STATE OF VERMONT
AGENCY OF TRANSPORTATION

PROPOSED IMPROVEMENT

TOWN OF BERLIN
COUNTY OF WASHINGTON
EDWARD F. KNAPP STATE AIRPORT

CONSTRUCTION OF AN AIRCRAFT TIEDOWN APRON TO ACCOMODATE TWELVE AIRCRAFT. TO INCLUDE TIEDOWN ANCHORS, SURFACE AND SUBSURFACE DRAINAGE, TAR EMULSION PROTECTIVE SEAL, CHAIN LINK FENCING, PAVEMENT MARKINGS AND A STUB TAXIWAY.

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RECORD PLANS

CONTRACTOR: AUSTIN CONST. INC. CONCORD, VT

RESIDENT ENGINEER: RICHARD R COMI

CONSTRUCTION BEGAN: AUGUST 8, 1989
CONSTRUCTION COMPLETED: OCTOBER 26, 1990

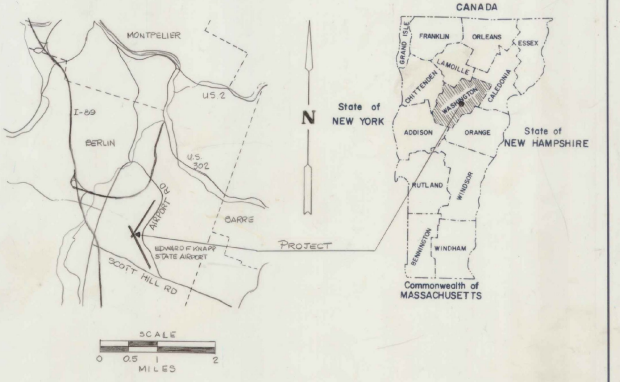
RECORD PLANS BY: JOE YANSUELA

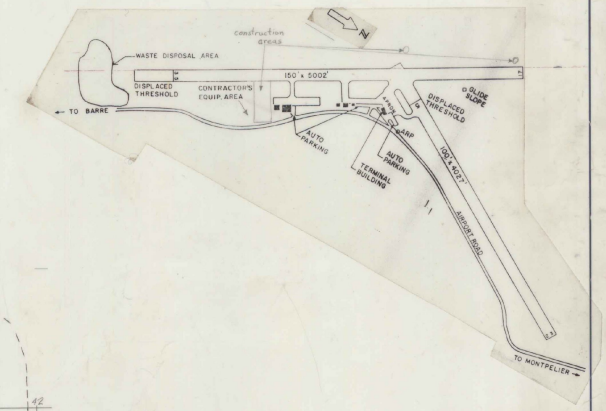
I hereby certify that all the construction required by this set of drawings has been accomplished as indicated herein.

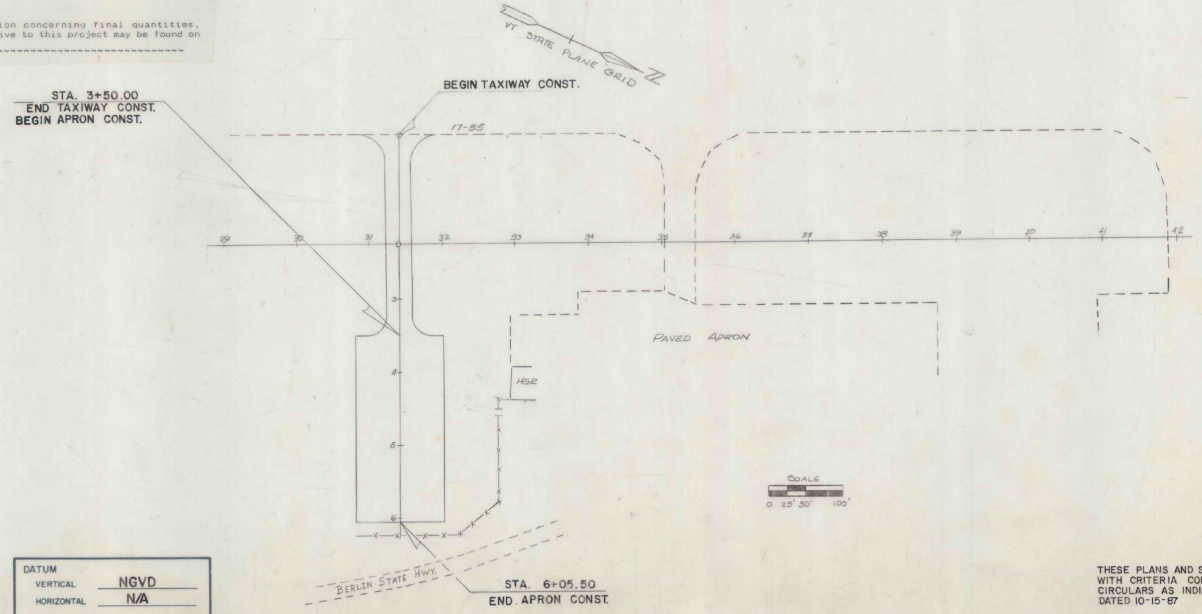
By Richard R. Comi (ROCR) Resident Engineer

Date 5-12-92

NOTE: Any further information concerning final quantities, amounts or other details relative to this project may be found on microfilm in Central files.







CONVENTIONAL SIGNS

COUNTY LINE
TOWN LINE
LIMITS OF ACCESS
POINT OF ACCESS
FENCE LINE
STONE WALL
TRAVELED WAY
GUARD RAIL
RAILROAD
SURVEY LINE
CULVERT
POWER POLE
TELEPHONE POLE
TREES
CONTROL OF ACCESS
PROPERTY LINE
R.O.W. TAKING LINE
SLOPE RIGHTS
TOP OF CUT
TOE OF SLOPE

DATUM
VERTICAL: NGVD
HORIZONTAL: N/A

THESE PLANS AND SPECIFICATIONS ARE IN ACCORDANCE WITH CRITERIA CONTAINED IN CURRENT FAA ADVISORY CIRCULARS AS INDICATED IN AC CHECKLIST, AC 00-2.1 DATED 10-15-87

SUBMITTED BY ORDER OF THE STATE TRANSPORTATION BOARD

APPROVED David B Kelley DATE 12/20/90
DIRECTOR OF ENGINEERING AND CONSTRUCTION

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

APPROVED _____ DATE _____
DIVISION ADMINISTRATOR

PROJECT AIR NO 03-2046

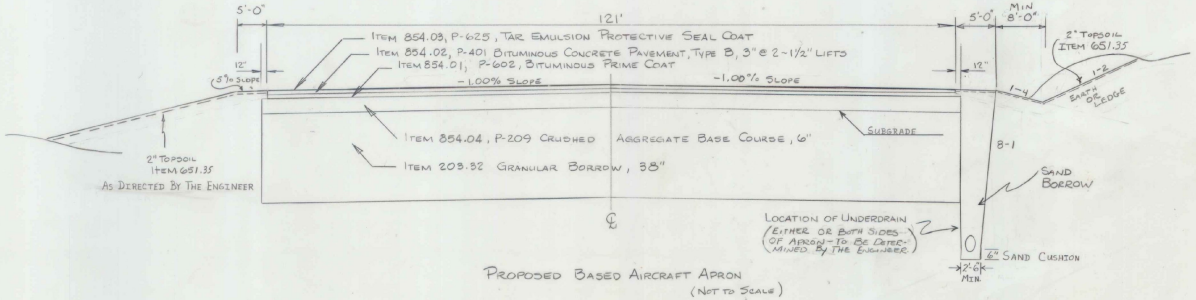
SHEET 1 OF 26 SHEETS

D-10 S.R.S. 12/17/70

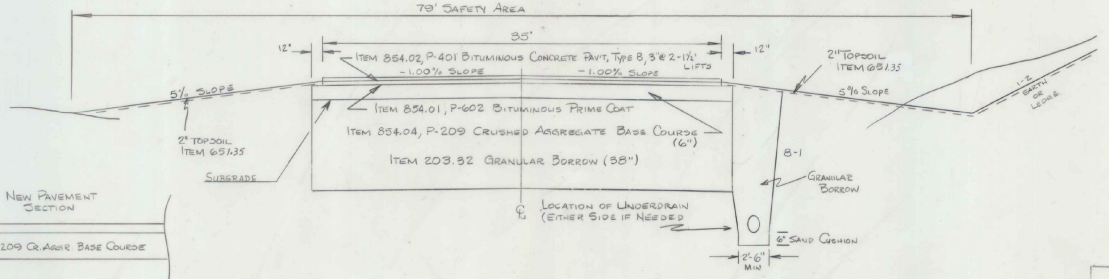
BRUNING 44-131 40282-1

TYPICAL SECTIONS

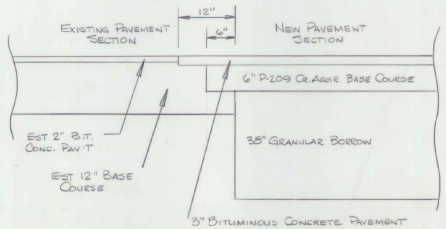
3" Bituminous Concrete Pavement, Item 854.02, P-401, Type "B", 2@1½" Lifts
Bituminous Prime Coat, Item 854.01, P-602 (Cutback Asphalt, MC-250)
6" Crushed Aggregate Base Course, Item 854.04, P-209 (Gradation B)
Tar Emulsion Protective Seal Coat, Item 854.03, P-625 (Apron Only)
38" Granular Borrow, Item 203.32



Proposed Based Aircraft Apron
(Not to Scale)



Proposed Stub Taxiway
(Not to Scale)



Vertical saw cut existing pavement section 12" back and paint saw cut with Bit. Prime Coat. No pay item

Butt Section Detail
(Not to Scale)

General Notes

WAS Seed, Item 651.15
~~To Be~~ Applied as directed by the Engineer.

% wt	Lbs/Acre	Name	Pur %	Germ %
3.33	2	Crown Vetch	97	75
50.00	30	Creeping Red Fescue	98	85
8.33	5	Timothy	99	85
16.67	10	~~Perennial~~ Rye Grass (Var. Pennfine)	95	85
8.34	5	Alfalfa (Var Saranac)	99	85
8.33	5	Birdsfoot ~~Trefoil~~ (Var. Empire)	98	85
5.00	3	Highland Bent Grass	92	85
100.00	60 Lbs/Acre			

The seed mixture ~~shall~~ DID not have a weed content exceeding 0.40% by weight and ~~shall~~ be free of all noxious weed seed. ~~WAS~~

Fertilizer, Item 651.18
WAS
Formula 10-20-10 ~~To Be~~ used with seed, Item 651.15, applied at the rate of 600 Lbs/Acre

Agricultural Limestone, Item 651.20
~~WAS To Be~~ applied at the rate of 2 tons/acre ~~or~~ as directed by the Engineer.

Hay Mulch, Item 651.25
WAS
~~To Be~~ placed on earth slopes at the rate of 2 tons/acre.

Topsoil, Item 651.35
WAS
~~To Be~~ used with seed, Item 651.15, as directed by the Engineer.

Allowable Thickness Tolerances

Sub-base	± 1"
Controlled Material	± 1"
Pavement	± ¼"
Base Course	± ⅜"

Notes

1. Sub-grade under areas ~~To Be~~ paved WERE ~~To Be~~ compacted to 95% density as per FAA T-611 (AASHTO T-180).
2. Bituminous prime coat ~~To Be~~ WAS applied as per Item 404, Subsection 404.06, Type I, First Application using MC-250.
3. For underdrain flushing basin detail refer to standard D-4 sheet 15 of 15 sheets.

