

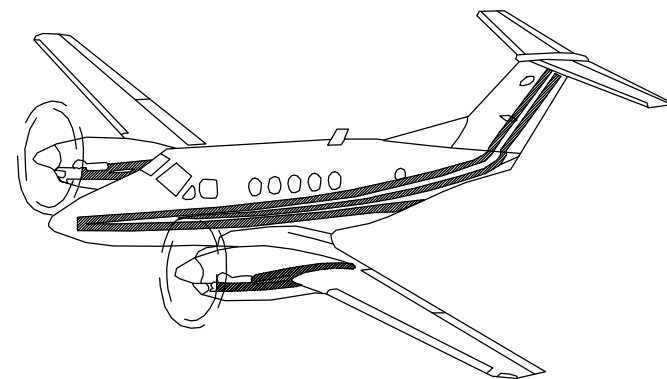
# PROPOSED AIRPORT PROJECT

## TOM MADSEN (DUTCH HARBOR) AIRPORT

### UNALASKA TAXIWAY AND APRON REHABILITATION

AIP NO. 3-02-0082-\_\_\_\_-202\_

PROJECT NO. SFAPT00178

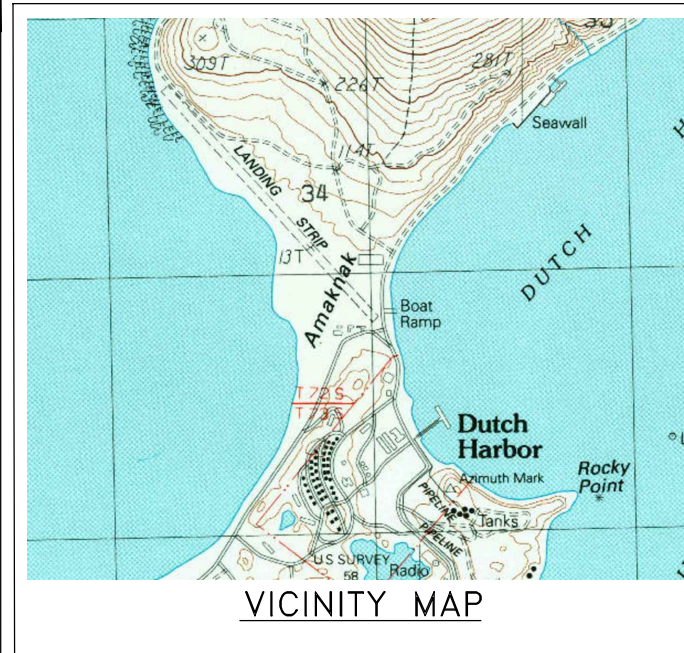
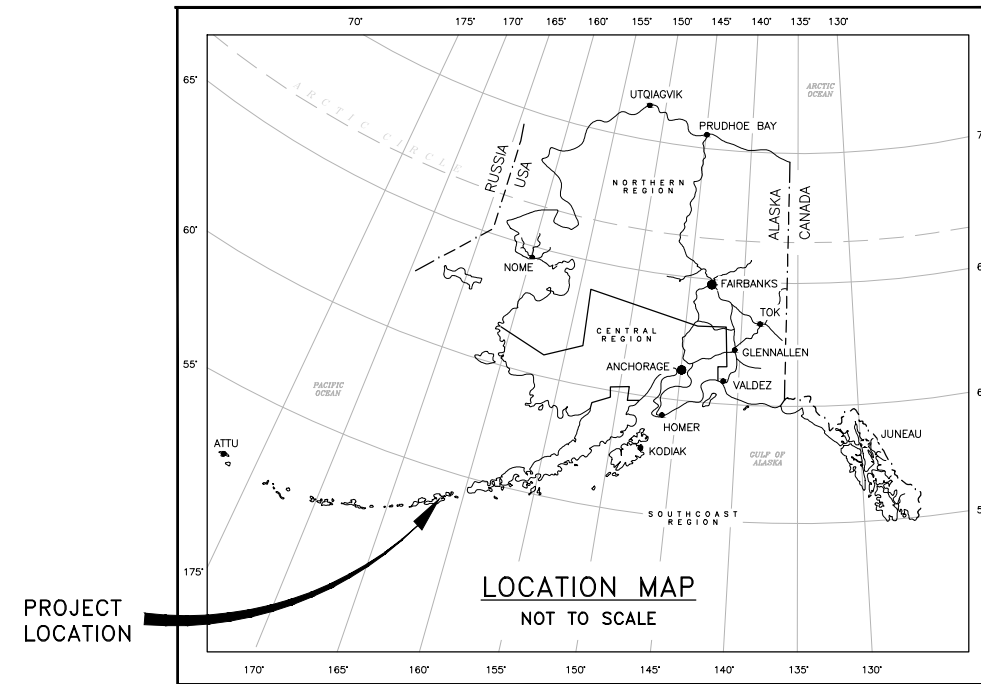


BRAN P. POLLARD, P.E., DOT&PF PROJECT MANAGER  
 LAURA NEWTON, P.E., DESIGNER/DESIGN ENGINEER, STANTEC

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

APPROVED BY: \_\_\_\_\_ DATE \_\_\_\_\_  
 KIRK MILLER, P.E., PRECONSTRUCTION ENGINEER, SOUTHCOAST REGION

ACCEPTED FOR CONSTRUCTION: \_\_\_\_\_ DATE \_\_\_\_\_  
 CHRISTOPHER GOINS, P.E., C.M., REGIONAL DIRECTOR, SOUTHCOAST REGION



INDEX OF SHEETS	
SHEET NO.	DESCRIPTION
1	COVER
2	ESTIMATE OF QUANTITIES
3	PROJECT LAYOUT, LEGEND, AND ABBREVIATIONS
4	SURVEY CONTROL SHEET
5	CONSTRUCTION SAFETY AND PHASING PLAN OVERVIEW
6	CONSTRUCTION SAFETY AND PHASING PLAN NOTES
7	CONSTRUCTION SAFETY AND PHASING PLAN – PHASE 1
8	CONSTRUCTION SAFETY AND PHASING PLAN – PHASE 2
9	CONSTRUCTION SAFETY AND PHASING PLAN – PHASE 3
10	CONSTRUCTION SAFETY AND PHASING PLAN – PHASE 4
11	CONSTRUCTION SAFETY AND PHASING PLAN – DETAILS
12	TYPICAL SECTIONS
13	TAXIWAYS A AND C GRADING
14	TERMINAL APRON GRADING
15	INFIELD GRADING
16	TAXIWAY B AND HANGAR APRON GRADING
17	TAXIWAYS A AND C MARKING PLAN
18	TAXIWAY B MARKING PLAN
19	MARKING DETAILS
20	TRENCH DRAIN AND PAVEMENT DETAILS
21	MISCELLANEOUS DETAILS
22	EROSION AND SEDIMENT CONTROL PLAN OVERVIEW
23	EROSION AND SEDIMENT CONTROL PLAN – PHASE 1
24	EROSION AND SEDIMENT CONTROL PLAN – PHASE 2
25	EROSION AND SEDIMENT CONTROL PLAN – PHASE 3
26	EROSION AND SEDIMENT CONTROL PLAN – PHASE 4
E1	ELECTRICAL LEGEND AND NOTES
E2	ELECTRICAL SITE DEMOLITION PLAN
E3	ELECTRICAL NEW WORK PLAN
E4-E7	ELECTRICAL DETAILS
E8-E9	ELECTRICAL SCHEDULES

PLANS DEVELOPED BY: STANTEC CONSULTING SERVICES, INC. 725 EAST FIREWEED LANE, SUITE 200, ANCHORAGE, AK 99503-2245 907-276-4245 CERTIFICATE OF AUTHORIZATION #126386  
 U:\2073017130\drawing\C\Sheets\00178\_C\_EST\_QTY.dwg 8/20/2024, 2:28 PM

ESTIMATED QUANTITIES			
ITEM NO	PAY ITEM	PAY UNIT	QUANTITY
D702.030.0000	TRENCH DRAIN	LF	160
D705.010.0012	UNDERDRAIN, HDPE, 12-INCH	LF	80
G100.010.0000	MOBILIZATION AND DEMOBILIZATION	LS	ALL REQ'D
G115.010.0000	WORKER MEALS AND LODGING, OR PER DIEM	LS	ALL REQ'D
G130.010.0000	FIELD OFFICE	LS	ALL REQ'D
G130.020.0000	FIELD LABORATORY	LS	ALL REQ'D
G130.060.0000	NUCLEAR TESTING EQUIPMENT STORAGE SHED	EACH	1
G130.090.0000	ENGINEERING COMMUNICATIONS	CS	ALL REQ'D
G131.010.0000	ENGINEERING TRANSPORTATION (TRUCK)	EACH	2
G135.010.0000	CONSTRUCTION SURVEYING BY THE CONTRACTOR	LS	ALL REQ'D
G200.010.0000	CONTRACTOR QUALITY CONTROL PROGRAM	LS	ALL REQ'D
G210.010.0000	CONTRACTOR SAFETY PLAN COMPLIANCE DOCUMENT	LS	ALL REQ'D
G700.010.0000	AIRPORT FLAGGER	CS	ALL REQ'D
L108.010.2008	UNDERGROUND CABLE #8 AWG, COPPER, 5KV FAA TYPE C, L-824	LF	4,000
L108.030.0006	#6 BARE COPPER GROUND CONDUCTOR	LF	2,000
L108.070.0000	GROUND ROD	EACH	6
L110.030.1002	RIGID STEEL CONDUIT, 2-INCH	LF	260
L110.080.1002	HDPE CONDUIT, 2-INCH	LF	1,240
L125.030.0000	MEDIUM INTENSITY RUNWAY EDGE AND THRESHOLD LIGHT, L-861 AND L-861E	EACH	1
L125.040.0000	TAXIWAY EDGE LIGHT, L-861T	EACH	46
L125.070.0000	REMOVE RUNWAY AND TAXIWAY LIGHT	EACH	15
L125.130.0000	AIRPORT SIGN, L-858	EACH	5
L125.170.0000	SPARE PARTS	CS	ALL REQ'D
L125.210.0000	ADJUST RUNWAY AND TAXIWAY LIGHT	EACH	13

ESTIMATING FACTORS		
ITEM NO	ITEM	FACTOR/QUANTITY
P401.010.0030	HOT MIX ASPHALT TYPE II, CLASS A	2.052 TON/CY
P401.020.5228	ASPHALT BINDER, PG 52-28	6.00% OF P-401
P603.010.0010	TACK COAT, STE-1	0.83 LB/SY
T901.020.0000	SEEDING	5 LB/1000SF

ESTIMATED QUANTITIES			
ITEM NO	PAY ITEM	PAY UNIT	QUANTITY
P152.010.0000	UNCLASSIFIED EXCAVATION	CY	200
P161.020.0000	RECYCLED ASPHALT PAVEMENT	CY	276
P162.010.0000	PAVEMENT COLD PLANING	SY	36,400
P170.020.0000	SOIL TESTING PROGRAM	CS	ALL REQ'D
P170.040.0000	SUPPLEMENTAL LABORATORY TEST	CS	ALL REQ'D
P170.080.0000	"HOT" MATERIAL OFFSITE TRANSPORTATION AND DISPOSAL	CS	ALL REQ'D
P171.010.0000	TEMPORARY CONTAMINATED SOIL STOCKPILE	CS	ALL REQ'D
P401.010.0030	HOT MIX ASPHALT TYPE II, CLASS A	TON	11,500
P401.020.5228	ASPHALT BINDER, PG 52-28	TON	690
P401.080.0000	HOT MIX ASPHALT PRICE ADJUSTMENT	CS	ALL REQ'D
P401.090.0000	ASPHALT MATERIAL PRICE ADJUSTMENT	CS	ALL REQ'D
P603.010.0010	TACK COAT, STE-1	TON	43
P620.010.0000	RUNWAY AND TAXIWAY PAINTING	SF	9,000
P620.050.0000	PAINTED MARKING REMOVAL	SF	319
P641.010.0000	EROSION, SEDIMENT, AND POLLUTION CONTROL ADMINISTRATION	LS	ALL REQ'D
P641.030.0000	TEMPORARY EROSION, SEDIMENT, AND POLLUTION CONTROL	LS	ALL REQ'D
P641.040.0000	TEMPORARY EROSION, SEDIMENT, AND POLLUTION CONTROL ADDITIVES	CS	ALL REQ'D
P641.060.0000	WITHHOLDING	CS	ALL REQ'D
P641.070.0000	SWPPP MANAGER	LS	ALL REQ'D
P641.110.0000	SWPPPTRACK	CS	ALL REQ'D
P650.020.0000	SOIL ANCHOR TIE-DOWN	SET	3
P670.010.0000	HAZARD MARKER BARRIER, PLASTIC	EACH	16
P671.020.0000	RUNWAY CLOSURE MARKER, ILLUMINATED	EACH	2
T901.020.0000	SEEDING	LB	165
T905.010.0010	TOPSOILING, CLASS A	SY	3,645

DESIGN LEN  
 DRAWN JAG  
 CHECKED EJG

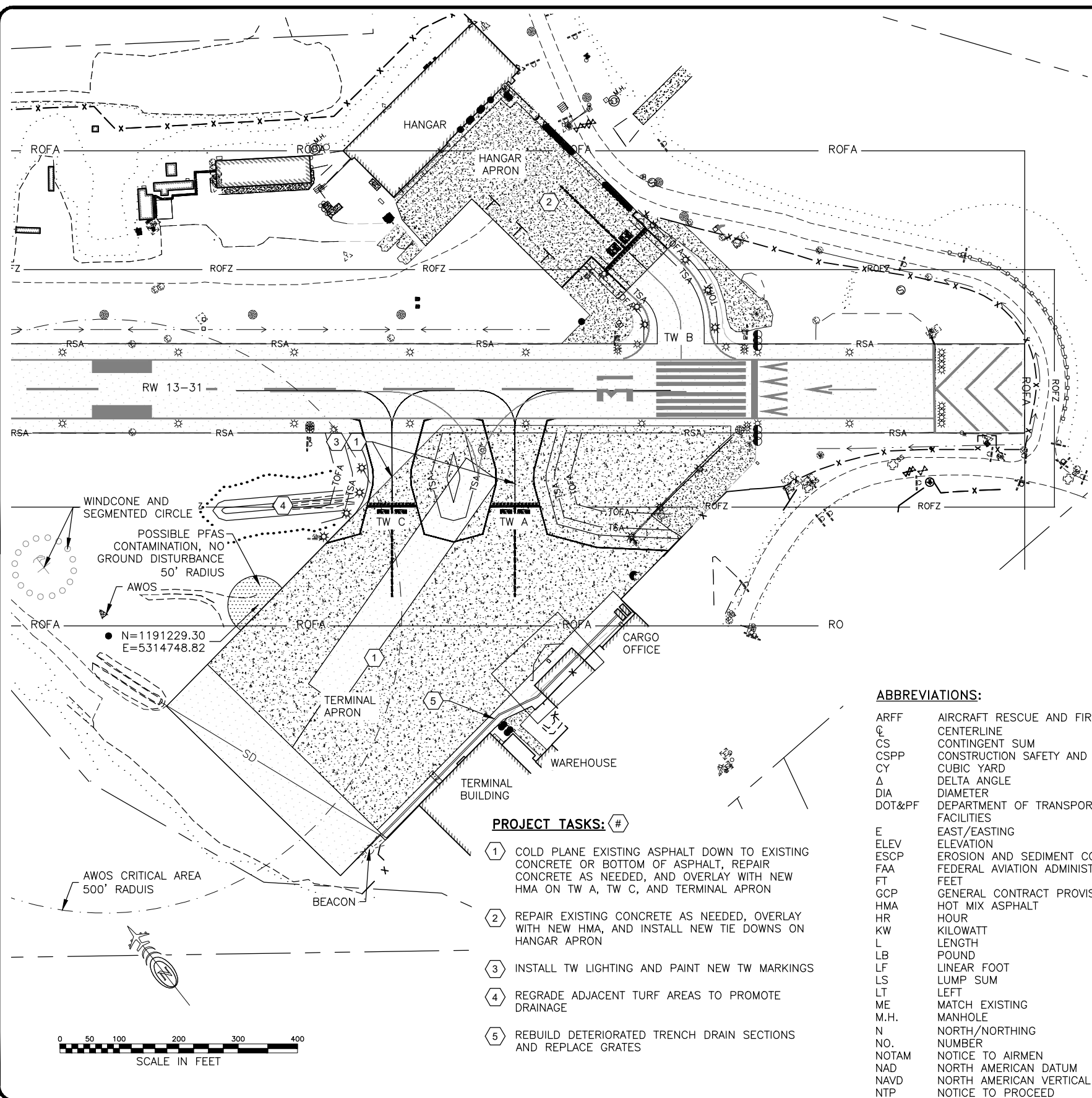
**STATE OF ALASKA**  
 DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES  
 SOUTHCOAST REGION-DESIGN AND CONSTRUCTION-AVIATION

BY	DATE	REVISIONS

**TOM MADSEN**  
**(DUTCH HARBOR) AIRPORT**  
 UNALASKA TAXIWAY AND APRON REHABILITATION  
 AIP 3-02-0082-\_\_\_\_-202\_/SFAPT00178  
 ESTIMATE OF QUANTITIES

SHEET  
**2**  
 OF  
**35**

8/20/2024, 2:28 PM  
 PLANS DEVELOPED BY: STANTEC CONSULTING SERVICES, INC. 725 EAST FIREWEED LANE, SUITE 200, ANCHORAGE, AK 99503-2245 907-276-4245 CERTIFICATE OF AUTHORIZATION #126386  
 U:\2073017130\drawing\00178\_C\_PROJ\_LAYOUT.dwg



- PROJECT TASKS: #**
- 1 COLD PLANE EXISTING ASPHALT DOWN TO EXISTING CONCRETE OR BOTTOM OF ASPHALT, REPAIR CONCRETE AS NEEDED, AND OVERLAY WITH NEW HMA ON TW A, TW C, AND TERMINAL APRON
  - 2 REPAIR EXISTING CONCRETE AS NEEDED, OVERLAY WITH NEW HMA, AND INSTALL NEW TIE DOWNS ON HANGAR APRON
  - 3 INSTALL TW LIGHTING AND PAINT NEW TW MARKINGS
  - 4 REGRADE ADJACENT TURF AREAS TO PROMOTE DRAINAGE
  - 5 REBUILD DETERIORATED TRENCH DRAIN SECTIONS AND REPLACE GRATES

**ABBREVIATIONS:**

ARFF	AIRCRAFT RESCUE AND FIREFIGHTING FACILITIES	NTS	NOT TO SCALE
C	CENTERLINE	NIC	NOT IN CONTRACT
CS	CONTINGENT SUM	OC	ON CENTER
CSPP	CONSTRUCTION SAFETY AND PHASING PLAN	PC	POINT OF CURVE
CY	CUBIC YARD	PCC	PORTLAND CEMENT CONCRETE
Δ	DELTA ANGLE	PI	POINT OF INTERSECTION
DIA	DIAMETER	PT	POINT OF TANGENCY
DOT&PF	DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES	R	RADIUS
E	EAST/EASTING	ROFA	RUNWAY OBJECT FREE AREA
ELEV	ELEVATION	ROFZ	RUNWAY OBSTACLE FREE ZONE
FAA	FEDERAL AVIATION ADMINISTRATION	RSA	RUNWAY SAFETY AREA
FT	FEET	RT	RIGHT
GCP	GENERAL CONTRACT PROVISION	RW	RUNWAY
HMA	HOT MIX ASPHALT	S	SOUTH
HR	HOUR	SC	SEDIMENT CONTROL
KW	KILOWATT	SF	SQUARE FEET
L	LENGTH	SREB	SNOW REMOVAL EQUIPMENT BUILDING
LB	POUND	STA	STATION
LF	LINEAR FOOT	SY	SQUARE YARD
LS	LUMP SUM	T	EXTERNAL TANGENT
LT	LEFT	TSA	TAXIWAY SAFETY AREA
ME	MATCH EXISTING	TOFA	TAXIWAY OBJECT FREE AREA
M.H.	MANHOLE	TW	TAXIWAY
N	NORTH/NORTHING	TYP	TYPICAL
NO.	NUMBER	W	WIDTH/WEST
NOTAM	NOTICE TO AIRMEN		
NAD	NORTH AMERICAN DATUM		
NAVD	NORTH AMERICAN VERTICAL DATUM		
NTP	NOTICE TO PROCEED		

**LEGEND:**

EXISTING	NEW	
		AIRPORT PROPERTY BOUNDARY
		ASPHALT
		AWOS
		BEACON
		BOLLARD
		BUILDING
		CATCH BASIN ROUND RIM
		CONCRETE
		CULVERT
		ELECTRIC RECEPTACLE
		ELECTRIC MANHOLE VAULT
		ELECTRIC PULL BOX
		ELECTRIC PEDESTAL
		ELECTRIC METER
		FENCE
		FIRE HYDRANT
		GRADE BREAK
		GRAVEL EDGE
		JUNCTION BOX SMALL
		JUNCTION BOX 25"X25" MIN.
		LIGHT POLE NO MAST ARM
		MAJOR CONTOUR
		MINOR CONTOUR
		POINT NUMBER
		RUNWAY OBSTACLE FREE ZONE
		RUNWAY OBJECT FREE AREA
		RUNWAY SAFETY AREA

**LEGEND:**

EXISTING	NEW	
		RW / TW EDGE
		RUNWAY EDGE LIGHT, BI-DIRECTIONAL
		SANITARY SEWER CLEANOUT
		SANITARY SEWER MANHOLE
		SATELLITE DISH
		SEGMENTED CIRCLE AND WIND CONE
		SIGN
		STORM DRAIN MANHOLE
		SURVEY: BLM MONUMENT
		SURVEY: FOUND MONUMENT
		SWALE FLOW LINE
		TAXIWAY EDGE LIGHT, OMNI-DIRECTIONAL
		TAXIWAY OBJECT FREE AREA
		TAXIWAY SAFETY AREA
		TELECOM. MANHOLE
		TELECOM. PEDESTAL
		THRESHOLD LIGHT
		TOE OF SLOPE
		TRANSFORMER
		TRENCH DRAIN
		UNDERGROUND ELECTRIC
		UNKNOWN MANHOLE
		WATER MANHOLE
		WATER VALVE
		WIND CONE

DESIGN LEN  
 DRAWN JAG  
 CHECKED EJG

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

NO.	BY	DATE	REVISIONS

**TOM MADSEN**  
**(DUTCH HARBOR) AIRPORT**  
 UNALASKA TAXIWAY AND APRON REHABILITATION  
 AIP 3-02-0082-\_\_\_-202\_/SFAPT00178  
 PROJECT LAYOUT, LEGEND, AND  
 ABBREVIATIONS

SHEET  
**3**  
 OF  
**35**

**HORIZONTAL CONTROL**

THIS PROJECT IS IN THE NAD83(2011) ALASKA STATE PLANE ZONE 10 GRID COORDINATE SYSTEM, EXPRESSED IN U.S. SURVEY FEET.

**BASIS OF COORDINATES**

THE BASIS OF COORDINATES IS PACS DUT E, A 4" BRASS DISK STAMPED DUT E 2010. THE NGS PUBLISHED COORDINATES WERE HELD FIXED AT 1192319.07N, 5314380.41E U.S. SURVEY FEET.

**VERTICAL CONTROL**

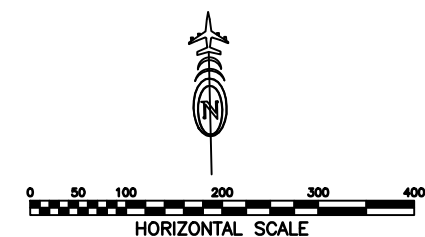
THE PROJECT VERTICAL DATUM IS NAVD88, BASED UPON HOLDING THE NGS PUBLISHED ORTHOMETRIC HEIGHT OF PACS DUT E FIXED AT 14.66 U.S. SURVEY FEET.

**PROJECT NOTES**

1. THE INFORMATION SHOWN HEREON IS BASED ON A FIELD SURVEY PERFORMED BY STANTEC CONSULTING INC. IN APRIL 2023.
2. THIS IS NOT A BOUNDARY SURVEY. PROPERTY INFORMATION SHOWN HEREON IS FOR GENERAL REFERENCE ONLY. THIS DRAWING WAS PREPARED WITHOUT THE BENEFIT OF A TITLE COMMITMENT AND MAY NOT SHOW EASEMENTS AND OTHER ENCUMBRANCES.
3. ALL DIMENSIONS, COORDINATES, AND ELEVATIONS SHOWN ARE IN U.S. SURVEY FEET UNLESS OTHERWISE NOTED.
4. RECOVERED AND SET CONTROL POINTS WERE SURVEYED USING REDUNDANT RTK GNSS TECHNIQUES USING TRIMBLE R12 RECEIVERS.
5. VERIFY HORIZONTAL AND VERTICAL CONTROL PRIOR TO USE.
6. TOPOGRAPHIC DATA WAS COLLECTED WITH RTK GNSS TECHNIQUES USING TRIMBLE R12 RECEIVERS.
7. UNDERGROUND UTILITY LOCATE MARKS WERE NOT PAINTED FOR THIS PROJECT. NO EVIDENCE OF RECENTLY CONSTRUCTED UNDERGROUND UTILITY INFRASTRUCTURE WAS OBSERVED DURING THE APRIL 2023 FIELD SURVEY.
8. TRENCH DRAIN FLOW LINE ELEVATIONS WERE COLLECTED USING RTK GNSS TECHNIQUES. THE DRAIN LINE WAS FILLED WITH DEBRIS, IN PLACES. ELEVATIONS ARE APPROXIMATE.

552

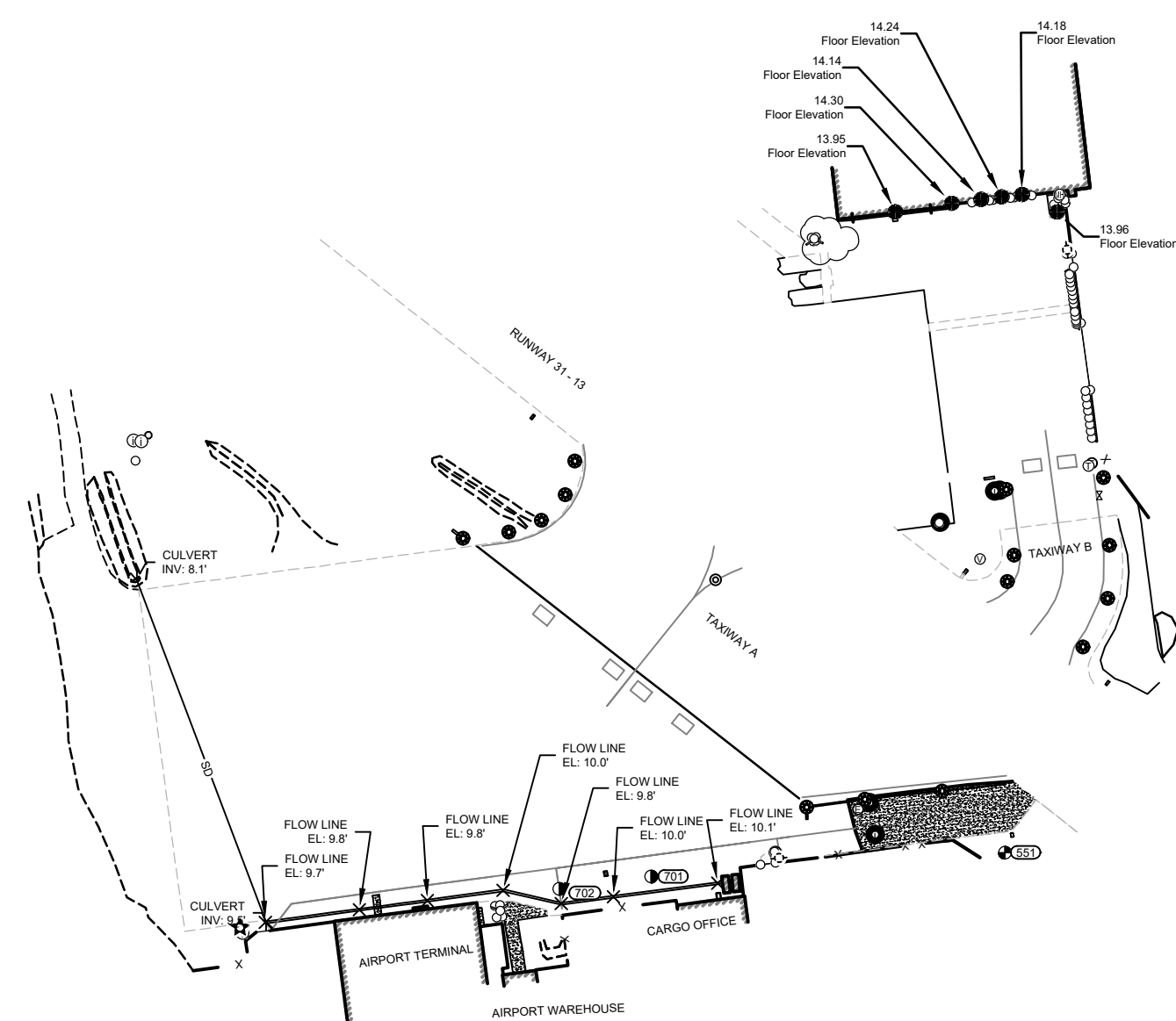
451  
553



**CONTROL POINT LEGEND**

- ALUMINUM CAP
- BRASS CAP
- ▲ SPIKE/MAG NAIL

CONTROL POINTS				
POINT	NORTHING	EASTING	ELEVATION	DESCRIPTION
451	1192347.01	5314329.88	14.58	SET SPIKE
551	1190878.59	5315550.90	12.88	SACS_4" BRASS CAP
552	1192451.75	5313512.30	11.82	SACS_4" BRASS CAP
553	1192319.07	5314380.41	14.66	PACS_4" BRASS CAP



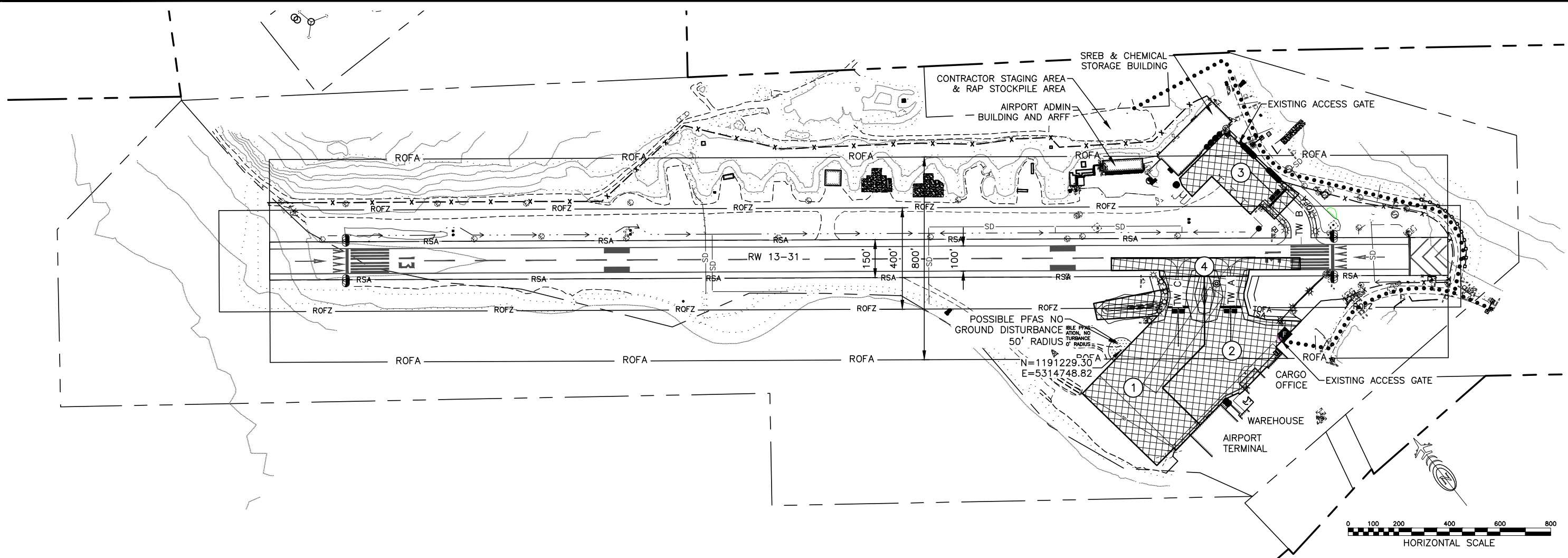
DESIGN LEN  
 DRAWN JAG  
 CHECKED EJG

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

BY	DATE	REVISIONS

**TOM MADSEN**  
**(DUTCH HARBOR) AIRPORT**  
 UNALASKA TAXIWAY AND APRON REHABILITATION  
 AIP 3-02-0082-\_\_\_\_-202\_/SFAPT00178  
 SURVEY CONTROL

SHEET 4 OF 35



**ANTICIPATED PHASING SCHEDULE**

- SPRING/SUMMER 2025 (45 DAYS): BEGIN PHASE 1. COLD PLANE EXISTING ASPHALT, REPAIR UNDERLYING CONCRETE AS NECESSARY AND OVERLAY WITH NEW HOT MIX ASPHALT. REPAIR EXISTING TRENCH DRAIN. EXCAVATE NEW DITCH, NEW TAXIWAY LIGHTING AND MARKINGS FOR TAXIWAY C.
- SUMMER 2025 (45 DAYS): BEGIN PHASE 2. COLD PLANE EXISTING ASPHALT, REPAIR UNDERLYING CONCRETE AS NECESSARY AND OVERLAY WITH NEW HOT MIX ASPHALT. REPAIR REMAINDER OF EXISTING TRENCH DRAIN. NEW TAXIWAY LIGHTING AND MARKINGS FOR TAXIWAY A.
- SUMMER/FALL 2025 (30 DAYS): BEGIN PHASE 3. REPAIR CONCRETE AS NECESSARY AND OVERLAY WITH NEW HOT MIX ASPHALT. REPLACE MARKINGS FOR TAXIWAY B.
- FALL 2025 (10 DAYS): BEGIN PHASE 4. CLOSE RUNWAY AT NIGHTTIME TO COMPLETE NEW LEAD IN LINES FOR TAXIWAY C AND A AND COMPLETION OF TAXIWAY AND RUNWAY EDGE LIGHTS.
- SEPTEMBER 30, 2025: PROJECT SUBSTANTIALLY COMPLETE.
- MAY 30, 2026: FINAL ACCEPTANCE.

