	255473.88	233675.78		EP/PC
175	255473.88	233695.28		EP
176	255441.88	233685.77		EP

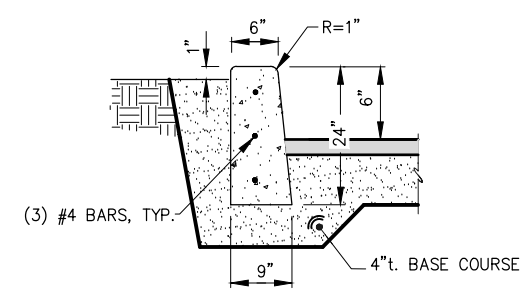
NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	1206	161



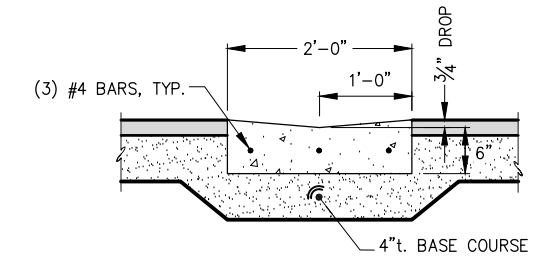
1 CONCRETE CURB AND GUTTER



2 CONCRETE SPILL CURB



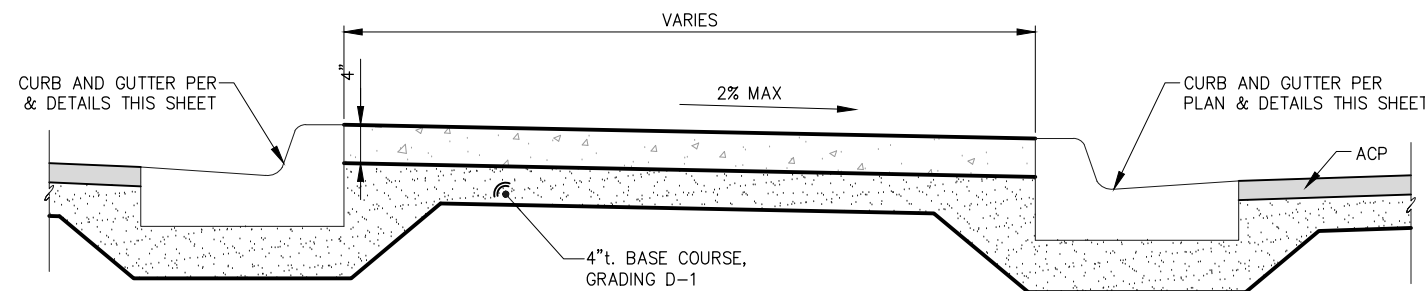
3 CONCRETE SINGLE CURB



4 CONCRETE CURB AND GUTTER

- NOTES:**

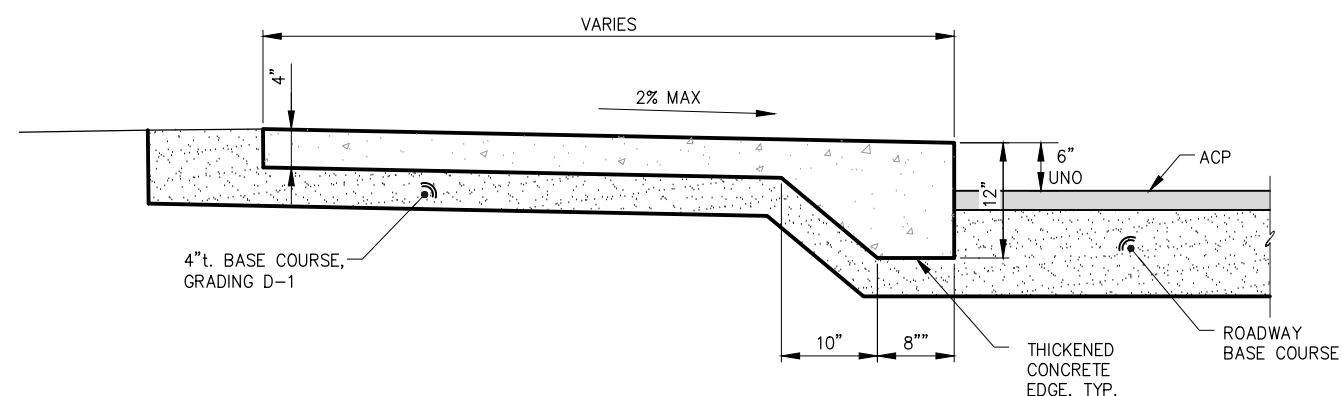
1. CURB AND GUTTER TRANSITION DESIGN TO BE APPROVED BY THE ENGINEER.
2. ALL STEEL MUST HAVE A MINIMUM OF 2" OF CONCRETE COVER.
3. ALL JOINTS SHALL BE EDGED.
4. EXPANSION JOINTS SHALL BE MAX $\frac{1}{2}$ ", MIN $\frac{1}{4}$ ", WITH NO GAPS FOR WATER INTRUSION. JOINTS SHALL BE A MAXIMUM OF 30' O.C.
5. STEEL TROWELING FINISH REQUIRED PRIOR TO BROOM FINISHING OF ALL SURFACES.
6. CONCRETE INTERNATIONAL CORPORATION ASHFORD FORMULA OR APPROVED EQUAL SHALL BE APPLIED AS A CURING COMPOUND. APPLICATION SHALL CONFORM TO THE MANUFACTURER'S INSTRUCTIONS.



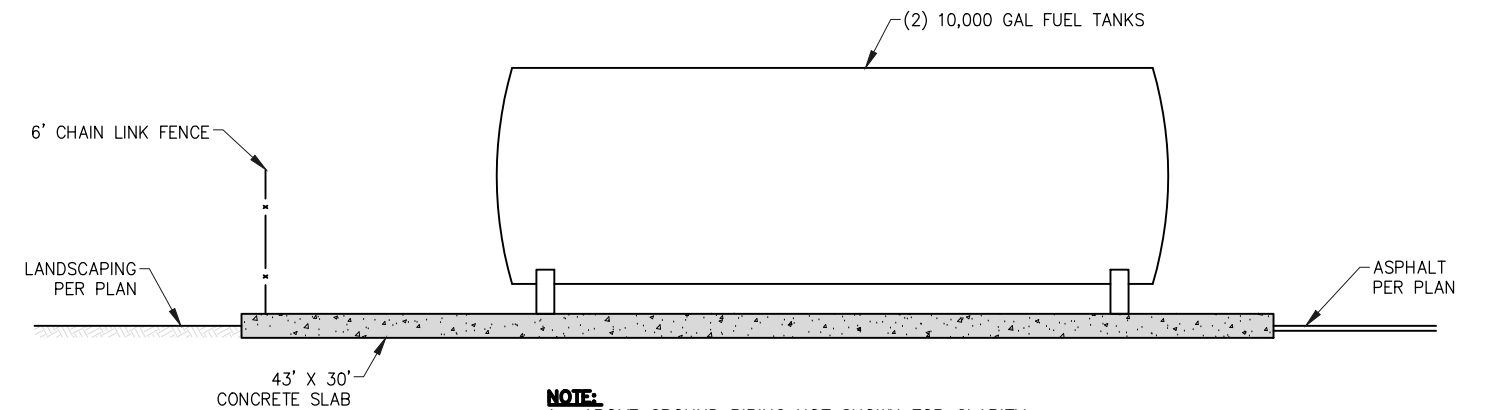
5 TYPICAL CONCRETE CURB ISLAND DETAIL

- ## NOTES

1. ALL JOINTS SHALL BE EDGED.
2. EXPANSION JOINTS SHALL BE MAX ½", MIN ¼", WITH NO GAPS FOR WATER INTRUSION.
3. STEEL TROWELING FINISH REQUIRED PRIOR TO BROOM FINISHING ON ALL SURFACES.
4. CONCRETE INTERNATIONAL CORPORATION ASHFORD FORMULA OR APPROVED EQUAL SHALL BE APPLIED AS A CURING COMPOUND. APPLICATION SHALL CONFORM TO THE MANUFACTURERS INSTRUCTIONS.



7 CONCRETE SIDEWALK



- NOTE:**

1. ABOVE GROUND PIPING NOT SHOWN FOR CLARITY.
SEE MECHANICAL SHEETS FOR ADDITIONAL FUEL PIPING INFORMATION.

8 FUEL TANK CONCRETE SLAB DETAIL

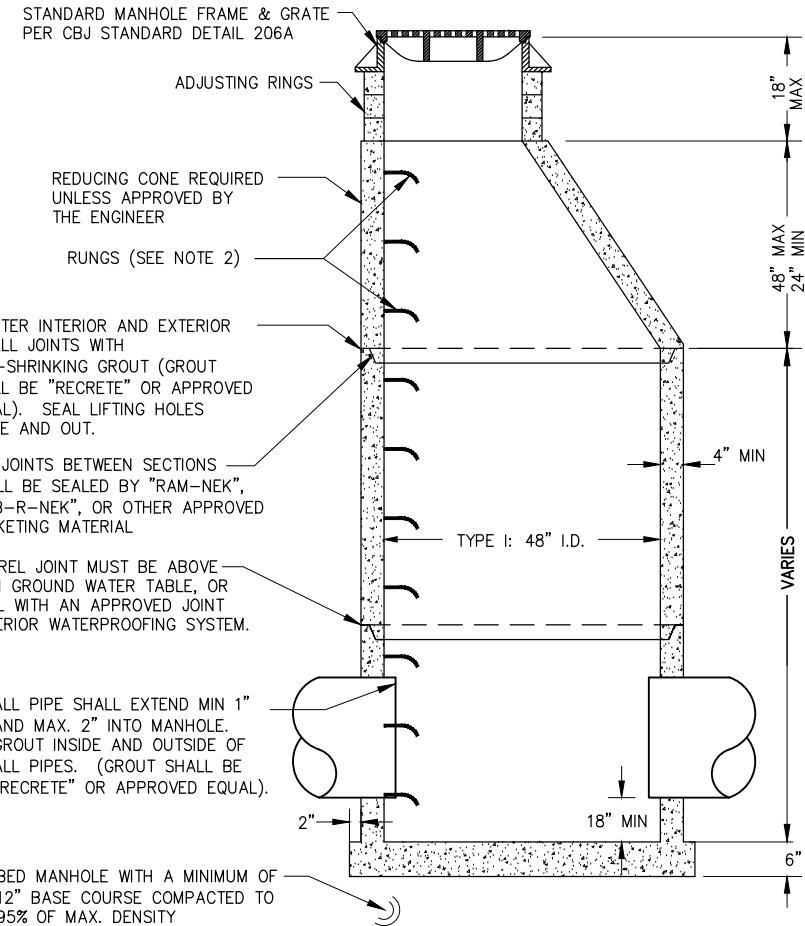
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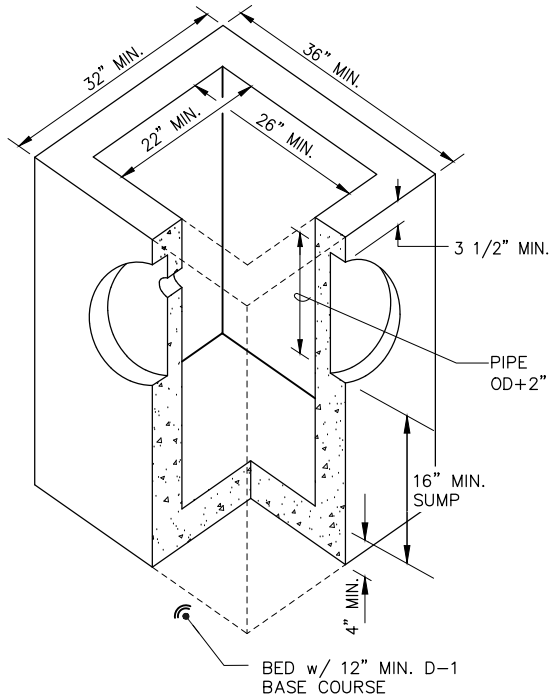
JNU CASCADE POINT FERRY TERMINAL

STAGING AREA DETAILS

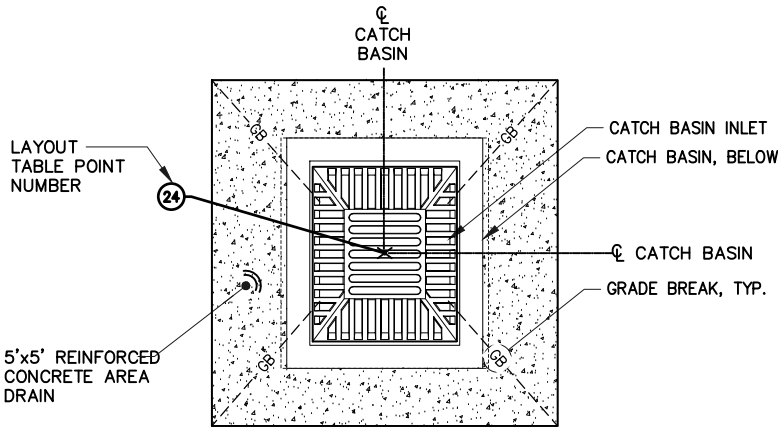


- NOTES:**
1. RUNGS PLACED 12" O.C. ON UNOBSTRUCTED SIDE OF MANHOLE. LAST RUNG 18" MAX FROM BOTTOM OF MANHOLE, AND TOP RUNG 6" MAX FROM TOP OF CONE. IF UNOBSTRUCTED SIDE NOT AVAILABLE, LAST RUNG PLACED 6" OVER SMALLEST PIPE.
 2. REFER TO A.S.T.M. C-478 FOR DESIGN REQUIREMENTS AND C-478-69 FOR MINIMUM STEEL FOR BARREL. BARREL SHALL BE IMBEDDED IN BASE SO THAT FIRST BARREL SECTION IS CONNECTED WITH BASE.
 3. BLOCKOUTS MUST BE FORMED.
 4. CONFORM ALL OTHER ASPECTS TO CBJ STD DTL 303.

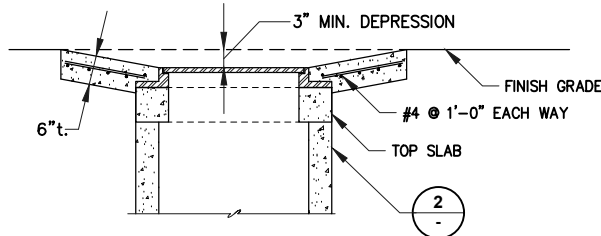
1 TYPE I STORM DRAIN MANHOLE



2 STORM SEWER CATCH BASIN



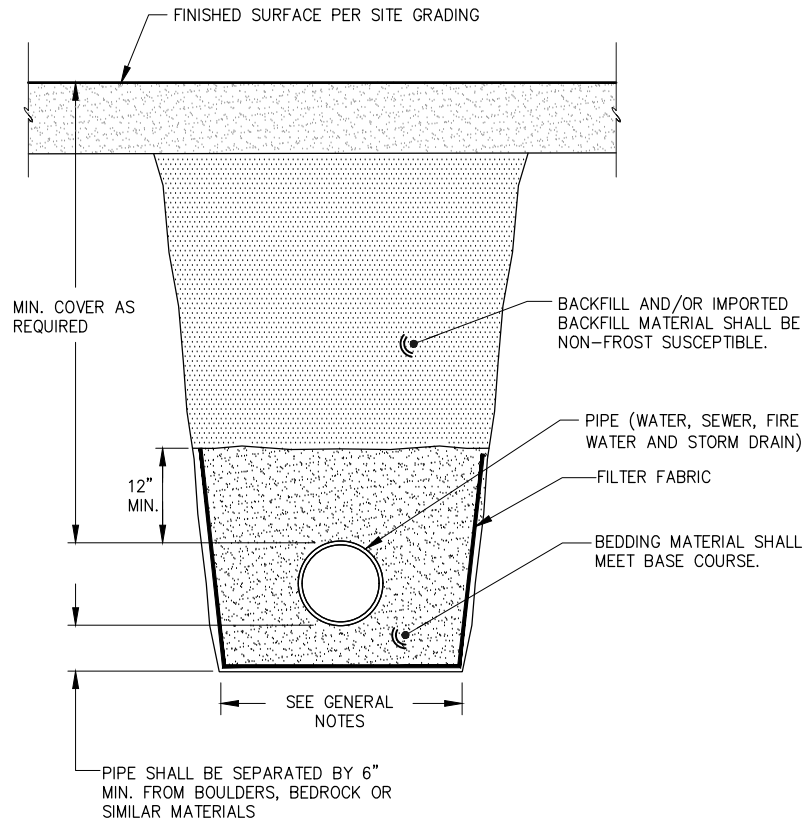
PLAN



SECTION

4 CONCRETE AREA DRAIN

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	1207	161



3 PIPE TRENCH DETAIL

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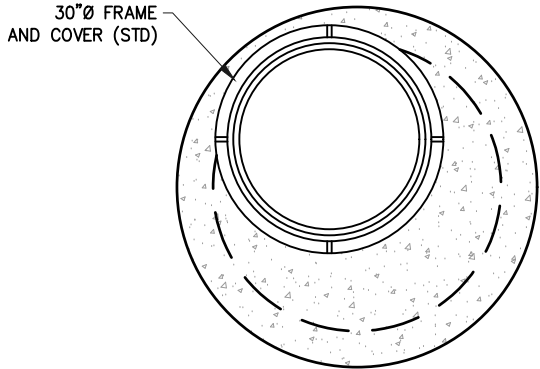
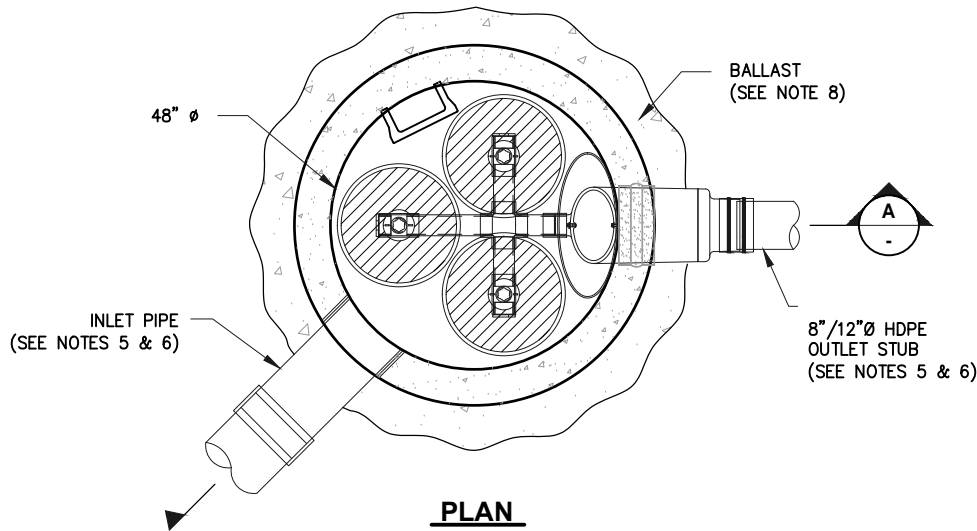
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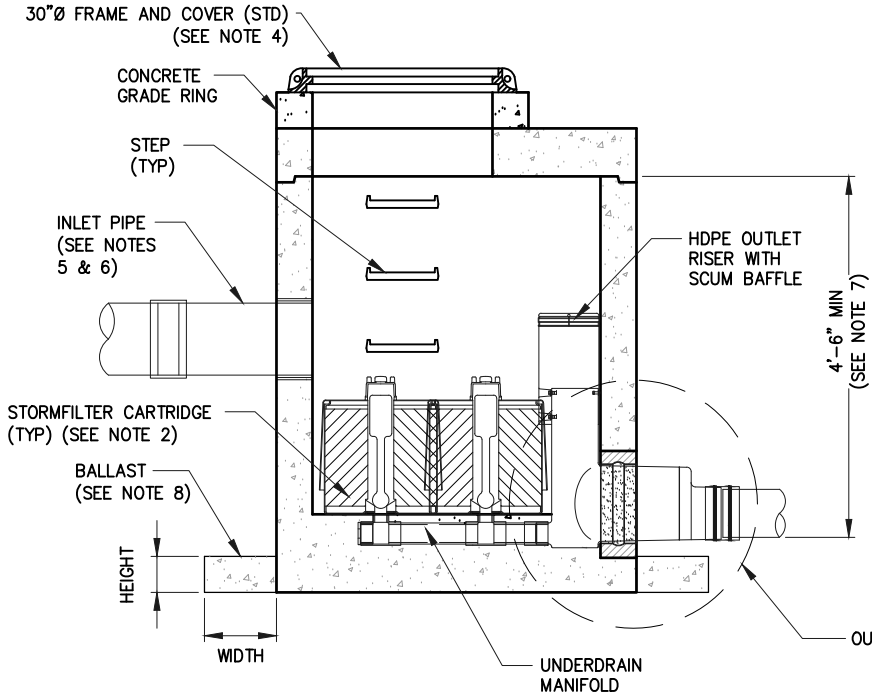
**JNU CASCADE POINT
FERRY TERMINAL**
**STAGING AREA
DETAILS**

FILE N:\23xxx\232045 Cascade Point Ferry Terminal\G. Drawings\CIVIL\120X Staging Area Details.dwg DATE 7/14/2025 15:25 LAYOUT STORM DETAILS (1) DESIGNED CHECKED DRAFTED

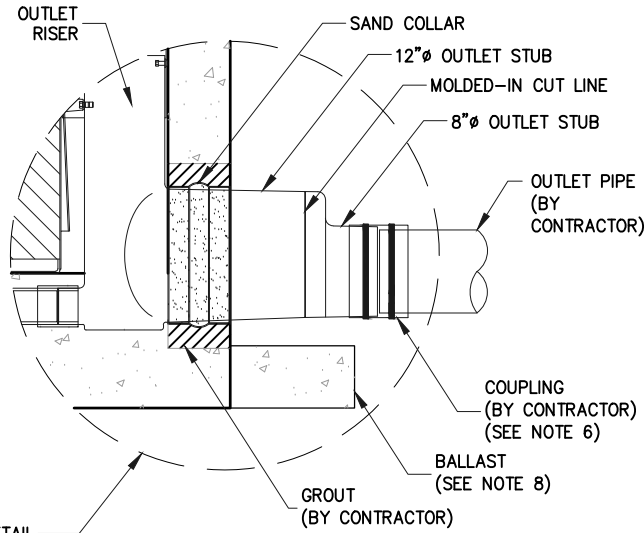
NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	1208	161



STORMFILTER MANHOLE - TOP VIEW



STORMFILTER MANHOLE - SECTION



STORMFILTER MANHOLE DETAIL

- NOTES:**
- 1) STORMFILTER BY CONTECH STORMWATER SOLUTIONS; PORTLAND, OR (800) 548-4667; SCARBOROUGH, ME (877) 907-8676; ELKRIDGE, MD (866) 740-3318.
 - 2) FILTER CARTRIDGE(S) TO BE THREE (3 TOTAL) SIPHON-ACTUATED AND SELF-CLEANING CSF METAL RX, 7.5 GPM.
 - 3) PRECAST MANHOLE STRUCTURE TO BE CONSTRUCTED IN ACCORDANCE WITH ASTM C478.
 - 4) STRUCTURE AND ACCESS COVERS TO MEET AASHTO H-20 LOAD RATING.
 - 5) STORMFILTER REQUIRES 2.3 FEET OF DROP FROM INLET TO OUTLET.
 - 6) INLET PIPING TO BE SPECIFIED BY ENGINEER AND PROVIDED BY CONTRACTOR. PRECAST MANHOLE STORMFILTER EQUIPPED WITH A DUAL DIAMETER HDPE OUTLET STUB AND SAND COLLAR. EIGHT INCH DIAMETER OUTLET SECTION MAY BE SEPARATED FROM OUTLET STUB AT MOLDED-IN CUT LINE TO ACCOMMODATE A 12 INCH OUTLET PIPE. CONNECTION TO DOWNSTREAM PIPING TO BE MADE USING A FLEXIBLE COUPLING OR ECCENTRIC REDUCER, AS REQUIRED. COUPLING BY FERNCO OR EQUAL AND PROVIDED BY CONTRACTOR.
 - 7) PROVIDE MINIMUM CLEARANCE FOR MAINTENANCE ACCESS.
 - 8) ANTI-FLOTATION BALLAST TO BE 2" WIDE AND 6" HEIGH.
 - 9) ALL STORMFILTERS REQUIRE REGULAR MAINTENANCE. REFER TO OPERATION AND MAINTENANCE GUIDELINES FOR MORE INFORMATION.

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DETAILS

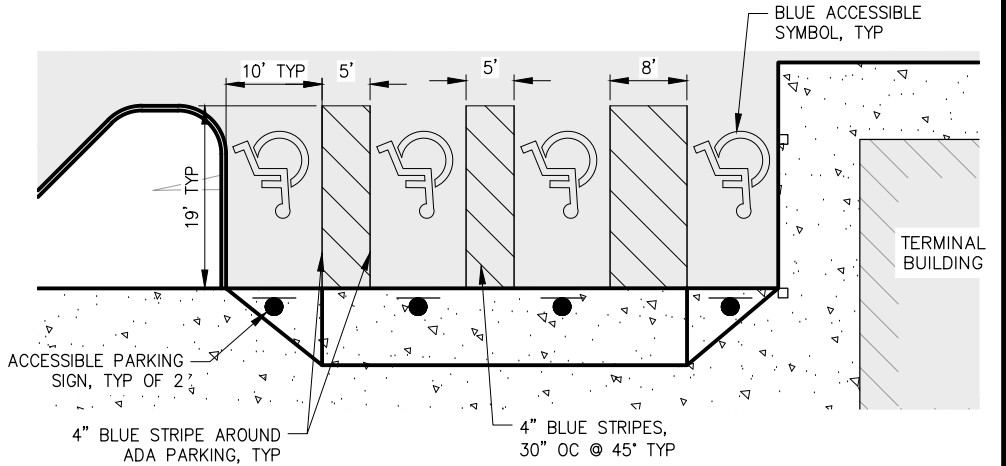
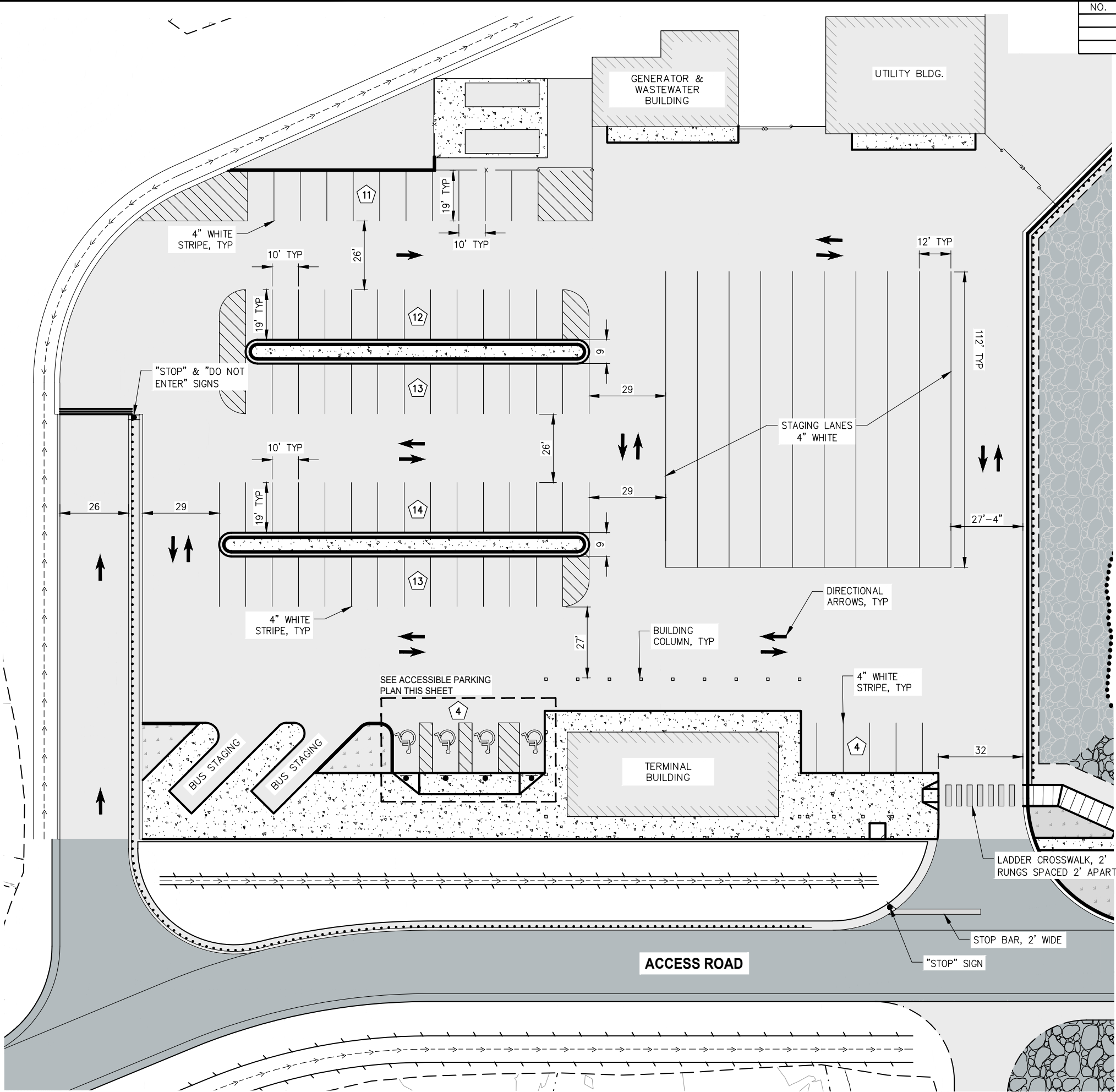
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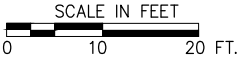
CHECKED

DESIGNED

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	1209	161

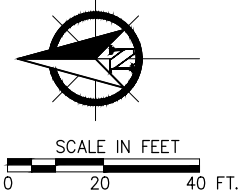


ACCESSIBLE PARKING PLAN



PARKING SUMMARY	
SIZE	QUANTITIES
10'X19' STANDARD	67 EACH
10'X19' ADA	4 EACH
STAGING LANES	1008 LF

NOTE:
= NUMBER OF PARKING STALLS PER AREA



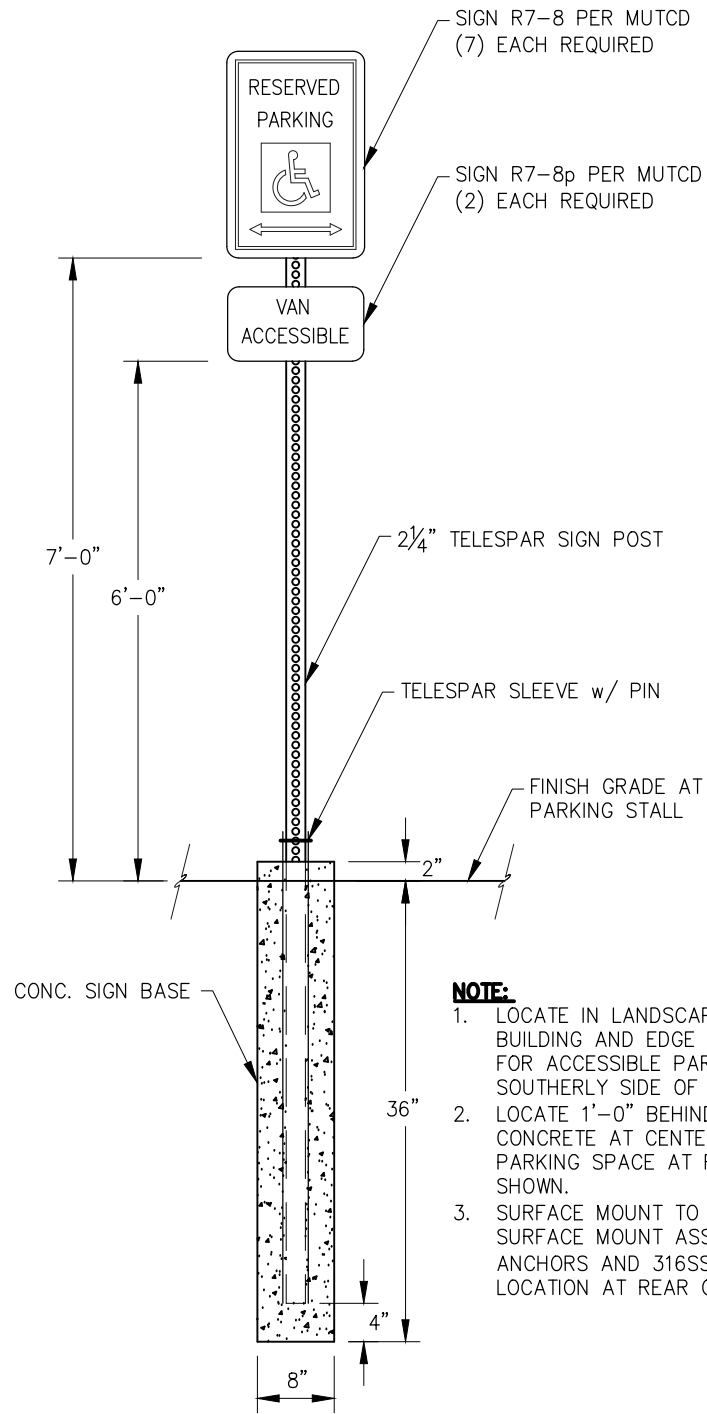
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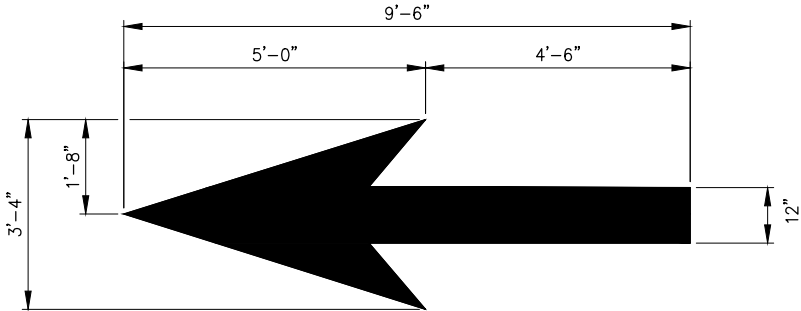
STAGING AREA SIGNING
& STRIPING PLAN



NOTE:

1. LOCATE IN LANDSCAPE BUFFER BETWEEN BUILDING AND EDGE OF CONCRETE SIDEWALK FOR ACCESSIBLE PARKING BAY ALONG SOUTHERLY SIDE OF BUILDING.
2. LOCATE 1'-0" BEHIND FACE OF SIDEWALK IN CONCRETE AT CENTERLINE OF ACCESSIBLE PARKING SPACE AT REAR OF BUILDING, AS SHOWN.
3. SURFACE MOUNT TO SIDEWALK w/ TELES PAR SURFACE MOUNT ASSEMBLY, HILTI EPOXY ANCHORS AND 316SS HARDWARE IN (1) LOCATION AT REAR OF BUILDING.

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	1210	161



THROUGH LANE-USE ARROW

NOTE:

ARROWS TO BE LOCATED AT APPROXIMATE LOCATION SHOWN ON SIGNING AND STRIPING PLAN. EXACT LOCATION TO BE DETERMINED IN FIELD AS INSTRUCTED BY ENGINEER.

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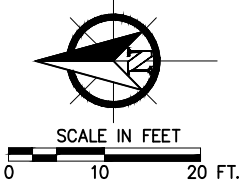
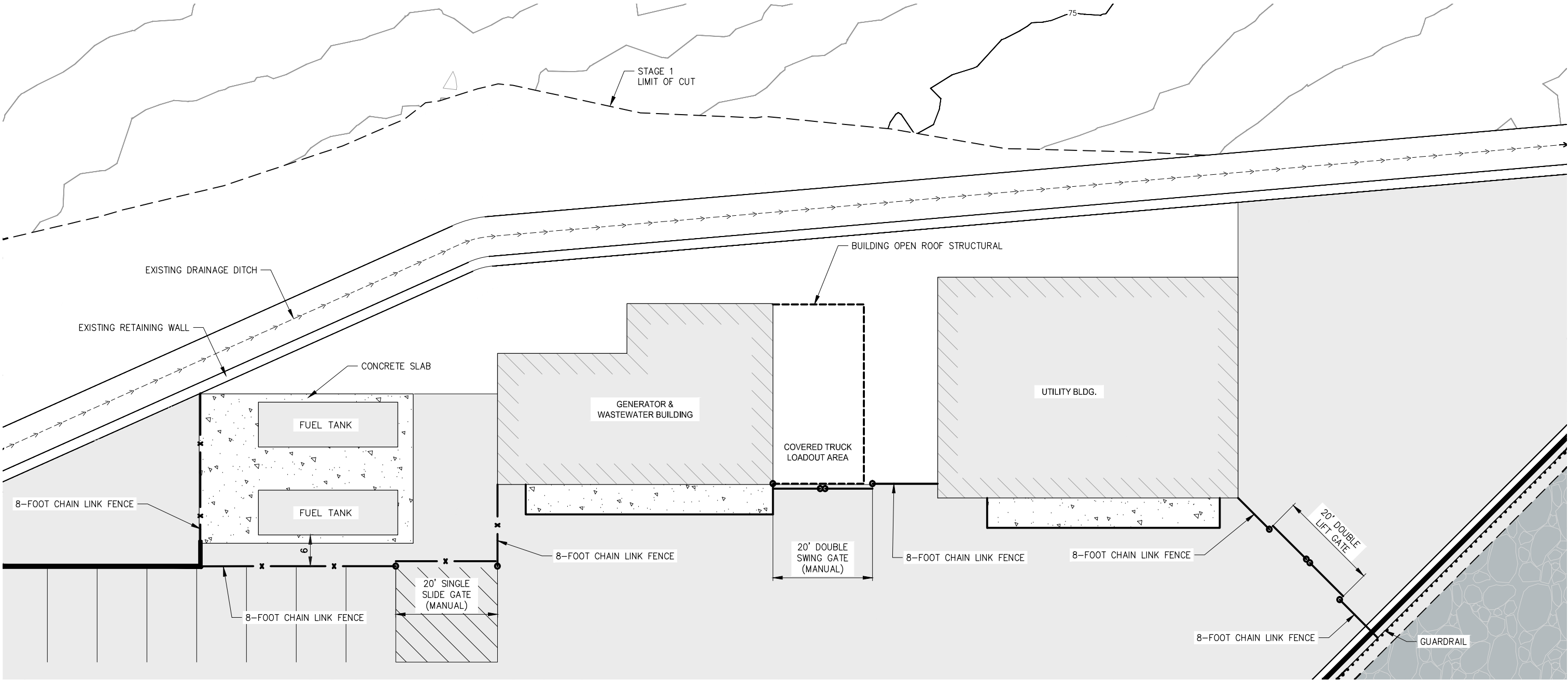


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FERRY TERMINAL**
**SIGNING & STRIPING
DETAILS**

FILE N:\23\232045 Cascade Point Ferry Terminal\G. Drawings\CIVIL\20X Staging Area Fencing Plan.dwg DATE 7/15/2025 11:27 LAYOUT 12 DESIGNED CHECKED DRAFTED

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	1211	161



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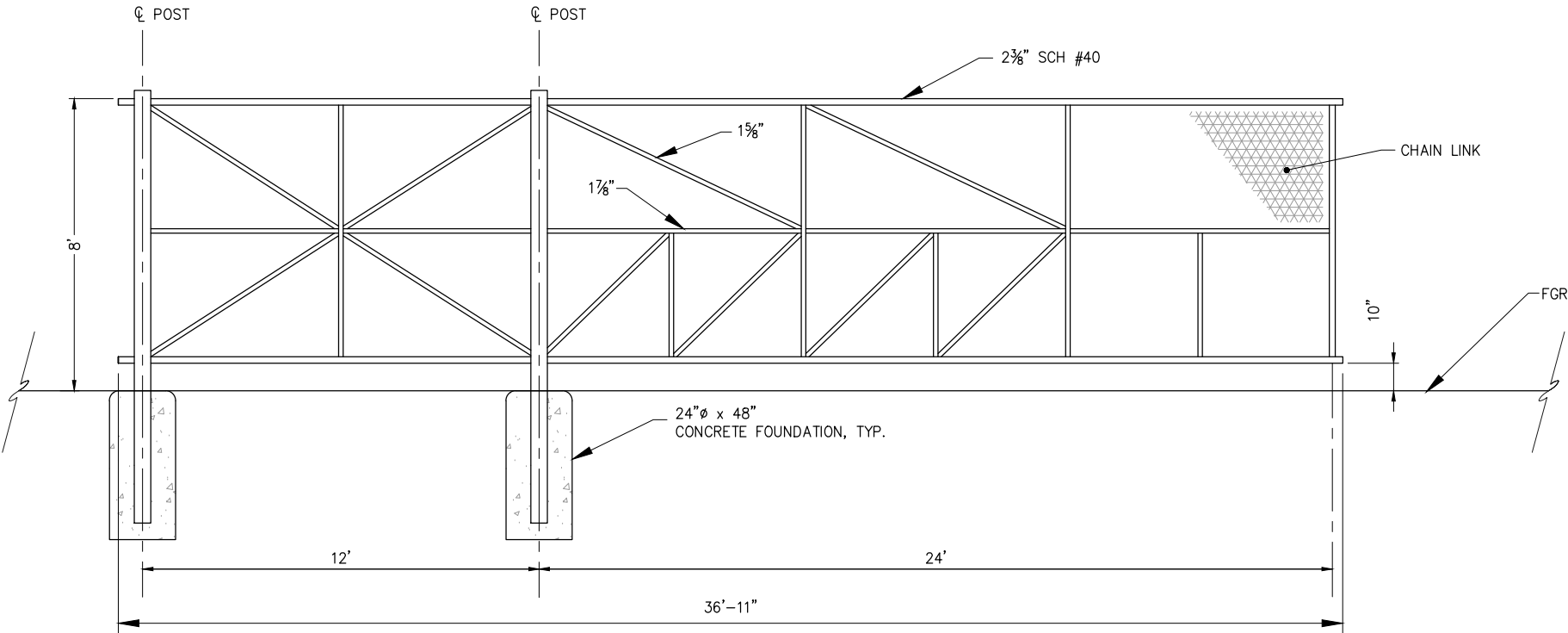
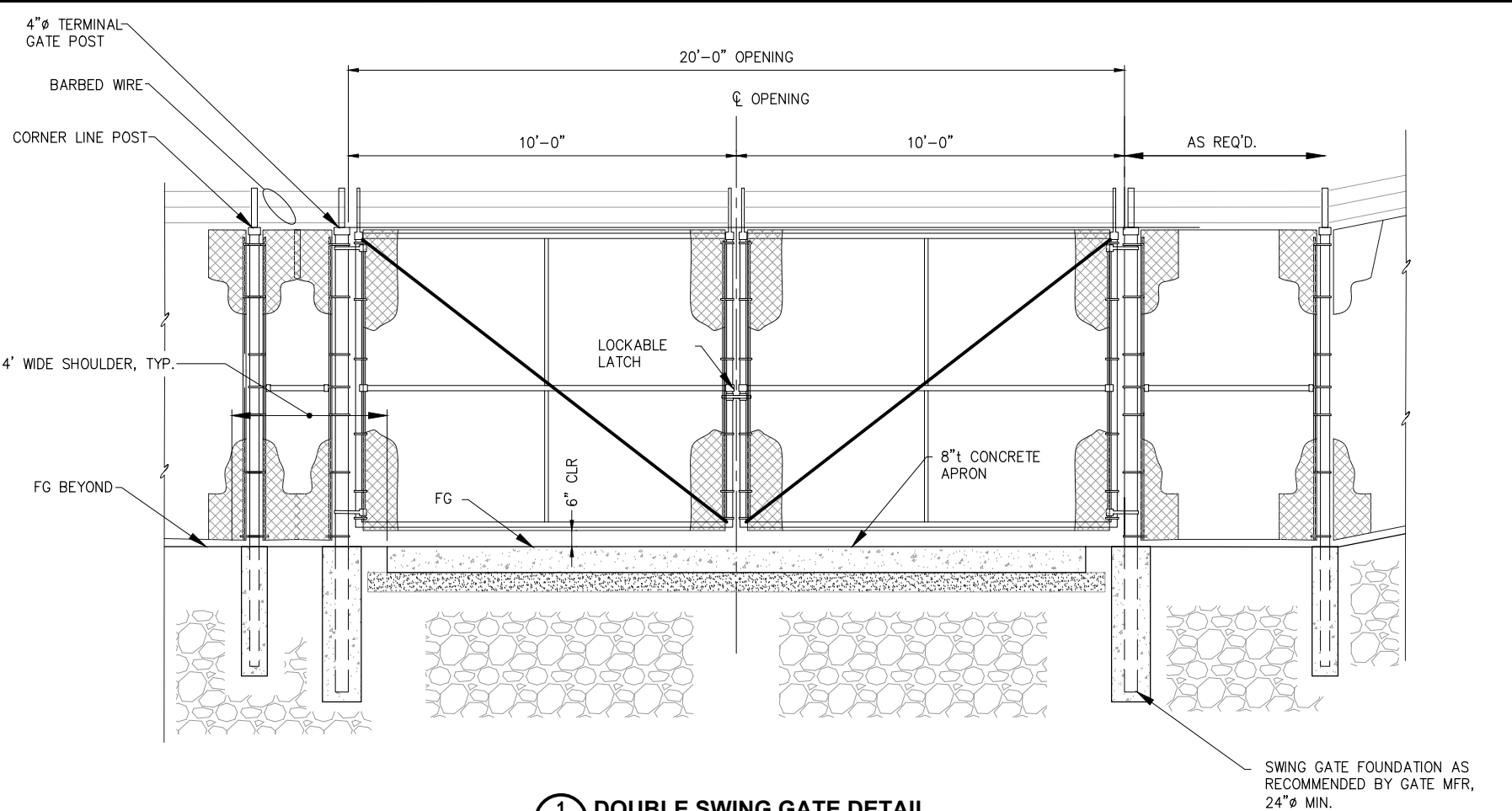
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**STAGING AREA
FENCING PLAN**

FILE N:\23xxx\232045 Cascade Point Ferry Terminal\G. Drawings\CIVIL\120X Staging Area Details.dwg DATE 7/14/2025 15:25 LAYOUT GATE DETAILS DESIGNED CHECKED DRAFTED

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	1212	161



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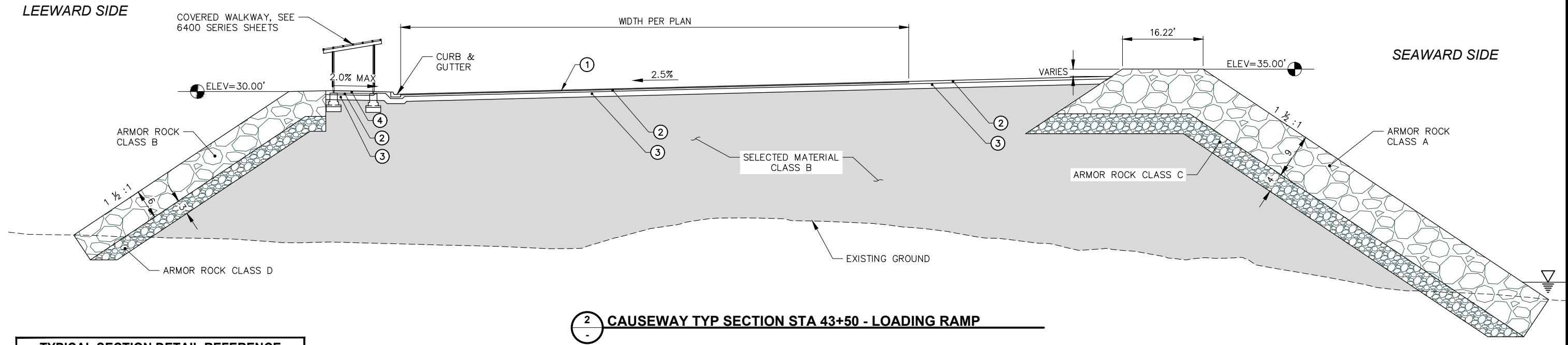
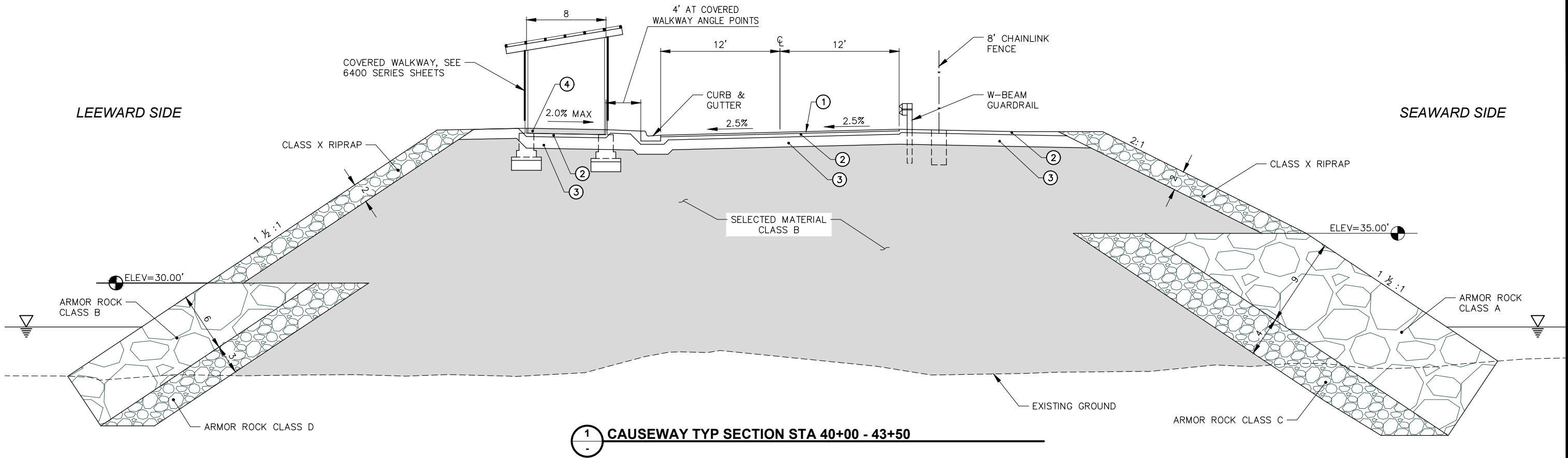
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JNU CASCADE POINT
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FENCING DETAILS

FILE N:\23xxx\232045 Cascade Point Ferry Terminal\G. Drawings\CIVIL\130x Causeway Site Sections.dwg DATE 7/15/2025 9:48 LAYOUT 12 DESIGNED CHECKED DRAFTED

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	1300	161



TYPICAL SECTION DETAIL REFERENCE	
①	2" HOT MIX ASPHALT, TYPE II; CLASS B,
②	4" AGGREGATE BASE COURSE, GRADING C-1
③	12" SUBBASE, GRADING A
④	4" CONCRETE

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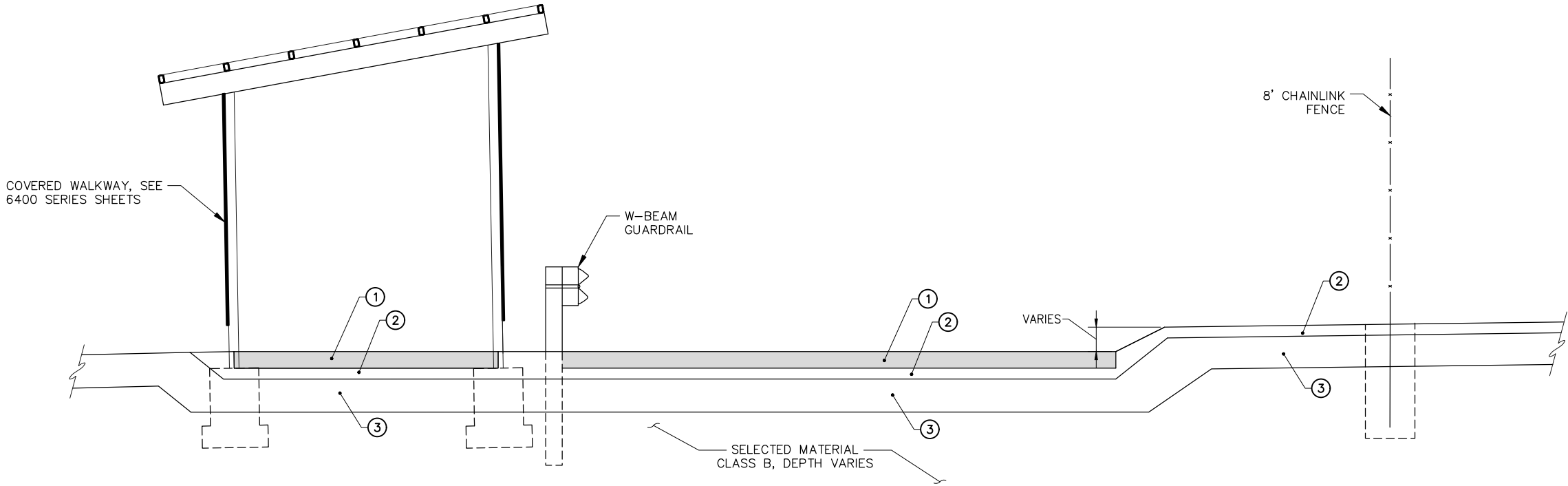
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CAUSEWAY SITE
SECTIONS

FILE N:\23xxx\232045 Cascade Point Ferry Terminal\G. Drawings\CIVIL\130x Causeway Site Sections.dwg DATE 7/15/2025 9:48 LAYOUT 12 (3) DESIGNED CHECKED DRAFTED

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	1301	161



1
-
LOADING RAMP TYPICAL SECTION

TYPICAL SECTION DETAIL REFERENCE

- 1 4" CONCRETE
- 2 4" AGGREGATE BASE COURSE, GRADING C-1
- 3 12" SUBBASE, GRADING A

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CAUSEWAY LOADING
RAMP TYPICAL
SECTION

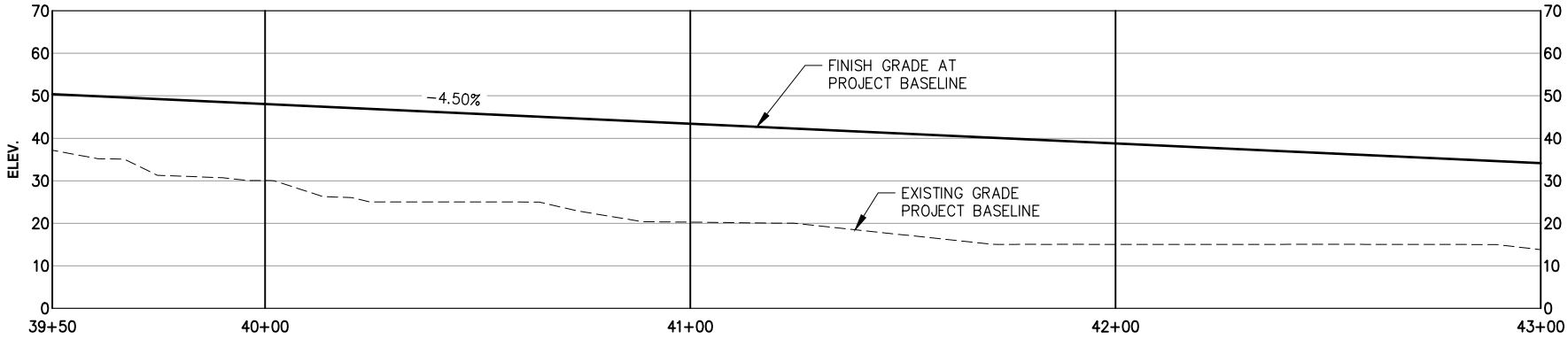
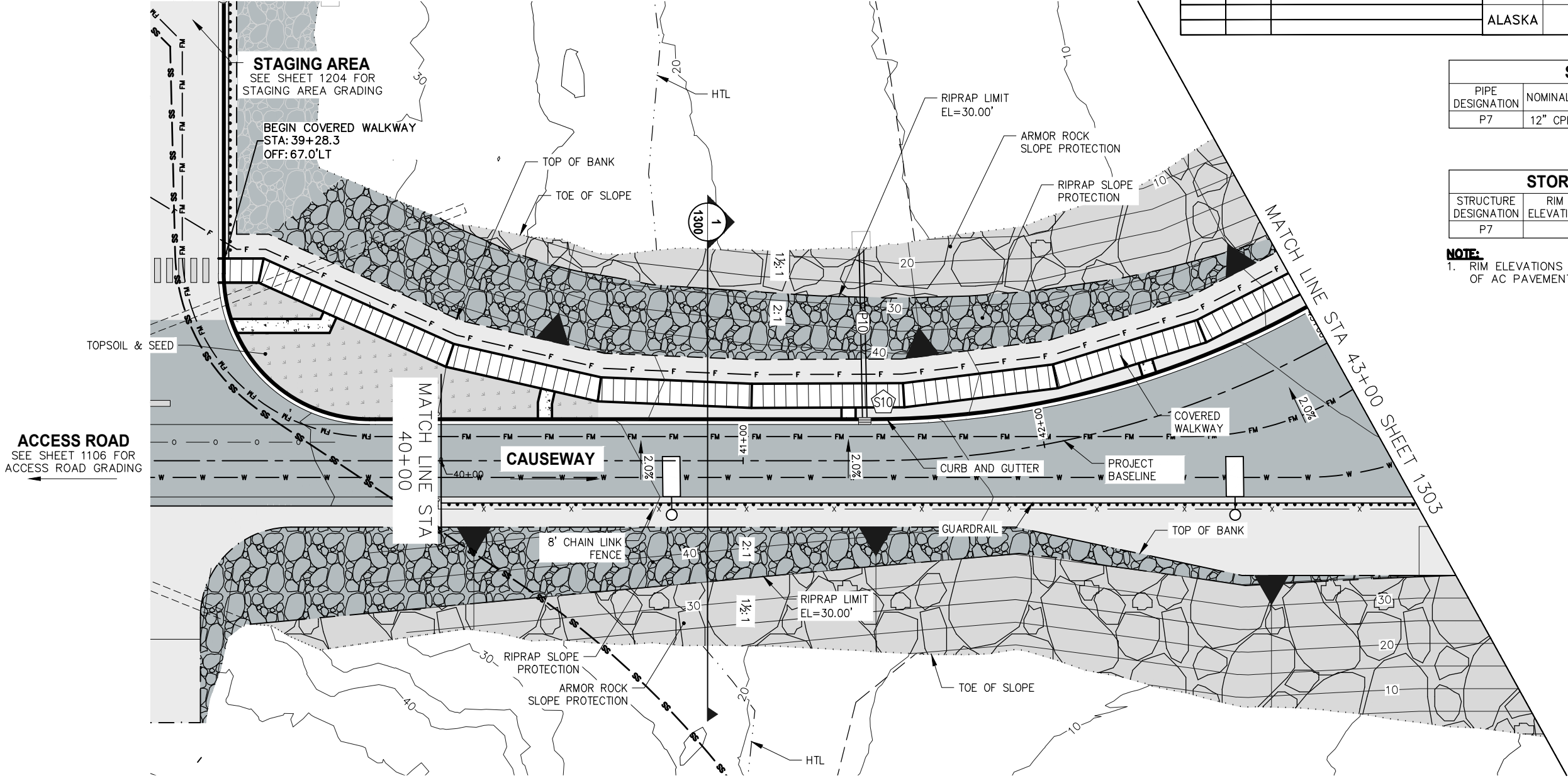
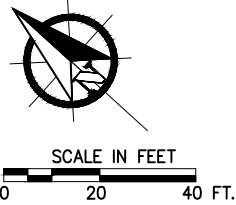
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NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	1302	161

STORM DRAIN PIPING							
PIPE DESIGNATION	NOMINAL Ø	LENGTH	FROM	IE	TO	IE	SLOPE
P7	12" CPEP	56.80	S7		OUTFALL		2.0%

STORM DRAIN STRUCTURES				
STRUCTURE DESIGNATION	RIM ELEVATION	STATION	OFFSET	TYPE
P7				SDMH TYPE I

NOTE:
1. RIM ELEVATIONS FOR CURB INLETS REFERENCE THE EDGE OF AC PAVEMENT @ THE CENTER OF THE RIM.



PLANS DEVELOPED BY:
PND ENGINEERS, INC.
9360 GLACIER HWY, STE.100
JUNEAU, AK 99801
907-586-2093
CAN: AECC250

35%
REVIEW
7/15/25

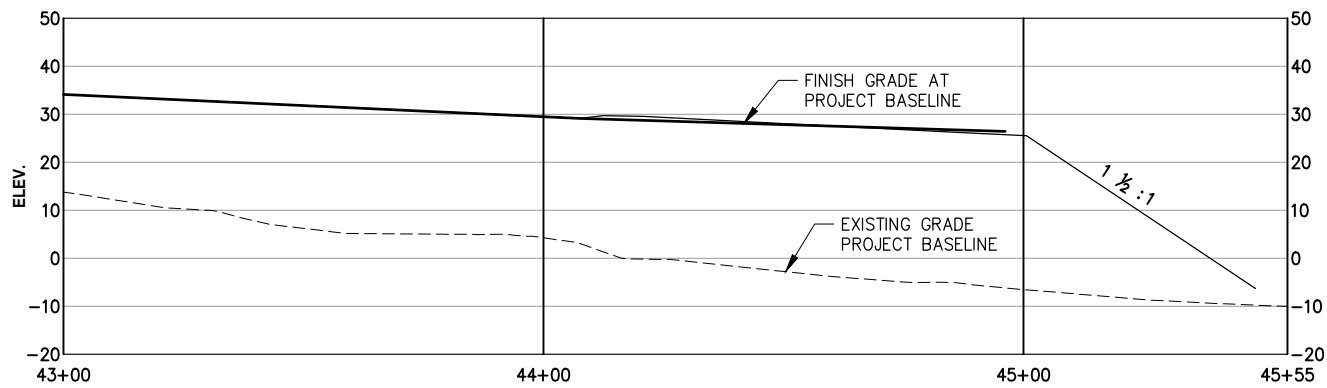
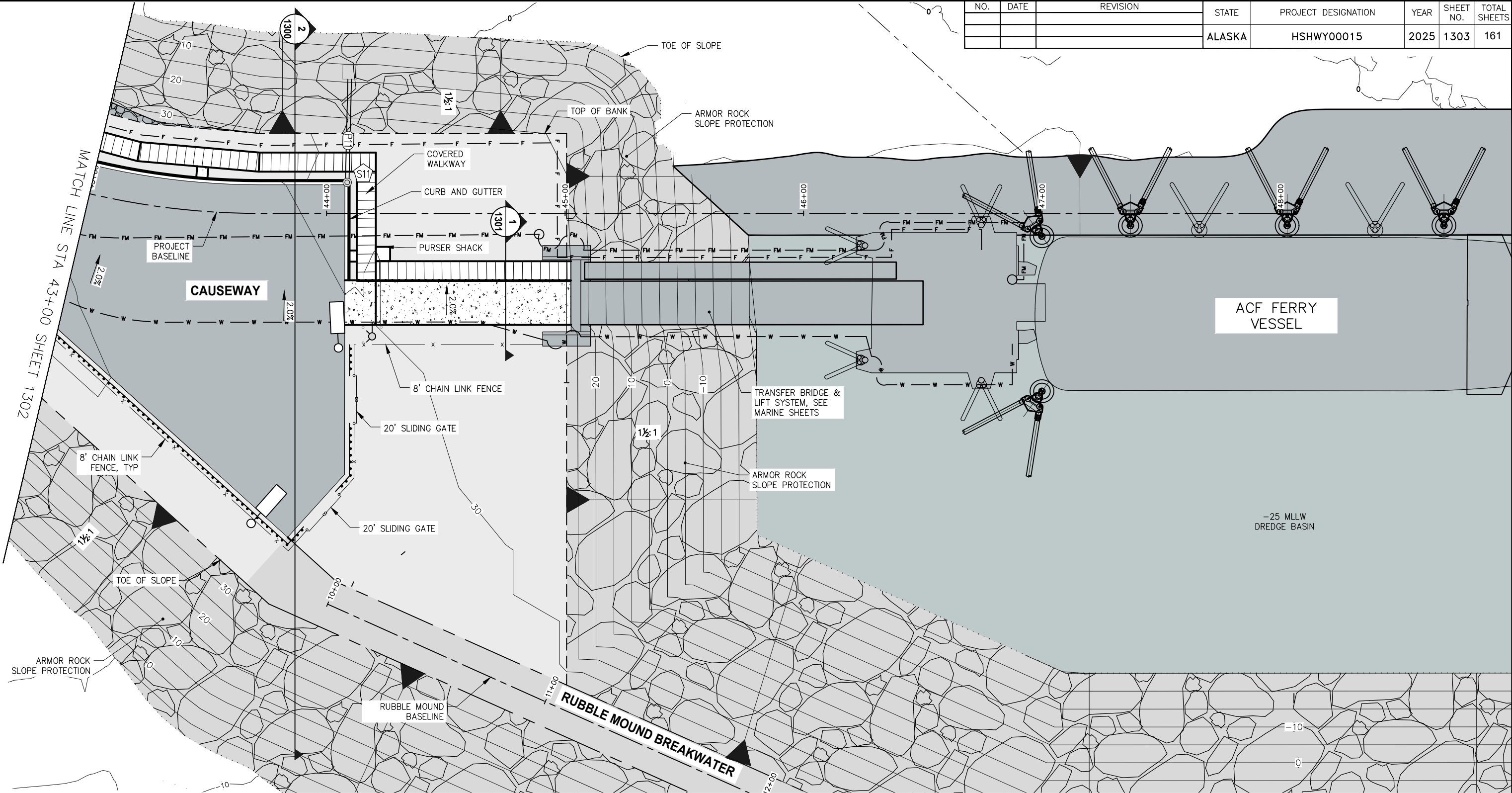
STATE OF ALASKA DEPARTMENT OF TRANSPORTATION
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6860 GLACIER HIGHWAY, JUNEAU, AK 99801
(907) 465-1763

**JNU CASCADE POINT
FERRY TERMINAL**

**CAUSEWAY PLAN &
PROFILE**

FILE N:\23xxx\232045 Cascade Point Ferry Terminal\G. Drawings\CIVIL\1300 Causeway Plan.dwg DATE 7/15/2025 9:38 LAYOUT 2 DESIGNED CHECKED DRAFTED

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	1303	161



STORM DRAIN PIPING							
PIPE DESIGNATION	NOMINAL Ø	LENGTH	FROM	IE	TO	IE	SLOPE
P8	12" CPEP	43.2	S8		OUTFALL		2.0%

STORM DRAIN STRUCTURES				
STRUCTURE DESIGNATION	RIM ELEVATION	STATION	OFFSET	TYPE
P8				SDMH TYPE I

NOTE:
1. RIM ELEVATIONS FOR CURB INLETS REFERENCE THE EDGE OF AC PAVEMENT @ THE CENTER OF THE RIM.



SCALE IN FEET
0 20 40 FT.

PLANS DEVELOPED BY:
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9360 GLACIER HWY, STE.100
JUNEAU, AK 99801
907-586-2093
CAN: AECC250

35%
REVIEW
7/15/25

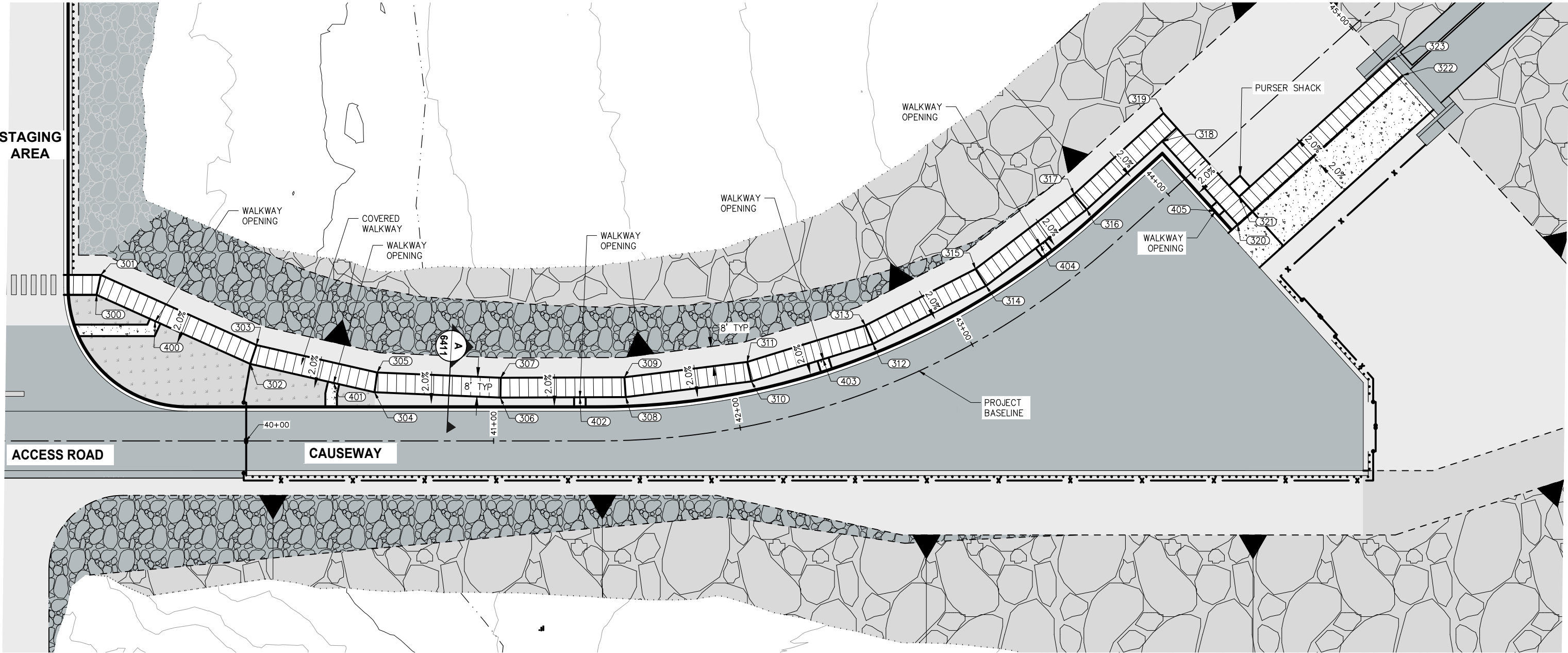
STATE OF ALASKA DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
6860 GLACIER HIGHWAY, JUNEAU, AK 99801
(907) 465-1763

**JNU CASCADE POINT
FERRY TERMINAL**

**CAUSEWAY PLAN &
PROFILE**

FILE N:\23\23045 Cascade Point Ferry Terminal\G. Drawings\CIVIL\130x Causeway Walkway Layout.dwg DATE 7/15/2025 9:55 LAYOUT 12 DESIGNED CHECKED DRAFTED

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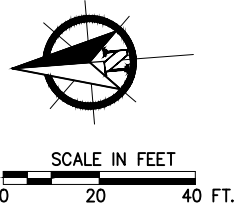
COVERED WALKWAY LAYOUT TABLE				
POINT No.	STATION	OFFSET	ELEV	DESCRIPTION
300				ANGLE POINT
301				ANGLE POINT
302				ANGLE POINT
303				ANGLE POINT
304				ANGLE POINT
305				ANGLE POINT
306				ANGLE POINT
307				ANGLE POINT

COVERED WALKWAY LAYOUT TABLE				
POINT No.	STATION	OFFSET	ELEV	DESCRIPTION
308				ANGLE POINT
309				ANGLE POINT
310				ANGLE POINT
311				ANGLE POINT
312				ANGLE POINT
313				ANGLE POINT
314				ANGLE POINT
315				ANGLE POINT

COVERED WALKWAY LAYOUT TABLE				
POINT No.	STATION	OFFSET	ELEV	DESCRIPTION
316				ANGLE POINT
317				ANGLE POINT
318				ANGLE POINT
319				ANGLE POINT
320				ANGLE POINT
321				ANGLE POINT
322				ANGLE POINT
323				ANGLE POINT

COVERED WALKWAY LAYOUT TABLE				
POINT No.	STATION	OFFSET	ELEV	DESCRIPTION
400				OPENING
401				OPENING
402				OPENING
403				OPENING
404				OPENING
405				OPENING

NOTE:
1. SEE SHEETS 6400-6411 FOR COVERED WALKWAY DETAILS.



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**JNU CASCADE POINT
FERRY TERMINAL**

WALKWAY LAYOUT PLAN

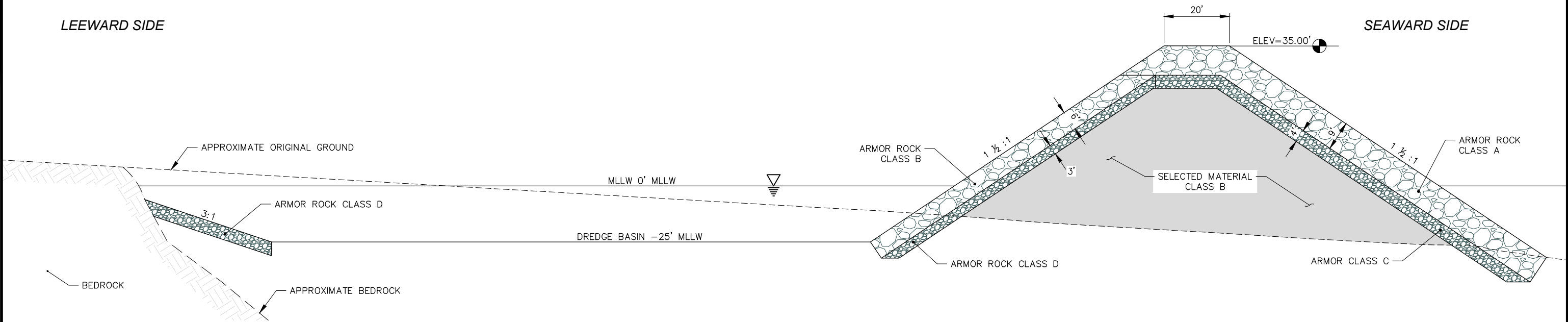
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DRAFTED

CHECKED

DESIGNED

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	1305	161



1 DREDGE BASIN & RUBBLE MOUND BREAKWATER TYPICAL SECTION

PLANS DEVELOPED BY:
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9360 GLACIER HWY., STE. 100
JUNEAU, AK 99801
907-586-2093
CAN:AECC250

**35%
REVIEW**
7/15/25

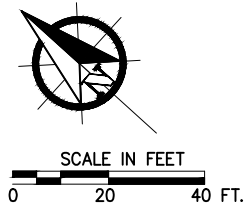
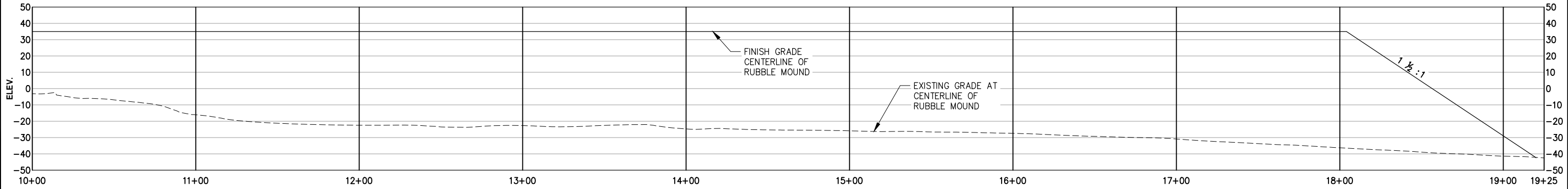
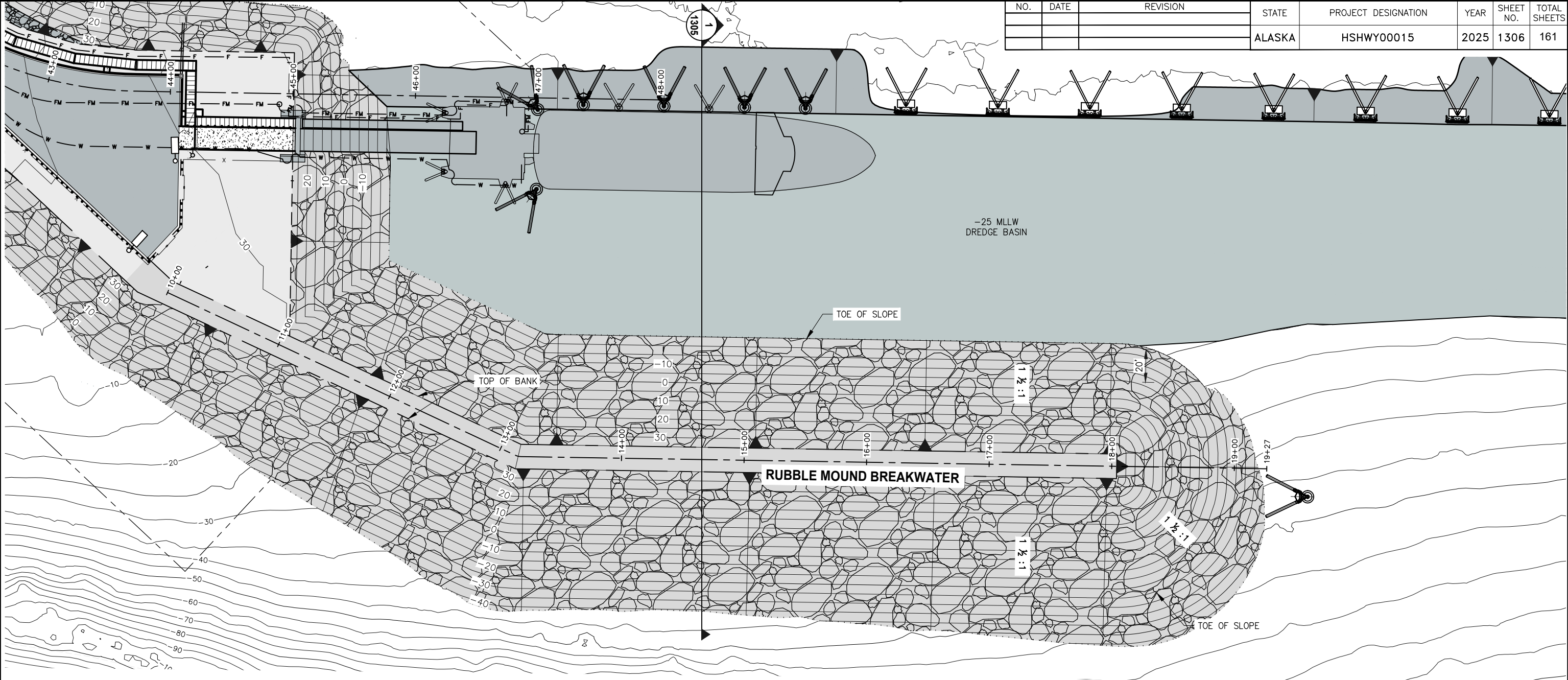
STATE OF ALASKA DEPARTMENT OF TRANSPORTATION
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6860 GLACIER HIGHWAY, JUNEAU, AK 99801
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**JNU CASCADE POINT
FERRY TERMINAL**

**RUBBLE MOUND
TYPICAL SECTION**

FILE N:\23xxx\232045 Cascade Point Ferry Terminal\G. Drawings\CIVIL\1300 Causeway Plan.dwg DATE 7/15/2025 9:38 LAYOUT 3 DESIGNED CHECKED DRAFTED

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	1306	161



PLANS DEVELOPED BY:
PND ENGINEERS, INC.
9360 GLACIER HWY, STE.100
JUNEAU, AK 99801
907-586-2093
CAN: AECC250

**35%
REVIEW**
7/15/25

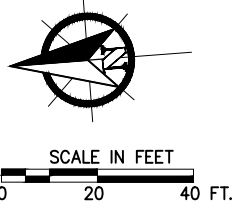
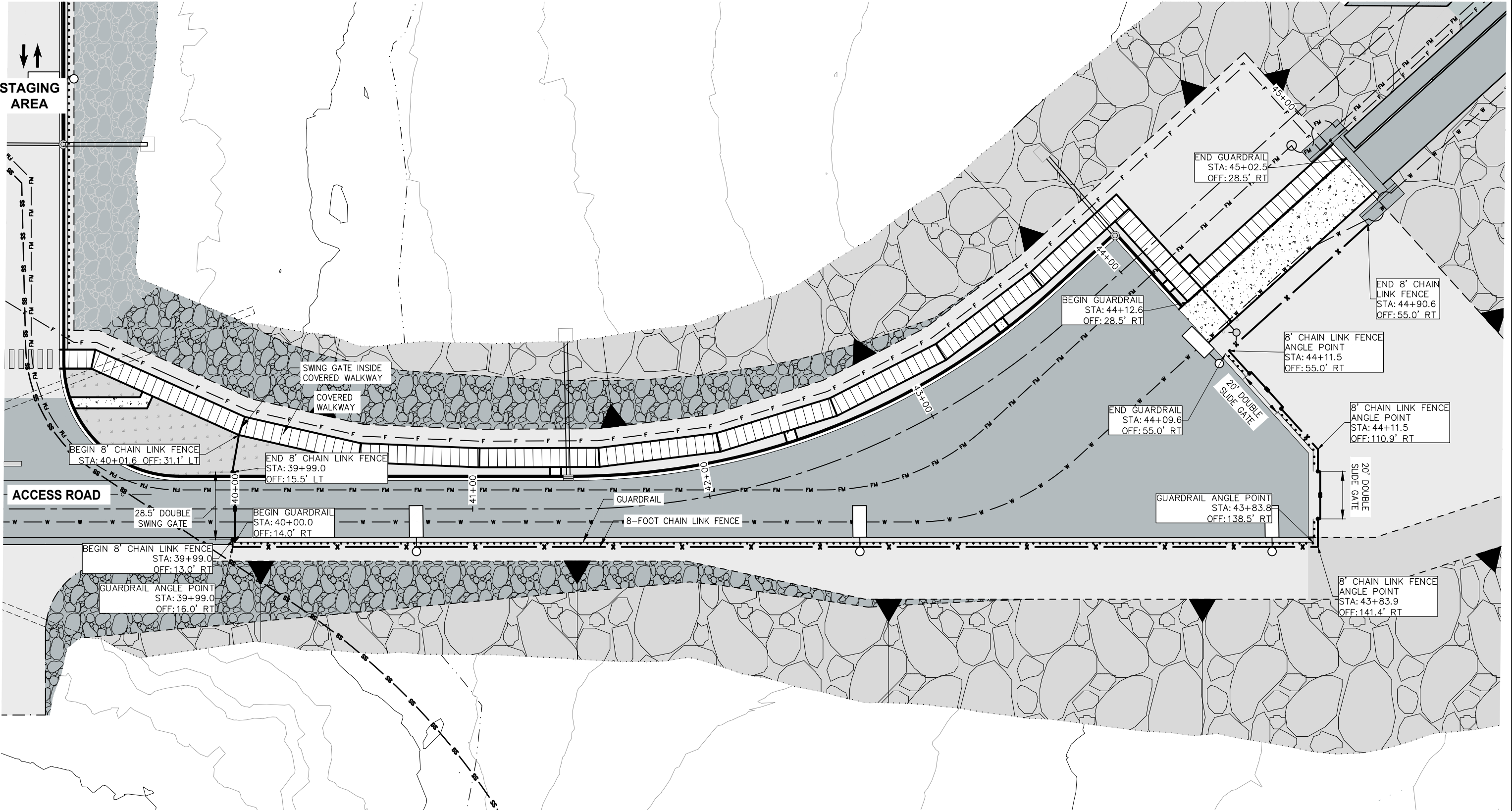
STATE OF ALASKA DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
6860 GLACIER HIGHWAY, JUNEAU, AK 99801
(907) 465-1763

**JNU CASCADE POINT
FERRY TERMINAL**

**RUBBLE MOUND PLAN
& PROFILE**

FILE N:\23xxx\232045 Cascade Point Ferry Terminal\G. Drawings\CIVIL\130X Causeway Fencing Plan.dwg DATE 7/15/2025 9:53 LAYOUT 12 DESIGNED CHECKED DRAFTED

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	1307	161



PLANS DEVELOPED BY:
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CAN: AECC250

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**JNU CASCADE POINT
FERRY TERMINAL**

**CAUSEWAY FENCING &
GUARDRAIL PLAN**

FILE N:\23xxx\232045 Cascade Point Ferry Terminal\G. Drawings\CIVIL\120X Staging Area Utility Plan.dwg DATE 7/15/2025 10:01 LAYOUT 12 DESIGNED CHECKED DRAFTED

LEGEND

SS

SS

GRAVITY SEWER

FM

FM

FORCE MAIN SEWER

STORM DRAIN/CULVERT

SD

SD

STORM DRAIN

W

W

POTABLE/FIRE WATER

RW

RW

RAW WATER

NPW

NPW

NON POTABLE WATER

O

O

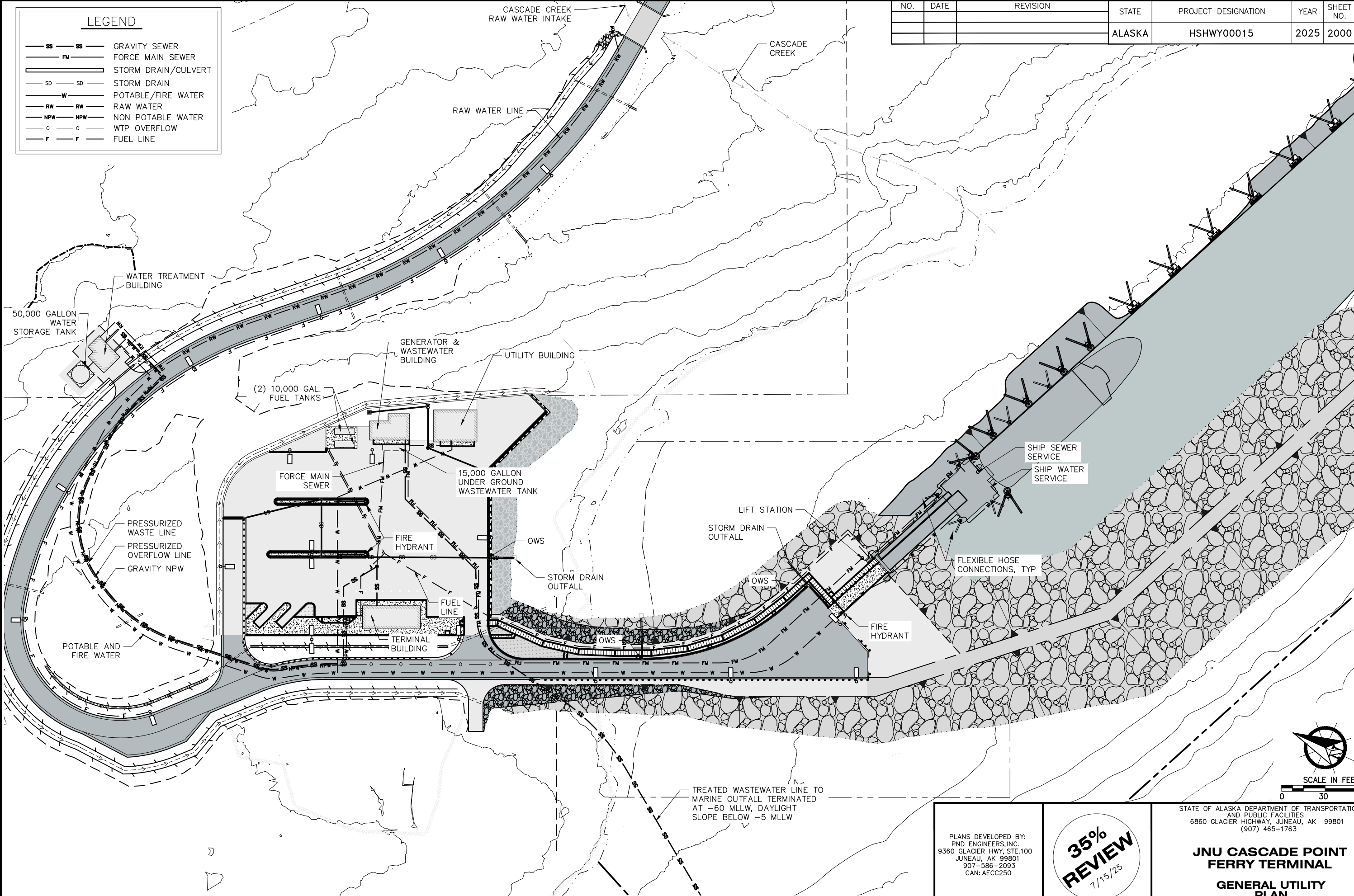
WTP OVERFLOW

F

F

FUEL LINE

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	2000	161



PLANS DEVELOPED BY:
PND ENGINEERS, INC.
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CAN: AECC250

35%
REVIEW
7/15/25

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(907) 465-1763

**JNU CASCADE POINT
FERRY TERMINAL**

**GENERAL UTILITY
PLAN**

FILE N:\23xxx\232045 Cascade Point Ferry Terminal\G. Drawings\CIVIL\2100 Utility Sheet Layout Schematic.dwg DATE 7/15/2025 10:12 LAYOUT 12 DESIGNED CHECKED DRAFTED

LEGEND

SS

SS

GRAVITY SEWER

FM

FM

FORCE MAIN SEWER

STORM DRAIN/CULVERT

SD

SD

STORM DRAIN

W

W

POTABLE/FIRE WATER

RW

RW

RAW WATER

NPW

NPW

NON POTABLE WATER

O

O

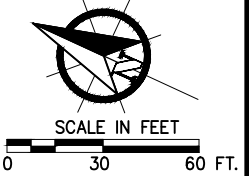
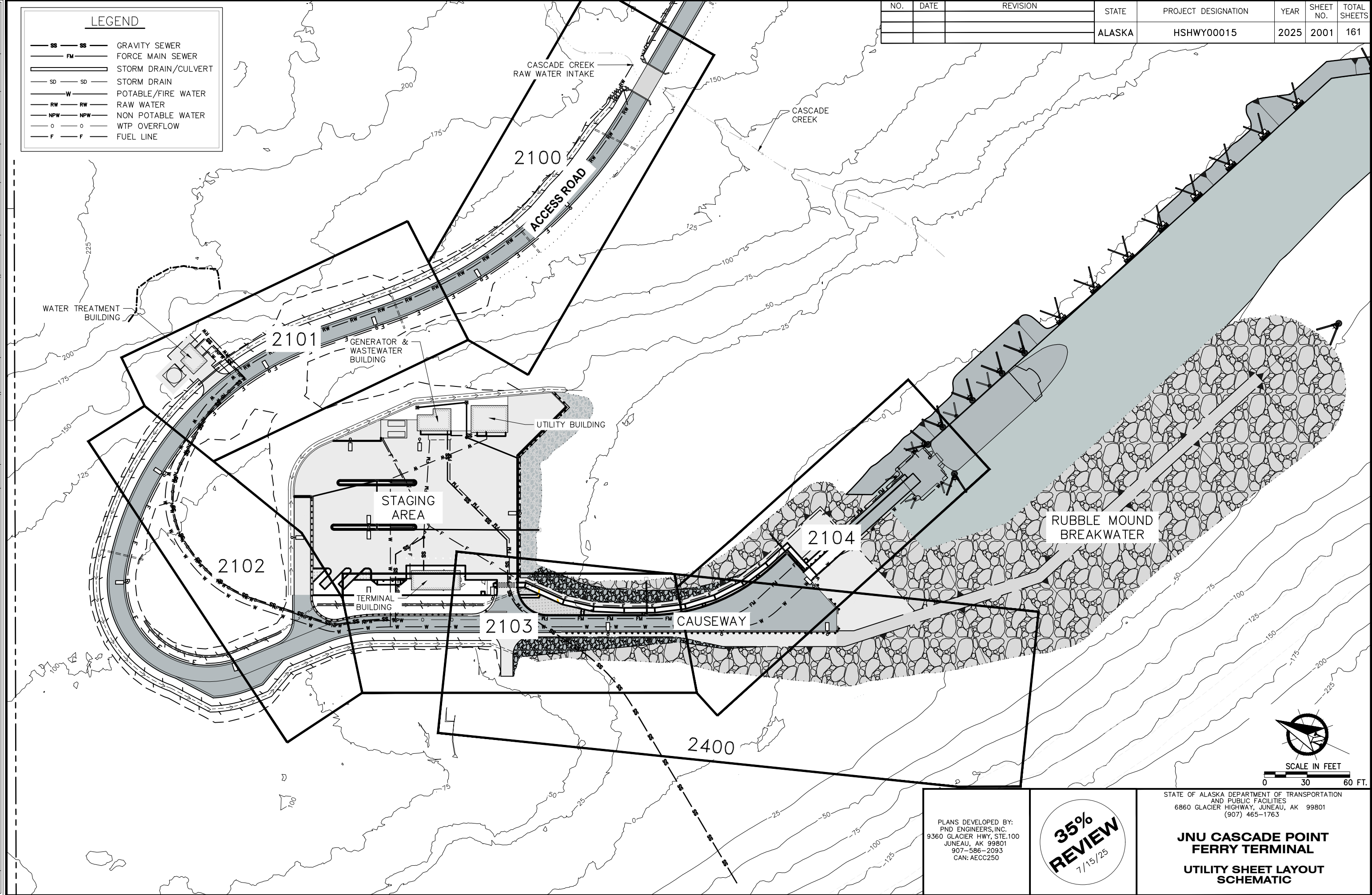
WTP OVERFLOW

