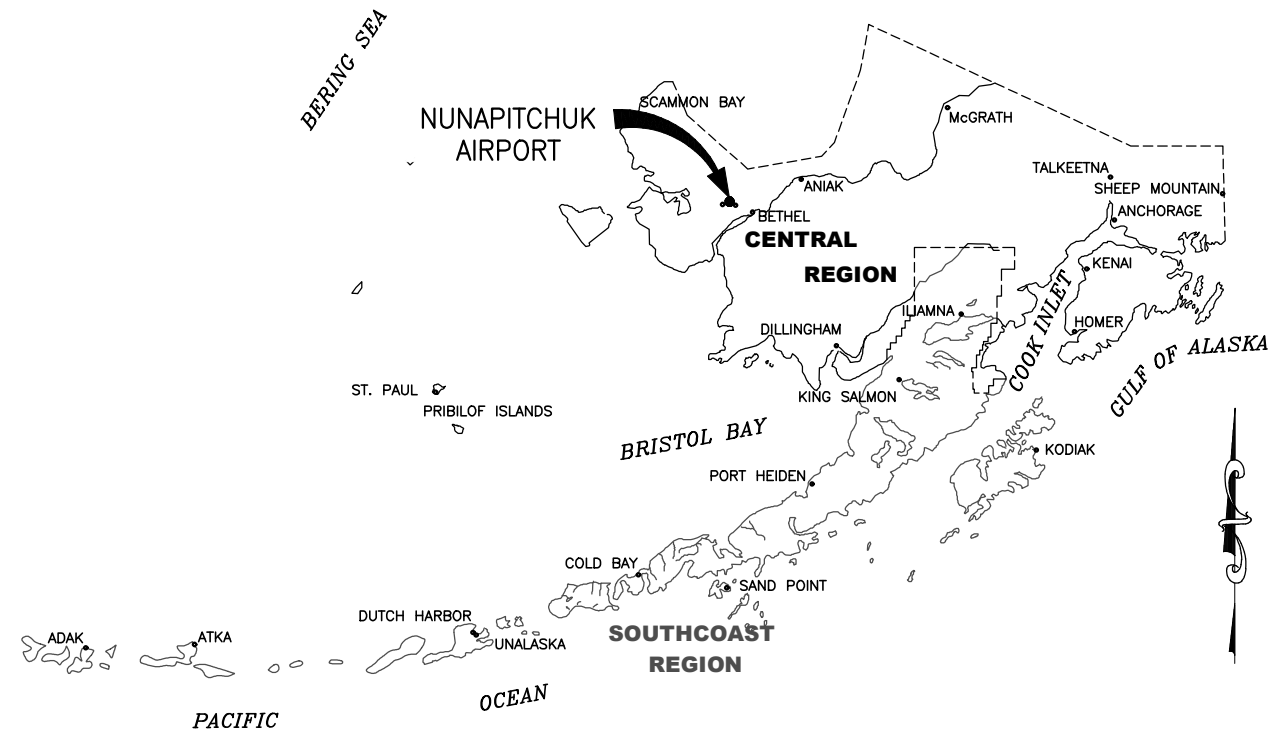


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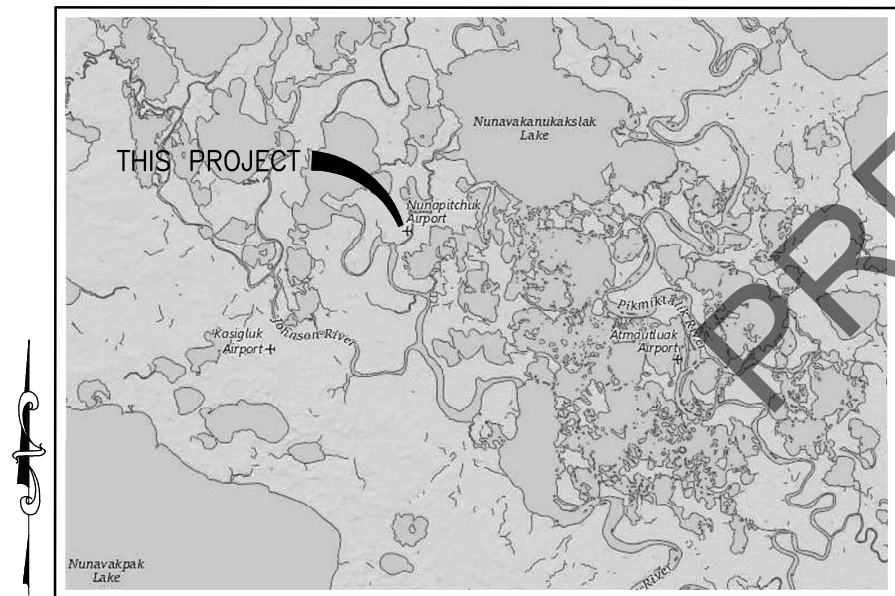
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Date Revised:
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ALASKA CENTRAL REGION
LOCATION MAP

NOT TO SCALE



VICINITY MAP

SCALE 1"= 4 MILES
T 9 N, R 74 W, S 5
SEWARD MERIDIAN
U.S.G.S. BAIRD INLET D-2 NE

CONSTRUCTION PLANS
NUNAPITCHUK AIRPORT
NUNAPITCHUK, ALASKA
AIRPORT IMPROVEMENTS
PROJECT No. CFAPT00427
AIRPORT IMPROVEMENT PROGRAM
No. 3-02-0446-0XX-20XX
20XX

PRE PSE
JUNE 2019

APPROVED	DATE
JOHN R. LINNELL, P.E.	REGIONAL PRECONSTRUCTION ENGINEER
APPROVED	DATE
LUKE S. BOWLAND, P.E.	AVIATION DESIGN SECTION CHIEF
APPROVED	DATE
BARBARA J. BEATON, P.E.	PROJECT MANAGER
CONCUR	DATE
JOEL G. ST AUBIN	REGIONAL CONSTRUCTION ENGINEER

STANTEC CONSULTING SERVICES INC.
725 EAST FIREWEED LANE, SUITE 200
ANCHORAGE, AK 99503-2245
(907) 276-4245
CERTIFICATE OF AUTHORIZATION #
126386

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STATE OF ALASKA
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AND PUBLIC FACILITIES
CENTRAL REGION
4111 AVIATION AVE., ANCHORAGE ALASKA 99502
PHONE (907) 269-0590

NUNAPITCHUK AIRPORT
NUNAPITCHUK, ALASKA
NUNAPITCHUK AIRPORT IMPROVEMENTS
PROJECT No. CFAPT00427
AIP No. 3-02-0446-0XX-20XX
TITLE, SIGNATURES, LOCATION MAP AND
VICINITY MAP

DATE:
06/27/2019
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Drawn By: ADC

Checked By: JGL

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SIGN FRAMING AND POST SPACING	S—00.11
BRACING FOR SIGNS MOUNTED ON SINGLE POST	S—01.01

LEGEND		
DESCRIPTION	EXISTING	PROPOSED
BOLLARD		
BUILDING		
CLEARING LIMITS		
CULVERT		
ELECTRICAL HANDHOLE		
ELECTRICAL JUNCTION BOX		
ELECTRICAL PEDALSTAL		
FILL SLOPE LIMITS		
GRAVEL EDGE		
HAUL ROUTE – TWO WAY		
IDENTIFICATION BUBBLE		
MAJOR CONTOUR		
MINOR CONTOUR		
PAPI		
POWER (BURIED)		
POWER (OVERHEAD)		
PROPERTY BOUNDARY		
REIL		
ROTATING BEACON		
RUNWAY OBJECT FREE AREA		
RUNWAY OBSTACLE FREE ZONE		
RUNWAY SAFETY AREA		
RUNWAY LIGHT		
SIGN		
SEGMENTED CIRCLE AND WIND CONE		

LEGEND		
DESCRIPTION	EXISTING	PROPOSED
TAXIWAY LIGHT		
TAXIWAY OBJECT FREE AREA		
TAXIWAY SAFETY AREA		
THRESHOLD LIGHT		
UTILITY POLE		
WATER EDGE		
WIND CONE		

ABBREVIATIONS			
16A	NUNAPITCHUK AIRPORT	MIN	MINIMUM
AIP	AIRPORT IMPROVEMENT PROJECT	MIRL	MEDIUM INTENSITY RUNWAY LIGHTING
AWOS	AUTOMATED WEATHER OBSERVING SYSTEM	MITL	MEDIUM INTENSITY TAXIWAY LIGHTING
BOP	BEGINNING OF PROJECT	N	NORTH/NORTHING
BVCS	BEGIN VERTICAL CURVE STATION	NAD	NORTH AMERICAN DATUM
BVCE	BEGIN VERTICAL CURVE ELEVATION	NAVD	NORTH AMERICAN VERTICAL DATUM
CASC	CRUSHED AGGREGATE SURFACE COURSE	NTP	NOTICE TO PROCEED
CL	CENTERLINE	NTS	NOT TO SCALE
CMP	CORRUGATED METAL PIPE	NIC	NOT IN CONTRACT
COMM	COMMUNICATION	OC	ON CENTER
CS	CONTINGENT SUM	OFA	OBJECT FREE AREA
CSP	CORRUGATED STEEL PIPE	OFZ	OBJECT FREE ZONE
CY	CUBIC YARD	OG	ORIGINAL GROUND
DIA	DIAMETER	PAPI	PRECISION APPROACH PATH INDICATOR
DOT&PF	DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES	PC	POINT OF CURVE
E	EAST/EASTING	PCC	PORTLAND CEMENT CONCRETE
EA	EACH	PI	POINT OF INTERSECTION
EG	EXISTING GROUND	PVI	POINT OF VERTICAL INTERSECTION
ELEV	ELEVATION	R	RADIUS
EOP	END OF PROJECT	REIL	RUNWAY END IDENTIFIER LIGHT
ESCP	EROSION AND SEDIMENT CONTROL PLAN	RD	ROAD
EVCS	END VERTICAL CURVE STATION	ROFA	RUNWAY OBJECT FREE AREA
EVCE	END VERTICAL CURVE ELEVATION	ROFZ	RUNWAY OBSTACLE FREE ZONE
FAA	FEDERAL AVIATION ADMINISTRATION	RSA	RUNWAY SAFETY AREA
FG	FINISHED GRADE	RT	RIGHT
GA	GENERAL AVIATION / GUAGE	RW	RUNWAY
GB	GRADE BREAK	SF	SQUARE FEET
HH	HAND HOLE	SREB	SNOW REMOVAL EQUIPMENT BUILDING
HR	HOUR	STA	STATION
INV	INVERT	SY	SQUARE YARD
L	LENGTH	TSA	TAXIWAY SAFETY AREA
LB	POUND	TOFA	TAXIWAY OBJECT FREE AREA
LF	LINEAR FOOT	TW	TAXIWAY
LS	LUMP SUM	TYP	TYPICAL
LT	LEFT	VC	VERTICAL CURVE
MAINT	MAINTENANCE		
MAX	MAXIMUM		
ME	MATCH EXISTING		

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NUNAPITCHUK AIRPORT
NUNAPITCHUK, ALASKA
NUNAPITCHUK AIRPORT IMPROVEMENTS
PROJECT No. CFAPT00427
AIP No. 3-02-0446-00X-20XX
LEGEND AND ABBREVIATIONS

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ESTIMATED QUANTITIES

No.	ITEM	UNIT	QTY	No.	ITEM	UNIT	QTY	No.	ITEM	UNIT	QTY
D701.010.0036	CS PIPE, 36-INCH	LF	160	L125.030.0000	MEDIUM INTENSITY RUNWAY EDGE AND THRESHOLD LIGHT, L-861 AND L-861E	EACH	36				
G100.010.0000	MOBILIZATION AND DEMOBILIZATION	LS	ALL REQ'D	L125.040.0000	TAXIWAY EDGE LIGHT, L-861T	EACH	32				
G115.010.0000	WORKER MEALS AND LODGING, OR PER DIEM	LS	ALL REQ'D	L125.070.0000	REMOVE RUNWAY AND TAXIWAY LIGHT	EACH	70				
G130.010.0000	FIELD OFFICE	LS	ALL REQ'D	L125.150.0000	HANDHOLE, L-867, SIZE B	EACH	6				
G130.020.0000	FIELD LABORATORY	LS	ALL REQ'D	L125.160.0000	JUNCTION BOX, TYPE II	EACH	5				
G130.060.0000	NUCLEAR TESTING EQUIPMENT STORAGE SHED	EACH	1	L125.170.0000	SPARE PARTS	CS	All REQ'D				
G130.090.0000	ENGINEERING COMMUNICATIONS	CS	ALL REQ'D	L125.400.0000	ADJUST HANDHOLE	EACH	8				
G131.010.0000	ENGINEERING TRANSPORTATION (TRUCK)	EACH	2	P151.010.0000	CLEARING	ACRE	6				
G131.020.0000	ENGINEERING TRANSPORTATION (ATV)	EACH	1	P152.010.0000	UNCLASSIFIED EXCAVATION	CY	2,700				
G135.010.0000	CONSTRUCTION SURVEYING BY THE CONTRACTOR	LS	ALL REQ'D	P152.200.0000	BORROW	TON	12,700				
G135.020.0000	EXTRA THREE PERSON SURVEY PARTY	HR	80	P167.010.0000	DUST PALLIATIVE	SY	51,100				
G300.010.0000	CPM SCHEDULING	LS	ALL REQ'D	P299.020.0000	CRUSHED AGGREGATE SURFACE COURSE	TON	20,800				
G700.010.0000	AIRPORT FLAGGER	CS	ALL REQ'D	P640.020.0000	SEGMENTED CIRCLE (PANEL-TYPE)	LS	ALL REQ'D				
G710.010.0000	HIGHWAY TRAFFIC MAINTENANCE	LS	ALL REQ'D	P641.010.0000	EROSION, SEDIMENT, AND POLLUTION CONTROL ADMINISTRATION	LS	ALL REQ'D				
L101.020.0000	ROTATING BEACON, MEDIUM INTENSITY, L-801A	EACH	1	P641.030.0000	TEMPORARY EROSION, SEDIMENT, AND POLLUTION CONTROL	LS	ALL REQ'D				
L103.010.0030	30-FEET HINGED POLE BEACON TOWER	EACH	1	P641.040.0000	TEMPORARY EROSION, SEDIMENT, AND POLLUTION CONTROL ADDITIVES	CS	ALL REQ'D				
L107.010.0008	8-FEET LIGHTED WIND CONE, IN PLACE	EACH	1	P641.060.0000	WITHHOLDING	CS	ALL REQ'D				
L108.010.2008	UNDERGROUND CABLE #8 AWG, COPPER, 5KV FAA TYPE C, L-824	LF	7,300	P641.070.0000	SWPPP MANAGER	LS	ALL REQ'D				
L108.030.0006	#6 BARE COPPER GROUND CONDUCTOR	LF	7,400	P650.020.0000	SOIL ANCHOR TIE-DOWN	SET	2				
L108.050.1008	UNDERGROUND CABLE #8 AWG, COPPER, 600V, TYPE C, L-824	LF	1,200	P660.030.0000	REFLECTIVE MARKER, TYPE II	EACH	26				
L108.070.0000	GROUND ROD	EACH	11	P661.020.0000	STANDARD SIGN	EACH	1				
L109.040.0000	INSTALLATION OF ELECTRICAL EQUIPMENT IN NEW OR EXISTING STRUCTURE	EACH	1	T901.020.0000	SEEDING	LB	135				
L110.030.1002	RIGID STEEL CONDUIT, 2-INCH	LF	90								
L110.080.1002	HDPE CONDUIT, 2-INCH	LF	7,480								
L125.020.0000	REGULATOR, L-828	EACH	1								

ESTIMATING FACTORS

No.	ITEM	FACTOR
P-152	BORROW	1.85 TON/CY
P-299	CRUSHED AGGREGATE SURFACE COURSE	1.96 TON/CY
T-901	SEEDING	1 LB/1000 SF

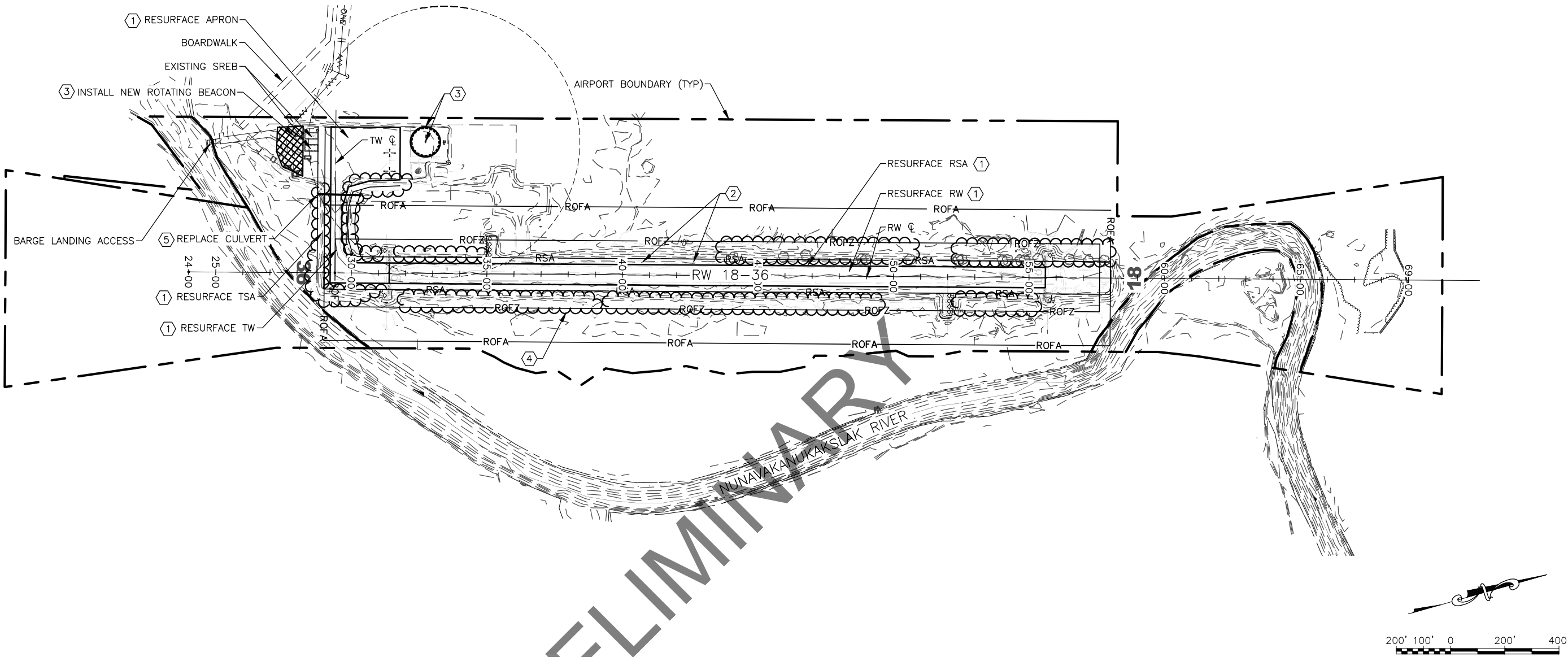
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(907) 276-4245
CERTIFICATE OF AUTHORIZATION #
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PHONE (907) 269-0590

NUNAPITCHUK AIRPORT
NUNAPITCHUK, ALASKA
NUNAPITCHUK AIRPORT IMPROVEMENTS
PROJECT No. CFAPT00427
AIP No. 3-02-0446-00X-20XX
ESTIMATED QUANTITIES

DATE:
06/27/2019
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4 OF 28



PROJECT TASKS:

- ① RESURFACE GRAVEL RW 18-36, TW, APRON, AND SAFETY AREAS.
- ② REPLACE AIRPORT RW LIGHTING SYSTEM.
- ③ REPLACE WIND CONE POLE, SEGMENTED CIRCLE, AND AIRPORT BEACON.
- ④ CLEAR VEGETATION.
- ⑤ REPLACE CULVERT.

CLEARING NOTES:

- 1. CLEAR VEGETATION TO THE LIMITS SHOWN ON SHEETS 8-12. SEE SECTION P-151.
- 2. CLEAR AND GRUB SIDE SLOPES OF RSA AND TSA, GRADE AND COMPACT.

LEGEND:

-  CONTRACTOR STAGING AREA

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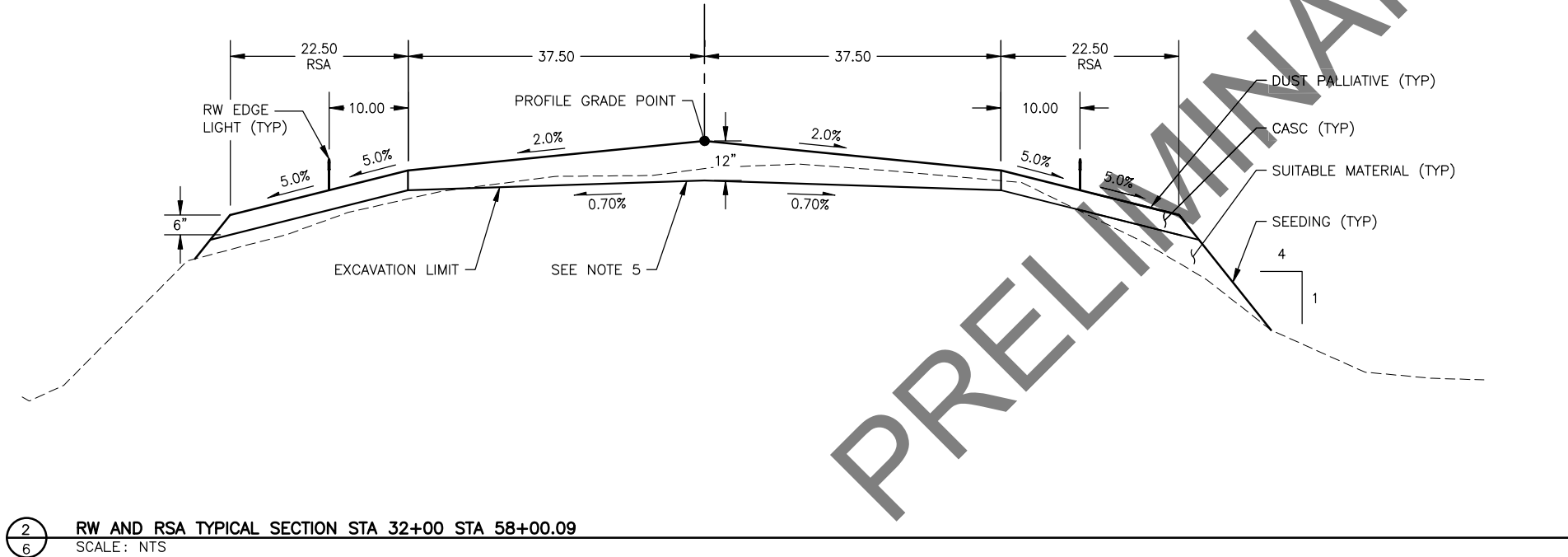
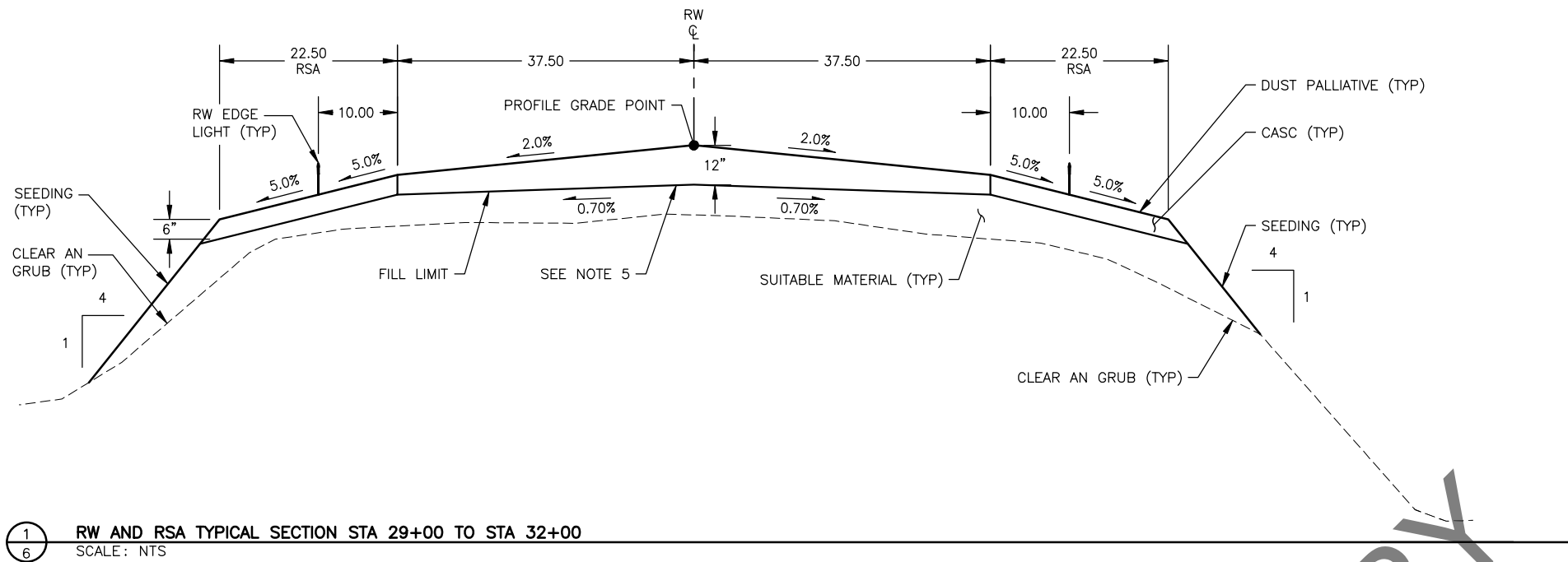
NUNAPITCHUK AIRPORT
NUNAPITCHUK, ALASKA
NUNAPITCHUK AIRPORT IMPROVEMENTS
PROJECT No. CFAPT00427
AIP No. 3-02-0446-00X-20XX
PROJECT LAYOUT PLAN

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TYPICAL SECTION NOTES:

1. CLEAR AND GRUB ALL SIDE SLOPES PRIOR TO REGRADING.
2. SEE GRADING SHEETS FOR LAYOUT AND DEFINITION OF VARIABLE DIMENSIONS SHOWN ON THE TYPICAL SECTIONS.
3. APPLY DUST PALLIATIVE TO ALL NEW CASC SURFACES, AND AS DIRECTED.
4. APPLY SEEDING TO ALL NEW SOIL SLOPES AND OTHER AREAS OF SOIL DISTURBANCE THAT REQUIRE STABILIZATION, AND AS DIRECTED.
5. THE CASC LAYER ON THE RW TYPICAL SECTION VARIES IN THICKNESS FROM 12 INCHES AT THE CENTERLINE, TO 6 INCHES THICK AT 37.5 FEET LEFT AND RIGHT. THE SURFACE CROSS SLOPE IS MAINTAINED AT 2.00%, AND THE SUBGRADE CROSS SLOPE IS MAINTAINED AT 0.70% AS SHOWN.
6. THE EDGE OF THE TW SAFETY AREA (TSA) MAINTAINS A CONSTANT WIDTH OF 22 FEET AS MEASURED FROM THE EDGE OF TW. SEE PLAN VIEW FOR LAYOUT OF THE TW EDGE TAPERS AND GRADING POINTS.

