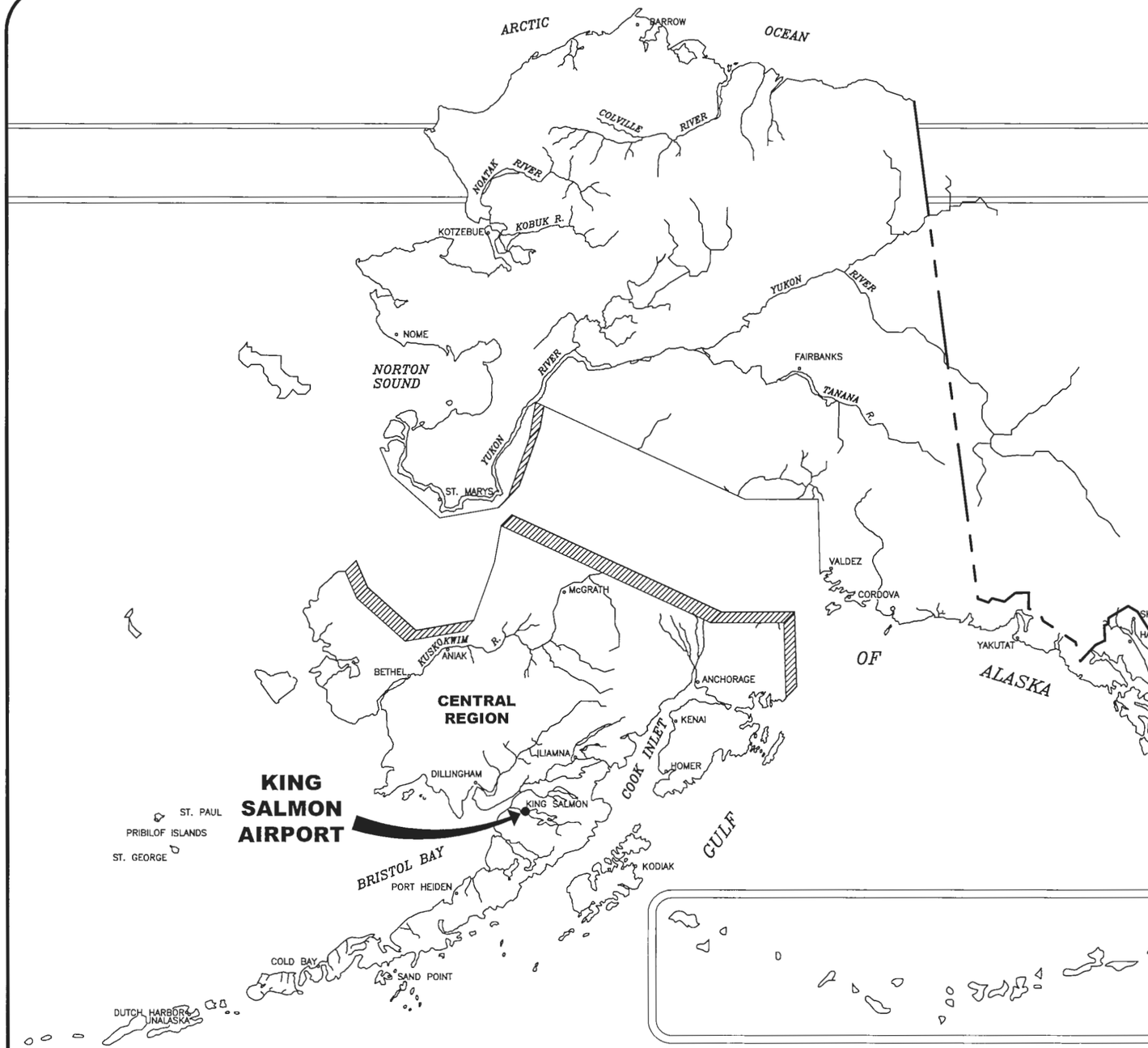


AS-BUILT

~~CONSTRUCTION PLANS~~ FOR

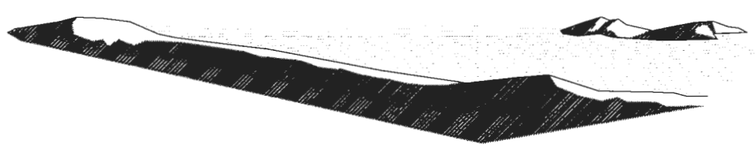
KING SALMON AIRPORT

KING SALMON, ALASKA
AIRPORT LIGHTING
PROJECT No. 52673
AIRPORT IMPROVEMENT PROGRAM
A.I.P. No. 3-02-0148-12-2011
2011

BID OPEN DATE:	MARCH 23, 2011
BID AMOUNT:	$6,109,623.00
FINAL AMOUNT:	$5,799,028.61
PROJECT ENGINEER:	LOUIE WEGGENER
AWARDED CONTRACTOR:	GRANITE CONSTRUCTION COMPANY
ADDRESS:	11471 LANG STREET ANCHORAGE, ALASKA 99515

AS-BUILT APPROVED
ANTHONY SPRAGUE, P.E.

DATE 8-25-14
CONSTRUCTION GROUP CHIEF



Data Plotted: November 19, 2010
Plot Ratio and Layout: 1=1, layout=cover
File: W:\Projects\King Salmon\AKN Lighting 2011\Asbuilt\DCV-AKN_LIGHTING.dwg 2014-8-22 15:09:45

Designed By:	AMS
Checked By:	BRH
Drawn By:	RDL

SPONSORED BY

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

CONCUR	DATE
ROBERT A. CAMPBELL, P.E.	DIRECTOR OF DESIGN AND CONSTRUCTION
APPROVED	DATE
K. KIM RICE, P.E.	REGIONAL PRECONSTRUCTION ENGINEER
APPROVED	DATE
HARVEY M. DOUTHIT, P.E.	DESIGN SECTION CHIEF
APPROVED	DATE
MORGAN P. MERRITT, P.E.	PROJECT MANAGER

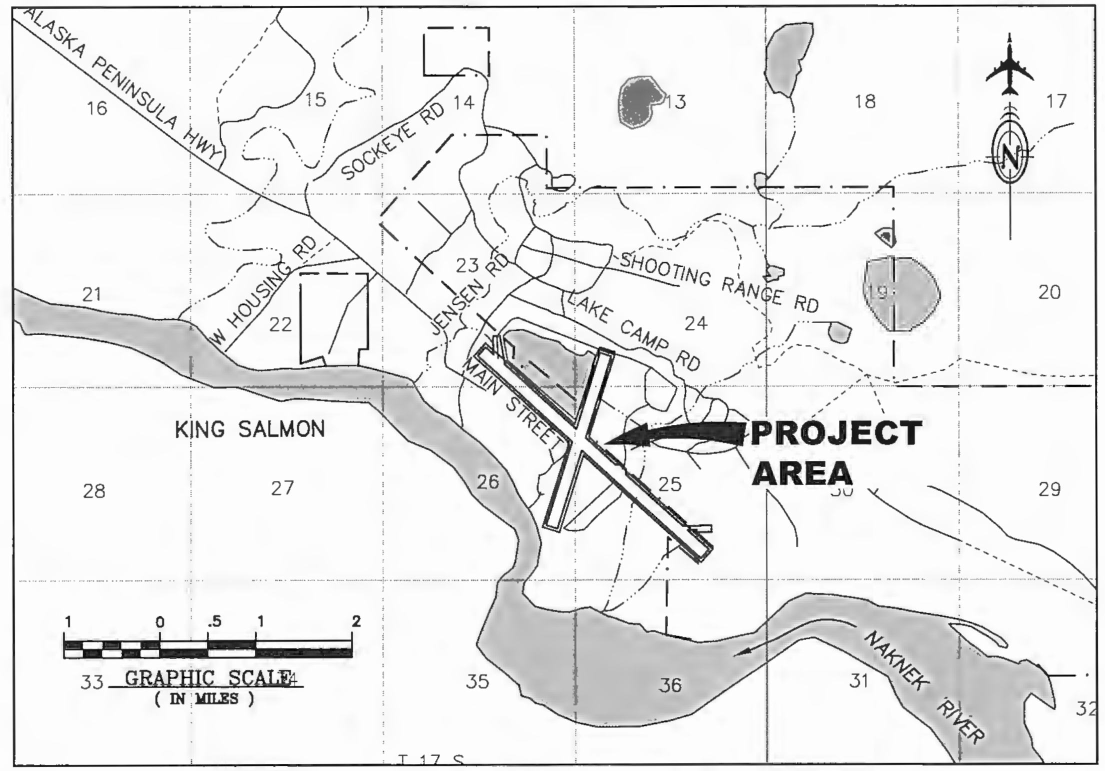
KING SALMON
AIRPORT LIGHTING
PROJECT No. 52673
A.I.P. No. 3-02-0148-12-2011

SHEET 1 OF 54

AS-BUILT 6/2014 1 OF 57

CIVIL LEGEND

EXISTING	NEW	DESCRIPTION
		PROPERTY BOUNDARY
RSA		RUNWAY SAFETY AREA
		EDGE OF GRAVEL
		EDGE OF PAVEMENT
		RAP
		CONCRETE
X		FENCE
SD		STORM DRAIN LINE
S		SANITARY SEWER LINE
		CULVERT
		DRAINAGE
		WETLANDS
E		UNDERGROUND ELECTRIC LINE
C		UNDERGROUND COMMUNICATION LINE
120		CONTOUR LINE
		SILT FENCE
		BUILDING
SD		STORM DRAIN MANHOLE
SS		SANITARY SEWER MANHOLE
SEWER		SEWER CLEANOUT
SEPTIC		SEWER SEPTIC CLEANOUT
WELL		MONITORING WELL
		WATER VALVE
		HYDRANT
		FUEL TANK
		GUARD RAIL
		ELECTRICAL PEDESTAL
		ELECTRICAL VAULT/TRANSFORMER
		RADIO TOWER
		ELECTRIC METER
		GUY ANCHOR
		ELECTRIC POWER POLE
		ELECTRIC LIGHT POLE
		ELECTRIC MANHOLE
		ELECTRIC JUNCTION BOX
		RUNWAY THRESHOLD LIGHT (BLUE/RED)
		RUNWAY EDGE LIGHT (WHITE)
		RUNWAY EDGE LIGHT (BLUE)
		RUNWAY APPROACH LIGHT
		TAXIWAY/APRON EDGE LIGHT
		PAPI
		TELEPHONE PEDESTAL
		TELEPHONE MANHOLE
		SIGN/MARKER
		RUNWAY DISTANCE REMAINING SIGN
		BOLLARD
TH-05-##		EXISTING TEST HOLE
		AIRCRAFT TIE DOWN
		AIRCRAFT TIEDOWN ANCHORS
		SATELLITE/RADAR DISH
		SPRUCE TREE
		ELECTRICAL PLUG IN
		ELECTRIC POWER POLE W/ LIGHT
		SEWER VENT PIPE
		LIGHTED WIND CONE
		SEGMENTED CIRCLE



VICINITY MAP

T 17S S, R 45 W, SEC 23, 25, 26, & 36,
SEWARD MERIDIAN, ALASKA
U.S.G.S. NAKNEK A-4 & A-5, AK

GENERAL NOTES

1. EXISTING GROUND CONTOURS ARE BASED ON DOWL HKM TOPOGRAPHIC SURVEY PERFORMED IN JULY THROUGH OCTOBER 2005, JANUARY & NOVEMBER 2006, AND JULY & AUGUST 2007.
2. SOILS INFORMATION IS DERIVED FROM SOILS INVESTIGATIONS PERFORMED BY DOT&PF AND DOWL HKM. SEE GEOTECHNICAL REPORT DATED JUNE 2006 TITLED KING SALMON AIRPORT RUNWAY SAFETY AREA IMPROVEMENTS PHASE 1 AND REPORT DATED APRIL 2008 TITLED SUBSURFACE EXPLORATION AND GEOTECHNICAL RECOMMENDATIONS, KING SALMON AIRPORT IMPROVEMENTS.
3. LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE BASED ON A COMBINATION OF FIELD SURVEY, AS BUILT RECORDS, AND APPROXIMATIONS FROM AIRPORT MAINTENANCE STAFF. CONTRACTOR SHALL FIELD LOCATE UTILITIES PRIOR TO EXCAVATION.
4. VERIFY HORIZONTAL AND VERTICAL LOCATIONS OF ALL UTILITIES ENCOUNTERED DURING CONSTRUCTION. RECORD LOCATIONS AND CHANGES TO UTILITIES IN SURVEY NOTES AND ON AS BUILT DRAWINGS.
5. VERIFY INVERTS AND LOCATIONS OF ALL UTILITY CONNECTION POINTS PRIOR TO INSTALLING PIPE. REPORT DISCREPANCIES FROM PLANS IMMEDIATELY TO OWNER'S REPRESENTATIVE.
6. ELEVATIONS SHOWN ARE TO PIPE INVERT, FLOW LINE, OR FINISH PAVEMENT SURFACE UNLESS OTHERWISE NOTED.
7. RESTORE ALL DISTURBED PROPERTY OUTSIDE OF WORK LIMITS TO ORIGINAL CONDITION.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR EROSION AND SEDIMENT CONTROLS AS NECESSARY TO COMPLY WITH FEDERAL, STATE, AND BOROUGH LAWS THAT PROHIBIT UNPERMITTED DISCHARGE OF POLLUTANTS, INCLUDING SEDIMENTS, THAT ARE A RESULT OF EROSION AND OTHER CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL CONDUCT ALL WORK SO SEDIMENT IS NOT TRANSPORTED ONTO THE ROADWAY OR ADJACENT PROPERTY. AT A MINIMUM, THE CONTRACTOR SHALL SWEEP UP ANY SEDIMENT TRACKED ONTO PAVED SURFACES IMMEDIATELY TO MINIMIZE THE WASH-OFF OF SEDIMENT INTO THE STORM DRAINAGE SYSTEM OR WATERWAYS AND TO MINIMIZE FOD. THE CONTRACTOR SHALL CONFORM WITH APPROVED SWPPP.

ABBREVIATIONS

ABN	ABANDONED
AC	ASPHALT CONCRETE
ACP	ASPHALT CONCRETE PAVEMENT
AD	ALGEBRAIC DIFFERENCE
AIP	AIRPORT IMPROVEMENTS PROJECT
BFM	BONDED FIBER MATRIX
BLDG	BUILDING
BVCE	BEGINNING VERTICAL CURVE ELEVATION
BVCS	BEGINNING VERTICAL CURVE STATION
CABC	CRUSHED AGGREGATE BASE COURSE
CASC	CRUSHED AGGREGATE SURFACE COURSE
℄	CENTERLINE
CMP	CORRUGATED METAL PIPE
CPEP	CORRUGATED POLYETHYLENE PIPE
CY	CUBIC YARD
DIA	DIAMETER
DOT&PF	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
E	EAST
ELEC	ELECTRIC
ELEV	ELEVATION
EMT	ELECTRICAL METALLIC TUBING
EVCE	END VERTICAL CURVE ELEVATION
EVCS	END VERTICAL CURVE STATION
FAA	FEDERAL AVIATION ADMINISTRATION
FOD	FOREIGN OBJECT DEBRIS
FT	FOOT
HMA	HOT MIX ASPHALT
IFR	INSTRUMENT FLIGHT RULES
INV	INVERT
LF	LINEAR FOOT
LT	LEFT
MAX	MAXIMUM
ME	MATCH EXISTING
MH	MANHOLE
MIN	MINIMUM
N	NORTH
NOTAM	NOTICE TO AIRMEN
NTS	NOT TO SCALE
PAPI	PRECISION APPROACH PATH INDICATOR
PCC	PORTLAND CEMENT CONCRETE
PCMP	POLYMER COATED METAL PIPE
POFZ	PRECISION OBSTACLE FREE ZONE
PVI	POINT OF VERTICAL INTERSECTION
RAP	RECYCLED ASPHALT PAVEMENT
RT	RIGHT
R/W	RUNWAY
RSA	RUNWAY SAFETY AREA
S	SOUTH
SD/FD	STORM DRAIN FIELD DRAIN
SDMH	STORM DRAIN MANHOLE
SRE	SNOW REMOVAL EQUIPMENT
STA	STATION
SY	SQUARE YARD
TSA	TAXIWAY SAFETY AREA
T/W	TAXIWAY
TYP	TYPICAL
UG	UNDERGROUND
VASI	VISUAL APPROACH SLOPE INDICATOR
VC	VERTICAL CURVE
W	WEST

INDEX

THE FOLLOWING DOT&PF STANDARD DRAWINGS APPLY TO THIS PROJECT:
E-13.00

Designed By: MJ | Drawn By: RDL | Checked By: BRH
DOWL FILE No: 234-26
SCRIPT FILE:
Date Revised: 7/01/2014, 3:56 PM
Layout Name: 02-INDEX
File Path and Name: W:\Projects\king salmon\akn lighting 2011\Asbuilt\DOT-AKN_LIGHTING.dwg

STATE OF ALASKA 49TH — Brian R. Hanson CE 11132 Jul 01, 2014 — REGISTERED PROFESSIONAL ENGINEER

DATE ORIGINALLY STAMPED 2/18/11

BY	DATE	REVISION
TC	6/2014	AS-BUILT

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

KING SALMON AIRPORT
KING SALMON, ALASKA
AIRPORT LIGHTING
PROJECT No. 52673
AIP No. 3-02-0148-12-2011
VICINITY MAP, ABBREVIATIONS, LEGEND, NOTES, & INDEX

DATE: 2/22/2011
SHEET: 2 OF 54
AS-BUILT SHEET: 2 OF 57

PLAN PREPARED BY DOWL HKM

ESTIMATE OF QUANTITIES BASE BID

ITEM NO.	PAY ITEM	PAY UNIT	QUANTITY	
D-701a	CPEP PIPE, 24 INCH	LINEAR FOOT	~~34~~	35
G-100a	MOBILIZATION AND DEMOBILIZATION	LUMP SUM	ALL REQUIRED	
G-115a	WORKER MEALS AND LODGING, OR PER DIEM	LUMP SUM	ALL REQUIRED	
G-130a	FIELD OFFICE	LUMP SUM	ALL REQUIRED	
G-130b	FIELD LABORATORY	LUMP SUM	ALL REQUIRED	
G-130g	NUCLEAR TESTING EQUIPMENT STORAGE SHED	EACH	1	
G-130j	ENGINEERING COMMUNICATIONS	CONTINGENT SUM	ALL REQUIRED	
G-131a	ENGINEERING TRANSPORTATION (TRUCK)	EACH	3	
G-135a	CONSTRUCTION SURVEYING BY THE CONTRACTOR	LUMP SUM	ALL REQUIRED	
G-135b	EXTRA THREE PERSON SURVEY PARTY	HOUR	~~72~~	336
G-150a	EQUIPMENT RENTAL, DOZER (MINIMUM 70HP)	HOUR	48	
G-300a	CPM SCHEDULING	LUMP SUM	ALL REQUIRED	
G-700a	AIRPORT FLAGGER	CONTINGENT SUM	ALL REQUIRED	
L-100b	REGULATOR, L-828	EACH	4	
L-100c	HIGH INTENSITY RUNWAY EDGE AND THRESHOLD LIGHT, L-862 AND L-862E	EACH	91	
L-100d	MEDIUM INTENSITY RUNWAY EDGE AND THRESHOLD LIGHT, L-861 AND L-861E	EACH	45	
L-100e	TAXIWAY EDGE LIGHT L-861T	EACH	~~139~~	141 *TWO ADDED AT TW C
L-100h	REMOVE RUNWAY AND TAXIWAY LIGHT	EACH	~~263~~	265
L-100k	FLUSH RUNWAY EDGE LIGHT, L-850C	EACH	~~7~~	6
L-100n	AIRPORT SIGN, TYPE L-858	EACH	2	
L-100q	JUNCTION BOX, TYPE II	EACH	5	
L-100r	TEMPORARY RUNWAY LIGHTING SYSTEM	LUMP SUM	ALL REQUIRED	
L-100ap	SPARE PARTS	LUMP SUM	ALL REQUIRED	
L-107a	8-FOOT LIGHTED WIND CONE, IN PLACE	EACH	3	
L-108a	UNDERGROUND CABLE #8 AWG, COPPER, 5 KV FAA TYPE "B" OR TYPE "C" (AS SPECIFIED ON PLAN), L-824	LINEAR FOOT	~~65,000~~	60,185
L-108c	#6 BARE COPPER GROUND CONDUCTOR	LINEAR FOOT	~~40,000~~	38,145.7
L-108g	GROUND ROD	EACH	36	
L-108h	UNDERGROUND CABLE #14 AWG, 2 CONDUCTOR, COPPER, 600V, TYPE "SOOW-A/SOOW"	LINEAR FOOT	~~1,750~~	1,946.9
L-108m	UNDERGROUND TELEPHONE CONTROL CABLE, #19 AWG, COPPER, 50 PR	LINEAR FOOT	~~520~~	630
L-108r	REMOVE DUCTBANK CONDUCTORS	LUMP SUM	ALL REQUIRED	
L-109c	ELECTRICAL ENCLOSURE AND FOUNDATION IN PLACE	EACH	1	
L-109d	INSTALLATION OF ELECTRICAL EQUIPMENT IN NEW OR EXISTING STRUCTURE	EACH	1	
L-109h	OVERHEAD ELECTRICAL SERVICE LINE	CONTINGENT SUM	ALL REQUIRED	
L-110g	2-INCH HDPE CONDUIT	LINEAR FOOT	~~38,000~~	33,169.97
L-135b	RELOCATE RVR	LUMP SUM	ALL REQUIRED	
L-145a	STANDBY GENERATOR AND ENCLOSURE	LUMP SUM	ALL REQUIRED	
P-157a	EROSION, SEDIMENT, AND POLLUTION CONTROL ADMINISTRATION	LUMP SUM	ALL REQUIRED	
P-157b	TEMPORARY EROSION, SEDIMENT, AND POLLUTION CONTROL	CONTINGENT SUM	ALL REQUIRED	
P-157e	SWPPP PRICE ADJUSTMENT	CONTINGENT SUM	ALL REQUIRED	
P-161a	RECYCLED ASPHALT PAVEMENT	SQUARE YARD	~~61,420~~	68,216.5
P-165a	REMOVAL OF STRUCTURES	LUMP SUM	ALL REQUIRED	
P-165e	REMOVAL OF UNFORESEEN STRUCTURES	CONTINGENT SUM	ALL REQUIRED	
P-209b	CRUSHED AGGREGATE BASE COURSE	TON	~~6,000~~	0
P-401a	HOT MIX ASPHALT TYPE II, CLASS A	TON	~~9,750~~	10,325.05
P-401b	HOT MIX ASPHALT PRICE ADJUSTMENT	CONTINGENT SUM	ALL REQUIRED	
P-401c	ASPHALT CEMENT, PG 52-28	TON	~~540~~	597.9
P-620c	RUNWAY AND TAXIWAY PAINTING	LUMP SUM	ALL REQUIRED	
P-670b	FLASHER UNIT FOR PLASTIC BARRIER	EACH	~~50~~	52
P-670c	FLAG	EACH	~~50~~	52
P-680a	SILT FENCE	LINEAR FOOT	~~750~~	352
P-152da	RUNWAY 18-36 DRAINAGE IMPROVEMENTS	LUMP SUM	ALL REQUIRED	
L-100na	REPAIR EXISTING AIRPORT SIGNS	LUMP SUM	ALL REQUIRED	
L-100s	INSTALL ARRESTOR LIGHT TRANSFORMERS	LUMP SUM	ALL REQUIRED	
L-100t	ELECTRICAL MANHOLE REPAIR	LUMP SUM	ALL REQUIRED	
L-108s	REPAIR OF BAK ARRESTOR UG CONDUCTOR	LUMP SUM	ALL REQUIRED	
L-109da	INSTALL ENCLOSURE RVR BOXES	LUMP SUM	ALL REQUIRED	
L-110ga	INSTALL 2 INCH HDPE CONDUIT CROSSINGS	LUMP SUM	ALL REQUIRED	
P-152z	T/W SHOULDER SUBGRADE PREPARATION	LUMP SUM	ALL REQUIRED	
P-151f	T/W SHOULDER SOD REMOVAL	LUMP SUM	ALL REQUIRED	
P-152y	STATION 83+07 TO 92+90 PAVEMENT EXCAVATION	LUMP SUM	ALL REQUIRED	
L-100x	RECONFIGURE AIRFIELD LIGHTING CONTROL SYSTEM	LUMP SUM	ALL REQUIRED	
P-152z	PAVEMENT EXCAVATION AND SAWCUTTING	LUMP SUM	ALL REQUIRED	

DATE ORIGINALLY STAMPED 2/18/11

P-165a REMOVAL OF STRUCTURES
ESTIMATE OF REMOVED STRUCTURES DESIGNATED FOR DISPOSAL
SEE PLANS FOR ALL ITEMS

WORK AREA	ITEM	APPROXIMATE QUANTITY
A – CRITICAL AREAS	8 PCC ENCASED LIGHT BASES	3.5 CF PCC REMOVAL PER BASE = 28 CF = 1 CY
B – R/W 12-30	R/W 12 THRESHOLD LIGHTS	8 LIGHTS
B – R/W 12-30	R/W 12 THRESHOLD PCC	27 CY
B – R/W 12-30	DECOMMISSION MANHOLE 17	1
B – R/W 12-30	71 PCC ENCASED LIGHT BASES	3.5 CF PCC REMOVAL PER BASE = 249 CF = 27 CY
D – R/W 18-36 & T/Ws	SUPPLEMENTAL WIND CONE	1
D – R/W 18-36 & T/Ws	R/W 18-36 EDGE LIGHT PCC REMOVAL	2,633 CY

* SEE PLANS FOR ADDITIONAL ITEMS.

ESTIMATED QUANTITIES FOR SELECT*
LUMP SUM OR SUBSIDIARY ITEMS

ITEM NO.	ITEM	APPROXIMATE QUANTITY
L-107a	HANDHOLE	17
	UNDERGROUND CABLE #8 AWG, COPPER, 5 KV FAA TYPE "B" OR TYPE "C", L-824	21,480 LF
	#6 BARE COPPER GROUND CONDUCTOR	9,210 LF
	2-INCH HDPE CONDUIT	7,860 LF
P-620c	RUNWAY AND TAXIWAY PAINTING	26 GAL YELLOW PAINT

* SEE PLANS FOR ADDITIONAL ITEMS.

ESTIMATING FACTORS

ITEM NO.	PAY ITEM	ESTIMATING FACTOR
P-209b	CRUSHED AGGREGATE BASE COURSE	145 lb/ft3
P-401a	HOT MIX ASPHALT TYPE 2, CLASS A	150 lb/ft3
P-401c	ASPHALT CEMENT, PG 52-28	5.5% BY WEIGHT OF P-401a
P-603a	TACK COAT, STE-1	0.10 gal/SY, 8.45 lb/gal

ESTIMATED VOLUME OF OF RAP
AVAILABLE AFTER PROCESSING

LOCATION	QUANTITY
WORK AREA A – CRITICAL AREAS	268 CY
WORK AREA B – R/W 12-30	1,873 CY
WORK AREA C – R/W 12 BLAST PAD	200 CY
WORK AREA D – R/W 18-36 & T/Ws	1,317 CY
WORK AREA E – ENCLOSURES	0 CY

STATE OF ALASKA 49TH
Brian R. Hanson
CE 11132
Jul 01, 2014.
PROFESSIONAL ENGINEER

BY	DATE	REVISION
TC	6/2014	AS-BUILT

PLAN PREPARED BY DOWL HKM

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

KING SALMON AIRPORT
KING SALMON, ALASKA
AIRPORT LIGHTING
PROJECT No. 52673
AIP No. 3-02-0148-12-2011
ESTIMATED QUANTITIES, ESTIMATING FACTORS, & SUMMARY TABLES

DATE: 2/22/2011
SHEET: 3 OF 54
AS-BUILT SHEET: 3 OF 57

Date Revised:
Layout Name: D2-QUAN
File Path and Name: W:\Projects\king salmon\akn lighting 2011\Asbuilt\DOT-AKN_LIGHTING.dwg
SCRIPT FILE:
DOWL FILE No: 234-26
Designed By: MJJ
Drawn By: RDL
Checked By: BRH
7/01/2014, 3:56 PM

GATE 27
AIRPORT PROPERTY BOUNDARY
TAXIWAY N
RUNWAY 18-36
GATE 26
AIRPORT PROPERTY BOUNDARY
GLIDE SLOPE CRITICAL AREA
POFZ
SHOULDER PAVEMENT REMOVAL FOR NEW LIGHTING SYSTEM
STAGING / STOCKPILE AREA
SHOULDER PAVEMENT REMOVAL FOR NEW LIGHTING SYSTEM
GATE 25
GATE 24
APPROXIMATE LOCATION OF PERIMETER FENCE
GATE 22
TAXIWAY P
RUNWAY 12-30
RUNWAY 12-30
TAXIWAY M
TAXIWAY A
TAXIWAY B
GATE 21
GATE 2
GATE 3
GATE 4
GATE 5
MAIN STREET
SHOULDER PAVEMENT REMOVAL FOR NEW LIGHTING SYSTEM
TAXIWAY C
TAXIWAY E
LOCALIZER CRITICAL AREA
APPROXIMATE LOCATION OF EXISTING PERIMETER ROAD
GATE 15
GATE 16
GATE 18
GATE 20
TAXIWAY D
GATE 14
GATE 8
GA APRON
GATE 12
RUNWAY 18-36
TAXIWAY G
GATE 9
AIRPORT PROPERTY BOUNDARY

SCOPE OF PROJECT

1. RUNWAY LIGHTING AND ASSOCIATED PAVING
2. SUPPLEMENTARY LIGHTED WIND CONES
3. REPAVE RUNWAY 12 BLAST PAD
4. ELECTRICAL ENCLOSURE AND STANDBY GENERATOR ENCLOSURE
5. TAXIWAY LIGHTING AND ASSOCIATED PAVING

LEGEND

HAUL ROUTES

NOTES

1. BRISTOL BAY BOROUGH MAY IMPOSE RESTRICTIONS ON CONSTRUCTION HAULING AND EQUIPMENT USE. CONTACT BOROUGH TO COORDINATE PLANNED ACTIVITIES TO AVOID CONSTRUCTION DELAYS.

GRAPHIC SCALE
350 0 175 350 700

STATE OF ALASKA 49TH
Brian R. Hanson
CE 11132
Jul 01, 2014
REGISTERED PROFESSIONAL ENGINEER

DATE ORIGINALLY STAMPED 2/18/11

PLAN PREPARED BY DOWL HKM

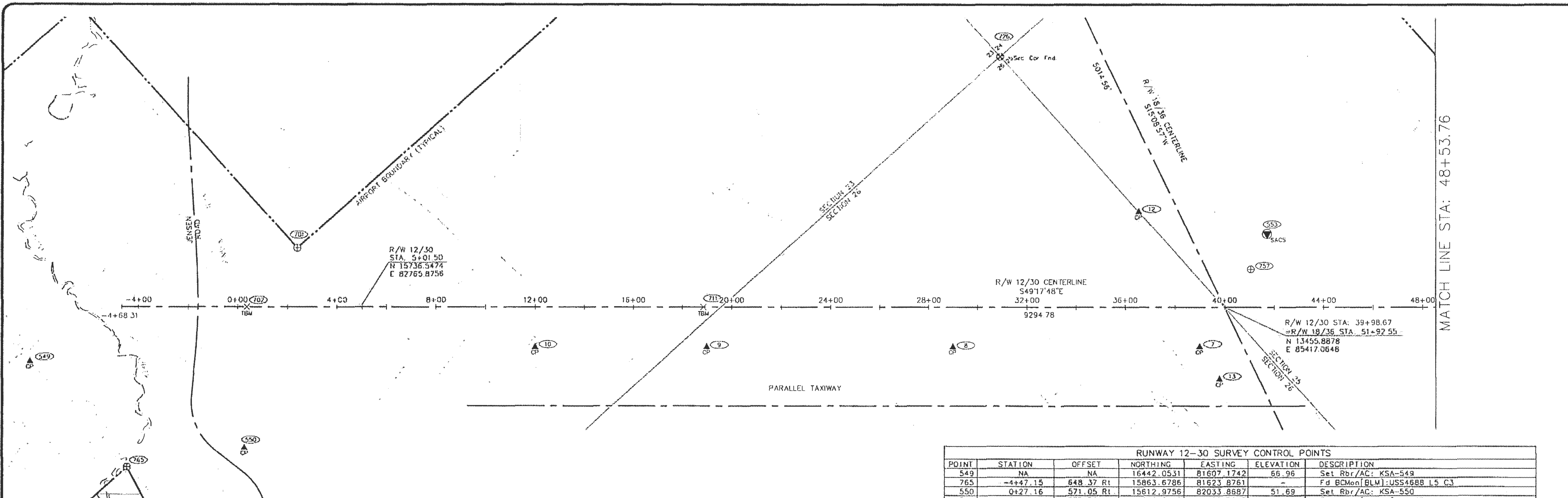
BY	DATE	REVISION
TC	6/2014	AS-BUILT

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

KING SALMON AIRPORT
KING SALMON, ALASKA
AIRPORT LIGHTING
PROJECT No. 52673
AIP No. 3-02-0148-12-2011
PROJECT LAYOUT PLAN

DATE: 2/22/2011
SHEET: 4 OF 54
AS-BUILT SHEET: 4 OF 57

Designed By: MLT
Drawn By: RDL
Checked By: BRH
DOWL FILE No: 234-26
SCRIPT FILE: PLP
Date Revised: 7/01/2014, 4:00 PM
Layout Name: 04-PLP
File Path and Name: W:\Projects\King Salmon\AKN Lighting 2011\Asbuilt\DRW-AKN_LIGHTING.dwg



RUNWAY 12–30 SURVEY CONTROL POINTS						
POINT	STATION	OFFSET	NORTHING	EASTING	ELEVATION	DESCRIPTION
549	NA	NA	16442.0531	81607.1742	66.96	Set Rbr/AC: KSA-549
765	-4+47.15	648.37 Rt	15863.6786	81623.8761	-	Fd BCMon[BLM]:USS4688 L5 C3
550	0+27.16	571.05 Rt.	15612.9756	82033.8687	51.69	Set Rbr/AC: KSA-550
701	2+40.12	237.70 Lt.	16087.2080	82722.7387	-	Fd ALMon[ITECH]:KSAFB
10	11+98.87	161.77 Rt.	15159.1227	83189.0463	54.85	Set Rbr/AC: KSA-10
9	18+98.88	161.50 Rt.	14702.8262	83719.9023	53.66	Set Rbr/AC: KSA-9
8	28+98.79	161.08 Rt.	14051.0552	84478.2034	55.10	Set Rbr/AC: KSA-8
726	30+90.97	1016.01 Lt.	14818.0753	85391.5268	-	Fd BCMon[BLM]:S23|S24/S26|S25+T17S R45W
12	36+54.78	384.65 Lt.	13971.7528	85407.2054	60.20	Set Rbr/AC: KSA-12
7	38+98.56	160.65 Rt.	13399.3872	85236.4011	57.97	Set Rbr/AC: KSA-7
13	39+78.16	291.97 Rt.	13247.9196	85211.1096	57.19	Set Rbr/AC: KSA-13
757	41+04.44	152.99 Lt.	13502.8922	85597.0161	-	Set ALMon[DOWL] RM N 1/16 S26|S25+T17S R45W
553	41+70.85	296.66 Lt.	13568.5050	85741.0566	63.02	Fd BCMon[NGS]: AKN-B (SACS)

RUNWAY 12–30 VERTICAL CONTROL						
POINT	STATION	OFFSET	NORTHING	EASTING	ELEVATION	DESCRIPTION
702	0+36.50	0.00	16039.7944	82413.3613	56.76	Fd BCMon[US Eng Offic]:B-6
711	18+85.94	0.06 Lt.	14833.7335	83815.4533	58.21	Fd BC[COE]:KS-10

HORIZONTAL CONTROL:

Coordinate System:
This project is located within the "King–Nak" Coordinate Sytem, a local surface grid coordinate system expressed in U.S. Survey feet units developed by the State of Alaska Department of Transportation and Public Facilities.

Basis of Coordinates:
The Basis of Coordinates is NGS Primary Airport Control Station "AKN–A", located near the southeast corner of Runway 18/36. Said station has "King–Nak" Coordinate System coordinates of 10997.3450 N, 84963.3550 E. U.S. Survey Feet.

Basis of Bearings:
The Basis of Bearings is a local plane bearing between NGS Primary Airport Control Station "AKN–A" and NGS Secondary Airport Control Station "AKN–C". NGS Secondary Airport Control Station "AKN–C" bears N28°12'27.9"W a distance of 5315.9136 feet from NGS Primary Airport Control Station "AKN–A" NGS Secondary Airport Control Station "AKN–C" has "King–Nak" Coordinate System coordinates of 15681.9384 N, 82450.6826 E. U.S. Survey Feet.

Translation Parameters:
To convert the local coordinates to NAD83 (92) State Plane coordinates expressed in U.S Survey Feet, translate using +1697882.76131 N usf, +1811590.29829 E usf, and scale using 0.9999837981.

VERTICAL CONTROL:

Elevations are based on Primary Airport Control Station (PACS) Monument "AKN–A" with a published elevation of 55.2'. The NGS Data Sheet lists on NAVD 88 orthometric height for this point that was determined by GPS observations and a high–resolution geoid model. GPS derived orthometric heights for airport stations designated as PACS or SACS are published to 1 decimal place (U.S. Survey Feet). This maintains relative accuracy between the PACS and SACS, it does not indicate accuracy relative to other marks which are part of the NAVD 88 network.

Elevations of Secondary Airport Control Stations (SACS), and other Horizontal & Vertical Survey Control points were established by differential levelling loops using a Leica DNA10 digital level. Elevations of Secondary Horizontal Survey Control points should be verified from the Vertical Survey Control before using due to the potential of settlement or frost heave of these types of monuments over time.

NOTES:

1) Horizontal control points 551, and 552 were used as the basis of coordinates and held in a simultaneous Least Squares Network Adjustment with Static GPS Control Points 1, 2, 548 – 550, 553, 701 – 710, 714–737, and 739–771, in Leica Geo Office Version 2.0. All other survey control point coordinates listed were established by DOWL Engineers using conventional traverse techniques utilizing a Leica TCRP 1205+ Total Station instrument. These conventional control points were adjusted with a least squares traverse adjustment in Land Development Desktop.

2) Control point 552, AKN–C (SACS), was disturbed and reset by others after this survey. Its new position has not been verified, therefore it is not shown or listed hereon.

3) All background information shown herein was obtained from the King Salmon Airport "Aerial Mapping", as performed by Aeromap utilizing photos acquired on August 23, 1987 and October 2, 1997. This background is for orientation purposes only.

4) This survey was completed by DOWL HKM in parts of July, August, September, and October of 2005, January and November of 2006, and July and August of 2007. All dimensions and coordinates shown are in U.S. Survey Feet unless noted otherwise.

5) 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).

MONUMENT LEGEND

- GOV'T SECTION CORNER (Sec Cor Fnd)
- GOV'T SURVEY MONUMENT
- NGS CONTROL MONUMENT
- PRIMARY MONUMENT [BRASS/AL CAP]
- CENTERLINE SURVEY MONUMENT
- COE MONUMENT/TEMPORARY BENCH MARK (TBM)
- PRIMARY CONTROL POINT (CP)
- POINT NUMBER

200 0 100 200 400 600 800 1000

SURVEYOR 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.

Stanley E. Ponsness 2/22/2011
Stanley E. Ponsness LS–6714 Date

STATE OF ALASKA 49TH STANLEY E. PONSNESS 6714-S REGISTERED PROFESSIONAL LAND SURVEYOR 2/22/2011

DATE ORIGINALLY STAMPED 2/22/11

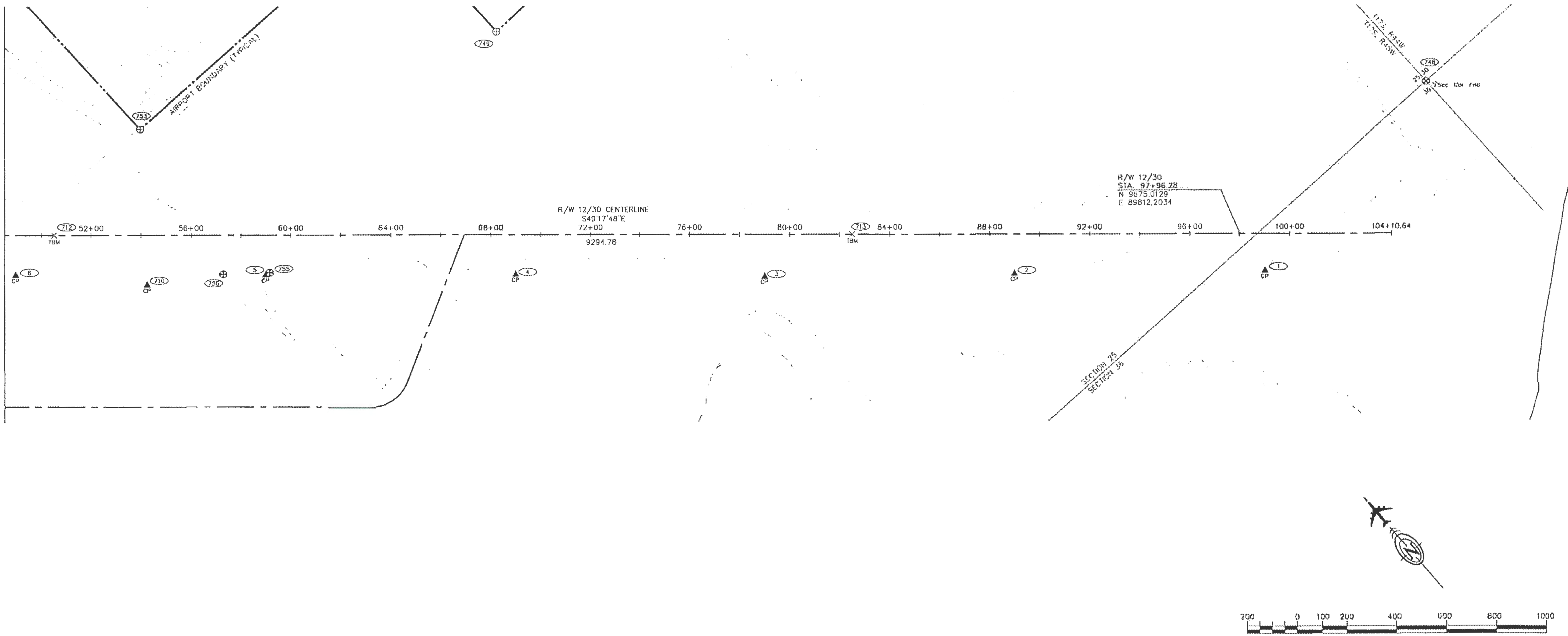
BY	DATE	REVISION
TC	6/2014	AS-BUILT

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

KING SALMON AIRPORT
KING SALMON, ALASKA
AIRPORT LIGHTING
PROJECT No. 52673
AIP No. 3-02-0148-12-2011
SURVEY CONTROL SHEET

DATE: 2/22/2011
SHEET: 5 OF 54
AS-BUILT SHEET: 5 OF 57

PLAN PREPARED BY DOWL HKM



RUNWAY 12-30 SURVEY CONTROL POINTS						
POINT	STATION	OFFSET	NORTHING	EASTING	ELEVATION	DESCRIPTION
6	48+98.63	160.22 Rt.	12747.5196	85994.8301	63.20	Set Rbr/AC: KSA-6
753	53+97.78	424.29 Lt.	12865.1222	86754.4155	-	Fd ALMon[ITECH]:KSAFB
710	54+24.82	199.96 Rt.	12374.2429	86367.8156	63.94	Fd Rod/BC[ADOT/PF]:ESKIMO
756	57+28.53	155.72 Rt.	12209.7216	86626.9159	-	Fd ALMon[BLM]:RM CW 1/16 S25•T17S R45W
5	58+98.99	159.78 Rt.	12095.4792	86753.4865	61.99	Set Rbr/AC: KSA-5
755	59+15.17	149.73 Rt.	12092.5418	86772.3051	-	Fd ALMon[BLM]:RM CW 1/16 S25•T17S R45W
749	68+23.91	815.41 Lt.	12231.5846	88090.6259	-	Fd ALMon[ITECH]:KSAFB
4	68+98.50	159.33 Rt.	11443.9960	87511.5042	61.87	Set Rbr/AC: KSA-4
3	78+98.87	168.25 Rt.	10784.8479	88264.0564	63.95	Set Rbr/AC: KSA-3
2	88+99.49	158.35 Rt.	10139.7999	89029.0829	66.67	Set Rbr/AC: AZ-KSA-2
1	99+00.27	148.45 Rt.	9494.6573	89794.2315	68.26	Set Rbr/AC: AZ-KSA-1
748	105+51.17	609.17 Lt.	9644.5254	90781.7524	-	Fd BCMon[BLM]:S25[S30/S36[S31•T17S R45W

RUNWAY 12-30 VERTICAL CONTROL						
POINT	STATION	OFFSET	NORTHING	EASTING	ELEVATION	DESCRIPTION
712	50+52.10	0.03 Lt.	12768.9257	86215.6787	65.71	Fd BC[COE]:KS-11
713	82+48.70	0.00	10684.2586	88638.9896	67.89	Fd BC[COE]:KS-12

SURVEYOR 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.

Stanley E. Ponsness LS-6714 — 2/22/2011 (Date)

MONUMENT LEGEND

- GOV'T SECTION CORNER (Sec. Cor. Fnd.)
- GOV'T SURVEY MONUMENT
- NGS CONTROL MONUMENT
- PRIMARY MONUMENT [BRASS/AL CAP]
- CENTERLINE SURVEY MONUMENT
- COE MONUMENT/TEMPORARY BENCH MARK (TBM)
- PRIMARY CONTROL POINT (CP)
- POINT NUMBER

STATE OF ALASKA — 49TH — STANLEY E. PONSNESS — 6714-S — REGISTERED PROFESSIONAL LAND SURVEYOR — 2/22/2011

DATE ORIGINALLY STAMPED 2/22/11

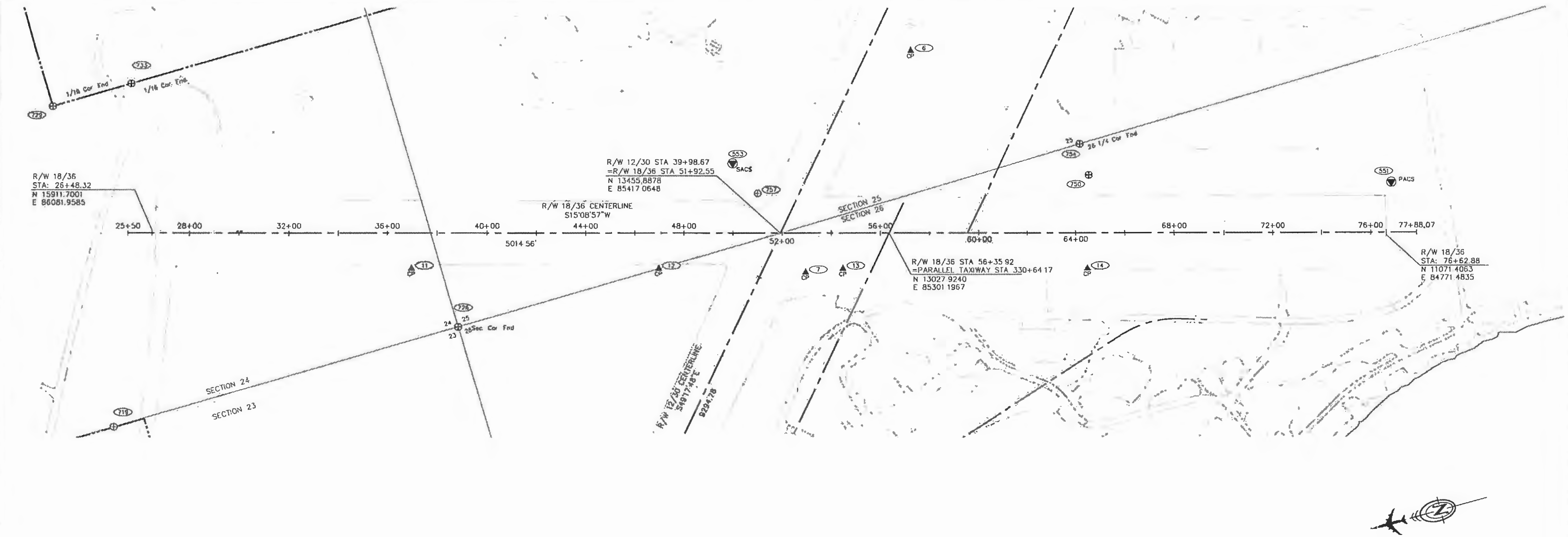
BY	DATE	REVISION
TC	6/2014	AS-BUILT

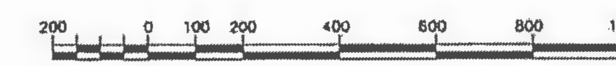
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

KING SALMON AIRPORT
KING SALMON, ALASKA
AIRPORT LIGHTING
PROJECT No. 52673
AIP No. 3-02-0148-12-2011
SURVEY CONTROL SHEET

DATE: 2/22/2011
SHEET: 6 OF 54
AS-BUILT SHEET: 6 OF 57

PLAN PREPARED BY DOWL HKM





RUNWAY 18-36 SURVEY CONTROL POINTS						
POINT	STATION	OFFSET	NORTHING	EASTING	ELEVATION	DESCRIPTION
729	22+46.26	515.36 Lt.	16165.1096	86684.4801	–	Fd ALMon[BLM]:SW1/16 S24•T17S R45W
719	24+94.20	788.31 Rt.	16266.4762	85361.3231	–	Fd ALMon[ITECH]: KSAFB
733	25+63.22	608.46 Lt.	15834.8279	86691.5070	–	Fd ALMon[BLM]:CNSSW 1/256 S24•T17S R45W
11	36+97.06	144.23 Rt.	14937.1014	85668.6677	60.97	Set Rbr/AC: KSA-11
726	38+84.37	380.64 Rt.	14818.0753	85391.5267	–	Fd BCMon[BLM]:S23℄S224/S26|S25•T17S R45W
12	46+97.19	144.33 Rt.	13971.7528	85407.2054	60.20	Set Rbr/AC: KSA-12
553	49+99.17	283.30 Lt.	13568.5050	85741.0566	63.11	Fd BCMon[NGS]: AKN-B (SACS)
757	51+00.15	161.41 Lt.	13502.8922	85597.0161	–	Set ALMon[DOWL]:RM N 1/16 S25•T17S R45W
7	52+94.30	159.62 Rt.	13399.3872	85236.4011	57.97	Set Rbr/AC: KSA-7
13	54+47.11	144.45 Rt.	13247.9196	85211.1096	57.19	Set Rbr/AC: KSA-13
6	57+26.19	743.01 Lt.	12747.5196	85994.8301	63.20	Set Rbr/AC: KSA-6
754	64+16.77	361.86 Lt.	12179.6467	85446.4207	–	Fd ALMon[BLM]:1/4 S26•T177S R45W
14	64+47.09	144.64 Rt.	12282.7473	84949.5970	53.78	Set Rbr/AC: KSA-14
750	64+53.43	235.44 Lt.	12177.2969	85314.8149	54.30	Fd ALMon[BLM]: RM 1/4 S26|S25•T17S R45W
551	76+84.22	204.56 Lt.	10997.3450	84963.3550	55.20	Fd BCMon[NGS]: AKN-A (PACS)

MONUMENT LEGEND

- Sec. Cor. Fnd. — GOV'T SECTION CORNER
- GOV'T SURVEY MONUMENT
- NGS CONTROL MONUMENT
- PRIMARY MONUMENT [BRASS/AL CAP]
- CENTERLINE SURVEY MONUMENT
- TBM — COE MONUMENT/TEMPORARY BENCH MARK
- CP — PRIMARY CONTROL POINT
- XX — POINT NUMBER

SURVEYOR 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.

Stanley E. Ponsness 2/22/2011
Stanley E. Ponsness LS-6714 Date

STATE OF ALASKA 49TH STANLEY E. PONSNESS 6714-S REGISTERED PROFESSIONAL LAND SURVEYOR 2/22/2011

DATE ORIGINALLY STAMPED 2/22/11

BY	DATE	REVISION
TC	6/2014	AS-BUILT

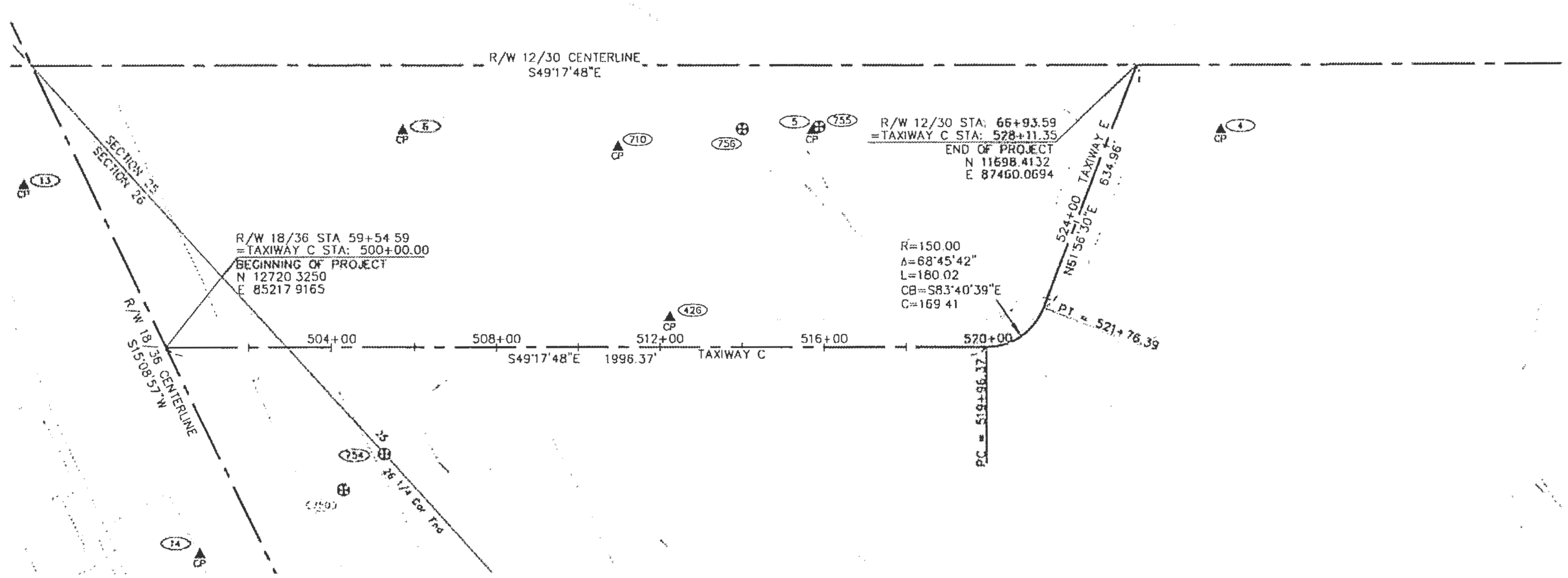
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

KING SALMON AIRPORT
KING SALMON, ALASKA
AIRPORT LIGHTING
PROJECT No. 52673
AIP No. 3-02-0148-12-2011
SURVEY CONTROL SHEET

DATE: 2/22/2011
SHEET: 7 OF 54
AS-BUILT SHEET: 7 OF 57

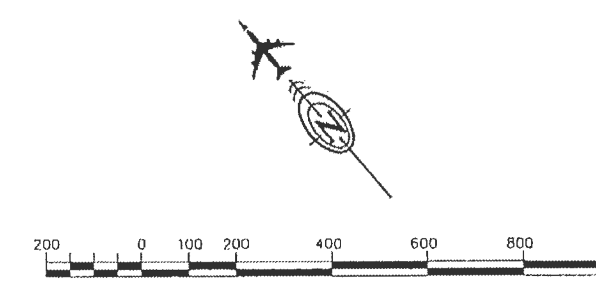
PLAN PREPARED BY DOWL HKM

Date Revised: 2/22/2011 8:46 AM | DOWL FILE No 234-26 | Layout Name: SHEET-7 | Designed By: MJJ | Drawn By: CLR/AMO | Checked By: BRH



MONUMENT LEGEND

Sec Cor Fnd	GOV'T SECTION CORNER
	GOV'T SURVEY MONUMENT
	NGS CONTROL MONUMENT
	PRIMARY MONUMENT [BRASS/AL CAP]
	CENTERLINE SURVEY MONUMENT
TBM	COE MONUMENT/TEMPORARY BENCH MARK
CP	PRIMARY CONTROL POINT
xx	POINT NUMBER



TAXIWAY C SURVEY CONTROL POINTS

POINT	STATION	OFFSET	NORTHING	EASTING	ELEVATION	DESCRIPTION
13	496+50.77	395.53 Lt.	13247.9196	85211.1096	57.19	Set Rbr/AC: KSA-13
14	500+81.95	506.71 Rt.	12282.7473	84949.5970	53.78	Set Rbr/AC: KSA-14
750	504+27.59	348.48 Rt.	12177.2969	85314.8149	–	Fd ALMon[BLM]:RM 1/4 S26|S25•T17S R45W
754	505+25.83	260.87 Rt.	12179.6467	85446.4207	–	Fd ALMon[BLM]:1/4 S26|S25•T17S R45W
6	505+71.24	527.28 Lt.	12747.5196	85994.8301	63.20	Set Rbr/AC: KSA-6
710	510+97.43	487.54 Lt.	12374.2429	86367.8156	63.94	Fd Rod/BC[ADOT/PF]:ESKIMO
426	512+23.37	71.29 Lt.	11976.5623	86191.8373	55.46	Set Rbr/AC: KSA-426
756	514+01.14	531.78 Lt.	12209.7216	86626.9159	–	Fd ALMon[BLM]:RM CW 1/16 S25•T17S R45W
5	515+71.60	527.72 Lt.	12095.4792	86753.4865	61.99	Set Rbr/AC: KSA-5
755	515+87.78	537.77 Lt.	12092.5418	86772.3051	–	Fd ALMon[BLM]:RM CW 1/16 S25•T17S R45W
4	527+37.07	248.71 Rt.	11443.9960	87511.5042	61.87	Set Rbr/AC: KSA-4

SURVEYOR 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.

Stanley E. Ponsness 2/22/2011

Stanley E. Ponsness LS-6714

STATE OF ALASKA 49TH STANLEY E. PONSNESS 6714-S 2/22/2011 PROFESSIONAL LAND SURVEYOR

DATE ORIGINALLY STAMPED 2/22/11

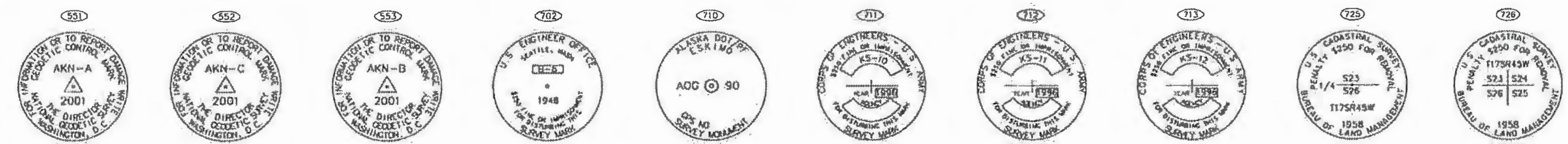
BY	DATE	REVISION
TC	6/2014	AS-BUILT

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

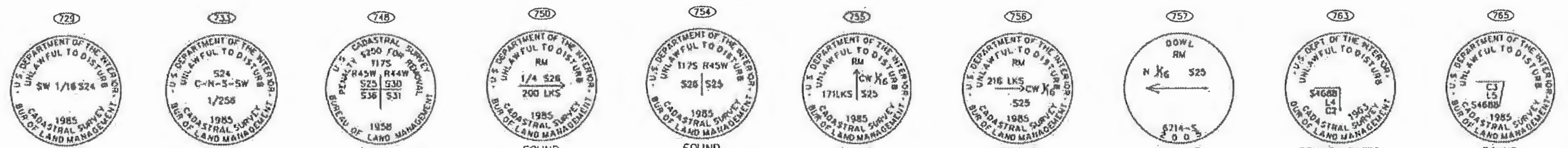
KING SALMON AIRPORT
KING SALMON, ALASKA
AIRPORT LIGHTING
PROJECT No. 52673
AIP No. 3-02-0148-12-2011
SURVEY CONTROL SHEET

DATE: 2/22/2011
SHEET: 8 OF 54
AS-BUILT SHEET: 8 OF 57

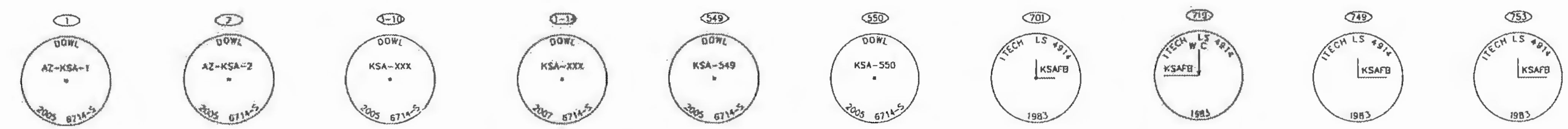
PLAN PREPARED BY DOWL HKM



- **551** — FOUND 3-1/4" BRASS CAP ON 2-3/8" STEEL POST 1.1' BELOW GRADE
- **552** — FOUND 3-1/4" BRASS CAP ON 2-3/8" STEEL POST 0.1' BELOW GRADE
- **553** — FOUND 3-1/4" BRASS CAP ON 2-3/8" STEEL POST 0.2' BELOW GRADE
- **702** — FOUND 3 1/2" BRASS CAP ON CONCRETE POST 1.1' ABOVE GRADE-FIRM CAP FLUSH WITH TOP
- **710** — FOUND 2-1/2" BRASS DONUT 2" BELOW DATUM POINT ON STAINLESS STEEL ROD 0.4' ABOVE GRADE INSIDE 4" DIA PVC PIPE 0.7' ABOVE GRADE W/ RUBBER CAP. 3 CARSONITE POSTS 2' FROM MON.
- **711** — FOUND 3 1/2" BRASS CAP ON CONCRETE PAD/BARRIER 0.05' BELOW GRADE
- **712** — FOUND 3 1/2" BRASS CAP ON CONCRETE PAD/BARRIER 0.05' BELOW GRADE
- **713** — FOUND 3 1/2" BRASS CAP ON CONCRETE PAD/BARRIER 0.05' BELOW GRADE
- **725** — FOUND 3 1/4" BRASS CAP ON 2 1/2" IRON POST 2.7' BELOW GRADE
- **726** — FOUND 3 1/4" BRASS CAP ON 2 1/2" IRON POST 0.4' ABOVE GRADE



- **729** — FOUND 3 1/4" ALUM. CAP ON 2 1/2" ALUM. POST 0.5' ABOVE GRADE
- **733** — FOUND 3 1/4" ALUM. CAP ON 2 1/2" ALUM. POST 0.1' ABOVE GRADE
- **748** — REHABILITATED 3 1/4" BRASS CAP ON 2 1/2" IRON POST 0.3' ABOVE GRADE
- **750** — FOUND 3 1/4" ALUM. CAP ON 3/4" DRIVE ROD 0.5' ABOVE GRADE
- **754** — FOUND 3 1/4" ALUM CAP ON 2 1/2" ALUM POST 1.5' BELOW GRADE
- **755** — FOUND 3 1/4" ALUM CAP 0.2' BELOW GRADE
- **756** — FOUND 3 1/4" ALUM. CAP 0.1' BELOW GRADE
- **757** — RE-SET 3 1/4" ALUM. CAP ON 2 1/2" ALUM. POST 0.3' BELOW GRADE
- **763** — REHABILITATED 3 1/4" BRASS CAP ON 2 1/2" IRON POST 0.3' ABOVE GRADE
- **765** — FOUND 3 1/4" BRASS CAP ON 2 1/2" ALUM POST 1.2' BELOW GRADE



- **1** — SET 5/8"x 30" REBAR W/ 2" ALUM CAP 0.3' BELOW GRADE
- **2** — SET 5/8"x30" REBAR W/ 2" ALUM. CAP 0.3' BELOW GRADE
- **3-10** — SET 5/8"x 30" REBAR W/ 2" ALUM CAP (TYPICAL TRAVERSE STATION)
- **3-13** — SET 5/8"x 30" REBAR W/ 2" ALUM CAP (TYPICAL TRAVERSE STATION)
- **549** — SET 5/8"x 30" REBAR W/ 2" ALUM. CAP 0.4' BELOW GRADE
- **550** — SET 5/8"x 30" REBAR W/ 2" ALUM CAP 0.2' BELOW GRADE
- **701** — FOUND 2-1/2" DIA. POST MON W/ 2-1/2" ALUM. CAP 0.4' ABOVE GRADE
- **719** — FOUND 2-1/2" DIA. POST MON W/ 2-1/2" ALUM. CAP 0.4' ABOVE GRADE
- **749** — FOUND 2-1/2" ALUM CAP MON ON 2 1/2" ALUM POST 0.5' BELOW GRADE
- **753** — FOUND 2-1/2" ALUM. CAP MON ON 2 1/2" ALUM POST 0.6' ABOVE GRADE

SURVEYOR 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.

Stanley E. Ponsness LS-6714 — 2/22/2011 Date

STATE OF ALASKA 49TH STANLEY E. PONSNESS 6714-S 2/22/2011 REGISTERED PROFESSIONAL LAND SURVEYOR

DATE ORIGINALLY STAMPED 2/22/11

BY	DATE	REVISION
TG	6/2014	AS-BUILT

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

KING SALMON AIRPORT
KING SALMON, ALASKA
AIRPORT LIGHTING
PROJECT No. 52673
AIP No. 3-02-0148-12-2011

SURVEY CONTROL SHEET

DATE: 2/22/2011
SHEET: 9 OF 54
AS-BUILT SHEET: 9 OF 57

PLAN PREPARED BY DOWL HKM

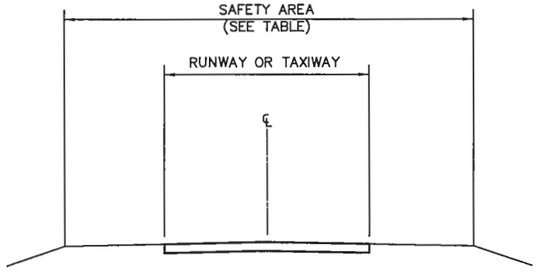
Date Revised: 2/22/2011 9:50 AM
Layout Name: SHEET-9
File Path and Name: [illegible]
DOWL File No. 334-26
Designed By: MJ
Drawn By: CLR/MWD
Checked By: SEM

CONSTRUCTION COMPLETION SCHEDULE

	WORK AREA	WORK TO BE COMPLETED	COMPLETION DATE	RESTRICTION	CLOSURES	NAVAID/VISUAL AID IMPACTS	HAZARD MARKER BARRIER LOCATION	NOTES
A	GLIDE SLOPE AND LOCALIZER CRITICAL AREA	INSTALL LIGHTING AND PAVE SHOULDERS	~~10/31/2012~~ * ~~8/15/2011~~	WORK MUST BE COMPLETED WITHIN 7 CALENDAR DAYS IN EACH CRITICAL AREA	NONE	GLIDE SLOPE AND LOCALIZER WILL BE TEMPORARILY DISABLED	AS DIRECTED BY THE ENGINEER	WORK IN CRITICAL AREAS REQUIRES 45 DAY ADVANCE NOTIFICATION. SEE SPECIFICATIONS & SAFETY PLAN NARRATIVE
B	R/W 12-30	INSTALL LIGHTING AND PAVE SHOULDERS	~~10/31/2012~~ * ~~9/15/2011~~	ONLY 1000 FEET OF TRENCH MAY BE OPEN AT ONE TIME NOTAMS FOR CONSTRUCTION ACTIVITIES WILL BE ALLOWED FOR ~~5000~~ FEET OF RUNWAY SHOULDER AT A TIME ⚠ T/W M, T/W P AND R/W 12-30 INTERSECTION SHALL NOT REMAIN UNPAVED FOR MORE THAN 3 CALENDAR DAYS	NONE	NONE	AS DIRECTED BY THE ENGINEER	ALL TRENCHES AND EXCAVATIONS IN SHOULDERS MUST BE BACKFILLED TO WITHIN 3 INCHES OF THE PRE-EXISTING SHOULDER ELEVATIONS AND GRADED TO MATCH THE PRE-EXISTING SHOULDER SLOPES AT THE END OF EACH CONSTRUCTION SHIFT ⚠ SEE NOTE 6 FOR LIGHTING REQUIREMENTS
C	R/W 12-30 BLAST PAD	PAVE AND STRIPE BLAST PAD	~~10/31/2013~~ * ~~9/15/2011~~	WORK MUST BE COMPLETED WITHIN 2 CALENDAR DAYS IN EACH CRITICAL AREA	TEMPORARY CLOSURE OF R/W 12-30 WEST OF RUNWAY INTERSECTIONS	NONE	AS DIRECTED BY THE ENGINEER	NONE
D	R/W 18-36 AND TAXIWAYS	INSTALL LIGHTING & SUPPLEMENTARY WIND CONES, PAVE SHOULDERS	~~10/31/2012~~ * ~~9/15/2012~~	ONLY 1000 FEET OF TRENCH MAY BE OPEN AT ONE TIME ⚠ NOTAMS FOR CONSTRUCTION ACTIVITIES WILL ALLOW PARTIAL CLOSURES OF RUNWAYS AND TAXIWAYS	⚠ LIMITED HALF WIDTH/LENGTH CLOSURES OF R/W 18-36	NONE	AS DIRECTED BY THE ENGINEER	R/W 18-36 & TAXIWAY SHOULDERS MAY REMAIN UNPAVED UNTIL 2012, SEE NOTE 10. ALL TRENCHES AND EXCAVATIONS IN SHOULDERS MUST BE BACKFILLED TO WITHIN 3 INCHES OF THE PRE-EXISTING SHOULDER ELEVATIONS AND GRADED TO MATCH THE PRE-EXISTING SHOULDER SLOPES AT THE END OF EACH CONSTRUCTION SHIFT ⚠ SEE NOTE 6 FOR LIGHTING REQUIREMENTS
E	ELECTRICAL EQUIPMENT AND STANDBY GENERATOR ENCLOSURE	CONSTRUCT ELECTRICAL EQUIPMENT ENCLOSURE AND INSTALL ELECTRICAL EQUIPMENT	~~10/31/2011~~ 2012 *	NONE	NONE	NONE	NONE	CONTINUOUS POWER MUST BE MAINTAINED THROUGHOUT CONSTRUCTION.
		CONSTRUCT STANDBY GENERATOR ENCLOSURE AND INSTALL GENERATOR	10/31/2012	NONE	NONE	NONE	NONE	CONTINUOUS POWER MUST BE MAINTAINED THROUGHOUT CONSTRUCTION.

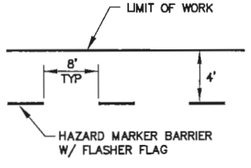
NOTES

1. SEE APPENDIX D FOR THE SAFETY PLAN NARRATIVE AND SECTION 80 OF THE SPECIFICATIONS FOR LIMITATIONS AND OPERATIONAL SAFETY CONCERNS.
2. THE CONTRACTOR WILL BE REQUIRED TO COORDINATE WITH THE ENGINEER AND AIRPORT MANAGER TO ISSUE NOTAMS REGARDING CURRENT AIRPORT OPERATIONS AND RESTRICTIONS. THE CONTRACTOR WILL BE REQUIRED TO ESTABLISH A POINT OF CONTACT WITH EACH OF THE SCHEDULED CARRIERS AND TO FAX UPDATED OPERATIONS INFORMATION TO THE CONTACTS EACH WEEK AS CHANGES OCCUR. THE UPDATES WILL INCLUDE A SKETCH OF AIRPORT OPERATION AREAS AND WORK AREAS.
3. WORK OUTSIDE THE LIMITS OF THE RUNWAY SAFETY AREA AND TAXIWAY SAFETY AREA MAY BE PERFORMED AT ANY TIME WITHOUT CLOSURES, (SEE DETAIL 1/10). WORK WITHIN THE SAFETY AREAS AND WORK AFFECTING OPERATIONS SHALL NOT BEGIN UNTIL AUTHORIZED BY THE ENGINEER.
4. RUNWAY CLOSURES CAN BE PROPOSED TO THE ENGINEER AND PUT INTO AFFECT ONLY WITH THE APPROVAL OF THE ENGINEER AND AIRPORT MANAGER.
5. MAINTAIN AIRCRAFT ACCESS TO THE APRONS, TAXIWAYS, AND RUNWAYS DURING ALL STAGES OF WORK. GUIDE AIRCRAFT THROUGH WORK AREAS AS REQUIRED.
6. PROVIDE TEMPORARY LIGHTING AS REQUIRED TO MAINTAIN OPERATIONAL R/W AND T/W LIGHTING SYSTEMS BETWEEN EVENING CIVIL TWILIGHT AND MORNING CIVIL TWILIGHT AND DURING INSTRUMENT FLIGHT RULES (IFR) WEATHER CONDITIONS. BOTH EDGES AND ENDS OF THE RUNWAYS SHALL HAVE OPERATIONAL LIGHTING. EXISTING LIGHTS MAY BE USED AS APPLICABLE.
7. PAPIS AND APPROACH LIGHTING SHALL REMAIN OPERATIONAL DURING CONSTRUCTION.
8. LIMITED OUTAGES ARE EXPECTED WHILE TRANSFERRING THE POWER SUPPLY FROM THE EXISTING ELECTRICAL EQUIPMENT ENCLOSURE TO THE NEW. OUTAGES WILL ONLY BE ALLOWED BETWEEN MORNING CIVIL TWILIGHT AND 3 HOURS PRIOR TO EVENING CIVIL TWILIGHT. COORDINATE WITH THE ENGINEER, FAA AND NAKNEK ELECTRIC ASSOCIATION FOR ALL PLANNED OUTAGES.
9. STORAGE OF EQUIPMENT OR MATERIALS ON THE RUNWAYS, TAXIWAYS, APRONS, OR SAFETY AREAS WILL NOT BE ALLOWED.
10. ALL UNPAVED SHOULDERS MUST BE GRADED TO MATCH THE PRE-EXISTING SHOULDER ELEVATIONS AND SLOPES PRIOR TO WINTER SHUTDOWN.
11. ⚠ CONTACT USAF THROUGH THE PROJECT ENGINEER TO LOCATE ANY BAK POWER CABLES BEFORE EXCAVATION.

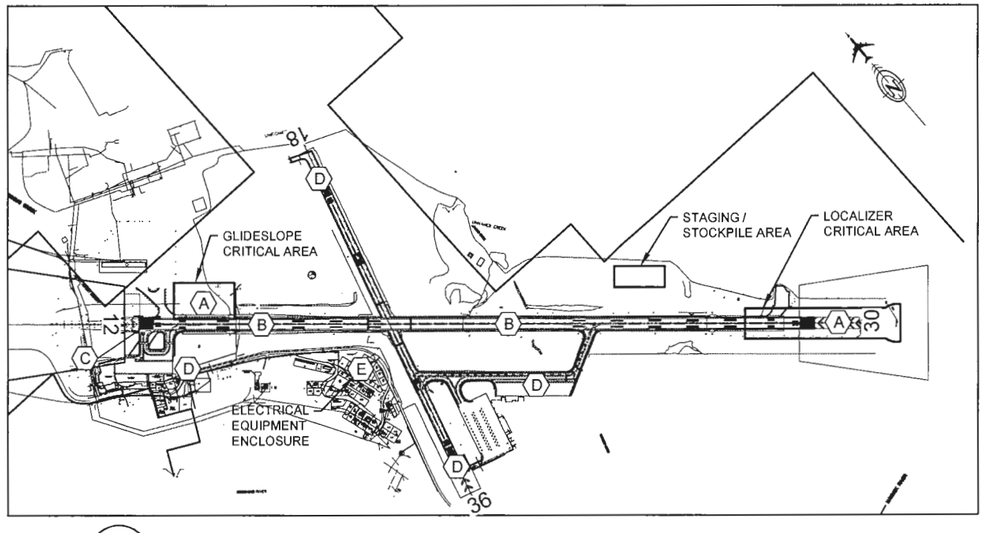


1/10 SAFETY AREA DETAIL
NTS

SAFETY AREA TABLE	
LOCATION	SAFETY AREA TOTAL WIDTH
R/W 12/30	500 FT
R/W 18/36	300 FT
T/W A	118 FT
T/W B	118 FT
T/W C	118 FT
T/W D	118 FT
T/W E	118 FT
T/W M	118 FT
T/W N	79 FT



2/10 HAZARD MARKER BARRIER LAYOUT
NTS



3/10 WORK AREA DETAIL
NTS

PLAN PREPARED BY DOWL HKM

DATE ORIGINALLY STAMPED 2/18/11

STATE OF ALASKA 49TH
Brian R. Hanson
CE 11132
Jul 01, 2014
REGISTERED PROFESSIONAL ENGINEER

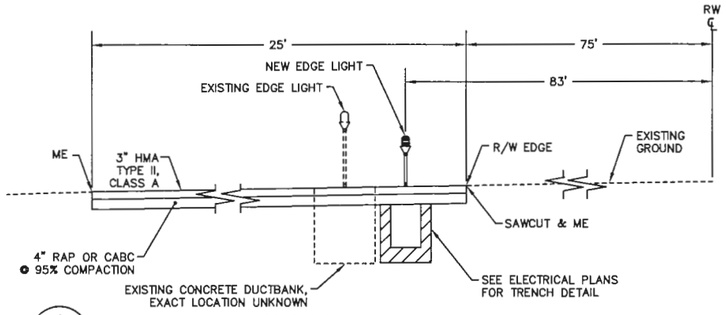
BY	DATE	REVISION
BRH	3/17/2011	ADDENDUM ⚠
	6/2014	AS-BUILT

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

KING SALMON AIRPORT
KING SALMON, ALASKA
AIRPORT LIGHTING
PROJECT No. 52673
AIP No. 3-02-0148-12-2011
CONSTRUCTION STAGING AND SAFETY PLAN, NOTES, AND DETAILS

DATE: 2/22/2011
SHEET: 10 OF 54
AS-BUILT SHEET: 10 OF 57

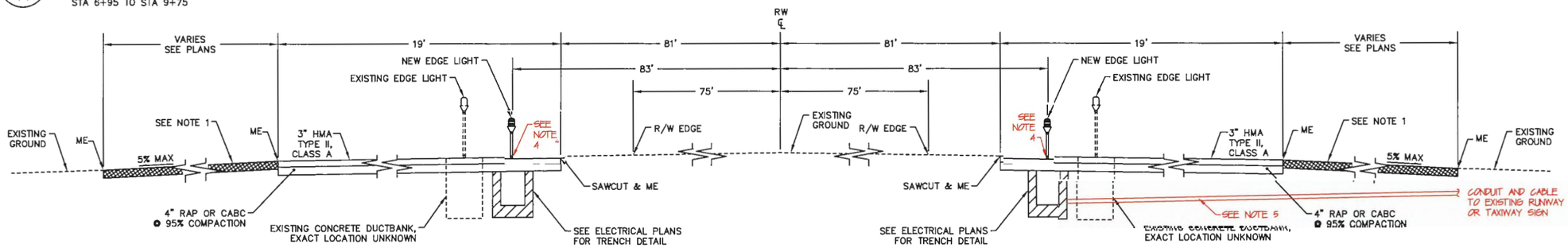
Designed By: MJ
Drawn By: RDL
Checked By: BRH
DOWL TILE No: 234-26
SCRIPT FILE: PLP
Date Revised: 7/01/2014, 4:04 PM
Layout Name: 10-STAGING
File Path and Name: N:\Projects\King Salmon\AKN Lighting 2011\Mstr\DRW-AKN_LIGHTING.dwg



1/11 RUNWAY 12-30 SHOULDER PAVING

NTS

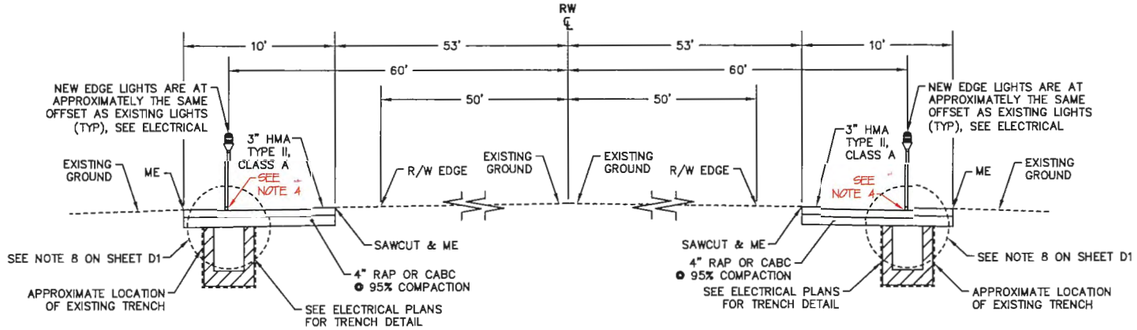
STA 6+95 TO STA 9+75



2/11 RUNWAY 12-30 SHOULDER PAVING

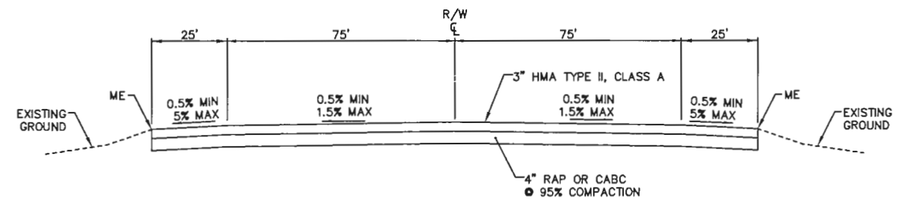
NTS

STA 11+21 TO STA 92+00



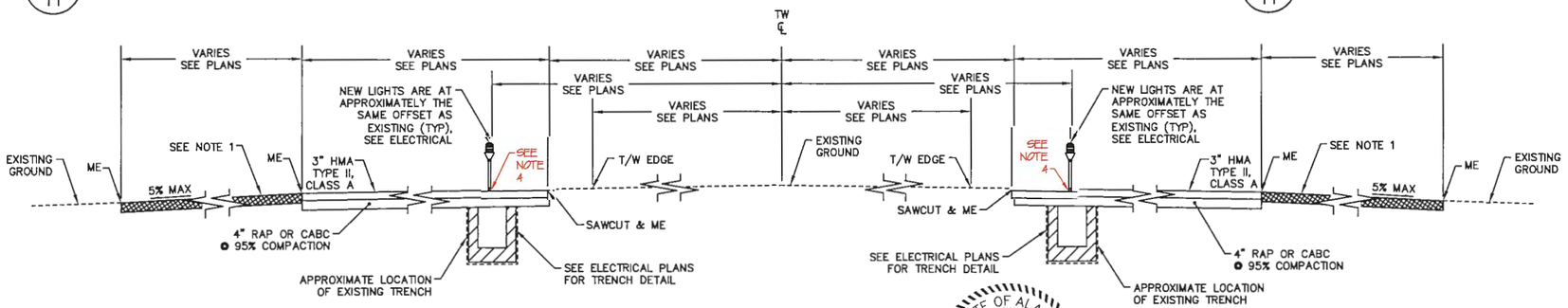
3/11 RUNWAY 18-36 SHOULDER PAVING

NTS



4/11 RUNWAY 12 BLAST PAD PAVING

NTS



5/11 TAXIWAY SHOULDER PAVING

NTS

NOTES

1. PROCESS EXISTING ASPHALT PAVEMENT IN PLACE ACCORDING TO P-161 AND GRADE TO MATCH PRE-EXISTING SLOPES. COMPACT MATERIAL TO 95%.
2. ALL RAP MATERIAL MUST BE USED BEFORE CABC CAN BE SUBSTITUTED.
3. ESTIMATED PAVEMENT THICKNESS VARIES BETWEEN 1.75" AND 6". SEE SUBSURFACE EXPLORATION REPORT PREPARED BY DOWL ENGINEERS DATED APRIL 2008 FOR PAVEMENT CORING DATA.
4. SHIMS RANGING FROM ½" TO 1-1/2" USED AS REQUIRED TO BRING LIGHT TO PROPER ELEVATION.
5. ALL 2" CONDUIT RUNS TO EXISTING SIGNS ARE REPLACE WITH 20 FEET OF NEW 2" CONDUIT AND COUPLED TO EXISTING FOR A DISTANCE OUTSIDE OF THE PAVED SHOULDER.

STATE OF ALASKA 49TH
Brian R. Hanson CE 11132 Jul 01, 2014
REGISTERED PROFESSIONAL ENGINEER

DATE ORIGINALLY STAMPED 2/18/11

PLAN PREPARED BY DOWL HKM

NO.	DATE	REVISION
1	6/2014	AS-BUILT

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

KING SALMON AIRPORT
KING SALMON, ALASKA
AIRPORT LIGHTING
PROJECT No. 52673
AIP No. 3-02-0148-12-2011
TYPICAL SECTIONS

DATE: 2/22/2011
SHEET: 11 OF 54
AS-BUILT SHEET: 11 OF 57

Designed By: MLI
Drawn By: RDL
Checked By: BRH
DGN. FILE No: 234-26
SCRIPT FILE:
7/01/2014, 4:05 PM
11-TYP
W:\Projects\King salmon\skn lighting 2011\Asbuilt\D01-4KN_LIGHTING.dwg
Date Revised:
Layout Name:
File Path and Name:

MATCH LINE STA 20+50

RUNWAY 12-30

TAXIWAY A

TAXIWAY B

TAXIWAY M

STA 4+95.00, 100.00' LT

STA 6+95.00 BEGIN SHOULDER PAVING

STA 8+97.97, 100.00' LT

STA 9+40.15, 138.02' LT

STA 9+40.15, 75.00' LT

R=135.00'

25.00'

75.00'

SEE NOTE 6

STA 11+21.32, 81.00' LT

STA 11+21.32, 141.00' LT

STA 11+45.00, 141.00' LT

R=181'

STA 12+52.64, 100.00' LT

APPROXIMATE EDGE OF EXISTING PAVEMENT

19.00'

81.00'

REMOVED DUE TO POOR CONDITION

STA 18+40.21 END SHOULDER PAVING

MOVED TO STA 18+78.70 FROM 18+81.70

STA 19+32.28 BEGIN SHOULDER PAVING

STA 4+95.00 57.05

57.13

57.07

THRESHOLD LIGHTS

STA 4+95.00, 100.00' RT

STA 6+95.00, 100.00' RT

SEE NOTE 3

STA 12+56.07, 79.00' RT PT

STA 12+56.07, 81.00' RT PT

STA 12+56.07, 100.00' RT PT BEGIN SHOULDER PAVING

R=121.00'

R=115.00'

STA 18+39.44 END SHOULDER PAVING

STA 19+31.47 BEGIN SHOULDER PAVING

STA 11+35.07, 200.00' RT PC

STA 11+51.07, 215.00' RT PC

STA 11+35.07, 400.00' RT

SILT FENCE

16.00'

24"CMP NW Inv=49.12 SE Inv=47.90

18"CMP NW Inv=50.65 SE Inv=52.67

6" WOOD STAVE PIPE INV=50.73

PROTECT INLET WITH GRAVEL BAG BARRIER

CONCRETE STRUCTURE W/ ACCESS TO CULVERT INV=46.18

CONCRETE STRUCTURE W/ ACCESS TO CULVERT INV=46.27

CONCRETE STRUCTURE W/ ACCESS TO CULVERT INV=46.54

ACCESS TO CULVERT INV=47.62

SD/FD BOTTOM ELEV=44.70 NE INV=45.85 (36" CMP) INV=46.03 (48" CMP) NW INV=45.30 (48" CMP)

SD/FD (ABANDONED) BOTTOM ELEV=49.85 NE INV=50.23 (18" CMP)

MECHANICAL VAULT FOR ARREST BARRIER

SD/FD (ABANDONED) BOTTOM ELEV=49.70 SW INV=50.10 (18" CMP)

ELEC/MH BOTTOM ELEV=49.02

18" CMP INV=49.99

"ILS CRITICAL AREA NO VEHICLES BEYOND THIS POINT"

ACCESS TO CULVERT INV=48.07 48" CMP INV=48.45

18" CMP (ABANDONED) INV=51.62

ELEC/MH BOTTOM ELEV=48.82

ELEC/MH BOTTOM ELEV=49.86

ELEC/MH BOTTOM ELEV=50.04

ELEC/MH BOTTOM ELEV=50.53

ELEC/MH BOTTOM ELEV=50.28

TAXIWAY SIGN "M"

ELEC/MH BOTTOM ELEV=49.79

Elec. MH Top=56.64 F.F.=50.91

SILT FENCE

50 0 25 50 100

GRAPHIC SCALE (IN FEET) HORIZONTAL

NOTES

1. ALL STATIONS AND OFFSETS ARE REFERENCED FROM THE RUNWAY 12-30 CENTERLINE UNLESS OTHERWISE NOTED.
2. SEE ELECTRICAL PLAN FOR STRUCTURES TO REMAIN IN SHOULDER PAVEMENT AREAS.
3. WORK AROUND EXISTING FAA LIGHTS IN BLAST PAD AREA. ALL LIGHTS TO REMAIN.
4. IN ADDITION TO EXISTING PAVEMENT WITHIN NEW PAVEMENT LIMITS, THE HATCHED AREAS SHALL BE PROCESSED IN PLACE ACCORDING TO P-161 AND MATERIAL SHALL BE GRADED TO MATCH PRE-EXISTING SLOPE.
5. ALL ASPHALT SHALL BE SAW CUT.
6. T/W M AND R/W 12-30 INTERSECTION SHALL NOT REMAIN UNPAVED FOR MORE THAN 3 CALENDAR DAYS.
7. GRAVEL BAG BARRIERS SHALL BE CONSTRUCTED OUT OF GEOTEXTILE FABRIC (NOT BURLAP) AND SHALL BE FILLED WITH 0.75 INCH ROCK OR 0.25 INCH PEA GRAVEL. A MINIMUM OF 3 LAYERS SHALL BE PLACED AROUND INLET. GRAVEL BAG BARRIERS ARE SUBSIDIARY TO P-157a.

KEY PLAN

18 12 30 36

STATE OF ALASKA 49TH REGISTERED PROFESSIONAL ENGINEER Brian R. Hanson CE 11132 Jul 03, 2014

DATE ORIGINALLY STAMPED 2/18/11

PLAN PREPARED BY DOWL HKM

BY	DATE	REVISION
TC	6/2014	AS-BUILT

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

KING SALMON AIRPORT
KING SALMON, ALASKA
AIRPORT LIGHTING
PROJECT No. 52673
AIP No. 3-02-0148-12-2011
RUNWAY 12-30 AND TAXIWAY B PLAN
STA 5+00 TO STA 20+50

DATE: 2/22/2011
SHEET: 12 OF 54
AS-BUILT SHEET: 12 OF 57

Date Revised: 7/03/2014, 3:44 PM
Layout Name: 12-(12-30)
File Path and Name: W:\Projects\king salmon\akn lighting 2011\Asbuilt\DRW-AKN_LIGHTING.dwg
SCRIPT FILE: P&P
DOWL FILE No: 234-26
Designed By: MLJ
Drawn By: RDL
Checked By: BRH

50 0 25 50 100

GRAPHIC SCALE
(IN FEET)
HORIZONTAL

SILT FENCE

30" CMP
NW INV=47.93
SE INV=48.59

ABANDONED ARREST BARRIER

UTILITY VAULT
BOT. ELEV=49.68

UNIDENTIFIED
UTILITY LINE

MOVED TO
STA 20+77.77
FROM 20+79.77

MOVED TO
STA 22+76.84
FROM 22+77.84

APPROXIMATE EDGE OF
EXISTING PAVEMENT

6%

19.00'

SAW CUT

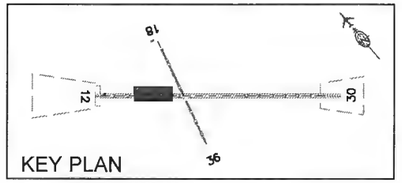
81.00'

RUNWAY 12-30

MATCH LINE STA 20+50

MATCH LINE STA 35+50

21+00 22+00 23+00 24+00 25+00 26+00 27+00 28+00 29+00 30+00 31+00 32+00 33+00 34+00 35+00



PLAN PREPARED BY DOWL HKM

DATE ORIGINALLY
STAMPED 2/18/11

STATE OF ALASKA
49TH
Brian R. Hanson
CE 11132
Jul 03, 2014
PROFESSIONAL ENGINEER

BY	DATE	REVISION
JC	6/2014	AS-BUILT

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
CENTRAL REGION

KING SALMON AIRPORT
KING SALMON, ALASKA
AIRPORT LIGHTING
PROJECT No. 52673
AIP No. 3-02-0148-12-2011
RUNWAY 12-30 PLAN
STA 20+50 TO STA 35+50

DATE: 2/22/2011
SHEET: 13 OF 54
AS-BUILT SHEET: 13 OF 57

Designed By: MJJ
Drawn By: RDL
Checked By: BRH
DOWL FILE No: 234-26
SCRIPT FILE: Map
Data Revised: 7/03/2014, 3:44 PM
Layout Name: 13-(12-30)
File Path and Name: W:\Projects\king salmon\akn lighting 2011\Asbuilt\DRW-AKN_LIGHTING.dwg

MATCH LINE STA 35+50

MATCH LINE STA 50+50

GRAPHIC SCALE
(IN FEET)
HORIZONTAL
50 0 25 50 100

REMOVED. ELEVATION WAS ABOVE SURROUNDINGS.

GRADED TO DRAIN AWAY FROM RUNWAYS

MH RING FAILED. REPAIRED BY REMOVING RING AND COVERING HOLE WITH STEEL PLATE THEN BURIED.

