AS-BUILT
~~CONSTRUCTION~~ PLANS FOR

DILLINGHAM AIRPORT

GENERAL AVIATION APRON EXPANSION

PROJECT 57978

1991

AIRPORT IMPROVEMENT PROGRAM
A.I.P. 3-02-0078-06

SPONSORED BY THE STATE OF ALASKA

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

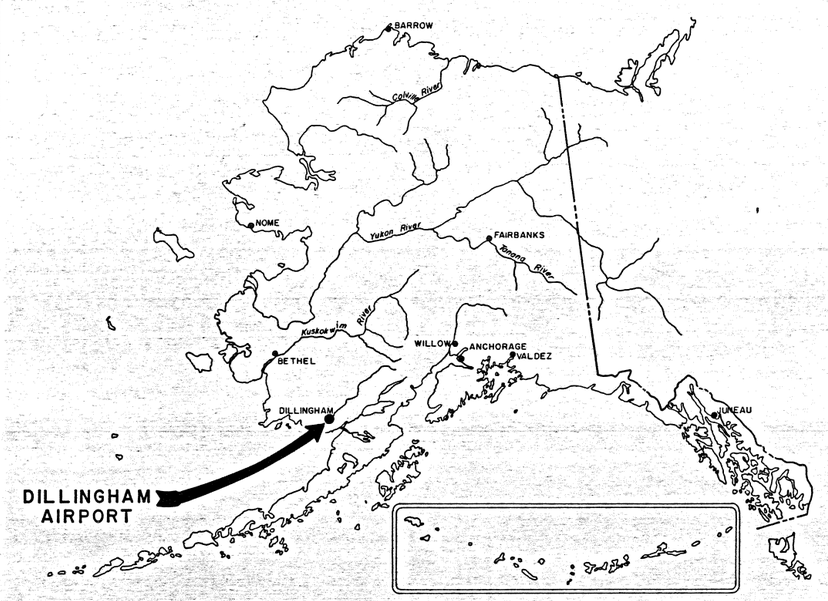
AS-BUILT

APPROVED Richard A. Briggs DATE 1-27-93
RICHARD A. BRIGGS, P.E. — AVIATION CONSTRUCTION ENGINEER

APPROVED Keith R. Morberg DATE 6/27/91
KEITH R. MORBERG, P.E. — CHIEF OF DESIGN

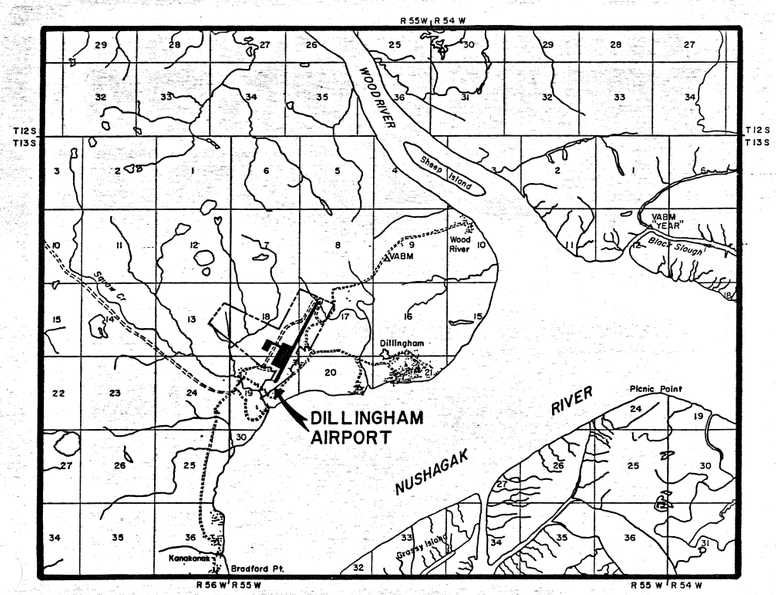
APPROVED Boyd J. Brownfield DATE 6/27/91
BOYD J. BROWNFIELD, P.E. — DIRECTOR, DESIGN AND CONSTRUCTION

DILLINGHAM AIRPORT	
SHT. 1 of 16	57978



LOCATION MAP

NO SCALE



VICINITY MAP

SCALE: 1" = 1 MILE

~~ESTIMATED~~ FINAL QUANTITIES

No.	ITEM	QUANTITY	UNIT
100	MOBILIZATION & DEMOBILIZATION	ALL REQUIRED	L.S.
120	D.B.E. ADJUSTMENT	ALL REQUIRED	C.S.
121	CONSTRUCTION SURVEYING BY THE CONTRACTOR	ALL REQUIRED	L.S.
125	ENGINEERING TRANSPORTATION	ALL REQUIRED	L.S.
132	FIELD LABORATORY	ALL REQUIRED	L.S.
200a	CLEARING	13.28	ACRES
330a	UNCLASSIFIED EXCAVATION	24,557	C.Y.
330e	BORROW EMBANKNENT	197,944	TON.
331	DISPOSAL AREA ACCESS ROAD	ALL REQUIRED	L.S.
400a	CORRUGATED METAL PIPE, 24" ROUND STEEL, 16 GAUGE, WITH END SECTIONS	60	L.F.
400b	CORRUGATED METAL PIPE, 18" ROUND STEEL, 16 GAUGE, WITH END SECTIONS	85.5	L.F.
400c	CORRUGATED METAL PIPE, 36" ROUND STEEL, 16 GAUGE, WITH END SECTIONS	61	L.F.
410	CULVERT THAW PIPE	ALL REQUIRED	L.S.
440a	CHAIN LINK FENCE	3,283.5 △	L.F.
440c	PEDESTRIAN GATE	1	EACH
440d	CHAIN LINK FENCE REMOVAL	1,191 △	L.F.
440e	20' CANTILEVER GATE	4	EACH
440f	30' SWING GATE WITH REMOVABLE END POST	1	EACH
540a	AGGREGATE SURFACE COURSE	20,111.5 △	TON
550b	GEOTEXTILE, REINFORCEMENT	11,907 △	S.Y.
556	SILT FENCE	1,580 △	L.F.
711	STANDARD SIGNS	70	S.F.
712	TYPE III, BARRICADE, FIXED TYPE	1	EACH
830	TIE-DOWN ANCHORS	369	EACH
840	AIRCRAFT RELOCATION	32	EACH
900b	SEED APPLICATION	250	LBS.
900c	FERTILIZER	4,400	LBS.
1060	APRON FLOOD LIGHTING	ALL REQUIRED	L.S.
1063	SECURITY GATE ELECTRICAL WORK	ALL REQUIRED	L.S.

INDEX

SHEET TITLE	AS-BUILT SHEET No.
TITLE SHEET	1
LOCATION & VICINITY MAPS, ESTIMATED QUANTITIES & INDEX	2
PROJECT SITE PLAN	3
PROJECT LAYOUT PLAN	4
GRADING PLAN	5
GENERAL AVIATION APRON PLAN & PROFILE STA. 26+00 TO STA. 41+50	6
ACCESS RD. PLAN & PROFILE STA. 0+00 TO STA. 5+00	7
ACCESS RD. PLAN & PROFILE STA. 5+00 TO STA. 18+00 & WEST LEASE LOT PLAN	8
TYPICAL SECTIONS	9
GENERAL AVIATION APRON TIE-DOWN PLAN, EAST LEASE LOT PLAN & FLOODLIGHTING PLAN	10
CULVERT & THAW PIPE DETAILS	11
FENCE DETAILS	12
SECURITY FENCING GATE DETAILS	13
FLOODLIGHT INSTALLATION DETAILS	14
SIGN DETAILS	15
ELECTRICAL GATE OPERATOR DETAILS	16
C.O. No.1	17 & 18

STANDARD DRAWINGS

C – 01.03
C – 02.01
S – 05.00

CHANGE ORDER No.1

1000r	NEW SINGLE MODULE AIRPORT SIGN	7	EACH
1000s	TRENCH, CONDUIT & CABLE	1	L.S.

CHANGE ORDER No.2

400aa	24" CMP	1	L.S.
440g	RELOCATE GAGE	1	L.S.

STATE OF ALASKA 49TH Gregg P. Bradley C.E. 5279 REGISTERED PROFESSIONAL ENGINEER

BY	DATE	CHANGE
WHV	1-27-93	AS-BUILT
VW	7-1-91	ESTIMATED QUANTITIES

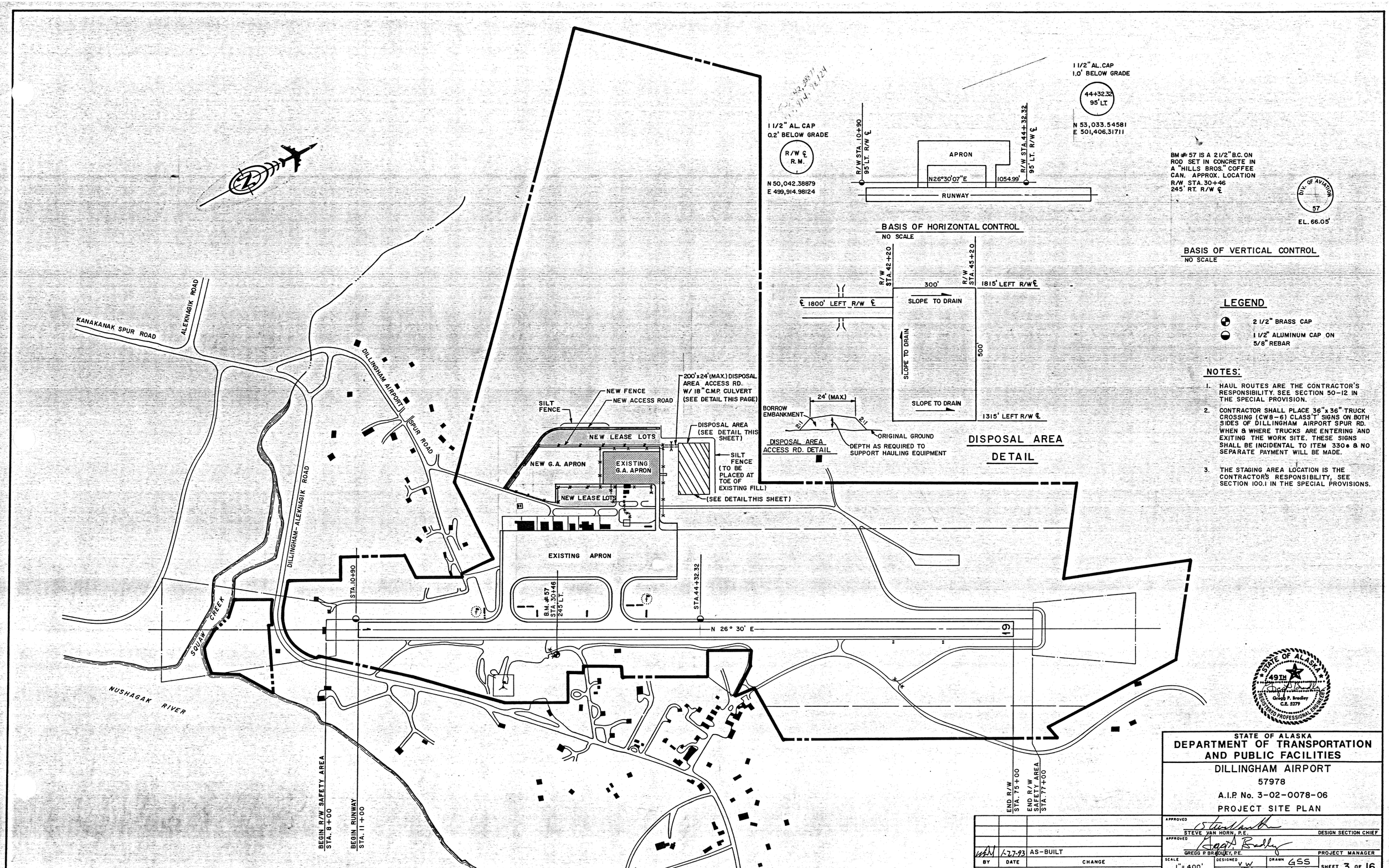
REVISIONS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

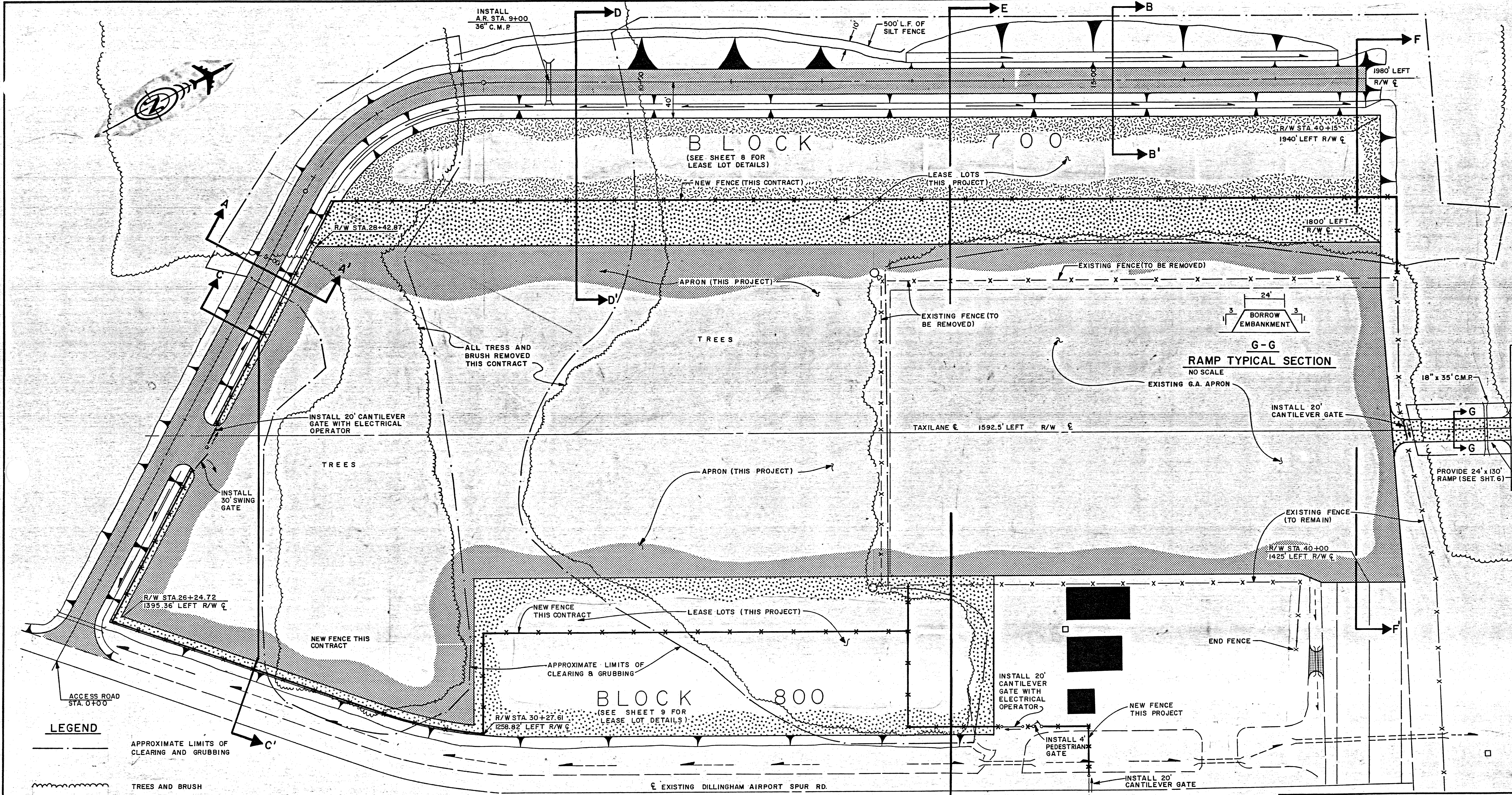
DILLINGHAM AIRPORT
57978
A.I.P. No. 3-02-0078-06
LOCATION AND VICINITY MAPS, QUANTITIES AND INDEX