F

F

FUEL LINE

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	2001	161



PLANS DEVELOPED BY:
PND ENGINEERS, INC.
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907-586-2093
CAN: AECC250

35%
REVIEW
7/15/25

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6860 GLACIER HIGHWAY, JUNEAU, AK 99801
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**JNU CASCADE POINT
FERRY TERMINAL**

**UTILITY SHEET LAYOUT
SCHEMATIC**

FILE N:\23xxx\232045 Cascade Point Ferry Terminal\G. Drawings\CIVIL\210X Water Plan and Profile.dwg DATE 7/15/2025 10:11 LAYOUT PP 1 DESIGNED CHECKED DRAFTED

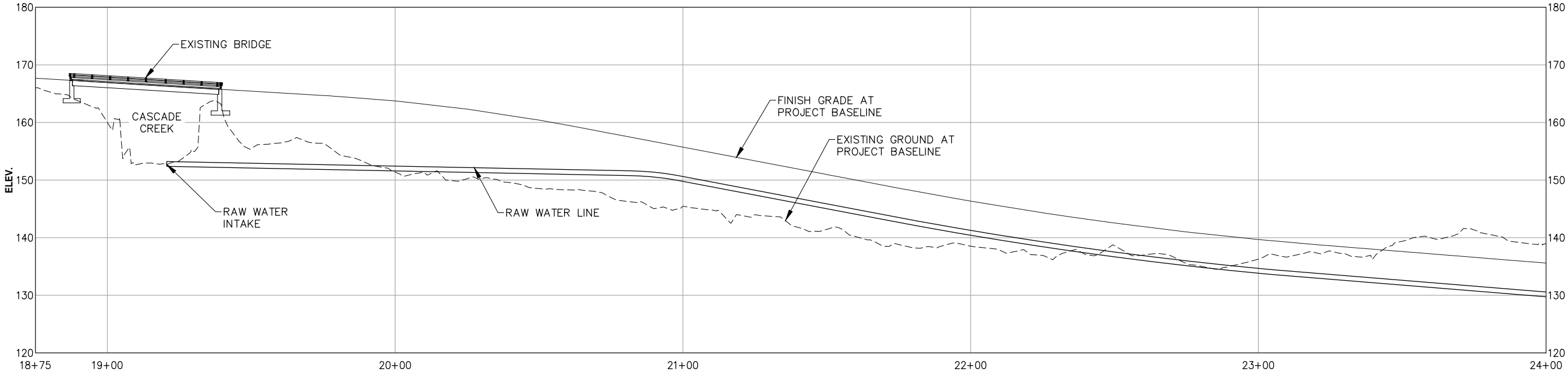
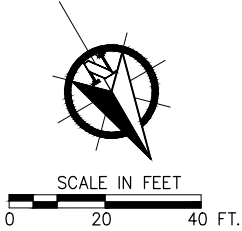
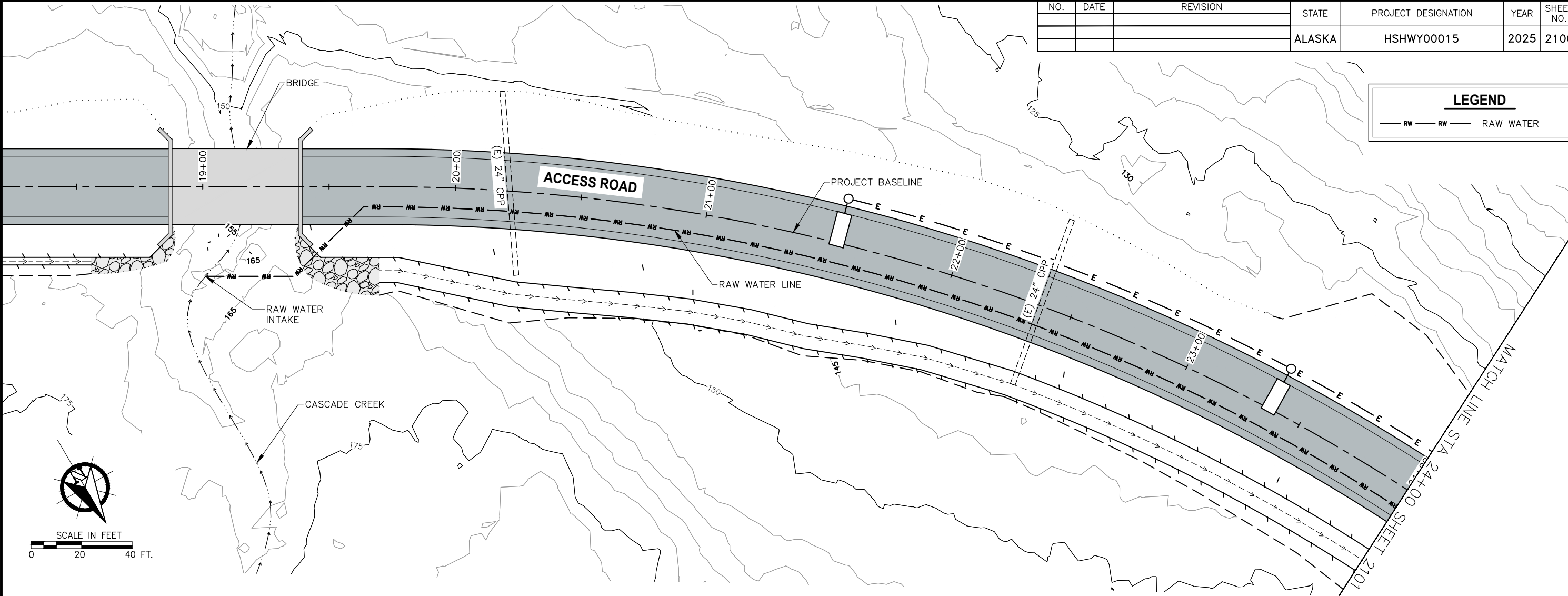
NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	2100	161

LEGEND

RW

RW

RAW WATER



PLANS DEVELOPED BY:
PND ENGINEERS, INC.
9360 GLACIER HWY, STE.100
JUNEAU, AK 99801
907-586-2093
CAN: AECC250

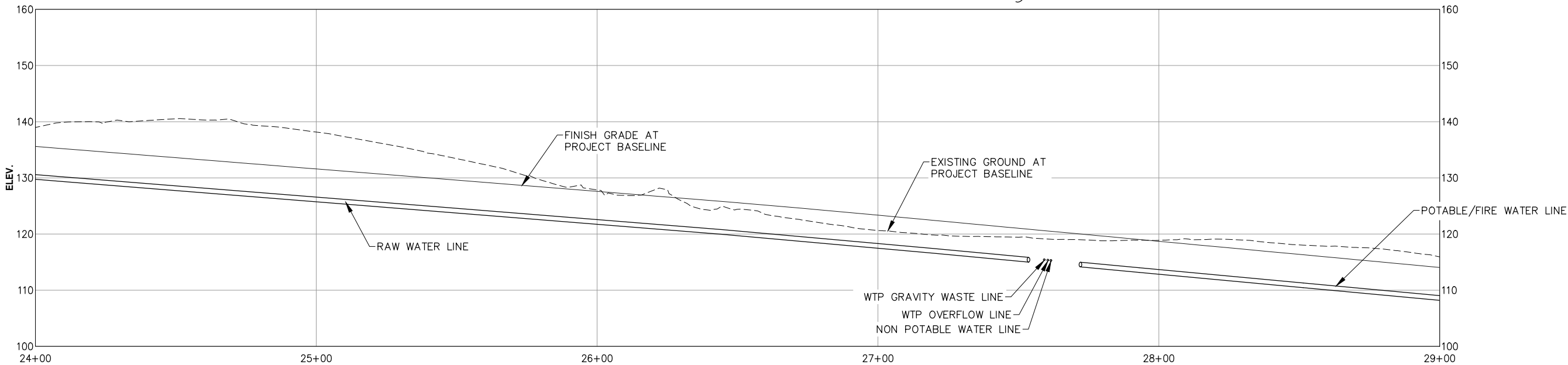
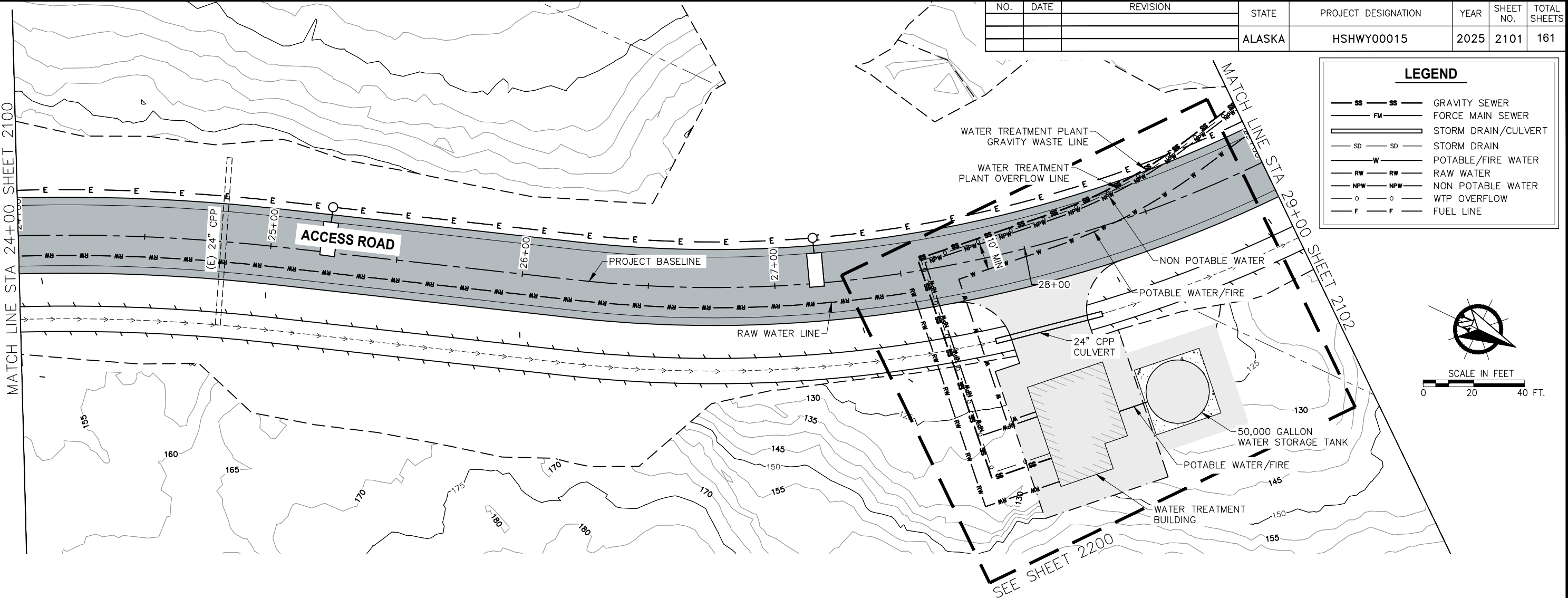
35%
REVIEW
7/15/25

STATE OF ALASKA DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
6860 GLACIER HIGHWAY, JUNEAU, AK 99801
(907) 465-1763

JNU CASCADE POINT
FERRY TERMINAL

UTILITY PLAN & PROFILE

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	2101	161



PLANS DEVELOPED BY:
PND ENGINEERS, INC.
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CAN: AECC250

**35%
REVIEW**
7/15/25

STATE OF ALASKA DEPARTMENT OF TRANSPORTATION
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**JNU CASCADE POINT
FERRY TERMINAL**
UTILITY PLAN & PROFILE

FILE N:\23xxx\232045 Cascade Point Ferry Terminal\G. Drawings\CIVIL\210X Water Plan and Profile.dwg DATE 7/15/2025 10:11 LAYOUT PP 3 DESIGNED CHECKED DRAFTED

LEGEND

SS

SS

GRAVITY SEWER

FM

FM

FORCE MAIN SEWER

STORM DRAIN/CULVERT

SD

SD

STORM DRAIN

W

W

POTABLE/FIRE WATER

RW

RW

RAW WATER

NPW

NPW

NON POTABLE WATER

O

O

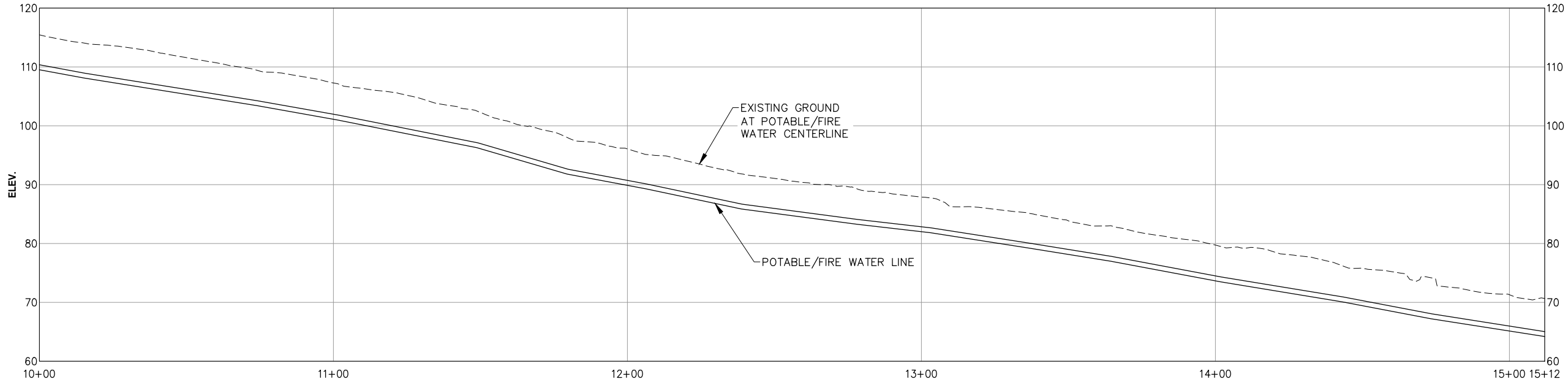
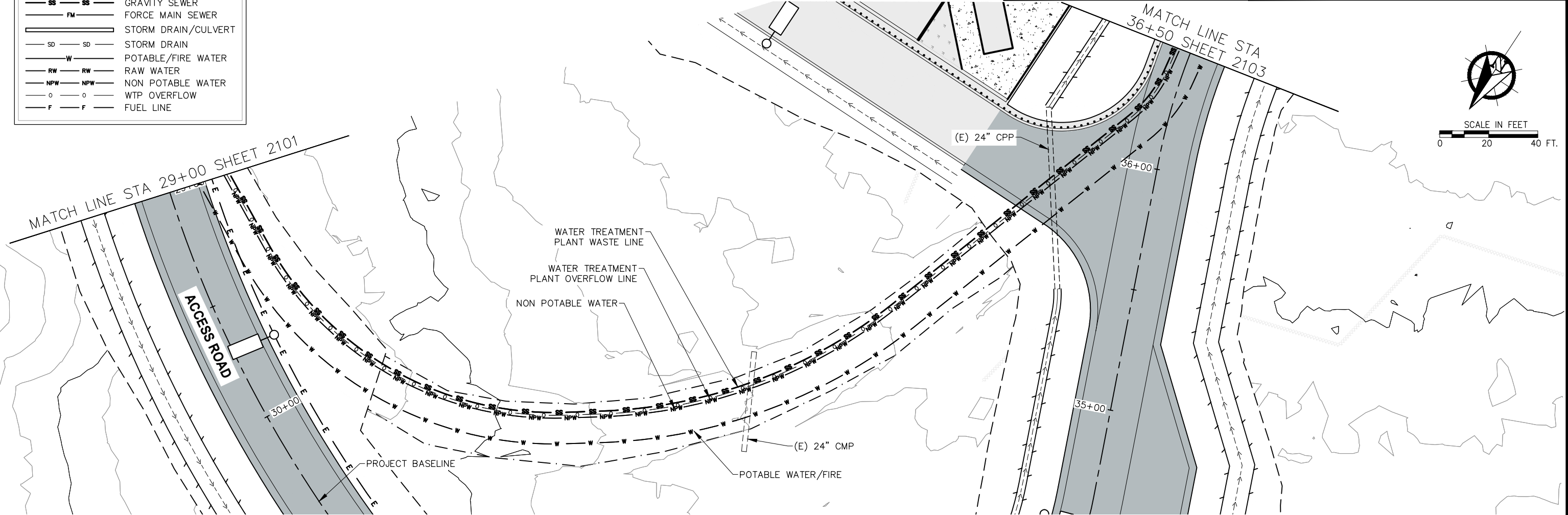
WTP OVERFLOW

F

F

FUEL LINE

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	2102	161



PLANS DEVELOPED BY:
PND ENGINEERS, INC.
9360 GLACIER HWY, STE.100
JUNEAU, AK 99801
907-586-2093
CAN: AECC250

35%
REVIEW
7/15/25

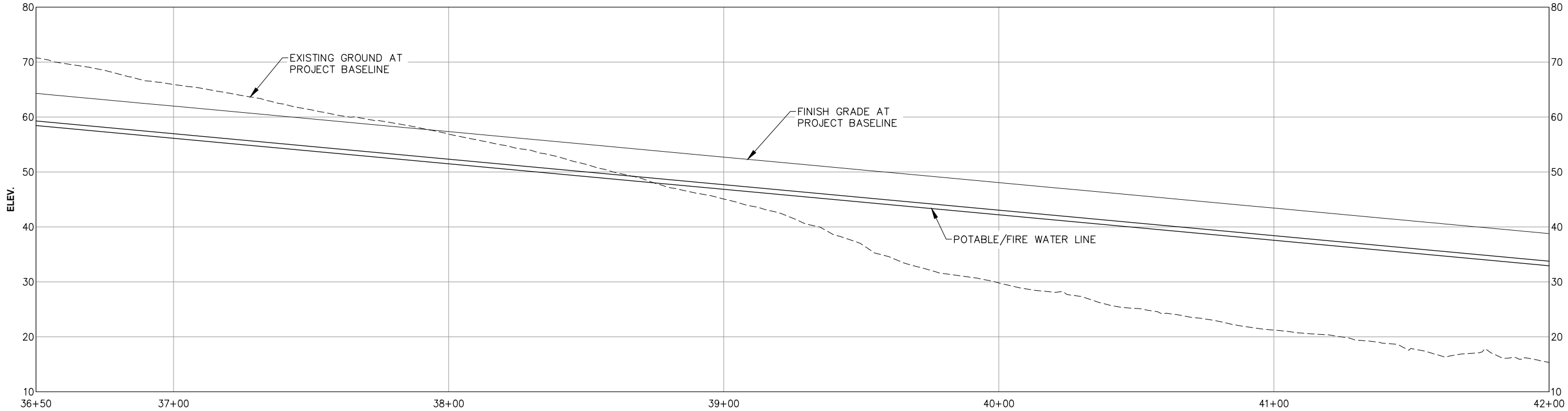
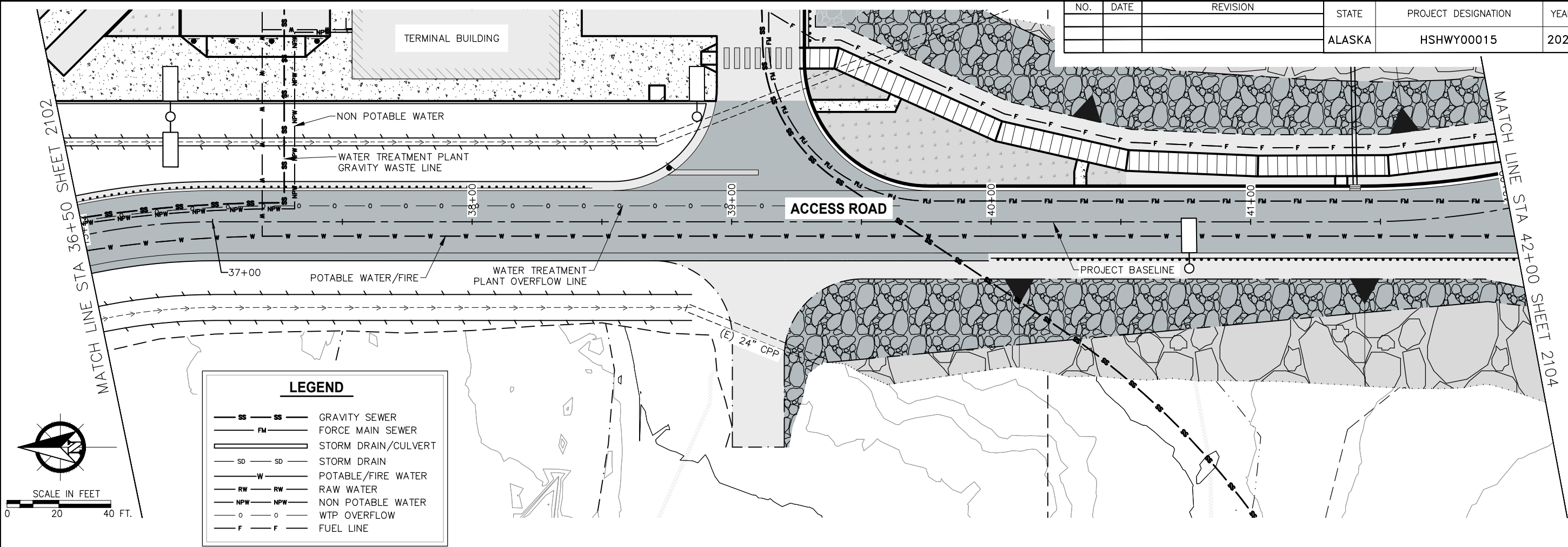
STATE OF ALASKA DEPARTMENT OF TRANSPORTATION
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6860 GLACIER HIGHWAY, JUNEAU, AK 99801
(907) 465-1763

JNU CASCADE POINT
FERRY TERMINAL

UTILITY PLAN & PROFILE

FILE N:\23xxx\232045 Cascade Point Ferry Terminal\G. Drawings\CIVIL\210X Water Plan and Profile.dwg DATE 7/15/2025 10:11 LAYOUT PP 4 DESIGNED CHECKED DRAFTED

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	2103	161



PLANS DEVELOPED BY:
PND ENGINEERS, INC.
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JUNEAU, AK 99801
907-586-2093
CAN: AECC250

35%
REVIEW
7/15/25

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**JNU CASCADE POINT
FERRY TERMINAL**

**UTILITY PLAN &
PROFILE**

FILE N:\23xxx\232045 Cascade Point Ferry Terminal\G. Drawings\CIVIL\210X Water Plan and Profile.dwg DATE 7/15/2025 10:11 LAYOUT PP 6 DESIGNED CHECKED DRAFTED

LEGEND

FM

FORCE MAIN SEWER

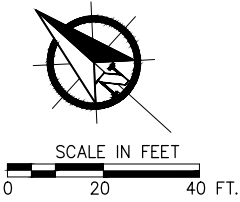
STORM DRAIN/CULVERT

W

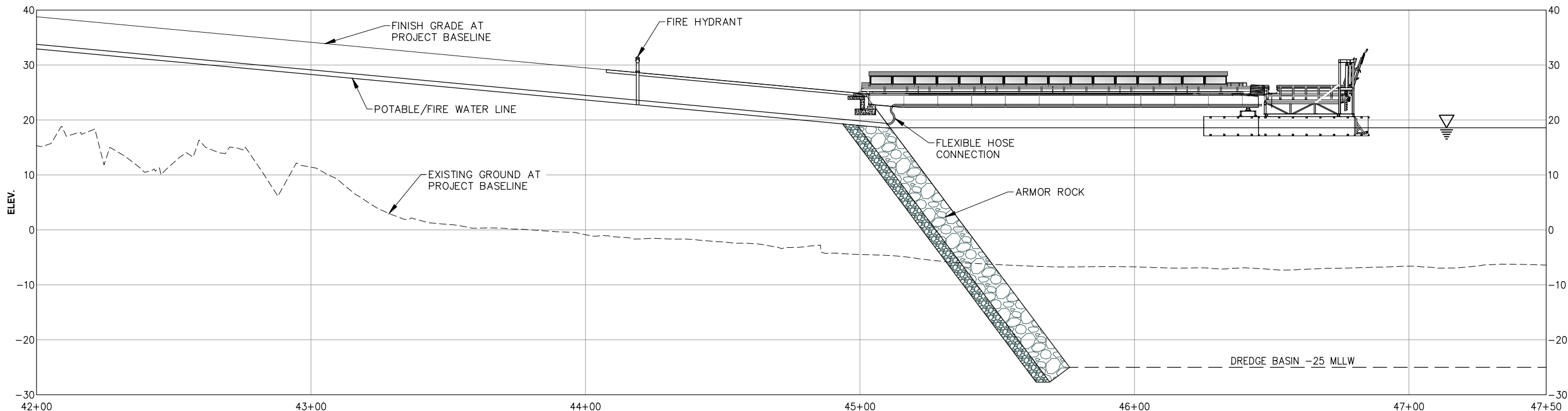
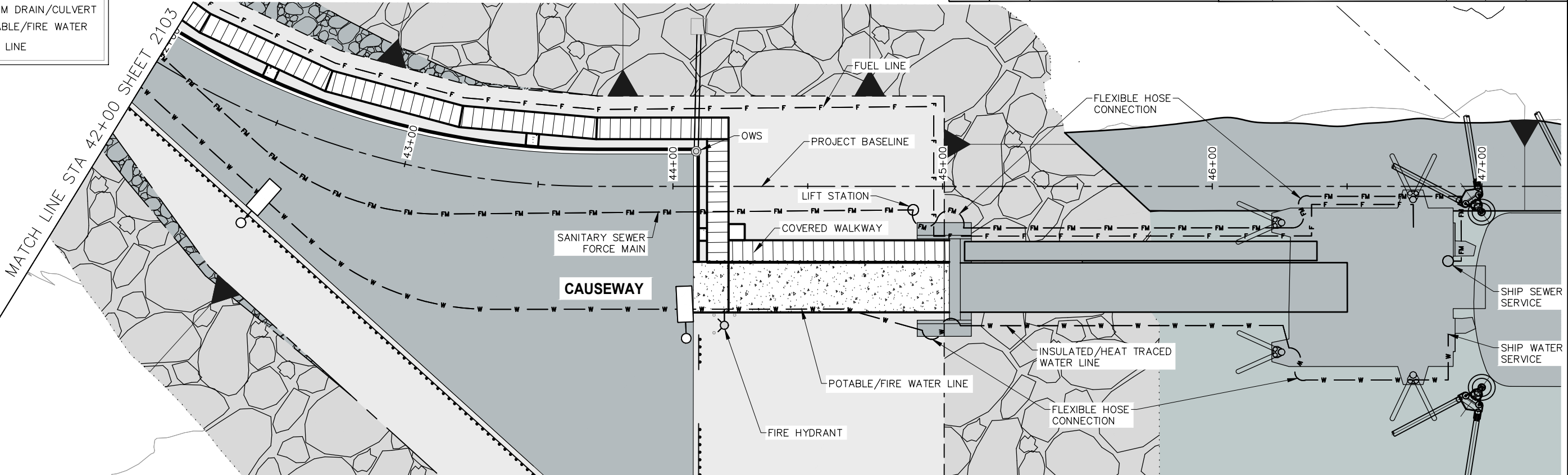
POTABLE/FIRE WATER

F

FUEL LINE



NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	2104	161



PLANS DEVELOPED BY:
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907-586-2093
CAN: AECC250

35%
REVIEW
7/15/25

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JNU CASCADE POINT
FERRY TERMINAL

UTILITY PLAN & PROFILE

FILE N:\23xxx\232045 Cascade Point Ferry Terminal\G. Drawings\CIVIL\150X Water Treatment BLDG Site Plan.dwg DATE 7/14/2025 11:51 LAYOUT 12 DESIGNED CHECKED DRAFTED

LEGEND

SS

SS

GRAVITY SEWER

FM

FM

FORCE MAIN SEWER

STORM DRAIN/CULVERT

SD

SD

STORM DRAIN

W

W

POTABLE/FIRE WATER

RW

RW

RAW WATER

NPW

NPW

NON POTABLE WATER

O

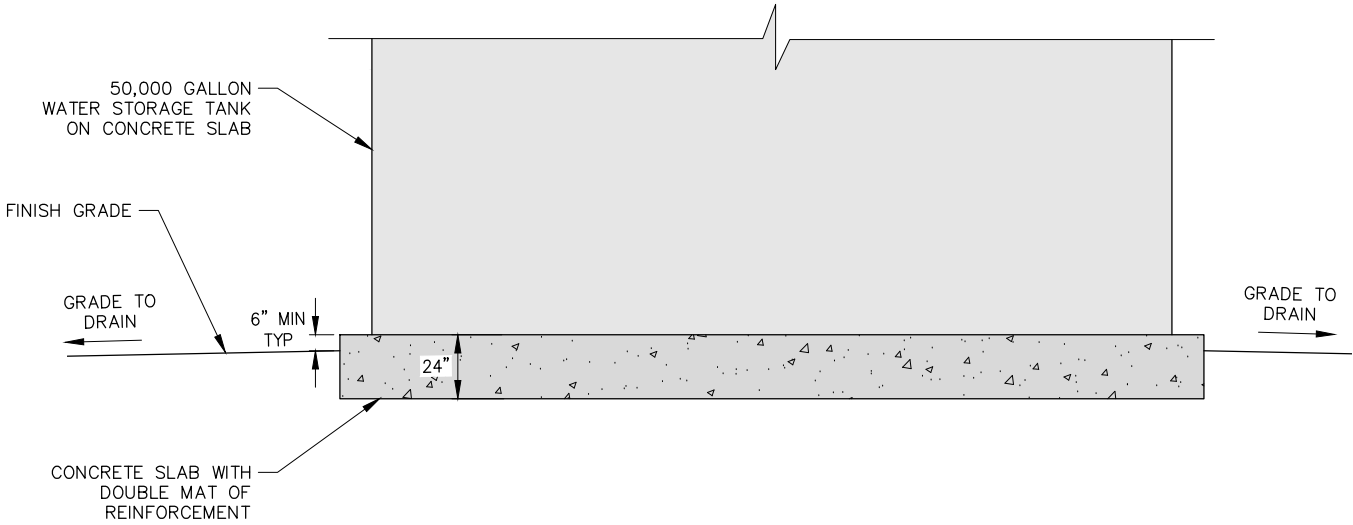
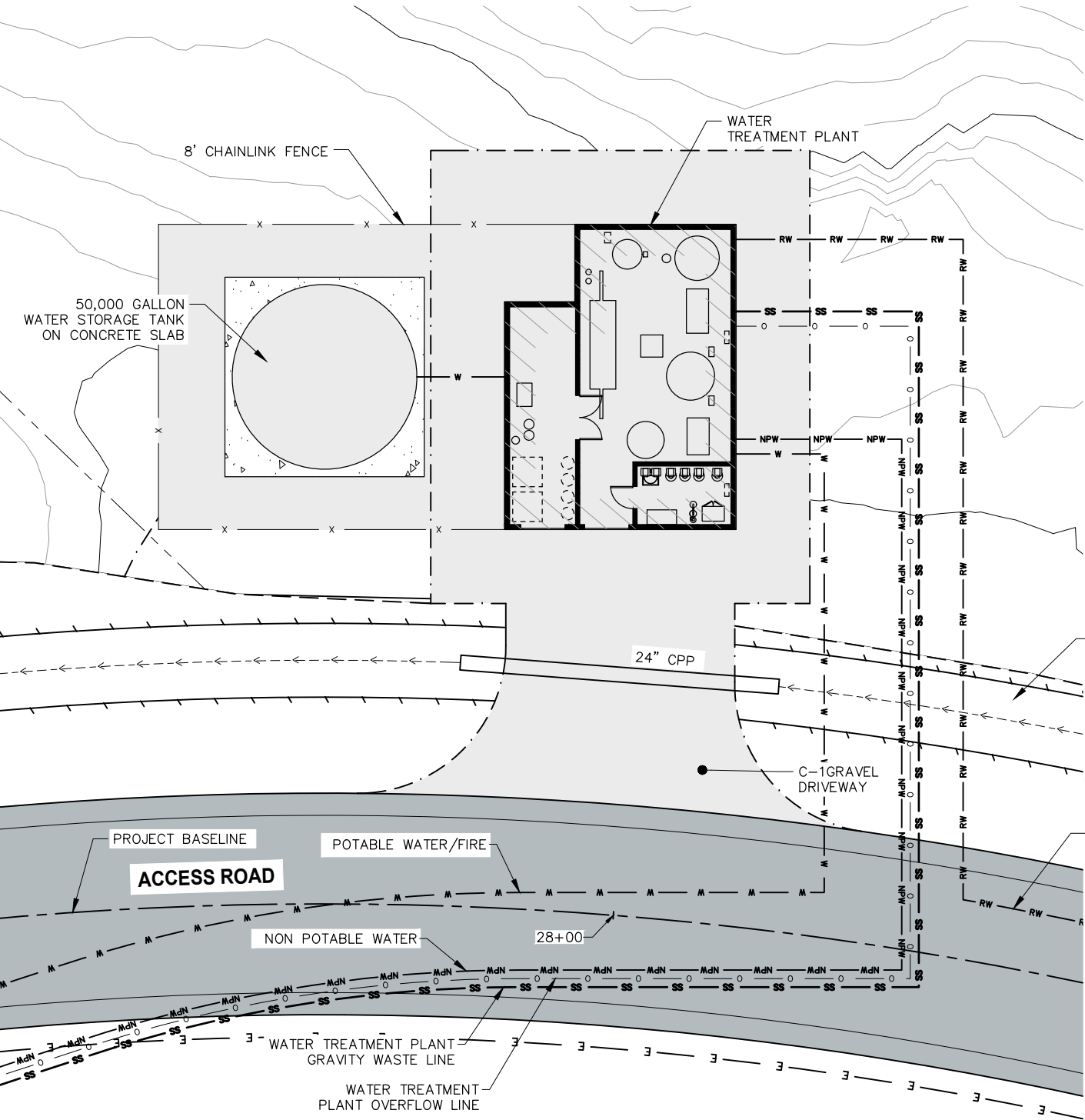
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WTP OVERFLOW

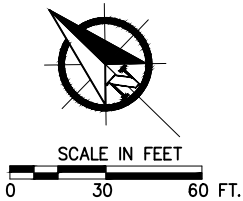
F

F

FUEL LINE



1 WATER STORAGE TANK SLAB SECTION



PLANS DEVELOPED BY:
PND ENGINEERS, INC.
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907-586-2093
CAN: AECC250

35%
REVIEW
7/15/25

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JNU CASCADE POINT
FERRY TERMINAL
WATER TREATMENT
PLANT UTILITY PLAN

FILE N:\23xxx\232045 Cascade Point Ferry Terminal\G. Drawings\Civil\210X Terminal Area Utility Plan.dwg DATE 7/14/2025 11:51 LAYOUT 12 DESIGNED CHECKED DRAFTED

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	2300	161

LEGEND

SS

SS

GRAVITY SEWER

FM

FM

FORCE MAIN SEWER

SD

SD

W

W

RW

RW

NPW

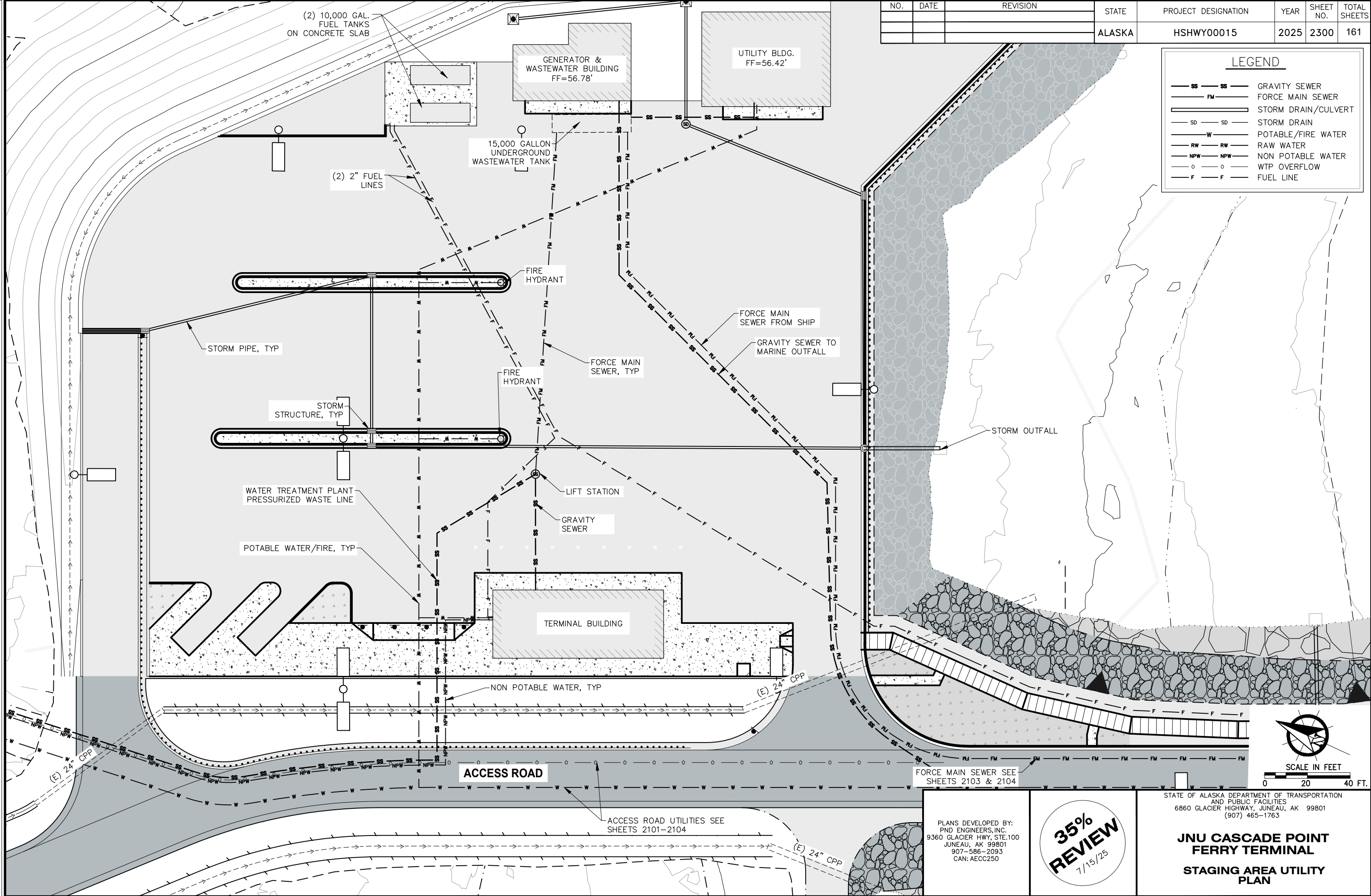
NPW

O

O

F

F



SCALE IN FEET
0 20 40 FT.

FORCE MAIN SEWER SEE SHEETS 2103 & 2104

ACCESS ROAD UTILITIES SEE SHEETS 2101-2104

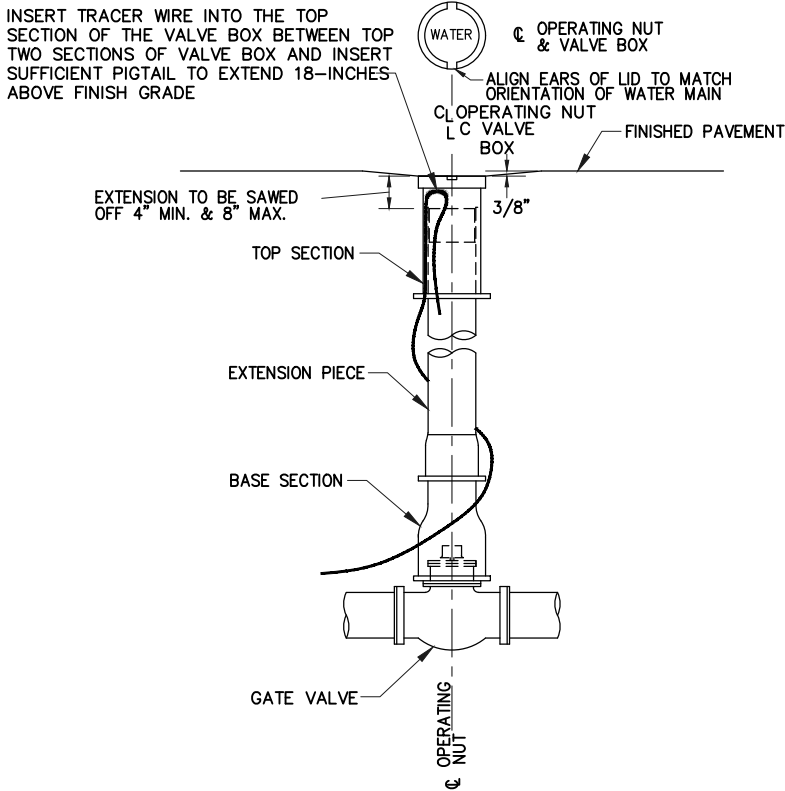
PLANS DEVELOPED BY:
PND ENGINEERS, INC.
9360 GLACIER HWY, STE.100
JUNEAU, AK 99801
907-586-2093
CAN: AECC250

35%
REVIEW
7/15/25

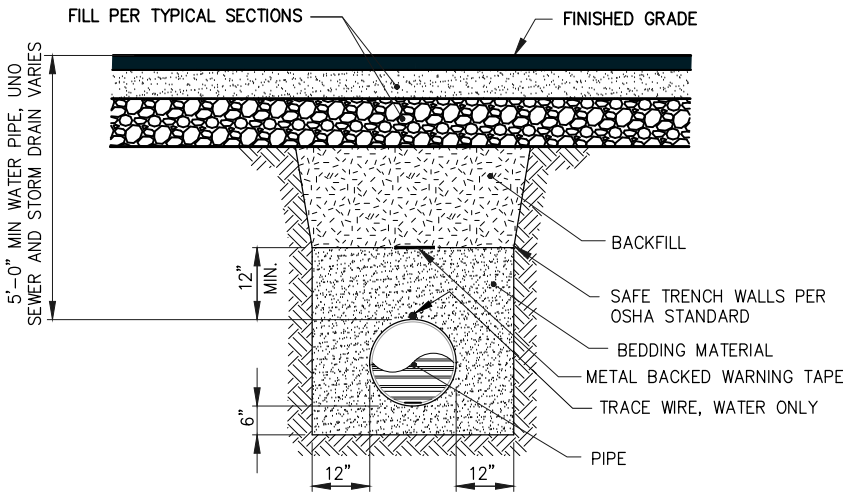
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AND PUBLIC FACILITIES
6860 GLACIER HIGHWAY, JUNEAU, AK 99801
(907) 465-1763

JNU CASCADE POINT
FERRY TERMINAL
STAGING AREA UTILITY
PLAN

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	2301	161



1 WATER VALVE DETAIL



NOTE:
DETAIL APPLIES TO ALL PIPE UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

2 PIPE TRENCH DETAIL

PLANS DEVELOPED BY:
PND ENGINEERS, INC.
9360 GLACIER HWY, STE.100
JUNEAU, AK 99801
907-586-2093
CAN: AECC250

**35%
REVIEW**
7/15/25

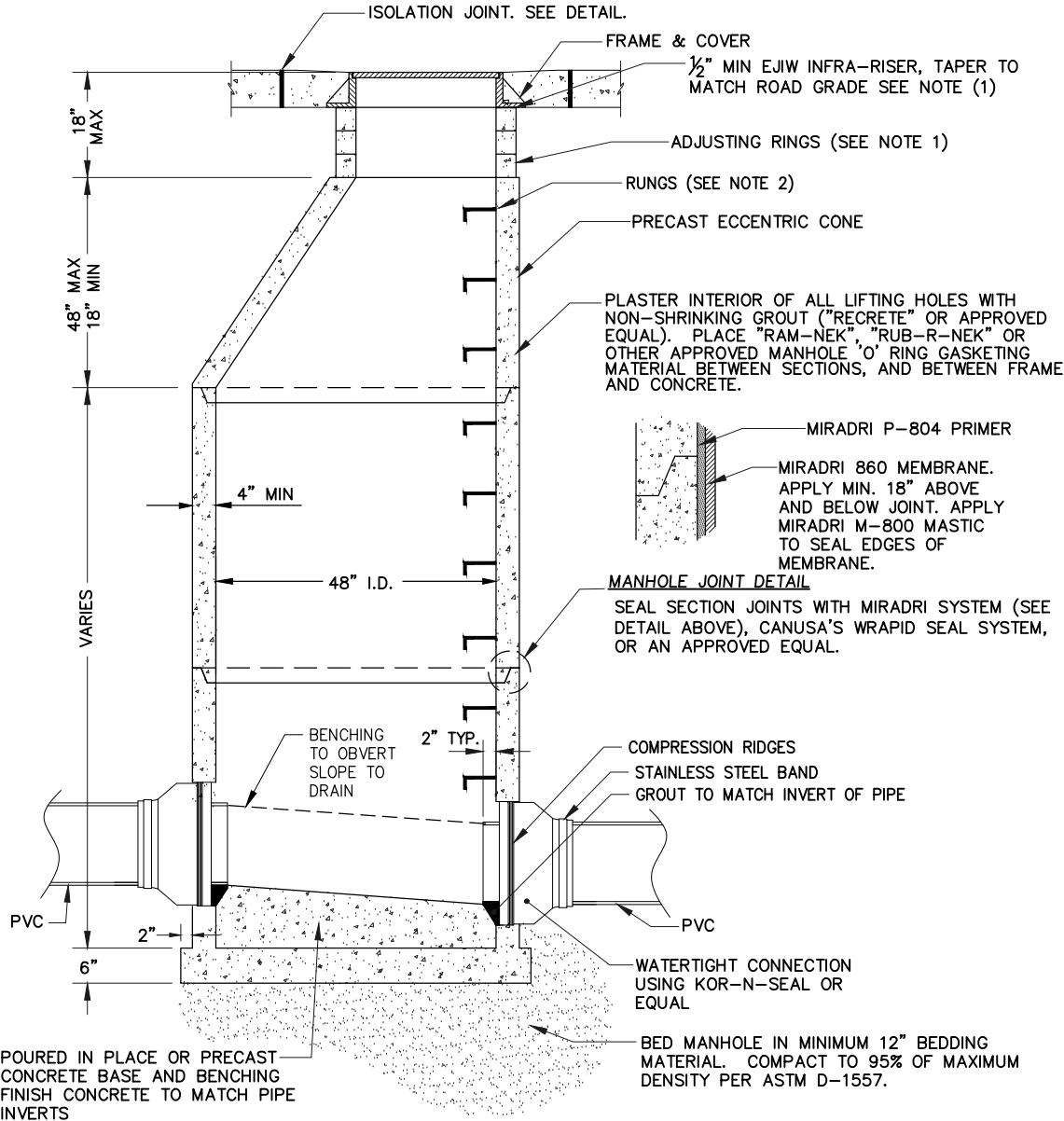
STATE OF ALASKA DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
6860 GLACIER HIGHWAY, JUNEAU, AK 99801
(907) 465-1763

**JNU CASCADE POINT
FERRY TERMINAL**

**STAGING AREA UTILITY
DETAILS**

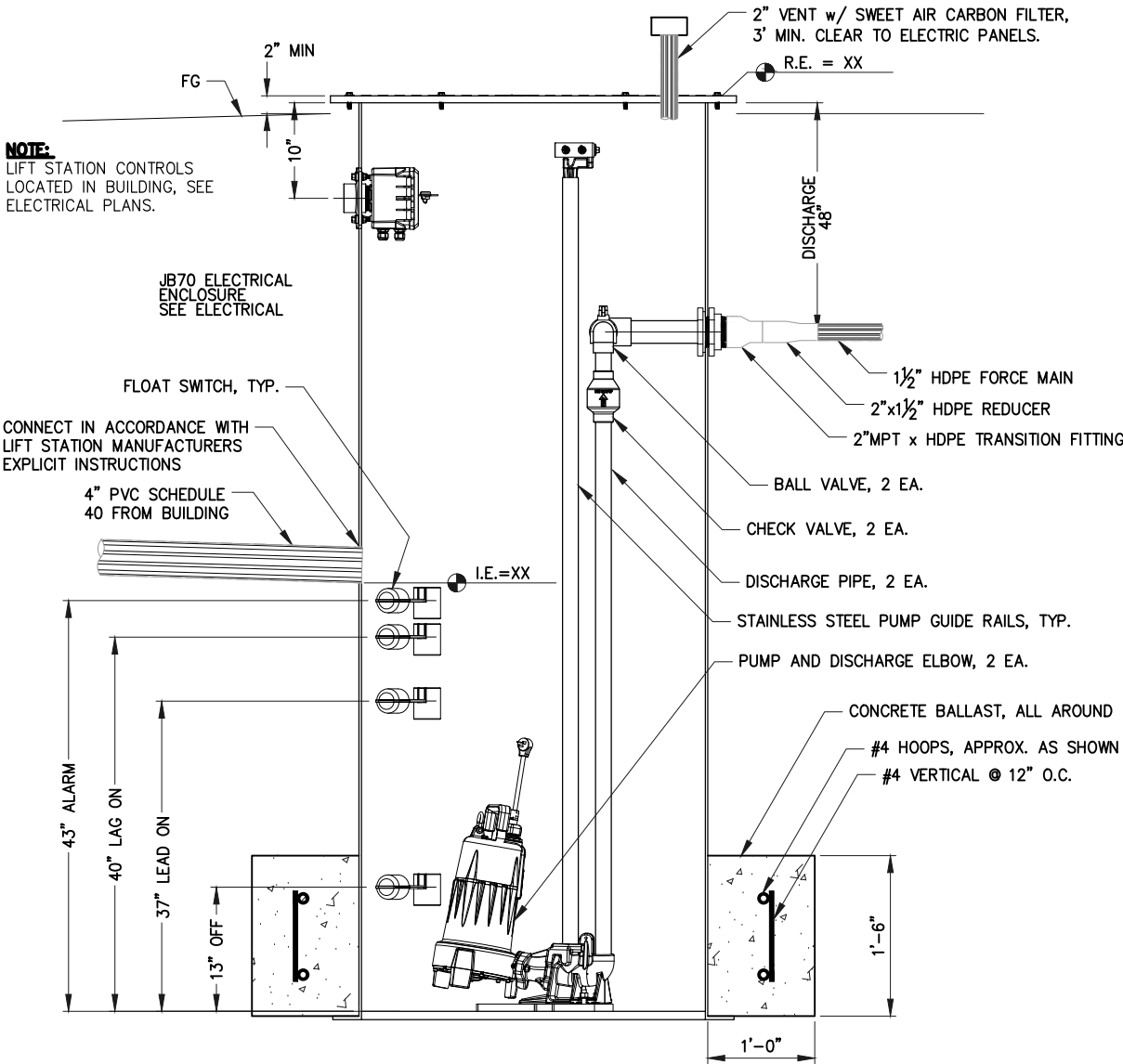
FILE N:\23xxx\232045 Cascade Point Ferry Terminal\G. Drawings\CIVIL\210X Utility Details.dwg DATE 7/14/2025 11:52 LAYOUT DETAILS DESIGNED CHECKED DRAFTED

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	SHWY00015	2025	2302	161



- NOTES
1. TOP ADJUSTING RINGS SHALL BE AN "INFRA-RISER", OR APPROVED EQUAL TO MEET FINAL GRADE. USE "PL POLYURETHANE SELF-LEVELING CONCRETE CRACK SEALANT" OR APPROVED EQUAL FOR "INFRA-RISER" INSTALLATION.
 2. RUNGS TO BE PLACED 12" O.C. ON UNOBSTRUCTED SIDE OF MANHOLE. LAST RUNG SHALL BE 18" MAX FROM BOTTOM OF MANHOLE, AND TOP RUNG SHALL BE 6" MAXIMUM FROM TOP OF CONE. IF UNOBSTRUCTED SIDE NOT AVAILABLE, LAST RUNG SHALL BE PLACED 6" OVER SMALLEST PIPE. RUNGS SHALL BE LANE POLYETHYLENE 14" LADDER STEPS OR AN APPROVED EQUAL.

1 SANITARY SEWER MANHOLE TYPE I



2 SANITARY SEWER LIFT STATION

PLANS DEVELOPED BY:
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9360 GLACIER HWY, STE.100
JUNEAU, AK 99801
907-586-2093
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FERRY TERMINAL
STAGING AREA UTILITY
DETAILS

FILE N:\23\23045 Cascade Point Ferry Terminal\G. Drawings\CIVIL\210X Marine Outfall.dwg DATE 7/14/2025 14:08 LAYOUT 12 DESIGNED CHECKED DRAFTED

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	2400	161

LEGEND

SS

FM

SD

W

RW

NPW

o

F

SS

FM

SD

W

RW

NPW

o

F

GRAVITY SEWER

FORCE MAIN SEWER

STORM DRAIN/CULVERT

STORM DRAIN

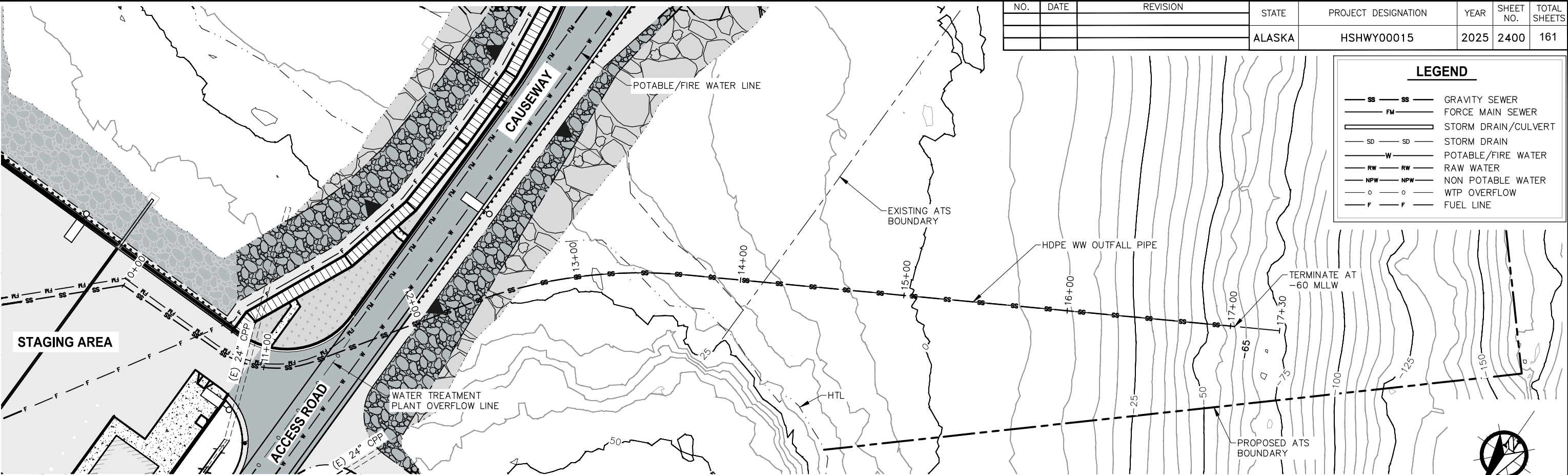
POTABLE/FIRE WATER

RAW WATER

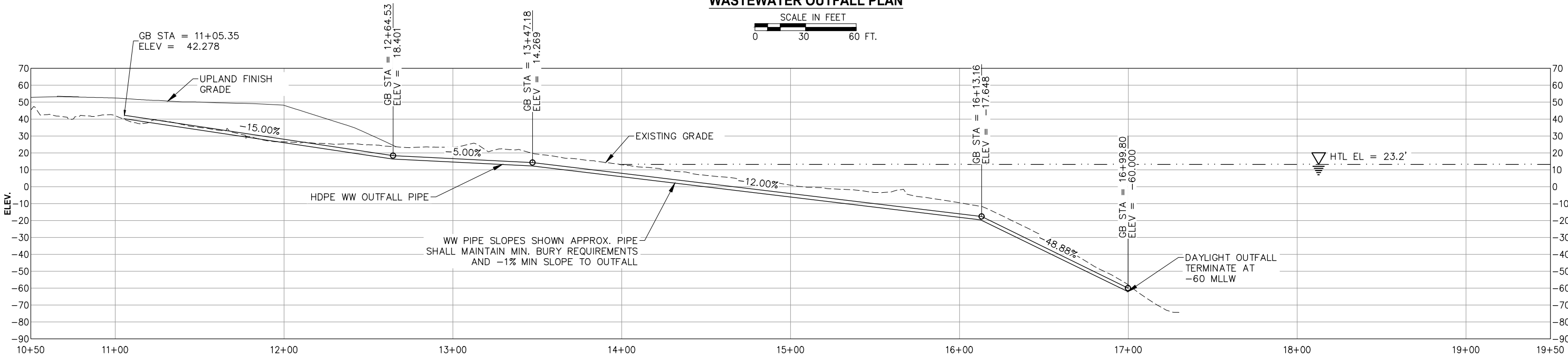
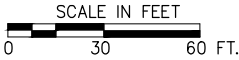
NON POTABLE WATER

WTP OVERFLOW

FUEL LINE



WASTEWATER OUTFALL PLAN



WASTEWATER OUTFALL PROFILE



- NOTES:
1. INSTALL TYPE I ANCHORS AT 11' OC TO DAYLIGHT POINT. TYPE II ANCHORS SHALL BE INSTALLED AT 4' OC DOWNSTREAM OF THE DAYLIGHT POINT.
 2. TYPE II ANCHORS SHALL BE INSTALLED ON THE DIFFUSER, SEE DIFFUSER DETAILS.

PLANS DEVELOPED BY:
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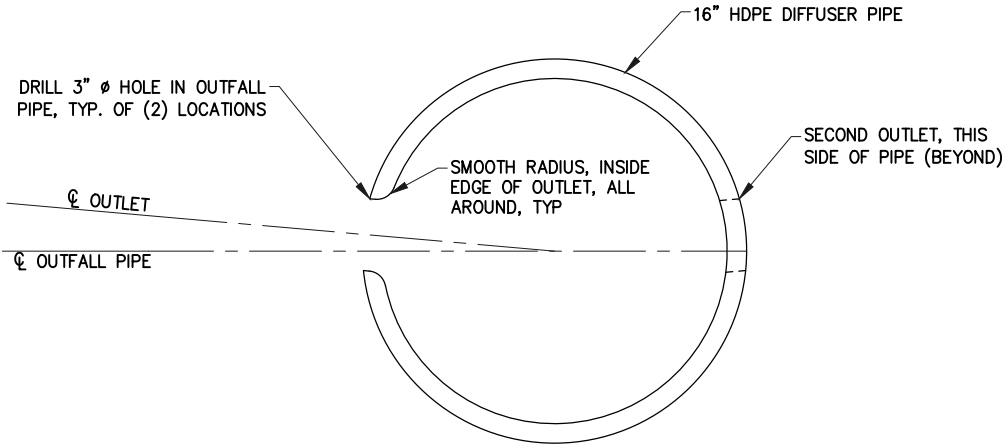
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JNU CASCADE POINT
FERRY TERMINAL

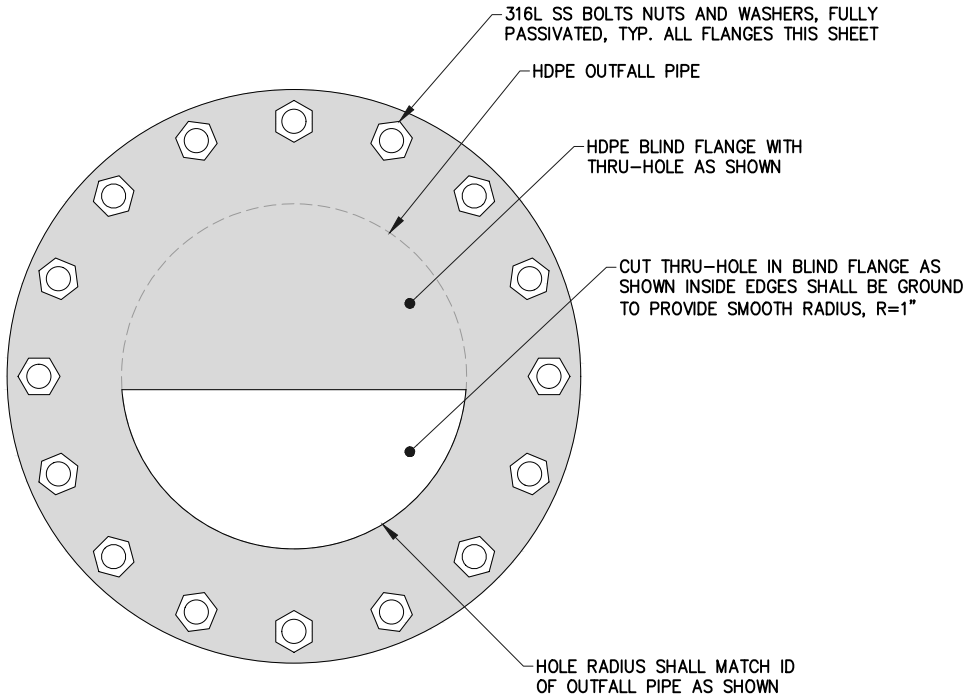
MARINE OUTFALL
PLAN & PROFILE

FILE N:\23xxx\232045 Cascade Point Ferry Terminal\G. Drawings\CIVIL\210X Marine Outfall Details.dwg DATE 7/15/2025 8:51 LAYOUT DETAILS (2) DESIGNED CHECKED DRAFTED

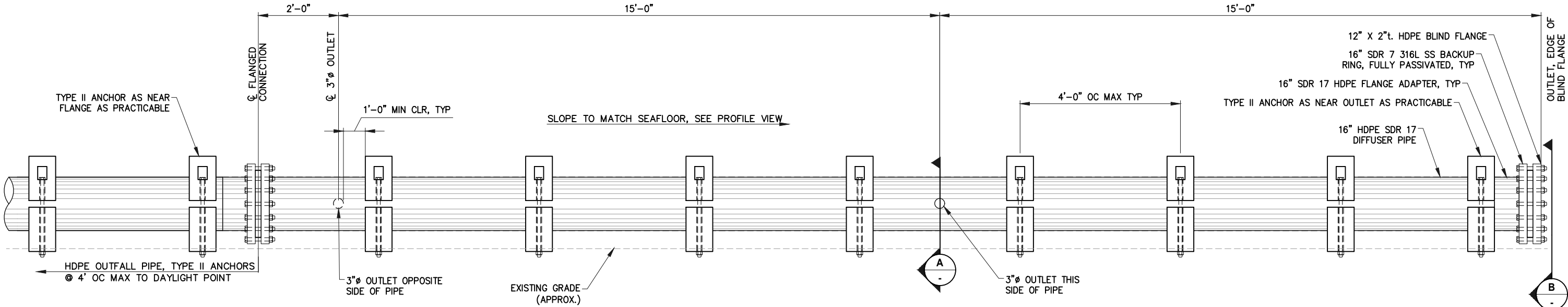
NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	2402	161



A
-
DIFFUSER OUTLET
TYPICAL SECTION



B
-
DIFFUSER END
ELEVATION



WASTEWATER OUTFALL DIFFUSER
ELEVATION

PLANS DEVELOPED BY:
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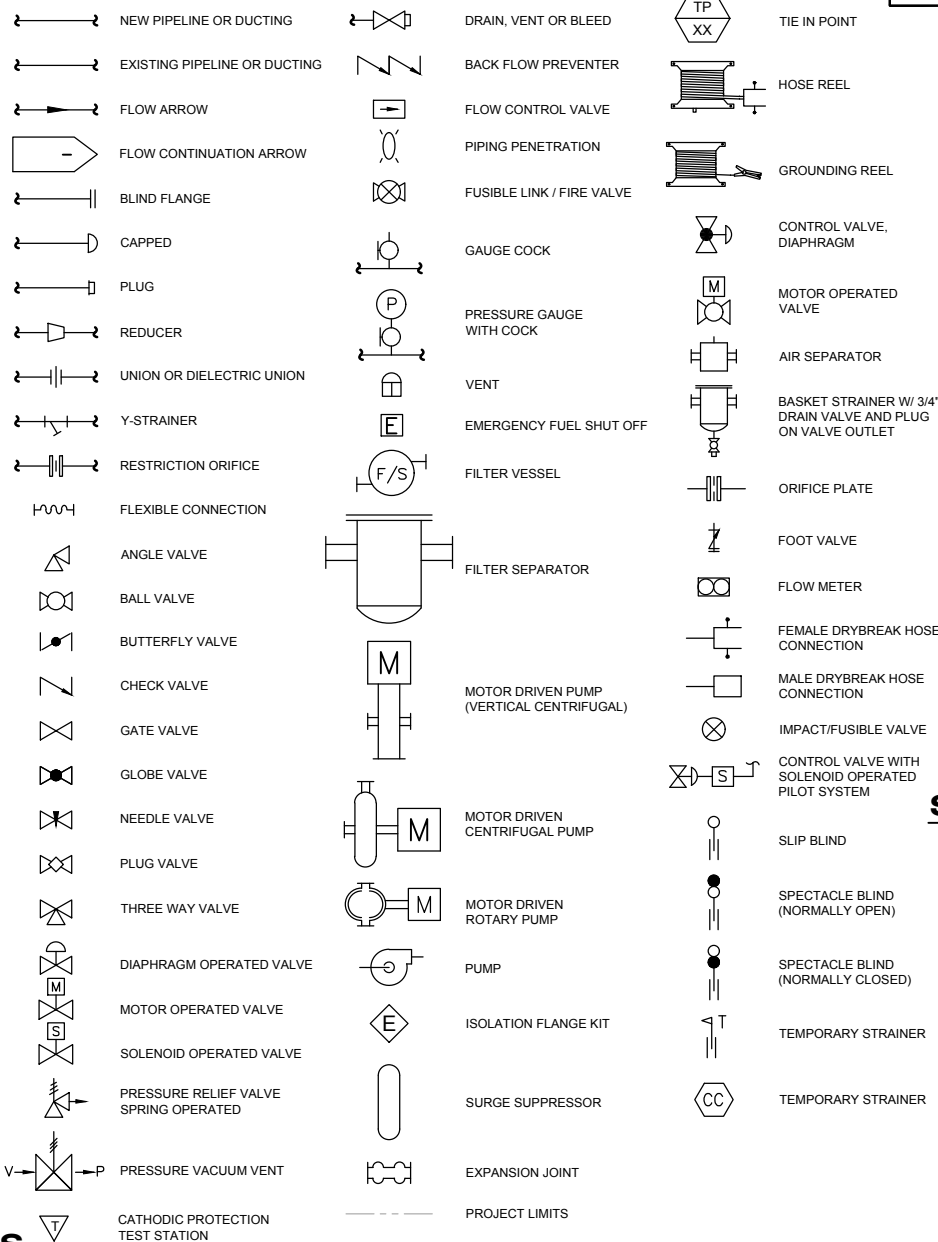
JNU CASCADE POINT
FERRY TERMINAL

MARINE OUTFALL
DETAILS

GENERAL ABBREVIATIONS

(a)	ABANDONED	MAX	MAXIMUM
ACI	AMERICAN CONCRETE INSTITUTE	MCM	THOUSAND CIRCULAR MILL
AKDOT	ALASKA STATE DEPT OF TRANSPORTATION	MIN	MINIMUM
API	AMERICAN PETROLEUM INSTITUTE	MMPT	MALE NATIONAL PIPE THREAD CONNECTION
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE	MOV	MOTOR OPERATED VALVE
ASME	AMERICAN SOCIETY OF MECHANICAL ENGR'S	MSS	MANUFACTURER'S STANDARDIZATION SOCIETY
ASTM	AMERICAN SOCIETY OF TESTING & MATERIALS	N.C.	NORMALLY CLOSED
ASTM	AMERICAN SOCIETY OF TESTING & MATERIALS	N.O.	NORMALLY OPEN
BLK	BLACK	NACE	NAT'L ORGANIZATION OF CORROSION ENGINEERS
BF	BLIND FLANGE	NFS	NON-FROST SUSCEPTIBLE
BOP	BOTTOM OF PIPE	No.	NUMBER
CL	CENTER LINE	NOM	NOMINAL
CAPL	CROSS AIRPORT PIPELINE	NPS	NOMINAL PIPE SIZE
CIP	CAST IN PLACE	NPT	NATIONAL PIPE THREADS
CONC	CONCRETE	NTS	NOT TO SCALE
CONC RED	CONCENTRIC REDUCER	O.O.S.	OUT OF SERVICE
CP TEST STATION	CATHODIC PROTECTION TEST STATION	OD	OUTSIDE DIAMETER
CMP	CORRUGATED METAL PIPE	OC	ON CENTER
CS	CARBON STEEL	PH	PHASE
CSC	CARR SEAL CLOSED	PI	PRESSURE INDICATOR
CSO	CARR SEAL OPEN	PL	PLATE
CTP	CROSS TOWN PIPELINE	PL	PLACE(S)
CV	CONTROL VALVE	PRV	PRESSURE RELIEF VALVE
DBB	DOUBLE BLOCK AND BLEED	PS	PIPE SUPPORT
DP	DIFFERENTIAL PRESSURE	PSI	POUNDS PER SQUARE INCH
DWG	DRAWING	PSIG	POUNDS PER SQUARE INCH GAUGE
EA	EACH	QTY	QUANTITY
ECC RED	ECCENTRIC REDUCER	RED	REDUCER
EL	ELEVATION	REF	REFERENCE
ELL	ELBOW	REQ'D	REQUIRED
ESD	EMERGENCY SHUT DOWN	RF	RAISED FACE
EXIST'G	EXISTING EQUIPMENT	RFWN	RAISED FACE WELD NECK (FLANGE)
EXT	EXTENSION	RPM	REVOLUTIONS PER MINUTE
FC	FAIL CLOSED	RSC	RIGID STEEL CONDUIT
FCV	FLOW CONTROL VALVE	(S)	IN SERVICE
FIN	FINISH	SB	SPECTACLE BLIND
FLG	FLANGE	SCH	SCHEDULE
FLGD	FLANGED PIPE CONNECTION	SCRD	SCREWED END CONNECTION (THREADED)
FNPT	FEMALE NATIONAL PIPE THREAD CONNECTION	SMLS	SEAMLESS
FO	FAIL OPEN	SW	SOCKET WELD
FP	FULL PORT	SPEC(S)	SPECIFICATION(S)
FT	FOOT	STD	STANDARD
GA	GAUGE	STA	STATION
GAL	GALLONS	STL	STEEL
GALV.	GALVANIZED	T.O.P.	TOP OF PIPE
GPM	GALLONS PER MINUTE	TDH	TOTAL DYNAMIC HEAD
HIC	HAND INDICATING CONTROLLER (MANUAL OPEN/CLOSE)	TYP	TYPICAL
HORIZ	HORIZONTAL	U.L.	UNDERWRITERS LABORATORIES
HP	HORSEPOWER	U.V.	ULTRAVIOLET
HPV	HIGH POINT VENT	VAC	VOLTS (ALTERNATING CURRENT)
H-XXX	HYDRANT NUMBER	VTA	VENT TO ATMOSPHERE
IAW	IN ACCORDANCE WITH	V-XXXXX-XX	VALVE NUMBER
ID	INSIDE DIAMETER	VB-XXX-XX	VALVE BOX NUMBER
IFS	ISOLATION FLANGE SYSTEM	VERT	VERTICAL
INSUL	INSULATION	W/	WITH
LB	POUND	WGA	WORM GEAR ACTUATOR
LPD	LOW POINT DRAIN	WN	WELD NECK
LR	LONG RADIUS	WOL	WELD-O-LET
MAG	MAGNETIC	WT	WEIGHT
MAWP	MAXIMUM ALLOWABLE WORKING PRESSURE	ZIL	POSITION INDICATOR LOW
MAG	MAGNETIC	ZSC	POSITION SWITCH CLOSE
		ZSO	POSITION SWITCH OPEN

PIPING SYMBOLS



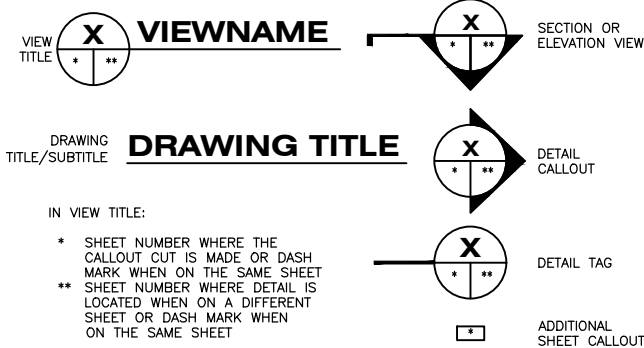
INSTRUMENTATION ABBREVIATIONS

AIT	SPECIFIC GRAVITY INDICATION TRANSMITTER	ME	MOISTURE ELEMENT
AY	SPECIFIC GRAVITY STATUS RELAY	MSH	MOISTURE SWITCH HIGH
BCV	BALL CHECK VALVE	NSHV	NON-FREEZE HAND VALVE
DPCV	DIFFERENTIAL PRESSURE CONTROL VALVE	PAH	PRESSURE ALARM HIGH
FAE	FLUID AIR ELIMINATOR	PAL	PRESSURE ALARM LOW
FAL	FLOW ALARM LOW	PB	PUSH BUTTON
FCV	FLOW CONTROL VALVE	PCV	PRESSURE CONTROL VALVE
FE	FLOW ELEMENT	DPAH	PRESSURE DIFFERENTIAL ALARM HIGH
FI	FLOW INDICATOR	PDIC	PRESSURE DIFFERENTIAL INDICATOR CONTROLLER
FIC	FLOW INDICATING CONTROLLER	PDI	PRESSURE DIFFERENTIAL INDICATOR
FIR	FLOW INDICATING RECORDER	POISH	PRESSURE DIFFERENTIAL INDICATOR AND SWITCH HIGH
FO	FLOW ORIFICE	PSH	PRESSURE DIFFERENTIAL SWITCH HIGH
FOD	FLOW STRAIGHTEN DEVICE	PDT	PRESSURE DIFFERENTIAL TRANSFER
FQIC	FLOW TOTALIZER INDICATING CONTROLLER	PI	PRESSURE INDICATOR
FQIR	FLOW TOTALIZER INDICATING RECORDER	PIC	PRESSURE INDICATOR CONTROLLER
FSH	FLOW SWITCH HIGH	PIR	PRESSURE INDICATING RECORDER
FSP	FUEL SAMPLE PORT	PLC	PROGRAM LOGIC CONTROLLER
FSV	FUEL SAMPLE VALVE	PRV	PRESSURE RELIEF VALVE
FT	FLOW TRANSMITTER	PSH	PRESSURE SWITCH HIGH
FV	FLOW VALVE	PSL	PRESSURE SWITCH LOW
HIC	HAND INDICATING CONTROLLER (MANUAL OPEN/ CLOSE)	PSV	PRESSURE SAFETY VALVE
HOA	MOTOR START WITH HAND-OFF-AUTO SELECTOR SWITCH	PT	PRESSURE TRANSMITTER
HS	HAND SELECTOR	PY	PRESSURE STATUS RELAY
HSB	HAND TEST HIGH	QI	QUANTITY INDICATOR
HSBH	HAND TEST HIGH HIGH	QY	QUANTITY RELAY
HV	HAND VALVE	SC	SPEED CONTROLLER
KY	TIME DELAY	SG	SITE GLASS
LAH	LEVEL ALARM HIGH	TE	TEMPERATURE ALARM HIGH
LAHH	LEVEL ALARM HIGH HIGH	TE	TEMPERATURE ELEMENT
LAL	LEVEL ALARM LOW	TI	TEMPERATURE INDICATOR
LALL	LEVEL ALARM LOW LOW	TIR	TEMPERATURE INDICATING RECORDER
LAX	LEVEL ALARM TROUBLE	TSH	TEMPERATURE SWITCH HIGH
LCS	LEVEL CONTROL SWITCH	TSV	TEMPERATURE SAFETY VALVE
LCV	LEVEL CONTROL VALVE	TT	TEMPERATURE TRANSMITTER
LG	LEVEL GAGE	WDAB	SPECIFIC GRAVITY CHANGE ALARM HIGH
LI	LEVEL INDICATOR	WIR	SPECIFIC GRAVITY INDICATING RECORDER
LIT	LEVEL INDICATING TRANSMITTER	YLAH	LIQUID ALARM HIGH
LSH	LEVEL SWITCH HIGH	YLT	LIQUID DETECTION TRANSMIT
LSHH	LEVEL SWITCH HIGH HIGH	YS	ALTERNATING SWITCH
LSL	LEVEL SWITCH LOW	ZI	POSITION INDICATOR
LSLL	LEVEL SWITCH LOW LOW	ZIC	POSITION INDICATOR CLOSE
LSM	LEVEL SWITCH MID.	ZIH	POSITION INDICATOR HIGH
LV	LEVEL VALVE	ZIL	POSITION INDICATOR LOW
LY	LEVEL STATUS RELAY	ZIO	POSITION INDICATOR OPEN
LYL	LIQUID ALARM PANEL	ZSC	POSITION SWITCH CLOSE
MAH	MOISTURE ALARM HIGH	ZSO	POSITION SWITCH OPEN
		ZSH	POSITION SWITCH HIGH
		ZSL	POSITION SWITCH LOW
		ZY	POSITION STATUS RELAY

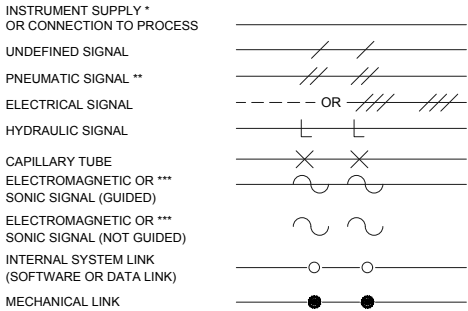
SERVICE DESIGNATIONS

AI	- INSTRUMENT AIR
AP	- PLANT AIR
AS	- AIR SERVICE
AV	- AVGAS
CGS	- COOLING GLYCOL SUPPLY
CGR	- COOLING GLYCOL RETURN
CH	- CHEMICAL
CW	- POTABLE WATER COLD
DW	- DRAIN
DF	- DIESEL FUEL
EX	- EXHAUST
FG	- FUEL GAS
FV	- FUEL OIL VENT
FW	- FIREWATER
G	- GAS, HYDROCARBON
HC	- HYDROCARBON
HF	- HYDRAULIC FLUID
HGS	- HEATING GLYCOL SUPPLY
HGR	- HEATING GLYCOL RETURN
HR	- HEATING RETURN
HS	- HEATING SUPPLY
HW	- POTABLE HOT WATER
JF	- JET FUEL
LO	- LUBE OIL
M	- METHANOL
N	- NITROGEN
NP	- NON POTABLE
PW	- PROCESS WATER
RL	- RAIN WATER LEADER
VW	- VENT
WP	- POTABLE WATER
WW	- WASTE

REFERENCE LEGEND



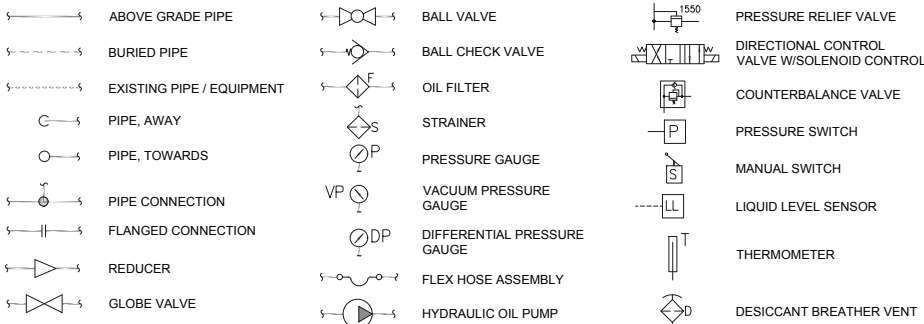
INSTRUMENT LINE SYMBOLS



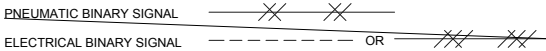
PIPING CLASS DESIGNATIONS

PIPE CLASS	DESIGN PRESSURE PSIG	TEMP DEG. F	FLANGE CLASS	MATERIAL	JOINTS
A	260	-20/200	150# RF	CARBON STEEL(CS)	WELDED
AA	200	-20/200	150# RF	GALVANIZED CS	SCREWED
AC	260	-50/200	150# RF	LOW TEMP CS	WELDED
AS	230	-150/100	150# RF	STAINLESS 316L	WELDED
B	675	-20/200	300# RF	CARBON STEEL	WELDED
D	1350	-20/200	800#	CARBON STEEL	WELDED
E	2025	-20/200	900#	CARBON STEEL	WELDED
F	3375	-20/200	1500#	CARBON STEEL	WELDED
FS	3000	-150/200	1500#	STAINLESS 316L	WELDED
G	5000	-20/200	2500#	CARBON STEEL	WELDED

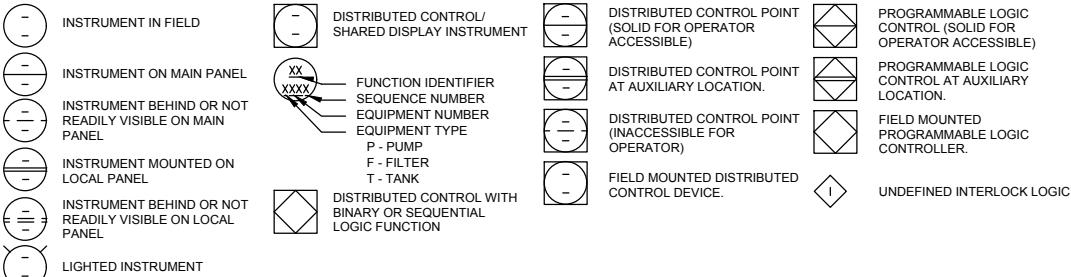
HYDRAULIC PIPING SYMBOLS



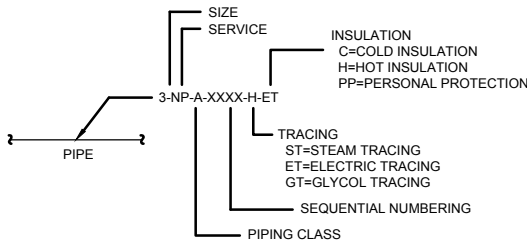
OPTIONAL BINARY (ON-OFF) SYMBOLS



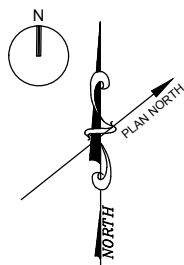
INSTRUMENT SYMBOLS



PIPING CALLOUT KEY



NORTH INDICATOR



PLANS DEVELOPED BY:
PRECISION ALASKA
ENGINEERING, LLC
3135 N MARCOS CIRCLE
WASILLA, AK 99645
907-232-8290

35%
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07/15/25

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6860 GLACIER HIGHWAY, JUNEAU, AK 99801
(907) 465-1763

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FERRY TERMINAL

MECHANICAL PIPING
SYMBOLS & ABBREVIATIONS

GENERAL NOTES:

1.

THE WORK CONSISTS OF PROVIDING LABOR, PRODUCTS, AND IN PERFORMING ALL OPERATION REQUIRED FOR THE COMPLETE OPERATING INSTALLATION OF ALL MECHANICAL SYSTEMS AS SHOWN AND SPECIFIED, IN STRICT ACCORDANCE WITH THIS SECTION OF THESE NOTES, APPLICABLE DRAWINGS, TERMS, AND ALL APPLICABLE CODES AND ORDINANCES GOVERNING INSTALLATION OF THE VARIOUS MECHANICAL SYSTEMS. COORDINATE ALL WORK FULLY WITH THE WORK OF OTHER CRAFTS. PROVIDE ALL SYSTEMS COMPLETE AND IN PROPER OPERATING ORDER.
2.

THE DRAWINGS ARE PARTLY DIAGRAMMATIC AND DO NOT SHOW ALL OFFSETS IN PIPING OR EXACT LOCATION OF PIPING, DUCT, ETC. ALSO, THE DRAWINGS DO NOT NECESSARILY SHOW IN DETAIL ALL FEATURES OF THE INSTALLATION; PROVIDE ALL WORK SHOWN ON THE DRAWINGS, MANUFACTURERS WRITTEN INSTRUCTIONS AND SPECIFICATIONS, UNLESS STATED OTHERWISE.
3.

COMPLY WITH THE APPLICABLE LOCAL, STATE, AND NATIONAL CODES, ORDINANCES AND REGULATIONS AFFECTING MATERIALS AND METHODS OF INSTALLATION OF THE MECHANICAL SYSTEMS. FOLLOW RECOMMENDED PRACTICES AS SET DOWN BY ASME, API, ANSI AND AWS.
4.

SUBMITTALS: THE CONTRACTOR SHALL PROVIDE THE PROJECT MANAGER WITH DATA SHEETS FOR MATERIALS AND EQUIPMENT PROPOSED FOR THIS PROJECT. THIS INCLUDES BUT NOT LIMITED TO PIPE, VALVES, VALVE MOTOR OPERATORS, COATING SYSTEMS, INSTRUMENTS, AND CONTROL SYSTEM COMPONENTS. SEE LIQUID HYDROCARBON SERVICE NOTES FOR PROCESS WELDING SUBMITTAL REQUIREMENTS.
5.

MECHANICAL DESIGN CONDITIONS:

5.1.

LOCATION: JUNEAU, ALASKA

5.2.

AMBIENT TEMPERATURE LIMIT:
MINIMUM TEMPERATURE: -20°F
MAXIMUM TEMPERATURE: 90°F

5.3.

FUEL PROPERTIES:
PUMPING / HANDING TEMPERATURE RANGE: -20°F TO 90°F

DIESEL (NO. 1 & NO. 2 - ULSD):
- SPECIFIC GRAVITY: 0.81 TO 0.96
- KINEMATIC VISCOSITY: 2.8 TO 5.0 CENTISTOKES (cST) AT 68°F
- VAPOR PRESSURE: <0.2 PSI @ 100°F
6.

COMPLETION: UPON COMPLETION OF THE MECHANICAL INSTALLATION, DEMONSTRATE TO THE PROJECT ENGINEER'S SATISFACTION THAT THE SYSTEMS HAVE BEEN INSTALLED IN A SATISFACTORY MANNER IN ACCORDANCE WITH THE PLANS, SPECIFICATIONS, AND APPLICABLE CODES. DEMONSTRATE DYNAMIC OPERATION OF ALL SYSTEMS. SHOW THAT ALL CONTROLS ARE OPERABLE AND ARE PROPERLY ADJUSTED IN ACCORDANCE WITH THE REQUIREMENTS OF THE FINAL SYSTEMS BALANCE, THAT ALL SYSTEMS ARE PROPERLY BALANCED, THAT ALL EQUIPMENT OPERATES PROPERLY, THAT FILTERS AND STRAINERS ARE CLEAN, AND THAT ALL COMPONENTS OF ALL SYSTEMS ARE INSTALLED AND ADJUSTED FOR PROPER OPERATION.
7.

STRUCTURAL INTERFERENCES: SHOULD STRUCTURAL MEMBERS PREVENT THE INSTALLATION OF PIPING, DUCTING OR EQUIPMENT, NOTIFY THE PROJECT ENGINEER BEFORE PROCEEDING. CONSIDER MINOR CHANGES IN POSITIONS OF EQUIPMENT, PIPING, OR DUCTING, IF DECIDED UPON BEFORE ANY ADJACENT CONNECTIONS HAVE BEEN MADE AS PART OF THE CONTRACT AT NO ADDITIONAL COST TO THE OWNER.
8.

COORDINATE WITH STRUCTURAL WORK TO DETERMINE ACCEPTABLE LOCATIONS FOR SLEEVES AND SUPPORTS WHICH ARE REQUIRED BUT MAY NOT BE SPECIFICALLY SHOWN ON THE PLANS. SCHEDULE INSTALLATION OF SLEEVES AND SPECIAL SUPPORTS IN A MANNER TIMELY TO THE WORK OF OTHER CRAFTS. ANTICIPATE MINOR OFFSETS NECESSARY FOR PROPER COORDINATION WITH OTHER WORK, AND ROUTE SYSTEMS APPROPRIATELY.
9.

CONTRACTOR SHALL FOLLOW THE PIPING PROJECT SPECIFICATIONS FOR THE FUEL PIPING AND HYDRAULIC SYSTEM PIPING.
10.

CONTRACTOR SHALL FOLLOW THE PIPELINE COATING SPECIFICATIONS.
11.

CONTRACTOR SHALL EXCAVATE THE PIPELINE TRENCH IN ACCORDANCE WITH THE SPECIFICATIONS.
12.

PROVIDE DUST, EROSION AND SEDIMENTATION CONTROL MEASURES DURING CONSTRUCTION. DIRECT SURFACE RUNOFF AWAY FROM EXCAVATION AND/OR STOCKPILES.
13.

VERIFY AND REDLINE ALL HORIZONTAL AND VERTICAL LOCATIONS OF ALL UTILITIES ENCOUNTERED DURING CONSTRUCTION. RECORD ALL LOCATIONS, SIZE, MATERIAL, SERVICE OF UTILITIES ENCOUNTERED. PROTECT EXISTING UTILITIES AND PROVIDE SUPPORT AS REQUIRED IN ORDER TO REMAIN IN SERVICE.

FUEL SYSTEM SEQUENCE OF OPERATIONS:

GENERAL:
ONE EXTERNAL AUDIBLE ALARM HORN AND BLUE BEACON LIGHT WILL BE MOUNTED OUTSIDE IN A LOCATION VISIBLE TO THE FUEL FILL AND DISPENSE OPERATIONS. A FUELING SYSTEM CONTROL PANEL WILL BE MOUNTED ON AN ELECTRICAL EQUIPMENT MOUNTING FRAME AND PROVIDED WITH LED LIGHTS INDICATING THE ALARM CONDITIONS. SEE FLOW DIAGRAMS FOR ADDITIONAL REQUIREMENTS.

- TRUCK OFFLOAD SYSTEM:
(FILLING FUEL STORAGE TANKS):
GENERAL: THE FUEL DELIVERY TRUCK CAN EITHER USE ITS OWN TRUCK MOUNTED TRANSFER PUMPS FOR OFFLOAD TO THE FUEL STORAGE TANKS OR THE PROVIDED GROUND PUMPS. FUEL WILL BE ROUTED THROUGH THE FILTRATION SYSTEM BEFORE ENTERING THE STORAGE TANKS. TANK FARM OPERATOR TO VERIFY AMOUNT TO BE TRANSFERRED AND CONFIRM FUEL AMOUNT WITHIN THE DESTINATION TANK. IF UTILIZING THE GROUND PUMPS THE TANK FARM OPERATOR TO SELECT 'TRANSFER PUMP P-T01A OR P-T01B START' ON THE FUELING MODE SELECTOR SWITCH (H0A-XXX) AT THE FUELING SYSTEM CONTROL PANEL.
1.

DETERMINE DESTINATION TANK T-01 OR T-02 AND MANUALLY LINE UP FILL VALVES TO THE SELECTED TANK.
2.

SELECT "START PUMP" ON THE SELECTOR SWITCH ON THE PUMP CONTROL PANEL OR ACTIVE THE FUEL DELIVERY TRUCK ONBOARD TRANSFER PUMPS. NOTE: SEE FLOW SWITCH OPERATIONS BELOW IN MARINE DISPENSING SECTION FOR FLOW SWITCH CONTROL LOGIC.
3.

WHEN THE NORMAL FULL LEVEL HAS BEEN REACHED IN THE SELECTED TANK THE OUTDOOR BEACON WILL ACTIVATE. DISCONTINUE OFFLOADING INTO THE FULL TANK AND PRESS THE "SILENCE/ACKNOWLEDGE" PUSHBUTTON ON THE PUMP CONTROL PANEL TO TURN OFF THE OUTDOOR BEACON. REPEAT THE SEQUENCE USING THE OTHER TANK IF NECESSARY.
4.

