1997 CLARENDON (RUTLAND ST. AIR) AIR 04-3111 C/2 90H106

STATE OF VERMONT
AGENCY OF TRANSPORTATION

PROPOSED IMPROVEMENTS
RUTLAND STATE AIRPORT
CLARENDON, VERMONT
AIP NO. 3-50-0015-11
E.A. 043111

TO INCLUDE: REHABILITATE, LIGHT & MARK RUNWAY 1-19 (100'x5000') & RELOCATE LOCALIZER AND SHELTER

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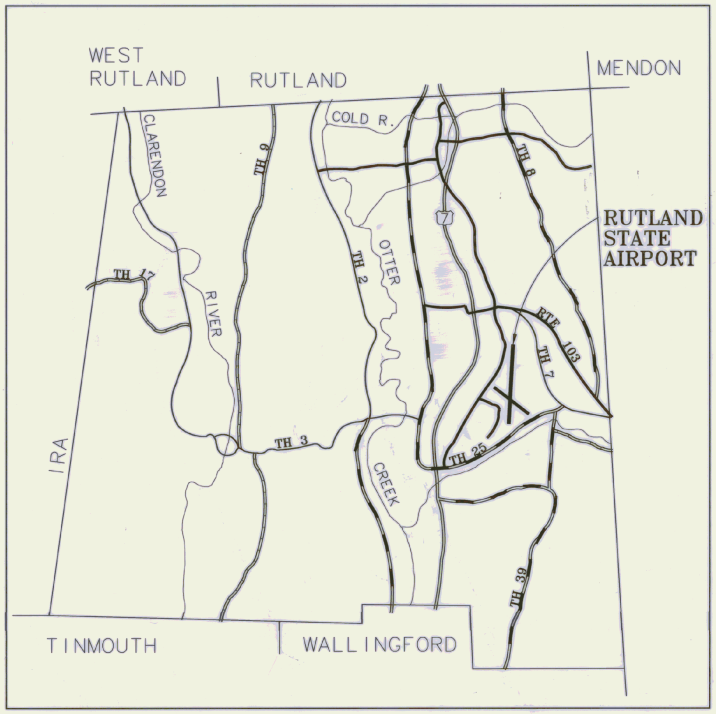
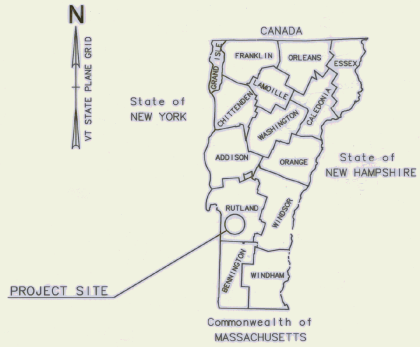


LOCATION MAP

APPROXIMATE SCALE : 1" = 1 MILE



A.A.I.A. OF 1982 SECTION 509(d) ASSURANCES

IN COMPLIANCE WITH THE AIRPORT AND AIRWAYS IMPROVEMENT ACT OF 1982, SECTION 509 (d) AND THE SPONSOR'S CERTIFICATION, DATED _____, THESE PLANS AND SPECIFICATIONS HAVE BEEN PREPARED IN ACCORDANCE WITH CURRENT FAA STANDARDS IDENTIFIED IN F.A.R. PART 152. ANY DEVIATION FROM THE FAA STANDARD WERE APPROVED IN A LETTER BY THE FAA, DATED _____, AND ARE DISCUSSED IN THE ENGINEERING REPORT ACCOMPANYING THESE PLANS.

DESIGN ENGINEER — 5/5/97 DATE

AS BUILT PLANS
I hereby certify that all the construction required by this set of drawings has been accomplished as indicated hereon.
By [signature] Resident Engineer
Date 12/31/98

URS Greiner, Inc.

STATE OF VERMONT
APPROVED _____ DATE 5-8-97
DIRECTOR OF RAIL, AIR, & PUBLIC TRANSPORTATION

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
APPROVED _____ DATE _____
CHIEF, AIRPORT DIVISION

QUANTITY SHEET

SUMMARY OF ESTIMATED QUANTITIES				AB
QUANTITIES GRAND TOTAL	UNIT	ITEMS	ITEM NO.	FINALS ROUNDING
12	EA	CLEARING – LARGE TREES	201.16	5
112,000	CY	COMMON EXCAVATION	203.15	
250	CY	SOLID ROCK EXCAVATION	203.16	5424
23,000	CY	GRANULAR BORROW	203.32	27,724
23,000	SY	FINE GRADE	203.40	28,115
7,000	CY	TRENCH EXCAVATION OF EARTH	204.20	
100	CY	TRENCH EXCAVATION OF ROCK	204.21	0
4,000	SY	COLD PLANING	210.10	2358
350	CY	SUBBASE OF GRAVEL, COURSE GRADED	301.25	0
70	CY	SUBBASE OF GRAVEL, FINE GRADED	301.26	0
180	TON	BITUMINOUS CONCRETE PAVEMENT	406.25	1093.76
13,000	TON	BIT. CONCRETE PAVEMENT (P-401) (PG58-34)	406.25 MOD. 1	13,139.64
500	LF	JOINT SEALER, HOT POURED	524.11	533
8,500	LF	CRACK REPAIR, TYPE I (P605)	524.11 MOD. 1	9124
7,000	LF	CRACK REPAIR, TYPE II (P605)	524.11 MOD. 2	11,965
2,000	LF	CRACK REPAIR, TYPE III (P605)	524.11 MOD. 3	1455
1	EA	RELOCATE LOCALIZER	529.20 MOD.	1
1,300	LF	15" CSP, 0.079"	601.0011	
675	LF	15" RCP, CLASS IV	601.0811	291
5	EA	15" CSP, END SECTION	601.6010	5EA
1	EA	15" RCP, END SECTION	601.6810	0
9	EA	CONCRETE DI/CB W/ CAST IRON FRAME & GRATE	604.10	
10	EA	CHANGE ELEVATION OF D.I./C.B.	604.40	11
9,200	LF	6" UNDERDRAIN	605.10	7367
500	LF	6" UNDERDRAIN CARRIER PIPE	605.20	889
38	EA	UNDERDRAIN FLUSHING BASINS	605.95	36
24	HOUR	ALL PURPOSE EXCAVATOR RENTAL, TYPE I	608.25	
100	MGAL	DUST CONTROL WITH WATER	609.10	465.8
40	CY	STONE FILL, TYPE II	613.11	
1,150	LF	3" PVC SEWER PIPE	628.35	932
1	LS	TRANSFER TO NEW SYSTEM – SANTARY SEWER	628.42	1
1	LS	FIELD OFFICE – ENGINEERS	631.10	1
1	LS	MOBILIZATION	635.10	1
56,000	LF	6" WHITE LINE (P620)	646.20 MOD. 1	37,905
3,600	LF	6" YELLOW LINE (P620)	646.21 MOD. 1	4096
2	EA	SYMBOL (1) (P620)	646.30 MOD. 1	2
1	EA	SYMBOL (9) (P620)	646.30 MOD. 2	1
24,000	LF	6" TEMPORARY WHITE LINE (P620)	646.60 MOD. 1	33,576
3,000	LF	6" TEMPORARY YELLOW LINE (P620)	646.61 MOD. 1	1050
4	EA	TEMPORARY SYMBOL (1) (P620)	646.70 MOD. 1	4
2	EA	TEMPORARY SYMBOL (9) (P620)	646.70 MOD. 2	3
2,000	SF	REMOVAL OF EXIST. PAV'T MARKING (P621)	646.82	0
20,000	SY	GEOTEXTILE FOR ROADBED SEPARATOR	649.11	29,032
10,000	SY	GEOTEXTILE FOR UNDERDRAIN TRENCH	649.41	8,516
600	SY	GEOTEXTILE FOR SILT FENCE	649.51	678
2,900	LB	SEED	651.15	4235
24,000	LB	FERTILIZER	651.18	23,800
95	TON	AGRICULTURAL LIMESTONE	651.20	1906
500	EA	HAY BALES FOR EROSION CONTROL	651.26	1 39
95	TON	MULCH	651.25	108.44
12,600	CY	TOPSOIL (2")	651.35	11,822
500	SY	EROSION MATTING	654.10	8402
1	EA	RELOCATE ODALS #1R &#1L (L-125)	678.16 MOD. 1	1
1	EA	RELOCATE ODALS UNIT #3 (L-102)	678.17 MOD. 1	1
1	EA	RELOCATE ODALS UNIT #20 (L-102)	678.17 MOD. 2	
23,500	LF	2" DIA. PVC ELECTRICAL CONDUIT (L-110)	678.21 MOD. 1	17,907
1	EA	TOWER FOR ODALS UNIT #3 (L-103)	679.45 MOD. 1	1
1	EA	TOWER FOR ODALS UNIT #20 (L-103)	679.45 MOD. 2	
6,100	CY	CRUSHED AGGREGATE BASE COURSE (P-209)	854.04	6889
16,000	LF	CABLE TRENCH (L-108)	864.04	13,907
29,000	LF	1/C #8, 600 OR 5000V, L-824C (L-108)	864.05	24,200
7,000	LF	1/C #4, 600V, L-824C (L-108)	864.05 MOD. 2	8410
2,500	LF	6 PAIR #19 CONTROL CABLE (L-108)	864.05 MOD. 3	2300
16,500	LF	#8 OR #6 COUNTERPOISE (L-108)	864.06 MOD. 1	13,677
1	LS	INSTALLATION OF VAULT EQUIPMENT (L-109)	864.07	1
180	LF	4 WAY x 4" DIA. UG ELECTRICAL DUCT (L-110)	864.09	175
69	EA	MIRLS, BASE MOUNTED (L-125)	864.10	66
3	EA	MIRLS, BASE MOUNTED, IN PAV'T (L-125)	864.10 MOD. 1	4
13	EA	MIRLS, BASE MOUNTED (L-125)	864.11	16
1	EA	RELOCATE VASI-4 (L-125)	864.12 MOD. 1	1
1	EA	TEMPORARY THRESHOLD (L-125 & P-620)	864.15 MOD. 1	0
20	EA	RELOCATE AIRFIELD SIGNS (L-125)	864.14 MOD. 1	15
1	LS	TESTING EQUIPMENT – CONCRETE	631.16	1
1	LS	TESTING EQUIPMENT – BITUMINOUS	631.17	1
1	LS	FIELD OFFICE – TELEPHONE (N.A.B.I.)	631.25	

EARTH WORK SUMMARY			
LOCATION	TOTAL EXCAVATION	TOTAL EMBANKMENT	
TAXIWAY "D"	3,950 cy	5,572 cy	
RUNWAY 1-19			
-STA. 98+50 – 111+50	18,736		
-STA. 111+50 – 157+40	183,551	87,265	
SUBTOTALS	106,237	92,837	
RNDG. (4%)	5,763	13,762	FACTORED FILL (15%)
TOTALS	112,000	106,762	
	cy	cy	

AB

EXTRA WORK ORDER - DESCRIPTION	EST QUANTITY	FINAL QUANTITY
900.01 EWO#1 ALSO RADIOS	3 EA	3 EA
900.02 EWO#2 QUARTZ HANDHOLE	1 EA	4 EA
900.03 EWO#3 6 VOLT BATTERIES	720 EA	284 EA
900.11 AUTHORIZED WORK	100 MAN HRS	365 MAN HRS

AIP 3-50-0015-11

RACHEL L. TURNOCK
No. 5951
REGISTERED PROFESSIONAL ENGINEER
STATE OF VERMONT

REV.	DATE	DESCRIPTION
1	12/97	AS BUILT

File No. I:\F40\12\DWG\S-05

Job No. F40122.01

RUTLAND STATE AIRPORT
CLARENDON, VERMONT

QUANITIY SUMMARY

URS Greiner, Inc.
3 MARCUS BOULEVARD
ALBANY, NEW YORK

Designed by: Date
G D'AMICO 2/97
Drawn by: 3/97
M MCCALLA
Checked by: 5/5/97
G D'AMICO
Approved by: 5/5/97
M CHURCHILL

Scale: HOR. – NONE
VERT. – NONE

Date: 5/5/97

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Sheet No
2

QUANTITY SHEET

SUMMARY OF ESTIMATED QUANTITIES

QUANTITIES GRAND TOTAL	UNIT	ITEMS	ITEM NO.	ROUNDING
12	EA	CLEARING – LARGE TREES	201.16	
112,000	CY	COMMON EXCAVATION	203.15	
250	CY	SOLID ROCK EXCAVATION	203.16	
23,000	CY	GRANULAR BORROW	203.32	
23,000	SY	FINE GRADE	203.40	
7,000	CY	TRENCH EXCAVATION OF EARTH	204.20	
100	CY	TRENCH EXCAVATION OF ROCK	204.21	
4,000	SY	COLD PLANING	210.10	
350	CY	SUBBASE OF GRAVEL, COURSE GRADED	301.25	
70	CY	SUBBASE OF GRAVEL, FINE GRADED	301.26	
180	TON	BITUMINOUS CONCRETE PAVEMENT	406.25	
13,000	TON	BIT. CONCRETE PAVEMENT (P-401) (PG58-34)	406.25 MOD. 1	
500	LF	JOINT SEALER, HOT POURED	524.11	
8,500	LF	CRACK REPAIR, TYPE I (P605)	524.11 MOD. 1	
7,000	LF	CRACK REPAIR, TYPE II (P605)	524.11 MOD. 2	
2,000	LF	CRACK REPAIR, TYPE III (P605)	524.11 MOD. 3	
1	EA	RELOCATE LOCALIZER,	529.20 MOD.	
1,300	LF	15" CSP, 0.079"	601.0011	
675	LF	15" RCP, CLASS IV	601.0811	
5	EA	15" CSP, END SECTION	601.6010	
1	EA	15" RCP, END SECTION	601.6810	
9	EA	CONCRETE DI/CB W/ CAST IRON FRAME & GRATE	604.10	
10	EA	CHANGE ELEVATION OF D.I./C.B.	604.40	
9,200	LF	6" UNDERDRAIN	605.10	
500	LF	6" UNDERDRAIN CARRIER PIPE	605.20	
38	EA	UNDERDRAIN FLUSHING BASINS	605.95	
24	HOUR	ALL PURPOSE EXCAVATOR RENTAL, TYPE I	608.25	
100	MGAL	DUST CONTROL WITH WATER	609.10	
40	CY	STONE FILL, TYPE II	613.11	
1,150	LF	3" PVC SEWER PIPE	628.35	
1	LS	TRANSFER TO NEW SYSTEM – SANTARY SEWER	628.42	
1	LS	FIELD OFFICE – ENGINEERS	631.10	
1	LS	MOBILIZATION	635.10	
56,000	LF	6" WHITE LINE (P620)	646.20 MOD. 1	
3,600	LF	6" YELLOW LINE (P620)	646.21 MOD. 1	
2	EA	SYMBOL (1) (P620)	646.30 MOD. 1	
1	EA	SYMBOL (9) (P620)	646.30 MOD. 2	
24,000	LF	6" TEMPORARY WHITE LINE (P620)	646.60 MOD. 1	
3,000	LF	6" TEMPORARY YELLOW LINE (P620)	646.61 MOD. 1	
4	EA	TEMPORARY SYMBOL (1) (P620)	646.70 MOD. 1	
2	EA	TEMPORARY SYMBOL (9) (P620)	646.70 MOD. 2	
2,000	SF	REMOVAL OF EXIST. PAV'T MARKING (P621)	646.82	
20,000	SY	GEOTEXTILE FOR ROADBED SEPARATOR	649.11	
10,000	SY	GEOTEXTILE FOR UNDERDRAIN TRENCH	649.41	
600	SY	GEOTEXTILE FOR SILT FENCE	649.51	
2,900	LB	SEED	651.15	
24,000	LB	FERTILIZER	651.18	
95	TON	AGRICULTURAL LIMESTONE	651.20	
500	EA	HAY BALES FOR EROSION CONTROL	651.26	
95	TON	MULCH	651.25	
12,600	CY	TOPSOIL (2")	651.35	
500	SY	EROSION MATTING	654.10	
1	EA	RELOCATE ODALS #1R &#1L (L-125)	678.16 MOD. 1	
1	EA	RELOCATE ODALS UNIT #3 (L-102)	678.17 MOD. 1	
1	EA	RELOCATE ODALS UNIT #20 (L-102)	678.17 MOD. 2	
23,500	LF	2" DIA. PVC ELECTRICAL CONDUIT (L-110)	678.21 MOD. 1	
1	EA	TOWER FOR ODALS UNIT #3 (L-103)	679.45 MOD. 1	
1	EA	TOWER FOR ODALS UNIT #20 (L-103)	679.45 MOD. 2	
6,100	CY	CRUSHED AGGREGATE BASE COURSE (P-209)	854.04	
16,000	LF	CABLE TRENCH (L-108)	864.04	
29,000	LF	1/C #8, 600 OR 5000V, L-824C (L-108)	864.05	
7,000	LF	1/C #4, 600V, L-824C (L-108)	864.05 MOD. 2	
2,500	LF	6 PAIR #19 CONTROL CABLE (L-108)	864.05 MOD. 3	
16,500	LF	#8 OR #6 COUNTERPOISE (L-108)	864.06 MOD. 1	
1	LS	INSTALLATION OF VAULT EQUIPMENT (L-109)	864.07	
180	LF	4 WAY x 4" DIA. UG ELECTRICAL DUCT (L-110)	864.09	
69	EA	MIRLS, BASE MOUNTED (L-125)	864.10	
3	EA	MIRLS, BASE MOUNTED, IN PAV'T (L-125)	864.10 MOD. 1	
13	EA	MIRLS, BASE MOUNTED (L-125)	864.11	
1	EA	RELOCATE VASI-4 (L-125)	864.12 MOD. 1	
1	EA	TEMPORARY THRESHOLD (L-125 & P-620)	864.15 MOD. 1	
20	EA	RELOCATE AIRFIELD SIGNS (L-125)	864.19 MOD. 1	
1	LS	TESTING EQUIPMENT – CONCRETE	631.16	
1	LS	TESTING EQUIPMENT – BITUMINOUS	631.17	
1	LS	FIELD OFFICE – TELEPHONE (N.A.B.I.)	631.25	

EARTH WORK SUMMARY

LOCATION	TOTAL EXCAVATION	TOTAL EMBANKMENT	
TAXIWAY "D"	3,950 cy	5,572 cy	
RUNWAY 1-19			
-STA. 98+50 – 111+50	18,736		
-STA. 111+50 – 157+40	183,551	87,265	
SUBTOTALS	106,237	92,837	
RNDG. (4%)	5,763	13,762	FACTORED FILL (15%)
TOTALS	112,000	106,762	
	cy	cy	

AIP 3-50-0015-11

STATE OF VERMONT — DEPARTMENT OF TRANSPORTATION — No. 5951 — REGISTERED PROFESSIONAL ENGINEER

Sheet No. T-3

REV.	DATE	DESCRIPTION

Job No. F401212.01

File No. I:\Y401213\DW-QS

RUTLAND STATE AIRPORT
CLARENDON, VERMONT

QUANTITY SUMMARY

URS Greiner, Inc.
3 MARCUS BOULEVARD
ALBANY, NEW YORK

Designed by: G D'AMICO 2/97
Drawn by: M MCCALLA 3/97
Checked by: G D'AMICO 5/5/97
Approved by: M CHURCHILL 5/5/97

Scale: HOR. – NONE
VERT. – NONE

Date: 5/5/97

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Sheet No
2

DRAINAGE QUANTITY SHEET

DRAINAGE STRUCTURES							QUANTITIES				
STRUCTURE	LOCATION	TYPE	REMARKS	PROPOSED T.G. ELEV.	FLOW LINE (OUT)		CONCRETE C.Y.	STEEL LB.	ADJUST ELEV. EACH	TRENCH EXC. C.Y.	ROCK EXC. CY
M1	80'RT 142+00	C.I.P	TO BE REMOVED								3
D2	67'RT 139+57	PRECAST	TO BE REMOVED								3
D3	67'RT 137+20	PRECAST	TO BE REMOVED								3
M4	78'RT 137+20	BRICK	TO BE REMOVED								3
D5	67'RT 135+20	PRECAST	TO BE REMOVED								3
D6	67'RT 133+20	PRECAST	TO BE REMOVED								3
M7	78'RT 133+20	BRICK	TO BE REMOVED								3
D8	67'RT 131+22	PRECAST	TO BE REMOVED								3
D9	67'RT 129+21	PRECAST	TO BE REMOVED								3
M10	78'RT 129+21	BRICK	TO BE REMOVED								3
D11	67'RT 127+20	PRECAST	TO BE REMOVED								3
D12	67'RT 125+16	PRECAST	TO BE REMOVED								3
M13	78'RT 125+16	BRICK	TO BE REMOVED								3
D14	67'RT 123+19	PRECAST	TO BE REMOVED								3
D15	67'RT 121+21	PRECAST	TO BE REMOVED								3
M16	78'RT 121+21	BRICK	TO BE REMOVED								3
D17	67'RT 119+21	PRECAST	TO BE REMOVED								3
D18	67'RT 117+21	PRECAST	TO BE REMOVED								3
M19	78'RT 117+21	BRICK	TO BE REMOVED								3
D20	67'RT 115+21	PRECAST	TO BE REMOVED								3
D21	67'RT 113+20	PRECAST	TO BE REMOVED								3
M22	78'RT 113+20	BRICK	TO BE REMOVED								3
M23	78'RT 112+08	BRICK	TO BE REMOVED								3
D24	74'RT 111+89	PRECAST	TO BE REMOVED								3
D25	67'RT 109+72	PRECAST	TO BE REMOVED								3
M26	78'RT 109+72	BRICK	TO BE REMOVED								3
D27	67'RT 107+72	PRECAST	TO BE REMOVED								3
D28	67'RT 105+73	PRECAST	TO BE REMOVED								3
M29	78'RT 105+73	BRICK	TO BE REMOVED								3
D30	67'RT 103+74	PRECAST	TO BE REMOVED								3
M31	78'RT 101+94	PRECAST	TO BE REMOVED								3
D32	67'RT 100+72	PRECAST	TO BE REMOVED								3
M32	78'RT 100+72	PRECAST	ADJUST ELEV OF F&G	779.27					1		
M33	78'LT 100+74	C.I.P.	ADJUST ELEV OF F&G	778.88					1		
M33A	272'LT 100+74	C.I.P.	TO BE REMOVED								3
D33	67'LT 100+74	C.I.P.	TO BE REMOVED								3
D34	67'LT 103+73	PRECAST	TO BE REMOVED								3
M35	80'LT 101+94	C.I.P.	TO BE REMOVED								3
D36	67'LT 105+73	PRECAST	TO BE REMOVED								3
M38	78'LT 105+73	BRICK	TO BE REMOVED								3
D37	67'LT 107+72	PRECAST	TO BE REMOVED								3
D39	67'LT 109+72	PRECAST	TO BE REMOVED								3
M41	78'LT 109+72	BRICK	TO BE REMOVED								3
D40	82'LT 111+01	PRECAST	TO BE REMOVED								3
M42	92'LT 111+01	BRICK	TO BE REMOVED								3
D43	67'LT 113+20	PRECAST	TO BE REMOVED								3
M44	78'LT 113+20	BRICK	TO BE REMOVED								3
D45	67'LT 115+21	PRECAST	TO BE REMOVED								3
M46	78'LT 115+21	BRICK	TO BE REMOVED								3
D47	67'LT 117+20	PRECAST	TO BE REMOVED								3
D48	67'LT 119+20	PRECAST	TO BE REMOVED								3
M49	78'LF 119+20	BRICK	TO BE REMOVED								3
D50	67'LT 121+21	PRECAST	TO BE REMOVED								3
D51	67'LT 123+21	PRECAST	TO BE REMOVED								3
M52	78'LT 123+21	BRICK	TO BE REMOVED								3
D53	67'LT 125+20	PRECAST	TO BE REMOVED								3
D54	67'LT 127+21	PRECAST	TO BE REMOVED								3
M55	78'LT 127+21	BRICK	TO BE REMOVED								3
D56	67'LT 129+21	PRECAST	TO BE REMOVED								3
D57	67'LT 131+21	PRECAST	TO BE REMOVED								3
M58	78'LT 131+21	BBRICK	TO BE REMOVED								3
D59	67'LT 133+21	PRECAST	TO BE REMOVED								3
D60	67'LT 135+20	PRECAST	TO BE REMOVED								3
M61	78'LT 135+20	BRICK	TO BE REMOVED								3
D62	67'LT 137+21	PRECAST	TO BE REMOVED								3
D63	67'LT 139+55	PRECAST	TO BE REMOVED								3
M64	78'LT 139+55	C.I.P.	TO BE REMOVED								3
M65	78'LT 142+00	C.I.P.	TO BE REMOVED								3
D66	67'LT 142+00	C.I.P.	TO BE REMOVED								3
M67	78'LT 143+28	C.I.P.	ADJUST ELEV OF F&G	777.45					1		
D68	67'LT 143+30	C.I.P.	TO BE REMOVED								3
M69	77'LT 145+52	C.I.P.	ADJ. ELEV OF F&G	776.30					1		
D70	67'LT 145+53	C.I.P.	TO BE REMOVED								3
M71	78'LT 147+72	C.I.P.	ADJ. ELEV OF F&G	775.15					1		
D72	67'LT 147+72	C.I.P.	TO BE REMOVED								3
M73	78'LT 149+91	C.I.P.	ADJ. ELEV OF F&G	774.02					1		
D74	67'LT 149+91	C.I.P.	TO BE REMOVED								
M75	81'RT 149+91	C.I.P.	TO BE REMOVED								
D76	67'RT 149+90	C.I.P.	TO BE REMOVED								
M75B	81'RT 148+75	C.I.P.	ADJ. ELEV OF F&G	774.80					1		
D75C	55'LT 648+00	C.I.P.	ADJ. ELEV OF F&G	774.21	770.10(E)				1		
D75D	45'LT 644+00	C.I.P.	~~ADJ. ELEV OF F&G~~	773.18		REBUILT AS					
M77	81'RT 147+71	C.I.P.	ADJ. ELEV OF F&G	775.09	768.80				1		
D78	67'RT 147+71	C.I.P.	TO BE REMOVED								3
M79	80'RT 145+52	C.I.P.	ADJ ELEV OF F&G	776.26					1		
D80	67'RT 145+52	C.I.P.	TO BE REMOVED								3
M81	80'RT 143+25	C.I.P.	ADJ ELEV OF F&G	777.42					1		
D82	67'RT 143+25	C.I.P.	TO BE REMOVED								3
D83	67'RT 142+00	C.I.P.	TO BE REMOVED								3
DI 100	202'LT 116+50	C.I.P.	TYPE A – NEW	781.20	778.0		1.7	150		12	
~~DI 101~~	~~202'LT 100+74~~	~~C.I.P.~~	~~TYPE A – NEW~~	~~775.60~~	~~770.0~~	~~FIELD VERIFY~~	~~3.9~~	~~347~~		~~45~~	EXCESS
DI 102	202'RT 113+48	C.I.P.	TYPE A – NEW	780.88	777.8		1.9	158		14	
DI 103	80'LT 305+00	C.I.P.	TYPE A – NEW	780.40	775.8		2.6	231		26	
CB 104	SW CORNER APRON	C.I.P.	CUT INTO EXISTING	779.81(E)	773.50						
AS ~~D 750~~	~~401'LT 644+00~~	~~PRECAST~~	~~TO BUILT~~	773.18 ±							
DI 105	80'RT 155+98	C.I.P.	TYPE A – NEW	759.25	754.25		2.8	239		30	
DI 106	80'LT 155+98	C.I.P.	TYPE A – NEW	759.25	754.25		2.8	239		30	
CB 107	202'RT 121+00	C.I.P.	TYPE A – NEW	782.17	778.0		3.0	270		18	
CB 108	390'LT 123+35±	C.I.P.	TYPE A – NEW	782.50	776.55		3.5	308		45	
CB 109	597'RT 126+01±	C.I.P.	CUT INTO EXISTING	775.50 (E)	771.50						
CB 110	202'LT 143+28	C.I.P.	TYPE A – NEW	773.60	763.50	FIELD VERIFY	5.1	454		64	
											3
HEADWALL	300'LT 116+55±	C.I.P.	EXISTING ~~TO BE~~ REMOVE	–	–						
						TOTALS	27.3 CY	2398 LB	11 ~~10~~ EA.	274 CY	~~23~~ 33 CY

AIP 3-50-0015-11

STATE OF VERMONT — DANIEL C. KERR — No. 5951 — REGISTERED PROFESSIONAL ENGINEER

REV.	DATE	DESCRIPTION
1	12/97	AS BUILT

Job No. F401212.00 — File No. I:\F401212\DR-05

RUTLAND STATE AIRPORT
CLARENDON, VERMONT

DRAINAGE SUMMARY

URS Gochner, Inc.
3 MARCUS BOULEVARD
ALBANY, NEW YORK

Designed by: G D'AMICO	Date 2/97
Drawn by: M MCCALLA	3/97
Checked by: G D'AMICO	5/5/97
Approved by: M CHURCHILL	5/5/97
Scale:	HOR. – NONE VERT. – NONE
Date:	5/5/97
Sheet	3 Of 65
Sheet No	3A

DRAINAGE QUANTITY SHEET

CULVERTS AND STORM DRAINS

LOCATION BEGIN	LOCATION END	SIZE & TYPE	AB LENGTH	FLOW LINE @ INLET	FLOW LINE @ OUTLET	TRENCH EXCAVATION CY	REMARKS
DI 100	300'LT 116+55	15"ø CSP	~~100'~~ 96	778.00	777.50	45	15"ø MES W/ STONE FILL, TYPE II @ OUTLET
~~DI 101~~	~~430'LT 100+80~~	~~15"ø RCP~~	~~230'~~	~~777.01~~	~~764.20~~	~~100~~	~~15"ø ES W/ STONE FILL, TYPE II @ OUTLET~~
DI 102	DI 103	15"ø CSP	~~225'~~ 199	777.80	775.90	140	
DI 103	CB 104	15"ø RCP	~~295'~~ 291	775.80	774.00	220	
DI 105	150'RT 155+93	15"ø CSP	~~90'~~ 62'	755.80	728.0	35	15"ø MES W/ STONE FILL, TYPE II @ OUTLET
DI 106	168'LT 155+93	15"ø CSP	~~80'~~ 70	775.80	738.0	45	15"ø MES W/ STONE FILL, TYPE II @ OUTLET
CB 107	CB 108	15"ø CSP	~~340'~~ 168	778.0	774.6	230	
CB 108	CB 109	15"ø CSP	~~335'~~ 315	774.55	771.60	225	
202'LT 121+40	202'LT 121+88	15"ø CSP	48'	782.34	782.28	N.A.	15"ø MES @ INLET & OUTLET
CB105	CB 106	15"ø CSP	152'			1040 cy	SUBTOTAL

UNDERDRAIN

LOCATION			SIZE & TYPE	LENGTH*	FLOW LINE @ INLET	FLOW LINE @ OUTLET	TRENCH EXCAVATION CY	REMARKS
M32	78'RT	100+72				774.7		
			6"ø UD	220 LF			163	
FB1	55'RT	102+80			776.02			
			6"ø UD	250 LF			185	
FB2	55'RT	105+30			776.64			
			6"ø UD	250 LF			185	
FB3	55'RT	107+80			777.23			
			6"ø UD	175LF			130	
FB4	55'RT	109+55			777.94			
FB5	55'RT	112+86			778.68			
			6"ø UD	170 LF			126	
FB6	55'RT	114+60			779.12			
			6"ø UD	250 LF			185	
FB7	55'RT	117+10			779.54			
			6"ø UD	250 LF			185	
FB8	55'RT	119+60			780.06			
FB9	55'RT	121+00			781.34			
			6"ø UD	360 LF			266	
FB10	55'RT	124+60			780.67			
			6"ø UD	250 LF			50	
FB11	55'RT	127+10			780.24			
			6"ø UD	250 LF			50	
FB12	55'RT	129+60			779.80			
			6"ø UD	250 LF			50	
~~FB13~~	~~55'RT~~	~~132+10~~	DELETED		778.64			
			6"ø UD	250 LF			50	
FB14	55'RT	134+60			777.43			
			6"ø UD	250 LF			50	
FB15	55'RT	137+10			776.21			
			6"ø UD	250 LF			50	
FB16	55'RT	139+60			774.99			
			6"ø UD	250 LF			50	
FB17	55'RT	142+10			773.77			
			6"ø UD	250 LF			185	
FB18	55'RT	144+60			772.50			
			6"ø UD	250 LF			185	
FB19	55'RT	147+10			771.20			
			6"ø UD	175 LF			130	
M75B	81'RT	148+75			770.20			
	140'RT	150+00			771.3			CONNECT TO EXISTING PVC UNDERDRAIN
						2275 cy		SUBTOTAL

* See Plan Sheets For As Built INFO

* See Plan Sheets For As Built INFO

LOCATION			SIZE & TYPE	LENGTH*	FLOW LINE @ INLET	FLOW LINE @ OUTLET	TRENCH EXCAVATION CY	REMARKS
	150'RT	151+80	6"ø UD	150 LF			104	
						757.50		OUTLET TO DAYLIGHT, STONE FILL, TYPE II
FB20B	103'LT	~~103+47~~						@ OUTLET
M33	~~79'LT~~	100+74	6"ø VO			774.70		
FB20A	103'LT	~~104+50~~	6"ø UD	220 LF			163	
FB20	~~55'LT~~	~~102+80~~			776.02			
			6"ø UD	250 LF			185	
FB21	55'LT	105+30			776.64			
			6"ø UD	250 LF			185	
FB22	55'LT	107+80			777.23			
			6"ø UD	240 LF			177	
FB23	55'LT	110+20			778.09			
FB24	55'LT	112+66			779.10			
			6"ø UD	194 LF			144	
FB25	55'LT	114+60			779.00			
			6"ø UD	250 LF			185	
FB26	55'LT	117+10			779.54			
			6"ø UD	250 LF			185	
FB27	55'LT	119+60			780.06			
			6"ø UD	250 LF			185	
FB28	55'LT	122+10			780.55			
			6"ø UD	250 LF			185	
FB29	55'LT	124+60			780.86			
			6"ø UD	250 LF			50	
~~FB30~~	~~55'LT~~	~~127+10~~			780.63			
			6"ø UD	250 LF			50	
~~FB31~~	~~55'LT~~	~~129+60~~			779.81			
			6"ø UD	250 LF			50	
~~FB32~~	~~55'LT~~	~~132+10~~			778.64			
			6"ø UD	250 LF			50	
FB33	55'LT	134+60			777.43			
			6"ø UD	250 LF			50	
FB34	55'LT	137+10			776.21			
			6"ø UD	250 LF			50	
FB35	55'LT	139+60			774.99			
			6"ø UD	250 LF			50	
FB36	55'LT	142+10			773.77			
			6"ø UD	250 LF			185	
FB37	55'LT	144+60			772.50			
		~~148+86~~ 148+60	6"ø UD	250 LF			185	
FB38	55'LT	~~147+10~~			771.20			
			6"ø UD	281 LF			208	
M73	78'LT	~~149+91~~ 149+63			769.50			
FB39 → M73			6"ø VO					
FB25	55'LT	114+60		220		779.00		
			6"ø CARRIER	~~240~~ LF			112	
DI 100	202'LT	116+50			778.00			
FB5	55'RT	112+86		160				
			6"ø CARRIER	~~155~~ LF			115	
DI 102	202'LT	113+48			778.0			
FB103 → FB9				135 LF			2853 cy	SUBTOTAL
T/W @ → OUTLET NORTH				154 LF				
TOTALS					AS BUILT		6168	TOTAL
15"ø CSP				1260 LF			332	RNDG
15"ø RCP				550 LF	291		6500 cy	TOTAL
6"ø UD				9200 LF	7367			
6"ø CARRIER PIPE				400 LF	889			
15"ø RCP ES				1 EA.	0			
15ø CSP				5 EA.	5			

AIP 3-50-0015-11

RUTLAND STATE AIRPORT
CLARENDON, VERMONT

DRAINAGE SUMMARY

URS Greiner, Inc.
3 MARCUS BOULEVARD
ALBANY, NEW YORK

Designed by: G D'AMICO 2/97
Drawn by: M MCCALLA 3/97
Checked by: G D'AMICO 5/5/97
Approved by: M CHURCHILL 5/5/97

Scale: HOR. – NONE VERT. – NONE

Date: 5/5/97

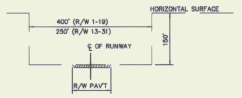
Sheet 3 Of 65

Sheet No 3B

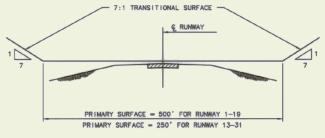
REV. DATE DESCRIPTION
12/97 As Built

Job No. F40232.00

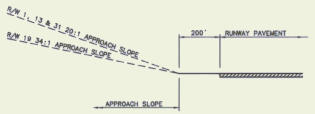
File No. I:\F40232\DWG\



C/4 RUNWAY OBSTACLE FREE ZONE TYP SECTION
SCALE = NONE



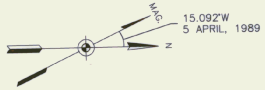
A/4 TYPICAL SECTION F.A.R. PART 77 IMAGINARY SURFACES
NOT TO SCALE

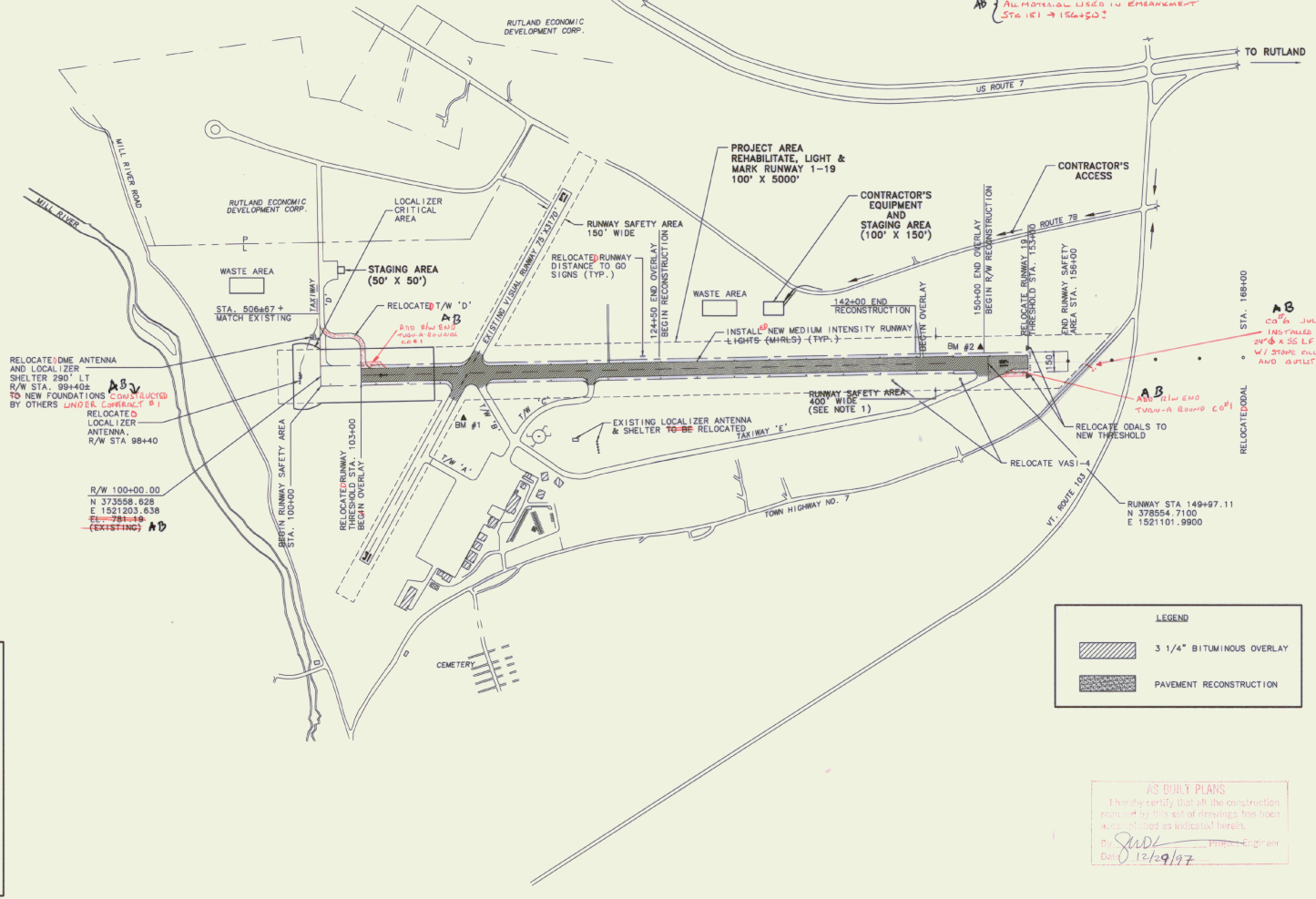


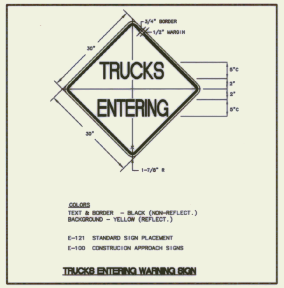
B/4 TYPICAL PROFILE F.A.R. PART 77 IMAGINARY SURFACES
NOT TO SCALE

NOTES:
1. RUNWAY 1-19 SAFETY AREA IS 150' WIDE WHEN OPERATING RUNWAY LENGTH IS LESS THAN 5000'. (400' WIDE WHEN OPERATIONAL LENGTH IS 5000').
2. SEE PHASING PLAN SHEET 6.
3. TWO (2) TRUCK ENTERING SIGNS ~~TO BE~~ PLACED APPROXIMATELY 150' AND 75' FROM THE CONTRACTOR'S ENTRANCE - IN EACH DIRECTION. SIGNS ~~TO BE~~ PLACED AT LEAST 6' OFF ROADWAY EDGE OF PAVEMENT. AB MD
4. BENCHMARK #1: DISK 650M, 1979
   374614.056N, 1521621.019E
   ELEVATION 782.45
5. BENCHMARK #2: DISK 1105, 1987
   378552.173N, 1520976.989E
   ELEVATION 773.79
6. ~~WASTE AREAS TO BE~~ LOCATED AS DIRECTED BY THE ENGINEER OUTSIDE RUNWAY SAFETY AREAS AND F.A.R. ~~PART 77~~ IMAGINARY SURFACES. AVOID WETLAND AREAS. ~~WASTE AREAS TO BE~~ GRADED, SEED, LIMED & MULCHED UPON COMPLETION OF PROJECT.

AB { ADDITIONAL WASTE AREAS NOT REQUIRED
ALL MATERIAL USED IN EMBANKMENT
STA 151 → 156+50 }







COLORS
TEXT & BORDER - BLACK (NON-REFLECT.)
BACKGROUND - YELLOW (REFLECT.)
E-121 STANDARD SIGN PLACEMENT
E-100 CONSTRUCTION APPROACH SIGNS

TRUCKS ENTERING WARNING SIGN

LEGEND
3 1/4" BITUMINOUS OVERLAY
PAVEMENT RECONSTRUCTION

SCALE IN FEET
800 400 0 800

AIP 3-50-0015-11

AS BUILT PLANS
I hereby certify that all the construction required by this set of drawings has been accomplished as indicated herein.
By [signature] Project Engineer
Date 12/29/97

STATE OF VERMONT
MICHAEL L. CRUSOE
No. 6564
REGISTERED PROFESSIONAL ENGINEER

REV.	DATE	DESCRIPTION
1	12/3/97	AS BUILT

Job No. F401213.00
File No. C:\F401213\GPL1

RUTLAND STATE AIRPORT
CLARENDON, VERMONT

GENERAL PROJECT LAYOUT

URS Greiner, Inc.
3 MARCUS BOULEVARD
ALBANY, NEW YORK

Designed by: G D'AMICO 2/97
Drawn by: M MICHELLI 3/97
Checked by: G D'AMICO 5/5/97
Approved by: M CHURCHILL 5/5/97
Scale: HOR. - 1" = 400' VERT. - N/A
Date: 5/5/97
Sheet 4 Of 65
Sheet No 4

GENERAL CONSTRUCTION AND SAFETY NOTES

GENERAL NOTES

1. THIS PROJECT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CONTRACT PLANS AND SPECIFICATIONS AND ANY RULES, REGULATIONS, STANDARDS OR SPECIFICATIONS REFERENCED THEREIN. THE PROJECT IS SUBJECT TO INSPECTION BY REPRESENTATIVES OF THE VERMONT AGENCY OF TRANSPORTATION (VAOT), AND THE FEDERAL AVIATION ADMINISTRATION (FAA).

2. THE PROJECT IS TO BE COMPLETED IN CONFORMANCE WITH THE "CONSTRUCTION PHASING PLANS AND NOTES," AS CONTAINED IN THE PLANS, AND SHALL BE CONSTRUCTED IN A TIMELY MANNER IN ACCORDANCE WITH THE CONTRACTOR'S APPROVED PROJECT SCHEDULE. THE SCHEDULE SHALL PROVIDE FOR COMPLETION OF THE PHASES AS SHOWN ON THE PLANS AND DESCRIBED IN THE CONTRACT SPECIFICATIONS.

3. THE CONTRACTOR IS EXPECTED TO MEET COMPLETION OF CRITICAL PORTIONS OF THE PROJECT AND OPEN THOSE SEGMENTS TO TRAFFIC BY THE SPECIFIED TIMES AND TO COMPLETE THE ENTIRE PROJECT ON TIME.

4. RUTLAND STATE AIRPORT WILL BE IN OPERATION DURING THE CONSTRUCTION OF THIS PROJECT. COORDINATION OF ALL WORK WITH THE AIRPORT MANAGER & THE PROJECT RESIDENT ENGINEER IS MANDATORY SO AS TO MINIMIZE IMPACTS ON AIRPORT OPERATIONS.

5. CONSTRUCTION AND MAINTENANCE OPERATIONS BY OTHERS MAY OCCUR CONCURRENTLY AND AT TIMES IN THE VICINITY OF CONSTRUCTION ASSOCIATED WITH THIS PROJECT. THE CONTRACTOR SHALL COORDINATE HIS OPERATIONS AND COOPERATE WITH MAINTENANCE CREWS AND OTHER CONTRACTORS WORKING ON THE AIRPORT.

6. ACCESS TO THE SITE – THE CONTRACTOR'S ACCESS POINTS TO THE SITE ARE SHOWN ON THE GENERAL PROJECT LAYOUT PLAN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL VEHICLES AND PERSONNEL WHO ENTER THROUGH THESE ACCESS POINTS. THE CONTRACTOR SHALL MAINTAIN A SECURITY GUARD AT EACH GATE BEING USED AT ALL TIMES WHILE CONSTRUCTION IS UNDERWAY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SECURING ALL ACCESS POINTS BEING USED AT THE END OF EACH CONSTRUCTION DAY OR WHEN ACCESS POINTS ARE UNATTENDED.

7. HAUL ROUTES – APPROXIMATE LOCATION OF HAUL ROUTES ON THE AIRPORT SITE ARE SHOWN ON THE PHASING PLANS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE OFF-SITE HAUL ROUTES (STATE OR TOWN HIGHWAYS) WITH THE APPROPRIATE OWNER WHO HAS JURISDICTION OVER THE AFFECTED ROUTE. ON-SITE HAUL ROUTES SHALL BE MAINTAINED BY THE CONTRACTOR AND SHALL BE RESTORED AT THE CONTRACTOR'S EXPENSE TO THEIR ORIGINAL CONDITION UPON COMPLETION OF BEING USED AS A HAUL ROUTE. THE BEFORE AND AFTER CONDITION OF ON-SITE HAUL ROUTES SHALL BE JOINTLY INSPECTED AND DETERMINED BY THE CONTRACTOR AND THE ENGINEER. FENCING, DRAINAGE, GRADING AND OTHER MISCELLANEOUS CONSTRUCTION REQUIRED TO CONSTRUCT TEMPORARY HAUL ROUTES OR ACCESS POINTS ON THE AIRPORT WILL BE THE CONTRACTOR'S RESPONSIBILITY AND SHALL BE APPROVED BY THE ENGINEER PRIOR TO COMMENCING THE WORK. EXISTING ACCESS ROADS TO AIRPORT FACILITIES SHALL REMAIN OPEN AND MAINTAINED AT ALL TIMES.

8. CONTRACTOR'S STAGING AREAS – AN AREA WILL BE MADE AVAILABLE FOR CONTRACTOR'S MOBILIZATION AND STORAGE. THIS AREA IS SHOWN ON THE GENERAL PROJECT LAYOUT. THE CONTRACTOR'S STAGING AREA SHALL BE GRADED, TOPSOILED, SEEDED, AND MULCHED UPON COMPLETION OF USE, AT THE CONTRACTOR'S EXPENSE.

9. DISPOSAL AREA – WASTE AREAS WILL BE MADE AVAILABLE FOR THE DISPOSAL OF THE CONTRACTOR'S SPOIL MATERIALS. IN THE MANNER IN WHICH MATERIALS ARE PLACED IN EMBANKMENTS SHALL BE AS SPECIFIED AND APPROVED BY THE ENGINEER. WASTE MATERIALS INCLUDE THOSE ITEMS WHICH ARE A DIRECT RESULT OF CONSTRUCTION. TRASH (i.e. CUPS, CANS, ETC.) SHALL BE DISPOSED OF THROUGH PROPER SANITARY METHODS.

10. SAFETY – THE CONTRACTOR SHALL CONDUCT HIS ACTIVITIES IN A SAFE MANNER AS SPECIFIED IN THE SECTION TITLED, "SAFETY REQUIREMENTS DURING CONSTRUCTION" ON THIS SHEET.

11. PROTECTION OF AND REPAIR OF DAMAGE TO EXISTING CABLES – LOCATION OF KNOWN EXISTING AIRPORT UNDERGROUND CABLES ARE SHOWN ON THE PLANS AND MUST BE VERIFIED BY THE CONTRACTOR. REPAIR OF CABLES DAMAGED DUE TO CONTRACTOR'S OPERATIONS MUST BE STARTED IMMEDIATELY AND CONTINUED UNTIL COMPLETED. ALL SUCH REPAIRS SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS AND SHALL BE AT THE CONTRACTOR'S EXPENSE. WHEN FAA CABLES ARE DAMAGED, REPAIRS SHALL BE DONE IN ACCORDANCE WITH FAA REQUIREMENTS AND IN THE PRESENCE OF AN FAA REPRESENTATIVE. THE FAA MAY ELECT TO HAVE THE REPAIR PERFORMED BY OTHERS IN WHICH CASE THE CONTRACTOR SHALL BE RESPONSIBLE FOR PAYING THE INCURRED COSTS OF REPAIRS.

12. EXISTING AIRFIELD LIGHTING SYSTEMS – INTERRUPTION OF EXISTING AIRFIELD LIGHTING SYSTEMS NOT INCLUDED IN THIS PROJECT SHALL NOT BE PERMITTED. ALL AIRFIELD LIGHTING CIRCUITS AFFECTED BY THIS PROJECT SHALL BE MAINTAINED BY THE CONTRACTOR DURING OPERATIONAL PERIODS IN ACCORDANCE WITH THE SPECIFICATIONS AND/OR AS DIRECTED BY THE ENGINEER.

13. CONSTRUCTION LIMITS – ALL CONTRACTOR VEHICLES AND TRAFFIC (UNLESS OTHERWISE AUTHORIZED) SHALL REMAIN WITHIN THE DESIGNATED CONSTRUCTION LIMITS OR HAUL ROUTES. CONSTRUCTION, STORAGE AND STOCKPILING LIMITS ARE FURTHER DEFINED IN THE SECTION TITLED, "SAFETY REQUIREMENTS DURING CONSTRUCTION" ON THIS SHEET.

14. PORTABLE FLOODLIGHTING – THE CONTRACTOR SHALL PROVIDE PORTABLE FLOODLIGHTING WHEN REQUIRED FOR CONSTRUCTION OPERATIONS. THE CONTRACTOR SHALL PROVIDE SUFFICIENT UNITS SO THAT ALL WORK AREAS ARE ILLUMINATED TO A LEVEL OF 5 HORIZONTAL FOOT CANDLES. THE LIGHTING LEVELS SHALL BE CALCULATED AND MEASURED IN ACCORDANCE WITH THE CURRENT STANDARDS OF THE ILLUMINATION ENGINEERING SOCIETY.

15. THE CONTRACTOR SHALL OBTAIN ALL THE PERMITS AND LICENSES REQUIRED FOR THE PROJECT WORK AT HIS OWN EXPENSE.

16. EXISTING TOPOGRAPHIC FIELD SURVEYS FOR THIS PROJECT AREA WERE PERFORMED BY LITTLE RIVER SURVEY CO. IN 1995.

17. THE HORIZONTAL CONTROL ON THIS PROJECT IS TIED TO THE 1983 AND 1988 NATIONAL GEODETIC HORIZONTAL AND VERTICAL DATUM, RESPECTIVELY.

SAFETY REQUIREMENTS DURING CONSTRUCTION

(A) FEDERAL AVIATION ADMINISTRATION (FAA) ADVISORY CIRCULARS (AC), ORDERS AND FEDERAL AVIATION REGULATIONS (FAR).

THE FOLLOWING PUBLICATIONS CONTAIN DEFINITIONS/DESCRIPTIONS OF CRITICAL AIRPORT OPERATING AREAS. THE AREAS DEFINED BELOW PERTAIN TO AIRFIELD SAFETY REQUIREMENTS AND ARE REFERENCED THROUGHOUT THE CONTRACT DOCUMENTS. COPIES OF THESE PUBLICATIONS ARE AVAILABLE THROUGH THE FAA OR CAN BE ORDERED BY MAIL FROM:

U.S. DEPARTMENT OF TRANSPORTATION
SUBSEQUENT DISTRIBUTION OFFICE
ARDMORE EAST BUSINESS CENTER
3341 Q 75TH AVE.
LANDOVER, MD. 20785

AND CAN BE REVIEWED AT THE OFFICES OF THE VERMONT AGENCY OF TRANSPORTATION.

(1) AC 150/5370-2, "OPERATIONAL SAFETY ON AIRPORTS DURING CONSTRUCTION", CURRENT EDITION.

(2) FAR PART 77 "OBJECTS AFFECTING NAVIGABLE AIRSPACE, CURRENT EDITION:

(3) AC 150/5300-13, "AIRPORT DESIGN", CURRENT EDITION, ESTABLISHES DESIGN, OPERATIONAL, AND MAINTENANCE STANDARDS FOR AIRPORTS. STANDARD TERMS USED IN THE CONTRACT PLANS AND SPECIFICATIONS ARE DEFINED BELOW:

(a) OBSTACLE FREE ZONE (OFZ) – A VOLUME OF SPACE WHICH IS FREE OF ALL FIXED OBJECTS AND CLEAR OF VEHICLES IN THE PROXIMITY OF AN AIRPLANE CONDUCTING AN APPROACH, MISSED APPROACH, LANDING, TAKEOFF, OR DEPARTURE. AN OFZ TYPICAL SECTION IS SHOWN ON THE GENERAL PROJECT LAYOUT PLAN.

(b) RUNWAY PROTECTION ZONE (RPZ): A TRAPEZOIDAL AREA CENTERED ON THE RUNWAY BEGINNING AT A POINT 200 FEET BEYOND THE END OF THE AREA USEABLE FOR TAKEOFF OR LANDING.

(c) OBJECT FREE AREA (OFA): A TWO DIMENSIONAL GROUND AREA SURROUNDING RUNWAYS, TAXIWAYS, AND TAXILANES WHICH IS CLEAR OF OBJECTS EXCEPT FOR OBJECTS WHOSE LOCATION IS FIXED BY FUNCTION.

(d) SAFETY AREA – THE SURFACE ADJACENT TO RUNWAYS, TAXIWAYS, AND TAXILANES OVER WHICH AIRCRAFT SHOULD, IN DRY WEATHER, BE ABLE TO CROSS AT NORMAL SPEEDS WITHOUT INCURRING SIGNIFICANT DAMAGE. A SAFETY AREA IS GRADED, DRAINED AND COMPACTED. IT IS FREE OF ANY HOLES, TRENCHES, BUMPS OR OTHER SIGNIFICANT SURFACE VARIATIONS OR OBJECTS OTHER THAN THOSE WHICH MUST BE THERE BECAUSE OF THEIR ESSENTIAL AERONAUTICAL FUNCTION. THE SAFETY AREA REQUIRES THE CAPABILITY OF SUPPORTING MAINTENANCE VEHICLES AND AIRCRAFT RESCUE AND FIRE FIGHTING VEHICLES UNDER NORMAL (DRY) CONDITIONS.

(B) GENERAL SAFETY REQUIREMENTS

(1) THE CONTRACTOR SHALL ACQUAINT HIS SUPERVISORS AND EMPLOYEES WITH THE AIRPORT ACTIVITY AND OPERATIONS THAT ARE INHERENT TO RUTLAND STATE AIRPORT AND SHALL CONDUCT HIS CONSTRUCTION ACTIVITIES TO CONFORM TO ALL ROUTINE AND EMERGENCY AIR TRAFFIC REQUIREMENTS AND GUIDELINES FOR SAFETY SPECIFIED HEREIN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL SAFETY DEVICES AS REQUIRED FOR THE PROTECTION OF HIS PERSONNEL.

(2) PROTECTION OF ALL PERSONS SHALL BE PROVIDED THROUGHOUT THE PROGRESS OF THE WORK. THE WORK SHALL PROCEED IN SUCH A MANNER AS TO PROVIDE SAFE CONDITIONS FOR ALL WORKERS AND AGENCY PERSONNEL. THE SEQUENCE OF OPERATION SHALL BE SUCH THAT MAXIMUM PROTECTION IS AFFORDED TO INSURE THAT PERSONNEL AND WORKERS IN THE WORK AREA ARE NOT SUBJECT TO ANY DANGEROUS CONDITIONS.

(3) DURING PERFORMANCE OF THIS CONTRACT, THE AIRPORT RUNWAYS, TAXIWAYS, AND AIRCRAFT PARKING APRONS SHALL REMAIN IN USE BY AIRCRAFT TO THE MAXIMUM EXTENT POSSIBLE. ALL AIRCRAFT TRAFFIC ON THESE AREAS SHALL HAVE PRIORITY OVER CONTRACTOR'S TRAFFIC. THE OWNER RESERVES THE RIGHT TO ORDER THE CONTRACTOR AT ANY TIME TO VACATE ANY AREA NECESSARY TO MAINTAIN SAFE AIRCRAFT OPERATIONS. USE OF AREAS NEAR THE CONTRACTOR'S WORK WILL BE CONTROLLED TO MINIMIZE DISTURBANCE TO THE CONTRACTOR'S OPERATION. THE CONTRACTOR SHALL NOT ALLOW EMPLOYEES, SUBCONTRACTORS, SUPPLIERS, OR ANY OTHER UNAUTHORIZED PERSON TO ENTER OR REMAIN IN ANY AIRPORT AREA WHICH WOULD BE HAZARDOUS TO PERSONS OR TO AIRCRAFT OPERATIONS.

(4) ALL WORK TO BE PERFORMED WHICH IS CLOSE TO AN ACTIVE RUNWAY, TAXIWAY OR APRON SHALL BE PERFORMED WHEN THE RUNWAY, TAXIWAY OR APRON IS NOT IN USE. SUCH WORK SHALL BE ACCOMPLISHED ONLY WITH PRIOR PERMISSION FROM THE ENGINEER AND AIRPORT MANAGER. REQUESTED CLOSINGS SHALL BE DIRECTED TO THE ENGINEER AT LEAST 48 HOURS IN ADVANCE.

(C) CONSTRUCTION AND FACILITIES MAINTENANCE

(1) THE FOLLOWING ARE CONSIDERED SAFETY PROBLEMS AND/OR HAZARDS:

(a) TRENCHES, HOLES, OR EXCAVATION ON OR ADJACENT TO ANY OPEN RUNWAY OR IN RUNWAY OR TAXIWAY SAFETY AREAS.

(b) UNMARKED/UNLIGHTED HOLES OR EXCAVATION IN ANY APRON, OPEN TAXIWAY, OPEN TAXILANE, OR RELATED SAFETY AREA.

(c) MOUNDS OR PILES OF EARTH, CONSTRUCTION MATERIALS, TEMPORARY STRUCTURES, OR OTHER OBJECTS IN THE VICINITY OF ANY OPEN RUNWAY, TAXIWAY, TAXILANE, OR IN ANY RELATED SAFETY, APPROACH, OR DEPARTURE AREA.

(d) VEHICLES OR EQUIPMENT, WHETHER OPERATING OR IDLE, ON ANY OPEN RUNWAY, TAXIWAY, TAXILANE, OR IN ANY RELATED SAFETY, APPROACH, OR DEPARTURE AREA.

(e) VEHICLES, EQUIPMENT, EXCAVATION, STOCKPILES, OR OTHER MATERIALS WHICH COULD INTERFERE WITH ELECTRONIC SIGNALS FROM RADIOS OR ELECTRONIC NAVIGATIONAL AIDS (NAVAIDS).

(f) PAVEMENT DROP-OFFS – LIPS (EITHER PERMANENT OR TEMPORARY, WHICH COULD CAUSE DAMAGE TO AIRCRAFT IF CROSSED AT NORMAL OPERATING SPEEDS. THE NORMAL MAXIMUM DROP-OFF OR LIP IS 1-1/2 INCHES.

(g) UNMARKED UTILITY, NAVAID, WEATHER SERVICE, RUNWAY LIGHTING, OR OTHER POWER OR SIGNAL CABLES THAT COULD BE DAMAGED DURING CONSTRUCTION.

(h) OBJECTS, WHETHER OR NOT MARKED OR FLAGGED, OR ACTIVITIES ANYWHERE ON OR IN THE VICINITY OF THE AIRPORT WHICH COULD BE DISTRACTING, CONFUSING, OR ALARMING TO PILOTS DURING AIRCRAFT OPERATIONS.

(i) UNFLAGGED/UNLIGHTED LOW VISIBILITY ITEMS SUCH AS TALL CRANES, DRILLS, AND THE LIKE ANYWHERE IN THE VICINITY OF ACTIVE RUNWAYS, OR IN ANY APPROACH OR DEPARTURE AREA.

(j) MISLEADING OR MALFUNCTIONING OBSTRUCTION LIGHTS OR UNLIGHTED/UNMARKED OBSTRUCTIONS IN THE APPROACH TO ANY ACTIVE RUNWAY.

(k) WATER, SNOW, DIRT, DEBRIS, OR OTHER TRANSIENT ACCUMULATION WHICH TEMPORARILY OBSCURES PAVEMENT MARKINGS OR PAVEMENT EDGES, OR DEROGATES VISIBILITY OF RUNWAY/TAXIWAY MARKINGS OR LIGHTING.

(l) INADEQUATE OR IMPROPER METHODS OF MARKING, BARRICADING, AND LIGHTING OF TEMPORARILY CLOSED PORTIONS OF THE AIRPORT OPERATIONS AREA.

(m) TRASH OR OTHER MATERIALS WITH FOREIGN OBJECT DAMAGE (FOD) POTENTIAL; WHETHER ON RUNWAYS, TAXIWAYS, OR APRONS; OR IN RELATED SAFETY AREAS.

(n) INADEQUATE BARRICADING OR OTHER MARKING WHICH IS PLACED TO SEPARATE CONSTRUCTION OR MAINTENANCE AREAS FROM OPEN AIRCRAFT OPERATING AREAS.

(o) FAILURE TO CONTROL UNAUTHORIZED VEHICLE AND HUMAN ACCESS TO ACTIVE AIRCRAFT OPERATING AREAS.

(p) FAILURE TO MAINTAIN RADIO COMMUNICATION BETWEEN CONSTRUCTION/MAINTENANCE VEHICLES AND RUTLAND UNICOM.

(q) CONSTRUCTION/MAINTENANCE ACTIVITIES OR MATERIALS WHICH COULD HAMPER THE RESPONSE OF AIRCRAFT RESCUE AND FIRE FIGHTING (ARFF) EQUIPMENT FROM REACHING ALL AIRCRAFT OR ANY PART OF THE RUNWAY/TAXIWAY SYSTEM, RUNWAY APPROACH AND DEPARTURE AREAS AND AIRCRAFT PARKING LOCATIONS.

(r) BIRD ATTRACTANTS ON AIRPORT SUCH AS: EDIBLES (FOOD SCRAPS, ETC.), MISCELLANEOUS TRASH, OR PONDED WATER.

(2) THE CONTRACTOR SHALL CONDUCT ACTIVITIES SO AS NOT TO VIOLATE ANY SAFETY STANDARDS CONTAINED HEREIN. THE CONTRACTOR SHALL INSPECT ALL CONSTRUCTION AND STORAGE AREAS AS OFTEN AS NECESSARY AND PROMPTLY TAKE ALL STEPS NECESSARY TO PREVENT/REMEDY ANY UNSAFE OR POTENTIALLY UNSAFE CONDITIONS OR ACTIVITIES DISCOVERED.

(3) THE VAOT WILL BE RESPONSIBLE FOR ISSUING APPROPRIATE NOTICE TO AIRMEN (NOTAM) CONCERNING CONSTRUCTION ACTIVITY ON THE AIRFIELD.

(D) MOTORIZED VEHICLES

THIS PROJECT INCLUDES WORK WITHIN THE AIRCRAFT OPERATIONS AREA (AOA).
ALL PERMITTED VEHICLES SHALL BE EQUIPPED WITH A FLASHING AMBER (YELLOW) DOME-TYPE LIGHT, MOUNTED ON TOP OF THE VEHICLE AND OF SUCH INTENSITY TO CONFORM TO LOCAL CODES FOR MAINTENANCE AND EMERGENCY VEHICLES.
ALL VEHICLES OPERATING WITHIN THE AIRFIELD BOUNDARY SHALL BE IDENTIFIED WITH A SIGN ON EACH SIDE OF THE VEHICLE BEARING THE CONTRACTOR'S NAME IN 12-INCH MINIMUM LETTER HEIGHT.

VEHICLES MAKING ONLY OCCASIONAL VISITS TO THE JOB SITE ARE EXEMPT FROM THE IDENTIFICATION REQUIREMENTS CONTAINED HEREIN ABOVE PROVIDED THAT THEY ARE ESCORTED INTO, THROUGH, AND OUT OF THE AIRPORT AREA BY A PROPERLY IDENTIFIED VEHICLE.

(E) RADIO COMMUNICATIONS

RADIO COMMUNICATIONS ARE REQUIRED BETWEEN THE CONTRACTOR'S REPRESENTATIVE AND RUTLAND UNICOM. RADIO CONTACT IS REQUIRED AT ALL TIMES WHILE THE CONTRACTOR HAS PERSONNEL AND EQUIPMENT ON THE PROJECT SITE AND WHILE THEY ARE IN AN ACTIVE AIR OPERATIONS AREA (AOA) OF THE AIRPORT. RADIOS SHALL BE FURNISHED BY THE CONTRACTOR AND SHALL BE CAPABLE OF TRANSMITTING AND RECEIVING AT A GROUND CONTROL FREQUENCY OF 122.8 MHZ. THIS FREQUENCY IS TO BE UTILIZED WHEN CROSSING ACTIVE FACILITIES. SUFFICIENT RADIOS SHALL BE ON SITE AND OPERATING AT ALL TIMES SO THAT INSTRUCTIONS OR COMMUNICATIONS MAY BE DISPATCHED TO ALL CREWS AND/OR EQUIPMENT WORKING IN AN ACTIVE AOA.

(F) DEBRIS

DEBRIS, WASTE, AND LOOSE MATERIAL (INCLUDING DUST AND DIRT) CAPABLE OF CAUSING DAMAGE TO AIRCRAFT LANDING GEAR OR PROPELLERS, OR BEING INGESTED IN JET ENGINES, SHALL NOT BE ALLOWED ON ACTIVE AIRCRAFT MOVEMENT AREAS OR ADJACENT GRASSED AREAS. MATERIALS OBSERVED TO BE WITHIN THESE AREAS SHALL BE REMOVED IMMEDIATELY BY THE CONTRACTOR. THE CONTRACTOR SHALL BE REQUIRED TO HAVE A SWEEPING MACHINE AND OPERATOR ON SITE AND READY AT ALL TIMES DURING CONSTRUCTION ACTIVITY. WHERE TRAVEL ON OR ACROSS RUNWAYS, RAMP AREAS, TAXIWAYS, OR AIRCRAFT APRONS IS REQUIRED, THE CONTRACTOR SHALL PROVIDE ADEQUATE PERSONNEL AND EQUIPMENT TO KEEP SUCH SURFACES CLEAR OF DEBRIS.

(G) FLAGMEN

IN ACCORDANCE WITH THE SPECIFICATIONS, THE CONTRACTOR SHALL, AT HIS OWN EXPENSE, FURNISH FLAGMEN AS NECESSARY TO CONTROL HIS TRAFFIC (UNLESS OTHERWISE DIRECTED BY THE ENGINEER).

