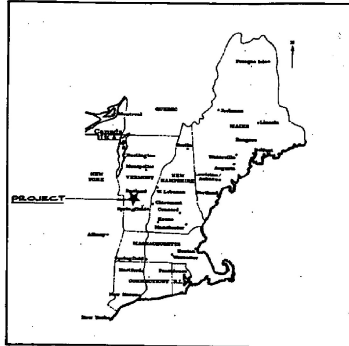


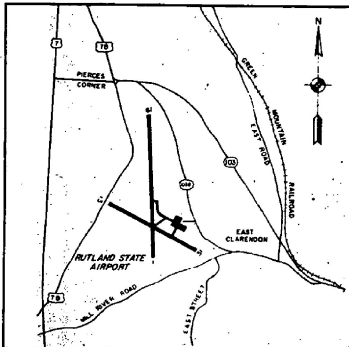
PLANS FOR

AIRPORT IMPROVEMENTS

TO INCLUDE: (1) RECONSTRUCT/REHABILITATE, MARK, AND LIGHT RUNWAY 13-31 (75' X 3260')
(2) INSTALL REILS AND PAPI ON RUNWAY 13



LOCATION MAP



VICINITY MAP

Date NOV 6 1987
 J.A. McDonald, Inc.
 Contractor
 James McDonald
 Signature
 President
 Title

ACTING
 Transportation Secretary's Signature

RUTLAND STATE AIRPORT
 CLARENDON, VERMONT

CONTRACT PLANS

THESE PLANS DO NOT REFLECT
 CHANGES MADE ON THE PROJECT.

A.I.P. PROJECT NO. 3-50-0015-04

A.I.R. 03-2043

INDEX OF SHEETS

NO.	DESCRIPTION
1	TITLE SHEET
2	SITE PLAN
3	PLAN & PROFILE - STA. 0+50 TO STA. 22+00
4	PLAN & PROFILE - STA. 22+00 TO STA. 39+80
5	PLAN & PROFILE - STA. 39+80 TO STA. 45+00
6	TYPICAL SECTIONS
7	LIGHTING PLAN
8	ELECTRICAL DETAILS
9	FAULTY LAYOUT
10	DRAINAGE DETAILS
11	MARKING DIAGRAM
12	APPROACH AIDS
13	CROSS SECTIONS STA. -0+50 TO STA. 12+00
14	CROSS SECTIONS STA. -12+50 TO STA. 15+00
15	CROSS SECTIONS STA. -15+50 TO STA. 19+50
16	CROSS SECTIONS STA. -19+00 TO STA. 22+00
17	CROSS SECTIONS STA. -22+50 TO STA. 25+00
18	CROSS SECTIONS STA. -25+50 TO STA. 28+50
19	CROSS SECTIONS STA. -29+00 TO STA. 31+50
20	CROSS SECTIONS STA. -32+00 TO STA. 34+50
21	CROSS SECTIONS STA. -35+00 TO STA. 37+50
22	CROSS SECTIONS STA. -38+00 TO STA. 40+50
23	CROSS SECTIONS STA. -41+00 TO STA. 43+00
24	CROSS SECTIONS STA. -43+50 TO STA. 45+00
25-28	CROSS SECTIONS - STA. 45+50 TO STA. 50+00
29	PROFILE
30	EARTHWORK SHEET
D-6	V.T. STANDARDS REINFORCED CONCRETE DROP INLET WITH GRATE (4/73R)
D-11	V.T. STANDARDS CAST IRON GRATE AND COVER (8-B1R)

VERMONT AGENCY OF TRANSPORTATION
 APPROVED: *Frank J. ...* 10/21/85
 DIRECTOR OF ENGINEERING AND CONSTRUCTION
 DATE

FEDERAL AVIATION ADMINISTRATION
 APPROVED: _____
 CHIEF, AIRPORT ENGINEERING AND SAFETY BRANCH
 DATE

ITEM NO.	DESCRIPTION	QUANTITY	ITEM NO.	DESCRIPTION	QUANTITY
201.10	Clearing and Grubbing	Lump Sum	664.01	Cold Mixed Recycled Base Course	6820 c.y.
203.28	Excavation of Surfaces and Pavements	3,100 c.y.	664.02	Bituminous Concrete Pavement (2-10)	4,400 tons
203.17	Unclassified Excavation	11,162 c.y.	664.03	Runway and Taxiway Paving	11,010 s.f.
203.30	Earth Borrow	1,412 c.y.	664.04	Cable Trench (L-108)	7,909 l.f.
203.32	Granular Borrow	11,120 c.y.	664.05	1/2" 80 L-828 4'x 5'6" (L-108)	17,900 l.f.
203.40	Fine Grading Subgrade	19,000 s.f.	664.06	60 Barb Counterpoise (L-108)	6,900 l.f.
204.20	Trench Excavation, Earth	3,260 c.y.	664.07	Installation of Airport Transformer Bank Equipment (L-109)	Lump Sum
204.21	Trench Excavation, Rock	328 c.y.	664.08	8 Bay x 4' dia., Duct (L-110)	497 l.f.
404.55	Hotback Asphalt	91 cwt.	664.09	4 Bay x 4' dia., Duct (L-110)	51 l.f.
501.25	Concrete, Class B	2.1 c.y.	664.10	Medium Intensity Runway Lights, Base Mounted (L-125)	46 each
507.18	Reinforcing steel	193 lbs.	664.11	Medium Intensity Taxiway Indicator, (P27) Type A Class 2 (L-881)	1 each
601.0026	24" dia. CSP (0.79')	160 l.f.	664.12	Runway End Identifier Lights, REILS (L-125)	1 each
601.0225	24" CAAP .060	380 l.f.	664.13	Training Guidance Sign, 2 Panel, 8'x 1', Style 2, Class 2 (L-125)	2 each
601.0425	24" PCCSP .064	380 l.f.			
601.0825	24" RCP Cl. III	380 l.f.			
	END OPTION ITEMS				
604.40	Clanging Elevations of Drop Inlets	20 each			
604.45	Cast Iron Grate w/frame Type A	1 each			
605.10	6' dia. Underdrain	2,250 l.f.			
605.20	6' dia. Carrier Pipe	200 l.f.			
605.55	Underdrain Flushing Basins	10 each			
608.25	All Purpose Excavator Rental T.I.	24 hours			
613.10	Stone FILL	15 c.y.			
631.10	Stone FILL, Type II	15 c.y.			
631.10	Engineer's Field Office	Lump Sum			
635.10	Relocation	Lump Sum			
651.15	Seed	565 lbs.			
651.18	Fertilizer	4715 lb.			
651.20	Artificial Limestone	19 tons			
651.25	Hay Balch	19 tons			
651.35	Topsoil	2205 c.y.			

QUANTITIES

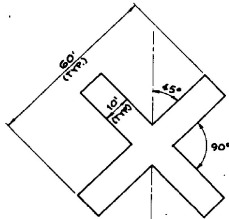
JULY-1985
 REVISED BY VAOT
 MAY 1987



Consulting Engineers

Dufresne-Henry, Inc. certifies that the plans and specifications for the project were prepared in accordance with criteria contained in the current edition of F.A.A. Advisory Circulars.

Orwell W. Dumas
 Walter B. Lovett, Jr., P.E. Director of Aviation Services

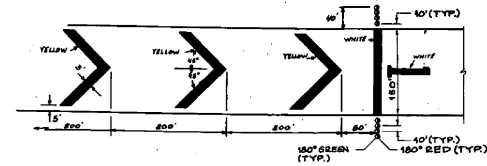
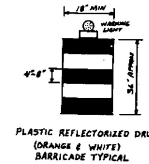


Closed Runway Marker
N.T.S.

MARKER NOTES

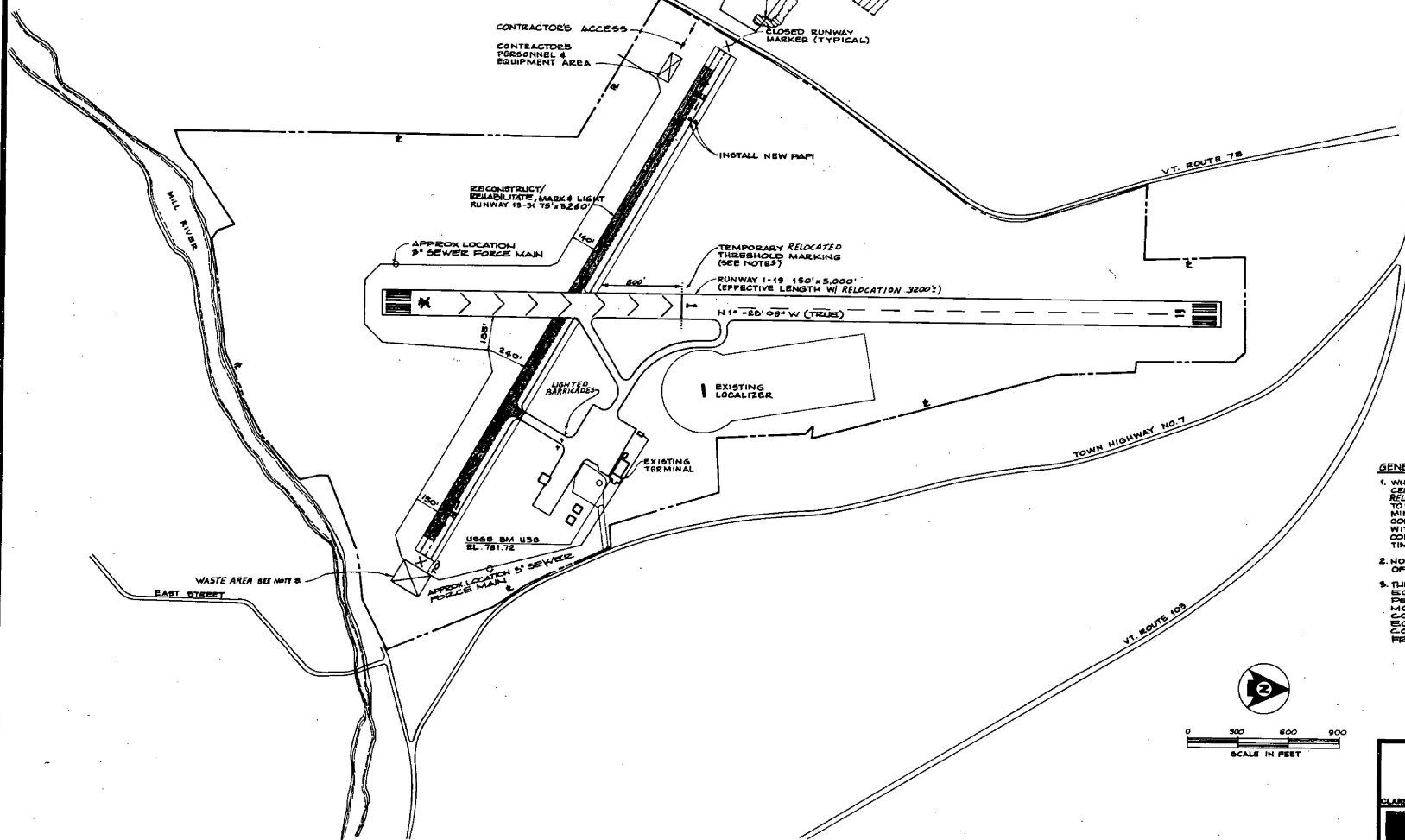
1. CLOSED RUNWAY MARKER TO BE IN PLACE DURING CONSTRUCTION PERIOD AS DIRECTED BY ENGINEER.
2. CLOSED RUNWAY MARKER MAY BE EITHER SNOW FENCE OR PLUMWOOD PAINTED YELLOW & SECURELY FASTENED IN PLACE.
3. COST OF PLACING & MAINTAINING THE CLOSED RUNWAY MARKER IS CONSIDERED NECESSARY & INCIDENTAL TO CONSTRUCTION & IS NOT A SEPARATE PAY ITEM.
4. CLOSED RUNWAY MARKER TO BE PLACED OVER EXISTING RUNWAY 1 NUMERAL DURING RUNWAY 1 RELOCATION.

EXTENDED RUNWAY &



TEMPORARY RELOCATED THRESHOLD DETAIL
N.T.S.

- NOTES:**
1. EIGHT TEMPORARY THRESHOLD LIGHTS ARE TO BE INSTALLED AS SHOWN.
 2. EACH LIGHT TO BE BATTERY OPERATED STEADY BURNING W/ 180° RED/180° GREEN LENS AS MANUF. BY WILMAN ENGINEERING (DEEP RIVER, CT.) OR EQUAL.
 3. THE CONTRACTOR SHALL FURNISH ALL BATTERIES TO BE USED DURING THE CONSTRUCTION PERIOD.
 4. THE CARE & MAINTENANCE OF THE TEMPORARY LIGHTS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
 5. THE MAINTENANCE DIVISION OF THE VAYT SHALL RETAIN POSSESSION OF THE LIGHTS AFTER COMPLETION OF CONSTRUCTION.
 6. THE COST OF THE TEMPORARY LIGHTS & BATTERIES IS NOT INCLUDED AS A SEPARATE PAY ITEM. THIS WORK IS NECESSARY & INCIDENTAL TO THE COST OF THE PROJECT.
 7. CONTRACTOR MAY AT HIS OPTION, INSTALL A MEDIUM INTENSITY THRESHOLD LIGHTS, CONFORMING TO FAA SPEC L-841E IN LIEU OF BATTERY OPERATED LIGHTS.
 8. WASTE AREA TO BE GRADED, TOPSOILED, SEED & MULCHED AS ORDERED BY THE ENGINEER. THE USE OF THIS WASTE AREA WILL REQUIRE THAT A 24" PIPE (.075 THICKNESS) ITEM #0185 BE PLACED IN THE EXISTING DRAINAGE SWALE AS ORDERED BY THE ENGINEER.
 9. ALL MARKINGS IN THE RELOCATED THRESHOLD AREA ARE YELLOW EXCEPT THE THRESHOLD BAR WHICH IS WHITE.



GENERAL NOTES:

1. WHEN WORKING WITHIN 200' OF RUNWAY 1-19 CENTERLINE, THE RUNWAY 1 THRESHOLD MUST BE RELOCATED. CONTRACTOR WILL ONLY BE ALLOWED TO DISPLACE THRESHOLD FOR 7 DAYS (MAXIMUM) TO MINIMIZE THE IMPACT TO SCHEDULE. BEFORE THE CONTRACTOR WILL COORDINATE THIS RELOCATION WITH THE AIRPORT MANAGER AND INSPECTOR. THE CONTRACTOR MAY RELOCATE THE THRESHOLD ONE TIME DURING THIS CONTRACT.
2. NO EQUIPMENT SHALL BE PARKED WITHIN 250' OF R/W 1-19 DURING NON-WORK HOURS.
3. THE CONTRACTOR WILL NOT BE ALLOWED TO MOVE EQUIPMENT ACROSS RUNWAY 1-19 WITHOUT THE PERMISSION OF THE ENGINEER. IN ORDER TO MOVE EQUIPMENT ACROSS THIS RUNWAY, CONTRACTOR WILL HAVE TO PROVIDE A FLAGMAN EQUIPPED WITH A RADIO, CAPABLE OF COMMUNICATING WITH AIRCRAFT ON UNICOM FREQUENCY OF 122.8 MHz.