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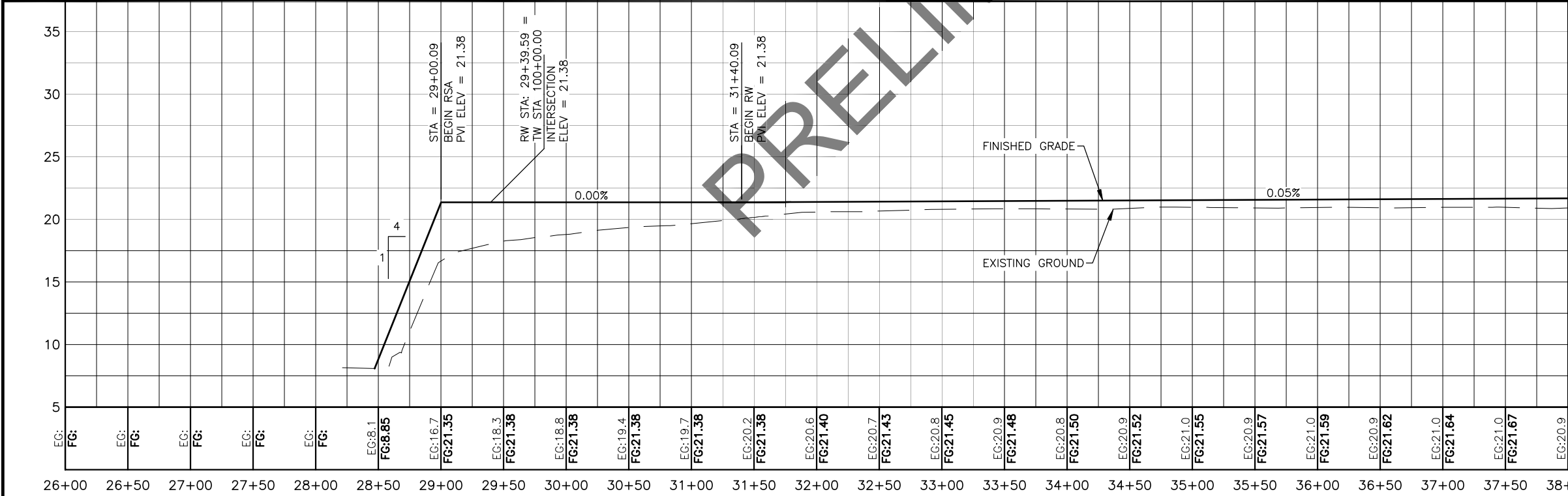
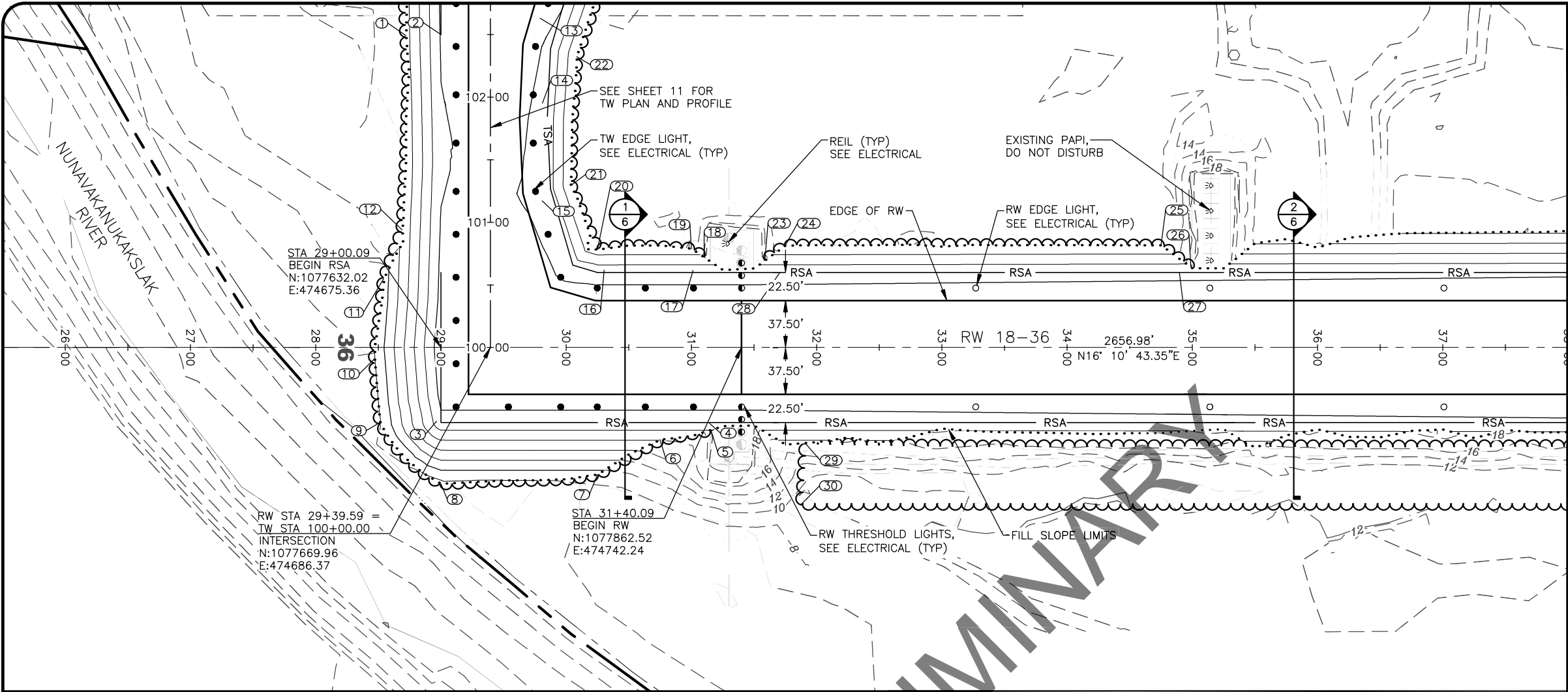
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NUNAPITCHUK AIRPORT
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TYPICAL SECTIONS I

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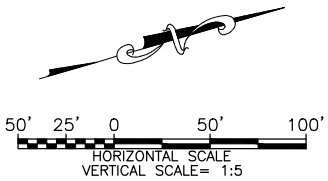
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Drawn By:
Checked By:



SEE SHEET 9
MATCH LINE RW 18-36 STA 38+00

CLEARING LIMITS		
POINT	STATION	OFFSET
1	28+72.03	249.04' LT
9	28+51.34	60.00' RT
2	29+00.09	250.00' LT
3	28+96.44	58.87' RT
4	31+14.57	60.57' RT
5	31+15.58	65.78' RT
6	30+75.00	73.66' RT
7	30+25.00	101.43' RT
8	29+00.09	108.79' RT
10	28+46.96	8.91' RT
11	28+54.41	55.11' LT
12	28+69.02	93.89' LT
13	29+79.24	262.91' LT
14	29+80.99	195.14' LT
15	29+80.86	117.13' LT
16	30+30.36	61.81' LT
17	31+01.29	61.56' LT
18	31+10.12	71.95' LT
19	31+00.00	78.80' LT
20	30+25.00	78.19' LT
21	30+03.58	129.32' LT
22	30+08.40	232.28' LT
23	31+58.66	69.52' LT
24	31+75.00	81.38' LT
25	34+75.00	81.50' LT
26	34+98.77	64.10' LT
27	34+89.73	59.95' LT
28	31+70.65	59.88' LT
29	31+91.10	76.83' RT
30	31+88.06	125.00' RT



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AIP No. 3-02-0446-00X-20XX
RW 18-36 PLAN AND PROFILE STA 26+00 TO
STA 38+00

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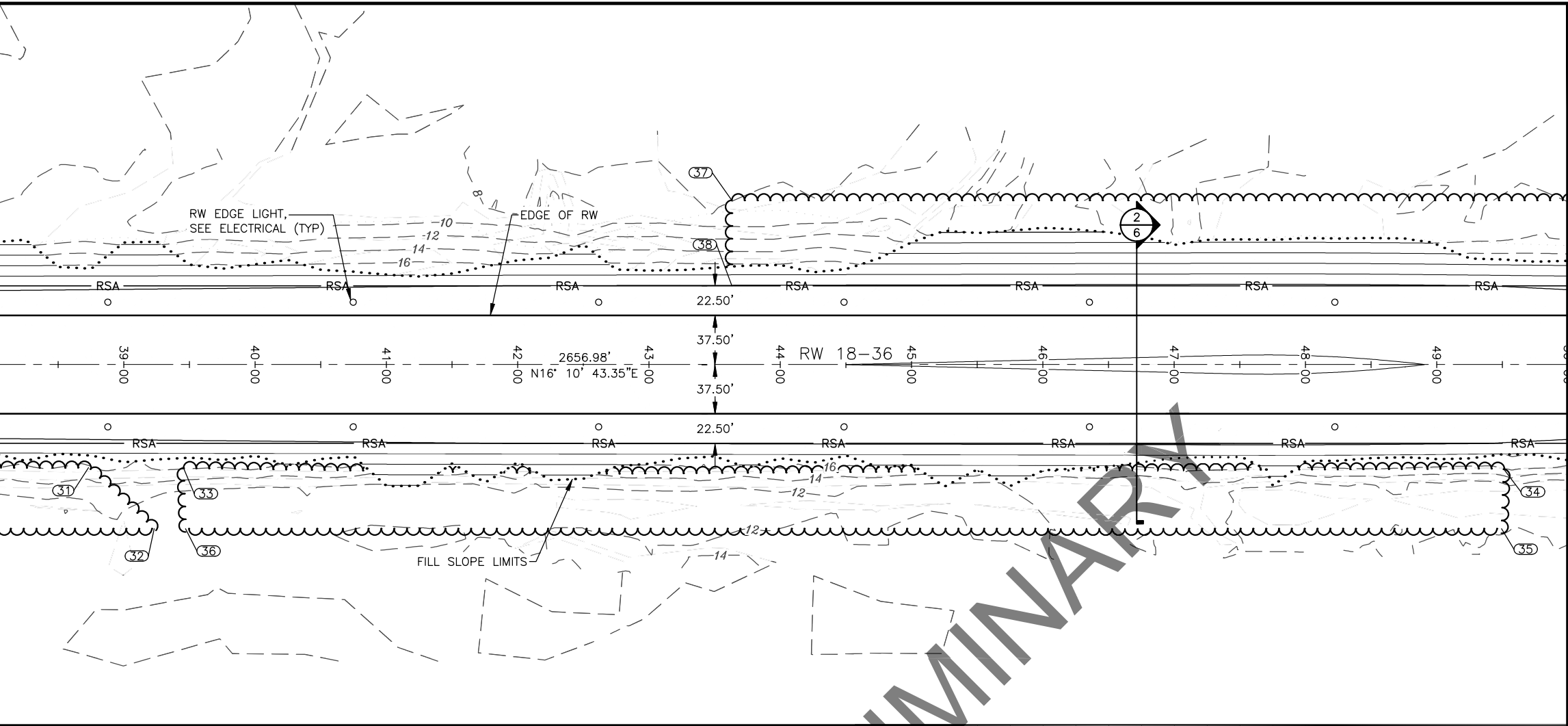
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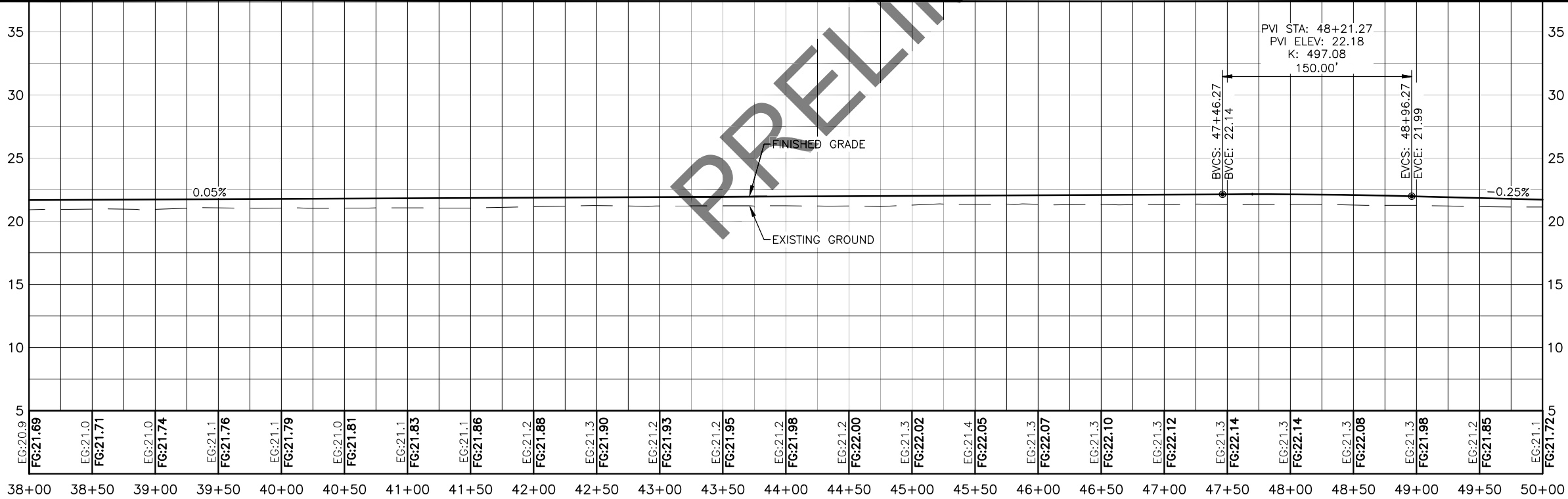
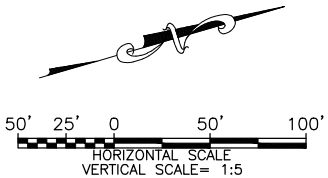
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MATCH LINE RW 18-36 STA 38+00
SEE SHEET 8



MATCH LINE RW 18-36 STA 50+00
SEE SHEET 10

CLEARING LIMITS		
POINT	STATION	OFFSET
31	38+73.21	78.47' RT
32	39+23.16	125.00' RT
33	39+45.43	78.73' RT
34	49+50.91	79.23' RT
35	49+49.30	125.00' RT
36	39+47.01	125.00' RT
37	43+63.13	125.00' LT
38	43+63.13	60.00' LT



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RW 18-36 PLAN AND PROFILE STA 38+00 TO
STA 50+00

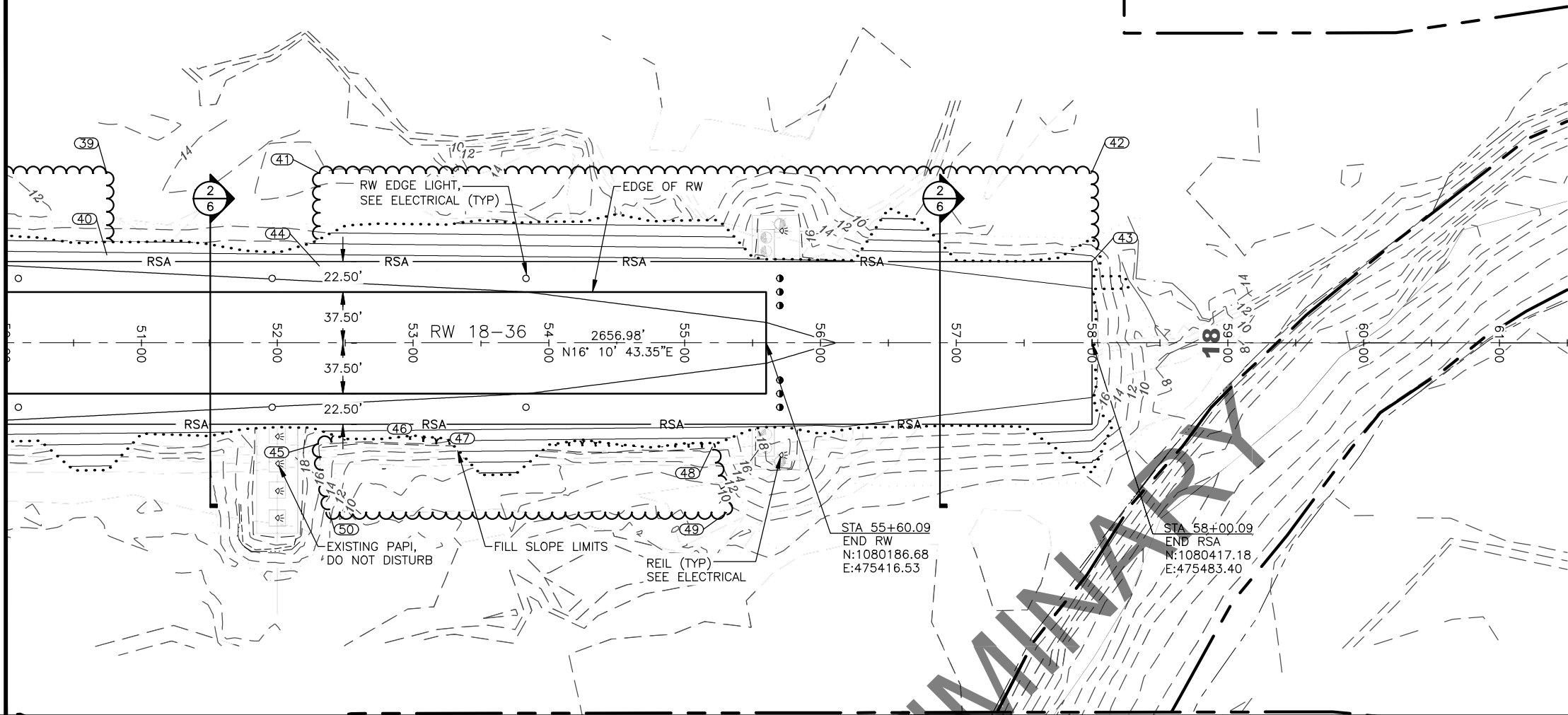
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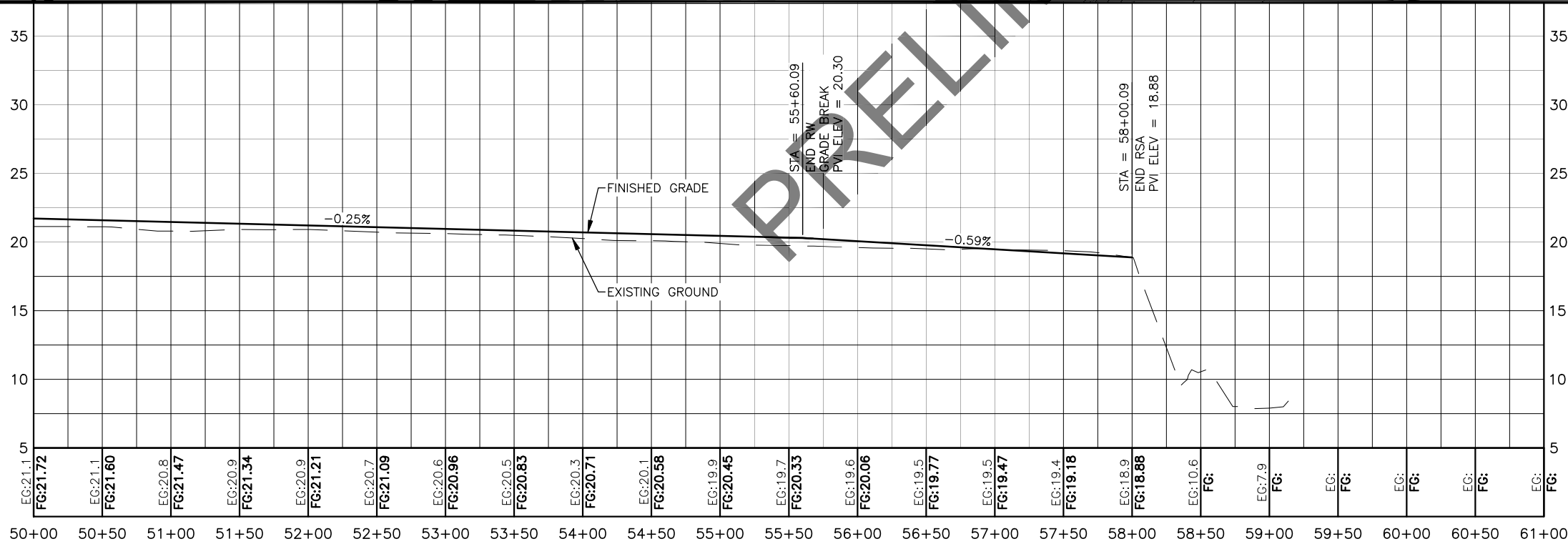
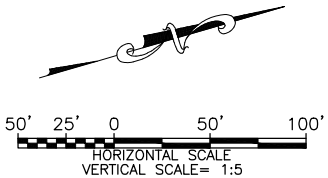
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MATCH LINE RW 18-36 STA 49+00
SEE SHEET 9



CLEARING LIMITS		
POINT	STATION	OFFSET
39	50+74.53	125.00' LT
40	50+74.53	64.80' LT
41	52+31.05	125.00' LT
42	57+99.55	125.00' LT
43	58+00.09	60.00' LT
44	52+31.05	56.59' LT
45	52+30.06	74.40' RT
46	52+73.60	67.19' RT
47	53+19.83	74.35' RT
48	55+20.28	76.76' RT
49	55+31.01	125.00' RT
50	52+38.38	125.00' RT



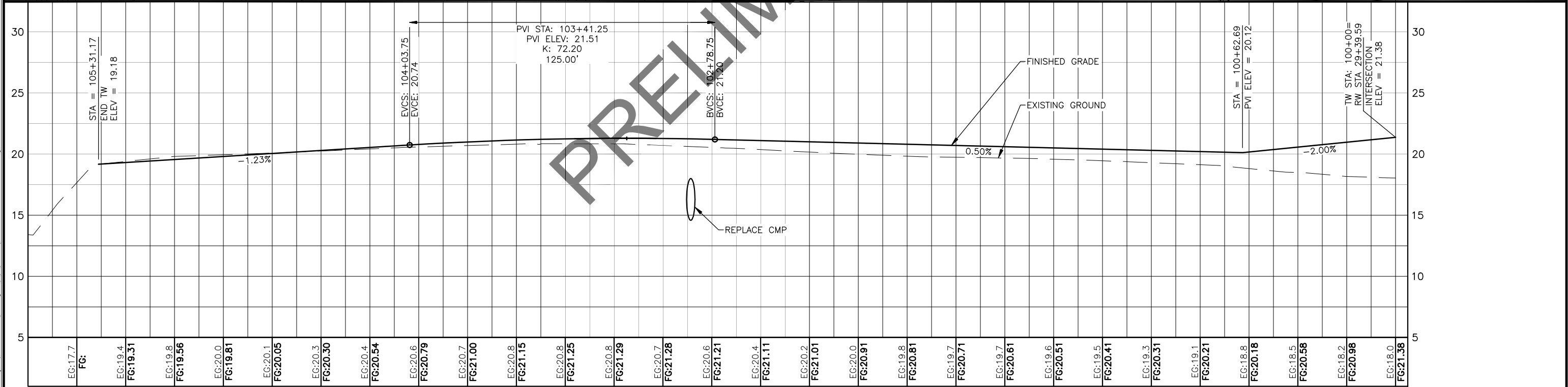
STANTEC CONSULTING SERVICES INC.
725 EAST FIREWEED LANE, SUITE 200
ANCHORAGE, AK 99503-2245
(907) 276-4245
CERTIFICATE OF AUTHORIZATION #
126386

BY	DATE	REVISION

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
CENTRAL REGION
4111 AVIATION AVE., ANCHORAGE ALASKA 99502
PHONE (907) 269-0590

