

File: C:\Civil_3D\Projects\23\62033-01\Aviation\Design\SA14-AV-CV-NU-IB-62033.dwg
 Script File: August 18, 2016
 Plot Date: August 18, 2016
 DWG File No. 232-89
 Designed By: C. WILT
 Checked By: B. HANSON
 Drawn By: C. SHATTEN

ESTIMATE OF QUANTITIES			
BID SCHEDULE 1			
NORTHWEST DEVELOPMENT AREA			
ITEM NO.	ITEM DESCRIPTION	PAY UNIT	TOTAL QUANTITY
D-701a(2)	POLYETHYLENE CORRUGATED PIPE, 18-INCH	LINEAR FOOT	1,430
D-701a(3)	POLYETHYLENE CORRUGATED PIPE, 24-INCH	LINEAR FOOT	170
D-751a(1)	MANHOLE, TYPE I	EACH	6
D-751a(2)	MANHOLE, TYPE II	EACH	1
D-754a	CURB AND GUTTER	LINEAR FOOT	835
G-100a(1)	MOBILIZATION AND DEMOBILIZATION	LUMP SUM	ALL REQUIRED
G-135a(1)	CONSTRUCTION SURVEYING BY THE CONTRACTOR	LUMP SUM	ALL REQUIRED
G-135b(1)	EXTRA THREE PERSON SURVEY PARTY	HOURLY	22
G-150a(1)	EQUIPMENT RENTAL	HOURLY	34
G-300a(1)	CPM SCHEDULING	LUMP SUM	ALL REQUIRED
G-700a(1)	AIRPORT FLAGGER	CONTINGENT SUM	ALL REQUIRED
L-100e	TAXIWAY EDGE LIGHT, L-861T	EACH	13
L-100h	REMOVE RUNWAY AND TAXIWAY LIGHT	EACH	1
L-100n	AIRPORT SIGN, TYPE L-858	EACH	1
L-100ap	SPARE PARTS	CONTINGENT SUM	ALL REQUIRED
L-108a	UNDERGROUND CABLE #8 AWG, COPPER, 5KV FAA TYPE "B" OR TYPE "C" (AS SPECIFIED ON PLANS), L-824	LINEAR FOOT	1,950
L-108c	#6 BARE COPPER GROUND CONDUCTOR	LINEAR FOOT	950
L-110g	2-INCH HDPE CONDUIT	LINEAR FOOT	950
P-152a	UNCLASSIFIED EXCAVATION	CUBIC YARD	23,495
P-154b	SUBBASE COURSE	TON	5,295
P-157a(1)	EROSION, SEDIMENT AND POLLUTION CONTROL ADMINISTRATION	LUMP SUM	ALL REQUIRED
P-157c(1)	TEMPORARY EROSION, SEDIMENT AND POLLUTION CONTROL	LUMP SUM	ALL REQUIRED
P-157e(1)	TEMPORARY EROSION, SEDIMENT AND POLLUTION CONTROL BY DIRECTIVE	CONTINGENT SUM	ALL REQUIRED
P-157f(1)	WITHHOLDING	CONTINGENT SUM	ALL REQUIRED
P-160a	EXCAVATION OF PAVEMENT	SQUARE YARD	4,630
P-161e	RECYCLED ASPHALT PAVEMENT PLACEMENT	CUBIC YARD	1,255
P-209b	CRUSHED AGGREGATE BASE COURSE	TON	7,100
P-401a(1)	HOT MIX ASPHALT TYPE II, CLASS B	TON	4,745
P-401b(1)	HOT MIX ASPHALT PRICE ADJUSTMENT	CONTINGENT SUM	ALL REQUIRED
P-401c(1)	ASPHALT CEMENT, PG 52-28	TON	265
P-603a	TACK COAT, PG 52-28	TON	7
P-620c	RUNWAY AND TAXIWAY PAINTING	LUMP SUM	ALL REQUIRED
P-620f	PAINTED MARKING REMOVAL	LUMP SUM	ALL REQUIRED
P-620h	ROADWAY PAINTING	LUMP SUM	ALL REQUIRED
P-650e(1)	CONCRETE ANCHOR, 5,000 LBS	EACH	21
P-660b	REFLECTIVE MARKER, TYPE II	EACH	6
P-670a	HAZARD MARKER BARRIER, PLASTIC	EACH	48
T-901a	SEEDING	ACRE	0.2
T-901c	WATER FOR MAINTANENCE	M-GAL	135.4
T-905a	TOPSOILING	SQUARE YARD	1,005
U-100a	WATER MAIN	LUMP SUM	ALL REQUIRED
U-200a	SANITARY SEWER SYSTEM	LUMP SUM	ALL REQUIRED
U-700a	GROUND LOOP, HORIZONTAL PIPING	LUMP SUM	ALL REQUIRED

TABLE OF ESTIMATING FACTORS		
ITEM NO.	ITEM DESCRIPTION	ESTIMATING FACTOR
P-154b	SUBBASE COURSE	145 LB/CF
P-209b	CRUSHED AGGREGATE BASE COURSE	145 LB/CF
P-401a(1)	HOT MIX ASPHALT TYPE II, CLASS B	150 LB/CF
#REF!	#REF!	150 LB/CF
P-401c(1)	ASPHALT CEMENT, PG 52-28	5.5% BY WEIGHT OF P-401a(1)
#REF!	#REF!	5.5% BY WEIGHT OF P-401a(2)
#REF!	#REF!	150 LB/CF
#REF!	#REF!	6.0% BY WEIGHT OF P-403a
P-603a	TACK COAT, PG 52-28	0.000334 TON/SY