ALL CONTRACTOR VEHICLES THAT ARE REQUIRED TO CROSS ACTIVE RUNWAYS, RUNWAY SAFETY AREAS, TAXIWAYS AND APRONS SHALL DO SO UNDER THE DIRECT CONTROL OF A COMPETENT FLAGMAN WHO IS IN DIRECT RADIO CONTACT WITH GROUND CONTROL. ALL AIRCRAFT TRAFFIC ON RUNWAYS, TAXIWAYS, AND APRONS SHALL HAVE PRIORITY OVER CONTRACTOR'S TRAFFIC. AT NO TIME SHALL THE CONTRACTOR'S VEHICLES OR PERSONNEL BE ALLOWED TO ENTER OR CROSS ACTIVE RUNWAYS OR CLEAR ZONES WITHOUT PROPER AUTHORIZATION.

(H) MISCELLANEOUS

(1) OPEN FLAME, WELDING OR TORCH CUTTING OPERATIONS ARE PROHIBITED UNLESS ADEQUATE FIRE AND SAFETY PRECAUTIONS HAVE BEEN TAKEN AND THE PROCEDURE PREVIOUSLY APPROVED BY THE ENGINEER.

(2) EQUIPMENT AND STOCKPILED MATERIAL SHALL BE CONSTRAINED IN A MANNER TO PREVENT MOVEMENT RESULTING FROM AIRCRAFT JET BLAST OR WIND CONDITIONS IN EXCESS OF 10 KNOTS.

(3) THE CONTRACTOR SHALL PROVIDE BUCKET TYPE CONSTRUCTION BARRICADES WITH FLASHING YELLOW LIGHTS AS SHOWN ON THE DRAWINGS TO DELINEATE THE WORK AREAS WHEN CLOSED TO AIRPORT TRAFFIC. OPEN TRENCHES, EXCAVATIONS AND STOCKPILED MATERIAL LOCATED IN THE AOA SHALL BE PROMINENTLY MARKED WITH ORANGE FLAGS AND LIGHTED BY APPROVED LIGHT UNITS DURING HOURS OF LIMITED VISIBILITY AND DARKNESS.

(4) ALL MATERIALS AND EQUIPMENT WHEN NOT IN USE SHALL BE PLACED IN APPROVED AREAS WHERE THEY WILL NOT CONSTITUTE A HAZARD TO AIRCRAFT OPERATIONS AND NOT PENETRATE CLEARANCE SURFACES. EQUIPMENT SHALL BE PARKED AT THE STAGING AREA WHEN NOT IN USE.

(5) MAXIMUM EQUIPMENT HEIGHT SHALL NOT EXCEED 15 FEET UNLESS PRIOR APPROVAL IS OBTAINED FROM THE ENGINEER.

(6) UPON COMPLETION OF ANY STAGE/PHASE OF WORK, THE ENGINEER WILL ARRANGE A PHYSICAL INSPECTION OF THE AREA WITH AIRPORT OPERATIONS PERSONNEL PRIOR TO OPENING ANY PORTION OF A RUNWAY, RAMP AREA OR AIRPORT ROADWAY THAT HAS BEEN CLOSED FOR WORK OR USED FOR A CROSSING POINT OR HAUL ROUTE BY THE CONTRACTOR.

(7) ENTRANCE TO THE AIRFIELD IS SUBJECT TO SECURITY REGULATIONS. ALL PERSONNEL ENTERING THE AIRFIELD MUST OBTAIN AND DISPLAY SECURITY IDENTIFICATION BADGES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ASSURING THAT ALL OF HIS EMPLOYEES WHO HAVE UNESCORTED ACCESS TO THE AIRFIELD, HAVE HAD A BACKGROUND CHECK PERFORMED ON THEM DATING BACK FIVE (5) YEARS VERIFYING REPRESENTATIONS MADE BY THE EMPLOYEE RELATING TO EMPLOYMENT.

(8) THE CONTRACTOR SHALL PROVIDE THE ENGINEER WITH A CURRENT LIST OF ALL EMPLOYEES WORKING ON THE AIRPORT. THE LIST SHALL BE MAINTAINED CURRENT BY THE CONTRACTOR AND APPLIES TO ALL SUBCONTRACTORS.

(9) EXCEPT FOR EMERGENCIES, ALL CONTACT WITH AIRPORT PERSONNEL SHALL BE MADE THROUGH THE RESIDENT ENGINEER. FOR EMERGENCIES INVOLVING SAFETY (INJURIES, FIRES, SECURITY BREACHES, ETC.) THE CONTRACTOR SHALL MAKE DIRECT CONTACT WITH AIRPORT OPERATIONS FOLLOWED BY NOTIFICATION TO THE RESIDENT ENGINEER AS SOON AS POSSIBLE.

(10) THE CONTRACTOR SHALL PROVIDE THE PHONE NUMBERS OF THREE PERSONNEL, INCLUDING THE PROJECT SUPERINTENDENT, WHO MAY BE CONTACTED IN AN EMERGENCY. PERSONNEL SHALL BE ON CALL 24 HOURS PER DAY FOR MAINTAINING AIRPORT HAZARD LIGHTING AND BARRICADES.

(11) IN ACCORDANCE WITH THE SPECIFICATIONS, FEDERAL WAGE RATES SHALL BE POSTED OUTSIDE THE SITE FIELD OFFICE IN A WEATHERPROOF ENCLOSURE.

(I) UTILITIES

(1) UNDERGROUND UTILITIES: THE LOCATIONS OF THE UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE CONSIDERED TO BE ONLY ESTIMATED LOCATIONS. ALL UTILITY LOCATIONS SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO COMMENCING CONSTRUCTION. IN THE EVENT ANY UTILITY IS DAMAGED THE CONTRACTOR SHALL BE RESPONSIBLE FOR PAYING FOR INCURRED COSTS OF REPAIRS.

(2) UTILITIES NOTIFICATION: AT LEAST TWO WORKING DAYS PRIOR TO COMMENCING CONSTRUCTION OPERATIONS IN AN AREA WHICH MAY INVOLVE UNDERGROUND UTILITY FACILITIES, THE CONTRACTOR SHALL NOTIFY THE RESIDENT ENGINEER, AND THE OWNER OF EACH UNDERGROUND UTILITY FACILITY AFFECTED.

(3) THE FOLLOWING IS A LIST OF COMPANIES WITH POSSIBLE UTILITIES WITHIN THE CONSTRUCTION LIMITS.

UTILITY	
DIGSAFE	1-800-225-4977
CVPS	1-800-649-2877

AIP 3-50-0015-11

STATE OF VERMONT — CHARLES E. PRESCOTT — No. 5951 — REGISTERED PROFESSIONAL ENGINEER

REV.	DATE	DESCRIPTION
1	12/6/99	AS BUILT

Job No. | File No. I:\F40121\DGN\A-1

RUTLAND STATE AIRPORT
CLARENDON, VERMONT

GENERAL CONSTRUCTION & SAFETY NOTES

URS Greiner, Inc.
3 MARCUS BOULEVARD
ALBANY, NEW YORK

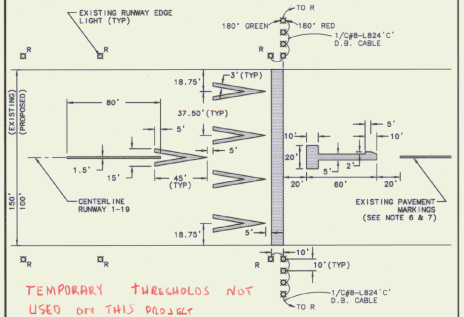
Designed by: G D'AMICO 2/97 | Date
Drawn by: M MCCALLA 3/97
Checked by: G D'AMICO 5/5/97
Approved by: M CHURCHILL 5/5/97

Scale: HOR. – N/A, VERT. – N/A

Date: 5/5/97

Sheet 5 Of 65

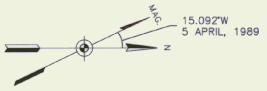
Sheet No 5

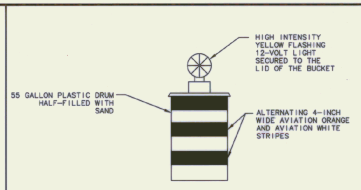


NOTES

1. ALL MARKINGS TO BE PAINTED WHITE.
2. EIGHT (8) TEMPORARY MEDIUM INTENSITY RUNWAY THRESHOLD LIGHTS (CONFORMING TO FAA SPECIFICATIONS L-861E) TO BE INSTALLED AS SHOWN – SEE SHEET 31.
3. TEMPORARY THRESHOLD LIGHTS TO BE STAKE OR CAN MOUNTED AT CONTRACTOR'S OPTION. EXISTING THRESHOLD LIGHTS MAY BE USED AT RELOCATED THRESHOLD AT CONTRACTOR'S OPTION. (SEE ELECTRICAL DETAILS – SHEET 28).
4. WHILE PREPARING TEMPORARY THRESHOLD, CLOSED RUNWAY MARKERS TO BE IN PLACE OVER NUMERALS "1" AND "19". RUNWAY 13-31 TO BE OPEN.
5. REMOVE EXISTING PAINT WHICH CONTRASTS WITH TEMPORARY PLAN BY SANDBLAST OR WATERBLAST TO THE SATISFACTION OF THE ENGINEER.
6. TEMPORARY MARKINGS TO BE PAID FOR UNDER ITEM 646.60, 646.61 AND 646.70.
7. TEMPORARY RELOCATED THRESHOLD WILL BE USED IF A TEMPORARY DISPLACED THRESHOLD IS NECESSARY, AS DETERMINED BY THE ENGINEER. IF THE TEMPORARY RELOCATED THRESHOLD IS REQUIRED DUE TO THE CONTRACTOR, THERE WILL BE NO PAYMENT FOR THIS ITEM. IF THE TEMPORARY RELOCATED THRESHOLD IS REQUIRED BY THE AIRPORT, AS DETERMINED BY THE ENGINEER, THE WORK WILL BE PAID FOR UNDER ITEM L-100.
8. SPACING SHOWN FOR THE EXISTING 150' WIDE RUNWAY, REDUCE SPACING PROPORTIONALLY FOR 100' WIDE RUNWAY.

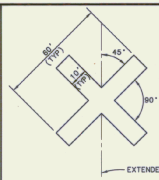
TEMPORARY RELOCATED THRESHOLD DETAIL (ITEM L-100)
SCALE: 1"=50'





TO BE PLACED WHERE DIRECTED BY THE ENGINEER. NOT A SEPARATE PAY ITEM.

BUCKET-TYPE CONSTRUCTION BARRICADE
NTS



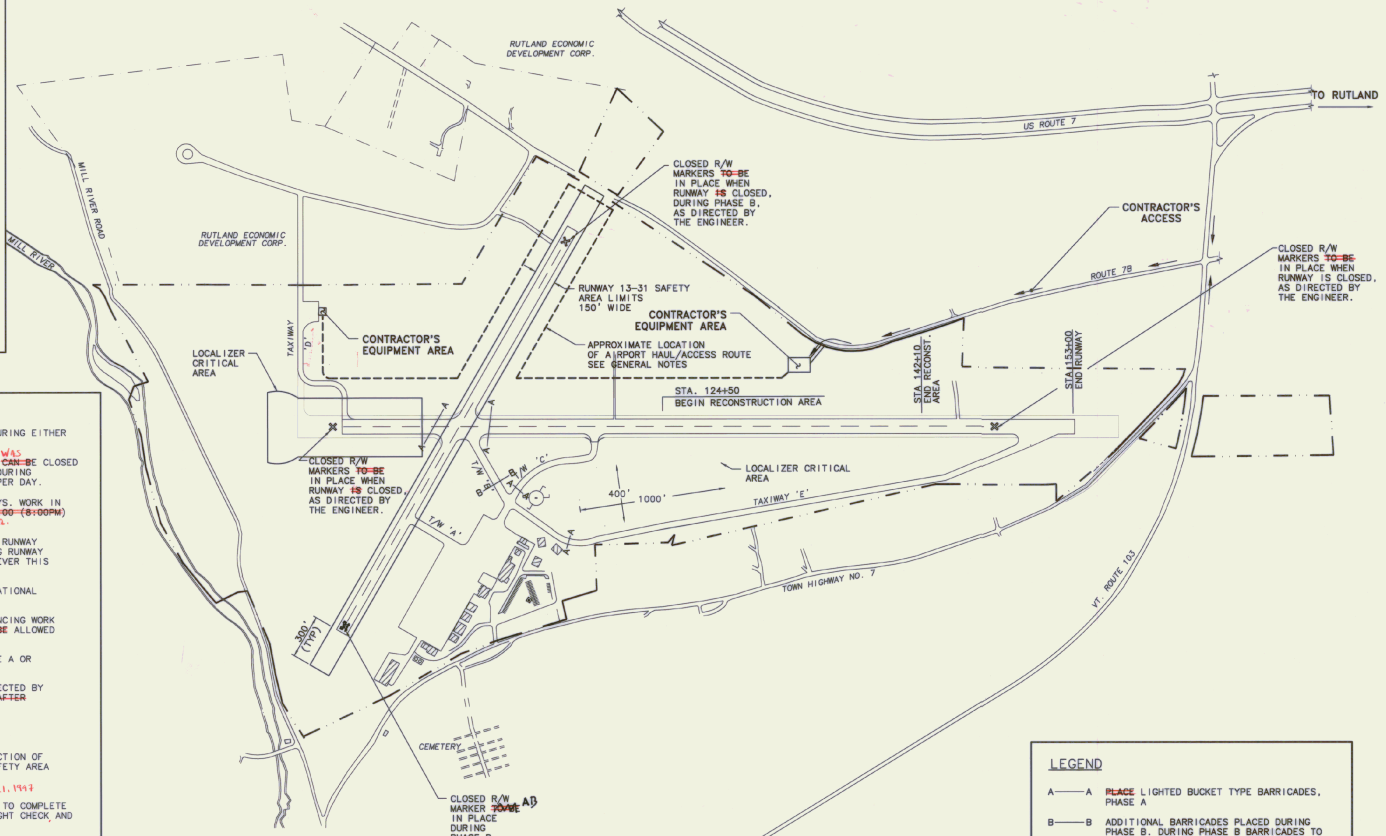
MARKER NOTES

1. CLOSED RUNWAY MARKER TO BE IN PLACE DURING CONSTRUCTION PERIOD AS DIRECTED BY ENGINEER.
2. CLOSED RUNWAY MARKER MAY BE EITHER SNOW FENCE OR PLYWOOD PAINTED YELLOW AND SECURELY FASTENED IN PLACE.
3. COST OF PLACING AND MAINTAINING THE CLOSED RUNWAY MARKER IS CONSIDERED NECESSARY AND INCIDENTAL TO CONSTRUCTION AND IS NOT A SEPARATE PAY ITEM.
4. CLOSED RUNWAY MARKER TO BE PLACED OVER NUMERALS, OR IN R/W OVERRUN AREA, JUST OFF THRESHOLD.

CLOSED RUNWAY MARKER
NTS

GENERAL NOTES:

1. CONTRACTOR'S MAIN ACCESS TO SITE TO BE FROM ROUTE 7B.
2. CONTRACTOR TO PROVIDE FLAG PERSON AT HAUL / ACCESS ROUTE CROSSING OF RUNWAY 13 SAFETY AREA, WHEN RUNWAY 13-31 IS OPERATIONAL.
3. FLAGPERSON TO CONTROL ACCESS WITHIN RUNWAY 13 SAFETY AREA. NO GROUND VEHICLE TRAFFIC WILL BE ALLOWED TO ENTER RUNWAY SAFETY AREA WHEN AIRCRAFT ARE APPROACHING OR DEPARTING RUNWAY 13.
4. FLAGPERSON IS TO HAVE ANAERONAUTICAL RADIO CAPABLE OF TRANSMITTING AND RECEIVING ON RUTLAND UNICOM FREQUENCY 122.8 MHZ.
5. HAUL ROUTE TO BE GRADED AND RETURNED TO TURF UPON COMPLETION OF PROJECT.
6. WASTE AREAS TO GRADED & SEEDED. PROVIDED EROSION CONTROL AS DIRECTED BY THE ENGINEER.



LEGEND

A——A PLACE LIGHTED BUCKET TYPE BARRICADES, PHASE A

B——B ADDITIONAL BARRICADES PLACED DURING PHASE B. DURING PHASE B BARRICADES TO TO BE PLACED BEFORE CLOSING RUNWAY 1-19 EACH EVENING AND REMOVED BEFORE OPENING RUNWAY EACH MORNING

SCALE IN FEET
800 400 0 800

PHASING NOTES

1. ALL WORK ON THE RUNWAY RECONSTRUCTION PROJECT WILL BE ACCOMPLISHED DURING EITHER PHASE A OR PHASE B.
2. RUNWAY 1-19 WILL BE CLOSED TO AIR TRAFFIC DURING PHASE A. THE RUNWAY CAN BE CLOSED FOR UP TO 35 CALENDAR DAYS. RUNWAY 13-31 IS TO BE OPEN AT ALL TIMES DURING PHASE A WORK. WORK DURING PHASE A CAN BE CARRIED OUT UP TO 24 HOURS PER DAY.
3. WORK DURING PHASE B MUST BE COMPLETED WITHIN NINETY (90) CALENDER DAYS. WORK IN THE RUNWAY SAFETY AREAS WILL BE ALLOWED ONLY BETWEEN THE HOURS OF 20:00 (8:00PM) TO 08:00 (8:00AM). AS DIRECTED BY THE ENGINEER.
4. WHENEVER WORK IS SCHEDULED WITHIN THE RUNWAY 13-31 SAFETY AREA, THIS RUNWAY MUST BE CLOSED. AT LEAST 48 HOURS NOTICE IS REQUIRED PRIOR TO CLOSING RUNWAY 13-31. CLOSE COORDINATION WITH THE AIRPORT MANAGER IS NECESSARY WHENEVER THIS RUNWAY IS SCHEDULED TO BE CLOSED.
5. ALL WORK MUST COMPLY WITH THE REQUIREMENTS OF A.C. 150/5370-2C, OPERATIONAL SAFETY DURING CONSTRUCTION, SEE CONSTRUCTION AND SAFETY NOTES)
6. THE CONTRACTOR MUST SUBMIT A SCHEDULE TO THE ENGINEER PRIOR TO COMMENCING WORK ON THE AIRPORT. THIS SCHEDULE IS TO BE UPDATED WEEKLY. NO WORK WILL BE ALLOWED OUTSIDE THE AREAS INCLUDED IN THE APPROVED SCHEDULE.
7. WORK OUTSIDE THE RUNWAY SAFETY AREAS CAN BE ACCOMPLISHED DURING PHASE A OR PHASE B.
8. PRIOR TO OPENING THE RUNWAYS TO AIR TRAFFIC, THE RUNWAY WILL BE INSPECTED BY THE CONTRACTOR AND ENGINEER. INSPECTIONS WILL BE SCHEDULED FOR 07:00 AFTER NIGHTLY SHUT DOWN. AS NECESSARY.

PHASE A

1. RECONSTRUCT RUNWAY 1-19 FROM STATION 124+50 TO 142+10. BEGIN CONSTRUCTION OF RUNWAY SAFETY AREAS, 200' LEFT AND RIGHT OF RUNWAY CENTERLINE AND SAFETY AREA OVERRUNS, STATION 153+00 TO 156+00.
2. RELOCATED DME ANTENNA. RELOCATED LOCALIZER AND SHELTER PRIOR TO JULY 21, 1997 THIS WORK IS TO BE ACCOMPLISHED AS SOON AS POSSIBLE TO ALLOW FOR FAA TO COMPLETE ALL MODIFICATIONS AND HOOK UPS, AS WELL AS PERFORM THE NECESSARY FLIGHT CHECK AND PUBLISH THE NEW APPROACH PLATES. (OCT 6, 1997)
3. NO WORK ALLOWED SOUTH OF INTERSECTION WITH RUNWAY 13-31 OTHER THAN PAV'T REMOVAL. WORK CONFINED WITH COORDINATION WITH ENGINEER & FAA

PHASE B

1. OVERLAY RUNWAY 1-19. TAPER OVERLAY AT THE END OF EACH DAY'S WORK TO ALLOW USE BY AIR TRAFFIC. ALL PAVING COMPLETED UNDER PHASE A
2. COMPLETE WORK IN RUNWAY SAFETY AREAS, 200' LEFT AND RIGHT OF RUNWAY CENTERLINE, AND IN SAFETY AREA OVERRUNS. WORK SOUTH OF R/W 13-31 CANNOT BEGIN UNTIL AUTHORIZED BY THE ENGINEER, AFTER LOCALIZER FLIGHT CHECK.
3. COMPLETE DRAINAGE WORK.
4. COMPLETE TAXIWAY D.
5. INSTALL/RELOCATE RUNWAY LIGHTING AND SIGNAGE RELOCATIONS, RELOCATE VASI AND ODALS.
6. NO SIGNIFICANT EXCAVATION OR GRADING ACTIVITIES WILL BE ALLOWED SOUTH OF RUNWAY INTERSECTION UNTIL FAA COMPLETES FLIGHT CHECK OF RELOCATED LOCALIZER (ANTICIPATED WITHIN TWO (2) WEEKS OF START OF PHASE B WORK).

AIP 3-50-0015-11

STATE OF VERMONT — MICHAEL J. CHURCH — REGISTERED PROFESSIONAL ENGINEER

REV.	DATE	DESCRIPTION
1	12/3/96	As Built

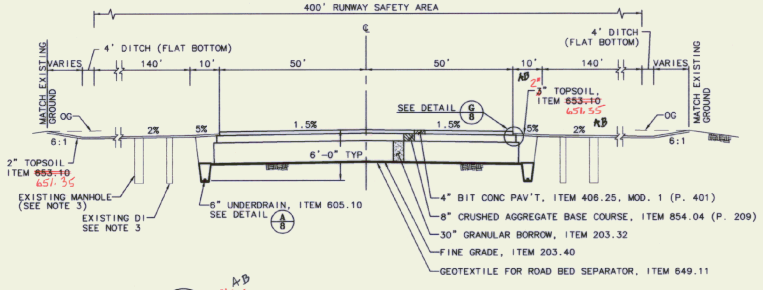
File No. I:\F40121\DWG\F40121-PP2
Job No. F40121.00

RUTLAND STATE AIRPORT
CLARENDON, VERMONT

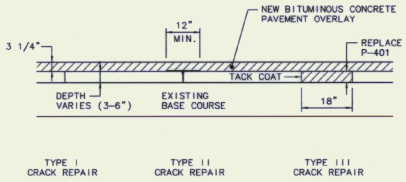
PHASING PLAN, NOTES

URS Greiner, Inc.
2 MARCUS BOULEVARD
ALBANY, NEW YORK

Designed by: G D'AMICO — Date: 2/97
Drawn by: M MCCALLA — 3/97
Checked by: G D'AMICO — 5/5/97
Approved by: M CHURCHILL — 5/5/97
Scale: HOR. – 1" = 400' VERT. – N/A
Date: 5/5/97
Sheet 6 Of 65
Sheet No 6



A/7 NEW PROPOSED TYPICAL SECTION R/W 1-19
STA 125+00 TO 142+00
SCALE = NONE



G/7 EXISTING RUNWAY PAVEMENT CRACK REPAIRS
SCALE = NONE

NOTES: 1. PRIOR TO PLACING NEW BITUMINOUS CONCRETE PAVEMENT OVERLAY, PAVEMENT CRACKS TO BE SEALED OR REPAIRED, AS FOLLOWS:

TYPE I CRACK REPAIR: CRACKS LESS THAN 3/4" IN WIDTH TO BE ROUTED AND SEALED WITH HOT POURED JOINT SEALING FILLER, PAVEMENT TO BE MADE UNDER ITEM 524.11 MOD. 1, TYPE I CRACK REPAIR (P-605).

TYPE II CRACK REPAIR: CRACKS BETWEEN 3/4" AND 1 1/4" IN WIDTH TO BE ROUTED SEALED WITH HOT POURED JOINT SEALING FILLER. PRIOR TO PLACING OVERLAY, CRACKS BETWEEN 1/2" AND 1 1/4" SHALL BE COVERED WITH A PAVEMENT REINFORCEMENT MATERIAL SUCH AS "PAVE-PREP" TM OR APPROVED EQUAL. PAYMENT TO BE MADE UNDER ITEM 524.11 MOD. 2 (P-605), TYPE II CRACK REPAIR.

TYPE III CRACK REPAIR: CRACKS OVER 1 1/4" IN WIDTH TO BE CUT OUT. EXISTING BIT. CONC. PAVEMENT (9") ON EITHER SIDE OF THE CRACK TO BE REMOVED, BASE MATERIAL RE-COMPACTED, AND NEW BITUMINOUS CONCRETE PAVEMENT (CONFORMING TO ITEM 406.25 MOD. 1 P-401) REPLACED. PAYMENT TO BE MADE UNDER ITEM 524.11, MOD. 3 (P-605)

2. DETERMINATION OF USE OF TYPE I, TYPE II, OR TYPE III CRACK REPAIR WILL BE AS DIRECTED BY THE ENGINEER.

3. CRACK SURVEY IN DEC. 1996 REVEALED APPROXIMATELY 17,000 LF OF CRACKS WHICH NEEDED REPAIR. APPROXIMATELY 10% TYPE III, APPROXIMATELY 50% TYPE II AND APPROXIMATELY 40% TYPE I.

GENERAL NOTES

1. SUBGRADE UNDER AREAS TO BE PAVED TO BE COMPACTED TO 100% DENSITY AS PER AASHTO T-180, OR AS DIRECTED BY THE ENGINEER
2. BITUMINOUS TACK COAT (EMULSIFIED ASPHALT, RS-1) TO BE APPLIED BETWEEN LIFTS OF BITUMINOUS CONCRETE PAVEMENT AT A RATE OF 0.01 TO 0.03 GAL / SY WHEN DIRECTED BY THE ENGINEER. (NOT A SEPARATE PAY ITEM.)
3. REMOVAL OF EXISTING MANHOLES AND DROP INLETS, TO BE PAID UNDER ITEM 203.16 SOLID ROCK EXCAVATION. (3 CY PER EACH UNIT REMOVED). EXISTING DRAINAGE LINES TO BE ABANDONED IN PLACE; PIPES TO BE PLUGGED EACH END WITH CONCRETE BEFORE BACKFILLING. PAYMENT TO BE SUBSIDIARY TO REMOVAL OF MANHOLES AND DROP INLETS.
4. EXISTING BITUMINOUS PAVEMENT 50'-75' EACH SIDE OF CENTERLINE TO BE REMOVED. PAYMENT TO BE MADE UNDER ITEM 203.15, COMMON EXCAVATION. AREA TO BE GRADED, TOPSOILED AND SEEDED.
5. ALL EXCAVATION TO BE PAID FOR UNDER ITEM 203.15, COMMON EXCAVATION OR 203.16 SOLID ROCK EXCAVATION.
6. SEED, ITEM 651.15 TO BE APPLIED AS DIRECTED BY ENGINEER.

% WT	LBS / A	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	PERR. 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			

THE SEED MIXTURE SHALL NOT HAVE A WEED CONTENT EXCEEDING 0.40% BY WEIGHT AND SHALL BE FREE OF ALL NOXIOUS WEED SEED.

FERTILIZER, ITEM 651.18, FORMULA 10-20-10 TO BE USED WITH SEED, ITEM 651.15, APPLIED AT THE RATE IF 500 LBS / ACRE.

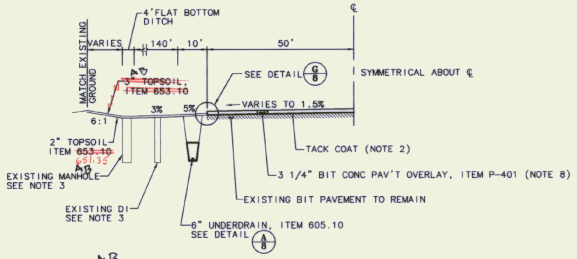
AGRICULTURAL LIMESTONE, ITEM 651.20, TO BE APPLIED AT RATE OF 2 TONS / ACRE OR AS DIRECTED BY ENGINEER.

HAY MULCH, ITEM 651.25, TO BE PLACED ON EARTH SLOPES AT THE RATE OF 2 TONS / ACRE.

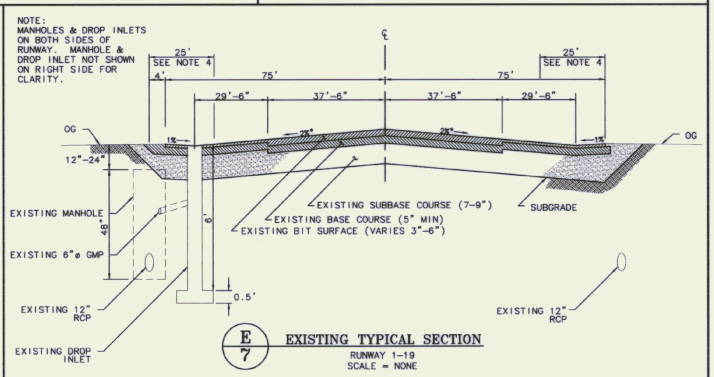
TOPSOIL, ITEM 651.35, TO BE USED WITH SEED, ITEM 651.15, AS DIRECTED BY THE ENGINEER.

ALLOWABLE THICKNESS TOLERANCES:
SUBGRADE ± 1"
CONTROLLED MATERIAL ± 1"
PAVEMENT ± 3/16"
BASE COURSE ± 1/2"

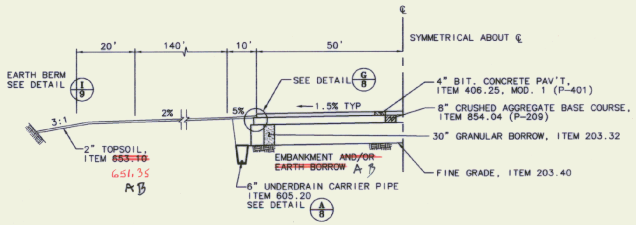
7. BITUMINOUS CONCRETE PAVEMENT DESIGN BASED ON PERFORMANCE GRADED ASPHALT - USED PG 58-34 IN ACCORDANCE WITH AASHTO DESIGNATION MP1.
8. MINIMUM OVERLAY DEPTH IS 2 INCHES. MILL EXISTING PAVEMENT GRADED ASPHALT - WHEN NECESSARY TO ACHIEVE MINIMUM THICKNESS.



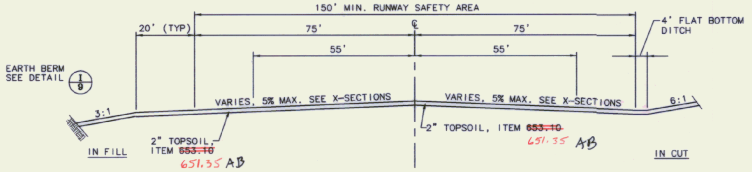
B/7 NEW PROPOSED TYPICAL SECTION R/W 1-19
STA 103+00 TO 124+50
SCALE = NONE



E/7 EXISTING TYPICAL SECTION
RUNWAY 1-19
SCALE = NONE



C/7 NEW PROPOSED TYPICAL SECTION R/W 1-19
STA 150+00 TO 153+00
SCALE = NONE



D/7 RUNWAY SAFETY AREA BEYOND RUNWAY THRESHOLD - TYPICAL SECTIONS
STA 100+00 TO 103+00
STA 153+00 TO 156+00
SCALE = NONE

* WHERE SHOWN ON PLANS OR AS ORDERED BY THE ENGINEER

AIP 3-50-0015-11

STATE OF VERMONT — PAUL L. CHARRON — No. 5951 — REGISTERED PROFESSIONAL ENGINEER

REV.	DATE	DESCRIPTION
1	12/12/97	As Built

File No. : (VAR023X5B01)

Job No.

RUTLAND STATE AIRPORT
CLARENDON, VERMONT

TYPICAL SECTIONS & DETAILS

URS Greiner, Inc.
3 MARCUS BOULEVARD
ALBANY, NEW YORK

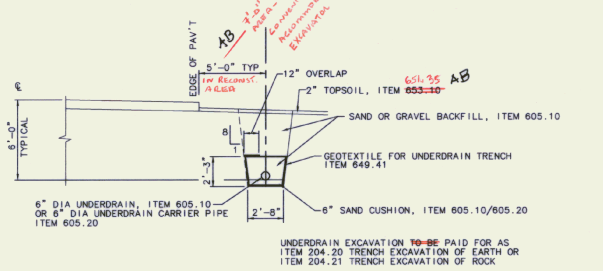
Designed by: G D'AMICO — Date 2/97
Drawn by: M MCCALLA — 3/97
Checked by: G D'AMICO — 5/5/97
Approved by: M CHURCHILL — 5/5/97

Scale: HS = AS NOTED, VS = AS NOTED

Date: 5/5/97

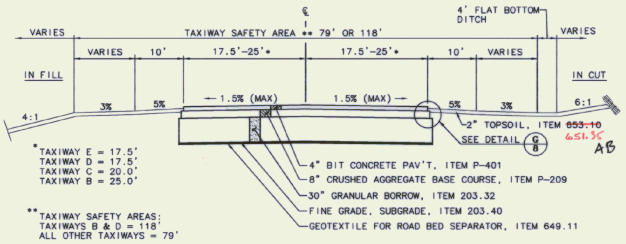
Sheet 7 Of 65

Sheet No 7



NOTES: SAND CUSHION AND GEOTEXTILE FOR ROADBED SEPARATOR NOT REQUIRED FOR UNDERDRAIN CARRIER PIPE.

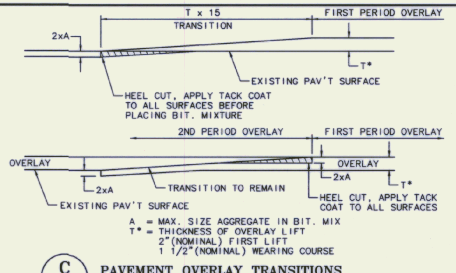
A/8 6" DIA UNDERDRAIN AND 6" DIA UNDERDRAIN CARRIER PIPE
SCALE = NONE



*TAXIWAY E = 17.5'
TAXIWAY D = 17.5'
TAXIWAY C = 20.0'
TAXIWAY B = 25.0'

**TAXIWAY SAFETY AREAS:
TAXIWAYS B & D = 118'
ALL OTHER TAXIWAYS = 79'

B/8 PROPOSED TAXIWAY TYPICAL SECTION
SCALE = NONE

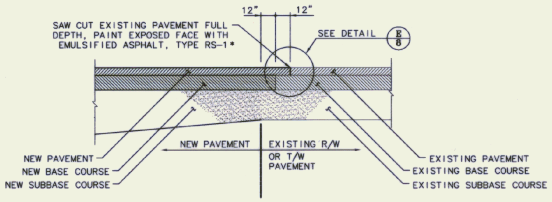


A = MAX. SIZE AGGREGATE IN BIT. MIX
T* = THICKNESS OF OVERLAY LIFT
2"(NOMINAL) FIRST LIFT
1 1/2"(NOMINAL) WEARING COURSE

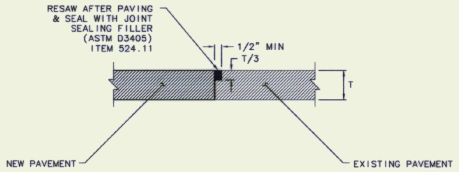
C/8 PAVEMENT OVERLAY TRANSITIONS
SCALE = NONE

1. OVERLAY OPERATION TO PROCEED FROM SOUTH TO NORTH
2. OVERLAY TO BE COMPLETED FULL WIDTH OF RUNWAY ON EACH EVENINGS WORK. During Phase A.
3. PLACEMENT OF PAVEMENT OVERLAY TO TERMINATE EACH NIGHT TO ALLOW SUFFICIENT TIME FOR PLACEMENT OF TEMPORARY MARKING AND CLEANUP PRIOR TO RE-OPENING THE RUNWAY.
4. AT THE END OF EACH NIGHT'S WORK, TRANSITION RAMPS TO BE CONSTRUCTED TO PROVIDE TRANSITION FROM COMPLETED COURSE OF THE OVERLAY TO THE EXISTING PAVEMENT.

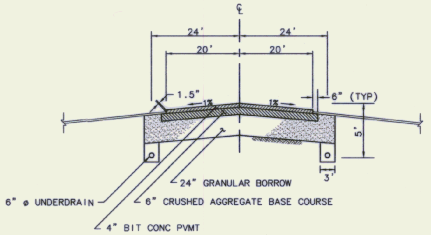
NOTE:
* THE COST OF THE PAVEMENT SAW CUT AND TACKCOAT ARE NOT A SEPARATE PAY ITEM. IT IS CONSIDERED AS SUBIDIARY TO THE OTHER ITEMS OF WORK.



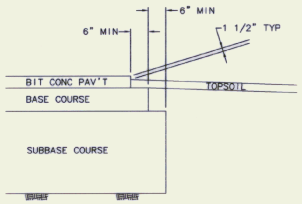
D/8 BUTT JOINT DETAIL
SCALE = NONE



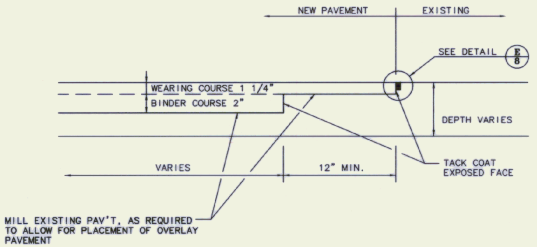
E/8 SAWCUT DETAIL
SCALE = NONE



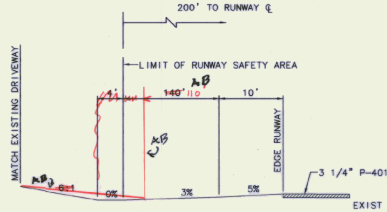
F/8 EXISTING TYPICAL SECTION TAXIWAY 'C'
SCALE = NONE



G/8 PAVEMENT SECTION EDGE (TYP.)
SCALE = NONE



H/8 OVERLAY BUTT JOINT DETAIL
SCALE = NONE



ROADWAY PROFILE TO MATCH NEW RUNWAY SAFETY AREA GRADES.

I/8 MAINTENANCE DRIVEWAY PROFILE STA 145+03± LEFT
SCALE = NONE

AIP 3-50-0015-11

STATE OF VERMONT
RUSSELL CHURCHILL
No. 5951
REGISTERED PROFESSIONAL ENGINEER

REV.	DATE	DESCRIPTION
1	12/11/98	As Built

Job No.
File No. 1/5401315P5801

RUTLAND STATE AIRPORT
CLARENDON, VERMONT

TYPICAL SECTIONS & DETAILS

URS Greiner, Inc.
3 MARCUS BOULEVARD
ALBANY, NEW YORK

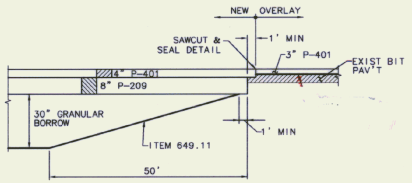
Designed by: G D'AMICO	Date 5/97
Drawn by: M MCCLAIN	2/97
Checked by: G D'AMICO	5/5/97
Approved by: M CHURCHILL	5/5/97

Scale: HS = AS NOTED
VS = AS NOTED

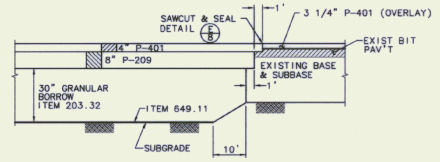
Date: 5/5/97

Sheet 8 Of 65

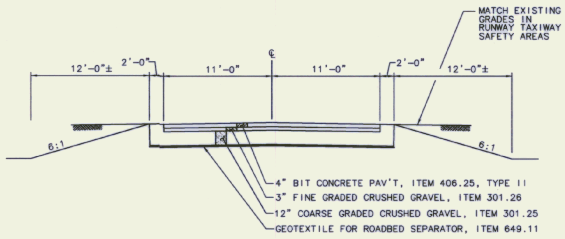
Sheet No
8



C/9 PROPOSED SUBGRADE TRANSITION
R/W STA 124+50 TO 125+00
T/W D STA 501+00 TO 500+50
SCALE = NONE

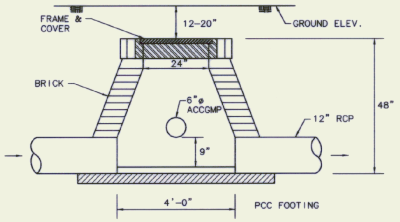


D/9 PROPOSED SUBGRADE TRANSITION
STA 142+00 TO 142+10
STA 149+90 TO 150+00
SCALE = NONE

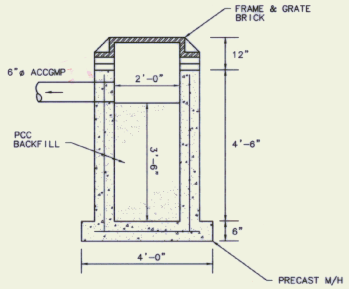


(DRIVE AT 506+60± RT IS 10' WIDE)
(DRIVE AT 121+60± LT REMAINS 11' WIDE)

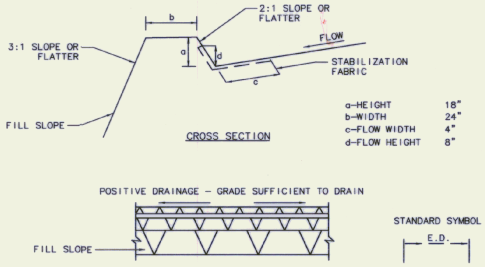
E/9 TYPICAL DRIVEWAY SECTION
SCALE = NONE



F/9 EXISTING MANHOLE DETAIL
TYPICAL
SCALE = NONE

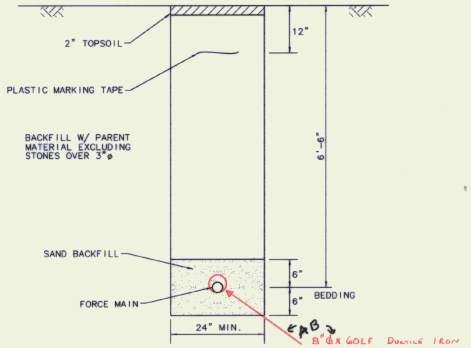


G/9 EXISTING DROP INLETS DETAIL
TYPICAL
SCALE = NONE



1. BERMS ~~SHALL BE~~ COMPACTED BY EARTH-MOVING EQUIPMENT.
2. TOP MAY BE WIDER AND SIDE SLOPES MAY BE FLATTER
3. BERMS ~~TO BE~~ CONSTRUCTED ALONG TOP OF SLOPE OUTSIDE RUNWAY SAFETY AREA OVERRUNS.

I/9 EARTH BERM
SCALE = NONE



J/9 TRENCH DETAIL
SCALE = NONE

AIP 3-50-0015-11

STATE OF VERMONT
ISAAC L. CROSBY
No. 5991
REGISTERED PROFESSIONAL ENGINEER

REV.	DATE	DESCRIPTION
1	4/28/98	As Built

Job No. 14032.00
File No. I:\14032\SHEET

RUTLAND STATE AIRPORT
CLARENDON, VERMONT

TYPICAL SECTIONS & DETAISL

URS Greiner, Inc.
3 MARCUS BOULEVARD
ALBANY, NEW YORK

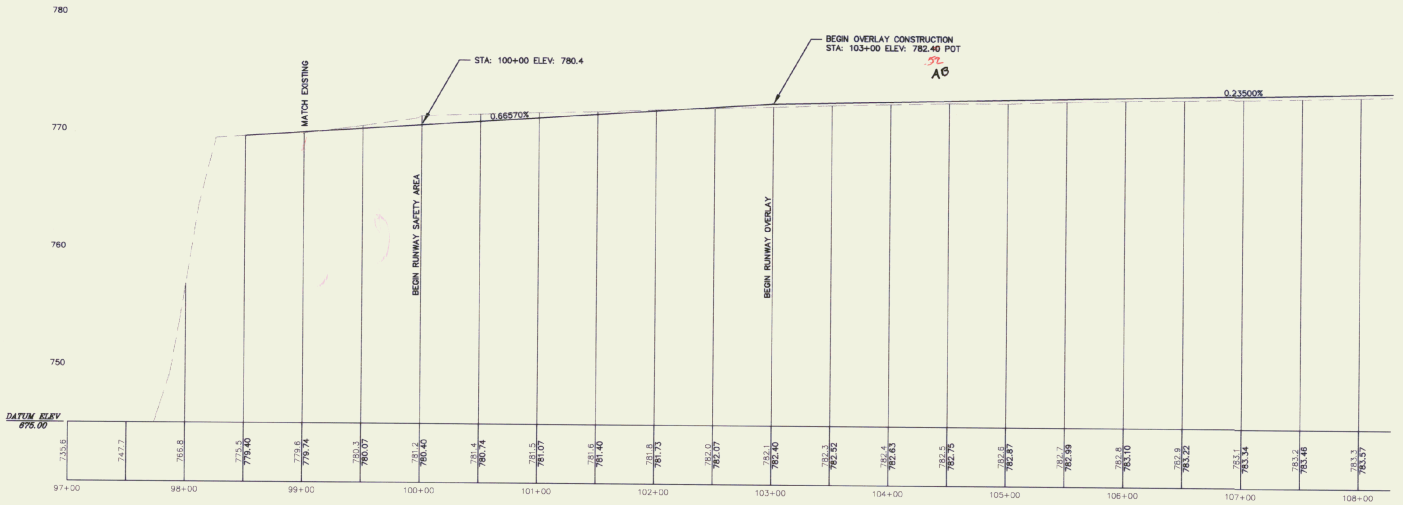
Designed by: G D'AMICO	Drawn by: M MCCALLA	Checked by: G D'AMICO
Date 2/97	3/97	5/5/97
Approved by: M GILDROEL 5/5/97		

Scale: HS - AS SHOWN
VS - AS SHOWN

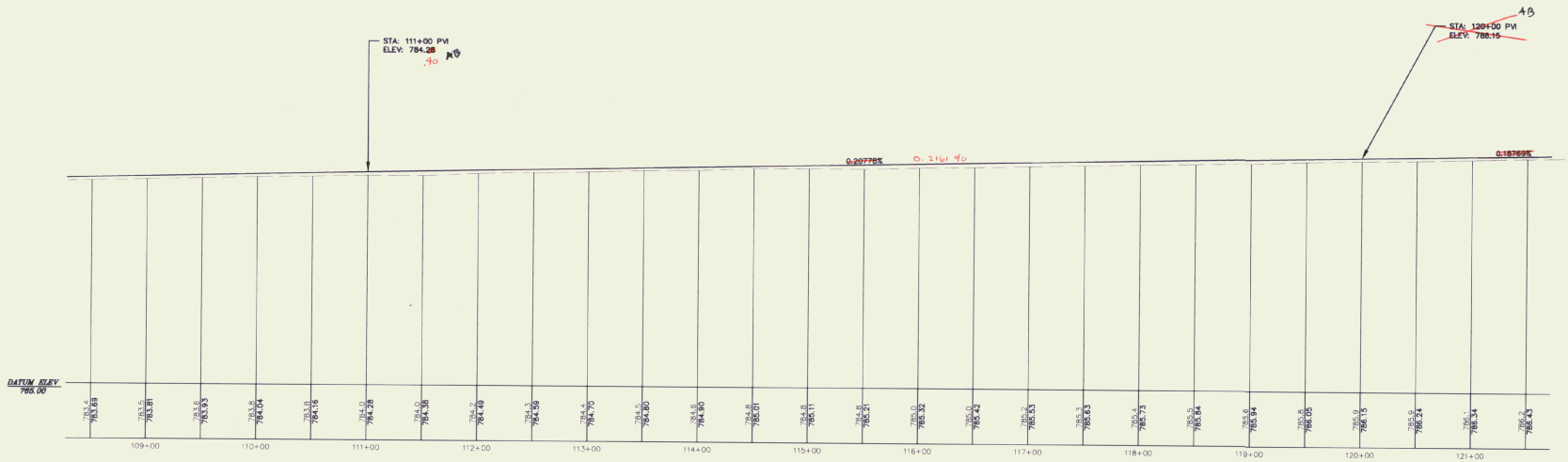
Date: 5/5/97

Sheet 9 Of 85

Sheet No
9



RUNWAY 1-19 PROFILE
STA 94+00 TO 108+00



RUNWAY 1-19 PROFILE
STA 108+50 TO 121+50

AIP 3-50-0015-11

STATE OF VERMONT
RUSSELL C. WOOL
No. 5951
REGISTERED
PROFESSIONAL ENGINEER

REV.	DATE	DESCRIPTION
1	7/18/97	PROFILE STA 103+50 TO 124+50

Job No. F4023280

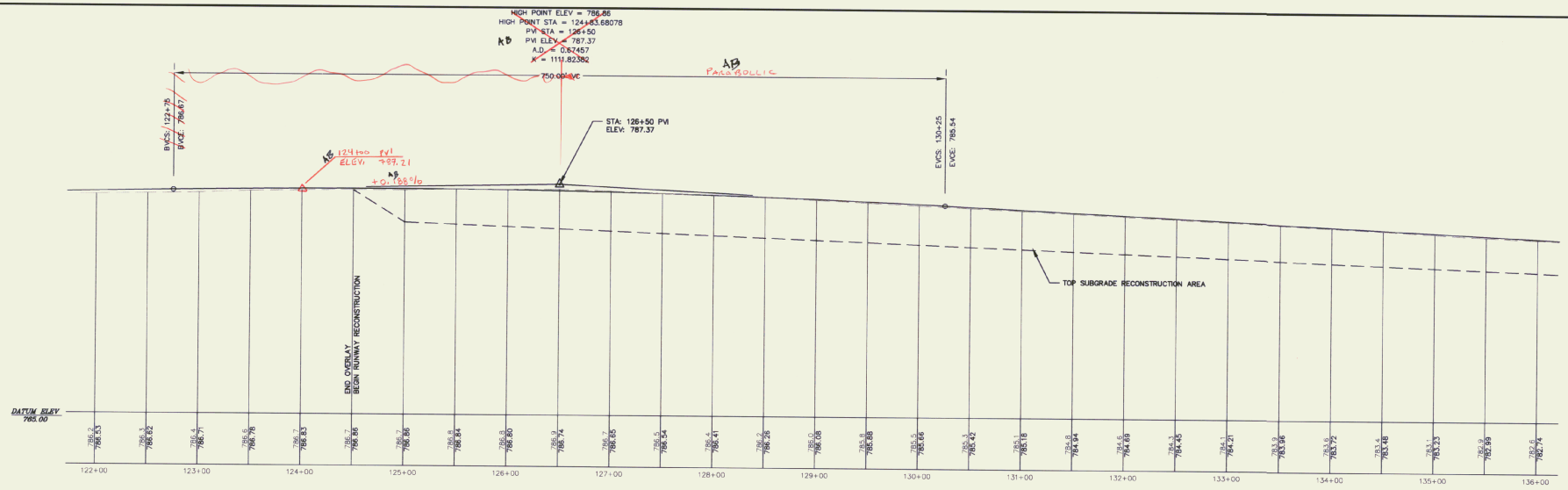
File No. \\F4023280\

RUTLAND STATE AIRPORT
CLARENDON, VERMONT

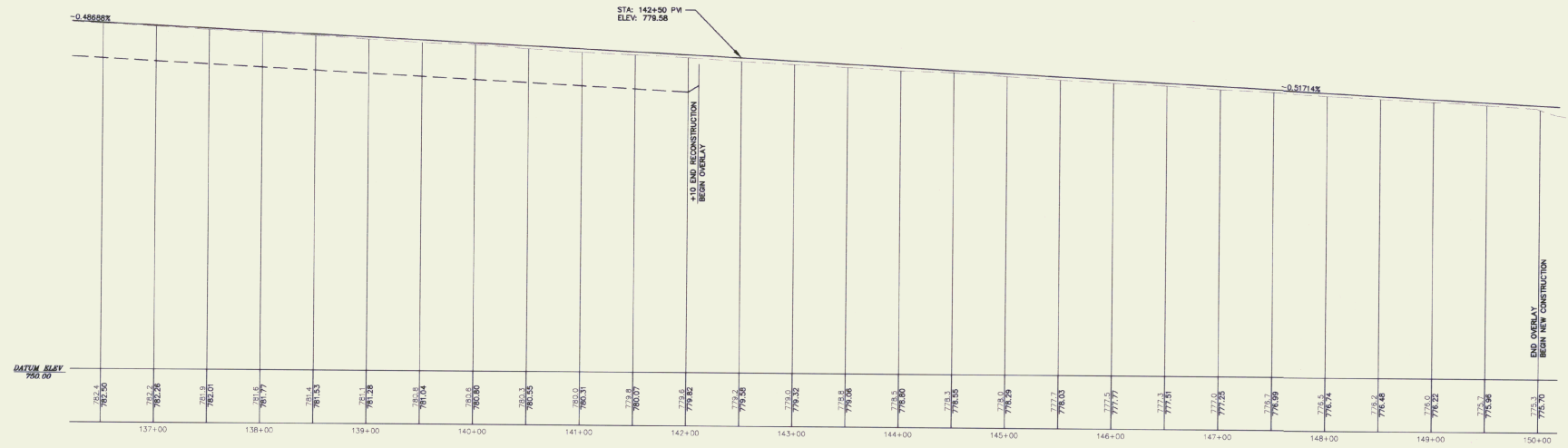
RUNWAY 1-19 PROFILE

URS Greiner, Inc.
3 MARCUS BOULEVARD
ALBANY, NEW YORK

Designed by: G D'AMICO	Date 2/97
Drawn by: M MCCALLA	3/97
Checked by: G D'AMICO	5/5/97
Approved by: M CHURCHILL	5/5/97
Scale:	HOR. - 1" = 50' VERT. - 1" = 5'
Date:	5/5/97
Sheet 10 Of 65	
Sheet No	10



RUNWAY 1-19 PROFILE
STA 122+00 TO 136+00



RUNWAY 1-19 PROFILE
STA 136+50 TO 150+00

AIP 3-50-0015-11

STATE OF VERMONT
DANIEL L. CROCKETT
No. 5951
REGISTERED PROFESSIONAL ENGINEER

REV.	DATE	DESCRIPTION
1	7/18/97	PROFILE STA. 102+52 → 136+52

File No. : \\FA0213\D\39\90
Job No. FA0213.00

RUTLAND STATE AIRPORT
CLARENDON, VERMONT

RUNWAY 1-19 PROFILE

URS Greiner, Inc.
3 MARCUS BOULEVARD
ALBANY, NEW YORK

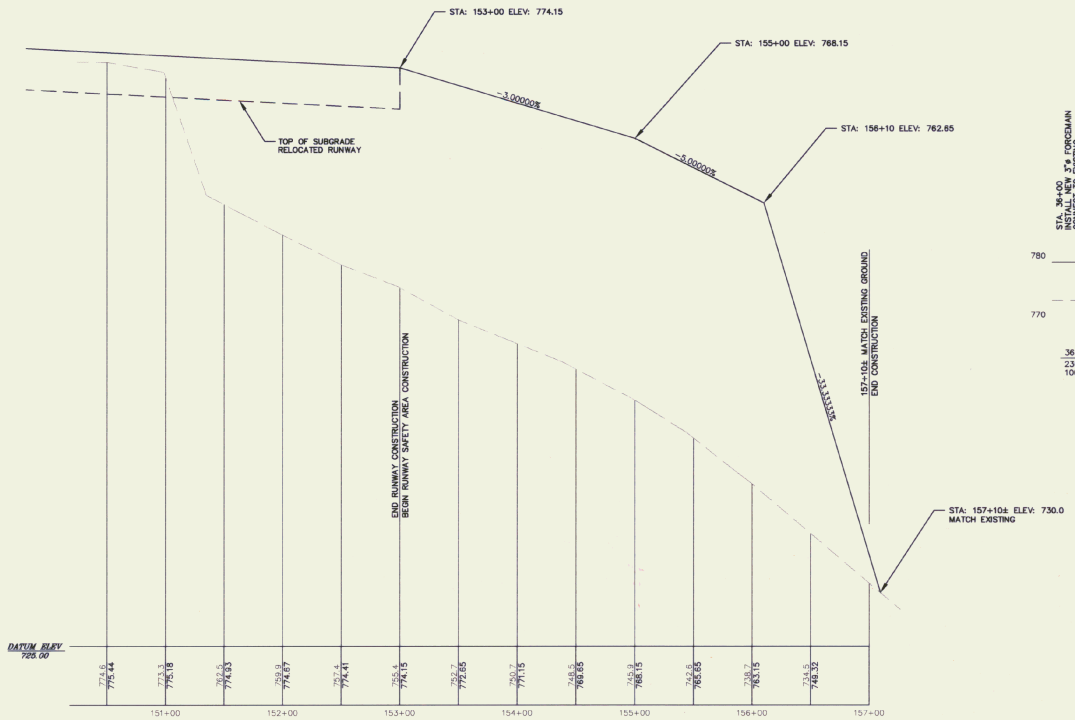
Designed by: G D'AMICO — Date: 2/97
Drawn by: M MCCALLA — 3/97
Checked by: G D'AMICO — 5/5/97
Approved by: D CHURCHILL — 5/5/97

Scale: HOR. - 1" = 50'
VERT. - 1" = 5'

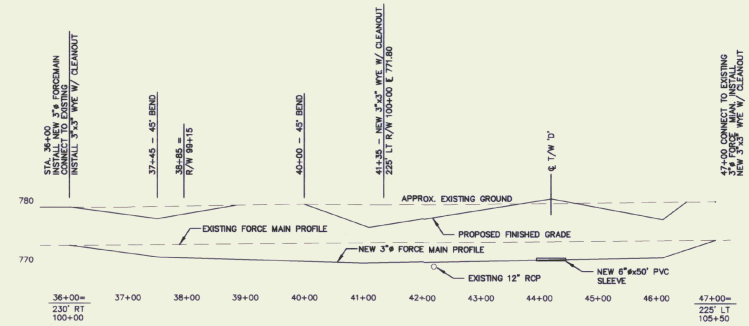
Date: 5/5/97

Sheet 11 Of 65

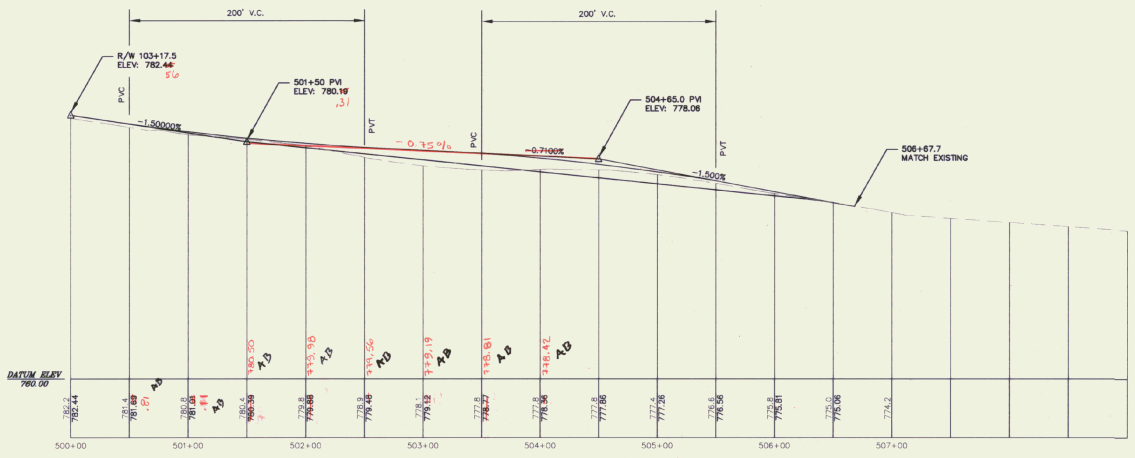
Sheet No
11



RUNWAY 1–19 PROFILE
STA 150+50 TO 157+10±



FORCE MAIN PROFILE
1" = 100' HORIZONTAL
1" = 5' VERTICAL



TAXIWAY 'D' PROFILE
STA 500+00 TO 507+00

AIP 3–50–0015–11

STATE OF VERMONT
DONALD L. CRUICKSHANK
No. 5961
REGISTERED PROFESSIONAL ENGINEER

REV.	DATE	DESCRIPTION
1	7/18/97	TAXIWAY 'D' - PROFILE

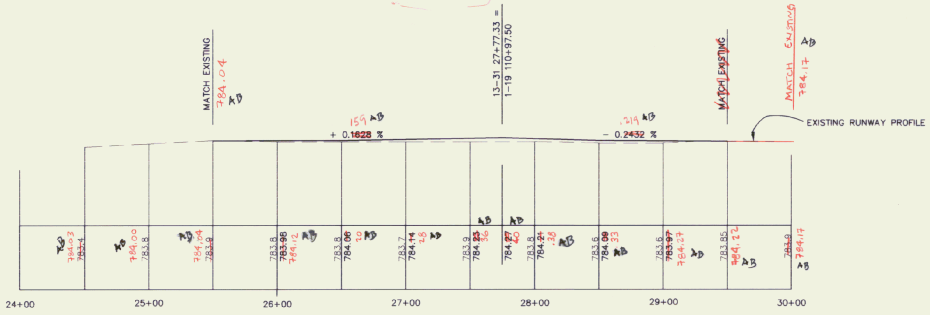
File No. I:\740521\021PRO
Job No. 740521.00

RUTLAND STATE AIRPORT
CLARENDON, VERMONT

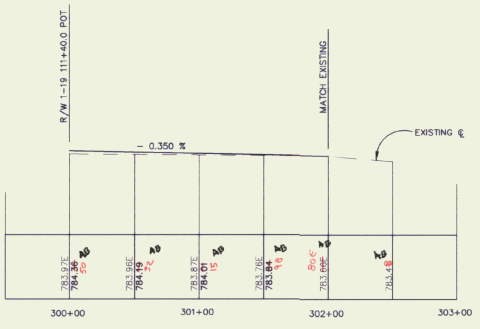
RUNWAY 1–19 PROFILE

URS Greiner, Inc.
3 MARCUS BOULEVARD
ALBANY, NEW YORK

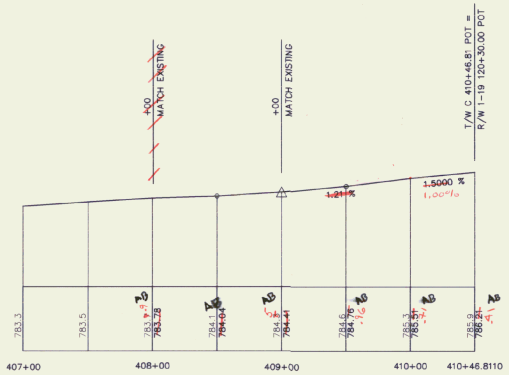
Designed by: G D'AMICO — Date 2/97
Drawn by: M MCCALLA — 3/97
Checked by: G D'AMICO — 5/5/97
Approved by: M CHURCHILL — 5/5/97
Scale: HOR. – 1" = 50' VERT. – 1" = 5'
Date: 5/5/97
Sheet 12 Of 65
Sheet No 12



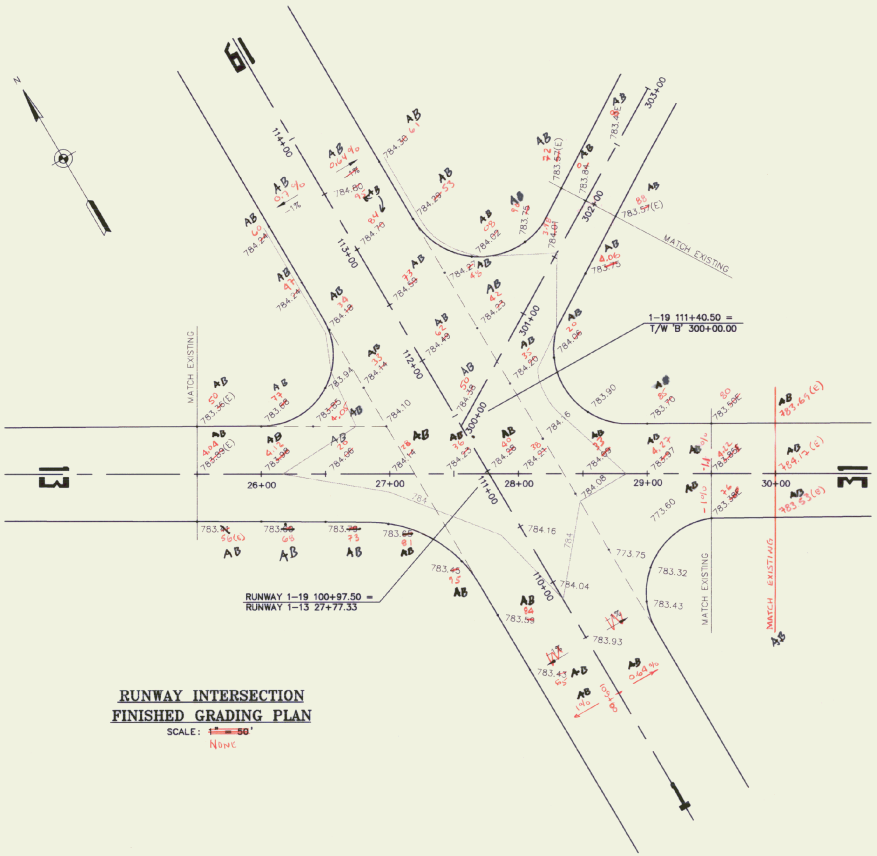
RUNWAY 13-31 PROFILE



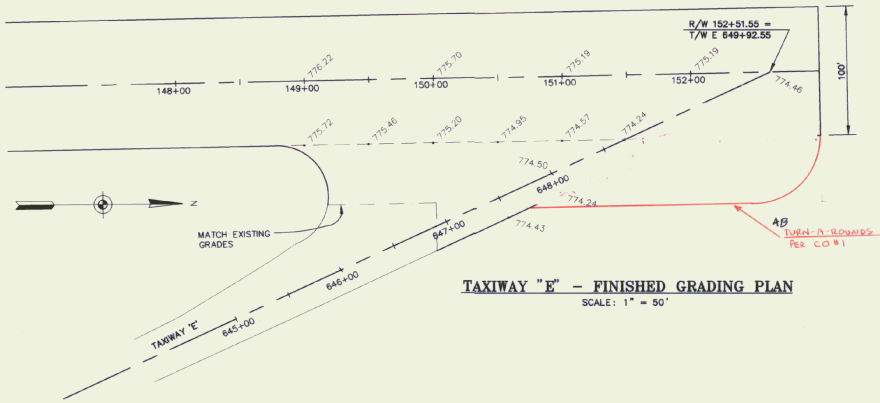
TAXIWAY "B" PROFILE



TAXIWAY "C" PROFILE



RUNWAY INTERSECTION
FINISHED GRADING PLAN
SCALE: ~~1" = 50'~~
NONE



TAXIWAY "E" - FINISHED GRADING PLAN
SCALE: 1" = 50'

AIP 3-50-0015-11

STATE OF VERMONT
No. 5951
REGISTERED PROFESSIONAL ENGINEER

REV.	DATE	DESCRIPTION
A	7/18/97	ADD FILE RW 13-31
	7/25/97	RW INTERSECTION F.G. PLAN

Job No. 740272.00

File No.: I:\740272\0\4\P

RUTLAND STATE AIRPORT
CLARENDON, VERMONT

TAXIWAYS - RUNWAY 13-31 PROFILES

URS Greiner, Inc.
3 MARCUS BOULEVARD
ALBANY, NEW YORK

Designed by: G D'AMICO	Drawn by: N MCCALLA 3/97	Checked by: G D'AMICO 5/5/97
Approved by: M CHURCHILL 5/5/97		

