

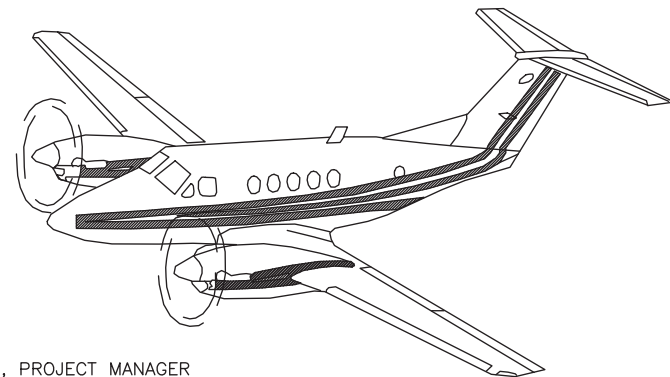
# PROPOSED AIRPORT PROJECT

## BREVIK MISSION AIRPORT

### BREVIK MISSION AIRPORT LIGHTING AND RESURFACING

AIP NO. 3-02-0400-XX-XXXX

PROJECT NO. NFAPT00500

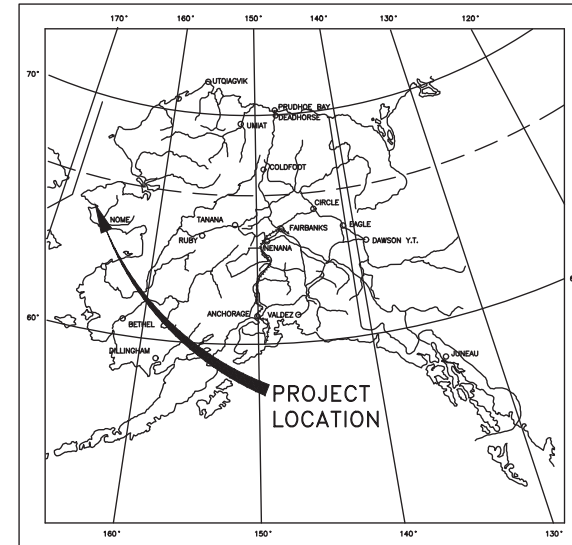


JONATHAN J. HUTCHINSON, P.E., PROJECT MANAGER

SPONSORED BY THE STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES  
NORTHERN REGION

APPROVED BY: *Albert Beck* DATE 4/5/2022  
for SARAH E. SCHACHER, P.E., PRECONSTRUCTION ENGINEER, NORTHERN REGION

ACCEPTED FOR CONSTRUCTION: *Joseph P. Kemp* DATE 4/5/2022  
for JOSEPH P. KEMP, P.E., ACTING REGIONAL DIRECTOR, NORTHERN REGION



LOCATION MAP



VICINITY MAP

SEC 9, T2S, R38W, KM  
USGS-TELLER B-3  
1"=10000'

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THE FOLLOWING AKDOT&PF STANDARD PLANS APPLY TO THIS PROJECT:  
S-01.02, S-05.02, S-30.05, S-00.12

As Advertised  
April 12, 2022  
Northern Region

SCOPE OF WORK

1. THE SCOPE OF WORK FOR THIS PROJECT IS TO RESURFACE AND FLATTEN EMBANKMENT SLOPES ON RUNWAYS 04-22 AND 11-29, TAXIWAY, APRON, AND ACCESS ROAD; REPAIR WIND CONE ACCESS ROAD; REPLACE RUNWAY 04-22, 11-29, AND TAXIWAY LIGHTING; REPLACE THE ROTATING BEACON AND LIGHTED WIND CONE; MULCH AND SEED THE RE-GRADED EMBANKMENT SLOPES; AND APPLY A DUST PALLIATIVE TO THE GRAVEL SURFACES.
2. THE SCOPE OF WORK TOGETHER WITH REFERENCED CODES, STANDARDS, SPECIFICATIONS, PROJECT DRAWINGS, STANDARD DRAWINGS, AND OTHER SUPPLEMENTAL INSTRUCTIONS COVERS THE PROJECT REQUIREMENTS.




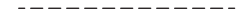



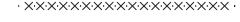



GENERAL NOTES

1. KNOWN UTILITIES AND STRUCTURES ARE SHOWN IN THEIR APPROXIMATE LOCATIONS. PRIOR TO WORK THE CONTRACTOR SHALL VERIFY SIZE, DEPTH, AND LOCATIONS OF ALL UNDERGROUND AND OVERHEAD UTILITIES AND STRUCTURES. THE CONTRACTOR SHALL PROTECT UTILITIES AND STRUCTURES FROM DAMAGE AND SHALL NOT DISTURB UNDERGROUND UTILITIES/STRUCTURES THAT ARE TO REMAIN.

ABBREVIATIONS

AIP	AIRPORT IMPROVEMENT PROJECT
DOT&PF	ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
BMPs	BEST MANAGEMENT PRACTICES
CL	CENTERLINE
E	EASTING
EEB	ELECTRICAL EQUIPMENT BUILDING
FOD	FOREIGN OBJECT DEBRIS
FT	FEET
LT	LEFT
MIN	MINIMUM
N	NORTHING
NO.	NUMBER
OFZ	OBJECT FREE ZONE
RW	RUNWAY
R	RADIUS
ROFA	RUNWAY OBJECT FREE AREA
RPZ	RUNWAY PROTECTION ZONE
RSA	RUNWAY SAFETY AREA
RT	RIGHT
SWPPP	STORM WATER POLLUTION PREVENTION PLAN
TOFA	TAXIWAY OBJECT FREE AREA
TW	TAXIWAY
TYP	TYPICAL

LEGEND

	CENTER LINE
	AIRPORT PROPERTY BOUNDARY (EXISTING)
	PERIMETER CONTROL
	EDGE OF RUNWAY, TAXIWAY, APRON (EXISTING)
	EDGE OF RUNWAY, TAXIWAY, APRON (PROPOSED)
	HAUL ROUTE
	CONSTRUCTOR STAGING AREA
	LOW PROFILE BARRICADE
	APPROXIMATE MEAN WATER LEVEL
	WIND CONE
	SEGMENTED CIRCLE

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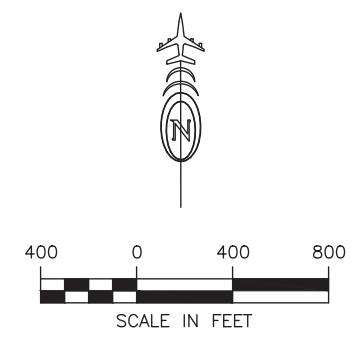
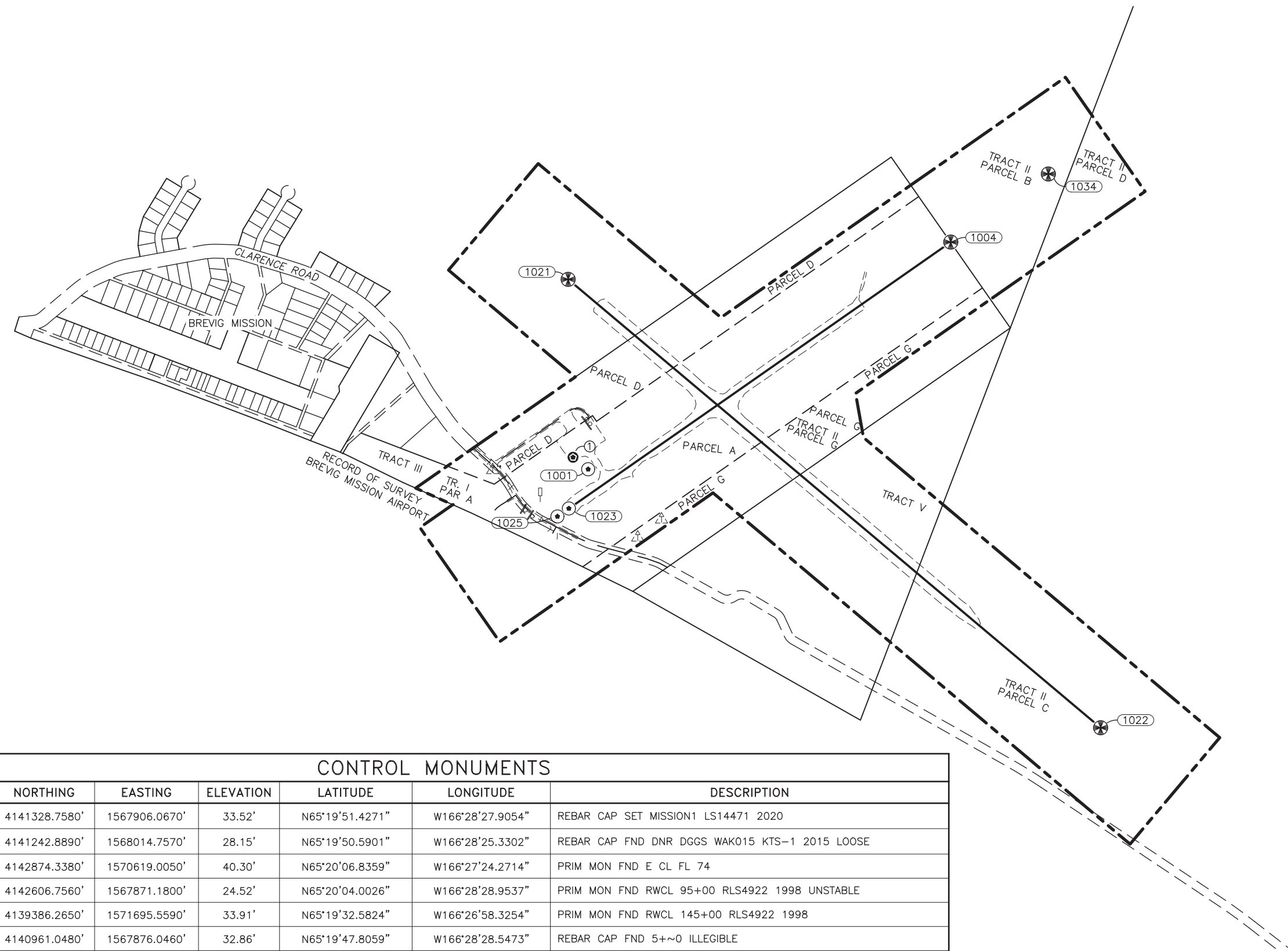
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BREVIG MISSION AIRPORT  
 AIRPORT LIGHTING AND RESURFACING  
 AIP 3-02-0400-XX-XXXX/NFAPT00500  
 LEGEND

SHEET  
 2 OF  
 36

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**LEGEND**

- PRIMARY MONUMENT FOUND
- REBAR AND CAP SET

**NOTES:**

1. VERIFY HORIZONTAL AND VERTICAL CONTROL PRIOR TO USE. ON MULTI YEAR PROJECTS, VERIFY ALL CONTROL ON A SEASONAL BASIS.
  2. BACKGROUND MAPPING IS SHOWN FOR ORIENTATION PURPOSES ONLY. THIS SHEET DOES NOT PURPORT TO DEPICT RIGHT-OF-WAY.
  3. ALL DISTANCES SHOWN ARE GROUND DISTANCES IN U.S. SURVEY FEET.
  4. THIS PROJECT IS LOCATED ENTIRELY WITHIN STATE PLANE ZONE 8.
- SPZ8 DEFINITION:  
 LINEAR UNIT: U.S. SURVEY FOOT (SFT)  
 DATUM: NAD83 (2011)  
 PROJECTION: TRANSVERSE MERCATOR  
 LATITUDE OF GRID ORIGIN: 54°00'00"N  
 CENTRAL MERIDIAN (GRID ORIGIN): 166°00'00"W  
 FALSE NORTHING: 0.000 SFT  
 FALSE EASTING: 1640416.666 SFT  
 STANDARD PARALLEL SCALE: 0.9999 (EXACT)
5. THE BASIS OF COORDINATES IS THE NAD83 (2011) (EPOCH:2010.0000) OPUS AVERAGED POSITION OF POINT #1 N: 4141328.78 FT, E: 1567906.09 FT.
  6. BASIS OF BEARING IS STATE PLANE ZONE 8.
  7. THE BASIS OF ELEVATION IS THE OPUS AVERAGED GEIOD12A (NAVD88) ELEVATION OF 33.49 FT AT POINT #1.

**CONTROL MONUMENTS**

POINT NO.	NORTHING	EASTING	ELEVATION	LATITUDE	LONGITUDE	DESCRIPTION
1	4141328.7580'	1567906.0670'	33.52'	N65°19'51.4271"	W166°28'27.9054"	REBAR CAP SET MISSION1 LS14471 2020
1001	4141242.8890'	1568014.7570'	28.15'	N65°19'50.5901"	W166°28'25.3302"	REBAR CAP FND DNR DGGS WAK015 KTS-1 2015 LOOSE
1004	4142874.3380'	1570619.0050'	40.30'	N65°20'06.8359"	W166°27'24.2714"	PRIM MON FND E CL FL 74
1021	4142606.7560'	1567871.1800'	24.52'	N65°20'04.0026"	W166°28'28.9537"	PRIM MON FND RWCL 95+00 RLS4922 1998 UNSTABLE
1022	4139386.2650'	1571695.5590'	33.91'	N65°19'32.5824"	W166°26'58.3254"	PRIM MON FND RWCL 145+00 RLS4922 1998
1023	4140961.0480'	1567876.0460'	32.86'	N65°19'47.8059"	W166°28'28.5473"	REBAR CAP FND 5+~0 ILLEGIBLE
1025	4140903.8500'	1567794.0190'	22.86'	N65°19'47.2369"	W166°28'30.4690"	REBAR CAP FND RWCL 4+00 S4922 1998
1034	4143363.4910'	1571320.2140'	45.99'	N65°20'11.6999"	W166°27'07.8359"	PRIM MON FND R/W CL 47+00 RLS4922 1998 LOOSE

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**BREVIG MISSION AIRPORT**  
 AIRPORT LIGHTING AND RESURFACING  
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 SURVEY CONTROL

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### ESTIMATE OF QUANTITIES

ITEM NO.	PAY ITEM	UNIT	QUANTITY
G100.010.0000	MOBILIZATION AND DEMOBILIZATION	LUMP SUM	ALL REQUIRED
G115.010.0000	WORKER MEALS & LODGING, OR PER DIEM	LUMP SUM	ALL REQUIRED
G130.010.0000	FIELD OFFICE	LUMP SUM	ALL REQUIRED
G130.020.0000	FIELD LABORATORY	LUMP SUM	ALL REQUIRED
G130.040.0000	MEAL	EACH	1,326
G130.050.0000	LODGING	EACH	438
G130.060.0000	NUCLEAR TESTING EQUIPMENT STORAGE SHED	EACH	1
G130.110.0000	FIELD COMMUNICATIONS	CONTINGENT SUM	ALL REQUIRED
G131.050.0000	ENGINEERING TRANSPORTATION	LUMP SUM	ALL REQUIRED
G135.010.0000	CONSTRUCTION SURVEYING BY THE CONTRACTOR	LUMP SUM	ALL REQUIRED
G135.020.0000	EXTRA THREE PERSON SURVEY PARTY	hour	120
G210.010.0000	CONTRACTOR SAFETY PLAN COMPLIANCE DOCUMENT	LUMP SUM	ALL REQUIRED
G700.010.0000	AIRPORT FLAGGER	CONTINGENT SUM	ALL REQUIRED
G700.030.0000	AIRPORT TRAFFIC MAINTENANCE	LUMP SUM	ALL REQUIRED
G710.010.0000	HIGHWAY TRAFFIC MAINTENANCE	LUMP SUM	ALL REQUIRED
G710.020.0000	HIGHWAY FLAGGER	CONTINGENT SUM	ALL REQUIRED
L101.020.0000	ROTATING BEACON, MEDIUM INTENSITY, L-801A	EACH	1
L107.010.0008	8- FEET LIGHTED WIND CONE, IN PLACE	EACH	1
L108.010.2008	UNDERGROUND CABLE #8 AWG, COPPER, 5kv FAA TYPE C, L-824	LF	12,000
L108.030.0006	#6 BARE COPPER GROUND CONDUCTOR	LF	12,000
L108.070.0000	GROUND ROD	EACH	16
L109.030.0000	ELECTRICAL ENCLOSURE AND FOUNDATION IN PLACE	EACH	1
L109.050.0000	INSTALLATION OF ELECTRICAL EQUIPMENT IN NEW OR EXISTING STRUCTURE	LUMP SUM	ALL REQUIRED
L110.030.1002	RIGID STEEL CONDUIT, 2-INCH	LF	850
L110.080.1002	HDPE CONDUIT, 2-INCH	LF	11,250
L125.020.0000	REGULATOR, L-828	EACH	1
L125.030.0000	MEDIUM INTENSITY RUNWAY EDGE AND THRESHOLD LIGHT, L-861 AND L-861SE	EACH	79
L125.040.0000	TAXIWAY EDGE LIGHT, L-861T	EACH	18
L125.050.0000	WINDCONE HANDHOLE, L-867	EACH	1
L125.070.0000	REMOVE RUNWAY AND TAXIWAY LIGHT	EACH	95
L125.170.0000	SPARE PARTS	CONTINGENT SUM	ALL REQUIRED
L125.180.0000	TEMPORARY RUNWAY LIGHTING SYSTEM	LUMP SUM	ALL REQUIRED
L161.010.0000	ELECTRICAL METER CENTERS	LUMP SUM	ALL REQUIRED
P152.200.0000	BORROW	TON	257,700
P165.010.0000	REMOVAL OF STRUCTURES	LUMP SUM	ALL REQUIRED
P167.010.0000	DUST PALLIATIVE	SQUARE YARD	104,000
P299.020.0000	CRUSHED AGGREGATE SURFACE COURSE	TON	34,300
P641.010.0000	EROSION, SEDIMENT, AND POLLUTION CONTROL ADMINISTRATION	LUMP SUM	ALL REQUIRED
P641.030.0000	TEMPORARY EROSION, SEDIMENT, AND POLLUTION CONTROL	LUMP SUM	ALL REQUIRED
P641.040.0000	TEMPORARY EROSION, SEDIMENT, AND POLLUTION CONTROL ADDITIVES	CONTINGENT SUM	ALL REQUIRED
P641.060.0000	WITHHOLDINGS	CONTINGENT SUM	ALL REQUIRED
P641.070.0000	SWPPP MANAGER	LUMP SUM	ALL REQUIRED
P648.020.0000	ARCHAEOLOGICAL MONITORING	CONTINGENT SUM	ALL REQUIRED
P660.030.0000	REFLECTIVE MARKER, TYPE II	EACH	137
P661.030.0000	STANDARD SIGNS	LUMP SUM	ALL REQUIRED
P670.010.0000	HAZARD MARKER BARRIER, PLASTIC	EACH	120
P671.020.0000	RUNWAY CLOSURE MARKER, ILLUMINATED	EACH	4
P680.010.0000	SILT FENCE	LF	14,900
T901.020.0000	SEEDING	POUND	1,380
T908.040.0000	MULCH - HYDRUALIC EROSION CONTROL PRODUCTS	SQUARE YARD	75,600

### ESTIMATE OF LUMP SUM QUANTITIES

ITEM NO.	DESCRIPTION	PAY UNIT	QUANTITY
P165.010.0000	REMOVAL OF STRUCTURES	EACH	1
P661.030.0000	STANDARD SIGNS	SF	35

### ESTIMATING FACTORS

ITEM NO.	DESCRIPTION	VALUE
P152.200.0000	BORROW	1.9 TON/CY
P299.020.0000	CRUSHED AGGREGATE SURFACE COARSE	1.9 TON/CY
T901.020.0000	SEEDING	2 LB/1,000 SF

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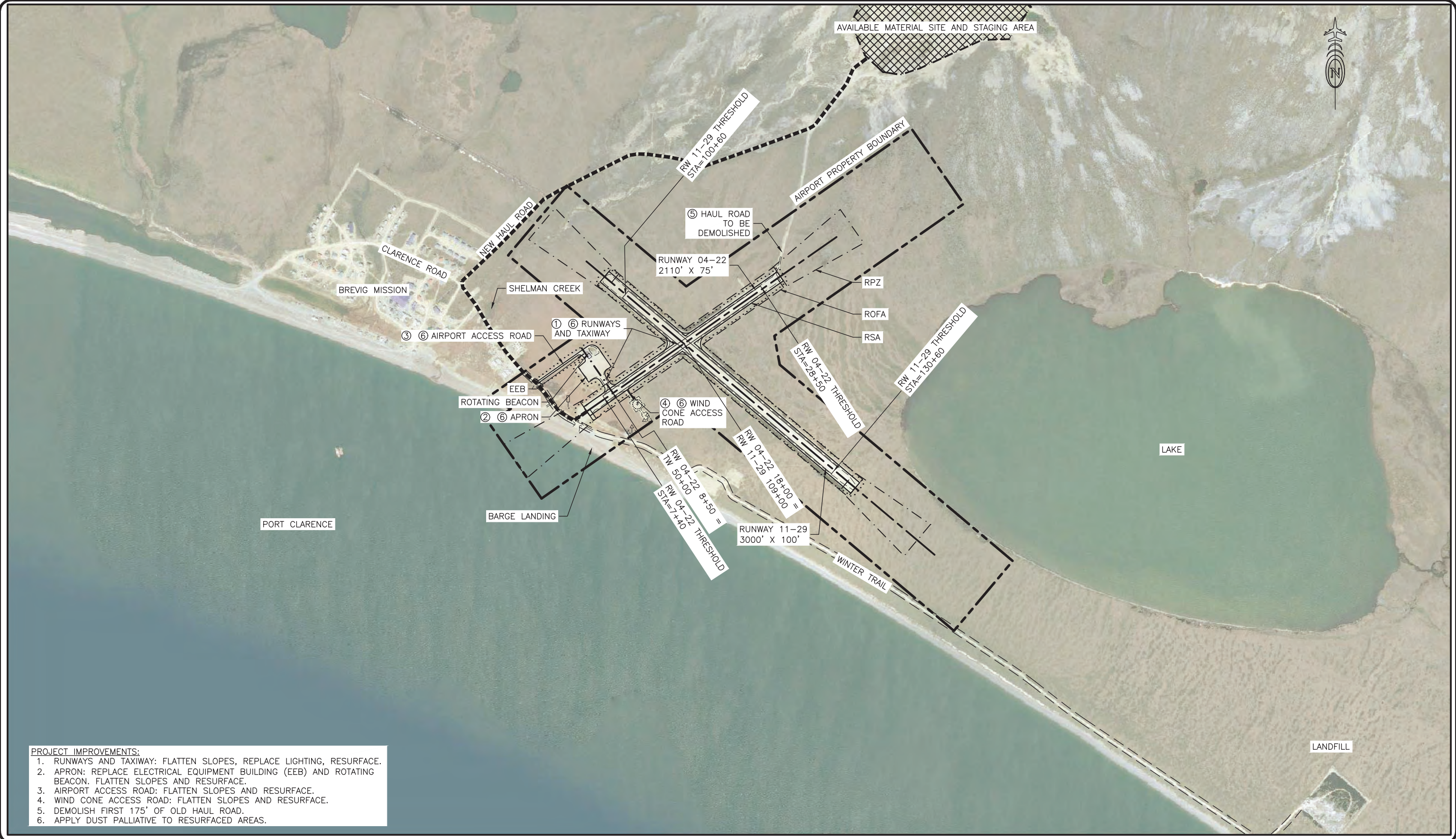
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 ESTIMATE OF QUANTITIES

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- PROJECT IMPROVEMENTS:**
1. RUNWAYS AND TAXIWAY: FLATTEN SLOPES, REPLACE LIGHTING, RESURFACE.
  2. APRON: REPLACE ELECTRICAL EQUIPMENT BUILDING (EEB) AND ROTATING BEACON. FLATTEN SLOPES AND RESURFACE.
  3. AIRPORT ACCESS ROAD: FLATTEN SLOPES AND RESURFACE.
  4. WIND CONE ACCESS ROAD: FLATTEN SLOPES AND RESURFACE.
  5. DEMOLISH FIRST 175' OF OLD HAUL ROAD.
  6. APPLY DUST PALLIATIVE TO RESURFACED AREAS.

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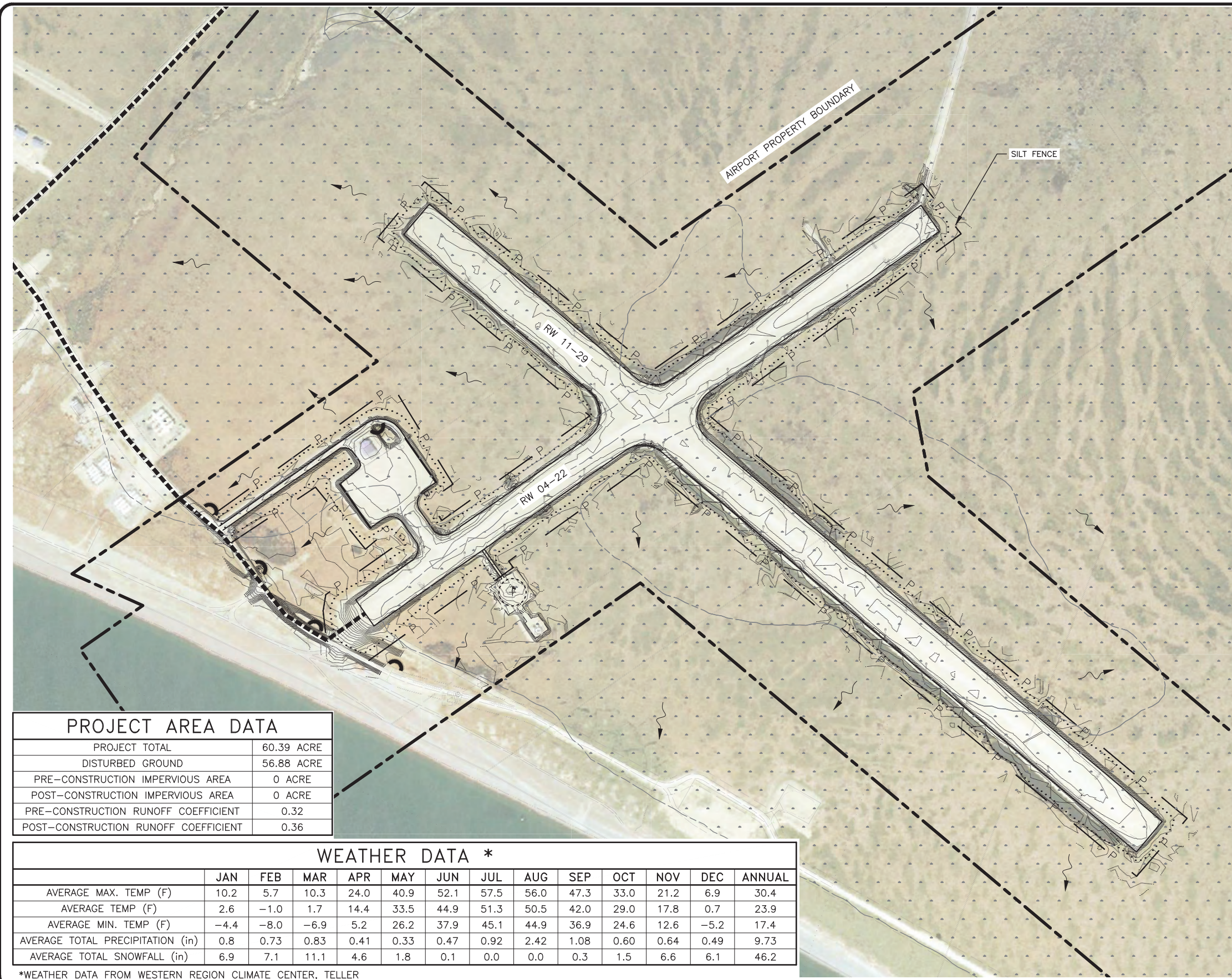
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**BREVIG MISSION AIRPORT**  
 AIRPORT LIGHTING AND RESURFACING  
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 PROJECT LAYOUT PLAN

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**LEGEND**

- PERIMETER CONTROL
- FLOW DIRECTION
- HAUL ROUTE
- WETLANDS
- HIGH VALUE WETLANDS
- INLET PROTECTION

**EROSION AND SEDIMENT CONTROL PLAN NOTES:**

1. THE CONTRACTOR SHALL CONSIDER CONTROLS SHOWN ON THIS SHEET AS GENERAL GUIDELINES IN DEVELOPING THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP). THE CONTRACTOR SHALL THOROUGHLY REVIEW THE SLOPES AND GRADES SHOWN ON THE CONSTRUCTION PLANS, PROFILES, AND TYPICAL SECTIONS AND UNDERSTAND THEIR RELATIONSHIP WITH DRAINAGE PATTERNS AND THE NEED FOR SPECIFIC EROSION AND SEDIMENT CONTROL MEASURES.
2. CONSTRUCT EMBANKMENT EROSION CONTROL ON ALL SLOPES. STABILIZE ALL DISTURBED AREAS, NOT SCHEDULED TO RECEIVE SURFACE COURSE, WITHIN 14 DAYS OF CEASING GROUND DISTURBING ACTIVITIES.
3. INSTALL EROSION AND SEDIMENT CONTROLS PRIOR TO ANY EARTH DISTURBING ACTIVITIES AT THE PROJECT OR MATERIAL SITES.
4. INSTALL AND MAINTAIN VEHICLE TRACKING ENTRANCE/EXIT THAT CONFORMS TO BEST MANAGEMENT PRACTICES (BMPs) TO PREVENT THE TRANSPORT OF CONSTRUCTION DEBRIS ONTO PUBLIC ROW AT THE CONSTRUCTION SITE AND MATERIAL SITES, AS NEEDED.
5. SILT FENCE SHOULD NOT BE INSTALLED IN STANDING WATER.
6. EQUIPMENT SHALL OPERATE ON GRAVEL PADS. NO EQUIPMENT MAY OPERATE ON WETLANDS UNLESS THE GROUND IS ADEQUATELY FROZEN AND PROTECTED FROM DAMAGE, AND SUCH ACTION IS APPROVED BY THE ENGINEER.
7. THE AIRPORT AND SURROUNDING GROUND IS ON PERMAFROST.
8. CLEARING ADJACENT TO OR WITHIN WETLANDS SHALL BE DONE SUCH THAT DEPOSITION OF DEBRIS DOES NOT CAUSE AN IMPACT TO WETLANDS.
9. UNDER NON-FROZEN CONDITIONS FABRICS MUST BE PLACED BENEATH STOCKPILED MATERIAL. EACH TYPE OF MATERIAL SHALL BE STOCKPILED SEPARATELY.
10. PERMANENT SEEDING OF EMBANKMENT SHALL BE IN ACCORDANCE WITH ITEM T901.020.0000.
11. ENVIRONMENTAL COMMITMENTS IN PERMITS AND BMPS SHOWN ON THE PLANS AND ADDRESSED IN APPENDIX E ARE SUBSIDIARY TO ITEM P641.030.0000.
12. CONTRACTOR SHALL USE FILTER BAGS ON DISCHARGE HOSES WHEN DEWATERING THAW PONDS AROUND THE RUNWAY PERIMETER. ENSURE WATER IS CLEAN BEFORE PUMPING. PUMP WATER A MINIMUM OF 50' DOWNSTREAM FROM EXISTING PONDS IN A MANNER THAT DOES NOT CREATE TURBIDITY AT THE DISCHARGE POINTS.
13. SEE APPENDIX "NMF5 ENVIRO COMMITMENTS" FOR PROJECT SPECIFIC BARGING REQUIREMENTS. ALL WORK REQUIRED TO MEET THE CONDITIONS OF THE PERMIT ARE CONTRACTOR'S RESPONSIBILITY AND SUBSIDIARY TO OTHER CONTRACT WORK.

