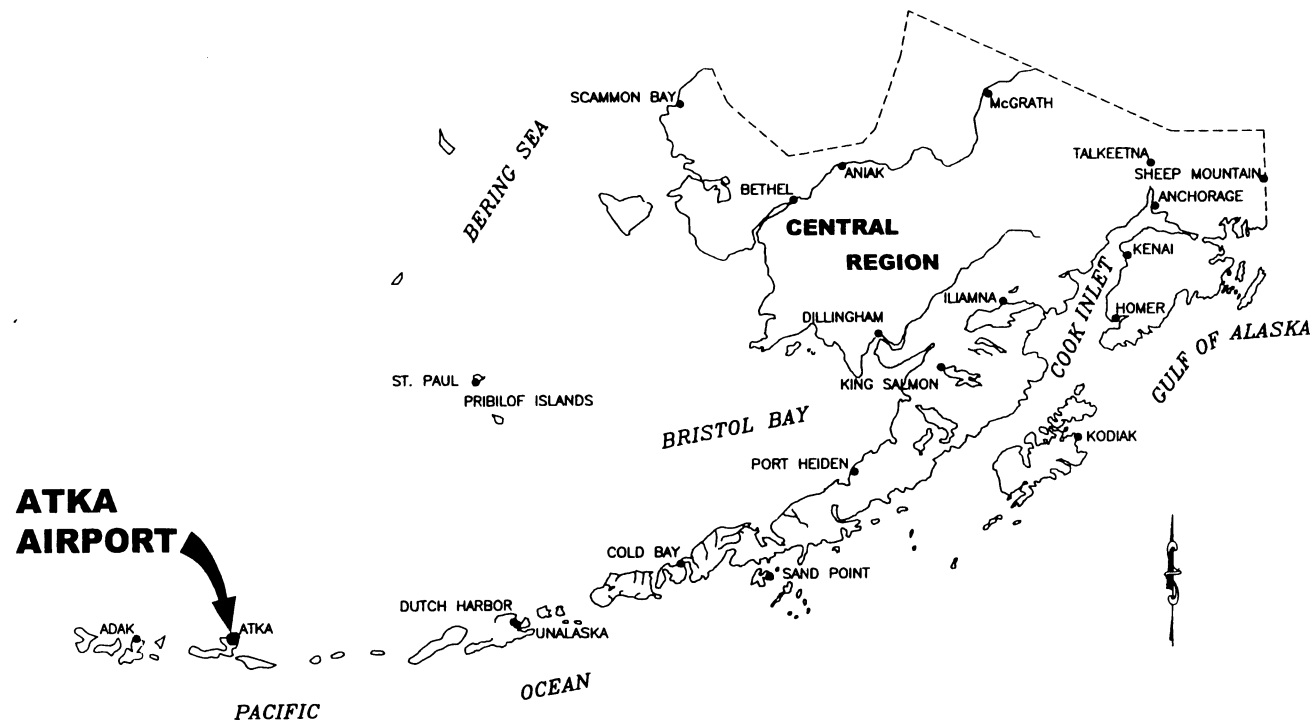
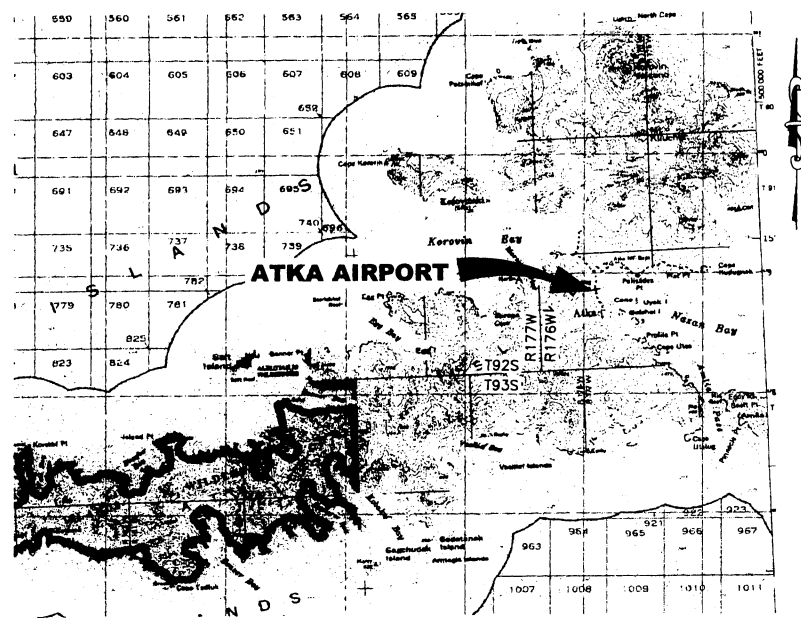


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## ALASKA CENTRAL REGION LOCATION MAP

NOT TO SCALE



## VICINITY MAP

1" = 5 MILES  
T 92 S, R 176 W, SEC. 4, 9, 10, 15, 16  
SEWARD MERIDIAN  
U.S.G.S. ATKA, ALASKA

# CONSTRUCTION PLANS FOR ATKA AIRPORT

## ATKA, ALASKA RUNWAY EXTENSION AND RESURFACING PROJECT No. 59621 AIRPORT IMPROVEMENT PROGRAM A.I.P. No. 3-02-0394-005-2008 2008

CENTRAL REGION  
AS -ADVERTISED  
APRIL 2008

CONCUR  
STEVEN R. HORN, P.E.

DATE 4/8/08  
DIRECTOR OF CONSTRUCTION AND OPERATIONS

APPROVED  
ROBERT A. CAMPBELL, P.E.

DATE 4-8-08  
REGIONAL PRECONSTRUCTION ENGINEER

APPROVED  
HARVEY M. DOUTHIT, P.E.

DATE 4/8/08  
DESIGN SECTION CHIEF

APPROVED  
TOM SCHMID, P.E.

DATE 4/4/08  
PROJECT MANAGER

BY	DATE	REVISION

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
CENTRAL REGION

ATKA AIRPORT  
ATKA, ALASKA  
RUNWAY EXTENSION AND RESURFACING  
59621  
AIP No. 3-02-0394-005-2008  
COVER SHEET

DATE:  
FEB 2008  
SHEET:  
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Designed By: KBC  
Drawn By: GDS  
Checked By: RLC

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LEGEND:

EXISTING:

	DEPRESSION
	EXISTING ROADS/ EMBANKMENT
	EXISTING STREAM
	MAJOR CONTOUR
	MINOR CONTOUR
	ROW / PROPERTY
	ANTENNA
	AWOS
	CULVERT
	RUNWAY LIGHTS
	WIND CONE
	WIND CONE AND SEGMENTED CIRCLE

PROPOSED:

	AIRCRAFT TIE-DOWN		DESIGN CONTROL POINT
	RUNWAY LIGHTS		PRIMARY MONUMENT
	TAXIWAY LIGHTS		SECONDARY MONUMENT
	THRESHOLD LIGHTS		MONITORING PLATES
	PIEZOMETER		ROTATING BEACON
	SIGN		LIGHTED WIND CONE & SEGMENTED CIRCLE
	SIGN NUMBER		UNLIGHTED WIND CONE
	CLEANOUT		CULVERT
	CUT LIMITS		FILL LIMITS
	FENCE		GRADE BREAK
	HAUL ROUTE		MATERIAL SITE BOUNDARY
	PROPERTY BOUNDARY		WETLANDS BOUNDARY
	VEGETATIVE MAT		

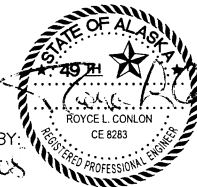
EARTHWORK SUMMARY

WORK AREA	P-152a	P-152h(2)	P-152aa	P-154b	P-161b	P-180b	P-208c	P-209b	T-905b
UNITS	CY	CY	TON	TON	CY	TON	TON	TON	SY
RUNWAY	21,440	54,613	102,500	49,976	1,778	0	388	28,321	42657
AIRSPACE	27,135	0	0	0	0	0	0	0	29686
SURCHARGE	23,600	23,600	0	0	0	0	0	0	0
TAXIWAY/APRON	5,035	26,123	0	11,469	395	0	0	6,309	41111
ACCESS ROAD	622	7,933	0	1,671	123	0	0	779	10274
WIND CONE	715	114	0	0	0	0	455	0	4235
SREB PAD	93	3,613	0	3,357	0	0	1,677	0	5760
LWC	500	0	0	0	0	550	0	0	0
SUBTOTAL	79,140	115,996	102,500	66,473	2,296	550	2,520	35,409	133,723
DEDUCT (P-152a) EXCAVATION USED AS EMBANKMENT		48,800							
TOTAL (ROUNDED)	79,200	67,200	102,500	66,500	2,300	550	2,600	35,500	133,800

ABBREVIATIONS:

Δ	DELTA ANGLE	NIC	NOT IN CONTRACT	RD	ROAD
AR	ACCESS ROAD	NTS	NOT TO SCALE	REIL	RUNWAY END IDENTIFICATION LIGHTS
ASA	AVIATION SUPPORT AREA	OC	ON CENTER	ROW	RIGHT OF WAY
AWOS	AUTOMATED WEATHER OBSERVATION SYSTEM	OG	ORIGINAL GROUND	RSA	RUNWAY SAFETY AREA
CL, C	CENTERLINE	OHE	OVER HEAD ELECTRIC	RSC	RIGID STEEL CONDUIT
CSP	CORRUGATED STEEL PIPE	OHE/T	OVER HEAD ELECTRIC AND TELEPHONE	RT	RIGHT
DIP	DUCTILE IRON PIPE	PAPI	PRECISION APPROACH PATH INDICATOR	SP	STEEL PIPE
EG	EXISTING GROUND	PC	POINT OF CURVE	SREB	SNOW REMOVAL EQUIPMENT BUILDING
EL	ELEVATION	PI	POINT OF INTERSECTION	STA	STATION
HDPE	HIGH DENSITY POLYETHYLENE	PST	PERFORATED STEEL SQUARE TUBE	T/W, TW	TAXIWAY
IE	INVERT ELEVATION	PVC	POINT OF VERTICAL CURVATURE	TBM	TEMPORARY BENCH MARK
LT	LEFT	PVI	POINT OF VERTICAL INTERSECTION	TYP	TYPICAL
LWC	LOW WATER CROSSING	PVT	POINT OF VERTICAL TANGENCY	UGE	UNDERGROUND ELECTRICAL
MIN	MINIMUM	R	RADIUS	UGE/T	UNDERGROUND ELECTRICAL AND TELEPHONE
MAX	MAXIMUM	RAP	RECYCLED ASPHALT PAVEMENT	VC	VERTICAL CURVE
NDB	NON-DIRECTIONAL BEACON	R/W, RW	RUNWAY	WC/SC	WIND CONE AND SEGMENTED CIRCLE

PLANS DEVELOPED BY:  
PDC, INC. 2/25/08



BY	DATE	REVISION

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
CENTRAL REGION

ATKA AIRPORT  
ATKA, ALASKA  
RUNWAY EXTENSION AND RESURFACING  
59621  
AIP No. 3-02-0394-005-2008  
INDEX, LEGEND, AND MATERIAL SUMMARY

DATE:  
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ESTIMATED QUANTITIES

No.	ITEM	QUANTITY	UNIT
D-701a(1)	CORRUGATED STEEL PIPE, 24 INCH	122	LF
D-701a(2)	CORRUGATED STEEL PIPE, 36 INCH	170	LF
F-162a	8-FOOT CHAIN-LINK FENCE	54	LF
F-162d	4-FOOT SINGLE CANTILEVER GATE	1	EACH
F-170a	STEEL BOLLARD	8	EACH
G-100a	MOBILIZATION AND DEMOBILIZATION	ALL REQ'D	LS
G-115a	WORKER MEALS AND LODGING, OR PER DIEM	ALL REQ'D	LS
G-130a	FIELD OFFICE	ALL REQ'D	LS
G-130b	FIELD LABORATORY	ALL REQ'D	LS
G-130g	NUCLEAR TESTING EQUIPMENT STORAGE SHED	1	EACH
G-130j	ENGINEERING COMMUNICATIONS	ALL REQ'D	CS
G-131a	ENGINEERING TRANSPORTATION (TRUCK)	2	EACH
G-131b	ENGINEERING TRANSPORTATION (ATV)	1	EACH
G-135a	CONSTRUCTION SURVEYING BY THE CONTRACTOR	ALL REQ'D	LS
G-135b	EXTRA THREE PERSON SURVEY PARTY	50	HR
G-700a	AIRPORT FLAGGER	ALL REQ'D	CS
G-710a	HIGHWAY TRAFFIC MAINTENANCE	ALL REQ'D	LS
G-710b	HIGHWAY FLAGGER	ALL REQ'D	CS
G-710c	HIGHWAY TRAFFIC PRICE ADJUSTMENT	ALL REQ'D	CS
G-710d	HIGHWAY TRAFFIC CONTROL	ALL REQ'D	CS
L-100b*	REGULATOR, L-828	1	EACH
L-100d*	MEDIUM INTENSITY RUNWAY EDGE AND THRESHOLD LIGHT, L-861 AND L-861E	62	EACH
L-100e*	TAXIWAY EDGE LIGHT, L-861T	22	EACH
L-100p*	HANDHOLE, L-867, SIZE B	3	EACH
L-100q(1)*	JUNCTION BOX, TYPE II	4	EACH
L-100q(2)*	JUNCTION BOX, PAPI	22	EACH
L-101b*	ROTATING BEACON, MEDIUM INTENSITY, L-801A	1	EACH
L-107b*	12-FOOT LIGHTED WIND CONE, IN PLACE	1	EACH
L-107d*	12-FOOT UNLIGHTED WIND CONE, IN PLACE	1	EACH
L-108a*	UNDERGROUND CABLE NO. 8 AWG, COPPER, 5 KV FAA TYPE "C", L-824	12,350	LF
L-108c*	NO. 6 BARE COPPER GROUND CONDUCTOR	17,200	LF
L-108g*	GROUND ROD	83	EACH
L-109d*	INSTALLATION OF ELECTRICAL EQUIPMENT IN NEW OR EXISTING STRUCTURE	1	EACH
L-110a*	2-INCH RIGID STEEL CONDUIT	1500	LF
L-110g*	2-INCH HDPE CONDUIT	23,835	LF

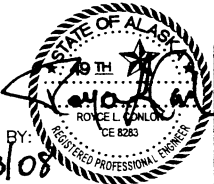
\* NON-AIP ELIGIBLE ITEMS

ESTIMATING FACTORS

No.	ITEM	FACTOR
P-152aa	SHOT ROCK	1.82 TON/CY
P-154b	SUBBASE COURSE	1.82 TON/CY
P-180a	RIPRAP, CLASS I	1.46 TON/CY
P-208c	CRUSHED AGGREGATE SURFACE COURSE	1.96 TON/CY
P-209b	CRUSHED AGGREGATE BASE COURSE	1.96 TON/CY
P-401a	HOT MIX ASPHALT TYPE II, CLASS A	2.034 TON/CY
P-401c	ASPHALT CEMENT PG 52-28	0.06 TON ASPHALT CEMENT PER TON HOT MIX ASPHALT

ESTIMATED QUANTITIES

No.	ITEM	QUANTITY	UNIT
P-151c	CLEARING & GRUBBING	11	ACRE
P-152a	UNCLASSIFIED EXCAVATION	79,200	CY
P-152h(2)	BORROW MEASURED IN FINAL POSITION	67,200	CY
P-152aa	SHOT ROCK	102,500	TON
P-154b	SUBBASE COURSE	66,500	TON
P-157a	EROSION AND POLLUTION CONTROL ADMINISTRATION	ALL REQ'D	LS
P-157c	TEMPORARY EROSION AND POLLUTION CONTROL	ALL REQ'D	LS
P-157d	TEMPORARY EROSION AND POLLUTION CONTROL AMENDMENTS	ALL REQ'D	CS
P-157e	EROSION AND POLLUTION CONTROL PRICE ADJUSTMENT	ALL REQ'D	CS
P-161b	RECYCLED ASPHALT PAVEMENT	2,300	CY
P-165a	REMOVAL OF STRUCTURES	ALL REQ'D	LS
P-171b	TEMPORARY CONTAMINATED SOIL STOCKPILE AREA	ALL REQ'D	CS
P-172b	CONTAMINATED SOIL REMEDIATION	20	CY
P-180b	RIPRAP, CLASS I	550	TON
P-208c	CRUSHED AGGREGATE SURFACE COURSE	2,600	TON
P-209b	CRUSHED AGGREGATE BASE COURSE	35,500	TON
P-401a	HOT MIX ASPHALT TYPE II, CLASS A	7,400	TON
P-401b	HOT MIX ASPHALT PRICE ADJUSTMENT	ALL REQ'D	CS
P-401c	ASPHALT CEMENT PG 52-28	450	TON
P-620c	RUNWAY AND TAXIWAY PAINTING	ALL REQ'D	LS
P-630a	PAVEMENT GROOVING	54,000	SY
P-640b	SEGMENTED CIRCLE (PANEL-TYPE)	ALL REQ'D	LS
P-650a	SOIL ANCHOR TIE-DOWN, DRIVEN TOGGLE	3	SET
P-660b	REFLECTIVE MARKER, TYPE II	84	EACH
P-661a	STANDARD SIGN	100	SF
P-681a	GEOTEXTILE, SEPARATION	15,300	SY
P-681b	GEOTEXTILE, STABILIZATION	28,000	SY
S-142a	EQUIPMENT STORAGE BUILDING (CONCRETE FLOOR)	1	EACH
S-142d	ROTATING BEACON ROOF ACCESS SYSTEM	1	EACH
S-142e	HOIST SYSTEM	1	EACH
S-142f	HEATING SYSTEM	1	EACH
S-143a	HEATING FUEL TANK, 1,000-GALLON	1	EACH
S-143b	FUEL	ALL REQ'D	LS
S-143d	ELECTRIC DISPENSING SYSTEM	1	EACH
S-143e	MOTOR VEHICLE FUEL-DISPENSING TANK, 1,000-GALLON	1	EACH
S-143f	SPILL PREVENTION CONTROL AND COUNTERMEASURE PLAN	ALL REQ'D	LS
T-901b	SEEDING	2,200	LB
T-901c	WATER FOR MAINTENANCE	1,000	M-GAL
T-905b	SCORIA	133,800	SY
T-905c	VEGETATIVE MAT	33,000	SY
U-500b	ELECTRICAL LINE EXTENSION	ALL REQ'D	LS



PLANS DEVELOPED BY:  
PDC, INC. 4/23/08

BY	DATE	REVISION

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
CENTRAL REGION

ATKA AIRPORT  
ATKA, ALASKA  
RUNWAY EXTENSION AND RESURFACING  
59621  
AIP No. 3-02-0394-005-2008  
ESTIMATED QUANTITIES

DATE:  
FEB 2008  
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### Horizontal Control

- A local surface plane coordinate system based on a series of least square adjusted static GPS observations performed by McClintock Land Associates. NGS Station "BOB", a 3 1/2" Brass Tablet in a 6" x 9" concrete post has a NAD83(CORS96)(EPOCH:2003.0000) geodetic position of 52°12'5.8182" North, 174°11'46.9733" West, determined with multiple static GPS observations with an average OPUS solution.
- Point 101, a found 1 1/2" Aluminum Cap monument at the North end of the existing runway was assigned local coordinates of N 50000.00', E 150000.00'. Point 102, a found Rebar at the South end of the runway, bears S 11°40'33" E 3520.25 feet and has coordinates of N 46552.59', E 150712.41'. Said line is the Basis of Bearings. All bearings shown are local bearings as oriented to the Basis of Bearings and the distances shown are local horizontal ground distances.
- Conversion from Alaska State Plane Zone 10, NAD83(CORS96) Feet to Local Feet:  
A. Scale State Plane Coordinates using 1.000111368  
B. Translate resulting coordinates using -402376.61N; -3532902.05E  
C. Rotate resulting coordinates around point 101, by 1°25'43.0977" Clockwise

Conversion from Local Feet to Alaska State Plane Zone 10, NAD83(CORS96) Feet:  
A. Rotate resulting coordinates around point 101, by 1°25'43.0977" Counter-Clockwise  
B. Translate resulting coordinates using +402376.61N; +3532902.05E  
C. Scale Local Coordinates using 0.999888644

### Vertical Control

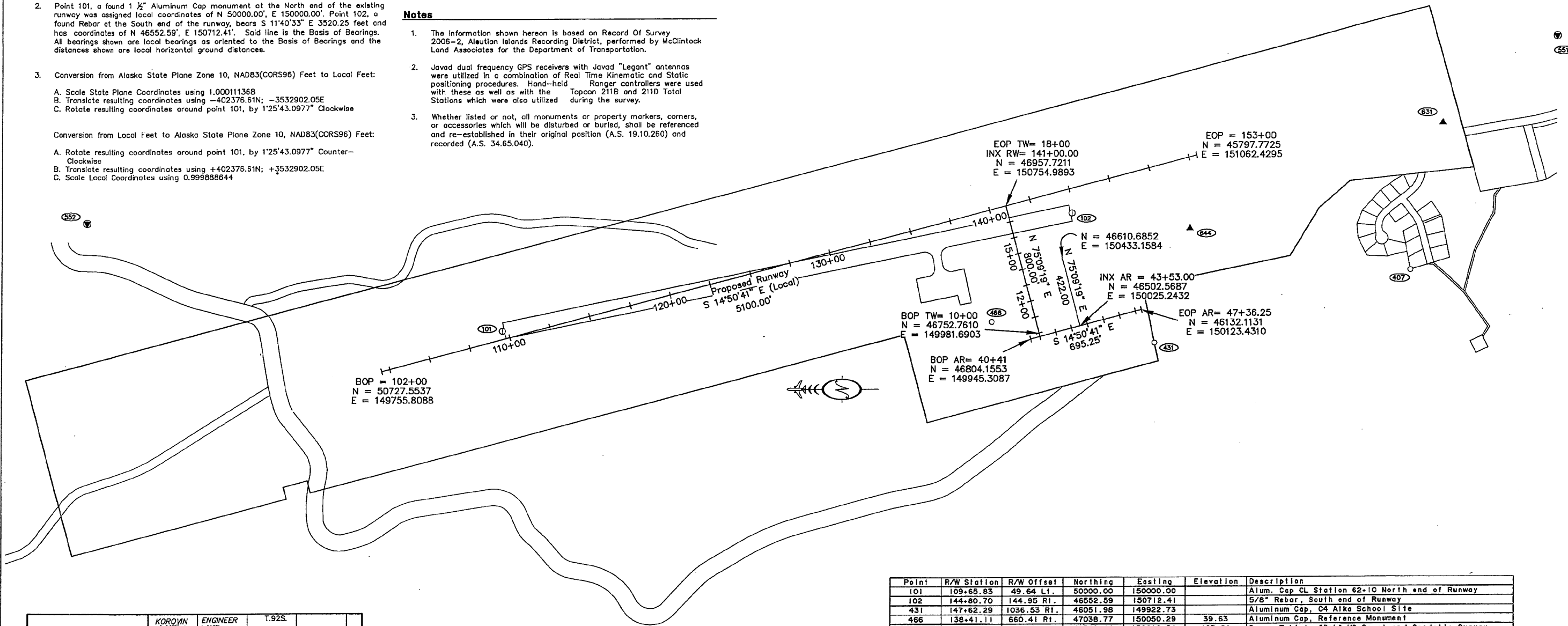
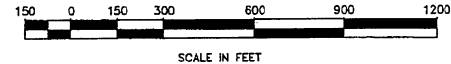
- The vertical datum is NAVD88(GEIOD99), established with an averaged OPUS orthometric solution at NGS Control Station "BOB" of 193.81 feet. The survey network's vertical control was supplemented with a series of (6) set 5/8"x30" Rebar, through which differential levels were run with a tie to "BOB".

### Notes

- The information shown hereon is based on Record Of Survey 2006-2, Aleutian Islands Recording District, performed by McClintock Land Associates for the Department of Transportation.
- Javad dual frequency GPS receivers with Javad "Legant" antennas were utilized in a combination of Real Time Kinematic and Static positioning procedures. Hand-held Ranger controllers were used with these as well as with the Topcon 211B and 211D Total Stations which were also utilized during the survey.
- Whether listed or not, all monuments or property markers, corners, or accessories which will be disturbed or buried, shall be referenced and re-established in their original position (A.S. 19.10.260) and recorded (A.S. 34.65.040).

### LEGEND

- GOVERNMENT CONTROL STATION
- CENTERLINE SECONDARY, FOUND
- CONTROL POINT
- SECONDARY CORNER, FOUND
- SURVEY POINT NUMBER



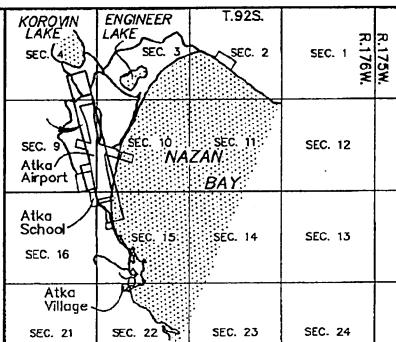
Point	R/W Station	R/W Offset	Northing	Easting	Elevation	Description
101	109+65.83	49.64 Lt.	50000.00	150000.00		Alum. Cap CL Station 62+10 North end of Runway
102	144+80.70	144.95 Rt.	46552.59	150712.41		5/8" Rebar, South end of Runway
431	147+62.29	1036.53 Rt.	46051.98	149922.73		Aluminum Cap, C4 Alka School Site
466	138+41.11	660.41 Rt.	47038.77	150050.29	39.63	Aluminum Cap, Reference Monument
551	N/A	N/A	41340.44	152612.64	193.81	Brass Tablet, "Bob" US Coast and Geodetic Survey
552	N/A	N/A	52514.07	150660.90		Brass Cap, "Graham" US Coast and Geodetic Survey
631	N/A	N/A	44301.38	151254.69	37.13	5/8"x30" Rebar
644	151+47.59	420.15 Rt.	45837.45	150617.26	43.33	5/8"x30" Rebar

Point	NAD83(CORS96)		ASPC Zone 10	
	Latitude	Longitude	Northing	Easting
101	52°13' 31.21318" N	174°12' 28.90359" W	452,326.24	3,682,491.94
102	52°12' 57.21772" N	174°12' 17.46585" W	448,898.05	3,683,289.98
551	52°12' 05.81823" N	174°11' 46.97334" W	443,735.46	3,685,319.25
552	52°12' 57.21772" N	174°12' 17.46585" W	448,898.05	3,683,289.98

### VICINITY MAP

Scale: 1" = 1 Mile

Source:  
U.S.G.S. Quadrangle Atka  
1:250,000  
Located within partially  
surveyed T92S, R176W  
Seward Meridian Alaska,  
Aleutian Islands Recording  
District



### SURVEYOR'S CERTIFICATE

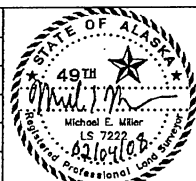
I HEREBY CERTIFY THAT I AM PROPERLY REGISTERED AND LICENSED TO PRACTICE LAND SURVEYING IN THE STATE OF ALASKA, AND THAT THIS DRAWING REPRESENTS A SURVEY MADE BY ME OR UNDER MY DIRECT SUPERVISION, AND THAT THE MONUMENTS SHOWN HEREON ACTUALLY EXIST AS DESCRIBED, AND THAT ALL DIMENSIONS AND OTHER DETAILS ARE CORRECT TO THE EXTENT SHOWN HEREON.

Michael E. Miller, LS 7222

02/04/08  
DATE

BY DATE

REVISIONS



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

DATE: \_\_\_\_\_  
DESIGN: \_\_\_\_\_  
DRAWN: \_\_\_\_\_  
CHECKED: \_\_\_\_\_

Atka  
Atka, Alaska  
Runway Extension & Resurface  
AKSAS 59621  
AIP No. 0394-005-2007  
Survey Control Sheet

Located within: Sections 3,4,9,10,15,16 T92S, R176W, SM, AK

SHEET

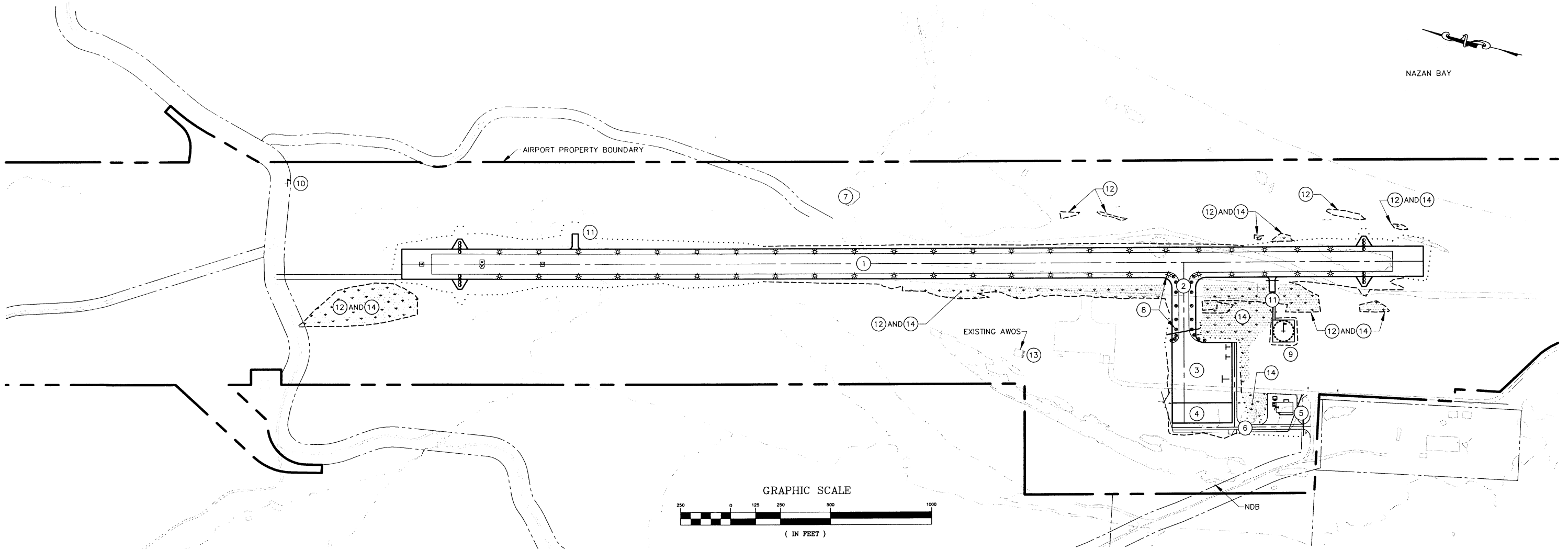
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**SCOPE OF PROJECT INCLUDES BUT IS NOT LIMITED TO:**

1. CONSTRUCT A 4,500'x100' WIDE RUNWAY IN A 5,100'x150' WIDE SAFETY AREA.
2. CONSTRUCT A 350'x50' WIDE TAXIWAY IN A 118' WIDE SAFETY AREA.
3. CONSTRUCT A 300'x300' APRON.
4. CONSTRUCT A 300'x100' AVIATION SUPPORT AREA.
5. CONSTRUCT A 150'x150' SREB PAD, 3-BAY SREB, ROTATING BEACON, AND AIRPORT LIGHTING EQUIPMENT TO BE PLACED IN THE SREB.
6. CONSTRUCT A 695'±x24' ACCESS ROAD.
7. CONSTRUCT A FISH PASSAGE LOW WATER CROSSING.
8. CONSTRUCT AIRPORT LIGHTING SYSTEM AND CONDUIT FOR FUTURE REIL AND PAPI LIGHTS.
9. CONSTRUCT LIGHTED WIND CONE AND SEGMENTED CIRCLE.
10. CONSTRUCT UNLIGHTED WIND CONE.
11. CONSTRUCT PAPI PADS.
12. REMOVE AIRSPACE TERRAIN OBSTRUCTION. SEE SHEET 16 FOR STATIONS AND OFFSETS.
13. RELOCATE ELECTRICAL AND TELEPHONE SERVICES TO THE EXISTING AWOS. SEE SHEETS UI AND U2.
14. PLACE VEGETATIVE MAT.
15. DEMOLISH EXISTING AIRPORT (SEE SHEET 26.)



PLANS DEVELOPED BY:  
PDC, INC. 2/22/08

BY	DATE	REVISION

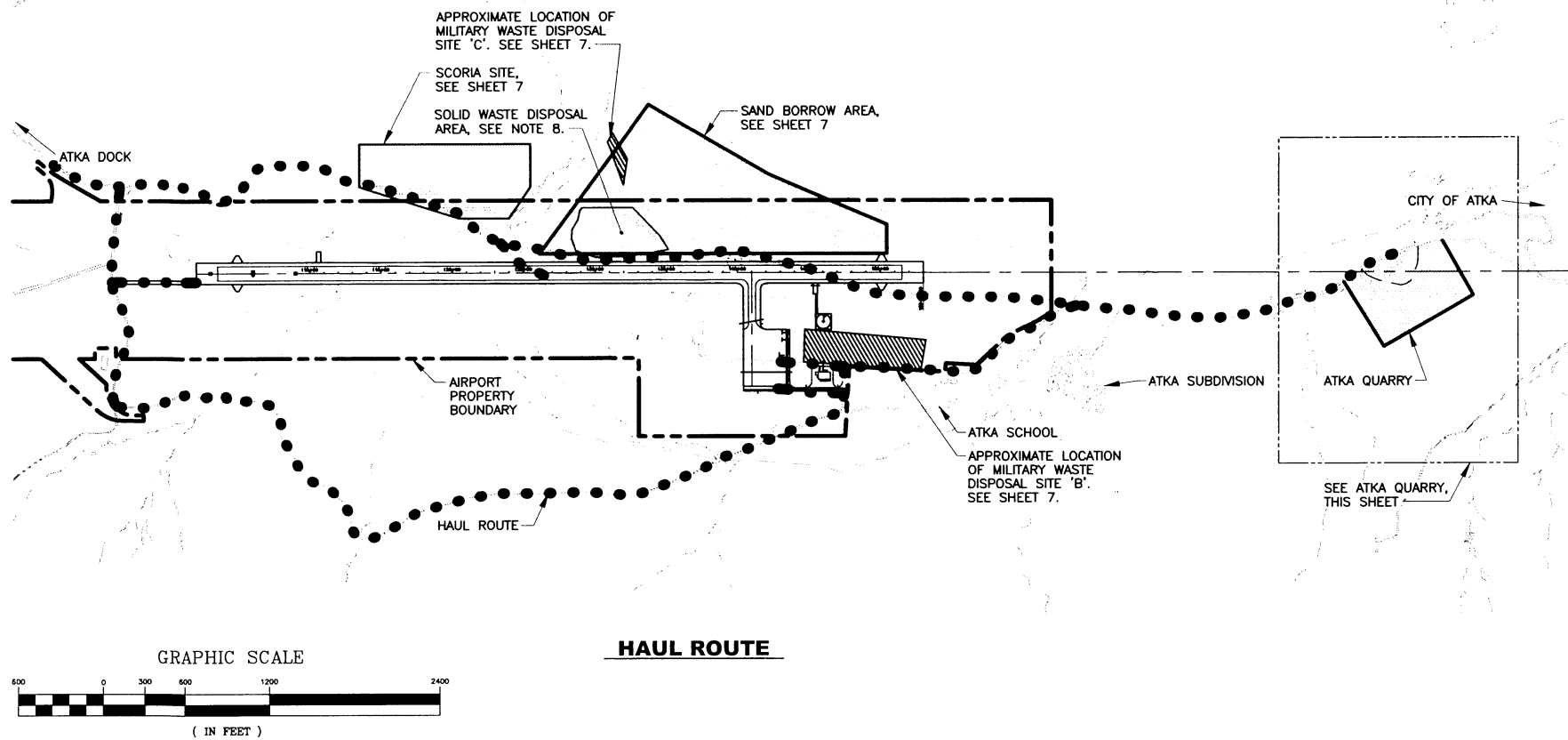
STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
CENTRAL REGION

ATKA AIRPORT  
ATKA, ALASKA  
RUNWAY EXTENSION AND RESURFACING  
59621  
AIP No. 3-02-0394-005-2008  
PROJECT LAYOUT PLAN

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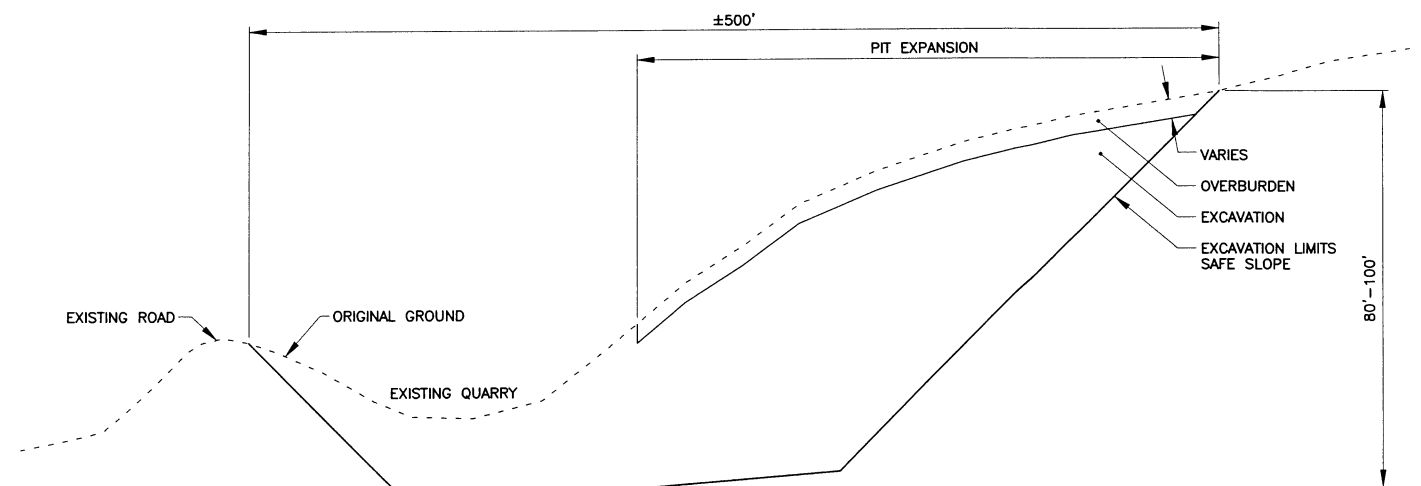
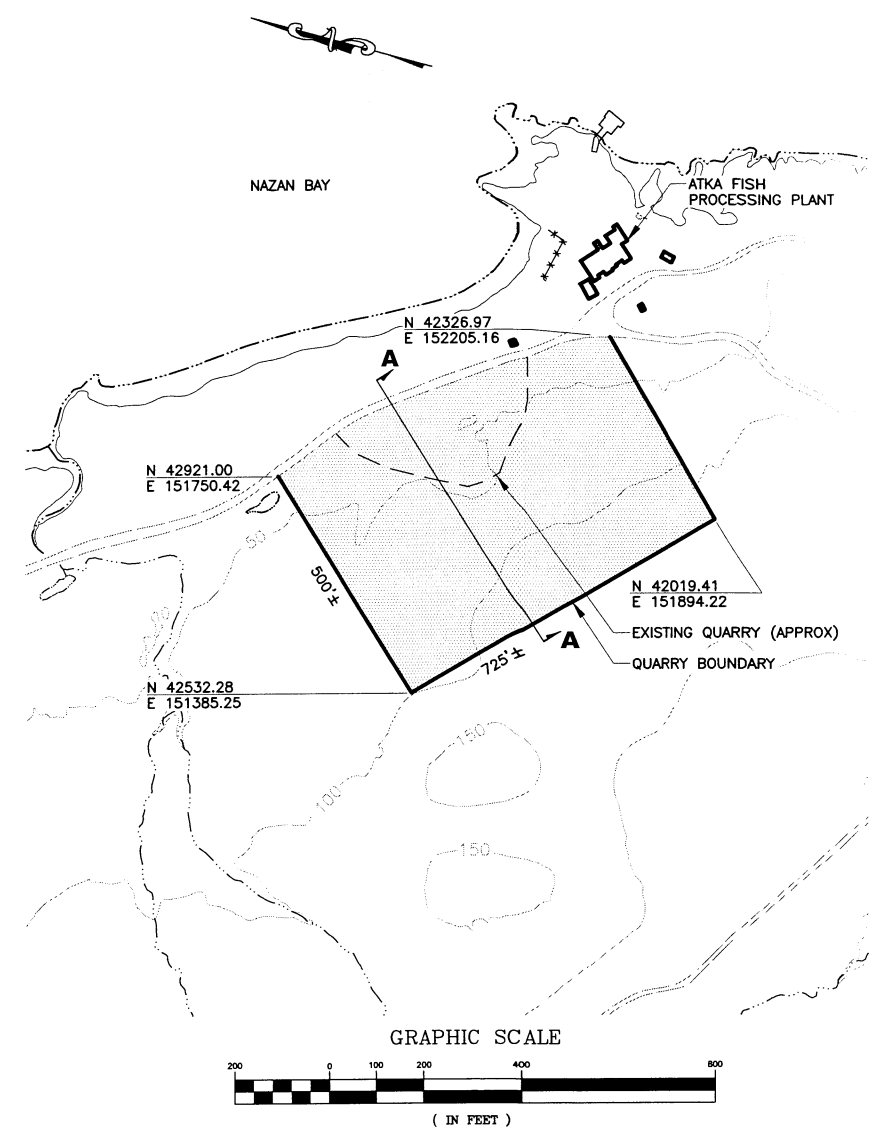


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#### SHEET NOTES:

1. SHOULD BARGE LANDING IMPROVEMENTS BE REQUIRED TO SUPPORT THE CONTRACTOR'S OPERATIONS, THE CONTRACTOR SHALL ACQUIRE ALL NECESSARY PERMITS AND AUTHORIZATION.
2. THE HAUL ROUTES MAY REQUIRE IMPROVEMENTS TO SUPPORT THE CONTRACTOR'S EQUIPMENT. TEMPORARY CULVERTS, DITCHING OR OTHER DRAINAGE FEATURES MAY BE REQUIRED FOR HAUL ROUTES DURING CONSTRUCTION.
3. SHOULD THE CONTRACTOR CHOOSE TO EXPAND THE SITES BEYOND THE LIMITS SHOWN ON THE PLANS, HE SHALL OBTAIN ALL REQUIRED PERMITS AND CLEARANCES IN ACCORDANCE WITH SECTION GCP 70-02.
4. MATERIAL SOURCE DEVELOPMENT, RECLAMATION AND HAUL ROUTE IMPROVEMENTS SHALL BE SUBSIDIARY TO OTHER ITEMS OF WORK.
5. THE HAUL ROUTE USED FOR ACCESS TO AIRPORT PASSES BY A SUBDIVISION AND SCHOOL. PROVIDE TRAFFIC CONTROL IN ACCORDANCE WITH SPECIFICATION G-710.
6. SEE SPECIAL USE PERMIT IN APPENDIX J OF THE SPECIFICATIONS FOR DESCRIPTIONS OF MATERIAL SITE BOUNDARIES.
7. WHEN WORKING NEAR DESIGNATED WETLANDS, THE CONTRACTOR WILL NEITHER PLACE FILL NOR OPERATE EQUIPMENT OUTSIDE THE PERMITTED AREAS.
8. SOLID WASTE DISPOSAL AREA FOR LANDING MAT AND SREB DEMOLITION MATERIALS, SEE SHEET 7 AND PERMITS.
9. SEE SECTION GCP 60-02 FOR MINING PLAN REQUIREMENTS.
10. SEE P-157 FOR BORROW, SEDIMENT, AND POLLUTION CONTROL REQUIREMENTS.
11. SEE P-152-3.2f FOR BLASTING REQUIREMENTS.



#### SECTION A-A: ATKA QUARRY MINING / RECLAMATION SECTION



PLANS DEVELOPED BY:  
PDC, INC. 4/25/08

BY	DATE	REVISION

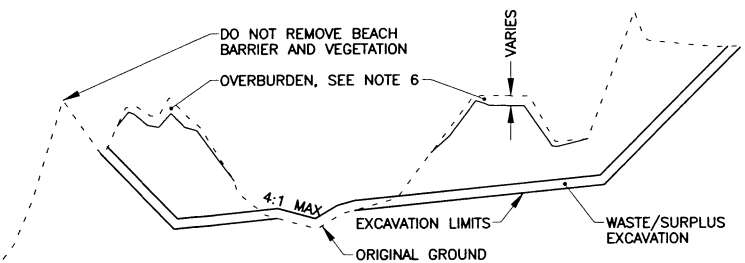
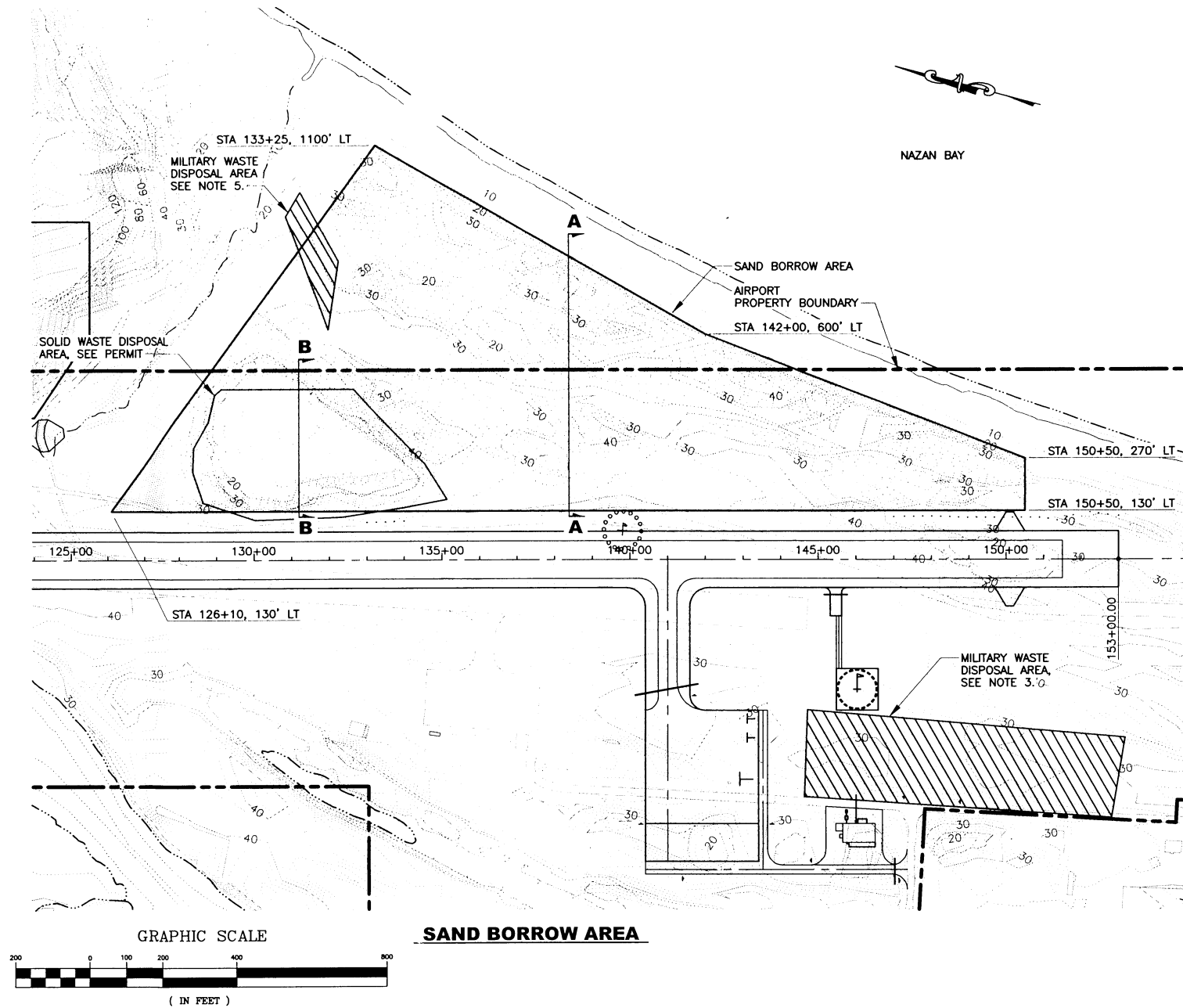
STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
CENTRAL REGION

**ATKA AIRPORT**  
ATKA, ALASKA  
RUNWAY EXTENSION AND RESURFACING  
59621  
AIP No. 3-02-0394-005-2008  
MATERIAL SITE PLAN

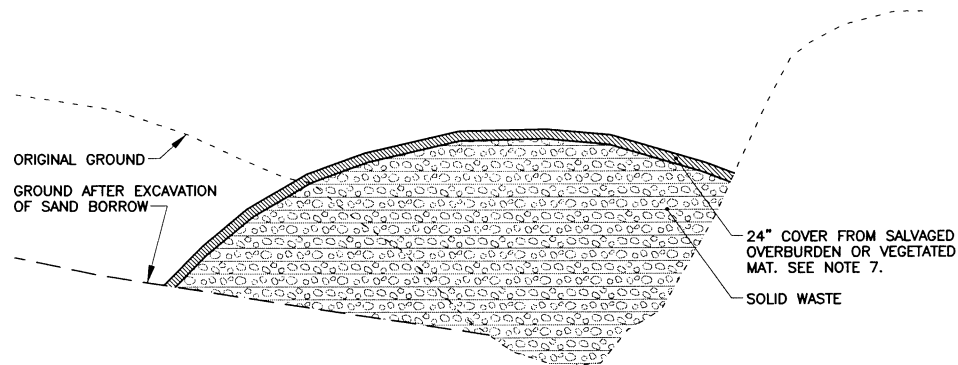
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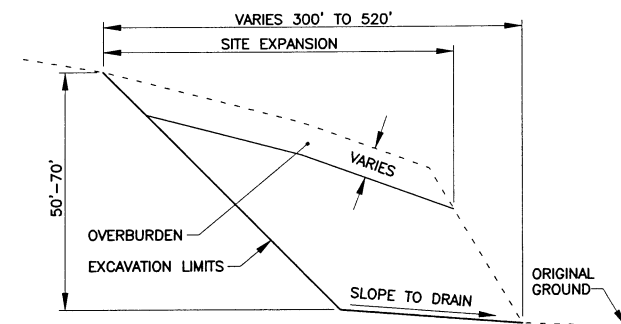
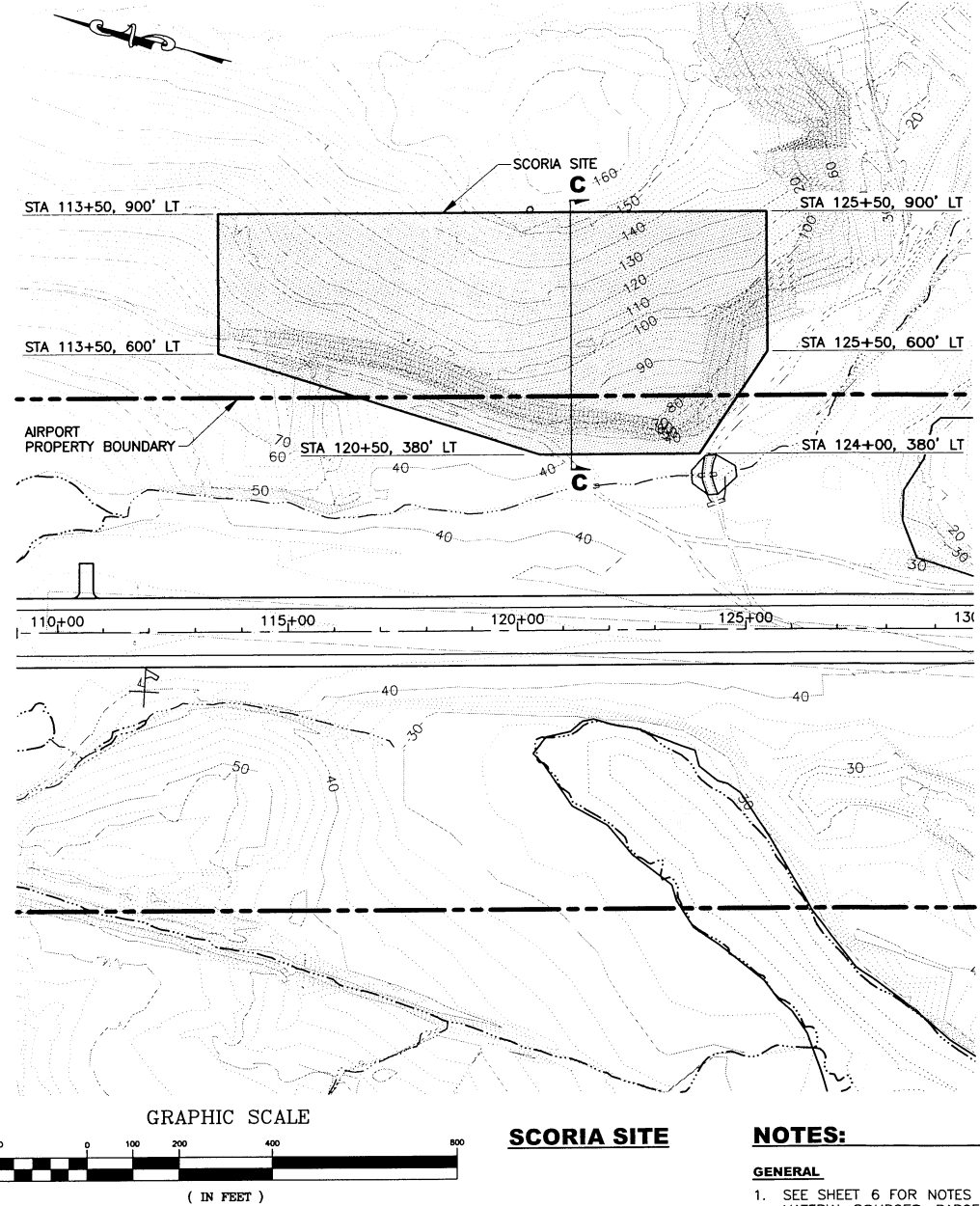
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**SECTION A-A:**  
**SAND BORROW AREA MINING / RECLAMATION SECTION**



**SECTION B-B:**  
**SOLID WASTE DISPOSAL AREA**  
**FINAL COVER DETAILS**



**SECTION C-C:**  
**SCORIA SITE MINING / RECLAMATION SECTION**

**NOTES:**

**GENERAL**

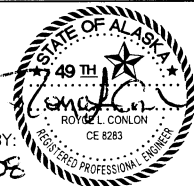
1. SEE SHEET 6 FOR NOTES PERTAINING TO HAUL ROUTES, MATERIAL SOURCES, BARGE LANDING, AND CONTRACTOR'S WORK.
2. SEE SECTION GCP 60-02 FOR MINING PLAN REQUIREMENTS.
3. SEE P-157 FOR BORROW, SEDIMENT, AND POLLUTION CONTROL REQUIREMENTS.