SCALE		
HORZ.	SCALE	
VERT.	SEE GRAPHIC	
TW	8/18/16	UPDATED QUANTITY FOR P-660b
BY	DATE	REVISIONS

Addendum 3



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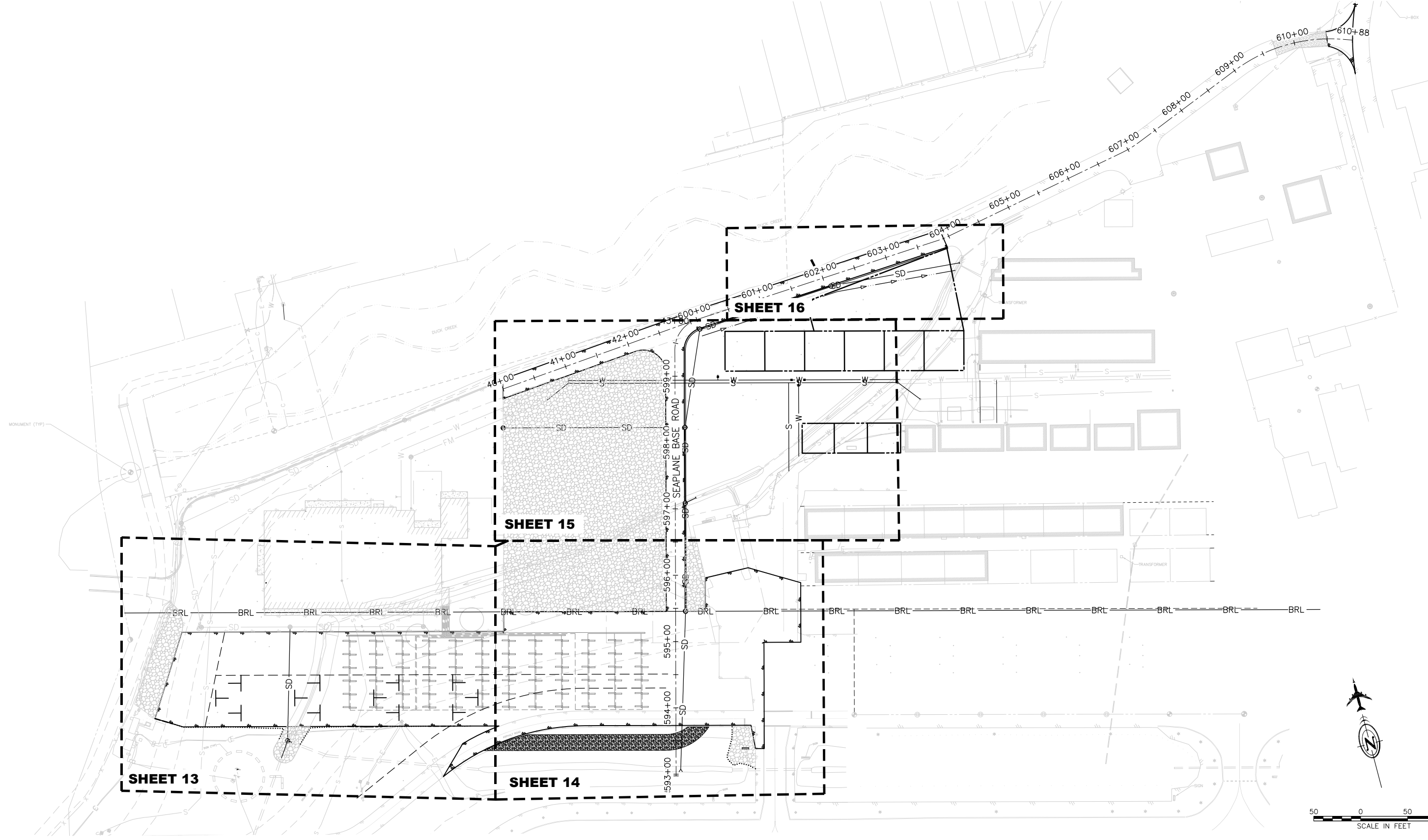
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JUNEAU INTERNATIONAL AIRPORT
JUNEAU, ALASKA

RUNWAY SAFETY AREA IMPROVEMENTS - PHASE 2B
CONTRACT NO. BE-17-045
AIP No. 3-02-0133-XXX-2016
ESTIMATED QUANTITIES, ESTIMATING FACTORS, & SUMMARY TABLES