A.I.P. PROJECT NO. 3-50-0015-04

RUTLAND STATE AIRPORT

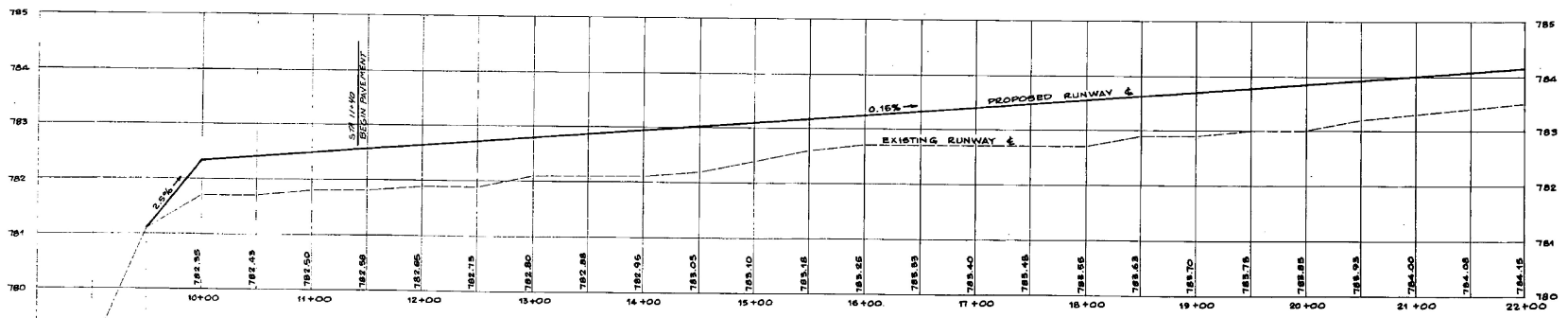
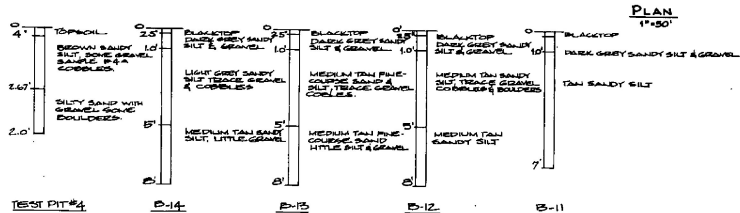
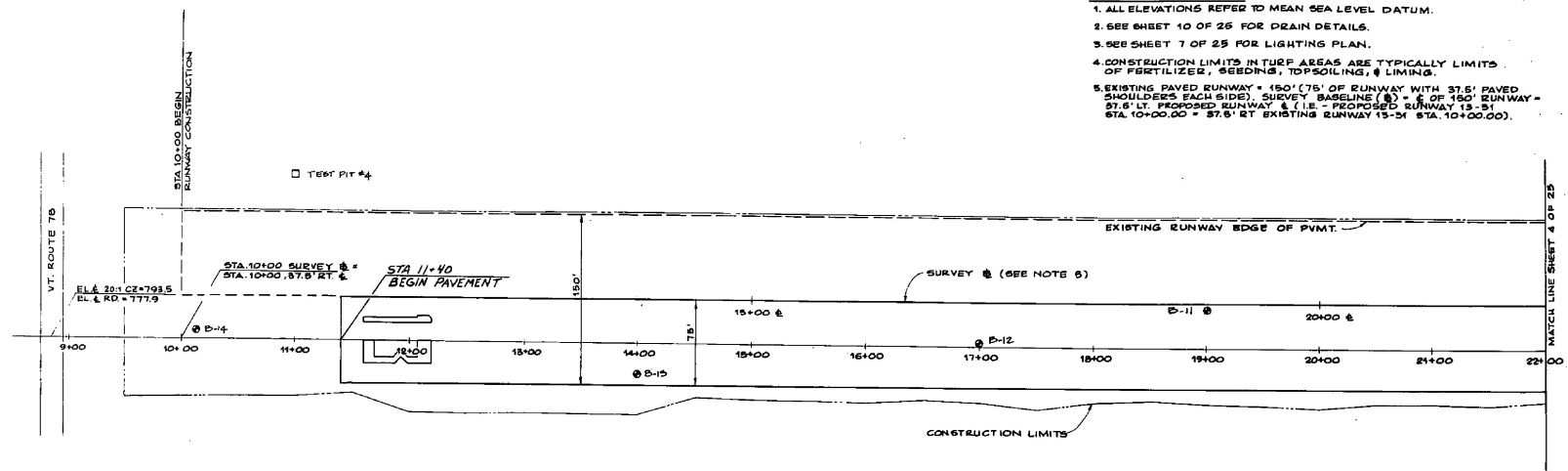
SITE PLAN

	Client No. 80-0182	
	Prof. Manager G.W. D'AMICO	
	Prof. Designer G.S. SAWES	
	Drawn By C.W. BELLS	
	Checked By G.W. D'AMICO	
Scale AS SHOWN	Approved	Sheet 1 of 30
Inc.	Date	D

Rev.	Description	By	Date

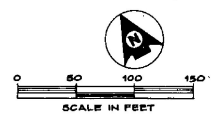
PLAN & PROFILE NOTES:

1. ALL ELEVATIONS REFER TO MEAN SEA LEVEL DATUM.
2. SEE SHEET 10 OF 25 FOR DRAIN DETAILS.
3. SEE SHEET 7 OF 25 FOR LIGHTING PLAN.
4. CONSTRUCTION LIMITS IN TURF AREAS ARE TYPICAL LIMITS OF FERTILIZER, SEEDING, TOPSOILING, & LIMING.
5. EXISTING PAVED RUNWAY = 150' (75' OF RUNWAY WITH 37.5' PAVED SHOULDERS EACH SIDE). SURVEY BASELINE (S) = E OF 150' RUNWAY = 37.5' LT. PROPOSED RUNWAY & (I.E. - PROPOSED RUNWAY 15-51 STA. 10+00.00 = 37.5' RT. EXISTING RUNWAY 15-51 STA. 10+00.00).



A.I.P. PROJECT NO. 3-50-0015-04
RUTLAND STATE AIRPORT

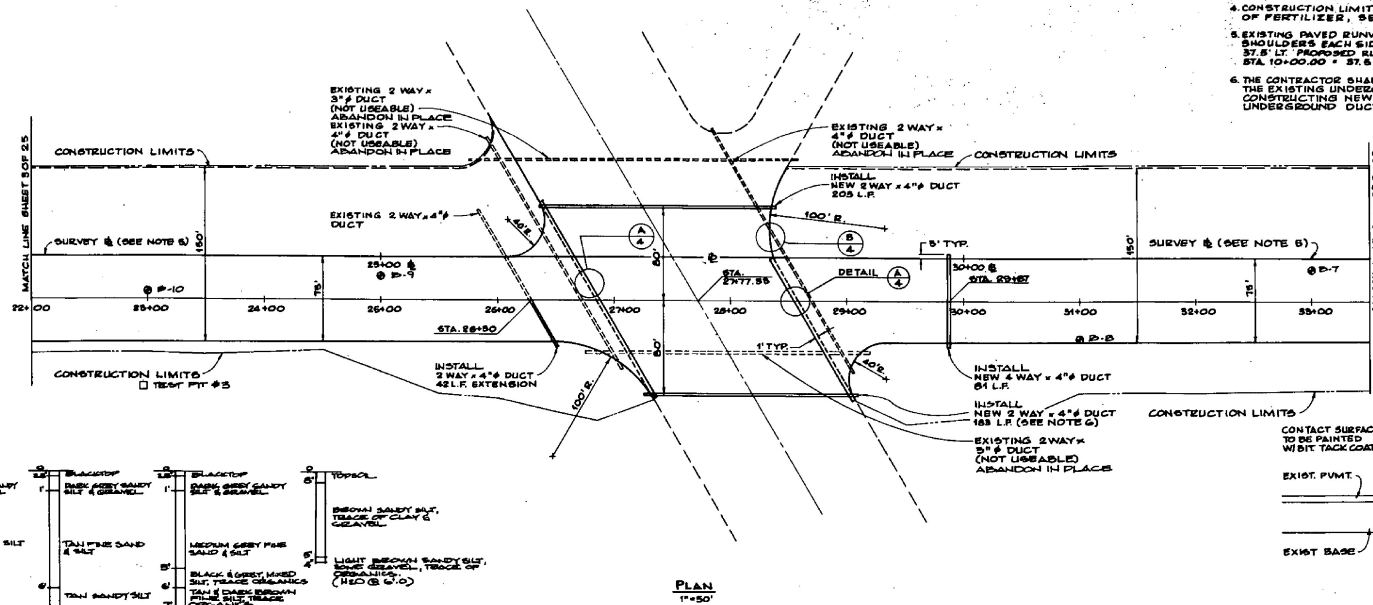
PLAN & PROFILE - STA. 8+50 TO STA. 22+00



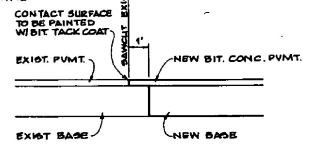
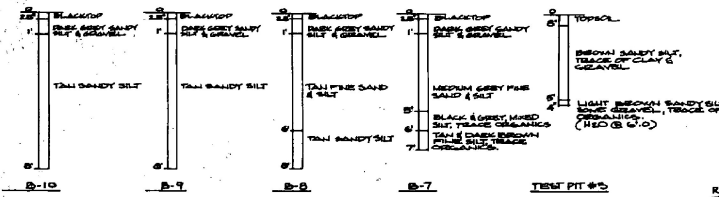
<p>Dulane-Henry INC.</p>	Client No. 80-018	
	Proj. Manager G.W. D'AMICO	
	Prof. Designer E.H. DAVIS	
	Drawn By C.W. BELL	
	Checked By G.W. D'AMICO	
Scale AS SHOWN	Sheet 8 of 30	
Approved	Date	Date

Rev.	Description	By	Date

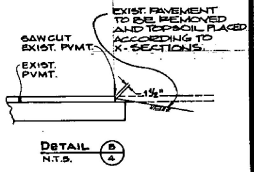
- PLAN & PROFILE NOTES**
1. ALL ELEVATIONS REFER TO MEAN SEA LEVEL DATUM.
 2. SEE SHEET 10 OF 25 FOR DRAIN DETAILS.
 3. SEE SHEET 7 OF 25 FOR LIGHTING PLAN.
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 5. EXISTING PAVED RUNWAY = 150' (75' OF RUNWAY WITH 37.5' PAVED SHOULDERS EACH SIDE). SURVEY BASELINE (S) = E OF 150' RUNWAY = 37.5' LT. PROPOSED RUNWAY & (L.R. - PROPOSED RUNWAY 15-31) STA. 10+00.00 = 37.5' RT. EXISTING RUNWAY 15-31 STA. 10+00.00.
 6. THE CONTRACTOR SHALL ASCERTAIN THE LOCATION & CONDITION OF THE EXISTING UNDERGROUND DUCTS IN THE FIELD, PRIOR TO CONSTRUCTING NEW DUCTS. THE CONSTRUCTION OF NEW UNDERGROUND DUCTS SHALL BE DETERMINED BY THE ENGINEER.



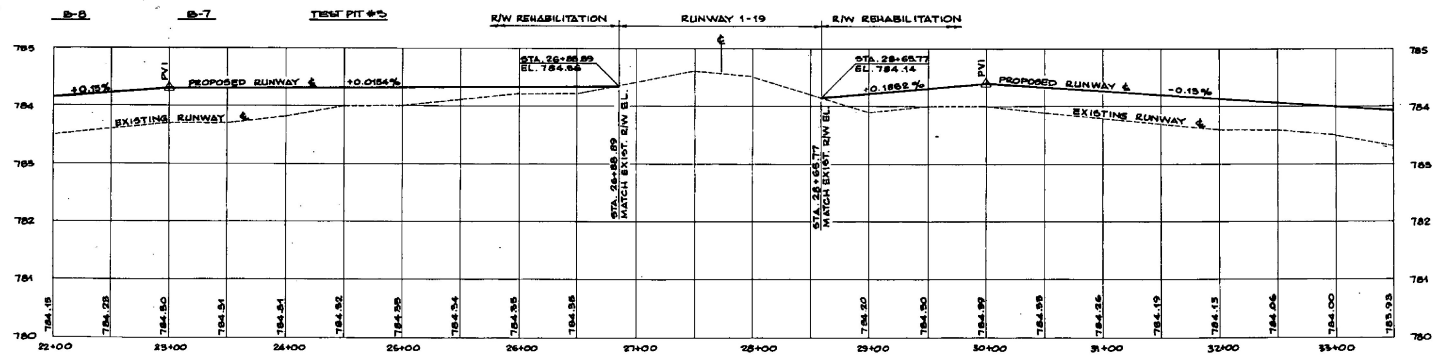
7. PAVING ON RUNWAY 15-31 TO TERMINATE @ STA. 26+09.2 & 28+65.2 AT WHICH POINTS THE PAVEMENT WILL ABUT EXISTING PAVEMENT ON RUNWAY 1-19.



DETAIL A
N.T.S.



DETAIL B
N.T.S.



PROFILE
HOR.: 1"=50'
VER.: 1"=1'

A.L.P. PROJECT NO. 3-50-0015-04
MOTLAND STATE AIRPORT
PLAN & PROFILE - STA. 22+00 TO STA. 33+50



Rev.	Description	By	Date

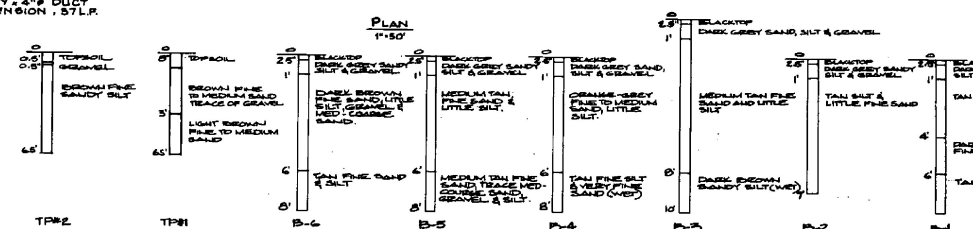
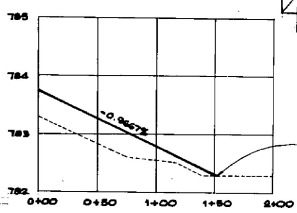
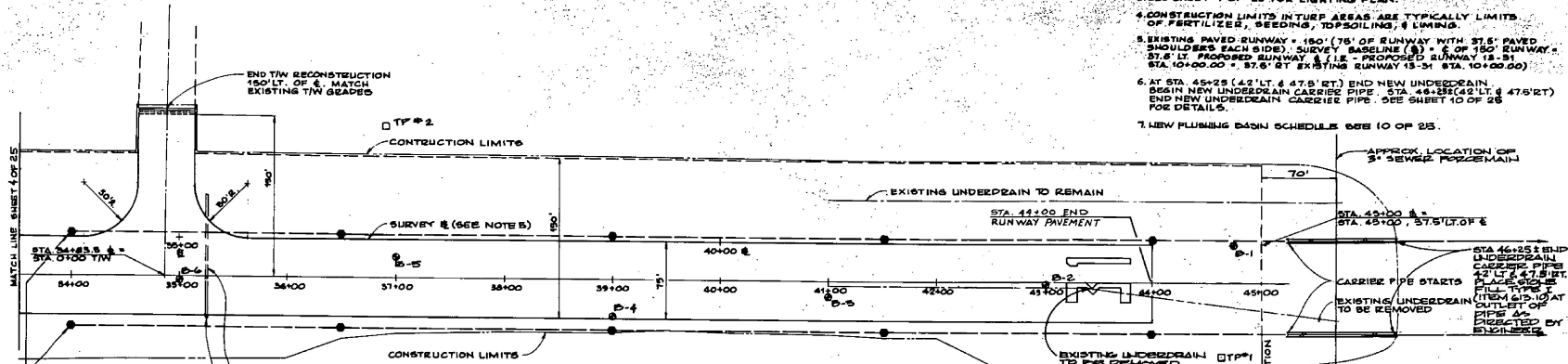
SLACKWOOD

D. W. SLACKWOOD & COMPANY, INC.
1521 Washington Ave.
Portland, Oregon 97202

Client No. 20-0182
 Proj. Manager G.W. D'AMBRO
 Prof. Designer G.S. BAWES
 Drawn By G.W. HILLS
 Checked By G.W. D'AMBRO
 Scale AS SHOWN
 Approved _____
 Date _____