CONSTRUCTION TASKS CAN BE MODIFIED, AS APPROVED BY THE ENGINEER. THE CONTRACTOR MAY SUBMIT ALTERNATE PLAN FOR APPROVAL.

ANTICIPATED SCHEDULE IS TO DEMONSTRATE APPROXIMATE PHASE DURATIONS. UPDATE DATES BASED ON CONTRACTOR'S APPROVED SCHEDULE AND ACTUAL CONTRACT COMPLETION DATES.

**LEGEND:**

- PROJECT AREA
- HAUL ROUTE (TWO WAY)
- CONSTRUCTION PHASE
- FLAGGER

DESIGN	LEN
DRAWN	JAG
CHECKED	EJG

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

NO.	BY	DATE	REVISIONS

**TOM MADSEN**  
**(DUTCH HARBOR) AIRPORT**  
UNALASKA TAXIWAY AND APRON REHABILITATION  
AIP 3-02-0082-\_\_\_\_-202\_/SFAPT00178  
CONSTRUCTION SAFETY AND  
PHASING PLAN OVERVIEW

SHEET  
**5**  
OF  
**35**



8/20/2024, 2:28 PM  
 PLANS DEVELOPED BY: STANTEC CONSULTING SERVICES, INC. 725 EAST FIREWEED LANE, SUITE 200, ANCHORAGE, AK 99503-2245 907-276-4245 CERTIFICATE OF AUTHORIZATION #126386  
 U:\2073017130\drawing\C\Sheets\00178\_C\_CSPP.dwg

**GENERAL SAFETY NOTES:**

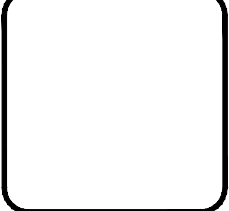
THE FOLLOWING NOTES APPLY TO WORK DONE IN THE AIRFIELD OPERATIONS AREA ONLY, UNLESS SPECIFICALLY STATED.

1. SUBMIT A SAFETY PLAN COMPLIANCE DOCUMENT (SPCD) IN ACCORDANCE WITH GENERAL CONTRACT PROVISIONS (GCP) SECTION 80. REFER TO FAA ADVISORY CIRCULAR (AC) 150/5370-2G FOR ADDITIONAL GUIDANCE ON PREPARING SPCD. DO NOT BEGIN CONSTRUCTION ACTIVITIES UNTIL THE ENGINEER APPROVES SPCD IN WRITING. ALLOW 30 DAYS FOR INITIAL REVIEW. INCLUDE CONSTRUCTION SEQUENCING. IF PLAN DIFFERS FROM WHAT IS SHOWN, OR IF SUBSEQUENT CHANGES ARE MADE, SUBMIT A REVISION TO THE ENGINEER FOR REVIEW AND APPROVAL. ALLOW 5 DAYS FOR REVIEW OF REVISIONS.
2. THE CONSTRUCTION SAFETY AND PHASING PLAN (CSPP) DOCUMENT (APPENDIX D OF THE SPECIFICATIONS) AND DRAWINGS DESCRIBE THE GENERAL SCOPE OF WORK FOR EACH PHASE. THESE SHEETS SHOW THE AIRPORT LAYOUT IN ITS EXISTING CONDITION. PARTICULAR RESTRICTIONS ARE NOTED IN THE PLAN FOR EACH PHASE.
3. COORDINATE WITH AIRPORT MANAGER PRIOR TO DEVELOPING A SCHEDULE. DEVELOP A CONSTRUCTION SCHEDULE TO MINIMIZE THE IMPACTS TO AIRPORT OPERATIONS AS MUCH AS PRACTICAL AND AS DIRECTED BY ENGINEER. THE CONSTRUCTION SCHEDULE SHOULD BE BASED ON THE PHASING SCHEDULE SHOWN, OR SUBMIT AN ALTERNATE PLAN FOR APPROVAL. PROVIDE SUFFICIENT SCHEDULE DETAIL TO ADDRESS REQUIRED SUBMITTALS, REVIEW PERIODS, MATERIAL PROCUREMENT, WORK, AND COORDINATION REQUIREMENTS.
4. WHENEVER THE PLANS OR SPECIFICATIONS CALL FOR COORDINATION, NOTIFICATION, CONTACT, OR OTHER INTERACTION WITH THE FEDERAL AVIATION ADMINISTRATION (FAA), AIRPORT MANAGEMENT, MAINTENANCE AND OPERATIONS, AIRPORT TENANTS, AIRPORT USERS, ANY LOCAL, STATE, OR FEDERAL AGENCY, GROUP, OR ASSOCIATION, OR THE GENERAL PUBLIC, SUCH ACTIVITY SHALL BE DONE THROUGH, IN THE PRESENCE OF, OR WITH THE WRITTEN APPROVAL OF THE ENGINEER. ALLOW SUFFICIENT TIME FOR COORDINATION AND APPROVALS WITHIN PROPOSED WORK SCHEDULES.
5. ALL WORKERS AND EQUIPMENT MUST CLEAR THE RSA, APPROACH SURFACES AND TOFA DURING ALL AIRCRAFT OPERATIONS, OR AS DIRECTED BY THE ENGINEER OR AIRPORT PERSONNEL. NO WORKERS OR EQUIPMENT MAY ENTER THE AIR OPERATIONS AREA UNTIL DIRECTED.
6. AS SHOWN, THE RSA IS 150 FEET WIDE, CENTERED ON THE ACTIVE RW, AND EXTENDS 300 FEET BEYOND RW THRESHOLDS. THE ROFA IS 800 FEET WIDE, CENTERED ON THE ACTIVE RW, AND EXTENDS 300 FEET BEYOND RW THRESHOLDS. SEE SHEET 11 FOR ADDITIONAL GROUND AND AIRSPACE RESTRICTIONS.
7. MARK OPEN TRENCHES WITH HAZARD MARKER BARRIERS, LIGHT WITH RED LIGHTS DURING HOURS OF RESTRICTED VISIBILITY OR DARKNESS. OPEN TRENCHES OR EXCAVATIONS ARE NOT PERMITTED WITHIN THE RSA OR TSA WHILE THE RW OR TW IS OPEN TO AIRCRAFT OPERATIONS.
8. REMOVE ALL FOREIGN OBJECTS AND DEBRIS (FOD) FROM ACTIVE SURFACES IMMEDIATELY UPON DISCOVERY OR NOTIFICATION. CONDUCT FOD INSPECTION AND RW/TW CLEANING REQUIRED PRIOR TO THE END OF EVERY SHIFT. PROVIDE A VACUUM SWEEPER TRUCK, (STREET SWEEPER) AS REQUIRED UNDER SECTION G-700-2.1. INCLUDE MAKE AND MODEL IN THE SPCD FOR APPROVAL. CLEANING IS SUBSIDIARY TO RELATED WORK. SEE GCP SECTION 40-05. FAILURE TO REMOVE FOD MAY BE CONSIDERED A SAFETY VIOLATION AS DETERMINED BY THE ENGINEER.
9. THE SPEED LIMIT ON THE AIRFIELD IS 25 MILES PER HOUR. SEE SECTION 80-05, THIRD PARAGRAPH REGARDING PENALTIES FOR VIOLATING CSPP REQUIREMENTS.
10. PROVIDE AIRPORT FLAGGER TO MONITOR COMMON TRAFFIC ADVISORY FREQUENCY (CTAF) ON 122.6 MHZ AND ADVISE CONSTRUCTION EQUIPMENT OPERATORS AT ALL TIMES DURING CONSTRUCTION. THE AIRPORT FLAGGER IS RESPONSIBLE FOR CLEARING ALL WORKERS AND EQUIPMENT FROM THE RSA AND TOFA FOR ALL AIRCRAFT OPERATIONS.
11. ALL WORKERS AND EQUIPMENT WITHIN THE ROFA, APPROACH SURFACES OR TOFA MUST REMAIN IN CONSTANT RADIO CONTACT WITH THE AIRPORT FLAGGER ON A FREQUENCY OTHER THAN THE CTAF, AS APPROVED BY THE FCC.

12. CARRY OUT CONTINUING COORDINATION THROUGH THE ENGINEER USING WEEKLY BRIEFINGS WITH AIRPORT MANAGEMENT, AIRPORT MAINTENANCE, FAA CONTRACTORS, AND AIRPORT USERS TO KEEP EVERYONE AWARE OF THE STATUS AND CHANGES OF AIRPORT SURFACES IN RELATION TO AIRCRAFT AND GROUND TRAFFIC. PROVIDE DETAILED DRAWINGS INDICATING TRAFFIC ROUTES FOR AIRCRAFT AND GROUND TRAFFIC. INDICATE AREAS CLOSED TO AIRCRAFT MOVEMENT AND PARKING. PROVIDE UPDATED DRAWINGS AS CONSTRUCTION PROCEEDS.
13. CONDUCT JOINT INSPECTIONS WITH THE PROJECT ENGINEER AND AIRPORT MANAGEMENT ON NEWLY CONSTRUCTED AIRPORT SURFACES. REMOVE ALL FOREIGN OBJECTS, CLEAN SURFACES AS REQUIRED, OR AS DIRECTED.
14. REPORT ANY SAFETY ISSUES TO THE ENGINEER AND AIRPORT MANAGER UPON DISCOVERY. TAKE IMMEDIATE ACTION TO RESOLVE SAFETY ISSUES AS DIRECTED.
15. PROVIDE WATER FOR DUST CONTROL AS REQUIRED, AND AS DIRECTED. DUST, SMOKE, STEAM, OR OTHER AIRBORNE PARTICULATES CAUSED BY CONTRACTOR ACTIVITIES MAY BE CONSIDERED A SAFETY VIOLATION AS DETERMINED BY THE ENGINEER.
16. FIELD VERIFY SUITABILITY OF HAUL ROUTES AND ANY STAGING AREAS SHOWN. DEVELOP AND MAINTAIN HAUL ROUTES AS REQUIRED. SEE STANDARD SPECIFICATIONS SECTIONS 40-05, 60-06 & 70-11a FOR STAGING AREA AND HAUL ROUTE REQUIREMENTS.
17. THE AWOS HAS A 500' CRITICAL AREA. THIS EQUIPMENT IS SENSITIVE TO DUST AND GROUND VIBRATION. COORDINATE WITH THE FAA THROUGH THE ENGINEER TO SCHEDULE EQUIPMENT MONITORING OR MAINTENANCE. APPROPRIATE MEASURES MUST BE IMPLEMENTED TO PROHIBIT SIGNIFICANT IMPACT TO THE AWOS. SEE CSPP NARRATIVE FOR ADDITIONAL DISCUSSION AND DUST CONTROL MEASURES.
18. DAILY APPROVALS TO OPEN THE RUNWAY & TAXIWAY FOR DAYTIME OR MEDEVAC OPERATIONS WILL NOT CONSTITUTE ACCEPTANCE FOR ANY TYPICAL SECTION, WORK, MATERIALS, OR RELIEVE THE CONTRACTOR OF AN CONTRACTUAL RESPONSIBILITY.
19. COORDINATE ANY REQUIRED UTILITY OUTAGES WITH AIRPORT MANAGEMENT, AIRPORT USERS, AND ANY AFFECTED PERSONS PRIOR TO SERVICE INTERRUPTION.
20. CONTRACTOR HAULING OPERATIONS ARE LIMITED TO THE HAUL ROUTES SHOWN ON THE PLANS. FOLLOWING CONSTRUCTION COMPLETION, TEMPORARY ACCESS ROUTES MUST BE REMOVED AND THE GROUND RESTORED TO ITS ORIGINAL CONDITION. SEE GCP 70-11(a).
21. DAMAGE TO FAA FACILITIES INCLUDING POWER DISRUPTION MUST BE IMMEDIATELY REPAIRED IN A MANNER ACCEPTABLE TO THE FAA AT THE CONTRACTOR'S EXPENSE.
22. TAXIING AIRCRAFT ALWAYS HAVE THE RIGHT OF WAY. GROUND VEHICLES MUST YIELD TO AIRCRAFT AT ALL TIMES. USE APPROVED AND MARKED HAUL ROUTES ONLY.
23. COORDINATE WITH THE AIRPORT MANAGER THROUGH THE ENGINEER.  
  
AIRPORT MANAGER CONTACT INFORMATION:  
DALE RUCKMAN                      PO BOX 920525  
(907) 581-1786                      DUTCH HARBOR, AK 99692
24. DUTCH HARBOR IS SERVED BY TWO FLIGHT SERVICE STATION (FSS)  
  
COLD BAY FSS (FROM 0900 LOCAL TO 1900 LOCAL)  
(800) 478-7250  
CTAF: 122.6 MHZ  
  
KENAI FSS  
(866) 864-1787

DESIGN LEN  
 DRAWN JAG  
 CHECKED EJG

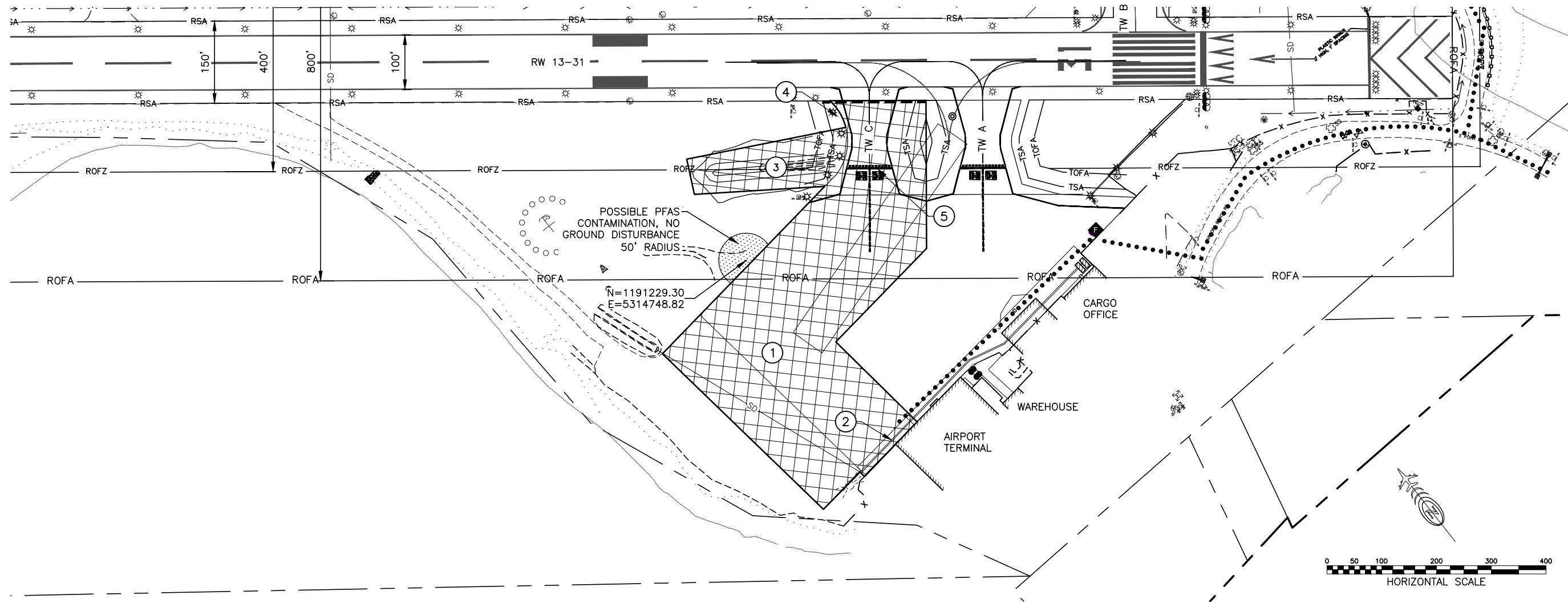
**STATE OF ALASKA**  
 DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES  
 SOUTHCOAST REGION-DESIGN AND CONSTRUCTION-AVIATION



BY	DATE	REVISIONS

**TOM MADSEN**  
**(DUTCH HARBOR) AIRPORT**  
 UNALASKA TAXIWAY AND APRON REHABILITATION  
 AIP 3-02-0082-\_\_\_\_-202\_/SFAPT00178  
 CONSTRUCTION SAFETY AND PHASING  
 PLAN NOTES

SHEET  
 6 / OF  
 35



**PHASE 1 SAFETY PLAN NOTES**

1. ALL WORKERS AND EQUIPMENT WILL REMAIN CLEAR OF THE RSA, ROFZ, & TOFA FOR AIRCRAFT OPERATIONS.
2. COORDINATE WITH AIRPORT MANAGEMENT FOR PROPER ISSUANCE OF NOTAMS FOR ALL WORK INCLUDING HAUL OPERATIONS.
3. TAKE ALL ACTIONS REQUIRED OR AS DIRECTED TO READY THE AIRFIELD TO ACCOMMODATE ALL MEDIVAC FLIGHTS IF NEEDED WITHIN 30 MINUTES OF NOTIFICATION. ANY AIRCRAFT DECLARING AN EMERGENCY WILL BE ALLOWED TO LAND.
4. AT THE END OF EACH SHIFT, CLEAN HAUL ROUTES WITHIN THE RSA, TSA, AND APRON AND RETURN TO PRE-EXISTING CONDITION.
5. PROVIDE WATER FOR DUST CONTROL AS REQUIRED, AND AS DIRECTED. DUST, SMOKE, STEAM, OR OTHER AIRBORNE PARTICULATES CAUSED BY CONTRACTOR ACTIVITIES MAY BE CONSIDERED A SAFETY VIOLATION AS DETERMINED BY THE ENGINEER.
6. THIS PROJECT INCLUDES WORK IN CLOSE PROXIMITY TO CRITICAL ELECTRONIC NAVIGATION AIDS (NAVAIDS) THAT ARE OWNED AND MAINTAINED BY THE FAA. PROTECTION OF THIS EQUIPMENT, AND KNOWLEDGE OF THE SURROUNDING CRITICAL AREAS IS ESSENTIAL TO AIRPORT SAFETY. THE ENGINEER MAY DIRECT THE SURVEYED MARKING OF THESE AREAS AS REQUIRED TO ENSURE THAT CONTRACTOR PERSONNEL ARE AWARE OF THE CRITICAL AREA BOUNDARIES.

**PHASE 1 CONSTRUCTION TASKS:**

- THE FOLLOWING LIST IS A GENERAL DESCRIPTION OF WORK TO BE COMPLETED IN THIS PHASE. IT IS NOT INTENDED AS A COMPREHENSIVE LIST OF ALL TASKS, OR RELATED WORK THAT WILL BE REQUIRED. THE LIST BELOW DOES NOT RELIEVE THE CONTRACTOR OF RESPONSIBILITY TO COORDINATE AND SCHEDULE THE WORK WITH AFFECTED INDIVIDUALS OR GROUPS, PRIOR TO BEGINNING WORK. INCLUDE ANY ADDITIONAL OR RELATED WORK AND GENERAL TASKS IN THE WORK SCHEDULE REQUIRED UNDER SECTION 80.
- 1 COLD PLANE EXISTING ASPHALT DOWN TO EXISTING CONCRETE. REPAIR UNDERLYING CONCRETE AS NEEDED. OVERLAY EXISTING CONCRETE WITH NEW HMA.
  - 2 REPAIR TRENCH DRAIN AS NEEDED.
  - 3 REGRADE DITCH
  - 4 CONSTRUCT NEW TW EDGE LIGHTING
  - 5 PAINT NEW TW MARKINGS

**PHASE 1 CLOSURES:**

- TW C (WEST HALF OF EXISTING TAXIWAY A)
- PORTION OF THE TERMINAL APRON

**LEGEND:**

- PHASE AREA
- HAUL ROUTE (TWO WAY)
- CONSTRUCTION TASK
- FLAGGER
- HAZARD MARKER BARRIER

**SURVEY NOTES:**

1. AFTER PAVEMENT COLD PLANING AND WHEN CONCRETE SURFACE IS EXPOSED, SURVEY THE TOP OF CONCRETE USING A 10-FOOT BY 10-FOOT GRID. PROVIDE A DIGITAL TERRAIN MODEL (DTM) OF THIS SURFACE TO THE DESIGNERS FOR REEVALUATION OF TERMINAL APRON GRADING. ANY REVISIONS TO THE TERMINAL APRON GRADING PLAN WILL BE TRANSMITTED TO THE ENGINEER WITHIN 5 WORK DAYS OF RECEIPT OF DTM.
2. SEE SPECIFICATION SECTION G-135 FOR ADDITIONAL INFORMATION

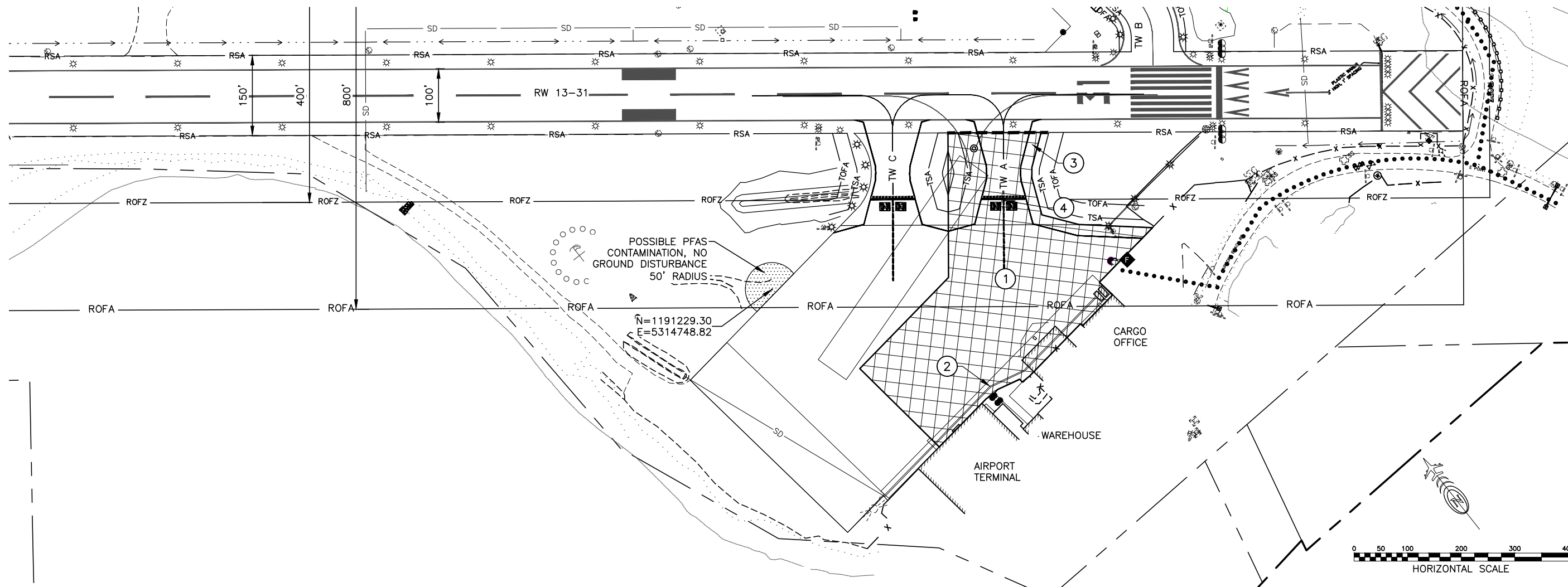
DESIGN	LEN
DRAWN	JAG
CHECKED	EJG

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

BY	DATE	REVISIONS

**TOM MADSEN**  
**(DUTCH HARBOR) AIRPORT**  
UNALASKA TAXIWAY AND APRON REHABILITATION  
AIP 3-02-0082-\_\_\_\_-202\_/SFAPT00178  
CONSTRUCTION SAFETY AND  
PHASING PLAN - PHASE 1

SHEET  
7  
OF  
35



**PHASE 2 SAFETY PLAN NOTES**

1. ALL WORKERS AND EQUIPMENT WILL REMAIN CLEAR OF THE RSA, ROFZ, & TOFA FOR AIRCRAFT OPERATIONS.
2. COORDINATE WITH AIRPORT MANAGEMENT FOR PROPER ISSUANCE OF NOTAMS FOR ALL WORK INCLUDING HAUL OPERATIONS.
3. TAKE ALL ACTIONS REQUIRED OR AS DIRECTED TO READY THE AIRFIELD TO ACCOMMODATE ALL MEDIVAC FLIGHTS IF NEEDED WITHIN 30 MINUTES OF NOTIFICATION. ANY AIRCRAFT DECLARING AN EMERGENCY WILL BE ALLOWED TO LAND.
4. AT THE END OF EACH SHIFT, CLEAN HAUL ROUTES WITHIN THE RSA, TSA, AND APRON AND RETURN TO PRE-EXISTING CONDITION.
5. PROVIDE WATER FOR DUST CONTROL AS REQUIRED, AND AS DIRECTED. DUST, SMOKE, STEAM, OR OTHER AIRBORNE PARTICULATES CAUSED BY CONTRACTOR ACTIVITIES MAY BE CONSIDERED A SAFETY VIOLATION AS DETERMINED BY THE ENGINEER.
6. THIS PROJECT INCLUDES WORK IN CLOSE PROXIMITY TO CRITICAL ELECTRONIC NAVIGATION AIDS (NAVAIDS) THAT ARE OWNED AND MAINTAINED BY THE FAA. PROTECTION OF THIS EQUIPMENT, AND KNOWLEDGE OF THE SURROUNDING CRITICAL AREAS IS ESSENTIAL TO AIRPORT SAFETY. THE ENGINEER MAY DIRECT THE SURVEYED MARKING OF THESE AREAS AS REQUIRED TO ENSURE THAT CONTRACTOR PERSONNEL ARE AWARE OF THE CRITICAL AREA BOUNDARIES.