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BY	DATE	REVISIONS
TW	8/18/16	REMOVED INCORRECT PAVEMENT LINES

SCALE	
HORZ.	SCALE
VERT.	SEE GRAPHIC
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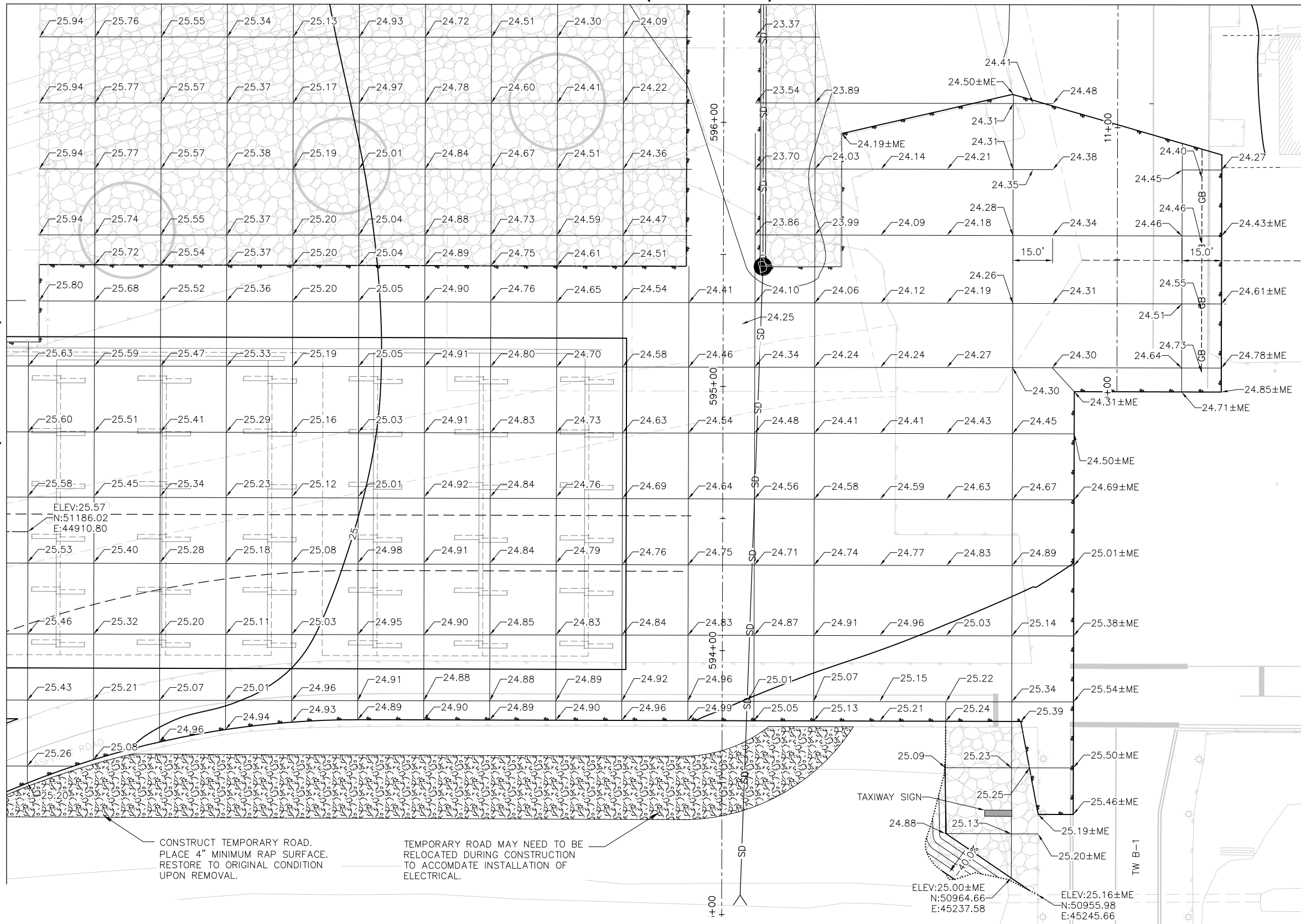
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 JUNEAU, ALASKA
 RUNWAY SAFETY AREA IMPROVEMENTS - PHASE 2B
 CONTRACT NO. BE-17-045
 AIP No. 3-02-0133-XXX-2016
 NW GRADING PLAN

SHEET
12
 OF
35

MATCHLINE (SEE SHEET 15)

MATCHLINE (SEE SHEET 13)

MATCHLINE (SEE SHEET 16)

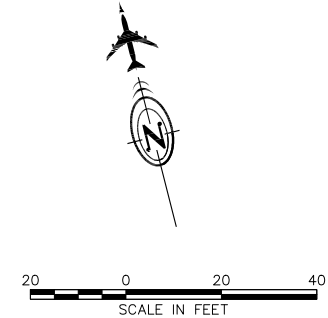


CONSTRUCT TEMPORARY ROAD. PLACE 4" MINIMUM RAP SURFACE. RESTORE TO ORIGINAL CONDITION UPON REMOVAL.

TEMPORARY ROAD MAY NEED TO BE RELOCATED DURING CONSTRUCTION TO ACCOMMODATE INSTALLATION OF ELECTRICAL.

ELEV: 25.00±ME
N: 50964.66
E: 45237.58

ELEV: 25.16±ME
N: 50955.98
E: 45245.66



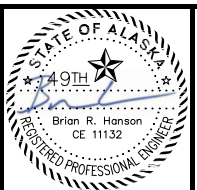
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TW	8/18/16	ADDITIONAL GRADING FOR TAXIWAY SIGN
BY	DATE	REVISIONS