**ENVIRONMENTAL INFORMATION:**

1. RECEIVING WATER BODIES: SHELMAN CREEK, PORT CLARENCE, WETLANDS.
2. IMPAIRED WATER BODIES: NONE.
3. ALL CONSTRUCTION ACTIVITY SHALL COMPLY WITH THE MIGRATORY BIRD TREATY ACT.
4. STORM SEWER: NONE.
5. THE AIRPORT AND SURROUNDING GROUND IS ON PERMAFROST.

**GENERAL SITE INFORMATION**

1. PROJECT TYPE: AIRPORT LIGHTING AND RESURFACING.
2. CLIMATE: THE CLIMATE IN BREVIG MISSION IS CLASSIFIED AS SUB-ARCTIC.
3. AVERAGE RAINFALL: 9.73 INCHES. (WESTERN REGION CLIMATE CENTER, TELLER)
4. 2 YEAR 24 HOUR RAINFALL: 1.11 INCHES. (NOAA ATLAS 14, VOLUME 7, VERSION 2, TELLER)
5. HISTORICAL AVERAGE DATES OF FREEZING TEMPERATURES: OCTOBER 7 TO JUNE 19. (WESTERN REGION CLIMATE CENTER)
6. APPROXIMATE GROWING SEASON: JUNE 2 TO OCTOBER 1. (REGIONAL SUPPLEMENT TO THE CORPS OF ENGINEERS WETLAND DELINEATION MANUAL: ALASKA REGION (VERSION 2))

PROJECT AREA DATA	
PROJECT TOTAL	60.39 ACRE
DISTURBED GROUND	56.88 ACRE
PRE-CONSTRUCTION IMPERVIOUS AREA	0 ACRE
POST-CONSTRUCTION IMPERVIOUS AREA	0 ACRE
PRE-CONSTRUCTION RUNOFF COEFFICIENT	0.32
POST-CONSTRUCTION RUNOFF COEFFICIENT	0.36

WEATHER DATA *													
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
AVERAGE MAX. TEMP (F)	10.2	5.7	10.3	24.0	40.9	52.1	57.5	56.0	47.3	33.0	21.2	6.9	30.4
AVERAGE TEMP (F)	2.6	-1.0	1.7	14.4	33.5	44.9	51.3	50.5	42.0	29.0	17.8	0.7	23.9
AVERAGE MIN. TEMP (F)	-4.4	-8.0	-6.9	5.2	26.2	37.9	45.1	44.9	36.9	24.6	12.6	-5.2	17.4
AVERAGE TOTAL PRECIPITATION (in)	0.8	0.73	0.83	0.41	0.33	0.47	0.92	2.42	1.08	0.60	0.64	0.49	9.73
AVERAGE TOTAL SNOWFALL (in)	6.9	7.1	11.1	4.6	1.8	0.1	0.0	0.0	0.3	1.5	6.6	6.1	46.2

\*WEATHER DATA FROM WESTERN REGION CLIMATE CENTER, TELLER

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SHEET  
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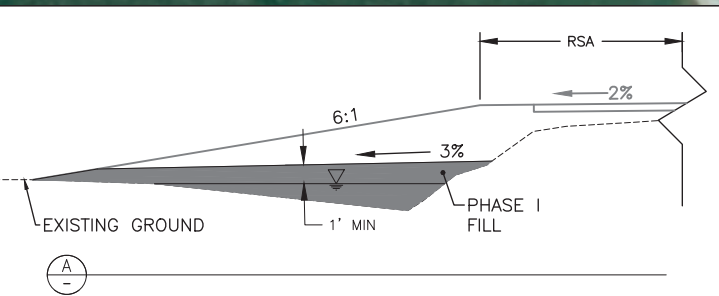
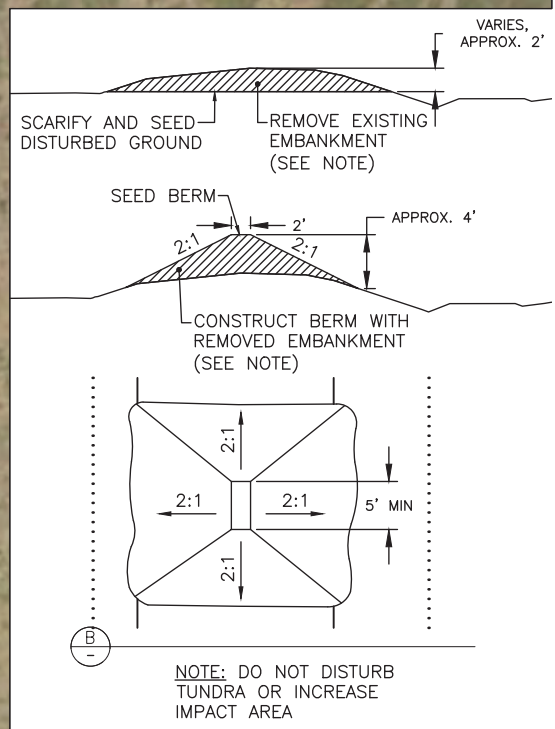


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**PHASE I A NOTES:**

1. SCHEDULE TO BE COMPLETED FROM AUGUST 1ST TO SEPTEMBER 30TH OF FIRST CONSTRUCTION SEASON.
2. PRE-CONSTRUCTION WORK ITEMS:
  - A. COORDINATE NOTAM ISSUANCE WITH THE AIRPORT MANAGER. (14 DAYS PRIOR TO CONSTRUCTION ACTIVITIES).
  - B. NOTIFY ALL AIR CARRIERS AND OTHER AIRCRAFT PERSONNEL OF PROPOSED CONSTRUCTION ACTIVITIES AND RUNWAY CLOSURES. (45 DAYS PRIOR TO CONSTRUCTION ACTIVITIES).
  - C. CLOSE RUNWAY 04-22.
  - D. COORDINATE PLACEMENT OF LOW-PROFILE BARRICADES AND ILLUMINATED RUNWAY CLOSURE MARKERS WITH AIRPORT MANAGER AND ENGINEER. USE BLUE LIGHTS FOR BARRICADES THAT DELINEATE A TAXIWAY AND RED LIGHTS IN OTHER LOCATIONS.
3. CONSTRUCTION WORK ITEMS:
  - A. RUNWAY 11-29 TO REMAIN OPEN THROUGHOUT THIS PHASE OF CONSTRUCTION ACTIVITIES.
  - B. ALL EQUIPMENT AND PERSONNEL MUST EVACUATE ACTIVE RUNWAYS WHEN IN USE BY AIRCRAFT. EQUIPMENT AND PERSONNEL MUST REMAIN OUTSIDE OF THE RUNWAY OBJECT FREE AREAS (ROFA) AND TAXIWAY OBJECT FREE AREAS (TOFA) UNTIL AIRCRAFT OPERATIONS HAVE ENDED.
  - C. MAINTAIN A 35' (MIN.) TEMPORARY TAXIWAY FROM RUNWAY 11-29 TO THE APRON AS SHOWN. CONTRACTOR SHALL VACATE THE TOFA WHEN THE TEMPORARY TAXIWAY IS IN USE. CONTRACTOR TO COORDINATE TEMPORARY TAXIWAY OPERATIONS WITH THE AIRPORT MANAGER. RSA AND TSA MUST BE TO STANDARD IF OPEN.
  - D. AIRPORT FLAGGER IS REQUIRED FOR ENTRANCES TO AIRPORT AREAS OPEN FOR OPERATIONS. CONTRACTOR TO LIMIT CROSSINGS OF ACTIVE AREAS AS MUCH AS POSSIBLE.
  - E. DEWATER ALL CONSTRUCTION FILL AREAS.
  - F. FILL DEWATERED AREAS WITH SPECIFIED MATERIAL IN AREAS SHOWN UTILIZING THE PROPOSED TYPICAL SECTIONS.
  - G. DEMOLISH OLD HAUL ROAD AND CONSTRUCT BERM AS SHOWN.
4. POST-PHASE WORK ITEMS:
  - A. COORDINATE REMOVAL AND/OR RELOCATION OF LOW-PROFILE BARRICADES AND ILLUMINATED RUNWAY CLOSURE MARKERS WITH THE AIRPORT MANAGER AND ENGINEER. ENSURE BARRICADES ARE FREE OF SAFETY AREAS AFTER WORK IN PHASE IS COMPLETED.
  - B. ALL EQUIPMENT AND MATERIALS MUST BE REMOVED AT LEAST 30 MINUTES PRIOR TO SCHEDULED REOPENING TO ALLOW CONTRACTOR TO INSPECT WORK AREAS AND RUNWAYS TO ENSURE THAT AREAS ARE CLEAR OF FOREIGN OBJECT DEBRIS (FOD) AND THAT SAFETY AREAS MEET STANDARDS.
5. ELECTRICAL WORK/LIGHTING NOTES:
  - A. PROVIDE JUMPER CONDUCTOR ACROSS RUNWAY 04-22 TO MAINTAIN RUNWAY LIGHTING OPERATION FOR RUNWAY 11-29. JUMPER CONDUCTOR TO BE FAA COMPLIANT CONDUCTOR, SIZED TO MATCH EXISTING CONDUCTOR, AND PER SPECIFICATION L-108. CONDUCTOR MAY BE DIRECT BURIED OR ROUTED IN HDPE AT A MINIMUM DEPTH OF 18". LIGHTING FOR RUNWAY 04-22 (INCLUDING THRESHOLDS) WHICH CANNOT BE REMOVED FROM THE LIGHTING CIRCUIT MUST BE COVERED IN SUCH A WAY TO PREVENT LIGHT LEAKAGE DURING NORMAL OPERATION OF RUNWAY 11-29. PROVIDE TEMPORARY TAXIWAY LIGHTING FROM RUNWAY 11-29 TO THE EXISTING APRON AT A MAXIMUM OF 100' SPACING. AT THE END OF TEMPORARY LIGHTING PERIOD, JUMPER CABLES MAY BE REMOVED OR ABANDONED IN PLACE.



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**STATE OF ALASKA**  
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BY	DATE	REVISIONS

**BREVIG MISSION AIRPORT**  
 AIRPORT LIGHTING AND RESURFACING  
 AIP 3-02-0400-XX-XXXX/NFAPT00500  
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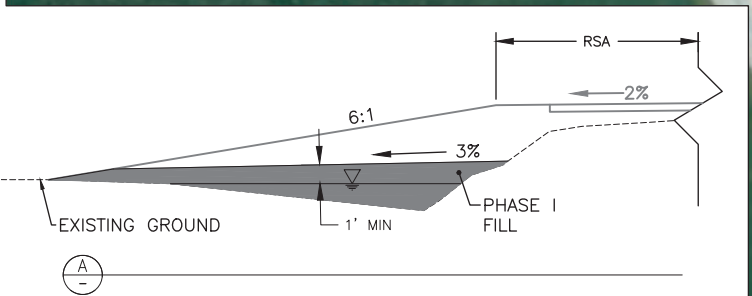


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**PHASE I B NOTES:**

1. SCHEDULE TO BE COMPLETED FROM AUGUST 1ST TO SEPTEMBER 30TH OF FIRST CONSTRUCTION SEASON.
2. PRE-CONSTRUCTION WORK ITEMS:
  - A. COORDINATE NOTAM ISSUANCE WITH THE AIRPORT MANAGER. (14 DAYS PRIOR TO CONSTRUCTION ACTIVITIES).
  - B. NOTIFY ALL AIR CARRIERS AND OTHER AIRCRAFT PERSONNEL OF PROPOSED CONSTRUCTION ACTIVITIES AND RUNWAY CLOSURES. (45 DAYS PRIOR TO NIGHT CONSTRUCTION ACTIVITIES).
  - C. CLOSE RUNWAYS, TAXIWAYS, AND APRON.
  - D. COORDINATE PLACEMENT OF LOW-PROFILE BARRICADES AND ILLUMINATED RUNWAY CLOSURE MARKERS WITH AIRPORT MANAGER AND ENGINEER. USE RED LIGHTS.
3. CONSTRUCTION WORK ITEMS:
  - A. ALL WORK IN THIS PHASE TO TAKE PLACE DURING NIGHTTIME CLOSURES.
  - B. RUNWAY 11-29 MUST BE AVAILABLE WITHIN 30 MINUTES OF NOTICE FOR EMERGENCY MEDEVAC OPERATIONS.
  - C. CONTRACTOR WILL BE RESPONSIBLE FOR REMOVAL OF ALL EQUIPMENT AND CONSTRUCTION PERSONNEL FROM RUNWAY 11-29 WITHIN 30 MINUTES OF THE MEDEVAC NOTICE.
  - D. DEWATER ALL CONSTRUCTION FILL AREAS.
  - E. FILL DEWATERED AREAS WITH SPECIFIED MATERIAL IN AREAS SHOWN UTILIZING THE PROPOSED TYPICAL SECTIONS.
4. POST-PHASE WORK ITEMS:
  - A. COORDINATE REMOVAL AND/OR RELOCATION OF LOW-PROFILE BARRICADES AND ILLUMINATED RUNWAY CLOSURE MARKERS WITH THE AIRPORT MANAGER AND ENGINEER. ENSURE BARRICADES ARE FREE OF SAFETY AREAS AFTER WORK IN PHASE IS COMPLETED.
  - B. ALL EQUIPMENT AND MATERIALS MUST BE REMOVED AT LEAST 30 MINUTES PRIOR TO SCHEDULED REOPENING TO ALLOW CONTRACTOR TO INSPECT WORK AREAS AND RUNWAYS TO ENSURE THAT AREAS ARE CLEAR OF FOREIGN OBJECT DEBRIS (FOD) AND THAT SAFETY AREAS MEET STANDARDS.
5. ELECTRICAL WORK/LIGHTING NOTES (ALL PHASES):
  - A. PROVIDE JUMPER CONDUCTOR ACROSS RUNWAY 04-22 TO MAINTAIN RUNWAY LIGHTING OPERATION FOR RUNWAY 11-29. JUMPER CONDUCTOR TO BE FAA COMPLIANT CONDUCTOR, SIZED TO MATCH EXISTING CONDUCTOR, AND PER SPECIFICATION L-108. CONDUCTOR MAY BE DIRECT BURIED OR ROUTED IN HDPE AT A MINIMUM DEPTH OF 18". LIGHTING FOR RUNWAY 04-22 (INCLUDING THRESHOLDS) WHICH CANNOT BE REMOVED FROM THE LIGHTING CIRCUIT MUST BE COVERED IN SUCH A WAY TO PREVENT LIGHT LEAKAGE DURING NORMAL OPERATION OF RUNWAY 11-29. PROVIDE TEMPORARY TAXIWAY LIGHTING FROM RUNWAY 11-29 TO THE EXISTING APRON AT A MAXIMUM OF 100' SPACING. AT THE END OF TEMPORARY LIGHTING PERIOD, JUMPER CABLES MAY BE REMOVED OR ABANDONED IN PLACE.



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**BREVIG MISSION AIRPORT**  
 AIRPORT LIGHTING AND RESURFACING  
 AIP 3-02-0400-XX-XXXX/NFAPT00500  
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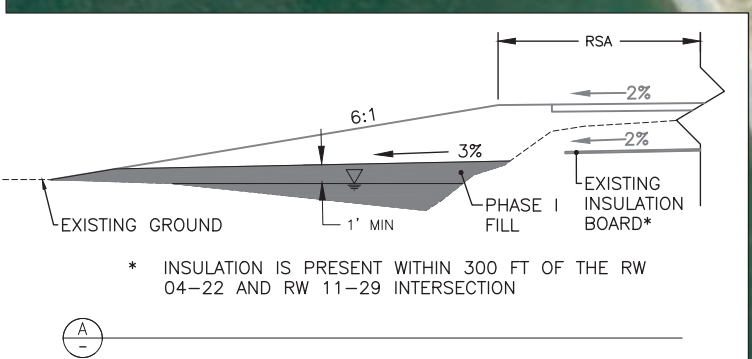


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**PHASE I C NOTES:**

1. SCHEDULE TO BE COMPLETED FROM AUGUST 1ST TO SEPTEMBER 30TH OF FIRST CONSTRUCTION SEASON.
2. PRE-CONSTRUCTION WORK ITEMS:
  - A. COORDINATE NOTAM ISSUANCE WITH THE AIRPORT MANAGER. (14 DAYS PRIOR TO CONSTRUCTION ACTIVITIES).
  - B. NOTIFY ALL AIR CARRIERS AND OTHER AIRCRAFT PERSONNEL OF PROPOSED CONSTRUCTION ACTIVITIES AND RUNWAY CLOSURES. (45 DAYS PRIOR TO CONSTRUCTION ACTIVITIES).
  - C. CLOSE RUNWAY 11-29.
  - D. COORDINATE PLACEMENT OF LOW-PROFILE BARRICADES AND ILLUMINATED RUNWAY CLOSURE MARKERS WITH AIRPORT MANAGER AND ENGINEER. USE RED LIGHTS.
3. CONSTRUCTION WORK ITEMS:
  - A. RUNWAY 04-22 TO REMAIN OPEN THROUGHOUT THIS PHASE OF CONSTRUCTION ACTIVITIES.
  - B. ALL EQUIPMENT AND PERSONNEL MUST EVACUATE ACTIVE RUNWAYS WHEN IN USE BY AIRCRAFT. EQUIPMENT AND PERSONNEL MUST REMAIN OUTSIDE OF THE RUNWAY OBJECT FREE AREAS (ROFA) AND TAXIWAY OBJECT FREE AREAS (TOFA) UNTIL AIRCRAFT OPERATIONS HAVE ENDED.
  - C. AIRPORT FLAGGER IS REQUIRED FOR ENTRANCES TO AIRPORT AREAS OPEN FOR OPERATIONS. CONTRACTOR TO LIMIT CROSSINGS OF ACTIVE AREAS AS MUCH AS POSSIBLE.
  - D. DEWATER ALL CONSTRUCTION FILL AREAS.
  - E. FILL DEWATERED AREAS WITH SPECIFIED MATERIAL IN AREAS SHOWN UTILIZING THE PROPOSED TYPICAL SECTIONS.
4. POST-PHASE WORK ITEMS:
  - A. COORDINATE REMOVAL AND/OR RELOCATION OF LOW-PROFILE BARRICADES AND ILLUMINATED RUNWAY CLOSURE MARKERS WITH THE AIRPORT MANAGER AND ENGINEER. ENSURE BARRICADES ARE FREE OF SAFETY AREAS AFTER WORK IN PHASE IS COMPLETED.
  - B. ALL EQUIPMENT AND MATERIALS MUST BE REMOVED AT LEAST 30 MINUTES PRIOR TO SCHEDULED REOPENING TO ALLOW CONTRACTOR TO INSPECT WORK AREAS AND RUNWAYS TO ENSURE THAT AREAS ARE CLEAR OF FOREIGN OBJECT DEBRIS (FOD) AND THAT SAFETY AREAS MEET STANDARDS.
5. ELECTRICAL WORK/LIGHTING NOTES:
  - A. PROVIDE JUMPER CONDUCTOR ACROSS RUNWAY 11-29 TO MAINTAIN RUNWAY LIGHTING OPERATION FOR RUNWAY 04-22. JUMPER CONDUCTOR TO BE FAA COMPLIANT CONDUCTOR, SIZED TO MATCH EXISTING CONDUCTOR, AND PER SPECIFICATION L-108. CONDUCTOR MAY BE DIRECT BURIED OR ROUTED IN HDPE AT A MINIMUM DEPTH OF 18". LIGHTING FOR RUNWAY 11-29 (INCLUDING THRESHOLDS) WHICH CANNOT BE REMOVED FROM THE LIGHTING CIRCUIT MUST BE COVERED IN SUCH A WAY TO PREVENT LIGHT LEAKAGE DURING NORMAL OPERATION OF RUNWAY 04-22. AT THE END OF TEMPORARY LIGHTING PERIOD, JUMPER CABLES MAY BE REMOVED OR ABANDONED IN PLACE.



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 AIRPORT LIGHTING AND RESURFACING  
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**PHASE II A NOTES:**

1. SCHEDULE DURING SPRING, SUMMER, AND FALL OF SECOND CONSTRUCTION SEASON.
2. PRE-CONSTRUCTION WORK ITEMS:
  - A. COORDINATE NOTAM ISSUANCE WITH THE AIRPORT MANAGER. (14 DAYS PRIOR TO CONSTRUCTION ACTIVITIES).
  - B. NOTIFY ALL AIR CARRIERS AND OTHER AIRCRAFT PERSONNEL OF PROPOSED CONSTRUCTION ACTIVITIES AND RUNWAY CLOSURES. (45 DAYS PRIOR TO CONSTRUCTION ACTIVITIES).
  - C. CLOSE RUNWAY 04-22.
  - D. COORDINATE PLACEMENT OF LOW-PROFILE BARRICADES AND ILLUMINATED RUNWAY CLOSURE MARKERS WITH AIRPORT MANAGER AND ENGINEER. USE BLUE LIGHTS FOR BARRICADES THAT DELINEATE A TAXIWAY AND RED LIGHTS IN OTHER LOCATIONS.
3. CONSTRUCTION WORK ITEMS:
  - A. RUNWAY 11-29 TO REMAIN OPEN THROUGHOUT THIS PHASE OF CONSTRUCTION ACTIVITIES.
  - B. ALL EQUIPMENT AND PERSONNEL MUST EVACUATE ACTIVE RUNWAYS WHEN IN USE BY AIRCRAFT. EQUIPMENT AND PERSONNEL MUST REMAIN OUTSIDE OF THE RUNWAY OBJECT FREE AREAS (ROFA) AND TAXIWAY OBJECT FREE AREAS (TOFA) UNTIL AIRCRAFT OPERATIONS HAVE ENDED.
  - C. MAINTAIN A 35' (MIN.) TEMPORARY TAXIWAY FROM RUNWAY 11-29 TO THE APRON AS SHOWN. CONTRACTOR SHALL VACATE THE TOFA WHEN THE TEMPORARY TAXIWAY IS IN USE. CONTRACTOR TO COORDINATE TEMPORARY TAXIWAY OPERATIONS WITH THE AIRPORT MANAGER. RSA AND TSA MUST BE TO STANDARD IF OPEN.
  - D. AIRPORT FLAGGER IS REQUIRED FOR ALL ENTRANCES TO AIRPORT AREAS OPEN FOR OPERATIONS. CONTRACTOR TO LIMIT CROSSINGS OF ACTIVE AREAS AS MUCH AS POSSIBLE.
  - E. PLACE SPECIFIED MATERIAL ON RUNWAY 04-22 AND THE WIND CONE ACCESS ROAD IN AREAS SHOWN UTILIZING THE PROPOSED TYPICAL SECTIONS.
  - F. CONTRACTOR TRAFFIC SHALL REMAIN OUTSIDE OF RUNWAY LIGHT LINES AFTER PLACING CRUSHED AGGREGATE SURFACE COURSE.
  - G. REPLACE LIGHTED WIND CONE ACCORDING TO SHEET 34 DETAIL.
4. POST-PHASE WORK ITEMS:
  - A. COORDINATE REMOVAL AND/OR RELOCATION OF LOW-PROFILE BARRICADES AND ILLUMINATED RUNWAY CLOSURE MARKERS WITH THE AIRPORT MANAGER AND ENGINEER. ENSURE BARRICADES ARE FREE OF SAFETY AREAS AFTER WORK IN PHASE IS COMPLETED.
  - B. ALL EQUIPMENT AND MATERIALS MUST BE REMOVED AT LEAST 30 MINUTES PRIOR TO SCHEDULED REOPENING TO ALLOW CONTRACTOR TO INSPECT WORK AREAS, TEMPORARY TAXIWAY, APRON AND RUNWAY TO ENSURE THAT AREAS ARE CLEAR OF FOREIGN OBJECT DEBRIS (FOD) AND THAT SAFETY AREAS MEET STANDARDS.
5. ELECTRICAL WORK/LIGHTING NOTES:
  - A. PROVIDE JUMPER CONDUCTOR ACROSS RUNWAY 04-22 TO MAINTAIN RUNWAY LIGHTING OPERATION FOR RUNWAY 11-29. JUMPER CONDUCTOR TO BE FAA COMPLIANT CONDUCTOR, SIZED TO MATCH EXISTING CONDUCTOR, AND PER SPECIFICATION L-108. CONDUCTOR MAY BE DIRECT BURIED OR ROUTED IN HDPE AT A MINIMUM DEPTH OF 18". LIGHTING FOR RUNWAY 04-22 (INCLUDING THRESHOLDS) WHICH CANNOT BE REMOVED FROM THE LIGHTING CIRCUIT MUST BE COVERED IN SUCH A WAY TO PREVENT LIGHT LEAKAGE DURING NORMAL OPERATION OF RUNWAY 11-29. PROVIDE TEMPORARY TAXIWAY LIGHTING FROM RUNWAY 11-29 TO THE EXISTING APRON AT A MAXIMUM OF 100' SPACING. AT THE END OF TEMPORARY LIGHTING PERIOD, JUMPER CABLES MAY BE REMOVED OR ABANDONED IN PLACE.
  - B. EXISTING WIND CONE SHALL NOT BE DEMOLISHED UNTIL NEW WIND CONE IS INSTALLED AND OPERATIONAL. LOCATE NEW WIND CONE DIRECTLY ADJACENT TO EXISTING WIND CONE.

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BY	DATE	REVISIONS

**BREVIG MISSION AIRPORT**  
 AIRPORT LIGHTING AND RESURFACING  
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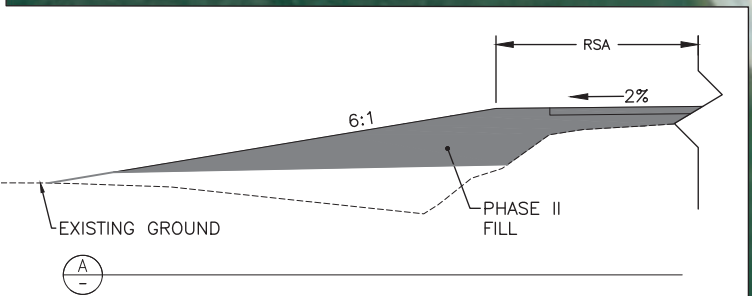


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**PHASE II B NOTES:**

1. SCHEDULE DURING SPRING, SUMMER, AND FALL OF SECOND CONSTRUCTION SEASON.
2. PRE-CONSTRUCTION WORK ITEMS:
  - A. COORDINATE NOTAM ISSUANCE WITH THE AIRPORT MANAGER. (14 DAYS PRIOR TO CONSTRUCTION ACTIVITIES).
  - B. NOTIFY ALL AIR CARRIERS AND OTHER AIRCRAFT PERSONNEL OF PROPOSED CONSTRUCTION ACTIVITIES AND RUNWAY CLOSURES. (45 DAYS PRIOR TO NIGHT CONSTRUCTION ACTIVITIES).
  - C. CLOSE RUNWAYS, TAXIWAYS, AND APRON.
  - D. COORDINATE PLACEMENT OF LOW-PROFILE BARRICADES AND ILLUMINATED RUNWAY CLOSURE MARKERS WITH AIRPORT MANAGER AND ENGINEER. USE RED LIGHTS.
3. CONSTRUCTION WORK ITEMS:
  - A. ALL WORK IN THIS PHASE TO TAKE PLACE DURING NIGHTTIME CLOSURES.
  - B. RUNWAY 11-29 MUST BE AVAILABLE WITHIN 30 MINUTES OF NOTICE FOR EMERGENCY MEDEVAC OPERATIONS.
  - C. CONTRACTOR WILL BE RESPONSIBLE FOR REMOVAL OF ALL EQUIPMENT AND CONSTRUCTION PERSONNEL FROM RUNWAY 11-29 WITHIN 30 MINUTES OF THE MEDEVAC NOTICE.
  - D. CONTRACTOR WILL BE RESPONSIBLE TO MAINTAIN A MAXIMUM 2% SLOPE WITHIN THE RUNWAY INTERSECTION, AND RUNWAY 04-22/APRON WORK AREAS AT ALL TIMES. THIS WILL ENSURE THAT ANY MEDEVAC PLANES REQUIRING THE USE OF RUNWAY 11-29 WILL BE ABLE TO SAFELY LAND AND TRAVEL THROUGH THESE AREAS.
  - E. ALL CONSTRUCTION ACTIVITIES AT THE INTERSECTION OF THE TWO RUNWAYS NEEDS TO BE COORDINATED WITH THE AIRPORT MANAGER.
  - F. PLACE SPECIFIED MATERIAL ON BOTH RUNWAYS AND APRON IN AREAS SHOWN UTILIZING THE PROPOSED TYPICAL SECTIONS.
  - G. AT THE END OF EACH NIGHTTIME CLOSURE IF RUNWAY IS NOT TO FINAL GRADE CONSTRUCT TEMPORARY TRANSITIONS ACCORDING TO DETAIL 2 ON SHEET 17. TRANSITIONS MUST EXTEND THE FULL WIDTH OF THE RW AND TW AND BE APPROVED BY THE ENGINEER PRIOR TO OPENING FOR AIRCRAFT OPERATIONS.
  - H. CONTRACTOR TRAFFIC SHALL REMAIN OUTSIDE OF RUNWAY LIGHT LINES AFTER PLACING CRUSHED AGGREGATE SURFACE COURSE.
4. POST-PHASE WORK ITEMS:
  - A. COORDINATE REMOVAL AND/OR RELOCATION OF LOW-PROFILE BARRICADES AND ILLUMINATED RUNWAY CLOSURE MARKERS WITH THE AIRPORT MANAGER AND ENGINEER. ENSURE BARRICADES ARE FREE OF SAFETY AREAS AFTER WORK IN PHASE IS COMPLETED.
  - B. ALL EQUIPMENT AND MATERIALS MUST BE REMOVED AT LEAST 30 MINUTES PRIOR TO SCHEDULED REOPENING TO ALLOW CONTRACTOR TO INSPECT WORK AREAS AND RUNWAYS TO ENSURE THAT AREAS ARE CLEAR OF FOREIGN OBJECT DEBRIS (FOD) AND THAT SAFETY AREAS MEET STANDARDS.
5. ELECTRICAL WORK/LIGHTING NOTES:
  - A. PROVIDE JUMPER CONDUCTOR ACROSS RUNWAY 04-22 TO MAINTAIN RUNWAY LIGHTING OPERATION FOR RUNWAY 11-29. JUMPER CONDUCTOR TO BE FAA COMPLIANT CONDUCTOR, SIZED TO MATCH EXISTING CONDUCTOR, AND PER SPECIFICATION L-108. CONDUCTOR MAY BE DIRECT BURIED OR ROUTED IN HDPE AT A MINIMUM DEPTH OF 18". LIGHTING FOR RUNWAY 04-22 (INCLUDING THRESHOLDS) WHICH CANNOT BE REMOVED FROM THE LIGHTING CIRCUIT MUST BE COVERED IN SUCH A WAY TO PREVENT LIGHT LEAKAGE DURING NORMAL OPERATION OF RUNWAY 11-29. PROVIDE TEMPORARY TAXIWAY LIGHTING FROM RUNWAY 11-29 TO THE EXISTING APRON AT A MAXIMUM OF 100' SPACING. AT THE END OF TEMPORARY LIGHTING PERIOD, JUMPER CABLES MAY BE REMOVED OR ABANDONED IN PLACE.