APPROVED STEVE VAN HORN, P.E. — DESIGN GROUP CHIEF
APPROVED GREGG P. BRADLEY, P.E. — PROJECT MANAGER

SCALE: AS SHOWN | DESIGNED: VW | DRAWN: GSS | CHECKED: | DATE: 6/27/91 | SHEET 2 OF 16



AS-BUILT 1/93 SHEET 3 OF 18



LEGEND

—— · ——	APPROXIMATE LIMITS OF CLEARING AND GRUBBING
∿∿∿∿	TREES AND BRUSH
———▶	PROPOSED DITCH DRAINAGE DIRECTION
— — —▶	EXISTING DITCH DRAINAGE DIRECTION
—✕—✕—	NEW FENCE (THIS PROJECT)
x — — x — — x	EXISTING FENCE (TO BE REMOVED)
x —— x —— x	EXISTING FENCE TO REMAIN
(dense dot pattern)	36" MIN. BORROW EMBANKMENT WITH 6" MIN. CRUSHED AGGREGATE SURFACE COURSE
(triangle dot pattern)	36" MIN. BORROW EMBANKMENT WITH NO AGGREGATE SURFACE COURSE
(dash pattern)	EMBANKMENT (FROM UNCLASSIFIED EXCAVATION)

NOTE

SEE SHEET 9 FOR TYPICAL SECTIONS

STATE OF ALASKA 49TH Gregg P. Bradley C.E. 5279 REGISTERED PROFESSIONAL ENGINEER

BY	DATE	CHANGE
WAH	1-27-93	AS-BUILT

REVISIONS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

DILLINGHAM AIRPORT
57978
A.I.P. NO. 3-02-0078-06

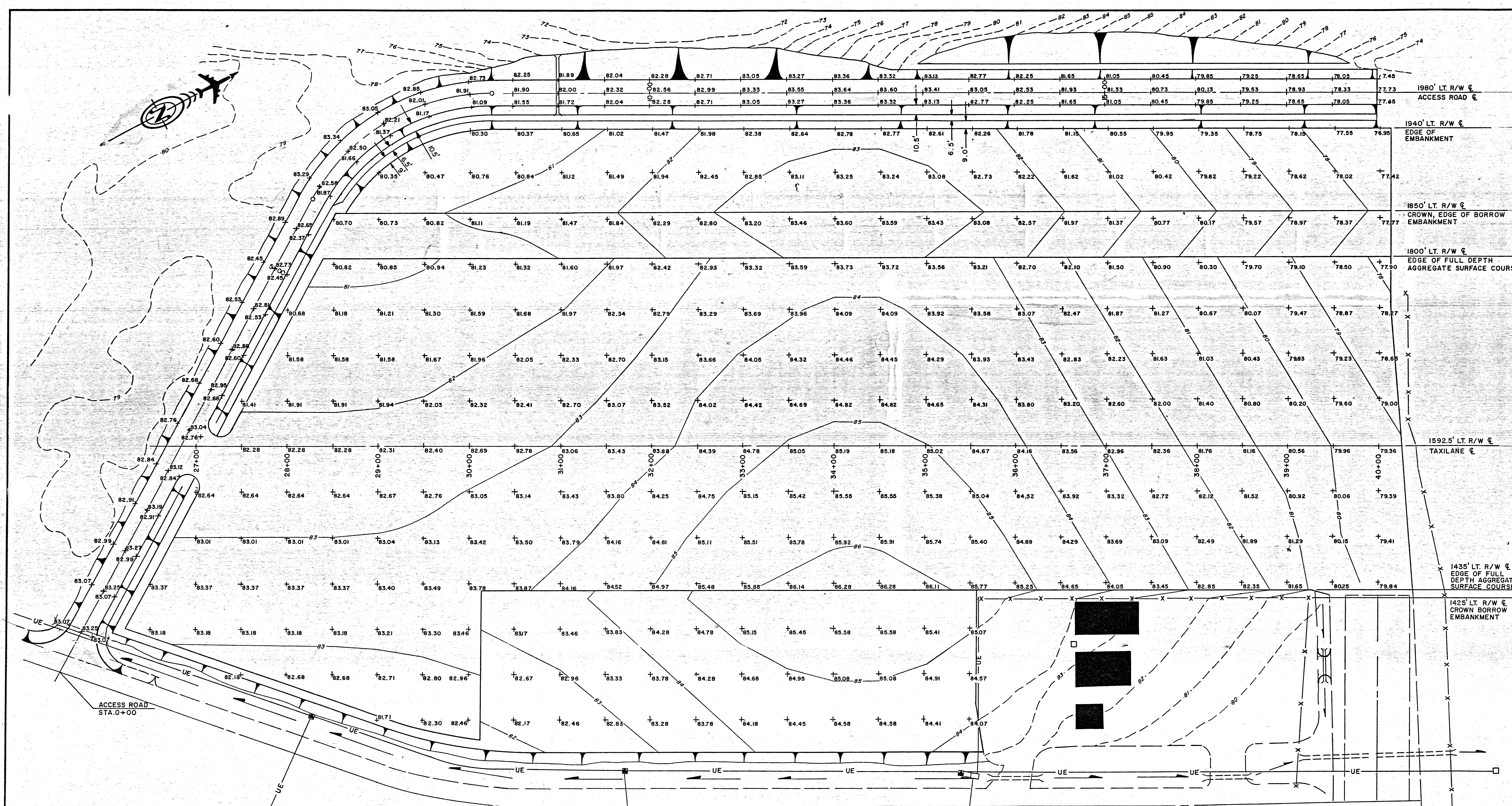
PROJECT LAYOUT PLAN

APPROVED STEVE VAN HORN, P.E. — DESIGN GROUP CHIEF
APPROVED GREGG P. BRADLEY, P.E. — PROJECT MANAGER

SCALE	DESIGNED	DRAWN	
1" = 50'	VW	cox	SHEET 4 OF 16
	CHECKED GPB	DATE 6/27/91	

AS-BUILT 1/93 SHEET 4 OF 18

A/E SUPPLIES 134600



NOTE:
ALL FINISH GRADE ELEVATION ARE 0.3' LOWER THAN NOTED ON THIS SHEET.

STATE OF ALASKA 49TH Gregg P. Bradley C.E. 3279 REGISTERED PROFESSIONAL ENGINEER

BY	DATE	CHANGE
WDA	1-27-93	AS-BUILT
		REVISIONS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

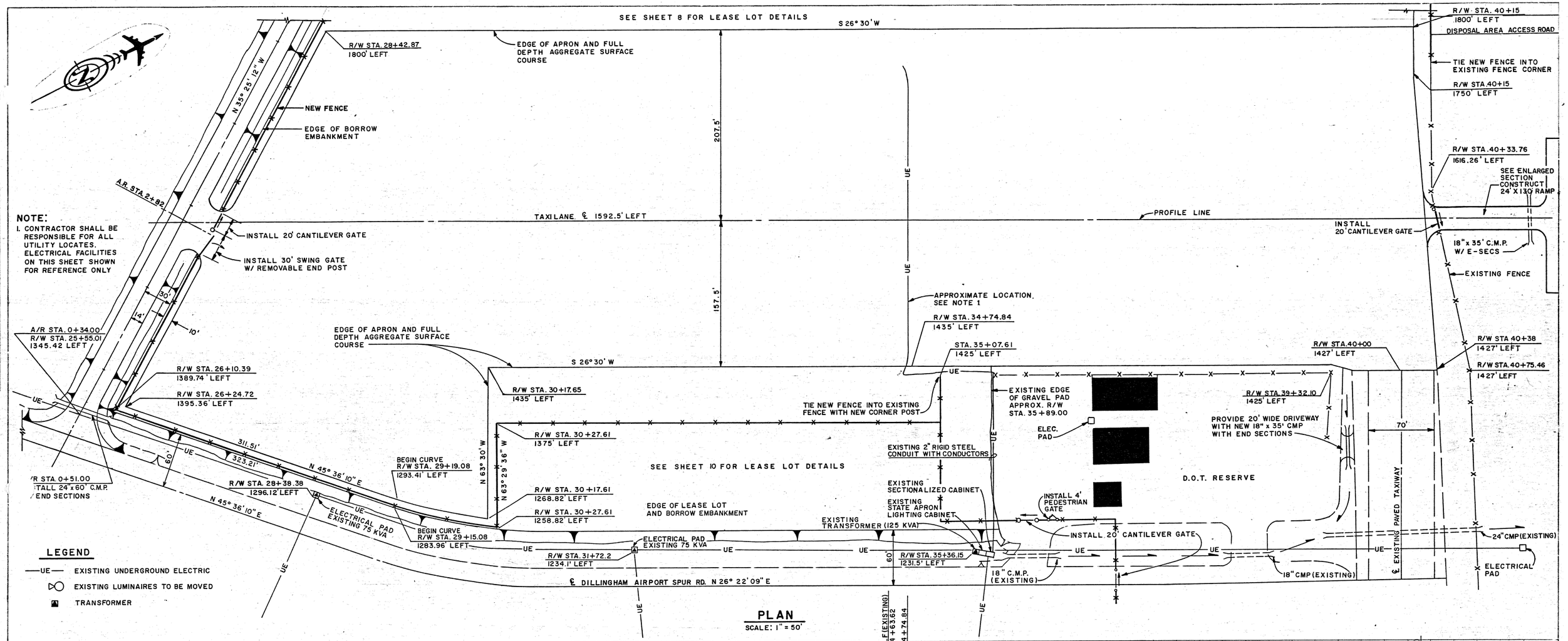
DILLINGHAM AIRPORT
57978
A.I.P. No. 3-02-0078-06
GRADING PLAN

APPROVED: STEVE VAN HORN, P.E. — DESIGN GROUP CHIEF
APPROVED: GREGG P. BRADLEY, P.E. — PROJECT MANAGER

SCALE 1" = 50' | DESIGNED VW | CHECKED | DRAWN | DATE 6/27/91 | SHEET 5 OF 16

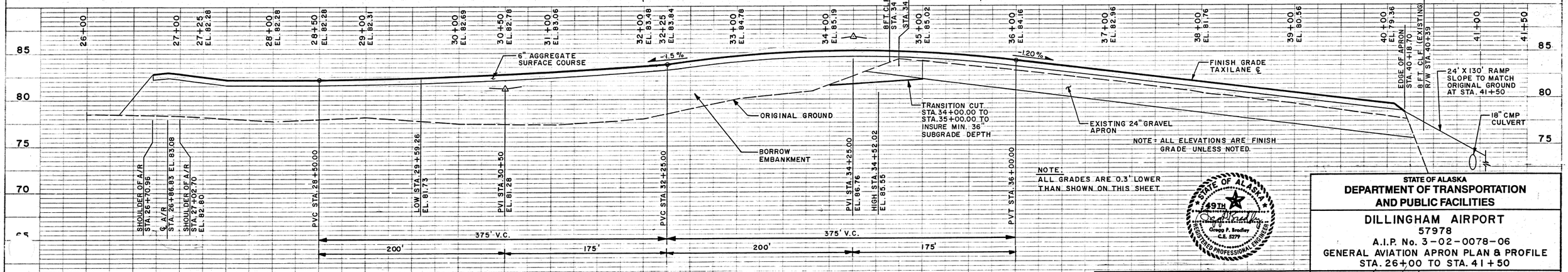
AS-BUILT 1/93 SHEET 5 OF 18

A/E SUPPLIES 134600



PLAN

SCALE: 1" = 50'



NOTE: ALL ELEVATIONS ARE FINISH GRADE UNLESS NOTED.

NOTE: ALL GRADES ARE 0.3' LOWER THAN SHOWN ON THIS SHEET.

APRON PROFILE

SCALE: VERT. 1" = 5'
HORIZ. 1" = 50'

STATE OF ALASKA 49TH Gregg P. Bradley C.E. 5279 REGISTERED PROFESSIONAL ENGINEER

BY	DATE	CHANGE
WVH	1-27-93	AS-BUILT

REVISIONS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

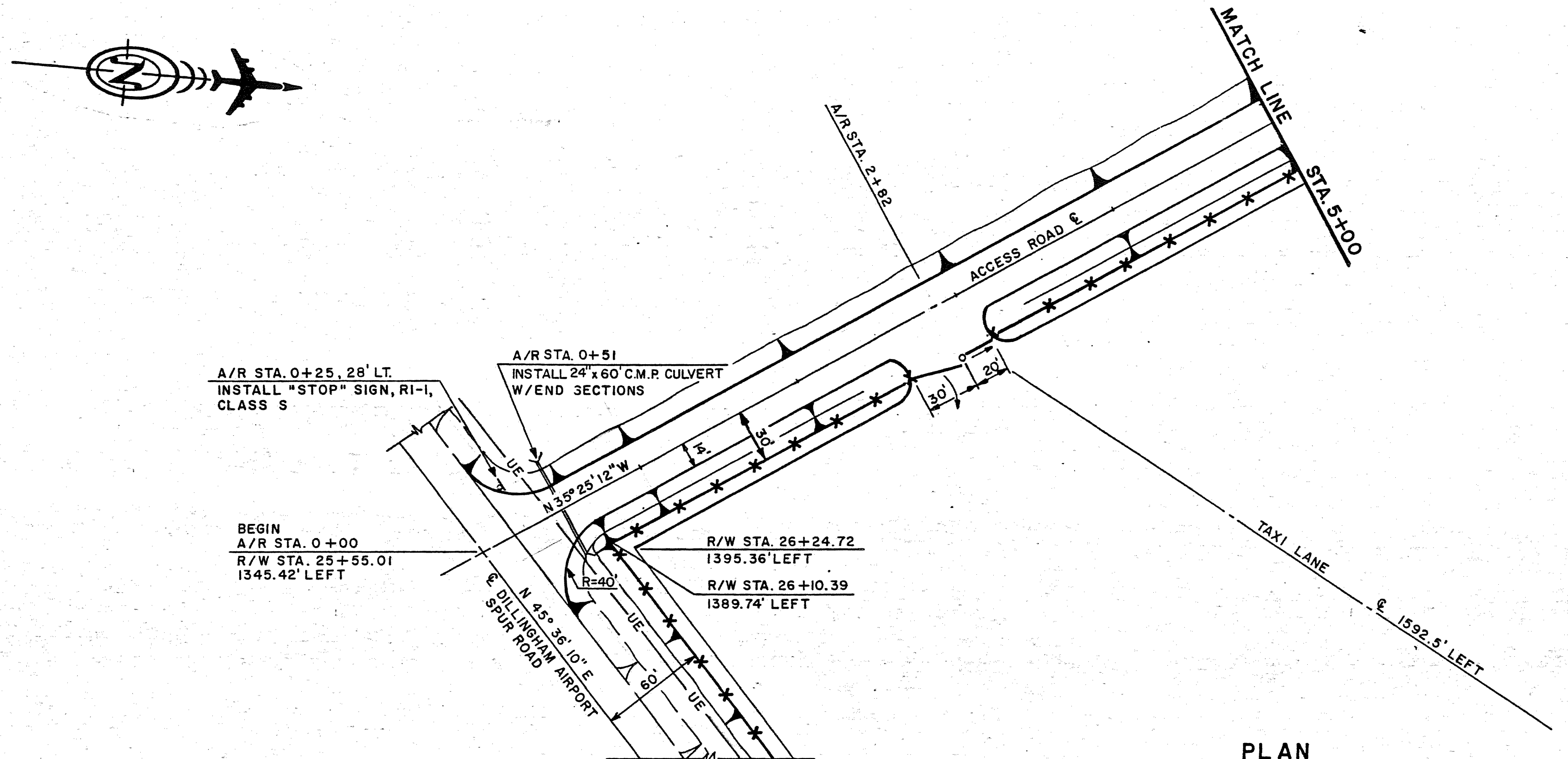
DILLINGHAM AIRPORT
57978
A.I.P. No. 3-02-0078-06
GENERAL AVIATION APRON PLAN & PROFILE
STA. 26+00 TO STA. 41+50