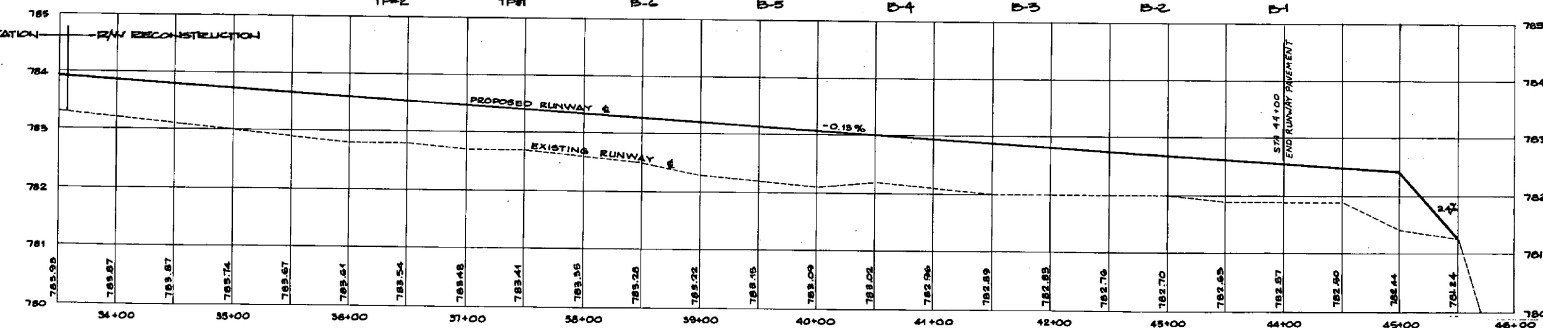
Sheet 6 of 30
D

- PLAN & PROFILE NOTES:**
1. ALL ELEVATIONS REFER TO MEAN SEA LEVEL DATUM.
 2. SEE SHEET 10 OF 25 FOR DRAIN DETAILS.
 3. SEE SHEET 7 OF 25 FOR LIGHTING PLAN.
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 5. EXISTING PAVED RUNWAY = 150' (75' OF RUNWAY WITH 37.5' PAVED SHOULDERS EACH SIDE). SURVEY BASELINE (S) = 2' OF 150' RUNWAY = 37.5' LT. PROPOSED RUNWAY & (L) = PROPOSED RUNWAY (R-S) STA. 34+00.00 + 37.5' BT. EXISTING RUNWAY (R-S) STA. 34+00.00.
 6. AT STA. 45+25 (42' LT. & 47.5' RT.) END NEW UNDERDRAIN. BEGIN NEW UNDERDRAIN CARRIER PIPE. STA. 46+25 (42' LT. & 47.5' RT.) END NEW UNDERDRAIN CARRIER PIPE. SEE SHEET 10 OF 25 FOR DETAILS.
 7. NEW PLUMBING BASIN SCHEDULE SEE 10 OF 25.

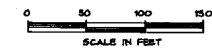


STA 1+80
TAXIWAY PROFILE
HOR. 1\"/>

STA 1+80
TAXIWAY PROFILE
HOR. 1\"/>



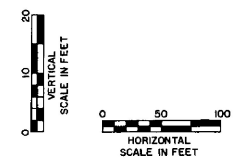
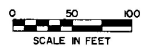
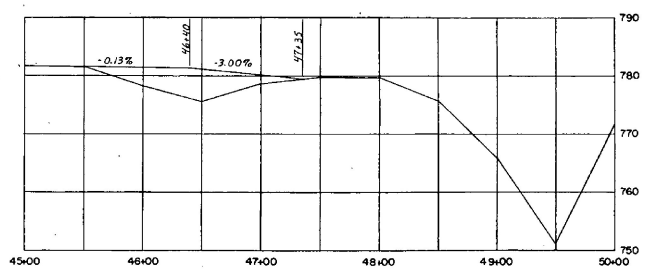
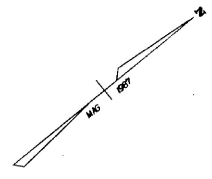
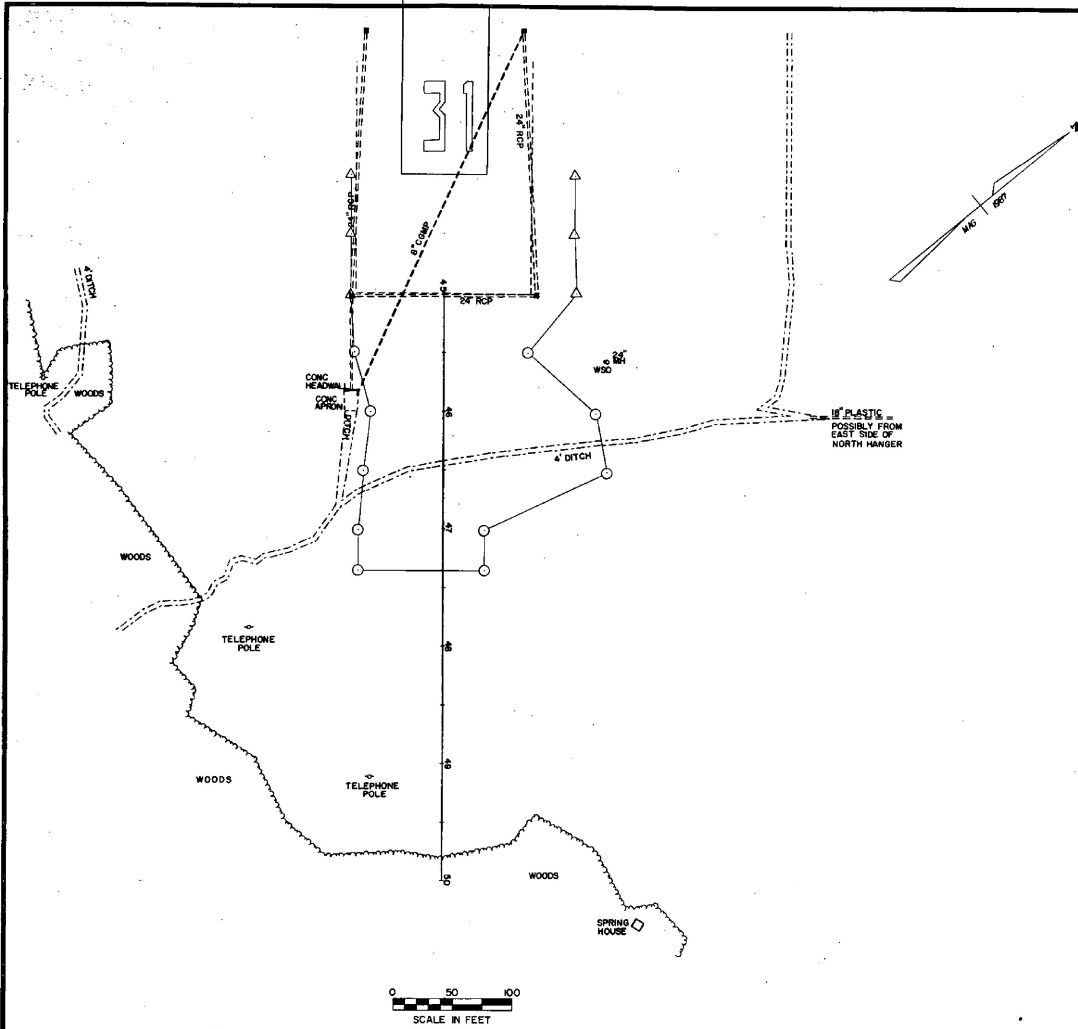
PROFILE
HOR. 1\"/>



A.I.P. PROJECT NO. 3-50-0015-04
MUTLAND STATE AIRPORT
PLAN & PROFILE - STA. 33+80 TO STA. 45-00.

DH Dunn & Henry INC.	Client No. 80-0122	
	Proj. Manager D.W. D'AMICO	
	Prin. Designer E.A. DAVIDS	
	Checked By C.W. WELLS	
Scale AS SHOWN	Approved	Sheet 8 of 30
Rev.	Description	By Date

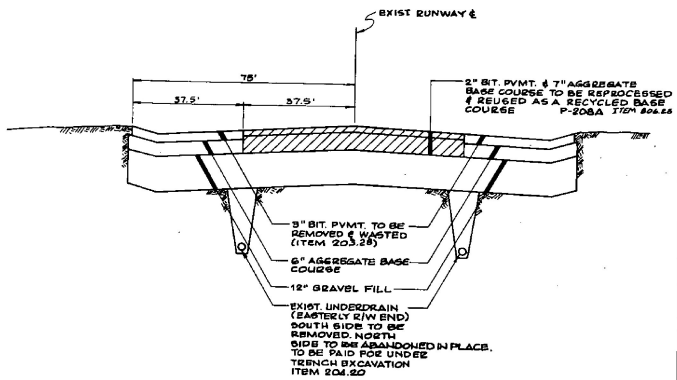
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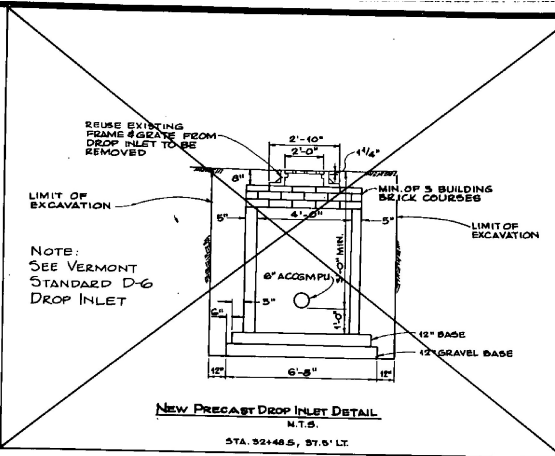
DATUM _____
 VERTICAL _____
 HORIZONTAL _____

SURVEYED BY REED DATE 6-87
 DRAWN BY DAYE DATE 6-87
 TRACED BY MURDOCK DATE 6-87

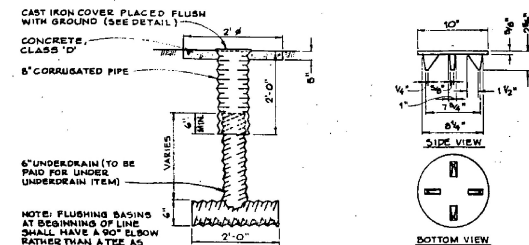
PROJ. AIR NO 03-2043
 SHEET 5A OF 30



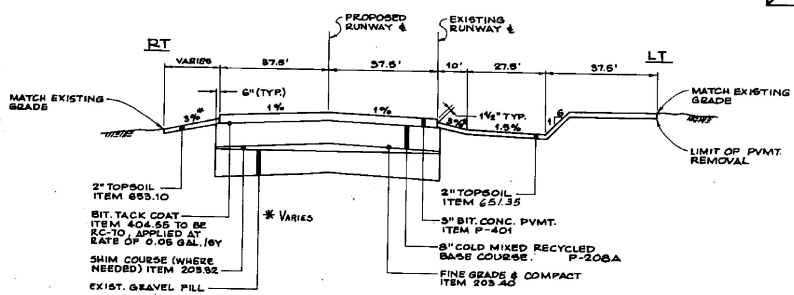
EXISTING TYPICAL SECTION
N.T.S.



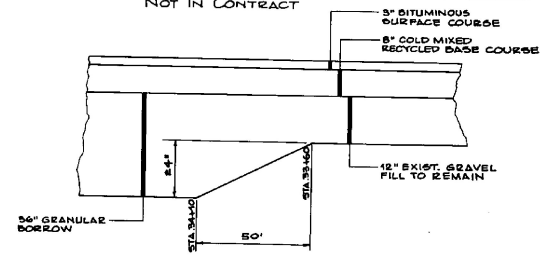
NEW PRECAST DROP INLET DETAIL
N.T.S.



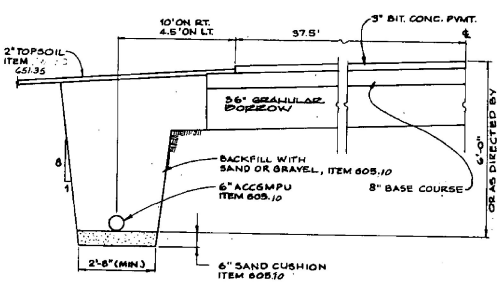
UNDERDRAIN FLUSHING BASIN
NOT TO SCALE
ITEM 605.95



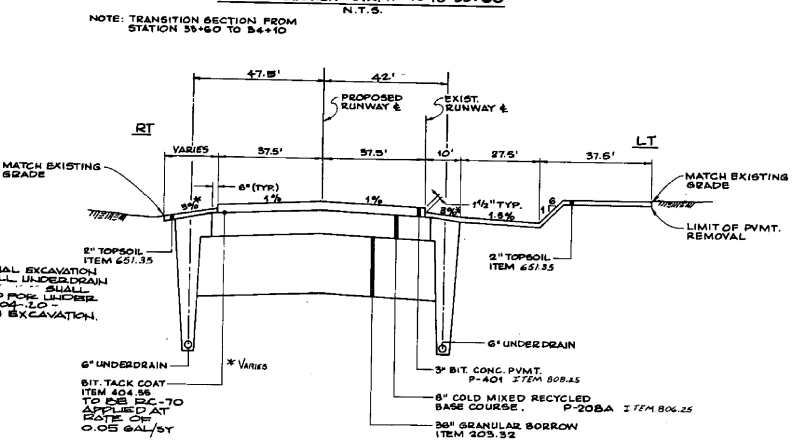
TYPICAL SECTION - STA. 11+40 TO 39+60
N.T.S.



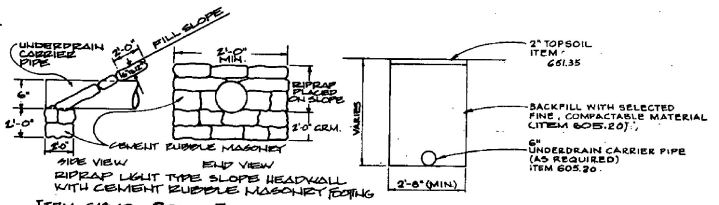
SUBGRADE TRANSITION SECTION
N.T.S.



UNDERDRAIN DETAIL
NOT TO SCALE



TYPICAL CROSS SECTION - STA. 34+10 TO 44+00
N.T.S.



UNDERDRAIN CARRIER PIPE
NOT TO SCALE

GENERAL NOTES

Seed, Item 651.16 to be applied as directed by Engineer.

QTY	UNITS	NAME	PRICE	DATE
3.33	2	Crown Vetch	97	75
50.00	30	Cresting Red Peas	98	85
8.33	5	Timothy	99	85
16.67	10	Yarr-Pye Grass (Var. Pennine)	95	85
8.33	5	Alfalfa (Var. Nevada)	99	85
8.33	5	Birdsfoot Trefoil (Var. Rapire)	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 of 500 lbs/acre.

Agriculture 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 north slopes at the rate of 2 tons/acre.

Topsoil, Item 651.35
To be used with seed, item 651.10, as directed by the Engineer.

Allowable thickness tolerances

Subbase	± 1"
Controlled Material	± 1"
Pavement	± 1"
Base Course	± 1"

- Sub-grade under areas to be paved to be compacted to 100% density as per FAA T-611 (AASHTO 99).
- Dilatant tack coat to be applied as per Item 404, Subsection 404.06, Type II. First Application using RC-250.
- Top of subbase under runway pavement to be fine graded and compacted to 100% density as per FAA T-611 (AASHTO 99).

A.I.P. PROJECT NO. 3-50-0015-04
RUTLAND STATE AIRPORT.