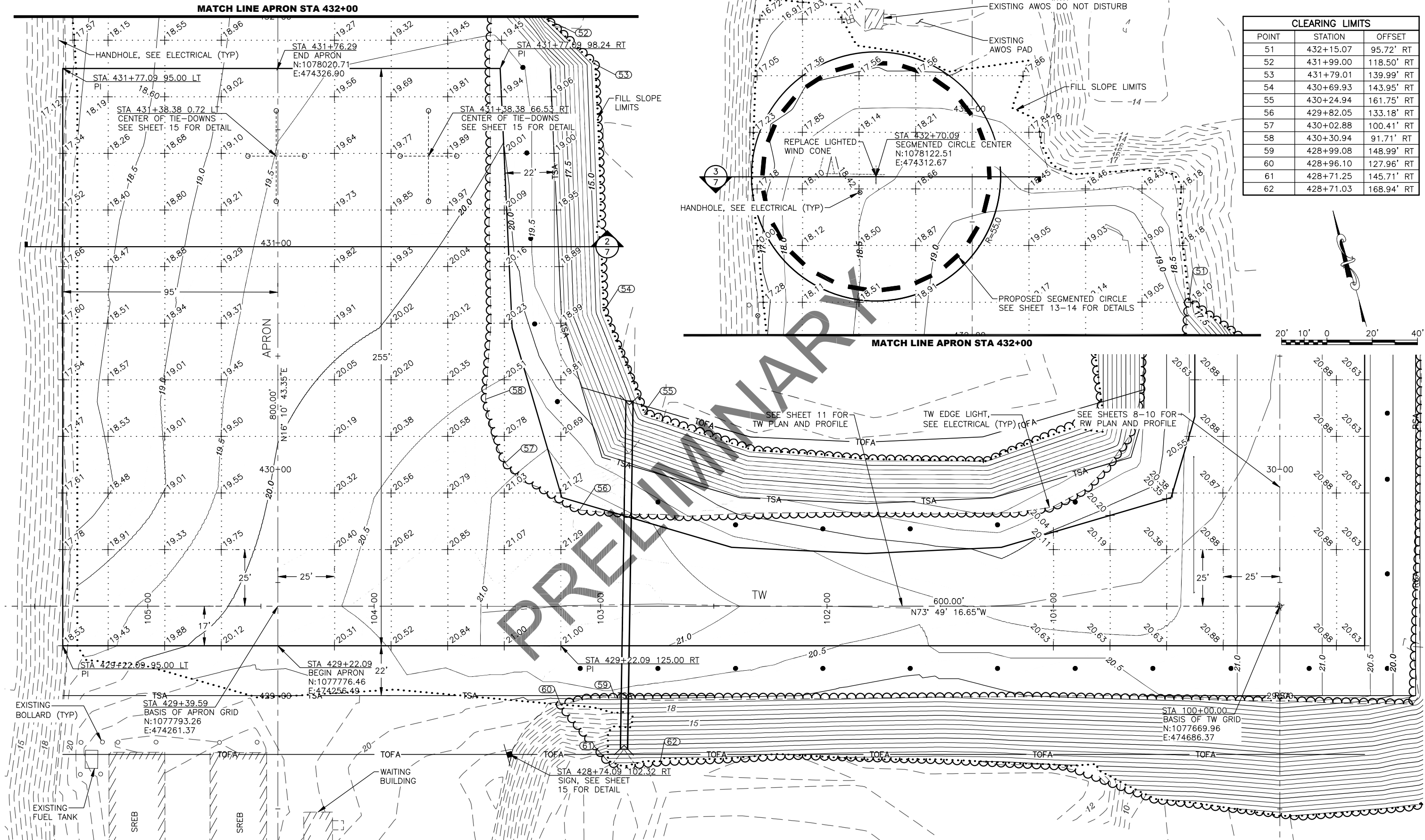
NUNAPITCHUK AIRPORT
NUNAPITCHUK, ALASKA
NUNAPITCHUK AIRPORT IMPROVEMENTS
PROJECT No. CFAPT00427
AIP No. 3-02-0446-00X-20XX
RW 18-36 PLAN AND PROFILE STA 50+00 TO
STA 61+00

DATE:
06/27/2019
SHEET:
10 OF 28



6/27/2019 4:18 PM
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Date Revised:
Layout Name:
File Path and Name:

LEN
ADC
JGL
Designed By:
Drawn By:
Checked By:

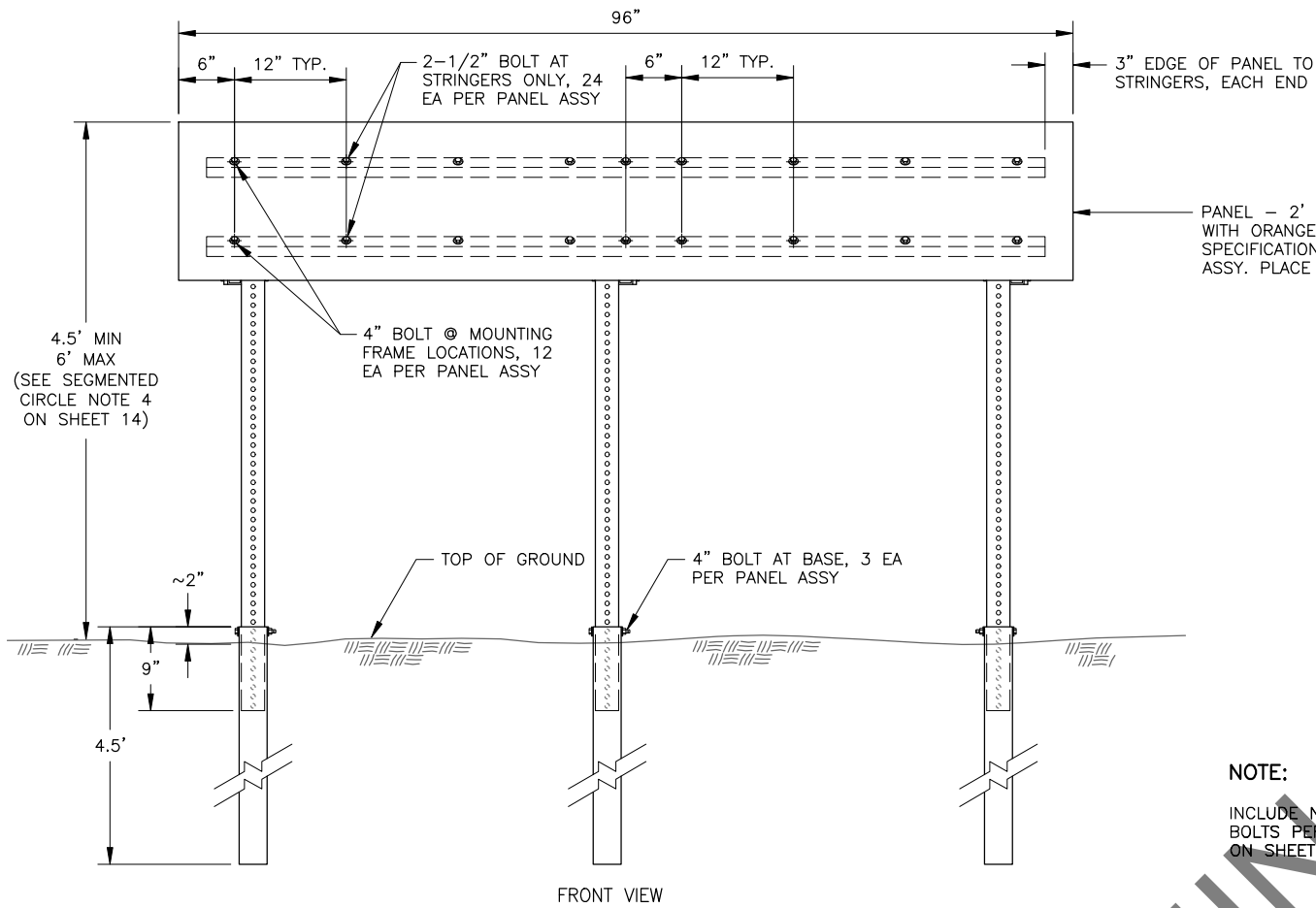


CLEARING LIMITS		
POINT	STATION	OFFSET
51	432+15.07	95.72' RT
52	431+99.00	118.50' RT
53	431+79.01	139.99' RT
54	430+69.93	143.95' RT
55	430+24.94	161.75' RT
56	429+82.05	133.18' RT
57	430+02.88	100.41' RT
58	430+30.94	91.71' RT
59	428+99.08	148.99' RT
60	428+96.10	127.96' RT
61	428+71.25	145.71' RT
62	428+71.03	168.94' RT

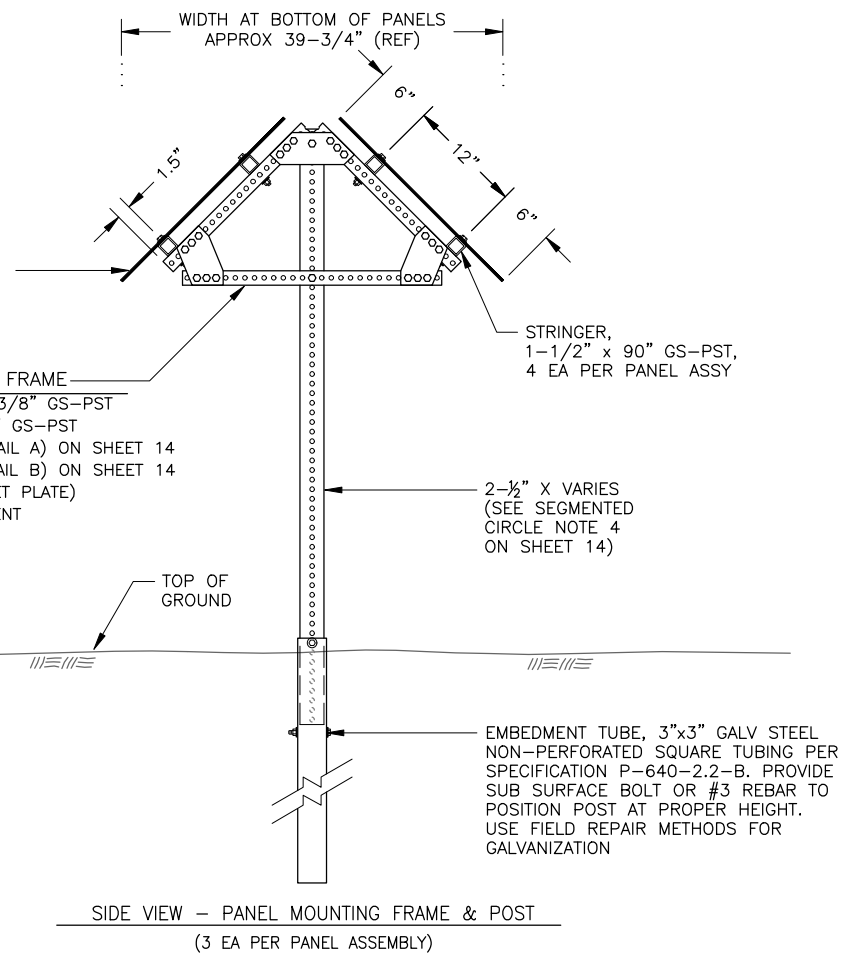


Designed By: LEN
Drawn By: ADC
Checked By: JGL

Date Revised: 6/27/2019 4:18 PM
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File Path and Name: U:\2047065600\drawing_nup\C\Sheets\00427-16A-NUP-DET.dwg

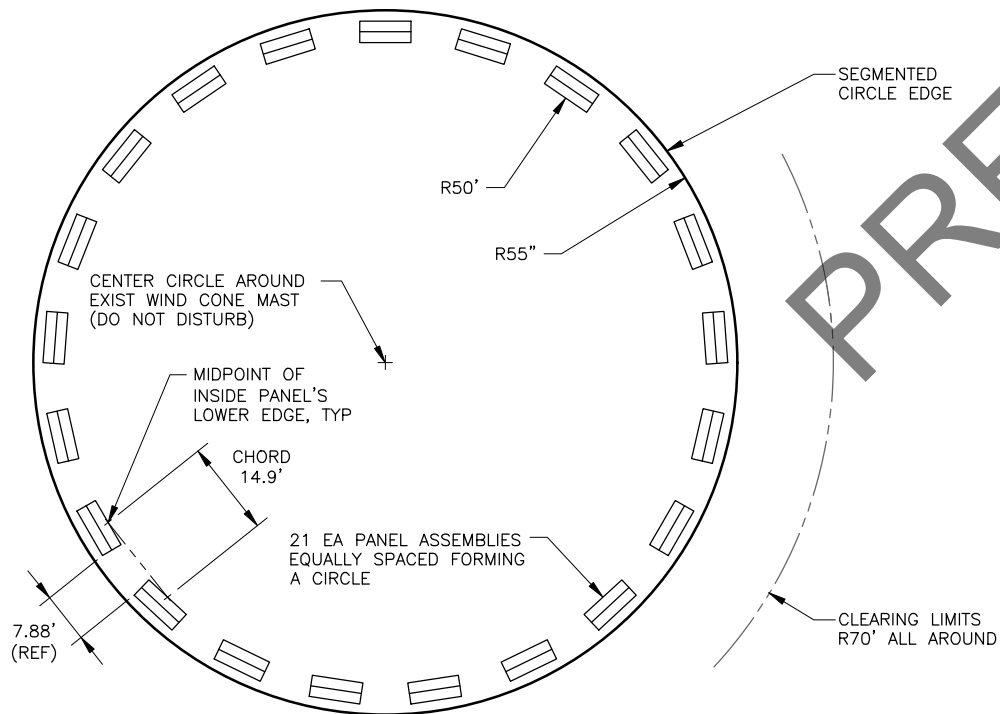


1 SEGMENTED CIRCLE PANEL ASSEMBLY
SCALE: NTS

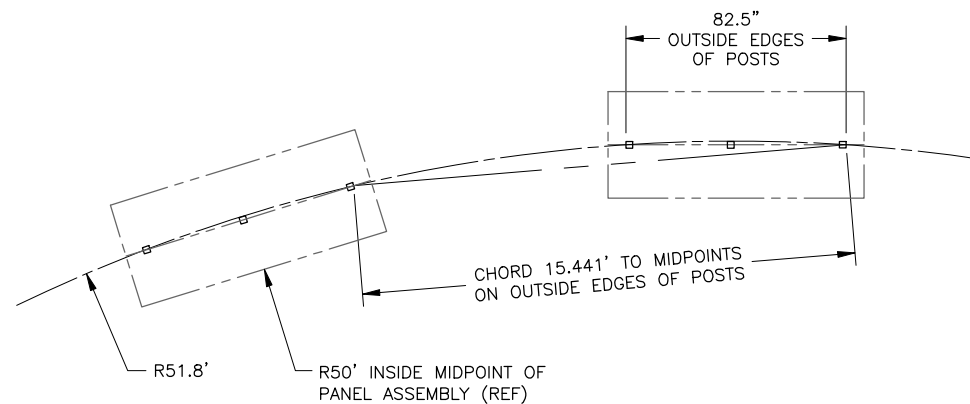


NOTE:

INCLUDE NUTS AND WASHERS WITH ALL BOLTS PER SEGMENTED CIRCLE NOTE 2 ON SHEET 14.



2 SEGMENTED CIRCLE LAYOUT
SCALE: NTS



3 POST PLACEMENT DETAIL
SCALE: NTS

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725 EAST FIREWEED LANE, SUITE 200
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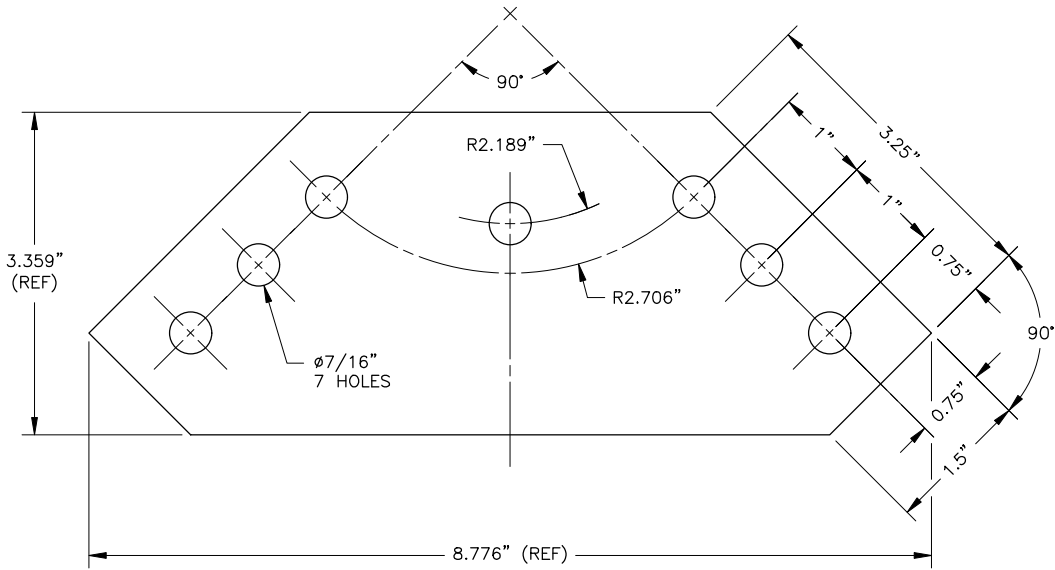
BY DATE REVISION

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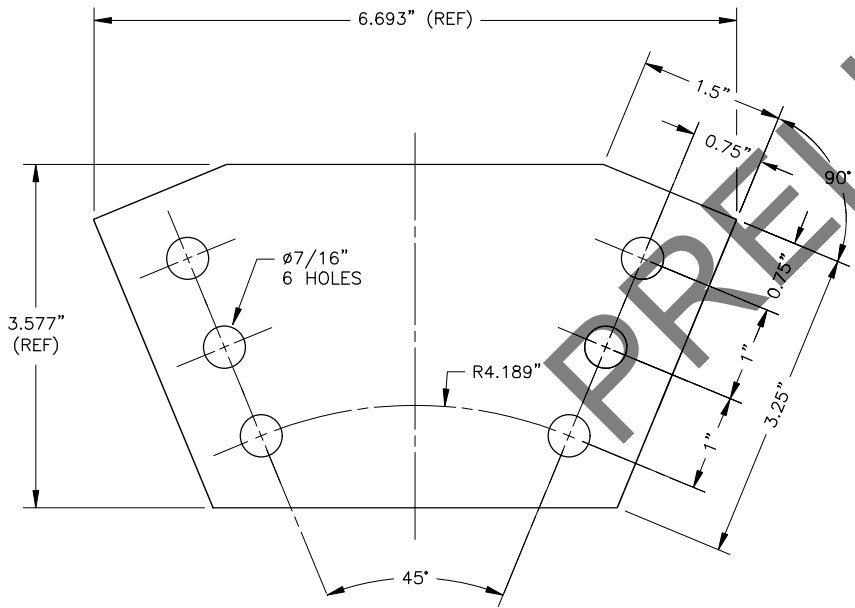
NUNAPITCHUK AIRPORT
NUNAPITCHUK, ALASKA
NUNAPITCHUK AIRPORT IMPROVEMENTS
PROJECT No. CFAPT00427
AIP No. 3-02-0446-00X-20XX
SEGMENTED CIRCLE DETAIL I

DATE:
06/27/2019

SHEET:
13 OF 28



1
14 PEAK GUSSET PLATE PANEL MOUNTING FRAME – DETAIL A
SCALE: NTS

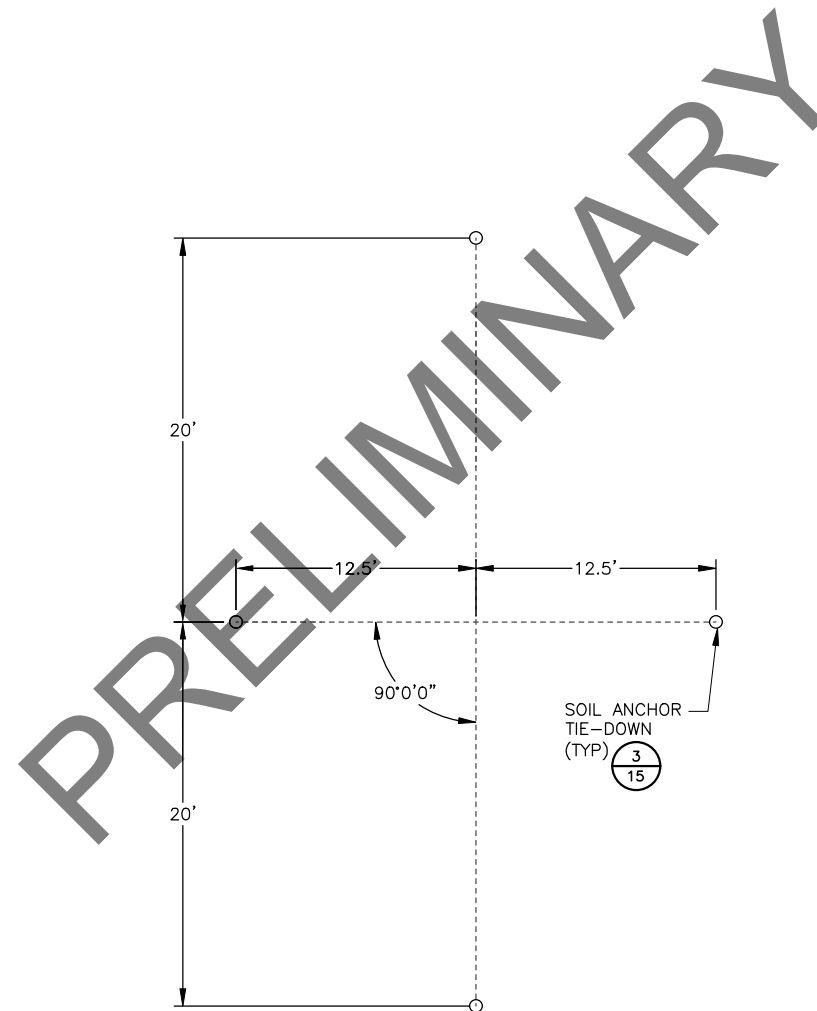


2
14 HEEL GUSSET PLATE PANEL MOUNTING FRAME – DETAIL B
SCALE: NTS

SEGMENTED CIRCLE NOTES:

1. ALL STRUCTURAL MEMBERS OF PANEL ASSEMBLY ARE GS-PST (GALVANIZED SQUARE – PERFORATED STEEL TUBING), SIZE AS INDICATED IN DRAWING, IN CONFORMANCE WITH SECTION P-640-2.2.b.
2. ALL BOLTS, NUTS, AND WASHERS SHALL CONFORM TO FASTENER SPECIFICATION TABLE INCLUDED IN THIS PLAN SET. ALL BOLTS USED IN PANEL ASSEMBLY SHALL BE 3/8" DIA. X LENGTH CALLED OUT IN PLANS, UNLESS OTHERWISE NOTED. FOR EACH BOLT INCLUDE 1 EA 3/8" NUT, AND 2 EA 3/8" WASHERS (7/16 ID X 1" OD) – ONE AT THE BOLT HEAD AND ONE AT THE NUT.
3. GUSSET PLATES SHALL CONFORM TO AIRPORT SPECIFICATION P-640-2.2 c(1) INCLUDED WITH THIS PLAN SET.
4. FINISH HEIGHT OF ALL INSTALLED PANEL ASSEMBLIES COMPRISING A SINGLE SEGMENTED CIRCLE SHALL BE UNIFORM WITH A MAXIMUM VARIANCE OF 6" THROUGHOUT CIRCLE LAYOUT, UNLESS OTHERWISE APPROVED BY THE ENGINEER.
5. PANEL ASSEMBLIES ARE TO BE REMOVABLE FROM EMBEDMENT TUBES FOR MAINTENANCE PURPOSES.
6. DIMENSIONS LABELED "(REF)" ARE FOR INFORMATIONAL PURPOSES ONLY.
7. INSTALLATION OF POSTS MAY REQUIRE MINOR TRENCHING IF OCCASIONAL ROCK IS ENCOUNTERED IN THE PAD BORROW EMBANKMENT. BACKFILL EXCAVATED MATERIAL AND RESTORE LEVEL SURFACE. THIS WORK IS SUBSIDIARY TO THE RESPECTIVE P-640 PAY ITEM AT EACH LOCATION.

FASTENER SPECIFICATION TABLE		
FASTENER TYPE	STEEL HOT DIPPED GALVANIZED	STAINLESS STEEL
BOLTS	ASTM A 307	ASTM F 593
NUTS	ASTM A 563	ASTM F 594
WASHERS	ASTM F 844	ASTM A 480



1. STAINLESS STEEL (OR GALV.) THREADED CLEVIS YOKE WITH 3/8"Ø THREADED STAINLESS STEEL (OR GALV.) CLEVIS PIN.
2. MINIMUM TENSILE BREAKING STRENGTH OF 9,000 LBS, A MINIMUM WORKING LOAD CAPACITY OF 3,500 LBS AND A MINIMUM FIELD PULL-OUT CAPACITY OF 5,000 LBS.

SIGNING SUMMARY TABLE				
SIGN	STATION	OFFSET	AREA (SQFT)	# OF SIGNS
SELECTIVE EXCLUSIONS	TW 103+40.21	65.50' LT	12	1

- ### **SIGNING NOTES:**
1. ALL APPLICABLE SIGNS SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) 2015, ALASKA DESIGN SPECIFICATIONS SUPPLEMENT (ASDS) 2015, AND STANDARD PLANS.
 2. WORK AND MATERIALS NOT SPECIFICALLY REFERRED TO UNDER A CONTRACT BID ITEM SHALL BE CONSIDERED SUBSIDIARY TO CONTRACT PAY ITEMS AND SHALL REQUIRE NO ADDITIONAL COMPENSATION. SEE SECTION 40-01.
 3. MOUNT SIGNS TO STANDARD SIGN POSTS.
 4. FABRICATE ALL SIGNS WITH TYPE IV REFLECTIVE SHEETING ON 0.125 INCH THICK ALUMINUM PANELS.
 5. ANY SIGNS REMOVED SHALL BE OFFERED TO THE AIRPORT. IF AIRPORT DOES NOT ACCEPT THEM, DISPOSE OF OFF SITE.

3 **TIE-DOWN ANCHOR DETAIL**
15 SCALE: NTS

GENERAL ELECTRICAL NOTES:

1.

LOCATIONS OF EXISTING EQUIPMENT, CONDUIT, ETC ARE TAKEN FROM ASBUILT DRAWINGS AND LIMITED SURVEY DATA AND SHALL BE FIELD VERIFIED. OBTAIN LOCATES OF EXISTING SYSTEMS AND EXCAVATE WITH CAUTION.
2.

REMOVE LIGHTS AND OTHER EQUIPMENT AS INDICATED ON DEMOLITION PLANS. REMOVAL INCLUDES ALL ASSOCIATED CONDUIT, CONDUCTORS, LIGHT BASES, TRANSFORMERS, CONTROLLERS, DRAIN CONDUITS, FOUNDATIONS, AND CONCRETE, UNLESS OTHERWISE INDICATED. ALL REMOVED LIGHTS, BASEPLATES (INCLUDING BOLTS), TRANSFORMERS, WIND CONES, ROTATING BEACON, BEACON PLATFORM, AND EQUIPMENT REMOVED FROM THE ELECTRICAL EQUIPMENT BUILDING SHALL BE OFFERED TO AIRPORT MAINTENANCE. DISPOSAL OF LIGHTING EQUIPMENT DEEMED NON-SALVAGABLE BY AIRPORT MAINTENANCE AND REMOVED CONDUIT, CONDUCTORS, LIGHT BASES, CONCRETE, AND OTHER MATERIAL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE DISPOSED OF AT AN APPROVED SITE OFF OF AIRPORT PROPERTY IN ACCORDANCE WITH FEDERAL AND STATE REGULATIONS. DISPOSAL COSTS SHALL BE SUBSIDIARY TO THE CONTRACT.
3.