RETURN THE PUMP SELECTOR SWITCH TO THE CENTER "AUTOMATIC" POSITION.

- TANK AREA ALARM CONDITIONS: THE FOLLOWING ARE ACTIONS FOR THE ALARMS INDICATED AT THE FUEL STORAGE TANKS T-01 AND T-02.
- HIGH-HIGH LEVEL SWITCH (HHLS): POWER-OFF TRANSFER FUELING PUMPS (P-T01A AND P-T01B), CLOSE SOV-101 AND SOV-201 FLOW CONTROL VALVE, ACTIVATE OUTDOOR HORN AND BEACON, ACTIVATE RED 'COMMON ALARM' LIGHT ON THE PUMP CONTROL PANEL.
- HIGH LEVEL SWITCH (HLS): ACTIVATE OUTDOOR BEACON AND CORRESPONDING TANK GREEN 'FULL' LIGHT ON THE PUMP CONTROL PANEL.
- LOW LEVEL SWITCH (LLS): POWER-OFF ALL FUEL TRANSFER PUMPS IN ALARM (P-T01A, P-T01B OR P-D01), ACTIVATE OUTDOOR BEACON AND CORRESPONDING TANK RED 'LO LVL' LIGHT ON THE PUMP CONTROL PANEL.

- DAY TANK ALARM & CONTROL CONDITIONS: THE FOLLOWING ARE ACTIONS FOR THE CONTROLS AND ALARMS INDICATED AT EACH OF THE THREE (3) DAY TANKS. FLOW SWITCH FS-D201 SEQUENCE OF OPERATION SIMILAR TO MARINE FUELING SYSTEM OPERATION DESCRIBED BELOW.
- HIGH-HIGH LEVEL SWITCH (HHLS): DE-ACTIVATE PUMP (P-D01), CLOSE SOV-D201 AND ASSOCIATED FLOW CONTROL VALVE CORRESPONDING TO THE DAY TANK (SOV-300, SOV-301, OR SOV-302) ACTIVATE OUTDOOR HORN AND BEACON, ACTIVATE RED 'COMMON ALARM' LIGHT ON THE PUMP CONTROL PANEL.
- HIGH LEVEL SWITCH (HLS): DE-ACTIVATE PUMP P-D01. CLOSE ANTI-SIPHON VALVE SOV-D201 AND CORRESPONDING DAY TANK FLOW CONTROL VALVE (SOV-3XX). ACTIVATE CORRESPONDING TANK GREEN 'FULL' LIGHT ON THE DAY TANK CONTROL PANEL.
- LEVEL SWITCH LOW (LSL): ACTIVATE PUMP P-D01. OPEN ANTI-SIPHON VALVE SOV-D201 AND CORRESPONDING DAY TANK FLOW CONTROL VALVE (SOV-3XX).
- LEVEL SWITCH LOW-LOW (LSLL): ACTIVATE PUMP P-D01.OUTDOOR BEACON AND CORRESPONDING TANK RED 'LO LVL' LIGHT ON THE DAY TANK CONTROL PANEL.

- FACILITY EMERGENCY FUEL SHUTOFF:
ACTIVATION OF ANY EFSO STATION WILL RESULT IN THE FOLLOWING.
- POWER-OFF TRANSFER PUMPS, (P-T01A, P-T01B AND P-D01).
- CLOSE ALL ELECTRICAL ACTUATED FLOW CONTROL VALVES AND ANTI-SIPHON VALVES.
- ACTIVATE OUTDOOR HORN AND BEACON.
- ACTIVATE RED 'COMMON ALARM' LIGHT ON PUMP CONTROL PANEL.

- FUELING SYSTEM CONTROL PANEL LIGHT INDICATORS:
GENERAL: PROVIDE SEPARATE TANK LEVEL LIGHT INDICATORS, AS NOTED BELOW, FOR TANK T-01 AND T-02.

- TANK T-01:
- HHLA:

OUTDOOR HORN AND BEACON, RED 'COMMON ALARM' LIGHT ON PUMP CONTROL PANEL.
- HLA:

OUTDOOR BEACON AND GREEN 'TANK FULL' LIGHT ON PUMP CONTROL PANEL.
- LLA:

OUTDOOR BEACON AND CORRESPONDING RED 'TANK LOW LEVEL' LIGHT ON PUMP CONTROL PANEL.

- TANK T-02:
- HHLA:

OUTDOOR HORN AND BEACON, RED 'COMMON ALARM' LIGHT ON PUMP CONTROL PANEL.
- HLA:

OUTDOOR BEACON AND GREEN 'TANK FULL' LIGHT ON PUMP CONTROL PANEL.
- LLA:

OUTDOOR BEACON AND CORRESPONDING RED 'TANK LOW LEVEL' LIGHT ON PUMP CONTROL PANEL.

- MARINE FUELING SYSTEM CONTROL SEQUENCE OF OPERATIONS:
NOTE: REFUELING OPERATOR ENGAGES HOSE REEL AND FUELING CONNECTIONS BEFORE PUMP SELECTION AND OPERATION BEGINS.
GENERAL: FLOW SWITCH FS-101A IS INTERLOCKED WITH THE OPERATION OF PUMP P-T01A. FLOW SWITCH FS-101B IS INTERLOCKED WITH THE OPERATION OF PUMP P-T01B. SEE FLOW DIAGRAMS FOR OPERATION AND INTERLOCK OF THE ANTI-SIPHON VALVES.

1.

SELECT SOURCE TANK 'T-01' OR 'T-02' FROM SELECTOR PUSH BUTTON AND SELECT EITHER PUMP 'P-T01A' OR 'P-T01B' START AT THE MARINE DISPENSING CABINET:

1.1.

THE FUEL FARM OPERATOR WILL SELECT WHICH PUMP THEY WANT TO RUN VIA A SELECTOR SWITCH AT THE CONTROL PANEL.
- 1.2.

THE PUMP START SEQUENCE SHALL BE AS FOLLOWS FOR PRESSURE FUELING:
2.

FUEL FARM OPERATOR SELECTS A SOURCE TANK AND TRANSFER PUMP VIA A SELECTOR SWITCH AT THE CONTROL PANEL LOCATED AT THE MARINE DISPENSING CABINET.

2.1.

THE TANK FARM OPERATOR ENTERS IN THE PRESET AMOUNT OF FUEL TO BE TRANSFERRED ON THE METER M-C01 ELECTRONIC REGISTER.
- 2.2.

UPON SELECTING 'PUMP START' ON THE METER REGISTER THE FOLLOWING WILL HAPPEN.
- 2.3.

ANTI-SIPHON VALVE (SOV-1XX AT SOURCE TANK WILL OPEN, TRANSFER PUMP WILL START, AND PRESET FLOW CONTROL VALVE SOV-C01 LOCATED IN THE MARINE DISPENSING CABINET WILL OPEN AND THE FLOW WILL START.

2.3.1.

A TIME DELAY RELAY WILL START TO ALLOW THE REFUELER 0-5 MINUTES (ADJUSTABLE) TO SQUEEZE THE DEADMAN HANDLE OR USE THE OVERWING HANDLE TO ESTABLISH FLOW AS MONITORED BY THE DESIGNATED PUMP'S FLOW SWITCH.
- 2.4.

IF FUEL IS NOT ESTABLISHED IN THE ALLOTTED TIME THE SELECTED PUMP WILL SHUTDOWN. IN THE EVENT OF TIMER EXPIRATION THE PUMP START BUTTON SHALL REQUIRE TO BE PRESSED AGAIN TO RE-ACTIVATE THE TIME DELAY RELAY AND RESTART THE SYSTEM.
3.

AFTER THE FLOW OF FUEL HAS BEEN ESTABLISHED, AS MONITORED BY THE PUMPS DESIGNATED FLOW SWITCH, THE PUMP WILL CONTINUE TO OPERATE UNTIL THE FOLLOWING HAPPENS.

3.1.

IF THE FLOW OF FUEL STOPS A SECOND TIME DELAY TIMER WILL START ALLOWING THE SELECTED PUMP TO CONTINUE TO OPERATE FOR 0-3 MINUTES (ADJUSTABLE). NOTE: THIS IS TO PREVENT SHORT CYCLING OF THE PUMP.
- 3.2.

IF THE FLOW OF FUEL IS RE-ESTABLISHED WITHIN THE DESIGNATED TIME THE TIME DELAY RELAY WILL RE-INITIATE AND THE PUMP WILL CONTINUE TO RUN.
- 3.3.

IF THE TIME DELAY RELAY EXPIRES THE PUMP WILL SHUTDOWN.
- NOTE:

THE PUMP FLOWING INDICATOR 'YELLOW' LIGHT SHALL ILLUMINATE UPON THE FLOW OF FUEL BEING ESTABLISHED AS MONITORED BY THE ASSOCIATED PUMP'S FLOW SWITCH.
4.

THE PUMP SHALL SHUTDOWN IF:

4.1.

THE ASSOCIATED PUMP LOW LEVEL SWITCH IS ACTIVATED.

4.2.

THE PUMP STOP BUTTON IS PRESSED.

4.3.

THE APPLICABLE FLOW SWITCH GOES INTO NO FLOW AND THE TIME DELAY RELAY EXPIRES AS DESCRIBED ABOVE.

4.4.

THE EMERGENCY FUEL SHUT-OFF SHUTDOWN BUTTON (EFSO) IS PRESSED. ANY OF THE THREE (3) EFSO BUTTON ACTIVATIONS, SHUTS DOWN ALL PUMPS IN THE FACILITY.

4.5.

EITHER TANK REACHES THE HHLA TRIP POINT.

- ALARM SILENCER / CONTROL OVERRIDE
- UPON ACTIVATION OF THE AUDIBLE HORN, A MANUAL SILENCER BUTTON IS TO BE PROVIDED IN ORDER TO DISABLE THE AUDIBLE ALARM CONDITION.
- UPON ACTIVATION OF EFSO PUSHBUTTONS ARE MANUALLY LATCHING. THE SYSTEM IS RE-ACTIVATED BY MANUALLY RESETTING THE PUSHBUTTON. A SEPARATE OVERRIDE FUNCTION IS REDUNDANT. HIGH LEVEL ALARM CONDITION, AN OVERRIDE SWITCH SHALL BE PROVIDED IN ORDER TO RE-ACTIVATE THE SYSTEM.
- UPON ACTIVATION OF THE HLA OR LLA OUTDOOR BEACON, THE BEACON CAN BE ACKNOWLEDGED AND DE-ACTIVATED BY PUSHING THE "ACKNOWLEDGE" PUSHBUTTON ON THE PUMP CONTROL PANEL.

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	3002	161

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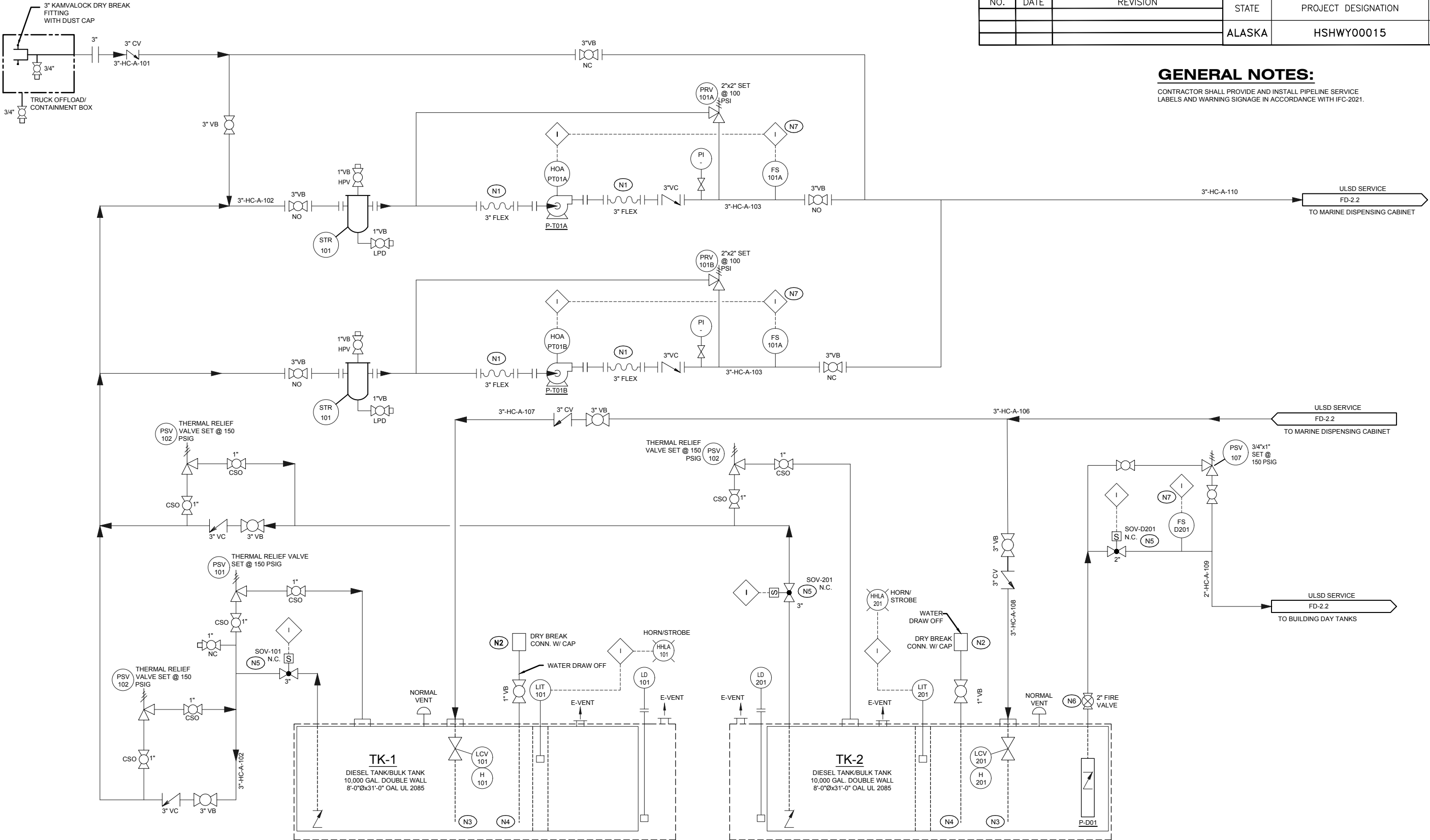
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FERRY TERMINAL

FUEL PIPING SEQUENCE OF
OPERATIONS

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	3101	161

GENERAL NOTES:

CONTRACTOR SHALL PROVIDE AND INSTALL PIPELINE SERVICE LABELS AND WARNING SIGNAGE IN ACCORDANCE WITH IFC-2021.



- SOV-101**
SOLENOID VALVE
ANTI-SIPHON DEVICE
120V/1 PH
- SOV-D301**
SOLENOID VALVE
ANTI-SIPHON DEVICE
120V/1 PH
- PRV-101 A/B**
PRESSURE RELIEF VALVE
2" ANSI 150#
CLA-VAL 50-48 OR EQUAL
- P-T01 A/B**
BLACKMER GNX3 (ULSD)
FLOW: 150 GPM @ 50PSI TDH
POWER: 10 HP
ELECTRICAL: 208V/3PH/60HZ
- P-D01**
RED JACKET (ULSD)
3/4 HP
FLOW: 30 GPM @ 70FT
ELECTRICAL: 120V/1PH

TANK SAFE FILL LOGIC:

- H XXX** MECHANICAL CONTROL VALVE LCV-XXX - CLOSSES FILL LINE AT 92% FILL CAPACITY. MORRISON BROS 9095AA OR EQUAL.
- LD XXX** LEAK DETECTION - VISUAL, KREUGER SENTRY GAUGE OR EQUAL.
- LI XXX** 0-100% MECHANICAL LEVEL INDICATOR, CLOCK GAUGE.
- HHLA XXX** HIGH-HIGH LEVEL ALARM - MORRISON BROS. CLOCK GAUGE FIGURE 918 WITH ALARM BOX.
- NUM** TIE-IN POINT

SHEET NOTES:

- N1** PROVIDE 150# FLANGED FLEXIBLE METAL HOSE/PUMP CONNECTOR, METRAFLEX SLP OR EQUAL.
- N2** DRY BREAK CONNECTION WITH CAP.
- N3** FILL STEM TO WITHIN 3" OF BOTTOM.
- N4** WATER DRAW-OFF PIPE TO BE WITHIN 1/2" OF TANK BOTTOM AT LOW END.
- N5** SOLENOID VALVE SHALL BE NORMALLY CLOSED. WHEN PUMP ENERGIZES, SOLENOID VALVE SHALL OPEN. WHEN PUMP DE-ENERGIZES, VALVE SHALL CLOSE.
- N6** PROVIDE FIRE VALVE FOR PUMP DISPENSER WITH FUSIBLE LINK. BASIS OF DESIGN MORRISON BROS FIGURE 346 OR APPROVED EQUAL.
- N7** FLOW SWITCH IS TO BE INTERLOCKED WITH THE OPERATION OF THE TRANSFER PUMP SHOWN. SEE SEQUENCE OF OPERATIONS. BASIS OF DESIGN MAGNETROL F10 OR APPROVED EQUAL.

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FLOW DIAGRAM TANKS**

FILE C:\QPC Design\Precision Alaska Engineering\Cascade Point Ferry Terminal\3102.dwg DATE 7/11/2025 11:36 LAYOUT 3102 RD DESIGNED RD CHECKED RD DRAFTED RJM

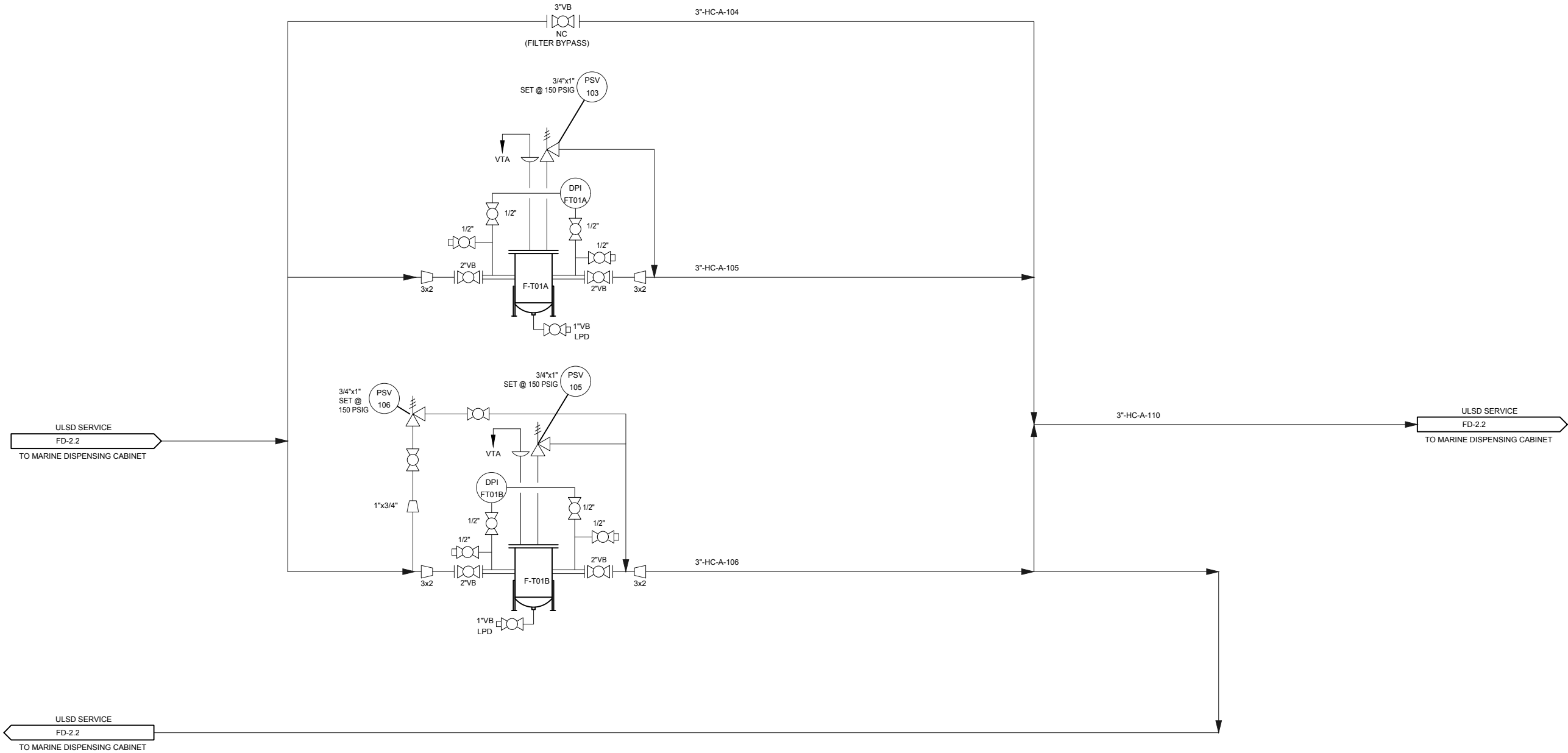
F-T01B
VIKING 2F
FILTER ASSEMBLY
150 GPM RATED
AQUACON FILTER

F-T01A
VIKING 2F
FILTER ASSEMBLY
150 GPM RATED
HYDROSORB ELEMENT

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	3102	161

GENERAL NOTES:

CONTRACTOR SHALL PROVIDE AND INSTALL PIPELINE SERVICE LABELS AND WARNING SIGNAGE IN ACCORDANCE WITH IFC-2021.



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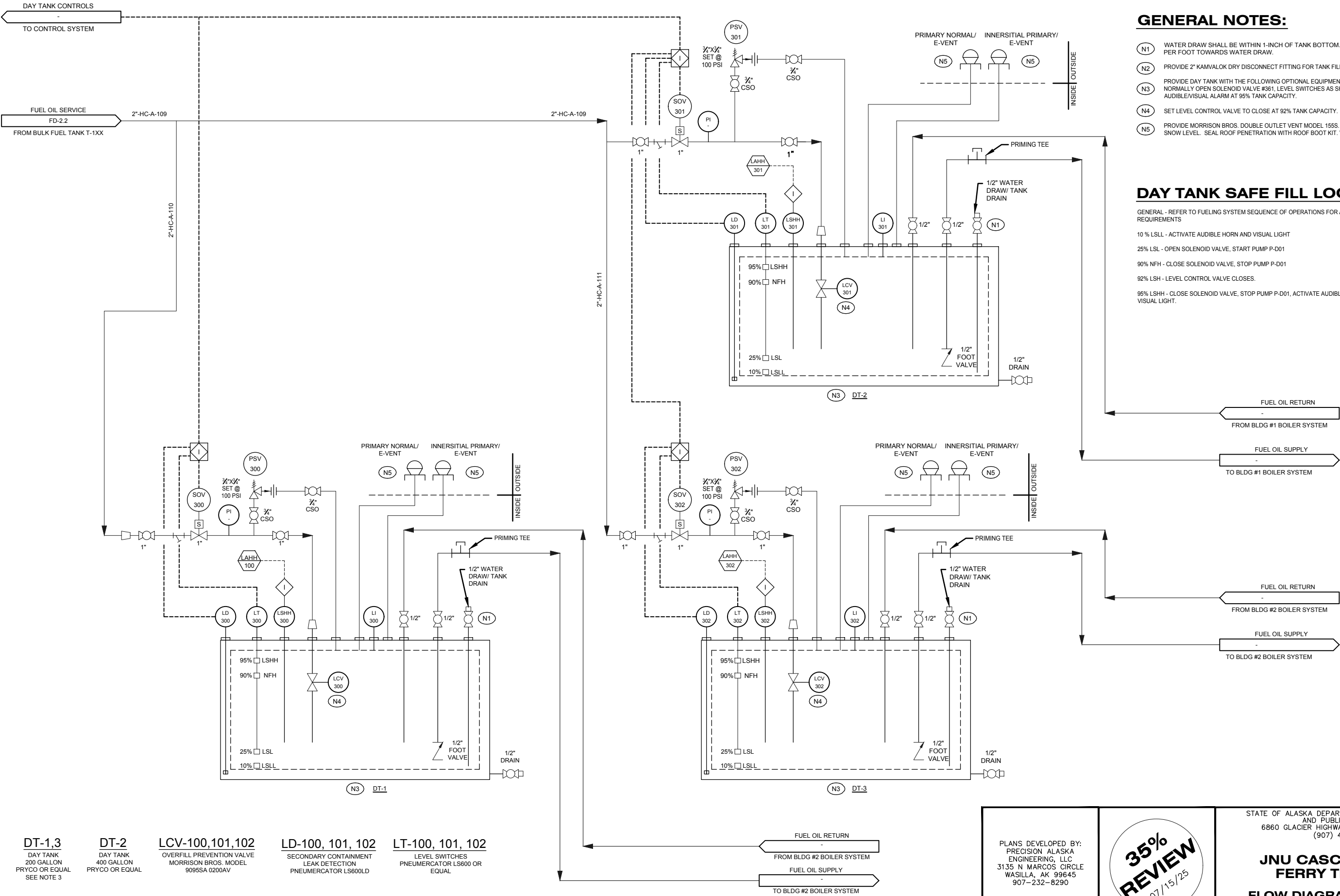
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FERRY TERMINAL

FLOW DIAGRAM
DISTRIBUTION PIPING

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	3103	161



DT-1,3
DAY TANK
200 GALLON
PRYCO OR EQUAL
SEE NOTE 3

DT-2
DAY TANK
400 GALLON
PRYCO OR EQUAL

LCV-100,101,102
OVERFILL PREVENTION VALVE
MORRISON BROS. MODEL
9095SA 0200AV

LD-100, 101, 102
SECONDARY CONTAINMENT
LEAK DETECTION
PNEUMERCATOR LS600LD

LT-100, 101, 102
LEVEL SWITCHES
PNEUMERCATOR LS600 OR
EQUAL

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**JNU CASCADE POINT
FERRY TERMINAL**
**FLOW DIAGRAM DAY TANKS
& SUPPORT FACILITIES**

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F-T01A
VIKING 2F
FILTER ASSEMBLY
150 GPM RATED
HYDROSORB ELEMENT

M-C01
PD METER
120 GPM MAX FLOW
LC M10 SERIES WITH LCR-II
METER REGISTER, OR EQUAL

XR-101
AUTOMATIC HOSE REEL
HOSE SIZE 1-1/2" ARCTIC
FLEXWING
DESIGN FLOW: 100 GPM
HOSE LENGTH: 100 FEET
ELECTRICAL: 120V/60HZ
(POWER REWIND)
BASIS OF DESIGN: HANNAY
28-25-26

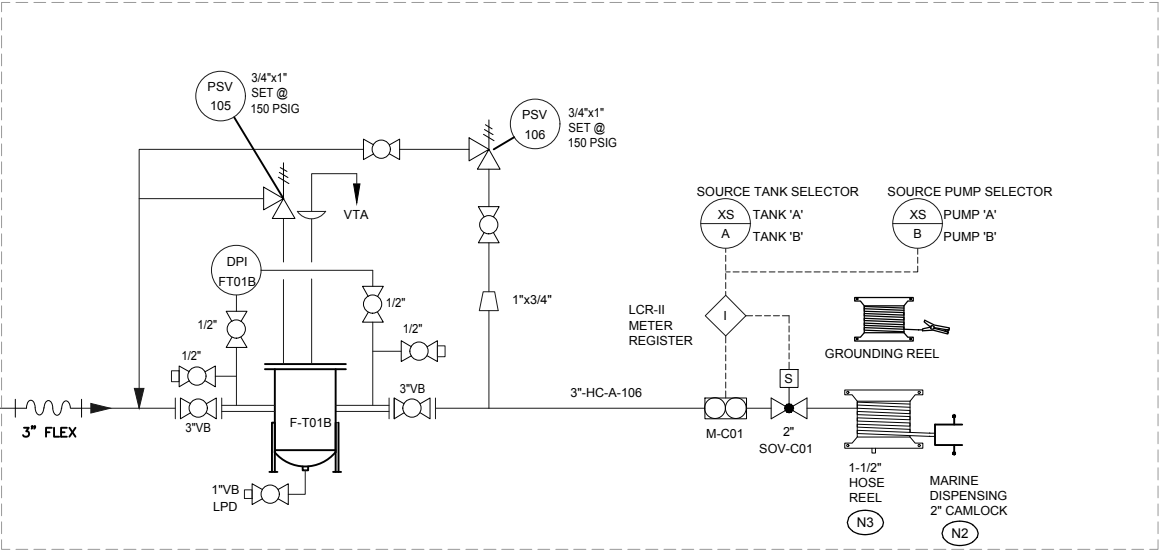
NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	3104	161

GENERAL NOTES:

1. CONTRACTOR SHALL PROVIDE AND INSTALL PIPELINE SERVICE LABELS AND WARNING SIGNAGE IN ACCORDANCE WITH IFC-2021.

SHEET NOTES:

- N1 UTILIZE LCR-II FOR CONTROLS.
N2 PROVIDE SELECTOR SWITCH FOR SOURCE TANK SELECTION AT MARINE ACABINET.
N3 PROVIDE SELECTOR SWITCH FOR SOURCE PUMP SELECTION AT MARINE ACABINET.



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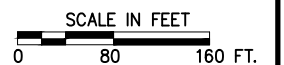
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JNU CASCADE POINT
FERRY TERMINAL
FLOW DIAGRAM MARINE
DISPENSER

GENERAL NOTES:

- SHEET NOTES:**

CONTRACTOR SHALL PROVIDE AND INSTALL AN EMERGENCY SHUT DOWN (ESD) SWITCH PER PLANS WITHIN 20 FEET TO 100 FEET OF THE DISPENSING EQUIPMENT WITH SIGNAGE IN ACCORDANCE WITH IFC-2021. CONTRACTOR SHALL ALSO PROVIDE AND INSTALL A FIRE EXTINGUISHER AT EACH MARINE DISPENSER WITH A MINIMUM RATING OF 2-A:20-B:C.



SITE PIPING PLAN

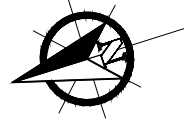
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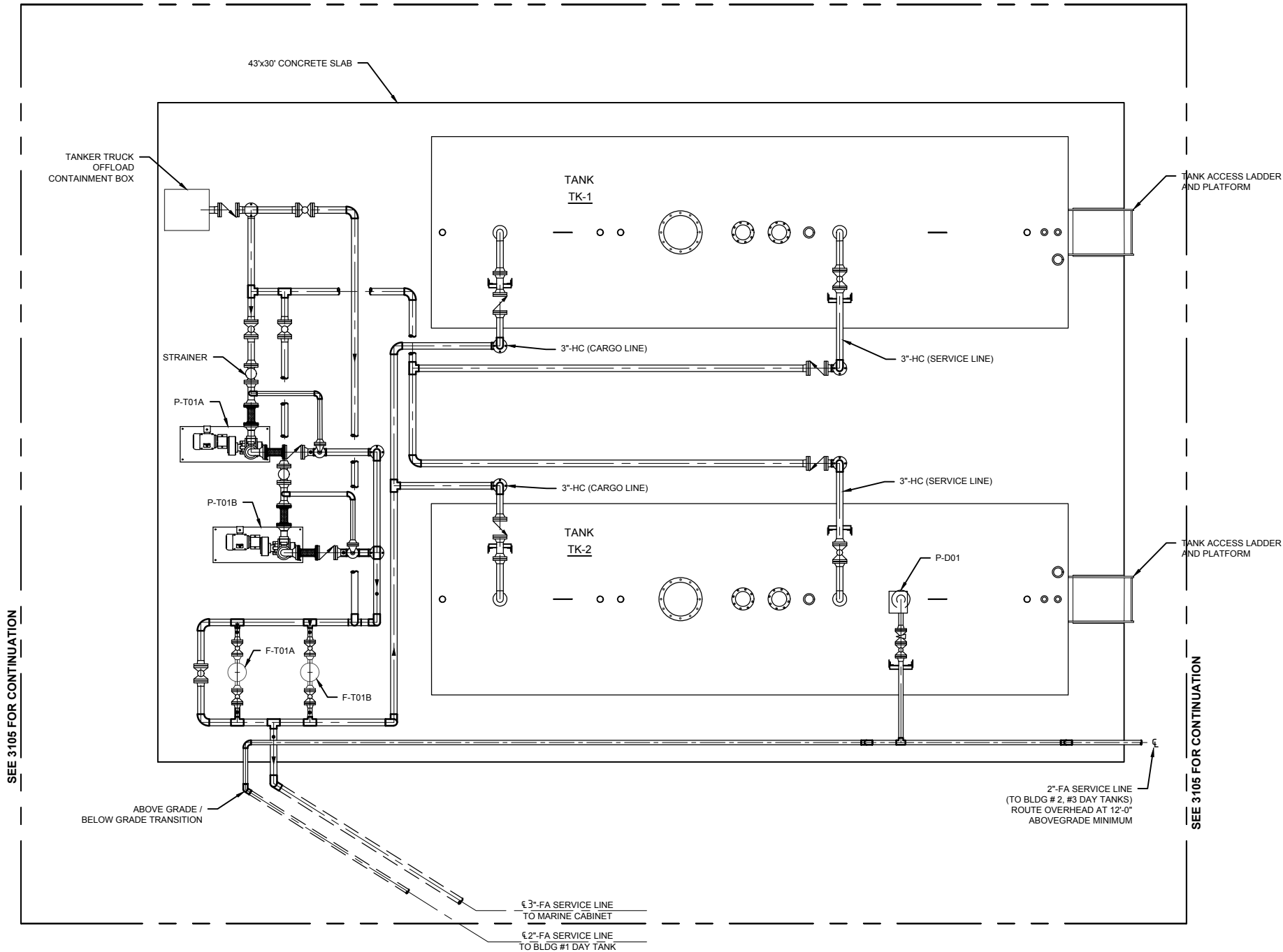
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TK-1
ULSD 2 DISPENSING TANK
10,000 GAL. DOUBLE WALL
9'-0"x28'-0" OAL
UL 2085

TK-2
ULSD 2 DISPENSING TANK
10,000 GAL. DOUBLE WALL
9'-0"x28'-0" OAL
UL 2085



TANK AREA PIPING PLAN

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	3106	161

GENERAL NOTES:

- PIPE ROUTING IS SHOWN SCHEMATICALLY AND OFFSET FOR CLARITY. PIPE SUPPORTS NOT SHOWN.
- PROVIDE SIGNAGE ON TANKS AND SURROUNDING INFRASTRUCTURE IN ACCORDANCE WITH 2021 IFC, NFPA 30.
- SEE FLOW DIAGRAMS FOR ADDITIONAL PIPING REQUIREMENTS.

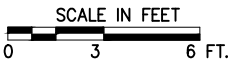
NOTES:

- N1** CONTRACTOR SHALL FIELD VERIFY PIPELINES ROUTING AND FINAL LOCATION PRIOR TO FABRICATION FOR ANY UNKNOWN FIELD CONDITIONS. REDLINE DRAWINGS WITH ANY CHANGES AND COORDINATE WITH OWNERS REPRESENTATIVE.
- N2** PROVIDE A MINIMUM CLEARANCE OF 3'-0" AROUND THE PERIMETER OF EACH TANK. PROVIDE PRE-ENGINEERED STAIR STYLES OVER EACH PIPE CROSSING WHERE THE EGRESS PATH IS BLOCKED FROM EQUIPMENT OR PIPING.
- N3** FOR 3-INCH NPS PIPING LOCATE SUPPORTS NOMINALLY EVERY 15'-0" MAXIMUM.
- N4** FOR 2-INCH NPS PIPING LOCATE SUPPORTS NOMINALLY EVERY 10'-0" MAXIMUM.
- N5** INSTALL FILTER VESSELS AND PUMPS TO CONCRETE SLAB PER THE MANUFACTURERS WRITTEN INSTRUCTIONS UTILIZING POST INSTALLED WEDGE ANCHORS.

IFC 2021 - TABLE 2306.2.3
MINIMUM SEPARATION REQUIREMENTS FOR ABOVE GROUND TANKS

CLASS OF LIQUID AND TANK TYPE	INDIVIDUAL TANK CAPACITY (GALLONS)	MINIMUM DIST. FROM NEAREST IMPORTANT BUILDING ON SAME PROPERTY (FEET)	MINIMUM DIST. FROM LOT LINE THAT IS OR CAN BE BUILT UPON, INCL. THE OPPOSITE SIDE OF A PUBLIC WAY (FEET)	MINIMUM DIST. FROM NEAREST SIDE OF ANY PUBLIC WAY (FEET)	MINIMUM DIST. BETWEEN TANKS (FEET)	MINIMUM DIST. FROM NEAREST DISPENSER (FEET) ^a
UL 2085 DOUBLE WALL TANK	0 TO 6,000	5	15	5	3	25
UL 2085 DOUBLE WALL TANK	6,001 TO 12,000	15	25	15	3	25

a. AT FLEET VEHICLE MOTOR FUEL-DISPENSING FACILITIES, A MINIMUM SEPARATION DISTANCE IS NOT REQUIRED.

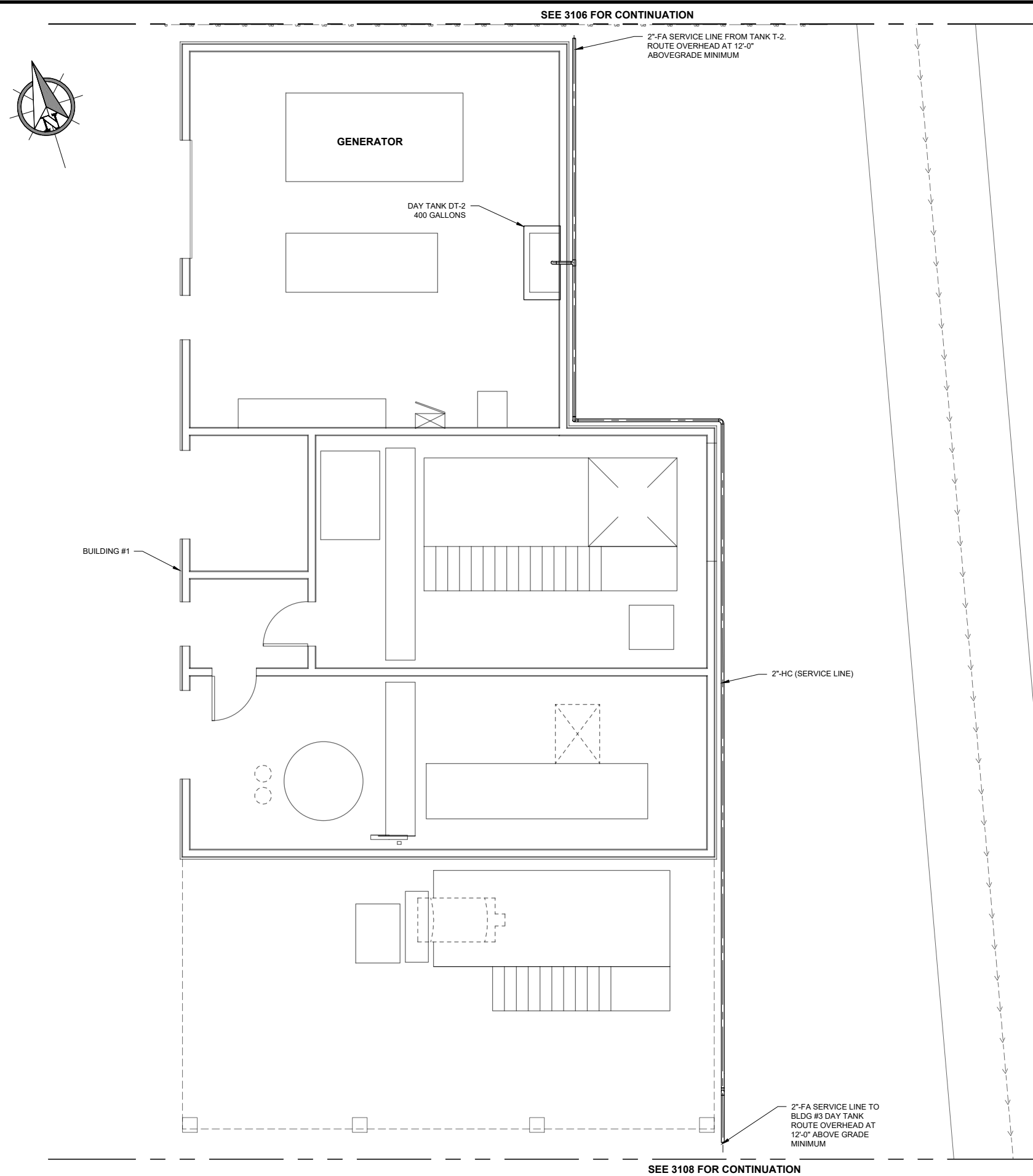


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JNU CASCADE POINT
FERRY TERMINAL
ENLARGED TANK AREA
PIPING PLAN



NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HS HWY 00015	2025	3107	161

GENERAL NOTES:

1. PIPE ROUTING IS SHOWN SCHEMATICALLY AND OFFSET FOR CLARITY. PIPE SUPPORTS NOT SHOWN.
2. PROVIDE SIGNAGE ON TANKS AND SURROUNDING INFRASTRUCTURE IN ACCORDANCE WITH 2021 IFC, NFPA 30.
3. SEE FLOW DIAGRAMS FOR ADDITIONAL PIPING REQUIREMENTS.

NOTES:

- | | |
|----|--|
| N1 | CONTRACTOR SHALL FIELD VERIFY PIPELINES ROUTING AND FINAL LOCATION PRIOR TO FABRICATION FOR ANY UNKNOWN FIELD CONDITIONS. REDLINE DRAWINGS WITH ANY CHANGES AND COORDINATE WITH OWNERS REPRESENTATIVE. |
| N2 | FOR 2-INCH NPS PIPING LOCATE SUPPORTS EVERY 10'-0" MAXIMUM. |

- N2** FOR 2-INCH NPS PIPING LOCATE SUPPORTS EVERY 10'-0" MAXIMUM.



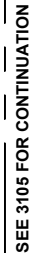
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JNU CASCADE POINT FERRY TERMINAL

UPLANDS PIPING PLAN TO BLDG #1



SEE 3105 FOR CONTINUATION

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	3109	161

GENERAL NOTES:

1. PIPE ROUTING IS SHOWN SCHEMATICALLY AND OFFSET FOR CLARITY. PIPE SUPPORTS NOT SHOWN.
2. PROVIDE SIGNAGE ON TANKS AND SURROUNDING INFRASTRUCTURE IN ACCORDANCE WITH 2021 IFC, NFPA 30.
3. SEE FLOW DIAGRAMS FOR ADDITIONAL PIPING REQUIREMENTS.

NOTES:

- N1** CONTRACTOR SHALL FIELD VERIFY PIPELINES ROUTING AND FINAL LOCATION PRIOR TO FABRICATION FOR ANY UNKNOWN FIELD CONDITIONS. REDLINE DRAWINGS WITH ANY CHANGES AND COORDINATE WITH OWNERS REPRESENTATIVE.
- N2** FOR 2-INCH NPS PIPING LOCATE SUPPORTS EVERY 10'-0" MAXIMUM.



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JNU CASCADE POINT FERRY TERMINAL

UPLANDS PIPING PLAN TO BLDG #3

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	3110	161

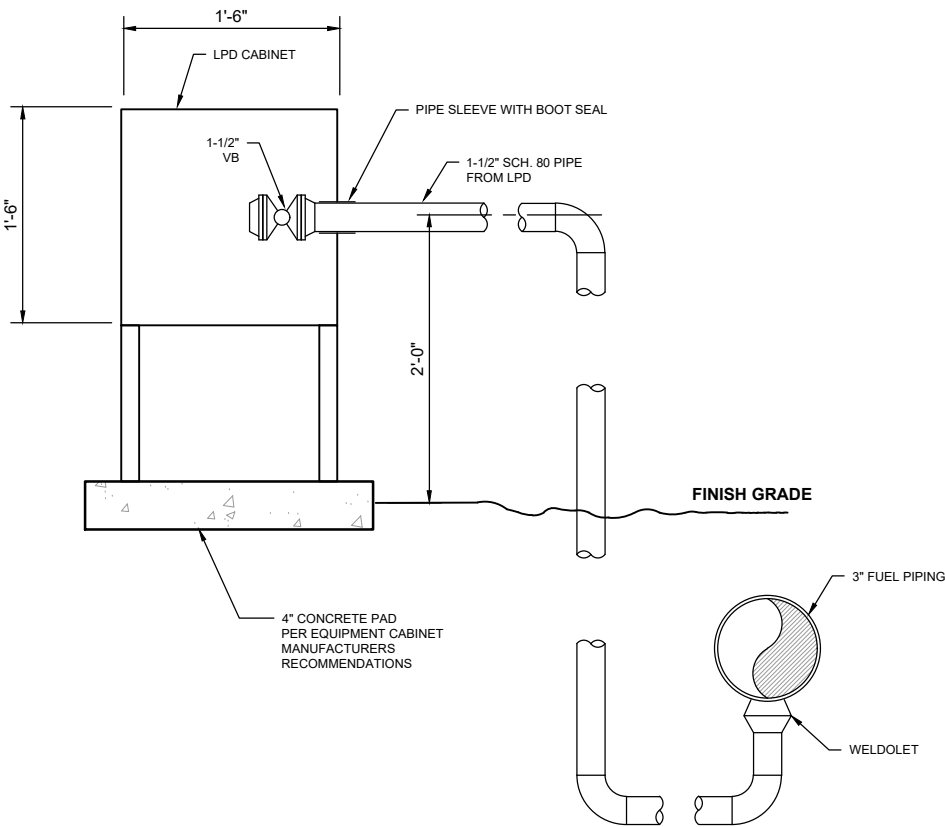
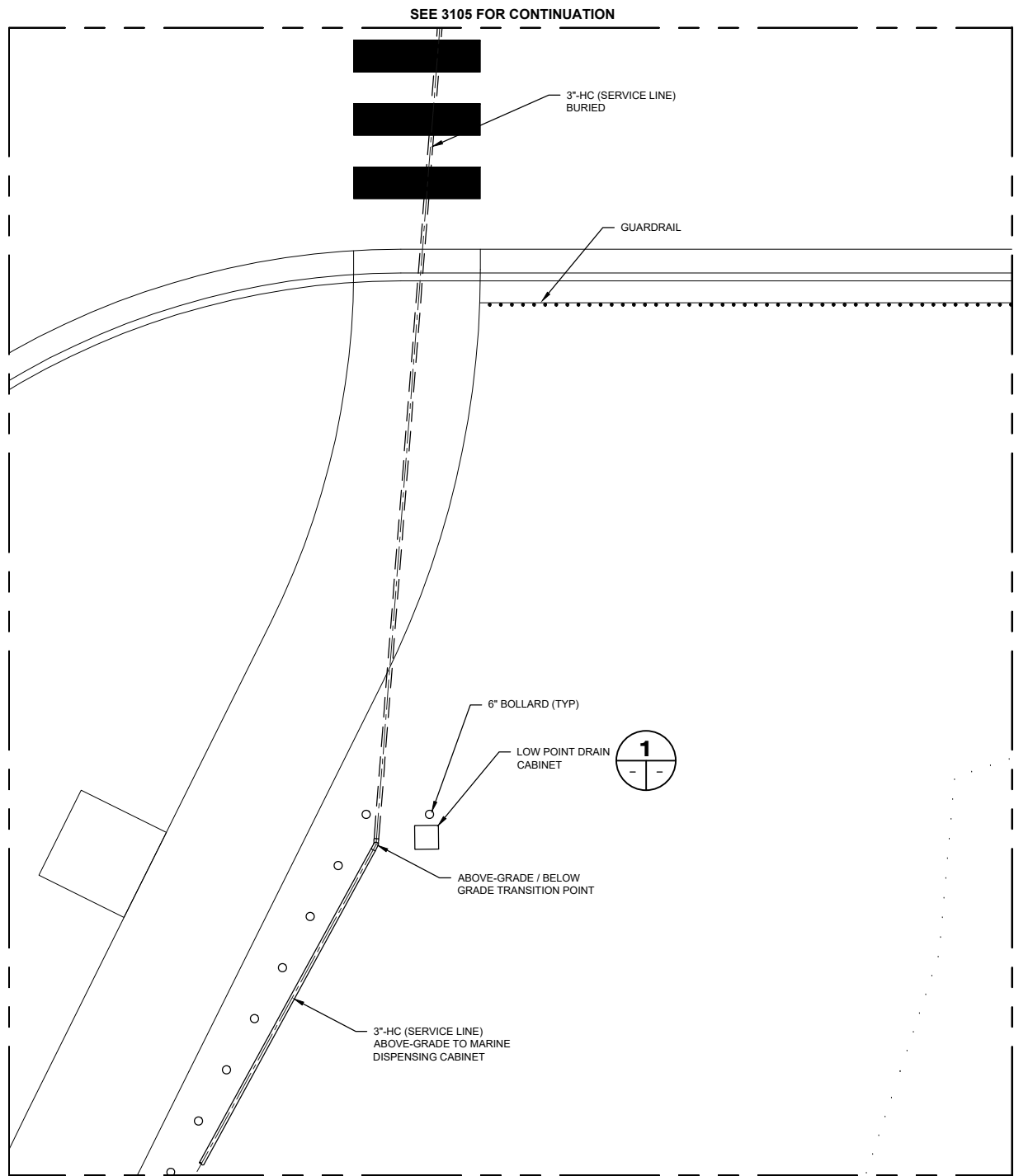


GENERAL NOTES:

1. PIPE ROUTING IS SHOWN SCHEMATICALLY AND OFFSET FOR CLARITY. PIPE SUPPORTS NOT SHOWN.
2. PROVIDE SIGNAGE ON TANKS AND SURROUNDING INFRASTRUCTURE IN ACCORDANCE WITH 2021 IFC, NFPA 30
3. SEE FLOW DIAGRAMS FOR ADDITIONAL PIPING REQUIREMENTS.

NOTES:

- (N1)** CONTRACTOR SHALL FIELD VERIFY PIPELINES ROUTING AND FINAL LOCATION PRIOR TO FABRICATION FOR ANY UNKNOWN FIELD CONDITIONS. REDLINE DRAWINGS WITH ANY CHANGES AND COORDINATE WITH OWNERS REPRESENTATIVE.
- (N2)** FOR 3-INCH NPS PIPING LOCATE SUPPORTS EVERY 15'-0" MAXIMUM.



1 LOW POINT DRAIN CABINET DETAIL

SCALE: NOT TO SCALE



PLANS DEVELOPED BY:
PRECISION ALASKA
ENGINEERING, LLC
3135 N MARCOS CIRCLE
WASILLA, AK 99645
907-232-8290

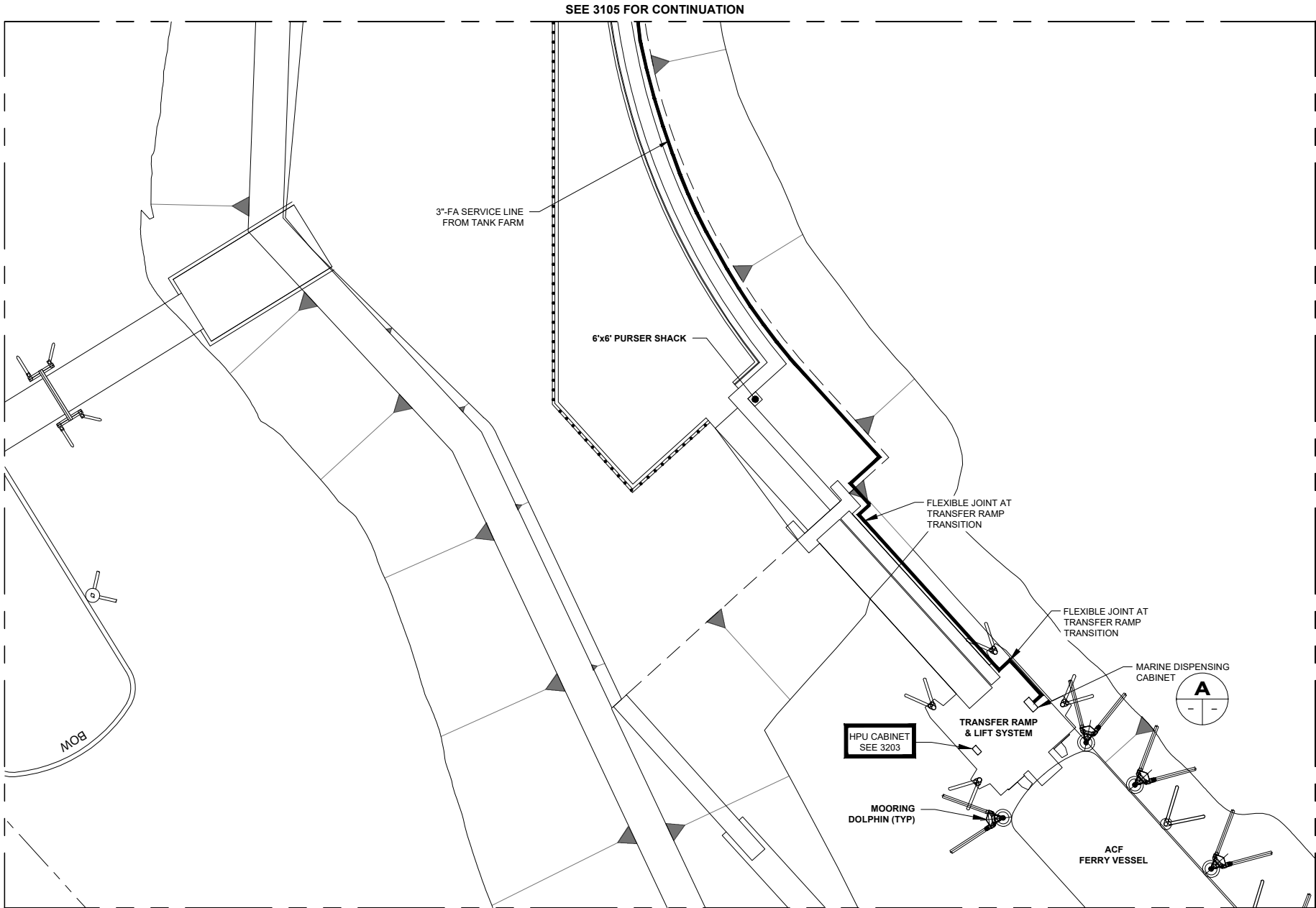
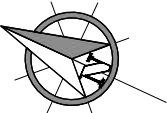
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REVIEW**
07/15/25

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(907) 465-1763

JNU CASCADE POINT FERRY TERMINAL

UPLANDS PIPING PLAN & DETAIL

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PIPING PLAN TO MARINE DISPENSER

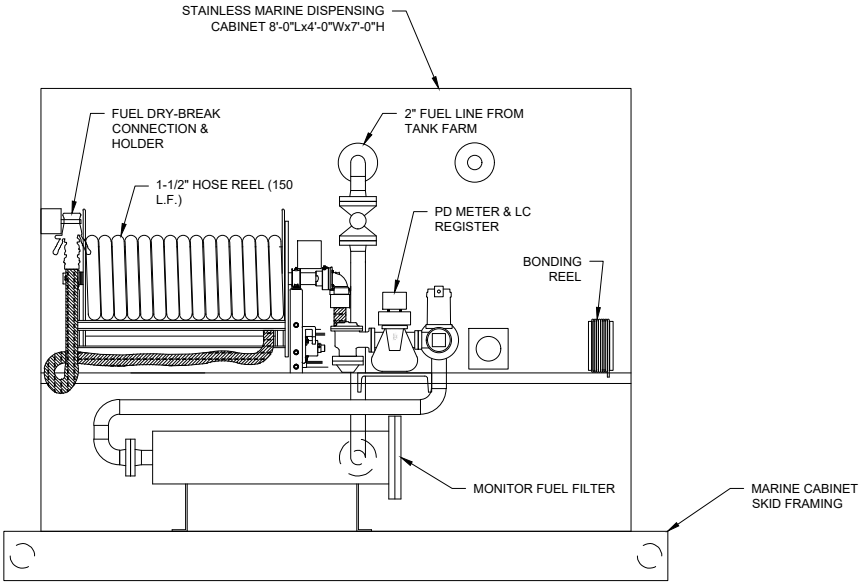
NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	3111	161

GENERAL NOTES:

- PIPE ROUTING IS SHOWN SCHEMATICALLY AND OFFSET FOR CLARITY, SEE DETAILS FOR PIPE SUPPORT ROUTING.
- PROVIDE SIGNAGE PER 2021 NFPA 30A, 2021 IFC FOR A MARINE DISPENSING FACILITY TO INCLUDE OPERATING INSTRUCTIONS LISTED IN SHEET NOTE 3. OPERATING INSTRUCTIONS TO BE A SIGN PRINTED WITH 2INCH TALL RED LETTERS ON A WHITE BACKGROUND PLACED IN A CONSPICUOUS AREA AT THE MARINE DISPENSING POINTS.
- SEE FLOW DIAGRAMS FOR ADDITIONAL PIPING REQUIREMENTS.

SHEET NOTES:

- CONTRACTOR SHALL FIELD VERIFY PIPELINES ROUTING AND FINAL LOCATION PRIOR TO FABRICATION FOR ANY UNKNOWN FIELD CONDITIONS. REDLINE DRAWINGS WITH ANY CHANGES AND COORDINATE WITH OWNERS REPRESENTATIVE.
- ROUTE NEW PIPELINES ALONG NEW DOCK. USE NEW SUPPORTS TO SUPPORT THE PIPELINE NOMINALLY EVERY 5-FEET. CONSULT ENGINEER AS NEEDED TO APPROVE THE SUPPORT SYSTEM FOR ADEQUACY.
- PROVIDE 150# RF FLANGED FLEX HOSE INSTALLED AT THE LOCATIONS SHOWN PER PLANS. HOSE TYPE: GOOD YEAR PLICORD FLEXWING OR EQUAL.
- PROVIDE CATLOW MODEL CV90 DISPENSING NOZZLE, AUTOMATIC VENTURI SHUT-OFF AND DUAL PISTON OR EQUAL.
- PROVIDE CONTINENTAL CONTITECH FUELING HOSE, REDLINE FUEL OIL, 250 PSIG OR EQUAL.
- MARINE DISPENSING SYSTEM OPERATING INSTRUCTIONS LABEL TO READ:
- CALL SERVICE ATTENDANT FOR ASSISTANCE IN OPERATION OF FUELING SYSTEM PUMPS AND DISPENSER EQUIPMENT.
 - BEFORE FUELING:
 - STOP ALL ENGINES AND AUXILIARIES.
 - SHUT OFF ALL ELECTRICITY, OPEN FLAMES, AND HEAT SOURCES
 - CHECK ALL BILGES FOR FUEL VAPORS
 - EXTINGUISH ALL SMOKING MATERIALS.
 - CLOSE ACCESS FITTING AND OPENINGS THAT COULD ALLOW FUEL VAPORS TO ENTER ENCLOSED SPACES OF VESSEL.
 - DURING FUELING:
 - MAINTAIN NOZZLE CONTACT WITH FILL PIPE.
 - WIPE UP SPILLS IMMEDIATELY.
 - AVOID OVERFILLING.
 - FUEL FILLING NOZZLE MUST BE ATTENDED AT ALL TIMES.
 - AFTER FUELING:
 - INSPECT BILGES FOR LEAKAGE AND FUEL ODORS.
 - VENTILATE UNTIL ODORS ARE REMOVED.
 - RETURN DISPENSING NOZZLE TO HOSE REEL WITH RETRACTION DEVICE
 - TURN PUMP ACTIVATION SWITCH TO "OFF" POSITION
 - RECORD AMOUNT DISPENSED AND SELECT "PRINT RECEIPT" IF NEEDED.
- NOTE: SEE FUEL PIPING FLOW DIAGRAM AND SEQUENCE OF OPERATION FOR ADDITIONAL INFORMATION.



MARINE DISPENSING CABINET ELEVATION
SCALE: NOT TO SCALE



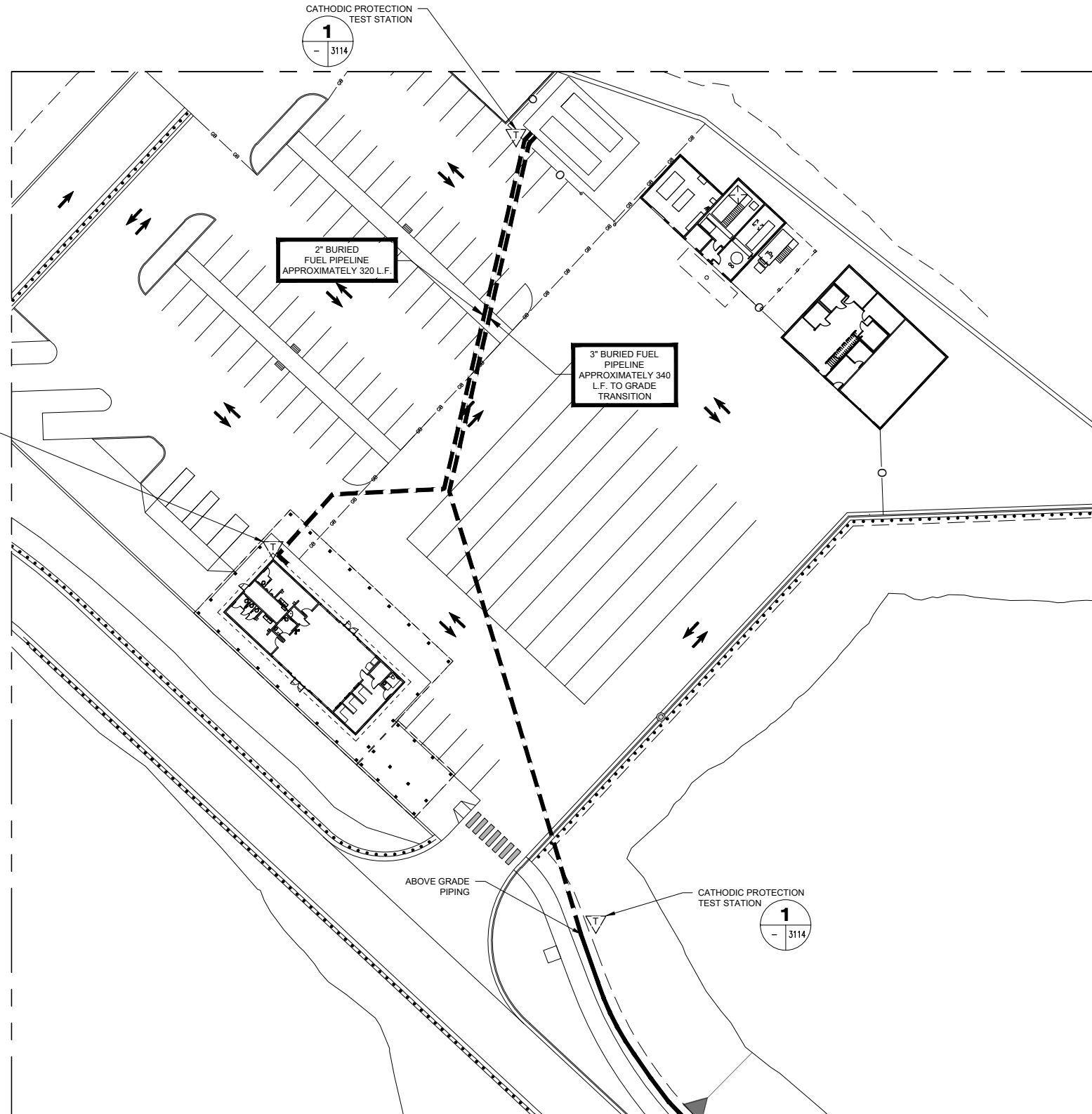
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UPLANDS PIPING PLAN TO
MARINE DISPENSER



CATHODIC PROTECTION PLAN

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	SHHWY00015	2025	3112	161

3. THE CATHODIC PROTECTION DESIGN IS SHOWN SCHEMATICALLY. SEE DRAWING 3114 FOR ADDITIONAL DETAILS AND PROJECT REQUIREMENTS.
4. THE INSTALLATION SHALL CONFORM TO THE APPLICABLE RULES OF NFPA 70.
5. SHOP DRAWINGS SHALL BE SUBMITTED AND SHALL CONSIST OF COMPLETE LIST OF EQUIPMENT, MATERIAL, CALCULATIONS, MANUFACTURERS DESCRIPTIVE AND TECHNICAL LITERATURE, CATALOG CUTS, AND INSTALLATION INSTRUCTIONS. SHOP DRAWINGS SHALL ALSO CONTAIN COMPLETE WIRING AND SCHEMATIC DIAGRAMS AND ANY OTHER DETAILS REQUIRED TO DEMONSTRATE THAT THE SYSTEM HAS BEEN COORDINATED AND WILL FUNCTION PROPERLY AS A UNIT.
6. UPON COMPLETION AND TESTING OF THE INSTALLED SYSTEM, TEST REPORTS SHALL BE SUBMITTED IN BOOKLET FORM TABULATION ALL FIELD TEST AND MEASUREMENTS PERFORMED. TEST REPORT SHALL BE PREPARED BY A PERSON QUALIFIED AND CERTIFIED IN ACCORDANCE WITH NACE REQUIREMENTS.
7. TEST STATIONS: TEST STATIONS SHALL BE OF THE TYPE AND LOCATIONS SHOWN AND SHALL BE BIG FINK POST TYPE OR APPROVED EQUAL.
8. CRITERIA FOR DETERMINING THE ADEQUACY OF PROTECTION ON THE BURIED PIPE SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF NACE RP-01 AND SHALL BE SPECIFIED BY THE CONTRACTORS NACE CERTIFIED TESTING AND REPORTING SUBCONTRACTOR.
9. SEE FLOW DIAGRAMS FOR ADDITIONAL PIPING REQUIREMENTS.

SCALE IN FEET



0 30 60 FT.

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JNU CASCADE POINT FERRY TERMINAL

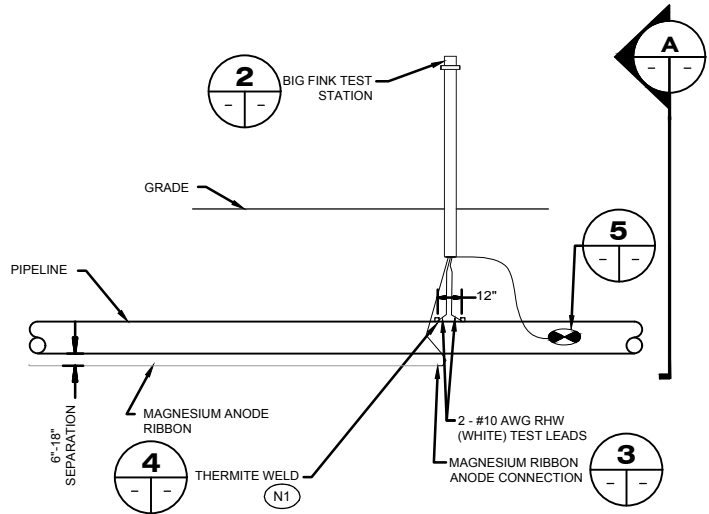
CATHODIC PROTECTION PLAN

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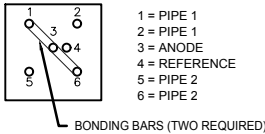
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			ALASKA	HSHWY00015	2025	3114	161

NOTES:

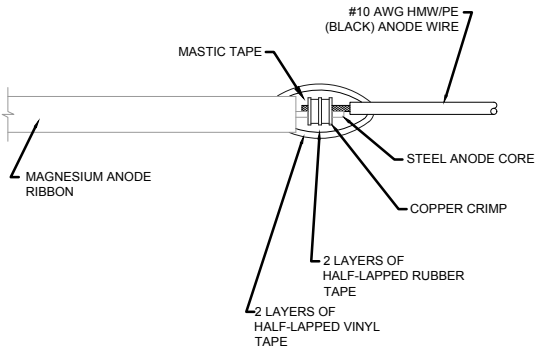
- N1INSTALLATION SHALL BE PERFORMED BY A CERTIFIED CORROSION PROTECTION INSTALLER.
- N2CONTRACTOR TO EMPLOY A CORROSION TESTING COMPANY TO PERFORM ADEQUACY TESTING. RESULTS SHALL BE PROVIDED TO ENGINEER AND OWNER.



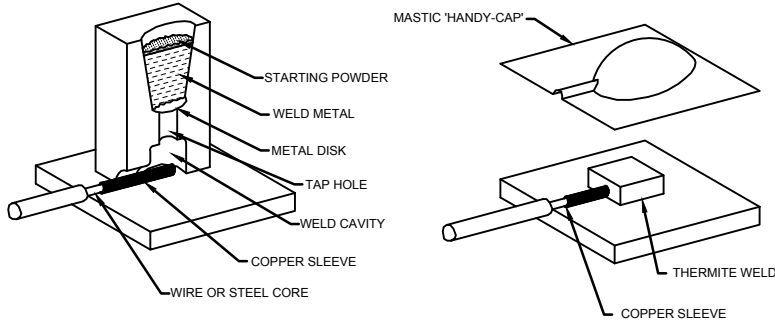
1 TEST STATION INSTALLATION
SCALE: NONE



2 TEST STATION INSTALLATION
SCALE: NONE

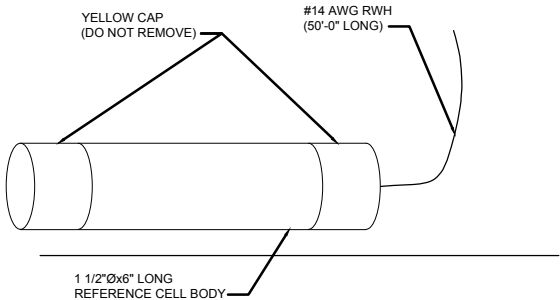


3 MAGNESIUM RIBBON ANODE CONNECTION
SCALE: NONE

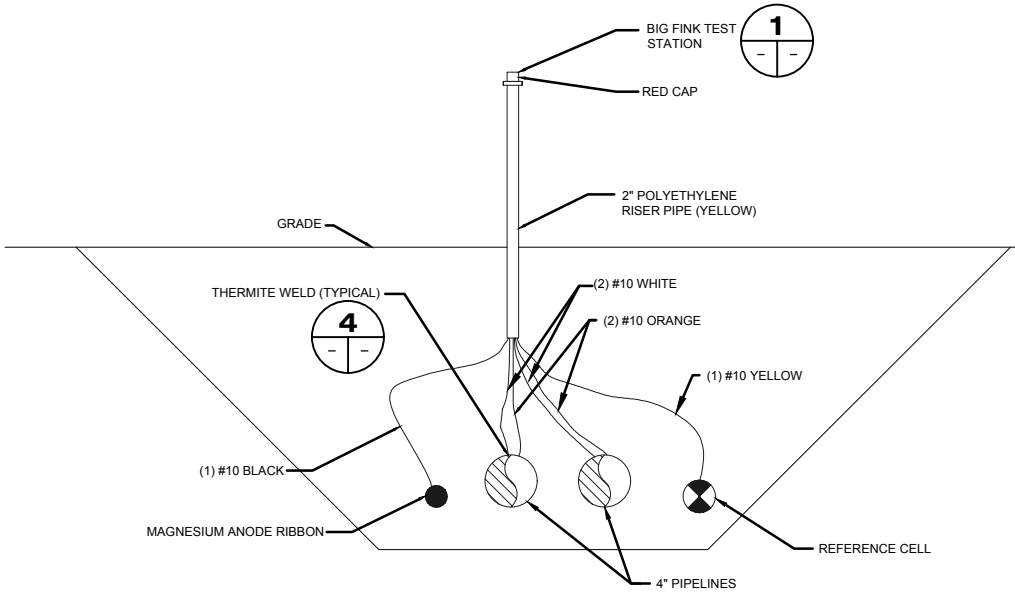


- NOTES:
- CLEAN WELD AREA TO BRIGHT METAL
 - WELD CABLE TO PIPE USING 'CADWELD' OR APPROVED EQUAL EXOTHERMIC WELD.
 - ADAPTER SLEEVE REQUIRED FOR EXOTHERMIC WELDING OF #6 AWG WIRE OR SMALLER.
 - CLEAN SLAG FROM WELD AREA AND TEST FOR ADHESION.
 - INSULATE WELD WITH ROYSTON HANDY CAP OR APPROVED EQUAL.
 - ALL CLEANED AREA NOT COVERED BY HANDY CAP SHALL BE COVERED WITH 125 MIL ROYSTON TAC TAPE OR APPROVED EQUAL.

4 EXOTHERMIC (THERMITE) WELD DETAIL
SCALE: NONE



5 REFERENCE CELL
SCALE: NONE



A CATHODIC PROTECTION PLACEMENT SECTION
SCALE: NONE

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JNU CASCADE POINT
FERRY TERMINAL
CP SYSTEM DETAILS

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	3201	161

NOTES:

THE HYDRAULIC SCHEMATIC IS PRELIMINARY. EQUIPMENT SIZING AND DESIGN BASIS IS TO BE CONFIRMED.

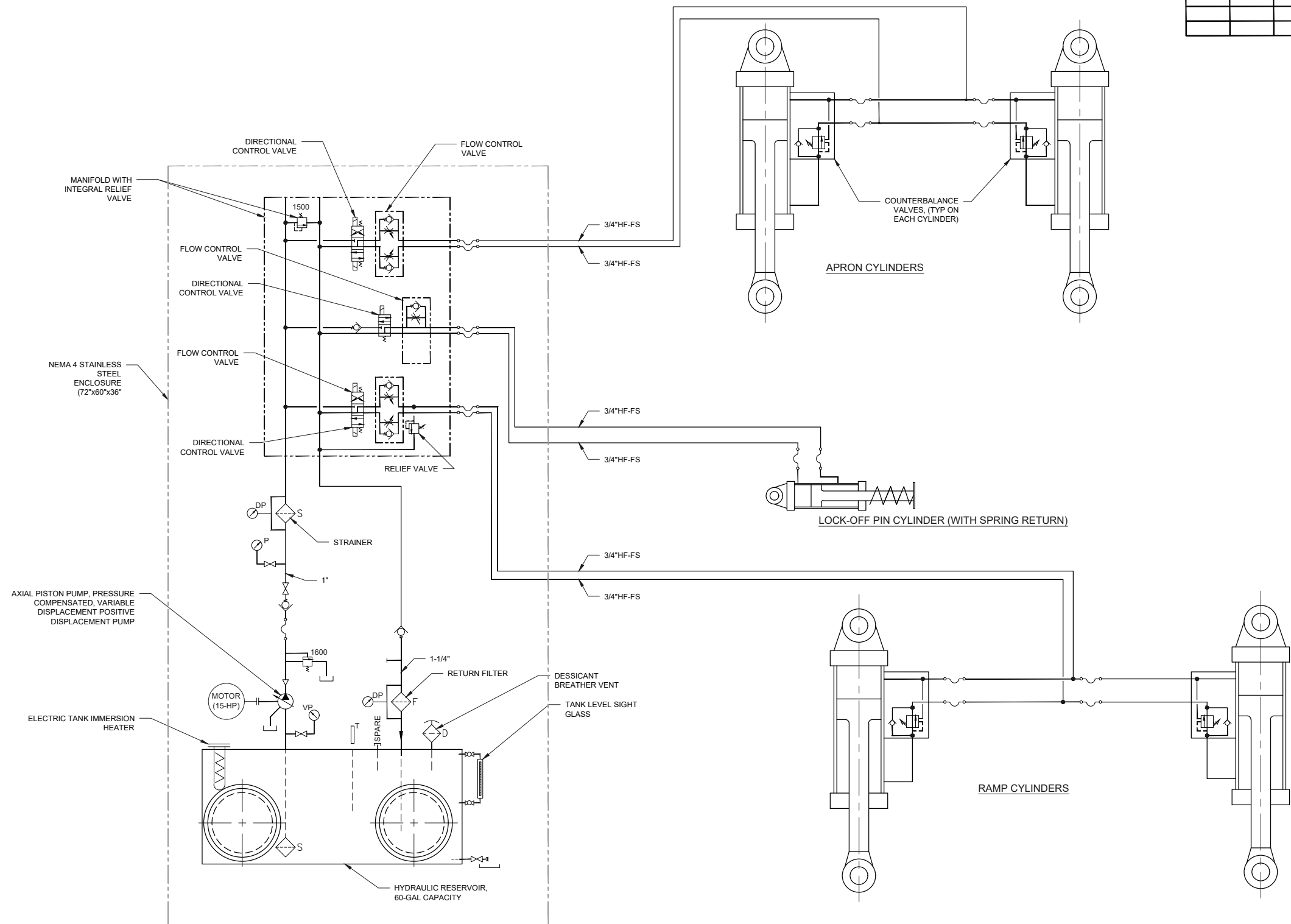
HYDRAULIC SYSTEM NARRATIVE:

NOTE: THE OPERATOR SHALL CONFIRM THE FERRY IS PROPERLY POSITIONED AND DOCKED PRIOR TO MANIPULATION OF THE HYDRAULIC SYSTEM.

GENERAL: THE HYDRAULIC POWER UNIT (HPU) IS PROVIDED WITH A CONTROL PANEL ATTACHED TO THE HPU ENCLOSURE AS WELL AS A REMOTE CONTROL PANEL POSITIONED FOR CLEAR VIEW OF THE RAMP, APRON AND FERRY LOADING/UNLOADING OPERATIONS. THE HYDRAULIC SYSTEM CONSISTS OF TWO (2) CYLINDERS USED TO RAISE AND LOWER THE RAMP. TWO (2) CYLINDERS TO RAISE AND LOWER THE RAMP. ONE (1) CYLINDER USED TO LOCK/UNLOCK THE RAMP INTO A TRANSFER POSITION. THE BELOW IS A GENERAL OVERVIEW OF THE HYDRAULIC RAMP SYSTEM OPERATIONAL CONTROL AND DOES NOT INCLUDE OPERATIONS OF ALL THE HPU EQUIPMENT.

- I. RAISING AND LOWERING THE RAMP.
- A. THE OPERATOR SELECTS HPU MOTOR "ON" PUSH BUTTON AT A CONTROL PANEL. THE HYDRAULIC PUMP WILL ENERGIZE AND A GREEN LIGHT AT THE CONTROL PANEL WILL ACTIVATE CONFIRMING THE SYSTEM IS ONLINE.
- 1) RAISING THE RAMP
- I. TO RAISE THE OPERATOR PUSHES AND HOLDS THE RAMP "UP" PUSHBUTTON UNTIL THE PROPER RAMP ELEVATION IS ACHIEVED AS DETERMINED BY THE OPERATOR.
- II. ONCE THE RAMP DESIRED ELEVATION IS ACHIEVED THE RAMP IS TO BE LOWERED BY PUSHING THE RAMP "DOWN" BUTTON UNTIL THE RAMP SUPPORT STRUCTURE IS FULLY RESTED ON THE SUPPORT AND THE RAMP LOCK IS FULLY ENGAGED.
- 2) LOWERING THE RAMP
- I. TO LOWER RAMP THE OPERATOR NEEDS TO RAISE THE RAMP UNTIL IT IS CLEAR OF THE RAMP LOCK STRUCTURE BY PRESSING THE RAMP "UP" PUSHBUTTON.
- II. ONCE THE RAMP IS CLEAR OF THE RAMP STRUCTURE THE RAMP "UNLOCK" PUSHBUTTON ALONG WITH THE RAMP "DOWN" PUSHBUTTON ARE TO BE SIMULTANEOUSLY PRESSED TO LOWER THE RAMP INTO THE DESIRED ELEVATION.
- III. ONCE THE DESIRED ELEVATION IS ACHIEVED THE "UNLOCK" BUTTON IS TO BE RELEASED AND THE RAMP IS TO BE LOWERED BY PUSHING THE "DOWN" PUSHBUTTON UNTIL THE RAMP SUPPORT STRUCTURE IS FULLY SECURED AND THE RAMP LOCK IS FULLY ENGAGED.
- 3) RAISING AND LOWERING THE APRON TO TRANSFER AND STOWED POSITIONS.
- I. TO LOWER (TRANSFER POSITION) THE OPERATOR PUSHES AND HOLDS THE APRON "DOWN" PUSHBUTTON UNTIL THE RAMP TRANSFER POSITION IS ACHIEVED AS SIGNALLED BY A "GREEN" LIGHT SET BY A LIMIT SWITCH MOUNTED TO THE STRUCTURE.
- II. TO RAISE (STOWED POSITION) THE OPERATOR PUSHES AND HOLDS THE APRON "UP" PUSHBUTTON UNTIL THE RAMP STOWED POSITION IS ACHIEVED AS SET BY A LIMIT SWITCH.

NOTE: THE HPU MOTOR IS TO BE DE-ENERGIZED WHEN THE CONTROLS ARE NOT ATTENDED BY PUSHING THE MOTOR "OFF" PUSHBUTTON AT THE CONTROL PANEL.



HYDRAULIC SYSTEM FUNCTIONAL SCHEMATIC

SCALE: NONE

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WASILLA, AK 99645
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JNU CASCADE POINT FERRY TERMINAL

HYDRAULIC PIPING DETAILS

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	HSHWY00015	2025	3203	161

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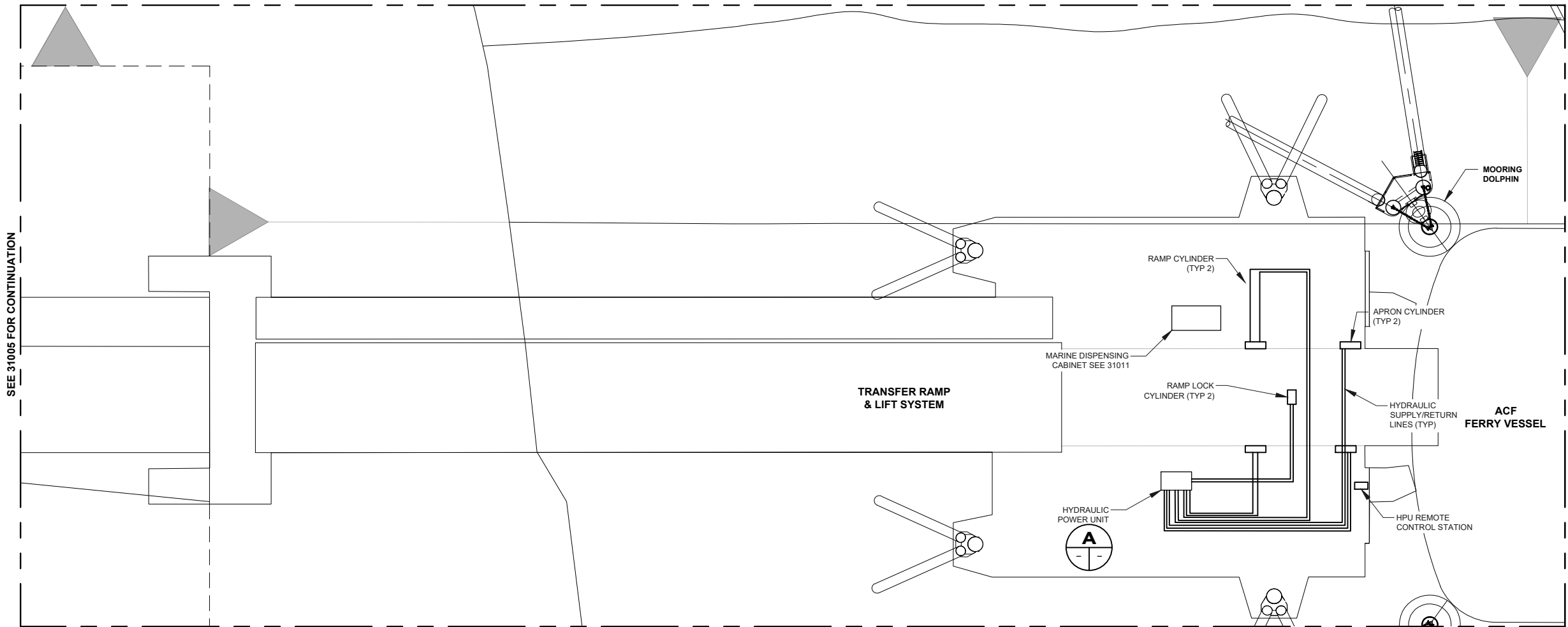
USE NEW NON-MARKING CLAMPS AND SUPPORTS TO SUPPORT THE HYDRAULIC PIPING NOMINALLY EVERY 5-FEET. CONSULT ENGINEER AS NEEDED TO APPROVE THE SUPPORT SYSTEM FOR ADEQUACY.

1. TURN HPU MOTOR "ON"

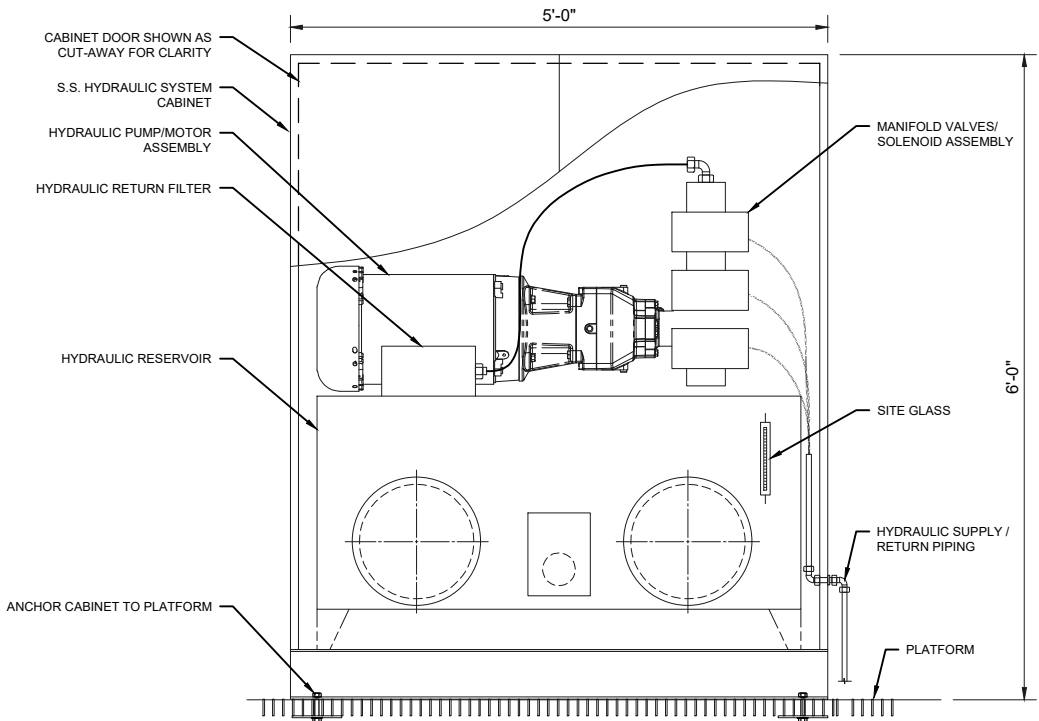
4. LOWER APRON. PUSH "DOWN" UNTIL GREEN LIGHT IS ON.

NOTE: SEE HYDRAULIC FLOW DIAGRAM FOR ADDITIONAL REQUIREMENTS AND CONTROLS INFORMATION.

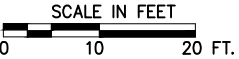
1. PIPE ROUTING IS SHOWN SCHEMATICALLY AND OFFSET FOR CLARITY, SEE DETAILS FOR PIPE SUPPORT ROUTING.