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BY	DATE	REVISIONS

**BREVIG MISSION AIRPORT**  
 AIRPORT LIGHTING AND RESURFACING  
 AIP 3-02-0400-XX-XXXX/NFAPT00500  
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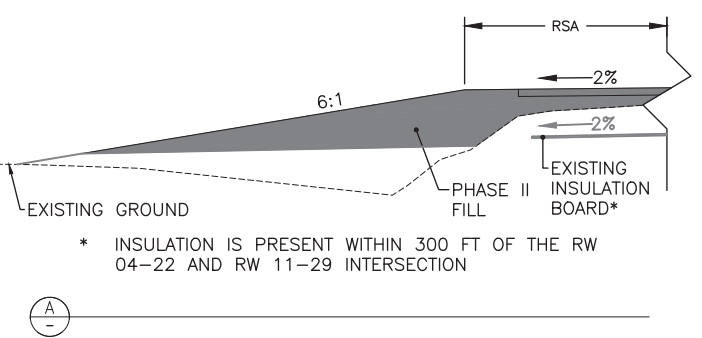


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**PHASE II C NOTES:**

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2. PRE-CONSTRUCTION WORK ITEMS:
  - A. COORDINATE NOTAM ISSUANCE WITH THE AIRPORT MANAGER. (14 DAYS PRIOR TO CONSTRUCTION ACTIVITIES).
  - B. NOTIFY ALL AIR CARRIERS AND OTHER AIRCRAFT PERSONNEL OF PROPOSED CONSTRUCTION ACTIVITIES AND RUNWAY CLOSURES. (45 DAYS PRIOR TO CONSTRUCTION ACTIVITIES).
  - C. CLOSE RUNWAY 11-29.
  - D. COORDINATE PLACEMENT OF LOW-PROFILE BARRICADES AND ILLUMINATED RUNWAY CLOSURE MARKERS WITH AIRPORT MANAGER AND ENGINEER. USE RED LIGHTS.
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  - A. RUNWAY 04-22 TO REMAIN OPEN THROUGHOUT THIS PHASE OF CONSTRUCTION ACTIVITIES.
  - B. ALL EQUIPMENT AND PERSONNEL MUST EVACUATE ACTIVE RUNWAYS WHEN IN USE BY AIRCRAFT. EQUIPMENT AND PERSONNEL MUST REMAIN OUTSIDE OF THE RUNWAY OBJECT FREE AREAS (ROFA) AND TAXIWAY OBJECT FREE AREAS (TOFA) UNTIL AIRCRAFT OPERATIONS HAVE ENDED.
  - C. AIRPORT FLAGGER IS REQUIRED FOR ENTRANCES TO AIRPORT AREAS OPEN FOR OPERATIONS. CONTRACTOR TO LIMIT CROSSINGS OF ACTIVE AREAS AS MUCH AS POSSIBLE.
  - D. PLACE SPECIFIED MATERIAL ON RUNWAY 11-29 IN AREAS SHOWN UTILIZING THE PROPOSED TYPICAL SECTIONS.
  - E. CONTRACTOR TRAFFIC SHALL REMAIN OUTSIDE OF RUNWAY LIGHT LINES AFTER PLACING AGGREGATE SURFACE COURSE.
4. POST-PHASE WORK ITEMS:
  - A. COORDINATE REMOVAL AND/OR RELOCATION OF LOW-PROFILE BARRICADES AND ILLUMINATED RUNWAY CLOSURE MARKERS WITH THE AIRPORT MANAGER AND ENGINEER. ENSURE BARRICADES ARE FREE OF SAFETY AREAS AFTER WORK IN PHASE IS COMPLETED.
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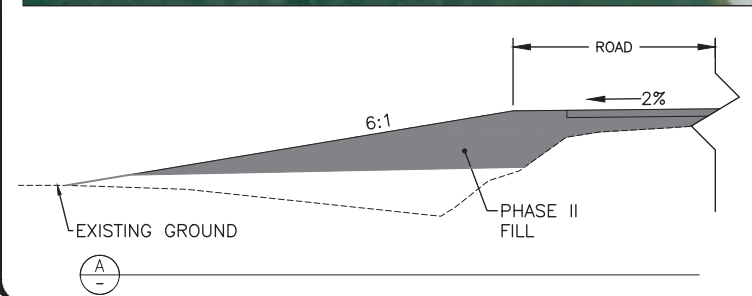
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 PLANS DEVELOPED BY: MICHAEL BAKER INTERNATIONAL, AECC103, 3900 C STREET SUITE 900, ANCHORAGE, AK 99503 (907) 273-1600  
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**PHASE III NOTES:**

1. SCHEDULE DURING SPRING, SUMMER, AND FALL OF SECOND CONSTRUCTION SEASON.
  2. PRE-CONSTRUCTION WORK ITEMS:
    - A. COORDINATE NOTAM ISSUANCE WITH THE AIRPORT MANAGER. (14 DAYS PRIOR TO CONSTRUCTION ACTIVITIES).
    - B. NOTIFY ALL AIR CARRIERS AND OTHER AIRCRAFT PERSONNEL OF PROPOSED CONSTRUCTION ACTIVITIES. (45 DAYS PRIOR TO CONSTRUCTION ACTIVITIES).
    - C. COORDINATE PLACEMENT OF LOW-PROFILE BARRICADES WITH AIRPORT MANAGER AND ENGINEER. USE RED LIGHTS. MAINTAIN APRON SIZE OF 300' X 160'.
  3. CONSTRUCTION WORK ITEMS:
    - A. THIS PHASE CAN BE DONE IN CONJUNCTION WITH OTHER PHASES AFTER PHASE I C. IF DONE INDEPENDENTLY, BOTH RUNWAYS TO REMAIN OPEN DURING CONSTRUCTION ACTIVITIES.
    - B. EQUIPMENT AND PERSONNEL MUST REMAIN OUTSIDE OF THE RUNWAY OBJECT FREE AREAS (ROFA) AND TAXIWAY OBJECT FREE AREAS (TOFA) IF RUNWAYS ARE ACTIVE.
    - C. WORK AREA TO BE ACCESSED FROM CLARENCE ROAD AS SHOWN.
    - D. PLACE SPECIFIED MATERIAL IN AREAS SHOWN UTILIZING THE PROPOSED TYPICAL SECTIONS.
    - E. REPLACE ROTATING BEACON ACCORDING TO SHEET 34 DETAIL AND EEB ACCORDING TO SHEET 35 DETAIL.
  4. POST-PHASE WORK ITEMS:
    - A. COORDINATE REMOVAL AND/OR RELOCATION OF LOW-PROFILE BARRICADES WITH THE AIRPORT MANAGER AND ENGINEER. ENSURE BARRICADES ARE FREE OF SAFETY AREAS AFTER WORK IN PHASE IS COMPLETED.
    - B. ALL EQUIPMENT AND MATERIALS MUST BE REMOVED AT LEAST 30 MINUTES PRIOR TO SCHEDULED REOPENING TO ALLOW CONTRACTOR TO INSPECT WORK AREAS AND RUNWAYS TO ENSURE THAT AREAS ARE CLEAR OF FOREIGN OBJECT DEBRIS (FOD) AND THAT SAFETY AREAS MEET STANDARDS.
2. ELECTRICAL WORK/LIGHTING NOTES:
- A. TO THE MAXIMUM EXTENT POSSIBLE, THE CONTRACTOR SHALL PERFORM ALL WORK RELATED TO NEW BEACON INSTALLATION PRIOR TO DEMOLISHING EXISTING BEACON AND LIMIT BEACON DOWN TIME TO THE MAXIMUM EXTENT POSSIBLE. TIMES WHERE NO BEACON WILL BE OPERATIONAL SHALL BE LIMITED TO PERIODS WHERE THERE IS NO SCHEDULED AIRPORT ACTIVITY.

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BY	DATE	REVISIONS

**BREVIG MISSION AIRPORT**  
 AIRPORT LIGHTING AND RESURFACING  
 AIP 3-02-0400-XX-XXXX/NFAPT00500  
 CSPP - PHASE III

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**PHASE IV NOTES:**

1. SCHEDULE TO BE COMPLETED AFTER ALL OTHER PHASES HAVE BEEN COMPLETED AND PRIOR TO SEPTEMBER 1ST. IF WEATHER IMPEDES THE APPLICATION OF DUST PALLIATIVE IT MAY BE APPLIED BETWEEN MAY 1ST AND AUGUST 31ST OF THE FOLLOWING YEAR.
2. PRE-CONSTRUCTION WORK ITEMS:
  - A. COORDINATE NOTAM ISSUANCE WITH THE AIRPORT MANAGER. (14 DAYS PRIOR TO CONSTRUCTION ACTIVITIES).
  - B. NOTIFY ALL AIR CARRIERS AND OTHER AIRCRAFT PERSONNEL OF PROPOSED CONSTRUCTION ACTIVITIES AND RUNWAY CLOSURES. (45 DAYS PRIOR TO NIGHT CONSTRUCTION ACTIVITIES).
  - C. CLOSE RUNWAYS, TAXIWAY, AND APRON.
  - D. DUST PALLIATIVE MUST BE APPLIED PRIOR TO SEPTEMBER 1ST. THE GROUND MUST BE DRY (NO RAIN WITHIN 48 HOURS OF APPLICATION OR PREDICTED WITHIN 48 HOURS AFTER APPLICATION). DUST PALLIATIVE CAN NOT BE APPLIED DURING WINDY CONDITIONS.
  - E. COORDINATE PLACEMENT OF RUNWAY CLOSURE MARKERS WITH AIRPORT MANAGER.
3. CONSTRUCTION WORK ITEMS:
  - A. ALL WORK IN THIS PHASE TO TAKE PLACE DURING NIGHTTIME CLOSURES.
  - B. RUNWAYS WILL TEMPORARILY CLOSE WHILE WORK ON IS UNDERWAY. HOWEVER, ONE RUNWAY AND ACCESS TO THE APRON MUST BE AVAILABLE WITHIN 30 MINUTES OF NOTICE FOR EMERGENCY MEDEVAC OPERATIONS.
  - C. ALL EQUIPMENT AND PERSONNEL MUST EVACUATE ACTIVE RUNWAYS WHEN IN USE BY AIRCRAFT. EQUIPMENT AND PERSONNEL MUST REMAIN OUTSIDE OF THE RUNWAY OBJECT FREE AREAS (ROFA) AND TAXIWAY OBJECT FREE AREAS (TOFA) UNTIL AIRCRAFT OPERATIONS HAVE ENDED.
  - D. CONTRACTOR WILL BE RESPONSIBLE FOR REMOVAL OF ALL EQUIPMENT AND CONSTRUCTION PERSONNEL FROM OPERATIONAL RUNWAY WITHIN 30 MINUTES OF THE MEDEVAC NOTICE.
  - E. ALL CONSTRUCTION ACTIVITIES ON BOTH RUNWAYS SHALL BE COORDINATED WITH THE AIRPORT MANAGER.
  - F. PLACE DUST PALLIATIVE IN AREAS SHOWN.
4. POST-PHASE WORK ITEMS:
  - A. COORDINATE REMOVAL AND/OR RELOCATION OF RUNWAY CLOSURE MARKERS WITH THE AIRPORT MANAGER AND ENGINEER. ENSURE BARRICADES ARE FREE OF SAFETY AREAS AFTER WORK IN PHASE IS COMPLETED.
  - B. ALL EQUIPMENT AND MATERIALS MUST BE REMOVED AT LEAST 30 MINUTES PRIOR TO SCHEDULED REOPENING TO ALLOW CONTRACTOR TO INSPECT WORK AREAS, TEMPORARY TAXIWAY, APRON AND RUNWAY TO ENSURE THAT AREAS ARE CLEAR OF FOREIGN OBJECT DEBRIS (FOD) AND THAT SAFETY AREAS MEET STANDARDS.

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BY	DATE	REVISIONS

BREVIG MISSION AIRPORT  
 AIRPORT LIGHTING AND RESURFACING  
 AIP 3-02-0400-XX-XXXX/NFAPT00500  
 CSPP - PHASE IV

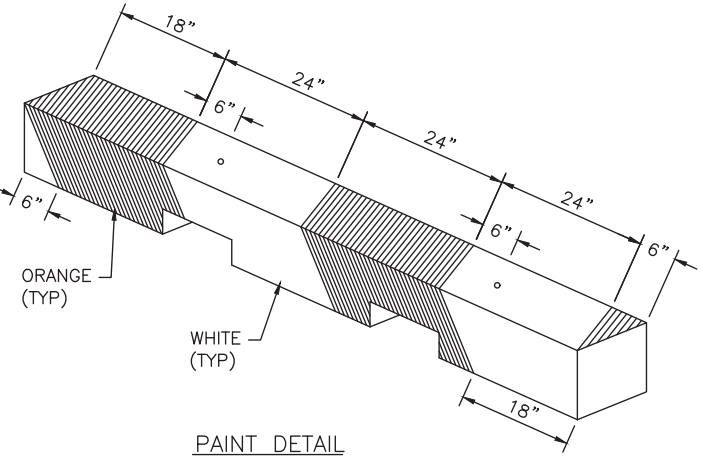
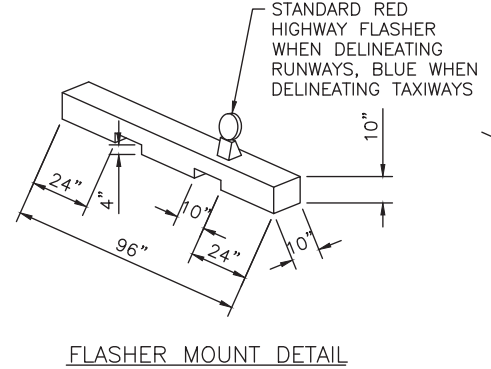
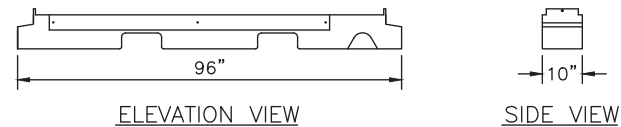
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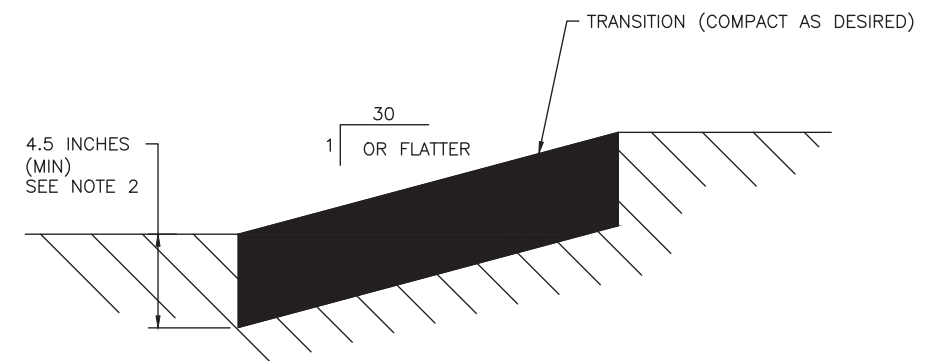
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**LOW PROFILE BARRICADE NOTES:**

- PLACE BARRIERS TO LIMIT ACCESS TO THE CLOSED RUNWAY. USE LOW STYLE BARRIERS THAT ARE LESS THAN 12 INCHES HIGH (EXCLUSIVE OF SUPPLEMENTARY LIGHTS) AND SHOULD BE SPACED TO PREVENT BREACH, BUT IN NO CASE GREATER THAN 10' APART. THEY MUST BE OF LOW MASS; EASILY COLLAPSIBLE UPON CONTACT WITH AN AIRCRAFT; AND WEIGHTED OR STURDILY ATTACHED TO THE SURFACE TO PREVENT DISPLACEMENT FROM PROPELLER BLAST OR OTHER WIND DISTURBANCE.
- DISABLE AND PREVENT THE OPERATION OF RUNWAY EDGE LIGHTS AND RUNWAY THRESHOLD LIGHTS DURING CLOSURE OF THE RUNWAY.
- HAZARD MARKER BARRIERS ARE NOT TO BE PLACED WITHIN THE OFZ OF THE ACTIVE RUNWAY. CONSIDER PROPELLER BLAST WHEN PLACING BARRIERS.
- SEE CSPP SECTION 16 FOR SPACING REQUIREMENTS.
- THE REQUIRED LIGHTS TO DELINEATE RUNWAYS MUST BE RED AND THE LIGHTS TO DELINEATE TAXIWAYS MUST BE BLUE. LIGHT MAY EITHER BE STEADY BURNING OR FLASHING. INTENSITIES AND LUMINANCE MUST BE AT LEAST FIVE CANDELAS EFFECTIVE INTENSITY AND FLASH AT A RATE OF FROM 55 TO 160 FLASHES PER MINUTE. THE RED BARRICADE LIGHTS SHALL BE SOLAR 360° OMNIDIRECTIONAL AND MAY NOT BE SPACED GREATER THAN 10' APART.
- LIGHTS MUST BE OPERATED BETWEEN SUNSET AND SUNRISE AND DURING PERIODS OF LOW VISIBILITY WHENEVER THE AIRPORT IS OPEN FOR OPERATIONS.
- CONTRACTOR SHALL MAINTAIN BARRICADE LIGHTS AND FLAGS AT ALL TIMES DURING CONSTRUCTION. EACH BARRICADE MUST HAVE BOTH LIGHTS OPERATING AT ALL TIMES.
- BARRICADES SHALL BE HELD IN PLACE WITH SAND BAGS OR WATER FILLED TO PREVENT MOVEMENT FROM PROPELLER BLAST. IF SANDBAGS ARE USED, SANDBAGS SHALL BE EITHER ORANGE OR WHITE.

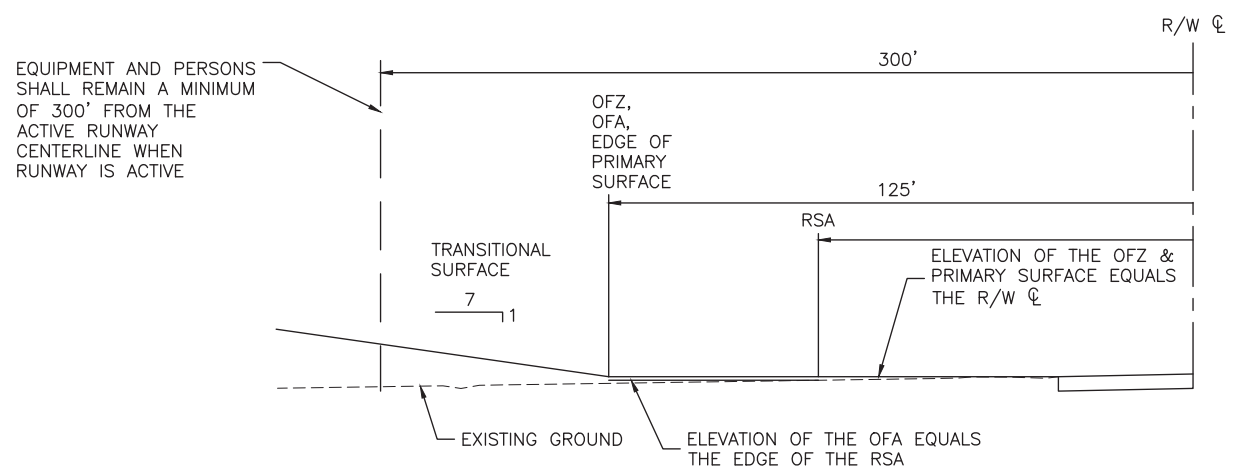


1 LOW PROFILE BARRICADE DETAILS  
8,9,10,11,12,13,14,15

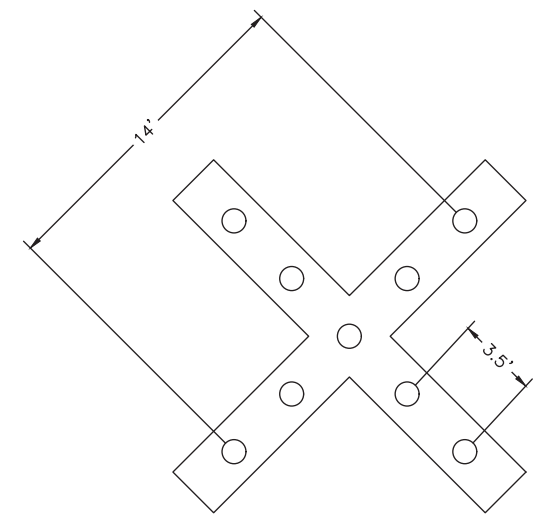


- NOTES:**
- TEMPORARY TRANSITIONS WILL BE SMOOTH AND FREE OF RUTS AND APPROVED BY THE ENGINEER PRIOR TO OPENING FOR AIRCRAFT OPERATIONS.
  - THICKNESS TO MATCH LAYER THICKNESS, OR AS NEEDED TO OBTAIN COMPACTION AS DIRECTED. USE THE MATERIAL SPECIFIED IN THE TYPICAL SECTION TO BUILD THE TEMPORARY TRANSITIONS. ALL ADDITIONAL WORK REQUIRED TO CONSTRUCT TEMPORARY TRANSITIONS IS SUBSIDIARY TO THE MATERIAL BEING PLACED. SUCH WORK MAY INCLUDE PLACEMENT, SCARIFYING, GRADING, COMPACTING, REMOVAL, REPLACEMENT, RE-COMPACTING, RE-GRADING, OR OTHER WORK AS REQUIRED TO ACCEPTABLY INCORPORATE MATERIALS INTO THE SUBSEQUENT WORK. NO SEPARATE MEASUREMENT OR PAYMENT WILL BE MADE.

2 TEMPORARY TRANSITION DETAIL  
13



3 SAFETY ZONE CLEARANCE DETAIL  
8,9,10,11,12,13,14,15,16



4 ILLUMINATED RUNWAY CLOSURE MARKER DETAIL  
8,9,10,12,13,14,16

- NOTES:**
- 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.
  - PORTABLE AND CAPABLE OF BEING TOWED.
  - ENERGIZED BY A PORTABLE POWER SUPPLY CAPABLE OF A MINIMUM OF 24 HOURS CONTINUOUS OPERATION.
  - SIMULTANEOUSLY FLASH ALL LIGHT SOURCES AT 2.5 SECONDS ON 2.5 SECONDS OFF.
  - CAPABLE OF SWITCHING BETWEEN DAY (70,000 CANDELA) AND NIGHT (2,000 CANDELA) INTENSITIES.
  - ALLOWING TILTING TO AN OPTIMUM ANGLE OF 5 DEGREES FROM VERTICAL.
  - REFER TO AC 150/5345-55A FOR ADDITIONAL REQUIREMENTS.

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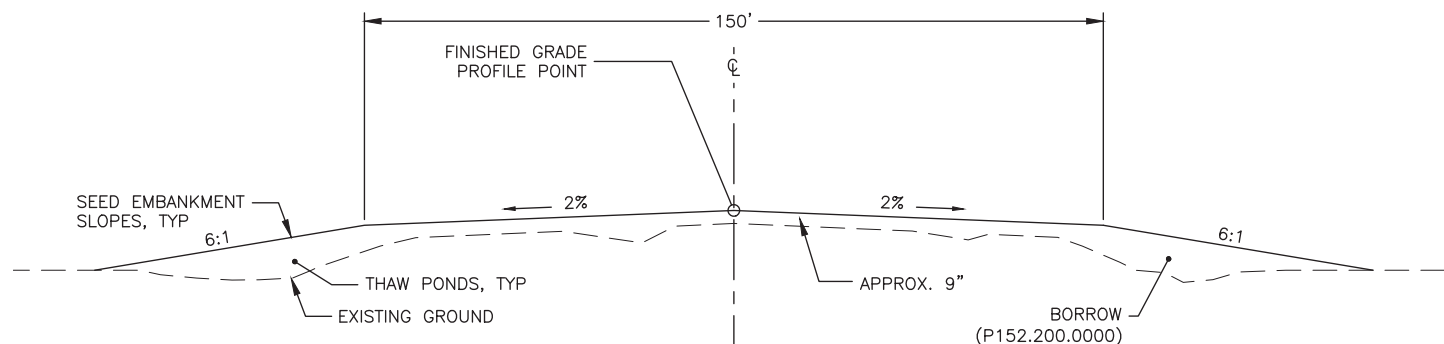
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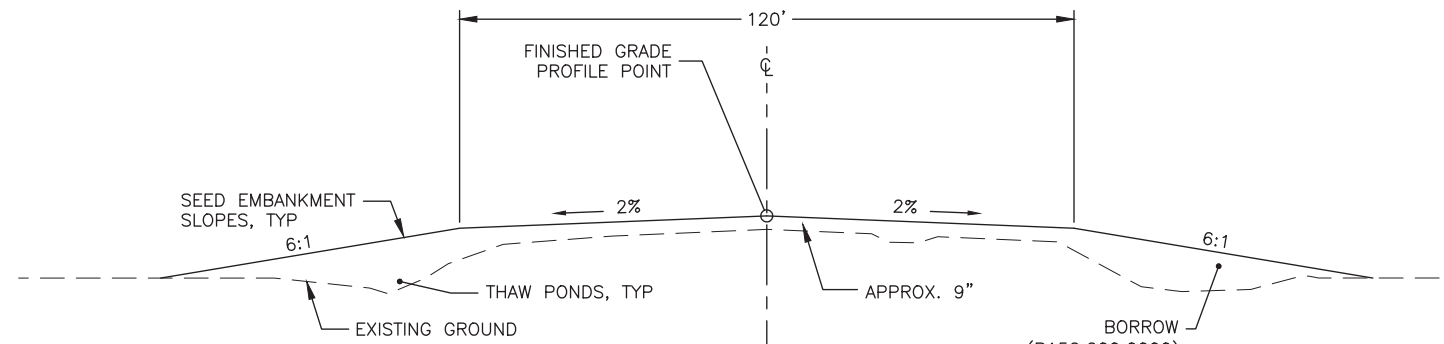
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AIRPORT LIGHTING AND RESURFACING  
AIP 3-02-0400-XX-XXXX/NFAPT00500  
SAFETY PLAN DETAILS

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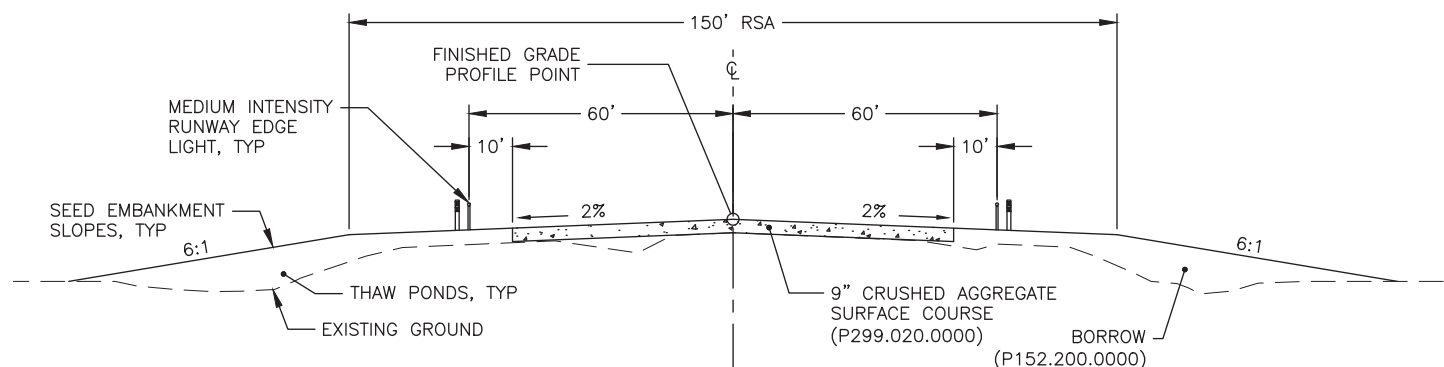
**RUNWAY 11-29 SAFETY AREA TYPICAL SECTION**

"RW 11-29" STA: 97+60 TO 100+60  
"RW 11-29" STA: 130+60 TO 133+60



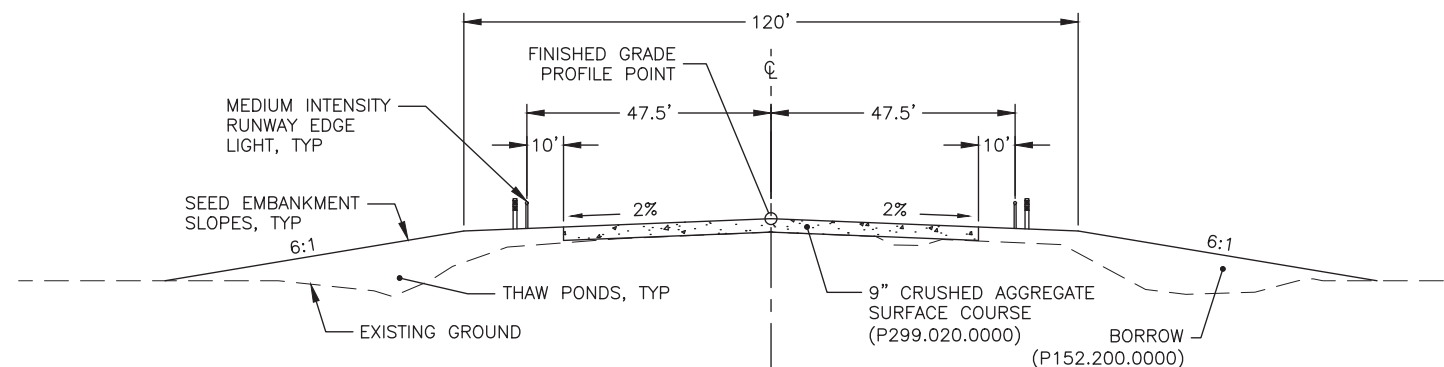
**RUNWAY 04-22 SAFETY AREA TYPICAL SECTION**

"RW 04-22" STA: 5+00 TO 7+40  
"RW 04-22" STA: 28+50 TO 30+90



**RUNWAY 11-29 TYPICAL SECTION**

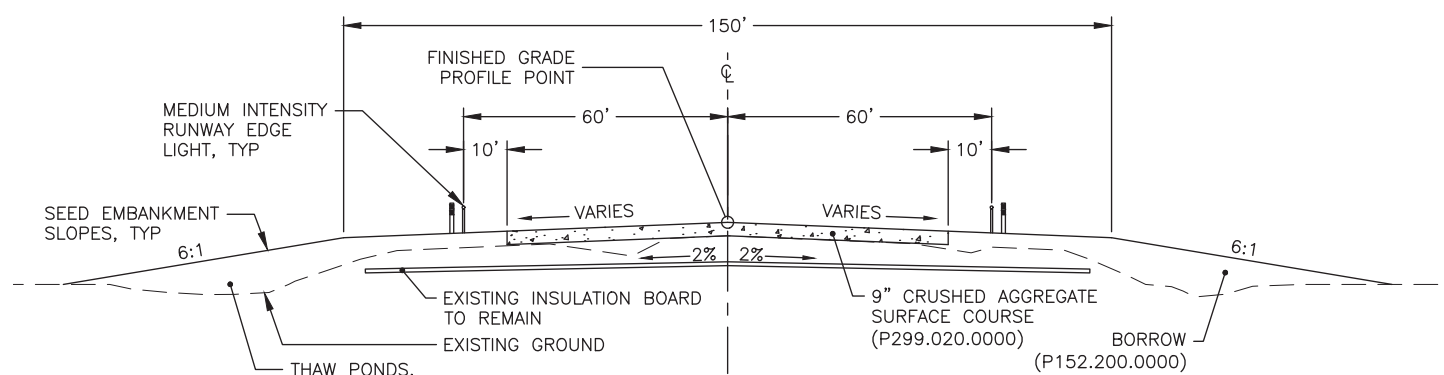
"RW 11-29" STA: 100+60 TO 105+55  
"RW 11-29" STA: 108+55 TO 109+50  
"RW 11-29" STA: 112+50 TO 130+60



**RUNWAY 04-22 TYPICAL SECTION\***

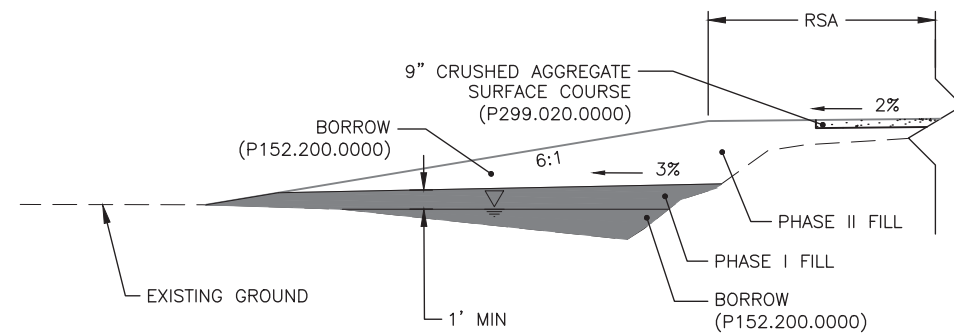
"RW 04-22" STA: 7+40 TO 28+50

\* PROVIDE A SMOOTH TRANSITION FROM A SLOPE OF 2% TO 1% AT THE TAXIWAY INTERSECTION.