APPROVED STEVE VAN HORN, P.E. — DESIGN GROUP CHIEF
APPROVED GREGG P. BRADLEY, P.E. — PROJECT MANAGER

SCALE	DESIGNED	DRAWN	
AS SHOWN	CHECKED VW	DATE 6/27/91	SHEET 6 OF 16

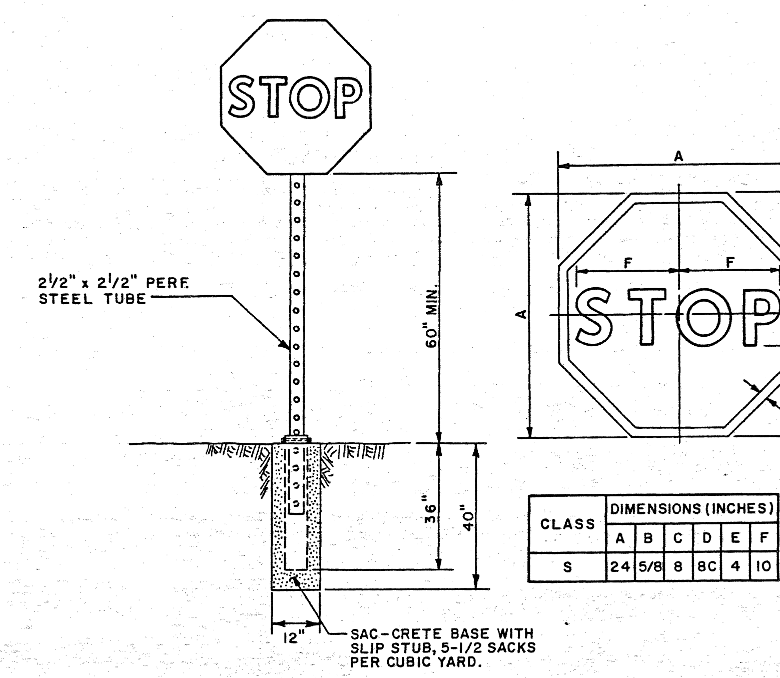
AS-BUILT 1/93 — SHEET 6 OF 18

K&E Keuffel & Esser Company
48 7074 Made in U.S.A.



PLAN

SCALE: 1" = 50'



CLASS	DIMENSIONS (INCHES)					
	A	B	C	D	E	F
S	24	5/8	8	8C	4	10

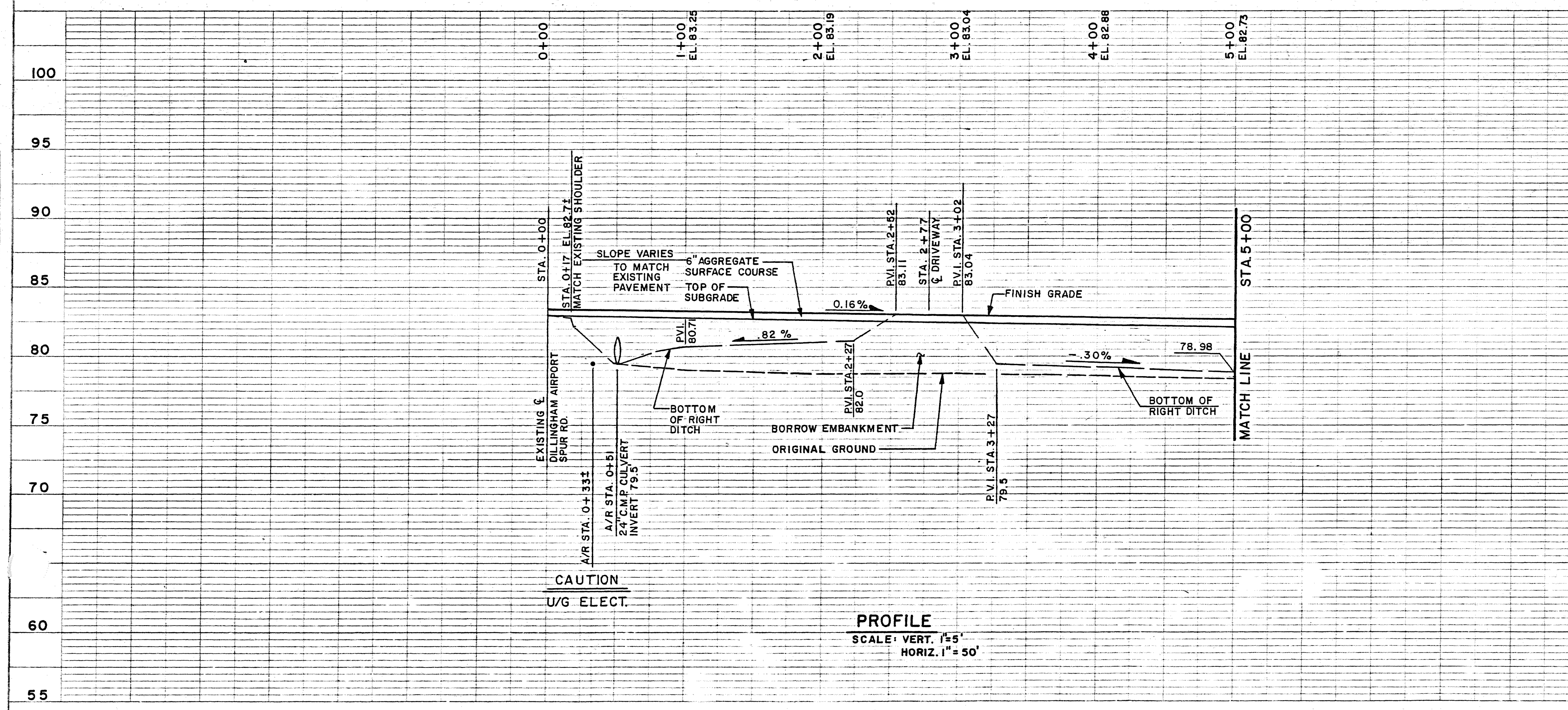
1. TOP OF POST, MOUNTING BRACKETS SHALL HAVE A MININUM CLEARANCE OF 3" FROM TOP EDGE OF SIGN.
2. ALL SIGN MOUNTING FASTENERS ON SIGN FACE SHALL BE PAINTED AS CLOSELY AS POSSIBLE IN MATCHING COLOR TO SIGN FACE.
3. ALL SIGN, ZEES, AND BRACES MOUNTED TO THE POST SHALL BE ATTACHED WITH 5/16" BOLTS.
4. ALL ALUMINUM NUTS, BOLTS, AND WASHERS SHALL BE ANODIZED.
5. FASTENER SPECIFICATION TABLE-3 FASTENERS PER SIGN.

		ALUMINUM	STEEL	STAINLESS STEEL
BOLTS	MACHINE & CARRIAGE	2024-T4	A-307	A-276
NUTS	REGULAR	6061-T6	A-307	A-276
	LOCK	2017-T4		
WASHERS		2024-T4	A-36	A-276

3. SIGN SHAPES & COLORS SHALL CONFORM TO THE ALASKA TRAFFIC MANUAL, ALASKA SIGN DESIGN SPECIFICATIONS, AND ALASKA STANDARD SPECIFICATION FOR HIGHWAY CONSTRUCTION.

STOP SIGN DETAILS

NO SCALE

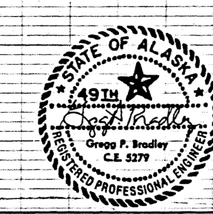


NOTE:
ALL GRADES ARE 0.3' LOWER THAN SHOWN ON THIS SHEET.

NOTE:
ALL ELEVATIONS ARE FINISH GRADE UNLESS NOTED.

PROFILE

SCALE: VERT. 1" = 5'
HORIZ. 1" = 50'



BY	DATE	CHANGE
	1-27-93	AS-BUILT
REVISIONS		

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

DILLINGHAM AIRPORT
57978
A.I.P. No. 3-02-0078-06
ACCESS ROAD PLAN & PROFILE
STA. 0+00 TO STA. 5+00

APPROVED: STEVE VAN HORN, P.E. — DESIGN GROUP CHIEF
APPROVED: GREGG P. BRADLEY, P.E. — PROJECT MANAGER

SCALE: AS SHOWN | DESIGNED: V.W. | DRAWN | SHEET 7 OF 16
CHECKED | DATE 6/27/91

K+E Keuffel & Esser Company

NOTE:
ALL GRADES ARE 0.3' LOWER THAN SHOWN ON THIS SHEET.

CURVE DATA
Δ=61°55'12"
D=25°27'53"
R=225'
T=134.98'
L=243.16'
S=6%
TL=125'

P.T. STA. 8+27.42
R/W STA. 30+26.54

END SUPER TRANSITION
STA. 9+10.75

STA. 9+00
INSTALL 36" x 60' CMP
CULVERT W/ END SECTIONS

A/R STA. 13+00
INSTALL "END ROAD 500 FT"
SIGN W14 – 2A, CLASS L

6.5 FT. WIDE FLAT BOTTOM DITCH

END A/R STA. 18+00
1980' LT.

A/R STA. 18+12, 1980' LT.
INSTALL 11' WIDE TYPE III BARRICADE,
FIXED TYPE (SEE STD. DRAWING C-01.02)
(SEE NOTES 1, 2 & 3)

P.I. STA. 7+19.24 =
R/W STA. 28+93.56, 1980' LT.

N 26° 30' E

10-00

15-00

6.5' WIDE FLAT BOTTOM DITCH

R/W STA. 40+15.00
1940' LT.

EDGE OF LEASE LOT AND EMBANKMENT

R/W STA. 30+15
1940 LT.

P.C. STA. 5+84.26

B L O C K 7 0 0

D.O.T.
RESERVE

LOT 1 | LOT 2 | LOT 3 | LOT 4 | LOT 5 | LOT 6 | LOT 7 | LOT 8 | LOT 9 | LOT 10

NEW FENCE

90'

R/W STA. 40+32.90
1850' LT

BEGIN SUPER TRANSITION
STA. 5+00.93

EDGE OF BORROW EMBANKMENT

50'

R/W STA. 40+15.00
1800' LT.

100' | 100' | 100' | 100' | 100' | 100' | 100' | 100' | 100' | 100'

MATCH LINE STA. 5+00

R/W STA. 28+58.21
1850' LT

R/W STA. 30+15
1800' LT.

EDGE OF FULL DEPTH AGGREGATE SURFACE COURSE

R/W STA. 35+15
1800' LT.

TIE NEW FENCE INTO EXISTING FENCE CORNER
R/W STA. 40+32.90
1762.35' LT.

R/W STA. 28+42.87
1800' LT.

R/W STA. 40+15
1750' LT.

335' FENCE TO BE REMOVED

EDGE OF EXISTING AGGREGATE SURFACE COURSE

567' FENCE TO BE REMOVED

EDGE OF EXISTING AGGREGATE SURFACE COURSE

PLAN
SCALE: 1" = 50'

LEGEND

INSTALL 5/8" x 42" REBAR WITH ALUMINUM CAP (THIS CONTRACT) 3" BELOW FINISH GRADE. THIS WORK IS INCIDENTAL TO PAY ITEM 121.

NOTES:

1. "END" SIGN W14 – 2A, CLASS S TO BE PLACED ON BARRICADE AT THE ACCESS ROAD CENTERLINE.
2. MARKER SIGNS (2 EACH) OM-4 SHALL BE PLACED ON THE TOP PANEL OF THE BARRICADE ON THE LEFT AND RIGHT ENDS.
3. THE FOOTINGS AND UPRIGHTS FOR THE BARRICADE SHALL BE AS SHOWN ON SHEET 15.

5+00 EL. 82.73 | 6+00 EL. 82.58 | 7+00 EL. 82.21 | 8+00 EL. 81.91 | 9+00 EL. 82.00 | 10+00 EL. 82.56 | 11+00 EL. 83.33 | 12+00 EL. 83.64 | 13+00 EL. 83.41 | 14+00 EL. 82.53 | 15+00 EL. 81.23 | 16+00 EL. 80.13 | 17+00 EL. 78.93 | 18+00 EL. 77.73

100 | 95 | 90 | 85 | 80 | 75 | 70 | 60 | 55

MATCH LINE STA. 5+00

EL. 82.50 | EL. 81.90 | EL. 82.77 | EL. 83.63

NOTES:
1. ALL ELEVATIONS ARE FINISH GRADE UNLESS NOTED.
2. LEFT DITCH MIRRORS RIGHT DITCH FROM APPROXIMATELY STA. 13+00 TO 18+00.

NOTE:
ALL GRADES ARE 0.3' LOWER THAN SHOW ON THIS SHEET.

-0.6% | FINISH GRADE | 6" AGGREGATE SURFACE COURSE | 0.97% | -1.20%

78.98 | -.30% | -.31% | +1.09% | -1.20%

BOTTOM OF RIGHT DITCH | BORROW EMBANKMENT | PVI DITCH EL. 78.53 | PVI DITCH EL. 81.13 | PVI DITCH EL. 79.03 | BORROW EMBANKMENT | BOTTOM OF EXCAVATION | BOTTOM OF RIGHT DITCH | 4:1 | DITCH EL. 74.23

ORIGINAL GROUND

GEOTEXTILE, REINFORCEMENT

STA. 9+00
36" CMP CULVERT
INVERT = 77.76

PVC 6+50 | PVI 8+50 EL. 81.15 | PVC 10+25 | PVI 12+25 EL. 84.63 | PVT 14+00

200' | 175' | 200' | 175'

375' V.C. | 375' V.C.