AS BUILT PLANS
I hereby certify that all the construction required by this ~~contract~~ drawings has been accomplished as indicated herein.
By _____ Resident Engineer
Date _____

AS BUILT PLANS
I hereby certify that all the construction required by this ~~contract~~ drawings has been accomplished as indicated herein.
By Richard R Conti Resident Engineer
Date 7-29-97

DATUM
VERTICAL _____
HORIZONTAL _____

SURVEYED BY _____ DATE _____
DRAWN BY KERR DATE 1-85
TRACED BY _____ DATE _____

E F KNAPP AIRPORT
PROJ. AIR NO. 03-2046
SHEET 2 OF 26

QUANTITY, EARTHWORKS, DRAINAGE AND ITEM DETAIL SHEET

STATE OF VERMONT
AGENCY OF TRANSPORTATION

APPROXIMATE SUMMARY OF QUANTITIES

EROSION CONTROL	BRIDGE	ROADWAY	GRAND TOTAL	UNIT	PAY ITEM	PAY ITEM NUMBER	INDEX NO.
			16730	CY	Common Excavation	203.15	9
			2400	CY	Solid Rock Excavation	203.16	15
			5950	CY	Granular Borrow	203.32	24
			4850	SY	Fine Grading-Subgrade	203.90	11
			1270	CY	Trench Excav. of Earth	209.20	3
			70	CY	Trench Excav. of Rock (EST)	209.21	
			550	CY	Drilling & Blasting of Solid Rock Subgrade	209.70	8
			38	CY	Concrete Class "B"	601.23	108
			610	LB	Reinforcing Steel	601.15	9
			652	LF	12" RCCSP (.064)	601.0405	
			54	LF	15" RCCSP (.064)	601.0410	
			3	EA	Cast Iron Grate w/Frame, Type A	604.45	
			614	LF	6" Underdrain	605.10	
			186	LF	6" Underdrain Carrier Pipe	605.20	
			246	LF	8" Underdrain Carrier Pipe	605.21	
			2	EA	Underdrain Flushing Basin	605.45	
			10	HR	All Purpose Excavator Rental, Type I (EST)	608.85	
			10	HR	Truck Rental (EST)	608.87	
			50	M GAL	Dust Control With Water (EST)	609.10	
			735	LF	Chain Link Fence, 6'	610.12	
			4	LF	Walk Gate for Chain Link Fence, 6'	610.16	
			1	LS	Mobilization	635.10	
			55	LB	Seed	651.13	9
			450	LB	Fertilizer	651.18	9
			2	TON	Agricultural Limestone	651.20	10
			2	TON	Hay Mulch	651.25	12
			770	CY	Topsoil	651.35	3
			100	SY	Erosion Matting (EST)	659.10	11
			1830	GAL	P-602 Bituminous Prime Coat	859.01	7
			770	TON	P-401 Bituminous Concrete Pavement	859.02	11
			460	GAL	P-615 Tar Emulsion Protective Seal Coat	859.03	9
			780	CY	P-209 Crushed Aggregate Base Course	859.09	1
			1	LS	P-620 Runway 4 Taxiway Painting	859.05	-
			70	LF	L-110 4 Wayx 4" Dia. 11.8 Elect. Duct	859.06	-
			36	EA	Airport Tiedown Anchors, Type A	859.07	-
			12	EA	Bracing Assembly For Chain Link Fence, 6'	620.21	
			* 50	CY	Stone Fill Type II	613.11	#1
			100	SY	GEOTEXTILE FABRIC FOR SILT FENCE	649.20	EST

DETAILED SUMMARY OF QUANTITIES

QUANTITY	UNIT	PAY ITEM
* 1		For Stone Fill locations see sheet 5 of 26
		2. Any excavation required for placement of stone to be paid as Trench Earth.

GRADES AND EARTHWORK

V.C.	% GRADE	STATION	GRADES ELEVATION ON TANGENT	GRADES ELEVATION ON V CURVE	GRADES V.C. CORR.	TOTAL EXCAV. EARTH & ROCK DIST. (FT)	TOTAL EXCAV. EARTH & ROCK AREA (SF)	TOTAL EXCAV. EARTH & ROCK VOL. (CY)	ROCK EXCAVATION AREA (SF)	ROCK EXCAVATION VOL. (CY)	EMBANKMENT AREA (SF)	EMBANKMENT VOL. (CY)
		6+40	N.A.				0		0			
			1146.19			25		792		282		
		6+15	1146.01				1710		609			
						10		748		273		
		6+05	1145.64				2330		972			
						55		4201		1214		
		5+50	1143.87				1795		219			
						50		3250		203		
		5+00	1142.12				1715		0			
						50		3116				
		4+50	1140.37				1650					
						50		2791				
		4+25	1139.49									
		4+00	1138.62			50	1580	2633				
							1295					
		3+50	1136.87			50		1168				
		3+00	1135.12				300				0	
						13						
		2+87						375				14
						37						
		2+50	1133.37				105				15	
		+25	1132.99			25	100	93			15	19
		2+00	1132.62			25	30	60			110	58
		1+87				25		14				134
		1+75	1132.24				0				180	
						25		5				141
		1+50	1131.87				10				126	
		1+25	1131.49			25	40	23			95	102
		1+00	1131.12			25	25	30			35	60
		0+87				25		49				16
		0+75	1130.74				80				0	
		0+50										
		0+00	1129.87									

-1.500%

COLUMN TOTALS — 19870 — 1792 — 539

EARTHWORK SUMMARY

EARTH AND ROCK EXCAVATION	19870 CY
SOLID ROCK EXCAVATION	1792 CY
EARTH EXCAVATION	17878 CY
PLANIMETERED FILL	539 CY
LESS FACTORED SOLID ROCK (1792 x 1.3)	2590 CY
LESS DISPLACEMENT OF LARGE STRUCTURES	CY
NET PLANIMETERED FILL	CY
FACTOR (x NET PLANIMETERED FILL)	CY
PLANIMETERED FILL INCLUDING FACTOR	CY
EXCESS SOLID ROCK	2051
MATERIALS AVAILABLE FOR FILLS:	
EARTH EXCAVATION	17878 CY
CHANNEL EXCAVATION (%x CY)	CY
UNDERDRAIN EXCAVATION (60%x CY)	CY
STRUCTURE EXCAVATION (%x CY)	CY
SOLID ROCK x 1.5	
TOTAL MATERIAL AVAILABLE FOR FILLS	CY
TOTAL FILL (W/O FACTOR)	CY
TOTAL MATERIAL FOR FILLS	CY
BORROW	CY
EXCESS EXCAVATION	CY
LESS FACTORED DEDUCTIBLE GRANULAR BORROW	CY
NET EARTH BORROW	CY
NET EXCESS EXCAVATION	* CY

* WASTE QUANTITY IS BASED ON UNIT 4&5 CASE WHERE FACTORED ROCK > FILL

CHAIN LINK FENCE (6')

@ 30+43 SOUTH ~ 32+91 ET 725 LF

UNDERDRAIN AND CARRIER PIPE

STATION TO STATION	TYPE U	TYPE S	POS	D (IN)	L (FT)	TRENCH EXC EARTH (CY)	TRENCH EXC ROCK (CY)	GRAN BKF (CY)	F B (EA)	MKR POSTS (EA)
30+03 SL 31+50		X		Rt	6"	126	90			30
SL 31+50 SL 6+05	X			Rt	6"	254	139	61	1	
30+03 SL 31+50		X			8"	246	107			
E ST UP										
	X				6"	260	200		1	
		X			6"	60	50			
					6" U/D & 8" U/D	539	196			
COLUMN TOTALS					8"CPL 246	586	61		2	1@30

GUARD RAIL, THREE CABLE W/LT.___ POSTS

STATION TO STATION	POS	MEASURED LENGTH (FT & IN.)	POST SPACING (FT & IN.)	FACTOR	PAY LENGTH (LF)	ANCHORS 6.2.66 (EA)	ANCHORS 621.67 (EA)
COLUMN TOTALS							

GUARD RAIL, BOX BEAM W/ST POSTS

STATION TO STATION	POS	POST SPACING (FT & IN.)	PAY LENGTH (LF)	REMARKS
COLUMN TOTALS				

DRAINAGE STRUCTURES

STATION	POS	SKEW	TYPE IN/OUT	DITCH IN	DITCH OUT	RCP D(IN)	RCP L(FT)	RCP CL.	PCCSP D(IN)	PCCSP L(FT)	PCCSP THRM	OPTION PIPES D (IN.)	OPTION PIPES L (FT)	OPTION PIPES RCP CL.	OPTION PIPES CSMP TH.	OPTION PIPES CSAP TH.	MES. (EA)	D.I. DEPTH (FT)	CONC. CL. B (CY)	REINF. STEEL (LB.)	D.I. GRATE TYPE	CRM (CY)	TRENCH EXC. EARTH (CY)	TRENCH EXC. ROCK (CY)	ST. FILL TYPE (CY)	MKR. POST LT	MKR. POST RT	REMARKS
30+03 SL 31+50	Rt																						143	4				Remove 8" VCP Remove RCD1
30+03	Rt																											Remove 8" VCP - No Quantities Given To Mfg'r U/D Carrier Pipe
SL 31+50 SL 34+00	Rt		RCD1						12"	200									2.6	231	A		132					
SL 31+50 SL 34+00	Rt		RCD1						12"	452									2.3	200	A		179	5				
39+62	Rt																		1.0	98								New 5'x 5.5' Cover
COLUMN TOTALS																												

GUARD RAIL, _____ STEEL BEAM WITH _____ POSTS

STATION TO STATION	POS	MEASURED LENGTH (FT & IN.)	POST SPACING (FT & IN.)	FACTOR	PAY LENGTH (LF)	ANCHORS 621 (EA)	ANCHORS 621 (EA)	REMARKS
COLUMN TOTALS								

TYPE OF CONSTRUCTION: _____

STATIONS FROM	STATIONS TO	PAVEMENT WIDTHS				EQUATIONS +	EQUATIONS −	REMARKS
SL 6+05	SL 31+50	121'						
SL 31+50	SL 34+75	35'						
								APRON
								TAXIWAY

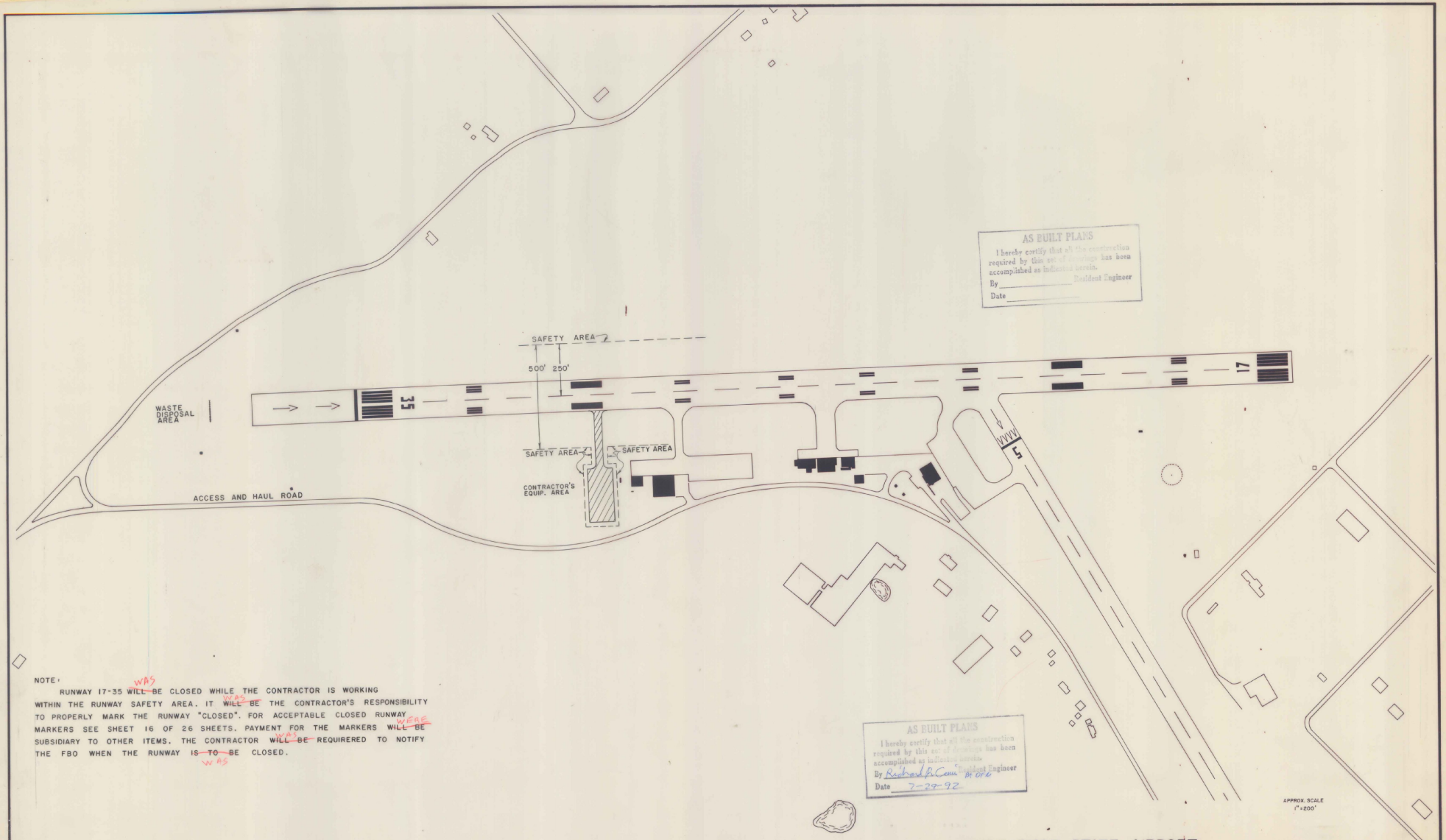
LENGTH OF PROJECT

STATION	STATION	FEET	MILES	REMARKS
SL 6+05	SL 31+50	255		
SL 31+50	SL 34+75	275		
COLUMN TOTALS		530'		