COORDINATE ALL LIGHTING OUTAGES CAUSED BY DISCONNECTIONS, CIRCUIT CHANGES, OR OTHER WORK WITH THE PROJECT ENGINEER. SCHEDULE INSTALLATION OF CONDUCTORS AND OTHER EQUIPMENT TO MINIMIZE QUANTITY AND DURATION OF OUTAGES.
4.

ALL AIRFIELD LIGHTING CONDUCTORS SHALL BE FAA TYPE C.
5.

INSTALL A #6 BARE COPPER GROUNDING CONDUCTOR WITH ALL LIGHTING CIRCUIT CONDUCTORS.
6.

INSTALL PULL ROPE IN ALL EMPTY CONDUITS.
7.

ADJUST OR REPLACE EXISTING FAA PAPI/REIL JUNCTION BOXES AND HANDHOLES AS REQUIRED FOR NEW GRADE ELEVATIONS. SEE SCHEDULE ON SHEET E13 FOR WORK REQUIRED AT EACH LOCATION.

SHEET NOTES: (X)

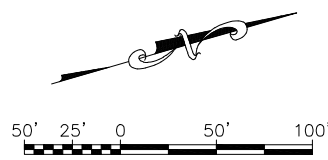
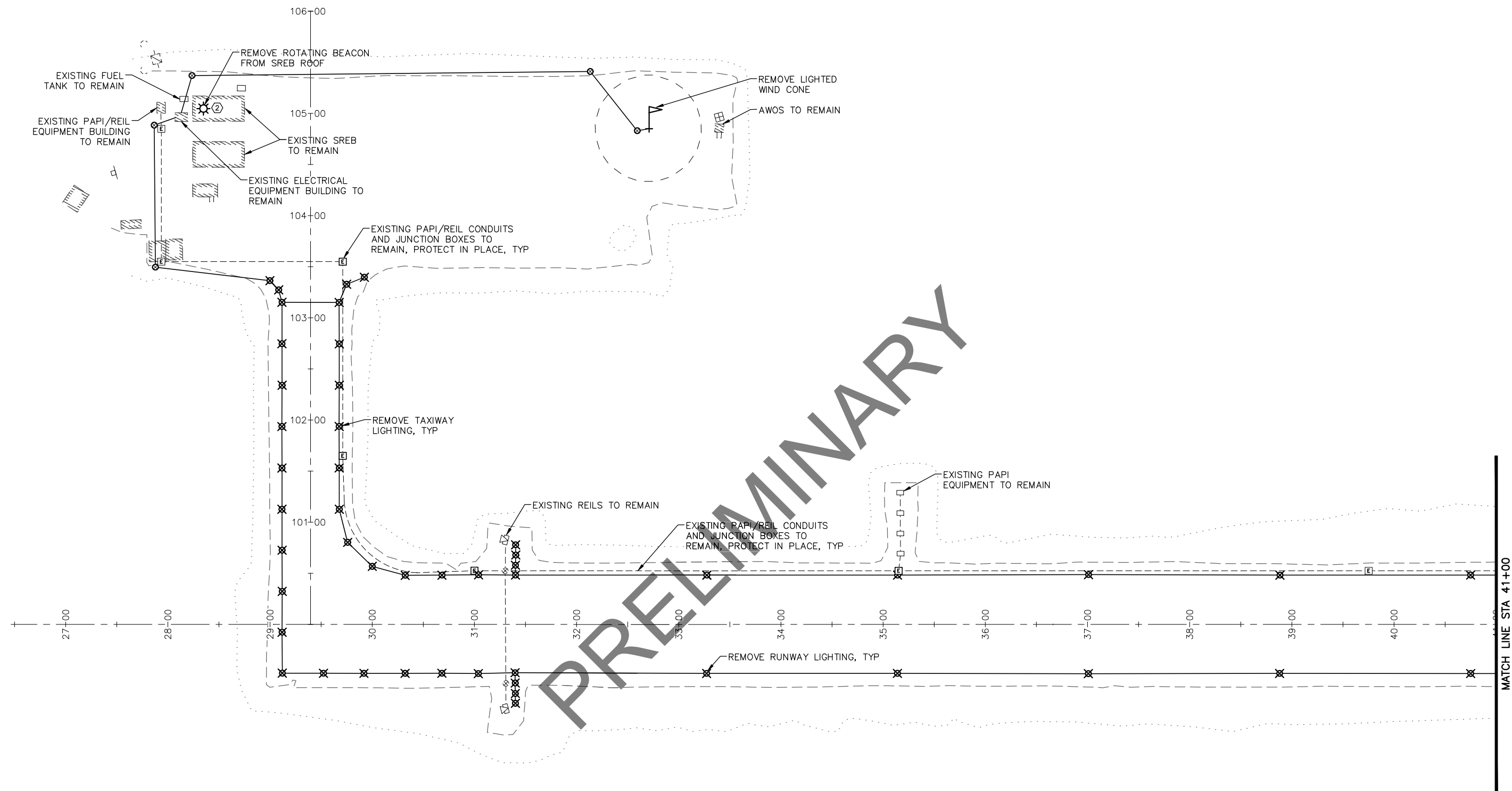
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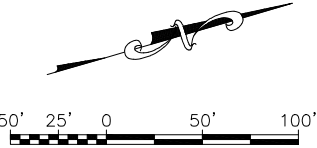
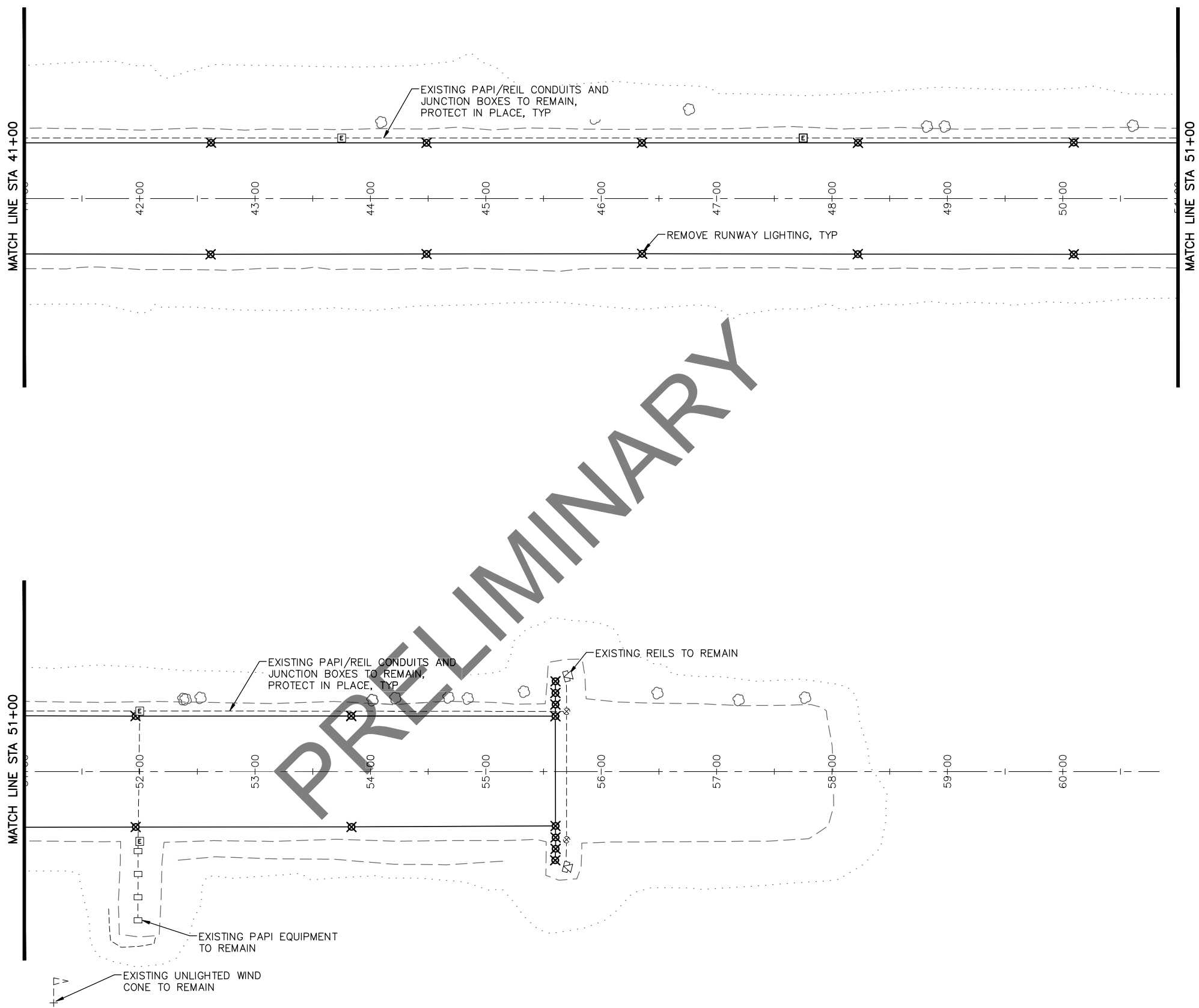
CONDUIT DRAIN TO DAYLIGHT, SEE DETAIL 5/E7. DRAIN LOCATIONS MAY BE ADJUSTED IN THE FIELD IN COORDINATION WITH THE ENGINEER TO PROVIDE OPTIMAL LOCATIONS OF CONDUIT DRAINS BASED ON ACTUAL GRADES AND CONDITIONS.
2.

REMOVE ROTATING BEACON, MOUNTING PLATFORM, LADDER, RADIO ANTENNA, AND ALL ASSOCIATED CONDUITS FROM SREB. SEAL ALL WALL AND ROOF PENETRATIONS WEATHERTIGHT.

ELECTRICAL PLAN LEGEND

<div><div><div>⊗</div><div>EXISTING LIGHT TO BE REMOVED</div></div><div><div>○</div><div>RUNWAY EDGE LIGHT, OMNI-DIRECTIONAL</div></div><div><div>⦶</div><div>RUNWAY EDGE LIGHT, BI-DIRECTIONAL</div></div><div><div>●</div><div>RUNWAY THRESHOLD LIGHT, BI-DIRECTIONAL</div></div><div><div>●</div><div>TAXIWAY EDGE LIGHT, OMNI-DIRECTIONAL</div></div><div><div>⏏</div><div>GROUND ROD, 3/4"x10' TYPICAL</div></div><div><div>⊗</div><div>HANDHOLE (HH), TYPE I (LIGHT BASE WITH BLANK COVER)</div></div><div><div>ⓔ</div><div>JUNCTION BOX</div></div><div><div>Ⓜ</div><div>METERBASE</div></div><div><div>⚡</div><div>WIND CONE</div></div><div><div>⚙</div><div>ROTATING BEACON</div></div><div><div>⊗</div><div>REFERENCE TO SHEET NOTE</div></div><div><div>⚠</div><div>REFERENCE TO REVISION</div></div></div>	<div><div>---XXX---</div><div>EXISTING UTILITY LINE TO REMAIN, XXX DESIGNATES TYPE</div></div> <div><div>—XXX—</div><div>NEW UTILITY LINE, XXX DESIGNATES TYPE UG = UNDERGROUND E = ELECTRIC OH = OVERHEAD T = TELEPHONE C = COMMUNICATIONS</div></div> <div><div>-----</div><div>EXISTING CONDUIT TO REMAIN</div></div> <div><div>————</div><div>HDPE CONDUIT WITH CONDUCTORS AS INDICATED, 2" UNLESS OTHERWISE INDICATED</div></div> <div><div>=====</div><div>RIGID STEEL CONDUIT WITH CONDUCTORS AS INDICATED, 2" UNLESS OTHERWISE INDICATED</div></div> <div><div>-.-.-.-.-</div><div>TEMPORARY JUMPER OR CIRCUIT, SURFACE LAID IN HDPE CONDUIT</div></div> <div><div>—#—</div><div>SERIES LIGHTING CIRCUIT, TICK MARKS INDICATE NUMBER OF 5KV SERIES CONDUCTORS IN CONDUIT (2 SHOWN), INCLUDE GROUND CONDUCTOR (NOT SHOWN), TICK MARKS NOT SHOWN ON SHORT SEGMENTS OR IN CONGESTED AREAS FOR CLARITY</div></div>
<div><div><div><div>EQUIPMENT NUMBER, SEE SCHEDULES ON SHEET E13</div><div><div>RX</div><div>RUNWAY EDGE LIGHT</div></div><div><div>TX</div><div>TAXIWAY EDGE LIGHT</div></div><div><div>HHX</div><div>HANDHOLE</div></div><div><div>FX</div><div>FAA JUNCTION BOX/HANDHOLE</div></div></div><div><div><div><div>LIGHT COLORS AND DISTRIBUTIONS</div><div><div>B</div><div>BLUE</div></div><div><div>Y</div><div>YELLOW/AMBER</div></div><div><div>G</div><div>GREEN</div></div><div><div>R</div><div>RED</div></div><div><div>W</div><div>WHITE</div></div><div><div>O</div><div>OBSCURED/BLANK</div></div><div><div>BI</div><div>BI-DIRECTIONAL</div></div><div><div>UNI</div><div>UNI-DIRECTIONAL</div></div><div><div>OMNI</div><div>OMNI-DIRECTIONAL</div></div></div></div></div></div></div>	<div><div><div><div>ELECTRICAL ABBREVIATIONS</div><div><div>AWOS</div><div>AUTOMATED WEATHER OBSERVING SYSTEM</div></div><div><div>BC</div><div>BARE COPPER</div></div><div><div>C</div><div>CONDUIT</div></div><div><div>CB</div><div>CIRCUIT BREAKER</div></div><div><div>CF</div><div>CUBIC FOOT</div></div><div><div>DOT&PF</div><div>DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES</div></div><div><div>EMT</div><div>ELECTRICAL METALLIC TUBING</div></div><div><div>EXST</div><div>EXISTING</div></div><div><div>FAA</div><div>FEDERAL AVIATION ADMINISTRATION</div></div><div><div>GRD</div><div>GROUND</div></div><div><div>HDPE</div><div>HIGH DENSITY POLYETHYLENE</div></div><div><div>LFMC</div><div>LIQUIDTIGHT FLEXIBLE METALLIC CONDUIT</div></div><div><div>LFNC</div><div>LIQUIDTIGHT FLEXIBLE NONMETALLIC CONDUIT</div></div><div><div>NF</div><div>NON-FUSED</div></div><div><div>NIC</div><div>NOT IN CONTRACT</div></div><div><div>PE</div><div>PHOTOELECTRIC</div></div><div><div>PVC</div><div>POLYVINYL CHLORIDE</div></div><div><div>RMC</div><div>RIGID METALLIC CONDUIT (GALVANIZED STEEL)</div></div><div><div>SREB</div><div>SNOW REMOVAL EQUIPMENT BUILDING</div></div><div><div>SS</div><div>STAINLESS STEEL</div></div><div><div>TYP</div><div>TYPICAL</div></div><div><div>UON</div><div>UNLESS OTHERWISE NOTED</div></div></div></div></div>





STANTEC CONSULTING SERVICES INC.
725 EAST FIREWEED LANE, SUITE 200
ANCHORAGE, AK 99503-2245
(907) 276-4245
CERTIFICATE OF AUTHORIZATION #
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STATE OF ALASKA
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AND PUBLIC FACILITIES
CENTRAL REGION
4111 AVIATION AVE., ANCHORAGE ALASKA 99502
PHONE (907) 269-0590

NUNAPITCHUK AIRPORT
NUNAPITCHUK, ALASKA
NUNAPITCHUK AIRPORT IMPROVEMENTS
PROJECT No. CFAPT00427
AIP No. 3-02-0446-00X-20XX
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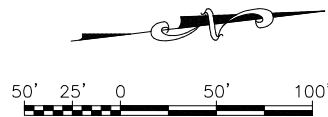
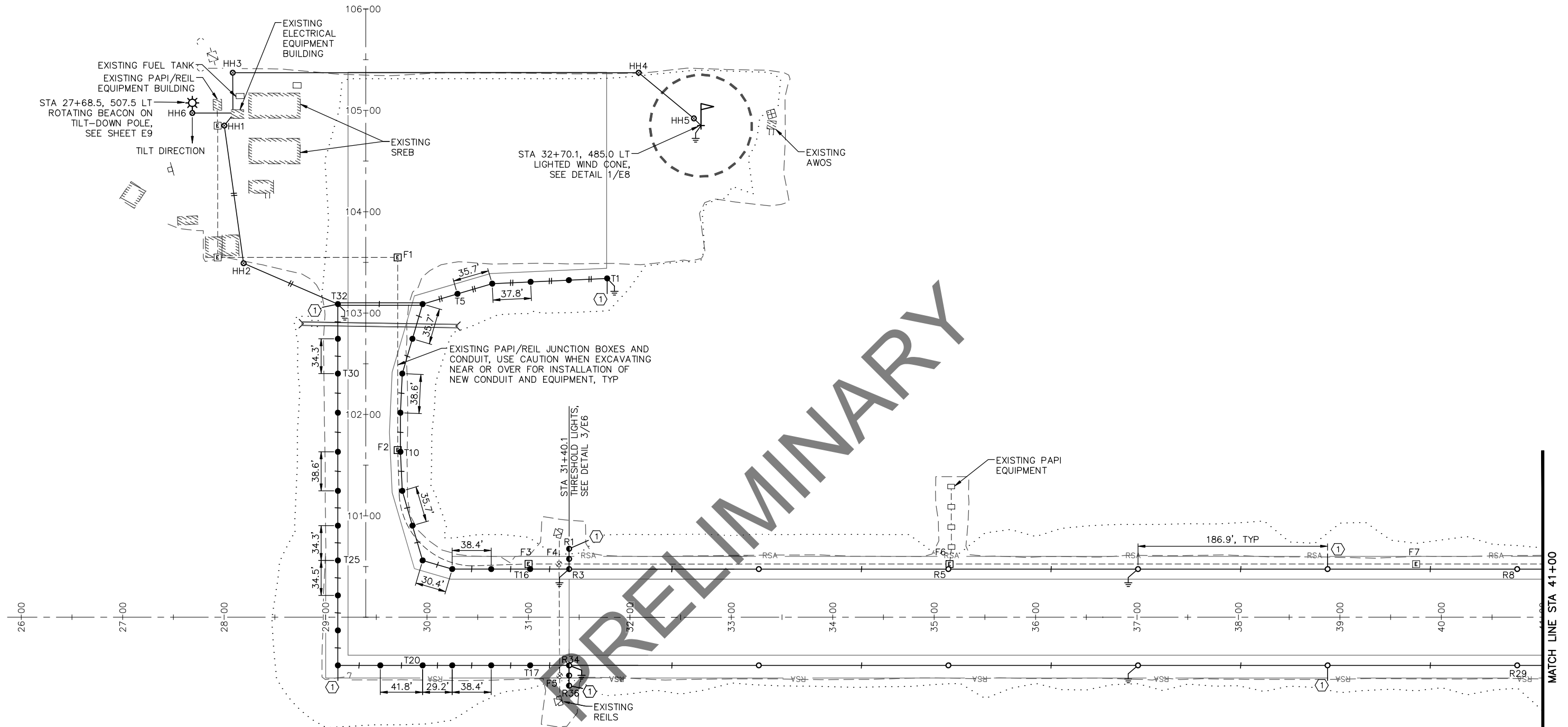
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SHEET:
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Date Revised:
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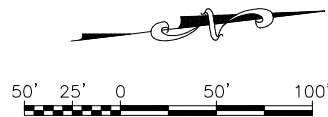
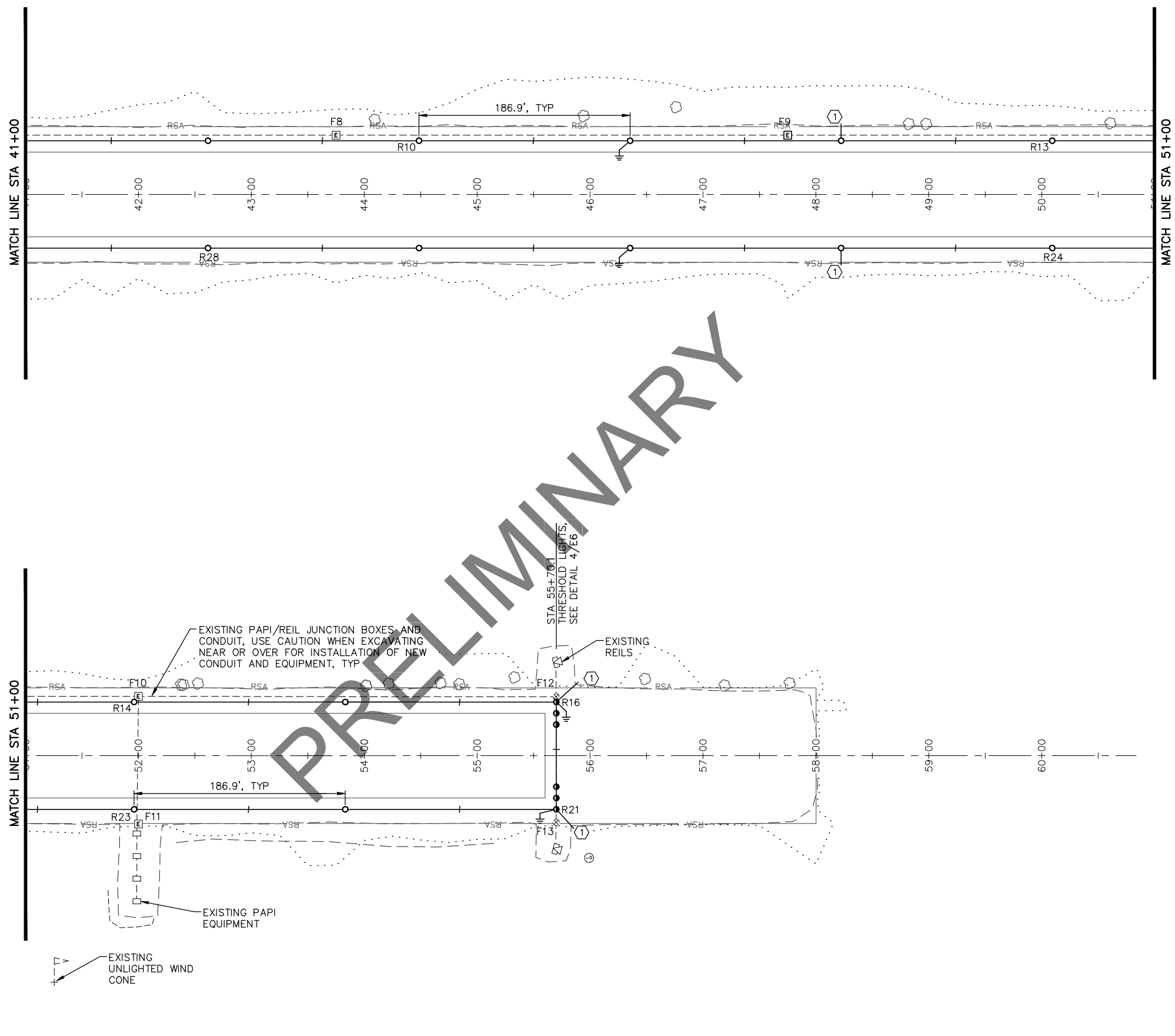
STANTEC CONSULTING SERVICES INC.
725 EAST FIREWEED LANE, SUITE 200
ANCHORAGE, AK 99503-2245
(907) 276-4245
CERTIFICATE OF AUTHORIZATION #
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STATE OF ALASKA
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NUNAPITCHUK AIRPORT
NUNAPITCHUK, ALASKA
NUNAPITCHUK AIRPORT IMPROVEMENTS
PROJECT No. CFAPT00427
AIP No. 3-02-0446-00X-20XX
LIGHTING PLAN-SOUTH

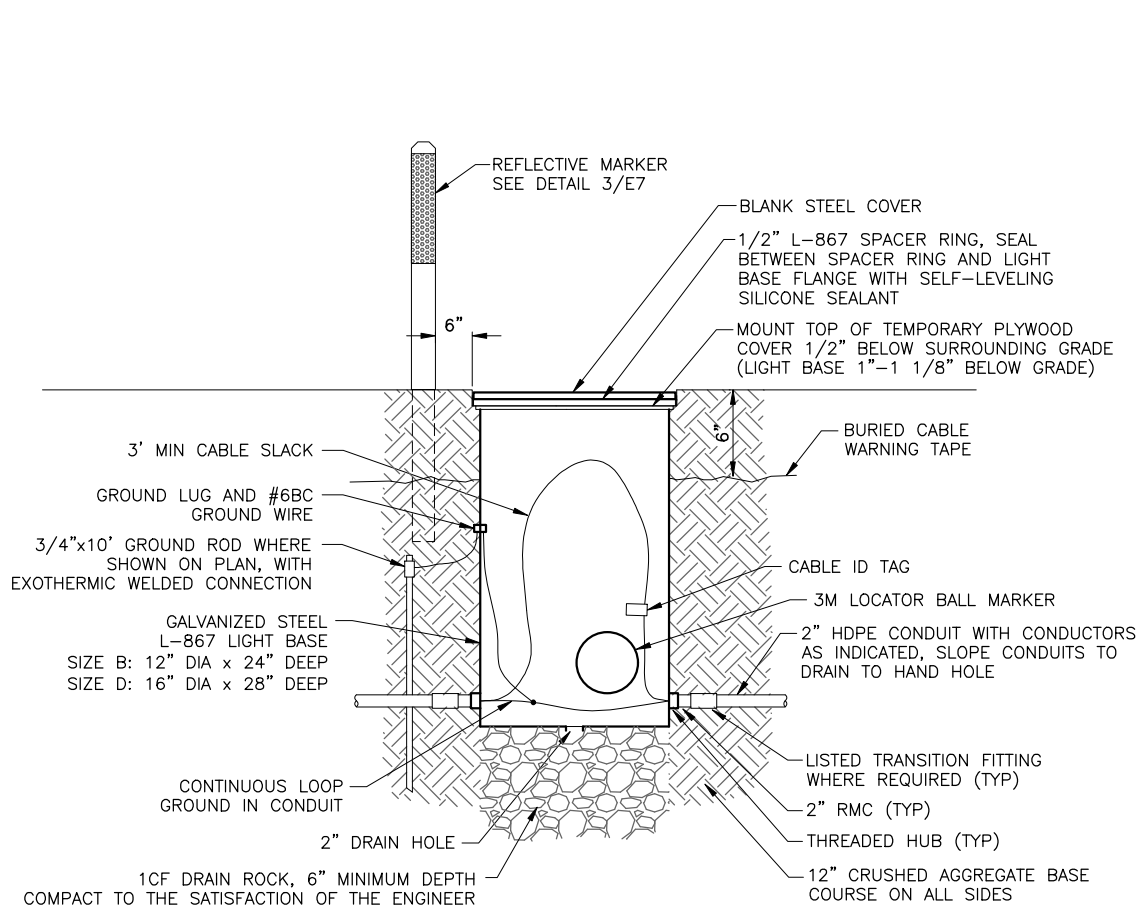
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06/27/2019
SHEET:
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Drawn By: ADC
Checked By: JGL