HYDRAULIC SYSTEM PLAN



HYDRAULIC SYSTEM ENCLOSURE ELEVATION



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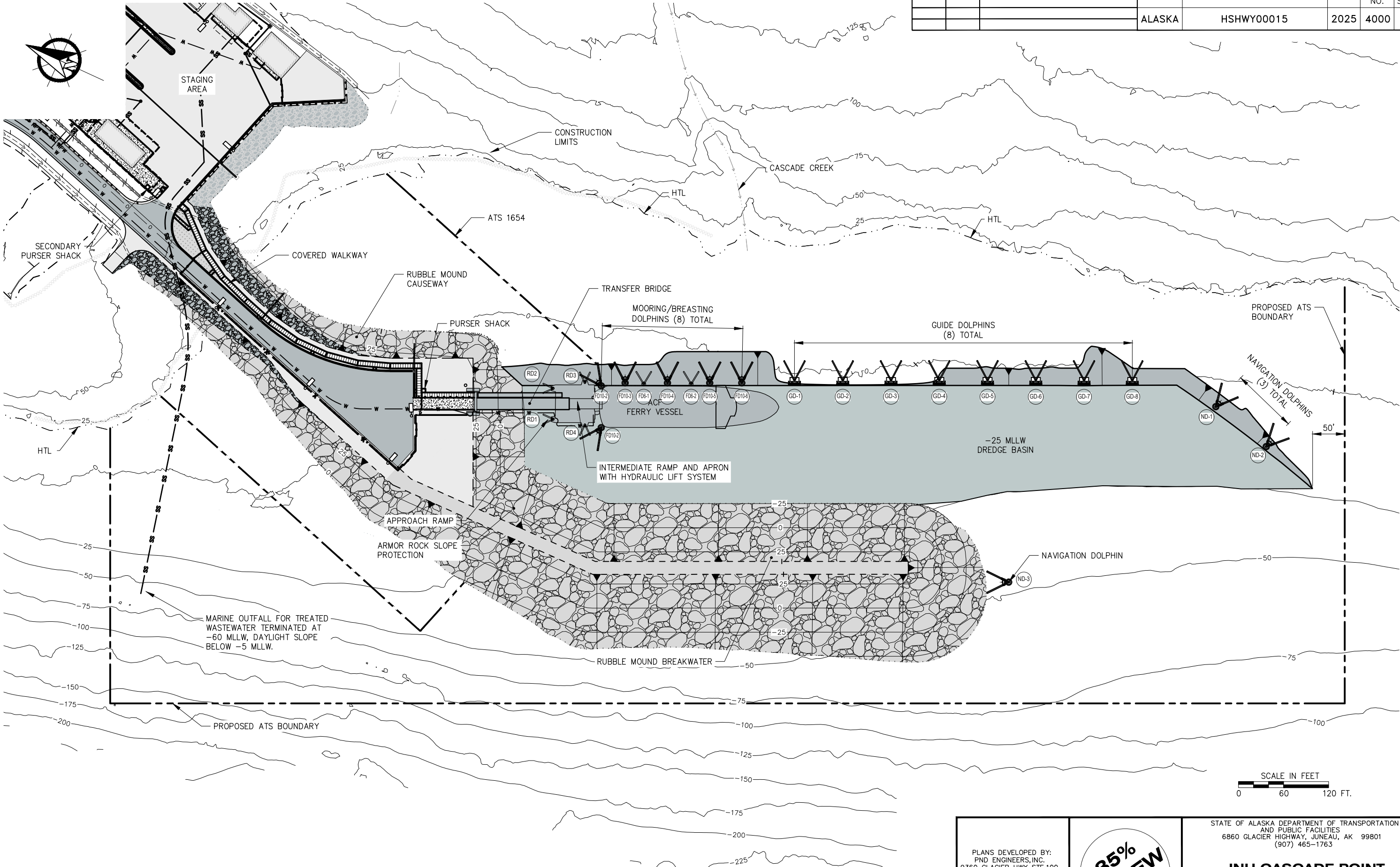
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HYDRAULIC PIPING DETAILS

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NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	4000	161



PLANS DEVELOPED BY:
PND ENGINEERS, INC.
9360 GLACIER HWY, STE.100
JUNEAU, AK 99801
907-586-2093
CAN: AECC250

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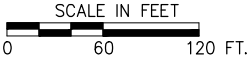
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**JNU CASCADE POINT
FERRY TERMINAL**

MARINE PLAN

Location		Pile Size	Pile Tip	Batter	Mudline Elevation (ft)	Cutoff Elevation (ft)	Supply Length	# of Anodes	Ultimate Load (kip)	
									Tension	Comp.
Guide Dolphin (GD1)	GD1-E Vert	36.0 x 0.500	SA	V	-25	30	80	3	-	-
	GD1-W Vert	36.0 x 0.500	SA	V	-25	30	80	3	-	-
	GD1-N Batter	36.0 x 0.500	RA	2V : 1H	-25	30	80	3	-	-
	GD1-NE Batter	36.0 x 0.500	RA	2V : 1H	-25	30	80	3	-	-
	GD1-E Fender	24.0 x 0.500	S	V	-25	30	80	2	-	-
Guide Dolphin (GD2)	GD1-W Fender	24.0 x 0.500	S	V	-25	30	80	2	-	-
	GD2-E Vert	36.0 x 0.500	SA	V	-25	30	80	3	-	-
	GD2-W Vert	36.0 x 0.500	SA	V	-25	30	80	3	-	-
	GD2-N Batter	36.0 x 0.500	RA	2V : 1H	-25	30	80	3	-	-
	GD2-NE Batter	36.0 x 0.500	RA	2V : 1H	-25	30	80	3	-	-
Guide Dolphin (GD3)	GD2-E Fender	24.0 x 0.500	S	V	-25	30	80	2	-	-
	GD2-W Fender	24.0 x 0.500	S	V	-25	30	80	2	-	-
	GD3-E Vert	36.0 x 0.500	SA	V	-25	30	80	3	-	-
	GD3-W Vert	36.0 x 0.500	SA	V	-25	30	80	3	-	-
	GD3-N Batter	36.0 x 0.500	RA	2V : 1H	-25	30	80	3	-	-
Guide Dolphin (GD4)	GD3-NE Batter	36.0 x 0.500	RA	2V : 1H	-25	30	80	3	-	-
	GD3-E Fender	24.0 x 0.500	S	V	-25	30	80	2	-	-
	GD3-W Fender	24.0 x 0.500	S	V	-25	30	80	2	-	-
	GD4-E Vert	36.0 x 0.500	SA	V	-25	30	80	3	-	-
	GD4-W Vert	36.0 x 0.500	SA	V	-25	30	80	3	-	-
Guide Dolphin (GD5)	GD4-N Batter	36.0 x 0.500	RA	2V : 1H	-25	30	80	3	-	-
	GD4-NE Batter	36.0 x 0.500	RA	2V : 1H	-25	30	80	3	-	-
	GD4-E Fender	24.0 x 0.500	S	V	-25	30	80	2	-	-
	GD4-W Fender	24.0 x 0.500	S	V	-25	30	80	2	-	-
	GD5-E Vert	36.0 x 0.500	SA	V	-25	30	80	3	-	-
Guide Dolphin (GD6)	GD5-W Vert	36.0 x 0.500	SA	V	-25	30	80	3	-	-
	GD5-N Batter	36.0 x 0.500	RA	2V : 1H	-25	30	80	3	-	-
	GD5-NE Batter	36.0 x 0.500	RA	2V : 1H	-25	30	80	3	-	-
	GD5-E Fender	24.0 x 0.500	S	V	-25	30	80	2	-	-
	GD5-W Fender	24.0 x 0.500	S	V	-25	30	80	2	-	-
Guide Dolphin (GD7)	GD6-E Vert	36.0 x 0.500	SA	V	-25	30	80	3	-	-
	GD6-W Vert	36.0 x 0.500	SA	V	-25	30	80	3	-	-
	GD6-N Batter	36.0 x 0.500	RA	2V : 1H	-25	30	80	3	-	-
	GD6-NE Batter	36.0 x 0.500	RA	2V : 1H	-25	30	80	3	-	-
	GD6-E Fender	24.0 x 0.500	S	V	-25	30	80	2	-	-
Guide Dolphin (GD8)	GD6-W Fender	24.0 x 0.500	S	V	-25	30	80	2	-	-
	GD7-E Vert	36.0 x 0.500	SA	V	-25	30	80	3	-	-
	GD7-W Vert	36.0 x 0.500	SA	V	-25	30	80	3	-	-
	GD7-N Batter	36.0 x 0.500	RA	2V : 1H	-25	30	80	3	-	-
	GD7-NE Batter	36.0 x 0.500	RA	2V : 1H	-25	30	80	3	-	-
Guide Dolphin (GD9)	GD7-E Fender	24.0 x 0.500	S	V	-25	30	80	2	-	-
	GD7-W Fender	24.0 x 0.500	S	V	-25	30	80	2	-	-
	GD8-E Vert	36.0 x 0.500	SA	V	-25	30	80	3	-	-
	GD8-W Vert	36.0 x 0.500	SA	V	-25	30	80	3	-	-
	GD8-N Batter	36.0 x 0.500	RA	2V : 1H	-25	30	80	3	-	-
Navigation Dolphin (ND1)	GD8-NE Batter	36.0 x 0.500	RA	2V : 1H	-25	30	80	3	-	-
	GD8-E Fender	24.0 x 0.500	S	V	-25	30	80	2	-	-
	GD8-W Fender	24.0 x 0.500	S	V	-25	30	80	2	-	-
	ND1 Vert	24.0 x 0.500	SA	V	-25	50	100	2	-	-
	ND1 E Batter	24.0 x 0.500	RA	2V : 1H	-25	50	100	2	-	-
Navigation Dolphin (ND2)	ND1 NE Batter	24.0 x 0.500	RA	2V : 1H	-25	50	100	2	-	-
	ND1 Fender	24.0 x 0.500	S	V	-25	50	100	2	-	-
	ND2 Vert	24.0 x 0.500	SA	V	-25	50	100	2	-	-
	ND2 E Batter	24.0 x 0.500	RA	2V : 1H	-25	50	100	2	-	-
	ND2 NE Batter	24.0 x 0.500	RA	2V : 1H	-25	50	100	2	-	-
Navigation Dolphin (ND3)	ND2 Fender	24.0 x 0.500	S	V	-25	50	100	2	-	-
	ND3 Vert	24.0 x 0.500	SA	V	-25	50	100	2	-	-
	ND3 N Batter	24.0 x 0.500	RA	2V : 1H	-25	50	100	2	-	-
	ND3 NW Batter	24.0 x 0.500	RA	2V : 1H	-25	50	100	2	-	-
	ND3 Fender	24.0 x 0.500	S	V	-25	50	100	2	-	-
							5,040			
Pile Schedule Legend:										
H = Horizontal		RA = Rock Anchor		SA = Socket Anchor						
V = Vertical		O = Open Shoe		S = Socket Only						

Location		Pile Size	Pile Tip	Batter	Mudline Elevation (ft)	Cutoff Elevation (ft)	Supply Length	# of Anodes	Ultimate Load (kip)	
									Tension	Comp.
Transfer Bridge Abutment	BA-E Vert	24.0 x 0.500	O	V	-	20	80	-	-	-
	BA-Center Vert	24.0 x 0.500	O	V	-	20	80	-	-	-
	BA-W Vert	24.0 x 0.500	O	V	-	20	80	-	-	-
	BA-E Batter	24.0 x 0.500	O	2V : 1H	-	20	80	-	-	-
	BA-W Batter	24.0 x 0.500	O	2V : 1H	-	20	80	-	-	-
Float Restraint Dolphin (RD1)	RD1 Vert	30.0 x 0.500	SA	V	-25	30	80	3	-	-
	RD1 N Batter	24.0 x 0.500	RA	2V : 1H	-25	30	80	2	-	-
	RD1 NW Batter	24.0 x 0.500	RA	2V: 1H	-25	30	80	2	-	-
Float Restraint Dolphin (RD2)	RD2 Vert	30.0 x 0.500	SA	V	-25	30	80	3	-	-
	RD2 N Batter	24.0 x 0.500	RA	2V : 1H	-25	30	80	2	-	-
	RD2 NW Batter	24.0 x 0.500	RA	2V: 1H	-25	30	80	2	-	-
Float Restraint Dolphin (RD3)	RD3 Vert	30.0 x 0.500	SA	V	-25	30	80	3	-	-
	RD3 NE Batter	24.0 x 0.500	RA	2V : 1H	-25	30	80	2	-	-
	RD3 E Batter	24.0 x 0.500	RA	2V: 1H	-25	30	80	2	-	-
Float Restraint Dolphin (RD4)	RD4 Vert	30.0 x 0.500	SA	V	-25	30	80	3	-	-
	RD4 SW Batter	24.0 x 0.500	RA	2V : 1H	-25	30	80	2	-	-
	RD4 W Batter	24.0 x 0.500	RA	2V: 1H	-25	30	80	2	-	-
Floating Fender Dolphin (FD10-1)	FD10-1 N Vert	24.0 x 0.500	SA	V	-25	50	100	2	-	-
	FD10-1 S Vert	24.0 x 0.500	SA	V	-25	50	100	2	-	-
	FD10-1 W Batter	24.0 x 0.500	RA	2V : 1H	-25	50	100	2	-	-
	FD10-1 SW Batter	24.0 x 0.500	RA	2V : 1H	-25	50	100	2	-	-
	FD10-1 Fender	24.0 x 0.500	S	V	-25	50	100	2	-	-
Floating Fender Dolphin (FD10-2)	FD10-2 N Vert	24.0 x 0.500	SA	V	-25	50	100	2	-	-
	FD10-2 S Vert	24.0 x 0.500	SA	V	-25	50	100	2	-	-
	FD10-2 NW Batter	24.0 x 0.500	RA	2V : 1H	-25	50	100	2	-	-
	FD10-2 NE Batter	24.0 x 0.500	RA	2V : 1H	-25	50	100	2	-	-
	FD10-2 Fender	24.0 x 0.500	S	V	-25	50	100	2	-	-
Floating Fender Dolphin (FD10-3)	FD10-3 E Vert	24.0 x 0.500	SA	V	-25	50	100	2	-	-
	FD10-3 W Vert	24.0 x 0.500	SA	V	-25	50	100	2	-	-
	FD10-3 N Batter	24.0 x 0.500	RA	2V : 1H	-25	50	100	2	-	-
	FD10-3 NE Batter	24.0 x 0.500	RA	2V : 1H	-25	50	100	2	-	-
	FD10-3 Fender	24.0 x 0.500	S	V	-25	50	100	2	-	-
Floating Fender Dolphin (FD10-4)	FD10-4 E Vert	24.0 x 0.500	SA	V	-25	50	100	2	-	-
	FD10-4 W Vert	24.0 x 0.500	SA	V	-25	50	100	2	-	-
	FD10-4 N Batter	24.0 x 0.500	RA	2V : 1H	-25	50	100	2	-	-
	FD10-4 NE Batter	24.0 x 0.500	RA	2V : 1H	-25	50	100	2	-	-
	FD10-4 Fender	24.0 x 0.500	S	V	-25	50	100	2	-	-
Floating Fender Dolphin (FD10-5)	FD10-5 E Vert	24.0 x 0.500	SA	V	-25	50	100	2	-	-
	FD10-5 W Vert	24.0 x 0.500	SA	V	-25	50	100	2	-	-
	FD10-5 N Batter	24.0 x 0.500	RA	2V : 1H	-25	50	100	2	-	-
	FD10-5 NE Batter	24.0 x 0.500	RA	2V : 1H	-25	50	100	2	-	-
	FD10-5 Fender	24.0 x 0.500	S	V	-25	50	100	2	-	-
Floating Fender Dolphin (FD10-6)	FD10-6 E Vert	24.0 x 0.500	SA	V	-25	50	100	2	-	-
	FD10-6 W Vert	24.0 x 0.500	SA	V	-25	50	100	2	-	-
	FD10-6 N Batter	24.0 x 0.500	RA	2V : 1H	-25	50	100	2	-	-
	FD10-6 NE Batter	24.0 x 0.500	RA	2V : 1H	-25	50	100	2	-	-
	FD10-6 Fender	24.0 x 0.500	S	V	-25	50	100	2	-	-
Floating Fender Dolphin (FD6-1)	FD6-1 Vert	24.0 x 0.500	SA	V	-25	50	100	2	-	-
	FD6-1 N Batter	24.0 x 0.500	SA	2V : 1H	-25	50	100	2	-	-
	FD6-1 NE Batter	24.0 x 0.500	RA	2V : 1H	-25	50	100	2	-	-
	FD6-1 Fender	24.0 x 0.500	S	V	-25	50	100	2	-	-
Floating Fender Dolphin (FD6-2)	FD6-2 Vert	24.0 x 0.500	SA	V	-25	50	100	2	-	-
	FD6-2 N Batter	24.0 x 0.500	SA	2V : 1H	-25	50	100	2	-	-
	FD6-2 NE Batter	24.0 x 0.500	RA	2V : 1H	-25	50	100	2	-	-
	FD6-2 Fender	24.0 x 0.500	S	V	-25	50	100	2	-	-
Pile Schedule Legend:							5,160			
H = Horizontal		RA = Rock Anchor		SA = Socket Anchor						
V = Vertical		O = Open Shoe		S = Socket Only						



PLANS DEVELOPED BY:
PND ENGINEERS, INC.
9360 GLACIER HWY, STE.100
JUNEAU, AK 99801
907-586-2093
CAN: AECC250

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REVIEW

7/15/25

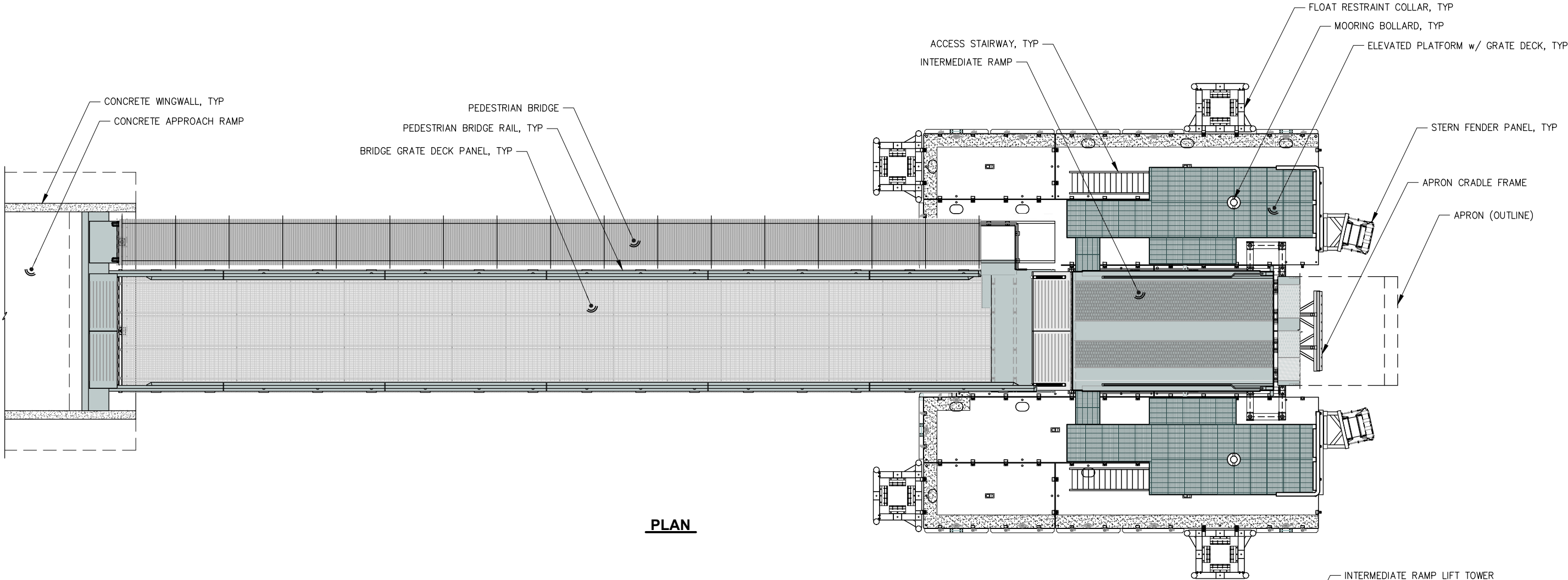
STATE OF ALASKA DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
6860 GLACIER HIGHWAY, JUNEAU, AK 99801
(907) 465-1763

**JNU CASCADE POINT
FERRY TERMINAL**

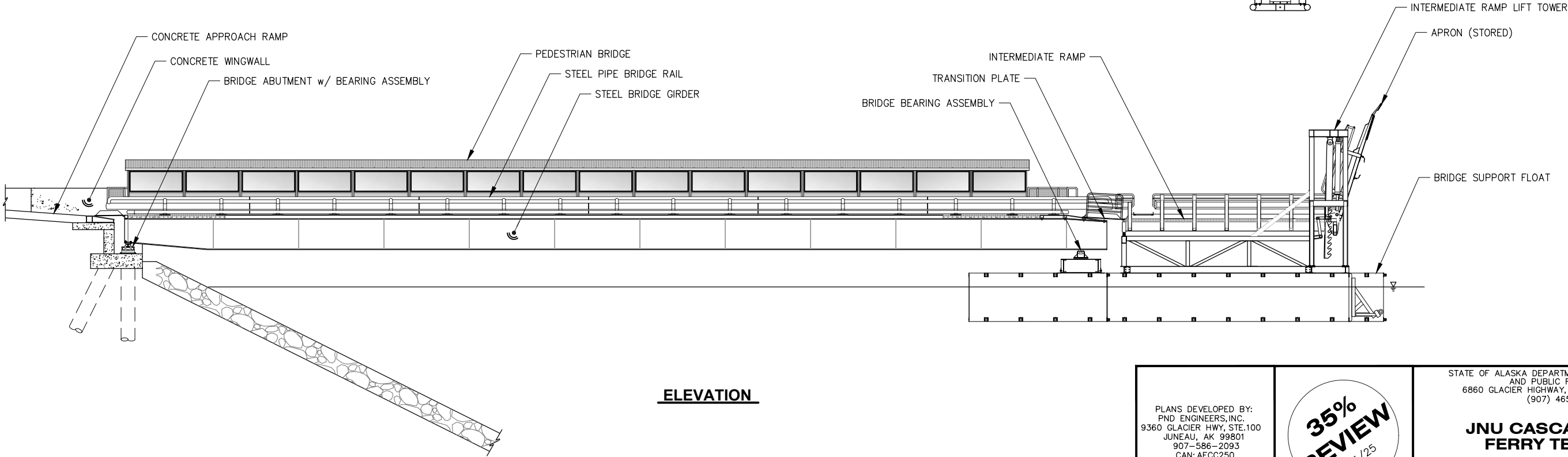
**MARINE PILE
SCHEDULE**

FILE N:\23xxx\232045 Cascade Point Ferry Terminal\G. Drawings\Marine\Bridge and Float\Bridge and Float.dwg DATE 7/14/2025 11:39 LAYOUT 4100 DESIGNED CHECKED MDS DRAFTED

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	4100	161



PLAN



ELEVATION

PLANS DEVELOPED BY:
PND ENGINEERS, INC.
9360 GLACIER HWY, STE.100
JUNEAU, AK 99801
907-586-2093
CAN: AECC250

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REVIEW
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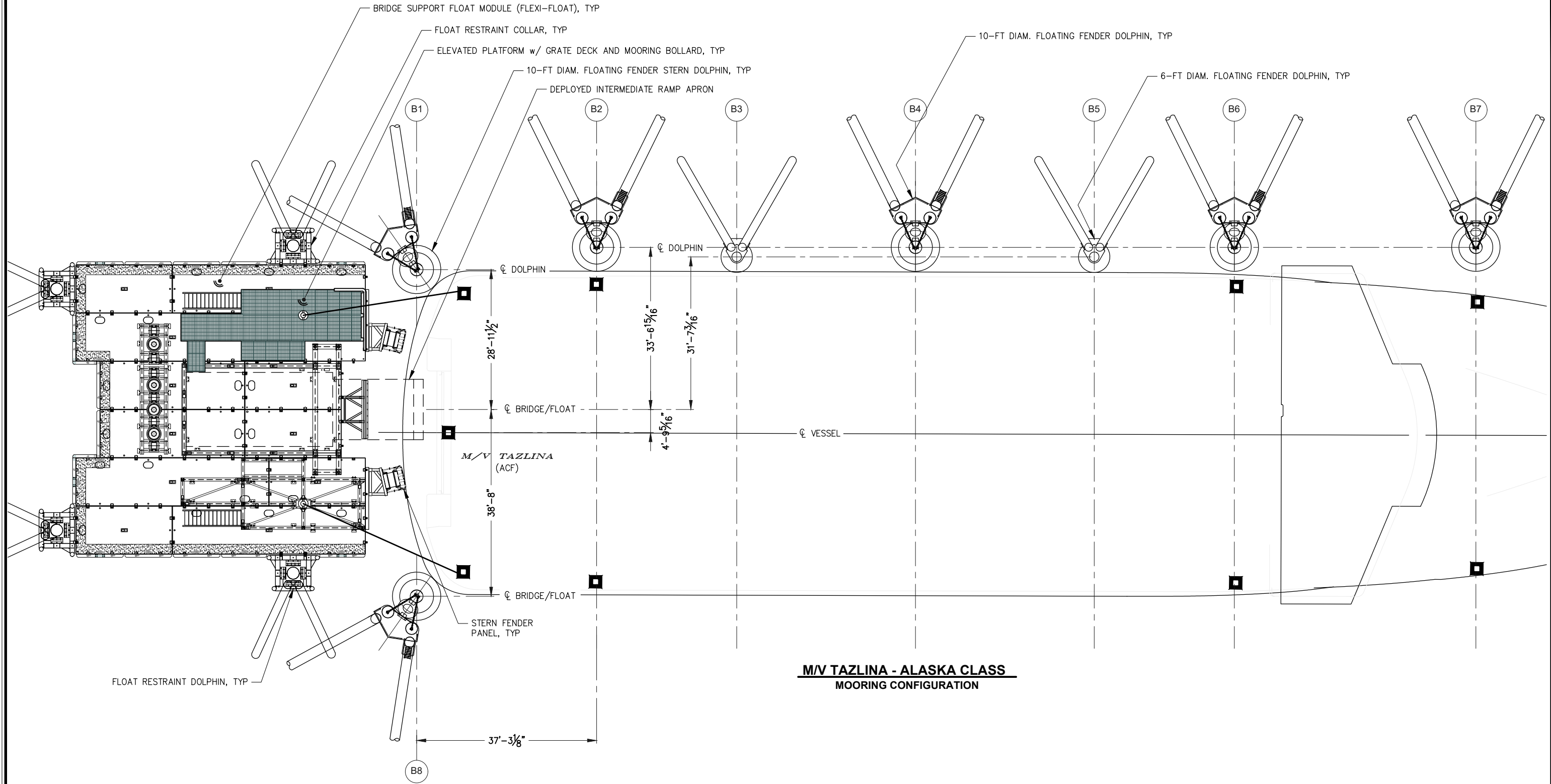
STATE OF ALASKA DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
6860 GLACIER HIGHWAY, JUNEAU, AK 99801
(907) 465-1763

JNU CASCADE POINT
FERRY TERMINAL

BRIDGE PLAN AND ELEVATION

FILE N:\23xxx\232045 Cascade Point Ferry Terminal\G. Drawings\Marine\Bridge and Float\Bridge and Float.dwg DATE 7/14/2025 11:39 LAYOUT 4101 DESIGNED CHECKED MDS DRAFTED

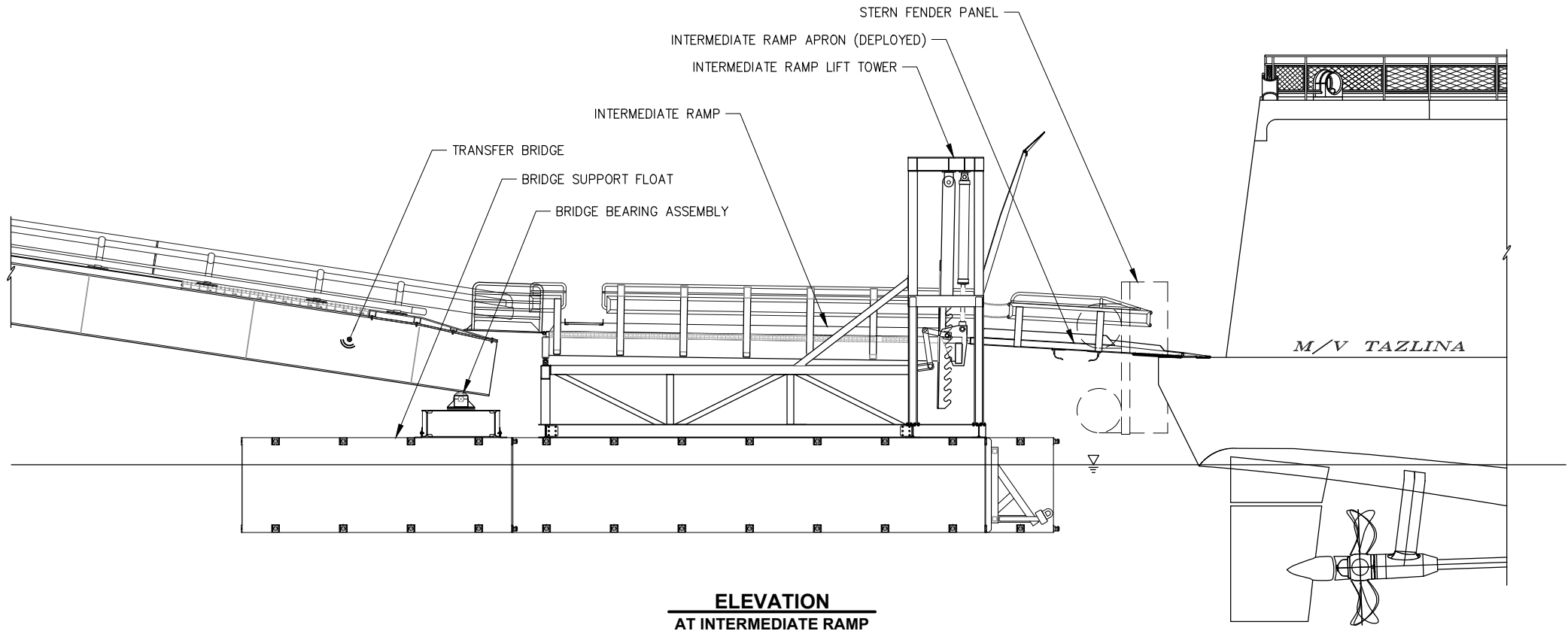
NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	4101	161



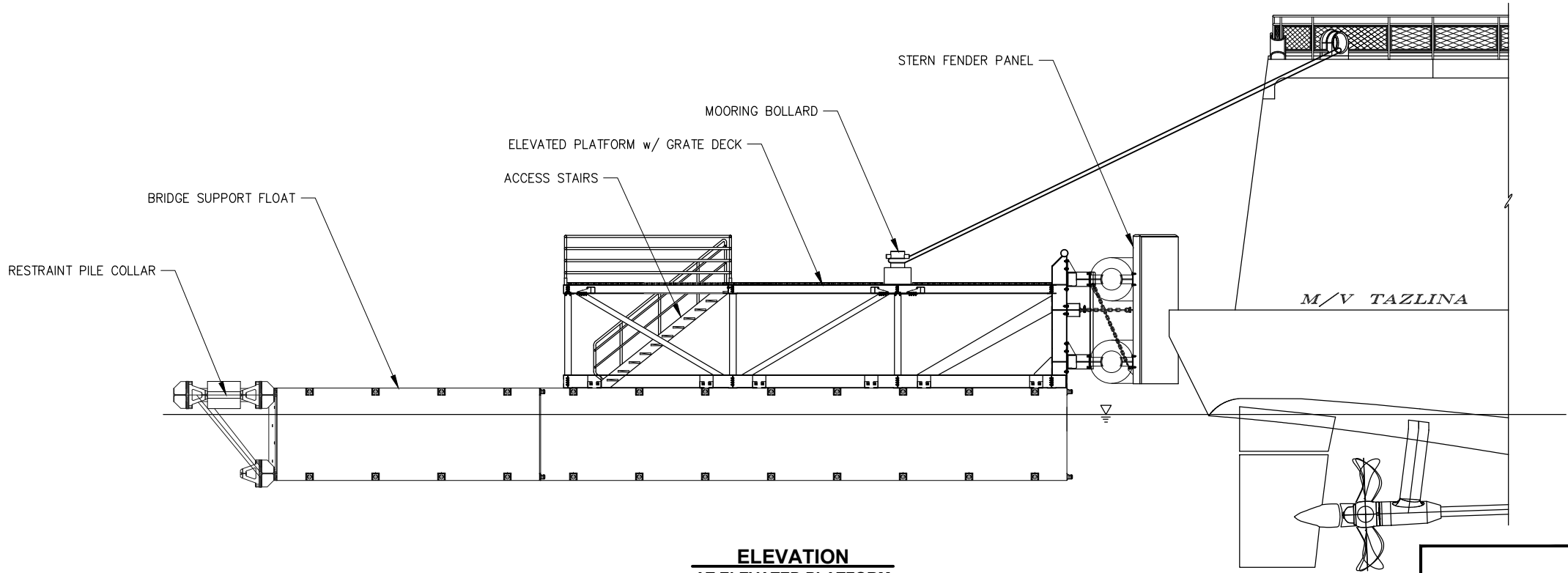
PLANS DEVELOPED BY: PND ENGINEERS, INC. 9360 GLACIER HWY, STE.100 JUNEAU, AK 99801 907-586-2093 CAN: AECC250	35% REVIEW 7/15/25	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES 6860 GLACIER HIGHWAY, JUNEAU, AK 99801 (907) 465-1763 JNU CASCADE POINT FERRY TERMINAL ACF MOORING LAYOUT
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FILE N:\23xxx\232045 Cascade Point Ferry Terminal\G. Drawings\Marine\Bridge and Float\Bridge and Float.dwg DATE 7/14/2025 11:39 LAYOUT 4102 DESIGNED CHECKED MDS DRAFTED

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	4102	161



ELEVATION
AT INTERMEDIATE RAMP



ELEVATION
AT ELEVATED PLATFORM

PLANS DEVELOPED BY:
PND ENGINEERS, INC.
9360 GLACIER HWY, STE.100
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907-586-2093
CAN: AECC250

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7/15/25

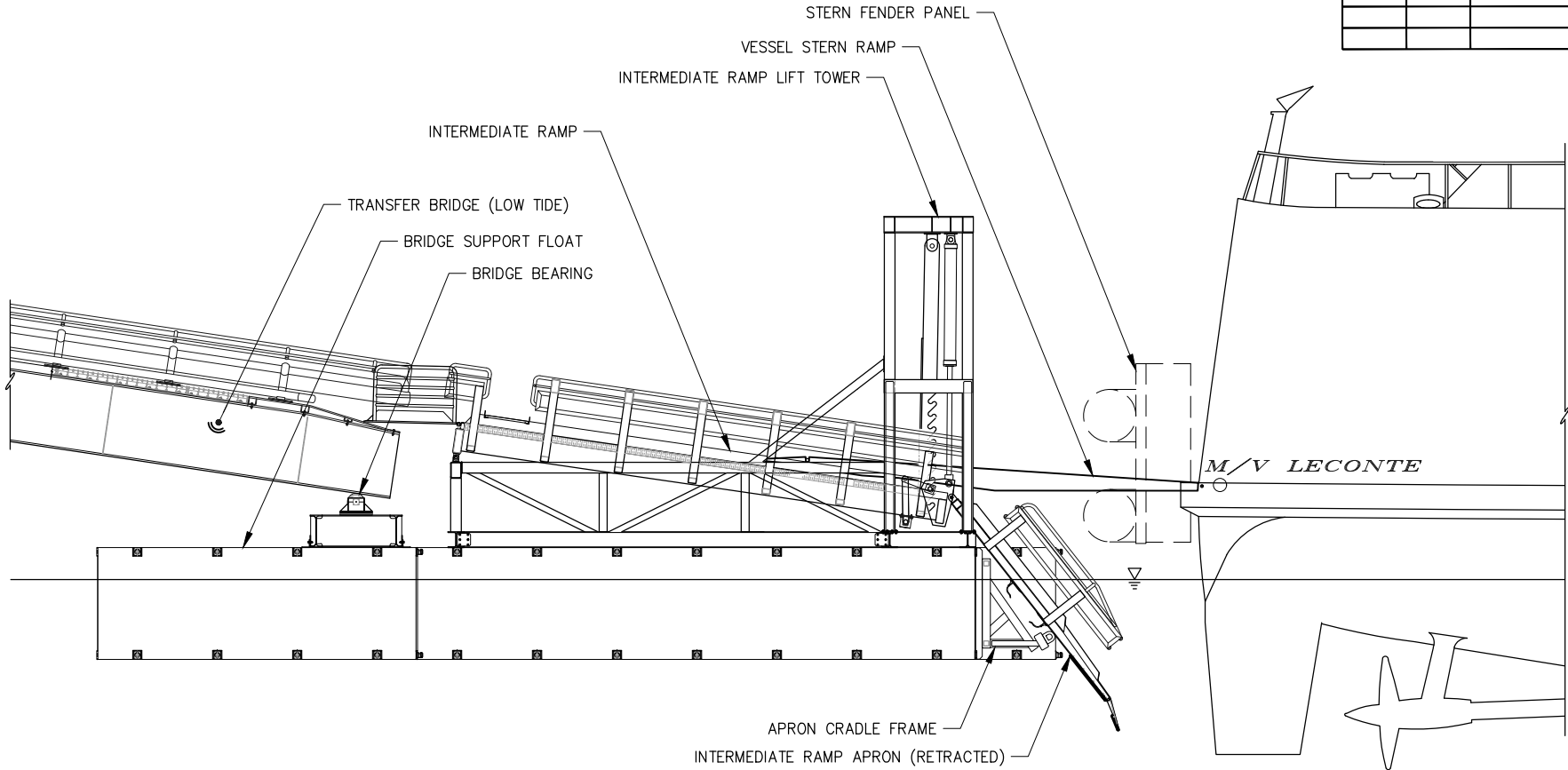
STATE OF ALASKA DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
6860 GLACIER HIGHWAY, JUNEAU, AK 99801
(907) 465-1763

JNU CASCADE POINT
FERRY TERMINAL

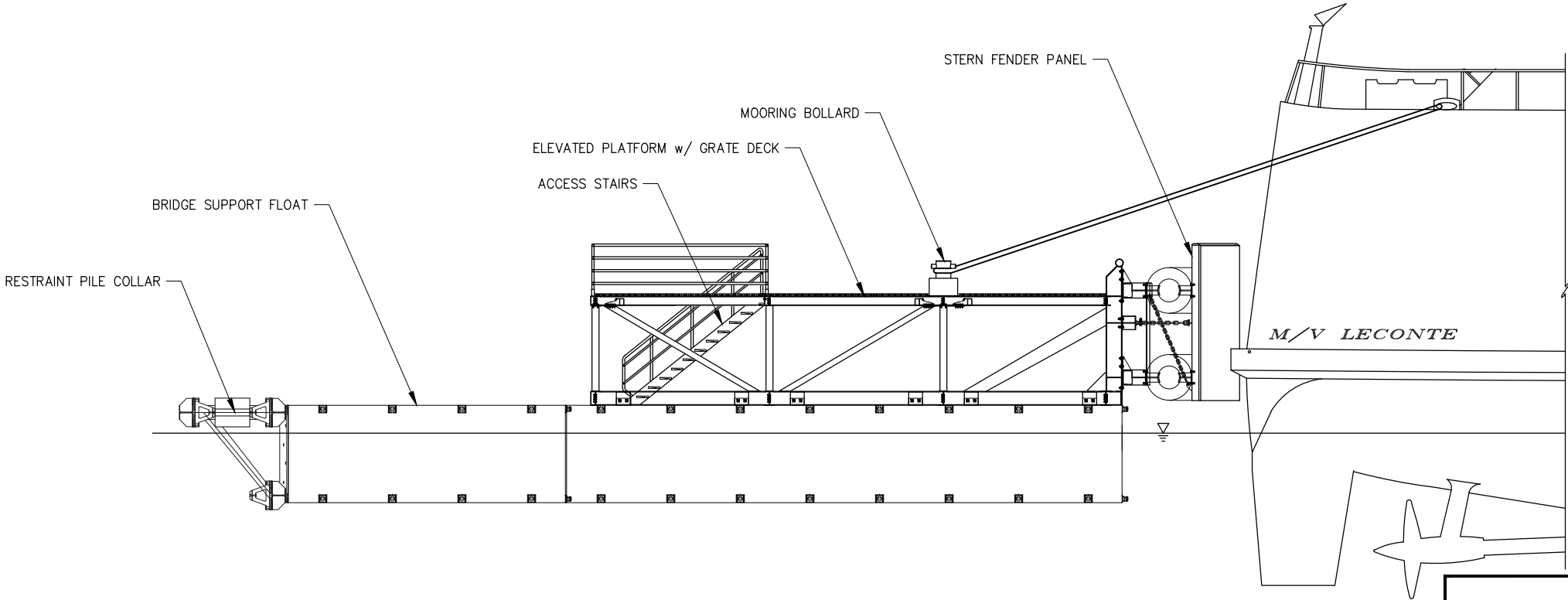
ACF BERTHING ELEVATIONS

FILE N:\23xxx\232045 Cascade Point Ferry Terminal\G. Drawings\Marine\Bridge and Float\Front and Side.dwg DATE 7/14/2025 11:39 LAYOUT 4103 DESIGNED MDS CHECKED MDS DRAFTED

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	4103	161



**ELEVATION
AT INTERMEDIATE RAMP**



**ELEVATION
AT ELEVATED PLATFORM**

PLANS DEVELOPED BY:
PND ENGINEERS, INC.
9360 GLACIER HWY, STE.100
JUNEAU, AK 99801
907-586-2093
CAN: AECC250

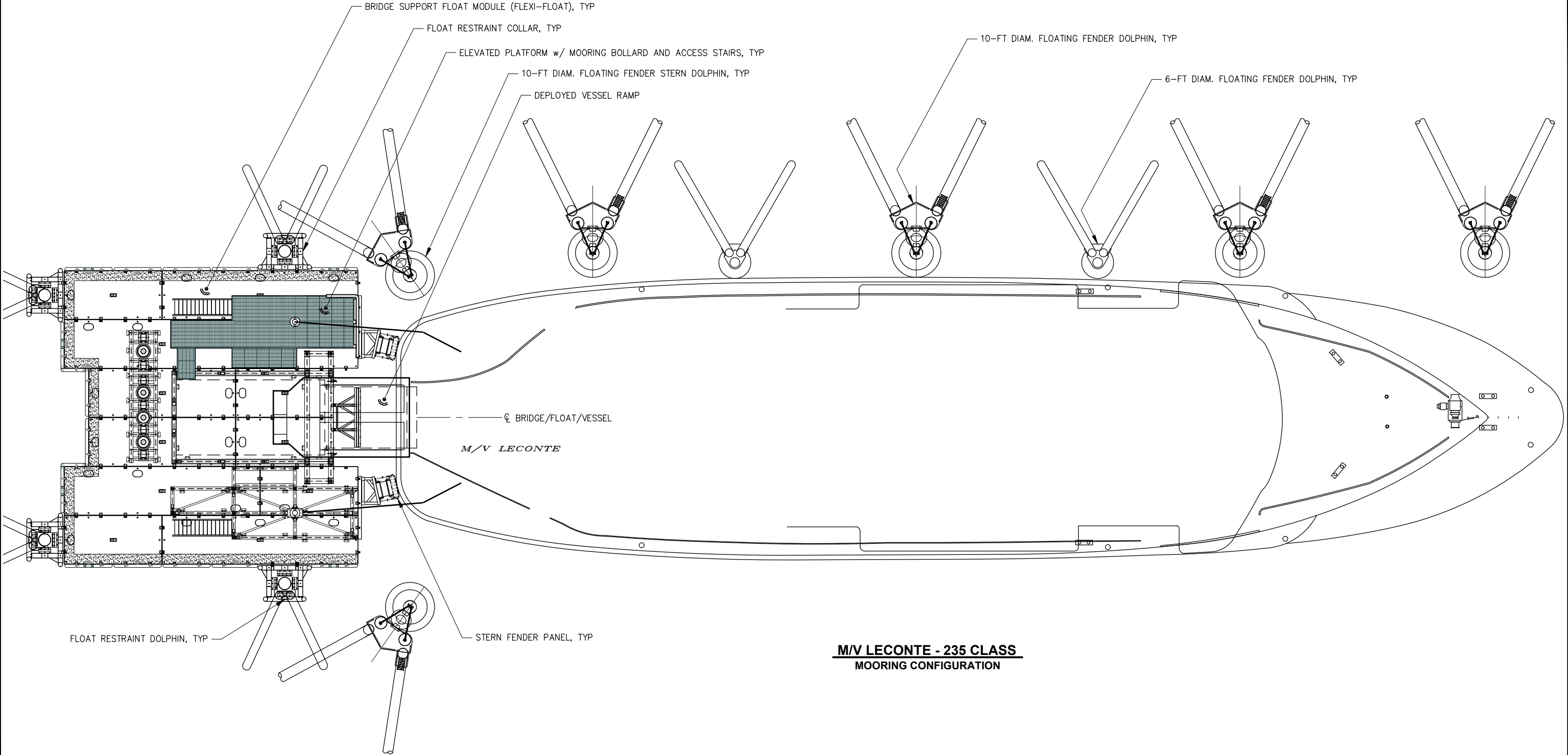
**35%
REVIEW**
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6860 GLACIER HIGHWAY, JUNEAU, AK 99801
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**JNU CASCADE POINT
FERRY TERMINAL**
**LECONTE BERTHING
ELEVATIONS**

FILE N:\23xxx\232045 Cascade Point Ferry Terminal\G. Drawings\Marine\Bridge and Float.dwg DATE 7/14/2025 11:39 LAYOUT 4104 DESIGNED CHECKED MDS DRAFTED

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	4104	161



M/V LECONTE - 235 CLASS
MOORING CONFIGURATION

PLANS DEVELOPED BY:
PND ENGINEERS, INC.
9360 GLACIER HWY, STE.100
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907-586-2093
CAN: AECC250

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REVIEW**
7/15/25

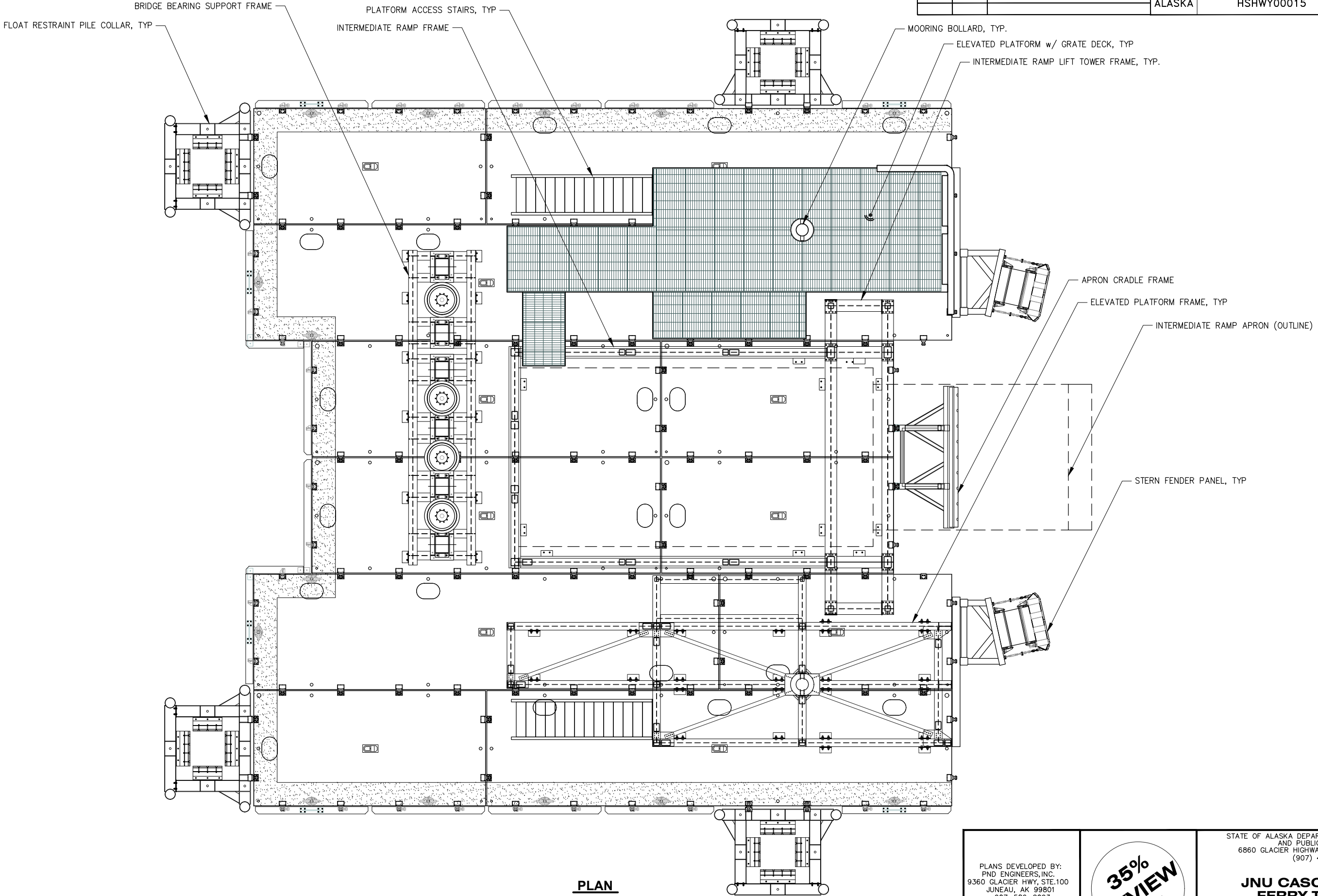
STATE OF ALASKA DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
6860 GLACIER HIGHWAY, JUNEAU, AK 99801
(907) 465-1763

**JNU CASCADE POINT
FERRY TERMINAL**

LECONTE MOORING LAYOUT

FILE N:\23xxx\232045 Cascade Point Ferry Terminal\G. Drawings\Marine\Bridge and Float\Bridge and Float.dwg DATE 7/14/2025 11:39 LAYOUT 4105 DESIGNED CHECKED MDS DRAFTED

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	4105	161



PLAN

PLANS DEVELOPED BY:
PND ENGINEERS, INC.
9360 GLACIER HWY, STE.100
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907-586-2093
CAN: AECC250

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REVIEW**
7/15/25

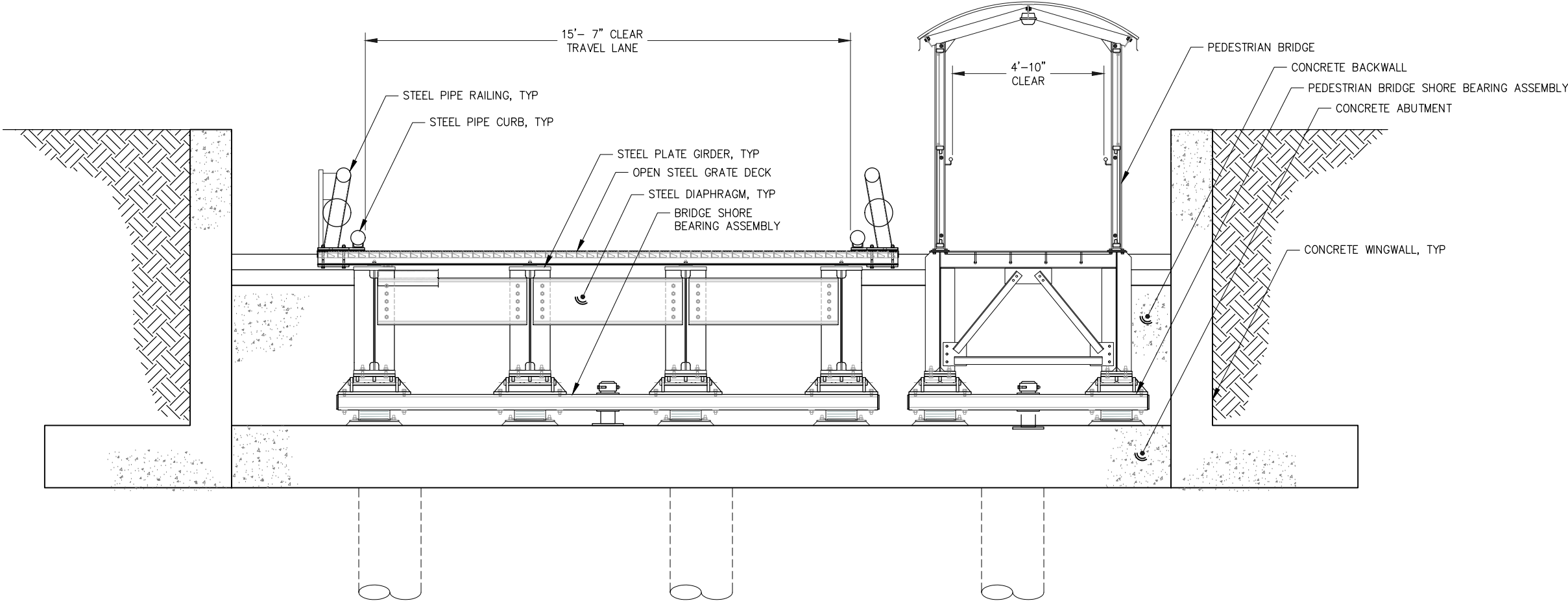
STATE OF ALASKA DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
6860 GLACIER HIGHWAY, JUNEAU, AK 99801
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**JNU CASCADE POINT
FERRY TERMINAL**

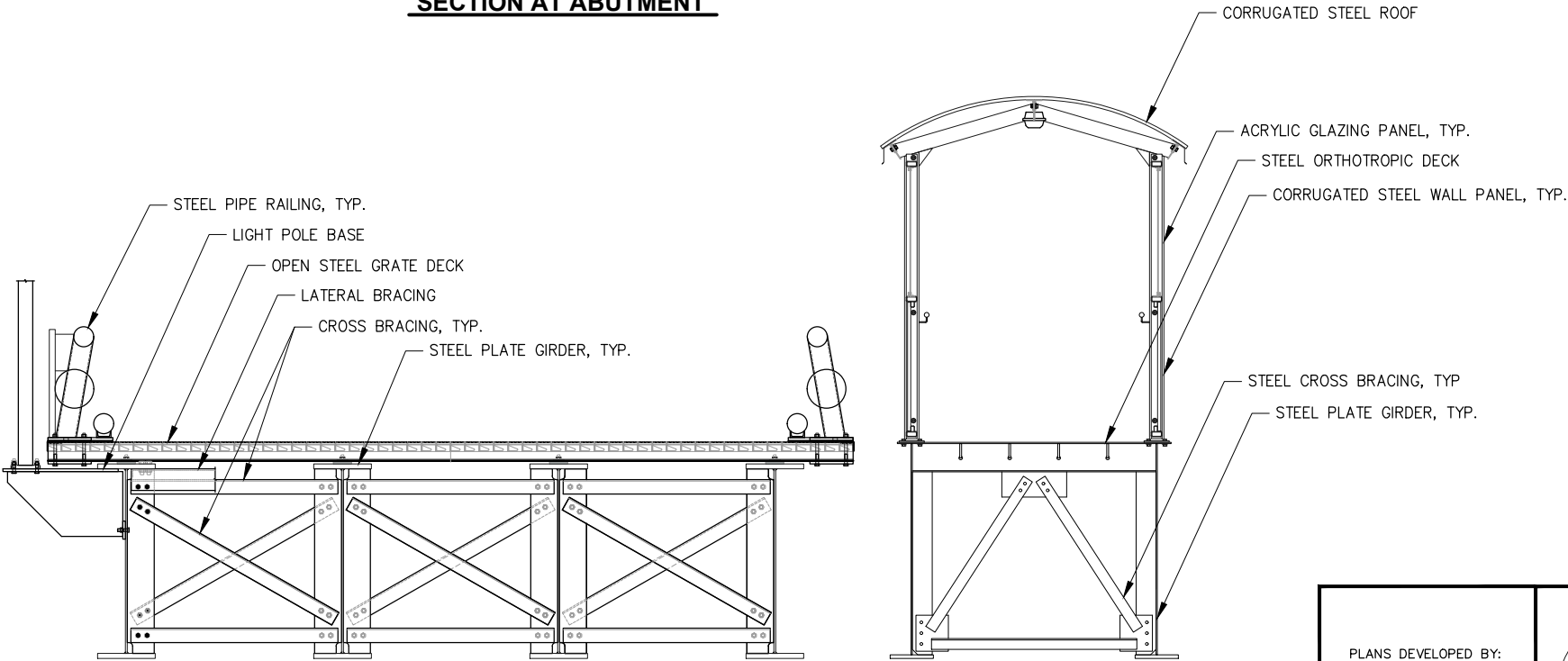
BRIDGE SUPPORT FLOAT

FILE N:\23xxx\232045 Cascade Point Ferry Terminal\G. Drawings\Marine\Bridge and Float\Bridge Section.dwg DATE 7/14/2025 11:38 LAYOUT 4106 DESIGNED CHECKED MDS DRAFTED

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	4106	161



SECTION AT ABUTMENT



TYPICAL SECTION

PLANS DEVELOPED BY:
PND ENGINEERS, INC.
9360 GLACIER HWY, STE.100
JUNEAU, AK 99801
907-586-2093
CAN: AECC250

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REVIEW**
7/15/25

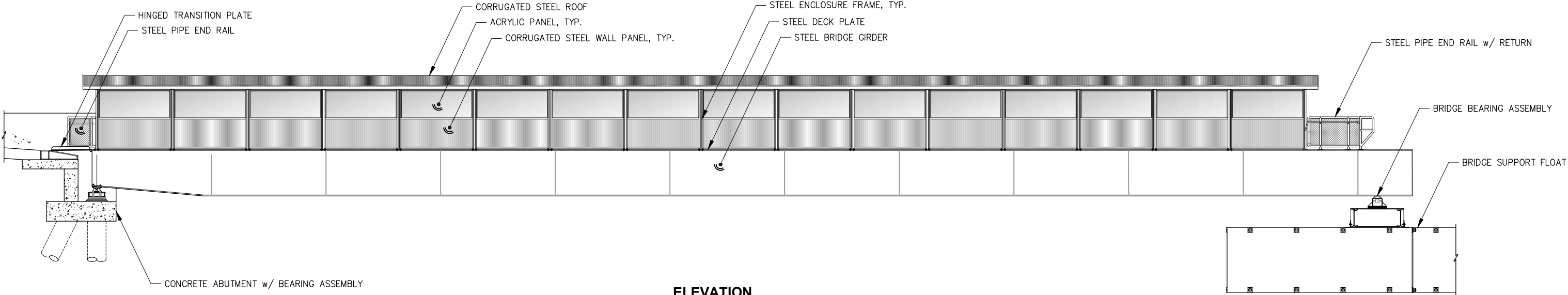
STATE OF ALASKA DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
6860 GLACIER HIGHWAY, JUNEAU, AK 99801
(907) 465-1763

**JNU CASCADE POINT
FERRY TERMINAL**

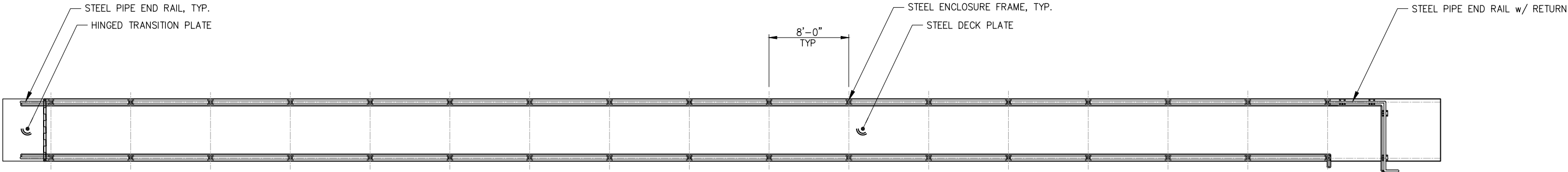
BRIDGE TYPICAL SECTIONS

FILE N:\23xxx\232045 Cascade Point Ferry Terminal\G. Drawings\Marine\Bridge and Float\Floating Pedestrian Bridge.dwg DATE 7/14/2025 11:38 LAYOUT 4107 DESIGNED CHECKED MDS DRAFTED

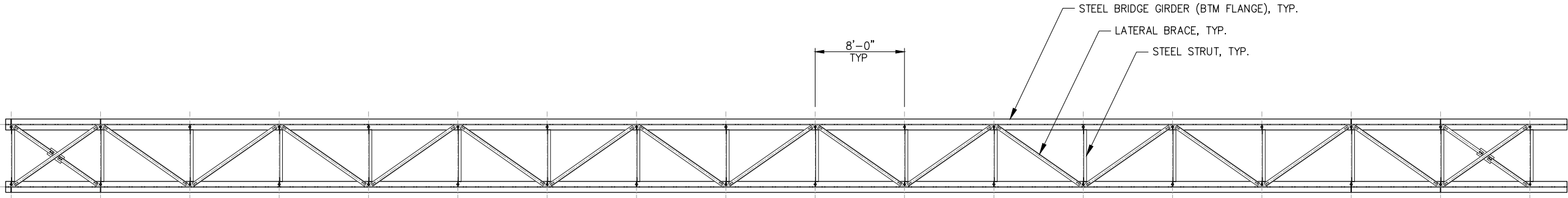
NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	4107	161



ELEVATION



DECK PLAN



GIRDER PLAN
BOTTOM FLANGE

PLANS DEVELOPED BY:
PND ENGINEERS, INC.
9360 GLACIER HWY, STE.100
JUNEAU, AK 99801
907-586-2093
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REVIEW**
7/15/25

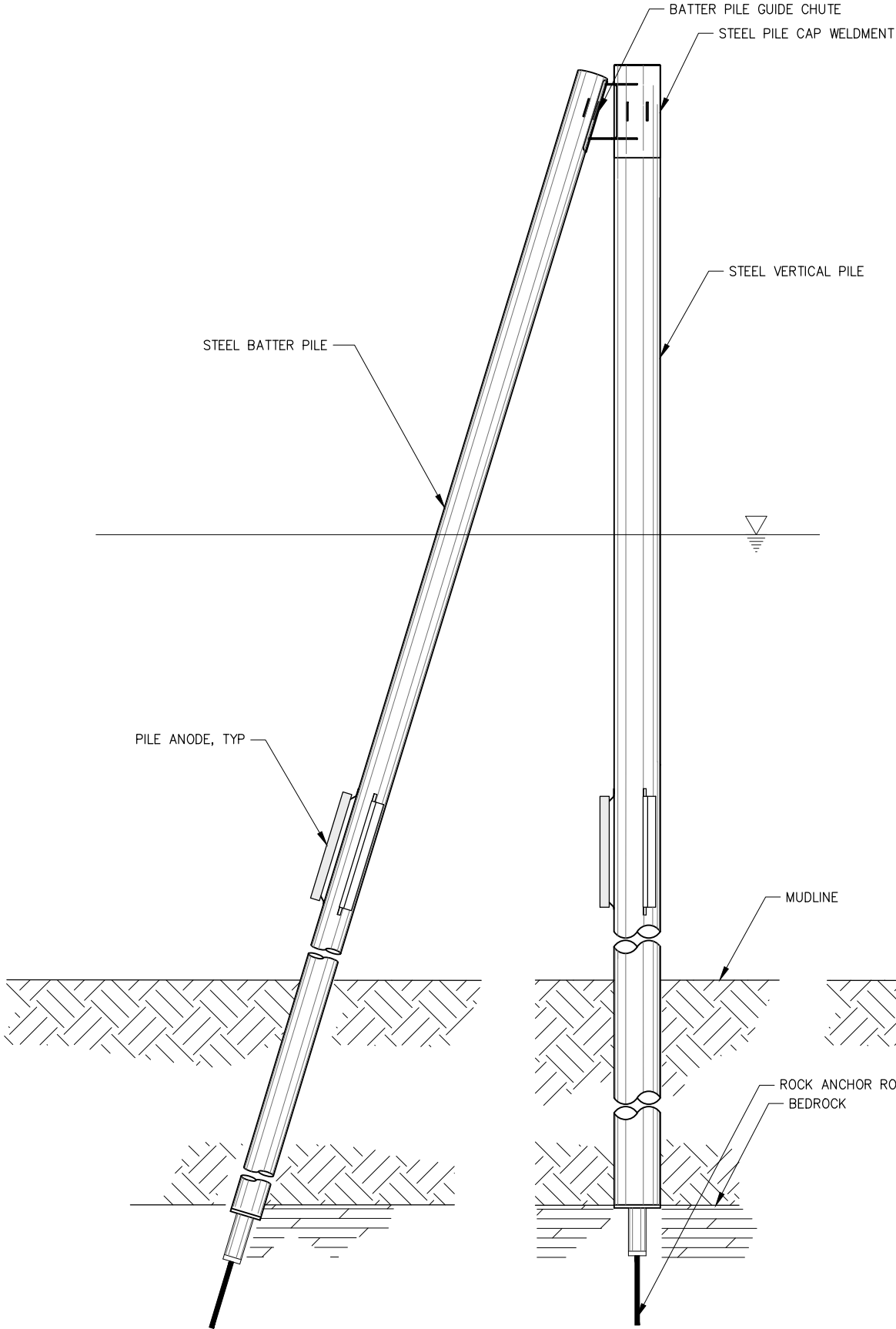
STATE OF ALASKA DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
6860 GLACIER HIGHWAY, JUNEAU, AK 99801
(907) 465-1763

**JNU CASCADE POINT
FERRY TERMINAL**

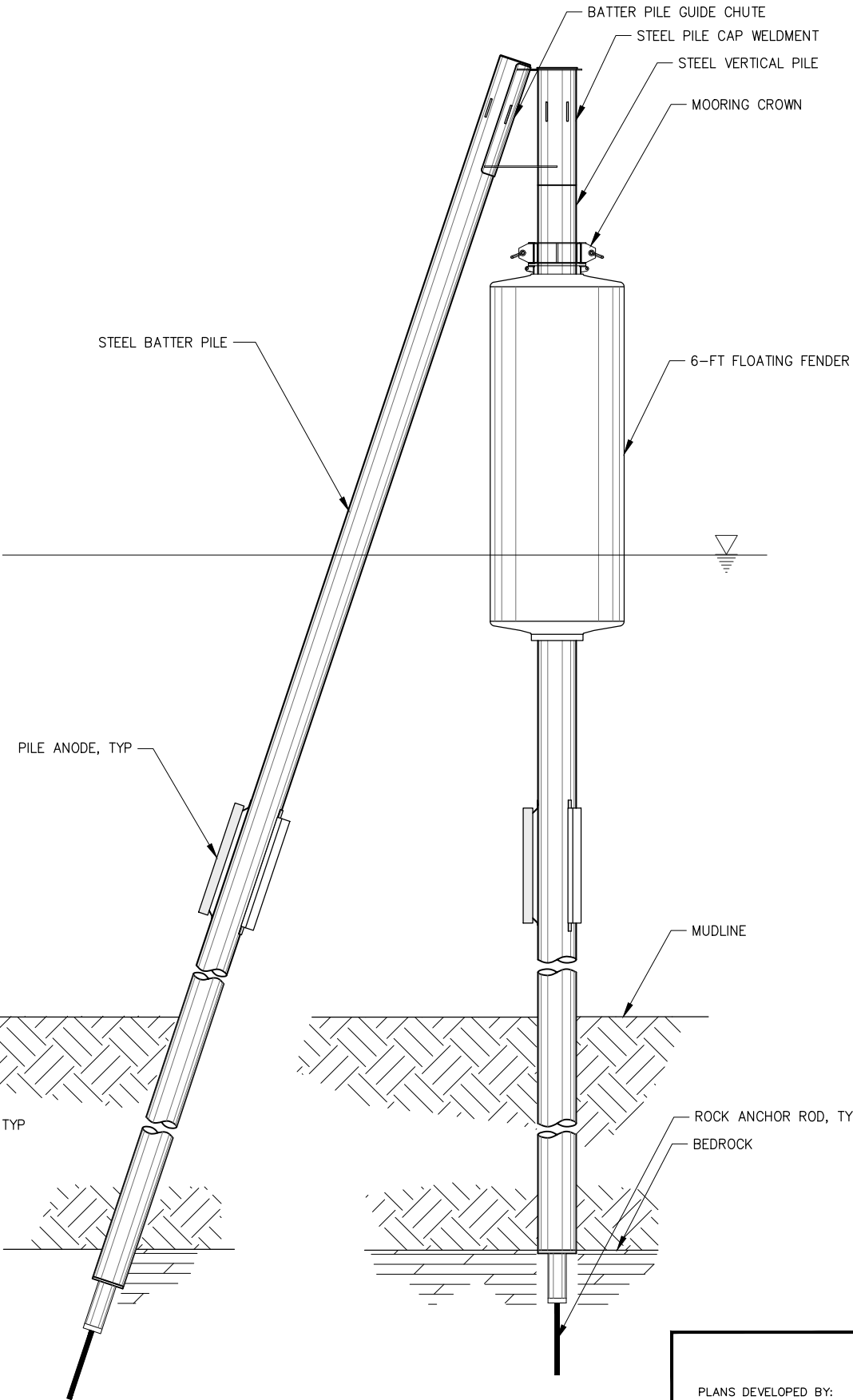
PEDESTRIAN BRIDGE

FILE N:\23xxx\232045 Cascade Point Ferry Terminal\G. Drawings\Marine\Dolphins\Restraint & 6-FT Floating Fender Dolphins.dwg 3/14/2025 11:39 LAYOUT 4200 DESIGNED MDS CHECKED DRAFTED

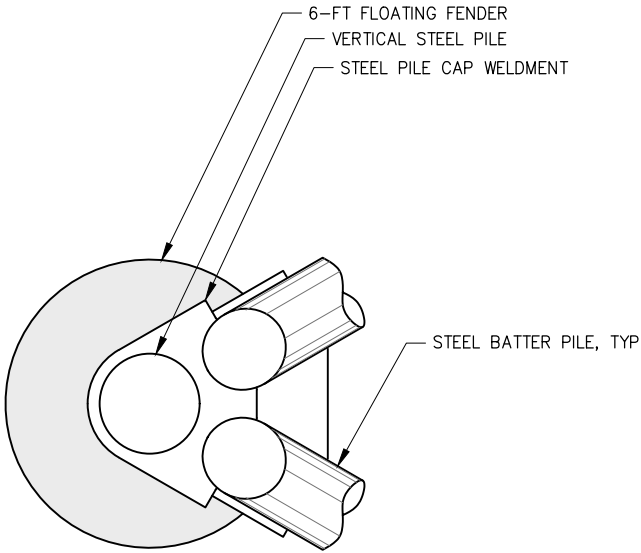
NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
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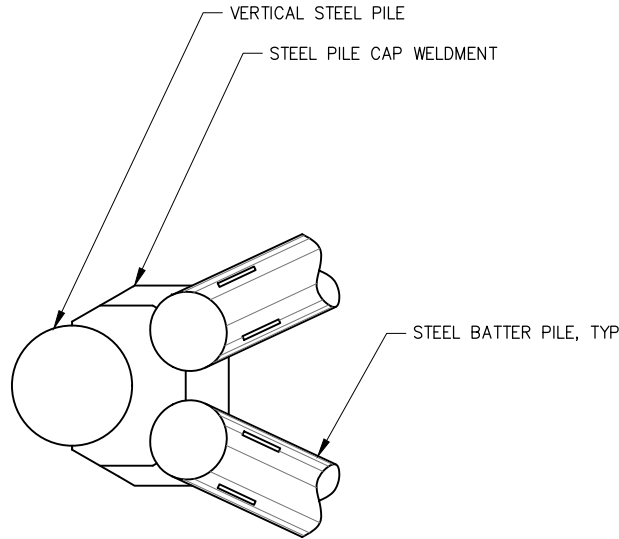
ELEVATION
RESTRAINT DOLPHIN



ELEVATION
6-FT FLOATING FENDER DOLPHIN



PLAN
6-FT FLOATING FENDER DOLPHIN



PLAN
RESTRAINT DOLPHIN

PLANS DEVELOPED BY:
PND ENGINEERS, INC.
9360 GLACIER HWY, STE.100
JUNEAU, AK 99801
907-586-2093
CAN: AECC250

**35%
REVIEW**
7/15/25

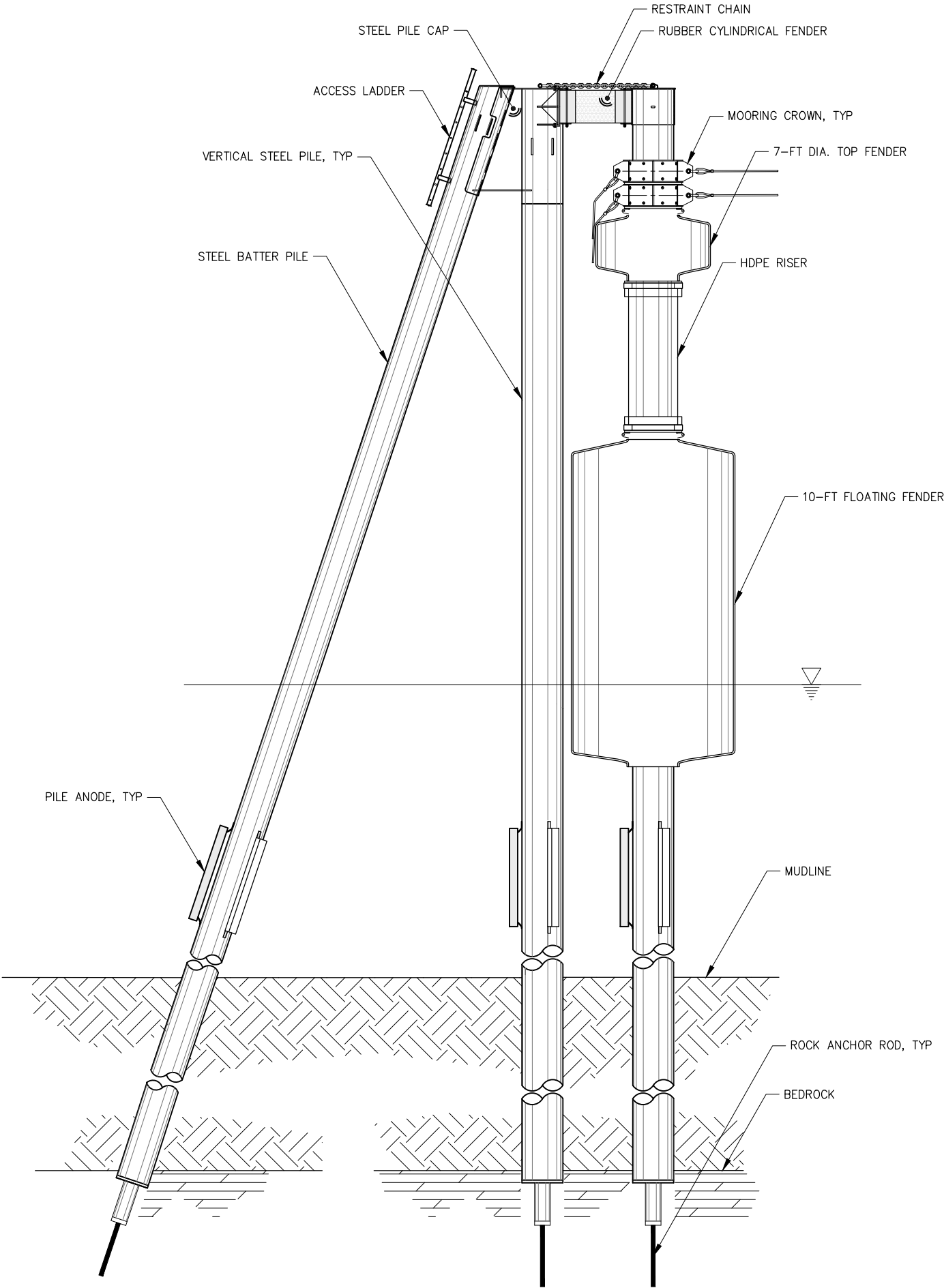
STATE OF ALASKA DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
6860 GLACIER HIGHWAY, JUNEAU, AK 99801
(907) 465-1763

**JNU CASCADE POINT
FERRY TERMINAL**

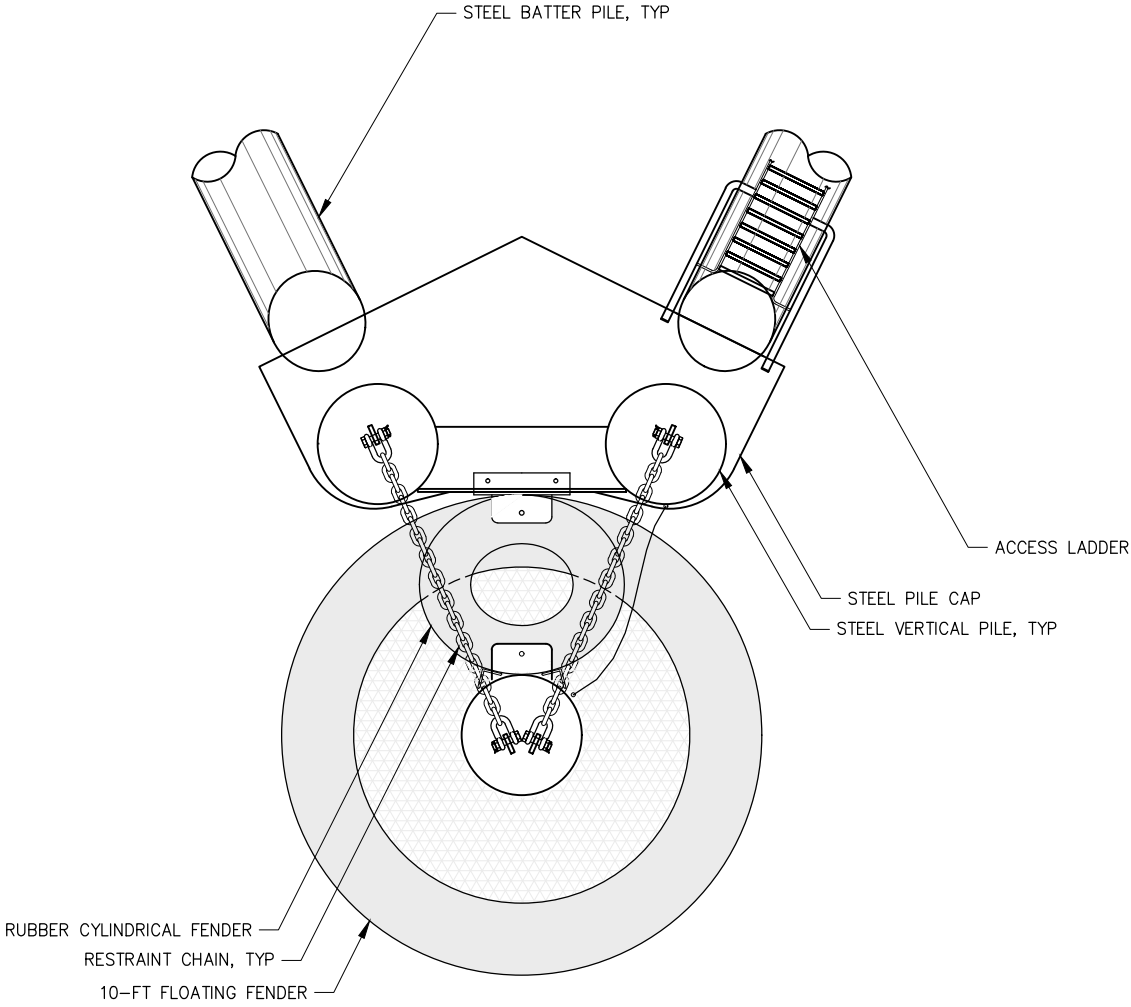
**RESTRAINT & 6-FT FLOATING
FENDER DOLPHINS**

FILE N:\23xxx\232045 Cascade Point Ferry Terminal\G. Drawings\Marine\Dolphins\10-FT Floating Fender Dolphin.dwg DATE 7/14/2025 11:39 LAYOUT 4201 DESIGNED CHECKED MDS DRAFTED

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	4201	161



ELEVATION



PLAN

PLANS DEVELOPED BY:
PND ENGINEERS, INC.
9360 GLACIER HWY, STE.100
JUNEAU, AK 99801
907-586-2093
CAN: AECC250

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REVIEW**
7/15/25

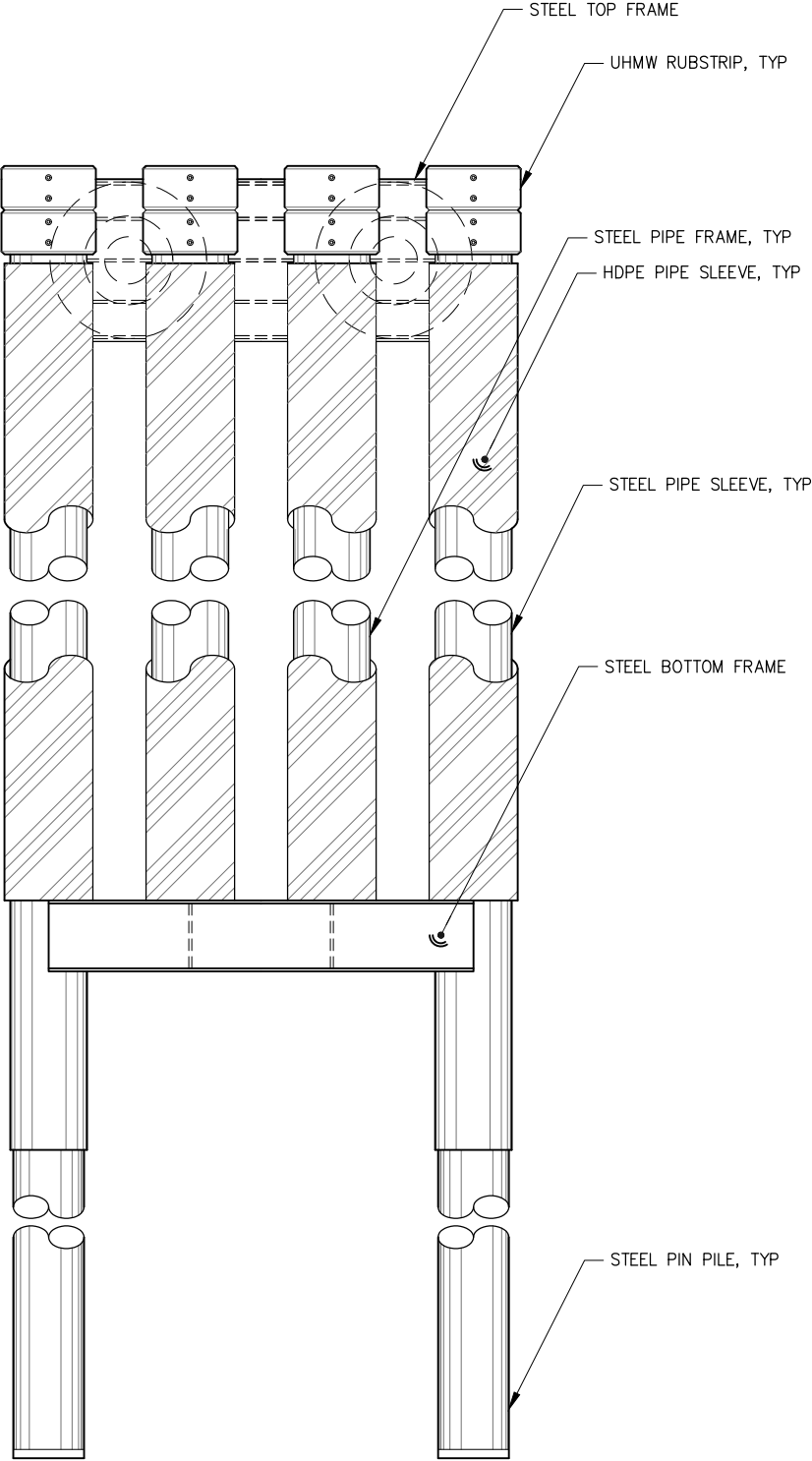
STATE OF ALASKA DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
6860 GLACIER HIGHWAY, JUNEAU, AK 99801
(907) 465-1763

**JNU CASCADE POINT
FERRY TERMINAL**

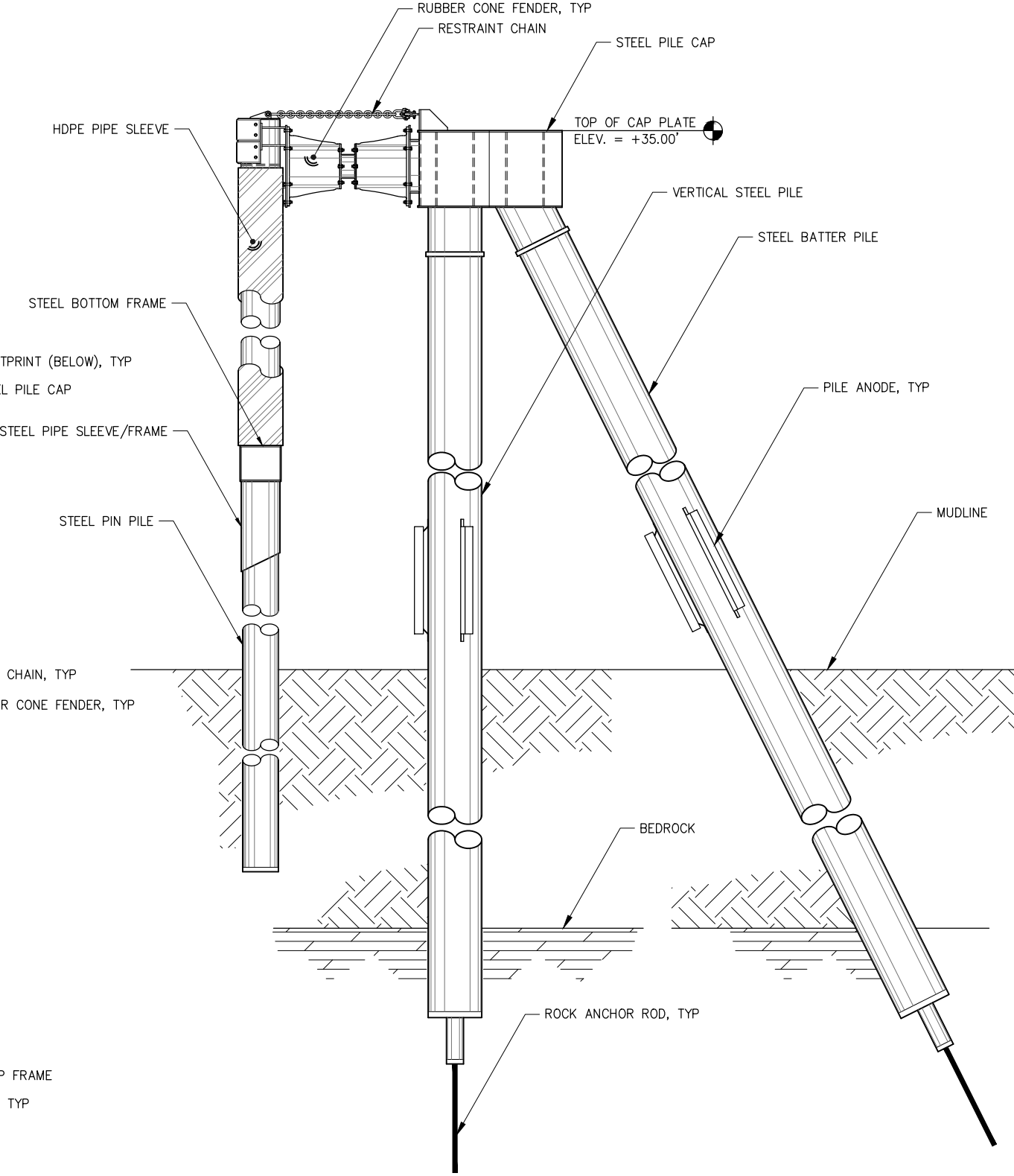
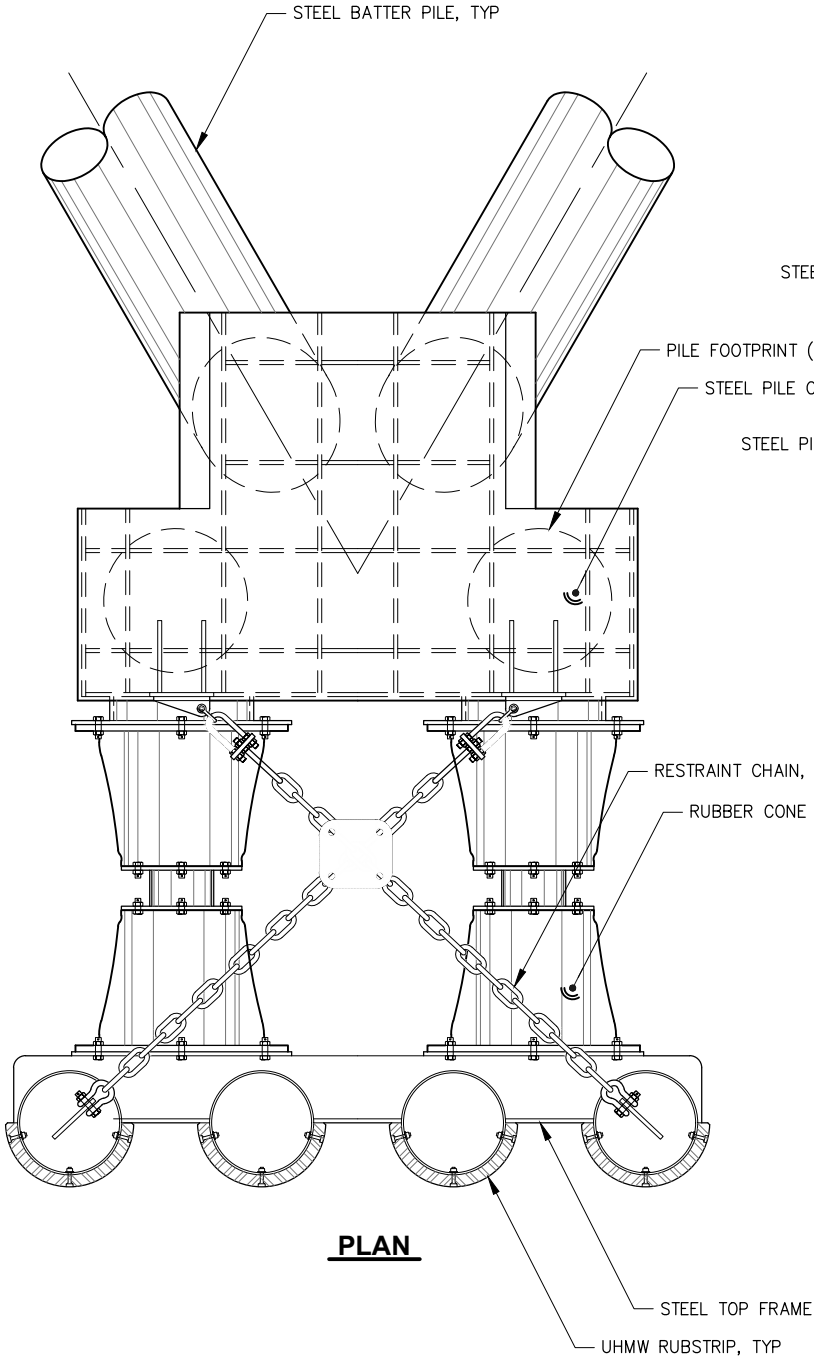
**10-FT FLOATING FENDER
DOLPHIN**

FILE N:\23xxx\232045 Cascade Point Ferry Terminal\G. Drawings\Marine\Bridge and Float\Bridge and Float.dwg DATE 7/14/2025 11:39 LAYOUT 4202 DESIGNED CHECKED MDS DRAFTED

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	4202	161



FRONT ELEVATION



SIDE ELEVATION

PLANS DEVELOPED BY:
PND ENGINEERS, INC.
9360 GLACIER HWY, STE.100
JUNEAU, AK 99801
907-586-2093
CAN: AECC250

35%
REVIEW
7/15/25

STATE OF ALASKA DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
6860 GLACIER HIGHWAY, JUNEAU, AK 99801
(907) 465-1763

**JNU CASCADE POINT
FERRY TERMINAL**
GUIDE DOLPHIN

FILE

DATE July 15, 2025

LAYOUT

DESIGNED ADG

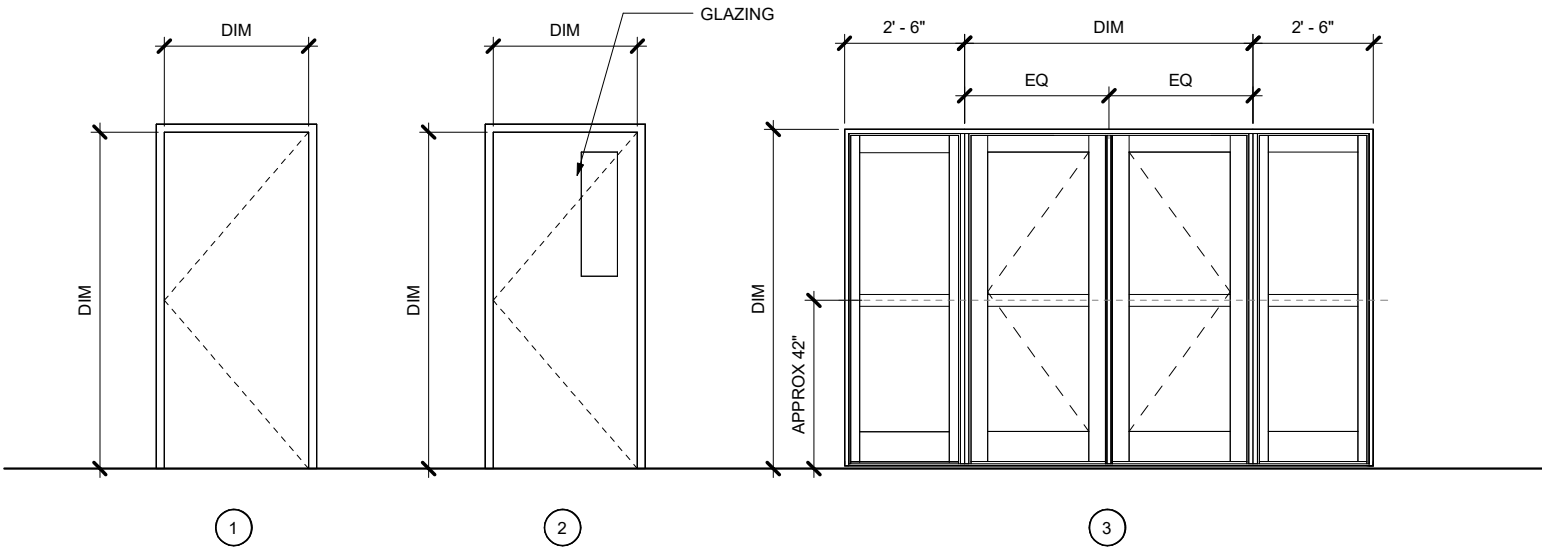
CHECKED WJ

DRAFTED ADG

OPENING SCHEDULE

Opening Schedule															
Opening				Door		Frame		Glass	Signage		Details			HW	Remarks
Mark	Type	Width	Height	Door Material	Door Finish	Frame Material	Frame Finish		Type	Text	DoorJamb Detail	Door Head Detail	Door Sill Detail		
101A	3	6' - 0"	7' - 0"	ALUM	PF	ALUM	PF	TEMP / INSUL							
101B	3	6' - 0"	7' - 0"	ALUM	PF	ALUM	PF	TEMP / INSUL							
102	1	3' - 0"	7' - 0"	WD	PF	HM	PT	-							
103A	2	3' - 0"	7' - 0"	WD	PF	HM	PT	TEMP / INSUL							
104	1	3' - 0"	7' - 0"	WD	PF	HM	PT	-							
105	1	3' - 0"	7' - 0"	WD	PF	HM	PT	-							
106	1	3' - 0"	7' - 0"	WD	PF	HM	PT	-							
107	1	3' - 0"	7' - 0"	WD	PF	HM	PT	-							
108	1	3' - 0"	7' - 0"	WD	PF	HM	PT	-							
109	1	3' - 0"	7' - 0"	WD	PF	HM	PT	-							

