# JNU FLOAT POND IMPROVEMENTS

## **VOLUME III of III**

Contract No. BE18-053

File No. 2011

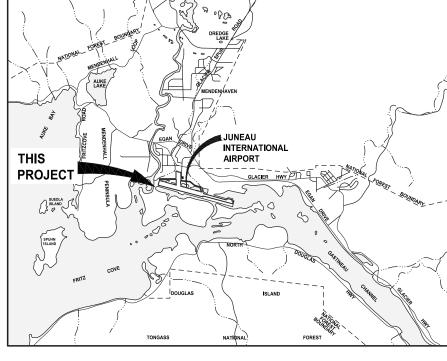


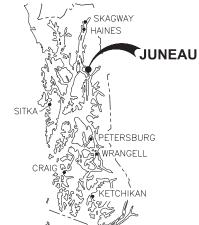
## **CITY & BOROUGH OF JUNEAU, ALASKA** JUNEAU INTERNATIONAL AIRPORT JNU FLOAT POND IMPROVEMENTS

**CBJ CONTRACT NO. BE18-053** 









**VICINITY MAP** 

**SOUTHEAST ALASKA** 

#### **TIDAL DATA**

SOURCE: NOAA NOS/CO-OPS STATION ID:

9452210 JUNEAU, ALASKA							
DESCRIPTION	ELEV. (FT.)						
HIGHEST OBSERVED WATER LEVEL	+24.58						
USACE HIGH TIDE LINE (HTL)	+20.6						
MEAN HIGHER HIGH WATER (MHHW)	+16.30						
MEAN HIGH WATER (MHW)	+15.34						
MEAN SEA LEVEL (MSL)	+8.56						
MEAN TIDE LEVEL (MTL)	+8.47						
MEAN LOW WATER (MLW)	+1.60						
MEAN LOWER LOW WATER (MLLW)	0.00						
LOWEST OBSERVED WATER LEVEL	-6.12						

DRAWING INDEX						
TITLE						
GENERAL						
COVER SHEET, VICINITY MAP AND DRAWING INDEX						
GENERAL PROJECT INFORMATION AND SURVEY CONTROL						
EXISTING CONDITIONS AND DEMOLITION PLAN						
CONSTRUCTION STAGING AND SAFETY PLAN OVERALL VIEW						
CIVIL						
SITE PLAN AND SEQUENCING						
SHUT-OFF VALVE ASSEMBLY DETAILS						
SHUT-OFF VALVE VAULT AND EARTHWORK DETAILS						
SHUT-OFF VALVE VAULT CONCRETE DETAILS						
DETAILS						
FENCE DETAILS						
TEMPORARY EXCAVATION PLAN						
TEMPORARY EXCAVATION SECTION						
SLIPLINE						
SLIPLINE DRAWING						
ELECTRICAL						
EXISTING OVERALL SITE PLAN, POWER & LIGHTING PLAN						
EQUIPMENT DETAIL AND SINGLE LINE DIAGRAM						

PND ENGINEERS, INC. (PND) IS NOT RESPONSIBLE FOR SAFETY PROGRAMS, METHODS OR PROCEDURES OF OPERATION, OR THE CONSTRUCTION OF THE DESIGN SHOWN ON THESE DRAWINGS. DRAWINGS ARE FOR THE USE OF THIS PROJECT ONLY AND ARE NOT INTENDED FOR REUSE WITHOUT WRITTEN APPROVAL FROM PND. DRAWINGS ARE ALSO NOT TO BE USED IN ANY MANNER THAT WOULD CONSTITUTE A DETRIMENT DIRECTLY OR INDIRECTLY TO PND.



		REVISIONS				_
REV.	DATE	DESCRIPTION	DWN.	CKD.	APP.	
						ĺ.









360 Glacier Highway Suite 100

AS SHOWN

DESIGN: TCB CHECKED: TCB DRAWN: WRB APPROVED: CRS



JUNEAU INTERNATIONAL AIRPORT JNU FLOAT POND IMPROVEMENTS **CONTRACT NO. BE18-053** 

**COVER SHEET, VICINITY MAP AND DRAWING INDEX** 

PND PROJECT #: 172077

G1

MAX

MFR

МН

MJ

MIN

MTF

PER

POC PRC PSF PVC

SSMH

ST STA

STD SW SY

TYP

MIIW

MAXIMUM MATCH EXISTING

MANHOLE

MINIMUM

MANUFACTURE (R)

MECHANICAL JOINT

MATCH TO EXISTING

NOT IN CONTRACT

OVERHEAD ELECTRICAL

POINT OF CURVATURE

POLY-VINYL CHLORIDE

POINT OF REVERSE CURVATURE

POUNDS PER SQUARE FOOT

NOT TO SCALE

ON CENTER

PERIMETER

RADIUS

REQUIRED

STREET

STATION

STANDARD

SQUARE YARD

SIDEWALK

THICK

TYPICAL

VALVE BOX

VERTICAL

WATERLINE WATER VALVE

WASTEWATER

WFST

WITH

PACKED JOINT

RIM ELEVATION

SOUTH SMOOTH

STORM DRAIN

SQUARE FEET

STAINLESS STEEL OR

STORM DRAIN MANHOLE

SANITARY SEWER MANHOLE

UNLESS NOTED OTHERWISE

SANITARY SEWER

POINT ON CURVE

MALE IRON PIPE THREAD

MEAN LOWER LOW WATER

**ABBREVIATIONS** ACP ASPHALT CONCRETE PAVEMENT AMERICANS WITH DISABILITIES ADA ALI. ADDITIVE ALTERNAT ALUM ALUMINUM APPROXIMATE BTM BOTTOM СB CATCH BASIN CITY & BOROUGH OF JUNEAU CUBIC FEET PER SECOND CENTER LINE CONC. CONCRETE CONTROL POINT CONNECT TO EXISTING CTE CUBIC YARD DUCTILE IRON DUCTILE IRON PIPE DR DTL DRIVE DETAIL FAST ELECTRO-FUSION EJIW EAST JORDAN IRON WORKS ELEVATION ELECTRICAL EDGE OF PAVEMENT FW FACH WAY FACE OF CURB FINISHED GRADE FIRE HYDRANT FORCE MAIN SEWER FLOWLINE OR FLANGE GAL VANIZED GAL V GRADE BREAK GALLONS PER MINUTE HOT-DIPPED GALVANIZED HIGH DENSITY POLYETHYLENE HMA HOT MIX ASPHALT IN ACCORDANCE WITH IAW

INVERT ELEVATION

LENGTH

LINEAR FFFT

LUMP SUM

**GENERAL NOTES** 

- PROPERTY DISTURBED DURING CONSTRUCTION SHALL BE RESTORED TO ITS PRE-CONSTRUCTION CONDITION OR BETTER AT NO
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLYING WITH APPROVED PERMITS, TIMELINES AND STIPULATIONS LISTED FOR CONSTRUCTION OF PROJECT AND FOR ADHERING TO ALL APPLICABLE, LOCAL, STATE AND FEDERAL CODES AND SAFETY
- THE LOCATIONS AND ELEVATIONS OF EXISTING FEATURES AND UTILITIES SHOWN ON THE DRAWINGS ARE APPROXIMATE. UTILITIES SHOWN ARE TAKEN FROM EXISTING RECORDS AND OTHER SOURCES. ADDITIONAL UTILITIES MAY BE PRESENT HOWEVER ARE NOT SHOWN. THE CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS IN THE FIELD AS NECESSARY PRIOR TO BEGINNING WORK. THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL UTILITIES ENCOUNTERED IN THE FIELD SHALL BE RECORDED ON THE CONTRACTOR'S RECORD DRAWINGS. CONTACT LOCAL UTILITIES AT THE FOLLOWING NUMBERS FOR LOCATE SERVICE A MINIMUM OF TWO BUSINESS DAYS PRIOR TO ANY EXCAVATION:

### **DIAL BEFORE YOU DIG!** 586-1333

UNDERGROUND POWER, TELEPHONE, T.V., COMMUNICATIONS, WATER AND WASTEWATER LINES ARE IN THE AREA. UTILITIES SHOWN HERE DO NOT