**SAND BORROW AREA**

4. THE SAND BORROW AREA SHALL HAVE ALL EXPOSED, UNVEGETATED SLOPES WITHIN THE MATERIAL SITE BOUNDARY COVERED WITH SURPLUS EXCAVATION AND SEEDING AS APPROVED BY THE ENGINEER. TOP SURFACE SHALL BE BELOW FINISH GRADE OF TERRAIN OBSTRUCTION REMOVAL TYPICAL SECTION, SEE SHEET 16.
5. MILITARY WASTE DISPOSAL AREA BOUNDARIES ARE APPROXIMATE. MAKE EVERY EFFORT TO AVOID BURIED DEBRIS; SEE WORK PLANS (2004) PREPARED BY OASIS ENVIRONMENTAL.
6. SALVAGE OVERBURDEN OR VEGETATIVE MAT FOR RECLAMATION OF MATERIAL SITE. RECLAMATION SHALL BE SUBSIDIARY TO OTHER ITEMS OF WORK AS SPECIFIED IN GCP 60-02d.
7. THE SOLID WASTE AREA SHALL HAVE A MINIMUM OF 24" COVER OVER THE ENTIRE AREA. THE AREA MUST BE GRADED TO PROMOTE RUNOFF AND PREVENT EROSION AND PONDING.

**SCORIA SITE**

8. MANDATORY MATERIAL AS PER T-905.
9. SEE P-152-3.2F FOR BLASTING REQUIREMENTS.



PLANS DEVELOPED BY:  
PDC, INC.  
2/25/08

BY	DATE	REVISION

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
CENTRAL REGION

ATKA AIRPORT  
ATKA, ALASKA  
RUNWAY EXTENSION AND RESURFACING  
AIP No. 3-02-0394-005-2008  
MATERIAL SITE / WASTE DISPOSAL PLAN

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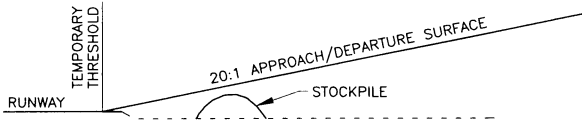
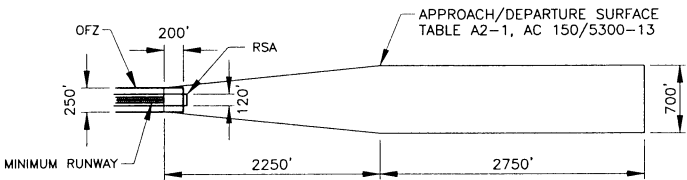
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MATERIAL STOCKPILE LIMITATION NOTES:

1. PLACE NO STOCKPILES WITHIN THE RUNWAY SAFETY AREA (RSA) OR WITHIN THE OBSTACLE FREE ZONE (OFZ).
2. STOCKPILE HEIGHT SHALL NOT EXCEED THE APPROACH/DEPARTURE SURFACE ELEVATION.

	WIDTH	LENGTH
OFZ	250'	200' BEYOND TEMPORARY THRESHOLD
RSA	120'	240' BEYOND TEMPORARY THRESHOLD



SHEET NOTES:

PHASE 1 DURATION  
CONSTRUCTION ON PHASE 1 SHALL BE COMPLETED BY DECEMBER 31, 2008.

SEQUENCE OF WORK

- SCHEDULE WORK TO MINIMIZE DISRUPTION OF AIRPORT ACTIVITIES, CONSIDERING AIR CARRIER TRAFFIC, CHARTER FLIGHTS, AIRPORT MAINTENANCE, AND CONVENIENCE TO THE TRAVELING PUBLIC.
- CONTRACTOR TO DESIGN TEMPORARY DRAINAGE SCHEME AND EROSION CONTROL TO PROTECT THE SLOPES DURING CONSTRUCTION. EROSION CONTROL METHOD SHALL BE SEEDING THAT COMPLIES WITH THE SEEDING SEASON SPECIFIED IN T-901, SCORIA AS SPECIFIED IN T-905, OR OTHER METHOD/MATERIAL TO PROVIDE ADEQUATE EROSION PROTECTION AS APPROVED BY THE ENGINEER.
- PRIOR TO CONSTRUCTION OF NEW APRON, THE UTILITIES SERVICING THE AWOS SHALL BE RELOCATED. PROVIDE WIND CONE IN LOCATION SHOWN.
- CONSTRUCTION OF THE NEW ACCESS ROAD, SREB, SEGMENTED CIRCLE, MAINTENANCE ROAD, TERRAIN OBSTRUCTION REMOVAL, AND PLACEMENT OF VEGETATIVE MAT MAY BE DONE IN ANY PHASE.
- CONTRACTOR SHALL PHASE WORK TO USE SUITABLE MATERIAL FROM EXCAVATION TO THE MAXIMUM EXTENT POSSIBLE.

OPEN RUNWAY (RW 15-33) = 84' X 3045'

DISPLACE THE NORTH THRESHOLD, R/W 15, 242', AND PROVIDE TEMPORARY LIGHTING. OTHER EXISTING LIGHTING IS TO REMAIN OPERATIONAL. DURING PHASE 1 THE EXISTING RUNWAY, TAXIWAY, APRON AND ACCESS ROAD ARE TO REMAIN OPEN.

EXCAVATE THE EXISTING 2" PAVEMENT NORTH OF DISPLACED THRESHOLD AND STOCKPILE OUTSIDE OF EXISTING OR PROPOSED RUNWAY SAFETY AREAS. STOCKPILES SHALL COMPLY WITH MATERIAL STOCKPILE LIMITATION DETAILS, THIS SHEET.

PLACE SURCHARGE ON THE NORTH END OF THE NEW RUNWAY. SURCHARGE TO BE PLACED BY OCTOBER 1, 2008.

COMPLETE EXCAVATIONS PLACE BORROW AND SUBBASE R/W EAST SIDE FROM APPROX STA 116+00-138+50 AND FULL RUNWAY 138+50-153+00 AND PORTION OF NEW TAXIWAY AND APRON.

MAINTAIN VEHICLE AND PEDESTRIAN ACCESS TO THE EXISTING APRON.

THE CONTRACTOR MAY PROPOSE MODIFICATIONS TO THIS PLAN TO COMPLEMENT HIS WORK PLAN AND SCHEDULE. WORK SHALL COMPLY WITH THE SAFETY PLAN, APPENDIX D IN THE SPECIFICATIONS.

RESTRICTION OF CONSTRUCTION ACTIVITY ON AIR OPERATIONS AREAS (AOA) AND RUNWAY AND TAXIWAY CLOSURES

CONSTRUCTION OF THE PROJECT WILL REQUIRE CLOSURE OF THE RUNWAY WITHIN THE CONSTRUCTION AREAS. THE CONTRACTOR MAY ONLY SCHEDULE WORK WITHIN THE RUNWAY SAFETY AREA AND AIRCRAFT OPERATION AREAS TO BE DONE DURING TIMES WHEN THE AIRPORT IS INACTIVE. DURING ACTIVE AIRPORT OPERATIONS, THE CONTRACTOR SHALL REMOVE EQUIPMENT TO DESIGNATED AREAS.

THE NEW EMBANKMENT WORK SHALL BE CONSTRUCTED WITHOUT ENTERING ANY ACTIVE AOA.

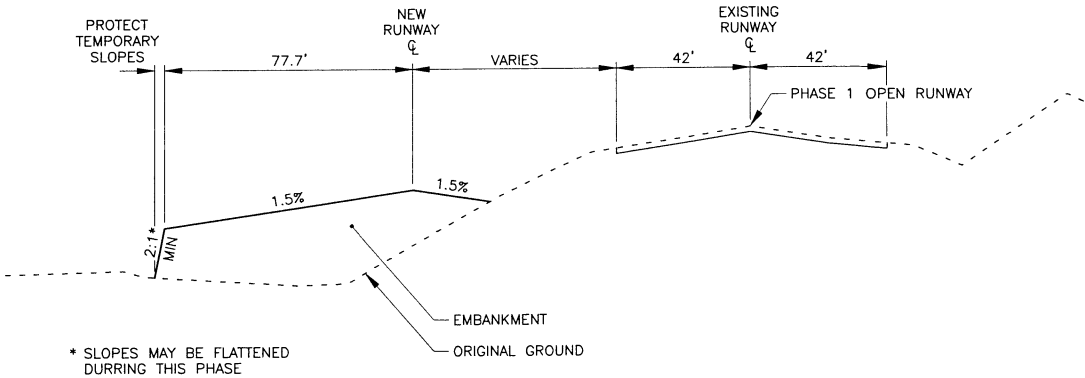
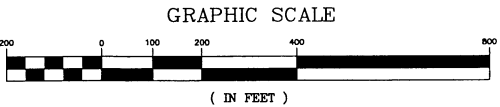
PLANS DEVELOPED BY:  
PDC, INC. 5/27/08



PHASE 1

LEGEND:

- OPEN RUNWAY, TAXIWAY, AND APRON
- SURCHARGE
- BORROW + SUBBASE
- RUNWAY CLOSURE MARKER



SECTION A-A: RUNWAY TYPICAL SCHEMATIC

SEE SHEET 16 FOR FULL TYPICAL SECTION DETAILS

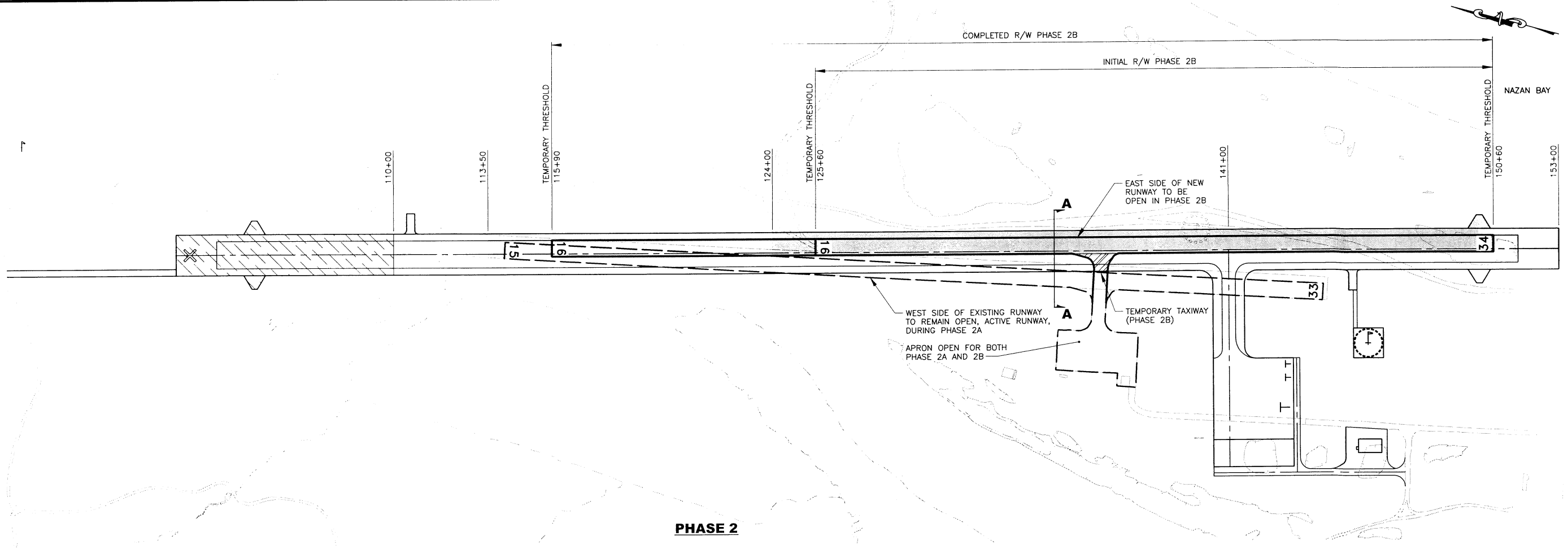
STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
CENTRAL REGION

ATKA AIRPORT  
ATKA, ALASKA  
RUNWAY EXTENSION AND RESURFACING  
59621  
AIP No. 3-02-0394-005-2008  
PROJECT PHASING PLAN - PHASE 1

DATE:  
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PHASE 2

SHEET NOTES:

**PHASE 2 DURATION**  
CONSTRUCTION OF PHASES 2-4 WILL BE COMPLETED BY OCTOBER 1, 2009. PHASE 2B SHALL BE COMPLETED WITHIN 20 CALENDAR DAYS OF CLOSING RUNWAY 15-33.

SEQUENCE OF WORK

- SCHEDULE WORK TO MINIMIZE DISRUPTION OF AIRPORT ACTIVITIES, CONSIDERING AIR CARRIER TRAFFIC, CHARTER FLIGHTS, AIRPORT MAINTENANCE, AND CONVENIENCE TO THE TRAVELING PUBLIC.
- CONTRACTOR TO DESIGN TEMPORARY DRAINAGE SCHEME AND EROSION CONTROL TO PROTECT THE SLOPES DURING CONSTRUCTION. EROSION CONTROL METHOD SHALL BE SEEDING THAT COMPLIES WITH THE SEEDING SEASON SPECIFIED IN T-901, SCORIA AS SPECIFIED IN T-905, OR OTHER METHOD/MATERIAL TO PROVIDE ADEQUATE EROSION PROTECTION AS APPROVED BY THE ENGINEER.

MAINTAIN EXISTING LIGHTING OR PROVIDE TEMPORARY EDGE AND THRESHOLD LIGHTS. PROVIDE WIND CONE IN NEW LOCATION.

CONSTRUCTION OF THE NEW ACCESS ROAD, SREB, SEGMENTED CIRCLE, MAINTENANCE ROAD, TERRAIN OBSTRUCTION REMOVAL, AND PLACEMENT OF VEGETATIVE MAT MAY BE DONE IN ANY PHASE.

CONTRACTOR SHALL PHASE WORK TO USE SUITABLE MATERIAL FROM EXCAVATION TO THE MAXIMUM EXTENT POSSIBLE.

**2A OPEN RUNWAY (15-33) = 60' X 3045'**  
REDUCE RW 15-33 WIDTH TO 60' KEEPING WEST SIDE OPEN AS SHOWN ON PLANS.

EXCAVATE THE EXISTING 2" PAVEMENT FROM THE EAST SIDE OF EXISTING RUNWAY OUTSIDE THE AOA AND STOCKPILE OUTSIDE OF EXISTING OR PROPOSED RUNWAY SAFETY AREAS. STOCKPILES SHALL COMPLY WITH MATERIAL STOCKPILE LIMITATION DETAILS, SHEET B.

CONSTRUCT FINISHED CRUSHED AGGREGATE BASE COURSE (CABC) ON THE EAST HALF OF THE SOUTH END OF THE NEW RUNWAY AND RSA FROM STA. 124+00 TO 153+00 AND A 35-FOOT WIDE TEMPORARY TAXIWAY TO THE EXISTING APRON AS SHOWN ON PLANS.

**2B OPEN RUNWAY (16-34) = 60' X 2500' (INITIAL R/W PHASE 2B)**  
OPEN NEW RUNWAY TO AIR TRAFFIC, CLOSE EXISTING RUNWAY. A TEMPORARY THRESHOLD SHALL BE MARKED AT RUNWAY STATION 125+60 AND 150+60. AIR TRAFFIC SHALL USE THE TEMPORARY TAXIWAY TO THE EXISTING APRON.

REMOVE SURCHARGE FROM NORTH END OF THE NEW RUNWAY IN ACCORDANCE WITH P-152-3.6b (MAY BE DONE NO SOONER THAN MAY 1, 2009).

CONSTRUCT FINISHED SUBBASE COURSE AND CABC FROM STA. 113+50 TO 124+00. MOVE TEMPORARY THRESHOLD TO STATION 115+90. AIR TRAFFIC SHALL USE THE TEMPORARY TAXIWAY TO THE EXISTING APRON.

**OPEN RUNWAY (16-34) = 60' x 3470' (COMPLETE R/W PHASE 2B)**

THE CONTRACTOR MAY PROPOSE MODIFICATIONS TO THIS PLAN TO COMPLEMENT HIS WORK PLAN AND SCHEDULE. WORK SHALL COMPLY WITH THE SAFETY PLAN, APPENDIX D IN THE SPECIFICATIONS.

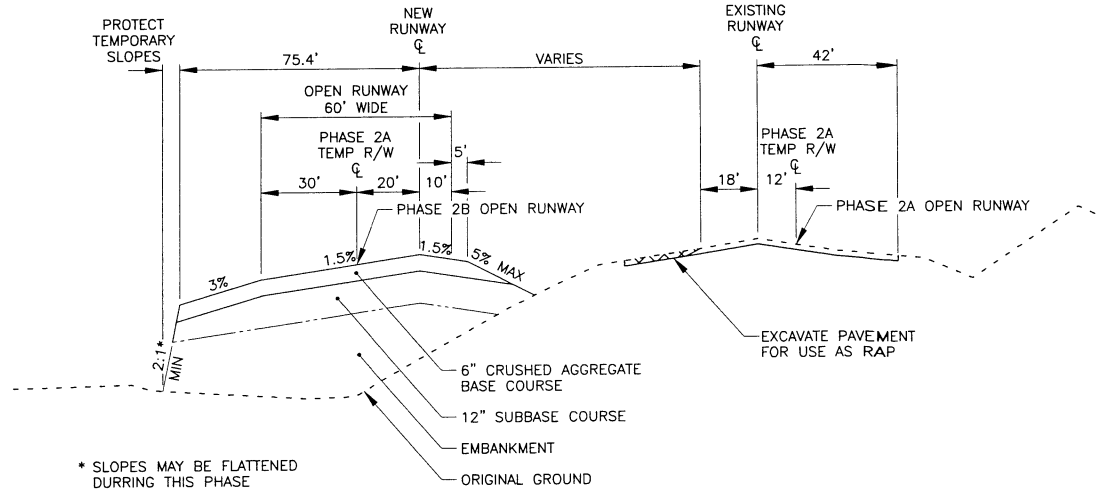
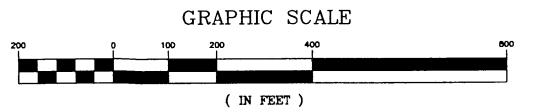
RESTRICTION OF CONSTRUCTION ACTIVITY ON AIRCRAFT OPERATIONS AREAS (AOA) AND RUNWAY AND TAXIWAY CLOSURES

CONSTRUCTION OF THE PROJECT WILL REQUIRE CLOSURE OF THE RUNWAY WITHIN THE CONSTRUCTION AREAS. WITH THE FIRST REDUCTION OF THE EXISTING RUNWAY WIDTH AND FOR THE DURATION OF CONSTRUCTION OF THE NEW AIRPORT, RESTRICT THE ATKA AIRPORT TO SMALL AIRPLANES (UNDER 12,500 POUNDS). THE CONTRACTOR MAY ONLY SCHEDULE WORK WITHIN THE RUNWAY SAFETY AREA AND AIRCRAFT OPERATION AREAS TO BE DONE DURING TIMES WHEN THE AIRPORT IS INACTIVE. DURING ACTIVE AIRPORT OPERATIONS, THE CONTRACTOR SHALL REMOVE EQUIPMENT TO DESIGNATED AREAS.

THE NEW RUNWAY AND TEMPORARY TAXIWAY WORK SHALL BE CONSTRUCTED WITHOUT ENTERING ANY ACTIVE AOA.

LEGEND:

- OPEN RUNWAY 15-33, TAXIWAY, AND APRON
- OPEN RUNWAY 16-34, TAXIWAY, AND APRON
- SURCHARGE
- FINISHED CRUSHED AGGREGATE BASE COURSE
- TEMPORARY TAXIWAY
- RUNWAY CLOSURE MARKER

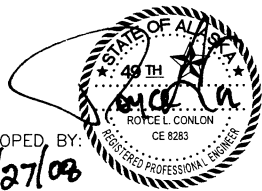


\* SLOPES MAY BE FLATTENED DURING THIS PHASE

SECTION A-A: RUNWAY TYPICAL SCHEMATIC

SEE SHEET 16 FOR FULL TYPICAL SECTION DETAILS

PLANS DEVELOPED BY:  
PDC, INC. 3/27/08



BY	DATE	REVISION

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
CENTRAL REGION

ATKA AIRPORT  
ATKA, ALASKA  
RUNWAY EXTENSION AND RESURFACING  
59621  
AIP No. 3-02-0394-005-2008  
PROJECT PHASING PLAN - PHASE 2

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**PHASE 3 DURATION**  
CONSTRUCTION OF PHASES 2-4 WILL BE COMPLETED BY OCTOBER 1, 2009.

- SCHEDULE WORK TO MINIMIZE DISRUPTION OF AIRPORT ACTIVITIES, CONSIDERING AIR CARRIER TRAFFIC, CHARTER FLIGHTS, AIRPORT MAINTENANCE, AND CONVENIENCE TO THE TRAVELING PUBLIC.
- CONTRACTOR TO DESIGN TEMPORARY EROSION CONTROL. EROSION CONTROL METHOD SHALL BE SEEDING THAT COMPLIES WITH THE SEEDING SEASON SPECIFIED IN T-901, SCORIA AS SPECIFIED IN T-905, OR OTHER METHOD/MATERIAL TO PROVIDE ADEQUATE EROSION PROTECTION AS APPROVED BY THE ENGINEER.

PROVIDE TEMPORARY EDGE AND THRESHOLD LIGHTS. PROVIDE WIND CONE IN NEW LOCATION.

CONTRACTOR SHALL PHASE WORK TO USE SUITABLE MATERIAL FROM EXCAVATION TO THE MAXIMUM EXTENT POSSIBLE.

CONSTRUCTION OF THE NEW ACCESS ROAD, SREB, SEGMENTED CIRCLE, MAINTENANCE ROAD, TERRAIN OBSTRUCTION REMOVAL, AND PLACEMENT OF VEGETATIVE MAT MAY BE DONE IN ANY PHASE.

**OPEN RUNWAY (16-34) = 60' X 3650'**  
PLACE REMAINING BORROW FROM STATION 102+00 TO 113+50; THE WEST SIDE FROM 113+50 TO ±121+00 AND THE REMAINING APRON AREA.

CONSTRUCT FINISHED SUBBASE COURSE AND CABC ON THE WEST HALF OF THE NEW RUNWAY FROM STA. 113+50 TO 153+00. CONSTRUCT FINISHED SUBBASE COURSE AND CABC ON THE NEW TAXIWAY AND APRON.






OPEN NEW TAXIWAY AND APRON; CLOSE TEMPORARY TAXIWAY TO EXISTING APRON.

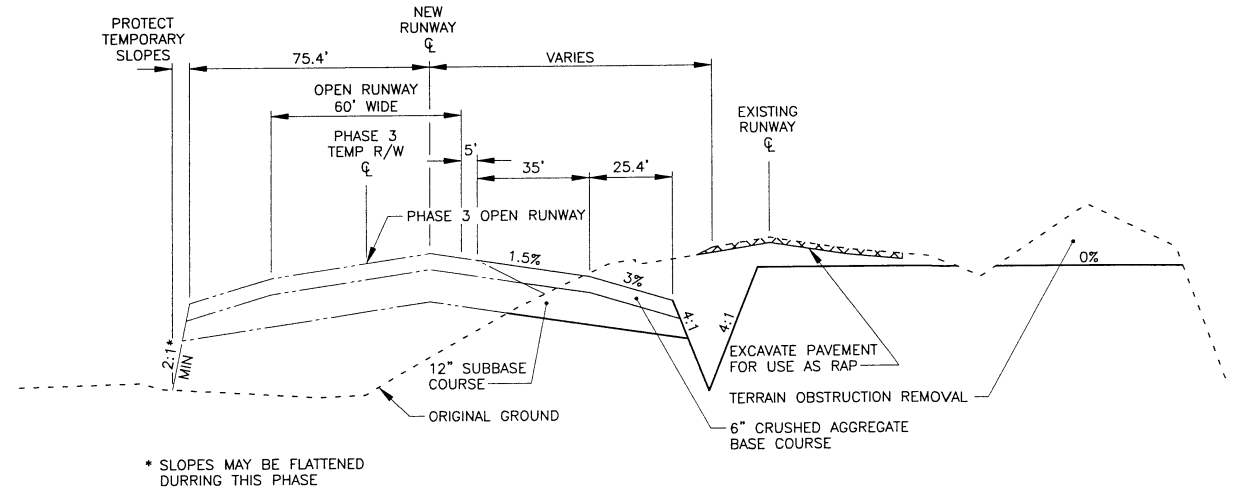
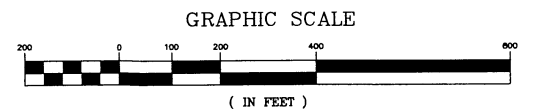
CONSTRUCT FINISHED SUBBASE COURSE AND CABC ON THE RUNWAY AT THE CLOSED TEMPORARY TAXIWAY LOCATION.

THE CONTRACTOR MAY PROPOSE MODIFICATIONS TO THIS PLAN TO COMPLEMENT HIS WORK PLAN AND SCHEDULE. WORK SHALL COMPLY WITH THE SAFETY PLAN, APPENDIX D IN THE SPECIFICATIONS.

**RESTRICTION OF CONSTRUCTION ACTIVITY ON AIRCRAFT OPERATIONS AREAS (AOA) AND RUNWAY AND TAXIWAY CLOSURES**  
CONSTRUCTION OF THE PROJECT WILL REQUIRE CLOSURE OF THE RUNWAY, TAXIWAY AND APRON WITHIN THE CONSTRUCTION AREAS. THE CONTRACTOR MAY ONLY SCHEDULE WORK WITHIN THE RUNWAY SAFETY AREA AND AIRCRAFT OPERATION AREAS TO BE DONE DURING TIMES WHEN THE AIRPORT IS INACTIVE. DURING ACTIVE AIRPORT OPERATIONS, THE CONTRACTOR SHALL REMOVE EQUIPMENT TO DESIGNATED AREAS.

WORK UP TO THE EDGE OF THE NORTH TEMPORARY THRESHOLD, THE CORRESPONDING SAFETY AREA AND ALONG THE WEST SIDE OF THE OPEN RUNWAY. CONSTRUCTION TRAFFIC SHALL BE RESTRICTED TO 150 FEET FROM THE RUNWAY AND 300 FEET FROM THE TEMPORARY THRESHOLD. ALL CONSTRUCTION ACTIVITY REQUIRED WITHIN THESE DISTANCES SHALL OCCUR WHEN THE AIRPORT IS INACTIVE OR BETWEEN THE HOURS OF 10:00 PM AND 7:00 AM.

	OPEN RUNWAY 16-34, TAXIWAY, AND APRON
	BORROW
	FINISHED CRUSHED AGGREGATE BASE COURSE
	TEMPORARY TAXIWAY
	RUNWAY CLOSURE MARKER



SEE SHEET 16 FOR FULL TYPICAL SECTION DETAILS

PLANS DEVELOPED BY:  
PDC, INC. 3/07/08



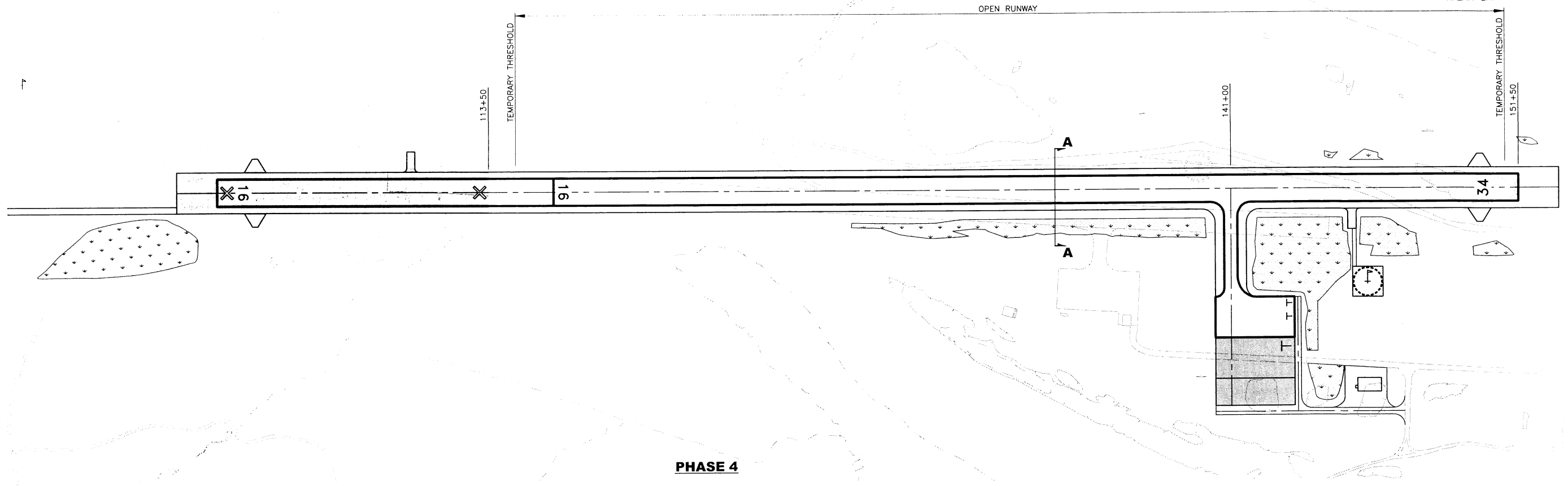
**STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
CENTRAL REGION**

**ATKA AIRPORT**  
ATKA, ALASKA  
RUNWAY EXTENSION AND RESURFACING  
59621  
AIP No. 3-02-0394-005-2008  
PROJECT PHASING PLAN - PHASE 3

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**SHEET NOTES:**

**PHASE 4 DURATION**  
CONSTRUCTION OF PHASES 2-4 SHALL BE COMPLETED BY OCTOBER 1, 2009.

**SEQUENCE OF WORK**  
SCHEDULE WORK TO MINIMIZE DISRUPTION OF AIRPORT ACTIVITIES, CONSIDERING AIR CARRIER TRAFFIC, CHARTER FLIGHTS, AIRPORT MAINTENANCE, AND CONVENIENCE TO THE TRAVELING PUBLIC.

CONSTRUCTION OF THE NEW ACCESS ROAD, SREB, SEGMENTED CIRCLE, MAINTENANCE ROAD AND TERRAIN OBSTRUCTION REMOVAL MAY BE DONE IN ANY PHASE.

**OPEN RUNWAY (16-34) = 100' X 3650'**  
CONSTRUCT FINISHED SUBBASE COURSE AND CABG ON THE NORTH END OF THE NEW RUNWAY.

PAVE AND STRIPE ALL NEW OPERATIONAL SURFACES.

COMPLETE WORK ON NEW RUNWAY SAFETY AREAS, LIGHTING, AND NAVIGATIONAL AIDS.

PRIOR TO OPENING FULL LENGTH RUNWAY TERRAIN EXCAVATION TO THE NORTHWEST OF THRESHOLD 16 SHALL BE COMPLETED.

OPEN FULL LENGTH RUNWAY.

PLACE VEGETATIVE MAT IN ACCORDANCE WITH SPECIFICATION T-905.

THE CONTRACTOR MAY PROPOSE MODIFICATIONS TO THIS PLAN TO COMPLEMENT HIS WORK PLAN AND SCHEDULE. WORK SHALL COMPLY WITH THE SAFETY PLAN, APPENDIX D IN THE SPECIFICATIONS.

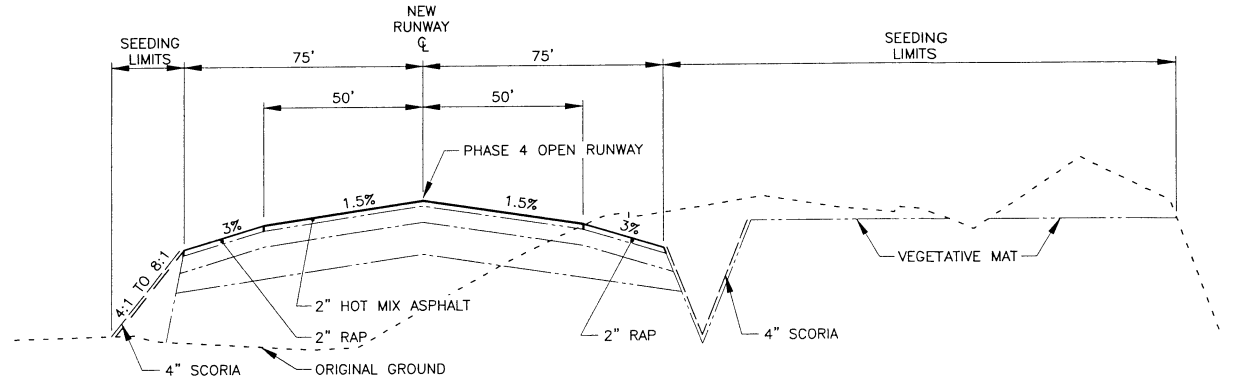
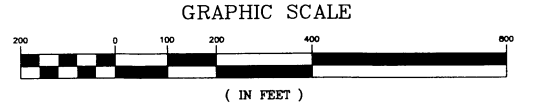
**RESTRICTION OF CONSTRUCTION ACTIVITY ON AIRCRAFT OPERATIONS AREAS (AOA) AND RUNWAY AND TAXIWAY CLOSURES**  
CONSTRUCTION OF THE PROJECT WILL REQUIRE CLOSURE OF THE RUNWAY, TAXIWAY, AND APRON WITHIN THE CONSTRUCTION AREAS. THE CONTRACTOR MAY ONLY SCHEDULE WORK WITHIN AIRCRAFT OPERATION AREAS TO BE DONE DURING TIMES WHEN THE AIRPORT IS INACTIVE. DURING ACTIVE AIRPORT OPERATIONS, THE CONTRACTOR SHALL REMOVE EQUIPMENT TO DESIGNATED AREAS.

MAINTAIN A MINIMUM OPEN RUNWAY OF 60' X 2500' DURING PAVING. PROVIDE TEMPORARY MARKINGS AND EDGE AND THRESHOLD LIGHTS AS NEEDED. WHEN INSTALLING THE LIGHTING AND NAVIGATIONAL AID CONDUITS, VEHICULAR TRAFFIC SHALL NOT OPERATE ON THE RUNWAY, BUT ONLY ON THE RUNWAY SAFETY AREAS.

**PHASE 4**

**LEGEND:**

- OPEN RUNWAY 16-34, TAXIWAY, AND APRON
- FINISHED CRUSHED AGGREGATE BASE COURSE
- RUNWAY CLOSURE MARKER
- VEGETATIVE MAT



**SECTION A-A: RUNWAY TYPICAL SCHEMATIC**

SEE SHEET 16 FOR FULL TYPICAL SECTION DETAILS

PLANS DEVELOPED BY:  
PDC, INC.  
3/27/08



BY	DATE	REVISION

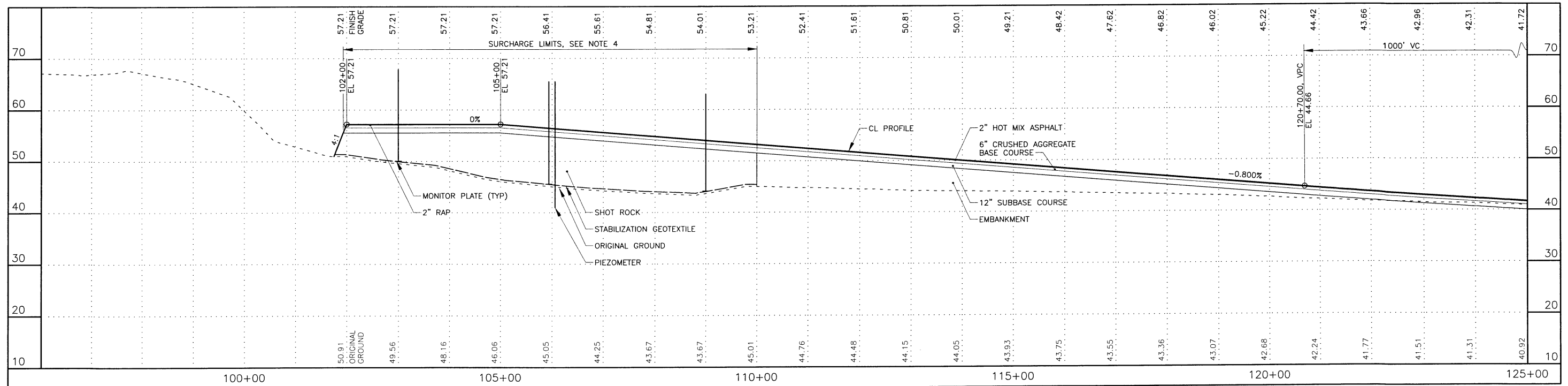
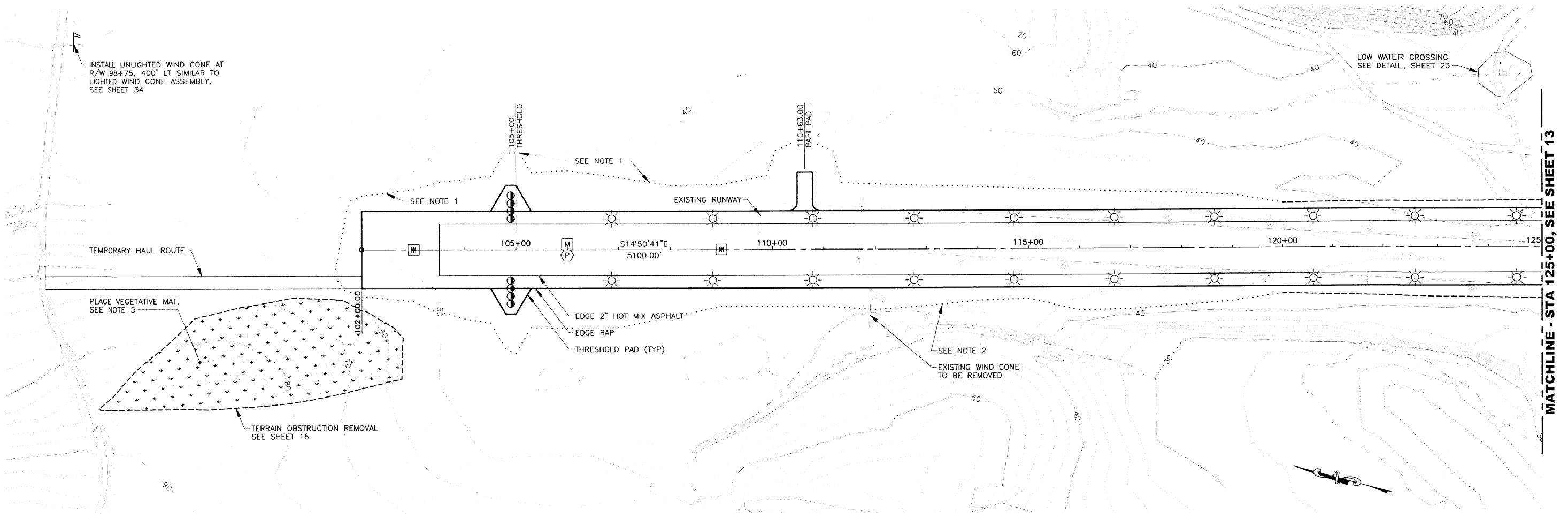
STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
CENTRAL REGION

**ATKA AIRPORT**  
ATKA, ALASKA  
RUNWAY EXTENSION AND RESURFACING  
59621  
AIP No. 3-02-0394-005-2008  
PROJECT PHASING PLAN - PHASE 4

DATE:  
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Date Revised: 2/22/2008, 3:13 PM  
Layout Name: 12-2001\01089\01089.dwg  
File Path and Name: P:\2001\01089\01089.dwg  
Designed By: KBK  
Drawn By: GDS  
Checked By: RLC



#### SHEET NOTES:

1. STEEPEN SLOPE TO AVOID CREEK AND PONDS IN ACCORDANCE WITH PERMITS.
2. STEEPEN SLOPE TO A MAXIMUM OF 4:1 BETWEEN EMBANKMENT TOE AND ADJACENT CREEK AND POND TO PROVIDE A 40' BUFFER.
3. CUT LIMITS INCLUDE EXCAVATION FOR TERRAIN OBSTRUCTION REMOVAL.
4. SEE SHEET 17 FOR SURCHARGE TYPICAL SECTION. TRANSITION BETWEEN TOP OF SHOT ROCK AND TOP OF SURCHARGE AT A 10:1.
5. PLACE VEGETATIVE MAT IN ACCORDANCE WITH SPECIFICATION T-905.



PLANS DEVELOPED BY:  
PDC, INC. 2/25/05

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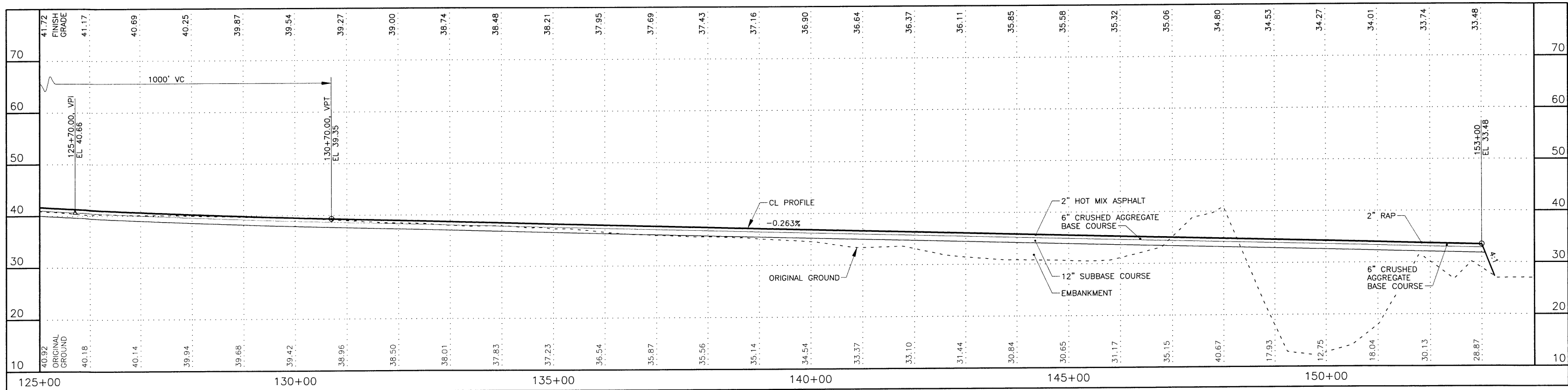
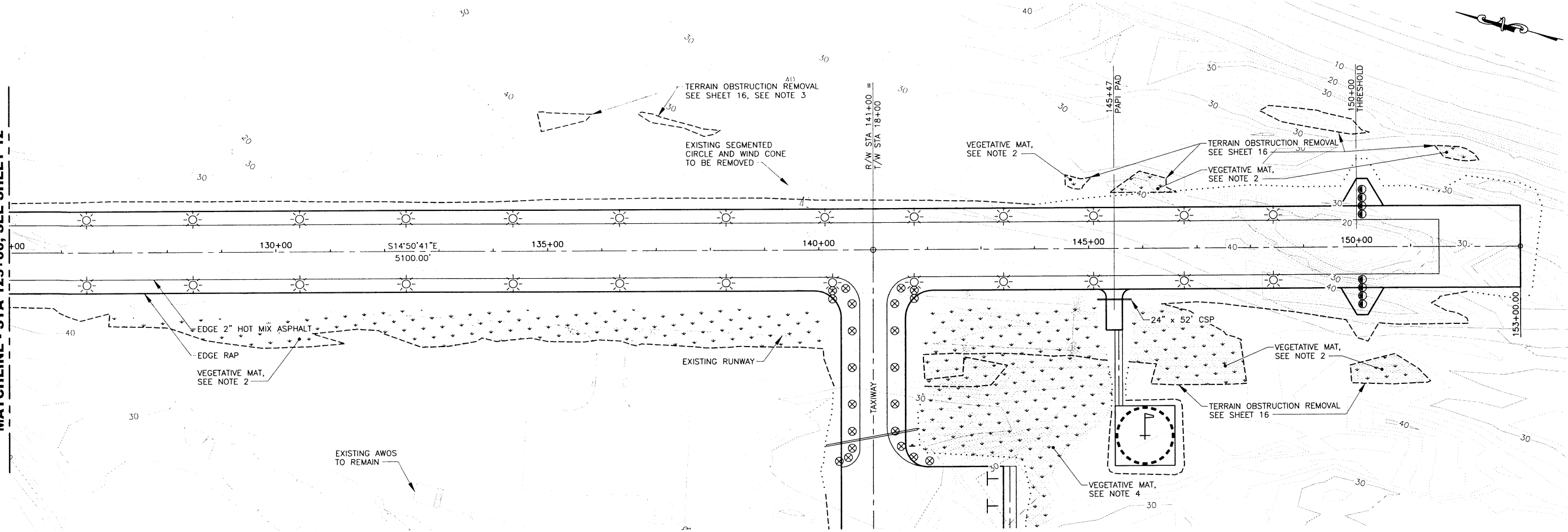
ATKA AIRPORT  
ATKA, ALASKA  
RUNWAY EXTENSION AND RESURFACING  
59621  
AIP No. 3-02-0394-005-2008  
RUNWAY PLAN AND PROFILE

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Date Revised: 2/25/2008, 1:26 PM  
Layout Name: 13  
File Path and Name: P:\2001\FD089\05-13\appf01089.dwg  
Designed By: KKK  
Drawn By: GDS  
Checked By: RLC

MATCHLINE - STA 125+00, SEE SHEET 12



**SHEET NOTES:**

- CUT LIMITS INCLUDE EXCAVATION FOR TERRAIN OBSTRUCTION REMOVAL.
- PLACE VEGETATIVE MAT, SEE RUNWAY TYPICAL SECTION SHEET 16.
- FINISH SURFACE TREATMENT FOR RECLAMATION OF TERRAIN OBSTRUCTION REMOVAL AREAS LOCATED WITHIN THE SAND BORROW AREA TO BE SUBSIDIARY TO MATERIAL SITE, SEE SECTION GCP 60-02.
- COVER UNVEGETATED AREAS OUTSIDE THE PROJECT TYPICAL SECTION. AREAS TO BE COVERED ARE ESTIMATED. EXACT LOCATIONS MAY BE ADJUSTED IN THE FIELD AS APPROVED BY THE ENGINEER.