DOOR TYPES

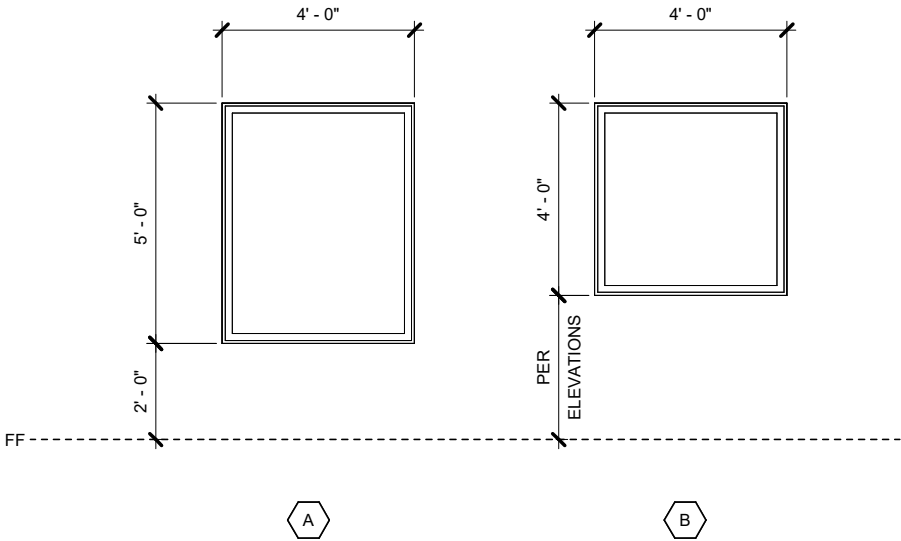


DOOR TYPES

Finish Schedule												
Room No.	Room Name	Floor Finish	Base		Wainscot		Walls				Ceiling Finish	Comments
			Finish	Ht	Finish	Ht	North	East	South	West		
100	COVERED DROP-OFF	-	-		-	-	-	-	-	-	T&G	
101	LOBBY	SLR	RUB	6' - 0"	-	-	GWB/PT	GWB/PT	GWB/PT	GWB/PT	T&G	
102	STORAGE	SLR	RUB	6' - 0"	-	-	GWB/PT	GWB/PT	GWB/PT	GWB/PT	GWB	
103	TICKETING	CRPT	RUB	6' - 0"	-	-	GWB/PT	GWB/PT	GWB/PT	GWB/PT	GWB	
104	MEN	SLR	RUB	6' - 0"	FRP	8' - 6"	GWB/PT	GWB/PT	GWB/PT	GWB/PT	GWB	
105	WOMEN	SLR	RUB	6' - 0"	FRP	8' - 6"	GWB/PT	GWB/PT	GWB/PT	GWB/PT	GWB	
106	FAMILY RESTROOM	SLR	RUB	6' - 0"	FRP	8' - 6"	GWB/PT	GWB/PT	GWB/PT	GWB/PT	GWB	
107	MECHANICAL	SLR	RUB	6' - 0"	FRP	8' - 6"	GWB/PT	GWB/PT	GWB/PT	GWB/PT	NONE	
108	JANITOR	SLR	RUB	6' - 0"	FRP	8' - 6"	GWB/PT	GWB/PT	GWB/PT	GWB/PT	GWB	
109	TOILET	SLR	RUB	6' - 0"	FRP	8' - 6"	GWB/PT	GWB/PT	GWB/PT	GWB/PT	GWB	
201	MECHANICAL MEZZANINE	PT	RUB	6' - 0"			FRP	FRP	FRP	FRP	GWB	

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	5101	161

WINDOW TYPES



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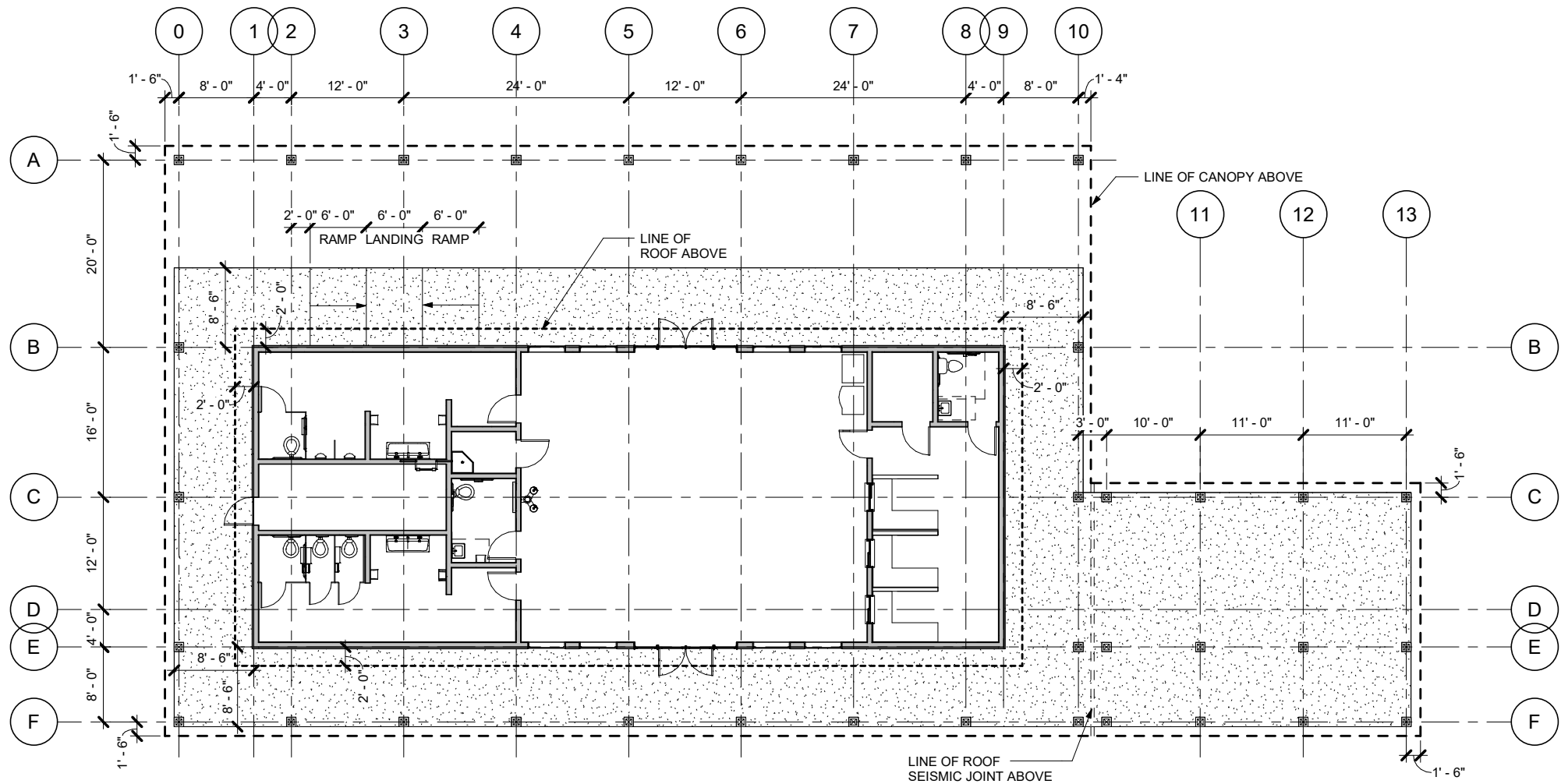
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JNU CASCADE POINT
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TICKETING BUILDING
SCHEDULES & TYPES

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	5102	161



1 COLUMN LAYOUT WITH CANOPY

SCALE: 0 4' 8' 16'



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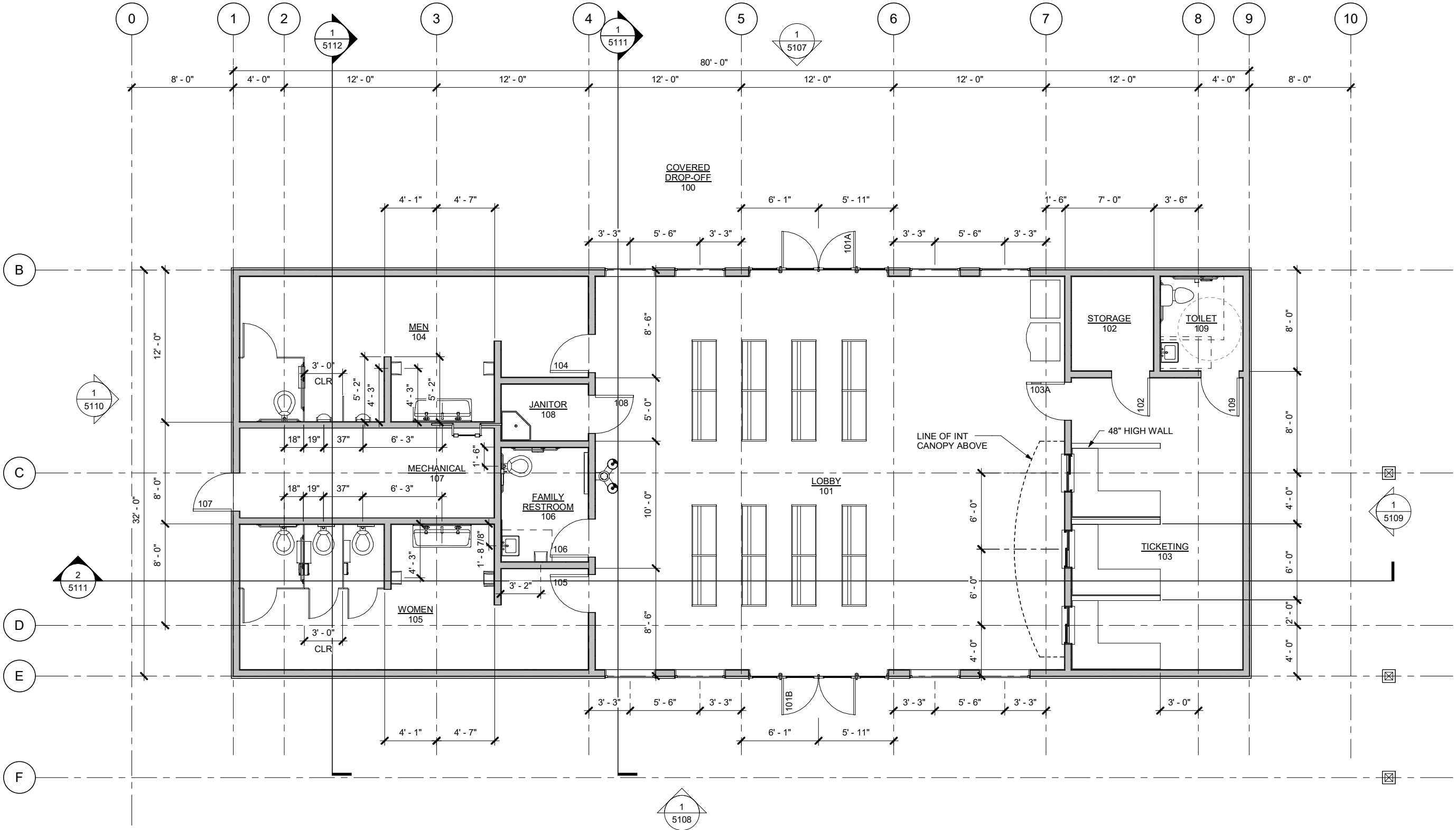


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**TICKETING BUILDING
COLUMN LAYOUT WITH CANOPY**

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	SHWY00015	2025	5103	161



1 FIRST FLOOR PLAN

SCALE: 0 2' 4' 8'



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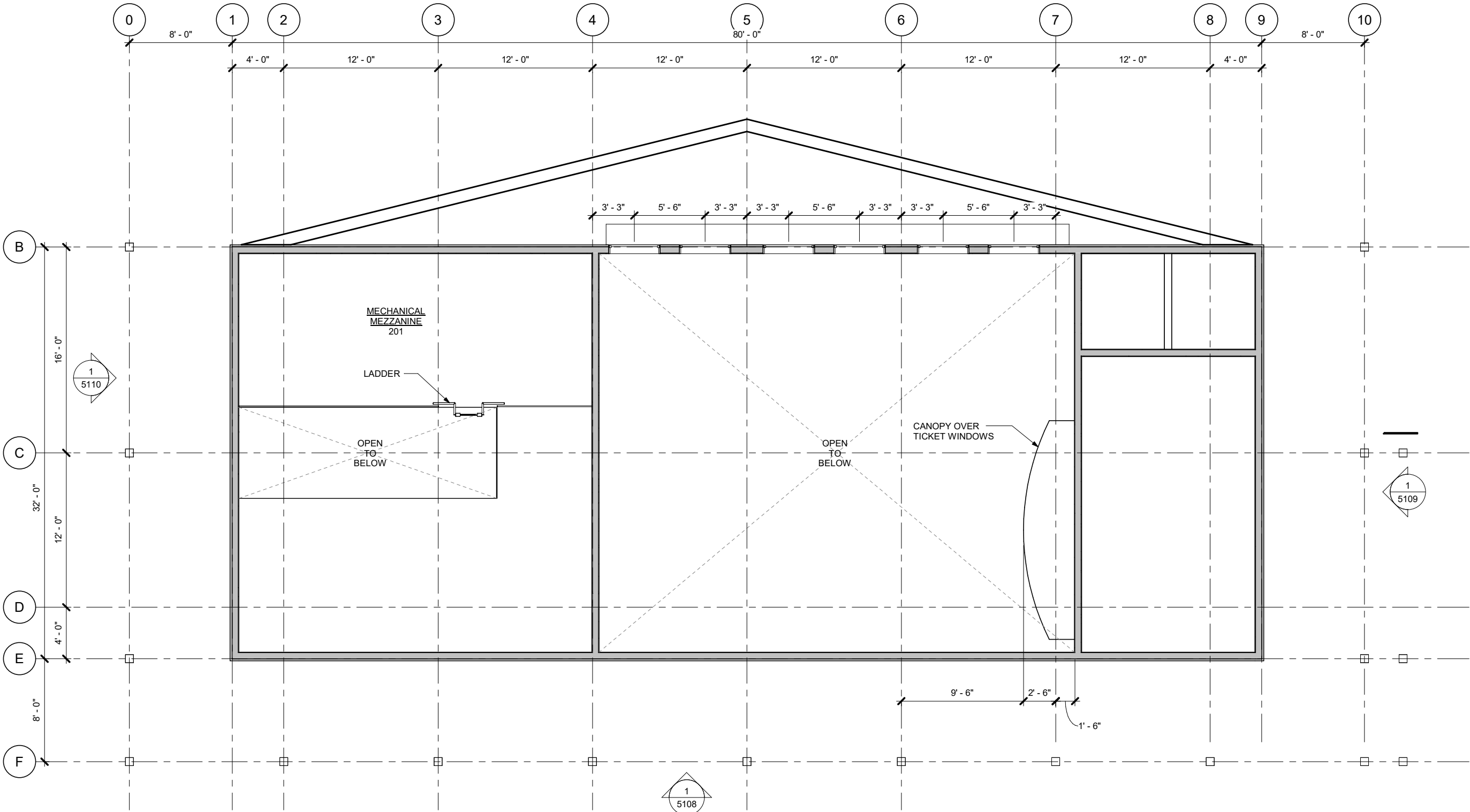
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**TICKETING BUILDING
FLOOR PLAN**

FILED DRAFTED ADG CHECKED WJ DESIGNED ADG LAYOUT DATE July 15, 2025

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	5104	161



1 MEZZANINE FLOOR PLAN

SCALE: 0 2' 4' 8'



PROJECT NORTH

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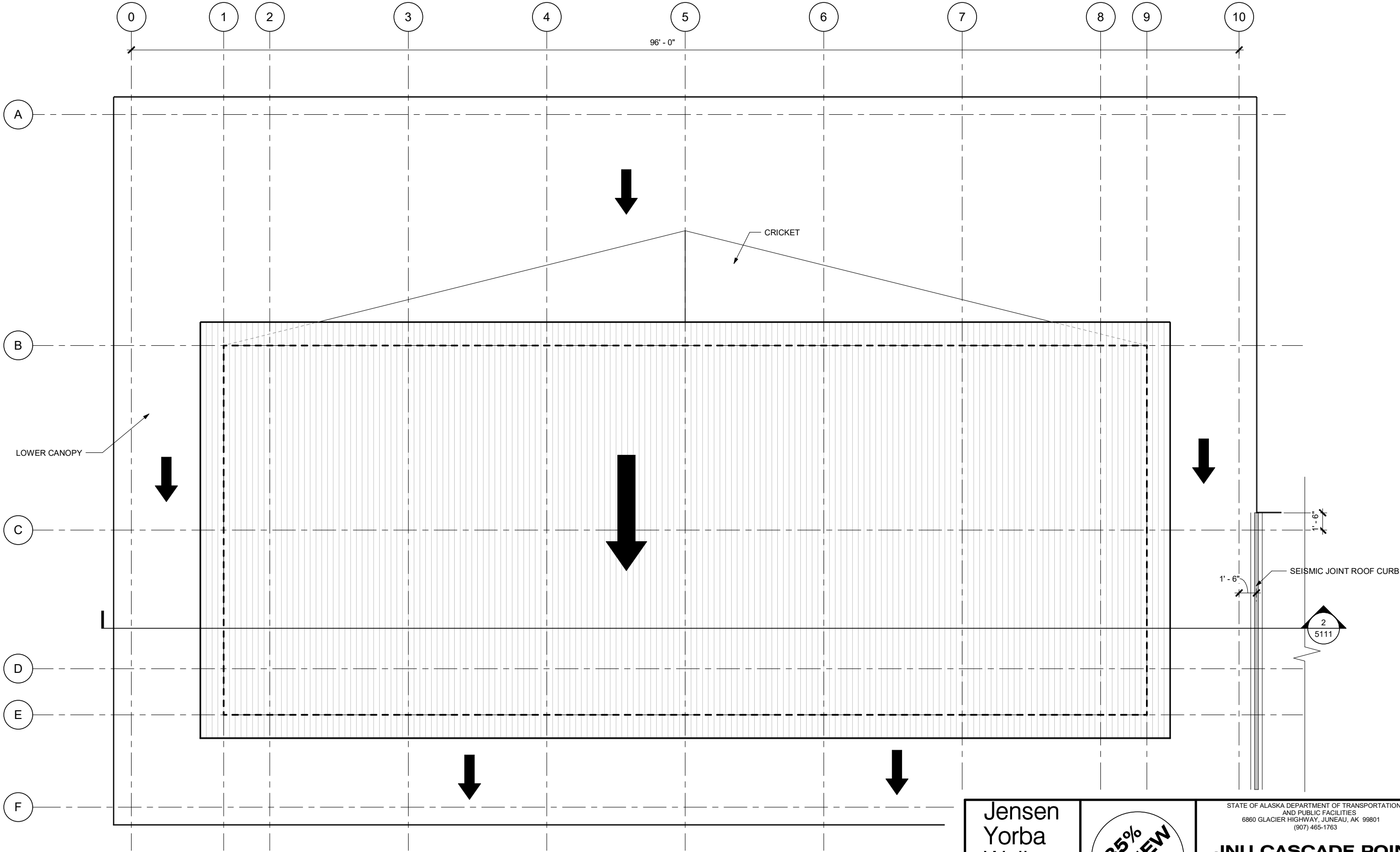
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TICKETING BUILDING MEZZANINE FLOOR PLAN

FILE | DATE July 15, 2025 | LAYOUT | DESIGNED ADG | CHECKED WJ | DRAFTED ADG

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	5106	161



1 ROOF PLAN

SCALE: 0 2' 4' 8'

PROJECT NORTH

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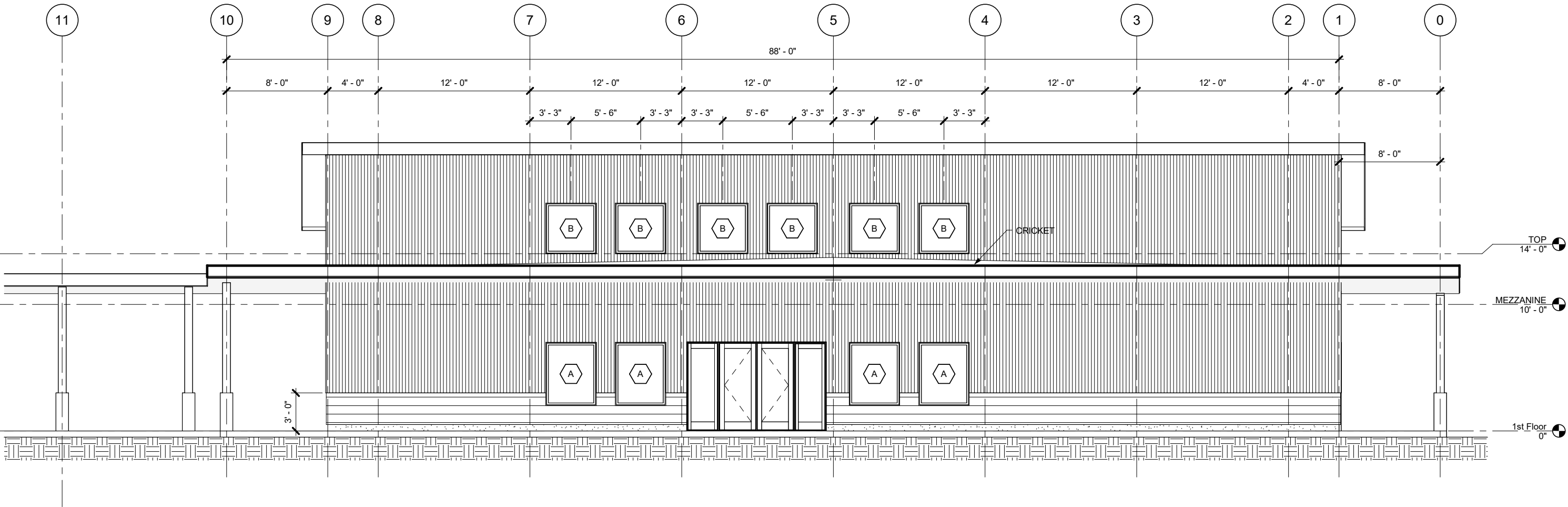
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TICKETING BUILDING ROOF PLAN

FILE | DATE July 15, 2025 | LAYOUT | DESIGNED ADG | CHECKED WJ | DRAFTED ADG

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	5107	161



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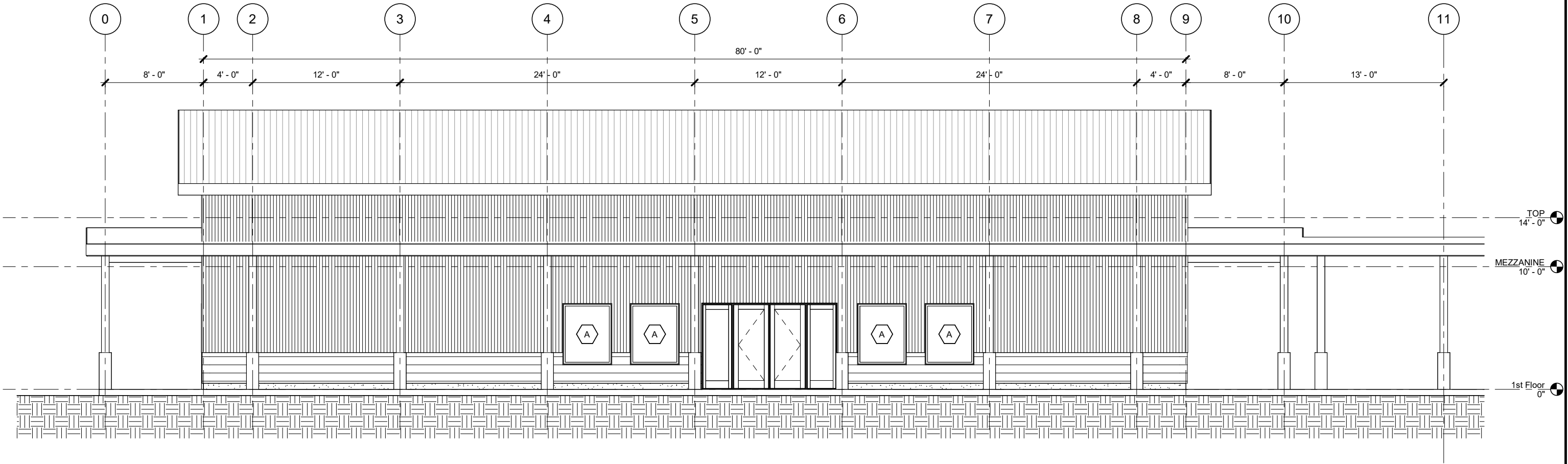
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**JNU CASCADE POINT
FERRY TERMINAL**

**TICKETING BUILDING
EXTERIOR ELEVATION**

FILE DESIGNED ADG CHECKED WJ DRAFTED ADG DATE July 15, 2025 LAYOUT

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	5108	161



1 EXTERIOR ELEVATION

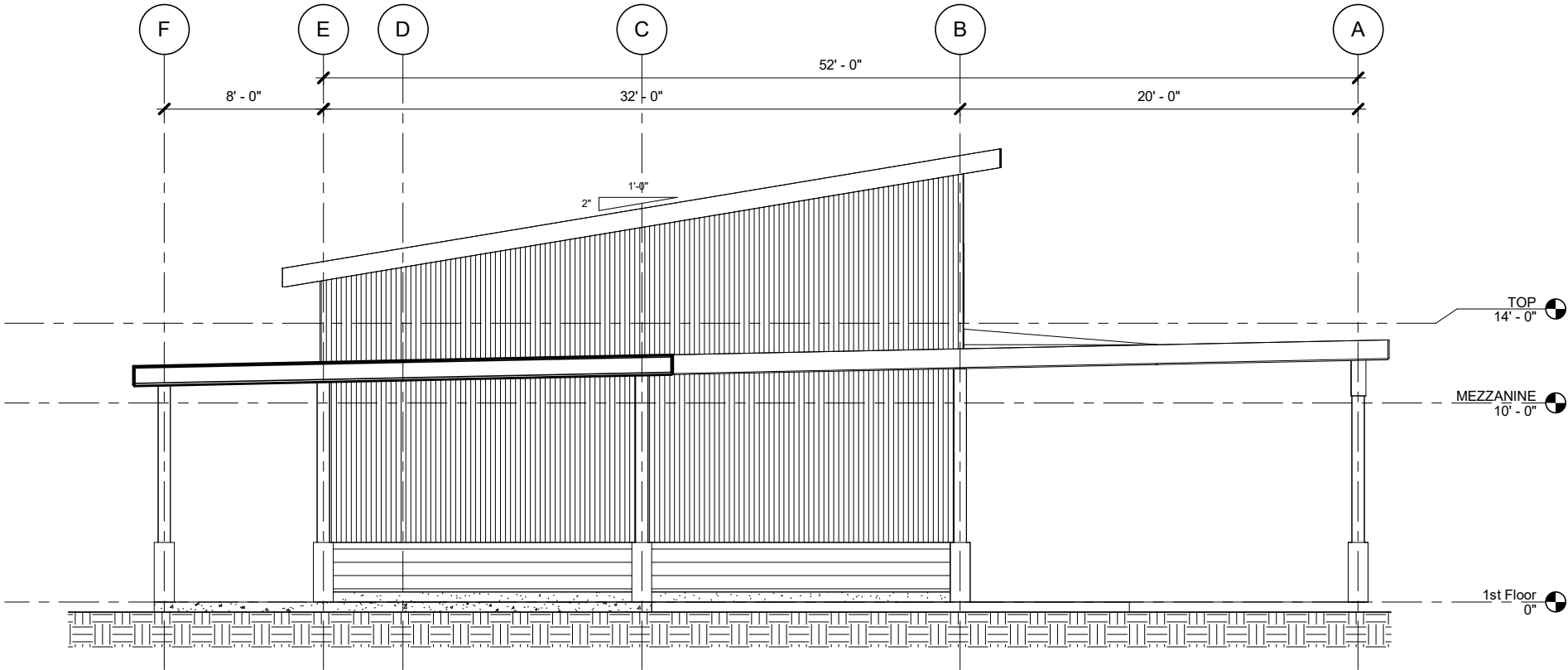
SCALE: 0 2' 4' 8'

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FERRY TERMINAL**
**TICKETING BUILDING
EXTERIOR ELEVATION**

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	5109	161



1 EAST ELEVATION

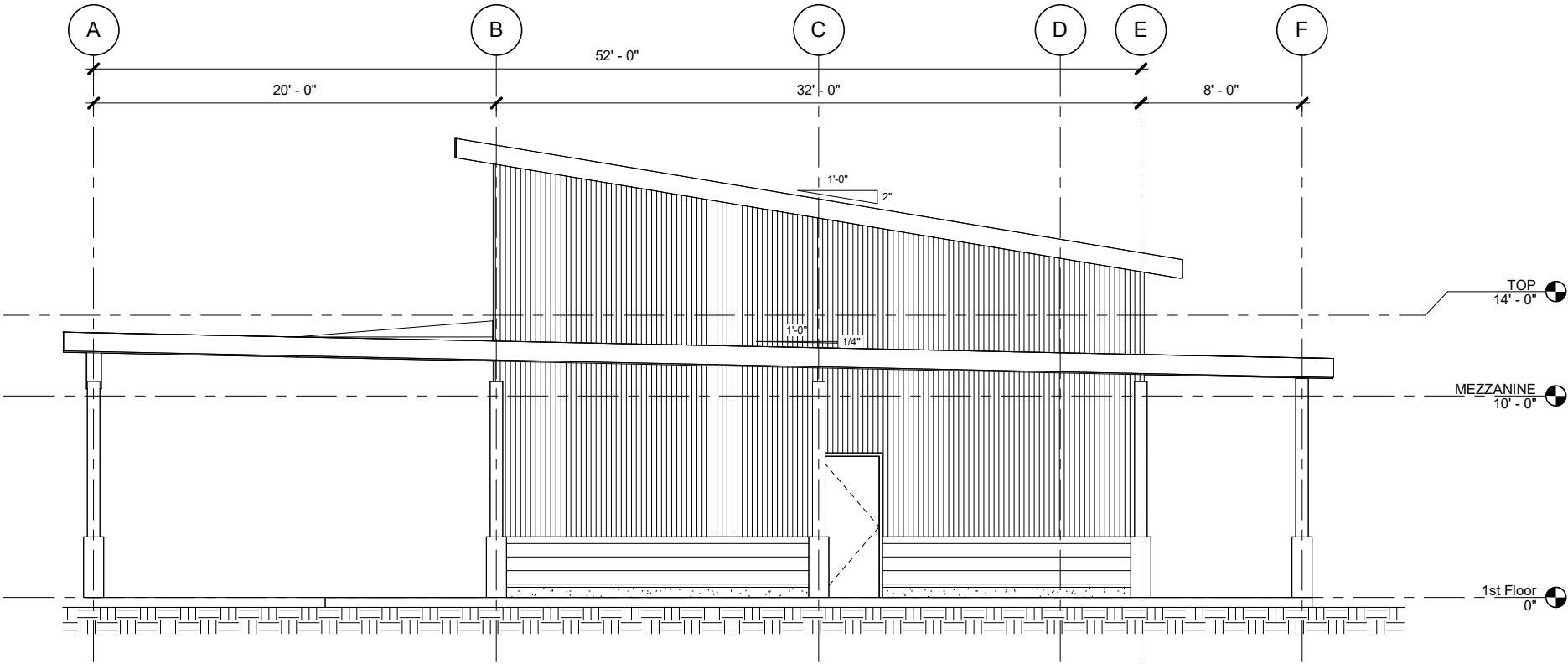
SCALE: 0 2' 4' 8'

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**TICKETING BUILDING
EXTERIOR ELEVATION**

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	5110	161



1 EXTERIOR ELEVATION

SCALE: 0 2' 4' 8'

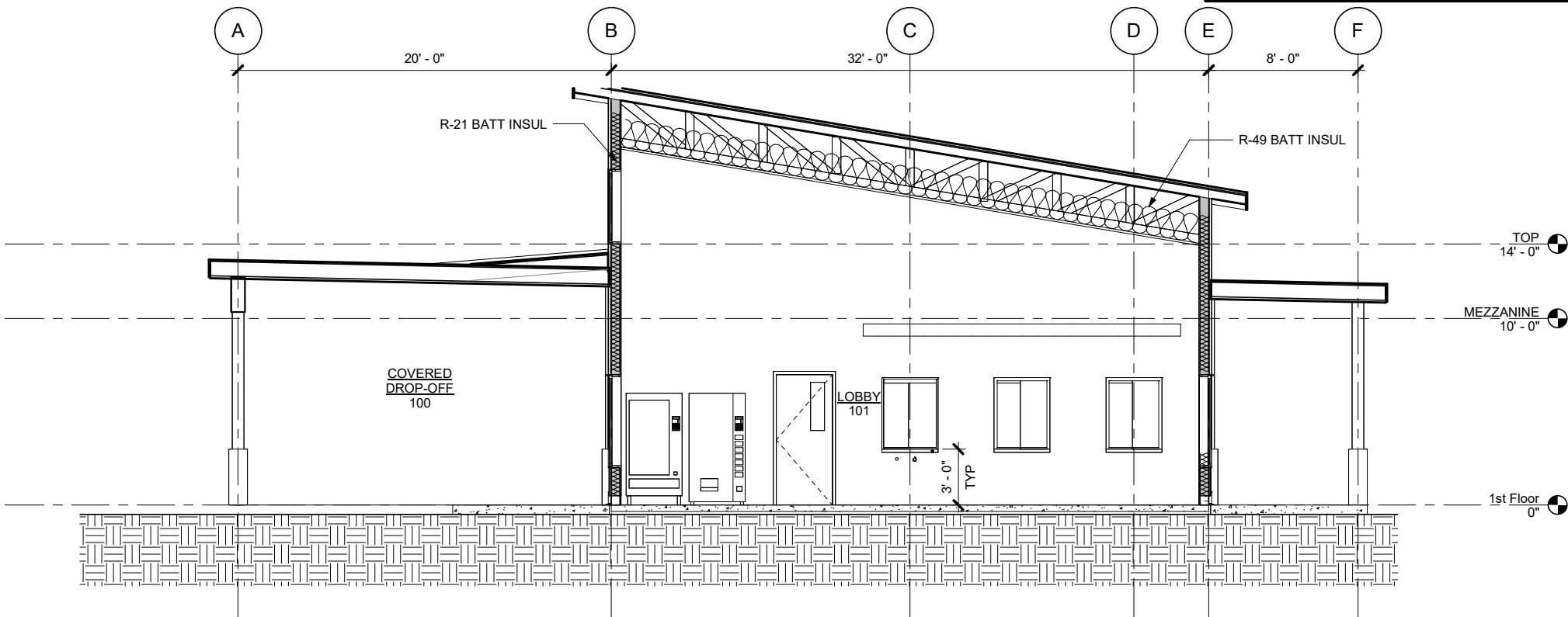
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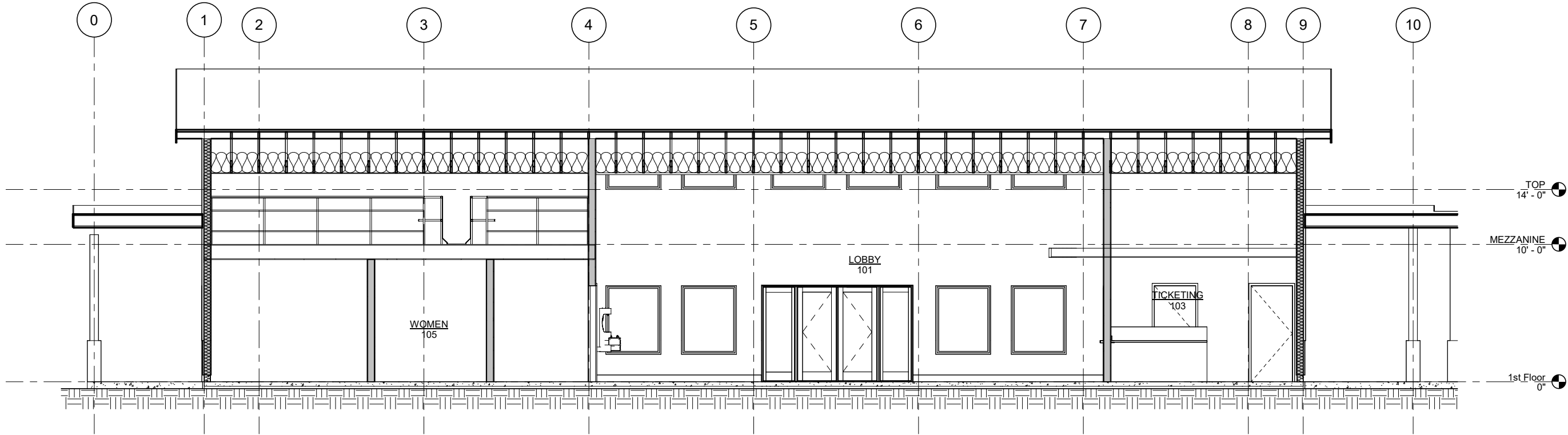
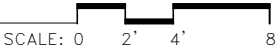
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**TICKETING BUILDING
EXTERIOR ELEVATION**

FILED DATE July 15, 2025 LAYOUT DESIGNED ADG CHECKED WJ DRAFTED ADG

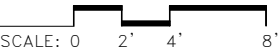
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			ALASKA	HSHWY00015	2025	5111	161



1 BUILDING SECTION



2 BUILDING SECTION



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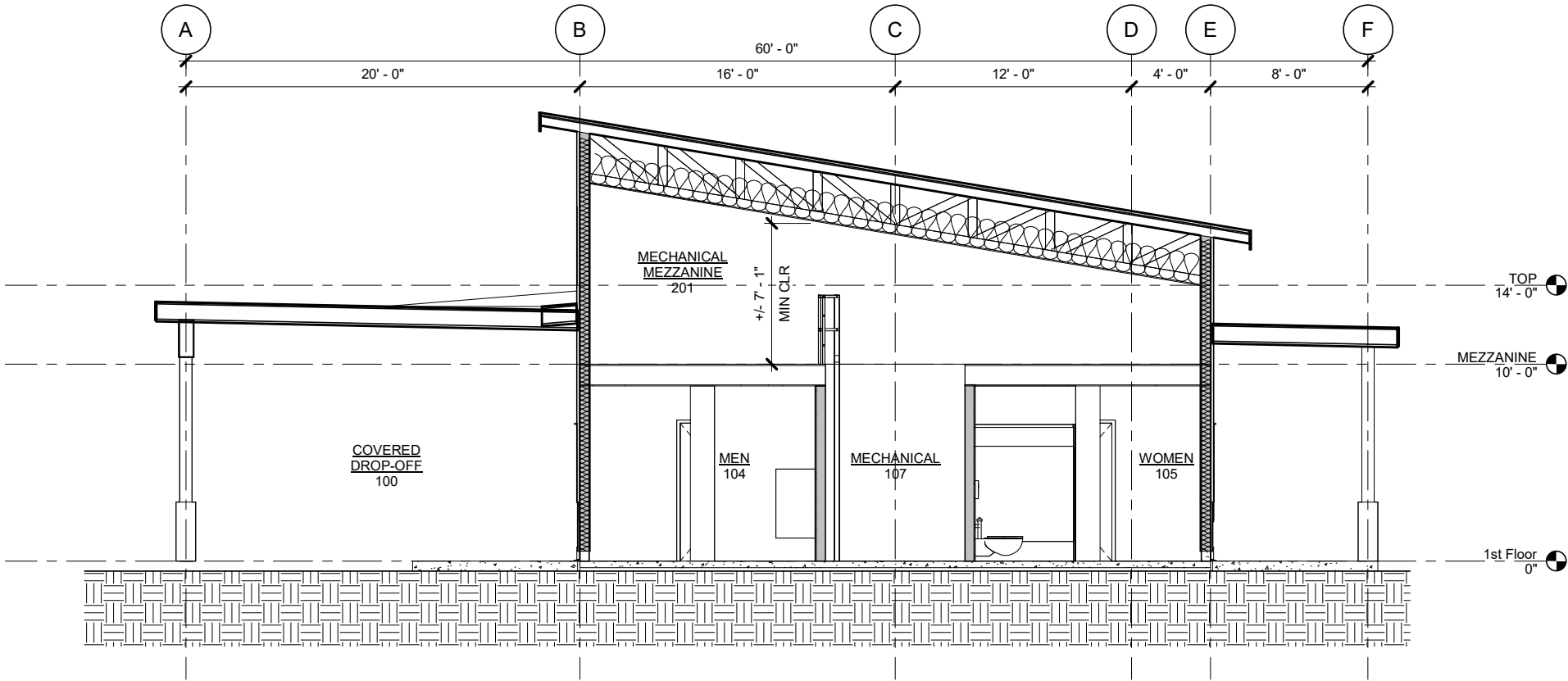
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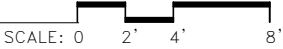
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TICKETING BUILDING BUILDING SECTIONS

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	5112	161



1 BUILDING SECTION



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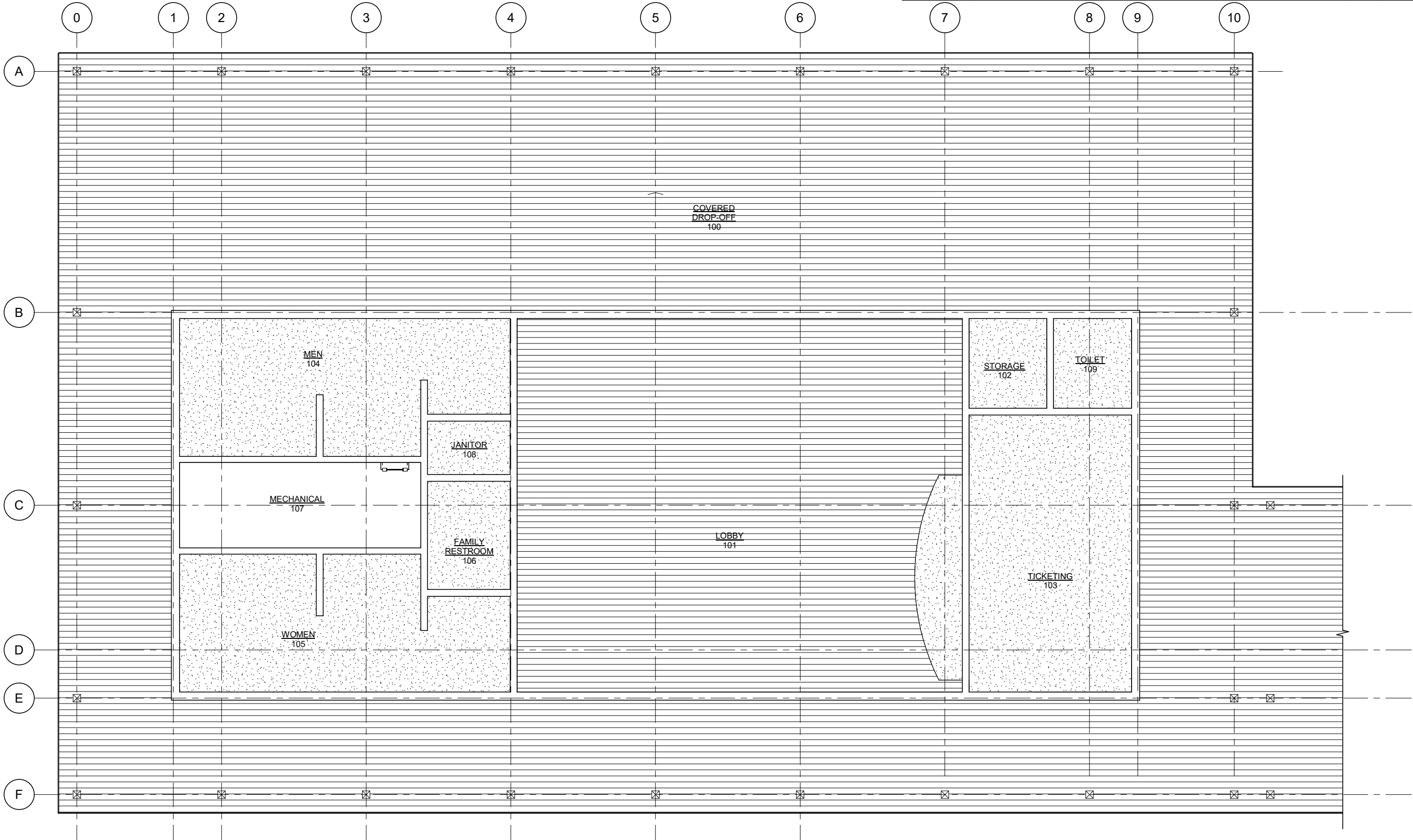
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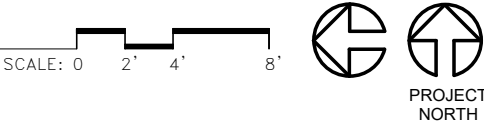
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TICKETING BUILDING
BUILDING SECTION

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	5113	161



1 FIRST FLOOR REFLECTED CEILING PLAN



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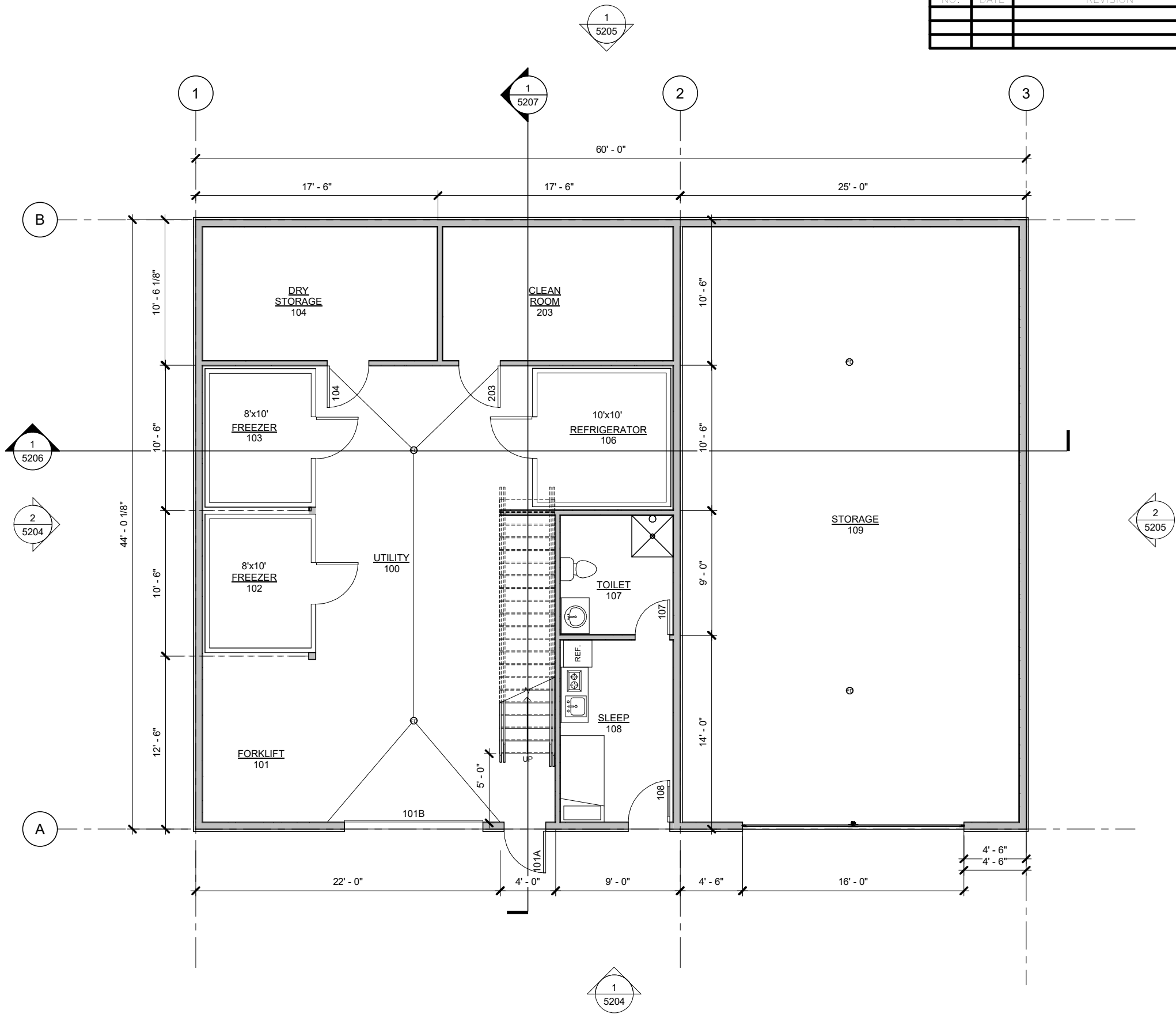
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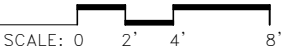
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FERRY TERMINAL

TICKETING BUILDING
REFLECTED CEILING PLAN

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	5201	161



1 FIRST FLOOR PLAN



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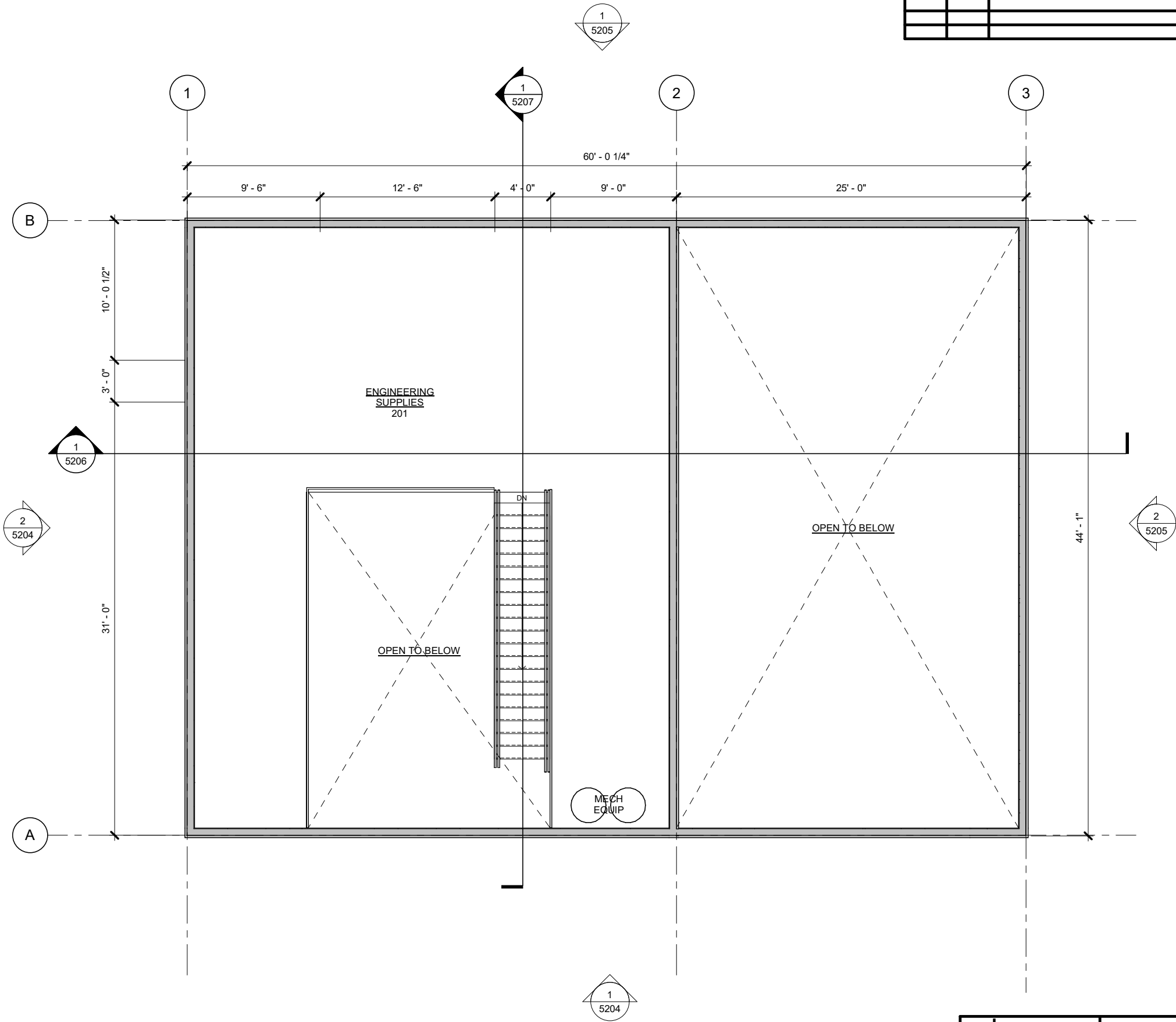


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**UTILITY BUILDING
FIRST FLOOR PLAN**

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	5202	161



1 SECOND FLOOR PLAN

SCALE: 0 2' 4' 8'



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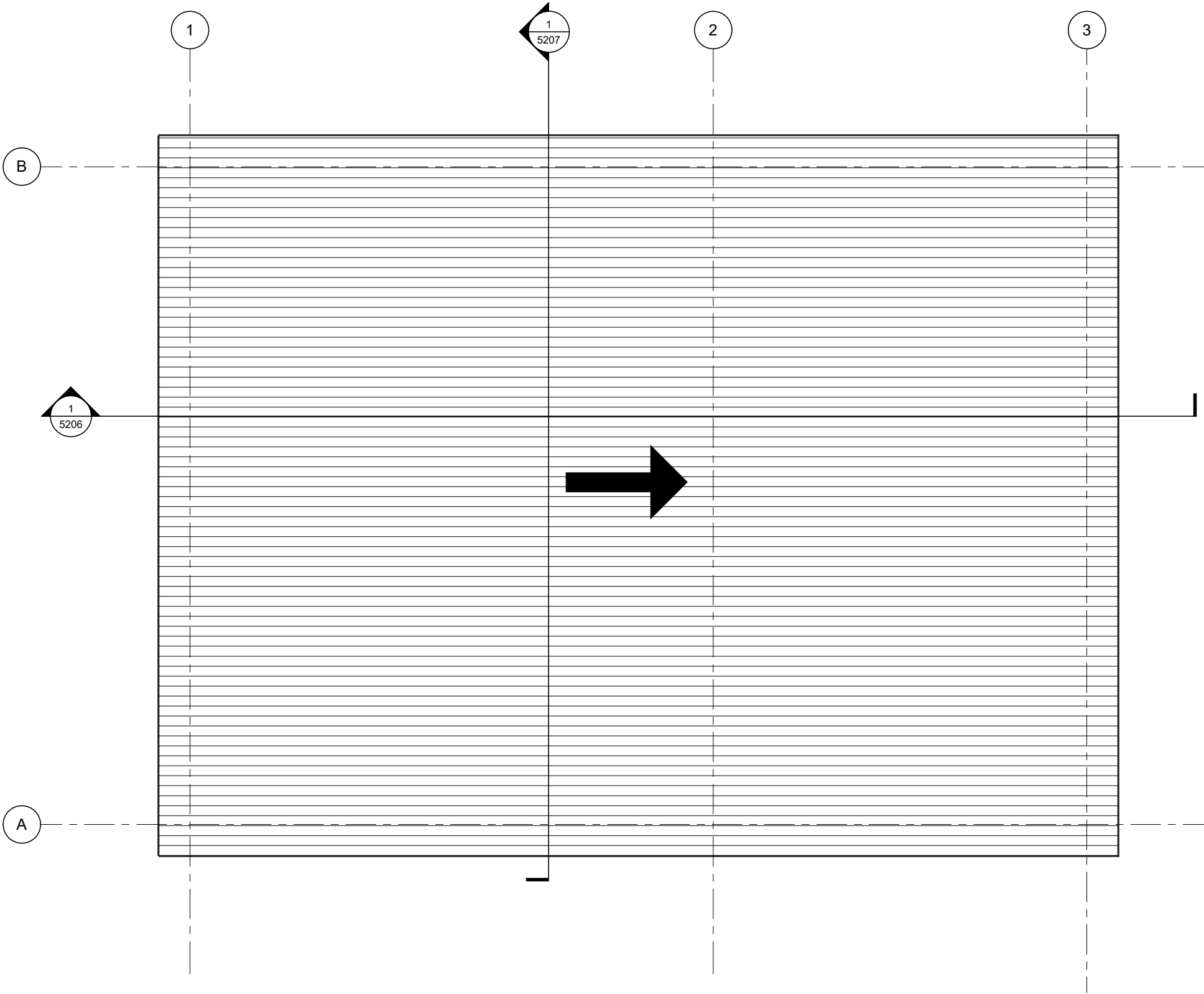
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UTILITY BUILDING
SECOND FLOOR PLAN

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	5203	161



1 ROOF PLAN

SCALE: 0 2' 4' 8'



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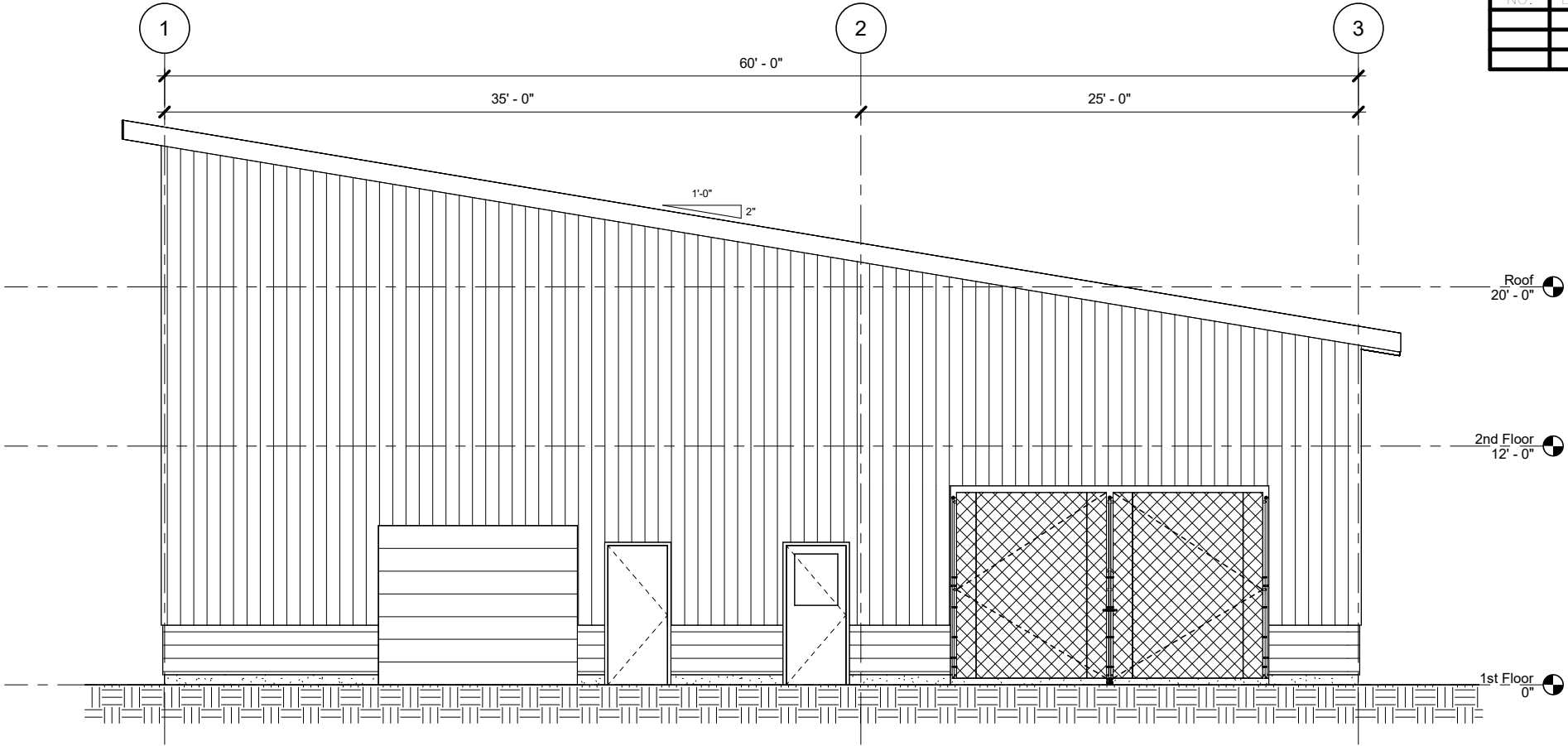


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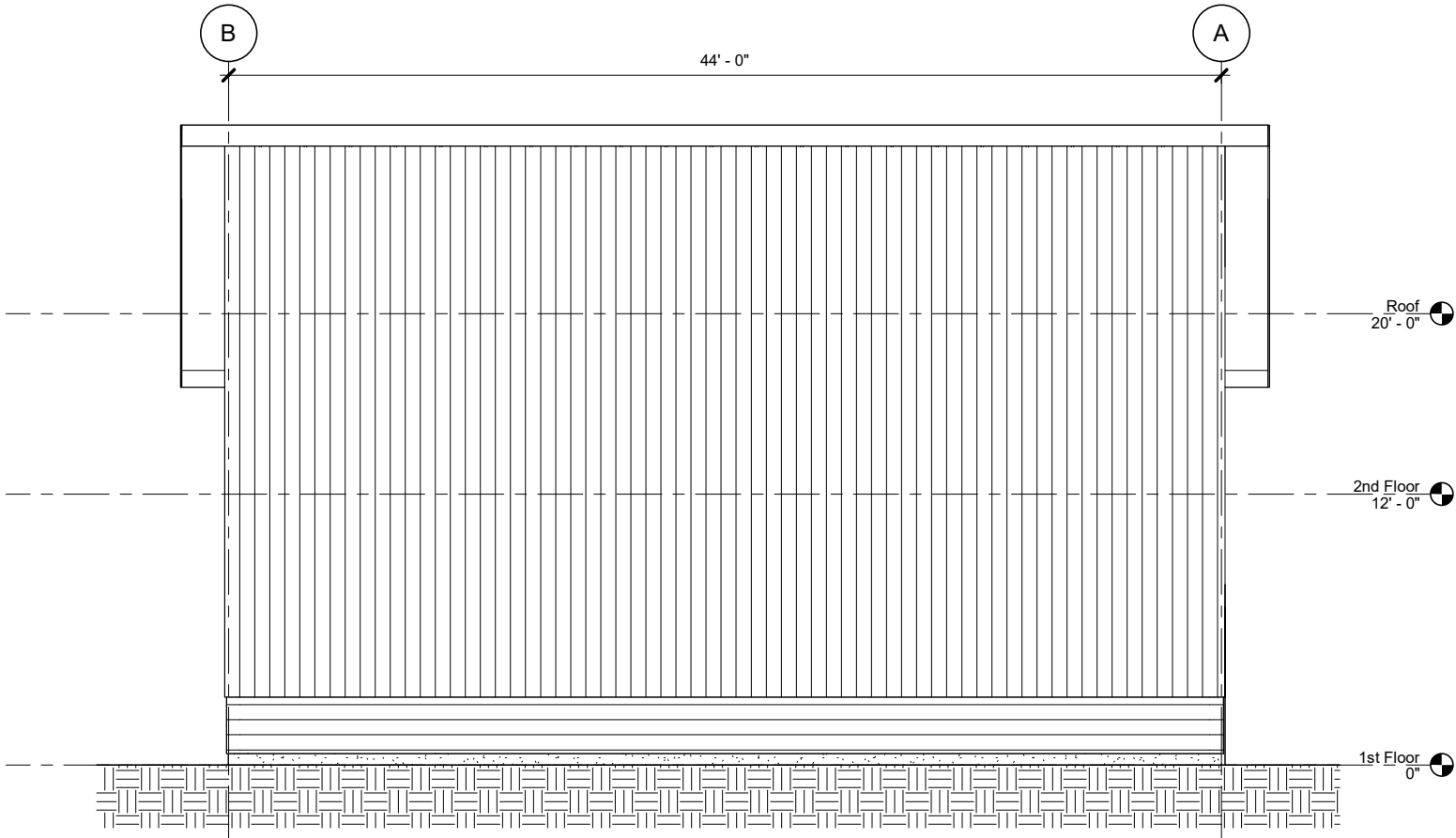
**UTILITY BUILDING
ROOF PLAN**

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	5204	161



1 WEST ELEVATION

SCALE: 0 2' 4' 8'



2 NORTH ELEVATION

SCALE: 0 2' 4' 8'

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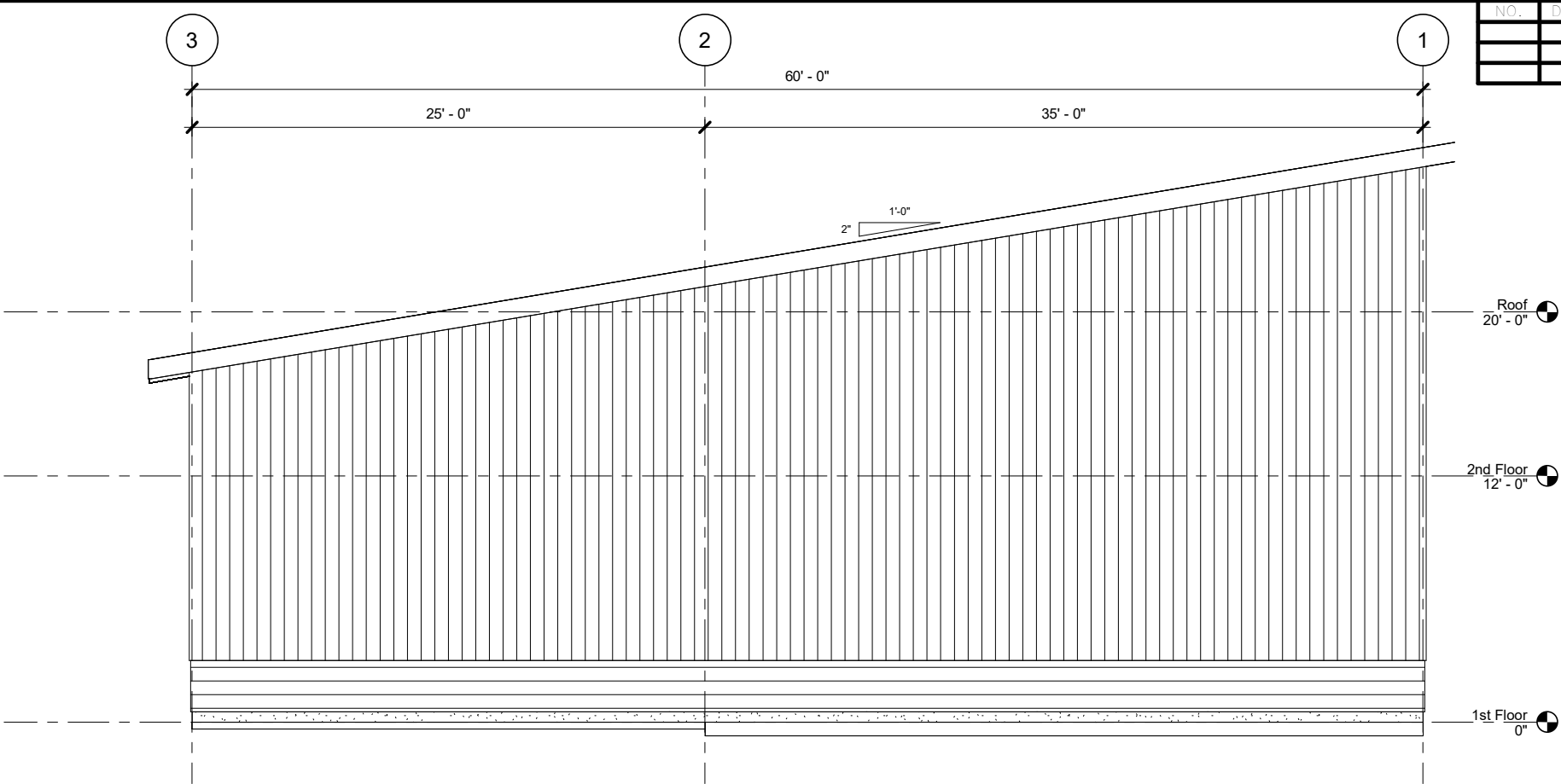
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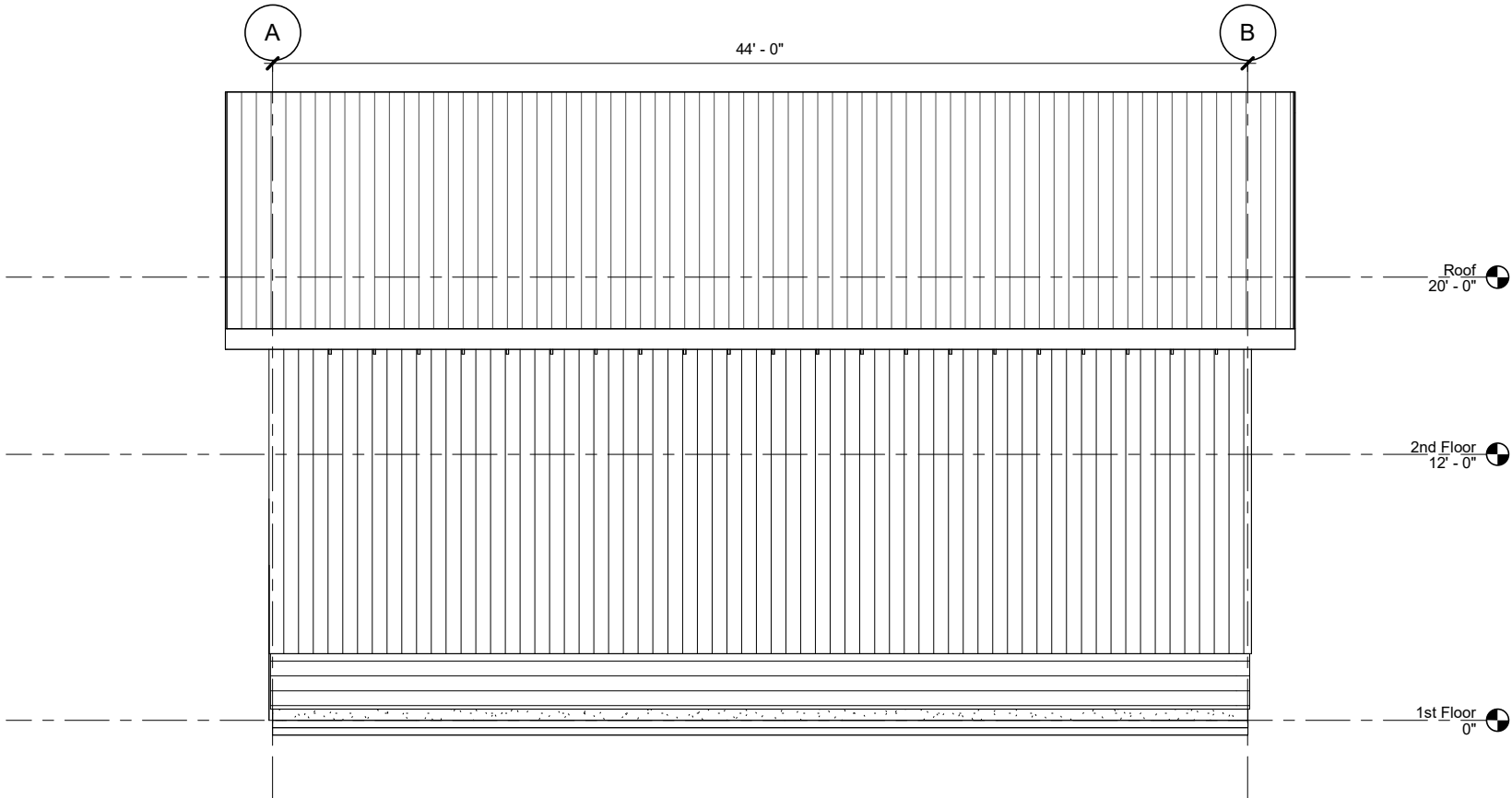
**UTILITY BUILDING
EXTERIOR ELEVATIONS**

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	5205	161



1 WEST ELEVATION

SCALE: 0 2' 4' 8'



2 SOUTH ELEVATION

SCALE: 0 2' 4' 8'

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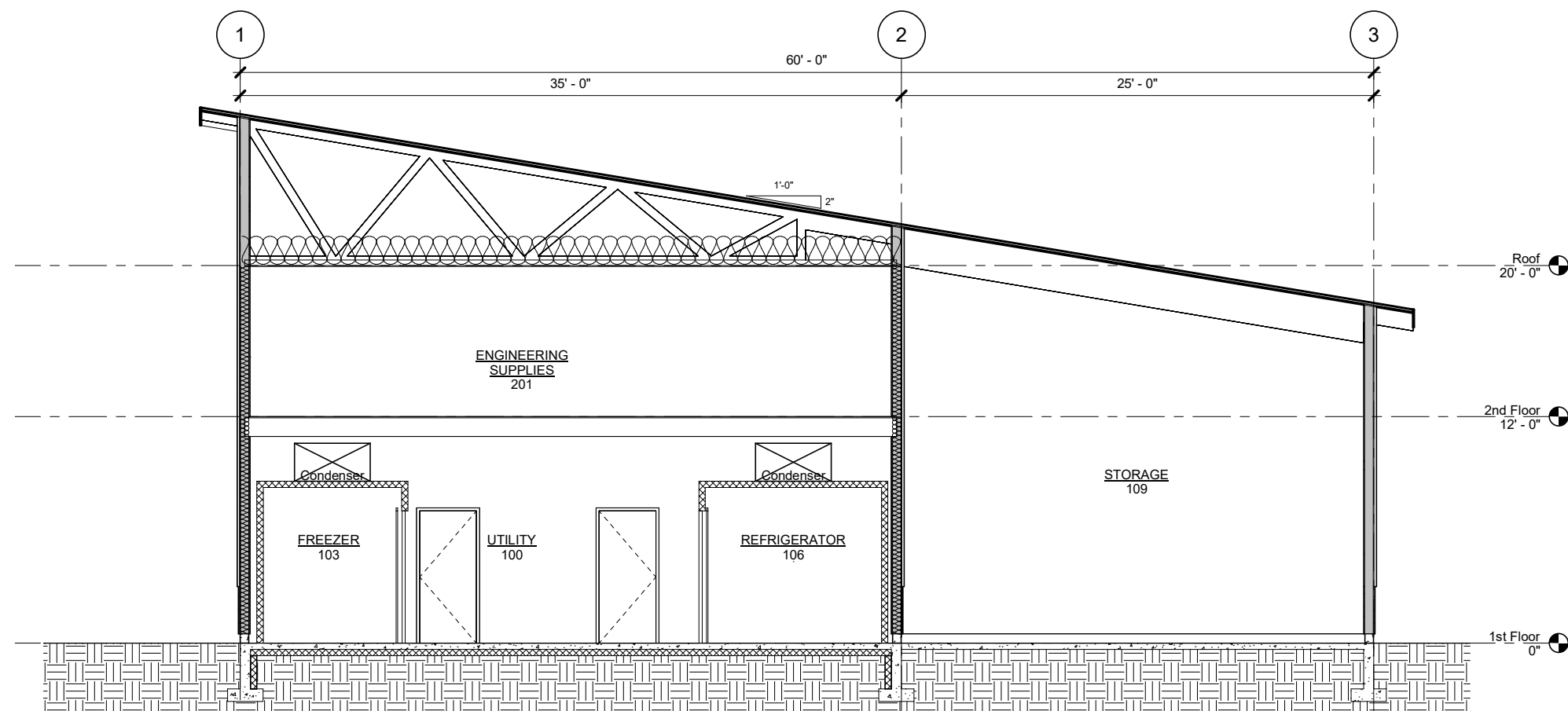
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UTILITY BUILDING
EXTERIOR ELEVATIONS

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	5206	161



1 BUILDING SECTION

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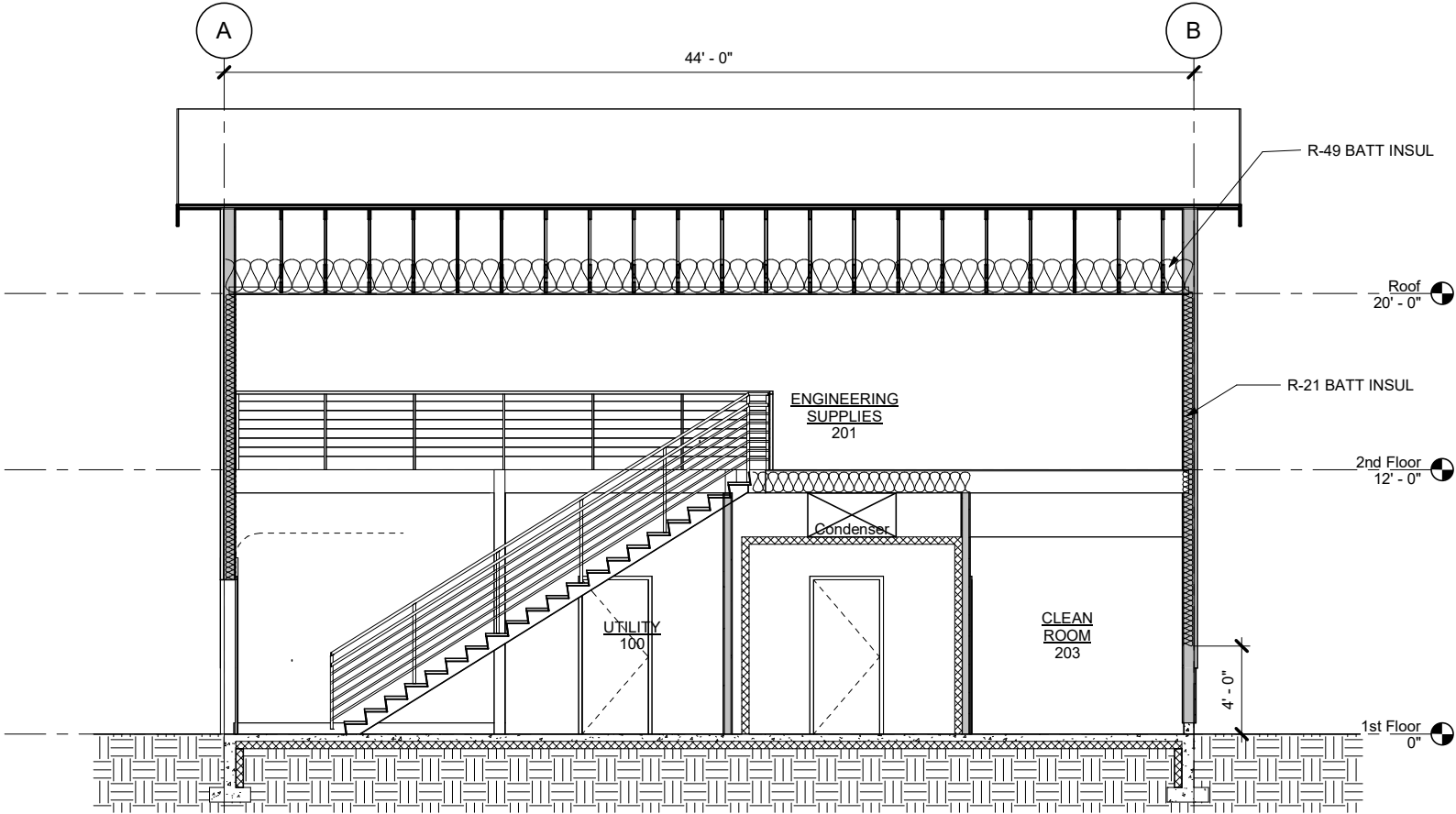
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**JNU CASCADE POINT
FERRY TERMINAL**

**UTILITY BUILDING
BUILDING SECTION**

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	5207	161



1 BUILDING SECTION

SCALE: 0 2' 4' 8'

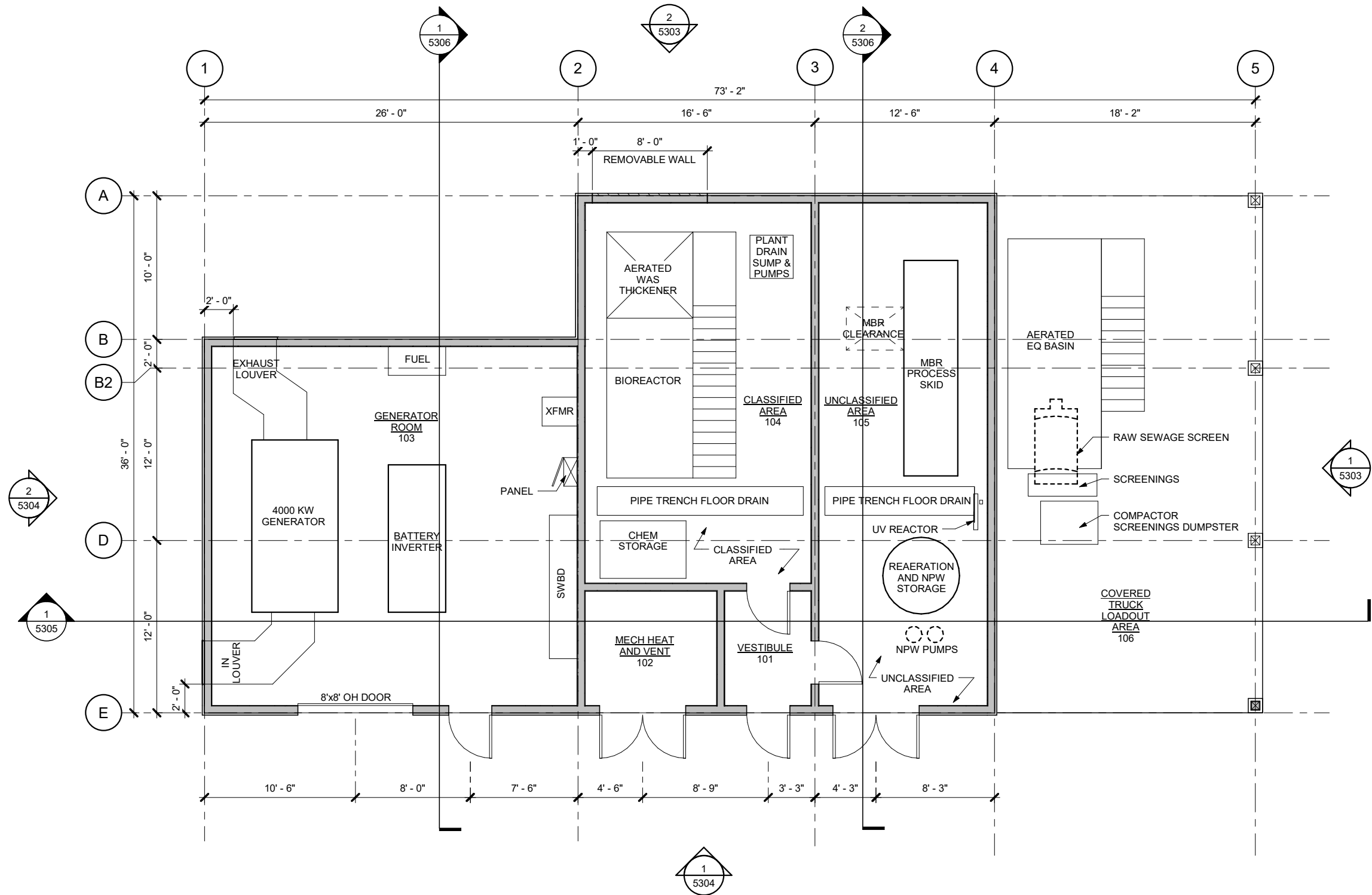
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**UTILITY BUILDING
BUILDING SECTION**

FILE | DATE July 15, 2025 | LAYOUT | DESIGNED ADG | CHECKED WJ | DRAFTED ADG

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	5301	161



1 FIRST FLOOR PLAN

SCALE: 0 2' 4' 8'

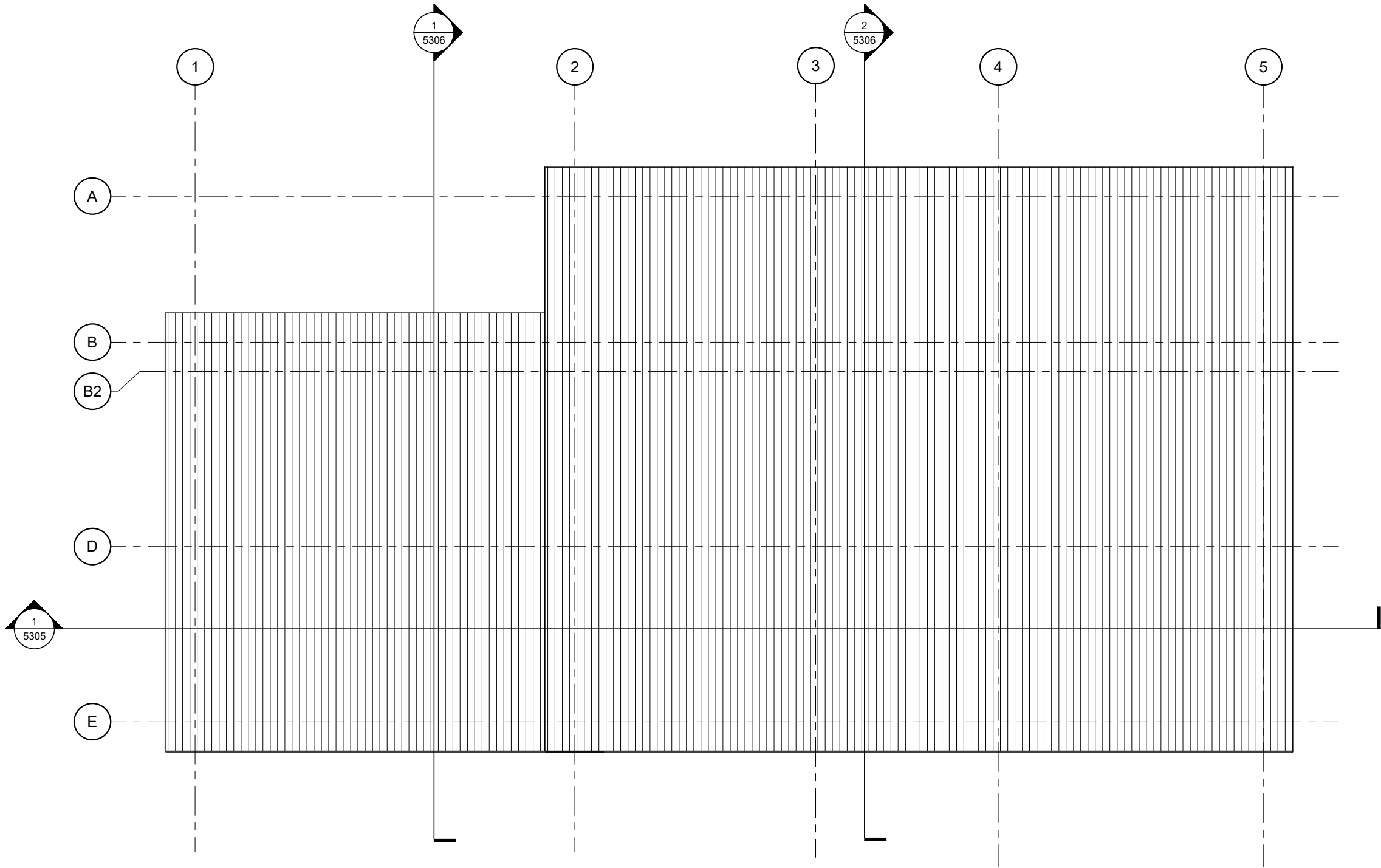


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**GENERATOR BUILDING
FIRST FLOOR PLAN**

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	5302	161



1 ROOF PLAN

SCALE: 0 2' 4' 8'



PROJECT
NORTH

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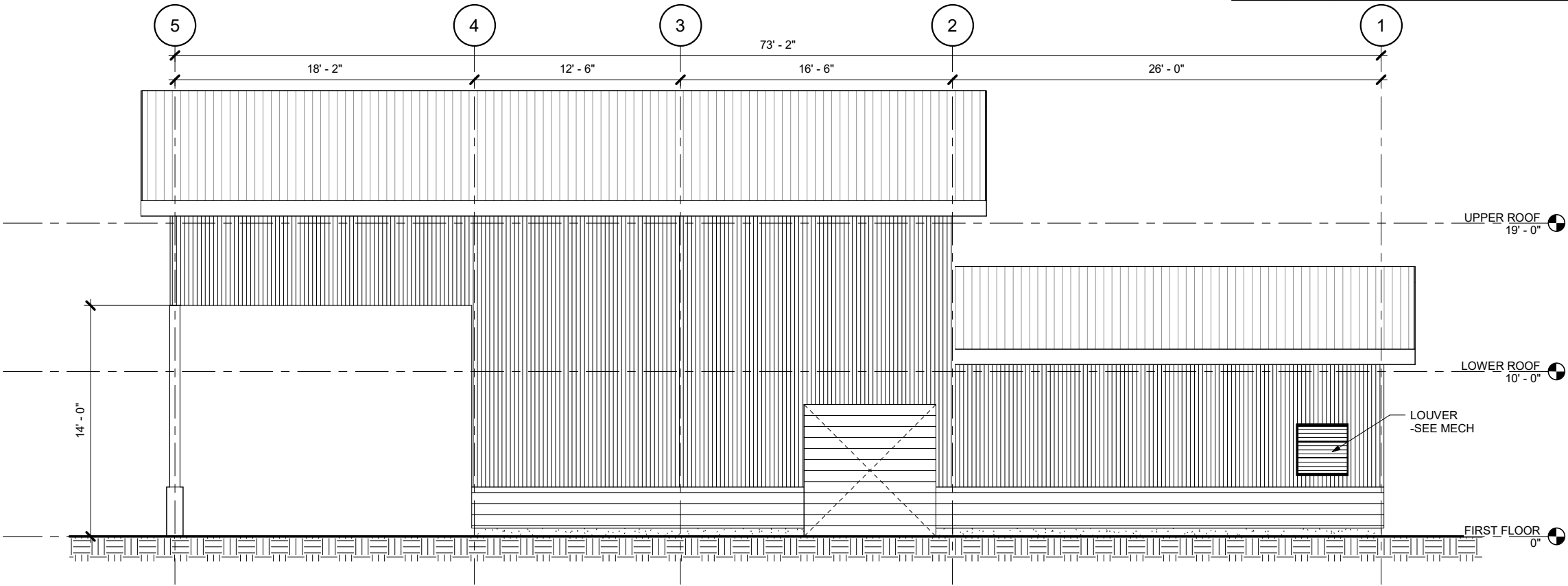


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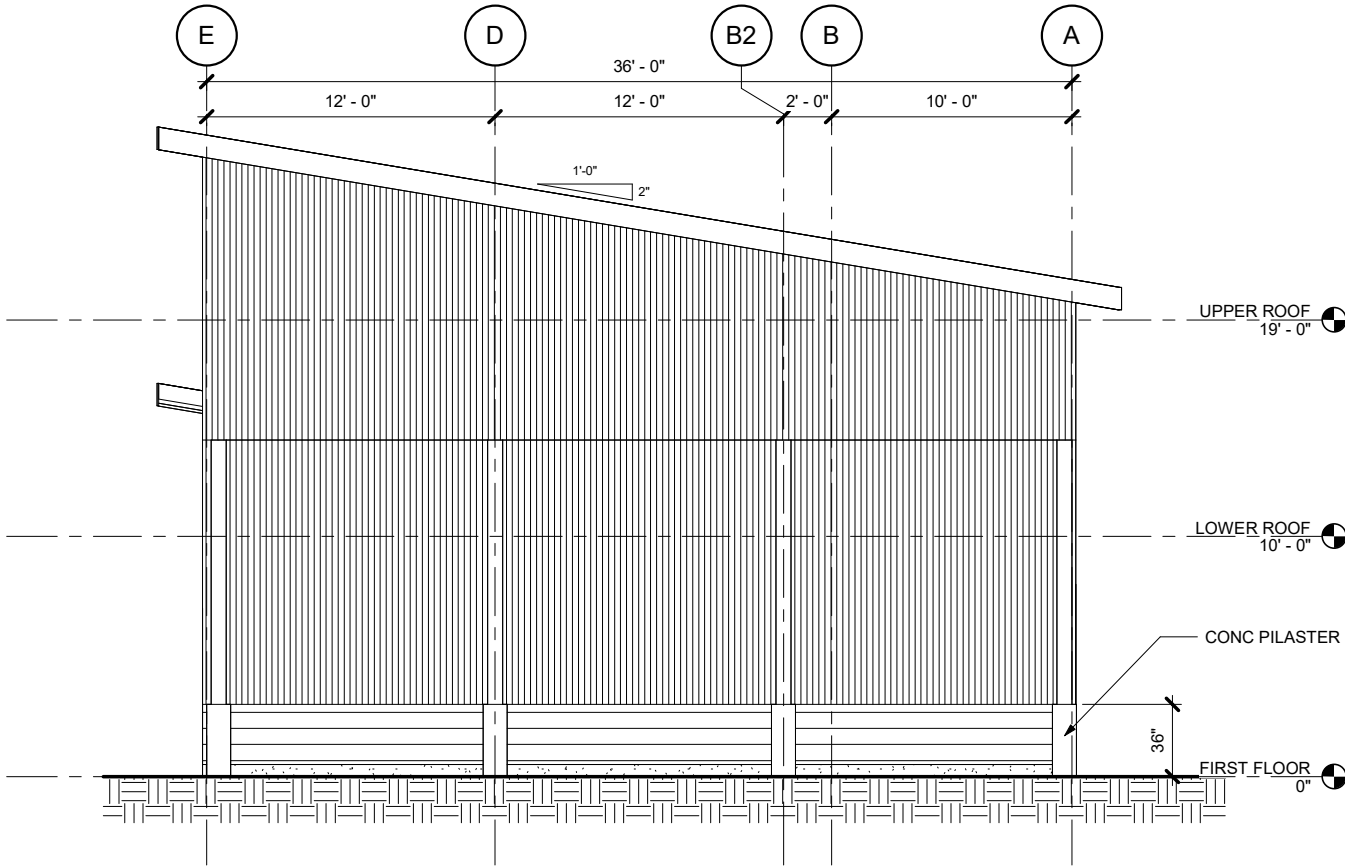
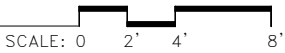
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**GENERATOR BUILDING
ROOF PLAN**

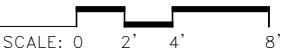
NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	5303	161



2 EXTERIOR ELEVATION



1 EXTERIOR ELEVATION



Jensen Yorba Wall Inc.