**RUNWAY 11-29 TYPICAL SECTION**

"RW 11-29" STA: 105+55 TO 108+55  
"RW 11-29" STA: 109+50 TO 112+50



**CONSTRUCTION PHASING TYPICAL SECTION**

**NOTES:**

1. PHASE I FILL WILL TAKE PLACE DURING THE FALL SEASON AND INCLUDE DEWATERING THE THAW PONDS WHILE USING NECESSARY BMPs. BORROW WILL THEN BE PLACED TO A MINIMUM OF 1' ABOVE THE EXISTING WATER LEVEL AND GRADED TO A 3% SLOPE FOR DRAINAGE.
2. PHASE II FILL WILL TAKE PLACE DURING THE FOLLOWING SPRING, SUMMER, AND FALL SEASONS AND INCLUDE PLACING BORROW AND CRUSHED AGGREGATE SURFACE COURSE TO ULTIMATE ELEVATION.

NOTE: CONTRACTOR TO FLATTEN SLOPES TO 6:1 IN LOCATIONS OTHER THAN SHOWN IN THE PLANS AS DIRECTED BY THE ENGINEER. THIS ITEM IS SUBSIDIARY TO P152.200.0000 BORROW.

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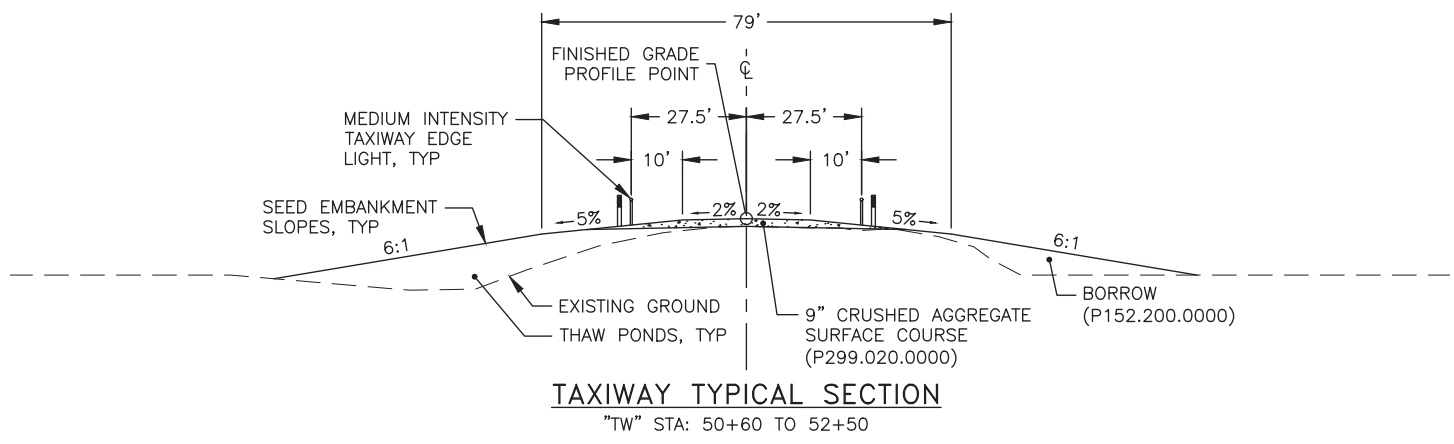


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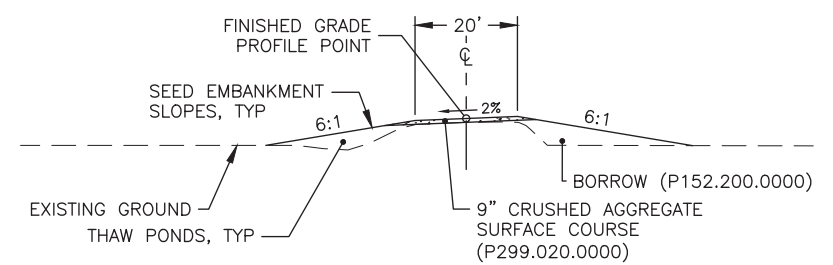
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AIRPORT LIGHTING AND RESURFACING  
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TYPICAL SECTIONS 1 OF 2

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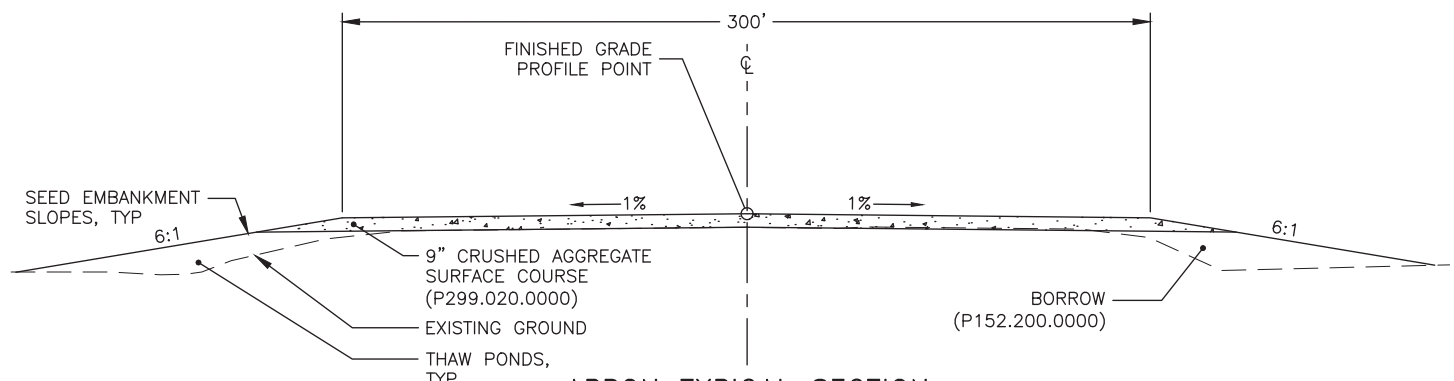
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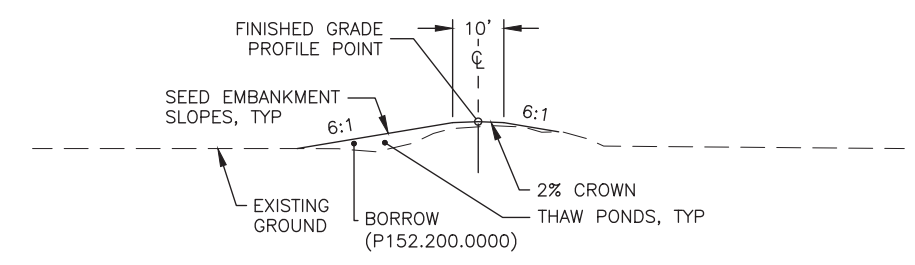
**TAXIWAY TYPICAL SECTION**  
 "TW" STA: 50+60 TO 52+50



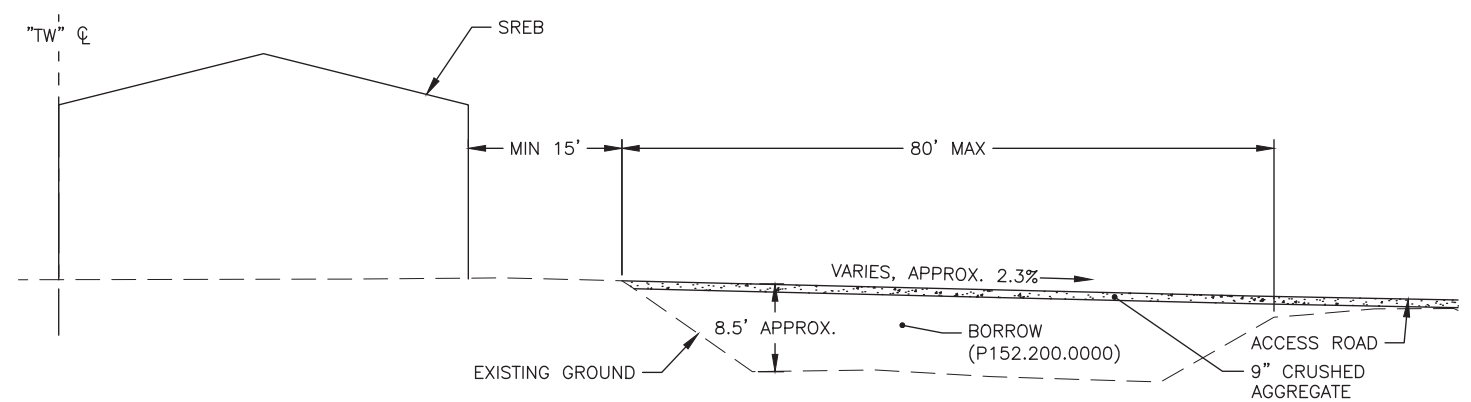
**ACCESS ROAD TYPICAL SECTION**  
 "AR" STA: 1116+88 TO 1125+49



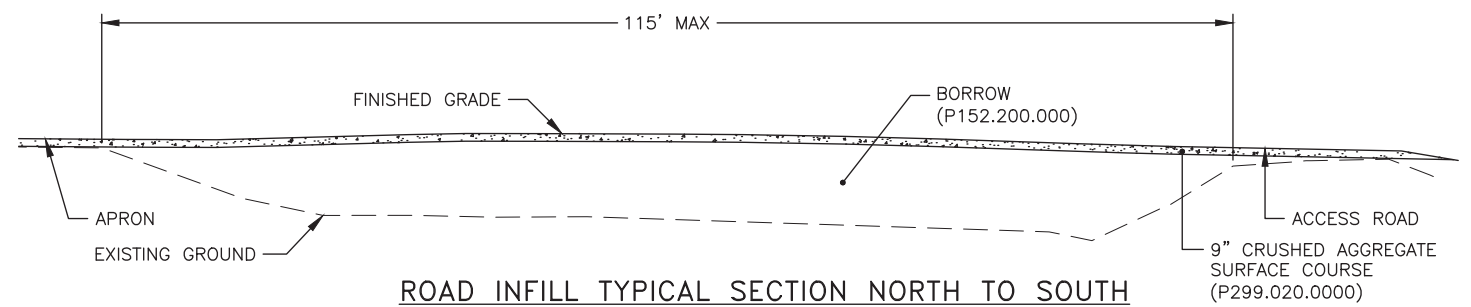
**APRON TYPICAL SECTION**  
 "TW" STA: 52+50 TO 54+50



**WIND CONE ROAD TYPICAL SECTION**  
 "WC" STA: 60+60 TO 61+90



**ROAD INFILL TYPICAL SECTION WEST TO EAST**



**ROAD INFILL TYPICAL SECTION NORTH TO SOUTH**

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 TYPICAL SECTIONS 2 OF 2

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### SIGNING SUMMARY

LOC. NO.	STATION	LOCATION		ASDS CODE	LEGEND	SIZE H X V (INCHES)			BRACING/FRAMING		AREA (SQ.FT.)	MTG. HGT. (FT.)	DIR.	POST			REMARKS
		LT.	RT.			BRACED	FRAMED	TYPE	SIZE (INCHES)	NO.							
1	"AR" STA 1125+49		X	SPECIAL 2	DANGER KEEP OFF RUNWAY	48	X	30		X	10.00		N	PST	2.5	2	LOCATION IS APPROXIMATE AND MAY REQUIRE FIELD ADJUSTMENT
				SPECIAL 1	AUTHORIZED PERSONNEL ONLY	30	X	42			8.75	N					
2	"AR" STA 1117+25	X		R1-1	STOP	30	X	30	X		6.25		E	PST	2.5	1	LOCATION IS APPROXIMATE AND MAY REQUIRE FIELD ADJUSTMENT
3	"AR" STA 1118+00		X	R2-1	SPEED LIMIT 15MPH	24	X	30	X		5		W	PST	2.5	1	LOCATION IS APPROXIMATE AND MAY REQUIRE FIELD ADJUSTMENT
4	"AR" STA 1125+06	X		R2-1	SPEED LIMIT 15MPH	24	X	30	X		5		S	PST	2.5	1	LOCATION IS APPROXIMATE AND MAY REQUIRE FIELD ADJUSTMENT
SUBTOTAL = 35																	

**SIGN SUMMARY ABBREVIATIONS**

LOG. NO.	SIGN LOCATION NUMBER	MTG. HGT.	MOUNTING HEIGHT
LT.	LEFT	DIR.	DIRECTION
RT.	RIGHT	PST	PERFORATED STEEL TUBE
H	HORIZONTAL	NO.	NUMBER
V	VERTICAL		

FASTENER SPECIFICATION TABLE		
FASTENERS	STEEL	STAINLESS STEEL
BOLTS	ASTM A 307	ASTM F 593
NUTS	ASTM A 563	ASTM F 594
WASHERS	ASTM A 844	ASTM A 480

**NOTE:**  
 THESE SPECIFICATIONS APPLY TO ALL SIGN FASTENER HARDWARE ON THE PROJECT.

**NOTES:**

- SIGN LOCATIONS MAY BE ADJUSTED BY THE ENGINEER. STAKE SIGN LOCATIONS 7 DAYS PRIOR TO INSTALLATION.
- MOUNTING HEIGHTS ARE PER STANDARD PLAN S-05.02 UNLESS OTHERWISE NOTED. FABRICATE ALL SIGNS FROM 0.125" THICK ALUMINUM SHEETING.
- DETERMINE POST LENGTHS IN THE FIELD. DO NOT EXTEND POSTS ABOVE TOP OF SIGN.
- INSTALL PST SIGN POSTS WITH SOIL EMBEDMENT. EMBED PST IN SLEEVE 12"-24". PER STANDARD PLAN S-30.05 DETAIL ON SHEET 20. ATTACH THE SIGN POST TO THE SLEEVE USING GALVANIZED 3/8" BOLT, NUT, SPLIT LOCK WASHER AND TWO FLAT WASHERS.
- 1/4" X 1 1/2" ALUMINUM ALLOY 6061-T6 BAR MAY ALSO BE USED TO FABRICATE SIGN BRACES AS SHOWN STANDARD PLAN S-01.02.
- ATTACH ALL SIGNS TO THEIR SUPPORTS WITH 3/8" BOLTS, EXCEPT ATTACH UNFRAMED SIGNS TO PST POSTS WITH ALUMINUM DRIVE RIVETS. WIND WASHERS ARE NOT REQUIRED WITH DRIVE RIVETS. INCLUDE SPLIT LOCK WASHERS WHEN BOLTS ARE USED.
- ALL FASTENER HARDWARE SHALL MEET THE REQUIREMENTS OF THE "FASTENER SPECIFICATION TABLE" ON THIS SHEET.
- MAINTAIN EXISTING SIGNS UNTIL NEW SIGNS ARE INSTALLED. DO NOT LEAVE DUPLICATE OR CONFLICTING SIGNING UP AT ANY TIME.
- LOCATE AND PROTECT ALL NEW AND EXISTING UNDERGROUND UTILITIES, INCLUDING BUT NOT LIMITED TO: PIPELINES, INTERCONNECT CABLES, SIGNAL SYSTEMS, LIGHTING SYSTEMS, STORM AND SANITARY SEWERS, WATER SYSTEMS, AND TELEPHONE AND ELECTRICAL CABLES, PRIOR TO INSTALLING SIGN POSTS. NOT ALL EXISTING UTILITIES MAY BE SHOWN ON THE PLANS.

6" LETTERS, RED

4" LETTERS, BLACK

BORDER, BLACK,  
 3/4" WIDE, BLACK

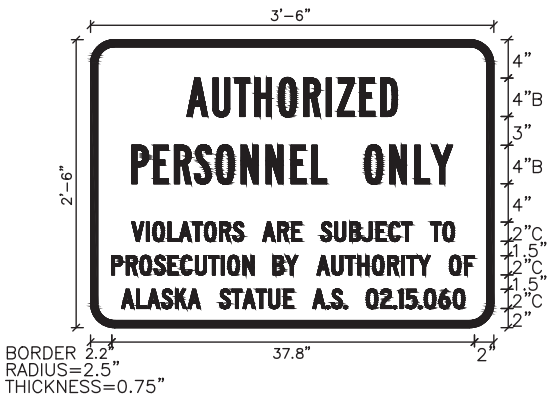
1' CIRCLE  
 (OUTSIDE DIAMETER)  
 W/SLASH,  
 1-3/8" THICK, RED

BACKGROUND, WHITE

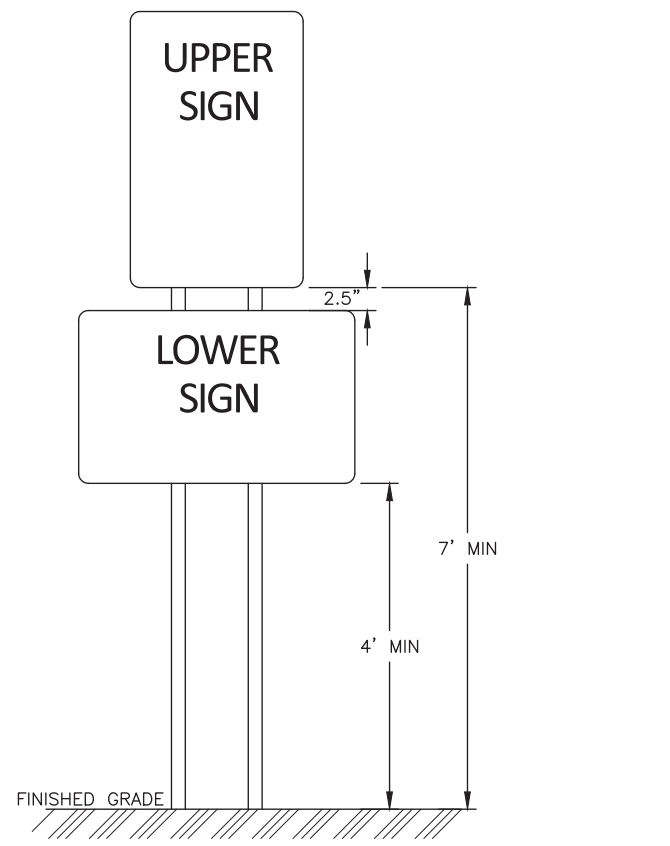
VEHICLES/PERSON  
 SYMBOLS, BLACK



SPECIAL SIGN 2 DETAIL



SPECIAL SIGN 1 DETAIL



SIGN MOUNTING HEIGHT DETAIL

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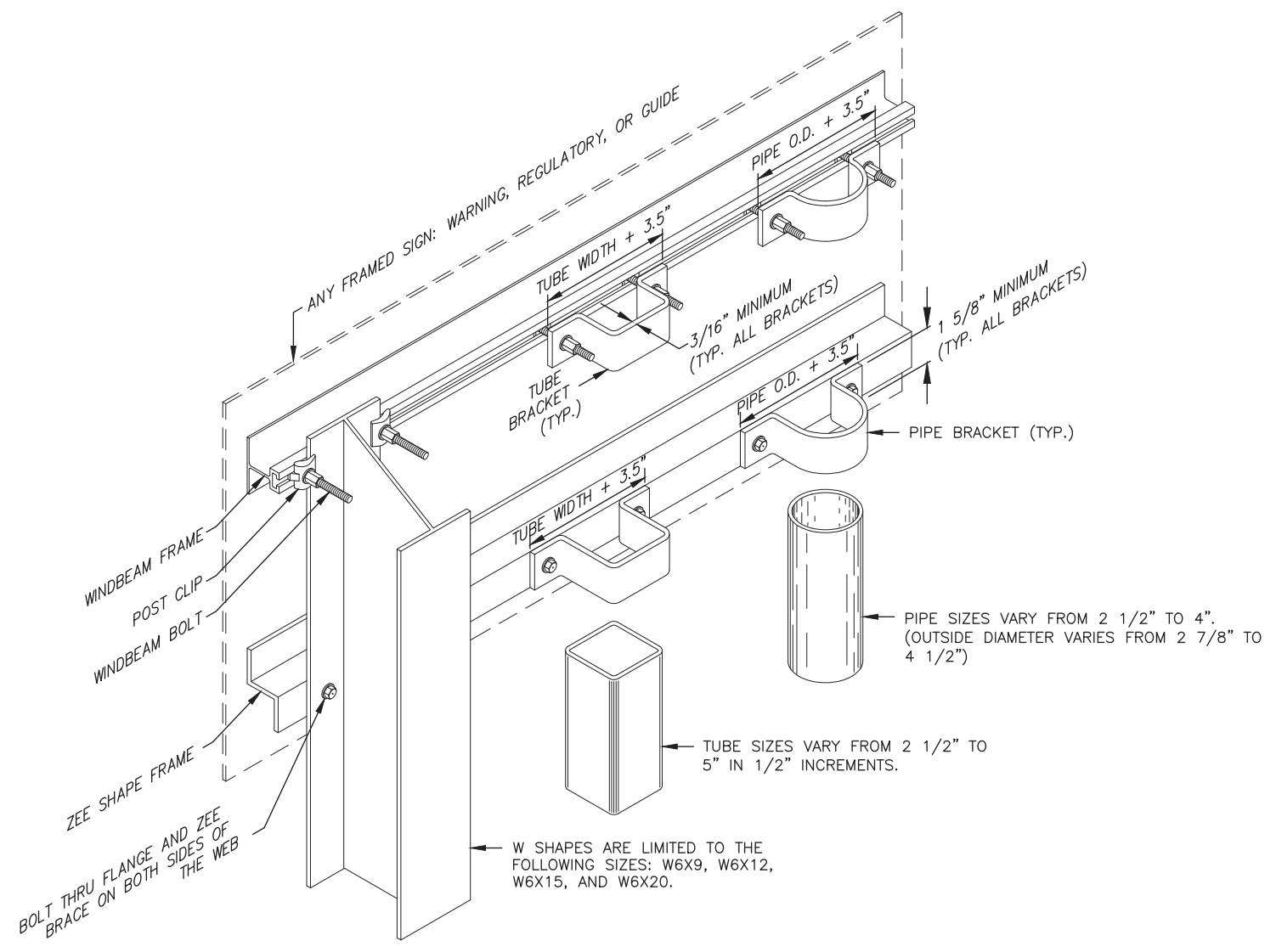
NO.	DATE	REVISIONS

**BREVIG MISSION AIRPORT**  
 AIRPORT LIGHTING AND RESURFACING  
 AIP 3-02-0400-XX-XXXX/NFAPT00500  
 SIGNING DETAILS 1 OF 2

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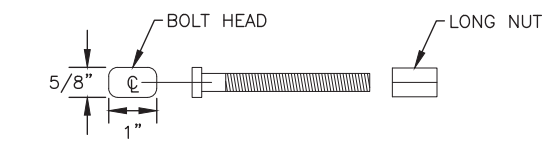
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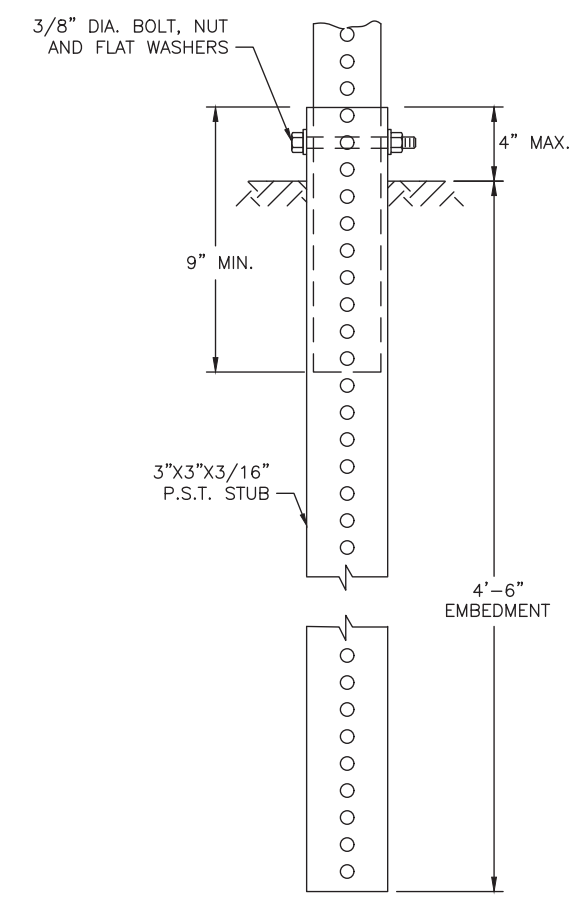
**FRAMED SIGN ATTACHMENT BRACKETS**

**NOTES:**

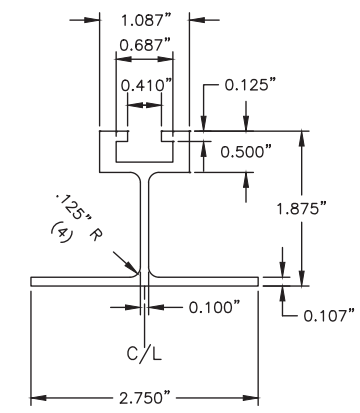
1. ATTACH FRAMED SIGNS TO POSTS WHEREVER THE FRAMES CROSS THE POSTS. AT EACH CROSSING, ATTACH THE SIGN USING TWO POST CLIPS ON W-SHAPE POSTS, A U-SHAPED BRACKET ON PIPES OR A BRACKET WITH SQUARE CORNERS ON TUBES.
2. THE TUBE BRACKETS USED ON EVEN INCH SIZE TUBES MAY ALSO BE USED ON TUBES 1/2" SMALLER IN SIZE.
3. THE BRACKET DETAILS SHOWN INDICATE GENERAL DESIGNS ONLY. DESIGNS MAY VARY BY MANUFACTURER.
4. ALUMINUM ALLOY 6061-T6 SHALL BE USED FOR ZEE SHAPE FRAMING AND RIVETS.



**3/8" WINDBEAM BOLT AND LONG NUT**



**SLEEVE TYPE SOIL EMBEDMENT SIGN FOUNDATION**



**EXTRUDED ALUMINUM WINDBEAM**

**NOTES:**

1. ALUMINUM ALLOY 6061-T6 SHALL BE USED FOR EXTRUDED WINDBEAM AND RIVETS.
2. ATTACH SIGNS TO WINDBEAM WITH 3/16" RIVETS AT 4" STAGGERED SPACING.