PLANS DEVELOPED BY:  
PDC, INC. 2/25/08

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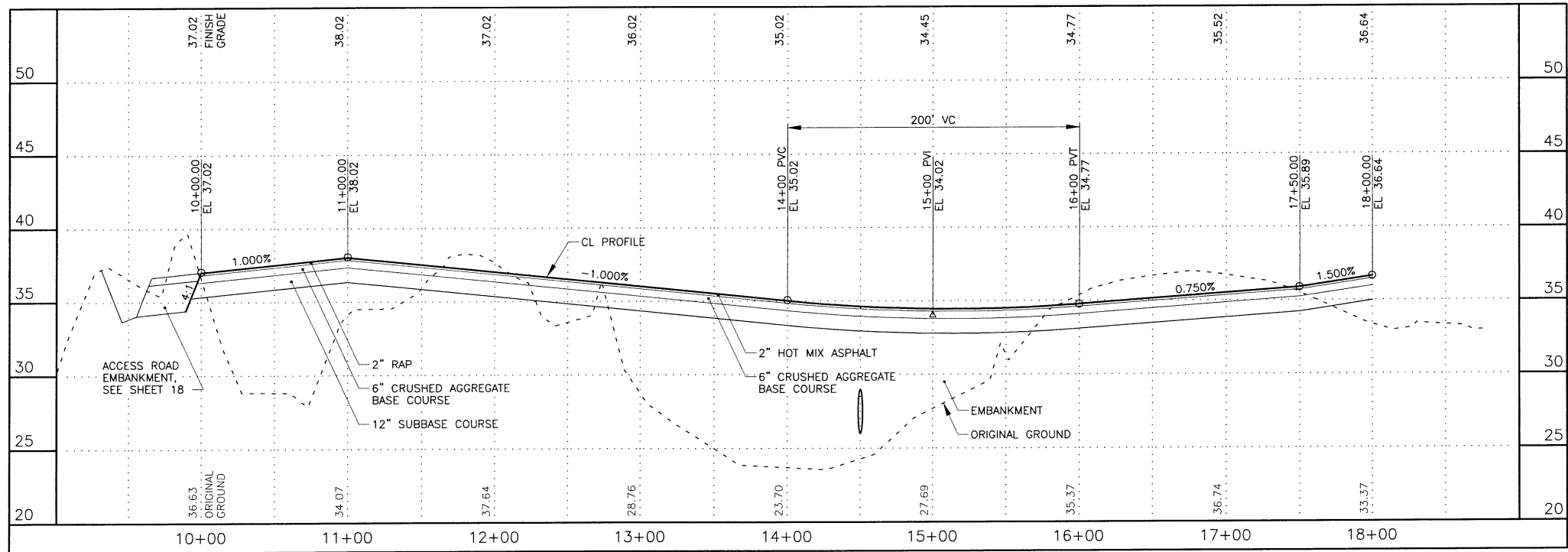
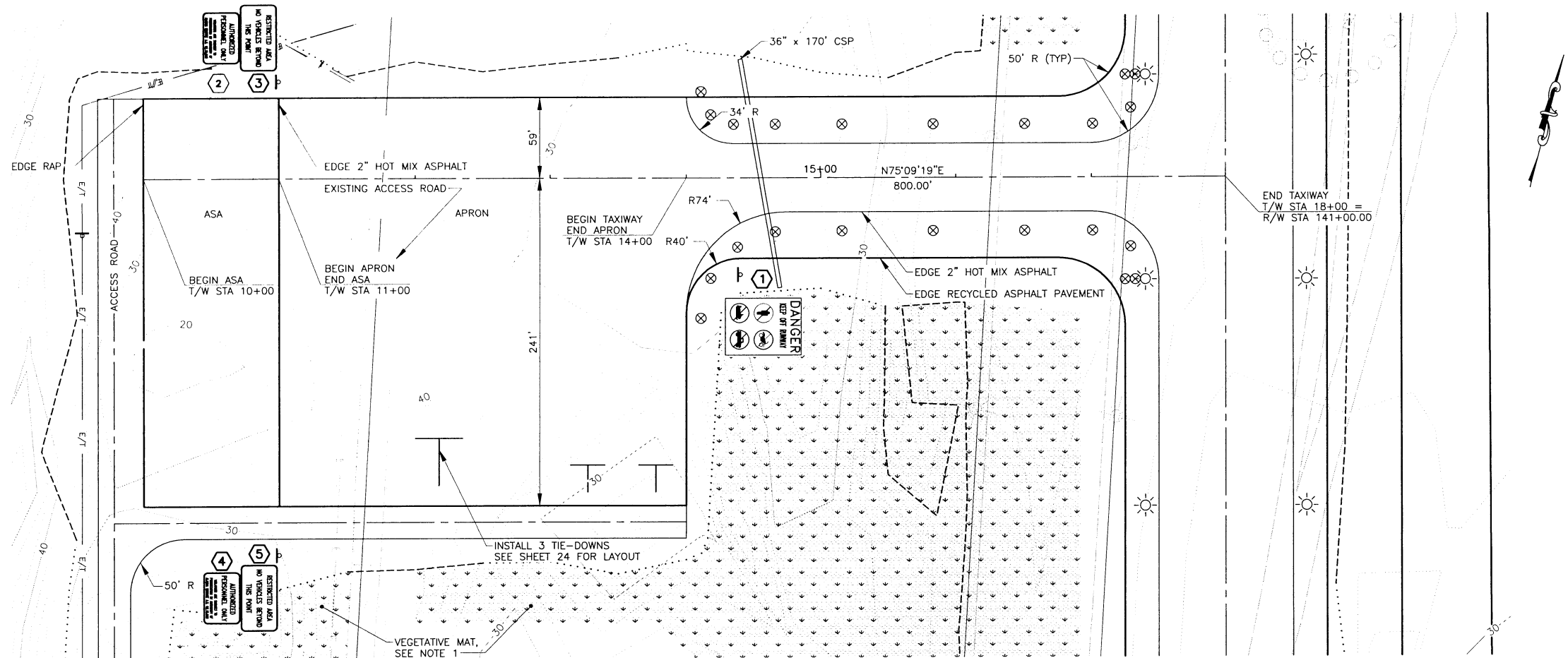
STATE OF ALASKA  
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CENTRAL REGION

ATKA AIRPORT  
ATKA, ALASKA  
RUNWAY EXTENSION AND RESURFACING  
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FEB 2008  
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Date Revised: 2/25/2008, 1:28 PM  
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File Path and Name: P:\2001\101089\14\1428cnpf01089.dwg  
Designed By: KBK  
Drawn By: GDS  
Checked By: RLC



#### SHEET NOTES:

1. PLACE VEGETATIVE MAT, SEE RUNWAY TYPICAL SECTION, SHEET 16. COVER UNVEGETATED AREAS OUTSIDE THE PROJECT TYPICAL SECTION. AREAS TO BE COVERED ARE ESTIMATED. EXACT LOCATIONS MAY BE ADJUSTED IN THE FIELD AS APPROVED BY THE ENGINEER.



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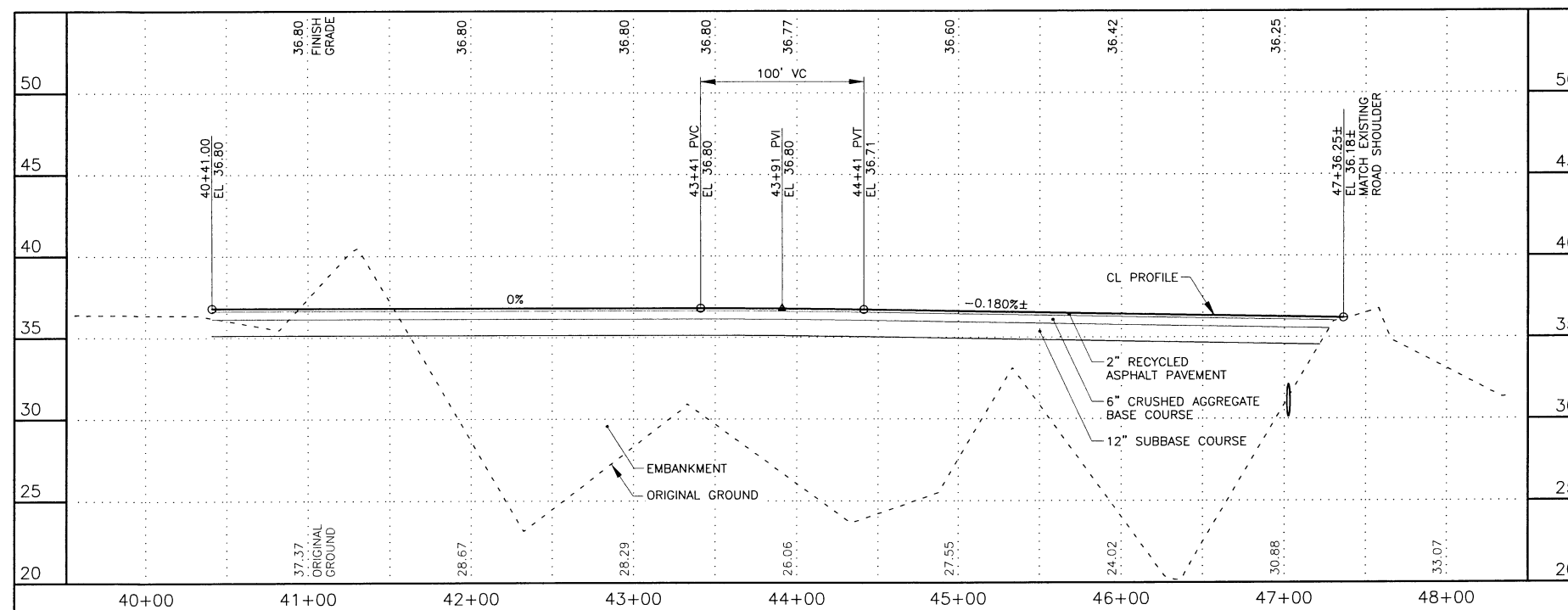
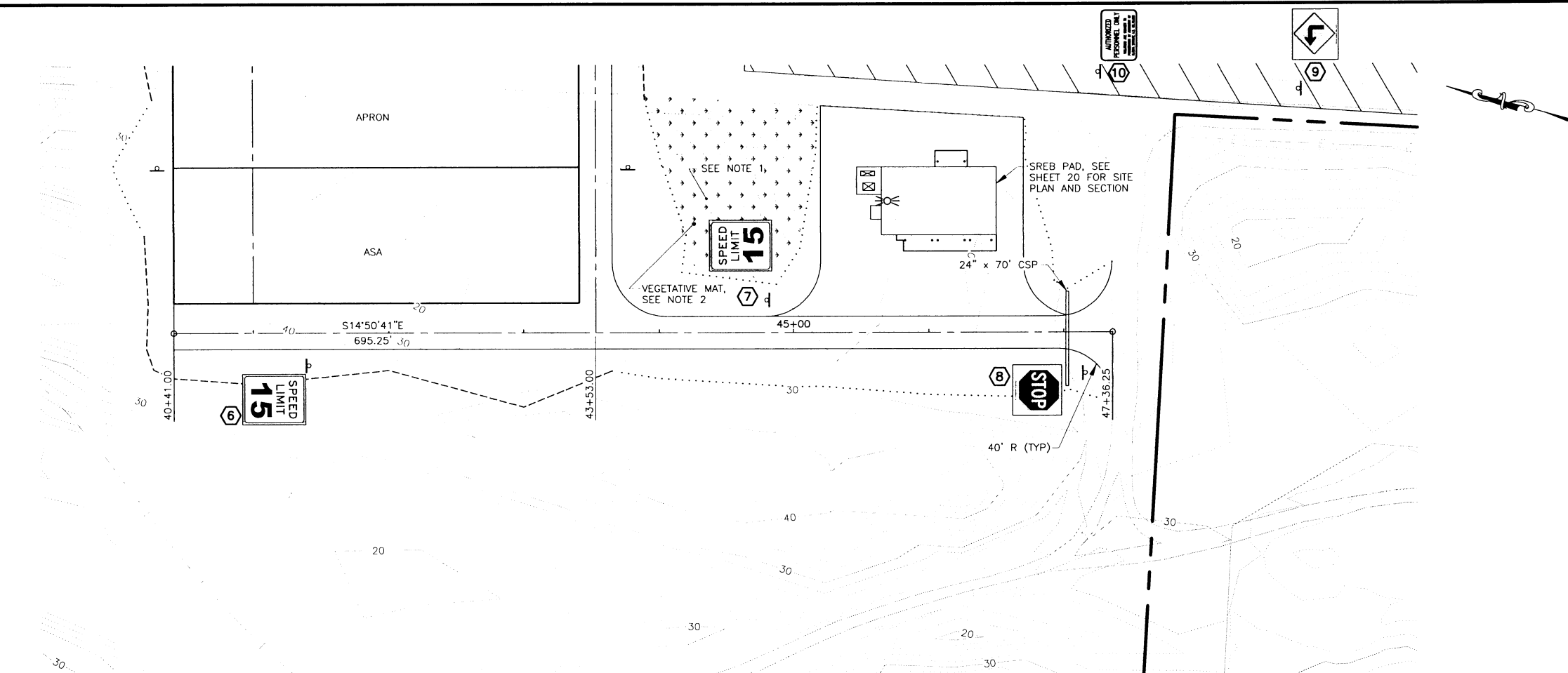
BY	DATE	REVISION

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
CENTRAL REGION

**ATKA AIRPORT**  
ATKA, ALASKA  
RUNWAY EXTENSION AND RESURFACING  
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TAXIWAY PLAN AND PROFILE

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**SHEET NOTES:**

1. IF SURPLUS "SUITABLE EXCAVATION" REMAINS, FILL LOW AREA BETWEEN SREB PAD AND APRON.
2. PLACE VEGETATIVE MAT, SEE RUNWAY TYPICAL SECTION, SHEET 16. COVER UNVEGETATED AREAS OUTSIDE THE PROJECT TYPICAL SECTION. AREAS TO BE COVERED ARE ESTIMATED. EXACT LOCATIONS MAY BE ADJUSTED IN THE FIELD AS APPROVED BY THE ENGINEER.



PLANS DEVELOPED BY:  
PDC, INC. *11/12/88*

BY	DATE	REVISION

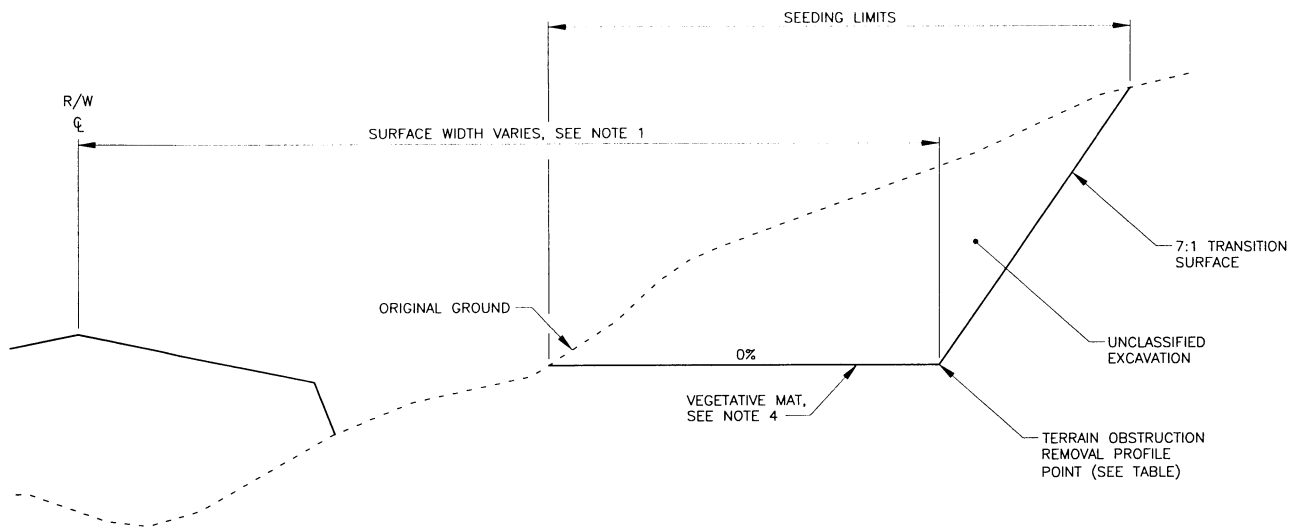
**STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
CENTRAL REGION**

**ATKA AIRPORT**  
ATKA, ALASKA  
RUNWAY EXTENSION AND RESURFACING  
59621  
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ACCESS ROAD PLAN AND PROFILE

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Date Revised: 2/22/2008, 3:20 PM  
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Drawn By: GDS  
Checked By: RLG



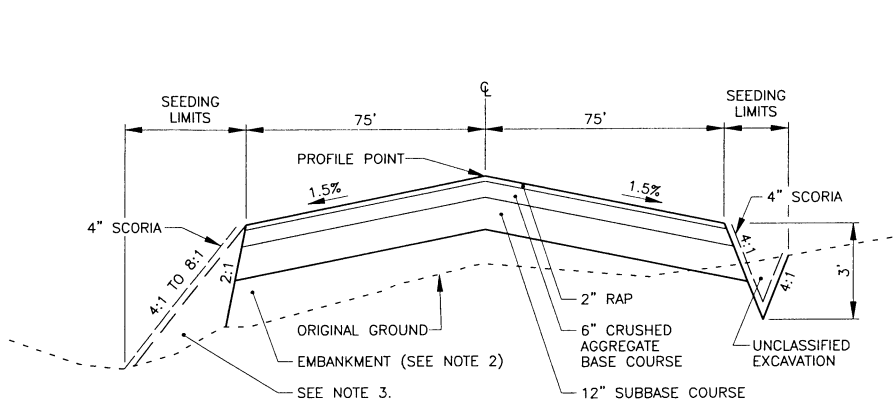
**TERRAIN OBSTRUCTION REMOVAL TYPICAL SECTION**  
R/W STA 96+00 TO 152+00

TERRAIN OBSTRUCTION REMOVAL PROFILE POINT			
R/W STA	OFFSET	ELEVATION	SLOPE TREATMENT
96+00	320'	91' (SEE NOTE 1)	VEGETATIVE MAT AND SEED
103+00	250'	56' (SEE NOTE 1)	SCORIA AND SEED
105+00	250'	56.46'	SCORIA AND SEED
105+00 TO 150+00	250'	MATCH R/W EDGE OF PAVEMENT	VEGETATIVE MAT AND SEED
150+00	250'	33.52'	VEGETATIVE MAT AND SEED
152+00	250'	33.50'	VEGETATIVE MAT AND SEED

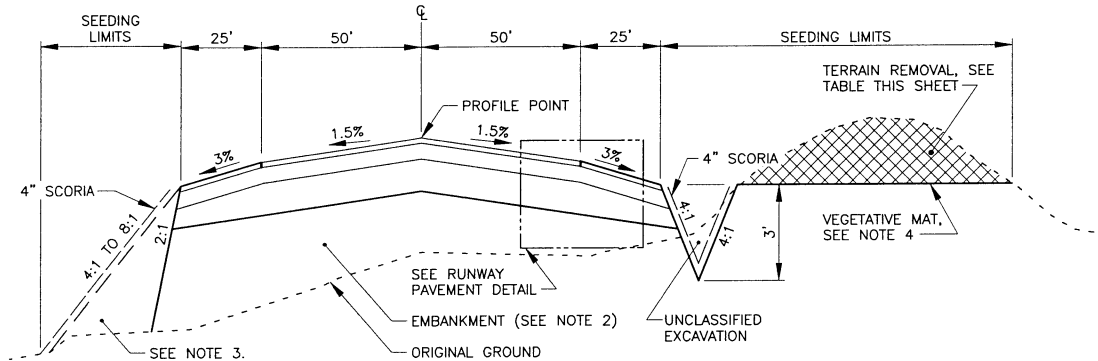
OFFSET APPLICABLE TO BOTH LEFT AND RIGHT OF RUNWAY CENTERLINE.

**SHEET NOTES:**

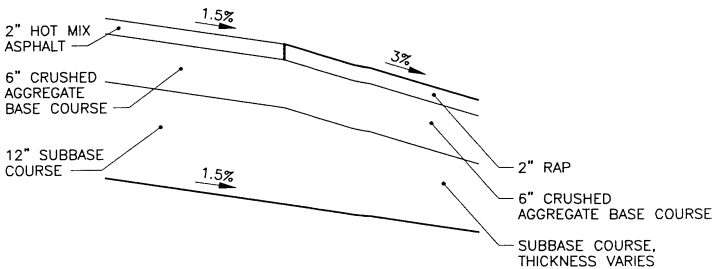
1. APPROACH SURFACE WIDTH FLARES FROM STATION 96+00 AT 320' TO STATION 103+00 AT 250'. THE APPROACH SURFACE ELEVATION IS ON A 20:1 SLOPE FROM 91' AT 96+00 TO 56' AT 103+00.
2. FROM R/W STA 102+00 TO STA 110+00, USE SHOT ROCK. SEE RUNWAY SURCHARGE TYPICAL SECTION.
3. FLATTEN SLOPES FROM 110+00 TO 153+00 WITH MATERIAL OBTAINED FROM SURPLUS EXCAVATION. TOP 4" SHALL BE SCORIA.
4. SPREAD VEGETATIVE MATERIAL OVER SLOPE PER SPECIFICATION T-905.



**RUNWAY SAFETY AREA TYPICAL SECTION**  
R/W STA 102+00 TO 103+50 AND 151+50 TO 153+00



**RUNWAY TYPICAL SECTION**  
R/W STA 103+50 TO 151+50



**RUNWAY PAVEMENT DETAIL**  
NO SCALE

PLANS DEVELOPED BY:  
PDC, INC.



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**ATKA AIRPORT**  
ATKA, ALASKA  
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59621  
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TYPICAL SECTIONS

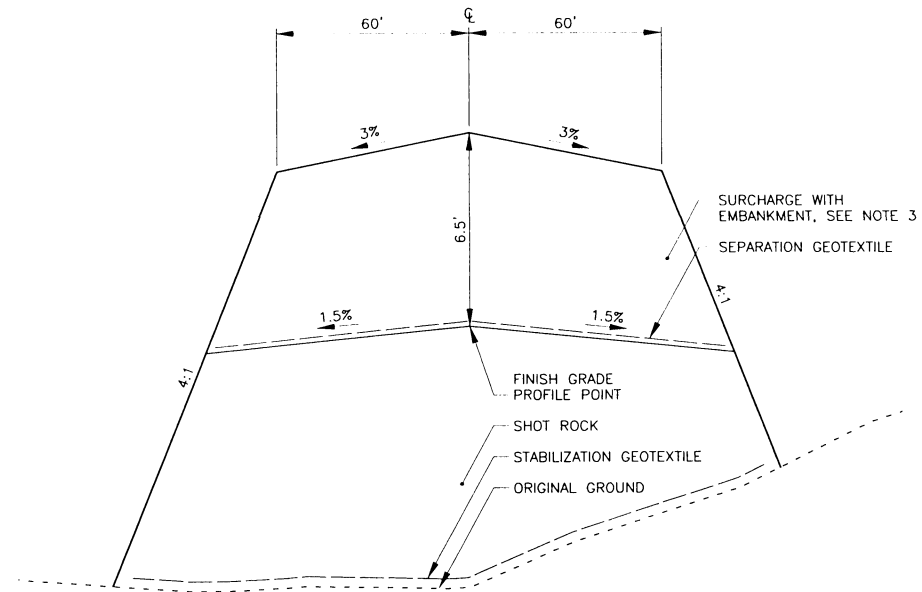
DATE:  
FEB 2008

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16  
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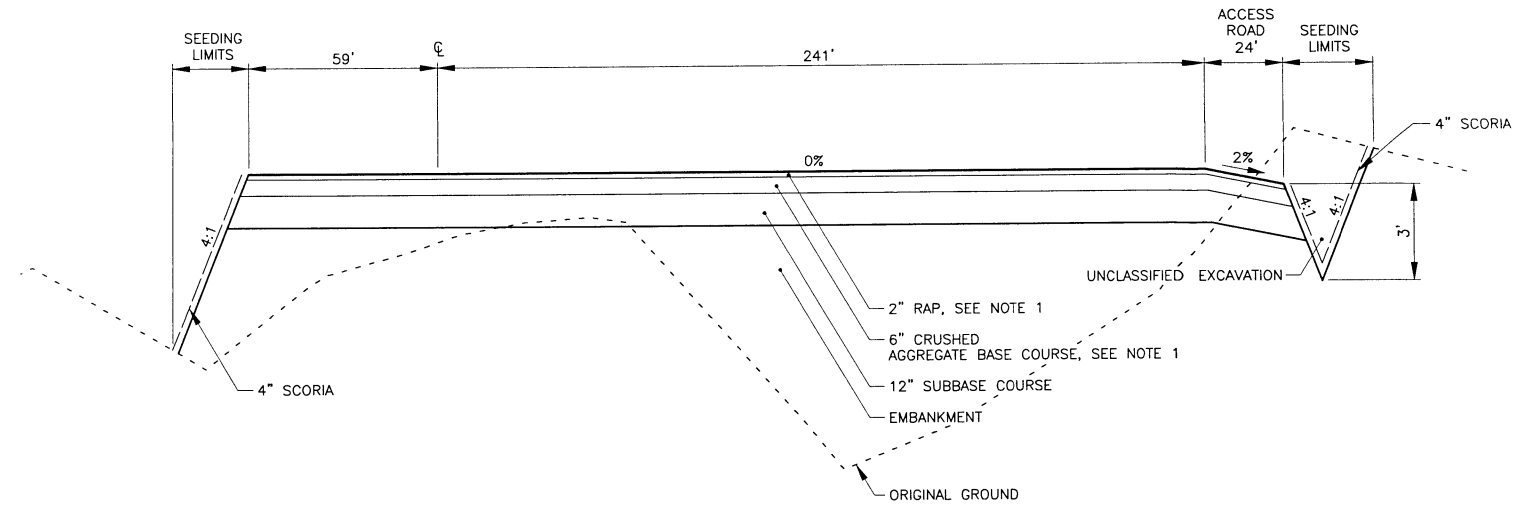


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Layout Name: 17  
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Designed By: KBK  
Drawn By: GDS  
Checked By: RLC



### RUNWAY SURCHARGE TYPICAL SECTION

R/W STA 102+00 TO 110+00

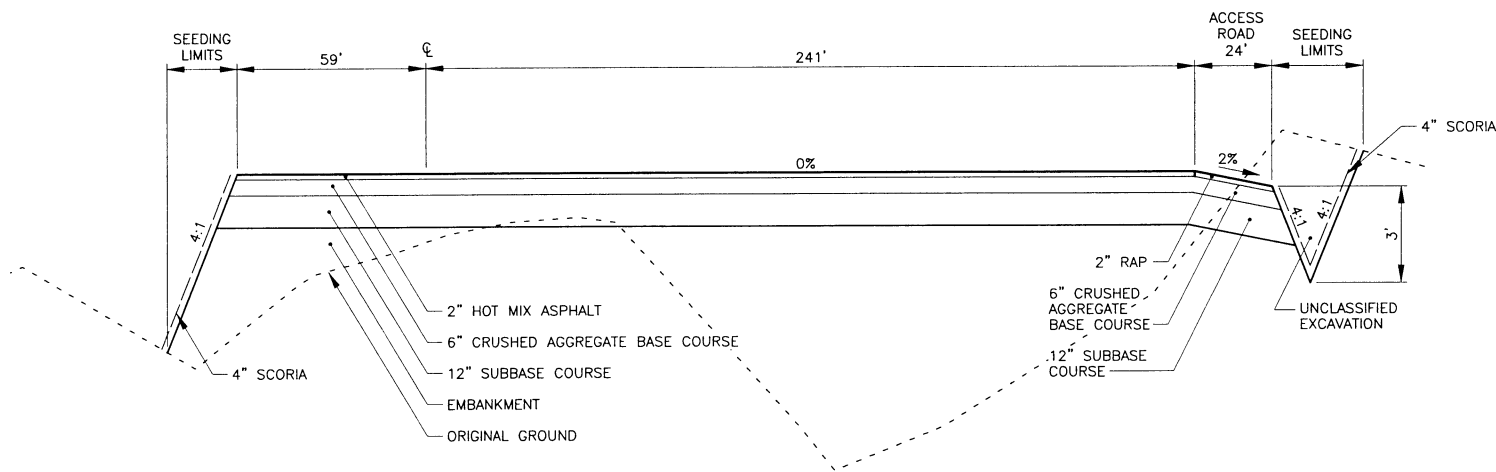


### AVIATION SUPPORT AREA TYPICAL SECTION

T/W STA 10+00 TO 11+00

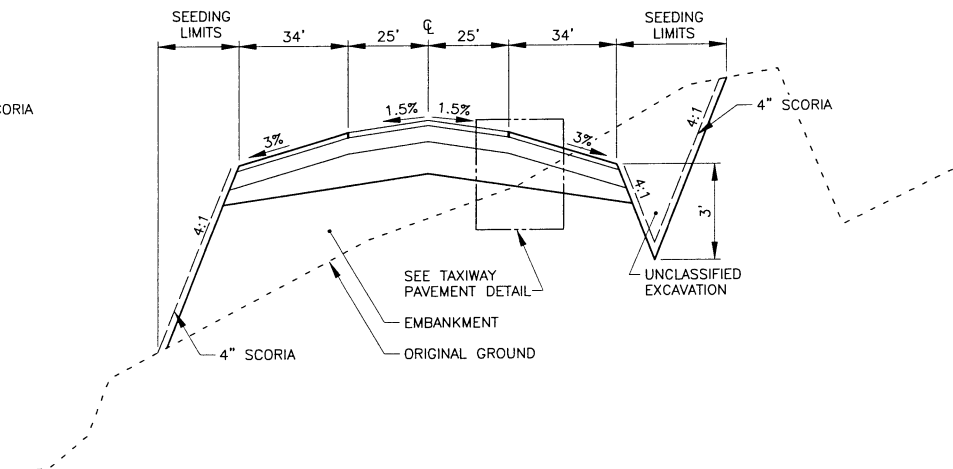
### SHEET NOTES:

- ALL AVAILABLE RAP SHALL BE USED ON THE PROJECT. IF EXCESS QUANTITY IS AVAILABLE AFTER ALL AREAS SHOWN ON THE PLANS ARE COMPLETE, SUBSTITUTE THE TOP 2" OF CASC WITH 2" RAP. PRIORITY FOR RAP PLACEMENT SHALL BE AS FOLLOWS:  
A. SREB PAD  
B. SEGMENTED CIRCLE PAD  
C. THRESHOLD PADS  
D. PAPI PADS
- IF THE AVAILABLE EXISTING PAVEMENT IS INSUFFICIENT TO PRODUCE THE RAP SHOWN ON THE PLANS, SUBSTITUTE 8 INCHES OF CRUSHED AGGREGATE SURFACE COURSE FOR THE 2 INCHES OF RAP AND 6" OF CRUSHED AGGREGATE BASE COURSE. PRIORITY FOR RAP PLACEMENT SHALL BE AS FOLLOWS:  
A. RUNWAY SAFETY AREA  
B. TAXIWAY SAFETY AREA  
C. ACCESS ROADS  
D. AVIATION SUPPORT AREA
- SURCHARGE SHALL BE REMOVED TO THE BOTTOM OF THE SPECIFIED SUBBASE LAYER AND THE SECTION SHALL BE FINISHED IN ACCORDANCE WITH TYPICAL SECTIONS ON SHEET 16. REMOVAL OF SURCHARGE SHALL BE PAID AS P-152a.



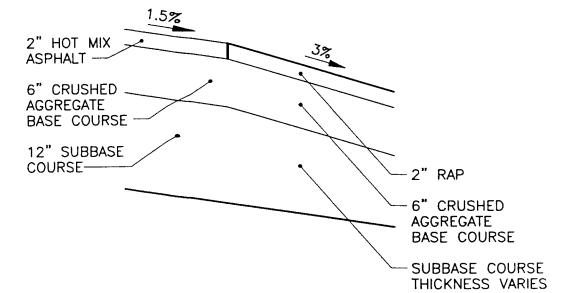
### APRON TYPICAL SECTION

T/W STA 11+00 TO 14+00



### TAXIWAY TYPICAL SECTION

T/W STA 14+00 TO 17+50



### TAXIWAY PAVEMENT DETAIL

NO SCALE



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PDC, INC. 2/25/08

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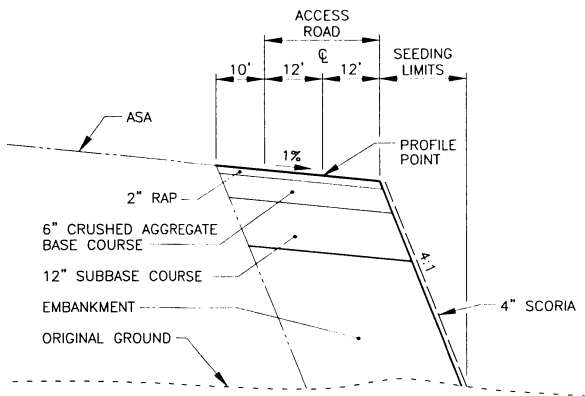
STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
CENTRAL REGION

ATKA AIRPORT  
ATKA, ALASKA  
RUNWAY EXTENSION AND RESURFACING  
59621  
AIP No. 3-02-0394-005-2008  
TYPICAL SECTIONS

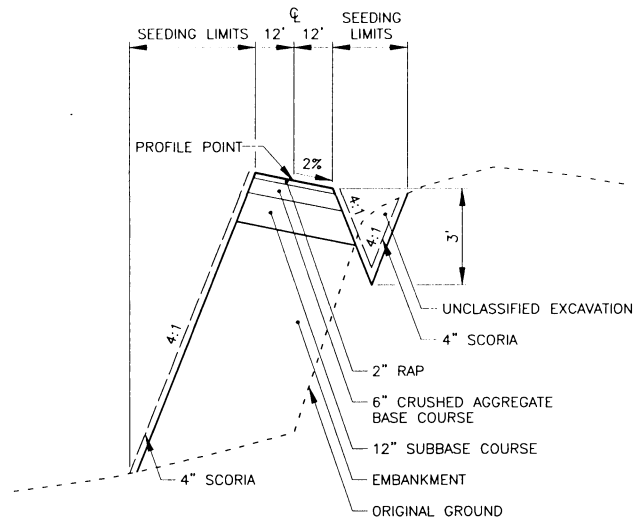
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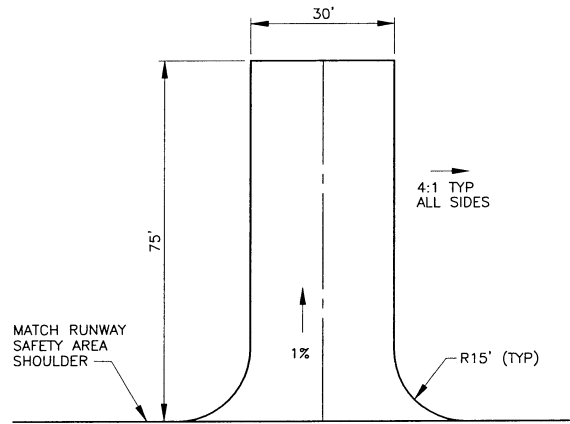


**ACCESS ROAD AT APRON TYPICAL SECTION**  
AR STA 40+41 TO 43+65

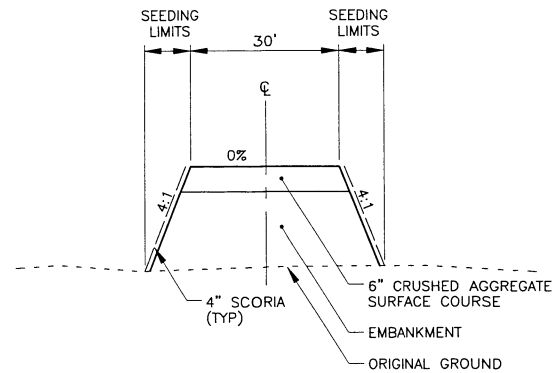


**ACCESS ROAD TYPICAL SECTION**  
AR STA 43+65 TO 45+20 AND AR STA 46+70 TO 47+36.25

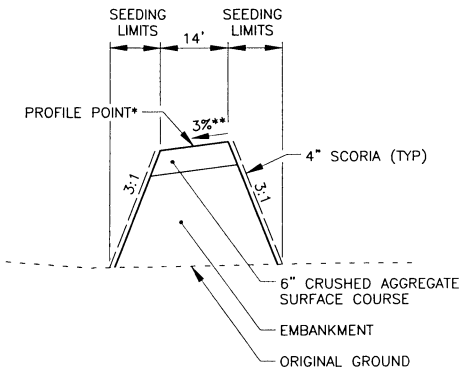
SEE SHEET 20 FOR ACCESS ROAD TYPICAL SECTION,  
AR STA 45+20 TO AR STA 46+70.



**PAPI PAD PLAN**  
NO SCALE



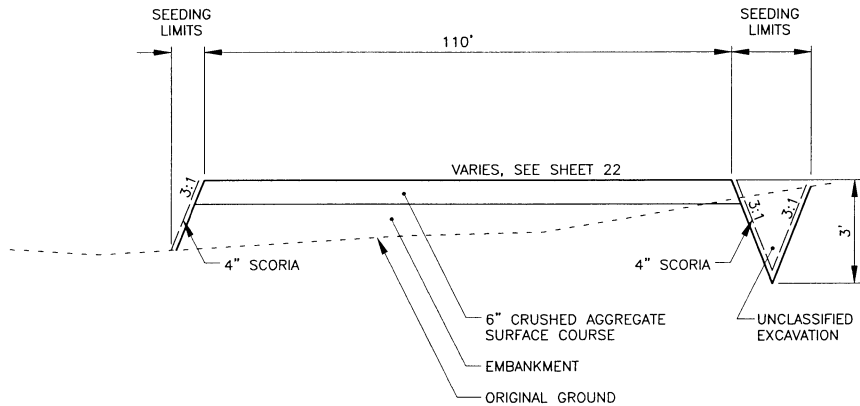
**PAPI PAD TYPICAL SECTION**  
NO SCALE



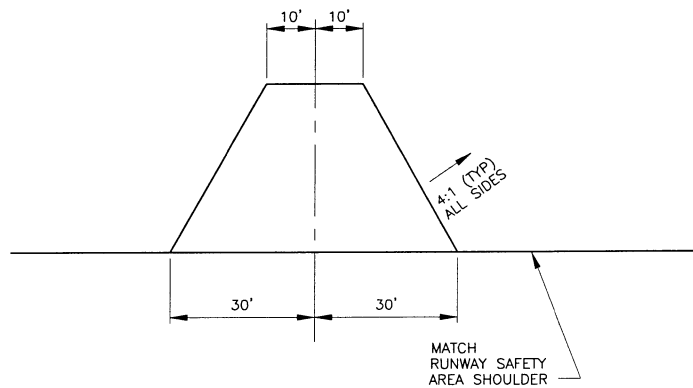
**MAINTENANCE ACCESS ROADS**  
NO SCALE

\* MATCH ELEVATION AT EDGE OF PAPI PAD AND AT WIND CONE AND SEGMENTED CIRCLE PAD, CONTINUOUS GRADE BETWEEN.

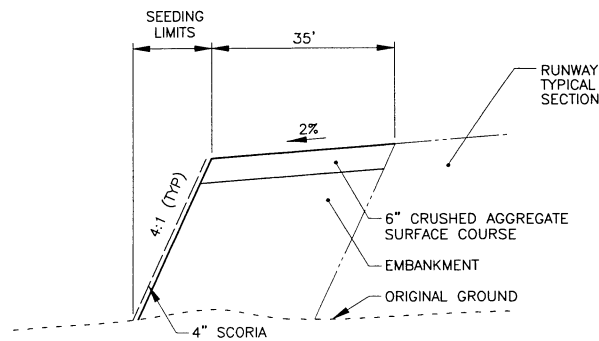
\*\* TRANSITION SLOPE FROM 3% TO MATCH SLOPE ON ADJACENT PADS



**WIND CONE AND SEGMENTED CIRCLE PAD**  
NO SCALE



**THRESHOLD PAD PLAN**  
NO SCALE



**THRESHOLD PAD SECTION**  
NO SCALE

PLANS DEVELOPED BY:  
PDC, INC. 4/25/08



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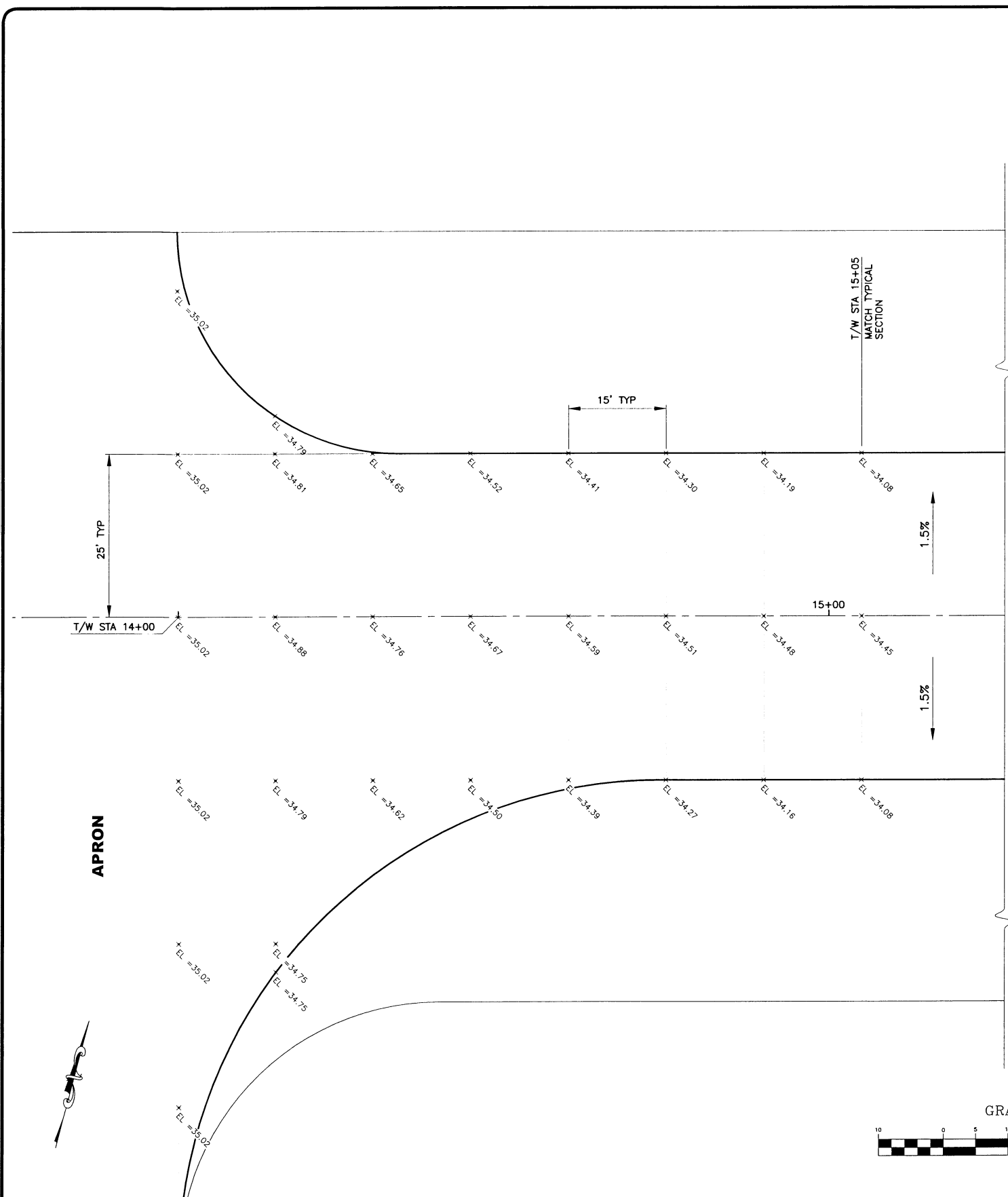
STATE OF ALASKA  
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CENTRAL REGION

ATKA AIRPORT  
ATKA, ALASKA  
RUNWAY EXTENSION AND RESURFACING  
59621  
AIP No. 3-02-0394-005-2008  
TYPICAL SECTIONS

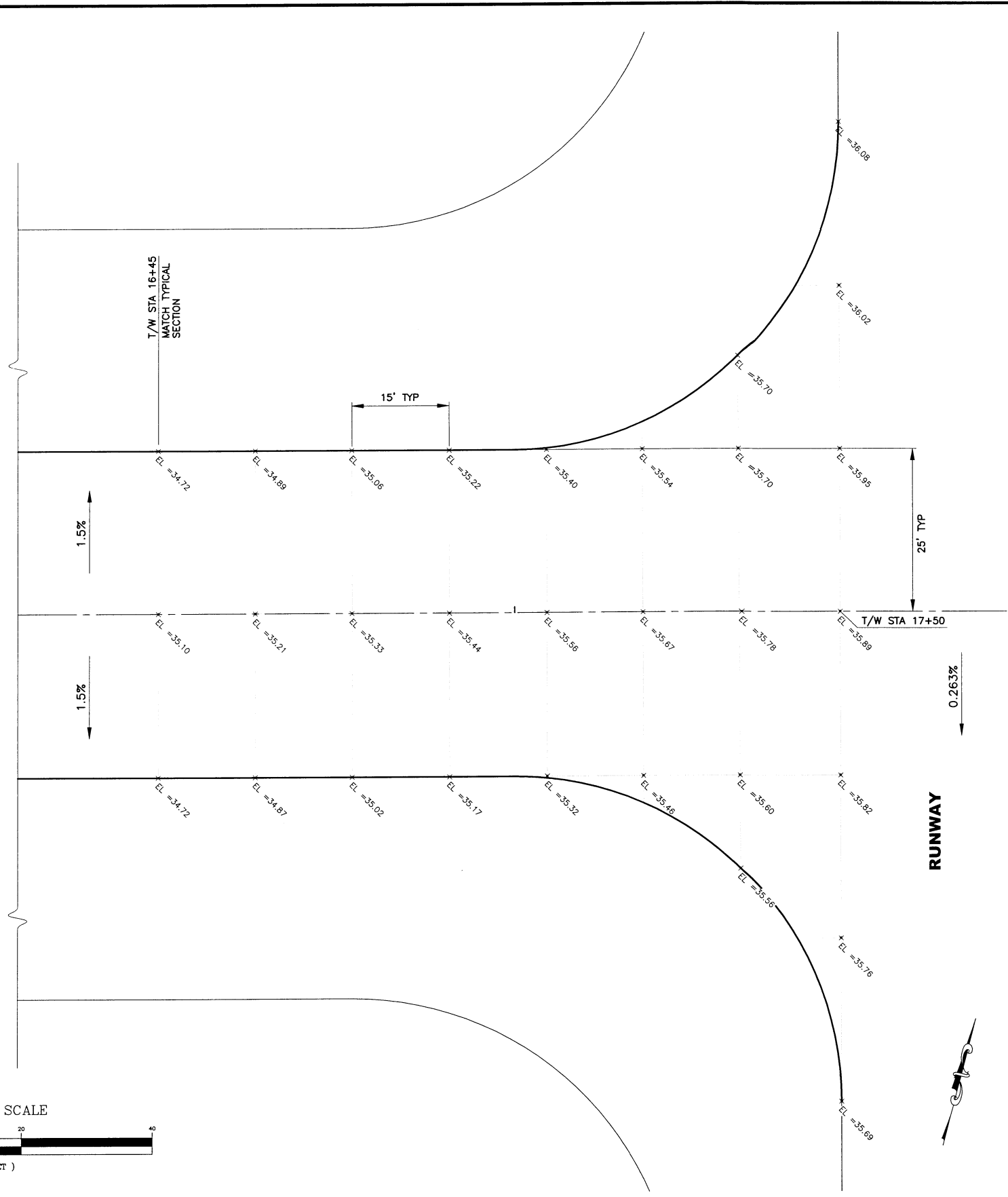
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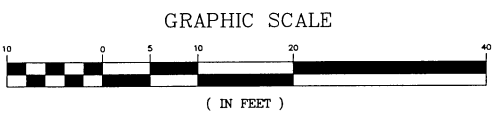
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Drawn By: RJP  
Checked By: RLC



TAXIWAY/APRON INTERSECTION DETAIL



TAXIWAY/RUNWAY INTERSECTION DETAIL



PLANS DEVELOPED BY:  
PDC, INC.  
2/22/08

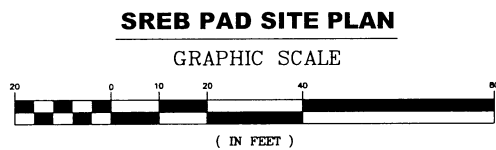
BY	DATE	REVISION

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
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CENTRAL REGION

ATKA AIRPORT  
ATKA, ALASKA  
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59621  
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INTERSECTION GRADING

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SHEET: 19 OF 38





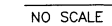
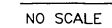
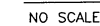
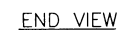
1. FOR ACCESS ROAD GRADE, SEE SHEET 15.
2. SEE PLAN FOR FINISH FLOOR ELEVATION.
3. CENTER GATE OPENING BETWEEN TANKS.
4. FENCE SHALL CONFORM TO STANDARD DRAWING F01.01.
5. SPACING BETWEEN BUILDING AND FENCE SHALL BE 3" MAXIMUM.