Scale: HOR. - 1" = 50'
VERT. - NONE

Date: 5/5/97

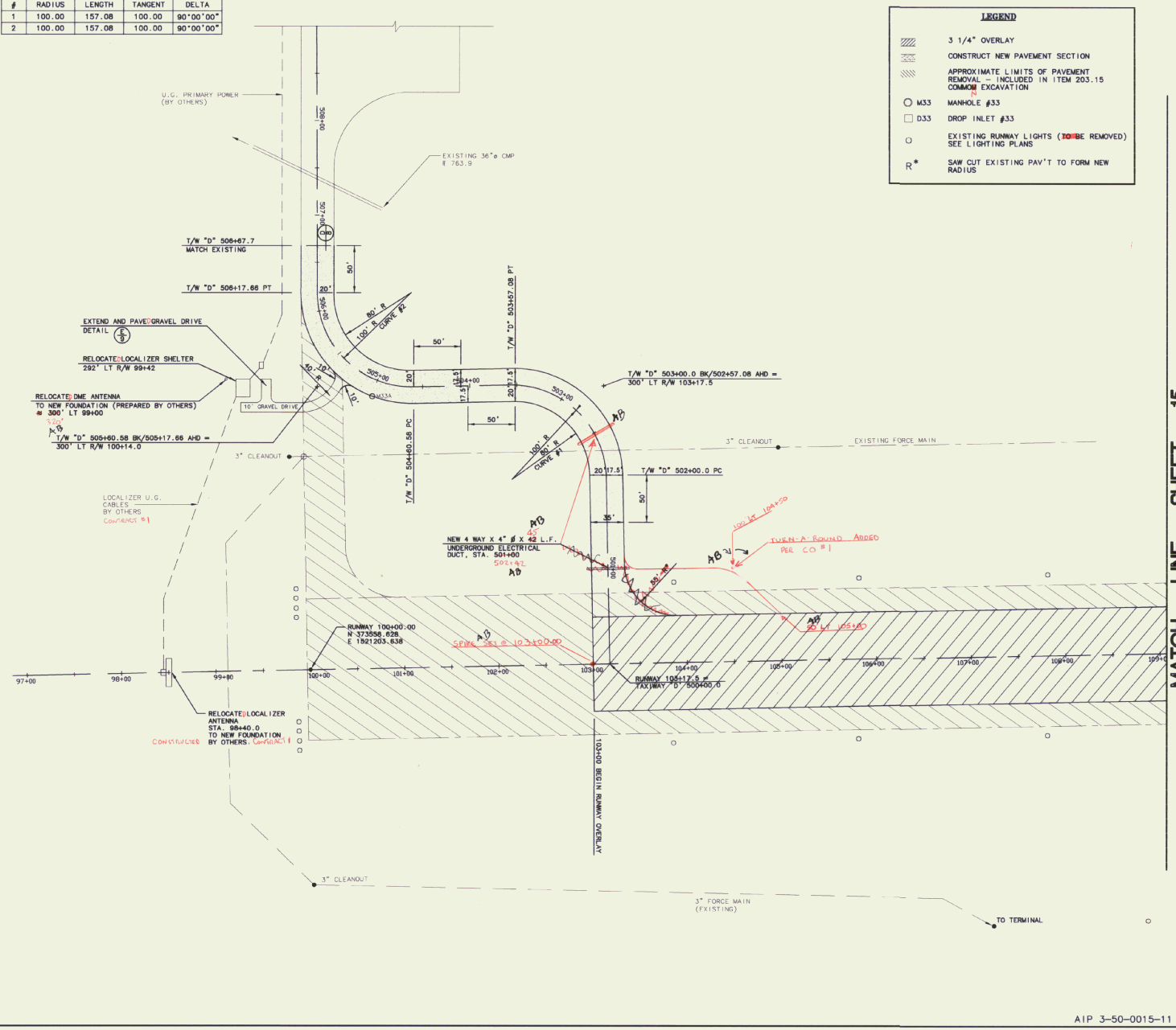
Sheet 13 Of 65

Sheet No
13

NOTE:

1. EXISTING RUNWAY 1-19 ~~IS~~ WAS 150' WIDE.
   NEW RUNWAY ~~TO BE~~ 100' WIDE.

CURVE DATA				
#	RADIUS	LENGTH	TANGENT	DELTA
1	100.00	157.08	100.00	90°00'00"
2	100.00	157.08	100.00	90°00'00"



AS BUILT PLANS
I hereby certify that all the construction required by this set of drawings has been accomplished as indicated herein.
By _____ Project Engr
Date 12/29/97

AIP 3-50-0015-11

STATE OF VERMONT — MICHAEL L. CHURCHILL — No. 5351 — REGISTERED PROFESSIONAL ENGINEER

REV.	DATE	DESCRIPTION
1	12/31/98	As Built

Job No. F401212.00 — File No. I:\F401212\dgn\PAVLA

RUTLAND STATE AIRPORT
CLARENDON, VERMONT

PAVING PLAN & GEOMETRIC LAYOUT

URS Greiner, Inc.
3 MARCUS BOULEVARD
ALBANY, NEW YORK

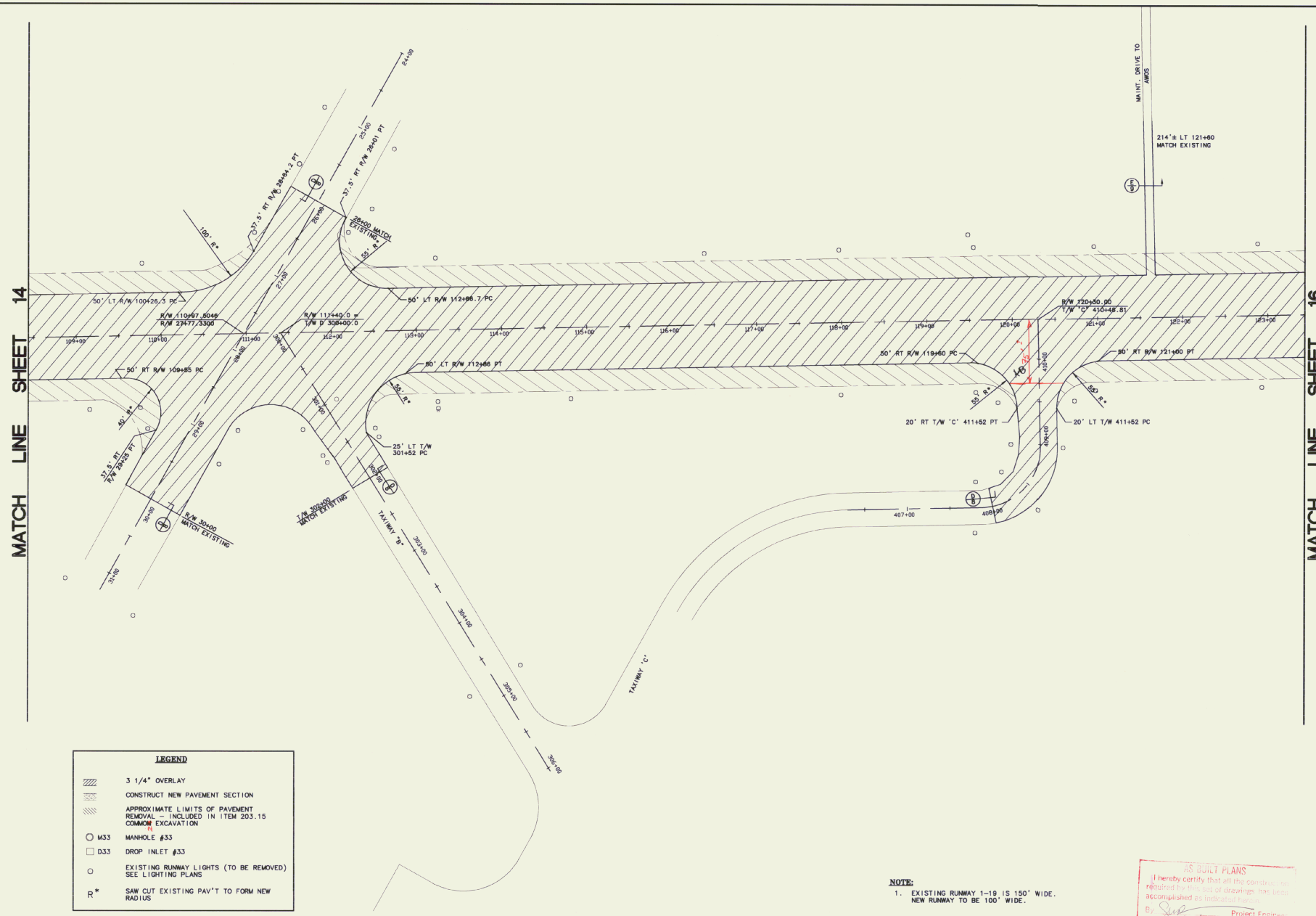
Designed by: G D'AMICO — Date: 2/97
Drawn by: M MCCALLA — 3/97
Checked by: G D'AMICO — 5/5/97
Approved by: M CHURCHILL — 5/5/97

Scale: HOR. – 1" = 50'
VERT. – NONE

Date: 5/5/97

Sheet 14 Of 65

Sheet No
14



LEGEND

- 3 1/4" OVERLAY
- CONSTRUCT NEW PAVEMENT SECTION
- APPROXIMATE LIMITS OF PAVEMENT REMOVAL – INCLUDED IN ITEM 203.15 COMMON EXCAVATION
- M33 MANHOLE #33
- D33 DROP INLET #33
- EXISTING RUNWAY LIGHTS (TO BE REMOVED) SEE LIGHTING PLANS
- R* SAW CUT EXISTING PAV'T TO FORM NEW RADIUS

NOTE:

1. EXISTING RUNWAY 1–19 IS 150' WIDE. NEW RUNWAY TO BE 100' WIDE.

AS BUILT PLANS
I hereby certify that all the construction required by this set of drawings has been accomplished as indicated herein.
By _____ Project Engineer
Date 12/29/97

AIP 3-50-0015-11

STATE OF VERMONT
RUSSELL L. CHURCHILL
No. 5951
REGISTERED PROFESSIONAL ENGINEER

REV.	DATE	DESCRIPTION
A	12/29/97	AS BUILT

Job No. F40123.00 | File No. I:\VF40123\Dgn\PPG4

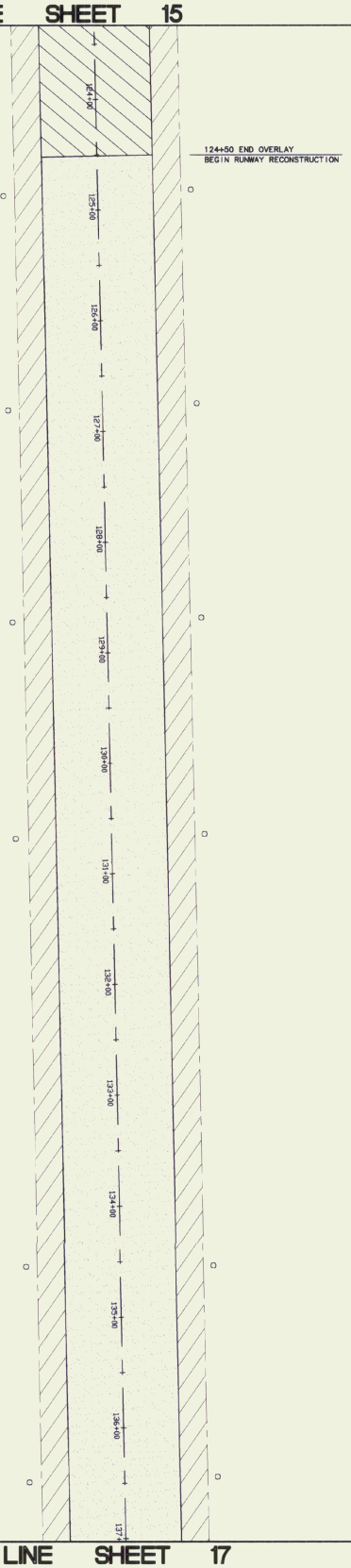
RUTLAND STATE AIRPORT
CLARENDON, VERMONT

PAVING PLAN & GEOMETRIC LAYOUT

URS Greiner, Inc.
3 MARCUS BOULEVARD
ALBANY, NEW YORK

Designed by: G D'AMICO	Date 2/97
Drawn by: M MCCALLA	3/97
Checked by: G D'AMICO	5/5/97
Approved by: M CHURCHILL	5/5/97
Scale:	HOR. – 1" = 50' VERT. – NONE
Date:	5/5/97
Sheet 15 Of 65	
Sheet No	15

MATCH LINE SHEET 15



MATCH LINE SHEET 17

LEGEND

- 3 1/4" OVERLAY
- CONSTRUCT NEW PAVEMENT SECTION
- APPROXIMATE LIMITS OF PAVEMENT REMOVAL – INCLUDED IN ITEM 203.15 COMMON EXCAVATION
- M33 MANHOLE #33
- D33 DROP INLET #33
- EXISTING RUNWAY LIGHTS (TO BE REMOVED) SEE LIGHTING PLANS
- R* SAW CUT EXISTING PAV'T TO FORM NEW RADIUS

NOTE:

1. EXISTING RUNWAY 1-19 IS 150' WIDE. NEW RUNWAY TO BE 100' WIDE.

AS BUILT PLANS

I hereby certify that all the construction required by this set of drawings has been accomplished in accordance therewith.

By _____ Project Engineer

Date 12/27/07

AIP 3-50-0015-11

Designed by: G D'AMICO Date 2/97	URS Greiner, Inc.	RUTLAND STATE AIRPORT	
Drawn by: N MCCALLA 3/97	3 MARCUS BOULEVARD	CLARENDON, VERMONT	
Checked by: G D'AMICO 5/5/97	ALBANY, NEW YORK	PAVING PLAN & GEOMETRIC LAYOUT	
Approved by: M CHURCHILL 5/5/97			

REV.	DATE	DESCRIPTION
1	12/31/08	As Builts

Job No. F401212.00 | File No. I:\F401212\PA-PPGL4

Scale: HOR. - 1" = 50' VERT. - NONE

Date: 5/5/97

Sheet 16 Of 65

Sheet No 16

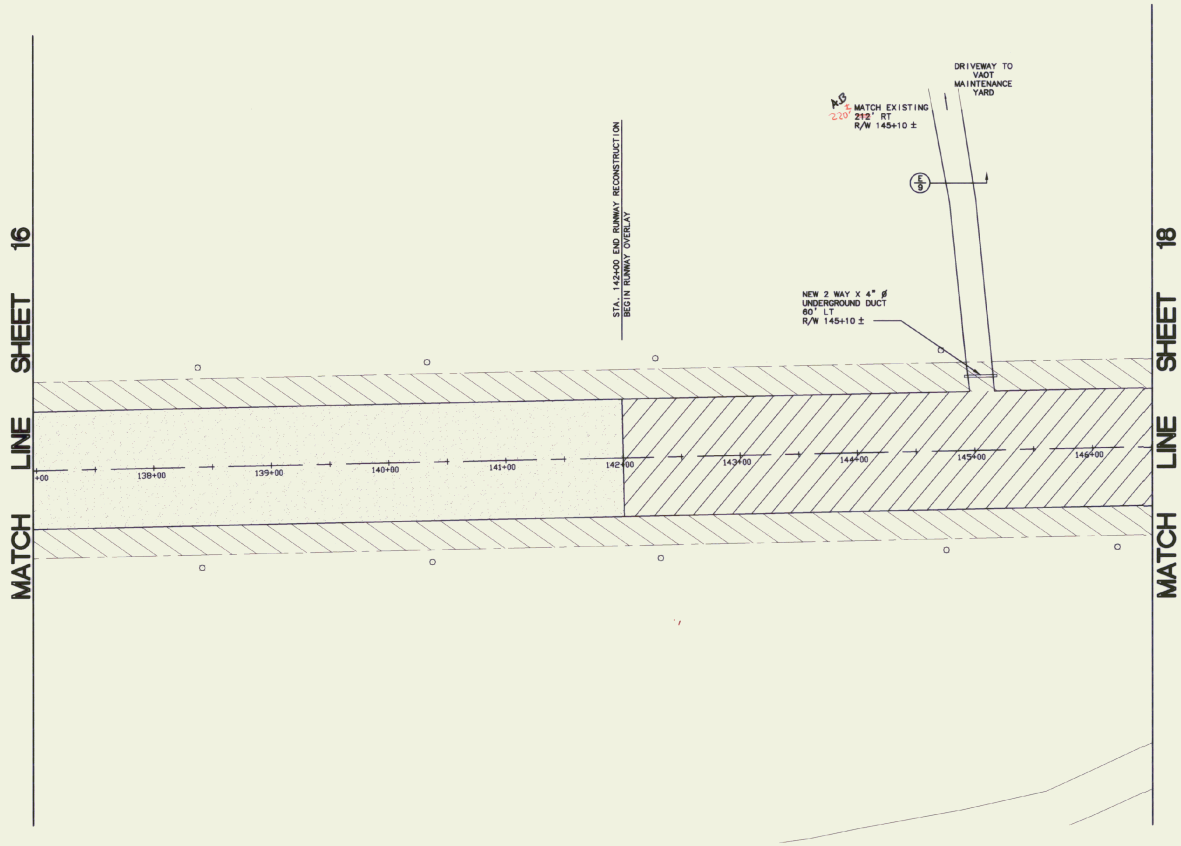
STATE OF VERMONT — No. 5551 — REGISTERED PROFESSIONAL ENGINEER

LEGEND

- 3 1/4" OVERLAY
- CONSTRUCT NEW PAVEMENT SECTION
- APPROXIMATE LIMITS OF PAVEMENT REMOVAL – INCLUDED IN ITEM 203.15 COMMON EXCAVATION
- M33 MANHOLE #33
- D33 DROP INLET #33
- EXISTING RUNWAY LIGHTS (~~TO BE~~ REMOVED) SEE LIGHTING PLANS
- R* SAW CUT EXISTING PAV'T TO FORM NEW RADIUS

NOTE:

1. EXISTING RUNWAY 1–19 ~~IS~~ WAS 150' WIDE. NEW RUNWAY ~~TO BE~~ 100' WIDE.



AS BUILT PLANS
I hereby certify that all the construction required by this set of drawings has been completed.
Project Engineer
12/29/97

AIP 3-50-0015-11

STATE OF VERMONT
MICHAEL L. CHURCHILL
REGISTERED PROFESSIONAL ENGINEER

REV.	DATE	DESCRIPTION
1	12/19/97	As Built

File No. I:\F40121\09-PROJ.4
Job No. F40121.00

RUTLAND STATE AIRPORT
CLARENDON, VERMONT

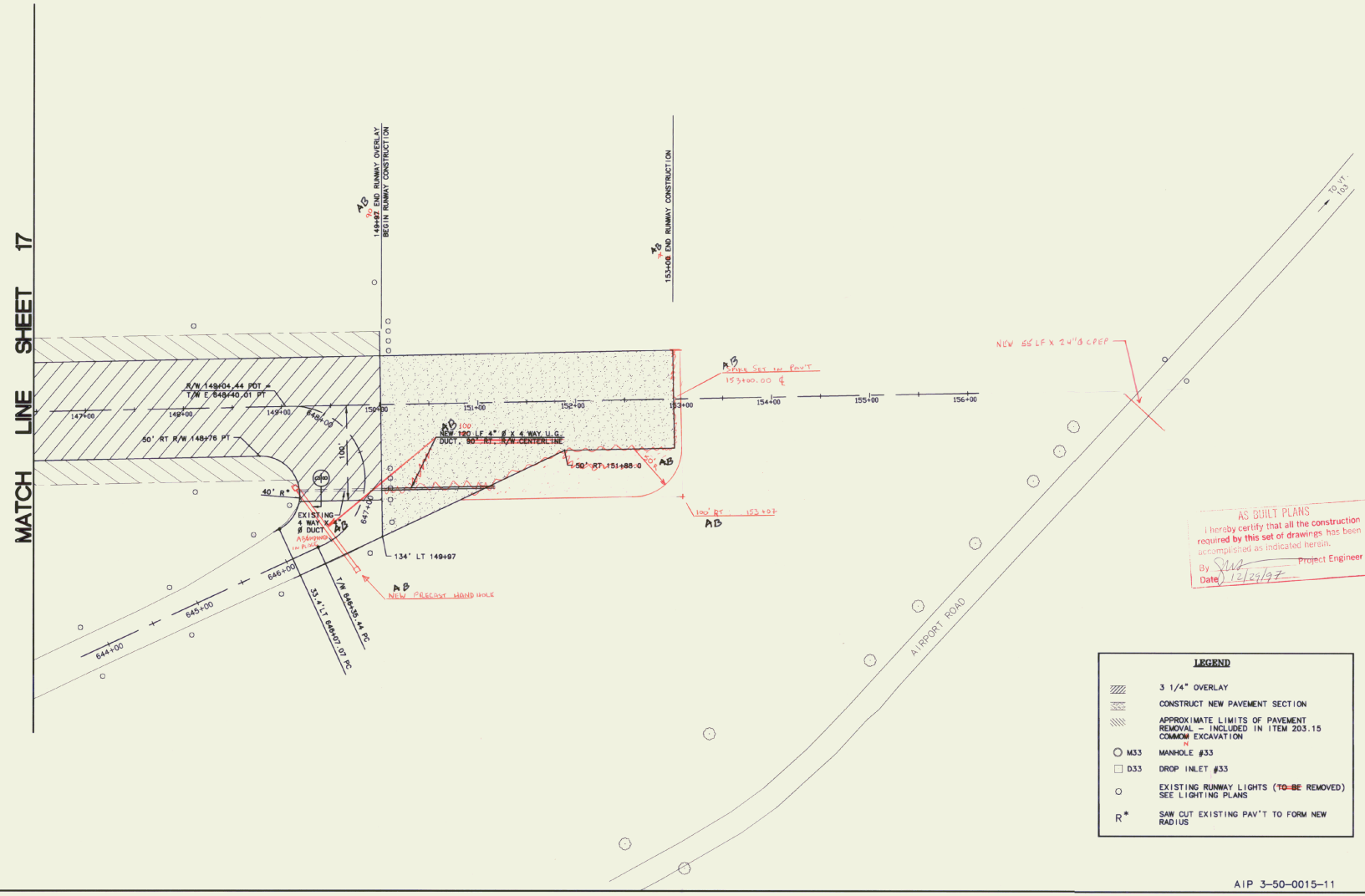
PAVING PLAN & GEOMETRIC LAYOUT

URS Greiner, Inc.
3 MARCUS BOULEVARD
ALBANY, NEW YORK

Designed by: G D'AMICO	Date 5/97
Drawn by: M MCCALLA	5/97
Checked by: G D'AMICO	5/5/97
Approved by: M CHURCHILL	5/5/97
Scale:	HOR. – 1" = 50' VERT. – NONE
Date:	5/5/97
Sheet 17	Of 65
Sheet No	17

NOTE:

1. EXISTING RUNWAY 1–19 ~~IS~~ WAS 150' WIDE.
   NEW RUNWAY ~~TO BE~~ 100' WIDE.



AS BUILT PLANS
I hereby certify that all the construction required by this set of drawings has been accomplished as indicated herein.
By _____ Project Engineer
Date 12/29/97

LEGEND

- 3 1/4" OVERLAY
- CONSTRUCT NEW PAVEMENT SECTION
- APPROXIMATE LIMITS OF PAVEMENT REMOVAL – INCLUDED IN ITEM 203.15 COMMON EXCAVATION
- M33 MANHOLE #33
- D33 DROP INLET #33
- EXISTING RUNWAY LIGHTS (~~TO BE~~ REMOVED) SEE LIGHTING PLANS
- R* SAW CUT EXISTING PAV'T TO FORM NEW RADIUS

AIP 3-50-0015-11

STATE OF VERMONT
DAELL CHURCHILL
REGISTERED PROFESSIONAL ENGINEER

REV.	DATE	DESCRIPTION
AB	12/31/97	As Built

Job No. F40312.00
File No. I:\F40312\DWG\PP04.4

RUTLAND STATE AIRPORT
CLARENDON, VERMONT

PAVING PLAN & GEOMETRIC LAYOUT

URS Greiner, Inc.
3 MARCUS BOULEVARD
ALBANY, NEW YORK

Designed by: G D'AMICO	Date 2/97
Drawn by: M MCCALLA	3/97
Checked by: G D'AMICO	5/5/97
Approved by: M CHURCHILL	5/5/97
Scale:	HOR. – 1" = 50' VERT. – NONE
Date:	5/5/97
Sheet	18 Of 65
Sheet No	18

NOTE:

1. ALL ELEVATIONS REFER TO MEAN SEA LEVEL DATUM. (NAVD-1988-VERTICAL SHIFT TO 1927 DATUM = -0.39')
2. CONTRACTOR TO INSTALL SILT FENCE, WHERE NOTED ON THE PLANS OR AS DIRECTED BY THE ENGINEER PRIOR TO COMMENCING OTHER WORK IN THE AREA.
3. STONE ~~SEDIMENT TRAP TO BE CONSTRUCTED~~ IN LONG OPEN CHANNELS, WHERE DIRECTED BY THE ENGINEER ~~TO FORM A SMALL PONDING AREA TO DETAIN RUNOFF TO ALLOW SUSPENDED SEDIMENT TO SETTLE~~. (PAID UNDER ITEM 613.11, STONE FILL, TYPE II).
4. EROSION CONTROL MATTING TO BE PLACED ON SLOPES GREATER THAN 5% TO LIMIT THE EFFECT OF RAINFALL IMPACT & RUNOFF.
5. ALL EARTH AREAS SUBJECT TO CONSTRUCTION ~~WILL BE~~ TOPSOILED AND SEEDED, AND EROSION MATTING APPLIED AS SOON AS WORK IN THE AREA IS COMPLETED.

REMOVE MANHOLES & DROP INLETS
ITEM 203.16
D27, D28, D30, D32, D37
D36, D34, D33,
M29, M31, M35, M38, M33A

CHANGE ELEVATION OF MANHOLES
ITEM 604.40
M32, M33

CONSTRUCT SPECIAL DITCH
1. 202' LT. 106~ TO INLET EXISTING 36"ø CMP (≈ 85' RT. 507+10±)
2. 202' LT 98+40± TO 202' LT 100+00
3. 202' RT 98+80± TO 202' RT 100+00

Stone Fill
AB
SPECIAL DITCH 202' RT. 98+80 → 100+00 5'
SPECIAL DITCH 202' LT 98+40 → 100+00 5'
SPECIAL DITCH 392' LT 103+43 → 100' RT 507+ 5'

LEGEND
- M33 MANHOLE #33
- D33 DROP INLET #33
- 6" UNDERDRAIN & FLUSHING BASIN
- IE FLOW LINE
- SSF SILT FENCE
- EB EARTH BERM

U.G. PRIMARY POWER
70' LT 508+30± PLACE STONE FILL, TYPE II ● OUTLET
EXISTING 36"ø CMP IE 763.9 ● INLET
NEW 15" RCP ES, 76' RT 506+50 W/ STONE FILL, TYPE II AT OUTLET IE 764.2
NEW 230 LF 15"ø RCP S = 0.015
SPECIAL DITCH
CONSTRUCTION LIMITS
6"ø UD OUTLET W/ STONE FILL 392' LT
225' LT 100+30 APPROX. LOCATION OF 3"ø FORCE MAIN INSTALL NEW 3" AVE W/ CLEANOUT, MATCH EXISTING
EXISTING FORCE MAIN
3" CLEANOUT
NEW 3" CLEANOUT
3" CLEANOUT
SPECIAL DITCH
END SPECIAL DITCH 202' LT 98+40± PLACE STONE FILL ● OUTLET, IE 774.0
CONSTRUCT NEW DI #101 202' LT 100+74 TO 776.80 IE 770.06 (ADJUST IN FIELD)
12" RCP (TYP) ABANDONED IN PLACE
5"ø DUCTILE IRON PIPE SLEEVE, 225' LT
SEE NOTE 2
SPECIAL DITCH
3" CLEANOUT
END SPECIAL DITCH 202' RT 98+80± WITH STONE FILL, TYPE II ● OUTLET, FLOW LINE = 778.0
NEW 3" CLEANOUT
3" FORCE MAIN (EXISTING)
TO TERMINAL
MATCH LINE SHEET 20
AIP 3-50-0015-11

STATE OF VERMONT — MICHAEL L. CHURCHILL — REGISTERED PROFESSIONAL ENGINEER

REV.	DATE	DESCRIPTION
1	12/11/96	By Addendum

Job No. F401212.00 — File No. I:\F401212\DGN\PRL2

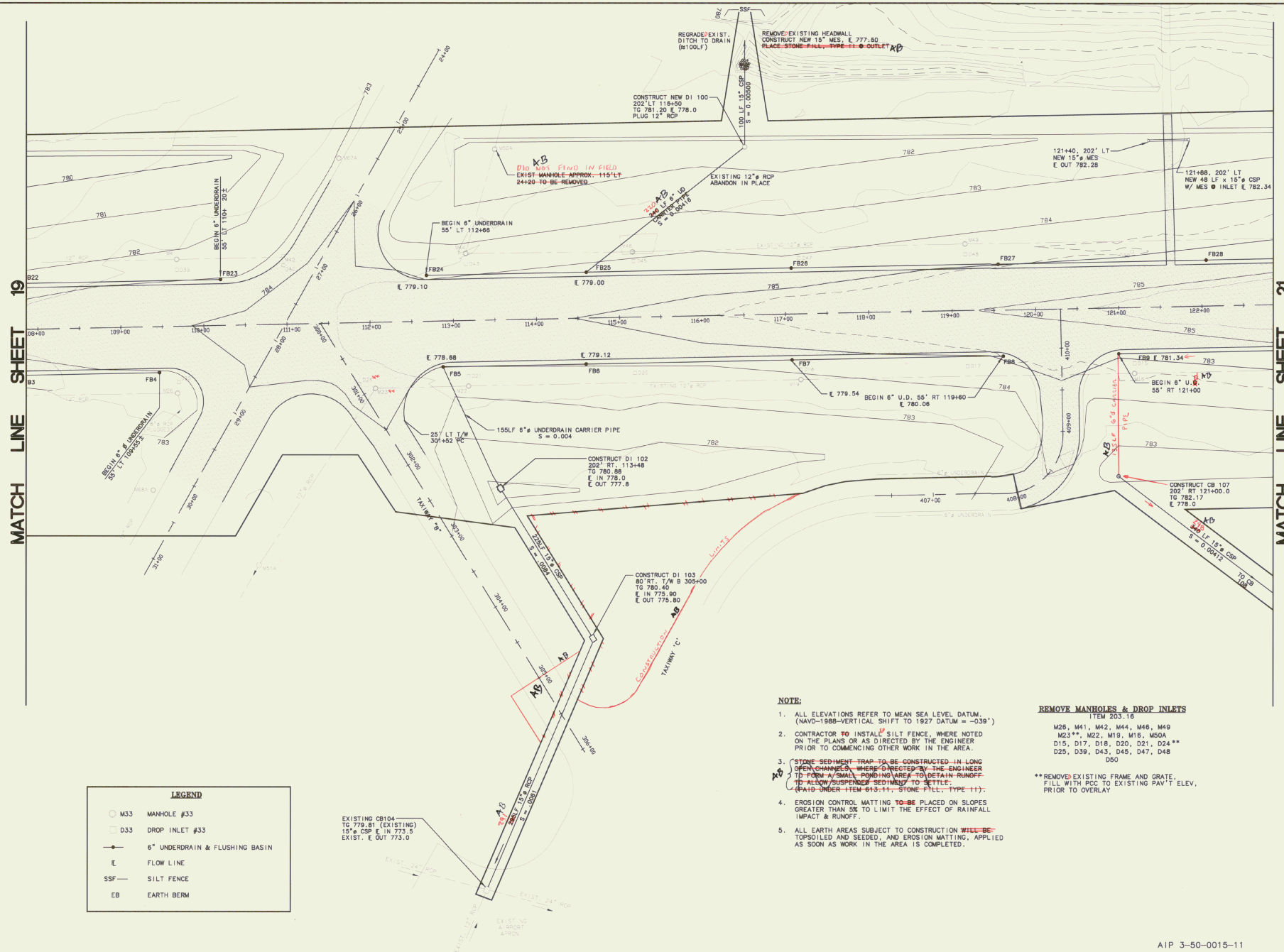
RUTLAND STATE AIRPORT
CLARENDON, VERMONT

GRADING AND DRAINAGE PLAN

URS Greiner, Inc.
3 MARCUS BOULEVARD
ALBANY, NEW YORK

Designed by: Date 5/5/97 — G D'AMICO
Drawn by: — M MCCALLA 5/97
Checked by: 5/5/97 — G D'AMICO
Approved by: 5/5/97 — W CHURCHILL

Scale: HOR. - 1" = 50' VERT. - NONE
Date: 5/5/97
Sheet 19 Of 65
Sheet No 19



LEGEND

M33	MANHOLE #33
D33	DROP INLET #33
	6" UNDERDRAIN & FLUSHING BASIN
℄	FLOW LINE
SSF	SILT FENCE
EB	EARTH BERM

NOTE:

1. ALL ELEVATIONS REFER TO MEAN SEA LEVEL DATUM. (NAVD-1988-VERTICAL SHIFT TO 1927 DATUM = -039')
2. CONTRACTOR ~~TO~~ INSTALL SILT FENCE, WHERE NOTED ON THE PLANS OR AS DIRECTED BY THE ENGINEER PRIOR TO COMMENCING OTHER WORK IN THE AREA.
3. ~~STONE SEDIMENT TRAP TO BE CONSTRUCTED IN LONG OPEN CHANNELS, WHERE DIRECTED BY THE ENGINEER TO FORM A SMALL PONDING AREA TO DETAIN RUNOFF TO ALLOW SUSPENDED SEDIMENT TO SETTLE.~~ ~~(PAID UNDER ITEM 613.11, STONE FILL, TYPE II).~~
4. EROSION CONTROL MATTING ~~TO BE~~ PLACED ON SLOPES GREATER THAN 5% TO LIMIT THE EFFECT OF RAINFALL IMPACT & RUNOFF.
5. ALL EARTH AREAS SUBJECT TO CONSTRUCTION ~~WILL BE~~ TOPSOILED AND SEEDED, AND EROSION MATTING, APPLIED AS SOON AS WORK IN THE AREA IS COMPLETED.

REMOVE MANHOLES & DROP INLETS
ITEM 203.16

M26, M41, M42, M44, M46, M49
M23**, M22, M19, M16, M50A
D15, D17, D18, D20, D21, D24**
D25, D39, D43, D45, D47, D48
D50

**REMOVE EXISTING FRAME AND GRATE, FILL WITH PCC TO EXISTING PAV'T ELEV, PRIOR TO OVERLAY

AIP 3-50-0015-11

STATE OF VERMONT — GREGORY C. FOLLETT — No. 5951 — REGISTERED PROFESSIONAL ENGINEER

REV.	DATE	DESCRIPTION
1	12/12/97	As Built

File No. I:\F401312\08-PRO2
Job No. F401312.08

RUTLAND STATE AIRPORT
CLARENDON, VERMONT

GRADING AND DRAINAGE PLAN

URS Greiner, Inc.
3 MARCUS BOULEVARD
ALBANY, NEW YORK

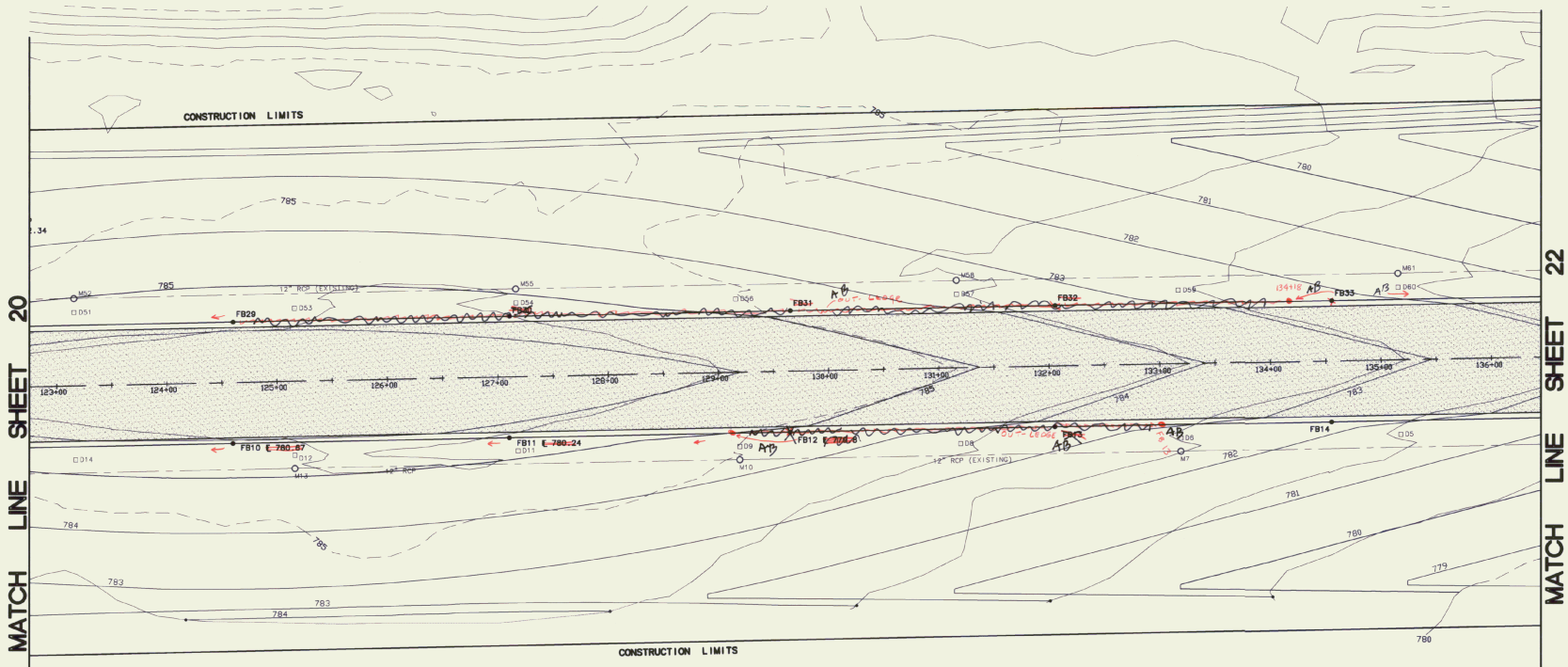
	Designed by:	Drawn by:	Checked by:	Approved by:
	G D'AMICO	M MCCALLA	G D'AMICO	M CHURCHILL
Date	2/97	3/97	5/5/97	5/5/97

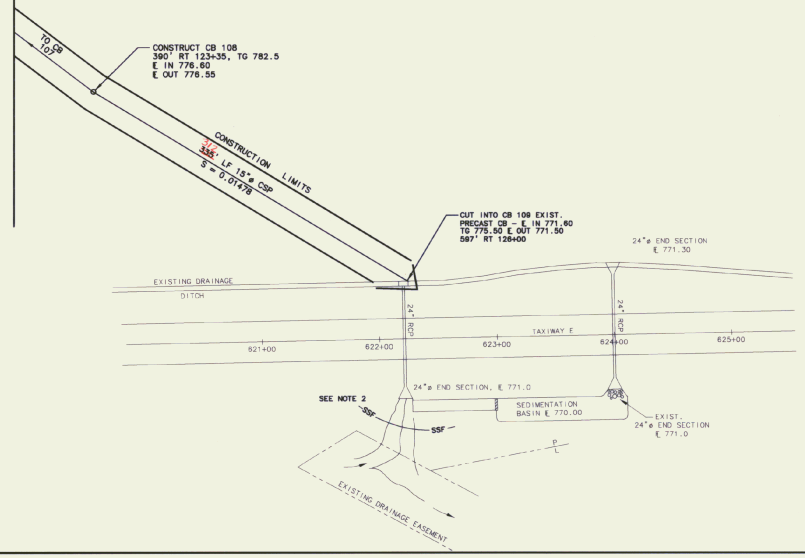
Scale: HOR. - 1" = 50'
VERT. - NONE

Date: 5/5/97

Sheet 20 Of 65

Sheet No
20





NOTE:

1. ALL ELEVATIONS REFER TO MEAN SEA LEVEL DATUM. (NAVD-1988-VERTICAL SHIFT TO 1927 DATUM = -039')
2. CONTRACTOR ~~TO~~ INSTALL SILT FENCE, WHERE NOTED ON THE PLANS OR AS DIRECTED BY THE ENGINEER PRIOR TO COMMENCING OTHER WORK IN THE AREA.
3. ~~STONE SEDIMENT TRAP TO BE CONSTRUCTED IN LONG OPEN CHANNELS, WHERE DIRECTED BY THE ENGINEER TO FORM A SMALL PONDING AREA TO DETAIN RUNOFF TO ALLOW SUSPENDED SEDIMENT TO SETTLE. (PAID UNDER ITEM 613.11, STONE FILL, TYPE II).~~
4. EROSION CONTROL MATTING ~~TO BE~~ PLACED ON SLOPES GREATER THAN 5% TO LIMIT THE EFFECT OF RAINFALL IMPACT & RUNOFF.
5. ALL EARTH AREAS SUBJECT TO CONSTRUCTION ~~WILL BE~~ TOPSOILED AND SEEDED, AND EROSION MATTING, APPLIED AS SOON AS WORK IN THE AREA IS COMPLETED.

REMOVE MANHOLES & DROP INLETS
(ITEM 203.16)

M7, M10, M13, M52, M55, M58, M61
D5, D6, D8, D9, D11, D12, D14, D51, D53, D54
D56, D57, D59, D60, D62

LEGEND

○ M33	MANHOLE #33
□ D33	DROP INLET #33
—●—	6" UNDERDRAIN & FLUSHING BASIN
℄	FLOW LINE
SSF—	SILT FENCE
EB	EARTH BERM

AIP 3-50-0015-11

STATE OF VERMONT
MICHAEL L. CROWLEY
REGISTERED PROFESSIONAL ENGINEER

REV.	DATE	DESCRIPTION
A/2	12/9/98	As Constr

Job No. 740212.00 | File No.: VT40212(AIP-PROJ)

RUTLAND STATE AIRPORT
CLARENDON, VERMONT

GRADING AND DRAINAGE PLAN

URS Greiner, Inc.
3 MARCUS BOULEVARD
ALBANY, NEW YORK

Designed by:	Date
G D'AMICO	2/97
Drawn by: M MCDALA	3/97
Checked by: G D'AMICO	5/5/97
Approved by: M GIURCHEL	5/5/97

Scale: HOR. - 1" = 50'
VERT. - NONE

Date: 5/5/97

Sheet 21 Of 65

Sheet No
21

NOTE:

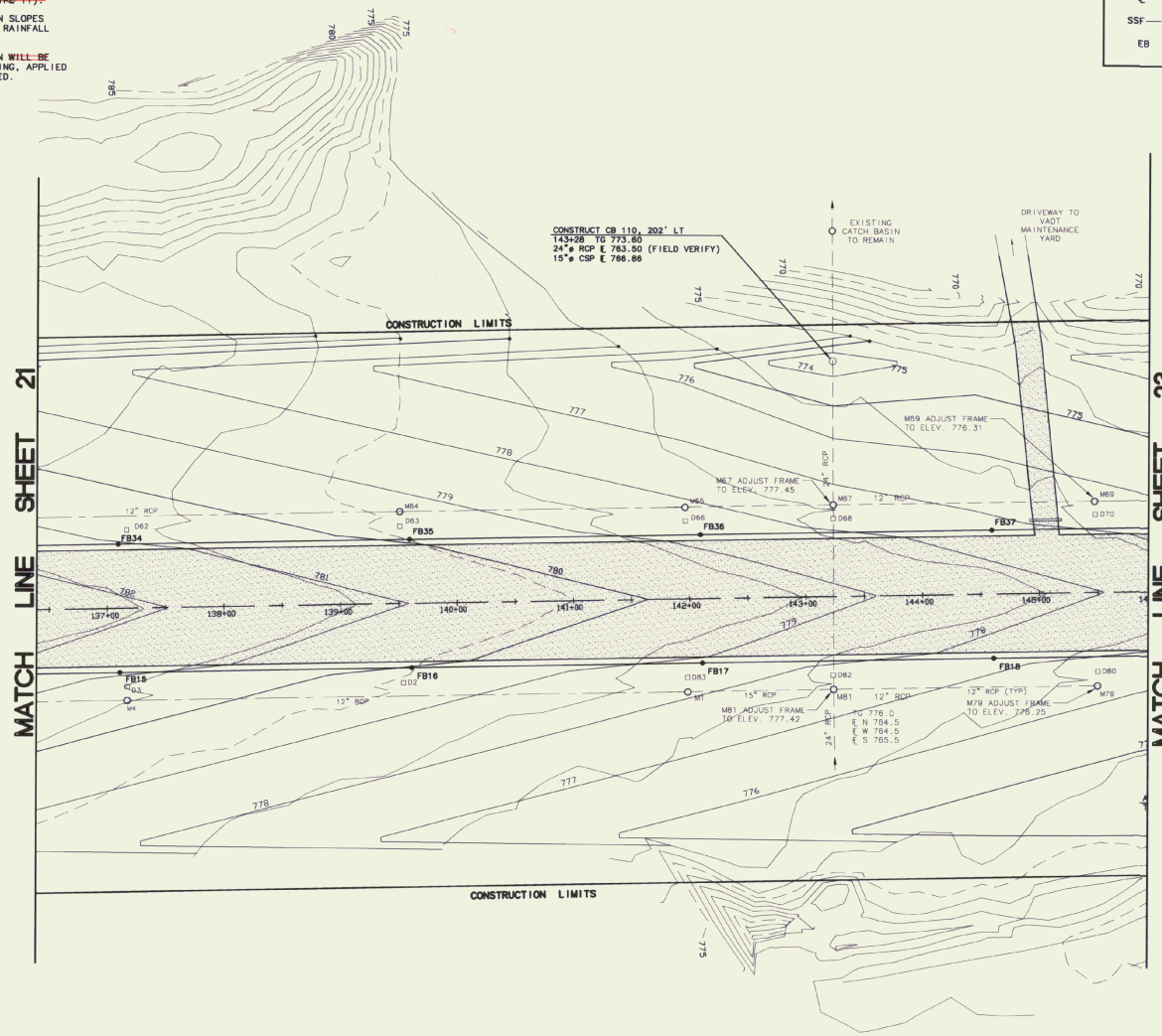
1. ALL ELEVATIONS REFER TO MEAN SEA LEVEL DATUM. (NAVD-1988-VERTICAL SHIFT TO 1927 DATUM = -039')
2. CONTRACTOR TO INSTALL SILT FENCE, WHERE NOTED ON THE PLANS OR AS DIRECTED BY THE ENGINEER PRIOR TO COMMENCING OTHER WORK IN THE AREA.
3. ~~STONE SEDIMENT TRAP TO BE CONSTRUCTED IN LONG OPEN CHANNELS, WHERE DIRECTED BY THE ENGINEER TO FORM A SMALL PONDING AREA TO DETAIN RUNOFF TO ALLOW SUSPENDED SEDIMENT TO SETTLE. (PAID UNDER ITEM 613.11, STONE FILL, TYPE II).~~
4. EROSION CONTROL MATTING ~~TO BE~~ PLACED ON SLOPES GREATER THAN ~~5%~~ TO LIMIT THE EFFECT OF RAINFALL IMPACT & RUNOFF.
5. ALL EARTH AREAS SUBJECT TO CONSTRUCTION ~~Will BE~~ TOPSOILED AND SEEDED, AND EROSION MATTING, APPLIED AS SOON AS WORK IN THE AREA IS COMPLETED.

REMOVE MANHOLES & DROP INLETS
(ITEM 203.16)
M1, M4, M64, M65, M75
D2, D3, D62, D63, D66, D68, D70
D80, D82, D83

CHANGE ELEVATION OF MANHOLES
ITEM 604.40
M67, M69, M79, M81

LEGEND

○ M33	MANHOLE #33
□ D33	DROP INLET #33
—●—	6" UNDERDRAIN & FLUSHING BASIN
℄	FLOW LINE
SSF—	SILT FENCE
EB	EARTH BERM



AIP 3-50-0015-11

REV.	DATE	DESCRIPTION
1	12/16/98	AS BUILT

File No. I:\F60123\DWG\F60123-PP02
Job No. F60123.00

RUTLAND STATE AIRPORT
CLARENDON, VERMONT

GRADING AND DRAINAGE PLAN

URS Greiner, Inc.
3 MARCUS BOULEVARD
ALBANY, NEW YORK

Designed by: G D'AMICO 2/97
Drawn by: W MCCALLA 3/97
Checked by: G D'AMICO 5/5/97
Approved by: W CHURCHILL 5/5/97

Scale: HOR. - 1" = 50'
VERT. - NONE
Date: 5/5/97
Sheet 22 Of 65
Sheet No 22

NOTE:

1. ALL ELEVATIONS REFER TO MEAN SEA LEVEL DATUM. (NAVD-1988-VERTICAL SHIFT TO 1927 DATUM = -039')
2. CONTRACTOR TO INSTALL SILT FENCE, WHERE NOTED ON THE PLANS OR AS DIRECTED BY THE ENGINEER PRIOR TO COMMENCING OTHER WORK IN THE AREA.
3. ~~STONE SEDIMENT TRAP TO BE CONSTRUCTED IN LONG OPEN CHANNELS, WHERE DIRECTED BY THE ENGINEER TO FORM A SMALL PONDING AREA TO DETAIN RUNOFF TO ALLOW SUSPENDED SEDIMENT TO SETTLE. (PAID UNDER ITEM 613.11, STONE FILL, TYPE II).~~
4. EROSION CONTROL MATTING ~~TO BE~~ PLACED ON SLOPES GREATER THAN 5% TO LIMIT THE EFFECT OF RAINFALL IMPACT & RUNOFF.
5. ALL EARTH AREAS SUBJECT TO CONSTRUCTION ~~WILL BE~~ TOPSOILED AND SEEDED, AND EROSION MATTING, APPLIED AS SOON AS WORK IN THE AREA ~~IS~~ COMPLETED.
6. ADDITIONAL WASTE MATERIAL ~~TO BE~~ PLACED AGAINST FILL SLOPES STATIONS 150 TO END. AVOID TRAVEL IN WETLAND AREAS. DESIGNATED. ALL FILL SLOPES AND WASTE AREAS ~~TO BE~~ TOPSOILED SEEDED AND MULCHED.

REMOVE MANHOLES & DROP INLETS
(ITEM 203.16)
M64, M75
D72, D76, D78

CHANGE ELEVATION OF MANHOLES &DROP INLETS
ITEM 604.40
M71, M73, M75B, M77
D75C, ~~D75D~~

MATCH LINE SHEET 22

CONSTRUCTION LIMITS

WETLANDS LIMITS

AIRPORT PROPERTY LINE

TERMINATE 8"ø UNDERDRAIN @ M73 ℄ 769.50 ADJUST FRAME TO ELEV 774.02

M71 ADJUST TO ELEV. 775.15

MES @ OUTLET W/ STONE FILL TYPE II 180' LT, 155+98

CONSTRUCT DI 106 90° 80' LT 155+98 TG 759.25 ℄ 754.25

CONSTRUCT DI 105 80' RT 155+98 TG 759.25 ℄ 754.25

TERMINATE 8"ø U.D. ℄ 770.20 ADJUST FRAME TO 774.80

ADJUST FRAME TO ELEV. 775.09

ADJUST FRAME ELEV. 774.21

EXISTING 8" PVC UNDERDRAIN TO BE ABANDONED

BEGIN NEW 6" ø UNDERDRAIN, CONNECT TO EXISTING 6" ø PVC ℄ 771.3 ±

TERMINATE 6"ø UNDERDRAIN 150' RT 151+98.5 PLACE STONE FILL TYPE II @ OUTLET ℄ 757.0

190' RT 155+98 MES @ OUTLET W/ STONE FILL TYPE II

EXISTING 8" PVC UNDERDRAIN

CONSTRUCTION LIMITS

APPROX. CONSTRUCTION LIMITS - ACTIVAL

TO TERMINAL

DEMARK - NAVY VAULT EASEMENT AREA

AIRPORT ROAD

LEGEND

M33	MANHOLE #33
D33	DROP INLET #33
	6" UNDERDRAIN & FLUSHING BASIN
℄	FLOW LINE
SSF	SILT FENCE
EB	EARTH BERM
	TREES TO BE CLEARED

AIP 3-50-0015-11

STATE OF VERMONT
MICHAEL L. CAMPION
No. 9651
REGISTERED PROFESSIONAL ENGINEER

REV.	DATE	DESCRIPTION
1	12/5/97	AS BUILT

File No. \\Vt01212\jm-proj
Job No. 140212.00

RUTLAND STATE AIRPORT
CLARENDON, VERMONT

GRADING AND DRAINAGE PLAN

URS Greiner, Inc.
3 MARCUS BOULEVARD
ALBANY, NEW YORK

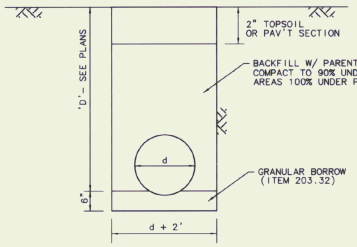
Designed by: G D'AMICO Date 2/97
Drawn by: M MCCALLA 3/97
Checked by: G D'AMICO 5/5/97
Approved by: M CHURCHILL 5/5/97

Scale: HOR. - 1" = 50'
VERT. - NONE

Date: 5/5/97

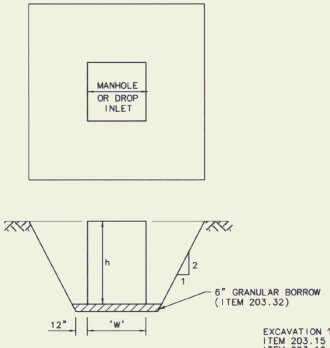
Sheet 23 Of 65

Sheet No
23



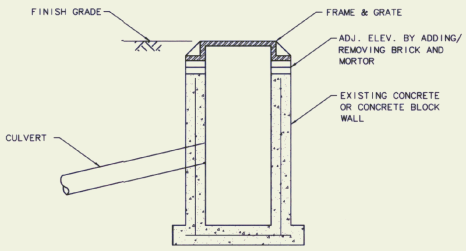
EXCAVATION ~~TO BE~~ PAID UNDER ITEM 204.20
TRENCH EXCAVATION OF EARTH OR ITEM 204.21
EXCAVATION OF ROCK

A/24 CULVERT IN TRENCH – TYPICAL
SCALE = NONE

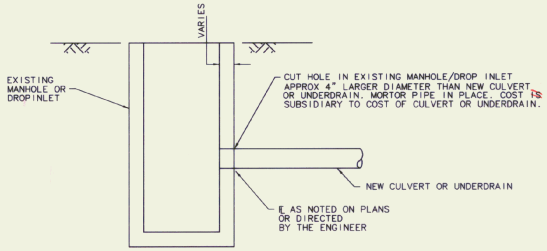


EXCAVATION ~~TO BE~~ PAID UNDER
ITEM 203.15 COMMON EXCAVATION OR
ITEM 203.16 ROCK EXCAVATION

B/24 DROP INLET/MANHOLE PLACEMENT
(TYPICAL)
SCALE = NONE



C/24 CHANGE ELEVATION OF MANHOLE
OR DROP INLET
SCALE = NONE



D/24 CULVERT/UNDERDRAIN INSTALLATION IN
EXISTING MANHOLE OR DROP INLET
SCALE = NONE

AIP 3-50-0015-11

STATE OF VERMONT
DONALD L. GRENIER
No. 5951
REGISTERED
PROFESSIONAL ENGINEER

REV.	DATE	DESCRIPTION
A	4/98	ADD RUNWAY 4

Job No. 740212.00
File No. I:\740212\CAD\C-50

RUTLAND STATE AIRPORT
CLARENDON, VERMONT

DRAINAGE DETAILS

URS Greiner, Inc.
3 MARCUS BOULEVARD
ALBANY, NEW YORK

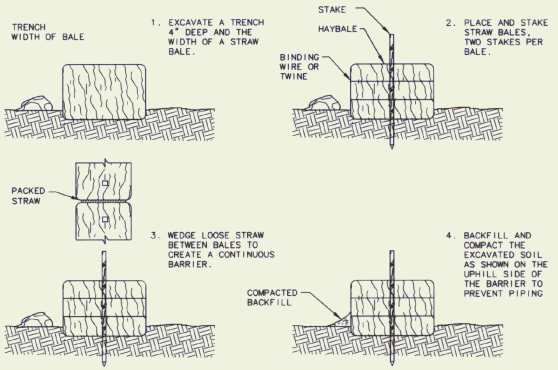
Designed by: G D'AMICO	Date 2/97
Drawn by: N MCCALLA	3/97
Checked by: G D'AMICO	5/5/97
Approved by: M CHURCHILL	5/5/97

Scale: HS – AS SHOWN
VS – AS SHOWN

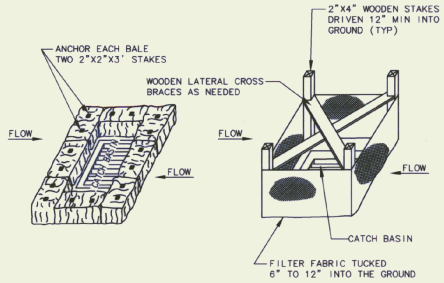
Date: 5/5/97

Sheet 24 Of 65

Sheet No
24



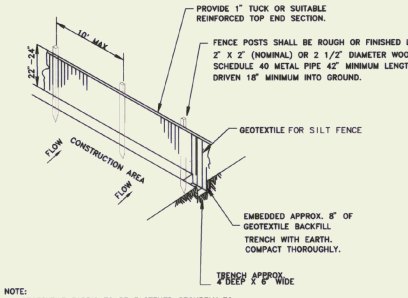
SEDIMENTATION BARRIER - HAYBALE
ITEM 651.26



HAY BALE INSTALLATION
ITEM 651.26

SILT FENCE INSTALLATION
ITEM 649.51

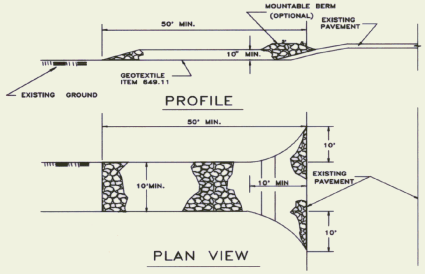
SEDIMENTATION CONTROL INLET PROTECTION



NOTE:
1. GEOTEXTILE FABRIC TO BE FASTENED SECURELY TO FENCE POST BY USE OF WIRE TIES. 3 FASTENERS PER POST.
2. ENDS OF INDIVIDUAL ROLLS OF GEOTEXTILE SHALL BE SECURELY FASTENED TO A COMMON POST OR OVERLAPPED 3' (MIN.).
3. TO BE PLACED AT LOCATIONS SHOWN ON PLANS OR AS ORDERED BY THE ENGINEER.

PLAN VIEW SYMBOL
S.S.F. S.S.F.

SLOPE SILT FENCE (S.S.F.)
NOT TO SCALE



CONSTRUCTION SPECIFICATIONS

1. STONE – SUBBASE OF CRUSHED AGGREGATE, COURSE GRADED ITEM 301.25.
2. LENGTH – AS REQUIRED, BUT NOT LESS THAN 50 FEET.
3. THICKNESS – NOT LESS THAN TEN (10) INCHES.
4. WIDTH – TEN (10) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.
5. GEOTEXTILE – WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
6. SURFACE WATER – ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED UNDER THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
7. MAINTENANCE – THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
8. PERIODIC INSPECTION AND MAINTENANCE SHALL BE PROVIDED AFTER HEAVY USE AND/OR RAIN.
9. THIS ENTRANCE WILL BE CONSTRUCTED AT LOCATIONS SHOWN ON THE PLANS AND/OR WHERE ORDERED BY THE ENGINEER.
10. THE LOCATION AND NUMBER OF STABILIZED CONSTRUCTION ENTRANCES WILL BE APPROVED BY THE ENGINEER.

STABILIZED CONSTRUCTION ENTRANCE
NOT TO SCALE

EROSION AND SEDIMENT CONTROL NOTES

1. THE CONTRACTOR SHALL CONSTRUCT ALL EROSION AND SEDIMENT CONTROL MEASURES PER THE APPROVED PLAN AND CONSTRUCTION SEQUENCE AND SHALL HAVE THEM INSPECTED BY THE ENGINEER PRIOR TO BEGINNING ANY OTHER LAND DISTURBANCES. MINOR SEDIMENT CONTROL DEVICE LOCATION ADJUSTMENTS MAY BE MADE IN THE FIELD WITH THE APPROVAL OF THE ENGINEER. THE CONTRACTOR SHALL ENSURE THAT ALL RUNOFF FROM DISTURBED AREAS IS DIRECTED TO THE SEDIMENT CONTROL DEVICES, AND SHALL NOT REMOVE ANY EROSION OR SEDIMENT CONTROL MEASURE WITHOUT PRIOR PERMISSION FROM THE ENGINEER. THE CONTRACTOR MUST OBTAIN PRIOR APPROVAL FOR CHANGES TO THE SEDIMENT CONTROL PLAN AND/OR SEQUENCE OF CONSTRUCTION.
2. THE CONTRACTOR SHALL MAINTAIN ALL EROSION AND SEDIMENT CONTROL MEASURES UNTIL SUCH TIMES AS THEY REMOVED.
3. THE CONTRACTOR SHALL APPLY SEED AND MULCH, OR OTHER APPROVED STABILIZATION MEASURES TO ALL DISTURBED AREAS AND STOCKPILES WITHIN FOURTEEN (14) CALENDAR DAYS AFTER STRIPPING AND GRADING ACTIVITIES HAVE CEASED IN THE AREA. MAINTENANCE SHALL BE PERFORMED AS NECESSARY TO ENSURE CONTINUED STABILIZATION. PERMANENT SOIL STABILIZATION SHALL BE PROVIDED WITHIN SEVEN (7) DAYS OF ESTABLISHMENT OF FINAL GRADE.
4. THIS EROSION CONTROL PLAN SHALL BE IMPLEMENTED ON ALL DISTURED AREAS WITHIN THE CONSTRUCTION SITE. ALL MEASURES INVOLING EROSION CONTROL PRACTICES SHALL BE INSTALLED IN CONFORMANCE WITH "THE VERMONT HANDBOOK FOR SOIL EROSION AND SEDIMENT CONTROL ON CONSTRUCTION SITES" AS PUBLISHED BY THE VT. GEOLOGICAL SURVEY.
5. DURING THE PERIOD OF CONSTRUCTION ACTIVITY, ALL EROSION CONTROL MEASURES SHALL BE MAINTAINED BY THE CONTRACTOR. AT THE COMPLETION OF CONSTRUCTION, THE CONTRACTOR SHALL COORDINATE THE TRANSFER OF MAINTENANCE RESPONSIBILITIES, IF REQUIRED, TO THE VT AGENCY OF TRANSPORATION.
6. ALL TEMPORARY EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE REMOVED AND DISPOSED OF WITHIN THIRTY (30) DAYS AFTER FINAL SITE STABILIZATION IS ACHIEVED OR AFTER THE TEMPORARY PRACTICES ARE NO LONGER NEEDED. TRAPPED SEDIMENT SHALL BE STABILIZED OR REMOVED TO PREVENT FURTHER EROSION.
7. EROSION CONTROL DEVICES REMOVED DURING GRADING OPERATIONS SHALL BE PUT BACK IN PLACE AT THE END OF THE DAY OR DURING INCLEMENT WEATHER AS DIRECTED BY THE ENGINEER.
8. STREAMS INCLUDING BED AND BANKS SHALL BE RESTABILIZED IMMEDIATELY AFTER CHANNEL WORK IS COMPLETED, INTERRUPTED, OR STOPPED.
9. NO SOIL, ROCK, DEBRIS, OR ANY OTHER MATERIAL SHALL BE DUMPED OR PLACED INTO A WATER COURSE OR INTO SUCH PROXIMITY THAT IT MAY READILY SLOUGH, SLIP, OR ERODE INTO A WATER COURSE UNLESS SUCH DUMPING OR PLACING IS AUTHORIZED BY THE ENGINEER AND, WHEN APPLICABLE, THE U.S. ARMY CORPS OF ENGINEERS, FOR SUCH PURPOSES AS, BUT NOT LIMITED TO, CONSTRUCTION OF BRIDGES, CULVERTS, AND EROSION CONTROL STRUCTURES.
10. PERMANENT SEEDING SHALL BE DONE BETWEEN APRIL 30 AND SEPTEMBER 15. IF SEEDING IS DONE AT OTHER TIMES, IT SHALL BE CLASSIFIED AS "TEMPORARY SEEDING." PERMANENT SEED SHALL CONFORM TO THE SEEDING MIXTURE STATED ON SHEET 7. TEMPORARY AND PERMANENT SEEDING SHALL CONSIST OF FERTILIZING, WATERING AND SEEDING PLACED AT RATES IN ACCORDANCE WITH THE SPECIFICATIONS. PERMANENT SEEDING AND MULCHING SHALL BE PAID FOR UNDER 651.15 AND 651.25 RESPECTIVELY. TEMPORARY SEED, MULCH, AND FERTILIZER FOR EROSION AND SEDIMENT CONTROL SHALL BE PLACED IN ACCORDANCE WITH THE SPECIFICATIONS. NO PAYMENT WILL BE MADE FOR TEMPORARY SEEDING OR MULCHING.
11. SURFACE DRAINAGE FLOWS OVER UNSTABILIZED CUT AND FILL SLOPES SHALL BE CONTROLLED BY EITHER PREVENTING DRAINAGE FLOWS TRAVERSING THE SLOPES OR BY INSTALLING PROTECTIVE DEVICES TO LOWER THE WATER DOWNSLOPE WITHOUT CAUSING EROSION. DIKES SHALL BE INSTALLED AND MAINTAINED AT THE TOP OF CUT OR FILL SLOPES UNTIL THE SLOPE AND DRAINAGE AREA TO IT ARE FULLY STABILIZED, AT WHICH TIME THEY MUST BE REMOVED AND FINAL GRADING DONE TO PROMOTE SHEET FLOW DRAINAGE. PROTECTIVE METHODS MUST BE PROVIDED AT POINTS OF CONCENTRATED FLOW WHERE EROSION IS LIKELY TO OCCUR.
12. ALL POINTS OF CONSTRUCTION INGRESS AND EGRESS IN UNPAVED AREAS SHALL BE STABILIZED AND PROTECTED TO PREVENT TRACKING OF MUD ONTO PUBLIC OR PRIVATE ROADWAYS.
13. IF ROADWAYS ACCUMULATE DEBRIS, THE CONTRACTOR SHALL USE A POWER BROOM TO REMOVE THE SEDIMENT TO THE SATISFACTION OF THE ENGINEER.
14. SALVAGED TOPSOIL WILL BE PLACED ON WELL DRAINED LAND AWAY FROM STREAMS IN ACCORDANCE WITH APPROVED EROSION AND SEDIMENT CONTROL MEASURES. IT SHALL BE PLACED IN NEAT PILES. THE CONTRACTOR WILL PROVIDE AN ADEQUATE QUANTITY OF SILT FENCE TO CONTROL THE PERIMETER OF THE STOCKPILE. THE CONTRACTOR, WITH THE APPROVAL OF THE ENGINEER, MAY CONSTRUCT AN EARTH DIKE IN LIEU OF SILT FENCE.

SITE DATA

PROJECT DESCRIPTION:
AIRPORT DEVELOPMENT TO INCLUDE PAVING, CLEARING AND GRUBBING, EARTHWORK, STORM DRAINAGE, AND UTILITIES.

TOTAL SITE AREA:
AREA WITHIN LIMITS OF WORK APPROX. 45 ACRES.

EXISTING SOIL TYPES:
-BROWN SILTY SAND WITH TRACES OF GRAVEL
-APPROXIMATELY 3" OF TOPSOIL
-INFORMATION OBTAINED FROM BORINGS DRILLED BY GREEN MOUNTAIN BORING DURING NOVEMBER 1996

SCHEDULE:
CONSTRUCTION TO COMMENCE SUMMER 1997, AND TO BE COMPLETED FALL, 1997. WITH THE IMPLEMENTATION OF EROSION CONTROL MEASURES TO BE THE FIRST PHASE OF ACTIVITY AND TO CONTINUE THROUGHOUT PROGRESS OF PROJECT.