SCALE	
HORZ.	SCALE
VERT.	SEE GRAPHIC
W.O. NO.	1123.62033
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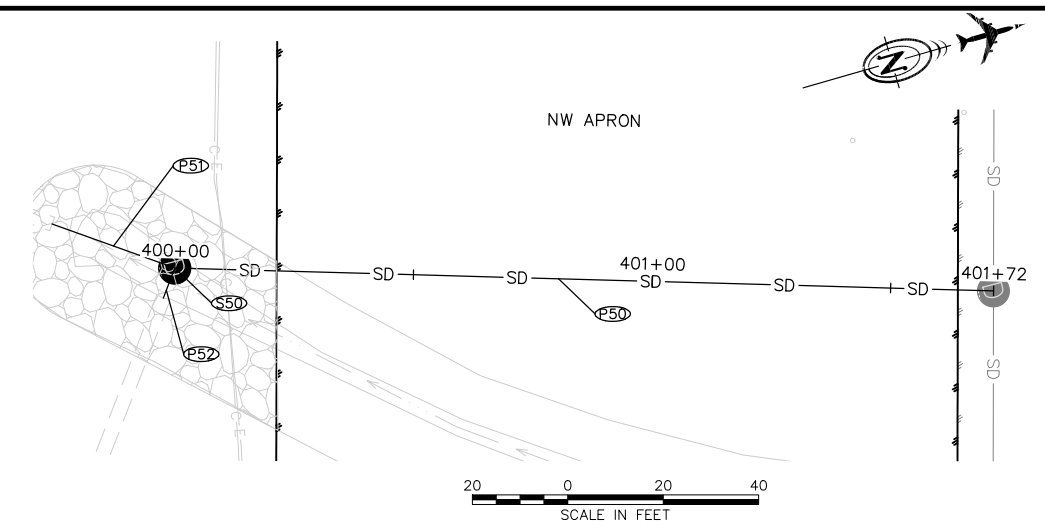


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JUNEAU, ALASKA

RUNWAY SAFETY AREA IMPROVEMENTS - PHASE 2B
CONTRACT NO. BE-17-045
AIP No. 3-02-0133-XXX-2016
NW GRADING PLAN

SHEET
14
OF
35

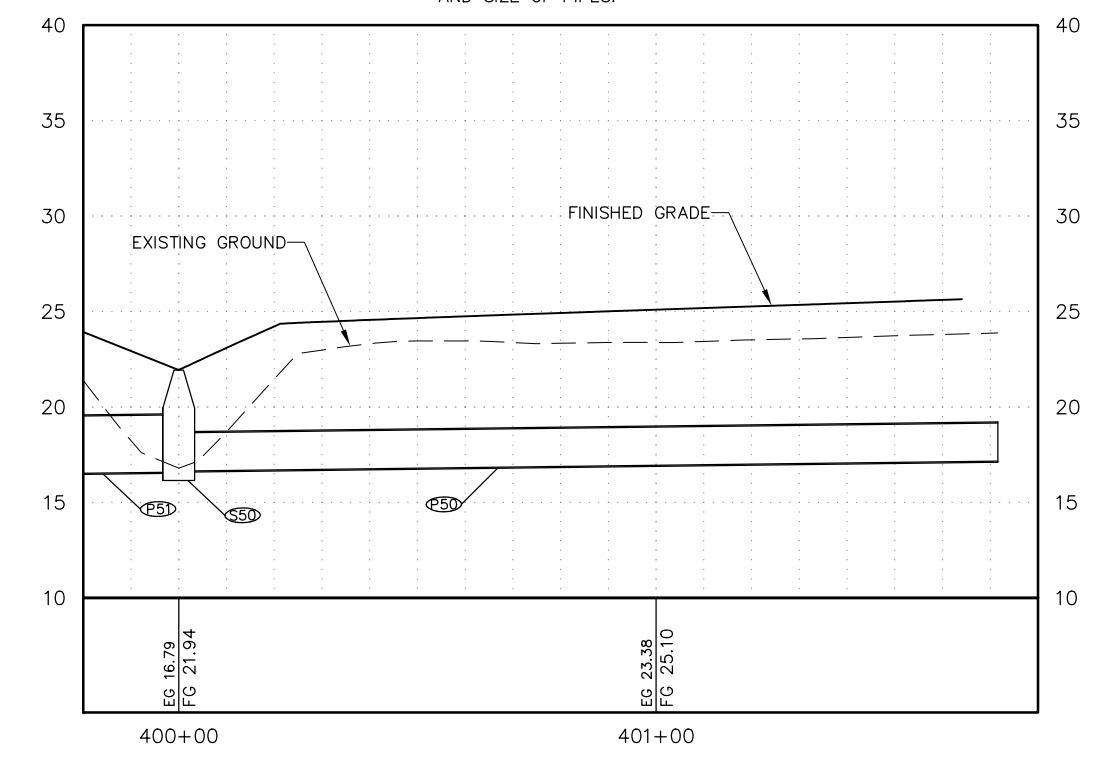
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PIPE SUMMARY						
PIPE ID	PIPE SIZE	LENGTH	GRADE	DIRECTION		REMARKS
				FROM	TO	
P50	24" CPEP	168'	0.30%		S50	SEE NOTE 1
P51	36" CPEP	28'			S50	SEE NOTE 2
P52	36" CPEP	7'			S50	SEE NOTE 2

STRUCTURE SUMMARY											
ID	TYPE	STATION	OFFSET	CASTING		INVERT ELEVATION				NORTHING	EASTING
				TOP	TYPE	N	E	S	W		
S50	CATCH BASIN	400+00.00	0.00'	21.94		16.65				58347.232	34678.090

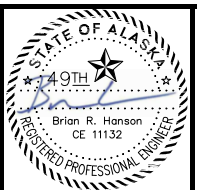
NOTES:
 1. PIPE WILL CONNECT TO MANHOLE CONSTRUCTED BY SREF PROJECT (BY OTHERS).
 2. ALL WORK TO INSTALL P51 AND P52 ARE SUBSIDIARY TO D-751A(2) MANHOLE, TYPE II (S50). CONTRACTOR TO FIELD VERIFY LENGTH AND SIZE OF PIPES.