TYPICAL SECTIONS

	Client No. 20-103	
	Prof. Manager G.W. D'AMICO Prof. Designer E.S. DAWES Drawn By C.W. HILLS Checked By G.W. D'AMICO Scale AS SHOWN Approved _____ Date _____	
CLARENDON 1271 Washington Ave. Putney, VT 05759 Phone 248-0100 Fax 248-0101	Sheet 8 of 30 Date _____	VERMONT STATE OF VERMONT No. 2013 PROFESSIONAL ENGINEER

FIGURE NO'S
BY 1988 ARE
DELETED

EXISTING PAD MOUNTED TRANSFORMER. PROVIDE NEW METERS, 20 AMP DISCONNECT.

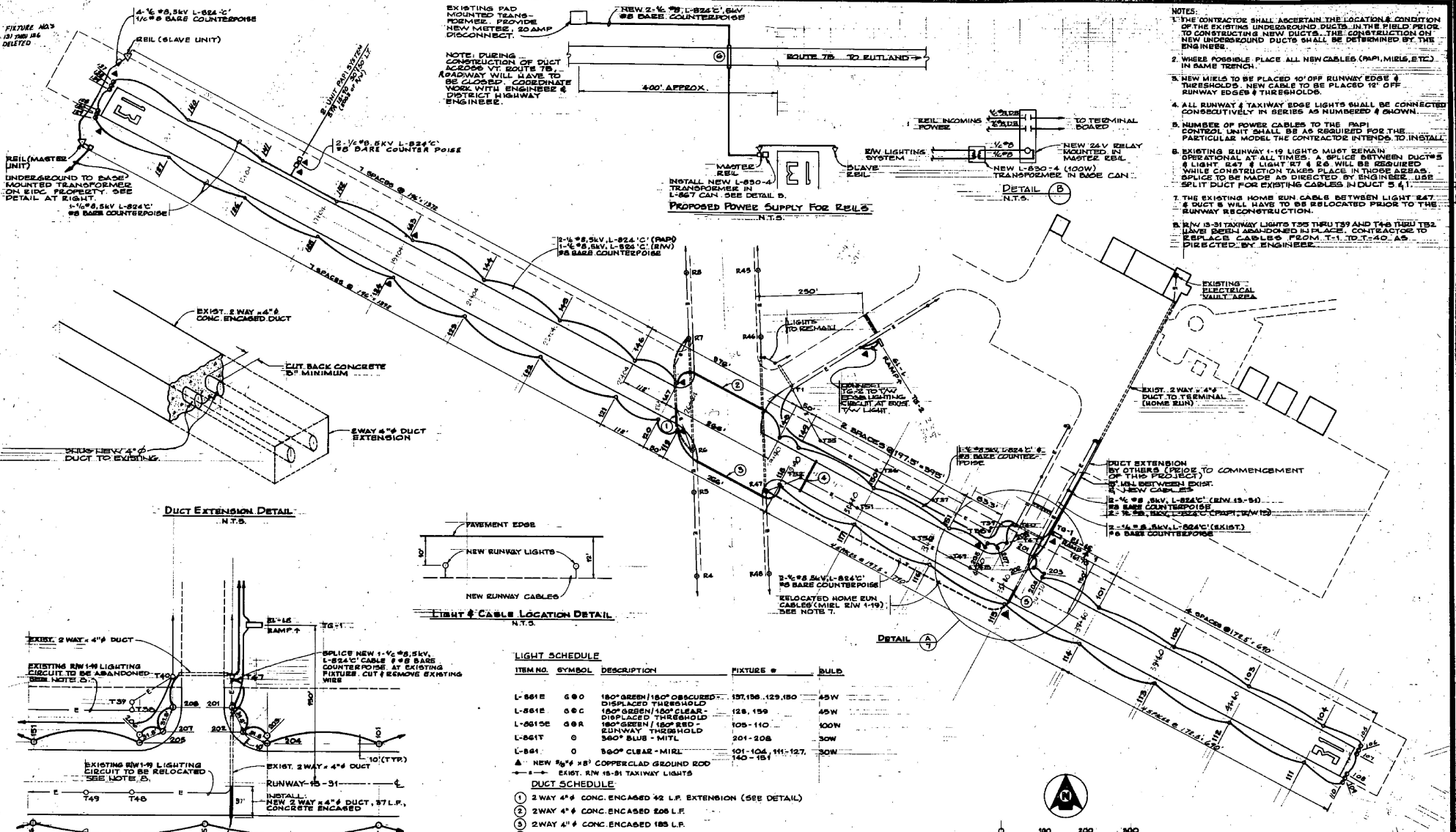
NOTE: DURING CONSTRUCTION OF DUCT ACROSS VI. ROUTE 78, ROADWAY WILL HAVE TO BE CLOSED. COORDINATE WORK WITH ENGINEER & DISTRICT HIGHWAY ENGINEER.

NEW 2-1/2" #8, L-824'C, 5KV #8 BARE COUNTERPOISE

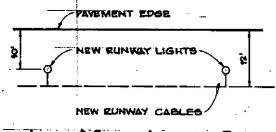
400' APPROX.

ROUTE 78 TO EUTLAND

- NOTES:
1. THE CONTRACTOR SHALL ASCERTAIN THE LOCATION & CONDITION OF THE EXISTING UNDERGROUND DUCTS IN THE FIELD PRIOR TO CONSTRUCTION OF NEW DUCTS. THE CONSTRUCTION OF NEW UNDERGROUND DUCTS SHALL BE DETERMINED BY THE ENGINEER.
 2. WHERE POSSIBLE, PLACE ALL NEW CABLES, (PAPI, MIREL, ETC.) IN SAME TRENCH.
 3. NEW WIRES TO BE PLACED 10" OFF RUNWAY EDGE & THRESHOLDS. NEW CABLE TO BE PLACED 12" OFF RUNWAY EDGES & THRESHOLDS.
 4. ALL RUNWAY & TAXIWAY EDGE LIGHTS SHALL BE CONNECTED CONSECUTIVELY IN SERIES AS NUMBERED & SHOWN.
 5. NUMBER OF POWER CABLES TO THE PAPI CONTROL UNIT SHALL BE AS REQUIRED FOR THE PARTICULAR MODEL THE CONTRACTOR INTENDS TO INSTALL.
 6. EXISTING RUNWAY 1-19 LIGHTS MUST REMAIN OPERATIONAL AT ALL TIMES. A SPLICE BETWEEN DUCTS & LIGHT #27 & LIGHT #7 & #6 WILL BE REQUIRED WHILE CONSTRUCTION TAKES PLACE IN THOSE AREAS. SPLICE TO BE MADE AS DIRECTED BY ENGINEER. USE SPLIT DUCT FOR EXISTING CABLES IN DUCT 5 & 1.
 7. THE EXISTING HOME RUN CABLE BETWEEN LIGHT #27 & DUCT 5 WILL HAVE TO BE RELOCATED PRIOR TO THE RUNWAY RECONSTRUCTION.
 8. RW 15-31 TAXIWAY LIGHTS T25 THRU T29 AND T46 THRU T52 HAVE BEEN ABANDONED IN PLACE. CONTRACTOR TO REPLACE CABLES FROM T-1 TO T-40 AS DIRECTED BY ENGINEER.



DUCT EXTENSION DETAIL
N.T.S.



LIGHT SCHEDULE

ITEM NO.	SYMBOL	DESCRIPTION	FIXTURE #	BULD
L-861E	000	180° GREEN / 180° DISCRETE DISPLACED THRESHOLD	137, 156, 129, 150	45W
L-861E	00C	180° GREEN / 180° CLEAR DISPLACED THRESHOLD	128, 159	45W
L-861DE	00R	180° GREEN / 180° RED - RUNWAY THRESHOLD	105-110	100W
L-861T	0	360° BLUE - MITL	201-208	30W
L-861	0	360° CLEAR - MIREL	101-104, 111-127	30W

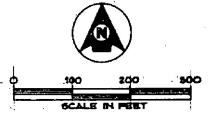
DUCT SCHEDULE

- ▲: NEW 1/2" #8 COPPER CLAD GROUND ROD
- : EXIST. RW 15-31 TAXIWAY LIGHTS
- ① 2 WAY 4" # CONC. ENCASED 42 L.F. EXTENSION (SEE DETAIL)
- ② 2 WAY 4" # CONC. ENCASED 208 L.F.
- ③ 2 WAY 4" # CONC. ENCASED 185 L.F.
- ④ 4 WAY 4" # CONC. ENCASED 81 L.F.
- ⑤ 2 WAY 4" # CONC. ENCASED 37 L.F. EXTENSION (SEE DETAIL)
- ⑥ 2 WAY 4" # CONC. ENCASED 30 L.F.

TAXIWAY GUIDANCE SIGN SCHEDULE

NO.	TYPE	LOCATION	FRONT	REAR
T3-1	5 PANEL, L-868 RW	OTA 55+36.5, 180° LT of 4'-7 1/2" DIA. 1-87.0, 50' RT.	01-13	RAMP
T3-2	5 PANEL, L-868 RW	50 RT. OF TW 4	1-13	RAMP

TAXIWAY SIGNS TO BE SIZE 1, CLASS 2, STYLE 2.



BUTLAND STATE AIRPORT

LIGHTING PLAN

Client No.
 Proj. Manager
 Proj. Designer
 Drawn By
 Checked By
 Approved
 Date

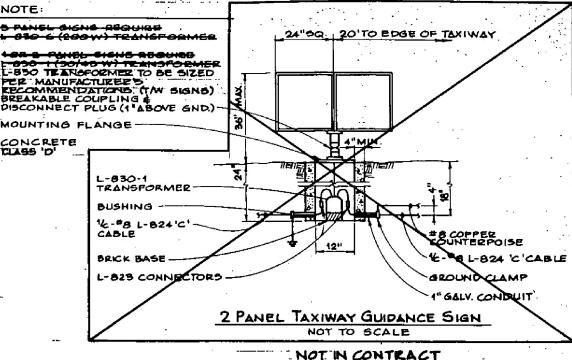
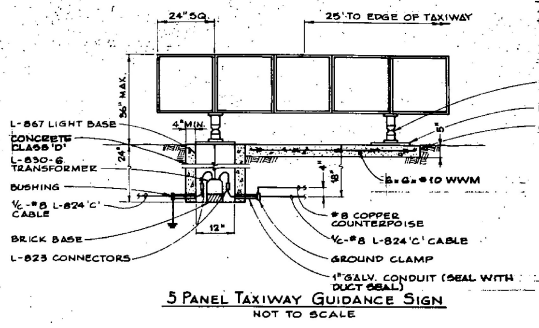
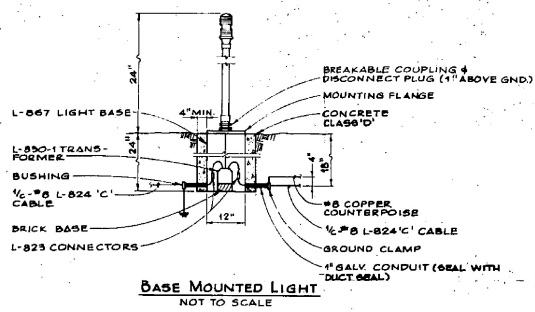
A.P. PROJECT NO. 9-80-0019-04

DELETE VASI, INDECT PAPI, 120' & 140'
 ADD: 200' & 250' DIA. E.I. DUCT R/W 7-11' & 7-12'

Rev. Description By Date

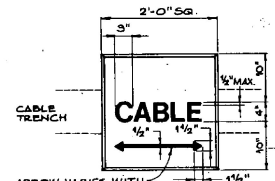
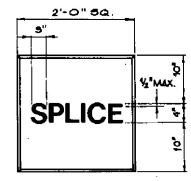
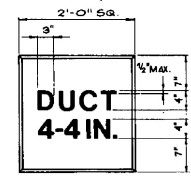
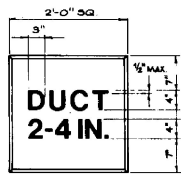
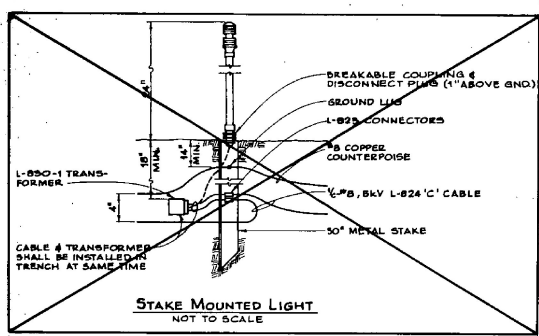
DH
Duffness-Henry
INC.

STATE OF VERMONT
REGISTERED PROFESSIONAL ENGINEER
No. 1071

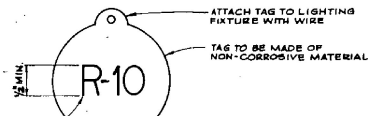
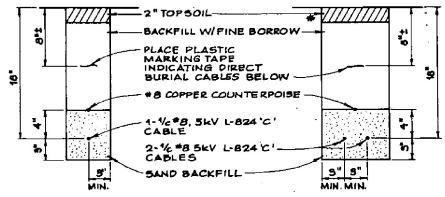
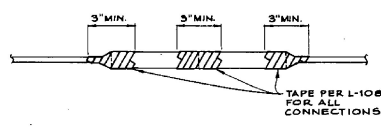
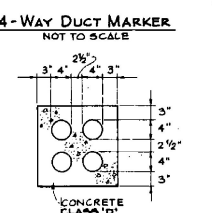
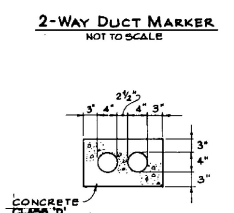


NOTE:
 3-PANEL SIGNS-REQUIRES
 L-850-6 (600W) TRANSFORMER
 4-PANEL SIGNS-REQUIRES
 L-850-1 TRANSFORMER
 L-850 TRANSFORMER TO BE SIZED
 PER MANUFACTURER'S
 RECOMMENDATIONS (TAXI SIGNS)
 BREAKABLE COUPLING &
 DISCONNECT PLUG (1" ABOVE GND)
 MOUNTING FLANGE
 CONCRETE
 CLASS 'D'

NOTE:
 PROVIDE A 3" LOOP OF CABLE AT ALL
 TRANSFORMER LOCATIONS.

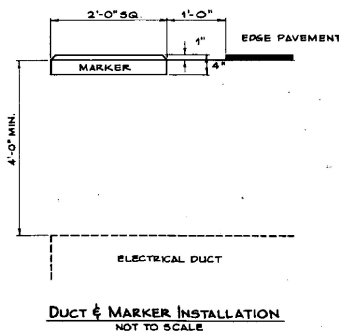


MARKER NOTES:
 1. HAND LETTERING NOT
 ALLOWED ON MARKERS.
 LETTERING IS TO BE
 IMPRESSED.
 2. ARROW ON CABLE
 MARKER TO INDICATE
 DIRECTION OF CABLES.
 3. PAYMENT FOR CABLE,
 SPLICE OR DUCT MARKERS
 TO BE SUBMITTED
 TO OTHER PAY ITEMS.