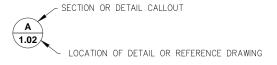
#### **DIAL BEFORE YOU DIG!** 811

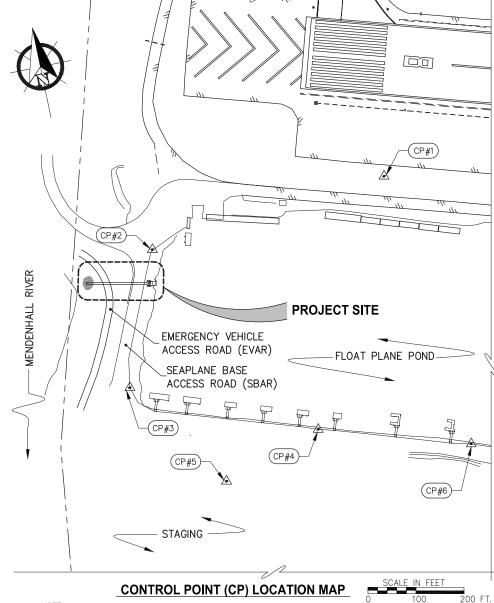
UNDERGROUND POWER, TELEPHONE, T.V., COMMUNICATIONS, WATER AND WASTEWATER LINES ARE IN THE AREA. UTILITIES SHOWN HERE DO NOT SUBSTITUTE FOR FIELD LOCATES

- THE CONTRACTOR SHALL NOT DISRUPT UTILITY SERVICES EXCEPT AS REQUIRED TO COMPLETE THE RECONFIGURATION OF THOSE SERVICES AS SHOWN IN THE PLANS. COORDINATE ANY DISRUPTIONS WITH OWNER AND NOTIFY AFFECTED RESIDENTS A
- PROTECT ALL EXISTING UTILITIES DURING CONSTRUCTION. NO ASSURANCE IS GIVEN THAT THE INDICATED POSITION OF ANY EXISTING UTILITY IS CORRECT OR THAT THE INFORMATION IS COMPLETE. ALL LOCATIONS OF EXISTING UTILITIES ARE APPROXIMATE AND IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE CORRECT AND TRUE LOCATION AS TO AVOID DAMAGE OR DISTURBANCE. DAMAGE TO EXISTING SITE FACILITIES SHALL BE REPAIRED BY THE CONTRACTOR AT NO
- 6. GRADING AND ALIGNMENT OF PIPE, STRUCTURES & FINAL SURFACING ARE SUBJECT TO MINOR REVISIONS BY THE ENGINEER TO FIT SITE CONDITIONS. GRADE ALL IMPROVEMENTS WITH POSITIVE DRAINAGE TO DITCHES, SWALES OR STORM DRAIN INLETS.
- 7. ALL ITEMS DESIGNATED TO BE REMOVED SHALL BE DISPOSED OF AT CONTRACTOR—PROVIDED DISPOSAL SITE, APPROVED BY THE ENGINEER, EXCEPT AS NOTED.
- MINOR FITTINGS AND VARIOUS SYSTEM APPURTENANCES NOT SHOWN MAY BE REQUIRED TO CONSTRUCT SYSTEMS. CONTRACTOR SHALL USE INDUSTRY STANDARD PRACTICES TO ACHIEVE ALL CONNECTIONS NOT DETAILED IN ACCORDANCE WITH THE SPECIFICATIONS AND CONSISTENT WITH APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS PER ENGINEER DIRECTION (INCIDENTAL).
- 9. MATCH EXISTING GRADES AT PROJECT LIMITS AND WHERE REQUIRED TO MATCH ELEVATIONS AT EXISTING ROADS.

#### **LEGEND**

EXISTING	PROPOSED	
		CENTERLINE
		PROPERTY LINE
		EDGE ACP OR GRAVEL ROADWAY
- X — X — X –	- X — X — X –	FENCE
	— Е —	UNDERGROUND ELECTRIC LINE
ss <sub>x</sub>		SANITARY SEWER
		MONUMENT OR SURVEY MARK
þ þ		SIGNS
		PAVEMENT





NOTE:
1. SURVEY PERFORMED BY CHILKAT SURVEYING AND MAPPING, AUGUST 2017.

2. PROPERTY LINES USED IN THESE PLANS ARE DERIVED FROM RECORDED PLATS AND DO NOT REPRESENT A BOUNDARY SURVEY.

	PROJECT CONTROL POINTS						
POINT	NORTHING	EASTING	ELEVATION	DESCRIPTION			
CP#1	50327.609	44681.673	24.83	JNU-D			
CP#2	50261.552	44179.726	19.62	MAG NAIL			
CP#3	49986.597	44083.106	18.72	12" SPIKE			
CP#4	49832.406	44454.293	18.32	12" SPIKE			
CP#5	49759.245	44247.764	21.75	12" SPIKE			
CP#6	49746.817	44763.018	18.18	6" SPIKE			



REVISIONS DATE DWN. CKD. APP. WRB PLR 1 8/15/18 ADDITIVE ALTERNATE CRS



DRAWN: WRB



DESIGN: TCB CHECKED: TCB



APPROVED: CRS



AS SHOWN

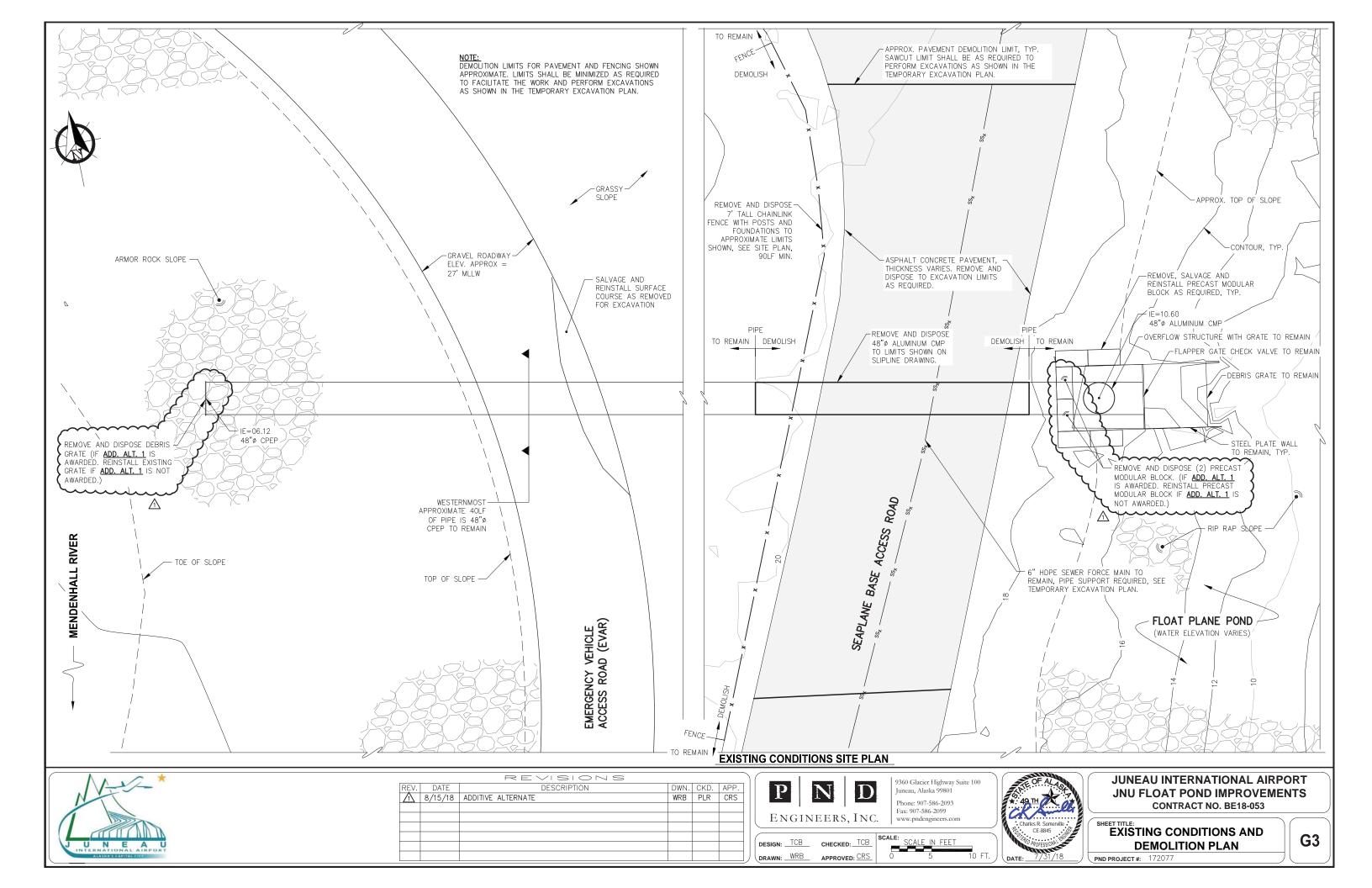
Fax: 907-586-2099 ENGINEERS, INC. www.pndengineers.c