BY	DATE	REVISIONS
TW	8/18/16	SHOW S50 IN PROFILE, REVISED NOTE 2

SCALE	
HORZ.	SCALE
VERT.	SEE GRAPHIC
W.O. NO.	1123.62033
FILE NO.	

Addendum 3

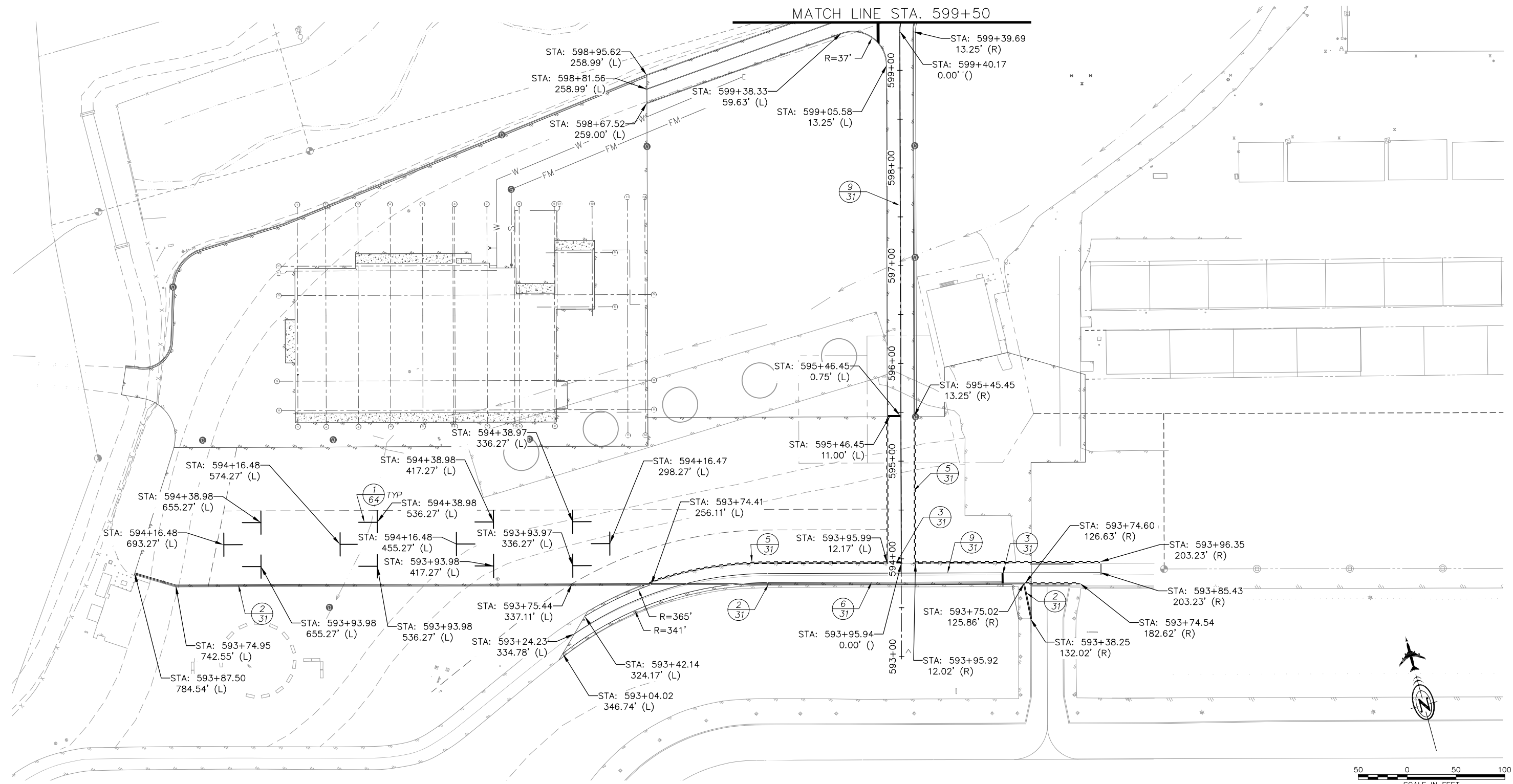


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 RUNWAY SAFETY AREA IMPROVEMENTS - PHASE 2B
 CONTRACT NO. BE-17-045
 AIP No. 3-02-0133-XXX-2016
 NW STORM DRAIN PLAN

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TW	8/18/16	EXTENDED CENTERLINE AND ZIPPER MARKINGS
BY	DATE	REVISIONS

SCALE	
HORZ.	SCALE
VERT.	SEE GRAPHIC
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RUNWAY SAFETY AREA IMPROVEMENTS - PHASE 2B
 CONTRACT NO. BE-17-045
 AIP No. 3-02-0133-XXX-2016
 NW TAXILANE
 MARKING PLAN & TIE DOWN LAYOUT

SHEET
 29
 OF
 35

GENERAL NOTE

THE TASKS LISTED ARE A GENERAL CONCEPT OF WORK TO BE PERFORMED WITHIN WORK AREA 1 AND DOES NOT REPRESENT A COMPREHENSIVE LIST OF ALL WORK REQUIRED. COORDINATION WITH THE CONTRACTOR PERFORMING WORK WITHIN THE SNOW-REMOVAL FACILITY AREA IS NECESSARY FOR ALL LISTED TASKS. STOCK PILES SHOULD BE PLACED IN WORK AREA 2 TEMPORARILY AS INDICATED IN THE PLAN VIEW. THE CONTRACTOR SHALL NOT ENTER THE AIRCRAFT OPERATIONS AREA DURING ANY OF THE BELOW TASKS. TW B-1 SHALL BE CLOSED UNTIL ALL WORK IS COMPLETED IN THE NWDA.