DESIGN REH

DRAWN JCZ

CHECKED REH

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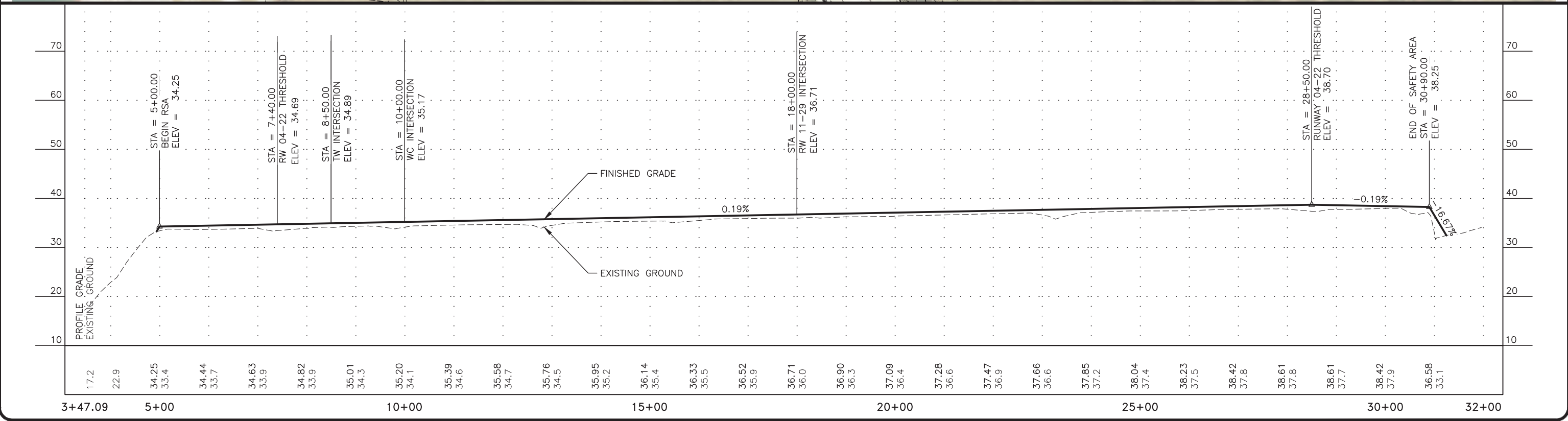
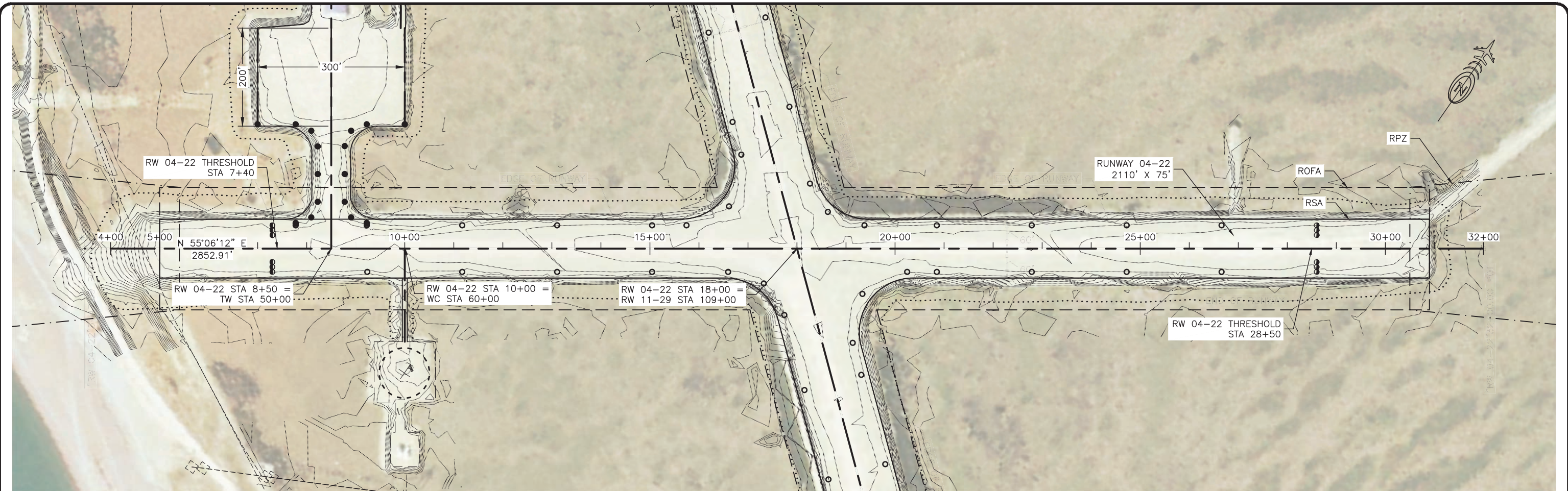


BY	DATE	REVISIONS

BREVIG MISSION AIRPORT  
 AIRPORT LIGHTING AND RESURFACING  
 AIP 3-02-0400-XX-XXXX/NFAPT00500  
 SIGNING DETAILS 2 OF 2

SHEET  
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 36

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BY	DATE	REVISIONS

**BREVIG MISSION AIRPORT**  
 AIRPORT LIGHTING AND RESURFACING  
 AIP 3-02-0400-XX-XXXX/NFAPT00500  
 RW 04-22 PLAN AND PROFILE

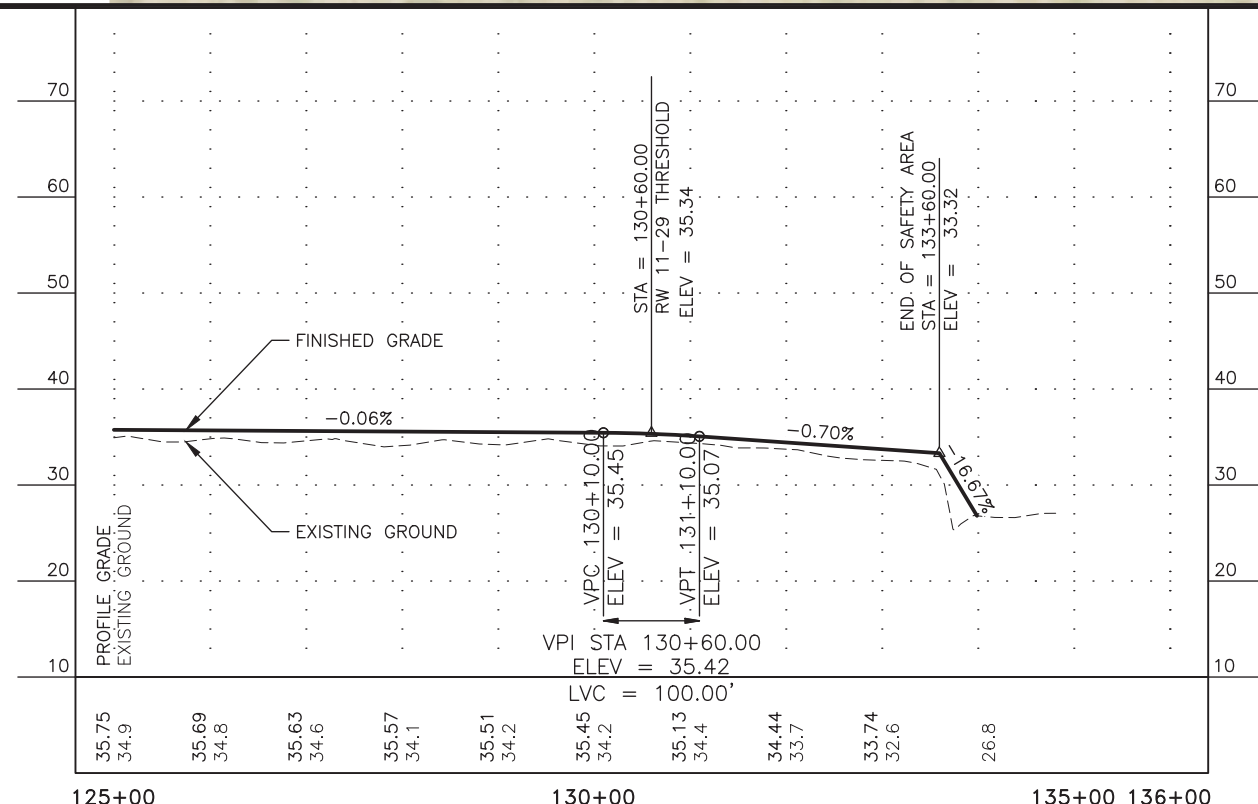
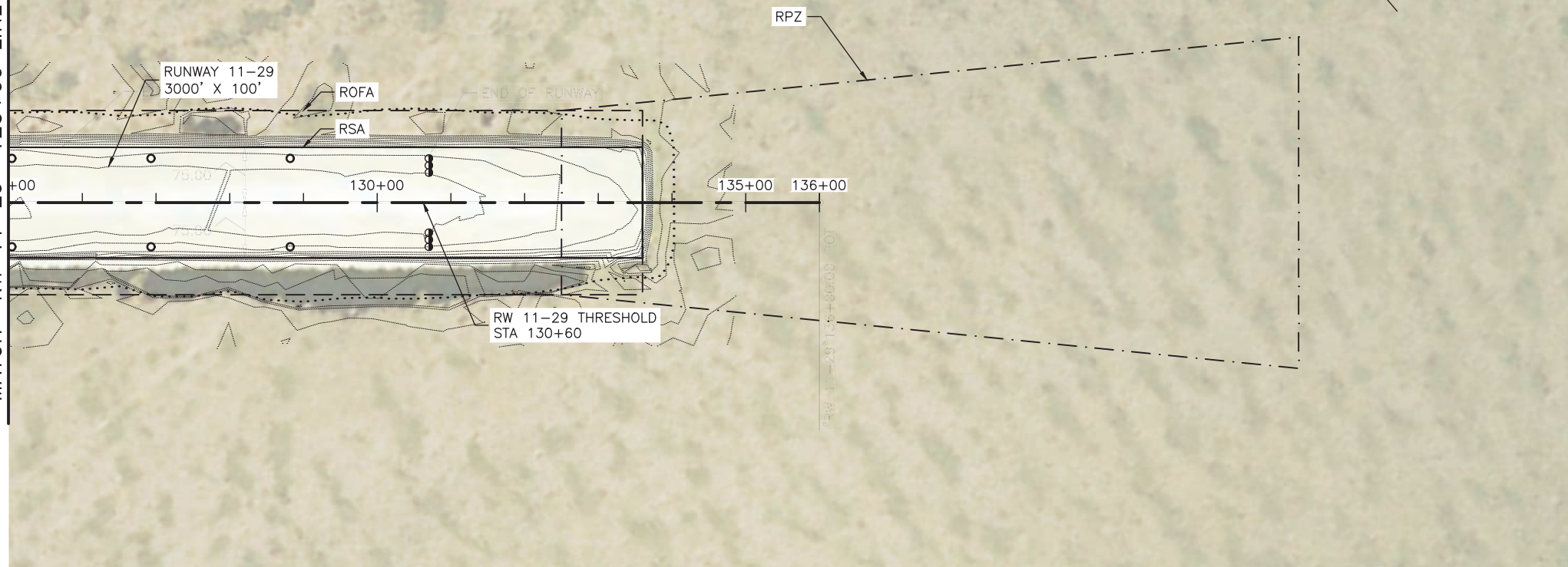
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MATCH "RW 11-29" 125+00 LINE



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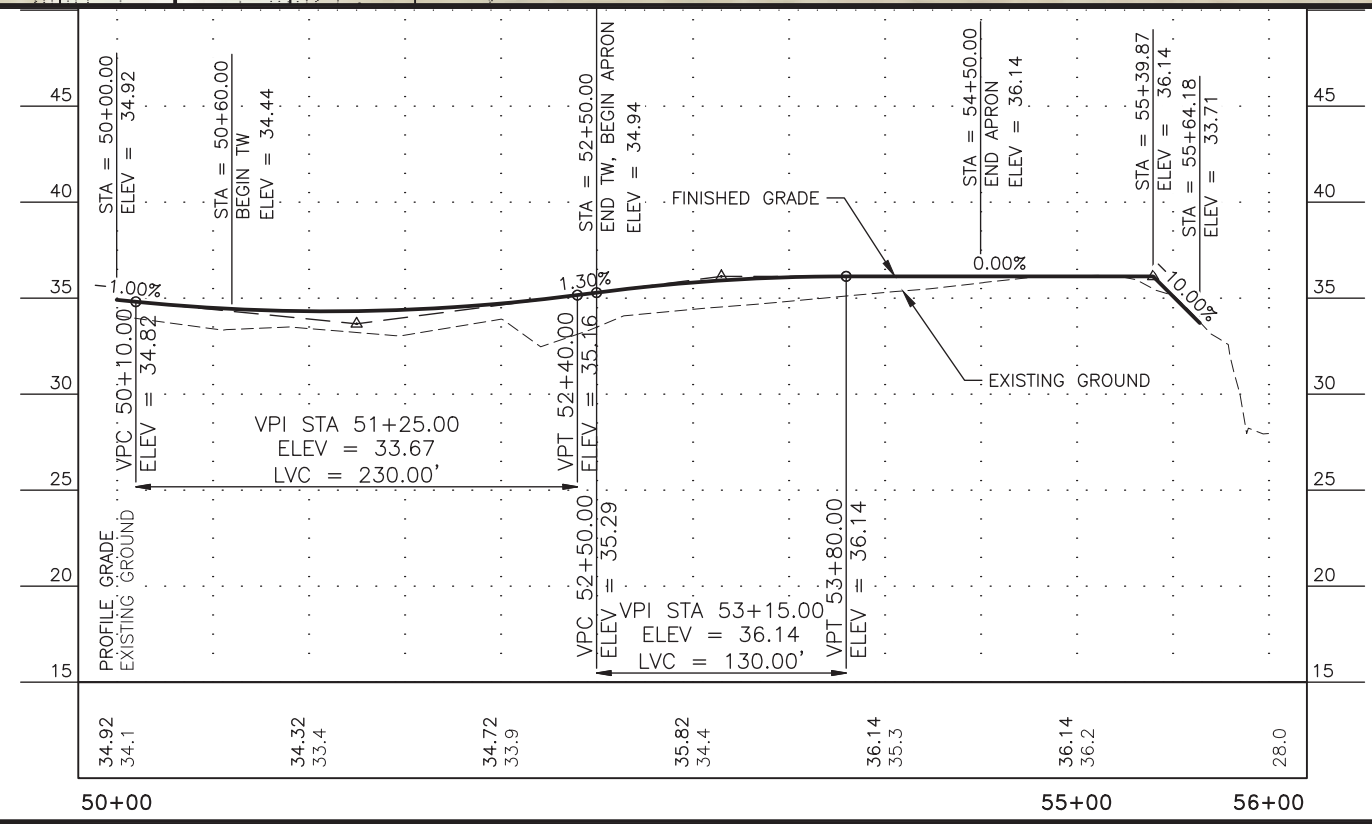
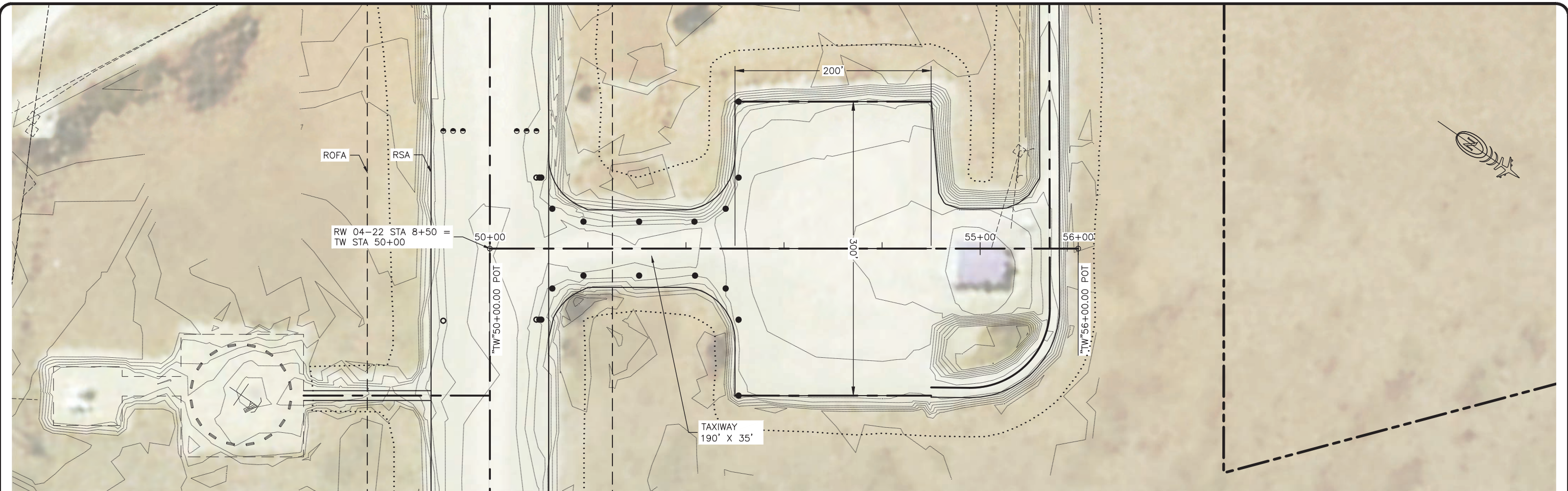
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 AIRPORT LIGHTING AND RESURFACING  
 AIP 3-02-0400-XX-XXXX/NFAPT00500  
 RW 11-29 PLAN AND PROFILE 2 OF 2

SHEET  
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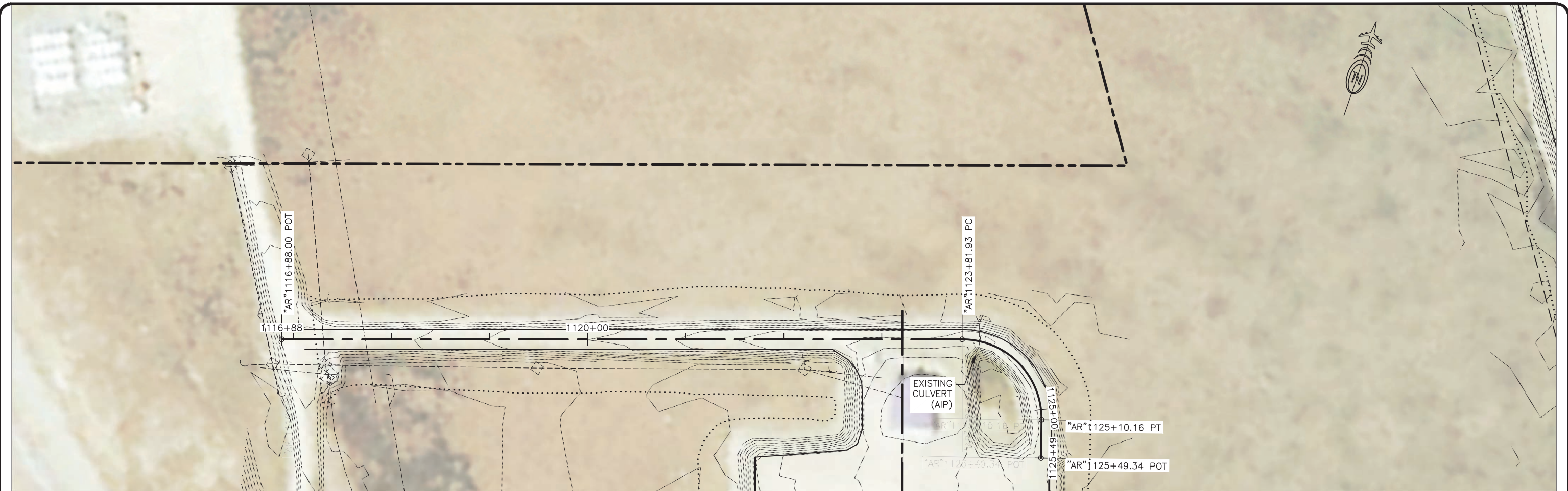
BY	DATE	REVISIONS

**BREVIG MISSION AIRPORT**  
 AIRPORT LIGHTING AND RESURFACING  
 AIP 3-02-0400-XX-XXXX/NFAPT00500  
 TW PLAN AND PROFILE

SHEET  
**25** OF  
**36**



PLANS DEVELOPED BY: CONSULTING FIRM NAME, LLC, CERT. OF AUTHORIZATION NO.: A111111, 1000 C STREET, SOMEWHERE, AK 99700, (907)000-0000  
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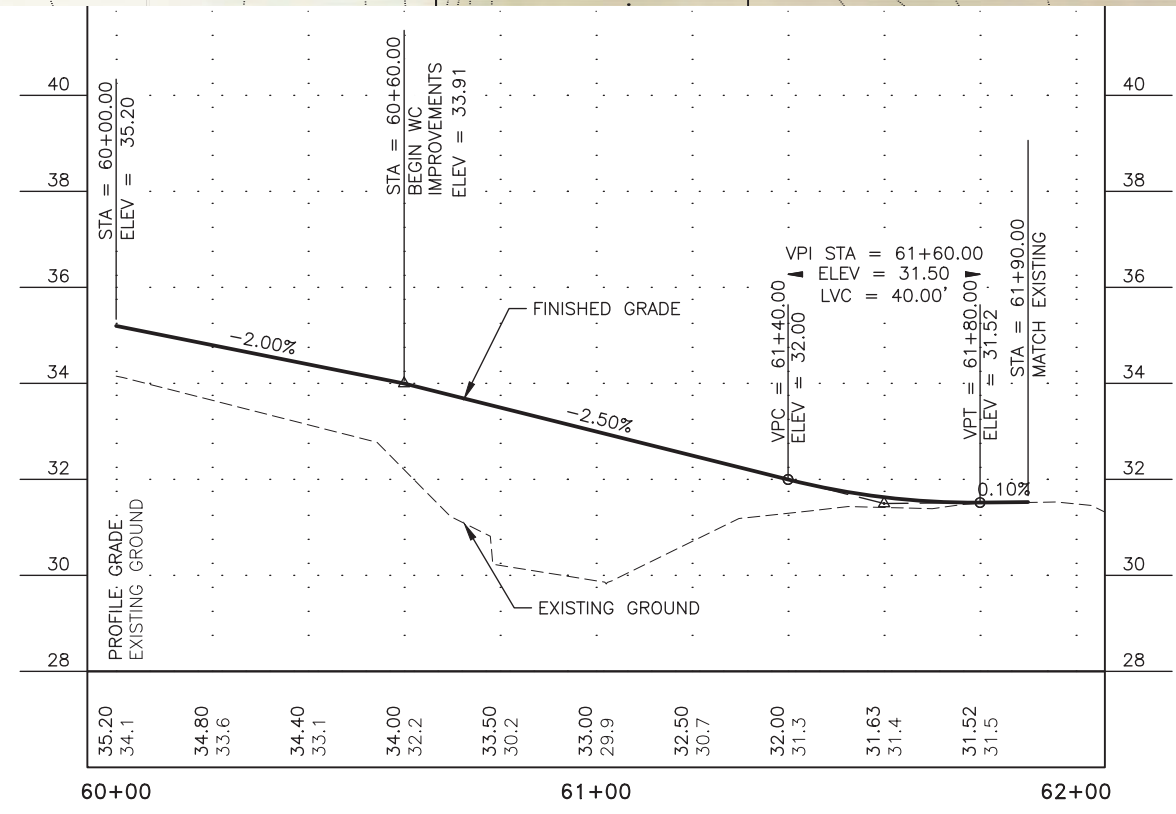
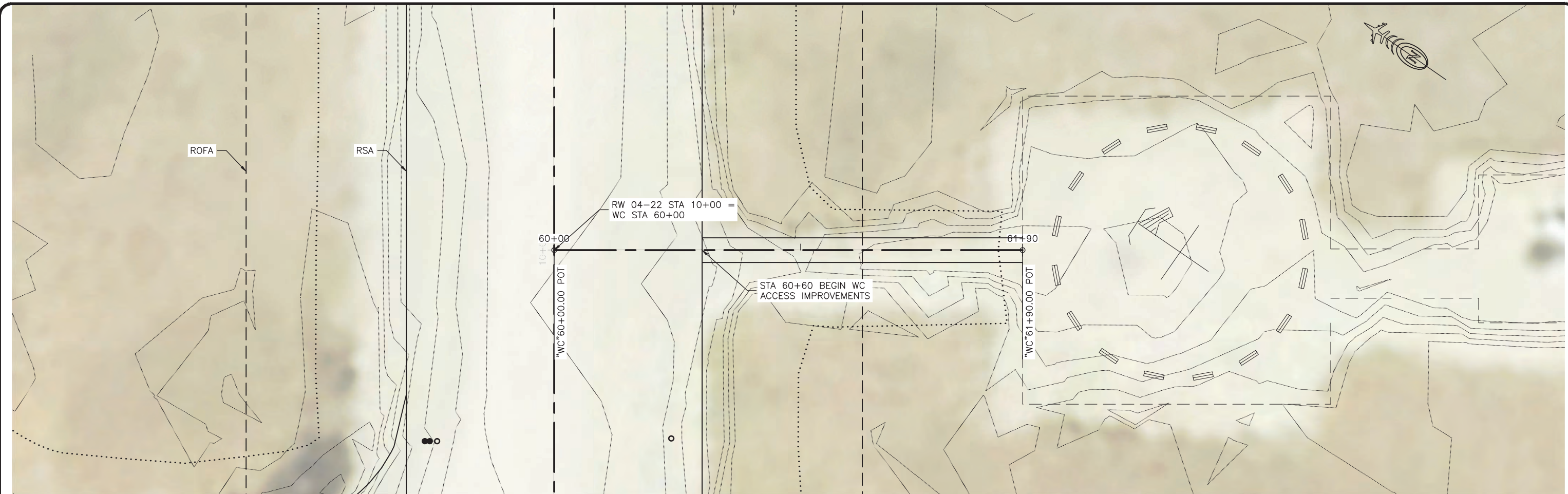
BY	DATE	REVISIONS

**BREVIG MISSION AIRPORT**  
 AIRPORT LIGHTING AND RESURFACING  
 AIP 3-02-0400-XX-XXXX/NFAPT00500  
 ROAD PLAN AND PROFILE

SHEET  
**26** OF  
**36**



PLANS DEVELOPED BY: CONSULTING FIRM NAME, LLC, CERT. OF AUTHORIZATION NO.: A111111, 1000 C STREET, SOMEWHERE, AK 99700, (907)000-0000  
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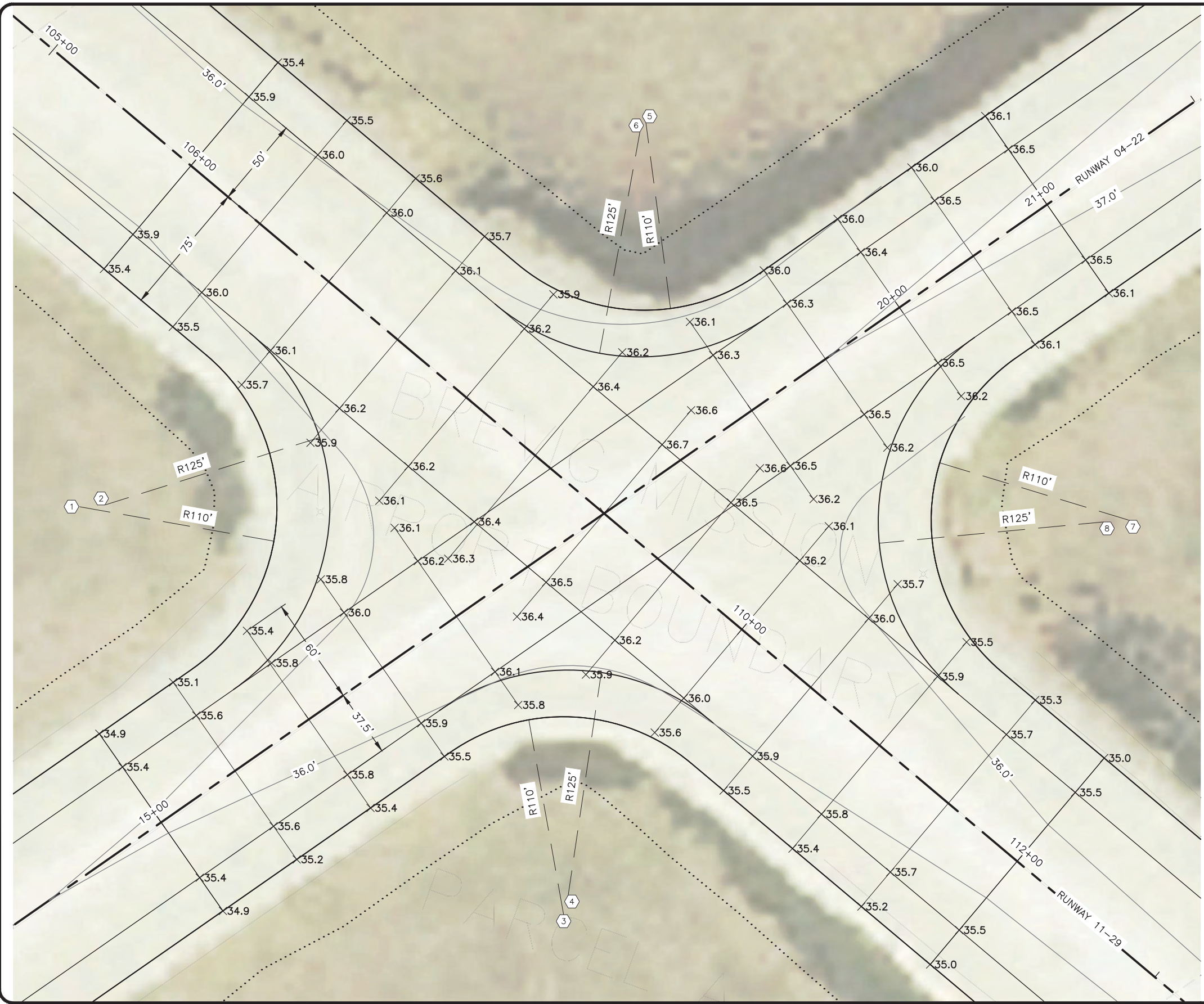
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**BREVIG MISSION AIRPORT**  
 AIRPORT LIGHTING AND RESURFACING  
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 WC PLAN AND PROFILE

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**27** OF  
**36**



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CURVE LAYOUT			
#	RW 04-22 STA	RW 04-22 OFFSET	DESCRIPTION
1	15+62.91	170.00' LT	RP
2	15+75.27	162.50' LT	RP
3	16+54.03	170.00' RT	RP
4	16+62.37	162.50' RT	RP
5	19+45.97	170.00' LT	RP
6	19+37.63	162.50' LT	RP
7	20+37.09	170.00' RT	RP
8	20+24.73	162.50' RT	RP

**NOTES:**

- ALL ELEVATIONS SHOWN ARE TOP OF FINISHED GRADE IN FEET.
- THE BASIS OF THE SPOT ELEVATION GRID IS STATIONING AT 50 FOOT INCREMENTS AND OFFSET ON THE EDGE OF RUNWAY AND RSA LINES.
- CONTOUR LINES ARE TO SHOW INTENT OF GRADING. PROVIDE SMOOTH TRANSITIONS BETWEEN ALL FINISHED GRADE SPOT ELEVATION LOCATIONS.
- SEE RUNWAY PROFILES FOR ELEVATIONS ALONG RUNWAY CENTERLINES

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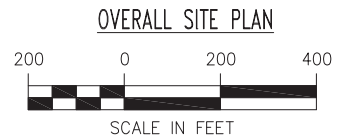
BY	DATE	REVISIONS

**BREVIG MISSION AIRPORT**  
 AIRPORT LIGHTING AND RESURFACING  
 AIP 3-02-0400-XX-XXXX/NFAPT00500  
 RUNWAY INTERSECTION GRADING PLAN

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**LEGEND AND ABBREVIATIONS**

- L-807 WIND CONE, LIGHTED
- MEDIUM INTENSITY L-861 R/W EDGE LIGHT, WHITE
- MEDIUM INTENSITY L-861SE THRESHOLD LIGHT, 180' GREEN, 180' RED
- MEDIUM INTENSITY L-861T T/W LIGHT, BLUE
- HANDHOLE
- GROUND ROD, 3/4"X10'
- CONDUIT OR DUCT BELOW GRADE. HDPE, MIN 2" UON (NUMBER OF CONDUCTORS SHOWN BY HASH MARKS)
- 2" CONDUIT, TYPE AS NOTED ON DRAWINGS
- DIA. DIAMETER
- (E) EXISTING TO REMAIN
- EEB ELECTRICAL EQUIPMENT BUILDING
- (D) DEMOLISH
- R/W RUNWAY
- RSA RUNWAY SAFETY AREA
- SREB SNOW REMOVAL EQUIPMENT BUILDING
- TSA TAXIWAY SAFETY AREA
- TYP. TYPICAL
- T/W TAXIWAY
- UON UNLESS OTHERWISE NOTED

**GENERAL NOTES**

1. CONTRACTOR SHALL OFFER ALL DEMOLISHED EQUIPMENT TO DOT FOR SALVAGE. ITEMS NOT SALVAGED BY DOT ARE THE RESPONSIBILITY OF THE CONTRACTOR TO DISPOSE OF. EQUIPMENT INCLUDES BUT IS NOT LIMITED TO: LIGHTS AND SUPPORT COLUMNS, CONTROLLERS, LIGHTING REGULATOR, ISOLATING TRANSFORMERS, ROTATING BEACON, AND WIND CONE.
2. THRESHOLD LIGHTS SHALL BE FAA TYPE L-861SE IN ACCORDANCE WITH AC 150/5340-30J TABLE 2-3.