STA 39+01.20=
STA 50+77.42
END SHOULDER PAVING

STA 40+18.69=
STA 51+28.11
BEGIN SHOULDER PAVING

STA 39+78.65=
STA 52+56.99
END SHOULDER PAVING

STA 40+96.15
STA 53+07.68
BEGIN SHOULDER PAVING

STA 50+06.64
END SHOULDER PAVING

STA 50+05.86
END SHOULDER PAVING

PROTECT INLET WITH GRAVEL BAG BARRIER

APPROXIMATE EDGE OF EXISTING PAVEMENT

ABANDONED

RUNWAY 12-30

Elec MH
Top=59.69
F.F.=51.99

Elec MH
Top=61.01
INV=58.42(24")

Elec MH
Top=60.81
F.F.=55.04

Elec MH
Top=60.01
F.F.=54.28

Elec MH
Top=59.18
F.F.=51.50

"18-36"

"36-18"

SAW CUT

MECHANICAL VAULT FOR ARREST BARRIER

VAULT

MATCH LINE

INSTALL SILT FENCE TO PROTECT STREAM
SEE DETAIL THIS SHEET

MECHANICAL VAULT FOR ARREST BARRIER

AGM

STA 50+98.66
BEGIN SHOULDER PAVING

STA 50+97.86
BEGIN SHOULDER PAVING

RUNWAY 12-30

RUNWAY
12-30

ARREST BARRIER

OLD FIXTURE

18" CMP (ABANDONED)

ELEC/MH
ELEV=58.95

MATCH LINE STA 50+50

MATCH LINE STA 63+50

MATCH LINE

1/14 DETAIL
NTS

KEY PLAN

DATE ORIGINALLY STAMPED 2/18/11

STATE OF ALASKA
49TH
Brian R. Hanson
CE 11132
Jul 03, 2014
REGISTERED PROFESSIONAL ENGINEER

NO	DATE	REVISION
2	6/2014	AS-BUILT

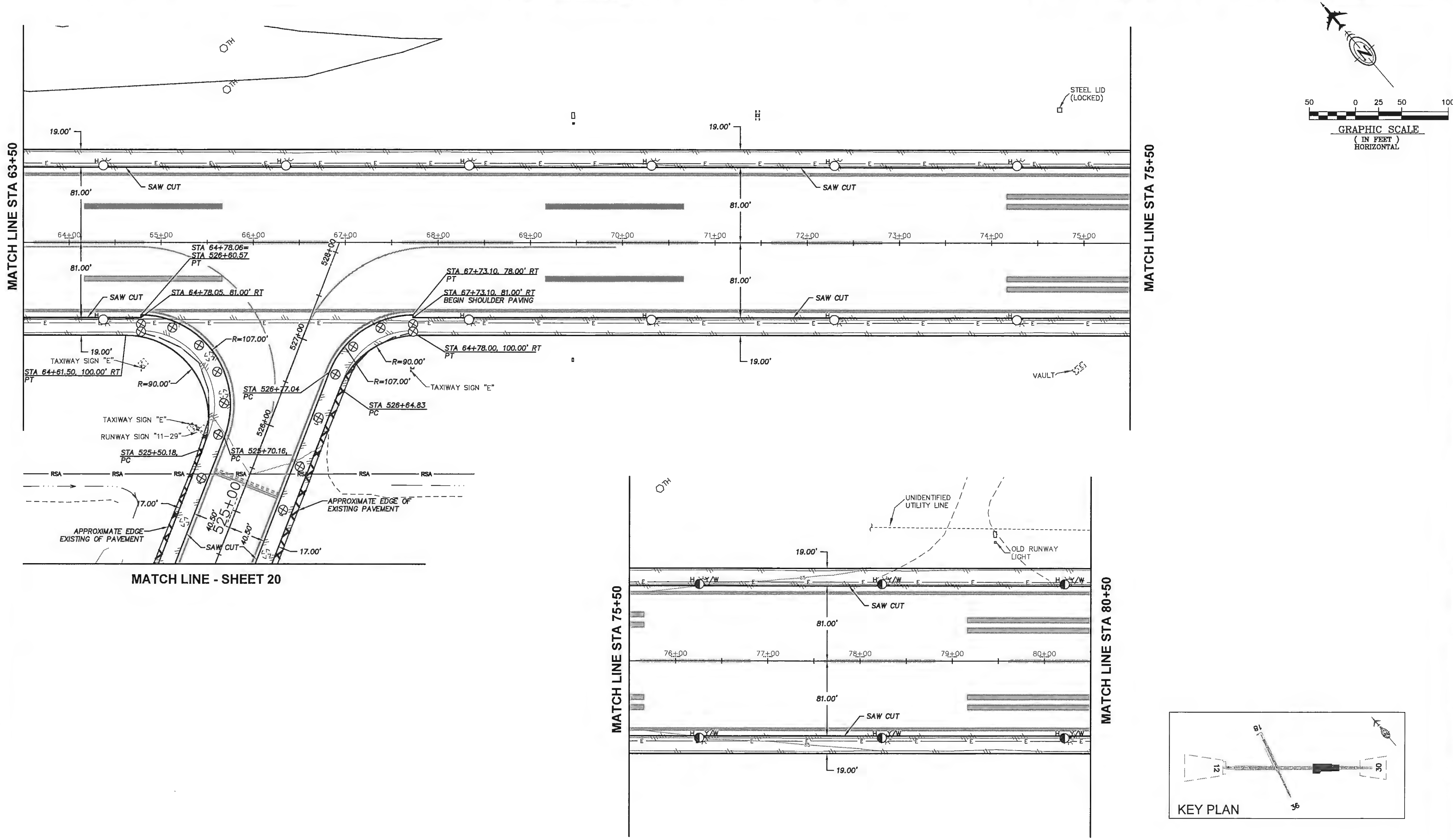
PLAN PREPARED BY DOWL HKM

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

KING SALMON AIRPORT
KING SALMON, ALASKA
AIRPORT LIGHTING
PROJECT No. 52673
AIP No. 3-02-0148-12-2011
RUNWAY 12-30 PLAN
STA 35+50 TO STA 63+50

DATE: 2/22/2011
SHEET: 14 OF 54
AS-BUILT SHEET: 14 OF 57

Designed By: MJJ
Drawn By: RDL
Checked By: BRH
DOWL FILE No: 234-26
SCRIPT FILE:
Date Revised: 7/03/2014, 3:44 PM
Layout Name: 14-30
File Path and Name: W:\Projects\king salmon\okn lighting 2011\Asbuilt\DRW-AKN_LIGHTING.dwg



Date Revised: 7/03/2014, 3:44 PM
Layout Name: 15-(12-30)
File Path and Name: W:\Projects\king salmon\akn lighting 2011\Asbuilt\DRW-AKN_LIGHTING.dwg
DOWL FILE No: 234-26
Designed By: MLI
Drawn By: RDL
Checked By: BRH

DATE ORIGINALLY STAMPED 2/18/11

STATE OF ALASKA 49TH Brian R. Hanson CE 11132 Jul 03, 2014 REGISTERED PROFESSIONAL ENGINEER

BY	DATE	REVISION
[initials]	6/2014	AS-BUILT

PLAN PREPARED BY DOWL HKM

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

KING SALMON AIRPORT
KING SALMON, ALASKA
AIRPORT LIGHTING
PROJECT No. 52673
AIP No. 3-02-0148-12-2011
RUNWAY 12-30 PLAN
STA 63+50 TO STA 80+50

DATE: 2/22/2011
SHEET: 15 OF 54
AS-BUILT SHEET: 15 OF 57

MATCH LINE STA 80+50

MATCH LINE STA 95+50

UTILITY VAULT
TOP OF PIPE=57.80

OLD FIXTURE

MECHANICAL VAULT
FOR ARREST BARRIER

AGM

MOVED TO STA 82+15.94 FROM 82+19.94

MOVED TO STA 84+15.24 FROM 84+18.01

ELEC/VAULT

OHP

REMOVED DUE TO POOR CONDITION

TAXIWAY SIGN "P"

TAXIWAY P

TAXIWAY SIGN "P-29"

STA 82+02.91
END SHOULDER PAVING

19.00'

SAW CUT

81.00'

STA 83+07.31
BEGIN SHOULDER PAVING

ARREST BARRIER

MOVED TO STA 86+14.75 FROM 86+16.08

STA 83+07.34
BEGIN SHOULDER PAVING

STA 81+96.11
END SHOULDER PAVING

24.50'

STA 92+20.00
END SHOULDER PAVING

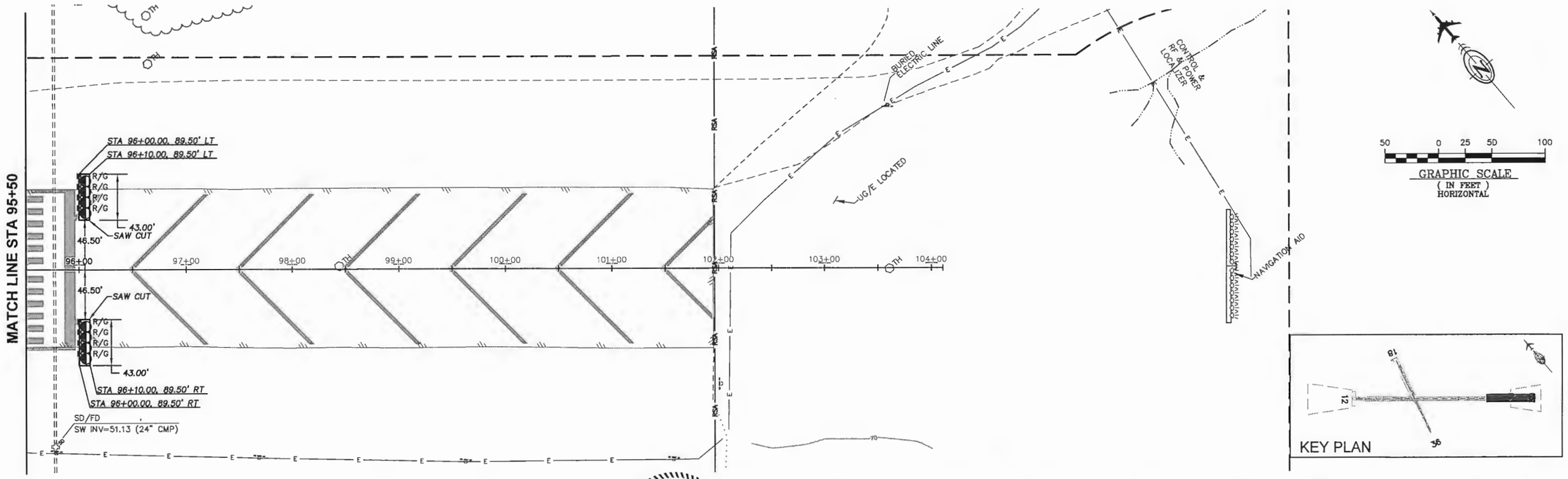
STA 93+98.21

STA 94+18.21

75.84'

74.37'

81+00 82+00 83+00 84+00 85+00 86+00 87+00 88+00 89+00 90+00 91+00 92+00 93+00 94+00 95+00



Date Revised: 7/03/2014, 3:44 PM
Layout Name: 16-12-30
File Path and Name: M:\Projects\King salmon\akn lighting 2011\Asbuilt\DRW-AKN_LIGHTING.dwg
SCRIPT FILE:
DOWL FILE No: 234-26
Designed By: MJJ
Drawn By: RDJ
Checked By: BRH

PLAN PREPARED BY DOWL HKM

DATE ORIGINALLY STAMPED 2/18/11

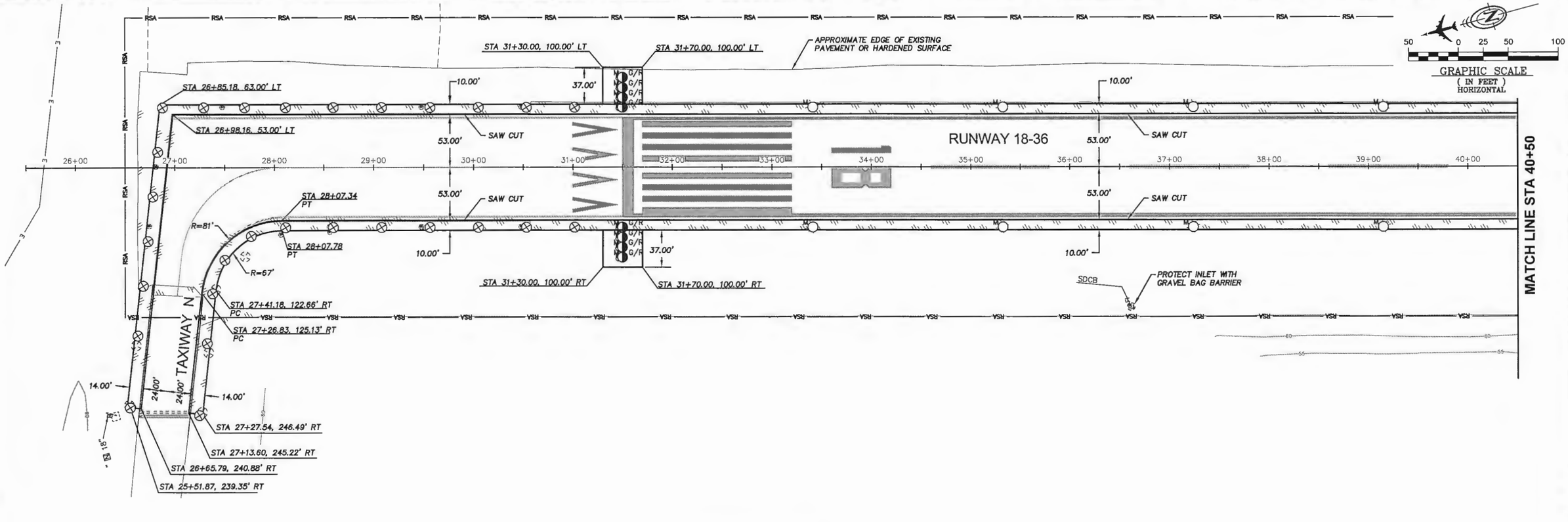
STATE OF ALASKA
49TH
Brian R. Hanson
CE 11132
Jul 03, 2014
REGISTERED PROFESSIONAL ENGINEER

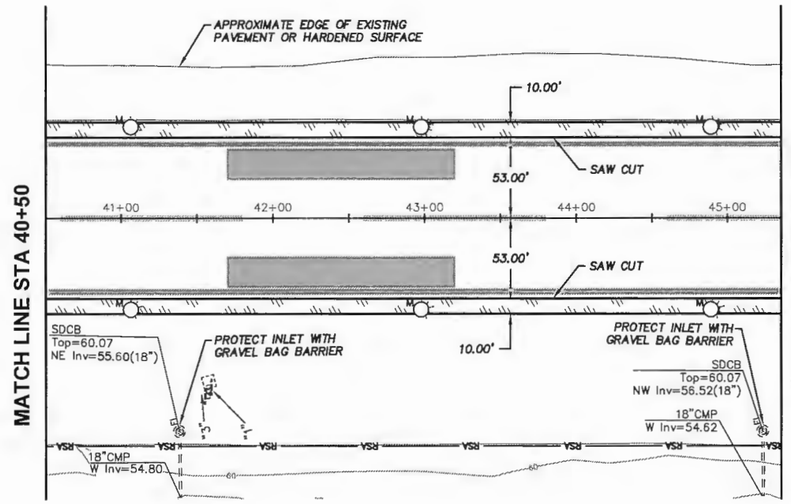
TC	6/2014	AS-BUILT
BY	DATE	REVISION

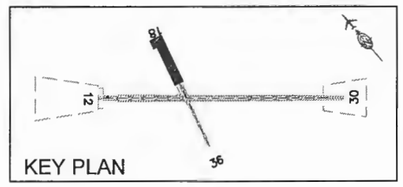
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

KING SALMON AIRPORT
KING SALMON, ALASKA
AIRPORT LIGHTING
PROJECT No. 52673
AIP No. 3-02-0148-12-2011
RUNWAY 12-30 PLAN
STA 80+50 TO STA 104+00

DATE: 2/22/2011
SHEET: 16 OF 54
AS-BUILT SHEET: 16 OF 57







NOTES

1. ALL STATIONS AND OFFSETS ARE REFERENCED FROM THE RUNWAY 18-36 CENTERLINE UNLESS OTHERWISE NOTED.
2. SEE ELECTRICAL PLAN FOR STRUCTURES TO REMAIN IN SHOULDER PAVEMENT AREAS.
3. IN ADDITION TO EXISTING PAVEMENT WITHIN NEW PAVEMENT LIMITS, THE HATCHED AREAS SHALL BE PROCESSED IN PLACE ACCORDING TO P-151 AND MATERIAL SHALL BE GRADED TO MATCH PRE-EXISTING SLOPE.
4. ALL ASPHALT OR HARDENED SURFACES SHALL BE SAW CUT.
5. GRAVEL BAG BARRIERS SHALL BE CONSTRUCTED OUT OF GEOTEXTILE FABRIC (NOT BURLAP) AND SHALL BE FILLED WITH 0.75 INCH ROCK OR 0.25 INCH PEA GRAVEL. A MINIMUM OF 3 LAYERS SHALL BE PLACED AROUND INLET. GRAVEL BAG BARRIERS ARE SUBSIDIARY TO P-157a.

Designed By: MJJ
Drawn By: RDL
Checked By: BRH
DOWL FILE No: 234-26
SCRIPT FILE:
Date Revised: 7/03/2014, 3:45 PM
Layout Name: 17-(18-36)
File Path and Name: W:\Projects\King salmon\akn lighting 2011\Asbuilt\DRW-AKN_LIGHTING.dgn

STATE OF ALASKA 49TH
Brian R. Hanson
CE 11132
Jul 03, 2014
REGISTERED PROFESSIONAL ENGINEER

DATE ORIGINALLY STAMPED 2/18/11

PLAN PREPARED BY DOWL HKM

BY	DATE	REVISION
TC	6/2014	AS-BUILT

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

KING SALMON AIRPORT
KING SALMON, ALASKA
AIRPORT LIGHTING
PROJECT No. 52673
AIP No. 3-02-0148-12-2011
RUNWAY 18-36 AND TAXIWAY N PLAN
STA 26+00 TO STA 45+50

DATE: 2/22/2011
SHEET: 17 OF 54
AS-BUILT SHEET: 17 OF 57

50 0 25 50 100

GRAPHIC SCALE
(IN FEET)
HORIZONTAL

MATCH LINE STA 45+50

RUNWAY 18-36

MATCH LINE STA 58+50

APPROXIMATE EDGE OF EXISTING PAVEMENT OR HARDENED SURFACE

STA 51+28.11=
STA 40+18.69
END SHOULDER PAVING

PROTECT INLET WITH GRAVEL BAG BARRIER

STA 53+07.68=
STA 40+96.15
BEGIN SHOULDER PAVING

STA 50+77.42=
STA 39+01.20
END SHOULDER PAVING

STA 52+56.99=
STA 39+78.65
BEGIN SHOULDER PAVING

APPROXIMATE EDGE OF EXISTING PAVEMENT

SAW CUT

GRADE TO DRAIN

Elec. MH
Top=80.81
F.F.=55.04

Elec. MH
Top=80.01
F.F.=54.28

Elec. MH
Top=59.69
F.F.=51.99

Elec. MH
Top=59.18
F.F.=51.50

KEY PLAN

PLAN PREPARED BY DOWL HKM

DATE ORIGINALLY STAMPED 2/18/11

STATE OF ALASKA 49TH
Brian R. Hanson
CE 11132
Jul 03, 2014
REGISTERED PROFESSIONAL ENGINEER

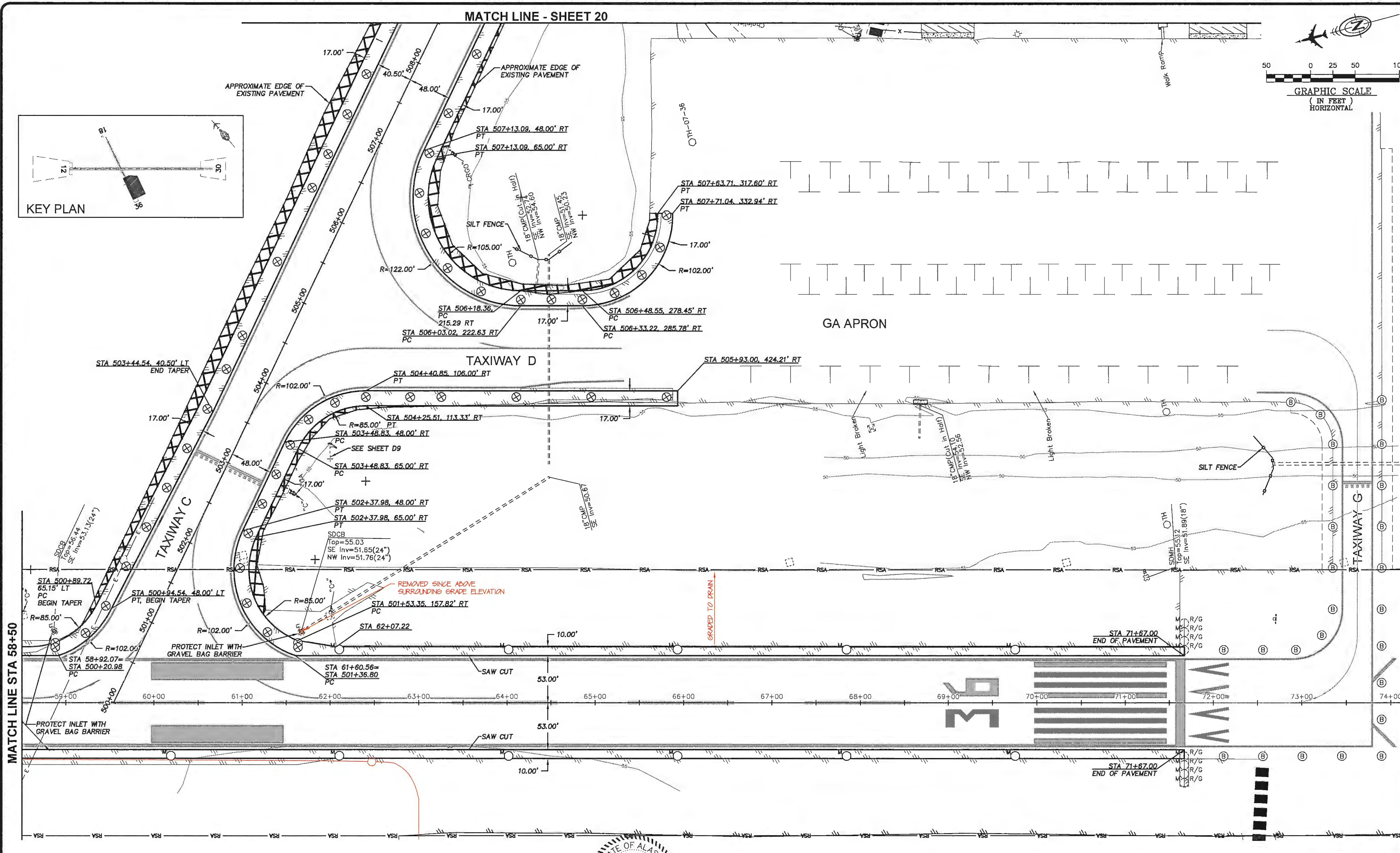
BY	DATE	REVISION
JC	6/2014	AS-BUILT

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

KING SALMON AIRPORT
KING SALMON, ALASKA
AIRPORT LIGHTING
PROJECT No. 52673
AIP No. 3-02-0148-12-2011
RUNWAY 18-36 PLAN
STA 45+50 TO STA 58+50

DATE: 2/22/2011
SHEET: 18 OF 54
AS-BUILT SHEET: 18 OF 57

Date Revised:
Layout Name: 18-(18-36)
File Path and Name: W:\Projects\king salmon\cdrs lighting 2011\Asbuilt\DRW-AKN_LIGHTING.dwg
SCRIPT FILE: (optional)
DOWL FILE No: 234-26
Designed By: MJJ
Drawn By: RDL
Checked By: BRH
7/03/2014, 3:45 PM


MATCH LINE - SHEET 20
MATCH LINE STA 58+50
KEY PLAN
GRAPHIC SCALE
(IN FEET)
HORIZONTAL
APPROXIMATE EDGE OF EXISTING PAVEMENT
TAXIWAY D
TAXIWAY C
TAXIWAY G
GA APRON
STA 507+13.09, 48.00' RT PT
STA 507+13.09, 65.00' RT PT
STA 507+63.71, 317.60' RT PT
STA 507+71.04, 332.94' RT PT
STA 506+18.36, PC 215.29 RT
STA 506+03.02, 222.63 RT PC
STA 506+48.55, 278.45' RT PC
STA 506+33.22, 285.78' RT PC
STA 505+93.00, 424.21' RT
STA 503+44.54, 40.50' LT END TAPER
STA 504+40.85, 106.00' RT PT
STA 504+25.51, 113.33' RT
STA 503+48.83, 48.00' RT PC
SEE SHEET D9
STA 503+48.83, 65.00' RT PC
STA 502+37.98, 48.00' RT PT
STA 502+37.98, 65.00' RT PT
SDCB Top=55.03 SE Inv=51.65(24") NW Inv=51.76(24")
REMOVED SINCE ABOVE SURROUNDING GRADE ELEVATION
STA 501+53.35, 157.82' RT PC
STA 62+07.22
STA 500+89.72 65.15' LT PC BEGIN TAPER
STA 500+94.54, 48.00' LT PT, BEGIN TAPER
STA 58+92.07= STA 500+20.98 PC
STA 61+60.56= STA 501+36.80 PC
PROTECT INLET WITH GRAVEL BAG BARRIER
SAW CUT
SILT FENCE
STA 71+67.00 END OF PAVEMENT
GRADED TO DRAIN
Light Broken
Walk Ramp
SDMH Top=55.12 SE Inv=51.89(18")
18"CMP(Cut in Half) SE Inv=52.74 NW Inv=54.60
18"CMP SE Inv=51.45 NW Inv=50.23
18"CMP SE Inv=50.67
18"CMP(Cut in Half) SE Inv=54.10 NW Inv=52.56
SDCB Top=56.44 SE Inv=53.13(24")
R=105.00' R=122.00' R=102.00' R=85.00'
17.00' 40.50' 48.00' 53.00' 10.00'

PLAN PREPARED BY DOWL HKM

DATE ORIGINALLY STAMPED 2/18/11

STATE OF ALASKA 49TH Brian R. Hanson CE 11132 Jul 03, 2014 REGISTERED PROFESSIONAL ENGINEER

BY	DATE	REVISION
JL	6/2014	AS-BUILT

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

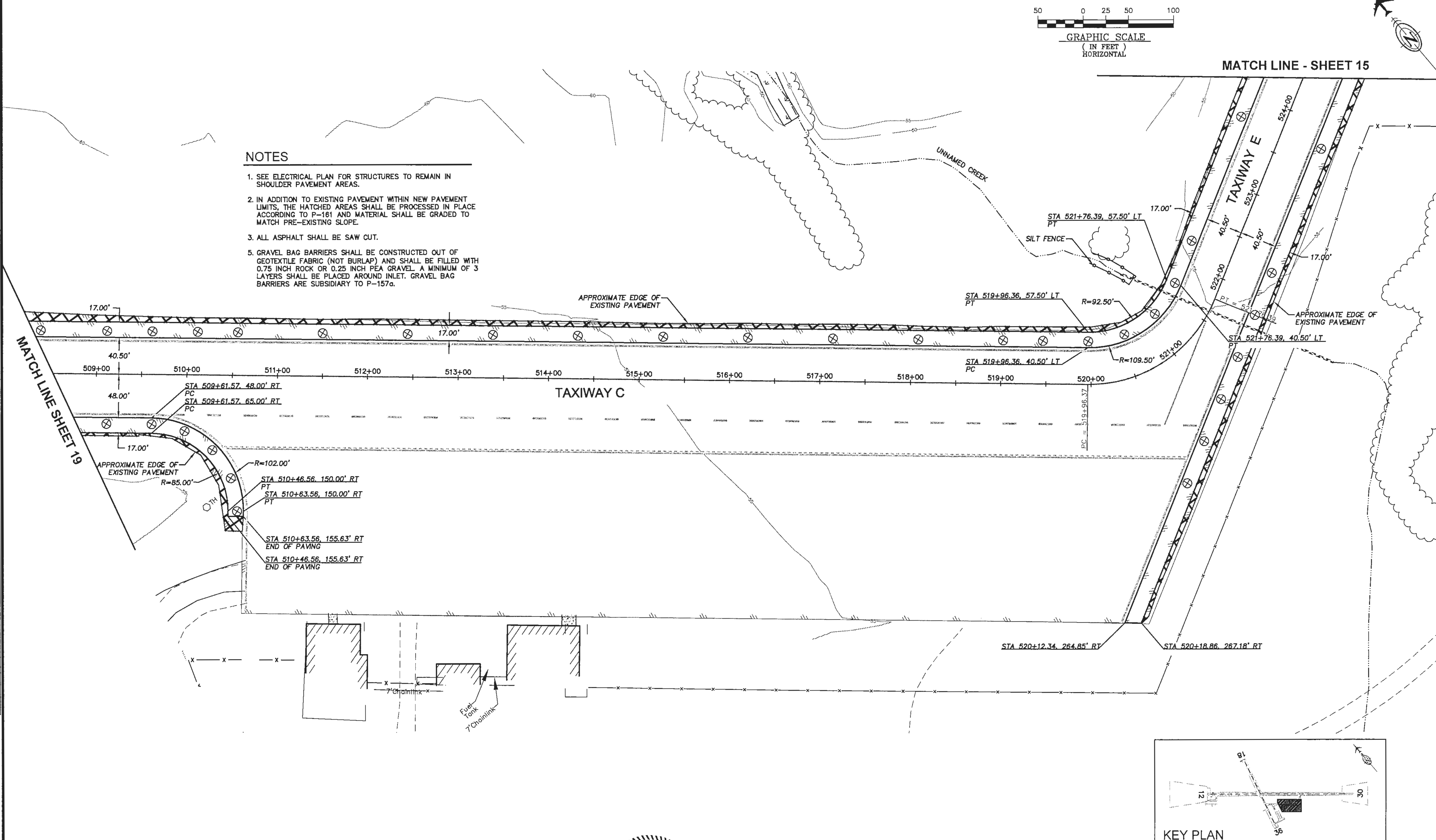
KING SALMON AIRPORT
KING SALMON, ALASKA
AIRPORT LIGHTING
PROJECT No. 52673
AIP No. 3-02-0148-12-2011
RUNWAY 18-36 & TAXIWAY C & D
STA 58+50 TO STA 74+50

DATE: 2/22/2011
SHEET: 19 OF 54
AS-BUILT SHEET: 19 OF 57

Date Revised: 7/03/2014, 3:45 PM
Layout Name: 19-(18-36)
File Path and Name: W:\Projects\king salmon\akn lighting 2011\Asbuilt\DRW-AKN_LIGHTING.dwg
SCRIPT FILE: P&P
DOWL FILE No: 234-26
Designed By: MJJ
Drawn By: RDL
Checked By: BRH

NOTES

1. SEE ELECTRICAL PLAN FOR STRUCTURES TO REMAIN IN SHOULDER PAVEMENT AREAS.
2. IN ADDITION TO EXISTING PAVEMENT WITHIN NEW PAVEMENT LIMITS, THE HATCHED AREAS SHALL BE PROCESSED IN PLACE ACCORDING TO P-161 AND MATERIAL SHALL BE GRADED TO MATCH PRE-EXISTING SLOPE.
3. ALL ASPHALT SHALL BE SAW CUT.
5. GRAVEL BAG BARRIERS SHALL BE CONSTRUCTED OUT OF GEOTEXTILE FABRIC (NOT BURLAP) AND SHALL BE FILLED WITH 0.75 INCH ROCK OR 0.25 INCH PEA GRAVEL. A MINIMUM OF 3 LAYERS SHALL BE PLACED AROUND INLET. GRAVEL BAG BARRIERS ARE SUBSIDIARY TO P-157a.



PLAN PREPARED BY DOWL HKM

DATE ORIGINALLY STAMPED 2/18/11

STATE OF ALASKA 49TH REGISTERED PROFESSIONAL ENGINEER Brian R. Hanson CE 11132 Jul 03, 2014

BY	DATE	REVISION
TC	6/2014	AS-BUILT

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

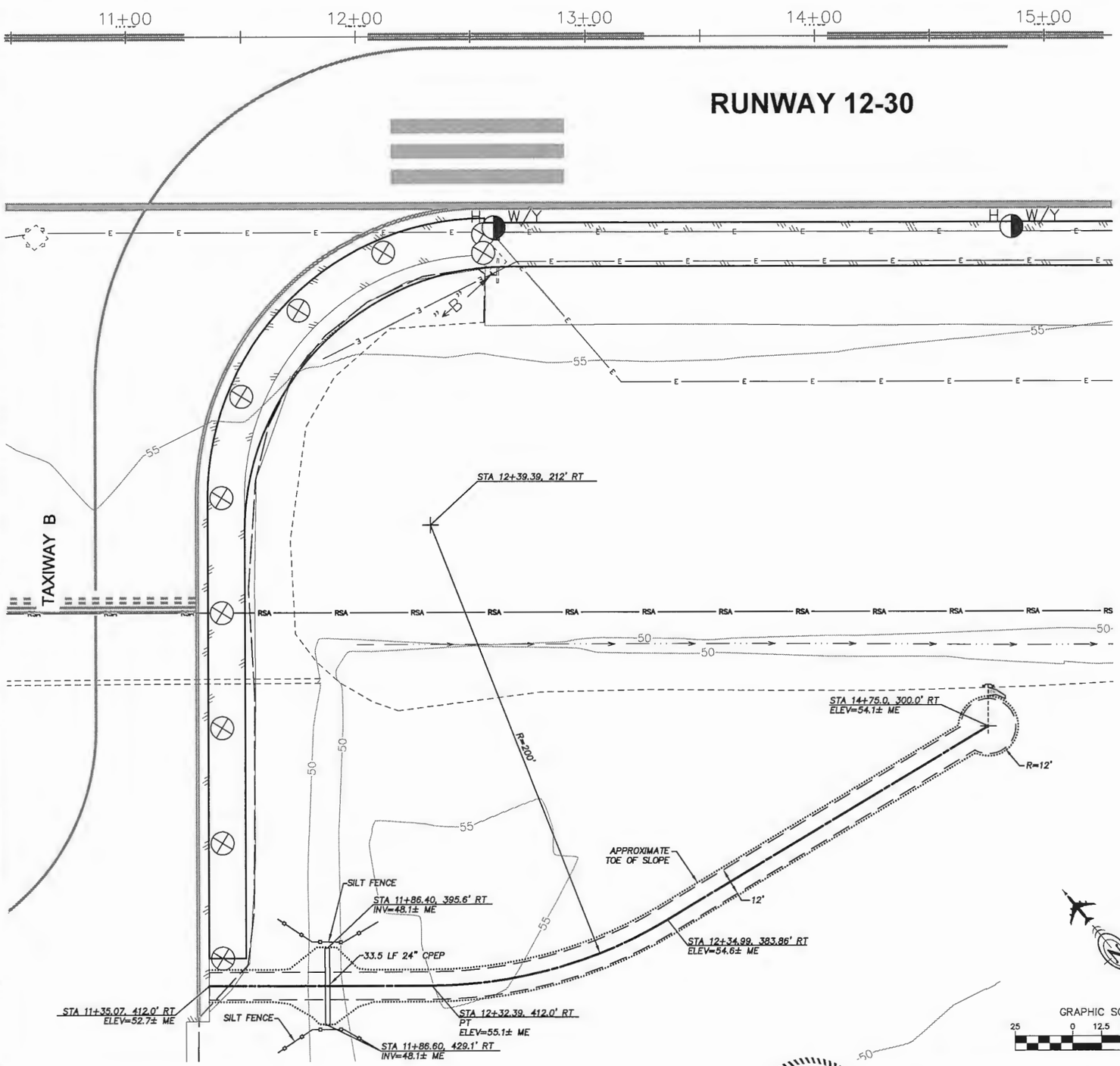
KING SALMON AIRPORT
KING SALMON, ALASKA
AIRPORT LIGHTING
PROJECT No. 52673
AIP No. 3-02-0148-12-2011
TAXIWAY C & E PLAN

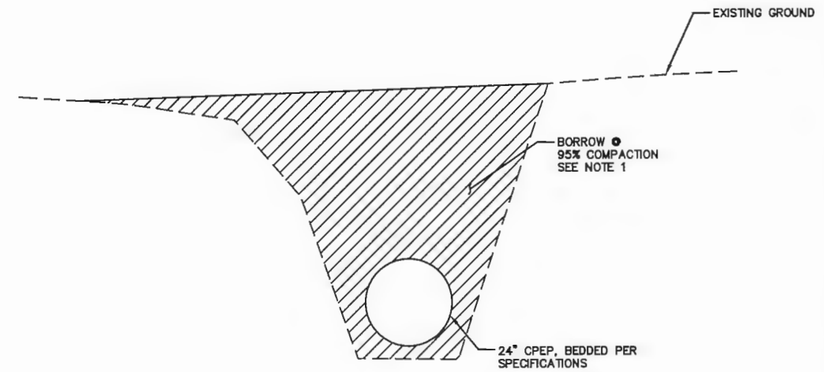
DATE: 2/22/2011
SHEET: 20 OF 54
AS-BUILT SHEET: 20 OF 57

Date Revised: 7/03/2014, 3:45 PM
Layout Name: 20-(TW_C&E)
File Path and Name: W:\Projects\king salmon\akn lighting 2011\Asbuilt\DRW-AKN_LIGHTING.dwg
SCRIPT FILE: P&P
DOWL FILE No: 234-26
Designed By: MJJ
Drawn By: RDL
Checked By: BRH

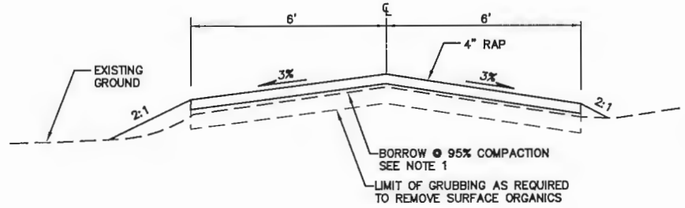
11+00 12+00 13+00 14+00 15+00

RUNWAY 12-30





1/21 TYPICAL CULVERT SECTION
NTS



2/21 WIND CONE ACCESS
NTS

NOTES

1. ALL BORROW FOR ACCESS ROAD SHALL BE SUBSIDIARY TO ITEM D-701a.
2. GRUBBING SHALL BE SUBSIDIARY TO ITEM D-701a.

GRAPHIC SCALE
25 0 12.5 25 50

STATE OF ALASKA 49TH
Brian R. Hanson
CE 11132
Jul 03, 2014
REGISTERED PROFESSIONAL ENGINEER

DATE ORIGINALLY STAMPED 2/18/11

PLAN PREPARED BY DOWL HKM

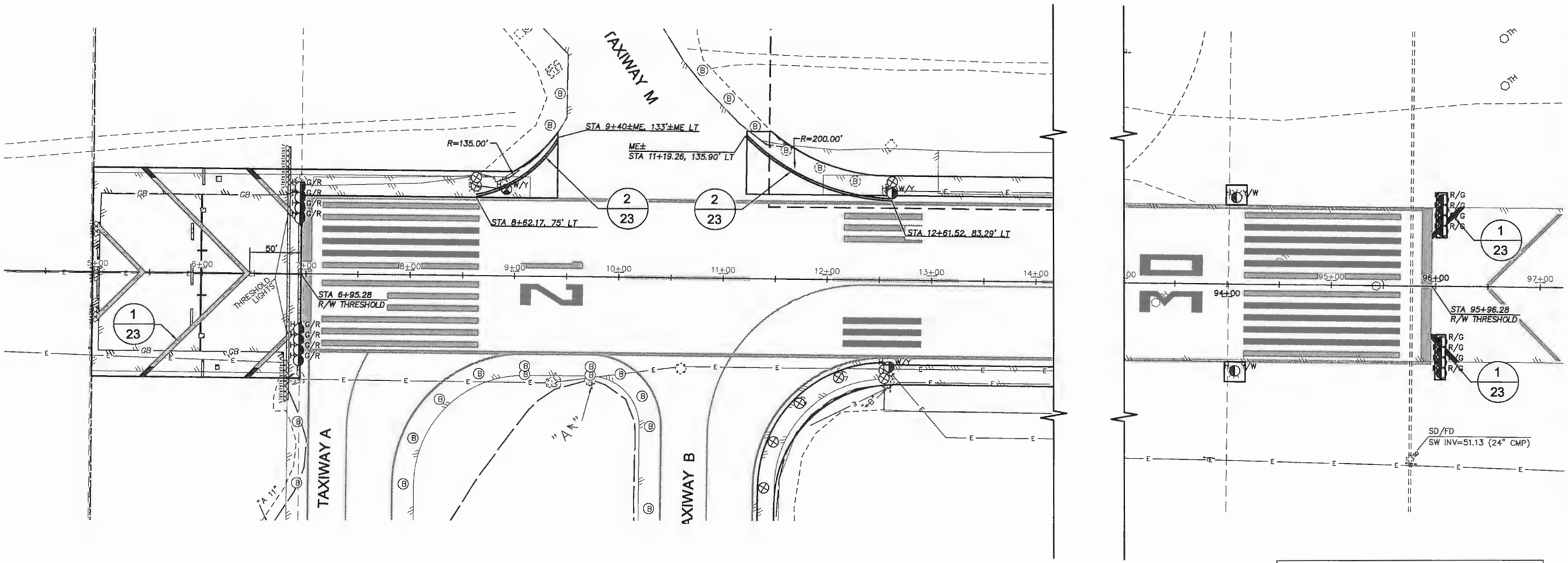
NO.	DATE	REVISION
2	6/2014	AS-BUILT
1	DATE	REVISION

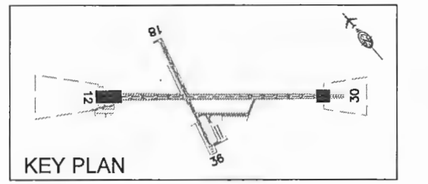
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

KING SALMON AIRPORT
KING SALMON, ALASKA
AIRPORT LIGHTING
PROJECT No. 52673
AIP No. 3-02-0148-12-2011
SUPPLEMENTAL LIGHTED WIND CONE
PLAN & DETAILS

DATE: 2/22/2011
SHEET: 21 OF 54
AS-BUILT SHEET: 21 OF 57

Date Plotted: 7/03/2014, 3:45 PM
Layout Name: 21-WindCone
File Path and Name: K:\Projects\king salmon\akn lighting 2011\Asbuilt\DRW-AKN_LIGHTING.dwg
SCRIPT FILE: P&P
DGN FILE No: 234-26
Designed By: MJJ
Drawn By: RDL
Checked By: BRH





50 0 25 50 100

GRAPHIC SCALE
(IN FEET)
HORIZONTAL

Date Revised:	7/03/2014, 3:45 PM
Layout Name:	22-BLAST_SQ
File Path and Name:	W:\Projects\Vdgy_salmon\akn_lighting_2011\Asbuilt\DRW-AKN_LIGHTING.dwg

SCRIPT FILE: P&P DOWL FILE No: 234-26

Designed By:	MJ
Drawn By:	RDL
Checked By:	BRH

PLAN PREPARED BY DOWL HKM

DATE ORIGINALLY STAMPED 2/18/11

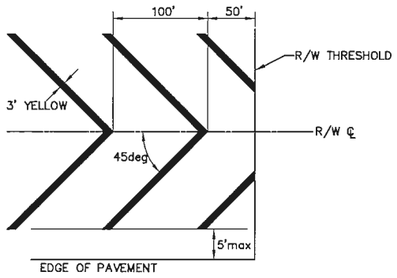
STATE OF ALASKA 49TH
Brian R. Hanson
CE 11132
Jul 03, 2014
REGISTERED PROFESSIONAL ENGINEER

BY	DATE	REVISION
BH	6/2014	AS-BUILT

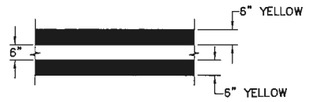
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

KING SALMON AIRPORT
KING SALMON, ALASKA
AIRPORT LIGHTING
PROJECT No. 52673
AIP No. 3-02-0148-12-2011
BLAST PAD MARKING PLAN

DATE: 2/22/2011
SHEET: 22 OF 54
AS-BUILT SHEET: 22 OF 57



1/23 BLAST PAD MARKING
NTS



2/23 CONTINUOUS TAXIWAY EDGE STRIPE DETAIL
NTS

NOTES

1. REFLECTIVE MEDIA SHALL BE APPLIED TO ALL MARKINGS AS SPECIFIED IN THE SPECIFICATIONS.

Date Revised:	7/03/2014, 3:46 PM
Layout Name:	23-MARK-DET
File Path and Name:	W:\Projects\king salmon\akn lighting 2011\Asbuilt\DOT-AKN_LIGHTING.dwg

SCRIPT FILE:	
DOWL FILE No: 234-26	
Designed By:	MLL
Drawn By:	RDL
Checked By:	BRH

PLAN PREPARED BY DOWL HKM

DATE ORIGINALLY STAMPED 2/18/11

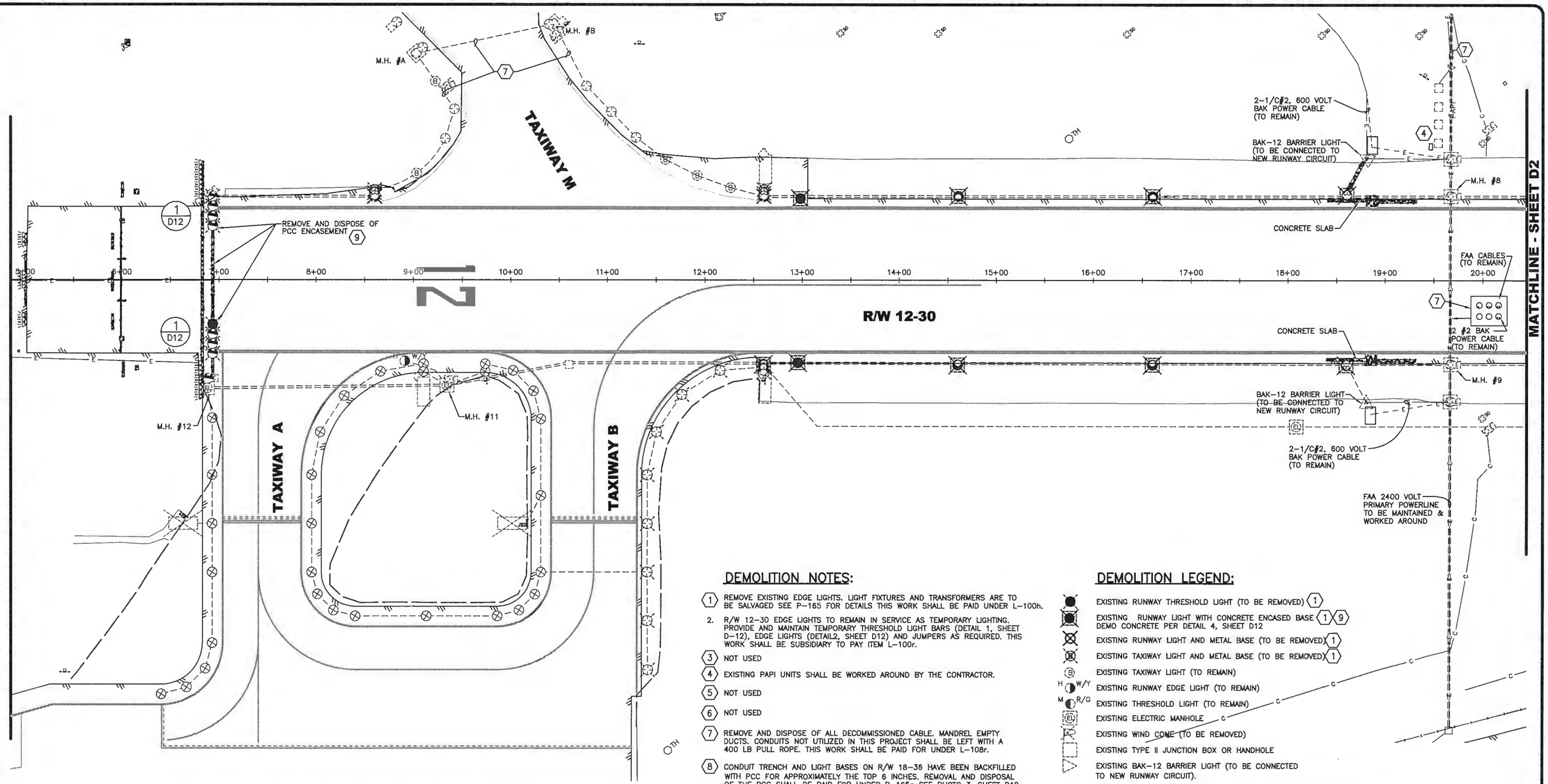
STATE OF ALASKA 49TH
Brian R. Hanson
CE 11132
Jul 03, 2014
REGISTERED PROFESSIONAL ENGINEER

BY	DATE	REVISION
TZ	6/2014	AS-BUILT

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

KING SALMON AIRPORT
KING SALMON, ALASKA
AIRPORT LIGHTING
PROJECT No. 52673
AIP No. 3-02-0148-12-2011
MARKING DETAILS

DATE: 2/22/2011
SHEET: 23 OF 54
AS-BUILT SHEET: 23 OF 56



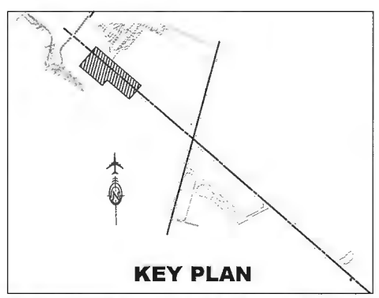
DEMOLITION NOTES:

1. REMOVE EXISTING EDGE LIGHTS. LIGHT FIXTURES AND TRANSFORMERS ARE TO BE SALVAGED SEE P-165 FOR DETAILS THIS WORK SHALL BE PAID UNDER L-100h.
2. R/W 12-30 EDGE LIGHTS TO REMAIN IN SERVICE AS TEMPORARY LIGHTING. PROVIDE AND MAINTAIN TEMPORARY THRESHOLD LIGHT BARS (DETAIL 1, SHEET D-12), EDGE LIGHTS (DETAIL2, SHEET D12) AND JUMPERS AS REQUIRED. THIS WORK SHALL BE SUBSIDIARY TO PAY ITEM L-100r.
3. NOT USED
4. EXISTING PAPI UNITS SHALL BE WORKED AROUND BY THE CONTRACTOR.
5. NOT USED
6. NOT USED
7. REMOVE AND DISPOSE OF ALL DECOMMISSIONED CABLE. MANDREL EMPTY DUCTS. CONDUITS NOT UTILIZED IN THIS PROJECT SHALL BE LEFT WITH A 400 LB PULL ROPE. THIS WORK SHALL BE PAID FOR UNDER L-108r.
8. CONDUIT TRENCH AND LIGHT BASES ON R/W 18-36 HAVE BEEN BACKFILLED WITH PCC FOR APPROXIMATELY THE TOP 6 INCHES. REMOVAL AND DISPOSAL OF THE PCC SHALL BE PAID FOR UNDER P-165a SEE PHOTO 3, SHEET D12.
9. REMOVAL OF STRUCTURES SHALL BE PAID FOR UNDER P-165a.
10. ABANDONED CONDUCTORS AND GROUND WIRES IN RACEWAY SHALL BE REMOVED, CONDUIT AND DIRECT BURIED WIRING SHALL BE ABANDONED IN PLACE.
11. THE CONTRACTOR SHALL RESTORE GRADE AND FINISH SURFACES DISTURBED BY THE REMOVAL OF THESE STRUCTURES. THIS WORK SHALL BE SUBSIDIARY TO THE CONTRACT AND NO SEPARATE PAYMENT WILL BE MADE.
12. ABANDONED CONDUIT RUNS EXPOSED DURING EXCAVATION SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR. THIS WORK SHALL BE SUBSIDIARY TO EXCAVATION AND NO SEPARATE PAYMENT WILL BE MADE.
13. CONTRACTOR SHALL RESTORE LIGHTING CONTROL AND POWER CIRCUITS. TO THE SATISFACTION OF THE AIRPORT MANAGER, ONE HOUR PRIOR TO SUNSET.

DEMOLITION LEGEND:

- EXISTING RUNWAY THRESHOLD LIGHT (TO BE REMOVED) (1)
- EXISTING RUNWAY LIGHT WITH CONCRETE ENCASED BASE (1)(9) DEMO CONCRETE PER DETAIL 4, SHEET D12
- EXISTING RUNWAY LIGHT AND METAL BASE (TO BE REMOVED) (1)
- EXISTING TAXIWAY LIGHT AND METAL BASE (TO BE REMOVED) (1)
- EXISTING TAXIWAY LIGHT (TO REMAIN)
- EXISTING RUNWAY EDGE LIGHT (TO REMAIN)
- EXISTING THRESHOLD LIGHT (TO REMAIN)
- EXISTING ELECTRIC MANHOLE
- EXISTING WIND CONE (TO BE REMOVED)
- EXISTING TYPE II JUNCTION BOX OR HANDHOLE
- EXISTING BAK-12 BARRIER LIGHT (TO BE CONNECTED TO NEW RUNWAY CIRCUIT).
- EXISTING CONCRETE ENCASE DUCT BANK (TO REMAIN AND WORKED AROUND)
- EXISTING AIRPORT SIGN (TO BE CONNECTED TO NEW CIRCUITS)
- EXISTING AIRPORT SIGN AND BASE (TO BE REMOVED) SHALL BE PAID AT THE UNIT PRICE UNDER L100h
- EXISTING UNDERGROUND ELECTRIC
- EXISTING UNDERGROUND COMMUNICATION
- EXISTING UNDERGROUND CONDUIT

GRAPHIC SCALE
50 0 25 50 100


KEY PLAN

PLAN PREPARED BY MBA CONSULTING ENGINEERS, INC.

DATE ORIGINALLY STAMPED 2/18/11

BY	DATE	REVISION
RC	6/2014	AS-BUILT

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

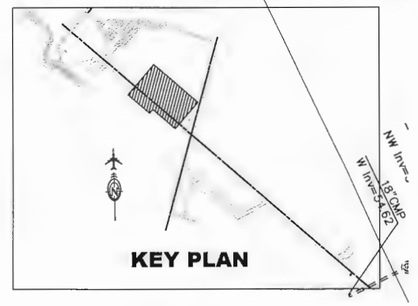
KING SALMON AIRPORT
KING SALMON, ALASKA
AIRPORT LIGHTING
PROJECT No. 52673
AIP No. 3-02-0148-12-2011
RUNWAY 12-30 LIGHTING
DEMOLITION PLANS

DATE: 2/22/2011
SHEET: D1 OF 54
AS-BUILT SHEET: 24 OF 57

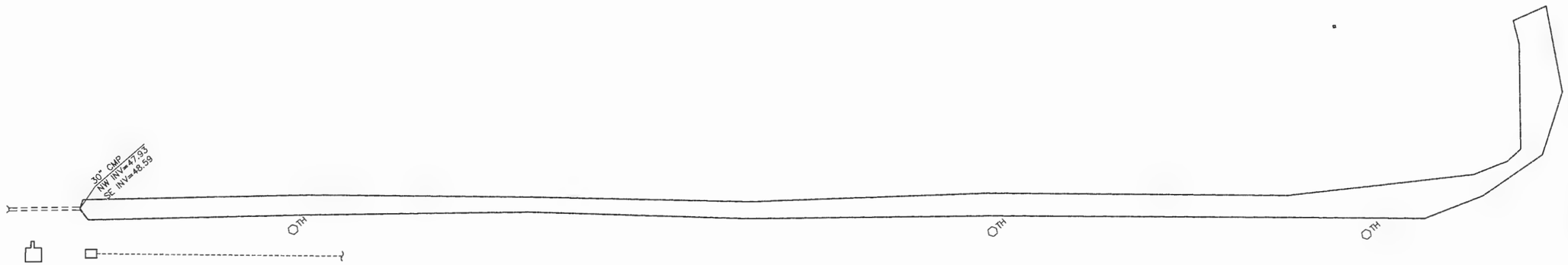
Date Revised:
Layout Name: D1
File Path and Name: W:\Projects\King salmon\vakn lighting 2011\Asbuilt\From Brian Hanson\07041_D1-D12.dwg
SCRIPT FILE:
DGWL FILE No: 234-26
Designed By: CMD
Drawn By: DMH
Checked By: MJL
7/03/2014, 3:46 PM

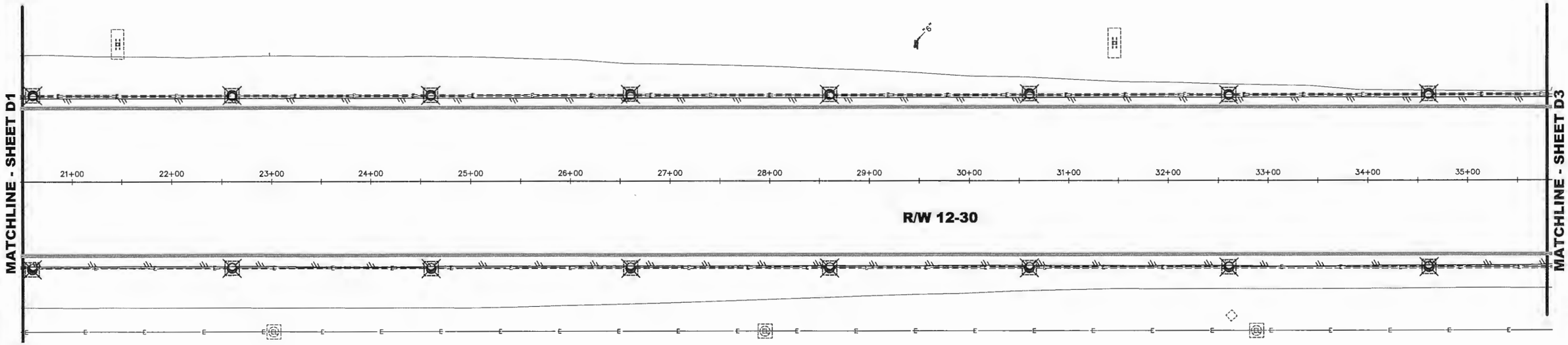
WIND SPEED AND DIRECTION INDICATOR TO REMAIN.

EXISTING WIND CONE AND SEGMENTED CIRCLE TO REMAIN.



NG
METAL BLDG
NCRETE PAD)





GRAPHIC SCALE
50 0 25 50 100

PLAN PREPARED BY MBA CONSULTING ENGINEERS, INC.

DATE ORIGINALLY STAMPED 2/18/11

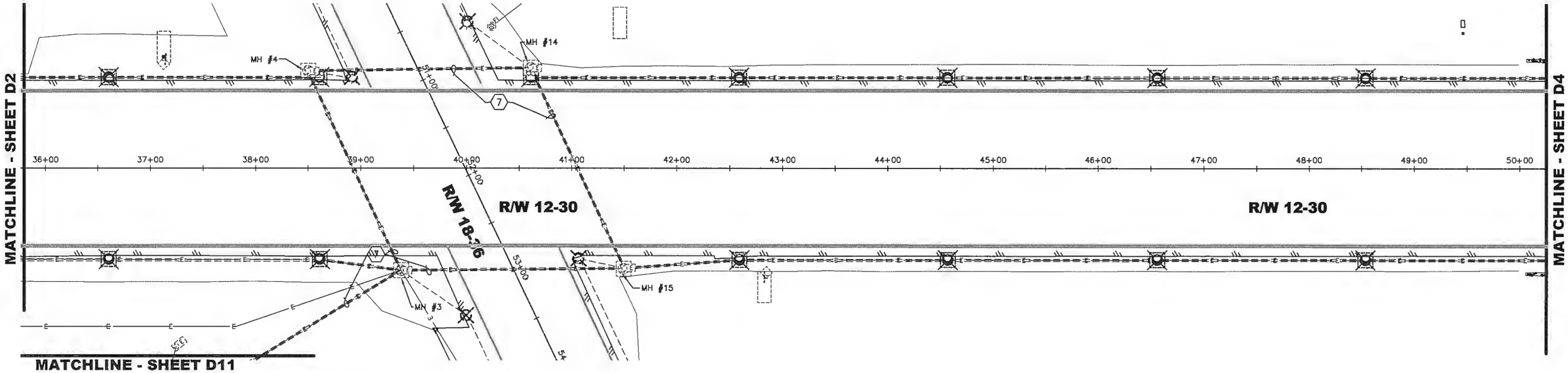
D2	6/2014	AS-BUILT
D1	DATE	REVISION

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

KING SALMON AIRPORT
KING SALMON, ALASKA
AIRPORT LIGHTING
PROJECT No. 52673
AIP No. 3-02-0148-12-2011
RUNWAY 12-30 LIGHTING
DEMOLITION PLANS

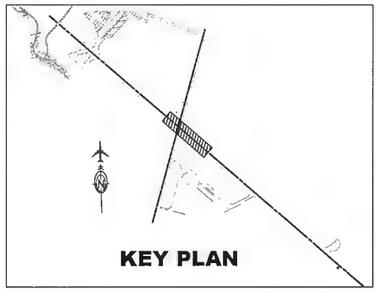
DATE: 2/22/2011
SHEET: D2 OF 54
AS-BUILT SHEET: 25 OF 57

SCRIPT FILE:	
DOWL FILE No: 234-26	
Designed By:	CMD
Drawn By:	MWH
Checked By:	MJL
Date Revised:	7/03/2014, 3:46 PM
Layout Name:	D2
File Path and Name:	M:\Projects\King salmon\okn lighting 2011\Mshalk\From Brian Hansen\07041_D1-D12.dwg



GRAPHIC SCALE

50 0 25 50 100



KEY PLAN

PLAN PREPARED BY MBA CONSULTING ENGINEERS, INC.

DATE ORIGINALLY STAMPED 2/18/11

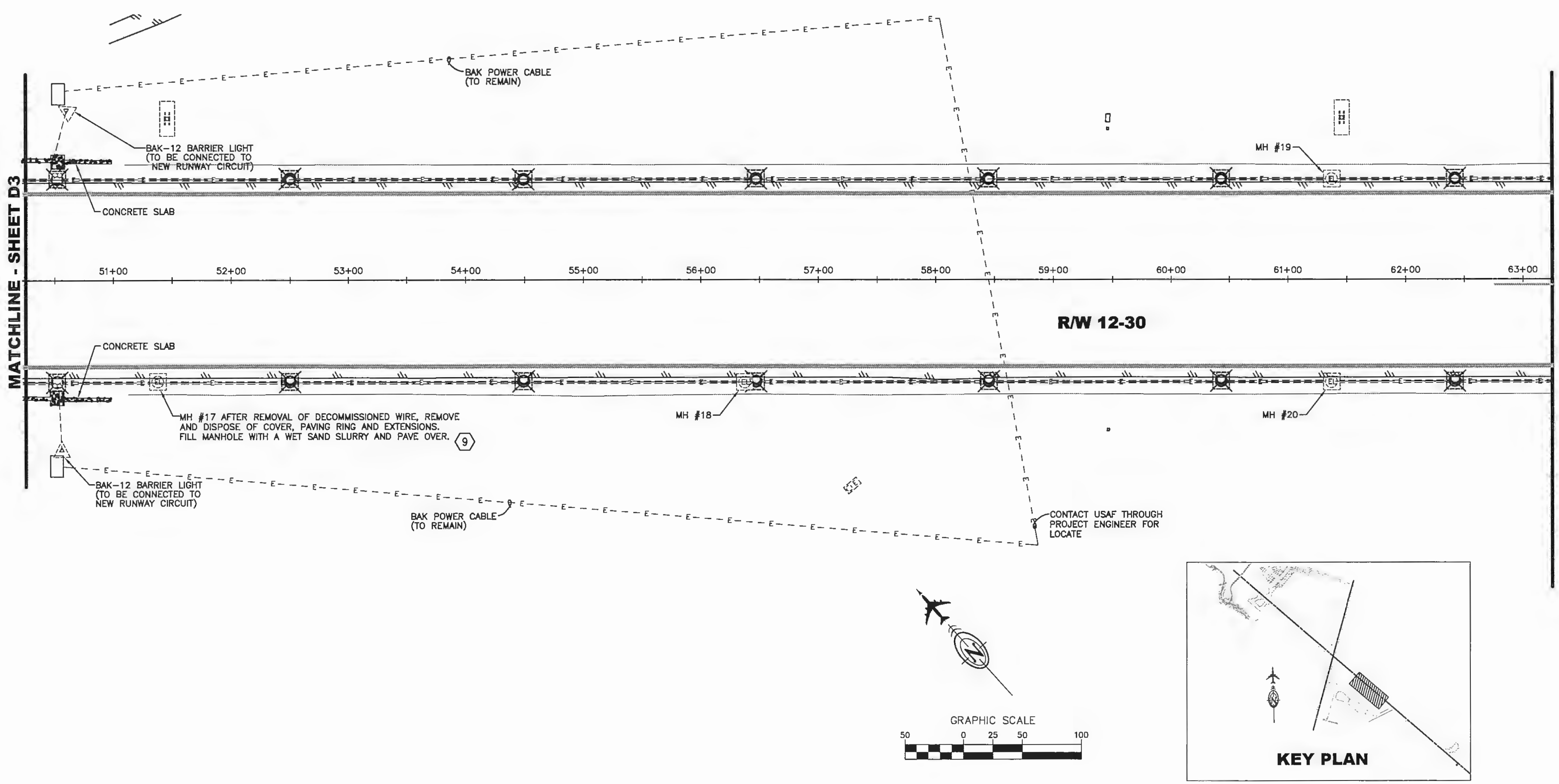
BY	DATE	REVISION
TC	6/2014	AS-BUILT

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

KING SALMON AIRPORT
KING SALMON, ALASKA
AIRPORT LIGHTING
PROJECT No. 52673
AIP No. 3-02-0148-12-2011
RUNWAY 12-30 LIGHTING
DEMOLITION PLANS

DATE: 2/22/2011
SHEET: D3 OF 54
AS-BUILT SHEET: 26 OF 57

Date Revised:
Layout Name: D3
File Path and Name: W:\Projects\King salmon\akn lighting 2011\Asbuilt\From Brian Hanson\07041_D1-D12.dwg
SCRIPT FILE:
DGWL FILE No: 234-26
7/03/2014, 3:46 PM
Designed By: CMD
Drawn By: DMH
Checked By: MJL



Date Revised: 7/03/2014, 3:46 PM
Layout Name: D4
File Path and Name: W:\Projects\king salmon\akn lighting 2011\Asbuilt\From Brian Hanson\07041_D1-D12.dwg
SCRIPT FILE:
DOWL FILE No: 234-26
Designed By: CMD
Drawn By: DMH
Checked By: MJL

PLAN PREPARED BY MBA CONSULTING ENGINEERS, INC.

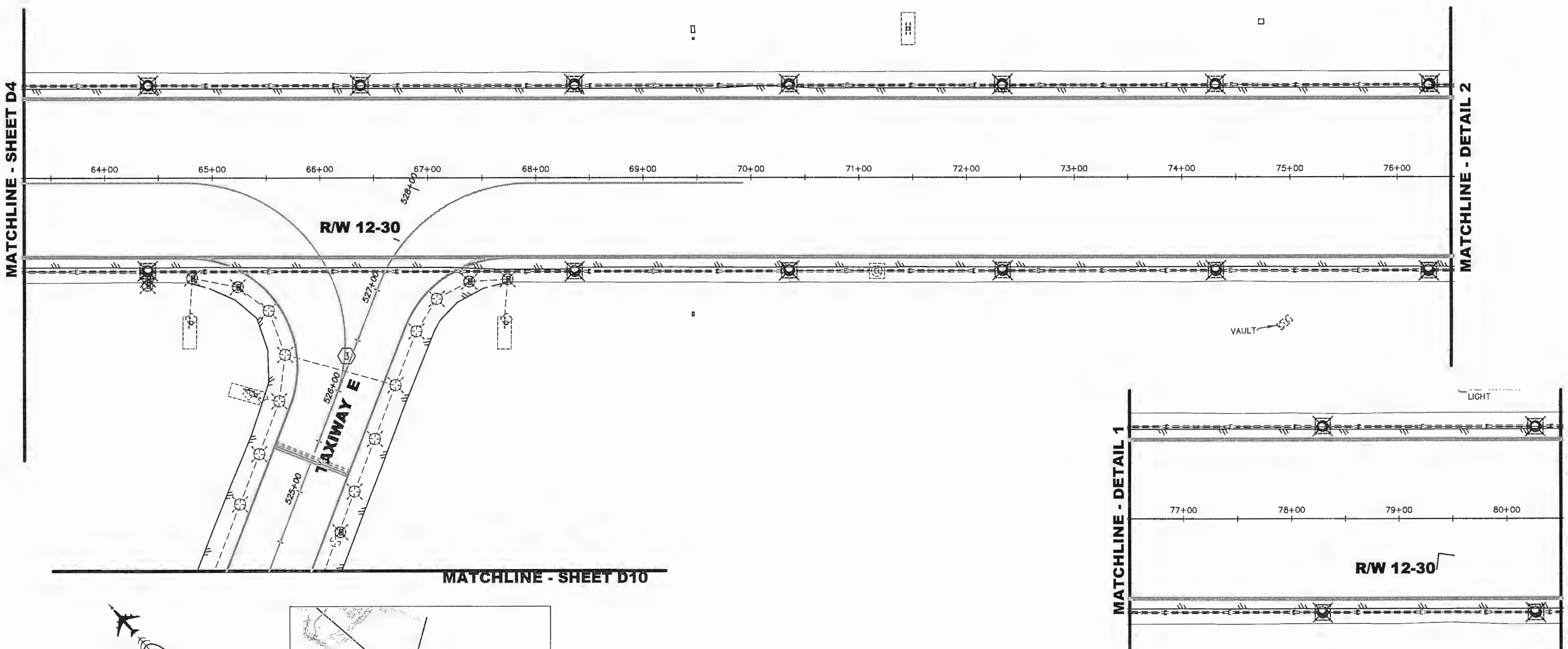
DATE ORIGINALLY STAMPED 2/18/11

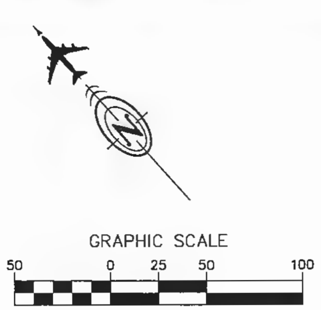
BY	DATE	REVISION
TL	6/2014	AS-BUILT

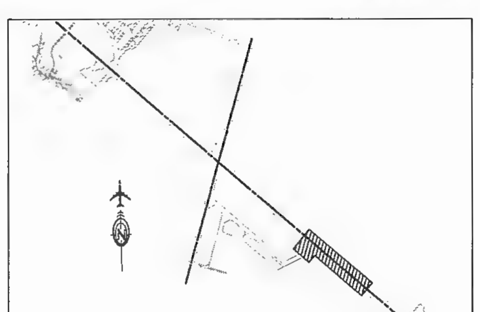
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

KING SALMON AIRPORT
KING SALMON, ALASKA
AIRPORT LIGHTING
PROJECT No. 52673
AIP No. 3-02-0148-12-2011
RUNWAY 12-30 LIGHTING DEMOLITION PLANS

DATE: 2/22/2011
SHEET: D4 OF 54
AS-BUILT SHEET: 27 OF 57







KEY PLAN

PLAN PREPARED BY MBA CONSULTING ENGINEERS, INC.

DATE ORIGINALLY STAMPED 2/18/11

BY	DATE	REVISION
TZ	6/2014	AS-BUILT

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

KING SALMON AIRPORT
KING SALMON, ALASKA
AIRPORT LIGHTING
PROJECT No. 52673
AIP No. 3-02-0148-12-2011
RUNWAY 12-30 LIGHTING DEMOLITION PLANS

DATE: 2/22/2011
SHEET: D5 OF 54
AS-BUILT SHEET: 28 OF 57

Date Revised:	7/03/2014, 3:47 PM	SCRIPT FILE:	DOWL FILE No: 234-26	Designed By:	CMD
Layout Name:	D5			Drawn By:	DMH
File Path and Name:	W:\Projects\king salmon\akn lighting 2011\Asbuilt\From Brian Hanson\07041_D1-D12.dwg			Checked By:	MJL

Date Revised:	7/03/2014, 3:47 PM
Layout Name:	D5
File Path and Name:	W:\Projects\King salmon\vain lighting 2011\Asbuilt\From Brion Hanson\070411_D1-D12.dwg

SCRIPT FILE:

DOWL FILE No: 234-26

Designed By:	CMD
Drawn By:	DMH
Checked By:	MJL

MATCHLINE - SHEET D5

BAK-12 BARRIER LIGHT (TO BE CONNECTED TO NEW RUNWAY CIRCUIT)

2-1/C#2 600 VOLT BAK POWER CABLE (TO REMAIN)

MH-25

ELEC/VAULT

OTH

TAXIWAY SIGN "P"

TW P

LIGHT POLE BASE

CONCRETE SLAB

81+00 82+00 83+00 84+00 85+00 86+00 87+00 88+00 89+00 90+00 91+00 92+00 93+00 94+00 95+00 96+00

R/W 12-30

CONCRETE SLAB

600V BAK POWER CABLES (TO REMAIN)

BAK-12 BARRIER LIGHT (TO BE CONNECTED TO NEW RUNWAY CIRCUIT)

MH-24

1 D12

2

4

GRAPHIC SCALE

50 0 25 50 100

KEY PLAN

PLAN PREPARED BY MBA CONSULTING ENGINEERS, INC.

DATE ORIGINALLY STAMPED 2/18/11

TC	6/2014	AS-BUILT	REVISION
BY	DATE		

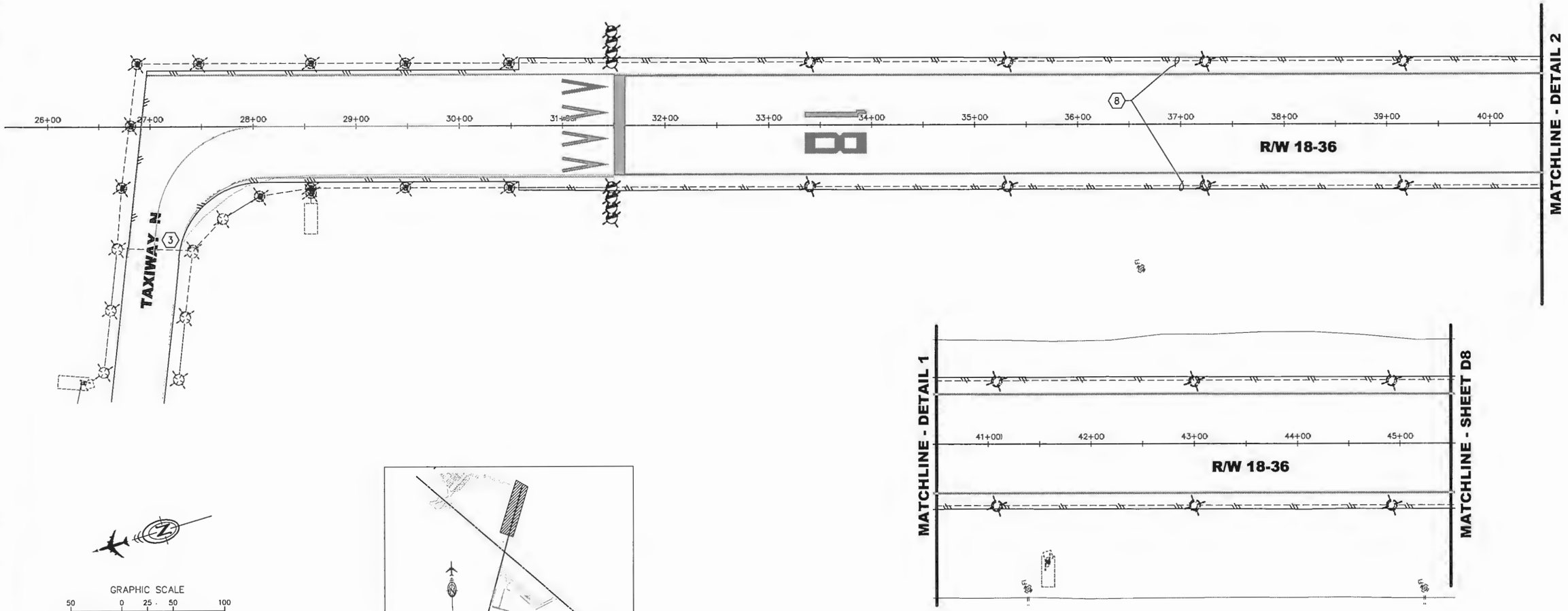
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

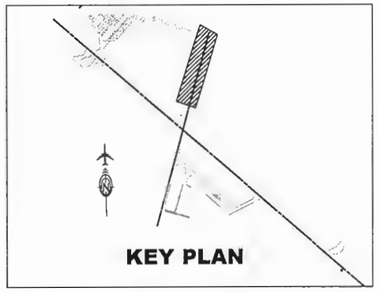
KING SALMON AIRPORT
KING SALMON, ALASKA
AIRPORT LIGHTING
PROJECT No. 52673
AIP No. 3-02-0148-12-2011
RUNWAY 12-30 LIGHTING
DEMOLITION PLANS

DATE: 2/22/2011

SHEET: D6 OF 54

AS-BUILT SHEET: 29 OF 57





Date Revised:	7/03/2014, 3:47 PM
Level Name:	D7
File Path and Name:	W:\Projects\king salmon\cikn lighting 2011\Asbuilt\From Brion Hanson\07041_D1-D12.dwg
SCRIPT FILE:	
DGN. FILE No: 234-26	
Designed By:	CMD
Drawn By:	DMH
Checked By:	MJL

PLAN PREPARED BY MBA CONSULTING ENGINEERS, INC.

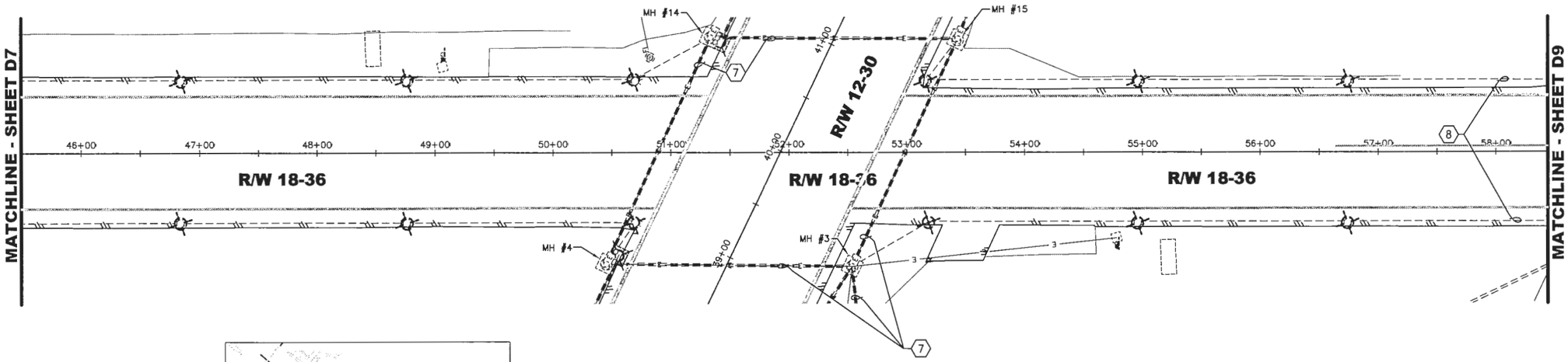
DATE ORIGINALLY STAMPED 2/18/11

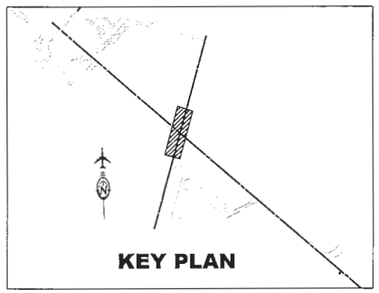
BY	DATE	REVISION
RZ	6/2014	AS-BUILT

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

KING SALMON AIRPORT
KING SALMON, ALASKA
AIRPORT LIGHTING
PROJECT No. 52673
AIP No. 3-02-0148-12-2011
RUNWAY 18-36 LIGHTING DEMOLITION PLANS

DATE: 2/22/2011
SHEET: D7 OF 54
AS-BUILT SHEET: 30 OF 57





Date Revised:		CMD
Local Name:	DOM. FILE No: 234-26	Designed By:
File Path and Name:	7/03/2014, 3:47 PM DB W:\Projects\king salmon\akn lighting 2011\Asbuilt\From Brian Hanson\D7041_D1-D12.dwg	Drawn By: DMH Checked By: MJL

DATE ORIGINALLY STAMPED 2/18/11

PLAN PREPARED BY MBA CONSULTING ENGINEERS, INC.

NO.	DATE	REVISION
1	6/2014	AS-BUILT

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

KING SALMON AIRPORT
KING SALMON, ALASKA
AIRPORT LIGHTING
PROJECT No. 52673
AIP No. 3-02-0148-12-2011
RUNWAY 18-36 LIGHTING
DEMOLITION PLANS

DATE: 2/22/2011
SHEET: D8 OF 54
AS-BUILT SHEET: 31 OF 57

MATCHLINE - SHEET D10

KEY PLAN

TAXIWAY C

TAXIWAY D

GA APRON

EXISTING WIND CONE TO BE REMOVED.

EXISTING NEA DISTRIBUTION LINE

EXISTING CIRCUITRY TO BE MAINTAINED

EXISTING CIRCUITRY TO BE MAINTAINED

TAXIWAY G

R/W 18-36

2-2" RSC

MATCHLINE - SHEET D8

SEE SHEET D1 FOR NOTES AND LEGEND

GRAPHIC SCALE

50 0 25 50 100

PLAN PREPARED BY MBA CONSULTING ENGINEERS, INC.

DATE ORIGINALLY STAMPED 2/18/11

NO	DATE	REVISION
2	6/2014	AS-BUILT
1	DATE	

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

KING SALMON AIRPORT
KING SALMON, ALASKA
AIRPORT LIGHTING
PROJECT No. 52673
AIP No. 3-02-0148-12-2011
RUNWAY 18-36 LIGHTING
DEMOLITION PLANS

DATE: 2/22/2011
SHEET: D9 OF 54
AS-BUILT SHEET: 32 OF 57

SCRIPT FILE:	
DOWL FILE No: 234-26	
Designed By:	CMD
Drawn By:	DMH
Checked By:	MJL
Date Revised:	7/03/2014, 3:47 PM
Layout Name:	D9
File Path and Name:	W:\Projects\King salmon\okn lighting 2011\Msbuilt\From Brian Hanson\V07041_01-012.dwg

MATCHLINE - SHEET D5

TAXIWAY C

TAXIWAY E

509+00 510+00 511+00 512+00 513+00 514+00 515+00 516+00 517+00 518+00 519+00 520+00 521+00 522+00 523+00 524+00

MATCHLINE - SHEET D9

GRAPHIC SCALE

50 0 25 50 100

KEY PLAN

PLAN PREPARED BY MBA CONSULTING ENGINEERS, INC.

DATE ORIGINALLY STAMPED 2/18/11

YR	6/2014	AS-BUILT	
BY	DATE	REVISION	

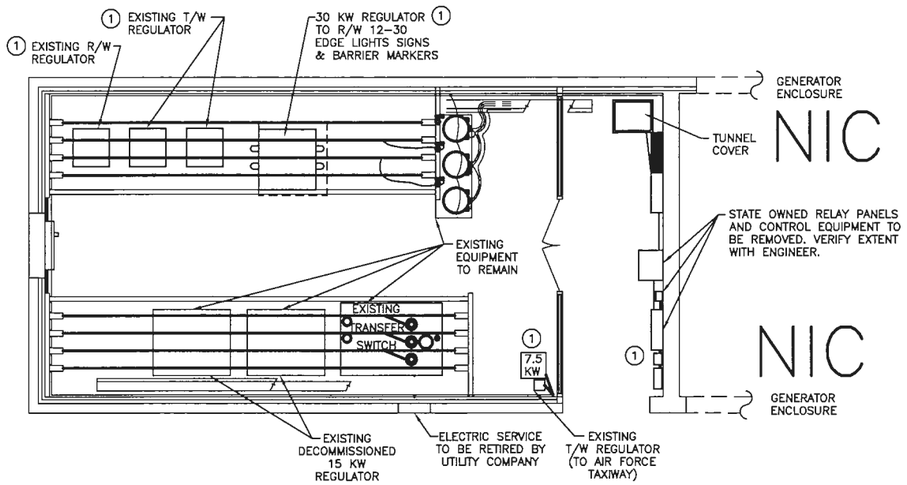
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

KING SALMON AIRPORT
KING SALMON, ALASKA
AIRPORT LIGHTING
PROJECT No. 52673
AIP No. 3-02-0148-12-2011
TAXIWAY C AND E LIGHTING DEMOLITION PLANS

DATE: 2/22/2011
SHEET: D10 OF 54
AS-BUILT SHEET: 33 OF 57

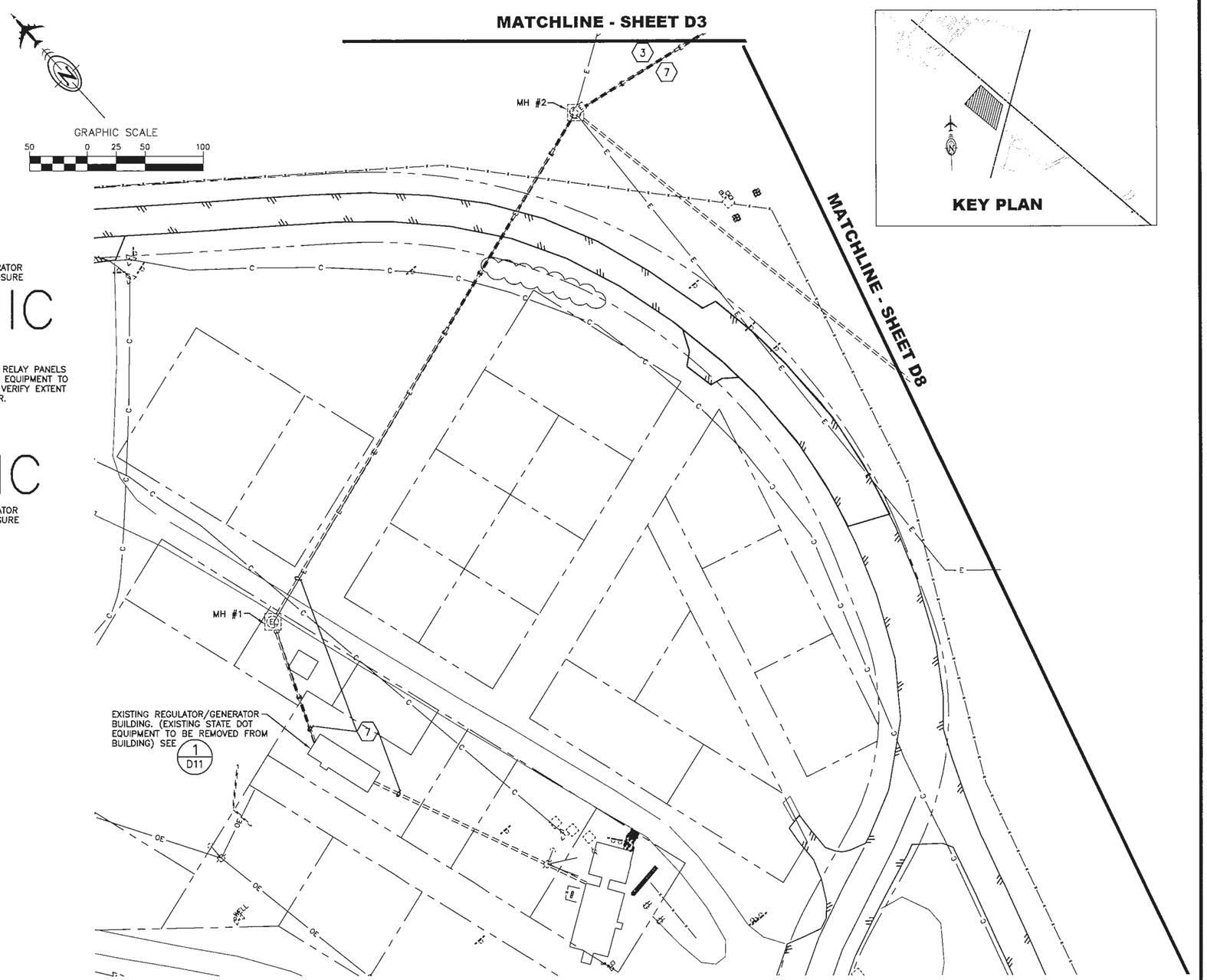
SCRIPT FILE:	DOWL FILE No: 234-26
Date Revised:	7/03/2014, 3:47 PM
Layout Name:	D10
File Path and Name:	W:\Projects\king salmon\cxln lighting 2011\Asbuilt\From Brian Hanson\D10_01-012.dwg

Designed By:	CMD
Drawn By:	MWH
Checked By:	MJL



1 / D11 EXISTING-REGULATOR VAULT PLAN
SCALE: NTS

1 STATE OWNED REGULATORS AND CONTROL EQUIPMENT ARE TO BE OFFERED TO STATE FIELD MAINTENANCE PERSONNEL FOR SALVAGE. INPUT WIRING TO BE REMOVED BACK TO THE PANEL BOARD CIRCUIT BREAKER. CONTROL WIRING TO BE REMOVED BACK TO THE RELAY PANEL. FIELD WIRING TO REMOVED BACK TO THE DUCT ENTRIES INTO THE TUNNEL. EQUIPMENT AND WIRING DEEMED UNSALVAGEABLE SHALL BE DISPOSED OF BY THE CONTRACTOR. ALL DEMOLITION WORK ASSOCIATED WITH THE EXISTING VAULT BUILDING SHALL BE PAID UNDER P-165a.



SEE SHEET D1 FOR NOTES AND LEGEND

PLAN PREPARED BY MBA CONSULTING ENGINEERS, INC.

DATE ORIGINALLY STAMPED 2/18/11

BY	DATE	REVISION
TC	6/2014	AS-BUILT

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

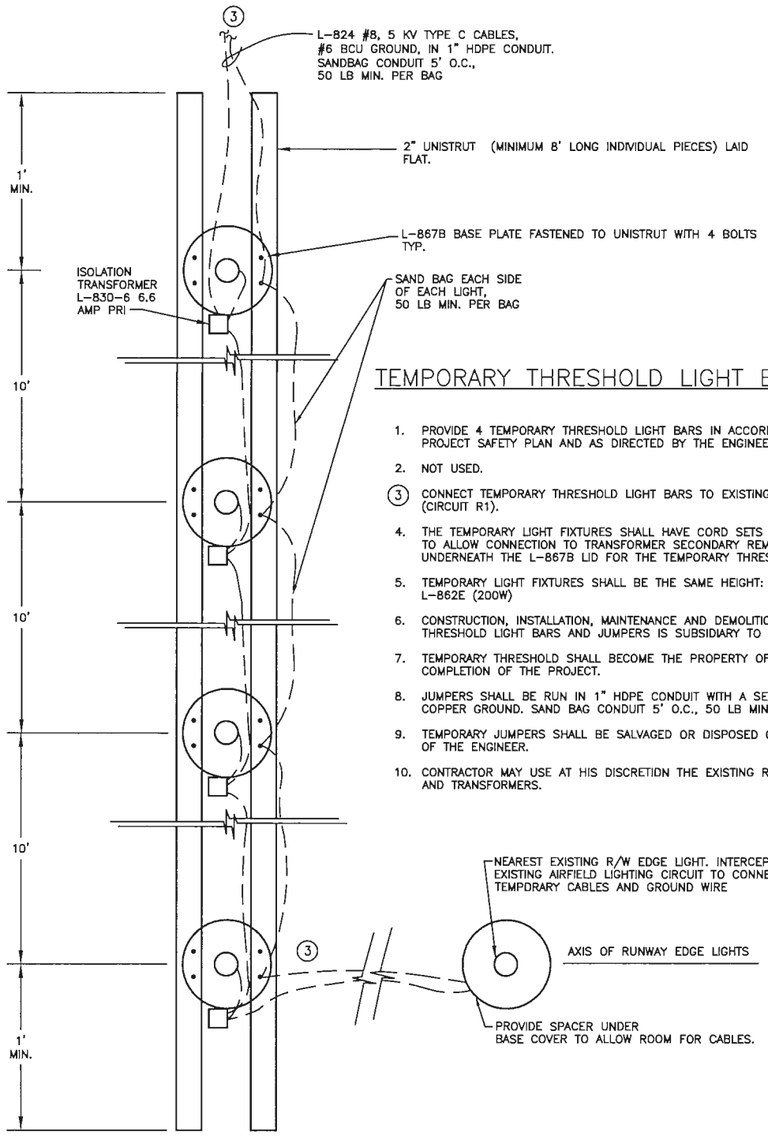
KING SALMON AIRPORT
KING SALMON, ALASKA
AIRPORT LIGHTING
PROJECT No. 52673
AIP No. 3-02-0148-12-2011
EXISTING REGULATOR/GENERATOR BUILDING DEMOLITION PLAN

DATE: 2/22/2011
SHEET: D11 OF 54
AS-BUILT SHEET: 34 OF 57

Date Revised: 7/03/2014, 3:48 PM
Layout Name: D11
File Path and Name: W:\Projects\King salmon\vain lighting 2011\Asbuilt\From Brian

SCRIPT FILE:
DGWL FILE No: 234-26

Designed By:	CMD
Drawn By:	DMH
Checked By:	MJL

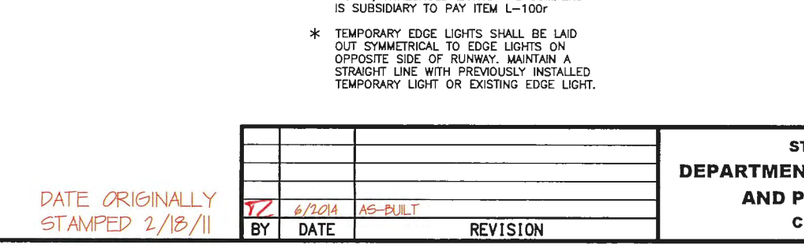


TEMPORARY THRESHOLD LIGHT BAR NOTES:

1. PROVIDE 4 TEMPORARY THRESHOLD LIGHT BARS IN ACCORDANCE WITH THE PROJECT SAFETY PLAN AND AS DIRECTED BY THE ENGINEER.
2. NOT USED.
3. CONNECT TEMPORARY THRESHOLD LIGHT BARS TO EXISTING EDGE LIGHTS (CIRCUIT R1).
4. THE TEMPORARY LIGHT FIXTURES SHALL HAVE CORD SETS OF SUFFICIENT LENGTH TO ALLOW CONNECTION TO TRANSFORMER SECONDARY REMOTE FROM THE AREA UNDERNEATH THE L-867B LID FOR THE TEMPORARY THRESHOLD
5. TEMPORARY LIGHT FIXTURES SHALL BE THE SAME HEIGHT: 20" L-862E (200W)
6. CONSTRUCTION, INSTALLATION, MAINTENANCE AND DEMOLITION OF THE TEMPORARY THRESHOLD LIGHT BARS AND JUMPERS IS SUBSIDIARY TO PAY ITEM L-100r.
7. TEMPORARY THRESHOLD SHALL BECOME THE PROPERTY OF THE STATE UPON COMPLETION OF THE PROJECT.
8. JUMPERS SHALL BE RUN IN 1" HDPE CONDUIT WITH A SEPARATE #6 BARE COPPER GROUND. SAND BAG CONDUIT 5' O.C., 50 LB MINIMUM PER SAND BAG.
9. TEMPORARY JUMPERS SHALL BE SALVAGED OR DISPOSED OF AT THE DIRECTION OF THE ENGINEER.
10. CONTRACTOR MAY USE AT HIS DISCRETION THE EXISTING R/W THRESHOLD LIGHTS AND TRANSFORMERS.