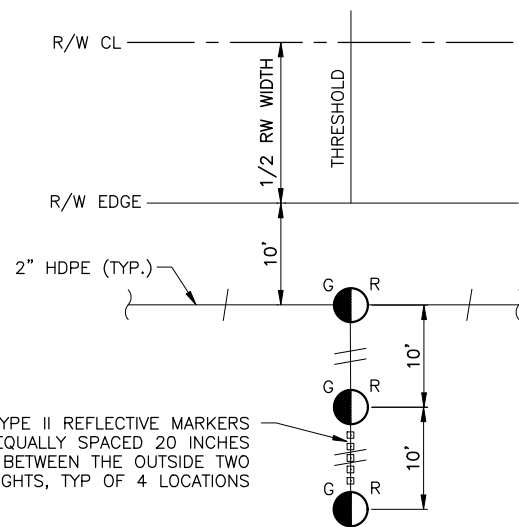
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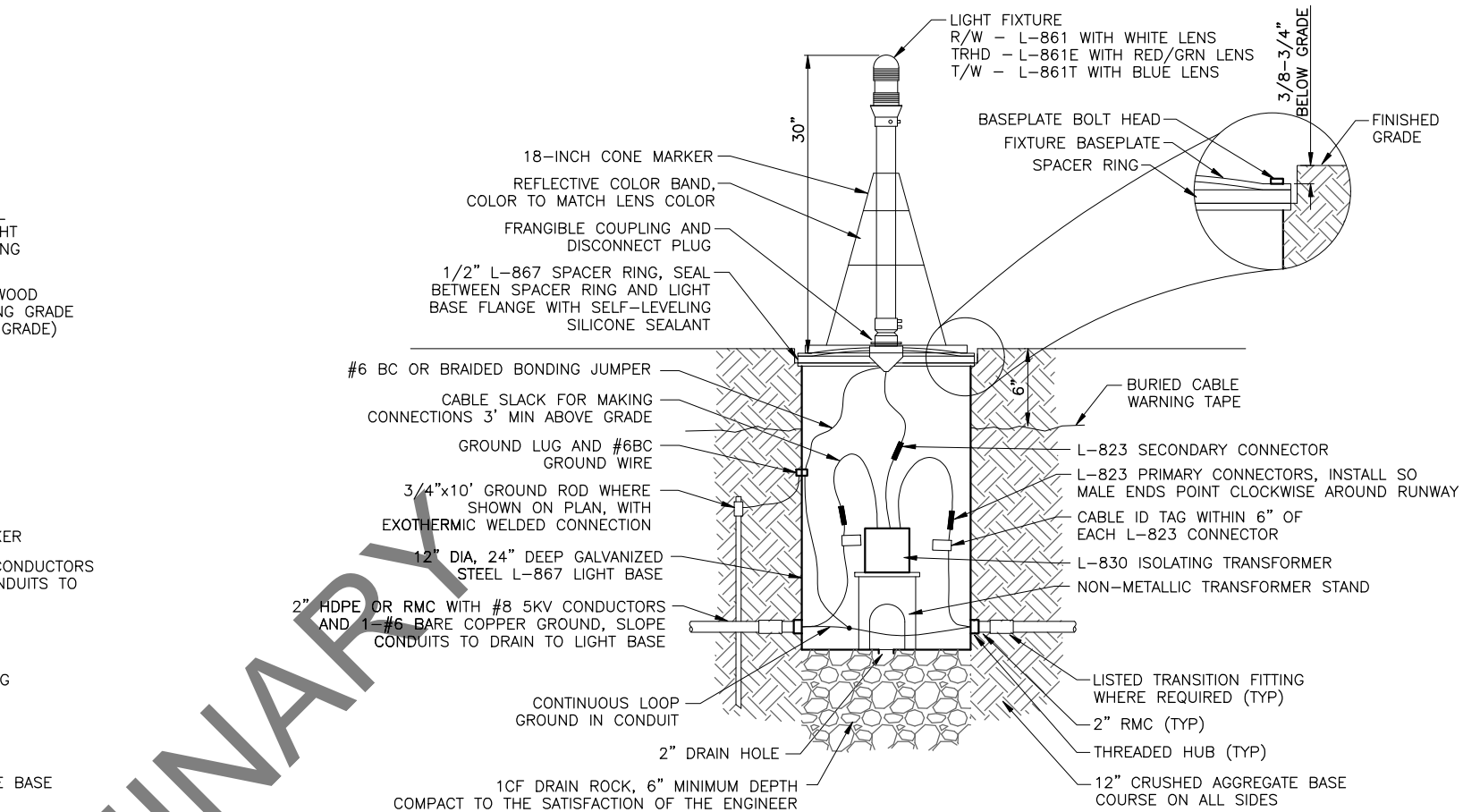
1 HANDHOLE DETAIL
E6 SCALE: N.T.S.

NOTE:
CIRCUIT GROUND WIRE ROUTED IN CONDUIT SHALL BE CONTINUOUS THROUGH LIGHT BASE OR JOINED USING IRREVERSIBLE COMPRESSION CONNECTORS AND SHALL NOT RELY ON LIGHT BASE GROUND LUG FOR CONTINUITY



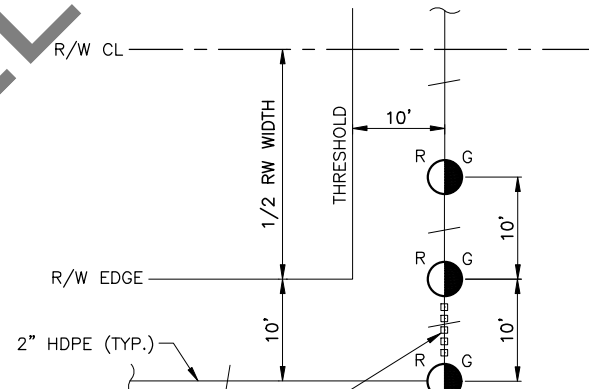
PROVIDE 5 TYPE II REFLECTIVE MARKERS (DETAIL 3/E7) EQUALLY SPACED 20 INCHES ON CENTER BETWEEN THE OUTSIDE TWO THRESHOLD LIGHTS, TYP OF 4 LOCATIONS

3 OUTBOARD THRESHOLD LIGHTING DETAIL
E6 SCALE: N.T.S.



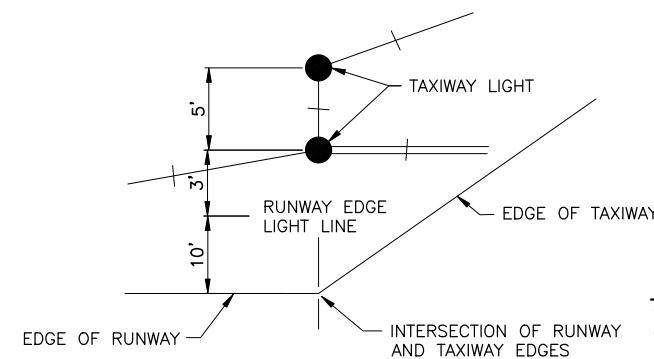
2 BASE MOUNTED LIGHT DETAIL
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NOTE:
CIRCUIT GROUND WIRE ROUTED IN CONDUIT SHALL BE CONTINUOUS THROUGH LIGHT BASE OR JOINED USING IRREVERSIBLE COMPRESSION CONNECTORS AND SHALL NOT RELY ON LIGHT BASE GROUND LUG FOR CONTINUITY



PROVIDE 5 TYPE II REFLECTIVE MARKERS (DETAIL 3/E7) EQUALLY SPACED 20 INCHES ON CENTER BETWEEN THE OUTSIDE TWO THRESHOLD LIGHTS, TYP OF 4 LOCATIONS

4 THRESHOLD LIGHTING DETAIL
E6 SCALE: N.T.S.



NOTE:
SEE LIGHTING PLAN FOR CONDUIT CONFIGURATION AT EACH INTERSECTION

5 TYPICAL TAXIWAY ENTRANCE LIGHTS
E6 SCALE: N.T.S.

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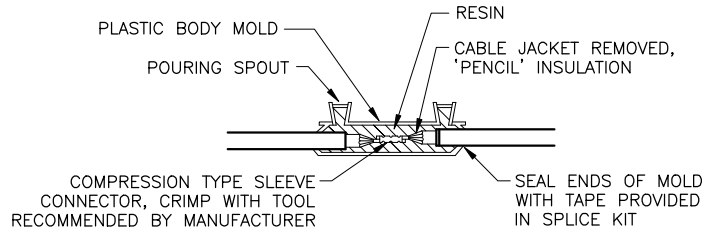
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PHONE (907) 269-0590

NUNAPITCHUK AIRPORT
NUNAPITCHUK, ALASKA
NUNAPITCHUK AIRPORT IMPROVEMENTS
PROJECT No. CFAPT00427
AIP No. 3-02-0446-00X-20XX
LIGHTING DETAILS

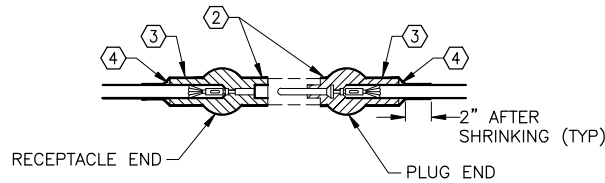
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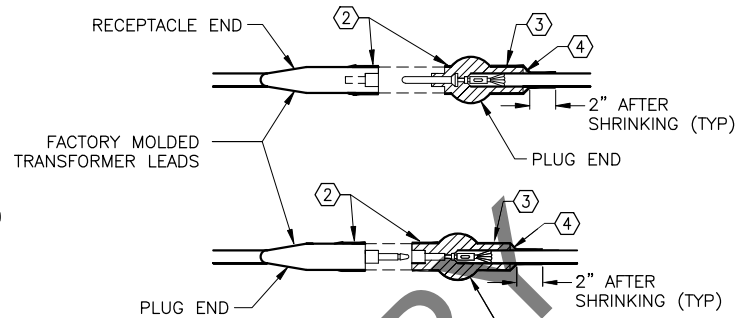
TYPE A

FOR SPLICES IN HOMERUNS AND
FOR EXTENSIONS TO EXISTING CABLES ONLY



TYPE B

FOR SPLICES FOR USE AT JUNCTION
OF HOMERUN WITH LOOP CIRCUIT

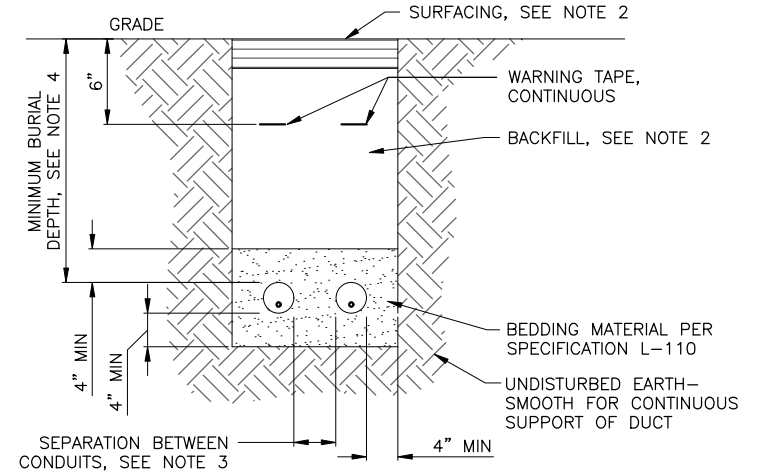


TYPE C

FOR SPLICES AT RUNWAY LIGHTS

NOTES:

1. CABLE SHALL MEET SPECIFICATION L-824. INSIDE DIAMETER OF CONNECTOR SHALL PROPERLY MATCH THE OUTSIDE DIAMETER OF CABLE. CONNECTOR SHALL BE SUPPLIED TO MATCH CABLE PER MANUFACTURER'S INSTRUCTIONS.
2. WRAP WITH A MINIMUM OF ONE LAYER PLASTIC TAPE, ONE-HALF LAPPED, EXTENDING AT LEAST 1.5" ON EACH SIDE OF JOINT. COVER WITH HEAT SHRINK, SEE NOTE 3.
3. HEAT SHRINKABLE TUBING WITH INTERNAL ADHESIVE FULL LENGTH.
4. INSTALL ADDITIONAL ADHESIVE COMPOUND FILLER



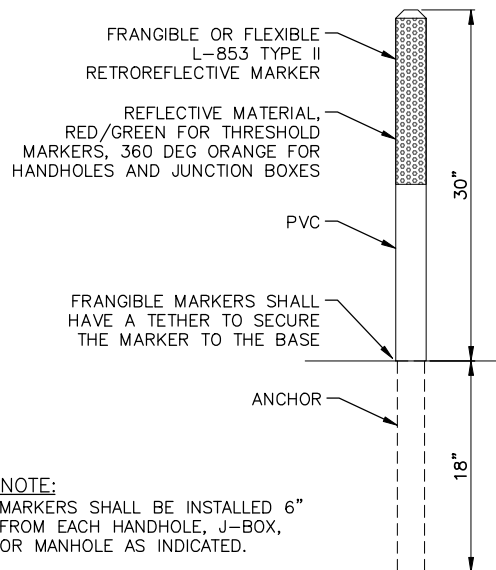
NOTES:

1. WIDTH OF TRENCH AND NUMBER OF CONDUITS PER TRENCH DETERMINED IN FIELD (2 SHOWN)
2. IN AREAS OF NEW SURFACING, SEE TYPICAL SECTIONS FOR SURFACING AND BACKFILL. IN EXISTING AREAS, MATCH EXISTING SURFACING AND BACKFILL.
3. SEPARATION BETWEEN CONDUITS SHALL BE AS FOLLOWS:
 - CONDUITS OF SAME TYPE (POWER OR SIGNAL) UNDER SAME OWNERSHIP - 2" MIN
 - AIRPORT LIGHTING AND FAA NAVAID CONDUITS - 12" MIN
 - AIRPORT LIGHTING OR FAA NAVAID CONDUITS AND FAA POWER CONDUITS - 24" MIN
4. MINIMUM BURIAL DEPTH SHALL BE AS FOLLOWS:
 - AIRPORT LIGHTING CONDUITS - 18" UNDER RUNWAYS AND TAXIWAYS
 - 24" UNDER ROADWAYS OPEN TO PUBLIC
 - FAA NAVIGATION AID CONDUITS - 24"

2

TYPICAL CONDUIT TRENCH DETAIL

SCALE: N.T.S.

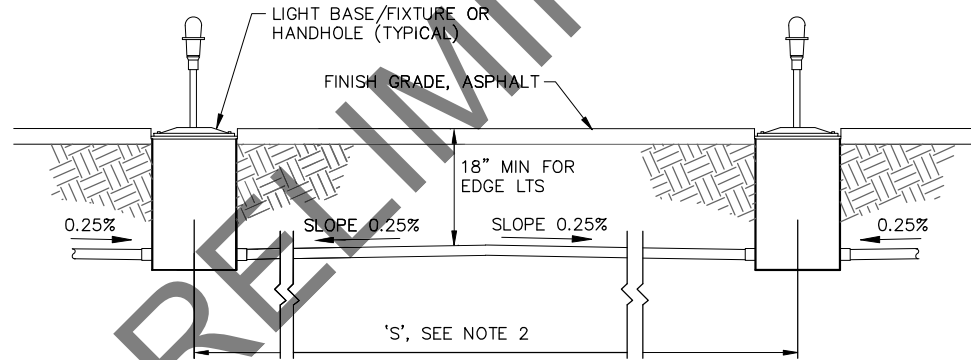


NOTE:
MARKERS SHALL BE INSTALLED 6"
FROM EACH HANDHOLE, J-BOX,
OR MANHOLE AS INDICATED.

3

REFLECTIVE MARKER DETAIL

SCALE: N.T.S.



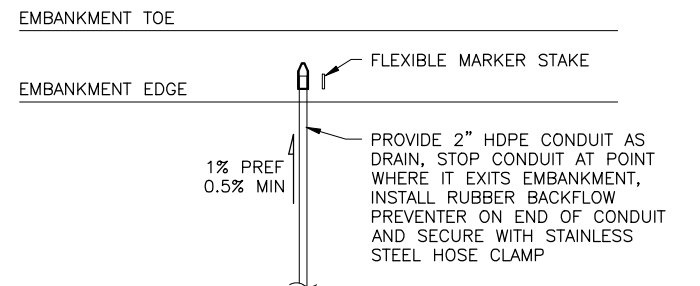
NOTES:

1. CONDUIT SHALL BE INSTALLED WITH CROWN TO DRAIN TO LIGHT BASES AS SHOWN.
2. IF 'S' IS LESS THAN 20', OR IF 0.25% SLOPE CAN BE MAINTAINED IN ONE DIRECTION DUE TO SLOPE OF GRADE, LAY CONDUIT STRAIGHT WITHOUT CROWN BETWEEN BASES/HANDHOLES. DUE TO GRADE OF RUNWAY AND TAXIWAY, THIS CONDITION WILL BE PRESENT AT NUMEROUS LOCATIONS, SEE PROFILE SHEETS FOR GENERAL GRADES.

4

TYPICAL INTERCONNECTION DETAIL

SCALE: N.T.S.

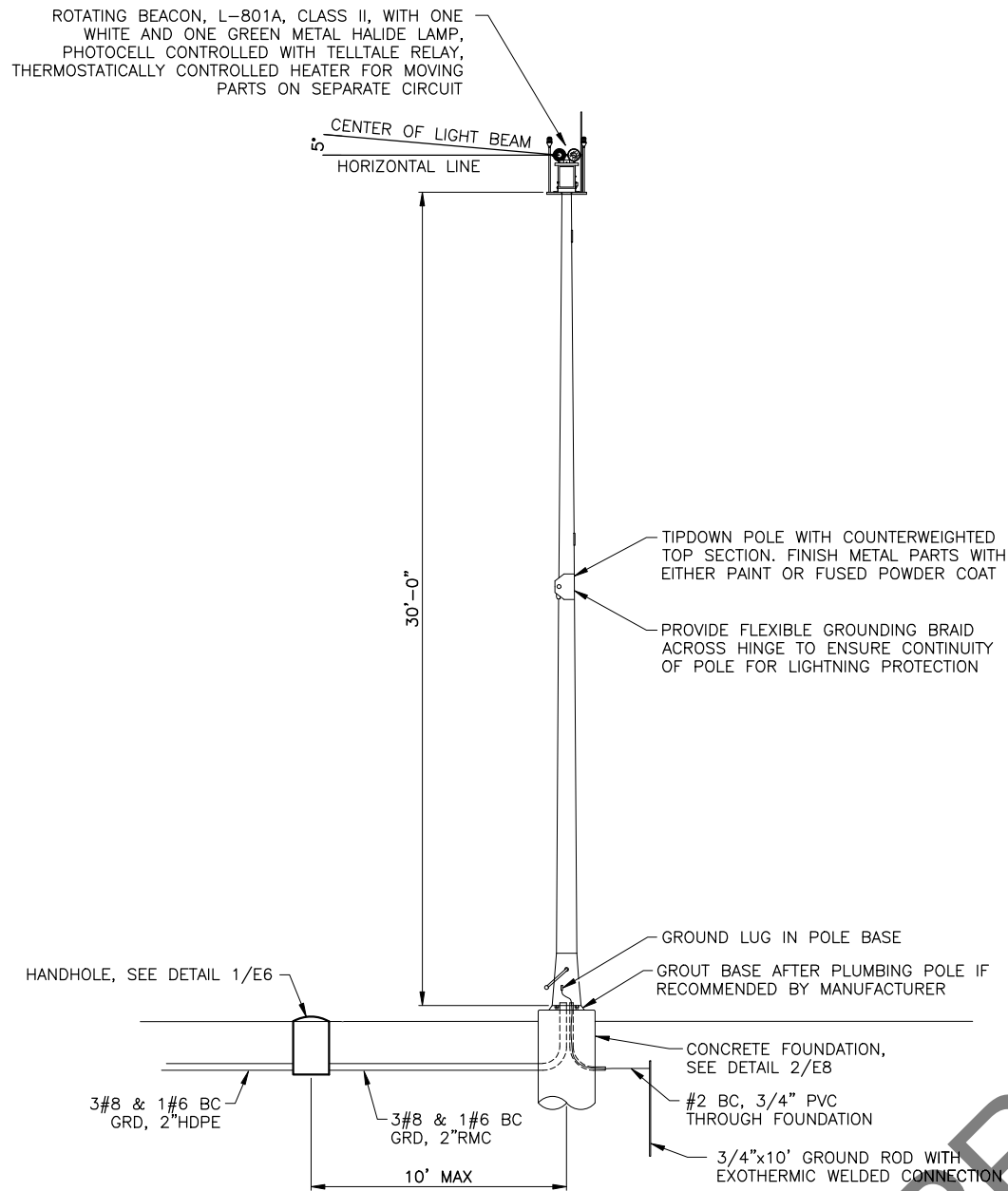


5

CONDUIT DRAIN DETAIL

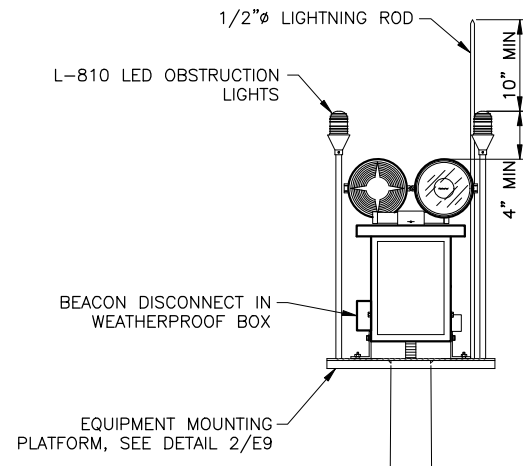
SCALE: N.T.S.



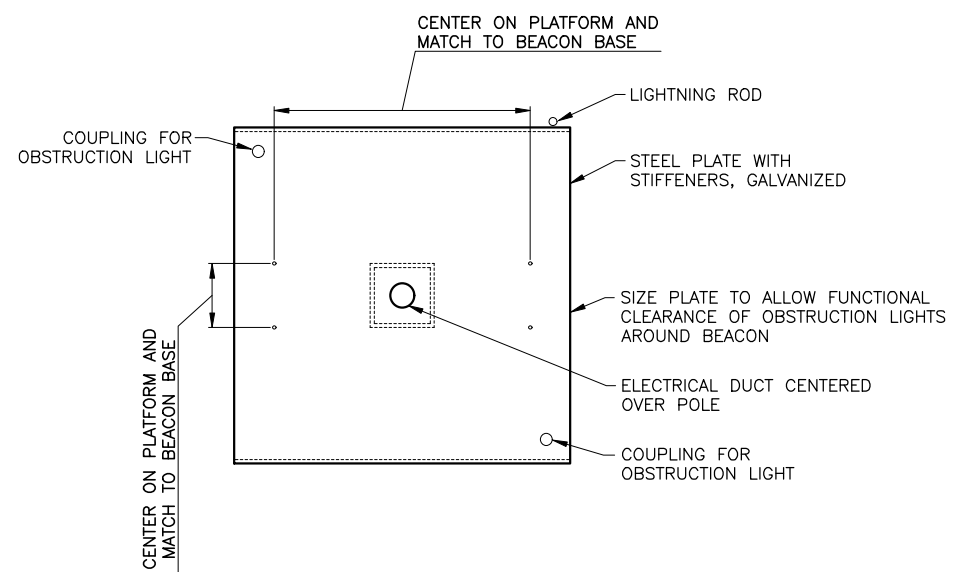


- NOTES:**
1. COMPONENTS AND ASSEMBLIES SHALL BE RATED FOR 120 MPH WINDS.
 2. BEAM DEFLECTION AT 45 MPH SHALL BE LESS THAN 2 DEGREES.
 3. MARK BEACON POLE LOCATION AND VERIFY FINAL LOCATION AND TILT-DOWN DIRECTION WITH ENGINEER PRIOR TO INSTALLATION.

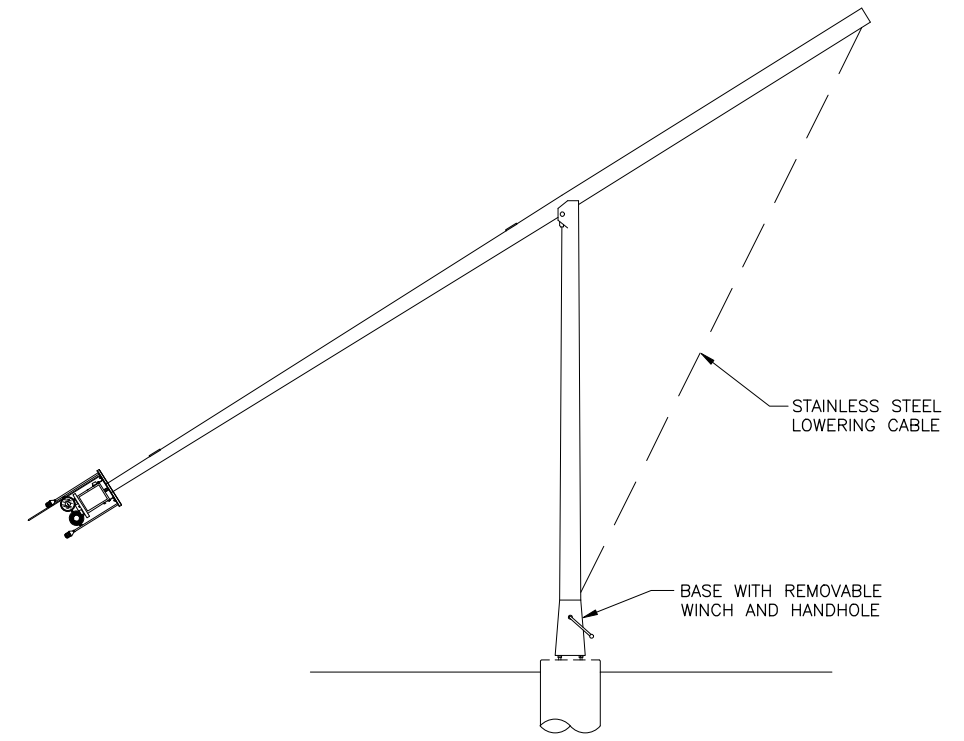
3 BEACON POLE ASSEMBLY
SCALE: N.T.S.