**PHASE 2 CONSTRUCTION TASKS:**

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

- 1 COLD PLANE EXISTING ASPHALT DOWN TO EXISTING CONCRETE. REPAIR UNDERLYING CONCRETE AS NEEDED. OVERLAY EXISTING CONCRETE WITH NEW HMA.
- 2 REPAIR TRENCH DRAIN AS NEEDED.
- 3 CONSTRUCT NEW TW EDGE LIGHTING
- 4 PAINT NEW TW MARKINGS

**PHASE 2 CLOSURES:**

- TW A (EAST HALF OF EXISTING TAXIWAY A)
- PORTION OF THE TERMINAL APRON

**LEGEND:**

- PHASE AREA
- HAUL ROUTE (TWO WAY)
- CONSTRUCTION TASK
- HAZARD MARKER BARRIER
- FLAGGER

**SURVEY NOTES:**

1. AFTER PAVEMENT MILLING AND WHEN CONCRETE SURFACE IS EXPOSED, SURVEY THE TOP OF CONCRETE USING A 10-FOOT BY 10-FOOT GRID. PROVIDE A DIGITAL TERRAIN MODEL (DTM) OF THIS SURFACE TO THE DESIGNERS FOR REEVALUATION OF TERMINAL APRON GRADING. ANY REVISIONS TO THE TERMINAL APRON GRADING PLAN WILL BE TRANSMITTED TO THE ENGINEER WITHIN 5 WORK DAYS OF RECEIPT OF DTM.
2. SEE SPECIFICATION SECTION G-135 FOR ADDITIONAL INFORMATION

DESIGN LEN  
 DRAWN JAG  
 CHECKED EJG

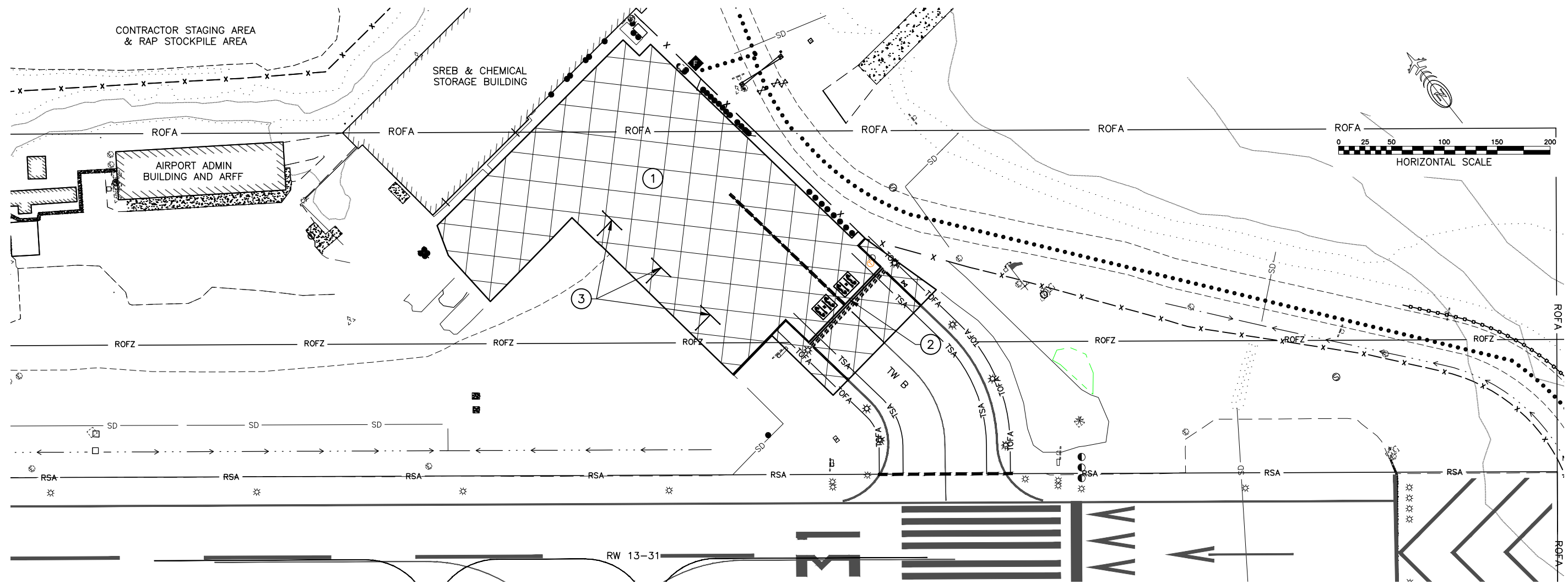
STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES  
 SOUTHCOAST REGION-DESIGN AND CONSTRUCTION-AVIATION

NO.	DATE	REVISIONS

TOM MADSEN  
 (DUTCH HARBOR) AIRPORT  
 UNALASKA TAXIWAY AND APRON REHABILITATION  
 AIP 3-02-0082-\_\_\_\_-202\_/SFAPT00178  
 CONSTRUCTION SAFETY AND  
 PHASING PLAN - PHASE 2

SHEET  
 8  
 OF  
 35





**PHASE 3 SAFETY PLAN NOTES**

1. ALL WORKERS AND EQUIPMENT WILL REMAIN CLEAR OF THE RSA, ROFZ, & TOFA FOR AIRCRAFT OPERATIONS.
2. COORDINATE WITH AIRPORT MANAGEMENT FOR PROPER ISSUANCE OF NOTAMS FOR ALL WORK INCLUDING HAUL OPERATIONS.
3. TAKE ALL ACTIONS REQUIRED OR AS DIRECTED TO READY THE AIRFIELD TO ACCOMMODATE ALL MEDIVAC FLIGHTS IF NEEDED WITHIN 30 MINUTES OF NOTIFICATION. ANY AIRCRAFT DECLARING AN EMERGENCY WILL BE ALLOWED TO LAND.
4. AT THE END OF EACH SHIFT, CLEAN HAUL ROUTES WITHIN THE RSA, TSA, AND APRON AND RETURN TO PRE-EXISTING CONDITION.
5. PROVIDE WATER FOR DUST CONTROL AS REQUIRED, AND AS DIRECTED. DUST, SMOKE, STEAM, OR OTHER AIRBORNE PARTICULATES CAUSED BY CONTRACTOR ACTIVITIES MAY BE CONSIDERED A SAFETY VIOLATION AS DETERMINED BY THE ENGINEER.
6. THIS PROJECT INCLUDES WORK IN CLOSE PROXIMITY TO CRITICAL ELECTRONIC NAVIGATION AIDS (NAVAIDS) THAT ARE OWNED AND MAINTAINED BY THE FAA. PROTECTION OF THIS EQUIPMENT, AND KNOWLEDGE OF THE SURROUNDING CRITICAL AREAS IS ESSENTIAL TO AIRPORT SAFETY. THE ENGINEER MAY DIRECT THE SURVEYED MARKING OF THESE AREAS AS REQUIRED TO ENSURE THAT CONTRACTOR PERSONNEL ARE AWARE OF THE CRITICAL AREA BOUNDARIES.

**PHASE 3 CONSTRUCTION TASKS: #**

- THE FOLLOWING LIST IS A GENERAL DESCRIPTION OF WORK TO BE COMPLETED IN THIS PHASE. IT IS NOT INTENDED AS A COMPREHENSIVE LIST OF ALL TASKS, OR RELATED WORK THAT WILL BE REQUIRED. THE LIST BELOW DOES NOT RELIEVE THE CONTRACTOR OF RESPONSIBILITY TO COORDINATE AND SCHEDULE THE WORK WITH AFFECTED INDIVIDUALS OR GROUPS, PRIOR TO BEGINNING WORK. INCLUDE ANY ADDITIONAL OR RELATED WORK AND GENERAL TASKS IN THE WORK SCHEDULE REQUIRED UNDER SECTION 80.
- 1 REPAIR EXISTING CONCRETE AS NEEDED. OVERLAY CONCRETE WITH NEW HMA.
  - 2 PAINT NEW TW MARKINGS
  - 3 INSTALL 3 NEW AIRCRAFT PARKING POSITIONS WITH TIE DOWNS

**PHASE 3 CLOSURES:**

- TAXIWAY B
- HANGER APRON

**LEGEND:**

- PHASE AREA
- HAUL ROUTE (TWO WAY)
- CONSTRUCTION TASK
- HAZARD MARKER BARRIER
- FLAGGER

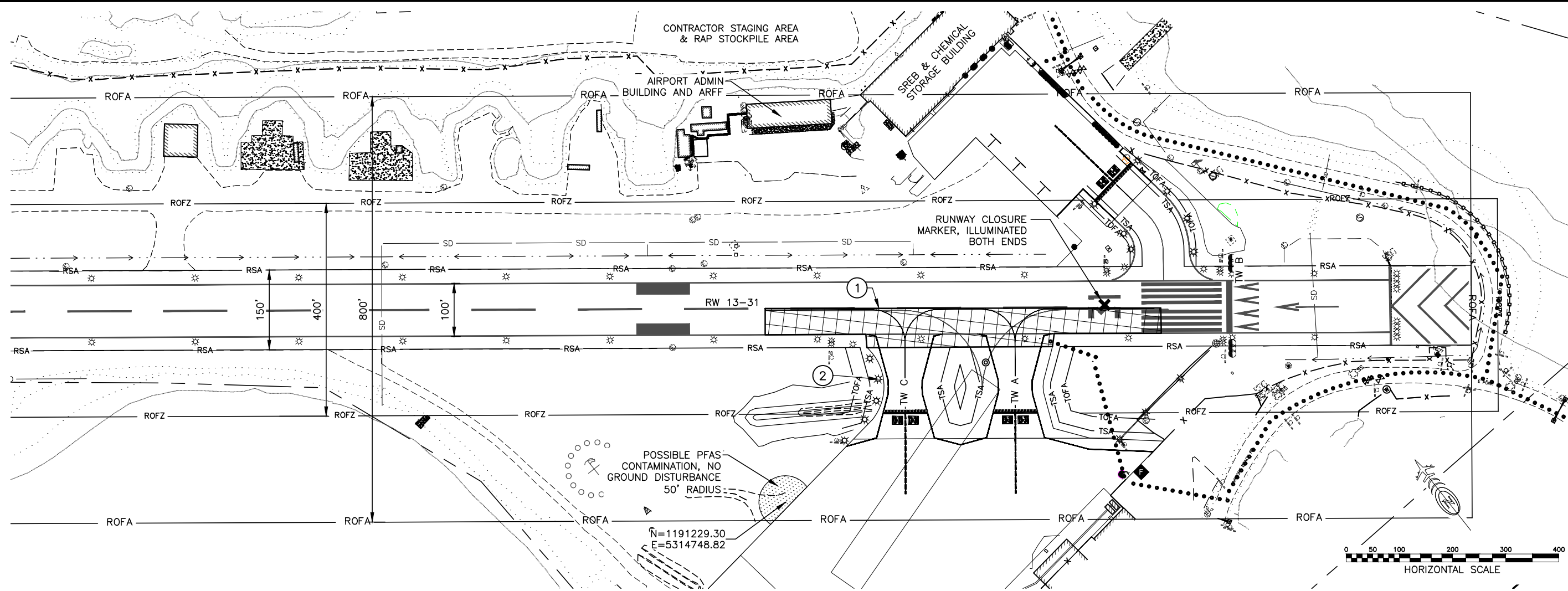
DESIGN LEN  
 DRAWN JAG  
 CHECKED EJG

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

NO.	DATE	REVISIONS

TOM MADSEN  
 (DUTCH HARBOR) AIRPORT  
 UNALASKA TAXIWAY AND APRON REHABILITATION  
 AIP 3-02-0082-\_\_\_\_-202\_/SFAPT00178  
 CONSTRUCTION SAFETY AND  
 PHASING PLAN - PHASE 3

SHEET  
 9  
 OF  
 35



**PHASE 4 SAFETY PLAN NOTES**

1. ALL WORKERS AND EQUIPMENT WILL REMAIN CLEAR OF THE RSA, & TOFA FOR AIRCRAFT OPERATIONS.
2. COORDINATE WITH AIRPORT MANAGEMENT FOR PROPER ISSUANCE OF NOTAMS FOR ALL WORK INCLUDING HAUL OPERATIONS.
3. TAKE ALL ACTIONS REQUIRED OR AS DIRECTED TO READY THE AIRFIELD TO ACCOMMODATE ALL MEDIVAC FLIGHTS IF NEEDED WITHIN 30 MINUTES OF NOTIFICATION. ANY AIRCRAFT DECLARING AN EMERGENCY WILL BE ALLOWED TO LAND.
4. AT THE END OF EACH SHIFT, CLEAN HAUL ROUTES WITHIN THE RSA, TSA, AND APRON AND RETURN TO PRE-EXISTING CONDITION.
5. PROVIDE WATER FOR DUST CONTROL AS REQUIRED, AND AS DIRECTED. DUST, SMOKE, STEAM, OR OTHER AIRBORNE PARTICULATES CAUSED BY CONTRACTOR ACTIVITIES MAY BE CONSIDERED A SAFETY VIOLATION AS DETERMINED BY THE ENGINEER.
6. THIS PROJECT INCLUDES WORK IN CLOSE PROXIMITY TO CRITICAL ELECTRONIC NAVIGATION AIDS (NAVAIDS) THAT ARE OWNED AND MAINTAINED BY THE FAA. PROTECTION OF THIS EQUIPMENT, AND KNOWLEDGE OF THE SURROUNDING CRITICAL AREAS IS ESSENTIAL TO AIRPORT SAFETY. THE ENGINEER MAY DIRECT THE SURVEYED MARKING OF THESE AREAS AS REQUIRED TO ENSURE THAT CONTRACTOR PERSONNEL ARE AWARE OF THE CRITICAL AREA BOUNDARIES.
7. PLACE ILLUMINATED CLOSURE MARKERS ON THE RUNWAY DESIGNATORS AT EACH END OF RW 13-31 TO CLOSE THE RUNWAY. COORDINATE AIRPORT MANAGEMENT PRIOR TO CLOSING AND OPENING THE RUNWAY FOR INSPECTIONS.

**PHASE 4 CONSTRUCTION TASKS:**

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

- ① COMPLETE NEW TW MARKINGS
- ② COMPLETE TW LIGHTING

**PHASE 4 CLOSURES:**

- RW 13-31 (NIGHT ONLY)
- TAXIWAYS A & C

**LEGEND:**

- PHASE AREA
- HAUL ROUTE (TWO WAY)
- CONSTRUCTION TASK
- FLAGGER

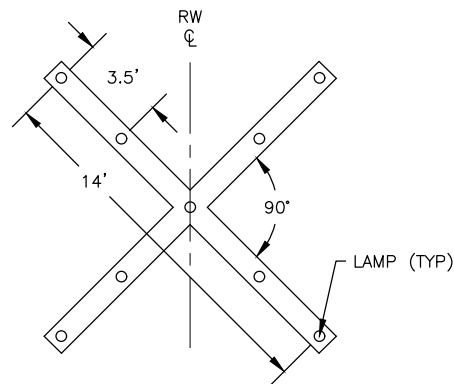
DESIGN	LEN
DRAWN	JAG
CHECKED	EJG

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

BY	DATE	REVISIONS

**TOM MADSEN**  
**(DUTCH HARBOR) AIRPORT**  
UNALASKA TAXIWAY AND APRON REHABILITATION  
AIP 3-02-0082-\_\_\_\_-202\_/SFAPT00178  
CONSTRUCTION SAFETY AND  
PHASING PLAN - PHASE 4

SHEET  
**10**  
OF  
**35**



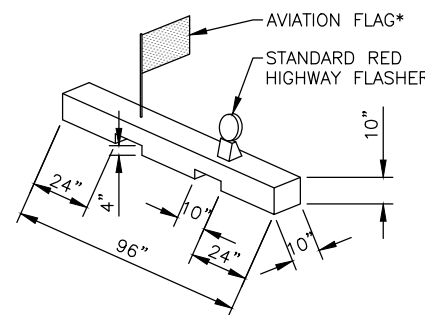
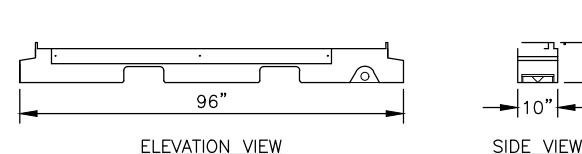
**NOTES:**

1. RW CLOSURE MARKER WILL BE LIGHTED.
2. INSTALL RW CLOSURE MARKER NEAR THRESHOLD OF THE CLOSED RW.
3. FURTHER REQUIREMENTS ARE DESCRIBED IN SPECIFICATION P-671 AND FAA AC 150/5345-55.

1  
11 **RUNWAY CLOSURE MARKER, ILLUMINATED**  
NTS

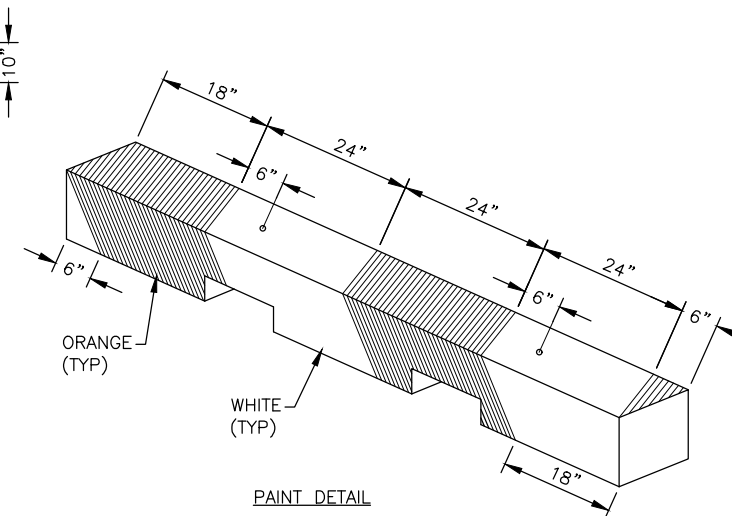
**NOTES:**

1. PLACE BARRIERS TO LIMIT ACCESS TO THE CLOSED AREAS. USE LOW STYLE PLASTIC BARRIERS (LESS THAN 12 INCHES HIGH) WHEN ADJACENT TO AN ACTIVE MOVEMENT AREA.
2. HAZARD MARKER BARRIERS ARE NOT TO BE PLACED WITHIN 250 FEET OF THE EDGE OF AN ACTIVE RW. CONSIDER PROPELLER WASH AND JET BLAST WHEN PLACING BARRIERS.
3. SEE CSPP SECTION 16 FOR SPACING REQUIREMENTS.
4. HAZARD BARRIER DETAIL IS CONCEPTUAL. SUBMIT ALTERNATE DESIGN, OR COMMERCIALY MANUFACTURED BARRIER FOR APPROVAL PRIOR TO PURCHASE.

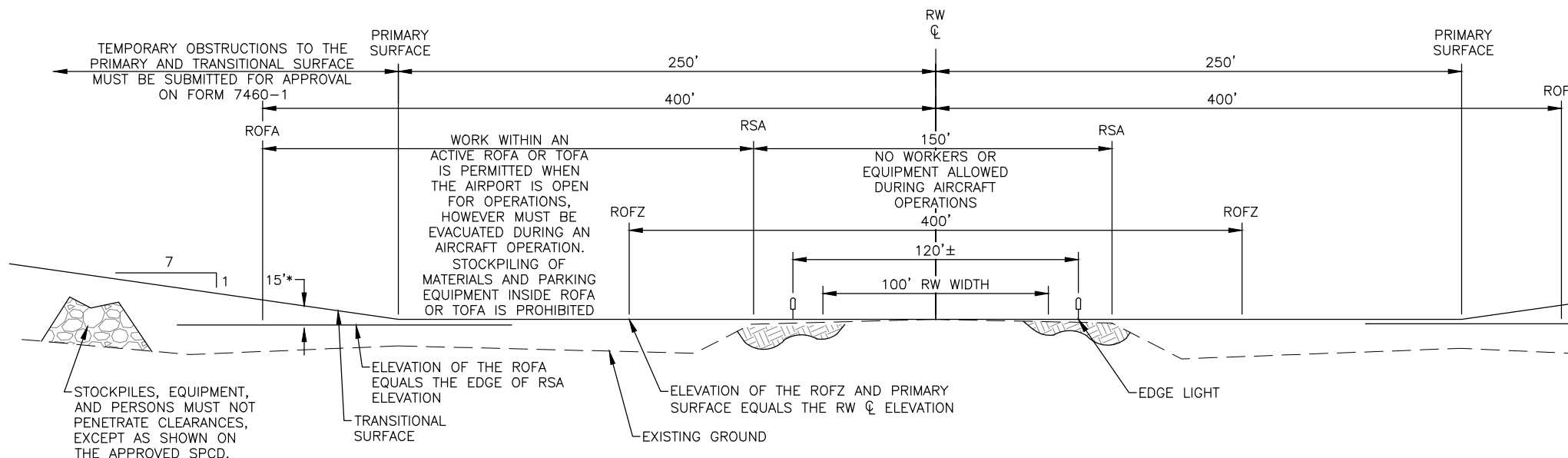


PREPARATION OF  
FLAG & FLASHER MOUNT DETAIL

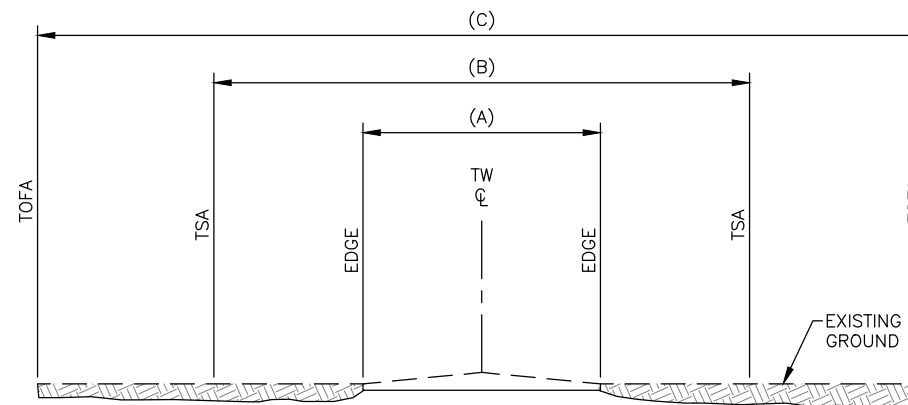
\* FLAGS SHALL ALTERNATE COLOR (ORANGE/WHITE) ON EACH BARRIER AS THEY ARE PLACED IN THE AIRPORT OPERATIONS AREA, IN SEQUENCE.



2  
11 **HAZARD MARKER BARRIER**  
NTS



3  
11 **VERTICAL RELATION OF THE RSA, ROFZ, AND ROFA**  
NTS



**NOTE:**

1. DIMENSIONS INDICATED WITH "(X)", REFERENCE TABLE BELOW.

4  
11 **SAFETY ZONES ADJACENT TO TAXIWAYS**  
NTS

TAXIWAY DATA TABLE				
TW	WIDTH (A)	TSA WIDTH (B)	TOFA (C)	ADG/TDG
A	50'	118'	171'	III/3
B	100'	79'	124'	III/3
C	50'	118'	171'	III/3

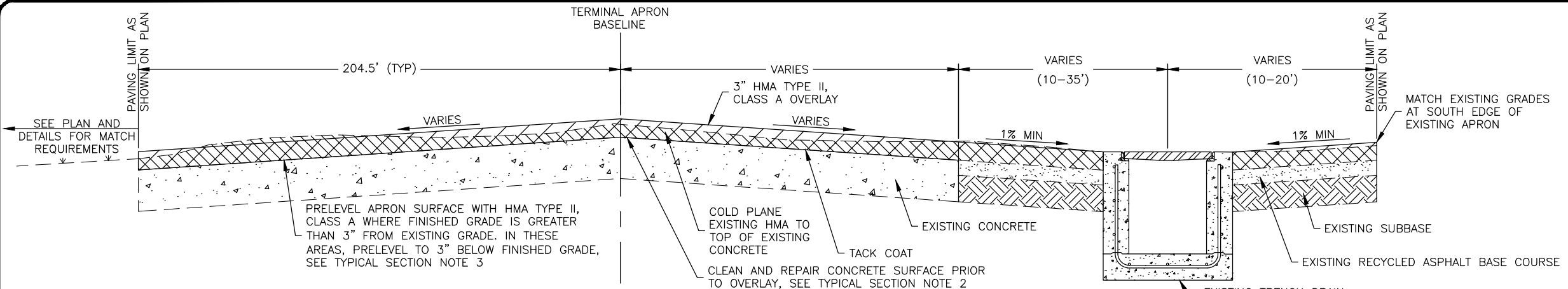
DESIGN LEN  
DRAWN JAG  
CHECKED EJJ

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

BY	DATE	REVISIONS

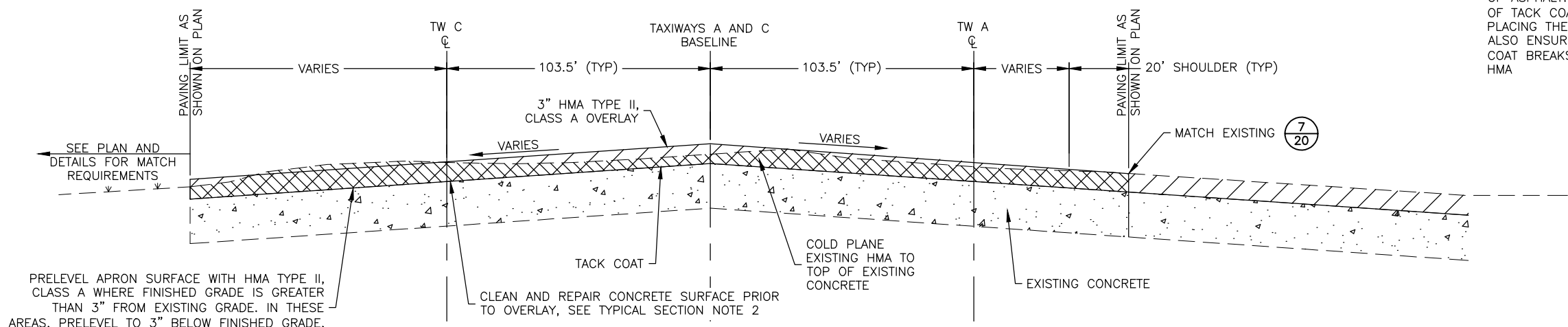
TOM MADSEN  
(DUTCH HARBOR) AIRPORT  
UNALASKA TAXIWAY AND APRON REHABILITATION  
AIP 3-02-0082-\_\_\_-202\_/SFAPT00178  
CONSTRUCTION SAFETY AND  
PHASING PLAN - DETAILS

SHEET  
11  
OF  
35

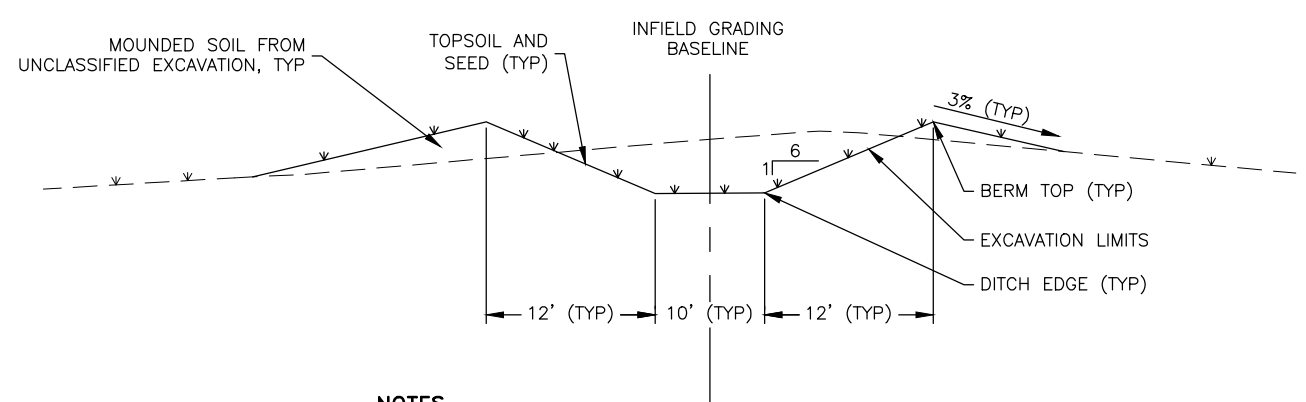


1 TERMINAL APRON TYPICAL SECTION  
NTS

- TYPICAL SECTION NOTES**
- DO NOT COLD PLANE BELOW TOP SURFACE OF EXISTING CONCRETE, PROTECT EXISTING CONCRETE FROM DAMAGE.
  - REPAIR EXISTING CONCRETE PRIOR TO PLACING 3-INCH HMA TYPE II, CLASS A OVERLAY. SEE DETAIL 3 ON SHEET 20.
  - FOR SECTIONS 1/12 AND 2/12, THERE ARE AREAS BENEATH EXISTING ASPHALT PAVEMENT WHERE NO CONCRETE PAVEMENT WILL BE ENCOUNTERED DURING PAVEMENT COLD PLANING. IN THESE AREAS, PRELEVEL WITH RAP (COMPACTED TO 98% MAXIMUM DENSITY) TO WITHIN THREE INCHES BELOW FINISHED GRADE ELEVATIONS.
  - FOR ALL AREAS WHERE EXISTING CONCRETE WILL BE OVERLAIN WITH HMA, PROVIDE 2 COATS OF TACK COAT DIRECTLY TO CONCRETE SURFACE PRIOR TO PLACING THE FIRST LIFT OF ASPHALT. ENSURE THAT THE FIRST COAT OF TACK COAT BREAKS (CURES) BEFORE PLACING THE SECOND COAT OF TACK COAT. ALSO ENSURE THE SECOND COAT OF TACK COAT BREAKS (CURES) PRIOR TO PLACING HMA

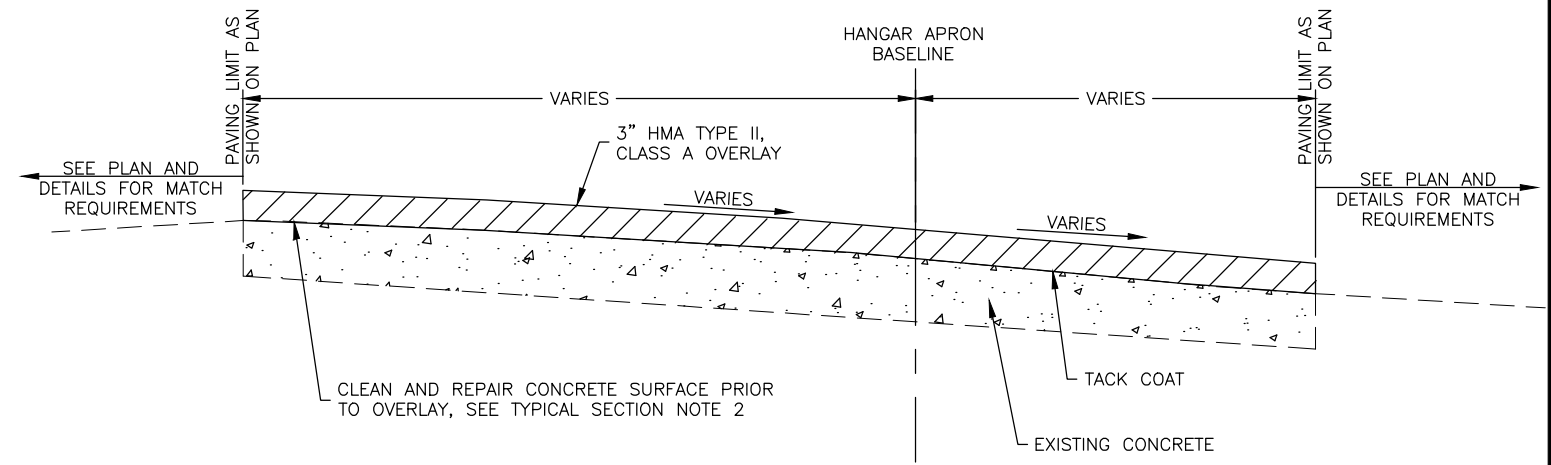


2 TAXIWAYS A AND C TYPICAL SECTION  
NTS



- NOTES**
- ALL MATERIAL EXCAVATED FROM SWALE WILL BE MOUNDED ON SWALE SIDES.
  - SWALE SURFACES MUST BE TRAVERSABLE BY MOWER.