PROFILE
SCALE: VERT. 1" = 5'
HORIZ. 1" = 50'

STATE OF ALASKA
49TH
Gregg P. Bradley
C.E. 5279
REGISTERED PROFESSIONAL ENGINEER

BY	DATE	CHANGE
WAA	1-27-93	AS-BUILT

REVISIONS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

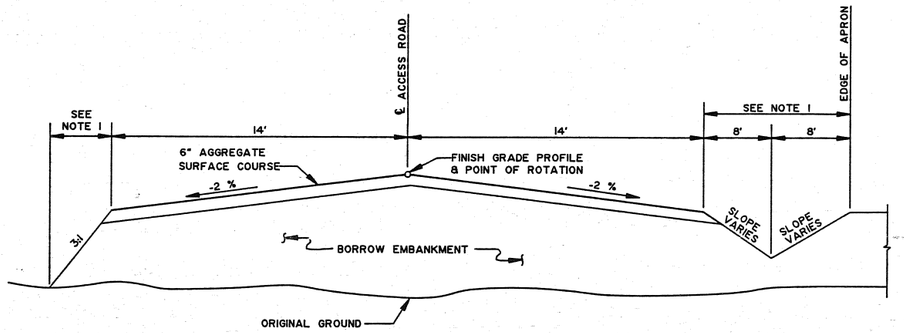
DILLINGHAM AIRPORT
57978
A.I.P. No. 3-02-0078-06
ACCESS ROAD PLAN & PROFILE STA. 5+00 TO STA. 18+00 & WEST LEASE LOT PLAN

APPROVED STEVE VAN HORN, P.E. — DESIGN GROUP CHIEF
APPROVED GREGG P. BRADLEY, P.E. — PROJECT MANAGER

SCALE: AS SHOWN | DESIGNED: V.W. | DRAWN: GSS | CHECKED: GPB | DATE: 6/27/91 | SHEET 8 OF 16

AS-BUILT 1/93 SHEET 8 OF 18

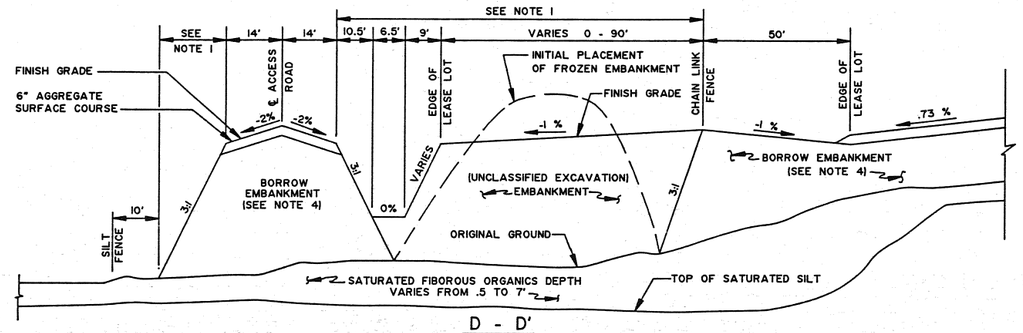
Keuffel & Esser Company
48 7021 Made in U.S.A.



A - A'

TYPICAL ACCESS ROAD - FILL SECTION (SEE SHEET 7 AND 8)

(ACCESS ROAD STA. 00+00 TO STA.5+84)

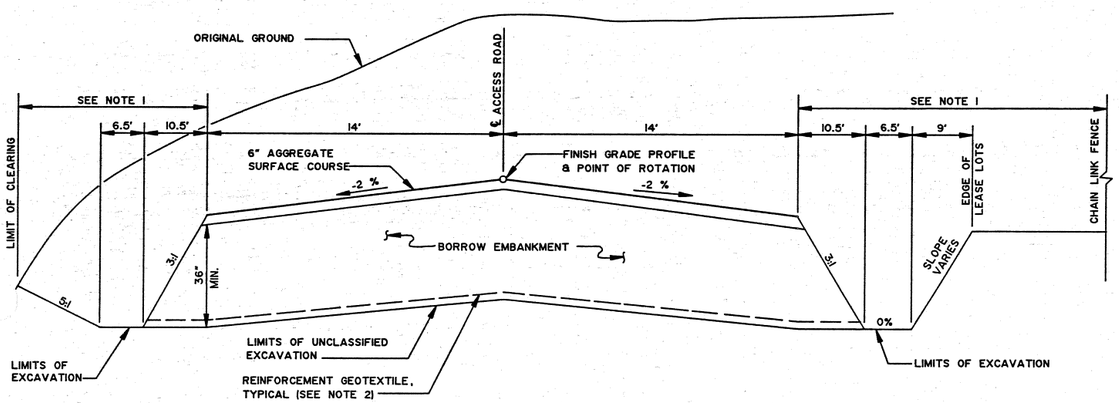


D - D'

TYPICAL ACCESS ROAD AND LEASE LOT (DEEP FILL) SECTION

APPROXIMATE RUNWAY STA. 28+42.87 TO STA. 34+00

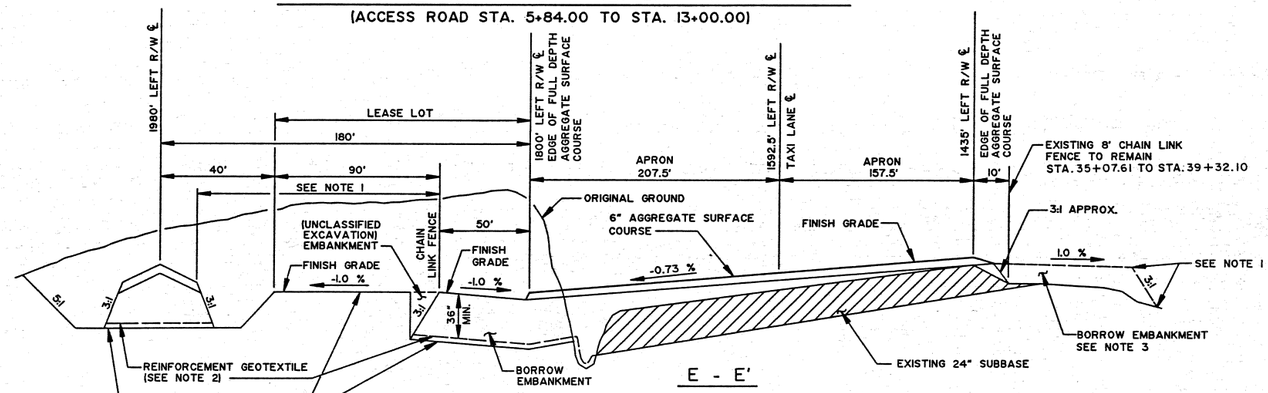
(ACCESS ROAD STA. 5+84.00 TO STA. 13+00.00)



B - B'

TYPICAL ACCESS ROAD - CUT SECTION (SEE SHEET 8)

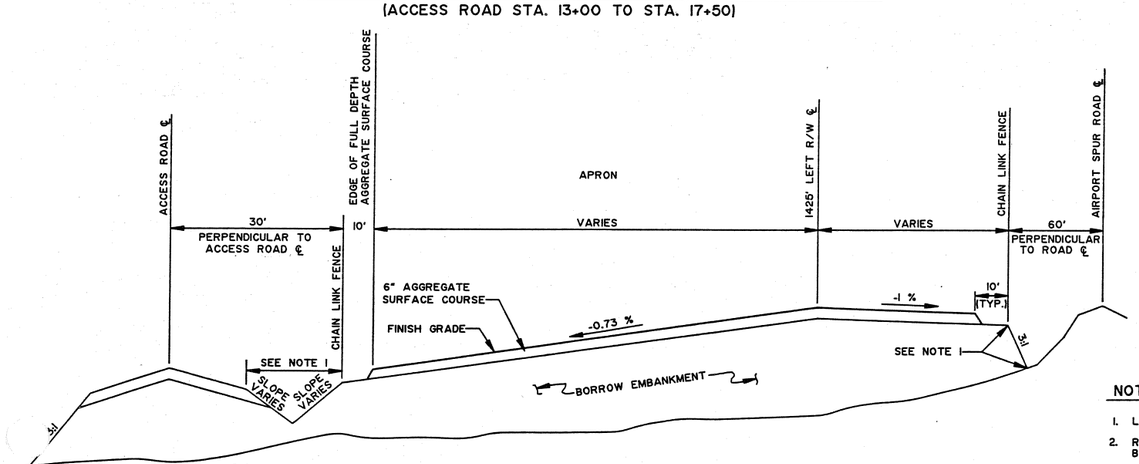
(ACCESS ROAD STA. 13+00 TO STA. 17+50)



E - E'

TYPICAL APRON CUT SECTION (SEE SHEET 6 AND 8)

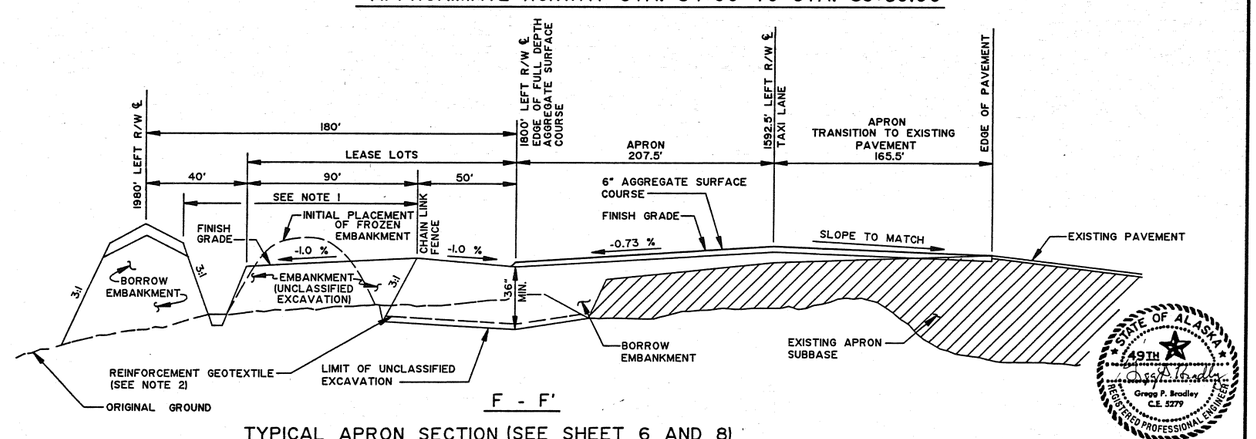
APPROXIMATE RUNWAY STA. 34+00 TO STA. 39+50.00



C - C'

TYPICAL APRON FILL SECTION (SEE SHEET 6)

RUNWAY STA. 26+12.31 TO STA. 28+42.87



F - F'

TYPICAL APRON SECTION (SEE SHEET 6 AND 8)

TRANSITION TO EXISTING TAXIWAY

APPROXIMATELY RUNWAY STA. 39+50.00 TO STA. 40+15.00

(ACCESS ROAD STA. 17+50.00 TO STA. 18+00.00)

NOTES:

1. LIMITS OF SEED APPLICATION AND FERTILIZER.
2. REINFORCEMENT GEOTEXTILE TO BE PLACED UNDER BORROW EMBANKMENT IN CUT SECTIONS.
3. EAST LEASE LOTS CONTINUE FROM STA. 30+07.61 TO EXISTING EDGE OF GRAVEL PAD APPROXIMATE STA. 35+89.00.
4. LIFT HEIGHT NOT TO EXCEED 2' UNLESS AUTHORIZED IN WRITING BY THE ENGINEER (SEE SP-330.3 f) TO AVOID SHEARING OF ORGANIC LAYER.

STATE OF ALASKA 49TH Gregg P. Bradley CE 5279 REGISTERED PROFESSIONAL ENGINEER

BY	DATE	CHANGED
WW	1-27-93	AS-BUILT

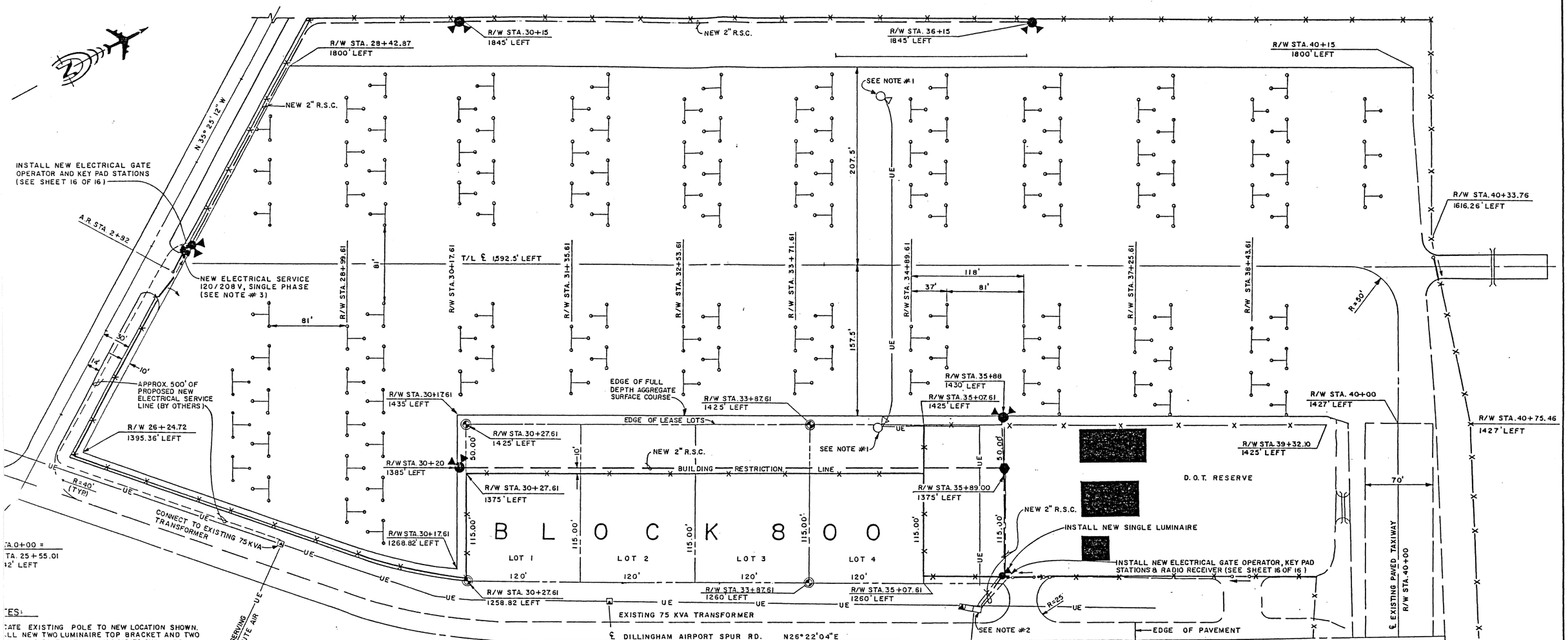
REVISIONS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

DILLINGHAM AIRPORT
57978
A.I.P. NO. 3-02-0078-06
TYPICAL SECTIONS

APPROVED STEVE VAN HORN, P.E. — DESIGN SECTION CHIEF
APPROVED GREGG P. BRADLEY, P.E. — PROJECT MANAGER

SCALE	DESIGNED	DRAWN	SHEET
NO SCALE	VW	GSS	9 OF 16
	CHECKED	DATE 6/27/91	



TA.0+00 =
TA. 25+55.01
2' LEFT

TES:

ATE EXISTING POLE TO NEW LOCATION SHOWN.
LL NEW TWO LUMINAIRE TOP BRACKET AND TWO
UMINAIRIES. EXISTING LUMINAIRES SHALL BE
GED AND DELIVERED TO AIRPORT MANAGER. THIS
IS INCIDENTAL TO PAY ITEM 1060.

ECT NEW RIGID STEEL CONDUITS TO EXISTING STATE
N LIGHTING CABINET. CONNECT NEW CONDUCTORS TO
CIRCUIT BREAKERS IN CABINET.

LL NEW LOAD CENTER WITH COMBINATION METER BASE,
P MAIN BREAKER, CONTACTOR, PHOTO CELL AND CIRCUIT
KER PANEL AS REQUIRED.

RACTOR SHALL BE RESPONSIBLE FOR ALL UTILITY LOCATES.

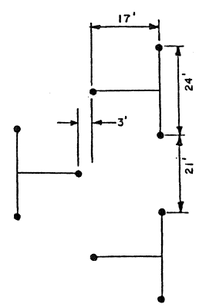
This Sheet Is Not An "As-Built."