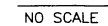




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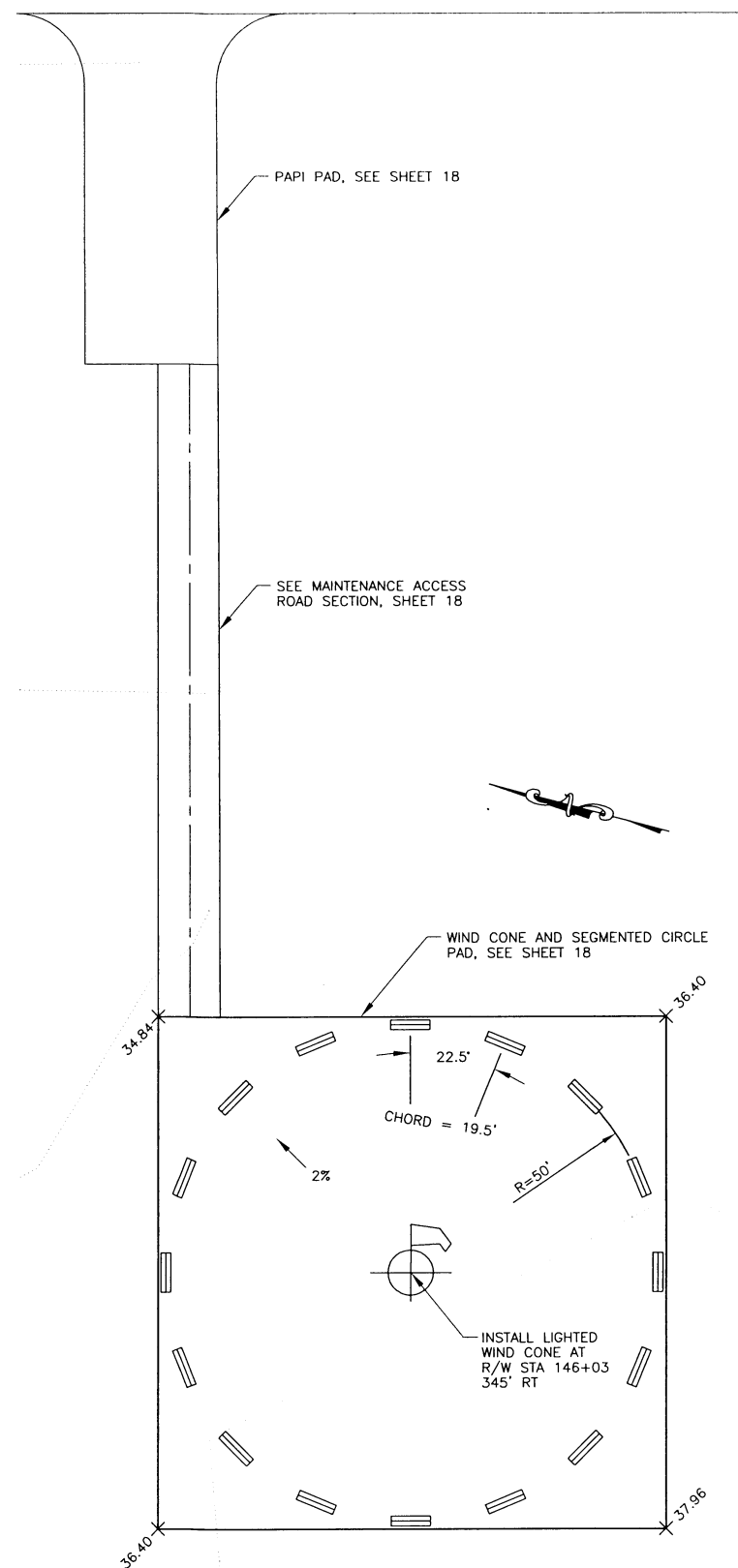


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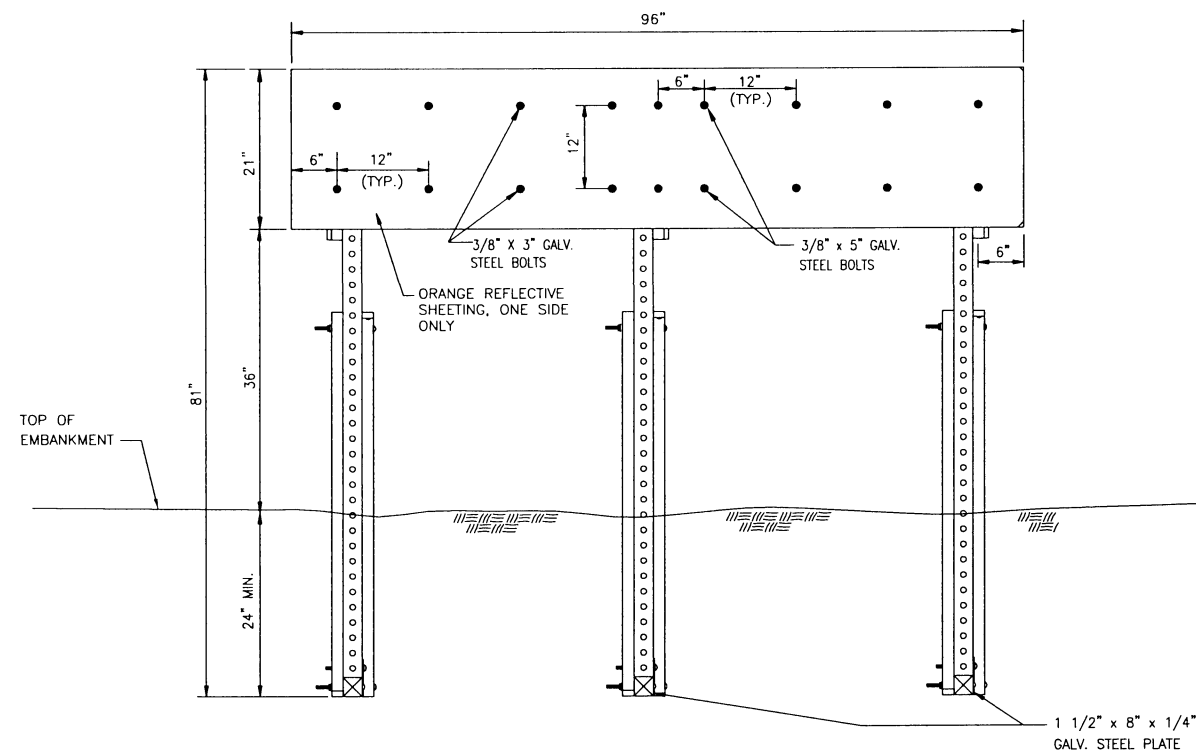




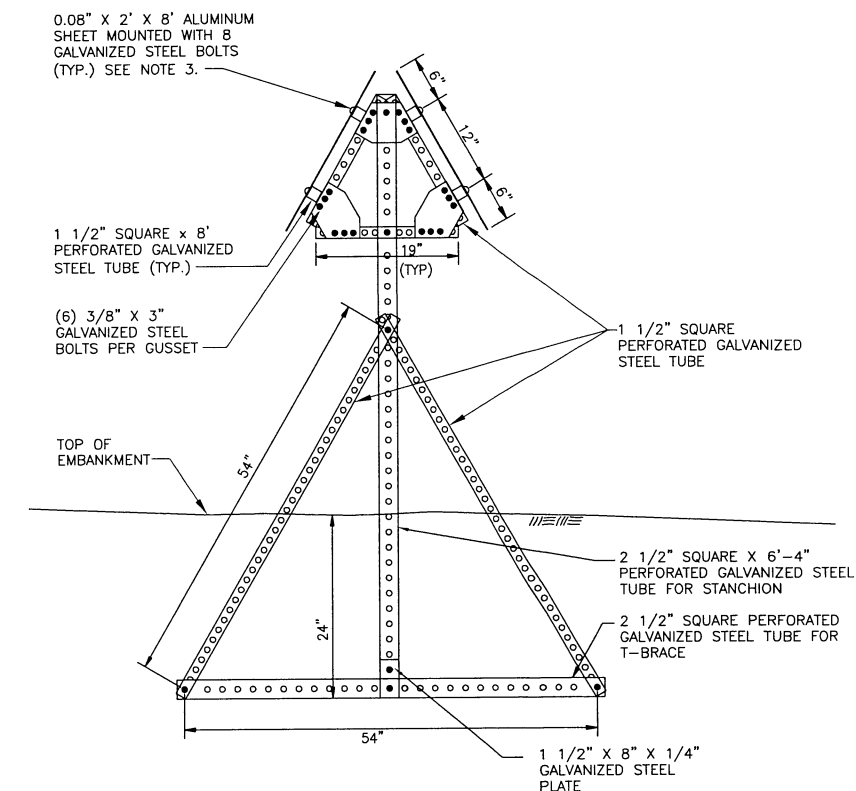
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### SEGMENTED CIRCLE LAYOUT



**FRONT VIEW DETAIL**  
NO SCALE

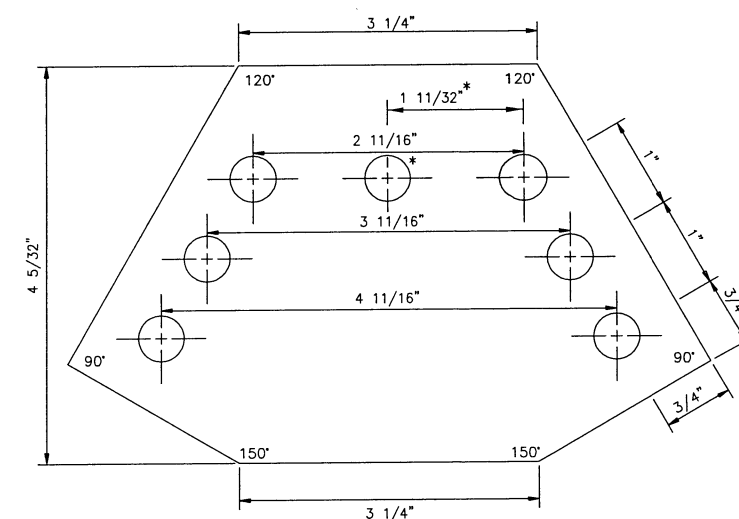


**SIDE VIEW DETAIL**  
NO SCALE

## SEGMENTED CIRCLE PANELS

**SEGMENTED CIRCLE NOTES:**

1. ALL STRUCTURAL MEMBERS ARE SQUARE PERFORATED GALVANIZED STEEL TUBING. (SIZE AS INDICATED IN DRAWING).
2. 3/8" X 5" GALVANIZED STEEL BOLTS SHALL BE USED TO FASTEN THE STRUCTURAL MEMBERS TOGETHER. GUSSET PLATES SHALL BE FASTENED WITH SIX 3/8" X 3" GALVANIZED STEEL BOLTS.
3. PRE-PUNCH ALUMINUM SHEETS 6" FROM TOP AND BOTTOM AS INDICATED IN DRAWING. FASTEN TO STRUCTURAL MEMBERS THROUGH LONGITUDINAL MEMBERS WITH 3/8" x 5" HOT DIPPED GALVANIZED BOLTS AND (2) 1" DIA. WASHERS EACH.
4. SEE SHEET 34 FOR WIND CONE DETAILS.



\*TOP GUSSET PLATES ONLY

### GUSSET PLATE DETAIL

NO SCALE



PLANS DEVELOPED BY:  
PDC, INC. *213515*

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**STATE OF ALASKA  
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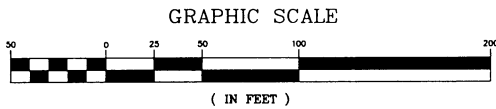
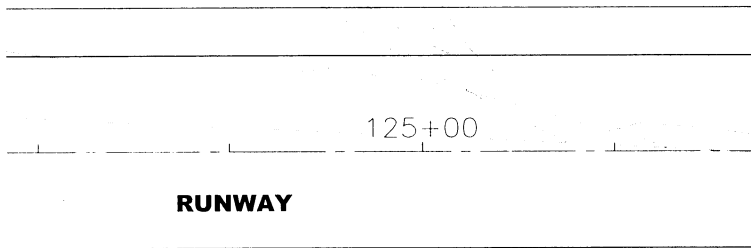
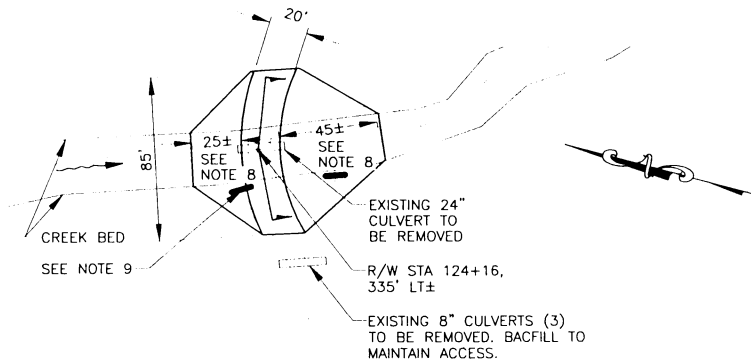
**ATKA AIRPORT**  
ATKA, ALASKA  
RUNWAY EXTENSION AND RESURFACING  
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AIP No. 3-02-0394-005-2008  
WIND CONE & SEGMENTED CIRCLE DETAILS

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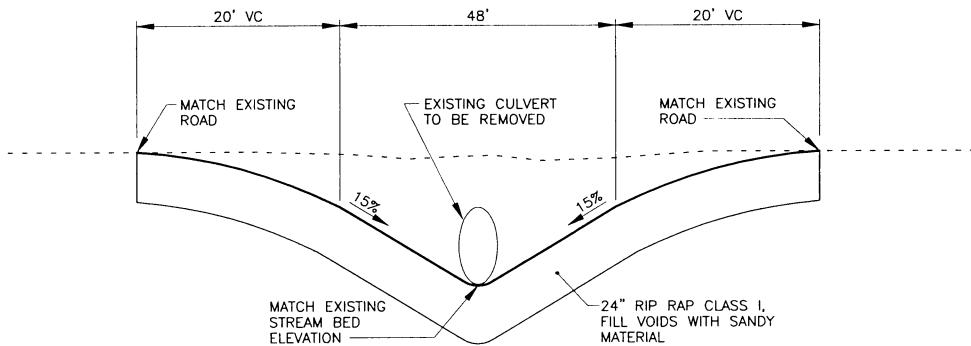


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Layout Name:	23	Drawn By:	RCS
File Path and Name:	F:\2001\F01089\C\1625cnd\F01089.dwg	Checked By:	RCS



LOW WATER CROSSING PLAN



LOW WATER CROSSING DETAIL

NO SCALE

CULVERT NOTES:

GENERAL INSTALLATION

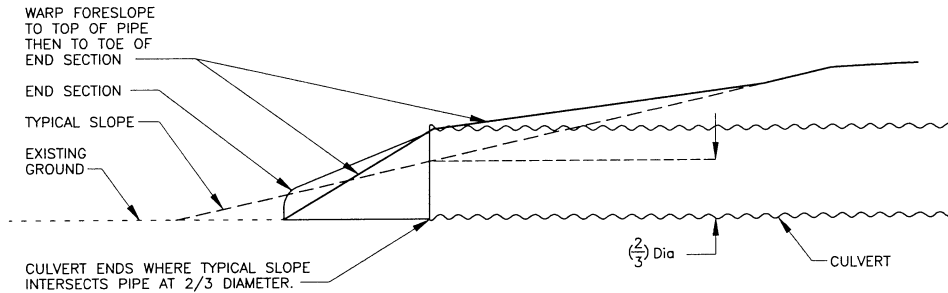
1. INSTALL END SECTIONS ON ALL NEW CULVERT ENDS.
2. CULVERT END SECTION SHALL BE GALVANIZED STEEL INSTALLATION CONFORMING TO STANDARD DRAWING D-06.10.
3. EXACT CULVERT LENGTHS, LOCATIONS, SKEWS, AND INVERTS TO BE DETERMINED BY THE FIELD ENGINEER.
4. SLOPES SHALL BE DRESSED AND WARPED TO CONFORM TO THE END SECTIONS. REFER TO CULVERT END SECTION, THIS SHEET.
5. CULVERT LENGTH INCLUDES THE LENGTH OF END SECTIONS.
6. INSTALL IN ACCORDANCE WITH STANDARD DRAWING D-01.02, ALTERNATIVE TYPE B DETAIL.

CULVERT REMOVAL - LOW WATER CROSSING

7. THE CONTRACTOR SHALL PROVIDE SURVEY OF THE STREAM IN ACCORDANCE WITH G-135 (THE CONTRACTOR SHALL OBTAIN APPROVAL FROM THE ENGINEER BEFORE BEGINNING CONSTRUCTION OF LWC).
8. ADJUST RIPRAP LENGTH AND TRANSITION LENGTHS TO ENSURE PROPER FLOW IN THE LWC AS DETERMINED BY THE ENGINEER.
9. PROVIDE DITCH BLOCKS TO DIRECT WATER THROUGH LWC.
10. ALTERED STREAMBANKS SHALL BE IMMEDIATELY STABILIZED TO PREVENT EROSION AND SEDIMENTATION OF THE STREAM.
11. LWC SHALL BE CONSTRUCTED IN ACCORDANCE WITH APPLICABLE PERMITS IN APPENDIX E.

CULVERT SUMMARY

STATION	DIAMETER (INCHES)	LENGTH (FEET)	TYPE	THICKNESS (INCHES)	END SECTIONS	MARKER POSTS	REMARKS
AR 47+03	24	70	CSP	0.064	YES	YES	
RW 145+47	24	52	CSP	0.064	YES	YES	PAPI PAD
TW 14+55	36	170	CSP	0.079	YES	YES	SKEW 10°



CULVERT END SECTION

NO SCALE



PLANS DEVELOPED BY:  
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3/27/08

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STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
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CENTRAL REGION

ATKA AIRPORT  
ATKA, ALASKA  
RUNWAY EXTENSION AND RESURFACING  
59621  
AIP No. 3-02-0394-005-2008  
CULVERT SUMMARY AND DRAINAGE DETAILS

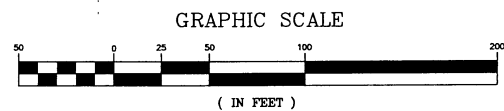
DATE:  
FEB 2008

SHEET:  
23  
OF



#### SHEET NOTES:

1. ALL RUNWAY MARKINGS ARE WHITE.
2. ALL TAXIWAY MARKINGS ARE YELLOW.
3. GLASS BEADS SHALL BE APPLIED TO RUNWAY AND TAXIWAY MARKINGS.
4. ALL DIMENSIONS SHOWN ON THIS SHEET ARE TYPICAL DIMENSIONS EXCEPT THE RUNWAY CENTERLINE SPACE AT RW STA 127+50. (SPACE WIDTH = 30')



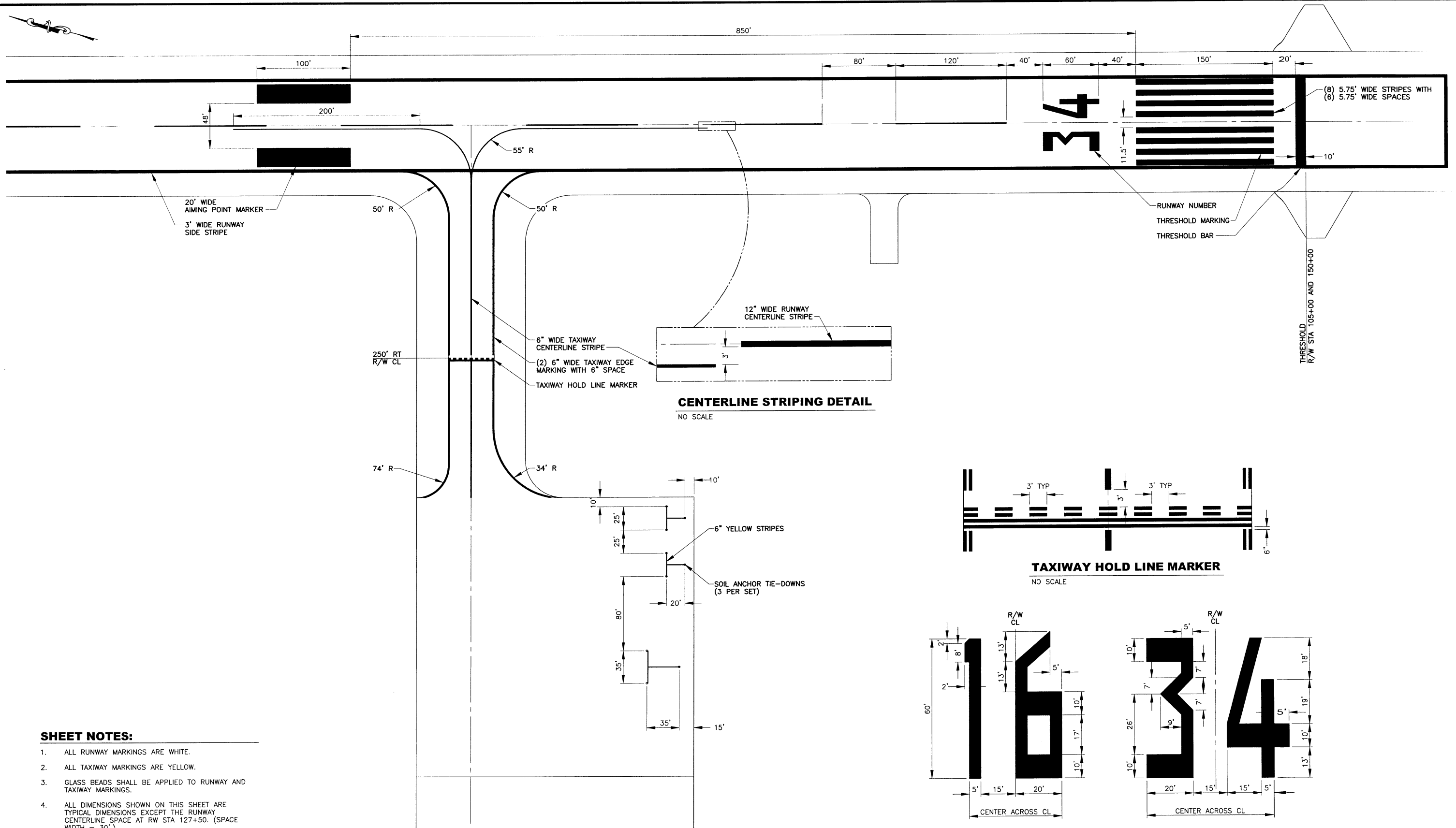
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BY	DATE	REVISION

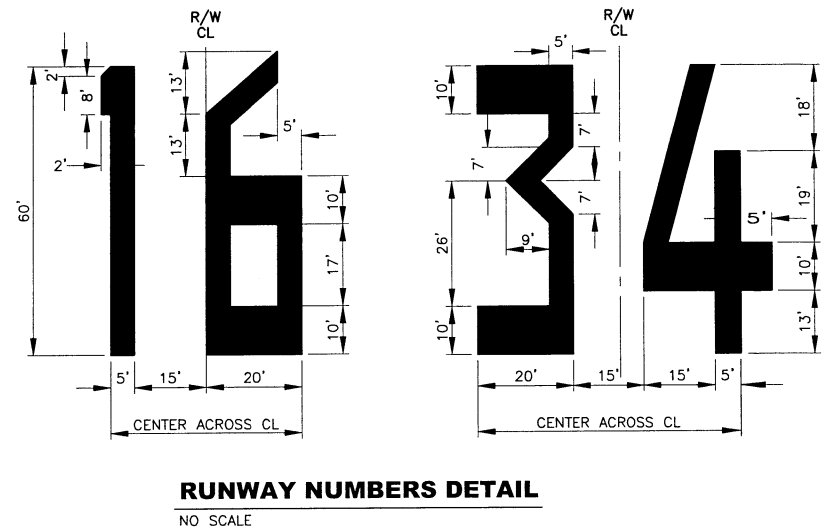
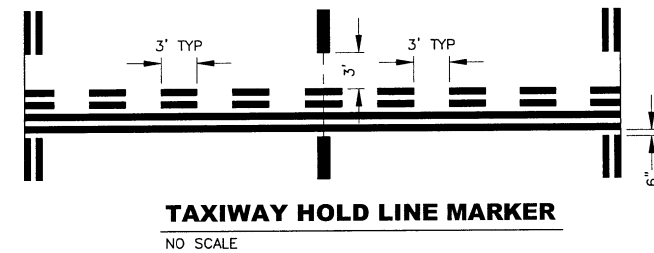
STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
CENTRAL REGION

ATKA AIRPORT  
ATKA, ALASKA  
RUNWAY EXTENSION AND RESURFACING  
59621  
AIP No. 3-02-0394-005-2008  
STRIPING PLAN AND TIE DOWN DETAILS

DATE:  
FEB 2008  
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38



CENTERLINE STRIPING DETAIL  
NO SCALE





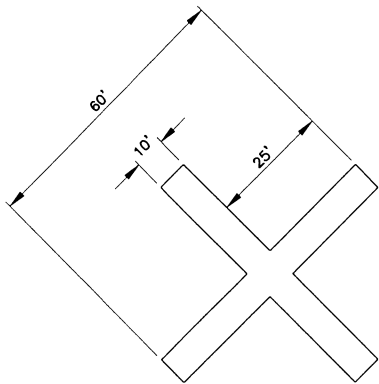
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Drawn By: GDS  
Checked By: RLC

SIGNING SUMMARY

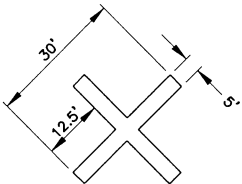
SIGN NO	STATION	OFFSET		CODE NO	LEGEND	SIZE (INCHES)	COLOR		POST TYPE	THICKNESS UNFRAMED (IN)	AREA SQ. FT.
		LEFT	RIGHT				LEGEND	BACKGROUND			
1	TW 14+40		71	SPEC	SELECTIVE EXCLUSION	36x48	RED & BLACK	WHITE	2.5" SP	0.125	12.00
2	TW 11+00	71		SPEC	AUTHORIZED PERSONNEL ONLY	30x42	WHITE	RED	2.5" SP	0.125	8.75
3	TW 11+00	71		SPEC	RESTRICTED AREA	30x54	WHITE	RED	2.5" SP	0.125	11.25
4	TW 11+00		277	SPEC	AUTHORIZED PERSONNEL ONLY	30x42	WHITE	RED	2.5" SP	0.125	8.75
5	TW 11+00		277	SPEC	RESTRICTED AREA	30x54	WHITE	RED	2.5" SP	0.125	11.25
6	AR 41+41		24	R2-1	SPEED LIMIT 15	30x36	BLACK	WHITE	2.5" x 2.5" PST	0.125	7.50
7	AR 44+80	24		R2-1	SPEED LIMIT 15	30x36	BLACK	WHITE	2.5" x 2.5" PST	0.125	7.50
8	AR 47+16		30	R1-1	STOP	30x30	WHITE	RED	2.5" x 2.5" PST	0.125	6.25
9	RW 148+75		643	W1-1L	LEFT ARROW	36x36	BLACK	YELLOW	2.5" x 2.5" PST	0.125	9.00
10	AR 47+25	192		SPEC	AUTHORIZED PERSONNEL ONLY	30x42	WHITE	RED	2.5" SP	0.125	8.75
11	RW 162+00		207	R5-1	DO NOT ENTER (SEE NOTE 6)	36x36	WHITE	RED	2.5" x 2.5" PST	0.125	9.00
TOTAL											100.00

SIGNING NOTES:

- POST LENGTHS SHALL BE DETERMINED IN THE FIELD BY THE CONTRACTOR. SIGNS INSTALLED AT THE SIDE OF THE ROAD SHALL BE AT LEAST 5 FEET, MEASURED FROM THE BOTTOM OF THE SIGN TO THE NEAR EDGE OF THE ROAD. OTHER POST-MOUNTED SIGNS SHALL BE INSTALLED WITH THE BOTTOM EDGE OF THE SIGN 7 FEET ABOVE THE GROUND, UNLESS DETERMINED OTHERWISE BY THE ENGINEER. ALL POSTS AND HARDWARE SHALL BE INCIDENTAL TO THE SIGNING BID ITEM. SEE STANDARD DRAWING S-05.01.
- PRIOR TO INSTALLING POSTS OR FOUNDATIONS, OR DOING ANY EXCAVATION, THE CONTRACTOR SHALL LOCATE AND PROTECT ALL EXISTING UNDERGROUND AND OVERHEAD UTILITIES. THE LOCATION OF UTILITIES AND POLES THAT ARE SHOWN ON THE PLAN SHEETS ARE APPROXIMATE, AND IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE ACTUAL LOCATION WHEN WORKING IN THE AREA.
- 2.5" PST EMBEDMENT SHALL BE SLEEVE TYPE WITH SOIL EMBEDMENT SEE STANDARD DRAWING S-30.03. FOR STEEL PIPE (SP), USE GALVANIZED SCHEDULE 40 PIPE WITH FOUNDATION SHOWN ON STANDARD DRAWING S-32.00.
- SEE SIGN SUMMARY FOR MINIMUM SIGN GAUGE AND STANDARD DRAWING S-00.10 FOR FRAMING REQUIREMENTS AND DETAILS.
- OFFSET DISTANCES ON THE SIGN SUMMARY ARE FROM CENTERLINE TO EDGE OF SIGN NEAREST THE TRAVELED WAY.
- SIGN 11 NOT SHOWN ON PLANS.



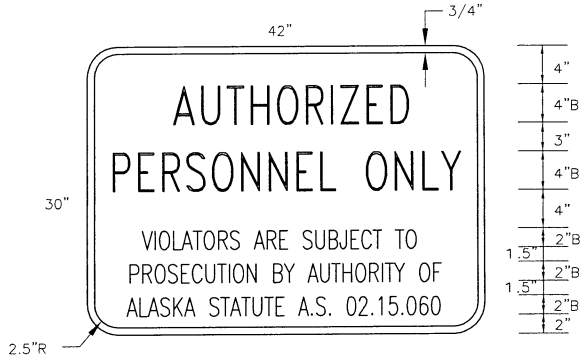
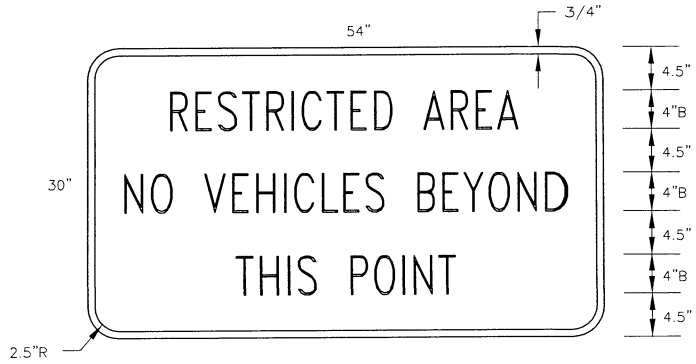
CLOSED RUNWAY MARKER



CLOSED TAXIWAY OR PARTIAL WIDTH RUNWAY

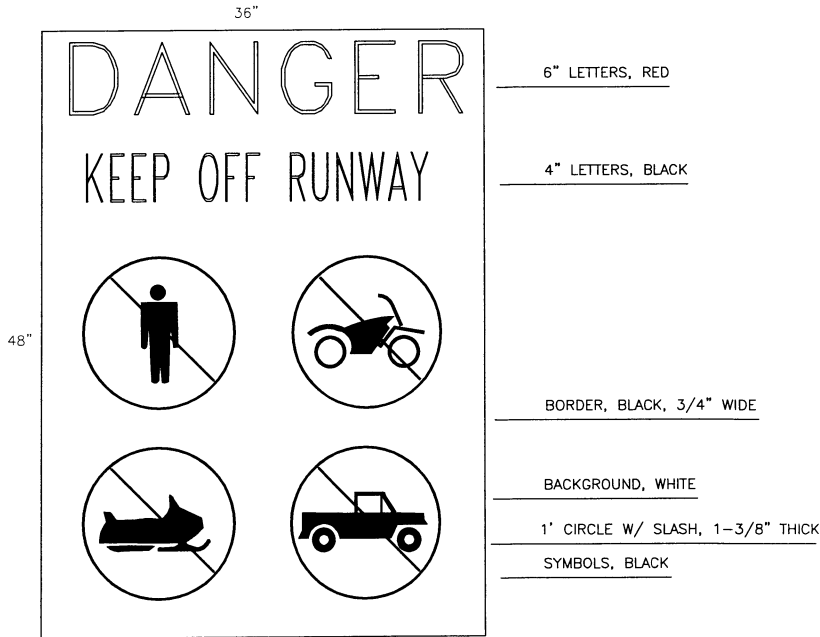
TEMPORARY MARKER NOTES:

- MARKERS SHALL BE PAINTED YELLOW.
- MARKERS SHALL BE CONSTRUCTED OF PLYWOOD OR HEAVY FABRIC FASTENED TO THE GROUND.
- MARKERS SHALL NOT MOVE IN WIND NOR PROP BLAST.



SPECIAL SIGN DETAILS

SIGN SHALL HAVE RED BACKGROUND WITH WHITE LEGEND



SELECTIVE EXCLUSIONS SIGN DETAIL



PLANS DEVELOPED BY:  
PDC, INC. 2/25/08

BY	DATE	REVISION

STATE OF ALASKA  
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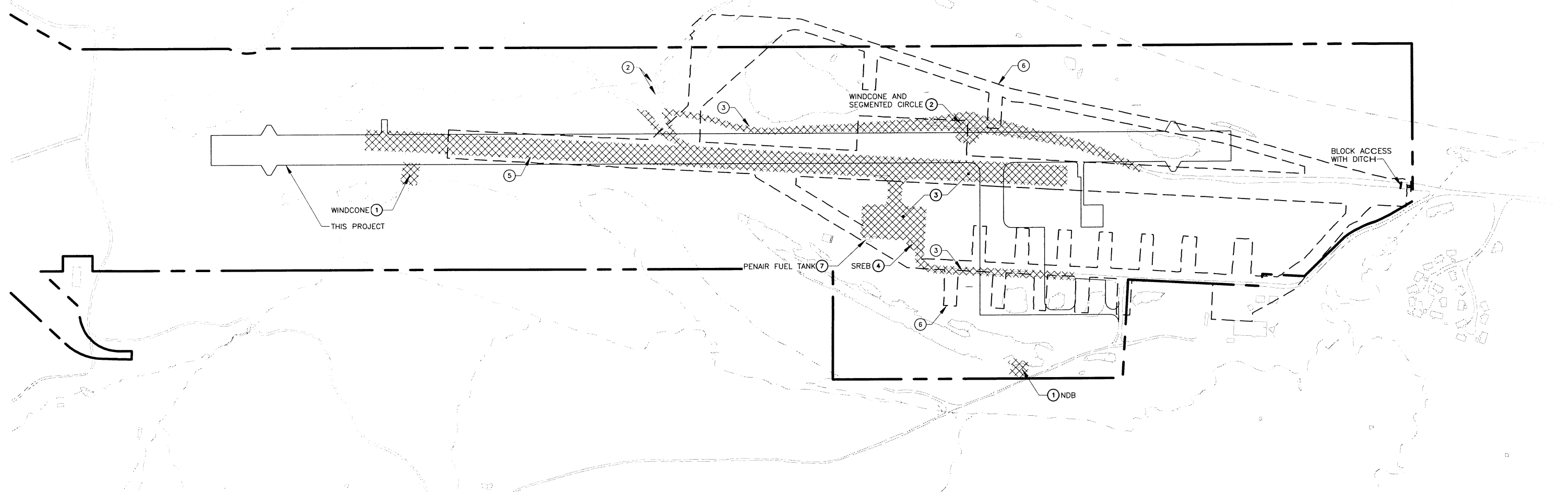
ATKA AIRPORT  
ATKA, ALASKA  
RUNWAY EXTENSION AND RESURFACING  
59621  
AIP No. 3-02-0394-005-2008  
SIGNING AND MARKING DETAILS

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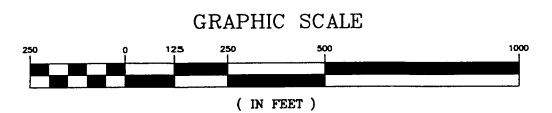




**SHEET NOTES:**

- (1) REMOVE AND SALVAGE IN ACCORDANCE WITH P-165.
- (2) SEGMENTED CIRCLE AND CULVERTS TO BE DISPOSED OF BY CONTRACTOR.
- (3) THE REMAINS OF THE EXISTING AIRPORT AND ACCESS ROAD EMBANKMENTS SHOWN FOR DEMOLITION SHALL BE SCARIFIED AND SEEDED IN ACCORDANCE WITH T-901.
- (4) CONTRACTOR TO ARRANGE WITH SERVING UTILITY TO DISCONNECT ELECTRICAL SERVICE TO BUILDING. SREB TO BE DISPOSED OF BY CONTRACTOR. DISPOSE OF CONTAMINATED SREB FLOOR SOIL IN ACCORDANCE WITH P-172 AND APPENDIX M.
- (5) EXCAVATE TO THE MINIMUM DEPTH NECESSARY TO REMOVE EXISTING PAVEMENTS AND STOCKPILE FOR USE AS RAP. SEE SPECIFICATION P-161.
- (6) LIMITS OF ABANDONED PIERCED STEEL PLANK RUNWAY AS SHOWN IN 1982 PROJECT. THE 1982 PROJECT REMOVED PLANKING IN AREAS OF EXCAVATION. IF PLANKING IS ENCOUNTERED, REMOVE AND DISPOSE OF IN SOLID WASTE DISPOSAL AREA SHOWN ON SHEET 7 AND SOLID WASTE PERMIT IN APPENDIX E OF THE SPECIFICATIONS.
- (7) SKID MOUNTED TANK TO BE RELOCATED TO NEW ASA LOCATION. TO BE COORDINATED BY PROJECT ENGINEER.

**LEGEND:**



PLANS DEVELOPED BY:  
PDC, INC. *shd*

BY	DATE	REVISION

**STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
CENTRAL REGION**












**ATKA AIRPORT**  
ATKA, ALASKA  
RUNWAY EXTENSION AND RESURFACING  
59621  
AIP No. 3-02-0394-005-2008  
EXISTING AIRPORT DEMOLITION PLAN

DATE: FEB 2008  
SHEET: 26 OF 38



Date Revised: 2/25/2008, 10:02 AM  
Layout Name: 27  
File Path and Name: P:\2001\F01089\VE\0000--RWY--LITE--F01089.dwg  
Designed By: JMK  
Drawn By: JLC  
Checked By: RLC

LEGEND

-  RUNWAY EDGE LIGHT (WHITE)
-  TAXIWAY EDGE LIGHT (BLUE)
-  THRESHOLD MARKER LIGHT (GREEN & RED)
-  2" NON-METALLIC, HDPE CONDUIT, HASH MARKS INDICATE NUMBER OF #8 AWG, 5KV CABLE PLUS ONE #6 AWG BARE COPPER GROUND CONDUCTOR, U.O.N.
-  2" RMC, RIGID GALVANIZED STEEL CONDUIT, HASH MARKS INDICATES NUMBER OF #8 AWG, 5KV CABLE PLUS ONE #6 AWG BARE COPPER GROUND CONDUCTOR, U.O.N.
-  GROUND ROD
-  GROUND ROD FOR COUNTERPOISE SYSTEM
-  ROTATING BEACON
-  L-867 HAND HOLE, CLASS II B, SIZE B
-  PAPI J-BOX
-  TYPE II J-BOX



WIND CONE AND SEGMENTED CIRCLE

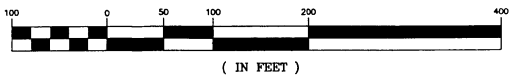
ABBREVIATIONS

U.O.N. UNLESS OTHERWISE NOTED  
U.G. UNDERGROUND  
RMC RIGID STEEL CONDUIT (RSC)

NOTES

- TWO SEPARATE GROUNDING SYSTEMS ARE DEPICTED ON THE DRAWINGS. EACH GROUNDING SYSTEM INCLUDES A SEPARATE SET OF GROUND RODS AND GROUNDING CONDUCTOR. THE SYSTEMS SHALL BE KEPT ELECTRICALLY SEPARATE EXCEPT FOR CONNECTION TO THE GROUNDING ELECTRODE SYSTEM ASSOCIATED WITH STRUCTURES SERVED BY THE BURIED RACEWAY SYSTEM. THE TWO SYSTEMS ARE:
  - AN EQUIPMENT GROUNDING SYSTEM (EGC). GROUND RODS FOR THE EQUIPMENT SYSTEM ARE LOCATED AT EVERY LIGHT BASE AND PRIMARY HAND HOLE, AND AT ADDITIONAL LOCATIONS SHOWN ON THE PLANS.
  - A LIGHTNING PROTECTION COUNTERPOISE (LPC). GROUND RODS FOR THE COUNTERPOISE SYSTEM ARE SPACED NO GREATER THAN 500 FEET APART.. THE COUNTERPOISE SYSTEM IS INSTALLED ONLY FOR THE FAA PAPI/REIL CONDUIT SYSTEM.
- THIS PROJECT INCLUDES:
  - INSTALLATION OF A COMPLETE AND OPERATIONAL RUNWAY LIGHTING SYSTEM, LIGHTED WIND CONE AND TOWER, SREB, BUILDING MOUNTED BEACON, ELECTRICAL EQUIPMENT INSTALLATION, RELOCATION OF POWER AND TELEPHONE LINES, AND COORDINATION OF THE CONNECTION OF ELECTRICAL POWER TO THE MULTI-GANG METER CENTER AS DESCRIBED IN THE PLANS AND SPECIFICATIONS.
  - INSTALLATION OF COMPLETE CONDUIT AND J-BOX SYSTEM FOR FUTURE PAPI AND REIL INSTALLATION, WITH PULLROPES IN ALL CONDUITS BETWEEN ALL J-BOXES AND HAND HOLES, AS SHOWN ON THE PLANS.

GRAPHIC SCALE



PLANS DEVELOPED BY:  
PDC, INC. 2-25-08



BY	DATE	REVISION

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
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CENTRAL REGION

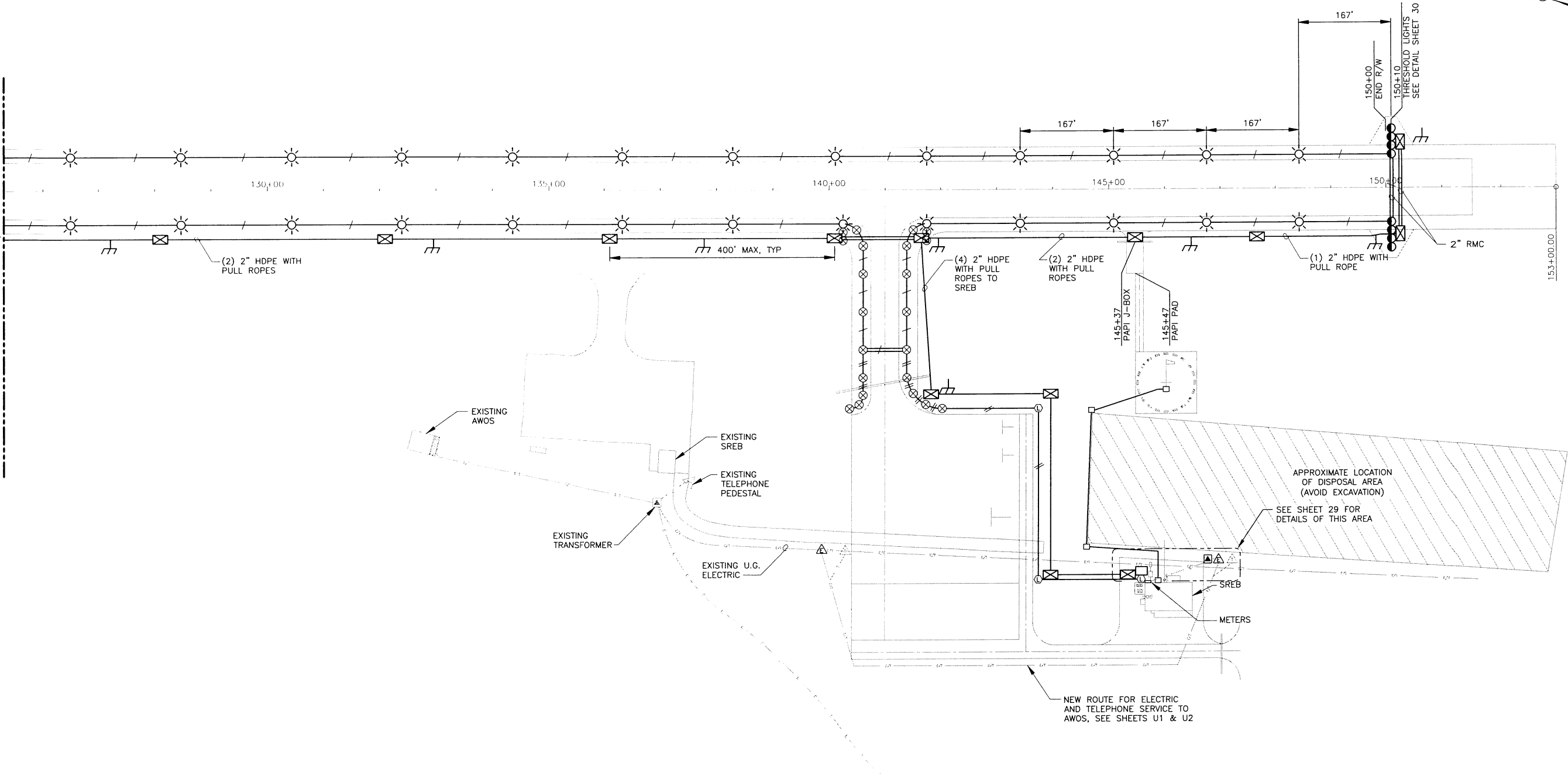
ATKA AIRPORT  
ATKA, ALASKA  
RUNWAY EXTENSION AND RESURFACING  
59621  
AIP No. 3-02-0394-005-2008  
RUNWAY LIGHTING PLAN (1 OF 2)

DATE:  
JUNE 2007  
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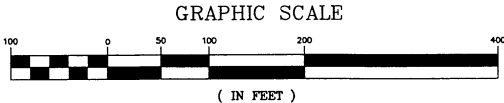
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MATCHLINE - STA 125+00, SEE SHEET 27



NOTES

1. EXISTING UNDERGROUND UTILITIES ARE SHOWN BASED ON AVAILABLE AS-BUILT INFORMATION. CONTRACTOR IS RESPONSIBLE FOR DETERMINING EXISTING CONDITIONS AND ARRANGING FOR THE UTILITIES TO LOCATE THEIR EXISTING FACILITIES.



3-27-08  
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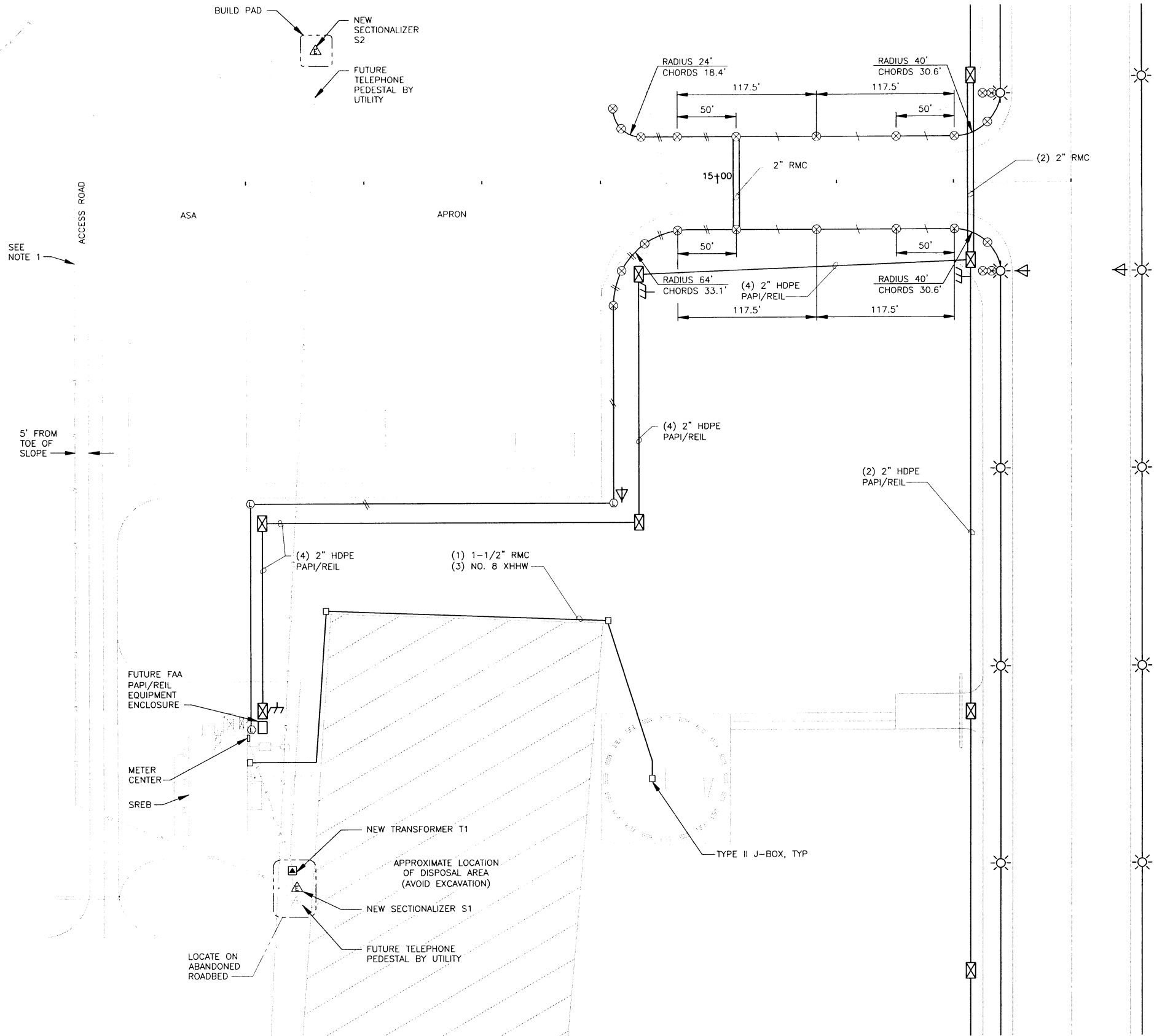
STATE OF ALASKA  
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AND PUBLIC FACILITIES  
CENTRAL REGION

ATKA AIRPORT  
ATKA, ALASKA  
RUNWAY EXTENSION AND RESURFACING  
59621  
AIP No. 3-02-0394-005-2008  
RUNWAY LIGHTING PLAN (2 OF 2)

DATE:  
JUNE 2007  
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28  
OF  
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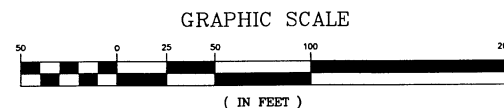


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Designed By: JMK  
Drawn By: JLC  
Checked By: RLC



# NOTES

1. THE CONTRACTOR SHALL COMPLETE RELOCATION OF ELECTRIC AND TELEPHONE TO PROVIDE CONTINUED SERVICE TO THE AWOS IN ACCORDANCE WITH THE DESIGN SHOWN ON REFERENCE DRAWINGS U1 AND U2 ATTACHED TO THESE PLANS.