3 INFIELD GRADING TYPICAL SECTION  
NTS



4 TAXIWAY B AND HANGAR APRON TYPICAL SECTION  
NTS

DESIGN LEN  
 DRAWN JAG  
 CHECKED EJG

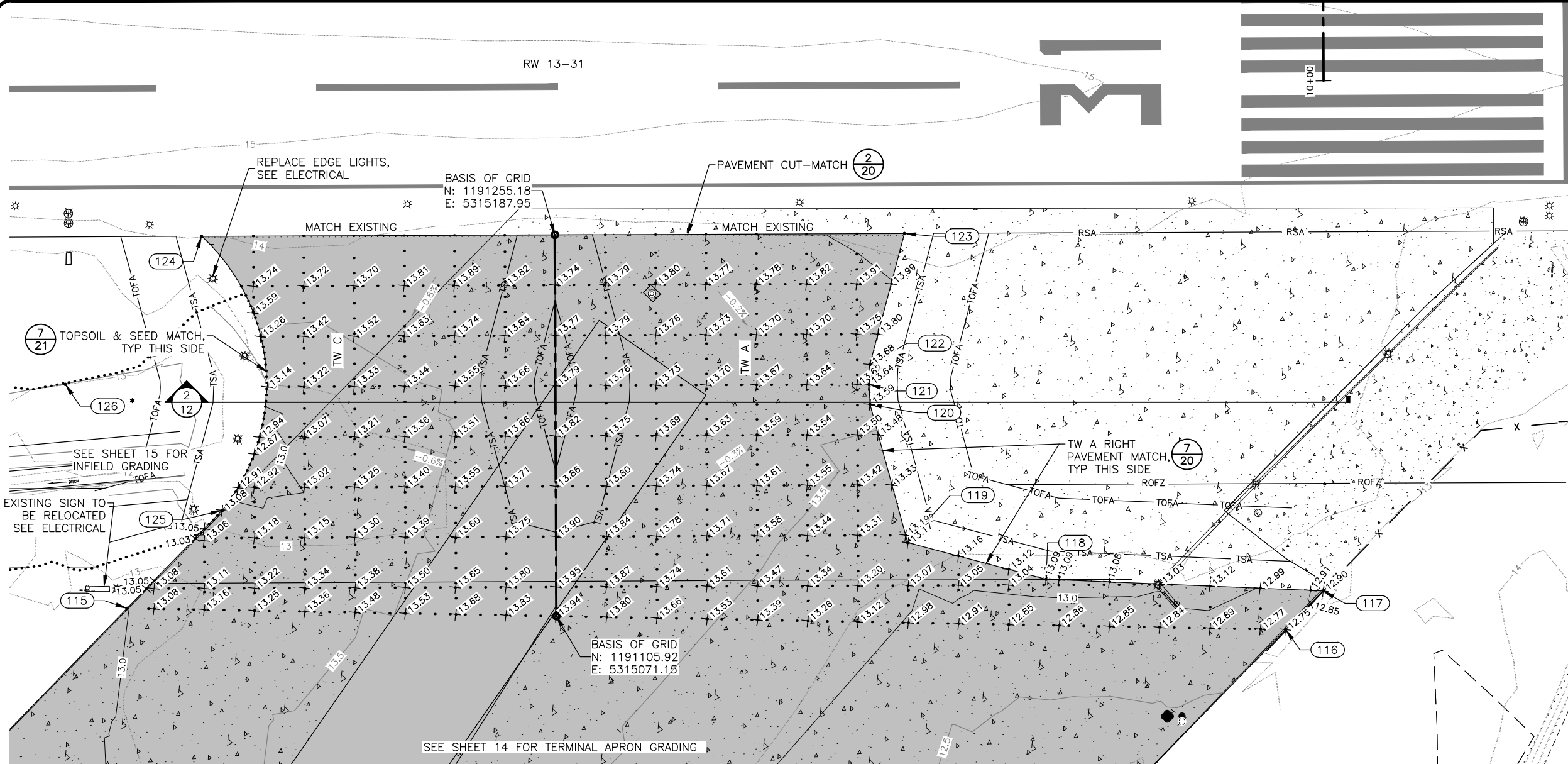
STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES  
 SOUTHCOAST REGION-DESIGN AND CONSTRUCTION-AVIATION

NO.	DATE	REVISIONS

TOM MADSEN  
 (DUTCH HARBOR) AIRPORT  
 UNALASKA TAXIWAY AND APRON REHABILITATION  
 AIP 3-02-0082-\_\_\_-202\_/SFAPT00178  
 TYPICAL SECTIONS

SHEET  
 12  
 OF  
 35





COLD PLANE AND OVERLAY LIMITS		
POINT NO.	NORTHING	EASTING
115	1191241.22	5314906.03
116	1190876.09	5315351.67
117	1190879.60	5315378.26
118	1190969.51	5315273.71
119	1191026.41	5315230.93
120	1191091.94	5315258.77
121	1191100.02	5315264.52
122	1191107.55	5315270.99
123	1191148.04	5315324.85
124	1191363.43	5315049.62
125	1191250.14	5314973.33
126*	1191347.59	5314950.87

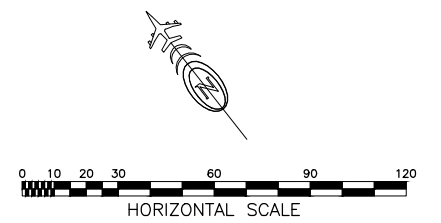
\* RADIUS POINT

**LEGEND:**

 COLD PLANE AND 3" INCH OVERLAY  
 SEE DETAIL 4 SHEET 20

**GRADING NOTES:**

1. CONTRACTOR MUST NOT DISTURB OR DESTROY HISTORIC CONCRETE THAT EXISTS BENEATH EXISTING ASPHALT.
2. REPAIR THE CONCRETE AS REQUIRED PRIOR TO PLACING 3-INCH HMA OVERLAY. SEE DETAIL 3 ON SHEET 12.
3. BASIS OF GRID IS AS SHOWN IN PLAN. GRID IS 25'X25' UNLESS OTHERWISE SHOWN.



DESIGN LEN  
 DRAWN JAG  
 CHECKED EJG

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

NO.	BY	DATE	REVISIONS

TOM MADSEN  
 (DUTCH HARBOR) AIRPORT  
 UNALASKA TAXIWAY AND APRON REHABILITATION  
 AIP 3-02-0082-\_\_\_\_-202\_/SFAPT00178  
 TAXIWAYS A AND C GRADING

SHEET  
 13  
 OF  
 35

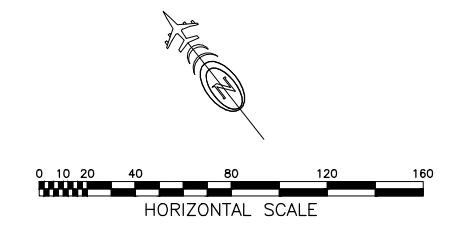


**COLD PLANE AND OVERLAY LIMITS**

POINT NO.	NORTHING	EASTING
100	1190860.96	5315237.12
101	1190827.19	5315242.32
102	1190816.48	5315162.00
103	1190821.94	5315161.08
104	1190804.18	5315026.17
105	1190804.00	5315008.44
106	1190810.75	5315008.05
107	1190821.33	5314963.71
108	1190819.98	5314954.77
109	1190821.08	5314936.40
110	1190819.86	5314929.15
111	1190785.68	5314674.57
112	1190797.16	5314673.31
113	1190785.27	5314578.59
114	1191190.49	5314523.68

**LEGEND:**  
 COLD PLANE AND 3" INCH OVERLAY  
 SEE DETAIL 4 SHEET 20

**NOTES:**  
 1. BASIS OF GRID IS AS SHOWN IN PLAN. GRID IS 25'x25' UNLESS OTHERWISE SHOWN.  
 2. INSTALL 20 LF OF 12-INCH PERFORATED HDPE PIPE IN TRENCH DRAIN CENTERED AT EACH OF 4 CARGO LOADING DOCKS. PIPE WILL MINIMIZE BLOCKAGE FROM PACKED SNOW AND ICE.



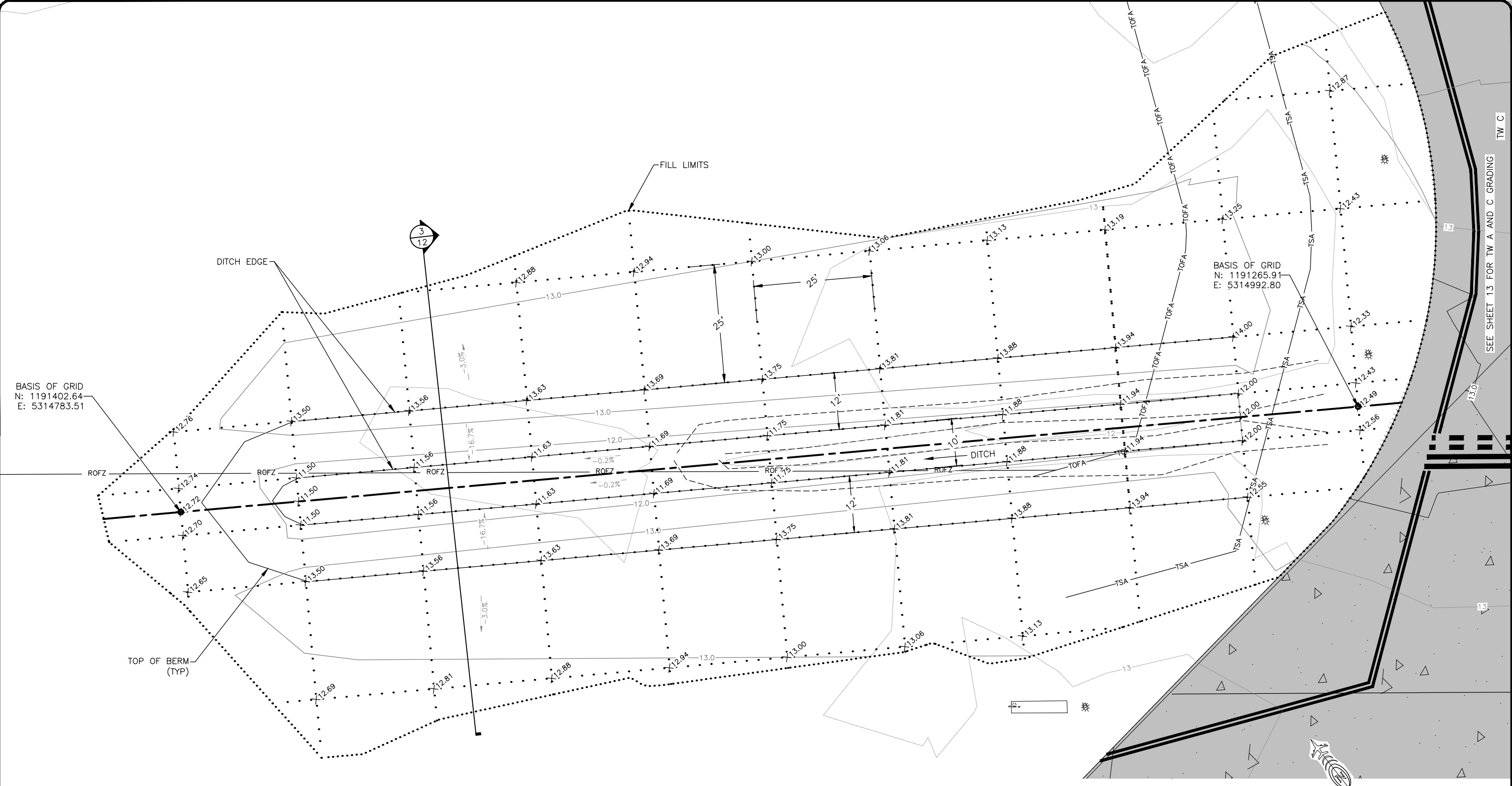
DESIGN L E N  
 DRAWN J A G  
 CHECKED E J G

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

BY	DATE	REVISIONS

TOM MADSEN  
 (DUTCH HARBOR) AIRPORT  
 UNALASKA TAXIWAY AND APRON REHABILITATION  
 AIP 3-02-0082-\_\_\_\_-202\_/SFAPT00178  
 TERMINAL APRON GRADING

SHEET  
 14  
 OF  
 35



BASIS OF GRID  
N: 1191402.64  
E: 5314783.51

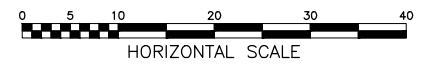
BASIS OF GRID  
N: 1191265.91  
E: 5314992.80

**LEGEND:**

 COLD PLANE AND 3" INCH OVERLAY  
SEE DETAIL 4 SHEET 20

**NOTES:**

1. BASIS OF GRID IS AS SHOWN IN PLAN. GRID IS 25'x25' UNLESS OTHERWISE SHOWN.



DESIGN LEN

DRAWN JAG

CHECKED EJG

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

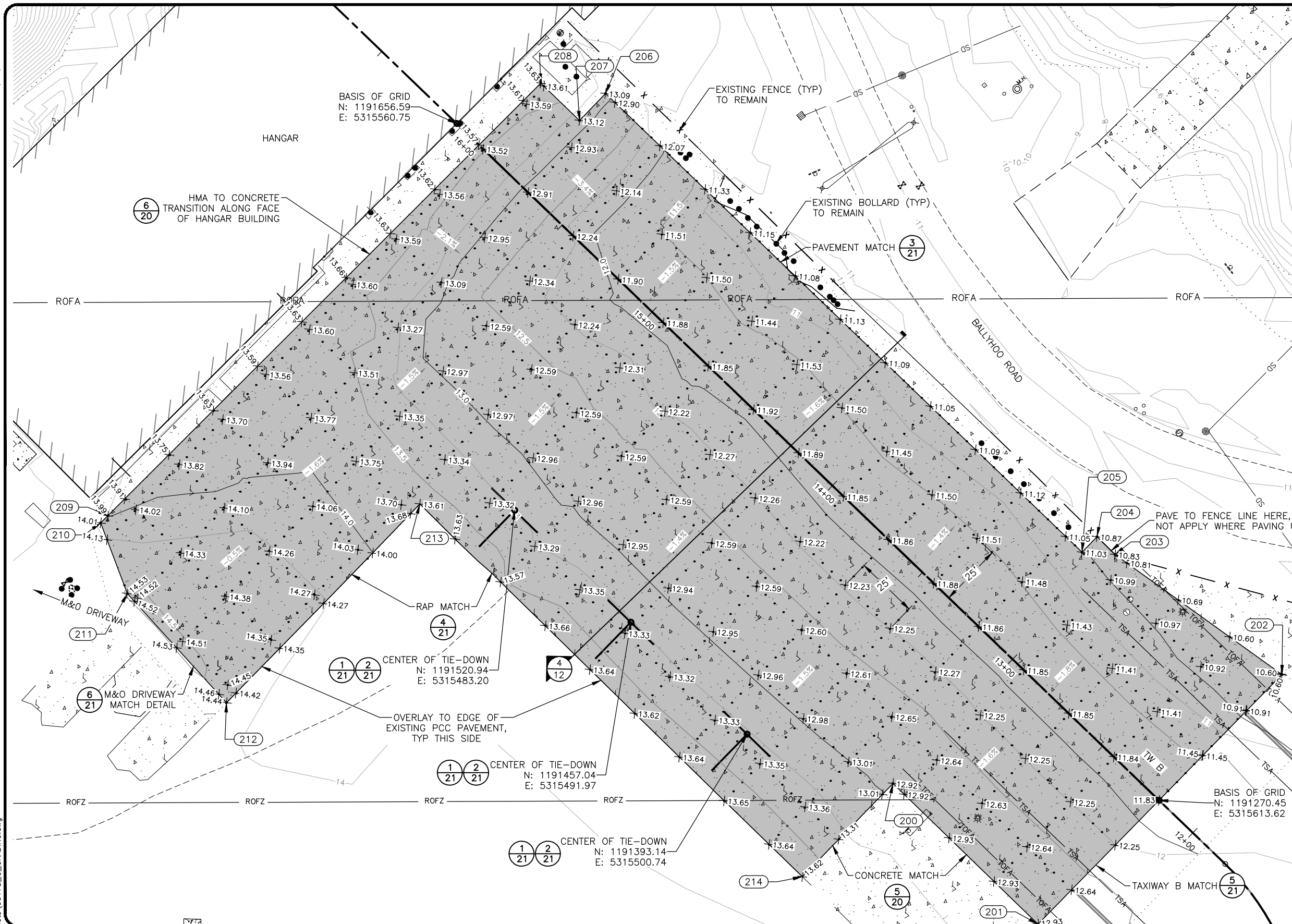
NO.	DATE	REVISIONS

TOM MADSEN  
(DUTCH HARBOR) AIRPORT  
UNALASKA TAXIWAY AND APRON REHABILITATION  
AIP 3-02-0082-\_\_\_-202\_/SFAPT00178  
INFIELD GRADING

SHEET  
15  
OF  
35


SEE SHEET 13 FOR TW A AND C GRADING

TW C



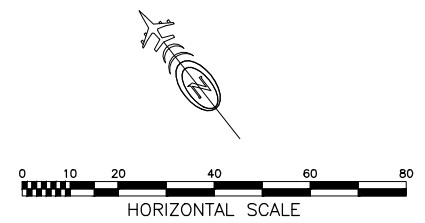
OVERLAY LIMITS		
POINT NO.	NORTHING	EASTING
200	1191341.61	5315534.32
201	1191261.57	5315544.96
202	1191279.46	5315683.30
203	1191358.42	5315660.62
204	1191368.50	5315659.40
206	1191629.17	5315614.92
207	1191627.13	5315600.06
209	1191619.91	5315354.31
210	1191619.44	5315350.26
211	1191590.68	5315341.14
212	1191531.92	5315345.23
213	1191546.38	5315455.05
214	1191334.77	5315482.85

**LEGEND:**

 3-INCH OVERLAY

**NOTES:**

1. BASIS OF GRID IS AS SHOWN IN PLAN. GRID IS 25'x25' UNLESS OTHERWISE SHOWN.



DESIGN LEN  
 DRAWN JAG  
 CHECKED EJJ

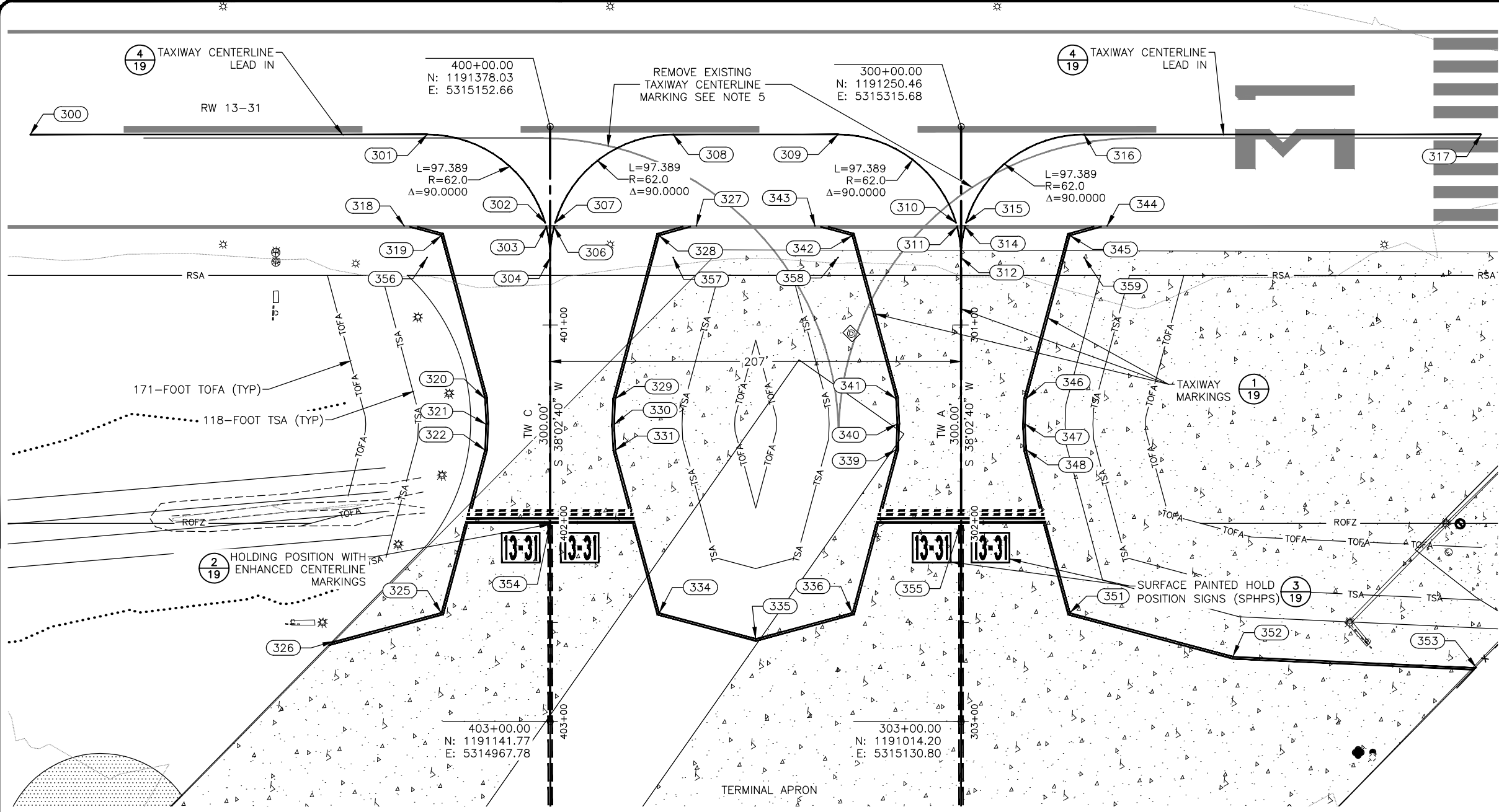
STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES  
 SOUTHCOAST REGION-DESIGN AND CONSTRUCTION-AVIATION

NO.	BY	DATE	REVISIONS

TOM MADSEN  
 (DUTCH HARBOR) AIRPORT  
 UNALASKA TAXIWAY AND APRON REHABILITATION  
 AIP 3-02-0082-\_\_\_-202\_/SFAPT00178  
 TAXIWAY B AND HANGAR APRON  
 GRADING

SHEET  
 16  
 OF  
 35





- GENERAL MARKING NOTES:**
1. TW MARKINGS ARE YELLOW EXCEPT FOR SPHPS. SEE DETAIL 3/19 FOR SPHPS.
  2. TW CENTERLINE MARKINGS ARE DIMENSIONED TO THE CENTER OF THE STRIPE. TW EDGE MARKINGS ARE DIMENSIONED TO THE OUTSIDE EDGE OF THE OUTER STRIPE. THE OUTER STRIPE IS ALWAYS THE STRIPE THAT IS FARTHEST AWAY FROM THE CENTERLINE.
  3. PAINT MUST NOT BE APPLIED UNTIL THE LAYOUT AND CONDITION OF THE SURFACE HAS BEEN APPROVED BY THE ENGINEER. SEE SECTION P-620-3.5. ADJUST LAYOUT OF MARKINGS AS DIRECTED PRIOR TO PAINT APPLICATION. PROVIDE SMOOTH TRANSITIONS IN MARKINGS TO MATCH EXISTING MARKINGS AT THE PROJECT LIMITS.
  4. ELECTRONIC POINT FILES ARE AVAILABLE FROM THE ENGINEER ON REQUEST.
  5. REMOVE EXISTING TW CENTERLINE MARKING FROM EDGE OF NEW TERMINAL APRON PAVEMENT TO WHERE IT ENDS ON THE RW PAVEMENT.

MARKING COORDINATES			
POINT #	STATION/OFFSET	REMARKS	
300	400+04.00, 262.00 RT	PI	
301	400+04.00, 62.00 RT	PT	
302	400+48.50, 2.52 RT	PI	
303	400+50.50, 1.97 RT	PI	
304	400+66.00, 0.00 RT	PC	
306	400+50.50, 1.97 LT	PI	
307	400+48.50, 2.52 LT	PI	
308	400+04.00, 62.00 LT	PT	
309	300+04.00, 62.00 RT	PT	

MARKING COORDINATES			
POINT #	STATION/OFFSET	REMARKS	
310	300+48.50, 2.52 RT	PI	
311	300+50.50, 1.97 RT	PI	
312	300+66.00, 0.00 RT	PC	
314	300+50.50, 1.97 LT	PI	
315	300+48.50, 2.52 LT	PI	
316	300+04.00, 62.00 LT	PT	
317	300+04.00, 262.00 LT	PI	
318	400+50.00, 73.64 RT	PI	
319	400+55.00, 55.00 RT	PI	

MARKING COORDINATES			
POINT #	STATION/OFFSET	REMARKS	
320	401+37.00, 33.00 RT	PI	
321	401+50.00, 32.40 RT	PI	
322	401+63.00, 33.00 RT	PI	
325	402+45.00, 55.00 RT	PI	
326	402+59.48, 108.99 RT	PI	
327	400+50.00, 73.64 LT	PI	
328	400+55.00, 55.00 LT	PI	
329	401+37.00, 33.00 LT	PI	
330	401+50.00, 32.40 LT	PI	

MARKING COORDINATES			
POINT #	STATION/OFFSET	REMARKS	
331	401+63.00, 33.00 LT	PI	
334	402+45.00, 55.00 LT	PI	
335	402+58.01, 103.50 LT	PI	
336	302+45.00, 55.00 RT	PI	
339	301+63.00, 33.00 RT	PI	
340	301+50.00, 32.40 RT	PI	
341	301+37.00, 33.00 RT	PI	
342	300+55.00, 55.00 RT	PI	
343	300+50.00, 73.64 RT	PI	

MARKING COORDINATES			
POINT #	STATION/OFFSET	REMARKS	
344	300+50.00, 73.64 LT	PI	
345	300+55.00, 55.00 LT	PI	
346	301+37.00, 33.00 LT	PI	
347	301+50.00, 32.40 LT	PI	
348	301+63.00, 33.00 LT	PI	
351	302+45.00, 55.00 LT	PI	
352	302+67.00, 137.00 LT	PI	
353	302+72.67, 259.59 LT	PI	
354	402+00.00, 0.00 RT	PI	

MARKING COORDINATES			
POINT #	STATION/OFFSET	REMARKS	
355	302+00.00, 0.00 RT	PI	
356	400+66.00, 62.00 RT	RP	
357	400+66.00, 62.00 LT	RP	
358	300+66.00, 62.00 RT	RP	
359	300+66.00, 62.00 LT	RP	

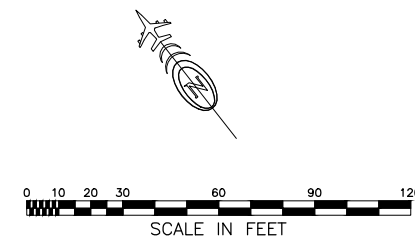
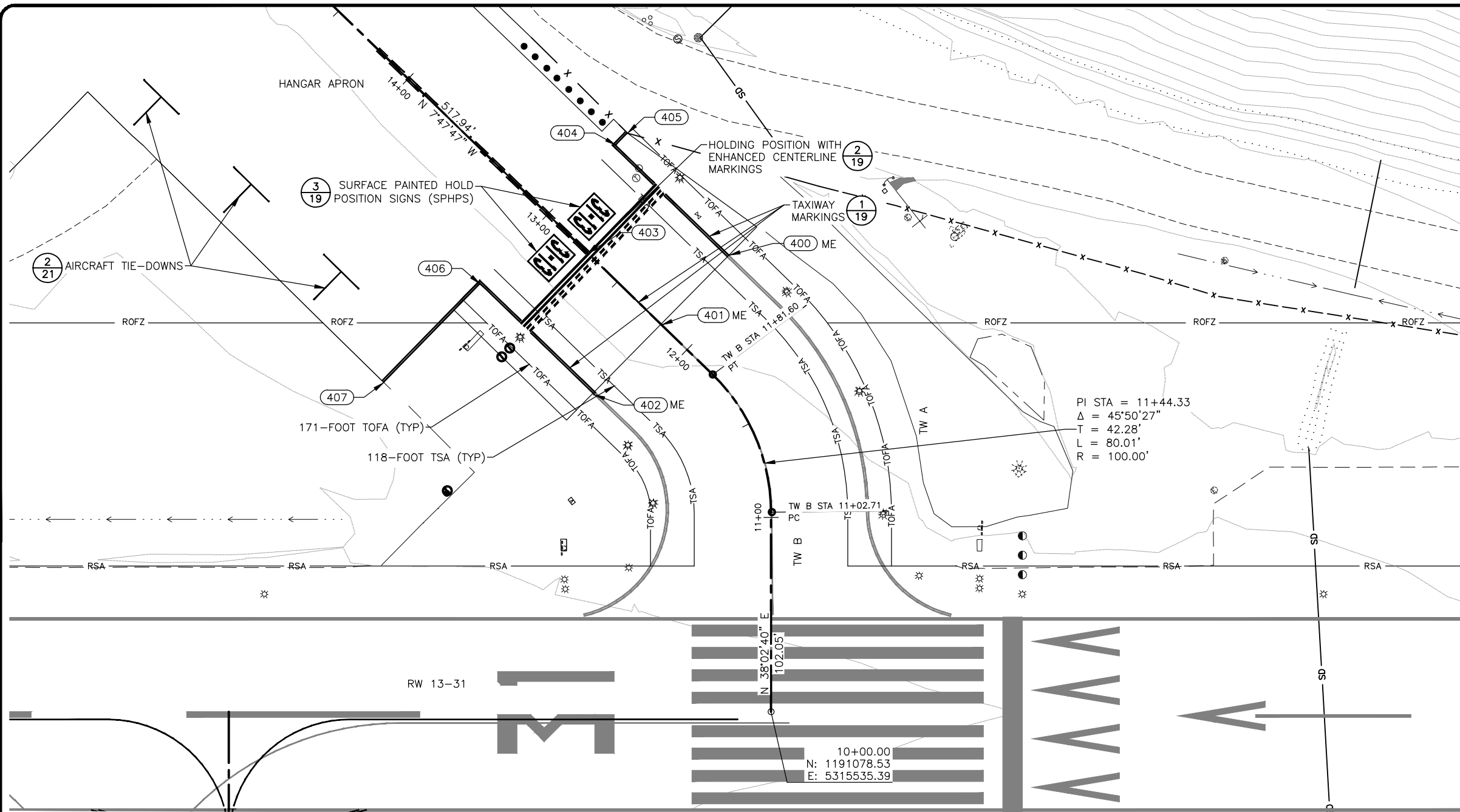
DESIGN LEN  
 DRAWN JAG  
 CHECKED EJG