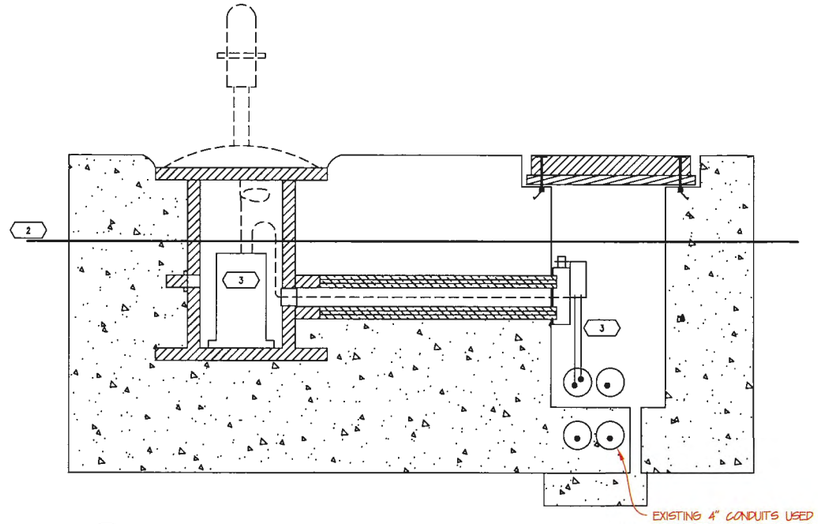
1 / D12 TEMPORARY THRESHOLD LIGHT BAR
SCALE: NTS

3 / D12 EXISTING EDGE LIGHT PCC
SCALE: NTS



2 / D12 TEMPORARY RUNWAY EDGE LIGHT DETAIL
SCALE: NTS

* CONTRACTOR MAY USE AT HIS DISCRETION FIXTURES AND TRANSFORMERS REMOVED FROM R/W 12-30
* TEMPORARY EDGE LIGHT ASSEMBLIES SHALL BE OFFERED TO THE STATE FOR SALVAGE AT COMPLETION OF THE PROJECT.
* CONSTRUCTION, INSTALLATION, MAINTENANCE AND DEMOLITION OF TEMPORARY EDGE LIGHTS, THRESHOLD LIGHTS AND JUMPERS IS SUBSIDIARY TO PAY ITEM L-100r
* TEMPORARY EDGE LIGHTS SHALL BE LAID OUT SYMMETRICAL TO EDGE LIGHTS ON OPPOSITE SIDE OF RUNWAY. MAINTAIN A STRAIGHT LINE WITH PREVIOUSLY INSTALLED TEMPORARY LIGHT OR EXISTING EDGE LIGHT.



4 / D12 EXISTING R/W LIGHT BASE & HANDHOLE DETAIL
NTS

1. REMOVE LIGHT FIXTURE, TRANSFORMER & WIRE PER DEMOLITION NOTES 1 & 7
2. REMOVE STEEL COVERS, FRAMES AND BASES. CONCRETE ENCASEMENT SHALL BE REMOVED TO A DEPTH OF 12" BELOW FINISH GRADE.
3. VOIDS SHALL BE FILLED IN ACCORDANCE WITH P-165.

Date Revised:		Designed By:	CMD
Layout Name:	D12	Drawn By:	DMH
File Path and Name:	W:\Projects\king salmon\akn lighting 2011\Asbuilt\From Brian Hanson\07041_D1-D12.dwg	Checked By:	MJL

DGWL FILE No: 234-26
SCRIPT FILE:
7/03/2014, 3:48 PM

BY	DATE	REVISION
TZ	6/2014	AS-BUILT

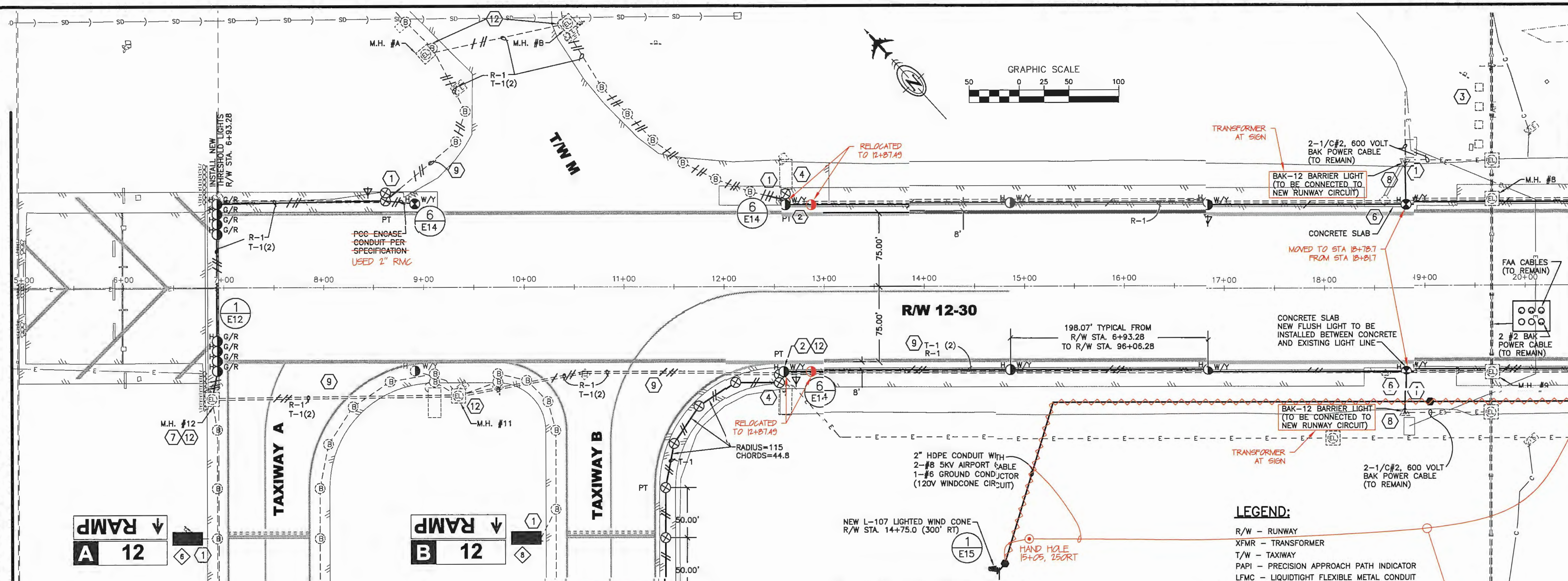
DATE ORIGINALLY STAMPED 2/18/11

PLAN PREPARED BY MBA CONSULTING ENGINEERS, INC.

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

KING SALMON AIRPORT
KING SALMON, ALASKA
AIRPORT LIGHTING
PROJECT No. 52673
AIP No. 3-02-0148-12-2011
TEMPORARY LIGHTING AND DEMOLITION DETAILS

DATE: 2/22/2011
SHEET: D12 OF 54
AS-BUILT SHEET: 35 OF 57



GENERAL ELECTRICAL NOTES:

1. CONNECT NEW CONDUIT TO EXISTING LIGHT BASE, HANDHOLE OR CONDUIT.
2. PROVIDE NEW LIGHT BASE WITH EXTRA HUB AND CONNECT TO NEW CONDUIT.
3. EXISTING TO BE MAINTAINED AND WORKED AROUND.
4. BUTT WELD NEW CONDUIT TO EXISTING PE CONDUIT. CONNECT EXISTING SIGN TO A NEW TRANSFORMER USING 1 NEW #14, 600 VOLT, 2 CONDUCTOR CABLE PLUS 1 #6 BARE COPPER GROUND WIRE. CONTRACTOR SHALL FIELD VERIFY TRANSFORMER SIZE. (2)
5. INSTALL NEW CONDUIT BEFORE RUNWAY, TAXIWAY OR SHOULDER IS PAVED.
6. INSTALL 2" HDPE CONDUIT USING DECOMMISSIONED 4" DUCT AS A CHASE WHERE NEW CONDUIT TRENCH IS IN CONFLICT WITH CONCRETE SLAB OR TAXIWAY.
7. INSTALL NEW HDPE CONDUITS INTO EXISTING MANHOLE FOR RUNWAY CROSSING. AFTER CONDUCTORS ARE PULLED, CONDUIT OPENINGS SHALL BE CAULKED TO PREVENT WATER FROM ENTERING THE LIGHT BASE ASSEMBLIES.
8. CONNECT EXISTING LIGHT TO NEW 30/45 WATT XFMR USING 1 NEW 2-CONDUCTOR #14 600V CABLE PLUS ONE #6 BARE CU GROUND. THIS WORK SHALL BE SUBSIDIARY TO THE CONTRACT AND SEPARATE PAYMENT WILL NOT BE MADE.
9. WHEN INSTALLED IN THE SAME STRUCTURE, DUCT BANK OR CONDUIT CONDUCTORS OF SEPARATE CIRCUITS SHALL BE IDENTIFIED BY COLORABLE INSULATION. THE COLORS GREEN AND WHITE SHALL NOT BE USED TO IDENTIFY SERIES CIRCUITS.
10. CONTRACTOR SHALL PROVIDE AND INSTALL CABLE MANAGEMENT SYSTEM IN EXISTING MANHOLES. INSTALL 4 VERTICAL SUPPORT MEMBERS AND (4) 10" HORIZONTAL SUPPORTS PER VAULT. SYSTEM SHALL BE CONSTRUCTED OF HOT DIPPED GALVANIZED STEEL. THIS WORK SHALL BE SUBSIDIARY TO THE PAY ITEM L-108a.
11. INSTALL WIND CONE CIRCUITS IN SEPARATE DUCT FROM SERIES CIRCUITS. SEPARATE CIRCUITS IN MANHOLE PER NEC.
12. CONNECT NEW CONDUCTORS TO EXISTING FOR CONTINUATION OF CIRCUIT.
13. CONNECT NEW HDPE CONDUIT TO EXISTING DISSIMILAR CONDUIT USING ELECTROFUSION COUPLING OR POLYCAM ADAPTER.
14. CONTRACTOR SHALL RESTORE LIGHTING CONTROL AND POWER CIRCUITS, TO THE SATISFACTION OF THE AIRPORT MANAGER, ONE HOUR PRIOR TO SUNSET.

LEGEND:

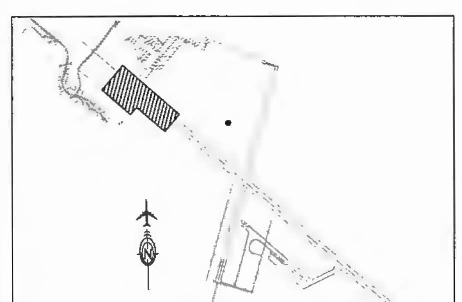
R/W – RUNWAY
XFMR – TRANSFORMER
T/W – TAXIWAY
PAPI – PRECISION APPROACH PATH INDICATOR
LFMC – LIQUIDTIGHT FLEXIBLE METAL CONDUIT

- EXISTING UNDERGROUND CONDUIT
- —C— EXISTING UNDERGROUND COMMUNICATION
- --E-- EXISTING UNDERGROUND ELECTRIC
- EXISTING CONCRETE ENCASE DUCT BANK
- NEW 2" RIGID STEEL CONDUIT
- / NEW 2" HDPE CONDUIT. HASH MARKS INDICATE NUMBER OF #8 AWG. 5KV AIRPORT CABLES TYPE "C" PLUS ONE #6 BARE COPPER GROUND CONDUCTOR.
- EXISTING HANDHOLE
- (EL) EXISTING ELECTRIC MANHOLE
- M R/G EXISTING RUNWAY THRESHOLD LIGHT – MEDIUM INTENSITY
- H Y/W EXISTING R/W EDGE LIGHT – HIGH INTENSITY
- (B) EXISTING TAXIWAY EDGE LIGHT
- H G/R NEW RUNWAY THRESHOLD LIGHT – HIGH INTENSITY
- M G/R NEW RUNWAY THRESHOLD LIGHT – MEDIUM INTENSITY
- H H Y/W NEW RUNWAY EDGE LIGHT – HIGH INTENSITY
- H NEW FLUSH RUNWAY EDGE LIGHT (CONCRETE ENCASED) – HIGH INTENSITY
- M NEW RUNWAY EDGE LIGHT – MEDIUM INTENSITY
- NEW TAXIWAY EDGE LIGHT
- NEW 3/4" X 10' GROUND ROD
- X SIGN NUMBER – SEE SIGN SCHEDULE, SHEET E14
- EXISTING AIRPORT SIGN (TO BE CONNECTED TO NEW CIRCUITS)
- NEW SIGN
- RELOCATED SIGN
- NEW HANDHOLE, L-867B
- EXISTING BAK-12 BARRIER LIGHT (TO BE CONNECTED TO NEW RUNWAY CIRCUIT)
- WIND CONE
- TYPE II JUNCTION BOX

LIGHT SCHEDULE

NUMBER	SYMBOLS	LOCATION	LIGHT DETAILS			
			LIGHT COLOR	LAMP WATTAGE	F.A.A. NUMBER	TRANSFORMER WATTAGE
7	H	R/W 12/30 FLUSH EDGE LIGHT	YELLOW/WHITE	(2)105	L850C	200
44	H	R/W 12/30 EDGE LIGHT	WHITE	120	L862	100
31	H Y/W	R/W 12/30 EDGE LIGHT	YELLOW/WHITE	120	L862	100
16	H R/G	R/W 12/30 THRESHOLD	RED/GREEN	200	L862E	200
8	M R/G	R/W 36 THRESHOLD	RED/GREEN	45	L861E	30/45
37	M	R/W 18/36 EDGE LIGHT	WHITE	30	L861	30/45
139		TAXIWAY EDGE LIGHT	BLUE	12	L861T	10/15

ALL TRANSFORMERS 6.6A/6.6A



KEY PLAN

DATE ORIGINALLY STAMPED 2/18/11

BY	DATE	REVISION
YC	6/2014	AS-BUILT
MBA	03-18-11	(2) ADDENDUM

PLAN PREPARED BY MBA CONSULTING ENGINEERS, INC.

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

KING SALMON AIRPORT
KING SALMON, ALASKA
AIRPORT LIGHTING
PROJECT No. 52673
AIP No. 3-02-0148-12-2011
RUNWAY 12-30 LIGHTING PLANS

DATE: 2/22/2011
SHEET: E1 OF 54
AS-BUILT SHEET: 36 OF 57

Date Revised: 7/07/2014, 8:46 AM
Layout Name: E1
Designed By: CMD
Drawn By: DMH
Checked By: MJL
DOWL FILE No: 234-26

Designed By:	CMD
Drawn By:	DMH
Checked By:	MJL

DGN File: SCRIPT FILE:
DGN File No: 234-26
Date Revised: 7/07/2014, 8:46 AM
Layout Name: E2
File Path and Name: W:\Projects\King salmon\dgn lighting 2011\Asbuilt\From Brion Hanson\07041_E1-E11.dwg

MATCHLINE - SHEET E1

MATCHLINE - SHEET E3

R/W 12-30

21+00 22+00 23+00 24+00 25+00 26+00 27+00 28+00 29+00 30+00 31+00 32+00 33+00 34+00 35+00

75.00'

8'

1 - BLACK/WHITE-R-1

R-1

MOVED TO STA 20+71.71
FROM STA 20+79.71

MOVED TO STA 22+76.84
FROM STA 22+71.84

9 T-1 (2)
R-1

WIND CONE CONDUIT

198.07' TYPICAL FROM
R/W STA. 64+93.28
TO R/W STA. 96+06.28

1 - BLACK/WHITE-R-1
2 - PURPLE-T-1

1 - RED-WIND CONE WIRE
1 - WHITE

MOVED TO R1

ROUTE CIRCUIT OUTSIDE
PAVED BLAST PROTECTION.

2" HDPE CONDUIT WITH
2-#8 5KV AIRPORT CABLE
1-#6 GROUND CONDUCTOR
(120V WINDCONE CIRCUIT)

WIND CONE CONDUIT INSTALLED
IN THE SAME TRENCH AS R-1 DIVERT
TO EDGE OF RSA @ STA 20+79

GRAPHIC SCALE
50 0 25 50 100

KEY PLAN

LEGEND
* HAND HOLES RELOCATED

PLAN PREPARED BY MBA CONSULTING ENGINEERS, INC.

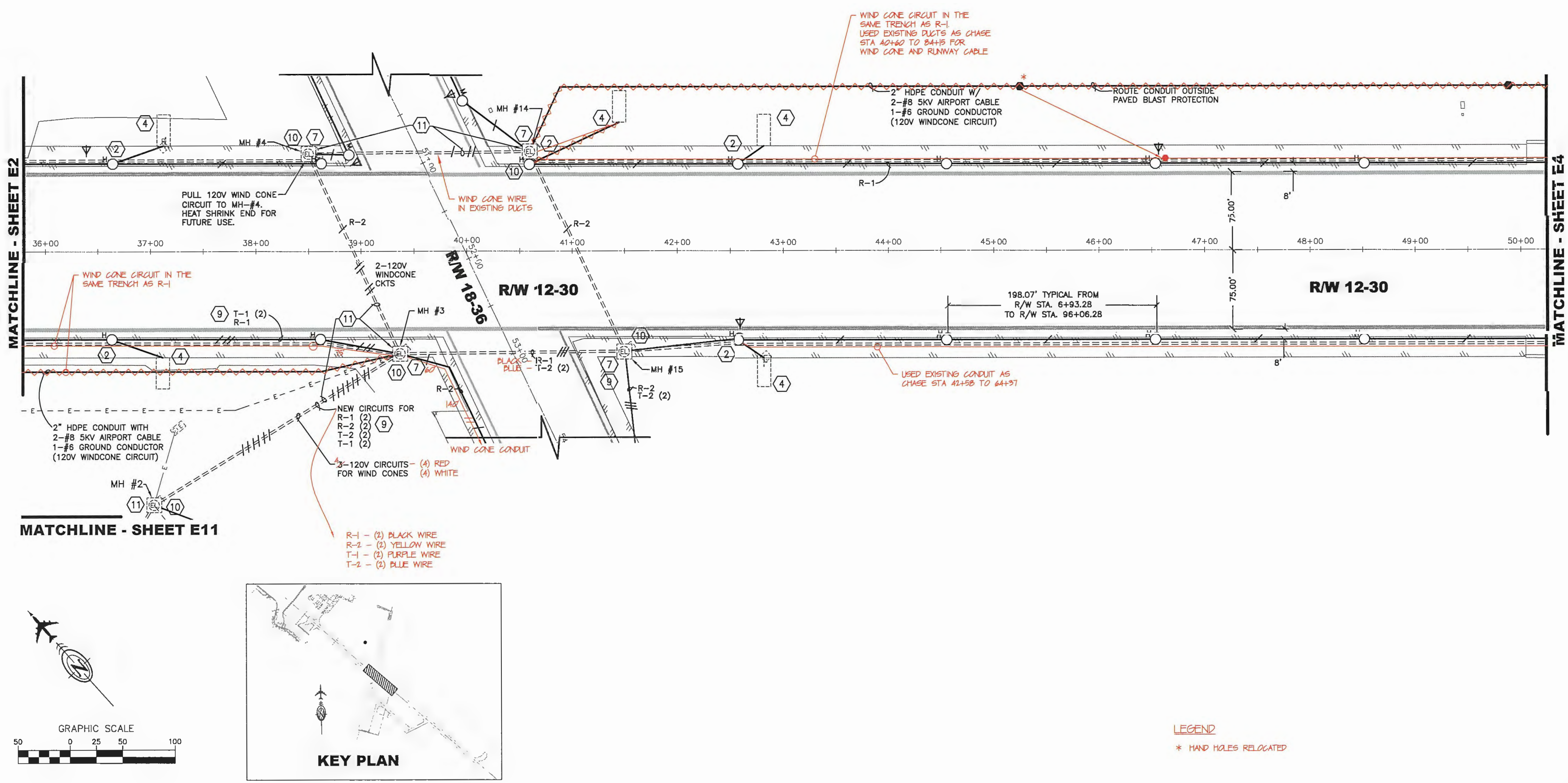
DATE ORIGINALLY
STAMPED 2/18/11

BY	DATE	REVISION
JC	6/2014	AS-BUILT

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
CENTRAL REGION

KING SALMON AIRPORT
KING SALMON, ALASKA
AIRPORT LIGHTING
PROJECT No. 52673
AIP No. 3-02-0148-12-2011
RUNWAY 12-30 LIGHTING PLANS

DATE: 2/22/2011
SHEET: E2 OF 54
AS-BUILT SHEET: 37 OF 57



Date Revised:	7/07/2014, 8:46 AM	SCRIPT FILE:	DOWL FILE No: 234-26
Layout Name:	E3		
File Path and Name:	W:\Projects\king salmon\akn lighting 2011\Asbuilt\From Brian Hanson\07041_E1-E11.dwg		

Designed By: CMD
Drawn By: DMH
Checked By: MJL

PLAN PREPARED BY MBA CONSULTING ENGINEERS, INC.

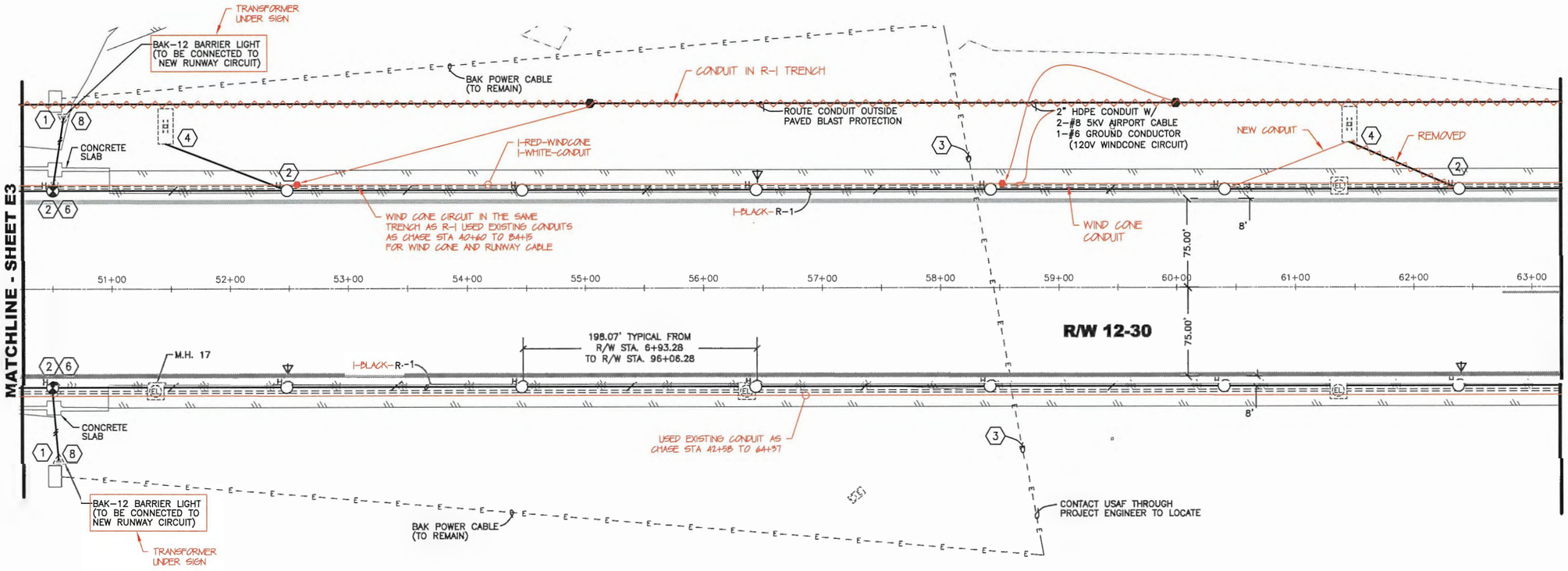
DATE ORIGINALLY STAMPED 2/18/11

BY	DATE	REVISION
TC	6/2014	AS-BUILT

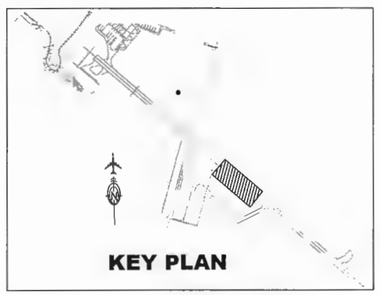
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

KING SALMON AIRPORT
KING SALMON, ALASKA
AIRPORT LIGHTING
PROJECT No. 52673
AIP No. 3-02-0148-12-2011
RUNWAY 12-30 LIGHTING PLANS

DATE: 2/22/2011
SHEET: E3 OF 54
AS-BUILT SHEET: 38 OF 57



GRAPHIC SCALE
50 0 25 50 100



Date Revised:	7/07/2014, 8:46 AM
Line Weights:	E4
File Path and Name:	W:\Projects\king_salmon\okn_lighting_2011\Asbuilt\From Brian Hanson\07041_E1-E11.dwg

SCRIPT FILE:

DGN. FILE No: 234-26

Designed By:	CMD
Drawn By:	DMH
Checked By:	M.L.

PLAN PREPARED BY MBA CONSULTING ENGINEERS, INC.

DATE ORIGINALLY STAMPED 2/18/11

BY	DATE	REVISION
TC	6/2014	AS-BUILT

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

KING SALMON AIRPORT
KING SALMON, ALASKA
AIRPORT LIGHTING
PROJECT No. 52673
AIP No. 3-02-0148-12-2011
RUNWAY 12-30 LIGHTING PLANS

DATE: 2/22/2011
SHEET: E4 OF 54
AS-BUILT SHEET: 39 OF 57

Date Revised:	7/07/2014, 8:46 AM	Designed By:	CMD
Signal Name:		Drawn By:	DMH
File Path and Name:	W:\Projects\king salmon\okn lighting 2011\Asbuilt\From Brian Hansen\07041_E1-E11.dwg	Checked By:	MJL

DOWL FILE No: 234-26

SCRIPT FILE: 07041_E1-E11.dwg

ROUTE CONDUIT OUTSIDE PAVED BLAST PROTECTION

2" HDPE CONDUIT W/
2-#8 5KV AIRPORT CABLE
1-#6 GROUND CONDUCTOR
(120V WINDCONE CIRCUIT)

1 - RED-WIND CONE
1 - WHITE

USED EXISTING CONDUITS AS CHASE FOR WIND CONE AND RUNWAY CABLE STA 40+60 TO STA 84+15

1-BLACK-R-1

MATCHLINE - SHEET E4

MATCHLINE - DETAIL 2

64+00 65+00 66+00 67+00 68+00 69+00 70+00 71+00 72+00 73+00 74+00 75+00 76+00

75.00'

USED EXISTING CONDUIT AS CHASE STA 42+58 TO 64+57

ELECTRICAL MANHOLE

T-2-(2)BLUE WIRE

(1) BLACK WIRE-R-1

R/W 12-30

TAXIWAY AND RUNWAY CROSSING

198.07' TYPICAL FROM R/W STA. 6+93.28 TO R/W STA. 96+06.28

USED EXISTING CONDUIT AS CHASE STA 60+33 TO 80+21

1-BLACK WIRE-R-1

RADIUS=90
CHORDS=34.7

RADIUS=90
CHORDS=35.7

T-2

PT

527+00

528+00

526+00

525+00

50.00'

56.88'

146.89'

TAXIWAY E

CROSSING DOES NOT EXISTING INSTALL NEW CROSSING AT INTERSECTION IN DUCT SYSTEM.

BLUE WIRE-T-2

MATCHLINE - SHEET E10

MATCHLINE - DETAIL 1

120V WINDCONE CIRCUIT

USED EXISTING CONDUITS AS CHASE FOR WINDCONE AND RUNWAY CABLE STA 40+60 TO 84+15

OLD RUNWAY LIGHT

R-1

8'

75.00'

R/W 12-30

77+00 78+00 79+00 80+00

198.07' TYPICAL FROM R/W STA. 6+93.28 TO R/W STA. 96+06.28

USED EXISTING CONDUIT AS CHASE STA 60+33 TO 80+21

MATCHLINE - SHEET E6

R-1

CROSS TW E @ INTERSECTION

T-1

ELECTRICAL MANHOLE

T-2

T-2 CIRCUIT TW E & C

GRAPHIC SCALE

50 0 25 50 100

KEY PLAN

LEGEND

* HAND HOLES RELOCATED

PLAN PREPARED BY MBA CONSULTING ENGINEERS, INC.

DATE ORIGINALLY STAMPED 2/18/11

BY	DATE	REVISION
TR	6/2014	AS-BUILT

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

KING SALMON AIRPORT
KING SALMON, ALASKA
AIRPORT LIGHTING
PROJECT No. 52673
AIP No. 3-02-0148-12-2011
RUNWAY 12-30 LIGHTING PLANS

DATE: 2/22/2011
SHEET: E5 OF 54
AS-BUILT SHEET: 40 OF 57

MATCHLINE - SHEET E5

NEW L-807 LIGHTED WIND CONE
R/W STA. 86+00 (305' LT)
290°

1 E15

WIND CONE CIRCUIT IN THE SAME TRENCH AS THE R-1 CIRCUIT

2" HDPE CONDUIT W/
2-#8 5kV AIRPORT CABLE
1-#6 GROUND CONDUCTOR
(120V WINDCONE CIRCUIT)

TRANSFORMER UNDER SIGN

BAK-12 BARRIER LIGHT
(TO BE CONNECTED TO
NEW RUNWAY CIRCUIT)

ROUTE CONDUIT OUTSIDE PAVED BLAST PROTECTION

2-1/C#2 600 VOLT
BAK POWER CABLE
(TO REMAIN)

MH#25

MOVED TO STA 84+15.24
FROM STA 84+18.01

CONCRETE SLAB

USED EXISTING CONDUITS AS CHASE FOR WIND CONE AND RUNWAY CABLE STA 82+60 TO STA 84+15

TRANSFORMER FOR SIGN IN HAND HOLE NEAR SIGN

5kV CABLE

TAXIWAY P

BLACK-R-1

EXISTING HAND HOLE IN CONCRETE

R/W 12-30

81+00 82+00 83+00 84+00 85+00 86+00 87+00 88+00 89+00 90+00 91+00 92+00 93+00 94+00 95+00 96+00

1 E6

1 E12

75.00'

MOVED TO STA 82+15.94
FROM STA 82+19.94

MOVED TO STA 86+14.75
FROM STA 86+16.08

198.07' TYPICAL FROM
R/W STA. 6+93.28
TO R/W STA. 96+06.28

R-1

MOVED TO STA 84+15.24
FROM STA 84+18.01

2-1/C#2 600 VOLT
BAK POWER CABLE
(TO REMAIN)

MH#24

BAK-12 BARRIER LIGHT
(TO BE CONNECTED TO
NEW RUNWAY CIRCUIT)

TRANSFORMER UNDER SIGN

EXISTING PAPI TO BE MAINTAINED AND WORKED AROUND.

R/W STA. 96+06.28
INSTALL THRESHOLD LIGHTS

TO EXISTING CONDUIT UNDER T/W 'P'

R/W EDGE

8'

COMPLETE LIGHT BAR NOT SHOWN FOR CLARITY.

CONNECT NEW THRESHOLD LIGHT BARS USING EXISTING CONDUIT.

10' TYPICAL

TO NEW CONSTRUCTION

NEW L-862 OR L-862E INSTALLED ON NEW L-867 IIB LIGHTBASE WITH HUB CONFIGURATION TO MATCH EXISTING CONDUIT RUNS.

EXISTING L867 IB LIGHTBASE TO BE REMOVED

1 TRANSITION RSC ELBOWS TO HDPE CONDUIT USING ELECTROFUSION COUPLINGS.

2 SAW CUT EXISTING ASPHALT SUFFICIENT WIDTH TO INSURE COMPACTION SPECIFICATION ARE MET AROUND NEW LIGHT BASE AND IN CONDUIT TRENCH.

3 PROVIDE LIGHT BASES WITH HUB CONFIGURATION REQUIRED TO MATCH EXISTING CONDUIT RUNS.

KEY PLAN

1 E6 R/W 30 LIGHT BARS
NTS

GRAPHIC SCALE
50 0 25 50 100

PLAN PREPARED BY MBA CONSULTING ENGINEERS, INC.

DATE ORIGINALLY STAMPED 2/18/11

NO.	DATE	REVISION
1	6/2014	AS-BUILT

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

KING SALMON AIRPORT
KING SALMON, ALASKA
AIRPORT LIGHTING
PROJECT No. 52673
AIP No. 3-02-0148-12-2011
RUNWAY 12-30 LIGHTING PLANS

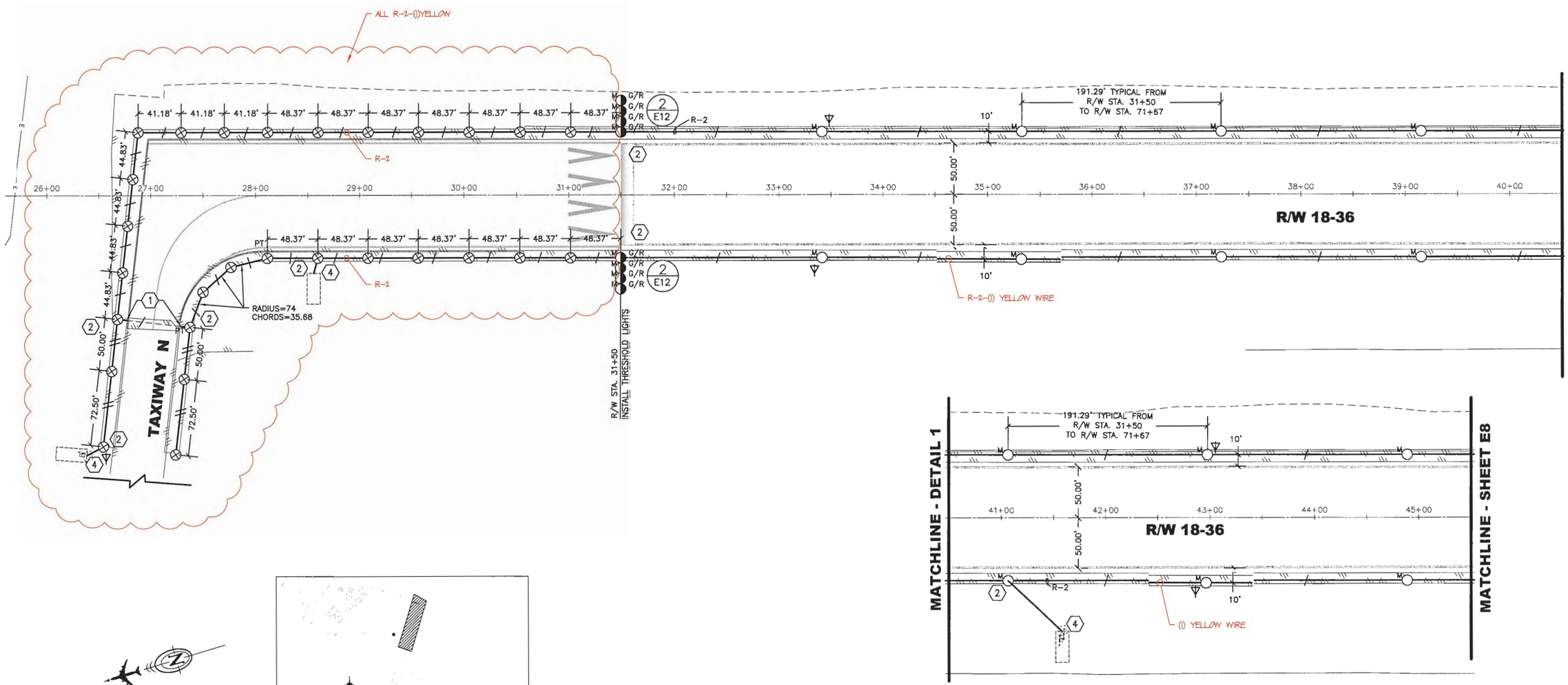
DATE: 2/22/2011
SHEET: E6 OF 54
AS-BUILT SHEET: 41 OF 57

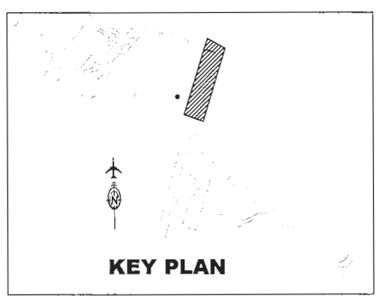
Designed By: CMD
Drawn By: DMH
Checked By: MJL

DOWL FILE No: 234-26

SCRIPT FILE:

Date Revised: 7/07/2014, 8:46 AM
Layout Name: E6
File Path and Name: W:\Projects\King salmon\Vakn lighting 2011\Asbuilt\From Brian Hanson\D7041_E1-E11.dwg





Date Revised:	7/07/2014, 8:47 AM
Layout Name:	
File Path and Name:	W:\Projects\Varg_salmon\ken lighting 2011\Asbuilt\From Brian Hanson\07041_E1-E11.dwg

SCRIPT FILE: DOWL FILE No. 234-26

Designed By:	CMD
Drawn By:	DMH
Checked By:	MJL

PLAN PREPARED BY MBA CONSULTING ENGINEERS, INC.

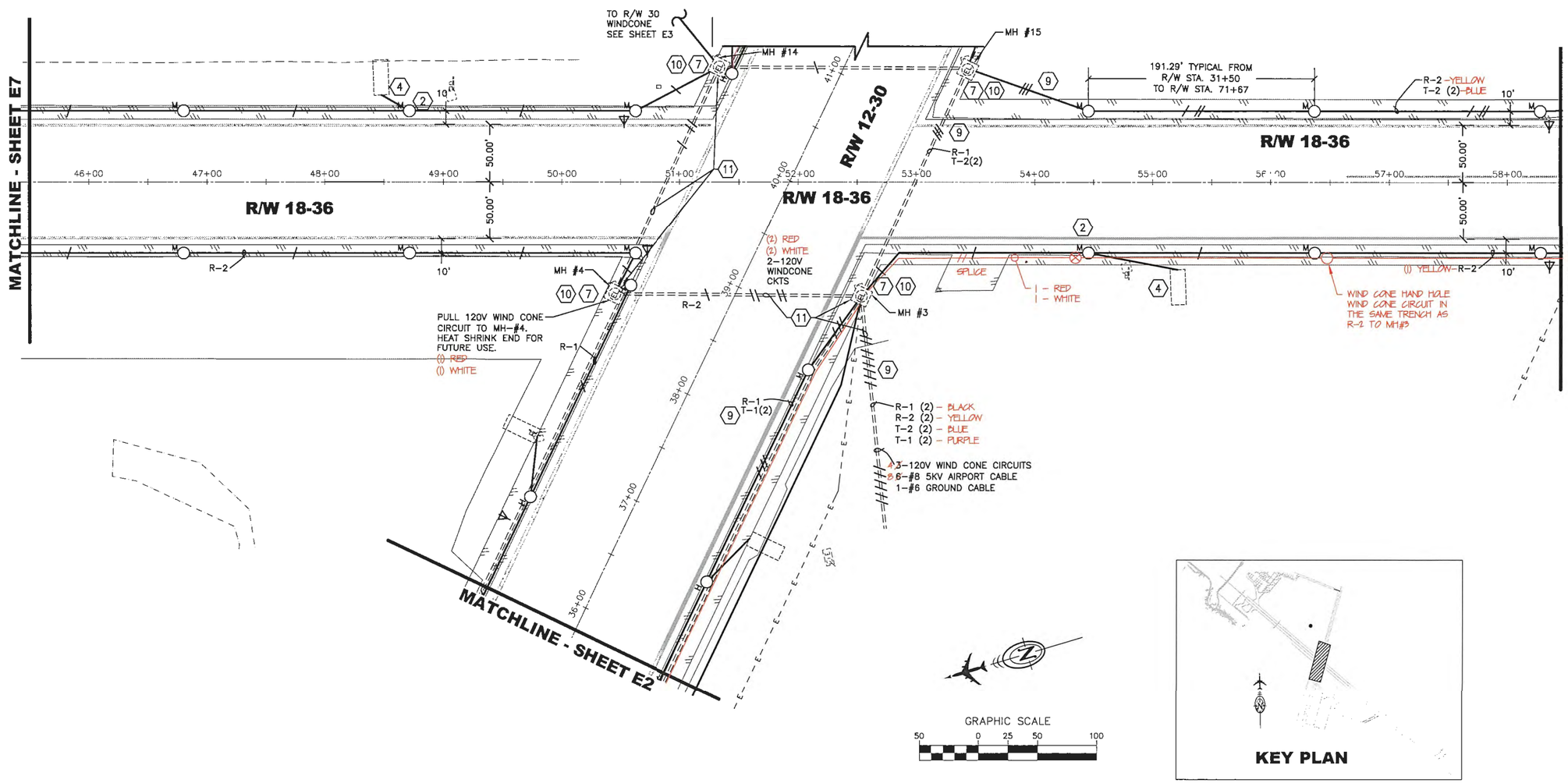
DATE ORIGINALLY STAMPED 2/18/11

TC	6/2014	AS-BUILT	
B1	DATE	REVISION	

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

KING SALMON AIRPORT
KING SALMON, ALASKA
AIRPORT LIGHTING
PROJECT No. 52673
AIP No. 3-02-0148-12-2011
RUNWAY 18-36 LIGHTING PLANS

DATE: 2/22/2011
SHEET: E7 OF 54
AS-BUILT SHEET: 42 OF 57



DATE ORIGINALLY STAMPED 2/18/11

PLAN PREPARED BY MBA CONSULTING ENGINEERS, INC.

BY	DATE	REVISION
VZ	6/2014	AS-BUILT

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

KING SALMON AIRPORT
KING SALMON, ALASKA
AIRPORT LIGHTING
PROJECT No. 52673
AIP No. 3-02-0148-12-2011
RUNWAY 18–36 LIGHTING PLANS

DATE: 2/22/2011
SHEET: E8 OF 54
AS-BUILT SHEET: 43 OF 57

Date Revised: 7/07/2014, 8:47 AM
Layout Name: E8
File Path and Name: W:\Projects\King salmon\akn lighting 2011\Asbuilt\From Brian Hanson\07041_E1-E11.dwg
SCRIPT FILE:
DGN FILE No: 234-26
Designed By: CMD
Drawn By: DMH
Checked By: MJL

MATCHLINE - SHEET E10

KEY PLAN

GRAPHIC SCALE
50 0 25 50 100

TAXIWAY C

TAXIWAY D

TAXIWAY G

GA APRON

R/W 18-36

MATCHLINE - SHEET E8

T-2-(1)-BLUE

ONE 5KV WIRE
T-2-(1)-BLUE

INSTALLED 2" HDPE CROSSING
USED EXISTING CROSSING (4" ERC CASING).
INSTALLED HAND HOLES (1)-T-2-BLUE

R-2-(1) YELLOW
T-2-(2) BLUE

R-2-(1) YELLOW
T-2-(2) BLUE

INSTALL 2" HDPE CONDUIT
IN EXISTING 4" RSC

INSTALLED HAND HOLE
(TOO SHARP OF A TURN FOR HDPE)

ADDED ADDITIONAL LIGHT BETWEEN
PT AND END OF TAXIWAY LIGHTS TO
AVOID CULVERT CROSSING UNDER TW C.
NEW CHORD LENGTH 91.29.

ADD ADDITIONAL LIGHT
NEW CHORD LENGTH
IS 26.08

RADIUS=115
CHORDS=46.1

RADIUS=95
CHORDS=37.1

RADIUS=95
CHORDS=35.4

RADIUS=95
CHORDS=40.2

RADIUS=95
CHORDS=38.5

T/W "C" STA.
503+82.4 (461' RT)

T-2-(2) BLUE

T-2(2)
R-1

T-2(2)
R-2

2-2" RSC

WIND CONE
HAND HOLE
STA 62+47.44

WIND CONE CIRCUIT IN
THE SAME TRENCH IN
R-2 TO MH#3

WIND CONE
STA 63+00 25ORT

EXISTING NEA
DISTRIBUTION
LINE

191.29' TYPICAL FROM
R/W STA. 31+50
TO R/W STA. 71+67

R/W STA. 71+67

SEE SHEET E1 FOR NOTES AND LEGEND

PLAN PREPARED BY MBA CONSULTING ENGINEERS, INC.

DATE ORIGINALLY
STAMPED 2/18/11

BY	DATE	REVISION
TL	6/2014	AS-BUILT

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
CENTRAL REGION

KING SALMON AIRPORT
KING SALMON, ALASKA
AIRPORT LIGHTING
PROJECT No. 52673
AIP No. 3-02-0148-12-2011
RUNWAY 18-36 LIGHTING PLANS

DATE: 2/22/2011
SHEET: E9 OF 54
AS-BUILT SHEET: 44 OF 57

Designed By: CMD
Drawn By: DMH
Checked By: MJL

DGWL FILE No: 234-26

SCRIPT FILE:

File Path and Name: W:\Projects\king salmon\okn lighting 2011\Asbuilt\From Brian Hanson\D7041_E1-E11.dwg

Last Plotted: 7/07/2014, 8:47 AM

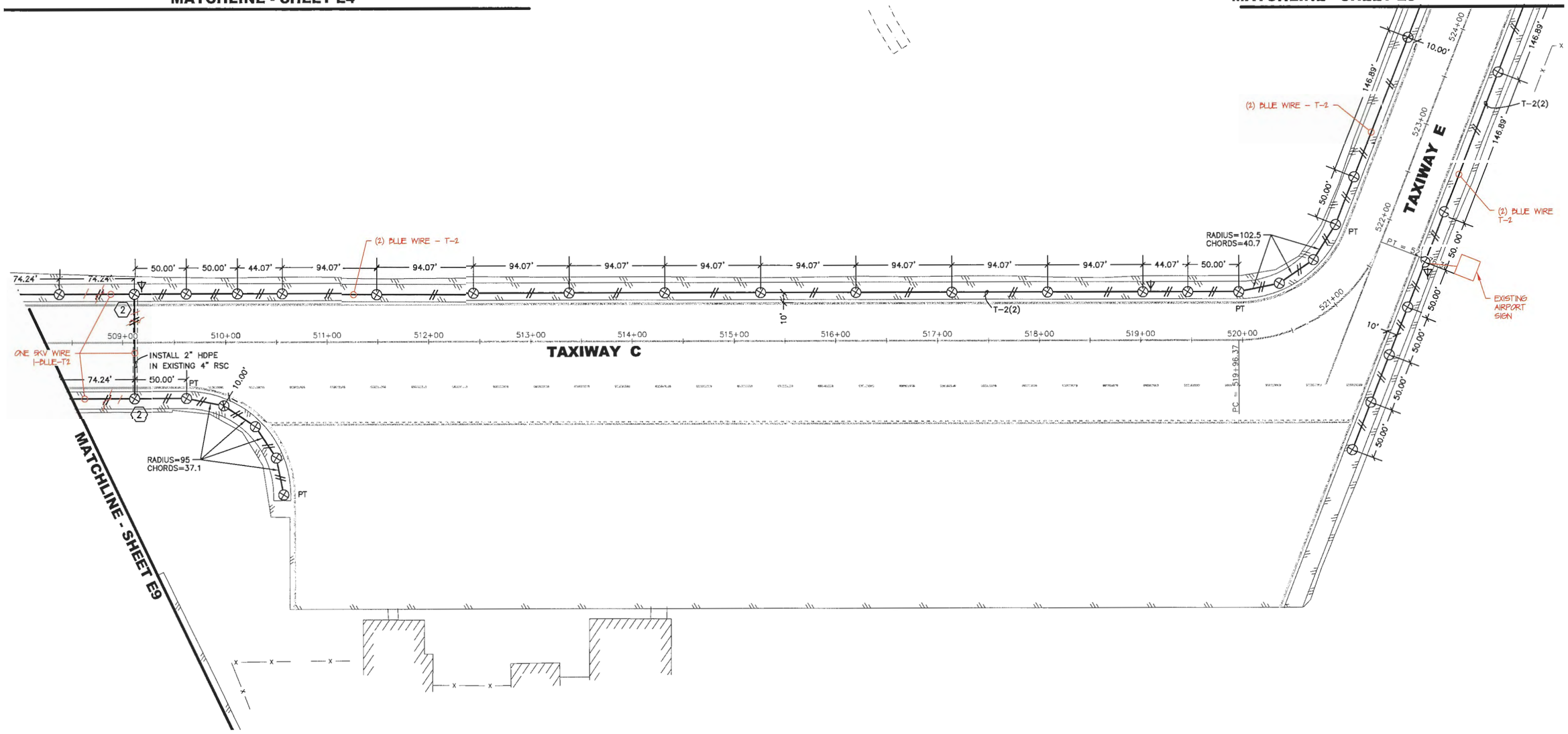
Style Name:

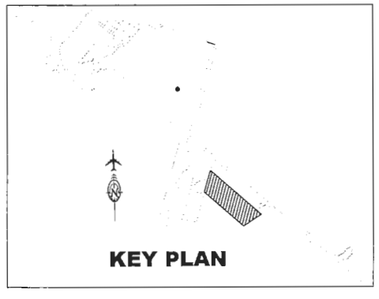
Date Revised:

MATCHLINE - SHEET E4

MATCHLINE - SHEET E5

MATCHLINE - SHEET E9





GRAPHIC SCALE
50 0 25 50 100

DATE ORIGINALLY STAMPED 2/18/11

Date Revised:	7/07/2014, 8:47 AM
Layout Name:	E10
File Path and Name:	W:\Projects\King salmon\akn lighting 2011\Asbuilt\From Brian Hanson\07041_E1-E11.dwg

SCRIPT FILE:
DGWL FILE No: 234-26

Designed By:	CMD
Drawn By:	DMH
Checked By:	MJL

BY	DATE	REVISION
JR	6/2014	AS-BUILT

PLAN PREPARED BY MBA CONSULTING ENGINEERS, INC.

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

KING SALMON AIRPORT
KING SALMON, ALASKA
AIRPORT LIGHTING
PROJECT No. 52673
AIP No. 3-02-0148-12-2011
TAXIWAY C AND E LIGHTING PLANS

DATE: 2/22/2011
SHEET: E10 OF 54
AS-BUILT SHEET: 45 OF 57

MATCHLINE - SHEET E1

AIR TRAFFIC CONTROL TOWER NOTES:

FOLLOWING COMPLETION OF THE PLAN WORK TO INSTALL THE NEW PILOT CONTROLLED LIGHTING SYSTEM, IT WAS DETERMINED THAT ADDITIONAL WORK WILL BE REQUIRED TO INTERFACE THE NEW SYSTEMS WITH THE EXISTING OUTDATE EQUIPMENT IN THE AIR TRAFFIC CONTROL TOWER.

EMERGENCY CALL FOR IN-OPERABLE RUNWAY LIGHTS. FOUND INTERMITTENT SWITCH WITHIN EXISTING SYSTEM NOT MODIFIED BY ELCON CORPORATION. REDIRECTED CIRCUIT TO SPARE SWITCH ON CONTROL CONSOLE.

NO PLANS FOR ATC TOWER WERE PROVIDED AT BEGINNING OF PROJECT. THE ABOVE IS FROM COMB OUT LINING WORK COMPLETED. NO AS BUILTS CREATED SINCE NO ORIGINAL PLANS MADE AVAILABLE TO CONTRACTOR OF PROJECT MANAGEMENT.

MATCHLINE - SHEET E3

MH #2

9

10 E1

11

WINDCONE CIRCUIT
2–#8, 5KV AIRPORT CABLES
1–#6 GROUND CONDUCTOR

INSTALL FACTORY 45° RSC ELBOW
R/W 18–36 STA. 54+57.39 (200' RT)

WIND CONE CIRCUIT INSTALLED IN THE SAME TRENCH AS THE R-2 CIRCUIT FROM WIND CONE AT STA 63+00 RT TO MH#3 TO MH#2

4–120V WIND CONE CIRCUITS
8–#8, 5KV AIRPORT CABLES
1–#6 GROUND CONDUCTOR

NEW CIRCUITS FOR
R-1(2)
R-2(2)
T-2(2)
T-1(2)

NEW ELECTRICAL ENCLOSURE
R/W 12–30
STA. 34+91.34
(608.75' RT)

R/W 18–36 STA. 56+67.72 (217' RT)

1 TRANSITION HDPE TO ABOVE GRADE ENCLOSURE USING LFMC AND ELECTROFUSION COUPLINGS OR POLY-CAM ADAPTER.

INSTALL NEW HDPE CONDUIT FROM EXISTING MANHOLE TO NEW ELECRICAL ENCLOSURE BUILDING FOR RUNWAY AND TAXIWAY HOMERUN CIRCUITS. PROVIDE ONE ADDITIONAL 2" SPARE HDPE CONDUIT.

9

NEW STANDBY GENERATOR ENCLOSURE
R/W 12–30
STA. 35+13.45
(622.43' RT)

MH #1

10 E1

AN INTERIM POWER DROP TO THE ELECTRICAL ENCLOSURE SHALL BE PROVIDED PENDING PRODUCTION OF THE NEW STANDBY GENERATOR.

ONE 2" HDPE CONDUIT WITH ONE 50 pr 19 AWG CONTROL CABLE — CONTROL TO TOWER CABLE FOR RUNWAY AND TAXIWAY

NEW NEA OVERHEAD ELECTRICAL SERVICE LINE (BY OTHERS)

EXISTING REGULATOR/ GENERATOR BUILDING

EXISTING ATCT

SEWER

Antenna

ARFF GATE ROAD

E5

1 / E15

WIND CONE
R/W 18–36
STA 63+00 ~~STA 62+00~~
(250 RT)

BEARING OF BUILDING SHALL PARALLEL TO LEASE LOT LINE. SITING SHALL BE TO THE CENTER OF THE BUILDING.

LEASE LOT

EXISTING DUCTBANK

12'

24'

10' *

16' *

10' MIN.

ELECTRICAL ENCLOSURE

STANDBY GENERATOR ENCLOSURE

LABEL "AIRFIELD LIGHTING"

LABEL "WINDCONE"

LABEL "COMMUNICATION"

COMM TO ATCT

MH #1

~~MH #1~~

MH #1

~~COMM TO ATCT~~

* DIMENSIONS ARE APPROXIMATE. MANUFACTURER'S SHOP DRAWING PENDING

GRAPHIC SCALE
50 0 25 50 100

KEY PLAN

SEE SHEET E1 FOR NOTES AND LEGEND

PLAN PREPARED BY MBA CONSULTING ENGINEERS, INC.

DATE ORIGINALLY STAMPED 2/18/11

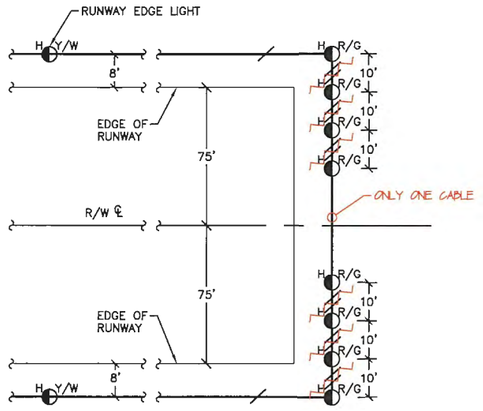
BY	DATE	REVISION
TZ	6/2014	AS-BUILT

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

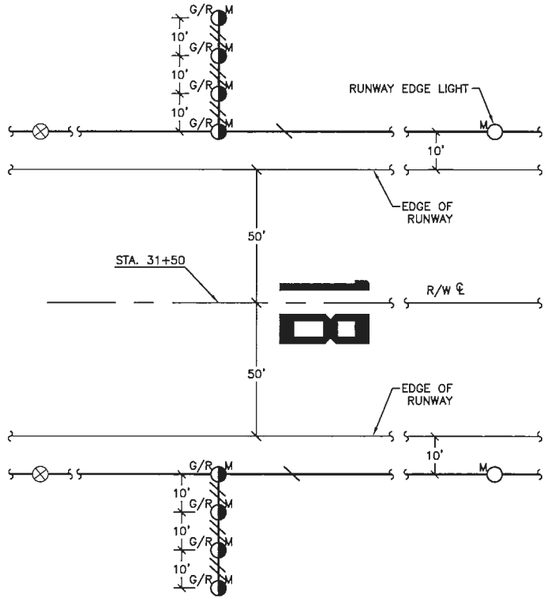
KING SALMON AIRPORT
KING SALMON, ALASKA
AIRPORT LIGHTING
PROJECT No. 52673
AIP No. 3-02-0148-12-2011
ELECT. ENCLOSURE/STANDBY GENERATOR ENCLOSURE SITE PLAN

DATE: 2/22/2011
SHEET: E11 OF 54
AS-BUILT SHEET: 46 OF 57

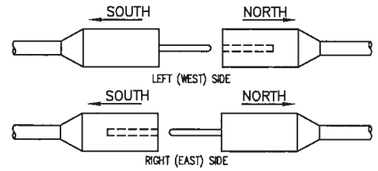
Designed By:	CMD
Drawn By:	DMH
Checked By:	MJL
DOWL FILE No: 234-26	
SCRIPT FILE:	
Date Revised:	7/07/2014, 8:47 AM
Layout Name:	E11
File Path and Name:	W:\Projects\king salmon\okn lighting 2011\Asbuilt\From Brian Hanson\07041_E1-E11.dwg



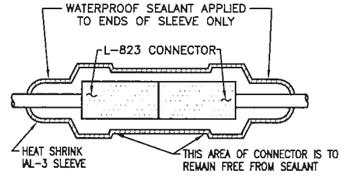
1 E12 R/W 12 & 30 THRESHOLD LIGHTING DETAIL
NTS



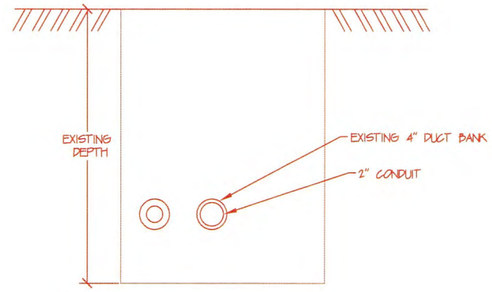
2 E12 R/W 18 THRESHOLD LIGHTING DETAIL
NTS



ORIENTATION OF L-823 CABLE CONNECTION IN LIGHT BASE DETAIL



3 E12 L-823 CONNECTOR
NTS



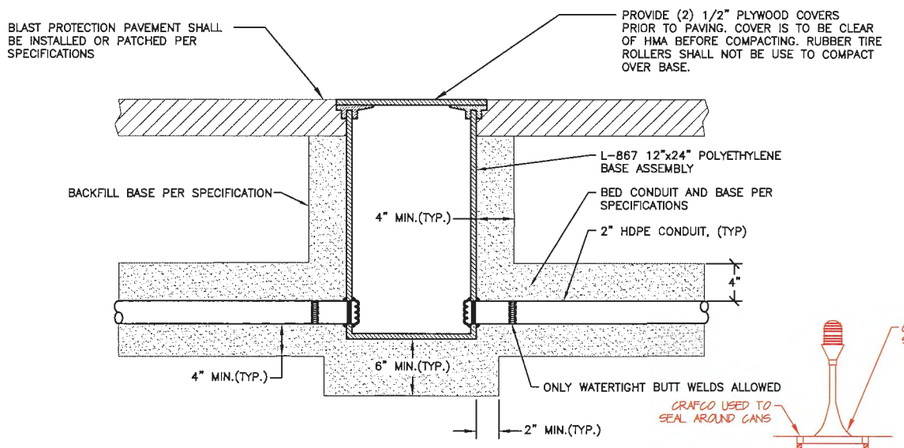
TWO CONDUITS INSTALLED AS SHOWN. WIND CONE AND RUNWAY LIGHTING IN PARALLEL CONDUITS. REFER TO SHEET D12.

4 E12 4" DUCT BANK USED AS CHASE (NOT USED)
NTS
STA 42+58 TO STA 64+37
STA 68+33 TO STA 80+21 RT
STA 104+60 TO STA 84+15 LT

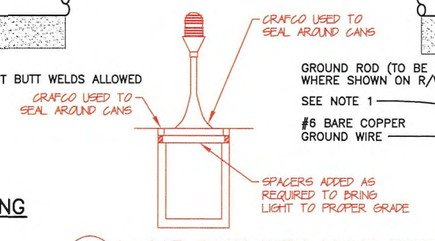
NOTES:

1. CONDUITS AND ANY OPENINGS SHALL BE CAULKED TO PREVENT WATER FROM ENTERING THE BASE ASSEMBLIES.
2. BASE ASSEMBLIES SHALL BE SEALED WATERTIGHT AND SHALL BE FILLED WITH GILSULATE 500 (AVAILABLE FROM ALASKA INSULATION SUPPLY, INC. ANCHORAGE, ALASKA) OR APPROVED EQUAL.
3. THE BASE ASSEMBLIES SHALL BE TYPE L-867, CLASS II, SIZE B, MADE FROM HIGH DENSITY POLYETHYLENE.
4. THE CONDUIT STUB SHALL BE SIDEWALL FUSED TO THE BASE ASSEMBLIES AT THE FACTORY USING BRANCH SADDLE FITTING MADE FROM HIGH DENSITY POLYETHYLENE, (AVAILABLE FROM ARCTIC INSULATION & MANUFACTURING ANCHORAGE, ALASKA) OR APPROVED EQUAL.

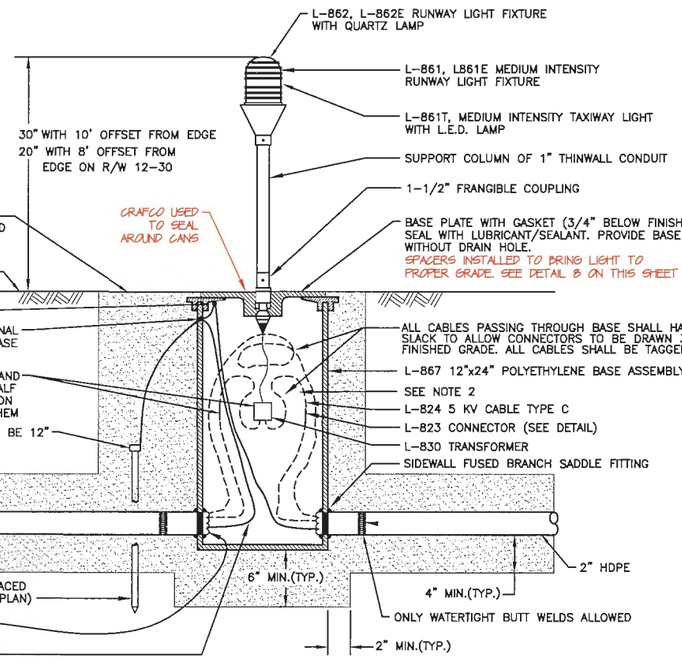
5 E12 CONDUIT TRENCH DETAIL
NTS



6 E12 L-867 BASE DETAIL DURING PAVING
NTS



8 E12 L-867 BASE WITH LIGHT EXTENSION
NTS



7 E12 L-867 BASE WITH LIGHT
NTS

BY	DATE	REVISION
RZ	6/2014	AS-BUILT

DATE ORIGINALLY STAMPED 2/18/11

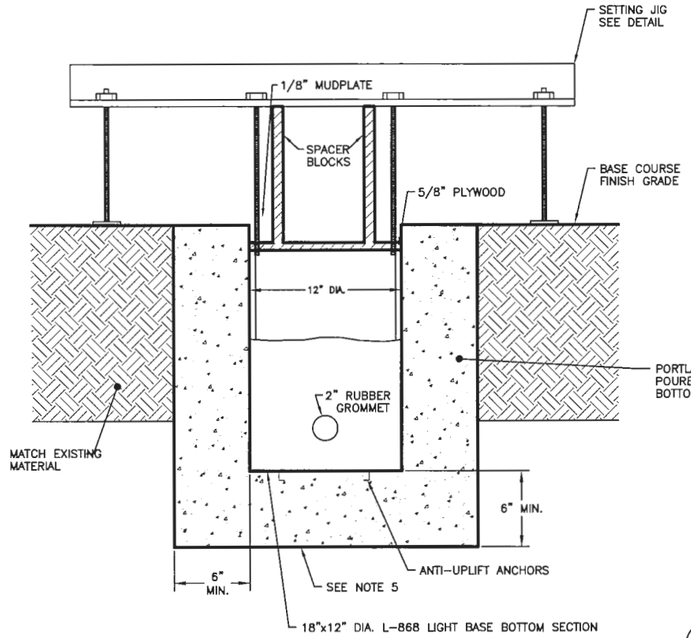
PLAN PREPARED BY MBA CONSULTING ENGINEERS, INC.

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

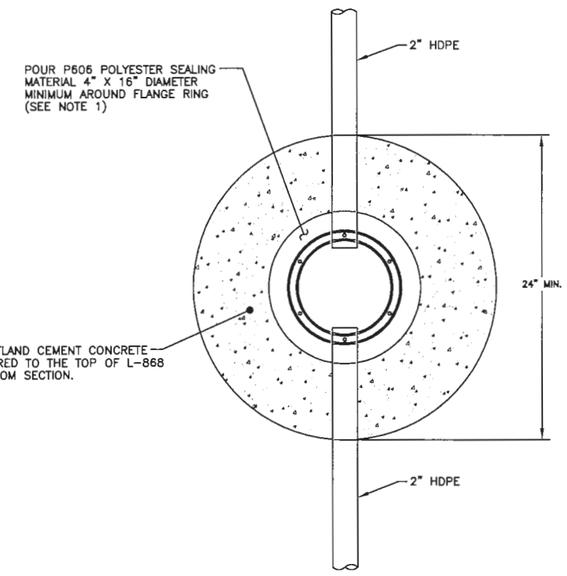
KING SALMON AIRPORT
KING SALMON, ALASKA
AIRPORT LIGHTING
PROJECT No. 52673
AIP No. 3-02-0148-12-2011
LIGHTING DETAILS

DATE: 2/22/2011
SHEET: E12 OF 54
AS-BUILT SHEET: 47 OF 57

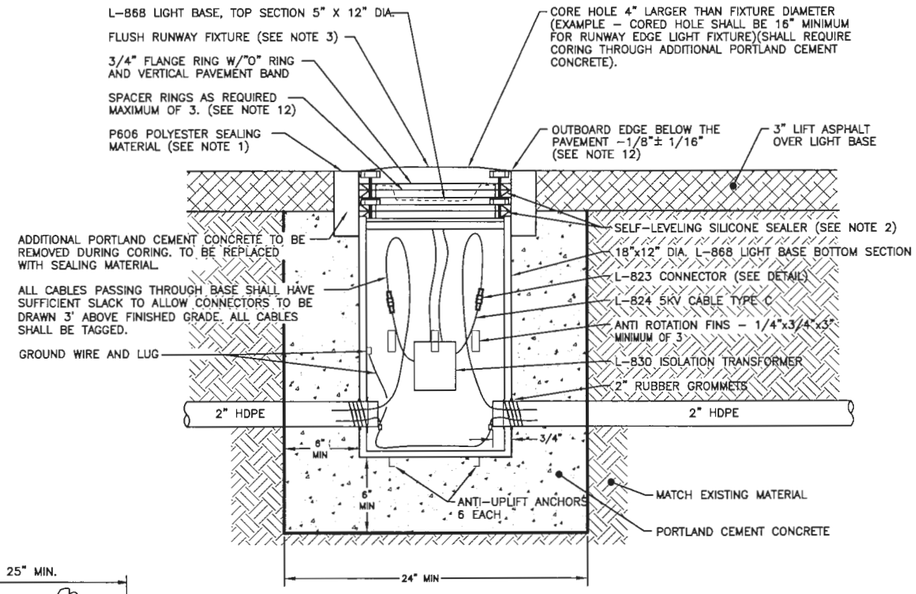
Date Revised: 7/07/2014, 8:47 AM
Layout Name: E12
File Path and Name: W:\Projects\King salmon\ykn lighting 2011\Xebuilt\From Brian Hanson\07041_E12.dwg
SCRIPT FILE: DGML FILE No: 234-26
LAYOUT: E12
Designed By: CMD
Drawn By: DMH
Checked By: MJL



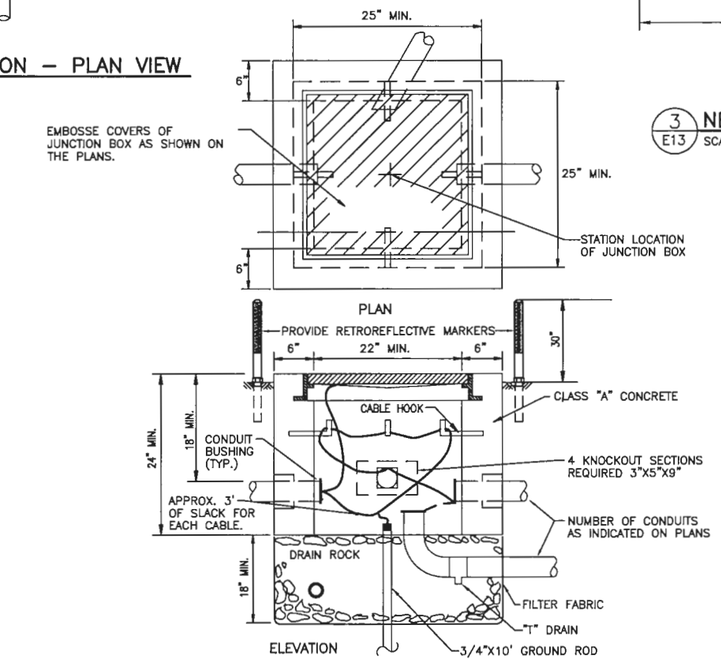
1 E13 NEW LIGHT BASE INSTALLATION – SECTION
SCALE: NTS



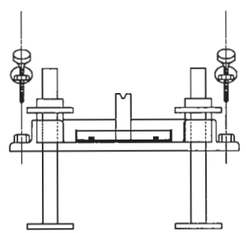
2 E13 NEW LIGHT BASE INSTALLATION – PLAN VIEW
SCALE: NTS



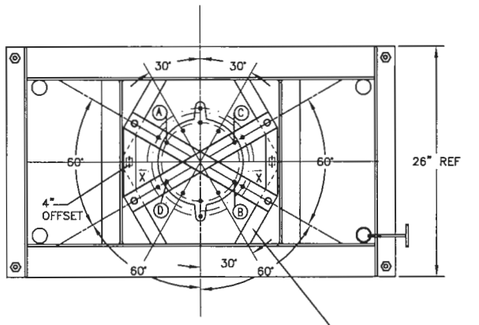
3 E13 NEW FLUSH LIGHT BASE ASSEMBLY
SCALE: NTS



5 E13 TYPE II JUNCTION BOX DETAIL
SCALE : NONE



END VIEW



SETTING JIG DETAIL

4 E13 SETTING JIG
SCALE: NTS

NOTES:

1. POLYESTER SEALING MATERIAL SHALL BE BITUPLASTIC MATERIALS MEETING SPECIFICATION P-606. SURFACE SHALL BE COMPLETELY CLEAN AND DRY BEFORE INSTALLING.
2. SELF-LEVELING SILICONE SEALER SHALL BE GE BRAND RTV 118 OR APPROVED EQUAL.
3. FIXTURE SHALL BE A FLUSH MOUNT MODEL AND INSTALLATION SHALL BE A DRY-TYPE SYSTEM.
4. CONDUIT SYSTEM SHALL BE INSTALLED AT THE SAME GRADE AS THE RUNWAY AND SLOPED TO DRAIN TO THE LOW SPOTS AND DRAINS.
5. BOTTOM OF CORED HOLE SHALL BE COMPACTED BEFORE CONCRETE IS POURED
6. A THIRD HUB FOR A CONDUIT DRAIN SHALL BE PROVIDED WHERE SHOWN ON PLANS.
7. NOT USED.
8. SETTING JIG FOR FIXTURE SHALL BE FROM JAQUITH INDUSTRIES INC. OR APPROVED EQUAL AND SHALL BE SUBSIDIARY TO THE CONTRACT
9. CONCRETE SHALL MEET THE REQUIREMENTS FOR STRUCTURAL CONCRETE (ITEM P-610)
10. ALL CONDUIT SHALL BE INSTALLED BEFORE FINAL PAVING OPERATION BEGINS.
11. NOT USED.
12. CONTRACTOR SHALL INSTALL ONE 1/2" SPACER RING FOR FUTURE ADJUSTMENT AND ANY OTHER SPACER RINGS AS REQUIRED TO MEET FINAL ELEVATION. THESE RINGS ARE SUBSIDIARY TO THE CONTRACT AND NO SEPARATE PAYMENT WILL BE MADE.

Date Revised: 7/07/2014, 8:48 AM
Layout Name: E13
File Path and Name: M:\Projects\king_salmon\ckn_lighting_2011\Msbuilt\From Brian Hanson\07041_E13.dwg
SCRIPT FILE: DGN. FILE No: 234-26
Designed By: CMD
Drawn By: DMH
Checked By: MJL
LAYOUT:

PLAN PREPARED BY MBA CONSULTING ENGINEERS, INC.

DATE ORIGINALLY STAMPED 2/18/11

B2	6/2014	AS-BUILT	
B1	DATE	REVISION	

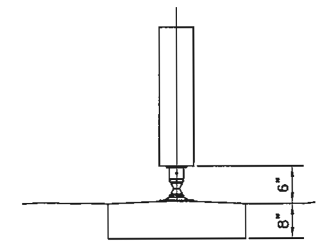
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

KING SALMON AIRPORT
KING SALMON, ALASKA
AIRPORT LIGHTING
PROJECT No. 52673
AIP No. 3-02-0148-12-2011
LIGHTING DETAILS

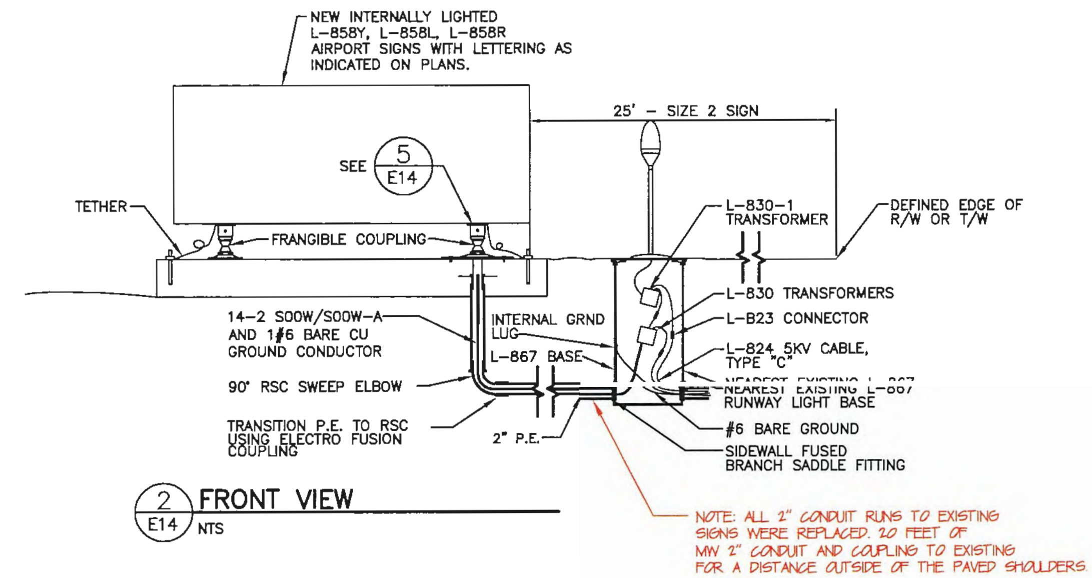
DATE: 2/22/2011
SHEET: E13 OF 54
AS-BUILT SHEET: 48 OF 57

SIGN SCHEDULE

	SIGN No.	PANEL No.	TYPE	PURPOSE	LEGEND	LEGEND COLOR	FACE COLOR	STATIONING	
1	6	1 2 3 4	L-858L L-858R L-858Y	LOCATION SIGN MANDATORY INSTRUCTION INBOUND DESTINATION	A 12 RAMP↑	YELLOW WHITE BLACK	BLACK RED YELLOW	R/W 12-30 STA. 6+78.0 (250 RT)	NEW SIGN SIZE 2, LED STYLE 2, CLASS 2
1	8	1 2 3 4	L-858L L-858R L-858Y	LOCATION SIGN MANDATORY INSTRUCTION INBOUND DESTINATION	B 12 RAMP↑	YELLOW WHITE BLACK	BLACK RED YELLOW	R/W 12-30 STA. 10+16.1 (250 RT)	NEW SIGN SIZE 2, LED STYLE 2, CLASS 2



1 SIDE VIEW E14 NTS

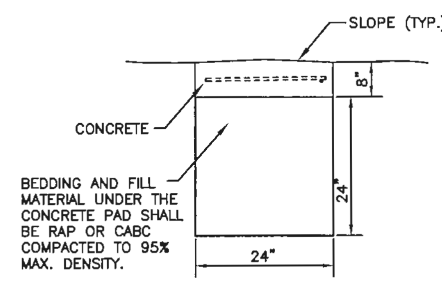


2 FRONT VIEW E14 NTS

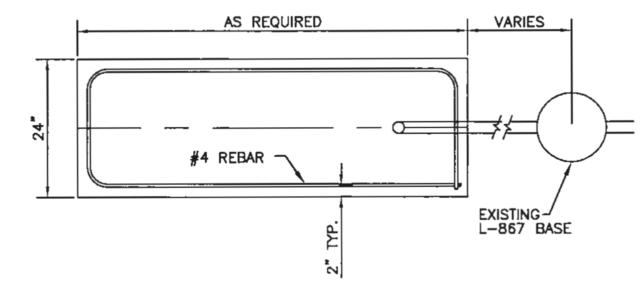
L-858 SIGN DETAILS

NOTES:

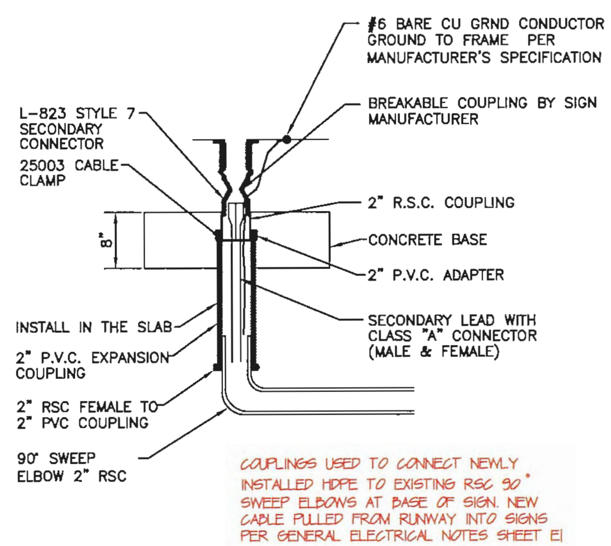
1. INSTALL NEW SIGN.
2. ALL CIRCUITS 6.6 A
3. TRANSFORMER WATTAGE SIZE PER MANUFACTURER'S SPECIFICATION.
4. ATTACH SIGNS TO CONCRETE BASE IN ACCORDANCE WITH MANUFACTURE'S INSTRUCTION.
5. THE CONTRACTOR SHALL CERTIFY THE CONCRETE BASE IS CONSTRUCTED TO MEET THE SPECIFICATION P610.
6. NEW TRANSFORMERS FOR EXISTING SIGNS SHALL BE SUBSIDIARY TO L-100n AND NO SEPARATE PAYMENTS WILL BE MADE.



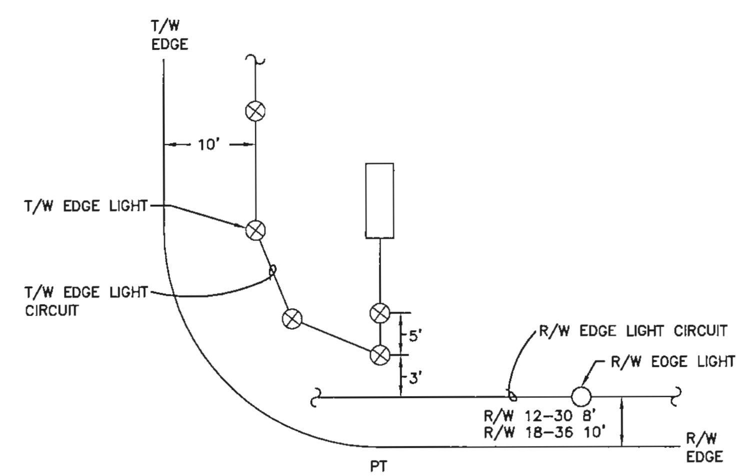
3 CONCRETE BASE SIDE VIEW E14 NTS



4 CONCRETE BASE PLAN E14 NTS



5 ELECTRICAL CONNECTION DETAIL E14 NTS



6 T/W ENTRANCE/EXIT LIGHT LOCATION DETAIL E14 NTS

Date Revised: 7/07/2014, 8:48 AM
Layout Name: E14
File Path and Name: W:\Projects\king salmon\akn lighting 2011\Asbuilt\From Brian Hanson\07041_E14.dwg
SCRIPT FILE:
DOWL FILE No: 234-26 LAYOUT.scr
Designed By: CMD
Drawn By: DMH
Checked By: MJL

PLAN PREPARED BY MBA CONSULTING ENGINEERS, INC.

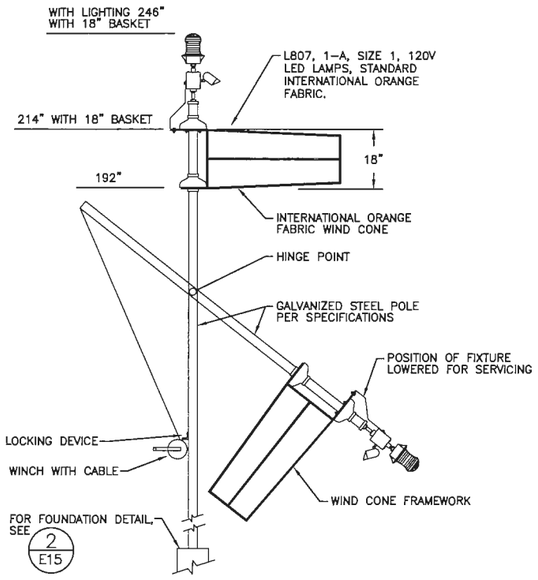
DATE ORIGINALLY STAMPED 2/18/11

BY	DATE	REVISION
TC	6/2014	AS-BUILT

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

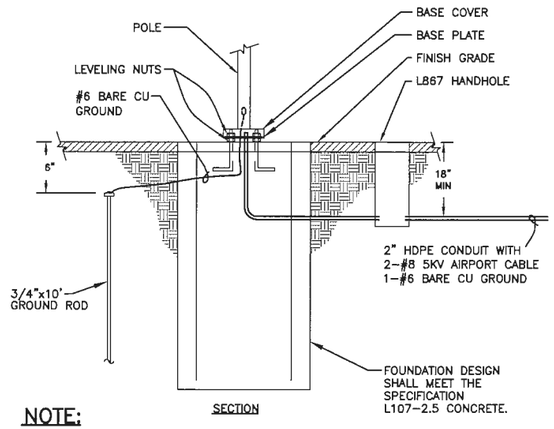
KING SALMON AIRPORT
KING SALMON, ALASKA
AIRPORT LIGHTING
PROJECT No. 52673
AIP No. 3-02-0148-12-2011
SIGN SCHEDULE AND DETAILS

DATE: 2/22/2011
SHEET: E14 OF 54
AS-BUILT SHEET: 49 OF 57



EXTERNALLY LIGHTED L807 WIND CONE.

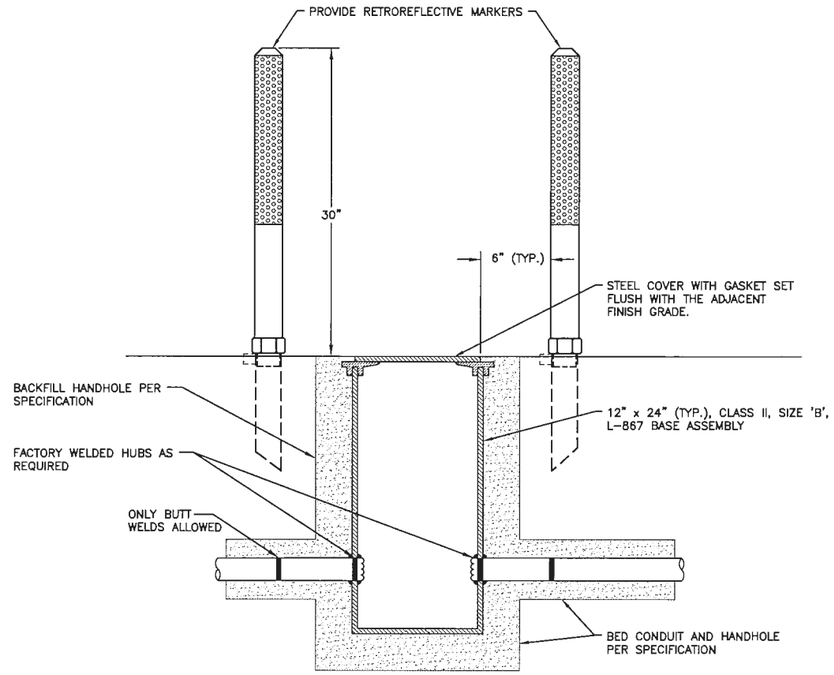
1 / E15 L807 LIGHTED WIND CONE DETAIL
NTS



NOTE:

1. VERIFY ANCHOR BOLT SIZE, BOLT CIRCLE, AND FOUNDATION SIZE WITH MANUFACTURER'S SHOP DRAWINGS.

2 / E15 L807 WIND CONE POLE BASE DETAIL
NTS



3 / E15 L867 HANDHOLE, WATERTIGHT
NTS

DATE ORIGINALLY STAMPED 2/18/11

BY	DATE	REVISION
TC	6/2014	AS-BUILT

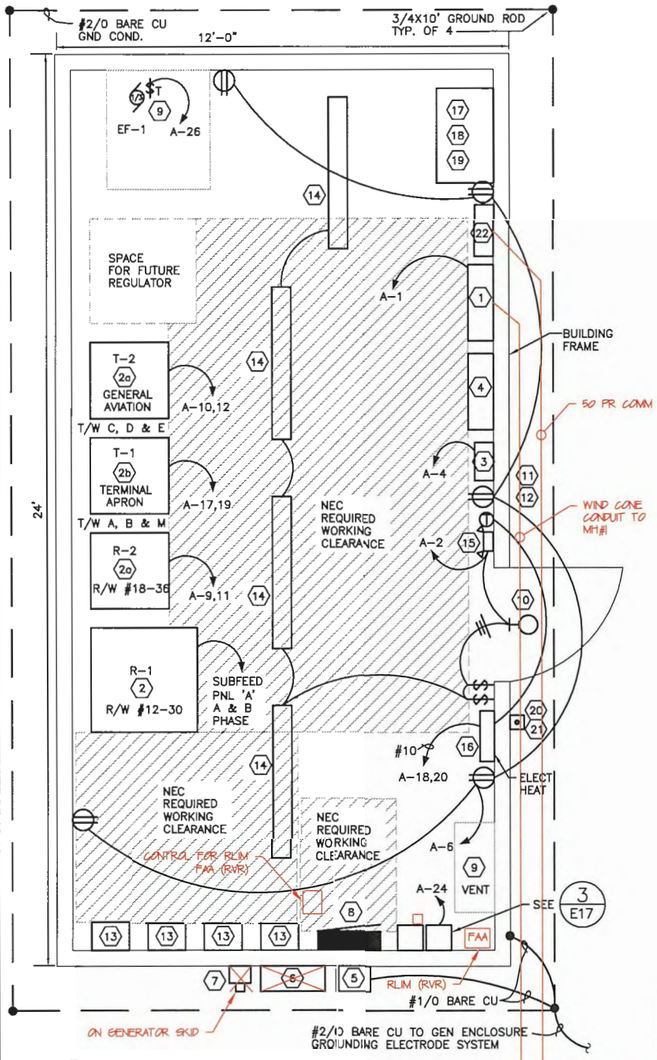
PLAN PREPARED BY MBA CONSULTING ENGINEERS, INC.

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

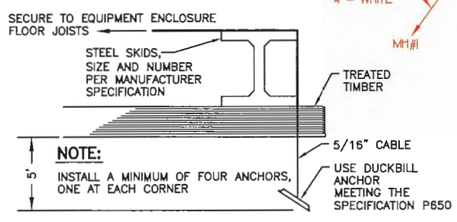
KING SALMON AIRPORT
KING SALMON, ALASKA
AIRPORT LIGHTING
PROJECT No. 52673
AIP No. 3-02-0148-12-2011
WIND CONE DETAILS

DATE: 2/22/2011
SHEET: E15 OF 54
AS-BUILT SHEET: 50 OF 57

Date Revised: 7/07/2014, 8:48 AM
Layout Name: E15
File Path and Name: W:\Projects\King salmon\vaks lighting 2011\Asbuilt\From Brian Hanson\07041_E15.dwg
SCRIPT FILE: DGWL FILE No: 234-26
LAYOUT: er
Designed By: DMD
Drawn By: DMD
Checked By: MJL



1 E16 ELECTRICAL ENCLOSURE PLAN
1/2"=1'-0"



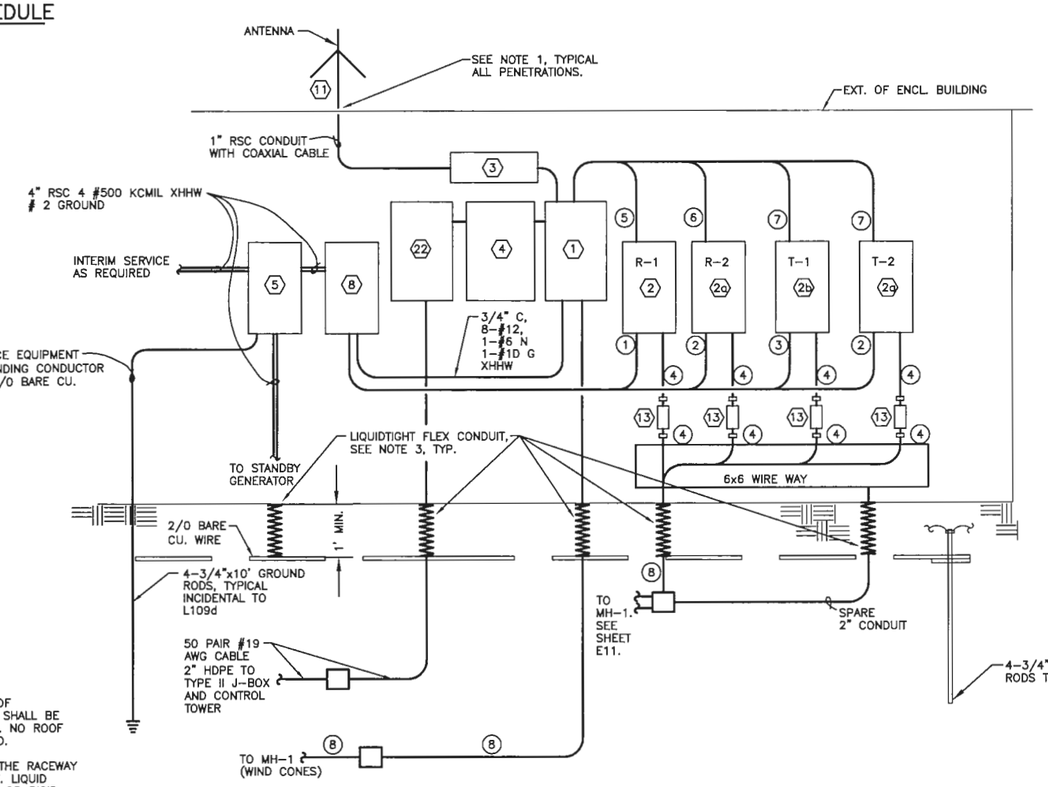
3 E16 ELECTRICAL ENCLOSURE TIE DOWN DETAIL
NTS

EQUIPMENT LIST

1. L-841 RELAY ASSEMBLY, SEE SPECS.
2. CONSTANT CURRENT REGULATOR, FERRORESONANT TYPE PROVIDE 30 KW. SUBSIDIARY TO PAY ITEM L-100b.
2a. CONSTANT CURRENT REGULATOR, FERRORESONANT TYPE PROVIDE 7.5 KW. SUBSIDIARY TO PAY ITEM L-100b.
2b. CONSTANT CURRENT REGULATOR, FERRORESONANT TYPE PROVIDE 10 KW. SUBSIDIARY TO PAY ITEM L-100b.
3. NEW RADIO CONTROLLER-FREQUENCY 121.9 MHZ.
4. TRANSFER RELAY ASSEMBLY.
5. MAIN SERVICE DISCONNECT, 3 POLE, 300A CIRCUIT BREAKER, 22,000 AIC, WEATHERPRROF.
6. CT CABINET.
7. METER AND METER BASE. CONTRACTOR TO COORDINATE WITH UTILITY FOR METERING REQUIREMENTS.
8. CIRCUIT BREAKER PANEL BOARD (PANEL A) SEE SPECS.
9. FOR VENTILATION SEE MECHANICAL DRAWING M-1.
10. EXTERIOR WALL PACK WITH 70W HPS LAMP, -40° BALLAST, PHOTOCELL CONTROL.
11. RADIO CONTROL ANTENNA - AV-1 OR APPROVED EQUAL.
12. PHOTOELECTRIC CONTROL - TORK NO. 2101 OR APPROVED EQUAL.
13. PLUG CUTOUT - 5KV, MOUNTED IN 14"x12"x8" NEMA 1 ENCLOSURE WITH HINGED COVER.
14. 4 FT LONG GENERAL PURPOSE STRIP LIGHTING FIXTURE WITH WIRE GUARD. 2 LAMP, 32 WATT, T8, 120V, ELECTRONIC BALLAST.
15. EMERGENCY LIGHT, 2 HEADS, WITH NI-CAD BATTERIES, 90 MIN. RATING, 12W TUNGSTEN HALOGEN LAMPS. INDUSTRIAL RATED.
16. 4000-WATT 208 VOLT WALL MOUNTED FAN-FORCED ELECTRIC HEATER, SURFACE MOUNT.
17. METAL WALL DESK McMASTER'S CARR CATALOG NO. 4796T15 20"x17"x15" OR APPROVED EQUAL. SLOPE TOP WITH PIGEON HOLE SHELVES, OR NO. 4808T18 4.5"x30"x32.5" DESK WITH LOCKING DRAWER OR APPROVED EQUAL. MOUNT DESK TOP AT 43" AFF. (ELBOW HEIGHT WHEN STANDING)
18. METAL CHAIR (ADJUSTABLE LEGS) WITH BACK SUPPORT FOR DESK: McMASTER-CARR MODEL 4835T63 OR APPROVED EQUAL.
19. METAL WALL CABINET (LOCKABLE) McMASTER-CARR MODEL 4531T26 26.5"X30"X9" WITH 2 SHELVES OR APPROVED EQUAL.
20. PUSH BUTTON STATION - GENERAL ELECTRIC NO. CR2943AJ201B OR APPROVED EQUAL.
21. SIGN TO READ: PUSH TO TURN RUNWAY LIGHTS ON. AUTO OFF IN 15 MIN.
22. COMMUNICATION CABINET, 12x16x6. NEMA 4 WITH 40 SPACE TERMINAL STRIP.