DESIGN RSG  
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BY	DATE	REVISIONS

**BREVIG MISSION AIRPORT**  
 AIRPORT LIGHTING AND RESURFACING  
 AIP 3-02-0400-XX-202X/NFAPT00500  
 ELECTRICAL SITE PLAN AND LEGEND

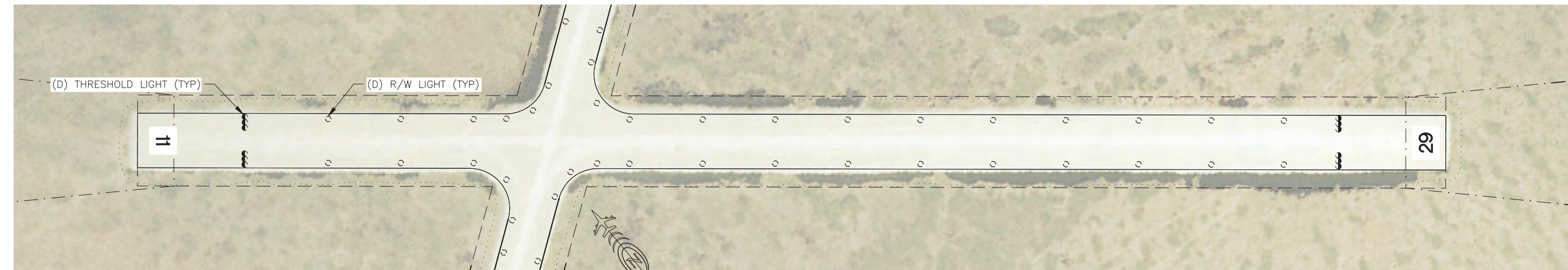
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**29** OF  
 36



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RUNWAY 04-22 AND TAXIWAY DEMOLITION PLAN



RUNWAY 11-29 DEMOLITION PLAN

**DEMOLITION NOTES**

- CONTRACTOR TO DEMOLISH ALL TAXIWAY, RUNWAY, AND THRESHOLD LIGHTS, INCLUDING LIGHT BASES, CONDUIT AND CONDUCTORS. CONTRACTOR SHALL DEMOLISH WIND CONE, ROTATING BEACON, AND EEB.

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 NORTHERN REGION-DESIGN AND CONSTRUCTION-AVIATION



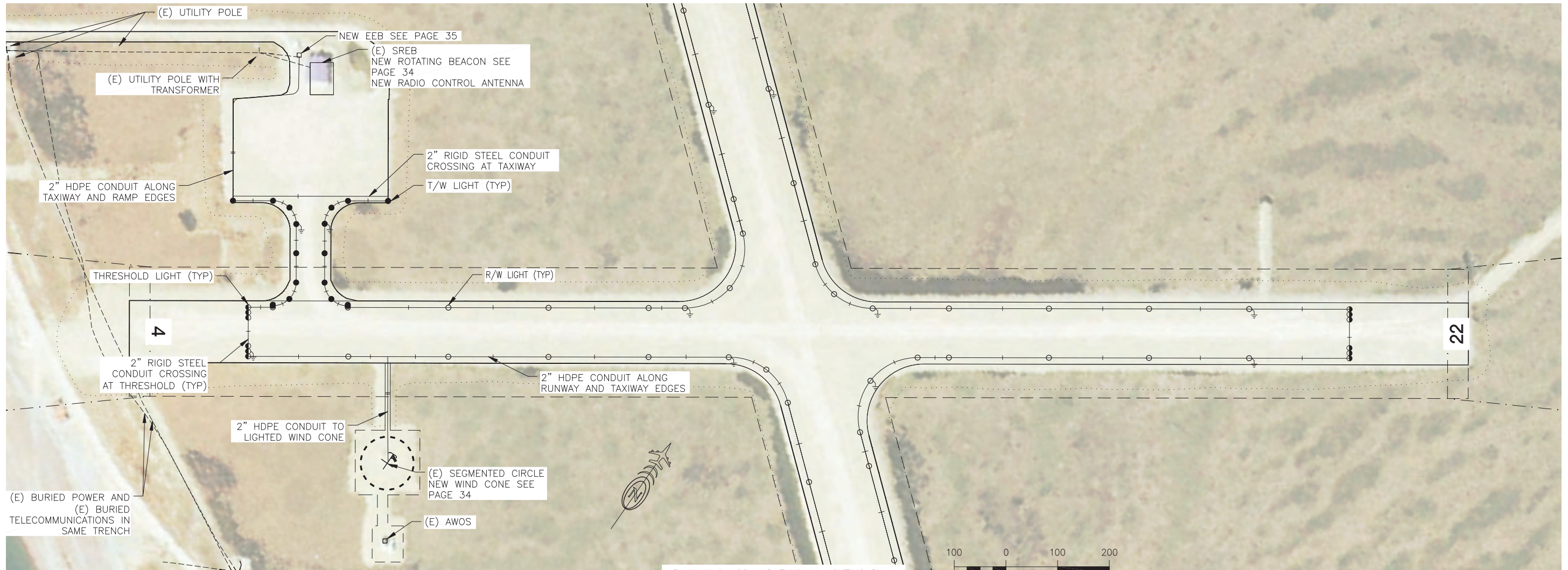
BY	DATE	REVISIONS

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 AIRPORT LIGHTING AND RESURFACING  
 AIP 3-02-0400-XX-202X/NFAPT00500  
 ELECTRICAL DEMOLITION PLANS

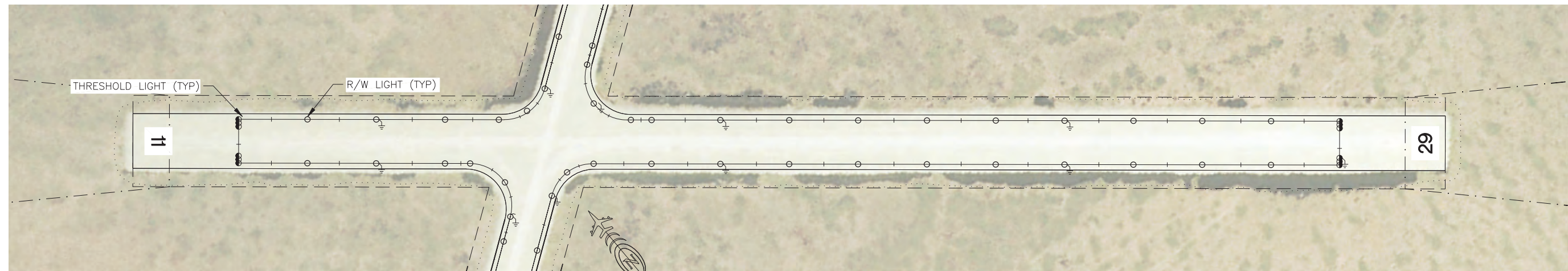
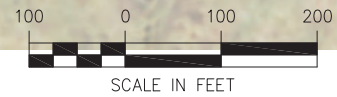
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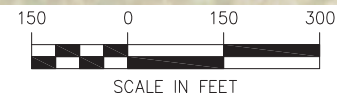
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RUNWAY 04-22 AND TAXIWAY LIGHTING PLAN



RUNWAY 11-29 LIGHTING PLAN



**CONSTRUCTION AND PHASING NOTES**

1. CONTRACTOR TO UTILIZE RIGID STEEL CONDUIT FOR ALL RUNWAY AND TAXIWAY CROSSINGS, INCLUDING CROSSINGS MADE AT RUNWAY THRESHOLDS.
2. THRESHOLD LIGHTS SHALL BE ORIENTED SUCH THAT RED LENS FACES OPPOSITE THRESHOLD.

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BY	DATE	REVISIONS

BREVIG MISSION AIRPORT  
 AIRPORT LIGHTING AND RESURFACING  
 AIP 3-02-0400-XX-202X/NFAPT00500  
 LIGHTING PLANS

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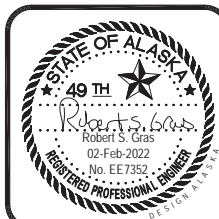
TAXIWAY LIGHT STATIONING		
LIGHT	STATION	OFFSET
EDGE LIGHT	50+50.5	72.5LT; 72.5RT
EDGE LIGHT	50+52.5	72.5LT; 72.5RT
EDGE LIGHT	50+63.7	40.7LT; 40.7RT
EDGE LIGHT	50+95.5	27.5LT; 27.5RT
EDGE LIGHT	51+52.2	27.5LT; 27.5RT
EDGE LIGHT	52+9.3	27.5LT; 27.5RT
EDGE LIGHT	52+40.5	40.7LT; 40.7RT
EDGE LIGHT	52+53.7	150LT, 72.5LT; 72.5RT, 150RT

RUNWAY 04-22 LIGHT STATIONING		
LIGHT	STATION	OFFSET
04 THRESHOLD	07+30.0	47.5LT, 37.5LT, 27.5LT; 47.5RT, 37.5RT, 27.5RT
EDGE LIGHT	07+77.5	47.5LT
EDGE LIGHT	09+22.5	47.5LT
EDGE LIGHT	09+23.6	47.5RT
EDGE LIGHT	11+17.2	47.5LT; 47.5RT
EDGE LIGHT	13+10.8	47.5LT; 47.5RT
EDGE LIGHT	15+4.4	47.5LT; 47.5RT
EDGE LIGHT	15+74.6	47.5LT
EDGE LIGHT	16+59.6	47.5RT
INTERSECTION EDGE LIGHT	16+61.4	86.2LT
INTERSECTION EDGE LIGHT	17+32.3	71.2RT
INTERSECTION EDGE LIGHT	18+63.0	75.0LT
INTERSECTION EDGE LIGHT	19+33.5	92.5RT
EDGE LIGHT	19+37.6	47.5LT
EDGE LIGHT	20+24.7	47.5RT
EDGE LIGHT	20+85.2	47.5LT; 47.5RT
EDGE LIGHT	22+78.8	47.5LT; 47.5RT
EDGE LIGHT	24+72.4	47.5LT; 47.5RT
EDGE LIGHT	26+66.0	47.5LT; 47.5RT
22 THRESHOLD	28+60.0	47.5LT, 37.5LT, 27.5LT; 47.5RT, 37.5RT, 27.5RT

RUNWAY 11-29 LIGHT STATIONING		
LIGHT	STATION	OFFSET
11 THRESHOLD	100+50	60LT, 50LT, 40LT; 60RT, 50RT, 40RT
EDGE LIGHT	102+38.8	60LT; 60RT
EDGE LIGHT	104+27.6	60LT; 60RT
EDGE LIGHT	106+16.4	60LT; 60RT
EDGE LIGHT	106+85.4	60RT
EDGE LIGHT	107+78.7	60LT
EDGE LIGHT	110+24.0	60RT
EDGE LIGHT	111+15.1	60LT
EDGE LIGHT	111+82.8	60LT; 60RT
EDGE LIGHT	113+71.6	60LT; 60RT
EDGE LIGHT	115+60.4	60LT; 60RT
EDGE LIGHT	117+49.2	60LT; 60RT
EDGE LIGHT	119+38.0	60LT; 60RT
EDGE LIGHT	121+26.8	60LT; 60RT
EDGE LIGHT	123+15.6	60LT; 60RT
EDGE LIGHT	125+4.4	60LT; 60RT
EDGE LIGHT	126+93.2	60LT; 60RT
EDGE LIGHT	128+82.0	60LT; 60RT
29 THRESHOLD	130+70.0	60LT, 50LT, 40LT; 60RT, 50RT, 40RT

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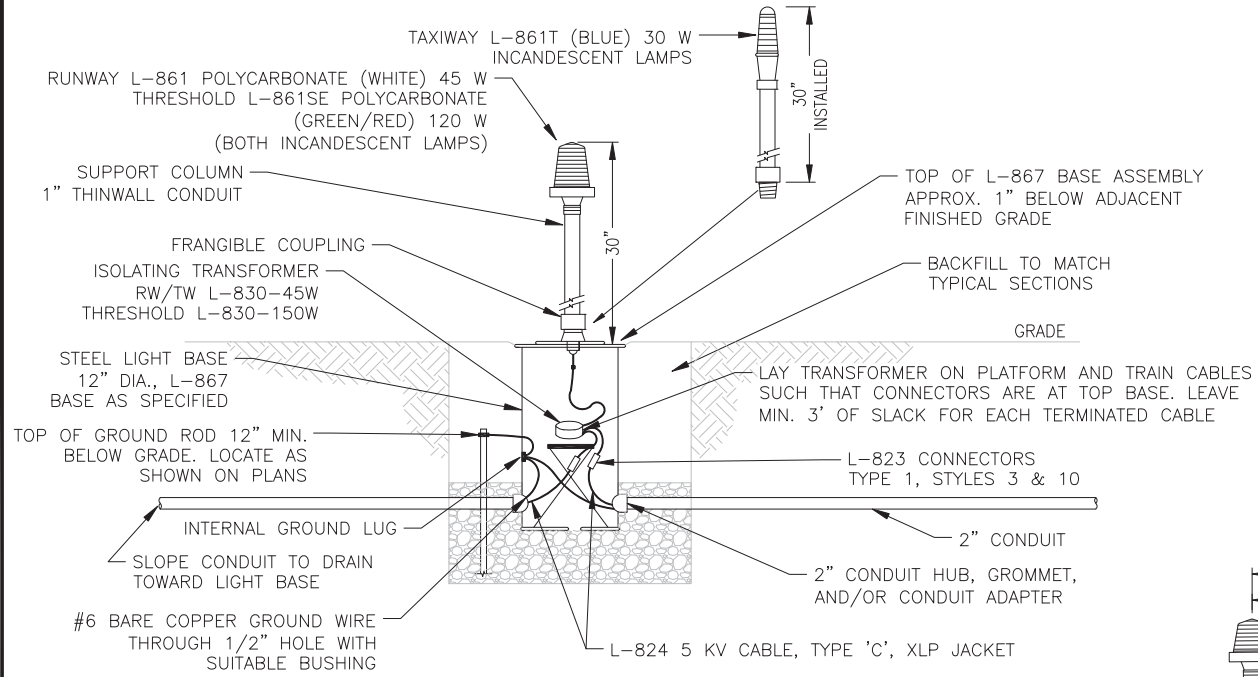
BY	DATE	REVISIONS

BREVIG MISSION AIRPORT  
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 AIP 3-02-0400-XX-202X/NFAPT00500  
 STATIONING

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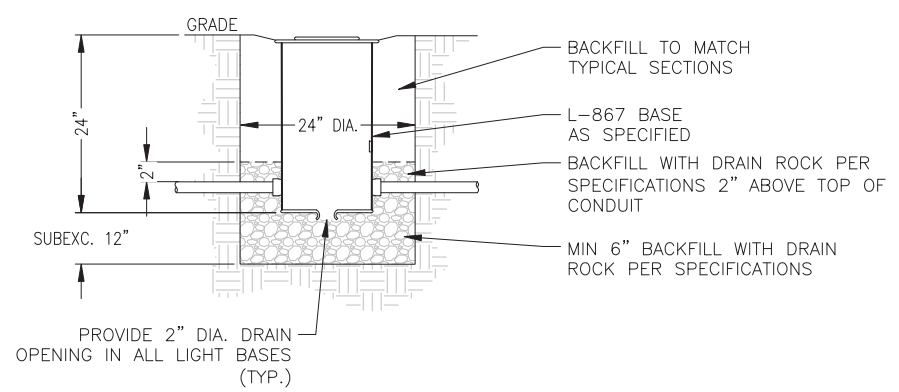


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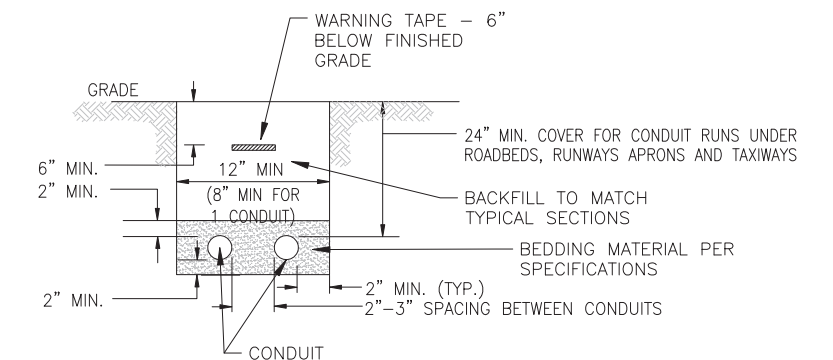
**RUNWAY EDGE, THRESHOLD & TAXIWAY LIGHT DETAIL**

NO SCALE  
NOTE: L-867 LIGHT ASSEMBLY WORK IS SUBSIDIARY TO ITEMS L125.030.0000 AND L125.040.0000 PER L-125 SPECIFICATIONS.



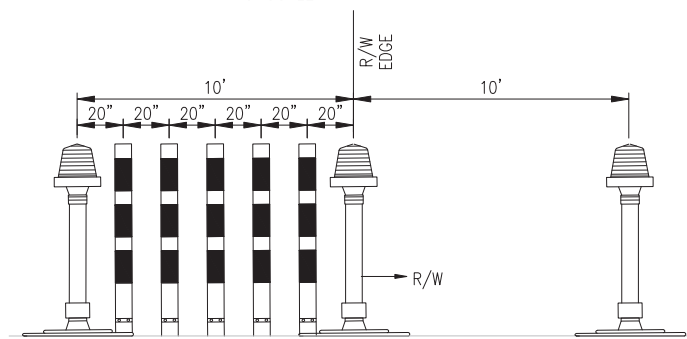
**HAND HOLE BURIAL DETAIL**

NO SCALE



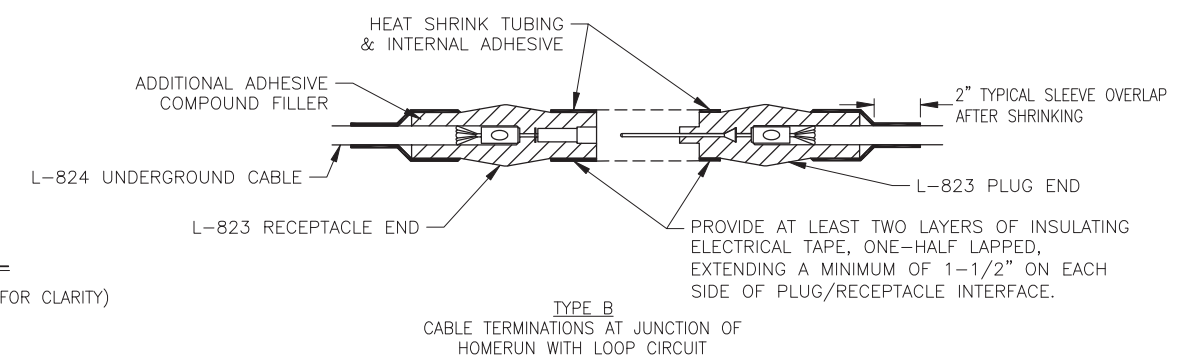
**TRENCHING DETAIL R/W LIGHTS**

NO SCALE

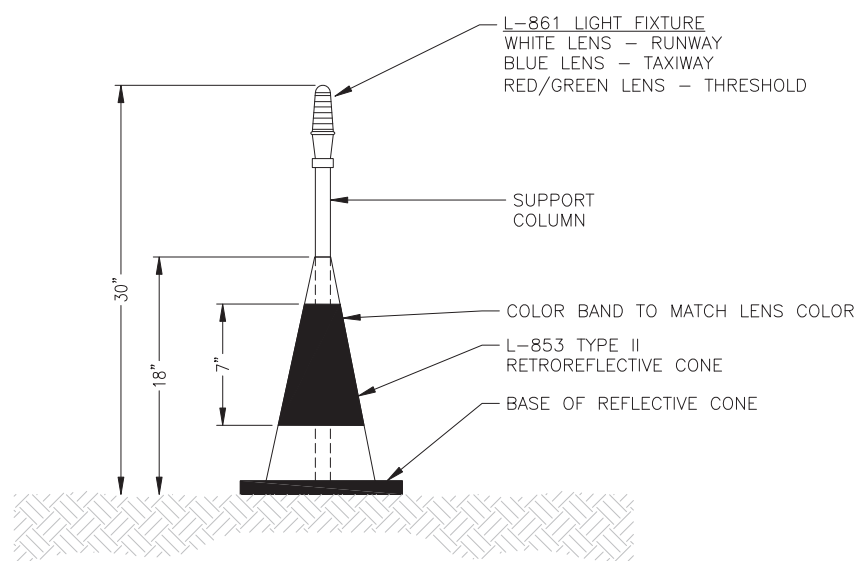


**THRESHOLD LIGHTING AND TYPE II MARKER DETAIL**

NO SCALE - (NOTE: REFLECTIVE CONES TO BE INSTALLED, BUT NOT SHOWN ON FRANGIBLE POSTS FOR CLARITY)

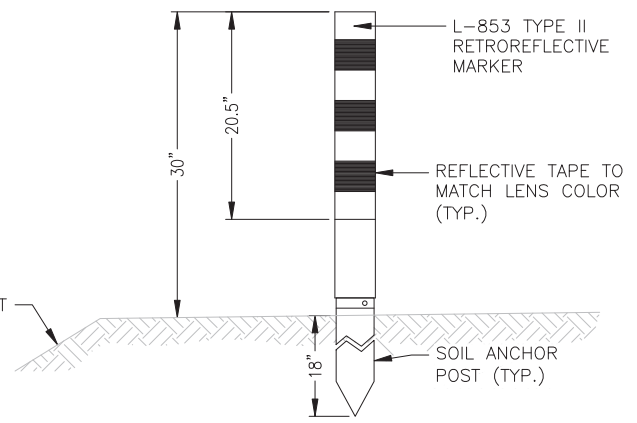


**TYPE B  
CABLE TERMINATIONS AT JUNCTION OF  
HOMERUN WITH LOOP CIRCUIT**



**TYPE II RETOREFLECTIVE MARKER CONE**

NO SCALE

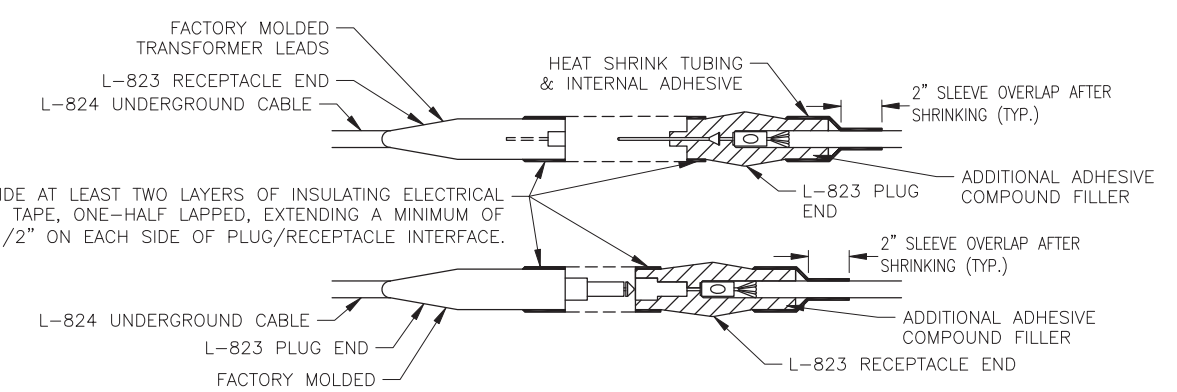


**TYPE II RETOREFLECTIVE MARKER DETAIL**

NO SCALE

**R/W & T/W REFLECTIVE MARKER COLOR SCHEDULE**

COMPONENT	TYPE II	LOCATION	COLOR	QTY
REFLECTIVE MARKER	TYPE II	THRESHOLD	WHITE	40
REFLECTIVE TAPE			GREEN/RED	40
REFLECTIVE CONE	TYPE II	THRESHOLD	WHITE	24
REFLECTIVE TAPE			GREEN/RED	24
REFLECTIVE CONE	TYPE II	RUNWAY	WHITE	55
REFLECTIVE TAPE			WHITE	55
REFLECTIVE CONE	TYPE II	TAXIWAY	WHITE	18
REFLECTIVE TAPE			BLUE	18



**TYPE C  
CABLE TERMINATIONS AT RUNWAY LIGHTS  
PRIMARY CABLE TERMINATION DETAILS**

- NOTES**
1. PROVIDE L-823 PLUG AND RECEPTACLE TERMINALS AT ALL LIGHT BASES AND HAND HOLES AS REQUIRED.
  2. INSIDE DIAMETER OF CONNECTOR SHALL PROPERLY MATCH THE OUTSIDE DIAMETER OF CABLE.
  3. PROPERLY SEAT BOTH PLUG AND RECEPTACLE ENDS ONTO CABLE AND CHECK FOR PROPER CONNECTOR PIN POSITIONING PRIOR TO HEATING SHRINKABLE TUBING.
  4. CONNECTION OF CONDUCTORS MUST BE MADE BY USING CRIMP CONNECTORS AND A CRIMPING TOOL APPROVED BY THE CONNECTOR/LUG MANUFACTURER. THE TOOL MUST PRODUCE A COMPLETE CRIMP BEFORE IT CAN BE REMOVED. THE CRIMPING TOOL USED MUST BE LISTED BY THE L-823 KIT MANUFACTURER. MAKE THE NUMBER AND TYPE OF CRIMPS PER THE KIT MANUFACTURER'S INSTRUCTIONS.

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**STATE OF ALASKA**  
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES  
NORTHERN REGION-DESIGN AND CONSTRUCTION-AVIATION

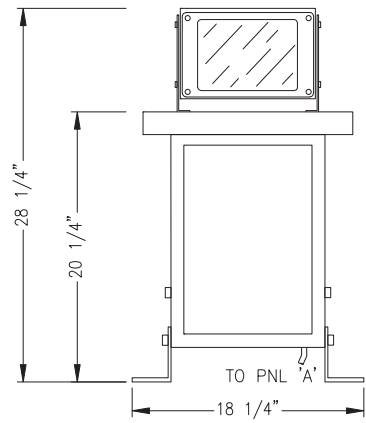


BY	DATE	REVISIONS

**BREVIG MISSION AIRPORT**  
AIRPORT LIGHTING AND RESURFACING  
AIP 3-02-0400-XX-202X/NFAPT00500  
LIGHTING DETAILS 1 OF 2

SHEET  
**33**  
OF  
**36**



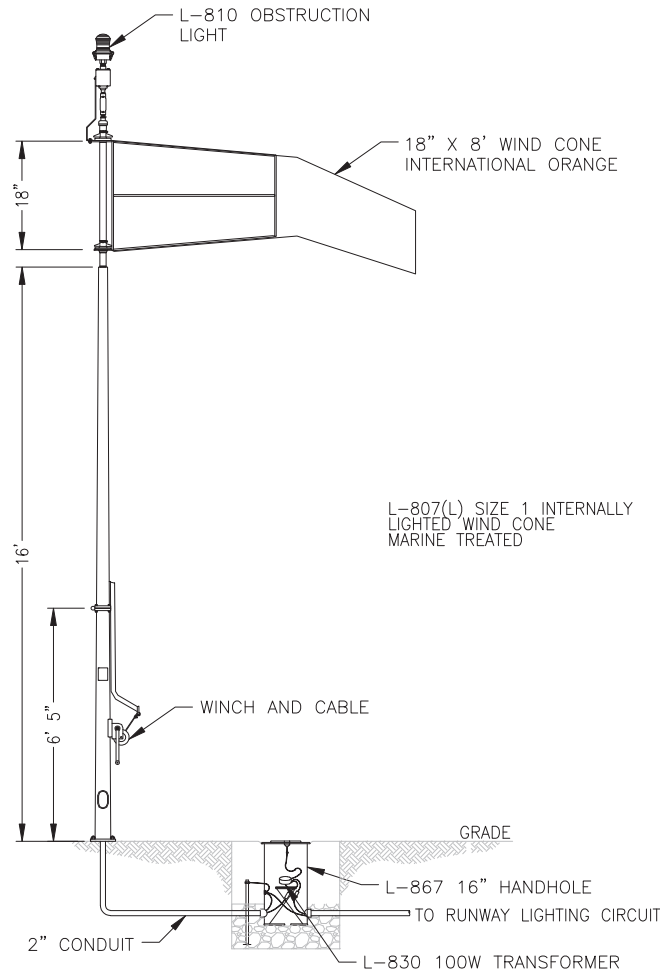


L-801A(L) CLASS II MEDIUM INTENSITY AIRPORT BEACON  
 ROTATION SPEED - 12 RPM  
 BEAM POWER MIN. 50,000  
 EFFECTIVE CANDELA FROM +3° TO +7° VERTICAL

MOUNT ON (E) STANDOFF PLATFORM ON SREB

**BEACON DETAIL**

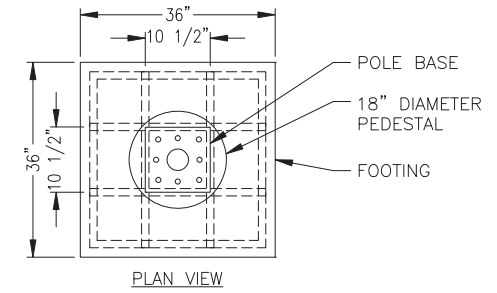
NO SCALE  
 NOTE: PROVIDE SEPARATE CIRCUITS FOR BEACON AND STRIP HEATER IN BEACON



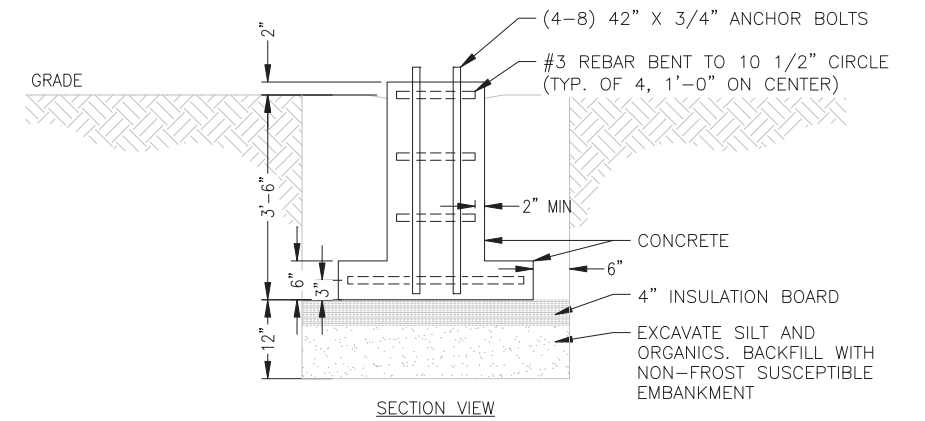
L-807(L) SIZE 1 INTERNALLY LIGHTED WIND CONE MARINE TREATED

**WIND CONE ASSEMBLY**

NO SCALE  
 NOTE: INSTALL WINDCONE WITHIN CENTER OF (E) SEGMENTED CIRCLE, DIRECTLY ADJACENT TO WINDCONE TO BE DEMOLISHED.