PROJECT NAME EE KNAPP STATE AIRPORT

PROJECT NO. AIR 03-2016

SHEET 4 OF 26 SHEETS



AS BUILT PLANS

I hereby certify that all the construction required by this set of drawings has been accomplished as indicated hereon.

By _____ Resident Engineer

Date _____

NOTE:

RUNWAY 17-35 ~~WILL~~ WAS ~~BE~~ CLOSED WHILE THE CONTRACTOR IS WORKING WITHIN THE RUNWAY SAFETY AREA. IT ~~WILL~~ WAS ~~BE~~ THE CONTRACTOR'S RESPONSIBILITY TO PROPERLY MARK THE RUNWAY "CLOSED". FOR ACCEPTABLE CLOSED RUNWAY MARKERS SEE SHEET 16 OF 26 SHEETS. PAYMENT FOR THE MARKERS ~~WILL~~ WERE ~~BE~~ SUBSIDIARY TO OTHER ITEMS. THE CONTRACTOR ~~WILL~~ WAS ~~BE~~ REQUIRERED TO NOTIFY THE FBO WHEN THE RUNWAY IS ~~TO~~ WAS ~~BE~~ CLOSED.

AS BUILT PLANS

I hereby certify that all the construction required by this set of drawings has been accomplished as indicated hereon.