CONDUIT & CONDUCTOR SCHEDULE

1. 2 #3/0 XHHW-2, 1 #6 GRD, 1-1/2" C
2. 2 #6 XHHW-2, 1 #6 GRD, 1" C
3. 2 #4 XHHW-2, 1 #6 GRD, 1" C
4. 2 #8, 5KV AIRPORT CABLE, 1 #6 BARE CU GRD, 1" C
5. 7 #12 XHHW-2, 1 #12 GRD, 3/4" C
6. 5 #12 XHHW-2, 1 #12 GRD, 3/4" C
7. 2 #12 XHHW-2, 1 #12 CU GRD, 3/4" C
8. 8 #8 5 KV AIRPORT CABLE, 1 #6 BARE CU GRD, 2" C



2 E16 ONE LINE DIAGRAM
NTS

SHEET NOTES:

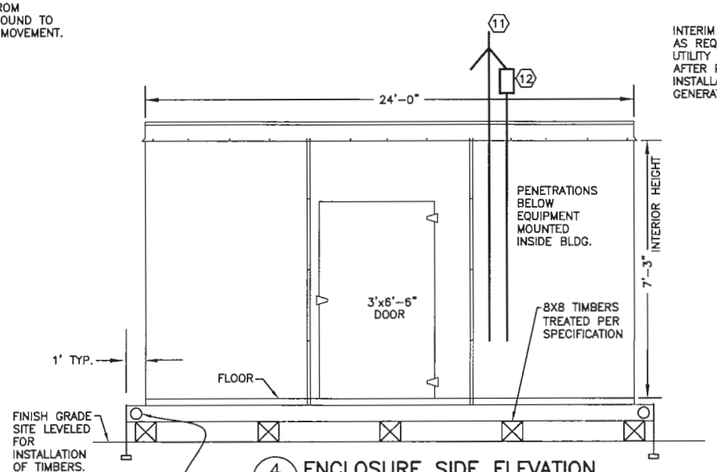
1. RUN CONDUIT ALONG OUTSIDE OF STRUCTURE. ALL PENETRATIONS SHALL BE SEALED WITH SILICONE SEALANT. NO ROOF PENETRATIONS WILL BE ALLOWED.
2. EMT TUBING MAY BE USED AS THE RACEWAY SYSTEM INSIDE THE ENCLOSURE. LIQUID TIGHT FLEXIBLE METAL CONDUIT OR RIGID STEEL CONDUIT ARE TO BE USED FOR OUTDOOR LOCATION. TRANSITION LFMC TO HDPE USING ELECTROFUSION COUPLING OR POLY-CAM ADAPTER.
3. PROVIDE MINIMUM 18 INCH LIQUIDTIGHT FLEXIBLE METAL CONDUIT SLACK LOOP AT ALL CONDUIT TRANSITIONS FROM UNDERGROUND TO ABOVE GROUND TO ACCOMMODATE DIFFERENTIAL MOVEMENT.

PANEL: A

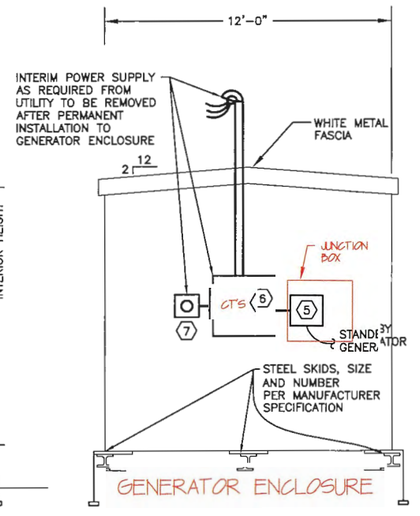
PROJECT: ELECTRICAL IMPROVEMENTS
LOCATION: KING SALMON AIRPORT
LUGS ■ CB □
THRUFEED LGS □ SURF ■ FLSH □ SHNT TRP □ SBFO LGS □
SUBFEED BKR ■ * ISO GRND BAR □ SOLID NEUTRAL ■

120/208VOLTS, 3 PH, 4 WIRE, 400 AMP, 22,000 AIC

CIRCUIT DESCRIPTION	KVA	AMP	CKT	CKT	AMP	KVA	CIRCUIT DESCRIPTION
L-841 RELAY ASSEMBLY	0.3	20/1	1	2	20/1	0.7	ENCLOSURE LIGHTS
SPARE		20/	3	4	20/1	0.2	RADIO RECEIVER/CONTROLLER
		/2	5	6	20/1	1.0	CONV. OUTLETS
SPARE		20/1	7	8	20/1		SPARE
REGULATOR R/W #18-36	5.6	50/	9	10	50/	5.8	REGULATOR T/W #2
		/2	11	12	/2		
SPACE			13	14	30/		SPARE
			15	16	/2		
REGULATOR T/W #1	10	70/	17	18	30/	4.0	4KW ELECT. HEAT
		/2	19	20	/2		
SPARE		50/	21	22	20/1	0.2	WIND CONES
		/2	23	24	20/1	0.2	FAA EQUIPMENT
SPARE		20/	25	26	15/1	0.9	FAN EF-1 (1/3 HP)
		/2	27	28	20/1		SPARE
SPARE		20/1	29	30	20/1		SPARE
SPARE		20/1	31	32	20/1		SPARE
SPARE		20/1	33	34			SPACE
SPACE			35	36			SPACE
SPACE			37	38			SPACE
SPACE			39	40			SPACE
SPACE			41	42			SPACE
CONNECTED LOAD:	51.1 KVA	142 A	REMARKS:				
DEMAND LOAD:	51.1 KVA	142 A					
DEMAND + CONT.	63.9 KVA	178 A	* R/W 12-30 REGULATOR SHALL BE FED USING 200A, 2 POLE SUBFEED CIRCUIT BREAKER ON 'A' AND 'B' PHASES AT 22.2 KVA LOAD. PANEL LOADING MUST BE BALANCED AS PRACTICAL.				
DATE:							
REV:							



4 E16 ENCLOSURE SIDE ELEVATION
NTS



5 E16 ENCLOSURE END ELEVATION
NTS

Date Revised: 7/07/2014, 8:48 AM
Layout Name: E16
File Path and Name: W:\Projects\King salmon\vakn lighting 2011\Asbuilt\From Brian Hanson\D7041_E16.dwg
SCRIPT FILE:
DGN. FILE No: 234-26
LAYOUT-scr
Designed By: CMD
Drawn By: DMH
Checked By: MJL

DATE ORIGINALLY STAMPED 2/18/11

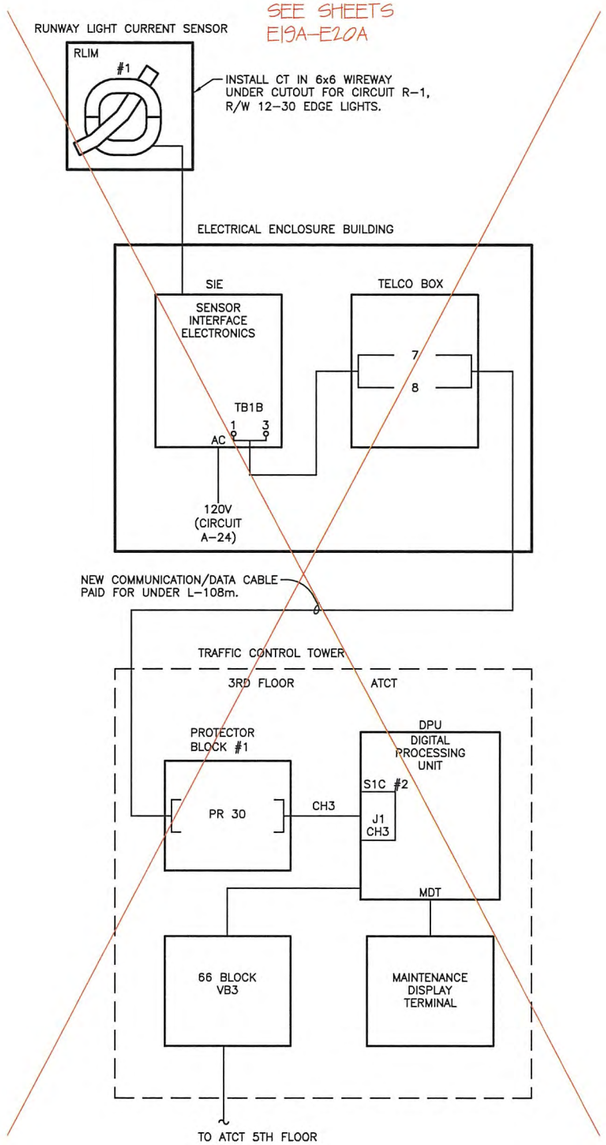
BY	DATE	REVISION
DC	6/2014	AS-BUILT

PLAN PREPARED BY MBA CONSULTING ENGINEERS, INC.

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

KING SALMON AIRPORT
KING SALMON, ALASKA
AIRPORT LIGHTING
PROJECT No. 52673
AIP No. 3-02-0148-12-2011
ELECTRICAL ENCLOSURE PLAN AND ONE-LINE DIAGRAM

DATE: 2/22/2011
SHEET: E16 OF 54
AS-BUILT SHEET: 51 OF 57



3 / E17 RUNWAY LIGHT INTENSITY MONITOR ONE-LINE DIAGRAM
NTS

NOTE:

RELOCATION OF SENSOR, INTERFACE AND TELCO BOX TO NEW LIGHTING VAULT SHALL BE PAID FOR UNDER L-135b.

PANEL: GP

PROJECT: KING SALMON AIRPORT - BLDG.

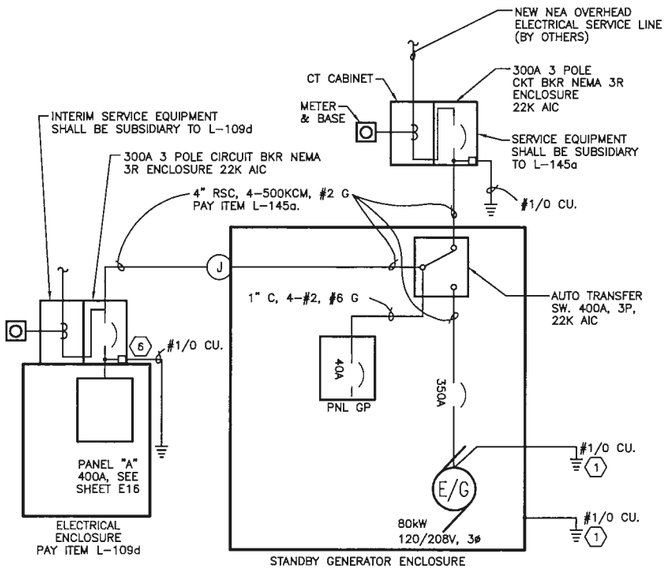
LUGS ☐ CB ■ | SURF ■ FLSH ☐ | THRUFEED LGS ☐ SHNT TRP ☐ SBFD LGS ☐ | SUBFEED BKR ☐ ISO GRND BAR ☐ SOLID NEUTRAL ■

120/208 VOLTS — 3 PH — 4 WIRE — 100 AMP — 22000 AIC

CIRCUIT DESCRIPTION	KVA	AMP	CKT	CKT	AMP	KVA	CIRCUIT DESCRIPTION
SPARE		20/1	1	2	20/1	0.3	INTERIOR LIGHTS
BATTERY BLANKET	0.5	20/1	3	4	20/1	0.2	EXTERIOR LIGHTS
BATTERY CHARGER	0.5	20/1	5	6	20/1	0.6	RECEPTACLES
ENGINE COOLANT HEATER	1	20/1	7	8	20/1	0.5	EXTERIOR ALARM STROBE
BUILDING HEATER	4.0	30/	9	10	20/1		SPARE
		/2	11	12			SPACE
SPACE			13	14			SPACE
SPACE			15	16			SPACE
SPACE			17	18			SPACE
SPACE			19	20			SPACE
	7.6 KVA	21 A					

DEMAND LOAD:	7.6 KVA	21 A
DEMAND + CONT.	9.5 KVA	27 A
DATE:		
REV:		

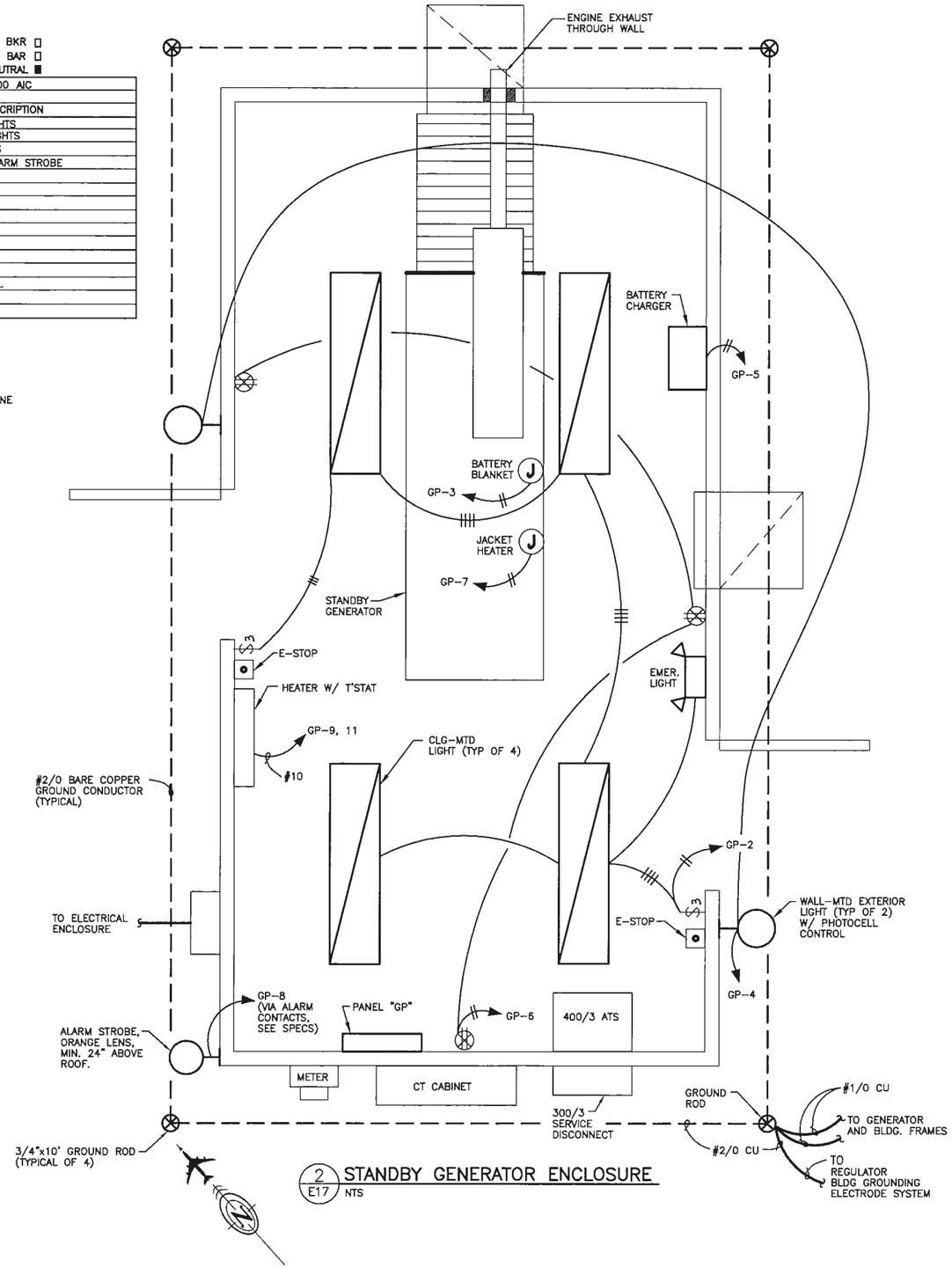
REMARKS:
BOLT-ON CBS, 40/3 MAIN CB.
SQUARE D TYPE NQOD OR EQUAL.



1 / E17 ONE-LINE DIAGRAM
NTS

NOTES:

1. BOND GENERATOR FRAME AND GENERATOR ENCLOSURE FRAME TO GROUNDING ELECTRODE SYSTEM.
2. CONDUCTOR AND CONDUIT SIZES ARE BASED ON USING CU, 75°C XHHW CONDUCTORS AND RIGID STEEL CONDUIT.
3. PAY ITEM L-145a.
4. COORDINATE WITH UTILITY FOR CT AND METERING REQUIREMENTS.
5. AIC BASED ON 75KVA TRANSFORMER, 1% Z.
6. REMOVE GROUND TO NEUTRAL BOND WHEN GENERATOR SET IS INSTALLED.



2 / E17 STANDBY GENERATOR ENCLOSURE
NTS

BY	DATE	REVISION
SC	6/2011	AS-BUILT

DATE ORIGINALLY STAMPED 2/18/11

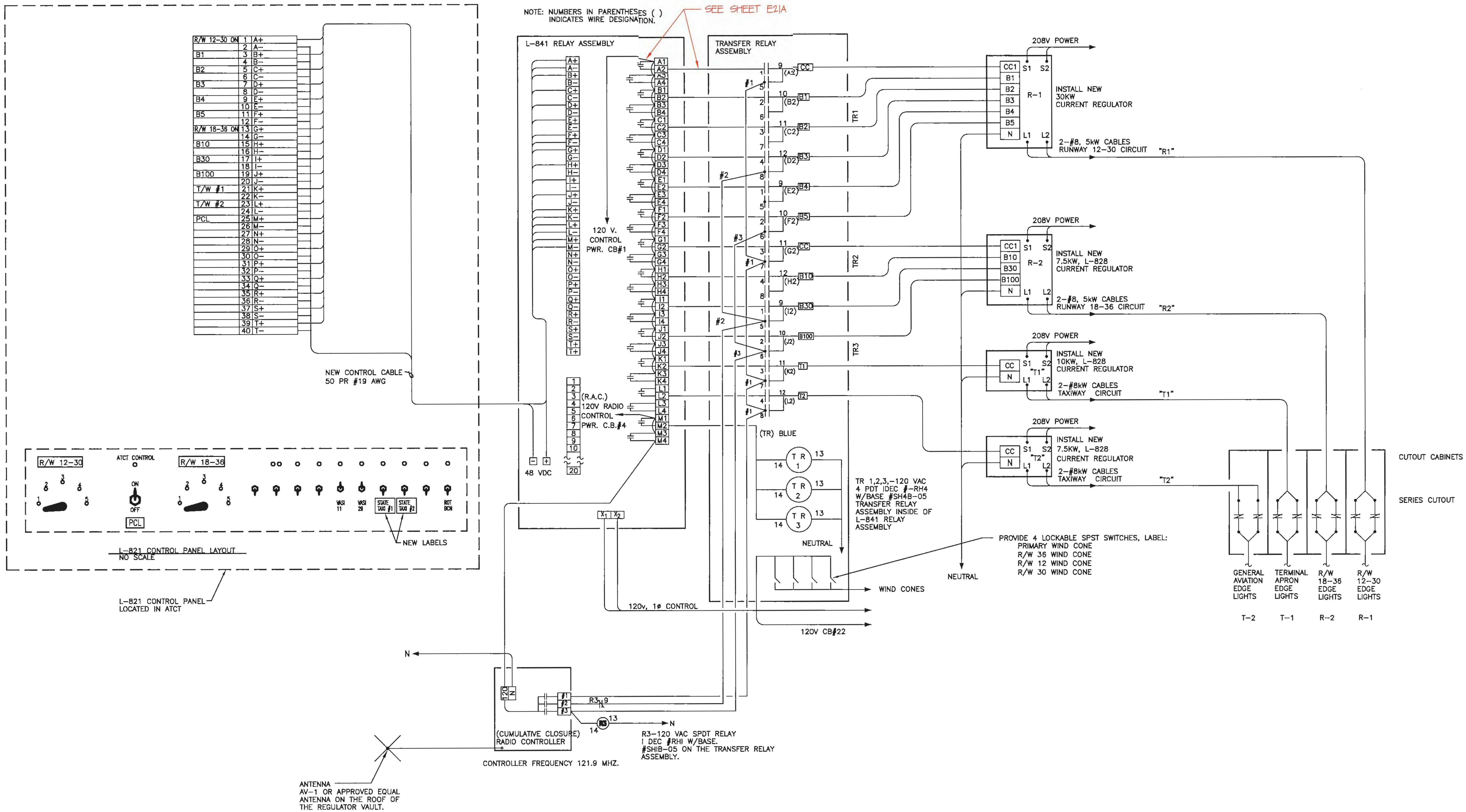
PLAN PREPARED BY MBA CONSULTING ENGINEERS, INC.

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

KING SALMON AIRPORT
KING SALMON, ALASKA
AIRPORT LIGHTING
PROJECT No. 52673
AIP No. 3-02-0148-12-2011
STANDBY GENERATOR ENCLOSURE

DATE: 2/22/2011
SHEET: E17 OF 54
AS-BUILT SHEET: 52 OF 57

Date Revised:
Layout Name: E17
File Path and Name: W:\Projects\King salmon\Lake lighting 2011\Asbuilt\From Brian Hanson\07041_E17.dwg
SCRIPT FILE:
DGN. FILE No: 234-26 — LAYOUT.scr
Designed By: CMD
Drawn By: DMH
Checked By: MJL
7/07/2014, 8:48 AM


NOTE: NUMBERS IN PARENTHESES ( ) INDICATES WIRE DESIGNATION.
SEE SHEET E21A
L-841 RELAY ASSEMBLY
TRANSFER RELAY ASSEMBLY
208V POWER
INSTALL NEW 30KW CURRENT REGULATOR
2-#8, 5kW CABLES RUNWAY 12-30 CIRCUIT "R1"
INSTALL NEW 7.5KW, L-828 CURRENT REGULATOR
2-#8, 5kW CABLES RUNWAY 18-36 CIRCUIT "R2"
INSTALL NEW 10KW, L-828 CURRENT REGULATOR
2-#8kW CABLES TAXIWAY CIRCUIT "T1"
INSTALL NEW 7.5KW, L-828 CURRENT REGULATOR
2-#8kW CABLES TAXIWAY CIRCUIT "T2"
120 V. CONTROL PWR. CB#1
(R.A.C.) 120V RADIO CONTROL PWR. C.B.#4
48 VDC
NEW CONTROL CABLE 50 PR #19 AWG
(TR) BLUE
TR 1,2,3,-120 VAC 4 PDT IDEC #-RH4 W/BASE #SH4B-05 TRANSFER RELAY ASSEMBLY INSIDE OF L-841 RELAY ASSEMBLY
NEUTRAL
WIND CONES
120v, 1φ CONTROL
120V CB#22
PROVIDE 4 LOCKABLE SPST SWITCHES, LABEL: PRIMARY WIND CONE R/W 36 WIND CONE R/W 12 WIND CONE R/W 30 WIND CONE
CUTOUT CABINETS
SERIES CUTOUT
GENERAL AVIATION EDGE LIGHTS T-2
TERMINAL APRON EDGE LIGHTS T-1
R/W 18-36 EDGE LIGHTS R-2
R/W 12-30 EDGE LIGHTS R-1
R/W 12-30
ATCT CONTROL
R/W 18-36
ON OFF
PCL
VASI 11
VASI 29
STATE TAXI #1
STATE TAXI #2
ROT BCN
NEW LABELS
L-821 CONTROL PANEL LAYOUT
NO SCALE
L-821 CONTROL PANEL LOCATED IN ATCT
N
(CUMULATIVE CLOSURE) RADIO CONTROLLER
CONTROLLER FREQUENCY 121.9 MHZ.
R3-120 VAC SPDT RELAY I DEC #RHI W/BASE. #SHIB-05 ON THE TRANSFER RELAY ASSEMBLY.
ANTENNA AV-1 OR APPROVED EQUAL ANTENNA ON THE ROOF OF THE REGULATOR VAULT.

Date Revised:	7/07/2014, 8:48 AM
Layout Name:	E19
File Path and Name:	W:\Projects\king salmon\akn lighting 2011\Asbuilt\From Brian Hanson\07041_E18.dwg
SCRIPT FILE:	
DOWL FILE No:	234-26
Designed By:	CMD
Drawn By:	DMH
Checked By:	MJL

PLAN PREPARED BY MBA CONSULTING ENGINEERS, INC.

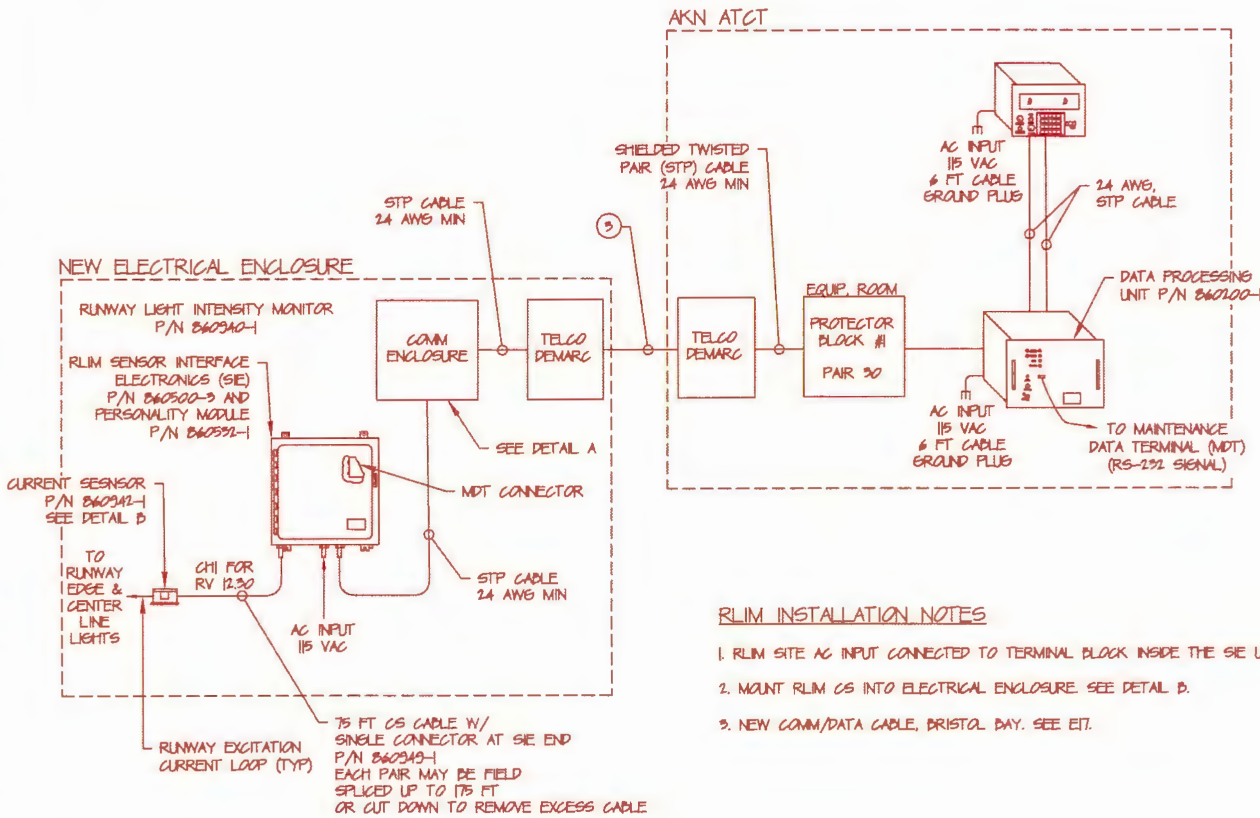
DATE ORIGINALLY STAMPED 2/18/11

BY	DATE	REVISION
TC	6/2014	AS-BUILT

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

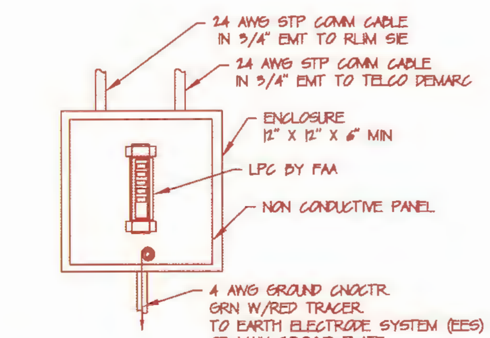
KING SALMON AIRPORT
KING SALMON, ALASKA
AIRPORT LIGHTING
PROJECT No. 52673
AIP No. 3-02-0148-12-2011
RUNWAY LIGHTING CONTROL WIRING DIAGRAM

DATE: 2/22/2011
SHEET: E18 OF 54
AS-BUILT SHEET: 53 OF 57

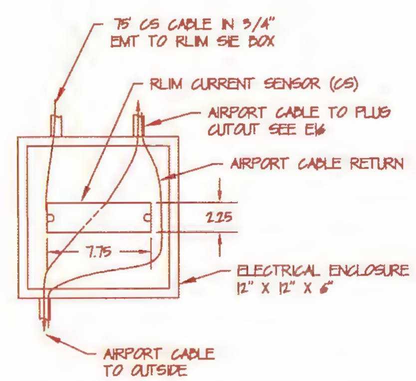


RLIM INSTALLATION NOTES

1. RLIM SITE AC INPUT CONNECTED TO TERMINAL BLOCK INSIDE THE SIE UNIT.
2. MOUNT RLIM CS INTO ELECTRICAL ENCLOSURE. SEE DETAIL B.
3. NEW COMM/DATA CABLE, BRISTOL BAY. SEE E17.

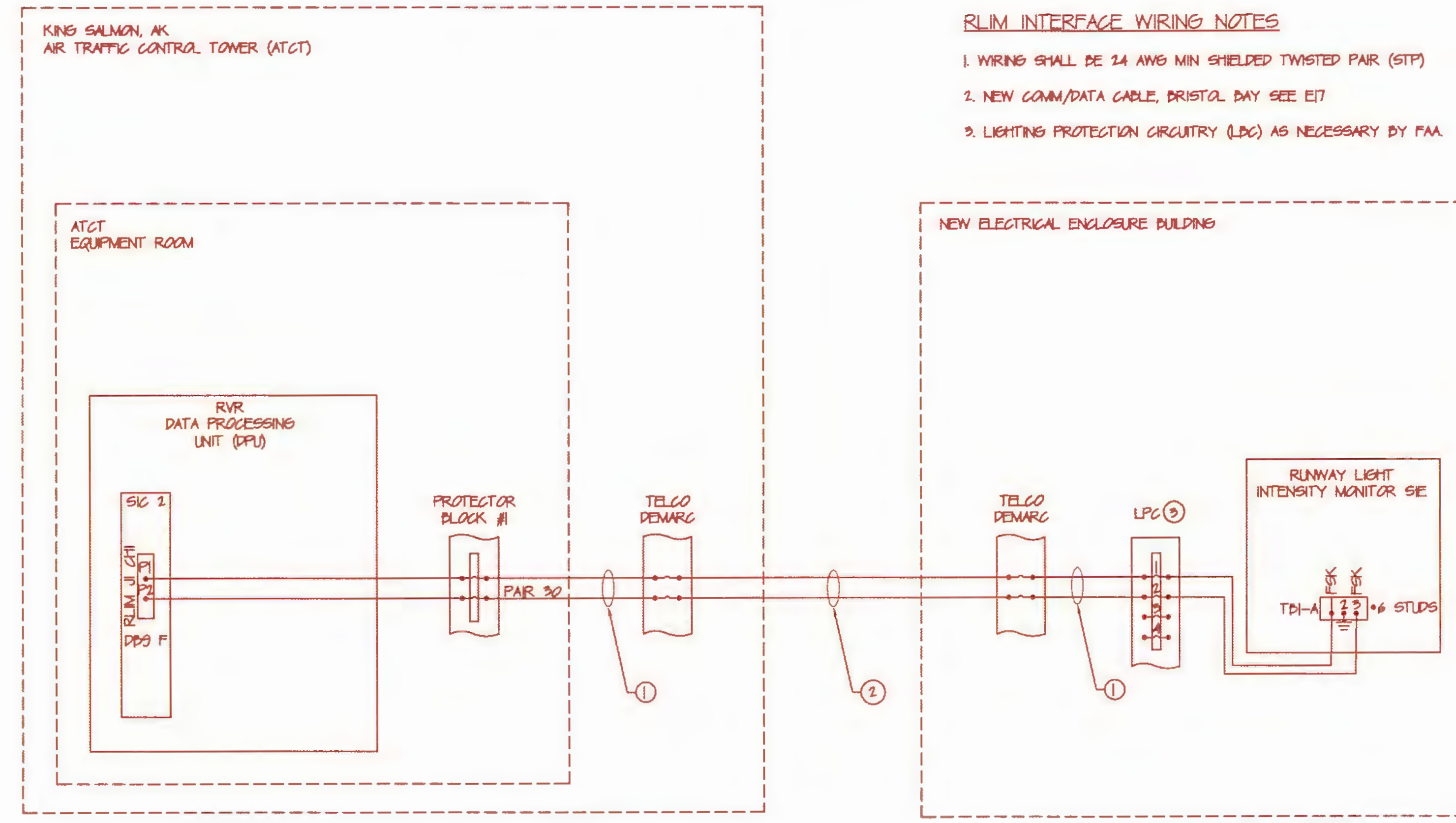


DETAIL A: TYPICAL COMM ENCLOSURE LAYOUT



DETAIL B: TYPICAL CS ENCLOSURE LAYOUT

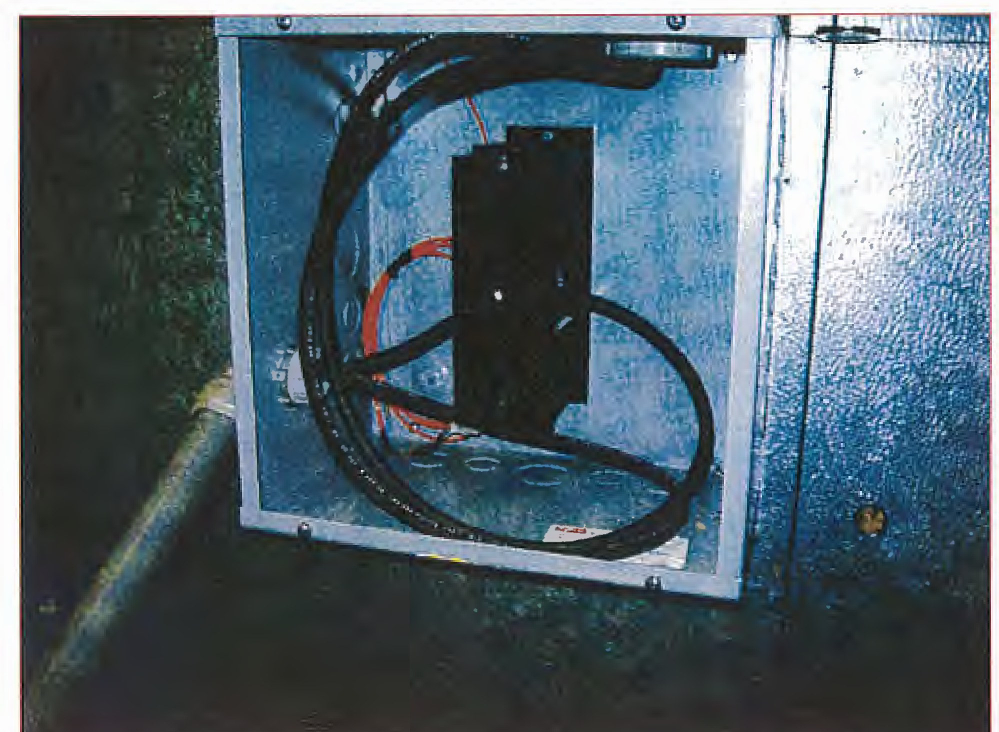
1 E19A RUNWAY LIGHT INTENSITY MONITOR (RLIM) CONFIGURATION NTS



RLIM INTERFACE WIRING NOTES

1. WIRING SHALL BE 24 AWG MIN SHIELDED TWISTED PAIR (STP)
2. NEW COMM/DATA CABLE, BRISTOL BAY SEE E17
3. LIGHTING PROTECTION CIRCUITRY (LPC) AS NECESSARY BY FAA

2 E19A RUNWAY VISUAL RANGE RLIM INTERFACE WIRING DIAGRAM NTS



3 E19A ENCLOSURE PHOTOGRAPH NTS

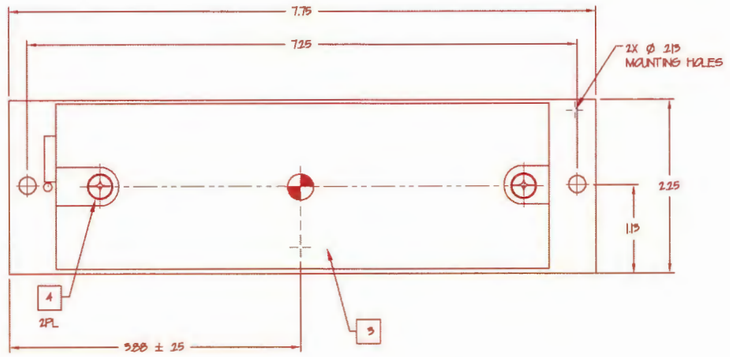
BY	DATE	REVISION
YC	6/2014	AS-BUILT

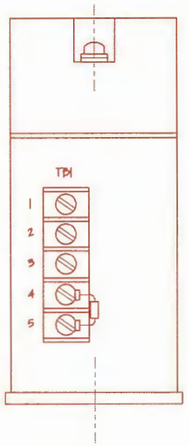
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

KING SALMON AIRPORT
KING SALMON, ALASKA
AIRPORT LIGHTING
PROJECT No. 52673
AIP No. 3-02-0148-12-2011
RLIM DRAWINGS

DATE: 2/22/2011
SHEET: E19A
AS-BUILT SHEET: 54 OF 57

Date Revised: 7/03/2014, 3:51 PM
Layout Name: E19
File Path and Name: W:\Projects\king salmon\akn lighting 2011\Asbuilt\From Brian Hanson\07041_E17.dwg
SCRIPT FILE:
DGWM FILE No: 234-25
Designed By: CMD
Drawn By: DMH
Checked By: MJL

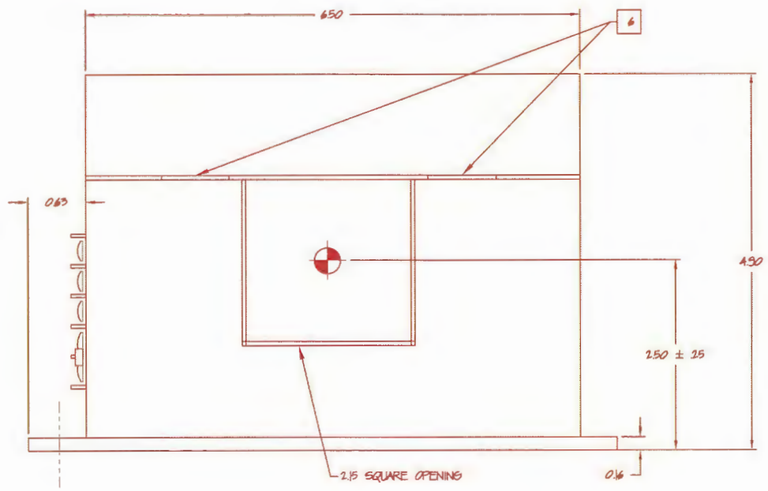




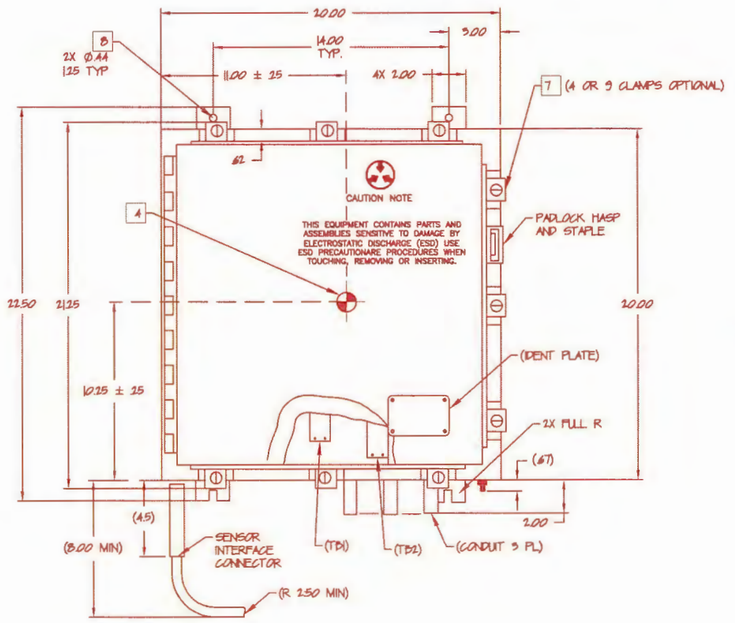
NOTES: UNLESS OTHERWISE SPECIFIED.

1. INTERPRET DRAWING PER DOD-STD-100.
2. TOTAL WEIGHT: APPROXIMATELY 8.5 LBS.
3. DENOTES CENTER OF GRAVITY.
4. TORQUE CAPTIVE SCREWS TO 8 IN-LBS TO ENSURE ELECTRICAL CONTACT.
5. WORKMANSHIP PER MIL-STD-454, REQUIREMENT 9.
6. GASKET INSTALLED AROUND CORE.

CONNECTION	MATES WITH TERMINAL LUG #6	FUNCTION
TB1-1	MS25036-101	SIGNAL HIGH
TB1-2	MS25036-101	SIGNAL LOW
TB1-3	MS25036-101	CHASSIS END
TB1-4		
TB1-5		



1 E20A RLIM CURRENT SENSOR INSTALLATION DRAWING
NTS



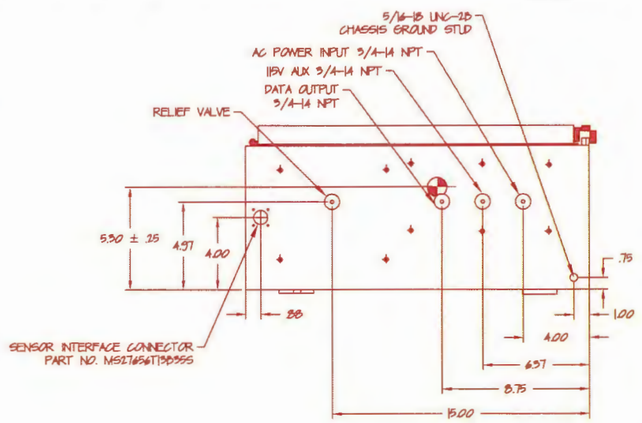
NOTES: UNLESS OTHERWISE SPECIFIED.

1. INTERPRET DRAWING IN ACCORDANCE WITH DOD-STD-100
2. FINISH: PAIN WITH 6403L SERIES (LEAD FREE) HIGH SOLIDS GLOSS POLYURETHANE, COLOR NO. 17925 PER FED-STD-595 WITH 340 HP CATALYST. MFG BY CARDINAL INDUSTRIAL FINISHES.
3. TOTAL WEIGHT WITHOUT BATTERY: APPROX 64 LBS. BATTERY WEIGHT APPROX 17 LBS.
4. DENOTES CENTER OF GRAVITY.
5. CONNECTIONS TO SIE TERMINAL BLOCKS TB1 AND TB2 TO BE MADE BY CUSTOMER PER TABLE "A"
6. POWER REQUIREMENT: 115VAC ±15%, 60HZ, 1 AMP MAX
7. TORQUE 20-25 INCH/LBS
8. FOR INSTALLATION USE 3/8" DIA BOLTS, 4 PLACES
9. WORKMANSHIP PER MIL-STD-454, REQUIREMENT 9.

5 TABLE A

DASH NO	CONNECTION	MATES WITH (OR EQUIVALENT)	WIRE COLOR	FUNCTION
-3				
1	J1	MS27467T13B35P	———	SENSOR INTERFACE (TX/ALS)
1	TB1-1D	MS25036-149 (TERM LUG #8)	———	FSK +
1	TB1-2D	-149	———	SHIELD
1	TB1-3D	-149	———	FSK -
1	TB2-2D	-153	WHITE	115 VAC NEUTRAL
1	TB2-1D	-153	BLACK	115 VAC LINE
1	TB2-3D	-153	GREEN	CHASSIS GROUND
1	TB2-4D	-153	WHITE	115 VAC AUX NEUT
1	TB2-5D	MS25036-153 (TERM LUG #8)	BLACK	115 VAC AUX LINE

2 E20A SIE (RLIM) INSTALLATION DRAWING
NTS



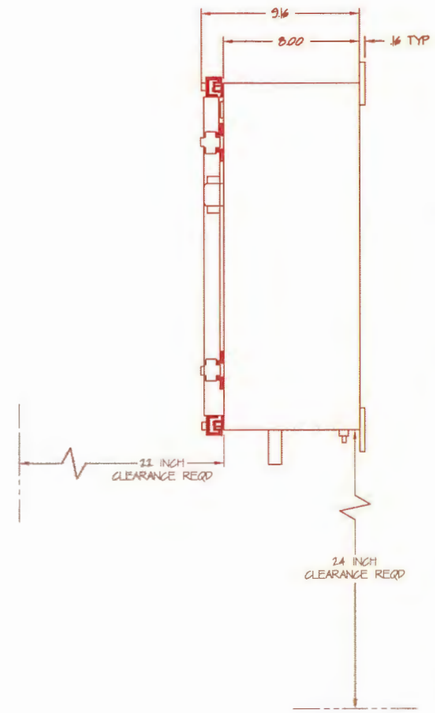


TABLE B

DASH NO	UNIT
-3	RUNWAY LIGHT INTENSITY MONITOR (RLIM)

BY	DATE	REVISION
YR	6/2014	AS-BUILT

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

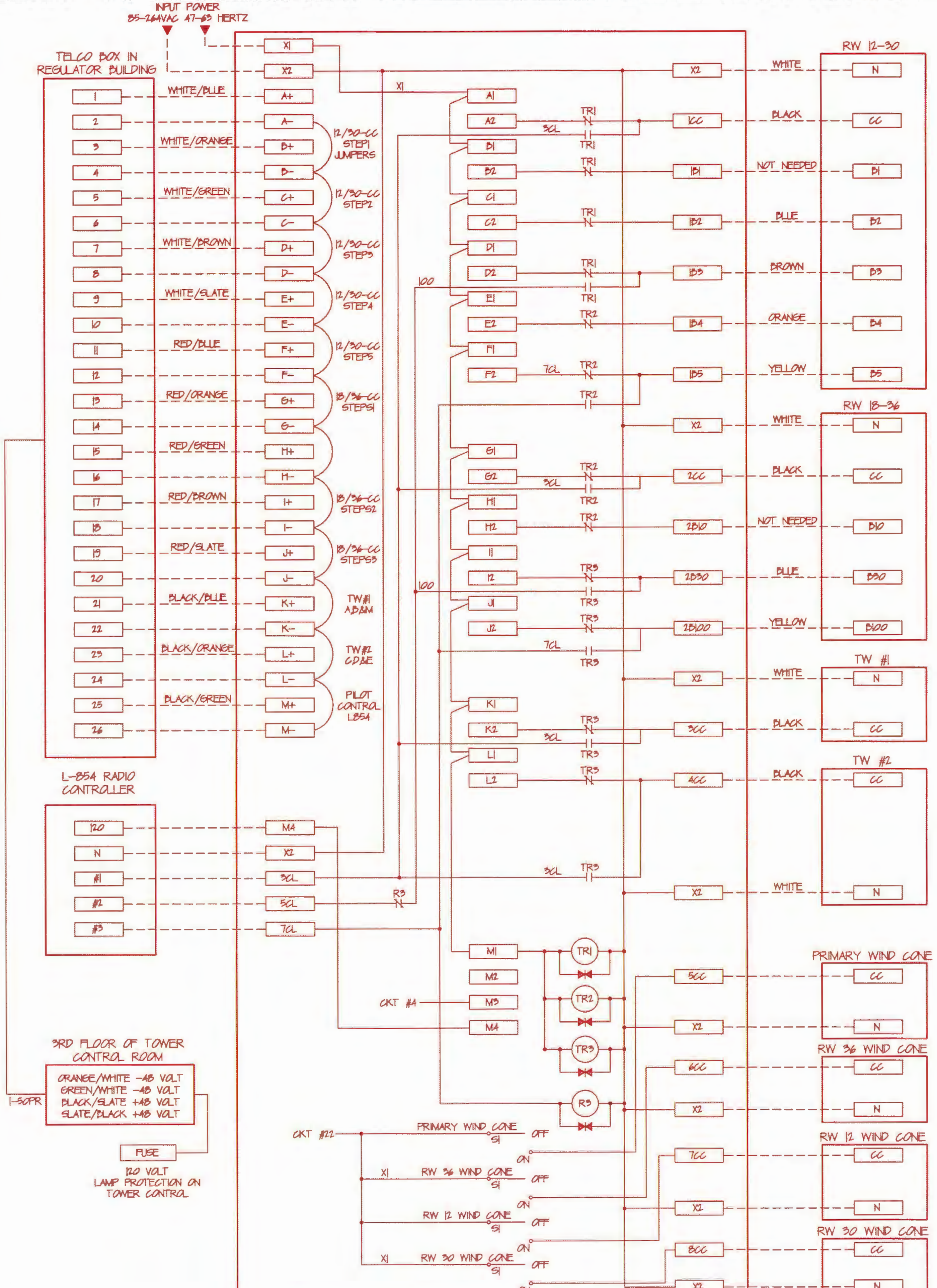
KING SALMON AIRPORT
KING SALMON, ALASKA
AIRPORT LIGHTING
PROJECT No. 52673
AIP No. 3-02-0148-12-2011
RLIM DRAWINGS

DATE: 2/22/2011
SHEET: E20A
AS-BUILT SHEET: 55 OF 57

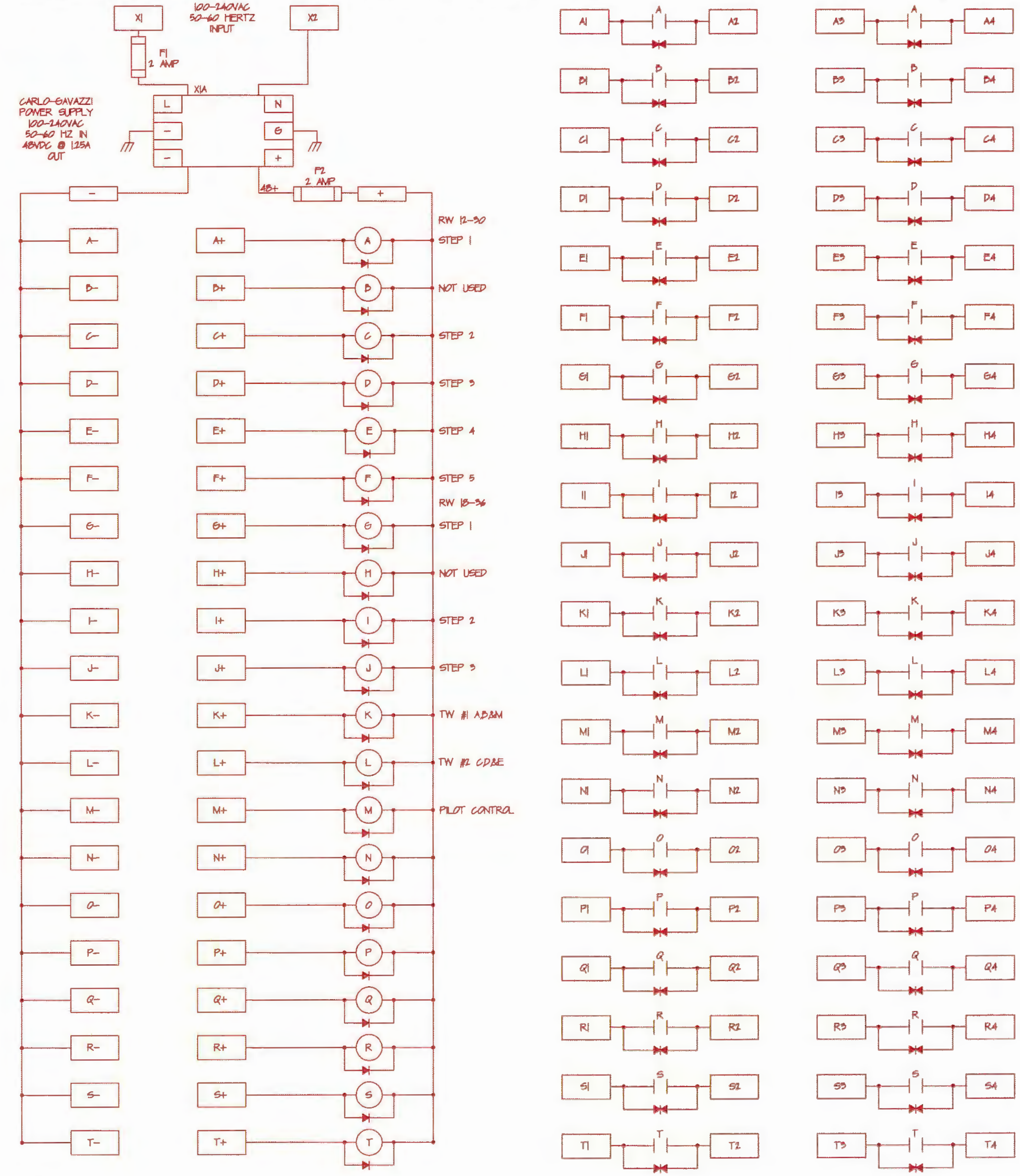
Date Revised: 7/03/2014, 3:52 PM
Layout Name: E19 (2)
File Path and Name: W:\Projects\King salmon\akn lighting 2011\Asbuilt\From Asbuilt\From Brian Hanson\07041_E17.dwg

SCRIPT FILE:	DGN FILE No: 234-26	Designed By:	CMD
		Drawn By:	DMH
		Checked By:	MJL

Date Revised:	7/03/2014, 3:52 PM
Layout Name:	E19 (3)
File Path and Name:	W:\Projects\king salmon\akn lighting 2011\Asbuilt\From Brian Hanson\07041_E17.dwg
SCRIPT FILE:	
DOWG. FILE No:	234-26
Designed By:	CMD
Drawn By:	DMH
Checked By:	MJL



1 (E21A) L841 RELAY INTERFACE & TRANSFER RELAY PANEL
NTS



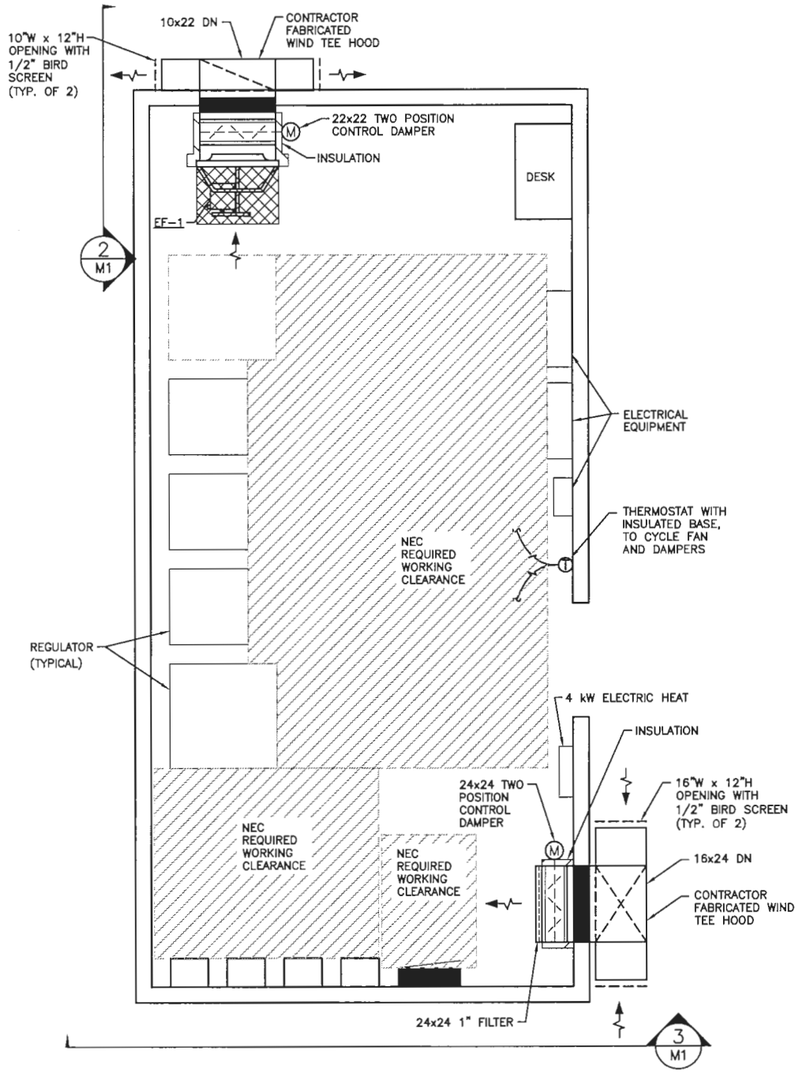
2 (E21A) WIRING DIAGRAM
NTS

BY	DATE	REVISION
TC	6/2014	AS-BUILT

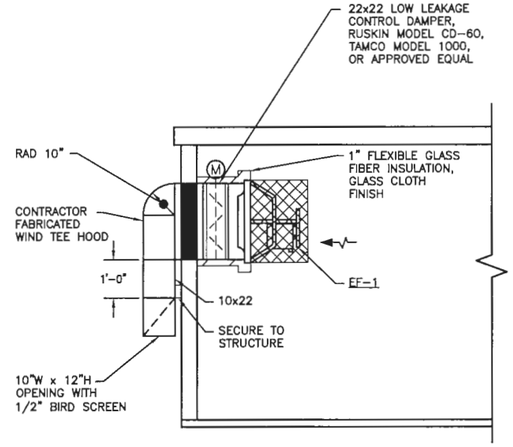
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

KING SALMON AIRPORT
KING SALMON, ALASKA
AIRPORT LIGHTING
PROJECT No. 52673
AIP No. 3-02-0148-12-2011
L841 LIGHTING INTERFACE PANEL
TYPE I, CLASS W, STYLE I, MODE I

DATE: 2/22/2011
SHEET: E21A
AS-BUILT SHEET: 56 OF 57



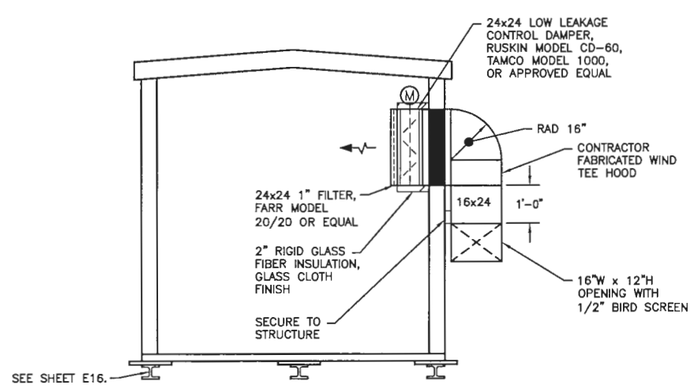
1 / M1 ELECTRICAL ENCLOSURE VENTILATION PLAN
SCALE: 1'-0" = 1/2"



2 / M1 EXHAUST FAN SECTION
SCALE: 1'-0" = 1/2"

FAN SCHEDULE

SYMBOL	LOCATION	CFM	S.P. TOT	S.P. EXT	RPM	O.V. FPM	TYPE SIZE	TYPE WHL	USE	MOTOR HP/VOLTS/PH	DESIGN BASIS PRODUCT
EF-1	EQUIPMENT SHELTER	1000	0.4	--	939	---	--	PROP	E/A	1/3/120/1	GREENHECK MODEL SBE-1H20-3 OR COOK MODEL 20XMW, SIDEWALL BELT DRIVE EXHAUST FAN WITH FAN GUARD, OR APPROVED EQUAL.



3 / M1 AIR INTAKE SECTION
SCALE: 1'-0" = 1/2"

SEQUENCE OF OPERATION

WHEN FAN IS OFF, OUTSIDE AIR AND EXHAUST DAMPERS ARE CLOSED. ROOM THERMOSTAT INDEXES FAN ON AT 80 DEGREES F (ADJUSTABLE) AND OFF AT 70 DEGREES F (ADJUSTABLE). WHEN FAN IS ON, OUTSIDE AIR AND EXHAUST DAMPERS SHALL OPEN TO PROVIDE EXHAUST AND MAKE-UP AIR. ON LOSS OF POWER, OUTSIDE AIR AND EXHAUST DAMPERS SHALL CLOSE.

DATE ORIGINALLY STAMPED 2/18/11

NO.	DATE	REVISION
1	6/2014	AS-BUILT

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

KING SALMON AIRPORT
KING SALMON, ALASKA
AIRPORT LIGHTING
PROJECT No. 52673
AIP No. 3-02-0148-12-2011
ELECTRICAL ENCLOSURE VENTILATION PLAN AND SECTIONS

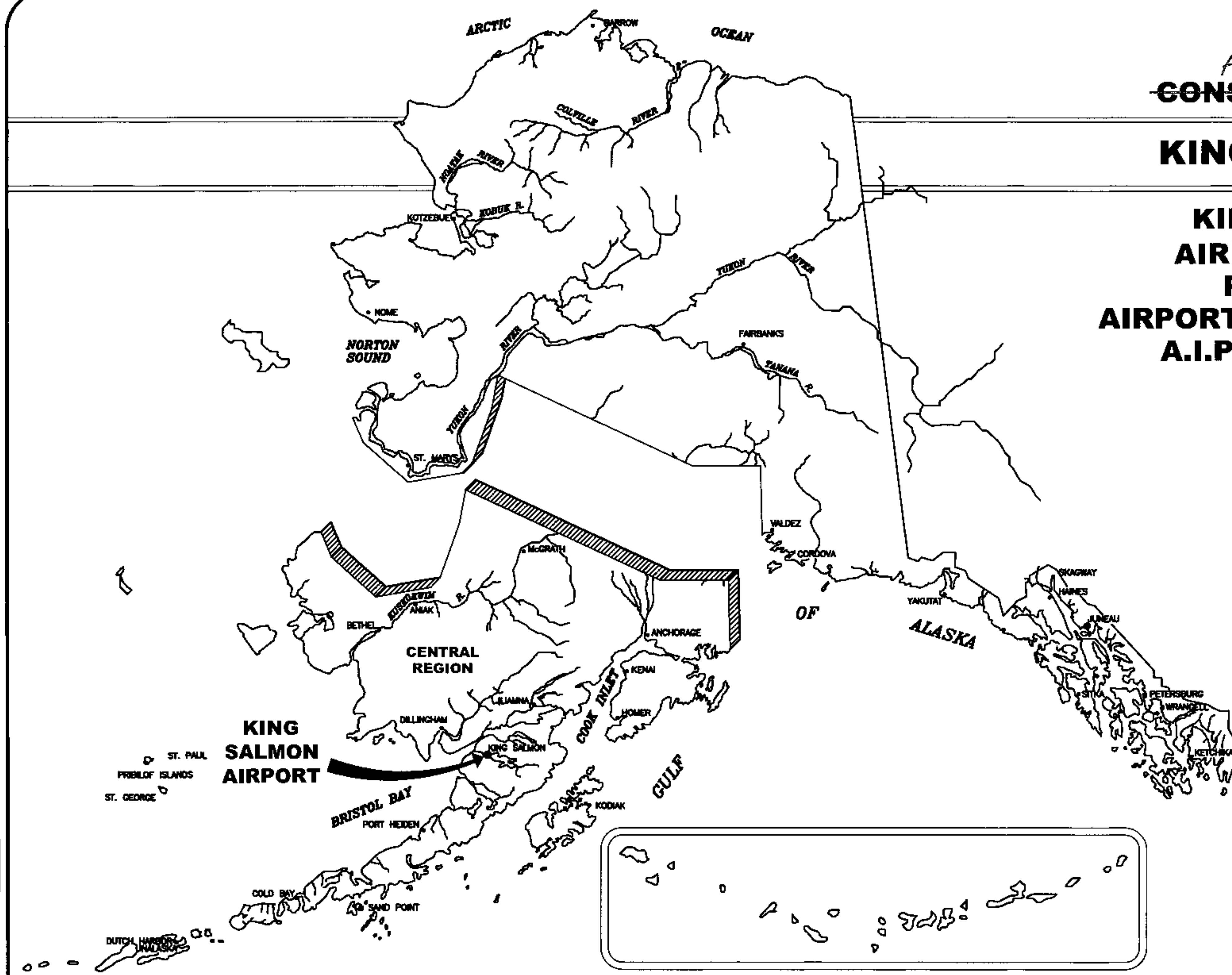
DATE: 2/22/2011
SHEET: M1 OF 54
AS-BUILT SHEET: 57 OF 57

Date Revised:
Layout Name:
File Path and Name: W:\Projects\king salmon\ckn lighting 2011\Asbuilt\From Brian Hanson\D7041_M1.dwg
Scale: 1:1
SCRIPT FILE:
DGN, FILE No: 234-25
Designed By: CMD
Drawn By: DMH
Checked By: MJL
7/03/2014, 3:52 PM

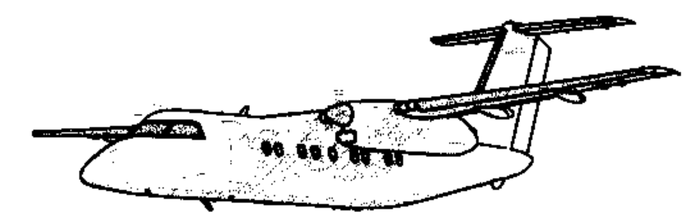
AS-BUILT
~~CONSTRUCTION~~ PLANS FOR

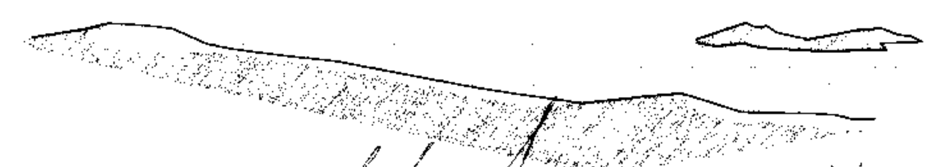
KING SALMON AIRPORT

KING SALMON, ALASKA
AIRPORT IMPROVEMENTS
PROJECT No. 53147
AIRPORT IMPROVEMENT PROGRAM
A.I.P. No. 3-02-0148-10-2008
2008



BID OPEN DATE:	MAY 19, 2008
BID AMOUNT:	$6,103,830.00
FINAL AMOUNT:	$5,933,827.23
PROJECT ENGINEER:	LOUIS C. WEGENER, JR.
AWARDED CONTRACTOR:	KNIK CONSTRUCTION CO., INC.
ADDRESS:	6441 S. AIRPARK PLACE ANCHORAGE, AK 99502





AS-BUILT APPROVED [signature] DATE 2/3/10
STEPHEN M. RYAN, P.E. AVIATION CONSTRUCTION GROUP CHIEF

AS-BUILT 10/2009 SHEET 1 OF 43

SPONSORED BY
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

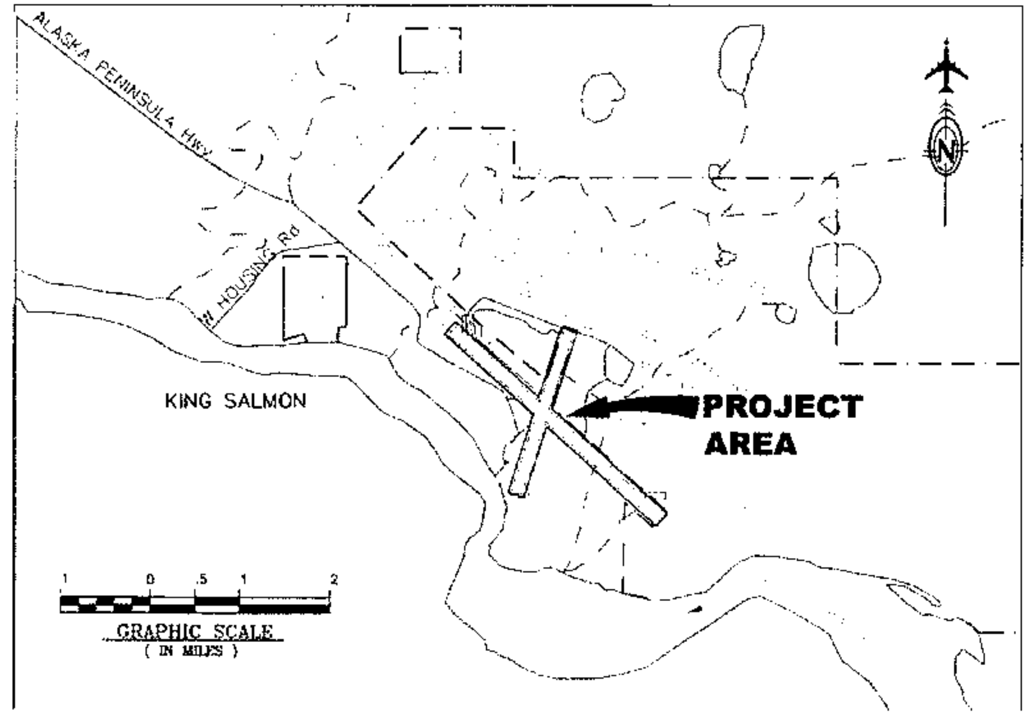
CONCUR STEVEN R. HORN, P.E.	DATE DIRECTOR OF CONSTRUCTION AND OPERATIONS
APPROVED ROBERT A. CAMPBELL, P.E.	DATE REGIONAL PRECONSTRUCTION ENGINEER
APPROVED HARVEY M. DOUTHIT, P.E.	DATE DESIGN SECTION CHIEF
APPROVED MORGAN P. MERRITT, P.E., P.L.S.	DATE PROJECT MANAGER

KING SALMON
AIRPORT IMPROVEMENTS
PROJECT No. 53147
A.I.P. No. 3-02-0148-10-2008

SHEET 1 OF 42

LEGEND

EXISTING	NEW	DESCRIPTION
		PROPERTY BOUNDARY
RSA		RUNWAY SAFETY AREA
		EDGE OF GRAVEL
		EDGE OF PAVEMENT
		CONCRETE
X		FENCE
SD		STORM DRAIN LINE
SS		SANITARY SEWER LINE
		CULVERT
		DRAINAGE
		WETLANDS
UG ELEC		UNDERGROUND ELECTRIC LINE
UC		UNDERGROUND TELEPHONE LINE
120	65	CONTOUR LINE
		SILT FENCE
		BUILDING
		STORM DRAIN MANHOLE
		SANITARY SEWER MANHOLE
		SEWER CLEANOUT
		SEWER SEPTIC CLEANOUT
		MONITORING WELL
		WATER VALVE
		HYDRANT
		FUEL TANK
		GUARD RAIL
		ELECTRICAL PEDESTAL
		ELECTRICAL VAULT/TRANSFORMER
		RADIO TOWER
		ELECTRIC METER
		GUY ANCHOR
		ELECTRIC POWER POLE
		ELECTRIC LIGHT POLE
		ELECTRIC MANHOLE
		ELECTRIC JUNCTION BOX
		RUNWAY THRESHOLD LIGHT (BLUE/RED)
		RUNWAY EDGE LIGHT (WHITE)
		RUNWAY EDGE LIGHT (BLUE)
		RUNWAY APPROACH LIGHT
		TAXIWAY/APRON EDGE LIGHT
		PAPI
		TELEPHONE PEDESTAL
		TELEPHONE MANHOLE
		SIGN/MARKER
		RUNWAY DISTANCE REMAINING SIGN
		BOLLARD
TH		PROPOSED TEST HOLE (CHARTREUSE PINFLAG)
TH-05-##		EXISTING TEST HOLE
		AIRCRAFT TIE DOWN
		AIRCRAFT TIEDOWN ANCHORS
		SATELLITE/RADAR DISH
		SPRUCE TREE
		ELECTRICAL PLUG IN
		ELECTRIC POWER POLE W/ LIGHT
		SEWER VENT PIPE
		LIGHTED WIND CONE
		SEGMENTED CIRCLE



VICINITY MAP

T 17S S, R 45 W, SEC 23, 25, 26, & 36,
SEWARD MERIDIAN, ALASKA
U.S.G.S. NAKNEK A-4 & A-5, AK

GENERAL NOTES

1. EXISTING GROUND CONTOURS ARE BASED ON DOWL ENGINEERS TOPOGRAPHIC SURVEY PERFORMED IN JULY THROUGH OCTOBER 2005, JANUARY & NOVEMBER 2006, AND JULY & AUGUST 2007.
2. SOILS INFORMATION IS DERIVED FROM SOILS INVESTIGATIONS PERFORMED BY DOT&PF AND DOWL ENGINEERS. SEE GEOTECHNICAL REPORT DATED JUNE 2006 TITLED KING SALMON AIRPORT RUNWAY SAFETY AREA IMPROVEMENTS PHASE 1 AND REPORT DATED APRIL 2008 TITLED SUBSURFACE EXPLORATION AND GEOTECHNICAL RECOMMENDATIONS, KING SALMON AIRPORT IMPROVEMENTS.
3. LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE BASED ON A COMBINATION OF FIELD SURVEY, AS BUILT RECORDS, AND APPROXIMATIONS FROM AIRPORT MAINTENANCE STAFF. CONTRACTOR SHALL FIELD LOCATE UTILITIES PRIOR TO EXCAVATION.
4. VERIFY HORIZONTAL AND VERTICAL LOCATIONS OF ALL UTILITIES ENCOUNTERED DURING CONSTRUCTION. RECORD LOCATIONS AND CHANGES TO UTILITIES IN SURVEY NOTES AND ON AS BUILT DRAWINGS.
5. VERIFY INVERTS AND LOCATIONS OF ALL UTILITY CONNECTION POINTS PRIOR TO INSTALLING PIPE. REPORT DISCREPANCIES FROM PLANS IMMEDIATELY TO OWNER'S REPRESENTATIVE.
6. ELEVATIONS SHOWN ARE TO PIPE INVERT, FLOW LINE, OR FINISH PAVEMENT SURFACE UNLESS OTHERWISE NOTED.
7. RESTORE ALL DISTURBED PROPERTY OUTSIDE OF WORK LIMITS TO ORIGINAL CONDITION.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR EROSION AND SEDIMENT CONTROLS AS NECESSARY TO COMPLY WITH FEDERAL, STATE, AND BOROUGH LAWS THAT PROHIBIT UNPERMITTED DISCHARGE OF POLLUTANTS, INCLUDING SEDIMENTS, THAT ARE A RESULT OF EROSION AND OTHER CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL CONDUCT ALL WORK SO SEDIMENT IS NOT TRANSPORTED ONTO THE ROADWAY OR ADJACENT PROPERTY. AT A MINIMUM, THE CONTRACTOR SHALL SWEEP UP ANY SEDIMENT TRACKED ONTO PAVED SURFACES IMMEDIATELY TO MINIMIZE THE WASH-OFF OF SEDIMENT INTO THE STORM DRAINAGE SYSTEM OR WATERWAYS AND TO MINIMIZE FOD.

INDEX

REFERENCE DRAWINGS

REIL/PAPI PLOT PLAN	ALD-9A3 SHEET 1/3
PAPI DETAILS	ALD-9A3 SHEET 2/3
PAPI ELECTRICAL WIRING SCHEMATIC	ALD-9A3 SHEET 3/3

STANDARD DRAWINGS

CULVERT PIPE & ARCH INSTALLATION	D-01.02
PIPE & ARCH TABLES	D-04.21
CULVERT END SECTIONS	D-06.10
CULVERT THAW PIPE	D-10.02
SEDIMENT CONTROL SYSTEM (SILT FENCE)	E-13.00

ABBREVIATIONS

ABN	ABANDONED	ME	MATCH EXISTING
AC	ASPHALT CONCRETE	MIN	MINIMUM
ACP	ASPHALT CONCRETE PAVEMENT	N	NORTH
AD	ALGEBRAIC DIFFERENCE	NOTAM	NOTICE TO AIRMEN
AIP	AIRPORT IMPROVEMENTS PROJECT	NTS	NOT TO SCALE
BVCE	BEGINNING VERTICAL CURVE ELEVATION	PAPI	PRECISION APPROACH PATH INDICATOR
BVCS	BEGINNING VERTICAL CURVE STATION	PCC	PORTLAND CEMENT CONCRETE
6" CABC	CRUSHED AGGREGATE BASE COURSE	PCMP	POLYMER COATED METAL PIPE
C	CENTERLINE	PVI	POINT OF VERTICAL INTERSECTION
CY	CUBIC YARD	RAP	RECYCLED ASPHALT PAVEMENT
DIA	DIAMETER	RT	RIGHT
DOT&PF	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES	R/W	RUNWAY
		RSA	RUNWAY SAFETY AREA
E	EAST	S	SOUTH
ELEC	ELECTRIC	SD/FD	STORM DRAIN FIELD DRAIN
ELEV	ELEVATION	SDMH	STORM DRAIN MANHOLE
EMT	ELECTRICAL METALLIC TUBING	SRE	SNOW REMOVAL EQUIPMENT
EVCE	END VERTICAL CURVE ELEVATION	STA	STATION
EVCS	END VERTICAL CURVE STATION	SY	SQUARE YARD
FAA	FEDERAL AVIATION ADMINISTRATION	TSA	TAXIWAY SAFETY AREA
FOD	FOREIGN OBJECT DEBRIS	T/W	TAXIWAY
FT	FOOT	TYP	TYPICAL
INV	INVERT	UG	UNDERGROUND
LF	LINEAR FOOT	VASI	VISUAL APPROACH SLOPE INDICATOR
LT	LEFT	VC	VERTICAL CURVE
MAX	MAXIMUM	W	WEST

AS-BUILT 10/2009 SHEET 2 OF 43

BY	DATE	REVISIONS	BY	DATE	REVISIONS
			SR	4/8/10	AS-BUILT

PLANS DEVELOPED BY MBA ENGINEERS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
CENTRAL REGION

KING SALMON AIRPORT
KING SALMON, ALASKA
AIRPORT IMPROVEMENTS
PROJECT NO. 53147
AIP No. 3-02-0148-10-2008
VICINITY MAP, ABBREVIATIONS, LEGEND, NOTES, & INDEX

SHEET 2 OF 42

Date Plotted: December 28, 2009
Designed By: AMS
Checked By: SGD/BRH
DOWL FILE No. 233-11 2008-10-31

FINAL ~~ESTIMATE OF~~ QUANTITIES
BASIC BID

ITEM NO.	PAY ITEM	PAY UNIT	QUANTITY	FINAL
G-100a	Mobilization and Demobilization	LUMP SUM	ALL REQUIRED	
G-115a	Worker Meals and Lodging, or Per Diem	LUMP SUM	ALL REQUIRED	
G-130a	Field Office	LUMP SUM	ALL REQUIRED	
G-130b	Field Laboratory	LUMP SUM	ALL REQUIRED	
G-130g	Nuclear Testing Equipment Storage Shed	EACH	1	
G-130j	Engineering Communications	CONTINGENT SUM	ALL REQUIRED	
G-131a	Engineering Transportation (Truck)	EACH	3	
G-135a	Construction Surveying by the Contractor	LUMP SUM	ALL REQUIRED	
G-135b	Extra Three Person Survey Party	HOUR	~~72~~	1.5
G-150a	Equipment Rental (Dozer, Minimum 70 HP)	HOUR	~~48~~	0
G-700a	Airport Flagger	CONTINGENT SUM	ALL REQUIRED	
G-710a	Highway Traffic Maintenance	LUMP SUM	ALL REQUIRED	
G-710b	Highway Flagger	CONTINGENT SUM	ALL REQUIRED	
G-710c	Highway Traffic Price Adjustment	CONTINGENT SUM	ALL REQUIRED	
G-710d	Highway Traffic Control	CONTINGENT SUM	ALL REQUIRED	
L-100a	Airport Lighting	LUMP SUM	ALL REQUIRED	
L-100l	Relocate Airport Sign, Type L-858	EACH	8	
L-100n	Airport Sign, Type L-858	EACH	~~2~~	1
L-100r	Temporary Runway Lighting System	LUMP SUM	ALL REQUIRED	
L-100u	Adjust Runway and Taxiway Light	EACH	~~8~~	0
L-100ah	Remove Runway and Taxiway Lights	LUMP SUM	ALL REQUIRED	
L-108b	Underground Cable #8 AWG, 5kV FAA Type "B" or Type "C" (as specified on plans), L-824	LUMP SUM	ALL REQUIRED	
L-108d	#6 Bare Copper Ground Conductor	LUMP SUM	ALL REQUIRED	
L-108i	Underground cable #14 AWG, 2 Conductor, copper, 600V, Type "SOOW-A/SOOW"	LUMP SUM	ALL REQUIRED	
L-110b	2-inch Rigid Steel Conduit	LUMP SUM	ALL REQUIRED	
L-110h	2-inch PE Conduit	LUMP SUM	ALL REQUIRED	
L-132c	Relocate Approach Lighting Aids	LUMP SUM	ALL REQUIRED	
P-152a	Unclassified Excavation	CUBIC YARD	~~11,300~~	10,813
P-154a	Subbase Course	CUBIC YARD	~~8,200~~	7,782.9
P-157a	Erosion and Pollution Control Administration	LUMP SUM	ALL REQUIRED	
P-157b	Temporary Erosion and Pollution Control	CONTINGENT SUM	ALL REQUIRED	
P-157e	Erosion and Pollution Control Price Adjustment	CONTINGENT SUM	ALL REQUIRED	
P-161a	Recycled Asphalt Pavement	SQUARE YARD	~~56,375~~	56,373
P-209a	Crushed Aggregate Base Course	CUBIC YARD	~~2,340~~	2,216.7
P-401a	Hot Mix Asphalt Type 2, Class A	TON	~~10,100~~	11,160
P-401b	Hot Mix Asphalt Price Adjustment	CONTINGENT SUM	ALL REQUIRED	
P-401c	Asphalt Cement, PG 52-28	TON	~~560~~	596.67
P-603a	Tack Coat, STE-1 *DELETED BY C.O. #1*	TON	~~3~~	0
P-605a	Joint Sealing Filler	LINEAR FOOT	~~151~~	0
P-620c	Runway and Taxiway Painting	LUMP SUM	ALL REQUIRED	
P-630a	Pavement Grooving	SQUARE YARD	~~53,050~~	49,205
P-670a	Hazardous Marker Barrier, Plastic	EACH	20	

FINAL ~~ESTIMATE OF~~ QUANTITIES
ADDITIVE ALTERNATE #1

ITEM NO.	PAY ITEM	PAY UNIT	QUANTITY	FINAL
G-100a.1	Mobilization and Demobilization	LUMP SUM	ALL REQUIRED	
G-115a.1	Worker Meals and Lodging, or Per Diem	LUMP SUM	ALL REQUIRED	
P-152a.1	Unclassified Excavation	CUBIC YARD	~~5,150~~	4,549
P-154a.1	Subbase Course	CUBIC YARD	~~4,000~~	3,558.3
P-161a.1	Recycled Asphalt Pavement	SQUARE YARD	~~6,626~~	6,164
P-209a.1	Crushed Aggregate Base Course	CUBIC YARD	~~1,140~~	1,055.4
P-401a.1	Hot Mix Asphalt Type 2, Class A	TON	~~1,100~~	953.5
P-401b.1	Hot Mix Asphalt Price Adjustment	CONTINGENT SUM	ALL REQUIRED	
P-401c.1	Asphalt Cement, PG 52-28	TON	~~70~~	51.18
P-620c.1	Runway and Taxiway Painting	LUMP SUM	ALL REQUIRED	

FINAL ~~ESTIMATE OF~~ QUANTITIES
ADDITIVE ALTERNATE #2

ITEM NO.	PAY ITEM	PAY UNIT	QUANTITY	FINAL
D-701a.2	PCMP Pipe, 36 inch	LINEAR FOOT	193	
D-760a.2	1.5 inch Diameter Thaw Pipe	LINEAR FOOT	193	
G-100a.2	Mobilization and Demobilization	LUMP SUM	ALL REQUIRED	
G-115a.2	Worker Meals and Lodging, or Per Diem	LUMP SUM	ALL REQUIRED	
L-100a.2	Airport Lighting	LUMP SUM	ALL REQUIRED	
L-100n.2	Airport Sign, Type L-858	EACH	~~2~~	1
L-100ah.2	Remove Runway and Taxiway Lights	LUMP SUM	ALL REQUIRED	
L-108b.2	Underground Cable #8 AWG, 5kV FAA Type "B" or Type "C" (as specified on plans), L-824	LUMP SUM	ALL REQUIRED	
L-108d.2	#6 Bare Copper Ground Conductor	LUMP SUM	ALL REQUIRED	
L-108i.2	Underground cable #14 AWG, 2 Conductor, copper, 600V, Type "SOOW-A/SOOW"	LUMP SUM	ALL REQUIRED	
L-110b.2	2-inch Rigid Steel Conduit	LUMP SUM	ALL REQUIRED	
L-110h.2	2-inch PE Conduit	LUMP SUM	ALL REQUIRED	
P-152a.2	Unclassified Excavation	CUBIC YARD	~~700~~	573
P-154a.2	Subbase Course	CUBIC YARD	~~750~~	2373.4
P-161a.2	Recycled Asphalt Pavement	SQUARE YARD	~~8,775~~	6235
P-165a.2	Removal of Structures	LUMP SUM	ALL REQUIRED	
P-209a.2	Crushed Aggregate Base Course	CUBIC YARD	~~220~~	180.9
P-401a.2	Hot Mix Asphalt Type 2, Class A	TON	~~1,700~~	1820.3
P-401b.2	Hot Mix Asphalt Price Adjustment	CONTINGENT SUM	ALL REQUIRED	
P-401c.2	Asphalt Cement, PG 52-28	TON	~~100~~	98.61
P-620c.2	Runway and Taxiway Painting	LUMP SUM	ALL REQUIRED	
P-670a.2	Hazardous Marker Barrier, Plastic	EACH	~~30~~	27
P-680a.2	Silt Fence	LINEAR FOOT	~~460~~	357
T-901i.2	Seeding	SQUARE YARD	~~510~~	608
T-905a.2	Topsoiling	SQUARE YARD	~~510~~	608
T-908a.2	Mulching	SQUARE YARD	~~510~~	6
L-100e2	*PAPI LIGHT AND R/W DISTANCE MARKERS*	*LUMP SUM*	*ALL REQ'D*	
P-161c	*RAP R/W 36 AND 30 BLAST AREA*	*LUMP SUM*	*ALL REQ'D*	
P-679f	*R/W AND T/W PAINTING MODS.*	*LUMP SUM*	*ALL REQ'D*	

FINAL ~~ESTIMATED~~ QUANTITIES FOR SELECT CIVIL LUMP SUM OR SUBSIDIARY ITEMS

ITEM NO.	LUMP SUM OR SUBSIDIARY ITEM	QUANTITY
D-701a.2	CULVERT MARKER POSTS	2 EA
D-701a.2	FLARED END SECTIONS	2 EA
D-701a.2	CLASS B BEDDING MATERIAL	22 CY
P-620c	NEW RUNWAY AND TAXIWAY PAINTING (WHITE)	2350 GAL
P-620c	NEW RUNWAY AND TAXIWAY PAINTING (YELLOW)	130 GAL
P-620c.1	NEW RUNWAY AND TAXIWAY PAINTING (YELLOW)	35 GAL
P-620c.2	NEW RUNWAY AND TAXIWAY PAINTING (YELLOW)	40 GAL
P-620c	REFLECTIVE MEDIA	9 TONS
P-620c.1	REFLECTIVE MEDIA	1 TONS
P-620c.1	REFLECTIVE MEDIA	1 TONS
P-620c	PAINT REMOVAL	159,100 SF
P-620c.1	PAINT REMOVAL	148 SF

* SEE ELECTRICAL PLANS FOR LUMP SUM ELECTRICAL ITEMS

ITEM P-165a REMOVAL AND DISPOSAL OF EXISTING STRUCTURES

ITEMS	REMOVE/ ABANDON	STATION	OFFSET
AIRCRAFT TIEDOWN	REMOVE	403+80	11.5' LT
AIRCRAFT TIEDOWN	1033;1033; REMOVE	403+80	56.5' LT
AIRCRAFT TIEDOWN	1033;1033; REMOVE	403+80	101.5' LT
AIRCRAFT TIEDOWN	1033;1033; REMOVE	404+61	35' LT
AIRCRAFT TIEDOWN	1033;1033; REMOVE	404+61	77.5' LT
AIRCRAFT TIEDOWN	1033;1033; REMOVE	404+95	56.5' LT
AIRCRAFT TIEDOWN	1033;1033; REMOVE	405+76	35' LT
AIRCRAFT TIEDOWN	1033;1033; REMOVE	405+76	77.5' LT
AIRCRAFT TIEDOWN	1033;1033; REMOVE	406+10	11.5' LT
AIRCRAFT TIEDOWN	1033;1033; REMOVE	406+10	56.5' LT

* SEE ELECTRICAL PLANS FOR LUMP SUM ELECTRICAL ITEMS

ESTIMATING FACTORS

ITEM NO.	PAY ITEM	ESTIMATING FACTOR
P-401a	HOT MIX ASPHALT TYPE 2, CLASS A	150 lb/ft3
P-401c	ASPHALT CEMENT, PG 52-28	5.5% BY WEIGHT OF P-401a
P-603a	TACK COAT, STE-1	0.10 gal/SY, 8.45lb/gal
P-152a	UNCLASSIFIED EXCAVATION	85% USABLE

EARTHWORK SUMMARY

WORK AREA		UNCLASSIFIED EXCAVATION (CY)	EMBANKMENT AVAILABLE (CY)	EMBANKMENT REQUIRED (CY)	21" SUBBASE COURSE (CY)	ACP EXCAVATION (CY)	RAP PLACEMENT (CY)	6" CABC (CY)
RUNWAY 29 THRESHOLD	BASIC BID	11,300	9,605	0	8,200	556	0	2,350
R/W 18-36 PAVING	BASIC BID	0	0	0	0	3,864	4,150	0
R/W 18 OVERRUN RECONSTRUCTION	ADD ALT #1	5,150	4,378	0	4,000	543	0	1,140
GA TAXIWAY CONSTRUCTION	ADD ALT #2	700	595	1,434	750	404	210	210
GA APRON	ADD ALT #2	0	0	0	0	327	330	0
TOTAL		17,150	14,578	1,434	12,950	5,694	4,690	3,700

AS-BUILT 10/2009 SHEET 3 OF 43

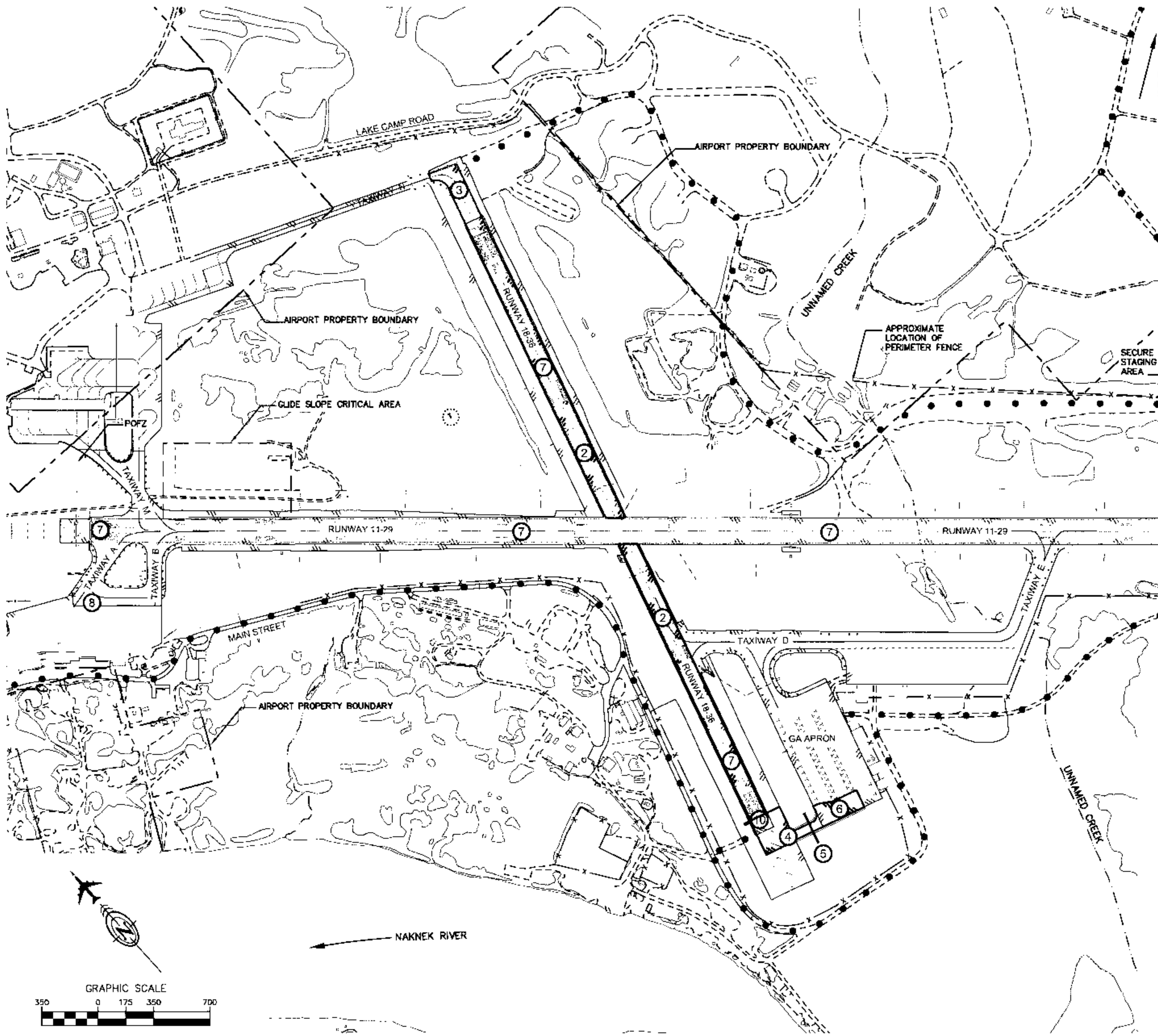
BY	DATE	REVISIONS	BY	DATE	REVISIONS
			SMR	*2/3/10*	*AS-BUILT*

PLANS DEVELOPED BY MBA ENGINEERS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

KING SALMON AIRPORT
KING SALMON, ALASKA
AIRPORT IMPROVEMENTS
PROJECT NO. 53147
AIP No. 3-02-0148-10-2008
ESTIMATED QUANTITIES, ESTIMATING FACTORS, & SUMMARY TABLES

SHEET 3 OF 42



SCOPE OF PROJECT

1. RELOCATE RUNWAY 29 THRESHOLD
2. PAVE RUNWAY SURFACE
3. RECONSTRUCT RUNWAY OVERRUN – ADD ALT #1
4. CONSTRUCT GA TAXIWAY – ADD ALT #2
5. INSTALL NEW PCMP CULVERT – ADD ALT #2
6. GA APRON PAVING – ADD ALT #2
7. REMOVE & REPLACE RUNWAY MARKINGS
8. NEW POFZ MARKINGS
9. RELOCATE PAPI
10. INSTALL NEW THRESHOLD LIGHTS

LEGEND

● ● ● HAUL ROUTES

NOTES

1. FLAGGER LOCATIONS AS DIRECTED BY THE ENGINEER.
2. THE BRISTOL BAY BOROUGH MAY IMPOSE RESTRICTIONS ON CONSTRUCTION HAULING EQUIPMENT; CONTACT THE BOROUGH FOR ADDITIONAL INFORMATION.