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

BY	DATE	REVISIONS

TOM MADSEN  
 (DUTCH HARBOR) AIRPORT  
 UNALASKA TAXIWAY AND APRON REHABILITATION  
 AIP 3-02-0082-\_\_\_-202\_/SFAPT00178  
 TAXIWAYS A AND C MARKING PLAN

SHEET  
 17  
 OF  
 35



MARKING COORDINATES		
POINT #	STATION/OFFSET	REMARKS
400	12+18.28, 50.00 RT	PI
401	12+18.27, 0.00 RT	PI
402	12+18.25, 50.00 LT	PI
403	12+71.18, 0.00 RT	PI
404	12+99.56, 50.00 RT	PI
405	12+99.53, 58.50 RT	PI
406	12+99.95, 50.00 LT	PI
407	13+00.22, 120.84 LT	PI

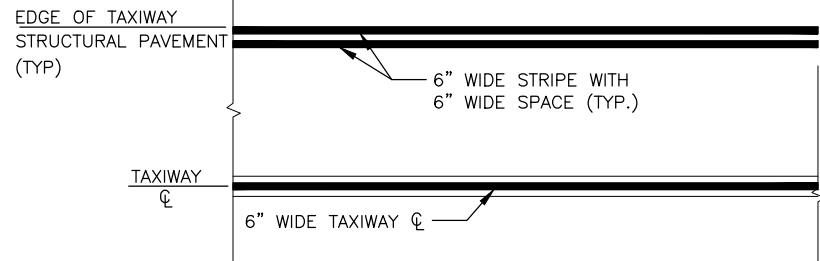
DESIGN LEN  
 DRAWN JAG  
 CHECKED EJG

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

BY	DATE	REVISIONS

TOM MADSEN  
 (DUTCH HARBOR) AIRPORT  
 UNALASKA TAXIWAY AND APRON REHABILITATION  
 AIP 3-02-0082-\_\_\_-202\_/SFAPT00178  
 TAXIWAY B MARKING PLAN

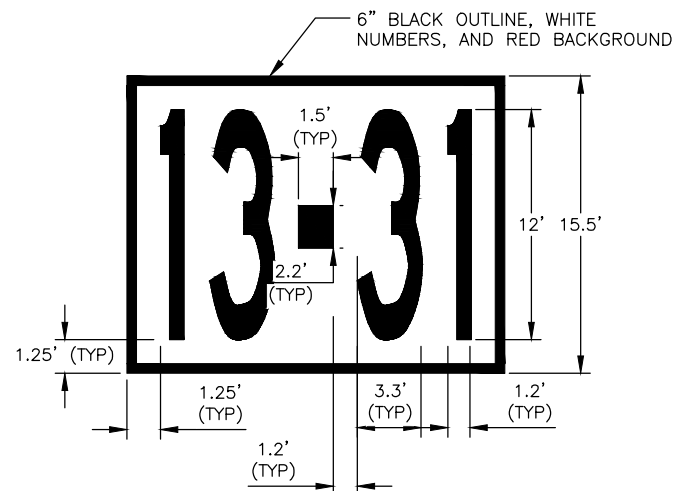
SHEET  
 18  
 OF  
 35



**TYPICAL MARKING DETAIL NOTES:**

1. ALL TAXIWAY MARKINGS ARE YELLOW UNLESS OTHERWISE INDICATED.
2. GLASS BEADS ON ALL PAINT EXCEPT BLACK.
3. ALL PAINT EXCEPT TAXIWAY EDGE MARKINGS HAVE 6" BLACK BORDERS.

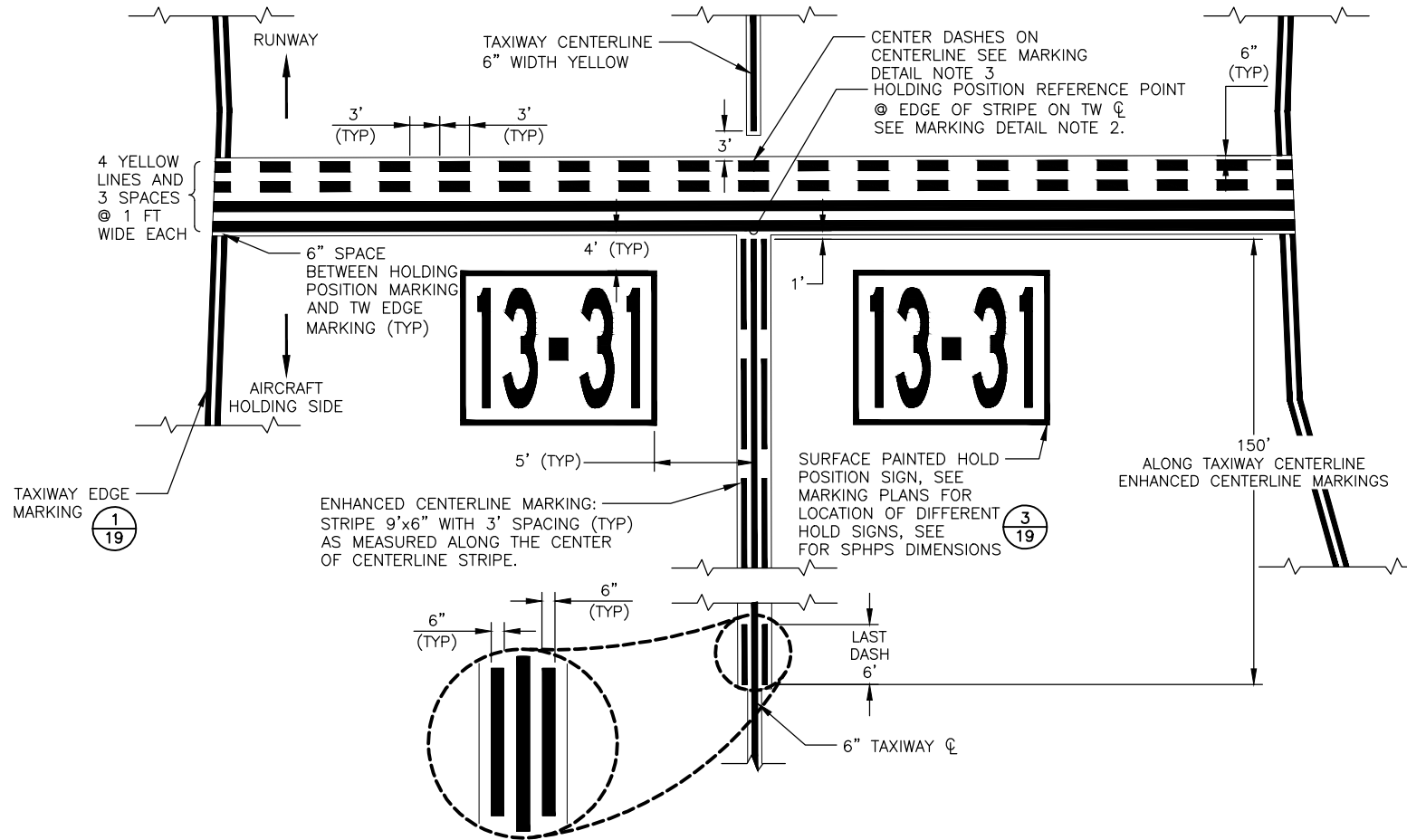
**1 TAXIWAY MARKING**  
 19 NTS



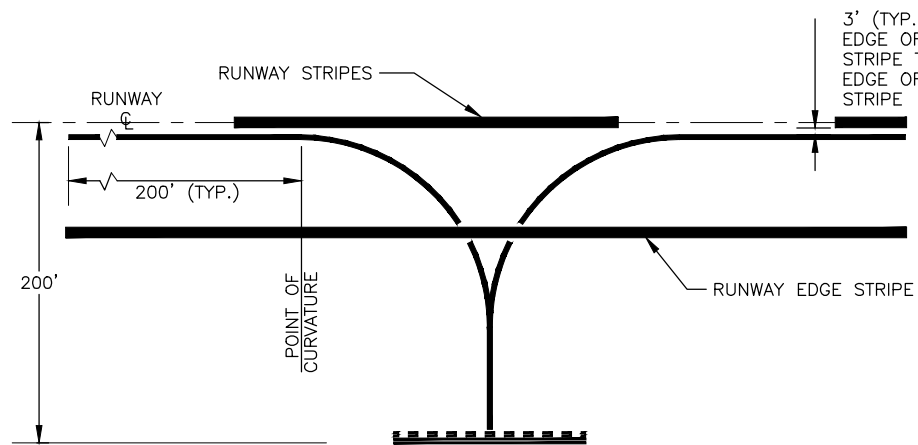
**NOTES:**

1. PROVIDE STENCILS FOR SPHPS MARKINGS AND SUBMIT DOCUMENTATION PROVING THAT STENCILS MEET THE REQUIREMENTS OF THE LATEST VERSION OF AC 150/5340-1. SEE APPENDIX B OF LATEST VERSION OF AC 150/5340-1 FOR ADDITIONAL DETAIL AND LAYOUT OF NUMBERS FOR THIS MARKING. EXCEPT FOR 12 FOOT HEIGHT, DIMENSIONS ARE APPROXIMATE, AND WILL REQUIRE SCALING FROM THE AC FIGURES. TYPICAL DIMENSIONS ARE 3.30' WIDE CHARACTERS WITH 1.2' SPACING. PRESENT DETAILED LAYOUT FOR APPROVAL PRIOR TO LAYOUT IN FIELD.

**3 SURFACE PAINTED HOLDING POSITION SIGNS (SPHPS)**  
 19 NTS



**2 HOLDING POSITION WITH ENHANCED CENTERLINE MARKINGS PERPENDICULAR TO RUNWAY HOLDING POSITION**  
 19 NTS



**NOTES:**

1. RUNWAY MARKINGS HAVE PRECEDENCE OVER TAXIWAY MARKINGS. BREAK TAXIWAY MARKINGS WHERE THEY CROSS ANY RUNWAY MARKINGS.

**4 TAXIWAY CENTERLINE LEAD IN**  
 19 NTS

**ENHANCED CENTERLINE MARKING NOTES:**

1. TYPICAL ENHANCED CENTERLINE MARKINGS ARE 150 FEET LONG AND CONSISTS OF 12 PAIR OF 9 FOOT LONG MARKINGS, AND THE LAST PAIR BEING 6 FOOT LONG MARKINGS.
2. ENHANCED CENTERLINE MARKINGS BEGIN 1 FOOT OFFSET FROM THE OUTER EDGE OF THE HOLDING BAR. FOR EXAMPLE THE "NINE FOOT" MARKING ON THE OUTSIDE OF A CURVE MAY BE SLIGHTLY LONGER THAN THE "NINE FOOT" MARKING ON THE INSIDE OF THE SAME CURVE.

**HOLD POSITION MARKING DETAIL NOTES:**

1. HOLDING POSITION MARKINGS EXTEND ACROSS FULL WIDTH OF TAXIWAY.
2. HOLDING POSITION REFERENCE POINT IS AT THE TAXIWAY CENTERLINE ON THE EDGE OF THE SOLID STRIPE FACING THE AIRCRAFT HOLDING SIDE OF THE TAXIWAY.
3. THE RUNWAY HOLDING POSITION DASHES ARE LOCATED LATERALLY SUCH THAT A SET OF DASHES IS CENTERED ON THE TAXIWAY CENTERLINE.
4. OFFSET DISTANCE FOR SPHPS FROM TAXIWAY CENTERLINE RANGE FROM 4 FT-10 FT (PREFERRED OFFSET DISTANCE IS 10 FT). OFFSET DISTANCE FOR SPHPS FROM HOLD POSITION MARKINGS RANGE 2 FT TO 4 FT (PREFERRED OFFSET DISTANCE IS 4'). CONFIRM WITH AIRFIELD MAINTENANCE.

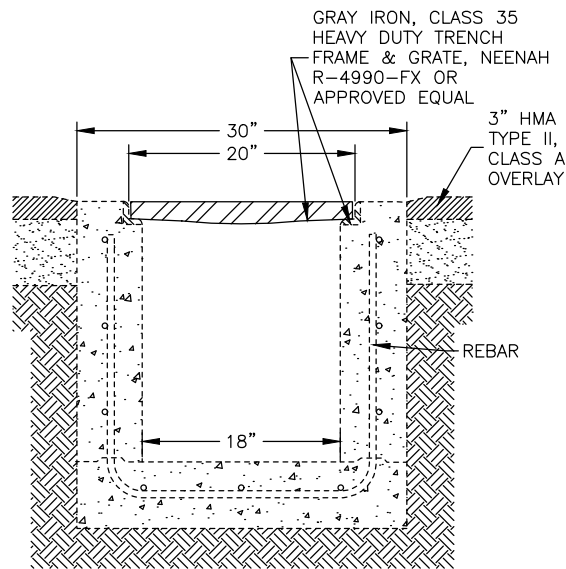
DESIGN LEN  
 DRAWN JAG  
 CHECKED EJG

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

NO.	DATE	REVISIONS

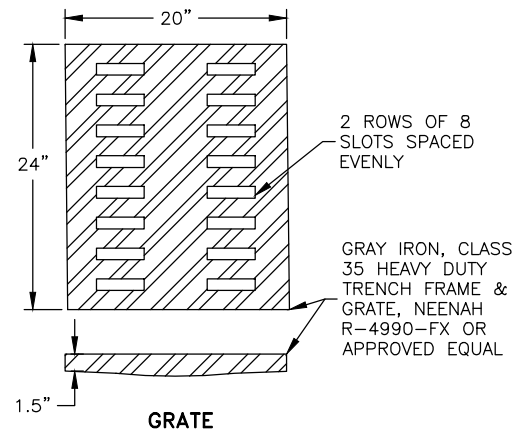
TOM MADSEN  
 (DUTCH HARBOR) AIRPORT  
 UNALASKA TAXIWAY AND APRON REHABILITATION  
 AIP 3-02-0082-\_\_\_-202\_/SFAPT00178  
 MARKING DETAILS

SHEET  
 19 OF  
 35



**TRENCH DRAIN NOTES**

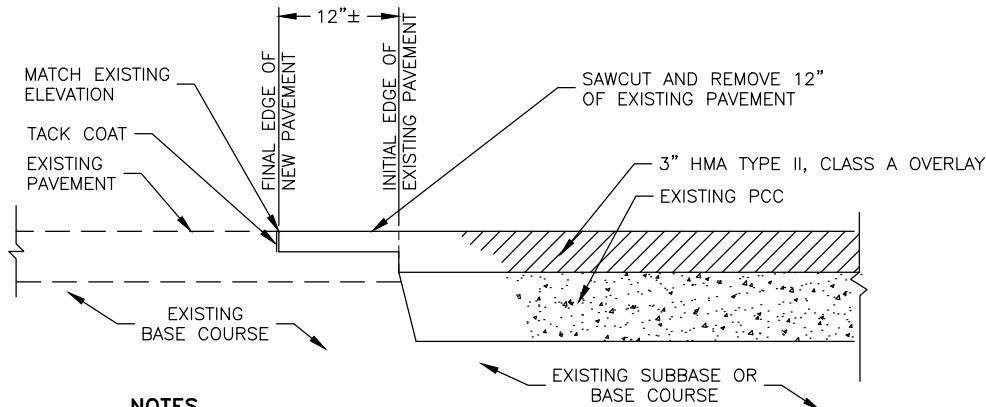
- REPAIR TRENCH DRAIN CONCRETE AS REQUIRED.
- REPLACE ALL GRATES WITHIN REPAIR AREAS. SALVAGE GRATES THAT ARE NOT BROKEN AND DELIVER TO AIRPORT MAINTENANCE AND OPERATIONS.



**TRENCH DRAIN REPAIR NOTES**

- USE EPOXY INJECTION TO REPAIR ANY CRACKING IN THE TRENCH SECTION.
- TO REPAIR DAMAGED TOP SECTION:
  - REMOVE LOOSE AND DAMAGED CONCRETE AND ORGANICS.
  - BRUSH/HAMMER THE SURFACE SO THE AGGREGATE IS FRACTURED AND SURFACE IS ROUGH.
  - IF REBAR IS CORRODED, SANDBLAST TO NEAR WHITE. REMOVE LOOSENED DEBRIS.
  - WORK A THIN PASTE OF CEMENT AND WATER INTO ALL REPAIR AREAS.
  - PLACE CONCRETE. CONCRETE REPAIR MIX MUST HAVE WATER-PROOFING AND AIR-ENTRAINMENT ADMIXTURES.

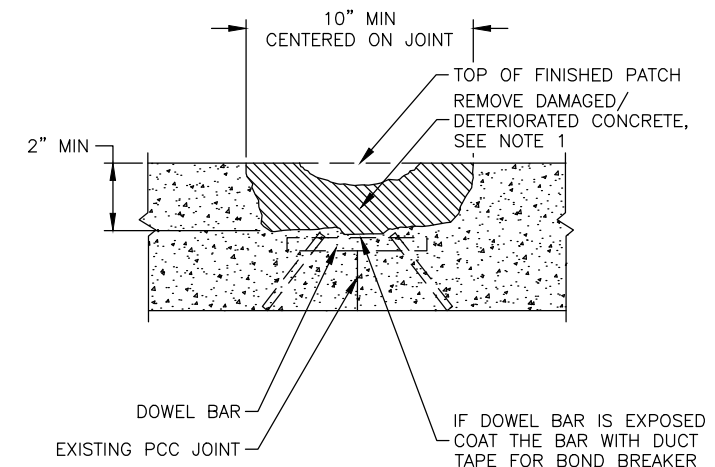
1 TRENCH DRAIN AND GRATE  
20 NTS



**NOTES**

- THIS DETAIL APPLIES AT LOCATIONS WHERE NEW HMA TYPE II, CLASS A IS PLACED AGAINST EXISTING PAVEMENT.

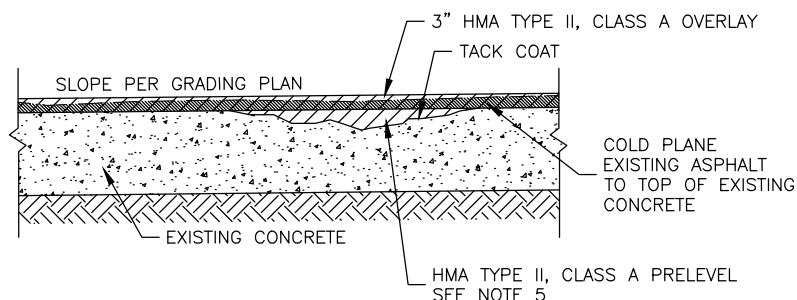
2 PAVEMENT CUT-MATCH SECTION  
20 NTS



**NOTES**

- REMOVE ALL ORGANICS AND LOOSE MATERIAL DOWN TO SOLID EXPOSED AGGREGATE. CLEAN JOINTS THEN PATCH WITH EITHER HMA TYPE II, CLASS A, EPOXY RESIN, CONCRETE, OR MORTAR. CLEAN ANY EXPOSED REBAR TO BARE METAL PRIOR TO APPLYING PATCH MATERIAL.
- REMOVAL OF LOOSE MATERIAL AND ORGANICS AND PREPARATION OF JOINTS IS SUBSIDIARY TO PAY ITEM P401.

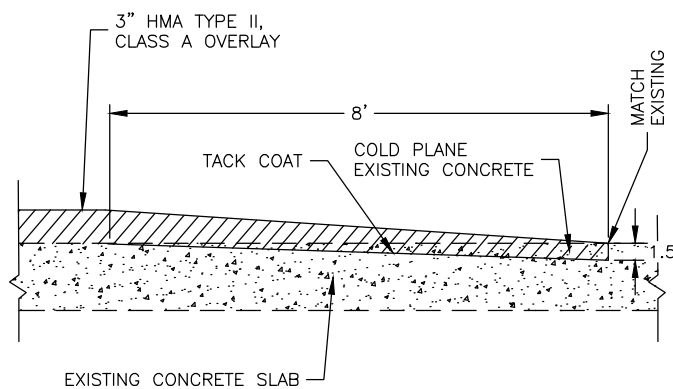
3 CONCRETE REPAIR  
20 NTS



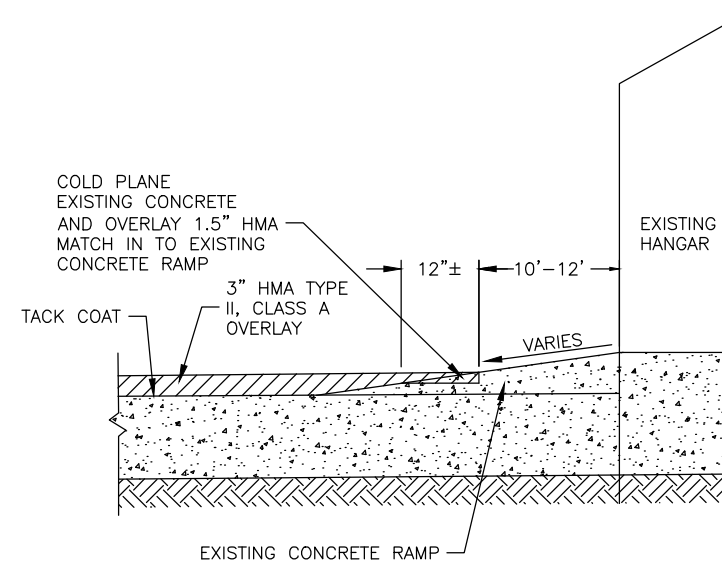
**COLD PLANE AND OVERLAY NOTES**

- REMOVE EXISTING ASPHALT.
- WASH AND SWEEP EXISTING APRON SURFACE PRIOR TO OVERLAY.
- REPAIR CONCRETE AS REQUIRED BY THE ENGINEER, SEE DETAIL 3/20.
- TACK CONCRETE AND ASPHALT SURFACES PRIOR TO PLACING OVERLAY.
- PRELEVEL APRON SURFACE WITH HMA TYPE II, CLASS A WHERE FINISHED GRADE IS GREATER THAN 3" FROM EXISTING GRADE. IN THESE AREAS, PRELEVEL TO 3" BELOW FINISHED GRADE.

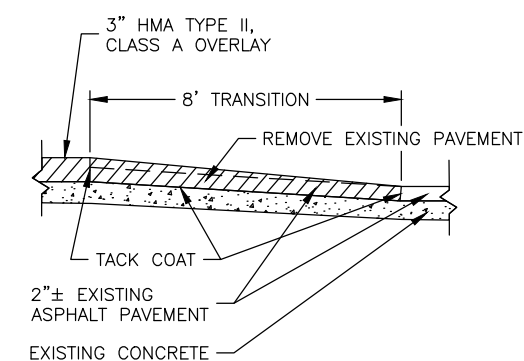
4 COLD PLANE AND OVERLAY  
20 NTS



5 CONCRETE MATCH DETAIL  
20 NTS



6 HMA TO CONCRETE TRANSITION DETAIL  
20 NTS



7 TW A RIGHT PAVEMENT MATCH  
20 NTS

DESIGN LEN  
 DRAWN JAG  
 CHECKED EJJ

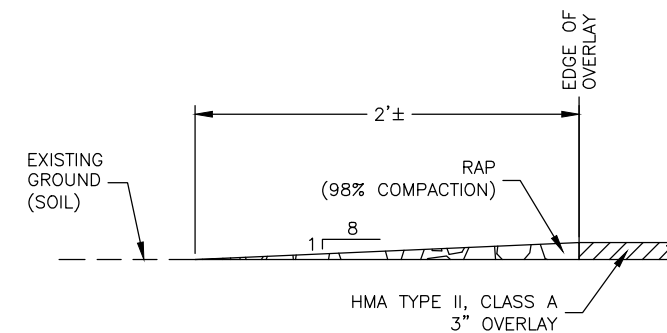
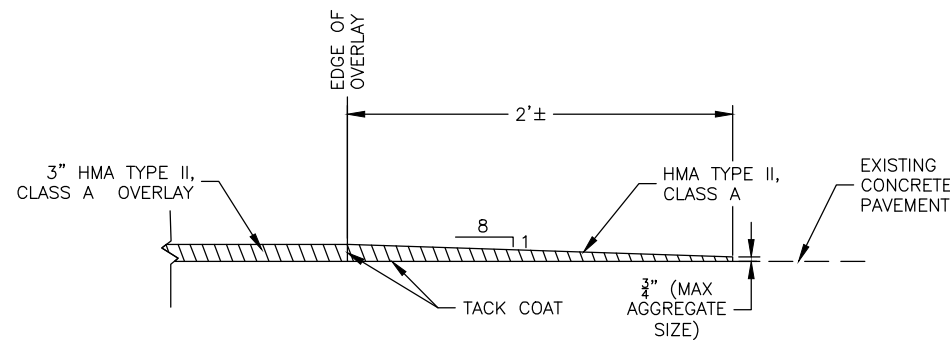
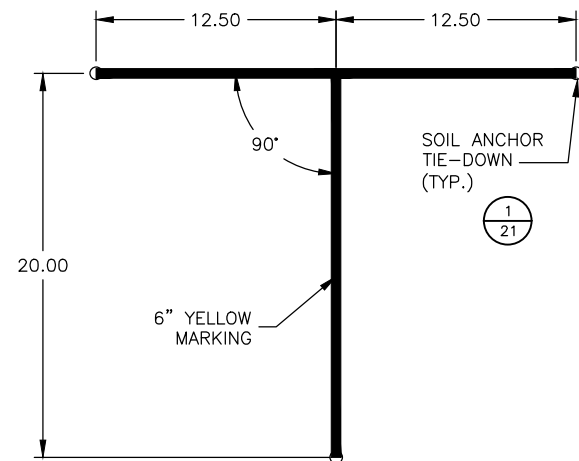
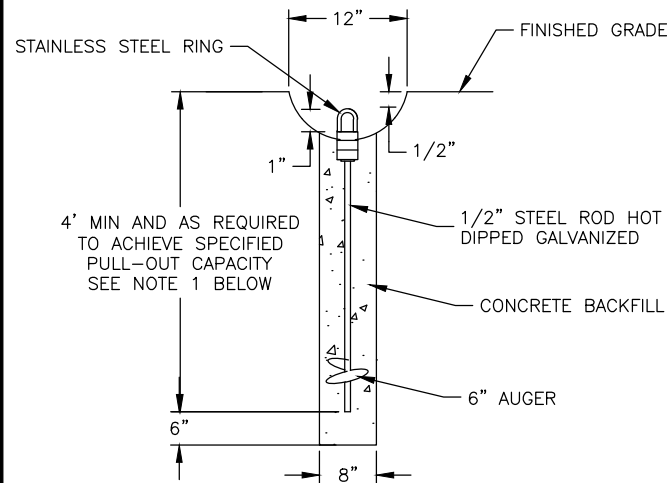
STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES  
 SOUTHCOAST REGION-DESIGN AND CONSTRUCTION-AVIATION

NO.	DATE	REVISIONS

TOM MADSEN  
 (DUTCH HARBOR) AIRPORT  
 UNALASKA TAXIWAY AND APRON REHABILITATION  
 AIP 3-02-0082-\_\_\_-202\_/SFAPT00178  
 TRENCH DRAIN AND PAVEMENT  
 DETAILS

SHEET  
 20  
 OF  
 35





**NOTES:**

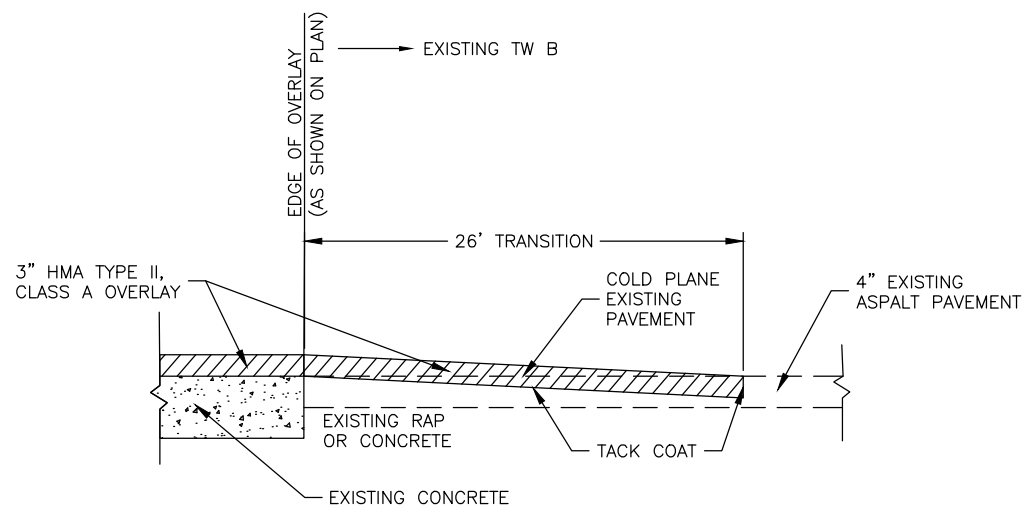
1. MINIMUM TENSILE BREAKING STRENGTH OF 9,000 LBS, A MINIMUM WORKING LOAD CAPACITY OF 3,500 LBS AND A MINIMUM FIELD PULLOUT CAPACITY OF 5,000 LBS.