By Richard A. Cann Resident Engineer

Date 7-29-92

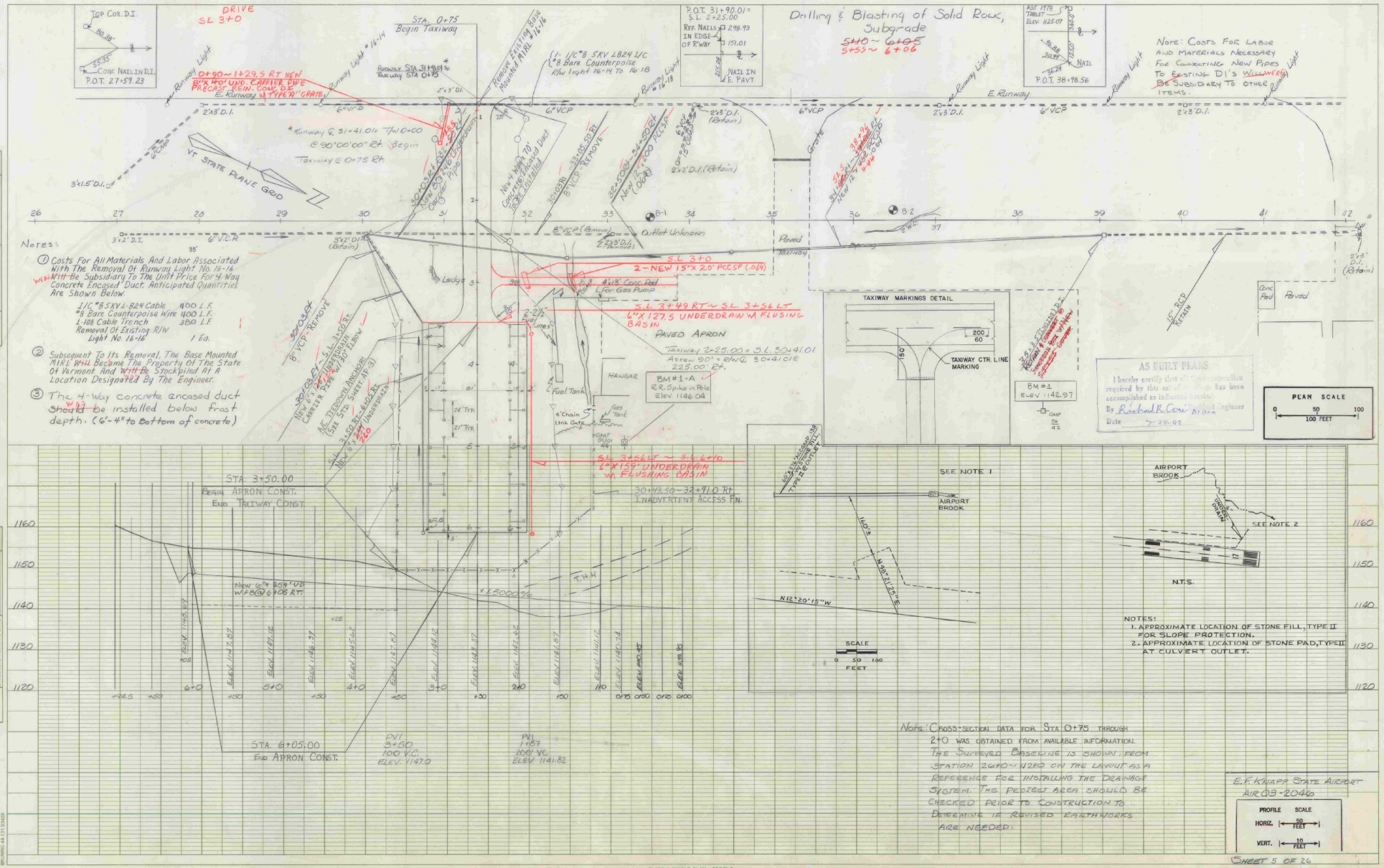
E.F. KNAPP STATE AIRPORT

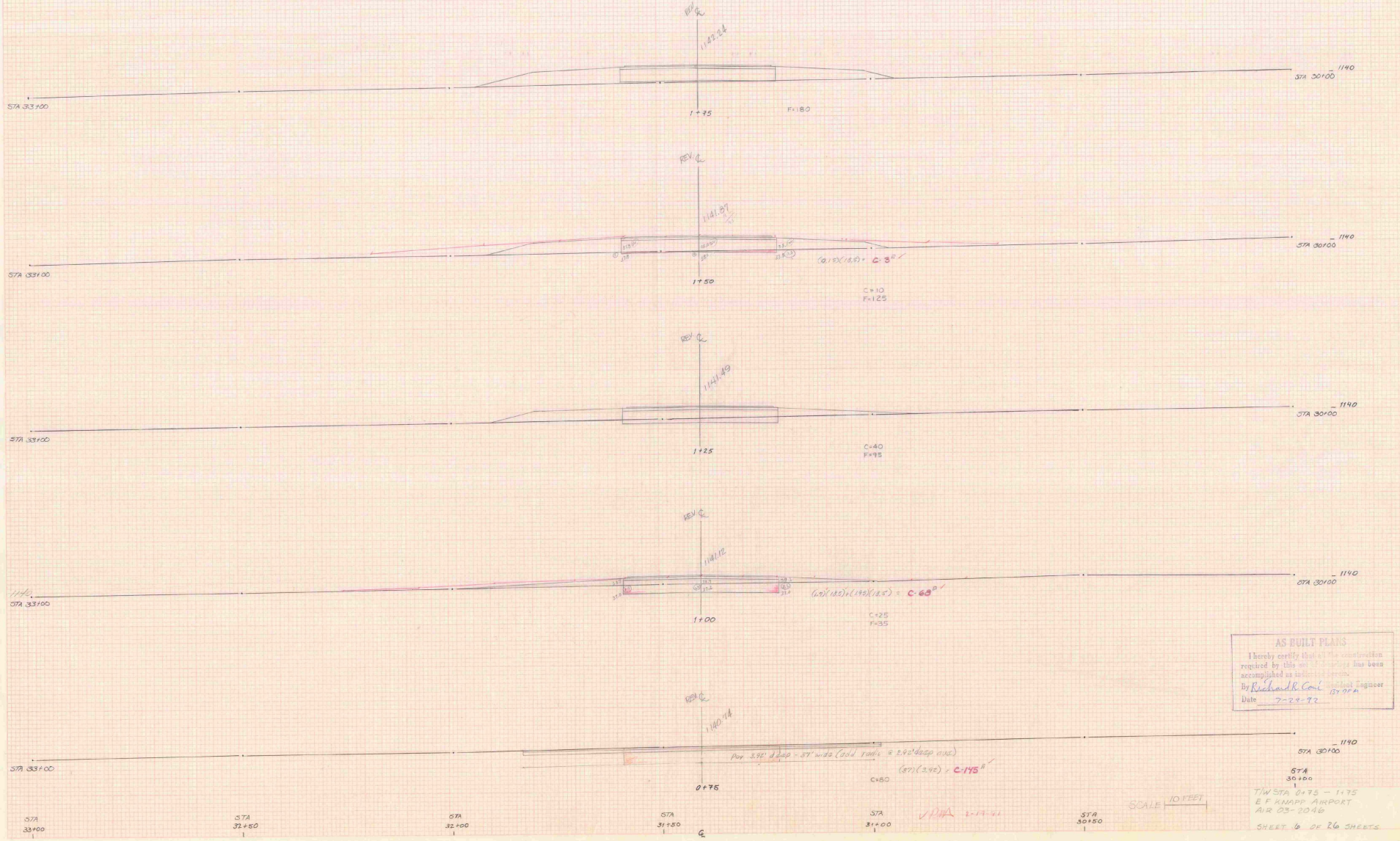
PROJECT AIR NO 03-2046

SHEET 3 OF 26 SHEETS

BASE MAP TRACED FROM 1983 AERIAL PHOTOGRAPH

RKJ


Drilling & Blasting of Solid Rock, Subgrade
5+10 ~ 6+05
5+55 ~ 6+06
DRIVE SL 3+0
STA. 0+75 Begin Taxiway
0+90 ~ 1+29.5 RT NEW 8"K HD UND. CARRIER PIPE PRECAST RSBN. CONC. D.I. E. Runway 14 TYPE "A" GRATE
Runway Light #16-14
Runway Light #16-18
Remove Existing Base Mounted MIRL #16-16
1-1/C #8 5KV L824 1/C #8 Bare Counterpoise Rlw Light 16-14 To 16-18
P.O.T. 31+90.01 = S.L. 2+25.00
REF NAILS @ 298.93 IN EDGE OF PVMT
151.01
NAIL IN E. PAVT.
RSE 1178 TABLET ELEV. 1125.07
NAIL
P.O.T. 38+98.56
Note: Costs For Labor And Materials Necessary For Connecting New Pipes To Existing D.I.'s Will Were To Be Subsidiary To Other Items.
E. Runway
6"VCP
2'x3' D.I.
Runway & 31+41.01± TWY 0+00 @ 90°00'00" Rt. Begin Taxiway @ 0+75 Rt.
VT STATE PLANE GRID
3+41.5' D.I.
30+03 SL 6" VCP - Remove
New 30" x 24" RCP Carrier Pipe
New 4 Way 70' Concrete Encased Duct Bank Installed
31+03 RR - 33+05.50 Rt. 8" VCP Remove
32+50 SL - 34+50 Rt. New 12" x 200' PCCSP (.064)
2'x2' D.I. (Retain)
Grade
38+92 SL - 41+92 Rt. New 12" x 300' PCCSP (.064)
26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42
B-1
B-2
3'x2' D.I. (Retain)
8" VCP (Remove)
Outlet Unknown
Paved Taxiway
2'x3' D.I. (Retain)
Notes:
① Costs For All Materials And Labor Associated With The Removal Of Runway Light No. 16-16 Will Not Be Subsidiary To The Unit Price For 4-Way Concrete Encased Duct. Anticipated Quantities Are Shown Below.
1/C #8 5KV L-824 Cable 400 L.F.
#8 Bare Counterpoise Wire 400 L.F.
L-108 Cable Trench 380 L.F.
Removal Of Existing R/W Light No. 16-16 1 Ea.
② Subsequent To Its Removal, The Base Mounted MIRL Will Become The Property Of The State Of Vermont And Will Be Stockpiled At A Location Designated By The Engineer.
③ The 4-Way concrete encased duct should be installed below frost depth. (6'-4" to Bottom of concrete)
S.L. 3+0
2 - NEW 15"x 20' PCCSP (.064)
4'x13' Conc. Pad For Gas Pump
2-2" Fuel Lines
S.L. 3+49 RT ~ S.L. 3+56 LT
6"X 127.5 UNDERDRAIN W/ FLUSING BASIN
PAVED APRON
Taxiway 2+25.00 = S.L. 30+41.01 Apron 90° = R/W @ 30+41.01 E 225.00' Rt.
HANGAR
BM #1-A R.R. Spike in Pole Elev. 1146.04
Ledge
Fuel Tank
4' Chain Link Gate
Gas Tank
GMP
TAXIWAY MARKINGS DETAIL
200
60
150
TAXIWAY CTR. LINE MARKING
BM #1 ELEV. 1142.97
GMP
Conc Pad
Paved
AS BUILT PLANS
I hereby certify that the information required by this sheet has been accomplished as indicated hereon.
By Richard R. Corey Project Engineer
Date 7-24-92
PLAN SCALE
0 50 100
100 FEET
S.L. 3+56 LT ~ S.L. 4+10
2"x 150' UNDERDRAIN W/ FLUSHING BASIN
30+43.50 ~ 32+91.0 RT
INADVERTENT ACCESS FIN.
STA. 3+50.00
Begin Apron Const.
End Taxiway Const.
New 6"x 25H "UD" W.F.B @ 6+05 RT.
1.5000%
F.H.H.
Elev. 1145.87
Elev. 1147.87
Elev. 1146.37
Elev. 1145.62
Elev. 1145.12
Elev. 1144.62
Elev. 1143.87
Elev. 1141.87
Elev. 1140.74
Elev. 1140.45
Elev. 1138.33
105
110
150
0+75 0+00 0+75 0+00
6+0 5+50 5+0 4+50 4+0 3+50 3+0 2+50 2+0 1+50 1+0 0+50 0+0
1160 1150 1140 1130 1120
STA. 6+05.00
End Apron Const.
PVI 3+50 100 V.C. ELEV. 1147.0
PVI 1+87 200 V.C. ELEV. 1141.82
SEE NOTE 1
AIRPORT BROOK
160'±
N 78°21'15" E
N 12°20'15" W
SCALE 0 50 100 FEET
AIRPORT BROOK
6" DRAIN
SEE NOTE 2
N.T.S.
NOTES:
1. APPROXIMATE LOCATION OF STONE FILL, TYPE II FOR SLOPE PROTECTION.
2. APPROXIMATE LOCATION OF STONE PAD, TYPE II AT CULVERT OUTLET.
Note: Cross-section data for Sta 0+75 through 2+0 was obtained from available information. The surveyed baseline is shown from station 2+40 ~ 42+20 on the layout as a reference for installing the drainage system. This project area should be checked prior to construction to determine if revised earthworks are needed.
E.F. KNAPP STATE AIRPORT
AIR 03-2046
PROFILE SCALE
HORIZ. 50 FEET
VERT. 10 FEET
SHEET 5 OF 26
PLATE 1 SINGLE PLAN - PROFILE
CHARLES BRUNING CO.
MADE IN U.S.A.



AS BUILT PLANS

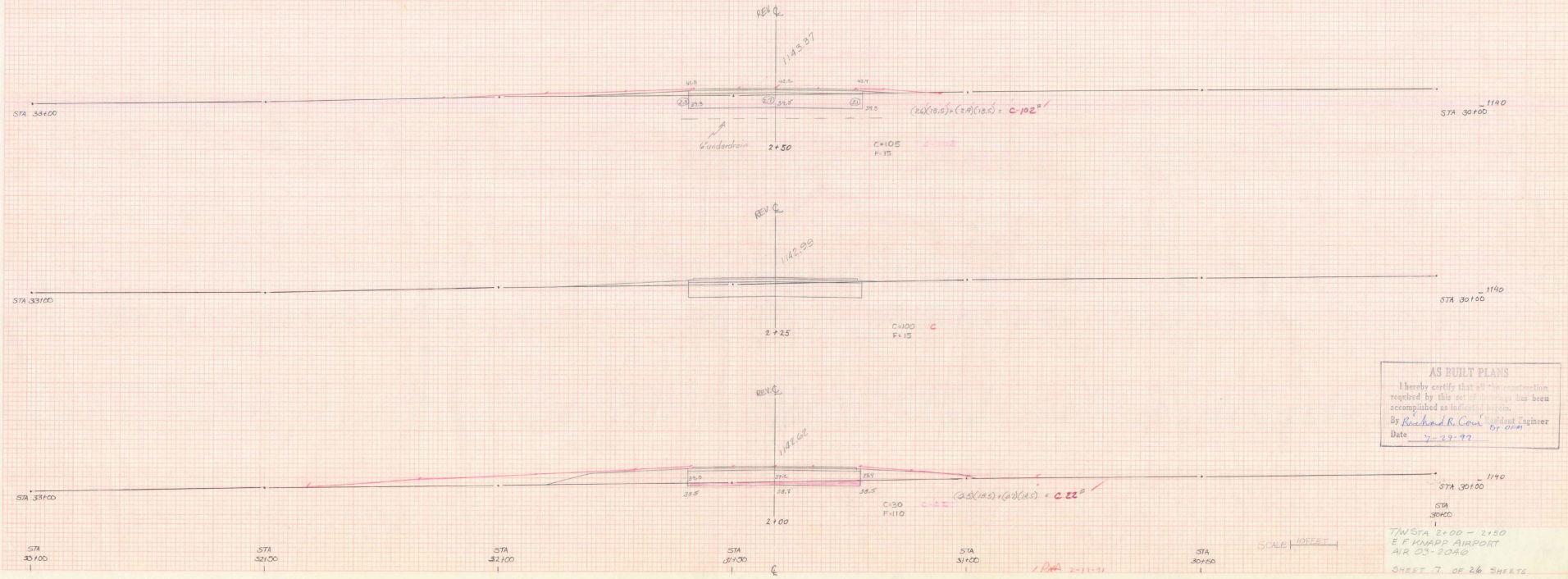
I hereby certify that all the construction required by this set of plans has been accomplished as shown hereon.

By Richard R. Conl Project Engineer
Date 7-29-92

SCALE 10 FEET

T/W STA 0+75 - 1+75
E F KNAPP AIRPORT
AIR 03-2046

SHEET 6 OF 26 SHEETS



AS BUILT PLANS

I hereby certify that all the construction required by this set of drawings has been accomplished as indicated herein.