AS-BUILT 10/2009 SHEET 4 OF 43

BY	DATE	REVISIONS	BY	DATE	REVISIONS
			SGD	2/3/10	AS-BUILT

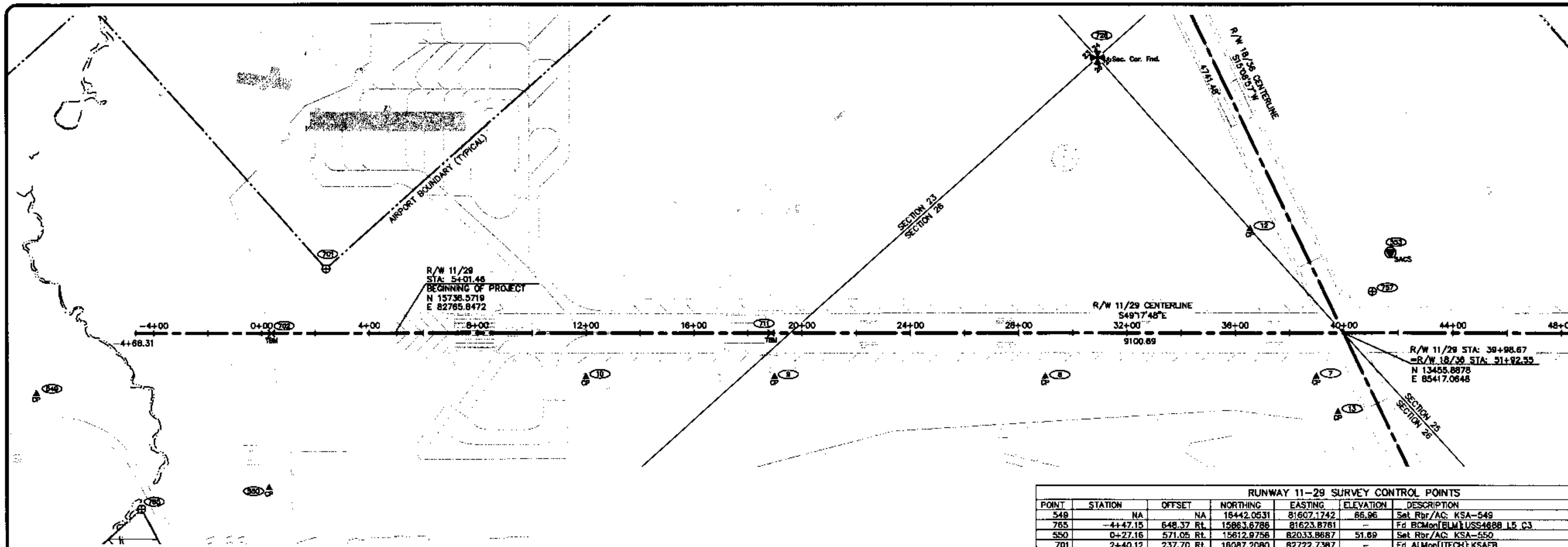
PLAN DEVELOPED BY DOWL ENGINEERS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

KING SALMON AIRPORT
KING SALMON, ALASKA
AIRPORT IMPROVEMENTS
PROJECT NO. 53147
AIP No. 3-02-0148-10-2008
PROJECT LAYOUT PLAN

SHEET 4 OF 42

Date Plotted: December 28, 2009
Designed By: AMS
Checked By: SGD/BRH



HORIZONTAL CONTROL:

Coordinate System:
This project is located within the "King-Nak" Coordinate Sytem, a local surface grid coordinate system expressed in U.S. Survey feet units developed by the State of Alaska Department of Transportation and Public Facilities.

Basis of Coordinates:
The Basis of Coordinates is NGS Primary Airport Control Station "AKN-A", located near the southeast corner of Runway 18/36. Said station has "King-Nak" Coordinate System coordinates of 10997.3450 N, 84963.3550 E. U.S. Survey Feet.

Basis of Bearings:
The Basis of Bearings is a local plane bearing between NGS Primary Airport Control Station "AKN-A" and NGS Secondary Airport Control Station "AKN-C". NGS Secondary Airport Control Station "AKN-C" bears N28°12'27.9"E a distance of 5315.9136 feet from NGS Primary Airport Control Station "AKN-A". NGS Secondary Airport Control Station "AKN-C" has "King-Nak" Coordinate System coordinates of 15681.9384 N, 82450.6826 E. U.S. Survey Feet.

Translation Parameters:
To convert the local coordinates to NAD83 (92) State Plane coordinates expressed in U.S. Survey Feet, translate using +1697882.76131 N usf, +1811590.29829 E usf, and scale using 0.9999837981.

VERTICAL CONTROL:

Elevations are based on Primary Airport Control Station (PACS) Monument "AKN-A" with a published elevation of 55.2'. The NGS Data Sheet lists an NAVD 88 orthometric height for this point that was determined by GPS observations and a high-resolution geoid model. GPS derived orthometric heights for airport stations designated as PACS or SACS are published to 1 decimal place (U.S. Survey Feet). This maintains relative accuracy between the PACS and SACS, it does not indicate accuracy relative to other marks which are part of the NAVD 88 network.

Elevations of Secondary Airport Control Stations (SACS), and other Horizontal & Vertical Survey Control points were established by differential levelling loops using a Leica DNA10 digital level. Elevations of Secondary Horizontal Survey Control points should be verified from the Vertical Survey Control before using due to the potential of settlement or frost heave of these types of monuments over time.

NOTES:

1) Horizontal control points 551, and 552 were used as the basis of coordinates and held in a simultaneous Least Squares Network Adjustment with Static GPS Control Points 1, 2, 548 – 550, 553, 701 – 710, 714–737, and 739–771, in Leica Geo Office Version 2.0. All other survey control point coordinates listed were established by DOWL Engineers using conventional traverse techniques utilizing a Leica TCRP 1205+ Total Station Instrument. These conventional control points were adjusted with a least squares traverse adjustment in Land Development Desktop.

2) Control point 552, AKN-C (SACS), was disturbed and reset by others after this survey. Its new position has not been verified, therefore it is not shown or listed hereon.

3) All background information shown herein was obtained from the King Salmon Airport "Aerial Mapping", as performed by Aeromap utilizing photos acquired on August 23, 1987 and October 2, 1997. This background is for orientation purposes only.

4) This survey was completed by DOWL Engineers in parts of July, August, September, and October of 2005, January and November of 2006, and July and August of 2007 All dimensions and coordinates shown are in U.S. Survey Feet unless noted otherwise.

5) 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),

SURVEYOR 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.

Stanley E. Ponsness LS-6714 Date

RUNWAY 11–29 SURVEY CONTROL POINTS

POINT	STATION	OFFSET	NORTHING	EASTING	ELEVATION	DESCRIPTION
549	NA	NA	16442.0531	81607.1742	66.96	Set Rbr/AC: KSA-549
765	-4+47.15	648.37 Rt.	15863.6786	81623.8761	–	Fd BCMon[BLM]: USS4688 L5 C3
550	0+27.16	571.05 Rt.	15612.9756	82033.8687	51.69	Set Rbr/AC: KSA-550
701	2+40.12	237.70 Rt.	16087.2080	82722.7387	–	Fd ALMon[ITECH]: KSAFB
10	11+98.87	161.77 Rt.	15159.1227	83189.0463	54.85	Set Rbr/AC: KSA-10
9	18+98.88	161.50 Rt.	14702.8262	83719.9023	53.66	Set Rbr/AC: KSA-9
8	28+98.79	161.08 Rt.	14051.0552	84478.2034	55.10	Set Rbr/AC: KSA-8
726	30+90.97	1016.01 Lt.	14818.0753	85391.5266	–	Fd BCMon[BLM]: S23|S24/S26|S25*T17S R45W
12	36+54.76	384.65 Lt.	13971.7528	85407.2054	60.20	Set Rbr/AC: KSA-12
7	38+98.56	160.65 Rt.	13399.3872	85236.4011	57.97	Set Rbr/AC: KSA-7
13	39+78.16	291.97 Rt.	13247.9196	85211.1096	57.19	Set Rbr/AC: KSA-13
757	41+04.44	152.99 Lt.	13502.6922	85597.0161	–	Set ALMon[DOWL]: RM N 1/16 S26|S25*T17S R45W
553	41+70.85	298.66 Lt.	13568.5050	85741.0566	63.02	Fd BCMon[NGS]: AKN-B (SACS)

RUNWAY 11–29 VERTICAL CONTROL

POINT	STATION	OFFSET	NORTHING	EASTING	ELEVATION	DESCRIPTION
702	0+38.50	0.00	16039.7944	82413.3613	56.76	Fd BCMon[US Eng Offic]: B-6
711	18+85.94	0.06 Lt.	14833.7335	83815.4533	58.21	Fd BC[COE]: K5-10

MONUMENT LEGEND

- GOV'T SECTION CORNER (Sec. Cor. Fnd.)
- GOV'T SURVEY MONUMENT
- NGS CONTROL MONUMENT
- PRIMARY MONUMENT [BRASS/AL CAP]
- CENTERLINE SURVEY MONUMENT
- COE MONUMENT/TEMPORARY BENCH MARK
- PRIMARY CONTROL POINT
- POINT NUMBER

200 0 100 200 400 600 800 1000

SCALE: 1"=200 U.S. SURVEY FEET AS-BUILT 10/2009 SHEET 5 OF 43

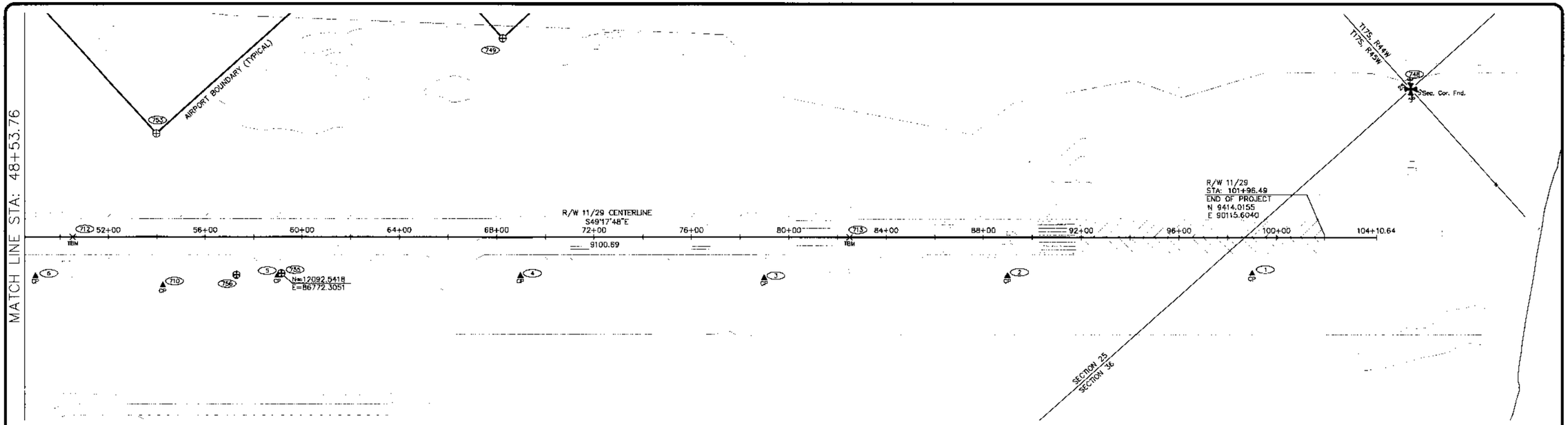
			SEP	12/3/09	AS-BUILT
BY	DATE	REVISIONS	BY	DATE	REVISIONS

PLANS DEVELOPED BY DOWL ENGINEERS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

KING SALMON AIRPORT
KING SALMON, ALASKA
AIRPORT IMPROVEMENTS
PROJECT NO. 53147
AIP No. 3-02-0148-10-2008
SURVEY CONTROL SHEET

SHEET 5 OF 42



HORIZONTAL CONTROL:

Coordinate System:
This project is located within the "King-Nak" Coordinate Sytem, a local surface grid coordinate system expressed in U.S. Survey feet units developed by the State of Alaska Department of Transportation and Public Facilities.

Basis of Coordinates:
The Basis of Coordinates is NGS Primary Airport Control Station "AKN-A", located near the southeast corner of Runway 18/36. Said station has "King-Nak" Coordinate System coordinates of 10997.3450 N, 84963.3550 E. U.S. Survey Feet.

Basis of Bearings:
The Basis of Bearings is a local plane bearing between NGS Primary Airport Control Station "AKN-A" and NGS Secondary Airport Control Station "AKN-C". NGS Secondary Airport Control Station "AKN-C" bears N28°12'27.9"E a distance of 5315.9136 feet from NGS Primary Airport Control Station "AKN-A". NGS Secondary Airport Control Station "AKN-C" has "King-Nak" Coordinate System coordinates of 15661.9364 N, 82450.6826 E. U.S. Survey Feet.

Translation Parameters:
To convert the local coordinates to NAD83 (92) State Plane coordinates expressed in U.S. Survey Feet, translate using +1697882.7613 N usf, +1811590.29829 E usf, and scale using 0.9999837981.

VERTICAL CONTROL:
Elevations are based on Primary Airport Control Station (PACS) Monument "AKN-A" with a published elevation of 55.2'. The NGS Data Sheet lists an NAVD 88 orthometric height for this point that was determined by GPS observations and a high-resolution geoid model. GPS derived orthometric heights for airport stations designated as PACS or SACS are published to 1 decimal place (U.S. Survey Feet). This maintains relative accuracy between the PACS and SACS, it does not indicate accuracy relative to other marks which are part of the NAVD 88 network.

Elevations of Secondary Airport Control Stations (SACS), and other Horizontal & Vertical Survey Control points were established by differential levelling loops using a Leica DNA10 digital level. Elevations of Secondary Horizontal Survey Control points should be verified from the Vertical Survey Control before using due to the potential of settlement or frost heave of these types of monuments over time.

NOTES:
1) Horizontal control points 551, and 552 were used as the basis of coordinates and held in a simultaneous Least Squares Network Adjustment with Static GPS Control Points 1, 2, 548 – 550, 553, 701 – 710, 714–737, and 739–771, in Leica Geo Office Version 2.0. All other survey control point coordinates listed were established by DOWL Engineers using conventional traverse techniques utilizing a Leica TCRP 1205+ Total Station instrument. These conventional control points were adjusted with a least squares traverse adjustment in Land Development Desktop.

2) Control point 552, AKN-C (SACS), was disturbed and reset by others after this survey. Its new position has not been verified, therefore it is not shown or listed hereon.

3) All background information shown herein was obtained from the King Salmon Airport "Aerial Mapping", as performed by Aeromap utilizing photos acquired on August 23, 1987 and October 2, 1997. This background is for orientation purposes only.

4) This survey was completed by DOWL Engineers in parts of July, August, September, and October of 2005, January and November of 2006, and July and August of 2007. All dimensions and coordinates shown are in U.S. Survey Feet unless noted otherwise.

5) 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).

RUNWAY 11–29 SURVEY CONTROL POINTS

POINT	STATION	OFFSET	NORTHING	EASTING	ELEVATION	DESCRIPTION
6	48+98.63	160.22 Rt.	12747.5196	85994.8301	63.20	Set Rbr/AC: KSA–6
753	53+97.78	424.29 Lt.	12865.1222	86754.4155	–	Fd ALMon[ITECH]:KSAFB
710	54+24.82	199.96 Rt.	12374.2429	86367.8156	63.94	Fd Rod/BC[ADOT/PF]:ESKIMO
756	57+28.53	155.72 Rt.	12209.7216	86626.9159	–	Fd ALMon[BLM]:RM CW 1/16 S25*T17S R45W
5	58+98.99	159.78 Rt.	12095.4792	86753.4865	61.99	Set Rbr/AC: KSA–5
755	59+15.17	149.73 Rt.	12092.5418	86772.3051	–	Fd ALMon[BLM]:RM CW 1/16 S25*T17S R45W
749	68+23.91	815.41 Lt.	12231.5846	88090.6259	–	Fd ALMon[ITECH]:KSAFB
4	68+98.50	159.33 Rt.	11443.9960	87511.5042	61.87	Set Rbr/AC: KSA–4
3	78+98.87	168.25 Rt.	10784.8479	88264.0564	63.95	Set Rbr/AC: KSA–3
2	88+99.49	158.35 Rt.	10139.7999	89029.0829	66.67	Set Rbr/AC: AZ–KSA–2
1	99+00.27	148.45 Rt.	9494.6573	89794.2315	68.26	Set Rbr/AC: AZ–KSA–1
748	NA	NA	9644.5254	90781.7524	–	Fd BCMon[BLM]:S25|S30/S36|S31*T17S R45W

RUNWAY 11–29 VERTICAL CONTROL

POINT	STATION	OFFSET	NORTHING	EASTING	ELEVATION	DESCRIPTION
712	50+52.10	0.03 Lt.	12768.9257	86215.6787	65.71	Fd BC[COE]:KS–11
713	82+48.70	0.00	10684.2586	88638.9896	67.89	Fd BC[COE]:KS–12

SURVEYOR 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.

Stanley E. Ponsness LS–6714 Date

200 0 100 200 400 600 800 1000

SCALE: 1"=200 U.S. SURVEY FEET

MONUMENT LEGEND

- GOV'T SECTION CORNER (Sec. Cor. Fnd.)
- GOV'T SURVEY MONUMENT
- NGS CONTROL MONUMENT
- PRIMARY MONUMENT [BRASS/AL CAP]
- CENTERLINE SURVEY MONUMENT
- COE MONUMENT/TEMPORARY BENCH MARK (TBM)
- PRIMARY CONTROL POINT (CP)
- POINT NUMBER (XX)

AS-BUILT 10/2009 SHEET 6 OF 43

Date Plotted: December 28, 2009
Plot Ratio and Layout:
File: W:\Projects\King Salmon\King Salmon 53147 As-built\AutoCAD\SCS-KSA-STAGE 1.dwg 09/20/29

SCRIPT FILE: DOWL FILE No: 233-11 | Designed By: SEP | Checked By: CLR | Drawn By: | 2008-4-15

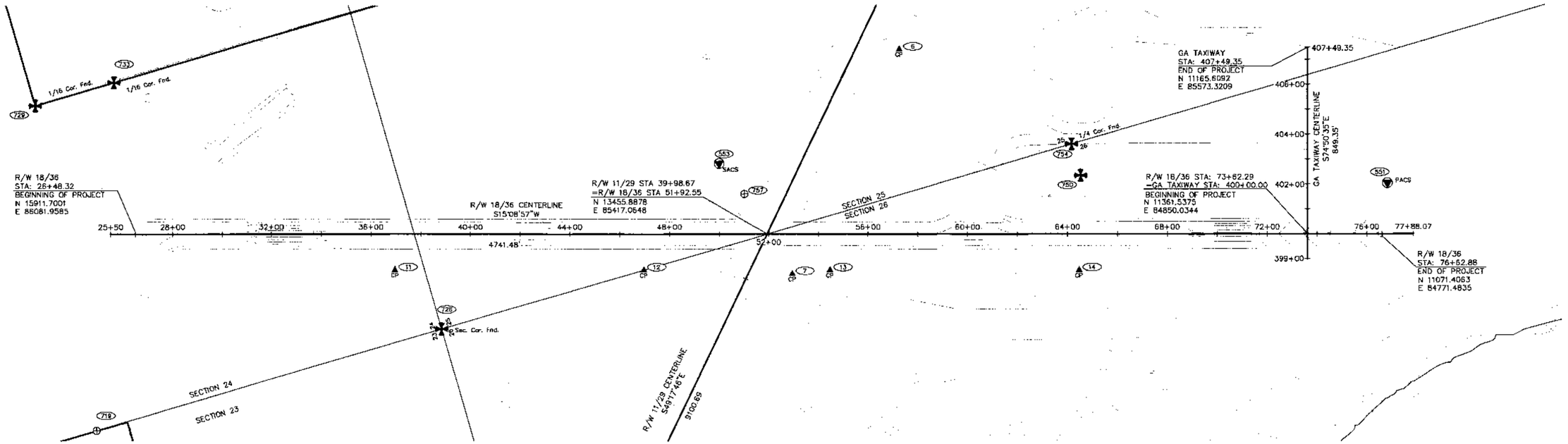
BY	DATE	REVISIONS	BY	DATE	REVISIONS
			SMP	2/8/10	AS-BUILT

PLANS DEVELOPED BY DOWL ENGINEERS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
CENTRAL REGION

KING SALMON AIRPORT
KING SALMON, ALASKA
AIRPORT IMPROVEMENTS
PROJECT NO. 53147
AIP No. 3–02–0148–10–2008
SURVEY CONTROL SHEET

SHEET 6 OF 42



HORIZONTAL CONTROL:

Coordinate System:
This project is located within the "King-Nak" Coordinate Sytem, a local surface grid coordinate system expressed in U.S. Survey feet units developed by the State of Alaska Department of Transportation and Public Facilities.

Basis of Coordinates:
The Basis of Coordinates is NGS Primary Airport Control Station "AKN-A", located near the southeast corner of Runway 18/36. Said station has "King-Nak" Coordinate System coordinates of 10997.3450 N, 84963.3550 E. U.S. Survey Feet.

Basis of Bearings:
The Basis of Bearings is a local plane bearing between NGS Primary Airport Control Station "AKN-A" and NGS Secondary Airport Control Station "AKN-C". NGS Secondary Airport Control Station "AKN-C" bears N28°12'27.9"E a distance of 5315.9136 feet from NGS Primary Airport Control Station "AKN-A". NGS Secondary Airport Control Station "AKN-C" has "King-Nak" Coordinate System coordinates of 15681.9384 N, 82450.6826 E. U.S. Survey Feet.

Translation Parameters:
To convert the local coordinates to NAD83 (92) State Plane coordinates expressed in U.S. Survey Feet, translate using +1697882.76131 N usf, +1811590.29829 E usf, and scale using 0.999983791.

RUNWAY 18-36 SURVEY CONTROL POINTS

POINT	STATION	OFFSET	NORTHING	EASTING	ELEVATION	DESCRIPTION
729	22+46.26	515.36 Lt.	16165.1096	86684.4801	–	Fd ALMon[BLM]: SW1/16 S24*T17S R4
719	24+94.20	788.31 Rt.	16266.4762	85361.3231	–	Fd ALMon[ITECH]: KSAFB
733	25+63.22	608.46 Lt.	15834.8279	86691.5070	–	Fd ALMon[BLM]: CNSSW 1/256 S24*T1
11	36+97.05	144.23 Rt.	14937.1014	85568.6677	60.97	Set Rbr/AC: KSA-11
726	38+84.37	380.64 Rt.	14818.0753	85391.5267	–	Fd BCMon[BLM]: S23|S224/S26|S25*T
12	46+97.19	144.33 Rt.	13971.7528	85407.2054	60.20	Set Rbr/AC: KSA-12
553	49+99.17	283.30 Lt.	13568.5050	85741.0566	63.11	Fd BCMon[NGS]: AKN-B (SACS)
757	51+00.15	181.41 Lt.	13502.8922	85597.0161	–	Set ALMon[DOWL]: RM N 1/16 S25*T1
7	52+94.30	159.62 Rt.	13398.3872	85236.4011	57.87	Set Rbr/AC: KSA-7
13	54+47.11	144.45 Rt.	13247.9196	85211.1096	57.19	Set Rbr/AC: KSA-13
6	57+26.19	743.01 Lt.	12747.5196	85994.8301	63.20	Set Rbr/AC: KSA-6
754	64+16.77	361.86 Lt.	12179.6467	85446.4207	–	Fd ALMon[BLM]:1/4 S26*T17S R45W
14	64+47.09	144.64 Rt.	12282.7473	84949.5970	53.78	Set Rbr/AC: KSA-14
750	64+53.43	235.44 Lt.	12177.2969	85314.8149	54.30	Fd ALMon[BLM]: RM 1/4 S26|S25*T17S R45W
551	76+84.22	204.56 Lt.	10997.3450	84963.3550	55.20	Fd BCMon[NGS]: AKN-A (PACS)

TAXIWAY SURVEY CONTROL POINTS

POINT	STATION	OFFSET	NORTHING	EASTING	ELEVATION	DESCRIPTION
14	398+55.24	915.20 Lt.	12282.7473	84949.5970	53.78	Set Rbr/AC: KSA-14
551	402+04.60	321.89 Rt.	10997.3450	84963.3550	55.20	Fd BCMon[NGS]: AKN-A (PACS)
750	402+35.32	906.90 Lt.	12177.2969	85314.8149	54.30	Fd ALMon[BLM]: RM 1/4 S26|S25*T17S R45W"
754	403+61.73	945.58 Lt.	12179.6467	85446.4207	–	Fd ALMon[BLM]:1/4 S26*T17S R45W"
6	407+42.59	1637.09 Lt.	12747.5196	85994.8301	63.20	Set Rbr/AC: KSA-6

VERTICAL CONTROL:
Elevations are based on Primary Airport Control Station (PACS) Monument "AKN-A" with a published elevation of 55.2'. The NGS Data Sheet lists an NAVD 88 orthometric height for this point that was determined by GPS observations and a high-resolution geoid model. GPS derived orthometric heights for airport stations designated as PACS or SACS are published to 1 decimal place (U.S. Survey Feet). This maintains relative accuracy between the PACS and SACS, it does not indicate accuracy relative to other marks which are part of the NAVD 88 network.

Elevations of Secondary Airport Control Stations (SACS), and other Horizontal & Vertical Survey Control points were established by differential levelling loops using a Leica DNA10 digital level. Elevations of Secondary Horizontal Survey Control points should be verified from the Vertical Survey Control before using due to the potential of settlement or frost heave of these types of monuments over time.

NOTES:
1) Horizontal control points 551, and 552 were used as the basis of coordinates and held in a simultaneous Least Squares Network Adjustment with Static GPS Control Points 1, 2, 548 – 550, 553, 701 – 710, 714–737, and 738–771, in Leica Geo Office Version 2.0. All other survey control point coordinates listed were established by DOWL Engineers using conventional traverse techniques utilizing a Leica TCRP 1205+ Total Station instrument. These conventional control points were adjusted with a least squares traverse adjustment in Land Development Desktop.

2) Control point 552, AKN-C (SACS), was disturbed and reset by others after this survey. Its new position has not been verified, therefore it is not shown or listed hereon.

3) All background information shown herein was obtained from the King Salmon Airport "Aerial Mapping", as performed by Aeromap utilizing photos acquired on August 23, 1987 and October 2, 1997. This background is for orientation purposes only.

4) This survey was completed by DOWL Engineers in parts of July, August, September, and October of 2005, January and November of 2006, and July and August of 2007. All dimensions and coordinates shown are in U.S. Survey Feet unless noted otherwise.

5) 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).

SURVEYOR 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.

Stanley E. Ponsness LS-6714 Date

200 0 100 200 400 600 800 1000

SCALE: 1"=200 U.S. SURVEY FEET

MONUMENT LEGEND

- 6 4 5 / 7 8 Spc. Cor. Fnd. — GOVT SECTION CORNER
- ⊕ — GOVT SURVEY MONUMENT
- ⊕ — NGS CONTROL MONUMENT
- ⊕ — PRIMARY MONUMENT [BRASS/AL CAP]
- ● — CENTERLINE SURVEY MONUMENT
- X TBM — COE MONUMENT/TEMPORARY BENCH MARK
- ▲ CP — PRIMARY CONTROL POINT
- (11) — POINT NUMBER

AS-BUILT 10/2009 SHEET 7 OF 43

BY	DATE	REVISIONS
SEP	7/8/10	AS-BUILT

PLANS DEVELOPED BY DOWL ENGINEERS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
CENTRAL REGION

KING SALMON AIRPORT
KING SALMON, ALASKA
AIRPORT IMPROVEMENTS
PROJECT NO. 53147
AIP No. 3-02-0148-10-2008
SURVEY CONTROL SHEET

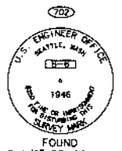
SHEET 7 OF 42

Designed By: SEP
Checked By: CJR
Drawn By:
DGN FILE No: 233-11
2008-4-15
SCRIPT FILE:
R:\Projects\King Salmon\King Salmon 53147 As-built\AutoCAD\DRS-KSA-STAGE II.dwg
Date Plotted: December 28, 2009
Plot Ratio and Layout:
File: 06-2024

FOUND
3-1/4" BRASS CAP
ON 2-3/8" STEEL POST
1.1' BELOW GRADE

FOUND
3-1/4" BRASS CAP
ON 2-3/8" STEEL POST
0.1' BELOW GRADE

FOUND
3-1/4" BRASS CAP
ON 2-3/8" STEEL POST
0.2' BELOW GRADE



FOUND
3 1/2" BRASS CAP
ON CONCRETE POST
1.1' ABOVE GRADE-FIRM
CAP FLUSH WITH TOP

FOUND
2-1/2" BRASS DONUT
2" BELOW DATUM POINT
ON STAINLESS STEEL ROD
0.4' ABOVE GRADE
INSIDE 4" DIA. PVC PIPE
0.7' ABOVE GRADE
W/ RUBBER CAP.
3 CARSONITE POSTS
2' FROM MON.

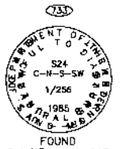
FOUND
3 1/2" BRASS CAP ON
CONCRETE PAD/BARRIER
0.05' BELOW GRADE

FOUND
3 1/2" BRASS CAP ON
CONCRETE PAD/BARRIER
0.05' BELOW GRADE

FOUND
3 1/2" BRASS CAP ON
CONCRETE PAD/BARRIER
0.05' BELOW GRADE

FOUND
3 1/4" BRASS CAP
ON 2 1/2" IRON POST
0.4' ABOVE GRADE

FOUND
3 1/4" ALUM. CAP
ON 2 1/2" ALUM. POST
0.5' ABOVE GRADE



FOUND
3 1/4" ALUM. CAP
ON 2 1/2" ALUM. POST
0.1' ABOVE GRADE

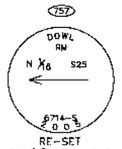
REHABILITATED
3 1/4" BRASS CAP
ON 2 1/2" IRON POST
0.3' ABOVE GRADE

FOUND
3 1/4" ALUM. CAP
ON 3/4" DRIVE ROD
0.5' ABOVE GRADE

FOUND
3 1/4" ALUM. CAP
ON 2 1/2" ALUM. POST
1.5' BELOW GRADE

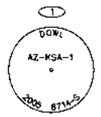
FOUND
3 1/4" ALUM. CAP
0.2' BELOW GRADE

FOUND
3 1/4" ALUM. CAP
0.1' BELOW GRADE



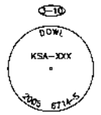
RE-SET
3 1/4" ALUM. CAP
ON 2 1/2" ALUM. POST
0.3' BELOW GRADE

FOUND
3 1/4" ALUM. CAP
ON 2 1/2" ALUM. POST
1.2' BELOW GRADE

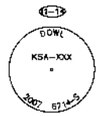


SET
5/8"x 30" REBAR
W/ 2" ALUM. CAP
0.3' BELOW GRADE

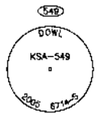
SET
5/8"x30" REBAR
W/ 2" ALUM. CAP
0.3' BELOW GRADE



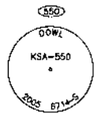
SET
5/8"x 30" REBAR
W/ 2" ALUM. CAP
(TYPICAL TRAVERSE STATION)



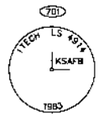
SET
5/8"x 30" REBAR
W/ 2" ALUM. CAP
(TYPICAL TRAVERSE STATION)



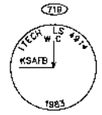
SET
5/8"x 30" REBAR
W/ 2" ALUM. CAP
0.4' BELOW GRADE



SET
5/8"x 30" REBAR
W/ 2" ALUM. CAP
0.2' BELOW GRADE



FOUND
2-1/2" DIA. POST MON
W/ 2-1/2" ALUM. CAP
0.4' ABOVE GRADE



FOUND
2-1/2" DIA. POST MON
W/ 2-1/2" ALUM. CAP
0.4' ABOVE GRADE

FOUND
2-1/2" ALUM. CAP MON
ON 2 1/2" ALUM. POST
0.5' BELOW GRADE

FOUND
2-1/2" ALUM. CAP MON
ON 2 1/2" ALUM. POST
0.8' ABOVE GRADE

SURVEYOR 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.

Stanley E. Ponsness LS-6714 Date

AS-BUILT 10/2009 SHEET 8 OF 43

BY	DATE	REVISIONS

BY	DATE	REVISIONS
SAE	2/3/16	AS-BUILT

PLANS DEVELOPED BY DOWL ENGINEERS

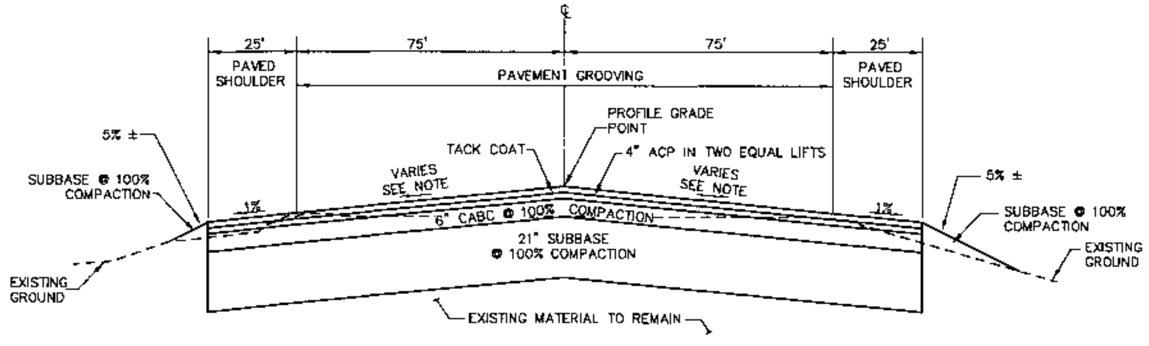
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
CENTRAL REGION

KING SALMON AIRPORT
KING SALMON, ALASKA
AIRPORT IMPROVEMENTS
PROJECT NO. 53147
AIP No. 3-02-0148-10-2008
SURVEY CONTROL SHEET

SHEET 8 OF 42

Date Plotted: December 28, 2009
Plot Ratio and Layout:
File: W:\Projects\King Salmon\King Salmon 53147 As-built\AutoCAD\SCS-KSA-STAGE II.dwg

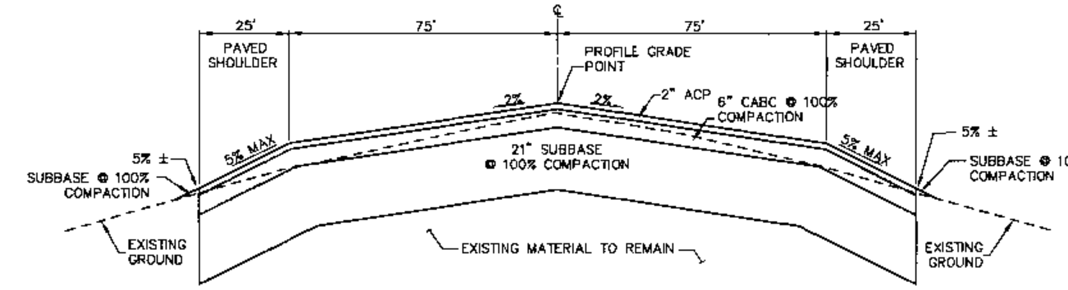
	DOWL FILE No. 233-11	SCRIPT FILE:
Designed By:		SEP
Checked By:	2008-4-15	CLR
Drawn By:		



NOTE: SLOPE IS 1% AT STA 91+96.16 AND TRANSITIONS TO 2% AT STA 92+25

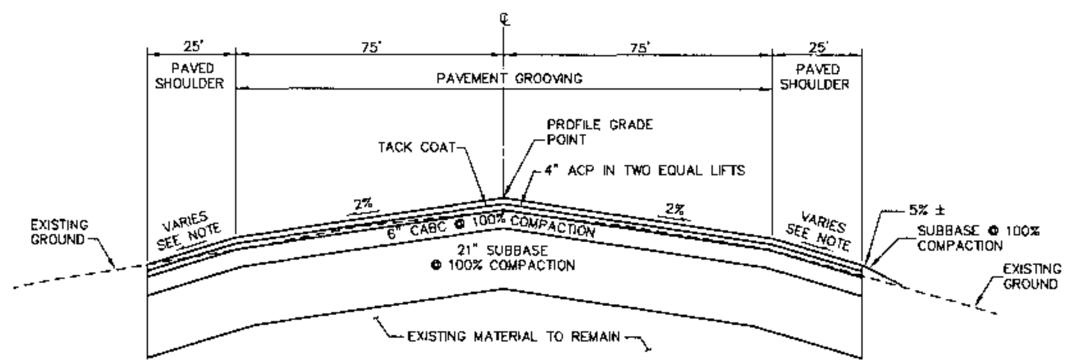
RUNWAY 29 THRESHOLD RELOCATION

STA 91+96.16 to STA 92+25



RUNWAY 29 BLAST PAD

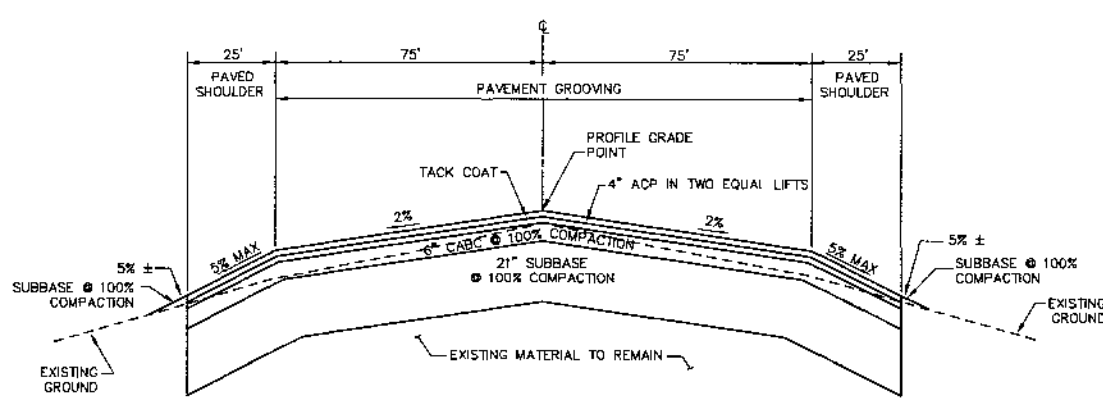
STA 95+96.28 to STA 97+96.28



NOTE: SLOPE IS 1% AT STA 92+25 AND TRANSITIONS TO 5% AT STA 93+00

RUNWAY 29 THRESHOLD RELOCATION

STA 92+25 to STA 93+00



RUNWAY 29 THRESHOLD RELOCATION

STA 93+00 to STA 95+96.28

NOTES

1. EXCAVATION AND PROCESSING OF EXISTING AC PAVEMENT WILL BE PAID FOR UNDER P–161a.
2. RAP MAY NOT BE USED FOR RUNWAY 29 THRESHOLD RELOCATION WORK.
3. ESTIMATED PAVEMENT THICKNESS VARIES BETWEEN 1.25" AND 6". SEE SUBSURFACE EXPLORATION REPORT PREPARED BY DOWL ENGINEERS DATED APRIL 2008 FOR PAVEMENT CORING DATA.
4. EXCESS RAP IS THE PROPERTY OF THE STATE AND SHALL BE HAULED AND STOCKPILED AS DIRECTED BY THE ENGINEER.

AS-BUILT 10/2009 SHEET 9 OF 43

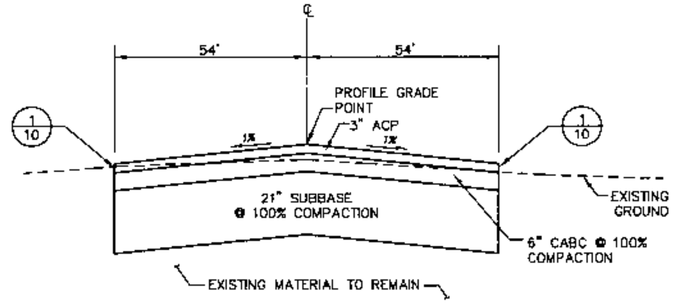
BY	DATE	REVISIONS	BY	DATE	REVISIONS
			SGO	2/3/10	AS-BUILT

PLANS DEVELOPED BY MBA ENGINEERS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

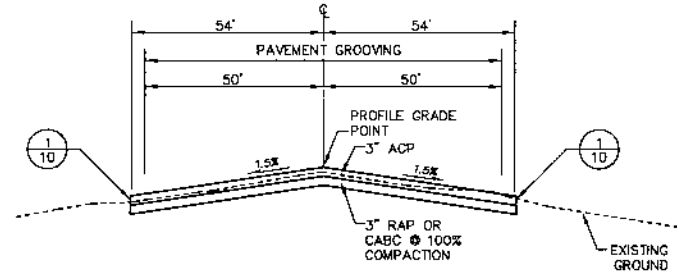
KING SALMON AIRPORT
KING SALMON, ALASKA
AIRPORT IMPROVEMENTS
PROJECT NO. 53147
AIP No. 3–02–0148–10–2008
TYPICAL SECTIONS & DETAILS

SHEET 9 OF 42



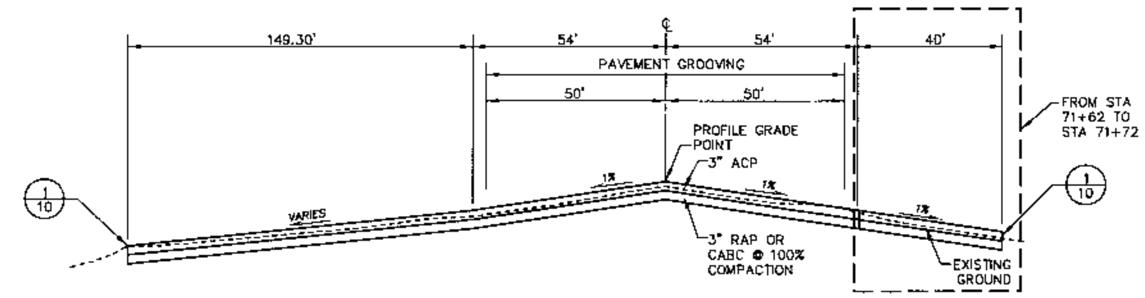
RUNWAY 18 OVERRUN RECONSTRUCTION - ADD ALT #1

STA 28+07.34 to STA 28+50



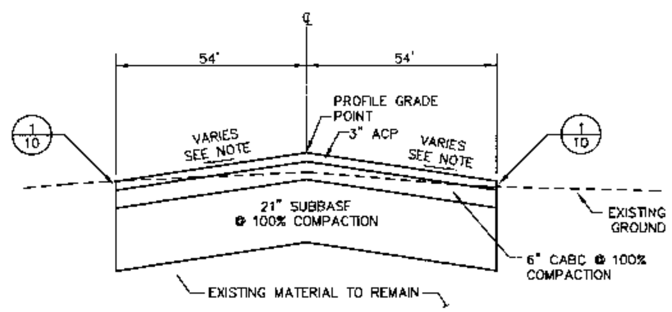
RUNWAY 18-36 RESURFACING

STA 31+50 to STA 45+50
STA 64+50 to STA ~~71+25~~ 71+00



RUNWAY 18-36 RESURFACING

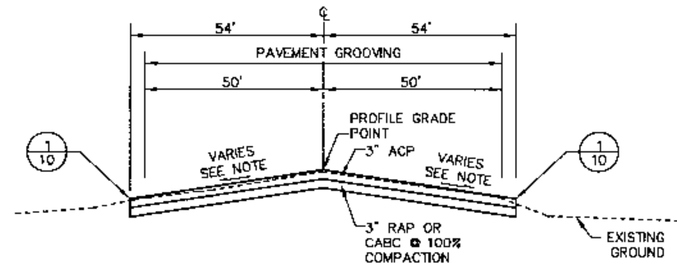
STA 71+62 to STA 73+34.82



NOTE: SLOPE IS 1% AT STA 28+50 AND TRANSITIONS TO 1.5% AT STA 29+50

RUNWAY 18 OVERRUN RECONSTRUCTION - ADD ALT #1

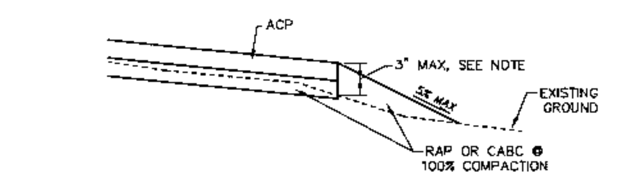
STA 28+50 to STA 29+00



NOTE: SLOPE IS 1.5% AT STA 45+50 AND TRANSITIONS TO 1% AT STA 46+00
SLOPE IS 1.5% AT STA ~~71+25~~ 71+00 AND TRANSITIONS TO 1% AT STA 71+62
SLOPE IS 1% AT STA 64+00 AND TRANSITIONS TO 1.5% AT STA 64+50

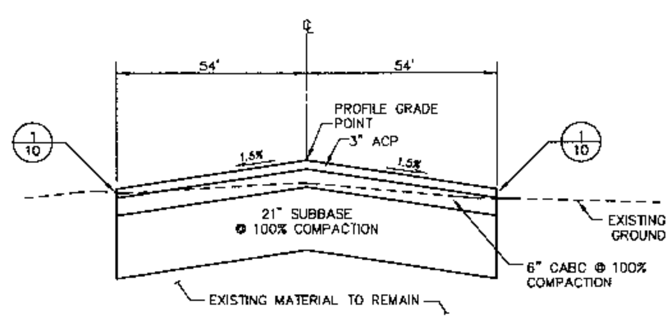
RUNWAY 18-36 RESURFACING

STA 45+50 to STA 46+00
STA 71+25 to STA 71+62
STA 64+00 to STA 64+50



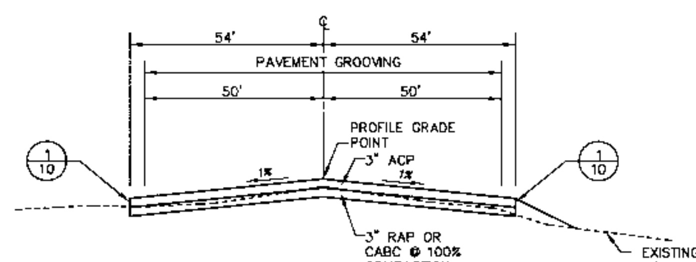
NOTE: WHEN VERTICAL DISTANCE EXCEEDS 3", PROVIDE RAP OR CABC

(1/10) RUNWAY 18-36 PAVEMENT EDGE



RUNWAY 18 OVERRUN RECONSTRUCTION - ADD ALT #1

STA 29+00 to STA 31+50



RUNWAY 18-36 RESURFACING

STA 46+00 to STA 48+50
STA 62+50 to STA 64+00

NOTES

1. EXCAVATION AND PROCESSING OF EXISTING AC PAVEMENT WILL BE PAID FOR UNDER P–161a.
2. RAP MAY NOT BE USED FOR THE RUNWAY 18 OVERRUN RECONSTRUCTION WORK.
3. ESTIMATED PAVEMENT THICKNESS VARIES BETWEEN 1.25" AND 6". SEE SUBSURFACE EXPLORATION REPORT PREPARED BY DOWL ENGINEERS DATED APRIL 2008 FOR PAVEMENT CORING DATA.
4. ALL RAP MATERIAL MUST BE USED BEFORE CABC CAN BE SUBSTITUTED.
5. EXCESS RAP IS THE PROPERTY OF THE STATE AND SHALL BE HAULED AND STOCKPILED AS DIRECTED BY THE ENGINEER.

AS-BUILT 10/2009 SHEET 10 OF 43

BY	DATE	REVISIONS	BY	DATE	REVISIONS
				2/3/10	AS-BUILT

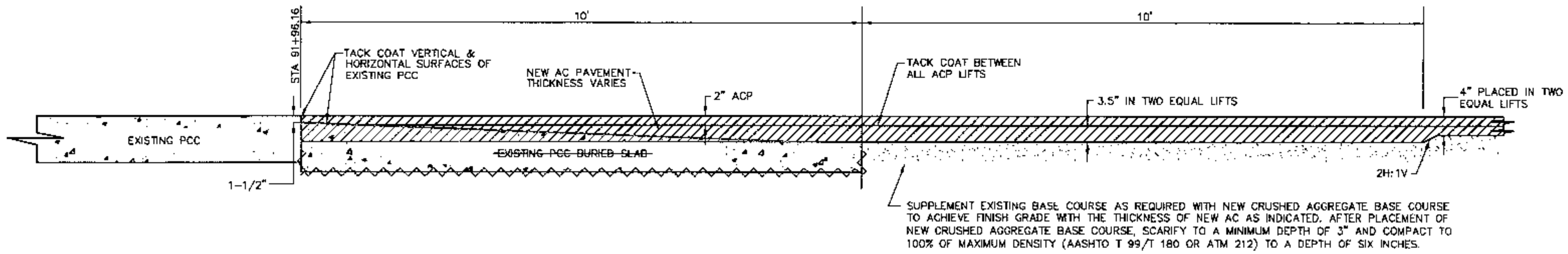
PLANS DEVELOPED BY MBA ENGINEERS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

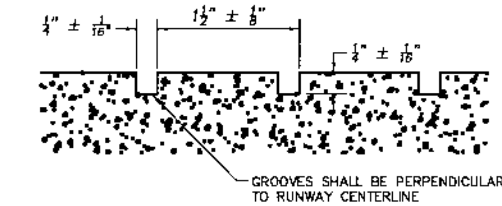
KING SALMON AIRPORT
KING SALMON, ALASKA
AIRPORT IMPROVEMENTS
PROJECT NO. 53147
AIP No. 3–02–0148–10–2008
TYPICAL SECTIONS & DETAILS

SHEET 10 OF 42

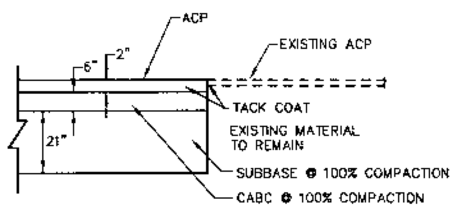
Date Plotted:	December 28, 2009	Designed By:	AMS
Plot Ratio and Layout:	SCRIPT FILE: DOWL FILE No: 233-11	Checked By:	SDO/BRH
File:	W:\Projects\King Salmon\King Salmon 53147 As-builts\AutoCAD\DOT-AKN_Stg2.dwg 2008-10-31	Drawn By:	



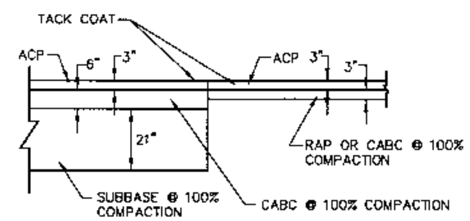
NEW ACP / EXISTING PCC TRANSITION



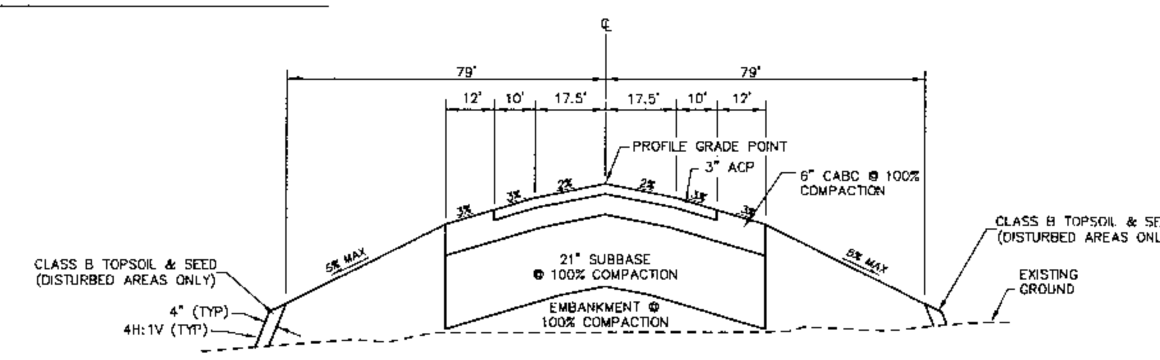
TYPICAL GROOVING SECTION



NEW 2" ACP / EXISTING ACP TRANSITION

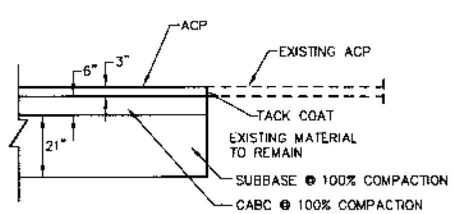


NEW 3" ACP / NEW 3" ACP & 3" RAP TRANSITION

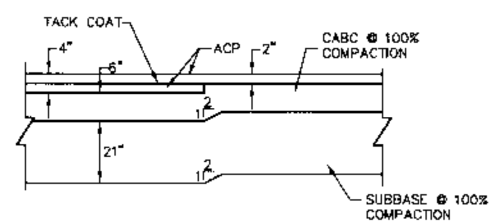


GA TAXIWAY - ADD ALT #2

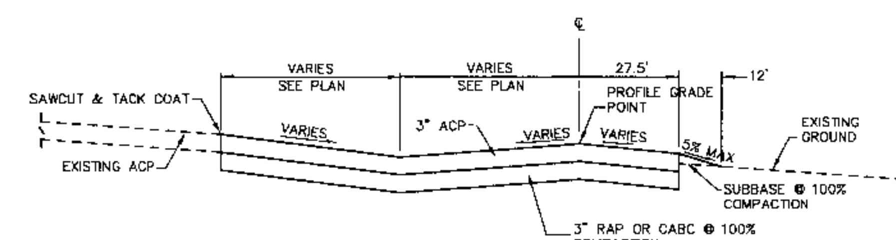
STA 401+50 to STA 403+39.31



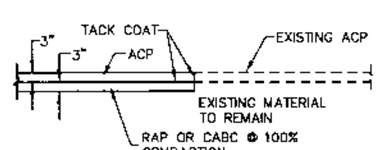
NEW 3" ACP / EXISTING ACP TRANSITION



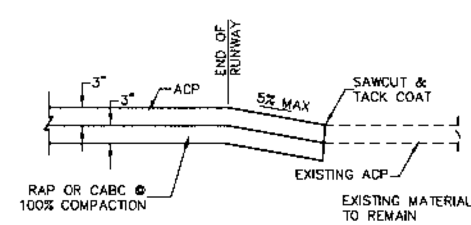
NEW 4" ACP / NEW 2" ACP TRANSITION



APRON PAVEMENT REPLACEMENT - ADD ALT #2



NEW 3" ACP & 3" RAP / EXISTING ACP TRANSITION



RUNWAY END TRANSITION

NOTES

1. EXCAVATION AND PROCESSING OF EXISTING AC PAVEMENT WILL BE PAID FOR UNDER P-161a.
2. ESTIMATED PAVEMENT THICKNESS VARIES BETWEEN 1.25" AND 6". SEE SUBSURFACE EXPLORATION REPORT PREPARED BY DOWL ENGINEERS DATED APRIL 2008 FOR PAVEMENT CORING DATA.
3. ALL RAP MATERIAL MUST BE USED BEFORE CABC CAN BE SUBSTITUTED.
4. EXCESS RAP IS THE PROPERTY OF THE STATE AND SHALL BE HAULED AND STOCKPILED AS DIRECTED BY THE ENGINEER.

AS-BUILT 10/2009 SHEET 11 OF 43

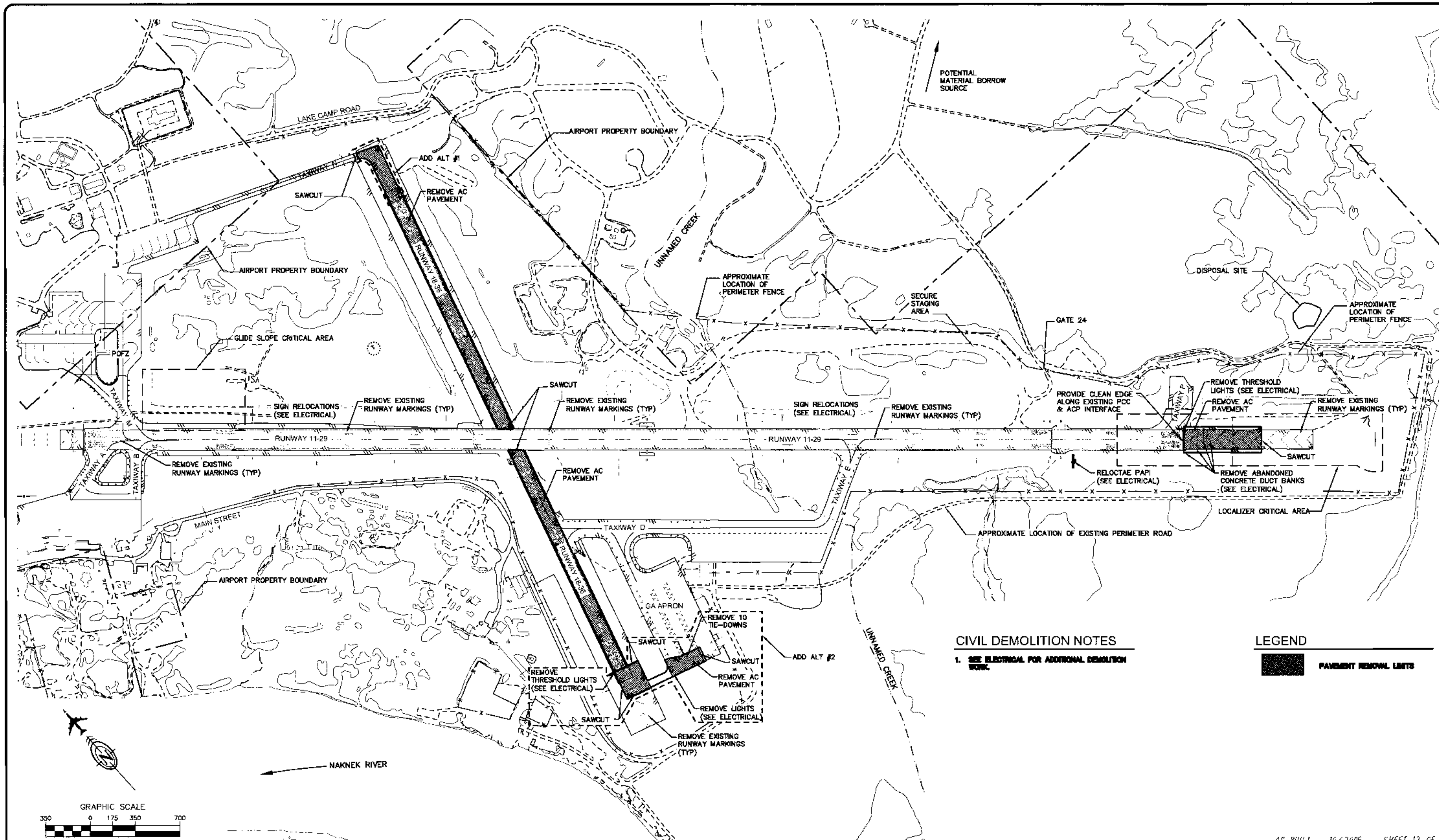
BY	DATE	REVISIONS	BY	DATE	REVISIONS
			[illegible]	2/4/10	AS-BUILT

PLANS DEVELOPED BY MBA ENGINEERS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

KING SALMON AIRPORT
KING SALMON, ALASKA
AIRPORT IMPROVEMENTS
PROJECT NO. 53147
AIP No. 3-02-0148-10-2008
TYPICAL SECTIONS & DETAILS

SHEET 11 OF 42



CIVIL DEMOLITION NOTES

1. SEE ELECTRICAL FOR ADDITIONAL DEMOLITION WORK.

LEGEND

PAVEMENT REMOVAL LIMITS

AS-BUILT 10/2009 SHEET 12 OF 43

BY	DATE	REVISIONS	BY	DATE	REVISIONS
				2/3/10	AS-BUILT

PLAN DEVELOPED BY DOWL ENGINEERS

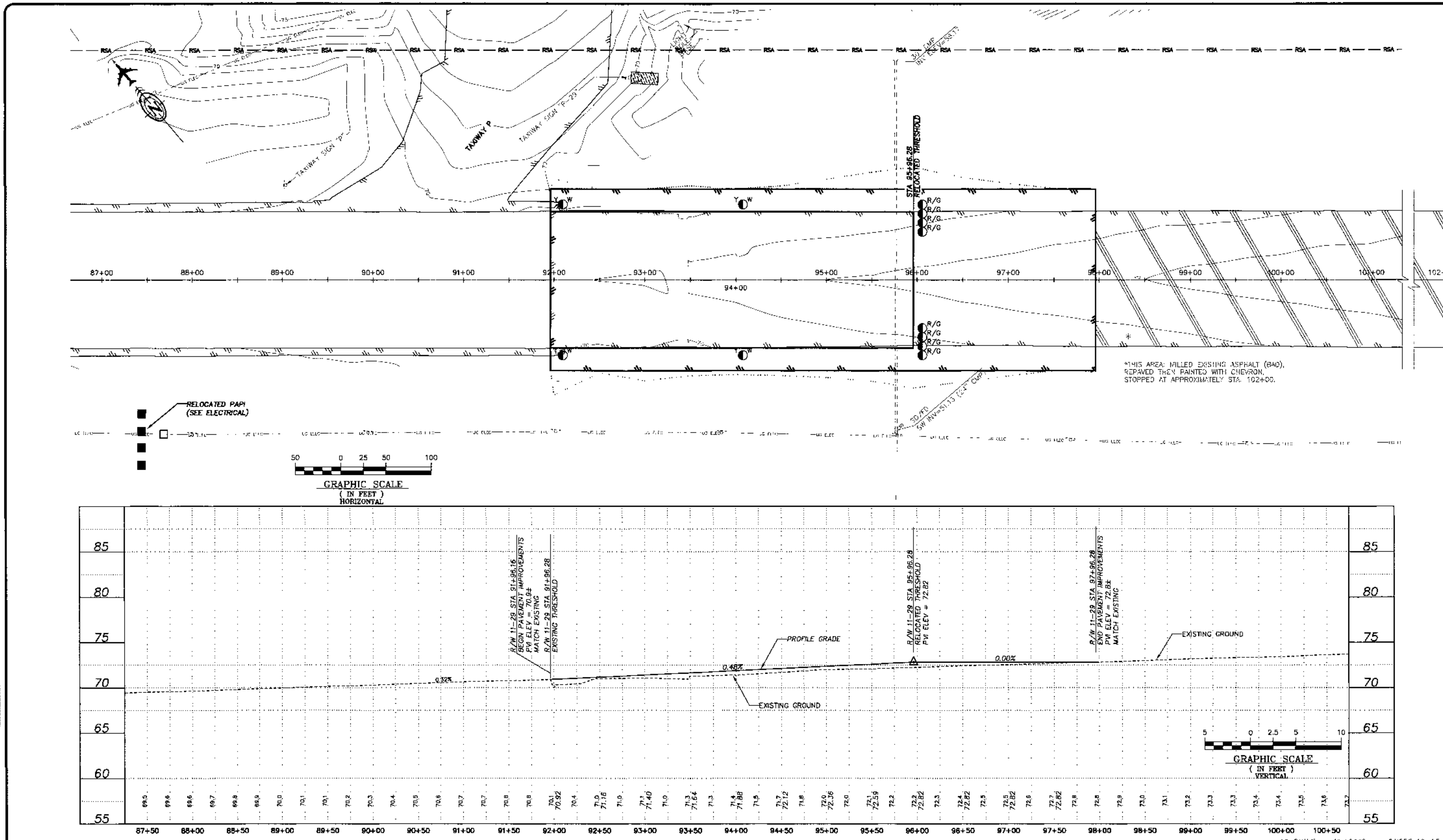
STATE OF ALASKA 49TH Brian R. Hanson CE 11132 REGISTERED PROFESSIONAL ENGINEER

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

KING SALMON AIRPORT
KING SALMON, ALASKA
AIRPORT IMPROVEMENTS
PROJECT NO. 53147
AIP No. 3-02-0148-10-2008
CIVIL DEMOLITION

SHEET 12 OF 42

Date Plotted: December 28, 2009 | Plot Style and Layout: | File: ... SCRIPT FILE: DEMO | DOWL FILE No. 333-11 | 2008-4-15 | Designed By: AHS | Checked By: SDD/BRH | Drawn By:



AS-BUILT 10/2009 SHEET 13 OF 43

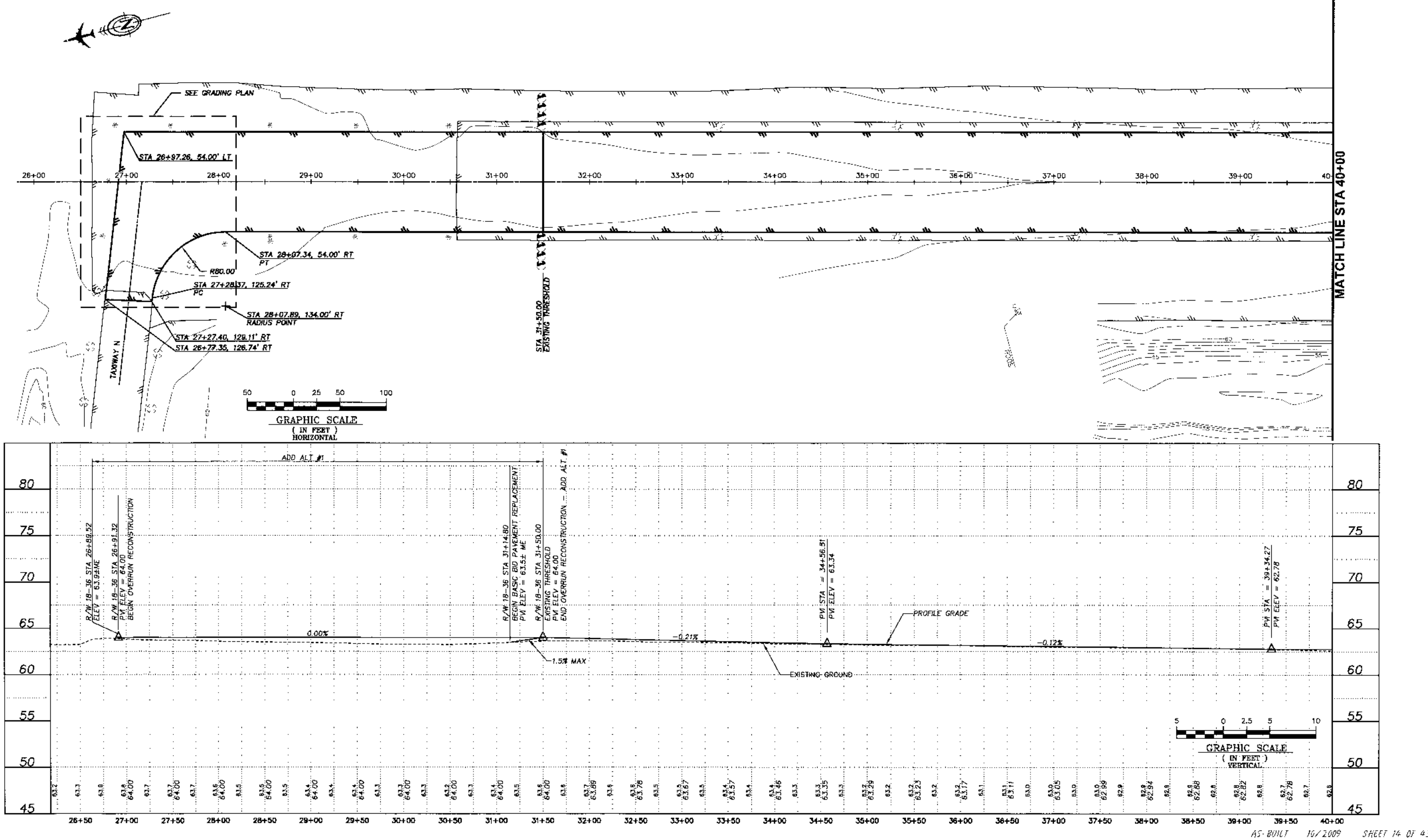
BY	DATE	REVISIONS	BY	DATE	REVISIONS
				2/3/10	AS-BUILT

PLAN DEVELOPED BY DOWL ENGINEERS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

KING SALMON AIRPORT
KING SALMON, ALASKA
AIRPORT IMPROVEMENTS
PROJECT NO. 53147
AIP No. 3-02-0148-10-2008
RUNWAY 29 THRESHOLD RELOCATION PLAN & PROFILE
STA 87+00 TO STA 101+00

SHEET 13 OF 42



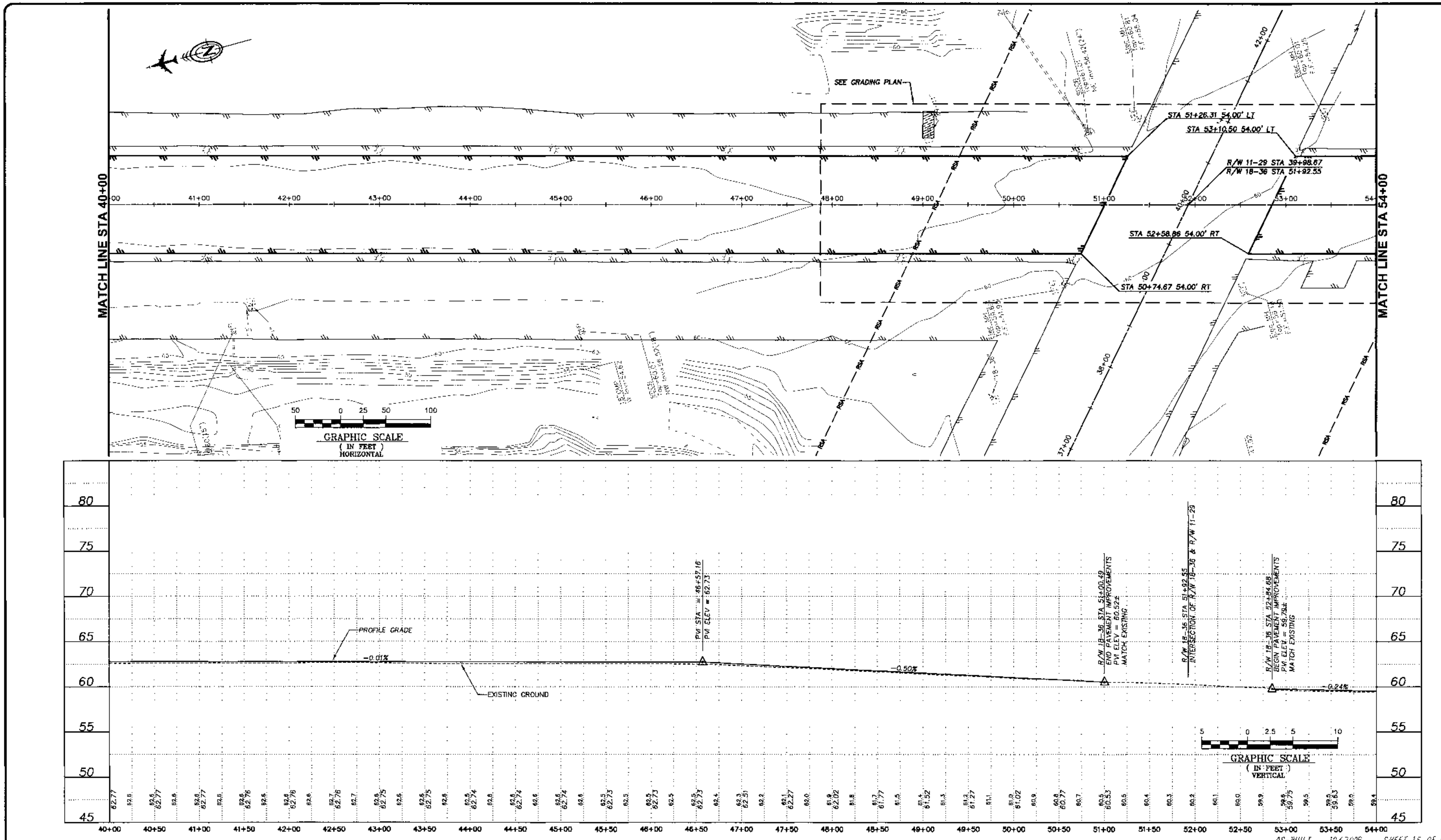
BY	DATE	REVISIONS	BY	DATE	REVISIONS
				1/5/10	AS-BUILT

PLAN DEVELOPED BY DOWL ENGINEERS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

KING SALMON AIRPORT
KING SALMON, ALASKA
AIRPORT IMPROVEMENTS
PROJECT NO. 53147
AIP No. 3-02-0148-10-2008
RUNWAY 18-36 PLAN & PROFILE
STA 26+50 TO STA 40+00

SHEET 14 OF 42

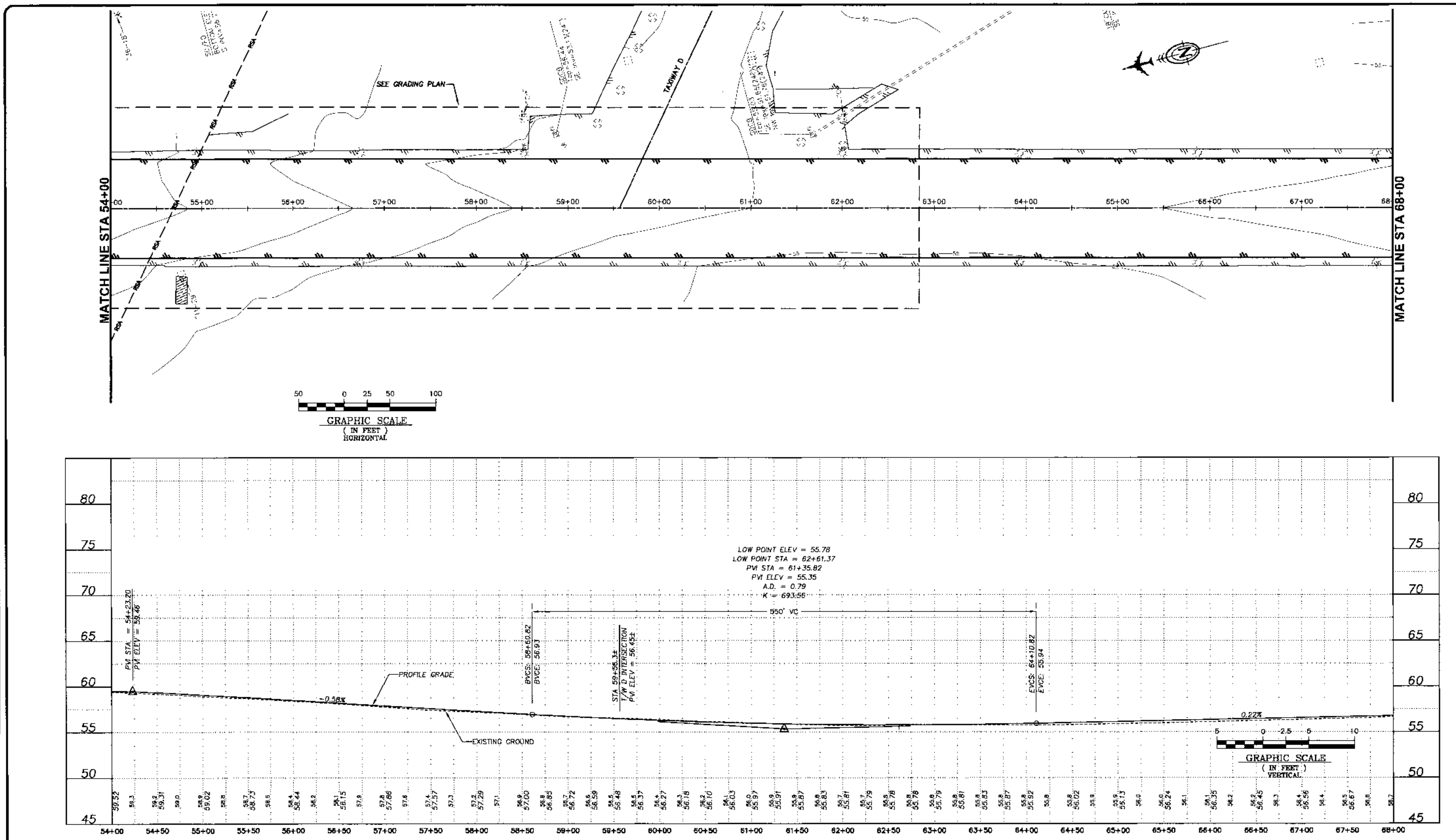


MATCH LINE STA 40+00
MATCH LINE STA 54+00
SEE GRADING PLAN
STA 51+26.31 54.00' LT
STA 53+10.50 54.00' LT
R/W 11-29 STA 39+98.67
R/W 18-36 STA 51+92.55
STA 52+58.86 54.00' RT
STA 50+74.67 54.00' RT
GRAPHIC SCALE
(IN FEET)
HORIZONTAL
PROFILE GRADE
-0.01%
EXISTING GROUND
PVI STA = 46+57.16
PVI ELEV = 62.73
-0.50%
R/W 18-36 STA 51+00.49
END PAVEMENT IMPROVEMENTS
PVI ELEV = 60.52±
MATCH EXISTING
R/W 18-36 STA 51+92.55
INTERSECTION OF R/W 18-36 & R/W 11-29
R/W 18-36 STA 52+84.88
BEGIN PAVEMENT IMPROVEMENTS
PVI ELEV = 59.79±
MATCH EXISTING
0.24%
GRAPHIC SCALE
(IN FEET)
VERTICAL
AS-BUILT 10/2009
SHEET 15 OF 43

BY / DATE / REVISIONS	BY / DATE / REVISIONS — 2/?/10 AS-BUILT	PLAN DEVELOPED BY DOWL ENGINEERS	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES CENTRAL REGION

KING SALMON AIRPORT
KING SALMON, ALASKA
AIRPORT IMPROVEMENTS
PROJECT NO. 53147
AIP No. 3-02-0148-10-2008
RUNWAY 18-36 PLAN & PROFILE
STA 40+00 TO STA 54+00

SHEET 15 OF 42



AS-BUILT 10/2009 SHEET 16 OF 43

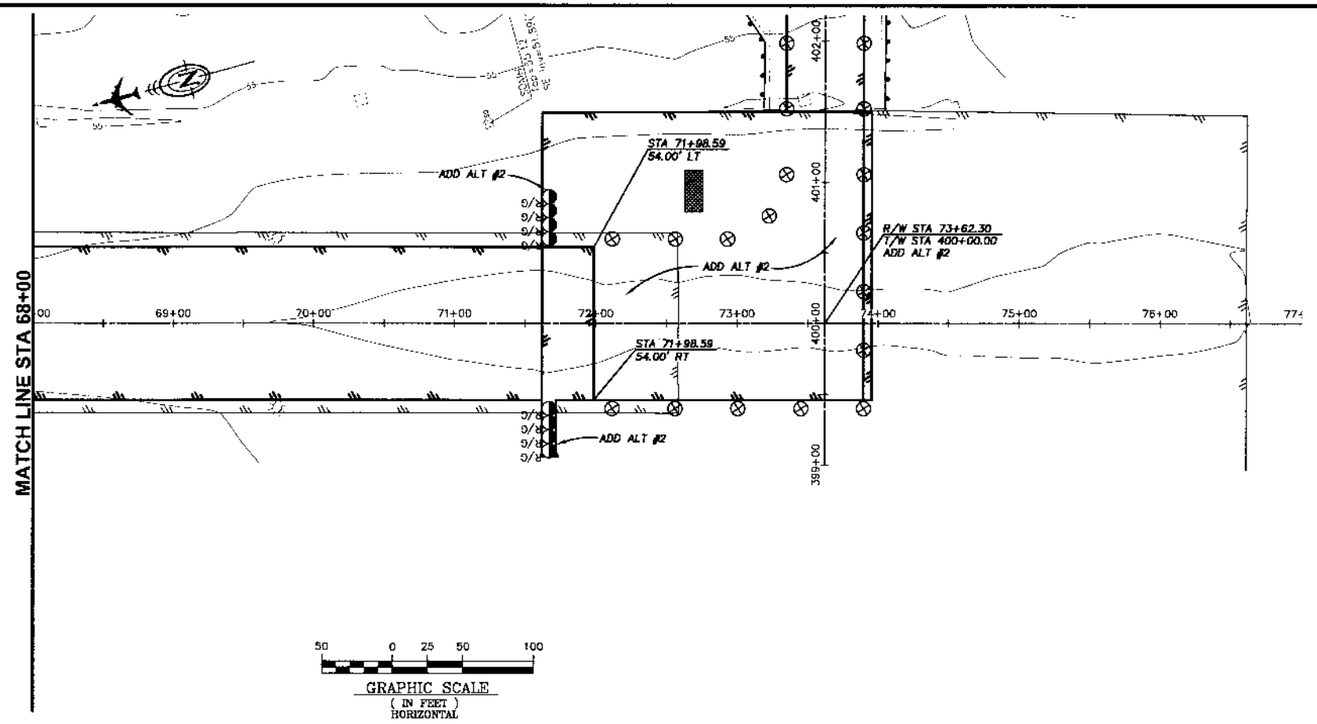
BY	DATE	REVISIONS	BY	DATE	REVISIONS
			SMR	2/3/10	AS-BUILT

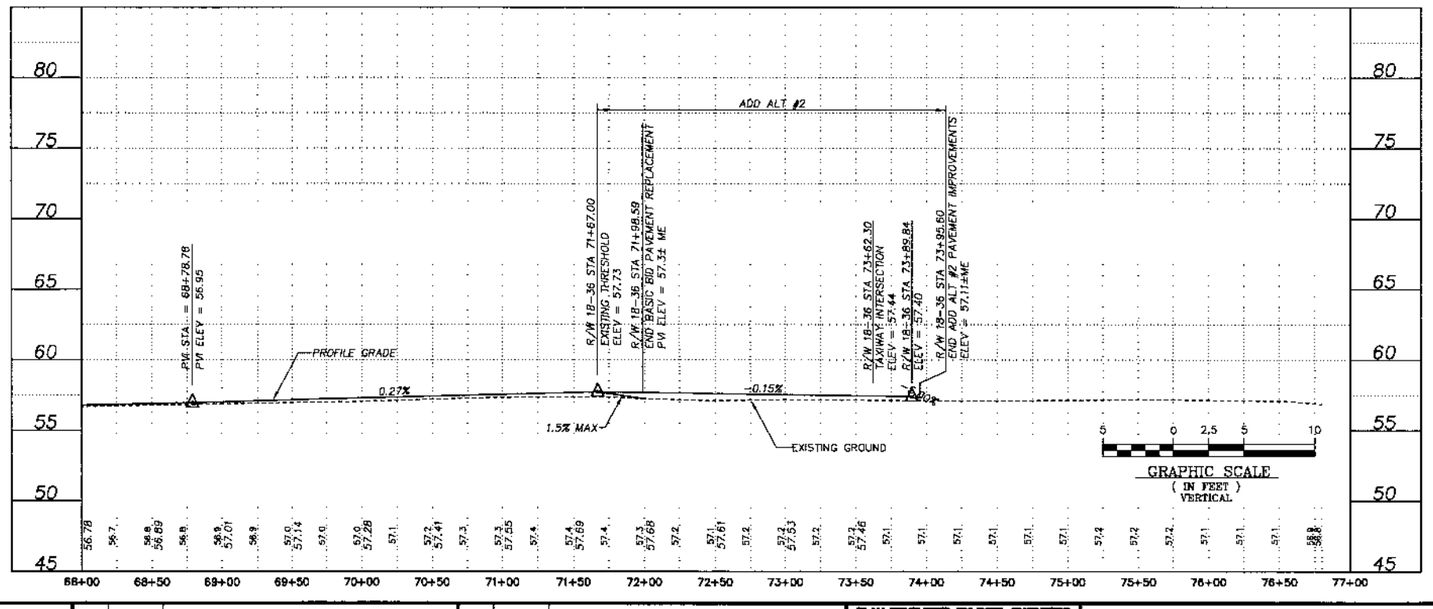
PLAN DEVELOPED BY DOWL ENGINEERS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

KING SALMON AIRPORT
KING SALMON, ALASKA
AIRPORT IMPROVEMENTS
PROJECT NO. 53147
AIP No. 3-02-0148-10-2008
RUNWAY 18-36 PLAN & PROFILE
STA 54+00 TO STA 68+00

SHEET 16 OF 42





Date Plotted:	December 28, 2009
Plot Style and Layout:	55PT FILE PMP
File:	M:\Projects\Viking Salmon\Viking Salmon 53147 As-built\AutoCAD\DRW-AKN_Sht2.dwg

Designed By:	AMS
Checked By:	SSD/JBH
Drawn By:	

BY	DATE	REVISIONS	BY	DATE	REVISIONS
			Engr	3/3/10	AS-BUILT

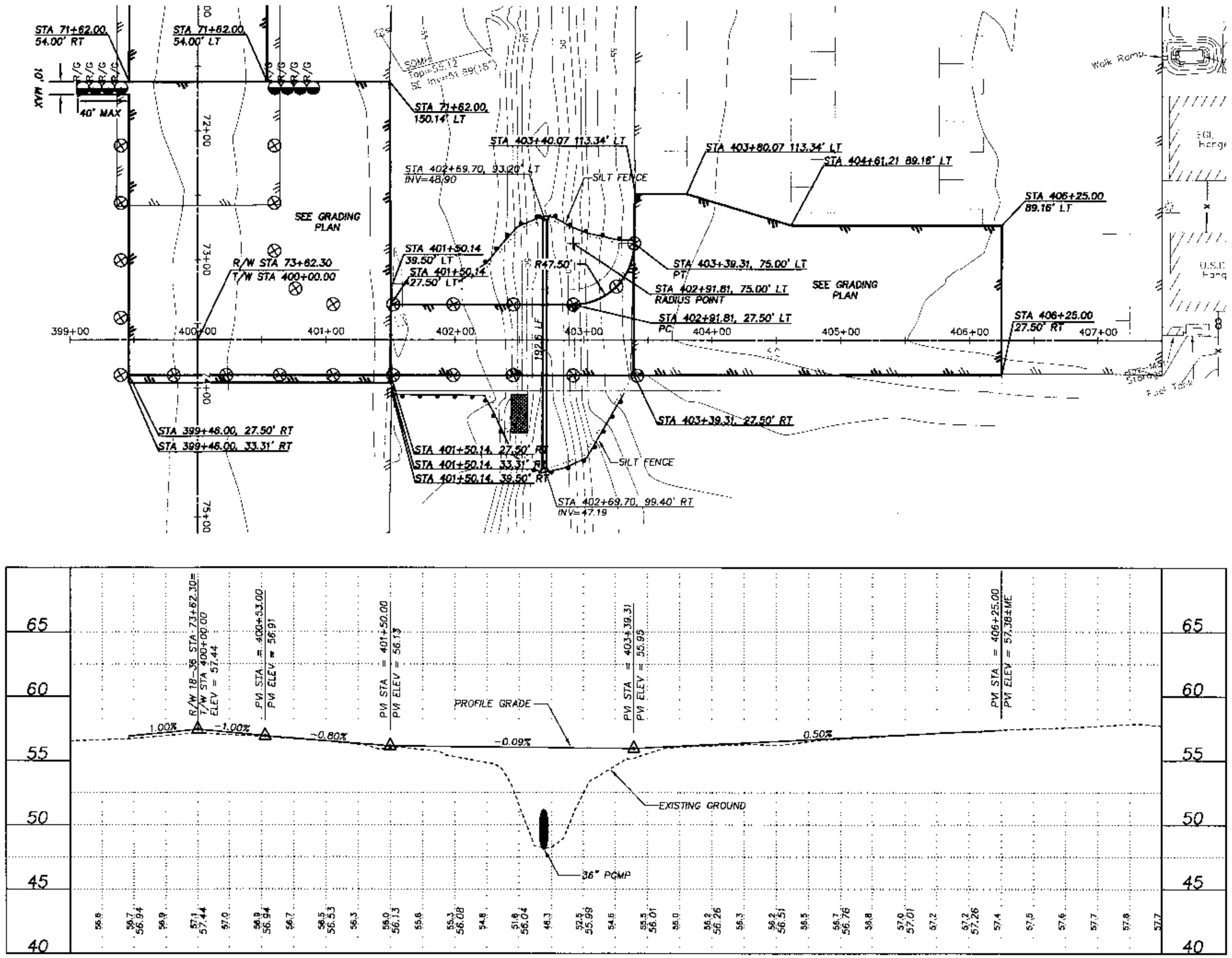
PLAN DEVELOPED BY DOWL ENGINEERS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
CENTRAL REGION

KING SALMON AIRPORT
KING SALMON, ALASKA
AIRPORT IMPROVEMENTS
PROJECT NO. 53147
AIP No. 3-02-0148-10-2008
RUNWAY 18-36 PLAN & PROFILE
STA 68+00 TO STA 77+00

SHEET 17 OF 42

AS-BUILT 10/2009 SHEET 17 OF 43



50 0 25 50 100

GRAPHIC SCALE
(IN FEET)
HORIZONTAL

NOTE:
ALL STATIONS AND OFFSETS ARE BASED ON THE TAXIWAY CENTERLINE UNLESS OTHERWISE NOTED.