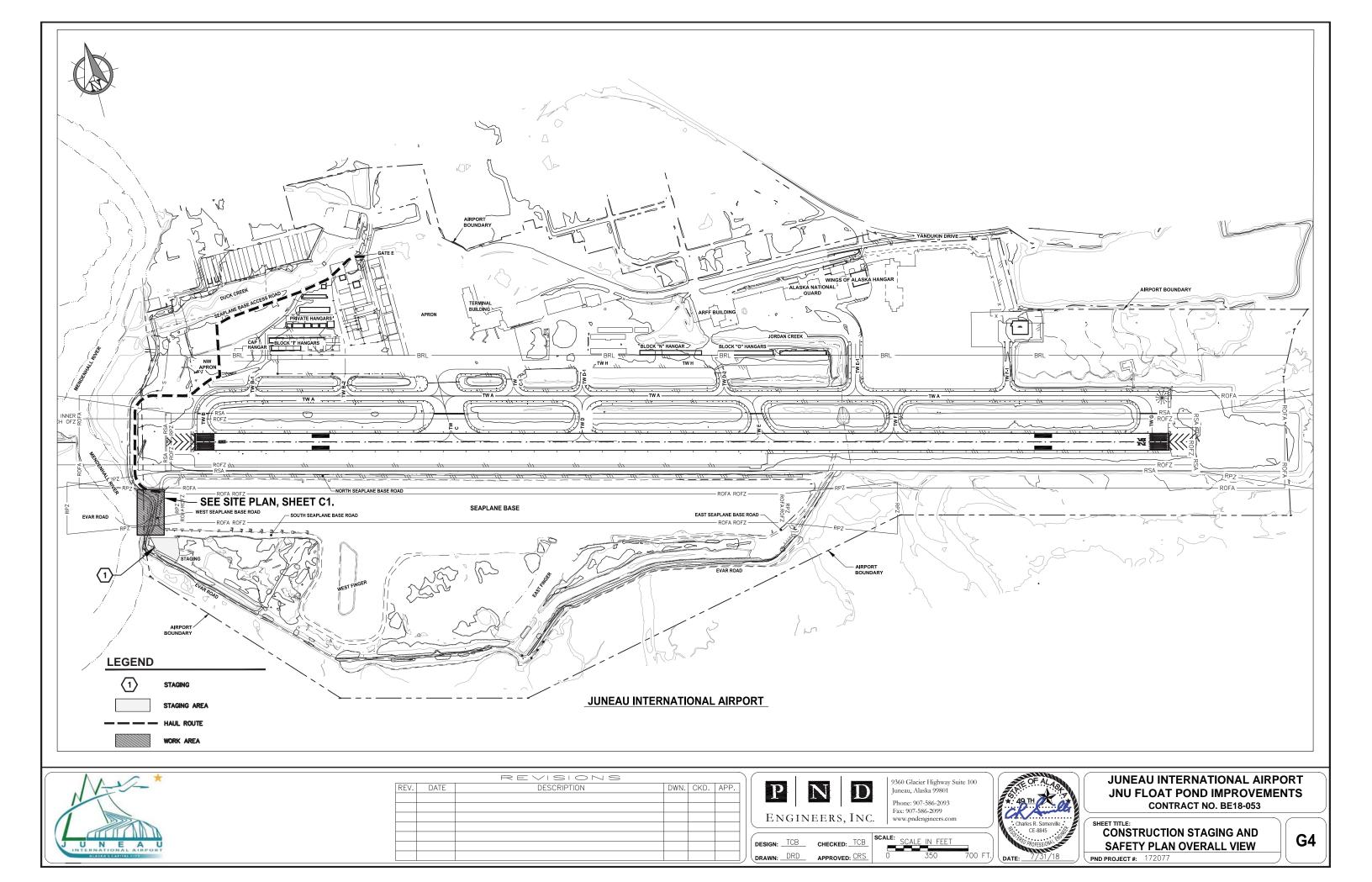
JUNEAU INTERNATIONAL AIRPORT JNU FLOAT POND IMPROVEMENTS **CONTRACT NO. BE18-053** 