3-27-08

PLANS DEVELOPED BY:  
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BY	DATE	REVISION

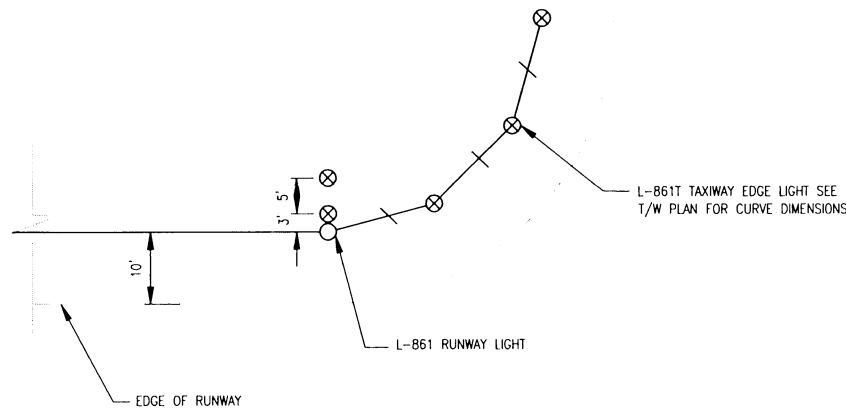
STATE OF ALASKA  
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AND PUBLIC FACILITIES  
CENTRAL REGION

ATKA AIRPORT  
ATKA, ALASKA  
RUNWAY EXTENSION AND RESURFACING  
59621  
AIP No. 3-02-0394-005-2008  
TAXIWAY LIGHTING PLAN

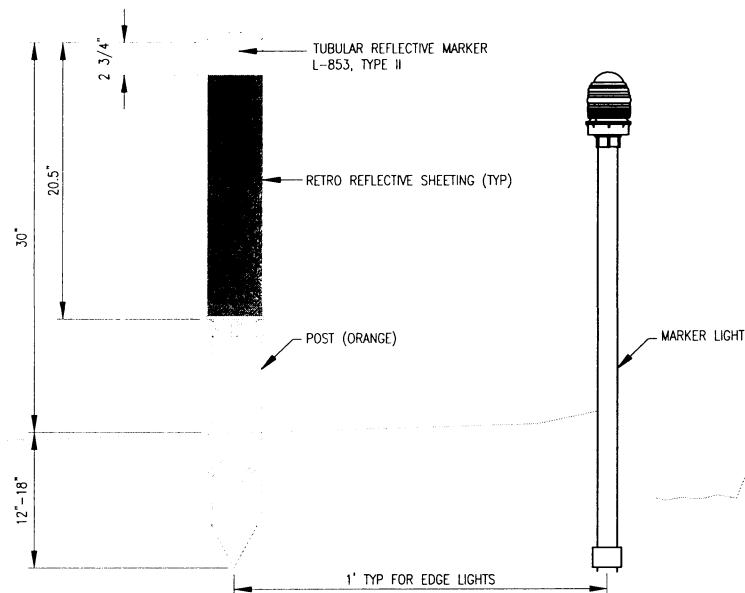
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JUNE 2007  
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OF  
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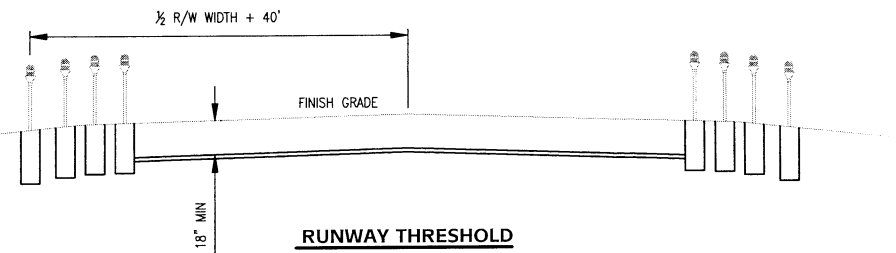
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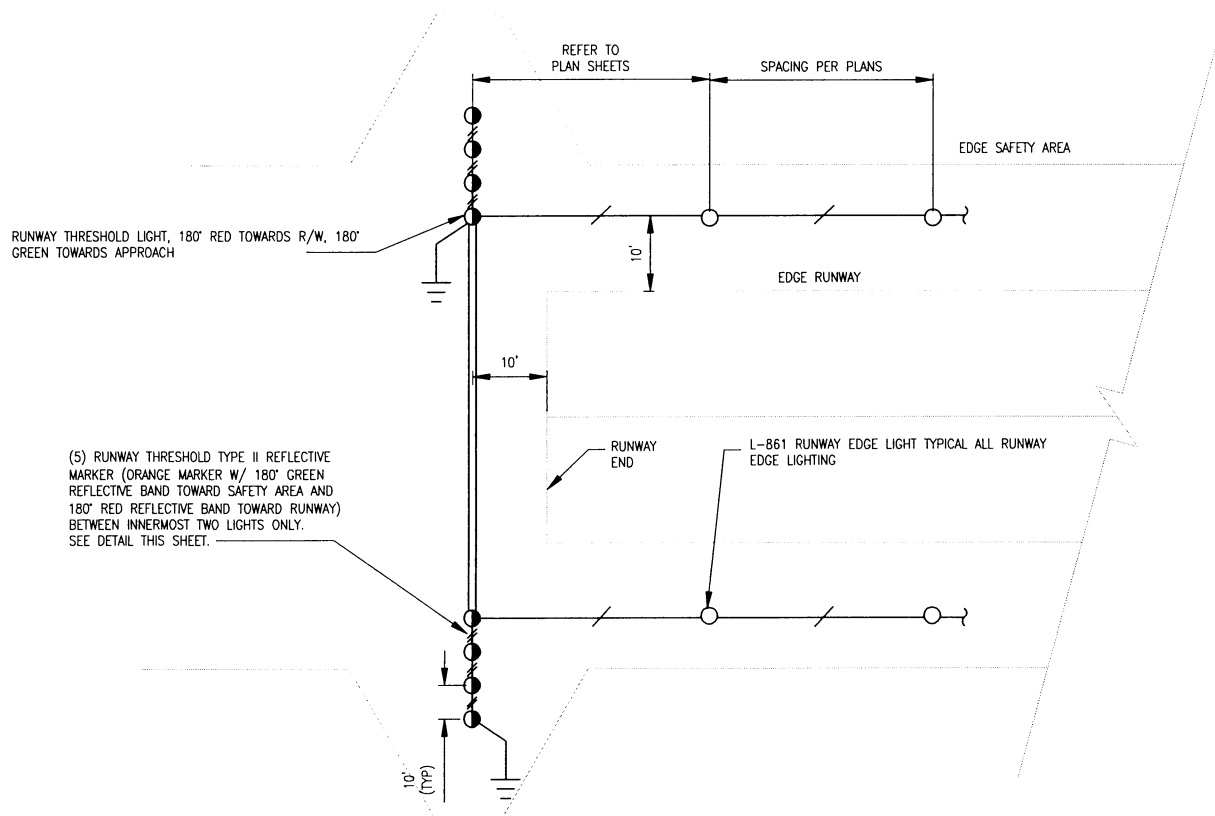
**T/W LIGHTING DETAIL**  
NO SCALE



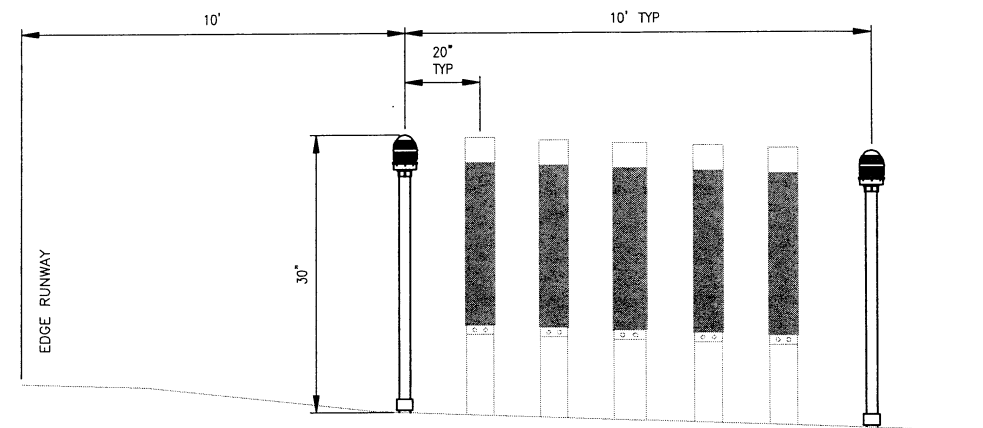
**REFLECTIVE MARKER TYPE II**  
NO SCALE



**TYPICAL LIGHTING SECTION**  
NO SCALE



**TYPICAL THRESHOLD LIGHTING DETAIL  
AT EACH RUNWAY END**  
NO SCALE



**TYPICAL THRESHOLD DETAIL**  
NO SCALE

**RUNWAY AND TAXIWAY EDGE LIGHT  
LEGEND AND SCHEDULE**

SYMBOL	NUMBER REQUIRED		LOCATION	LIGHT DETAILS		
	LEFT	RIGHT		LIGHT COLOR	F.A.A NUMBER	WATTAGE
●	8	8	THRESHOLD	180° GREEN - 180° RED	L-861E	45
⊗	11	11	T/W AND APRON	BLUE	L-861T	45
○	23	23	RUNWAY	WHITE	L-861	45
TOTAL UNITS REQUIRED		84				

**TYPE II REFLECTIVE MARKER SCHEDULE**

COMPONENT	LOCATION	COLOR	QTY
REFLECTIVE SHEETING	THRESHOLD	GREEN/RED	20
REFLECTIVE SHEETING	TAXIWAY	BLUE	18
REFLECTIVE SHEETING	RUNWAY	WHITE	46
TOTAL			84



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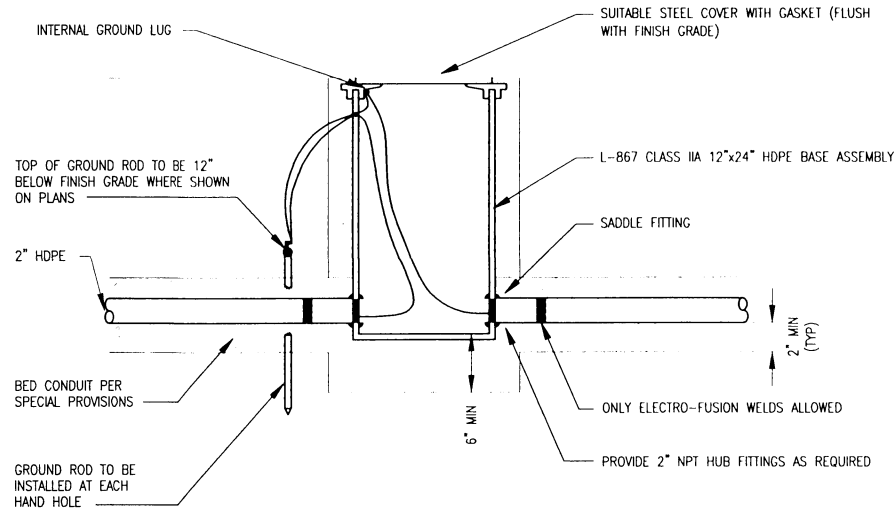
BY	DATE	REVISION

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
CENTRAL REGION

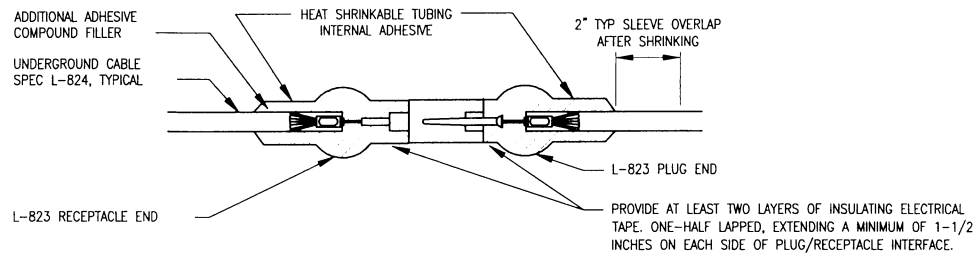
**ATKA AIRPORT**  
ATKA, ALASKA  
RUNWAY EXTENSION AND RESURFACING  
59621  
AIP No. 3-02-0394-005-2008  
ELECTRICAL TYPICAL SECTIONS

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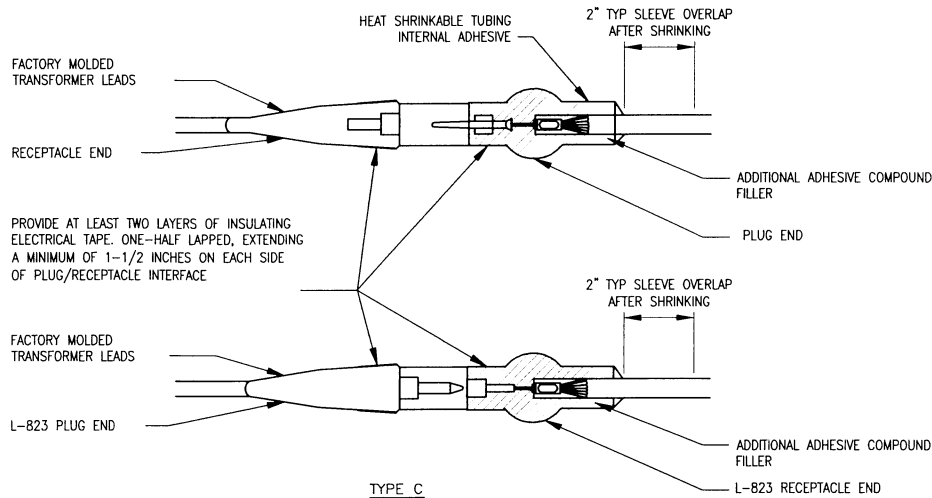


NO SCALE



TYPE B

### CABLE TERMINATIONS AT JUNCTION OF HOME RUN WITH LOOP CIRCUIT

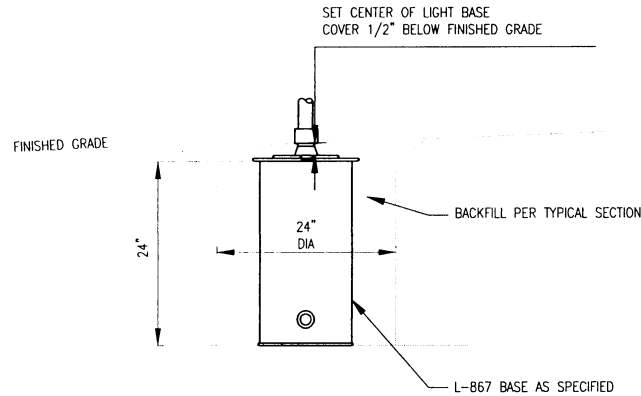


TYPE C

### CABLE TERMINATIONS AT RUNWAY LIGHTS

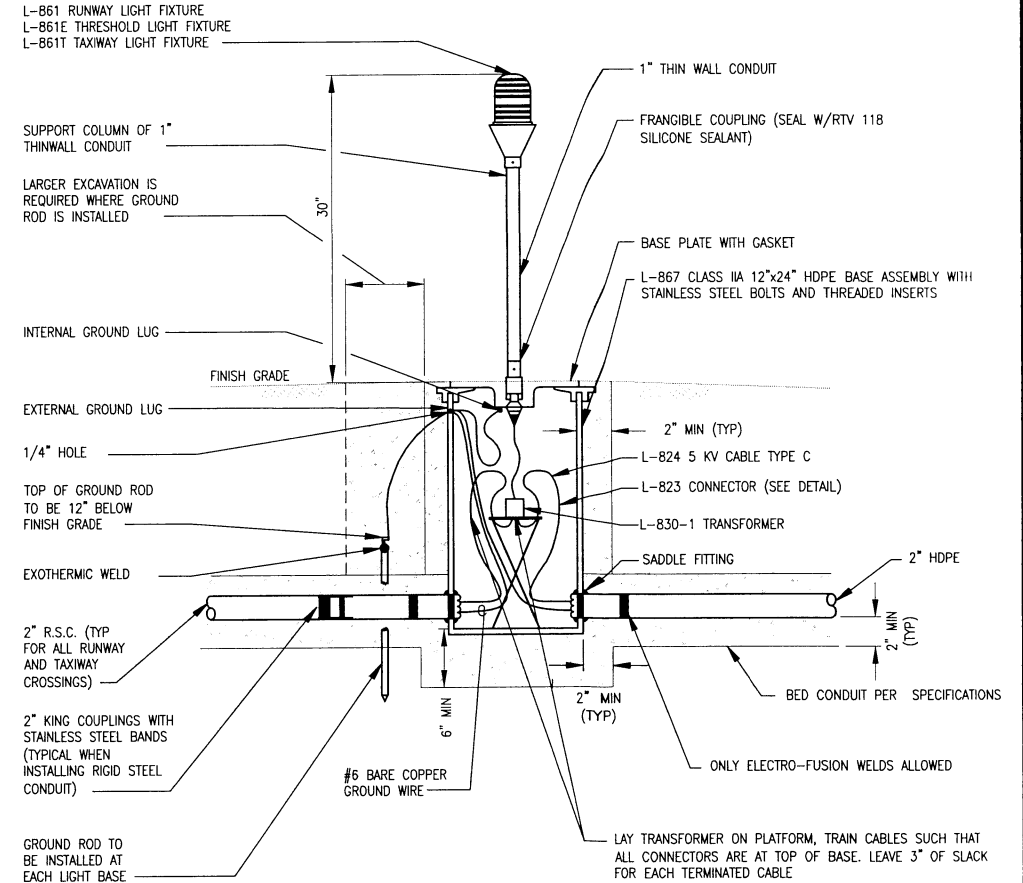
## PRIMARY CABLE TERMINATION DETAILS

NO SCALE



### LIGHT BASE DETAIL

NO SCALE



### MEDIUM INTENSITY LIGHT DETAIL

NO SCALE

**SHEET NOTES:**

1. THE LIGHT BASE ASSEMBLIES SHALL BE TYPE L-B67, SIZE B, CLASS IIA OR IIB, MADE FROM HIGH DENSITY POLYETHYLENE (HDPE).
2. THE CONDUIT STUB SHALL BE SIDEWALL FUSED TO THE LIGHT BASE ASSEMBLIES AT THE FACTORY OR IN THE FIELD USING A SADDLE FITTING MADE FROM HDPE, (AVAILABLE FROM MASKELL-ROBBINS, INC., OF HAYWARD, CA.) OR APPROVED EQUAL.
3. STEEL COVERS FOR HANDHOLES AND LIGHT CANS SHALL BE RATED FOR AIRPLANE WHEEL LOADING AND PAVING MACHINERY, RESPECTIVELY. COVER GASKET TO BE RUBBER.
4. PROVIDE L-823 PLUG AND RECEPTACLE TERMINALS AT ALL LIGHT BASES AND HANDHOLES AS REQUIRED.
5. INSIDE DIAMETER OF CONNECTOR SHALL PROPERLY MATCH THE OUTSIDE DIAMETER OF CABLE.
6. PROPERLY SEAT BOTH PLUG AND RECEPTACLE ENDS ONTO CABLE AND CHECK FOR PROPER CONNECTOR PIN POSITIONING PRIOR TO HEATING SHRINKABLE TUBING.



PLANS DEVELOPED BY:  
PDC, INC. 205

BY	DATE	REVISION

**STATE OF ALASKA  
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CENTRAL REGION**

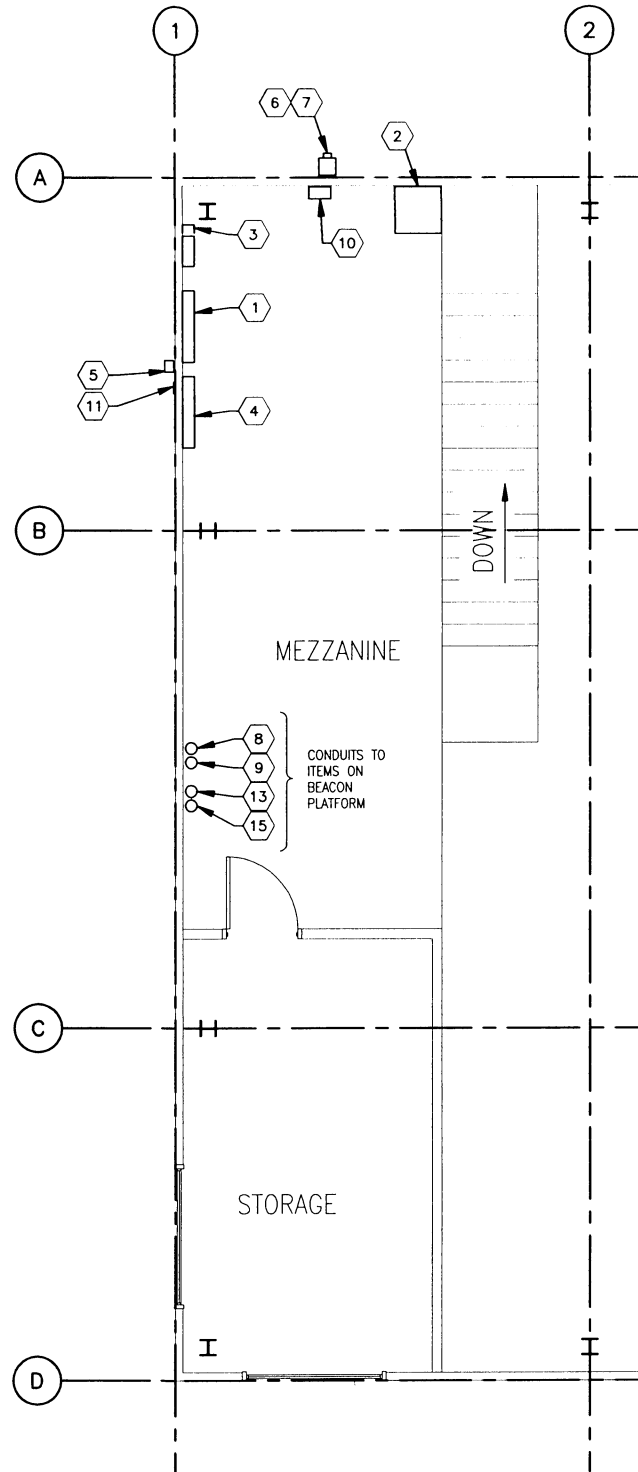
**ATKA AIRPORT**  
**ATKA, ALASKA**  
 RUNWAY EXTENSION AND RESURFACING  
 59621  
 AIP No. 3-02-0394-005-2008  
 AIRPORT LIGHTING DETAILS

DATE: JUNE 2007

SHEET:  
31 OF 38



Date Revised: 2/25/2008, 9:57 AM  
Layout Name: 32  
File Path and Name: P:\2001\F01089\LE00004FD01089.dwg  
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Checked By: JMK  
Checked By: JMK



**PLAN VIEW - SREB MEZZANINE**  
NO SCALE  
SEE SREB PLAN

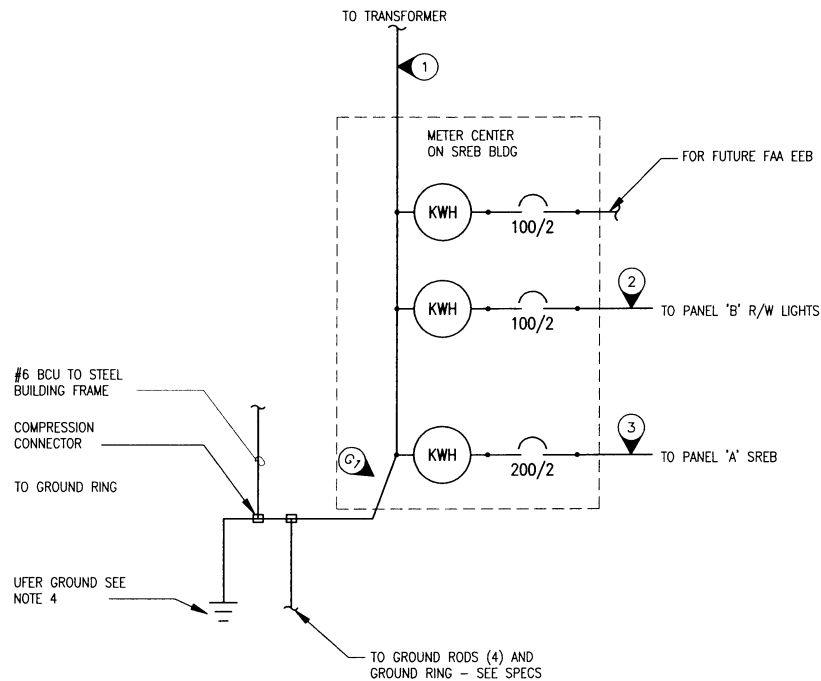
PANEL "B"				VOLTS: 240/120				CIRCUITS: 20			
BUS AMPS: 100				1 PHASE, 3 WIRE				MOUNTING: SURFACE			
MAIN BREAKER: MLO				AIC RATING: 10,000				LOCATION: MEZZANINE			
C	LOAD	VOLT-AMPS		BRKR SIZE	CKT NO	CKT NO	BRKR SIZE	VOLT-AMPS		LOAD	C
		PH A	PH B					PH A	PH B		
6	LIGHTING CONTROL PANEL	600		20/1	1	2	20/1	400		BEACON STRIP HEATER	6
6	WIND CONE		200	20/1	3	4	20/1		616	BEACON & OBSTRUCT. LIGHT	6
6	LIGHTING REGULATOR	3750		70/2	5	6	20/1	75		75W STRIP HEATER – LTG CTRL	6
6	"		3750	----	7	8	20/1		500	SPARE	8
8	SPARE	500		20/1	9	10	20/1	500		SPARE	8
	SPACE				11	12	20/1		500	SPARE	8
	SPACE				13	14				SPACE	
	SPACE				15	16				SPACE	
	SPACE				17	18				SPACE	
	SPACE				19	20				SPACE	
LOAD SUMMARY		CONNECTED KVA			% DIV		NEC TOTAL		COMMENTS:		
CODE DESCRIPTION		PH A	PH B	TOTAL							
1)LIGHTING =					125%		KVA		* – DENOTES 5 mA GFCI CIRCUIT BREAKER		
2)RECEPTACLES =					10K+.5REM		KVA				
3)MOTORS =					100%		KVA				
4)LARGEST MOTOR =					125%		KVA				
5)MISC. NON-CONTINUOUS =					100%		KVA				
6)MISC. CONTINUOUS =		4.8	4.6	9.4	125%		11.7 KVA				
7)NON-COINCIDENTAL =					100%		KVA				
8)SPARE =		1.0	1.0	2.0	100%		2.0 KVA				
TOTAL KVA		5.8	5.6	11.4			13.7 KVA				
TOTAL AMPERES		48.5	46.4	47.5			57.2 AMPS				

#### FEEDER SCHEDULE

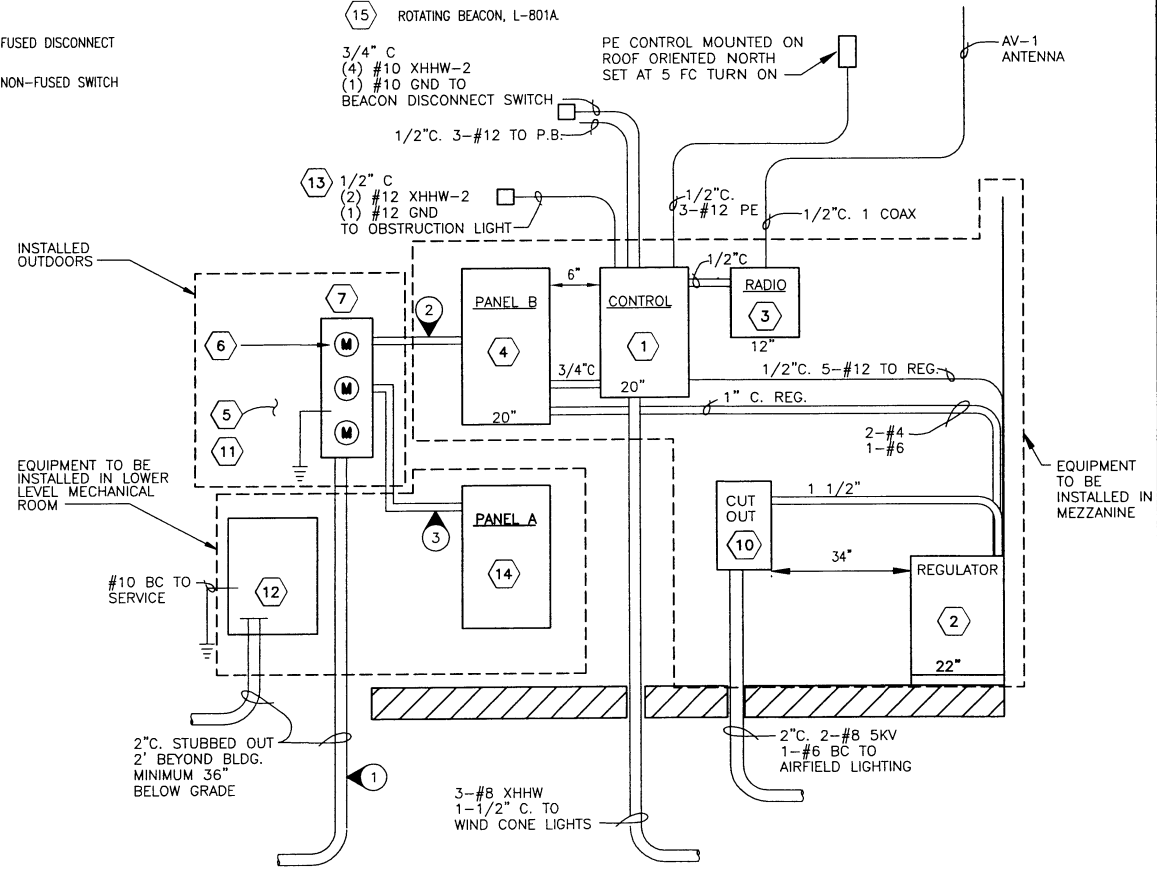
NO.	CONDUCTORS	RACEWAY	COMMENTS
1	INCLUDED WITH UTILITY RELOCATION. SEE SHEETS U1 AND U2	2" LFMC	PROVIDE LFMC TO 24" UNDERGROUND. UTILITY WILL RUN CONDUIT FROM THIS POINT TO TRANSFORMER
2	3 NO. 2 XHHW 1 NO. 8 XHHW GND	1-1/4" RSC	DO NOT SUBSTITUTE EMT
3	3 NO. 3/0 XHHW 1 NO. 6 XHHW GND	2" RSC	DO NOT SUBSTITUTE EMT
G1	1 NO. 1/0 BCU		

#### ELECTRICAL SYMBOLS

- ☒ DISCONNECT SWITCH
- LIQUID TIGHT FLEX CONDUIT
- FUSED DISCONNECT
- NON-FUSED SWITCH



**POWER ONE LINE DIAGRAM**  
NO SCALE



**EQUIPMENT LAYOUT**  
NO SCALE

#### SHEET NOTES:

- ALL ELECTRICAL METHODS, TECHNIQUES, AND MATERIAL SHALL CONFORM TO THE CURRENT EDITION OF THE N.E.C.
- EMT CONDUIT MAY BE USED IN PLACE OF RMC FOR INTERIOR CONDUITS LOCATED MORE THAN 10 FEET ABOVE THE FLOOR EXCEPT WHERE NOTED. SEE SPECIFICATIONS.
- ALL WALL PENETRATIONS SHALL BE SEALED WITH APPROVED SEALANT.
- UFR GROUND TO CONSIST OF 50 FEET OF #2 BARE COPPER GROUND WIRE IN THE LOWER 2 INCHES OF THE CONCRETE FOUNDATION FOOTING FOR SRE BUILDING. USE AN IRREVERSIBLE SPLICE TO JOIN GROUND CONNECTORS. SUBSTITUTE GROUND RING FOR UFR GROUND IF BUILDING HAS VAPOR BARRIER UNDER FOOTINGS.

#### EQUIPMENT LIST

- LIGHTING CONTROL PANEL. SEE SPECIFICATIONS.
- CONSTANT CURRENT REGULATOR, L-82B, 7.5 KW, 3-STEP, NON-SOLID STATE TYPE, HEVI-DUTY OR APPROVED EQUAL. SECURE TO FLOOR WITH THROUGH BOLTS. SEE SPECIFICATIONS.
- RADIO CONTROLLER, L-854, CONTROL INDUSTRIES, MODEL RC-175A OR APPROVED EQUAL. SEE SPECIFICATIONS L-109. SET TO LOCAL CTAC FREQUENCY.
- CIRCUIT BREAKER PANEL BOARD (PANEL B), 100A, 240V, 20 SPACE, M.L.O., SURFACE MOUNT WITH COVER, DOOR, GROUND BAR KIT AND BREAKERS, 14" WIDE, SQUARE-D CAT. No. NQ020L100CU or APPROVED EQUAL. SEE SPECIFICATIONS.
- PUSH BUTTON STATION-GENERAL ELECTRIC NO. CR2943AJ202B OR APPROVED EQUAL.
- KILOWATT-HOUR METERS, SINGLE-PHASE, CLASS 200, PROVIDED BY CONTRACTOR WHO IS RESPONSIBLE FOR THE MODIFICATIONS TO THE UTILITY ELECTRICAL SYSTEM.
- METER CENTER, 3-GANG, 400A, 120/240V, NEMA 3-R ENCLOSURE. SIZE BREAKERS AS SHOWN.
- RADIO CONTROL ANTENNA, ANTENNA SPECIALIST MODEL AV-1, OR APPROVED EQUAL. MOUNT ON PIPE SUPPORT ON SIDE OF BUILDING AS DETAILED.
- PHOTOELECTRIC CONTROL, TORK NO. 2101 OR APPROVED EQUAL.
- PLUG CUT-OUT, 5 KV, IN NEMA 1 HINGED DOOR ENCLOSURE, SIZED 14" x 12" x 8" (H,W,D), SEPSCO No. 30196, OR APPROVED EQUAL.
- SIGN TO READ: PUSH TO TURN RUNWAY LIGHTS ON. AUTO OFF IN 15 MIN.
- TELEPHONE TERMINAL BOARD - 24" x 18" x 3/4" (H,W,D) PLYWOOD, MOUNTED 60" TO CENTER WITH 1-1/4" IMC OR RSC TO THE OUTSIDE OF THE BUILDING 18" ABOVE FINISH GRADE FOR FUTURE TELEPHONE SERVICE. PROVIDE CONDUIT SEAL WHERE CONDUIT PASSES THROUGH THE WALL.
- OBSTRUCTION LIGHT, L810
- CIRCUIT BREAKER PANEL BOARD (PANEL A), 200A, 240V, M.L.O., SURFACE MOUNT WITH COVER, DOOR, GROUND BAR KIT AND BREAKERS. SEE SPECIFICATIONS.
- ROTATING BEACON, L-801A



PLANS DEVELOPED BY:  
PDC, INC. 2-25-08

BY	DATE	REVISION

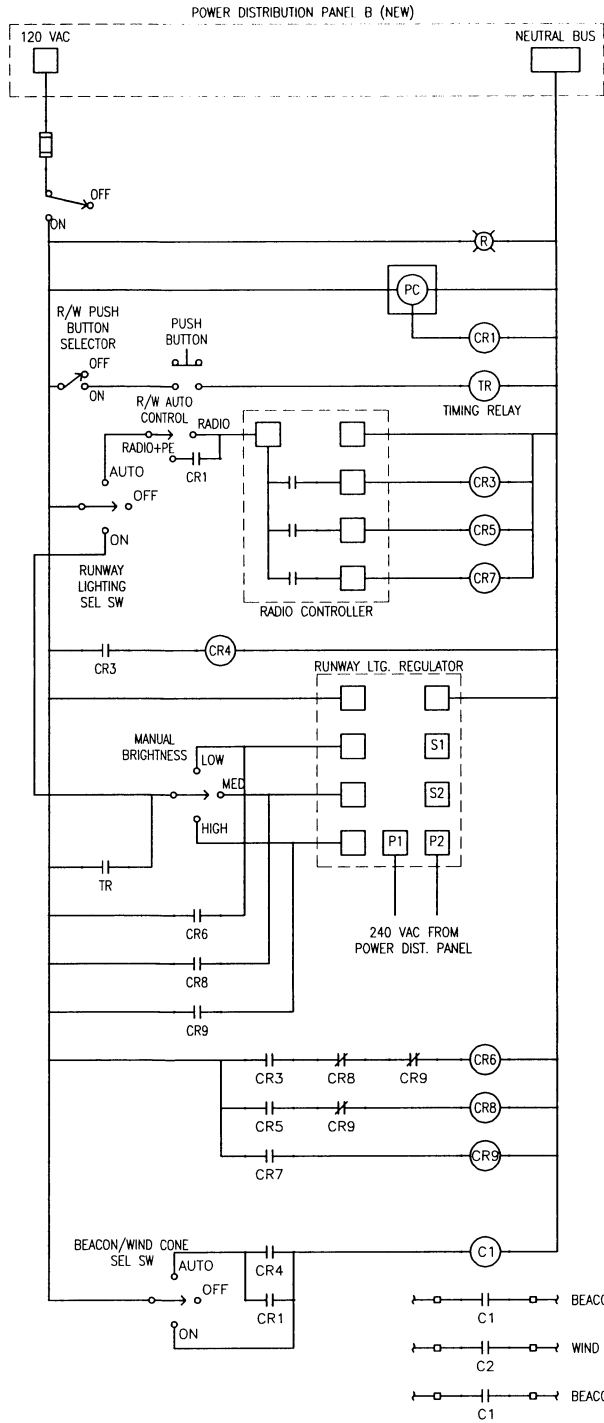
STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
CENTRAL REGION

ATKA AIRPORT  
ATKA, ALASKA  
RUNWAY EXTENSION AND RESURFACING  
59621  
AIP No. 3-02-0394-005-2008  
MEZZANINE & LIGHTING PLAN DETAILS

DATE:  
JUNE 2007  
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32  
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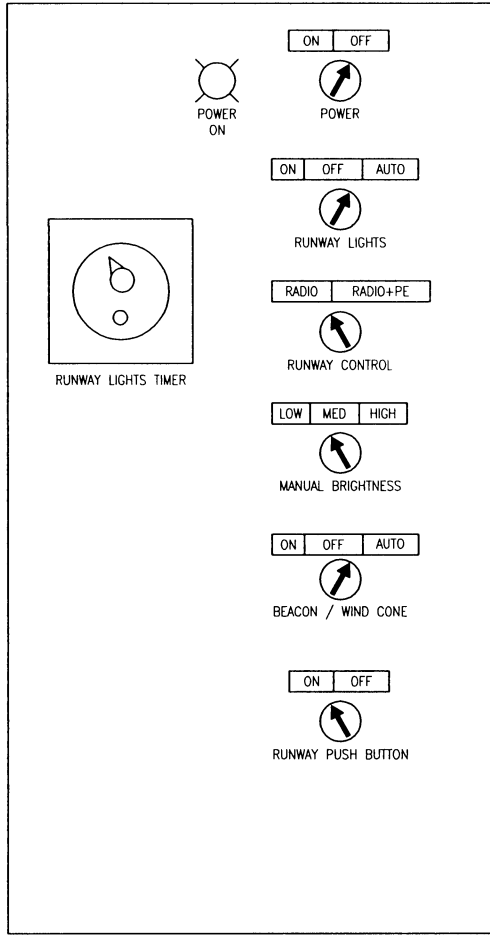
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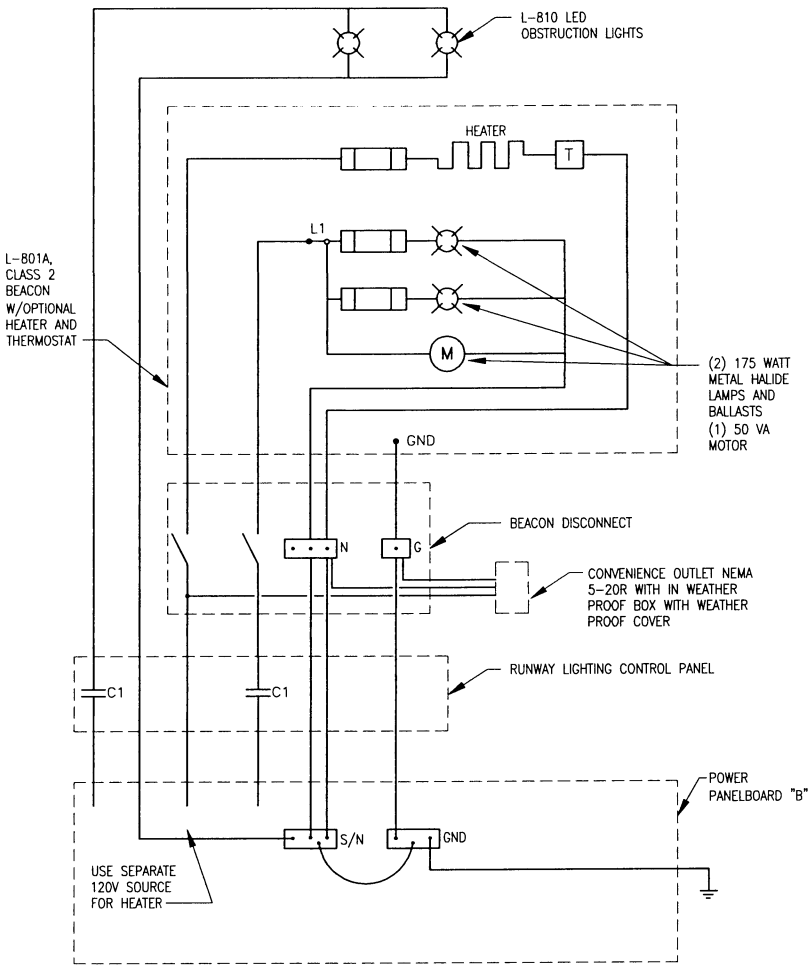
**CONTROL PANEL DIAGRAM**  
NO SCALE

**DETAIL NOTE:**

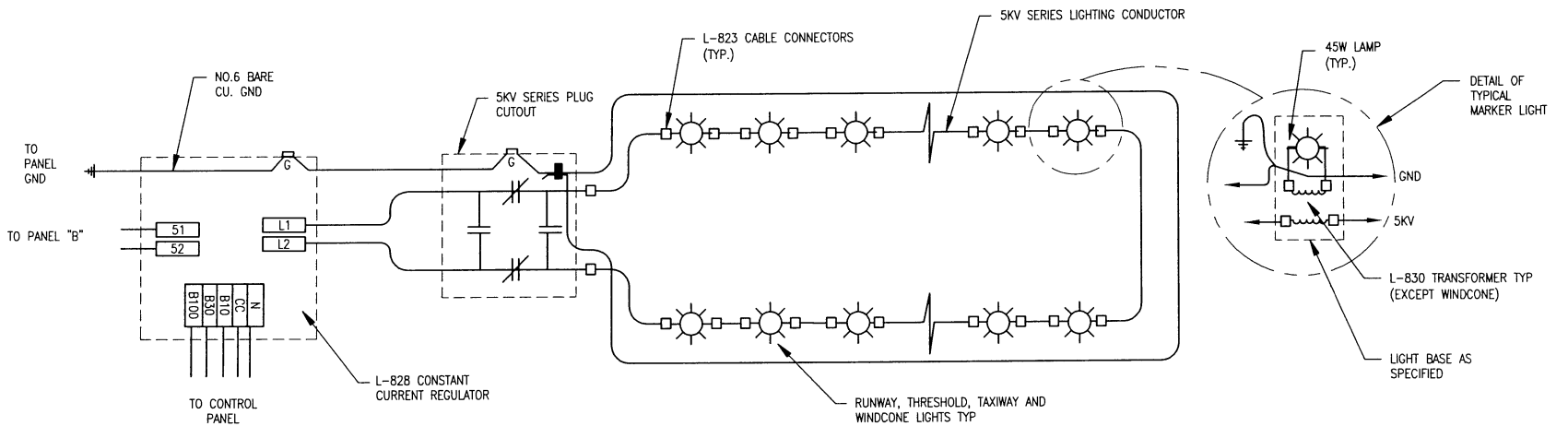
ALL CONTROL RELAYS CR1, CR2, CR3, ETC. AND/OR CONTACTORS C1, C2, C3, ETC. SHALL BE SIZED BY THE SUPPLIER AND/OR CONTRACTOR TO MEET ALL NECESSARY LOAD REQUIREMENTS. TIMING RELAY TR SHALL BE ADJUSTABLE 0-30 MIN.  
NOTE: CR2 NOT USED.



**CONTROL PANEL DETAIL**  
NO SCALE



**ROTATING BEACON WIRING DETAIL**  
NO SCALE



**RUNWAY LIGHTING ONE LINE DIAGRAM**  
NO SCALE

**LIGHTING CONTROL OPERATION:**

SEE L-109 FOR CONTROL PANEL SPECIFICATIONS.

**CONTROL PANEL FEATURES:**

**POWER SELECTOR SWITCH AND PILOT LIGHT:**  
THIS IS THE MAIN POWER SWITCH TO THE CONTROL PANEL. THE PILOT LIGHT INDICATES THAT THE CONTROL PANEL IS ENERGIZED.

**RUNWAY LIGHTING SELECTOR THREE-POSITION SWITCH:**  
THIS SWITCH SELECTS THE R/W LIGHTS OPERATING MODE.  
"ON": - R/W LIGHTS ARE ON, AT THE MANUALLY SELECTED BRIGHTNESS.

"OFF": - R/W LIGHTS ARE MANUALLY TURNED OFF.

"AUTO": - R/W LIGHTS CONTROLLED BY RADIO AND / OR PHOTO ELECTRIC CELL..

**MANUAL BRIGHTNESS SELECTOR THREE-POSITION SWITCH:**  
THIS SELECTOR SWITCH ALLOWS MANUAL SELECTION (FROM THE CONTROL PANEL) OF THE THREE RUNWAY LIGHTING INTENSITY LEVELS (LOW, MEDIUM AND HIGH) WHEN THE RUNWAY LIGHTING SELECTOR SWITCH IS IN THE MANUAL "ON" (NON-RADIO CONTROLLED) POSITION.

**BEACON AND WIND CONE SELECTOR THREE-POSITION SWITCH:**  
SELECTS THE OPERATING MODE FOR THE BEACON AND WINDCONE.  
"ON": - BEACON & WIND CONE ARE MANUALLY TURNED ON.

"OFF": - BEACON & WINDCONE ARE MANUALLY TURNED OFF.

"AUTO": - BEACON AND WINDCONE ARE CONTROLLED BY THE PHOTOCELL.

**EXTERNAL DEVICES:**

**PHOTOCELL:**  
THE PHOTOCELL CONTROLS THE BEACON & WIND CONE AUTOMATICALLY WHEN THE BEACON / WIND CONE SELECTOR SWITCH IS IN THE "AUTO" POSITION.

**EXTERIOR PUSH-BUTTON SWITCH:**  
MOMENTARY CONTACT SWITCH TURNS RUNWAY LIGHTS ON AT PRESET BRIGHTNESS FOR 15 MINUTES, CONTROLLED BY ADJUSTABLE TIMER.

**RADIO CONTROLLER:**  
THE RADIO CONTROL UNIT HAS THREE OUTPUTS (LOW, MEDIUM, AND HIGH) BASED UPON 3, 5, OR 7 PULSES BEING RECEIVED FROM THE PILOT ON THE LOCAL COMMON TRAFFIC ADVISORY FREQUENCY (CTAF). THE RUNWAY LIGHTING SELECTOR SWITCH MUST BE IN THE "AUTO" POSITION FOR THE RADIO CONTROL UNIT TO BE FUNCTIONAL. IN THE AUTO MODE, THE RECEPTION OF 3, 5, OR 7 RADIO PULSES WILL SET THE REGULATOR TO THE CORRESPONDING INTENSITY LEVEL. AFTER OPERATION BY RADIO CONTROL, THE RADIO CONTROL UNIT AUTOMATICALLY TURNS OFF ALL RUNWAY LIGHTS AFTER 15 MINUTES ELAPSED TIME, UNLESS, THE PILOT AGAIN INITIATES RADIO COMMAND.

**RUNWAY LIGHTING REGULATOR:**  
THE RUNWAY LIGHTING REGULATOR PROVIDES POWER TO RUNWAY, TAXIWAY, AND THRESHOLD LIGHTS. IT HAS THREE INTENSITY LEVELS (LOW, MEDIUM, AND HIGH) SET EITHER BY MANUAL SELECTOR SWITCH OR 3, 5, OR 7 PULSES RECEIVED BY RADIO ON THE LOCAL CTAF.

**ROTATING BEACON NOTES:**

BEACON DISCONNECT TO BE NEMA TYPE 3R, 240 VOLT, 30 AMP, 3-POLE WITH NEUTRAL AND GROUND BARS, SQUARE-D HJ361RB OR EQUAL. INSTALL PER SPECIFICATIONS.



PLANS DEVELOPED BY:  
PDC, INC.

2-25-08

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STATE OF ALASKA  
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CENTRAL REGION

ATKA AIRPORT  
ATKA, ALASKA  
RUNWAY EXTENSION AND RESURFACING  
59621  
AIP No. 3-02-0394-005-2008  
AIRPORT LIGHTING CONTROL DETAILS

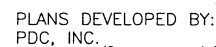
DATE:  
JUNE 2007  
SHEET:  
33  
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38





**SHEET NOTES:**

1. ANCHOR BOLT PATTERN SHALL BE SET TO MATCH WIND CONE POLE BASE PATTERN.
2. WIND CONE DISCONNECT: NEMA 3R, LOCKABLE, 30 AMP, 240V, WITH GROUND BAR AND INSULATED NEUTRAL BAR.

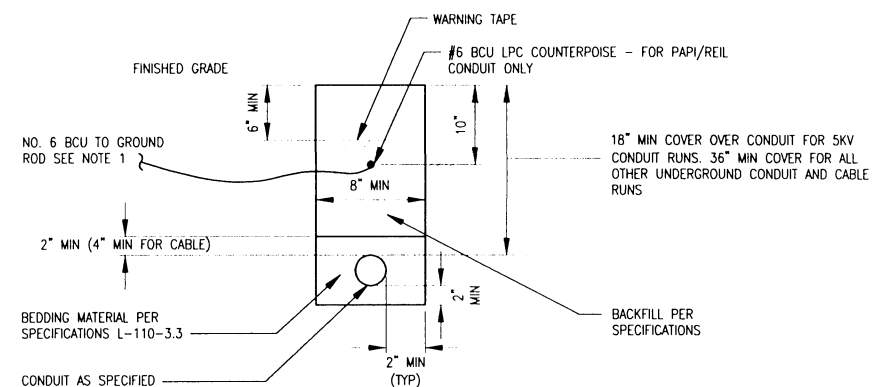


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CENTRAL REGION**

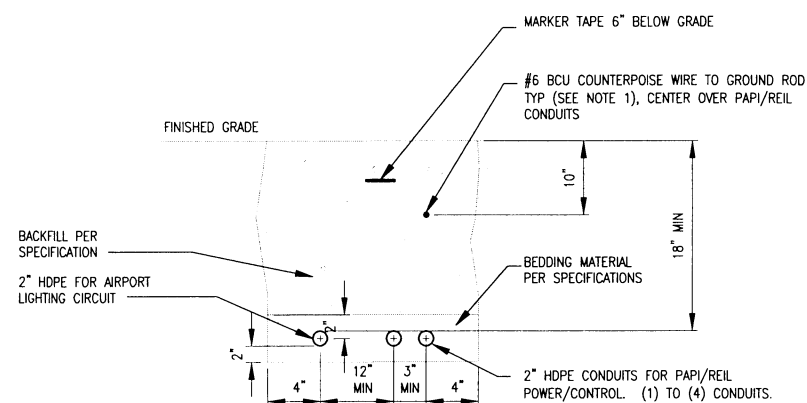
**ATKA AIRPORT**  
ATKA, ALASKA  
RUNWAY EXTENSION AND RESURFACING  
59621  
AIP No. 3-02-0394-005-2008  
WIND CONE DETAILS



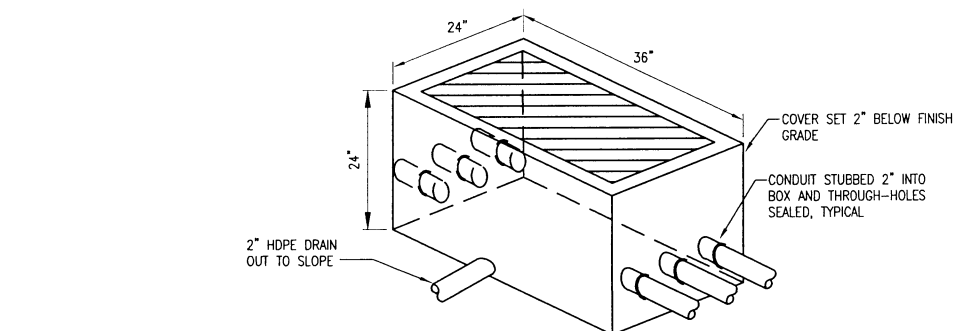
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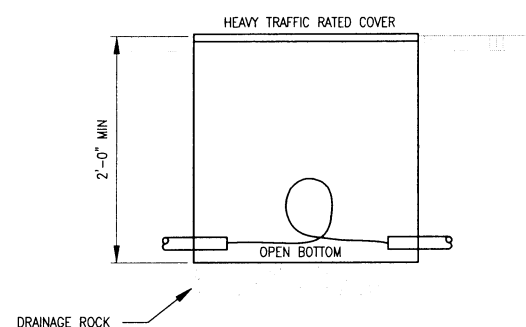
**TYPICAL TRENCH DETAIL - SINGLE CONDUIT OR CABLE**  
NO SCALE.



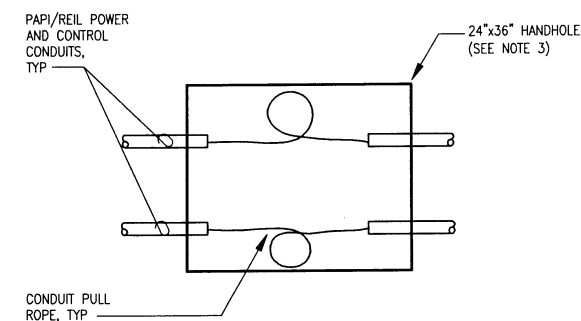
**TYPICAL JOINT TRENCH DETAIL  
FOR PAPI/REIL POWER & A/P LIGHTING**  
NO SCALE



- ## SHEET NOTES:
- COUNTERPOISE SHALL BE RUN ABOVE ALL PAPI/REIL CONDUITS. COUNTERPOISE IS NOT REQUIRED FOR R/W EDGE LIGHTING CONDUITS. COUNTERPOISE GROUND RODS SHALL BE A MINIMUM OF 3/4" BY 10", ON A MAXIMUM OF 500' SPACING. INSTALL GROUND ROD A MINIMUM OF 6" BELOW SURFACE. CONNECT ROD TO COUNTERPOISE WIRES WITH NO. 6 BARE COPPER BURIED 8" MINIMUM. CONNECT TO RODS AND COUNTERPOISE WITH EXOTHERMIC CONNECTIONS.
  - ALL HDPE AND STEEL CONDUITS FOR FAA PAPI AND REIL SHALL HAVE A PULL ROPE INSTALLED.
  - PAPI/REIL J-BOX SHALL BE CONSTRUCTED OF POLYMER CONCRETE, REINFORCED WITH HEAVY-WEAVE FIBERGLASS, AND A MINIMUM SIZE OF 24 X 36 X 24 INCHES DEEP. THE ENCLOSURE AND COVER SHALL BE GREEN IN COLOR. COVERS SHALL BE HEAVY DUTY TRAFFIC RATED WITH A MINIMUM RATING OF 15,000 POUNDS OVER A 10" BY 10" AREA. THE ENCLOSURE SHALL BE DESIGNED AND TESTED TO TEMPERATURES OF MINUS 50 °F. THE COVER SHALL BE NON-SLIP AND MARKED WITH THE WORDS "FAA-LIGHTING".