10 0 5 10 20

GRAPHIC SCALE
(IN FEET)
VERTICAL

AS-BUILT 10/2009 SHEET 18 OF 43

BY	DATE	REVISIONS	BY	DATE	REVISIONS
					AS-BUILT

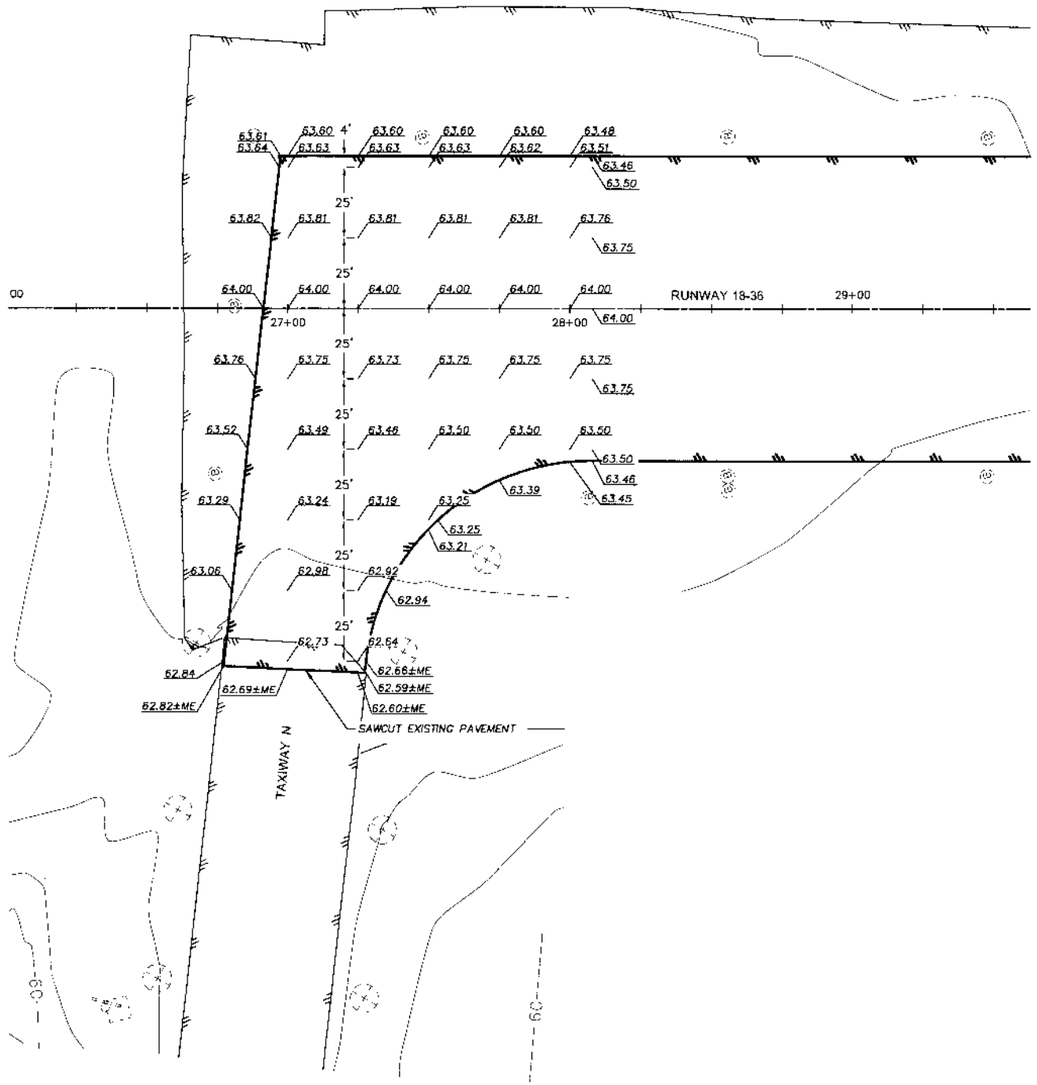
PLAN DEVELOPED BY DOWL ENGINEERS

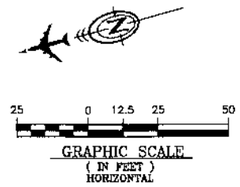
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

KING SALMON AIRPORT
KING SALMON, ALASKA
AIRPORT IMPROVEMENTS
PROJECT NO. 53147
AIP No. 3-02-0148-10-2008
TAXIWAY & APRON PLAN & PROFILE
ADDITIVE ALTERNATE #2

SHEET 18 OF 42

Date Plotted: December 28, 2009
Plot Ratio and Layout:
File: K:\Projects\King Salmon\King Salmon 53147 As-builts\AutoCAD\DRW-AKH_Stg2.dwg
SCRIPT FILE: P&P
DOWL FILE No: 233-11 2008-4-18
Designed By: AMS
Checked By: SGO/BRH
Drawn By:





Date Plotted:	December 28, 2009
Plot Ratio and Layout:	
File:	W:\Projects\King Salmon\King_Salmon_53147 As-built\AutoCAD\DPW-AKN_51x24.dwg

Designed By:	AMS
Checked By:	SGD/RRH
Drawn By:	

SCRIPT FILE: GRADING DWG. FILE No. 233-11
2009-4-16 16:38:31

AS-BUILT 10/2009 SHEET 19 OF 43

BY	DATE	REVISIONS

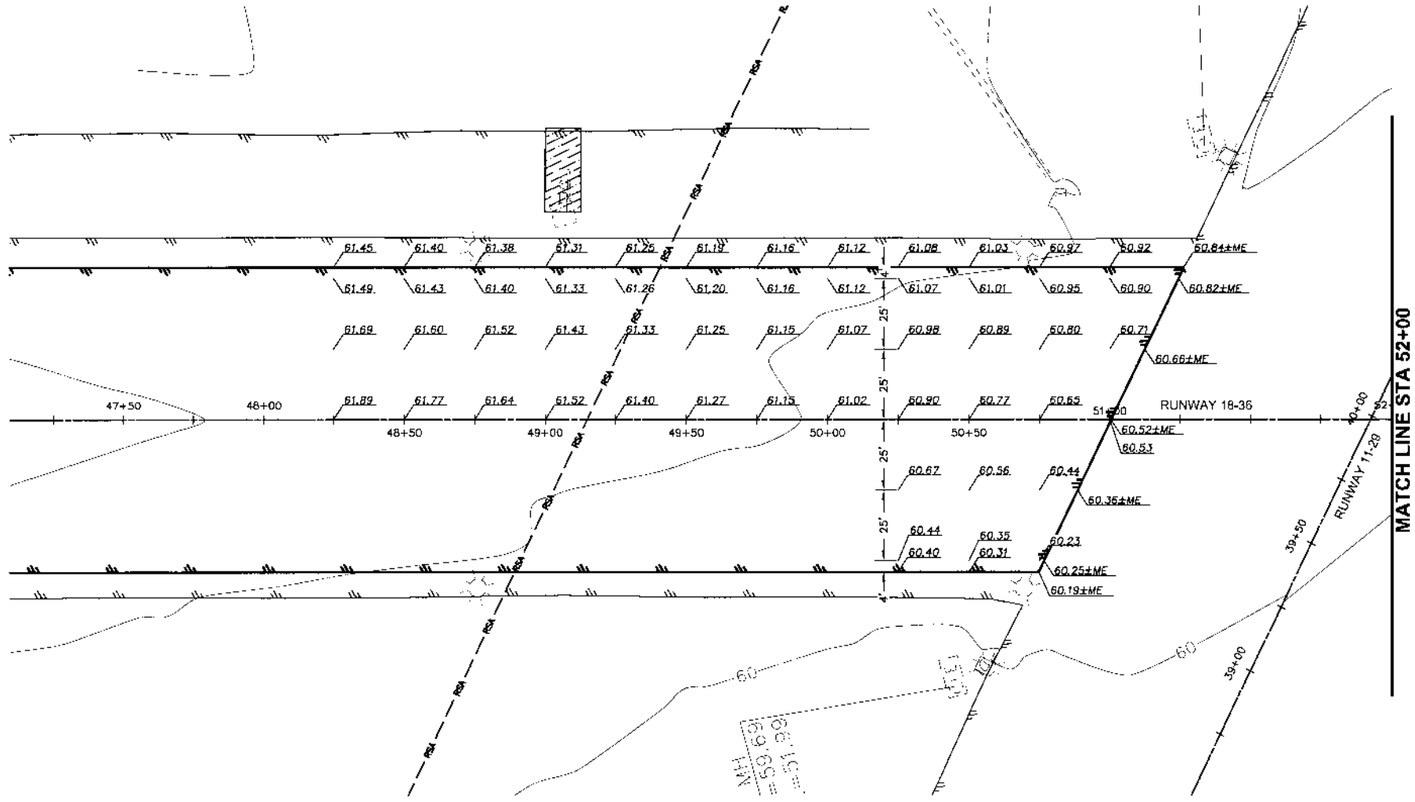
BY	DATE	REVISIONS
GAR	7/6/10	AS-BUILT

PLAN DEVELOPED BY DOWL ENGINEERS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

KING SALMON AIRPORT
KING SALMON, ALASKA
AIRPORT IMPROVEMENTS
PROJECT NO. 53147
AIP No. 3-02-0148-10-2008
GRADING PLAN – TAXIWAY N INTERSECTION
ADDITIVE ALTERNATE #1

SHEET 19 OF 42



0 12.5 25 50

GRAPHIC SCALE
(IN FEET)
HORIZONTAL

Date Plotted: December 28, 2009
Plot Ratio and Layout:
File: M:\Projects\Viking Salmon\Viking Salmon 53147 As-built\AutoCAD\GRH-ARP...Sig2.dwg

SCRIPT FILE: GRADING
DOWL FILE No: 233-11
2009-4-18 10:36:31

Sheet Set By: AMS
Checked By: SGO/RKH
Drawn By:

AS-BUILT 10/2009 SHEET 20 OF 43

BY	DATE	REVISIONS
	5-12-10	AS-BUILT

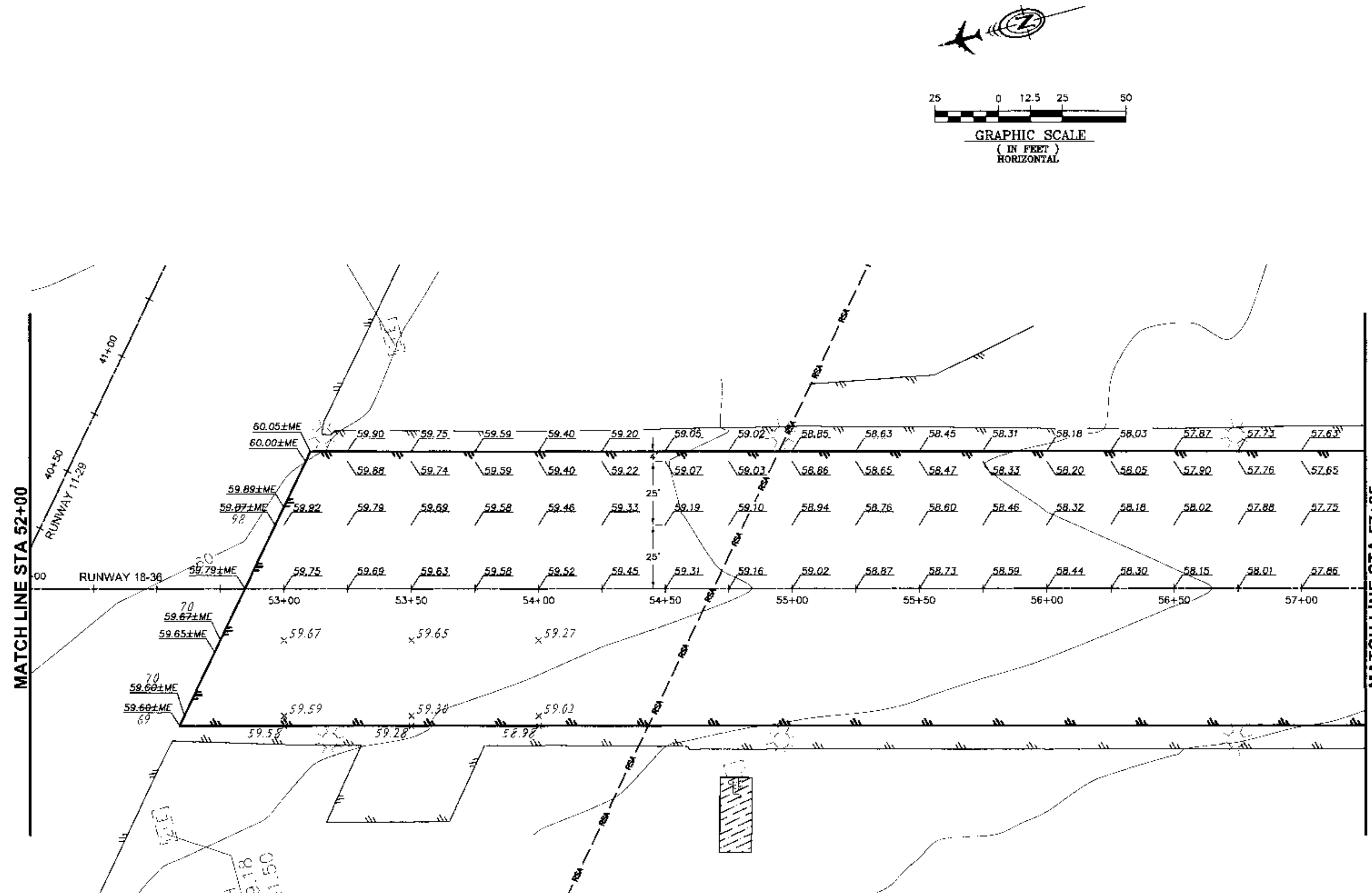
BY	DATE	REVISIONS

PLAN DEVELOPED BY DOWL ENGINEERS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

KING SALMON AIRPORT
KING SALMON, ALASKA
AIRPORT IMPROVEMENTS
PROJECT NO. 53147
AIP No. 3-02-0148-10-2008
GRADING PLAN
RUNWAY 18-36 & RUNWAY 11-29 INTERSECTION

SHEET 20 OF 42



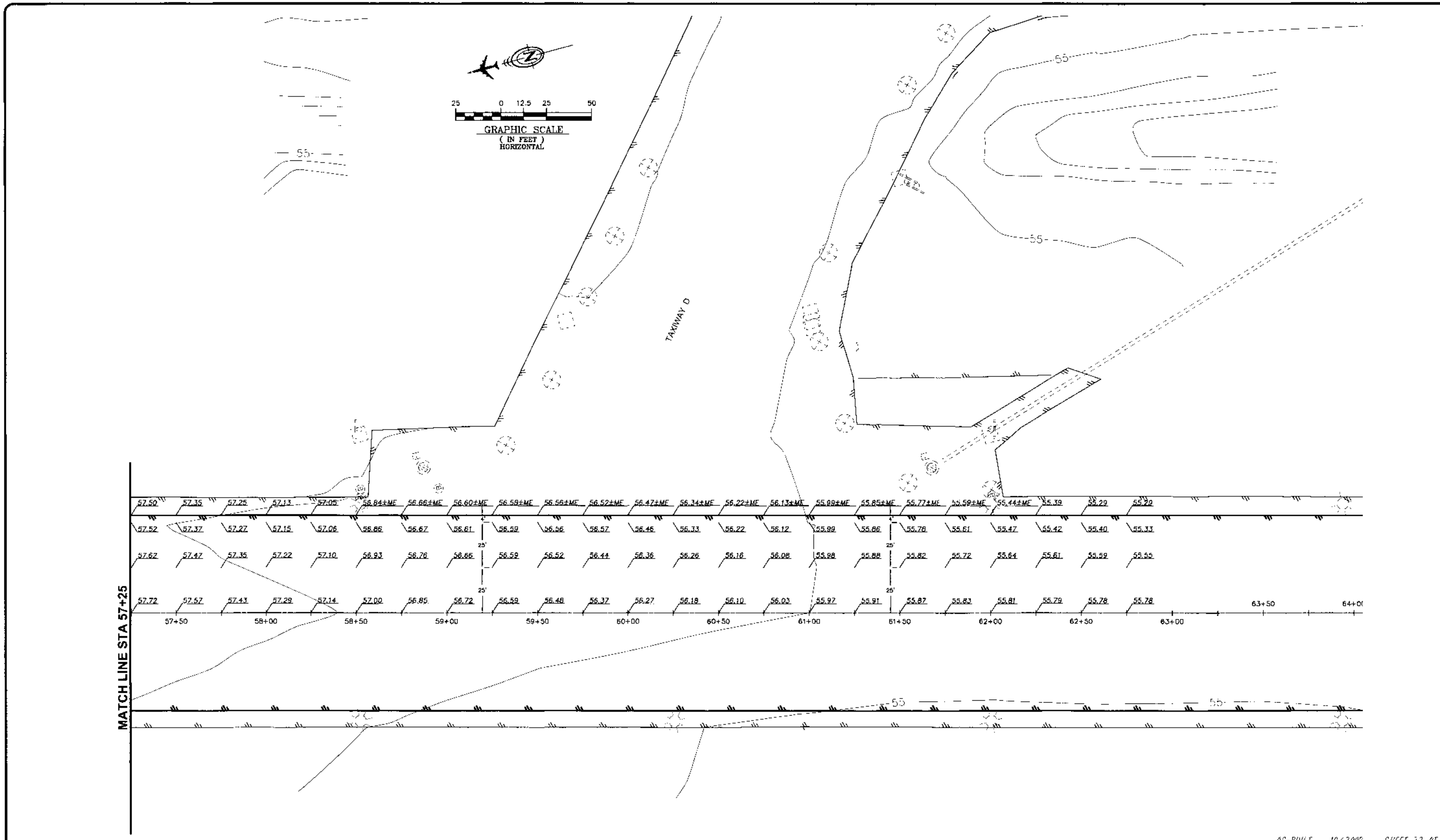
BY	DATE	REVISIONS	BY	DATE	REVISIONS
			SGM	3/15	AS-BUILT

PLAN DEVELOPED BY DOWL ENGINEERS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

KING SALMON AIRPORT
KING SALMON, ALASKA
AIRPORT IMPROVEMENTS
PROJECT NO. 53147
AIP No. 3-02-0148-10-2008
GRADING PLAN
RUNWAY 18-36 & RUNWAY 11-29 INTERSECTION

SHEET 21 OF 42



Date Plotted: December 28, 2009
Plot Ratio and Layout:
SCRIPT FILE: P&P
DOWL FILE No: 233-11
Designed By: AMS
Checked By: SCG/BRH
Drawn By:

AS-BUILT 10/2009 SHEET 22 OF 43

BY	DATE	REVISIONS

BY	DATE	REVISIONS
SAD	2/3/10	AS-BUILT

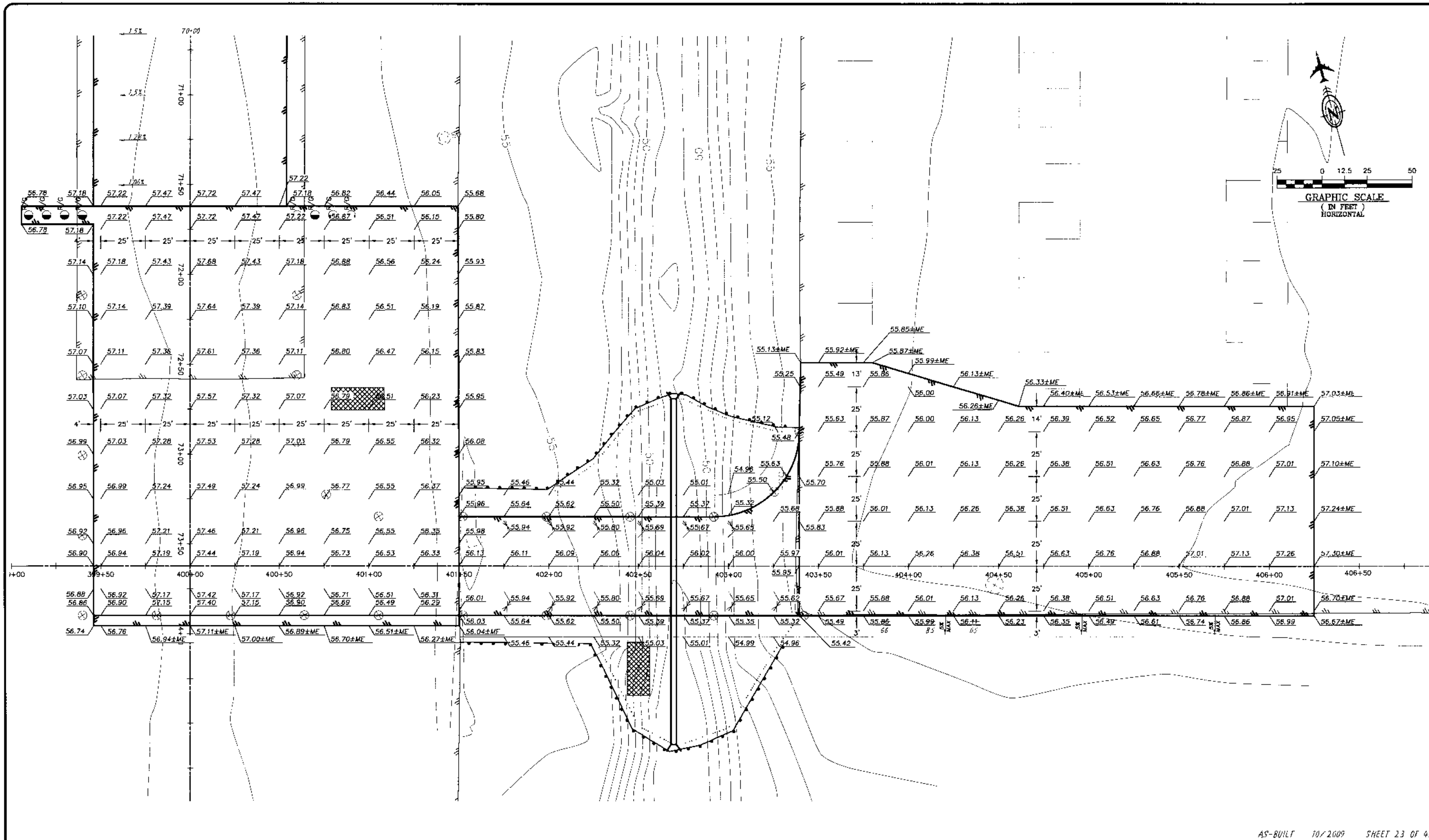
PLAN DEVELOPED BY DOWL ENGINEERS

STATE OF ALASKA 49TH Brian R. Hanson CE 11132 REGISTERED PROFESSIONAL ENGINEER

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

KING SALMON AIRPORT
KING SALMON, ALASKA
AIRPORT IMPROVEMENTS
PROJECT NO. 53147
AIP No. 3-02-0148-10-2008
GRADING PLAN
TAXIWAY D INTERSECTION

SHEET 22 OF 42



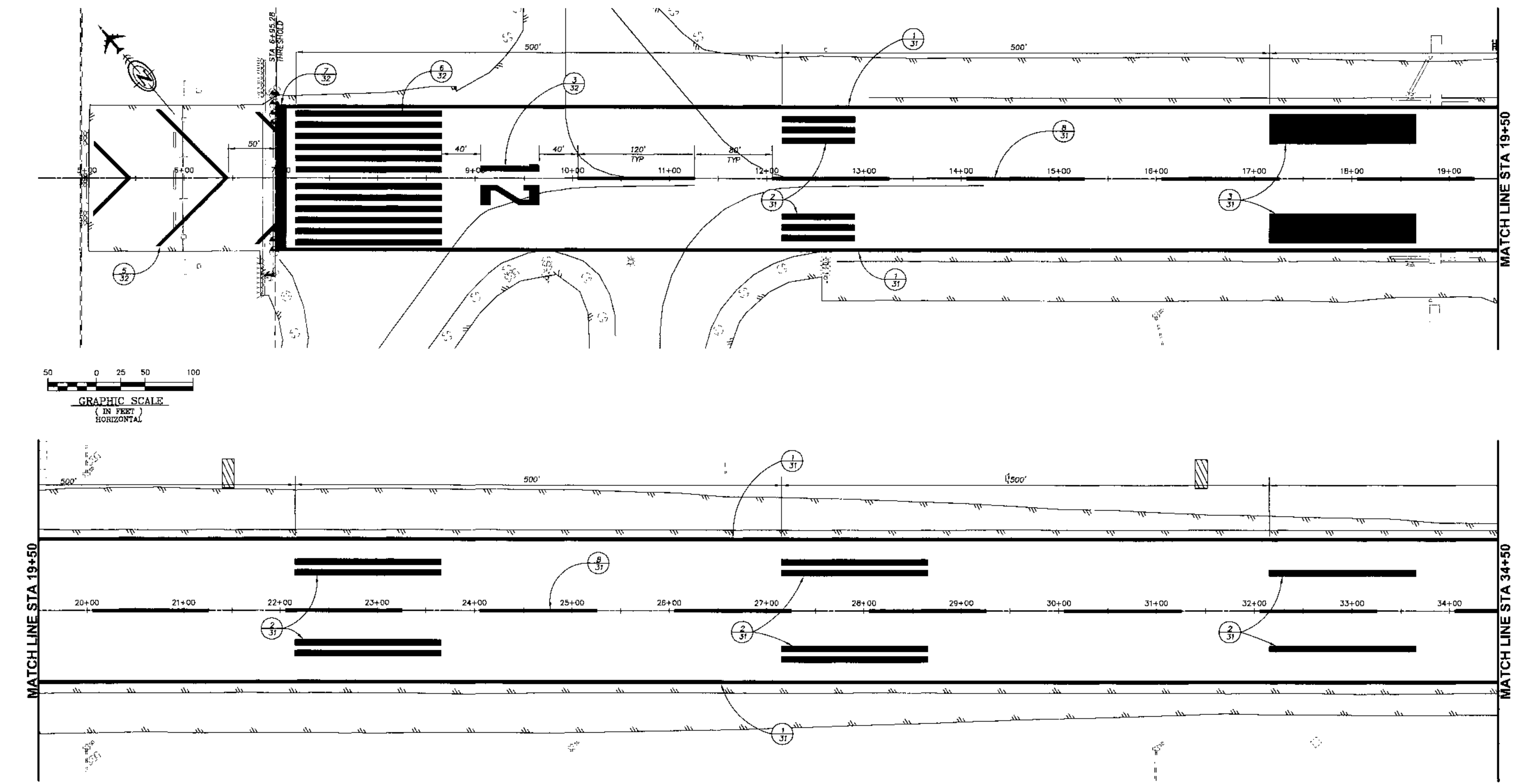
PLAN DEVELOPED BY DOWL ENGINEERS

BY	DATE	REVISIONS	BY	DATE	REVISIONS
			SMD	2/3/10	AS-BUILT

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

KING SALMON AIRPORT
KING SALMON, ALASKA
AIRPORT IMPROVEMENTS
PROJECT NO. 53147
AIP No. 3-02-0148-10-2008
GRADING PLAN - RUNWAY 36 END, TAXIWAY, & GA APRON
ADDITIVE ALTERNATE #2

SHEET 23 OF 42



AS-BUILT 10/2009 SHEET 24 OF 43

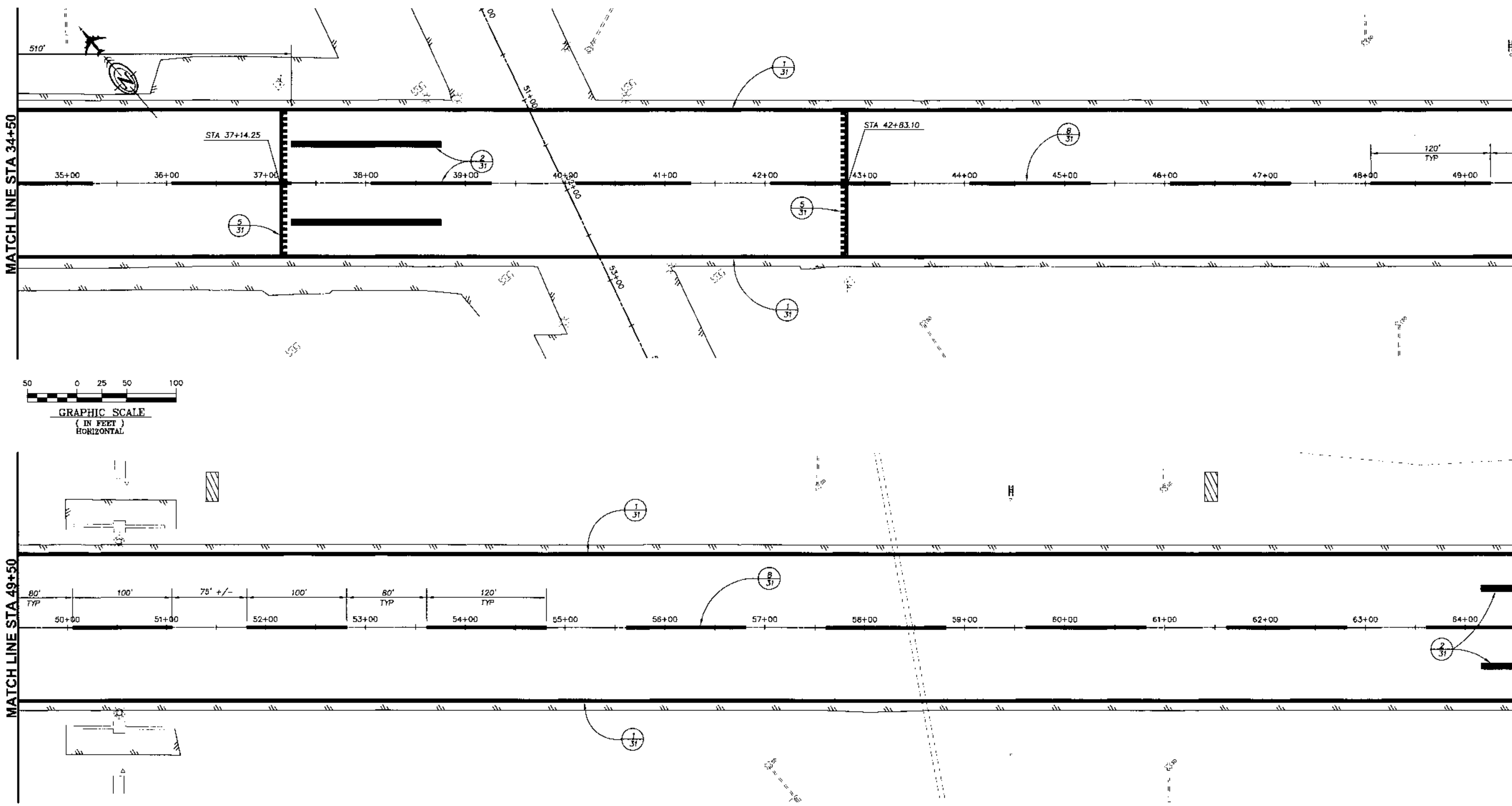
BY	DATE	REVISIONS	BY	DATE	REVISIONS
					AS-BUILT

PLAN DEVELOPED BY DOWL ENGINEERS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

KING SALMON AIRPORT
KING SALMON, ALASKA
AIRPORT IMPROVEMENTS
PROJECT NO. 53147
AIP No. 3-02-0148-10-2008
RUNWAY 12-30 MARKING LAYOUT PLAN
STA 5+00 TO STA 34+50

SHEET 24 OF 42



AS-BUILT 10/2009 SHEET 25 OF 43

BY	DATE	REVISIONS	BY	DATE	REVISIONS
			SHR	2/8/10	AS-BUILT

PLAN DEVELOPED BY DOWL ENGINEERS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

KING SALMON AIRPORT
KING SALMON, ALASKA
AIRPORT IMPROVEMENTS
PROJECT NO. 53147
AIP No. 3-02-0148-10-2008
RUNWAY 12-30 MARKING LAYOUT PLAN
STA 34+50 TO STA 64+50

SHEET 25 OF 42

AS-BUILT 10/2009 SHEET 26 OF 43

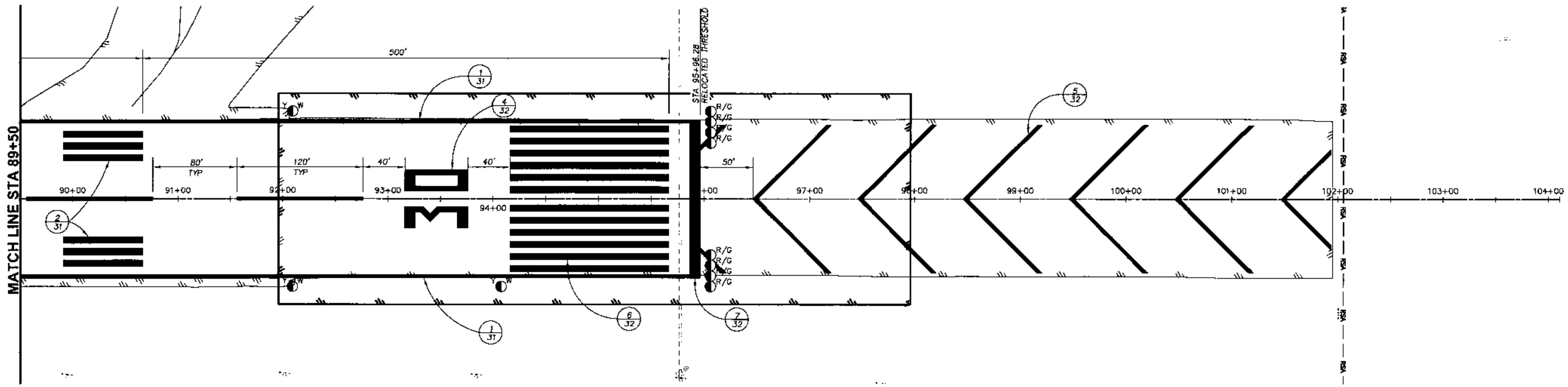
BY	DATE	REVISIONS	BY	DATE	REVISIONS
			SHD	2/3/10	AS-BUILT

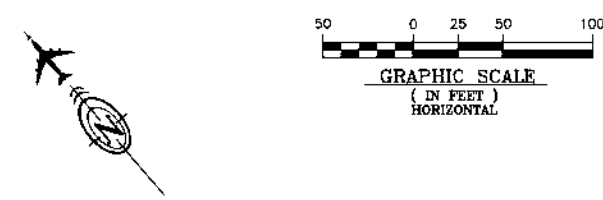
PLAN DEVELOPED BY DOWL ENGINEERS

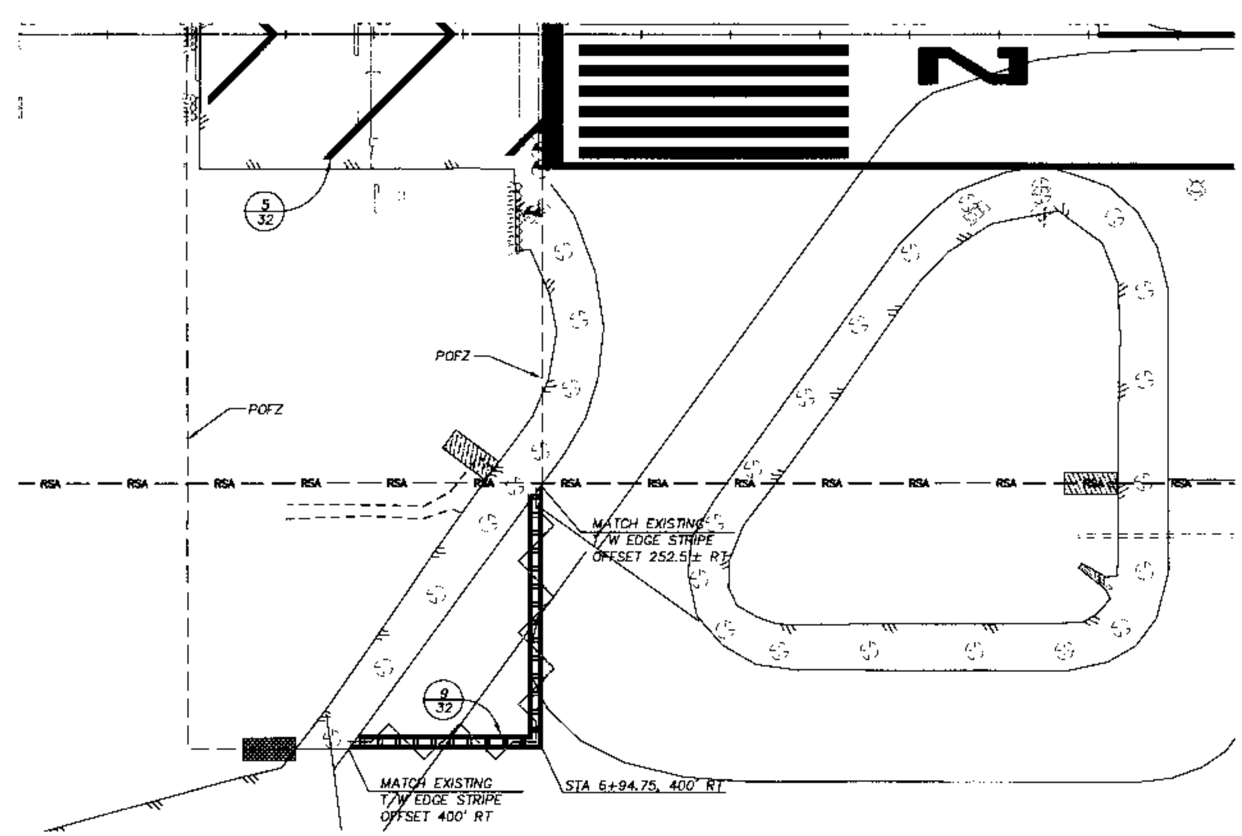
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
CENTRAL REGION

KING SALMON AIRPORT
KING SALMON, ALASKA
AIRPORT IMPROVEMENTS
PROJECT NO. 53147
AIP No. 3-02-0148-10-2008
RUNWAY 12-30 MARKING LAYOUT PLAN
STA 64+50 TO STA 89+50

SHEET 26 OF 42







POFZ MARKING DETAIL

AS-BUILT 10/2009 SHEET 27 OF 43

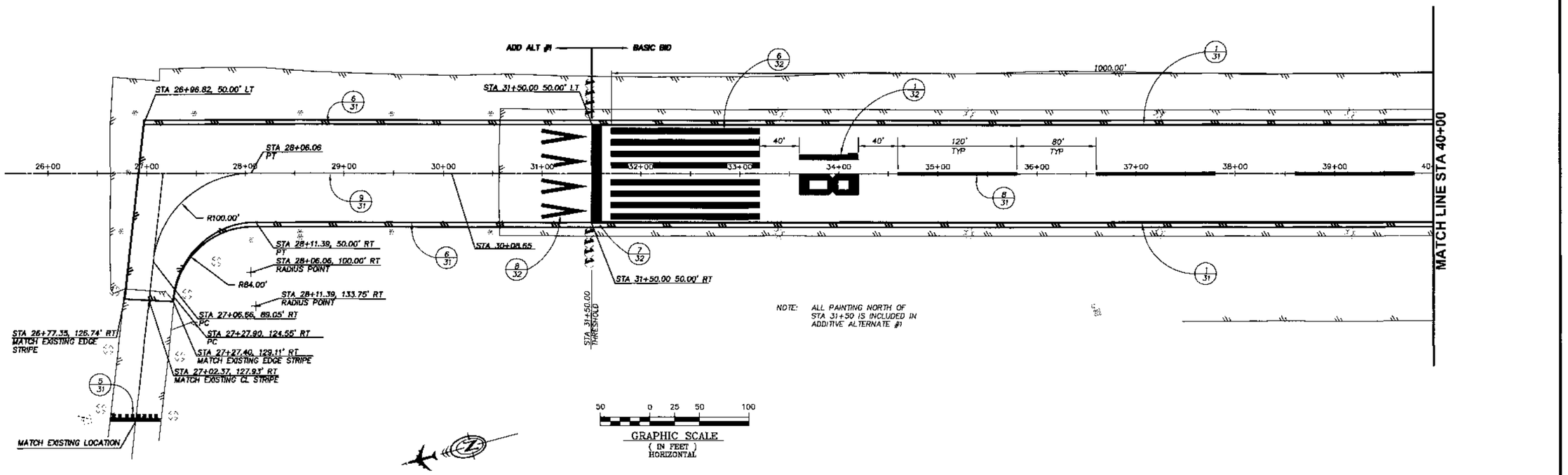
BY	DATE	REVISIONS	BY	DATE	REVISIONS
					AS-BUILT

PLAN DEVELOPED BY DOWL ENGINEERS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

KING SALMON AIRPORT
KING SALMON, ALASKA
AIRPORT IMPROVEMENTS
PROJECT NO. 53147
AIP No. 3-02-0148-10-2008
RUNWAY 12-30 MARKING LAYOUT PLAN
STA 89+50 TO STA 102+00

SHEET 27 OF 42



Date Plotted: December 28, 2009
Prof Rolls and Layout:
File: W:\Projects\Viking Salmon\Viking Salmon 53147 As-built\AutoCAD\DRW-400_Sht2.dwg

Designed By:	AMS
Checked By:	SGD/RRH
Drawn By:	
DWG. FILE No: 233-11	
2008-4-18	15:38:31

AS-BUILT 10/2009 SHEET 28 OF 43

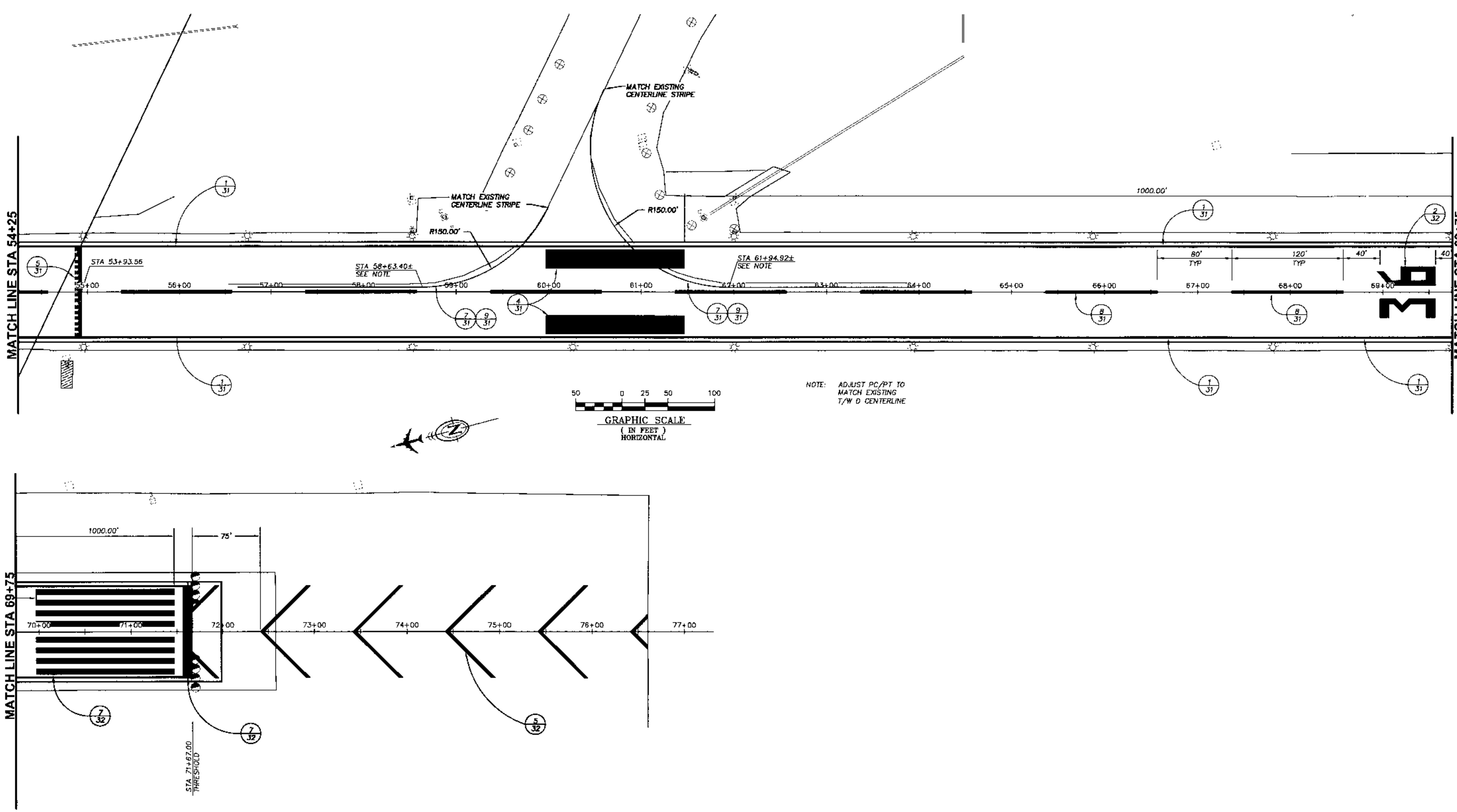
BY	DATE	REVISIONS
Smd	12-8-10	AS-BUILT

PLAN DEVELOPED BY DOWL ENGINEERS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
CENTRAL REGION

KING SALMON AIRPORT
KING SALMON, ALASKA
AIRPORT IMPROVEMENTS
PROJECT NO. 53147
AIP No. 3-02-0148-10-2008
RUNWAY 18-36 MARKING LAYOUT PLAN
STA 26+00 TO STA 54+25

SHEET 28 OF 42



BASIC BID

SEE SHEET 30 FOR ADD ALT #2 MARKINGS AND DIMENSIONS

AS-BUILT 10/2009 SHEET 29 OF 43

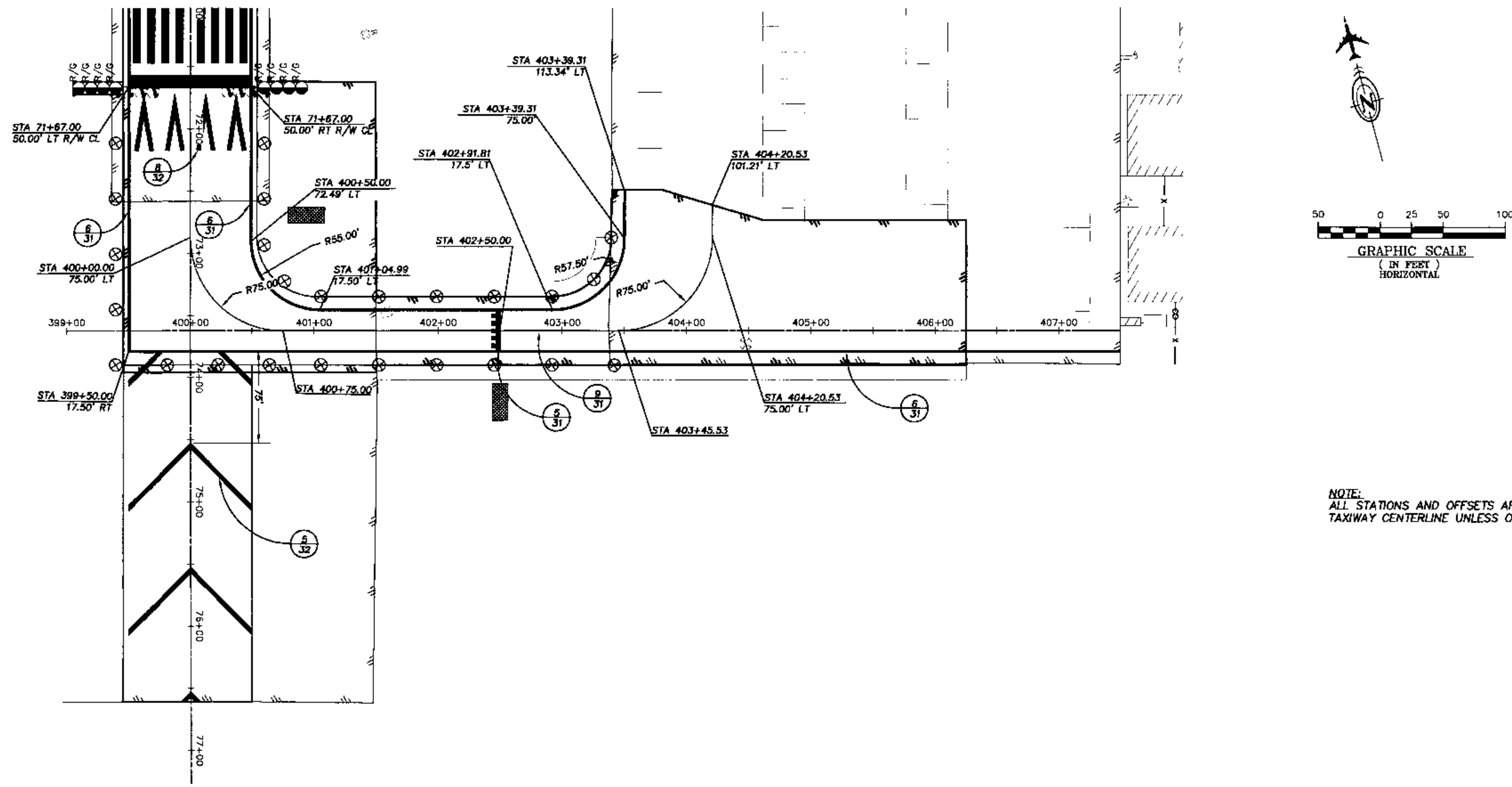
BY	DATE	REVISIONS	BY	DATE	REVISIONS
					AS-BUILT

PLAN DEVELOPED BY DOWL ENGINEERS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

KING SALMON AIRPORT
KING SALMON, ALASKA
AIRPORT IMPROVEMENTS
PROJECT NO. 53147
AIP No. 3-02-0148-10-2008
RUNWAY 18-36 MARKING LAYOUT PLAN
STA 54+25 TO STA 77+00

SHEET 29 OF 42



NOTE:
ALL STATIONS AND OFFSETS ARE BASED ON THE TAXIWAY CENTERLINE UNLESS OTHERWISE NOTED.

AS-BUILT 10/2009 SHEET 30 OF 43

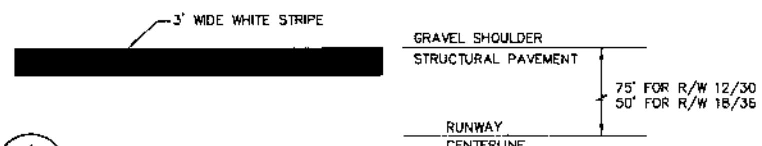
BY	DATE	REVISIONS	BY	DATE	REVISIONS
			SOD	2/3/10	AS-BUILT

PLAN DEVELOPED BY DOWL ENGINEERS

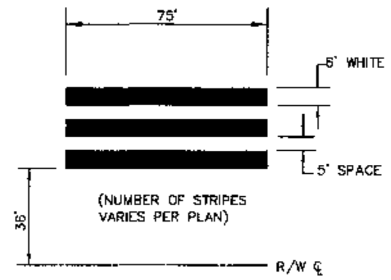
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

KING SALMON AIRPORT
KING SALMON, ALASKA
AIRPORT IMPROVEMENTS
PROJECT NO. 53147
AIP No. 3-02-0148-10-2008
TAXIWAY & APRON MARKING LAYOUT PLAN
ADDITIVE ALTERNATE #2

SHEET 30 OF 42

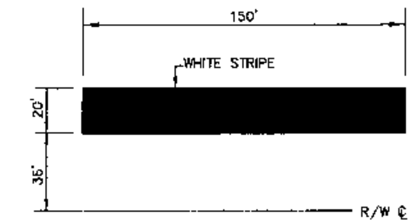


1 / 31 RUNWAY EDGE MARKING
NTS

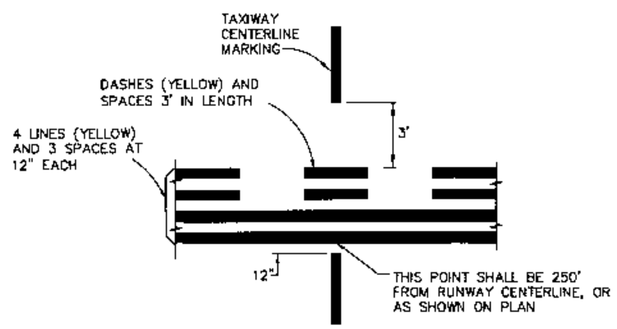


2 / 31 TOUCHDOWN ZONE MARKER
NTS

3 / 31 AIMING POINT MARKER RUNWAY 12-30
NTS

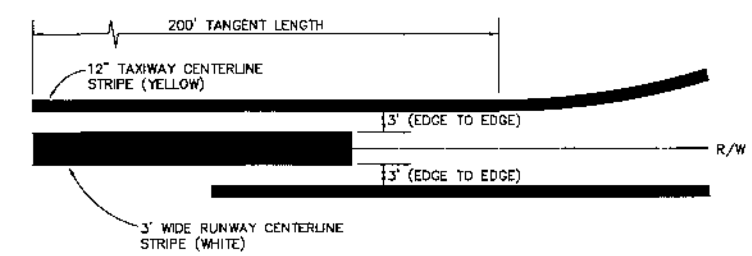


4 / 31 AIMING POINT MARKER RUNWAY 18-36
NTS



5 / 31 RUNWAY HOLDING POSITION MARKING
NTS

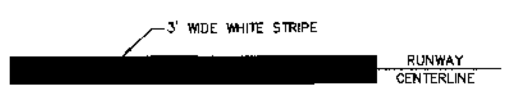
6 / 31 CONTINUOUS TAXIWAY YELLOW EDGE STRIPE DETAIL
NTS



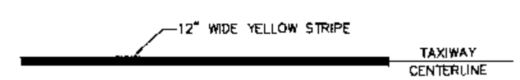
7 / 31 TAXIWAY CENTERLINE TO RUNWAY CENTERLINE OFFSET
NTS

MARKING NOTES

1. TAXIWAY EDGE DIMENSIONS ARE TO THE OUTSIDE EDGE OF DOUBLE LINES. RUNWAY EDGE DIMENSIONS ARE TO THE OUTSIDE EDGE OF LINE. THESE OUTSIDE LINES COINCIDE WITH THE EDGE OF STRUCTURAL PAVEMENT UNLESS NOTED OTHERWISE.
2. REFLECTIVE MEDIA SHALL BE APPLIED TO ALL STRIPES AND MARKINGS AS SPECIFIED IN THE SPECIFICATIONS.



8 / 31 RUNWAY CENTERLINE MARKING
NTS



9 / 31 TAXIWAY CENTERLINE MARKING
NTS

Date Plotted:	December 28, 2009		Designed By:	AMS
Plot Ratio and Layout:		SCRIPT FILE: DOWL FILE No: 233-11	Checked By:	SGD/BRH
File:	W:\Projects\King Salmon\King Salmon 53147 As-builts\AutoCAD\DOT-AKN_Stg2.dwg 2008-10-31 17:04:36		Drawn By:	

AS-BUILT 10/2009 SHEET 31 OF 43

BY	DATE	REVISIONS	BY	DATE	REVISIONS
				4/3/10	AS-BUILT

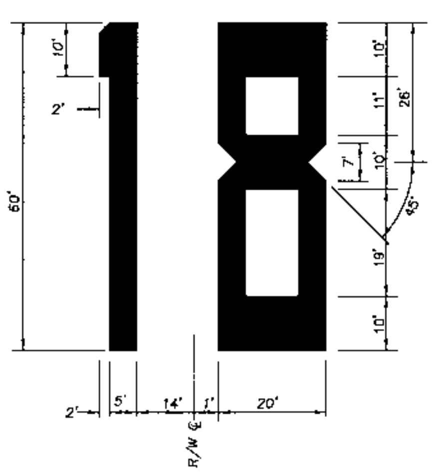
PLANS DEVELOPED BY MBA ENGINEERS

STATE OF ALASKA 49TH — MICHAEL J. LOVE 4/15/08 — REGISTERED PROFESSIONAL ENGINEER

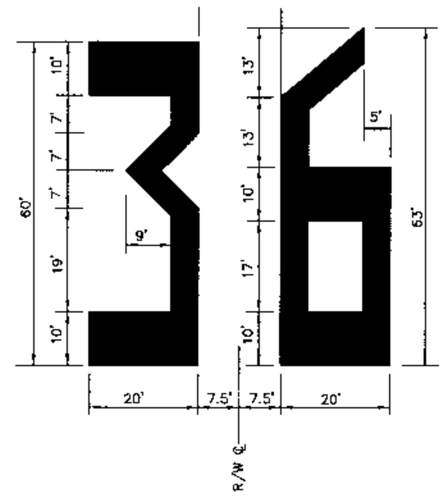
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

KING SALMON AIRPORT
KING SALMON, ALASKA
AIRPORT IMPROVEMENTS
PROJECT NO. 53147
AIP No. 3-02-0148-10-2008
MARKING DETAILS

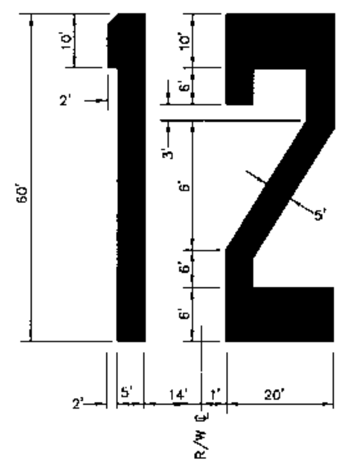
SHEET 31 OF 42



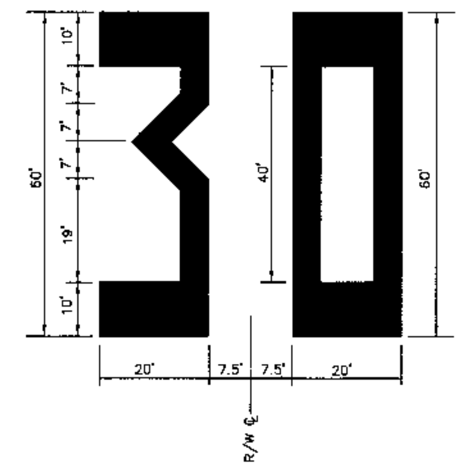
1/32 RUNWAY NUMBERS
WHITE NTS



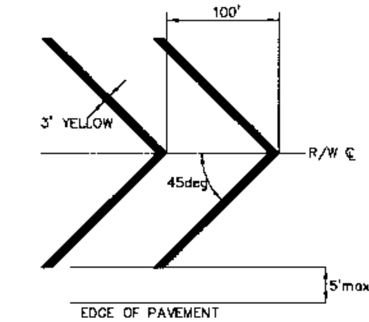
2/32 RUNWAY NUMBERS
WHITE NTS



3/32 RUNWAY NUMBERS
WHITE NTS



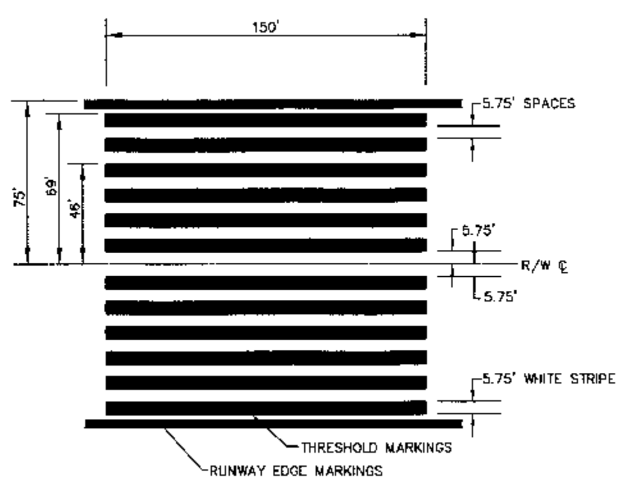
4/32 RUNWAY NUMBERS
WHITE NTS



5/32 BLAST PAD MARKINGS
NTS

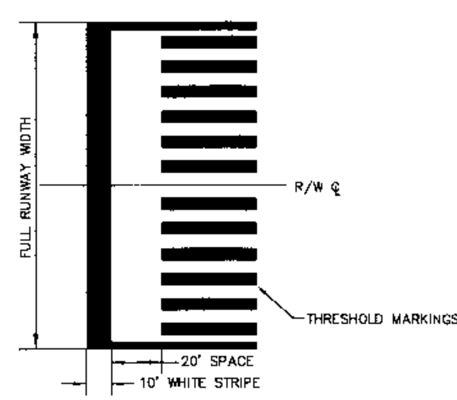
MARKING NOTES

1. TAXIWAY EDGE DIMENSIONS ARE TO THE OUTSIDE EDGE OF DOUBLE LINES. RUNWAY EDGE DIMENSIONS ARE TO THE OUTSIDE EDGE OF LINE. THESE OUTSIDE LINES COINCIDE WITH THE EDGE OF STRUCTURAL PAVEMENT UNLESS NOTED OTHERWISE.
2. REFLECTIVE MEDIA SHALL BE APPLIED TO ALL STRIPES AND MARKINGS AS SPECIFIED IN THE SPECIFICATIONS.

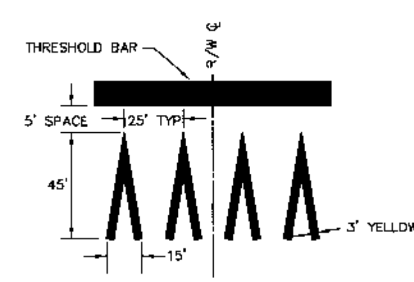


RUNWAY 12-30 SHOWN, 12 STRIPES.
RUNWAY 18-36 HAS 8 STRIPES

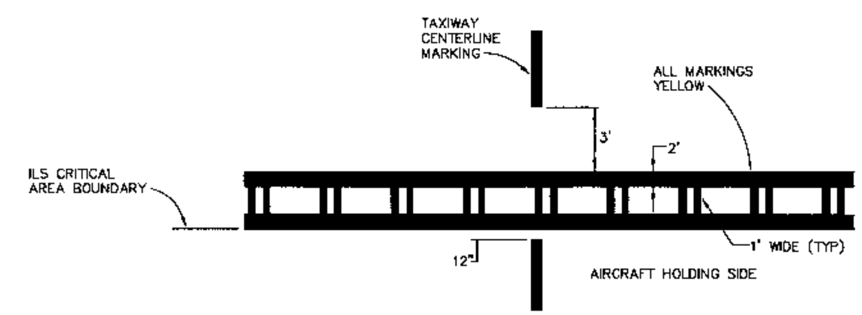
6/32 THRESHOLD MARKING
NTS



7/32 THRESHOLD BAR
NTS



8/32 ARROWHEADS
NTS



9/32 ILS HOLDING POSITION MARKINGS
NTS

AS-BUILT 10/2009 SHEET 32 OF 43

BY	DATE	REVISIONS

BY	DATE	REVISIONS
[initials]	2/8/10	AS-BUILT

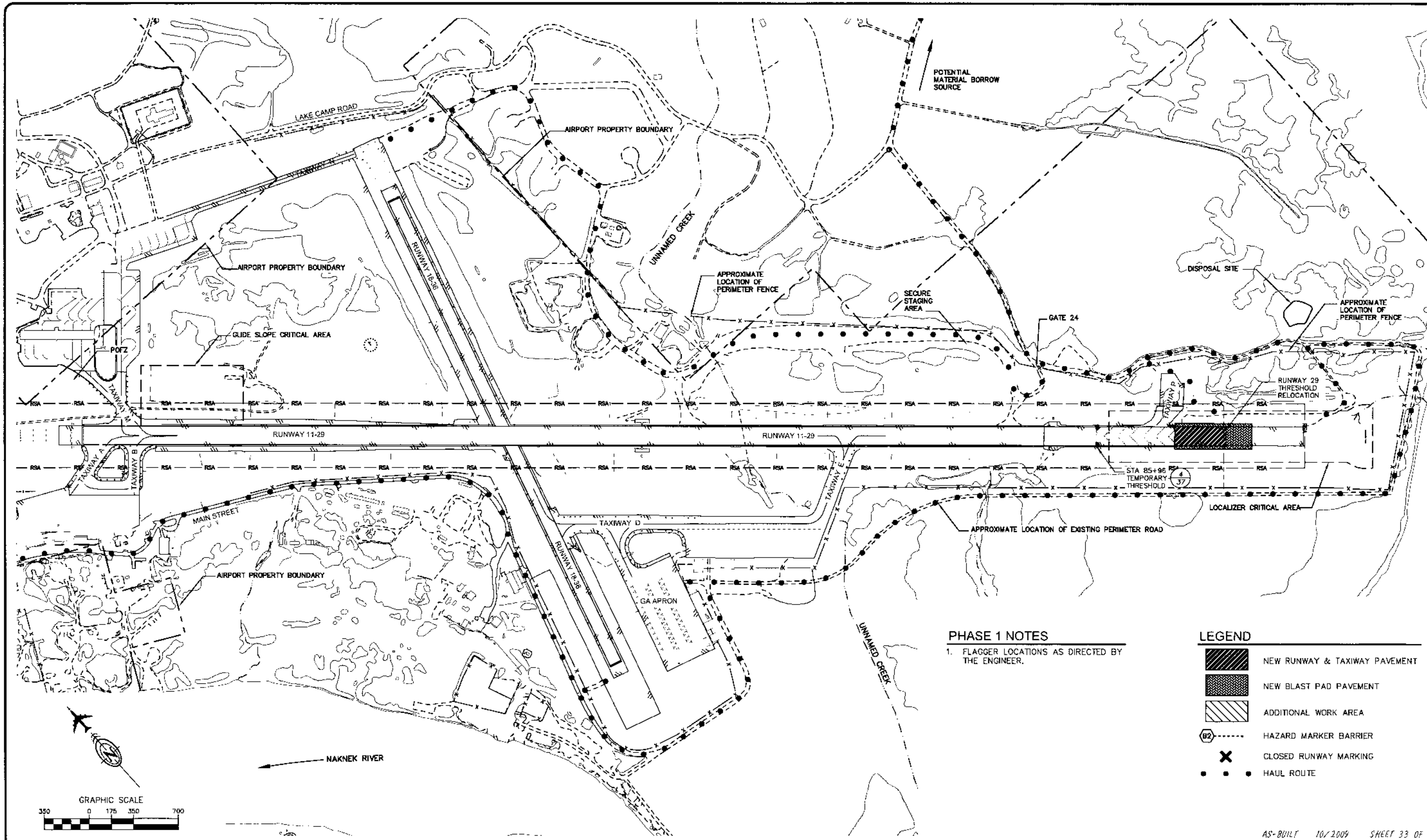
PLANS DEVELOPED BY MBA ENGINEERS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

KING SALMON AIRPORT
KING SALMON, ALASKA
AIRPORT IMPROVEMENTS
PROJECT NO. 53147
AIP No. 3-02-0148-10-2008
MARKING DETAILS

SHEET 32 OF 42

Date Plotted: December 28, 2009
Plot Ratio and Layout:
File: W:\Projects\King Salmon\King Salmon 53147 As-builts\AutoCAD\DOT-AKN_Stg2.dwg
SCRIPT FILE:
DOWL FILE No. 233-11 2006-10-31
Designed By: AMS
Checked By: SGO/BRH
Drawn By:



AS-BUILT 10/2009 SHEET 33 OF 43

PHASE 1 NOTES

1. FLAGGER LOCATIONS AS DIRECTED BY THE ENGINEER.

LEGEND

- NEW RUNWAY & TAXIWAY PAVEMENT
- NEW BLAST PAD PAVEMENT
- ADDITIONAL WORK AREA
- (B2) HAZARD MARKER BARRIER
- ✕ CLOSED RUNWAY MARKING
- ● ● ● HAUL ROUTE

BY	DATE	REVISIONS

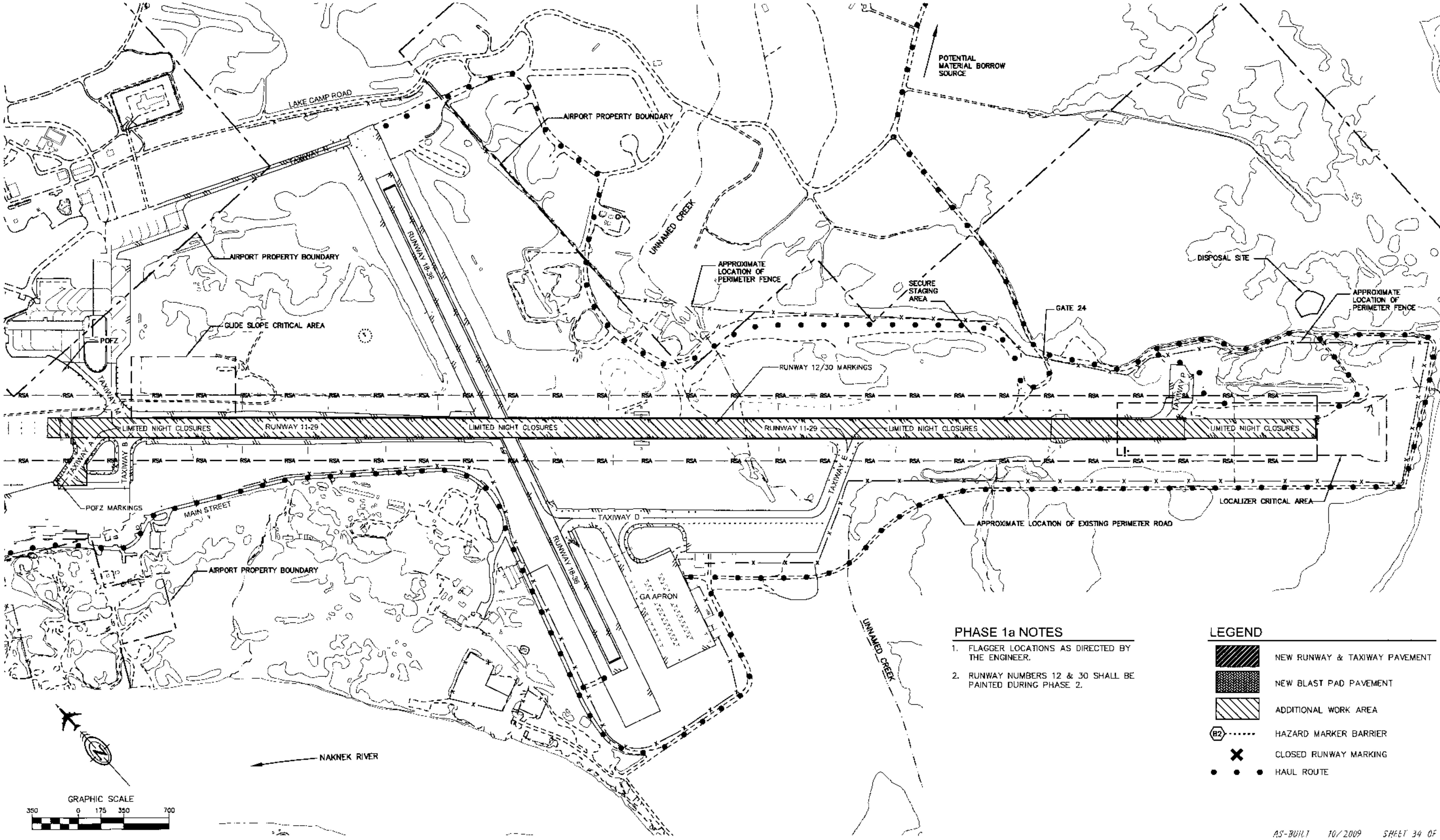
BY	DATE	REVISIONS
SMD	2/3/10	AS-BUILT

PLAN DEVELOPED BY DOWL ENGINEERS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

KING SALMON AIRPORT
KING SALMON, ALASKA
AIRPORT IMPROVEMENTS
PROJECT NO. 53147
AIP No. 3-02-0148-10-2008
SAFETY PLAN
PHASE 1

SHEET 33 OF 42



PHASE 1a NOTES

1. FLAGGER LOCATIONS AS DIRECTED BY THE ENGINEER.
2. RUNWAY NUMBERS 12 & 30 SHALL BE PAINTED DURING PHASE 2.

LEGEND

- NEW RUNWAY & TAXIWAY PAVEMENT
- NEW BLAST PAD PAVEMENT
- ADDITIONAL WORK AREA
- B2 HAZARD MARKER BARRIER
- X CLOSED RUNWAY MARKING
- • • • HAUL ROUTE

AS-BUILT 10/2009 SHEET 34 OF 43

Date Plotted:	December 28, 2009	Designed By:	AMS
Plot Ratio and Layout:	SCRIPT FILE: SAFETY DOWL FILE No: 233-11	Checked By:	SGD/BRH
File:	W:\Projects\King Salmon\King Salmon 53147 As-builts\AutoCAD\DRW-AKN_Stg2.dwg 2008-4-18	Drawn By:	

BY	DATE	REVISIONS	BY	DATE	REVISIONS
			SAR	2/3/10	AS-BUILT

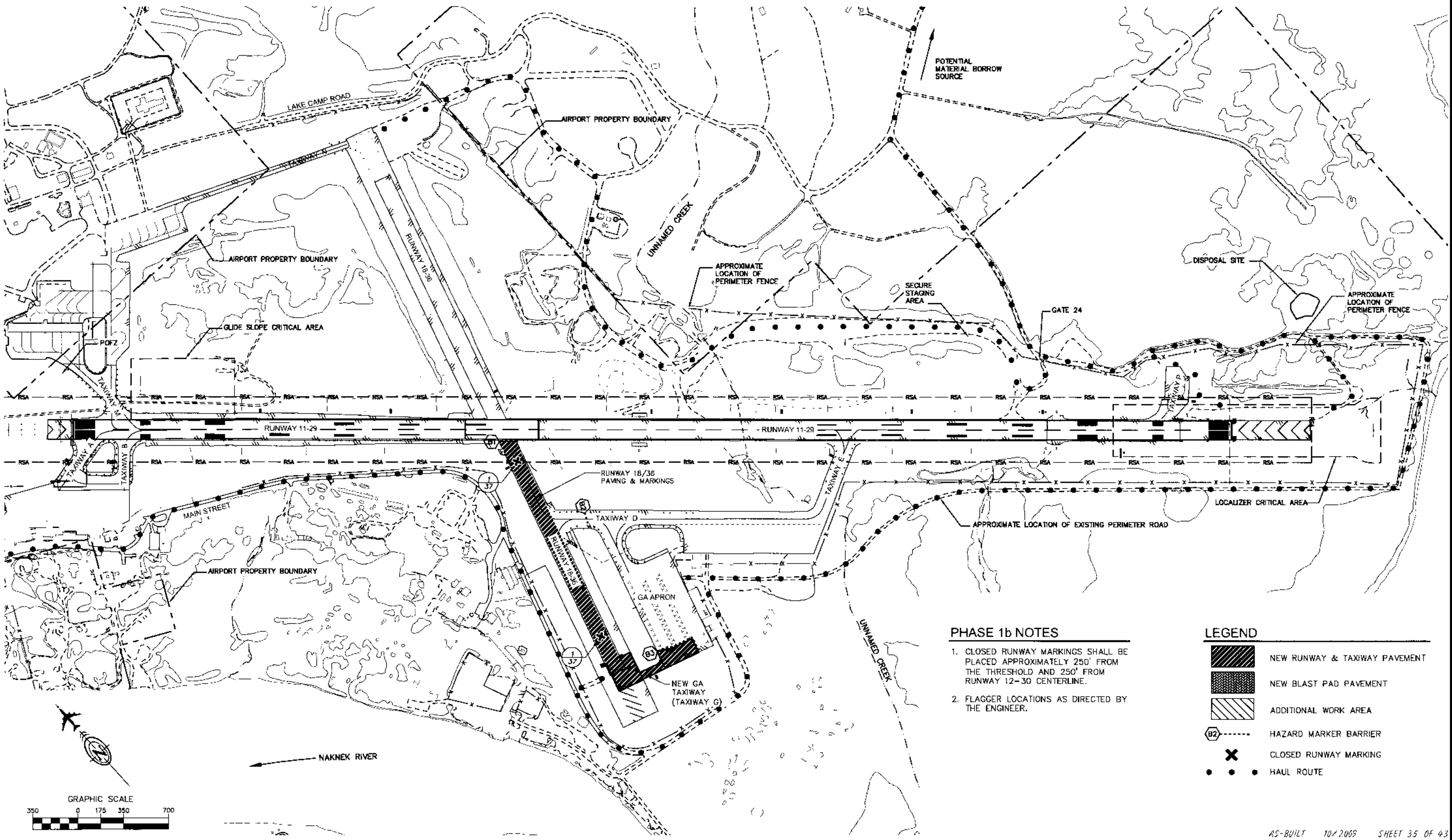
PLAN DEVELOPED BY DOWL ENGINEERS

STATE OF ALASKA 49TH Brian R. Hanson CE 11132 REGISTERED PROFESSIONAL ENGINEER

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

KING SALMON AIRPORT
KING SALMON, ALASKA
AIRPORT IMPROVEMENTS
PROJECT NO. 53147
AIP No. 3-02-0148-10-2008
SAFETY PLAN
PHASE 1a

SHEET 34 OF 42



PHASE 1b NOTES

1. CLOSED RUNWAY MARKINGS SHALL BE PLACED APPROXIMATELY 250' FROM THE THRESHOLD AND 250' FROM RUNWAY 12-30 CENTERLINE.
2. FLAGGER LOCATIONS AS DIRECTED BY THE ENGINEER.

LEGEND

- NEW RUNWAY & TAXIWAY PAVEMENT
- NEW BLAST PAD PAVEMENT
- ADDITIONAL WORK AREA
- HAZARD MARKER BARRIER
- CLOSED RUNWAY MARKING
- HAUL ROUTE

AS-BUILT 10/2009 SHEET 35 OF 43

BY	DATE	REVISIONS	BY	DATE	REVISIONS
			SWP	2/3/10	AS-BUILT

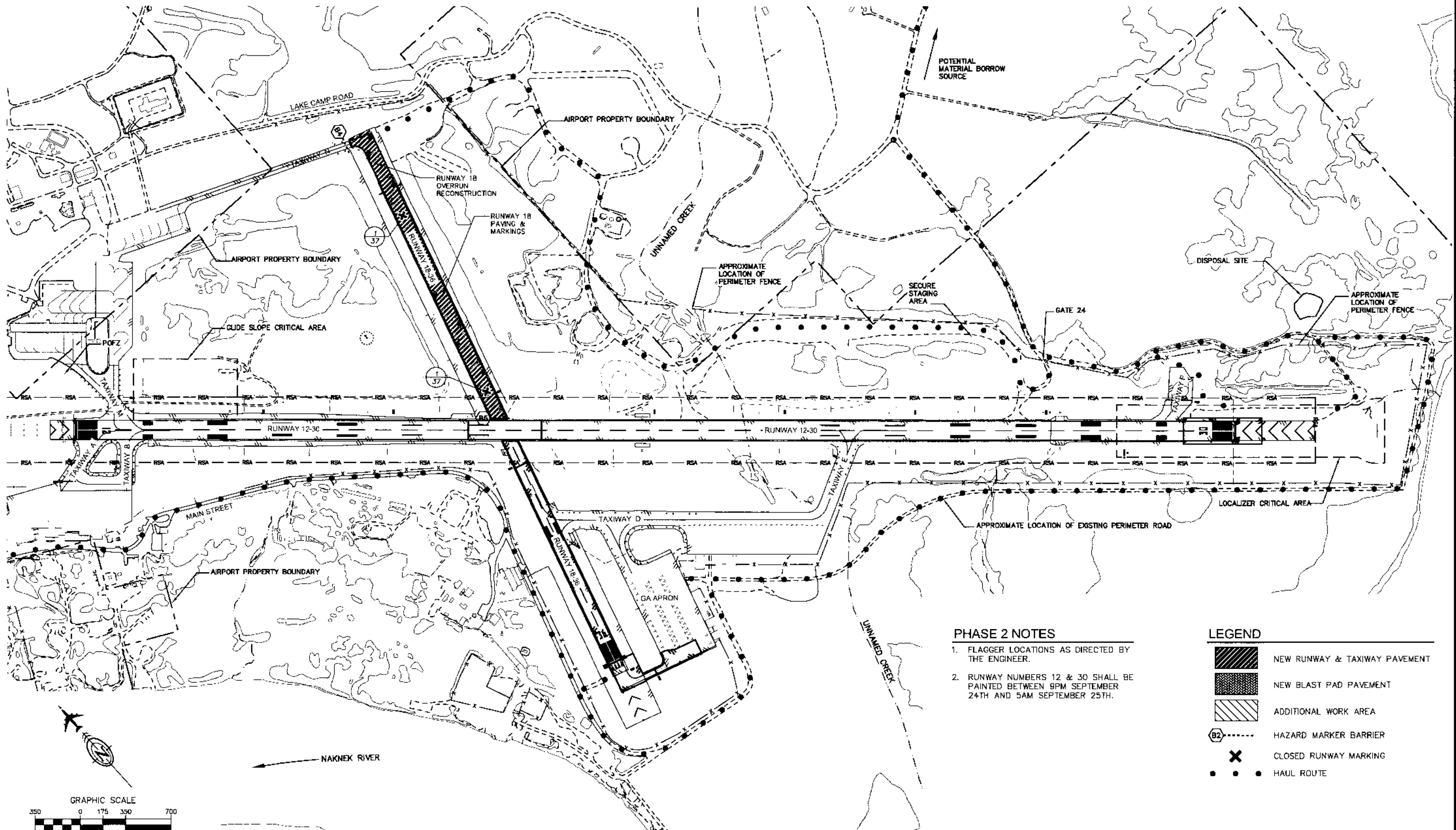
PLAN DEVELOPED BY DOWL ENGINEERS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

KING SALMON AIRPORT
KING SALMON, ALASKA
AIRPORT IMPROVEMENTS
PROJECT NO. 53147
AIP No. 3-02-0148-10-2008
SAFETY PLAN
PHASE 1b

SHEET 35 OF 42

Date Plotted: December 28, 2009 | Designed By: AMS | Checked By: SGD/BRH | Drawn By:
Plot Ratio and Layout: | SCRIPT FILE: SAFETY | DOWL FILE No. 233-11



PHASE 2 NOTES

1. FLAGGER LOCATIONS AS DIRECTED BY THE ENGINEER.
2. RUNWAY NUMBERS 12 & 30 SHALL BE PAINTED BETWEEN 9PM SEPTEMBER 24TH AND 5AM SEPTEMBER 25TH.

LEGEND

- NEW RUNWAY & TAXIWAY PAVEMENT
- NEW BLAST PAD PAVEMENT
- ADDITIONAL WORK AREA
- B2 HAZARD MARKER BARRIER
- ✕ CLOSED RUNWAY MARKING
- • • • HAUL ROUTE

AS-BUILT 10/2009 SHEET 36 OF 43

BY	DATE	REVISIONS	BY	DATE	REVISIONS
				2/4/10	AS-BUILT

PLAN DEVELOPED BY DOWL ENGINEERS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

KING SALMON AIRPORT
KING SALMON, ALASKA
AIRPORT IMPROVEMENTS
PROJECT NO. 53147
AIP No. 3-02-0148-10-2008
SAFETY PLAN
PHASE 2

SHEET 36 OF 42

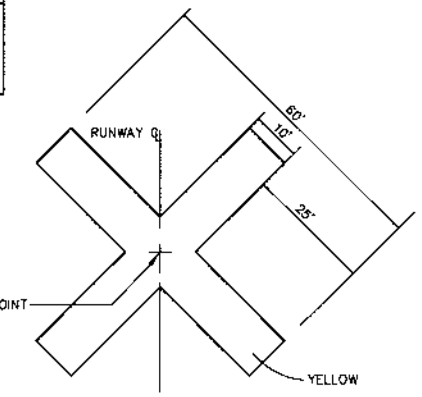
Date Plotted: December 28, 2009 | Designed By: AMS | Checked By: SGD/BRH | Drawn By: | DOWL FILE No. 233-11

RUNWAY, TAXIWAY, & APRON CONSTRUCTION PHASING SCHEDULE

Construction Phase	Work to be Completed	Completion Date	Runway Closures	Taxiway Closures	Hazard Marker Barrier Location(s)
1	Relocate R/W 29 threshold. Complete all R/W 29 electrical work at threshold.	August 15, 2008	Close 600 feet of R/W 29. Provide temporary threshold and closed runway markings.	None, access to T/W P shall be maintained	
1a	Remove R/W 11–29 markings, except the R/W numbers. Paint new R/W markings, except the R/W numbers. Paint R/W 12 POFZ.	August 15, 2008	Nightly closures of portions of R/W 12–30 for new R/W markings	None	
1b	Resurface & groove R/W 18–36 south of R/W 12–30. Paint new R/W markings. If Add Alt #2 is awarded, construct new T/W and apron tie in. Paint new T/W markings.	August 15, 2008	R/W 36 south of R/W 12–30	T/W D	Intersection R/W 36 and R/W 12–30, T/W D. If Add Alt #2 is awarded – south end of GA Apron
2	Resurface & groove R/W 18–36 north of R/W 12–30. Paint new R/W 18–36 markings and R/W numbers 12 & 30. If Add Alt #1 is awarded, reconstruct R/W 18 Overrun. Paint new T/W markings.	September 25, 2008 for 12 & 30 R/W numbers. September 30, 2008 for all other work.	R/W 18 north of R/W 12–30	T/W N	Intersection R/W 18 and R/W 12–30 & T/W N

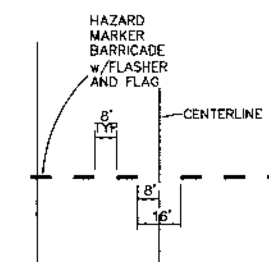
NOTES

1. PHASE 1 WORK CANNOT BEGIN UNTIL JULY 15, 2008. NO EARTHWORK ACTIVITIES SHALL BEGIN IN PHASE 1 WORK AREA UNTIL THE TEMPORARY THRESHOLD AND TEMPORARY MARKINGS ARE INSTALLED AND ACCEPTED BY THE ENGINEER. PHASE 1a WORK SHALL BE COMPLETED AFTER PHASE 1. WORK CANNOT BEGIN ON PHASE 2 UNTIL PHASE 1b IS COMPLETE.
2. RUNWAY CLOSURES CAN BE PROPOSED AND PUT INTO AFFECT ONLY WITH THE APPROVAL OF THE AIRPORT MANAGER. NIGHT CLOSURES OF RUNWAY 11–29 ARE ANTICIPATED FOR MARKING REMOVAL AND INSTALLATION OF NEW MARKINGS.
3. WORK OUTSIDE THE LIMITS OF THE RUNWAY SAFETY AREA AND TAXIWAY SAFETY AREA MAY BE PERFORMED AT ANY TIME. THIS WORK MAY BEGIN ONCE A NOTICE TO PROCEED HAS BEEN ISSUED. WORK AFFECTING OPERATIONS, AS SHOWN IN THE SAFETY PLAN, SHALL NOT BEGIN UNTIL AUTHORIZED BY THE ENGINEER.
4. CONSTRUCTION WORK MAY BE PERFORMED WITHOUT CLOSURES AS LONG AS EQUIPMENT IS NOT PRESENT WITHIN THE ACTIVE SAFETY AREA DURING AIRCRAFT OPERATIONS.
5. MAINTAIN AIRCRAFT ACCESS TO THE APRONS DURING ACTIVE RUNWAY USE FOR ALL STAGES OF WORK. GUIDE AIRCRAFT THROUGH TAXIWAY WORK AREAS AS REQUIRED.
6. PROVIDE WEEKLY NOTIFICATIONS OF ACTIVE AIRPORT AREAS AND CONSTRUCTION ACTIVITIES TO THE CONTACTS LISTED IN THE SAFETY PLAN AND/OR SPECIFICATIONS.
7. PROVIDE TEMPORARY LIGHTING FOR EACH PHASE OF CONSTRUCTION ALLOWING AIRCRAFT OPERATIONS. DURING ACTIVE OPERATIONS, BOTH EDGES AND ENDS OF THE ACTIVE RUNWAY SHALL HAVE OPERATIONAL LIGHTING. EXISTING LIGHTS MAY BE USED AS APPLICABLE.
8. EXISTING RUNWAY AND THRESHOLD LIGHTING SHALL BE MADE INACTIVE IN AREAS OUTSIDE THE ACTIVE RUNWAY.
9. PAPI AND APPROACH LIGHTING ON RUNWAY 11 SHALL REMAIN OPERATIONAL DURING CONSTRUCTION. THE LOCALIZER WILL BE SHUT DOWN BY FAA DURING CONSTRUCTION.
10. NOTAMS NEED TO BE ISSUED INDICATING TEMPORARY THRESHOLD, RUNWAY CLOSURES AND CHANGES IN OPERATIONS. COORDINATE CONSTRUCTION ACTIVITIES WITH THE AIRPORT MANAGER WHO WILL ISSUE NOTAMS.
11. SPECIAL REQUIREMENTS FOR PROVIDING AND MAINTAINING TEMPORARY LIGHTING ARE INCLUDED IN THE ELECTRICAL PLAN SHEETS AND THE SAFETY PLAN NARRATIVE.
12. PAINT FOR TEMPORARY MARKINGS SHALL BE APPLIED AT 25 PERCENT OF THE TOTAL APPLICATION RATE. TEMPORARY MARKINGS ARE SUBSIDIARY TO P–620. PRIOR TO PLACING TEMPORARY MARKINGS EXISTING THRESHOLD MARKINGS/BAR AND AIMING MARKINGS SHALL BE COMPLETELY REMOVED.
13. THE CONTRACTOR SHALL MAINTAIN CLOSED RUNWAY MARKINGS, AS SHOWN ON THE PLANS, DURING CONSTRUCTION PERIODS.
14. STORAGE OF EQUIPMENT OR MATERIALS ON THE RUNWAYS, TAXIWAYS, APRONS, OR SAFETY AREAS WILL NOT BE ALLOWED.
15. EQUIPMENT WILL NOT BE ALLOWED OUTSIDE THE FOOTPRINT OF THE PROJECT, EXCEPT ON EXISTING ROADS.
16. SEE APPENDIX D FOR THE SAFETY PLAN NARRATIVE AND SECTION 80 OF THE SPECIFICATIONS FOR LIMITATIONS AND OPERATIONAL SAFETY CONCERNS.

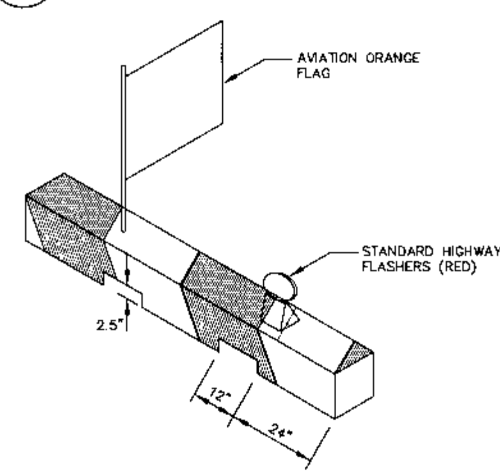


1. MARKINGS SHALL BE SECURED IN PLACE WITH 3" MAXIMUM HEIGHT SANDBAGS.
2. MARKINGS SHALL BE SUPPLIED BY THE CONTRACTOR, SUBSIDIARY TO ITEM G–100a.
3. MARKINGS SHALL BE PLACED AT THE PLANNED LOCATIONS WHEN FULL CLOSURES ARE IN EFFECT.

1/37 CLOSED RUNWAY MARKING
NTS

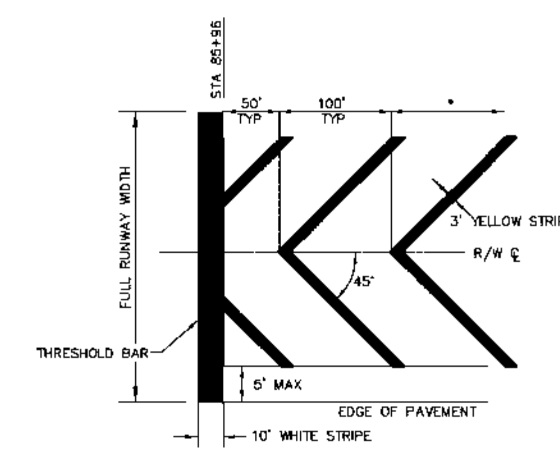


3/37 HAZARD MARKER BARRIER
NTS



1. BARRIERS SHALL BE IN PLACE TO LIMIT ACCESS TO CLOSED PORTIONS OF THE AIRFIELD WHENEVER RUNWAY IS OPEN.
2. REFER TO SECTION P–670, HAZARDOUS AREA BARRIER.

2/37 HAZARD MARKER BARRIER
NTS



• CONTINUE MARKINGS TO STA 91+96

4/37 TEMPORARY THRESHOLD & CLOSED R/W MARKINGS
NTS

AS-BUILT 10/2009 SHEET 37 OF 43

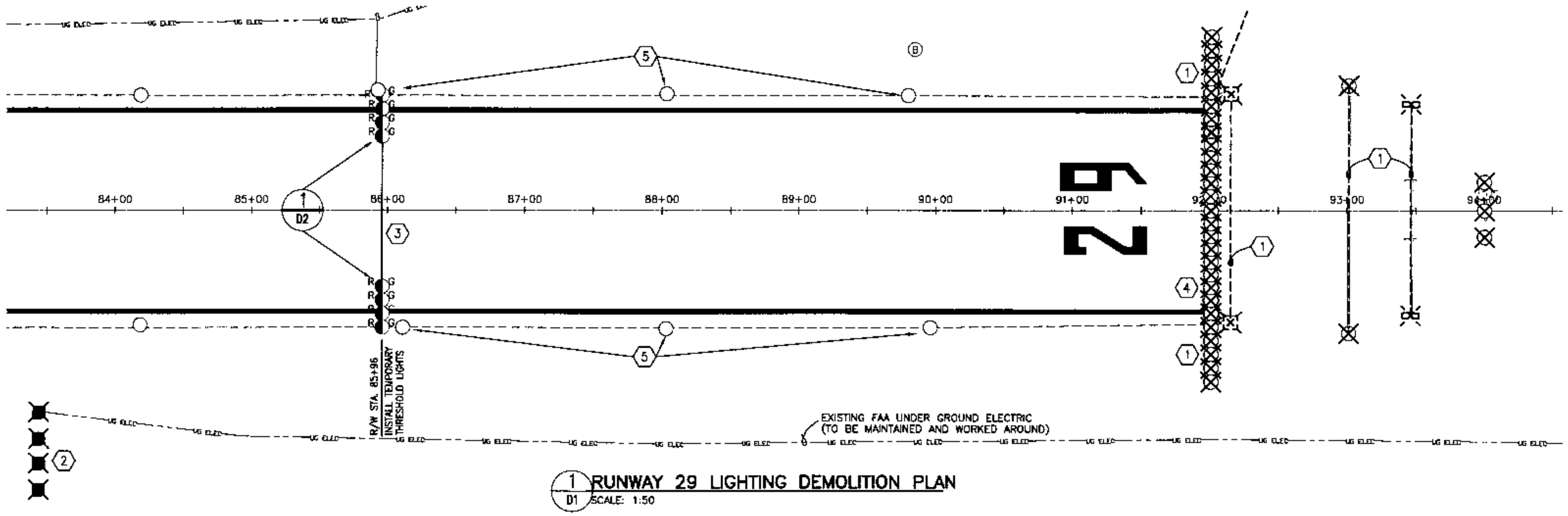
BY	DATE	REVISIONS	BY	DATE	REVISIONS
			SGD	2/3/10	AS-BUILT

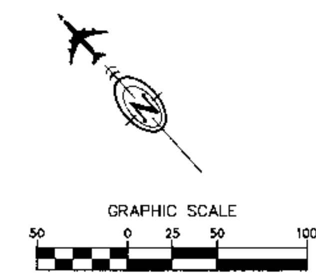
PLAN DEVELOPED BY DOWL ENGINEERS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

KING SALMON AIRPORT
KING SALMON, ALASKA
AIRPORT IMPROVEMENTS
PROJECT NO. 53147
AIP No. 3-02-0148-10-2008
SAFETY PLAN
PHASING SCHEDULE, NOTES, & DETAILS

SHEET 37 OF 42

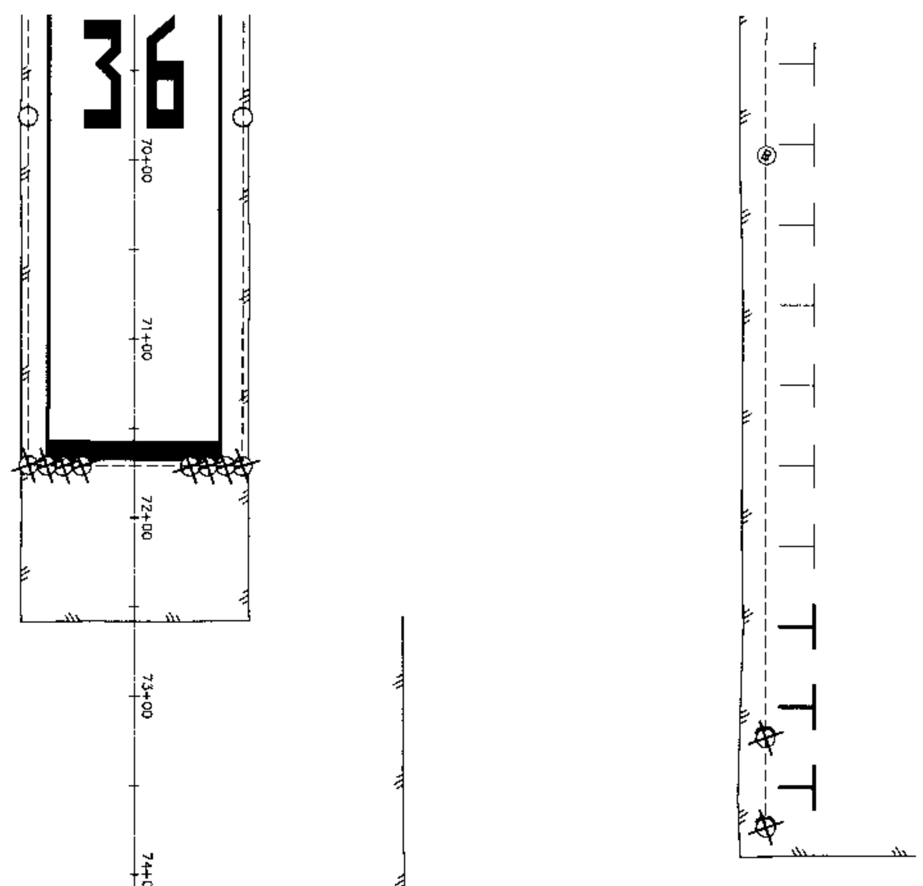


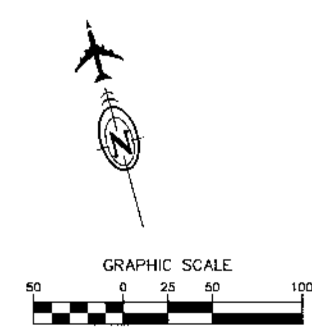


1 RUNWAY 29 LIGHTING DEMOLITION PLAN
D1 SCALE: 1:50

LEGEND:

- EXISTING LIGHT, LIGHT BASE, HANDHOLE OR JUNCTION BOX TO BE REMOVED
- EXISTING R/W EDGE OR THRESHOLD LIGHT
- TEMPORARY L-862E THRESHOLD LIGHT
- MANHOLE – APPROXIMATELY 5'x5'x5' TO BE REMOVED
- UNDERGROUND ELECTRIC
- PAPI LIGHT HOUSING ASSEMBLY





2 RUNWAY 36 DEMOLITION PLAN ADDITIVE ALTERNATE #2
D1 SCALE: 1:50

NOTES:

1. REMOVE EXISTING THRESHOLD LIGHTS. LIGHT FIXTURES ARE TO BE SALVAGED AND OFFERED TO THE STATE FIELD MAINTENANCE PERSONNEL. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF TRANSFORMERS, WIRE, CONDUITS AND ASSOCIATED DUCT BANK SYSTEMS AS SHOWN ON THE PLANS. THIS WORK SHALL INCLUDE THE REMOVAL AND DISPOSAL OF PREVIOUSLY ABANDONED STRUCTURES AND DUCTS. FINISH GRADE OUTSIDE THE LIMITS OF EXCAVATION SHALL BE RESTORED. THIS WORK SHALL BE SUBSIDIARY TO L-100ah.
2. REMOVE PAPI'S. CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFE STORAGE OF PAPI COMPONENTS. CONTRACTOR SHALL REMOVE AND DISPOSE OF SCREW PILE PADS, HANDHOLES, JUNCTION BOXES, GROUND RODS AND WIRE. CONDUIT MAY BE ABANDONED IN PLACE. FINISH GRADE SHALL BE RESTORED WHERE STRUCTURES HAVE BEEN REMOVED. THIS WORK SHALL BE SUBSIDIARY TO L-132c AND NO SEPARATE PAYMENT WILL BE MADE.
3. CONSTRUCT TEMPORARY THRESHOLD PER DETAIL 1, SHEET D2. INSTALL AND MAINTAIN JUMPERS AND THRESHOLD FOR THE DURATION OF THE PROJECT AT THE LOCATIONS SHOWN ON THE PLANS. EXTEND CAUTION ZONE WEST OF TEMPORARY THRESHOLD UTILIZING FIXTURE LENSES BEHIND THE THRESHOLD. UPON REMOVAL AND DISPOSAL OF TEMPORARY THRESHOLD THE CONTRACTOR SHALL RESTORE CIRCUITS AND CAUTION ZONE LIGHTING. THIS WORK SHALL BE SUBSIDIARY TO L-100r.
4. IN ADDITION TO THE 8 THRESHOLD LIGHTS THERE ARE NO LESS THAN 57 ADDITIONAL DECOMMISSIONED CONCRETE ENCASED LIGHT BASES. NOT ALL SHOWN FOR CLARITY.
5. EDGE LIGHTS BEYOND TEMPORARY THRESHOLD SHALL BE INOPERABLE WHEN TEMPORARY THRESHOLD IS IN SERVICE.