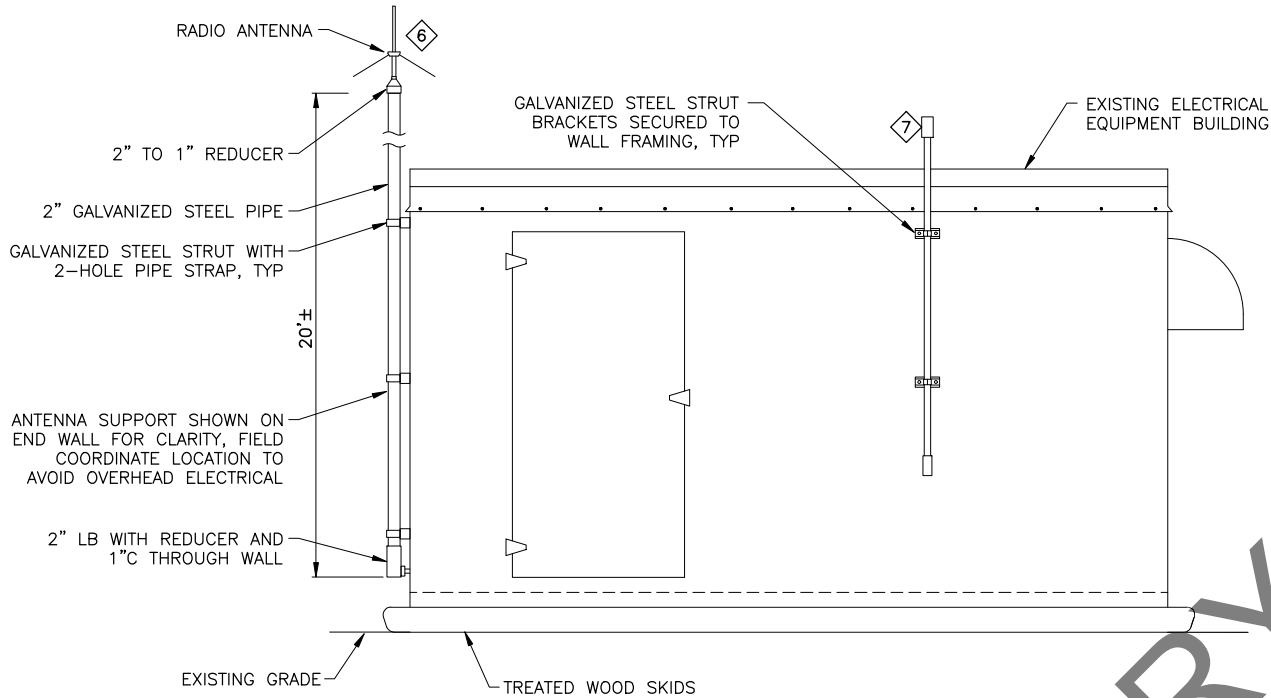
1 BEACON ASSEMBLY DETAILS
SCALE: N.T.S.



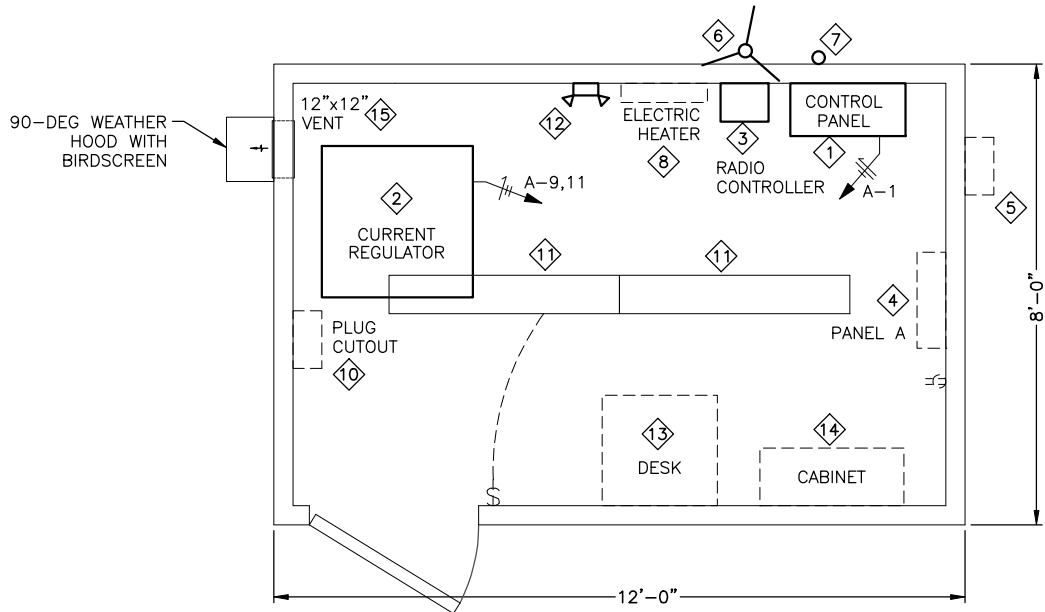
2 EQUIPMENT MOUNTING PLATFORM DETAIL
SCALE: N.T.S.



4 BEACON POLE ASSEMBLY, SERVICE POSITION
SCALE: N.T.S.



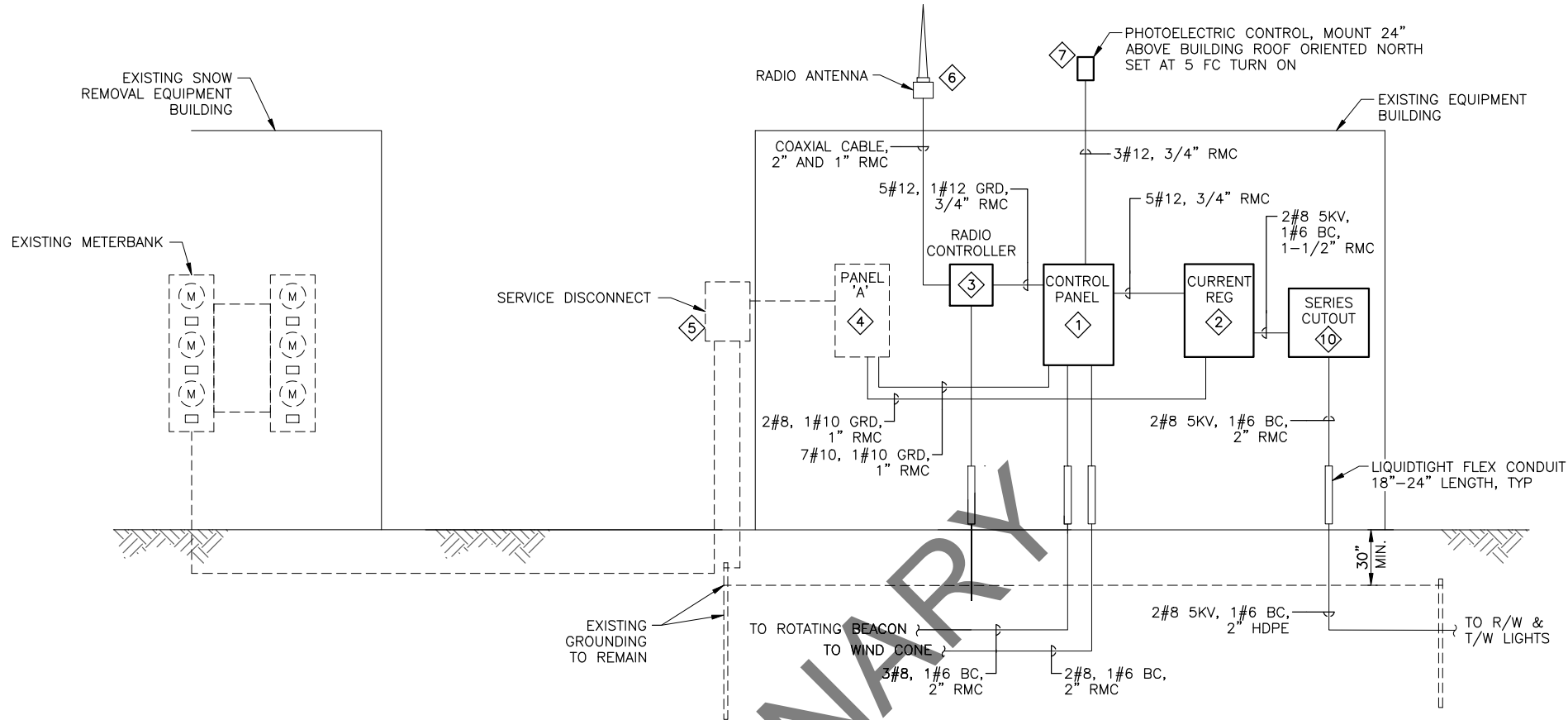
1 TYPICAL BUILDING SIDE ELEVATION
E10 SCALE: N.T.S.



2 ELECTRICAL EQUIPMENT BUILDING PLAN
E10 SCALE: N.T.S.

EQUIPMENT LIST				
NO.	DESCRIPTION	REPL EXST	EXST TO REM	NOTES
1	LIGHTING CONTROL PANEL	X		SEE SPECIFICATION L-109 AND SHEET E12
2	4KW REGULATOR, 3-STEP 240V INPUT, 6.6A OUTPUT	X		FERRORESONANT TYPE WITH DIGITAL METER
3	ADJUSTABLE FREQUENCY RADIO CONTROLLER	X		SET FREQUENCY TO CTAF: 122.9MHZ, RELAYS SHALL OPERATE CUMULATIVELY
4	PANELBOARD		X	SEE PANEL SCHEDULE FOR ADDITIONAL INFORMATION
5	SERVICE DISCONNECT		X	
6	RADIO ANTENNA	X		FIELD VERIFY LOCATION.
7	PHOTOELECTRIC CONTROL	X		
8	2000W ELECTRIC HEATER		X	
9	NOT USED			
10	PLUG CUTOUT, 5KV		X	MOUNT IN EXISTING NEMA 1 ENCLOSURE
11	INTERIOR LIGHT FIXTURE	X		4000LM OUTPUT, FROSTED LENS, 120V
12	EMERGENCY LIGHT	X		
13	METAL WALL DESK		X	
14	LOCKABLE WALL CABINET		X	
15	12"x12" RELIEF AIR VENT		X	

BUILDING PLAN LEGEND	
	DUPLEX RECEPTACLE
	SINGLE POLE SWITCH
	CEILING MOUNTED LIGHT FIXTURE
	EMERGENCY LIGHT WITH BATTERY BACKUP
	THERMOSTAT
	SEE EQUIPMENT LIST



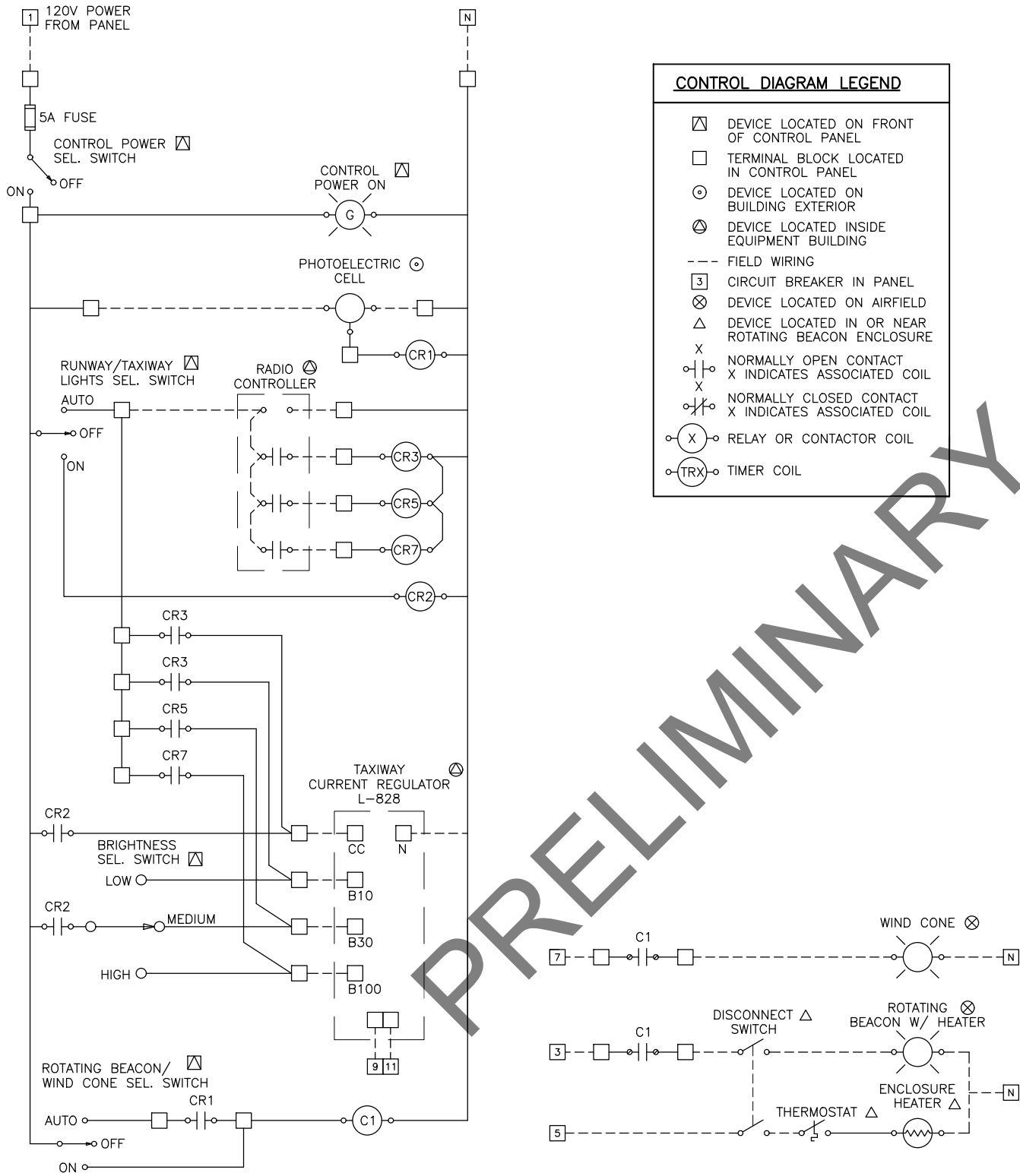
ELECTRICAL EQUIPMENT BUILDING NOTES:

1. ALL BUILDING PENETRATIONS SHALL GO THROUGH THE FLOOR OR WALLS. WALL PENETRATIONS SHALL BE MADE BELOW THE LEVEL OF THE INTERIOR EQUIPMENT THEY SERVE.
2. NO PENETRATIONS SHALL BE MADE THROUGH THE ROOF.
3. ALL PENETRATIONS SHALL BE SEALED WEATHERTIGHT WITH SILICONE SEALANT.
4. IMC OR EMT MAY BE USED FOR CONDUIT SECTIONS LOCATED ENTIRELY INTERIOR TO THE EQUIPMENT BUILDING.
5. GROUND RING AND RODS ARE SUBSIDIARY TO EQUIPMENT BUILDING INSTALLATION.
6. ALL CONDUCTORS SHALL BE COPPER, TYPE XHHW-2 UNLESS OTHERWISE INDICATED.
7. PROVIDE FAULT CURRENT LABEL ON SERVICE EQUIPMENT (SERVICE DISCONNECT) READING "AVAILABLE FAULT CURRENT = 3328A, CALCULATED ON 11 JUN 2019."
8. PROVIDE FAULT CURRENT LABEL ON SERVICE EQUIPMENT (METERBANK) READING "AVAILABLE FAULT CURRENT = 3573A, CALCULATED ON 11 JUN 2019."

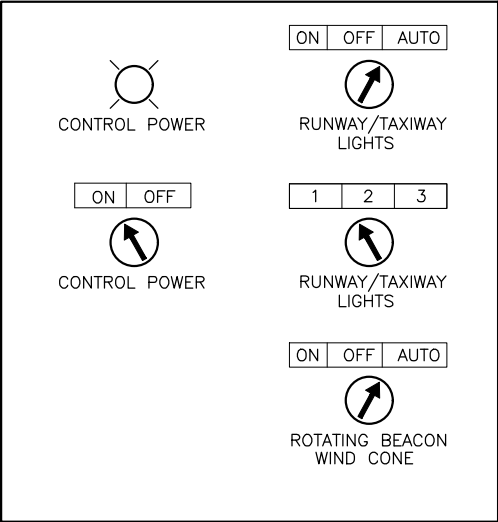
EQUIPMENT LIST				
NO.	DESCRIPTION	REPL EXST	EXST TO REM	NOTES
1	LIGHTING CONTROL PANEL	X		SEE SPECIFICATION L-109 AND SHEET E12
2	4KW REGULATOR, 3-STEP 240V INPUT, 6.6A OUTPUT	X		FERRORESONANT TYPE WITH DIGITAL METER
3	ADJUSTABLE FREQUENCY RADIO CONTROLLER	X		SET FREQUENCY TO CTAF: 122.9MHZ, RELAYS SHALL OPERATE CUMULATIVELY
4	PANELBOARD		X	SEE PANEL SCHEDULE FOR ADDITIONAL INFORMATION
5	SERVICE DISCONNECT		X	
6	RADIO ANTENNA	X		FIELD VERIFY LOCATION.
7	PHOTOELECTRIC CONTROL	X		
8	2000W ELECTRIC HEATER		X	
9	NOT USED			
10	PLUG CUTOUT, 5KV		X	MOUNT IN EXISTING NEMA 1 ENCLOSURE
11	INTERIOR LIGHT FIXTURE	X		4000LM OUTPUT, FROSTED LENS, 120V
12	EMERGENCY LIGHT	X		
13	METAL WALL DESK		X	
14	LOCKABLE WALL CABINET		X	
15	12"x12" RELIEF AIR VENT		X	

ONE-LINE DIAGRAM
SCALE: N.T.S.

EXISTING PANEL 'A'									
CKT	LOAD	BRANCH		CONN KVA		BRANCH		LOAD	CKT
		BKR	VA	A	B	VA	BKR		
1	LIGHTING CONTROL PANEL	20/1	600	0.6			20/1	SPARE	2
3	ROTATING BEACON	20/2	395		0.5	139	20/1	ENCLOSURE LIGHTS	4
5	BEACON STRIP HEATER		400	0.6		180	20/1	RECEPTACLES	6
7	WIND CONE	20/1	64		1.1	1000	20/2	ELECTRIC HEATER	8
9	4KW REGULATOR	30/2	2760	3.8		1000			10
11	SEE NOTE 2	NOTE 3	2760		2.8	75	20/1	STRIP HEATER	12
13	SPARE (SEE NOTE 4)	40/2		0.0					14
15					0.0				16
17				0.0					18
CONNECTED LOAD				9.4 KVA	4.9	4.4	PANEL SPECIFICATIONS		
				39 AMPS	41	37	MAINS RATING AMPS - 100		
NEC DEMAND				11.1 KVA			MAIN CIRCUIT BREAKER AMPERES - MLO		
				46 AMPS			CAPACITY ONE-POLE CIRCUITS - 18		
PANEL NOTES						SYSTEM VOLTAGE - 240/120			
1. ALL CIRCUIT BREAKERS ARE EXISTING UNLESS OTHERWISE INDICATED.						PHASE, NO. OF WIRES - 1 PH, 3 W			
2. MAXIMUM INPUT LOAD SHOWN. ACTUAL LOAD WILL BE LESS.						AIC RATING - 10,000			
3. REPLACE EXISTING CKT BREAKER(S) WITH NEW BREAKER INDICATED.						MOUNTING - SURFACE			
RELOCATE EXISTING CIRCUIT BREAKERS AND LABEL AS SPARE.									
4. RELOCATED EXISTING CIRCUIT BREAKER. LEAVE IN OFF POSITION.									



1
E12 CONTROL PANEL LADDER DIAGRAM
SCALE: N.T.S.



CONTROL SEQUENCE DESCRIPTION

RUNWAY & TAXIWAY LIGHTS

- ON - LIGHTS ON AT BRIGHTNESS SET BY MANUAL BRIGHTNESS SWITCH
- OFF - LIGHTS OFF
- AUTO - RADIO CONTROLLER ENABLED
3 CLICKS OF MIC TURNS ON RW/TW LIGHTS AT STEP 1,
2 ADDITIONAL CLICKS OF MIC TURNS RW/TW LIGHTS TO STEP 2,
2 ADDITIONAL CLICKS OF MIC TURNS RW/TW LIGHTS TO STEP 3,
LIGHTS REMAIN ON FOR 15 MINUTES AFTER LAST CLICK

ROTATING BEACON/WIND CONE

- ON - BEACON ON
- OFF - BEACON OFF
- AUTO - PHOTOELECTRIC CONTROL ENABLED

2
E12 CONTROL PANEL DETAIL
SCALE: N.T.S.

FAA JUNCTION BOX AND HH SCHEDULE						
NUM	TYPE	SIZE WxLxD	STATION	OFFSET	ESTIMATED ELEV CHANGE	REMARKS
F1	II	24x36x24	103+55.0	31.5 R	0.59	SEE NOTE 4
F2	II	24x36x24	101+65.0	31.5 R	0.78	SEE NOTE 4
F3	II	24x36x24	31+00.1	52.6 L	1.53	SEE NOTE 4
F4	I	B	31+30.1	52.5 L	1.14	SEE NOTE 3
F5	I	B	31+30.7	57.8 R	0.71	SEE NOTE 3
F6	II	24x36x24	35+15.1	52.5 L	0.82	SEE NOTE 4
F7	II	24x36x24	39+75.1	52.5 L	0.44	SEE NOTE 2
F8	II	24x36x24	43+75.1	52.5 L	0.52	SEE NOTE 2
F9	II	24x36x24	47+75.1	52.5 L	0.73	SEE NOTE 4
F10	II	24x36x24	52+00.1	52.5 L	0.21	SEE NOTE 2
F11	II	24x36x24	52+00.1	60.5 R	0.32	SEE NOTE 2
F12	I	B	55+70.1	52.2 L	0.43	SEE NOTE 3
F13	I	B	55+69.9	59.0 R	0.56	SEE NOTE 3

- NOTES:
- JUNCTION BOX LOCATIONS ARE BASED ON ASBUILT DRAWINGS. TYPE II JUNCTION BOX CONSTRUCTION IS UNKNOWN. VERIFY LOCATIONS, CONSTRUCTION, AND ELEVATIONS PRIOR TO STARTING WORK.
 - RAISE JUNCTION BOX OR PROVIDE JUNCTION BOX EXTENSION AS REQUIRED TO BRING JUNCTION BOX TO NEW GRADE ELEVATION. PROTECT EXISTING CONDUIT AND CONDUCTORS IN PLACE.
 - PROVIDE LIGHT BASE EXTENSION TO BRING HANDHOLE TO NEW GRADE ELEVATION.
 - REPLACE EXISTING JUNCTION BOX WITH NEW H-20 TRAFFIC-RATED JUNCTION BOX AT NEW GRADE ELEVATION. PROTECT EXISTING CONDUITS AND CONDUCTORS IN PLACE.