LIGHT LOCATION SCHEDULE

STATION	NO.	OFFSET (ft.)	STATION	NO.	OFFSET (ft.)
	IN-106	DELETED	39+30	118	47.38
			39+30	149	47.38
			39+37.5	117	47.38
			39+37.5	130	47.38
41+80	128	47.38	39+53.0	116	47.38
	129	47.38	39+53.0	152	47.38
	130	47.38	39+58.5	205	47.38
	131	47.38	39+58.5	206	50.31
	132	47.38	39+58.5	207	61.38
	133	47.38	39+58.5	208	67.38
	134	47.38	39+58.5	209	73.38
	135	47.38	39+58.5	210	79.38
	136	47.38	39+58.5	211	85.38
	137	47.38	39+58.5	212	91.38
	138	47.38	39+58.5	213	97.38
	139	47.38	39+58.5	214	103.38
	140	47.38	39+58.5	215	109.38
	141	47.38	39+58.5	216	115.38
	142	47.38	39+58.5	217	121.38
	143	47.38	39+58.5	218	127.38
	144	47.38	39+58.5	219	133.38
	145	47.38	39+58.5	220	139.38
	146	47.38	39+58.5	221	145.38
	147	47.38	39+58.5	222	151.38
	148	47.38	39+58.5	223	157.38
	149	47.38	39+58.5	224	163.38
	150	47.38	39+58.5	225	169.38
	151	47.38	39+58.5	226	175.38
	152	47.38	39+58.5	227	181.38
	153	47.38	39+58.5	228	187.38
	154	47.38	39+58.5	229	193.38
	155	47.38	39+58.5	230	199.38
	156	47.38	39+58.5	231	205.38
	157	47.38	39+58.5	232	211.38
	158	47.38	39+58.5	233	217.38
	159	47.38	39+58.5	234	223.38
	160	47.38	39+58.5	235	229.38
	161	47.38	39+58.5	236	235.38
	162	47.38	39+58.5	237	241.38
	163	47.38	39+58.5	238	247.38
	164	47.38	39+58.5	239	253.38
	165	47.38	39+58.5	240	259.38
	166	47.38	39+58.5	241	265.38
	167	47.38	39+58.5	242	271.38
	168	47.38	39+58.5	243	277.38
	169	47.38	39+58.5	244	283.38
	170	47.38	39+58.5	245	289.38
	171	47.38	39+58.5	246	295.38
	172	47.38	39+58.5	247	301.38
	173	47.38	39+58.5	248	307.38
	174	47.38	39+58.5	249	313.38
	175	47.38	39+58.5	250	319.38
	176	47.38	39+58.5	251	325.38
	177	47.38	39+58.5	252	331.38
	178	47.38	39+58.5	253	337.38
	179	47.38	39+58.5	254	343.38
	180	47.38	39+58.5	255	349.38
	181	47.38	39+58.5	256	355.38
	182	47.38	39+58.5	257	361.38
	183	47.38	39+58.5	258	367.38
	184	47.38	39+58.5	259	373.38
	185	47.38	39+58.5	260	379.38
	186	47.38	39+58.5	261	385.38
	187	47.38	39+58.5	262	391.38
	188	47.38	39+58.5	263	397.38
	189	47.38	39+58.5	264	403.38
	190	47.38	39+58.5	265	409.38
	191	47.38	39+58.5	266	415.38
	192	47.38	39+58.5	267	421.38
	193	47.38	39+58.5	268	427.38
	194	47.38	39+58.5	269	433.38
	195	47.38	39+58.5	270	439.38
	196	47.38	39+58.5	271	445.38
	197	47.38	39+58.5	272	451.38
	198	47.38	39+58.5	273	457.38
	199	47.38	39+58.5	274	463.38
	200	47.38	39+58.5	275	469.38
	201	47.38	39+58.5	276	475.38
	202	47.38	39+58.5	277	481.38
	203	47.38	39+58.5	278	487.38
	204	47.38	39+58.5	279	493.38
	205	47.38	39+58.5	280	499.38
	206	47.38	39+58.5	281	505.38
	207	47.38	39+58.5	282	511.38
	208	47.38	39+58.5	283	517.38
	209	47.38	39+58.5	284	523.38
	210	47.38	39+58.5	285	529.38
	211	47.38	39+58.5	286	535.38
	212	47.38	39+58.5	287	541.38
	213	47.38	39+58.5	288	547.38
	214	47.38	39+58.5	289	553.38
	215	47.38	39+58.5	290	559.38
	216	47.38	39+58.5	291	565.38
	217	47.38	39+58.5	292	571.38
	218	47.38	39+58.5	293	577.38
	219	47.38	39+58.5	294	583.38
	220	47.38	39+58.5	295	589.38
	221	47.38	39+58.5	296	595.38
	222	47.38	39+58.5	297	601.38
	223	47.38	39+58.5	298	607.38
	224	47.38	39+58.5	299	613.38
	225	47.38	39+58.5	300	619.38



A.I.P. PROJECT NO. 3-50-001544

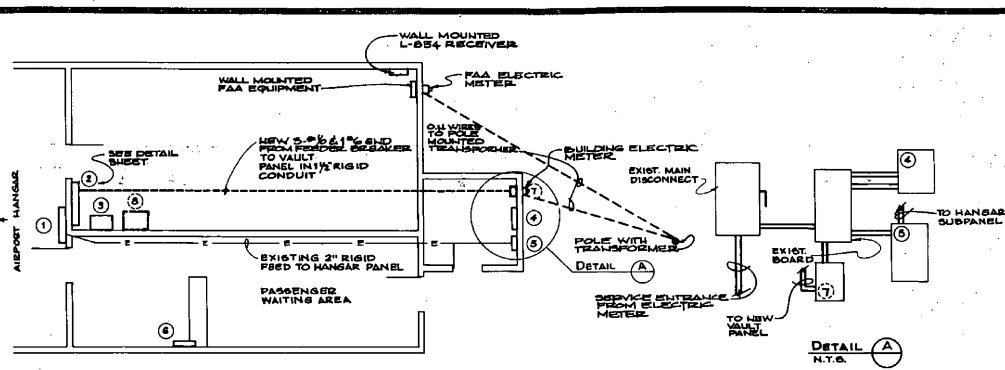
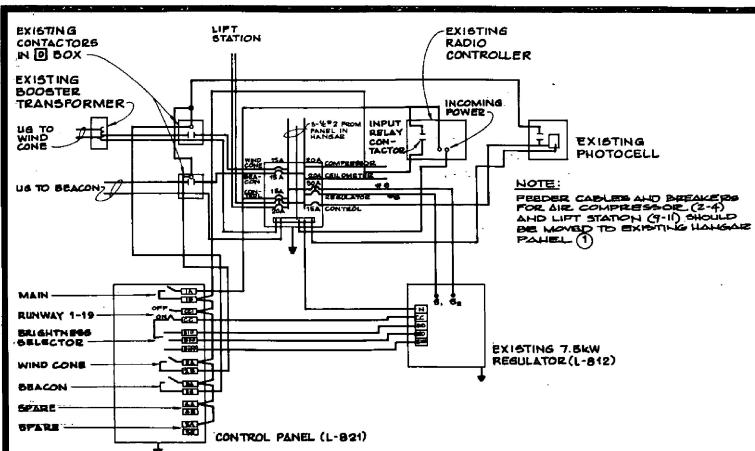
RUTLAND STATE AIRPORT
ELECTRICAL DETAILS

DH
Dubs & Harry Inc.

Client No. 3-50-001544
 Proj. Manager: S.M., P.E.
 Proj. Designer: S.M., P.E.
 Drawn By: S.M., P.E.
 Checked By: S.M., P.E.
 Scale: AS SHOWN
 Date: 10/1/80

Sheet No. 30

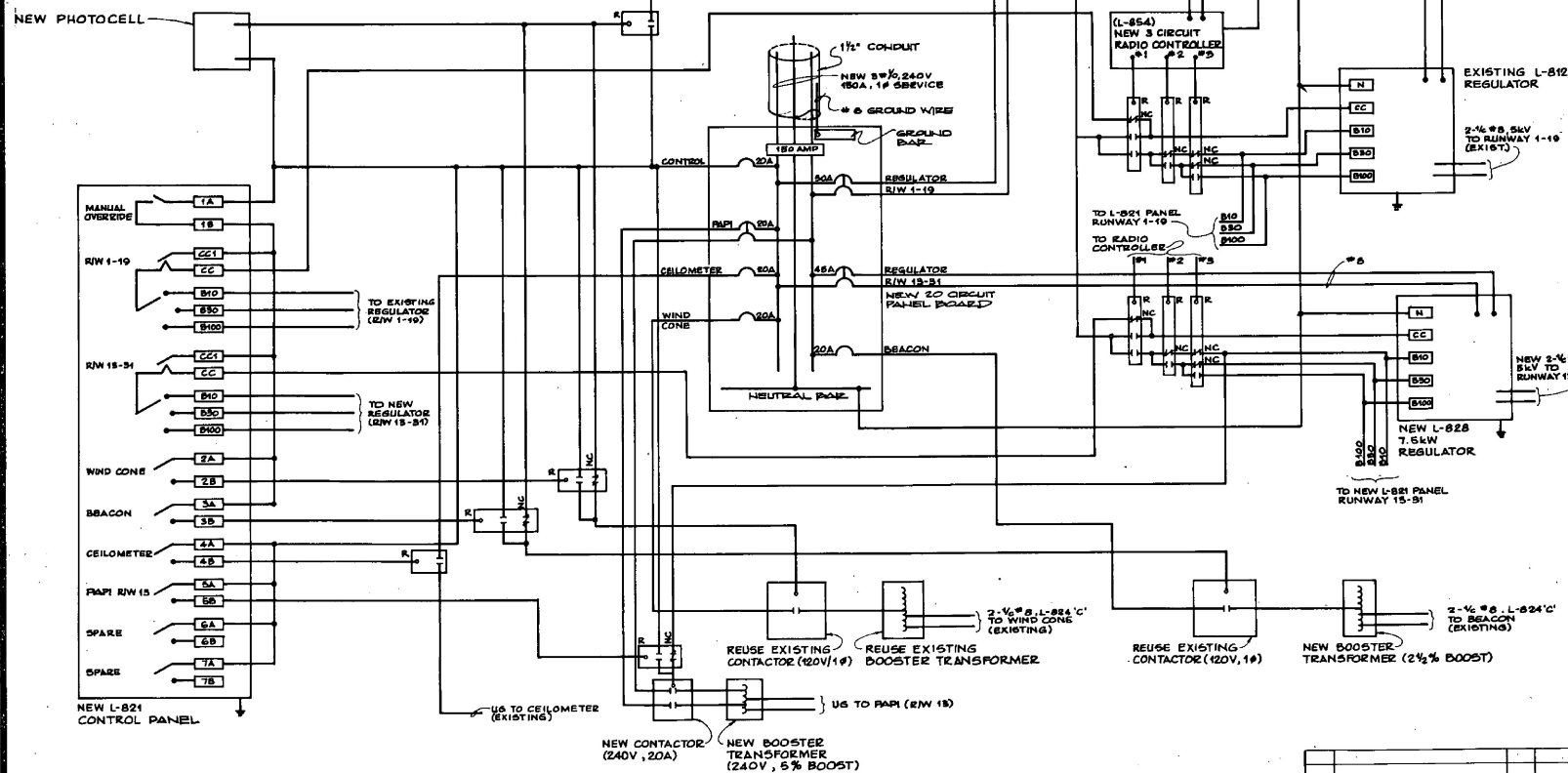
Rev.	Description	By	Date



EXISTING VAULT WIRING DIAGRAM
N.Y.S.

TERMINAL AREA VAULT FLOOR PLAN
N.Y.S.

- EQUIPMENT SCHEDULE**
- EXIST. HANGAR PANEL (100A - HANGAR VAULT)
 - EXIST. VAULT PANEL (VAULT ONLY)
 - EXIST. 7.5KW REGULATOR (R/W 1-19)
 - EXIST. PANEL (HEATING SYSTEM, WELL, OFFICE) (50A)
 - EXIST. 100A FEEDER BREAKER (HANGAR/VAULT)
 - EXIST. L-821 PANEL TO BE REMOVED, REPLACE WITH NEW
 - NEW 150A FEEDER BREAKER (VAULT SERVICE ONLY)
 - NEW 7.5KW REGULATOR (R/W 13-31) L-828



- GENERAL NOTES:**
- RUNWAY 1-19 LIGHTING TO REMAIN IN SERVICE (NIGHTTIME) DURING CONSTRUCTION.
 - ALL WIRING 1/2" #12 UNLESS OTHERWISE NOTED.
 - 2" 120VAC RELAY WITH NEON INDICATING LIGHT USE SQUARE "D", KP 13 OR EQUAL.
 - PHOTOCELL - USE CROUSE-HINDS MODEL PEC-4 OR EQUAL. MOUNT ON NORTH SIDE OF BUILDING, OR AS DIRECTED BY THE ENGINEER.
 - WIND CONE & BEACON ARE TO OPERATE ON PHOTOCELL FOR CONTINUOUS NIGHTTIME OPERATION.
 - NORMAL OPERATIONS OF MIELS TO BE VIA RADIO CONTROL.
 - ALL CONTACTORS, RELAYS, ETC. TO BE MOUNTED IN NEMA-4 ENCLOSURE.
 - NEUTRAL CONDUCTORS NOT SHOWN.
 - RADIO CONTROL OPERATION - FREQUENCY: 122.5 MHz
CIRCUIT #1 MIELS 50% (3 CLICKS)
CIRCUIT #2 MIELS 50% (5 CLICKS)
CIRCUIT #3 MIELS 100% (7 CLICKS)
 - NEW BOOSTER TRANSFORMERS - 120/240 PRIMARY, 120V SECONDARY @ 5.5A, 100VA RATING. USE ACME ELECTRIC CAT. NO. T-81488 OR EQUAL. CONNECT POLE INPUT VOLTAGE & PERCENT BOOST AS LISTED ABOVE.
 - RADIO ANTENNA, MOUNT ON ROOF OF TERMINAL BUILDING.
 - EXISTING ELECTRICAL EQUIPMENT NOT BEING REUSED TO BE STORED ON AIRPORT PROPERTY AS ORDERED BY THE ENGINEER.
 - ALL WIRING SHALL BE IN ACCORDANCE WITH LATEST EDITION OF THE NATIONAL ELECTRICAL CODE.

A.I.P. PROJECT NO. 3-50-0015-04
RUTLAND STATE AIRPORT
VAULT LAYOUT

Client No. 80-6183
Prof. Manager G.W. O'ARMO
Prof. Designer E.B. DAVIES
Drawn By C.W. MULLA
Checked By G.W. O'ARMO
Scale AS SHOWN
Approved AS SHOWN
Date

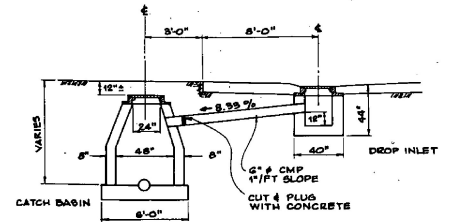
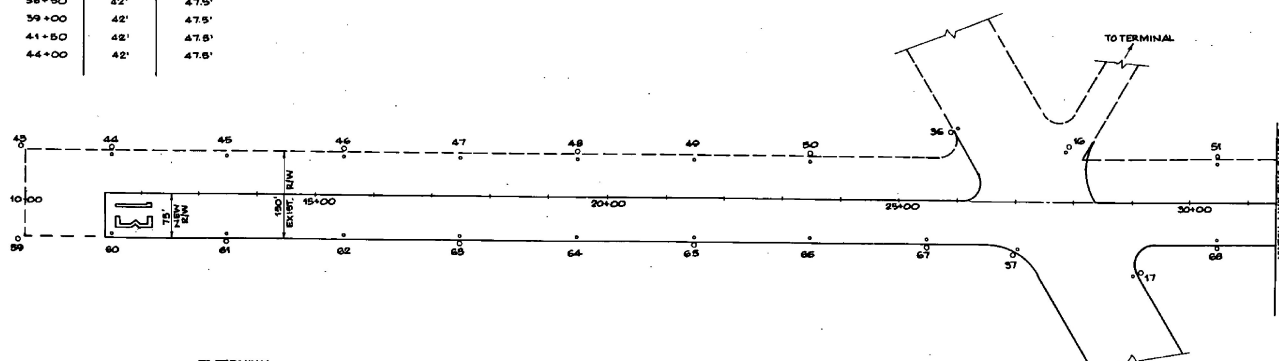
Dulane-Henry Inc.