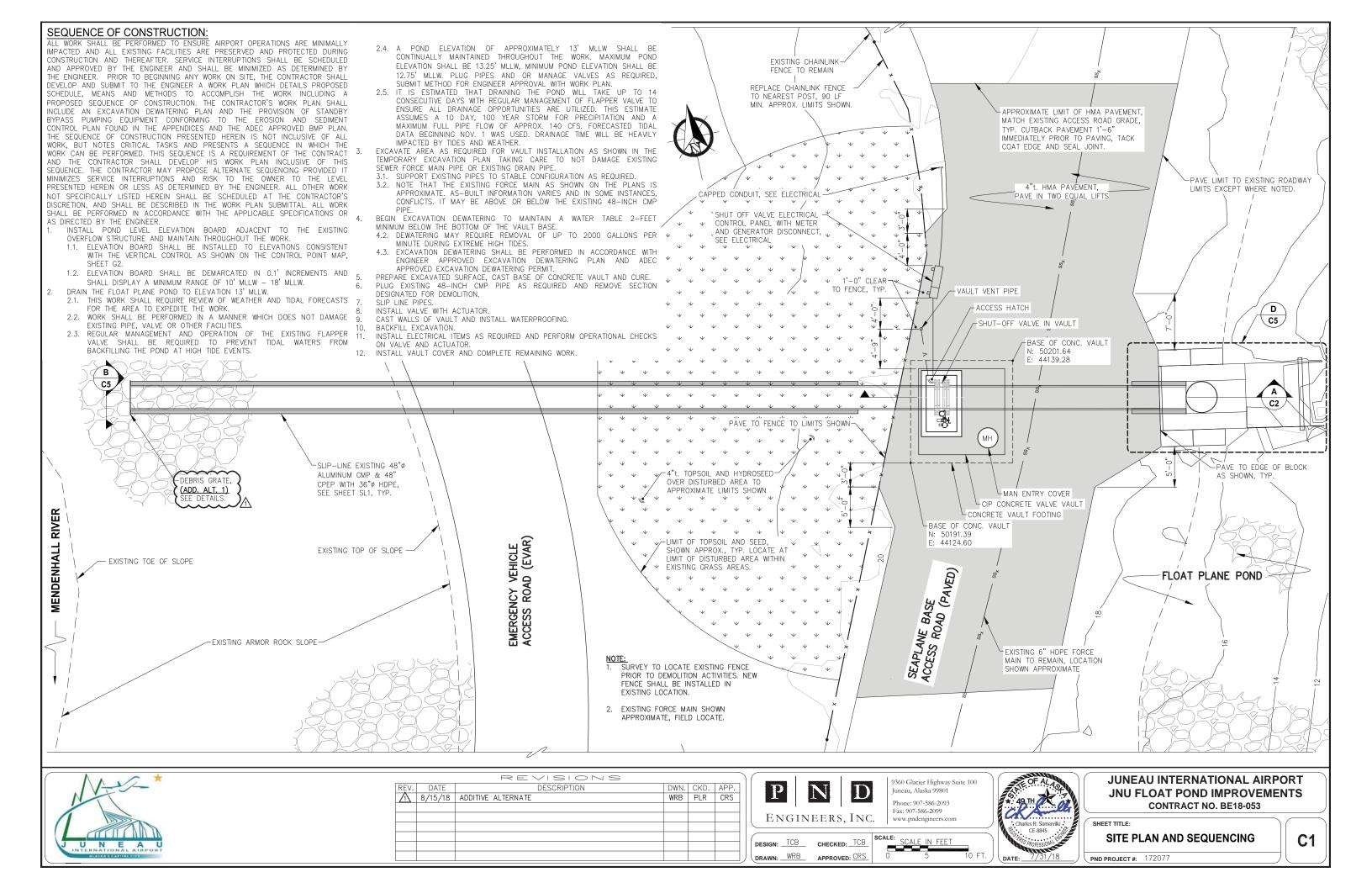
**GENERAL PROJECT INFORMATION** AND SURVEY CONTROL

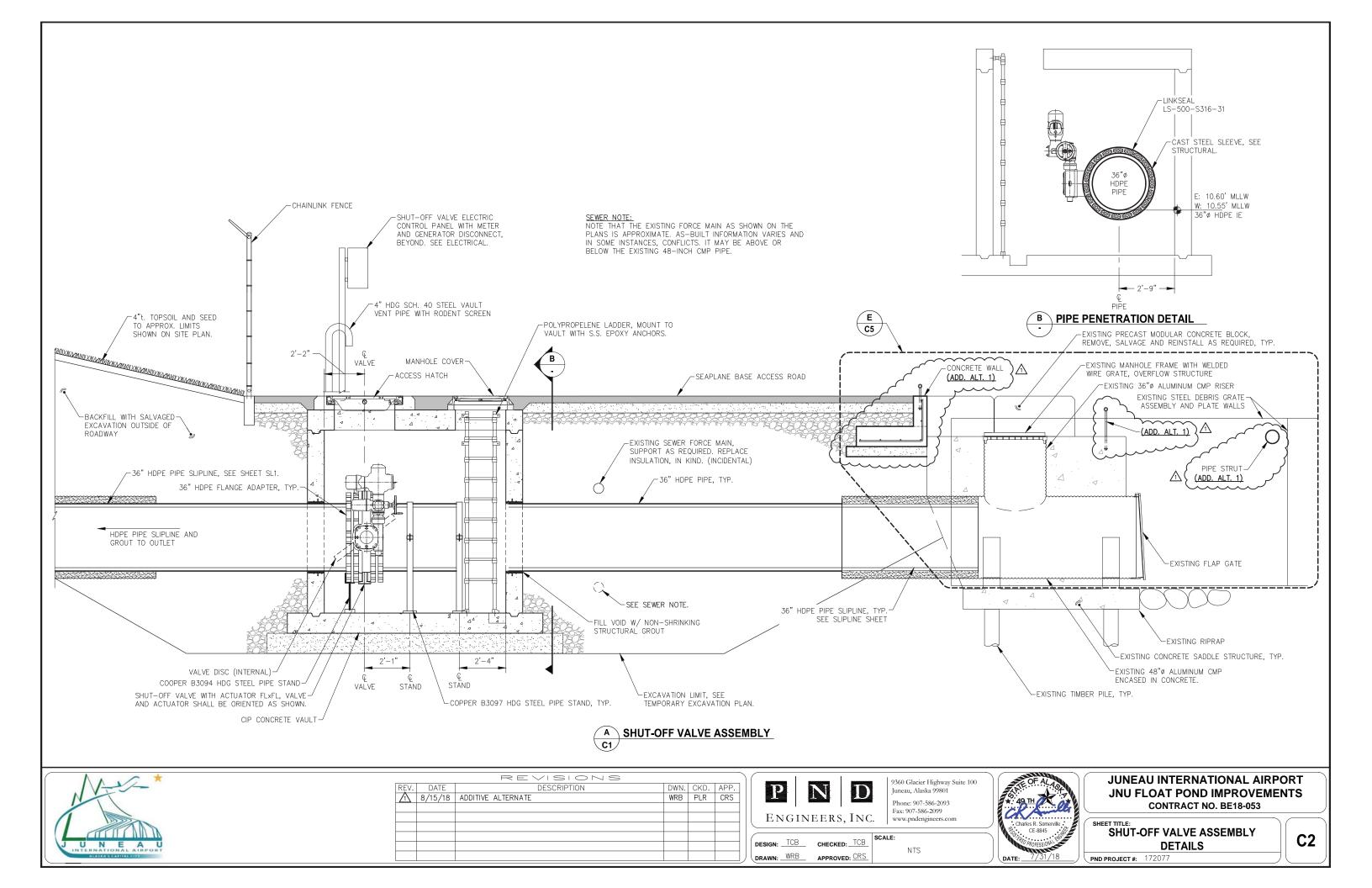
PND PROJECT #: 172077

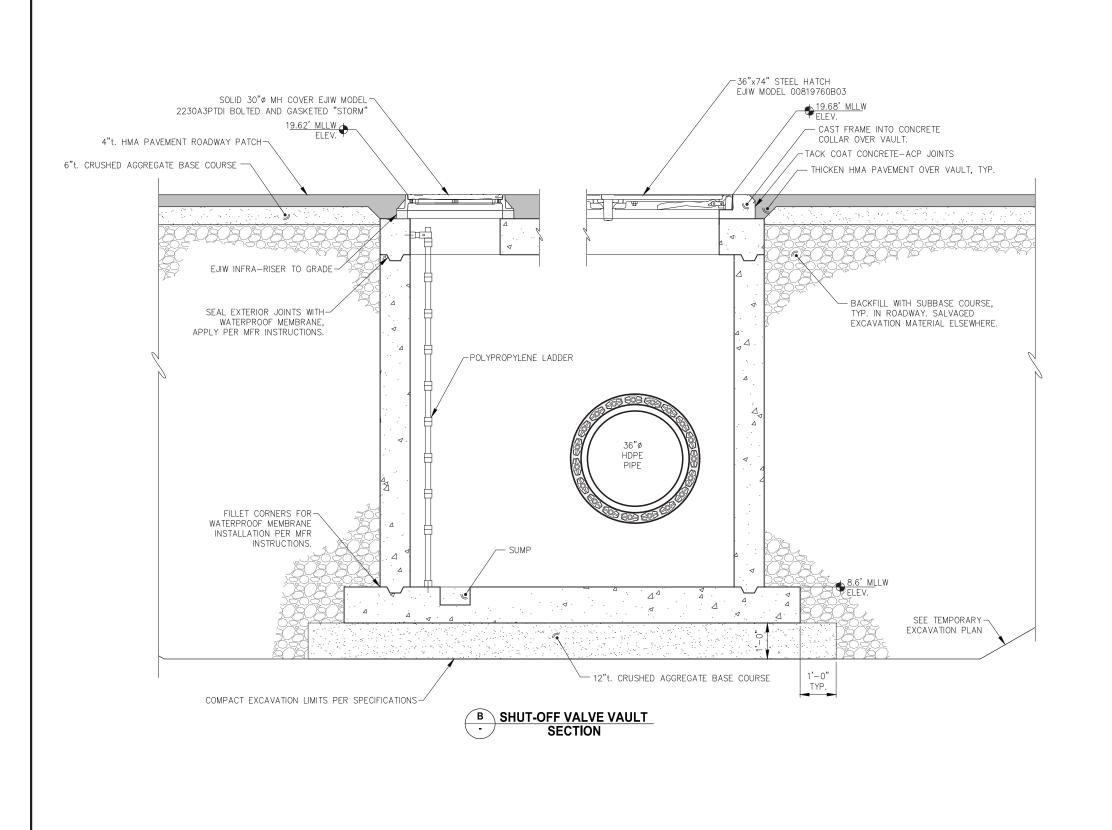
G2

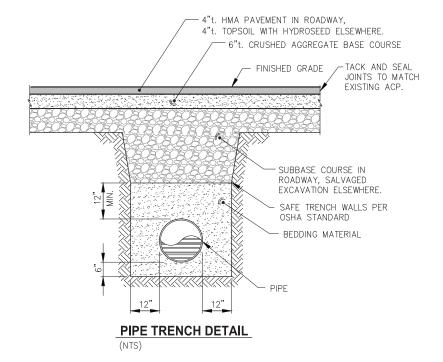














REVISIONS REV. DATE DESCRIPTION DWN. CKD. APP.