RECEIVING WATERS:
MILL RIVER, OTTER CREEK

AIP 3-50-0015-11

STATE OF VERMONT
OFFICIAL SEAL
No. 5951
REGISTERED PROFESSIONAL ENGINEER

REV.	DATE	DESCRIPTION
1	4/98	As Built

Job No. F401212.00
File No.: I:\F401212\SD02

RUTLAND STATE AIRPORT
CLARENDON, VERMONT

SEDIMENTATION / EROSION CONTROL DETAILS

URS Greiner, Inc.
3 MARCUS BOULEVARD
ALBANY, NEW YORK

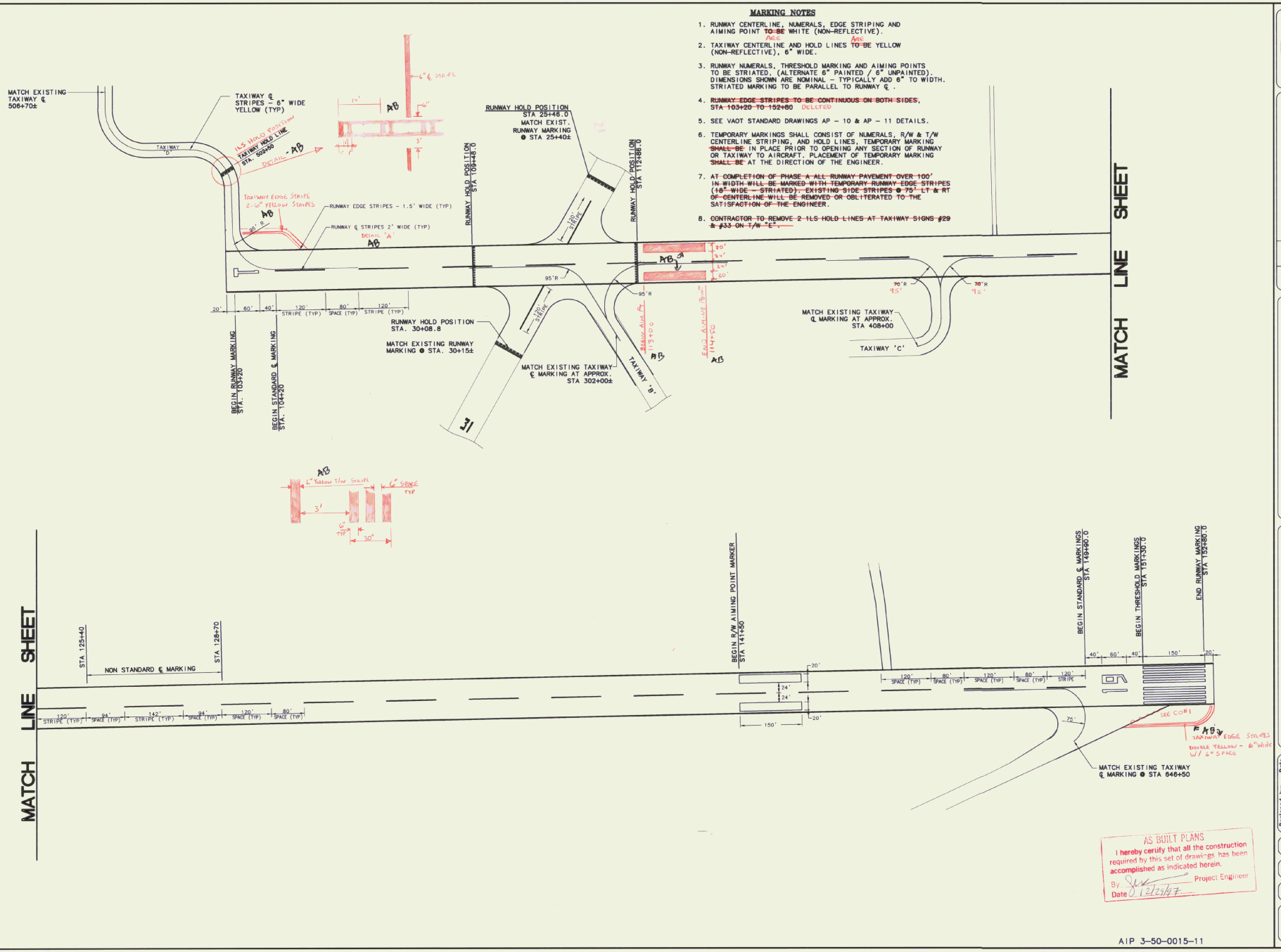
		Date
Designed by:	G D'AMICO	2/97
Drawn by:	M MCCALLA	3/97
Checked by:	G D'AMICO	5/5/97
Approved by:	M CHURCHILL	5/5/97

Scale: HOR. – NONE
VERT. – NONE

Date: 5/5/97

Sheet 25 Of 65

Sheet No
25



RUTLAND STATE AIRPORT
CLARENDON, VERMONT

PAVEMENT MARKING PLAN

URS Greiner, Inc.
3 MARCUS BOULEVARD
ALBANY, NEW YORK

REV.	DATE	DESCRIPTION
1	12/97	AS BUILT

Job No. 140212.00

File No.: V:\140212\PMP

Designed by: G D'AMICO Date 2/97
Drawn by: M MCCALLA 3/97
Checked by: G D'AMICO 5/5/97
Approved by: M CHURCHILL 5/5/97

Scale: HOR. – 1" = 100'
VERT. – NONE

Date: 5/5/97

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Sheet No
26

STATE OF VERMONT
AGENCY OF TRANSPORTATION

PROPOSED IMPROVEMENTS
RUTLAND STATE AIRPORT
CLARENDON, VERMONT
AIP NO. 3-50-0015-10
E.A. 043111

TO INCLUDE: LOCALIZER SITE PREPARATION

INDEX OF SHEETS

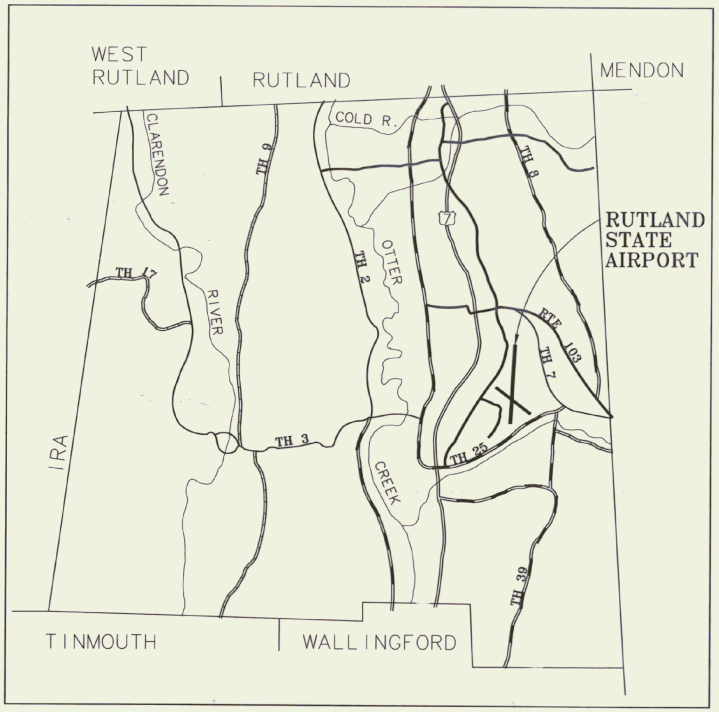
1	TITLE SHEET
2	GENERAL PROJECT LAYOUT
3	SAFETY NOTES
4	GENERAL CONSTRUCTION AND SAFETY NOTES
5-6	LOCALIZER SITE DETAILS
7	LOCALIZER RELOCATION - SITE PLAN
8	SEDIMENTATION / EROSION CONTROL PLANS
9	BORING LOGS

STANDARDS

AP-2 06/01/94
AP-3 06/01/94
AP-10 06/01/94

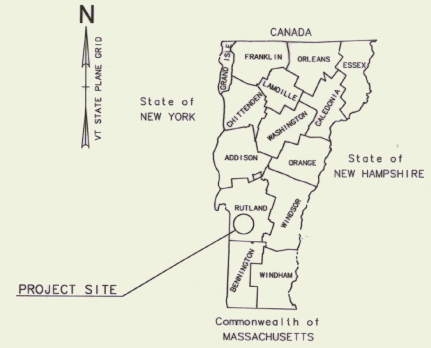
TABLE OF QUANTITIES

ITEM NO.	DESCRIPTION	ESTIMATED QUANTITY
~~N/A~~ (636.15 (mod.))	LOCALIZER SITE WORK	1 LUMP SUM
~~L-170~~ (AD 900.02)	UTILITY COST ALLOWANCE	1 LUMP SUM
635.10	MOBILIZATION	1 LUMP SUM
900.01 (AD)	S.A. #1	1 LUMP SUM



LOCATION MAP

APPROXIMATE SCALE : 1" = 1 MILE



RECORD PLANS

CONTRACTOR: BELDEN CO., INC.
RESIDENT ENGINEER: G. D'AMICO
CONSTRUCTION BEGAN: JUNE 12, 1997
CONSTRUCTION COMPLETED: SEPTEMBER 19, 1997
RECORD PLANS BY: G. D'AMICO

I HEREBY CERTIFY THAT ALL THE CONSTRUCTION REQUIRED BY THIS SET OF DRAWINGS HAS BEEN ACCOMPLISHED AS INDICATED HEREIN.

BY Gerald W. D'Amico RESIDENT ENGINEER
DATE 24 Nov '97

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

A.I.A. OF 1982 SECTION 509(d) ASSURANCES

IN COMPLIANCE WITH THE AIRPORT AND AIRWAYS IMPROVEMENT ACT OF 1982, SECTION 509 (d) AND THE SPONSOR'S CERTIFICATION, DATED _____, THESE PLANS AND SPECIFICATIONS HAVE BEEN PREPARED IN ACCORDANCE WITH CURRENT FAA STANDARDS IDENTIFIED IN F.A.R. PART 152. ANY DEVIATION FROM THE FAA STANDARD WERE APPROVED IN A LETTER BY THE FAA, DATED AUGUST 13, 1996, AND ARE DISCUSSED IN THE ENGINEERING REPORT ACCOMPANYING THESE PLANS.

_____ DESIGN ENGINEER _____ DATE

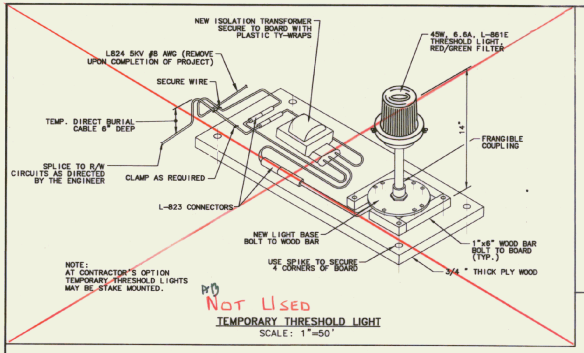
269

URS Greiner, Inc.

STATE OF VERMONT
APPROVED _____ DATE 4-18-97
DIRECTOR OF RAIL, AIR, & PUBLIC TRANSPORTATION

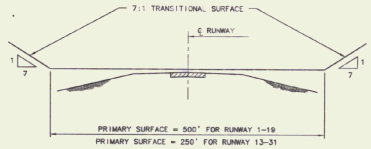
DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
APPROVED _____ DATE _____
CHIEF, AIRPORTS DIVISION

STATE OF VERMONT — ROBERT L. CRUMB — No. 5951 — REGISTERED PROFESSIONAL ENGINEER

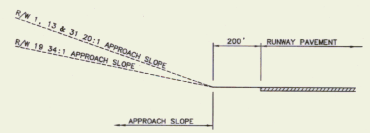


NOT USED

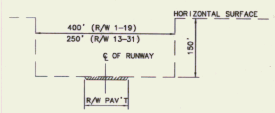
TEMPORARY THRESHOLD LIGHT
SCALE: 1"=50'



A — TYPICAL SECTION F.A.R. PART 77 IMAGINARY SURFACES
NOT TO SCALE



B — TYPICAL PROFILE F.A.R. PART 77 IMAGINARY SURFACES
NOT TO SCALE



C — RUNWAY OBSTACLE FREE ZONE TYP SECTION
NOT TO SCALE

GENERAL NOTES:

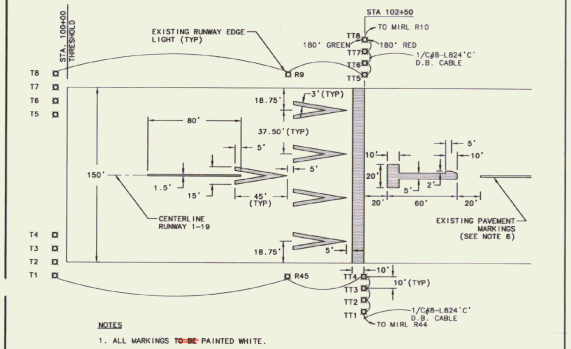
1. CONTRACTOR'S MAIN ACCESS TO SITE ~~TO BE FROM TOWN HIGHWAY NO. 7.~~ WAS THRU REDC
2. CONTRACTOR ~~TO~~ PROVIDED FLAGPERSON AT HAUL / ACCESS ROUTE CROSSING OF RUNWAY 13 SAFETY AREA, WHEN RUNWAY 13-31 ~~IS~~ WAS OPERATIONAL.
3. FLAGPERSON TO CONTROL ACCESS WITHIN RUNWAY 13-31 SAFETY AREA. NO GROUND VEHICLE TRAFFIC ~~WILL BE~~ ALLOWED TO ENTER RUNWAY SAFETY AREA WHEN AIR CRAFT ARE APPROACHING OR DEPARTING RUNWAY 13-31.
4. FLAGPERSON ~~SHALL~~ MONITOR AN AERONAUTICAL RADIO CAPABLE OF TRANSMITTING AND RECEIVING ON RUTLAND UNICOM FREQUENCY 122.8 MHZ.
5. HAUL ROUTE ~~TO BE~~ GRADED AND RETURNED TO TURF UPON COMPLETION OF PROJECT.
6. PHASING OF CONSTRUCTION ACTIVITIES. CONTRACTOR ~~SHALL~~ COORDINATED ALL RUNWAY CLOSURES WITH THE AIRPORT MANAGER.

~~a. CONTRACTOR MAY INSTALL TEMPORARY THRESHOLD LIGHTING WHILE RUNWAY IS ACTIVE, HOWEVER, WHEN AIRCRAFT ARE UTILIZING THE RUNWAY, THE CONTRACTOR SHALL REMOVE HIS EQUIPMENT AND MEN FROM THE RUNWAY SAFETY AREA.~~

b. WHEN THE CONTRACTOR ~~IS PREPARED TO~~ CONNECTED THE ELECTRICAL CIRCUITRY AND INSTALLED THE THRESHOLD MARKINGS, HE ~~SHALL~~ CLOSED RUNWAY 1-19 WITH RUNWAY CLOSED MARKERS. THIS WORK ~~SHALL BE~~ DONE WITHIN 1 ~~12 HOUR PERIOD~~, BETWEEN THE HOURS OF ~~7:00 PM~~ AND 7:00 AM. AT THE END OF THIS TIME PERIOD THE RUNWAY ~~SHALL BE~~ REOPENED TO AIRCRAFT ACTIVITY.

c. INSTALL LOCALIZER ANTENNA AND SHELTER FOUNDATION AND OTHER RELATED INFRASTRUCTURE WORK.

d. AT COMPLETION OF INFRASTRUCTURE WORK, THE ~~CONTRACTOR SHALL REMOVE THE TEMPORARY THRESHOLD AND MARKINGS. RUNWAY 1-19 SHALL BE CLOSED WITH RUNWAY CLOSED MARKERS, AND REMOVAL OF THE RELOCATED THRESHOLD EQUIPMENT AND MARKINGS, AND INSTALLATION OF ORIGINAL MARKINGS SHALL BE ACCOMPLISHED. THIS WORK SHALL BE DONE WITHIN 1 12 HOUR PERIOD, BETWEEN THE HOURS OF 7:00 PM AND 7:00 AM. AT THE END OF THIS TIME PERIOD THE RUNWAY SHALL BE REOPENED TO AIRCRAFT ACTIVITY.~~ RUNWAY WAS CLOSED FOR RECONSTRUCTION UNDER CONTRACT 2.



NOTES

1. ALL MARKINGS ~~TO BE~~ PAINTED WHITE.
2. EIGHT (8) TEMPORARY MEDIUM INTENSITY RUNWAY THRESHOLD LIGHTS (CONFORMING TO FAA SPECIFICATIONS L-861E) ~~TO BE~~ INSTALLED AS SHOWN.
3. TEMPORARY THRESHOLD LIGHTS: TT1 – TT8.
4. COORDINATE PLACING TEMPORARY THRESHOLD WITH AIRPORT MANAGEMENT.
5. DISCONNECT MIRLS T1 THRU R9 AND R45. PROVIDE WATERPROOF SPLICE. CONNECT TO EXISTING HOME CABLES.
6. ~~REMOVE EXISTING PAINT WHICH CONFLICTS WITH TEMPORARY PAINT BY SANDBLAST OR WATER BLAST TO THE SATISFACTION OF THE ENGINEER.~~ NOT REQUIRED.
7. UPON COMPLETION OF WORK, REMOVED ALL TEMPORARY THRESHOLD LIGHTING AND MARKING, ~~AND RESTORE ORIGINAL THRESHOLD AND RUNWAY LIGHTING AND MARKING TO THE SATISFACTION OF THE ENGINEER.~~ TURN OVER LIGHT FIXTURE AND TRANSFORMERS TO VAOT / MAINTENANCE DIV. UNDER CONTRACT 2.

TEMPORARY RELOCATED THRESHOLD DETAIL
SCALE: 1"=50'

NOTE: DRUMS TO BE PLACED 10' O.C.

BUCKET-TYPE CONSTRUCTION BARRICADE
NTS

MARKER NOTES

1. CLOSED RUNWAY MARKER ~~TO BE~~ IN PLACE DURING CONSTRUCTION PERIOD WHEN DIRECTED BY ENGINEER.
2. CLOSED RUNWAY MARKER ~~MAY BE EITHER SNOW FENCE OR PLYWOOD PAINTED YELLOW~~ WAS YELLOW FABRIC AND SECURELY FASTENED IN PLACE.
3. COST OF PLACING AND MAINTAINING THE CLOSED RUNWAY MARKER ~~AS~~ CONSIDERED NECESSARY AND INCIDENTAL TO CONSTRUCTION AND ~~IS~~ NOT A SEPARATE PAY ITEM.
4. CLOSED RUNWAY MARKER ~~TO BE~~ PLACED OVER NUMERALS.

CLOSED RUNWAY MARKER
NTS

262

STATE OF VERMONT — CHURCHILL — No. 5951 — REGISTERED PROFESSIONAL ENGINEER

REV.	DATE	DESCRIPTION
1	11/98	REVISED PER AS-BUILTS

Job No. FA021200

File No. U:\VA021200-GP1

RUTLAND STATE AIRPORT
CLARENDON, VERMONT

GENERAL PROJECT LAYOUT

URS Greiner, Inc.
3 MARCUS BOULEVARD
ALBANY, NEW YORK

Designed by: C D'AMICO	Date 01/31/97
Drawn by: M MCCALLA	03/06/97
Checked by: S MILLER	
Approved by: M CHURCHILL	4/14/97

Scale: HOR. – 1" = 400'
VERT. – N/A

Date: 04/09/97

Sheet 2 Of 9

Sheet No 2

GENERAL CONSTRUCTION AND SAFETY NOTES

GENERAL NOTES

1. THIS PROJECT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CONTRACT PLANS AND SPECIFICATIONS AND ANY RULES, REGULATIONS, STANDARDS OR SPECIFICATIONS REFERENCED THEREIN. THE PROJECT IS SUBJECT TO INSPECTION BY REPRESENTATIVES OF THE VERMONT AGENCY OF TRANSPORTATION (VAOT), AND THE FEDERAL AVIATION ADMINISTRATION (FAA).

2. THE PROJECT IS TO BE COMPLETED IN CONFORMANCE WITH THESE "CONSTRUCTION PHASING PLANS AND NOTES," AS CONTAINED IN THE PLANS, AND SHALL BE CONSTRUCTED IN A TIMELY MANNER IN ACCORDANCE WITH THE CONTRACTOR'S APPROVED PROJECT SCHEDULE. THE SCHEDULE SHALL PROVIDE FOR COMPLETION OF THE PHASES AS SHOWN ON THE PLANS AND DESCRIBED IN THE CONTRACT SPECIFICATIONS.

3. THE CONTRACTOR IS EXPECTED TO MEET COMPLETION OF CRITICAL PORTIONS OF THE PROJECT AND OPEN THOSE SEGMENTS TO TRAFFIC BY THE SPECIFIED TIMES AND TO COMPLETE THE ENTIRE PROJECT ON TIME.

4. RUTLAND STATE AIRPORT WILL BE IN OPERATION DURING THE CONSTRUCTION OF THIS PROJECT. COORDINATION OF ALL WORK WITH THE AIRPORT MANAGER & THE PROJECT RESIDENT ENGINEER IS MANDATORY SO AS TO MINIMIZE IMPACTS ON AIRPORT OPERATIONS.

5. CONSTRUCTION AND MAINTENANCE OPERATIONS BY OTHERS MAY OCCUR CONCURRENTLY AND AT TIMES IN THE VICINITY OF CONSTRUCTION ASSOCIATED WITH THIS PROJECT. THE CONTRACTOR SHALL COORDINATE HIS OPERATIONS AND COOPERATE WITH MAINTENANCE CREWS AND OTHER CONTRACTORS WORKING ON THE AIRPORT.

6. ACCESS TO THE SITE – THE CONTRACTOR'S ACCESS POINTS TO THE SITE ARE SHOWN ON THE GENERAL PROJECT LAYOUT PLAN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL VEHICLES AND PERSONNEL WHO ENTER THROUGH THESE ACCESS POINTS. THE CONTRACTOR SHALL MAINTAIN A SECURITY GUARD AT EACH GATE BEING USED AT ALL TIMES WHILE CONSTRUCTION IS UNDERWAY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SECURING ALL ACCESS POINTS BEING USED AT THE END OF EACH CONSTRUCTION DAY OR WHEN ACCESS POINTS ARE UNATTENDED.

7. HAUL ROUTES – APPROXIMATE LOCATION OF HAUL ROUTES ON THE AIRPORT SITE ARE SHOWN ON THE PHASING PLANS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE OFF-SITE HAUL ROUTES (STATE OR TOWN HIGHWAYS) WITH THE APPROPRIATE OWNER WHO HAS JURISDICTION OVER THE AFFECTED ROUTE. ON-SITE HAUL ROUTES SHALL BE MAINTAINED BY THE CONTRACTOR AND SHALL BE RESTORED AT THE CONTRACTOR'S EXPENSE TO THEIR ORIGINAL CONDITION UPON COMPLETION OF BEING USED AS A HAUL ROUTE. THE BEFORE AND AFTER CONDITION OF ON-SITE HAUL ROUTES SHALL BE JOINTLY INSPECTED AND DETERMINED BY THE CONTRACTOR AND THE ENGINEER. FENCING, DRAINAGE, GRADING AND OTHER MISCELLANEOUS CONSTRUCTION REQUIRED TO CONSTRUCT TEMPORARY HAUL ROUTES OR ACCESS POINTS ON THE AIRPORT WILL BE THE CONTRACTOR'S RESPONSIBILITY AND SHALL BE APPROVED BY THE ENGINEER PRIOR TO COMMENCING THE WORK. EXISTING ACCESS ROADS TO AIRPORT FACILITIES SHALL REMAIN OPEN AND MAINTAINED AT ALL TIMES.

8. CONTRACTOR'S STAGING AREAS – AN AREA WILL BE MADE AVAILABLE FOR CONTRACTOR'S MOBILIZATION AND STORAGE. THIS AREA IS SHOWN ON THE GENERAL PROJECT LAYOUT. THE CONTRACTOR'S STAGING AREA SHALL BE GRADED, TOPSOILED, SEEDED, AND MULCHED UPON COMPLETION OF USE, AT THE CONTRACTOR'S EXPENSE.

9. DISPOSAL AREA – WASTE AREAS WILL BE MADE AVAILABLE FOR THE DISPOSAL OF THE CONTRACTOR'S SPOIL MATERIALS. THE MANNER IN WHICH MATERIALS ARE PLACED IN EMBANKMENTS SHALL BE AS SPECIFIED AND APPROVED BY THE ENGINEER. WASTE MATERIALS INCLUDE THOSE ITEMS WHICH ARE A DIRECT RESULT OF CONSTRUCTION. TRASH (i.e. CUPS, CANS, ETC.) SHALL BE DISPOSED OF THROUGH PROPER SANITARY METHODS.

10. SAFETY – THE CONTRACTOR SHALL CONDUCT HIS ACTIVITIES IN A SAFE MANNER AS SPECIFIED IN THE SECTION TITLED, "SAFETY REQUIREMENTS DURING CONSTRUCTION" ON THIS SHEET.

11. PROTECTION OF AND REPAIR OF DAMAGE TO EXISTING CABLES – LOCATION OF KNOWN EXISTING AIRPORT UNDERGROUND CABLES ARE SHOWN ON THE PLANS AND MUST BE VERIFIED BY THE CONTRACTOR. REPAIR OF CABLES DAMAGED DUE TO CONTRACTOR'S OPERATIONS MUST BE STARTED IMMEDIATELY AND CONTINUED UNTIL COMPLETED. ALL SUCH REPAIRS SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS AND SHALL BE AT THE CONTRACTOR'S EXPENSE. WHEN FAA CABLES ARE DAMAGED, REPAIRS SHALL BE DONE IN ACCORDANCE WITH FAA REQUIREMENTS AND IN THE PRESENCE OF AN FAA REPRESENTATIVE. THE FAA MAY ELECT TO HAVE THE REPAIR PERFORMED BY OTHERS IN WHICH CASE THE CONTRACTOR SHALL BE RESPONSIBLE FOR PAYING THE INCURRED COSTS OF REPAIRS.

12. EXISTING AIRFIELD LIGHTING SYSTEMS – INTERRUPTION OF EXISTING AIRFIELD LIGHTING SYSTEMS NOT INCLUDED IN THIS PROJECT SHALL NOT BE PERMITTED. ALL AIRFIELD LIGHTING CIRCUITS AFFECTED BY THIS PROJECT SHALL BE MAINTAINED BY THE CONTRACTOR DURING OPERATIONAL PERIODS IN ACCORDANCE WITH THE SPECIFICATIONS AND/OR AS DIRECTED BY THE ENGINEER.

13. CONSTRUCTION LIMITS – ALL CONTRACTOR VEHICLES AND TRAFFIC (UNLESS OTHERWISE AUTHORIZED) SHALL REMAIN WITHIN THE DESIGNATED CONSTRUCTION LIMITS OR HAUL ROUTES. CONSTRUCTION, STORAGE AND STOCKPILING LIMITS ARE FURTHER DEFINED IN THE SECTION TITLED, "SAFETY REQUIREMENTS DURING CONSTRUCTION" ON THIS SHEET.

14. PORTABLE FLOODLIGHTING – THE CONTRACTOR SHALL PROVIDE PORTABLE FLOODLIGHTING WHEN REQUIRED FOR CONSTRUCTION OPERATIONS. THE CONTRACTOR SHALL PROVIDE SUFFICIENT UNITS SO THAT ALL WORK AREAS ARE ILLUMINATED TO A LEVEL OF 5 HORIZONTAL FOOT CANDLES. THE LIGHTING LEVELS SHALL BE CALCULATED AND MEASURED IN ACCORDANCE WITH THE CURRENT STANDARDS OF THE ILLUMINATION ENGINEERING SOCIETY.

15. THE CONTRACTOR SHALL OBTAIN ALL THE PERMITS AND LICENSES REQUIRED FOR HIS THE PROJECT WORK ON THE PROJECT AT HIS OWN EXPENSE.

16. EXISTING TOPOGRAPHIC FIELD SURVEYS FOR THIS PROJECT AREA WERE PERFORMED BY LITTLE RIVER SURVEY CO. IN 1995 & 1997.

17. THE HORIZONTAL CONTROL ON THIS PROJECT IS TIED TO THE 1983 AND 1988 NATIONAL GEODETIC HORIZONTAL AND VERTICAL DATUM, RESPECTIVELY.

SAFETY REQUIREMENTS DURING CONSTRUCTION

(A) FEDERAL AVIATION ADMINISTRATION (FAA) ADVISORY CIRCULARS (AC), ORDERS AND FEDERAL AVIATION REGULATIONS (FAR).

THE FOLLOWING PUBLICATIONS CONTAIN DEFINITIONS/DESCRIPTIONS OF CRITICAL AIRPORT OPERATING AREAS. THE AREAS DEFINED BELOW PERTAIN TO AIRFIELD SAFETY REQUIREMENTS AND ARE REFERENCED THROUGHOUT THE CONTRACT DOCUMENTS. COPIES OF THESE PUBLICATIONS ARE AVAILABLE THROUGH THE FAA OR CAN BE ORDERED BY MAIL FROM:

U.S. DEPARTMENT OF TRANSPORTATION
SUBSEQUENT DISTRIBUTION OFFICE
ARDMORE EAST BUSINESS CENTER
3341 Q 75TH AVE.
LANDOVER, MD. 20785

AND CAN BE REVIEWED AT THE OFFICES OF THE VERMONT AGENCY OF TRANSPORTATION, RAIL, AIR AND PUBLIC TRANSPORTATION DIVISION, NATIONAL LIFE BUILDING, MONTPELIER, VERMONT.

(1) AC 150/5370-2, "OPERATIONAL SAFETY ON AIRPORTS DURING CONSTRUCTION", CURRENT EDITION.

(2) FAR PART 77 "OBJECTS AFFECTING NAVIGABLE AIRSPACE, CURRENT EDITION:

(3) AC 150/5300-13, "AIRPORT DESIGN", CURRENT EDITION, ESTABLISHES DESIGN, OPERATIONAL, AND MAINTENANCE STANDARDS FOR AIRPORTS. STANDARD TERMS USED IN THE CONTRACT PLANS AND SPECIFICATIONS ARE DEFINED BELOW:

(a) RUNWAY PROTECTION ZONE (RPZ): A TRAPEZOIDAL AREA CENTERED ON THE RUNWAY BEGINNING AT A POINT 200 FEET BEYOND THE END OF THE AREA USEABLE FOR TAKEOFF OR LANDING. THE RPZ IS SHOWN ON THE GENERAL PROJECT LAYOUT PLAN.

(b) OBJECT FREE AREA (OFA): A TWO DIMENSIONAL GROUND AREA SURROUNDING RUNWAYS, TAXIWAYS, AND TAXILANES WHICH IS CLEAR OF OBJECTS EXCEPT FOR OBJECTS WHOSE LOCATION IS FIXED BY FUNCTION.

(c) SAFETY AREA – THE SURFACE ADJACENT TO RUNWAYS, TAXIWAYS, AND TAXILANES OVER WHICH AIRCRAFT SHOULD, IN DRY WEATHER, BE ABLE TO CROSS AT NORMAL SPEEDS WITHOUT INCURRING SIGNIFICANT DAMAGE. A SAFETY AREA IS GRADED, DRAINED AND COMPACTED. IT IS FREE OF ANY HOLES, TRENCHES, BUMPS OR OTHER SIGNIFICANT SURFACE VARIATIONS OR OBJECTS OTHER THAN THOSE WHICH MUST BE THERE BECAUSE OF THEIR ESSENTIAL AERONAUTICAL FUNCTION. THE SAFETY AREA REQUIRES THE CAPABILITY OF SUPPORTING MAINTENANCE VEHICLES AND AIRCRAFT RESCUE AND FIRE FIGHTING VEHICLES UNDER NORMAL (DRY) CONDITIONS.

(B) GENERAL SAFETY REQUIREMENTS

(1) THE CONTRACTOR SHALL ACQUAINT HIS SUPERVISORS AND EMPLOYEES WITH THE AIRPORT ACTIVITY AND OPERATIONS THAT ARE INHERENT TO RUTLAND STATE AIRPORT AND SHALL CONDUCT HIS CONSTRUCTION ACTIVITIES TO CONFORM TO ALL ROUTINE AND EMERGENCY AIR TRAFFIC REQUIREMENTS AND GUIDELINES FOR SAFETY SPECIFIED HEREIN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL SAFETY DEVICES AS REQUIRED FOR THE PROTECTION OF HIS PERSONNEL.

(2) PROTECTION OF ALL PERSONS SHALL BE PROVIDED THROUGHOUT THE PROGRESS OF THE WORK. THE WORK SHALL PROCEED IN SUCH A MANNER AS TO PROVIDE SAFE CONDITIONS FOR ALL WORKERS AND AGENCY PERSONNEL. THE SEQUENCE OF OPERATION SHALL BE SUCH THAT MAXIMUM PROTECTION IS AFFORDED TO INSURE THAT PERSONNEL AND WORKERS IN THE WORK AREA ARE NOT SUBJECT TO ANY DANGEROUS CONDITIONS.

(3) DURING PERFORMANCE OF THIS CONTRACT, THE AIRPORT RUNWAYS, TAXIWAYS, AND AIRCRAFT PARKING APRONS SHALL REMAIN IN USE BY AIRCRAFT TO THE MAXIMUM EXTENT POSSIBLE. ALL AIRCRAFT TRAFFIC ON THESE AREAS SHALL HAVE PRIORITY OVER CONTRACTOR'S TRAFFIC. THE OWNER RESERVES THE RIGHT TO ORDER THE CONTRACTOR AT ANY TIME TO VACATE ANY AREA NECESSARY TO MAINTAIN SAFE AIRCRAFT OPERATIONS. USE OF AREAS NEAR THE CONTRACTOR'S WORK WILL BE CONTROLLED TO MINIMIZE DISTURBANCE TO THE CONTRACTOR'S OPERATION. THE CONTRACTOR SHALL NOT ALLOW EMPLOYEES, SUBCONTRACTORS, SUPPLIERS, OR ANY OTHER UNAUTHORIZED PERSON TO ENTER OR REMAIN IN ANY AIRPORT AREA WHICH WOULD BE HAZARDOUS TO PERSONS OR TO AIRCRAFT OPERATIONS.

(4) ALL WORK TO BE PERFORMED WHICH IS CLOSE TO AN ACTIVE RUNWAY, TAXIWAY OR APRON SHALL BE PERFORMED WHEN THE RUNWAY, TAXIWAY OR APRON IS NOT IN USE. SUCH WORK SHALL BE ACCOMPLISHED ONLY WITH PRIOR PERMISSION FROM THE ENGINEER AND AIRPORT MANAGER. REQUESTED CLOSINGS SHALL BE DIRECTED TO THE ENGINEER AT LEAST 48 HOURS IN ADVANCE.

(C) CONSTRUCTION AND FACILITIES MAINTENANCE

(1) THE FOLLOWING ARE CONSIDERED SAFETY PROBLEMS AND/OR HAZARDS:

(a) TRENCHES, HOLES, OR EXCAVATION ON OR ADJACENT TO ANY OPEN RUNWAY OR IN RUNWAY OR TAXIWAY SAFETY AREAS.

(b) UNMARKED/UNLIGHTED HOLES OR EXCAVATION IN ANY APRON, OPEN TAXIWAY, OPEN TAXILANE, OR RELATED SAFETY AREA.

(c) MOUNDS OR PILES OF EARTH, CONSTRUCTION MATERIALS, TEMPORARY STRUCTURES, OR OTHER OBJECTS IN THE VICINITY OF ANY OPEN RUNWAY, TAXIWAY, TAXILANE, OR IN ANY RELATED SAFETY, APPROACH, OR DEPARTURE AREA.

(d) VEHICLES OR EQUIPMENT, WHETHER OPERATING OR IDLE, ON ANY OPEN RUNWAY, TAXIWAY, TAXILANE, OR IN ANY RELATED SAFETY, APPROACH, OR DEPARTURE AREA.

(e) VEHICLES, EQUIPMENT, EXCAVATION, STOCKPILES, OR OTHER MATERIALS WHICH COULD INTERFERE WITH ELECTRONIC SIGNALS FROM RADIOS OR ELECTRONIC NAVIGATIONAL AIDS (NAVAIDS).

(f) PAVEMENT DROP-OFFS – LIPS (EITHER PERMANENT OR TEMPORARY, WHICH COULD CAUSE DAMAGE TO AIRCRAFT IF CROSSED AT NORMAL OPERATING SPEEDS. THE NORMAL MAXIMUM DROP-OFF OR LIP IS 1-1/2 INCHES.

(g) UNMARKED UTILITY, NAVAID, WEATHER SERVICE, RUNWAY LIGHTING, OR OTHER POWER OR SIGNAL CABLES THAT COULD BE DAMAGED DURING CONSTRUCTION.

(h) OBJECTS, WHETHER OR NOT MARKED OR FLAGGED, OR ACTIVITIES ANYWHERE ON OR IN THE VICINITY OF THE AIRPORT WHICH COULD BE DISTRACTING, CONFUSING, OR ALARMING TO PILOTS DURING AIRCRAFT OPERATIONS.

(i) UNFLAGGED/UNLIGHTED LOW VISIBILITY ITEMS SUCH AS TALL CRANES, DRILLS, AND THE LIKE, ANYWHERE IN THE VICINITY OF ACTIVE RUNWAYS, OR IN ANY APPROACH OR DEPARTURE AREA.

(j) MISLEADING OR MALFUNCTIONING OBSTRUCTION LIGHTS OR UNLIGHTED/UNMARKED OBSTRUCTIONS IN THE APPROACH TO ANY ACTIVE RUNWAY.

(k) WATER, SNOW, DIRT, DEBRIS, OR OTHER TRANSIENT ACCUMULATION WHICH TEMPORARILY OBSCURES PAVEMENT MARKINGS OR PAVEMENT EDGES, OR DEROGATES VISIBILITY OF RUNWAY/TAXIWAY MARKINGS OR LIGHTING.

(l) INADEQUATE OR IMPROPER METHODS OF MARKING, BARRICADING, AND LIGHTING OF TEMPORARILY CLOSED PORTIONS OF THE AIRPORT OPERATIONS AREA.

(m) TRASH OR OTHER MATERIALS WITH FOREIGN OBJECT DAMAGE (FOD) POTENTIAL, WHETHER ON RUNWAYS, TAXIWAYS, OR APRONS; OR IN RELATED SAFETY AREAS.

(n) INADEQUATE BARRICADING OR OTHER MARKING WHICH IS PLACED TO SEPARATE CONSTRUCTION OR MAINTENANCE AREAS FROM OPEN AIRCRAFT OPERATING AREAS.

(o) FAILURE TO CONTROL UNAUTHORIZED VEHICLE AND HUMAN ACCESS TO ACTIVE AIRCRAFT OPERATING AREAS.

(p) FAILURE TO MAINTAIN RADIO COMMUNICATION BETWEEN CONSTRUCTION/MAINTENANCE VEHICLES AND RUTLAND UNICOM.

(q) CONSTRUCTION/MAINTENANCE ACTIVITIES OR MATERIALS WHICH COULD HAMPER THE RESPONSE OF AIRCRAFT RESCUE AND FIRE FIGHTING (ARFF) EQUIPMENT FROM REACHING ALL AIRCRAFT OR ANY PART OF THE RUNWAY/TAXIWAY SYSTEM, RUNWAY APPROACH AND DEPARTURE AREAS AND AIRCRAFT PARKING LOCATIONS.

(r) BIRD ATTRACTANTS ON AIRPORT SUCH AS: EDIBLES (FOOD SCRAPS, ETC.), MISCELLANEOUS TRASH, OR PONDED WATER.

(2) THE CONTRACTOR SHALL CONDUCT ACTIVITIES SO AS NOT TO VIOLATE ANY SAFETY STANDARDS CONTAINED HEREIN. THE CONTRACTOR SHALL INSPECT ALL CONSTRUCTION AND STORAGE AREAS AS OFTEN AS NECESSARY AND PROMPTLY TAKE ALL STEPS NECESSARY TO PREVENT/REMEDY ANY UNSAFE OR POTENTIALLY UNSAFE CONDITIONS OR ACTIVITIES DISCOVERED.

(3) THE VAOT WILL BE RESPONSIBLE FOR ISSUING APPROPRIATE NOTICE TO AIRMEN (NOTAM) CONCERNING CONSTRUCTION ACTIVITY ON THE AIRFIELD.

(D) MOTORIZED VEHICLES

THIS PROJECT INCLUDES WORK WITHIN THE AIRCRAFT OPERATIONS AREA (AOA).
ALL PERMITTED VEHICLES SHALL BE EQUIPPED WITH A FLASHING AMBER (YELLOW) DOME-TYPE LIGHT, MOUNTED ON TOP OF THE VEHICLE AND OF SUCH INTENSITY TO CONFORM TO LOCAL CODES FOR MAINTENANCE AND EMERGENCY VEHICLES.
ALL VEHICLES OPERATING WITHIN THE AIRFIELD BOUNDARY SHALL BE IDENTIFIED WITH A SIGN ON EACH SIDE OF THE VEHICLE BEARING THE CONTRACTOR'S NAME IN 12-INCH MINIMUM LETTER HEIGHT.

VEHICLES MAKING ONLY OCCASIONAL VISITS TO THE JOB SITE ARE EXEMPT FROM THE IDENTIFICATION REQUIREMENTS CONTAINED HEREIN ABOVE PROVIDED THAT THEY ARE ESCORTED INTO, THROUGH, AND OUT OF THE AIRPORT AREA BY A PROPERLY IDENTIFIED VEHICLE.

(E) RADIO COMMUNICATIONS

RADIO COMMUNICATIONS ARE REQUIRED BETWEEN THE CONTRACTOR'S REPRESENTATIVE AND RUTLAND UNICOM. RADIO CONTACT IS REQUIRED AT ALL TIMES WHILE THE CONTRACTOR HAS PERSONNEL AND EQUIPMENT ON THE PROJECT SITE AND WHILE THEY ARE IN AN ACTIVE AIR OPERATIONS AREA (AOA) OF THE AIRPORT. RADIOS SHALL BE FURNISHED BY THE CONTRACTOR AND SHALL BE CAPABLE OF TRANSMITTING AND RECEIVING AT A GROUND CONTROL FREQUENCY OF 122.8 MHZ. THIS FREQUENCY IS TO BE UTILIZED WHEN CROSSING ACTIVE FACILITIES. SUFFICIENT RADIOS SHALL BE ON SITE AND OPERATING AT ALL TIMES SO THAT INSTRUCTIONS OR COMMUNICATIONS MAY BE DISPATCHED TO ALL CREWS AND/OR EQUIPMENT WORKING IN AN ACTIVE AOA.

(F) DEBRIS

DEBRIS, WASTE, AND LOOSE MATERIAL (INCLUDING DUST AND DIRT) CAPABLE OF CAUSING DAMAGE TO AIRCRAFT LANDING GEAR OR PROPELLERS, OR BEING INGESTED IN JET ENGINES, SHALL NOT BE ALLOWED ON ACTIVE AIRCRAFT MOVEMENT AREAS OR ADJACENT GRASSED AREAS. MATERIALS OBSERVED TO BE WITHIN THESE AREAS SHALL BE REMOVED IMMEDIATELY BY THE CONTRACTOR. THE CONTRACTOR SHALL BE REQUIRED TO HAVE A SWEEPING MACHINE AND OPERATOR ON SITE AND READY AT ALL TIMES DURING CONSTRUCTION ACTIVITY. WHERE TRAVEL ON OR ACROSS RUNWAYS, RAMP AREAS, TAXIWAYS, OR AIRCRAFT APRONS IS REQUIRED, THE CONTRACTOR SHALL PROVIDE ADEQUATE PERSONNEL AND EQUIPMENT TO KEEP SUCH SURFACES CLEAR OF DEBRIS.

(G) FLAGMEN

IN ACCORDANCE WITH THE SPECIFICATIONS, THE CONTRACTOR SHALL, AT HIS OWN EXPENSE, FURNISH FLAGMEN AS NECESSARY TO CONTROL HIS TRAFFIC (UNLESS OTHERWISE DIRECTED BY THE ENGINEER).

ALL CONTRACTOR VEHICLES THAT ARE REQUIRED TO CROSS ACTIVE RUNWAYS, RUNWAY SAFETY AREAS, TAXIWAYS AND APRONS SHALL DO SO UNDER THE DIRECT CONTROL OF A COMPETENT FLAGMAN WHO IS IN DIRECT RADIO CONTACT WITH GROUND CONTROL. ALL AIRCRAFT TRAFFIC ON RUNWAYS, TAXIWAYS, AND APRONS SHALL HAVE PRIORITY OVER CONTRACTOR'S TRAFFIC. AT NO TIME SHALL THE CONTRACTOR'S VEHICLES OR PERSONNEL BE ALLOWED TO ENTER OR CROSS ACTIVE RUNWAYS OR CLEAR ZONES WITHOUT PROPER AUTHORIZATION.

(H) MISCELLANEOUS

(1) OPEN FLAME, WELDING OR TORCH CUTTING OPERATIONS ARE PROHIBITED UNLESS ADEQUATE FIRE AND SAFETY PRECAUTIONS HAVE BEEN TAKEN AND THE PROCEDURE PREVIOUSLY APPROVED BY THE ENGINEER.

(2) EQUIPMENT AND STOCKPILED MATERIAL SHALL BE CONSTRAINED IN A MANNER TO PREVENT MOVEMENT RESULTING FROM AIRCRAFT JET BLAST OR WIND CONDITIONS IN EXCESS OF 10 KNOTS.

(3) THE CONTRACTOR SHALL PROVIDE BUCKET TYPE CONSTRUCTION BARRICADES WITH FLASHING YELLOW LIGHTS AS SHOWN ON THE DRAWINGS TO DELINEATE THE WORK AREAS WHEN CLOSED TO AIRPORT TRAFFIC. OPEN TRENCHES, EXCAVATIONS AND STOCKPILED MATERIAL LOCATED IN THE AOA SHALL BE PROMINENTLY MARKED WITH ORANGE FLAGS AND LIGHTED BY APPROVED LIGHT UNITS DURING HOURS OF LIMITED VISIBILITY AND DARKNESS.

(4) ALL MATERIALS AND EQUIPMENT WHEN NOT IN USE SHALL BE PLACED IN APPROVED AREAS WHERE THEY WILL NOT CONSTITUTE A HAZARD TO AIRCRAFT OPERATIONS AND NOT PENETRATE CLEARANCE SURFACES. EQUIPMENT SHALL BE PARKED AT THE STAGING AREA WHEN NOT IN USE.

(5) MAXIMUM EQUIPMENT HEIGHT SHALL NOT EXCEED 15 FEET UNLESS PRIOR APPROVAL IS OBTAINED FROM THE ENGINEER.

(6) UPON COMPLETION OF ANY STAGE/PHASE OF WORK, THE ENGINEER WILL ARRANGE A PHYSICAL INSPECTION OF THE AREA WITH AIRPORT OPERATIONS PERSONNEL PRIOR TO OPENING ANY PORTION OF A RUNWAY, RAMP AREA OR AIRPORT ROADWAY THAT HAS BEEN CLOSED FOR WORK OR USED FOR A CROSSING POINT OR HAUL ROUTE BY THE CONTRACTOR.

(7) ENTRANCE TO THE AIRFIELD IS SUBJECT TO SECURITY REGULATIONS. ALL PERSONNEL ENTERING THE AIRFIELD MUST OBTAIN AND DISPLAY SECURITY IDENTIFICATION BADGES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ASSURING THAT ALL OF HIS EMPLOYEES WHO HAVE UNESCORTED ACCESS TO THE AIRFIELD, HAVE HAD A BACKGROUND CHECK PERFORMED ON THEM DATING BACK FIVE (5) YEARS VERIFYING REPRESENTATIONS MADE BY THE EMPLOYEE RELATING TO EMPLOYMENT.

(8) THE CONTRACTOR SHALL PROVIDE THE ENGINEER WITH A CURRENT LIST OF ALL EMPLOYEES WORKING ON THE AIRPORT. THE LIST SHALL BE MAINTAINED CURRENT BY THE CONTRACTOR AND APPLIES TO ALL SUBCONTRACTORS.

(9) EXCEPT FOR EMERGENCIES, ALL CONTACT WITH AIRPORT PERSONNEL SHALL BE MADE THROUGH THE RESIDENT ENGINEER. FOR EMERGENCIES INVOLVING SAFETY (INJURIES, FIRES, SECURITY BREACHES, ETC.) THE CONTRACTOR SHALL MAKE DIRECT CONTACT WITH AIRPORT OPERATIONS FOLLOWED BY NOTIFICATION TO THE RESIDENT ENGINEER AS SOON AS POSSIBLE.

(10) THE CONTRACTOR SHALL PROVIDE THE PHONE NUMBERS OF THREE PERSONNEL, INCLUDING THE PROJECT SUPERINTENDENT, WHO MAY BE CONTACTED IN AN EMERGENCY. PERSONNEL SHALL BE ON CALL 24 HOURS PER DAY FOR MAINTAINING AIRPORT HAZARD LIGHTING AND BARRICADES.

(11) IN ACCORDANCE WITH THE SPECIFICATIONS, FEDERAL WAGE RATES SHALL BE POSTED OUTSIDE THE SITE FIELD OFFICE IN A WEATHERPROOF ENCLOSURE.

(I) UTILITIES

(1) UNDERGROUND UTILITIES: THE LOCATIONS OF THE UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE CONSIDERED TO BE ONLY ESTIMATED LOCATIONS. ALL UTILITY LOCATIONS SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO COMMENCING CONSTRUCTION. IN THE EVENT ANY UTILITY IS DAMAGED THE CONTRACTOR SHALL BE RESPONSIBLE FOR PAYING FOR INCURRED COSTS OF REPAIRS.

(2) UTILITIES NOTIFICATION: AT LEAST TWO WORKING DAYS PRIOR TO COMMENCING CONSTRUCTION OPERATIONS IN AN AREA WHICH MAY INVOLVE UNDERGROUND UTILITY FACILITIES, THE CONTRACTOR SHALL NOTIFY THE RESIDENT ENGINEER, AND THE OWNER OF EACH UNDERGROUND UTILITY FACILITY AFFECTED.

(3) THE FOLLOWING IS A LIST OF COMPANIES WITH POSSIBLE UTILITIES WITHIN THE CONSTRUCTION LIMITS.

UTILITY	
DIGSAFE	1-800-225-4977
CVPS	1-800-649-2877

26C

URS Greiner, Inc.
3 MARCUS BOULEVARD
ALBANY, NEW YORK

RUTLAND STATE AIRPORT
CLARENDON, VERMONT

SAFETY NOTES

REV.	DATE	DESCRIPTION
1	10/6/97	REVISED PHASING

Job No. F401212.00 File No. I:\F401212\DGN\

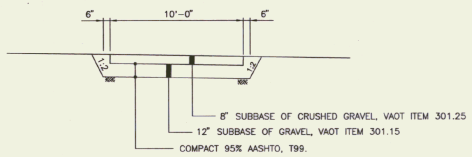
Designed by: G D'AMICO
Drawn by: M MCCALLA
Checked by: S MILLER
Approved by: WILLIAM C. CHURCHILL 4/4/97

Scale: HS NA VS N/A

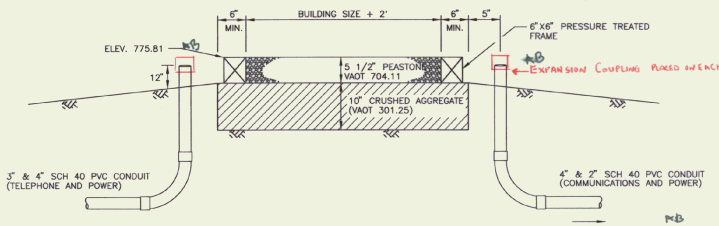
Date: 04/09/97

Sheet 3 Of 9

Sheet No 3

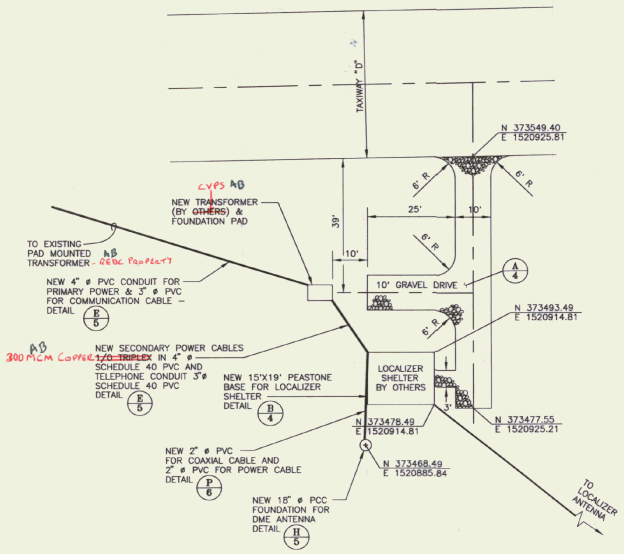


A — GRAVEL DRIVE
SCALE: NONE



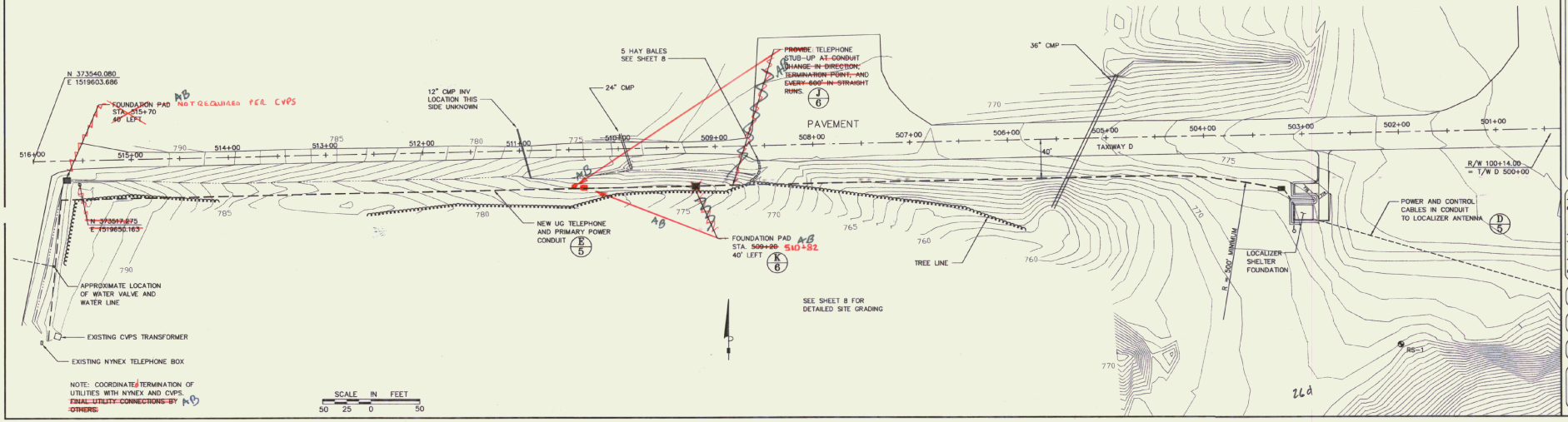
NOTE: PROVIDE 20' CABLE SLACK – EACH END OF ALL CABLES. SEAL CONDUITS WITH APPROVED DUCT SEAL AFTER INSTALLATION OF CABLES OR PULL WIRES.

B — LOCALIZER SHELTER FOUNDATION
SCALE: NONE



C — SITE DETAIL – LOCALIZER SHELTER
SCALE: NONE

NOTES:
1. SITE PREPARATION: EXCAVATE TOPSOIL TO GOOD BEARING SOIL COMPACT SUBGRADE, AND CRUSHED AGGREGATE TO 95%, AASHTO T99
2. PEASTONE LAYER TO BE LEVEL
3. SHELTER RELOCATION BY OTHERS
4. SEE DETAIL 1/6 FOR BUILDING GROUNDING DETAILS



NOTE: COORDINATE TERMINATION OF UTILITIES WITH NYNEX AND CVPS. FINAL UTILITY CONNECTIONS BY OTHERS.

SCALE IN FEET
50 25 0 50

STATE OF VERMONT — CHRISTOPHER M. CHURCHILL — No. 5951 — REGISTERED PROFESSIONAL ENGINEER

REV.	DATE	DESCRIPTION
1	4/14/97	RECORD DRAWING

Job No. F401212.00
File No. I:\VA01212\DWG\DSP

RUTLAND STATE AIRPORT
CLARENDON, VERMONT

LOCALIZER RELOCATION – SITE PLAN

URS Greiner, Inc.
3 MARCUS BOULEVARD
ALBANY, NEW YORK

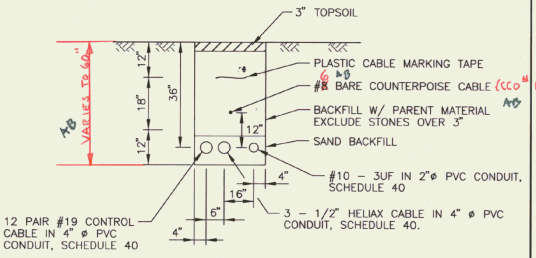
Designed by: C D'AMICO 01/31/97
Drawn by: M MCCALLA 03/06/97
Checked by: S MILLER
Approved by: M CHURCHILL 4/14/97

Scale: HOR. – 1" = 50'
VERT. – NONE

Date: 04/09/97

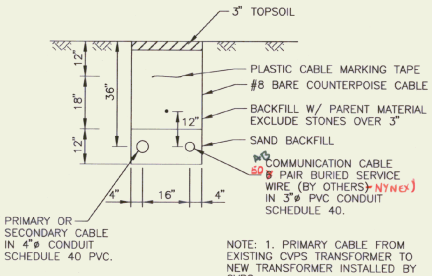
Sheet 4 Of 9

Sheet No 4



D — CONDUIT TRENCH FROM LOCALIZER TO SHELTER

NOTE – PROVIDE 20' CABLE SLACK – EACH END OF ALL CABLES. FOR FUTURE CONNECTION – BY OTHERS. ~~MOUND TOPSOIL SLIGHTLY TO ACCOUNT FOR BACKFILL SETTLEMENT.~~ CONTRACT 2.



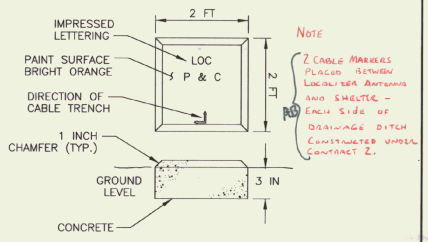
NOTE: 1. PRIMARY CABLE FROM EXISTING CVPS TRANSFORMER TO NEW TRANSFORMER INSTALLED BY CVPS

2. SECONDARY CABLE FROM NEW TRANSFORMER TO LOCALIZER SHELTER ~~TO BE 1/0 TRIPLEX~~, 500 MCM COPPLE INSTALLED BY CONTRACTOR. (200 AMP)

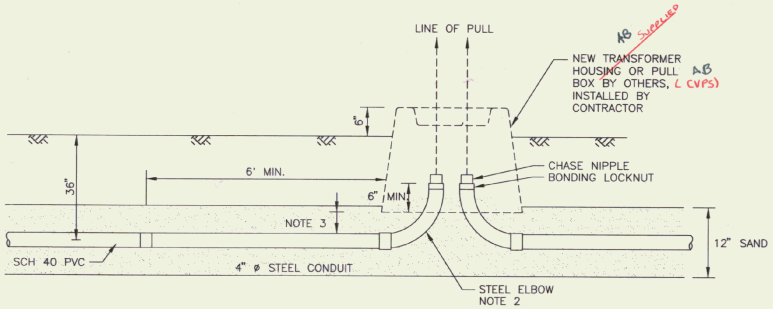
3. TERMINATE SECONDARY CABLE & CONDUIT AT GROUND LEVEL AT ~~PROPOSED~~ LOCALIZER SHELTER SITE. ~~LEAVE~~ 20' CABLE SLACK FOR CONNECTION TO DISCONNECT ON SHELTER BY OTHERS. – CONTRACT 2

4. MOUND TOPSOIL SLIGHTLY TO ACCOUNT FOR BACKFILL SETTLEMENT.

E — PRIMARY/SECONDARY CONDUIT TRENCH

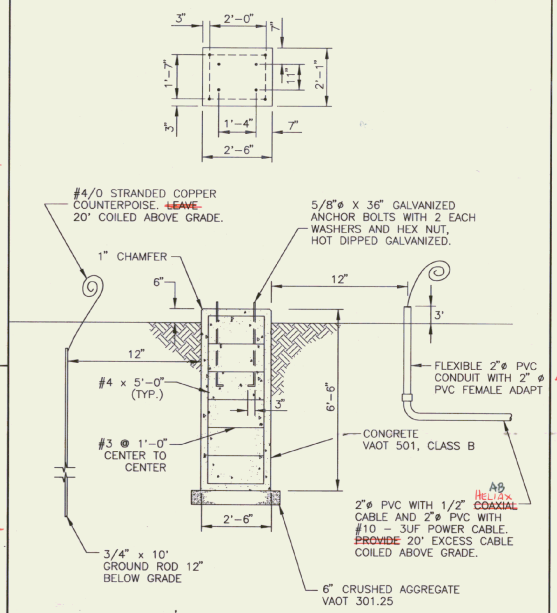


F — CABLE MARKER

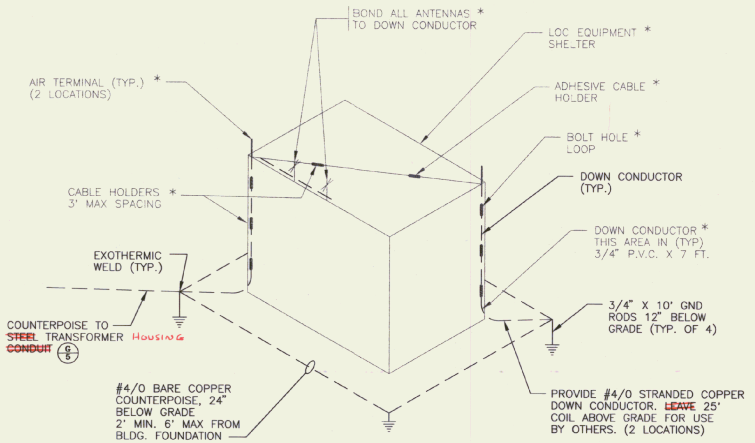


G — PULL BOX SECTION

NOTES:
1. ELBOWS ~~TO BE~~ ALIGNED TO ALLOW STRAIGHT PULL THROUGH BOX PAD OPENING
2. USE 90° ELBOWS
3. PROVIDE SUFFICIENT CLEARANCE SO BOX PAD DOES NOT CONTACT ELBOWS
4. INSTALL PULL WIRE IN CONDUIT (500# MIN RATING)
5. SEAL CONDUITS WITH APPROVED DUCT SEAL AFTER CABLES INSTALLED
6. BOND STEEL CONDUIT TO GROUND GRID. SEE DETAIL (4/8)
7. PROVIDE DRAINAGE AWAY FROM TRANSFORMER HOUSING
8. PLACE 3" MIN SAND IN BOTTOM OF TRANSFORMER HOUSING
9. SEE DETAIL (8/8) FOR ADDITIONAL DETAIL



H — PIER FOUNDATION FOR DME ANTENNA MAST



* INDICATES BY OTHERS, UNDER CONTRACT 2.

I — LIGHTNING PROTECTION DETAIL

GENERAL NOTES

1. ALL DISTURBED AREAS ~~TO BE~~ REGRADED, TOPSOILED (3" MIN.) LIMED, FERTILIZED, AND MULCHED.

2. CRUSHED AGGREGATE TO CONFORM TO VAOT SPECIFICATION 301.25

3. INSTALLATION OF UNDERGROUND CONDUIT AND COMMUNICATIONS CABLES TO CONFORM TO REQUIREMENTS OF THE LOCAL UTILITY (CVPS) & TELEPHONE Co. (NYNEX).

STATE OF VERMONT — GREGORY CROFFUTT — No. 5951 — REGISTERED PROFESSIONAL ENGINEER

REV.	DATE	DESCRIPTION
1	Update Record Drawings	

Job No. F401212.00 — File No. I:\V401212\DWG\LSD

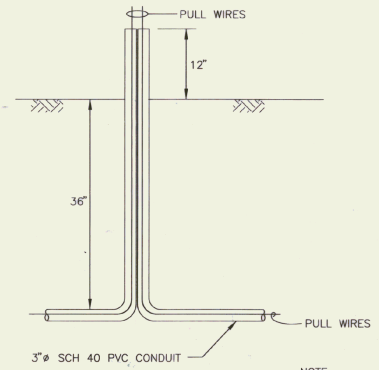
RUTLAND STATE AIRPORT
CLARENDON, VERMONT

LOCALIZER SITE DETAILS

URS Greiner, Inc.
3 MARCUS BOULEVARD
ALBANY, NEW YORK

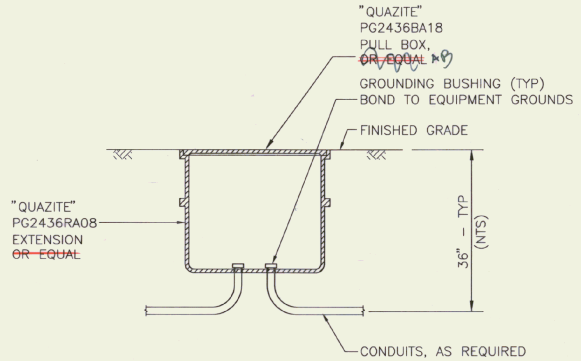
Designed by: G D'AMICO — Date
Drawn by: M MCCALLA 01/31/97
Checked by: S MILLER
Approved by: M CHURCHILL 4/4/97

Scale: HOR. – NONE VERT. – NONE
Date: 04/08/97
Sheet 5 Of 9
Sheet No 5



NOTE:
SEAL CONDUIT WITH APPROVED DUCT SEAL AFTER PULL WIRES ARE INSTALLED.

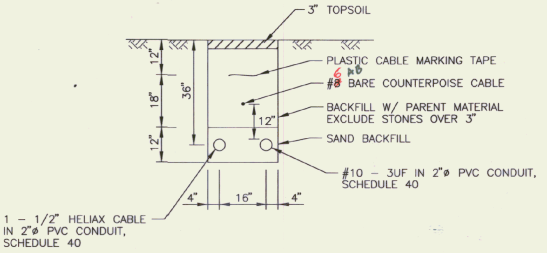
J — TELEPHONE STUB-UP
SCALE: NONE



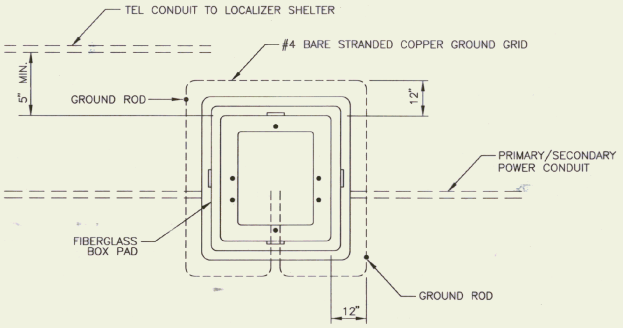
NOTE:
PROVIDE LOOPS IN HANDHOLES WHERE NO SPLICES OCCUR. TERMINATE SPARE ~~COAXIAL~~ CABLE IN HANDHOLE WITH 10 FEET OF EXTRA CABLE COILED AND TAPED.

O — POWER & COMMUNICATION HANDHOLE DETAIL
SCALE: 1"=1'-0"

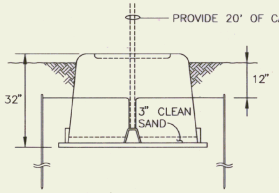
SEE LOCATION ON SHEET 8.



P — CONDUIT TRENCH FROM DME TO SHELTER
SCALE: NONE



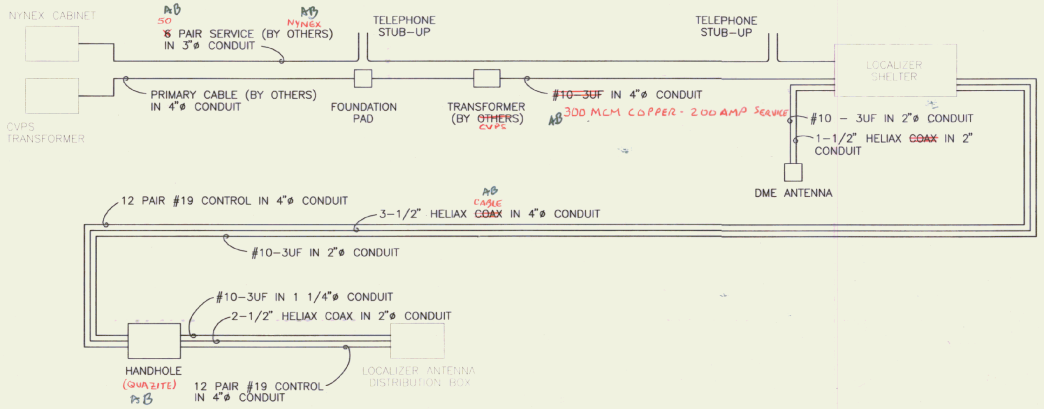
PLAN



ELEVATION

NOTE:
PULL BOX PROVIDED BY CVPS, INSTALLED BY CONTRACTOR. ALL GROUNDING WORK PROVIDED BY CONTRACTOR. PROVIDED 5' MIN. HORIZONTAL CLEARANCE BETWEEN PULL BOX AND NEW TELEPHONE CONDUIT ADJACENT TO PULL BOX.