Sheet 8 of 30

Rev.	Description	By	Date

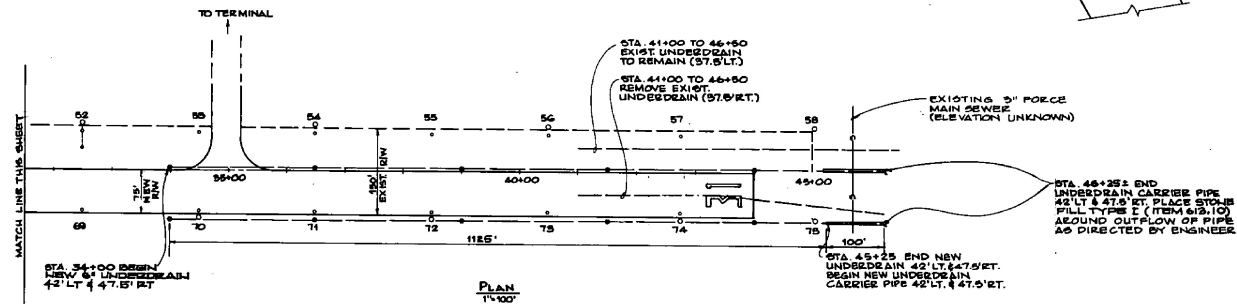
NEW FLUSHING BASIN SCHEDULE

STATION	OFFSET LT.	OFFSET RT.
34+00	42'	47.5'
36+50	42'	47.5'
39+00	42'	47.5'
41+50	42'	47.5'
44+00	42'	47.5'

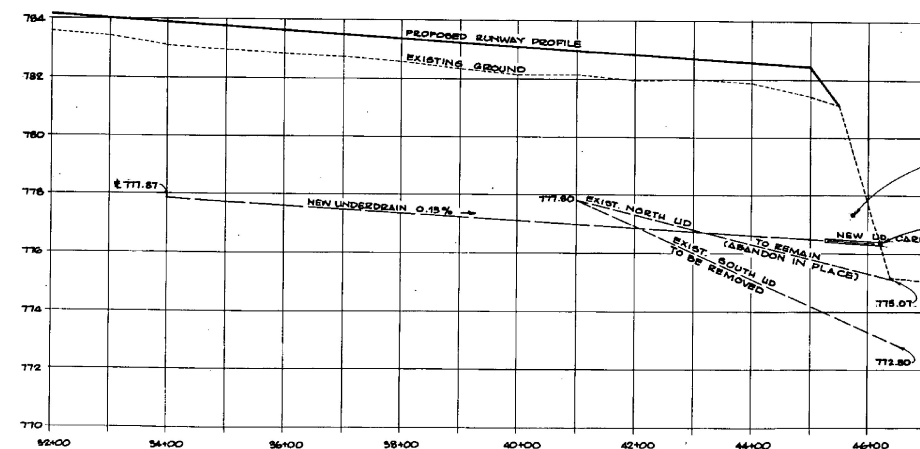


EXIST. CATCH BASIN & DROP INLET DETAIL
N.T.S.

NOTE:
IF DROP INLET IS TO BE REMOVED, THE CONTRACTOR WILL CUT AND PLUG THE 6" x 6" METAL PIPE AS CLOSE TO THE CATCH BASIN AS POSSIBLE. THE PLUG SHALL BE CONCRETE.



NO.	TYPE	DATE	EXISTING ELEV.	FINAL ELEV.	REMARKS
10	CB	2748.5	87' 11"	78.12	To remove
11	DI	2748.5	87' 11"	78.12	To remove
12	CB	2808.5	120' 00"	78.75	To remove
13	DI	2808.5	120' 00"	78.75	To remove
14	CB	2868.5	120' 00"	78.38	To remove
15	DI	2868.5	120' 00"	78.38	To remove
16	CB	2928.5	80' 00"	78.01	To remove
17	DI	2928.5	80' 00"	78.01	To remove
18	CB	2988.5	78' 11"	78.02	Adjust Frame and Grate
19	DI	2988.5	78' 11"	78.02	Adjust Frame and Grate
20	CB	3048.5	78' 11"	78.02	Adjust Frame and Grate
21	DI	3048.5	78' 11"	78.02	Adjust Frame and Grate
22	CB	3108.5	78' 11"	78.02	Adjust Frame and Grate
23	DI	3108.5	78' 11"	78.02	Adjust Frame and Grate
24	CB	3168.5	78' 11"	78.02	Adjust Frame and Grate
25	DI	3168.5	78' 11"	78.02	Adjust Frame and Grate
26	CB	3228.5	78' 11"	78.02	Adjust Frame and Grate
27	DI	3228.5	78' 11"	78.02	Adjust Frame and Grate
28	CB	3288.5	78' 11"	78.02	Adjust Frame and Grate
29	DI	3288.5	78' 11"	78.02	Adjust Frame and Grate
30	CB	3348.5	78' 11"	78.02	Adjust Frame and Grate
31	DI	3348.5	78' 11"	78.02	Adjust Frame and Grate
32	CB	3408.5	78' 11"	78.02	Adjust Frame and Grate
33	DI	3408.5	78' 11"	78.02	Adjust Frame and Grate
34	CB	3468.5	78' 11"	78.02	Adjust Frame and Grate
35	DI	3468.5	78' 11"	78.02	Adjust Frame and Grate
36	CB	3528.5	78' 11"	78.02	Adjust Frame and Grate
37	DI	3528.5	78' 11"	78.02	Adjust Frame and Grate
38	CB	3588.5	78' 11"	78.02	Adjust Frame and Grate
39	DI	3588.5	78' 11"	78.02	Adjust Frame and Grate
40	CB	3648.5	78' 11"	78.02	Adjust Frame and Grate
41	DI	3648.5	78' 11"	78.02	Adjust Frame and Grate
42	CB	3708.5	78' 11"	78.02	Adjust Frame and Grate
43	DI	3708.5	78' 11"	78.02	Adjust Frame and Grate
44	CB	3768.5	78' 11"	78.02	Adjust Frame and Grate
45	DI	3768.5	78' 11"	78.02	Adjust Frame and Grate
46	CB	3828.5	78' 11"	78.02	Adjust Frame and Grate
47	DI	3828.5	78' 11"	78.02	Adjust Frame and Grate
48	CB	3888.5	78' 11"	78.02	Adjust Frame and Grate
49	DI	3888.5	78' 11"	78.02	Adjust Frame and Grate
50	CB	3948.5	78' 11"	78.02	Adjust Frame and Grate
51	DI	3948.5	78' 11"	78.02	Adjust Frame and Grate
52	CB	4008.5	78' 11"	78.02	Adjust Frame and Grate
53	DI	4008.5	78' 11"	78.02	Adjust Frame and Grate
54	CB	4068.5	78' 11"	78.02	Adjust Frame and Grate
55	DI	4068.5	78' 11"	78.02	Adjust Frame and Grate
56	CB	4128.5	78' 11"	78.02	Adjust Frame and Grate
57	DI	4128.5	78' 11"	78.02	Adjust Frame and Grate
58	CB	4188.5	78' 11"	78.02	Adjust Frame and Grate
59	DI	4188.5	78' 11"	78.02	Adjust Frame and Grate
60	CB	4248.5	78' 11"	78.02	Adjust Frame and Grate
61	DI	4248.5	78' 11"	78.02	Adjust Frame and Grate
62	CB	4308.5	78' 11"	78.02	Adjust Frame and Grate
63	DI	4308.5	78' 11"	78.02	Adjust Frame and Grate
64	CB	4368.5	78' 11"	78.02	Adjust Frame and Grate
65	DI	4368.5	78' 11"	78.02	Adjust Frame and Grate
66	CB	4428.5	78' 11"	78.02	Adjust Frame and Grate
67	DI	4428.5	78' 11"	78.02	Adjust Frame and Grate
68	CB	4488.5	78' 11"	78.02	Adjust Frame and Grate
69	DI	4488.5	78' 11"	78.02	Adjust Frame and Grate
70	CB	4548.5	78' 11"	78.02	Adjust Frame and Grate
71	DI	4548.5	78' 11"	78.02	Adjust Frame and Grate
72	CB	4608.5	78' 11"	78.02	Adjust Frame and Grate
73	DI	4608.5	78' 11"	78.02	Adjust Frame and Grate
74	CB	4668.5	78' 11"	78.02	Adjust Frame and Grate
75	DI	4668.5	78' 11"	78.02	Adjust Frame and Grate



- LEGEND**
- EXIST. CATCH BASIN
 - EXIST. DROP INLET
 - EXIST. UNDERDRAIN
 - NEW FLUSHING BASIN
 - NEW DROP INLET
 - NEW UNDERDRAIN
 - NEW UNDERDRAIN CARRIER PIPE



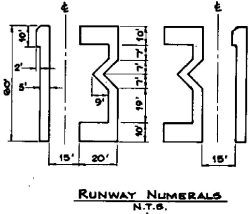
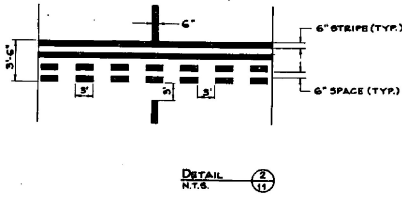
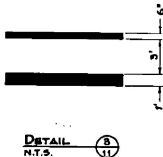
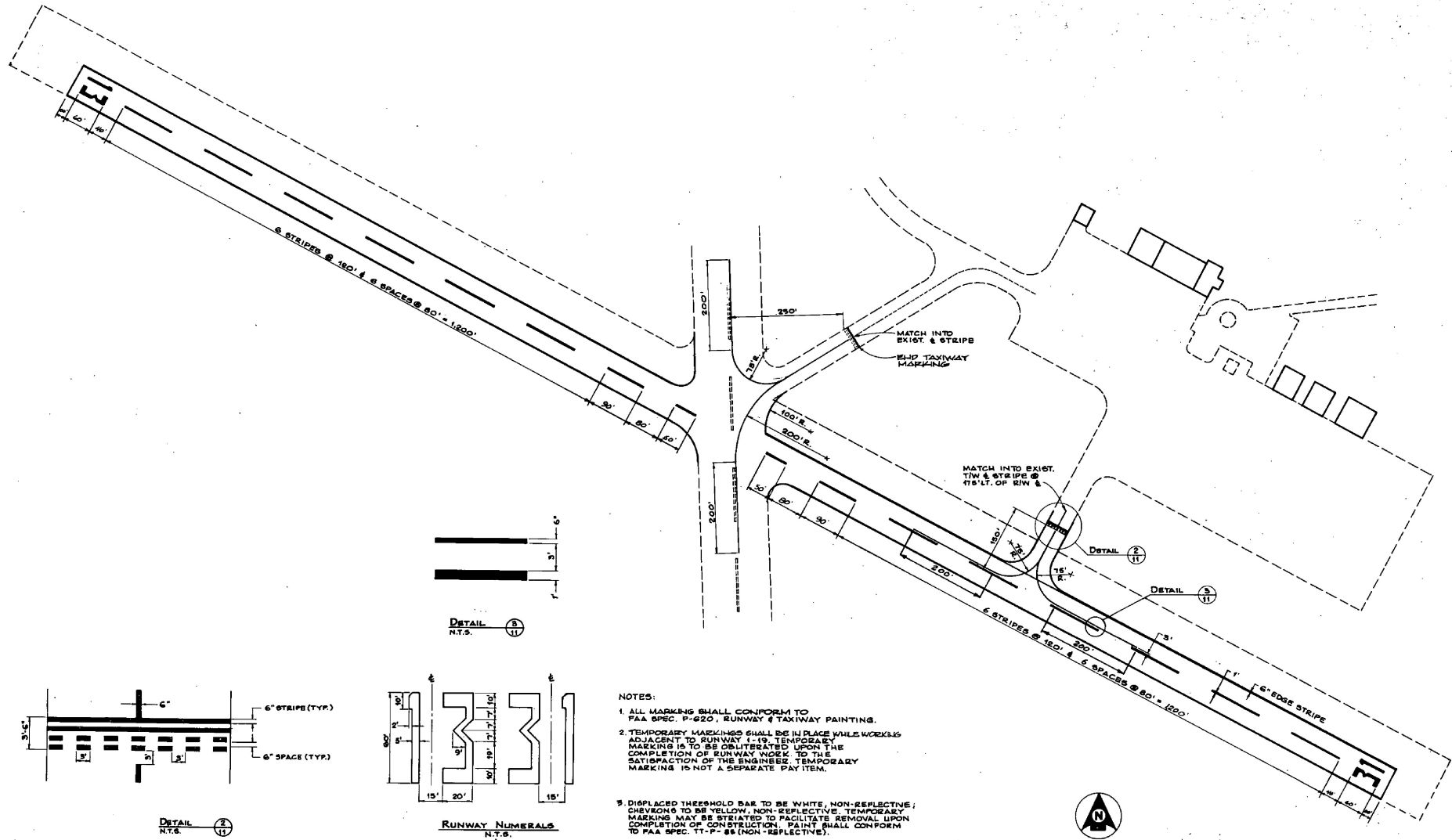
A.L.P. PROJECT NO. 3-50-0018-04

Rev.	Description	By	Date

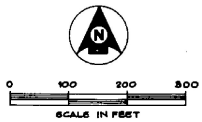
RUTLAND STATE AIRPORT

DRAINAGE DETAILS

D Drummond-Henry 100 Northrup Ave. Portland, Maine 04103	Client No. 80-0182	STATE OF VERMONT DEPARTMENT OF TRANSPORTATION No. 3373 PROFESSIONAL ENGINEER
	Proj. Manager G.M. D'AMICO	
	Drawn By G.W. HALL	
	Checked By G.M. D'AMICO	
Scale AS-SHOWN	Approved _____	Date _____
Sheet 18 of 30		D



- NOTES:**
1. ALL MARKING SHALL CONFORM TO FAA SPEC. P-620, RUNWAY & TAXIWAY PAINTING.
 2. TEMPORARY MARKINGS SHALL BE IN PLACE WHILE WORKS ADJACENT TO RUNWAY 19. TEMPORARY MARKING IS TO BE OBLITERATED UPON THE COMPLETION OF RUNWAY WORK TO THE SATISFACTION OF THE ENGINEER. TEMPORARY MARKING IS NOT A SEPARATE PAY ITEM.
 3. DISPLACED THRESHOLD BAR TO BE WHITE, NON-REFLECTIVE; CHEVRONS TO BE YELLOW, NON-REFLECTIVE. TEMPORARY MARKING MAY BE STRIATED TO FACILITATE REMOVAL UPON COMPLETION OF CONSTRUCTION. PAINT SHALL CONFORM TO FAA SPEC. TT-P-86 (NON-REFLECTIVE).
 4. TEMPORARY MARKING MAY BE SNOW FENCE, LIMESTONE, TARPAPEN OR OTHER MEANS SATISFACTORY TO THE ENGINEER.
 5. RUNWAY CENTERLINE & NUMERALS ARE TO BE WHITE. TAXIWAY CENTERLINE & HOLDLINE ARE TO BE AVIATION YELLOW, CONFORMING TO FEDERAL SPEC. TT-P-85 (HIGH REFLECTIVE).
 6. THE NUMERAL ONE, WHEN USED ALONE, CONTAINS A 20" x 10" HORIZONTAL BAR TO DIFFERENTIATE IT FROM THE RUNWAY CENTERLINE MARKINGS.