LEGEND

- INSTALL 5/8" x 42" REBAR WITH ALUMINUM CAP 3" BELOW FINISHED GRADE. THIS WORK IS INCIDENTAL TO PAY ITEM 121 (THIS CONTRACT)
- NEW 2" R.S.C. WITH 2 #4 X HHW AND 1 #8 BARE COPPER GROUND CONDUCTOR
- UE — EXISTING UNDERGROUND ELECTRIC
- EXISTING LUMINAIRES TO BE SALVAGED AND POLES TO BE RELOCATED
- 45° — INSTALL NEW LUMINAIRES
- EXISTING TRANSFORMER
- EXISTING CABINETS
- NEW TYPE I JUNCTION BOX

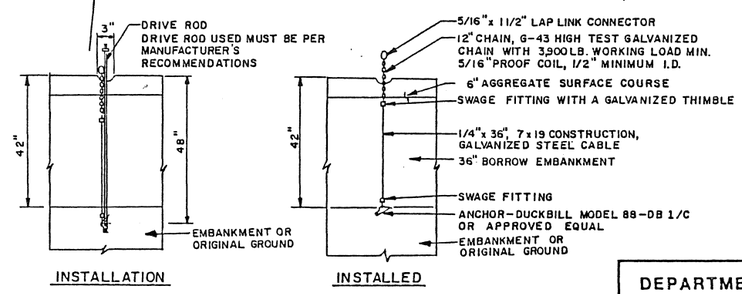
PLAN

SCALE: 1" = 50'



TYPICAL TIE-DOWN ANCHOR LAYOUT

SCALE: 1" = 20'



TYPICAL TIE-DOWN ANCHOR DETAILS

NO SCALE

STATE OF ALASKA 49TH Gregg P. Bradley C.E. 5279 REGISTERED PROFESSIONAL ENGINEER

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

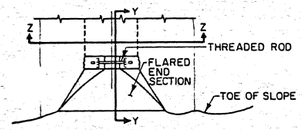
DILLINGHAM AIRPORT
57978
A.I.P. No. 3-02-0078-06
GENERAL AVIATION APRON TIE-DOWN PLAN, EAST LEASE LOT PLAN & FLOODLIGHTING PLAN

BY	DATE	CHANGE

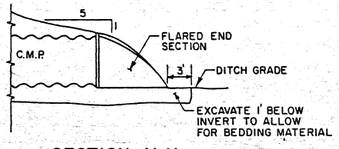
REVISIONS

APPROVED STEVE VAN HORN, P.E. DESIGN GROUP CHIEF
APPROVED GREGG P. BRADLEY, P.E. PROJECT MANAGER

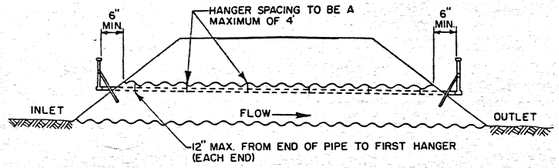
SCALE	DESIGNED	DRAWN	SHEET
1" = 50'	CHECKED VW	DATE 6/27/91	10 OF 16



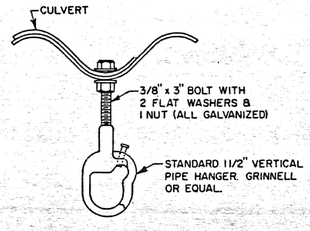
PLAN



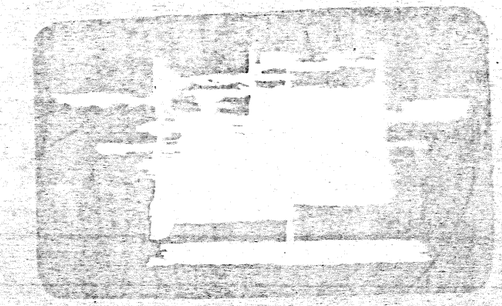
SECTION Y-Y

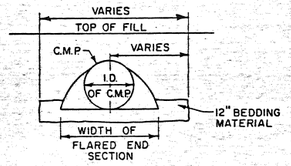


LOCATION OF THAW PIPE

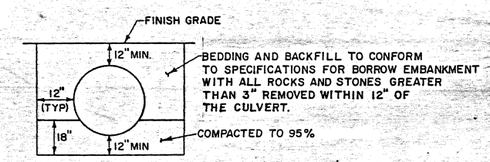


THAW PIPE HANGER DETAIL

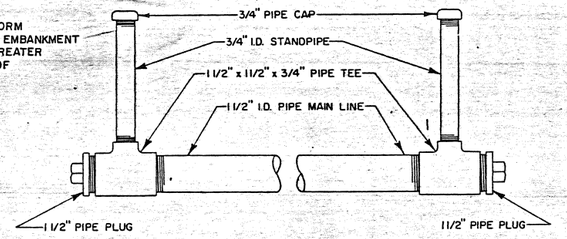




TYPICAL END VIEW

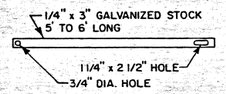


SECTION Z-Z

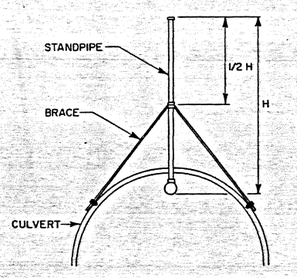


STANDARD SINGLE THAW PIPE

TYPICAL CULVERT INSTALLATION



STANDPIPE BRACE DETAIL



LOCATION OF STANDPIPE BRACE

NOTE: HEIGHT OF ALL STANDPIPE TO BE 1/2 THE HEIGHT OF CULVERT COVER OR 5' WHICHEVER IS LESS.

THAW PIPE DETAILS

STATE OF ALASKA 49TH Gregg P. Bradley C.E. 5279 REGISTERED PROFESSIONAL ENGINEER

BY	DATE	CHANGE
NBL	1-27-93	AS-BUILT

REVISIONS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

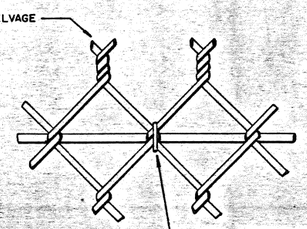
DILLINGHAM AIRPORT
57978
A.I.P. NO. 3-02-0078-06

CULVERT AND THAW PIPE DETAILS

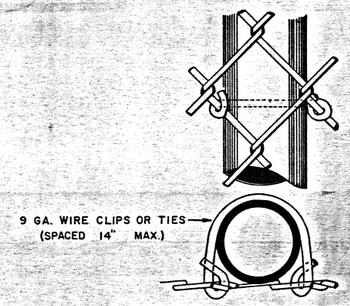
APPROVED STEVE VAN HORN, P.E. — DESIGN SECTION CHIEF
APPROVED GREGG P. BRADLEY, P.E. — PROJECT MANAGER

SCALE	DESIGNED	DRAWN	
NO SCALE	CHECKED	DATE 6/27/91	SHEET 11 OF 16

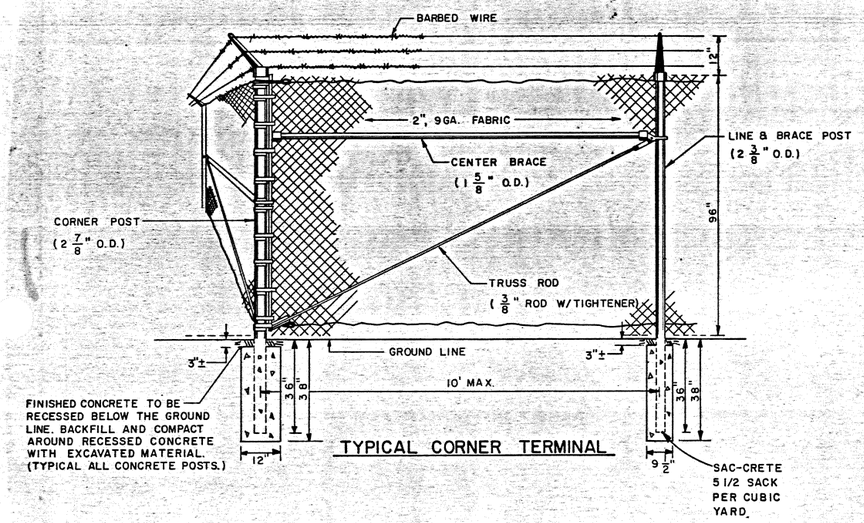
AS-BUILT 1/93 SHEET 11 OF 18



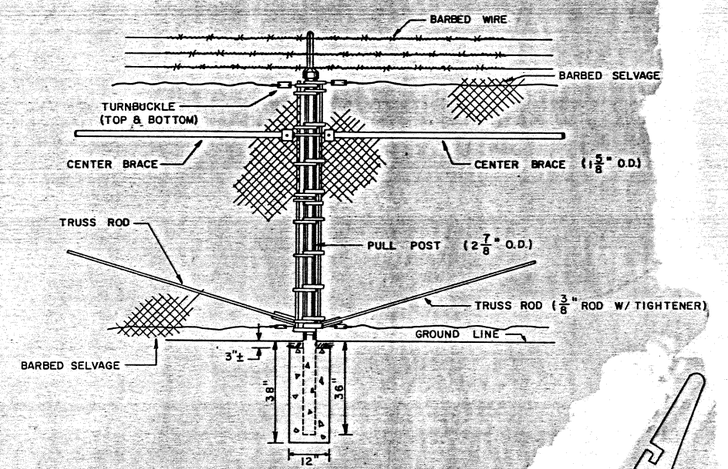
TYPICAL METHOD OF TYING FABRIC TO TENSION WIRE



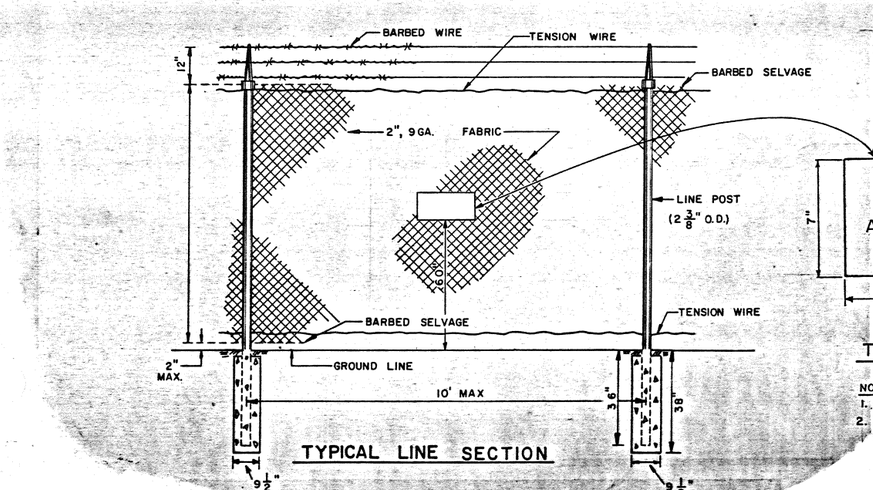
TYPICAL METHOD OF TYING FABRIC TO TUBULAR POSTS



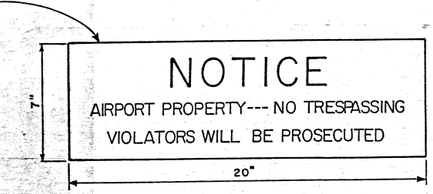
TYPICAL CORNER TERMINAL



TYPICAL PULL POST

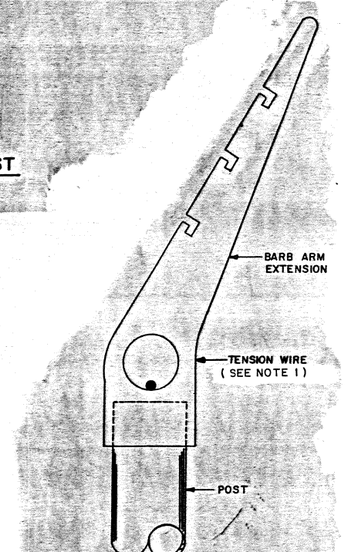


TYPICAL LINE SECTION



TYPICAL FENCE PERIMETER SIGN

NOTES:
1. INSTALL SIGNS EVERY 300'
2. SEE SHEET 14 FOR DIMENSIONS



TYPICAL EYE-TOP BARB-TOP EXTENSION

NOTES:
1. TYPICAL TOP FOR ALL LINE & PULL POSTS
2. TENSION WIRE TO BE THREADED THROUGH EYE-TOP, AS SHOWN, ON ALL POSTS.

STATE OF ALASKA 49TH Gregg P. Bradley C.E. 5279 REGISTERED PROFESSIONAL ENGINEER

BY	DATE	CHANGE
WHH	1-27-93	AS-BUILT

REVISIONS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

DILLINGHAM AIRPORT
57978
A.I.P. No. 3-02-0078-06

FENCE DETAILS

APPROVED STEVE VAN HORN, P.E. — DESIGN GROUP CHIEF
APPROVED GREGG P. BRADLEY, P.E. — PROJECT MANAGER

SCALE	DESIGNED	DRAWN	SHEET
NO SCALE	CHECKED	DATE 6/27/91	12 OF 16

AS-BUILT 1/93 SHEET 12 OF 18

CHART # 1
SPECIFICATIONS FOR SINGLE GATES

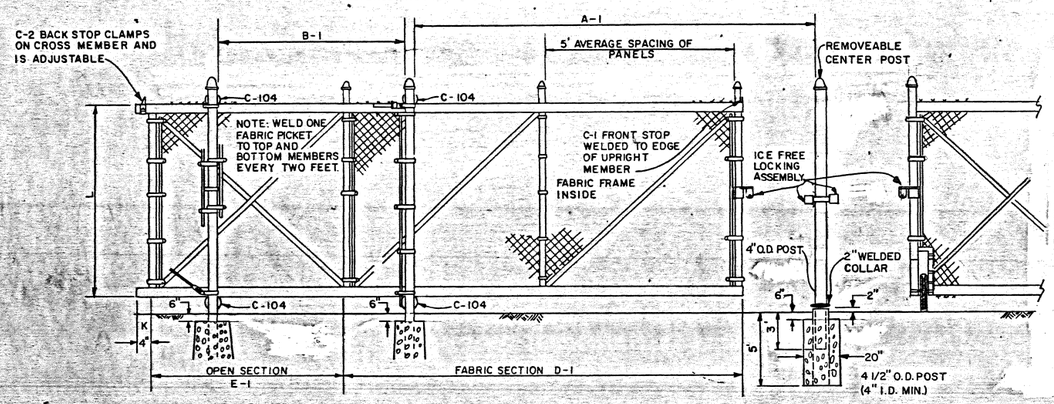
A-1 SINGLE GATE OPENING	B-1 ROLLER POST SPACING	H-1 OVER ALL LENGTH 2 1/2" O.D. TOP AND BOTTOM	D-1 FABRIC SECTION OF FRAME	E-1 OPEN SECTION OF FRAME	K EXTENSION OF FRAME
6'-0"	4'-0"	11'-2"	6'-6"	4'-4"	4"
8'-0"	4'-0"	13'-2"	8'-6"	4'-4"	4"
10'-0"	5'-0"	16'-2"	10'-6"	5'-4"	4"
12'-0"	6'-0"	19'-2"	12'-6"	6'-4"	4"
14'-0"	7'-0"	22'-2"	14'-6"	7'-4"	4"
16'-0"	8'-0"	25'-2"	16'-6"	8'-4"	4"
18'-0"	9'-0"	28'-2"	18'-6"	9'-4"	4"
20'-0"	10'-0"	31'-2"	20'-6"	10'-4"	4"
30'-0"	15'-0"	46'-2"	30'-6"	15'-4"	4"
32'-0"	16'-0"	49'-2"	32'-6"	16'-4"	4"
40'-0"	20'-0"	60'-2"	40'-6"	20'-4"	4"
50'-0"	25'-0"	76'-2"	50'-6"	25'-4"	4"

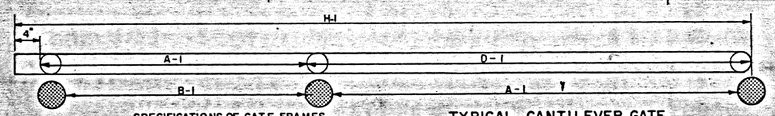
CHART # 2
SPECIFICATIONS GATE HEIGHTS

	F FENCE HEIGHT	L POST HEIGHT TO GRADE	J FRAME HEIGHT	LENGTH 2" O.D. UPRIGHTS
	—	—	—	—
7'	7'-6"	5'-5 3/4"	5'-1"	
8'	8'-6"	6'-5 3/4"	6'-1"	
9'	9'-6"	7'-5 3/4"	7'-1"	
10'	10'-6"	8'-5 3/4"	8'-1"	
12'	12'-6"	10'-5 3/4"	10'-1"	

NOTE: ALL FENCE AND GATES INSTALLED UNDER THIS CONTRACT SHALL BE 8FT. IN HEIGHT.