1  
21 NTS  
**HELICAL ANCHOR TIE-DOWN**

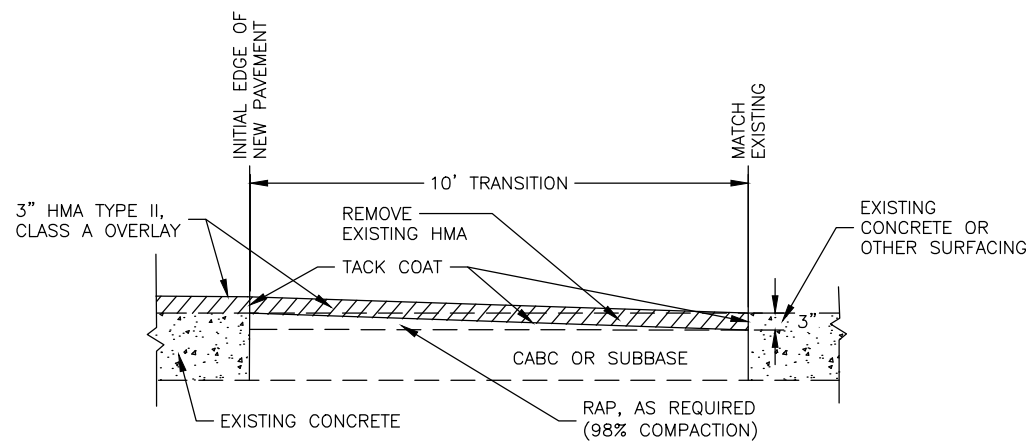
2  
21 NTS  
**TIE-DOWN LAYOUT**

3  
21 NTS  
**PAVEMENT MATCH DETAILS**

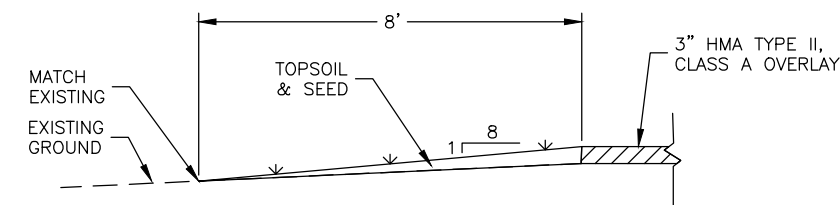
4  
21 NTS  
**RAP MATCH DETAILS**



5  
21 NTS  
**TAXIWAY B MATCH DETAILS**



6  
21 NTS  
**M&O DRIVEWAY MATCH DETAIL**



7  
21 NTS  
**TOPSOIL & SEED MATCH**

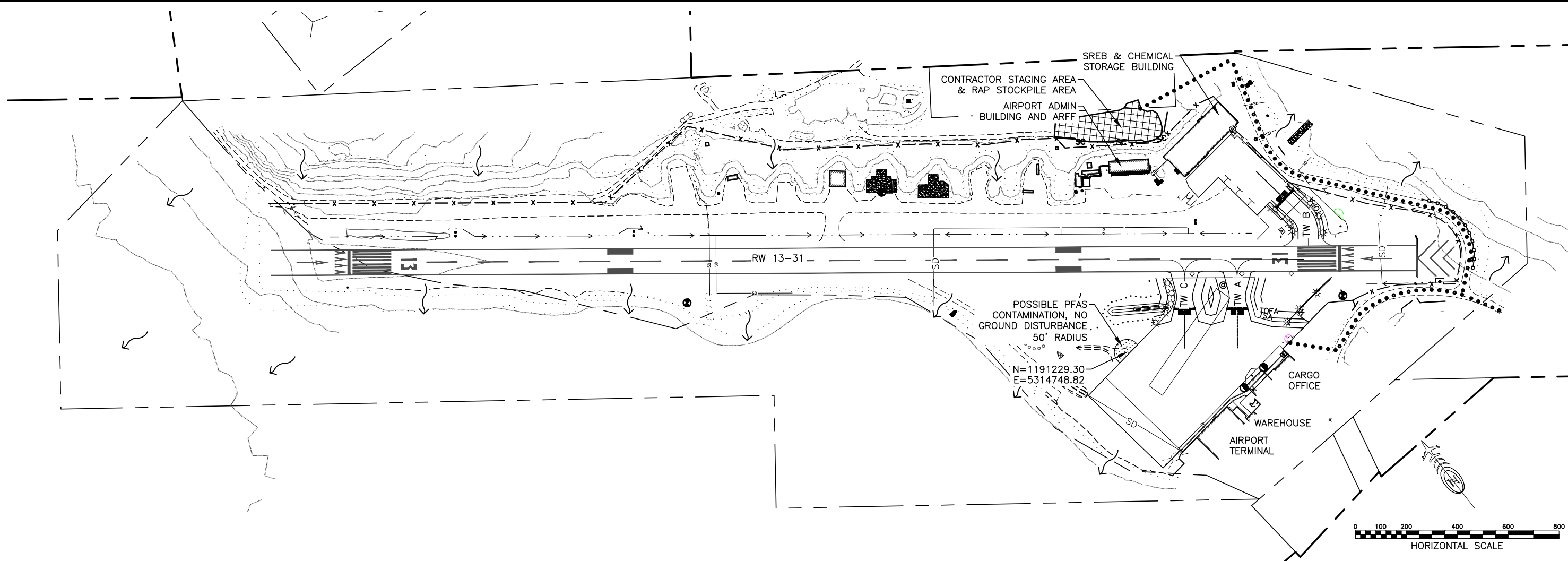
DESIGN LEN  
DRAWN JAG  
CHECKED EJG

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

BY	DATE	REVISIONS

TOM MADSEN  
(DUTCH HARBOR) AIRPORT  
UNALASKA TAXIWAY AND APRON REHABILITATION  
AIP 3-02-0082-\_\_\_-202\_/SFAPT00178  
MISCELLANEOUS DETAILS

SHEET  
21  
OF  
35



**EROSION AND SEDIMENT CONTROL PLAN NOTES:**

1. DEVELOP A STORM WATER POLLUTION PREVENTION PLAN (SWPPP) THAT COMPLIES WITH THE ALASKA POLLUTANT DISCHARGE ELIMINATION SYSTEM (APDES) REQUIREMENTS FOR STORM WATER DISCHARGES FOR THE PROJECT.
2. NO EARTHWORK WILL BE ALLOWED UNTIL PERMIT COVERAGE UNDER THE CONSTRUCTION GENERAL PERMIT HAS BEEN OBTAINED.
3. MINIMIZE THE AREA AND TIME PERIOD ERODIBLE SOILS ARE EXPOSED TO STORM WATER. INITIATE STABILIZATION IMMEDIATELY WHEN GRADING ACTIVITIES CEASE.
4. MAINTAIN ALL BMPs ON A DAILY BASIS INCLUDING, BUT NOT LIMITED TO REMOVAL AND DISPOSAL OF ACCUMULATED SOILS, CLEANING BMPs, AND REPLACEMENT OF DAMAGED BMPs.
5. DO NOT MAINTAIN EQUIPMENT OR REFUEL VEHICLES/EQUIPMENT WITHIN 100 FEET OF A WATER BODY OR WETLANDS.
6. PROVIDE SEDIMENT CONTROL AS SHOWN ON PLANS, AND AS NECESSARY TO PREVENT MIGRATION OF SEDIMENT USING CONTROL INDICATED IN THE SWPPP.
7. EROSION AND SEDIMENT CONTROL MATERIALS WILL BE LOCALLY PRODUCED PRODUCTS THAT ARE SEED AND WEED FREE, TO MINIMIZE POTENTIAL IMPORTATIONS OF NEW PLANT SPECIES FROM OUTSIDE ALASKA.
8. PROVIDE EROSION AND SEDIMENT CONTROL AROUND ALL STOCKPILE AREAS.
9. RESTORE ALL DISTURBED AREAS DISTURBED BY CONTRACT ACTIVITIES TO PRE-EXISTING CONDITIONS.
10. PREPARE A HAZARDOUS MATERIAL CONTROL PLAN (HMCP) TO PREVENT DISCHARGES OF POLLUTANTS FROM STORAGE, USE, CONTAINMENT, CLEANUP, AND DISPOSAL OF HAZARDOUS MATERIAL, INCLUDING PETROLEUM PRODUCTS RELATED TO CONSTRUCTION ACTIVITIES AND EQUIPMENT.
11. PROVIDE FIBER ROLLS ALONG CONTOURS TO BREAK UP DISTURBED EMBANKMENT SLOPE LENGTHS, WHERE THERE ARE SLOPES 25 FEET IN LENGTH OR LONGER OR WHERE THERE IS EXCESSIVE EROSION OCCURRING ON SLOPES.
12. MINIMIZE THE DISTURBANCE OR DAMAGE TO NATURAL VEGETATED AREAS AS MUCH AS PRACTICABLE.
13. VERIFY THAT DISTURBANCES ARE AUTHORIZED UNDER THE APPLICABLE PROJECT PERMITS.
14. ALL MATERIAL SITES MUST BE CONTRACTOR-FURNISHED. GCP 70 REQUIRES THE CONTRACTOR OBTAIN ALL PERMITS NECESSARY.
15. EXCAVATION DEWATERING WILL BE PERFORMED WITHIN 1500 FEET OF AN ACTIVE CONTAMINATED SITE AND THE CONTRACTOR MUST PROVIDE A PLAN TO SUBMIT TO ADEC FOR DEWATERING AT THIS LOCATION AND FILE A NOI TO COMPLY WITH ADEC EXCAVATION DEWATERING GENERAL PERMIT (AKG002000) BEFORE DEWATERING ACTIVITY BEGINS.

**ESCP LEGEND:**

- SC — SEDIMENT CONTROL
- FLOW ARROW

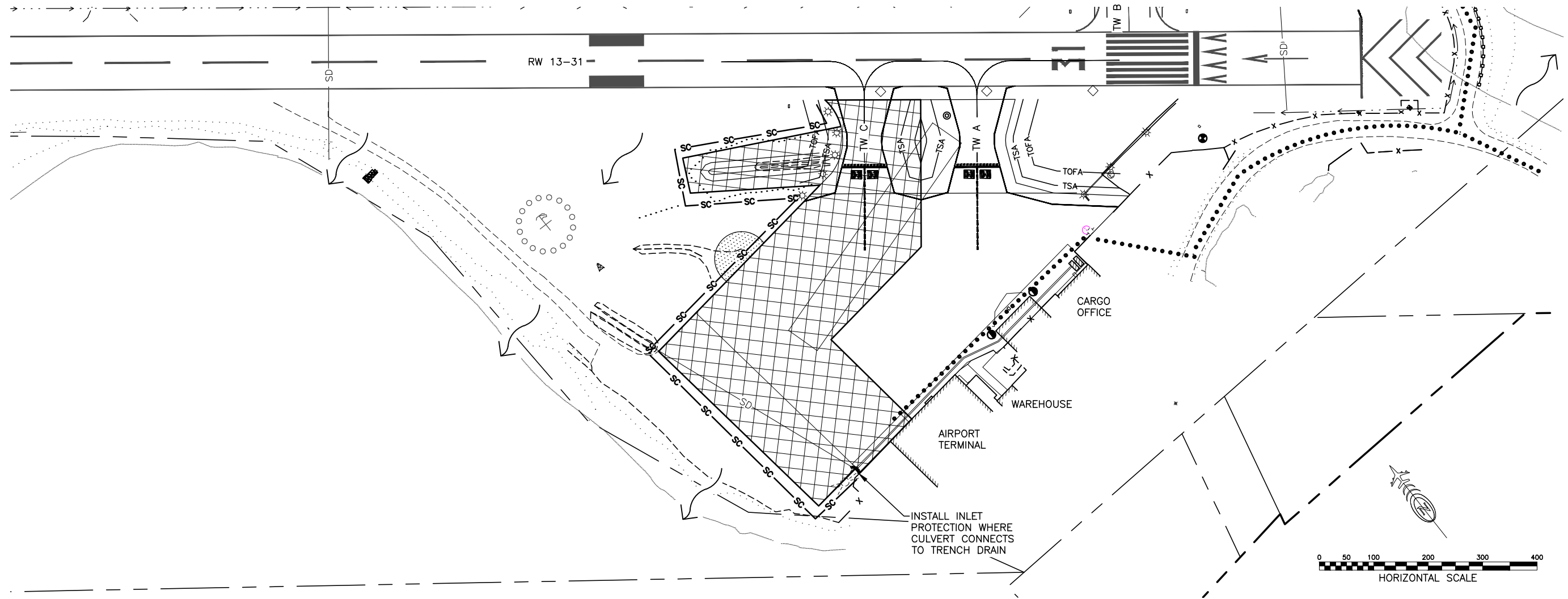
DESIGN LEN  
 DRAWN JAG  
 CHECKED EJG

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

NO.	DATE	REVISIONS

TOM MADSEN  
 (DUTCH HARBOR) AIRPORT  
 UNALASKA TAXIWAY AND APRON REHABILITATION  
 AIP 3-02-0082-\_\_\_\_-202\_/SFAPT00178  
 EROSION AND SEDIMENT CONTROL  
 PLAN OVERVIEW

SHEET  
 22  
 OF  
 35



**ESCP LEGEND:**

- sc— SEDIMENT CONTROL
- FLOW ARROW
- ⊕ INLET PROTECTION

**PHASE 1 LEGEND:**

- ..... HAUL ROUTE (TWO WAY)
- [Hatched Box] PHASE 1 CONSTRUCTION AREA

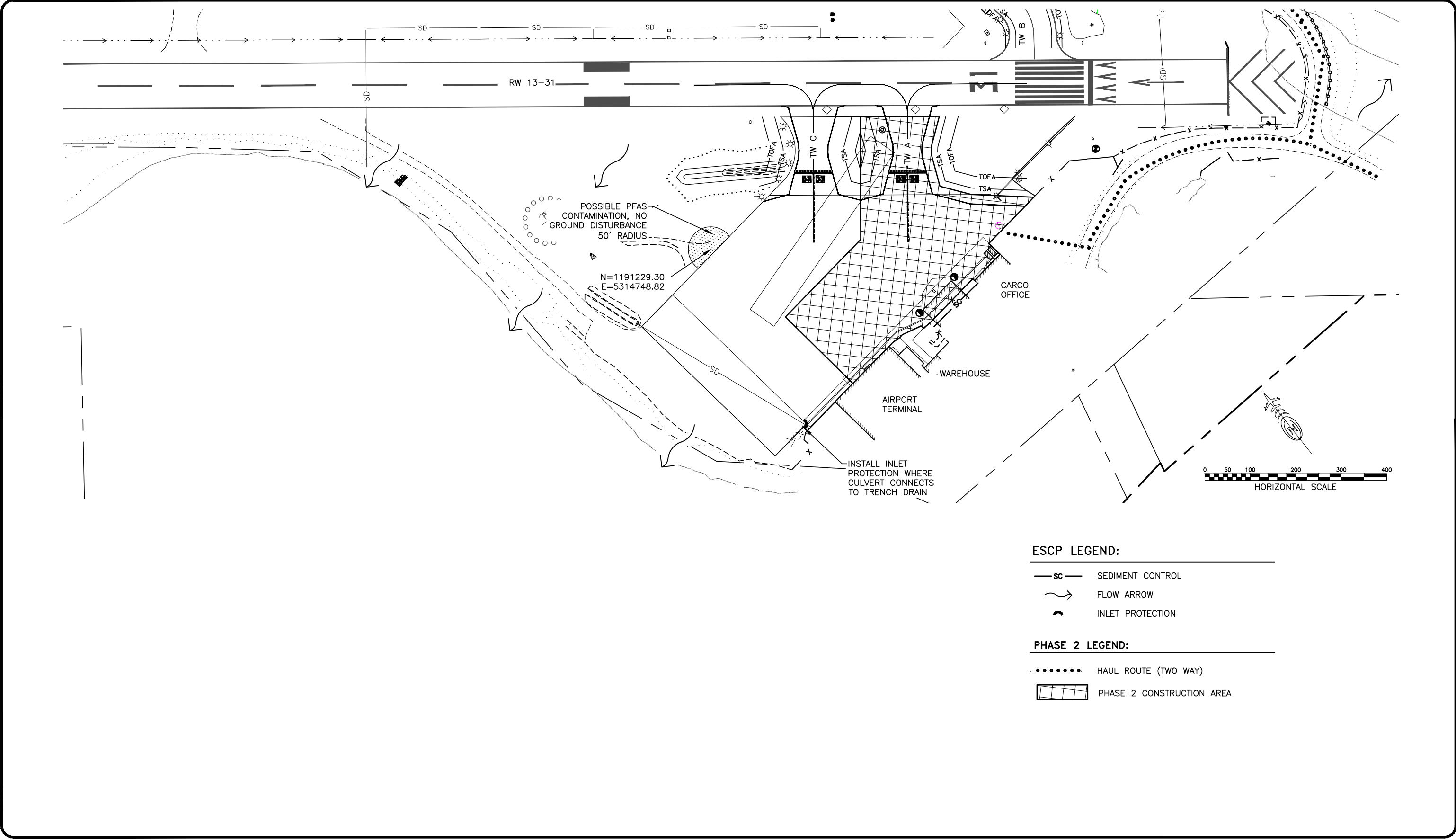
DESIGN	LEN
DRAWN	JAG
CHECKED	EJG

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

BY	DATE	REVISIONS

**TOM MADSEN**  
**(DUTCH HARBOR) AIRPORT**  
UNALASKA TAXIWAY AND APRON REHABILITATION  
AIP 3-02-0082-\_\_\_\_-202\_/SFAPT00178  
EROSION AND SEDIMENT CONTROL  
PLAN - PHASE 1

SHEET  
**23**  
OF  
**35**



**ESCP LEGEND:**

- sc — SEDIMENT CONTROL
- FLOW ARROW
- ⌒ INLET PROTECTION

**PHASE 2 LEGEND:**

- ..... HAUL ROUTE (TWO WAY)
- ▨ PHASE 2 CONSTRUCTION AREA

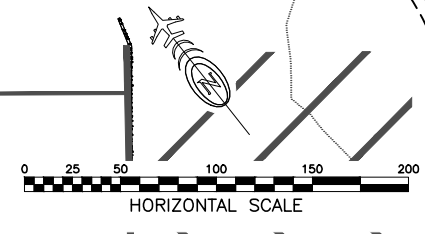
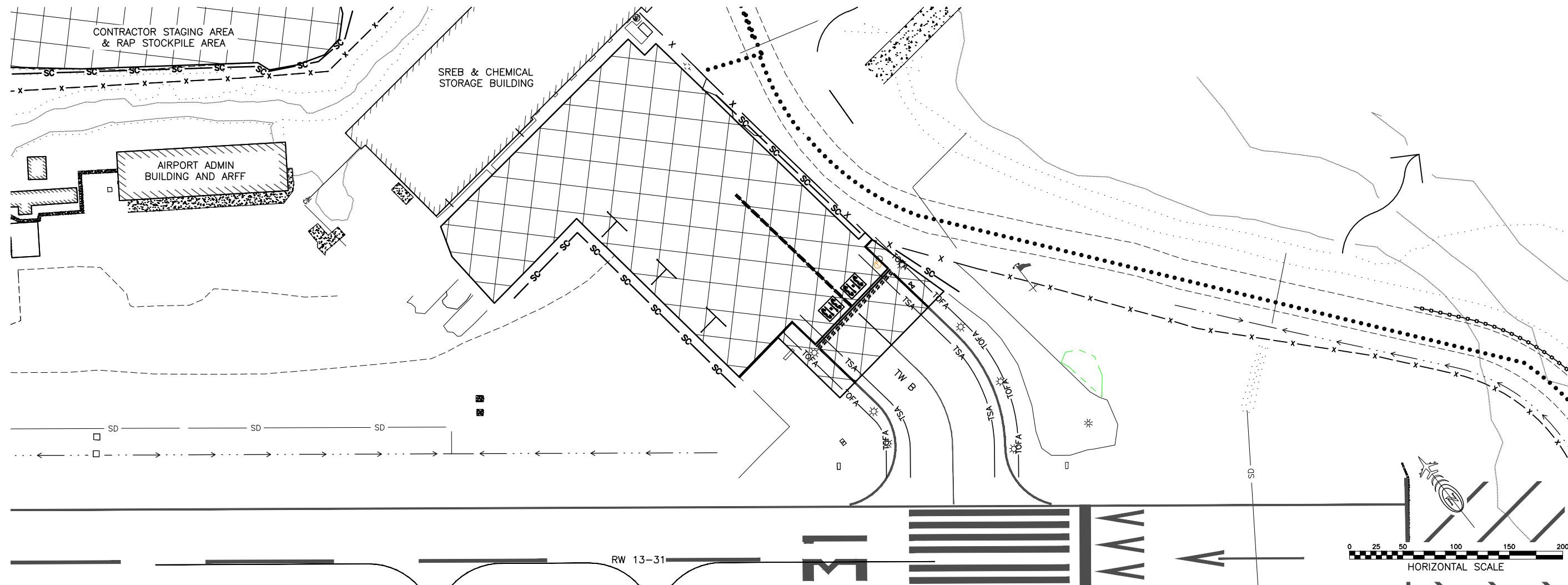
DESIGN	LEN
DRAWN	JAG
CHECKED	EJG

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

BY	DATE	REVISIONS

**TOM MADSEN**  
**(DUTCH HARBOR) AIRPORT**  
UNALASKA TAXIWAY AND APRON REHABILITATION  
AIP 3-02-0082-\_\_\_\_-202\_/SFAPT00178  
EROSION AND SEDIMENT CONTROL  
PLAN - PHASE 2

SHEET  
**24**  
OF  
**35**



**ESCP LEGEND:**

- sc— SEDIMENT CONTROL
- ~> FLOW ARROW

**PHASE 3 LEGEND:**

- ..... HAUL ROUTE (TWO WAY)
- [Grid] PHASE 3 CONSTRUCTION AREA

DESIGN LEN  
 DRAWN JAG  
 CHECKED EJG

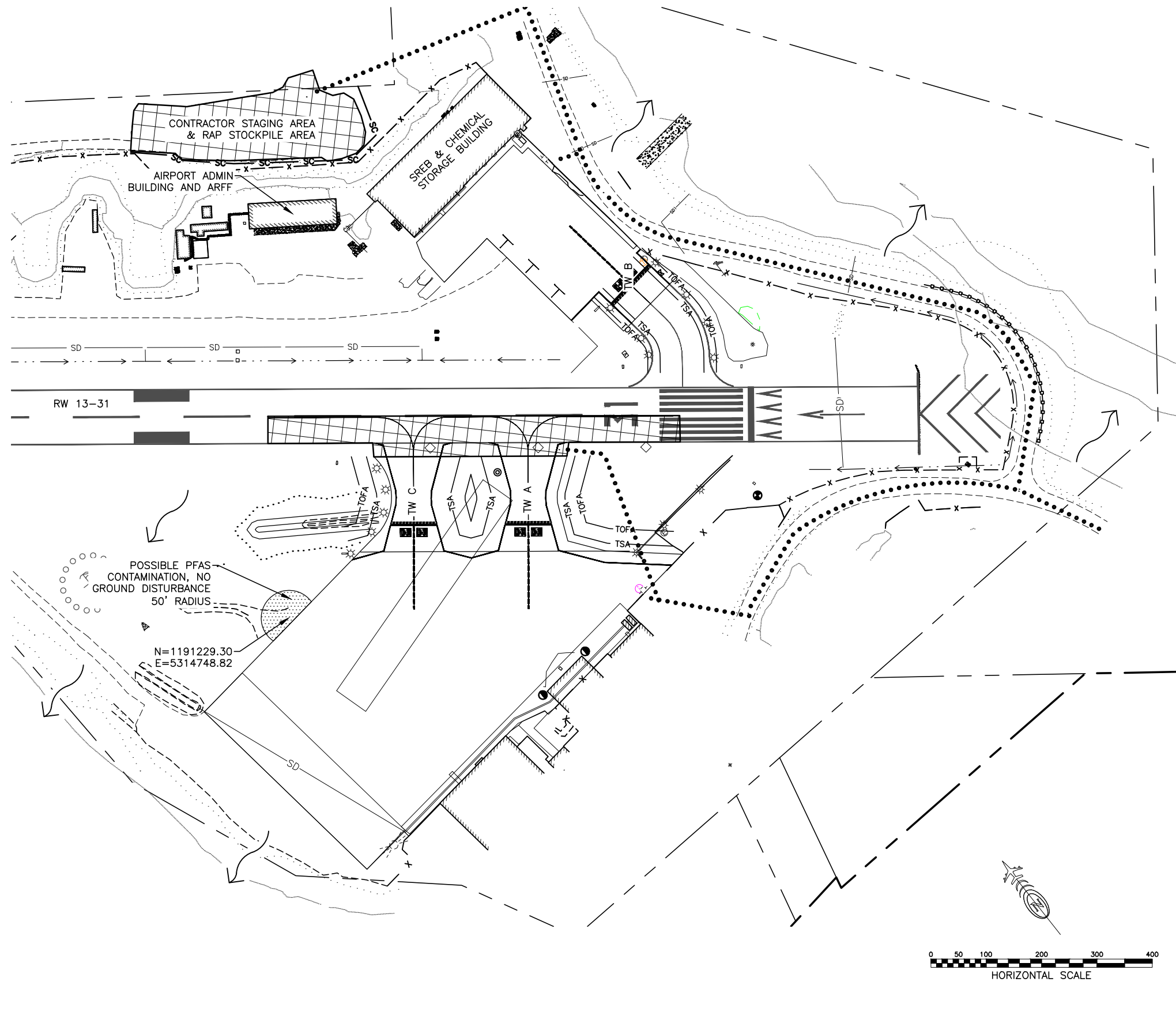
STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES  
 SOUTHCOAST REGION-DESIGN AND CONSTRUCTION-AVIATION

BY	DATE	REVISIONS

TOM MADSEN  
 (DUTCH HARBOR) AIRPORT  
 UNALASKA TAXIWAY AND APRON REHABILITATION  
 AIP 3-02-0082-\_\_\_\_-202\_/SFAPT00178  
 EROSION AND SEDIMENT CONTROL  
 PLAN - PHASE 3

SHEET  
 25  
 OF  
 35



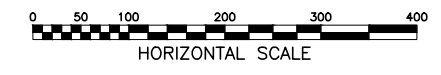


**ESCP LEGEND:**

- sc— SEDIMENT CONTROL
- FLOW ARROW
- ⊕ INLET PROTECTION

**PHASE 4 LEGEND:**

- ..... HAUL ROUTE (TWO WAY)
- [Grid Pattern] PHASE 4 CONSTRUCTION AREA



DESIGN	LEN
DRAWN	JAG
CHECKED	EJG

**STATE OF ALASKA**  
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES  
SOUTHCOAST REGION—DESIGN AND CONSTRUCTION—AVIATION

BY	DATE	REVISIONS

**TOM MADSEN**  
**(DUTCH HARBOR) AIRPORT**  
UNALASKA TAXIWAY AND APRON REHABILITATION  
AIP 3-02-0082-\_\_\_\_-202\_/SFAPT00178  
EROSION AND SEDIMENT CONTROL  
PLAN - PHASE 4

SHEET  
**26**  
OF  
**35**

**DEMOLITION NOTES:**

1. REMOVE LIGHTS AND SIGNS AS INDICATED ON DEMOLITION PLANS. REMOVAL INCLUDES ALL ASSOCIATED CONDUIT, CONDUCTORS, LIGHT BASES, TRANSFORMERS, CONTROLLERS, DRAIN CONDUITS, FOUNDATIONS, AND CONCRETE, UNLESS OTHERWISE INDICATED. OFFER ALL REMOVED LIGHTS, SIGNS, TRANSFORMERS, AND CONTROLLERS IN SERVICEABLE CONDITION TO AIRPORT MAINTENANCE. DELIVER ALL REMOVED CONDUCTORS TO A DUMPSTER PROVIDED BY AIRPORT MAINTENANCE FOR DISPOSAL. DISPOSAL OF LIGHTING EQUIPMENT DEEMED NON-SALVAGABLE BY AIRPORT MAINTENANCE AND REMOVED CONDUIT, LIGHT BASES, CONCRETE, AND OTHER MATERIAL IS THE RESPONSIBILITY OF THE CONTRACTOR. DISPOSE OF MATERIAL AT AN APPROVED SITE OFF OF AIRPORT PROPERTY IN ACCORDANCE WITH FEDERAL AND STATE REGULATIONS. DISPOSAL COSTS ARE SUBSIDIARY TO THE CONTRACT.
2. WHEN REMOVING CONDUCTORS FROM EXISTING CONDUIT TO REMAIN, INSTALL A PULL ROPE FOR FUTURE USE PER SPECIFICATION L-108.
3. CONDUITS SHOWN TO BE REMOVED THAT WILL NOT BE DISTURBED BY EXCAVATION ASSOCIATED WITH THIS PROJECT MAY BE ABANDONED IN PLACE UNLESS OTHERWISE DIRECTED BY THE ENGINEER. REMOVE ALL CONDUCTORS FROM ABANDONED CONDUITS. REMOVE ALL LIGHT BASES UNLESS OTHERWISE INDICATED.
4. REMOVAL OF EXISTING LIGHTED SIGNS IS SUBSIDIARY TO INSTALLATION OF NEW SIGNS.

**LIGHTING NOTES:**

1. COORDINATE ALL LIGHTING OUTAGES CAUSED BY DISCONNECTIONS, CIRCUIT CHANGES, OR OTHER WORK WITH THE PROJECT ENGINEER PER GCP 50 AND GCP 80. SCHEDULE INSTALLATION OF CONDUCTORS AND OTHER EQUIPMENT TO MINIMIZE QUANTITY AND DURATION OF OUTAGES. PROVIDE A MINIMUM OF 48 HOURS NOTICE FOR REQUIRED LOCKOUTS TO ALLOW AIRPORT MAINTENANCE TO ENSURE PERSONNEL ARE AVAILABLE.
2. EXISTING DUCT BANKS AND UNDERGROUND UTILITIES TO REMAIN MUST BE PROTECTED AND REMAIN IN SERVICE DURING CONSTRUCTION UNLESS OTHERWISE INDICATED.
3. ALL AIRFIELD LIGHTING CONDUCTORS MUST BE FAA TYPE C, 8 AWG.
4. INSTALL A #6 BARE COPPER GROUNDING CONDUCTOR WITH ALL LIGHTING AND SIGN CIRCUIT CONDUCTORS.
5. WHEN DRILLING HOLES IN EXISTING LIGHT BASES TO ADD CONDUIT ENTRIES, APPLY COLD GALVANIZING OR SIMILAR CORROSION PROTECTION TO BARE METAL AFTER DRILLING BEFORE INSTALLING RUBBER GROMMET.
6. THE EXISTING 10KW LIGHTING REGULATOR AND ASSOCIATED CONTROLS SHALL REMAIN IN SERVICE AND ARE LOCATED ON THE SECOND FLOOR MEZZANINE IN THE ARFF/SREB.