9360 Glacier Highway Suite 100 Juneau, Alaska 99801 Phone: 907-586-2093 Fax: 907-586-2099

ENGINEERS, INC. www.pndengineers.con DESIGN: TCB CHECKED: TCB DRAWN: WRB APPROVED: CRS

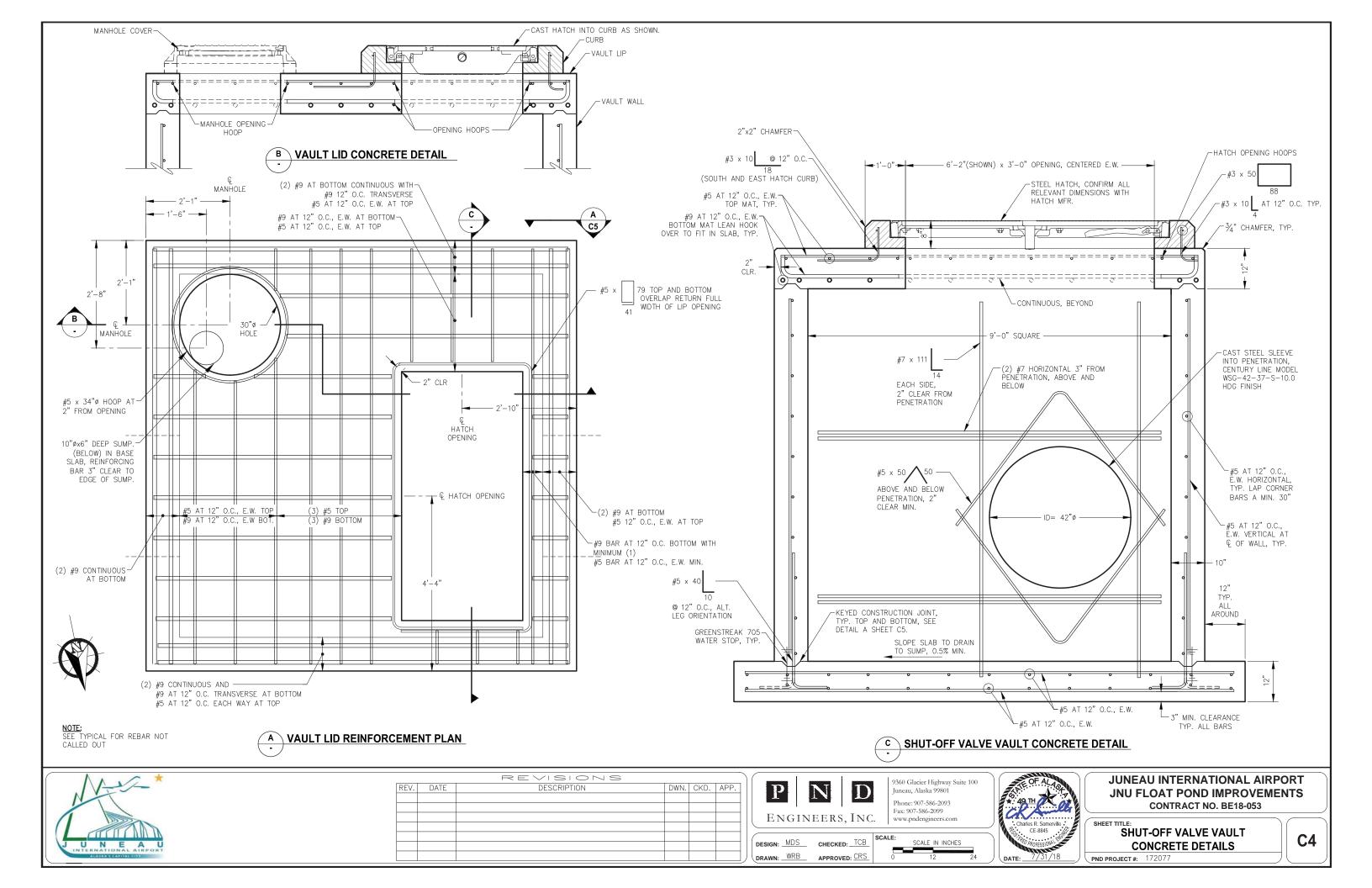


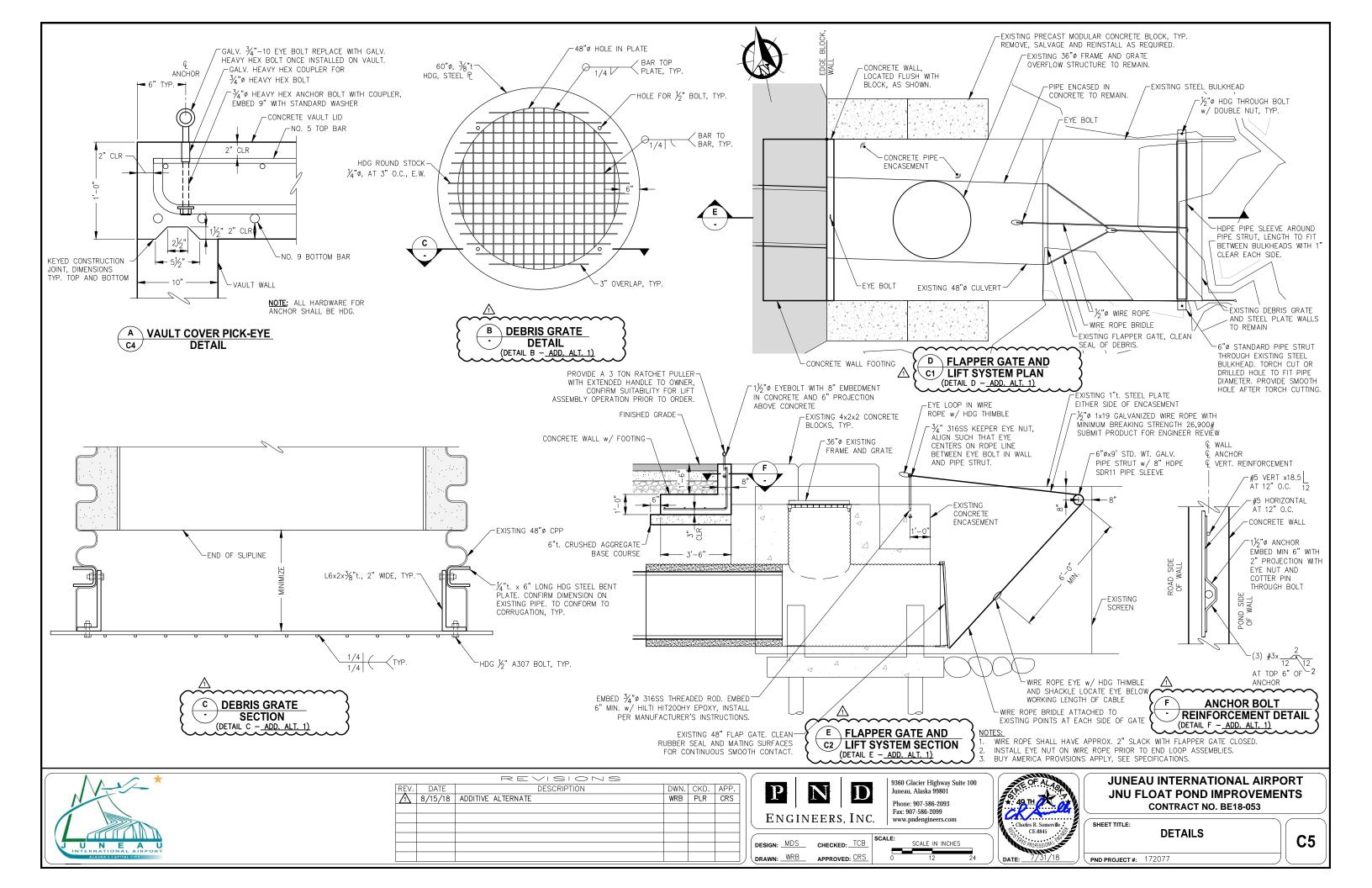
JUNEAU INTERNATIONAL AIRPORT JNU FLOAT POND IMPROVEMENTS **CONTRACT NO. BE18-053** 