By Richard R. Court Resident Engineer by DDM

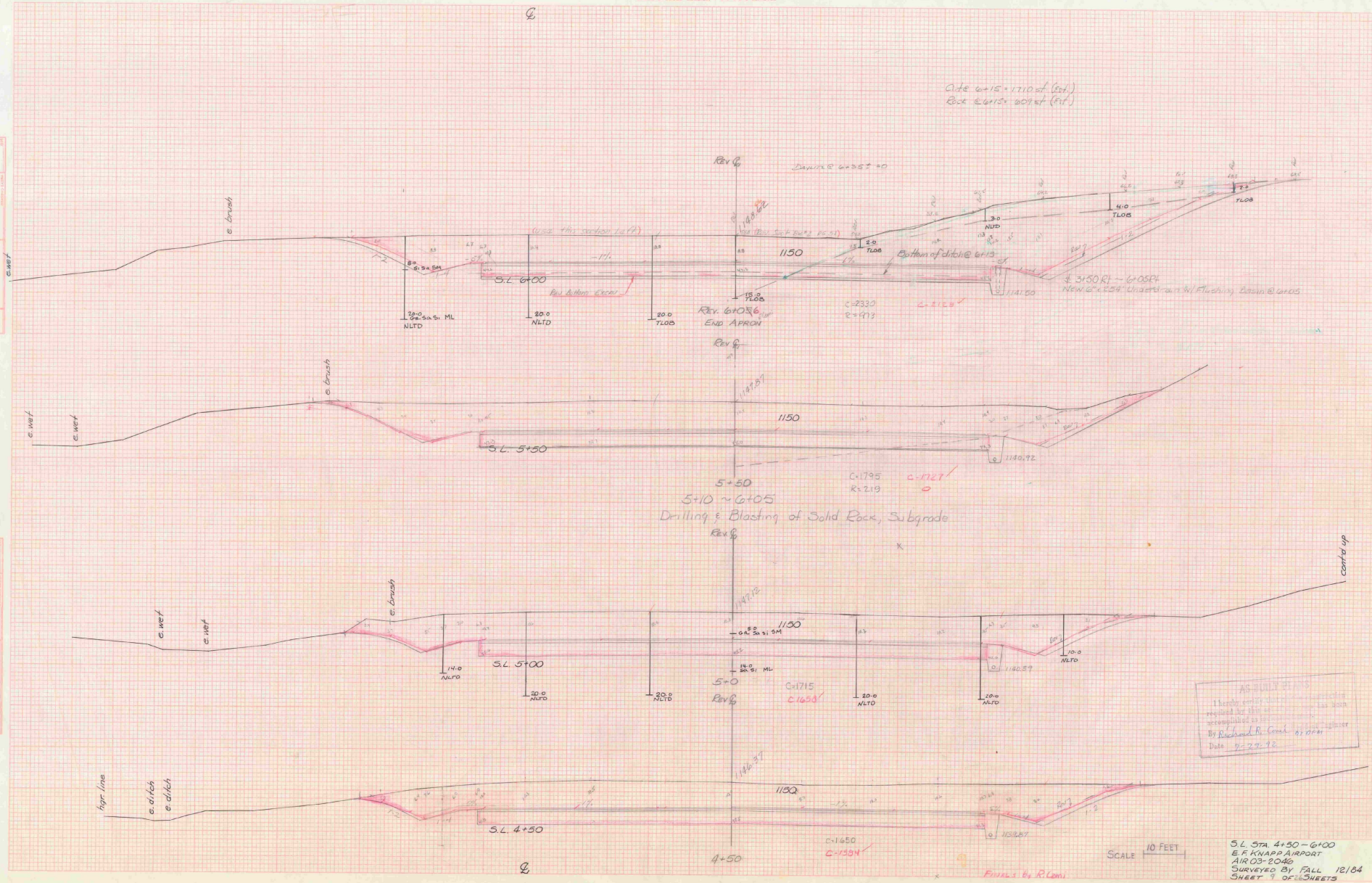
Date 7-29-97

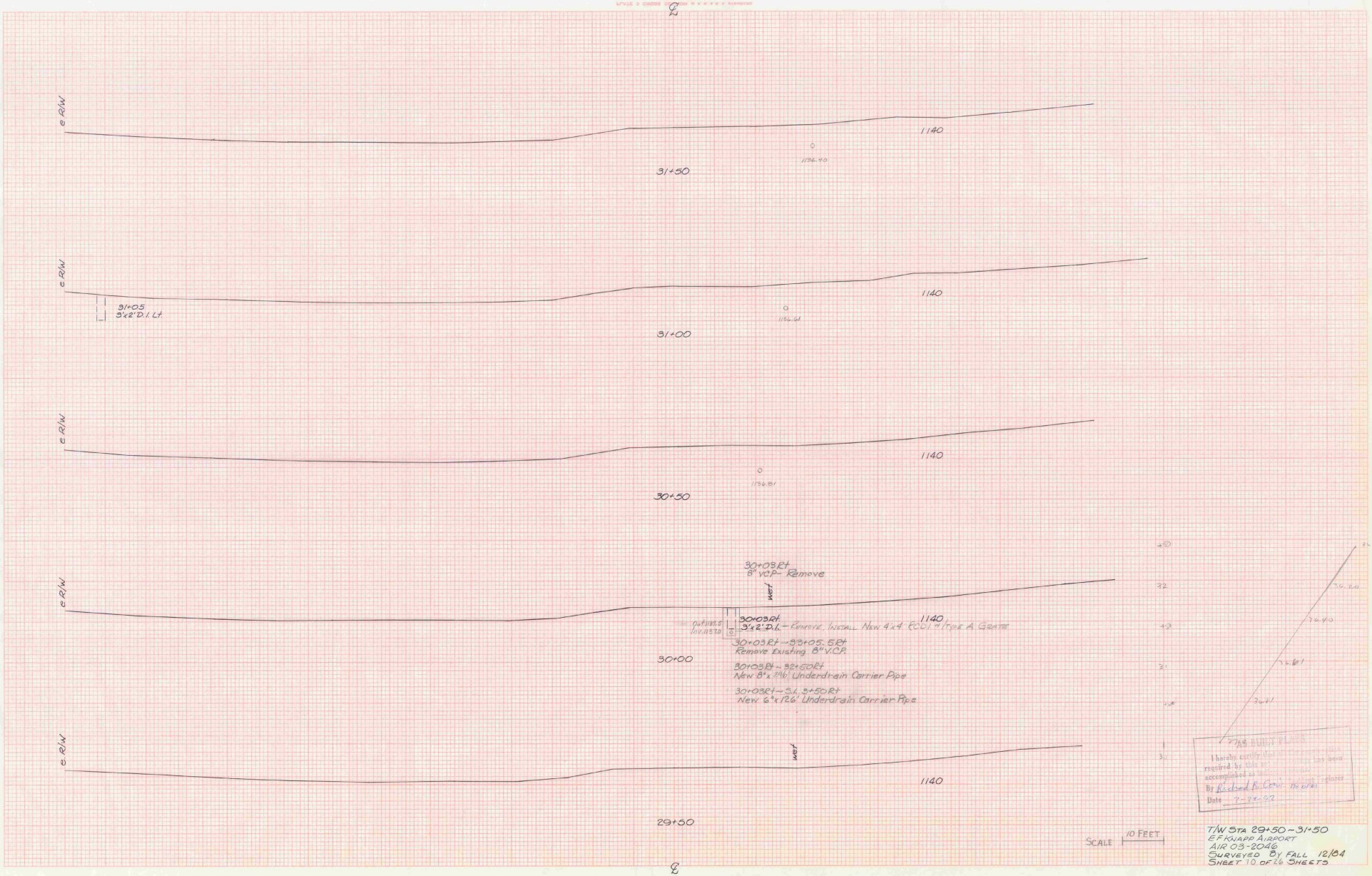
T/W STA 2+00 – 2+50
E F KNAPP AIRPORT
AIR 03-2040

SHEET 7 OF 26 SHEETS

DRAWING 3 A A A A.D. MOTSAM SSORD E TALM
MOTAMMOMOD MARTTAD

S.L. STA 2+25 – 4+00
E.F. KNAPP AIRPORT
AIR 03-2046
SURVEYED BY: FALL 10/06
SHEET 1 OF 10 SHEETS


℄
Cut: 6+15 = 1710 sf (est.)
Rock @ 6+15: 607 sf (Fit)
Rev ℄
Begin R @ 6+35 ± 0
E. brush
E. wet
(Cross this section to Rt)
8.0 Gr. Sa. Si. SM
S.L. 6+00
Rev. Bottom Excav.
28.0 Gr. Sa. Si. ML NLTD
20.0 NLTD
20.0 TLOB
Rev. 6+05.6 END APRON
15.8 TLOB
1150
Bottom of ditch @ 6+13
3.0 NLTD
4.0 TLOB
2.0 TLOB
1141.50
℄ 3+50 Rt ~ 6+05 Rt
New 6" x 54" Uncoated cm. w/ Flushing Basin @ 6+05
C=2330
R=973
C=2126
1147.37
E. brush
E. wet
E. wet
1150
S.L. 5+50
1140.92
C=1795
R=719
C=1727
5+50
5+10 ~ 6+05
Drilling & Blasting of Solid Rock, Subgrade
Rev ℄
1147.12
E. brush
E. wet
E. wet
1150
8.0 Gr. Sa. Si. SM
14.0 NLTD
S.L. 5+00
14.0 Sa. Si. ML
20.0 NLTD
20.0 NLTD
20.0 NLTD
20.0 NLTD
10.0 NLTD
1140.37
5+0
C=1715
C=1658
Rev ℄
contd up
AS-BUILT SHEET
I hereby certify that the work shown hereon was accomplished as required by the contract.
By Richard R. Cook
Date 9-29-92
1146.87
hor. line
E. ditch
E. ditch
1150
S.L. 4+50
1139.87
C=1650
C=1594
4+50
SCALE 10 FEET
Finals by R. Cook
V. Dale 3-19-91
S.L. STA. 4+50 – 6+00
E.F. KNAPP AIRPORT
AIR 03-2040
SURVEYED BY: FALL 12/84
SHEET 9 OF 16 SHEETS



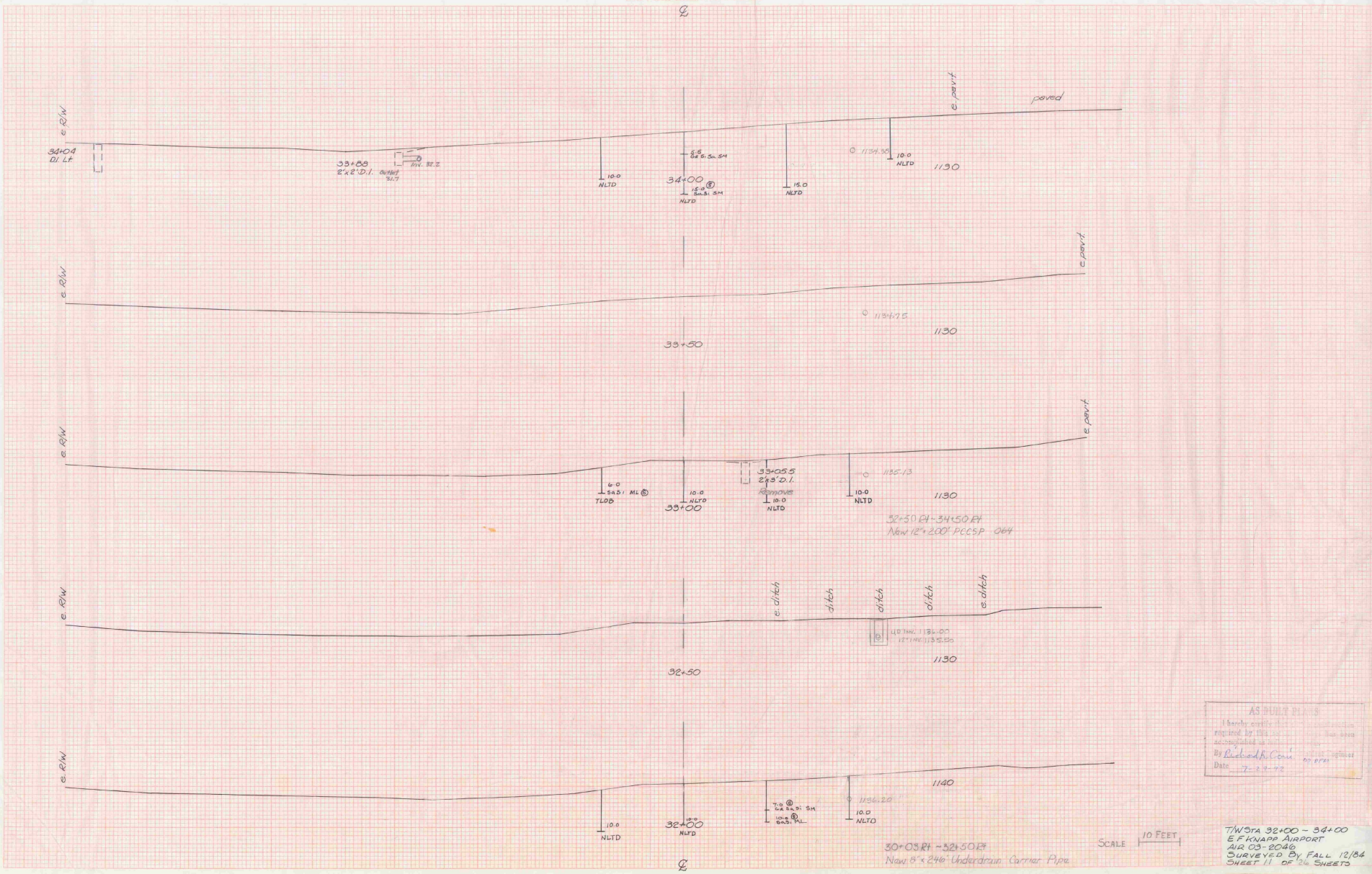
AS BUILT PLAN

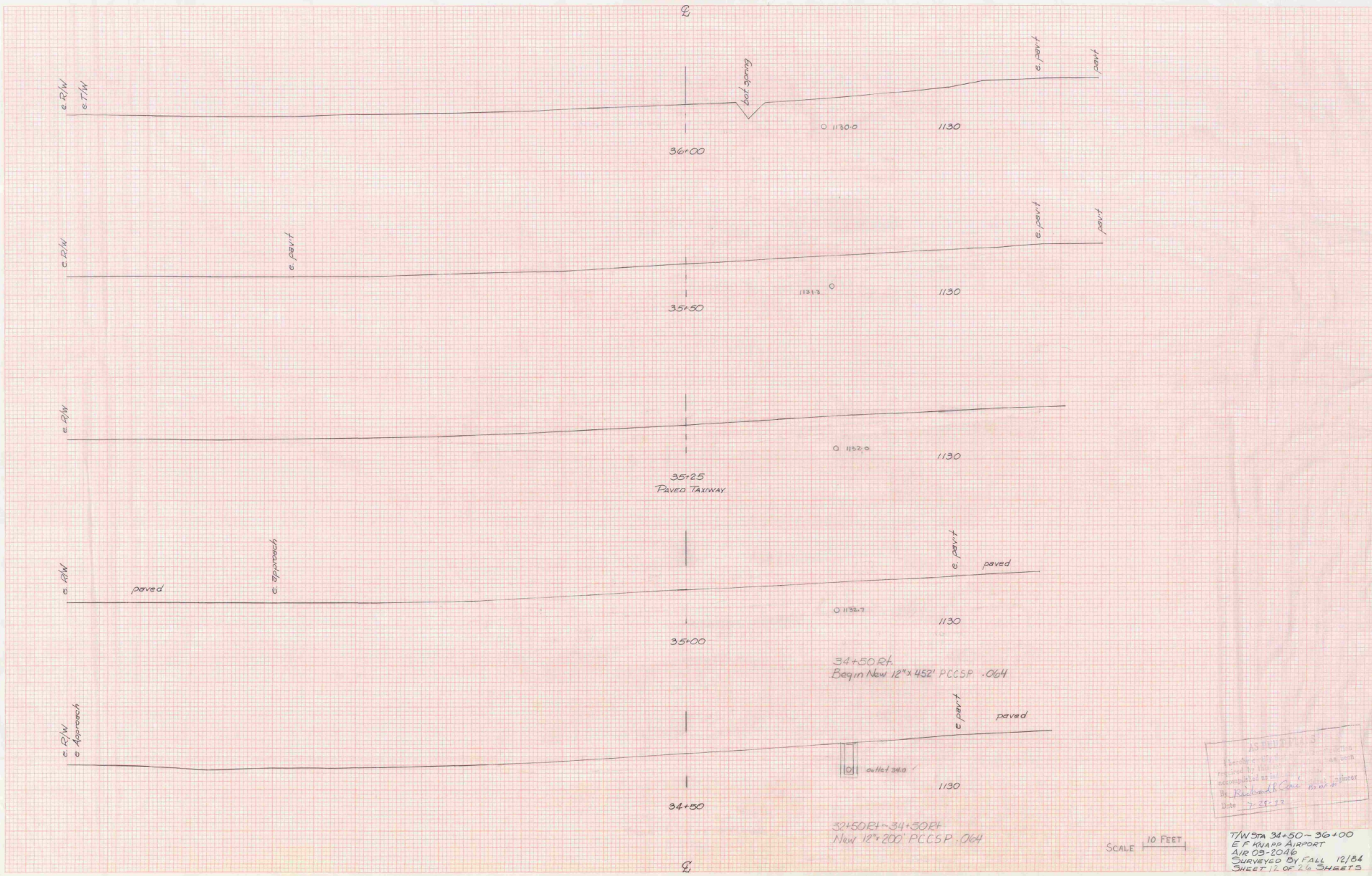
I hereby certify that the work shown hereon was performed by this contractor or under my direct supervision and accomplished as shown.