K — PULL BOX DETAILS
SCALE: NONE



Q — WIRING DIAGRAM
SCALE: NONE

26

STATE OF VERMONT — DAVID L. CRANDALL — No. 5951 — REGISTERED PROFESSIONAL ENGINEER

REV.	DATE	DESCRIPTION
1	11/19/97	RECORD DRAWINGS

Job No. F4017.25.00 — File No. I:\F4017\25\BK-SD2

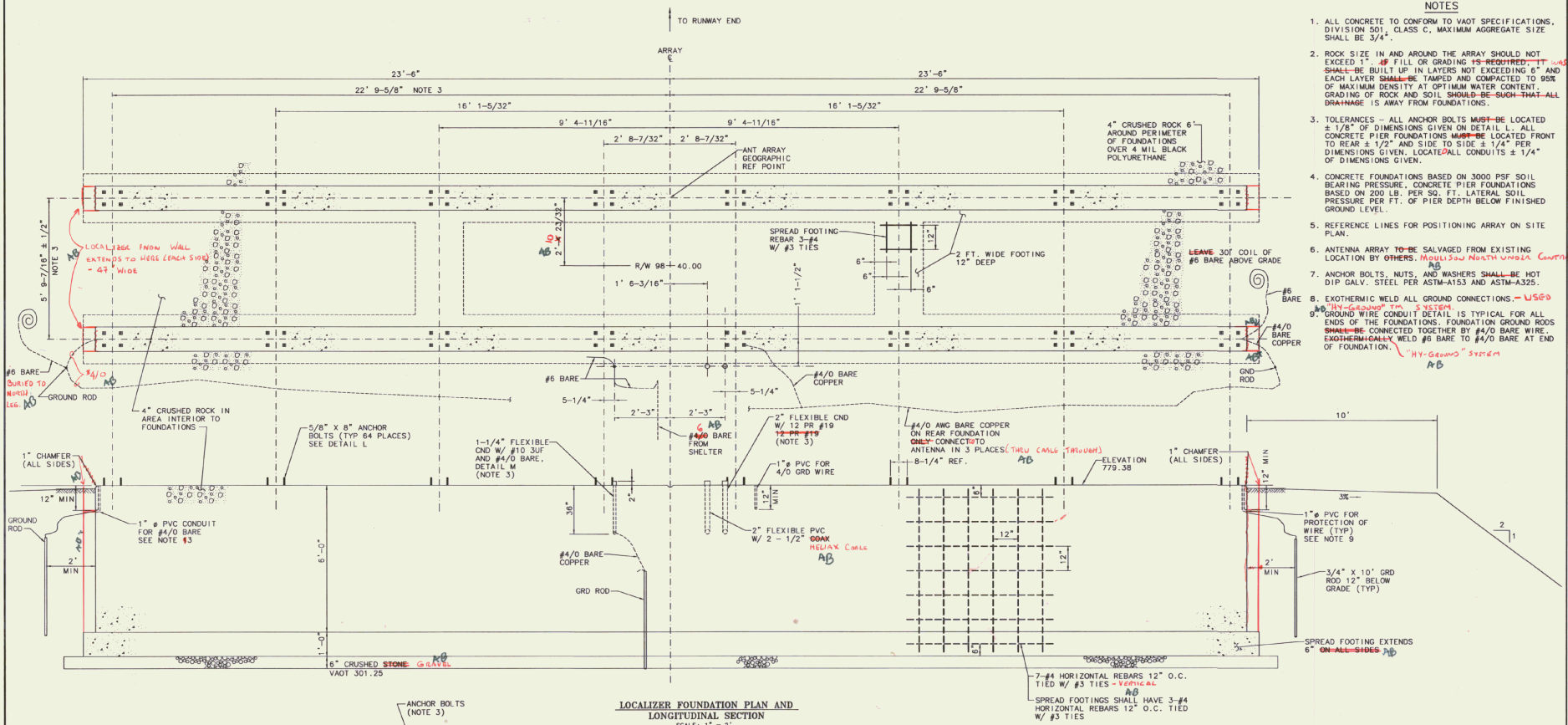
RUTLAND STATE AIRPORT
CLARENDON, VERMONT

LOCALIZER SITE DETAILS

URS Greiner, Inc.
3 MARCUS BOULEVARD
ALBANY, NEW YORK

Designed by: Date — G D'AMICO
Drawn by: M MCCALLA 03/09/97
Checked by: S MILLER
Approved by: P.M. M CHURCHILL 4/4/97

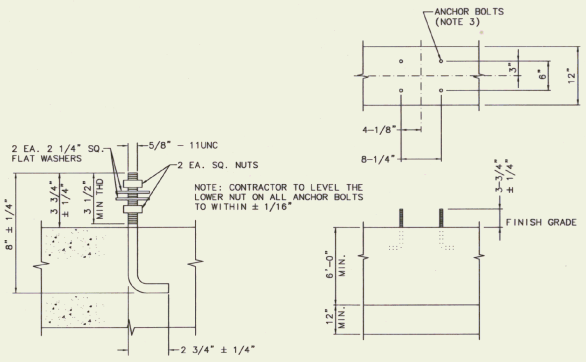
Scale: HOR. - NONE, VERT. - NONE
Date: 04/09/97
Sheet 6 Of 9
Sheet No 6



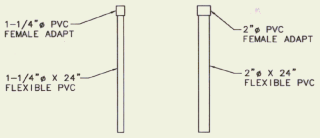
LOCALIZER FOUNDATION PLAN AND LONGITUDINAL SECTION
SCALE: 1" = 2'

NOTES

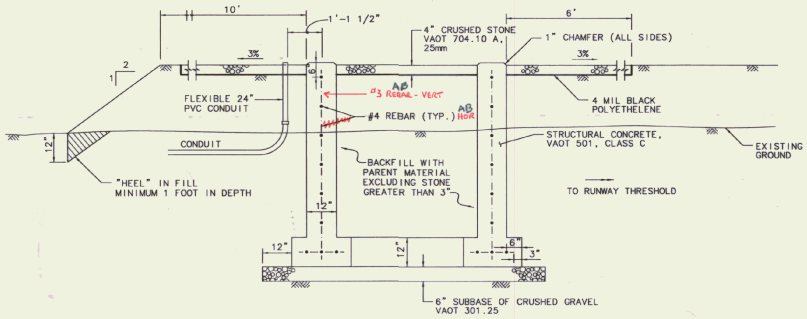
1. ALL CONCRETE TO CONFORM TO VAOT SPECIFICATIONS, DIVISION 501, CLASS C, MAXIMUM AGGREGATE SIZE SHALL BE 3/4".
2. ROCK SIZE IN AND AROUND THE ARRAY SHOULD NOT EXCEED 1". IF FILL OR GRADING IS REQUIRED, IT WAS SHALL BE BUILT UP IN LAYERS NOT EXCEEDING 6" AND EACH LAYER SHALL BE TAMPED AND COMPACTED TO 95% OF MAXIMUM DENSITY AT OPTIMUM WATER CONTENT. GRADING OF ROCK AND SOIL SHOULD BE SUCH THAT ALL DRAINAGE IS AWAY FROM FOUNDATIONS.
3. TOLERANCES – ALL ANCHOR BOLTS MUST BE LOCATED ± 1/8" OF DIMENSIONS GIVEN ON DETAIL L. ALL CONCRETE PIER FOUNDATIONS MUST BE LOCATED FRONT TO REAR ± 1/2" AND SIDE TO SIDE ± 1/4" PER DIMENSIONS GIVEN. LOCATE ALL CONDUITS ± 1/4" OF DIMENSIONS GIVEN.
4. CONCRETE FOUNDATIONS BASED ON 3000 PSF SOIL BEARING PRESSURE. CONCRETE PIER FOUNDATIONS BASED ON 200 LB. PER SQ. FT. LATERAL SOIL PRESSURE PER FT. OF PIER DEPTH BELOW FINISHED GROUND LEVEL.
5. REFERENCE LINES FOR POSITIONING ARRAY ON SITE PLAN.
6. ANTENNA ARRAY TO BE SALVAGED FROM EXISTING LOCATION BY OTHERS. MOULTON NORTH UNOLA CONTRACT 2.
7. ANCHOR BOLTS, NUTS, AND WASHERS SHALL BE HOT DIP GALV. STEEL PER ASTM-A153 AND ASTM-A325.
8. EXOTHERMIC WELD ALL GROUND CONNECTIONS. – USED "HY-GROUND" TM SYSTEM.
9. GROUND WIRE CONDUIT DETAIL IS TYPICAL FOR ALL ENDS OF THE FOUNDATIONS. FOUNDATION GROUND RODS SHALL BE CONNECTED TOGETHER BY #4/0 BARE WIRE. EXOTHERMICALLY WELD #6 BARE TO #4/0 BARE AT END OF FOUNDATION. "HY-GROUND" SYSTEM



L — TYPICAL ANCHOR BOLT (NOTE 7)
SCALE: NONE



M — DIST. UNIT CONDUIT DETAILS
SCALE: NONE
NOTE: PROVIDE EXPANSION COUPLING ON ABOVE GRADE CONDUITS.



N — LOCALIZER FOUNDATION TRASVERSE SECTION
SCALE: 1" = 2'

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STATE OF VERMONT — JAMES CHURCHILL — No. 5951 — REGISTERED PROFESSIONAL ENGINEER

REV.	DATE	DESCRIPTION
2		Adopt Record Drawings
1		

Job No. F401212.00 — File No. I:/F401212/LOCDTN

RUTLAND STATE AIRPORT
CLARENDON, VERMONT

LOCALIZER FOUNDATION DETAILS

URS Greiner, Inc.
3 MARCUS BOULEVARD
ALBANY, NEW YORK

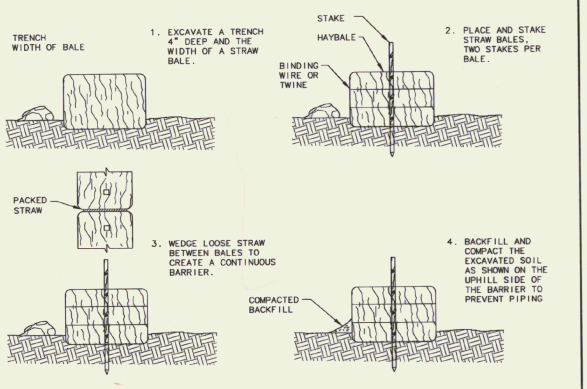
Designed by: G D'AMICO 1/29/97
Drawn by: M MCCALLA 1/29/97
Checked by: S MILLER
Approved by: M CHURCHILL 4/4/97

Scale: HOR. NONE VERT. NONE

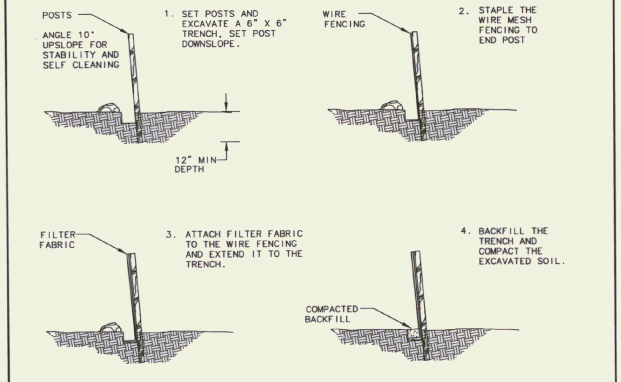
Date: 04/09/97

Sheet 7 Of 9

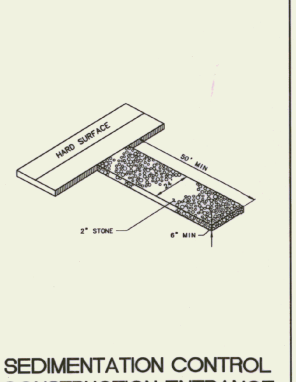
Sheet No 7



SEDIMENTATION BARRIER - HAYBALE



SEDIMENTATION BARRIER - SILT FENCE



SEDIMENTATION CONTROL CONSTRUCTION ENTRANCE

SITE DATA

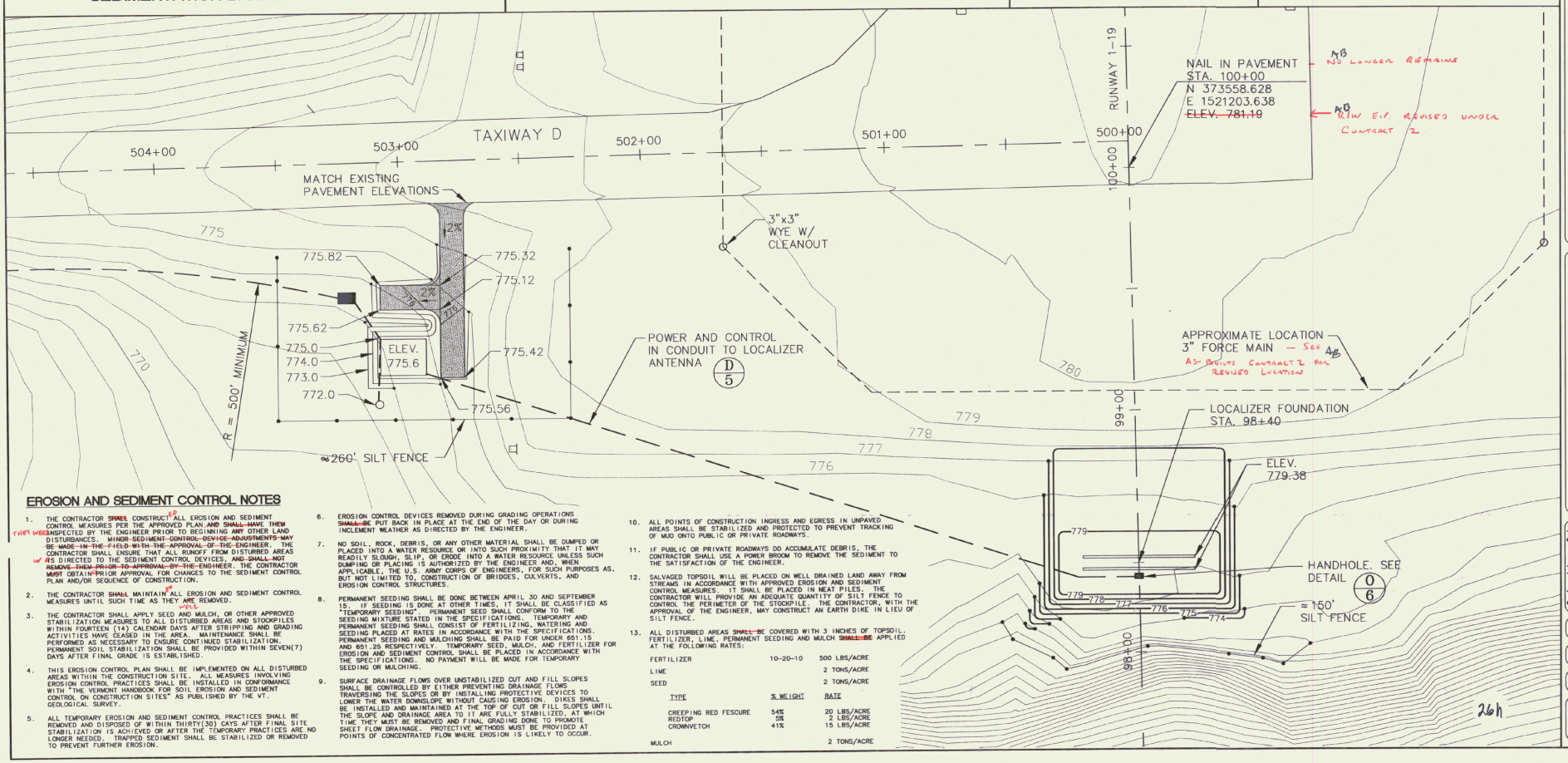
PROJECT DESCRIPTION:
AIRPORT DEVELOPMENT TO INCLUDE EARTHWORK, STORM DRAINAGE, AND UTILITIES.

TOTAL SITE AREA:
AREA WITHIN LIMITS OF WORK APPROXIMATELY 1 ACRE.

EXISTING SOIL TYPES:
- BROWN SILTY SAND WITH TRACES OF GRAVEL.
- APPROXIMATELY 3" OF TOPSOIL.
- INFORMATION OBTAINED FROM BORINGS DRILLED BY GREEN MOUNTAIN BORINGS DURING NOVEMBER 1996.

SCHEDULE:
CONSTRUCTION ~~TO~~ COMMENCE JUNE 1997, AND ~~TO BE~~ COMPLETED AUGUST, 1997, ~~WITH THE IMPLEMENTATION OF~~ EROSION CONTROL MEASURES ~~TO BE~~ THE FIRST PHASES OF ACTIVITY AND ~~TO~~ CONTINUE THROUGHOUT PROGRESS OF PROJECT.

RECEIVING WATERS:
MILL RIVER, OTTERCREEK.



EROSION AND SEDIMENT CONTROL NOTES

1. THE CONTRACTOR ~~SHALL~~ CONSTRUCT ALL EROSION AND SEDIMENT CONTROL MEASURES PER THE APPROVED PLAN ~~AND SHALL HAVE THEM~~ THEY WERE INSPECTED BY THE ENGINEER PRIOR TO BEGINNING ~~ANY~~ OTHER LAND DISTURBANCES. ~~MINOR SEDIMENT CONTROL DEVICE ADJUSTMENTS MAY BE MADE IN THE FIELD WITH THE APPROVAL OF THE ENGINEER.~~ THE CONTRACTOR SHALL ENSURE THAT ALL RUNOFF FROM DISTURBED AREAS ~~WILL~~ IS DIRECTED TO THE SEDIMENT CONTROL DEVICES, ~~AND SHALL NOT REMOVE THEM PRIOR TO APPROVAL BY THE ENGINEER.~~ THE CONTRACTOR ~~MUST~~ OBTAIN PRIOR APPROVAL FOR CHANGES TO THE SEDIMENT CONTROL PLAN AND/OR SEQUENCE OF CONSTRUCTION.
2. THE CONTRACTOR ~~SHALL~~ MAINTAIN ALL EROSION AND SEDIMENT CONTROL MEASURES UNTIL SUCH TIME AS THEY ~~ARE~~ WERE REMOVED.
3. THE CONTRACTOR SHALL APPLY SEED AND MULCH, OR OTHER APPROVED STABILIZATION MEASURES TO ALL DISTURBED AREAS AND STOCKPILES WITHIN FOURTEEN (14) CALENDAR DAYS AFTER STRIPPING AND GRADING ACTIVITIES HAVE CEASED IN THE AREA. MAINTENANCE SHALL BE PERFORMED AS NECESSARY TO ENSURE CONTINUED STABILIZATION. PERMANENT SOIL STABILIZATION SHALL BE PROVIDED WITHIN SEVEN(7) DAYS AFTER FINAL GRADE IS ESTABLISHED.
4. THIS EROSION CONTROL PLAN SHALL BE IMPLEMENTED ON ALL DISTURBED AREAS WITHIN THE CONSTRUCTION SITE. ALL MEASURES INVOLVING EROSION CONTROL PRACTICES SHALL BE INSTALLED IN CONFORMANCE WITH "THE VERMONT HANDBOOK FOR SOIL EROSION AND SEDIMENT CONTROL ON CONSTRUCTION SITES" AS PUBLISHED BY THE VT. GEOLOGICAL SURVEY.
5. ALL TEMPORARY EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE REMOVED AND DISPOSED OF WITHIN THIRTY(30) CAYS AFTER FINAL SITE STABILIZATION IS ACHIEVED OR AFTER THE TEMPORARY PRACTICES ARE NO LONGER NEEDED. TRAPPED SEDIMENT SHALL BE STABILIZED OR REMOVED TO PREVENT FURTHER EROSION.
6. EROSION CONTROL DEVICES REMOVED DURING GRADING OPERATIONS ~~SHALL BE~~ PUT BACK IN PLACE AT THE END OF THE DAY OR DURING INCLEMENT WEATHER AS DIRECTED BY THE ENGINEER.
7. NO SOIL, ROCK, DEBRIS, OR ANY OTHER MATERIAL SHALL BE DUMPED OR PLACED INTO A WATER RESOURCE OR INTO SUCH PROXIMITY THAT IT MAY READILY SLOUGH, SLIP, OR ERODE INTO A WATER RESOURCE UNLESS SUCH DUMPING OR PLACING IS AUTHORIZED BY THE ENGINEER AND, WHEN APPLICABLE, THE U.S. ARMY CORPS OF ENGINEERS, FOR SUCH PURPOSES AS, BUT NOT LIMITED TO, CONSTRUCTION OF BRIDGES, CULVERTS, AND EROSION CONTROL STRUCTURES.
8. PERMANENT SEEDING SHALL BE DONE BETWEEN APRIL 30 AND SEPTEMBER 15. IF SEEDING IS DONE AT OTHER TIMES, IT SHALL BE CLASSIFIED AS "TEMPORARY SEEDING". PERMANENT SEED SHALL CONFORM TO THE SEEDING MIXTURE STATED IN THE SPECIFICATIONS. TEMPORARY AND PERMANENT SEEDING SHALL CONSIST OF FERTILIZING, WATERING AND SEEDING PLACED AT RATES IN ACCORDANCE WITH THE SPECIFICATIONS. PERMANENT SEEDING AND MULCHING SHALL BE PAID FOR UNDER 651.15 AND 651.25 RESPECTIVELY. TEMPORARY SEED, MULCH, AND FERTILIZER FOR EROSION AND SEDIMENT CONTROL SHALL BE PLACED IN ACCORDANCE WITH THE SPECIFICATIONS. NO PAYMENT WILL BE MADE FOR TEMPORARY SEEDING OR MULCHING.
9. SURFACE DRAINAGE FLOWS OVER UNSTABILIZED CUT AND FILL SLOPES SHALL BE CONTROLLED BY EITHER PREVENTING DRAINAGE FLOWS TRAVERSING THE SLOPES OR BY INSTALLING PROTECTIVE DEVICES TO LOWER THE WATER DOWNSLOPE WITHOUT CAUSING EROSION. DIKES SHALL BE INSTALLED AND MAINTAINED AT THE TOP OF CUT OR FILL SLOPES UNTIL THE SLOPE AND DRAINAGE AREA TO IT ARE FULLY STABILIZED, AT WHICH TIME THEY MUST BE REMOVED AND FINAL GRADING DONE TO PROMOTE SHEET FLOW DRAINAGE. PROTECTIVE METHODS MUST BE PROVIDED AT POINTS OF CONCENTRATED FLOW WHERE EROSION IS LIKELY TO OCCUR.
10. ALL POINTS OF CONSTRUCTION INGRESS AND EGRESS IN UNPAVED AREAS SHALL BE STABILIZED AND PROTECTED TO PREVENT TRACKING OF MUD ONTO PUBLIC OR PRIVATE ROADWAYS.
11. IF PUBLIC OR PRIVATE ROADWAYS DO ACCUMULATE DEBRIS, THE CONTRACTOR SHALL USE A POWER BROOM TO REMOVE THE SEDIMENT TO THE SATISFACTION OF THE ENGINEER.
12. SALVAGED TOPSOIL WILL BE PLACED ON WELL DRAINED LAND AWAY FROM STREAMS IN ACCORDANCE WITH APPROVED EROSION AND SEDIMENT CONTROL MEASURES. IT SHALL BE PLACED IN NEAT PILES. THE CONTRACTOR WILL PROVIDE AN ADEQUATE QUANTITY OF SILT FENCE TO CONTROL THE PERIMETER OF THE STOCKPILE. THE CONTRACTOR, WITH THE APPROVAL OF THE ENGINEER, MAY CONSTRUCT AN EARTH DIKE IN LIEU OF SILT FENCE.
13. ALL DISTURBED AREAS ~~SHALL BE~~ COVERED WITH 3 INCHES OF TOPSOIL. FERTILIZER, LIME, PERMANENT SEEDING AND MULCH ~~SHALL BE~~ APPLIED AT THE FOLLOWING RATES:

FERTILIZER	10-20-10	500 LBS/ACRE
LIME		2 TONS/ACRE
SEED		2 TONS/ACRE

TYPE	% WEIGHT	RATE
CREEPING RED FESCURE	54%	20 LBS/ACRE
REDTOP	5%	2 LBS/ACRE
CROWNVETCH	41%	15 LBS/ACRE
MULCH		2 TONS/ACRE

REV.	DATE	DESCRIPTION
1	11/6/97	REVISED PER COMMENTS

Job No. F401212.00 File No. I:\F401212\DWG\ESC1

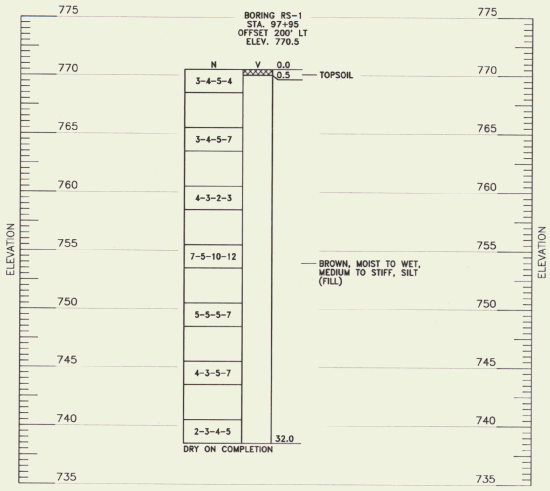
RUTLAND STATE AIRPORT
CLARENDON, VERMONT

SEDIMENTATION / EROSION CONTROL DETAILS

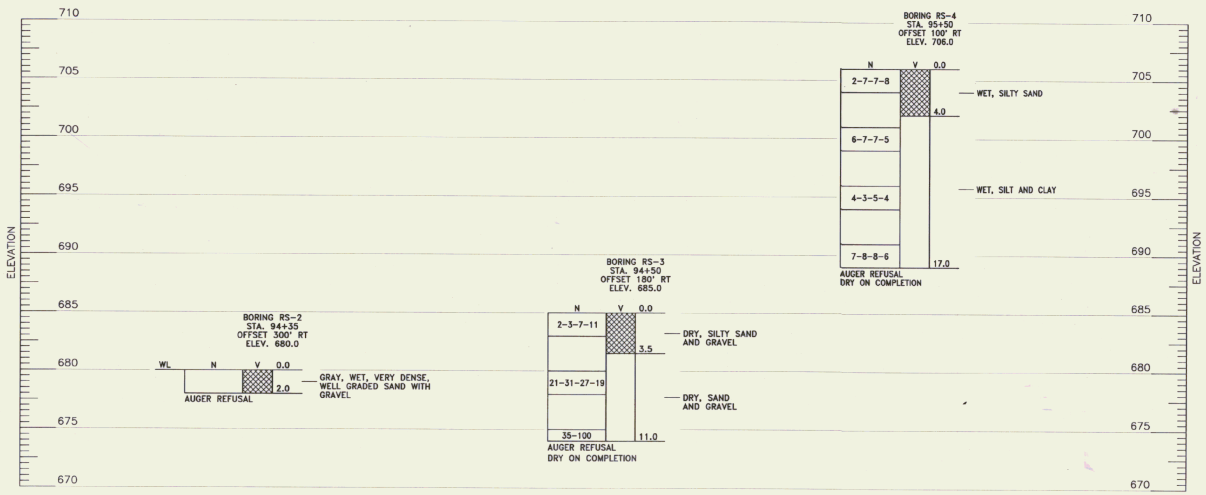
URS Greiner, Inc.
3 MARCUS BOULEVARD
ALBANY, NEW YORK

Designed by: C D'AMICO 02/04/97
Drawn by: M MCDALLA 02/04/97
Checked by: S MILLER
Approved by: M CHURCHILL 4/4/97

Scale: HOR. – NONE VERT. – NONE
Date: 04/09/97
Sheet 8 Of 9
Sheet No 8

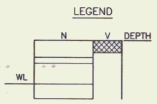


BORINGS AND DRIVE TESTS
SCALE: AS SHOWN



BORINGS AND DRIVE TESTS
SCALE: AS SHOWN

LEGEND



NOTE:

1.) BORINGS AND DRIVE TESTS WERE TAKEN IN NOVEMBER 1995, BY GREEN MOUNTAIN BORING.

2.) N – BLOWS PER 6 INCH INCREMENT OF PENETRATION OF SAMPLING SPOON OR PENETRATION IN INCHES FOR THE INDICATED BLOWS OF A 140 LB. HAMMER FALLING 30". WHERE ROCK IS ENCOUNTERED, PERCENT CORE RECOVERY IS SHOWN. R.Q.D. IS SHOWN IN PARENTHESES.

THE ROCK QUALITY DESIGNATION (R.Q.D.) IS BASED ON A MODIFIED CORE RECOVERY PROCEDURE WHICH, IN TURN, IS BASED INDIRECTLY ON THE NUMBER OF FRACTURES (EXCEPT THOSE DUE DIRECTLY TO DRILLING OPERATIONS) AND THE AMOUNT OF SOFTENING OR ALTERATION IN THE ROCK MASS AS OBSERVED IN THE ROCK CORES FROM A DRILL HOLE. INSTEAD OF COUNTING THE FRACTURES, AN INDIRECT MEASURE IS OBTAINED BY SUMMING THE TOTAL LENGTH OF CORE RECOVERED BY COUNTING ONLY THOSE PIECES OF HARD AND SOUND CORE WHICH ARE 4 INCHES OR GREATER IN LENGTH. THE RATIO OF THIS MODIFIED CORE RECOVERY LENGTH TO THE TOTAL CORE RUN LENGTH IS KNOWN AS THE R.Q.D.

V – ALTERNATE SHADING INDICATES EXTENT OF SOIL OR ROCK LAYERS.

WL – WATER LEVEL READING AT COMPLETION OF BORING.

261

STATE OF VERMONT — NORMAN L. CHURCHILL — No. 5961 — REGISTERED PROFESSIONAL ENGINEER

REV.	DATE	DESCRIPTION
1	11/18/97	RECORD DRAWINGS

File No. I:\V40121\DWG\BL1

Job No. V40121.00

RUTLAND STATE AIRPORT
CLARENDON, VERMONT

BORING LOGS

URS Greiner, Inc.
3 MARCUS BOULEVARD
ALBANY, NEW YORK

Designed by: K U	Date 01/23/96
Drawn by: K U	01/23/96
Checked by: S MILLER	01/23/96
Approved by: N.L.C M CHURCHILL	4/4/97

Scale: HOR. – AS SHOWN
VERT. – NONE

Date: 04/09/97

Sheet 9 Of 9

Sheet No
9

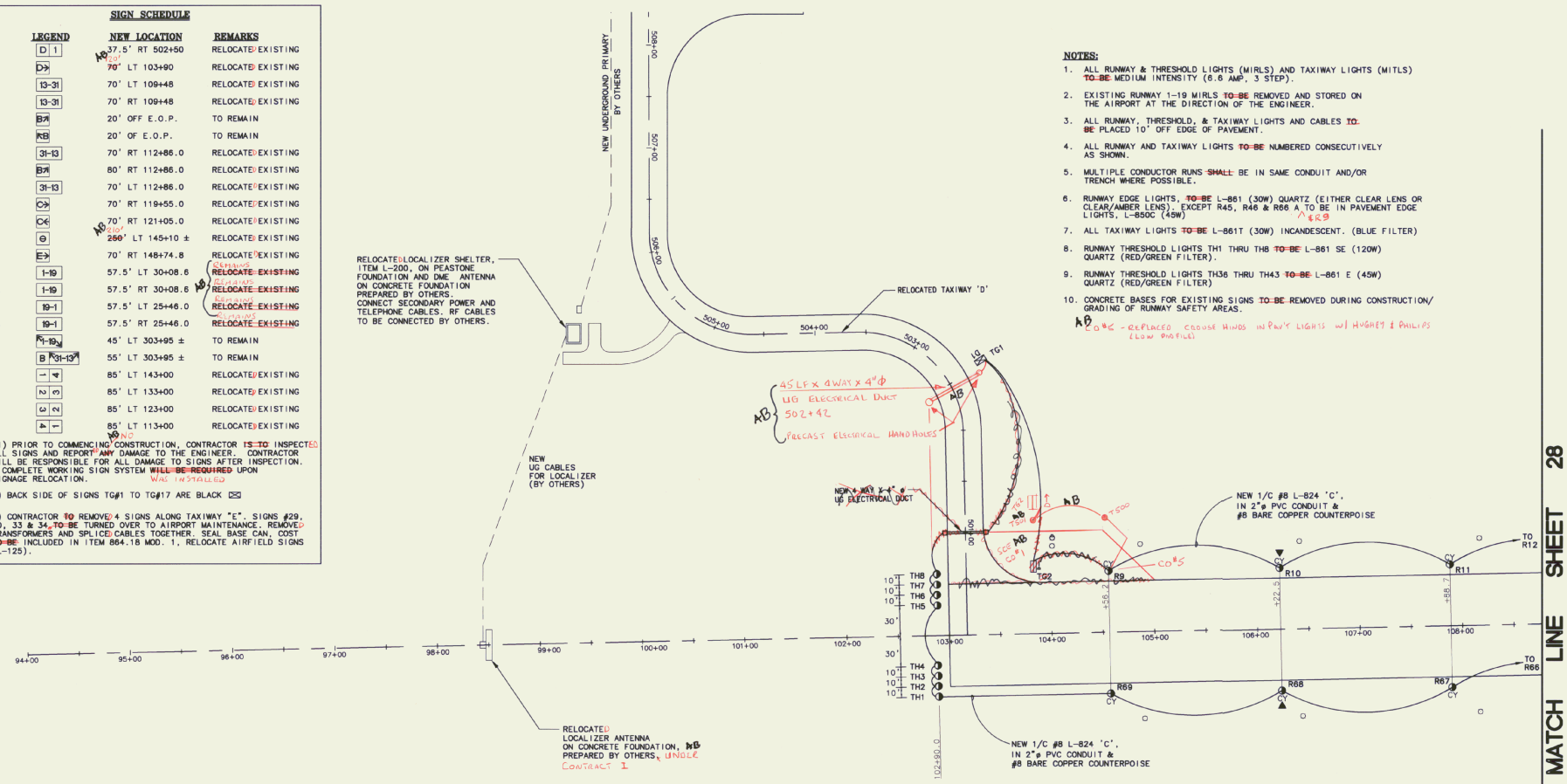
SIGN SCHEDULE

SIGN	LEGEND	NEW LOCATION	REMARKS
TG #1	D 1	AB 37.5' RT 502+50	RELOCATED EXISTING
TG #2	D	AB 70' LT 103+90	RELOCATED EXISTING
TG #3	13-31	70' LT 109+48	RELOCATED EXISTING
TG #4	13-31	70' RT 109+48	RELOCATED EXISTING
TG #5	B	20' OFF E.O.P.	TO REMAIN
TG #6	RB	20' OF E.O.P.	TO REMAIN
TG #7	31-13	70' RT 112+86.0	RELOCATED EXISTING
TG #8	B	80' RT 112+86.0	RELOCATED EXISTING
TG #9	31-13	70' LT 112+86.0	RELOCATED EXISTING
TG #10	C	70' RT 119+55.0	RELOCATED EXISTING
TG #11	C	70' RT 121+05.0	RELOCATED EXISTING
TG #12	E	AB 210' 250' LT 145+10 ±	RELOCATED EXISTING
TG #13	E	70' RT 148+74.8	RELOCATED EXISTING
TG #14	1-19	57.5' LT 30+08.6	REMARKS RELOCATE EXISTING
TG #14A	1-19	57.5' RT 30+08.6	AB REMARKS RELOCATE EXISTING
TG #15	19-1	57.5' LT 25+46.0	REMARKS RELOCATE EXISTING
TG #15A	19-1	57.5' RT 25+46.0	RELOCATE EXISTING
TG #16	1-19	45' LT 303+95 ±	TO REMAIN
TG #17	B 31-13	55' LT 303+95 ±	TO REMAIN
DM #1	1 4	85' LT 143+00	RELOCATED EXISTING
DM #2	2 3	85' LT 133+00	RELOCATED EXISTING
DM #3	3 2	85' LT 123+00	RELOCATED EXISTING
DM #4	4 1	AB NS 85' LT 113+00	RELOCATED EXISTING

NOTE: (1) PRIOR TO COMMENCING CONSTRUCTION, CONTRACTOR IS TO INSPECT ALL SIGNS AND REPORT ANY DAMAGE TO THE ENGINEER. CONTRACTOR WILL BE RESPONSIBLE FOR ALL DAMAGE TO SIGNS AFTER INSPECTION. A COMPLETE WORKING SIGN SYSTEM WILL BE REQUIRED UPON SIGNAGE RELOCATION. WAS INSTALLED

(2) BACK SIDE OF SIGNS TG#1 TO TG#17 ARE BLACK

(3) CONTRACTOR TO REMOVE 4 SIGNS ALONG TAXIWAY "E". SIGNS #29, 30, 33 & 34, TO BE TURNED OVER TO AIRPORT MAINTENANCE. REMOVE TRANSFORMERS AND SPLICE CABLES TOGETHER. SEAL BASE CAN. COST TO BE INCLUDED IN ITEM 864.18 MOD. 1, RELOCATE AIRFIELD SIGNS (L-125).



NOTES:

1. ALL RUNWAY & THRESHOLD LIGHTS (MIRLS) AND TAXIWAY LIGHTS (MITLS) TO BE MEDIUM INTENSITY (6.6 AMP, 3 STEP).
2. EXISTING RUNWAY 1-19 MIRLS TO BE REMOVED AND STORED ON THE AIRPORT AT THE DIRECTION OF THE ENGINEER.
3. ALL RUNWAY, THRESHOLD, & TAXIWAY LIGHTS AND CABLES TO BE PLACED 10' OFF EDGE OF PAVEMENT.
4. ALL RUNWAY AND TAXIWAY LIGHTS TO BE NUMBERED CONSECUTIVELY AS SHOWN.
5. MULTIPLE CONDUCTOR RUNS SHALL BE IN SAME CONDUIT AND/OR TRENCH WHERE POSSIBLE.
6. RUNWAY EDGE LIGHTS, TO BE L-861 (30W) QUARTZ (EITHER CLEAR LENS OR CLEAR/AMBER LENS). EXCEPT R45, R46 & R66 A TO BE IN PAVEMENT EDGE LIGHTS, L-850C (45W) AB SR9
7. ALL TAXIWAY LIGHTS TO BE L-861T (30W) INCANDESCENT. (BLUE FILTER)
8. RUNWAY THRESHOLD LIGHTS TH1 THRU TH8 TO BE L-861 SE (120W) QUARTZ (RED/GREEN FILTER).
9. RUNWAY THRESHOLD LIGHTS TH36 THRU TH43 TO BE L-861 E (45W) QUARTZ (RED/GREEN FILTER)
10. CONCRETE BASES FOR EXISTING SIGNS TO BE REMOVED DURING CONSTRUCTION/ GRADING OF RUNWAY SAFETY AREAS.

AB CO#6 - REPLACED CROUSE HINDS IN PAVT LIGHTS W/ HUGHEY & PHILLIPS (LOW PROFILE)

LEGEND

- EXISTING RUNWAY AND TAXIWAY LIGHTS
- EXISTING TAXIWAY SIGNS
- NEW THRESHOLD LIGHTS (180° GREEN / 180° RED LENS)
- NEW TAXIWAY LIGHTS (BLUE FILTER)
- NEW RUNWAY LIGHTS (CLEAR LENS)
- NEW RUNWAY LIGHTS (180° CLEAR / 180° AMBER LENS)
- TG #1 RELOCATED TAXIWAY SIGN
- UNDERGROUND CONCRETE ENCASED DUCT & MARKERS
- 5/8" ø X 8' COPPERCLAD GROUND ROD
- RELOCATED ODALS

AIP 3-50-0015-11

STATE OF VERMONT — MICHAEL L. UNION — No. 5951 — REGISTERED PROFESSIONAL ENGINEER

REV.	DATE	DESCRIPTION
AG	1/16/98	AS BUILTS

File No.: \\F401212\DGN-PRO1\
Job No. F401212

RUTLAND STATE AIRPORT
CLARENDON, VERMONT

RUNWAY LIGHTING PLANS

URS Greiner, Inc.
3 MARCUS BOULEVARD
ALBANY, NEW YORK

Designed by:	Date
G D'AMICO	2/97
Drawn by: M MCCALLA	3/97
Checked by: G D'AMICO	5/5/97
Approved by: M CHURCHILL	5/5/97

Scale: HOR. - 1" = 50' VERT. - NONE

Date: 5/5/97

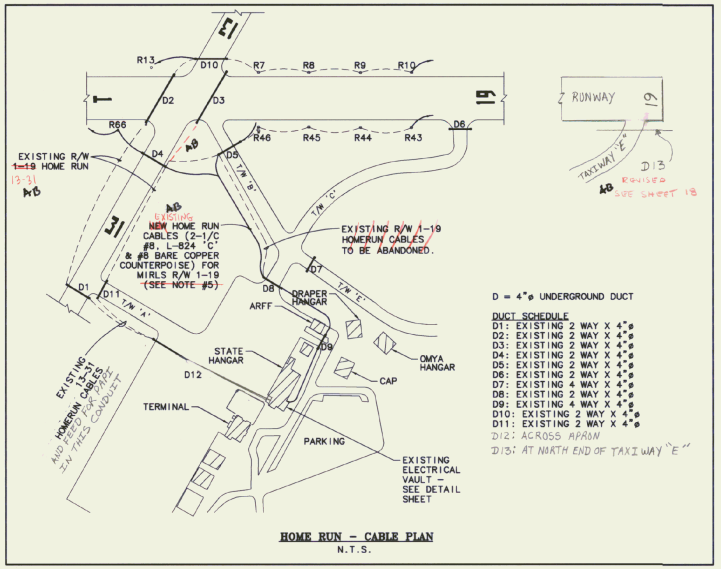
Sheet 27 Of 65

Sheet No 27

NOTES:

1. ALL RUNWAY & THRESHOLD LIGHTS (MIRLS) AND TAXIWAY LIGHTS (MITLS) ~~TO BE~~ MEDIUM INTENSITY (6.6 AMP, 3 STEP).
2. EXISTING RUNWAY 1-19 MIRLS INCLUDING BASE AND CONDUIT (TO THE EXTENT POSSIBLE) ~~TO BE~~ REMOVED AND STORED ON THE AIRPORT ~~AT THE AIRPORT~~ AT THE DIRECTION OF THE ENGINEER.
3. ALL RUNWAY, THRESHOLD, & TAXIWAY LIGHTS AND CABLES ~~TO BE~~ PLACED 10' OFF EDGE OF PAVEMENT.
4. ALL RUNWAY AND TAXIWAY LIGHTS ~~TO BE~~ NUMBERED CONSECUTIVELY AS SHOWN.
5. MULTIPLE CONDUCTOR RUNS ~~SHALL BE~~ IN SAME CONDUIT AND/OR TRENCH WHERE POSSIBLE.
6. RUNWAY EDGE LIGHTS, ~~TO BE~~ L-861 (30W) QUARTZ (EITHER CLEAR LENS OR CLEAR/AMBER LENS), EXCEPT R45, R46 & R66 A ~~TO BE~~ IN PAVEMENT EDGE LIGHTS, L-850C (45W)
7. ALL TAXIWAY LIGHTS ~~TO BE~~ L-861T (30W) INCANDESCENT. (BLUE FILTER)
8. RUNWAY THRESHOLD LIGHTS TH1 THRU TH8 ~~TO BE~~ L-861 SE (120W) QUARTZ (RED/GREEN FILTER).
9. RUNWAY THRESHOLD LIGHTS TH36 THRU TH43 ~~TO BE~~ L-861 E (45W) QUARTZ (RED/GREEN FILTER)
10. CONCRETE BASES FOR EXISTING SIGNS ~~TO BE~~ REMOVED DURING CONSTRUCTION/ GRADING OF RUNWAY SAFETY AREAS.
11. R #118, #119, #147, #148 TO REMAIN IN PLACE.

AB CO #5 - CHANGED CROUSE HINDS IMPACT LIGHTS WITH HUGHEN & PHILLIPS CLOU R-MILE)



HOME RUN - CABLE PLAN
N.T.S.

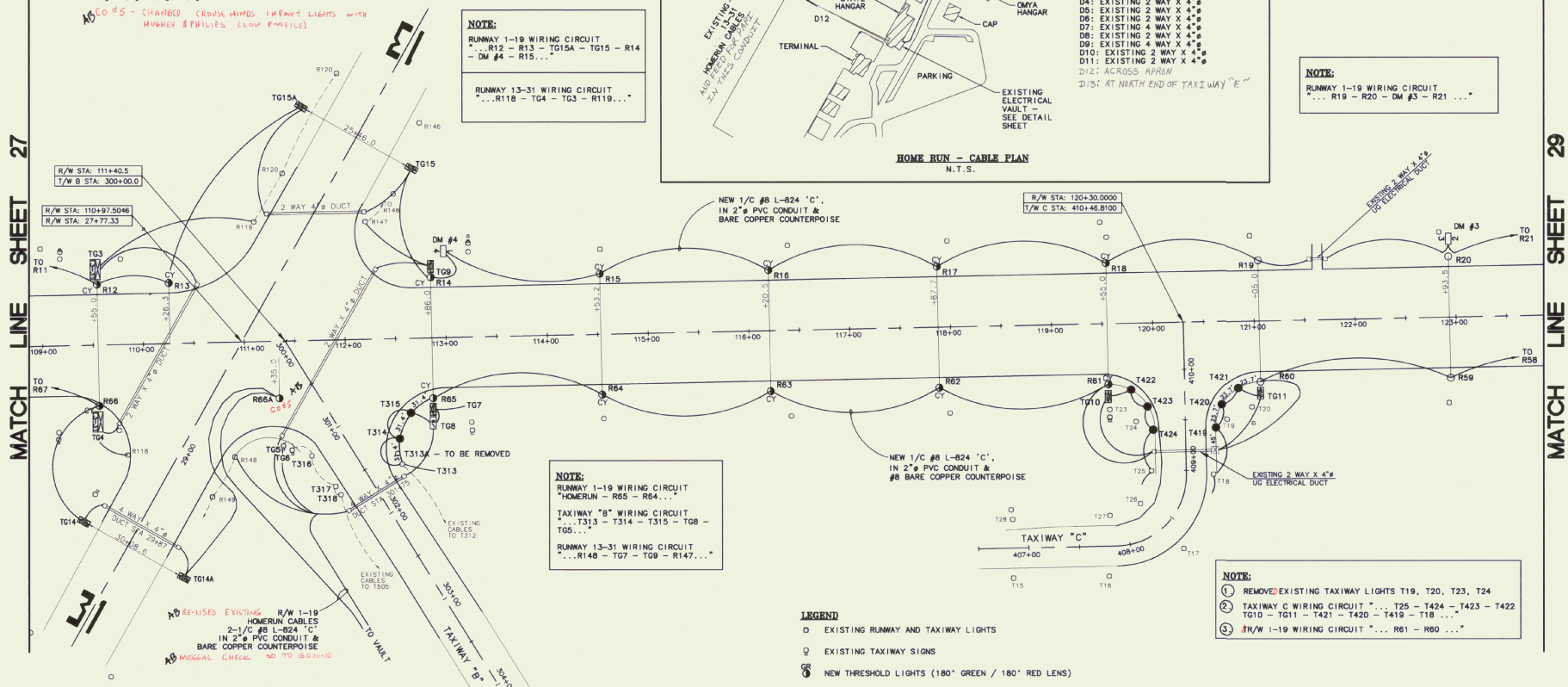
D = 4"ø UNDERGROUND DUCT

DUCT SCHEDULE
D1: EXISTING 2 WAY X 4"ø
D2: EXISTING 2 WAY X 4"ø
D3: EXISTING 2 WAY X 4"ø
D4: EXISTING 2 WAY X 4"ø
D5: EXISTING 2 WAY X 4"ø
D6: EXISTING 2 WAY X 4"ø
D7: EXISTING 4 WAY X 4"ø
D8: EXISTING 2 WAY X 4"ø
D9: EXISTING 4 WAY X 4"ø
D10: EXISTING 2 WAY X 4"ø
D11: EXISTING 2 WAY X 4"ø
D12: ACROSS APRON
D13: AT NORTH END OF TAXIWAY "E"

NOTE:
RUNWAY 1-19 WIRING CIRCUIT
"...R12 - R13 - TG15A - TG15 - R14 - DM #4 - R15..."

RUNWAY 13-31 WIRING CIRCUIT
"...R118 - TG4 - TG3 - R119..."

NOTE:
RUNWAY 1-19 WIRING CIRCUIT
"... R19 - R20 - DM #3 - R21 ..."



AB RE-USED EXISTING R/W 1-19 HOMERUN CABLES 2-1/C #8 L-824 'C' IN 2"ø PVC CONDUIT & BARE COPPER COUNTERPOISE

AB MEGGAL CHECK NO TO GROUND

NOTE:
RUNWAY 1-19 WIRING CIRCUIT
"HOMERUN - R65 - R64..."

TAXIWAY "B" WIRING CIRCUIT
"...T313 - T314 - T315 - TG8 - TG5..."

RUNWAY 13-31 WIRING CIRCUIT
"...R148 - TG7 - TG9 - R147..."

NEW 1/C #8 L-824 'C', IN 2"ø PVC CONDUIT & #8 BARE COPPER COUNTERPOISE

EXISTING 2 WAY X 4"ø UG ELECTRICAL DUCT

NOTE:
RUNWAY 1-19 WIRING CIRCUIT
"VAULT R66A - TG14A - TG14 - R66..."

NOTE:
1. REMOVED EXISTING TAXIWAY LIGHTS T19, T20, T23, T24
2. TAXIWAY C WIRING CIRCUIT "... T25 - T424 - T423 - T422 TG10 - TG11 - T421 - T420 - T419 - T18 ..."
3. T/W 1-19 WIRING CIRCUIT "... R61 - R60 ..."

LEGEND

- EXISTING RUNWAY AND TAXIWAY LIGHTS
- EXISTING TAXIWAY SIGNS
- NEW THRESHOLD LIGHTS (180° GREEN / 180° RED LENS)
- NEW TAXIWAY LIGHTS (BLUE FILTER)
- NEW RUNWAY LIGHTS (CLEAR LENS)
- NEW RUNWAY LIGHTS (180° CLEAR / 180° AMBER LENS)
- TG #1 RELOCATED TAXIWAY SIGN
- UNDERGROUND CONCRETE ENCASED DUCT & MARKERS
- 5/8" ø X 8' COPPERCLAD GROUND ROD
- RELOCATED ODALS

AIP 3-50-0015-11

STATE OF VERMONT — MICHAEL L. GRAVES — No. 5691 — REGISTERED PROFESSIONAL ENGINEER

REV.	DATE	DESCRIPTION
AB	12/31/98	AS BUILT

Job No. 5401212 | File No.: V:\401212\PRO\

RUTLAND STATE AIRPORT
CLARENDON, VERMONT

RUNWAY LIGHTING PLAN

URS Greiner, Inc.
3 MARCUS BOULEVARD
ALBANY, NEW YORK

	Date
Designed by: G D'AMICO	2/97
Drawn by: M MCCALLA	3/97
Checked by: G D'AMICO	5/5/97
Approved by: M CHURCHILL	5/5/97

Scale: HOR. - 1" = 50' VERT. - NONE
Date: 5/5/97
Sheet 28 Of 65
Sheet No 28

LEGEND

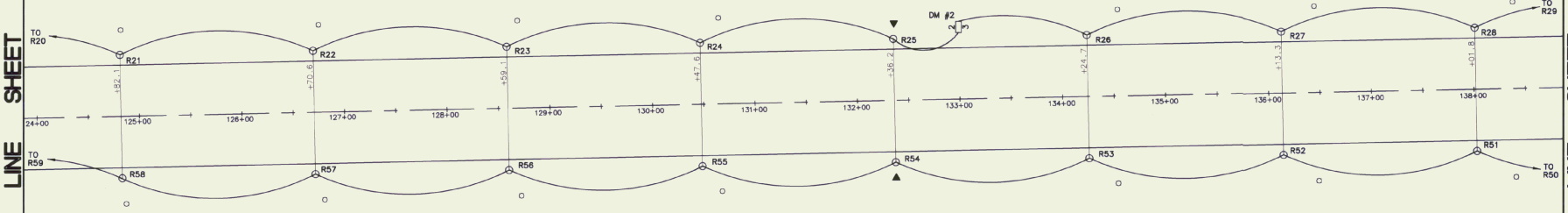
- EXISTING RUNWAY AND TAXIWAY LIGHTS
- EXISTING TAXIWAY SIGNS
- NEW THRESHOLD LIGHTS (180° GREEN / 180° RED LENS)
- NEW TAXIWAY LIGHTS (BLUE FILTER)
- NEW RUNWAY LIGHTS (CLEAR LENS)
- NEW RUNWAY LIGHTS (180° CLEAR / 180° AMBER LENS)
- TG #1 RELOCATED TAXIWAY SIGN
- UNDERGROUND CONCRETE ENCASED DUCT & MARKERS
- 5/8" ø X 8' COPPERCLAD GROUND ROD
- RELOCATED ODALS

NOTES:

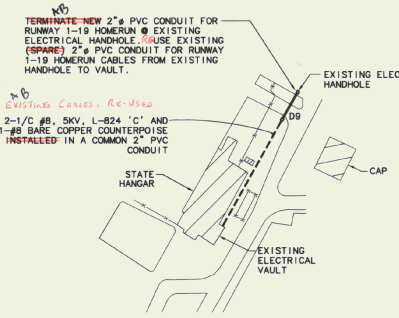
1. ALL RUNWAY & THRESHOLD LIGHTS (MIRLS) AND TAXIWAY LIGHTS (MITLS) ~~TO BE~~ MEDIUM INTENSITY (6.6 AMP, 3 STEP).
2. EXISTING RUNWAY 1–19 MIRLS ~~TO BE~~ REMOVED AND STORED ON THE AIRPORT AT THE DIRECTION OF THE ENGINEER.
3. ALL RUNWAY, THRESHOLD, & TAXIWAY LIGHTS AND CABLES ~~TO BE~~ PLACED 10' OFF EDGE OF PAVEMENT.
4. ALL RUNWAY AND TAXIWAY LIGHTS ~~TO BE~~ NUMBERED CONSECUTIVELY AS SHOWN.
5. MULTIPLE CONDUCTOR RUNS ~~SHALL BE~~ IN SAME CONDUIT AND/OR TRENCH WHERE POSSIBLE.
6. RUNWAY EDGE LIGHTS, ~~TO BE~~ L–861 (30W) QUARTZ (EITHER CLEAR LENS OR CLEAR/AMBER LENS), EXCEPT R45, R48 & R66 A ~~TO BE~~ IN PAVEMENT EDGE LIGHTS, L–850C (45W) AB 10/97
7. ALL TAXIWAY LIGHTS ~~TO BE~~ L–861T (30W) INCANDESCENT. (BLUE FILTER)
8. RUNWAY THRESHOLD LIGHTS TH1 THRU TH8 ~~TO BE~~ L–861 SE (120W) QUARTZ (RED/GREEN FILTER).
9. RUNWAY THRESHOLD LIGHTS TH36 THRU TH43 ~~TO BE~~ L–861 E (45W) QUARTZ (RED/GREEN FILTER)
10. CONCRETE BASES FOR EXISTING SIGNS ~~TO BE~~ REMOVED DURING CONSTRUCTION/ GRADING OF RUNWAY SAFETY AREAS.

NOTE:
RUNWAY 1–19 WIRING CIRCUIT
"...R25 – DM #2 – R26..."

MATCH LINE SHEET 28



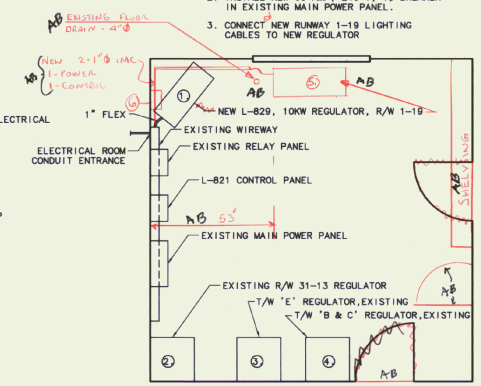
MATCH LINE SHEET 30



ELECTRICAL VAULT LOCATION

NOTES:

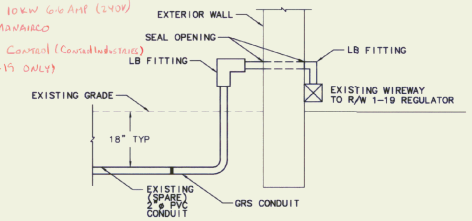
1. EXISTING 7.5 KW REGULATOR ~~TO BE~~ REMOVED AND TURNED OVER TO AIRPORT.
2. INSTALL NEW 60 AMP, 240 V, 1ø BREAKER IN EXISTING MAIN POWER PANEL.
3. CONNECT NEW RUNWAY 1–19 LIGHTING CABLES TO NEW REGULATOR



ELECTRICAL VAULT LAYOUT
N.T.S.

EQUIPMENT SCHEDULE:

1. L 829, ~~10~~ KW, 6.6 AMP (240 V) (NEW). ~~TO EXISTING - REMOVED~~
2. L 828, 7.5 KV, 6.6 AMP (240 V) HEVI DUTY REGULATOR.
3. L–828, 7.5 KV, 6.6 AMP (240 V) ADB–ALNACO REGULATOR.
4. L–828, 7.5 KV, 6.6 AMP (240 V) ADB–ALNACO REGULATOR.
5. NEW L-829, 10KW 6.6 AMP (240V) REGULATOR - MANARCO
6. NEW RADIO CONTROL (Constellation/ITRONIX) (RUNWAY 1-19 ONLY)



EXISTING CONDUIT ENTRANCE ELECTRICAL ROOM
N.T.S.

AIP 3–50–0015–11

STATE OF VERMONT
DANIEL L. CHURCHILL
No. 5951
REGISTERED PROFESSIONAL ENGINEER

REV.	DATE	DESCRIPTION
A	10/31/97	As Built

File No. I:\F401212\dgn\PRO3.3

Job No. F401212

RUTLAND STATE AIRPORT
CLARENDON, VERMONT

RUNWAY LIGHTING PLANS

URS Greiner, Inc.
3 MARCUS BOULEVARD
ALBANY, NEW YORK

	Designed by:	Drawn by:	Checked by:	Approved by:
	G D'AMICO	M McCALLA	G D'AMICO	M CHURCHILL
Date	2/97	3/97	5/5/97	5/5/97

Scale: HOR. – 1" = 50'
VERT. – NONE

Date: 5/5/97

Sheet 29 Of 65

Sheet No
29

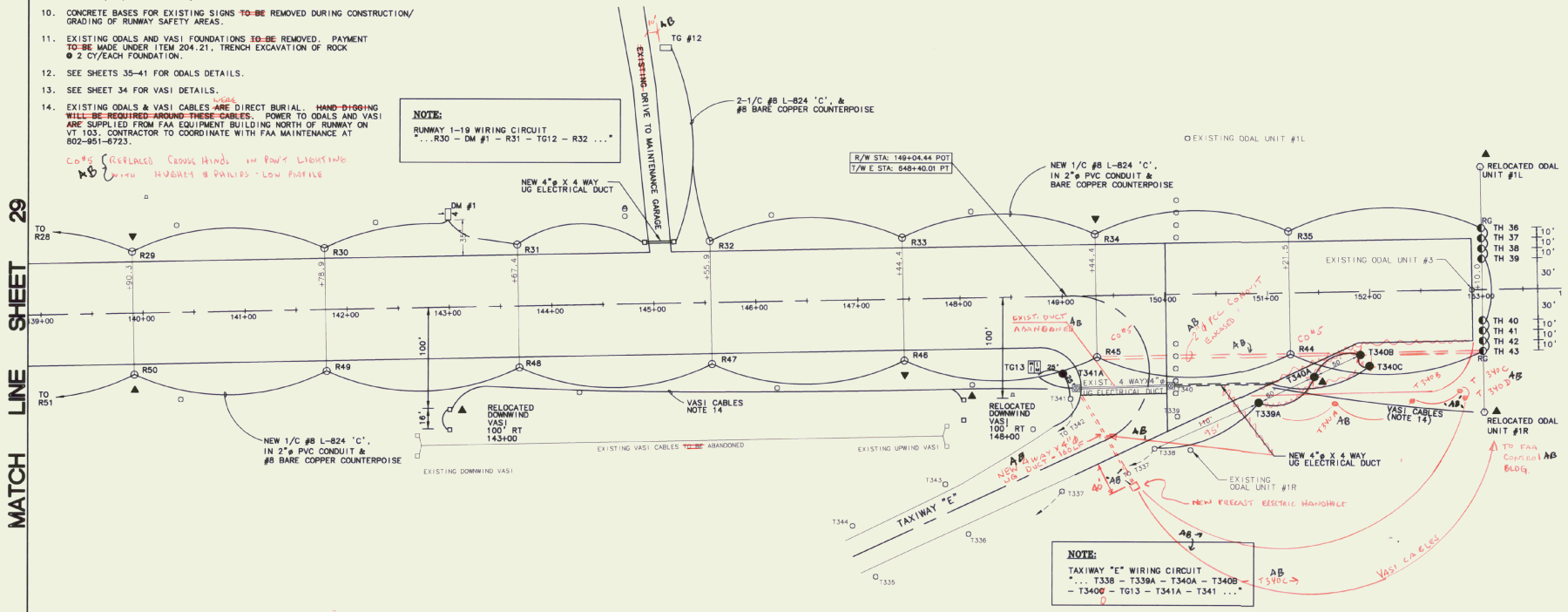
NOTES:

1. ALL RUNWAY & THRESHOLD LIGHTS (MIRLS) AND TAXIWAY LIGHTS (MITLS) ~~TO BE~~ MEDIUM INTENSITY (6.6 AMP, 3 STEP).
2. EXISTING RUNWAY 1-19 MIRLS ~~TO BE~~ REMOVED AND STORED ON THE AIRPORT AT THE DIRECTION OF THE ENGINEER.
3. ALL RUNWAY, THRESHOLD, & TAXIWAY LIGHTS AND CABLES ~~TO BE~~ PLACED 10' OFF EDGE OF PAVEMENT.
4. ALL RUNWAY AND TAXIWAY LIGHTS ~~TO BE~~ NUMBERED CONSECUTIVELY AS SHOWN.
5. MULTIPLE CONDUCTOR RUNS ~~SHALL BE~~ IN SAME CONDUIT AND/OR TRENCH WHERE POSSIBLE.
6. RUNWAY EDGE LIGHTS, ~~TO BE~~ L-861 (30W) QUARTZ (EITHER CLEAR LENS OR CLEAR/AMBER LENS). EXCEPT R45, R46 & R86 A ~~TO BE~~ IN PAVEMENT EDGE LIGHTS, L-850C (45W)
7. ALL TAXIWAY LIGHTS ~~TO BE~~ L-861T (30W) INCANDESCENT. (BLUE FILTER)
8. RUNWAY THRESHOLD LIGHTS TH1 THRU TH8 ~~TO BE~~ L-861 SE (120W) QUARTZ (RED/GREEN FILTER).
9. RUNWAY THRESHOLD LIGHTS TH36 THRU TH43 ~~TO BE~~ L-861 E (45W) QUARTZ (RED/GREEN FILTER)
10. CONCRETE BASES FOR EXISTING SIGNS ~~TO BE~~ REMOVED DURING CONSTRUCTION/ GRADING OF RUNWAY SAFETY AREAS.
11. EXISTING ODALS AND VASI FOUNDATIONS ~~TO BE~~ REMOVED. PAYMENT ~~TO BE~~ MADE UNDER ITEM 204.21, TRENCH EXCAVATION OF ROCK @ 2 CY/EACH FOUNDATION.
12. SEE SHEETS 35-41 FOR ODALS DETAILS.
13. SEE SHEET 34 FOR VASI DETAILS.
14. EXISTING ODALS & VASI CABLES ~~ARE~~ DIRECT BURIAL. ~~HAND DIGGING WILL BE REQUIRED AROUND THESE CABLES~~. POWER TO ODALS AND VASI ~~ARE~~ SUPPLIED FROM FAA EQUIPMENT BUILDING NORTH OF RUNWAY ON VT 103. CONTRACTOR TO COORDINATE WITH FAA MAINTENANCE AT 802-951-6723.

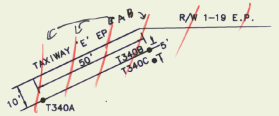
CO'S (REPLACED CROUSE HINDS IN RWY LIGHTING with HUBBELL @ PANELS - LOW PROFILE)

ODALS SCHEDULE		
UNIT #	EXISTING LOCATION	REMARKS
~~1R~~	150' RT 150+20±	RELOCATED TO 125' RT 153+10
1L	150' LT 150+20±	RELOCATED TO 125' LT 153+10
2	℄ 153+00±	REMOVE EXISTING ODAL & TOWER
3	℄ 156+00	MODIFY TOWER AND L.I.R MAST TO ELEVATION 772.0 RE-USE ODAL UNIT #3.
20	~~℄ 168+00±~~ NEW STA. 168+00	INSTALL NEW TUBULAR STEEL TOWER AND L.I.R MAST. RE-USE ODAL UNIT #2.

NOTE:
RUNWAY 1-19 WIRING CIRCUIT
"...R30 – DM #1 – R31 – TG12 – R32 ..."



NOTE:
TAXIWAY "E" WIRING CIRCUIT
"... T338 – T339A – T340A – T340B – T340C – TG13 – T341A – T341 ..."



RUNWAY/TAXIWAY INTERSECTION

LEGEND

- EXISTING RUNWAY AND TAXIWAY LIGHTS
- EXISTING TAXIWAY SIGNS
- NEW THRESHOLD LIGHTS (180° GREEN / 180° RED LENS)
- NEW TAXIWAY LIGHTS (BLUE FILTER)
- NEW RUNWAY LIGHTS (CLEAR LENS)
- NEW RUNWAY LIGHTS (180° CLEAR / 180° AMBER LENS)
- TG #1 RELOCATED TAXIWAY SIGN
- UNDERGROUND CONCRETE ENCASED DUCT & MARKERS
- 5/8" ø X 8' COPPERCLAD GROUND ROD
- RELOCATED ODALS

MATCH LINE SHEET 29

AIP 3-50-0015-11

STATE OF VERMONT — MICHAEL J. CHURCHILL — No. 5951 — REGISTERED PROFESSIONAL ENGINEER

AS-BUILTS

REV.	DATE	DESCRIPTION

Job No. F401212 | File No.: V401212(#PR3)

RUTLAND STATE AIRPORT
CLARENDON, VERMONT

RUNWAY LIGHTING PLANS

URS Greiner, Inc.
3 MARCUS BOULEVARD
ALBANY, NEW YORK

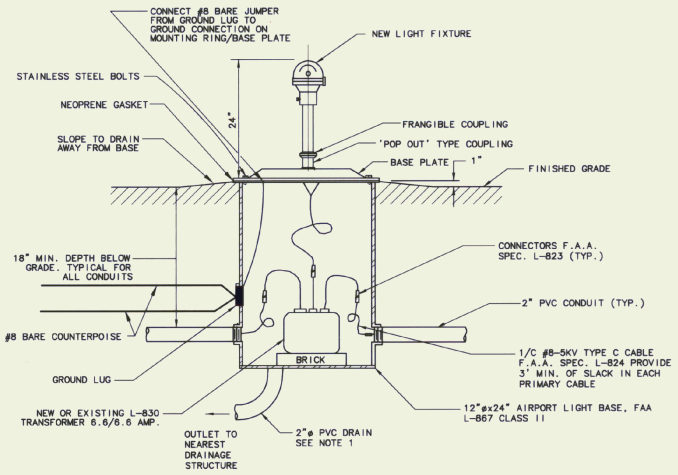
Designed by: G D'AMICO	Date 2/97
Drawn by: M MCCALLA	3/97
Checked by: G D'AMICO	5/5/97
Approved by: M CHURCHILL	5/5/97

Scale: HOR. - 1" = 50' VERT. - NONE

Date: 5/5/97

Sheet 30 Of 65

Sheet No 30

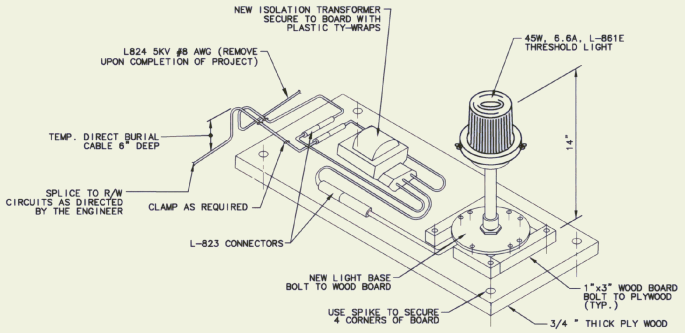


NOTE:
1. 2"ø PVC DRAIN TO BE PLACED IN BASE CANS TH 1, TH 8, R13, R66, R14, T314, T424, R46, R35, TH43. DRAIN 2"ø PVC TO NEAREST DRAINAGE STRUCTURE OR FLUSHING BASIN OR AS DIRECTED BY THE ENGINEER COST TO BE INCLUDED UNDER ITEM 678.21, MOD 1, 2"ø PVC.

TYPICAL ELEVATED EDGE LIGHT

NOT TO SCALE

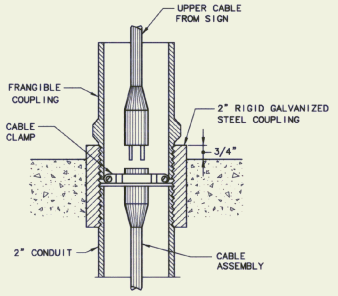
NOTE:
AT CONTRACTOR'S OPTION TEMPORARY THRESHOLD LIGHTS MAY BE STAKE MOUNTED.