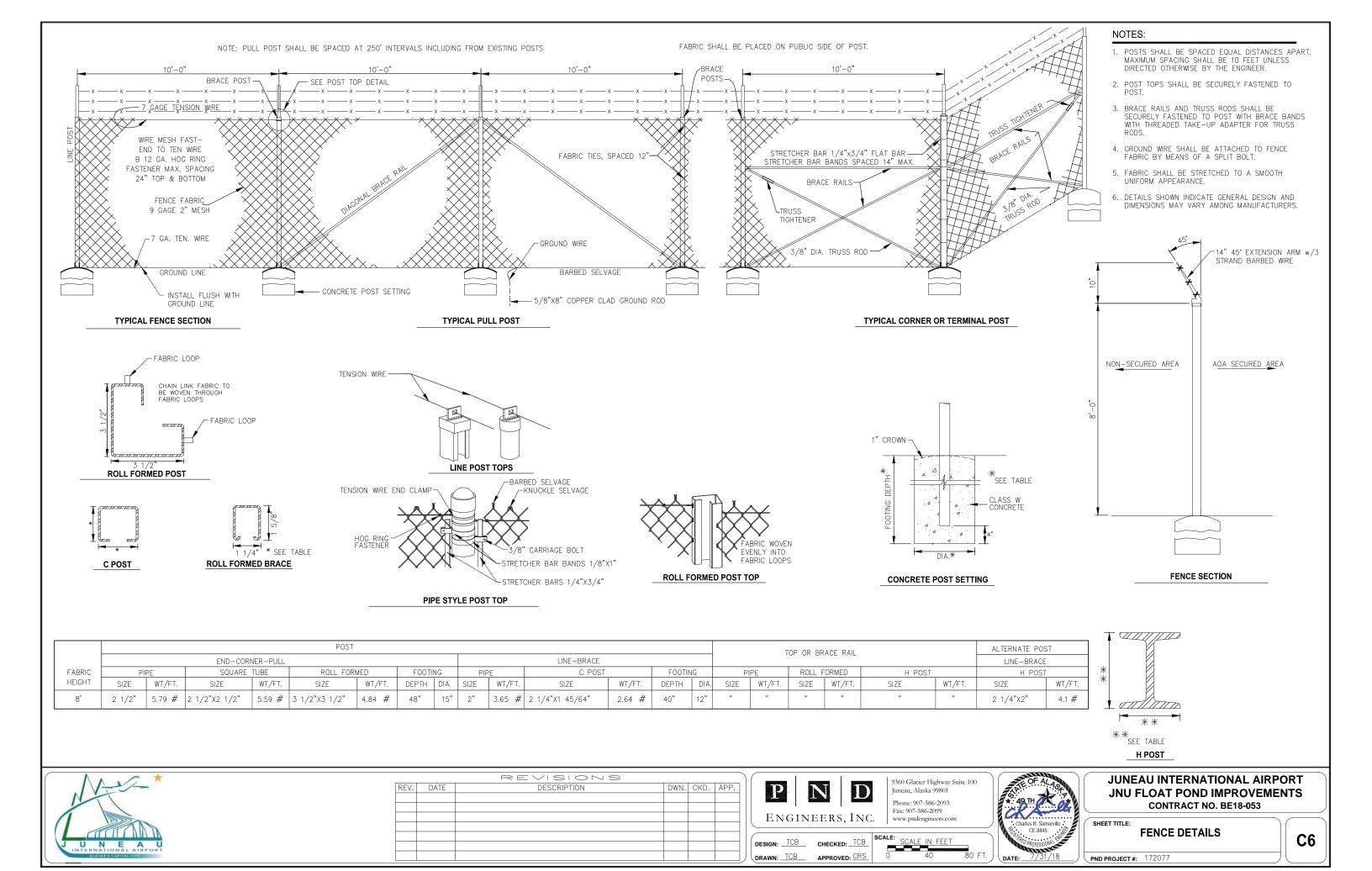
PND PROJECT #: 172077

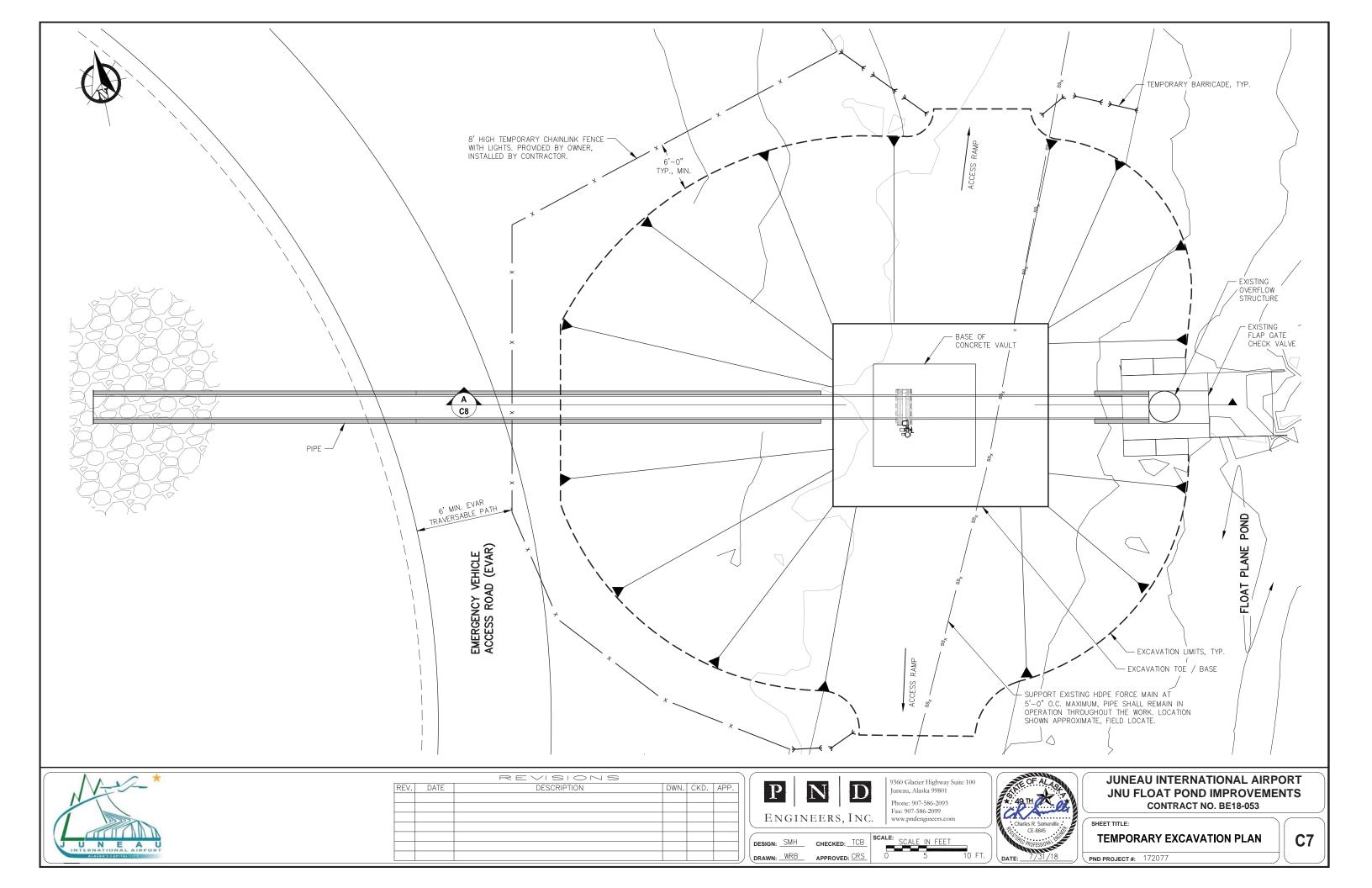
SHUT-OFF VALVE VAULT AND **EARTHWORK DETAILS** 

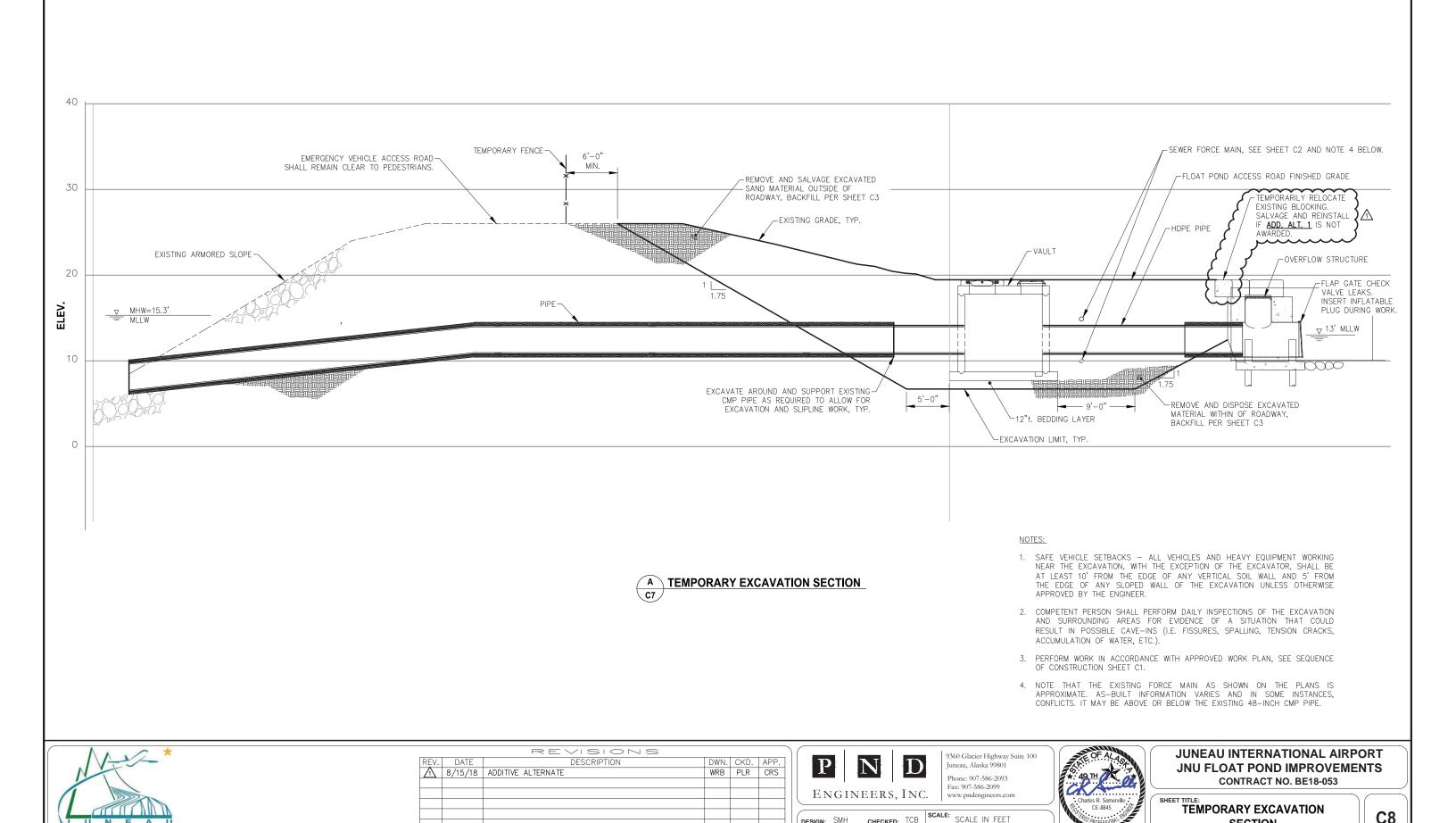
C3











DESIGN: SMH CHECKED: TCB

APPROVED: CRS

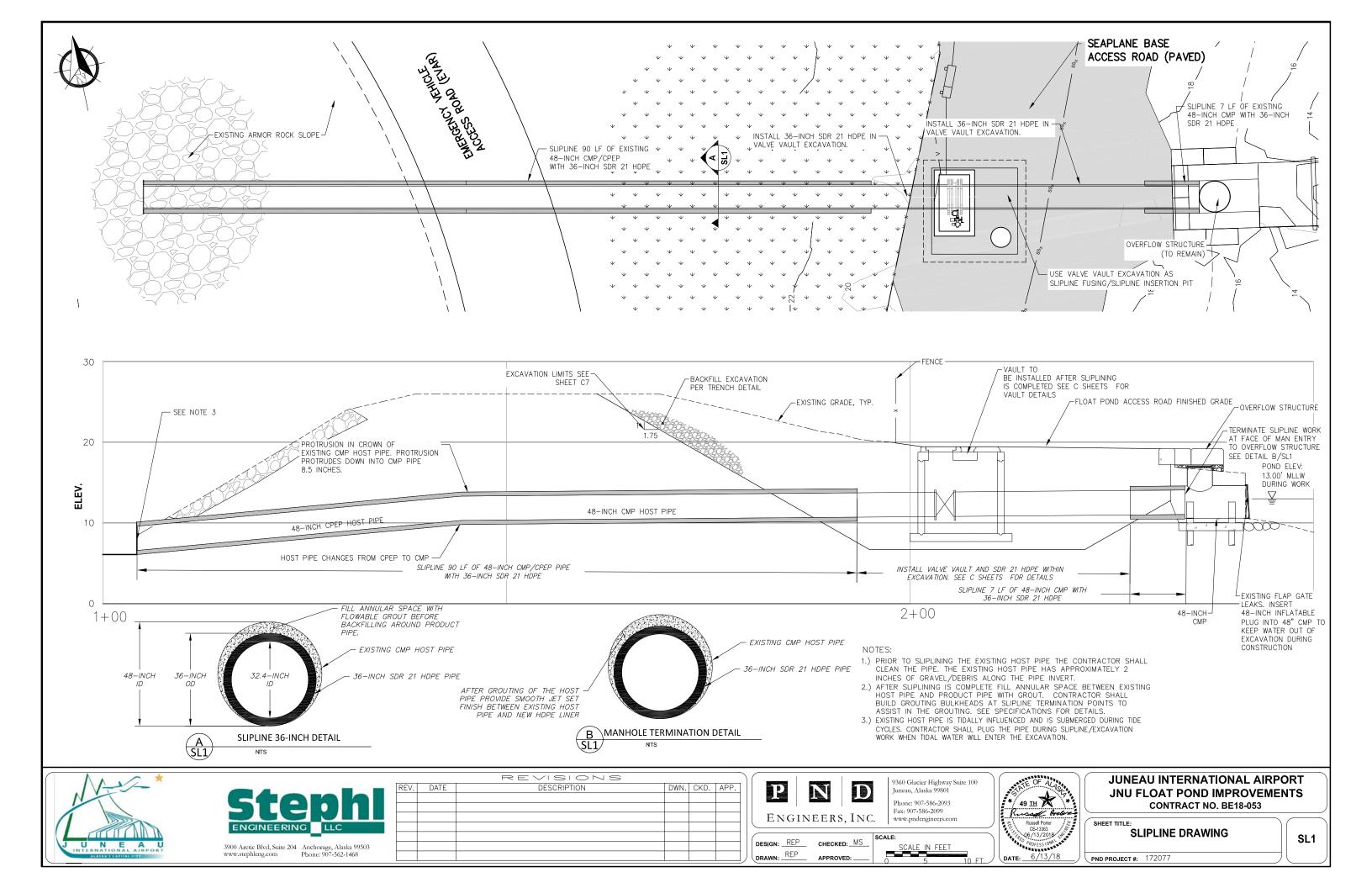
DRAWN: WRB

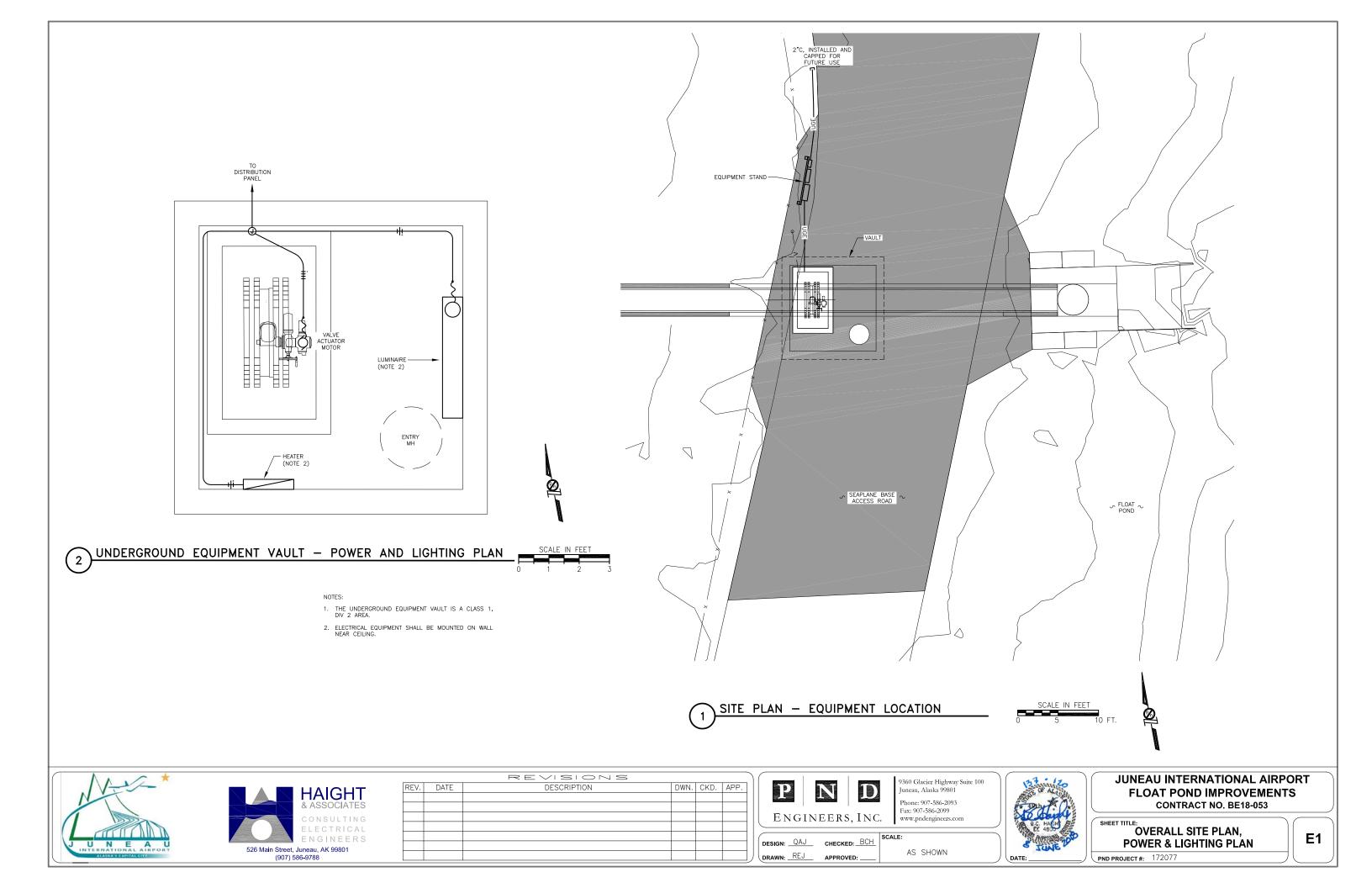
C8

**SECTION** 

PND PROJECT #: 172077

DATE: \_\_





DETAIL - EQUIPMENT STAND

LOAD

KW AMPS VOLTS PHASE RATING

**LEGEND** 

#### **ABBREVIATIONS:**

HDG HOT DIPPED GALVANIZED SS STAINLESS STEEL UGE UNDERGROUND ELECTRICAL

UON UNLESS OTHERWISE NOTED

#### POWER:

 $\Diamond$ DUPLEX RECEPTACLE HEATER, WALL MOUNTED Ó MOTOR CONNECTION

**(J)** JUNCTION BOX

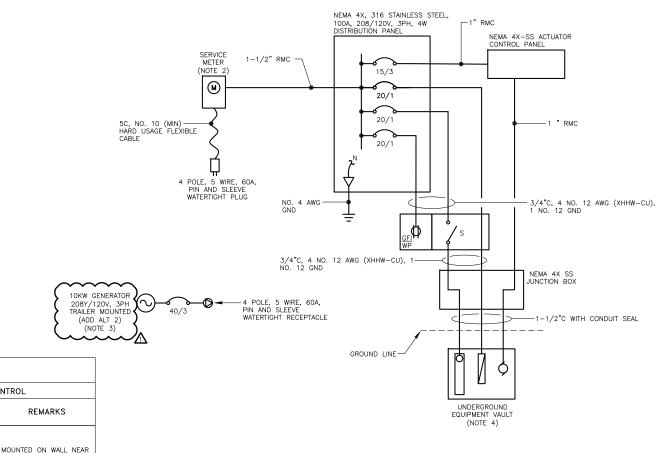