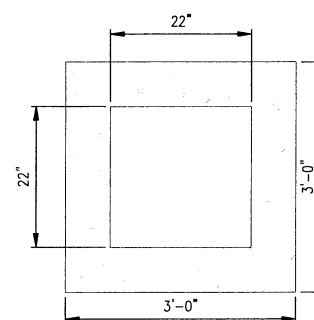


## ELEVATION

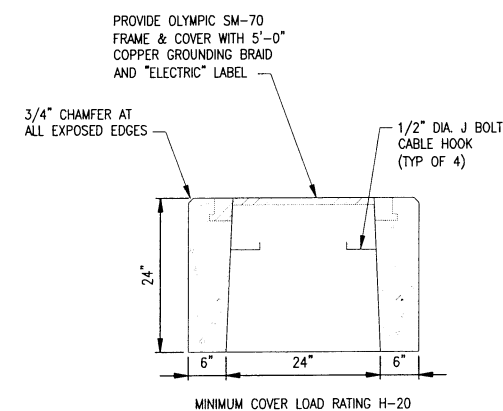


### PLAN VIEW

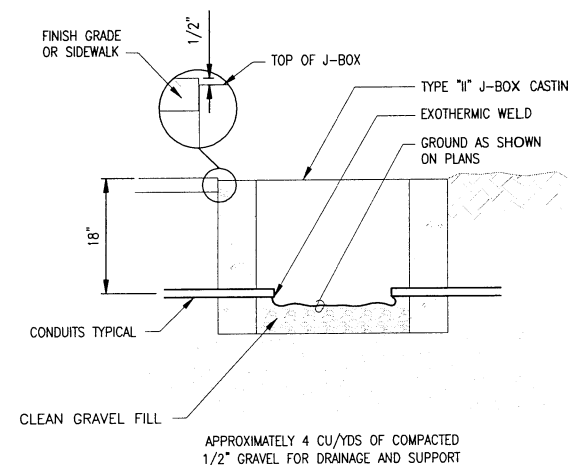
**PAPI/REIL J-BOX - TYP**  
NO SCALE



### PLAN VIEW



**TYPE II J-BOX - TYP**  
NO SCALE



## ELEVATION VIEWS



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BY	DATE	REVISION

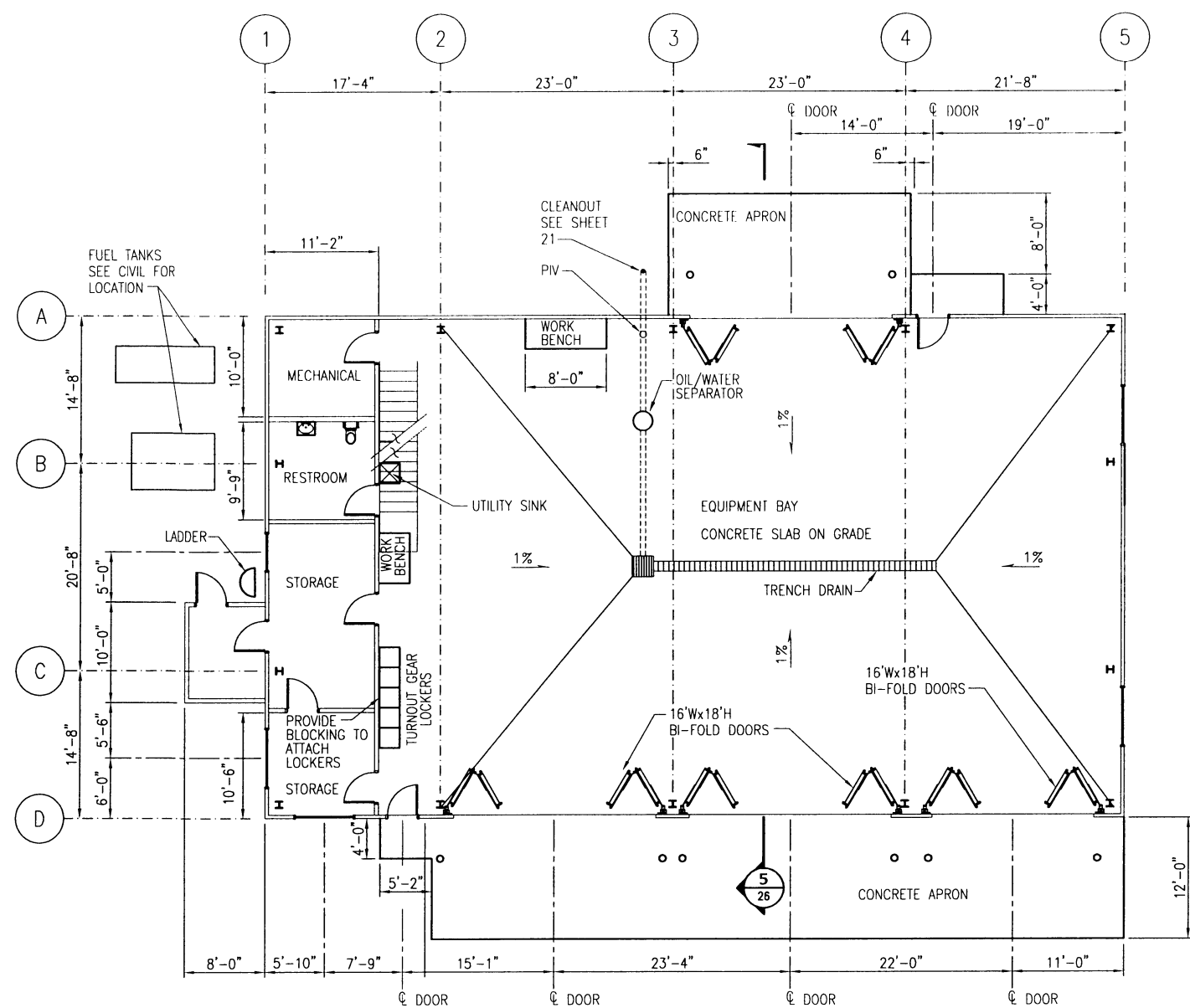
**STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
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CENTRAL REGION**

**ATKA AIRPORT**  
ATKA, ALASKA  
RUNWAY EXTENSION AND RESURFACING  
59621  
AIP No. 3-02-0394-005-2008  
TRENCH & J-BOX DETAILS

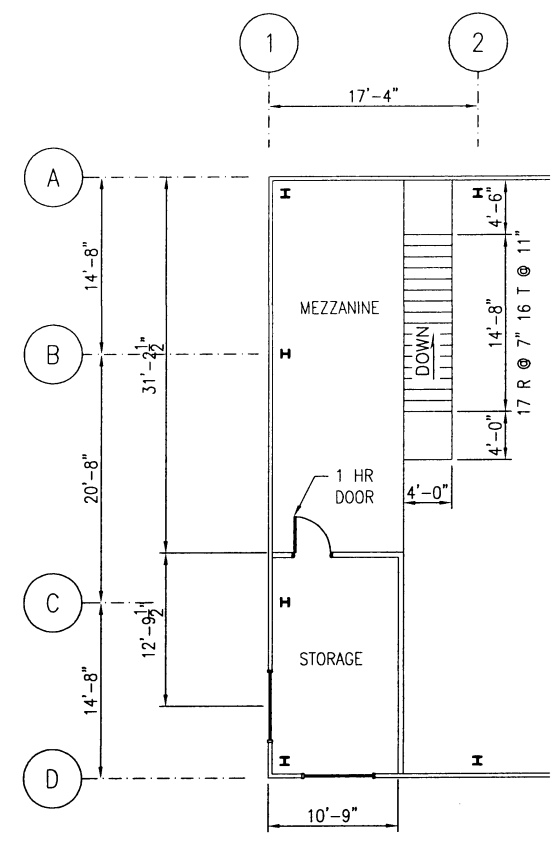
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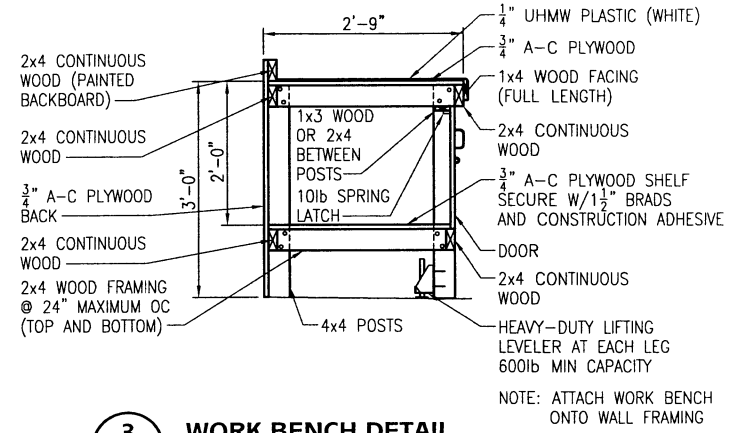
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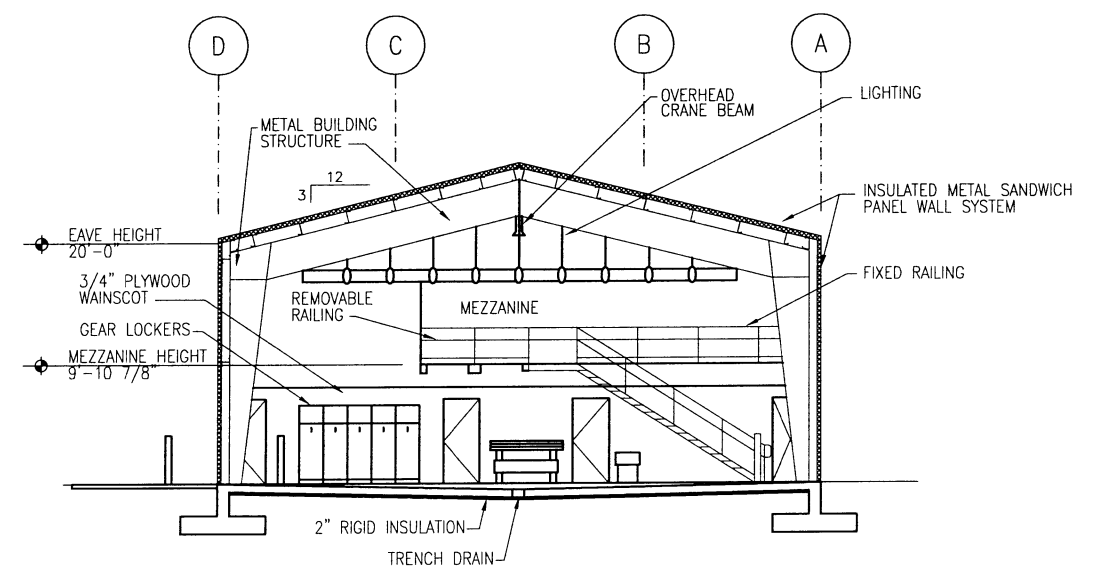
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36 NTS



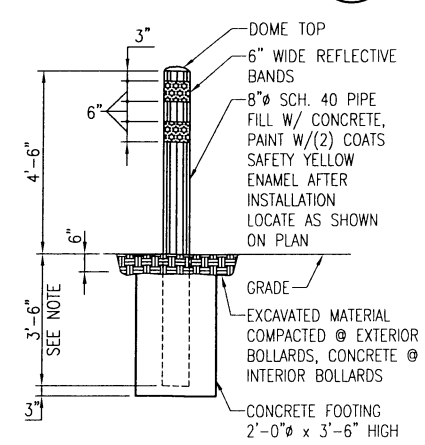
**2 MEZZANINE PLAN**  
36 NTS



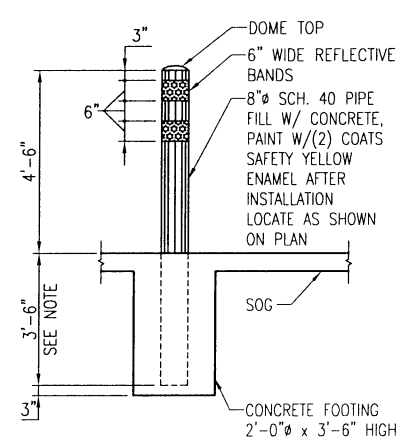
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36 NTS



**6 BUILDING SECTION**  
36 NTS



**4 EXTERIOR BOLLARD DETAIL**  
36 NTS

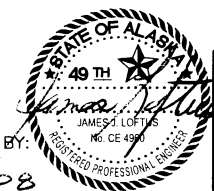


**5 INTERNAL BOLLARD DETAIL**  
36 NTS

NOTE: REDUCE DEPTH OF EMBEDMENT AS REQ'D WHERE BOLLARD CONFLICTS W/ FOOTING

NOTE: REDUCE DEPTH OF EMBEDMENT AS REQ'D WHERE BOLLARD CONFLICTS W/ FOOTING

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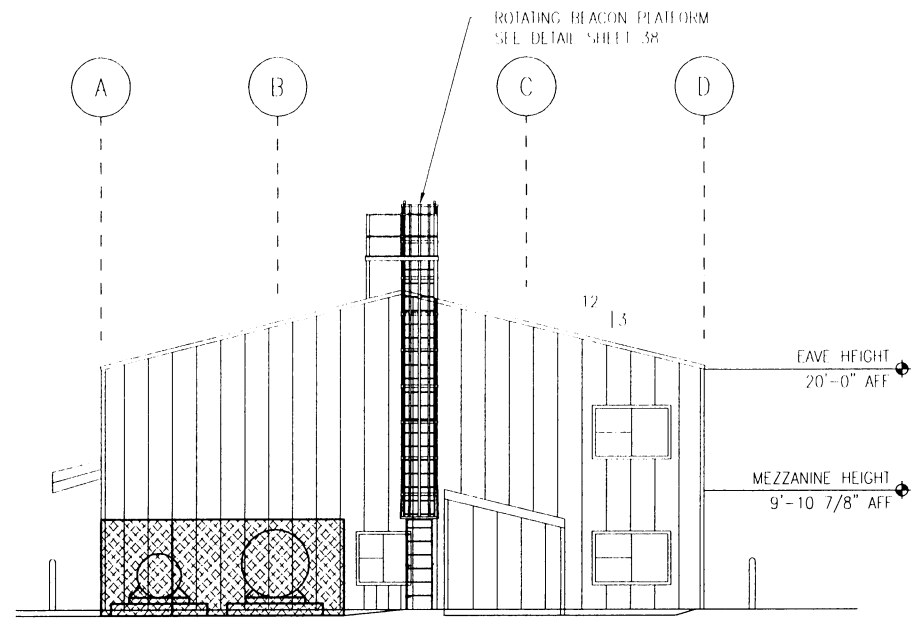
STATE OF ALASKA  
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ATKA AIRPORT  
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SREB FLOOR PLAN AND DETAILS

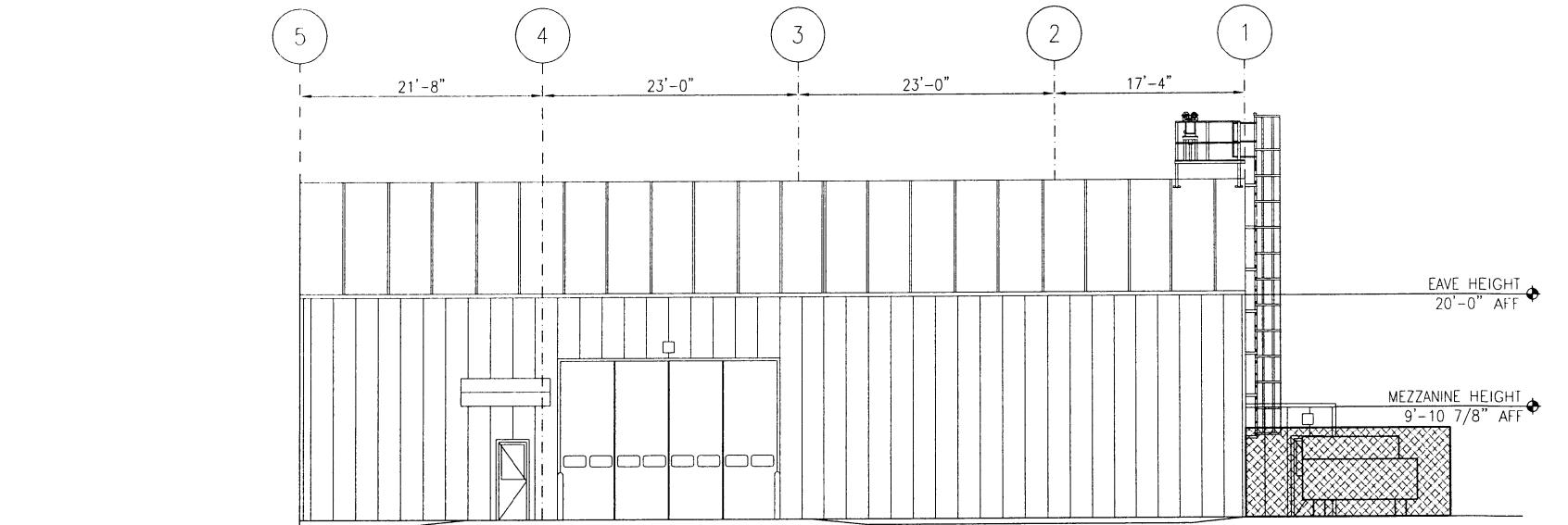
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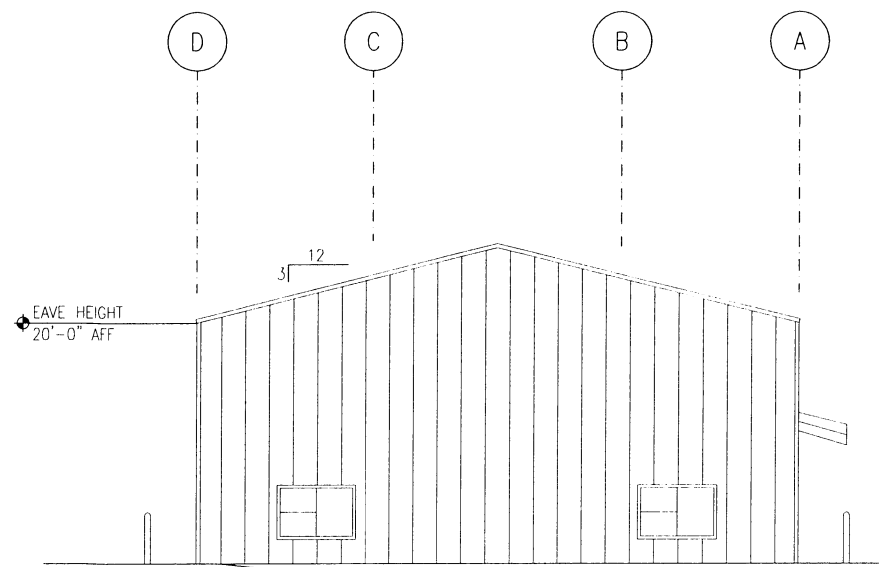
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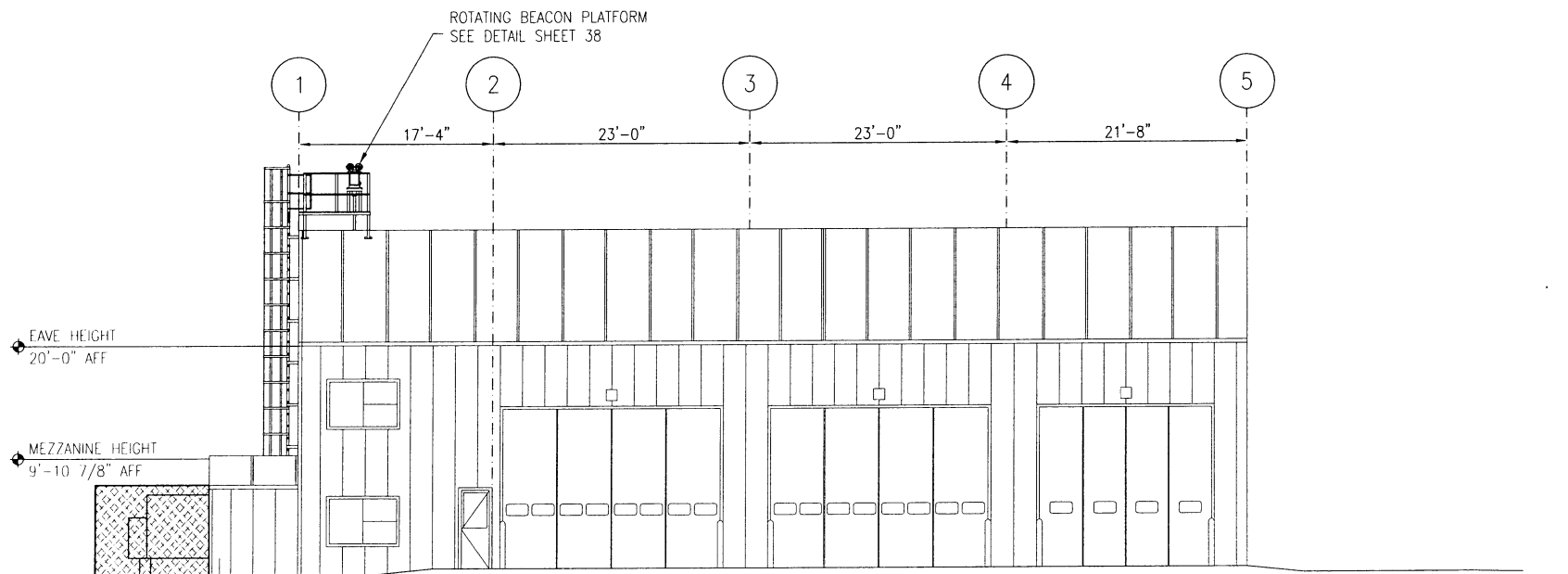
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37 NTS



2 EAST ELEVATION  
37 NTS

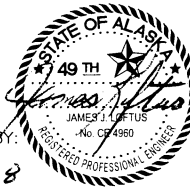


3 SOUTH ELEVATION  
37 NTS



4 WEST ELEVATION  
37 NTS

PLANS DEVELOPED BY:  
PDC, INC. 2/25/08



BY	DATE	REVISION

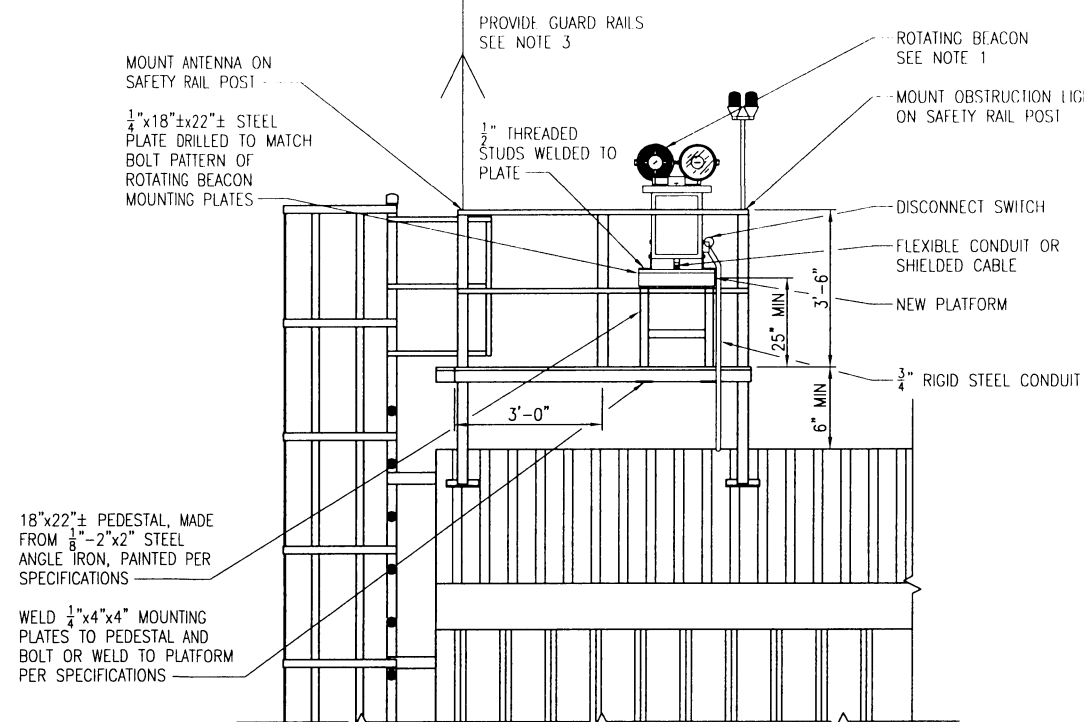
STATE OF ALASKA  
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SREB EXTERIOR ELEVATIONS

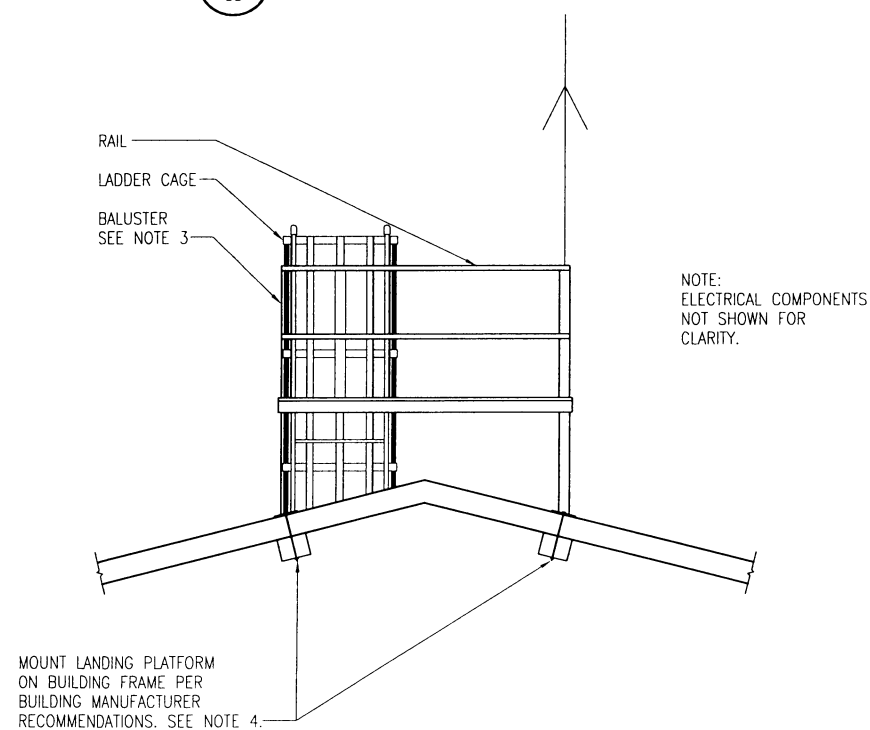
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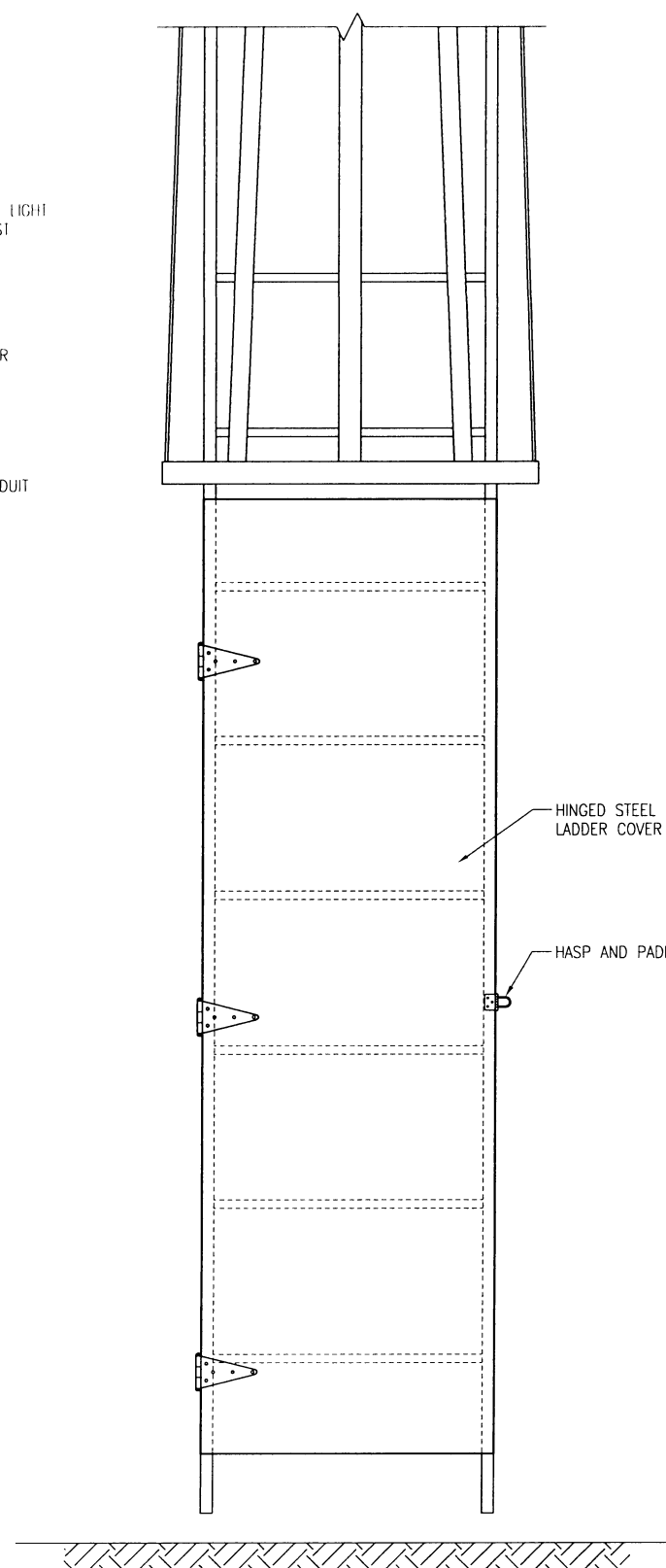
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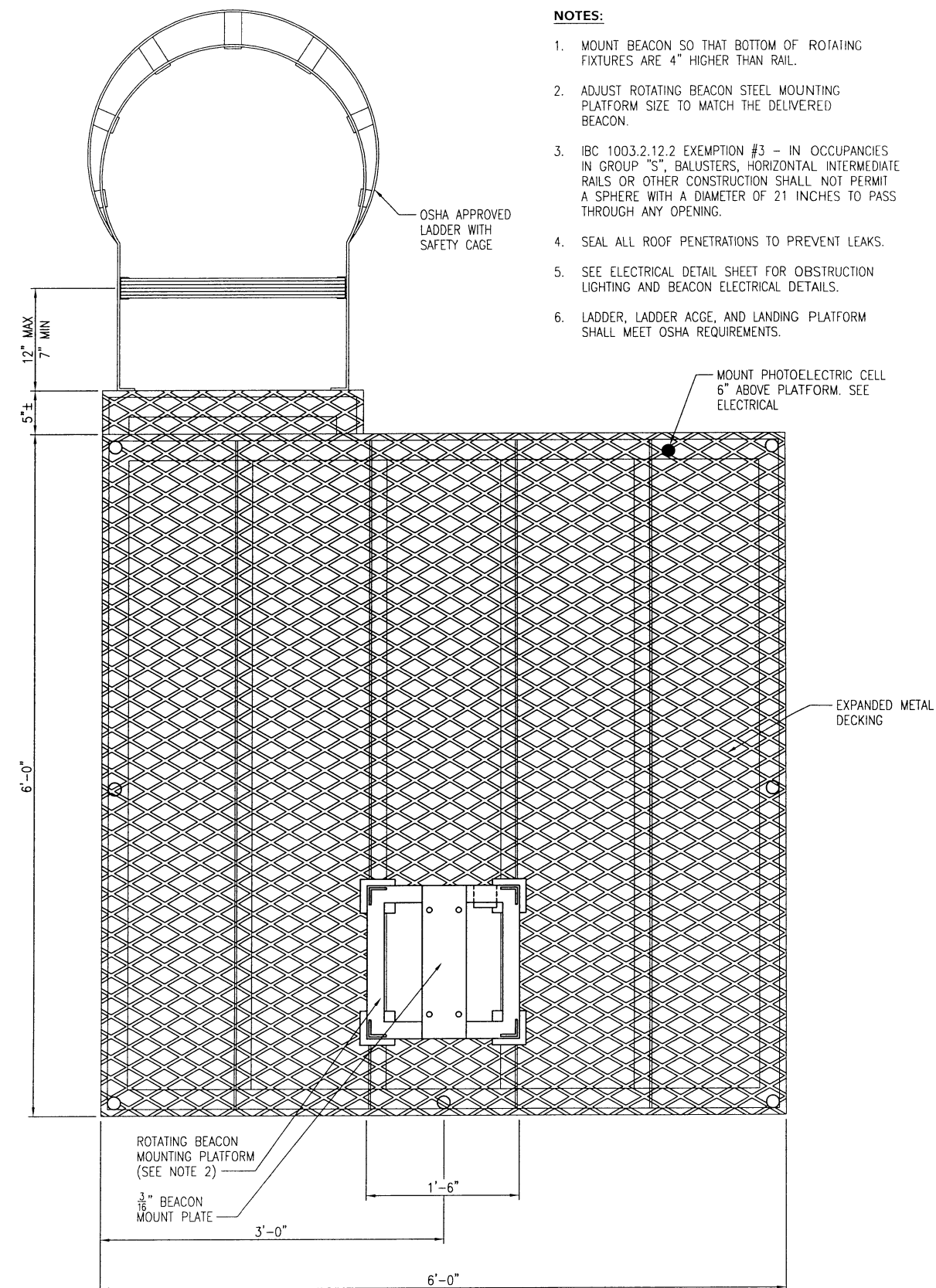
**1 LANDING PLATFORM SIDE VIEW**



**2 LANDING PLATFORM FRONT VIEW**



**3 LADDER BASE DETAIL**



**4 LADDER BASE DETAIL**

- NOTES:**
1. MOUNT BEACON SO THAT BOTTOM OF ROTATING FIXTURES ARE 4" HIGHER THAN RAIL.
  2. ADJUST ROTATING BEACON STEEL MOUNTING PLATFORM SIZE TO MATCH THE DELIVERED BEACON.
  3. IBC 1003.2.12.2 EXEMPTION #3 - IN OCCUPANCIES IN GROUP "S", BALUSTERS, HORIZONTAL INTERMEDIATE RAILS OR OTHER CONSTRUCTION SHALL NOT PERMIT A SPHERE WITH A DIAMETER OF 21 INCHES TO PASS THROUGH ANY OPENING.
  4. SEAL ALL ROOF PENETRATIONS TO PREVENT LEAKS.
  5. SEE ELECTRICAL DETAIL SHEET FOR OBSTRUCTION LIGHTING AND BEACON ELECTRICAL DETAILS.
  6. LADDER, LADDER ACCE, AND LANDING PLATFORM SHALL MEET OSHA REQUIREMENTS.

— MOUNT PHOTOELECTRIC CELL  
6" ABOVE PLATFORM. SEE  
ELECTRICAL

— EXPANDED METAL  
DECKING

NOTE:  
ELECTRICAL COMPONENTS  
NOT SHOWN FOR  
CLARITY.

—HINGED STEEL PLATE  
LADDER COVER

— HASP AND PADLOCK

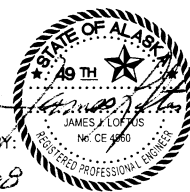
ROTATING BEACON  
MOUNTING PLATFORM  
(SEE NOTE 2) ———

$\frac{3}{16}$ " BEACON  
MOUNT PLATE

1'-6'

3'-C

6'-0"



PLANS DEVELOPED BY:  
PDC, INC. 2/25/08

BY	DATE	REVISION

**STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
CENTRAL REGION**

**ATKA AIRPORT**  
ATKA, ALASKA  
RUNWAY EXTENSION AND RESURFACING  
59621  
AIP No. 3-02-0394-005-2008  
ROTATING BEACON PLATFORM

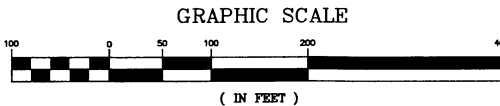
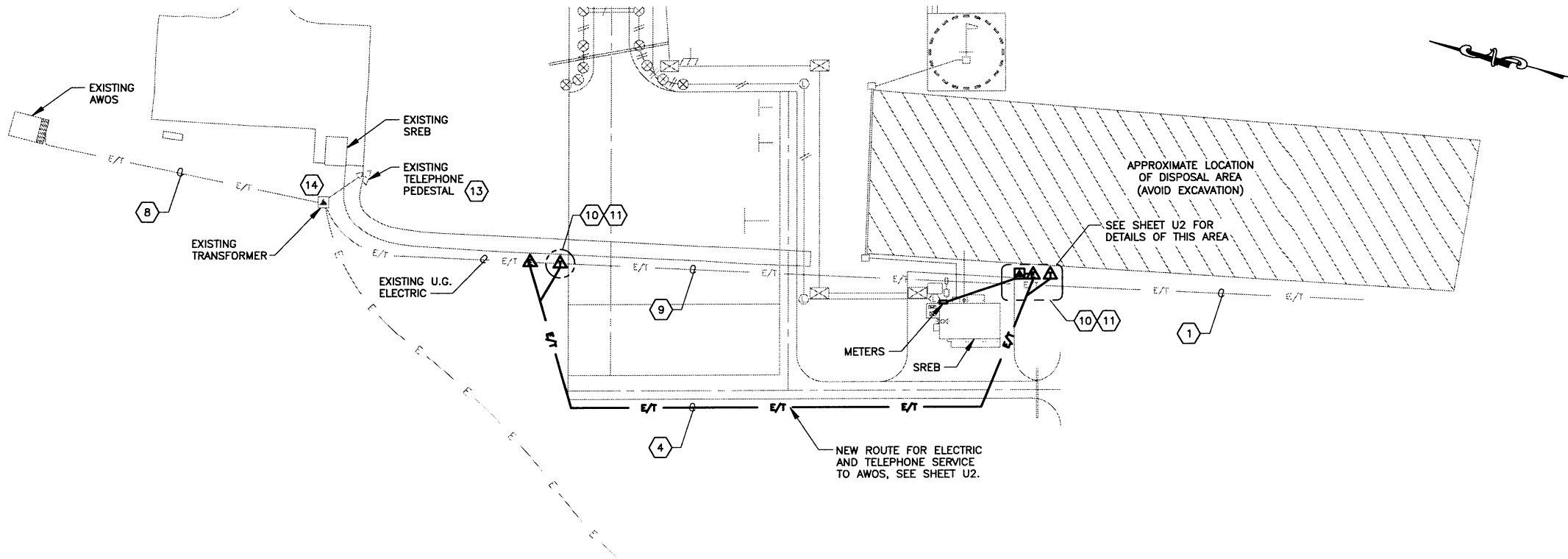
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SHEET: 38 OF 38



Date Revised: 4/01/2008, 2:10 PM  
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Designed By: JMK  
Drawn By: JLC  
Checked By: RLC

NOTES - FOR SHEETS U1 AND U2

- EXISTING UNDERGROUND 25-PAIR TELEPHONE & 7.2 KV PRIMARY CABLES. TERMINATE 7.2 KV CABLE WITH LOAD BREAK ELBOW IN SECTIONALIZING CABINET #S1.
- NEW 15KV SECTIONALIZING CABINET #S1 WITH 3 LOAD BREAK ELBOW CONNECTIONS. PROVIDE PROTECTIVE BOLLARDS.
- NEW 7.2KV/120/240-VOLT SINGLE-PHASE 25 KVA PAD-MOUNT TRANSFORMER #T1 FOR THE SNOW REMOVAL EQUIPMENT STORAGE BUILDING, RUNWAY LIGHTING SYSTEM, AND OTHER ELECTRICAL LOADS ON THE NEW APRON. CONNECT TO SECTIONALIZING SWITCH #1 WITH 15-KV CABLE IN HDPE CONDUIT. PROVIDE PROTECTIVE BOLLARDS.
- NEW UNDERGROUND 15-KV, #1/0 AL, CABLE WITH CONCENTRIC NEUTRAL, 133% INSULATION IN SCHEDULE-40 HDPE CONDUIT FROM THE SECTIONALIZING CABINET #S1 TO SECTIONALIZING CABINET #S2 WITH LOAD BREAK ELBOW CONNECTIONS. NEW 2-INCH HDPE CONDUIT WITH PULL WIRE FOR FUTURE TELEPHONE CABLE TO BE INSTALLED BY UTILITY. DEPTH OF BURY: 15-KV CABLE - 40 INCHES, TELEPHONE CABLE - 36-INCHES SEPARATED FROM 15-KV CABLE 12-INCHES HORIZONTAL. INSTALL "BURIED ELECTRICAL" WARNING TAPES 12 TO 18 INCHES BELOW FINISH GRADE. MARK CHANGES IN DIRECTION WITH "BURIED ELECTRICAL" FIBERGLASS MARKING STAKES SPACED 200 FEET.
- NEW 15KV SECTIONALIZING CABINET #S2 WITH 3 LOAD BREAK CONNECTIONS. THIRD CONNECTOR TO BE CAPPED FOR FUTURE USE. PROVIDE PROTECTIVE BOLLARDS.
- EXISTING UNDERGROUND 15-KV CABLE FROM THE SECTIONALIZING CABINET #S2 TO EXISTING TRANSFORMER FOR THE AWOS. TERMINATE CABLE TO TRANSFORMER WITH LOAD BREAK ELBOW CONNECTION. EXISTING 25-PAIR TELEPHONE CABLE TO PEDESTAL AT AWOS - NO WORK REQUIRED.
- EXISTING AWOS TRANSFORMER. NO WORK REQUIRED.
- EXISTING UNDERGROUND 120/240-VOLT SECONDARY AND TELEPHONE CABLES TO THE AWOS. NO WORK REQUIRED.
- EXISTING UNDERGROUND 15 KV PRIMARY CABLE UNDER THE NEW APRON, TO BE ABANDONED IN PLACE. EXISTING 25-PAIR TELEPHONE CABLE UNDER APRON TO REMAIN ACTIVE.
- FUTURE TELEPHONE PEDESTAL, TO BE LOCATED ABOVE UNDERGROUND TELEPHONE CABLE 5 TO 10 FEET FROM NEW SECTIONALIZING CABINETS #S1 & #S2. LOCATIONS DETERMINED BY CONTRACTOR.
- TERMINATE TELEPHONE CONDUIT (SEE NOTE #4) WITHIN 5-FEET OF THE NEW TELEPHONE PEDESTAL LOCATIONS AND MARK WITH "BURIED TELEPHONE" FIBERGLASS MARKING STAKES. SEAL THE ENDS OF THE CONDUIT WITH PLASTIC PLUG AND ELECTRICAL TAPE.
- SECONDARY SERVICE CONDUCTORS TO METER CENTER ON SREB, # 2/0 AL, XHHW-2 TRIPLEX IN HDPE CONDUIT.
- EXISTING TELEPHONE PEDESTAL. NO WORK REQUIRED.
- EXISTING ELECTRIC & TELEPHONE SERVICE CONDUCTORS TO EXISTING SREB. NO WORK REQUIRED.
- ALL WORK ON THIS SHEET DONE BY CONTRACTOR AND PAID UNDER ITEM U-500b.



4-1-08 BY DATE REVISION

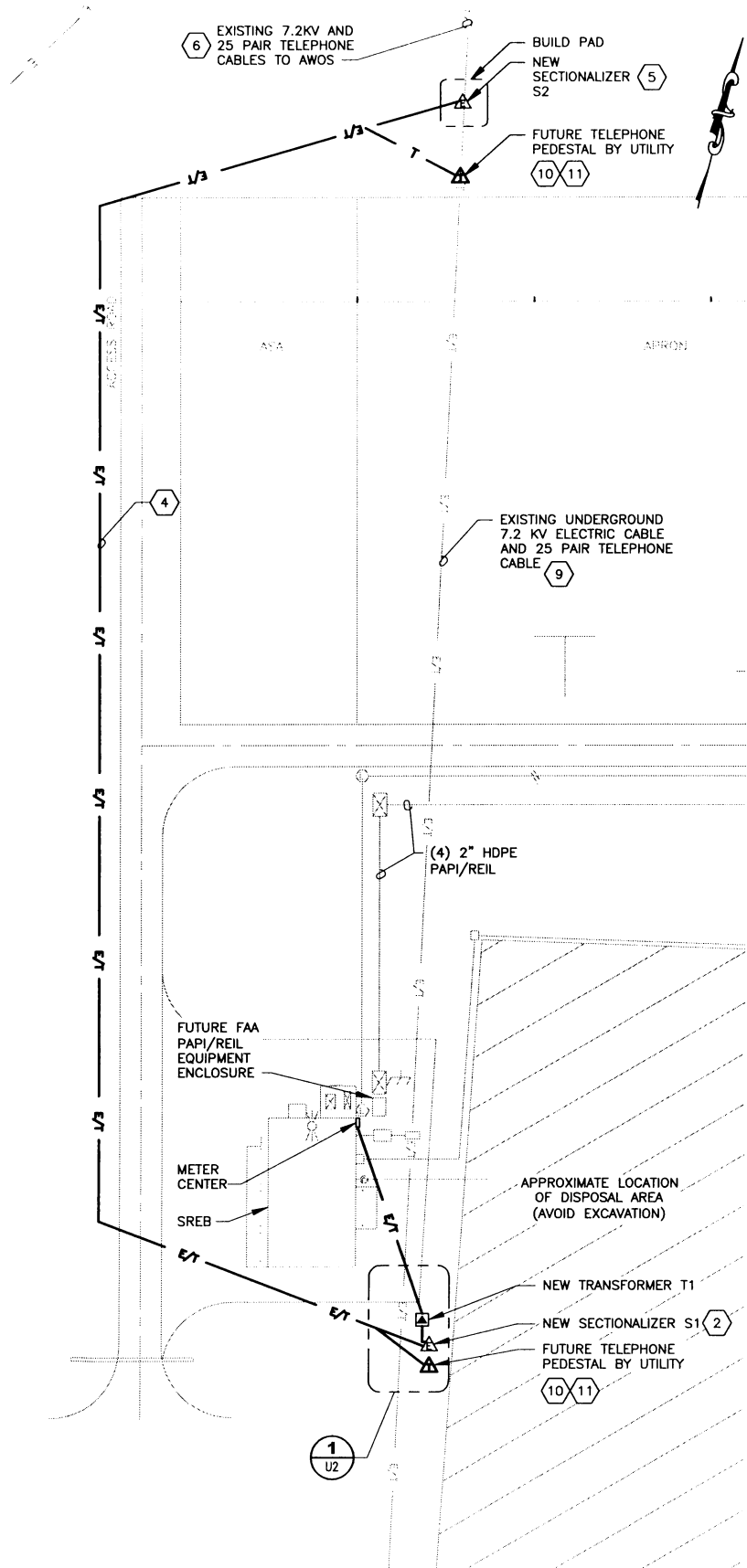
STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
CENTRAL REGION

ATKA AIRPORT  
ATKA, ALASKA  
RUNWAY EXTENSION AND RESURFACING  
59621  
AIP No. 3-02-0394-005-2008  
UTILITY RELOCATION PLAN

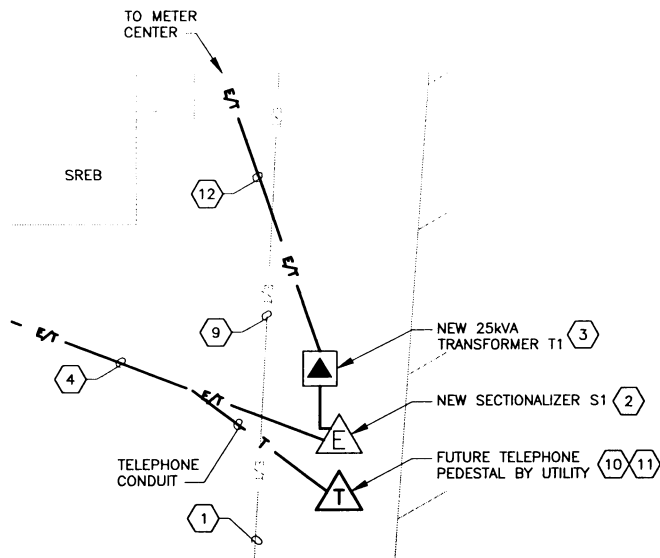
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JUNE 2007  
SHEET:  
U1  
OF  
2



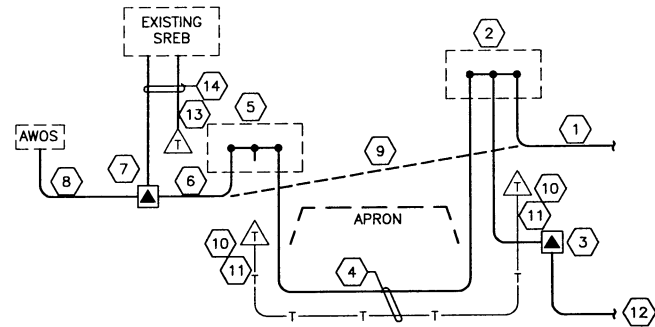
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Designed By: JMK  
Drawn By: JLC  
Checked By: RLC



**1** **DETAIL - SREB AREA UTILITY RELOCATION**  
U2 NO SCALE

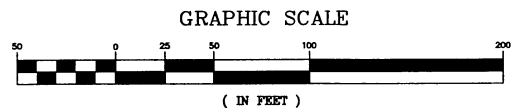


**2** **ONE-LINE DIAGRAM ELECTRICAL LINE RELOCATION TELEPHONE CONDUIT**  
U2 NO SCALE



STAKING SHEET

EXIST RET ADD REPEAT	CONDUCTOR						LOCATION	HEIGHT AND CLASS	PRIMARY ASSEMBLY		GUYS (E)		ANCHORS (F)		TRANS-FORMERS (G)		SECONDARY (J)		SERVICE (K)		MISC (M)		REMARKS
	SERVICE		SECONDARY		PRIMARY																		
	NO	SZ	BACK	NO	SZ	BACK																	
	TYPE	SPAN	TYPE	SPAN	TYPE	SPAN			NO	UNITS	NO	UNITS	NO	UNITS	NO	UNITS	NO	UNITS	NO	UNITS			
NEW							S1		1	UM3-14									1	UM6-6	Install load break elbow on primary feeder from City of Atka. Install primary feeders to S2 & T1 Tags to read: AEC circuit #, To T1, and To S2		
								1	UMI-7NC									3	UM6-1				
								1	UM6-21									1	UM6-4				
																		1	UM12				
																				3	UM-tag		
NEW	1	1/0			1	1/0	T1							1	UG6-25				1	UM6-1	Tag to read: From S1		
														1	UM1-7NC				1	UM12			
														1	UJ2-6				1	UM6-4			
	TRI		95			15 kV		25											1	UM-tag			
NEW					1	1/0	S2		1	UM3-14									1	UM6-6	Install load break elbow on existing 15 kV cable to AWOS transformer. Tags to read: To AWOS Transformer, and To S1. Install 2-inch HDPE conduit in trench from S1 for future ACS communications cable.		
								1	UMI-7NC										2	UM6-1			
								1	UM6-21										1	UM6-4			
					15 kV	960													1	UM6-10			
																			1	UM12			
																			2	UM-tag			
NO	DATE	REVISION				BY	VILLAGE -Atka Alaska				City of Atka (electricity)				Project No. 59621 / AIP 3-02-0394-005-2007				Atka Airport Runway Extension and Resurfacing U-500b - Electric Line Extension WORK ORDER NO. :				
							DATE - May 18, 2007				P.O. Box 765												
							ENGR - Michael L. Stoianoff				Unalaska, Alaska 99685												
							APPR -				Tel: 907-839-2233 Fax 907-839-2234												