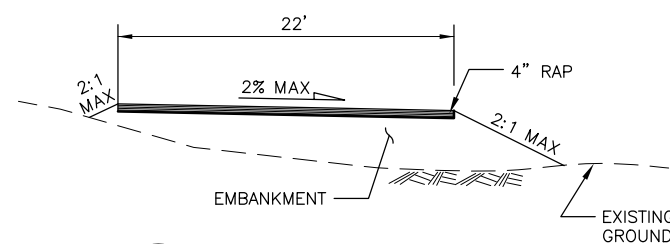
WORK AREA 1 INCLUDES:

- CONSTRUCT TEMPORARY RAP ROAD SOUTH OF WORK AREA
- INSTALL TEMPORARY PERIMETER FENCING AROUND WORK AREA
- EXCAVATION FOR GROUND SOURCE HEAT PUMP
- INSTALLATION OF GROUND SOURCE HEAT PUMP
- FILL EXCAVATED AREA
- INSTALL STORM DRAIN PIPING AND CULVERT (COORDINATION WITH SREF REQUIRED)
- INSTALL CONCRETE SECTIONS FOR APRON TIE-DOWNS
- PAVE APRON WITHIN PROPOSED PAVEMENT EDGE LIMITS
- PAVE ACCESS ROAD DIRECTLY SOUTH OF WORK AREA
- APPLY MARKINGS FOR TIE-DOWN AREAS
- APPLY STRIPING FOR ACCESS ROAD DIRECTLY SOUTH OF WORK AREA

WORK AREA 2 INCLUDES:

- INSTALL STORM DRAIN PIPING AND STRUCTURES (COORDINATION WITH SREF CONTRACTOR REQUIRED)
- INSTALL WATER UTILITIES (COORDINATION WITH SREF CONTRACTOR REQUIRED)
- INSTALL SEWER UTILITIES (COORDINATION WITH SREF CONTRACTOR REQUIRED)
- CONSTRUCT AND PAVE ACCESS ROAD
- APPLY STRIPING FOR ACCESS ROAD

ACCOMMODATE OCCASSIONAL ARFF ACCESS BY PLANES FOR THE MONTHS OF OCTOBER THROUGH APRIL



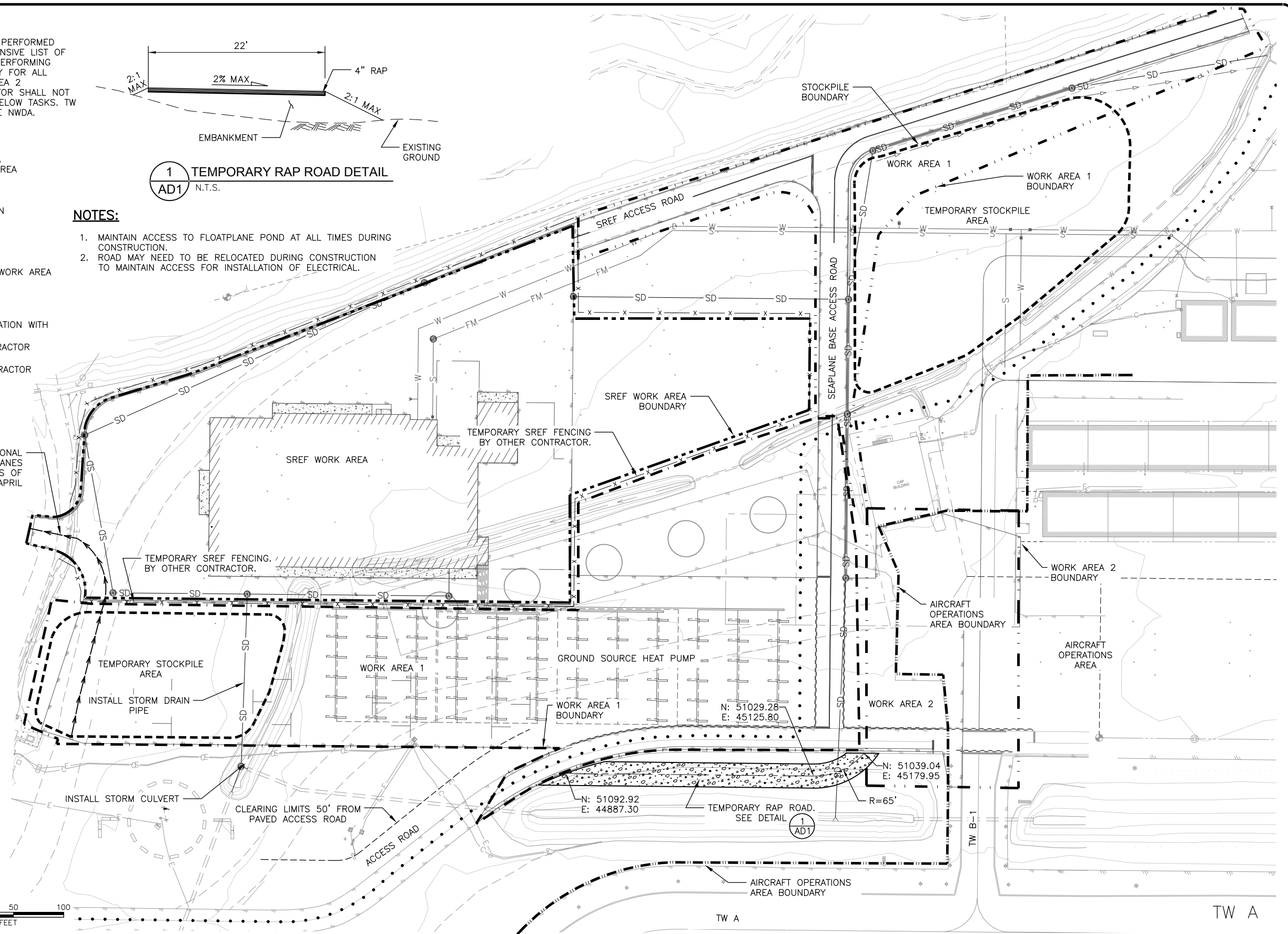
1
AD1 N.T.S.