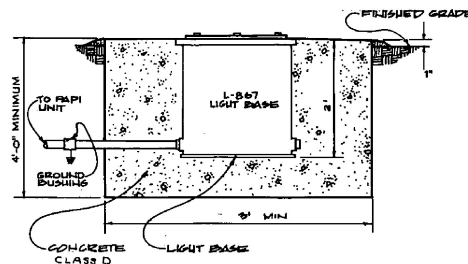
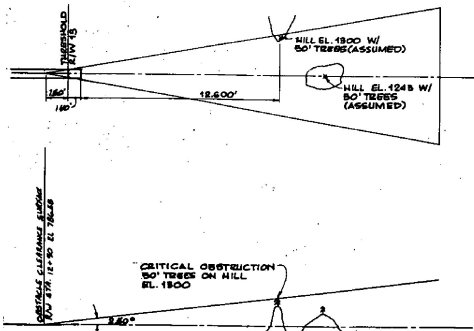
A.L.P. PROJECT NO. 3-50-0015-04

Rev.	Description	By	Date

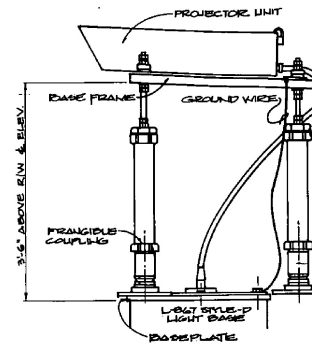
RU - LAND STATE AIRPORT

MARKING DIAGRAM

	Client No. 80-0183	
	Proj. Manager G.W. D'AMICO	
	Prd. Designer E.S. DAVIES	
	Drawn By C.W. HALLS	
	Checked By G.W. D'AMICO	
Scale AS SHOWN	Approved	Sheet 11 of 30
Date	Date	D



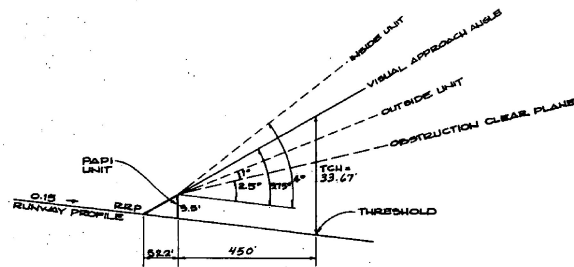
PAPI CAN INSTALLATION
N.T.S.



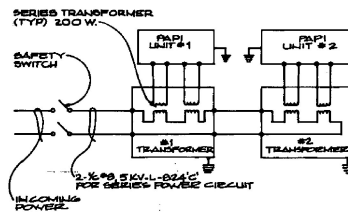
2 WAY PAPI MOUNTING DETAIL
N.T.S.

PAPI NOTES

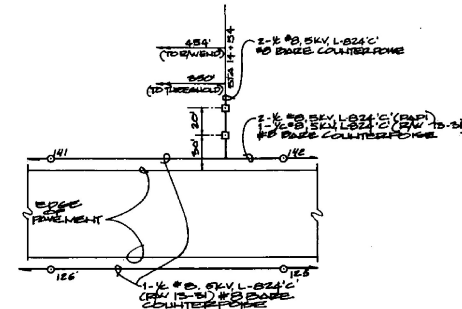
1. CONTRACTOR TO SPECIFY THE AIMING ANGLE ON THE PROJECTOR UNITS
2. PAPI TO CONFORM TO FAA SPEC. L-851, STYLE A (VOLTAGE POWERED) CLASS 2 (OPERATION TO 150AC)
3. REFER TO MANUFACTURER'S SPECIFICATION FOR DIMENSIONS AND FOUNDATION SIZING



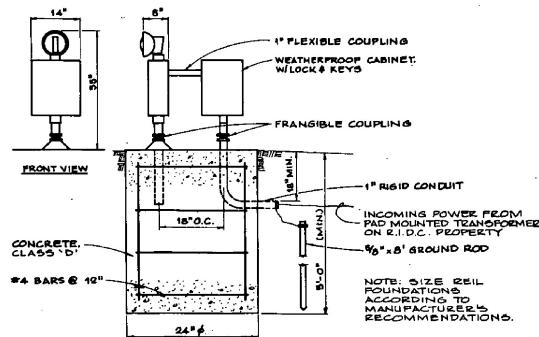
PAPI AIMING ANGLE
N.T.S.



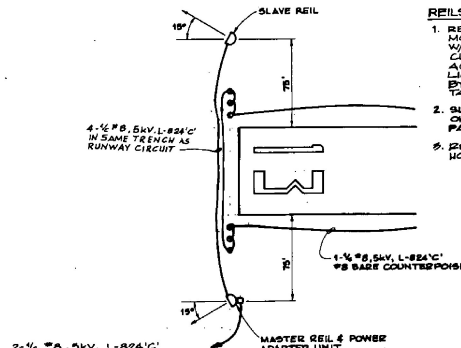
PAPI WIRING DIAGRAM
N.T.S.



PAPI SITING & WIRING DIAGRAM
1" = 50'



MASTER REIL UNIT
N.T.S.



2-1/2" #8, 5KV, L-824C'
UNDERGROUND TO
PAD MOUNTED TRANSFORMER
ON R.I.D.C. PROPERTY
SEE DETAIL ON
SHEET 7 OF 25.

REILS SITING & WIRING DIAGRAM
N.T.S.

REILS NOTES

1. REILS TO BE AMBASSADORE MODEL NO. 684A 20-100 OHM EQUAL W/120V, 6.6A POWER ADAPTER & CURRENT RELAYING TO BE ACTIVATED OFF RUNWAY LIGHTING CIRCUIT AS MANUL BY GODFREY ENGINEERING, TAMPA, FL.
2. SLAVE REIL TO BE MOUNTED ON FOUNDATION SIMILAR TO PAPI FOUNDATION SHOWN ABOVE
3. REILS SHALL BE AIMED 15° HORIZONTAL & 10° VERTICAL

A.I.P. PROJECT NO. 3-50-0015-04

RUTLAND STATE AIRPORT

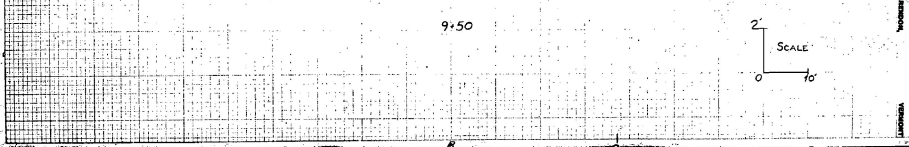
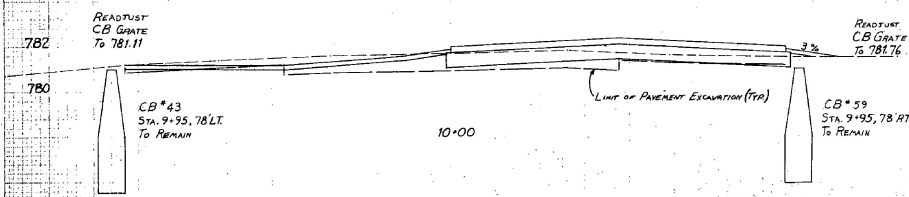
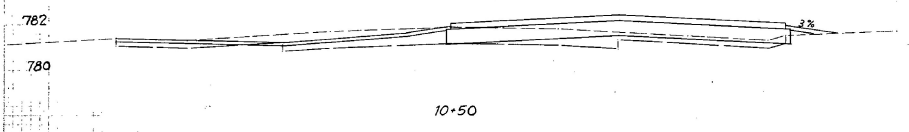
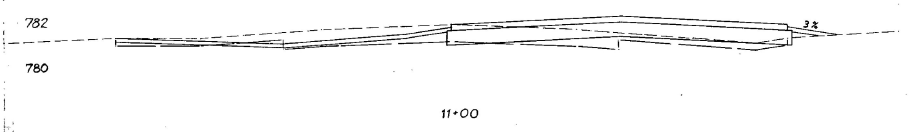
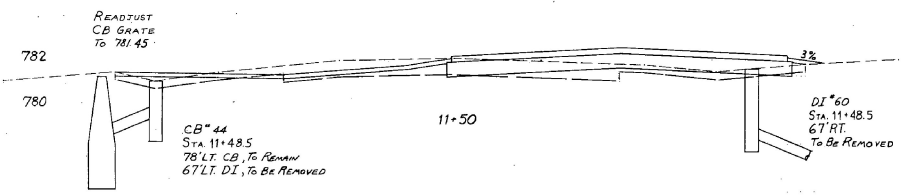
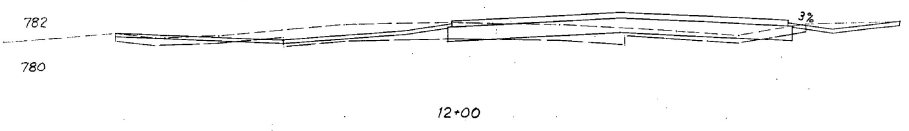
APPROACH AIDS

DH Durrett-Hornby	Client No. 30-0183	
	Prod. Manager G.W. D'AMICO	
	Prod. Designer E.S. DAWES	
	Drawn By C.W. HALLS	
	Checked By G.W. D'AMICO	
Scale 1/8" = 1'-0"	Approved JAR 08/25/83	Sheet 12 of 30
Rev.	Description	By Date

DELETE VASI, INSET PAPI	590	6-14-83
ADD REILS POWER VIA R.I.D.C.	6WD	7-12-83

NO.	DATE	REVISION

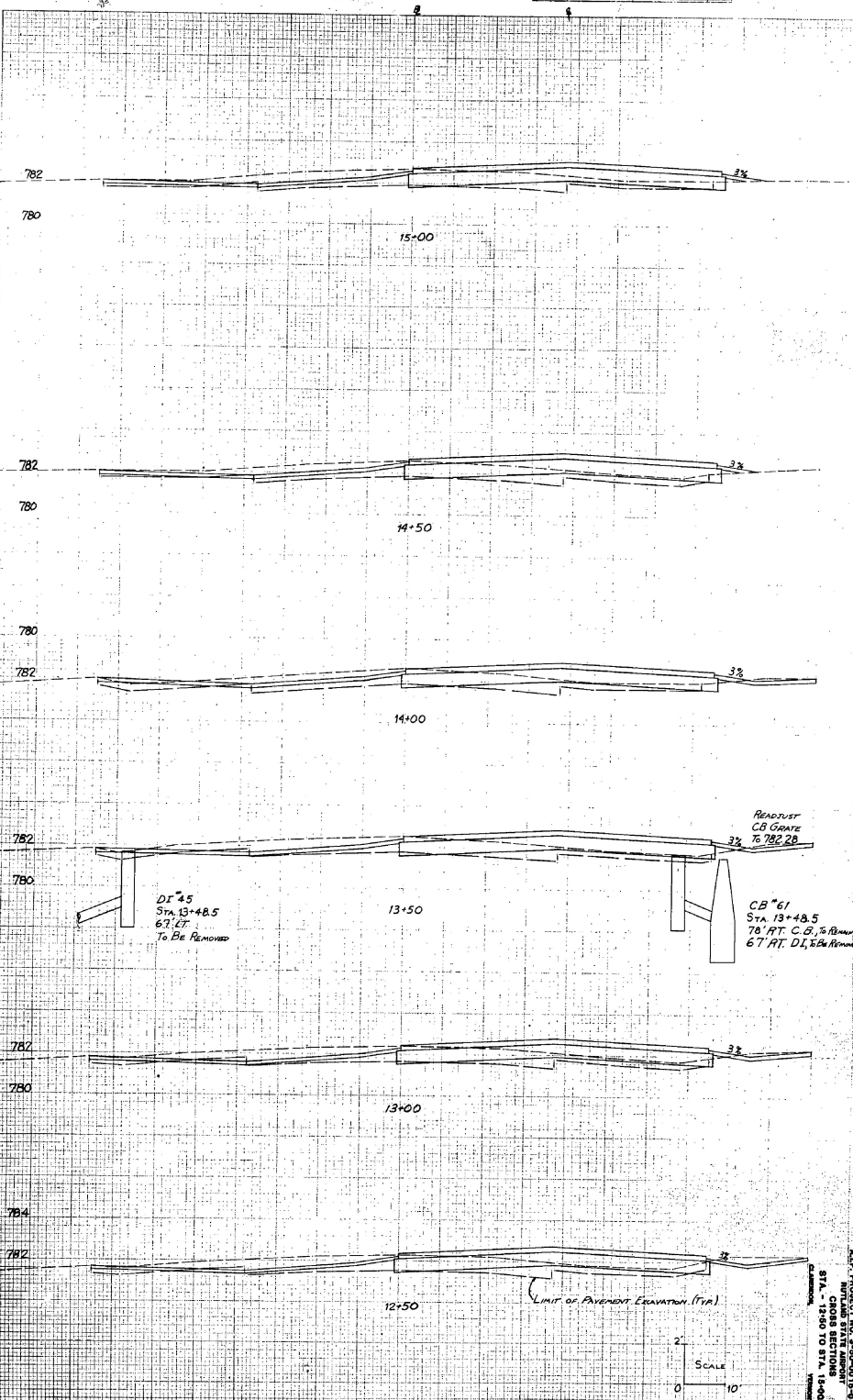
NO.	DATE	REVISION



ALP PROJECT NO. 3-82-0018-04
 CROSS SECTIONS
 STA. 9+40 TO STA. 13+00
 (continued)

DATE	10/1/50
BY	J. H. ...
CHECKED	...

DATE	10/1/50
BY	J. H. ...
CHECKED	...



DI 45
STA. 13+48.5
67' LT.
To Be Removed

CB 61
STA. 13+48.5
78' RT. C.S. To Be
67' RT. DI, To Be Removed

Remove
CB Grade
To 782.28

LIMIT OF PAVEMENT ELEVATION (PVE)



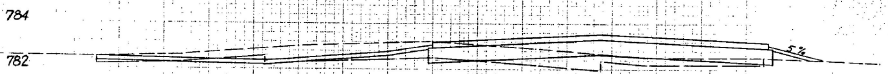
ALP PROJECT NO. 2-10-018-04
NUTLAND STATE HIGHWAY
STA. 12+50 TO STA. 14+00
COLUMBIA, MISSOURI

DATE	REVISION

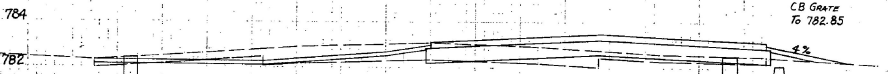
DATE	REVISION



18+50



18+00



17+50

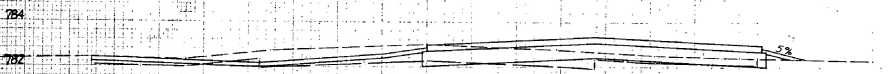
ROADJUST
CB GRATE
TO 782.85

DI # 47
Sta. 17+48.5
6.7' LT
TO BE REMOVED

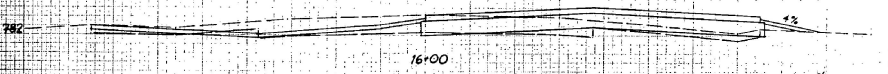
CB # 63
Sta. 17+48.5
6.7' RT DI, TO BE REMOVED
78' RT CB, TO REMAIN