4-1-08 BY DATE REVISION

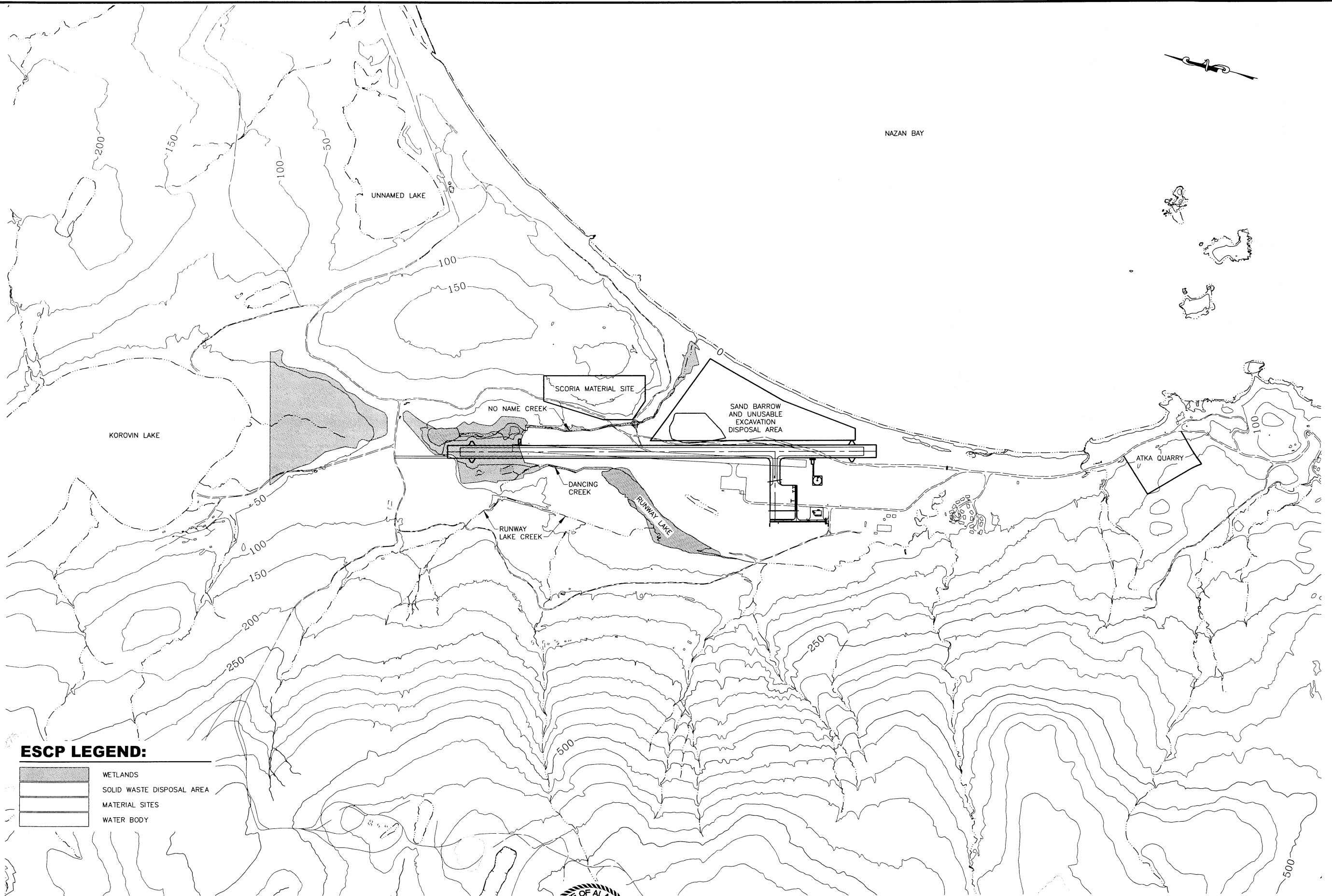
STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
CENTRAL REGION

ATKA AIRPORT  
ATKA, ALASKA  
RUNWAY EXTENSION AND RESURFACING  
59621  
AIP No. 3-02-0394-005-2008  
UTILITY RELOCATION PLAN

DATE:  
JUNE 2007  
SHEET:  
U2  
OF  
2

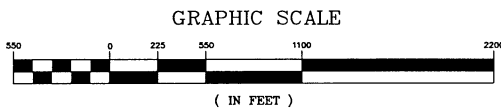


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Designed By: KRG  
Drawn By: JLC  
Checked By: RLC



**ESCP LEGEND:**

- WETLANDS
- SOLID WASTE DISPOSAL AREA
- MATERIAL SITES
- WATER BODY



PLANS DEVELOPED BY:  
PDC, INC. 2/25/08



BY	DATE	REVISION

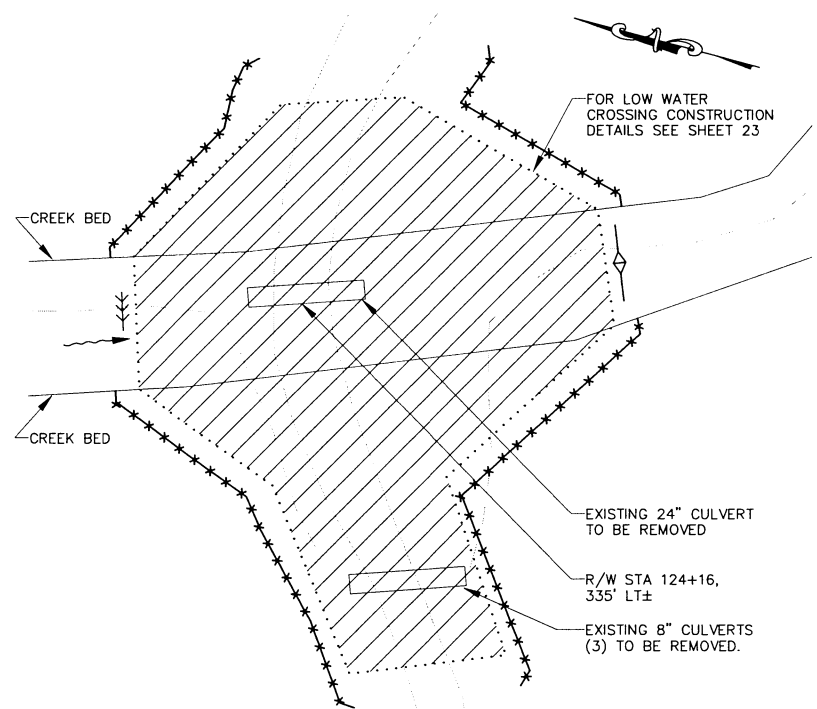
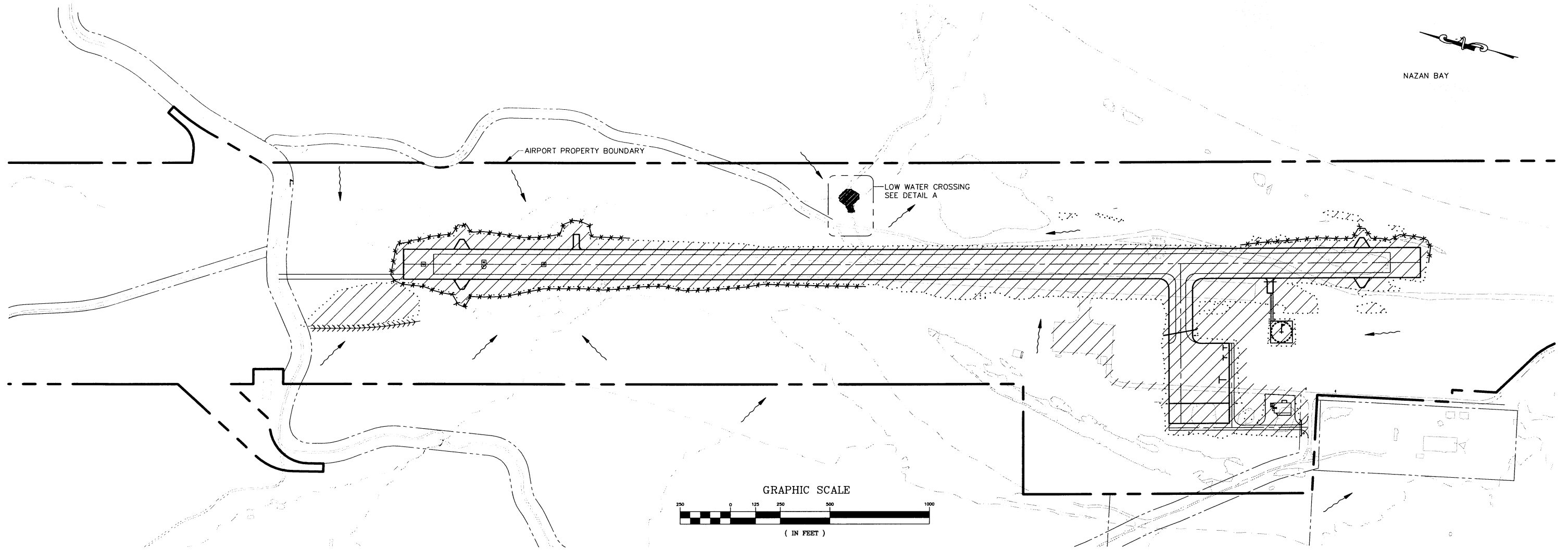
STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
CENTRAL REGION

**ATKA AIRPORT**  
ATKA, ALASKA  
RUNWAY EXTENSION AND RESURFACING  
59621  
AIP No. 3-02-0394-005-2008  
ESCP LOCATION MAP

DATE:  
FEB 2008  
SHEET:  
ES1



Date Revised: 2/25/2008, 4:59 PM  
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Designed By: KBK  
Drawn By: JLC  
Checked By: RLC



- ESCP LEGEND:**
- EXISTING TOP OF EMBANKMENT
  - PROPOSED TOP OF EMBANKMENT
  - AREA OF GROUND DISTURBANCE
  - SURFACE FLOW DIRECTION
  - TEMPORARY SILT FENCE (SEE DETAILS ON PAGE F-43 OF THE ALASKA SWPPP GUIDE)
  - TEMPORARY ROCK CHECK DAM (SEE DETAILS ON PAGE F-20 OF THE ALASKA SWPPP GUIDE)
  - TEMPORARY INTERCEPTION/DIVERSION DIKE (SEE DETAILS ON PAGE F-5 OF THE ALASKA SWPPP GUIDE)



PLANS DEVELOPED BY:  
PDC, INC. 2/25/08

BY	DATE	REVISION

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
CENTRAL REGION

**ATKA AIRPORT**  
ATKA, ALASKA  
RUNWAY EXTENSION AND RESURFACING  
59621  
AIP No. 3-02-0394-005-2008  
ESCP SITE MAP

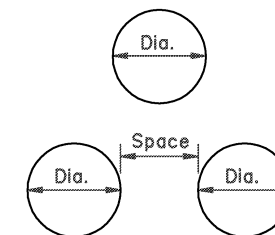
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FEB 2008  
SHEET:  
ES2



GENERAL NOTES:

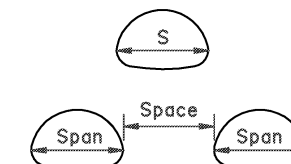
- Sidefill shall be placed and compacted with care under haunches of pipe and shall be brought up evenly and simultaneously on both sides of pipe to 1 foot above the top of the full length of the pipe.
- Alternate installation methods may only be used when specified or approved by the Engineer.

D = Nominal Pipe Diameter



MULTIPLE INSTALLATIONS	
Dia.	Minimum Space Between Pipes
0" - 42"	24"
48" & Over	1/2 Dia. of pipe or 3', whichever is less.

S = Nominal Pipe Arch Span

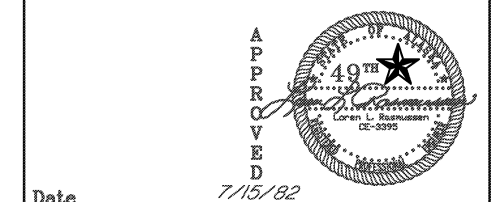


MULTIPLE INSTALLATIONS	
Dia.	Minimum Space Between Pipes
0" - 42"	24"
48" & Over	1/2 Span of pipe arch or 3', whichever is less.

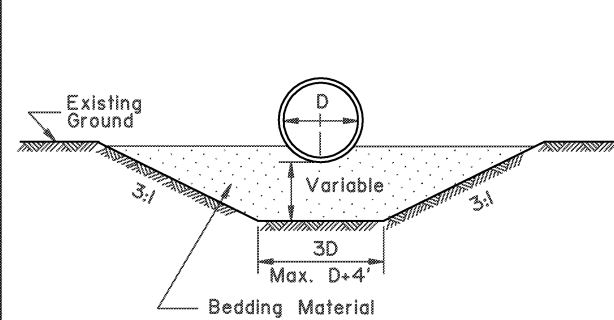
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Date	Description	By
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State of Alaska  
Department of Transportation  
& Public Facilities

CULVERT PIPE & ARCH  
INSTALLATION DETAILS

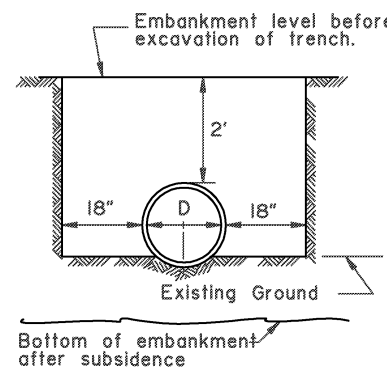


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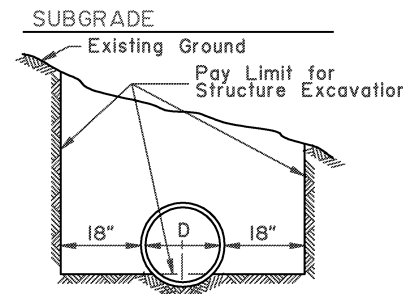


TYPE "A"  
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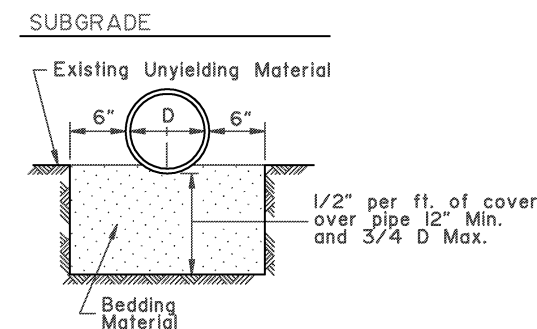
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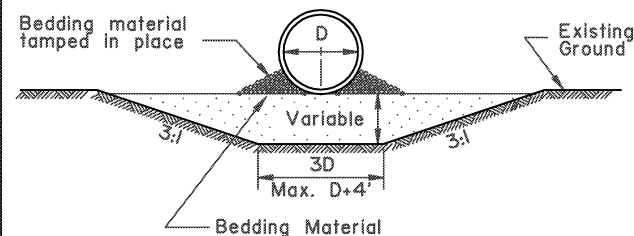
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TYPE "C"

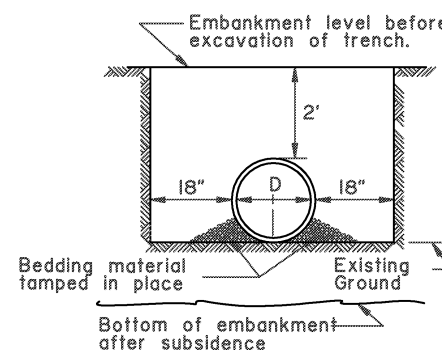


TYPE "D"  
ROCK OR UNYIELDING MATERIAL

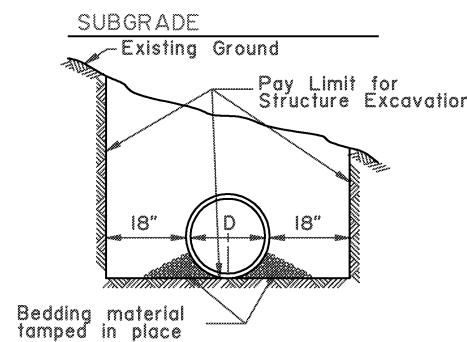


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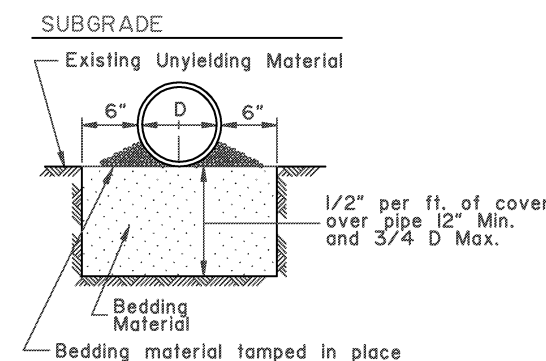
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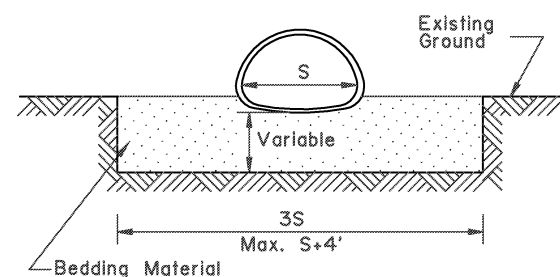


'ALTERNATE'  
TYPE "C"



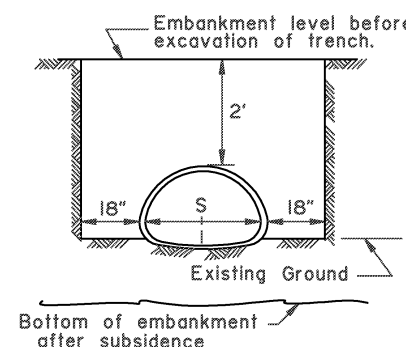
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ROCK OR UNYIELDING MATERIAL

CULVERT PIPE

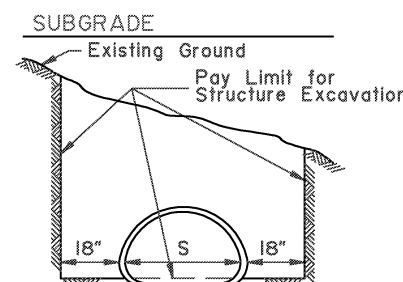


TYPE "A"  
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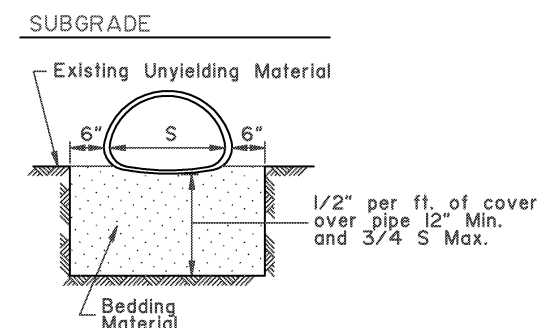
To be used in unstable areas as directed by the Engineer.



TYPE "B"



TYPE "C"



TYPE "D"  
ROCK OR UNYIELDING MATERIAL

ARCH



GENERAL NOTES:

1. All material and workmanship shall be in accordance with the State of Alaska, Standard Specifications for Highway Construction.
2. The contractor shall select only pipes that meet specific height of cover criteria shown on the plans or in the special provisions.
3. No more than one type of pipe may be used on any single installation or installation grouping.
4. All structural plate pipes shall be placed on a pre-shaped foundation conforming to the depth of the bottom plates with clearance for assembling to the adjacent plates allowed.
5. See Standard Drawing "Culvert Pipe & Arch Installation Details" for foundation and structural backfill details.
6. Minimum cover shall be measured from the top of pipe to the top of rigid pavement or to the top of flexible pavement subgrade. In all cases, the minimum cover shall not be less than 12". Minimum cover during construction shall be that required to protect the pipe from damage or deflection.
7. These tables have been developed for an H-20 live load and for compacted soil weighing 120 lbs. per cubic foot or less. If compacted soil cover exceeds 120 lbs. per cubic foot, the contractor shall use the depth of cover shown in the plans for the specific pipe. Where compacted soil cover exceeds 120 lbs. per cubic foot and no specific cover requirements are provided in the plans, the contractor shall determine the required minimum pipe cover in accordance with Section 12 of the 2000 AASHTO "LRFD Bridge Design Specifications".

Minimum & Maximum Cover For 9" x 2 1/2" Aluminum Structural Plate Pipe *																						
GAGE		0.100"			0.125"			0.150"			0.175"			0.200"			0.225"			0.250"		
Dia. (In)	Min. (In)	Max. (Ft)	Min. (In)	Max. (Ft)	Min. (In)	Max. (Ft)	Min. (In)	Max. (Ft)	Min. (In)	Max. (Ft)	Min. (In)	Max. (Ft)	Min. (In)	Max. (Ft)	Min. (In)	Max. (Ft)	Min. (In)	Max. (Ft)	Min. (In)	Max. (Ft)		
60	12	29 31	12	38 45	12	49 60	12	58 70	12	58 81	12	58 92	12	58 100+								
66	12	26 28	12	35 41	12	44 54	12	53 64	12	53 74	12	53 84	12	53 94								
72	13	24 25	12	32 37	12	41 50	12	48 58	12	48 67	12	48 77	12	48 86								
78	14	22 23	12	29 35	12	37 46	12	45 54	12	45 62	12	45 71	12	45 79								
84	15	20 22	13	27 32	12	35 42	12	41 50	12	41 58	12	41 66	12	41 73								
90	16	19 20	14	25 30	13	32 40	12	39 47	12	39 54	12	39 61	12	39 68								
96	17	18 19	15	24 28	14	30 37	13	36 44	12	36 50	12	36 57	12	36 64								
102	18	17 18	16	22 26	15	29 35	14	34 41	13	34 47	13	34 54	13	34 60								
108	19	16 17	17	21 25	16	27 33	14	32 39	14	32 45	14	32 51	14	32 57								
114	20	15 16	18	20 23	16	25 31	15	30 37	15	30 42	15	30 48	15	30 54								
120	21	14 15	19	19 22	17	24 30	16	29 35	15	29 40	15	29 46	15	29 51								
126	22	13 14	20	18 21	18	23 28	17	27 33	16	27 38	16	27 44	16	27 49								
132	23	13 14	21	17 20	19	22 27	18	26 32	17	26 37	17	26 42	17	26 47								
138	24	12 13	22	16 19	20	21 26	18	25 30	18	25 35	18	25 40	18	25 44								
144	25	12 12	22	16 18	21	20 25	19	24 29	18	24 33	18	24 38	18	24 43								
150			23	15 18	21	19 24	20	23 28	19	23 32	19	23 36	19	23 41								
156			24	14 17	22	18 23	21	22 27	20	22 31	20	22 35	20	22 39								
162					23	18 22	21	21 26	21	21 30	21	21 34	21	21 38								
168					24	17 21	22	20 25	21	20 29	21	20 33	21	20 36								
174					25	17 20	23	20 24	22	20 28	22	20 31	22	20 35								
180							24	19 23	23	19 27	23	19 30	23	19 34								

\*Longitudinal seams use (5 1/3) 3/4" dia. bolts per foot.

58  
100+  
Upper figure for pipe with aluminum bolts.  
(FOR TABLE ABOVE ONLY.)  
Lower figure for pipe with galvanized steel bolts.

Minimum & Maximum Cover For 3" x 1" Aluminum Pipe														
GAGE		0.060"			0.075"		0.105"		0.135"		0.164"			
Dia. (In)	Min. (In)	Max. (Ft)	Min. (In)	Max. (Ft)	Min. (In)	Max. (Ft)	Min. (In)	Max. (Ft)	Min. (In)	Max. (Ft)	Min. (In)	Max. (Ft)		
30	12	52	12	65										
36	12	43	12	54	12	100+	12	100+	12	100+				
42	12	36	12	46	12	65	12	100+	12	100+				
48	12	32	12	40	12	57	12	73	12	100+				
54	15	28	15	35	15	50	12	65	12	100+				
60	15	25	15	32	15	45	15	58	15	72				
66	18	23	18	28	18	41	18	53	18	65				
72	18	21	18	26	18	37	18	48	18	59				
78			21	24	21	34	21	44	21	55				
84					21	31	21	41	21	57				
90					24	29	24	38	24	47				
96					24	27	24	36	24	44				
102							24	33	24	41				
108							24	31	24	39				
114										24	37			
120										24	35			

Minimum & Maximum Cover For 2 2/3" x 1/2" Aluminum Pipe													
GAGE	0.060"		0.075"		0.105"		0.135"		0.164"				
Dia. (In)	Min. (In)	Max. (Ft)	Min. (In)	Max. (Ft)	Min. (In)	Max. (Ft)	Min. (In)	Max. (Ft)	Min. (In)	Max. (Ft)			
12	12	100+	12	100+	12	100+	12	100+	12	100+			
15	12	94	12	100+	12	100+	12	100+	12	100+			
18	12	75	12	94	12	100+	12	100+	12	100+			
21	12	65	12	82	12	100+	12	100+	12	100+			
24	12	56	12	71	12	99	12	100+	12	100+			
27	12	48	12	63	12	89	12	100+	12	100+			
30			12	56	12	79	12	100+	12	100+			
36			12	47	12	66	12	85	12	100+			
42			12	55	12	56	12	73	12	100+			
48			12	47	12	49	12	63	12	78			
54					15	43	15	56	15	69			
60							15	50	15	62			
66							18	44	18	56			
72									18	45			

CORRUGATED CIRCULAR ALUMINUM PIPE

CORRUGATED ALUMINUM PIPE-ARCH

Minimum & Maximum Cover For 2 2/3" x 1/2" Aluminum Pipe-Arch						
				Max. Cover (Ft)		
Span x Rise (In. x In.)	Corner Radius (In)	Minimum Gage (In)	Min. Cover (In)	2 Tons Corner Bearing Pressure	3 Tons Corner Bearing Pressure	@
17 x 13	3	0.060	12	13	20	
21 x 15	3	0.060	12	12	19	
24 x 18	3	0.060	12	11	16	
28 x 20	3	0.075	12	10	16	
35 x 24	3	0.075	12	9	14	
42 x 29	3 1/2	0.105	12	7	13	
49 x 33	4	0.105	15	6	12	
57 x 38	5	0.135	15	6	12	
64 x 43	6	0.135	18	6	12	
71 x 47	7	0.164	18	6	12	

Minimum & Maximum Cover For 3" x 1" Aluminum Pipe-Arch						
				Max. Cover (Ft)		
Span x Rise (In. x In.)	Corner Radius (In)	Minimum Gage (In)	Min. Cover (In)	2 Tons Corner Bearing Pressure	3 Tons Corner Bearing Pressure	@
40 x 31	5	0.075	30	8	12	
46 x 36	6	0.075	24	8	13	
53 x 41	7	0.075	24	8	13	
60 x 46	8	0.075	24	13	20	
66 x 51	9	0.075	18	13	20	
73 x 55	12	0.075	18	16	24	
81 x 59	14	0.105	18	14	22	
87 x 63	14	0.105	18	13	20	
95 x 67	16	0.105	18	12	18	
103 x 71	16	0.135	24	11	17	
112 x 75	18	0.164	24	10	16	
117 x 79	18	0.164	24	10	15	

Minimum & Maximum Cover For 9" x 2 1/2" Aluminum Structural Plate Pipe-Arch*						
Span x Rise (Ft-In x Ft-In)	Corner Radius (In)	Minimum Gage (In)	Min. Cover (ft)	Max. Cover in Feet For Soil Bearing Capacity of:		
				2 Tons/ft²	3 Tons/ft²	
5 - 11 x 5 - 5	31.8	0.100	2	24**	24**	
6 - 11 x 5 - 9	31.8	0.100	2	22**	22**	
7 - 3 x 5 - 11	31.8	0.100	2	20**	20**	
7 - 9 x 6 - 0	31.8	0.100	2	28**	18 **	
8 - 5 x 6 - 3	31.8	0.100	2	17 **	17 **	
9 - 3 x 6 - 5	31.8	0.100	2	15 **	15 **	
10 - 3 x 6 - 9	31.8	0.100	2	14 **	14 **	
10 - 9 x 6 - 10	31.8	0.100	2	13 **	13 **	
11 - 5 x 7 - 1	31.8	0.100	2	12 **	12 **	
12 - 7 x 7 - 5	31.8	0.125	2	14	16 **	
12 - 11 x 7 - 6	31.8	0.150	2	13	14 **	
13 - 1 x 8 - 2	31.8	0.150	2	13	18 **	
13 - 11 x 8 - 5	31.8	0.150	2	12	17 **	
14 - 8 x 9 - 8	31.8	0.175	2	12	18	
15 - 4 x 10 - 0	31.8	0.175	2	11	17	
16 - 1 x 10 - 4	31.8	0.200	2	10	16	
16 - 9 x 10 - 8	31.8	0.200	2.17	10	15	
17 - 3 x 11 - 0	31.8	0.225	2.25	10	15	
18 - 0 x 11 - 4	31.8	0.255	2.25	9	14	
18 - 8 x 11 - 8	31.8	0.250	2.33	9	14	

\*Longitudinal seams use (5 1/3) 3/4" dia. bolts per foot.

\*\*Fill limited by the seam strength of the bolts. 3/4" dia. bolts per foot.

METAL THICKNESSES & GAGES	
ALUMINUM	GAGE NO. (For Info Only)
0.060	16
0.075	14
0.105	12
0.135	10
0.164	8

This column shall not be used unless specified on the plans or approved by the Regional Geotechnical Engineer.

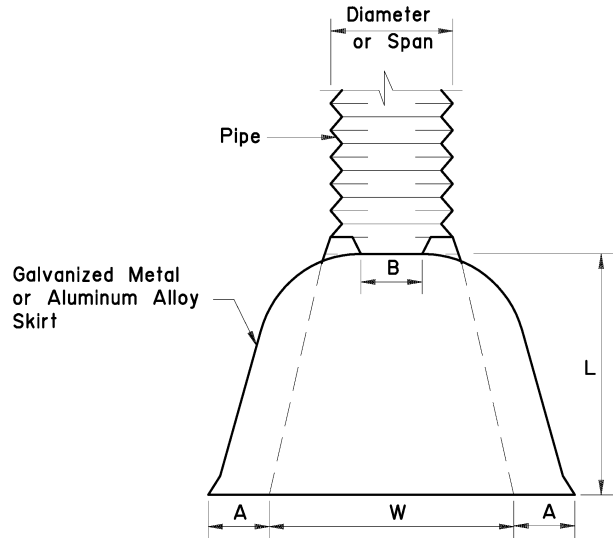
REVISIONS		
Date	Description	By
8/10/00	Pipe Tables & G. Notes.	DFD
10/31/03	Pipe Table Updates & New Sheet 4	LRG

Sheet 1 of 4

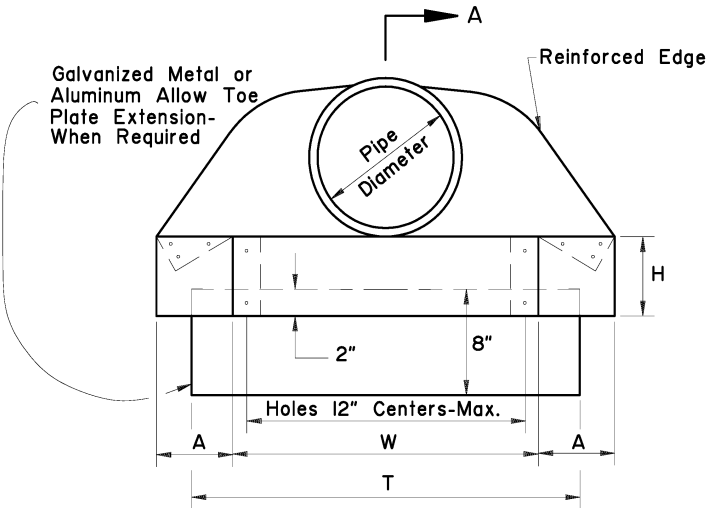
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Department of Transportation  
& Public Facilities

PIPE AND ARCH TABLES

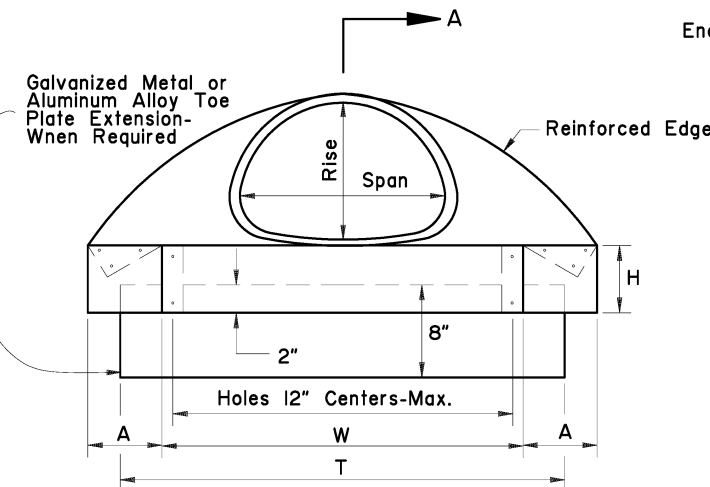




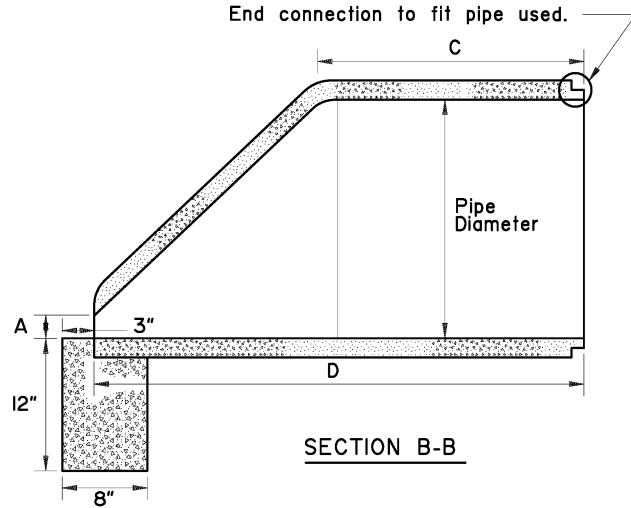
PLAN  
ROUND AND PIPE ARCH



ELEVATION  
ROUND PIPE

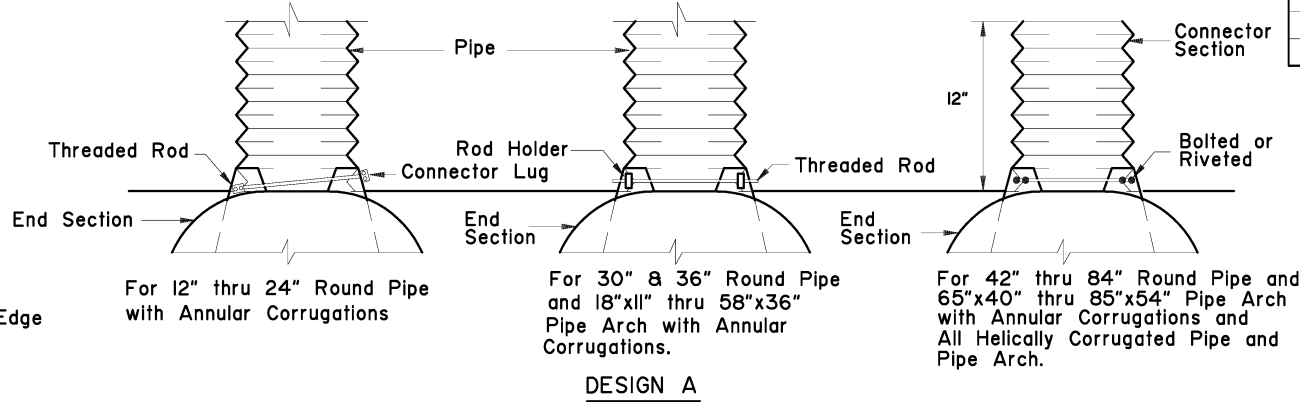
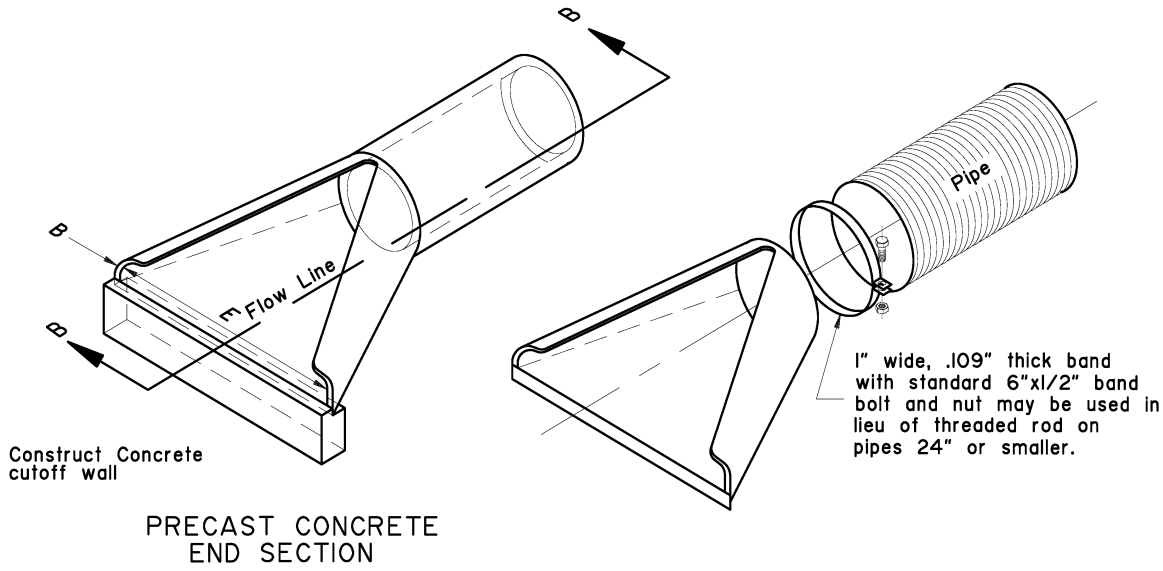


ELEVATION  
PIPE ARCH

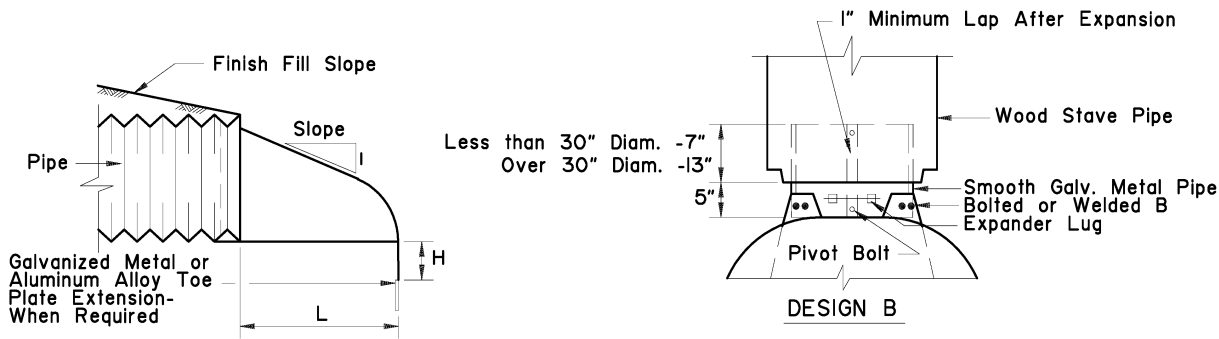


SECTION B-B

MINIMUM DIMENSIONS					
Pipe Diameter	A	B	C	D	E
12"	4"	1 3/4"	24"	46"	24"
18"	9"	2"	25"	50"	36"
24"	9 1/2"	2 1/2"	30"	72"	48"
30"	12"	3"	20"	73"	60"
36"	15"	3 3/8"	35"	97"	72"
42"	21"	3 3/4"	35"	98"	78"
48"	24"	4 1/4"	26"	98"	84"
54"	27"	4 5/8"	33"	99"	82"



DESIGN A



METAL END SECTION CONNECTED TO WOOD STAVE PIPE

ROUND PIPE										
Pipe Diam. Inches	Thickness For Aluminum	Thk. for Galv. Metal	Dimension Inches						Skirt	Approx. Slope
			1" A Tol.	B Max.	1" H Tol.	1 1/2" L Tol.	2" W Tol.	2" T Tol.		
12"	0.060	0.064	6"	6"	6"	21"	24"	34"	1 Pc.	2 1/2
15"	0.060	0.064	7"	8"	6"	26"	30"	40"	1 Pc.	2 1/2
18"	0.060	0.064	8"	10"	6"	31"	36"	46"	1 Pc.	2 1/2
21"	0.060	0.064	9"	12"	6"	36"	42"	52"	1 Pc.	2 1/2
24"	0.075	0.064	10"	13"	6"	41"	48"	58"	1 Pc.	2 1/2
30"	0.075	0.079	12"	16"	8"	51"	60"	70"	1 Pc.	2 1/2
36"	0.105	0.079	14"	19"	9"	60"	72"	94"	2 Pc.	2 1/2
42"	0.105	0.109	16"	22"	11"	69"	84"	106"	2 Pc.	2 1/2
48"	0.105	0.109	18"	27"	12"	78"	90"	112"	2 Pc.	2 1/4
54"	0.105	0.109	18"	30"	12"	84"	102"	122"	2 Pc.	2 1/4
60"	0.135	0.109	18"	33"	12"	87"	114"	134"	3 Pc.	2 1/4
66"	0.135	0.109	18"	36"	12"	87"	120"	142"	3 Pc.	2 1/4
72"	0.135	0.109	18"	39"	12"	87"	126"	146"	3 Pc.	2 1/4
78"	— —	0.109	18"	42"	12"	87"	132"	152"	3 Pc.	1 1/4
84"	— —	0.109	18"	45"	12"	87"	138"	158"	3 Pc.	1 1/6

PIPE-ARCH											
Pipe-Arch Dimension Inches		Thickness for Aluminum	Thk. for Galv. Metal	Dimension Inches						Skirt	Approx. Slope
				A 1" Tol.	B Max.	H 1" Tol.	L 1 1/2" Tol.	W 2" Tol.	T 2" Tol.		
Span	Rise										
17"	13"	0.060	0.064	7"	9"	6"	19"	30"	40"	1 Pc.	2 1/2
21"	15"	0.060	0.064	7"	10"	6"	23"	36"	46"	1 Pc.	2 1/2
24"	18"	0.060	0.064	8"	12"	6"	28"	42"	52"	1 Pc.	2 1/2
28"	20"	0.075	0.064	9"	14"	6"	32"	48"	58"	1 Pc.	2 1/2
35"	24"	0.075	0.079	10"	16"	6"	39"	60"	70"	1 Pc.	2 1/2
42"	29"	0.105	0.079	12"	18"	8"	46"	75"	85"	1 Pc.	2 1/2
49"	33"	0.105	0.109	13"	21"	9"	53"	85"	103"	2 Pc.	2 1/2
57"	38"	0.105	0.109	18"	26"	12"	63"	90"	114"	2 Pc.	2 1/2
64"	43"	0.105	0.109	18"	30"	12"	70"	102"	130"	2 Pc.	2 1/4
71"	47"	0.135	0.109	18"	33"	12"	77"	114"	144"	3 Pc.	2 1/4
77"	52"	0.135	0.109	18"	36"	12"	84"	120"	158"	3 Pc.	2 1/4
83"	57"	0.135	0.109	18"	39"	12"	90"	126"	170"	3 Pc.	2 1/4

GENERAL NOTES:

- Toe plate extensions will be required only when provided for on the plans. When required, the toe plate extensions shall be punched with holes to match those in lip of skirt and fastened with 3/8 inch or larger galvanized nuts and bolts and shall be the same gage as the end section.
- Galvanized Metal or Aluminum Alloy End Sections may be used on Wood Stave and Plastic Pipe.
- All 3 piece bodies shall have 12 gage sides and 10 gage center panels. Multiple panel bodies shall have lap seams which are to be tightly joined by 3/8" galvanized rivets or bolts.

REVISIONS		
Date	Description	By
3/1/83	Arch Dimensions	WJF/HK
8/10/00	Note 2	DFD

Sheet 1 of 3

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CULVERT END SECTIONS



Date 7/15/82

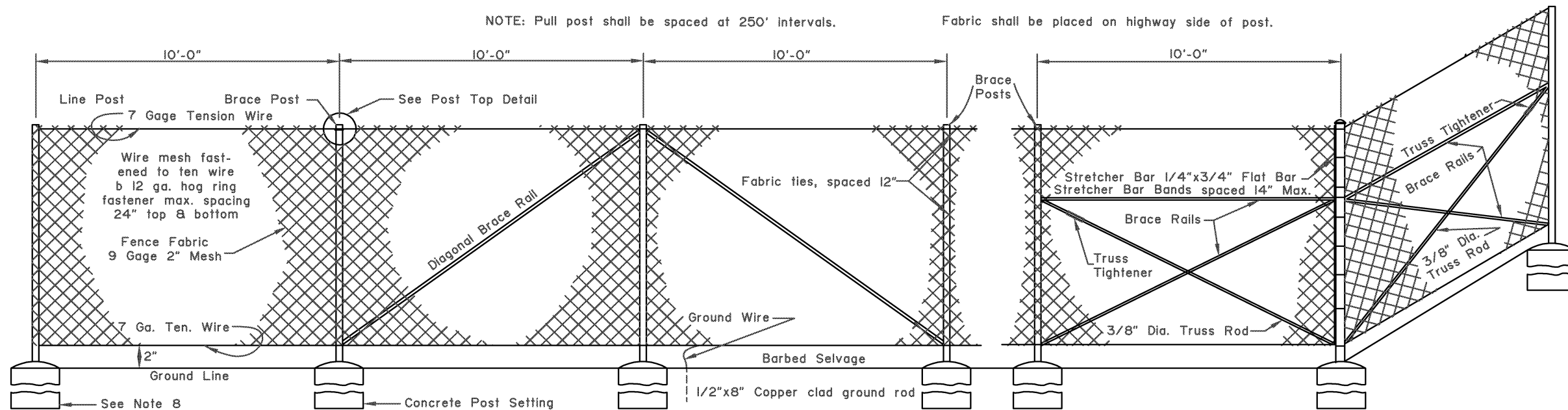


## GENERAL NOTES:

1. Posts shall be spaced equal distances apart. Maximum spacing shall be 10 feet unless directed otherwise by the Engineer.
2. Post tops shall be securely fastened to post.
3. Brace rails and truss rods shall be securely fastened to post with brace bands with threaded take-up adaptor for truss rods.
4. Ground wire shall be attached to fence fabric by means of a split bolt.
5. Fabric shall be stretched to a smooth uniform appearance.
6. Details shown indicate general design and dimensions may vary among manufacturers.
7. For fence gate details, see Standard Drawing Chain Link Fence Gate.
8. Line post shall be set in concrete unless shown otherwise on the plans.

NOTE: Pull post shall be spaced at 250' intervals.

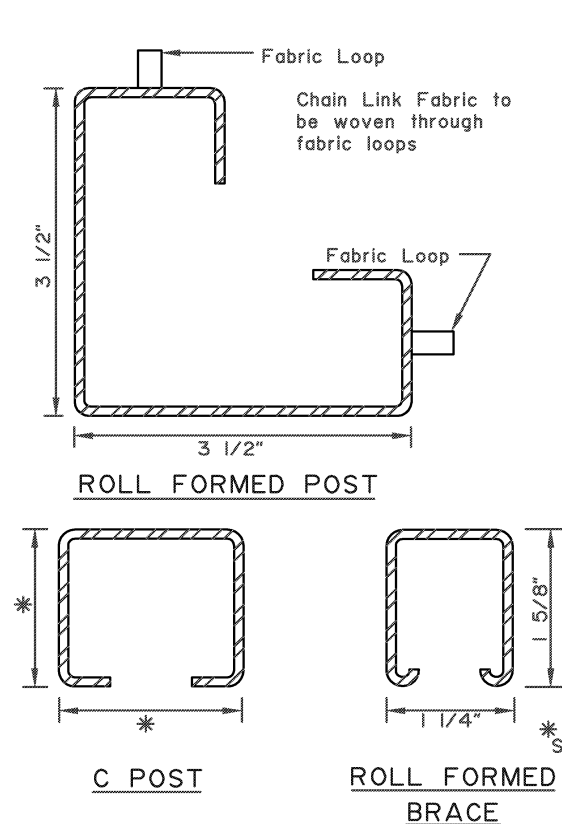
Fabric shall be placed on highway side of post.