AS-BUILT 10/2009 SHEET 38 OF 43

BY	DATE	REVISIONS	BY	DATE	REVISIONS
			SFK??	2/8/10	AS-BUILT

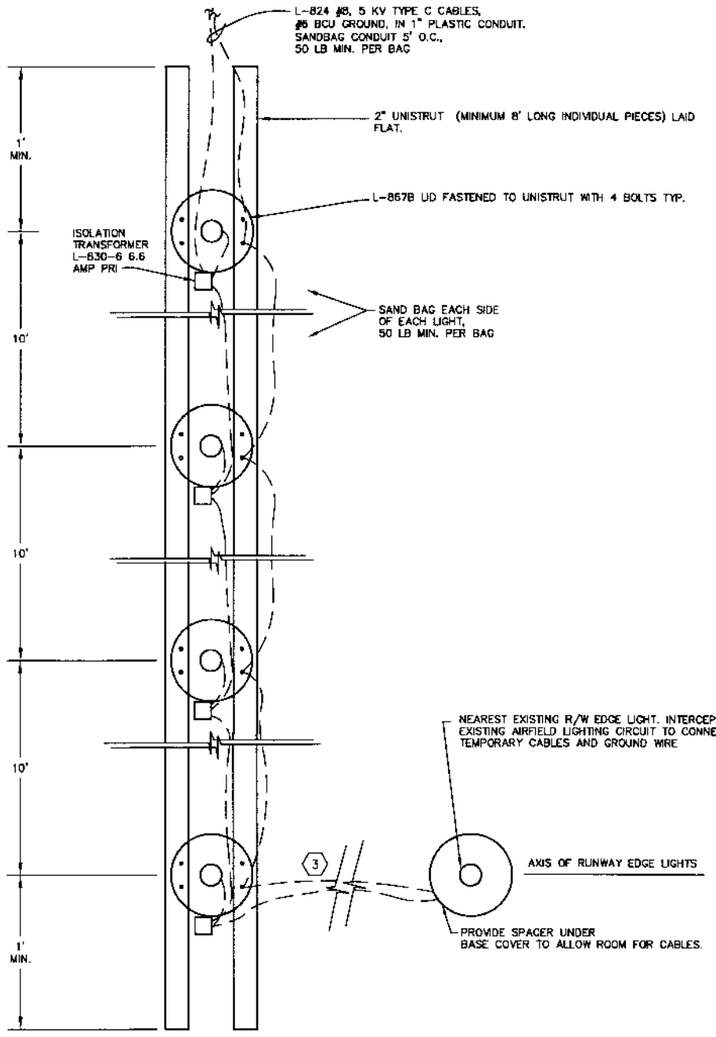
PLANS DEVELOPED BY MBA ENGINEERS

STATE OF ALASKA 49TH MICHAEL J. LOVE 4/15/08 EE-5018 REGISTERED PROFESSIONAL ENGINEER

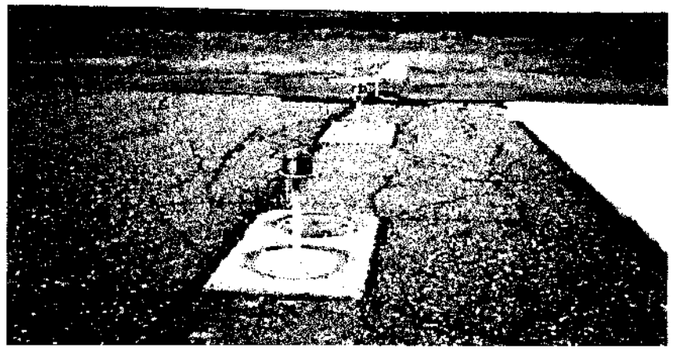
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

KING SALMON AIRPORT
KING SALMON, ALASKA
AIRPORT IMPROVEMENTS
PROJECT NO. 53147
AIP No. 3-02-0148-10-2008
RUNWAY LIGHTING DEMOLITION PLANS

SHEET D1 OF 42



1/D2 TEMPORARY THRESHOLD LIGHT BAR



2/D2 R/W 29 THRESHOLD LIGHTS

NOTES

1. PROVIDE 2 TEMPORARY THRESHOLD LIGHT BARS IN ACCORDANCE WITH THE PROJECT SAFETY PLAN AND AS DIRECTED BY THE ENGINEER.
2. NOT USED.
3. CONNECT TEMPORARY THRESHOLD LIGHT BARS TO EXISTING EDGE LIGHTS (CIRCUIT R1).
4. THE TEMPORARY LIGHT FIXTURES SHALL HAVE CORD SETS OF SUFFICIENT LENGTH TO ALLOW CONNECTION TO TRANSFORMER SECONDARY REMOTE FROM THE AREA UNDERNEATH THE L-867B UD FOR THE TEMPORARY THRESHOLD
5. TEMPORARY LIGHT FIXTURES SHALL BE THE SAME HEIGHT: L-862E (200W)
6. CONSTRUCTION, INSTALLATION AND MAINTENANCE OF THE TEMPORARY THRESHOLD LIGHT BARS AND JUMPERS IS SUBSIDIARY TO PAY ITEM L-108r.
7. TEMPORARY THRESHOLD SHALL BECOME THE PROPERTY OF THE STATE UPON COMPLETION OF THE PROJECT.
8. JUMPERS SHALL BE RUN IN 1" PLASTIC CONDUIT WITH A SEPARATE #6 BARE COPPER GROUND. SAND BAG CONDUIT 5' O.C., 50 LB MINIMUM PER SAND BAG.
9. TEMPORARY JUMPERS SHALL BE SALVAGED OR DISPOSED OF AT THE DIRECTION OF THE ENGINEER.
10. CONTRACTOR MAY USE AT HIS DISCRETION THE EXISTING R/W 29 THRESHOLD LIGHTS AND TRANSFORMERS.

3/D2 DECOMMISSIONED R/W 29 THRESHOLD LIGHTS

Designed By:	AMS
Checked By:	SSD/BRN
Drawn By:	
DWG. FILE No: 233-11	
2008-10-31 17:04:38	
SCRIPT FILE:	
S:\47 As-built\AutoCAD\17041_02.dwg	
December 28, 2009	
W:\Projects\King Salmon\King Salmon 53147 As-built\	
Date Plotted:	
Plot Ratio and Layout:	
File:	

AS-BUILT 10/2009 SHEET 39 OF 43

BY	DATE	REVISIONS

BY	DATE	REVISIONS
JMR	2/3/10	AS-BUILT

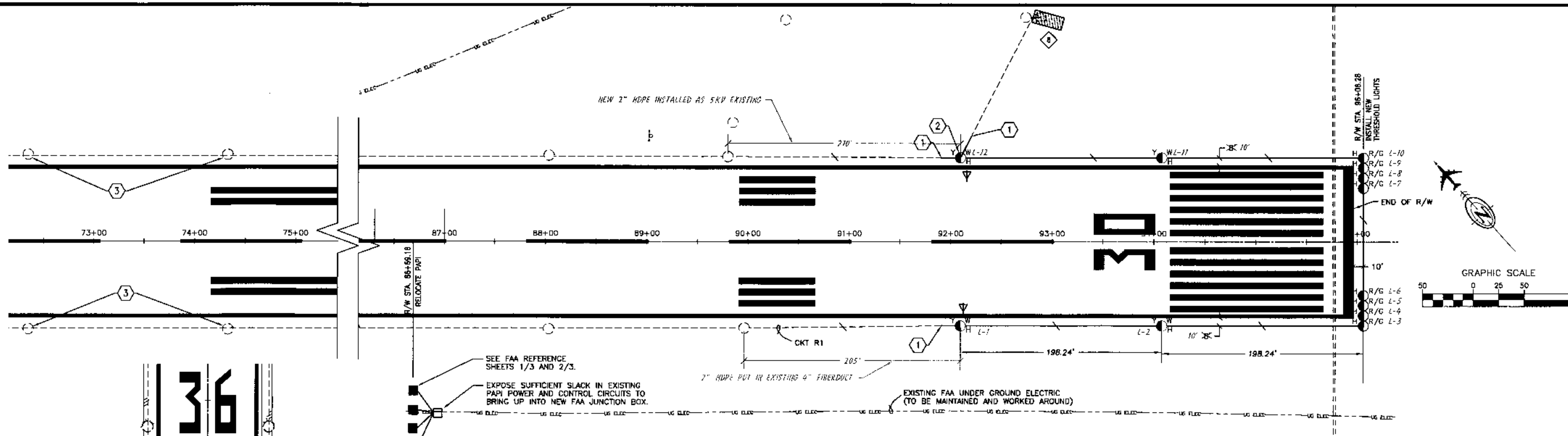
PLANS DEVELOPED BY MBA ENGINEERS

STATE OF ALASKA
MICHAEL A LOVE
4/15/08
REGISTERED PROFESSIONAL ENGINEER

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

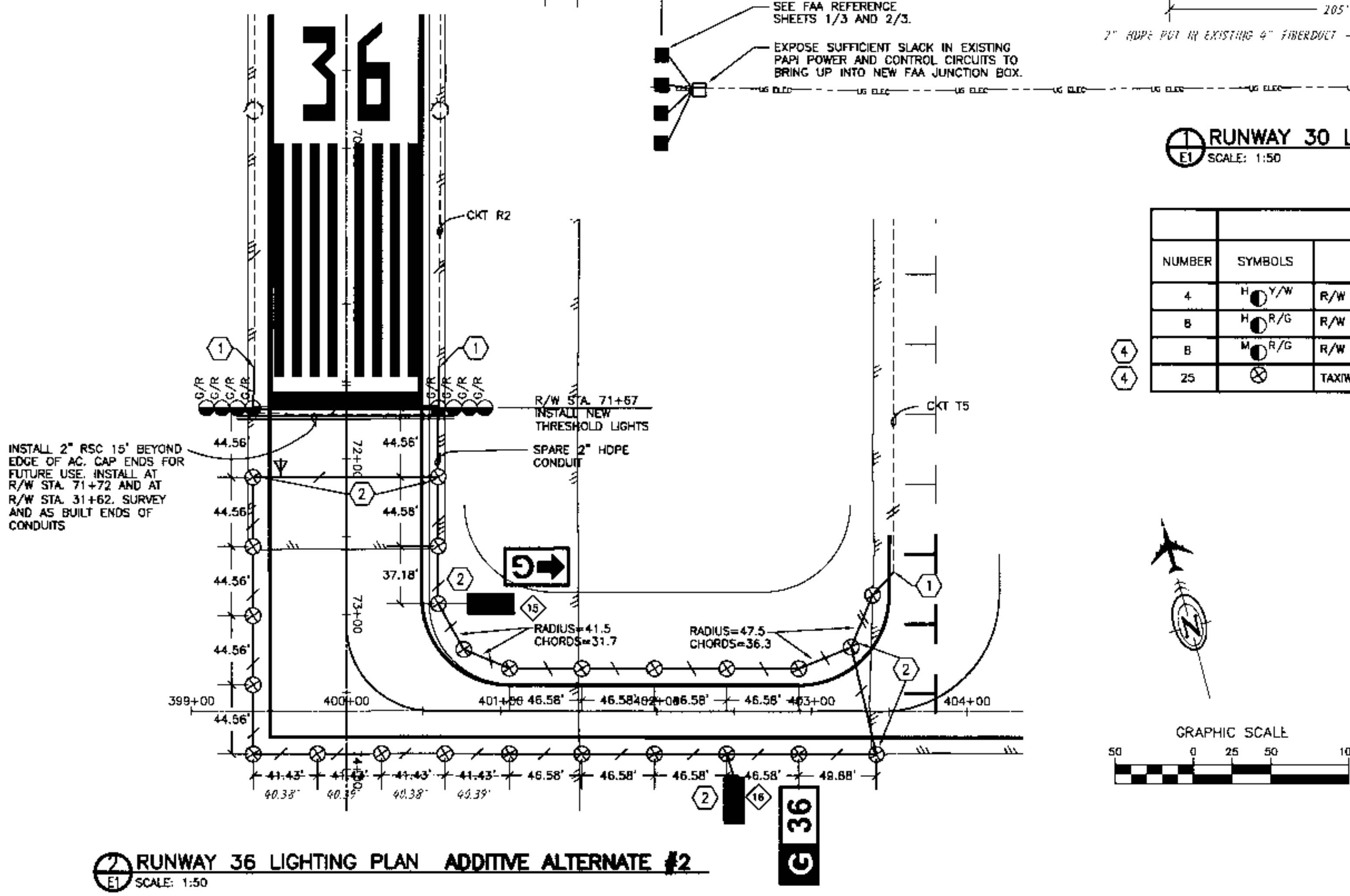
KING SALMON AIRPORT
KING SALMON, ALASKA
AIRPORT IMPROVEMENTS
PROJECT NO. 53147
AIP No. 3-02-0148-10-2008
TEMPORARY THRESHOLD DETAIL AND PHOTOS

SHEET D2 OF 42



1 / E1 RUNWAY 30 LIGHTING PLAN
SCALE: 1:50

	LIGHT SCHEDULE						
	NUMBER	SYMBOLS	LOCATION	LIGHT DETAILS			
				LIGHT COLOR	WATTAGE	F.A.A. NUMBER	ALL TRANSFORMERS 6.6 A WATTAGE
	4	H Y/W	R/W 12-30 EDGE LIGHT	YELLOW/WHITE	120	L862	100
	8	H R/G	R/W 30 THRESHOLD	RED/GREEN	200	L862E	200
(4)	8	M R/G	R/W 36 THRESHOLD	RED/GREEN	45	L861E	30/45
(4)	25	⊗	TAXIWAY EDGE LIGHTS	BLUE	12	L861T	10/15



2 / E1 RUNWAY 36 LIGHTING PLAN ADDITIVE ALTERNATE #2
SCALE: 1:50

NOTES:

1. CONNECT NEW TO EXISTING CONDUITS UTILIZING ELECTROFUSION COUPLINGS. CONNECT NEW CONDUCTORS BACK TO THE LAST LIGHT BASE FOR THE CONTINUATION OF CIRCUITS.
2. PROVIDE LIGHT BASE WITH ADDITIONAL THREADED HUBS AS REQUIRED.
3. CHANGE CAUTION ZONE LIGHT LENS (YELLOW/WHITE) TO WHITE/WHITE. THIS WORK SHALL BE SUBSIDIARY TO L-100a AND NO SEPARATE PAYMENT WILL BE MADE.
4. **ADDITIVE ALTERNATE #2**

LEGEND SHEET E1, E2, E3

- R/W – RUNWAY
- T/W – TAXIWAY
- PAPI – PRECISION APPROACH PATH INDICATOR
- NEW 2" HDPE CONDUIT. HASH MARKS INDICATE NUMBER OF #8 AWG. 5KV AIRPORT CABLES TYPE "C" PLUS ONE #6 BARE COPPER GROUND CONDUCTOR.
- NEW 2" RIGID STEEL CONDUIT
- H R/G NEW RUNWAY THRESHOLD LIGHT – HIGH INTENSITY
- M R/G NEW RUNWAY THRESHOLD LIGHT – MEDIUM INTENSITY
- H Y/W NEW RUNWAY EDGE LIGHT – HIGH INTENSITY
- ⊗ NEW TAXIWAY EDGE LIGHT
- EXISTING R/W OR T/W LIGHT
- FAA J-BOX
- PAPI LIGHT HOUSING ASSEMBLY
- NEW 3/4" X 10' GROUND ROD
- EXISTING SIGN BASE TO BE REMOVED
- NEW SIGN
- EXISTING UNDERGROUND ELECTRIC
- SIGN NUMBER – SEE SCHEDULE
- RELOCATED SIGN
- EXISTING SIGN – NEW PANELS

AS-BUILT 10/2009 SHEET 40 OF 43

Date Plotted: December 28, 2009 | SCRIPT FILE: | DGN. FILE No. 233-11 | Designed By: AMS | Checked By: SGO/BRH | Drawn By:

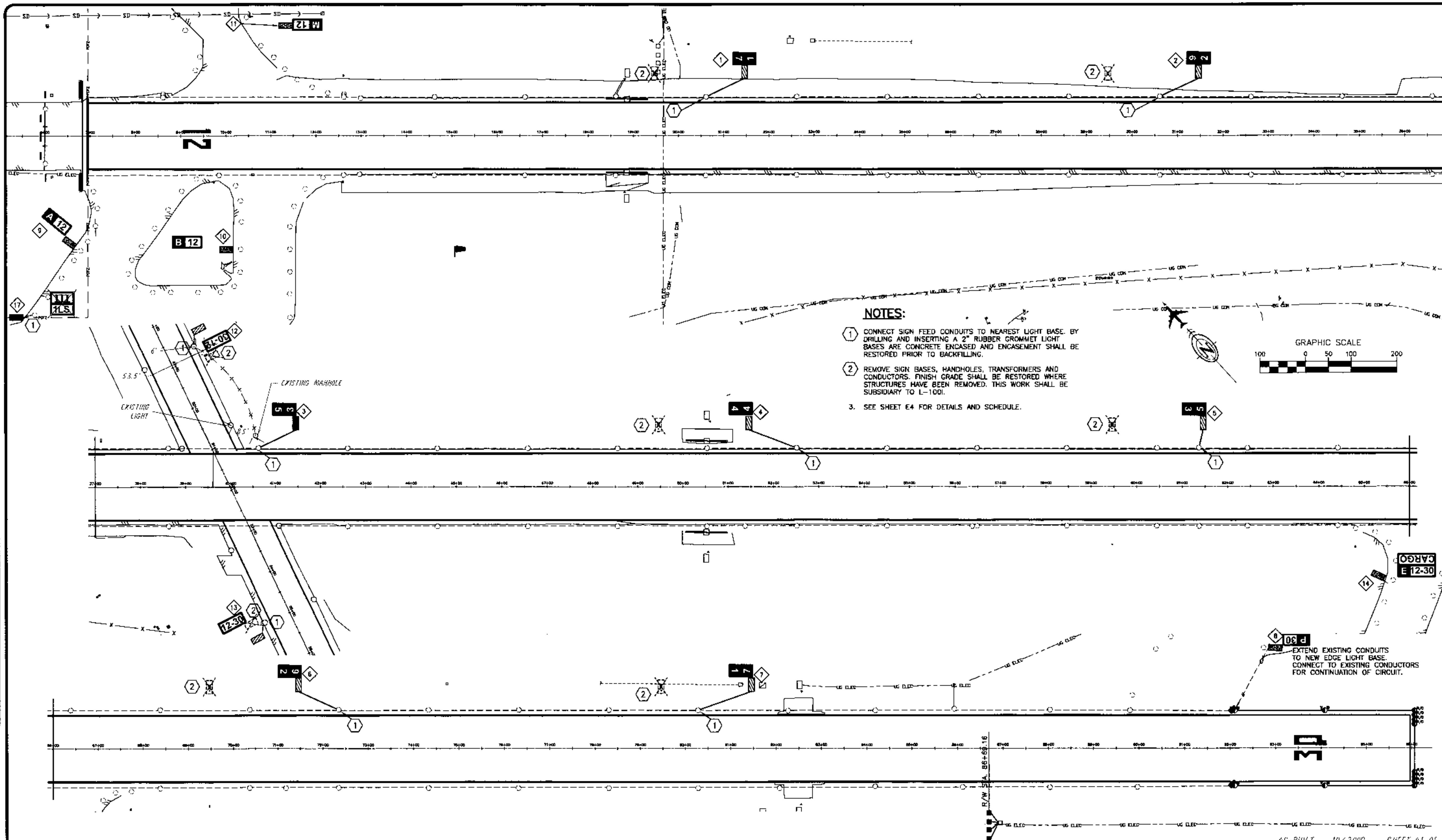
BY	DATE	REVISIONS
		AS-BUILT

PLANS DEVELOPED BY MBA ENGINEERS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

KING SALMON AIRPORT
KING SALMON, ALASKA
AIRPORT IMPROVEMENTS
PROJECT NO. 53147
AIP No. 3-02-0148-10-2008
RUNWAY LIGHTING PLANS

SHEET E1 OF 42



NOTES:

1. CONNECT SIGN FEED CONDUITS TO NEAREST LIGHT BASE. BY DRILLING AND INSERTING A 2" RUBBER GROMMET LIGHT BASES ARE CONCRETE ENCASED AND ENCASEMENT SHALL BE RESTORED PRIOR TO BACKFILLING.
2. REMOVE SIGN BASES, HANDHOLES, TRANSFORMERS AND CONDUCTORS. FINISH GRADE SHALL BE RESTORED WHERE STRUCTURES HAVE BEEN REMOVED. THIS WORK SHALL BE SUBSIDIARY TO L-100I.
3. SEE SHEET E4 FOR DETAILS AND SCHEDULE.

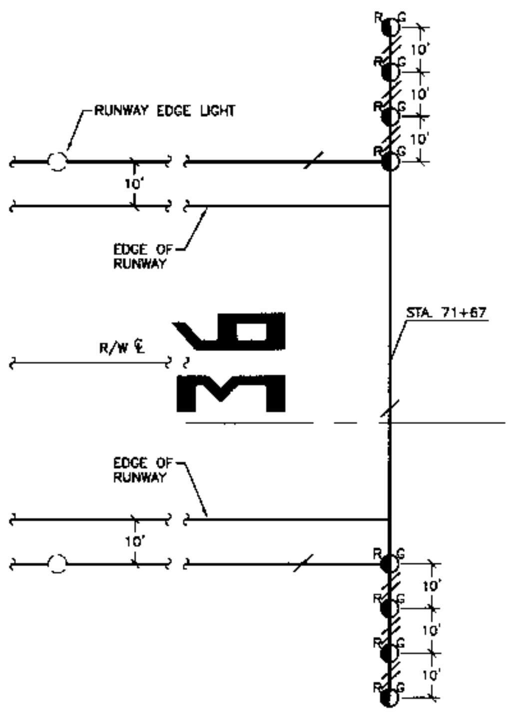
BY	DATE	REVISIONS	BY	DATE	REVISIONS
				2/3/10	AS-BUILT

PLANS DEVELOPED BY MBA ENGINEERS

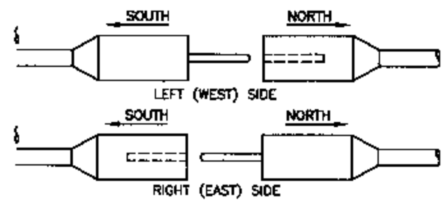
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

KING SALMON AIRPORT
KING SALMON, ALASKA
AIRPORT IMPROVEMENTS
PROJECT NO. 53147
AIP No. 3-02-0148-10-2008
RUNWAY 12-30 SIGN PLAN

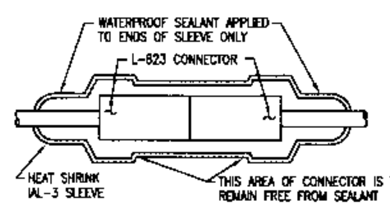
SHEET E2 OF 42



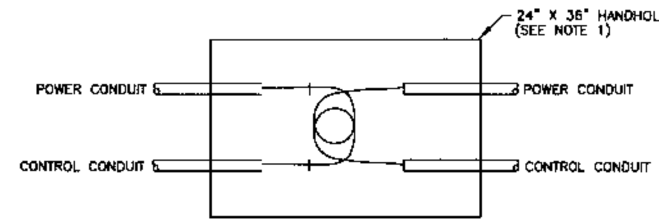
1 E3 R/W 36 THRESHOLD LIGHTING DETAIL – **ADDITIVE ALTERNATE #2**
NTS



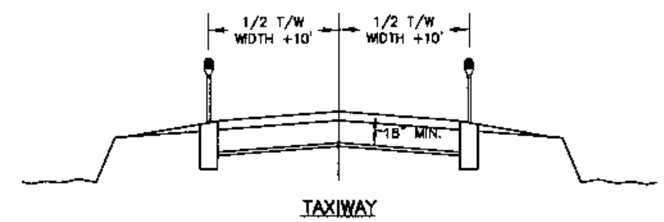
ORIENTATION OF L-823 CABLE CONNECTION IN LIGHT BASE DETAIL



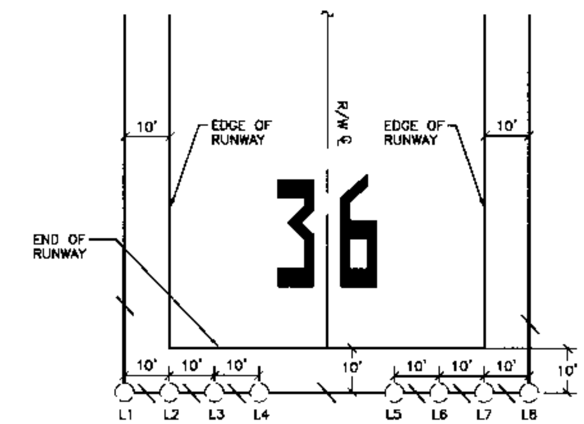
3 E3 L-823 CONNECTOR
NTS



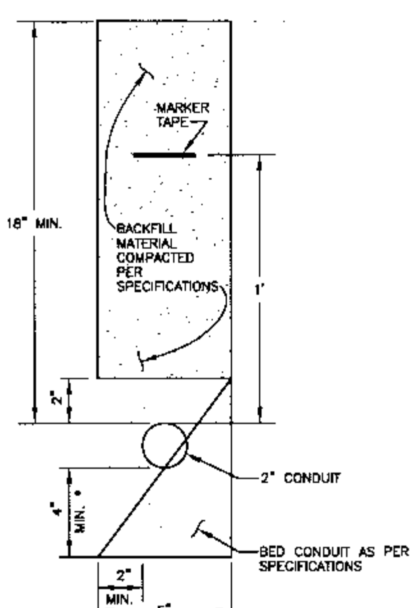
2 E3 PULL BOX PLAN VIEW
NTS



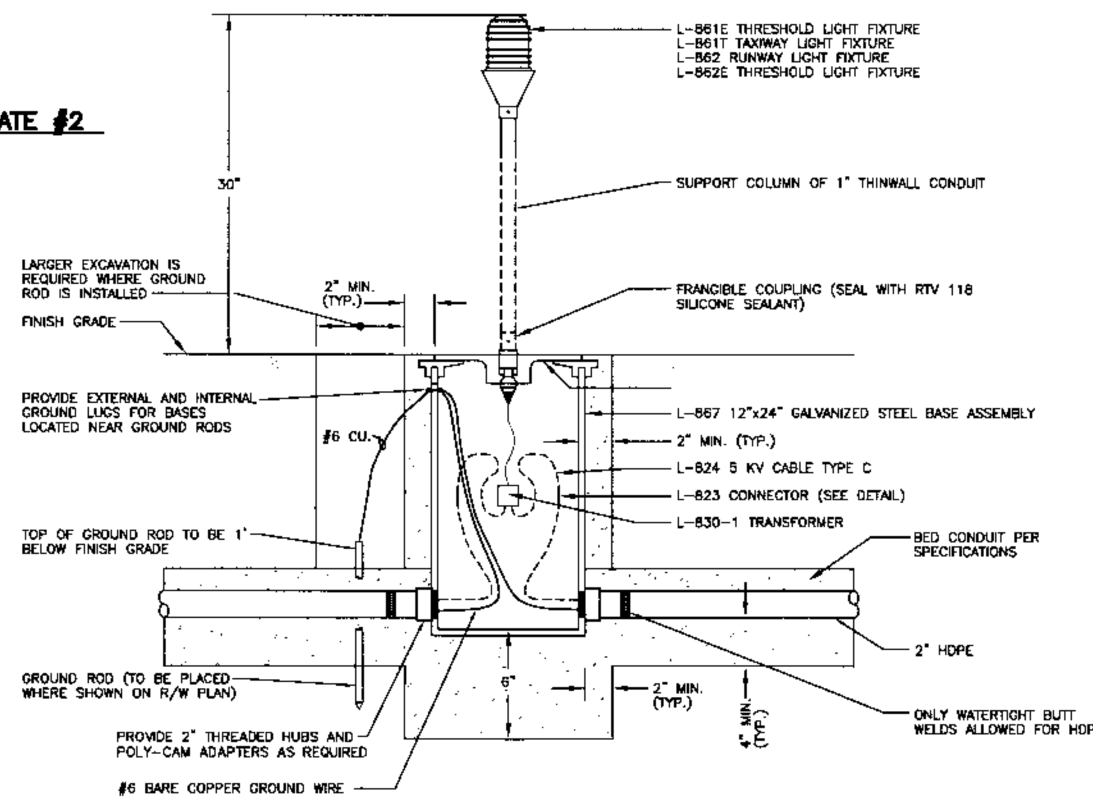
4 E3 TYPICAL LIGHTING SECTIONS
NTS



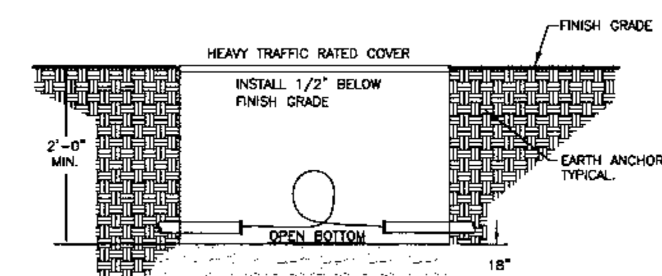
7 E3 ADJUST THRESHOLD LIGHT ELEVATION – **BASIC BID**
NTS



5 E3 CONDUIT TRENCH DETAIL
NTS



6 E3 R/W–T/W LIGHT DETAIL
NTS



NOTE:

1. EACH PULL 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" X 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" OR "FAA-WEATHER".
2. PULL BOX ARE SUBSIDIARY TO I132c AND NO SEPARATE PAYMENT WILL BE MADE.

8 E3 PULL BOX SECTION VIEW
NTS

AS-BUILT 10/2009 SHEET 42 OF 43

BY	DATE	REVISIONS	BY	DATE	REVISIONS
			SGD	2/3/10	AS-BUILT

PLANS DEVELOPED BY MBA ENGINEERS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

KING SALMON AIRPORT
KING SALMON, ALASKA
AIRPORT IMPROVEMENTS
PROJECT NO. 53147
AIP No. 3-02-0148-10-2008
LIGHTING DETAILS

SHEET E3 OF 42

Date Plotted: December 28, 2009
Designed By: AMS
Checked By: SGD/BRH

SIGN SCHEDULE

	SIGN No.	PANEL No.	TYPE	PURPOSE	LEGEND	LEGEND COLOR	FACE COLOR	STATIONING	
⟨2⟩	1	1 2	L-858B L-858B	RUNWAY DISTANCE REMAINING SIGN	7 1	WHITE WHITE	BLACK BLACK	R/W 12-30 STA. 21+46 (~~126'~~ 136' LT)	PROVIDE NEW TRANSFORMER
⟨2⟩	2	1 2	L-858B L-858B	RUNWAY DISTANCE REMAINING SIGN	6 2	WHITE WHITE	BLACK BLACK	R/W 12-30 STA. 31+46 (~~126'~~ 136' LT)	PROVIDE NEW TRANSFORMER
⟨1⟩	3	1 2	L-858B L-858B	RUNWAY DISTANCE REMAINING SIGN	5 3	WHITE WHITE	BLACK BLACK	R/W 12-30 STA. 41+46 (~~126'~~ 136' LT)	NEW SIGN SIZE 4, STYLE 3, CLASS 2
⟨2⟩	4	1 2	L-858B L-858B	RUNWAY DISTANCE REMAINING SIGN	4 4	WHITE WHITE	BLACK BLACK	R/W 12-30 STA. 51+46 (~~126'~~ 136' LT)	PROVIDE NEW TRANSFORMER
⟨2⟩	5	1 2	L-858B L-858B	RUNWAY DISTANCE REMAINING SIGN	3 5	WHITE WHITE	BLACK BLACK	R/W 12-30 STA. 61+46 (~~126'~~ 136' LT)	PROVIDE NEW TRANSFORMER
⟨2⟩	6	1 2	L-858B L-858B	RUNWAY DISTANCE REMAINING SIGN	2 6	WHITE WHITE	BLACK BLACK	R/W 12-30 STA. 71+46 (~~126'~~ 136' LT)	PROVIDE NEW TRANSFORMER
⟨2⟩	7	1 2	L-858B L-858B	RUNWAY DISTANCE REMAINING SIGN	1 7	WHITE WHITE	BLACK BLACK	R/W 12-30 STA. 81+46 (~~126'~~ 136' LT)	PROVIDE NEW TRANSFORMER
⟨3⟩	8	1 2	L-858L L-858R	LOCATION MANDATORY INSTRUCTION	P 30	YELLOW WHITE	BLACK RED	R/W 12-30 STA. 92+85 (222.5' LT)	PROVIDE NEW SIGN PANELS AND NEW TRANSFORMER
⟨3⟩	9	1 2	L-858L L-858R	LOCATION MANDATORY INSTRUCTION	A 12	YELLOW WHITE	BLACK RED	R/W 12-30 STA. 6+66 (244' RT)	PROVIDE NEW SIGN PANELS
⟨3⟩	10	1 2	L-858L L-858R	LOCATION MANDATORY INSTRUCTION	B 12	YELLOW WHITE	BLACK RED	R/W 12-30 STA. 10+16 (251' RT)	PROVIDE NEW SIGN PANELS
⟨3⟩	11	1 2	L-858L L-858R	LOCATION MANDATORY INSTRUCTION	M 12	YELLOW WHITE	BLACK RED	R/W 12-30 STA. 10+52 (262.8' LT)	PROVIDE NEW SIGN PANELS
⟨2⟩⟨3⟩	12	1 2	L-858R	MANDATORY INSTRUCTION	30-12 BLANK	WHITE	RED	R/W 18-36 STA. 48+91.53 (75' LT)	PROVIDE NEW SIGN PANELS AND NEW TRANSFORMER
⟨2⟩⟨3⟩	13	1 2	L-858R	MANDATORY INSTRUCTION	12-30 BLANK	WHITE	RED	R/W 18-36 STA. 53+94.56 (75' RT)	PROVIDE NEW SIGN PANELS AND NEW TRANSFORMER
⟨3⟩	14	1 2	L-858R L-858Y	MANDATORY INSTRUCTION DESTINATION	12-30 CARGO	WHITE BLACK	RED YELLOW	R/W 12-30 STA. 65+44.5 (202' RT)	PROVIDE NEW SIGN PANELS
⟨6⟩⟨1⟩	15	1 2	L-858Y	RUNWAY EXIT SIGN	—G	BLACK	YELLOW	R/W 18-36 STA. 72+97.3 (75' LT)	NEW SIGN SIZE 2, STYLE 2, CLASS 2
⟨6⟩⟨1⟩	16	1 2	L-858L L-858R	LOCATION SIGN MANDATORY INSTRUCTION	G 36	YELLOW WHITE	BLACK RED	T/W G STA. 402+50 (42.5' RT)	NEW SIGN SIZE 2, STYLE 2, CLASS 2
⟨1⟩	17	1 2	L-858R	MANDATORY INSTRUCTION	ILS	WHITE	RED	R/W 12-30 STA. 5+50 (400' RT)	NEW SIGN SIZE 2, STYLE 2, CLASS 2
		3 4	L-858Y	ILS AREA BOUNDARY SIGN	⫼	BLACK	YELLOW		

1/2" PER FOOT

NOTES:

⟨1⟩ INSTALL NEW SIGN.

⟨2⟩ RELOCATE EXISTING SIGN.

⟨3⟩ REPLACE SIGN PANELS WITH NEW REFLECTING THE NEW RUNWAY DESIGNATION. EXISTING SIGNS ARE SIZE 2. MANUFACTURED BY SIEMENS. PANELS ARE SPLIT BY DIVIDERS AT STANDARD MODULE WIDTH. THIS WORK SHALL BE SUBSIDIARY TO L-100n AND NO SEPARATE PAYMENT WILL BE MADE.

4. ALL CIRCUITS 6.6 A

5. TRANSFORMER WATTAGE SIZE PER MANUFACTURER'S SPECIFICATION.

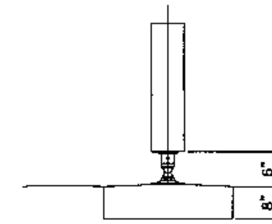
⟨6⟩ **ADDITIVE ALTERNATE #2**

7. ATTACH SIGNS TO CONCRETE BASE IN ACCORDANCE WITH MANUFACTURE'S INSTRUCTION.

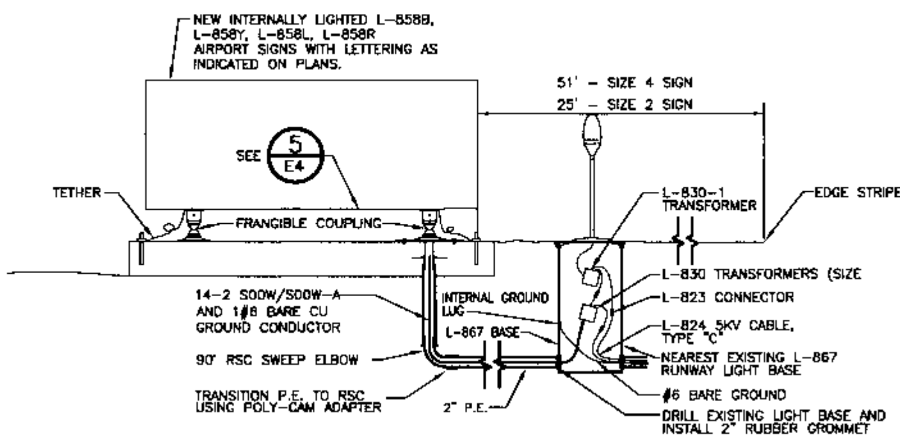
8. THE CONTRACTOR SHALL CERTIFY THE CONCRETE BASE IF CONSTRUCTED ON MEETING THE SPECIFICATION P610.

ADJUST THRESHOLD LIGHT ELEVATION – BASIC BID

LIGHT NO.	EXISTING ELEVATION	PLANNED ELEVATION	EXTENSION
L1	56.51	57.12	6-3/4"
L2	56.74	57.22	5"
L3	56.95	57.32	3-3/4"
L4	57.04	57.42	3-3/4"
L5	57.08	57.41	3-1/4"
L6	56.96	57.32	3-3/4"
L7	56.80	57.22	4-1/4"
L8	56.67	57.08	4-1/4"



1 / E4 SIDE VIEW
NTS

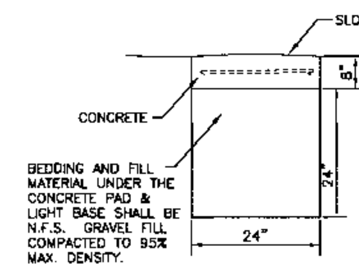


2 / E4 FRONT VIEW
NTS

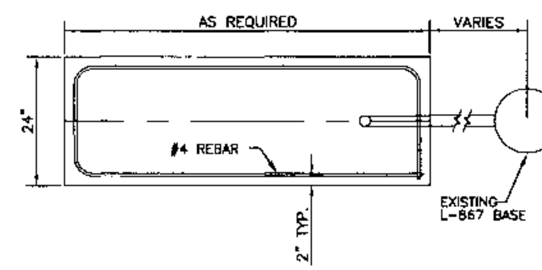
EDGE LIGHT BASE EXTENSION NOTES:

1. REMOVE THE EXISTING LIGHT FIXTURE AND BASE PLATE.
2. INSTALL THE NEW L-867 BASE EXTENSION . THE BASE EXTENSION SHALL BE TYPE L-867, CLASS 1, SIZE B, GALVANIZED STEEL.
3. REINSTALL THE LIGHT FIXTURE WITH STAINLESS STEEL HARDWARE AND COAT THE BOLTS AND FRANGIBLE COUPLINGS WITH A SUITABLE CORROSION INHIBITOR PRIOR TO BEING INSTALLED. REUSE EXISTING COMPONENTS AND PROVIDE NEW COMPONENTS AS INDICATED.

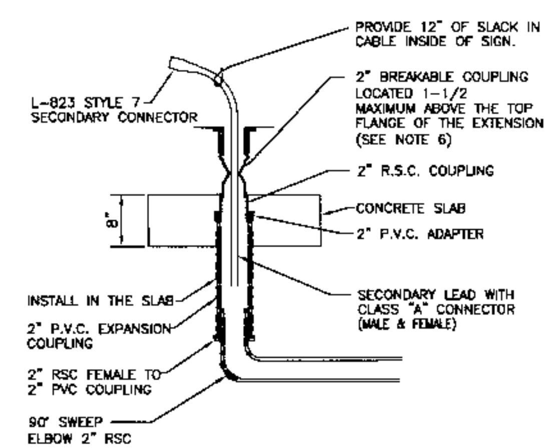
L-858 SIGN DETAILS



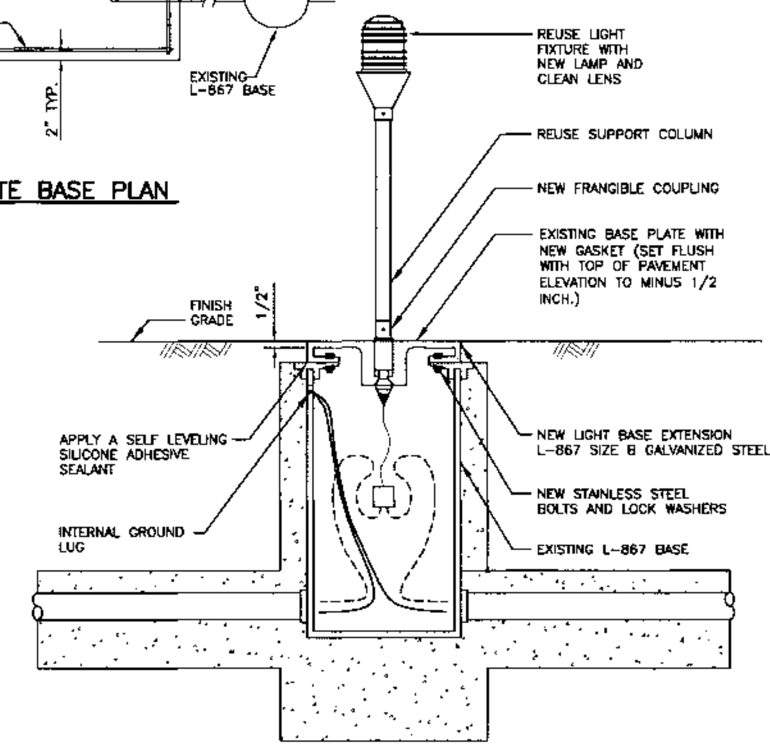
3 / E4 CONCRETE BASE SIDE VIEW
NTS



4 / E4 CONCRETE BASE PLAN
NTS



5 / E4 ELECTRICAL CONNECTION DETAIL
NTS



6 / E4 EDGE LIGHT BASE EXTENSION DETAIL
NTS

AS-BUILT 10/2009 SHEET 43 OF 43

BY	DATE	REVISIONS	BY	DATE	REVISIONS
			[illegible]	2/2/10	AS-BUILT

PLANS DEVELOPED BY MBA ENGINEERS

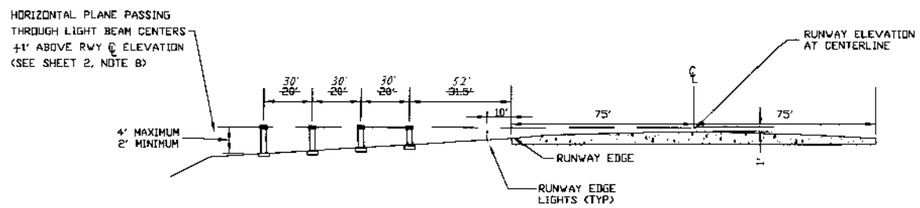
STATE OF ALASKA 49TH MICHAEL J. LOVE 4/15/08 EE-5613

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

KING SALMON AIRPORT
KING SALMON, ALASKA
AIRPORT IMPROVEMENTS
PROJECT NO. 53147
AIP No. 3-02-0148-10-2008
SIGN SCHEDULE AND DETAILS

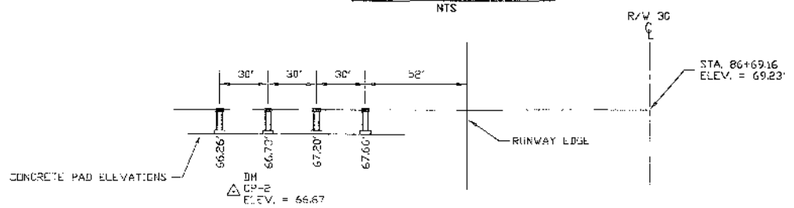
SHEET E4 OF 42

Designed By: AMS
Checked By: SGO/BRH
Drawn By:
DOWL FILE No: 233-11
Date Plotted: December 28, 2009



ELEVATION - TYPICAL

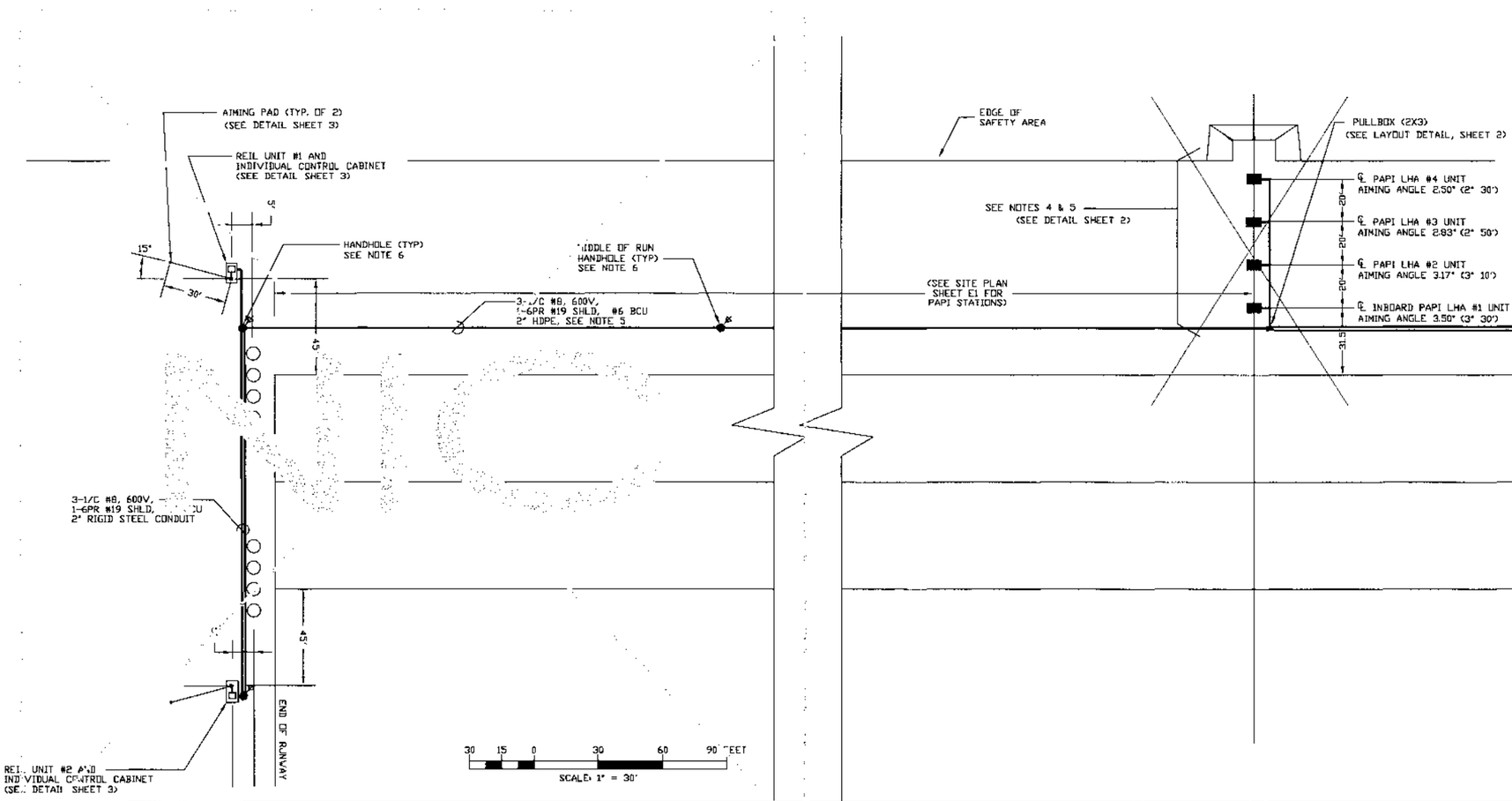
NTS



NTS

NOTES:

1. COORDINATE ALL ACTIVITIES WITH THE AIRPORT MANAGER AND LOCATE EXISTING CABLES PRIOR TO TRENCHING. BACKFILL AND COMPACT IN 6' LIFTS, TOP COARSE AND OVERALL COMPACTION SHALL BE EQUAL TO SURROUNDING SAFETY AREA.
2. CABLE SHALL BE INSTALLED IN ACCORDANCE WITH APPLICABLE CABLE INSTALLATION STANDARDS.
3. INSTALL CABLE MARKERS AT 200' SPACING ON RUNS OVER 200' IN LENGTH AND AT LOCATION OF CHANGE OF DIRECTION ON CABLE RUN AND AT SPLICE AS REQUIRED BY SPECIFICATION FAA-C-1391.
4. ALL UNITS IN A BAR SHALL BE LOCATED ON A LINE PERPENDICULAR TO THE RUNWAY CENTERLINE. THE FRONT FACES OF EACH LIGHT UNIT MUST BE WITHIN ±6" OF THIS LINE.
5. ALL UNITS SHALL BE AIMED OUTWARD INTO THE APPROACH ZONE ON A LINE PARALLEL TO THE RUNWAY CENTERLINE WITHIN A TOLERANCE OF ± 1/2 DEGREE.
6. HDPE CONDUIT AND L-867 HANDHOLES SHALL BE INSTALLED IN ACCORDANCE WITH BASE CONTRACT DRAWINGS AND SPECIFICATIONS.



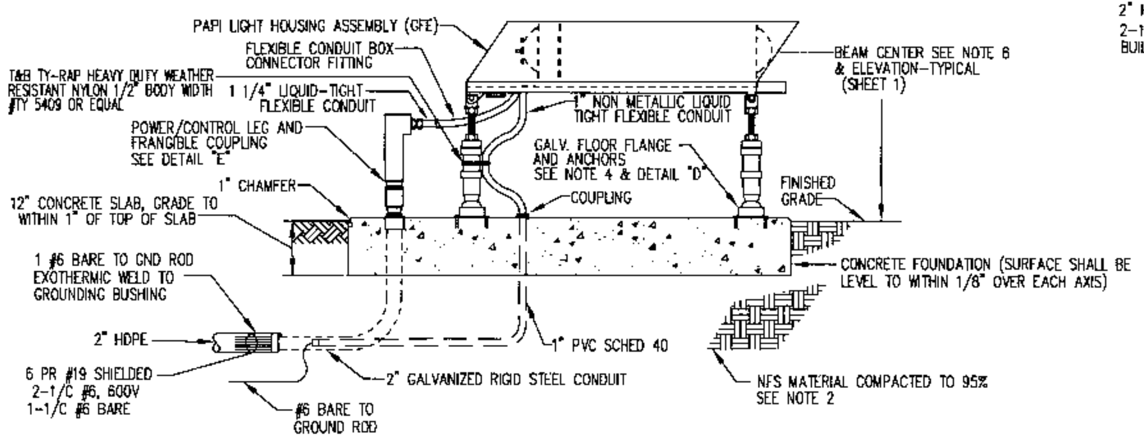
REV NO.	RECORD DATE / DESIGN DATE	PRINTED NAME	DRAFTED BY / CHECKED BY	DESCRIPTION
	2/3/10	AS-BUILT	EMR	
	8/12/07			

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
ALASKAN REGION - ANCHORAGE, ALASKA

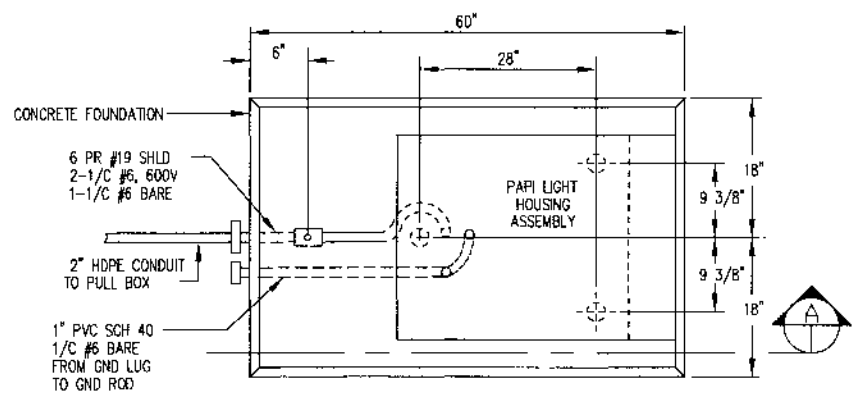
REIL/PAPI
PLOT PLAN
VARIOUS, ALASKA

SUBMITTED BY	APPROVED BY
THOMAS P. ONDRA PROJECT MANAGER, ANI-760/760	WALTER WILSON, MANAGER ANI-780/780 NAV/LANDING/SURV/WX PLATFORM

DESIGNED BY	AIRWAY FACILITIES SERVICE	DATE	STD DET NA-SMO
DRAWN BY	ANI-700		
REVIEWED BY	ANCHORAGE	DRAWING NUMBER	
SHEET NO 1/3	NAS IMPLEMENTATION CENTER	ALD-9A3-XXX.XXX	X

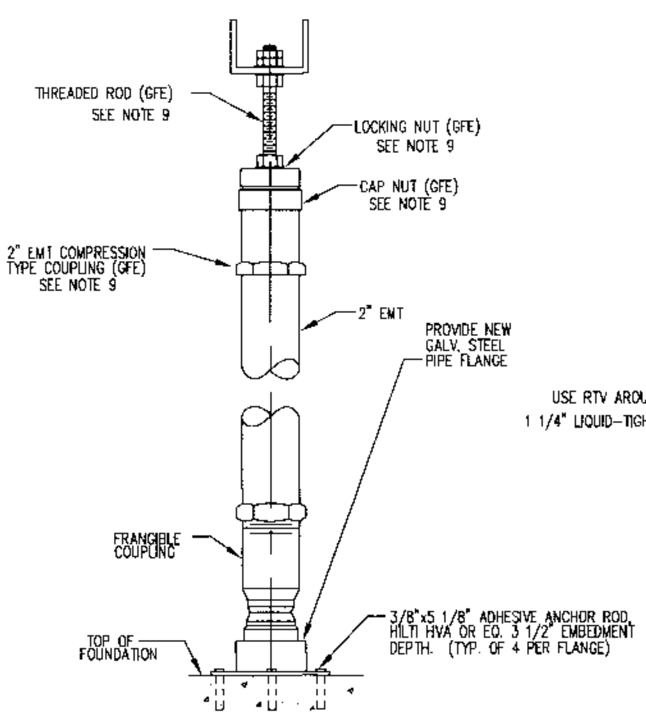


SECTION A



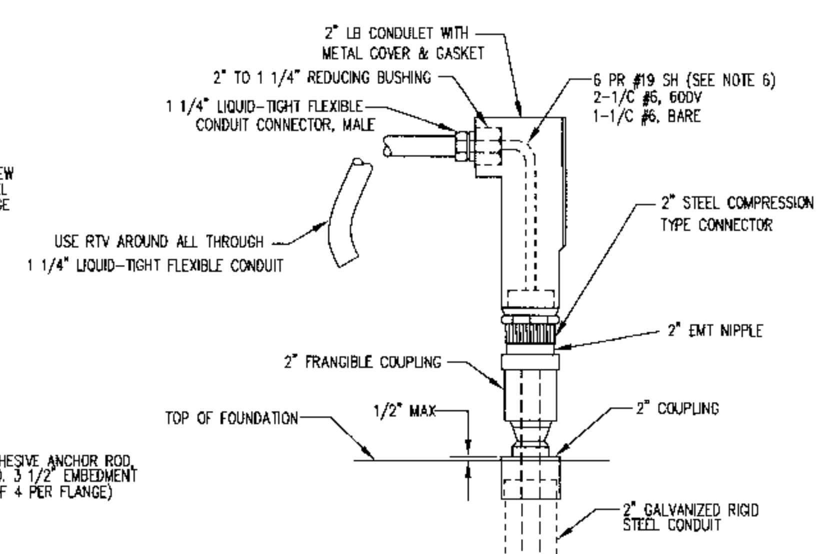
LIGHT HOUSING ASSEMBLY

PLAN VIEW



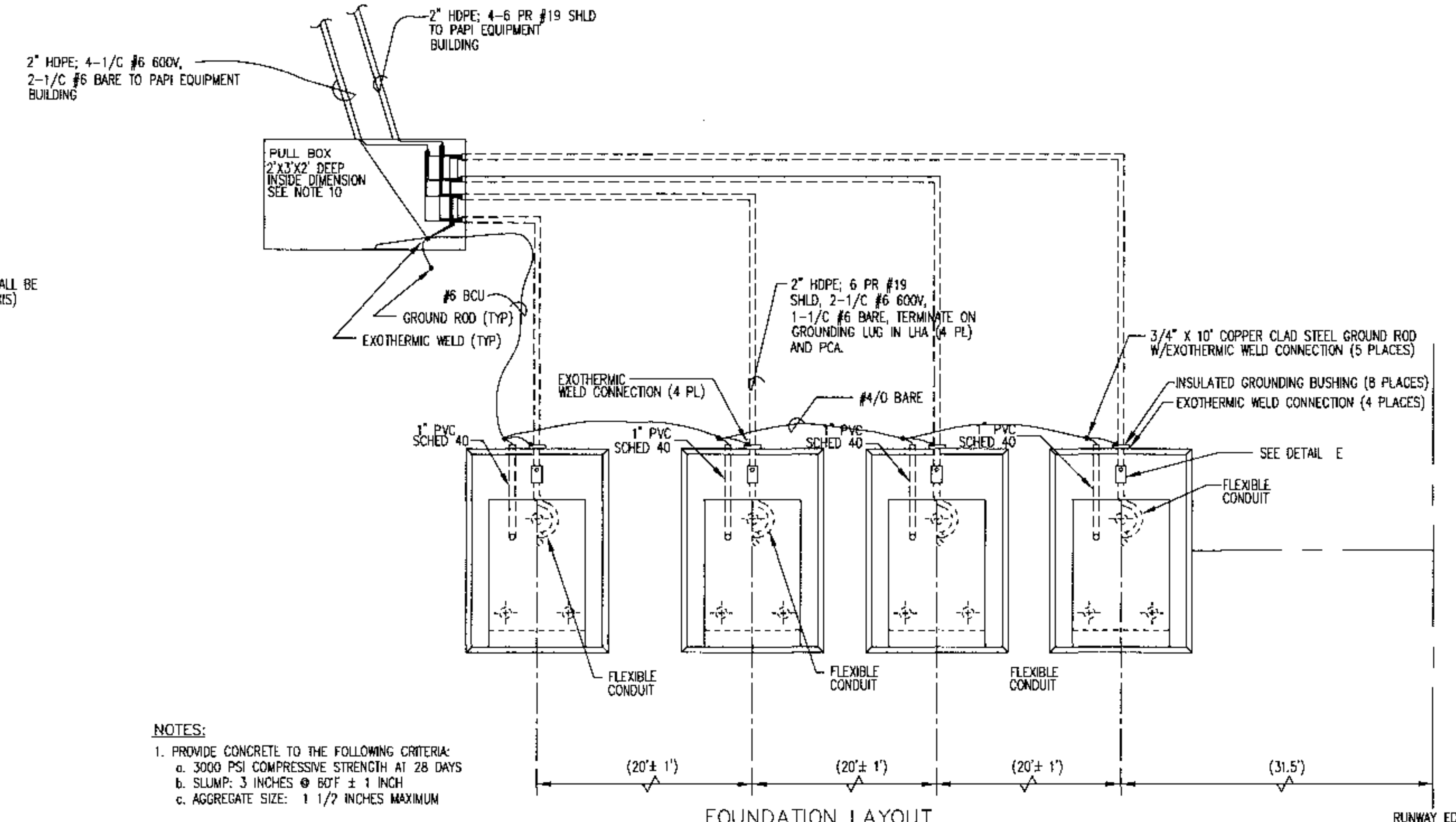
DETAIL 'D'

STRUCTURAL LEG DETAIL



DETAIL 'E'

POWER AND CONTROL WIRE LEG

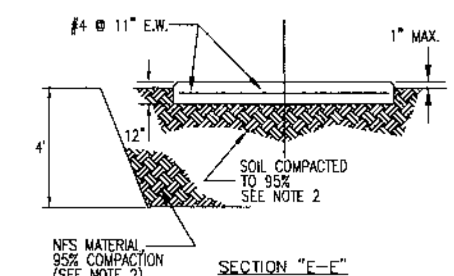


FOUNDATION LAYOUT

NOT TO SCALE

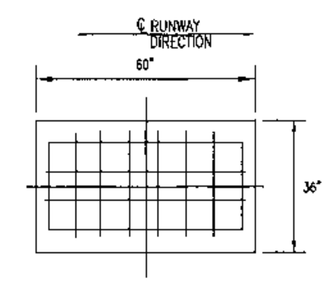
NOTES:

1. PROVIDE CONCRETE TO THE FOLLOWING CRITERIA:
   a. 3000 PSI COMPRESSIVE STRENGTH AT 28 DAYS
   b. SLUMP: 3 INCHES @ 60°F ± 1 INCH
   c. AGGREGATE SIZE: 1 1/2 INCHES MAXIMUM
2. PRIOR TO PLACING FORMS, ENSURE ONLY NFS MATERIAL COMPACTED TO 95% IS BELOW ALL FOUNDATIONS. IF NFS MATERIAL IS NOT PRESENT, EXCAVATE AS REQUIRED TO PROVIDE A MINIMUM OF 4 FEET OF NFS MATERIAL BENEATH PAPI FOUNDATIONS. PLACE FILL IN 8" LIFTS AND COMPACT TO 95% OF MAXIMUM DENSITY AS DETERMINED BY ASTM D-1557 OR ATM T-12.
3. REINFORCING STEEL SHALL BE ASTM A615, GRADE 60, DEFORMED STEEL BARS.
4. DRILL HOLES AND INSTALL ADHESIVE ANCHOR RODS WHEN PAPI UNITS HAVE BEEN ACCURATELY LOCATED.
5. COORDINATE PLACEMENT OF CONDUIT STUB-UPS WITH ELECTRICAL CONTRACTOR & SITE ENGINEER.
6. CLEAN AND FOLD BACK UNUSED SHIELDED PAIRS AND TAPE IN THE LHA.
7. ALL MOUNTINGS TO BE 2 INCH FRANGIBLE COUPLINGS.
8. 2" EMT LENGTH IS REQUIRED SO THAT THE BEAM CENTERS OF ALL LIGHT UNITS SHALL BE WITHIN 1 INCH OF A HORIZONTAL PLANE. THIS HORIZONTAL PLANE SHALL BE WITHIN 1 FOOT OF THE ELEVATION OF THE RUNWAY CROWN ADJACENT TO THE PAPI UNITS. IDEAL LAMP HEIGHT IS 3-4 FEET ABOVE GRADE, CONTACT FAA IF LESS THAN 2.5 FEET FOR OPTIONS. CUT REAR EMT LEG 1.5" SHORTER THAN FRONT TO AID IN AIMING.
9. TO PREVENT SEIZURE, ADD ANTI-SEIZE COMPOUND, NSN# 8030-00-251-3980 MANUFACTURED BY JET-LUBE, INC., HOUSTON, TX OR EQUAL.
10. LAYOUT IS GENERAL, REFERENCE SHEET 1 FOR ACTUAL PULL BOX LOCATION. ENSURE 18" MIN OF FREE DRAINING MATERIAL IS UNDER PULL BOX.



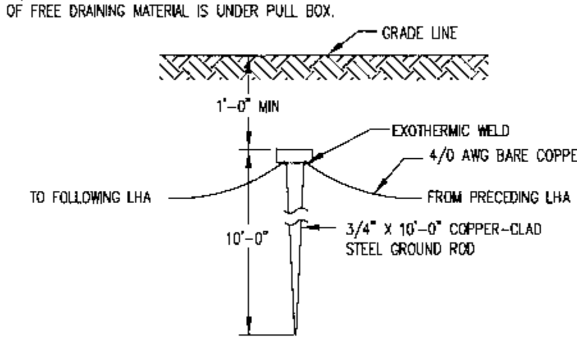
SECTION "E-E"

SCALE: 3/4" = 1'



PLAN PAPI FOUNDATION

SCALE: 3/4" = 1'



DETAIL 'A'

TYPICAL GROUND ROD INSTALLATION DETAIL

REV. NO.	RECORD DATE / DESIGN DATE	PRINTED NAME	DRAFTED BY / CHECKED BY	DESCRIPTION
	2/3/10	AS-BUILT	[illegible]	
	9/12/07			

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
ALASKAN REGION — ANCHORAGE, ALASKA

PAPI
DETAILS
VARIOUS, ALASKA

SUBMITTED BY: THOMAS P. ONDRA, PROJECT MANAGER, ANI-750/780

APPROVED BY: WALTER WILSON, MANAGER ANI-750/760 NAV/LANDING/SURV/WX PLATFORM

DESIGNED BY / DRAWN BY / REVIEWED BY

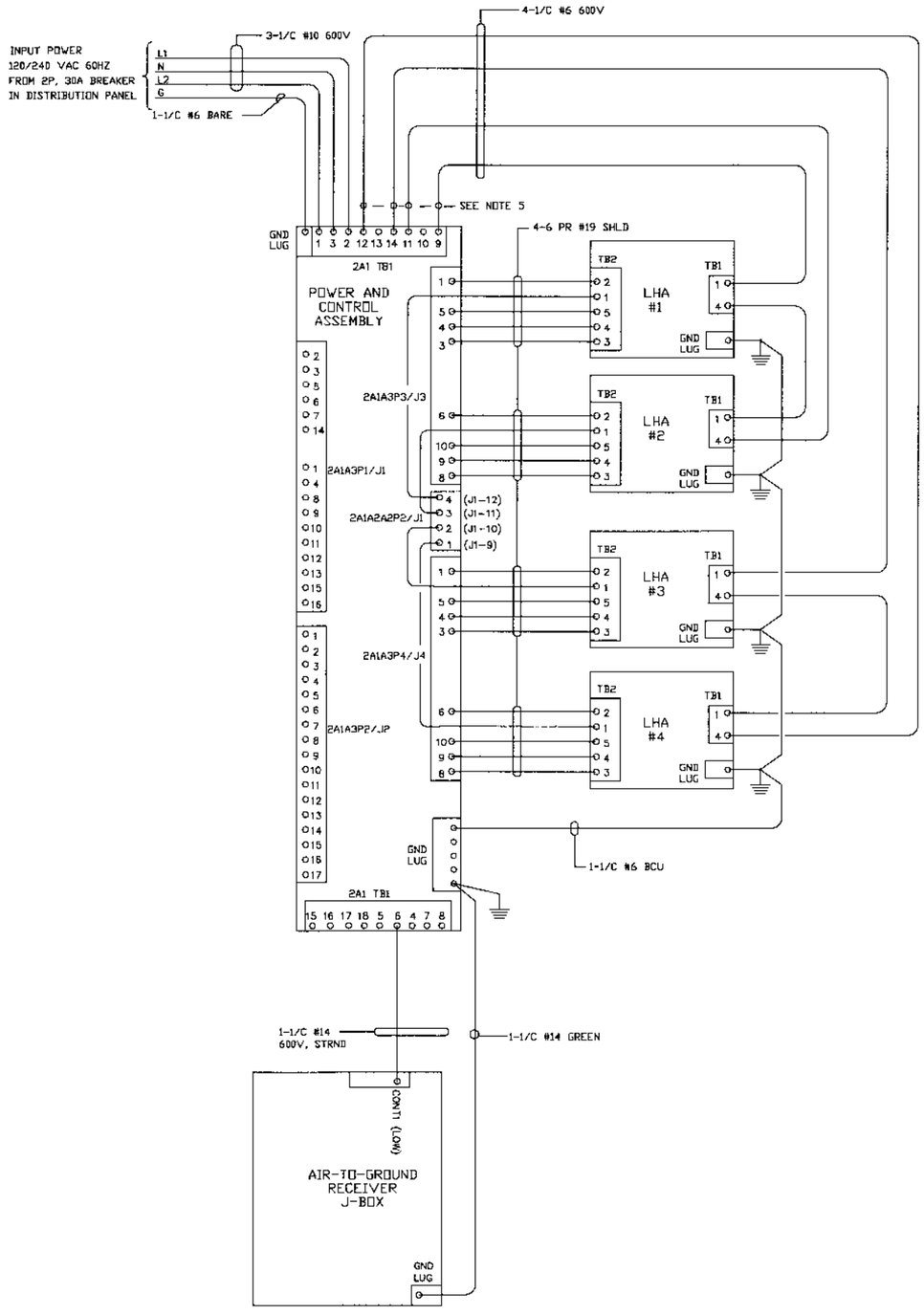
AIRWAY FACILITIES SERVICE
ANI-700
ANCHORAGE
NAS IMPLEMENTATION CENTER

DATE

STD DIST NA-SMO

DRAWING NUMBER: ALD-9A3-XXX.XXX X

SHEET NO 2/3



PAPI ELECTRICAL SYSTEM WIRING DIAGRAM

SCALE: N.T.S.

NOTE

1. REFERENCE FIGURE 9-6 IN TI 6850.96 (INCLUDED WITH EQUIPMENT) FOR PAPI JACK LOCATIONS.
2. REFERENCE CHAPTER 9 OF TI 6850.96 FOR JACK LOCATIONS, AS WELL AS DETAILED INSTALLATION INSTRUCTIONS.
3. NOT USED.
4. THE SHIELDED CONTROL CABLE SHALL HAVE ITS OUTER JACKET AND SHIELD TRIMMED BACK TO THE POINT OF ENTRY INTO THE CABINET. GROUND THE SHIELD AND CLEAN ALL CONDUCTORS WHILE ENSURING THE PAIRS REMAIN TWISTED. NEATLY ROUTE AND SECURE ALL CONDUCTORS OUT OF THE WAY ALONG THE BACK AND SIDES OF THE CABINET TO ALLOW FOR TROUBLESHOOTING AND COMPONENT REPAIR. ALL UNUSED CONDUCTORS SHALL BE FOLDED BACK AND NEATLY SECURED IN EITHER THE CONDUIT OR ALONG THE BOTTOM OF THE CABINET.
5. #8 AWG AND LARGER CONDUCTORS WILL NOT FIT IN 2A1TB1, TRANSITION TO #10 AWG STRANDED IN SQUARE DUCT UTILIZING A BURNDY IN-LINE SPLICER/REDUCER #BISR2 OR EQUAL.

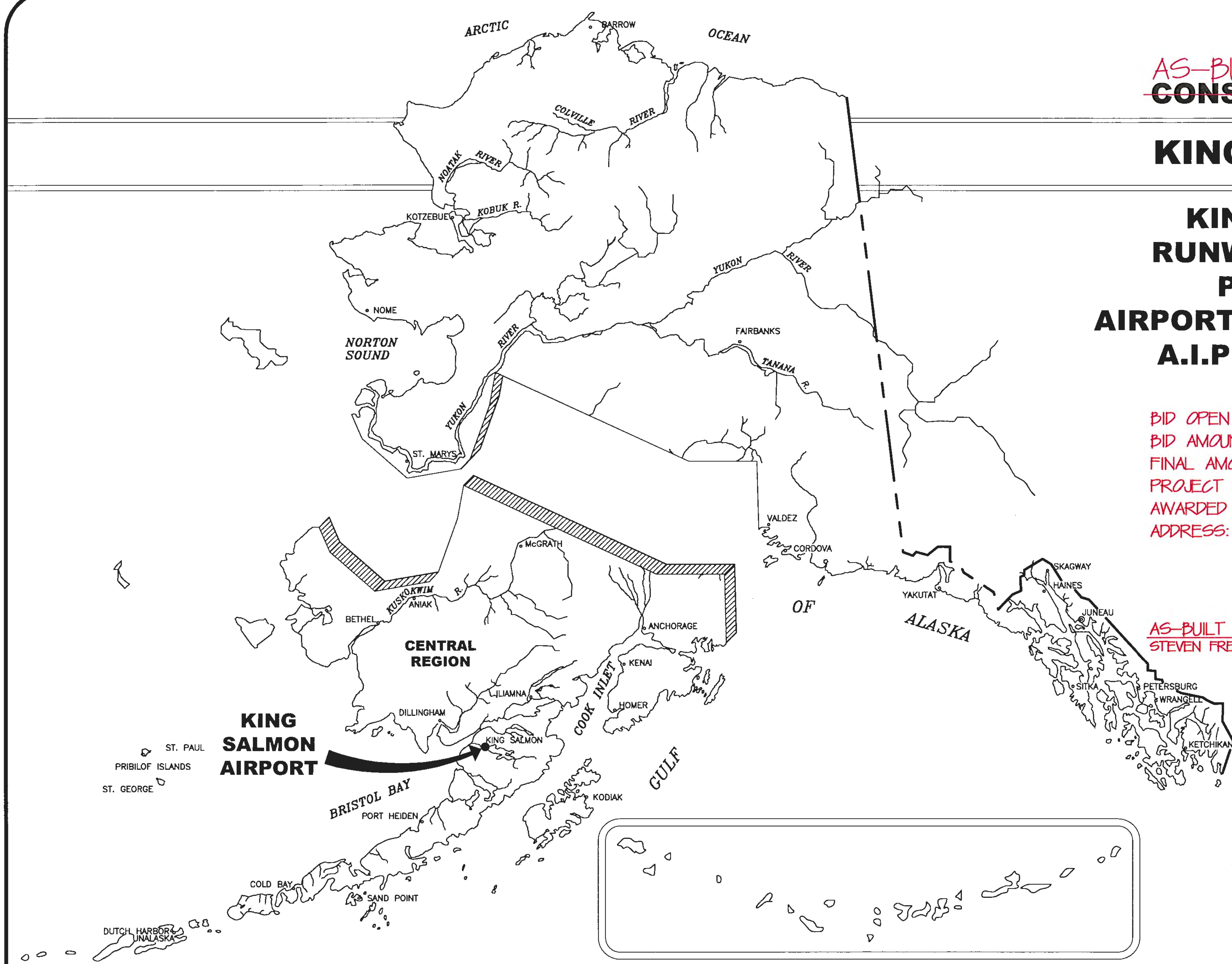
REV NO.	RECORD DATE / DESIGN DATE	PRINTED NAME	DRAFTED BY / CHECKED BY	DESCRIPTION
A/3/CD	9/12/07	AS-BUILT	[illegible]	

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
ALASKAN REGION - ANCHORAGE, ALASKA

PAPI
ELECTRICAL WIRING SCHEMATIC AND VARIOUS, ALASKA

SUBMITTED BY	APPROVED BY
THOMAS P. ONDRA PROJECT MANAGER, ANI-760/780	WALTER WILSON, MANAGER ANI-760/780 NAV/LANDING/SURV/WX PLATFORM

SHEET NO	DESIGNED BY / DRAWN BY / REVIEWED BY	AIRWAY FACILITIES SERVICE	DATE	STD DGT NA-SNG
3/3		ANI-700 ANCHORAGE NAS IMPLEMENTATION CENTER	DRAWING NUMBER ALD-XXX-XXX.XXX	X



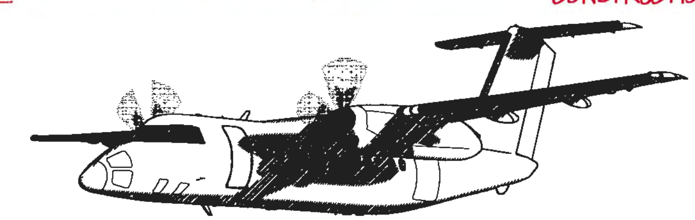
AS-BUILT ~~CONSTRUCTION~~ PLANS FOR

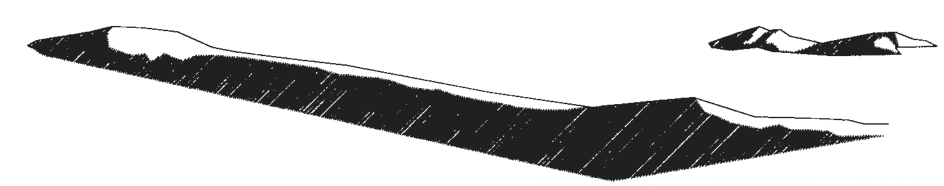
KING SALMON AIRPORT

KING SALMON, ALASKA
RUNWAY & TAXIWAY SIGNS
PROJECT No. 57093
AIRPORT IMPROVEMENT PROGRAM
A.I.P. No. 3-02-0148-12-2011
2014

BID OPEN DATE:	May 21, 2014
BID AMOUNT:	$ 486,700.00
FINAL AMOUNT:	$ 494,204.58
PROJECT ENGINEER:	SCOTT RHEE, P.E.
AWARDED CONTRACTOR:	ALASKA POWER & COMMUNICATIONS
ADDRESS:	6151 A STREET ANCHORAGE, AK 99518

AS-BUILT APPROVED [signature] DATE 3-12-15
STEVEN FREY, P.E. CONSTRUCTION GROUP CHIEF





AS-BUILT 1/2015 1 OF 17

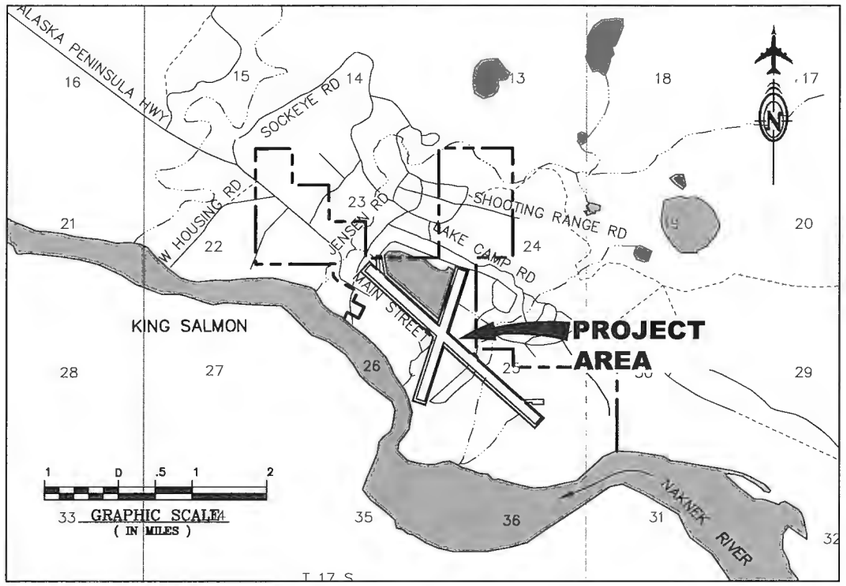
SPONSORED BY
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

CONCUR	DATE
JOEL ST. AUBIN, P.E.	DIRECTOR OF DESIGN AND CONSTRUCTION
APPROVED	DATE
KENNETH M. MORTON, P.E.	REGIONAL PRECONSTRUCTION ENGINEER
APPROVED	DATE
WOLFGANG JUNGE, P.E.	DESIGN SECTION CHIEF
APPROVED	DATE
MORGAN P. MERRITT, P.E.	PROJECT MANAGER

KING SALMON
RUNWAY & TAXIWAY SIGNS
PROJECT No. 57093
A.I.P. No. 3-02-0148-12-2011

CIVIL LEGEND

EXISTING	NEW	DESCRIPTION
		PROPERTY BOUNDARY
RSA		RUNWAY SAFETY AREA
		EDGE OF GRAVEL
		EDGE OF PAVEMENT
		RAP
		CONCRETE
X X		FENCE
SD		STORM DRAIN LINE
S		SANITARY SEWER LINE
		CULVERT
		DRAINAGE
		WETLANDS
E		UNDERGROUND ELECTRIC LINE
C		UNDERGROUND COMMUNICATION LINE
120		CONTOUR LINE
		SILT FENCE
		BUILDING
SD		STORM DRAIN MANHOLE
SS		SANITARY SEWER MANHOLE
SEWER		SEWER CLEANOUT
SEPTIC		SEWER SEPTIC CLEANOUT
WELL		MONITORING WELL
		WATER VALVE
		HYDRANT
		FUEL TANK
		GUARD RAIL
		ELECTRICAL PEDESTAL
		ELECTRICAL VAULT/TRANSFORMER
		RADIO TOWER
		ELECTRIC METER
		GUY ANCHOR
		ELECTRIC POWER POLE
		ELECTRIC LIGHT POLE
		ELECTRIC MANHOLE
		ELECTRIC JUNCTION BOX
		RUNWAY THRESHOLD LIGHT (BLUE/RED)
		RUNWAY EDGE LIGHT (WHITE)
		RUNWAY EDGE LIGHT (BLUE)
		RUNWAY APPROACH LIGHT
		TAXIWAY/APRON EDGE LIGHT
		PAPI
		TELEPHONE PEDESTAL
		TELEPHONE MANHOLE
		SIGN/MARKER
		RUNWAY DISTANCE REMAINING SIGN
		BOLLARD
TH-05-##		EXISTING TEST HOLE
		AIRCRAFT TIE DOWN
		AIRCRAFT TIEDOWN ANCHORS
		SATELLITE/RADAR DISH
		SPRUCE TREE
		ELECTRICAL PLUG IN
		ELECTRIC POWER POLE W/ LIGHT
		SEWER VENT PIPE
		LIGHTED WIND CONE
		SEGMENTED CIRCLE



VICINITY MAP

T 17 S, R 45 W, SEC 23, 24, 25, & 26
SEWARD MERIDIAN, ALASKA
U.S.G.S. NAKNEK C-3 & C-2, AK

INDEX

GENERAL NOTES

1. EXISTING GROUND CONTOURS ARE BASED ON DOWL HKM TOPOGRAPHIC SURVEY PERFORMED IN JULY THROUGH OCTOBER 2005, JANUARY & NOVEMBER 2006, AND JULY & AUGUST 2007.
2. SOILS INFORMATION IS DERIVED FROM SOILS INVESTIGATIONS PERFORMED BY DOT&PF AND DOWL HKM. SEE GEOTECHNICAL REPORT DATED JUNE 2006 TITLED KING SALMON AIRPORT RUNWAY SAFETY AREA IMPROVEMENTS PHASE 1 AND REPORT DATED APRIL 2008 TITLED SUBSURFACE EXPLORATION AND GEOTECHNICAL RECOMMENDATIONS, KING SALMON AIRPORT IMPROVEMENTS.
3. LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE BASED ON A COMBINATION OF FIELD SURVEY, AS BUILT RECORDS, AND APPROXIMATIONS FROM AIRPORT MAINTENANCE STAFF. CONTRACTOR SHALL FIELD LOCATE UTILITIES PRIOR TO EXCAVATION.
4. VERIFY HORIZONTAL AND VERTICAL LOCATIONS OF ALL UTILITIES ENCOUNTERED DURING CONSTRUCTION. RECORD LOCATIONS AND CHANGES TO UTILITIES IN SURVEY NOTES AND ON AS BUILT DRAWINGS.
5. VERIFY INVERTS AND LOCATIONS OF ALL UTILITY CONNECTION POINTS PRIOR TO INSTALLING PIPE. REPORT DISCREPANCIES FROM PLANS IMMEDIATELY TO OWNER'S REPRESENTATIVE.
6. ELEVATIONS SHOWN ARE TO PIPE INVERT, FLOW LINE, OR FINISH PAVEMENT SURFACE UNLESS OTHERWISE NOTED.
7. RESTORE ALL DISTURBED PROPERTY OUTSIDE OF WORK LIMITS TO ORIGINAL CONDITION.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR EROSION AND SEDIMENT CONTROLS AS NECESSARY TO COMPLY WITH FEDERAL, STATE, AND BOROUGH LAWS THAT PROHIBIT UNPERMITTED DISCHARGE OF POLLUTANTS, INCLUDING SEDIMENTS, THAT ARE A RESULT OF EROSION AND OTHER CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL CONDUCT ALL WORK SO SEDIMENT IS NOT TRANSPORTED ONTO THE ROADWAY OR ADJACENT PROPERTY. AT A MINIMUM, THE CONTRACTOR SHALL SWEEP UP ANY SEDIMENT TRACKED ONTO PAVED SURFACES IMMEDIATELY TO MINIMIZE THE WASH-OFF OF SEDIMENT INTO THE STORM DRAINAGE SYSTEM OR WATERWAYS AND TO MINIMIZE FOD. THE CONTRACTOR SHALL CONFORM WITH APPROVED SWPPP.

ABBREVIATIONS

ABN	ABANDONED	ELEC	ELECTRIC	MH	MANHOLE	SY	SQUARE YARD
AC	ASPHALT CONCRETE	ELEV	ELEVATION	MIN	MINIMUM	TSA	TAXIWAY SAFETY AREA
ACP	ASPHALT CONCRETE PAVEMENT	EMT	ELECTRICAL METALLIC TUBING	N	NORTH	TW	TAXIWAY
AD	ALGEBRAIC DIFFERENCE	EVCE	END VERTICAL CURVE ELEVATION	NOTAM	NOTICE TO AIRMEN	TYP	TYPICAL
AIP	AIRPORT IMPROVEMENTS PROJECT	EVCS	END VERTICAL CURVE STATION	NTS	NOT TO SCALE	UG	UNDERGROUND
BAK	BARRIER ARRESTING KIT	FAA	FEDERAL AVIATION ADMINISTRATION	PAPI	PRECISION APPROACH PATH INDICATOR	USAF	UNITED STATES AIR FORCE
BFM	BONDED FIBER MATRIX	FOD	FOREIGN OBJECT DEBRIS	PCC	PORTLAND CEMENT CONCRETE	VASI	VISUAL APPROACH SLOPE INDICATOR
BLDG	BUILDING	FR	FIBER ROLL	POMP	POLYMER COATED METAL PIPE	VC	VERTICAL CURVE
BVCE	BEGINNING VERTICAL CURVE ELEVATION	FT	FOOT	POFZ	PRECISION OBSTACLE FREE ZONE	W	WEST
BVCS	BEGINNING VERTICAL CURVE STATION	GA	GENERAL AVIATION	PVI	POINT OF VERTICAL INTERSECTION		
CABC	CRUSHED AGGREGATE BASE COURSE	HECP	HYDRAULIC EROSION CONTROL PRODUCT	RAP	RECYCLED ASPHALT PAVEMENT		
CASC	CRUSHED AGGREGATE SURFACE COURSE	HDPE	HIGH-DENSITY POLYETHYLENE	RT	RIGHT		
℄	CENTERLINE	HMA	HOT MIX ASPHALT	RW	RUNWAY		
CMP	CORRUGATED METAL PIPE	IFR	INSTRUMENT FLIGHT RULES	RSA	RUNWAY SAFETY AREA		
CPEP	CORRUGATED POLYETHYLENE PIPE	INV	INVERT	S	SOUTH		
CY	CUBIC YARD	LB	POUND	SD/FD	STORM DRAIN FIELD DRAIN		
DIA	DIAMETER	LF	LINEAR FOOT	SDMH	STORM DRAIN MANHOLE		
DOT&PF	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES	LT	LEFT	SRE	SNOW REMOVAL EQUIPMENT		
		MAX	MAXIMUM	STA	STATION		
E	EAST	ME	MATCH EXISTING	SWPPP	STORM WATER POLLUTION PREVENTION PLAN		
EA	EACH						

THE FOLLOWING DOT&PF STANDARD DRAWINGS APPLY TO THIS PROJECT:
E-13.00

PLAN PREPARED BY DOWL HKM

BY	DATE	REVISION
SJF	01/2015	AS-BUILT

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

KING SALMON AIRPORT
KING SALMON, ALASKA
RUNWAY & TAXIWAY SIGNS
PROJECT No. 57093
AIP No. 3-02-0148-12-2011
VICINITY MAP, ABBREVIATIONS, LEGEND, NOTES, & INDEX

DATE: 3/18/2014
SHEET: 2 OF 17
AS-BUILT SHEET:

AS-BUILT 1/2015 2 OF 17

Date Revised:
Layout Name: 2_VICINITY MAP ABBREV LEGEND NOTES & INDEX
File Path and Name: W:\Projects\King Salmon\57093 AKN Signs\Ak-built\AKN 2-3\Design\MS12-AV-DT-60137.dwg
DOWL FILE No: 234-28
SCRIPT FILE:
12/16/2014, 1:40 PM
Designed By: MJJ
Drawn By: RDL
Checked By: BRH

ESTIMATE OF QUANTITIES BASE BID

ITEM NO.	PAY ITEM	PAY UNIT	QUANTITY
G-100a	MOBILIZATION AND DEMOBILIZATION	LUMP SUM	ALL REQUIRED
G-115a	WORKER MEALS AND LODGING, OR PER DIEM	LUMP SUM	ALL REQUIRED
G-131a	ENGINEERING TRANSPORTATION (TRUCK)	EACH	1
G-135a	CONSTRUCTION SURVEYING BY THE CONTRACTOR	LUMP SUM	ALL REQUIRED
L-100n	AIRPORT SIGN, TYPE L-858	EACH	32
P-157a	EROSION, SEDIMENT, AND POLLUTION CONTROL ADMINISTRATION	LUMP SUM	ALL REQUIRED
P-157b	TEMPORARY EROSION, SEDIMENT, AND POLLUTION CONTROL	CONTINGENT SUM	ALL REQUIRED
P-157f	WITHHOLDING	CONTINGENT SUM	ALL REQUIRED
P-157g	SWPPP MANAGER	LUMP SUM	ALL REQUIRED
========== ADDITIVE ALTERNATE ==========			
L-100n.1	AIRPORT SIGN, TYPE L-858	EACH	6
	CHANGE ORDER NO. 1 (AIP)		
L-100m	ASPHALT SAW CUTTING AND REMOVAL	LUMP SUM	ALL REQUIRED

ESTIMATED QUANTITIES FOR SELECT* SUBSIDIARY ITEMS

ITEM NO.	ITEM	APPROXIMATE QUANTITY
L-100n	SPARE PARTS	ALL REQUIRED
	UNDERGROUND CABLE #8 AWG, COPPER, 5 kV FAA TYPE "B" OR TYPE "C", L-824	200 LF
	#6 BARE COPPER GROUND CONDUCTOR	1055 LF
	UNDERGROUND CABLE #14 AWG, 2-CONDUCTOR, COPPER, 600V, TYPE "SOOW-A/SOOW"	860 LF
	2-INCH HDPE CONDUIT	1095 LF
	REMOVAL OF STRUCTURES	ALL REQUIRED
	~~CRUSHED AGGREGATE BASE COURSE~~ RECYCLED ASPHALT PAVEMENT	105 TON
	STRUCTURAL PORTLAND CEMENT CONCRETE	17 CY
	GEOTEXTILE, SEPARATION	168 SY
L-100n.1	SPARE PARTS	ALL REQUIRED
	UNDERGROUND CABLE #8 AWG, COPPER, 5 kV FAA TYPE "B" OR TYPE "C", L-824	40 LF
	#6 BARE COPPER GROUND CONDUCTOR	260 LF
	UNDERGROUND CABLE #14 AWG, 2-CONDUCTOR, COPPER, 600V, TYPE "SOOW-A/SOOW"	190 LF
	2-INCH HDPE CONDUIT	255 LF
	REMOVAL OF STRUCTURES	ALL REQUIRED
	~~CRUSHED AGGREGATE BASE COURSE~~ RECYCLED ASPHALT PAVEMENT	15 TONS
	STRUCTURAL PORTLAND CEMENT CONCRETE	2 CY
	GEOTEXTILE, SEPARATION	22 SY

* SEE PLANS FOR ADDITIONAL ITEMS.