**SHEET NOTES:** (X) (APPLY TO PLAN SHEETS E2-E3)

1. REMOVE CONDUCTORS TO EXISTING LIGHT BASE OR MANHOLE TO REMAIN. REMOVE CONDUIT TO EXISTING LIGHT BASE OR MANHOLE OR AS FAR AS REQUIRED FOR EXCAVATION OF CURRENT PROJECT AND INSTALLATION OF NEW COUPLING TO NEW CONDUIT. PLUG AND PROTECT EXISTING CONDUIT OR LIGHT BASE CONDUIT HUB DURING EXCAVATION. SEE SHEET NOTE 2 FOR CONNECTION OF NEW WORK.
2. CONNECT NEW CONDUIT TO EXISTING CONDUIT OR LIGHT BASE. INSTALL NEW CONDUCTORS AND CONNECT TO EXISTING WIRING AND TRANSFORMER IN EXISTING LIGHT BASE. WIRING CONNECTIONS ARE SUBSIDIARY TO L108 ITEMS.
3. REMOVE LIGHT FIXTURES, BASEPLATES, TRANSFORMERS, AND WIRING. EXISTING LIGHT BASES AND CONDUIT TO REMAIN.
4. INSTALL BLANK COVERS ON EXISTING LIGHT BASES. WORK IS SUBSIDIARY TO DEMOLITION WORK PER SHEET NOTE 3.
5. EXISTING RUNWAY LIGHTS TO REMAIN. PROTECT IN PLACE DURING CONSTRUCTION.
6. INSTALL 2" LIGHT BASE EXTENSION AND (2) 1/2" SPACER RINGS TO ACCOMMODATE PAVEMENT OVERLAY. INSTALLATION SHALL BE SIMILAR TO DETAIL 1/E4. WORK IS SUBSIDIARY TO FIXTURE INSTALLATION PER SHEET NOTE 11.
7. NEW LIGHTING IN THIS AREA WILL REQUIRE SAW CUTTING AND CORE DRILLING OF EXISTING CONCRETE APRON FOR INSTALLATION OF LIGHT BASES AND CONDUIT.
8. REMOVE SEMI-FLUSH FIXTURE AND TRANSFORMER. LIGHT BASE, CONDUIT, AND WIRING TO REMAIN.
9. INSTALL NEW ELEVATED FIXTURE ON HEAVY BASEPLATE WITH L-868 BOLT CONFIGURATION. CONNECT TO NEW TRANSFORMER AND EXISTING WIRING IN EXISTING LIGHT BASE.
10. REMOVE LIGHT FIXTURE AND BASEPLATE. EXISTING LIGHT BASES, TRANSFORMERS, CONDUIT, AND WIRING TO REMAIN. WORK IS PAID FOR UNDER ITEM L125.210.0000.
11. INSTALL NEW FIXTURE AND BASEPLATE ON EXISTING LIGHT BASE WITH NEW GASKET. CONNECT TO EXISTING TRANSFORMER. WORK IS PAID FOR UNDER ITEM L125.210.0000.
12. LIGHT BASES AND CONDUIT CAST INTO EXISTING APRON CONCRETE MAY BE ABANDONED IN PLACE. PROVIDE BLANK STEEL COVERS AND NOTE ON ASBUILT DRAWINGS.
13. FOR ABANDONED LIGHT BASES LOCATED BELOW NEW ASPHALT OVERLAY, PLUG CONDUIT AND FILL LIGHT BASE WITH CONCRETE UP TO LEVEL OF EXISTING CONCRETE APRON PRIOR TO PLACING ASPHALT.

**ELECTRICAL PLAN LEGEND**

<p>EXISTING TO REMAIN (DEMO/NEW PLANS)</p> <p>DEMOLITION (DEMO PLANS)</p> <p>NEW WORK (NEW PLANS)</p>	<p>EXISTING LIGHT</p> <p>EXISTING LIGHT TO BE MODIFIED, SEE NOTES AND/OR SCHEDULES FOR WORK TO BE PERFORMED</p> <p>RUNWAY EDGE LIGHT, OMNI-DIRECTIONAL</p> <p>RUNWAY EDGE LIGHT, BI-DIRECTIONAL</p> <p>FLUSH RUNWAY EDGE LIGHT, BI-DIRECTIONAL</p> <p>FLUSH RUNWAY EDGE LIGHT, BI-DIRECTIONAL, 2-COLOR</p> <p>TAXIWAY EDGE LIGHT, OMNI-DIRECTIONAL</p> <p>LIGHTED AIRPORT SIGN</p> <p>SERIES LIGHTING CIRCUIT, TICK MARKS INDICATE NUMBER OF 5KV SERIES CONDUCTORS IN HDPE CONDUIT (2 SHOWN), INCLUDE GROUND CONDUCTOR (NOT SHOWN), TICK MARKS NOT SHOWN ON SHORT SEGMENTS OR IN CONGESTED AREAS FOR CLARITY</p> <p>SERIES LIGHTING CIRCUIT, TICK MARKS INDICATE NUMBER OF 5KV SERIES CONDUCTORS IN CONCRETE ENCASED RIGID STEEL CONDUIT (2 SHOWN), INCLUDE GROUND CONDUCTOR (NOT SHOWN), TICK MARKS NOT SHOWN ON SHORT SEGMENTS OR IN CONGESTED AREAS FOR CLARITY</p> <p>ELECTRICAL CONDUIT</p> <p>GROUND ROD, 3/4"x10' TYPICAL</p> <p>L-867/L-868 HANDHOLE, TYPE I (LIGHT BASE WITH BLANK COVER), UNLESS OTHERWISE INDICATED</p> <p>DRYWELL</p> <p>STORM DRAIN MANHOLE OR CATCH BASIN</p> <p>ELECTRICAL MANHOLE</p> <p>COMMUNICATIONS MANHOLE</p> <p>ELECTRICAL TYPE II JUNCTION BOX</p> <p>COMMUNICATIONS TYPE II JUNCTION BOX</p> <p>DUCT BANK, USE/TYPE AS SHOWN</p> <p>PRIMARY UNDERGROUND ELECTRICAL LINE</p> <p>UNDERGROUND COMMUNICATIONS LINE</p> <p>TEMPORARY JUMPER</p> <p>REIL FIXTURE</p>	<p><b>ABBREVIATIONS</b></p> <p>ARFF AIRPORT RESCUE AND FIRE FIGHTING</p> <p>BC BARE COPPER</p> <p>BOP BEGINNING OF PROJECT</p> <p>C CONDUIT</p> <p>Ø DIA DIAMETER</p> <p>EOP END OF PROJECT</p> <p>EMH ELECTRICAL MANHOLE</p> <p>EMT ELECTRICAL METALLIC TUBING</p> <p>FAA FEDERAL AVIATION ADMINISTRATION</p> <p>GRD GROUND</p> <p>HDPE HIGH DENSITY POLYETHYLENE</p> <p>HMA HOT MIX ASPHALT</p> <p>LFMC LIQUIDTIGHT FLEXIBLE METALLIC CONDUIT</p> <p>LFNC LIQUIDTIGHT FLEXIBLE NONMETALLIC CONDUIT</p> <p>NFPA NATIONAL FIRE PROTECTION ASSOCIATION</p> <p>PAPI PRECISION APPROACH PATH INDICATOR</p> <p>PPE PERSONAL PROTECTIVE EQUIPMENT</p> <p>PVC POLYVINYL CHLORIDE</p> <p>RAP RECLAIMED ASPHALT PAVEMENT</p> <p>REIL RUNWAY END IDENTIFIER LIGHT</p> <p>RMC RIGID METALLIC CONDUIT (GALVANIZED STEEL)</p> <p>SREB SNOW REMOVAL EQUIPMENT BUILDING</p> <p>SS STAINLESS STEEL</p> <p>TYP TYPICAL</p> <p>UON UNLESS OTHERWISE NOTED</p> <p>VASI VISUAL APPROACH SLOPE INDICATOR</p> <p>EQUIPMENT NUMBER, SEE SCHEDULES ON SHEETS E8-E9</p> <p>DX DEMOLITION ITEM</p> <p>EX TAXIWAY EDGE LIGHT</p> <p>HHX HANDHOLE</p> <p>SX LIGHTED SIGN</p> <p>(X) REFERENCE TO SHEET NOTE</p> <p><b>LIGHT COLORS AND DISTRIBUTIONS</b></p> <p>B BLUE</p> <p>Y YELLOW</p> <p>G GREEN</p> <p>R RED</p> <p>W WHITE</p> <p>O OBSCURED</p> <p>BI BI-DIRECTIONAL</p> <p>UNI UNI-DIRECTIONAL</p> <p>OMNI OMNI-DIRECTIONAL</p>
---	---	---

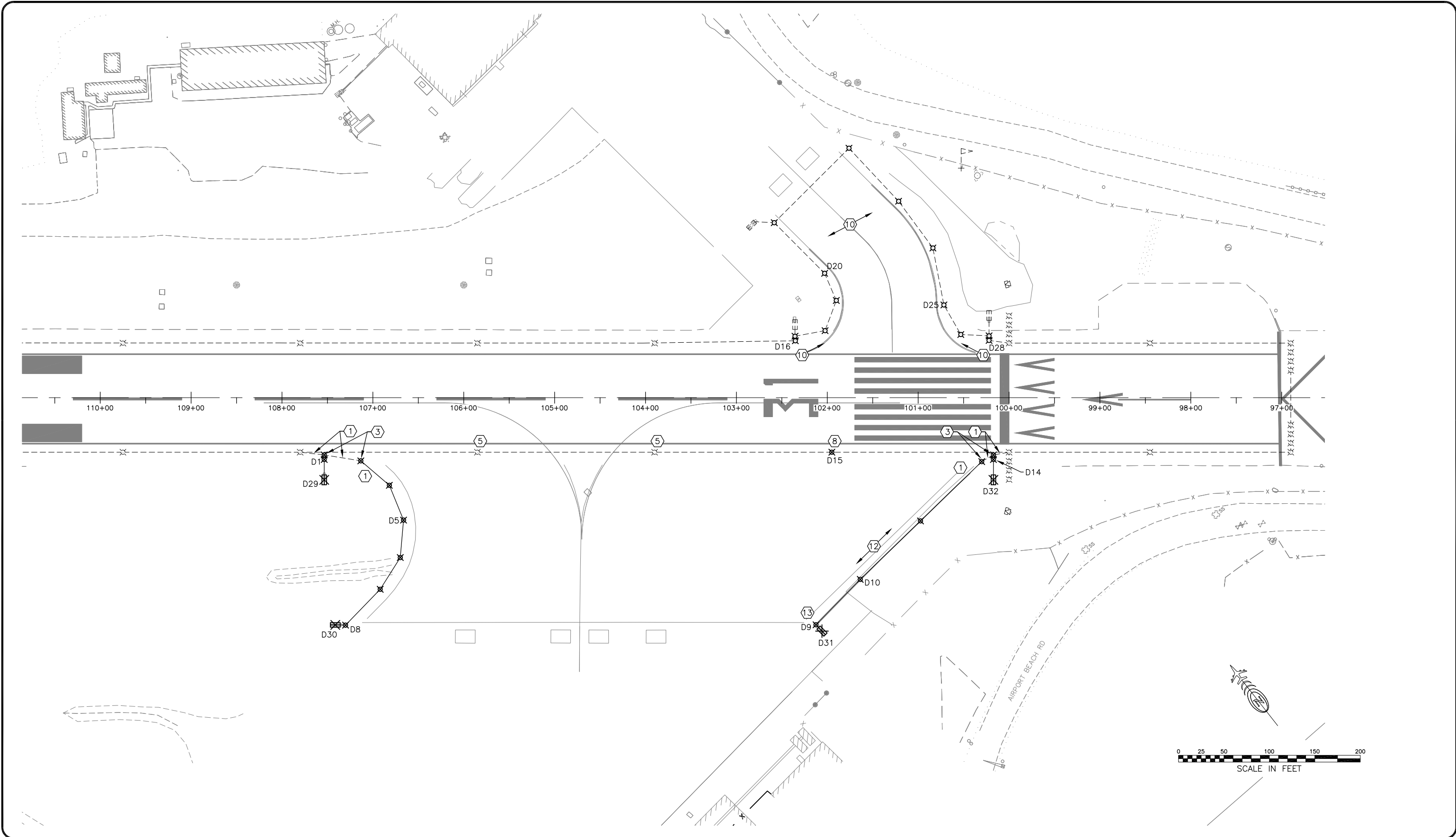
DESIGN LFS  
 DRAWN JCA  
 CHECKED CLR

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

BY	DATE	REVISIONS

**TOM MADSEN**  
 (DUTCH HARBOR) AIRPORT  
 UNALASKA TAXIWAY AND APRON REHABILITATION  
 AIP 3-02-0082-\_\_\_-202\_/SFAPT00178  
 ELECTRICAL LEGEND AND NOTES

SHEET  
**E1**  
 OF  
**35**



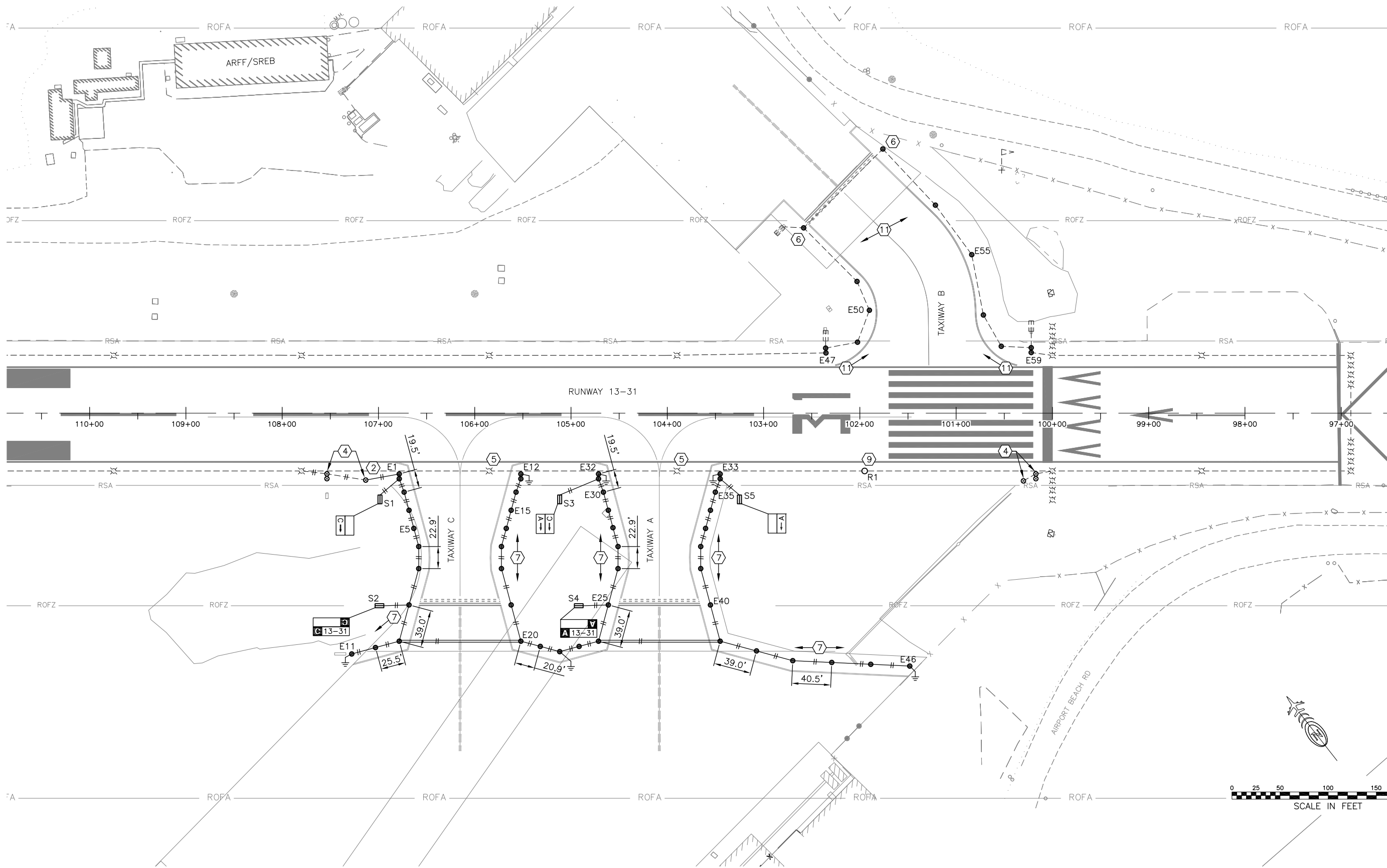
DESIGN LFS  
 DRAWN JCA  
 CHECKED CLR

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

BY	DATE	REVISIONS

TOM MADSEN  
 (DUTCH HARBOR) AIRPORT  
 UNALASKA TAXIWAY AND APRON REHABILITATION  
 AIP 3-02-0082-\_\_\_-202\_/SFAPT00178  
 ELECTRICAL SITE DEMOLITION PLAN

SHEET  
**E2**  
 OF  
 35



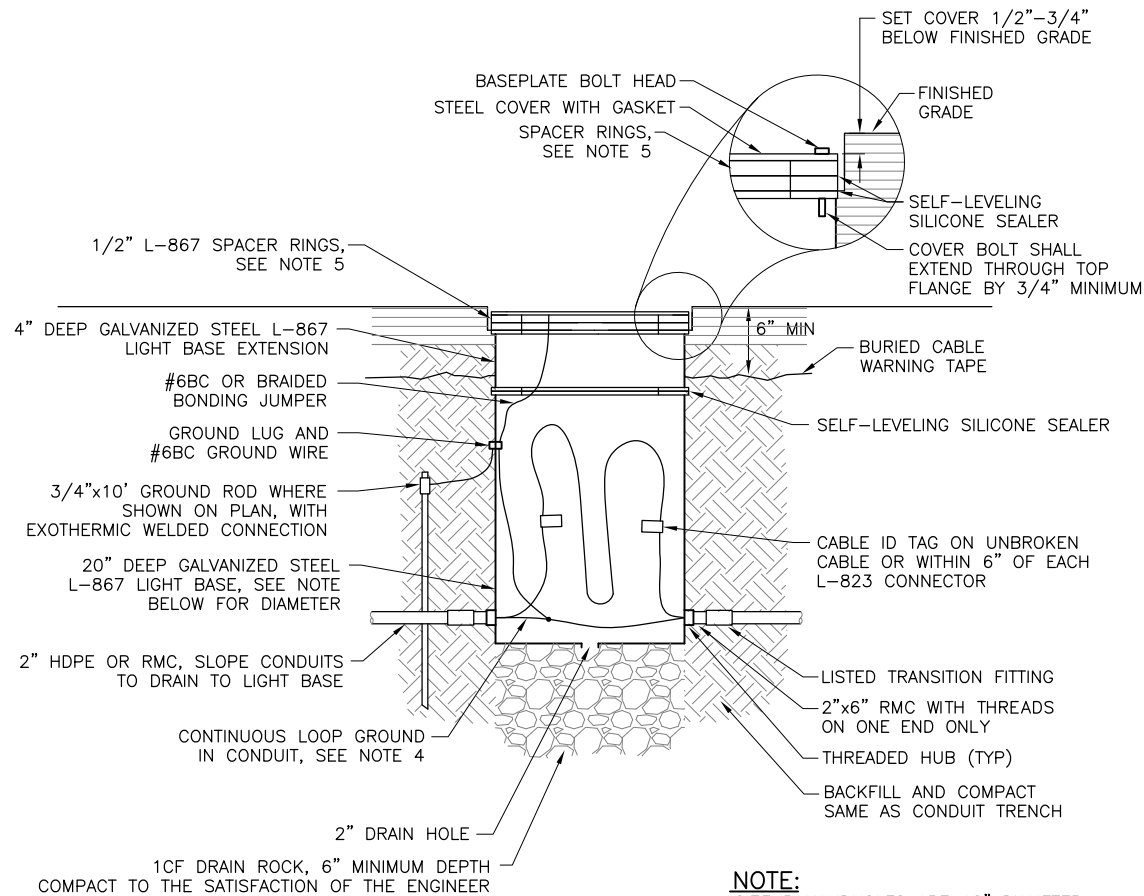
DESIGN LFS  
 DRAWN JCA  
 CHECKED CLR

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

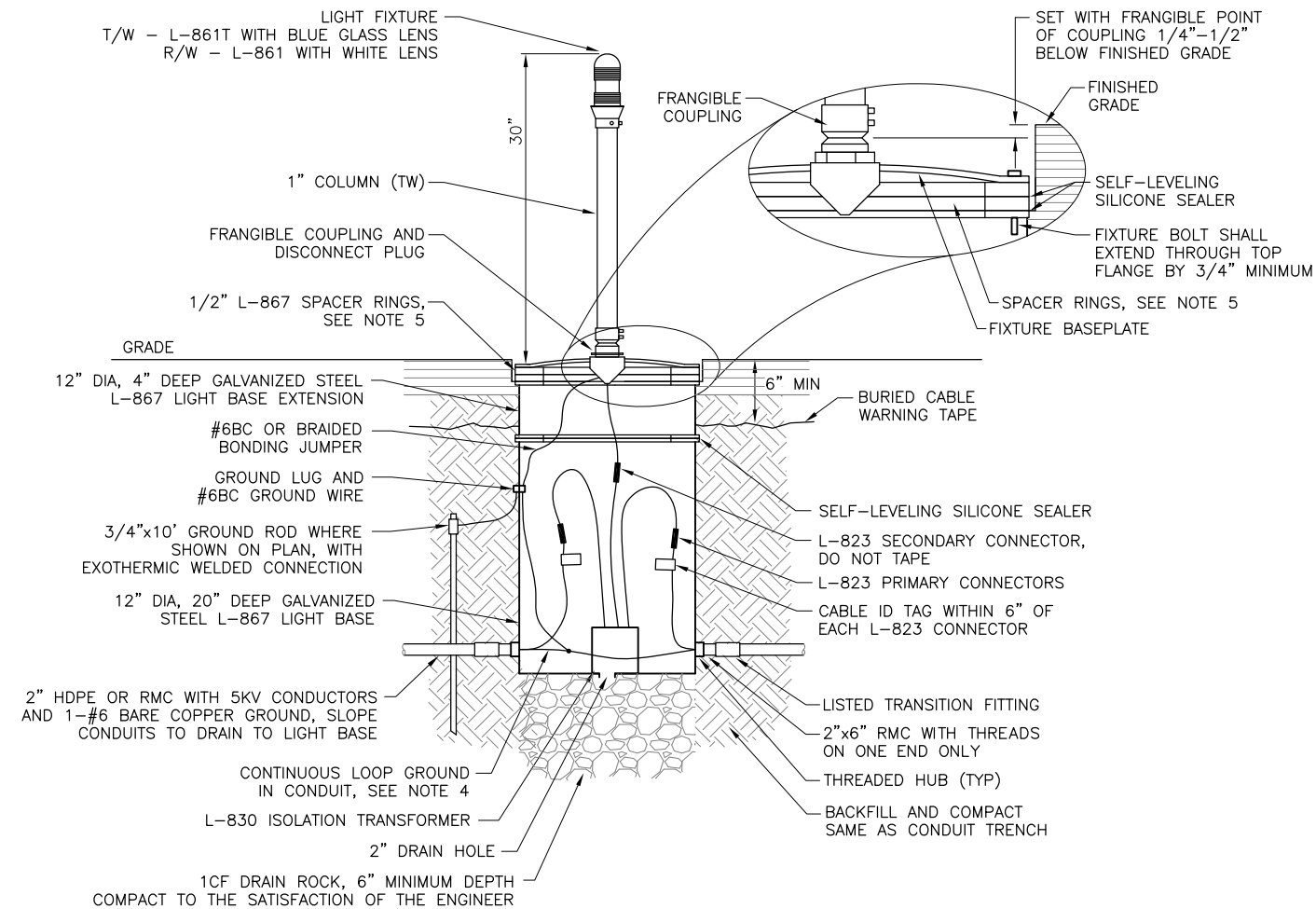
NO.	BY	DATE	REVISIONS

TOM MADSEN  
 (DUTCH HARBOR) AIRPORT  
 UNALASKA TAXIWAY AND APRON REHABILITATION  
 AIP 3-02-0082-\_\_\_-202\_/SFAPT00178  
 ELECTRICAL SITE NEW WORK PLAN

SHEET  
**E3**  
 OF  
 35



1 HANDHOLE, TYPE I DETAIL  
E4 NTS



2 BASE MOUNTED LIGHT DETAIL  
E4 NTS

NOTES:

1. SELF-LEVELING SILICONE SEALER MUST BE MOMENTIVE RTV118 OR APPROVED EQUAL.
2. INSTALL CONDUIT SYSTEM TO DRAIN TO THE LIGHT BASES.
3. PROVIDE LIGHT BASES WITH THEADED HUBS (NO DRILLED AND GROMMET CONNECTIONS). PROVIDE ADDITIONAL HUBS FOR CONDUIT DRAINS AND/OR SIGN CONNECTIONS WHERE SHOWN ON PLANS.
4. CIRCUIT GROUND WIRE ROUTED IN CONDUIT MUST BE CONTINUOUS THROUGH LIGHT BASE OR JOINED USING IRREVERSIBLE COMPRESSION CONNECTORS AND MUST NOT RELY ON LIGHT BASE GROUND LUG FOR CONTINUITY.
5. PROVIDE A MINIMUM OF TWO 1/2" SPACER RINGS BELOW BASEPLATE FOR COMPLETED INSTALLATION OF ELEVATED EDGE LIGHTS AND HANDHOLES. ADDITIONAL SPACER RINGS REQUIRED DURING SET UP FOR PAVING ARE SUBSIDIARY.
6. LEAVE SUFFICIENT SLACK IN POWER FEED CONDUCTORS TO MAKE CONNECTIONS 2 FEET ABOVE GRADE. LEAVE SUFFICIENT SLACK IN RETURN AND LOOP CONDUCTORS TO REACH 2 FEET ABOVE GRADE WITH CENTER OF SLACK CONDUCTOR.