#### **DIAGRAM SYMBOLS:**

CIRCUIT BREAKER DISCONNECT OR SWITCH

> $\odot$ GENERATOR  $\nabla$ GROUND BUS GROUND ROD  $\bigcirc$ M METER

#### <u>LIGHTING</u>

WALL MOUNTED LINEAR LED LUMINAIRE



SINGLE LINE DIAGRAM - POWER DISTRIBUTION

#### 4' ENCLOSED LED INDUSTRIAL, FIBERGLASS HOUSING, RIBBED FROSTED ACRYLIC LENS, INTEGRAL ELECTRONIC DRIVER 120-277V, 47W, CLASS 1 DIV 2 COMPLIANT PER NEC, .047 .40 120 20A HEM-4-35-ML-RFA-E-U CLASS 1 DIV 2 COMPLIANT PER NEC, 500W, 120V WITH THERMOSTAT HEATREX HX-254-F0310052B-S1 .50 4.2 120 20A CLASS 1 DIV 2 COMPLIANT PER NEC, FULLY SUBMERSIBLE VALVE ACTUATOR MOTOR Ó 208 15A **HAIGHT**

MANUFACTURER

HP

CONSULTING

ENGINEERS

526 Main Street, Juneau, AK 99801

(907) 586-9788

ECTRICAL

DESIGNATION