522 West 10th Street
Juneau, Alaska 99801
907.586.1070
AECC137
jensenyorbawall.com

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REVIEW

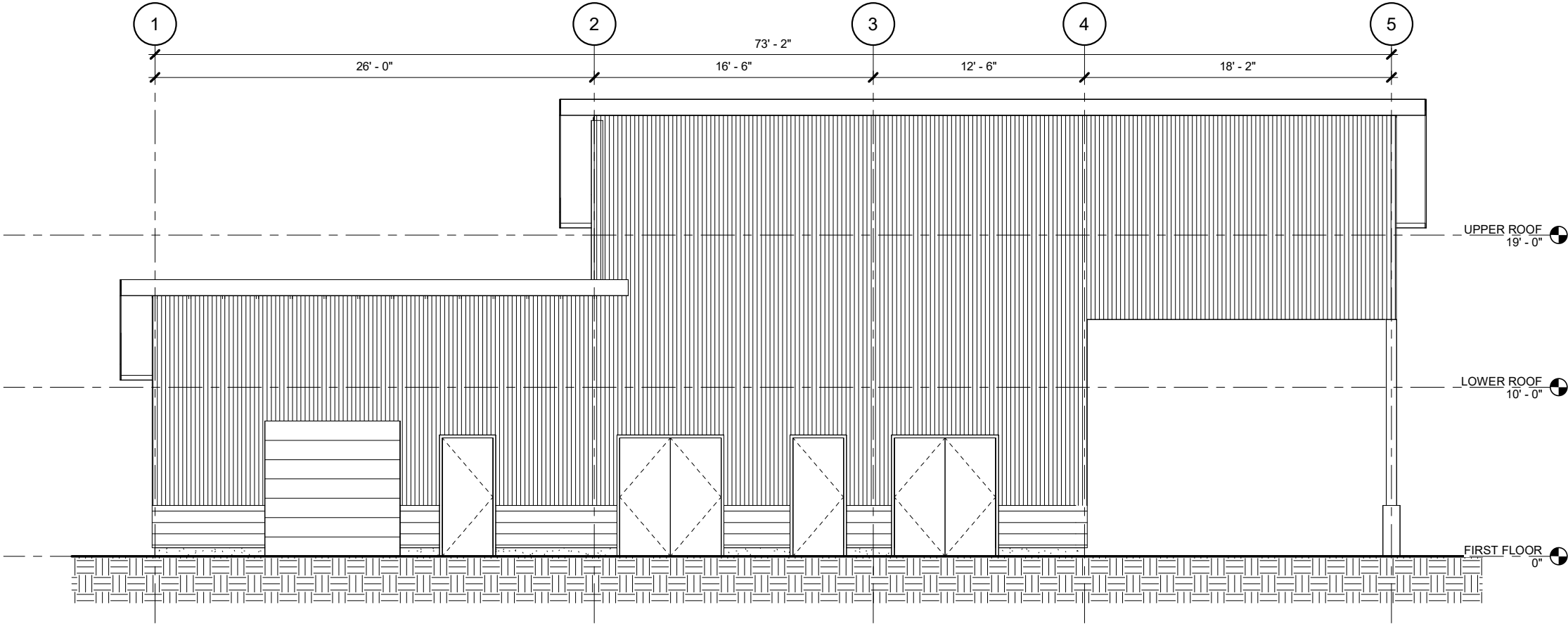
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STATE OF ALASKA DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
6860 GLACIER HIGHWAY, JUNEAU, AK 99801
(907) 465-1763

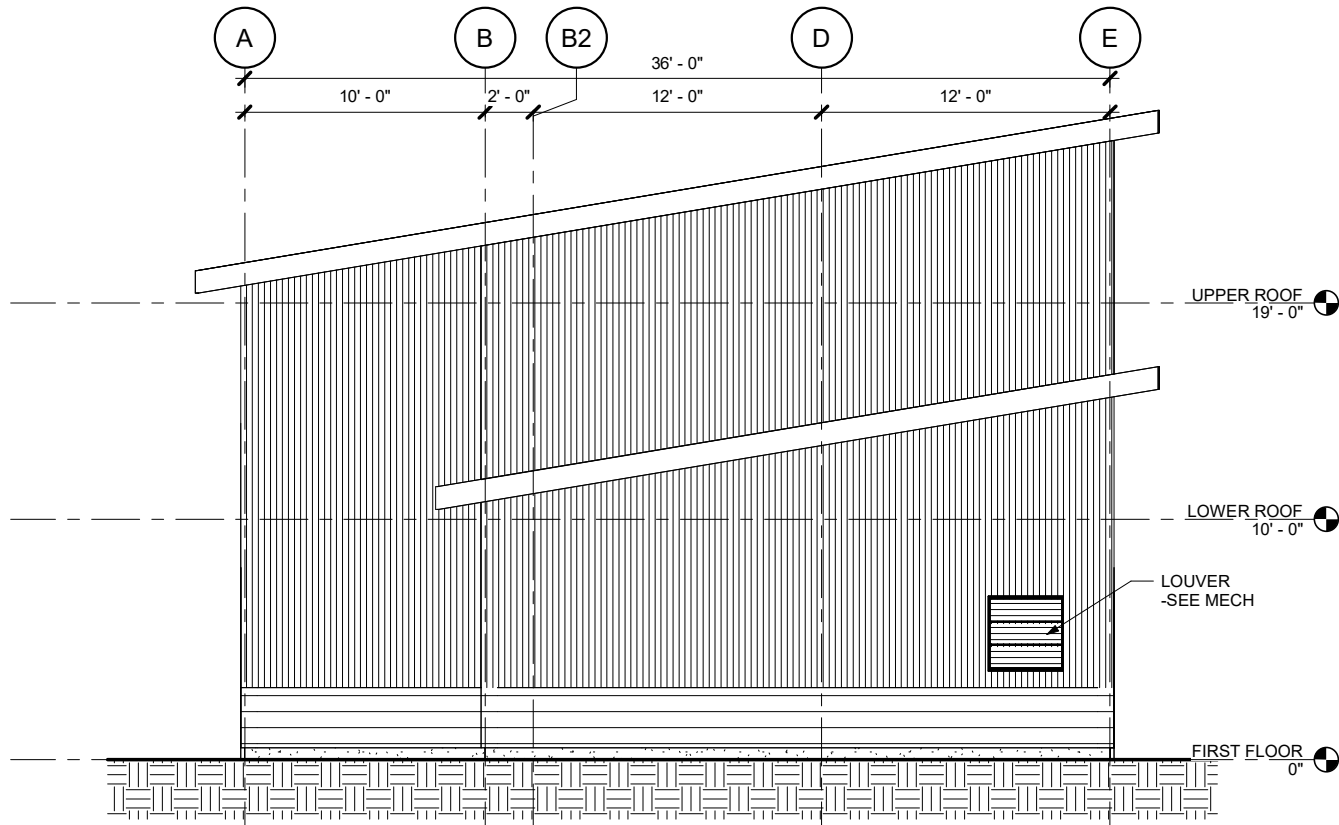
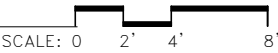
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FERRY TERMINAL

GENERATOR BUILDING
EXTERIOR ELEVATIONS

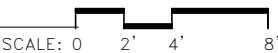
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			ALASKA	HSHWY00015	2025	5304	161



1 EXTERIOR ELEVATION



2 EXTERIOR ELEVATION



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Yorba
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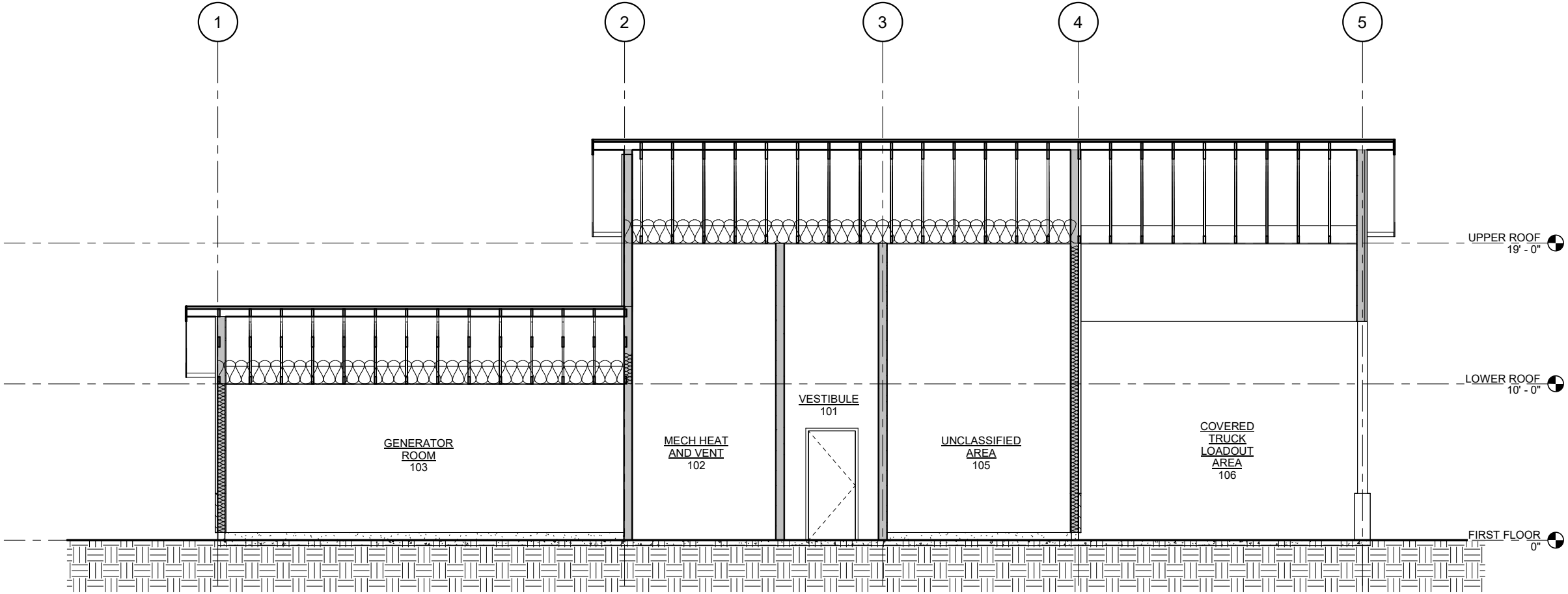
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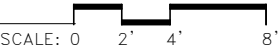
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FERRY TERMINAL

GENERATOR BUILDING
EXTERIOR ELEVATIONS

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	5305	161



1 BUILDING SECTION



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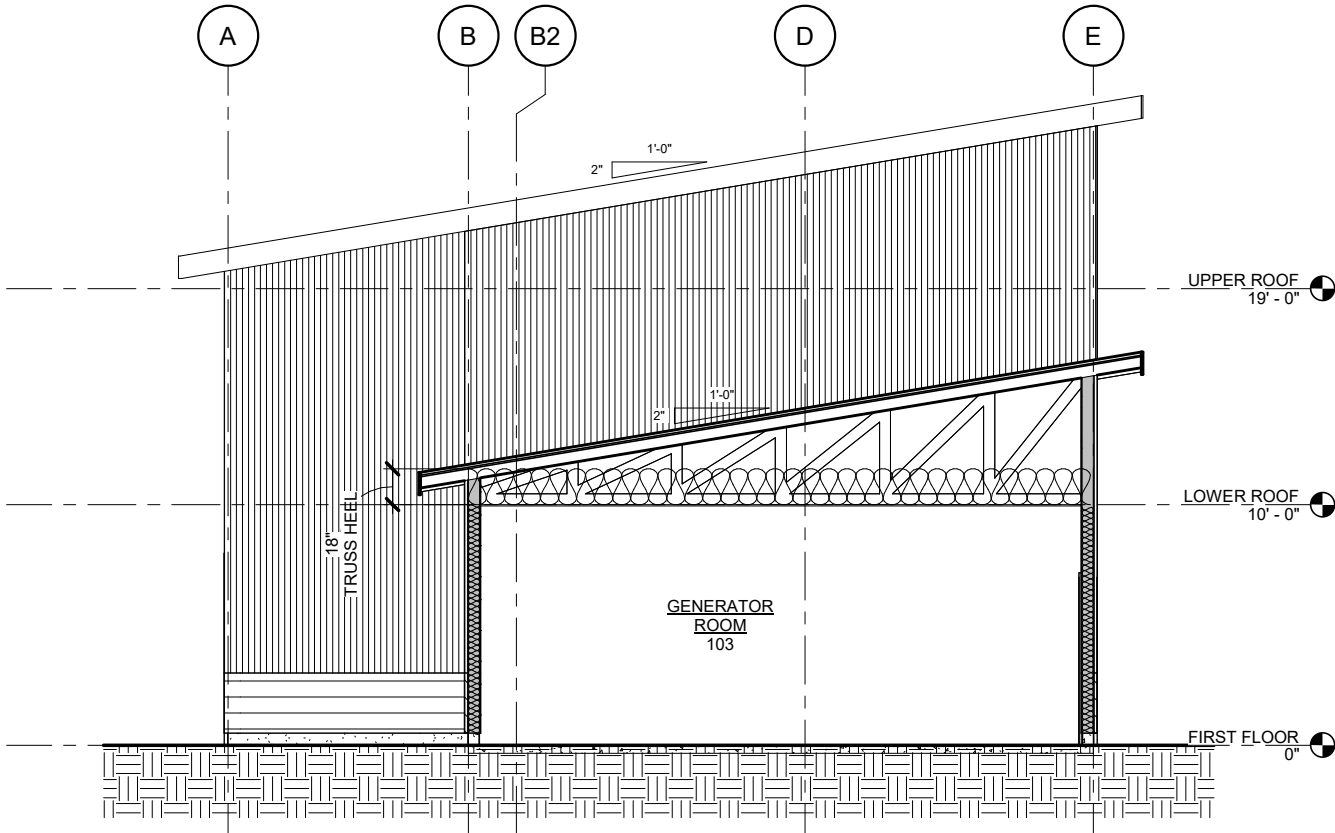
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AND PUBLIC FACILITIES
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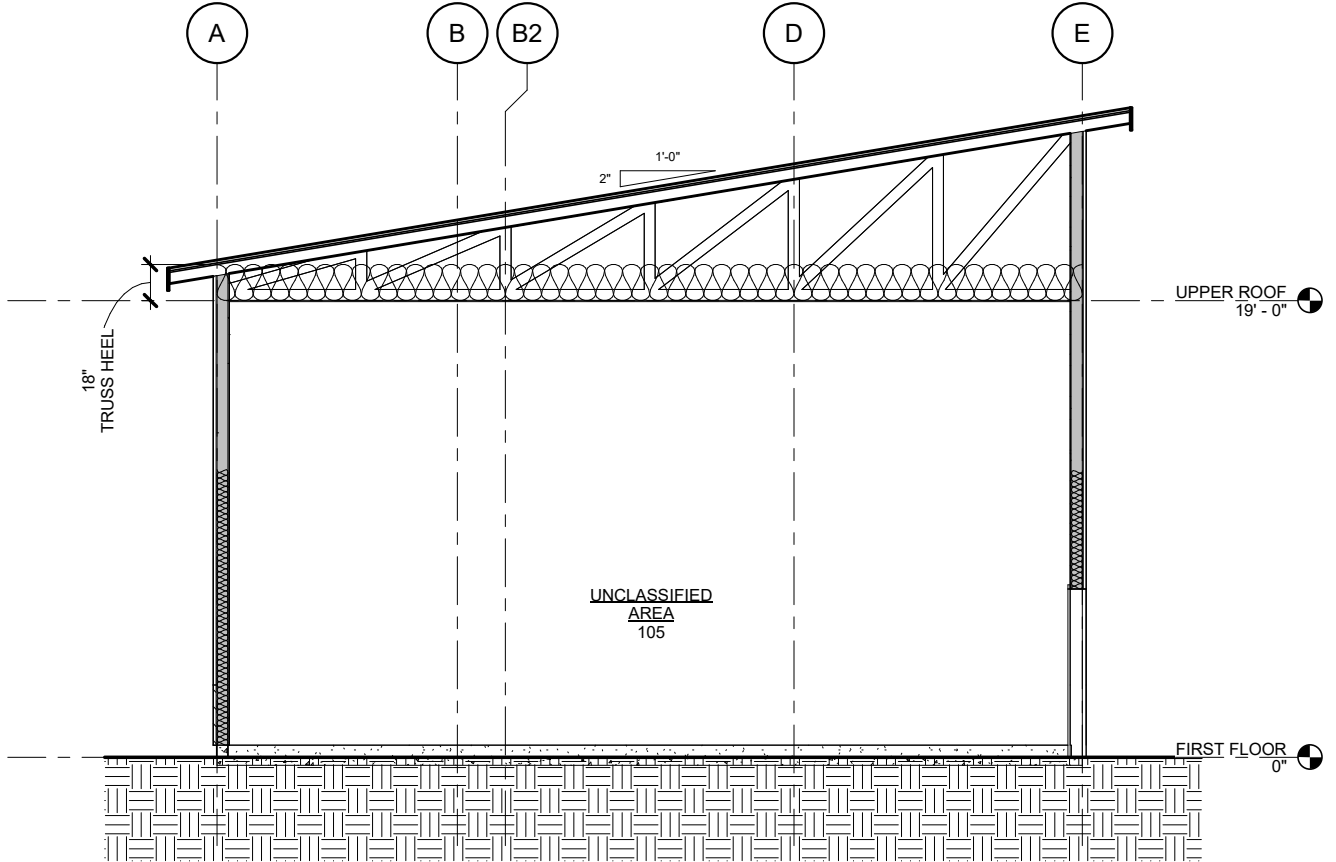
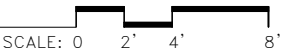
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FERRY TERMINAL

GENERATOR BUILDING
BUILDING SECTION

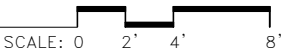
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1 BUILDING SECTION



2 BUILDING SECTION

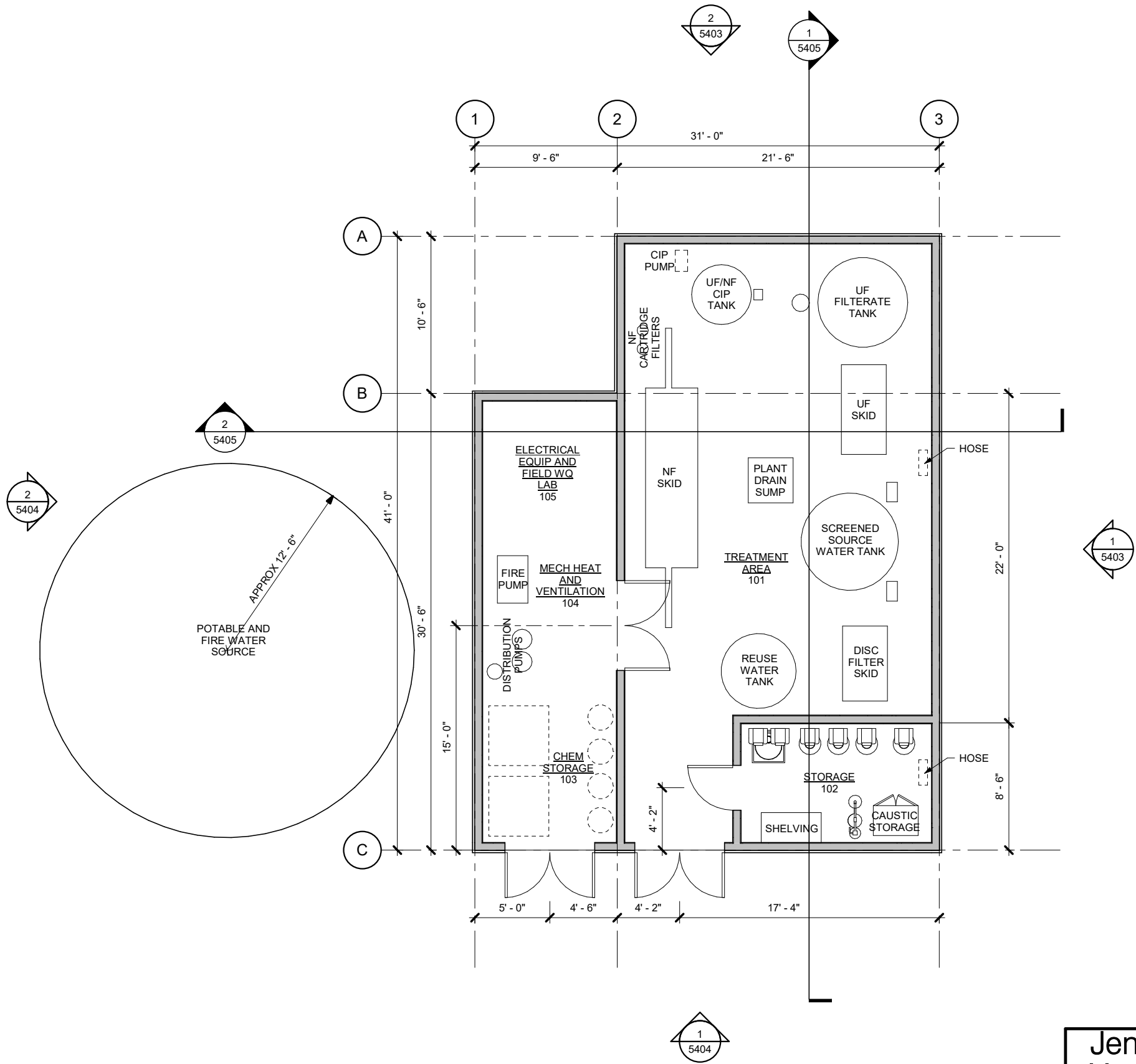


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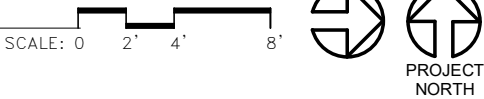


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**JNU CASCADE POINT
FERRY TERMINAL**
**GENERATOR BUILDING
BUILDING SECTIONS**

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	5401	161



1 FIRST FLOOR PLAN



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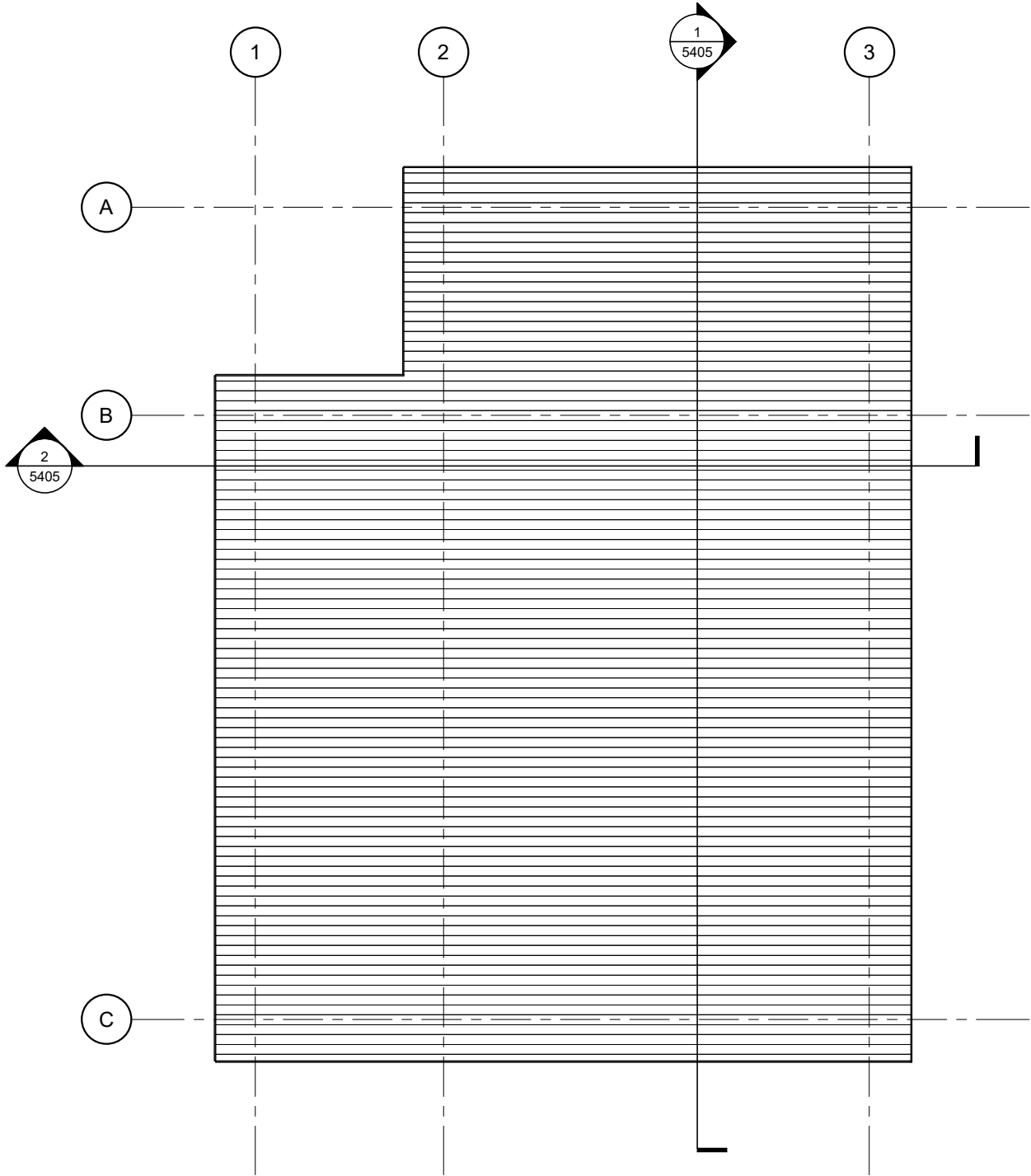
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WATER TREATMENT BUILDING FLOOR PLAN

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	5402	161



1 ROOF PLAN

SCALE: 0 2' 4' 8'



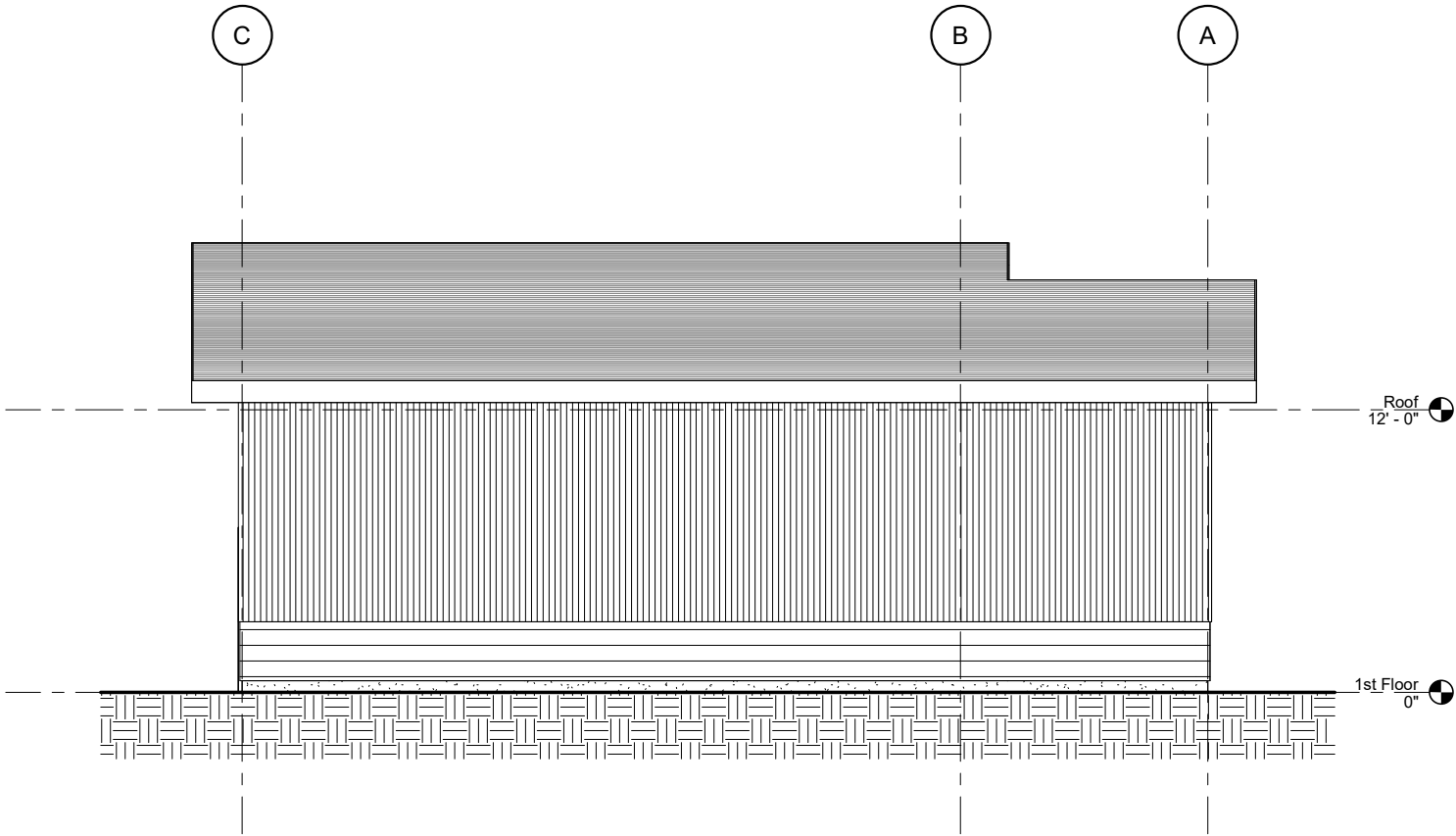
PROJECT
NORTH

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Yorba
Wall Inc.
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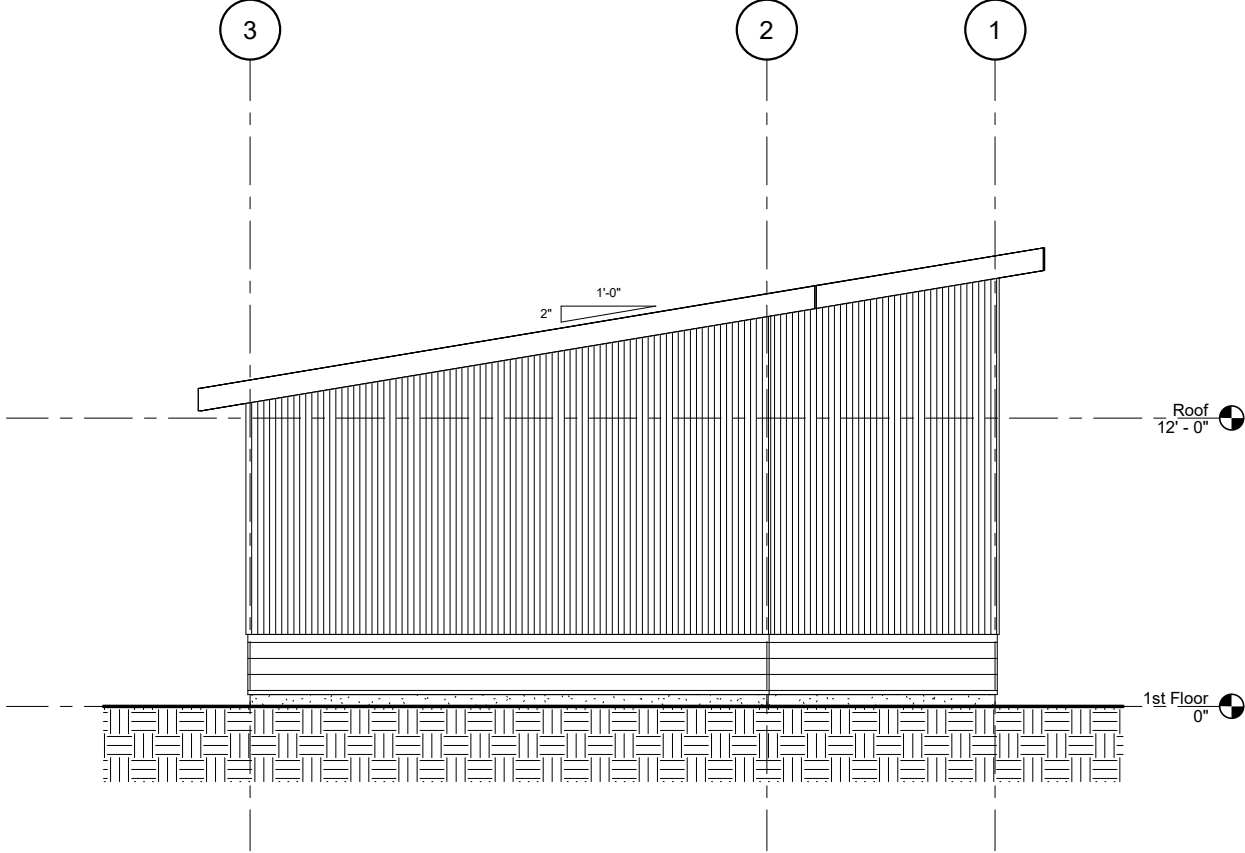
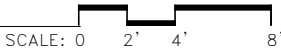


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**JNU CASCADE POINT
FERRY TERMINAL**
**WATER TREATMENT BUILDING
ROOF PLAN**

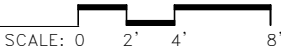
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			ALASKA	HSHWY00015	2025	5403	161



1 EXTERIOR ELEVATION



2 EXTERIOR ELEVATION

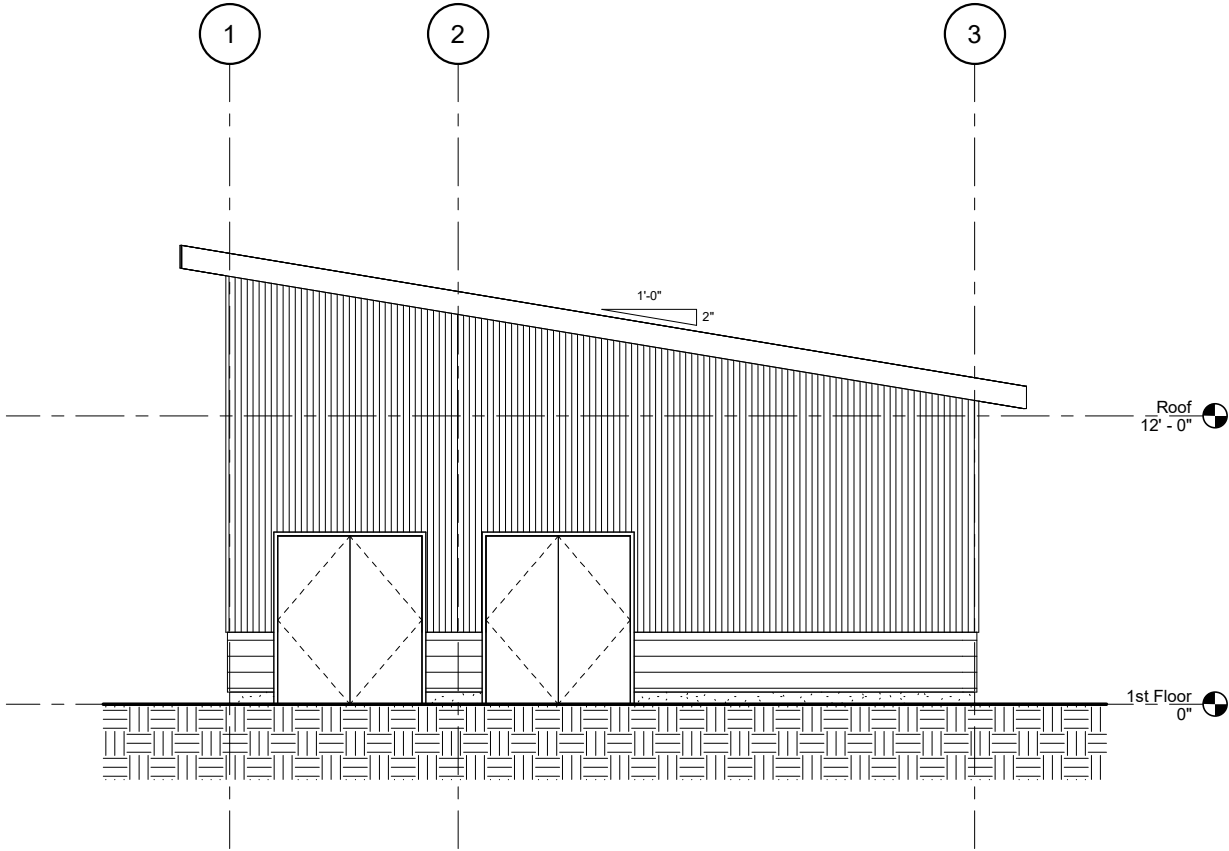


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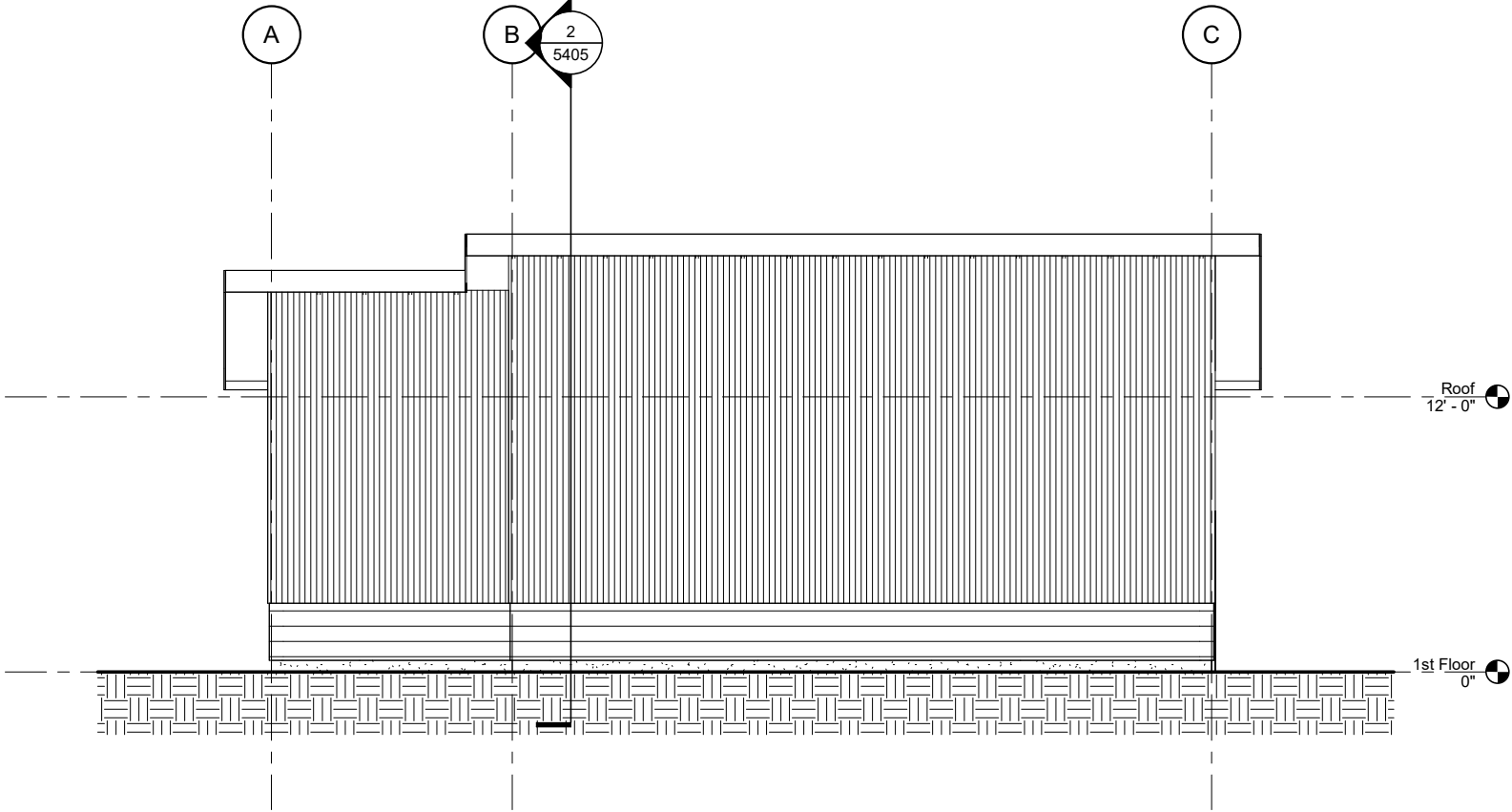
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**JNU CASCADE POINT
FERRY TERMINAL**
**WATER TREATMENT BUILDING
EXTERIOR ELEVATIONS**

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
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1 EXTERIOR ELEVATION

SCALE: 0 2' 4' 8'



2 EXTERIOR ELEVATION

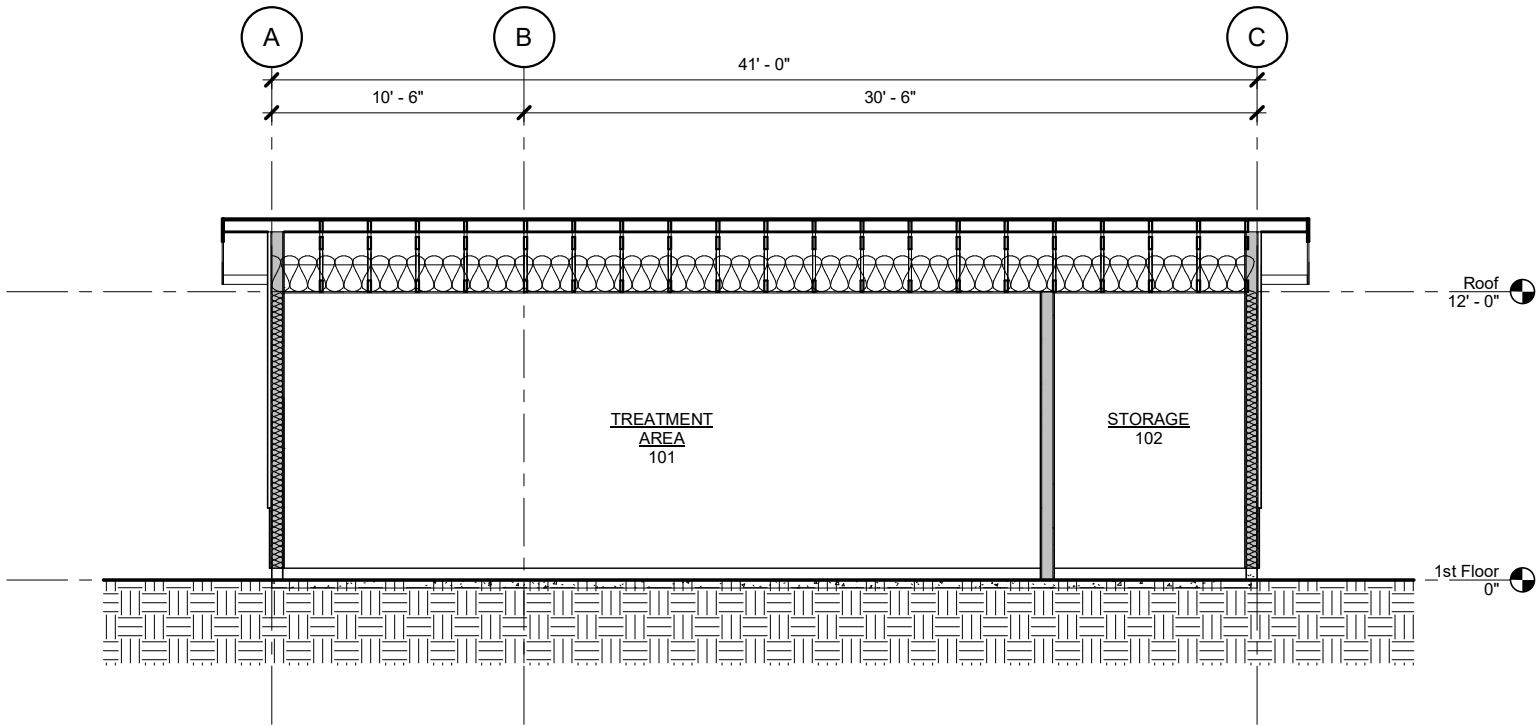
SCALE: 0 2' 4' 8'

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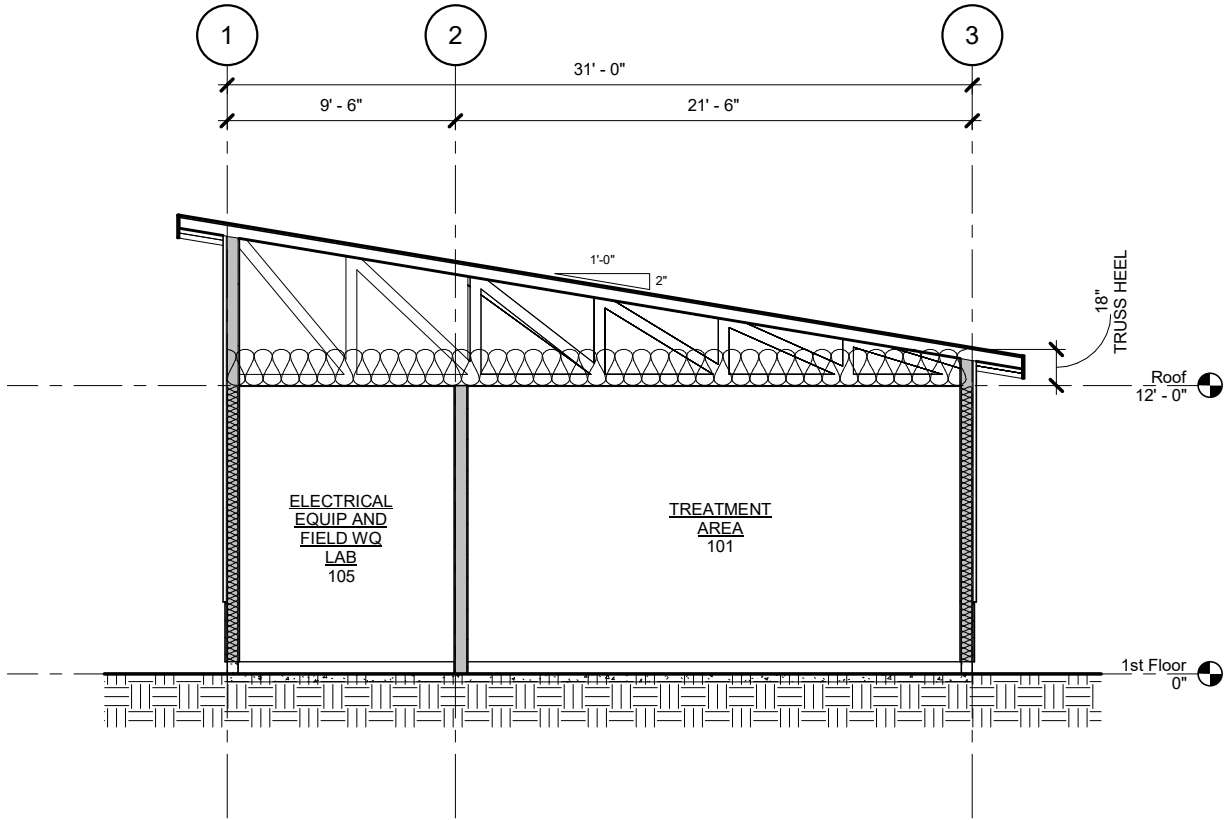
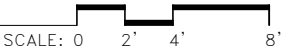
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FERRY TERMINAL**
**WATER TREATMENT BUILDING
EXTERIOR ELEVATIONS**

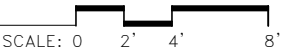
NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	5405	161



1 BUILDING SECTION



2 BUILDING SECTION



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FERRY TERMINAL

WATER TREATMENT BUILDING
BUILDING SECTIONS

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	6001	161

GENERAL NOTES

CODE:

CONSTRUCTION SHALL BE IN CONFORMANCE WITH THE INTERNATIONAL BUILDING CODE (IBC), 2021 EDITION, AS AMENDED BY CITY AND BOROUGH OF JUNEAU.

LOAD CRITERIA:

- RISK CATEGORY: II

SNOW:

GROUND SNOW LOAD, $P_g=60$ PSF

SNOW EXPOSURE FACTOR, $C_e=0.9$

THERMAL FACTOR, $C_t=1.00$

SNOW IMPORTANCE FACTOR, $I_s=1.00$
- WIND:

BASIC WIND SPEED (3 SECOND GUST), $V=128$ MPH

EXPOSURE CATEGORY =D

INTERNAL PRESSURE COEFFICIENT, $G_{Cpi}=\pm 0.18$ FOR ENCLOSED BUILDINGS

WIND DIRECTIONALITY FACTOR, $K_d=0.85$

TOPOGRAPHIC FACTOR, $K_{zt}=1.00$

GROUND ELEVATION FACTOR, $K_e=1.00$

GUST EFFECT FACTOR, $G=0.85$
- SEISMIC:

SITE CLASS =D

SEISMIC IMPORTANCE FACTOR,

$I_e=1.00$

$S_s=0.839g$

$S_1=0.452g$

$S_d=0.651g$

$S_d1=0.557g$

RESPONSE MODIFICATION FACTORS, $R=6.5$ FOR LIGHT-FRAME TIMBER WALLS

SHEATHED WITH SHEAR-RATED STRUCTURAL PANELS

$R=3.0$ FOR ORDINARY STEEL MOMENT FRAME

SEISMIC RESPONSE COEFFICIENT,

$C_s=0.10$ FOR TIMBER SHEARWALLS

$C_s=0.217$ FOR STEEL MOMENT FRAMES
- LIVE LOADS:

FLOOR LOAD =100 PSF

MEZZANINE LOAD =250 PSF

STAIR LOAD =100 PSF OR 300 LBF POINT LOAD

SHOP DRAWINGS:

THE CONTRACTOR SHALL REVIEW, STAMP WITH HIS APPROVAL, DATE AND SIGN ALL SHOP DRAWINGS REQUIRED BY THE CONTRACT DOCUMENTS PRIOR TO SUBMITTAL TO THE ENGINEER. AT THE TIME OF SUBMISSION, THE CONTRACTOR SHALL INFORM THE ENGINEER IN WRITING OF ANY DEVIATION IN THE SHOP DRAWINGS FROM THE REQUIREMENTS OF THE CONTRACT DRAWINGS.

MISCELLANEOUS:

REFER TO ARCHITECTURAL PLANS FOR WALL OPENINGS, ARCHITECTURAL TREATMENT AND DIMENSIONS NOT SHOWN, CONSULT MECHANICAL PLANS FOR SIZE AND LOCATION OF ALL OPENINGS FOR DUCTS, PIPING, ETC. NOT SHOWN. COORDINATE WITH ARCHITECTURAL FOR DETAILED INFORMATION. PROVIDE AND INSTALL BLOCKING BETWEEN STUDS AT MECHANICAL EQUIPMENT AND SEISMIC RESTRAINT PER MECHANICAL. PROVIDE BLOCKING FOR ARCHITECTURAL ELEMENTS.

SPECIAL INSPECTION:

SPECIAL INSPECTION SHALL BE PERFORMED PER IBC 2021 CHAPTER 17.

ABBREVIATIONS

AC	ALASKA CEDAR	EW	EACH WAY
AITC	AMERICAN INSTITUTE FOR TIMBER CONSTRUCTION	EQ	EQUIVALENT
		FF	
ARCH	ARCHITECT	FND	FOUNDATION
		GALV	HOT DIP GALVANIZED
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS	GLB	GLU LAM BEAM
AWPA	AMERICAN WOOD PRESERVER'S ASSOCIATION	MAX.	MAXIMUM
		MIN.	MINIMUM
BLDG	BUILDING	NO.	NUMBER
BLKG	BLOCKING	O.C.	ON CENTER
BM	BEAM	PL	PLATE
BN	BOUNDARY NAILING	P/T	PRESSURE TREATED
BW	BEARING WALL	PSI	POUNDS PER SQUARE INCH
BTWN	BETWEEN		
CL	CENTERLINE	REINF	REINFORCING
CLR	CLEAR	REQ'D	REQUIRED
CONC	CONCRETE	SCHED	SCHEDULE
CRSI	CONCRETE REINFORCING STEEL INSTITUTE	SIM	SIMILAR
		STD	STANDARD
CY	CUBIC YARD	STR	STRUCTURAL
DBL	DOUBLE	SW	SHEAR WALL
		TYP.	TYPICAL
EA	EACH	W/C	WATER/CEMENT
EMBED	EMBEDMENT	U.N.O.	UNLESS NOTED OTHERWISE
EN	EDGE NAILING		
EL	ELEVATION		

SPREAD FOOTING SCHEDULE		
MARK	SIZE	REINFORCEMENT
F1	3'-0" x 3'-0" x 12" THICK	(3) #5 EW BOTTOM AND TOP
F2	4'-0" x 4'-0" x 12" THICK	(5) #5 EW BOTTOM AND TOP

PLANS DEVELOPED BY:
PND ENGINEERS, INC.
9360 GLACIER HWY, STE.100
JUNEAU, AK 99801
907-586-2093
CAN: AECC250



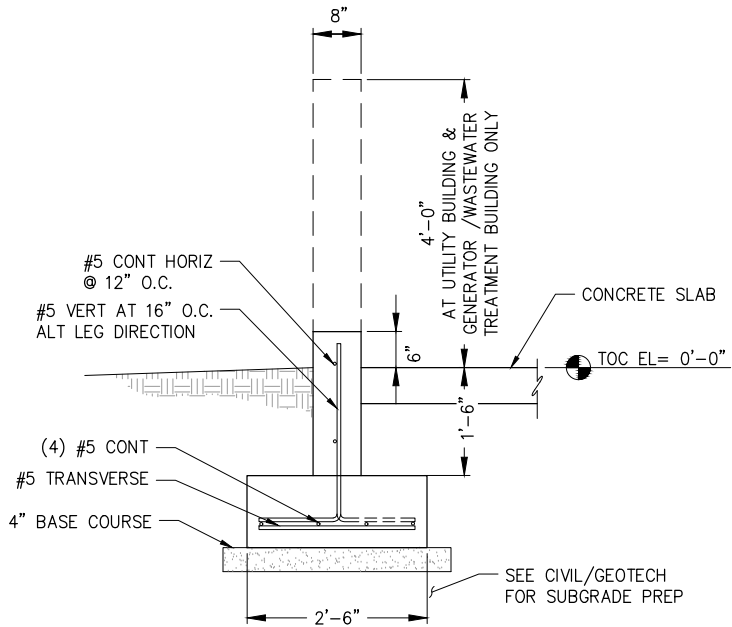
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JNU CASCADE POINT
FERRY TERMINAL

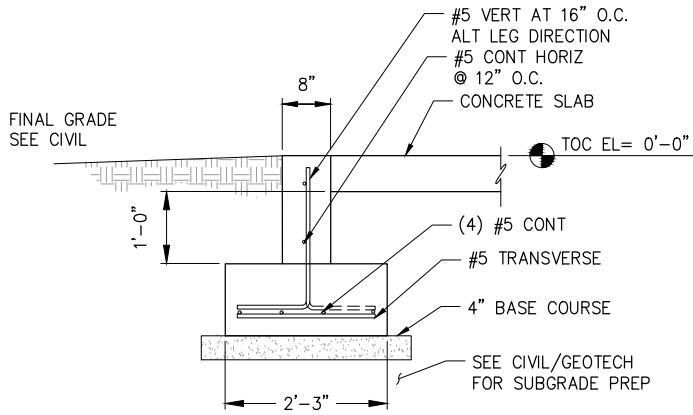
STRUCTURAL GENERAL NOTES

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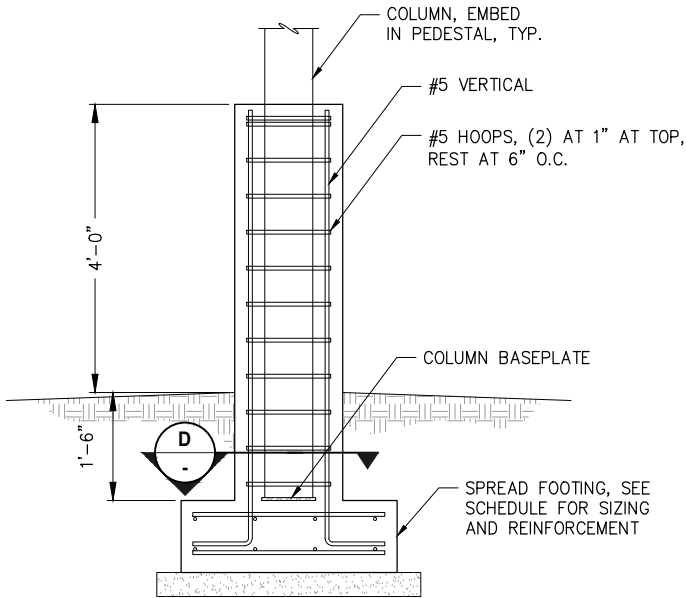
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			ALASKA	HSHWY00015	2025	6002	161



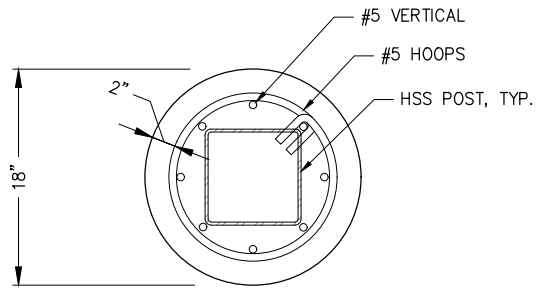
A TYPICAL FOUNDATION WALL AND STRIP FOOTING



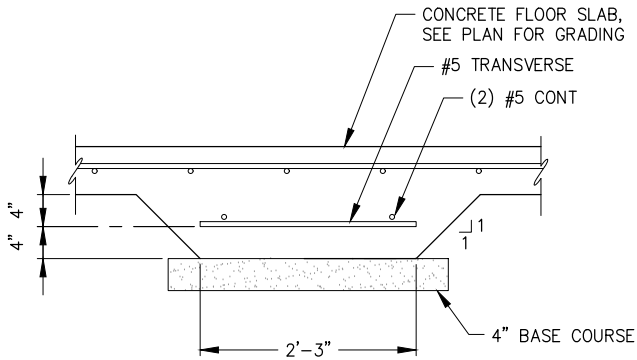
B TYPICAL FOUNDATION WALL AT ENTRANCES



C TYPICAL SPREAD FOOTING



D TYPICAL PEDESTAL WALL



E THICKENED SLAB DETAIL

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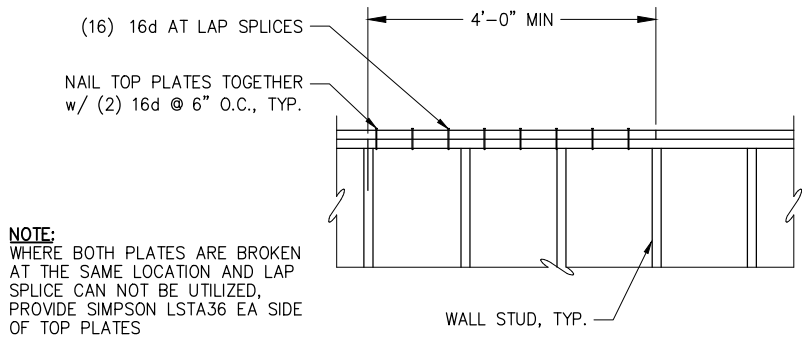
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**JNU CASCADE POINT
FERRY TERMINAL**

**STANDARD FOUNDATION
DETAILS**

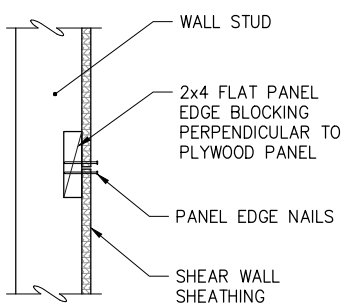
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NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	SHWY00015	2025	6003	161

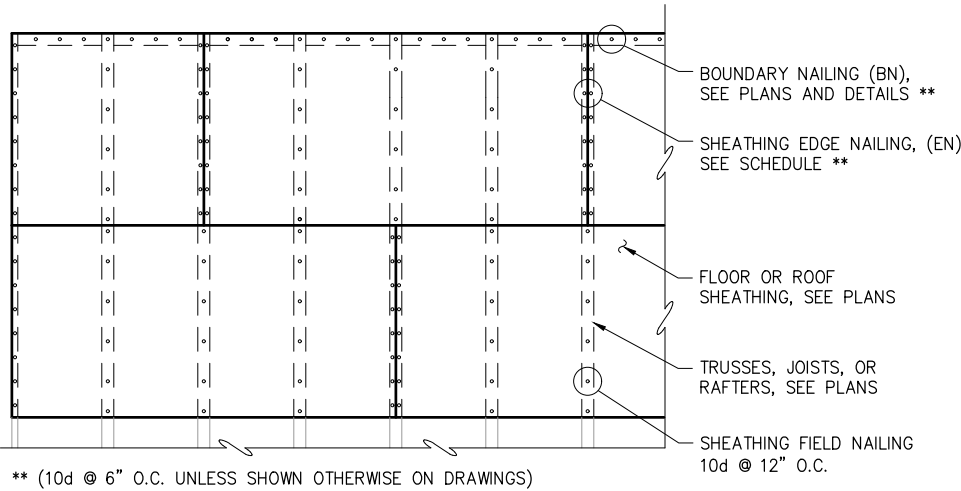


NOTE:
WHERE BOTH PLATES ARE BROKEN
AT THE SAME LOCATION AND LAP
SPICE CAN NOT BE UTILIZED,
PROVIDE SIMPSON LSTA36 EA SIDE
OF TOP PLATES

A
-
TYPICAL BEARING/SHEAR WALL
TOP PLATE SPICE DETAIL

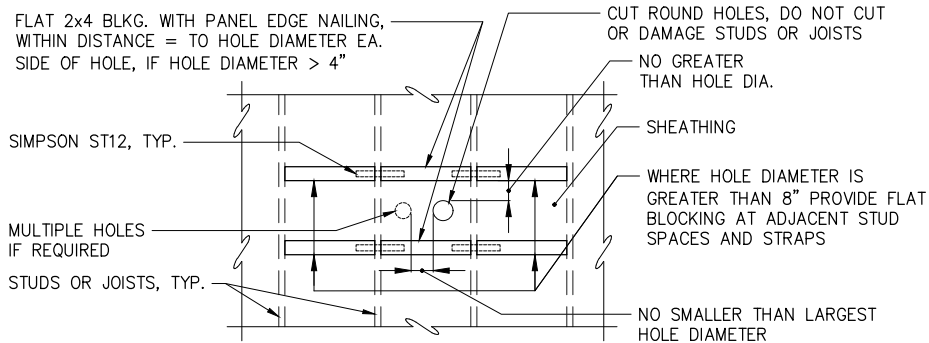


B
-
TYPICAL SHEAR WALL
PANEL EDGE BLOCKING DETAIL

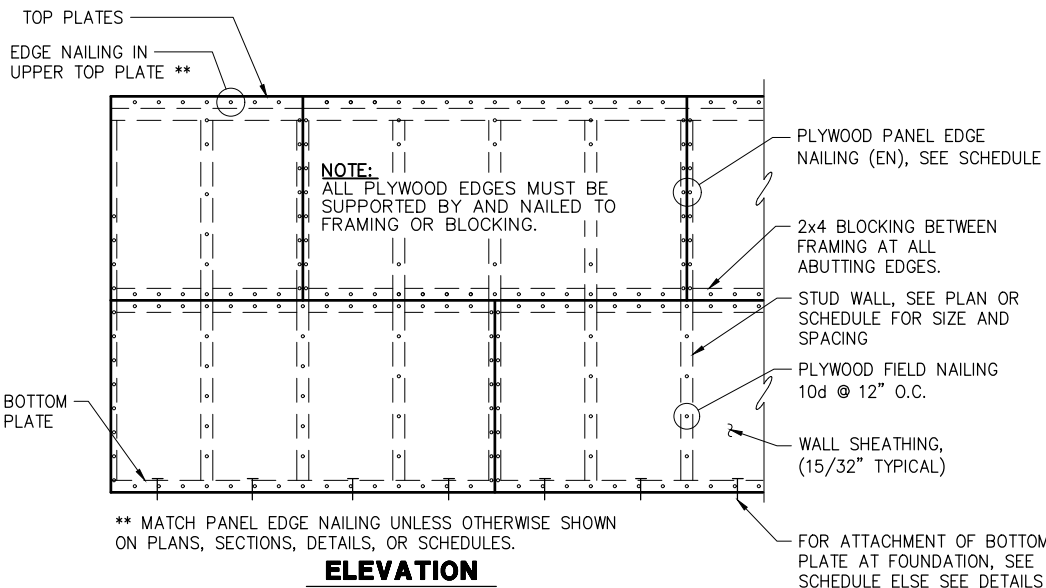


NOTES:
1. STAGGER SHEATHING JOINTS A MINIMUM OF TWO JOIST SPACES
2. NAILS AT ABUTTING SHEATHING EDGES MUST PENETRATE THE SAME PIECE
OF FRAMING OR BLOCKING.

D
-
TYPICAL PLYWOOD DIAPHRAGM
FOR FLOOR OR ROOF DETAIL

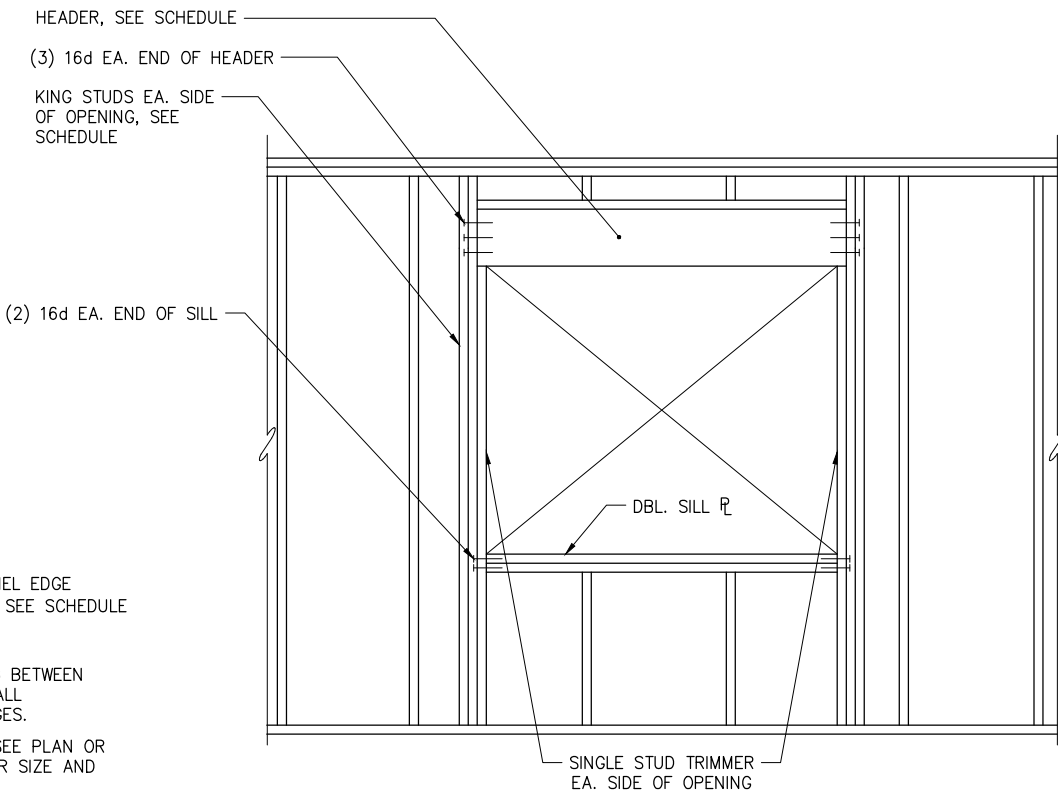


F
-
TYPICAL SHEAR WALL AND
DIAPHRAGM PENETRATION DETAIL



NOTES:
1. PLYWOOD IS SHOWN HORIZONTAL, IT MAY ALSO BE POSITIONED VERTICAL.
2. STAGGER PLYWOOD JOINTS A MINIMUM OF TWO STUD SPACES.
3. NAILS AT ABUTTING PLYWOOD EDGES MUST PENETRATE THE SAME PIECE OF FRAMING OR BLOCKING.
4. SEE PLANS FOR HOLD DOWNS, STRAPS AND ADDITIONAL BLOCKING.

E
-
TYPICAL SHEAR WALL DETAIL



C
-
TYPICAL BEARING/SHEAR
WALL HEADER DETAIL

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JNU CASCADE POINT
FERRY TERMINAL

STANDARD FRAMING DETAILS

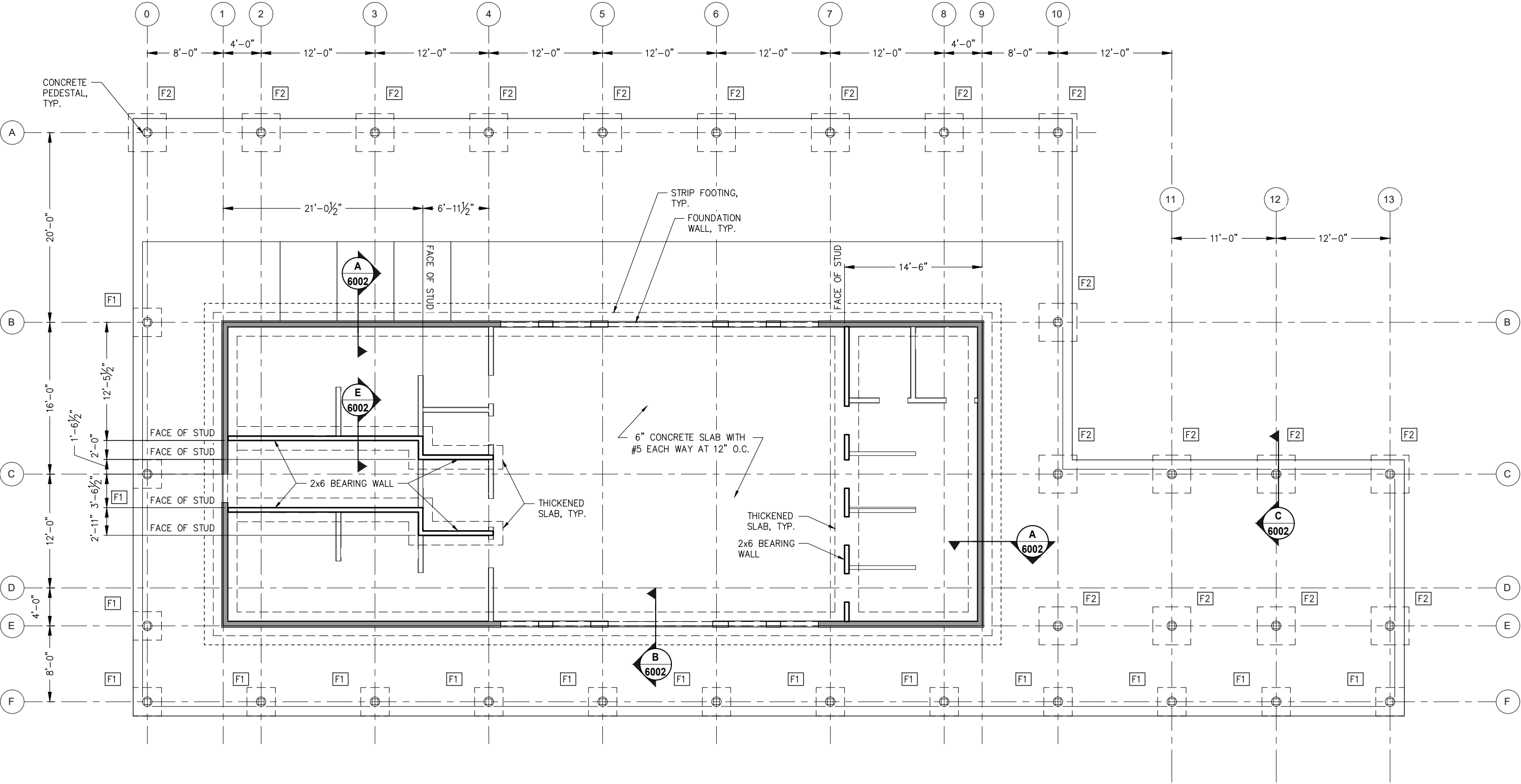
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DRAFTED

CHECKED

DESIGNED

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	6100	161



NOTE:
— INDICATES SHEARWALL LOCATION

1 TICKETING BUILDING FOUNDATION PLAN
AND FIRST FLOOR PLAN

PLANS DEVELOPED BY:
PND ENGINEERS, INC.
9360 GLACIER HWY, STE.100
JUNEAU, AK 99801
907-586-2093
CAN: AECC250

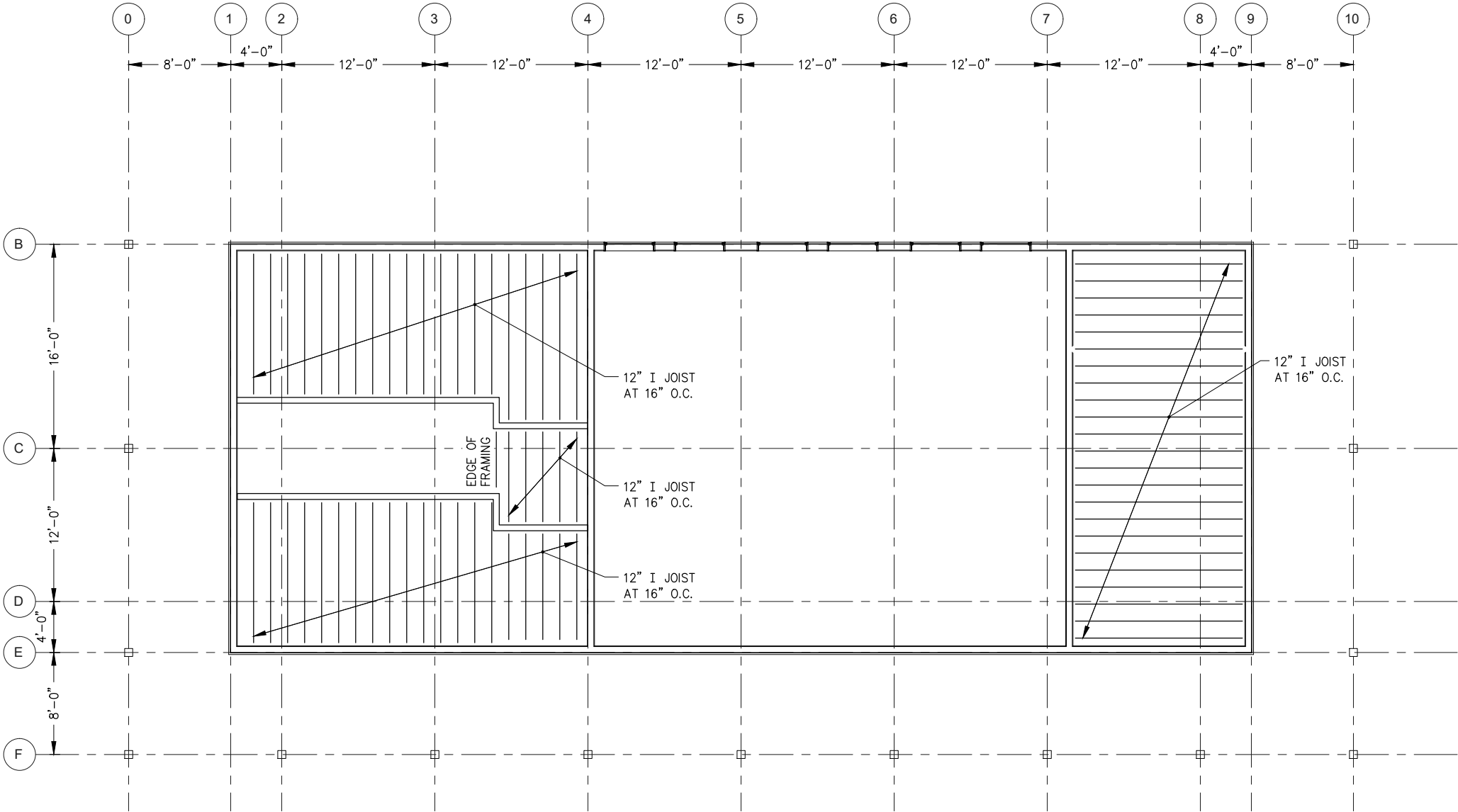
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JNU CASCADE POINT
FERRY TERMINAL
TICKETING BUILDING
FOUNDATION PLAN &
FIRST FLOOR PLAN

FILE N:\23xxx\232045 Cascade Point Ferry Terminal\G. Drawings\Structural\6101 Ticketing Building Mezzanine.dwg DATE 7/14/2025 13:31 LAYOUT 6101 DESIGNED CHECKED DRAFTED

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	6101	161



1 TICKING BUILDING MEZZANINE FRAMING PLAN

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907-586-2093
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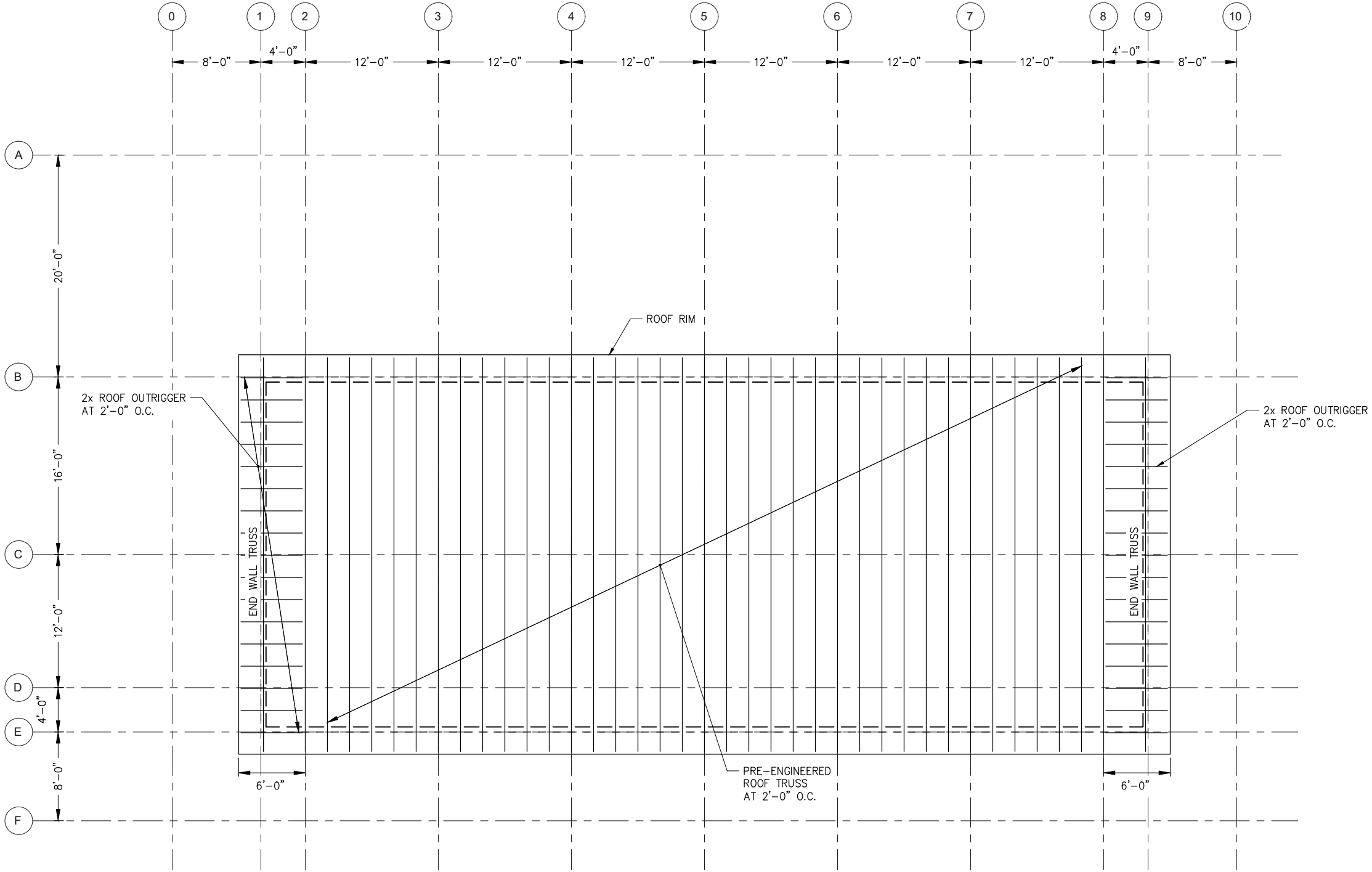
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TICKETING BUILDING
MEZZANINE FRAMING PLAN

FILE N:\23xxx\232045 Cascade Point Ferry Terminal\G. Drawings\Structural\6103 Ticketing Building Roof Framing Plan.dwg 7/14/2025 13:36 LAYOUT 6103 DESIGNED CHECKED DRAFTED

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	6103	161



1 TICKETING BUILDING ROOF FRAMING PLAN

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JUNEAU, AK 99801
907-586-2093
CAN: AECC250

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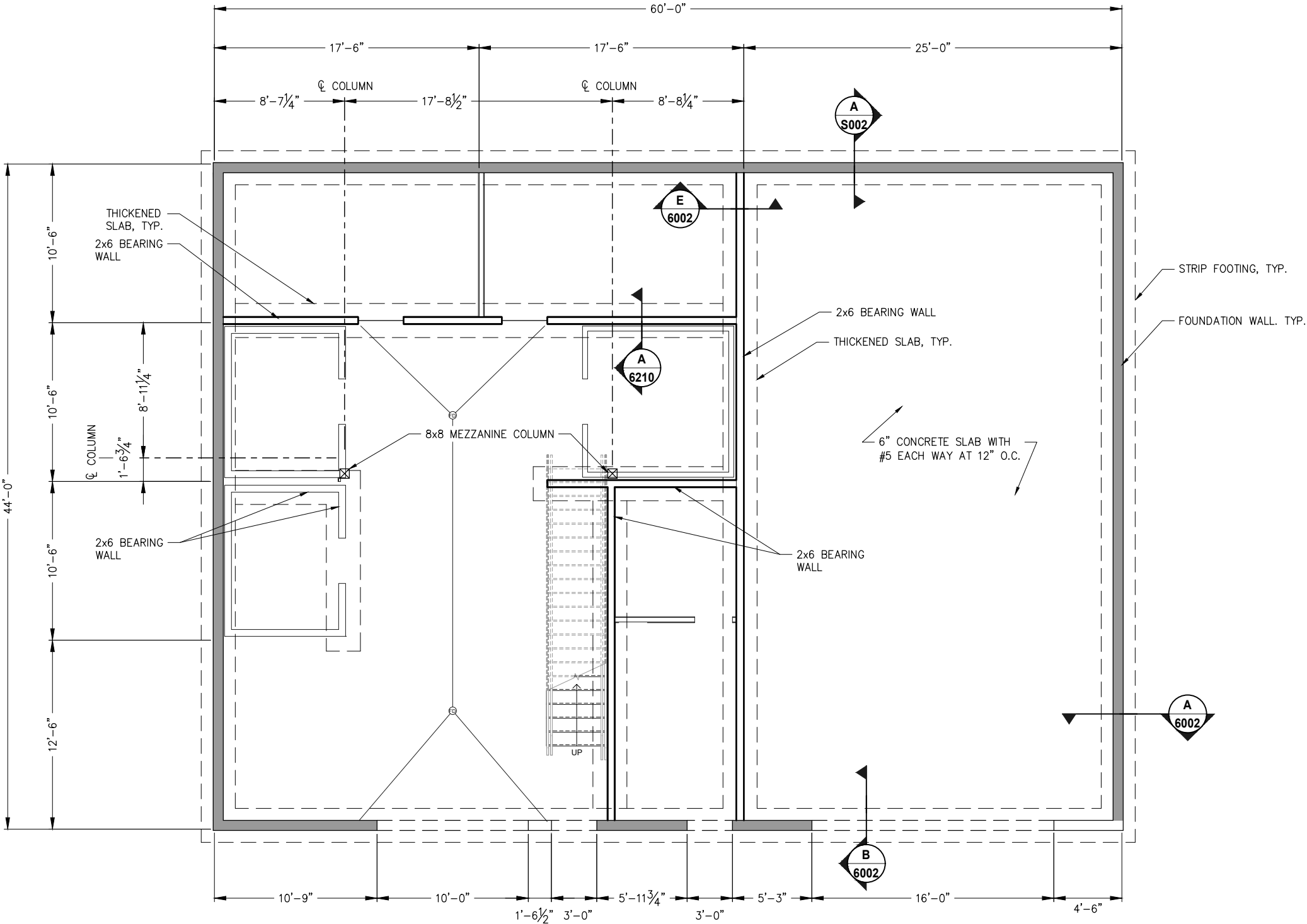
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TICKETING BUILDING
ROOF FRAMING PLAN

FILE N:\23xxx\232045 Cascade Point Ferry Terminal\G. Drawings\Structural\6200 Utility Building Foundation Plan.dwgDATE 7/14/2025 13:37 LAYOUT 6200 DESIGNED CHECKED DRAFTED

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	6200	161



NOTE:
— INDICATES SHEARWALL LOCATION

1 - UTILITY BUILDING FOUNDATION PLAN
AND FIRST FLOOR FRAMING PLAN

PLANS DEVELOPED BY:
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9360 GLACIER HWY, STE.100
JUNEAU, AK 99801
907-586-2093
CAN: AECC250

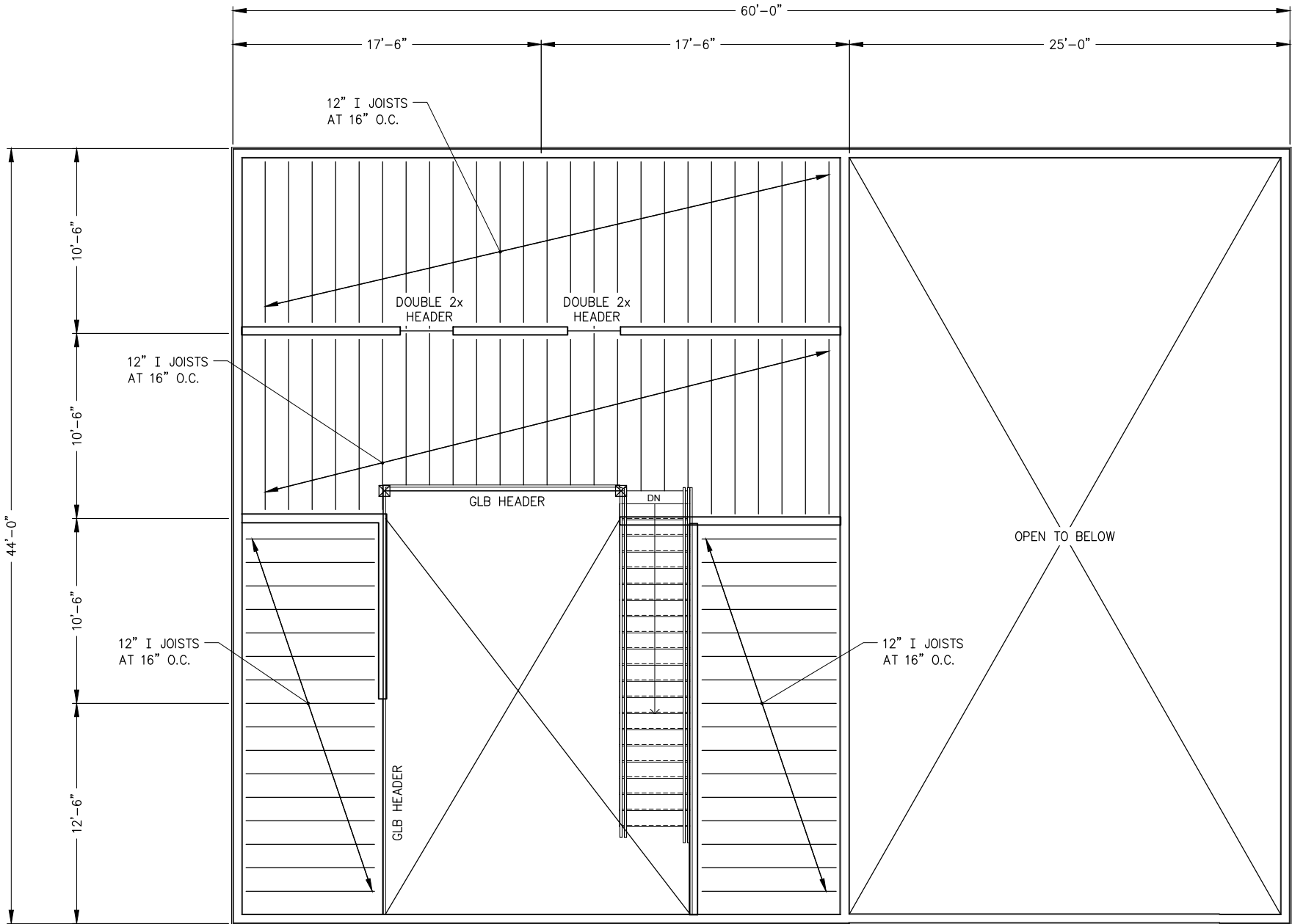
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JNU CASCADE POINT
FERRY TERMINAL
UTILITY BUILDING
FOUNDATION PLAN &
FIRST FLOOR FRAMING PLAN

FILE | N:\23xxx\232045 Cascade Point Ferry Terminal\G. Drawings\Structural\6201 Utility Building Mezzanine.dwg | DATE | 7/14/2025 13:37 | LAYOUT | 6201 | DESIGNED | | CHECKED | | DRAFTED |

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	6201	161



1 UTILITY BUILDING MEZZANINE FRAMING PLAN

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907-586-2093
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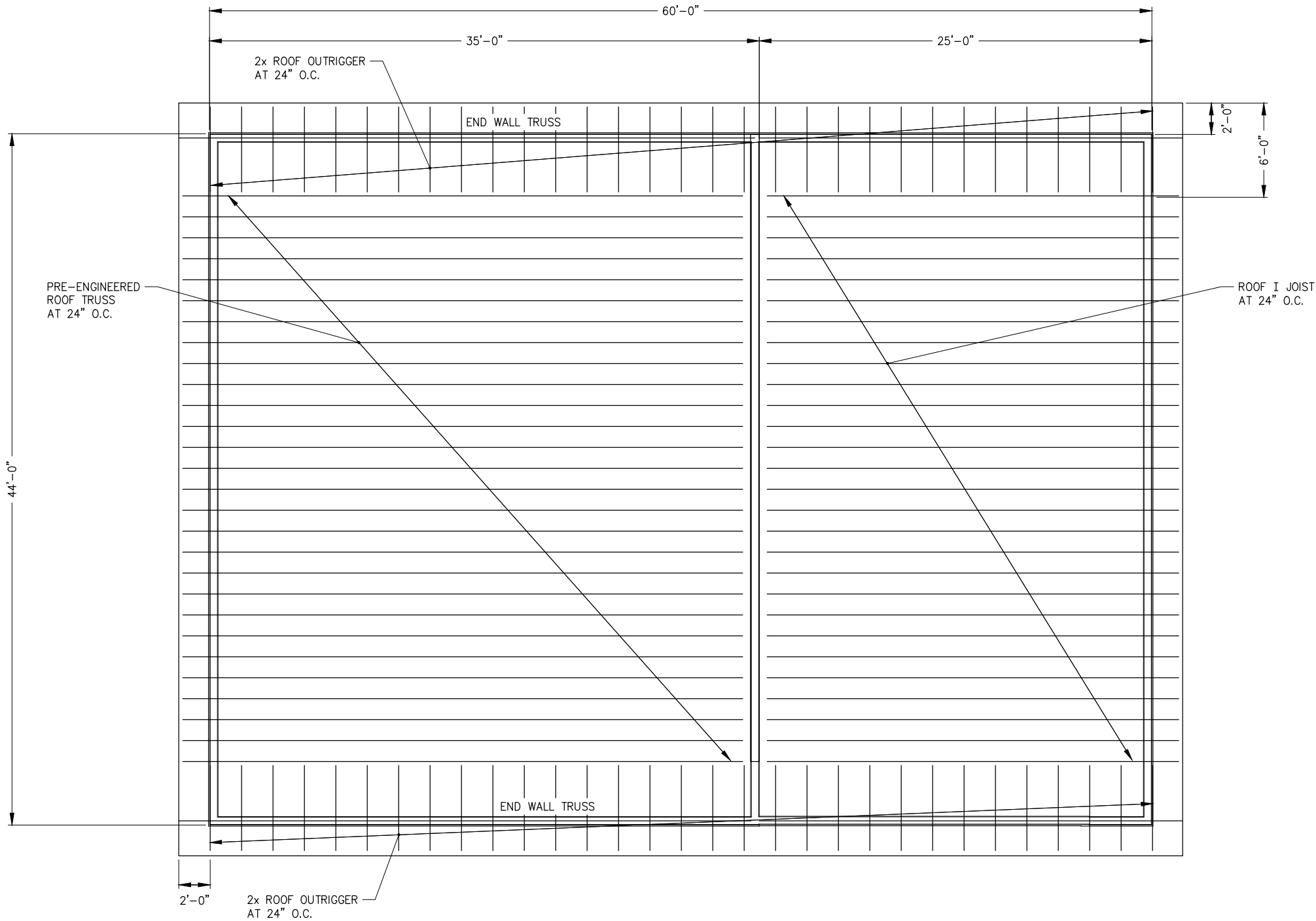
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**UTILITY BUILDING
MEZZANINE FRAMING PLAN**