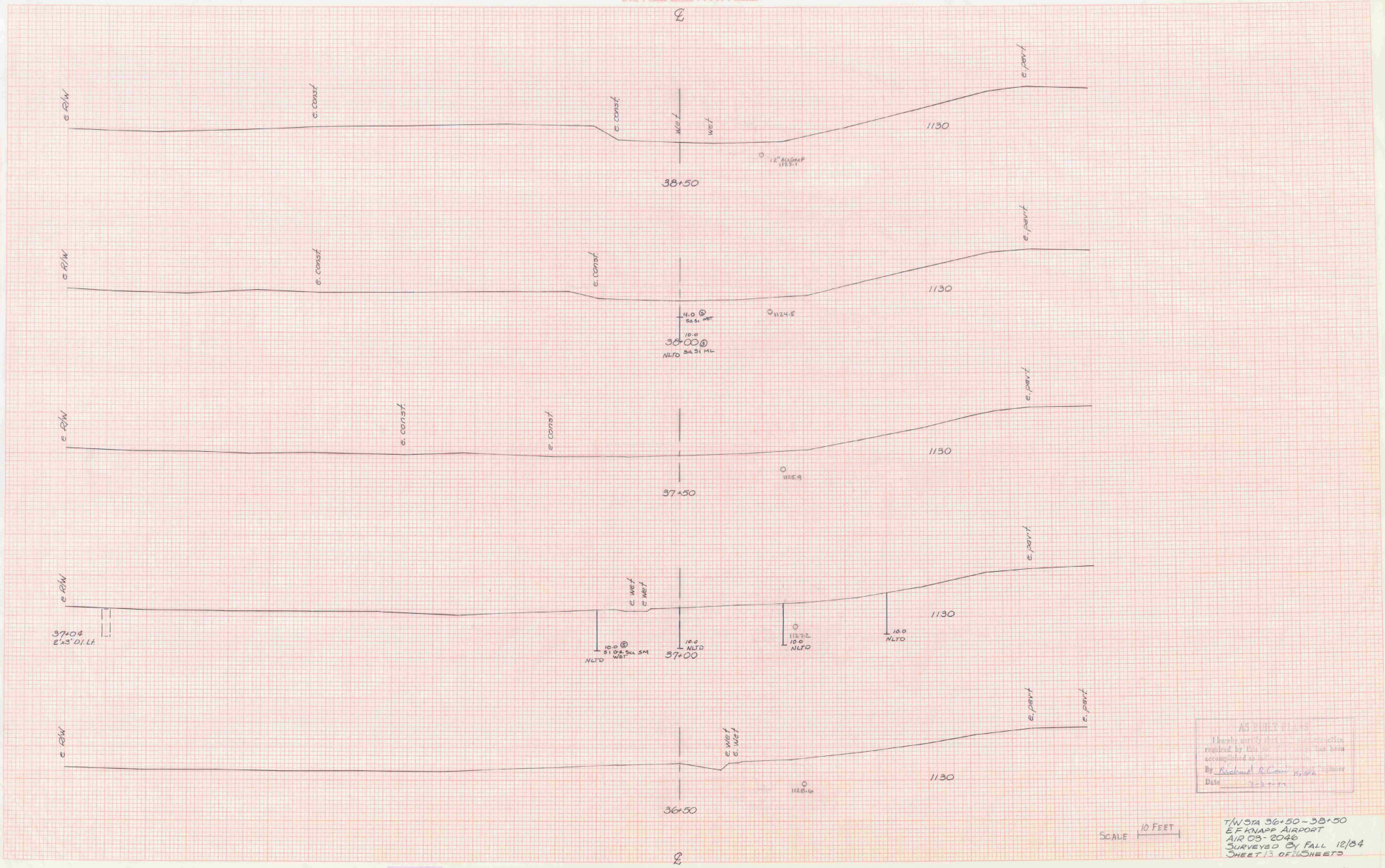
By Richard B. Crews for others

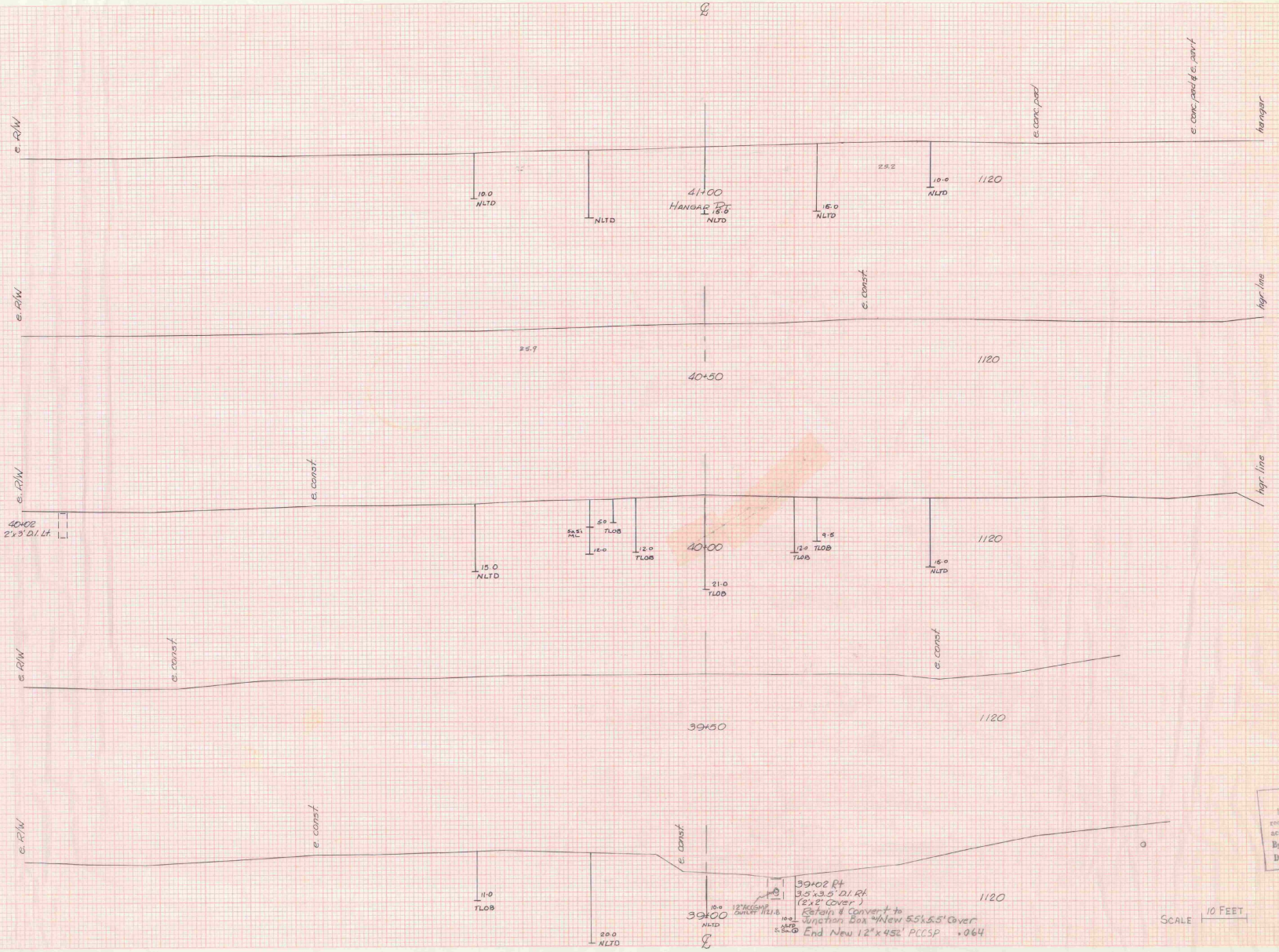
Date 7-24-87

T/W Sta 29+50 - 31+50
E.F. Knapp Airport
AIR 03-2046
Surveyed By Fall 12/84
Sheet 10 of 26 Sheets


℄
e. RW
34+04
DI. Lt
33+89
2'x2' D.I.
Inv. 32.2
Outlet 31.7
10.0
NLTD
34+00
5.5
6a 6:3a.SM
15.0
Ba3:SM
NLTD
15.0
NLTD
1134.35
10.0
NLTD
1130
e. pavt.
paved
e. RW
1134.75
1130
33+50
e. RW
e. pavt.
6.0
SA5:1 ML
TLOB
10.0
NLTD
33+00
33+05.5
2'x3' D.I.
Remove
10.0
NLTD
1135.13
10.0
NLTD
1130
32+50 Rt - 34+50 Rt
New 12" x 200' PCCSP .064
e. RW
e. ditch
ditch
ditch
ditch
e. ditch
LID Inv. 1136.00
12" Inv. 1135.50
1130
32+50
e. RW
1140
10.0
NLTD
32+00
10.0
NLTD
7.0
6a 5a 2a: SM
10.0
6a3:ML
1136.20
10.0
NLTD
30+03 Rt - 32+50 Rt
New 8" x 246' Underdrain Carrier Pipe
SCALE 10 FEET
AS-BUILT PLANS
I hereby certify ... required by this ... has been accomplished as ...
By Richard P. Cook ... ENGINEER
Date 7-29-92
T/W 3TA 32+00 - 34+00
E F HNAPP AIRPORT
AIR 03-2046
SURVEYED BY FALL 12/84
SHEET 11 OF 216 SHEETS


℄
e R/W
e T/W
Ditch
e pavt
pavt
0 1130.0
1130
36+00
e R/W
e pavt
pavt
1131.3
1130
35+50
e R/W
0 1132.0
1130
35+25
Paved Taxiway
e R/W
paved
e pavt
pavt
paved
0 1132.7
1130
35+00
34+50 Rt.
Begin New 12"x 452' PCCSP .064
e R/W
e Approach
e pavt
paved
outlet 34.0
1130
34+50
32+50 Rt - 34+50 Rt.
New 12" x 200' PCCSP .064
SCALE 10 FEET
T/W Sta 34+50 - 36+00
E F Knapp Airport
AIR 03-2046
Surveyed By Fall 12/84
Sheet 12 of 26 Sheets