RUNWAY EDGE LIGHT SCHEDULE							
NUM	LENS COLOR	TYPE	LAMP WATTAGE	XFMR WATTAGE	STATION	OFFSET	REMARKS
R1	G/R	L-861E	45	30/45	31+40.1	67.5 L	
R2	G/R	L-861E	45	30/45	31+40.1	57.5 L	
R3	G/R	L-861E	45	30/45	31+40.1	47.5 L	
R4	W	L-861	45	30/45	33+27.0	47.5 L	
R5	W	L-861	45	30/45	35+13.9	47.5 L	
R6	W	L-861	45	30/45	37+00.9	47.5 L	
R7	W	L-861	45	30/45	38+87.8	47.5 L	
R8	W	L-861	45	30/45	40+74.7	47.5 L	
R9	W	L-861	45	30/45	42+61.6	47.5 L	
R10	W	L-861	45	30/45	44+48.6	47.5 L	
R11	W	L-861	45	30/45	46+35.5	47.5 L	
R12	W	L-861	45	30/45	48+22.4	47.5 L	
R13	W	L-861	45	30/45	50+09.3	47.5 L	
R14	W	L-861	45	30/45	51+96.2	47.5 L	
R15	W	L-861	45	30/45	53+83.2	47.5 L	
R16	R/G	L-861E	45	30/45	55+70.1	47.5 L	
R17	R/G	L-861E	45	30/45	55+70.1	37.5 L	
R18	R/G	L-861E	45	30/45	55+70.1	27.5 L	
R19	R/G	L-861E	45	30/45	55+70.1	27.5 R	
R20	R/G	L-861E	45	30/45	55+70.1	37.5 R	
R21	R/G	L-861E	45	30/45	55+70.1	47.5 R	
R22	W	L-861	45	30/45	53+83.2	47.5 R	
R23	W	L-861	45	30/45	51+96.2	47.5 R	
R24	W	L-861	45	30/45	50+09.3	47.5 R	
R25	W	L-861	45	30/45	48+22.4	47.5 R	
R26	W	L-861	45	30/45	46+35.5	47.5 R	
R27	W	L-861	45	30/45	44+48.6	47.5 R	
R28	W	L-861	45	30/45	42+61.6	47.5 R	
R29	W	L-861	45	30/45	40+74.7	47.5 R	
R30	W	L-861	45	30/45	38+87.8	47.5 R	
R31	W	L-861	45	30/45	37+00.9	47.5 R	
R32	W	L-861	45	30/45	35+13.9	47.5 R	
R33	W	L-861	45	30/45	33+27.0	47.5 R	
R34	G/R	L-861E	45	30/45	31+40.1	47.5 R	
R35	G/R	L-861E	45	30/45	31+40.1	57.5 R	
R36	G/R	L-861E	45	30/45	31+40.1	67.5 R	

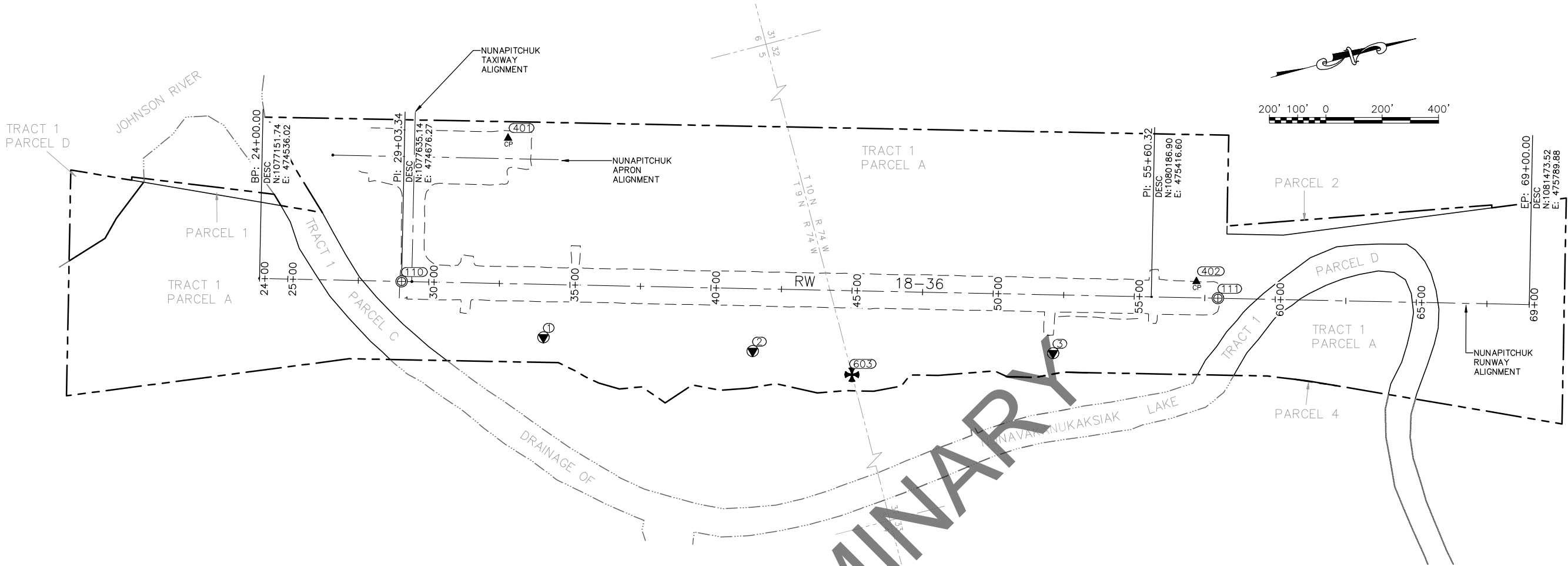
TAXIWAY EDGE LIGHT SCHEDULE							
NUM	LENS COLOR	TYPE	LAMP WATTAGE	XFMR WATTAGE	STATION	OFFSET	REMARKS
T1	B	L-861T	30	30/45	31+77.6	334.3 L	
T2	B	L-861T	30	30/45	31+39.8	332.6 L	
T3	B	L-861T	30	30/45	31+02.0	330.8 L	
T4	B	L-861T	30	30/45	30+64.3	329.1 L	
T5	B	L-861T	30	30/45	30+30.0	319.0 L	
T6	B	L-861T	30	30/45	29+95.6	309.0 L	
T7	B	L-861T	30	30/45	29+85.6	274.7 L	
T8	B	L-861T	30	30/45	29+75.5	240.4 L	
T9	B	L-861T	30	30/45	29+73.8	201.8 L	
T10	B	L-861T	30	30/45	29+73.8	163.2 L	
T11	B	L-861T	30	30/45	29+75.5	124.7 L	
T12	B	L-861T	30	30/45	29+85.6	90.4 L	
T13	B	L-861T	30	30/45	29+95.6	56.1 L	
T14	B	L-861T	30	30/45	30+24.8	47.5 L	
T15	B	L-861T	30	30/45	30+63.2	47.5 L	
T16	B	L-861T	30	30/45	31+01.7	47.5 L	
T17	B	L-861T	30	30/45	31+01.7	47.5 R	
T18	B	L-861T	30	30/45	30+63.2	47.5 R	
T19	B	L-861T	30	30/45	30+24.8	47.5 R	
T20	B	L-861T	30	30/45	29+95.6	47.5 R	
T21	B	L-861T	30	30/45	29+53.9	47.5 R	
T22	B	L-861T	30	30/45	29+12.1	47.5 R	
T23	B	L-861T	30	30/45	29+12.1	13.0 R	
T24	B	L-861T	30	30/45	29+12.1	21.5 L	
T25	B	L-861T	30	30/45	29+12.1	56.1 L	
T26	B	L-861T	30	30/45	29+12.1	90.4 L	
T27	B	L-861T	30	30/45	29+12.1	124.7 L	
T28	B	L-861T	30	30/45	29+12.1	163.2 L	
T29	B	L-861T	30	30/45	29+12.1	201.8 L	
T30	B	L-861T	30	30/45	29+12.1	240.4 L	
T31	B	L-861T	30	30/45	29+12.1	274.7 L	
T32	B	L-861T	30	30/45	29+12.1	309.0 L	

HANDHOLE SCHEDULE					
NUM	TYPE	SIZE	STATION	OFFSET	REMARKS
HH1	I	B	28+00.1	485.1 L	
HH2	I	B	28+19.2	349.2 L	
HH3	I	B	28+08.4	537.2 L	
HH4	I	B	32+08.6	537.2 L	
HH5	I	B	32+63.0	492.1 L	
HH6	I	B	27+68.5	497.4 L	

- NOTES:
- LOCATIONS ARE APPROXIMATE, FIELD LOCATE HANDHOLES IN COORDINATION WITH THE ENGINEER BASED ON SITE CONDITIONS, SURROUNDING GRADES AND EQUIPMENT, AND CONDUIT ROUTING.

Designed By: LEN
Drawn By: ADC
Checked By: JGL

Date Revised: 6/27/2019, 12:17 PM
Layout Name: scs
File Path and Name: U:\2047065800\drawing_nup\c\Sheets\00427-16A-NUP-SCS.dwg



HORIZONTAL CONTROL

Coordinate System:
This project is located entirely within the Kuskokwim River 2015 Low Distortion Projection (LDP), a U.S. Survey Foot coordinate system developed by the Alaska Department of Transportation.

Basis of Coordinates:
The NAD83(2011) (Epoch 2010.00) published positions of the following National Geodetic Survey (NGS) Continuously Operating Reference Stations (CORS) were held fixed: "BET1" (PID: DK4091), "AB14" (PID: DL6426), and "AB15" (PID: DI2152).

LDP PARAMETERS:
Linear Unit: US Survey Feet
Datum: NAD83
Ellipsoid: GRS 80
Projection: Hotine Oblique Mercator
Latitude of Center: 60°40'00" N
Longitude of Center: 162°00'00" W
Azimuth: 50°00'00"
False Northing: -15,500,000.0'
False Easting: -19,100,000.0'
Grid Scale Factor: 1.000002 (exact)

VERTICAL CONTROL

The project vertical datum is GNSS-derived NAVD88 using Geoid12B (Alaska), holding the orthometric elevation of control point 402 at 18.216 U.S. Survey Feet.

SURVEY NOTES

- Set control points and recovered monuments shown on this sheet were surveyed using networked static GPS techniques. GPS measurements were performed using Trimble R8 & R6 GNSS receivers, and processed using Trimble Business Center v4.10 (TBC) software.
- All elevations shown on this plot were established via networked static GPS techniques.
- Property information shown herein is provided for orientation purposes only and may not reflect legal property line locations.
- The control survey was completed during December 5-8, 2018 and May 27-29, 2019 by Stantec Consulting, inc.
- All dimensions and coordinates shown are in U.S. Survey Feet unless otherwise noted.
- "16A" is the Federal Aviation Administration designation for the Atmautluak Airport located in Atmautluak Alaska.
- Stantec plans to establish new Primary and Secondary Airport Control Stations (PACS and SACS), and to verify the stability of control shown hereon during July, 2019. A revised SCS sheet will be available from the engineer at that time with updated control information.

LEGEND

- RECOVERED S.S. ROD WITH DATUM POINT
- SET PROJECT CONTROL
- RECOVERED CENTERLINE MONUMENT
- RECOVERED PRIMARY GOVERNMENT MONUMENT
- POINT NUMBER IDENTIFIER

- ALIGNMENT
- AIRPORT BOUNDARY
- AIRPORT TRACTS
- EDGE OF WATER
- UNSURVEYED SECTION LINE
- EDGE OF PAD

HORIZONTAL CONTROL					
Point #	Northing	Easting	Station	Offset	Description
1	1078069.1372	474997.6031	34+09.68	187.68R	Fd SSRod/BC Datum Point[DOT]: GPS NUP-1 2011
2	1078772.7245	475236.6880	41+52.02	221.26R	Fd SSRod/BC Datum Point[DOT]: GPS NUP-2 2011
3	1079799.2934	475519.3142	52+16.69	206.65R	Fd SSRod/BC Datum Point[DOT]: GPS NUP-3 2011
110	1077635.1428	474676.2697	29+03.34	0.00R	Fd AC[9235-S]: RUNWAY CENTERLINE 2011
111	1080413.8933	475482.4517	57+96.67	0.00R	Fd AC[9235-S]: RUNWAY CENTERLINE 2011
603	1079091.0941	475407.9432	45+05.50	297.02R	Fd AC: WP T10NR74W S32[S5 T9N 1977

VERTICAL CONTROL						
Point #	Northing	Easting	Station	Offset	Elevation	Description
401	1078131.0717	474283.8063	32+70.28	515.10L	18.23	Set Rbr/RPC[STANTEC]: CONTROL POINT
402	1080355.7283	475405.4643	57+19.36	57.73L	18.22	Set Rbr/RPC[STANTEC]: CONTROL POINT

Surveyor's Certificate

I hereby certify that I am properly Registered and Licensed to practice Land Surveying in the State of Alaska, and that this drawing represents a survey made by me or under my direct supervision, and that the monuments shown hereon actually exist as described, and that all dimensions and other details are correct to the extent shown hereon.

Dean Cimmiyotti LS-7613 Date

STANTEC CONSULTING SERVICES INC.
725 EAST FIREWEED LANE, SUITE 200
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CERTIFICATE OF AUTHORIZATION #
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BY DATE REVISION

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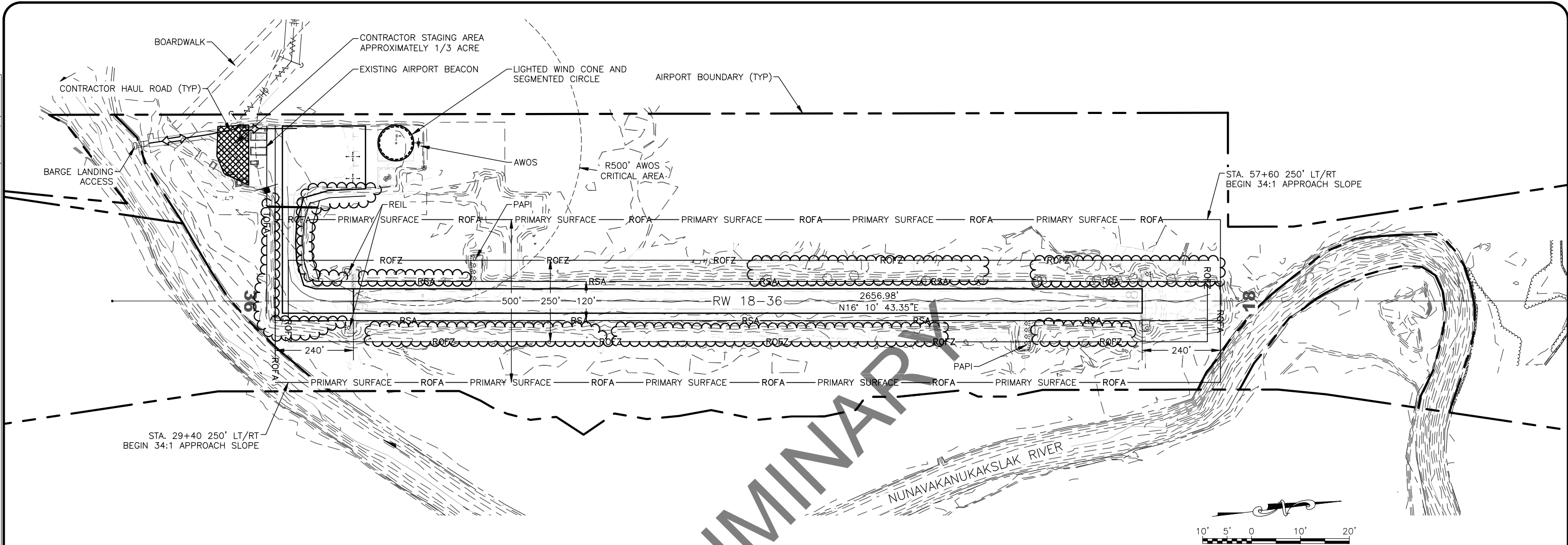
NUNAPITCHUK AIRPORT
NUNAPITCHUK, ALASKA
NUNAPITCHUK AIRPORT IMPROVEMENTS
PROJECT No. CFAPT00427
AIP No. 3-02-0446-00X-20XX
SURVEY CONTROL

DATE:
06/27/2019

SHEET:
AB1 of AB1

Designed By: LEN
Drawn By: ADC
Checked By: JGL

Date Revised: 6/27/2019, 4:19 PM
Layout Name: OVERVIEW
File Path and Name: U:\A\2047065600\drawing_nup\C\Sheets\00427-16A-NUP-CSPD.dwg



NOTES:

- SUBMIT A SAFETY PLAN COMPLIANCE DOCUMENT (SPCD) TO THE ENGINEER FOR REVIEW. DO NOT BEGIN CONSTRUCTION ACTIVITIES UNTIL THE ENGINEER APPROVES SPCD IN WRITING. ALLOW 30 DAYS FOR INITIAL REVIEW. INCLUDE CONSTRUCTION SEQUENCING. IF PLAN DIFFERS FROM WHAT IS SHOWN, OR IF SUBSEQUENT CHANGES ARE MADE, SUBMIT A REVISION TO THE ENGINEER FOR REVIEW AND APPROVAL. ALLOW 5 DAYS FOR REVIEW OF REVISIONS.
- THE CONSTRUCTION SAFETY AND PHASING PLAN (CSPP) DOCUMENT AND DRAWINGS DESCRIBE THE GENERAL SCOPE OF WORK FOR EACH PHASE. THIS SHEET SHOWS THE AIRPORT LAYOUT IN ITS EXISTING CONDITION. PARTICULAR RESTRICTIONS ARE NOTED IN THE PLAN VIEW FOR EACH PHASE. ANY STATION AND OFFSETS REFERENCE THE RW ALIGNMENT AS DEFINED.
- DEVELOP A CONSTRUCTION SCHEDULE BASED ON SEQUENCING SHOWN, OR SUBMIT AN ALTERNATE WORK SEQUENCE FOR APPROVAL. ALTERNATE WORK SEQUENCE THAT REQUIRES REVISION OF THE CSPP WILL REQUIRE 30 DAYS FOR FAA APPROVAL. PROVIDE SUFFICIENT DETAIL TO ADDRESS REQUIRED SUBMITTALS, REVIEW PERIODS, PROCUREMENT OF MATERIALS, WORK, AND COORDINATION REQUIREMENTS.
- WHENEVER THE PLANS OR SPECIFICATIONS CALL FOR COORDINATION, NOTIFICATION, CONTACT, OR OTHER INTERACTION WITH THE FEDERAL AVIATION ADMINISTRATION (FAA), AIRPORT MANAGEMENT, MAINTENANCE AND OPERATIONS, AIRPORT TENANTS, AIRPORT USERS, ANY LOCAL, STATE, OR FEDERAL AGENCY, GROUP, OR ASSOCIATION, OR THE GENERAL PUBLIC, SUCH ACTIVITY SHALL BE DONE THROUGH, IN THE PRESENCE OF, OR WITH THE WRITTEN APPROVAL OF THE ENGINEER. ALLOW SUFFICIENT TIME FOR COORDINATION AND APPROVALS WITHIN PROPOSED WORK SCHEDULES.
- NIGHT TIME CLOSURES OF THE RW WILL BE REQUIRED TO COMPLETE THIS PROJECT. COORDINATE WITH AIRPORT MANAGEMENT AND AIRPORT USERS TO ESTABLISH HOURS FOR NIGHT TIME CLOSURES. SUBMIT PROPOSED CLOSURE TIMES AS PART OF THE CPM AND WORK SCHEDULES. DISABLE OR COVER RW EDGE LIGHTS AND THRESHOLD LIGHTS DURING RW CLOSURES.
- DURING AIRCRAFT OPERATIONS, KEEP PERSONNEL AND EQUIPMENT OUTSIDE OF THE RW SAFETY AREA (RSA) AND OBSTACLE FREE ZONE (ROFZ).
- CLEAR CRITICAL AREAS OR SAFETY AREAS OF PERSONNEL AND EQUIPMENT WHEN DIRECTED BY THE ENGINEER OR AIRPORT PERSONNEL.
- THE RSA DURING CONSTRUCTION IS 120 FEET WIDE, CENTERED ON THE ACTIVE RW AND EXTENDS 240 FEET BEYOND RW THRESHOLDS. THE ROFZ IS 250 FEET WIDE, CENTERED ON THE ACTIVE RW, AND EXTENDS 200 FEET BEYOND THE RW THRESHOLDS. SEE SAFETY PLAN DETAILS FOR ADDITIONAL GROUND AND AIRSPACE RESTRICTIONS.
- WORK OUTSIDE THE RSA AND ROFZ MAY BE PERFORMED AT ANY TIME DURING THE CONTRACT, SUBJECT TO APPROVED SAFETY PLANS AND CONDITIONS. LIMITATIONS DESCRIBED IN SECTION 80 OF THE GENERAL CONTRACT PROVISIONS (GCP), AND PERMIT CONDITIONS, IF ANY EXIST.
- MARK OPEN TRENCHES WITH HAZARD MARKER BARRIERS, LIGHT WITH RED LIGHTS DURING HOURS OF RESTRICTED VISIBILITY OR DARKNESS. OPEN TRENCHES OR EXCAVATIONS ARE NOT PERMITTED WITHIN THE RSA WHILE THE RW IS OPEN. IF THE RW IS OPENED BEFORE EXCAVATIONS ARE BACKFILLED, COVERS FOR TRENCHES OR EXCAVATIONS MUST BE OF SUFFICIENT STRENGTH TO SUPPORT THE WEIGHT OF THE HEAVIEST AIRCRAFT OPERATING ON THE RW.
- EQUIPMENT WILL ONLY BE PERMITTED INSIDE THE AIR OPERATIONS AREA AS APPROVED BY THE ENGINEER.
- CONDUCT FOREIGN OBJECT AND DEBRIS (FOD) INSPECTION AND RW/TW CLEANING REQUIRED PRIOR TO THE END OF EVERY SHIFT. CLEANING SHALL BE SUBSIDIARY TO RELATED WORK. SEE GCP SECTION 40-05.
- THE SPEED LIMIT WITHIN THE AIRPORT PROPERTY SHALL BE 25 MPH. SEE GCP SECTION 80-05, THIRD PARAGRAPH.
- PROVIDE AIRPORT FLAGGER TO MONITOR COMMON TRAFFIC ADVISORY FREQUENCY (CTAF) ON 122.9 MHZ AND ADVISE CONSTRUCTION EQUIPMENT OPERATORS AT ALL TIMES DURING CONSTRUCTION. AIRPORT FLAGGER SHALL BE RESPONSIBLE FOR CLEARING ALL WORKERS AND EQUIPMENT WITHIN 125 FEET OF THE ACTIVE RW CENTERLINE (ROFZ) FOR ALL AIRCRAFT OPERATIONS.
- ALL WORKERS AND EQUIPMENT WORKING WITHIN THE ROFA OR TOFA SHALL REMAIN IN CONSTANT RADIO CONTACT WITH THE AIRPORT FLAGGER. VEHICLES AND WORKERS MAY REMAIN WITHIN THE ROFA DURING AIRCRAFT OPERATIONS, BUT VEHICLES MUST BE ATTENDED AT ALL TIMES. NO PARKING OF VEHICLES IS ALLOWED WITHIN THE ROFA.
- STORAGE OR STAGING OF EQUIPMENT OR MATERIALS ON THE APRON, TW OFA OR RW OFA WILL NOT BE ALLOWED. NO STOCKPILING OF MATERIALS, PARKING OR STAGING OF EQUIPMENT IS ALLOWED WITHIN 250 FEET OF THE ACTIVE RW CENTERLINE (ROFA), NOR WITHIN 240 FEET BEYOND EACH OF THE THRESHOLDS ALONG THE EXTENDED RW CENTERLINE.
- CARRYOUT CONTINUING COORDINATION THROUGH THE ENGINEER USING WEEKLY BRIEFINGS WITH AIRPORT MANAGEMENT, AIRPORT MAINTENANCE, FAA CONTRACTORS, AND AIRPORT USERS TO KEEP EVERYONE AWARE OF THE STATUS AND CHANGES OF AIRPORT SURFACES IN RELATION TO AIRCRAFT AND GROUND TRAFFIC. PROVIDE DETAILED DRAWINGS INDICATING TRAFFIC ROUTES FOR AIRCRAFT, GROUND TRAFFIC, AND PASSENGERS. INDICATE AREAS CLOSED TO AIRCRAFT MOVEMENT AND PARKING. PROVIDE UPDATED DRAWINGS AS CONSTRUCTION PROCEEDS.
- CONDUCT JOINT INSPECTIONS WITH THE PROJECT ENGINEER AND AIRPORT MANAGEMENT ON NEWLY CONSTRUCTED AIRPORT SURFACES. REMOVE ALL FOREIGN OBJECTS, CLEAN SURFACES AS REQUIRED, OR AS DIRECTED.
- REPORT ANY SAFETY ISSUES TO THE ENGINEER AND AIRPORT MANAGER UPON DISCOVERY. TAKE IMMEDIATE ACTION TO RESOLVE SAFETY ISSUES AS DIRECTED.
- PROVIDE WATER FOR DUST CONTROL AS REQUIRED, AND AS DIRECTED. DUST, SMOKE, STEAM, OR OTHER AIRBORNE PARTICULATES CAUSED BY CONTRACTOR ACTIVITIES MAY BE CONSIDERED A SAFETY VIOLATION AS DETERMINED BY THE ENGINEER.
- REMOVE ALL FOD FROM ACTIVE SURFACES IMMEDIATELY UPON DISCOVERY OR NOTIFICATION. FAILURE TO REMOVE FOD MAY BE CONSIDERED A SAFETY VIOLATION AS DETERMINED BY THE ENGINEER.
- REFER TO FAA ADVISORY CIRCULAR (AC) 150/5370-2G FOR ADDITIONAL GUIDANCE ON PREPARING SAFETY PLANS. REFER TO AC 150/5300-13A CHAPTER 3 FOR CLEARANCE STANDARDS RELATED TO THE OFA, OBJECT FREE ZONE (OFZ), AND RSA. REFER TO PARAGRAPH 303 IN THE AC REGARDING RW END SITING CRITERIA. NOTICE THAT THE MOST RESTRICTIVE CRITERIA GOVERNS.
- NUNAPITCHUK IS AN APPROACH CATEGORY A AND DESIGN GROUP 1 AIRPORT WITH APPROACH VISIBILITY MINIMUM OF ONE STATUTE MILE.
- FIELD VERIFY SUITABILITY OF HAUL ROUTES AND STAGING AREAS SHOWN. DEVELOP AND MAINTAIN HAUL ROUTES AS REQUIRED. SEE SECTIONS 40-04, 60-06 & 70-11G. PROVIDE TRAFFIC CONTROL PLANS FOR EACH PHASE OF WORK. SEE SECTION G-710.
- CONTACT THE AIRPORT MANAGER THROUGH THE ENGINEER. AIRPORT MANAGER CONTACT INFORMATION:

LAWRENCE DAVIS
BOX 505
BETHEL, AK 99559
907-543-2498
- NUNAPITCHUK IS SERVED BY A FLIGHT SERVICE STATION (FSS)

KENAI FSS
907-283-8469
CTAF: 122.9 MHZ
- STOCKPILE AREAS MUST BE ON CONTRACTOR STAGING AREAS OR OFF AIRPORT PROPERTY. CONTRACTOR MUST DISPOSE OF EXCESS MATERIALS. SUBMIT STOCKPILE AND WASTE DISPOSAL LOCATIONS IN THE SPCD FOR APPROVAL BY THE ENGINEER. CONTRACTOR MUST OBTAIN PERMITS AS SPECIFIED UNDER SECTION 70.