FILE N:\23xxx\232045 Cascade Point Ferry Terminal\G. Drawings\Structural\6202 Utility Building Roof Framing Plan.dwg 7/14/2025 13:38 LAYOUT 6202 DESIGNED CHECKED DRAFTED

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	6202	161



1 - UTILITY BUILDING ROOF FRAMING PLAN

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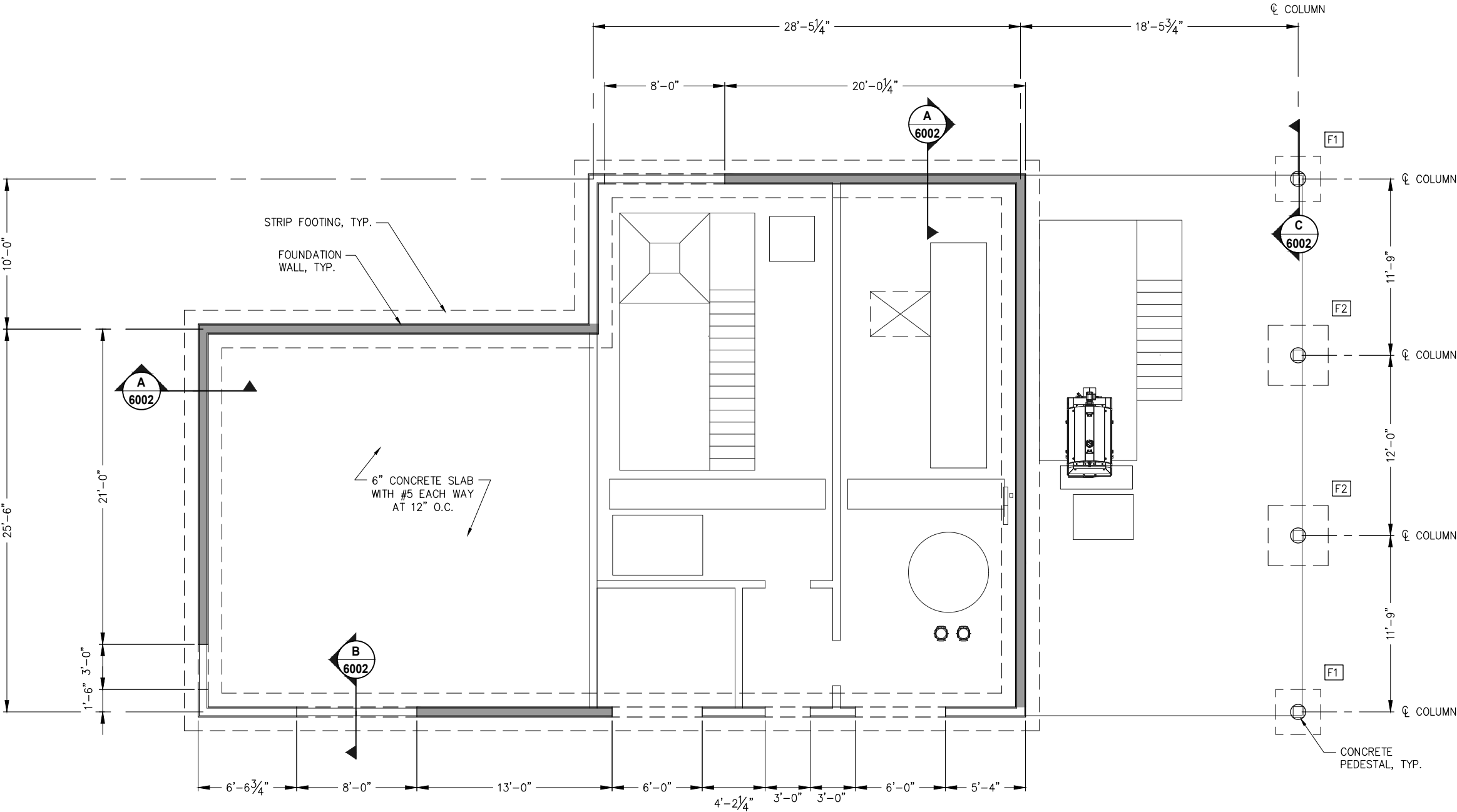
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**UTILITY BUILDING
ROOF FRAMING PLAN**

FILE N:\23xxx\232045 Cascade Point Ferry Terminal\G. Drawings\Structural\G.300 Generator Building Foundation Plan.dwg 7/14/2025 13:39 LAYOUT 6300 DESIGNED CHECKED DRAFTED

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
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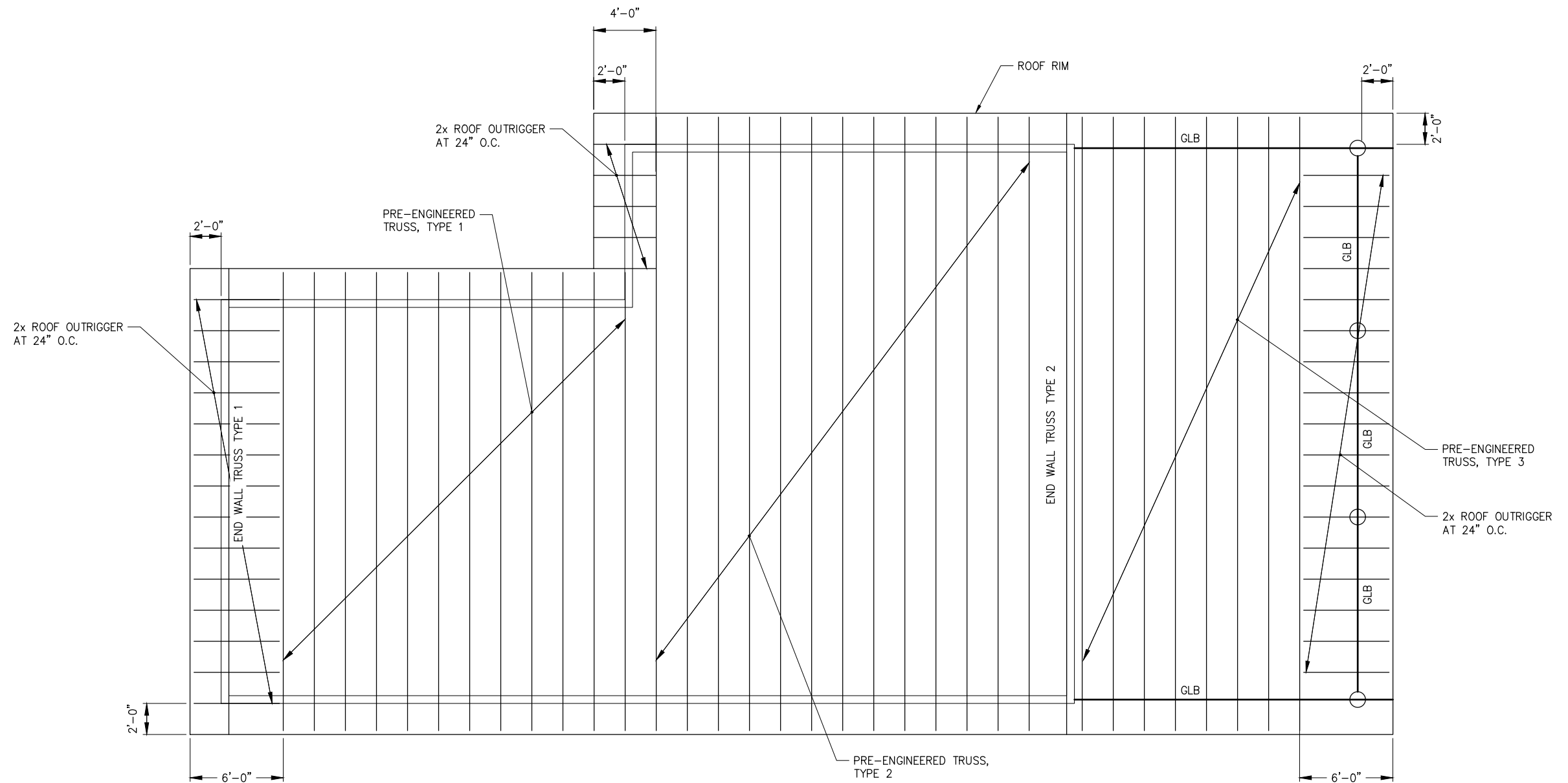


NOTE:
— INDICATES SHEARWALL LOCATION

1
- **GENERATOR AND WASTEWATER TREATMENT BUILDING
FOUNDATION PLAN AND FIRST FLOOR FRAMING PLAN**

PLANS DEVELOPED BY: PND ENGINEERS, INC. 9360 GLACIER HWY, STE.100 JUNEAU, AK 99801 907-586-2093 CAN: AECC250	35% REVIEW 7/15/25	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES 6860 GLACIER HIGHWAY, JUNEAU, AK 99801 (907) 465-1763 JNU CASCADE POINT FERRY TERMINAL GENERATOR BUILDING FOUNDATION PLAN & FIRST FLOOR FRAMING PLAN
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NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	6301	161



1 GENERATOR AND WASTEWATER TREATMENT BUILDING
- ROOF FRAMING PLAN

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907-586-2093
CAN: AECC250

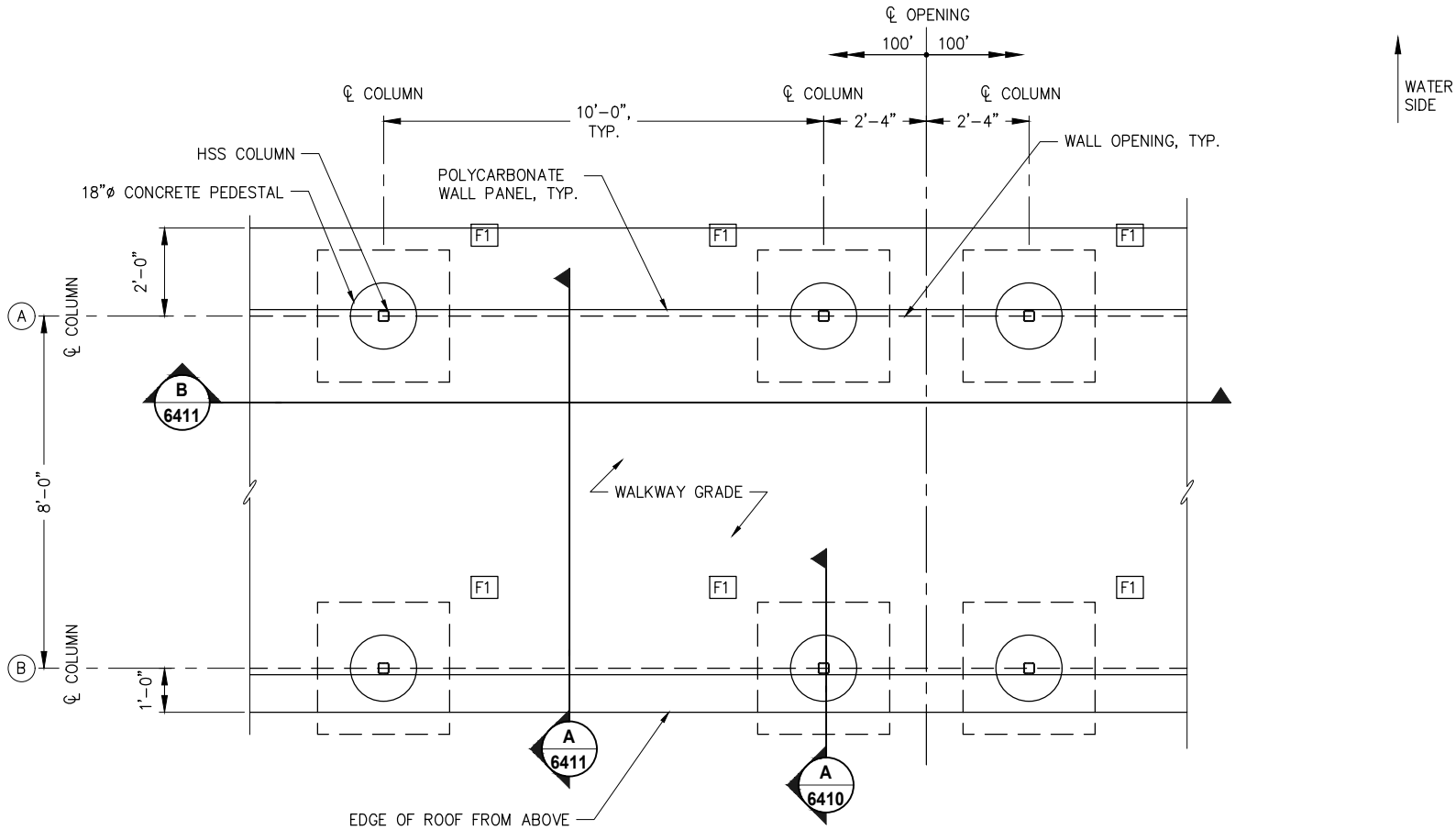
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GENERATOR BUILDING ROOF FRAMING PLAN

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	6400	161



1
-
TYPICAL PARTIAL COVERED WALKWAY FOUNDATION PLAN
AT WALKWAY OPENING

PLANS DEVELOPED BY:
PND ENGINEERS, INC.
9360 GLACIER HWY, STE.100
JUNEAU, AK 99801
907-586-2093
CAN: AECC250

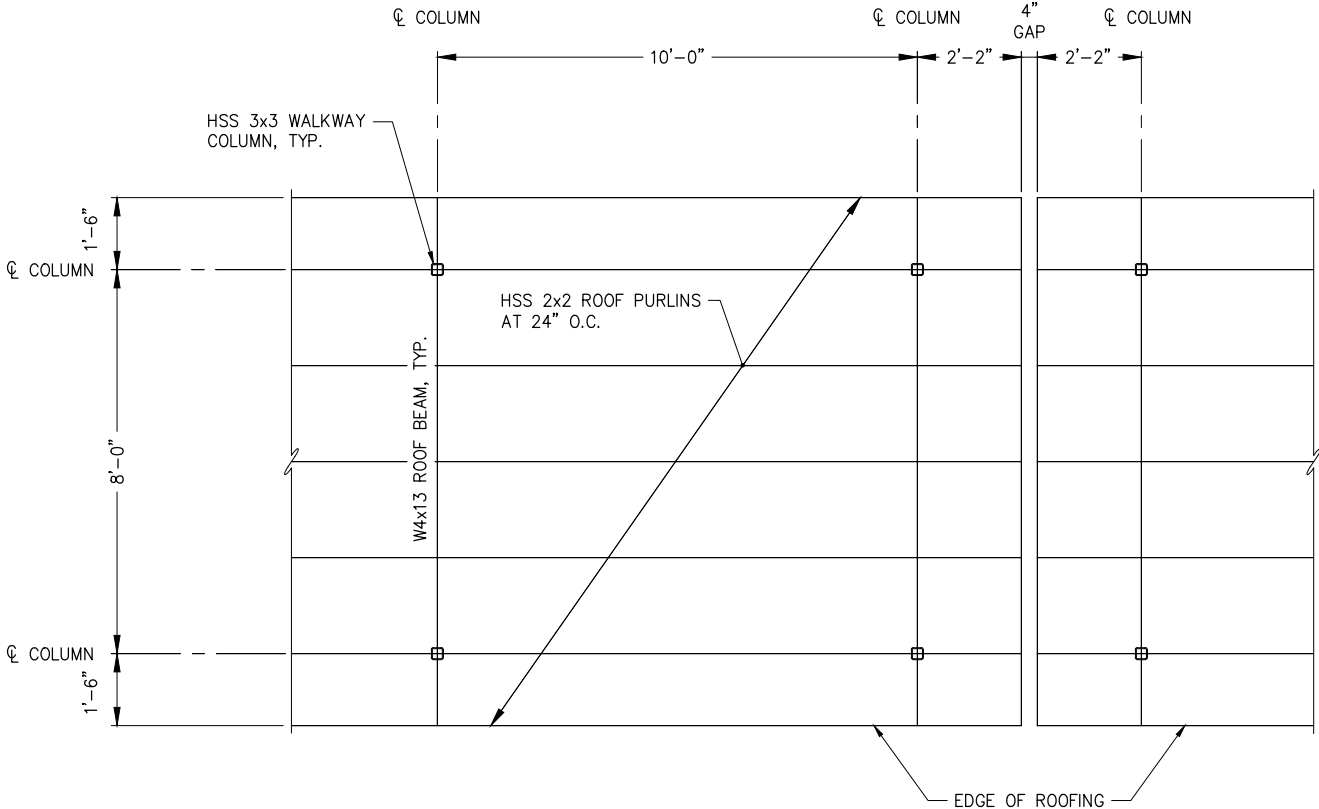
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**COVERED WALKWAY
FOUNDATION PLAN**

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	6401	161



1 COVERED WALKWAY FRAMING PLAN

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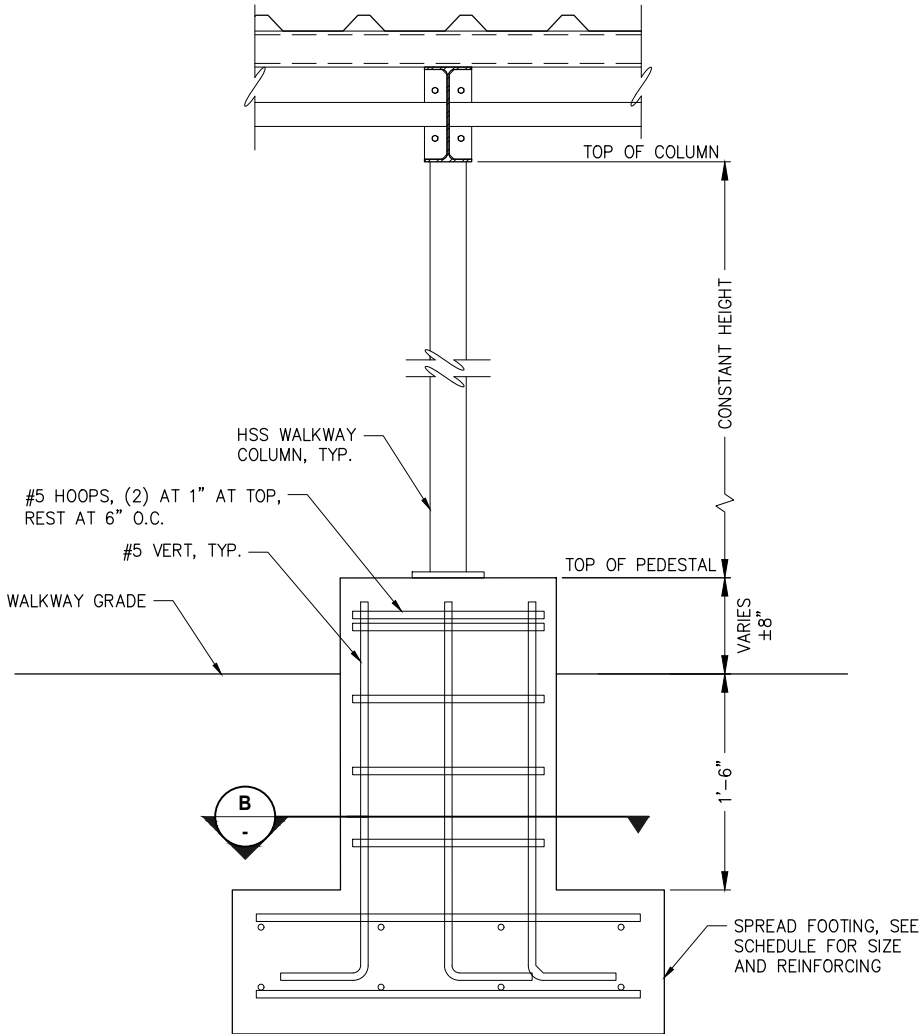
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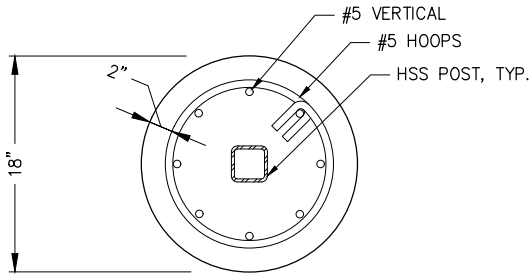
COVERED WALKWAY
FRAMING PLAN

FILE N:\23xxx\232045 Cascade Point Ferry Terminal\G. Drawings\Structural\6410 Walkway Foundation Details.dwg DATE 7/14/2025 13:54 LAYOUT 6410 DESIGNED CHECKED DRAFTED

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	6410	161



A COVERED WALKWAY SPREAD FOOTING, TYPICAL



B COVERED WALKWAY PEDESTAL PLAN, TYPICAL

PLANS DEVELOPED BY:
PND ENGINEERS, INC.
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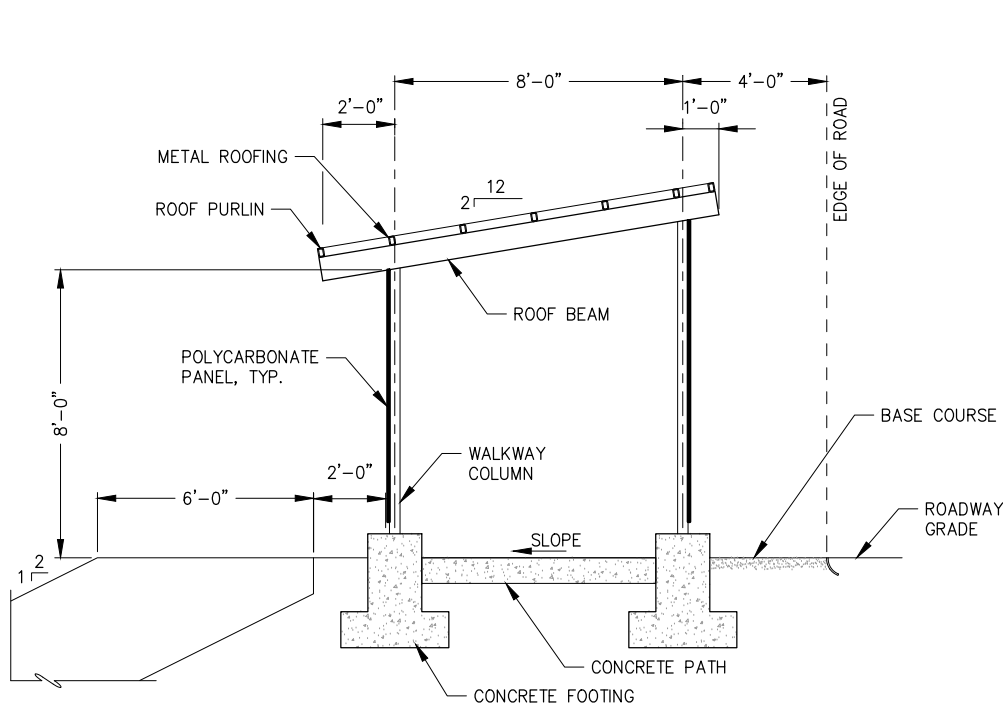
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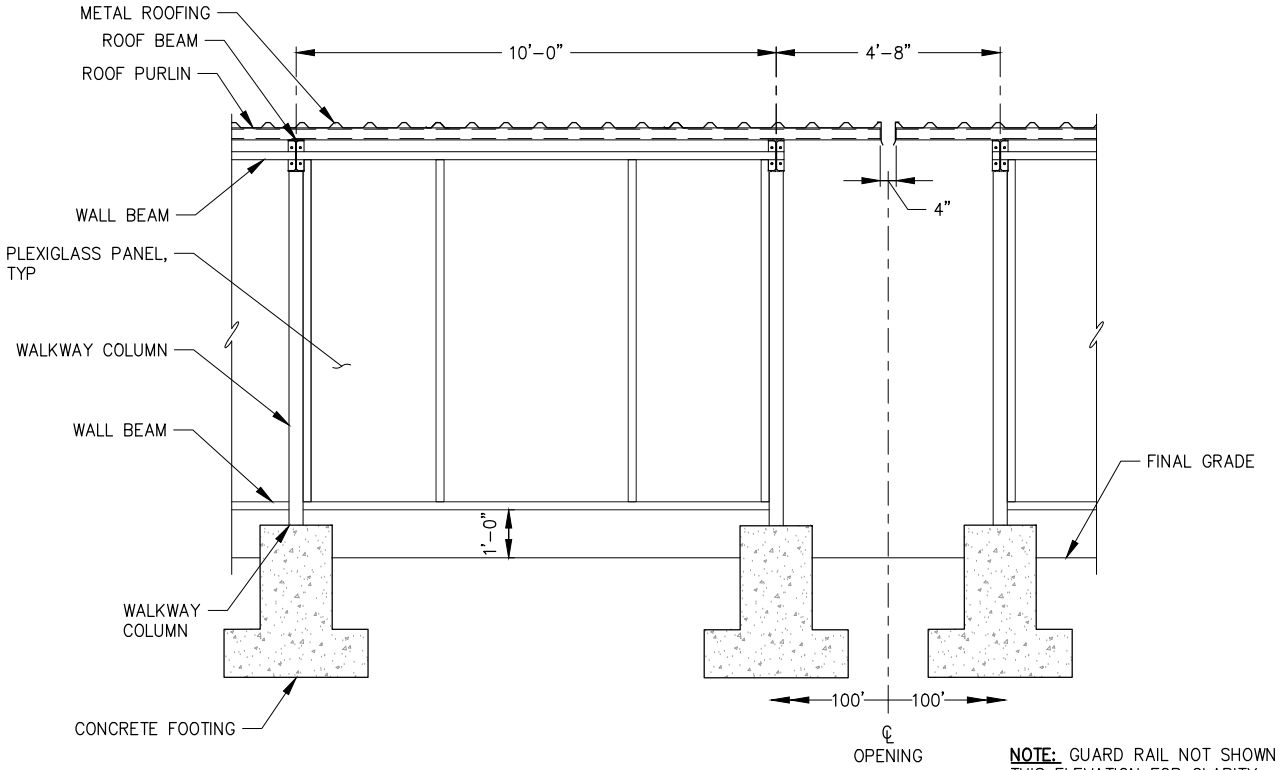
**COVERED WALKWAY
FOUNDATION DETAILS**

FILE N:\23xxx\232045 Cascade Point Ferry Terminal\G. Drawings\Structural\6411 Walkway Framing Sections.dwg DATE 7/14/2025 14:08 LAYOUT 6411 DESIGNED CHECKED DRAFTED

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	6411	161



A WALKWAY SECTION
SCALE IN FEET
0 2 4ft.



B WALKWAY ELEVATION
SCALE IN FEET
0 2' 4'

PLANS DEVELOPED BY:
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FERRY TERMINAL**

**COVERED WALKWAY
FRAMING SECTIONS**

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	7001	161

GENERAL SCHEDULE	
<div><div>SHEET WHERE DRAWING IS REFERENCED</div><div><div>A1</div><div>E-101</div><div>E-111</div></div><div>DRAWING IDENTIFICATION SHEET ON WHICH DRAWING IS SHOWN</div></div>	VIEW TITLE SYMBOL
<div><div>A1</div><div>E-101</div></div> <div>DRAWING IDENTIFICATION SHEET ON WHICH DRAWING IS SHOWN</div>	CALLOUT SYMBOL
<div><div>A1</div><div>E-401</div></div> <div>DRAWING IDENTIFICATION SHEET ON WHICH DRAWING IS SHOWN</div>	SECTION SYMBOL
<div><div>A1/E-101</div></div> <div>DRAWING IDENTIFICATION SHEET ON WHICH CONTINUATION OF VIEW IS SHOWN</div>	MATCHLINE VIEW REFERENCE
<div><div>ROOM NAME</div><div>101</div></div>	ROOM NAME AND NUMBER DESIGNATION
<div><div>#</div></div>	SHEET KEYNOTE
<div><div>1.</div></div>	SHEET NOTE
<div><div></div></div>	NORTH ARROW

ABBREVIATIONS

#	NUMBER
(D)	DEMOLISH
(E)	EXISTING
(N)	NEW
(RN)	REPLACE EXISTING WITH NEW
(S)	SALVAGE
+C	ABOVE COUNTER
+XX	DIMENSIONED HEIGHT XX INCHES AFF
A	AMPERES
AC	ALTERNATING CURRENT
ADA	AMERICANS WITH DISABILITY ACT
AF	AMP FRAME
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISH GRADE
AIC	AMPS INTERRUPTING CAPACITY
AL	ALUMINUM
AMP	AMPERES
APPX	APPROXIMATE
ARCH	ARCHITECTURAL
ASC	ABOVE SUSPENDED CEILING
AT	AMP TRIP
ATS	AUTOMATIC TRANSFER SWITCH
AUX	AUXILIARY
BCU	BARE COPPER WIRE
BFG	BELOW FINISHED GRADE
BLDG	BUILDING
BPB	BRANCH-CIRCUIT PANELBOARD, CB BRANCHES
BPF	BRANCH-CIRCUIT PANELBOARD, FUSED BRANCHES
BSMT	BASEMENT
C	CONDUIT
C/L	CENTERLINE
CAM	CAMERA
CAT	CATEGORY
CATV	CABLE TELEVISION
CB	CIRCUIT BREAKER
CCTV	CLOSED CIRCUIT TELEVISION
CFOI	CONTRACTOR FURNISH OWNER INSTALL
CIRC	CIRCULATING
CKT	CIRCUIT
CL	CLASS
CLG	CEILING
CNDR	CONDUCTOR
CO	CARBON MONOXIDE
COAX	COAXIAL CABLE
COL	COLUMN
CR	CRITICAL BRANCH (HEALTHCARE FACILITY)
CT	CURRENT TRANSFORMER
CTRL	CONTROL
CU	COPPER
DC	DIRECT CURRENT
DEGC	DEGREES CELSIUS
DEGF	DEGREES FAHRENHEIT
DG	DIESEL GENERATOR
DIA	DIAMETER
DIM	DIMENSION
DISC	DISCONNECT
DIST	DISTRIBUTION
DIV	DIVISION
DP	DISTRIBUTION PANELBOARD
DPB	DISTRIBUTION PANELBOARD, CB BRANCHES
DPDT	DOUBLE POLE DOUBLE THROW
DPF	DISTRIBUTION PANELBOARD, FUSED BRANCHES
DR	AUTOMATIC DOOR OPERATOR
DWG	DRAWING
E	EAST
EBJ	EQUIPMENT BONDING JUMPER
ECN	EXTRA CAPACITY NEUT (200%)
EGB	EQUIPMENT GROUND BUS
EGC	EQUIPMENT GROUNDING CONDUCTOR
EL	SWITCHED EMERGENCY LIGHT
EM	EMERGENCY

ABBREVIATIONS

EMT	ELECTRICAL METALLIC TUBING
ENT	ELECTRICAL NONMETALLIC TUBING
EOL	END OF LINE
EQ	EQUIPMENT BRANCH (HEALTHCARE FACILITY)
ER	EMERGENCY RELAY (EM LIGHTING POWER TRANSFER)
EST	ESTIMATED
FA	FIRE ALARM
FACU	FIRE ALARM CONTROL UNIT
FAIC	FIRE ALARM INTERFACE CABINET
FARA	FIRE ALARM REMOTE ANNUNCIATOR
FDN	FOUNDATION
FG	FINISH GRADE
FLA	FULL LOAD AMPS
FMC	FLEXIBLE METAL CONDUIT
FO	FIBER OPTIC
FR	FULLY RATED
FRC	FIBERGLASS RIGID CONDUIT
FTL	FEED-THRU LUGS
FU	FUSE
GALV	GALVANIZED
GC	GENERAL CONTRACTOR
GEC	GROUNDING ELECTRODE CONDUCTOR
GFCI	GROUND-FAULT CIRCUIT INTERRUPTER (5mA)
GFPE	GROUND-FAULT PROTECTION OF EQUIPMENT (30mA)
GND	GROUND OR GROUNDED
GRC	GALVANIZED RIGID STEEL CONDUIT (HOT-DIPPED)
HBH	HEADBOLT HEATER
HDPE	HIGH-DENSITY POLYETHYLENE
HH	HANDHOLE
HID	HIGH INTENSITY DISCHARGE (LAMP)
HPS	HIGH PRESSURE SODIUM
HT	HEAT TRACE
HV	HIGH VOLTAGE
IBC	INTERNATIONAL BUILDING CODE
IBT	INTERSYSTEM BONDING TERMINATION
ID	INSIDE DIAMETER
IDC	INITIATING DEVICE CIRCUIT
IES	ILLUMINATING ENGINEERING SOCIETY
IFC	INTERNATIONAL FIRE CODE
IG	ISOLATED GROUND
IGB	ISOLATED GROUND BUS
IGC	ISOLATED GROUND CONDUCTOR
IMC	INTERMEDIATE METALLIC CONDUIT
INCND	INCANDESCENT
JB	JUNCTION BOX
JCN	JACKETED CONCENTRIC NEUTRAL (CABLE)
KO	KNOCKOUT
KVA	KILOVOLT AMPERES
L	LINE
LC	LIGHTING CONTACTOR
LED	LIGHT EMITTING DIODE
LFMC	LIQUIDTIGHT FLEXIBLE METAL CONDUIT
LFNC	LIQUIDTIGHT FLEXIBLE NONMETALLIC CONDUIT
LS	LIFE-SAFETY BRANCH (HEALTHCARE FACILITY)
LSW	LIMIT SWITCH
LTG	LIGHTING
LV	LOW VOLTAGE
MAN	MANUAL
MAX	MAXIMUM
MC	METAL-CLAD
MCB	MAIN CIRCUIT BREAKER
MCC	MOTOR CONTROL CENTER
MCP	MOTOR CIRCUIT PROTECTOR
MDH	MAGNETIC DOOR HOLDERS
MECH	MECHANICAL
MED	MEDIUM

ABBREVIATIONS

MEZ	MEZZANINE
MH	MANHOLE
MHD	METAL HALIDE
MIN	MINIMUM
MISC	MISCELLANEOUS
MLO	MAIN LUGS ONLY
MRCT	MULTI-RATIO CURRENT TRANSFORMER
MTD	MOUNTED
MTS	MANUAL TRANSFER SWITCH
MV	MEDIUM-VOLTAGE
N	NEUTRAL, NORTH
NAC	NOTIFICATION APPLIANCE CIRCUIT (FIRE ALARM)
NC	NORMALLY CLOSED
NEC	NATIONAL ELECTRICAL CODE; NFPA 70
NECA	NATIONAL ELECTRICAL CONTRACTORS ASSOCIATION
NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
NESC	NATIONAL ELECTRICAL SAFETY CODE
NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
NIC	NOT IN CONTRACT
NL	NIGHT LIGHT
NO	NORMALLY OPEN
OC	ON CENTER
OD	OUTSIDE DIAMETER
OFCI	OWNER FURNISHED CONTRACTOR INSTALL
OFOI	OWNER FURNISHED OWNER INSTALL
P	POLE
PA	PUBLIC ADDRESS
PC	PHOTOELECTRIC CONTROL/SWITCH
PF	POWER FACTOR
PH	PHASE
PNL	PANEL(BOARD)
PR	PAIR
PRI	PRIMARY
PS	PRESSURE SWITCH
PT	POTENTIAL TRANSFORMER
PVC	POLYVINYL CHLORIDE CONDUIT
RCPT	RECEPTACLE
RDHT	ROOF DRAIN HEAT TRACE
REQD	REQUIRED
REV	REVISION, REVERSE
RLHT	RAIN LEADER HEAT TACE
RM	ROOM
RMC	RIGID METAL CONDUIT (HOT-DIPPED GALVANIZED)
RMS	ROOT MEAN SQUARED
ROW	RIGHT OF WAY
RRHT	RAIN LEADER RELIEF HEAT TRACE
RU	RACK UNIT
S	SOUTH
SD	FIRE/SMOKE DAMPER
SEC	SECONDARY
SFB	SUB-FEED CB
SFL	SUB-FEED DOUBLE LUGS
SHT	SHEET (REFER TO DRAWING)
SLC	SIGNALING LINE CIRCUIT (FA INITIATING)
SN	SOLID NEUTRAL
SPD	SURGE PROTECTION DEVICE
SPDT	SINGLE POLE DOUBLE THROW
SPEC	SPECIFICATION
SPST	SINGLE POLE SINGLE THROW
SR	SERIES RATED
SS	STAINLESS STEEL, SOFT-START

ABBREVIATIONS

SSBJ	SUPPLY-SIDE BONDING JUMPER
STBY	STAND-BY
STP	SHIELDED TWISTED PAIR
SVD	SERVICE DISCONNECT
SW	SWITCH
SWBD	SWITCHBOARD
SWD	SWITCHED
SWGR	SWITCHGEAR
SWN	SWITCHED NEUTRAL
TBB	TELECOMMUNICATIONS BONDING BACKBONE CABLE
TEBB	TELECOMMUNICATIONS BACKBOARD
TEL	TELEPHONE
TGB	TELECOMMUNICATIONS GROUNDING BUSBAR
TMGB	TELECOMMUNICATIONS MAIN GROUNDING BUSBAR
TS	TERMINAL STRIP (DIN RAIL, ETC.)
TUP	TRIP UNIT POWER SUPPLY
TYP	TYPICAL
UG	UNDERGROUND
UL	UNDERWRITERS' LABORATORIES
UON	UNLESS OTHERWISE NOTED
UPS	UNINTERRUPTIBLE POWER SUPPLY
USWD	UNSWITCHED CIRCUIT
UTP	UNSHIELDED TWISTED PAIR
V	VOLTS
VA	VOLT AMPERES
VAR	VOLT-AMPS REACTIVE
VEST	VESTIBULE
VFC	VARIABLE FREQUENCY CONTROLLER
W	WATT, WEST or WIRE
W/	WITH
W/O	WITHOUT
WH	WATTHOUR
WP	WEATHERPROOF
XC	AUXILIARY CONTACT
XFER	TRANSFER
XFMR	TRANSFORMER
XP	EXPLOSION PROOF
xPyT	x POLE y THROW (x and y indicate quantity)

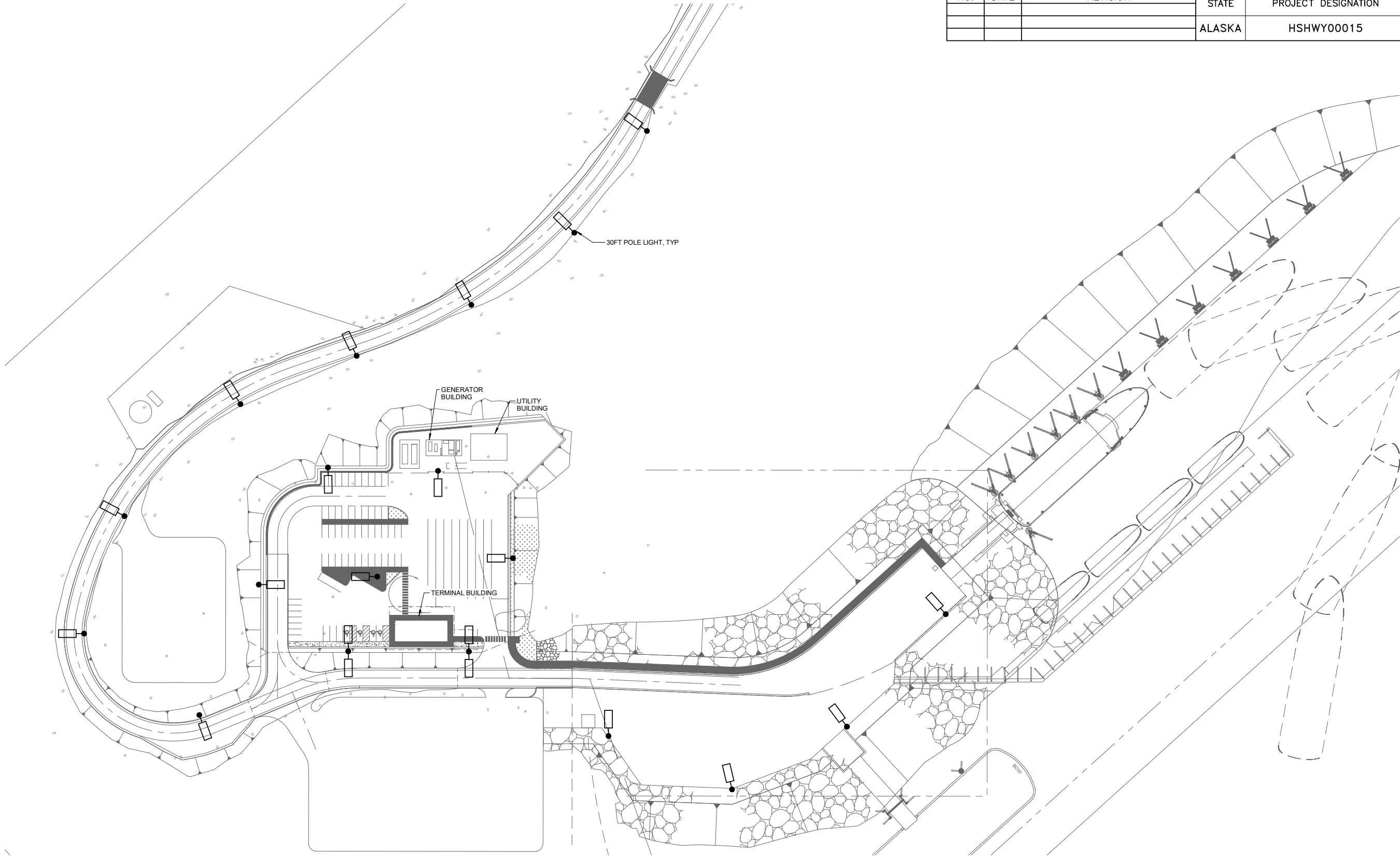


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(907) 465-1763

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LEGEND AND ABBREVIATIONS
GENERATOR BUILDING

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	7002	161



1 ELECTRICAL SITE PLAN



Juneau, AK
9109 Mendenhall Mall Rd, Ste 4
Juneau, AK 99801
Phone: 907.780.6060
www.respec.com
AEC0163270

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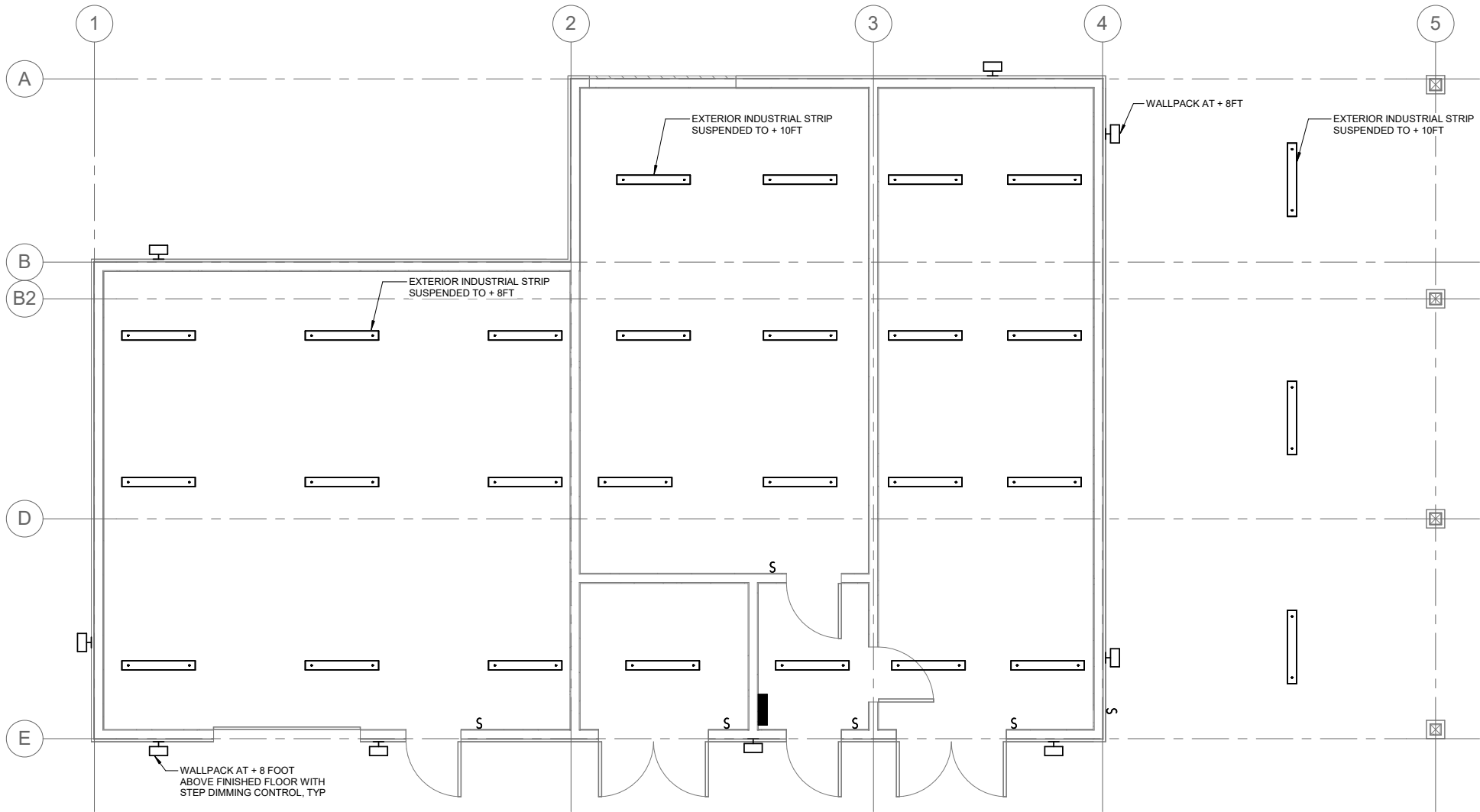
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SITE PLAN
GENERATOR BUILDING

FILE LAYOUT MODEL DATE 07/15/25 DESIGNED SH CHECKED BCH DRAFTED CSB


NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	7311	161



1 GENERATOR BUILDING LIGHTING PLAN



Juneau, AK
9109 Mendenhall Mall Rd, Ste 4
Juneau, AK 99801
Phone: 907.790.6060
www.respec.com
AEC0163270



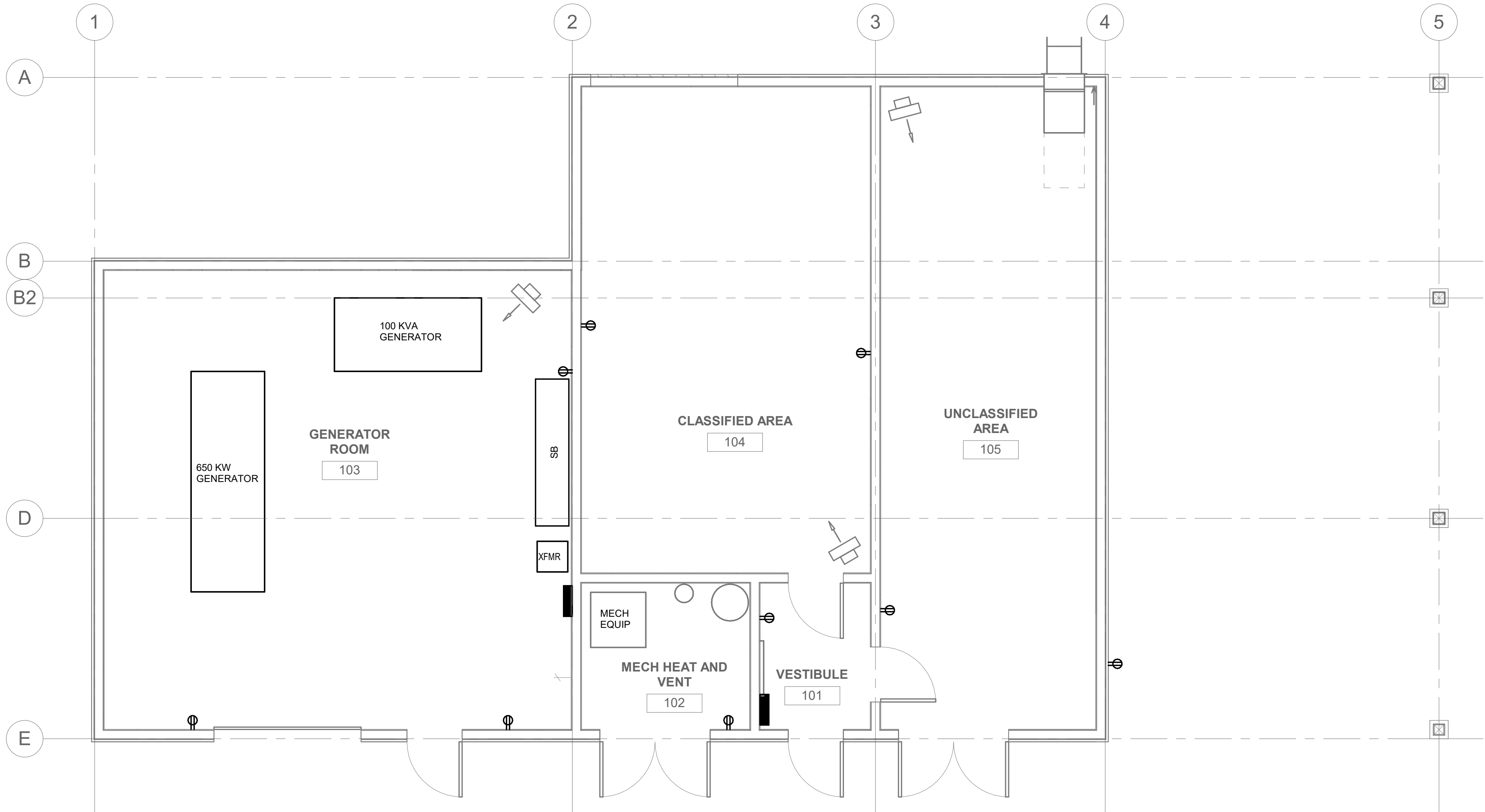
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FERRY TERMINAL**


**BUILDING PLAN - LIGHTING
GENERATOR BUILDING**

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTA SHEETS
			ALASKA	HSHWY00015	2025	7321	152



1

GENERATOR BUILDING POWER PLAN



Juneau, AK
9109 Mendenhall Mall Rd, Ste 4
Juneau, AK 99801
Phone: 907.790.6060
www.respec.com
AECC163270

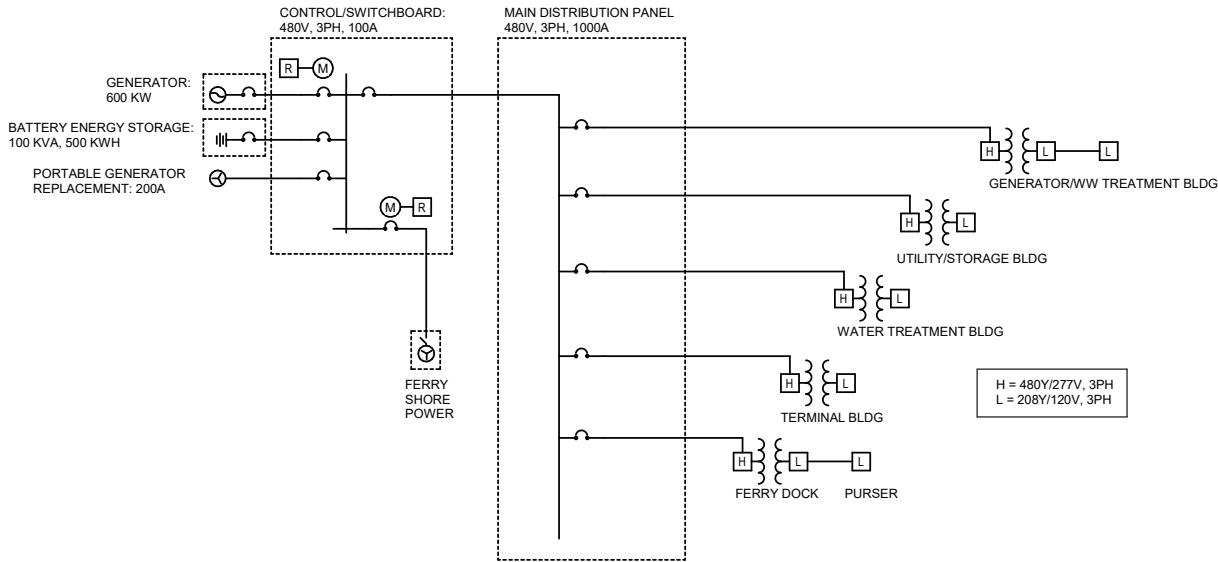
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**JNU CASCADE POINT
FERRY TERMINAL**

**BUILDING PLAN - POWER
GENERATOR BUILDING**

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	7361	161



CONTROLS:

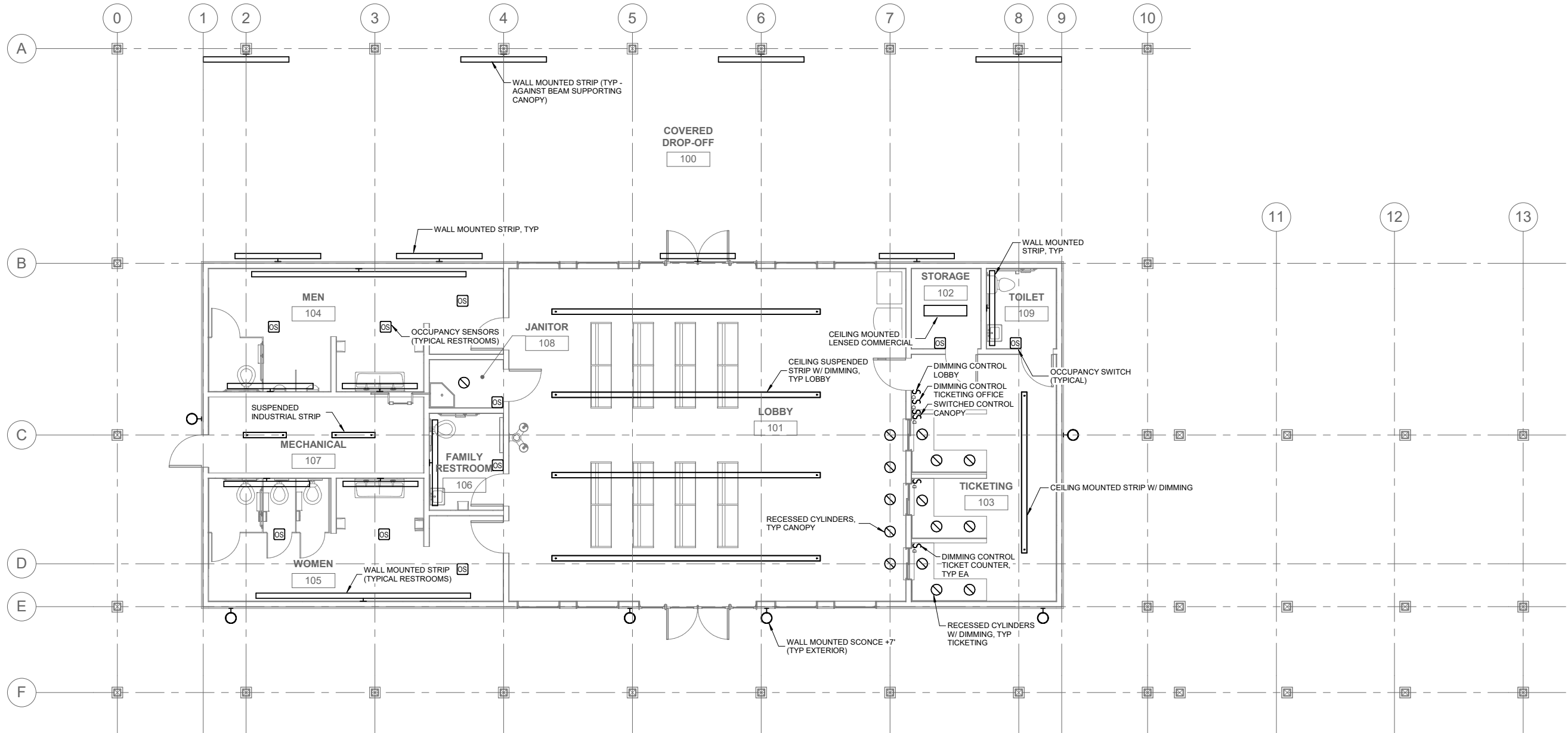
- NORMAL CONFIGURATION - SHIP IN PORT: THE BESS CIRCUIT BREAKER WILL REMAIN CLOSED AT ALL TIMES. THE GENERATOR OR THE UTILITY AND SHIP CIRCUIT BREAKERS WILL CLOSE TO POWER THE SHIP. THE OTHER POWER SOURCE CIRCUIT BREAKERS WILL BE OPEN.
- NORMAL CONFIGURATION - SHIP UNDERWAY: PRIOR TO THE INSTALLATION OF THE UTILITY SOURCE, THE GENERATOR AND SHIP CIRCUIT BREAKERS WILL BE OPEN. THE BESS WILL POWER THE SITE.
- OPTIONAL CONFIGURATION - SHIP IN PORT: THE SHIP'S CIRCUIT BREAKER WILL BE CLOSED TO POWER THE SITE AND THE BESS WHEN THE UTILITY AND GENERATOR ARE NOT AVAILABLE.
- SECOND OPTIONAL CONFIGURATION: THE PORTABLE GENERATOR CIRCUIT BREAKER WILL BE CLOSED WITH POWER PROVIDED BY THE PORTABLE GENERATOR TO THE UPLAND SITE AND THE BESS WHEN THE SHIP AND GENERATOR ARE NOT AVAILABLE.
- ROADWAY, STAGING, AND PASSENGER WALKWAY AREA LIGHTING WILL BE POWERED AND CONTROLLED FROM THE GENERATOR BUILDING BRANCH CIRCUIT PANEL.

1 SINGLE LINE DIAGRAM

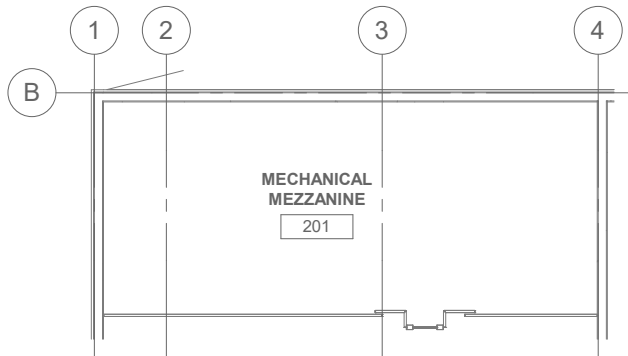
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DATE 07/15/25

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	7111	161



1 FERRY TERMINAL LIGHTING PLAN



2 MEZZININE LIGHTING PLAN

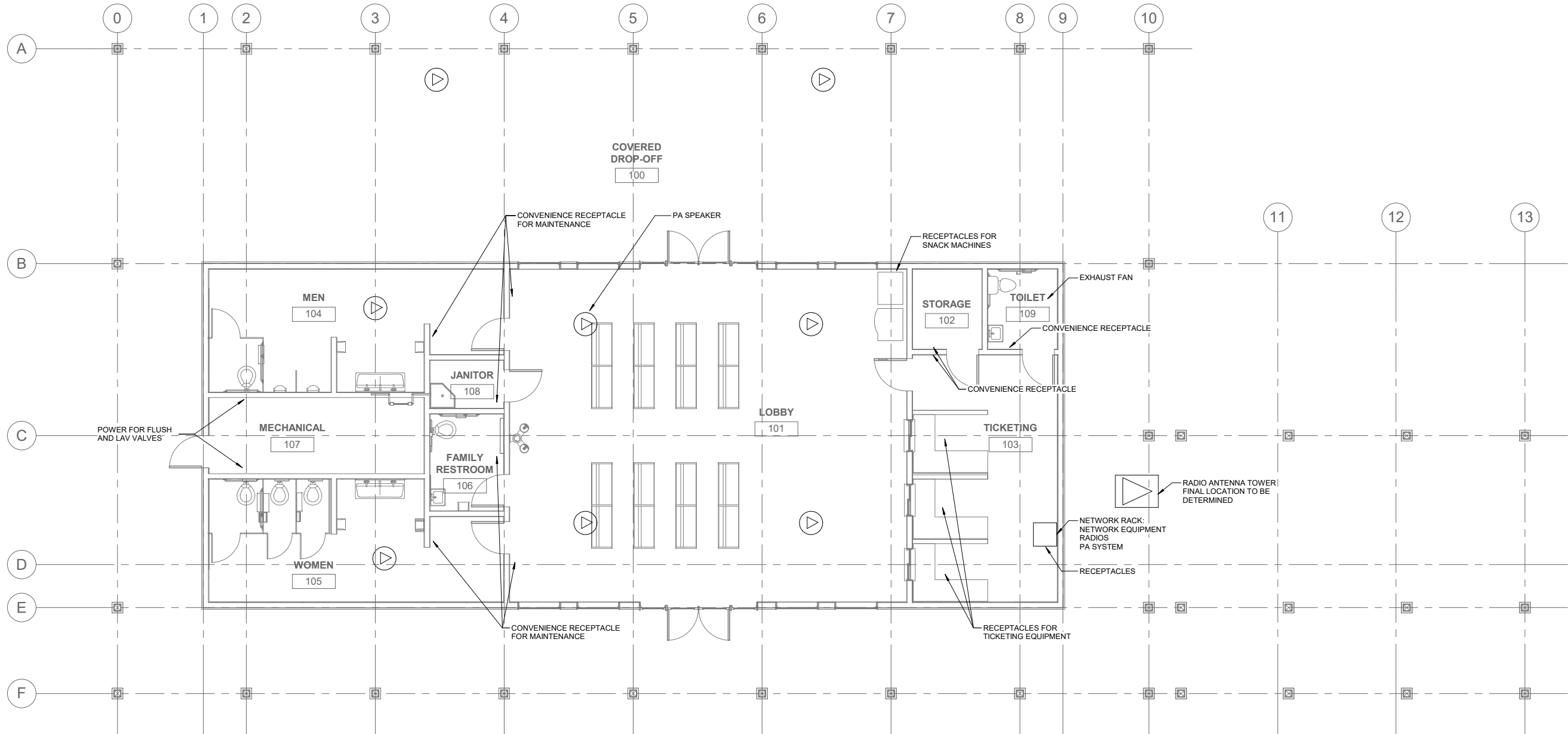


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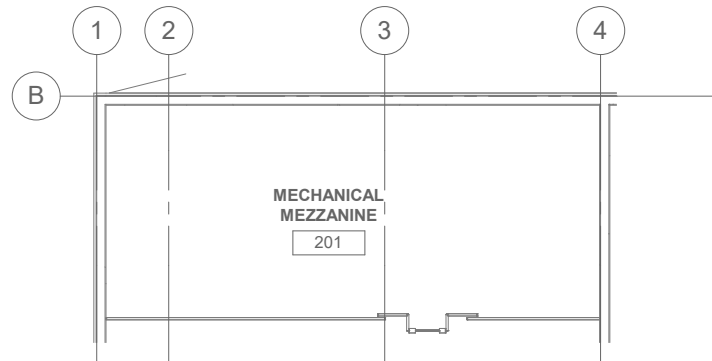
**JNU CASCADE POINT
FERRY TERMINAL**

FERRY TERMINAL - LIGHTING


NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	7121	161



1 FERRY TERMINAL POWER PLAN



2 MEZZININE POWER PLAN



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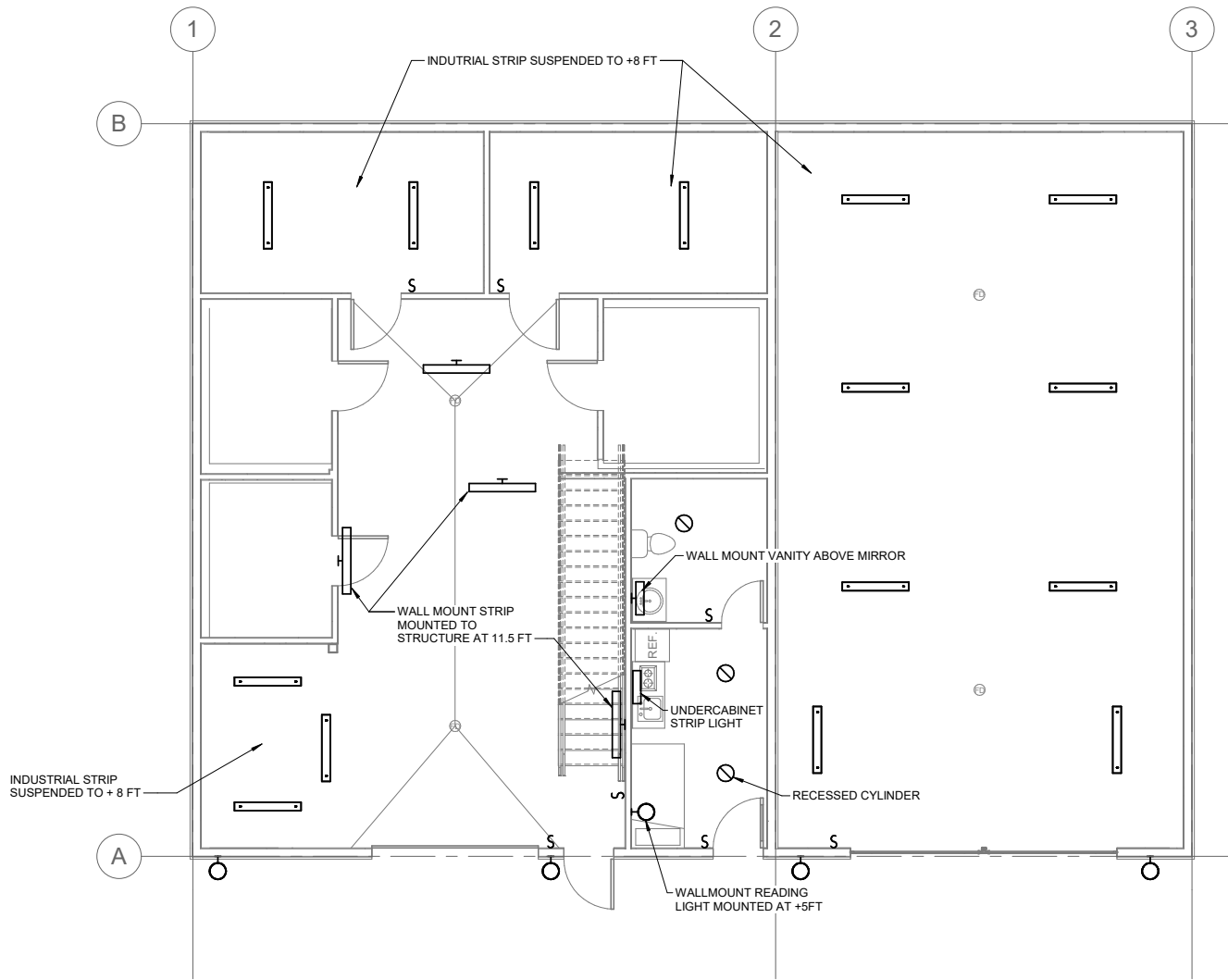
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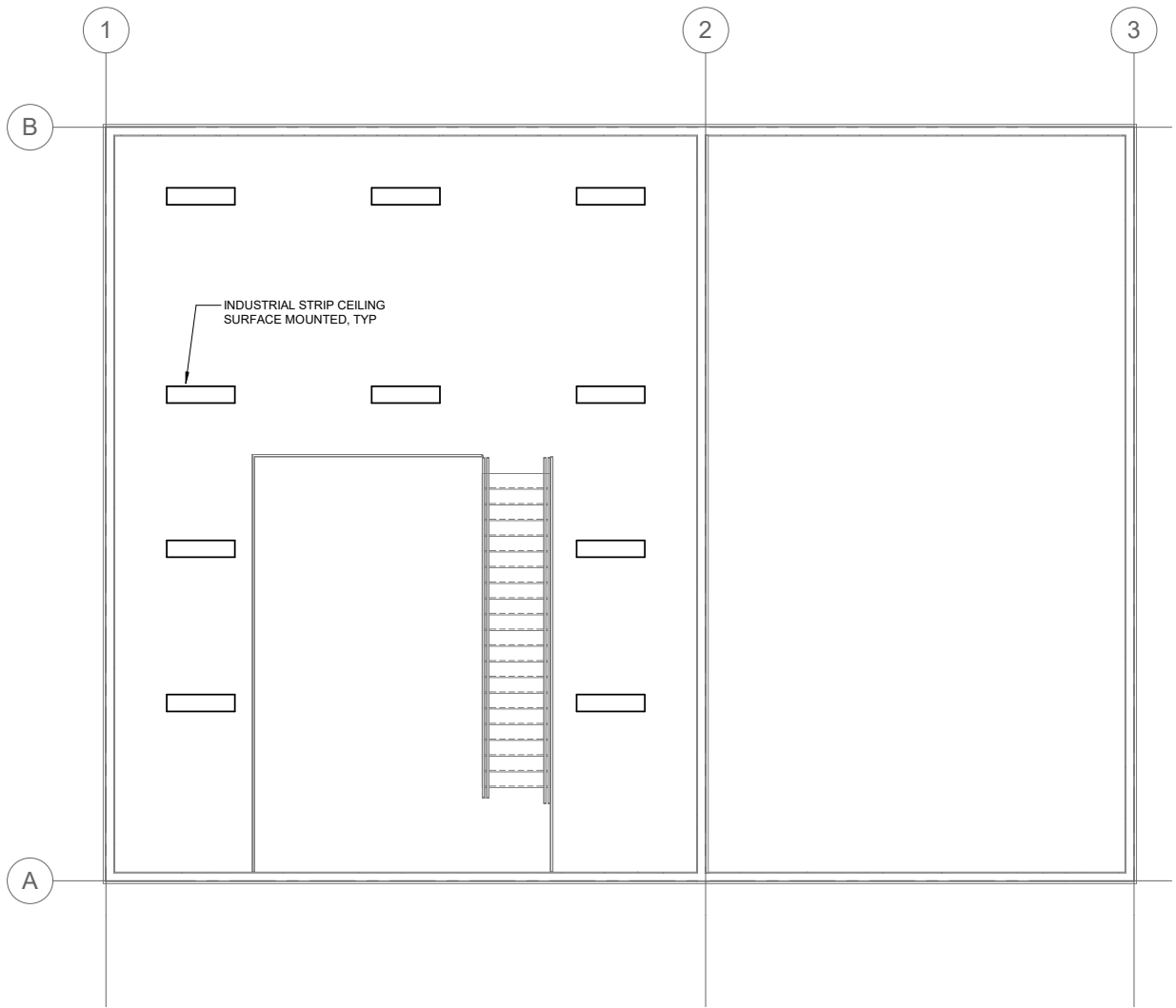
**JNU CASCADE POINT
FERRY TERMINAL**

FERRY TERMINAL - POWER

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	7311	161

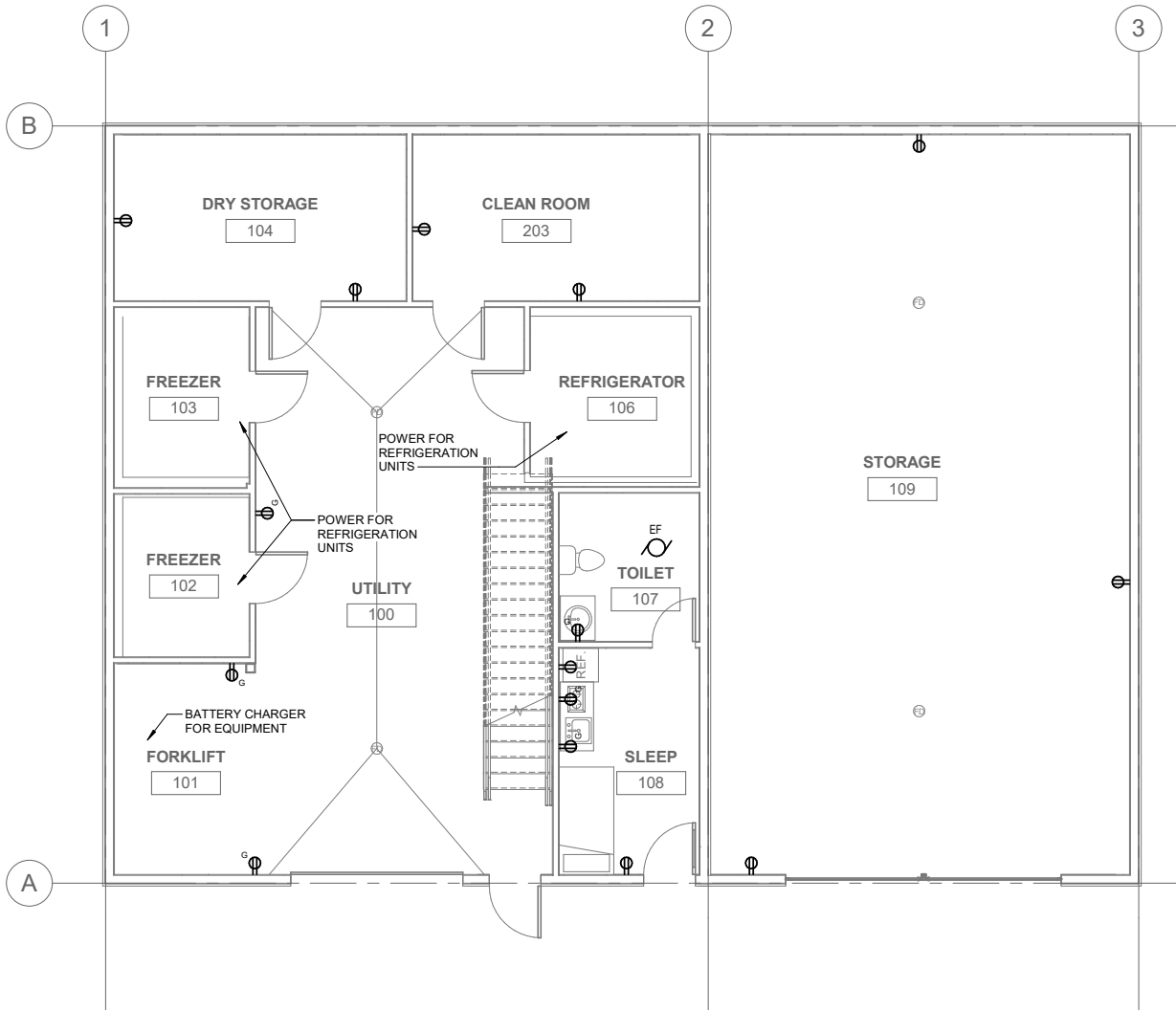


1 FIRST FLOOR STORGE SHED LIGHTING PLAN

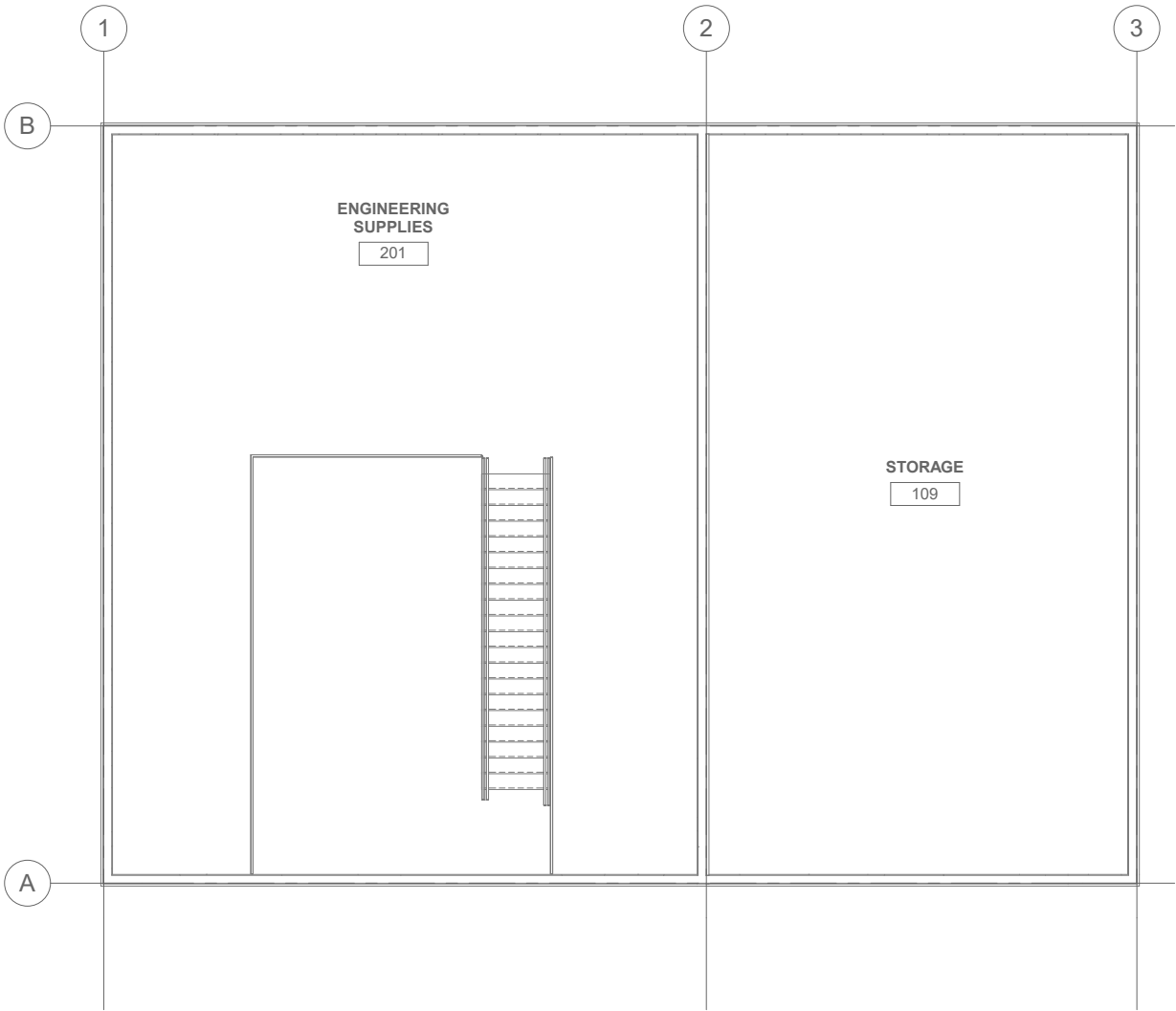


2 SECOND FLOOR STORAGE SHED LIGHTING PLAN

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	7321	161



1 FIRST FLOOR STORAGE SHED POWER PLAN

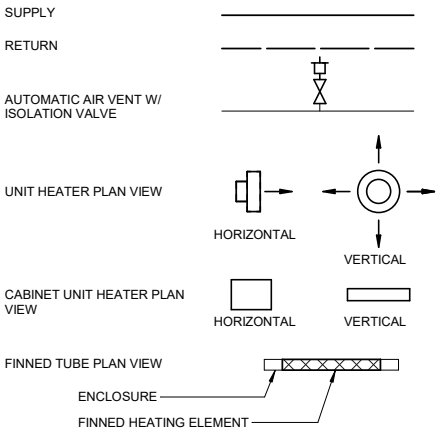


2 SECOND FLOOR STORAGE SHED POWER PLAN

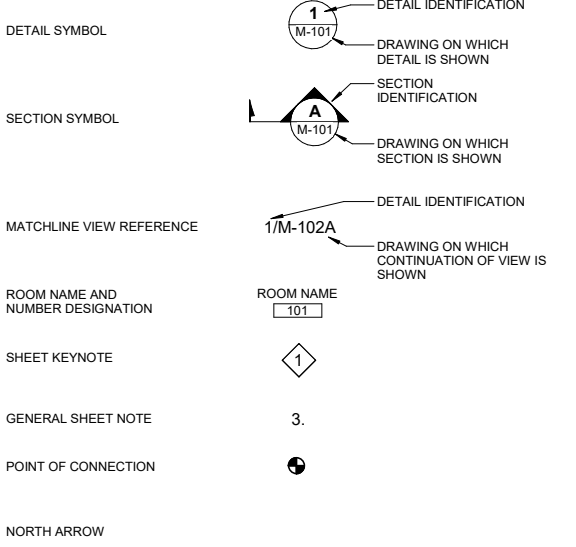
ABBREVIATIONS

ACFM	ACTUAL CUBIC FEET PER MINUTE	MAX	MAXIMUM
AFF	ABOVE FINISHED FLOOR	MBH	THOUSAND BTU's PER HOUR
AGT	AVERAGE GLYCOL TEMPERATURE	MIN	MINIMUM
AHAP	AS HIGH AS POSSIBLE	MISC	MISCELLANEOUS
AHU	AIR HANDLING UNIT	NC	NORMALLY CLOSED
APPROX	APPROXIMATE	NO	NORMALLY OPEN
AS	AIR SEPARATOR	NO.	NUMBER
AV	ACID VENT	NPCW	NON POTABLE COLD WATER
AVTR	ACID VENT THROUGH ROOF	02	OXYGEN
AW	ACID WASTE	OA	OUTSIDE AIR
BTU	BRITISH THERMAL UNIT	OC	ON CENTER
CA	COMPRESSED AIR	ORD	OVERFLOW ROOF DRAIN
CFM	CUBIC FEET PER MINUTE	ORL	OVERFLOW RAIN LEADER
CIRC	CIRCULATION	OSA	OUTSIDE AIR SUPPLY
CH	CHILLER	P	PUMP
CLNG	CEILING	PCR	PUMPED CONDENSATE RETURN
CO	CARBON MONOXIDE	PD	PRESSURE DROP
CO2	CARBON DIOXIDE	PDJ	PLUMBING & DRAINAGE INSTITUTE
CONT	CONTINUATION, CONTINUED	PG	PROPYLENE GLYCOL
CP	CIRCULATING PUMP	PH	PHASE
CR	CONDENSATE RETURN	PHC	PRE HEAT COIL
CU	COPPER	POC	POINT OF CONNECTION
CW	COLD WATER	PSIG	POUNDS PER SQUARE INCH GAUGE
CWR	CHILLED WATER RETURN	PSI	POUNDS PER SQUARE INCH
CWS	CHILLED WATER SUPPLY	PW	PUMPED WASTE
(D)	DEMOLISH	RA	RETURN AIR
DDC	DIRECT DIGITAL CONTROLS	RCP	RADIANT CEILING PANEL
DIA	DIAMETER	RD	ROOF DRAIN
DHWC	DOMESTIC HOT WATER CIRC	RECIRC	RECIRCULATION
DN	DOWN	RFL	REFRIGERANT LIQUID
DWR	DEMINERALIZED WATER RETURN	RFM	RADIANT FLOOR MANIFOLD
DWS	DEMINERALIZED WATER SUPPLY	RFS	REFRIGERANT SUCTION
DY	DIRECT EXPANSION	RHC	REHEAT HEATING COIL
(E)	EXISTING	RL	RAINLEADER
EA	EXHAUST AIR	RPBP	REDUCED PRESSURE ZONE
EBB	ELECTRIC BASEBOARD		BACKFLOW PREVENTER
EF	EXHAUST FAN	RTU	ROOF TOP UNIT
EGT	ENTERING GLYCOL TEMPERATURE	RV	REFRIGERANT VAPOR
ENT	ENTERING	RWL	RAIN WATER LEADER
ET	EXPANSION TANK	RZ	RADIANT ZONE
ESP	EXTERNAL STATIC PRESSURE	SA	SUPPLY AIR
EUH	ELECTRIC UNIT HEATER	SCH	SCHEDULE
EWT	ENTERING WATER TEMPERATURE	SQFT	SQUARE FEET
FCO	FLOOR CLEANOUT	SF	SUPPLY FAN
FCU	FAN COIL UNIT	SH	STEAM HUMIDIFIER
FD	FIRE DAMPER	SP	SUMP PUMP
FD	FLOOR DRAIN	SS	STAINLESS STEEL
FIM	FORCED MAIN	TA	TRANSFER AIR
FOS	FUEL OIL SUPPLY	TEMP	TEMPERATURE
FT	FEET	TDH	TOTAL DEVELOPED HEAD
FT	FINNED TUBE	TP	TRAP PRIMER
FSD	FIRE SMOKE DAMPER	TYP	TYPICAL
GAL	GALLONS	UL	UNDERWRITER'S LABORATORY
GALV	GALVANIZED	UON	UNLESS OTHERWISE NOTED
GCR	GLYCOL COOLING RETURN	VAV	VARIABLE AIR VOLUME
GCS	GLYCOL COOLING SUPPLY	UH	UNIT HEATER
GHR	GLYCOL HEATING RETURN	VTR	VENT THROUGH ROOF
GHS	GLYCOL HEATING SUPPLY	VR	VENT RISER
GI	GREASE INTERCEPTOR	W	WASTE
GMT	GLYCOL MAKE-UP TANK	W/	WITH
GPM	GALLONS PER MINUTE	W.C.	WATER COLUMN
HB	HOSE BIBB	WCO	WALL CLEANOUT
HC	HEATING COIL	WH	WATER HEATER
HP	HORSE POWER	WHA	WATER HAMMER ARRESTOR
HRV	HEAT RECOVERY VENTILATOR	WPD	WATER PRESSURE DROP
HW	HOT WATER	WRT	WITH RESPECT TO
HWC	HOT WATER CIRCULATION		
HWR	HEATING WATER RETURN		
HWS	HEATING WATER SUPPLY		
HX	HEAT EXCHANGER		
HZ	HERTZ		
ID	INSIDE DIAMETER		
IN	INCHES		
LAV	LAVATORY		
LF	LINEAL FEET		
LGT	LEAVING GLYCOL TEMP		
LHWR	LOW TEMP HEATING WATER RETURN		
LHWS	LOW TEMP HEATING WATER SUPPLY		
LVG	LEAVING		
LW	LAB WASTE		
LWH	LAB WATER HEATER		
LWT	LEAVING WATER TEMPERATURE		

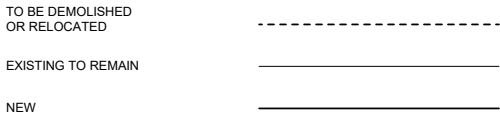
HEATING & COOLING



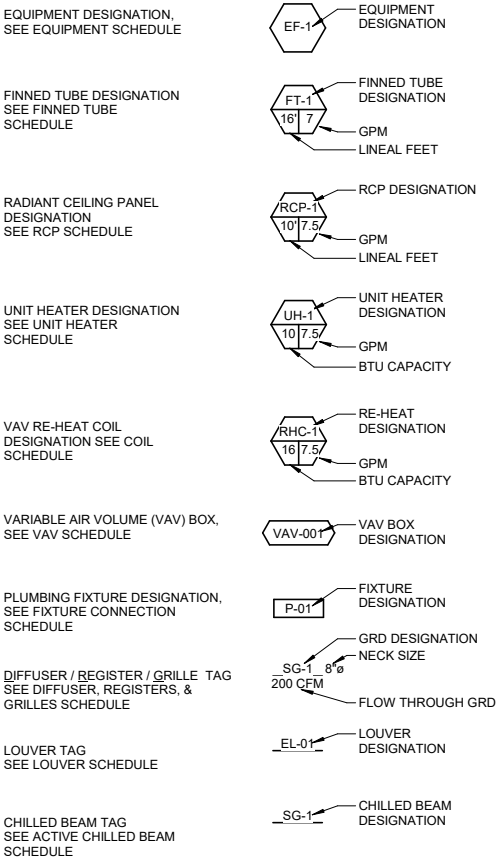
GENERAL



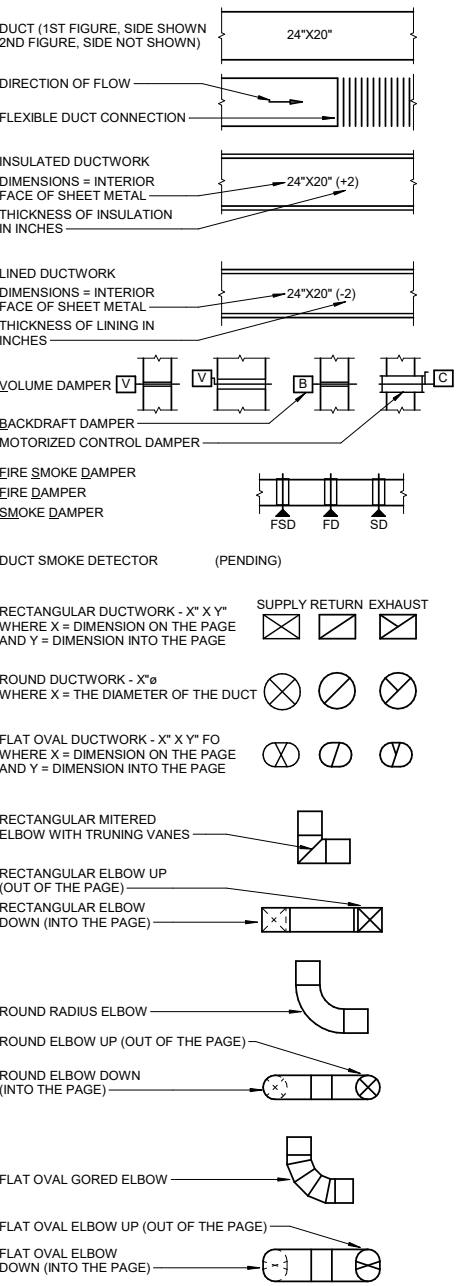
CONSTRUCTION PHASE LIFESTYLE



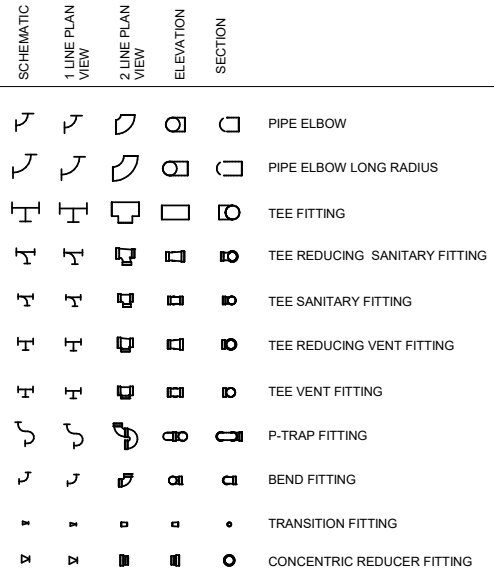
MECHANICAL TAGS



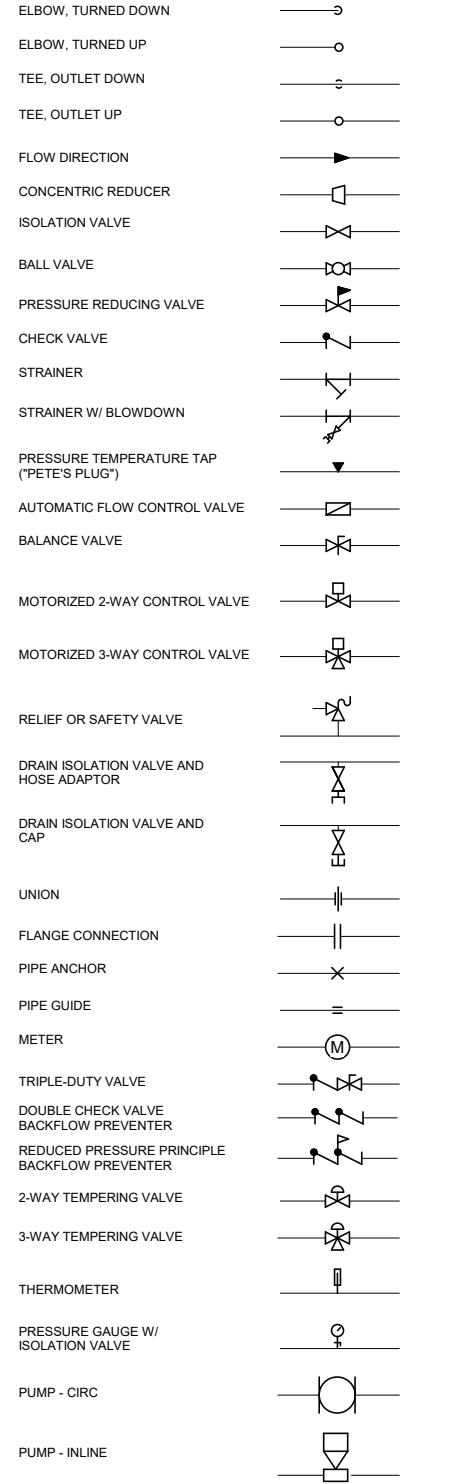
DUCT LEGEND



PIPE FITTINGS LEGEND



PIPE FITTINGS & VALVES



NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	8101	161

224200 - PLUMBING FIXTURE SCHEDULE

NOTES:

MARK	FIXTURE DESCRIPTION	HW/TW	CW	TRAP	WASTE	VENT	BASIS OF DESIGN	COMMENTS
L-1	LAVATORY	1/2	1/2	1-1/2	2	2	AMERICAN STANDARD LUCERNE	WALL MOUNTED VITREOUS CHINA,ASSE-1070 MIXING VALVE, PROVIDE ADA PREMANUFACTURED PIPING INSULATION KITS
L-2	LAVATORY	1/2	1/2	2	2	2	SEE ARCH.	WALL MOUNTED, MULTI USE. ASSE-1070 MIXING VALVE, PROVIDE ADA PREMANUFACTURED PIPING INSULATION KITS
SS-1	SERVICE SINK	1/2	1/2	2	3	2	AMERICAN STANDARD FLORWELL	FLOOR MOUNTED SERVICE SINK
U-1	URINAL	-	1	-	2	2	AMERICAN STANDARD WASHBROOK	WALL MOUNTED URINAL, LOW FLOW.
WC-1	ADA WATER CLOSET	-	3/4	-	3	2	MANSFIELD QUANTUM	WALL MOUNT, PRESSURE ASSISTED TANK
WC-2	WATER CLOSET	-	3/4	-	3	2	MANSFIELD QUANTUM	WALL MOUNT, PRESSURE ASSISTED TANK

223400 - WATER HEATER SCHEDULE

NOTES:

MARK	SERVICE	TYPE	RECOVERY, GPH @ 90F RISE	VOLUME (GAL)	MBH INPUT	V	PH	BASIS OF DESIGN		COMMENTS
								MANUFACTURER	MODEL	
HWH-1	DOMESTIC HOT WATER	INDIRECT	89	41	40	115	1	AMTROL	CH-41ZDW	DOUBLE WALL HEAT EXCHANGER, NSF-61

232123 - PUMP SCHEDULE

NOTES:

MARK	LOCATION	SERVICE	FLOW (GPM)	HEAD (FT)	FLUID	ELECTRICAL DATA				BASIS OF DESIGN		COMMENTS
						HP	V	PH	CONTROLLER	MANUFACTURER	MODEL	
BP-1	107-MECHANICAL	NON-POTABLE PRESSURE	15	90	NON-POTABLE WATER	1/2	115	1	DISCONNECT	AMTROL	RP-15A	20 GALLON RECEIVER TANK. INTERNAL CONTROLS
P-1	107-MECHANICAL	B-1 LOOP	12	15	30% GLYCOL	1/6	115	1	DDC	TACO	00	
P-2	107-MECHANICAL	HWH-1 LOOP	5	10	30% GLYCOL	1/6	115	1	DDC	TACO	00	
P-3	107-MECHANICAL	RADIANT LOOP	10	20	30% GLYCOL	1/6	115	1	DDC	TACO	00	
P-4	107-MECHANICAL	HW RECIRCULATION	2	15	POTABLE WATER	1/20	115	1	DISCONNECT	TACO	00	NSF-61 RATED.