℄
℄ pvmt.
e RW
e. const.
e. const.
W.E.T.
W.E.T.
1130
12" ALUMINAP 1123.1
38+50
℄ pvmt.
e RW
e. const.
e. const.
1130
4.0 SA 51 WET
1124.5
10.0 NLTD SA 51 ML
38+00
℄ pvmt.
e RW
e. const.
e. const.
1130
1125.9
37+50
℄ pvmt.
e RW
E. WET.
E. WET.
1130
37+04 E 43.01 Lt.
10.0 NLTD SA 51 WET
10.0 NLTD
37+00
113.72
10.0 NLTD
10.0 NLTD
℄ pvmt.
e RW
E. WET.
E. WET.
1130
1128.16
36+50
℄
SCALE 10 FEET
T/N STA 36+50 - 38+50
EFKNAPP AIRPORT
AIR 03-2046
SURVEYED BY FALL 12/84
SHEET 13 OF 26 SHEETS


℄
e. R/W
10.0 NLTD
NLTD
41+00
HANGAR ℄
18.0 NLTD
16.0 NLTD
10.0 NLTD
1120
e. conc. pad
e. conc. pad
hangar
e. R/W
e. const.
hgr. line
25.9
1120
40+50
e. R/W
e. const.
hgr. line
40+50
2'x3' D.I. Lt.
15.0 NLTD
5.0 TLOB
12.0
12.0 TLOB
40+00
21.0 TLOB
12.0 TLOB
9.5 TLOB
16.0 NLTD
1120
e. R/W
e. const.
e. const.
39+50
1120
e. R/W
e. const.
e. const.
11.0 TLOB
39+00
NLTD
20.0 NLTD
39+02 Rt
3.5'x3.5' D.I. Rt.
(2'x2' Cover)
Retain & Convert to
Junction Box "M"
New 5.5'x5.5' Cover
End New 12"x452' PCCSP .064
1120
SCALE 10 FEET
T/W STA 39+00 - 41+00
E F KNAPP AIRPORT
AIR 03-2046
SURVEYED BY FALL 12/84
SHEET 14 OF 26 SHEETS

STATE OF VERMONT
AGENCY OF TRANSPORTATION
RIGHT OF WAY PLANS
DETAIL SHEET

TABLE OF PROJECT PROPERTY ACQUISITION

PARCEL NO.	GRANTOR	SHEET NO.	BEGINNING STATION	ENDING STATION	TAKING	REM.	RIGHTS	TITLE TAKEN	DATE	TOWN OR CITY RECORDED	BK.	PG.	REMARKS
	SEE PREVIOUS SHEET FOR PARCEL 4B												
4C		8	32+95 RT. 32+94 RT. 32+95 RT. 33+80 RT. 34+80 RT. 34+98 RT.	35+60 RT. 35+40 RT. 36+16 RT. 35+20 RT. 34+98 RT.	0.10 A±		CONST. (T) 0.05A± REMOVE & RESET (T) SLOPE (T) 0.02A± DITCH & DRAINAGE (P) CULVERT (P)						2000 S.F.± STOCKADE FENCE 1010 S.F.±
4D		6, 8	19+20 RT. 21+03 RT.	24+91 LT. 22+50 RT.	2.275A±		ALL R. T. & I. SLOPE (T) 0.01A±						HIGHWAY EASEMENT US7 640 S.F.±
4E		8	24+25 RT. 24+92 RT. 25+25 RT. 28+50 RT.	36+16 RT. 26+30 RT. 25+78 RT.	2.015A±		ALL R. T. & I. CONST. (T) 0.03A± SLOPE (T) 0.01A± DITCH (P)						HIGHWAY EASEMENT US 7 2415 S.F. 1150 S.F.
5A	STATE OF VERMONT - LESSOR VERMONT RAILWAY, INC. - LESSEE	6, 8	23+17 RT. 25+30 RT. 27+89 LT. 28+50 LT. 31+92 LT. 32+00 LT. 32+44 LT.	29+00 LT. 35+00 LT. 28+05 LT.			CROSSING EASEMENT (P) SLOPE (P) 0.31A± CUL., DIT. & DR. (P) CUL., DIT. & DR. (P) CUL., DIT. & DR. (P) CUL., DIT. & DR. (P) DRIVE (T)						12' GRAVEL M.P. 0488
5B		8	32+45 LT. 34+50 LT.	36+16 RT. 34+57 LT.	0.19A±		ALL R. T. & I. CUL., DIT. & DR. (P)						HIGHWAY EASEMENT US 7
6A	TOWN OF WALLINGFORD	7	T.H. 13 0+95 CL.	T.H. 13 4+00 CL.			APPROACH (T)						WALDO LANE
6B		8	32+77 RT.				APPROACH (T)						T.H. 68
7	CENTRAL VERMONT PUBLIC SERVICE CORP.												UTILITY
8	G. T. E. OF VERMONT												UTILITY
9	NEW ENGLAND TELEPHONE COMPANY												UTILITY
10	ADELPHIA CABLE OF RUTLAND												UTILITY
	MAINTENANCE AGREEMENT NO. 1	6, 7	T.H. 13 0+12 CL.	T.H. 13 1+50 CL.									138'

REVISION NO.	SHEET	DESCRIPTION OF REVISION	DATE	MADE BY	APPROVED BY
13	8	PARCEL NO. 5 STATE OF VERMONT. CHANGE OFFSET DISTANCES ON PARCEL 5B AS FOLLOWS: 36+16 28' LT. AND 36+16 24' LT. PER C.O. 8467.	12-22-93	M.J.R.	L.W.B.
	5	PARCEL NO. 4 BOYLAN. ADD RIGHT TO REMOVE & RESET (T), 'STOCKADE FENCE' FROM STA. 32+95 RT. ~ 36+16 RT. PER C.O. 8459.			

0137013 200 1805 84E036

ACCT.prop
/prop/84e036/re036d.dgn
DATE PLOTTED 22-DEC-1993
84e036d2.1

DR.(P)- DRAINAGE RIGHT
DIT.(P)- DITCHING RIGHT
CH.(P)- CHANNEL RT.
DRIVE (T)- DRIVE RIGHT
CUL.(P)- CULVERT RIGHT
[W]- WATER SOURCES

PRESENT R.O.W.
TAKING WITHOUT ACCESS
TAKING WITHOUT ACCESS ALONG PROPERTY LINE
TAKING WITH ACCESS
(P) PERMANENT EASEMENT
(T) TEMPORARY EASEMENT

LEGEND
CZ (P) CLEAR ZONE
CONST. (T) CONSTRUCTION EASEMENT
SR SR SLOPE RIGHTS
P PROPERTY LINE
L TOP OF CUT
TOE OF SLOPE

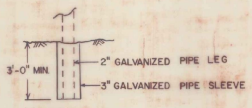
REVISED 12-22-93

APPROVED: LAWRENCE BLISS, L.S. DATE: 02-25-93
AGENT D, PLANS & TITLES

R. O. W. PLANS
WALLINGFORD
BRS 0137(13)
SHEET 5 OF 9

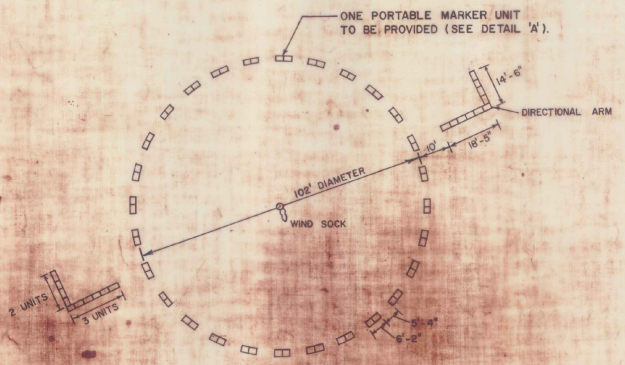
NOTES

1. THE LOCATION OF THE PORTABLE MARKER UNIT SHALL BE AS ORDERED BY THE ENGINEER.
2. DIRECTIONAL ARMS ARE INSTALLED ONLY ON AIRPORTS WITH A NON-STANDARD TRAFFIC PATTERN (RIGHT-HAND PATTERN). WHEN INSTALLED, DIRECTIONAL ARMS WILL BE MAGNETICALLY ORIENTED TO THE RUNWAY AND WILL SHOW TRAFFIC PATTERN ON EACH RUNWAY.



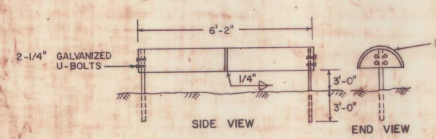
LEG DETAIL

DETAIL 'A'



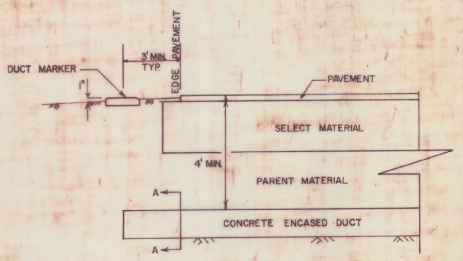
SEGMENTED CIRCLE LAYOUT

WITH DIRECTIONAL ARMS



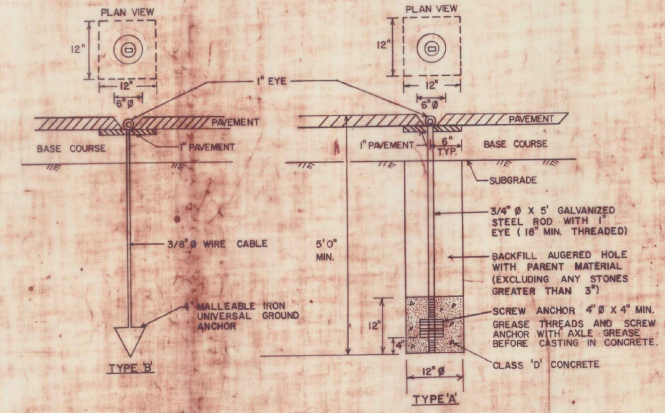
PORTABLE UNIT HAS LEGS OF 2" Ø GALVANIZED PIPE. STATIONARY UNITS HAVE LEGS OF 2" Ø GALVANIZED PIPE OR 1-1/2" X 3/8" L (GALV.).

SEGMENTED CIRCLE MARKER UNIT

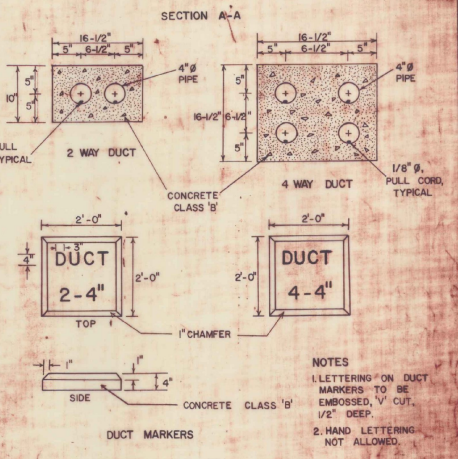


AIRPORT UNDERGROUND ELECTRICAL DUCT

(IN EARTH)



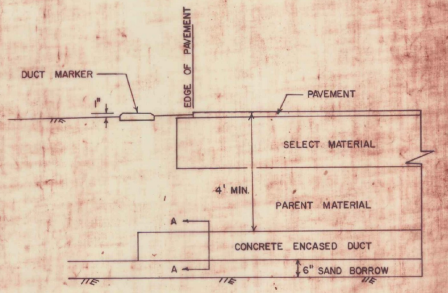
AIRPLANE TIE DOWN ANCHOR



DUCT MARKERS

NOTES

1. LETTERING ON DUCT MARKERS TO BE EMBOSSED, 'V' CUT, 1/2" DEEP.
2. HAND LETTERING NOT ALLOWED.



AIRPORT UNDERGROUND ELECTRICAL DUCT

(IN ROCK)