LEGEND:

- ↔ HAUL ROUTE (TWO WAY)
- ▨ CONTRACTOR STAGING AREA

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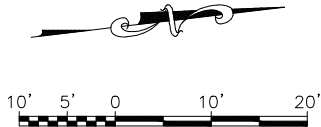
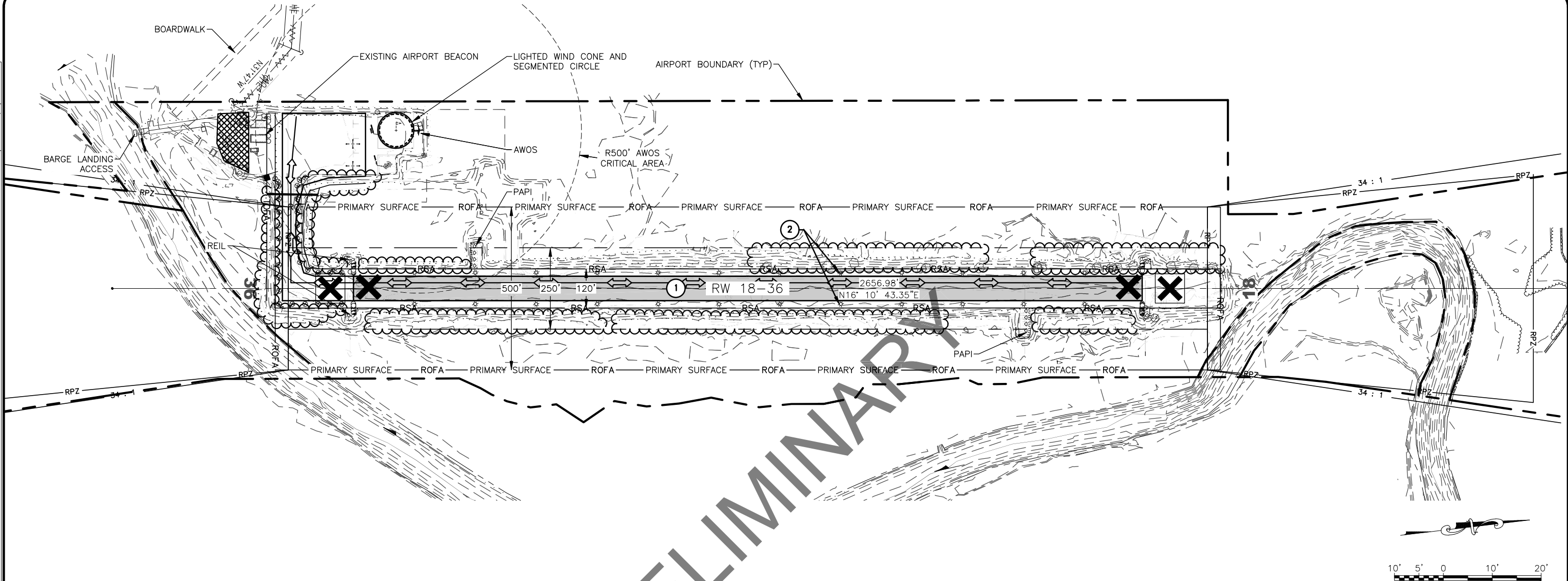
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NUNAPITCHUK AIRPORT
NUNAPITCHUK, ALASKA
NUNAPITCHUK AIRPORT IMPROVEMENTS
PROJECT No. CFAPT00427
AIP No. 3-02-0446-00X-20XX
CONSTRUCTION SAFETY AND PHASING OVERVIEW

DATE:
06/27/2019
SHEET:
AD1 OF AD4

Designed By: LEN
Drawn By: ADC
Checked By: JGL

Date Revised: 6/27/2019, 4:19 PM
Layout Name: PHASE1
File Path and Name: U:\2047065600\drawing_nup\C\Sheets\00427-16A-NUP-CSPD.dwg



ANTICIPATED PROJECT SCHEDULE

MAY 30, 2022	BEGIN PROJECT
JUNE 15, 2022	NIGHTTIME RW CLOSURES BEGIN
JULY 15, 2022	LIGHTING REPLACEMENT AND RW RESURFACING COMPLETE. END NIGHTTIME CLOSURES. END PHASE 1.
AUGUST 30, 2022	END PHASE 2.
SEPTEMBER 15, 2022	SUBSTANTIAL COMPLETION.
SEPTEMBER 30, 2022	FINAL ACCEPTANCE.

WORK ITEMS CAN BE COMPLETED IN ANY SEQUENCE, AS APPROVED BY THE ENGINEER.

ANTICIPATED PROJECT SCHEDULE IS AN ESTIMATED TIME LINE TO FAA FOR WHEN PROJECT MAY BE COMPLETED. DEVELOP A CPM SCHEDULE MEETING CONTRACT MILESTONES FOR REVIEW WITH SPCD.

PHASE 1 CONSTRUCTION TASKS ①

THE FOLLOWING LIST IS A GENERAL DESCRIPTION OF WORK TO BE COMPLETED IN THIS PHASE. IT IS NOT INTENDED AS A COMPREHENSIVE LIST OF ALL TASKS, OR RELATED WORK THAT WILL BE REQUIRED. THE LIST BELOW DOES NOT RELIEVE THE CONTRACTOR OF RESPONSIBILITY TO COORDINATE AND SCHEDULE THE WORK WITH AFFECTED INDIVIDUALS OR GROUPS, PRIOR TO BEGINNING WORK. INCLUDE ANY ADDITIONAL OR RELATED WORK AND GENERAL TASKS IN THE WORK SCHEDULE REQUIRED UNDER SECTION 80 AND SECTION G-300. PHASE 2 WORK CAN BE PERFORMED CONCURRENTLY WITH PHASE 1.

- ① RESURFACE RW
- ② REPLACE AIRPORT LIGHTING SYSTEM

GENERAL PHASING NOTES

TASKS LISTED MAY REQUIRE CONCURRENT WORK. ALL WORK MUST BE ACCOMPLISHED ACCORDING TO THE LIMITATIONS IN THE CONSTRUCTION SAFETY AND PHASING PLAN, APPLICABLE SPECIAL PROVISIONS, ENVIRONMENTAL COMMITMENTS, AND PERMIT CONDITIONS.

OPEN TRENCHES ARE NOT ALLOWED IN THE RSA WHILE THE RUNWAY IS OPEN, PER AC 150-5370-2, 2.22.1.4.1. CONTRACTOR SHALL BACKFILL OR COVER OPEN TRENCHES WITH STEEL ROAD PLATES PRIOR TO OPENING RUNWAY FOR AIRCRAFT OPERATIONS.

PHASE 1 NOTES

- CLOSE RUNWAY AT NIGHT FOR WORK WITHIN THE RSA AND ROFZ. COORDINATE WITH AIRPORT USERS TO ACCOMMODATE ALL SCHEDULED FLIGHTS. COORDINATE WITH AIRPORT MANAGEMENT FOR ISSUANCE OF PROPER NOTAM'S. INSTALL ILLUMINATED RW CLOSURE AND RW CLOSURE 'X' MARKERS IMMEDIATELY UPON NOTIFICATION OF RW CLOSURE. COORDINATE WITH AIRPORT MANAGEMENT TO TURN OFF RW LIGHTS, TW LIGHTS, AND AIRPORT BEACON DURING CLOSURES. PLACE REFLECTIVE TEMPORARY EDGE MARKERS THAT CORRELATE TO EXISTING LIGHT POSITIONS.
- DURING RW CLOSURES THE CONTRACTOR WILL TAKE ALL ACTIONS REQUIRED OR AS DIRECTED TO READY THE AIRFIELD TO ACCOMMODATE ALL MEDEVAC FLIGHTS IF NEEDED. ANY AIRCRAFT DECLARING AN EMERGENCY WILL BE ALLOWED TO LAND.

- NIGHT TIME CLOSURES WILL COMMENCE 30 MINUTES AFTER LAST SCHEDULED DEPARTURE, AND END 30 MINUTES PRIOR TO THE FIRST SCHEDULED ARRIVAL THE FOLLOWING DAY.
- AT THE END OF EACH SHIFT, TRANSITIONS WILL BE CONSTRUCTED WITH SUITABLE MATERIAL TO KEEP THE RW OPEN AND OPERATIONAL DURING DAYTIME HOURS. TRANSITIONS SHALL BE APPROVED BY THE ENGINEER PRIOR TO RW OPENING EACH DAY.
- DURING AIRCRAFT OPERATIONS ALL PERSONS AND EQUIPMENT MUST BE AT LEAST 125 FEET AWAY FROM ACTIVE RW CENTERLINE (ROFZ), AND 240 FEET BEYOND RW ENDS. PERSONS AND EQUIPMENT MUST NOT PENETRATE APPROACH SURFACES. THE LOCATION OF THE 34:1 APPROACH SURFACES ARE SHOWN ON AD1.
- STOCKPILES WILL NOT PENETRATE APPROACH SURFACES SHOWN. THE LOCATION OF THE 34:1 APPROACH SURFACES ARE SHOWN ON AD1.
- PROVIDE A TEMPORARY LIGHTING SYSTEM WHILE REPLACING RW LIGHTING SYSTEM.

LEGEND:

- HAUL ROUTE (TWO WAY)
- CONTRACTOR STAGING AREA
- PHASE 1 CONSTRUCTION AREA
- RW CLOSURE MARKER
- ILLUMINATED RW CLOSURE MARKER

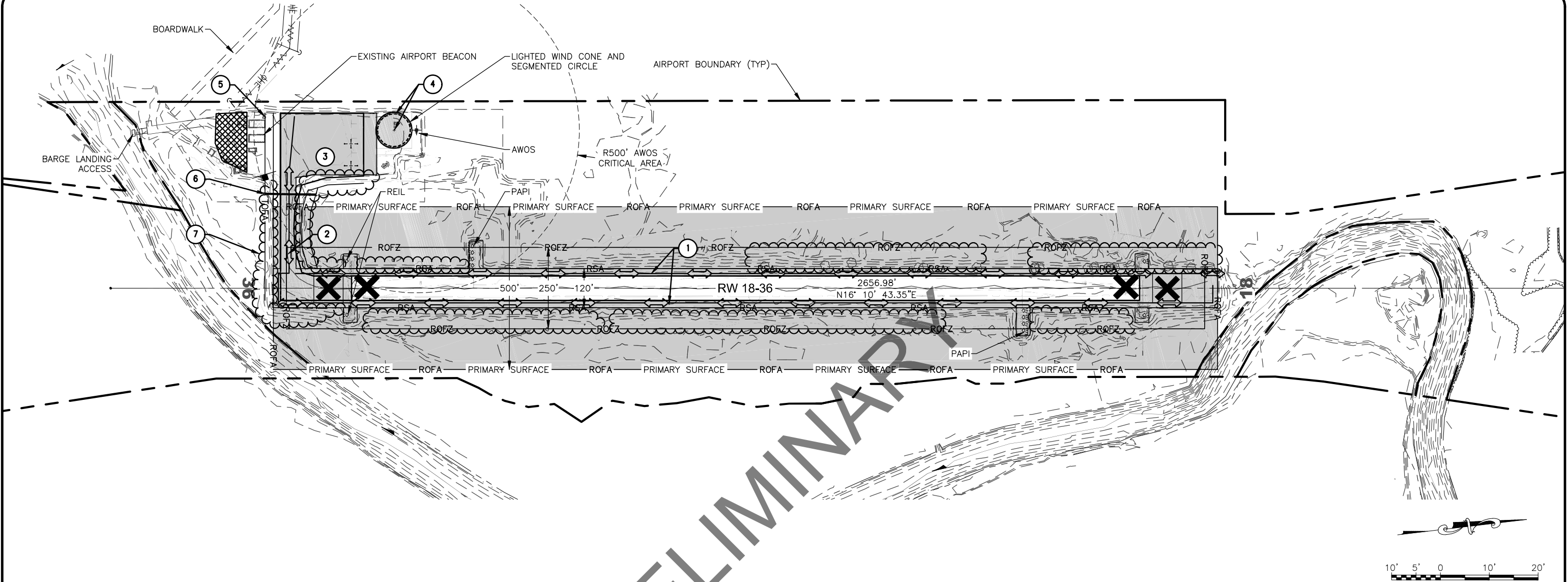
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NUNAPITCHUK AIRPORT
NUNAPITCHUK, ALASKA
NUNAPITCHUK AIRPORT IMPROVEMENTS
PROJECT No. CFAPT00427
AIP No. 3-02-0446-00X-20XX
CONSTRUCTION SAFETY AND PHASING PHASE 1

DATE:
06/27/2019
SHEET:
AD2 of AD4



PHASE 2 CONSTRUCTION TASKS

THE FOLLOWING LIST IS A GENERAL DESCRIPTION OF WORK TO BE COMPLETED IN THIS PHASE. IT IS NOT INTENDED AS A COMPREHENSIVE LIST OF ALL TASKS, OR RELATED WORK THAT WILL BE REQUIRED. THE LIST BELOW DOES NOT RELIEVE THE CONTRACTOR OF RESPONSIBILITY TO COORDINATE AND SCHEDULE THE WORK WITH AFFECTED INDIVIDUALS OR GROUPS, PRIOR TO BEGINNING WORK. INCLUDE ANY ADDITIONAL OR RELATED WORK AND GENERAL TASKS IN THE WORK SCHEDULE REQUIRED UNDER SECTION 80 AND SECTION G-300. PHASE 2 WORK CAN OCCUR CONCURRENTLY WITH PHASE 1.

- 1 RESURFACE RSA
- 2 RESURFACE TW
- 3 RESURFACE APRON
- 4 REPLACE PRIMARY WIND CONE AND SEGMENTED CIRCLE
- 5 REPLACE BEACON ASSEMBLY
- 6 CLEAR VEGETATION
- 7 REPLACE CULVERT

PHASE 2 NOTES

- 1. CLOSE RW FOR ALL WORK WITHIN RSA AND ROFZ. COORDINATE WITH AIRPORT MANAGEMENT FOR PROPER ISSUE OF NOTAM PRIOR TO BEGINNING REMAINING WORK INSIDE THE RSA. A NOTAM FOR PRIOR PERMISSION WILL BE ISSUED FOR THE RW. WHEN AIRCRAFT REQUEST PERMISSION TO USE RW 18-36 ALL PERSONS AND EQUIPMENT MUST BE CLEAR OF THE RSA WITHIN 15 MINUTES.
- 2. THE RW WILL REMAIN OPEN DURING ALL WORK ON THE TW AND APRON. AIRCRAFT MUST HAVE ACCESS TO/FROM THE APRON AT ALL TIMES.
- 3. LOW PROFILE BARRICADES WILL BE INSTALLED DURING APRON WORK TO PREVENT TRAFFIC FROM ENTERING WORK AREA. AIRCRAFT MUST HAVE ACCESS TO A PORTION OF THE APRON FOR PARKING AND MANEUVERING AT ALL TIMES.
- 4. COORDINATE WITH AIRPORT MANAGEMENT FOR PROPER ISSUE OF NOTAM PRIOR TO BEGINNING WORK ON THE PRIMARY WIND CONE, SEGMENTED CIRCLE, AND BEACON.
- 5. COORDINATE WITH AIRPORT MANAGEMENT PRIOR TO BEGINNING WORK. SCHEDULE WORK TO REDUCE OR ELIMINATE THE IMPACTS TO AIRPORT OPERATIONS AS MUCH AS PRACTICAL, AND AS DIRECTED BY THE ENGINEER.
- 6. DURING AIRCRAFT OPERATIONS ALL PERSONS AND EQUIPMENT MUST BE AT LEAST 125 FEET AWAY FROM ACTIVE RW CENTERLINE (ROFZ), AND 240 FEET BEYOND RW ENDS. PERSONS AND EQUIPMENT MUST NOT PENETRATE APPROACH SURFACES. THE LOCATION OF THE 34:1 APPROACH SURFACES ARE SHOWN ON AD1.
- 7. STOCKPILES MUST NOT PENETRATE APPROACH SURFACES SHOWN AT ANY TIME. THE LOCATION OF THE 34:1 APPROACH SURFACES ARE SHOWN ON AD1.
- 8. COORDINATE ANY REQUIRED UTILITY OUTAGES WITH AIRPORT MANAGEMENT, AIRPORT USERS, AND ANY AFFECTED PERSONS PRIOR TO SERVICE INTERRUPTION.

LEGEND:

- HAUL ROUTE (TWO WAY)
- CONTRACTOR STAGING AREA
- PHASE 2 CONSTRUCTION AREA
- ILLUMINATED RW CLOSURE MARKER

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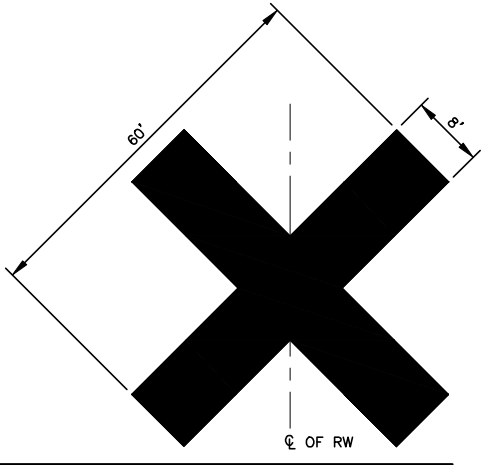
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PROJECT No. CFAPT00427
AIP No. 3-02-0446-00X-20XX
CONSTRUCTION SAFETY AND PHASING PHASE 2

DATE:
06/27/2019
SHEET:
AD3 OF AD4

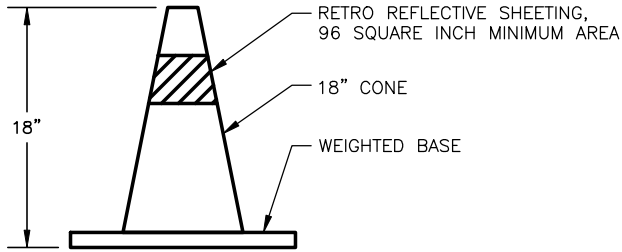
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Date Revised: 6/27/2019, 4:19 PM
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NOTES

1. RW CLOSURE MARKER, VINYL MESH PANEL, SHALL BE POSITIONED AT THE ENDS OF THE RW TO DENOTE A TEMPORARY CLOSED RW, OR AS DIRECTED.
2. RW CLOSURE MARKERS SHALL BE CONSTRUCTED MATERIAL SPECIFIED IN SECTION P-671, AND SHALL BE YELLOW IN COLOR.
3. PLACE MAINTAIN, AND RELOCATE RW CLOSURE MARKERS AS CONSTRUCTION REQUIRES.
4. PLACE RW CLOSURE MARKER AND ILLUMINATED PANEL AT EACH END OF THE CLOSED RW. ALIGN ON THE EXTENDED CENTERLINE, AND POSITION ON THE RSA EMBANKMENT TO AVOID CONFLICT WITH CONSTRUCTION ACTIVITY, OR AS OTHERWISE DIRECTED. SEE SECTION P-671, AC 150/5345-53, AND AC 150/5345-55 FOR ADDITIONAL REQUIREMENTS AND GUIDANCE FOR CLOSURE MARKERS.



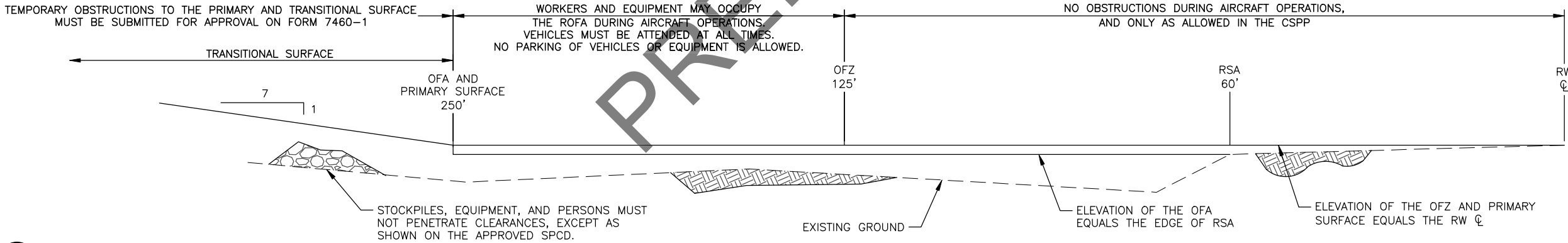
1 RW CLOSURE MARKER
AD4 SCALE: NTS



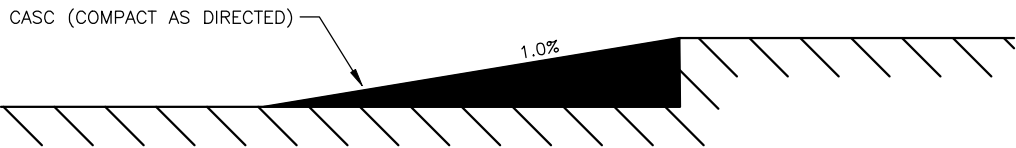
NOTES

1. TEMPORARY RW EDGE MARKERS SHALL HAVE A WHITE RETRO REFLECTIVE SHEETING.
2. TEMPORARY SAFETY AREA MARKERS SHALL HAVE AN ORANGE RETRO REFLECTIVE SHEETING.
3. TEMPORARY THRESHOLD MARKERS SHALL HAVE A RED AND GREEN RETRO REFLECTIVE SHEETING. THE GREEN SIDE OF THE SHEETING SHALL FACE THE APPROACH OF THE RUNWAY, AND THE RED SIDE OF THE SHEETING SHALL FACE THE RUNWAY.
4. TEMPORARY TW EDGE MARKERS SHALL HAVE A BLUE RETRO REFLECTIVE SHEETING.
5. TEMPORARY MARKERS PAID UNDER ITEM P-660.
6. ALL TEMPORARY MARKERS SHALL BE TETHERED TO PREVENT FOREIGN OBJECT FIBERS (FOD). INSTALLATION OF THE CONE ON A PERMANENT LIGHTING FIXTURE WILL MEET TETHERING REQUIREMENTS.

3 TEMPORARY EDGE MARKERS
AD4 SCALE: NTS



5 VERTICAL RELATION OF THE RSA, OFZ, AND OFA
AD4 SCALE: NTS



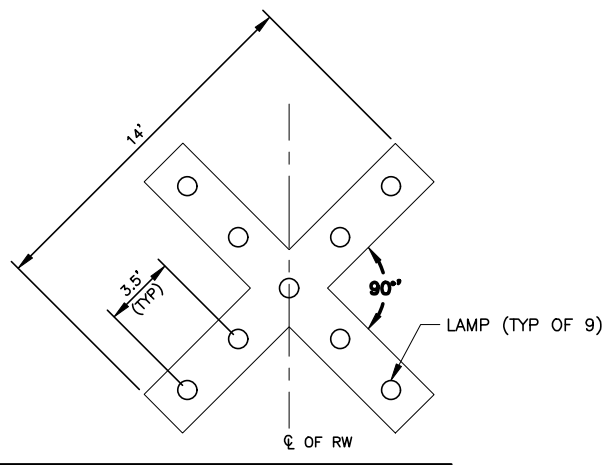
NOTES:

1. TRANSITIONS WILL BE SMOOTH AND FREE OF RUTS AND APPROVED BY THE ENGINEER PRIOR TO OPENING FOR AIRCRAFT OPERATIONS.

6 TRANSITION WEDGE DETAIL
AD4 SCALE: NTS

NOTES

1. PLACE ILLUMINATED RW CLOSURE MARKERS AT EACH END OF THE CLOSED RW. ALIGN MARKERS ON THE CENTERLINE OF THE RSA OR AS DIRECTED BY THE ENGINEER.
2. KEY FEATURES OF THE ILLUMINATED RW CLOSURE MARKER INCLUDE THE FOLLOWING:
A. PORTABLE AND CAPABLE OF BEING TOWED.
B. ENERGIZED BY A PORTABLE POWER SUPPLY CAPABLE OF A MINIMUM OF 24 HOURS CONTINUOUS OPERATION.
C. SIMULTANEOUSLY FLASH ALL LIGHT SOURCES AT 2.5 SECONDS ON, 2.5 SECONDS OFF.
D. CAPABLE OF SWITCHING BETWEEN DAY (70,000 CANDELA) AND NIGHT (2,000 CANDELA) INTENSITIES.
E. ALLOWING TILTING TO AN OPTIMUM ANGLE OF 5 DEGREES FROM VERTICAL.
F. REFER TO AC 150/5345-55 FOR ADDITIONAL REQUIREMENTS.



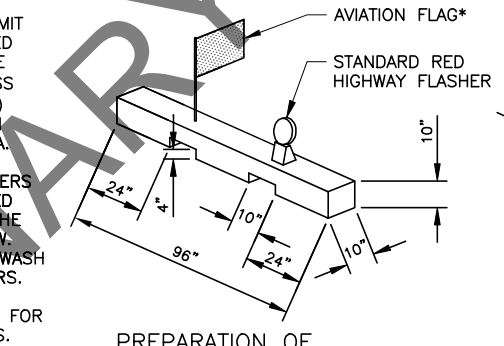
2 ILLUMINATED RW CLOSURE MARKER
AD4 SCALE: NTS

NOTES

1. PLACE BARRIERS TO LIMIT ACCESS TO THE CLOSED AREAS. USE LOW STYLE PLASTIC BARRIERS (LESS THAN 12 INCHES HIGH) WHEN ADJACENT TO AN ACTIVE MOVEMENT AREA.
2. HAZARD MARKER BARRIERS ARE NOT TO BE PLACED WITHIN 125 FEET OF THE EDGE OF AN ACTIVE RW. CONSIDER PROPELLER WASH WHEN PLACING BARRIERS.
3. SEE CSPP SECTION 16 FOR SPACING REQUIREMENTS.

ELEVATION VIEW

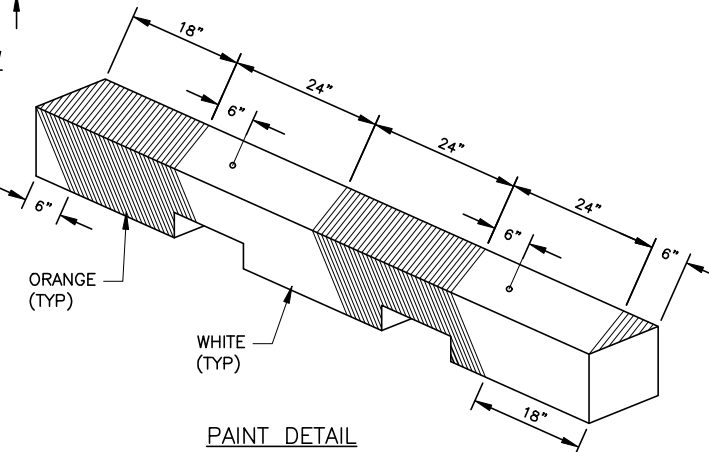
SIDE VIEW



PREPARATION OF FLAG & FLASHER MOUNT DETAIL

* FLAGS SHALL ALTERNATE COLOR (ORANGE/WHITE) ON EACH BARRIER AS THEY ARE PLACED IN THE AIRPORT OPERATIONS AREA, IN SEQUENCE.

4 HAZARD MARKER BARRIER
AD4 SCALE: NTS



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AD4 OF AD4