235223 - BOILER SCHEDULE

NOTES:

MARK	TYPE	INPUT (MBH)	NET OUTPUT (MBH)	FUEL	PRV PRESSURE (PSI)	ELECTRICAL			BASIS OF DESIGN		COMMENTS
						HP	V	PH	MANUFACTURER	MODEL	
B-1	HYDRONIC	140	106	OIL	30				WEIL MCLAIN	WGO-4	

237313 - HEAT RECOVERY AIR HANDLING UNIT SCHEDULE

NOTES:

MARK	SERVICE	CFM	ELECTRICAL DATA				BASIS OF DESIGN		COMMENTS
			HP	V	HZ	CONTROL LER	MANUFACTURER	MODEL	
HRV-1	OUTSIDE AIR	350	1/4	115	60	ECM	FANTEC	SHR-450	MERV 6 FILTERS

233416 - FAN SCHEDULE

NOTES: ESP VALUE INDICATED IS REQUIRED PRESSURE DOWNSTREAM OF DUCT CONNECTION TO FAN EQUIPMENT (I.E. EXCLUSIVE OF FAN CABINET AND DUCT OUTLET CONNECTION) ON DISCHARGE END.

MARK	SERVICE	CFM	ESP (IN. WC)	DRIVE TYPE	ELECTRICAL DATA				BASIS OF DESIGN		COMMENTS	
					HP	V	HZ	PH	CONTROLLER	MANUFACTURER		MODEL
EF-1	TOILET ROOM	50	0.25	DIRECT	1/20	115	60	1	WALL SWITCH	PANASONIC	FV-0511VK2	PROVIDE WITH BACKDRAFT DAMPER AND EXTERIOR WALL CAP.

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JNU CASCADE POINT
FERRY TERMINAL
SCHEDULES
TICKETING BUILDING

FILE LAYOUT MODEL DESIGNED SB CHECKED Checker DRAFTED TS

DATE 07/15/25

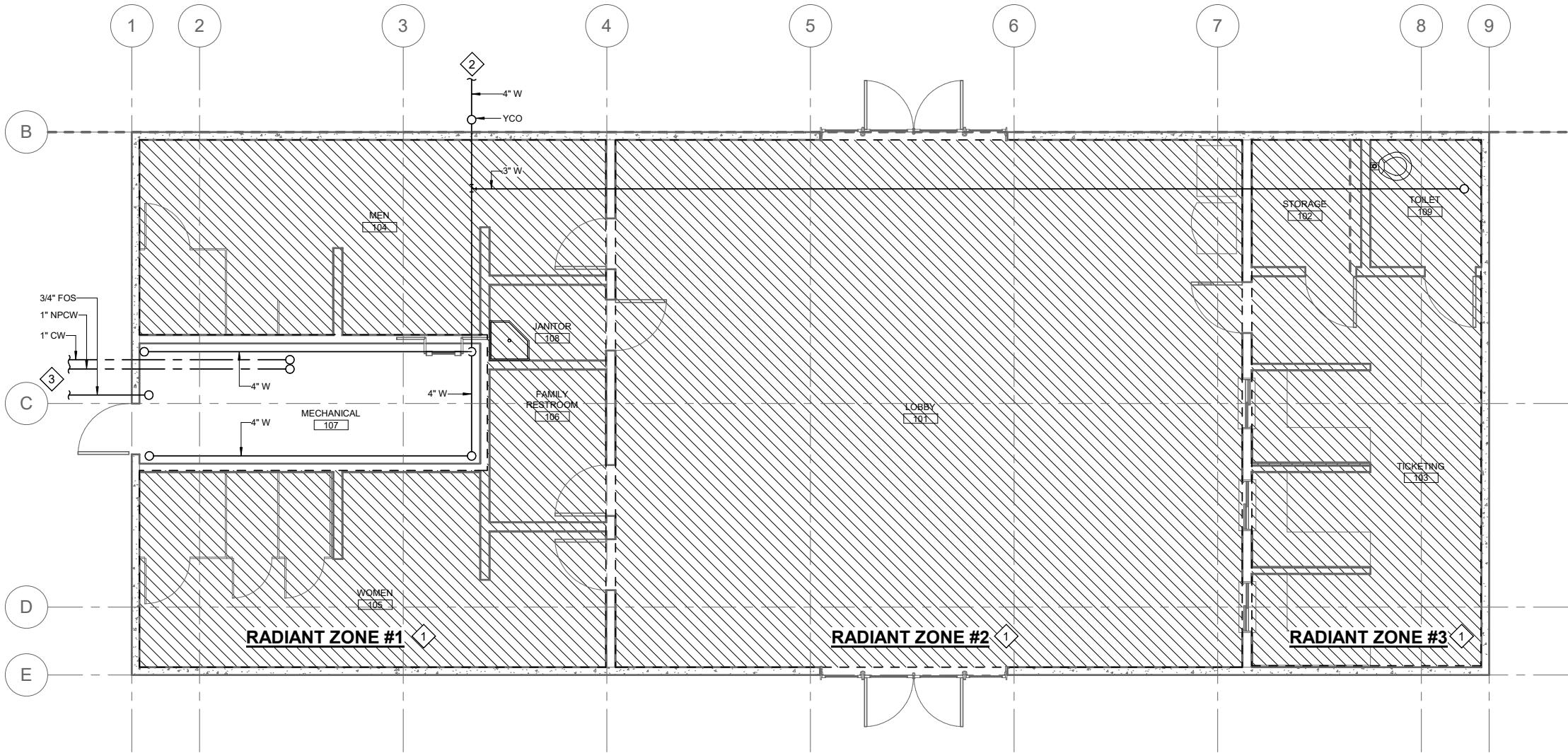
NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	8110	161

SHEET NOTES

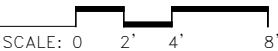
1. SHEET NOTES.


SHEET KEYNOTES

1. RADIANT HEATING ZONE. TYPICAL OF 3.
2. 4" SANITARY WASTE TO LIFT STATION/
3. SERVICES FROM WATER TREATMENT PLANT
AND FUEL DEPOT. SEE FUEL AND UTILITY
PLANS.



1 FERRY TERMINAL - UNDERFLOOR PLAN - PLUMBING





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**JNU CASCADE POINT
FERRY TERMINAL
UNDERFLOOR PLAN
TICKETING BUILDING**

FILE LAYOUT MODEL DESIGNED SB CHECKED Checker DRAFTED TS

DATE 07/15/25

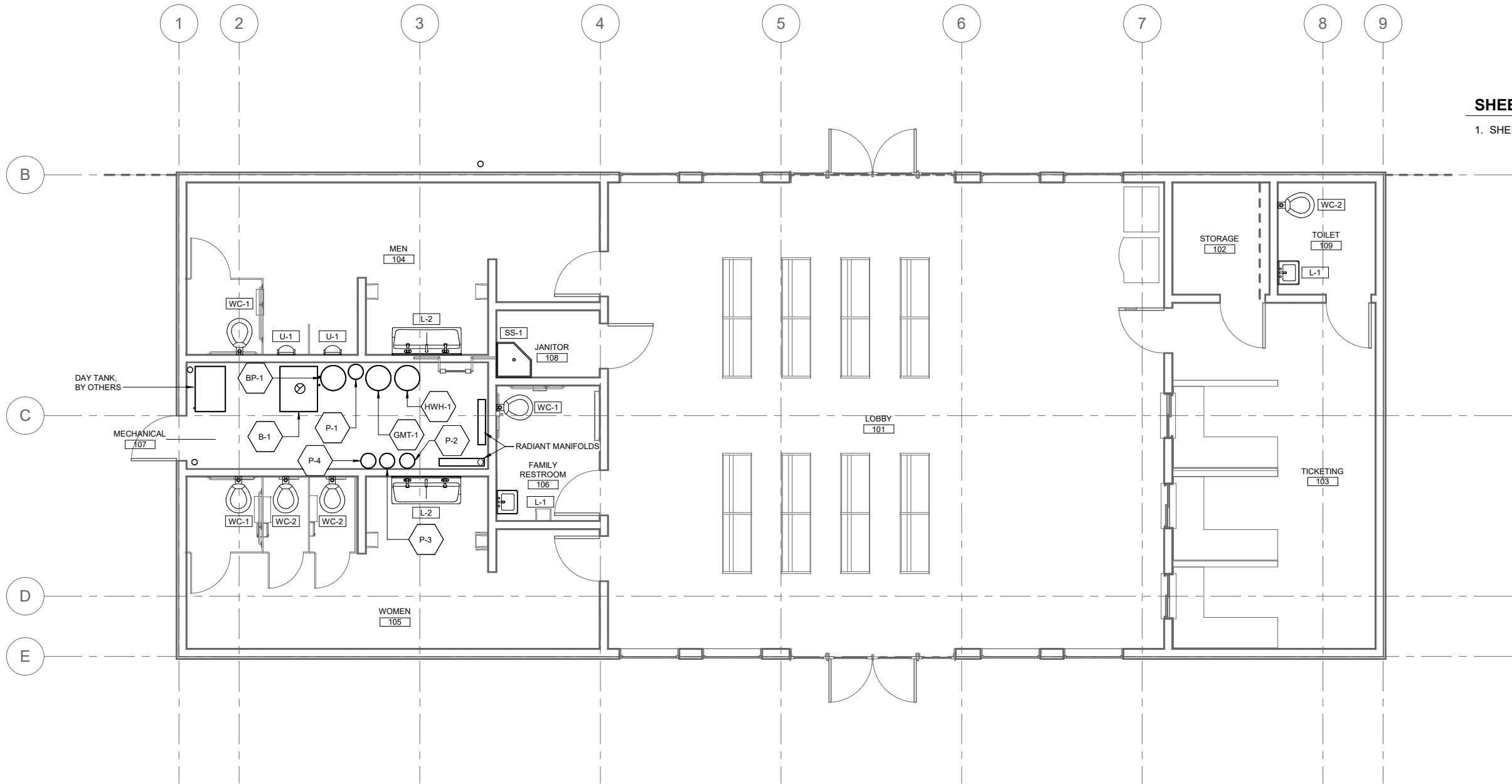
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			ALASKA	HSHWY00015	2025	8111	161

SHEET NOTES

1. SHEET NOTES.


SHEET KEYNOTES #

1. SHEET KEYNOTES.



1 FERRY TERMINAL - FIRST FLOOR PLAN

SCALE: 0 2' 4' 8'



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**JNU CASCADE POINT
FERRY TERMINAL
FLOOR PLAN
TICKETING BUILDING**

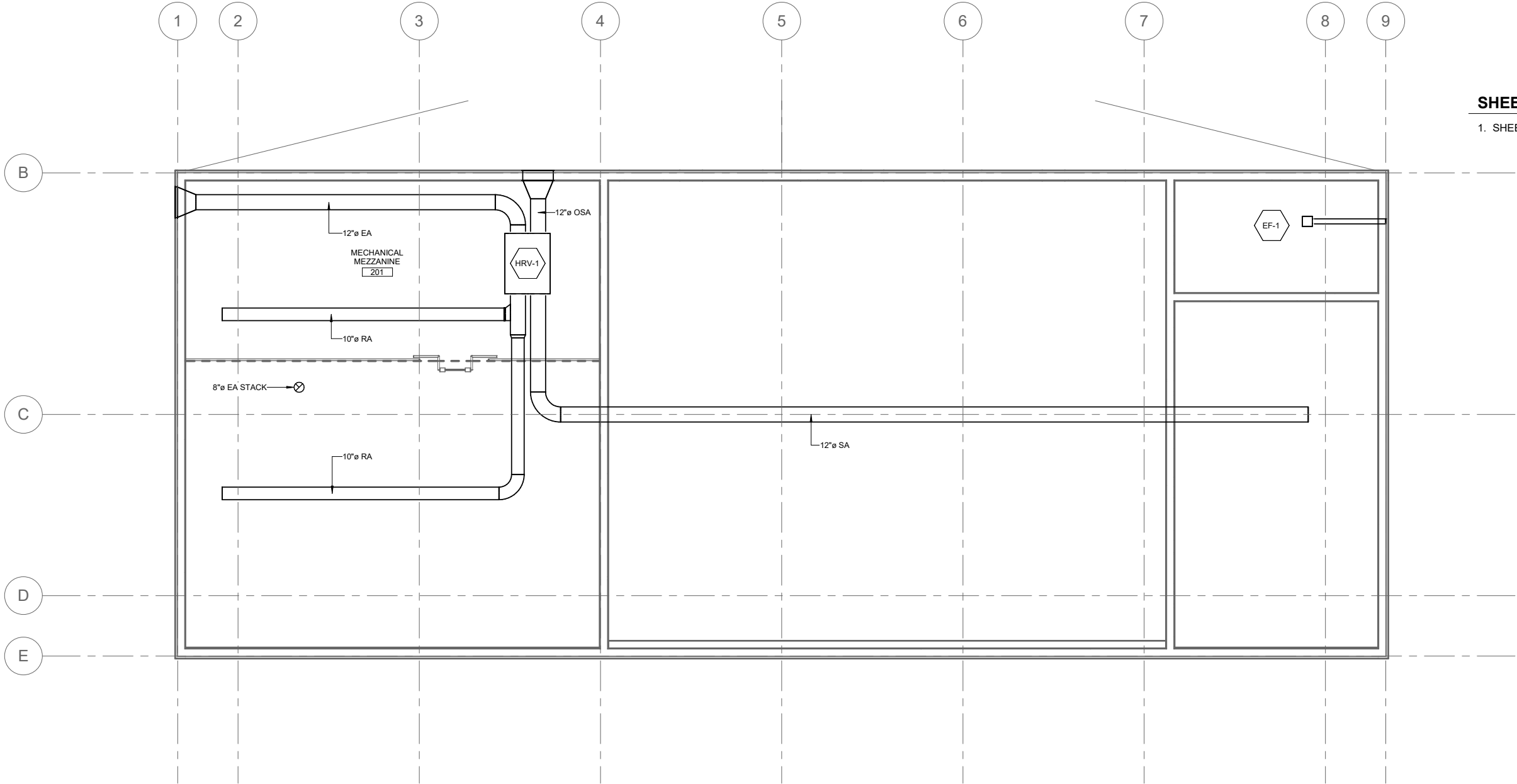
NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	8112	161

SHEET NOTES

1. SHEET NOTES.


SHEET KEYNOTES

1. SHEET KEYNOTES.



1 FERRY TERMINAL - MEZZANINE PLAN

SCALE: 0 2' 4' 8'



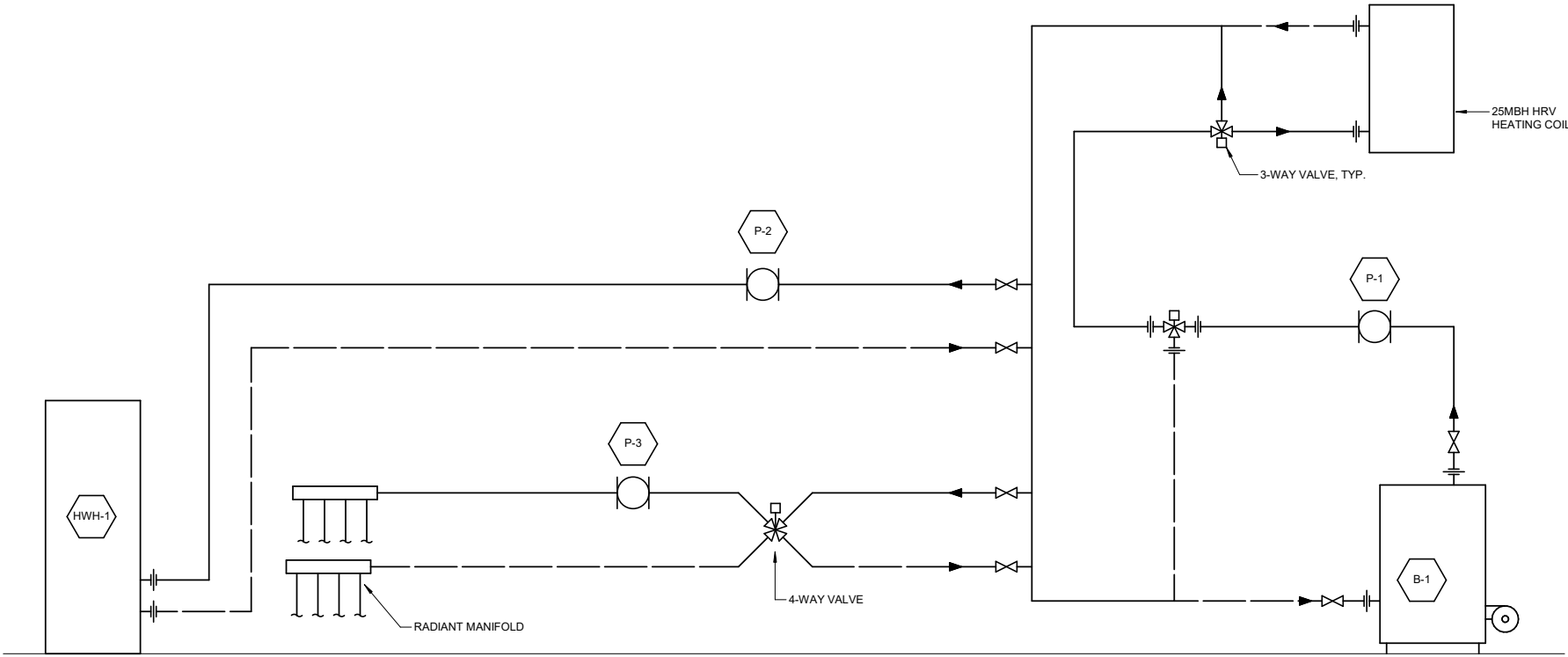
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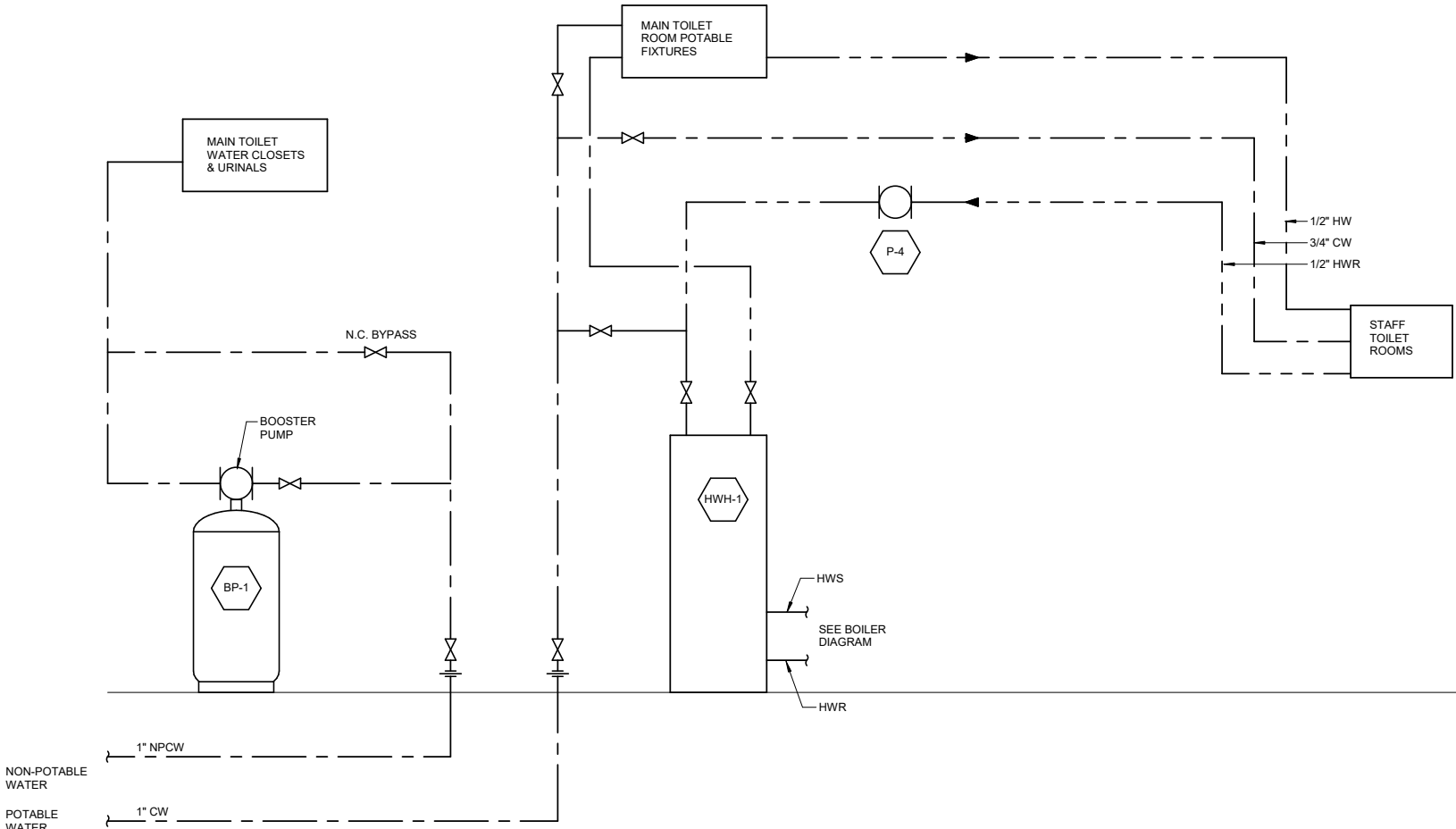
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**JNU CASCADE POINT
FERRY TERMINAL
MEZZANINE PLAN - PLUMBING
TICKETING BUILDING**

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	8140	161



1 BOILER DIAGRAM
8140 SCALE: NO SCALE



2 DOMESTIC WATER PIPING DIAGRAM
8140 SCALE: NO SCALE



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**JNU CASCADE POINT
FERRY TERMINAL
DIAGRAMS
TICKETING BUILDING**

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	8201	161

224200 - PLUMBING FIXTURE SCHEDULE

NOTES:								
MARK	FIXTURE DESCRIPTION	HW/TW	CW	TRAP	WASTE	VENT	BASIS OF DESIGN	COMMENTS
L-1	LAVATORY	1/2"	1/2"	1-1/2"	2"	1-1/2"	AMERICAN STANDARD	ASSE 1070 TEMPERING VALVE
S-1	SINK	1/2"	1/2"	2"	2"	1-1/2"	AMERICAN STANDARD	ASSE 1070 TEMPERING VALVE
SH-1	SHOWER	1/2"	1/2"	2"	2"	1-1/2"	AMERICAN STANDARD	FIXTURES AND TRIM ONLY. SURROUND BY ARCH. ASSE 1016 TEMPERING VALVE
WC-1	WATER CLOSET	-	3/4"	-	3"	2"	MANSFIELD QUANTUM	FLOOR MOUNT, TANK TYPE.

223400 - WATER HEATER SCHEDULE

NOTES:							
MARK	SERVICE	TYPE	RECOVERY, GPH @ 90F RISE	MBH INPUT	BASIS OF DESIGN		COMMENTS
					MANUFACTURER	MODEL	
HWH-1	DOMESTIC HOT WATER	INDIRECT	69	40	AMTROL	CH-41ZDW	DOUBLE WALL HEAT NSF 61 RATED.

233416 - FAN SCHEDULE

NOTES: ESP VALUE INDICATED IS REQUIRED PRESSURE DOWNSTREAM OF DUCT CONNECTION TO FAN EQUIPMENT (I.E. EXCLUSIVE OF FAN CABINET AND DUCT OUTLET CONNECTION) ON DISCHARGE END.											
MARK	SERVICE	CFM	ESP (IN. WC)	ELECTRICAL DATA				BASIS OF DESIGN		COMMENTS	
				HP	V	HZ	PH	CONTROLLER	MANUFACTURER		MODEL
CF-1	CEILING FAN	7000	-	1/10	115	60	1	WALL SWITCH	GREENHECK	DM-3	
EF-1	TOILET ROOM	70	0.25	1/20	115	60	1	WALL SWITCH	PANASONIC	FV-0511VK2	

235223 - BOILER SCHEDULE

NOTES:											
MARK	TYPE	INPUT (MBH)	NET OUTPUT (MBH)	FUEL	PRV PRESSURE (PSI)	ELECTRICAL			BASIS OF DESIGN		COMMENTS
						HP	V	PH	MANUFACTURER	MODEL	
B-1	HYDRONIC	140	122	OIL	30		115	1	WEIL MCLAIN	WGO-4	

238200 - UNIT HEATER SCHEDULE

NOTES:													
MARK	TYPE	CAPACITY (MBH)	EGT (°F)	LGT (°F)	CFM	RPM	ELECTRICAL				BASIS OF DESIGN		COMMENTS
							HP	V	PH	HZ	MANUFACTURER	MODEL	
HUH-1	HYDRONIC UNIT HEATER	75	180	160	1510	1625	1/8	115	1	1	MODINE	HSB86L	

238200 - BASEBOARD SCHEDULE

NOTES:															
MARK	ENCLOSURE		ELEMENT						FLUID	AVERAGE FLUID TEMP (°F)	CAPACITY (BTU/H/FT)	ENTERING AIR TEMP (°F)	BASIS OF DESIGN		COMMENTS
	TYPE	HEIGHT	FIN			TUBE							MANUFAC TURER	MODEL	
			SIZE (INxIN)	SPACING (FPF)	MATERIAL	DIAMETER	ROWS	MATERIAL							
BB-1	STEEL	0' - 11"	2.5"x2.75"	51	AL	3/4"	1	CU	35% PG	170	610	65	SLANT FIN	MULTIPAK 88	

232123 - PUMP SCHEDULE

NOTES:											
MARK	LOCATION	SERVICE	FLOW (GPM)	HEAD (FT)	FLUID	ELECTRICAL DATA			BASIS OF DESIGN		COMMENTS
						HP	V	PH	MANUFACTURER	MODEL	
P-1	MEZZANINE	B-1 PRIMARY LOOP	15	15	WATER	1/4	115	1	TACO	00	
P-2	MEZZANINE	SHELTER ZONE	3	10	WATER	1/8	115	1	TACO	00	
P-3	MEZZANINE	HWH-1	10	10	WATER	1/8	115	1	TACO	00	
P-4	MEZZANINE	ENGINEERING SUPPLIES ZONE	5	10	WATER	1/8	115	1	TACO	00	

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JNU CASCADE POINT
FERRY TERMINAL
SCHEDULES
UTILITY BUILDING

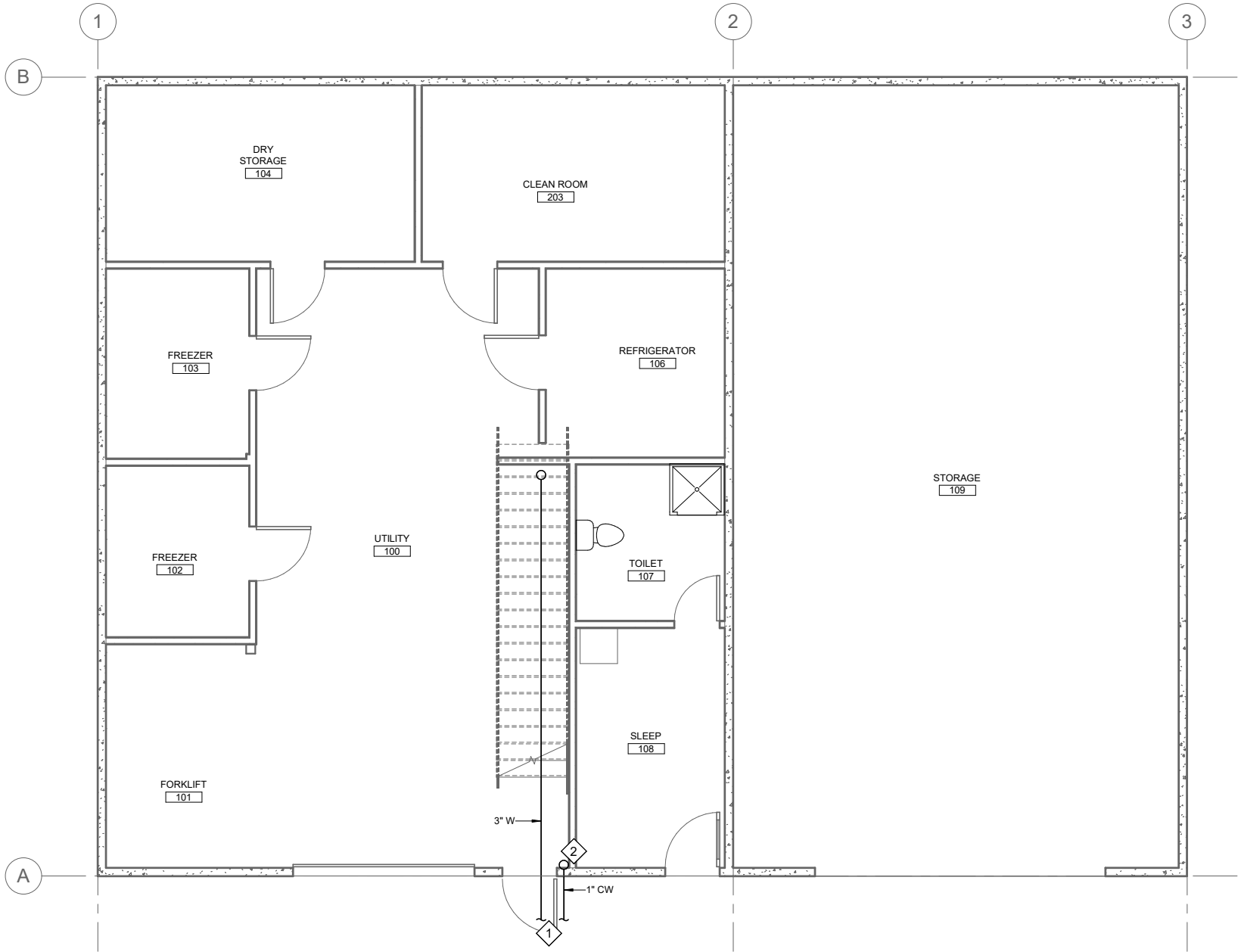
NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	8210	161

SHEET NOTES

1. SHEET NOTES.

SHEET KEYNOTES ◆ #

1. 3"W TO WASTE WATER TREATMENT FACILITY.
1" CW FROM DOMESTIC WATER TREATMENT PLANT.
2. 1" CW TO HWH-1 ABOVE AND DOMESTIC FIXTURES.



1 UTILITY BUILDING - UNDERFLOOR PLAN

SCALE: 0 2' 4' 8'



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UNDERFLOOR PLAN
UTILITY BUILDING

FILE LAYOUT MODEL DATE 07/15/25 DESIGNED SB CHECKED Checker DRAFTED TS

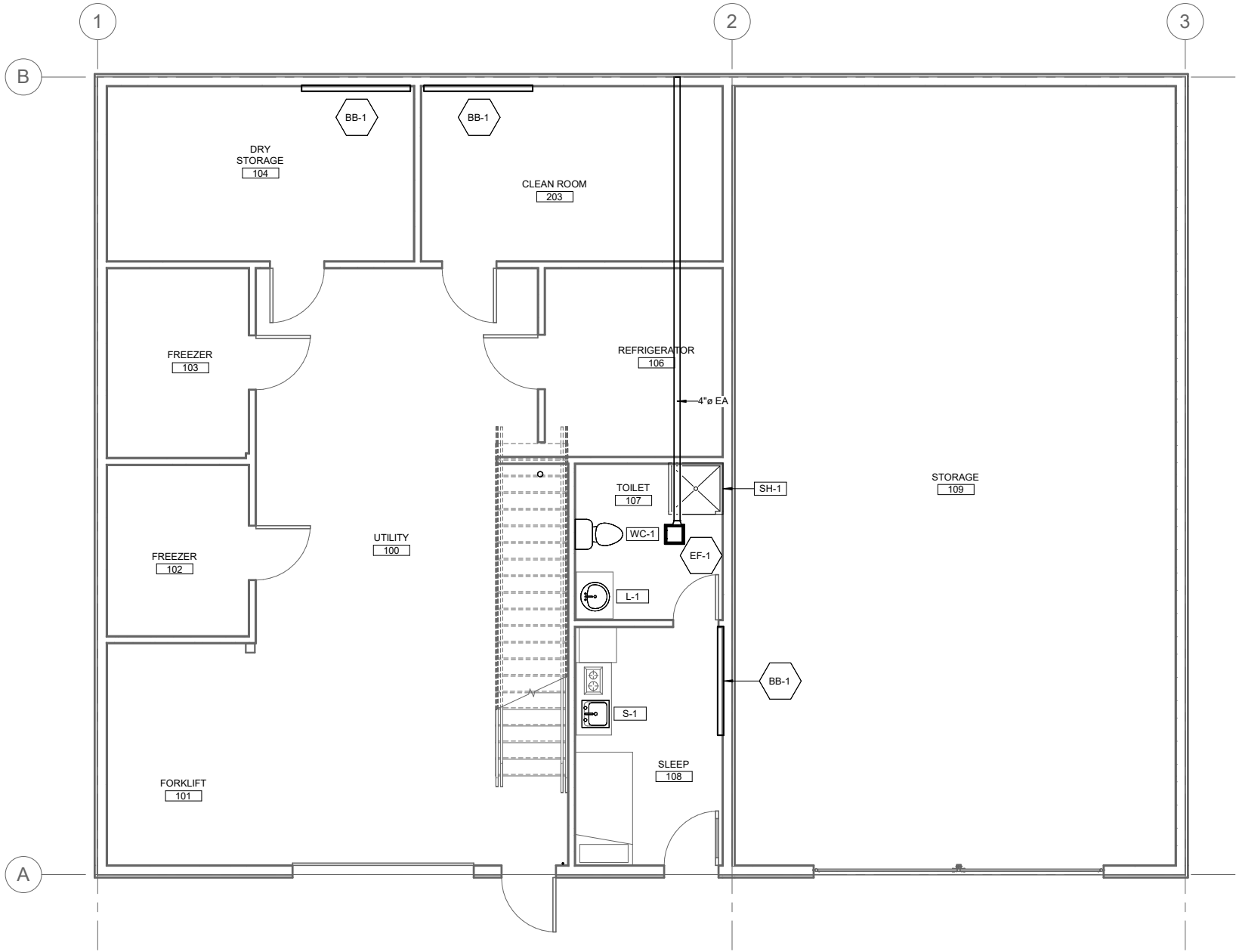
NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	8211	161

SHEET NOTES

1. SHEET NOTES.


SHEET KEYNOTES #

1. SHEET KEYNOTES.



1 UTILITY BUILDING - FIRST FLOOR PLAN

SCALE: 0 2' 4' 8'



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FIRST FLOOR PLAN
UTILITY BUILDING**

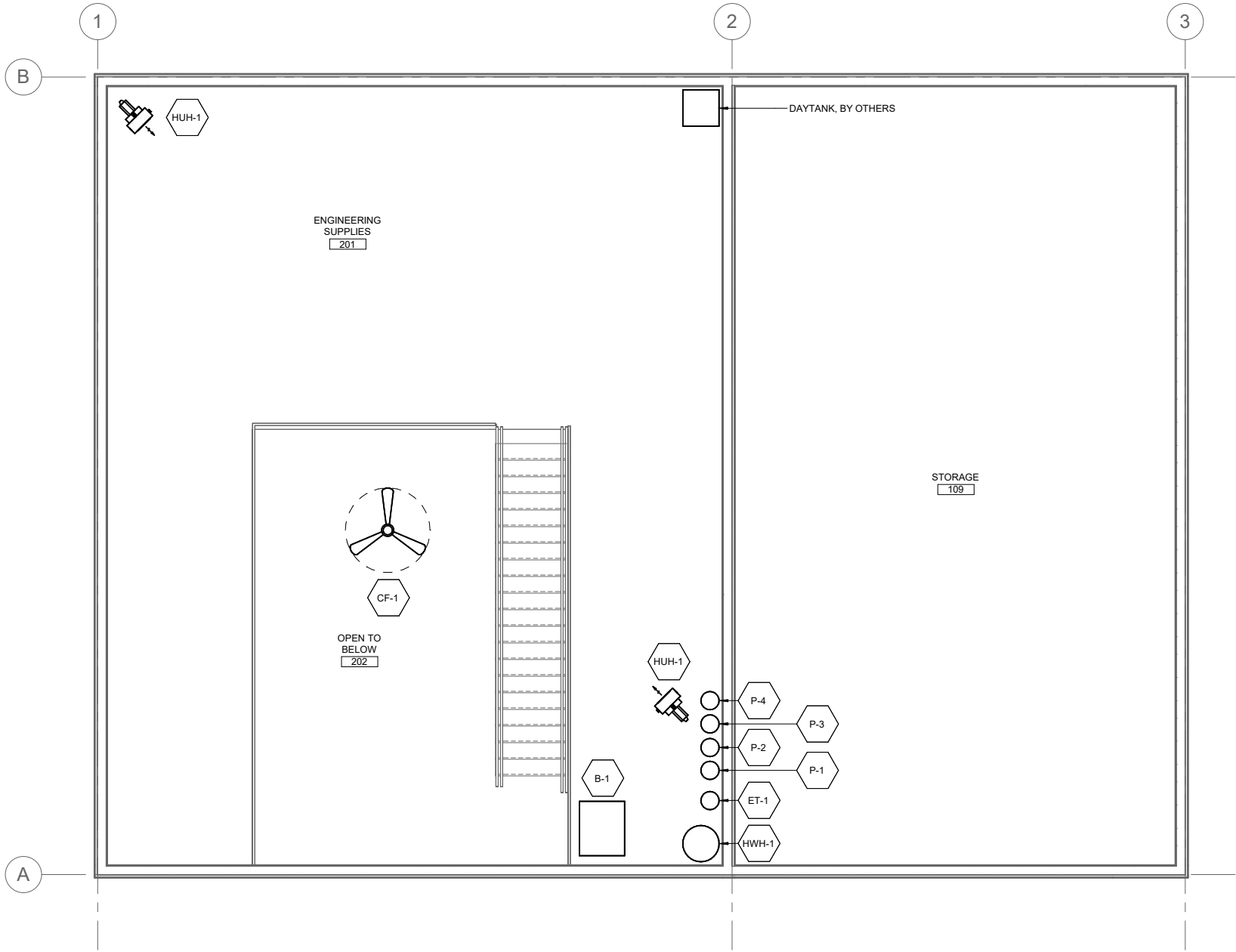
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SHEET NOTES

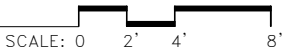
1. SHEET NOTES.

SHEET KEYNOTES #

1. SHEET KEYNOTES.



1 UTILITY BUILDING - SECOND FLOOR PLAN



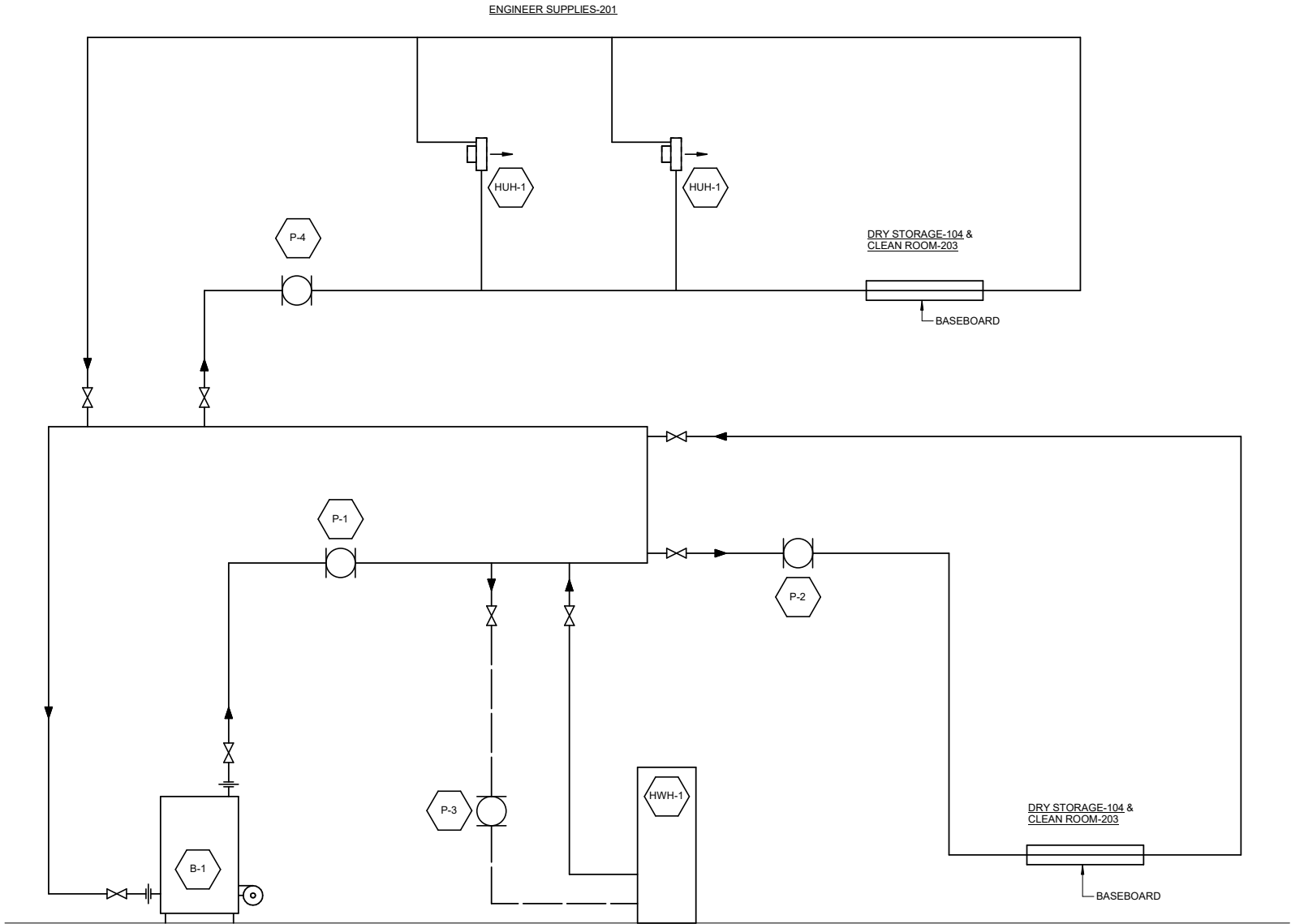
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FERRY TERMINAL
SECOND FLOOR PLAN
UTILITY BUILDING

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	8240	161



1

8240

BOILER DIAGRAM

SCALE: NO SCALE

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	8301	161

238200 - UNIT HEATER SCHEDULE												
NOTES:												
MARK	TYPE	CAPACITY (MBH)	CFM	OIL INPUT (GPH)	RPM	ELECTRICAL				BASIS OF DESIGN		COMMENTS
						HP	V	PH	HZ	MANUFACTURER	MODEL	
FUH-1	FUEL OIL UNIT HEATER	100	1890	0.85	1100	1/5	115	1	60	MODINE	POR100	
HUH-2	HYDRONIC UNIT HEATER	75	1510	-	1625	1/8	115	1	60	MODINE	HSB86L	SPARK PROOF MOTOR. CORROSION RESISTANT COATING.

233416 - FAN SCHEDULE											
NOTES: ESP VALUE INDICATED IS REQUIRED PRESSURE DOWNSTREAM OF DUCT CONNECTION TO FAN EQUIPMENT (I.E. EXCLUSIVE OF FAN CABINET AND DUCT OUTLET CONNECTION) ON DISCHARGE END.											
MARK	SERVICE	CFM	ESP (IN. WC)	ELECTRICAL DATA					BASIS OF DESIGN		COMMENTS
				HP	V	HZ	PH	CONTROL LER	MANUFACTURER	MODEL	
EF-1	CLASSIFIED VENTILATION	600	0.25	1/4	115	60	1	ECM	GREENHECK	CUE	ROOF MOUNTED EXHAUST FAN. SPARKPROOF MOTOR.
EF-2	UNCLASSIFIED VENTILATION	500	0.25	1/4	115	60	1	ECM	GREENHECK	AER	DIRECT DRIVE WALL MOUNT. WEATHERHOOD, BACKDRAFT DAMPER.

238200 - UNIT HEATER SCHEDULE												
NOTES:												
MARK	TYPE	CAPACITY (MBH)	CFM	OIL INPUT (GPH)	RPM	ELECTRICAL				BASIS OF DESIGN		COMMENTS
						HP	V	PH	HZ	MANUFACTURER	MODEL	
FUH-1	FUEL OIL UNIT HEATER	100	1890	0.85	1100	1/5	115	1	60	MODINE	POR100	
HUH-2	HYDRONIC UNIT HEATER	75	1510	-	1625	1/8	115	1	60	MODINE	HSB86L	SPARK PROOF MOTOR. CORROSION RESISTANT COATING.

235223 - BOILER SCHEDULE											
NOTES:											
MARK	TYPE	INPUT (MBH)	NET OUTPUT (MBH)	FUEL	PRV PRESSURE (PSI)	ELECTRICAL			BASIS OF DESIGN		COMMENTS
						HP	V	PH	MANUFACTURER	MODEL	
B-1	HYDRONIC	140	122	OIL	30		115	1	WEIL MCLAIN	WGO-4	

232123 - PUMP SCHEDULE											
NOTES:											
MARK	LOCATION	SERVICE	FLOW (GPM)	HEAD (FT)	FLUID	ELECTRICAL DATA			BASIS OF DESIGN		COMMENTS
						HP	V	PH	MANUFACTURER	MODEL	
P-1	MECHANICAL ROOM	B-1	15	15	WATER	1/8	115	1	TACO	00	

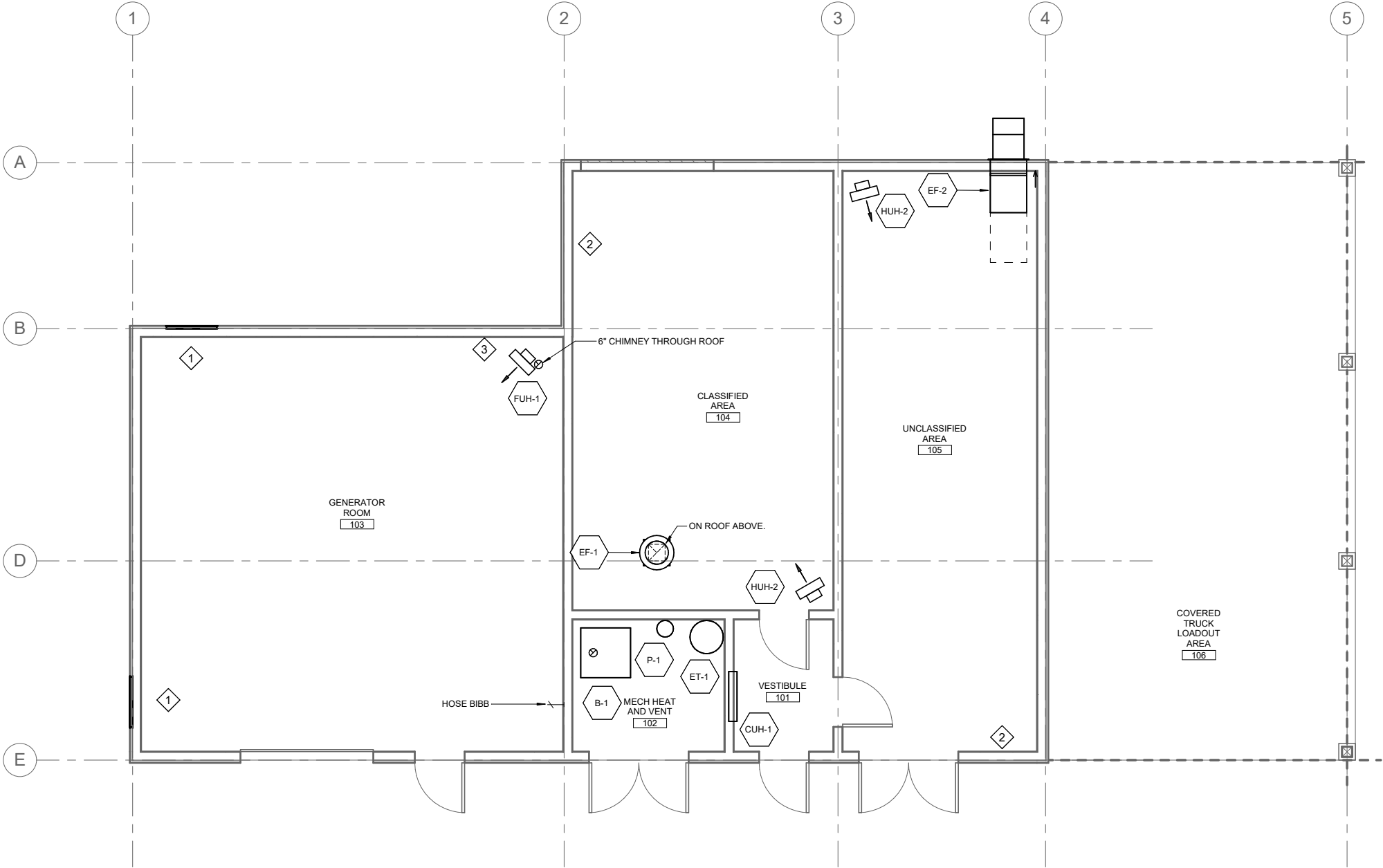
NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	8311	161

SHEET NOTES

1. SHEET NOTES.

SHEET KEYNOTES #

1. INSTALL DUCT COWLING FOR GENERATOR RADIATOR SYSTEM TO EXTERIOR LOUVER. SEE ELECTRICAL.
2. INSTALL 20"X12" RELIEF LOUVER.
3. INSTALL 48"X48" RELIEF LOUVER.



1 GENERATOR BUILDING - FLOOR PLAN

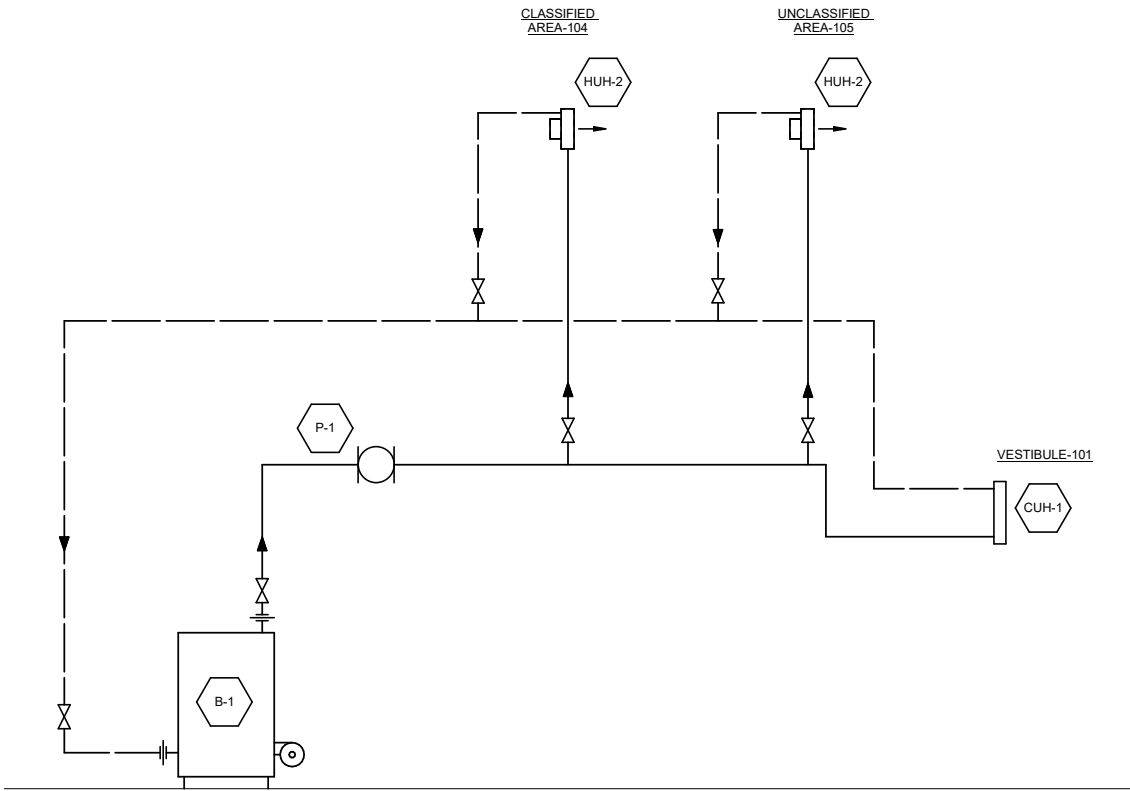
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GENERATOR BUILDING**

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	8340	161




1

8340

BOILER DIAGRAM

SCALE: NO SCALE




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DIAGRAMS
GENERATOR BUILDING**

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	8401	161



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SCHEDULES
WATER TREATMENT BUILDING**

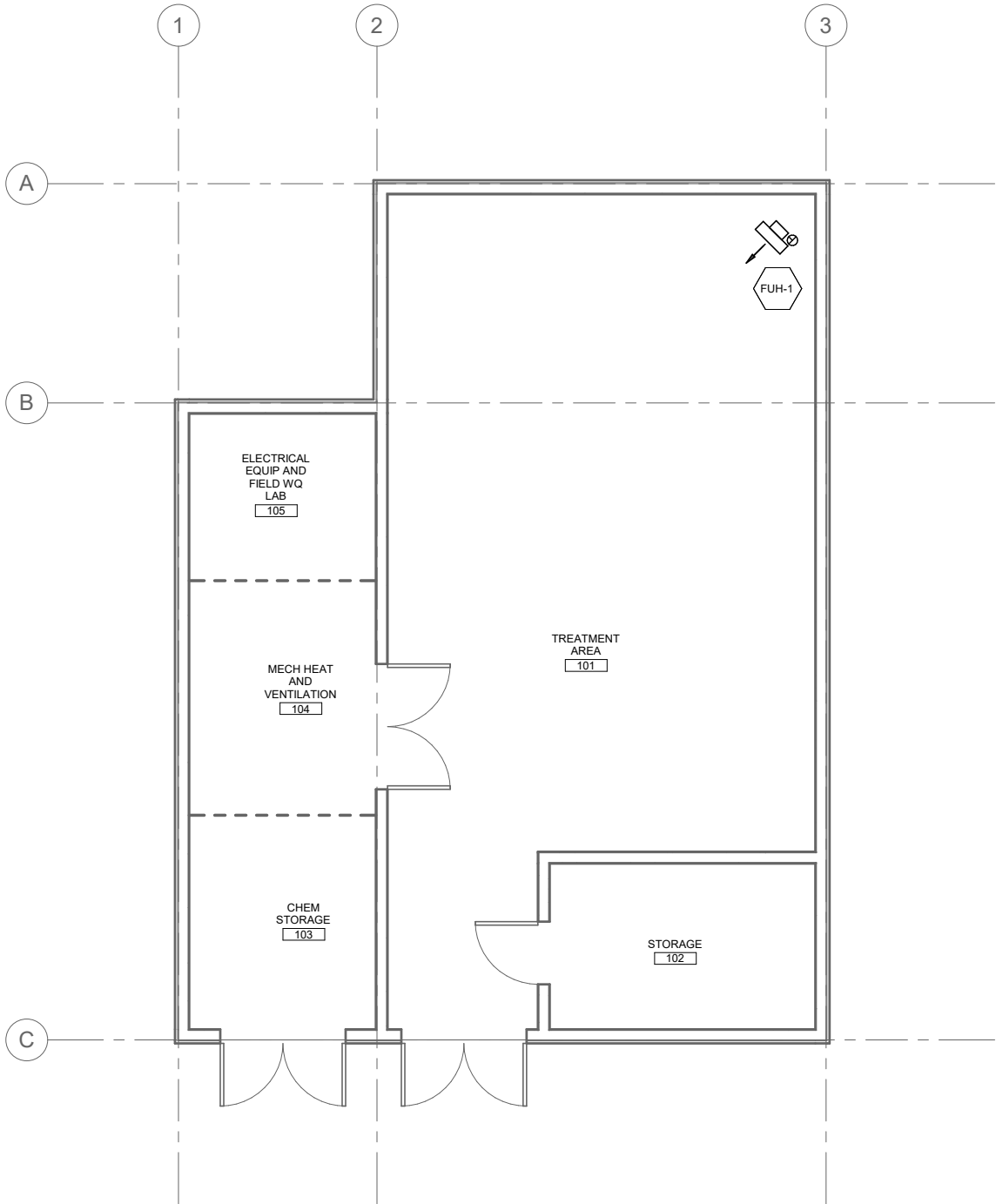
NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	HSHWY00015	2025	8411	161

SHEET NOTES

1. SHEET NOTES.


SHEET KEYNOTES #

1. SHEET KEYNOTES.



1 WATER TREATMENT BUILDING - FLOOR PLAN

SCALE: 0 2' 4' 8'



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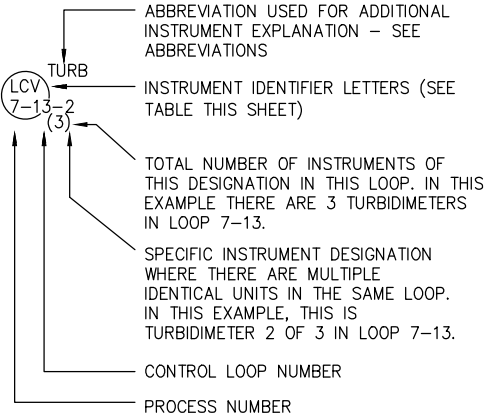
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FLOOR PLAN - PLUMBING

WATER TREATMENT BUILDING

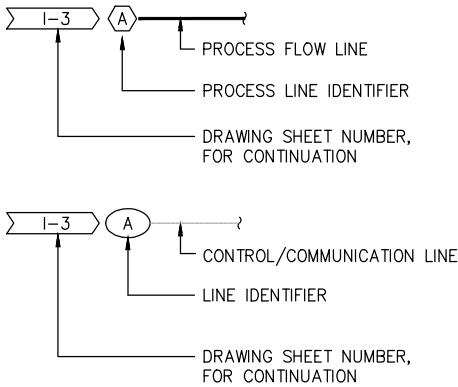
NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
				HSHWY00015	2025	9001	161

TYPICAL INSTRUMENT NUMBER



- INTERLOCK
- FLOW PACED RATIO CONTROL
- FIELD OR LOCAL MOUNTED INSTRUMENT
- PANEL MOUNTED INSTRUMENT
- INSTRUMENT COMMUNICATION AND/OR DEVICE CONTROL FROM PLC AT PRIMARY STATION

DIAGRAM INTERFACE LEGEND



NOTES:

- ◆ DESIGNATES ITEM TO BE FURNISHED BY OWNER, DELIVERED AND INSTALLED BY CONTRACTOR
- POINT OF CONNECTION TO OWNER FINISHED EQUIPMENT
- POINT OF CONNECTION TO EXISTING
- ◇ DESIGNATES ITEM TO BE FURNISHED AND INSTALLED BY CONTRACTOR
- (E) DESIGNATES EXISTING COMPONENT

INSTRUMENT LETTER DESIGNATION TABLE

LETTER	FIRST LETTER(S)		SUCCESSIVE LETTERS		
	PROCESS / INITIATING VARIABLE	MODIFIER	READOUT	OUTPUT	MODIFIER
A	ANALYSIS (+)		ALARM		AUTO
B	BURNER FLAME				
C	CONDUCTIVITY			CONTROL	
D	DENSITY				
E	VOLTAGE				
F	FLOW				
G	GAUGE				
H	HAND (MANUAL)				HIGH
I	CURRENT	INDICATOR			
J	POWER				
K	TIME, SCHEDULE			CONTROL	
L	LEVEL		LIGHT (PILOT)		LOW
M	MOTION	MOMENTARY			MIDDLE
N	–				
O	–	OFF			
P	PRESSURE / VACUUM				
Q	QUANTITY OR EVENT	INTEGRATE			
R	–				
S	SPEED OR FREQUENCY			SWITCH	
T	TEMPERATURE		TRANSDUCER		
U	MULTI-VARIABLE (+)				MULTIFUNCTION
V	VACUUM				
W	WEIGHT OR FORCE				
X	UNCLASSIFIED (+)			SEQUENCE	
Y	–			RELAY	
Z	POSITION				

LINE LEGEND

- PROCESS FLOW LINE, PRIMARY
- PROCESS FLOW LINE, SECONDARY
- CONTROL SIGNAL (ANALOG OR DISCRETE)
- ETHERNET COMMUNICATIONS LINK
- FLOW DIRECTION
- EQUIPMENT SKID LIMITS
- INSTRUMENT AIR

ABBREVIATIONS

AAV	AUTOMATIC AIR VENT
ABV	ABOVE
AC	AIR COMPRESSOR
AFF	ABOVE FINISH FLOOR
AIT	ANALYTICAL INDICATOR/TRANSMITTER
AR/vv	AIR RELIEF/ VACUUM VENT VALVE
BPV	BACKPRESSURE VALVE
BV	BALL VALVE
BW	BACKWASH
BWS	BACKWASH WATER SUPPLY
BWW	BACKWASH WASTE WATER
CC	CALIBRATION COLUMN
CF	CLEANING FEAD
CONN	CONNECTION
COND	CONDENSATE
CPVC	CHLORINATED POLY VINYL CHLORIDE
CW	COLD WATER
D	DRAIN
DPIT	DIFFERENTIAL PRESSURE INDICATOR/TRANSMITTER
DV	DRAIN VALVE
E, EX	EXISTING
F	FILTER
FCO	FLOW CONTROL ORIFICE
FCV	FLOW CONTROL VALVE
FD	FLOOR DRAIN
FLEX	FLEXIBLE
FIT	FLOW INDICATOR/TRANSMITTER
FQIT	FLOW INDICATOR/TOTALIZER/TRANSMITTER
FV	FLOW VALVE (OPEN CLOSE ONLY)
HS	HAND SWITCH
HV	HAND VALVE
HW	HOT WATER
HWS	HOT WATER SUPPLY
HWR	HOT WATER RETURN
L/R	LOCAL/REMOTE
LCP	LOCAL CONTROL PANEL
LIT	LEVEL INDICATOR TRANSMITTER
LPA	LOW PRESSURE AIR
LT	LEVEL TRANSMITTER
MP	MOTOR PANEL
MS	MOTOR STARTER
NFC	NANOFILTER CONCENTRATE
NPS	NATIONAL PARK SERVICE
NPW	NON-POTABLE WATER
NRV	NON-RETURN VALVE (CHECK VALVE)
OCL	HYPOCHLORITE
O/C	OPEN/CLOSE
OF	OVERFLOW
O/O	ON/OFF
P	PUMP
PI	PRESSURE INDICATOR
PLC	PROGRAMMABLE LOGIC CONTROLLER
POC	POINT OF CONNECTION
PE	POLYETHYLENE TUBING
PO4	ORTHOPHOSPHATE
PRDV	PRESSURE REDUCING VALVE
PSV	PRESSURE SAFETY VALVE
PV	PROCESS VALVE
PVC	POLYVINYL CHLORIDE
PW	PROCESS WATER
R	RECEIVER
RPBFP	REDUCED PRESSURE BACKFLOW PREVENTER
SA	SODA ASH
SCP	SCADA CONTROL PANEL
SI	SCALE INHIBITOR
SKH	SPEED CONTROL/ HAND
SW	SETTLED WATER
SS	STAINLESS STEEL
ST	STRAINER
STL	STEEL
SV	SOLENOID VALVE OR SAMPLE VALVE
T,TK	TANK
TC	TEMPERATURE CONTROLLER
TEMP	TEMPORARY
TT	TEMPERATURE TRANSMITTER
TURB	TURBIDITY
TYP	TYPICAL
TW	TREATED WATER
UF	ULTRAFILTRATION
V	VENT
VFD	VARIABLE FREQUENCY DRIVE
W1	POTABLE WATER
W2	NON POTABLE WATER
WC	WATER CLOSET
WW	WELL WATER
WWTP	WASTEWATER TREATMENT PLANT
ZC	POSITION CONTROL
ZSC	POSITION SWITCH CLOSED
ZSO	POSITION SWITCH OPEN

VALVES & PROCESS COMPONENTS

	GATE VALVE, MANUAL		BLOWER
	BALL VALVE, 2 WAY, MANUAL		PUMP
	BALL VALVE, 3 WAY, MANUAL		PUMP, CENTRIFUGAL
	CHECK VALVE, SWING CHECK		PUMP, GEAR
	CHECK VALVE, BALL CHECK POPPET VALVE		SAMPLE PORT
	GLOBE VALVE, MANUAL		PRESSURE SWITCH
	PLUG VALVE, MANUAL		FLOW SWITCH
	DIAPHRAGM VALVE, MANUAL		FLOW ELEMENT, MAGNETIC METER
	DIAPHRAGM VALVE, PNEUMATIC ACUTATION		FLOW ELEMENT, VORTEX METER
	DIAPHRAGM VALVE, PNEUMATIC, 3-WAY		FLOW ELEMENT, PADDLE WHEEL
	DIAPHRAGM VALVE, MOTOR ACTUATED		FLOW RATE INDICATOR, VARIABLE ORIFICE
	MOTOR-ACTUATED VALVE W/ TOGGLE SWITCH		FLOW CONTROL ORIFICE
	BUTTERFLY VALVE, MANUAL		LEVEL SENSOR, RADAR
	BUTTERFLY VALVE, MOTOR ACTUATED		LEVEL SENSOR, ULTRASONIC
	REDUCED PRESSURE BACKFLOW PREVENTER		ELECTRICAL SUPPLY CONTRACTOR PROVIDED
	BALL VALVE, MOTOR ACTUATED		DRY DISCONNECT DUAL BALL VALVES
	SPRING LOADED PRESSURE SAFETY VALVE		DIAPHRAGM SEAL
	PRESSURE REDUCING VALVE		PERISTALTIC PUMP
	PRESSURE GAUGE		PULSATION DAMPENER
	FILTER		SCREENED TANK VENT
	FLEX CONNECTION		REDUCER
	PIPE UNION		WYE STRAINER
	AUTOMATIC AIR VENT		INLINE STATIC MIXER
			DRAIN

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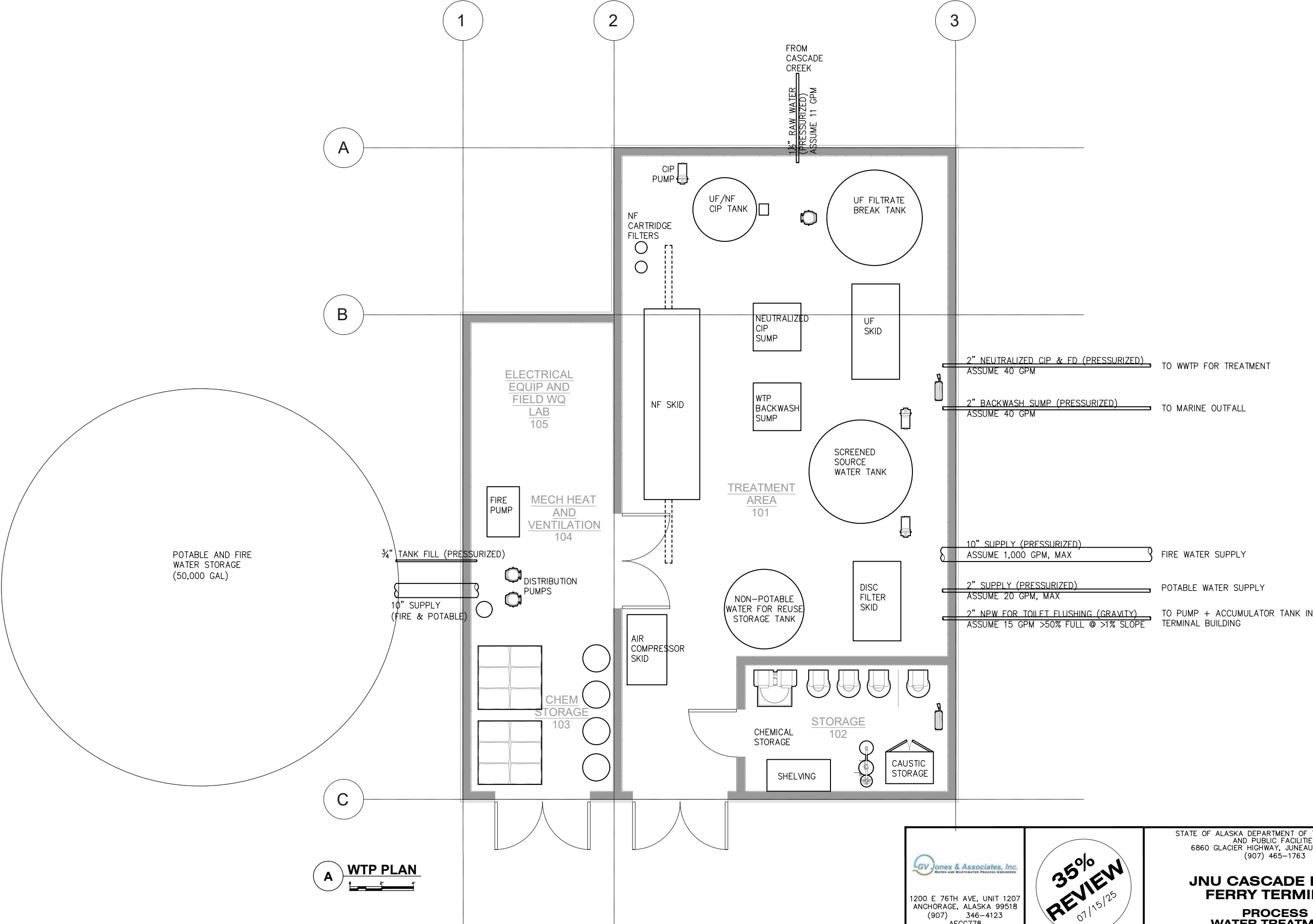
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**JNU CASCADE POINT
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**PROCESS
SYMBOLS, LEGENDS, &
ABBREVIATIONS**

FILE X:\Project Files\074. PND\074-03. Cascade Point\Miscellaneous\Drawings\CPFT.dwg DATE 7/14/2025 12:29 LAYOUT 9201 DESIGNED CHECKED DRAFTED

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
				HSHWY00015	2025	9201	161



A WTP PLAN

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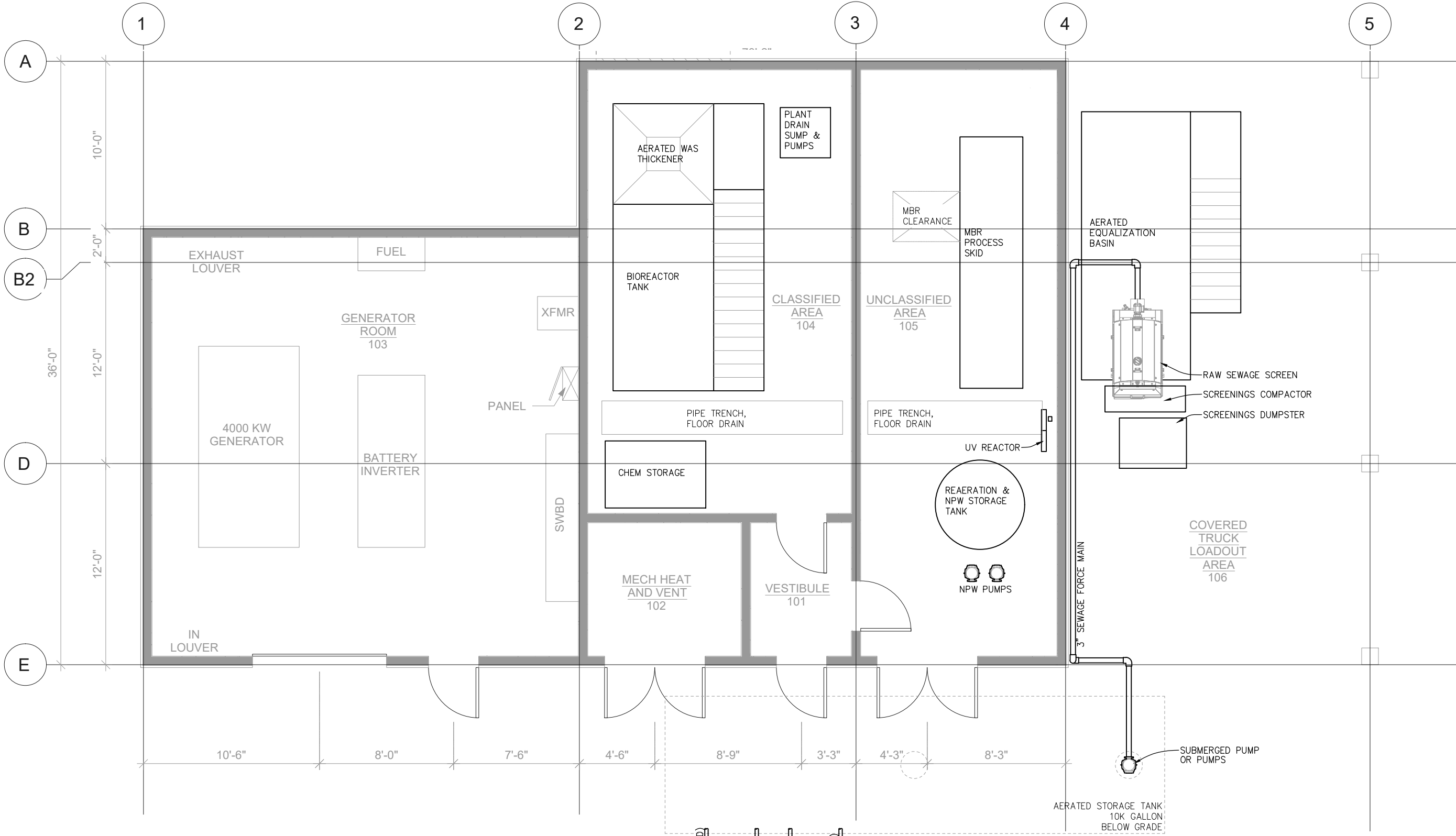
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**PROCESS
WATER TREATMENT
EQUIPMENT PLAN**

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
				HSHWY00015	2025	9202	161



A WWTP PLAN

2" WW NEUT CIP WTP (PRESSURIZED)
ASSUME 40 GPM (35 GPD)

2" WW VESSEL (PRESSURIZED)
ASSUME 40 GPM (2,000 GPD)

2" WW TERMINAL (PRESSURIZED)
ASSUME 40 GPM (930 GPD)

2" WW UTILITY BLDG (PRESSURIZED)
ASSUME 40 GPM (80 GPD)

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**JNU CASCADE POINT
FERRY TERMINAL**

**PROCESS
SEWAGE TREATMENT
EQUIPMENT PLAN**

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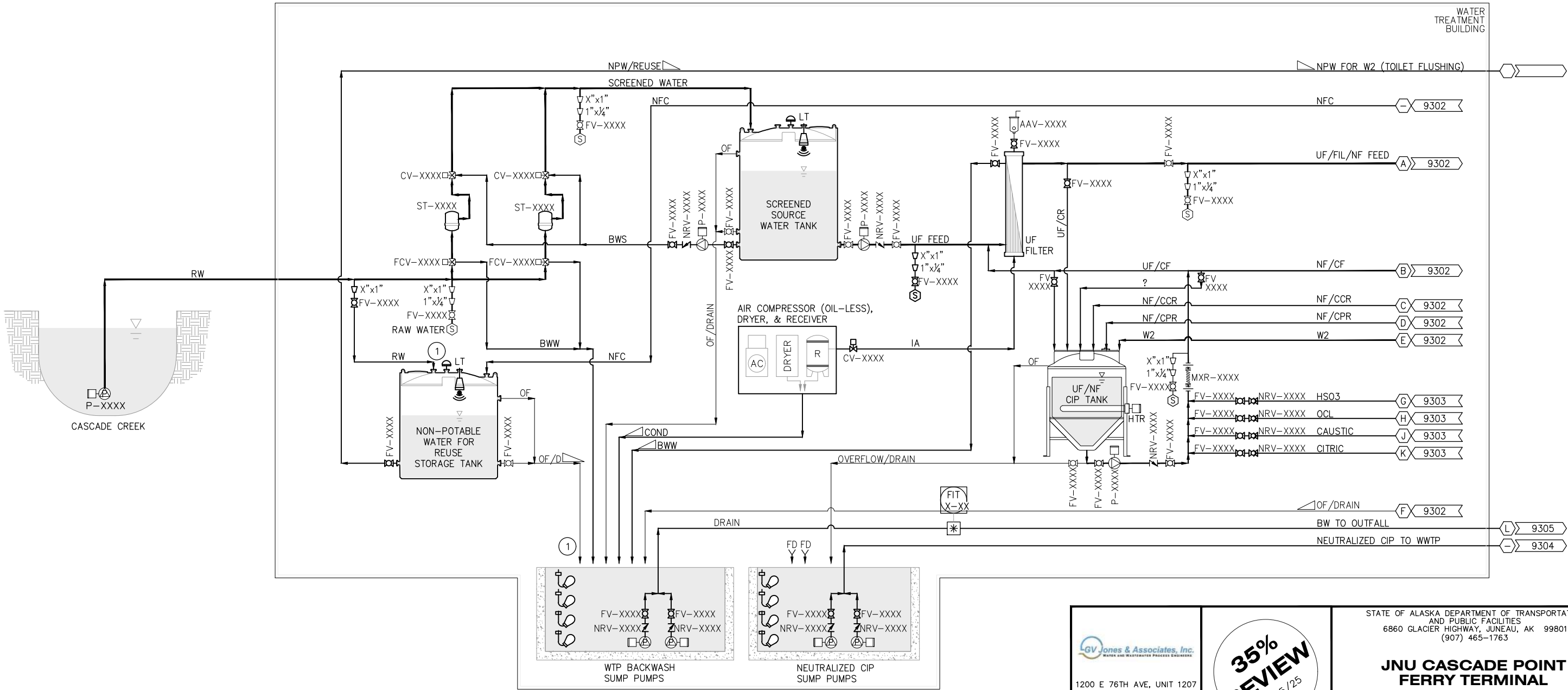
NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
				HSHWY00015	2025	9301	161

SHEET NOTES

- 1 AIR GAPS

(E) PLANT SCADA

CONTROL PANEL



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PROCESS
WATER TREATMENT P&ID

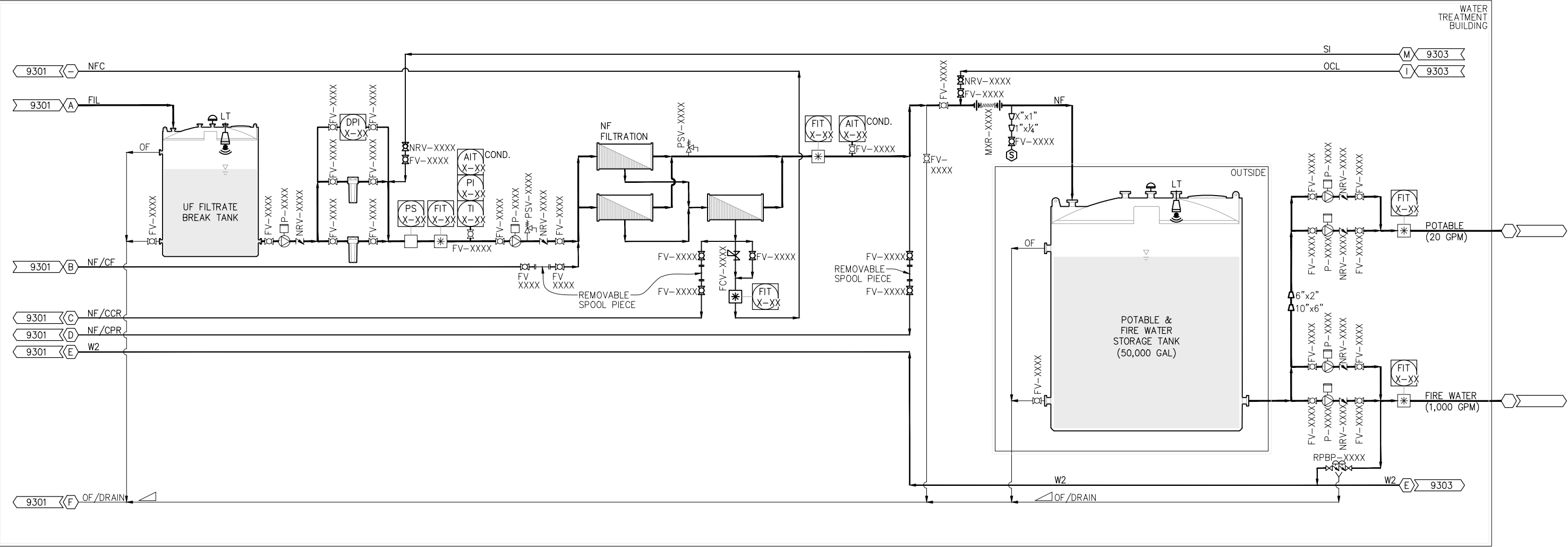
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NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
				HSHWY00015	2025	9302	161

(E) PLANT SCADA

CONTROL PANEL

SHEET NOTES



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**JNU CASCADE POINT
FERRY TERMINAL**

**PROCESS
WATER TREATMENT P&ID**

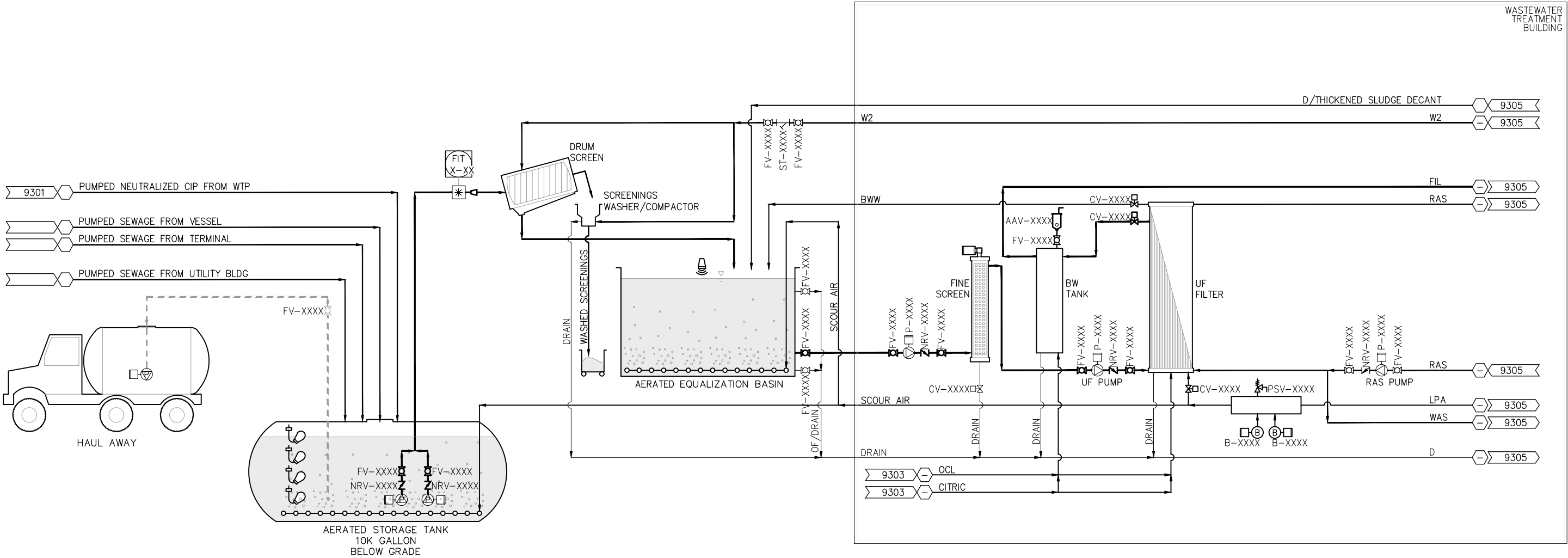
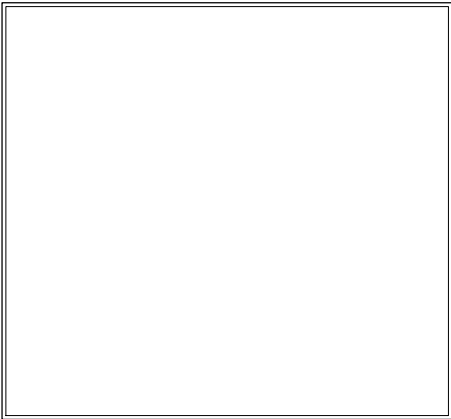
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NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
				HSHWY00015	2025	9304	161

SHEET NOTES

(E) PLANT SCADA

CONTROL PANEL



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FERRY TERMINAL**

**PROCESS
SEWAGE TREATMENT P&ID**

FILE X:\Project Files\074. PND\074-03. Cascade Point\Miscellaneous\Drawings\CPFT.dwg DATE 7/14/2025 12:29 LAYOUT 9305 DESIGNED CHECKED DRAFTED

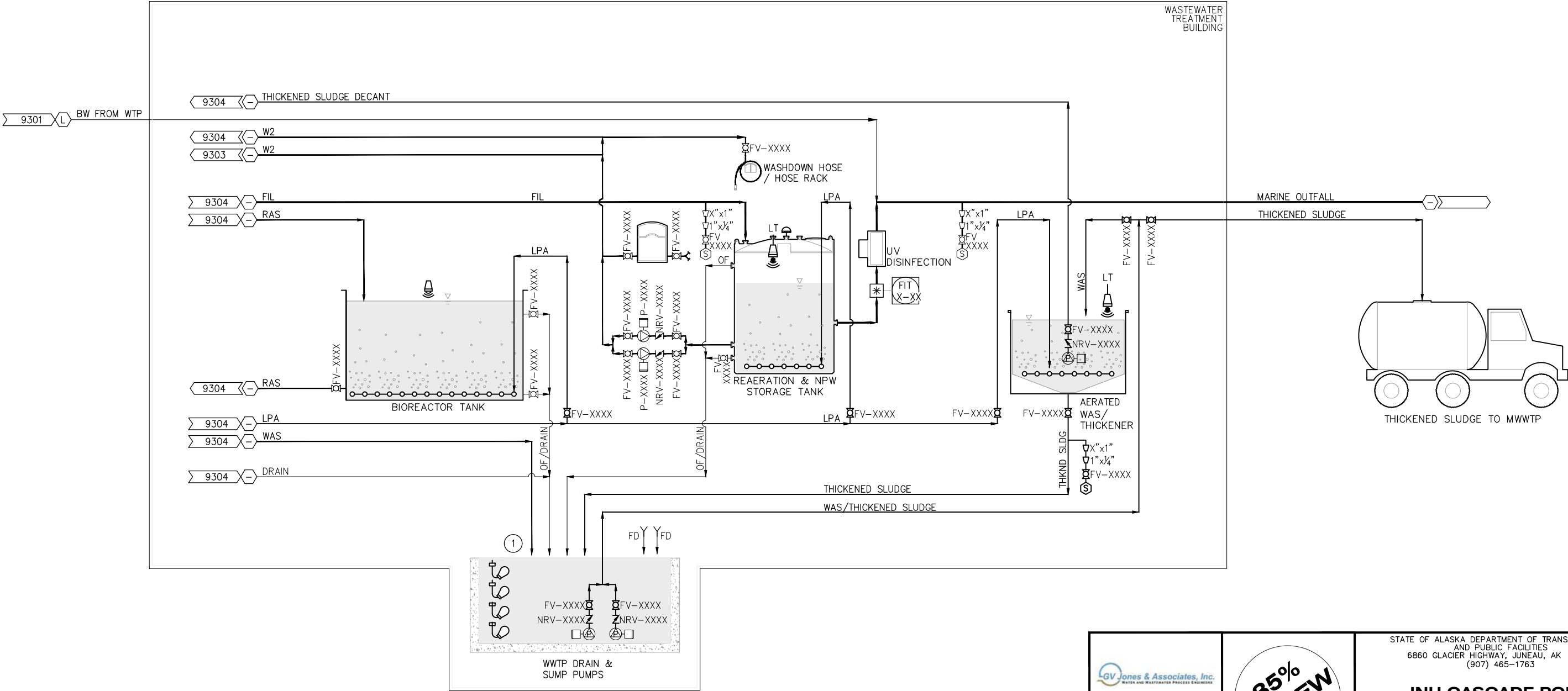
NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
				HSHWY00015	2025	9305	161

(E) PLANT SCADA

CONTROL PANEL

SHEET NOTES

1 AIR GAPS



GV Jones & Associates, Inc.
WATER AND WASTEWATER PROCESS ENGINEERS
1200 E 76TH AVE, UNIT 1207
ANCHORAGE, ALASKA 99518
(907) 346-4123
AEC778

35%
REVIEW
07/15/25

STATE OF ALASKA DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
6860 GLACIER HIGHWAY, JUNEAU, AK 99801
(907) 465-1763

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