NOTES:

1. MAINTAIN ACCESS TO FLOATPLANE POND AT ALL TIMES DURING CONSTRUCTION.
2. ROAD MAY NEED TO BE RELOCATED DURING CONSTRUCTION TO MAINTAIN ACCESS FOR INSTALLATION OF ELECTRICAL.

LEGEND

- x-x-x- TEMPORARY FENCING
- HAZARD MARKING BARRIER
- | AIRCRAFT TIEDOWN
- SD PROPOSED STORM DRAIN UTILITY
- HAUL ROUTE
- AIRCRAFT OPERATIONS AREA BOUNDARY
- TEMPORARY RAP ROAD
- TEMPORARY STOCKPILE BOUNDARY
- WORK AREA 1 BOUNDARY
- WORK AREA 2 BOUNDARY
- SREF WORK AREA BOUNDARY



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BY	DATE	REVISIONS
TW	8/18/16	REMOVED STOCKPILE LOCATION WEST OF CAP

SCALE	
HORZ.	SCALE
VERT.	SEE GRAPHIC
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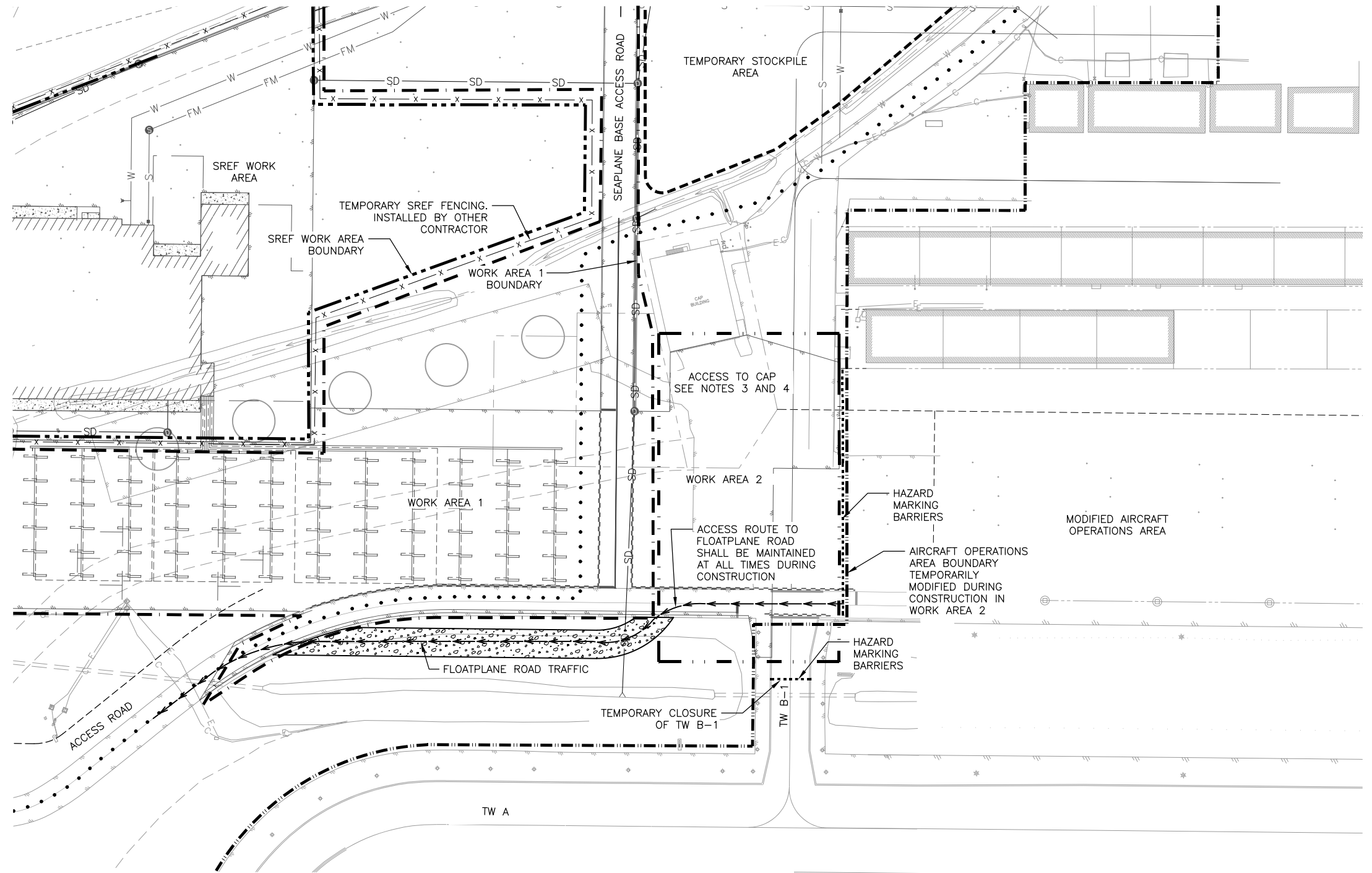