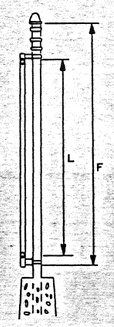
OUTSIDE VIEW - LEFT HAND GATE
(REVERSE INSTALLATION FOR RIGHT HAND GATE)



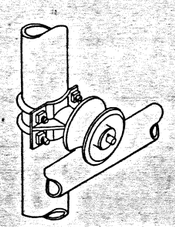


SPECIFICATIONS OF GATE FRAMES
TOP AND BOTTOM MEMBERS — 2 1/2" O.D. PIPE
UPRIGHT MEMBERS — 2" O.D. PIPE
HORIZONTAL AND DIAGONAL BRADS 1 5/8" O.D. PIPE.
GATE FRAME MEMBERS SHALL BE SCHEDULE 40 PIPE

TYPICAL CANTILEVER GATE
NO SCALE



GATE HEIGHTS
NO SCALE



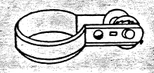
ROLLER ASSEMBLY
C-104

ACORN CAP FOR GATE POST (OR DOME CAP)

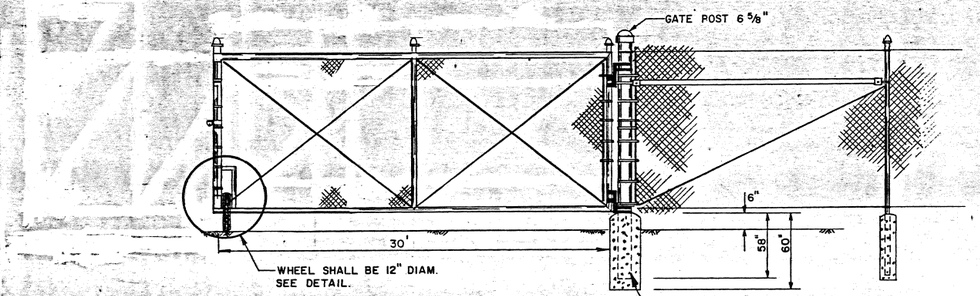
CLEVIS PIN FOR PADLOCK
P-8

FRONT STOP
C-1

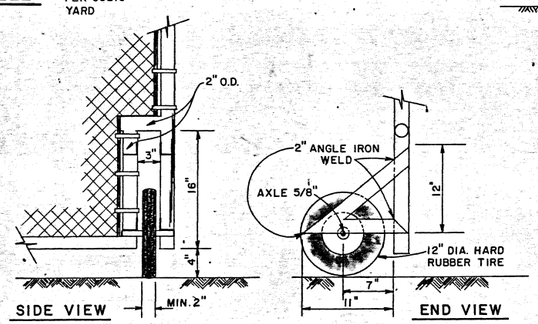
BACK STOP
C-2



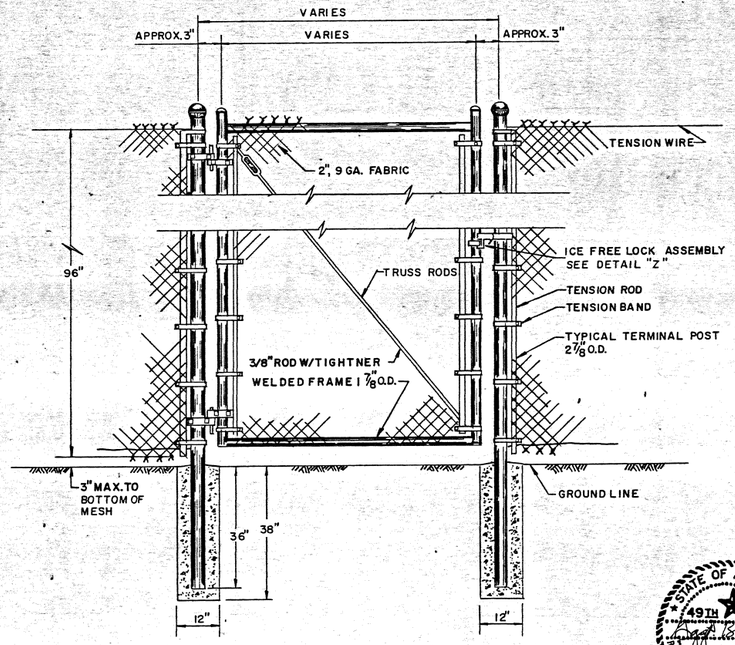
BARB WIRE BAND WITH RACHET
NO. 60



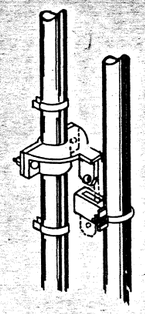
30' SINGLE SWING GATE WITH WHEEL
NO SCALE



WHEEL DETAIL
NO SCALE



TYPICAL PEDESTRIAN GATE
NO SCALE



ICE FREE LOCKING ASSEMBLY
NO SCALE
DETAIL "J"

STATE OF ALASKA 49TH
Gregg P. Bradley
C.E. 5279
REGISTERED PROFESSIONAL ENGINEER

BY	DATE	CHANGE
WJH	1-27-93	AS-BUILT

REVISIONS

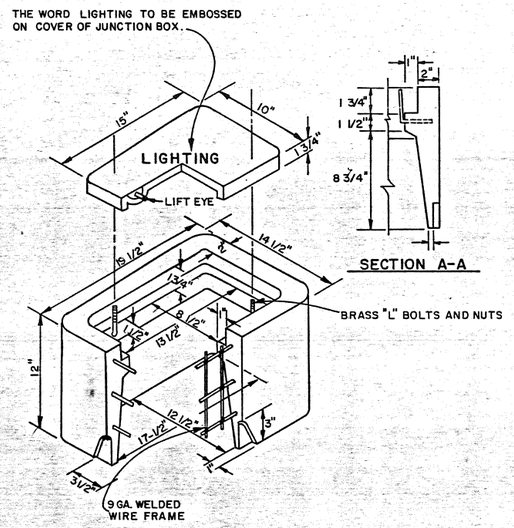
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
DILLINGHAM AIRPORT
57978
A.I.P. No. 3-02-0078-06
SECURITY FENCING
GATE DETAILS

APPROVED STEVE VAN HORN, P.E. — DESIGN GROUP CHIEF
APPROVED GREGG P. BRADLEY, P.E. — PROJECT MANAGER

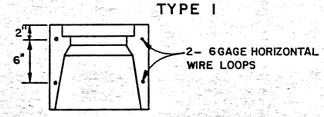
SCALE	DESIGNED	DRAWN	SHEET
AS SHOWN	CHECKED	DATE 6/27/91	13 OF 16

LUMINARE NOTES

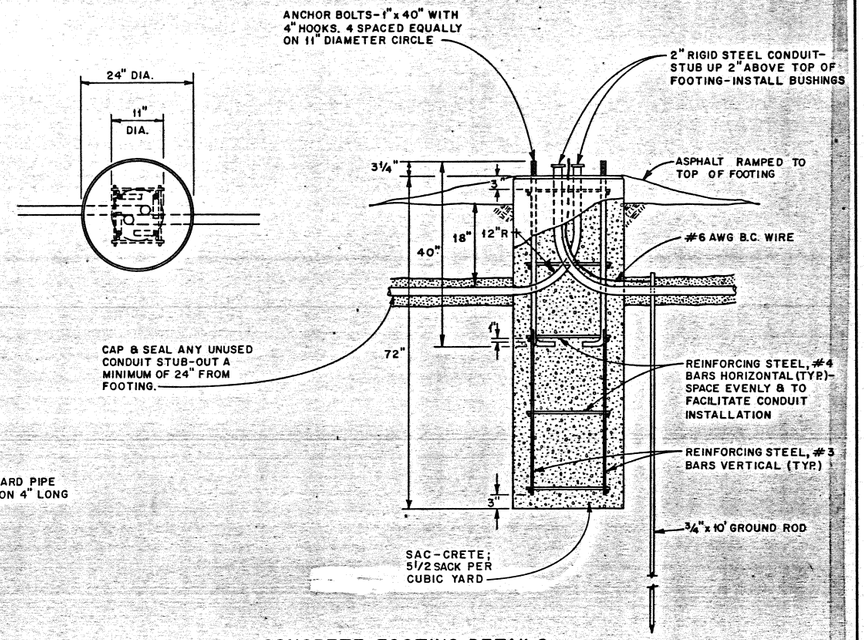
1. ANCHOR LIGHT FIXTURES BY INSTALLING ADDITIONAL SET SCREWS TO PREVENT LIGHTS FROM ROTATING.
2. AIMING ANGLES AND AIMING POINTS ARE INITIAL SETTINGS - FINAL SETTINGS SHALL BE DETERMINED IN THE FIELD.
3. POLES AND BRACKETS SHALL BE PAINTED WITH ALUMINUM PAINT.
4. POLES SHALL BE ERECTED STRAIGHT AND VERTICAL WITHIN 0.25 OF A DEGREE.



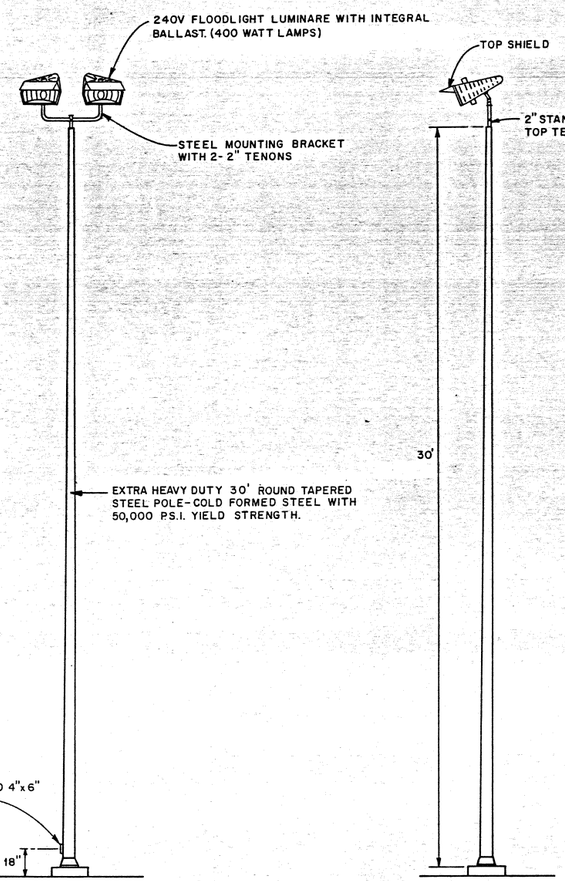
TYPE I



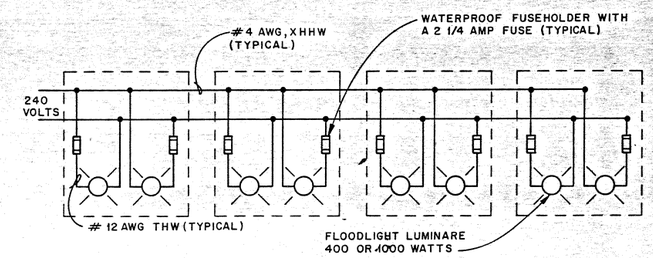
ALTERNATE REINFORCING



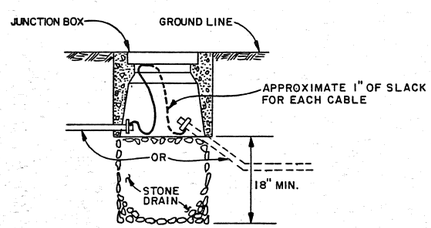
CONCRETE FOOTING DETAILS



FLOODLIGHT ELEVATIONS



FLOODLIGHT WIRING DIAGRAM



TYPE I JUNCTION BOX DETAILS

STATE OF ALASKA 49TH Clyde M. Dahle No. EE 4833 REGISTERED PROFESSIONAL ENGINEER

BY	DATE	CHANGE
WAH	1-27-93	AS-BUILT

REVISIONS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

DILLINGHAM AIRPORT
57978
A.I.P. No. 3-02-0078-06

FLOODLIGHT INSTALLATION DETAILS

APPROVED STEVE VAN HORN, P.E. — DESIGN SECTION CHIEF
APPROVED GREGG P. BRADLEY, P.E. — PROJECT MANAGER

SCALE: NO SCALE | DESIGNED: CMD | DRAWN: O.N. | CHECKED | DATE: 6/27/91 | SHEET 14 OF 16

A/E SUPPLIES 134600

"STOP" SIGN PLATE DETAIL

NO SCALE

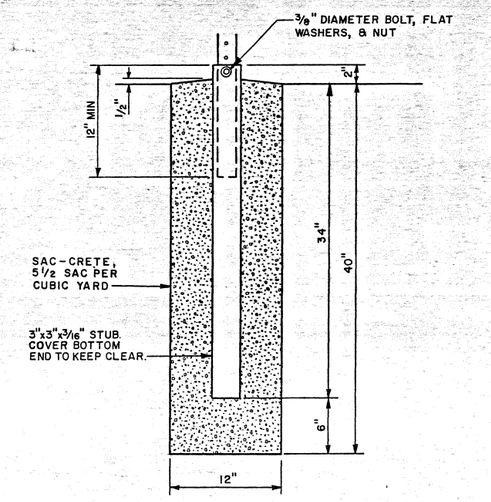
NOTES

1. "STOP" SIGN PLATES SHALL HAVE WHITE REFLECTIVE SHEETING BACKGROUND WITH RED LETTERING.
2. "STOP" SIGN PLATES SHALL BE PLACED IN CENTER OF ALL GATES. INSTALLED UNDER THIS CONTRACT.

NOTES:

1. "NOTICE" SIGN PLATE SHALL HAVE WHITE REFLECTIVE SHEETING BACKGROUND WITH RED LETTERING.
2. THE LOWER EDGE OF ALL "NOTICE" SIGN PLATES SHALL BE INSTALLED 5 FEET ABOVE THE GROUND.