DESCRIPTION

ITEM

_								
			REVISIONS				)	
	REV.	DATE	DESCRIPTION	DWN.	CKD.	APP.		
	$\Delta$	8/15/18	ADDITIVE ALTERNATE	REJ	QAJ	ВСН		
								ENGIN
								DESIGN: QAJ
								DRAWN:REJ

CIRCUITING

CONDUCTORS

3 NO. 12, 1 NO. 12 NEUT., 1 NO. 12 GND

DISCONNECT

SWITCH FUSE SIZE

NO SCALE

2 NO. 12, 1 NO. 12 GND

NO. 12, 1 NO. 12 GND

**EQUIPMENT SCHEDULE** 



REMARKS

MOUNTED ON WALL NEAR CEILING.

CONTROL

CEILING.

STARTER CONTROL



DESIGN: QAJ CHECKED: BCH

APPROVED:





9360 Glacier Highway Suite 100 uneau, Alaska 99801

Fax: 907-586-2099 www.pndengineers.com

AS SHOWN



#### JUNEAU INTERNATIONAL AIRPORT **FLOAT POND IMPROVEMENTS** CONTRACT NO. BE18-053

**EQUIPMENT DETAIL AND SINGLE LINE** DIAGRAM

PND PROJECT #: 172077

**E2**