REVISIONS AND CORRECTIONS

APPROVED: DEC. 15, 1981 DATE

DIR. OF ENGINEERING AND CONSTRUCTION

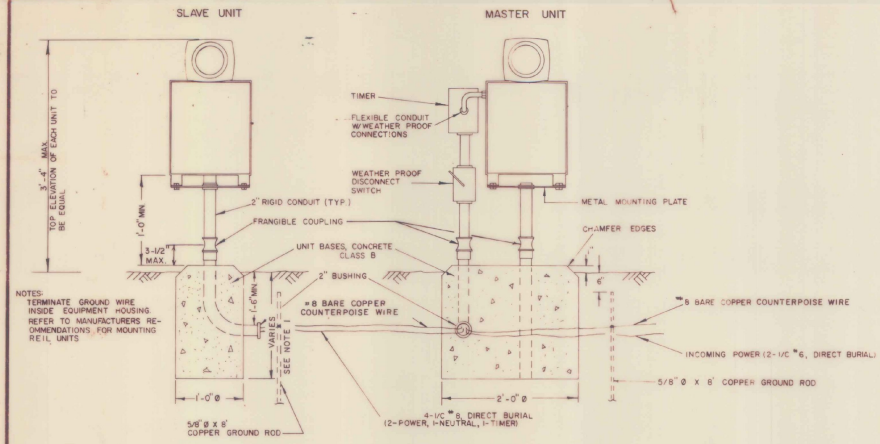
CHIEF OF DESIGN

SURVEY AND PLANS ENGINEER

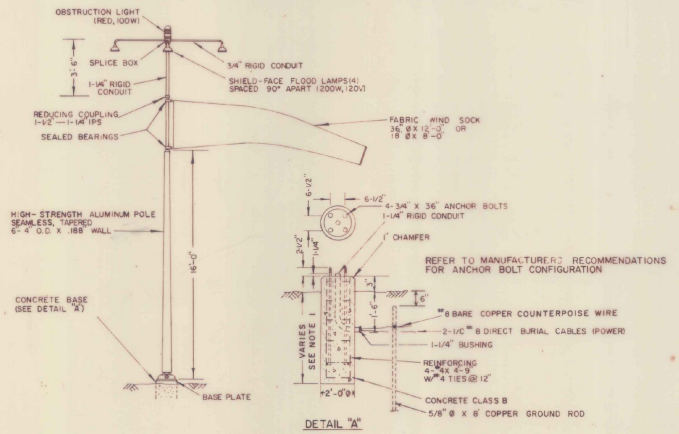
SEGMENTED CIRCLE
DIRECTIONAL ARMS
AIRPLANE TIE DOWN ANCHORS
AIRPORT UNDERGROUND ELECTRICAL DUCT

VERMONT AGENCY OF TRANSPORTATION

STANDARD AP-3



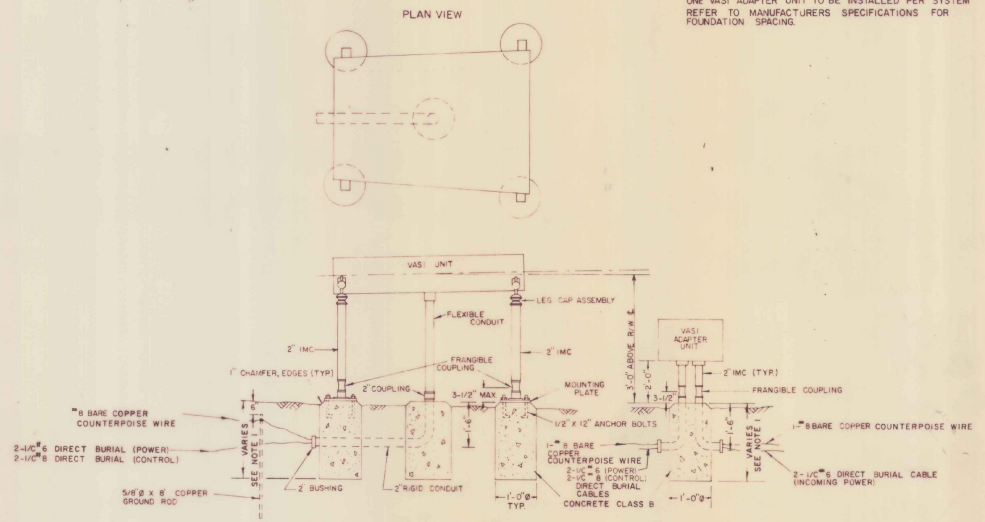
RUNWAY END IDENTIFIER LIGHTS (REILS) L-849



EIGHT FOOT OR TWELVE FOOT ILLUMINATED WIND CONE L-107

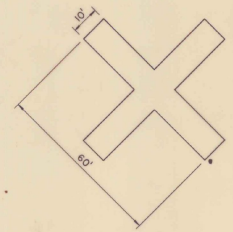
VASI NOTES

VASI SYSTEM TO INCLUDE 2 OR 4 UNITS SEE PLAN-LAYOUT SHEET FOR SYSTEM TO BE INSTALLED
ONE VASI ADAPTER UNIT TO BE INSTALLED PER SYSTEM
REFER TO MANUFACTURERS SPECIFICATIONS FOR FOUNDATION SPACING.



VISUAL APPROACH SLOPE INDICATOR (VASI) L-851

NOTES:
1. ALL FOUNDATIONS SHOULD EXTEND ONE (1) FOOT BELOW AVERAGE FROST PENETRATION.
2. TERMINATE COUNTERPOISE WIRES INSIDE EQUIPMENT HOUSING.



CLOSED RUNWAY MARKER

CLOSED RUNWAY MARKER NOTES:

1. MARKERS TO BE YELLOW PLYWOOD OR SNOW FENCE.
2. MARKERS TO BE SUBSIDIARY TO OTHER PAY ITEMS.
3. MARKERS TO BE PLACED OVER RUNWAY NUMERALS OR OFF RUNWAY ENDS AS APPLICABLE.
4. MARKERS TO BE ANCHORED TO THE SATISFACTION OF THE ENGINEER.

REVISIONS AND CORRECTIONS

12/1/82 ADDED NOTE 1, OTHER MINOR REVISIONS.

11/30/83 ADDED CLOSED RUNWAY MARKER

APPROVED: DEC. 15, 1981 DATE

S. J. Gage
DIR. OF ENGINEERING AND CONSTRUCTION

CHIEF OF DESIGN

SURVEY AND PLANS ENGINEER

VISUAL APPROACH AIDS
CLOSED RUNWAY MARKER

VERMONT AGENCY OF TRANSPORTATION

STANDARD AP-4

SHEET 16 OF 26 SHEETS

D—8

STA	DIST	AREA	CY VOL
0+75	B/H	145	
	25		98.6
1+00	50	68	457
1+50	50	3	23.1
2+00	50	22	114.8
2+50	50	102	439.8
3+00	50	373	1311.1
3+50	B/CK	1043	
3+50	AHead	1214	
	50		2619.4
4+00	50	1535	
	50		2888.0
4+50	50	1584	
	50		3001.9
5+00	50	1628	
	50		3134.3
5+50	50	1707	
	56		3529.4
6+06	B/H	2128	

Comp by RMA 5-7-91

17266.1 Cy's 0+75 = 6+06 75.31

2 of 3 Sheets

Grade 1' beyond pave. (-2%)

11+18.66

Ledge (Butt)

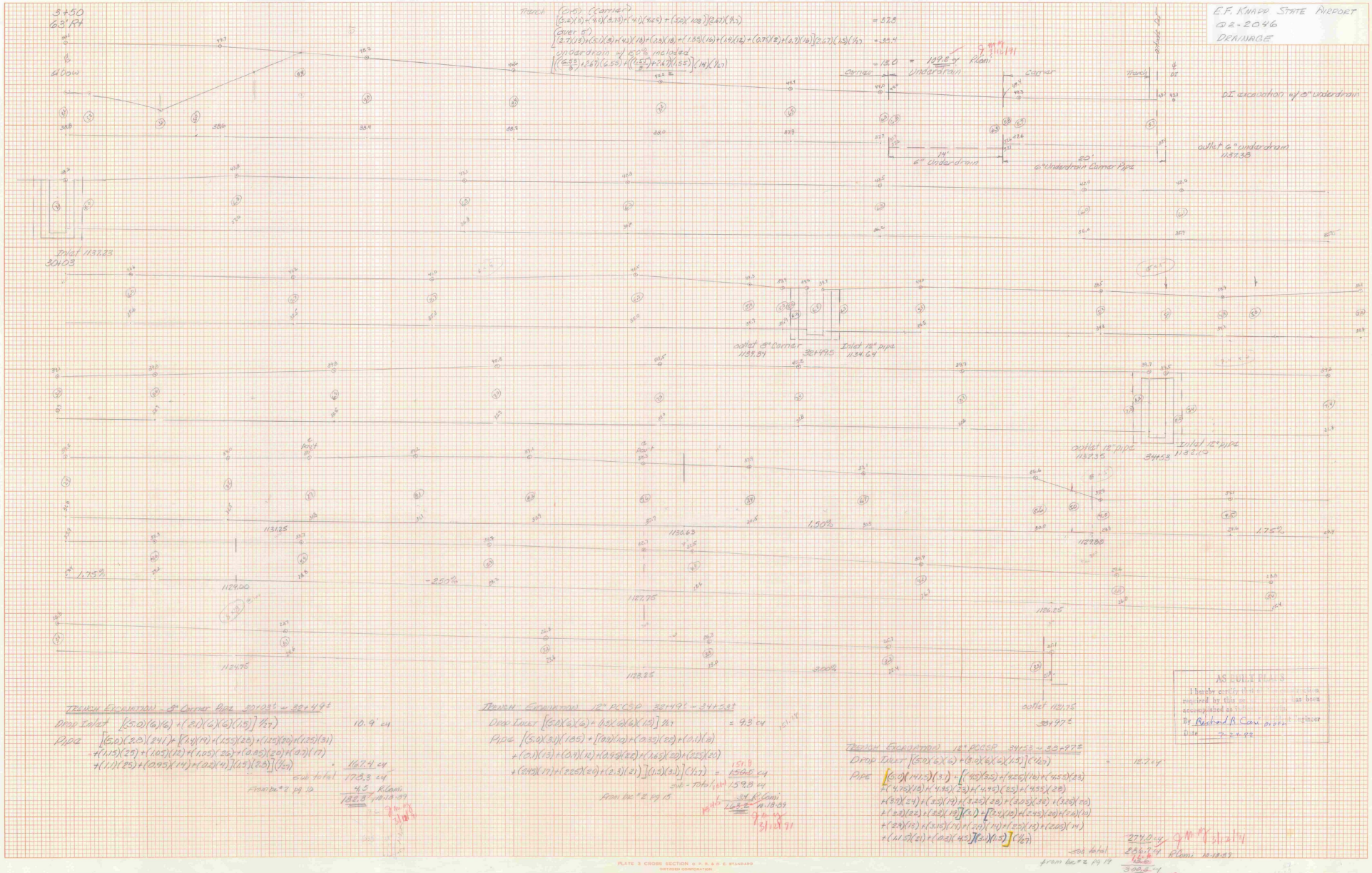
Sections to this left use Ar 0 as Baseline see Detail pg 52

11+50

Ledge

(14.5)(8.3)+(.5)(8.3)(10.3)+(.5)(10.3)(13.3)+(.5)(13.3)(13.3)+(.5)(13.3)(13.3)+(.5)(13

E.F. KNAPP STATE AIRPORT
02-2046
DRAINAGE


3+50
63' Rt
6 flow
Inlet 1132.23
30.08
Trench (Corner)
Trench
Corner
Corner
14'
6" Underdrain
20'
6" Underdrain Corner Pipe
DI excavation of 6" underdrain
outlet 6" underdrain
1137.38
outlet 8" Corner
1139.51
Inlet 12" pipe
1134.64
outlet 12" pipe
1132.35
Inlet 12" pipe
1132.10
1.75%
-2.50%
1.50%
1.75%
1124.00
1124.75
1123.25
1130.63
1127.88
1106.25
1137.75
1137.97
1137.25
1137.25
1137.25

1990

Berlin (E.F. Knapp Airport

Air 03- 2046

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