JUNEAU INTERNATIONAL AIRPORT
 JUNEAU, ALASKA
 RUNWAY SAFETY AREA IMPROVEMENTS - PHASE 2B
 CONTRACT NO. BE-17-045
 AIP No. 3-02-0133-XXX-2016
 CONSTRUCTION SAFETY PHASING PLAN
 NWDA WORK AREA 1

SHEET
AD1
 OF
AD2

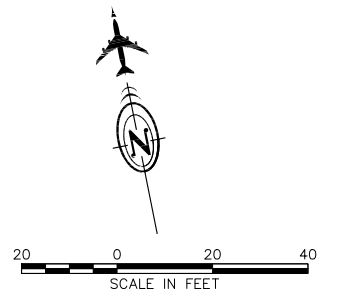
NOTES

- THIS PARTICULAR WORK AREA FALLS WITHIN THE AIRCRAFT OPERATIONS AREA, AND INCLUDES THE FOLLOWING TASKS:
 - INSTALL STORM DRAIN UTILITIES AND CULVERT
 - CONSTRUCT AND PAVE ACCESS ROAD
 - CONSTRUCT AND PAVE NW TAXILANE
 - INSTALL TAXILANE EDGE LIGHTING
 - APPLY STRIPING AND EDGE MARKINGS FOR ACCESS ROAD
 - APPLY CENTERLINE AND EDGE MARKINGS FOR NW TAXILANE
- BEFORE BEGINNING WORK IN THIS AREA, THE CONTRACTOR IS RESPONSIBLE FOR COMMUNICATING ALL CONSTRUCTION WORK NEEDED WITH THE PROJECT ENGINEER. THE PROJECT ENGINEER AND ASCO SHALL THEN ISSUE A NOTAM AT LEAST 48 HOURS IN ADVANCE TO TEMPORARILY MOVE THE AIRCRAFT OPERATIONS AREA. DURING CONSTRUCTION, COORDINATION WITH THE AIR-TRAFFIC CONTROL TOWER IS REQUIRED. THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER AND ASCO OF CHANGED CONDITIONS THAT MIGHT CLOSE A NOTAM. ANY CHANGES TO THE WORK SCHEDULE MUST BE COMMUNICATED WITH THE AIR-TRAFFIC CONTROL TOWER. THE CONTRACTOR SHALL PERFORM CONSTRUCTION ONLY WITHIN THE TEMPORARY WORK AREA. NOTE THAT TW B-1 WILL ALSO BE CLOSED DURING CONSTRUCTION.
- MAINTAIN AIRCRAFT ACCESS TO THE CAP. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING AND WORKING AROUND ALL OPERATIONS. CONTRACTOR SHALL PROVIDE A CAP ACCESS PLAN FOR APPROVAL BY THE ENGINEER. APPROVAL OF ACCESS PLAN IS REQUIRED PRIOR TO BEGINNING OF WORK.
- CAP ACCESS PLAN SHALL INCLUDE, BUT IS NOT LIMITED TO, SCHEDULING WORK, SEPARATION OF AIRCRAFT FROM ACTIVE CONSTRUCTION, TRAFFIC CONTROL DEVICES REQUIRED, AND HAZARD MARKER BARRIER LOCATIONS. ALL WORK ASSOCIATED WITH PREPARING, AND MAINTAINING THE CAP ACCESS PLAN ARE SUBSIDIARY TO THE CONTRACT.
- ONCE THE CONTRACTOR HAS COMPLETED ALL TASK WITHIN THE TEMPORARY WORK AREA, ALL TEMPORARY FENCING, BARRIERS, AND OTHER EQUIPMENT MUST BE REMOVED FROM THE AREA. ONCE COMPLETED, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER AND ASCO TO RE-PLACE THE ORIGINAL PERIMETER OF THE AIRCRAFT OPERATIONS AREA.



LEGEND

- x - x - x - TEMPORARY FENCING
- HAZARD MARKING BARRIER
- SD — PROPOSED STORM DRAIN UTILITY
- • • • • HAUL ROUTE
- AIRCRAFT OPERATIONS AREA BOUNDARY
- WORK AREA 1 BOUNDARY
- WORK AREA 2 BOUNDARY
- TEMPORARY RAP ROAD
- TEMPORARY STOCKPILE BOUNDARY

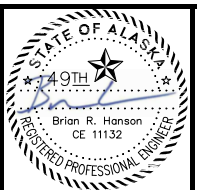


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BY	DATE	REVISIONS
TW	8/18/16	REMOVED COORDINATION AREA EAST OF CAP

SCALE	
HORZ.	SCALE
VERT.	SEE GRAPHIC
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 CONSTRUCTION SAFETY PHASING PLAN
 NWDA WORK AREA 2

SHEET
AD2
 OF
AD2