TEMPORARY THRESHOLD LIGHT

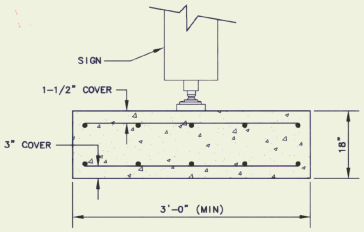
NOT TO SCALE

AB TEMPORARY LIGHTS NOT USED ON PROJECT



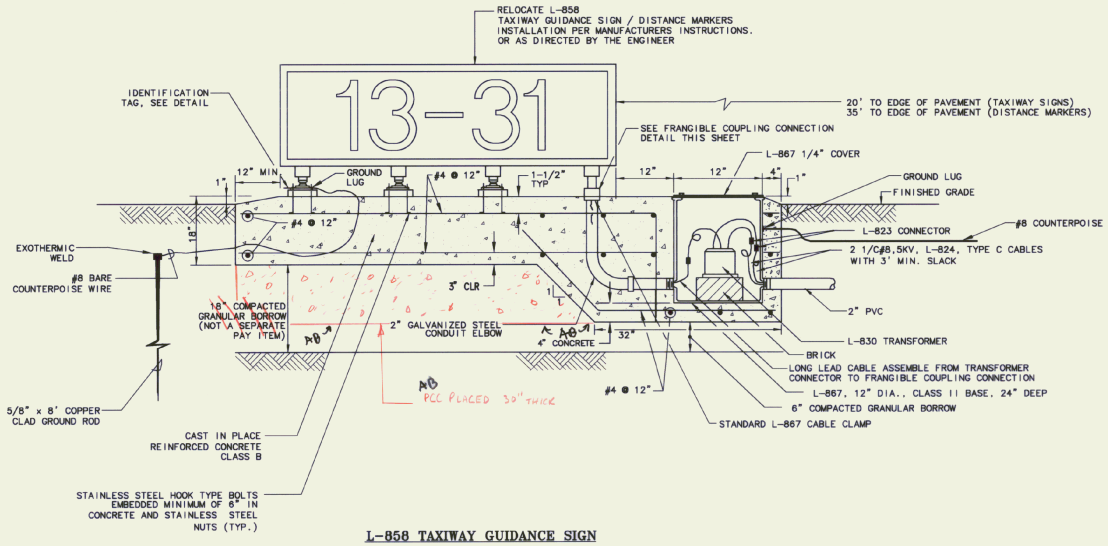
FRANGIBLE COUPLING CONNECTION DETAIL

NOT TO SCALE



TAXIWAY GUIDANCE SIGN SECTION

NOT TO SCALE



L-858 TAXIWAY GUIDANCE SIGN

NOT TO SCALE

AIP 3-50-0015-11

STATE OF VERMONT
RUSSELL L. CHURCHILL
No. 9951
REGISTERED PROFESSIONAL ENGINEER

REV.	DATE	DESCRIPTION
	12/97	AS BUILT REVISED

File No. 1:\F40\21\E\E01-DET
Job No. F40212.00

RUTLAND STATE AIRPORT
CLARENDON, VERMONT

RUNWAY LIGHTING DETAILS

URS Greiner, Inc.
3 MARCUS BOULEVARD
ALBANY, NEW YORK

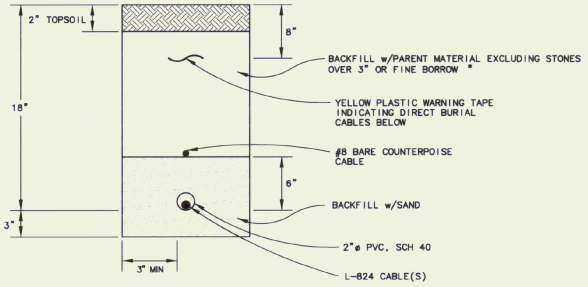
Designed by: G D'AMICO	Date 2/97
Drawn by: M MCCALLA	3/97
Checked by: G D'AMICO	5/5/97
Approved by: M CHURCHILL	5/5/97

Scale: HOR. – NONE
VERT. – NONE

Date: 5/5/97

Sheet 31 Of 85

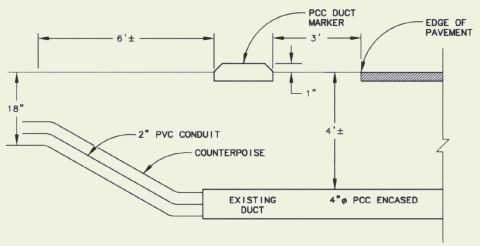
Sheet No
31



NOTE:
ADDITIONAL CONDUITS MAY BE PLACED IN SAME TRENCH @ 3" SPACING, MAX. NUMBER OF CABLES / CONDUIT PER N.E.C.

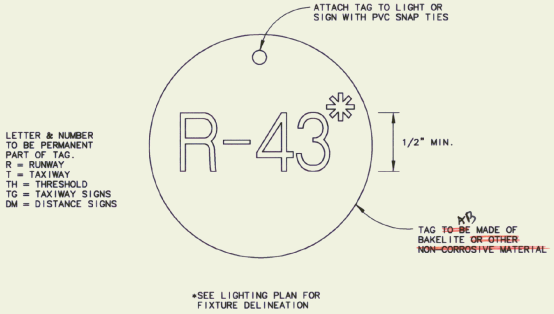
*FINE BORROW-MATERIAL REASONABLY FREE FROM LOAN, CLAY OR ORGANIC MATERIAL, MAXIMUM SIZE = 1/2"

CONDUIT TRENCH DETAIL (TYP)
NOT TO SCALE



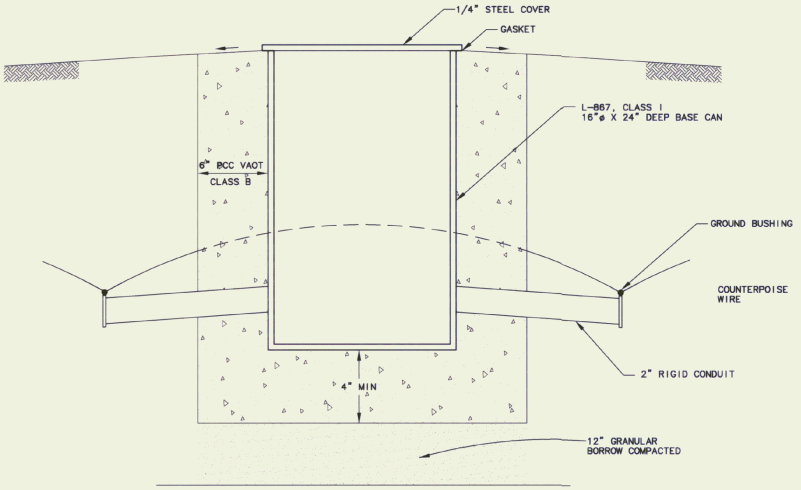
NOTE:
1. PLACE 2" PVC CONDUIT & COUNTERPOISE IN EXISTING 4" PCC ENCASED DUCT. FULL LENGTH. USE EXISTING SPARE (EMPTY) DUCT IF AVAILABLE.
2. HAND EXCAVATE AROUND EXISTING DUCT. EXISTING CABLES MAY BE DIRECT BURIAL.
3. REPLACE EXISTING PCC DUCT MARKERS, AS SHOWN.

CONDUIT/DUCT DETAIL (TYP)
NOT TO SCALE



*SEE LIGHTING PLAN FOR FIXTURE DELINEATION

FIXTURE IDENTIFICATION TAG (TYP)
NOT TO SCALE



ELECTRICAL HANDHOLE (TYP)
NOT TO SCALE

AIP 3-50-0015-11

STATE OF VERMONT
PAUL L. CROMWELL
No. 9551
REGISTERED PROFESSIONAL ENGINEER

AS-BUILT PRINTS 12-97

REV.	DATE	DESCRIPTION

Job No. 140212.00
File No. I:\140212\DWG\

RUTLAND STATE AIRPORT
CLARENDON, VERMONT

RUNWAY LIGHTING DETAILS

URS Greiner, Inc.
3 MARCUS BOULEVARD
ALBANY, NEW YORK

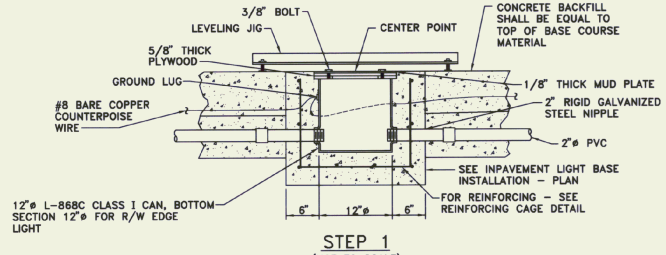
		Date
Designed by:	G. D'AMICO	2/97
Drawn by:	M MCCALLA	3/97
Checked by:	G. D'AMICO	5/5/97
Approved by:	M CHURCHILL	5/5/97

Scale: HS = N/A
VS = N/A

Date: 5/5/97

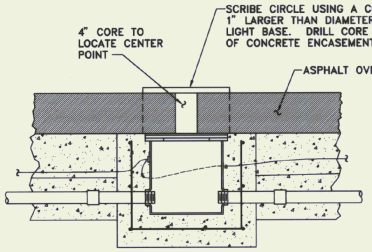
Sheet 32 Of 65

Sheet No
32

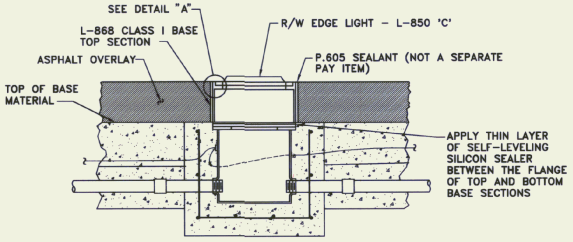


SECTION 12"ø FOR R/W EDGE

STEP 1
(NOT TO SCALE)



STEP 2
(NOT TO SCALE)

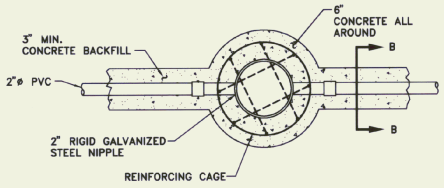


STEP 2
(NOT TO SCALE)

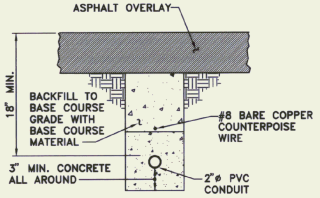
CO#5
AB INSTALLED A STAINLESS STEEL ADJUSTING RING ON L-868 CAN. MOUNTED WITH 4 PHILIPS IN PAVT LIGHT L-850 C ON STAINLESS STL ADJUSTING RING

GENERAL NOTES:

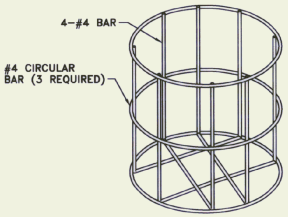
1. VIBRATE CONCRETE BACKFILL TO ENSURE THERE ARE NO VOIDS.
2. CONCRETE TO CONFORM TO VAOT SPECIFICATIONS SECTION 501, CLASS B, 3/4" MAX SIZE AGGREGATE
3. PRIOR TO ASPHALT PAVING, COVER MUD PLATE WITH A SHINGLE OR ANOTHER THIN ARTICLE WHEN TACK COAT IS APPLIED PRIOR TO PAVING. BEFORE PAVING COMMENCES, REMOVE SHINGLE AND LIGHTLY WIPE DOWN MUD PLATE WITH VEGETABLE OIL.
4. TIGHTEN ALL BOLTS TO THE TORQUE SPECIFIED BY THE MANUFACTURER. DO NOT REUSE SHIPPING BOLTS TO INSTALL COVERS.



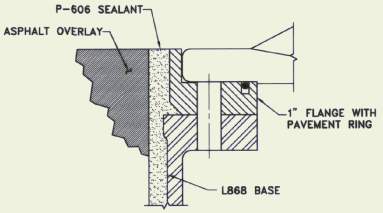
INPAVEMENT LIGHT BASE INSTALLATION – PLAN
(NOT TO SCALE)



SECTION B–B
(NOT TO SCALE)



REINFORCING CAGE DETAIL
(NOT TO SCALE)



DETAIL "A"
(NOT TO SCALE)

INSTALLATION OF IN PAVEMENT LIGHTING (L-850-C)

AIP 3-50-0015-11

STATE OF VERMONT
PAUL L. GRENIER
No. 2951
REGISTERED PROFESSIONAL ENGINEER

REV.	DATE	DESCRIPTION
AB	1/20/98	As Built

File No.: 1:\740121\01.NL
Job No.: 740121.00

RUTLAND STATE AIRPORT
CLARENDON, VERMONT

RUNWAY LIGHTING DETAILS

URS Greiner, Inc.
3 MARCUS BOULEVARD
ALBANY, NEW YORK

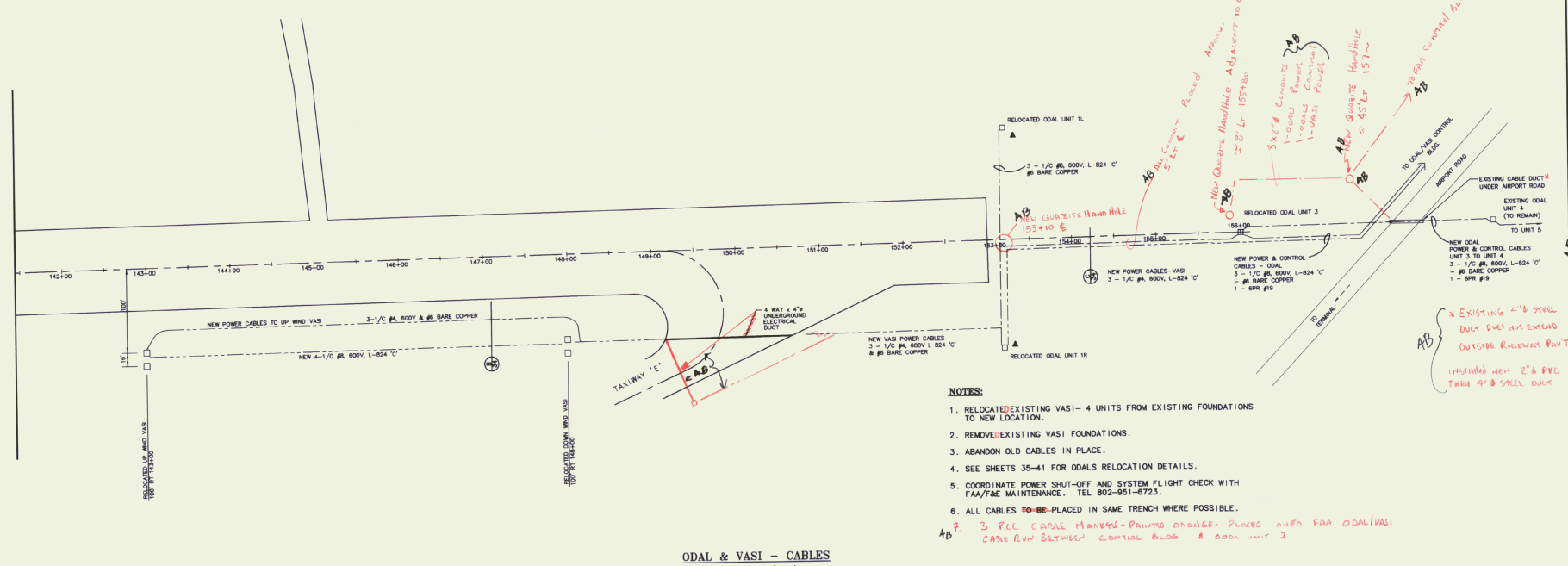
		Date
Designed by:	O D'AMICO	2/97
Drawn by:	M MCCALLA	3/97
Checked by:	O D'AMICO	5/5/97
Approved by:	M CHURCHILL	5/5/97

Scale: HS = N/A
VS = N/A

Date: 5/5/97

Sheet 33 Of 65

Sheet No
33

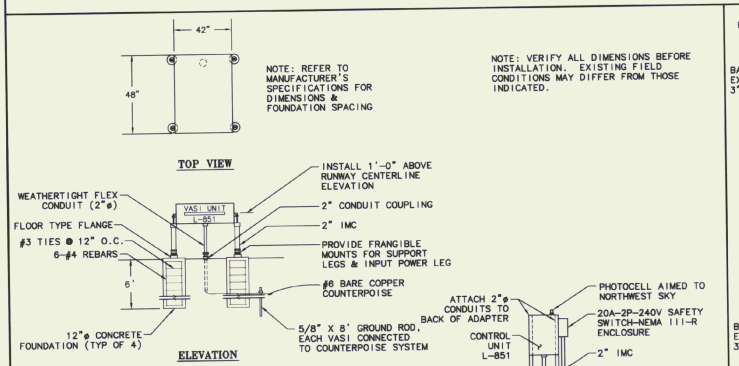


NOTES:

1. RELOCATED EXISTING VASI- 4 UNITS FROM EXISTING FOUNDATIONS TO NEW LOCATION.
2. REMOVE EXISTING VASI FOUNDATIONS.
3. ABANDON OLD CABLES IN PLACE.
4. SEE SHEETS 35-41 FOR ODALS RELOCATION DETAILS.
5. COORDINATE POWER SHUT-OFF AND SYSTEM FLIGHT CHECK WITH FAA/F&E MAINTENANCE. TEL 802-951-6723.
6. ALL CABLES ~~TO BE~~ PLACED IN SAME TRENCH WHERE POSSIBLE.
7. 3 PLC CABLE MARKERS - PAINTED ORANGE- PLACED OVER FAA ODAL/VASI CABLE RUN BETWEEN CONTROL BLDG & ODAL UNIT 3

ODAL & VASI – CABLES

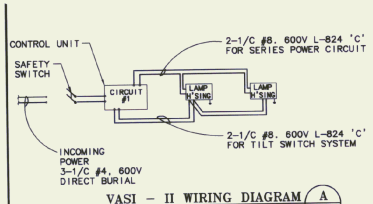
SCALE: 1"=60'



VASI LIGHT UNIT

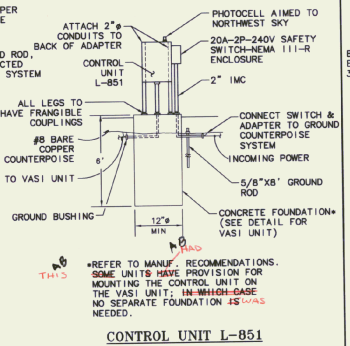
SCALE: N.T.S.

NOTE: VERIFY ALL DIMENSIONS BEFORE INSTALLATION. EXISTING FIELD CONDITIONS MAY DIFFER FROM THOSE INDICATED.



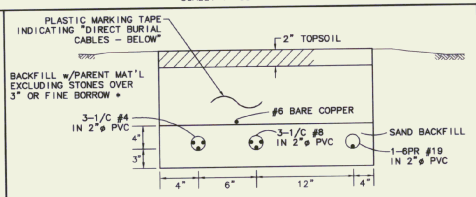
VASI – II WIRING DIAGRAM A/34

SCALE: N.T.S.



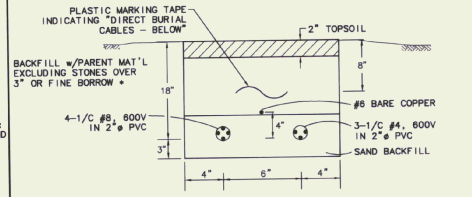
CONTROL UNIT L-851

SCALE: N.T.S.



C/34 CABLE TRENCH DETAILS

SCALE: N.T.S.

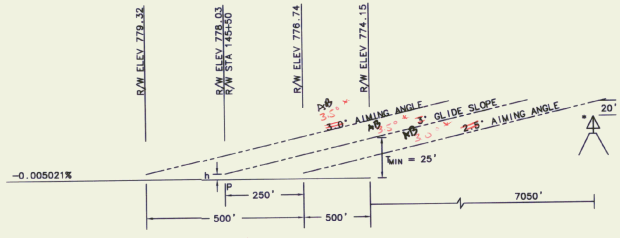


* FINE BORROW – MATERIAL REASONABLY FREE OF LOAM, CLAY AND ORGANIC MATERIAL, MAX. SIZE 1/2"

B/34 CABLE TRENCH DETAILS

SCALE: N.T.S.

* REVISED PER FAA DIRECTION



VASI AIMING ∢

TAN $\phi = \frac{Y}{X}$

Y = (943+20) – 778 = 185'

X = 7,550'

ϕ = 1°25'

ϕ = ∢ =1°25' + 0°45' = 2°10'

USE MIN EFFECTIVE ∢ OF 2°30'

THRESHOLD CROSSING HEIGHT

TAN ϕ = T/750 = 0.043661

T_1 = 32.7'

T_2 = ELEV @ 145+50 – ELEV @ 153+00 = 778.0 – 774.2 = 3.8

T = T_1 + T_2 = 32.7 + 3.8 = 36.5

36.5 > 25 O.K.

D/34 VASI AIMING ANGLES

SCALE: N.T.S.

AIP 3-50-0015-11

STATE OF VERMONT — JAMES C. THOMAS — No. 5051 — REGISTERED PROFESSIONAL ENGINEER

REV.	DATE	DESCRIPTION
	12/97	As Built Drawing

File No. 17401212.00-033

Job No. F401212.00

RUTLAND STATE AIRPORT
CLARENDON, VERMONT

ELECTRICAL PLANS
VASI MOUNTING DETAILS

Greiner, Inc.
3 MARCUS BOULEVARD
ALBANY, NEW YORK

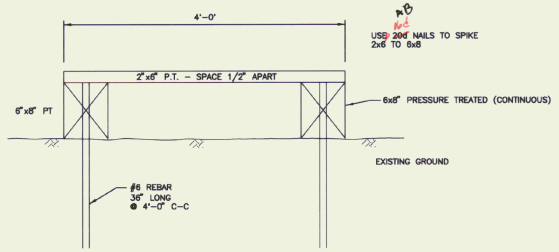
	Date
Designed by: C D'AMICO	2/97
Drawn by: M MCCALLA	3/97
Checked by: C D'AMICO	5/5/97
Approved by: M CHURCHILL	5/5/97

Scale: HOR. – AS NOTED VERT. – NONE

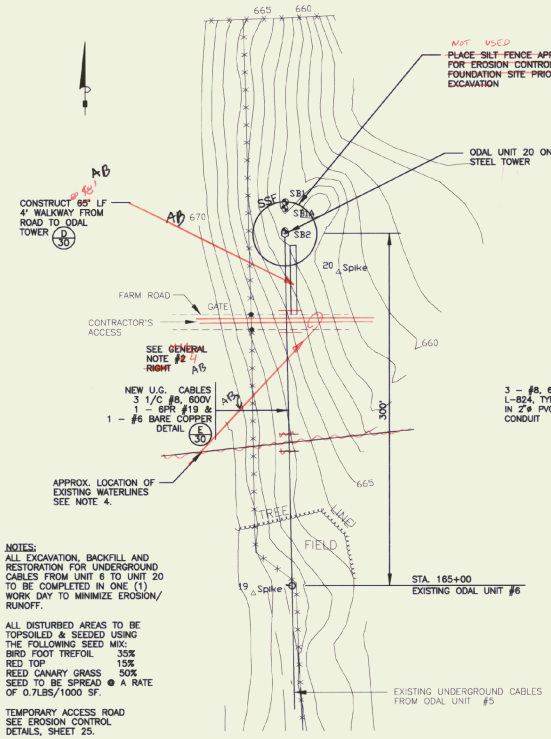
Date: 5/5/97

Sheet 34 Of 65

Sheet No 34



D/35 WALKWAY DETAIL
N.T.S.

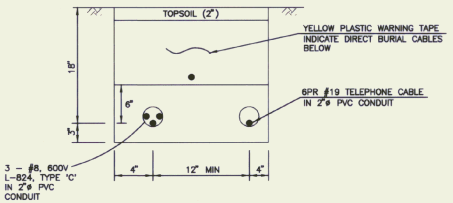


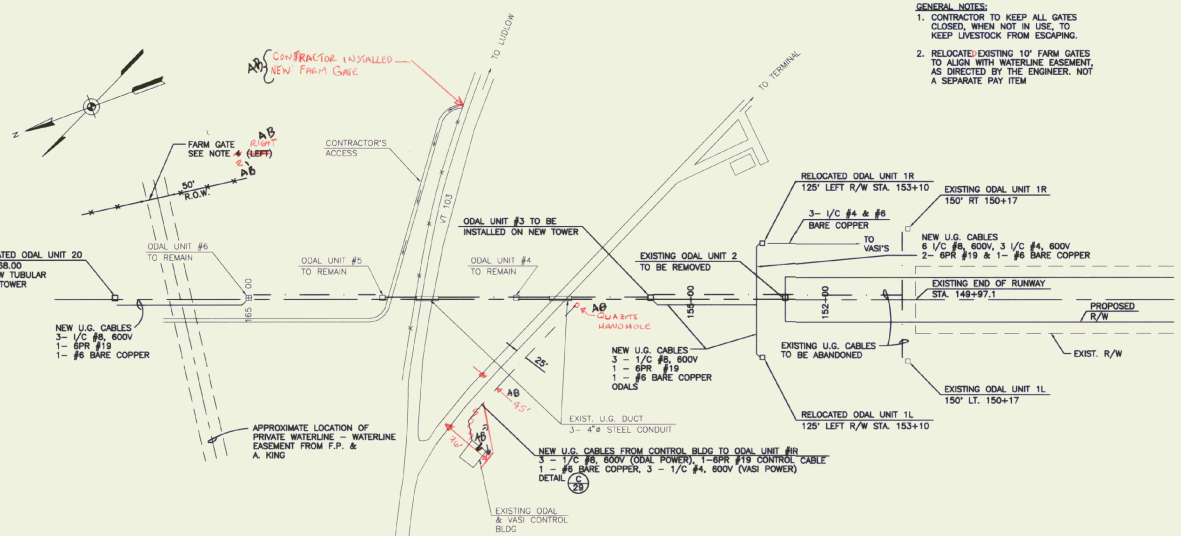
NOTES:
1. ALL EXCAVATION, BACKFILL AND RESTORATION FOR UNDERGROUND CABLES FROM UNIT 6 TO UNIT 20 TO BE COMPLETED IN ONE (1) WORK DAY TO MINIMIZE EROSION/ RUNOFF.
2. ALL DISTURBED AREAS TO BE TOPSOILED & SEEDED USING THE FOLLOWING SEED MIX:

BIRD FOOT TREFOIL	35%
RED TOP	15%
REED CANARY GRASS	50%

SEED TO BE SPREAD @ A RATE OF 0.7LBS/1000 SF.
3. TEMPORARY ACCESS ROAD SEE EROSION CONTROL DETAILS, SHEET 25.
4. PLACE 2 - 12LF 6"ø SLEEVES, APPROX 4.5' 5' BELOW GRADE PARALLEL TO EXISTING WATERLINE. NOT A SEPARATE PAY ITEM.

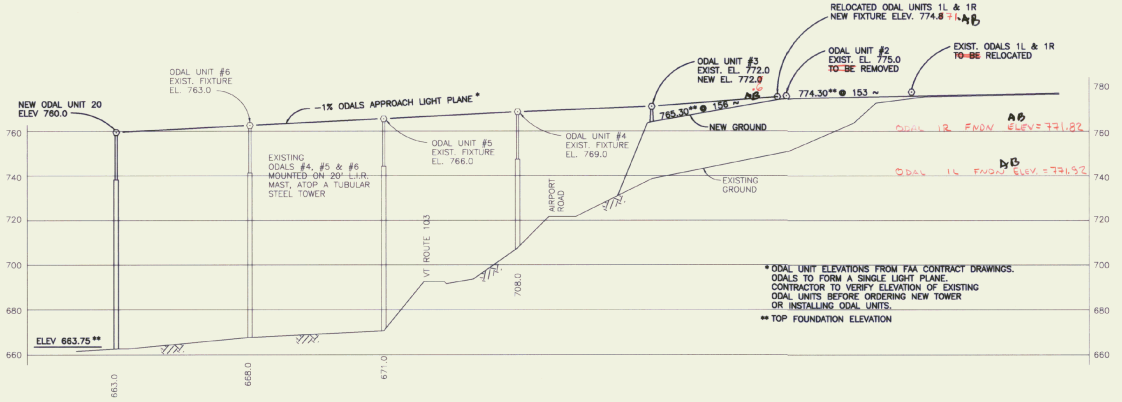
A/35 ODAL UNIT 20
SCALE: 1" = 50'





GENERAL NOTES:
1. CONTRACTOR TO KEEP ALL GATES CLOSED, WHEN NOT IN USE, TO KEEP LIVESTOCK FROM ESCAPING.
2. RELOCATE EXISTING 10' FARM GATES TO ALIGN WITH WATERLINE EASEMENT, AS DIRECTED BY THE ENGINEER. NOT A SEPARATE PAY ITEM

C/35 ODAL UNIT PLAN
N.T.S.



* ODAL UNIT ELEVATIONS FROM FAA CONTRACT DRAWINGS. ODALS TO FORM A SINGLE LIGHT PLANE. CONTRACTOR TO VERIFY ELEVATION OF EXISTING ODAL UNITS BEFORE ORDERING NEW TOWER OR INSTALLING ODAL UNITS.
** TOP FOUNDATION ELEVATION

B/35 ODAL TOWERS - PROFILE
N.T.S.

AIP 3-50-0015-11

STATE OF VERMONT — MICHAEL L. CHURCHILL — No. 5951 — REGISTERED PROFESSIONAL ENGINEER

REV.	DATE	DESCRIPTION
	12/96	AS-BUILT DRAWING

File No.: VF0312\ODALS-PP
Job No. F0312.00

RUTLAND STATE AIRPORT
CLARENDON, VERMONT

ODALS - PLAN & PROFILE

URS Greiner, Inc.
3 MARCUS BOULEVARD
ALBANY, NEW YORK

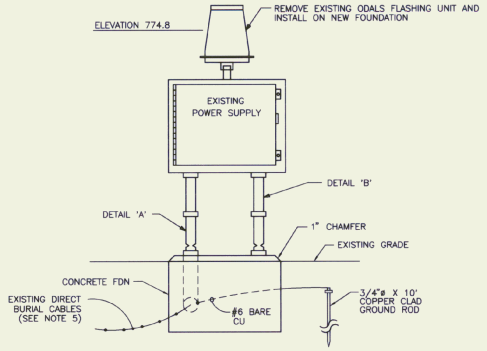
		Date
Designed by:	G D'AMICO	2/97
Drawn by:	M MCCALLA	3/97
Checked by:	G D'AMICO	5/5/97
Approved by:	M CHURCHILL	5/5/97

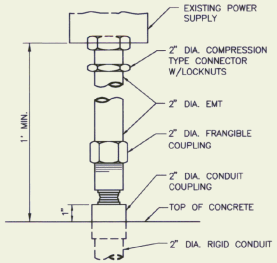
Scale: HOR. - 1" = 100'
VERT. - 1" = 20'

Date: 5/5/97

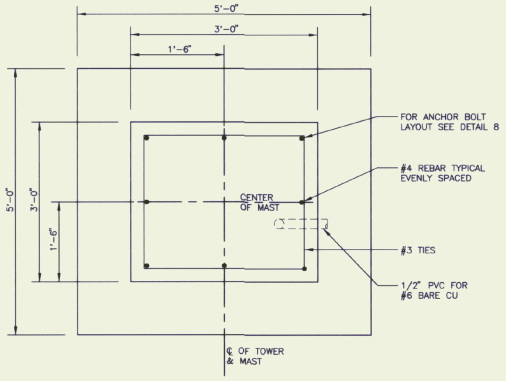
Sheet 35 Of 65

Sheet No
35

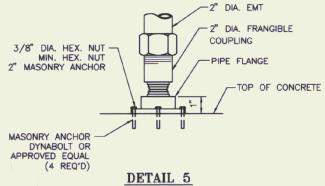




DETAIL 4



DETAIL 6



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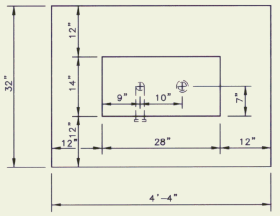
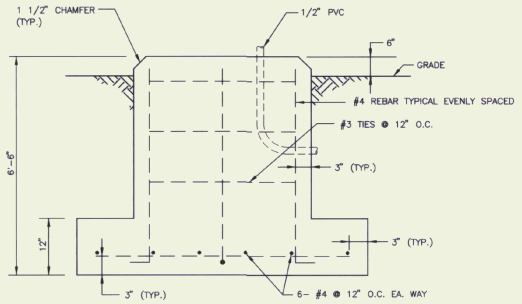
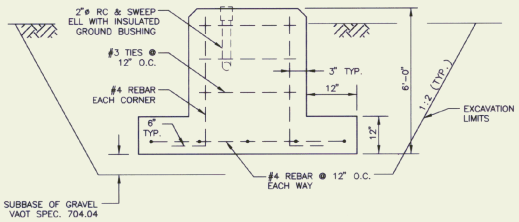


DETAIL 2



DETAIL 7

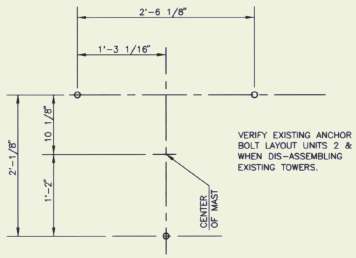
ODALS FOUNDATION DETAILS
ODALS UNITS #1R & #1L
125' LT & RT OF STA. 153+20



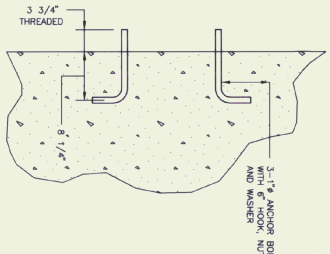
DETAIL 3

NOTES:

1. EXISTING FOUNDATIONS UNITS #2 & #3 ~~TO BE~~ ABANDONED IN PLACE.
2. ODALS ELECTRICAL CABLES ~~TO BE~~ RE-ROUTED TO NEW LOCATION.
3. EXISTING ODALS UNITS ~~TO BE~~ REMOVED FROM EXISTING FOUNDATIONS AND PLACED ON NEW FOUNDATIONS.
4. ALL CONCRETE ~~TO BE~~ CLASS B, CONFORMING TO SECTION 501. STRUCTURAL CONCRETE, VAOT SPECIFICATIONS.
5. EXISTING UNDERGROUND (DIRECT BURIAL CABLES) 3-1/C #8, 600V, 1- 6 PR #19 - TELEPHONE CABLE, & #8 BARE COPPER BETWEEN UNITS. SEE UNIT WIRING DIAGRAM.
6. USE ANTI-SEIZE COMPOUND ON ALL THREADS.
7. ALL ANCHOR BOLTS, NUTS & WASHERS SHALL BE HOT DIP GALVANIZED PER ASTM - 13 & ASTM - 325.



ANCHOR BOLT PLAN
DETAIL 8



ANCHOR BOLTS
DETAIL 9

ODALS FOUNDATION DETAILS
UNIT #3
STATION 156+00

AIP 3-50-0015-11

STATE OF VERMONT — SCOTT L. CHURCHEL — No. 5951 — REGISTERED PROFESSIONAL ENGINEER

REV:	DATE	DESCRIPTION
		As Built Drawing
	12/97	

Job No. 740123.00 — File No. I:\740123\ODALS-FD

RUTLAND STATE AIRPORT
CLARENDON, VERMONT

ODALS FOUNDATION DETAILS

URS Greiner, Inc.
3 MARCUS BOULEVARD
ALBANY, NEW YORK

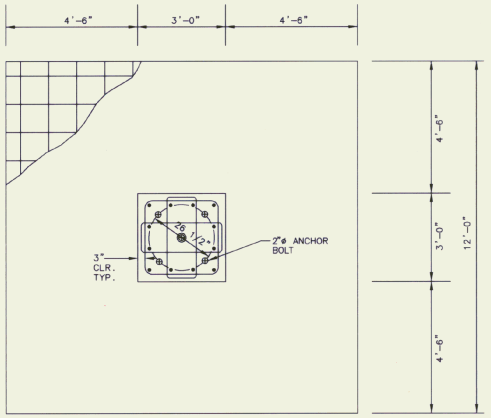
Designed by: G D'AMICO	Date 2/97	
Drawn by: N NICOLLS	3/97	
Checked by: G D'AMICO	5/5/97	
Approved by: S CHURCHEL	5/5/97	

Scale: HS - AS SHOWN
VS - AS SHOWN

Date: 5/5/97

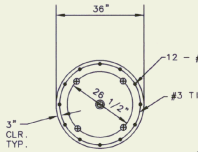
Sheet 36 Of 65

Sheet No
36



PLAN

NOTE:
A 36" DIAMETER PIER ~~MAY BE~~ USED, AT THE CONTRACTOR'S OPTION IN LIEU OF THE SQUARE PIER.



AB USED

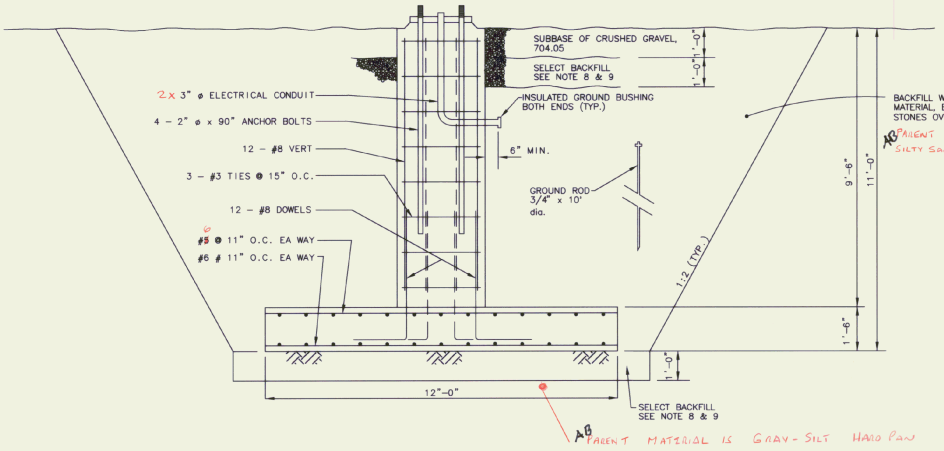
AB INSTALLED 6 - 2'd ANCHOR BOLTS EQUALLY SPACED - PER MANUFACTURERS RECOMMENDATION

36" DIA. FOUNDATION PIER

FOUNDATION NOTES

1. CONCRETE TO CONFORM TO VAOT SPECIFICATIONS SECTION 501 - STRUCTURE CONCRETE, CLASS A.
2. REINFORCING STEEL TO CONFORM TO VAOT SPECIFICATIONS SECTION 507 - REINFORCING STEEL. STEEL TO BE ASTM A615, GRADE 60, EXCEPT STIRRUPS AND TIES TO BE GRADE 40.
3. REINFORCEMENT SHALL BE TIED SECURELY IN PLACE BEFORE PLACING CONCRETE USING APPROVED CHAIRS AND SPACERS. NO BARS SHALL BE CUT OR OMITTED IN THE FIELD WITHOUT THE APPROVAL OF THE ENGINEER. USE PLASTIC TIPPED ACCESSORIES IN CONCRETE EXPOSED TO WEATHER, WATER OR VIEW.
4. THE CONTRACTOR SHALL INSTALL ALL ANCHORS, BOLTS, PLATES, NAILERS, SLOTS, CHASES, PIPE SLEEVES, ETC., AS REQUIRED BY OTHER TRADES. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS BEFORE SETTING SCREEDS AND FORMS.
5. FOOTINGS ~~SHALL~~ REST ON ~~SUITABLE UNDISTURBED SOIL OR~~ COMPACTED GRANULAR FILL HAVING A MINIMUM BEARING CAPACITY OF 3000 PSF. ~~THE ENGINEER SHALL BE NOTED PROMPTLY OF ANY WEAK STRATA, WATER CONDITIONS OR OTHER POOR BEARING CONDITIONS.~~
6. UNLESS OTHERWISE NOTED, ALL FOOTINGS AND PIERS ~~SHALL BE~~ CENTERED UNDER SUPPORT MEMBERS.
7. CONCRETE TEMPERATURES DURING THE FIRST SEVEN DAYS SHALL BE MAINTAINED BETWEEN 50 F AND 90 F. RAPID DRYING MUST BE PREVENTED. ALL SURFACES SHALL BE KEPT CONTINUOUSLY MOIST FOR A MINIMUM OF SEVEN DAYS.
8. BACKFILLING AGAINST PIERS SHALL BE DONE BY PLACING LEVEL LAYERS ALL AROUND THE PIER. PIERS MUST BE AT LEAST SEVEN DAYS OLD BEFORE BACKFILLING.
9. SELECT BACKFILL SHALL:
   A. CONFORM TO VAOT 704.04. AB (USED 1" CRUSHED STONE)
   B. BE PLACED IN MAXIMUM 8" LEVEL LIFTS AND COMPACTED TO 90 % MAXIMUM DENSITY AT OPTIMUM MOISTURE CONTENT AS DEFINED BY ASTM D-1557.
10. CONTRACTOR TO DESIGN, FURNISH AND INSTALL ALL TEMPORARY SHEETING, SHORING AND BRACING NECESSARY TO COMPLETE THE CONSTRUCTION. NOT REQUIRED - MATERIAL WAS STABLE
11. THE CONTRACTOR ~~SHALL~~ PROVIDE AB THE NECESSARY EQUIPMENT ~~AND~~ TO DEWATER THE SITE TO FACILITATE CONSTRUCTION AND SAFE WORKING CONDITIONS.
12. SHOP DRAWINGS PREPARED IN ACCORDANCE WITH ACI STANDARDS ~~WILL BE REQUIRED~~ FROM THE CONTRACTOR FOR REINFORCING STEEL PRIOR TO CONSTRUCTION.
13. DESIGN LOADS:

MOMENT	=	229 K-FT.
VERTICAL SHEAR	=	6256 LBS.
HORIZONTAL SHEAR	=	4360 LBS.



SECTION

AIP 3-50-0015-11

STATE OF VERMONT — DAVID L. CHURCHILL — No. 5551 — REGISTERED PROFESSIONAL ENGINEER

AB

REV.	DATE	DESCRIPTION
		As Built Drawings

Job No. 140312.00 — File No. I:\140312\TIF

RUTLAND STATE AIRPORT
CLARENDON, VERMONT

ODALS TOWER FOUNDATION DETAILS

URS Greiner, Inc.
3 MARCUS BOULEVARD
ALBANY, NEW YORK

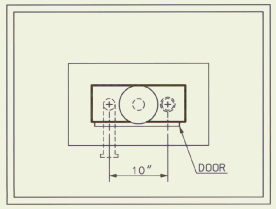
	Date
Designed by: D DiMEO	2/97
Drawn by: M MCCALL	3/97
Checked by: D DiMEO	5/5/97
Approved by: M CHURCHILL	5/5/97

Scale: HS - AS SHOWN
VS - AS SHOWN

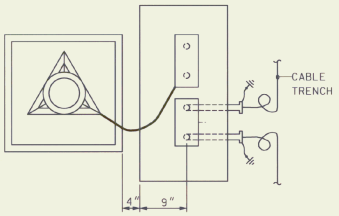
Date: 5/5/97

Sheet 37 Of 65

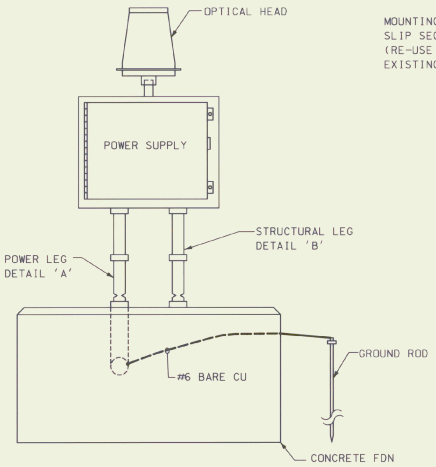
Sheet No
37



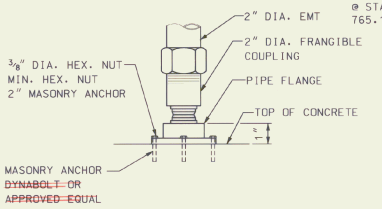
PLAN
N.T.S



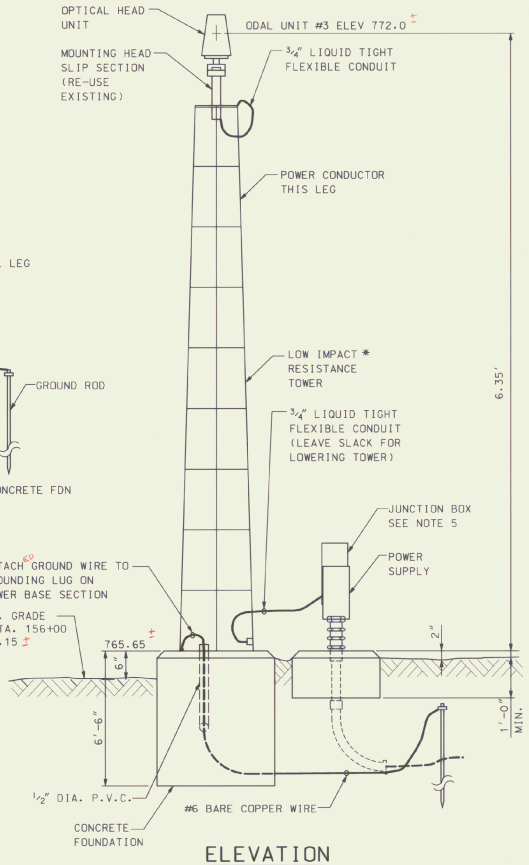
PLAN
N.T.S



ELEVATION
ODALS UNIT 1R & 1L
N.T.S

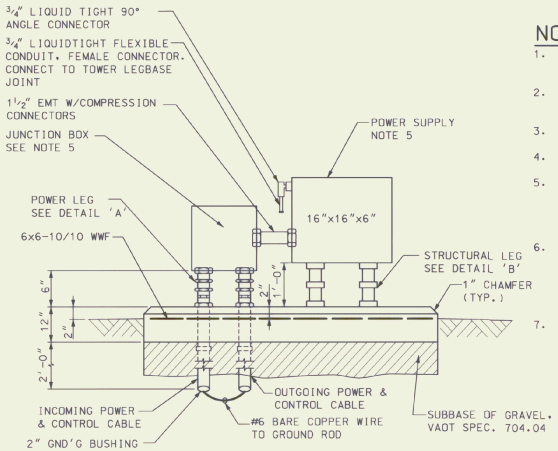


STRUCTURAL LEG-DETAIL 'B'
N.T.S



ELEVATION
N.T.S

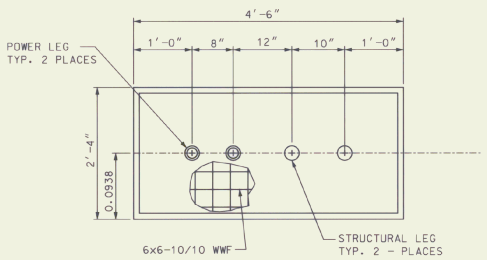
ODAL UNIT #3
* REUSE EXISTING TOWER- ADJUST TO HEIGHT



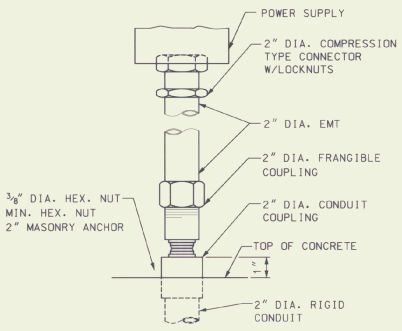
ELEVATION
N.T.S

NOTES:

1. REFER TO FACILITY LAYOUT PLAN FOR LIGHT FIXTURE ELEVATIONS.
2. REFER TO SHEET 35 FOR TOP ELEVATION OF CONCRETE FOUNDATION.
3. REFER TO CABLE LAYOUT PLAN FOR ROUTING.
4. USE ANTI-SEIZE COMPOUND ON ALL PIPE THREADS.
5. RELOCATE ALL EXISTING EQUIPMENT, RE-USE TO THE EXISTENT POSSIBLE. CONTRACTOR TO SUPPLY NEW PCC FOUNDATIONS AND ALL CONDUIT, FITTINGS, CABLES, ETC.
6. CONTRACTOR TO INSPECT ALL EQUIPMENT PRIOR TO RELOCATING. EXISTING DAMAGE TO BE NOTED. CONTRACTOR WILL BE RESPONSIBLE FOR REPLACING OR REPAIRING ALL DAMAGE CAUSED BY HIS FORCES DURING RELOCATION & RE-INSTALLATION.
7. CONTRACTOR TO VERIFY NEW ODAL UNIT ELEVATION AND TOWER HEIGHT PRIOR TO INSTALLATION.



PLAN
EQUIPMENT PAD FOUNDATION DETAILS



STRUCTURAL LEG-DETAIL 'A'
N.T.S

STATE OF VERMONT
MICHAEL L. CHURCHILL
No. 6614
REGISTERED PROFESSIONAL ENGINEER

REV.	DATE	DESCRIPTION
1	10/8/97	As Built

File No. FY/MCAD/FLMOUNT

Job No. F401212.00

RUTLAND STATE AIRPORT
CLARENDON, VERMONT

ODALS - FLASHER MOUNTING DETAILS

URS Greiner, Inc
3 MARCUS BOULEVARD
ALBANY, NEW YORK

Designed by: G.D'AMICO 2/97	Drawn by: W.MCCALLA 3/97	Checked by: G.D'AMICO 5/5/97	Approved by: M.CHURCHILL 5/5/97

Scale: N.T.S.

Date: 5/5/97

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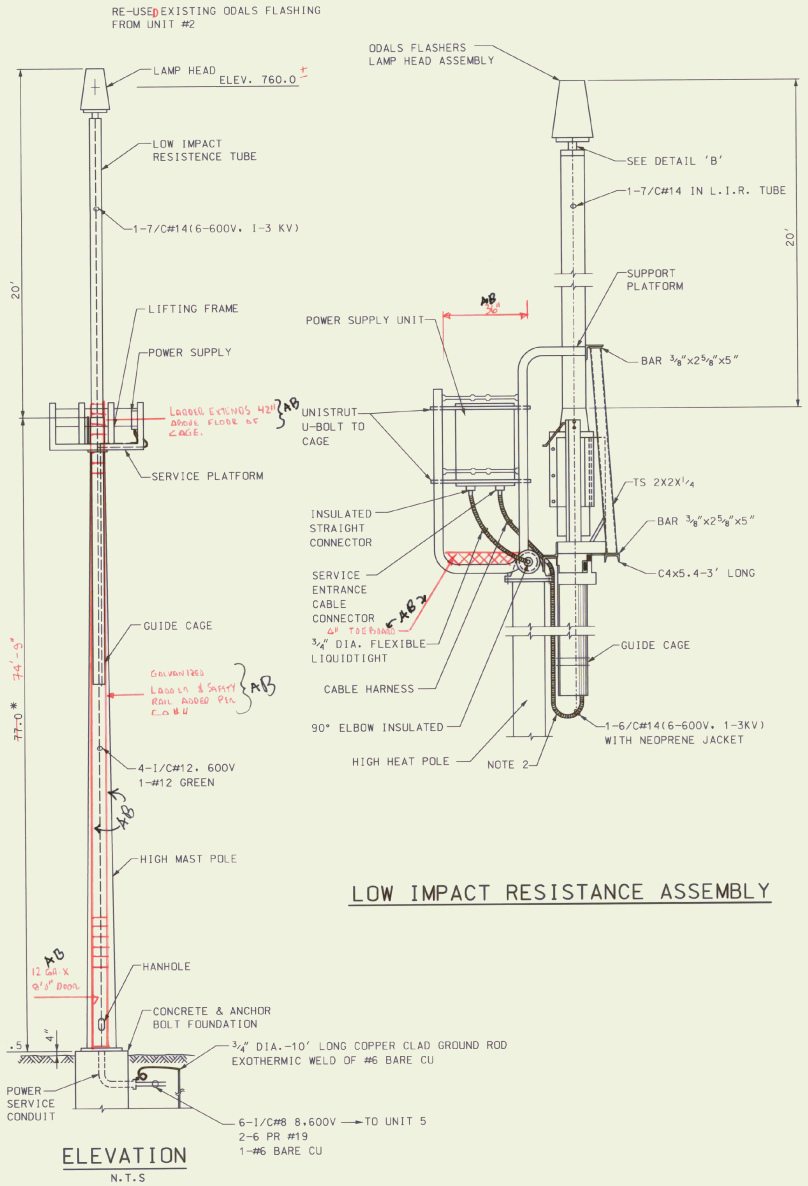
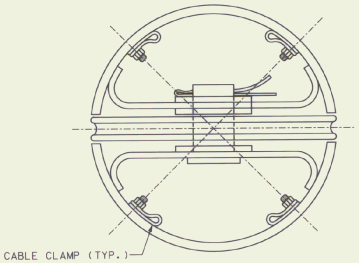
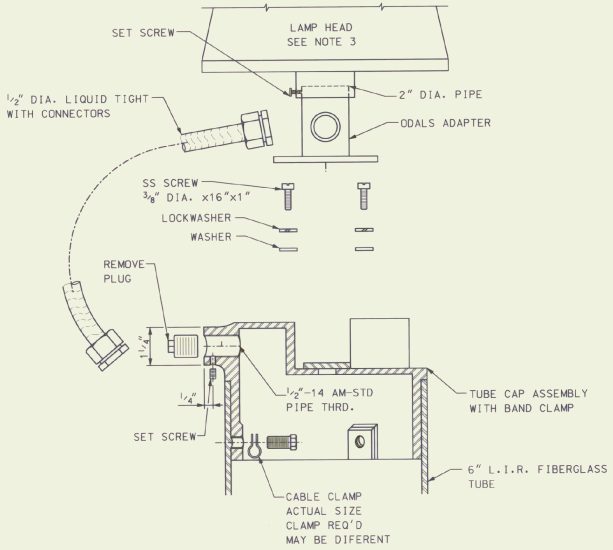
Sheet No
38



LOW IMPACT RESISTANCE ASSEMBLY



DETAIL 'A'
N.T.S



DETAIL 'B'
N.T.S

ELEVATION
N.T.S

* CONTRACTOR TO VERIFY ELEVATIONS
SEE NOTES SHEET 30

NOTES:

1. MAKE ALL TERMINATIONS IN HANDHOLE USING WIRE NUTS OR BURNDY CONNECTORS AND LEAVE 3' OF SLACK. TAG ALL CONTROL CABLES IN HANDHOLES OR JUNCTION BOXES SHALL BE TAGGED AS TO ORIGIN OR DESTINATION AND COLOR CODED (POWER) OR NUMBERED (CONTROL).
2. TIE CABLE HARNESS EVERY 3' TO TOWER OR GUIDE CAGE FROM CONTROL BOX TO BOTTOM OF CAGE USING BLACK WEATHER RESISTANT CABLE TIES TYPE PLT. FROM BOTTOM OF GUIDE CAGE TO LIR TUBE LEAVE LOOSE. SEE DETAIL 'A' FOR CONNECTION AT LIR TUBE.
3. FOR LAMP HEAD LEVELING PROCEDURE SEE MANUFACTURE INSTRUCTION MANUAL (TI G350.47).
4. HIGH MAST TOWER FOR ODAL UNIT 20 ONLY.

AB
5. HIGH MAST POLE SUPPLIED BY VALMONT INDUSTRIES VALLEY, NEBRASKA - SEE SHOP DRAWINGS FOR DETAILS
6. CAGE REQUESTED BY FAA ADDED LADDER & INCREASED CAGE SIZE. LADDER DETAILS PROVIDED BY PB ADTAMS, INC SOUTH BURLINGTON, VT.
7. SAFETY RAIL SUPPLIED BY FAA

STATE OF VERMONT DONALD L. CHAMPOUX No. 4951 REGISTERED PROFESSIONAL ENGINEER

REV.	DATE	DESCRIPTION
AB		
1	7/22/97	ADDED

JOB No. F401212.00

File No. P:\RCAD\ODALWR

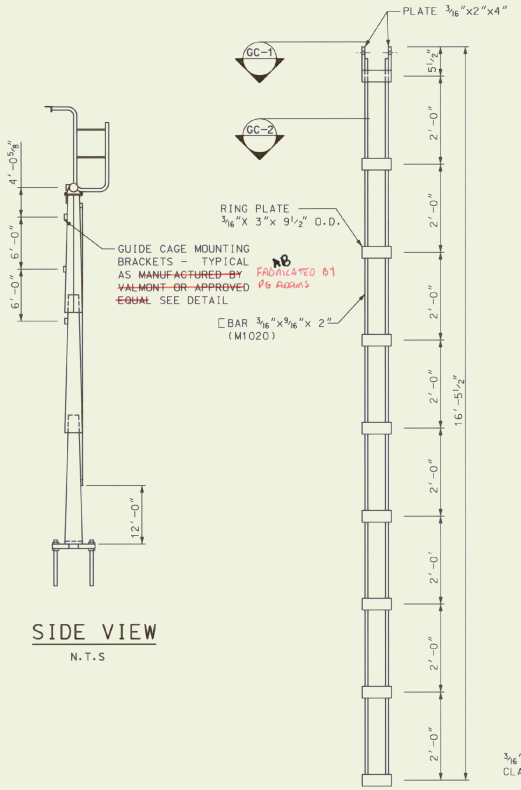
RUTLAND STATE AIRPORT
CLARENDON, VERMONT

ODALS UNIT #20
WIRING AND EQUIPMENT MOUNTING

URS Greiner, Inc
3 MARCUS BOULEVARD
ALBANY, NEW YORK

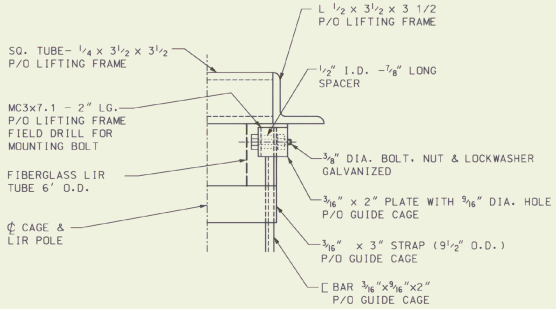
Designed by: G D AMICO 2/97
Drawn by: M MCCALLA 3/97
Checked by: G D AMICO 5/5/97
Approved by: W CHURCHILL 5/5/97

Scale: N.T.S.
Date: 5/5/97
Sheet 39 Of 65
Sheet No 39

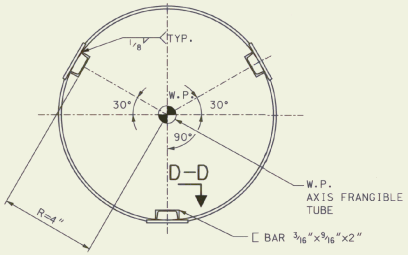


SIDE VIEW
N.T.S

GUIDE CAGE GC
N.T.S



GUIDE CAGE MOUNTING DETAIL
SCALE: 3"= 1'-0"



SECTION GC-1
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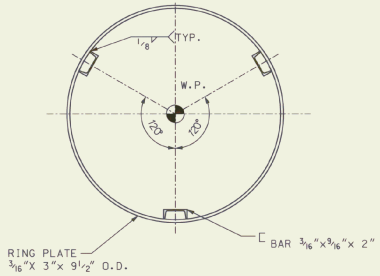

SECTION GC-2
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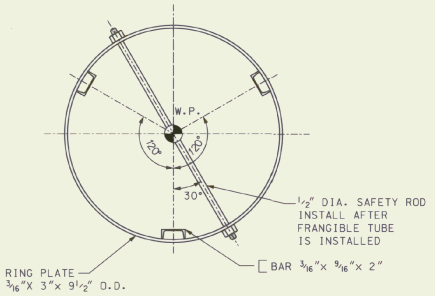

SECTION GC-1
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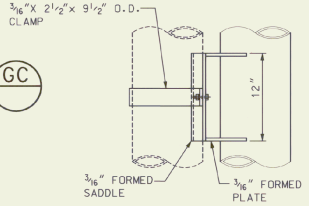
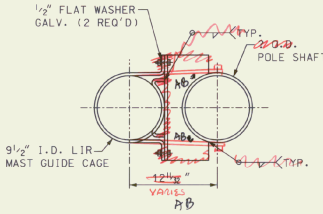
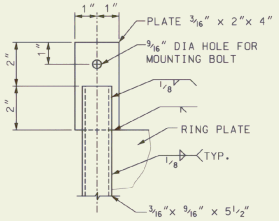


SIDE VIEW



TOP VIEW



SECTION D-D
N.T.S

GUIDE CAGE MOUNTING BRACKET
N.T.S

STATE OF VERMONT MICHAEL L. CHURCHILL No. 5941 REGISTERED PROFESSIONAL ENGINEER

REV.	DATE	DESCRIPTION
1	5/19/97	As Built

File No. P:/MCAD/CAGEBLS

Job No. P:/f401212

RUTLAND STATE AIRPORT
CLARENDON, VERMONT

ODALS UNIT #6
L.I.R. GUIDE CAGE DETAILS

URS Greiner, Inc
3 MARCUS BOULEVARD
ALBANY, NEW YORK

Designed by: G.D'AMICO 2/97
Drawn by: M MCCALLA 3/97
Checked by: G D'AMICO 5/5/97
Approved by: M CHURCHILL 5/5/97

Scale: AS NOTED

Date: 5/5/97

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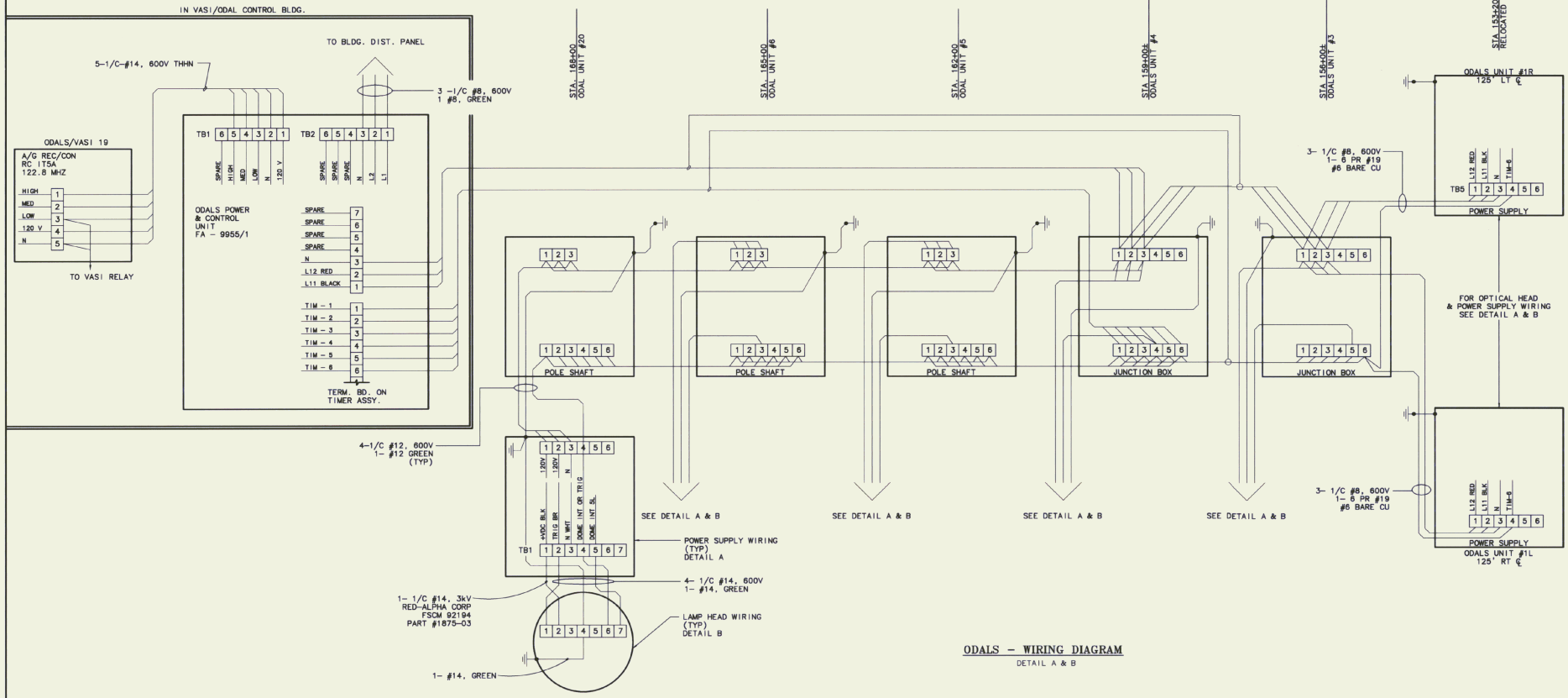
Sheet No
40



ODALS - WIRING DIAGRAM

DETAIL A & B

AIP 3-50-0015-11

STATE OF VERMONT
MICHAEL L. CHURCHILL
No. 8981
REGISTERED
PROFESSIONAL ENGINEER

REV.	DATE	DESCRIPTION
1	5/5/97	As Built

File No. I:\F40121\ODALS-WD
Job No. F40121.00

RUTLAND STATE AIRPORT
CLARENDON, VERMONT

ODALS WIRING DIAGRAM

Greiner, Inc.
3 MARCUS BOULEVARD
ALBANY, NEW YORK

Designed by: G D'AMICO	Date 2/97	
Drawn by: N MCCALLA	3/97	
Checked by: G D'AMICO	5/5/97	
Approved by: M CHURCHILL	5/5/97	

Scale: HOR. - AS NOTED
VERT. - NONE

Date: 5/5/97

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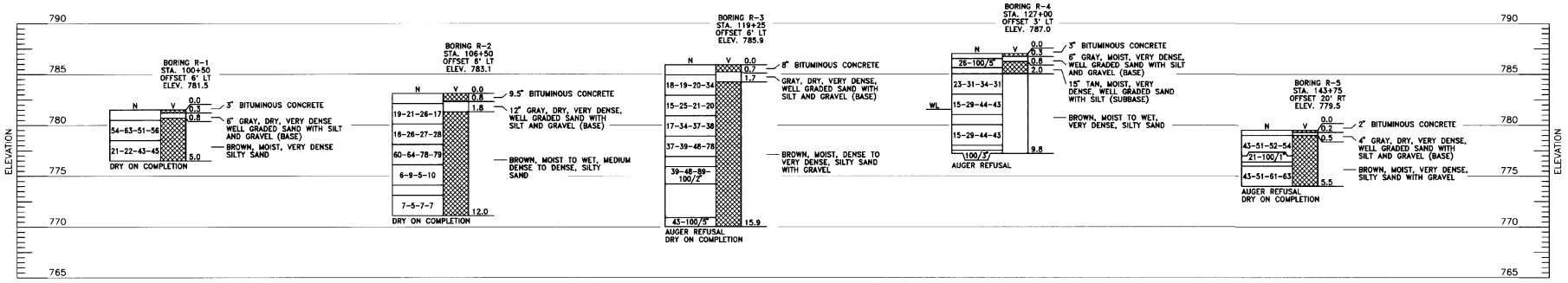
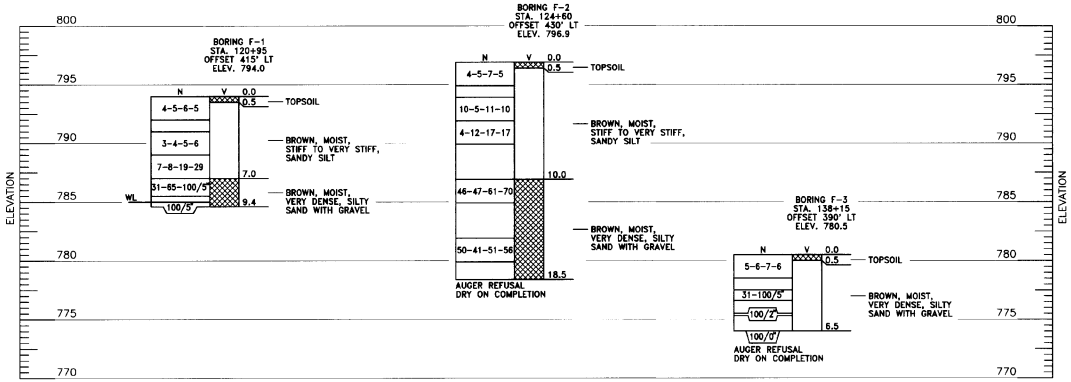
Sheet No
41

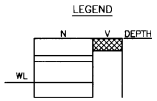


BORINGS AND DRIVE TESTS
SCALE: AS SHOWN



BORINGS AND DRIVE TESTS
SCALE: AS SHOWN

LEGEND



NOTE:

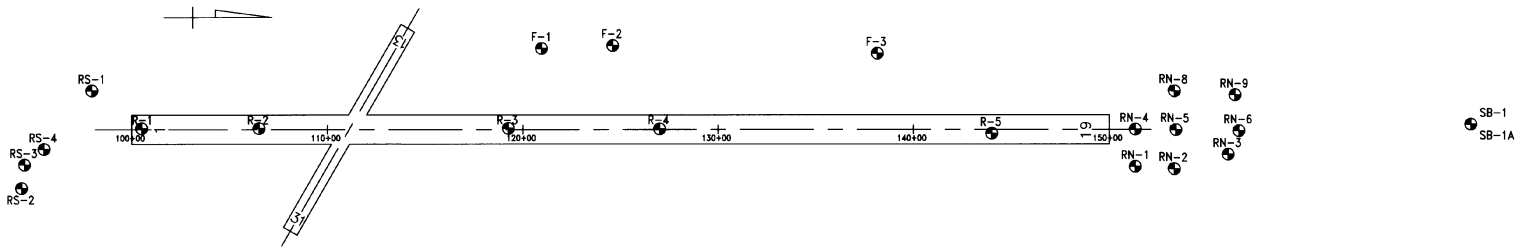
1.) BORINGS AND DRIVE TESTS WERE TAKEN IN NOVEMBER 1995, AND JAN 97 BY GREEN MOUNTAIN BORING.

2.) N– BLOWS PER 6 INCH INCREMENT OF PENETRATION OF SAMPLING SPOON OR PENETRATION IN INCHES FOR THE INDICATED BLOWS OF A 140 LB. HAMMER FALLING 30". WHERE ROCK IS ENCOUNTERED, PERCENT CORE RECOVERY IS SHOWN. R.Q.D. IS SHOWN IN PARENTHESES.