"NOTICE" SIGN DETAIL



FOUNDATION FOR PERMANENT SIGNS & BARRACADE

STATE OF ALASKA 49TH Gregg P. Bradley C.E. 5279 REGISTERED PROFESSIONAL ENGINEER

BY	DATE	CHANGE
WHL	1-27-93	AS-BUILT

REVISIONS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

DILLINGHAM AIRPORT
57978
A.I.P. No. 3-02-0078-06

SIGN DETAILS

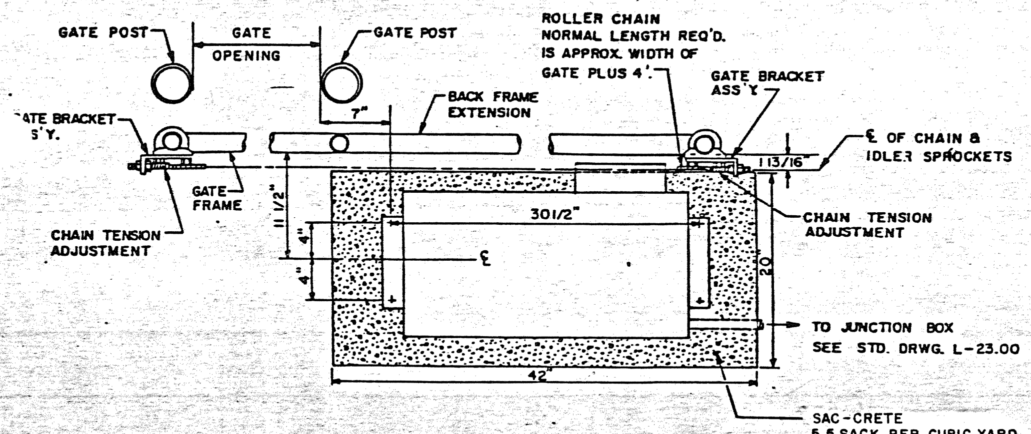
APPROVED STEVE VAN HORN, P.E. — DESIGN GROUP CHIEF

APPROVED GREGG P. BRADLEY, P.E. — PROJECT MANAGER

SCALE: NO SCALE | DESIGNED: YW | CHECKED: | DRAWN: DT | DATE: 6/27/91 | SHEET 15 OF 16

A/E SUPPLIES 134002

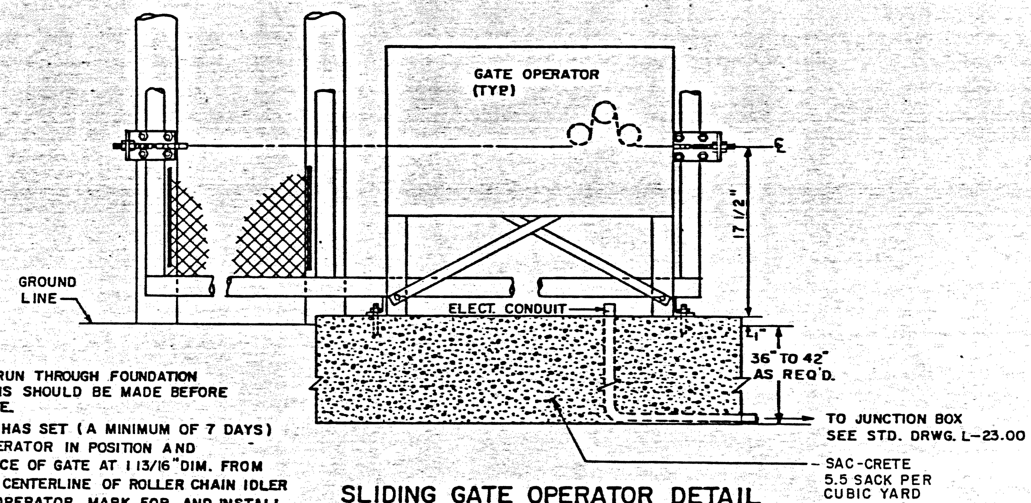
AS-BUILT 1/93 SHEET 15 OF 18



CONCRETE PAD MOUNTING DETAIL (PLAN)

NO SCALE

NOTE: DIMENSIONS ARE TYPICAL AND MAY VARY DEPENDING UPON INDIVIDUAL MANUFACTURER.



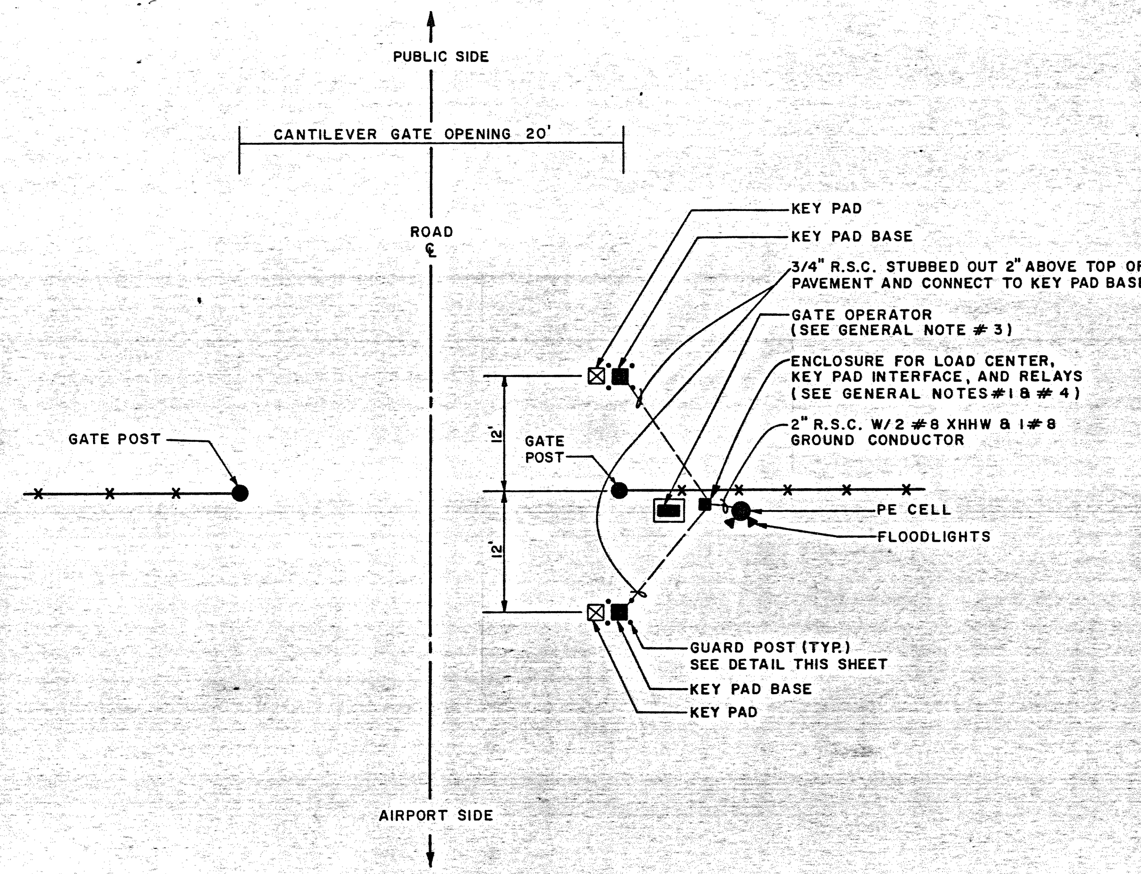
SLIDING GATE OPERATOR DETAIL (ELEVATION)

(SEE SHEET 10)

NO SCALE

NOTES:

1. IF CONDUIT IS TO RUN THROUGH FOUNDATION PROVISION FOR THIS SHOULD BE MADE BEFORE POURING CONCRETE.
2. AFTER CONCRETE HAS SET (A MINIMUM OF 7 DAYS) THEN LOCATE OPERATOR IN POSITION AND LINE UP WITH FACE OF GATE AT 1 13/16" DIM. FROM FACE OF GATE TO CENTERLINE OF ROLLER CHAIN IDLER SPROCKETS ON OPERATOR. MARK FOR AND INSTALL BOLT ANCHORS (PROVIDED WITH OPERATORS) IN CONCRETE.
3. DIMENSIONS ARE TYPICAL AND MAY VARY DEPENDING UPON INDIVIDUAL MANUFACTURER.



TYPICAL SECURITY GATE DETAILS

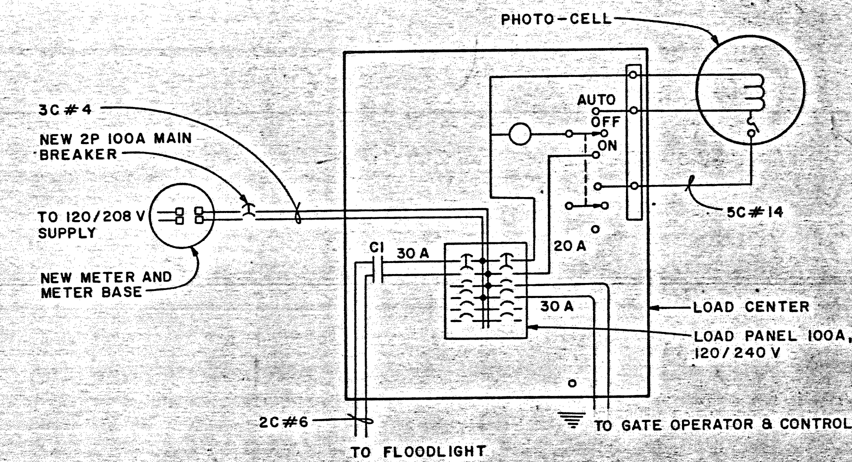
PLAN VIEW

(SEE SHEET 10)

NO SCALE

LOAD CENTER NOTES:

1. CONNECT THE GROUND BUS OF THE LOAD CENTER TO THE GROUND ROD WITH A #6 SOFT DRAWN BARE COPPER CONDUCTOR & APPROVED CONNECTORS.
2. ALL SWITCHES & CIRCUIT BREAKERS SHALL BE LABELED FOR CIRCUIT & DIRECTION IN A PROMINENT MANNER.
3. PHOTO-CELL CONTACT & COIL SHALL BE RATED FOR OPERATION AT 120V AC.
4. THE CONTACTOR COIL SHALL BE RATED FOR OPERATION AT 120V AC.
5. THE PREFERRED LOCATION FOR THE HAND-OFF-AUTO SWITCH & THE CONTACTOR IS IN THE DISTRIBUTION ENCLOSURE.
6. THE PHOTO-CELL FOR LIGHTING CONTROL SHALL BE LOCATED ON THE ADJACENT POLE, ORIENTED TO UNOBSTRUCTED NORTHERN SKY.

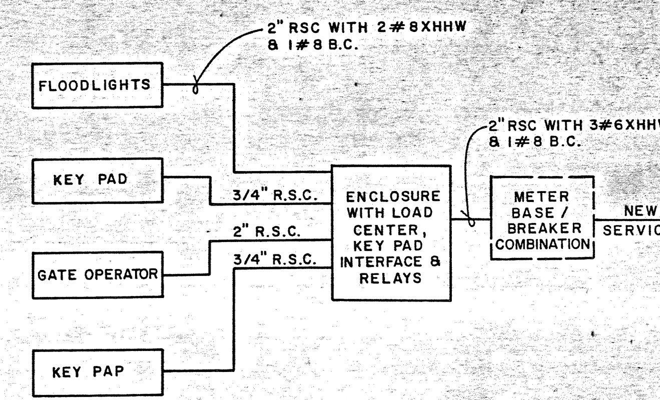


LOAD CENTER WIRING DIAGRAM

NO SCALE

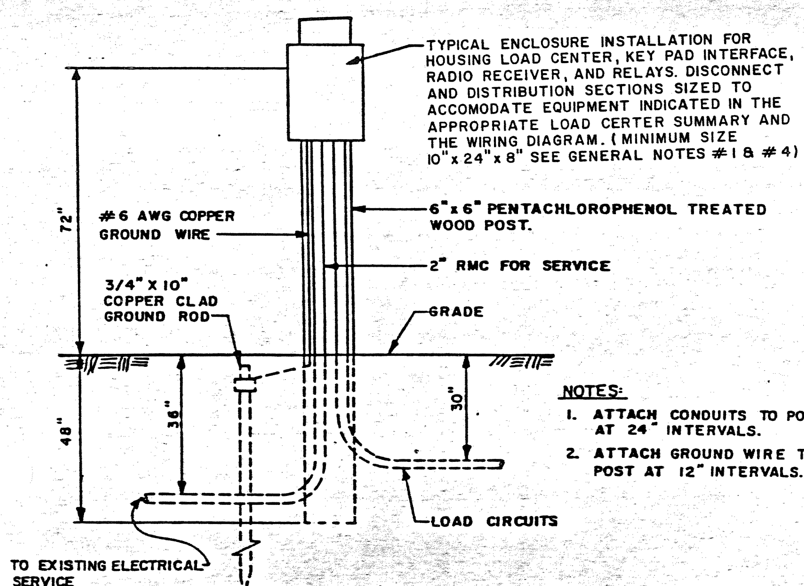
GENERAL NOTES:

1. ENCLOSURE, LOAD CENTER, RADIO RECEIVER, KEY PAD, INTERFACE, RELAYS, WIRE, AND ALL CONDUITS SHALL BE PROVIDED AND INSTALLED BY THE CONTRACTOR.
2. GATE OPERATOR SHALL BE 1 H.P., 208 V., 1 PHASE, LINK CONTROL MODEL XGSL OR APPROVED EQUAL. INSTALL PER MANUFACTURERS INSTRUCTIONS.
3. THE LOCATION OF THE GATE OPERATORS WILL BE DETERMINED IN THE FIELD.
4. AT THE M & O GATE LOCATION THE EXISTING LIGHTING LOAD CENTER WILL BE UTILIZED. NEW CIRCUIT BREAKERS SHALL BE PROVIDED AND INSTALLED BY THE CONTRACTOR, THE EXISTING PANEL IS A GE TYPE NLAB.



TYPICAL ONE-LINE WIRING DIAGRAM

NO SCALE

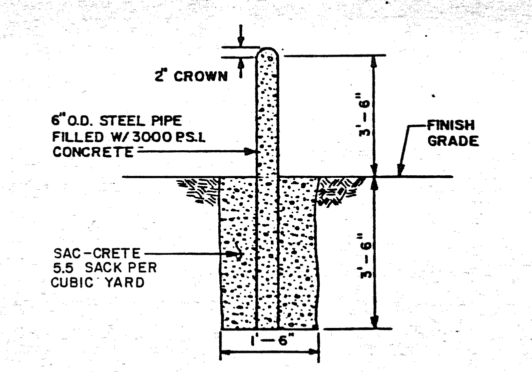


NOTES:

1. ATTACH CONDUITS TO POST AT 24" INTERVALS.
2. ATTACH GROUND WIRE TO POST AT 12" INTERVALS.

TYPICAL ENCLOSURE DETAIL

NO SCALE

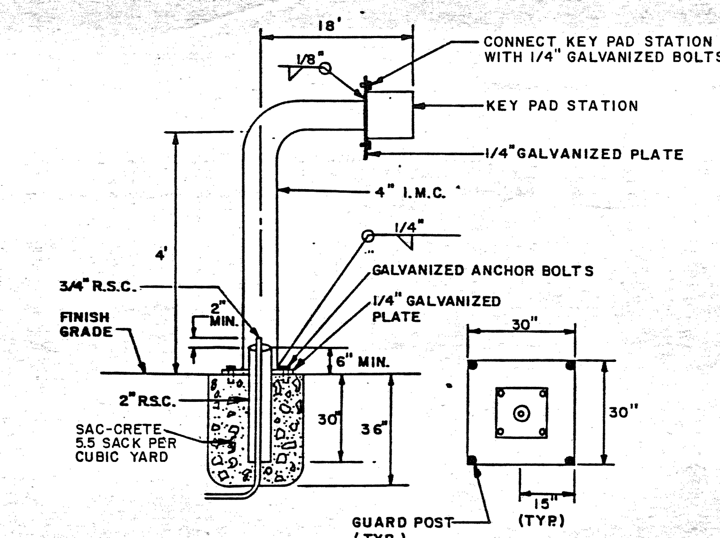


NOTES:

1. ALL COSTS ASSOCIATED WITH THE CONSTRUCTION OF THE GUARD POSTS SHALL BE INCIDENTAL TO THE CONTRACT & NO SEPERATE PAYMENT SHALL BE MADE.
2. GUARD POSTS TO BE INSTALLED IN THE SAME CONCRETE BASE AS THE KEY PAD POLE