TYPICAL FENCE SECTION

TYPICAL PULL POST

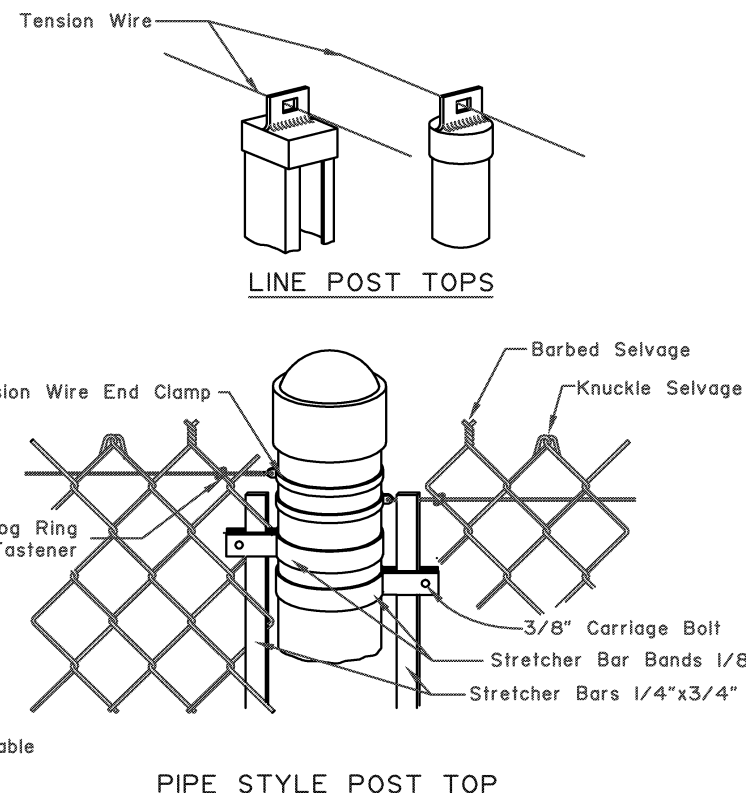
TYPICAL CORNER OR TERMINAL POST



ROLL FORMED POST

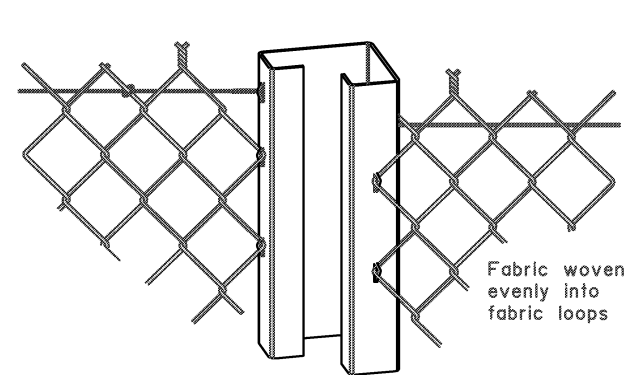
C POST

ROLL FORMED  
BRACE

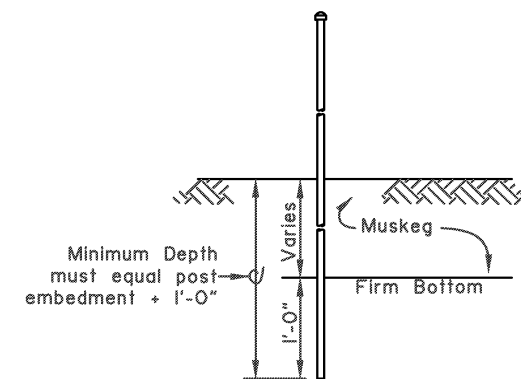


LINE POST TOPS

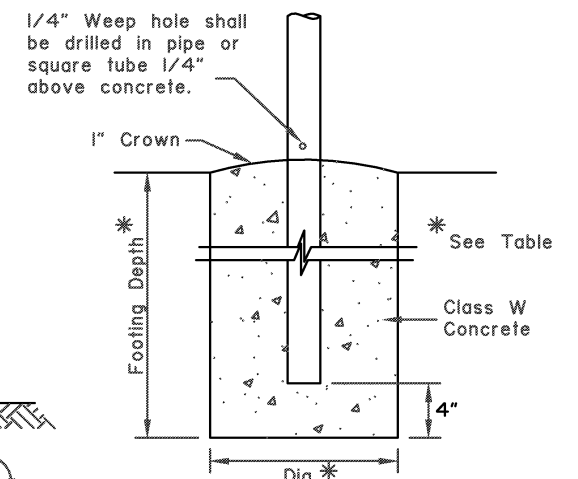
PIPE STYLE POST TOP



ROLL FORMED POST TOP

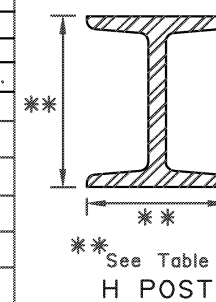


POST SETTING IN MUSKEG AREAS



CONCRETE POST SETTING

FABRIC HEIGHT	POST														TOP OR BRACE RAIL						ALTERNATE POST	
	END-CORNER-PULL								LINE-BRACE												LINE-BRACE	
	PIPE		SQUARE TUBE		ROLL FORMED		FOOTING		PIPE		C POST		FOOTING		PIPE		ROLL FORMED		H POST		H POST	
	SIZE	WT./FT.	SIZE	WT./FT.	SIZE	WT./FT.	DEPTH	DIA.	SIZE	WT./FT.	SIZE	WT./FT.	DEPTH	DIA	SIZE	WT./FT.	SIZE	WT./FT.	SIZE	WT./FT.	SIZE	WT./FT.
3'	2"	3.65#	2" x 2"	4.31 #	3 1/2"x3 1/2"	4.84#	40"	10"	1 1/2"	2.72 #	1 7/8"x1 5/8"	2.28 #	28"	10"	1 1/4"	2.27#	1 5/8"	1.35#	1 1/2"x 1 5/16"	2.27 #	1 7/8"x1 5/8"	2.72 #
4'	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
5'	2"	3.65#	2" x 2"	4.31 #	3 1/2"x3 1/2"	4.84#	40"	10"	1 1/2"	2.72 #	1 7/8"x1 5/8"	2.28 #	28"	10"	"	"	"	"	"	"	1 7/8"x1 5/8"	2.72 #
6'	2 1/2"	5.79#	2 1/2"x2 1/2"	5.59#	3 1/2"x3 1/2"	4.84#	48"	15"	2"	3.65 #	2 1/4"x1 45/64"	2.64 #	40"	12"	"	"	"	"	"	"	2 1/4"x2"	4.1#
7'	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
8'	2 1/2"	5.79#	2 1/2"x2 1/2"	5.59#	3 1/2"x3 1/2"	4.84#	48"	15"	2"	3.65 #	2 1/4"x1 45/64"	2.64 #	40"	12"	"	"	"	"	"	"	2 1/4"x2"	4.1#



See Table  
H POST

REVISIONS		
Date	Description	By
3/1/83	Revised Gen. Notes	WJF/HK

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## CHAIN LINK FENCE

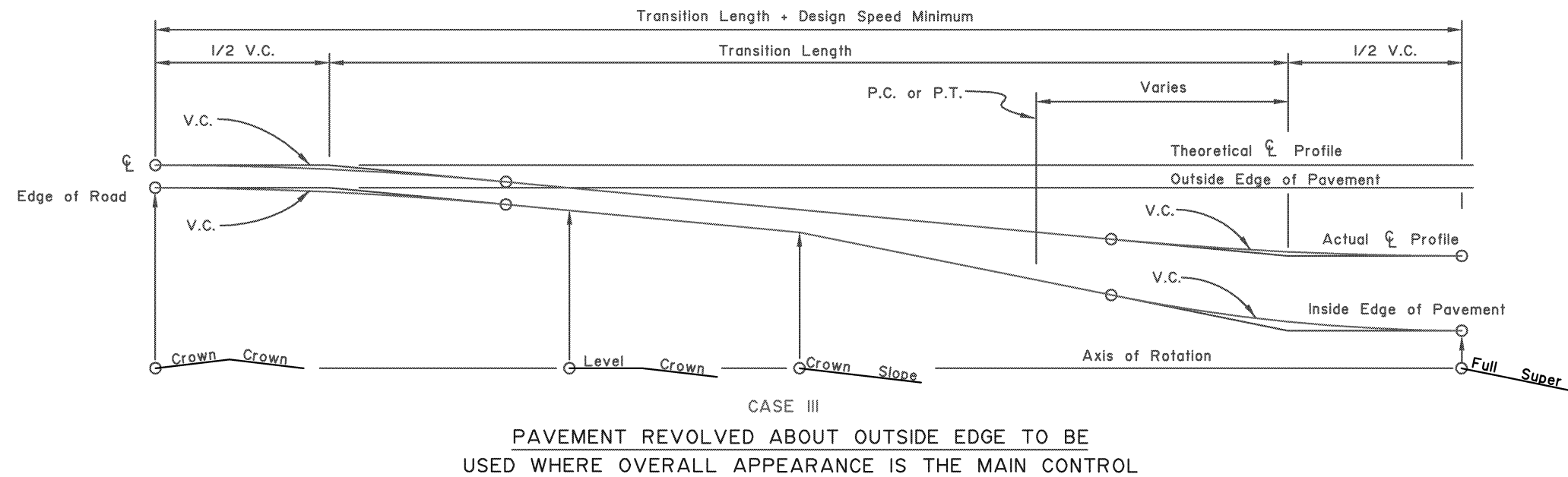
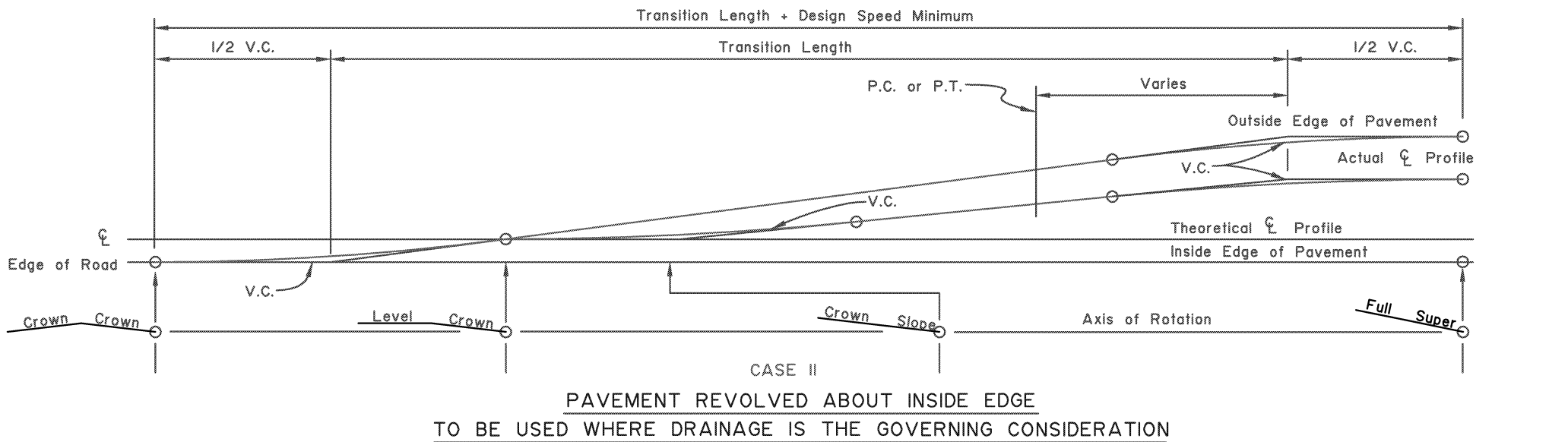
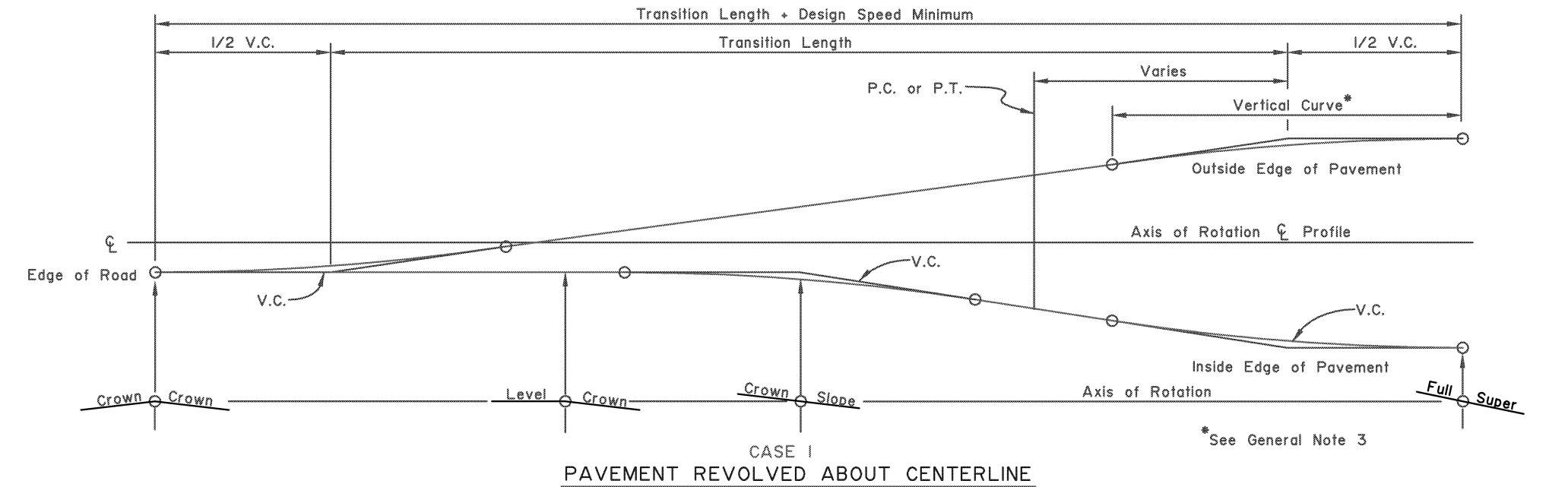


Date 7/15/82



GENERAL NOTES:

1. Location of transition length relative to horizontal curves will be shown on the plans or as directed by the Engineer.
2. Widening for guardrail or curvature will not change the location of the axis of rotation.
3. Minimum vertical curve length in feet shall be the numerical value of the design speed in M.P.H.
4. Superelevation shall be built into the subgrade and carried through the shoulders.



REVISIONS		
Date	Description	By

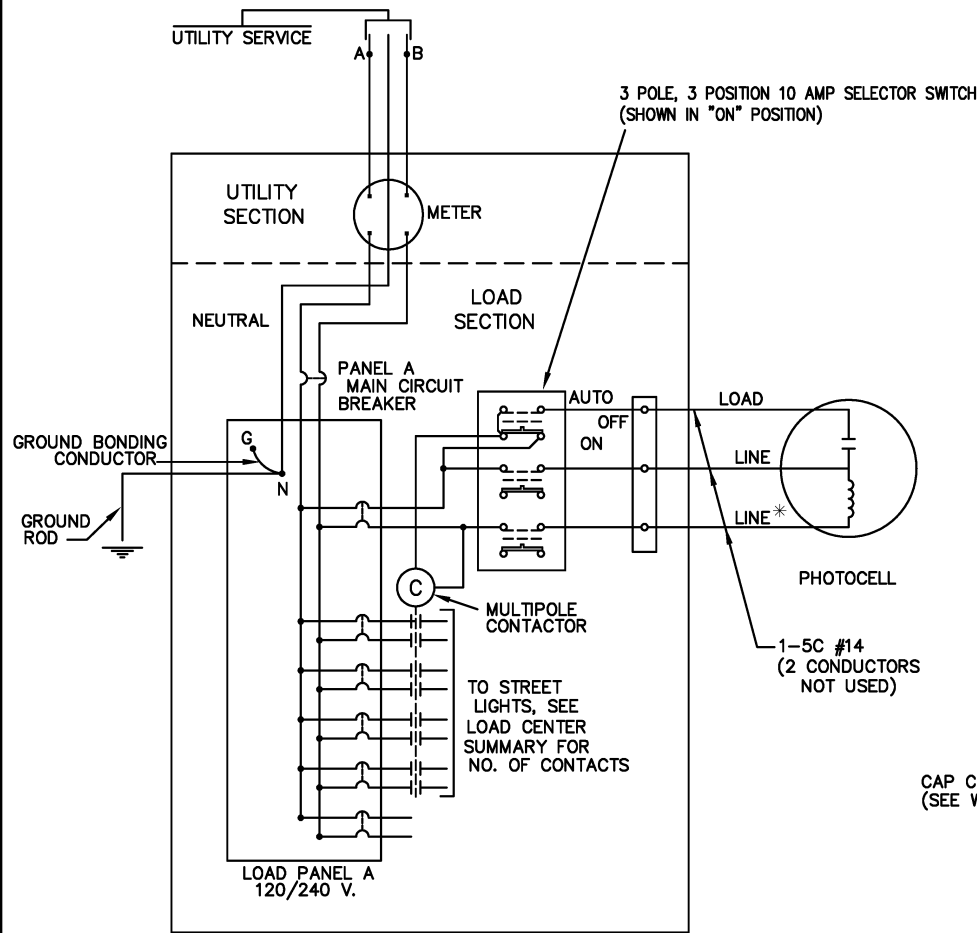
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Department of Transportation  
& Public Facilities

SUPERELEVATION  
TRANSITION

APPROVED  
49TH  
Loren L. Henderson  
05-3380

Date 12/1/87





LOAD CENTER ONE LINE DIAGRAM AND  
SELECTOR SWITCH WIRING

TYPE 2 & 3 LOAD CENTERS – USED FOR LIGHTING  
WITH PHOTOELECTRIC AND THERMOSTATIC CONTROLS

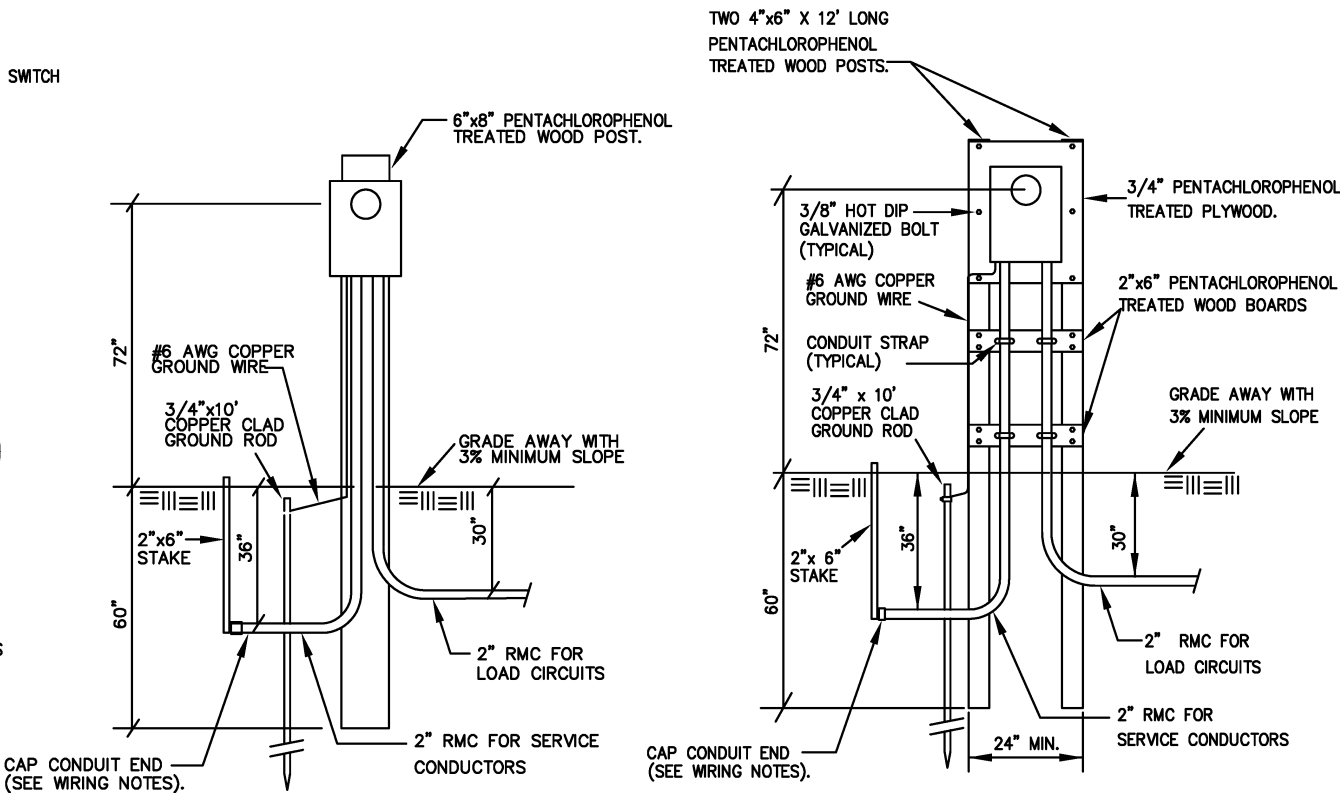
\* GROUNDED NEUTRAL, IF SERVICE IS 240/480 VOLT SINGLE  
PHASE OR 277/480 VOLT THREE-PHASE; AND UNDERGROUND LINE,  
IF SERVICE IS 120/240 VOLT SINGLE PHASE.

INSTALLATION NOTES:

1. INSTALL TYPE 3 LOAD CENTER POLES OF SUFFICIENT LENGTH TO PROVIDE THE FOLLOWING MINIMUM GROUND TO SERVICE CONDUCTOR CLEARANCE:
  - A. 21 FEET, IF THE SERVICE CONDUCTORS ARE LOCATED ABOVE ROADWAYS OR PARKING AREAS.
  - B. 28 FEET, IF THE SERVICE CONDUCTORS ARE LOCATED WITHIN 20 FEET OF A RAILROAD TRACK.
  - C. 18 FEET IN ALL OTHER CIRCUMSTANCES.
2. SET THE BUTT END OF TYPE 3 LOAD CENTER POLES TO THE FOLLOWING MINIMUM DEPTH:
  - A. 10 PERCENT OF ITS LENGTH PLUS 2 FEET, OR 5 FEET, WHICHEVER IS GREATER, IF IT IS INSTALLED IN EARTH OTHER THAN SOLID ROCK OR MUSKEG.
  - B. 10 PERCENT OF ITS LENGTH, OR 4 FEET, WHICHEVER IS GREATER, IF IT IS INSTALLED IN SOLID ROCK.
  - C. CONSIDER MUSKEG TO BE AIR, AND SET THE BUTT ENDS TO THE DEPTH GIVEN IN A OR B, WHICHEVER APPLIES, IN THE UNDERLYING EARTH OR ROCK.

WHENEVER MORE THAN TWO FEET OF EARTH OVERLAYS ROCK, OR THE DIAMETER OF THE DRILLED HOLE IN ROCK EXCEEDS TWICE THE DIAMETER OF THE POLE AT THE GROUND LINE, CONSIDER THE INSTALLATION AS EARTH.

3. ATTACH ALL CONDUITS TO THE POSTS AND POLES USING TWO HOLE RIGID METAL CONDUIT STRAPS LOCATED ON 24 INCH MAXIMUM CENTERS.
4. ATTACH ALL GROUND CONDUCTORS TO THE POSTS AND POLES USING CABLE STAPLES LOCATED ON 12 INCH CENTERS.

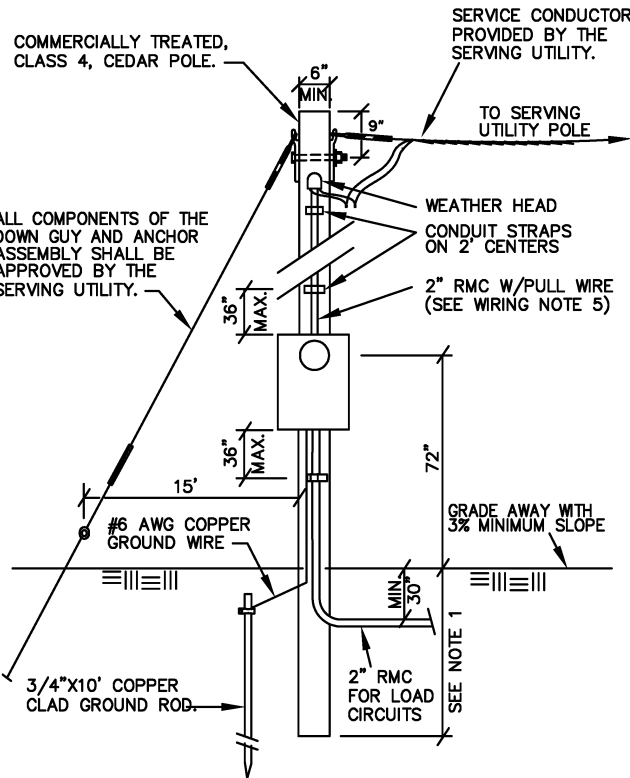


TYPE 2 LOAD CENTER  
SINGLE POST – STANDARD

TYPE 2 LOAD CENTER  
DUAL POST – ALTERNATE

WIRING NOTES:

1. FURNISH ALL EQUIPMENT NOTED IN THE LOAD CENTER SUMMARY, PLUS TWO 20-AMP 2-POLE SPARE CIRCUIT BREAKERS, AND SPACE FOR A MINIMUM OF TWO ADDITIONAL TWO-POLE CIRCUIT BREAKERS, IN EACH LOAD PANEL. SEE SUMMARIES FOR LOAD PANEL VOLTAGES, CURRENT RATINGS, SHORT CIRCUIT INTERRUPTING RATINGS, AND THE NAME OF THE SERVING UTILITY.
2. SIZE THE TYPE 2 AND 3 LOAD CENTER CABINETS TO HOLD THE EQUIPMENT SHOWN IN THE WIRING DIAGRAM AND DETAILED IN EACH LOAD CENTER SUMMARY, ALLOWING SPACE FOR WIRING PER THE NATIONAL ELECTRICAL CODE. INSTALLING A METER BASE AND MAIN BREAKER IN A SEPARATE ENCLOSURE IS ALLOWABLE. HOWEVER IN THIS CASE, FURNISH A BREAKER PANEL WITH A MAIN BREAKER.
3. LABEL ALL CIRCUIT BREAKERS AS TO FUNCTION AND POSITION. LABEL THE SELECTOR SWITCH "LIGHTING" AND ITS POSITIONS "ON-OFF-AUTO".
4. THE VOLTAGE FOR THE PHOTOELECTRIC CONTROL EQUIPMENT SHALL BE 240-VOLT, DERIVED FROM THE SERVICE VOLTAGE, OR FROM A CONTROL TRANSFORMER.
5. LABEL ALL CIRCUIT BREAKERS AS TO FUNCTION AND POSITION.
6. STORE A SCHEMATIC DIAGRAM, A CIRCUIT DIRECTORY, AND A MATERIALS LIST THAT INCLUDES THE MANUFACTURER'S NAME AND PART/CATALOG NUMBERS, ALL LAMINATED IN PLASTIC, IN A METAL POCKET ATTACHED TO THE INSIDE OF THE LOAD CENTER. INSTALL THE POCKET ON THE LOAD CENTER DOOR, PROVIDING DRAIN HOLES TO PREVENT WATER ACCUMULATION.
7. WHEN METAL HALIDE OR MERCURY VAPOR LAMPED FIXTURES ARE USED, PROVIDE A REMOTE BULB THERMOSTAT, SO THAT THE CONTACT CLOSSES AND THE LIGHTS TURN ON WHEN THE TEMPERATURE DROPS TO 15° FAHRENHEIT. WIRE THERMOSTAT SO THAT ITS CONTACT IS PARALLEL THE CONTACT IN THE PHOTOELECTRIC CELL.
8. USE THE SINGLE-POST TYPE 2 "STANDARD" LOAD CENTER IN ALL LOCATIONS EXCEPT WHERE THE SERVING UTILITY REQUIRES THE TWO-POST TYPE 2 "ALTERNATIVE" LOAD CENTER. REFER TO THE LOAD CENTER SUMMARY FOR WHICH TO INSTALL.
9. THE LENGTH AND TYPE OF SERVICE ENTRANCE CONDUIT INSTALLED BY THE CONTRACTOR VARIES BY UTILITY. REGARDLESS OF ITS LENGTH, INSTALL A PULL ROPE IN THE SERVICE CONDUIT AND A CAP ON THE BURIED END: MARK THE BURIED END WITH A 2"x 6" STAKE. SEE THE LOAD CENTER SUMMARIES FOR THE FOLLOWING INFORMATION.
  - A. STATION AND OFFSET OF THE LOAD CENTER AND POWER SOURCE.
  - B. WHERE THE CONTRACTOR TERMINATES THE SERVICE ENTRANCE CONDUIT.
  - C. THE TYPE OF SERVICE ENTRANCE CONDUIT (SUCH AS RIGID METAL CONDUIT OR LIQUID-TIGHT FLEXIBLE METAL CONDUIT).
  - D. THE MAXIMUM AND MINIMUM DISTANCES ALLOWED BETWEEN THE TYPE-3 LOAD CENTER POLE AND UTILITY POLE TO WHICH THE AERIAL DROP IS CONNECTED.



TYPE 3 LOAD CENTER

REVISIONS		
Date	Description	By

Sheet 1 of 1

State of Alaska  
Department of Transportation  
& Public Facilities

TYPE 2 AND 3  
LOAD CENTERS



Date 5/15/01



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 manufacture'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.

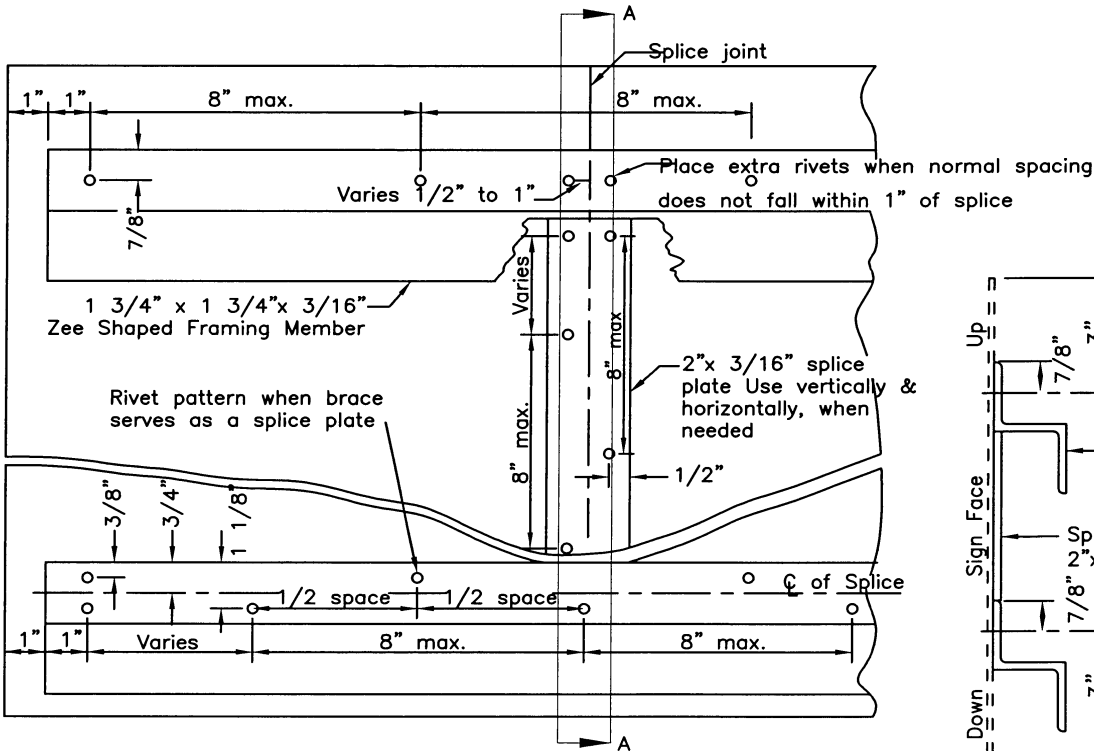
Pipe and Tube Sign Post Spacing			
Sign Width (W)	No. of Posts	Distance Between Posts	Sign Overhang
4.5 ft. to 10.0 ft.	2	0.6W	0.2W
10.5 ft. to 11.0 ft.	2	6.0 feet	Varies

W Shape Sign Post Spacing			
Sign Width (W)	No. of Posts	Distance Between Posts	Sign Overhang
11.5 ft to 13.0 ft	2	8.0 feet	Varies
13.5 ft to 20.0 ft	2	0.6W	0.2W
20.5 ft to 22.5 ft	3	8.0 feet	Varies
23.0 ft to 29.5 ft	3	0.35W	0.15W
30.0 ft to 31.5 ft	4	8.0 feet	Varies
32.0 ft to 40.0 ft	4	0.25W	0.125W

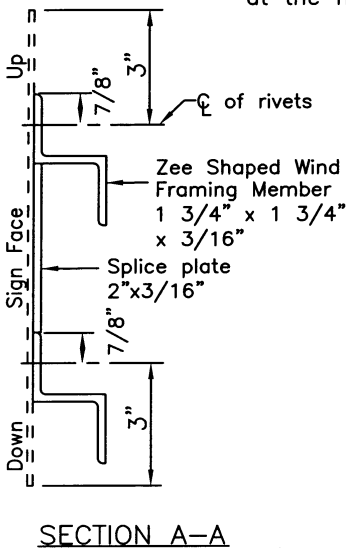
SIGN POST SPACING

SIGN POST SELECTION AND SPACING NOTES

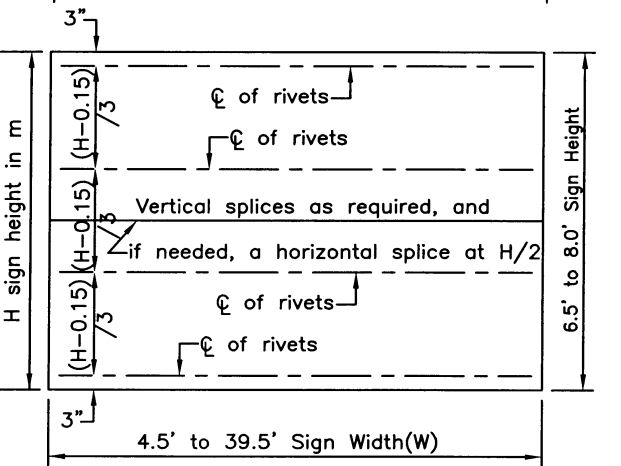
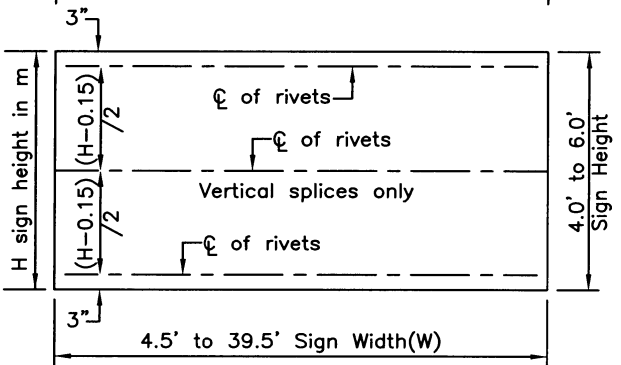
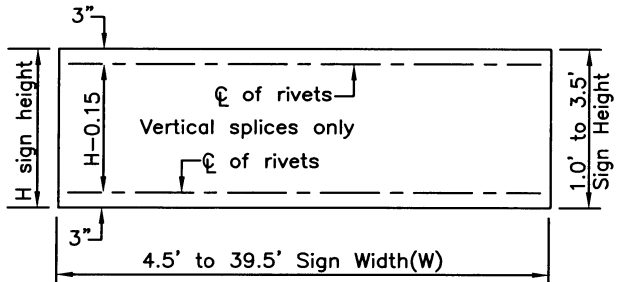
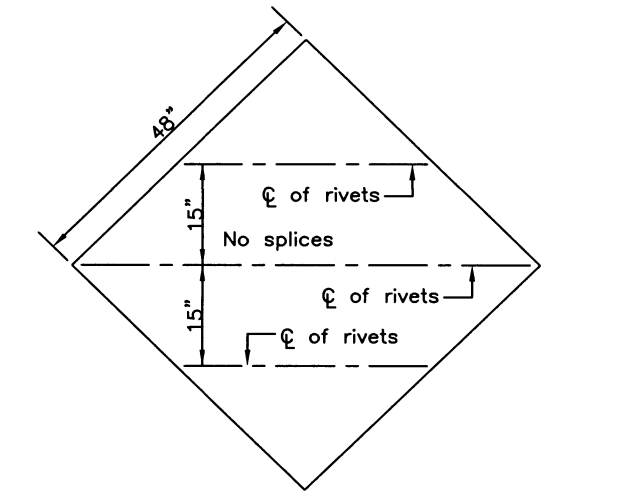
1. Use one tube (solid or perforated) to support all signs that measure 48" or less in width or diameter, diamond shaped signs that measure 48" or less on a side, Class T roadway route marker assemblies, and E5-1 gore signs. Do not use pipe posts for single post signs.
2. Install combination stop and street name signs on a 2-1/2" perforated tube.
3. Use two pipes spaced according to the Pipe and Tube Sign Post Spacing table to support signs too large for one post and not more than 11.0' in width. Tubes may be substituted for pipes provided the tube size equals the nominal pipe size.
4. Do not use perforated tubing larger than 2" for two post installations.
5. Use the number of W shape posts specified in the W Shape Sign Post table to support signs more than 11.0' in width.



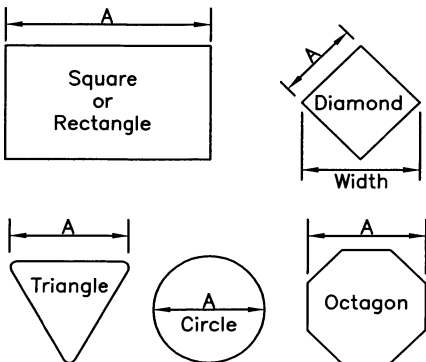
RIVET DETAIL FOR ZEE SHAPED WIND FRAMING & SPLICE PLATE



SECTION A-A



WIND FRAMING LOCATIONS



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.

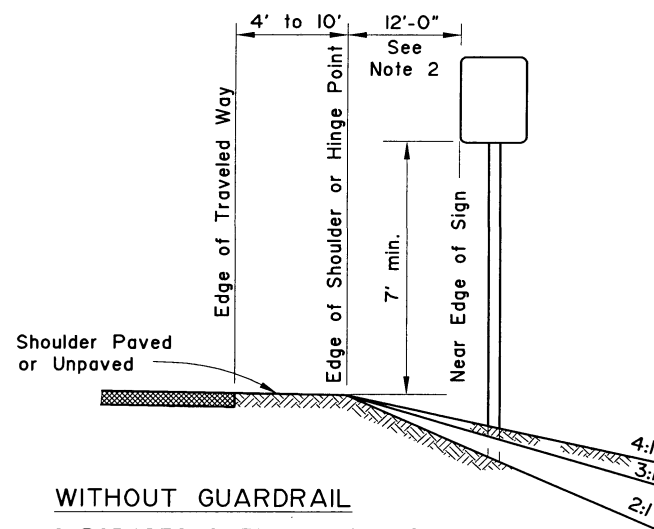
LIGHT SIGNS

REVISIONS		
Date	Description	By
Sheet 1 of 1		
State of Alaska Department of Transportation & Public Facilities		
SIGN FRAMING AND POST SPACING		
APPROVED		
Date	2/28/03	

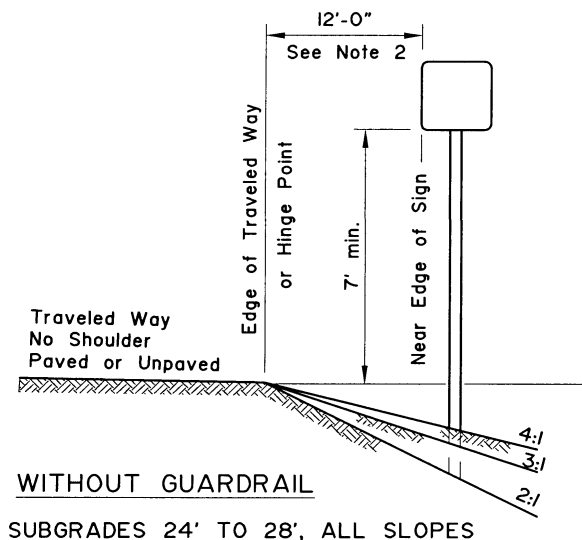


## GENERAL NOTES

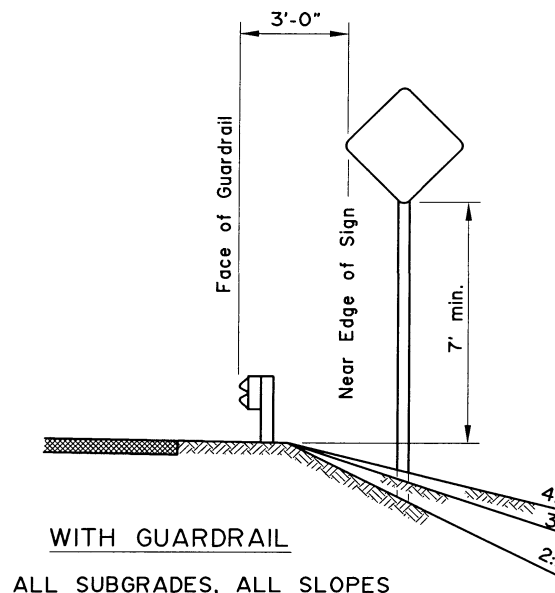
1. Unless shown otherwise on the plans, the standard sign offset is 12'. The minimum is 6'.
2. If signs extend over sidewalks, the minimum vertical clearance is 7'-0".
3. Add 6" to mounting height on unpaved roads.
4. If signs extend over bike paths, the minimum vertical clearance is 8' 0".
5. When signs 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.
6. When multiple hinged sign supports are used, mount hinges at least 7' above the ground.



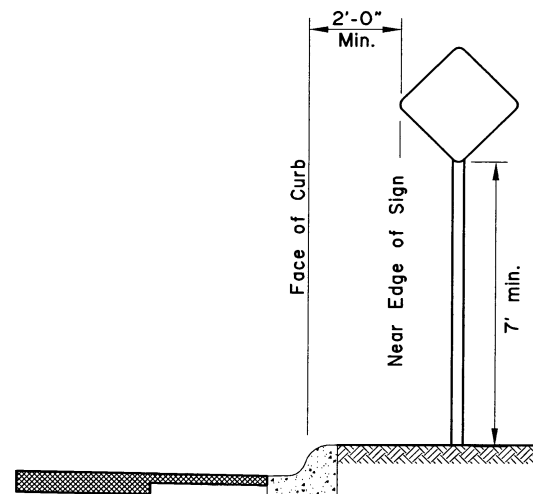
WITHOUT GUARDRAIL  
SUBGRADES OVER 28', ALL SLOPES



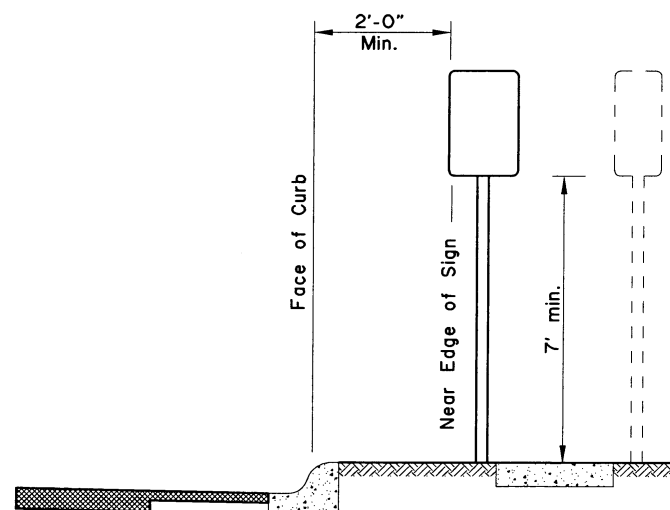
WITHOUT GUARDRAIL  
SUBGRADES 24' TO 28', ALL SLOPES



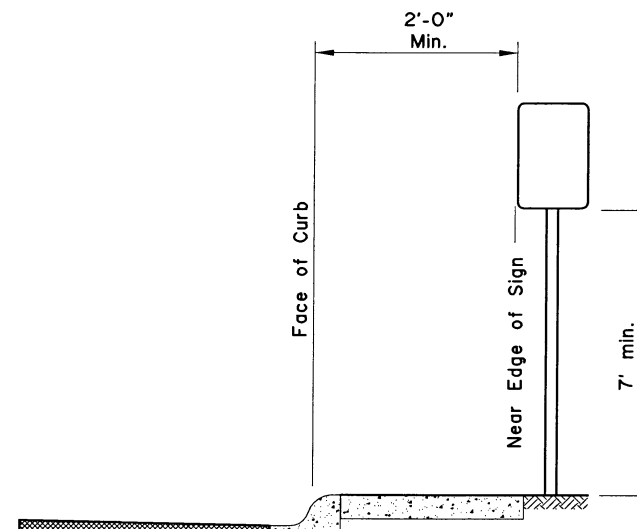
WITH GUARDRAIL  
ALL SUBGRADES, ALL SLOPES



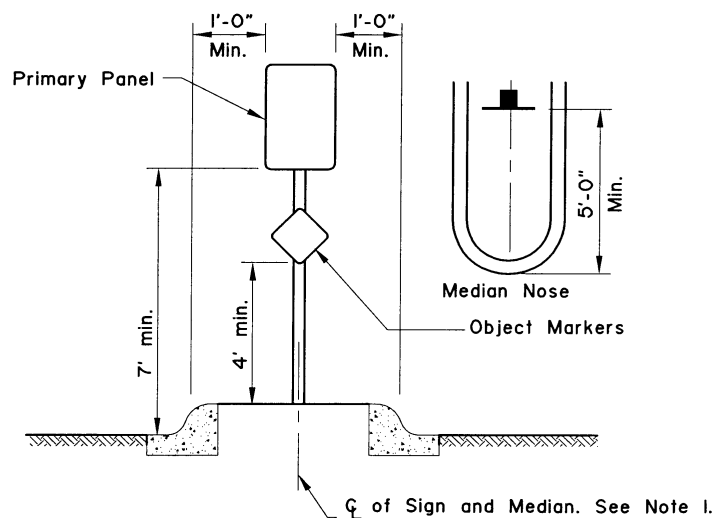
CURB WITHOUT SIDEWALK



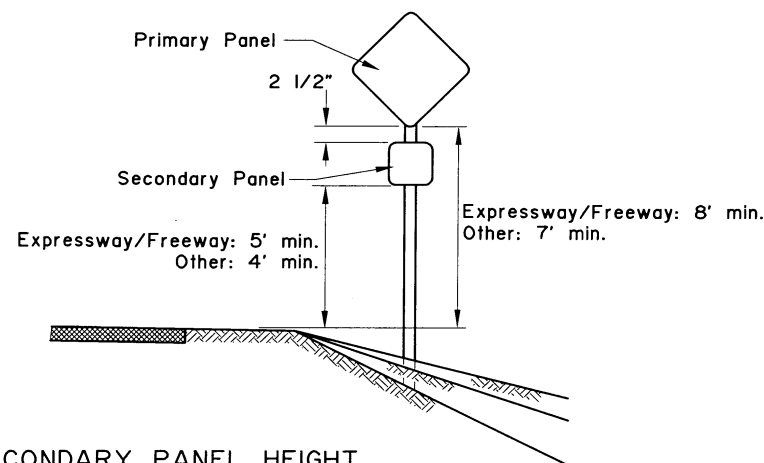
CURB WITH PARKWAY AND SIDEWALK  
(If R/W width permits, signs should be placed behind sidewalk.)



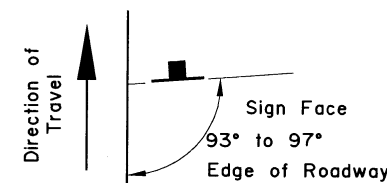
CURB WITH SIDEWALK WITHOUT PARKWAY



RAISED MEDIANS  
Minimum 4' Width for Signing



SECONDARY PANEL HEIGHT  
ALL TWO PANEL MOUNTING



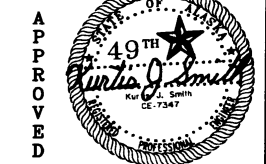
SIGN POSITIONING

REVISIONS		
Date	Description	By
4/3/01	Revised Sign Heights	KJS

Sheet 1 of 1

State of Alaska  
Department of Transportation  
& Public Facilities

POST MOUNTED SIGN  
OFFSET AND HEIGHT

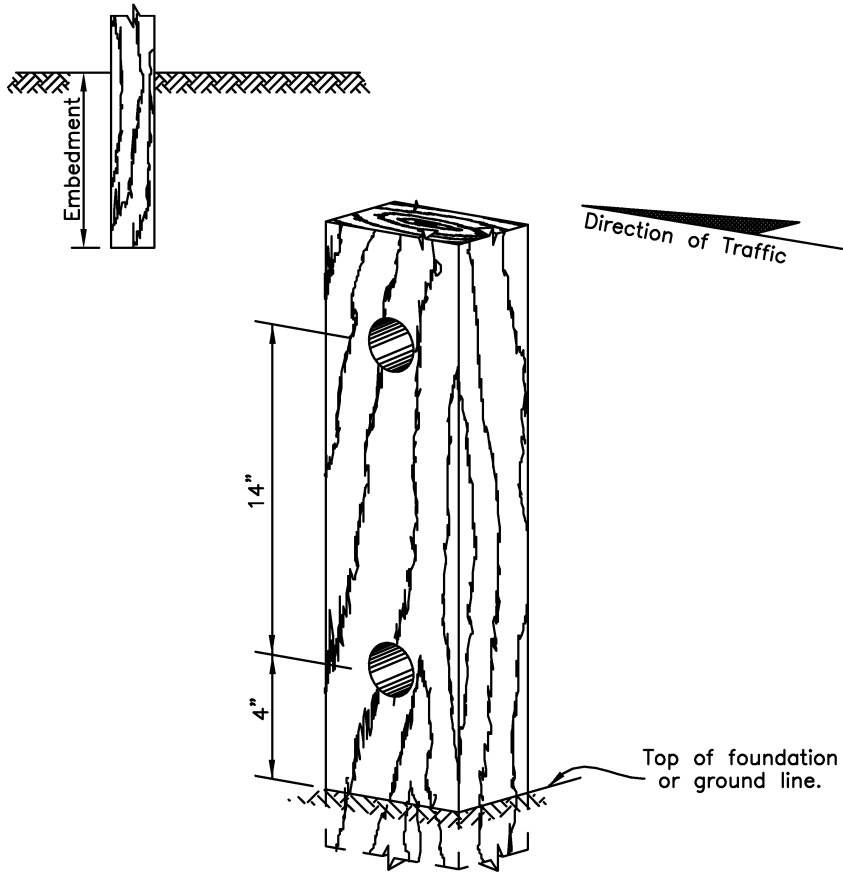


Date 7/15/82



GENERAL NOTES:

- 1. Refer to Standard Drawing "Sheet Aluminum Sign and Framing" for light sign 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. Do not install wood posts larger than 6"x8".
- 5. Use larger posts than shown on this sheet, with hinges, for multiple support signs where the supports are separated by more than 7 feet.

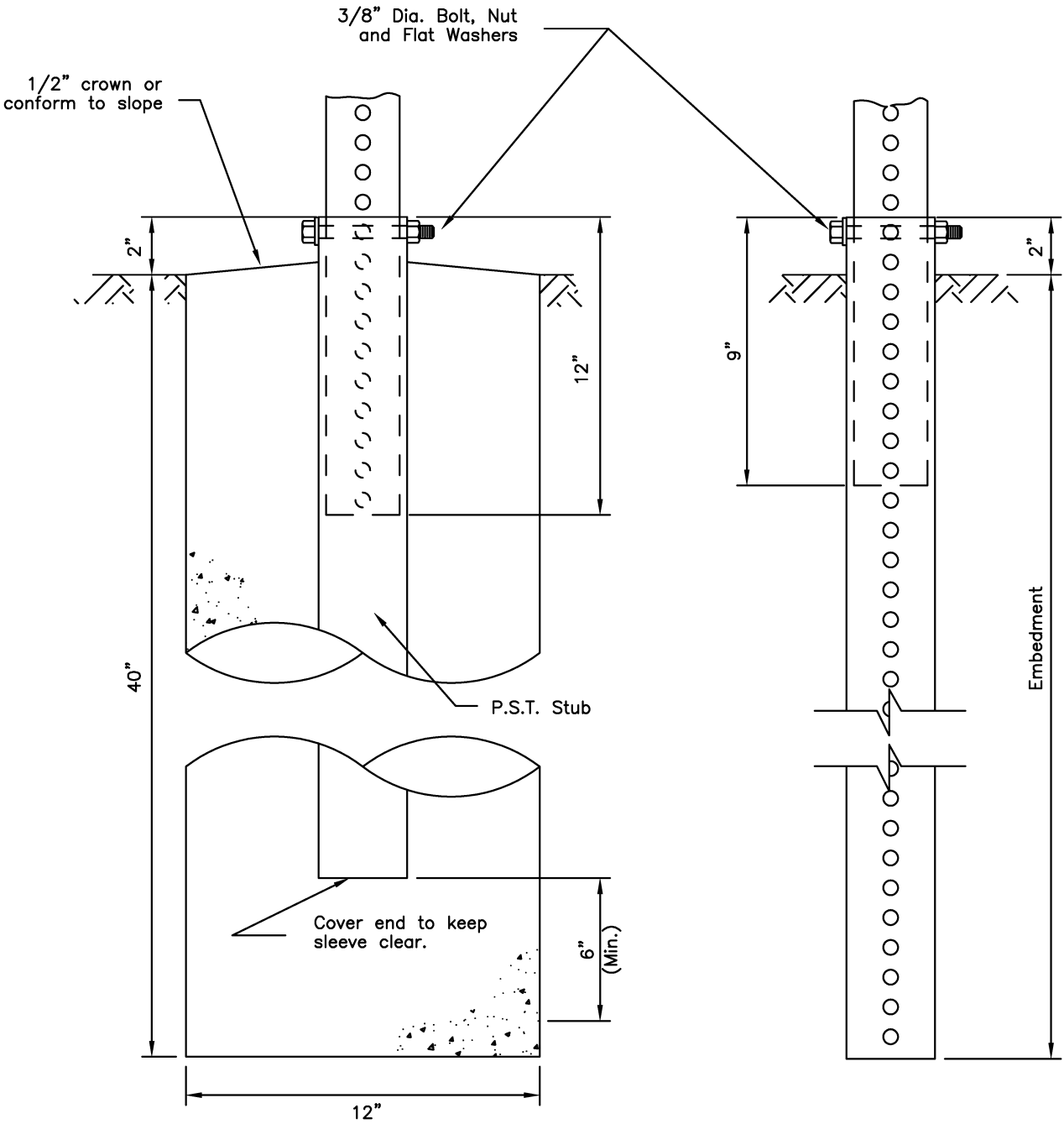


Note: If holes are field drilled after post has been treated, the holes shall be thoroughly swabbed with a 5% solution of pentachlorophenol and mineral spirits.

WOOD POSTS			
SIZE	HOLE DIA.	EMBEDMENT*	NUMBER OF POSTS WITHIN 7 Ft. PATH
4"x4"	NONE	36"	2
4"x6"	1 1/2"	36"	2
6"x6"	1 1/2"	40"	1
6"x8"	3"	48"	1

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

WOOD POSTS



SLEEVE TYPE  
-CONCRETE FOUNDATION-

SLEEVE TYPE \*  
-SOIL EMBEDMENT-

PERFORATED STEEL TUBES (P.S.T.) (12 ga. - .105" Wall Thickness)		
POST SIZE (inch)	Embedment Depth	No. of P.S.T.s permitted within 7 ft path
1 1/2" x 1 1/2"	3'-0"	2
1 3/4" x 1 3/4"	3'-0"	2
2" x 2"	3'-6"	2
2 1/4" x 2 1/4"	4'-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

REVISIONS		
Date	Description	By
1/1/85	Redraft-Delete Post	Gdo
4/2/01	Revised PST table	Kjs
	Added note 3	
2/12/02	Revised Wood Posts	Kjs

Sheet 1 of 1

State of Alaska  
Department of Transportation  
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LIGHT SIGN  
STRUCTURE POST  
EMBEDMENT



Date 7/15/82