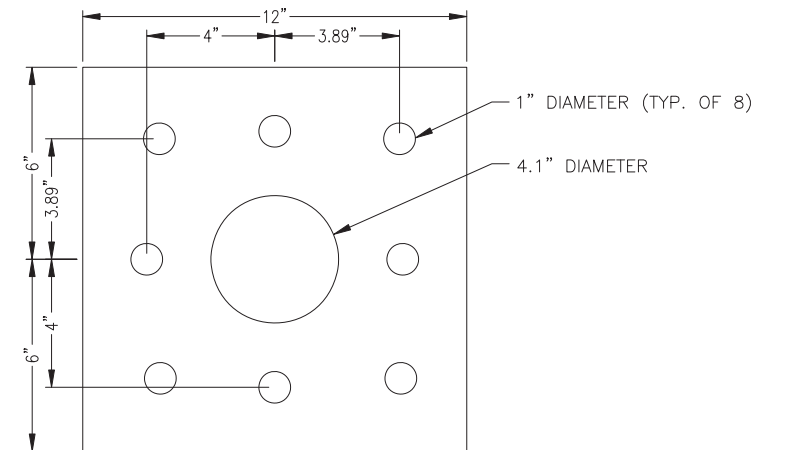
PLAN VIEW



SECTION VIEW

**WIND CONE FOUNDATION DETAIL**

NO SCALE



**WIND CONE BASE PLATE DETAIL**

NO SCALE

PROVIDE MINIMUM 4 ANCHOR BOLTS

PLANS DEVELOPED BY: DESIGN ALASKA, INC., AEC6511, 601 COLLEGE ROAD, FAIRBANKS, AK 99701 (907) 452-1241

DESIGN RSG  
 DRAWN JCC  
 CHECKED RSG

STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES  
 NORTHERN REGION-DESIGN AND CONSTRUCTION-AVIATION

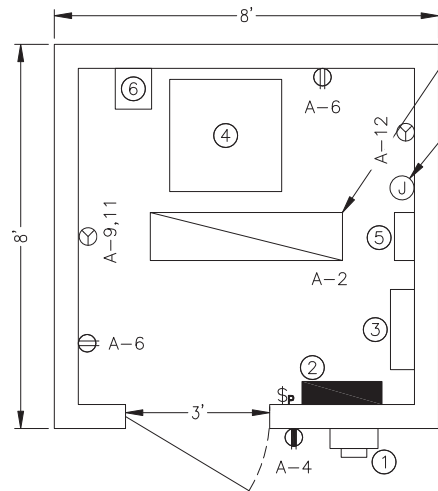


BY	DATE	REVISIONS

BREVIG MISSION AIRPORT  
 AIRPORT LIGHTING AND RESURFACING  
 AIP 3-02-0400-XX-202X/NFAPT00500  
 LIGHTING DETAILS 2 OF 2

SHEET 34 OF 36





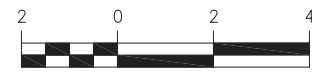
NEW LIGHT FIXTURE. BASIS OF DESIGN:  
LITHONIA FEM-L48-6000LM-LPACL-MD-40K-80CRI  
OR APPROVED EQUAL

NEW JUNCTION BOX  
TO NEW PHOTOCELL

**EQUIPMENT LIST**

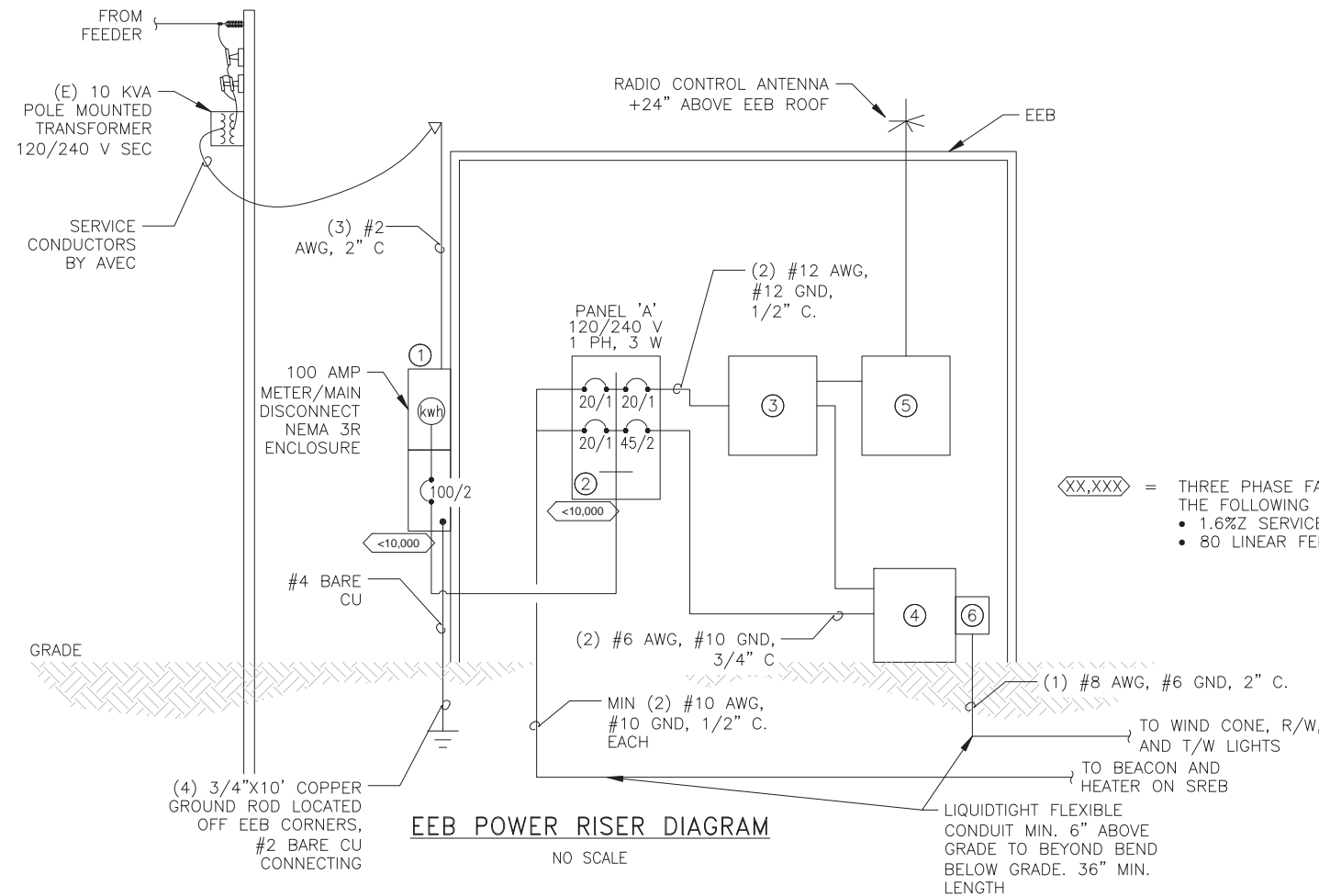
- ① 100A METER BASE/MAIN DISCONNECT, SEE SPECIFICATIONS
- ② 120/240V PANEL 'A', SEE SPECIFICATIONS AND PANEL SCHEDULE
- ③ LIGHTING CONTROL PANEL
- ④ 10KW HEAVY DUTY CONSTANT CURRENT REGULATOR, L-828
- ⑤ RADIO CONTROLLER, L-854
- ⑥ 5KV PLUG CUTOUT IN NEMA 1 BOX

**EQUIPMENT ENCLOSURE BUILDING PLAN**



SCALE IN FEET

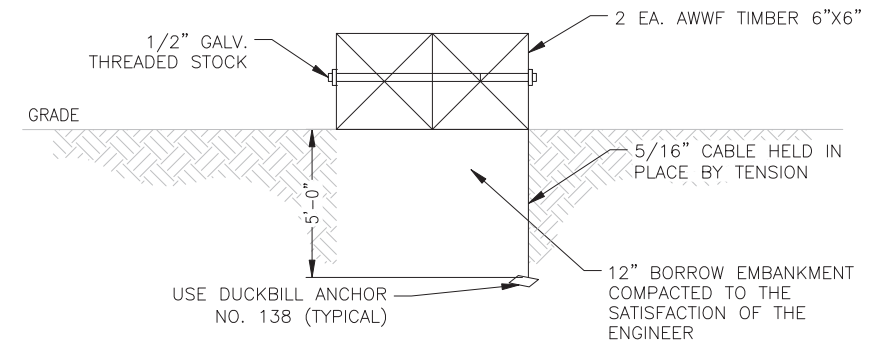
NOTE: ALL WALL PENETRATIONS SHALL BE SEALED WITH SILICONE SEALANT.



**EEB POWER RISER DIAGRAM**

NO SCALE

XXX,XXX = THREE PHASE FAULT CURRENT UNDER THE FOLLOWING ASSUMPTIONS:  
• 1.6%Z SERVICE TRANSFORMER  
• 80 LINEAR FEET OF SECONDARY



**EEB TIE DOWN DETAIL**

NO SCALE

NOTE: SECURE TIMBERS TO EQUIPMENT ENCLOSURE BUILDING FLOOR JOISTS WITH (6) EACH 3/4"x9" GALV. MACHINE BOLTS, (3) AT EACH END, COUNTERSINK BOLT HEADS IN BOTTOM OF TIMBERS.

**PANEL 'A'**

LOCATION: EEB VOLTS: 120/240 V A.I.C. RATING: 10,000 A  
 SUPPLY: METER/MAIN COMBO PHASES: 1 MAINS TYPE: MLO  
 MOUNTING: SURFACE WIRES: 3 MAINS RATING: 100 A  
 ENCLOSURE: NEMA TYPE 1 POLE SPACES: 20 PANELBOARD FEEDER C/B RATING: 100 A

**NOTES:**

CKT NO	P	TRIP	LOAD SERVED	LOAD TYPE	LOAD (VA)	BUS	LOAD (VA)	LOAD TYPE	LOAD SERVED	TRIP	P	CKT NO
1	1	20	LIGHTING CONTROL PANEL	E	500	A	38	L	ENCLOSURE LIGHTING	20	1	2
3	1	20	SPARE	S	0	B	180	R	REC - EXTERIOR	20	1	4
5	1	20	ROTATING BEACON AND MOTOR	M	136	A	360	R	REC - INTERIOR	20	1	6
7	1	20	BEACON STRIP HEATER	C	400	B	1,000	C	EEB HEATER (2 KW)	20	1	8
9	2	45	10 KW REGULATOR	E	4,100	A	1,000	C	" "	20	1	10
11			" "	E	4,100	B	100	M	EXHAUST FAN (100 W)	15	1	12
13	1	20	SPARE	S	0	A	0	-	PREPARED SPACE	--	--	14
15	--	--	PREPARED SPACE	-	0	B	0	-	" "	--	--	16
17	--	--	" "	-	0	A	0	-	" "	--	--	18
19	--	--	" "	-	0	B	0	-	" "	--	--	20

**CONNECTED LOAD CALCULATIONS:**

PHASE	LOAD	BALANCE	CURRENT	LOAD PERCENTAGE
PHASE A	6,134 VA	51%	25.6 A	26%
PHASE B	5,780 VA	49%	24.1 A	24%
PHASE C	--	--	--	--
<b>TOTAL CONNECTED LOAD:</b>	<b>11,914 VA</b>		<b>49.6 A</b>	<b>50%</b>

**NEC DEMAND LOAD CALCULATIONS:**

	LOAD	FACTOR	TOTAL	CURRENT	LOAD PERCENTAGE
L=LIGHTING X125%	38 VA	125%	47 VA	0.2 A	0%
R=RECEPTACLES (NEC 220.44)	540 VA	100%	540 VA	2.3 A	2%
C=EQUIPMENT (CONT.) X125%	2,400 VA	125%	3,000 VA	12.5 A	13%
E=EQUIPMENT (NON-CONT.) X100%	8,700 VA	100%	8,700 VA	36.3 A	36%
M=MOTORS (+25% OF LARGEST)	236 VA	114%	270 VA	1.1 A	1%
A=APPLIANCES (NEC 220.56)	--	--	--	--	--
<b>TOTAL DEMAND LOAD:</b>	<b>11,914 VA</b>	<b>105%</b>	<b>12,557 VA</b>	<b>52.3 A</b>	<b>52%</b>

PLANS DEVELOPED BY: DESIGN ALASKA, INC., AEC0511, 601 COLLEGE ROAD, FAIRBANKS, AK 99701 (907) 452-1241  
 P:\502101\Drawings\161470\_LIT-EEB

DESIGN RSG  
 DRAWN JCC  
 CHECKED RSG

STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES  
 NORTHERN REGION-DESIGN AND CONSTRUCTION-AVIATION



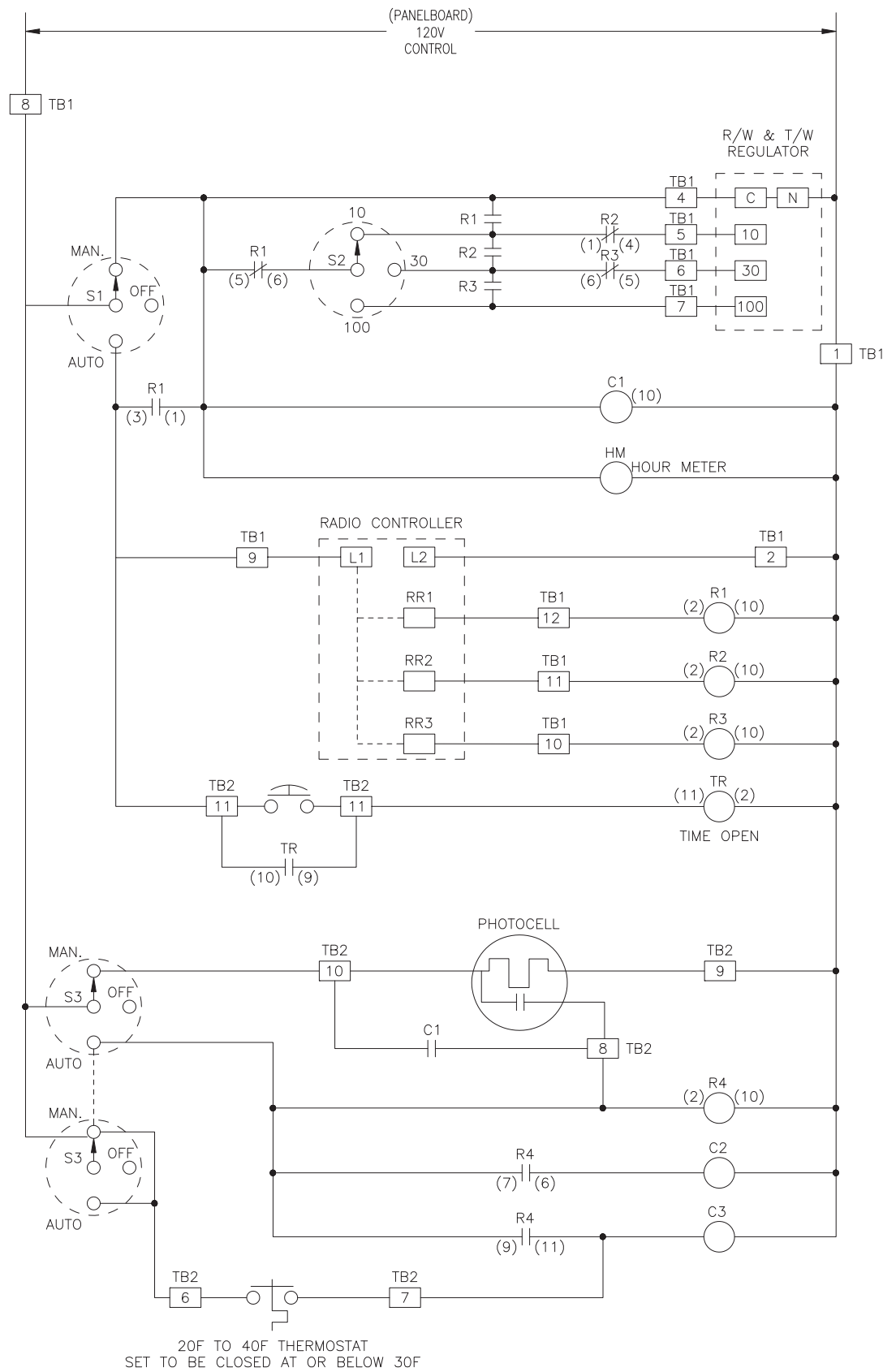
BY	DATE	REVISIONS

BREVIG MISSION AIRPORT  
 AIRPORT LIGHTING AND RESURFACING  
 AIP 3-02-0400-XX-202X/NFAPT00500  
 ELECTRICAL EQUIPMENT BUILDING

SHEET  
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PLANS DEVELOPED BY: DESIGN ALASKA, INC., AECC511, 601 COLLEGE ROAD, FAIRBANKS, AK 99701 (907) 452-1241  
P:\502101\Drawings\61470\_LIT-CONTROL



20F TO 40F THERMOSTAT  
SET TO BE CLOSED AT OR BELOW 30F

### CONTROL EQUIPMENT

RELAYS RR1, RR2, & RR3 ARE INTERNAL IN THE RADIO CONTROLLER.

RELAYS R1, R2, R3, & R4 SHALL BE ENCLOSED, PLUG-IN TYPE WITH 10A, 120V, 60HZ CONTACTS, 120V 60HZ OPERATING COIL, SUITABLE FOR OPERATION AT -60 DEG F.

TERMINAL BLOCKS TB1, TB2, & TB3 SHALL HAVE TERMINALS RATED 30A, 120V, 60HZ.

CONTACTORS C1, C2, & C3 SHALL BE ENCLOSED, WITH 30A, 120V, 60HZ CONTACTS, 120V 60 HZ OPERATING COILS, AND BE SUITABLE FOR OPERATION AT -60 DEG F.

### NOTES

THIS CONTROL DIAGRAM ASSUMES THAT THE RADIO CONTROLLER RELAYS ARE PROGRAMMED TO BE OPERATED "SEQUENTIALLY", SUCH THAT WITHIN A 5 SECOND PERIOD:

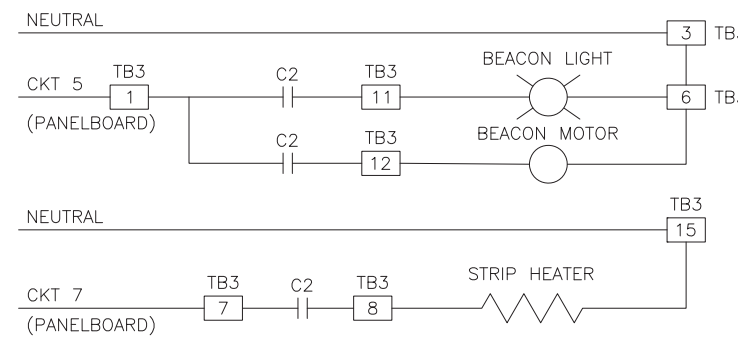
- RR1 IS ACTIVATED IF 3 PULSES ARE RECEIVED
- RR2 IS ACTIVATED IF 5 PULSES ARE RECEIVED
- RR3 IS ACTIVATED IF 7 PULSES ARE RECEIVED

RELAYS SHALL BE GENERAL PURPOSE CONTROL RELAYS, UNLESS OTHERWISE NOTED.

TERMINAL NUMBERS AND RELAY CONNECTION NUMBERS ARE FOR REFERENCE ONLY - AS-BUILT DRAWINGS ARE TO SHOW NUMBERS USED.

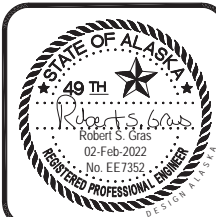
### LIGHTING CONTROL SEQUENCE

1. MANUAL - AT CONTROL PANEL
  - 1.A. SWITCH S1 - SET TO MANUAL
    - 1.A.1. RUNWAY LIGHTS - ON
    - 1.A.2. TAXIWAY LIGHTS - ON
    - 1.A.3. WIND CONE LIGHTS - ON
  - 1.B. SWITCH S2 - SELECT RUNWAY LIGHT INTENSITY, 10-30-100% IN MANUAL & TIME RELAY POSITION
2. AUTOMATIC - SWITCH S1 - SET TO AUTO
  - 2.A. RADIO CONTROLLER
    - 2.A.1. RELAY RR1 ACTIVATED
      - 2.A.1.1. RUNWAY LIGHTS - ON 10% INTENSITY
      - 2.A.1.2. TAXIWAY LIGHTS - ON 10% INTENSITY
      - 2.A.1.3. WIND CONE LIGHTS - ON 100% INTENSITY
    - 2.A.2. RELAY RR1 & RR2 ACTIVATED
      - 2.A.2.1. RUNWAY LIGHTS - ON 30% INTENSITY
      - 2.A.2.2. TAXIWAY LIGHTS - ON 30% INTENSITY
      - 2.A.2.3. WIND CONE LIGHTS - ON 100% INTENSITY
    - 2.A.3. RELAY RR1, RR2, & RR3 ACTIVATED
      - 2.A.3.1. RUNWAY LIGHTS - ON 100% INTENSITY
      - 2.A.3.2. TAXIWAY LIGHTS - ON 100% INTENSITY
      - 2.A.3.3. WIND CONE LIGHTS - ON 100% INTENSITY
    - 2.A.4. RELAY RR1, RR2, & RR3 DEACTIVATED BY INTERNAL TIMER
      - 2.A.4.1. RUNWAY LIGHTS - OFF
      - 2.A.4.2. TAXIWAY LIGHTS - OFF
      - 2.A.4.3. WIND CONE LIGHTS - OFF
  3. CLOSING SWITCH S4 WILL NOT OVERRIDE AUTOMATIC OPERATION BY THE RADIO CONTROLLER NOR MANUAL OPERATION AT THE CONTROL PANEL.
  4. SWITCH S3 ALLOWS MANUAL OR AUTOMATIC OPERATION OFF THE ROTATING BEACON. AUTOMATIC OPERATION CONTROLLED BY PHOTOCELL OR R/W AND T/W LIGHTING SYSTEMS. THE THERMOSTAT OPERATES THE STRIP HEATER IN MANUAL & AUTOMATIC POSITIONS



DESIGN RSG  
DRAWN JCC  
CHECKED RSG

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES  
NORTHERN REGION-DESIGN AND CONSTRUCTION-AVIATION



BY DATE REVISIONS

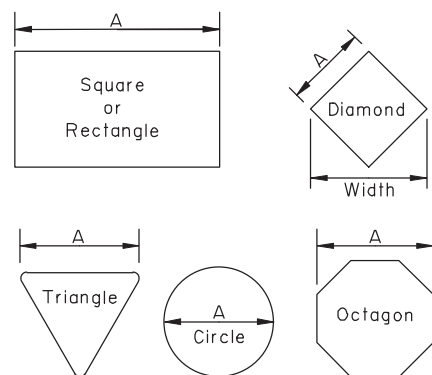
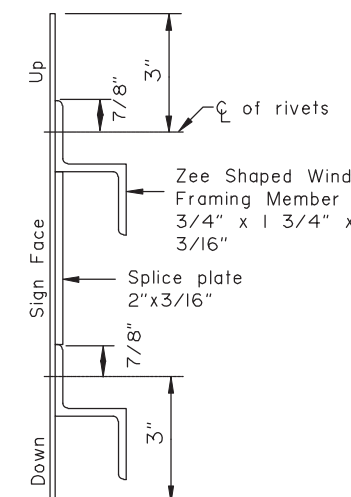
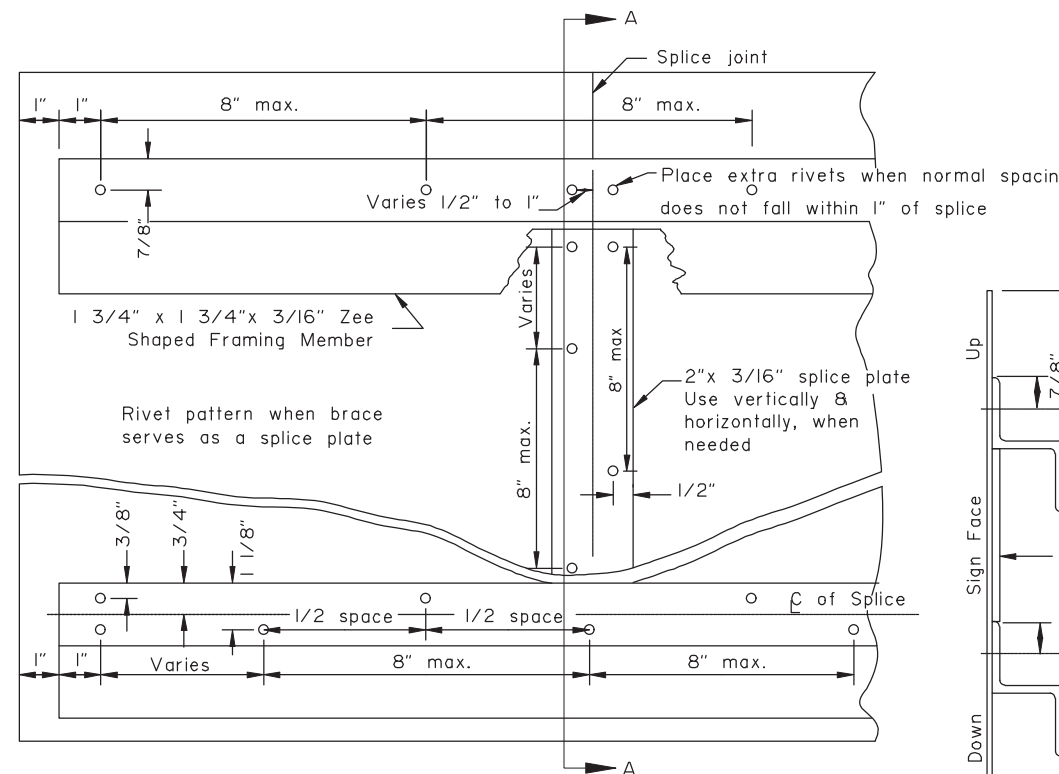
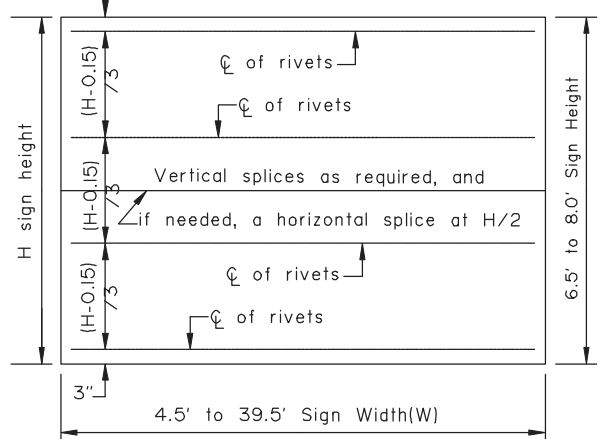
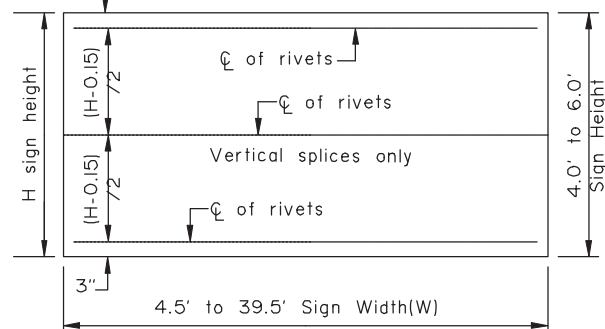
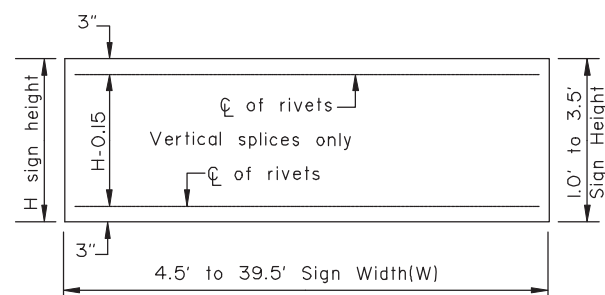
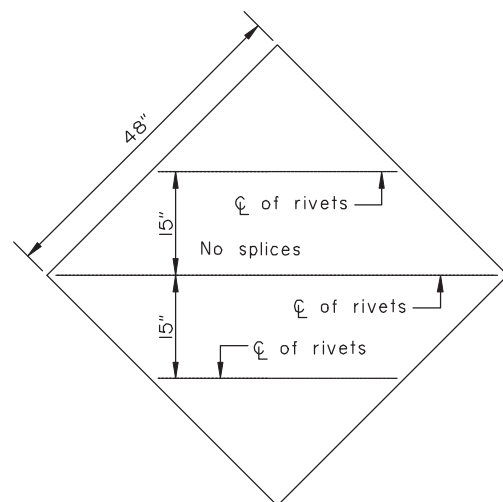
BREVIG MISSION AIRPORT  
AIRPORT LIGHTING AND RESURFACING  
AIP 3-02-0400-XX-202X/NFAPT00500  
LIGHTING CONTROLS DIAGRAM

SHEET  
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GENERAL NOTES

1. See the standard specifications for the aluminum alloys that you may use for sign sheeting and wind framing members.
2. Fabricate all signs from 0.125" thick aluminum sheeting.
3. Sign fabricators may use alternates to the zee shaped framing member with approval of the engineer, if the frame manufacturer certifies their design equals or exceeds the strength of the zee shaped design.
4. Install one piece wind framing members on all signs up to 23.5' wide. Use one splice in each wind frame on all signs wider than 23.5'. Locate splices at least 18" from all posts and panel edges. Stagger splices in adjacent framing members at least 8.0' apart.
5. Attach wind framing members with rivets or with an engineer approved, double sided, high strength, adhesive tape. Clean and handle sheeting and framing members and apply tape in accordance with the tape manufacturer's written instructions. Install two rivets in both ends of each framing member.
6. Use 3/16" diameter rivets conforming to aluminum alloy 6061-T6 for cold driven rivets, or aluminum alloy 6061-T43 for hot driven rivets.
7. Sign fabricators may use sign panels extruded with integral framing with approval of the engineer, if the manufacturer certifies their design equals or exceeds the strength of the 0.125" thick panel with framing attached to it.
8. Frame all signs taller than 8.0' with five wind framing members located (H-0.15)/4 spaces. If needed, make a horizontal splice at the middle wind frame.
9. Do not use round pipes for sign supports.