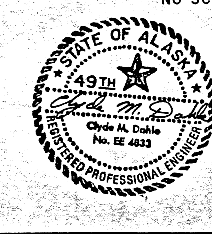
GUARD POST DETAIL

NO SCALE



KEY PAD POLE DETAIL

NO SCALE



BY	DATE	CHANGE
WDJ	1-27-93	AS-BUILT
		REVISIONS

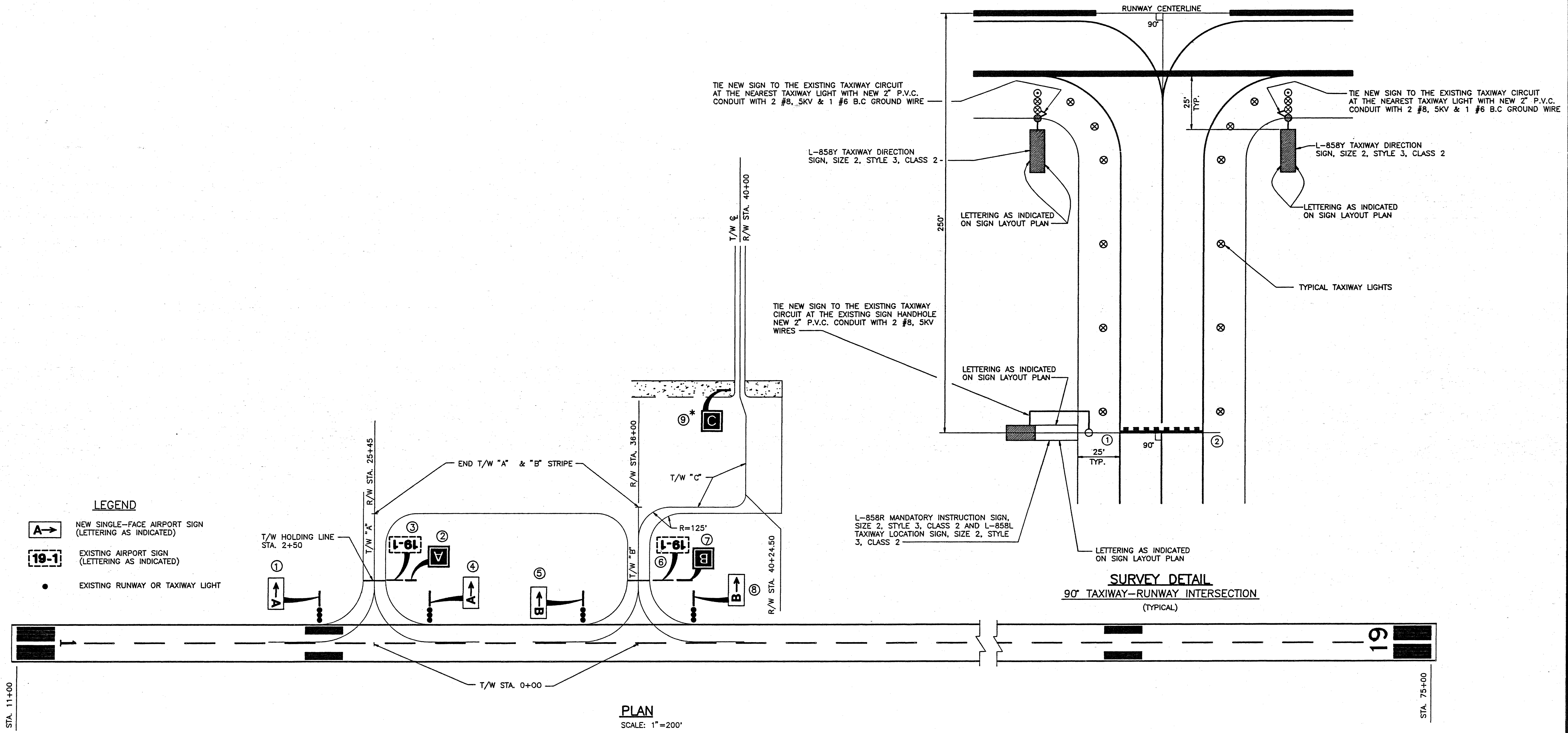
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

DILLINGHAM AIRPORT
57978
A.I.P. NO. 3-02-0078-06
ELECTRICAL GATE OPERATOR DETAILS

APPROVED: STEVE VAN HORN, P.E. — DESIGN SECTION CHIEF
APPROVED: GREGG P. BRADLEY, P.E. — PROJECT MANAGER
SCALE: AS SHOWN | DESIGNED: CMD | DRAWN: | CHECKED: | DATE: 6/27/91 | SHEET 16 OF 16

AS-BUILT 1/93 SHEET 16 OF 18

A/E SUPPLIES



SIGN SCHEDULE

SIGN NUMBER	FACE NUMBER	TYPE	PURPOSE	NUMBER MODULES	LEGEND	LEGEND COLOR	FACE COLOR
1	1 2	L-858Y	TAXIWAY DIRECTION SIGN	1	← A BLANK	BLACK	YELLOW
2	1 2	L-858L	TAXIWAY LOCATION SIGN	1	A BLANK	YELLOW	BLACK
3	1 2	EXISTING	MANDATORY INSTRUCTION SIGN	2	19-1 BLANK	WHITE	RED
4	1 2	L-858Y	TAXIWAY DIRECTION SIGN	1	A → BLANK	BLACK	YELLOW
5	1 2	L-858Y	TAXIWAY DIRECTION SIGN	1	← B BLANK	BLACK	YELLOW
6	1 2	EXISTING	MANDATORY INSTRUCTION SIGN	2	19-1 BLANK	WHITE	RED
7	1 2	L-858L	TAXIWAY LOCATION SIGN	1	B BLANK	YELLOW	BLACK
8	1 2	L-858Y	TAXIWAY DIRECTION SIGN	1	B → BLANK	BLACK	YELLOW
*9	1 2	UNLIGHTED	TAXIWAY LOCATION SIGN	1	C BLANK	YELLOW	BLACK

* UNLIGHTED SIGN (SEE NOTE 4)

NOTES

1. SIGN SYMBOLS ARE ORIENTED IN GENERAL THE WAY THE SIGNS WILL BE INSTALLED IN THE FIELD. (THEY ARE TYPICALLY INSTALLED PERPENDICULAR TO THE EDGE OF THE RUNWAY OR TAXIWAY AND 15 FT. OUTSIDE OF THE EXISTING LIGHT LINE.)
2. SIGNS ARE TYPICALLY CONNECTED TO THE NEAREST EXISTING LIGHT BASE FOR ELECTRICAL POWER.
3. ALL SIGNS ARE TYPE L-858, SIZE 2, STYLE 3, CLASS 2 AS CONTAINED IN F.A.A. ADVISORY CIRCULAR 150/5345-44E.
4. UNLIGHTED SIGNS SHALL HAVE RETROFLECTIVE FACES MEETING FEDERAL SPECIFICATION L-5-300, TYPE I, REFLECTIVITY 2 OR 4.
5. THE APPROX. NUMBER OF MODULES PROVIDED IN THE SIGN SCHEDULE AND THE BID SCHEDULE IS ONLY FOR THE CONVENIENCE OF THE CONTRACTOR IN BIDDING THE SIGNS. THE CONTRACTOR SHALL PROVIDE SIGNS OF SUFFICIENT LENGTH FOR THE LEGENDS SHOWN.

STATE OF ALASKA 49TH Clyde M. Dahle EE-4833 REGISTERED PROFESSIONAL ENGINEER

BY	DATE	CHANGED
WDH	1-27-93	AS-BUILT

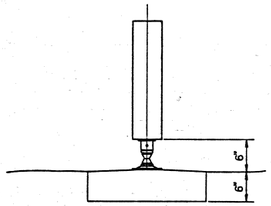
REVISIONS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

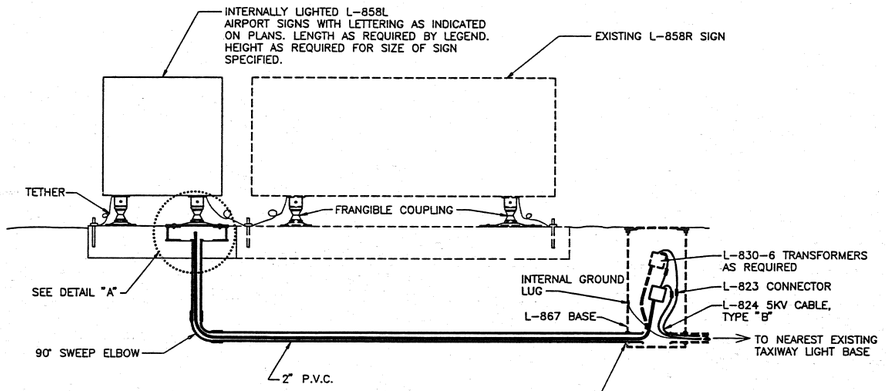
DILLINGHAM AIRPORT
57978
A.I.P. No. 3-02-0078-06
CHANGE ORDER # 1
SIGNING LAYOUT PLAN

APPROVED: STEVE VAN HORN, P.E. — DESIGN SECTION CHIEF
APPROVED: GREGG P. BRADLEY, P.E. — PROJECT MANAGER

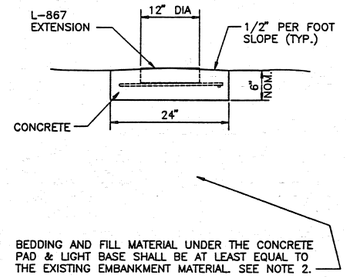
SCALE: AS SHOWN | DESIGNED: CMD | DRAWN: GJG | CHECKED: SJN | DATE: 2-4-92 | SHEET 1 OF 2



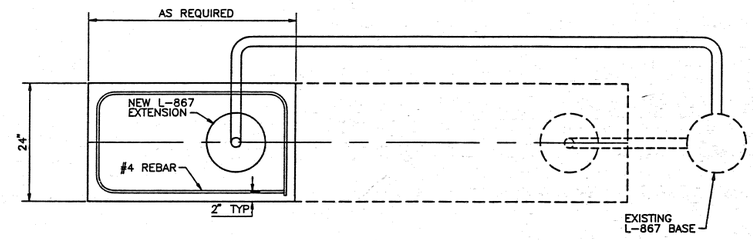
SIDE VIEW



FRONT VIEW

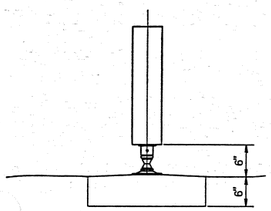


CONCRETE BASE SIDE VIEW

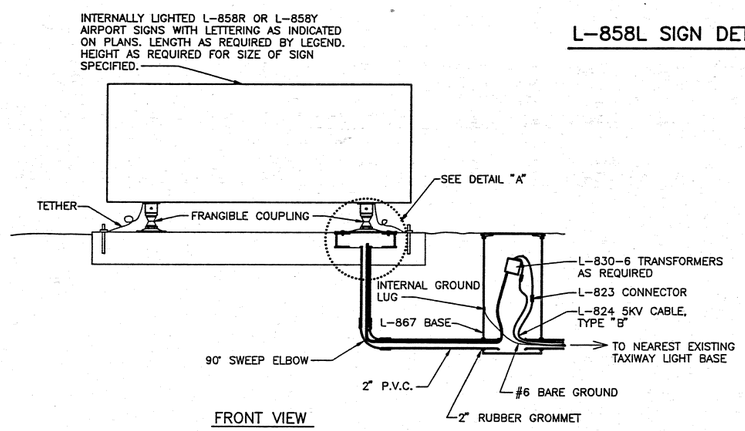


CONCRETE BASE PLAN

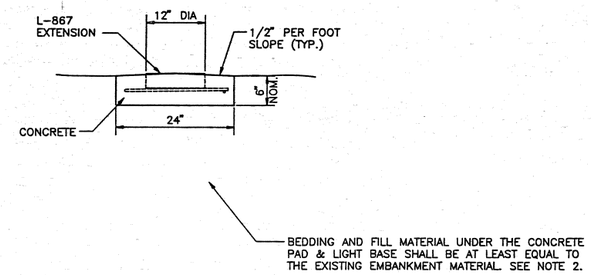
L-858L SIGN DETAILS



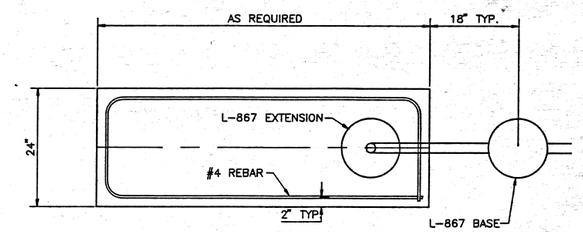
SIDE VIEW



FRONT VIEW

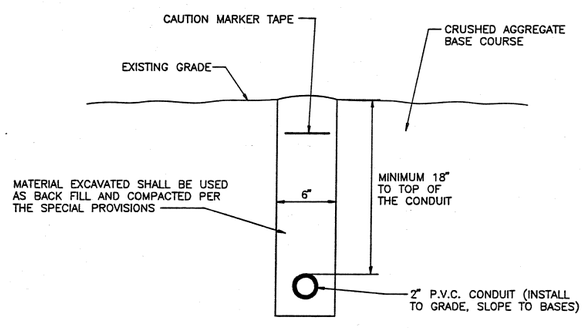


CONCRETE BASE SIDE VIEW

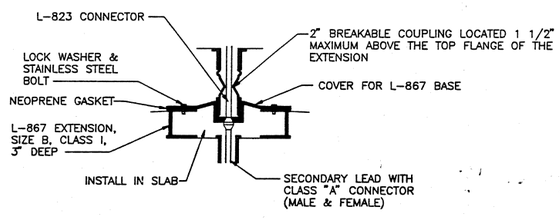


CONCRETE BASE PLAN

L-858Y SIGN DETAILS



CONDUIT TRENCH DETAIL



DETAIL "A"

NOTES

1. TO LOCATE TYPE L-828 SIGNS FIRST LOCATE POINT 1 & 2 (SEE SURVEY DETAIL) THEN PLACE SIGNS 25' FROM THE OUTSIDE EDGE OF THE PAINT STRIPE OR EDGE OF FULL DEPTH SURFACING.
2. MINOR GRADING OR FILL SHALL BE REQUIRED AT ALL SIGN LOCATIONS. THE GRADING AND EARTHWORK SHALL BE INCIDENTAL TO THE CONTRACT AND NO SEPARATE PAYMENT SHALL BE MADE.
3. ATTACH SIGNS TO CONCRETE BASE IN ACCORDANCE WITH MANUFACTURE'S INSTRUCTIONS.
4. THE CONTRACTOR SHALL CERTIFY THE CONCRETE BASE IS CONSTRUCTED OF SACK-CRETE CONTAINING 5 1/2 SACKS OF CONCRETE PER CUBIC YARD OF CONCRETE.

STATE OF ALASKA 49TH Clyde M. Dahle EE-4833 REGISTERED PROFESSIONAL ENGINEER

BY	DATE	REVISIONS
WN	1-27-93	AS-BUILT

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

DILLINGHAM AIRPORT
57978
A.I.P. No. 3-02-0078-06
CHANGE ORDER #1
AIRPORT SIGN DETAILS

APPROVED STEVE VAN HORN, P.E. — DESIGN SECTION CHIEF
APPROVED GREGG P. BRADLEY, P.E. — PROJECT MANAGER

SCALE: NO SCALE | DESIGNED: CMD | DRAWN: DLD | CHECKED: | DATE: 2-4-92 | SHEET 2 OF 2

AS-BUILT 1/93 SHEET 18 OF 18