THE ROCK QUALITY DESIGNATION (R.Q.D.) IS BASED ON A MODIFIED CORE RECOVERY PROCEDURE WHICH, IN TURN, IS BASED INDIRECTLY ON THE NUMBER OF FRACTURES (EXCEPT THOSE DUE DIRECTLY TO DRILLING OPERATIONS) AND THE AMOUNT OF SOFTENING OR ALTERATION IN THE ROCK MASS AS OBSERVED IN THE ROCK CORES FROM A DRILL HOLE. INSTEAD OF COUNTING THE FRACTURES, AN INDIRECT MEASURE IS OBTAINED BY SUMMING THE TOTAL LENGTH OF CORE RECOVERED BY COUNTING ONLY THOSE PIECES OF HARD AND SOUND CORE WHICH ARE 4 INCHES OR GREATER IN LENGTH. THE RATIO OF THIS MODIFIED CORE RECOVERY LENGTH TO THE TOTAL CORE RUN LENGTH IS KNOWN AS THE R.Q.D.

V– ALTERNATE SHADING INDICATES EXTENT OF SOIL OR ROCK LAYERS.

WL– WATER LEVEL READING AT COMPLETION OF BORING.



BORINGS AND DRIVE TESTS LOCATION PLAN
SCALE: 1" = 300'

AIP 3-50-0015-11

STATE OF VERMONT
MICHAEL L. CHURCHILL
REGISTERED PROFESSIONAL ENGINEER

REV.	DATE	DESCRIPTION
1	2/18/97	ADDED SB-1 / SB-1A

Job No. F4D212.00

File No. I:\F4D\F4D212\CAD\BORINGS

RUTLAND STATE AIRPORT
CLARENDON, VERMONT

BORING LOGS

URS Greiner, Inc.
3 MARCUS BOULEVARD
ALBANY, NEW YORK

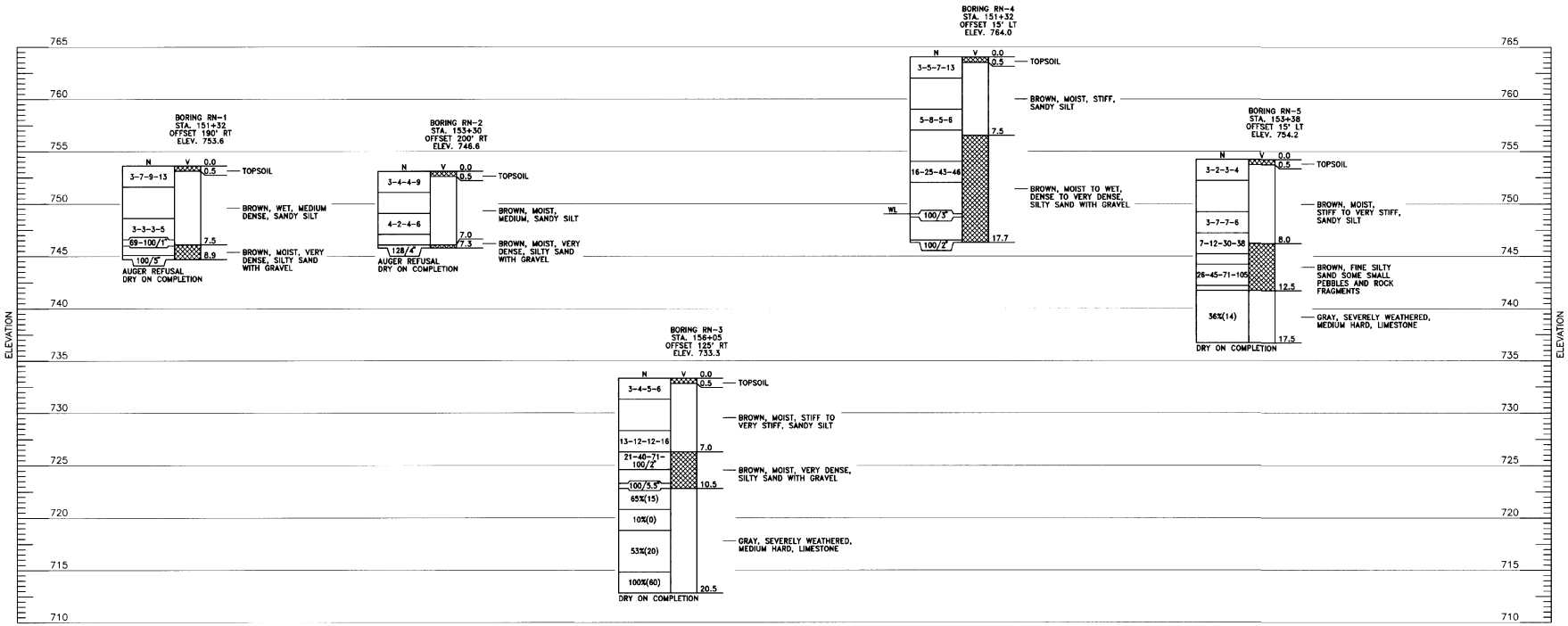
Designed by: C D'AMICO Date 05/97
Drawn by: M MCCALLA 05/97
Checked by: C D'AMICO 05/97
Approved by: M CHURCHILL 05/97

Scale: HOR. – AS SHOWN
VERT. – NONE

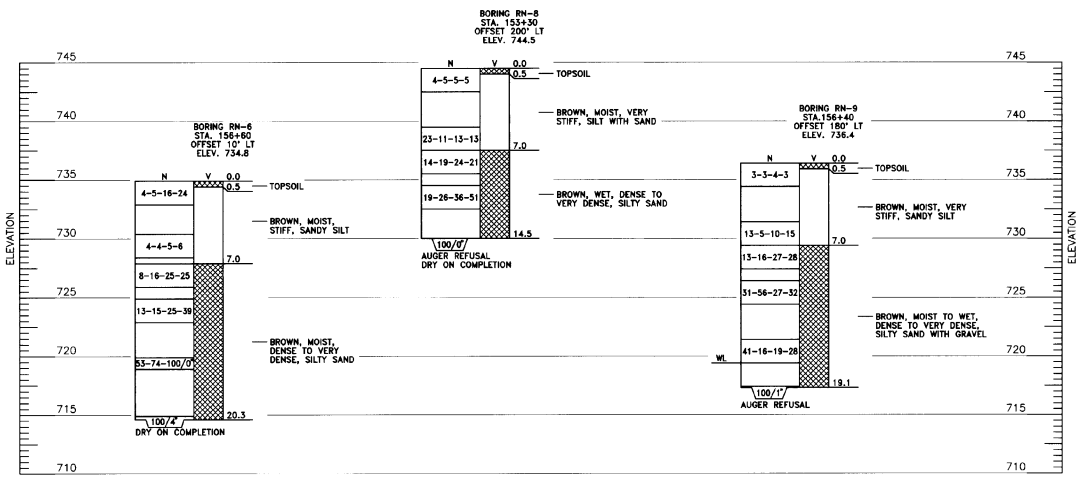
Date: 5/5/97

Sheet 42 Of 65

Sheet No
42



BORINGS AND DRIVE TESTS
SCALE: AS SHOWN



BORINGS AND DRIVE TESTS
SCALE: AS SHOWN

NOTE:

1.) BORINGS AND DRIVE TESTS WERE TAKEN IN NOVEMBER 1995, BY GREEN MOUNTAIN BORING.

2.) N- BLOWS PER 6 INCH INCREMENT OF PENETRATION OF SAMPLING SPOON OR PENETRATION IN INCHES FOR THE INDICATED BLOWS OF A 140 LB. HAMMER FALLING 30". WHERE ROCK IS ENCOUNTERED, PERCENT CORE RECOVERY IS SHOWN. R.Q.D. IS SHOWN IN PARENTHESES.

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V- ALTERNATE SHADING INDICATES EXTENT OF SOIL OR ROCK LAYERS.

WL- WATER LEVEL READING AT COMPLETION OF BORING.

AIP 3-50-0015-11

STATE OF VERMONT
MICHAEL L. CRUNKLETON
REGISTERED
PROFESSIONAL ENGINEER

REV.	DATE	DESCRIPTION

File No. 1:\f40212\00\805

Job No. F40212.00

RUTLAND STATE AIRPORT
CLARENDON, VERMONT

BORING LOGS

URS Greiner, Inc.
3 MARCUS BOULEVARD
ALBANY, NEW YORK

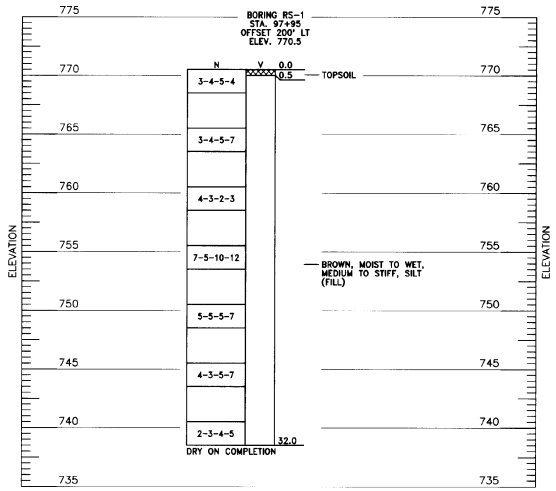
	Date
Designed by: C. D'AMICO	5/5/97
Drawn by: M. MCCALLA	5/5/97
Checked by: C. D'AMICO	5/5/97
Approved by: M. CHURCHILL	5/5/97

Scale: HOR. - AS SHOWN
VERT. - NONE

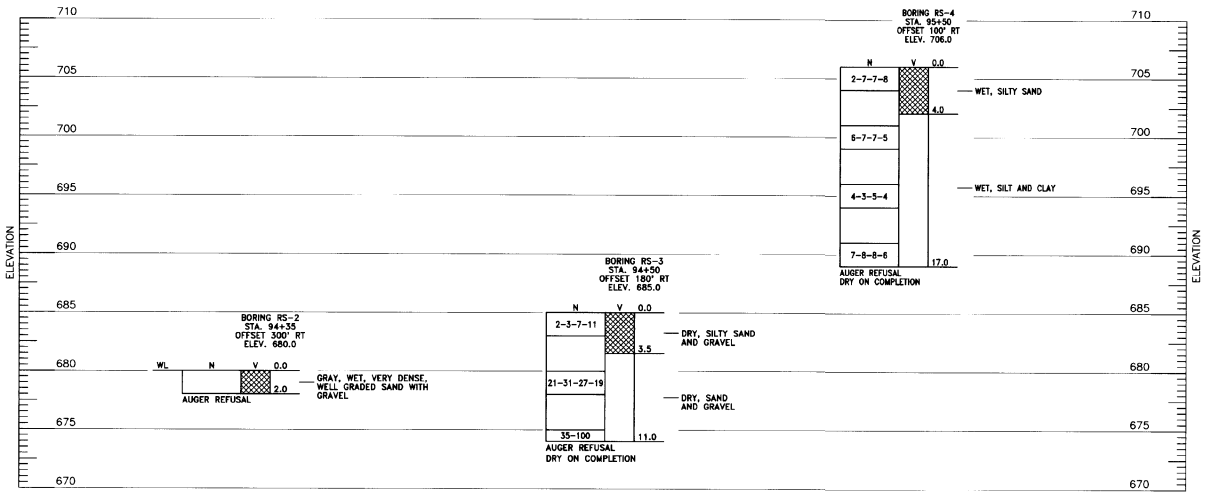
Date: 5/5/97

Sheet 43 Of 65

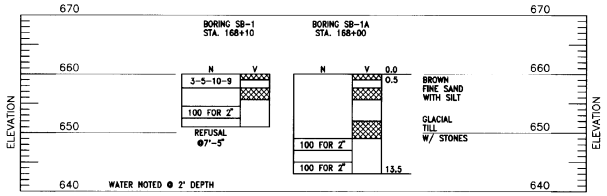
Sheet No
43



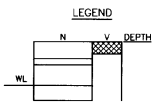
BORINGS AND DRIVE TESTS
SCALE: AS SHOWN



BORINGS AND DRIVE TESTS
SCALE: AS SHOWN



BORINGS AND DRIVE TESTS
SCALE: AS SHOWN



NOTE:

1.) BORINGS AND DRIVE TESTS WERE TAKEN IN NOVEMBER 1995, BY GREEN MOUNTAIN BORING.

2.) N–BLOWS PER 6 INCH INCREMENT OF PENETRATION OF SAMPLING SPOON OR PENETRATION IN INCHES FOR THE INDICATED BLOWS OF A 140 LB. HAMMER FALLING 30". WHERE ROCK IS ENCOUNTERED, PERCENT CORE RECOVERY IS SHOWN. R.Q.D. IS SHOWN IN PARENTHESES.

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V–ALTERNATE SHADING INDICATES EXTENT OF SOIL OR ROCK LAYERS.

WL–WATER LEVEL READING AT COMPLETION OF BORING.

STATE OF VERMONT
SCOTT L. CHURCHILL
REGISTERED PROFESSIONAL ENGINEER

REV.	DATE	DESCRIPTION
1	12/18/97	ADDED

Job No. F401212.00
File No. I:\F401212\DWG\BOR

RUTLAND STATE AIRPORT
CLARENDON, VERMONT

BORING LOGS

URS Greiner, Inc.
3 MARCUS BOULEVARD
ALBANY, NEW YORK

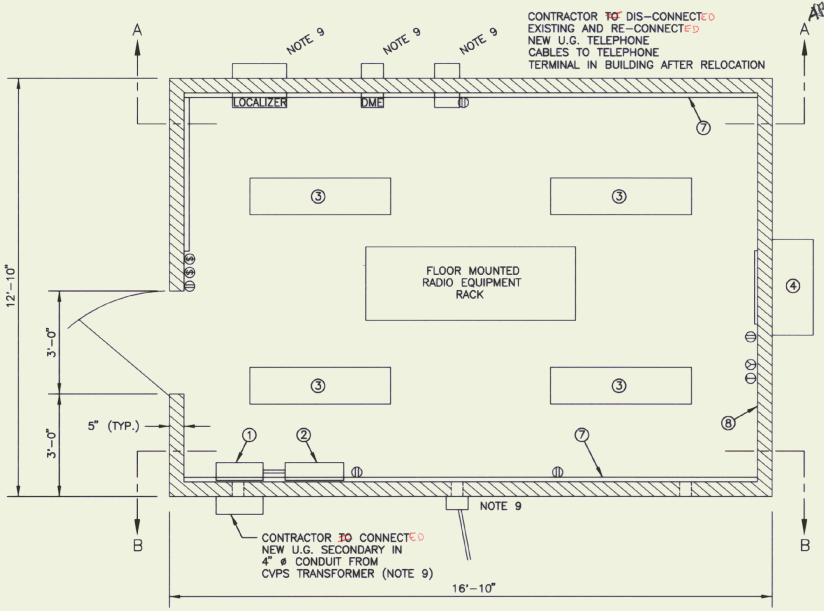
Designed by: G D'AMICO Date 12/03/96
Drawn by: M MCCALLA 12/03/96
Checked by: G D'AMICO 12/3/96
Approved by: M CHURCHILL 12/3/96

Scale: HOR. – AS SHOWN VERT. – NONE

Date: 5/5/97

Sheet 44 Of 65

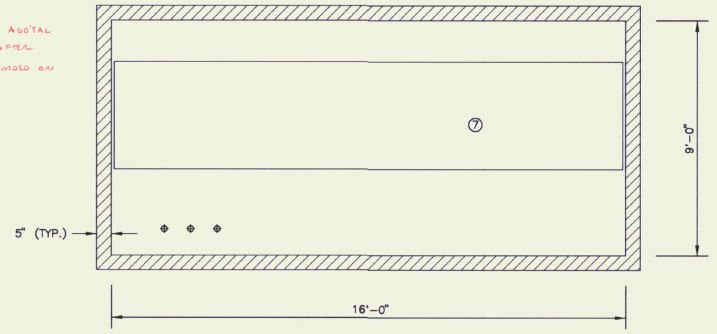
Sheet No
44



EXISTING LOCALIZER BLDG. EQUIPMENT LAYOUT

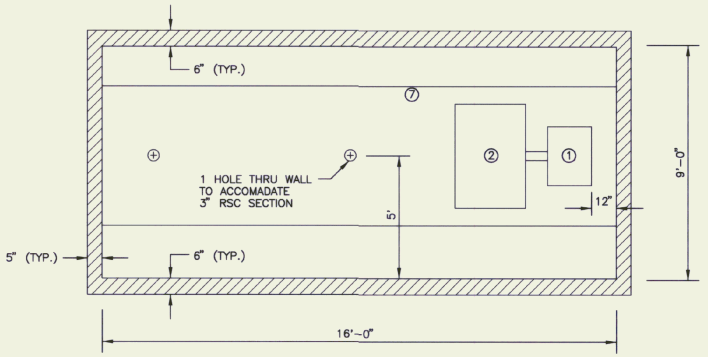
SCALE: NONE

NOTE -
FAA-F&E CONTRACTOR MADE ADDITAL
RENOVATIONS INSIDE BUILDING AFTER
RELOCATION - CHANGES NOT RECORDED ON
THESE DRAWINGS.



SECTION "A-A"

SCALE: NONE

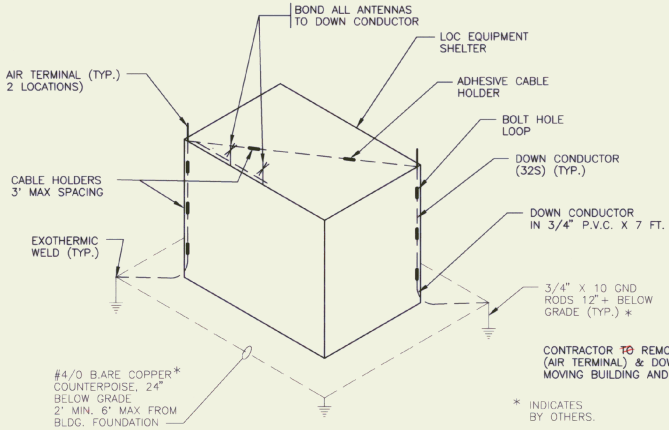


SECTION "B-B"

SCALE: NONE

NOTES:

1. NEMA 1 ENCLOSURE, FUSED 2 POLE, SOLID NEUTRAL, DEAD FRONT, 400 AMP DISCONNECT SWITCH.
2. NEMA 1 ENCLOSURE, 1 PHASE, 3-WIRE, S/N, 120/240 VOLT, ~~400~~ 200 AMP MAIN BREAKER WITH NEUTRAL. ALL BOLT ON BREAKERS. KD
3. FLUORESCENT LIGHT FIXTURE.
4. AIR CONDITIONER - WALL MOUNTED.
5. EXTERIOR DOOR.
6. HEAVY DUTY, WEATHER PROOF, EXTERIOR WALL LIGHT MOUNTED ABOVE DOOR.
7. 3/4 IN. PLYWOOD BOLTED TO WALL.
8. PAINTED DRYWALL INTERIOR.
9. EXISTING SHELTER IS A PRE-CAST CONCRETE UNIT COMPLETE WITH WALLS, FLOOR & CEILING EXISTING BUILDING ON A PEASTONE BASE. CONTRACTOR TO DISCONNECT ALL CABLES & CONDUIT AT EXISTING LOCATION BEFORE RELOCATING SHELTER.
10. ALL LOOSE MATERIALS ~~TO BE~~ WERE PACKAGED AND MOVED SEPARATELY. SECURE ALL EQUIPMENT PRIOR TO RELOCATING SHELTER. REMOVED ROOF MOUNTED ANTENNAS.
11. BUILDING/SHELTER ~~TO BE~~ LIFTED AND TRANSPORTED TO NEW SITE AS A COMPLETE UNIT.
12. BUILDING/SHELTER ~~TO BE~~ POSITIONED AT NEW LOCATION AS SHOWN ON SITE PLAN. ~~OR AS DIRECTED BY THE ENGINEER~~. CONNECT NEW CABLES AND CONDUITS AT NEW SITE. NEW CABLES AND CONDUITS BY OTHERS. COORDINATED TELEPHONE AND POWER CABLES WITH LOCAL PHONE AND UTILITY COMPANIES. COORDINATED FAA CABLE CONNECTIONS WITH FAA/F&E CONTACT JAMES CAULFIELD, @ (617) 238-7462.
13. CONTRACTOR TO REMOVE ELECTRICAL CABLING, & PEASTONE FOUNDATION FROM EXISTING SITE. CONTRACTOR TO REMOVED EXISTING FOUNDATION FOR LOCALIZER & DME. AREA ~~TO BE~~ REGRADED, TOPSOILED AND SEEDED. COST OF THIS WORK ~~TO BE~~ INCLUDED IN COST OF ITEM 529.20 MOD 1.



CONTRACTOR TO REMOVE/SALVAGED LIGHTING ROD (AIR TERMINAL) & DOWN CONDUCTORS PRIOR TO MOVING BUILDING AND RE-INSTALLING IN NEW LOCATION.

* INDICATES BY OTHERS.

LIGHTNING PROTECTION DETAILS

SCALE: NONE

LEGEND

- (S) LIGHT SWITCH, 4'-6" ABOVE FLOOR
- DUPLEX RECEPTICLE, 4' ABOVE FLOOR
- 240 VOLT RECEPTICLE, 4' ABOVE FLOOR
- 240 VOLT LINE THERMOSTAT

AIP 3-50-0015-11

STATE OF VERMONT
PAUL L. GRONDIN
No. 5994
REGISTERED
PROFESSIONAL ENGINEER

REV.	DATE	DESCRIPTION
1	11/97	AS BUILT

Job No. F401212.00 | File No. F:\F401212\VCB

RUTLAND STATE AIRPORT
CLARENDON, VERMONT

LOCALIZER/DME RUNWAY 19
POWER AND CONTROL BUILDING

URS Greiner, Inc.
3 MARCUS BOULEVARD
ALBANY, NEW YORK

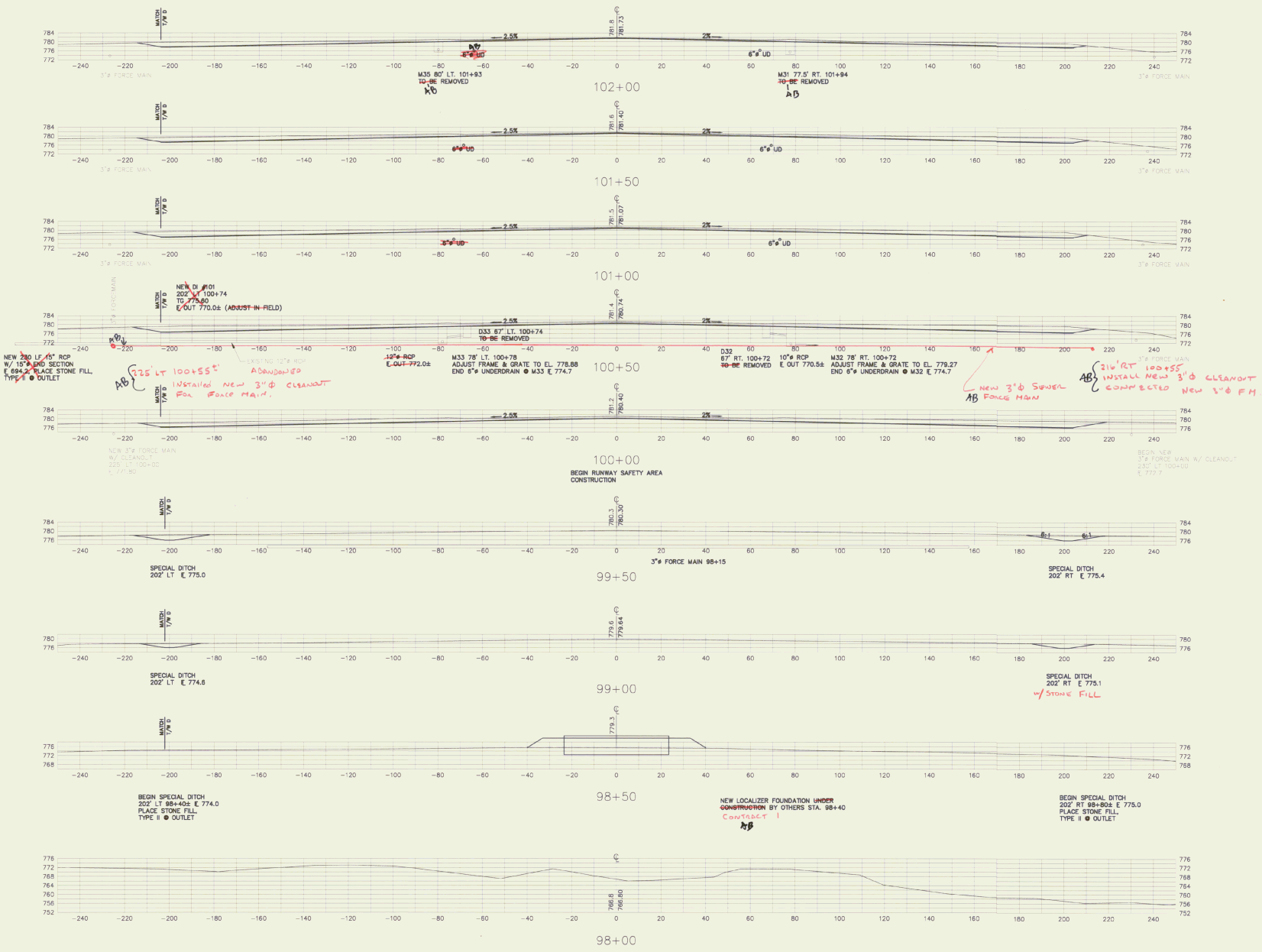
Designed by: G D'AMICO	Date 2/97
Drawn by: M MCCALLA	3/97
Checked by: G D'AMICO	5/5/97
Approved by: M CHURCHILL	5/5/97

Scale: HOR. - 1" = 40'
VERT. - 1" = 4'

Date: 5/5/97

Sheet 45 Of 85

Sheet No
45



AIP 3-50-0015-11

STATE OF VERMONT
MICHAEL C. O'NEIL
No. 5951
REGISTERED PROFESSIONAL ENGINEER

REV.	DATE	DESCRIPTION
1	6/98	AS BUILT

File No. LV-9012(7),1212-05

Job No. F-9012(7)00

RUTLAND STATE AIRPORT
CLARENDON, VERMONT

RUNWAY CROSS SECTIONS

URS Greiner, Inc.
3 MARCUS BOULEVARD
ALBANY, NEW YORK

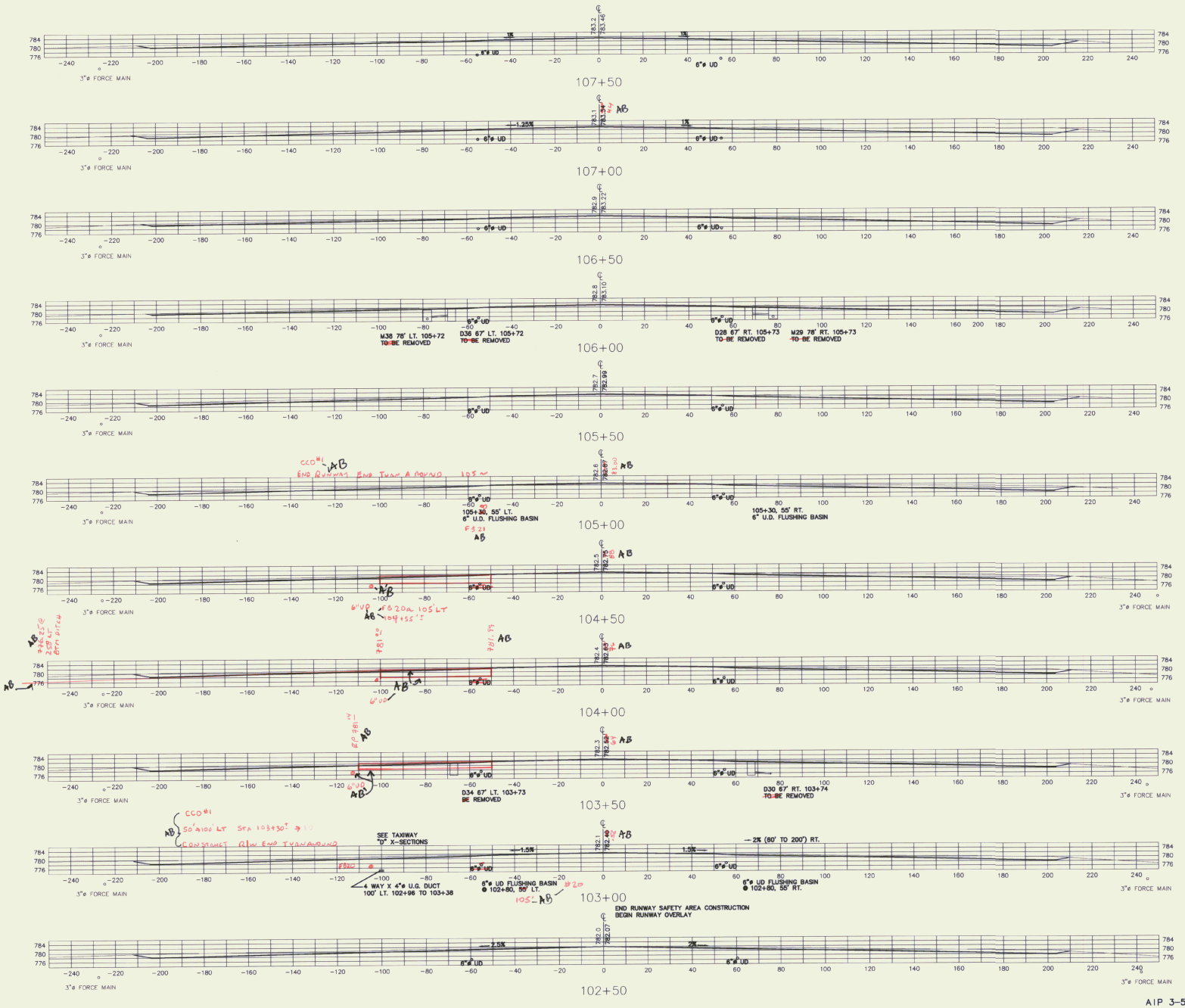
	Date
Designed by: D'AMICO	2/97
Drawn by: M MCCALL	3/97
Checked by: D'AMICO	5/5/97
Approved by: M CHURCHILL	5/5/97

Scale: HOR. - 1" = 20'
VERT. - 1" = 20'

Date: 5/5/97

Sheet 46 Of 65

Sheet No
46



AIP 3-50-0015-11

RUTLAND STATE AIRPORT
CLARENDON, VERMONT

RUNWAY CROSS SECTIONS

URS Greiner, Inc.
3 MARCUS BOULEVARD
ALBANY, NEW YORK

REV.	DATE	DESCRIPTION
	AB 10/27/98	AS BUILT

Job No. 14012.09 File No. V:\14012\01\313-05

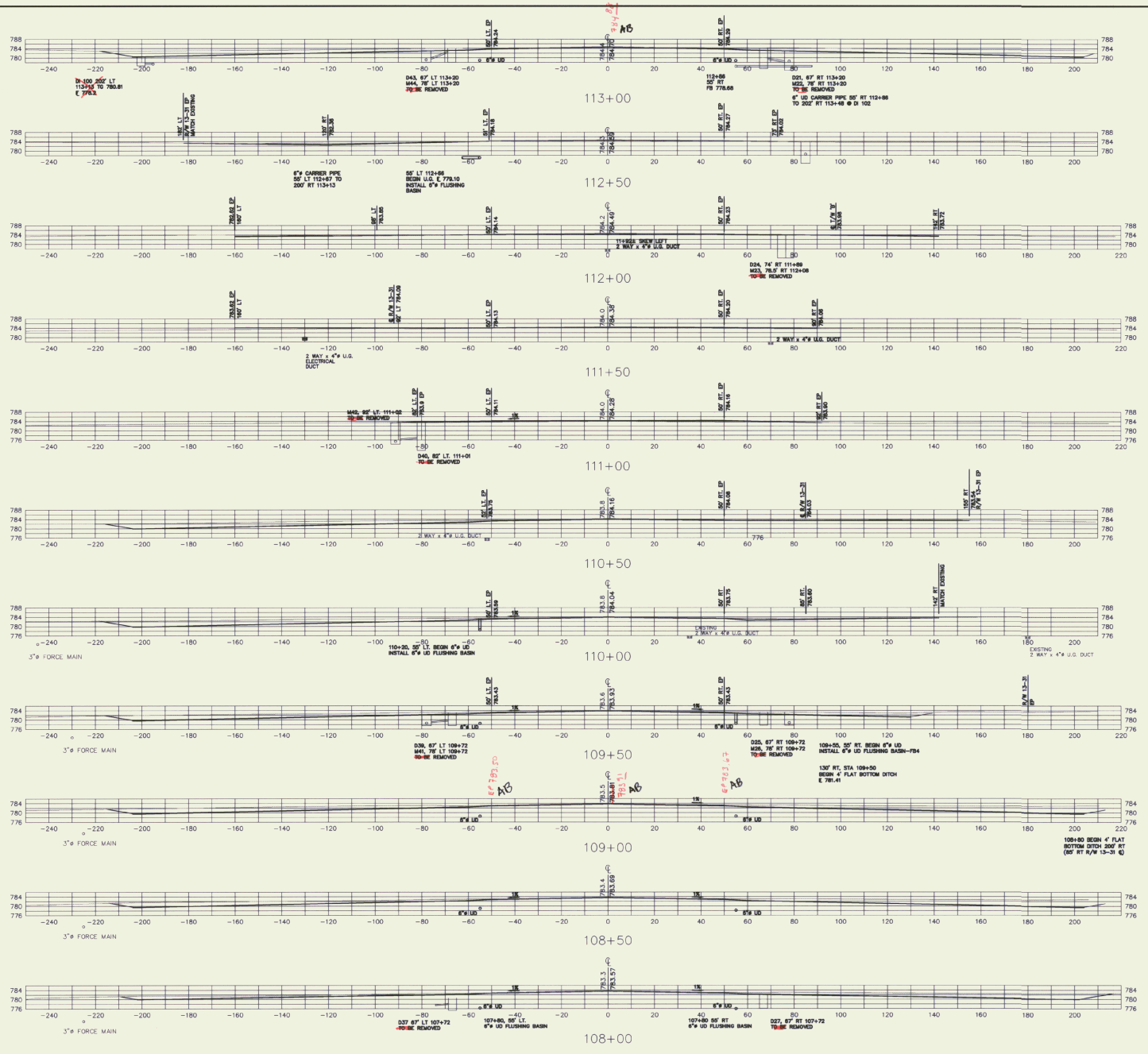
Designed by: G D'AMICO Date 2/97
Drawn by: N MCCALLA 3/97
Checked by: G D'AMICO 5/5/97
Approved by: N CHURCHILL 5/5/97

Scale: HOR. - 1" = 20'
VERT. - 1" = 20'

Date: 5/5/97

Sheet 47 Of 65

Sheet No
47



STATE OF VERMONT
CHARLES CHURCHILL
No. 5951
REGISTERED PROFESSIONAL ENGINEER

REV.	DATE	DESCRIPTION
1	11/13/97	As Built

Job No. F401212.00 File No. L:\401212\1212-RS

RUTLAND STATE AIRPORT
CLARENDON, VERMONT

RUNWAY CROSS SECTIONS

URS Greiner, Inc.
3 MARCUS BOULEVARD
ALBANY, NEW YORK

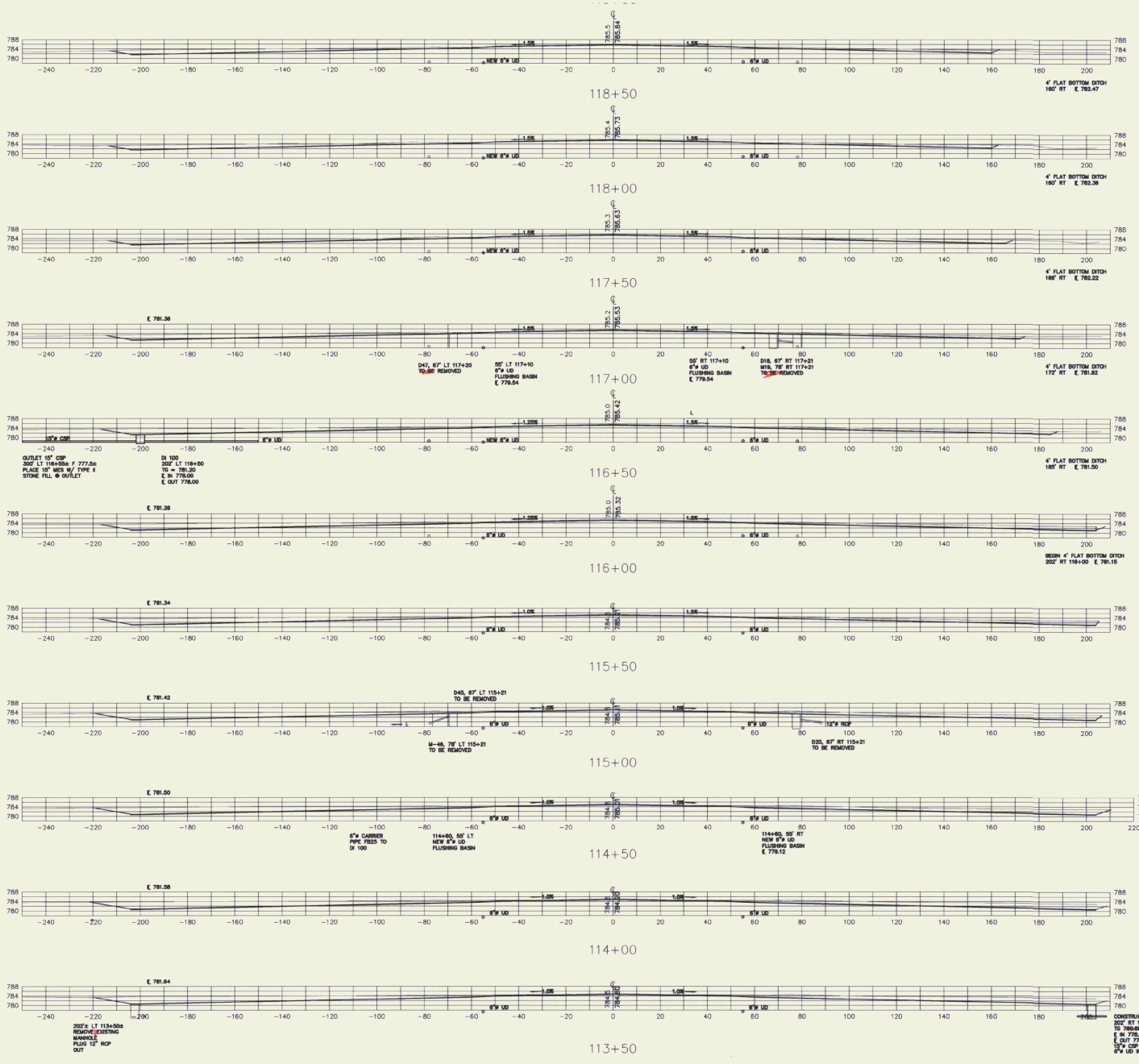
	Date
Designed by: G D'AMICO	2/97
Drawn by: M MCCALLA	3/97
Checked by: G D'AMICO	5/5/97
Approved by: M CHURCHILL	5/5/97

Scale: HOR. – 1" = 20'
VERT. – 1" = 20'

Date: 5/5/97

Sheet 48 Of 65

Sheet No
48



AIP 3-50-0015-11

STATE OF VERMONT
DARRELL L. CRUMB
1957
REGISTERED PROFESSIONAL ENGINEER

REV.	DATE	DESCRIPTION
1	12/17/96	AS BUILT

Job No. 76012200

File No. LV4012\1212-R5

RUTLAND STATE AIRPORT
CLARENDON, VERMONT

RUNWAY CROSS SECTIONS

URS Greiner, Inc.
3 MARCUS BOULEVARD
ALBANY, NEW YORK

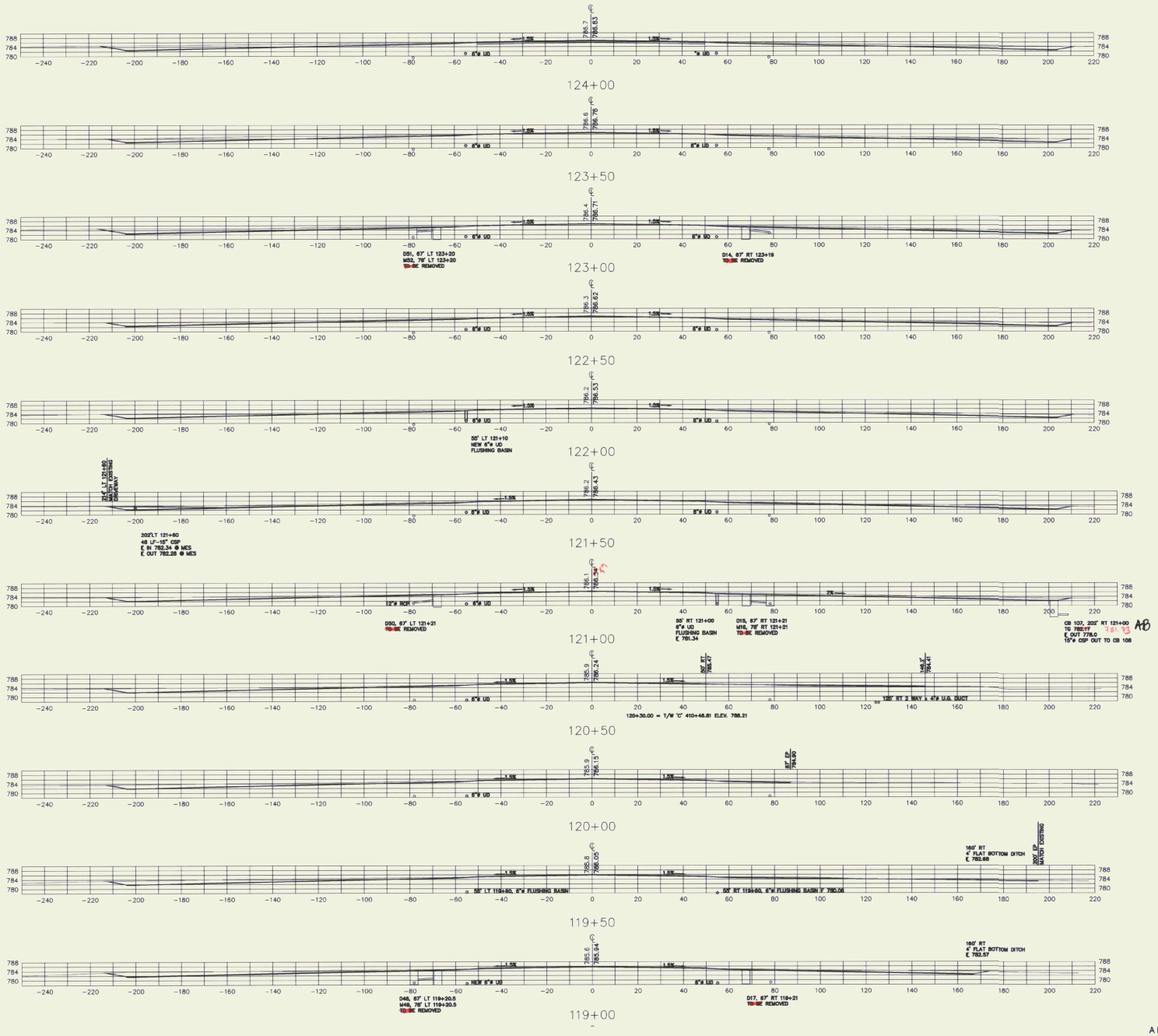
Designed by: G D'AMICO	Drawn by: M MCCALLA	Checked by: G D'AMICO
Date 2/97	3/97	5/5/97
Approved by: M CHURCHILL 5/5/97		

Scale: HOR. – 1" = 20'
VERT. – 1" = 20'

Date: 5/5/97

Sheet 49 Of 65

Sheet No
49



AIP 3-50-0015-11

STATE OF VERMONT
S. L. CRUMBLL
No. 5951
REGISTERED PROFESSIONAL ENGINEER

REV.	DATE	DESCRIPTION
1	12/1/98	AB As Built

Job No. F6032100

File No. LV-F6032(12)+-85

RUTLAND STATE AIRPORT
CLARENDON, VERMONT

RUNWAY CROSS SECTIONS

URS Greiner, Inc.
3 MARCUS BOULEVARD
ALBANY, NEW YORK

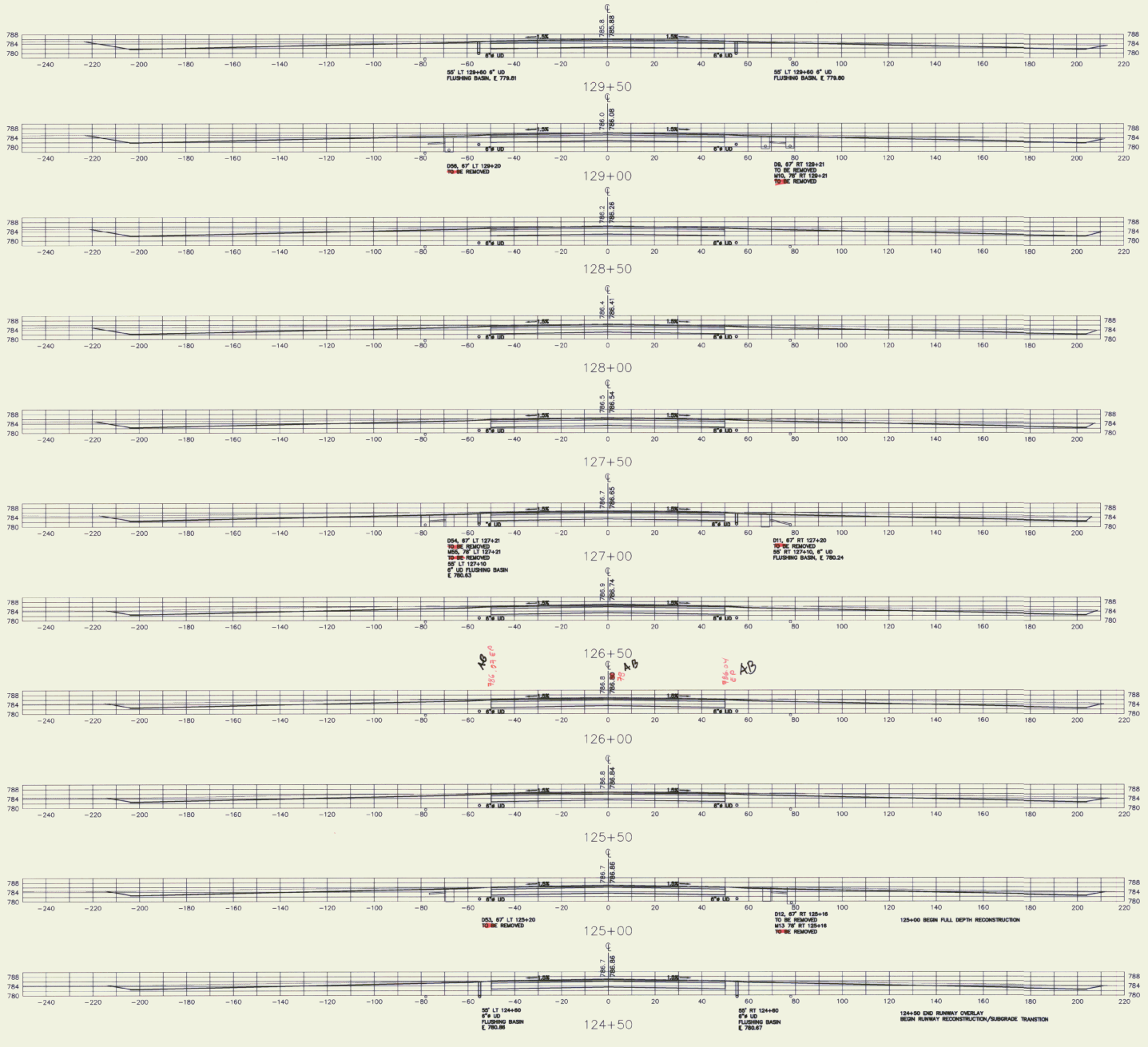
		Date
Designed by:	G D'AMICO	2/97
Drawn by:	M MCCALLA	3/97
Checked by:	G D'AMICO	5/5/97
Approved by:	M CHURCHILL	5/5/97

Scale: HOR. - 1" = 20'
VERT. - 1" = 20'

Date: 5/5/97

Sheet 50 Of 65

Sheet No
50



AIP 3-50-0015-11

STATE OF VERMONT
RUSSELL L. CHURCHILL
No. 5951
REGISTERED PROFESSIONAL ENGINEER

REV.	DATE	DESCRIPTION
1	5/5/97	AS Cust

Job No. | File No.

RUTLAND STATE AIRPORT
CLARENDON, VERMONT

RUNWAY CROSS SECTIONS

URS Greiner, Inc.
3 MARCUS BOULEVARD
ALBANY, NEW YORK

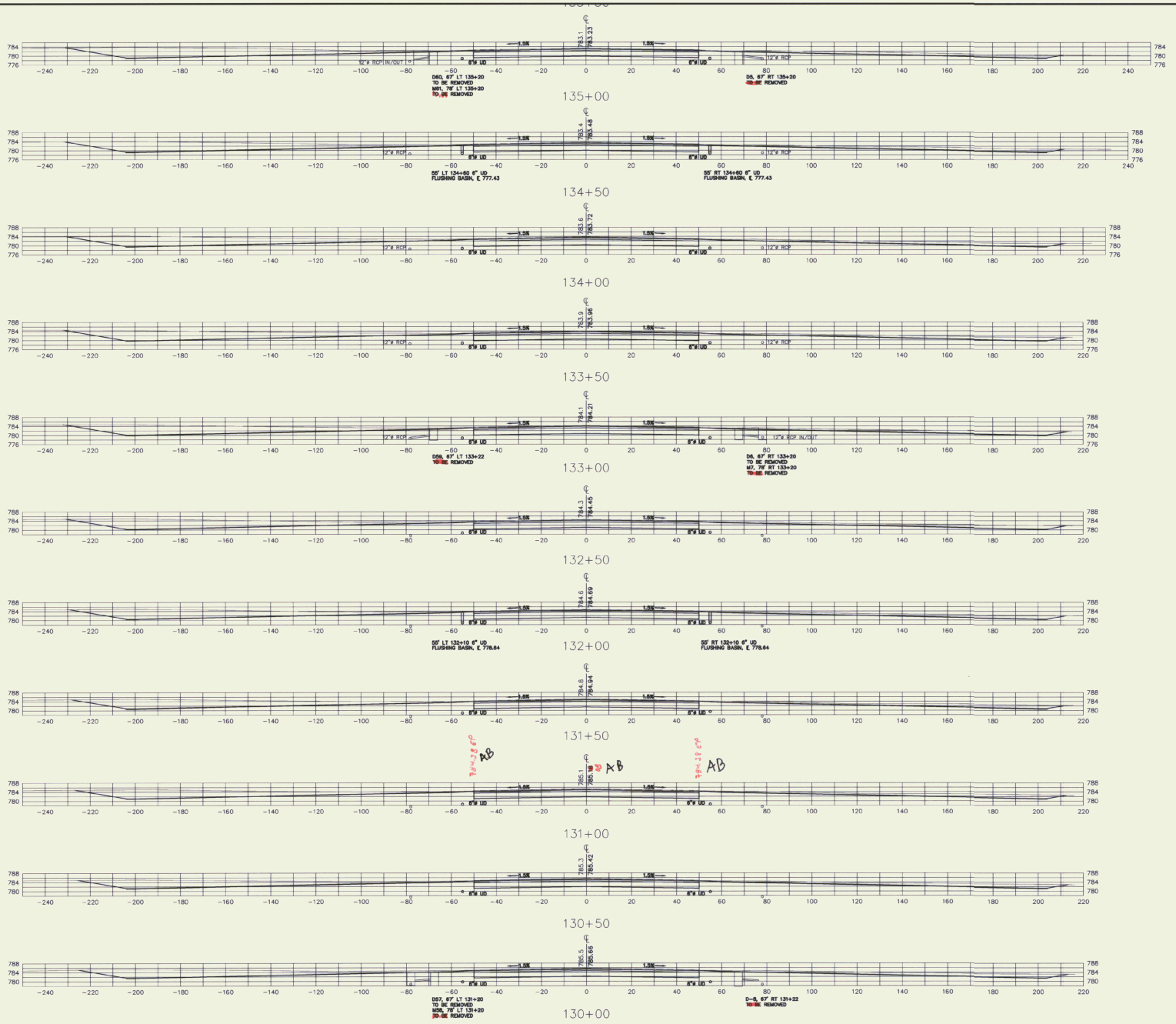
		Date
Designed by:	G D'AMICO	2/97
Drawn by:	M MCCALLA	3/97
Checked by:	G D'AMICO	5/5/97
Approved by:	M CHURCHILL	5/5/97

Scale: HOR. - 1" = 20'
VERT. - 1" = 20'

Date: 5/5/97

Sheet 51 Of 65

Sheet No
51



AIP 3-50-0015-11

STATE OF VERMONT
MICHAEL L. CHURCHILL
No. 10,504
REGISTERED PROFESSIONAL ENGINEER

REV.	DATE	DESCRIPTION
1	12/31/97	As Built

Job No. F401312.20

File No. I:\F401215\1212-05

RUTLAND STATE AIRPORT
CLARENDON, VERMONT

RUNWAY CROSS SECTIONS

URS Greiner, Inc.
3 MARCUS BOULEVARD
ALBANY, NEW YORK

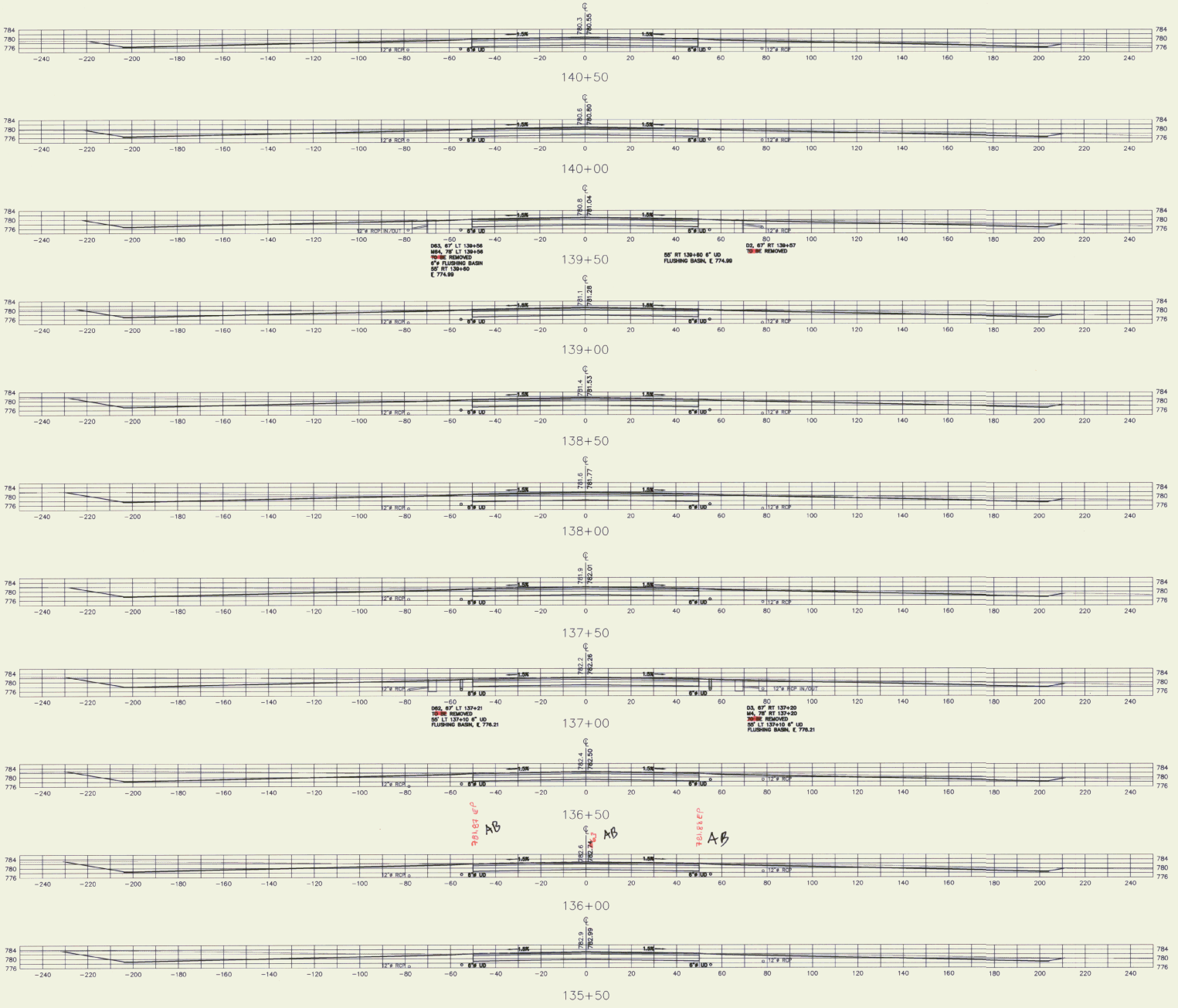
Designed by: G D'AMICO	Drawn by: M MCCALLA	Checked by: G D'AMICO
Date 2/97	3/97	5/5/97
Approved by: M CHURCHILL		
5/5/97		

Scale: HOR. – 1" = 20
VERT. – 1" = 20

Date: 5/5/97

Sheet 52 Of 57

Sheet No
52



AIP 3-50-0015-11

STATE OF VERMONT
MICHAEL L. CHIRICO
No. 7051
REGISTERED PROFESSIONAL ENGINEER

REV.	DATE	DESCRIPTION
1	12/19/98	AS BUILT

Job No. 76012100 | File No. SYM0125\1212-R5

RUTLAND STATE AIRPORT
CLARENDON, VERMONT

RUNWAY CROSS SECTIONS

URS Greiner, Inc.
3 MARCUS BOULEVARD
ALBANY, NEW YORK

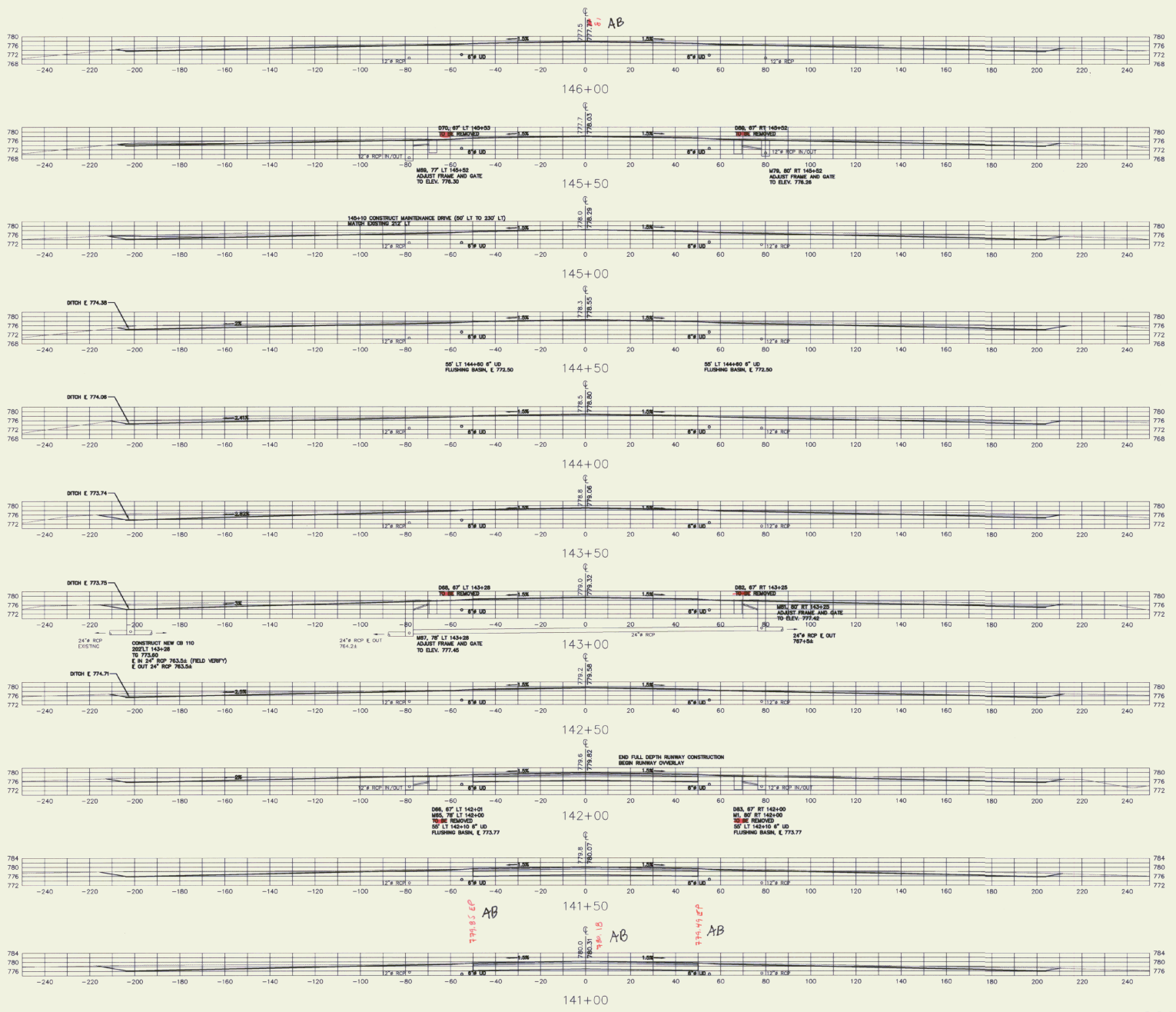
		Date
Designed by:	G D'AMICO	2/97
Drawn by:	M MCCALLA	3/97
Checked by:	G D'AMICO	5/5/97
Approved by:	M CHURCHILL	5/5/97

Scale: HOR. – 1" = 20
VERT. – 1" = 20

Date: 5/5/97

Sheet 53 Of 57

Sheet No
53



AIP 3-50-0015-11

STATE OF VERMONT
STEVEN L. CROSBY
No. 9951
REGISTERED PROFESSIONAL ENGINEER

REV.	DATE	DESCRIPTION
1	12/1/98	As Built

Job No. 96121.00 | File No. I:\96121\1212-45

RUTLAND STATE AIRPORT
CLARENDON, VERMONT

RUNWAY CROSS SECTIONS

URS Greiner, Inc.
3 MARCUS BOULEVARD
ALBANY, NEW YORK

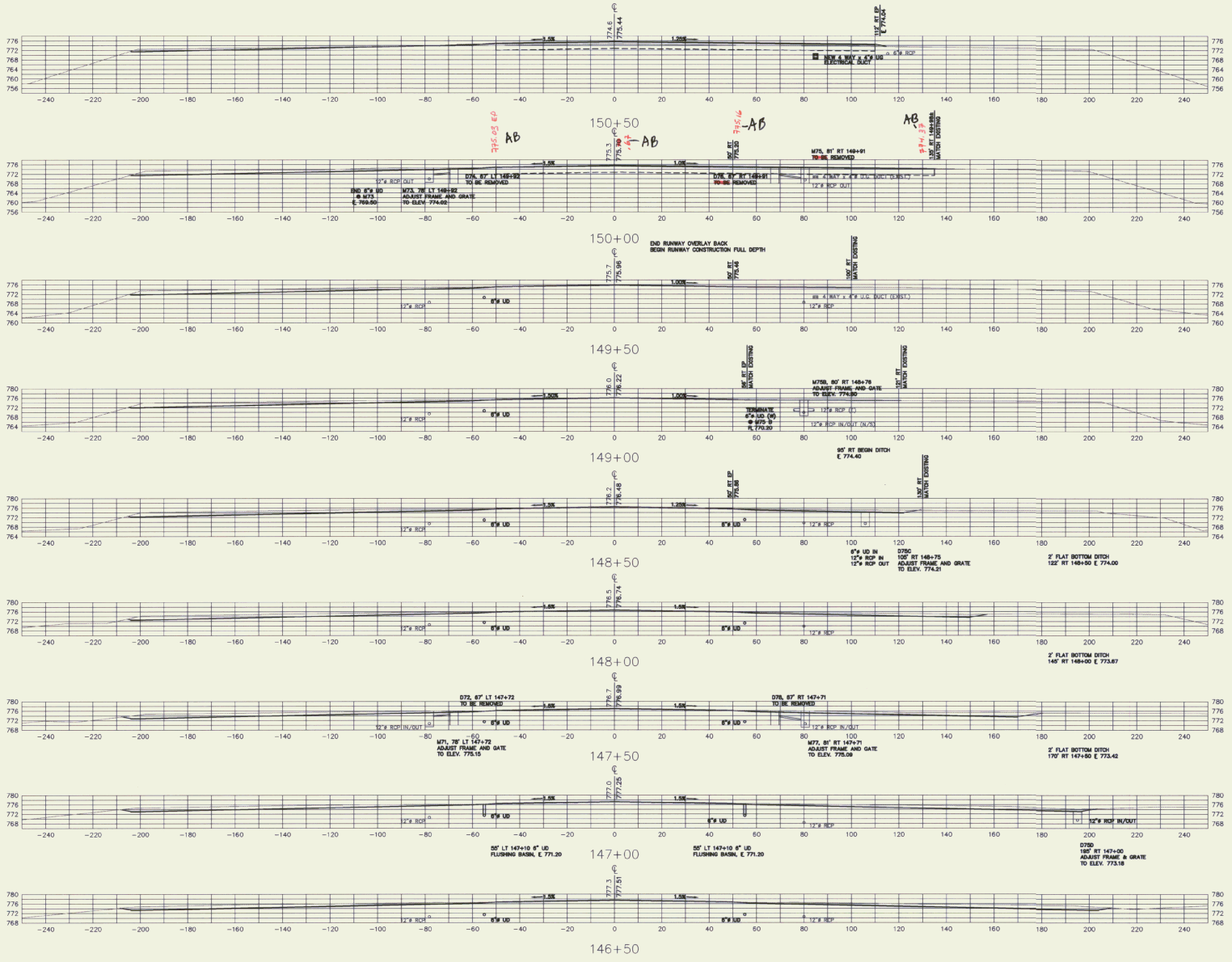
	Date
Designed by: G D'AMICO	2/97
Drawn by: M MCCALLA	3/97
Checked by: G D'AMICO	5/5/97
Approved by: M CHURCHILL	5/5/97

Scale: HOR. – 1" = 20
VERT. – 1" = 20

Date: 5/5/97

Sheet 54 Of 57

Sheet No
54



AIP 3-50-0015-11

STATE OF VERMONT
MICHAEL L. CROWELL
No. 5951
REGISTERED PROFESSIONAL ENGINEER

REV.	DATE	DESCRIPTION
1	11/19/96	AS SHOWN

Job No. 740121.20 | File No. LV740121\1212-45

RUTLAND STATE AIRPORT
CLARENDON, VERMONT

RUNWAY CROSS SECTIONS

URS Greiner, Inc.
3 MARCUS BOULEVARD
ALBANY, NEW YORK

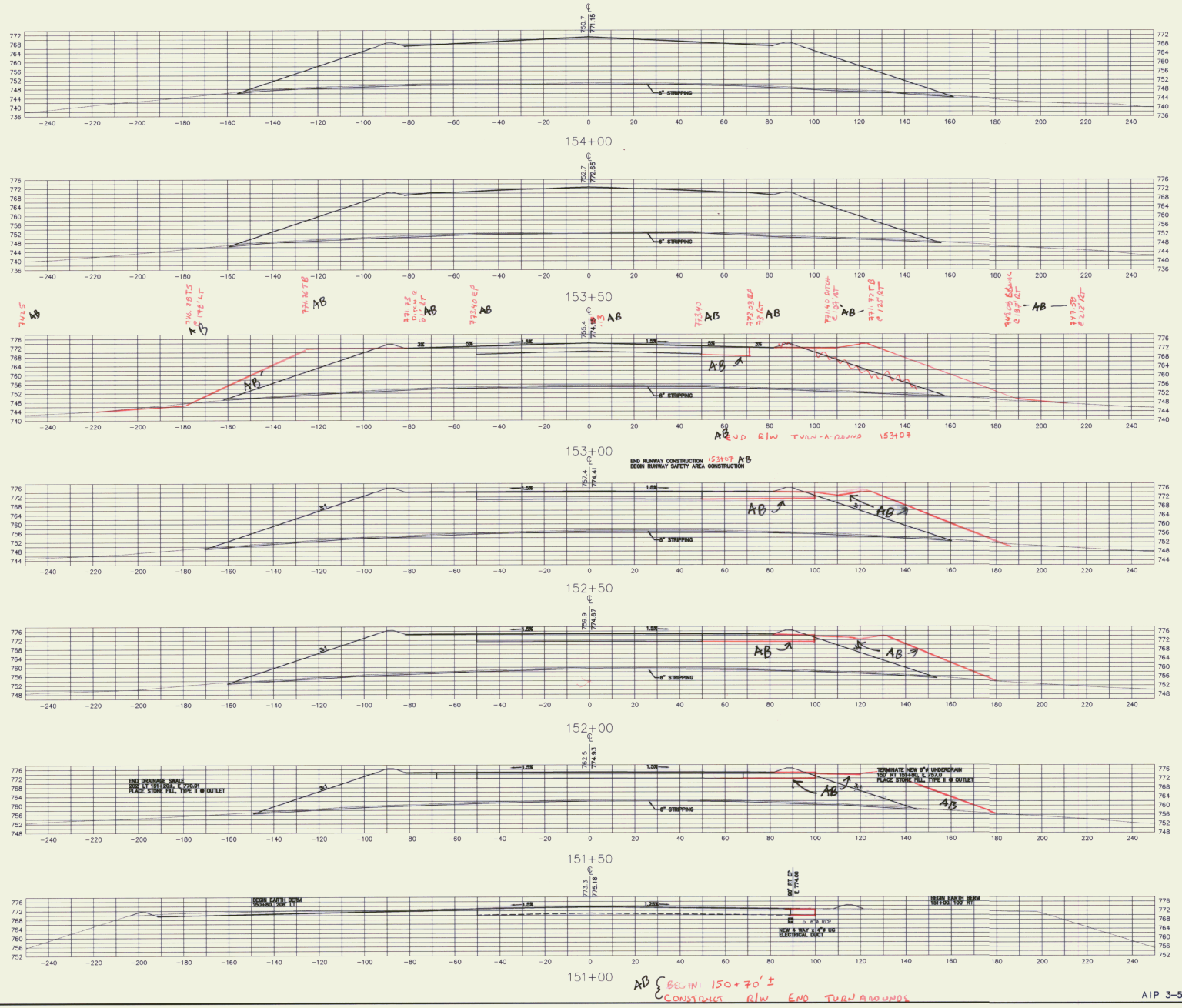
Designed by: G D'AMICO — Date 2/97
Drawn by: M MCCALLA — 3/97
Checked by: G D'AMICO — 5/5/97
Approved by: M CHURCHILL — 5/5/97

Scale: HOR. - 1" = 20
VERT. - 1" = 20

Date: 5/5/97

Sheet 55 Of 57

Sheet No
55



AIP 3-50-0015-11

STATE OF VERMONT
SCOTT L. CAMPBELL
No. 5951
REGISTERED PROFESSIONAL ENGINEER

REV.	DATE	DESCRIPTION
1	12/4/97	AS BUILT

Job No. F401212.00 | File No. I:\F401212\1212-05

RUTLAND STATE AIRPORT
CLARENDON, VERMONT

RUNWAY CROSS SECTIONS

URS Greiner, Inc.
3 MARCUS BOULEVARD
ALBANY, NEW YORK

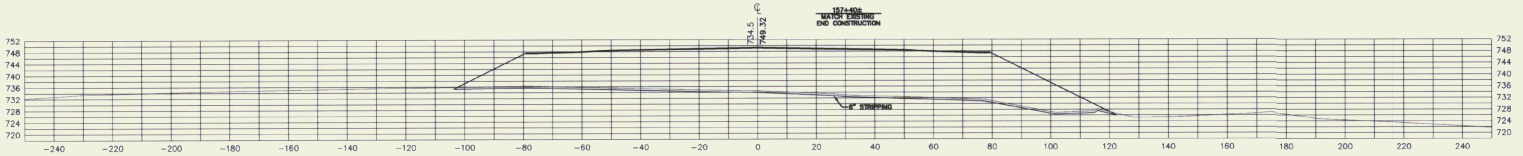
Designed by: G D'AMICO	Date 2/97
Drawn by: M MCCALLA	3/97
Checked by: G D'AMICO	5/5/97
Approved by: M CAMPBELL	5/5/97

Scale: HOR. - 1" = 20
VERT. - 1" = 20

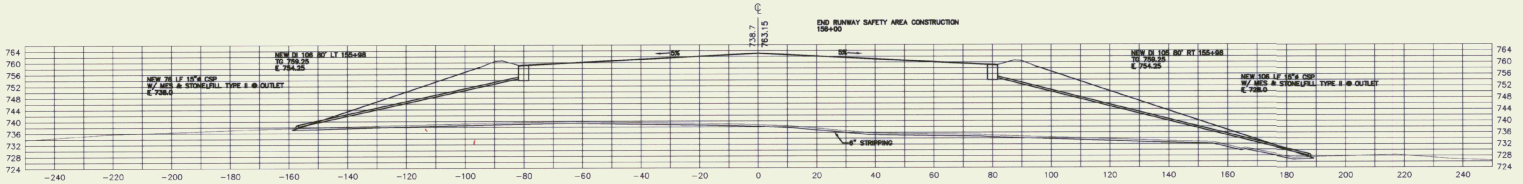
Date: 5/5/97

Sheet 56 Of 57

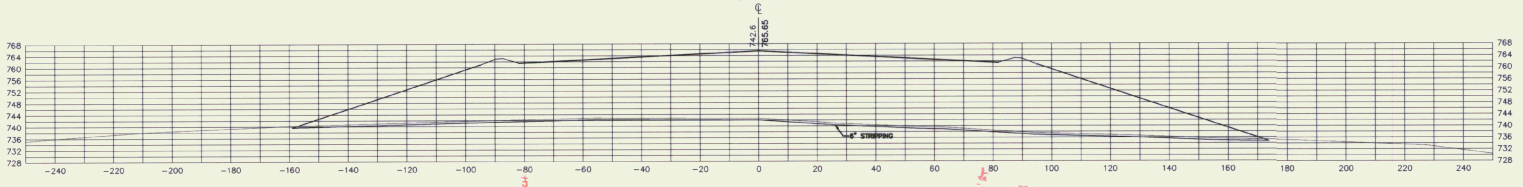
Sheet No
56



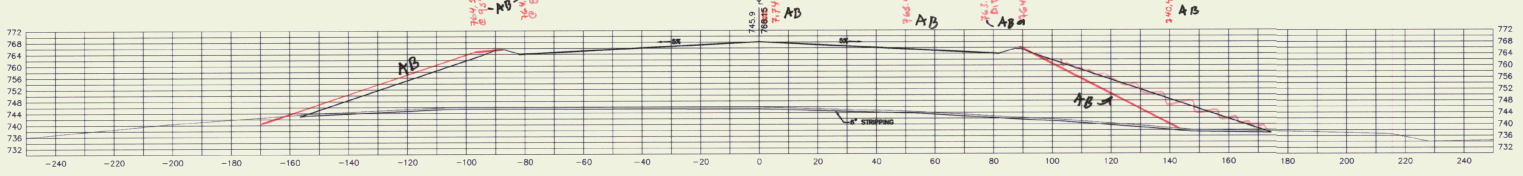
156+50



156+00



155+50



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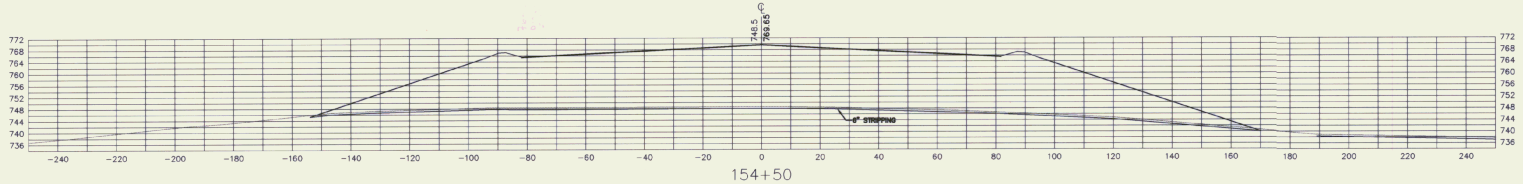


154+50

AIP 3-50-0015-11

STATE OF VERMONT
CARL L. CHURCHILL
No. 5951
REGISTERED PROFESSIONAL ENGINEER

REV.	DATE	DESCRIPTION
1	12/1/98	As Built

Job No. F601212.00 | File No. R:\F601212\1212-05

RUTLAND STATE AIRPORT
CLARENDON, VERMONT

RUNWAY CROSS SECTIONS

URS Greiner, Inc.
3 MARCUS BOULEVARD
ALBANY, NEW YORK

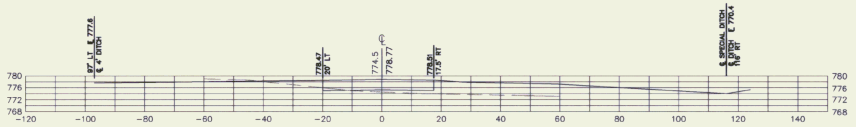
Designed by: G D'AMICO — Date: 2/97
Drawn by: M MCCALL A — 3/97
Checked by: G D'AMICO — 5/5/97
Approved by: M CHURCHILL — 5/5/97

Scale: HOR. - 1" = 20
VERT. - 1" = 20

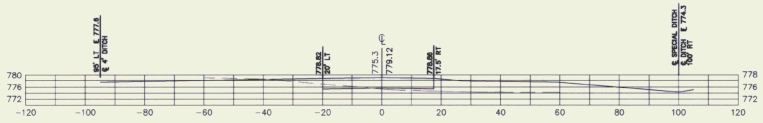
Date: 5/5/97

Sheet 57 Of 57

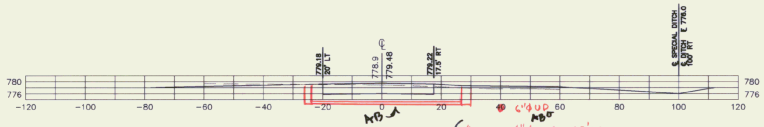
Sheet No
57



503+50

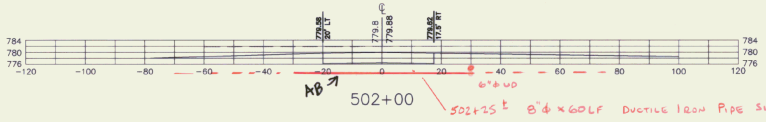


503+00



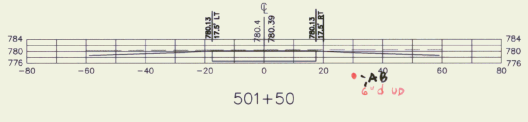
502+50

AB { 4 WAY x 4"ø UG x 45' LF
ELEC. DUCT W/HANDHOLE EACH END
STA 502+42



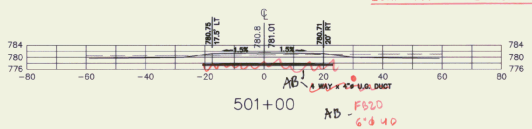
502+00

502+25 ± 8"ø x 60 LF DUCTILE IRON PIPE SLOPED } AB
FOR 3"ø PVC SEWER PIPE.