Maximum size unframed signs using 0.125" thick aluminum sheeting.	
Sign Shape	A
Squares, Shields, and Route Markers	48"
Rectangles	48"
Diamonds	48"
Triangles	48"
Rounds and Octagons	48"

Install wind framing on all signs that exceed the dimensions listed.

LIGHT SIGNS

WIND FRAMING LOCATIONS

RIVET DETAIL FOR ZEE SHAPED WIND FRAMING & SPLICE PLATE

SECTION A-A

Note: Drawing not to scale

State of Alaska DOT&PF  
ALASKA STANDARD PLAN  
SIGN FRAMING

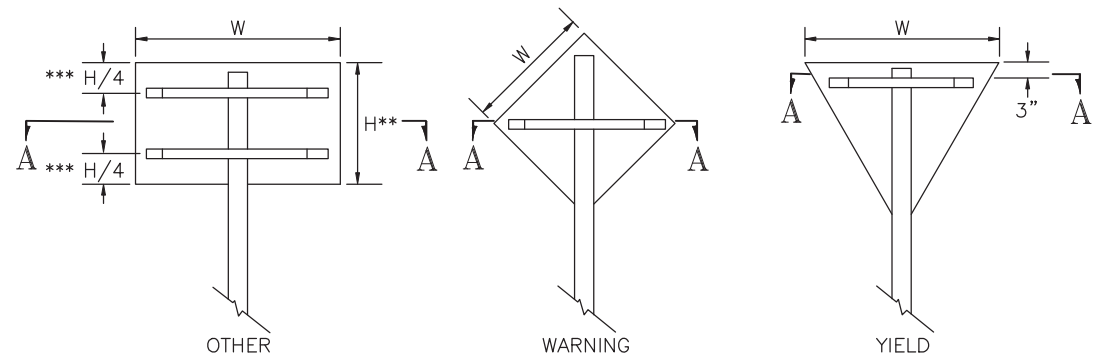
Adopted as an Alaska Standard Plan by: *Carolyn Morehouse*  
Carolyn Morehouse, P.E.  
Chief Engineer

Adoption Date: 7/17/2020

Last Code and Stds. Review  
By: WTH Date: 7/8/2020

Next Code and Standards Review date: 7/8/2030

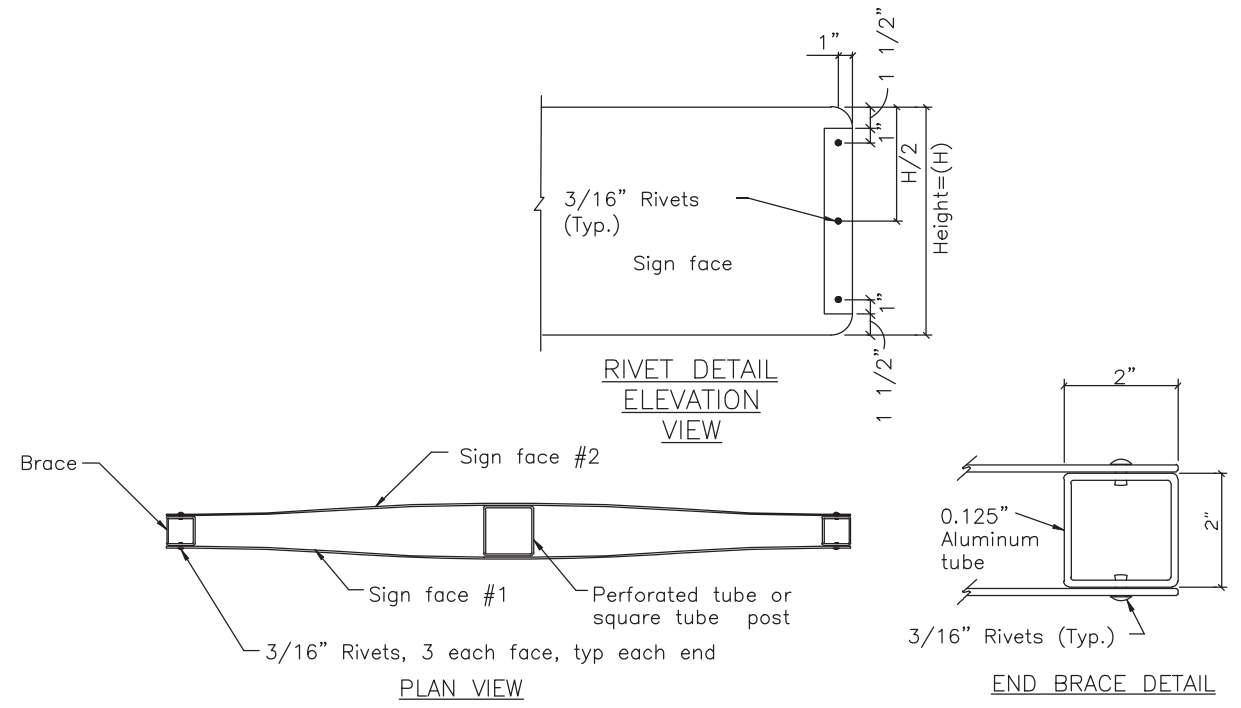




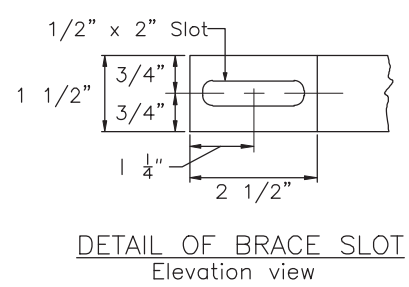
\*\*\* Use one brace when  $H \leq 18"$   
 Use two braces when  $18" < H < 48"$   
 Use three braces when  $H \geq 48"$

\*\* Position of brace may be varied to match  
 Pre-drilled mounting holes in panel

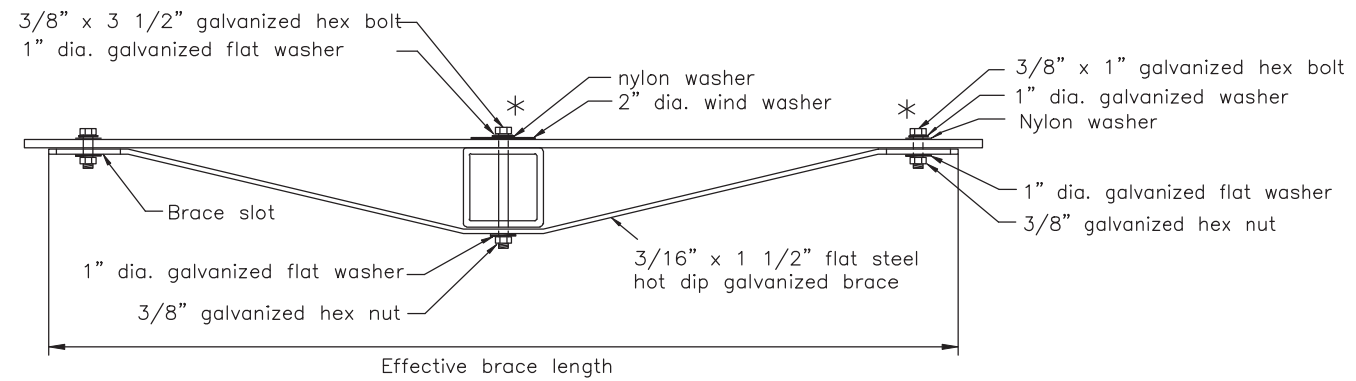
SIGN BRACING PLACEMENT



SMALL STREET NAME SIGN (D3-1, D3-1A, D3-1D) BRACING DETAILS



DETAIL OF BRACE SLOT  
Elevation view



TUBE POST SIGN BRACING SECTION A-A  
Plan view

\* Adjust location of bracing so that bolts and washers will miss the sign legend

Sign Width(W)	Effective Brace Length		
	Warning	Yield	Other
30"	36"	24"	24"
36"	42"	30"	30"
42"	48"	-	36"
48"	Two posts	36"	42"

< 30" No bracing required and use square tube

Note: Drawing not to scale

State of Alaska DOT&PF  
 ALASKA STANDARD PLAN

**BRACING FOR SIGNS  
 MOUNTED ON SINGLE POST**

Adopted as an Alaska Standard Plan by: *Carolyn Morehouse*  
 Carolyn Morehouse, P.E.  
 Chief Engineer

Adoption Date: 7/17/2020

Last Code and Stds. Review  
 By: WTH Date: 7/8/2020

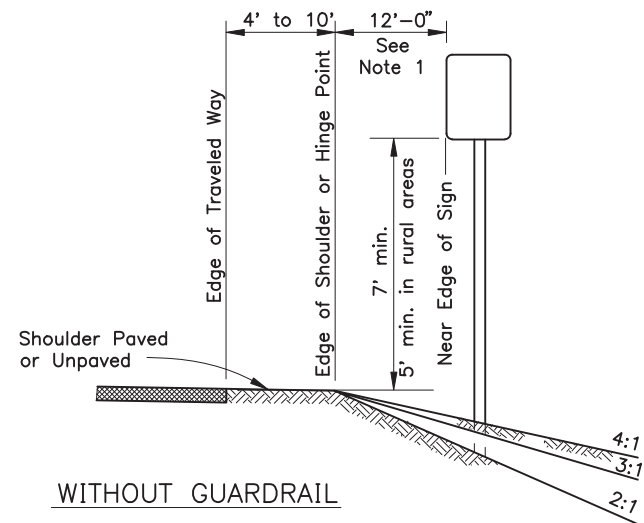
Next Code and Standards Review date: 7/8/2030

S-01.02

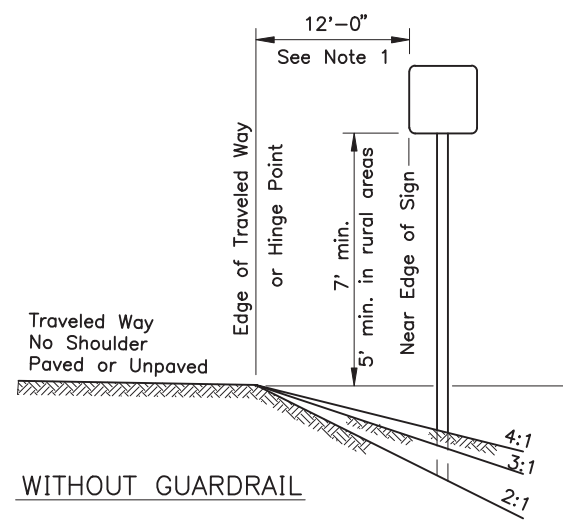


# S-05.02

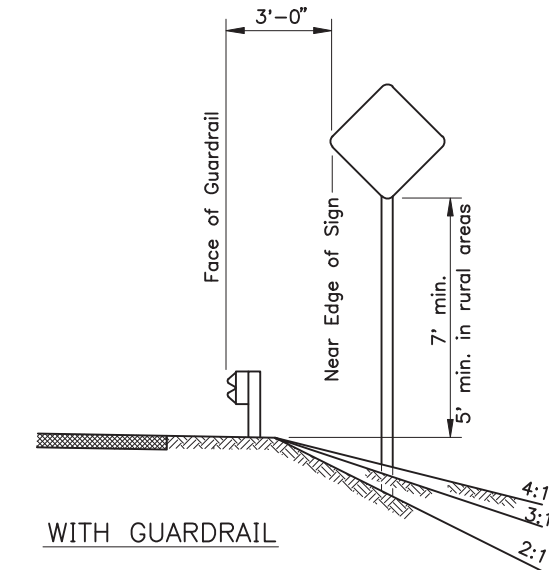
SHEET  
1 of 1



**WITHOUT GUARDRAIL**  
SUBGRADES OVER 28', ALL SLOPES



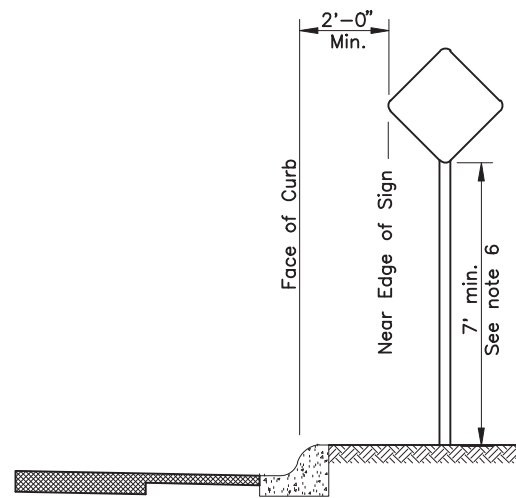
**WITHOUT GUARDRAIL**  
SUBGRADES 24' TO 28', ALL SLOPES



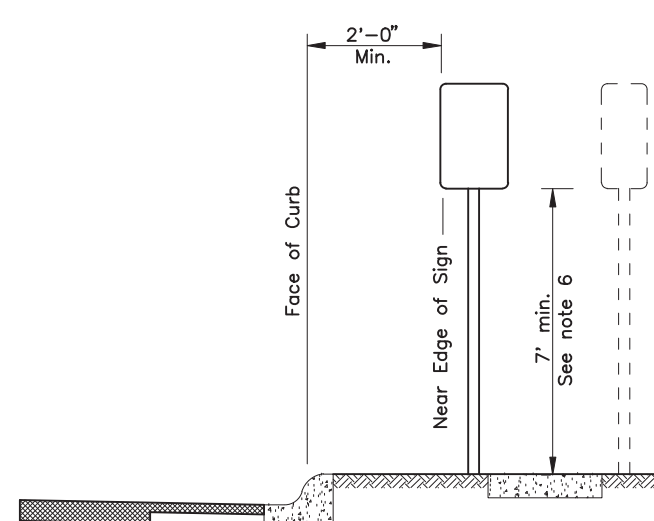
**WITH GUARDRAIL**  
ALL SUBGRADES, ALL SLOPES

## GENERAL NOTES

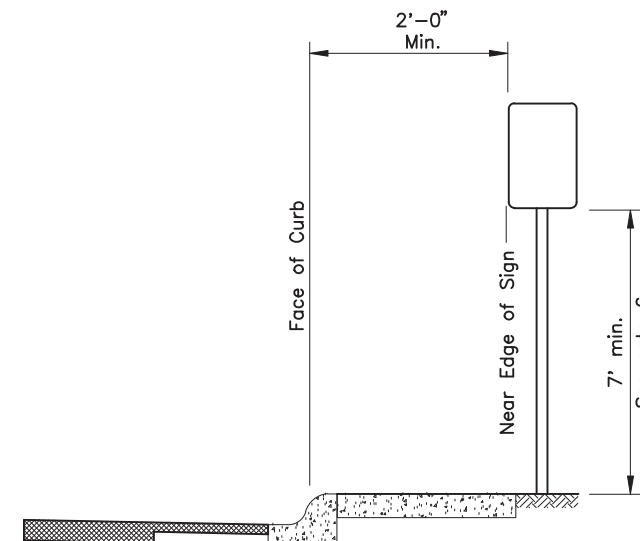
1. Unless shown otherwise on the plans, the standard sign offset is 12'. The minimum is 6' where shoulder width is 6' or greater.
2. Add 6" to mounting height on unpaved roads.
3. If signs extend over bike paths, the minimum vertical clearance is 8' 0".
4. When signs are placed 30' or more from the edge of traveled way, mount them with the bottom of the sign at least 5' above the road surface at the near edge of the road.
5. When multiple hinged sign supports are used, mount hinges at least 7' above the ground.
6. Minimum mounting height is 7'-0" where parking or pedestrian movements are likely to occur, or where signs extend over sidewalks.
7. For construction signs in rural areas, mounting height shall be 7' minimum.



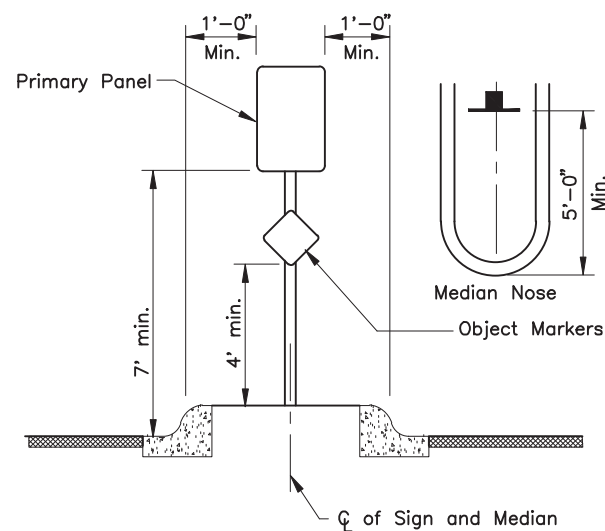
**CURB WITHOUT SIDEWALK**



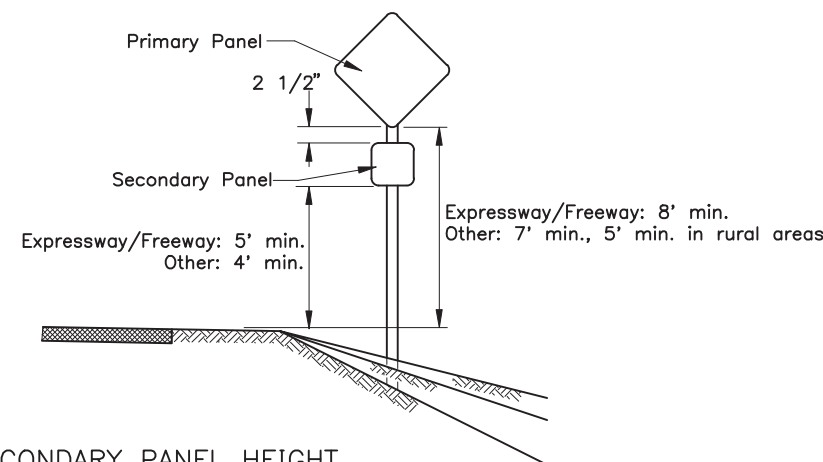
**CURB WITH PARKWAY AND SIDEWALK**  
(If R/W width permits, signs should be placed behind sidewalk.)



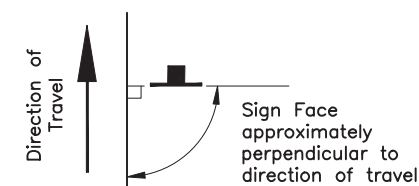
**CURB WITH SIDEWALK WITHOUT PARKWAY**



**RAISED MEDIANS**  
Minimum 4' Width for Signing



**SECONDARY PANEL HEIGHT**  
ALL TWO PANEL MOUNTING



**SIGN POSITIONING**

State of Alaska DOT&PF  
ALASKA STANDARD PLAN

POST MOUNTED SIGN  
OFFSET AND HEIGHT

Adopted as an Alaska  
Standard Plan by *Carolyn Morehouse*  
Carolyn Morehouse, P.E.  
Chief Engineer

Adoption Date: 7/17/2020

Last Code and Stds. Review  
By: KLK Date: 7/8/2020

Next Code and Standards Review Date: 7/8/2030

S-05.02

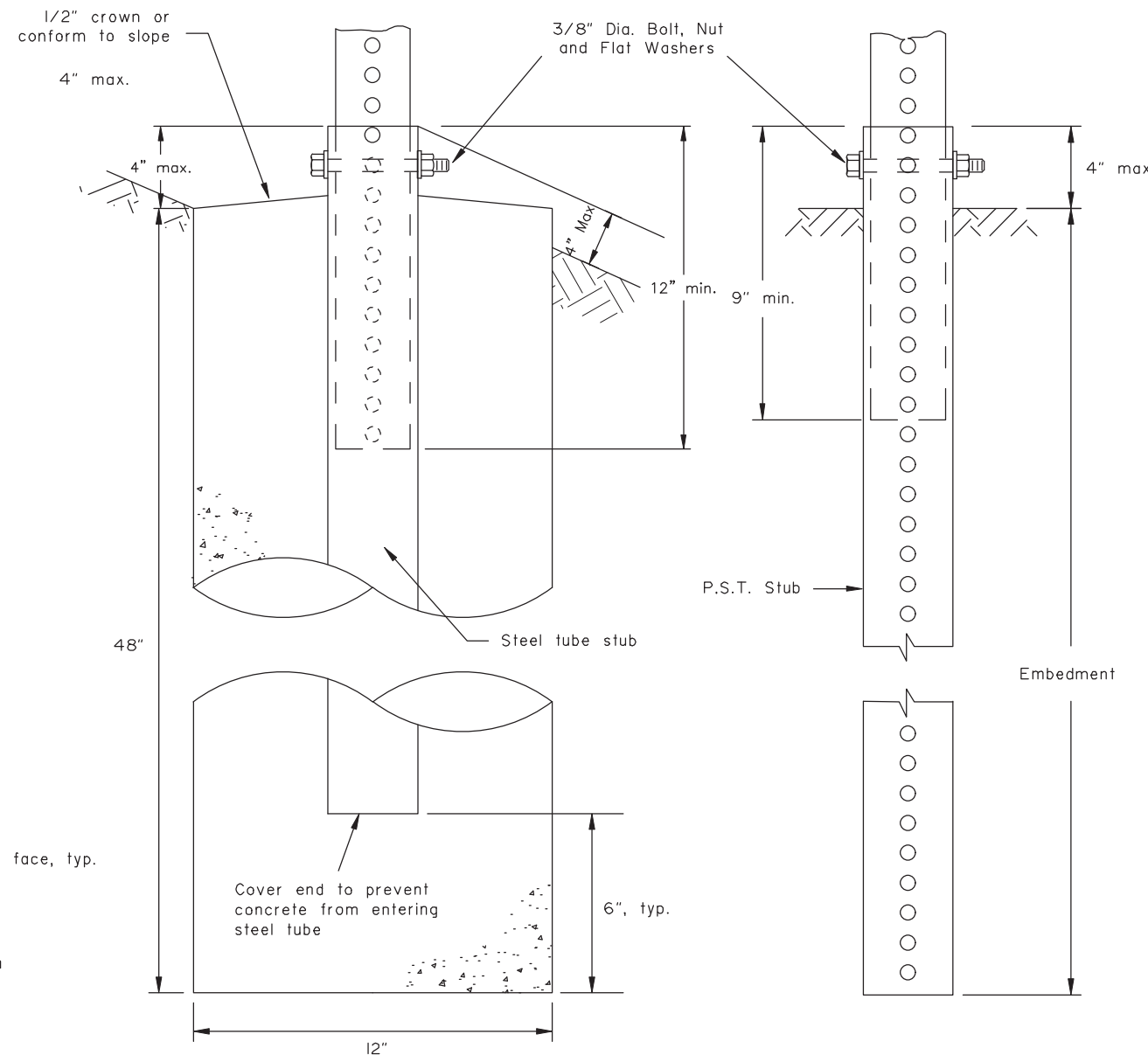
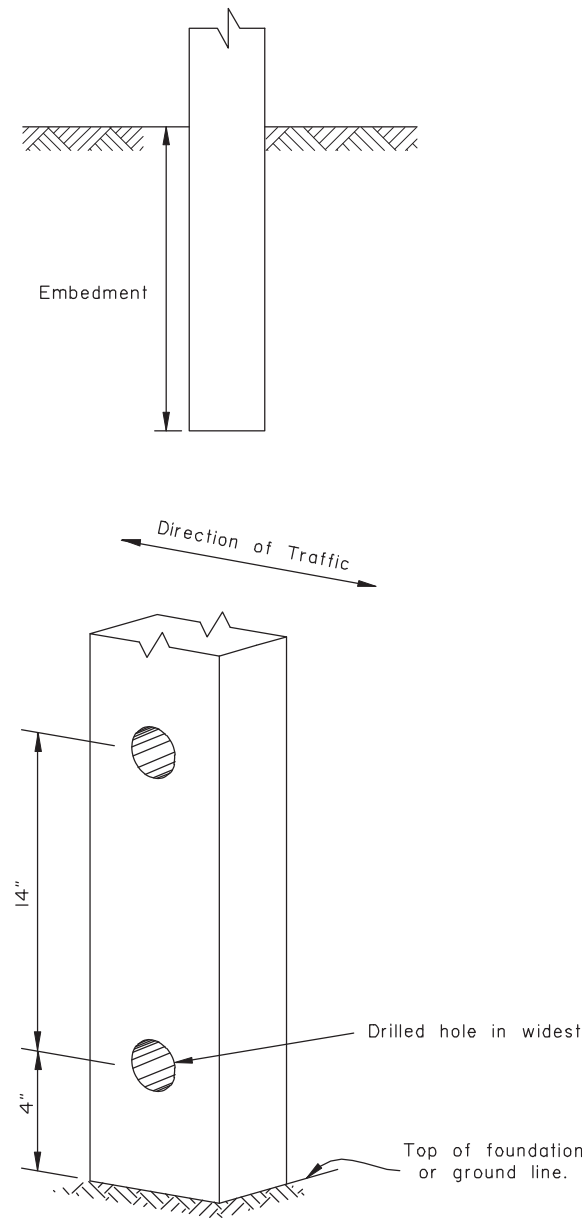


**GENERAL NOTES:**

1. Sign shall be placed symmetrically around posts and refer to Standard Plan S-00 for sign framing details.
2. See plans for type of post, size and embedment type.
3. To maintain crashworthiness, install no more than the number of P.S.T.s or wood posts specified in the tables within 7' of each other.
4. Concrete shall be class B.
5. Do not use the supports on this drawing for multiple support signs if supports are separated by more than 7 feet.
6. Treat all field cuts and field drilled holes in wood posts in accordance with Section 730-2.04 of the Standard Specifications.

**SIGN POST SPACING NOTES:**

1. Install sign support in accordance with the table below, unless otherwise required by plans or specifications.
2. Exceptions:
  - a. Use one post for all E5-1 gore signs, regardless of width.
  - b. Use one 2.5" P.S.T. for all STOP signs, with or without street name signs.
3. Supports placed within 7' of each other must be acceptable for that use. See tables below for the sizes of wood posts and P.S.T.s that may be used within 7'. See Manufacturer's documentation for breakaway couplings and tubes that may be used within 7'.
4. See Standard Plan S-31 for frangible couplings, hinges, and foundations for tube and W-shape sign supports.



**SLEEVE TYPE  
CONCRETE FOUNDATION**

**SLEEVE TYPE\*  
SOIL EMBEDMENT**

WOOD SIGN POSTS			
SIZE	HOLE DIA.	EMBEDMENT*	NO. OF POSTS WITHIN 7 Ft. PATH
4"x4"	NONE	4'-1"	2
4"x6"	1 1/2"	5'-3"	2
6"x6"	1 1/2"	4'-9"	1
6"x8"	3"	4'-9"	1

\* Embedment depth applies in both strong and weak soil.

**WOOD POSTS**

PERFORATED STEEL TUBES (P.S.T.)		
POST SIZE	Embedment Depth	No. of P.S.T.s permitted within 7 ft path
1 1/2" x 1 1/2"	4'-8"	2
1 3/4" x 1 3/4"	4'-6"	2
2" x 2"	4'-3"	2
2 1/4" x 2 1/4"	5'-0"	1
2 1/2" x 2 1/2"	4'-6"	1

\* Use 3"x3"x3/16" Stub for 2 1/2"x2 1/2" PST Applications.

**PERFORATED STEEL TUBE (PST) POSTS**

TUBE SIGN POST SPACING								
Sign Width (feet)	No. of Posts	Distance Between Posts	Sign Overhang	Post Type				Notes
				P.S.T.	Wood	Steel Tube	W-Shape	
0.5 to 4.0	1	-	0.5W	X	X	X		See Note 2.
4.5 to 10.0	2	0.6W	0.2W	X	X	X		See Note 3.
10.5 to 11.0	2	6	Varies	X	X	X		See Note 3.
11.5 to 13.0	2	8	Varies				X	
13.5 to 20.0	2	0.6W	0.2W				X	
20.5 to 22.5	3	8	Varies				X	
23.0 to 29.5	3	0.35W	0.15W				X	
30.0 to 31.5	4	8	Varies				X	
32.0 to 40.0	4	0.25W	0.125W				X	

**TUBE SIGN POST SPACING**

Note: Drawing not to scale

**State of Alaska DOT&PF  
ALASKA STANDARD PLAN  
LIGHT SIGN STRUCTURE  
POST EMBEDMENT**

Adopted as an Alaska Standard Plan by: *Carolyn Morehouse*  
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Chief Engineer

Adoption Date: 7/17/2020

Last Code and Stds. Review  
By: WTH Date: 7/8/2020

Next Code and Standards Review date: 7/8/2030