DESIGN LFS  
 DRAWN JCA  
 CHECKED CLR

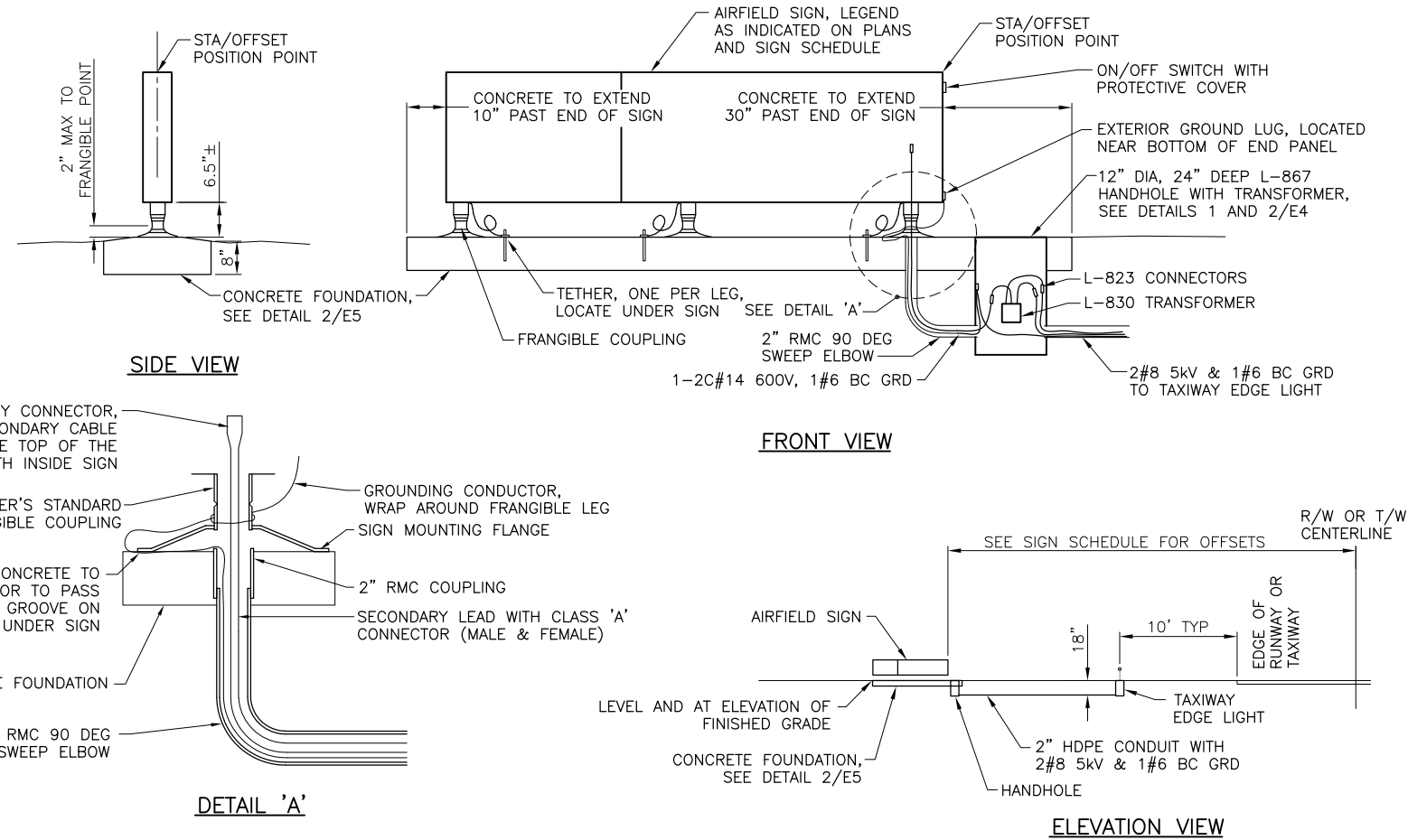
STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES  
 SOUTHCOAST REGION-DESIGN AND CONSTRUCTION-AVIATION

NO.	DATE	REVISIONS

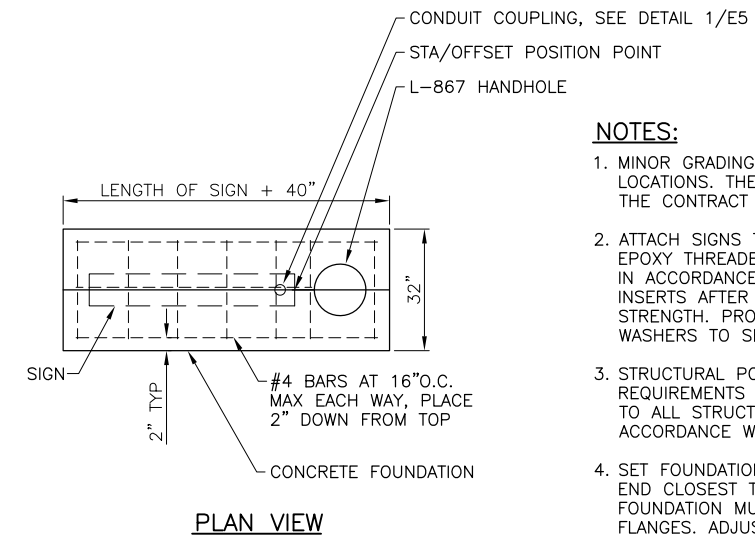
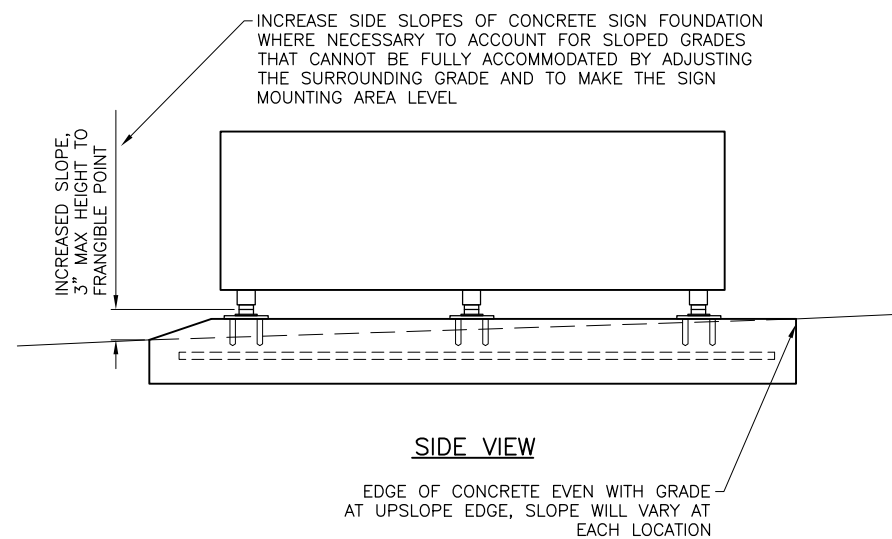
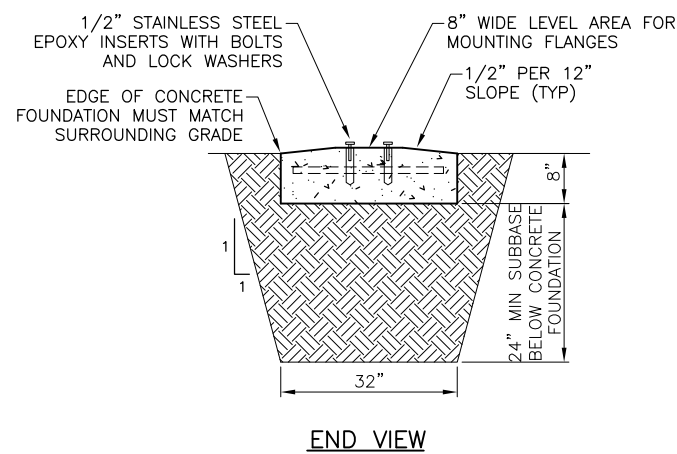
TOM MADSEN  
 (DUTCH HARBOR) AIRPORT  
 UNALASKA TAXIWAY AND APRON REHABILITATION  
 AIP 3-02-0082-\_\_\_-202\_/SFAPT00178  
 ELECTRICAL DETAILS

SHEET  
 E4  
 OF  
 35





1 AIRFIELD SIGN DETAILS  
 E5 NTS



- NOTES:**
- MINOR GRADING OR FILL WILL BE REQUIRED AT ALL SIGN LOCATIONS. THE GRADING AND EARTHWORK IS SUBSIDIARY TO THE CONTRACT AND NO SEPARATE PAYMENT WILL BE MADE.
  - ATTACH SIGNS TO CONCRETE BASE USING STAINLESS STEEL EPOXY THREADED INSERTS, SIMILAR TO HILTI HIS-RN, INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. INSTALL INSERTS AFTER CONCRETE HAS REACHED FULL DESIGN STRENGTH. PROVIDE STAINLESS STEEL BOLTS WITH SPLIT LOCK WASHERS TO SECURE SIGNS TO INSERTS.
  - STRUCTURAL PORTLAND CEMENT CONCRETE MUST MEET THE REQUIREMENTS OF SECTION P-610. APPLY A SURFACE SEALER TO ALL STRUCTURAL PORTLAND CEMENT CONCRETE IN ACCORDANCE WITH THE REQUIREMENTS OF SECTION P-610.
  - SET FOUNDATION TO MATCH SHOULDER SURFACE ELEVATION AT END CLOSEST TO RUNWAY OR TAXIWAY EDGE. CENTER OF FOUNDATION MUST BE LEVEL TO SUPPORT SIGN MOUNTING FLANGES. ADJUST SURROUNDING GRADE TO MEET EDGE OF OTHER SIDES OF FOUNDATION.

2 CONCRETE SIGN FOUNDATION DETAILS  
 E5 NTS

DESIGN LFS  
 DRAWN JCA  
 CHECKED CLR

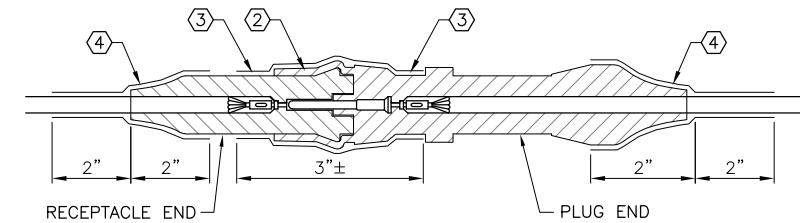
STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES  
 SOUTHCOAST REGION-DESIGN AND CONSTRUCTION-AVIATION

BY	DATE	REVISIONS

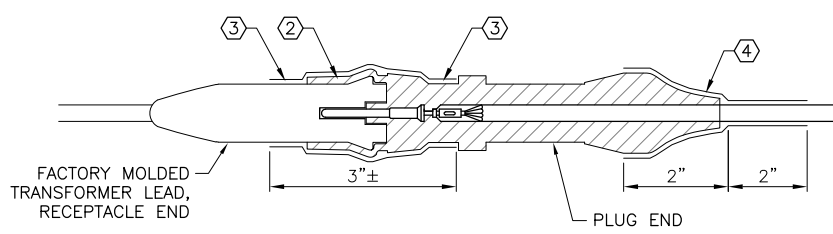
TOM MADSEN  
 (DUTCH HARBOR) AIRPORT  
 UNALASKA TAXIWAY AND APRON REHABILITATION  
 AIP 3-02-0082-\_\_\_-202\_/SFAPT00178  
 ELECTRICAL DETAILS

SHEET  
**E5**  
 OF  
 35

8/15/2024, 11:20 AM  
 PLANS DEVELOPED BY: STANTEC CONSULTING SERVICES, INC. 725 EAST FIREWEED LANE, SUITE 200, ANCHORAGE, AK 99503-2245 907-276-4245 CERTIFICATE OF AUTHORIZATION #126386  
 U:\2073017130\drawing\Drawings\00178-DUT-E04-E07-DETAILS.dwg



**TYPE B**  
 FOR SPLICES FOR USE AT TEST POINTS, JUNCTION OF HOMERUN WITH LOOP CIRCUITS, AND SPLICES IN HOMERUN CABLES

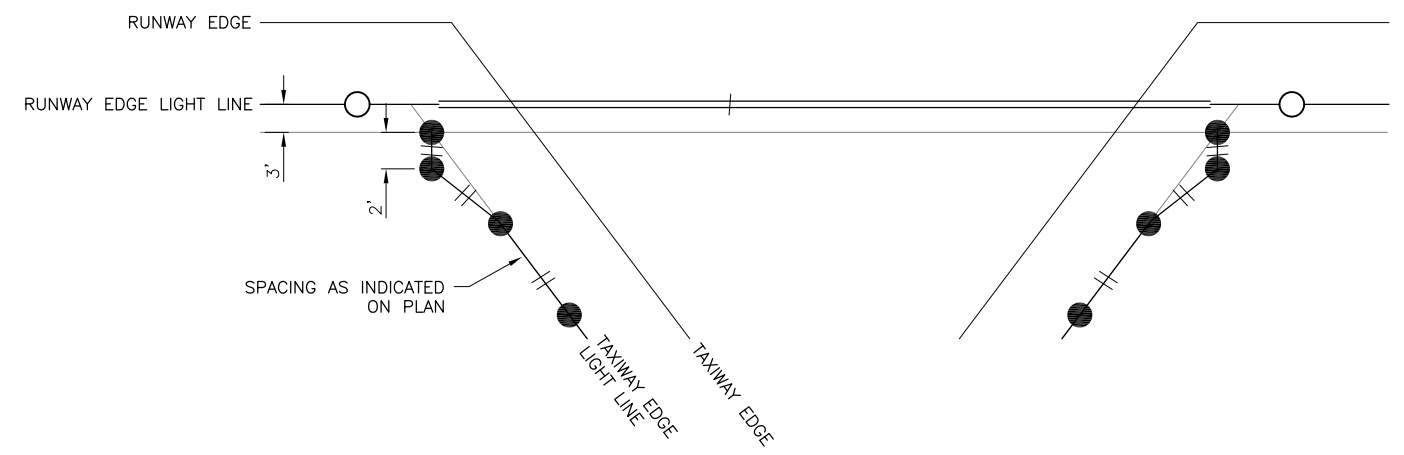


**TYPE C**  
 FOR SPLICES AT ISOLATION TRANSFORMERS

1  
 E6  
 NTS  
**TYPICAL SPLICE DETAILS**

**NOTES:**

1. CABLE MUST MEET SPECIFICATION L-824. INSIDE DIAMETER OF CONNECTOR MUST PROPERLY MATCH THE OUTSIDE DIAMETER OF CABLE. CONNECTOR MUST BE SUPPLIED TO MATCH CABLE PER MANUFACTURER'S INSTRUCTIONS.
2. L-823 CONNECTOR MUST HAVE FACTORY-MOLDED SEALING FLAP. PULL SEALING FLAP ACROSS CONNECTOR INTERFACE. REMOVE SEALING FLAP FROM RECEPTACLE CONNECTOR FOR TYPE B CONNECTIONS.
3. WRAP CONNECTOR INTERFACE WITH A MINIMUM OF ONE LAYER RUBBER TAPE AND ONE LAYER PLASTIC TAPE, EACH LAYER ONE-HALF LAPPED. EXTEND TAPE TO A FLAT SECTION OF CONNECTOR BODY TO ACHIEVE A GOOD CONTACT SEAL, APPROXIMATELY 3" OF TOTAL WRAP AREA.
4. L-823 CONNECTOR MUST HAVE TAPERED STRAIN RELIEF AT CABLE ENTRY. WRAP CABLE ENTRY POINT OF FIELD-INSTALLED CONNECTOR WITH A MINIMUM OF ONE LAYER RUBBER TAPE AND ONE LAYER PLASTIC TAPE, EACH LAYER ONE-HALF LAPPED, EXTENDING AT LEAST 2" ONTO CABLE AND CONNECTOR.



2  
 E6  
 NTS  
**TYPICAL RUNWAY ENTRANCE EDGE LIGHT DETAIL**

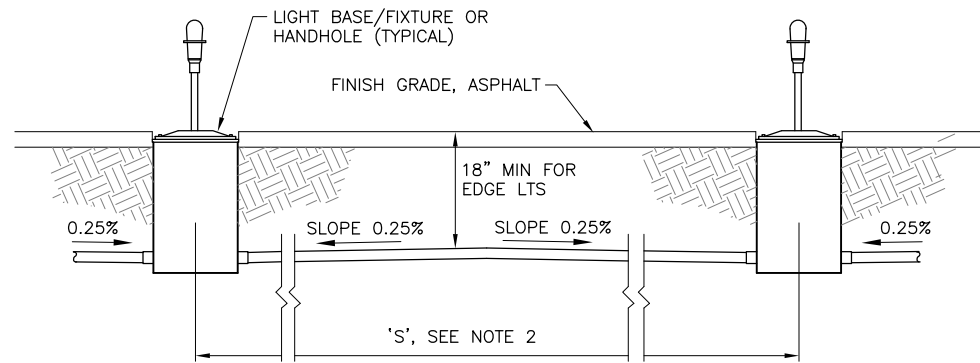
DESIGN LPS  
 DRAWN JCA  
 CHECKED CLR

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

NO.	BY	DATE	REVISIONS

**TOM MADSEN**  
 (DUTCH HARBOR) AIRPORT  
 UNALASKA TAXIWAY AND APRON REHABILITATION  
 AIP 3-02-0082-\_\_\_-202\_/SFAPT00178  
**ELECTRICAL DETAILS**

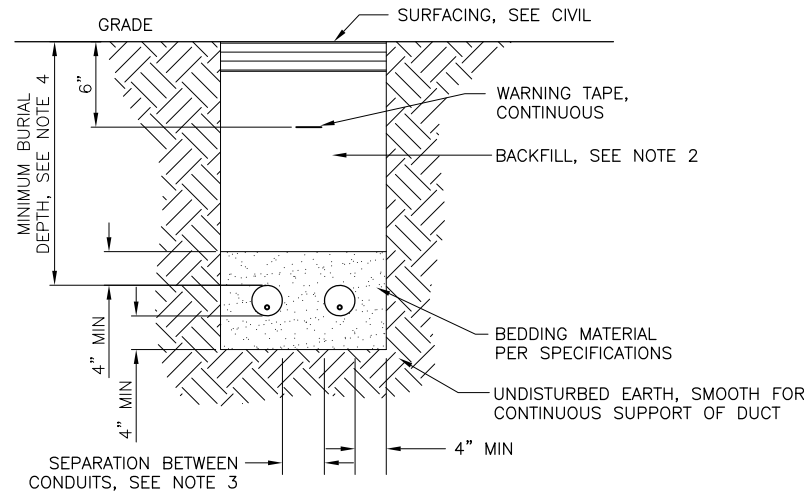
SHEET  
**E6**  
 OF  
**35**



**NOTES:**

1. CONDUIT MUST BE INSTALLED WITH CROWN TO DRAIN TO LIGHT BASES AS SHOWN.
2. IF 'S' IS LESS THAN 20', OR IF 0.25% SLOPE CAN BE MAINTAINED IN ONE DIRECTION DUE TO SLOPE OF GRADE, LAY CONDUIT STRAIGHT WITHOUT CROWN BETWEEN BASES/HANDHOLES.
3. PROVIDE ADDITIONAL HUBS FOR CONDUIT DRAINS WHERE SHOWN ON PLANS.
4. INSTALL ALL CONDUIT, LIGHT BASES, AND HANDHOLES BEFORE INSTALLATION OF SURFACE ASPHALT PAVEMENT.

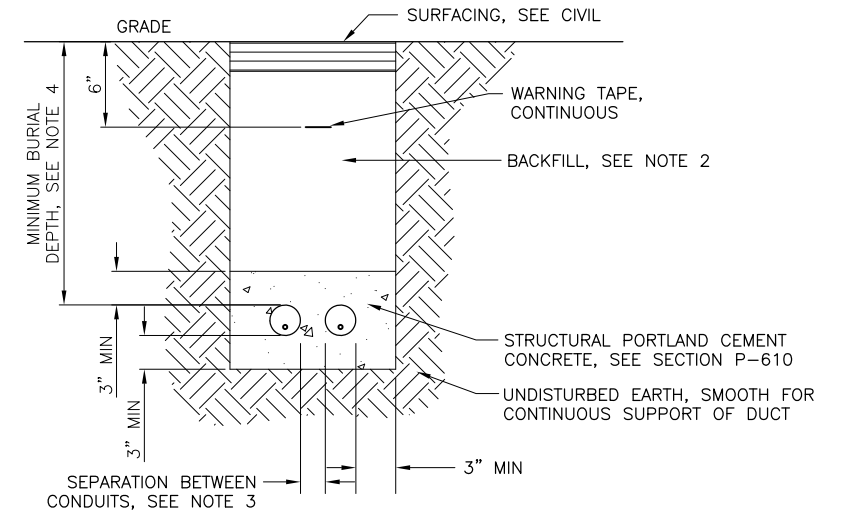
1 TYPICAL INTERCONNECTION DETAIL  
 E7 NTS



**NOTES:**

1. WIDTH OF TRENCH AND NUMBER OF CONDUITS PER TRENCH WILL VARY (2 SHOWN).
2. BACKFILL SHALL CONSIST OF RAP COMPACTED TO 98%. IN AREAS OF EXISTING CONCRETE APRON, BACKFILL TO LEVEL OF EXISTING CONCRETE SURFACE.
3. USE COMMERCIALY MANUFACTURED DUCT SPACERS IN COMMON DUCTBANKS WITH PARALLEL CONDUITS SPACED EVERY 5' O.C. TO MAINTAIN SEPARATION. SEPARATION BETWEEN CONDUITS MUST BE AS FOLLOWS:  
 -CONDUITS OF SAME TYPE (POWER OR SIGNAL) UNDER SAME OWNERSHIP - 2"  
 -AIRPORT LIGHTING AND FAA CONDUITS - 12" MIN  
 -PRIMARY POWER AND ANY OTHER CONDUIT - 18" MIN  
 -TELECOM UTILITY AND ANY OTHER CONDUIT - 18" MIN
4. MINIMUM BURIAL DEPTH MUST BE AS FOLLOWS, UNLESS OTHERWISE INDICATED:  
 -AIRPORT LIGHTING CONDUITS - 18"

2 TYPICAL CONDUIT TRENCH DETAIL  
 E7 NTS



**NOTES:**

1. WIDTH OF TRENCH AND NUMBER OF CONDUITS PER TRENCH WILL VARY (2 SHOWN).
2. BACKFILL SHALL CONSIST OF RAP COMPACTED TO 98%. IN AREAS OF EXISTING CONCRETE APRON, BACKFILL TO LEVEL OF EXISTING CONCRETE SURFACE.
3. USE COMMERCIALY MANUFACTURED DUCT SPACERS IN COMMON DUCTBANKS WITH PARALLEL CONDUITS SPACED EVERY 5' O.C. TO MAINTAIN SEPARATION. SEPARATION BETWEEN CONDUITS MUST BE AS FOLLOWS:  
 -CONDUITS OF SAME TYPE (POWER OR SIGNAL) UNDER SAME OWNERSHIP - 1 1/2"  
 -AIRPORT LIGHTING AND FAA CONDUITS - 12" MIN  
 -PRIMARY POWER AND ANY OTHER CONDUIT - 18" MIN  
 -TELECOM UTILITY AND ANY OTHER CONDUIT - 18" MIN
4. MINIMUM BURIAL DEPTH MUST BE AS FOLLOWS, UNLESS OTHERWISE INDICATED:  
 -AIRPORT LIGHTING CONDUITS - 18"

3 CONCRETE ENCASED CONDUIT DETAIL  
 E7 NTS

DESIGN LPS  
 DRAWN JCA  
 CHECKED CLR

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

NO.	DATE	REVISIONS

TOM MADSEN  
 (DUTCH HARBOR) AIRPORT  
 UNALASKA TAXIWAY AND APRON REHABILITATION  
 AIP 3-02-0082-\_\_\_-202\_/SFAPT00178  
 ELECTRICAL DETAILS

SHEET  
 E7  
 OF  
 35

TAXIWAY EDGE LIGHT SCHEDULE							
NUM	LENS COLOR	TYPE	WATTAGE		STATION	OFFSET	REMARKS
			LAMP	XFMR			
E1	B	L-861T	30	30/45	106+78.4	63.2L	
E2	B	L-861T	30	30/45	106+78.4	65.2L	
E3	B	L-861T	30	30/45	106+73.3	82.0L	
E4	B	L-861T	30	30/45	106+68.3	100.9L	
E5	B	L-861T	30	30/45	106+63.2	119.7L	
E6	B	L-861T	30	30/45	106+58.2	138.5L	
E7	B	L-861T	30	30/45	106+58.2	161.5L	
E8	B	L-861T	30	30/45	106+68.3	199.1L	
E9	B	L-861T	30	30/45	106+78.4	236.8L	
E10	B	L-861T	30	30/45	107+03.1	243.5L	
E11	B	L-861T	30	30/45	107+27.7	250.1L	
E12	B	L-861T	30	30/45	105+52.1	63.2L	
E13	B	L-861T	30	30/45	105+52.1	65.2L	
E14	B	L-861T	30	30/45	105+57.1	82.0L	
E15	B	L-861T	30	30/45	105+62.2	100.9L	
E16	B	L-861T	30	30/45	105+67.2	119.7L	
E17	B	L-861T	30	30/45	105+72.3	138.5L	
E18	B	L-861T	30	30/45	105+72.3	161.5L	
E19	B	L-861T	30	30/45	105+62.2	199.1L	
E20	B	L-861T	30	30/45	105+52.1	236.8L	
E21	B	L-861T	30	30/45	105+31.9	242.2L	
E22	B	L-861T	30	30/45	105+11.7	247.7L	
E23	B	L-861T	30	30/45	104+91.6	242.2L	
E24	B	L-861T	30	30/45	104+71.4	236.8L	
E25	B	L-861T	30	30/45	104+61.3	199.1L	
E26	B	L-861T	30	30/45	104+51.2	161.5L	
E27	B	L-861T	30	30/45	104+51.2	138.5L	
E28	B	L-861T	30	30/45	104+56.4	118.9L	
E29	B	L-861T	30	30/45	104+61.3	100.9L	
E30	B	L-861T	30	30/45	104+66.3	82.0L	
E31	B	L-861T	30	30/45	104+71.4	65.2L	
E32	B	L-861T	30	30/45	104+71.4	63.2L	
E33	B	L-861T	30	30/45	103+45.1	63.2L	
E34	B	L-861T	30	30/45	103+45.1	65.2L	
E35	B	L-861T	30	30/45	103+50.1	82.0L	
E36	B	L-861T	30	30/45	103+55.2	100.9L	
E37	B	L-861T	30	30/45	103+60.2	119.7L	
E38	B	L-861T	30	30/45	103+65.3	138.5L	
E39	B	L-861T	30	30/45	103+65.3	161.5L	
E40	B	L-861T	30	30/45	103+55.2	199.1L	
E41	B	L-861T	30	30/45	103+45.1	236.8L	
E42	B	L-861T	30	30/45	103+07.4	246.9L	
E43	B	L-861T	30	30/45	102+69.7	257.1L	
E44	B	L-861T	30	30/45	102+29.2	258.9L	
E45	B	L-861T	30	30/45	101+88.7	260.8L	
E46	B	L-861T	30	30/45	101+48.2	262.7L	
E47	B	L-861T	30	EXST	102+35.2	62.6R	SEE NOTE 1
E48	B	L-861T	30	EXST	102+35.5	67.6R	SEE NOTE 1
E49	B	L-861T	30	EXST	102+02.4	73.7R	SEE NOTE 1
E50	B	L-861T	30	EXST	101+90.1	106.9R	SEE NOTE 1
E51	B	L-861T	30	EXST	102+02.9	136.8R	SEE NOTE 1
E52	B	L-861T	30	EXST	102+58.4	192.5R	SEE NOTES 1 AND 2
E53	B	L-861T	30	EXST	101+76.1	274.4R	SEE NOTES 1 AND 2
E54	B	L-861T	30	EXST	101+21.5	216.1R	SEE NOTE 1
E55	B	L-861T	30	EXST	100+83.8	164.6R	SEE NOTE 1
E56	B	L-861T	30	EXST	100+71.7	102.0R	SEE NOTE 1
E57	B	L-861T	30	EXST	100+53.1	69.5R	SEE NOTE 1
E58	B	L-861T	30	EXST	100+22.0	68.0R	SEE NOTE 1
E59	B	L-861T	30	EXST	100+22.0	63.0R	SEE NOTE 1

NOTE 1: INSTALL NEW FIXTURE ON EXISTING LIGHT BASE. CONNECT TO EXISTING TRANSFORMER. PAID UNDER L125.210.0000.

NOTE 2: INSTALL LIGHT BASE EXTENSION AND SPACER RINGS ON EXISTING LIGHT BASE. SUBSIDIARY TO L125.210.0000.

RUNWAY EDGE LIGHT SCHEDULE							
NUM	LENS COLOR	TYPE	WATTAGE		STATION	OFFSET	REMARKS
			LAMP	XFMR			
R1	W	L-861	45	30/45	101+95.0	60.0L	SEE NOTE 1

NOTE 1: INSTALL FIXTURE ON EXISTING L-868 LIGHT BASE. PROVIDE WITH HEAVY BASEPLATE WITH L-868 BOLT CONFIGURATION.

DEMOLITION SCHEDULE			
NUM	STATION	OFFSET	REMARKS
D1	107+53.5	68.0L	TW EDGE LT, NOTE 3
D2	107+53.5	63.0L	TW EDGE LT, NOTE 3
D3	107+13.3	69.5L	TW EDGE LT, NOTE 3
D4	106+81.9	96.4L	TW EDGE LT
D5	106+66.2	134.7L	TW EDGE LT
D6	106+69.9	175.9L	TW EDGE LT
D7	106+91.9	210.9L	TW EDGE LT
D8	107+30.1	250.3L	TW EDGE LT
D9	102+12.4	249.9L	TW EDGE LT
D10	101+63.7	199.9L	TW EDGE LT
D11	100+97.4	135.6L	TW EDGE LT
D12	100+30.1	70.4L	TW EDGE LT, NOTE 3
D13	100+17.2	63.0L	TW EDGE LT, NOTE 3
D14	100+17.2	68.0L	TW EDGE LT, NOTE 3
D15	101+95.0	60.0L	RW EDGE LT, NOTE 1
D16	102+35.2	62.6R	TW EDGE LT, NOTE 2
D17	102+35.5	67.6R	TW EDGE LT, NOTE 2
D18	102+02.4	73.7R	TW EDGE LT, NOTE 2
D19	101+90.1	106.9R	TW EDGE LT, NOTE 2
D20	102+02.9	136.8R	TW EDGE LT, NOTE 2
D21	102+58.4	192.5R	TW EDGE LT, NOTE 2
D22	101+76.1	274.4R	TW EDGE LT, NOTE 2
D23	101+21.5	216.1R	TW EDGE LT, NOTE 2
D24	100+83.8	164.6R	TW EDGE LT, NOTE 2
D25	100+71.7	102.0R	TW EDGE LT, NOTE 2
D26	100+53.1	69.5R	TW EDGE LT, NOTE 2
D27	100+22.0	68.0R	TW EDGE LT, NOTE 2
D28	100+22.0	63.0R	TW EDGE LT, NOTE 2
D29	107+53.5	85.0L	LIGHTED SIGN
D30	107+35.9	250.0L	LIGHTED SIGN
D31	102+09.7	253.0L	LIGHTED SIGN
D32	100+17.2	85.0L	LIGHTED SIGN

NOTE 1: REMOVE FIXTURE AND TRANSFORMER ONLY. LIGHT BASE AND CONDUCTORS TO REMAIN.

NOTE 2: REMOVE FIXTURE AND BASEPLATE ONLY. LIGHT BASE, TRANSFORMER, AND CONDUCTORS TO REMAIN. PAID UNDER L125.210.0000.

NOTE 3: REMOVE FIXTURE, TRANSFORMER, AND CONDUCTORS. LIGHT BASE TO REMAIN.

DESIGN LFS  
 DRAWN JCA  
 CHECKED CLR

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

BY	DATE	REVISIONS

**TOM MADSEN**  
 (DUTCH HARBOR) AIRPORT  
 UNALASKA TAXIWAY AND APRON REHABILITATION  
 AIP 3-02-0082-\_\_\_-202\_/SFAPT00178  
**ELECTRICAL SCHEDULES**

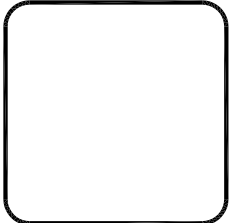
SHEET  
**E8**  
 OF  
**35**

SIGN SCHEDULE														
NUM	SIDE	PANEL	LEGEND	TYPE	LEGEND COLOR	FACE COLOR	STATION	OFFSET	SIZE	STYLE	CLASS	MODE	XFMR	REMARKS
S1	1	1	C →	L-85BY	BLACK	YELLOW	106+98.4	85.0L	2	2	2	3	100	
	2	1	-	-	-	-								
S2	1	1	C	L-85BL	YELLOW	BLACK	106+94.4	200.0L	2	2	2	3	100	
	2	1	13-31	L-85BR	WHITE	RED								
S3	1	1	A →	L-85BY	BLACK	YELLOW	105+11.7	85.0L	2	2	2	3	100	
	2	1	← C	L-85BY	BLACK	YELLOW								
S4	1	1	A	L-85BL	YELLOW	BLACK	104+87.4	200.0L	2	2	2	3	100	
	2	1	13-31	L-85BR	WHITE	RED								
S5	1	1	-	-	-	-	103+25.1	85.0L	2	2	2	3	100	
	2	1	← A	L-85BY	BLACK	YELLOW								

NOTE 1: MANUFACTURER SHALL VERIFY TRANSFORMER SIZES BASED ON SIGN CONFIGURATION AS PART OF SUBMITTAL PROCESS.

DESIGN LPS  
 DRAWN JCA  
 CHECKED CLR

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



BY	DATE	REVISIONS

TOM MADSEN  
 (DUTCH HARBOR) AIRPORT  
 UNALASKA TAXIWAY AND APRON REHABILITATION  
 AIP 3-02-0082-\_\_\_-202\_/SFAPT00178  
 ELECTRICAL SCHEDULES

SHEET  
**E9**  
 OF  
 35