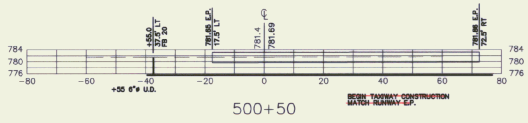
501+50

AB
BEGIN T/W CONSTRUCTION 501+00



501+00

AD - FB20
6"ø UD



500+50

AB { SEE R/W X-SECTIONS
103+00 → 105+00
50' - 100' LT
R/W END THRESHOLDS
CO #1

AIP 3-50-0015-11

STATE OF VERMONT
RACHEL L. GRATTON
No. 9951
REGISTERED PROFESSIONAL ENGINEER

REV.	DATE	DESCRIPTION
1	12/19/97	AS BUILT

Job No. 76127.00 | File No. LV76127.1212-RSB

RUTLAND STATE AIRPORT
CLARENDON, VERMONT

TAXIWAY CROSS SECTIONS

URS Greiner, Inc.
3 MARCUS BOULEVARD
ALBANY, NEW YORK

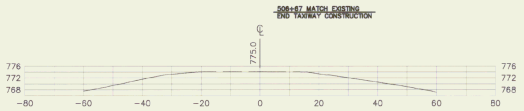
Designed by: G D'AMICO	Date 2/97
Drawn by: W MCCALLA	3/97
Checked by: G D'AMICO	5/5/97
Approved by: W CHURCHILL	5/5/97

Scale: HOR. - 1" = 20
VERT. - 1" = 20

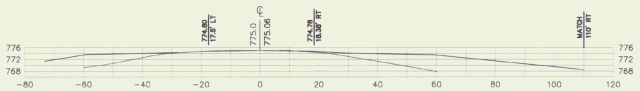
Date: 5/5/97

Sheet 58 Of 59

Sheet No
58



506+67



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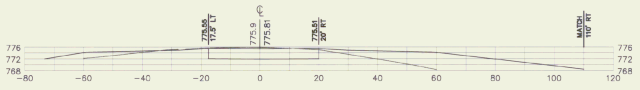
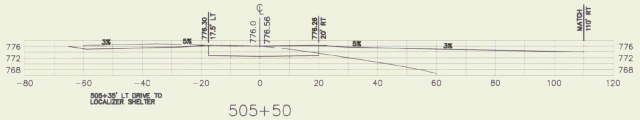


506+00



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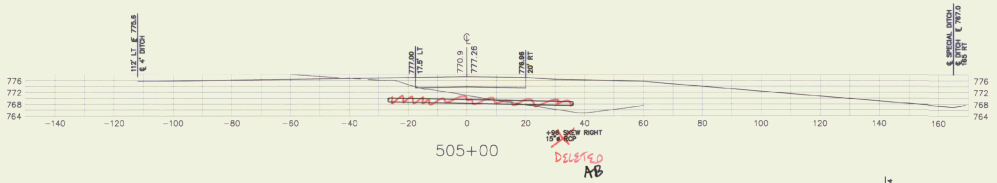

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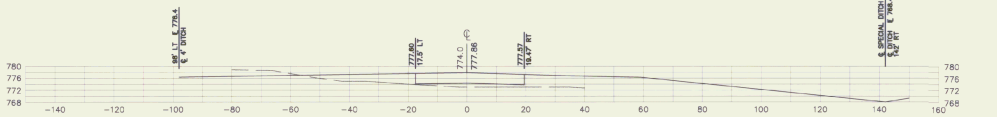

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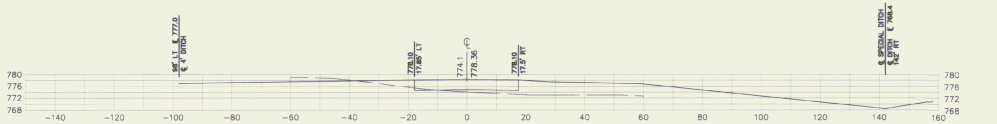


504+00

AIP 3-50-0015-11

STATE OF VERMONT
RICHARD L. CROSSETT
No. 9951
REGISTERED PROFESSIONAL ENGINEER

REV.	DATE	DESCRIPTION
1	12/5/97	AB As Built

Job No. F4012120

File No. L:\F4012\5\1212-02S

RUTLAND STATE AIRPORT
CLARENDON, VERMONT

TAXIWAY CROSS SECTIONS

URS Greiner, Inc.
3 MARCUS BOULEVARD
ALBANY, NEW YORK

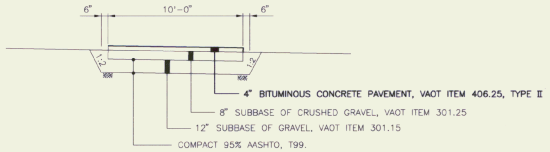
Designed by: Date
L.F.MACCO 2/97
Drawn by:
M.MCCALLA 3/97
Checked by:
C.D'AMICO 5/5/97
Approved by:
MCHURCHILL 5/5/97

Scale: HOR. - 1" = 20
VERT. - 1" = 20

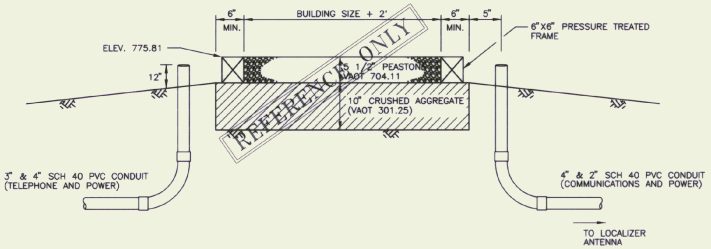
Date: 5/5/97

Sheet 59 Of 59

Sheet No
59

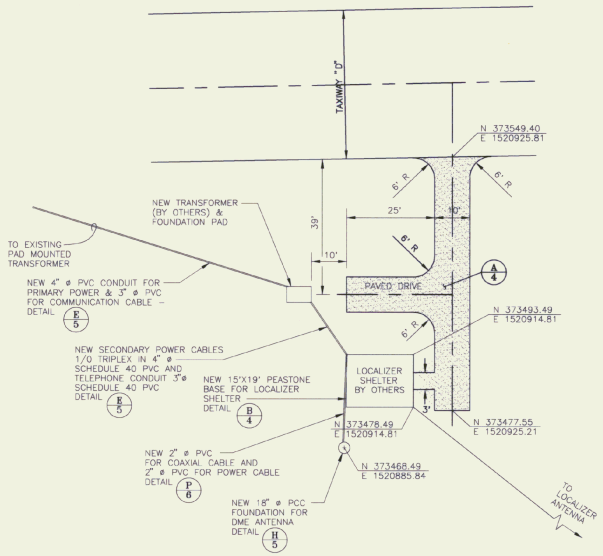


A — GRAVEL DRIVE
SCALE: NONE



NOTE: PROVIDE 20' CABLE SLACK – EACH END OF ALL CABLES. SEAL CONDUITS WITH APPROVED DUCT SEAL AFTER INSTALLATION OF CABLES OR PULL WIRES.

B — LOCALIZER SHELTER FOUNDATION
SCALE: NONE

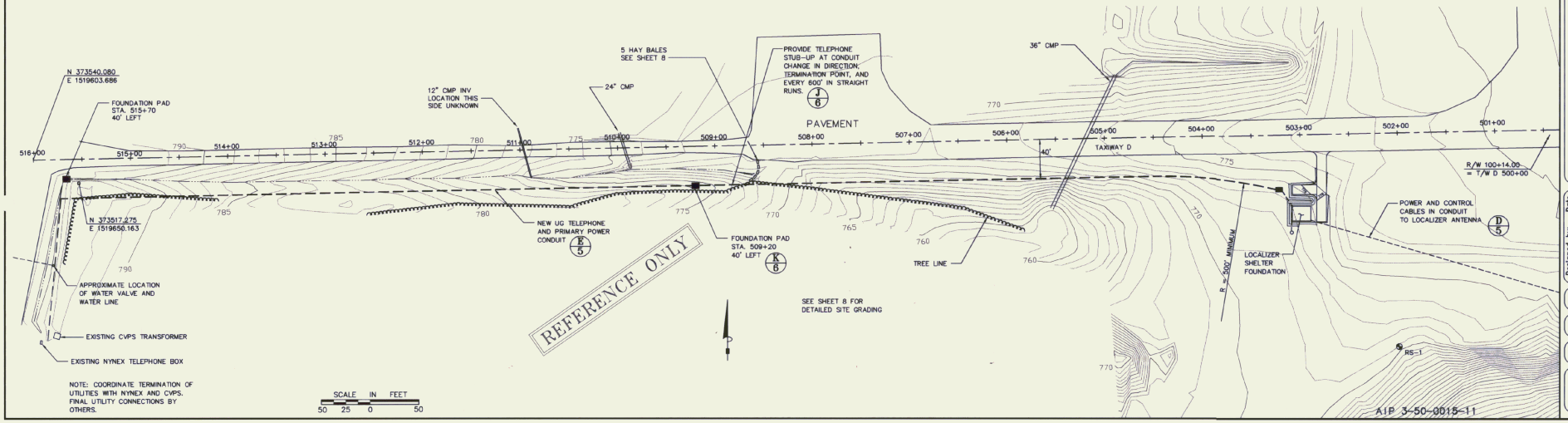


NOTES:

1. CONTRACTOR TO RELOCATE EXISTING LOCALIZER SHELTER ONTO EXISTING EXISTING PEASTONE FOUNDATION IN ACCORDANCE WITH SPECIFICATION SECTION L-200.
2. CONTRACTOR TO MAKE FINAL ELECTRICAL CONNECTIONS AT TRANSFORMER TO SECONDARY POWER CABLES, FROM SECONDARY POWER CABLES TO THE POWER PANEL INSIDE THE LOCALIZER SHELTER, AND FROM THE POWER PANEL TO THE LOCALIZER ANTENNA ARRAY.
3. CONTRACTOR TO MAKE FINAL COMMUNICATIONS (TELEPHONE) CONNECTIONS FROM TELEPHONE CABINET ADJACENT TO LOCALIZER SHELTER TO THE CONTROL INTERFACE BOX MOUNTED ON EXTERIOR OF BUILDING.
4. FAA TO MAKE ALL COAXIAL CABLE CONNECTIONS.
5. CONTRACTOR TO EXTEND SHELTER DRIVEWAY AS SHOWN ON SHEET 14. CONTRACTOR TO PAVE SHELTER DRIVEWAY.

C — SITE DETAIL – LOCALIZER SHELTER
SCALE: NONE

NOTES:
1. SITE PREPARATION: EXCAVATE TOPSOIL TO GOOD BEARING SOIL COMPACT SUBGRADE, AND CRUSHED AGGREGATE TO 95%, AASHTO T99
2. PEASTONE LAYER TO BE LEVEL
3. SHELTER RELOCATION BY OTHERS
4. SEE DETAIL 1/6 FOR BUILDING GROUNDING DETAILS



NOTE: COORDINATE TERMINATION OF UTILITIES WITH NYNEX AND CVPS. FINAL UTILITY CONNECTIONS BY OTHERS.

AIP 3-50-0015-11

STATE OF VERMONT — MICHAEL J. PRATT — No. 5951 — REGISTERED PROFESSIONAL ENGINEER

REV.	DATE	DESCRIPTION
1	4/30/98	As Built

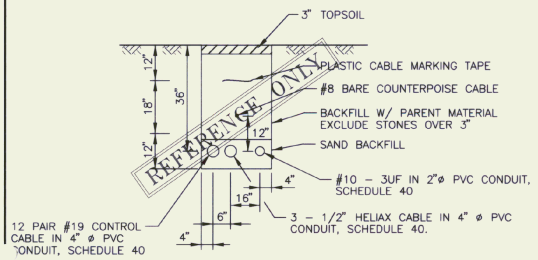
File No. 1:\740\12\LSP-4
Job No. 740\12.00

RUTLAND STATE AIRPORT
CLARENDON, VERMONT

LOCALIZER RELOCATION – SITE PLAN

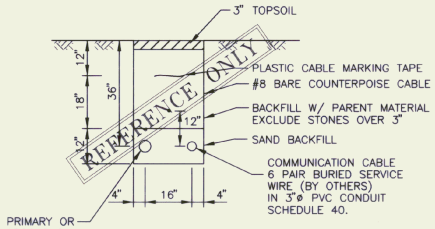
URS Greiner, Inc.
3 MARCUS BOULEVARD
ALBANY, NEW YORK

Designed by: G D'AMICO	Date 2/97
Drawn by: M MCCALLA	3/97
Checked by: G D'AMICO	5/5/97
Approved by: M CHURCHILL	5/5/97
Scale:	HOR. – 1" = 50' VERT. – NONE
Date:	5/5/97
Sheet 60 Of	65
Sheet No	60



D — CONDUIT TRENCH FROM LOCALIZER TO SHELTER

NOTE – PROVIDE 20' CABLE SLACK – EACH END OF ALL CABLES. FOR FUTURE CONNECTION – BY OTHERS. MOUND TOPSOIL SLIGHTLY TO ACCOUNT FOR BACKFILL SETTLEMENT.



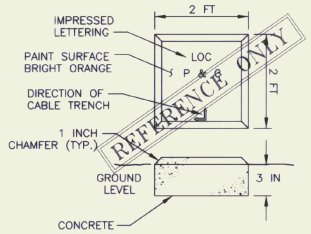
NOTE: 1. PRIMARY CABLE FROM EXISTING CVPS TRANSFORMER TO NEW TRANSFORMER INSTALLED BY CVPS

2. SECONDARY CABLE FROM NEW TRANSFORMER TO LOCALIZER SHELTER TO BE 1/0 TRIPLEX, INSTALLED BY CONTRACTOR.

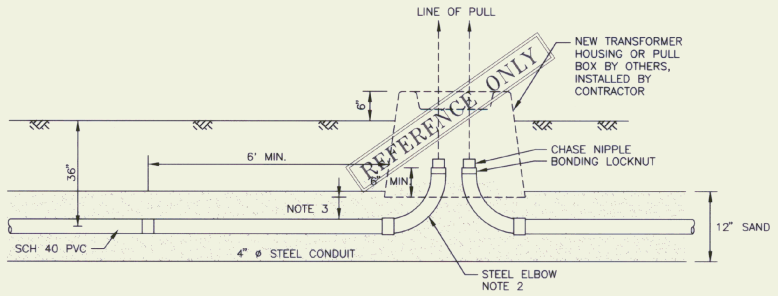
3. TERMINATE SECONDARY CABLE & CONDUIT AT GROUND LEVEL AT PROPOSED LOCALIZER SHELTER SITE. LEAVE 20' CABLE SLACK FOR CONNECTION TO DISCONNECT ON SHELTER BY OTHERS.

4. MOUND TOPSOIL SLIGHTLY TO ACCOUNT FOR BACKFILL SETTLEMENT.

E — PRIMARY/SECONDARY CONDUIT TRENCH

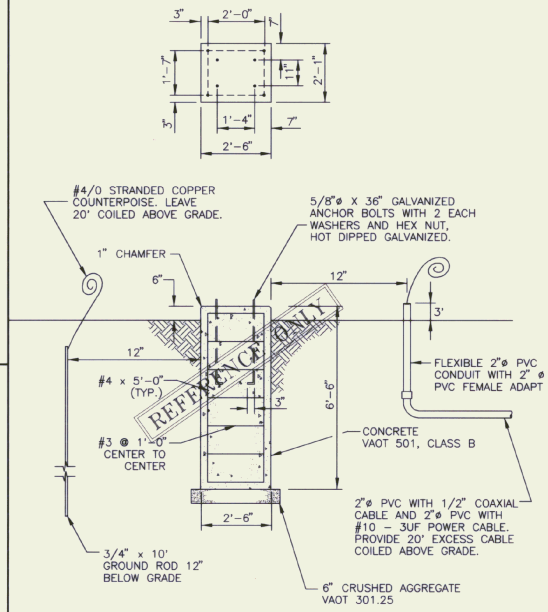


F — CABLE MARKER



G — PULL BOX SECTION

NOTES:
1. ELBOWS TO BE ALIGNED TO ALLOW STRAIGHT PULL THROUGH BOX PAD OPENING
2. USE 90° ELBOWS
3. PROVIDE SUFFICIENT CLEARANCE SO BOX PAD DOES NOT CONTACT ELBOWS
4. INSTALL PULL WIRE IN CONDUIT (500# MIN RATING)
5. SEAL CONDUITS WITH APPROVED DUCT SEAL AFTER CABLES INSTALLED
6. BOND STEEL CONDUIT TO GROUND GRID. SEE DETAIL (I/–)
7. PROVIDE DRAINAGE AWAY FROM TRANSFORMER HOUSING
8. PLACE 3" MIN SAND IN BOTTOM OF TRANSFORMER HOUSING
9. SEE DETAIL (K/6) FOR ADDITIONAL DETAIL



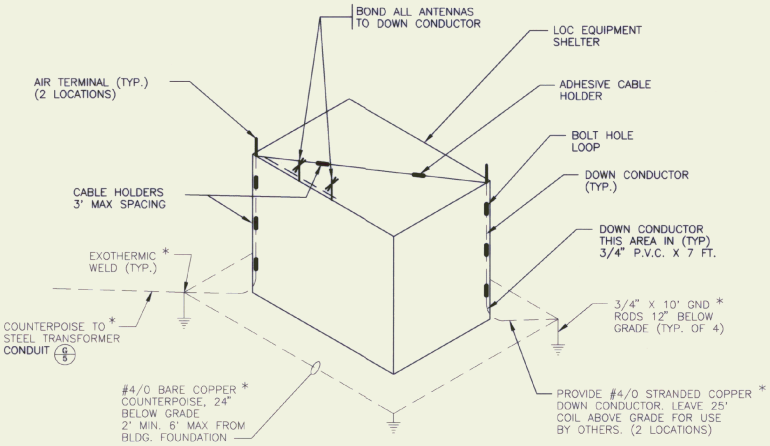
H — PIER FOUNDATION FOR DME ANTENNA MAST

GENERAL NOTES

1. ALL DISTURBED AREAS TO BE REGRADED, TOPSOILED (3" MIN.) LIMED, FERTILIZED, AND MULCHED.

2. CRUSHED AGGREGATE TO CONFORM TO VAOT SPECIFICATION 301.25

3. INSTALLATION OF UNDERGROUND CONDUIT AND COMMUNICATIONS CABLES TO CONFORM TO REQUIREMENTS OF THE LOCAL UTILITY (CVPS) & TELEPHONE Co. (NYNEX).



* INDICATES BY OTHERS.

I — LIGHTNING PROTECTION DETAIL

AIP 3-50-0015-11

STATE OF VERMONT — JACK L. CRUMB — No. 5051 — REGISTERED PROFESSIONAL ENGINEER

REV.	DATE	DESCRIPTION
1	12/11/96	AIR As Built

Job No. 740121.00 — File No. I:\740121\SURV

RUTLAND STATE AIRPORT
CLARENDON, VERMONT

LOCALIZER SITE DETAILS

URS Greiner, Inc.
3 MARCUS BOULEVARD
ALBANY, NEW YORK

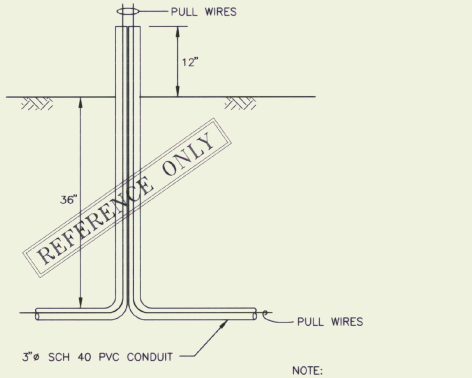
Designed by: G D'AMICO — Date: 2/97
Drawn by: M MCCALLA — 3/97
Checked by: G D'AMICO — 5/5/97
Approved by: M CHURCHILL — 5/5/97

Scale: HOR. – NONE VERT. – NONE

Date: 5/5/97

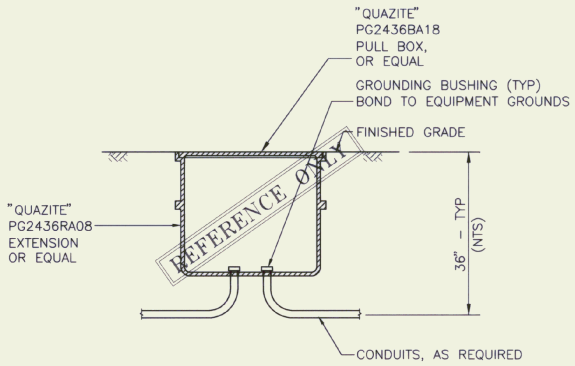
Sheet 61 Of 65

Sheet No 61



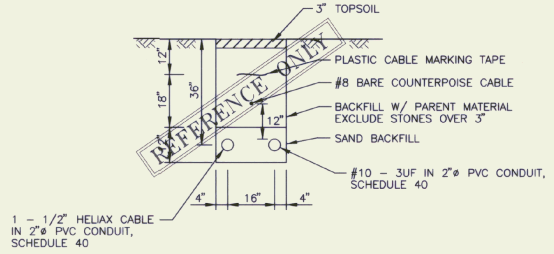
NOTE:
SEAL CONDUIT WITH APPROVED DUCT SEAL AFTER PULL WIRES ARE INSTALLED.

J — TELEPHONE STUB-UP
SCALE: NONE

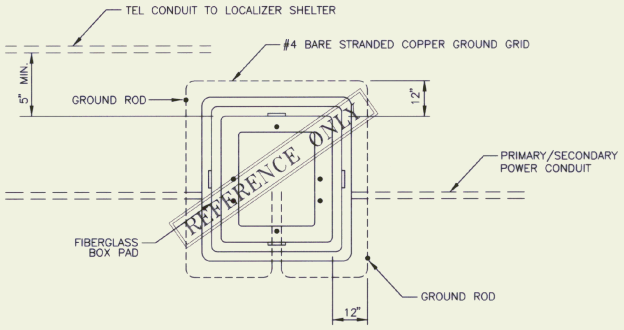


NOTE:
PROVIDE LOOPS IN HANDHOLES WHERE NO SPLICES OCCUR. TERMINATE SPARE COAXIAL CABLE IN HANDHOLE WITH 10 FEET OF EXTRA CABLE COILED AND TAPED.

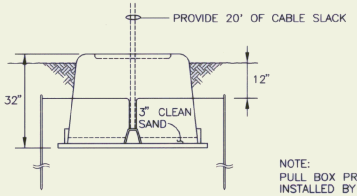
0 — POWER & COMMUNICATION HANDHOLE DETAIL
SCALE: 1"=1'-0"



P — CONDUIT TRENCH FROM DME TO SHELTER
SCALE: NONE



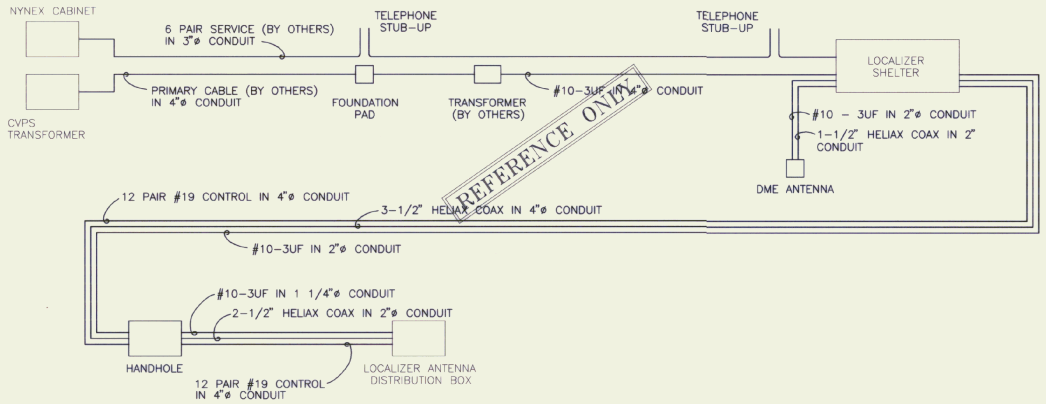
PLAN



ELEVATION

NOTE:
PULL BOX PROVIDED BY CVPS, INSTALLED BY CONTRACTOR. ALL GROUNDING WORK PROVIDED BY CONTRACTOR. PROVIDED 5' MIN. HORIZONTAL CLEARANCE BETWEEN PULL BOX AND NEW TELEPHONE CONDUIT ADJACENT TO PULL BOX.

K — PULL BOX DETAILS
SCALE: NONE



Q — WIRING DIAGRAM
SCALE: NONE

AIP 3-50-0015-11

STATE OF VERMONT
BASIL C. PURSEL
No. 5951
REGISTERED PROFESSIONAL ENGINEER

REV.	DATE	DESCRIPTION
A	5/5/97	As Built

Job No. F401212.00
File No. I:\F401212\S25-4

RUTLAND STATE AIRPORT
CLARENDON, VERMONT

LOCALIZER SITE DETAILS

URS Greiner, Inc.
3 MARCUS BOULEVARD
ALBANY, NEW YORK

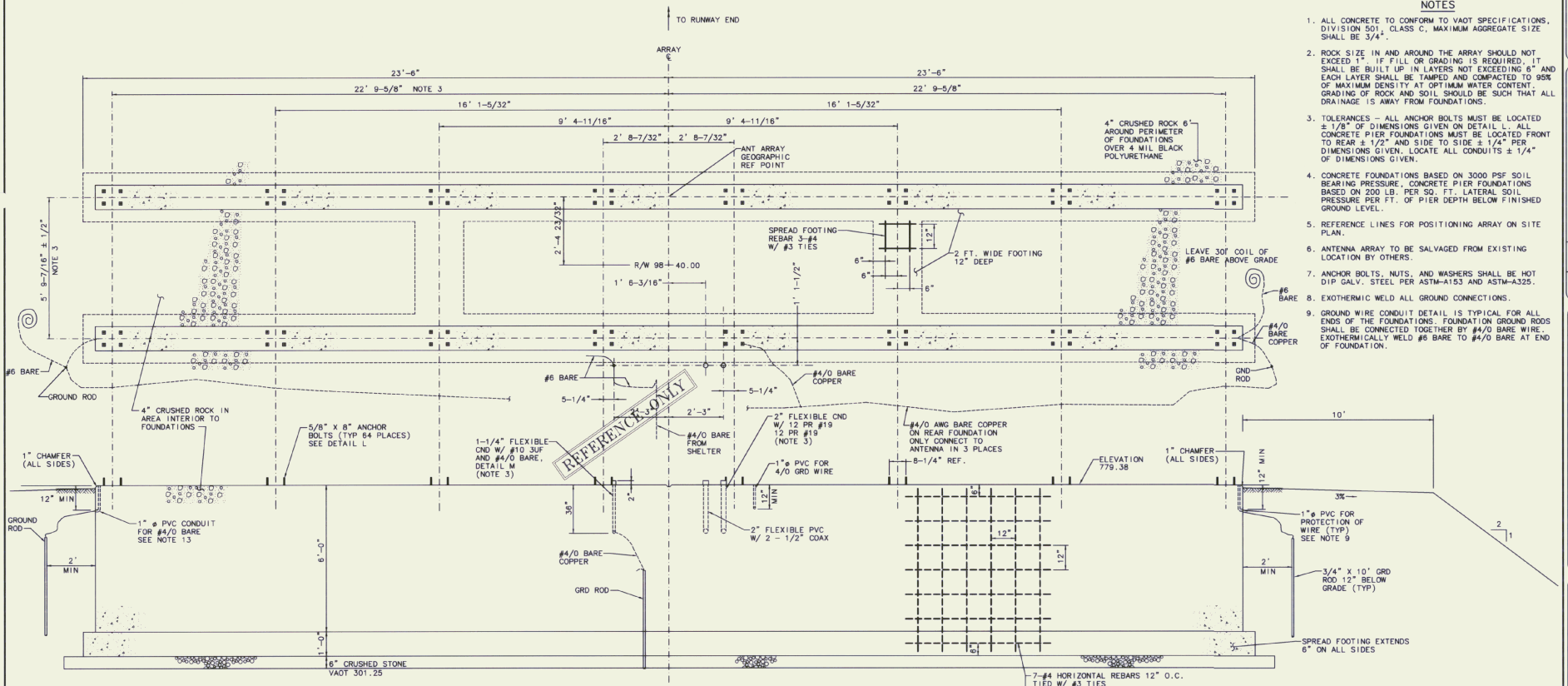
Designed by: G D'AMICO	Date 2/97
Drawn by: M MCCALLA	3/97
Checked by: G D'AMICO	5/5/97
Approved by: M CHURCHILL	5/5/97

Scale: HOR. - NONE
VERT. - NONE

Date: 5/5/97

Sheet 62 Of 65

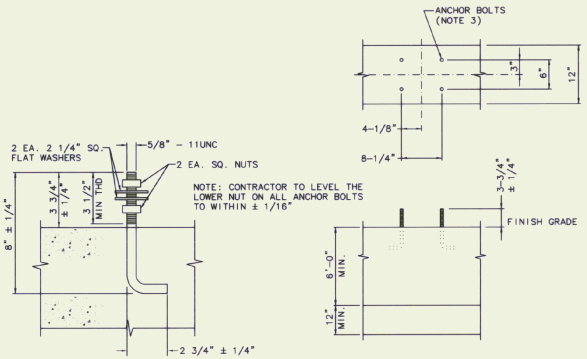
Sheet No
62



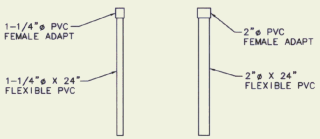
LOCALIZER FOUNDATION PLAN AND LONGITUDINAL SECTION
SCALE: 1" = 2'

NOTES

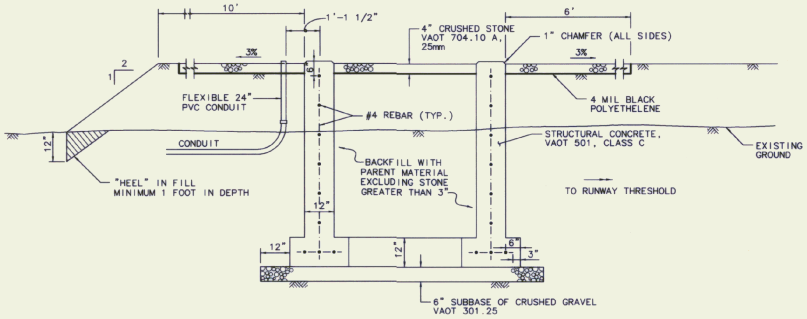
1. ALL CONCRETE TO CONFORM TO VAOT SPECIFICATIONS, DIVISION 501, CLASS C, MAXIMUM AGGREGATE SIZE SHALL BE 3/4".
2. ROCK SIZE IN AND AROUND THE ARRAY SHOULD NOT EXCEED 1". IF FILL OR GRADING IS REQUIRED, IT SHALL BE BUILT UP IN LAYERS NOT EXCEEDING 6" AND EACH LAYER SHALL BE TAMPED AND COMPACTED TO 95% OF MAXIMUM DENSITY AT OPTIMUM WATER CONTENT. GRADING OF ROCK AND SOIL SHOULD BE SUCH THAT ALL DRAINAGE IS AWAY FROM FOUNDATIONS.
3. TOLERANCES – ALL ANCHOR BOLTS MUST BE LOCATED ± 1/8" OF DIMENSIONS GIVEN ON DETAIL L. ALL CONCRETE PIER FOUNDATIONS MUST BE LOCATED FRONT TO REAR ± 1/2" AND SIDE TO SIDE ± 1/4" PER DIMENSIONS GIVEN. LOCATE ALL CONDUITS ± 1/4" OF DIMENSIONS GIVEN.
4. CONCRETE FOUNDATIONS BASED ON 3000 PSF SOIL BEARING PRESSURE, CONCRETE PIER FOUNDATIONS BASED ON 200 LB. PER SQ. FT. LATERAL SOIL PRESSURE PER FT. OF PIER DEPTH BELOW FINISHED GROUND LEVEL.
5. REFERENCE LINES FOR POSITIONING ARRAY ON SITE PLAN.
6. ANTENNA ARRAY TO BE SALVAGED FROM EXISTING LOCATION BY OTHERS.
7. ANCHOR BOLTS, NUTS, AND WASHERS SHALL BE HOT DIP GALV. STEEL PER ASTM-A153 AND ASTM-A325.
8. EXOTHERMIC WELD ALL GROUND CONNECTIONS.
9. GROUND WIRE CONDUIT DETAIL IS TYPICAL FOR ALL ENDS OF THE FOUNDATIONS. FOUNDATION GROUND RODS SHALL BE CONNECTED TOGETHER BY #4/0 BARE WIRE. EXOTHERMICALLY WELD #6 BARE TO #4/0 BARE AT END OF FOUNDATION.



L — TYPICAL ANCHOR BOLT (NOTE 7)
SCALE: NONE



M — DIST. UNIT CONDUIT DETAILS
SCALE: NONE
NOTE: PROVIDE EXPANSION COUPLING ON ABOVE GRADE CONDUITS.



N — LOCALIZER FOUNDATION TRASVERSE SECTION
SCALE: 1" = 2'

AIP 3-50-0015-11

STATE OF VERMONT — MICHAEL L. ONGEL — No. 9951 — REGISTERED PROFESSIONAL ENGINEER

REV.	DATE	DESCRIPTION
1	12/12/96	AS-BUILT

Job No. F401212.00 — File No. I:/F401212/LOCTN-A

RUTLAND STATE AIRPORT
CLARENDON, VERMONT

LOCALIZER FOUNDATION DETAILS

URS Greiner, Inc.
3 MARCUS BOULEVARD
ALBANY, NEW YORK

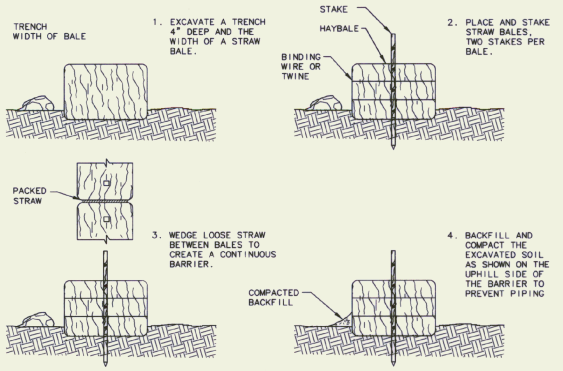
Designed by: G D'AMICO	Date 2/97	
Drawn by: M NICALLA	3/97	
Checked by: G D'AMICO	5/5/97	
Approved by: M GADOMSKI, P.E.	5/5/97	

Scale: HOR. NONE VERT. NONE

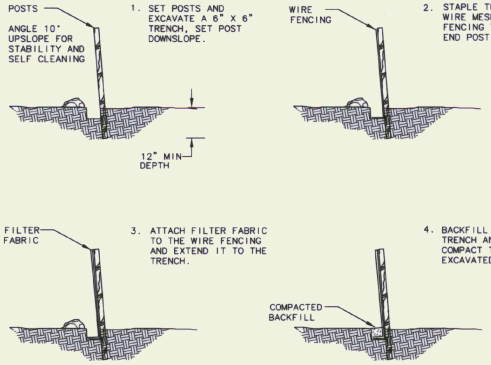
Date: 5/5/97

Sheet 63 Of 85

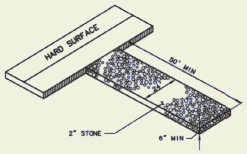
Sheet No 63



SEDIMENTATION BARRIER - HAYBALE



SEDIMENTATION BARRIER - SILT FENCE



SEDIMENTATION CONTROL CONSTRUCTION ENTRANCE

SITE DATA

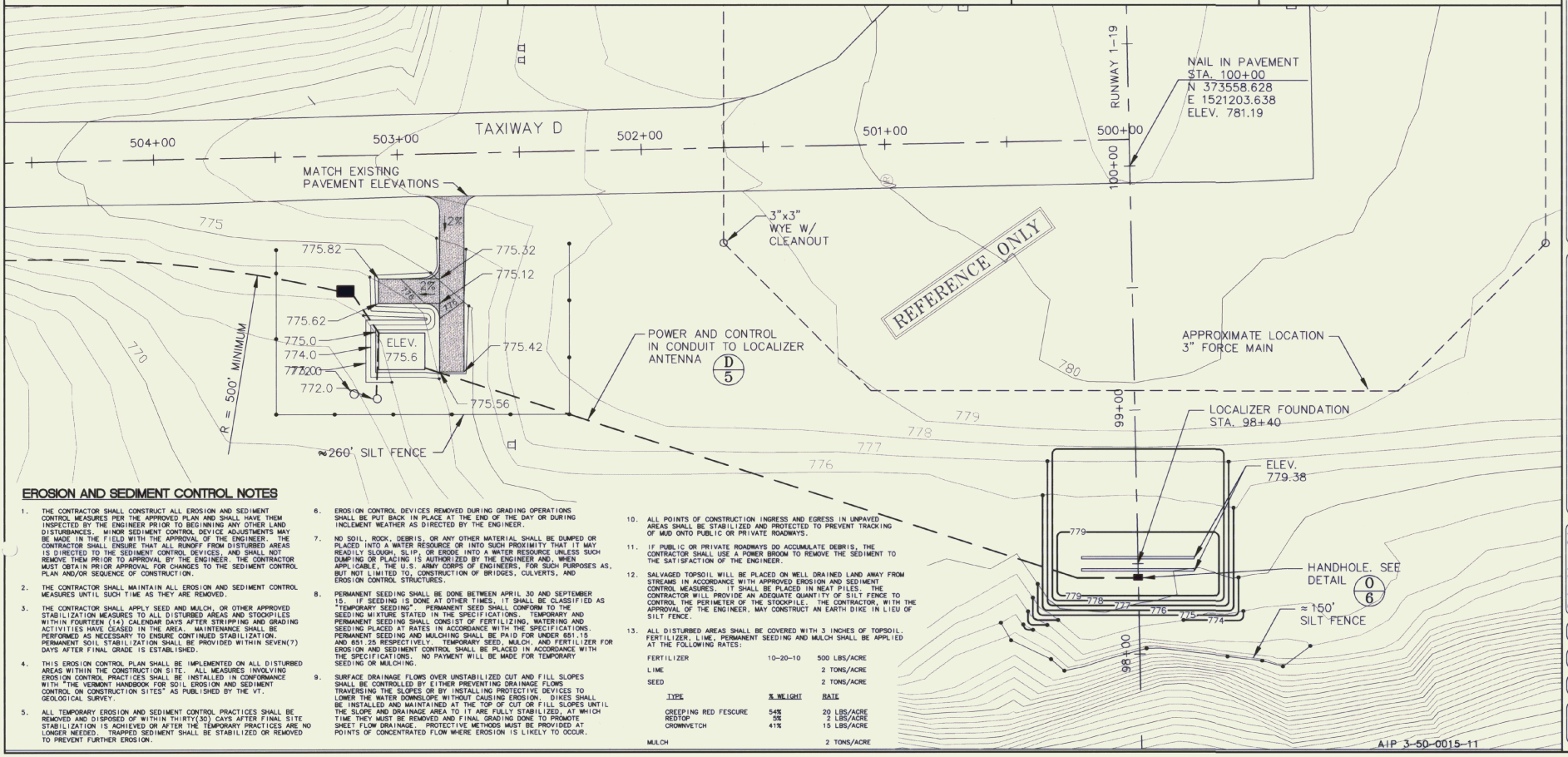
PROJECT DESCRIPTION:
AIRPORT DEVELOPMENT TO INCLUDE EARTHWORK, STORM DRAINAGE, AND UTILITIES.

TOTAL SITE AREA:
AREA WITHIN LIMITS OF WORK APPROXIMATELY 1 ACRE.

EXISTING SOIL TYPES:
- BROWN SILTY SAND WITH TRACES OF GRAVEL.
- APPROXIMATELY 3" OF TOPSOIL.
- INFORMATION OBTAINED FROM BORINGS DRILLED BY GREEN MOUNTAIN BORINGS DURING NOVEMBER 1996.

SCHEDULE:
CONSTRUCTION TO COMMENCE JUNE 1997, AND TO BE COMPLETED AUGUST, 1997, WITH THE IMPLEMENTATION OF EROSION CONTROL MEASURES TO BE THE FIRST PHASES OF ACTIVITY AND TO CONTINUE THROUGHOUT PROGRESS OF PROJECT.

RECEIVING WATERS:
MILL RIVER, OTTERCREEK.



EROSION AND SEDIMENT CONTROL NOTES

1. THE CONTRACTOR SHALL CONSTRUCT ALL EROSION AND SEDIMENT CONTROL MEASURES PER THE APPROVED PLAN AND SHALL HAVE THEM INSPECTED BY THE ENGINEER PRIOR TO BEGINNING ANY OTHER LAND DISTURBANCES. MINOR SEDIMENT CONTROL DEVICE ADJUSTMENTS MAY BE MADE IN THE FIELD WITH THE APPROVAL OF THE ENGINEER. THE CONTRACTOR SHALL ENSURE THAT ALL RUNOFF FROM DISTURBED AREAS IS DIRECTED TO THE SEDIMENT CONTROL DEVICES, AND SHALL NOT REMOVE THEM PRIOR TO APPROVAL BY THE ENGINEER. THE CONTRACTOR MUST OBTAIN PRIOR APPROVAL FOR CHANGES TO THE SEDIMENT CONTROL PLAN AND/OR SEQUENCE OF CONSTRUCTION.
2. THE CONTRACTOR SHALL MAINTAIN ALL EROSION AND SEDIMENT CONTROL MEASURES UNTIL SUCH TIME AS THEY ARE REMOVED.
3. THE CONTRACTOR SHALL APPLY SEED AND MULCH, OR OTHER APPROVED STABILIZATION MEASURES TO ALL DISTURBED AREAS AND STOCKPILES WITHIN FOURTEEN (14) CALENDAR DAYS AFTER STRIPPING AND GRADING ACTIVITIES HAVE CEASED IN THE AREA. MAINTENANCE SHALL BE PERFORMED AS NECESSARY TO ENSURE CONTINUED STABILIZATION. PERMANENT SOIL STABILIZATION SHALL BE PROVIDED WITHIN SEVEN(7) DAYS AFTER FINAL GRADE IS ESTABLISHED.
4. THIS EROSION CONTROL PLAN SHALL BE IMPLEMENTED ON ALL DISTURBED AREAS WITHIN THE CONSTRUCTION SITE. ALL MEASURES INVOLVING EROSION CONTROL PRACTICES SHALL BE INSTALLED IN CONFORMANCE WITH "THE VERMONT HANDBOOK FOR SOIL EROSION AND SEDIMENT CONTROL ON CONSTRUCTION SITES" AS PUBLISHED BY THE VT. GEOLOGICAL SURVEY.
5. ALL TEMPORARY EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE REMOVED AND DISPOSED OF WITHIN THIRTY(30) DAYS AFTER FINAL SITE STABILIZATION IS ACHIEVED OR AFTER THE TEMPORARY PRACTICES ARE NO LONGER NEEDED. TRAPPED SEDIMENT SHALL BE STABILIZED OR REMOVED TO PREVENT FURTHER EROSION.
6. EROSION CONTROL DEVICES REMOVED DURING GRADING OPERATIONS SHALL BE PUT BACK IN PLACE AT THE END OF THE DAY OR DURING INCLEMENT WEATHER AS DIRECTED BY THE ENGINEER.
7. NO SOIL, ROCK, DEBRIS, OR ANY OTHER MATERIAL SHALL BE DUMPED OR PLACED INTO A WATER RESOURCE OR INTO SUCH PROXIMITY THAT IT MAY READILY SLOUGH, SLIP, OR ERODE INTO A WATER RESOURCE UNLESS SUCH DUMPING OR PLACING IS AUTHORIZED BY THE ENGINEER AND, WHEN APPLICABLE, THE U.S. ARMY CORPS OF ENGINEERS, FOR SUCH PURPOSES AS, BUT NOT LIMITED TO, CONSTRUCTION OF BRIDGES, CULVERTS, AND EROSION CONTROL STRUCTURES.
8. PERMANENT SEEDING SHALL BE DONE BETWEEN APRIL 30 AND SEPTEMBER 15. IF SEEDING IS DONE AT OTHER TIMES, IT SHALL BE CLASSIFIED AS "TEMPORARY SEEDING". PERMANENT SEED SHALL CONFORM TO THE SEEDING MIXTURE STATED IN THE SPECIFICATIONS. TEMPORARY AND PERMANENT SEEDING SHALL CONSIST OF FERTILIZING, WATERING AND SEEDING PLACED AT RATES IN ACCORDANCE WITH THE SPECIFICATIONS. PERMANENT SEEDING AND MULCHING SHALL BE PAID FOR UNDER 651.15 AND 651.25 RESPECTIVELY. TEMPORARY SEED, MULCH, AND FERTILIZER FOR EROSION AND SEDIMENT CONTROL SHALL BE PLACED IN ACCORDANCE WITH THE SPECIFICATIONS. NO PAYMENT WILL BE MADE FOR TEMPORARY SEEDING OR MULCHING.
9. SURFACE DRAINAGE FLOWS OVER UNSTABILIZED CUT AND FILL SLOPES SHALL BE CONTROLLED BY EITHER PREVENTING DRAINAGE FLOWS TRAVERSING THE SLOPES OR BY INSTALLING PROTECTIVE DEVICES TO LOWER THE WATER DOWNSLOPE WITHOUT CAUSING EROSION. DIKES SHALL BE INSTALLED AND MAINTAINED AT THE TOP OF CUT OR FILL SLOPES UNTIL THE SLOPE AND DRAINAGE AREA TO IT ARE FULLY STABILIZED, AT WHICH TIME THEY MUST BE REMOVED AND FINAL GRADING DONE TO PROMOTE SHEET FLOW DRAINAGE. PROTECTIVE METHODS MUST BE PROVIDED AT POINTS OF CONCENTRATED FLOW WHERE EROSION IS LIKELY TO OCCUR.
10. ALL POINTS OF CONSTRUCTION INGRESS AND EGRESS IN UNPAVED AREAS SHALL BE STABILIZED AND PROTECTED TO PREVENT TRACKING OF MUD ONTO PUBLIC OR PRIVATE ROADWAYS.
11. IF PUBLIC OR PRIVATE ROADWAYS DO ACCUMULATE DEBRIS, THE CONTRACTOR SHALL USE A POWER BROOM TO REMOVE THE SEDIMENT TO THE SATISFACTION OF THE ENGINEER.
12. SALVAGED TOPSOIL WILL BE PLACED ON WELL DRAINED LAND AWAY FROM STREAMS IN ACCORDANCE WITH APPROVED EROSION AND SEDIMENT CONTROL MEASURES. IT SHALL BE PLACED IN NEAT PILES. THE CONTRACTOR WILL PROVIDE AN ADEQUATE QUANTITY OF SILT FENCE TO CONTROL THE PERIMETER OF THE STOCKPILE. THE CONTRACTOR, WITH THE APPROVAL OF THE ENGINEER, MAY CONSTRUCT AN EARTH DIKE IN LIEU OF SILT FENCE.
13. ALL DISTURBED AREAS SHALL BE COVERED WITH 3 INCHES OF TOPSOIL. FERTILIZER, LIME, PERMANENT SEEDING AND MULCH SHALL BE APPLIED AT THE FOLLOWING RATES:

FERTILIZER	10-20-10	500 LBS/ACRE
LIME		2 TONS/ACRE
SEED		2 TONS/ACRE
TYPE	**% WEIGHT**	**RATE**
CREEPING RED FESCURE	54%	20 LBS/ACRE
REDTOP	5%	2 LBS/ACRE
CROWNVETCH	41%	15 LBS/ACRE
MULCH		2 TONS/ACRE

AIP 3-50-0015-11

STATE OF VERMONT — PAUL CHURCHILL — No. 9951 — REGISTERED PROFESSIONAL ENGINEER

REV.	DATE	DESCRIPTION
1	12/1/97	AB Addendum

File No.: I:\F40121\SEDI-4
Job No. F40121.00

RUTLAND STATE AIRPORT
CLARENDON, VERMONT

SEDIMENTATION / EROSION CONTROL DETAILS

URS Greiner, Inc.
3 MARCUS BOULEVARD
ALBANY, NEW YORK

		Date
Designed by:	G D'AMICO	2/97
Drawn by:	M MCCALLA	3/97
Checked by:	G D'AMICO	5/5/97
Approved by:	M CHURCHILL	5/5/97

Scale: HOR. – NONE
VERT. – NONE

Date: 5/5/97

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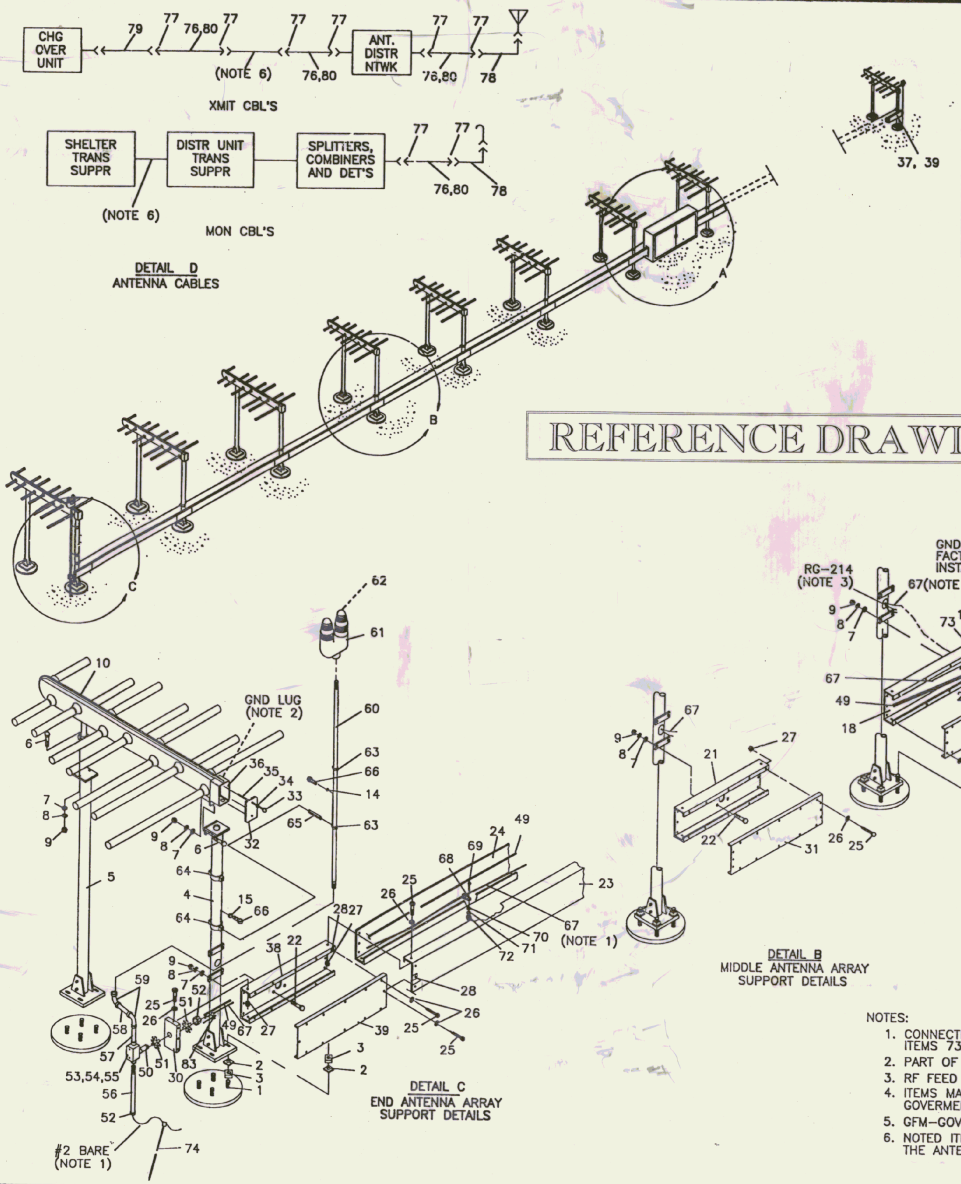

ITEM	QTY	DESCRIPTION	WPN
71	12	WASHER, LOCK #10	926001-0081
72	12	NUT, HEX #10-32	930001-0304
73	16	CONN, SPLIT BOLT (KS17)	229911-0004
74	3	GND ROD 3/4" X 10'	*
75	1	EL, SWEEP 1-1/4" PVC 90°	*
76	1	CABLE, RF 1/4" HELIAX 1700' L	111588-1700
77	70	CONN, RF TYPE N MALE	230161-0001
78	28	CONN, RF ADPTR TYPE N RT ANGLE	875004-0001
79	4	CONN, RF ADPTR STR TNC M-NFE	228913-0001
80	1	KIT, IDENT CBL SLEEVE	069200-0001
81	24	BOLT, HEX NYLON 1/4"-20 X 1" L (NOTE 6)	502644-0053
82	24	NUT, HEX NYLON 1/4"-20 (NOTE 6)	300658-0007
83	2	CONN, SPLIT BOLT (KS23)	229911-0012

PARTS LIST

ITEM	QTY	DESCRIPTION	WPN
70	12	WASHER, FLAT #10	925000-0808
69	12	SCREW, MACH. #10-32 X 1/2"	916012-0272
68	12	LUG, GND SOLDERLESS	025478-0001
67	250'	WIRE, #6 BARE	110041-0001
66	8	SCREW, MACH. 1/4"-20 X 1/2"	915016-0079
65	4	SPACER, HEX TAPPED, 2-1/2" L	270706-6677
64	4	HANGER, CND 2-1/2"	033786-0008
63	4	HANGER, CND 3/4"	033786-0002
62	4	BULB, LIGHT	035823-0000
61	2	LIGHT, OBS	035707-0001
60	2	CND, 3/4" X 48" L	033671-0001
59	4	EL, 45° CND	033754-0002
58	2	NIPPLE, CND 3/4" X 10" L	033586-0005
57	2	NIPPLE, CND 3/4" X 3" L	033586-0001
56	2	CND, 3/4" X 30" L	033671-0004
55	2	GASKET, COVER	033728-0003
54	2	COVER, UNILET	033590-0001
53	2	UNILET, "T" 3/4"	033588-0001
52	2	BUSHING, INSULATED 3/4"	033516-0000
51	4	NUT, LOCK 3/4"	033514-0000
50	2	NIPPLE, CND 3/4" X 5" L	033586-0006
49	200'	CABLE, POWER, #12-2 UF	111456-0002
48	1	BUSHING, INSULATED 1-1/4"	*
47	1	LOCK NUT, CND 1-1/4"	*
46	1	ADAPTER, PVC MALE 1-1/4"	*
45	1	CND, PVC RIGID 1-1/4"X24"	*
44	2	BUSHING, INSULATED 3"	*
43	2	LOCKNUT, CND 3"	*
42	2	ADAPTER, PVC MALE 3"	*
41	2	CND, PVC RIGID 3" X 24"	*
40	2	EL, SWEEP 3" PVC 90°	*
39	2	COVER, ADAPTER RACEWAY END	489114-0C01
38	1	RACEWAY, CABLE ADAPTER END (RT)	282219-0001
37	1	RACEWAY, CABLE ADAPTER END (LT)	282219-0002
36	14	GASKET, CHAN WEATHERCAP (NOTE 2)	265047-0001
35	28	NUT, HEX 1/4"-20 (NOTE 2)	930026-0003
34	28	WASHER, FLAT 1/4" (NOTE 2)	925000-0810
33	28	BOLT,HEX 1/4"-20 X 4-1/4" (NOTE 2)	919070-0024
32	14	CAP, WEATHER SHIELD (NOTE 2)	265048-0001
31	10	COVER, WRAPPER RACEWAY (CTR)	489043-0001
30	2	CAP, END RACEWAY	281821-0001
29	2	COVER, ADAPTER RACEWAY (DU)	489113-0001
28	164	NUT, SPEED #8-32	100999-0001
27	130	NUT, SELF-LOCKING #8-32	100482-0008
26	310	WASHER, FLAT #8	925000-0807
25	310	SCREW, MACH. #8-32 X 1/2" PHPHMS	915014-0045
24	12	RACEWAY, CABLE SECT BOT 94" L	282218-0001
23	12	RACEWAY, CABLE SECT TOP 94" L	282217-0001
22	56	BOLT, HEX 5/16"-18 X 1"	919063-0030
21	10	RACEWAY, CABLE WRAPPER (CTR) 26"	282173-0001
20	2	GASKET, RACEWAY ADAPTER (DU)	265056-0001
19	1	RACEWAY, CABLE ADAPTER (LT)	282220-0002
18	1	RACEWAY, CABLE ADAPTER (RT)	282220-0001
17	1	UNIT, DISTR ASSY	120354-0001
16	12	NUT, HEX 1/4"-20	930000-2254
15	12	WASHER, LOCK 1/4"	926001-0082
14	16	WASHER, FLAT 1/4"	925001-0007
13	4	BOLT, HEX 1/4"-20 X 3/4"	919065-0005
12	1	BRACKET, MTG DISTR UNIT, LEFT	093431-0002
11	1	BRACKET, MTG DISTR UNIT, RIGHT	093431-0001
10	14	ELEMENT, ANT.	447837-0100
9	112	NUT, HEX 5/16"-18	930000-2314
8	112	WASHER, LOCK 5/16"	926001-0083
7	112	WASHER, FLAT 5/16"	925001-0008
6	56	BOLT, HEX 5/16"-18 X 1-1/2"	919063-0032
5	14	SUPPORT ASSY, FRONT	119007-0001
4	14	SUPPORT ASSY, REAR	119006-0001
3	224	NUT, SQ GALV 5/8"-11	*
2	224	WASHER, FLAT, SQ GALV 5/8"	*
1	112	BOLT, ANCHOR GALV 5/8"-11 X 12"	*

PARTS LIST

NOTES:

1. CONNECTIONS TO ITEM 67 AND #2 BARE ARE MADE WITH ITEMS 73 AND 83, RESPECTIVELY, INSIDE CABLE TROUGH.
2. PART OF LOC. ANT. ELEMENT AND IS FACTORY ASSEMBLED.
3. RF FEED & MONITOR CABLES TO ANT. VIA REAR ANT. MAST.
4. ITEMS MARKED WITH AN ASTERISK (*) ARE FURNISHED BY GOVERMENT CIVIL CONTRACTOR.
5. GFM-GOVERMENT FURNISHED MATERIAL.
6. NOTED ITEMS ARE TO BE USED AS SPARE HARDWARE FOR THE ANTENNA RADOME ASSEMBLIES.

REV. LTR	DATE	DESCRIPTION	CHECKED	APPROVED

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
WASHINGTON, D.C. 20590

INSTRUMENT LANDING SYSTEM
CAPTURE EFFECT LOCALIZER
ANTENNA ARRAY
INSTALLATION DETAILS
TYPE NO. FA-10582

SHEET 65

REVIEWED BY	SUBMITTED BY	APPROVED BY

DESIGNED BY	ISSUED BY	DATE: 7-1-94	REV. LTR.
DRAWN BY SCHAFER	AIRWAY FACILITIES SERVICE	DRAWING NO. D-6288-18	
CHECKED BY			