ESTIMATING FACTORS

ITEM NO.	PAY ITEM	ESTIMATING FACTOR
P-209b	CRUSHED AGGREGATE BASE COURSE	145 lb/ft3

AS-BUILT 1/2015 3 OF 17

BY	DATE	REVISION
SJF	01/2015	AS-BUILT

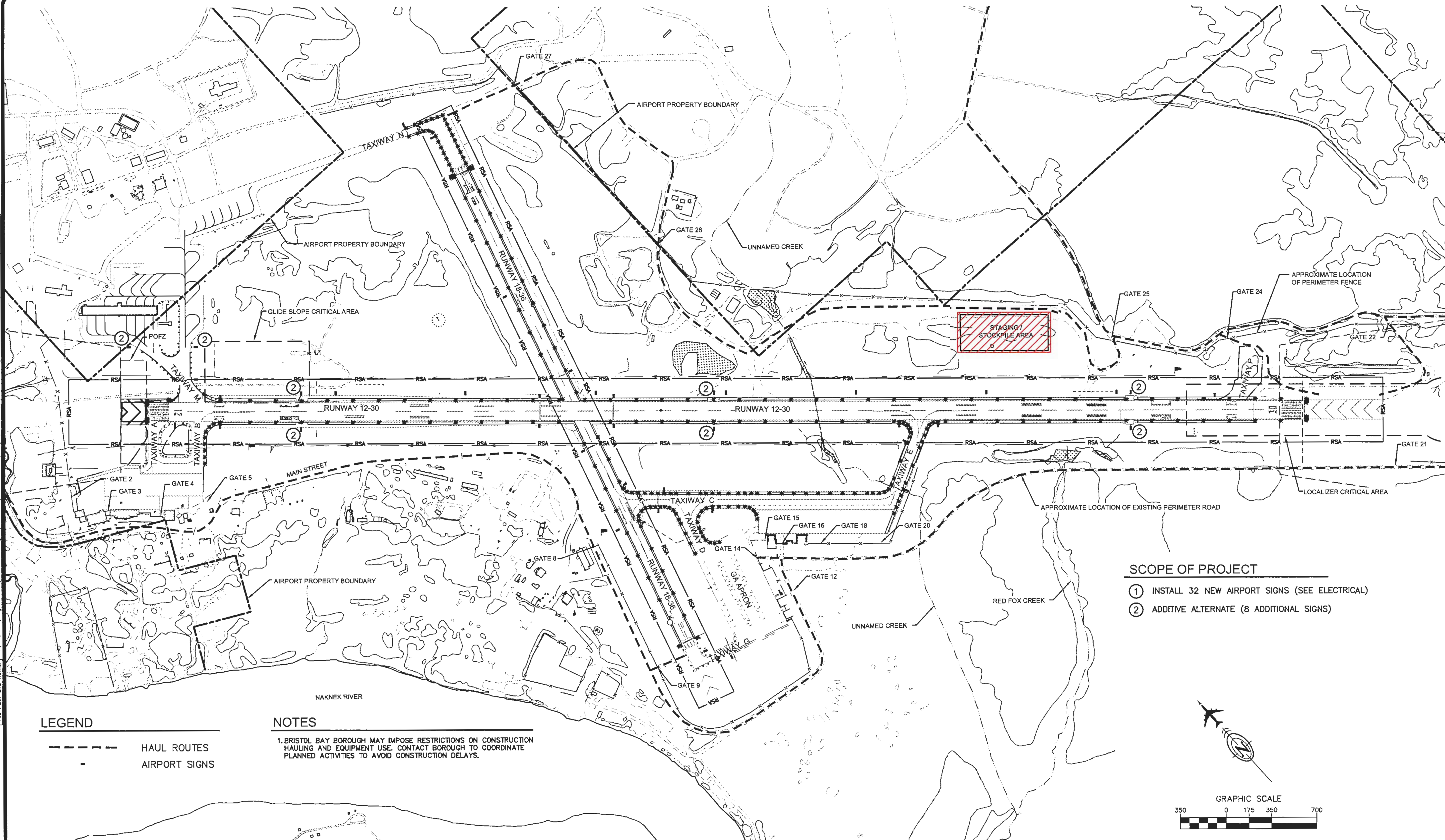
PLAN PREPARED BY DOWL HKM

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

KING SALMON AIRPORT
KING SALMON, ALASKA
RUNWAY & TAXIWAY SIGNS
PROJECT No. 57093
AIP No. 3-02-0148-12-2011
ESTIMATED QUANTITIES, ESTIMATING FACTORS, & SUMMARY TABLES

DATE: 3/18/2014
SHEET: 3 OF 17
AS-BUILT SHEET:

SCRIPT FILE:
Date Revised: 12/16/2014, 1:40 PM
Layout Name: 3_ESTIMATED QUANTITIES ESTIMATING FACTORS & SUMMARY TABLES
File Path and Name: W:\Projects\King Salmon\57093 AKN Signs\As-builts\AKN 2-3\Design\VAS12-AV-DT-60137.dwg
DOWL FILE No. 234-26
Designed By: MJJ
Drawn By: RDL
Checked By: BRH



SCOPE OF PROJECT

1. INSTALL 32 NEW AIRPORT SIGNS (SEE ELECTRICAL)
2. ADDITIVE ALTERNATE (8 ADDITIONAL SIGNS)

LEGEND

- - - - HAUL ROUTES
▪ AIRPORT SIGNS

NOTES

1. BRISTOL BAY BOROUGH MAY IMPOSE RESTRICTIONS ON CONSTRUCTION HAULING AND EQUIPMENT USE. CONTACT BOROUGH TO COORDINATE PLANNED ACTIVITIES TO AVOID CONSTRUCTION DELAYS.

AS-BUILT 1/2015 4 OF 17

BY	DATE	REVISION
SJF	01/2015	AS-BUILT

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

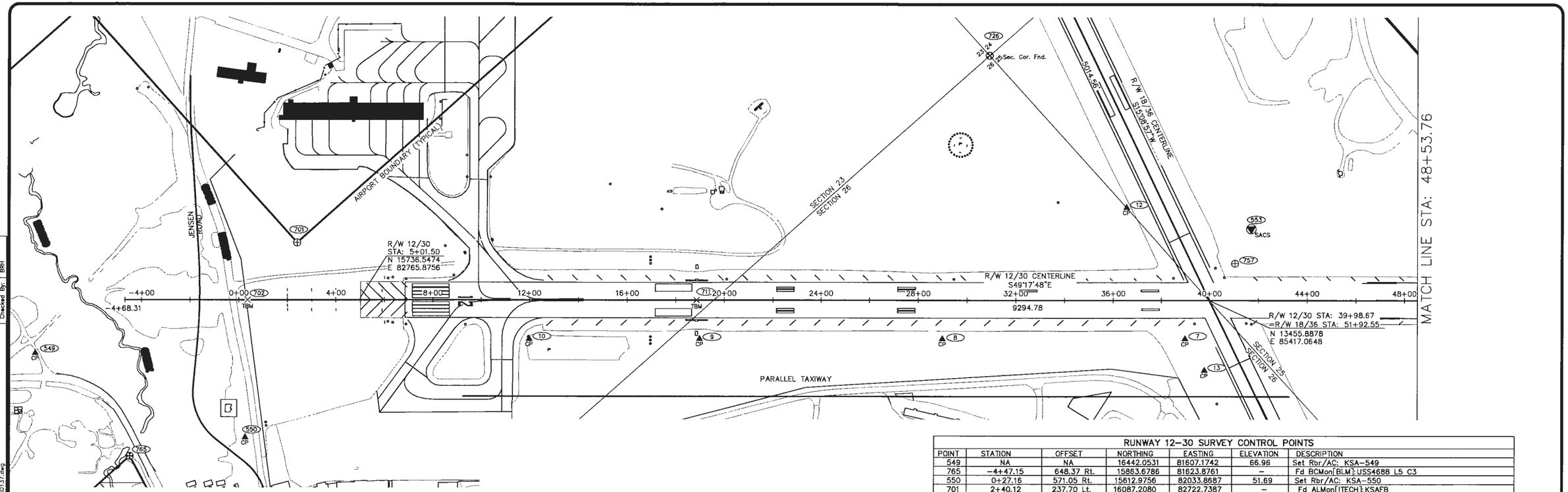
KING SALMON AIRPORT
KING SALMON, ALASKA
RUNWAY & TAXIWAY SIGNS
PROJECT No. 57093
AIP No. 3-02-0148-12-2011
PROJECT LAYOUT PLAN

DATE: 3/18/2014
SHEET: 4 OF 17
AS-BUILT SHEET:

PLAN PREPARED BY DOWL HKM

Date Revised:	12/30/2014, 7:33 AM	Designed By:	MLI
Layout Name:	4 PROJECT LAYOUT PLAN	Drawn By:	RDL
File Path and Name:	W:\Projects\King Salmon\57093 AKN Signs\As-builts\AKN 4 10&11\Design\MC12-AV-DRW-60137.dwg	Checked By:	BRH

SCRIPT FILE: PLP DOWL FILE No: 234-26



HORIZONTAL CONTROL:

Coordinate System:
This project is located within the "King-Nak" Coordinate Sytem, a local surface grid coordinate system expressed in U.S. Survey feet units developed by the State of Alaska Department of Transportation and Public Facilities.

Basis of Coordinates:
The Basis of Coordinates is NGS Primary Airport Control Station "AKN-A", located near the southeast corner of Runway 18/36. Said station has "King-Nak" Coordinate System coordinates of 10997.3450 N, 84963.3550 E. U.S. Survey Feet.

Basis of Bearings:
The Basis of Bearings is a local plane bearing between NGS Primary Airport Control Station "AKN-A" and NGS Secondary Airport Control Station "AKN-C". NGS Secondary Airport Control Station "AKN-C" bears N28°12'27.9"W a distance of 5315.9136 feet from NGS Primary Airport Control Station "AKN-A". NGS Secondary Airport Control Station "AKN-C" has "King-Nak" Coordinate System coordinates of 15681.9384 N, 82450.6826 E. U.S. Survey Feet.

Translation Parameters:
To convert the local coordinates to NAD83 (92) State Plane coordinates expressed in U.S. Survey Feet, translate using +1697882.76131 N usf, +1811590.29829 E usf, and scale using 0.99998379B1.

VERTICAL CONTROL:
Elevations are based on Primary Airport Control Station (PACS) Monument "AKN-A" with a published elevation of 55.2'. The NGS Data Sheet lists an NAVD 88 orthometric height for this point that was determined by GPS observations and a high-resolution geoid model. GPS derived orthometric heights for airport stations designated as PACS or SACS are published to 1 decimal place (U.S. Survey Feet). This maintains relative accuracy between the PACS and SACS, it does not indicate accuracy relative to other marks which are part of the NAVD 88 network.

Elevations of Secondary Airport Control Stations (SACS), and other Horizontal & Vertical Survey Control points were established by differential levelling loops using a Leica DNA10 digital level. Elevations of Secondary Horizontal Survey Control points should be verified from the Vertical Survey Control before using due to the potential of settlement or frost heave of these types of monuments over time.

NOTES:
1) Horizontal control points 551, and 552 were used as the basis of coordinates and held in a simultaneous Leoast Squares Network Adjustment with Static GPS Control Points 1, 2, 548 - 550, 553, 701 - 710, 714-737, and 739-771, in Leica Geo Office Version 2.0. All other survey control point coordinates listed were established by DOWL Engineers using conventional traverse techniques utilizing a Leica TCRP 1205+ Total Station instrument. These conventional control points were adjusted with a least squares traverse adjustment in Land Development Desktop.

2) Control point 552, AKN-C (SACS), was disturbed and reset by others after this survey. Its new position has not been verified, therefore it is not shown or listed hereon.

3) All background information shown herein was obtained from the King Salmon Airport "Aerial Mapping", as performed by Aeromap utilizing photos acquired on August 23, 1987 and October 2, 1997. This background is for orientation purposes only.

4) This survey was completed by DOWL HKM in parts of July, August, September, and October of 2005, January and November of 2006, and July and August of 2007. All dimensions and coordinates shown are in U.S. Survey Feet unless noted otherwise.

5) 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).

6) Monuments and control points shown hereon have not been field verified since 2009.

RUNWAY 12-30 SURVEY CONTROL POINTS

POINT	STATION	OFFSET	NORTHING	EASTING	ELEVATION	DESCRIPTION
549	NA	NA	16442.0531	81607.1742	66.96	Set Rbr/AC: KSA-549
765	-4+47.15	648.37 Rt.	15863.6786	81623.8761	-	Fd BCMon[BLM]:USS4688 L5 C3
550	0+27.16	571.05 Rt.	15612.9756	82033.8687	51.69	Set Rbr/AC: KSA-550
701	2+40.12	237.70 Lt.	16087.2080	82722.7387	-	Fd ALMon[ITECH]:KSAFB
10	11+98.87	161.77 Rt.	15159.1227	83189.0463	54.85	Set Rbr/AC: KSA-10
9	18+98.88	161.50 Rt.	14702.8262	83719.9023	53.66	Set Rbr/AC: KSA-9
8	28+98.79	161.08 Rt.	14051.0552	84478.2034	55.10	Set Rbr/AC: KSA-8
726	30+90.97	1016.01 Lt.	14818.0753	85391.5268	-	Fd BCMon[BLM]:S23|S24/S26|S25*T17S R45W
12	36+54.78	384.65 Lt.	13971.7528	85407.2054	60.20	Set Rbr/AC: KSA-12
7	38+98.56	160.65 Rt.	13399.3872	85236.4011	57.97	Set Rbr/AC: KSA-7
13	39+78.16	291.97 Rt.	13247.9196	85211.1096	57.19	Set Rbr/AC: KSA-13
757	41+04.44	152.99 Lt.	13502.8922	85597.0161	-	Set ALMon[DOWL]:RM N 1/16 S26|S25*T17S R45W
553	41+70.85	296.66 Lt.	13568.5050	85741.0566	63.02	Fd BCMon[NGS]: AKN-B (SACS)

RUNWAY 12-30 VERTICAL CONTROL

POINT	STATION	OFFSET	NORTHING	EASTING	ELEVATION	DESCRIPTION
702	0+36.50	0.00	16039.7944	82413.3613	56.76	Fd BCMon[US Eng Offic]:B-6
711	18+85.94	0.06 Lt.	14833.7335	83815.4533	58.21	Fd BC[COE]:KS-10

MONUMENT LEGEND

- Sec. Cor. Fnd. — GOV'T SECTION CORNER
- GOV'T SURVEY MONUMENT
- NGS CONTROL MONUMENT
- PRIMARY MONUMENT [BRASS/AL CAP]
- CENTERLINE SURVEY MONUMENT
- TBM — COE MONUMENT/TEMPORARY BENCH MARK
- CP — PRIMARY CONTROL POINT
- xx — POINT NUMBER

200 0 100 200 400 600 800 1000

AS-BUILT 1/2015 5 OF 17

BY	DATE	REVISION
SJF	01/2015	AS-BUILT

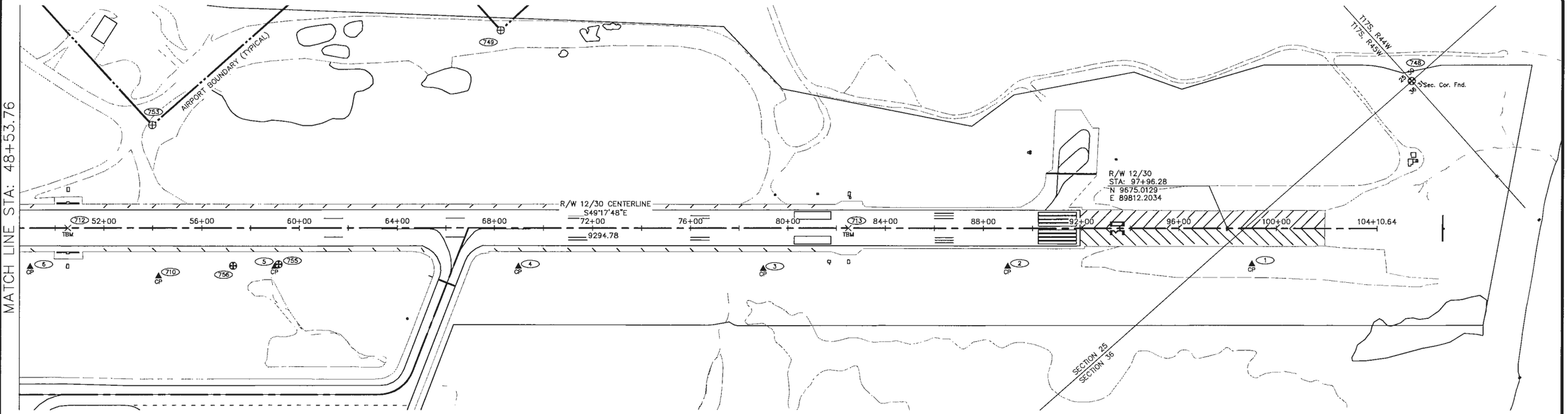
PLAN PREPARED BY DOWL HKM

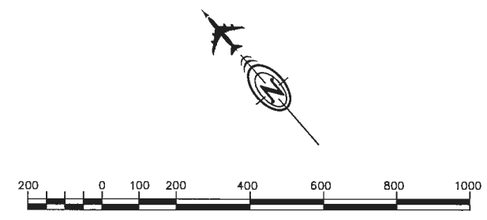
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

KING SALMON AIRPORT
KING SALMON, ALASKA
RUNWAY & TAXIWAY SIGNS
PROJECT No. 57093
AIP No. 3-02-0148-12-2011
SURVEY CONTROL SHEET

DATE: 3/18/2014
SHEET: 5 OF 17
AS-BUILT SHEET:

SCRIPT FILE: -AV-SC-60137.dwg
DOWL FILE No: 234-26
Designed By: MJJ
Drawn By: RDL
Checked By: BRH
Date Revised: 12/29/2014, 3:30 PM
Layout Name: 5 SURVEY CONTROL SHEET
File Path and Name: W:\Projects\King Salmon\57093 AKN Signs\Ae-Build\MC12-AV-SC-60137.dwg





RUNWAY 12–30 SURVEY CONTROL POINTS						
POINT	STATION	OFFSET	NORTHING	EASTING	ELEVATION	DESCRIPTION
6	48+98.63	160.22 Rt.	12747.5196	85994.8301	63.20	Set Rbr/AC: KSA–6
753	53+97.78	424.29 Lt.	12865.1222	86754.4155	–	Fd ALMon[ITECH]:KSAFB
710	54+24.82	199.96 Rt.	12374.2429	86367.8156	63.94	Fd Rod/BC[ADOT/PF]:ESKIMO
756	57+28.53	155.72 Rt.	12209.7216	86626.9159	–	Fd ALMon[BLM]:RM CW 1/16 S25*T17S R45W
5	58+98.99	159.78 Rt.	12095.4792	86753.4865	61.99	Set Rbr/AC: KSA–5
755	59+15.17	149.73 Rt.	12092.5418	86772.3051	–	Fd ALMon[BLM]:RM CW 1/16 S25*T17S R45W
749	68+23.91	815.41 Lt.	12231.5846	88090.6259	–	Fd ALMon[ITECH]:KSAFB
4	68+98.50	159.33 Rt.	11443.9960	87511.5042	61.87	Set Rbr/AC: KSA–4
3	78+98.87	168.25 Rt.	10784.8479	88264.0564	63.95	Set Rbr/AC: KSA–3
2	88+99.49	158.35 Rt.	10139.7999	89029.0829	66.67	Set Rbr/AC: AZ–KSA–2
1	99+00.27	148.45 Rt.	9494.6573	89794.2315	68.26	Set Rbr/AC: AZ–KSA–1
748	105+51.17	609.17 Lt.	9644.5254	90781.7524	–	Fd BCMon[BLM]:S25\S30/S36\S31*T17S R45W

RUNWAY 12–30 VERTICAL CONTROL						
POINT	STATION	OFFSET	NORTHING	EASTING	ELEVATION	DESCRIPTION
712	50+52.10	0.03 Lt.	12768.9257	86215.6787	65.71	Fd BC[COE]:KS–11
713	82+48.70	0.00	10684.2586	88638.9896	67.89	Fd BC[COE]:KS–12

MONUMENT LEGEND

- 5 | 8 / 7 | 6 Sec. Cor. Fnd. — GOV'T SECTION CORNER
- GOV'T SURVEY MONUMENT
- NGS CONTROL MONUMENT
- PRIMARY MONUMENT [BRASS/AL CAP]
- CENTERLINE SURVEY MONUMENT
- TBM — COE MONUMENT/TEMPORARY BENCH MARK
- CP — PRIMARY CONTROL POINT
- (xx) — POINT NUMBER

AS-BUILT 1/2015 6 OF 17

BY	DATE	REVISION
SJF	01/2015	AS-BUILT

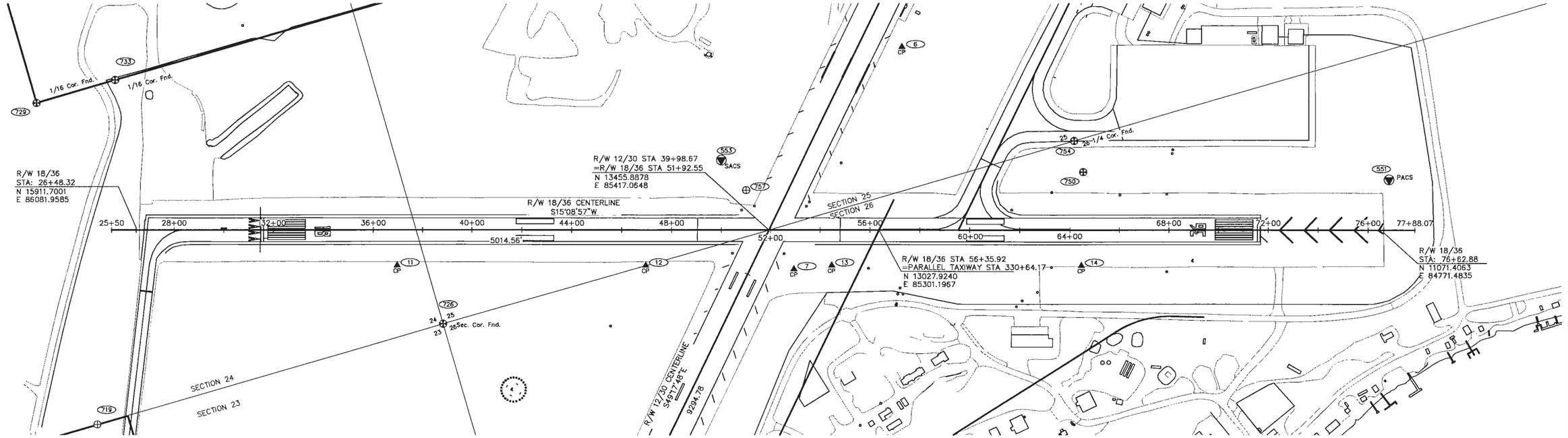
PLAN PREPARED BY DOWL HKM

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

KING SALMON AIRPORT
KING SALMON, ALASKA
RUNWAY & TAXIWAY SIGNS
PROJECT No. 57093
AIP No. 3-02-0148-12-2011
SURVEY CONTROL SHEET

DATE: 3/18/2014
SHEET: 6 OF 17
AS-BUILT SHEET:

Date Revised:
Layout Name: 6 SURVEY CONTROL SHEET
File Path and Name: W:\Projects\Vicky Salmon\57093 AKN Signs\As-builts\MC12-AV-SC-80137.dwg
12/29/2014, 3:31 PM
SCRIPT FILE:
DOWL FILE No: 234-26
Designed By: MJJ
Drawn By: RDL
Checked By: BRH



RUNWAY 18–36 SURVEY CONTROL POINTS						
POINT	STATION	OFFSET	NORTHING	EASTING	ELEVATION	DESCRIPTION
729	22+46.26	515.36 Lt.	16165.1096	86684.4801	–	Fd ALMon[BLM]: SW1/16 S24*T17S R45W
719	24+94.20	788.31 Rt.	16266.4762	85361.3231	–	Fd ALMon[ITECH]: KSAFB
733	25+63.22	608.46 Lt.	15834.8279	86691.5070	–	Fd ALMon[BLM]: CNSSW 1/256 S24*T17S R45W
11	36+97.06	144.23 Rt.	14937.1014	85668.6677	60.97	Set Rbr/AC: KSA–11
726	38+84.37	380.64 Rt.	14818.0753	85391.5267	–	Fd BCMon[BLM]: S23|S224/S26|S25*T17S R45W
12	46+97.19	144.33 Rt.	13971.7528	85407.2054	60.20	Set Rbr/AC: KSA–12
553	49+99.17	283.30 Lt.	13568.5050	85741.0566	63.11	Fd BCMon[NGS]: AKN–B (SACS)
757	51+00.15	161.41 Lt.	13502.8922	85597.0161	–	Set ALMon[DOWL]: RM N 1/16 S25*T17S R45W
7	52+94.30	159.62 Rt.	13399.3872	85236.4011	57.97	Set Rbr/AC: KSA–7
13	54+47.11	144.45 Rt.	13247.9196	85211.1096	57.19	Set Rbr/AC: KSA–13
6	57+26.19	743.01 Lt.	12747.5196	85994.8301	63.20	Set Rbr/AC: KSA–6
754	64+16.77	361.86 Lt.	12179.6467	85446.4207	–	Fd ALMon[BLM]: 1/4 S26*T177S R45W
14	64+47.09	144.64 Rt.	12282.7473	84949.5970	53.78	Set Rbr/AC: KSA–14
750	64+53.43	235.44 Lt.	12177.2969	85314.8149	54.30	Fd ALMon[BLM]: RM 1/4 S26|S25*T17S R45W
551	76+84.22	204.56 Lt.	10997.3450	84963.3550	55.20	Fd BCMon[NGS]: AKN–A (PACS)

200 0 100 200 400 600 800 1000

MONUMENT LEGEND

- GOV'T SECTION CORNER
- GOV'T SURVEY MONUMENT
- NGS CONTROL MONUMENT
- PRIMARY MONUMENT [BRASS/AL CAP]
- CENTERLINE SURVEY MONUMENT
- COE MONUMENT/TEMPORARY BENCH MARK
- PRIMARY CONTROL POINT
- POINT NUMBER

AS-BUILT 1/2015 7 OF 17

BY	DATE	REVISION
SJF	01/2015	AS-BUILT

PLAN PREPARED BY DOWL HKM

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

KING SALMON AIRPORT
KING SALMON, ALASKA
RUNWAY & TAXIWAY SIGNS
PROJECT No. 57093
AIP No. 3-02-0148-12-2011
SURVEY CONTROL SHEET

DATE: 3/18/2014
SHEET: 7 OF 17
AS-BUILT SHEET:

Date Revised:
Layout Name: 7_SURVEY CONTROL_SHEET
File Path and Name: W:\Projects\King_Salmon\57093 AKN Signs\As-builts\MC12-AV-SC-60137.dwg
SCRIPT FILE:
DOWL TILE No: 234-26
Designed By: MLJ
Drawn By: RDL
Checked By: BRH
12/29/2014, 3:31 PM

(551)


FOUND
3-1/4" BRASS CAP
ON 2-3/8" STEEL POST
1.1' BELOW GRADE

(552)


FOUND
3-1/4" BRASS CAP
ON 2-3/8" STEEL POST
0.1' BELOW GRADE

(553)


FOUND
3-1/4" BRASS CAP
ON 2-3/8" STEEL POST
0.2' BELOW GRADE

(702)


FOUND
3 1/2" BRASS CAP
ON CONCRETE POST
1.1' ABOVE GRADE-FIRM
CAP FLUSH WITH TOP

(710)


FOUND
2-1/2" BRASS DONUT
2" BELOW DATUM POINT
ON STAINLESS STEEL ROD
0.4' ABOVE GRADE
INSIDE 4" DIA. PVC PIPE
0.7' ABOVE GRADE
W/ RUBBER CAP.
3 CARSONITE POSTS
2' FROM MON.

(711)


FOUND
3 1/2" BRASS CAP ON
CONCRETE PAD/BARRIER
0.05' BELOW GRADE

(712)


FOUND
3 1/2" BRASS CAP ON
CONCRETE PAD/BARRIER
0.05' BELOW GRADE

(713)


FOUND
3 1/2" BRASS CAP ON
CONCRETE PAD/BARRIER
0.05' BELOW GRADE

(725)


FOUND
3 1/4" BRASS CAP
ON 2 1/2" IRON POST
2.7' BELOW GRADE

(726)


FOUND
3 1/4" BRASS CAP
ON 2 1/2" IRON POST
0.4' ABOVE GRADE

(729)


FOUND
3 1/4" ALUM. CAP
ON 2 1/2" ALUM. POST
0.5' ABOVE GRADE

(733)


FOUND
3 1/4" ALUM. CAP
ON 2 1/2" ALUM. POST
0.1' ABOVE GRADE

(748)


REHABILITATED
3 1/4" BRASS CAP
ON 2 1/2" IRON POST
0.3' ABOVE GRADE

(750)


FOUND
3 1/4" ALUM. CAP
ON 3/4" DRIVE ROD
0.5' ABOVE GRADE

(754)

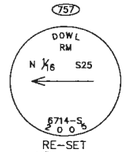

FOUND
3 1/4" ALUM. CAP
ON 2 1/2" ALUM. POST
1.5' BELOW GRADE

(755)


FOUND
3 1/4" ALUM. CAP
0.2' BELOW GRADE

(756)


FOUND
3 1/4" ALUM. CAP
0.1' BELOW GRADE

(757)


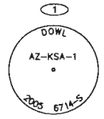
RE-SET
3 1/4" ALUM. CAP
ON 2 1/2" ALUM. POST
0.3' BELOW GRADE

(763)

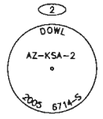

REHABILITATED
3 1/4" BRASS CAP
ON 2 1/2" IRON POST
0.3' ABOVE GRADE

(765)

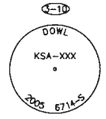

FOUND
3 1/4" BRASS CAP
ON 2 1/2" ALUM. POST
1.2' BELOW GRADE

(1)


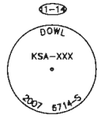
SET
5/8"x 30" REBAR
W/ 2" ALUM. CAP
0.3' BELOW GRADE

(2)


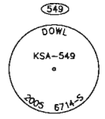
SET
5/8"x30" REBAR
W/ 2" ALUM. CAP
0.3' BELOW GRADE

(J-10)


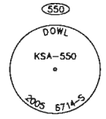
SET
5/8"x 30" REBAR
W/ 2" ALUM. CAP
(TYPICAL TRAVERSE STATION)

(J-14)


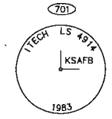
SET
5/8"x 30" REBAR
W/ 2" ALUM. CAP
(TYPICAL TRAVERSE STATION)

(549)


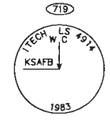
SET
5/8"x 30" REBAR
W/ 2" ALUM. CAP
0.4' BELOW GRADE

(550)


SET
5/8"x 30" REBAR
W/ 2" ALUM. CAP
0.2' BELOW GRADE

(701)


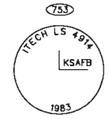
FOUND
2-1/2" DIA. POST MON
W/ 2-1/2" ALUM. CAP
0.4' ABOVE GRADE

(719)


FOUND
2-1/2" DIA. POST MON
W/ 2-1/2" ALUM. CAP
0.4' ABOVE GRADE

(749)


FOUND
2-1/2" ALUM. CAP MON
ON 2 1/2" ALUM. POST
0.5' BELOW GRADE

(753)


FOUND
2-1/2" ALUM. CAP MON
ON 2 1/2" ALUM. POST
0.6' ABOVE GRADE

SCRIPT FILE:
DOWL FILE No: 234-26
Designed By: MLJ
Drawn By: ROL
Checked By: BRH
Date Revised: 12/29/2014, 3:31 PM
Layout Name: 8 SURVEY CONTROL SHEET
File Path and Name: W:\Projects\King Salmon\57093 AKN Signs\As-builts\AC12-AV-SC-80137.dwg

AS-BUILT 1/2015 8 OF 17

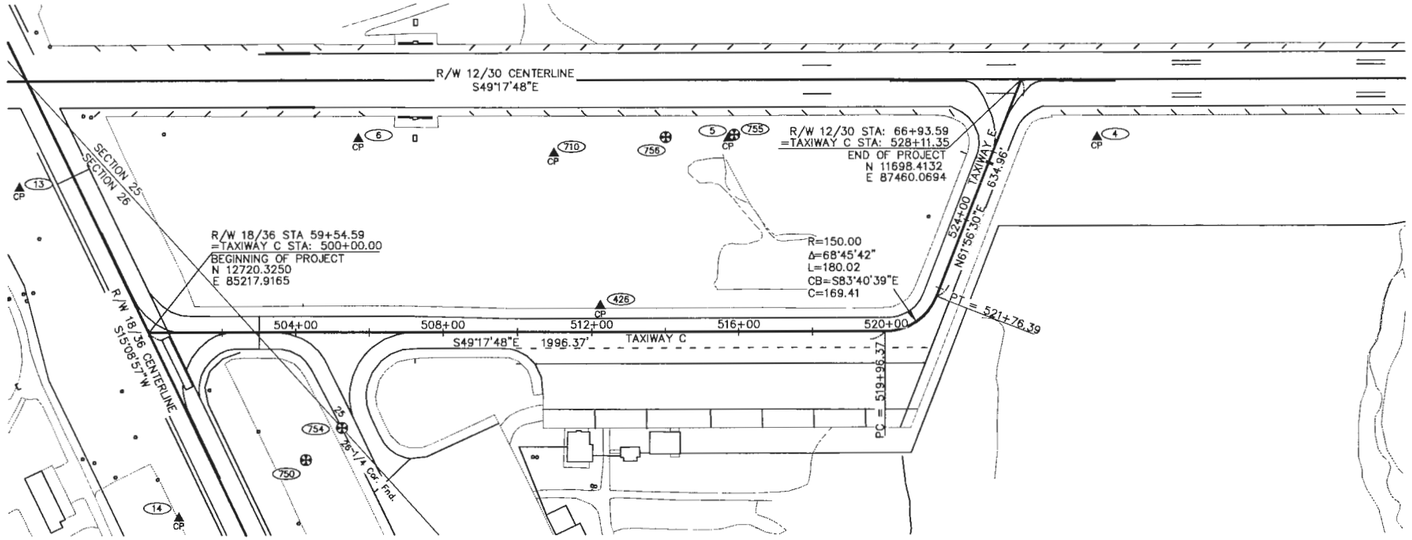
BY	DATE	REVISION
SJF	01/2015	AS-BUILT

PLAN PREPARED BY DOWL HKM

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

KING SALMON AIRPORT
KING SALMON, ALASKA
RUNWAY & TAXIWAY SIGNS
PROJECT No. 57093
AIP No. 3-02-0148-12-2011
SURVEY CONTROL SHEET

DATE: 3/18/2014
SHEET: 8 OF 17
AS-BUILT SHEET:



MONUMENT LEGEND

- GOV'T SECTION CORNER
- GOV'T SURVEY MONUMENT
- NGS CONTROL MONUMENT
- PRIMARY MONUMENT [BRASS/AL CAP]
- CENTERLINE SURVEY MONUMENT
- COE MONUMENT/TEMPORARY BENCH MARK
- PRIMARY CONTROL POINT
- POINT NUMBER

200 0 100 200 400 600 800 1000

TAXIWAY C SURVEY CONTROL POINTS

POINT	STATION	OFFSET	NORTHING	EASTING	ELEVATION	DESCRIPTION
13	496+50.77	395.53 Lt.	13247.9196	85211.1096	57.19	Set Rbr/AC: KSA-13
14	500+81.95	506.71 Rt.	12282.7473	84949.5970	53.78	Set Rbr/AC: KSA-14
750	504+27.59	348.48 Rt.	12177.2959	85314.8149	–	Fd ALMon[BLM]:RM 1/4 S26|S25*T17S R45W
754	505+25.83	260.87 Rt.	12179.6467	85446.4207	–	Fd ALMon[BLM]:1/4 S26|S25*T17S R45W
6	505+71.24	527.28 Lt.	12747.5196	85994.8301	63.20	Set Rbr/AC: KSA-6
710	510+97.43	487.54 Lt.	12374.2429	86367.8156	63.94	Fd Rod/BC[ADOT/PF]:ESKIMO
426	512+23.37	71.29 Lt.	11976.5623	86191.8373	55.46	Set Rbr/AC: KSA-426
756	514+01.14	531.78 Lt.	12209.7216	86626.9159	–	Fd ALMon[BLM]:RM CW 1/16 S25*T17S R45W
5	515+71.60	527.72 Lt.	12095.4792	86753.4865	61.99	Set Rbr/AC: KSA-5
755	515+87.78	537.77 Lt.	12092.5418	86772.3051	–	Fd ALMon[BLM]:RM CW 1/16 S25*T17S R45W
4	527+37.07	248.71 Rt.	11443.9960	87511.5042	61.87	Set Rbr/AC: KSA-4

PLAN PREPARED BY DOWL HKM

SJP	01/2015	AS-BUILT	
BY	DATE	REVISION	

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

KING SALMON AIRPORT
KING SALMON, ALASKA
RUNWAY & TAXIWAY SIGNS
PROJECT No. 57093
AIP No. 3-02-0148-12-2011
SURVEY CONTROL SHEET

DATE: 3/18/2014
SHEET: 9 OF 17
AS-BUILT SHEET:

AS-BUILT 1/2015 9 OF 17

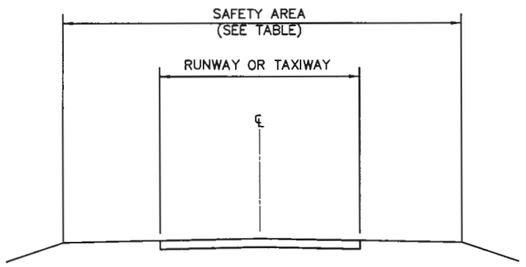
Date Revised:
Layout Name: 9 SURVEY CONTROL SHEET
File Path and Name: W:\Projects\King Salmon\57093 AKN Signs\As-builts\MG12-AV-SC-60137.dwg
12/29/2014, 3:31 PM
SCRIPT FILE:
DGN FILE No: 234-26
Designed By: MJJ
Drawn By: ROL
Checked By: BRH

CONSTRUCTION COMPLETION SCHEDULE

WORK AREA		WORK TO BE COMPLETED	COMPLETION DATE	RESTRICTION	CLOSURES	NAVAID/VISUAL AID IMPACTS	HAZARD MARKER BARRIER LOCATION	NOTES
(A)	GLIDE SLOPE AND LOCALIZER CRITICAL AREA	INSTALL NEW RW AND TW SIGNS	10/1/2014	WORK MUST BE COMPLETED WITHIN 7 CALENDAR DAYS IN EACH CRITICAL AREA	NONE	GLIDE SLOPE AND LOCALIZER WILL BE TEMPORARILY DISABLED OR A NOTAM WILL BE ISSUED	AS DIRECTED BY THE ENGINEER	WORK IN CRITICAL AREAS REQUIRES 45 DAY ADVANCE NOTIFICATION. SEE SPECIFICATIONS & SAFETY PLAN NARRATIVE
(B)	RW 12-30 AND TAXIWAYS	INSTALL NEW RW AND TW SIGNS	10/1/2014	NOTAMS FOR CONSTRUCTION ACTIVITIES MAY ALLOW PARTIAL CLOSURES OF RUNWAYS AND TAXIWAYS	NONE	NONE	AS DIRECTED BY THE ENGINEER	ALL TRENCHES AND EXCAVATIONS MUST BE BACKFILLED TO PRE-EXISTING ELEVATIONS AND GRADED TO MATCH THE PRE-EXISTING SLOPES AT THE END OF EACH CONSTRUCTION SHIFT. SEE NOTE 6 FOR LIGHTING REQUIREMENTS
(C)	RW 18-36 AND TAXIWAYS	INSTALL NEW RW AND TW SIGNS	10/1/2014	NOTAMS FOR CONSTRUCTION ACTIVITIES MAY ALLOW PARTIAL CLOSURES OF RUNWAYS AND TAXIWAYS	NONE	NONE	AS DIRECTED BY THE ENGINEER	ALL TRENCHES AND EXCAVATIONS MUST BE BACKFILLED TO PRE-EXISTING ELEVATIONS AND GRADED TO MATCH THE PRE-EXISTING SLOPES AT THE END OF EACH CONSTRUCTION SHIFT. SEE NOTE 6 FOR LIGHTING REQUIREMENTS

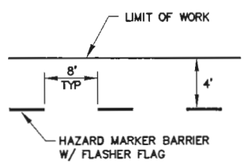
NOTES

1. SEE APPENDIX D FOR THE SAFETY PLAN NARRATIVE AND SECTION 80 OF THE SPECIFICATIONS FOR LIMITATIONS AND OPERATIONAL SAFETY CONCERNS.
2. THE CONTRACTOR WILL BE REQUIRED TO COORDINATE WITH THE ENGINEER AND AIRPORT MANAGER TO ISSUE NOTAMS REGARDING CURRENT AIRPORT OPERATIONS AND RESTRICTIONS. THE CONTRACTOR WILL BE REQUIRED TO ESTABLISH A POINT OF CONTACT WITH EACH OF THE SCHEDULED CARRIERS AND TO FAX UPDATED OPERATIONS INFORMATION TO THE CONTACTS EACH WEEK AS CHANGES OCCUR. THE UPDATES WILL INCLUDE A SKETCH OF AIRPORT OPERATION AREAS AND WORK AREAS.
3. WORK OUTSIDE THE LIMITS OF THE RUNWAY SAFETY AREA AND TAXIWAY SAFETY AREA MAY BE PERFORMED AT ANY TIME WITHOUT CLOSURES, (SEE DETAIL 1/10). WORK WITHIN THE SAFETY AREAS AND WORK AFFECTING OPERATIONS SHALL NOT BEGIN UNTIL AUTHORIZED BY THE ENGINEER.
4. RUNWAY CLOSURES CAN BE PROPOSED TO THE ENGINEER AND PUT INTO AFFECT ONLY WITH THE APPROVAL OF THE ENGINEER AND AIRPORT MANAGER.
5. MAINTAIN AIRCRAFT ACCESS TO THE APRONS, TAXIWAYS, AND RUNWAYS DURING ALL STAGES OF WORK. GUIDE AIRCRAFT THROUGH WORK AREAS AS REQUIRED.
6. PROVIDE TEMPORARY LIGHTING AND JUMPERS AS REQUIRED TO MAINTAIN OPERATIONAL SIGNAGE, RW LIGHTING, AND TW LIGHTING SYSTEMS BETWEEN EVENING CIVIL TWILIGHT AND MORNING CIVIL TWILIGHT AND DURING INSTRUMENT FLIGHT RULES (IFR) WEATHER CONDITIONS. EXISTING EQUIPMENT MAY BE USED AS APPLICABLE.
7. PAPIS AND APPROACH LIGHTING SHALL REMAIN OPERATIONAL DURING CONSTRUCTION.
8. STORAGE OF EQUIPMENT OR MATERIALS ON THE RUNWAYS, TAXIWAYS, APRONS, OR SAFETY AREAS WILL NOT BE ALLOWED.
9. ALL TRENCHES AND EXCAVATIONS MUST BE BACKFILLED TO PRE-EXISTING ELEVATIONS AND GRADED TO MATCH THE PRE-EXISTING SLOPES AT THE END OF EACH CONSTRUCTION SHIFT. NO TRENCHES MAY BE LEFT OPEN IN RSAs OR TSAs.
10. CONTACT USAF THROUGH THE PROJECT ENGINEER TO LOCATE ANY BAK POWER CABLES BEFORE EXCAVATION.

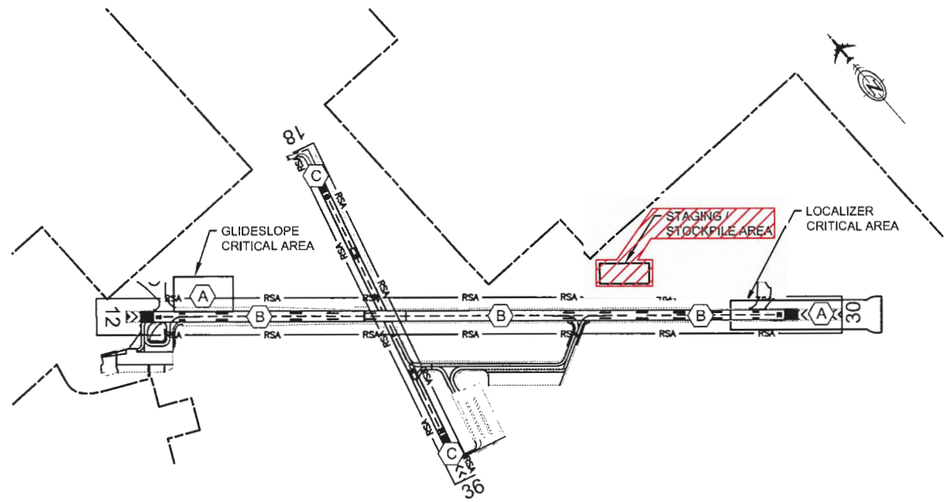


SAFETY AREA TABLE	
LOCATION	SAFETY AREA TOTAL WIDTH
RW 12/30	500 FT
RW 18/36	300 FT
TW A	118 FT
TW B	118 FT
TW C	118 FT
TW D	118 FT
TW E	118 FT
TW G	79 FT
TW K	118 FT
TW M	118 FT
TW N	79 FT

1/10 SAFETY AREA DETAIL
NTS



2/10 HAZARD MARKER BARRIER LAYOUT
NTS



3/10 WORK AREA DETAIL
NTS

PLAN PREPARED BY DOWL HKM

SJF	01/2015	AS-BUILT	REVISION
BY	DATE		

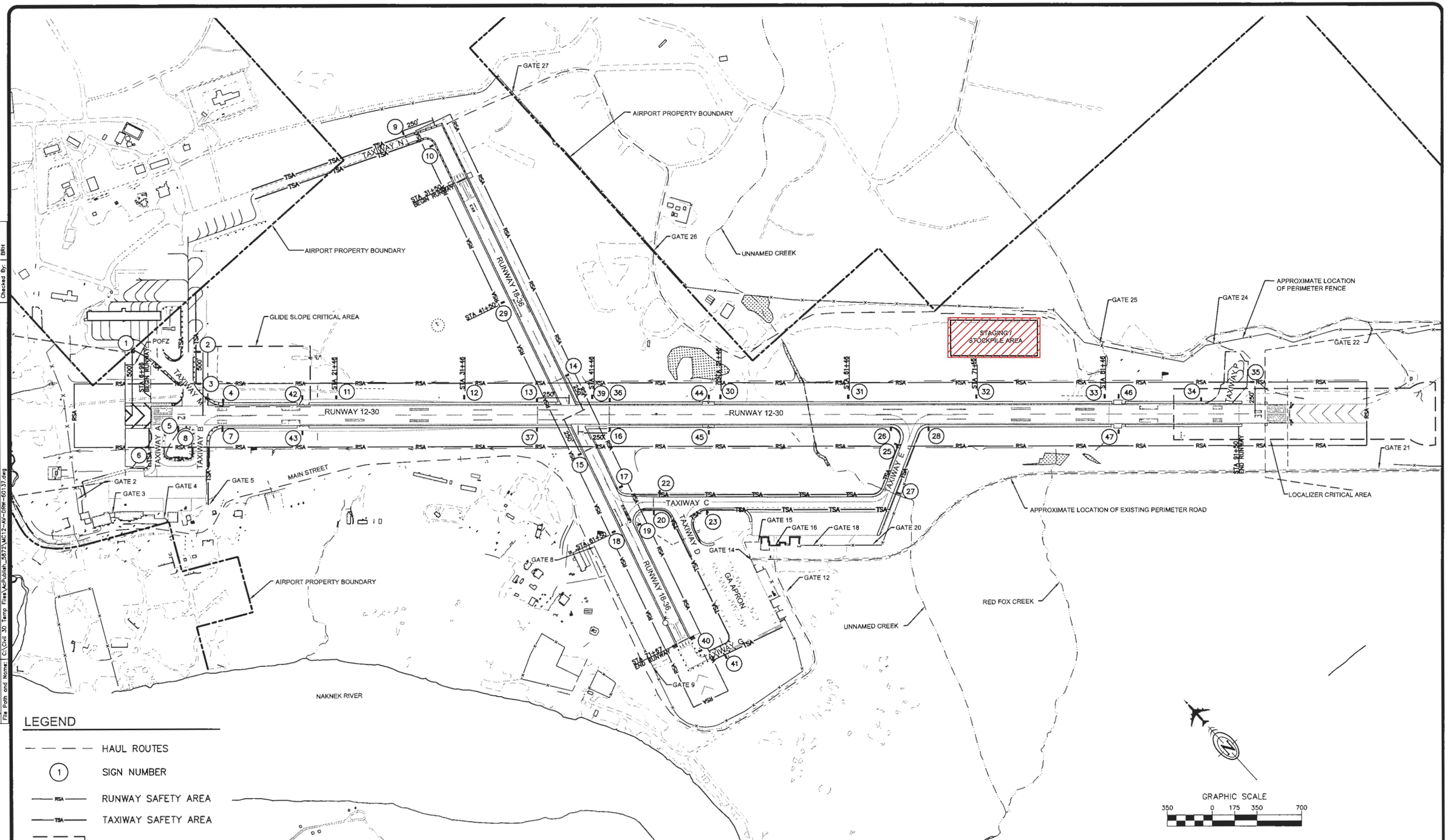
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

KING SALMON AIRPORT
KING SALMON, ALASKA
RUNWAY & TAXIWAY SIGNS
PROJECT No. 57093
AIP No. 3-02-0148-12-2011
CONSTRUCTION STAGING AND SAFETY PLAN, NOTES, AND DETAILS

DATE: 3/18/2014
SHEET: 10 OF 17
AS-BUILT SHEET:

AS-BUILT 1/2015 10 OF 17

Date Revised: 12/30/2014, 7:16 AM
Issued Note: 10 CONSTRUCTION STAGIN AND SAFETY PLAN, NOTES, AND DETAILS
File Path and Name: C:\Civil 3D Temp Files\AcPublish_5872\WC12-AW-DRW-60137.dwg
SCRIPT FILE: PLP
DWG. FILE No: 234-26
Designed By: MLI
Drawn By: RDL
Checked By: BRH



LEGEND

- HAUL ROUTES
- (1) SIGN NUMBER
- RSA — RUNWAY SAFETY AREA
- TSA — TAXIWAY SAFETY AREA
- CRITICAL AREA

PLAN PREPARED BY DOWL HKM

Designed By: MLJ
Drawn By: RDL
Checked By: BRH

DOWL FILE No: 234-26

SCRIPT FILE: PLP

Date Revised: 12/30/2014, 7:16 AM
Layout Name: 11. CONSTRUCTION STAGING
File Path and Name: C:\Civil 3D Temp Files\AcPublish_5672\MC12-AV-DRW-60137.dwg

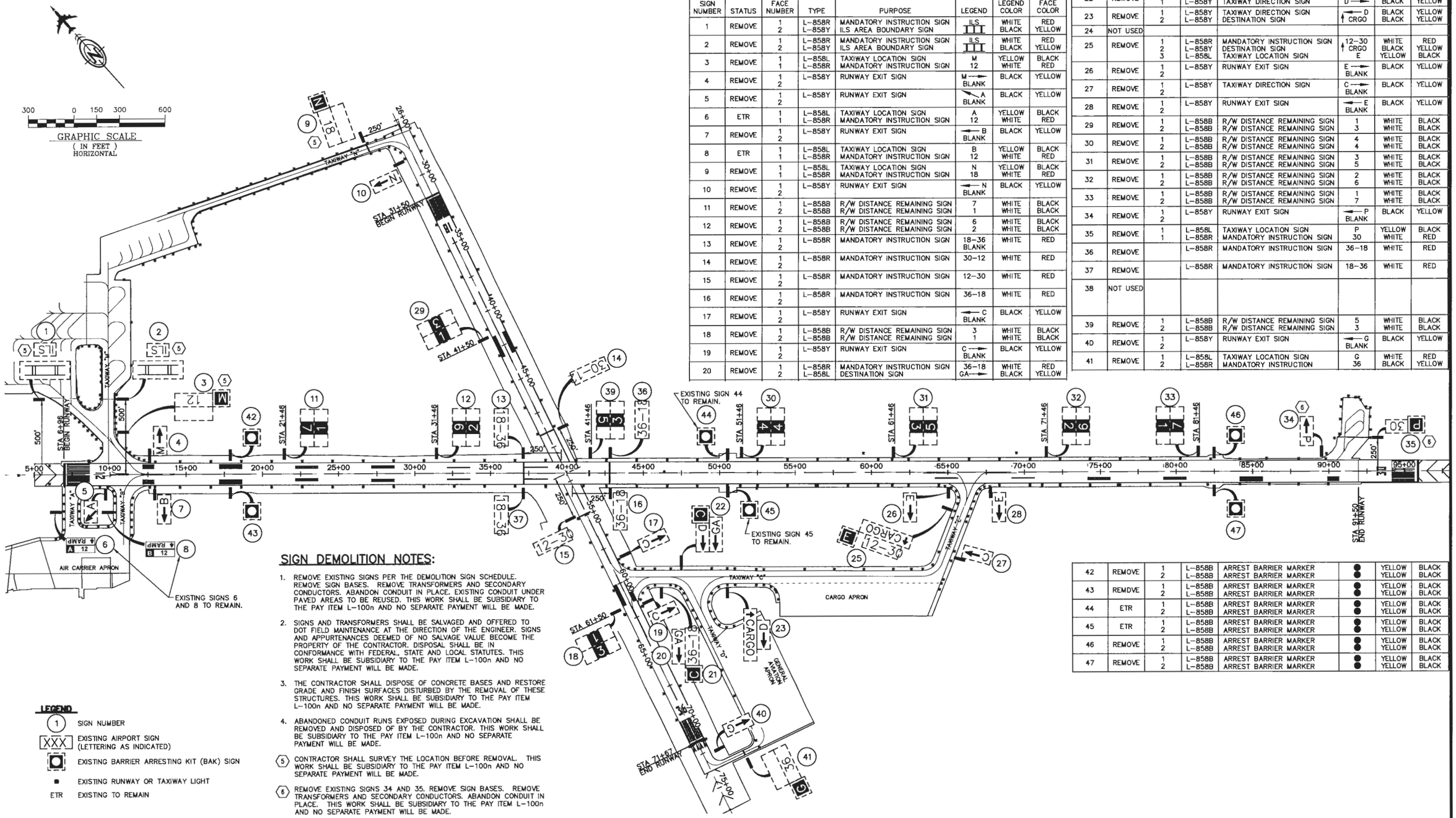
AS-BUILT 1/2015 11 OF 17

NO.	DATE	REVISION
SJF	01/2015	AS-BUILT

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

KING SALMON AIRPORT
KING SALMON, ALASKA
RUNWAY & TAXIWAY SIGNS
PROJECT No. 57093
AIP No. 3-02-0148-12-2011
CONSTRUCTION STAGING AND SAFETY PLAN

DATE: 3/18/2014
SHEET: 11 OF 17
AS-BUILT SHEET:



SIGN DEMOLITION NOTES:

1. REMOVE EXISTING SIGNS PER THE DEMOLITION SIGN SCHEDULE. REMOVE SIGN BASES. REMOVE TRANSFORMERS AND SECONDARY CONDUCTORS. ABANDON CONDUIT IN PLACE. EXISTING CONDUIT UNDER PAVED AREAS TO BE REUSED. THIS WORK SHALL BE SUBSIDIARY TO THE PAY ITEM L-100n AND NO SEPARATE PAYMENT WILL BE MADE.
2. SIGNS AND TRANSFORMERS SHALL BE SALVAGED AND OFFERED TO DOT FIELD MAINTENANCE AT THE DIRECTION OF THE ENGINEER. SIGNS AND APPURTENANCES DEEMED OF NO SALVAGE VALUE BECOME THE PROPERTY OF THE CONTRACTOR. DISPOSAL SHALL BE IN CONFORMANCE WITH FEDERAL, STATE AND LOCAL STATUTES. THIS WORK SHALL BE SUBSIDIARY TO THE PAY ITEM L-100n AND NO SEPARATE PAYMENT WILL BE MADE.
3. THE CONTRACTOR SHALL DISPOSE OF CONCRETE BASES AND RESTORE GRADE AND FINISH SURFACES DISTURBED BY THE REMOVAL OF THESE STRUCTURES. THIS WORK SHALL BE SUBSIDIARY TO THE PAY ITEM L-100n AND NO SEPARATE PAYMENT WILL BE MADE.
4. ABANDONED CONDUIT RUNS EXPOSED DURING EXCAVATION SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR. THIS WORK SHALL BE SUBSIDIARY TO THE PAY ITEM L-100n AND NO SEPARATE PAYMENT WILL BE MADE.
5. CONTRACTOR SHALL SURVEY THE LOCATION BEFORE REMOVAL. THIS WORK SHALL BE SUBSIDIARY TO THE PAY ITEM L-100n AND NO SEPARATE PAYMENT WILL BE MADE.
6. REMOVE EXISTING SIGNS 34 AND 35. REMOVE SIGN BASES. REMOVE TRANSFORMERS AND SECONDARY CONDUCTORS. ABANDON CONDUIT IN PLACE. THIS WORK SHALL BE SUBSIDIARY TO THE PAY ITEM L-100n AND NO SEPARATE PAYMENT WILL BE MADE.
7. SEE SHEET E1 FOR SIGNS INCLUDED IN ADDITIVE ALTERNATE #1.

LEGEND

- (1) SIGN NUMBER
- XXX EXISTING AIRPORT SIGN (LETTERING AS INDICATED)
- EXISTING BARRIER ARRESTING KIT (BAK) SIGN
- EXISTING RUNWAY OR TAXIWAY LIGHT
- ETR EXISTING TO REMAIN

DEMOLITION SIGN SCHEDULE

SIGN NUMBER	STATUS	FACE NUMBER	TYPE	PURPOSE	LEGEND	LEGEND COLOR	FACE COLOR
1	REMOVE	1 2	L-858R L-858Y	MANDATORY INSTRUCTION SIGN ILS AREA BOUNDARY SIGN	ILS	WHITE BLACK	RED YELLOW
2	REMOVE	1 2	L-858R L-858Y	MANDATORY INSTRUCTION SIGN ILS AREA BOUNDARY SIGN	ILS	WHITE BLACK	RED YELLOW
3	REMOVE	1 1	L-858L L-858R	TAXIWAY LOCATION SIGN MANDATORY INSTRUCTION SIGN	M 12	YELLOW WHITE	BLACK RED
4	REMOVE	1 2	L-858Y	RUNWAY EXIT SIGN	M BLANK	BLACK	YELLOW
5	REMOVE	1 2	L-858Y	RUNWAY EXIT SIGN	A BLANK	BLACK	YELLOW
6	ETR	1 1	L-858L L-858R	TAXIWAY LOCATION SIGN MANDATORY INSTRUCTION SIGN	A 12	YELLOW WHITE	BLACK RED
7	REMOVE	1 2	L-858Y	RUNWAY EXIT SIGN	B BLANK	BLACK	YELLOW
8	ETR	1 1	L-858L L-858R	TAXIWAY LOCATION SIGN MANDATORY INSTRUCTION SIGN	B 12	YELLOW WHITE	BLACK RED
9	REMOVE	1 1	L-858L L-858R	TAXIWAY LOCATION SIGN MANDATORY INSTRUCTION SIGN	N 18	YELLOW WHITE	BLACK RED
10	REMOVE	1 2	L-858Y	RUNWAY EXIT SIGN	N BLANK	BLACK	YELLOW
11	REMOVE	1 2	L-858B L-858B	R/W DISTANCE REMAINING SIGN R/W DISTANCE REMAINING SIGN	7 1	WHITE WHITE	BLACK BLACK
12	REMOVE	1 2	L-858B L-858B	R/W DISTANCE REMAINING SIGN R/W DISTANCE REMAINING SIGN	6 2	WHITE WHITE	BLACK BLACK
13	REMOVE	1 2	L-858R	MANDATORY INSTRUCTION SIGN	18-36 BLANK	WHITE	RED
14	REMOVE	1 2	L-858R	MANDATORY INSTRUCTION SIGN	30-12	WHITE	RED
15	REMOVE	1 2	L-858R	MANDATORY INSTRUCTION SIGN	12-30	WHITE	RED
16	REMOVE	1 2	L-858R	MANDATORY INSTRUCTION SIGN	36-18	WHITE	RED
17	REMOVE	1 2	L-858Y	RUNWAY EXIT SIGN	C BLANK	BLACK	YELLOW
18	REMOVE	1 2	L-858B L-858B	R/W DISTANCE REMAINING SIGN R/W DISTANCE REMAINING SIGN	3 1	WHITE WHITE	BLACK BLACK
19	REMOVE	1 2	L-858Y	RUNWAY EXIT SIGN	C BLANK	BLACK	YELLOW
20	REMOVE	1 2	L-858R L-858L	MANDATORY INSTRUCTION SIGN DESTINATION SIGN	36-18 GA	WHITE BLACK	RED YELLOW
21	REMOVE	1 2	L-858L	TAXIWAY LOCATION SIGN	C BLANK	YELLOW	BLACK
22	REMOVE	1 1	L-858L L-858Y	TAXIWAY LOCATION SIGN TAXIWAY DIRECTION SIGN	C D	YELLOW BLACK	BLACK YELLOW
23	REMOVE	1 2	L-858Y L-858Y	TAXIWAY DIRECTION SIGN DESTINATION SIGN	D CRGO	BLACK BLACK	YELLOW YELLOW
24	NOT USED						
25	REMOVE	1 2 3	L-858R L-858Y L-858L	MANDATORY INSTRUCTION SIGN DESTINATION SIGN TAXIWAY LOCATION SIGN	12-30 CRGO E	WHITE BLACK YELLOW	RED YELLOW BLACK
26	REMOVE	1 2	L-858Y	RUNWAY EXIT SIGN	E BLANK	BLACK	YELLOW
27	REMOVE	1 2	L-858Y	TAXIWAY DIRECTION SIGN	C BLANK	BLACK	YELLOW
28	REMOVE	1 2	L-858Y	RUNWAY EXIT SIGN	E BLANK	BLACK	YELLOW
29	REMOVE	1 2	L-858B L-858B	R/W DISTANCE REMAINING SIGN R/W DISTANCE REMAINING SIGN	1 3	WHITE WHITE	BLACK BLACK
30	REMOVE	1 2	L-858B L-858B	R/W DISTANCE REMAINING SIGN R/W DISTANCE REMAINING SIGN	4 4	WHITE WHITE	BLACK BLACK
31	REMOVE	1 2	L-858B L-858B	R/W DISTANCE REMAINING SIGN R/W DISTANCE REMAINING SIGN	3 5	WHITE WHITE	BLACK BLACK
32	REMOVE	1 2	L-858B L-858B	R/W DISTANCE REMAINING SIGN R/W DISTANCE REMAINING SIGN	2 6	WHITE WHITE	BLACK BLACK
33	REMOVE	1 2	L-858B L-858B	R/W DISTANCE REMAINING SIGN R/W DISTANCE REMAINING SIGN	1 7	WHITE WHITE	BLACK BLACK
34	REMOVE	1 2	L-858Y	RUNWAY EXIT SIGN	P BLANK	BLACK	YELLOW
35	REMOVE	1 1	L-858L L-858R	TAXIWAY LOCATION SIGN MANDATORY INSTRUCTION SIGN	P 30	YELLOW WHITE	BLACK RED
36	REMOVE		L-858R	MANDATORY INSTRUCTION SIGN	36-18	WHITE	RED
37	REMOVE		L-858R	MANDATORY INSTRUCTION SIGN	18-36	WHITE	RED
38	NOT USED						
39	REMOVE	1 2	L-858B L-858B	R/W DISTANCE REMAINING SIGN R/W DISTANCE REMAINING SIGN	5 3	WHITE WHITE	BLACK BLACK
40	REMOVE	1 2	L-858Y	RUNWAY EXIT SIGN	G BLANK	BLACK	YELLOW
41	REMOVE	1 2	L-858L L-858R	TAXIWAY LOCATION SIGN MANDATORY INSTRUCTION	G 36	WHITE BLACK	RED YELLOW
42	REMOVE	1 2	L-858B L-858B	ARREST BARRIER MARKER ARREST BARRIER MARKER	●	YELLOW YELLOW	BLACK BLACK
43	REMDVE	1 2	L-858B L-858B	ARREST BARRIER MARKER ARREST BARRIER MARKER	●	YELLOW YELLOW	BLACK BLACK
44	ETR	1 2	L-858B L-858B	ARREST BARRIER MARKER ARREST BARRIER MARKER	●	YELLOW YELLOW	BLACK BLACK
45	ETR	1 2	L-858B L-858B	ARREST BARRIER MARKER ARREST BARRIER MARKER	●	YELLOW YELLOW	BLACK BLACK
46	REMOVE	1 2	L-858B L-858B	ARREST BARRIER MARKER ARREST BARRIER MARKER	●	YELLOW YELLOW	BLACK BLACK
47	REMOVE	1 2	L-858B L-858B	ARREST BARRIER MARKER ARREST BARRIER MARKER	●	YELLOW YELLOW	BLACK BLACK

SCRIPT FILE:	
DWK. FILE No: 234-26	
Designed By: DMH	
Drawn By: DMH	
Checked By: MJL	
Date Revised: 3/10/2014	
Layout Name: Model	
File Path and Name: G:\07041KSA King Salmon Airport\Signs 2013\Xref\D-TTL8-AKN_LIGHTING.dwg	

AS-BUILT 1/2015 12 OF 17

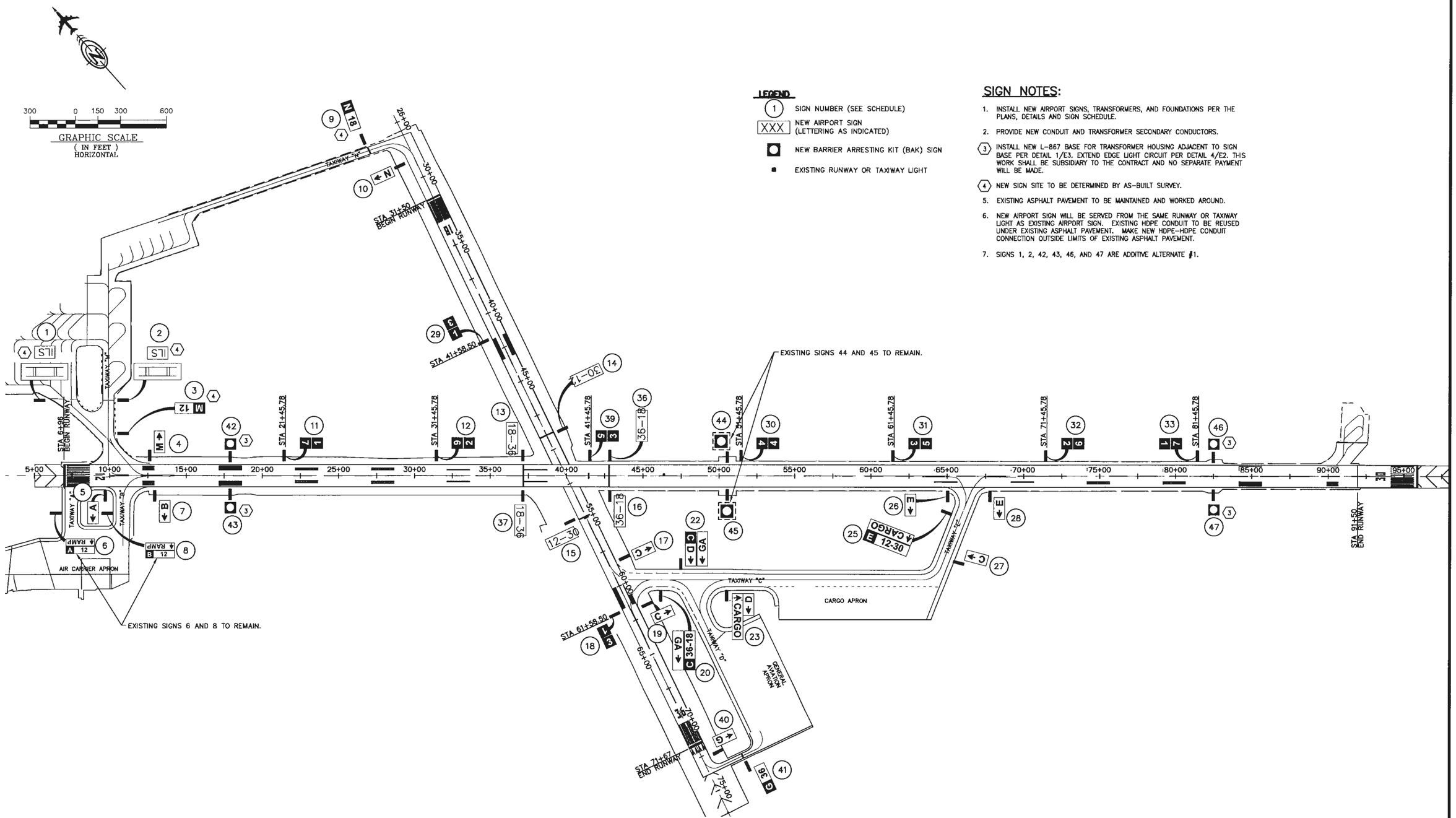
SJF	01/2015	AS-BUILT	REVISION
BY	DATE		

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

KING SALMON AIRPORT
KING SALMON, ALASKA
RUNWAY AND TAXIWAY SIGNS
PROJECT No. 57093
AIP No. 3-02-0148-12-2011
SIGN DEMOLITION PLAN

DATE: 3/11/2014
SHEET: D1 OF 17
AS-BUILT SHEET:

PLAN PREPARED BY MBA CONSULTING ENGINEERS, INC.



Date Revised:	3/10/2014
Layout Name:	Model
File Path and Name:	G:\0704KSA King Salmon Airport\Signs 2013\Xref\0-TITLE-AKN_LIGHTING.dwg

SCRIPT FILE:	DGN. FILE No: 234-26	Designed By:	DMH
		Drawn By:	DMH
		Checked By:	MAL

AS-BUILT 1/2015 13 OF 17

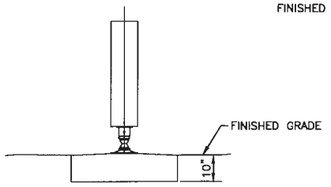
BY	DATE	REVISION
STP	01/2015	AS-BUILT

PLAN PREPARED BY MBA CONSULTING ENGINEERS, INC.

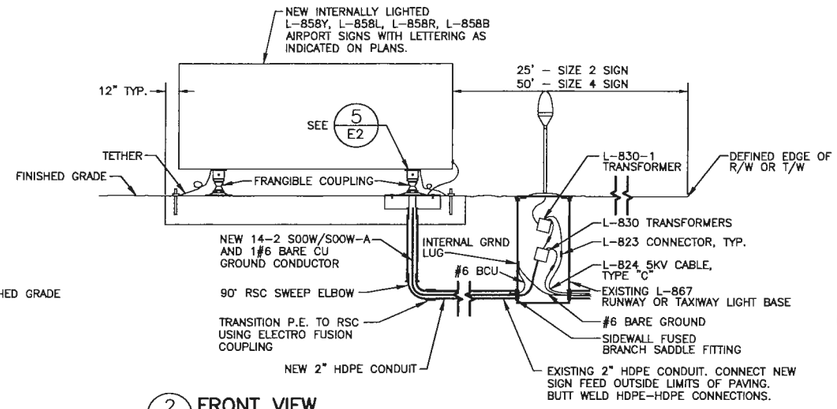
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

KING SALMON AIRPORT
KING SALMON, ALASKA
RUNWAY AND TAXIWAY SIGNS
PROJECT No. 57093
AIP No. 3-02-0148-12-2011
SIGN PLAN

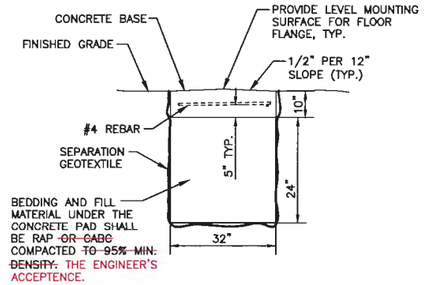
DATE: 3/11/2014
SHEET: E1 OF 17
AS-BUILT SHEET:



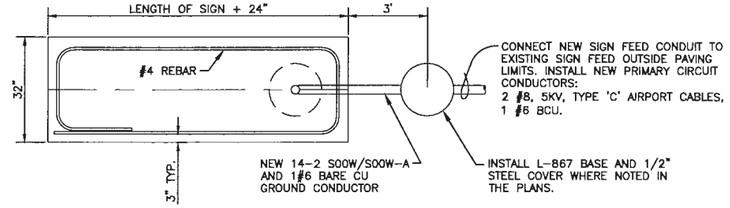
1 / E2 SIDE VIEW
NTS



2 / E2 FRONT VIEW
NTS

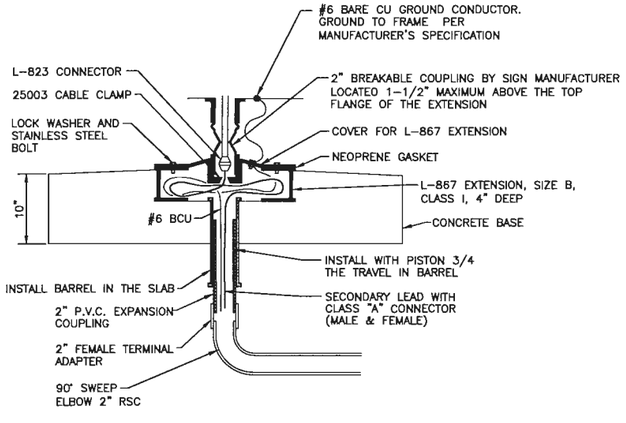


3 / E2 CONCRETE BASE SIDE VIEW
NTS



4 / E2 CONCRETE BASE PLAN
NTS

L-858 SIGN DETAILS



5 / E2 ELECTRICAL CONNECTION DETAIL
NTS

NOTES:

1. ALL NEW SIGNS – LED STYLE 2 AND 3, CLASS 2, MODE 3.
2. NEW SIGNS AND TRANSFORMERS SHALL BE COMPATIBLE WITH EXISTING 6.6 A CIRCUITS.
3. ALL PRODUCTS AND COMPONENTS, INCLUDING SIGNS AND LIGHT ENGINES: NEW AND UNUSED, MOST CURRENT MANUFACTURED MODEL. PRODUCT SUBMITTAL TO INCLUDE DATE OF MANUFACTURE.
4. PROVIDE NEW TRANSFORMERS, SECONDARY WIRING, AND GROUNDING. TRANSFORMER WATTAGE SIZE PER MANUFACTURER'S SPECIFICATION.
5. ATTACH SIGNS TO CONCRETE BASE IN ACCORDANCE WITH MANUFACTURE'S INSTRUCTION.
6. THE CONTRACTOR SHALL CERTIFY THE CONCRETE BASE IS CONSTRUCTED TO MEET THE SPECIFICATION P-610.
7. CONDUIT SHALL MEET THE SPECIFICATION L-110 AND SHALL BE SUBSIDIARY TO THE ITEM L-100n AND NO SEPARATE PAYMENT WILL BE MADE.
8. CABLE AND CONDUCTORS SHALL MEET THE SPECIFICATION L-108 AND SHALL BE SUBSIDIARY TO THE ITEM L-100n AND NO SEPARATE PAYMENT WILL BE MADE.
9. BEDDING, BACK FILL AND FINISH GRADE RESTORATION SHALL BE SUBSIDIARY TO THE CONTRACT AND NO SEPARATE PAYMENT WILL BE MADE.
10. ALL CABLES PASSING THROUGH BASE SHALL HAVE SUFFICIENT SLACK TO ALLOW CONNECTORS TO BE DRAWN 3' ABOVE FINISHED GRADE. ALL CABLES SHALL BE TAGGED.
11. SUSPEND TRANSFORMER AND CONNECTOR IN UPPER HALF OF BASE JUST UNDER LIGHT COVER USING INSULATION MATERIAL TO SUPPORT THEM.
12. EXISTING LIGHT BASES ARE FILLED WITH FREE FLOWING INSULATING MATERIAL. REPLACE THE INSULATING MATERIAL, AND PROVIDE NEW GASKET AND NEW GASKETED WASHERS. SEAL LIGHT BASE ASSEMBLIES WATERTIGHT PER SPECIFICATION L-100. THIS WORK SHALL BE SUBSIDIARY TO ITEM L-100n AND NO SEPARATE PAYMENT WILL BE MADE.

AS-BUILT 1/2015 14 OF 17

BY	DATE	REVISION
SJF	01/2015	AS-BUILT

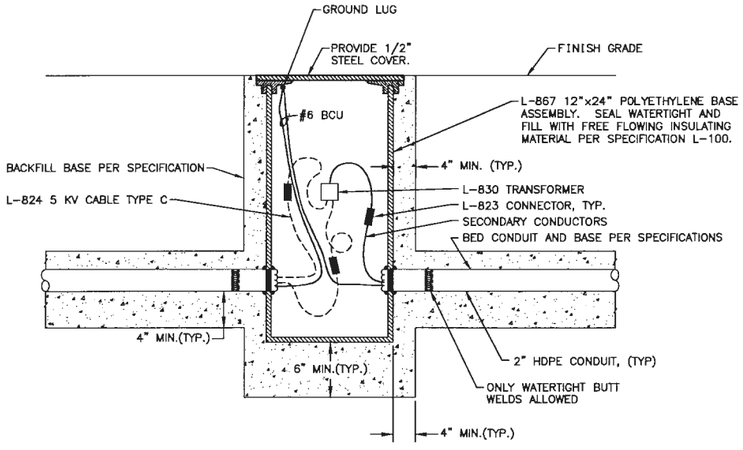
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

KING SALMON AIRPORT
KING SALMON, ALASKA
RUNWAY AND TAXIWAY SIGNS
PROJECT No. 57093
AIP No. 3-02-0148-12-2011
DETAILS

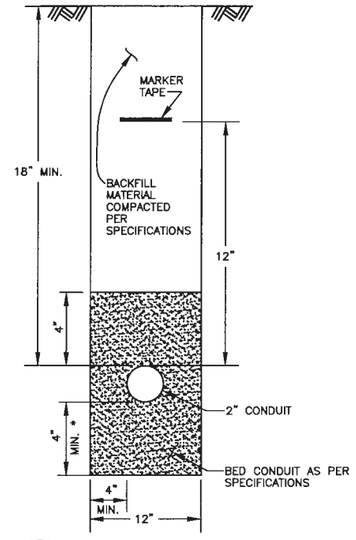
DATE: 3/11/2014
SHEET: E2 OF 17
AS-BUILT SHEET:

PLAN PREPARED BY MBA CONSULTING ENGINEERS, INC.

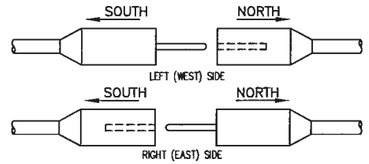
Date Revised: 3/10/2014 | Designed By: DMH
Layout Name: Model | Drawn By: DMH
File Path and Name: G:\07041KSA King Salmon Airport\Signs 2013\Xref\D-TTL8-AKN_LIGHTING.dwg | Checked By: MJL
DOM FILE No: 234-26
SCRIPT FILE:



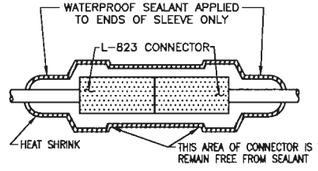
1 E3 L-867 HANDHOLE DETAIL
NTS



2 E3 CONDUIT TRENCH DETAIL
NTS



ORIENTATION OF L-823 CABLE CONNECTION IN LIGHT BASE DETAIL



3 E3 L-823 CONNECTOR
NTS

AS-BUILT 1/2015 15 OF 17

BY	DATE	REVISION
SJF	01/2015	AS-BUILT

PLAN PREPARED BY MBA CONSULTING ENGINEERS, INC.

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

KING SALMON AIRPORT
KING SALMON, ALASKA
RUNWAY AND TAXIWAY SIGNS
PROJECT No. 57093
AIP No. 3-02-0148-12-2011
DETAILS

DATE: 3/11/2014
SHEET: E3 OF 17
AS-BUILT SHEET:

Date Revised:
Layout Name: Model
File Path and Name: G:\07041KSA King Salmon Airport\Signs 2013\Xref\D-TTLB-AKN_LIGHTING.dwg
DWG. FILE No: 234-28
SCRIPT FILE:
3/10/2014
Designed By: DMH
Drawn By: DMH
Checked By: MAL

SIGN SCHEDULE

	SIGN NUMBER	SIZE	STATUS	FACE NUMBER	TYPE	PURPOSE	LEGEND	LEGEND COLOR	FACE COLOR	STATIONING	REMARKS	SEE SHEET NOTE
ADD/ALT #1	1	2	NEW	1 2	L-858R L-858Y	MANDATORY INSTRUCTION SIGN ILS AREA BOUNDARY SIGN	ILS	WHITE BLACK	RED YELLOW		EXISTING LOCATION	SEE NOTE 5, SHEET D1 AND NOTE 4, SHEET E1
ADD/ALT #1	2	2	NEW	1 2	L-858R L-858Y	MANDATORY INSTRUCTION SIGN ILS AREA BOUNDARY SIGN	ILS	WHITE BLACK	RED YELLOW		EXISTING LOCATION	SEE NOTE 5, SHEET D1 AND NOTE 4, SHEET E1
	3	2	NEW	1 1	L-858L L-858R	TAXIWAY LOCATION SIGN MANDATORY INSTRUCTION SIGN	M 12	YELLOW WHITE	BLACK RED		EXISTING LOCATION	SEE NOTE 5, SHEET D1 AND NOTE 4, SHEET E1
	4	2	NEW	1 2	L-858Y	RUNWAY EXIT SIGN	M → BLANK	BLACK	YELLOW	R/W 12-30 STA. 12+61.74 (100' L)		
	5	2	NEW	1 2	L-858Y	RUNWAY EXIT SIGN	← A BLANK	BLACK	YELLOW	R/W 12-30 STA. 9+10.50 (100' R)		
	6	2	EXISTING	1 1	L-858L L-858R	TAXIWAY LOCATION SIGN MANDATORY INSTRUCTION SIGN	A 12	YELLOW WHITE	BLACK RED	R/W 12-30 STA. 6+78.00 (250' R)	EXISTING SIGN TO REMAIN	
	7	2	NEW	1 2	L-858Y	RUNWAY EXIT SIGN	← B BLANK	BLACK	YELLOW	R/W 12-30 STA. 12+56.07 (100' R)		
	8	2	EXISTING	1 1	L-858L L-858R	TAXIWAY LOCATION SIGN MANDATORY INSTRUCTION SIGN	B 12	YELLOW WHITE	BLACK RED	R/W 12-30 STA. 10+16.10 (250' R)	EXISTING SIGN TO REMAIN	
	9	2	NEW	1 1	L-858L L-858R	TAXIWAY LOCATION SIGN MANDATORY INSTRUCTION SIGN	N 18	YELLOW WHITE	BLACK RED	R/W 18-36 STA. 26+38.88 (248.45' R)	EXISTING LOCATION	SEE NOTE 5, SHEET D1 AND NOTE 4, SHEET E1
	10	2	NEW	1 2	L-858Y	RUNWAY EXIT SIGN	← N BLANK	BLACK	YELLOW	R/W 18-36 STA. 28+11.39 (75' R)	CONDUIT STUB OUT FOR SIGN FEED LOCATED APPROXIMATELY 40 FEET UP STATION	
	11	4	NEW	1 2	L-858B L-858B	R/W DISTANCE REMAINING SIGN R/W DISTANCE REMAINING SIGN	7 1	WHITE WHITE	BLACK BLACK	R/W 12-30 STA. 21+45.78 (125' L)		
	12	4	NEW	1 2	L-858B L-858B	R/W DISTANCE REMAINING SIGN R/W DISTANCE REMAINING SIGN	6 2	WHITE WHITE	BLACK BLACK	R/W 12-30 STA. 31+45.78 (125' L)		
	13	2	NEW	1 2	L-858R	MANDATORY INSTRUCTION SIGN	18-36 BLANK	WHITE	RED	R/W 12-30 STA. 37+14.25 (100' L)		
	14	2	NEW	1 2	L-858R	MANDATORY INSTRUCTION SIGN	30-12	WHITE	RED	R/W 18-36 STA. 48+91.53 (75' L)		
	15	2	NEW	1 2	L-858R	MANDATORY INSTRUCTION SIGN	12-30	WHITE	RED	R/W 18-36 STA. 54+93.56 (75' R)		
	16	2	NEW	1 2	L-858R	MANDATORY INSTRUCTION SIGN	36-18	WHITE	RED	R/W 12-30 STA. 42+83.10 (100' R)		
	17	2	NEW	1 2	L-858Y	RUNWAY EXIT SIGN	← C BLANK	BLACK	YELLOW	R/W 18-36 STA. 58+63.70 (75' L)		
	18	4	NEW	1 2	L-858B L-858B	R/W DISTANCE REMAINING SIGN R/W DISTANCE REMAINING SIGN	3 1	WHITE WHITE	BLACK BLACK	R/W 18-36 STA. 61+58.50 (100' R)		
	19	2	NEW	1 2	L-858Y	RUNWAY EXIT SIGN	C → BLANK	BLACK	YELLOW	R/W 18-36 STA. 61+91.80 (75' L)		
	20	2	NEW	1 2 3	L-858R L-858Y L-858L	MANDATORY INSTRUCTION SIGN DESTINATION SIGN TAXIWAY LOCATION SIGN	36-18 GA → C	WHITE BLACK YELLOW	RED YELLOW BLACK	T/W 'C' STA. 502+98.67 (70' R)		
	21		NOT USED									
	22	2	NEW	1 2 3	L-858L L-858Y L-858Y	TAXIWAY LOCATION SIGN TAXIWAY DIRECTION SIGN DESTINATION SIGN	C D → ← GA	YELLOW BLACK BLACK	BLACK YELLOW YELLOW	T/W 'C' STA. 503+48.83 (62.5' L)		

SIGN NOTES:

1. SIGNS TO BE INSTALLED SO THAT THE FACE IS PERPENDICULAR TO THE CENTERLINE OF RUNWAY OR TAXIWAY.
2. STATION AND OFFSET REFER TO THE EDGE OF THE SIGN NEAREST THE RUNWAY OR TAXIWAY. SEE DETAIL 2/E2.
3. OFFSETS LISTED IN THE SIGN SCHEDULE ARE FROM THE CENTERLINE OF THE RUNWAY OR TAXIWAY.

AS-BUILT 1/2015 16 OF 17

BY	DATE	REVISION
SJF	01/2015	AS-BUILT

PLAN PREPARED BY MBA CONSULTING ENGINEERS, INC.

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

KING SALMON AIRPORT
KING SALMON, ALASKA
RUNWAY AND TAXIWAY SIGNS
PROJECT No. 57093
AIP No. 3-02-0148-12-2011
SIGN SCHEDULE

DATE: 3/11/2014
SHEET: E4 OF 17
AS-BUILT SHEET:

SCRIPT FILE:
DOWL FILE No: 234-26
Designed By: DMH
Drawn By: DMH
Checked By: MJL
Date Revised: 3/10/2014
Layout Name: Model
File Path and Name: G:\07041KSA King Salmon Airport\Signs 2013\Xref\D-TTL8-AKN_LIGHTING.dwg

SIGN SCHEDULE

	SIGN NUMBER	SIZE	STATUS	FACE NUMBER	TYPE	PURPOSE	LEGEND	LEGEND COLOR	FACE COLOR	STATIONING	REMARKS	SEE SHHET NOTE
	23	2	NEW	1 2	L-858Y L-858Y	TAXIWAY DIRECTION SIGN DESTINATION SIGN	← D ↑ CARGO	BLACK BLACK	YELLOW YELLOW	T/W 'C' STA. 507+13.09 (70' R)		
	24		NOT USED									
	25	2	NEW	1 2 3	L-858L L-858R L-858Y	TAXIWAY LOCATION SIGN MANDATORY INSTRUCTION SIGN DESTINATION SIGN	E 12-30 ↑ CARGO	YELLOW WHITE BLACK	BLACK RED YELLOW	T/W 'E' STA. 525+28.56 (62.5' L)		
	26	2	NEW	1 2	L-858Y	RUNWAY EXIT SIGN	E → BLANK	BLACK	YELLOW	R/W 12-30 STA. 64+78.06 (100' R)		
	27	2	NEW	1 2	L-858Y	TAXIWAY DIRECTION SIGN	C → BLANK	BLACK	YELLOW	T/W 'E' STA. 521+76.39 (62.5' R)		
	28	2	NEW	1 2	L-858Y	RUNWAY EXIT SIGN	← E BLANK	BLACK	YELLOW	R/W 12-30 STA. 67+73.10 (100' R)		
	29	4	NEW	1 2	L-858B L-858B	R/W DISTANCE REMAINING SIGN R/W DISTANCE REMAINING SIGN	1 3	WHITE WHITE	BLACK BLACK	R/W 18-36 STA. 41+58.50 (100' R)		
	30	4	NEW	1 2	L-858B L-858B	R/W DISTANCE REMAINING SIGN R/W DISTANCE REMAINING SIGN	4 4	WHITE WHITE	BLACK BLACK	R/W 12-30 STA. 51+45.78 (125' L)		
	31	4	NEW	1 2	L-858B L-858B	R/W DISTANCE REMAINING SIGN R/W DISTANCE REMAINING SIGN	3 5	WHITE WHITE	BLACK BLACK	R/W 12-30 STA. 61+45.78 (125' L)		
	32	4	NEW	1 2	L-858B L-858B	R/W DISTANCE REMAINING SIGN R/W DISTANCE REMAINING SIGN	2 6	WHITE WHITE	BLACK BLACK	R/W 12-30 STA. 71+45.78 (125' L)		
	33	4	NEW	1 2	L-858B L-858B	R/W DISTANCE REMAINING SIGN R/W DISTANCE REMAINING SIGN	1 7	WHITE WHITE	BLACK BLACK	R/W 12-30 STA. 81+45.78 (125' L)		
	34		NOT USED									
	35		NOT USED									
	36	2	NEW		L-858R	MANDATORY INSTRUCTION SIGN	36-18	WHITE	RED	R/W 12-30 STA. 42+83.10 (100' L)		
	37	2	NEW		L-858R	MANDATORY INSTRUCTION SIGN	18-36	WHITE	RED	R/W 12-30 STA. 37+14.25 (100' R)		
	38		NOT USED									
	39	4	NEW	1 2	L-858B L-858B	R/W DISTANCE REMAINING SIGN R/W DISTANCE REMAINING SIGN	5 3	WHITE WHITE	BLACK BLACK	R/W 12-30 STA. 41+45.78 (125' L)		
	40	2	NEW	1 2	L-858Y	RUNWAY EXIT SIGN	← G BLANK	BLACK	YELLOW	R/W 18-36 STA. 72+89.81 (75' L)		
	41	2	NEW	1 2	L-858L L-858R	TAXIWAY LOCATION SIGN MANDATORY INSTRUCTION	G 36	WHITE BLACK	RED YELLOW	R/W 18-36 STA. 74+04.83 (250' L)		
ADD/ALT #1	42	4	NEW	1 2	L-858B L-858B	ARREST BARRIER MARKER ARREST BARRIER MARKER	● ●	YELLOW YELLOW	BLACK BLACK	R/W 12-30 STA. 18+80.65 (125' L)		SEE NOTE 3, SHEET E1
ADD/ALT #1	43	4	NEW	1 2	L-858B L-858B	ARREST BARRIER MARKER ARREST BARRIER MARKER	● ●	YELLOW YELLOW	BLACK BLACK	R/W 12-30 STA. 18+80.65 (125' R)		SEE NOTE 3, SHEET E1
	44	4	EXISTING	1 2	L-858B L-858B	ARREST BARRIER MARKER ARREST BARRIER MARKER	● ●	YELLOW YELLOW	BLACK YELLOW	R/W 12-30 STA. 50+55.67 (125' L)		
	45	4	EXISTING	1 2	L-858B L-858B	ARREST BARRIER MARKER ARREST BARRIER MARKER	● ●	YELLOW YELLOW	BLACK YELLOW	R/W 12-30 STA. 50+55.67 (125' R)		
ADD/ALT #1	46	4	NEW	1 2	L-858B L-858B	ARREST BARRIER MARKER ARREST BARRIER MARKER	● ●	YELLOW YELLOW	BLACK YELLOW	R/W 12-30 STA. 82+55.19 (125' L)		SEE NOTE 3, SHEET E1
ADD/ALT #1	47	4	NEW	1 2	L-858B L-858B	ARREST BARRIER MARKER ARREST BARRIER MARKER	● ●	YELLOW YELLOW	BLACK YELLOW	R/W 12-30 STA. 82+55.19 (125' R)		SEE NOTE 3, SHEET E1

SIGN NOTES:

1. SIGNS TO BE INSTALLED SO THAT THE FACE IS PERPENDICULAR TO THE CENTERLINE OF RUNWAY OR TAXIWAY.
2. STATION AND OFFSET REFER TO THE EDGE OF THE SIGN NEAREST THE RUNWAY OR TAXIWAY. SEE DETAIL 2/E2.
3. OFFSETS LISTED IN THE SIGN SCHEDULE ARE FROM THE CENTERLINE OF THE RUNWAY OR TAXIWAY.

AS-BUILT 1/2015 17 OF 17

BY	DATE	REVISION
SJP	01/2015	AS-BUILT

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

KING SALMON AIRPORT
KING SALMON, ALASKA
RUNWAY AND TAXIWAY SIGNS
PROJECT No. 57093
AIP No. 3-02-0148-12-2011
SIGN SCHEDULE

DATE: 3/11/2014
SHEET: E5 OF 17
AS-BUILT SHEET:

PLAN PREPARED BY MBA CONSULTING ENGINEERS, INC.

SCRIPT FILE: DWL FILE No: 234-26
Designed By: DMH
Drawn By: DMH
Checked By: MJL
Date Revised: 3/10/2014
Layout Name: Model
File Path and Name: G:\07041KSA King Salmon Airport\Signs 2013\Xref\D-TTLB-AKN_LIGHTING.dwg