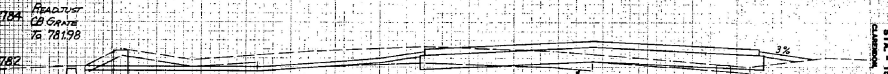
17+00



16+50



16+00



15+50

ROADJUST
CB GRATE
TO 781.98

CB # 46
Sta. 15+48.5
6.7' LT DI, TO BE REMOVED
78' LT CB, TO REMAIN

DI # 62
Sta. 15+48.5
6.7' RT DI
TO BE REMOVED

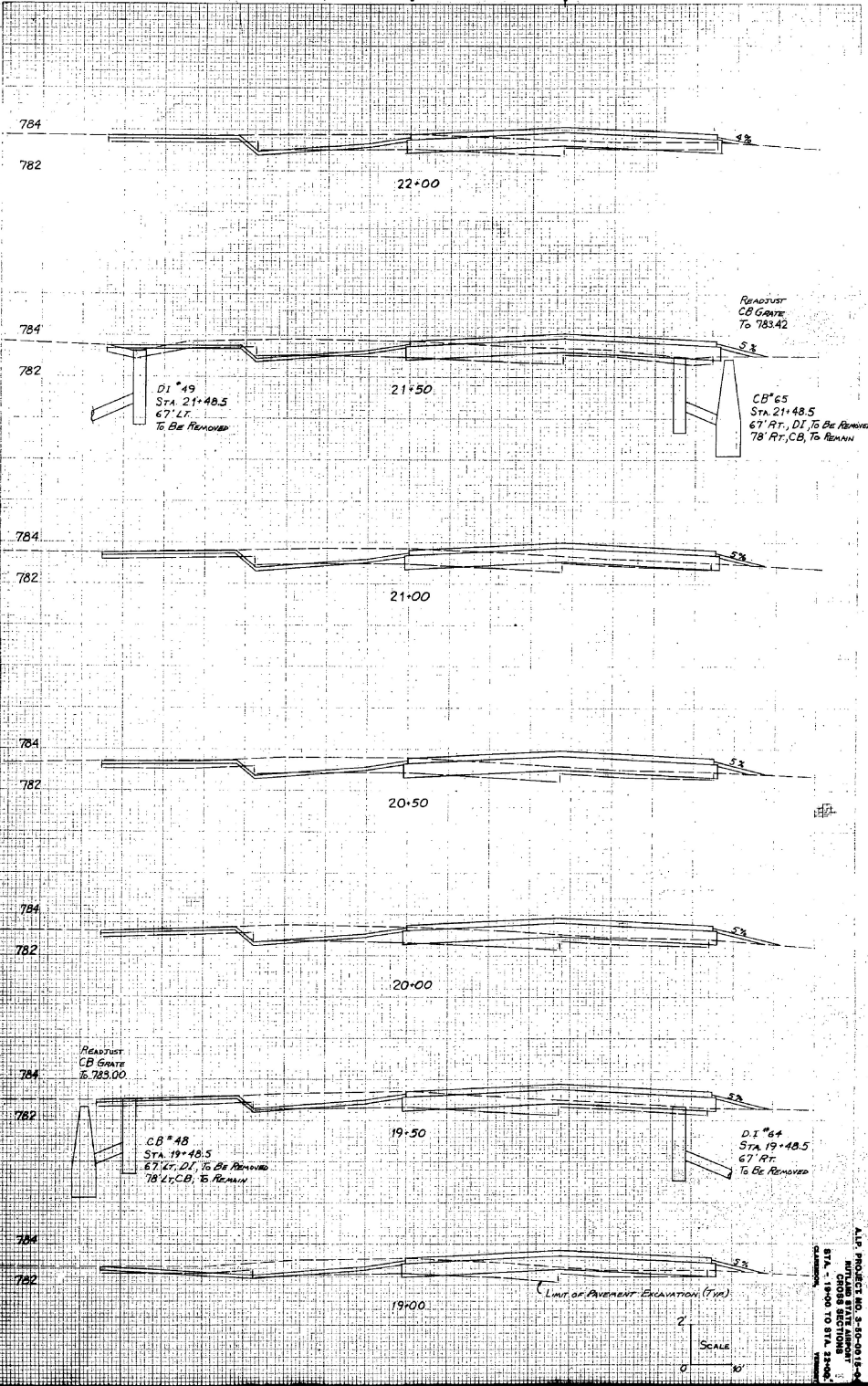
LIMIT OF PAVEMENT
EXCAVATION (TYR)



ALP PROJECT NO. 3-16-0018-0
RUTLAND STREET LIGHTING
STA. 15+50 TO STA. 18+00
DATE: 10/10/00

DATE	BY	CHECKED

DATE	BY	CHECKED



READJUST
CB GATE
TO 783.42

DI #49
STA. 21+48.5
67' RT.
TO BE REMOVED

CB #65
STA. 21+48.5
67' RT., DI. TO BE REMOVED
78' RT., CB, TO REMAIN

READJUST
CB GATE
TO 783.00

CB #48
STA. 19+48.5
67' RT., DI. TO BE REMOVED
78' RT., CB, TO REMAIN

DI #64
STA. 19+48.5
67' RT.
TO BE REMOVED

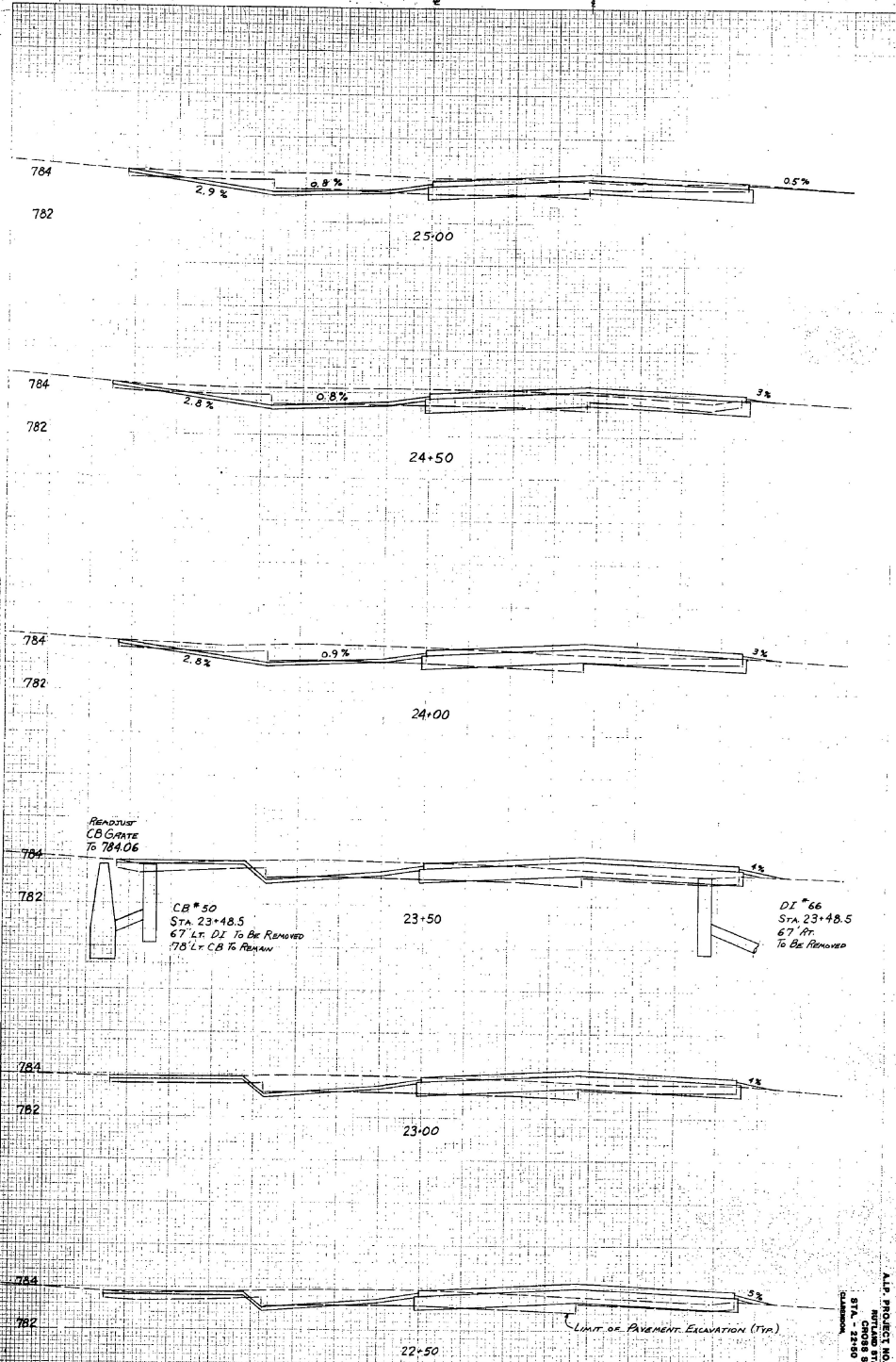
Limit of Pavement Excavation (Typ)



ALP PROJECT NO. S-10-0018-0
MILWAUKEE STATE UNIVERSITY
STATIONING - 1900 TO STA. 2200
DATE - 10/10/00

DATE	DESCRIPTION

DATE	DESCRIPTION



READJUST
CB GATE
TO 784.06

CB # 50
STA. 23+48.5
67' Lx DI TO BE REMOVED
78' Lx CB TO REMAIN

DI # 66
STA. 23+48.5
67' Lx
TO BE REMOVED

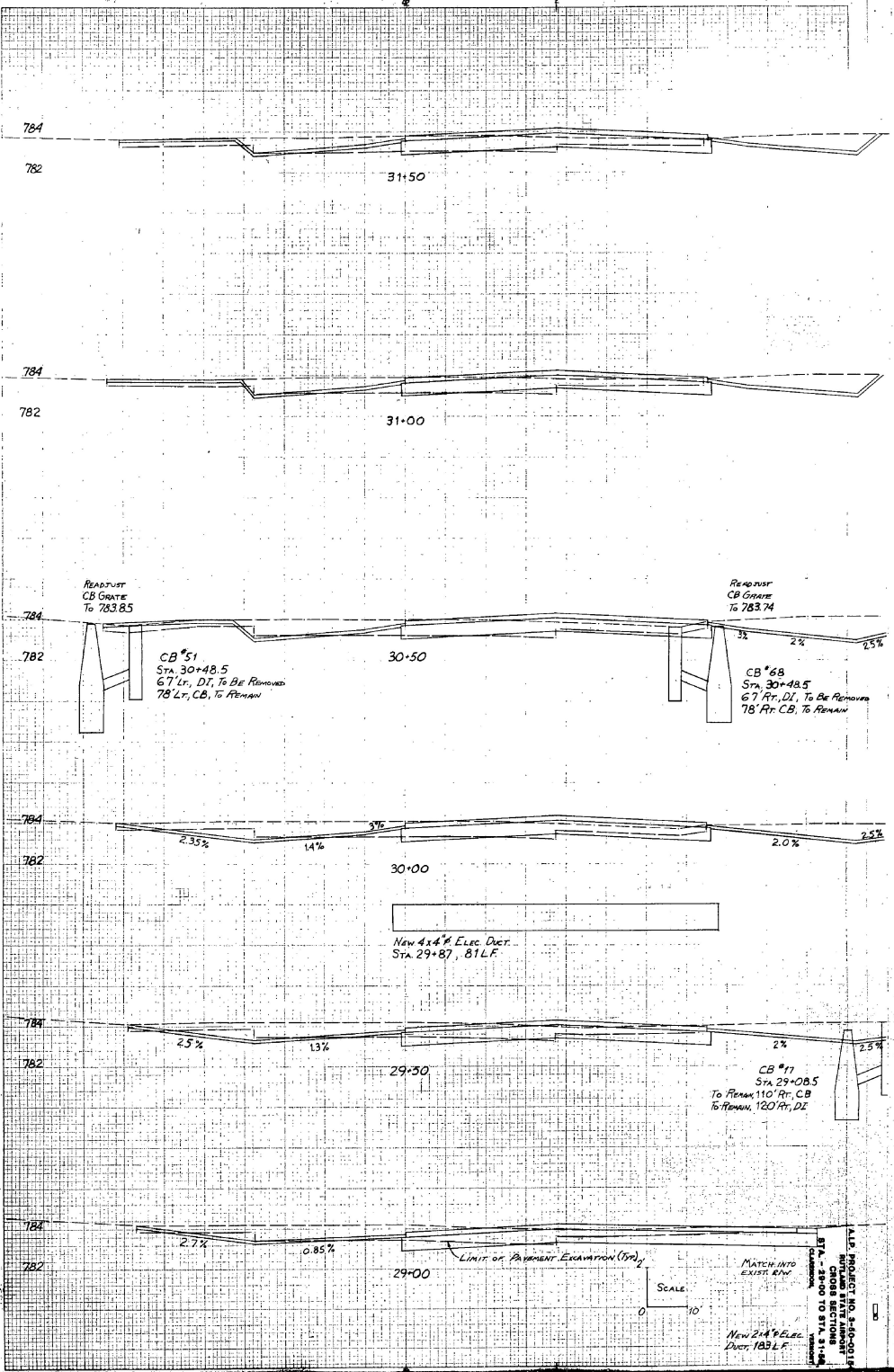
LIMIT OF PAYMENT ELEVATION (TYP)

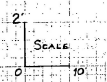
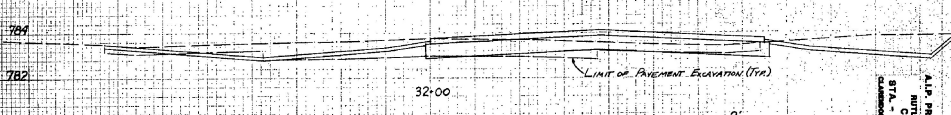
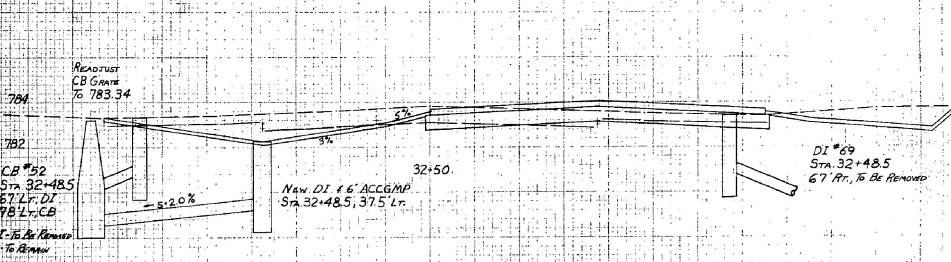
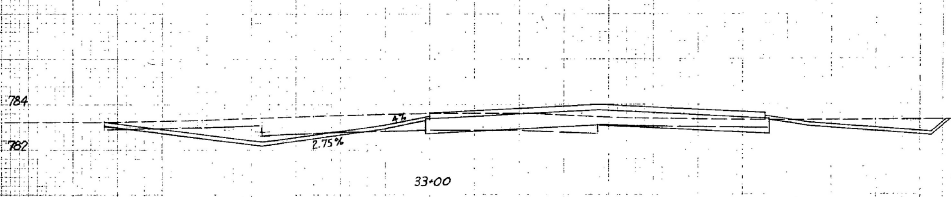
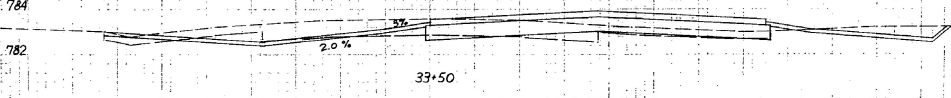
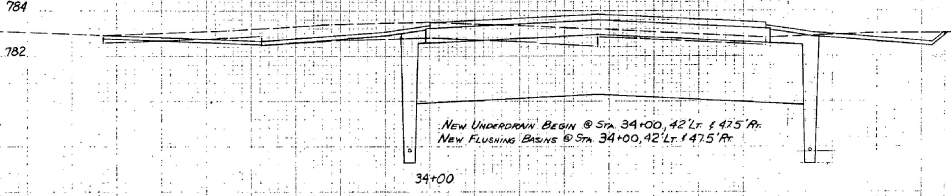
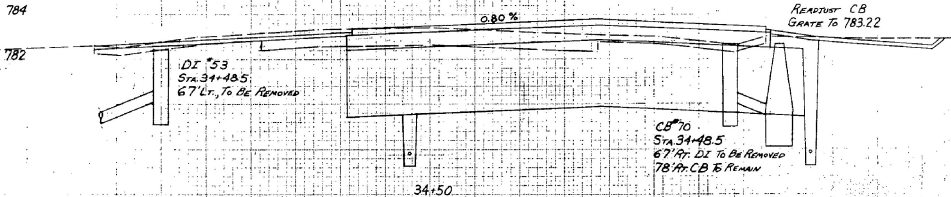
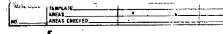
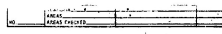


ALP PROJECT NO. 3-10-00-018-0
WYUJIAN STATE AVENUE
STA. 22+60 TO 23+2000
COLUMBIA

DATE	NO.	REVISION

DATE	NO.	REVISION

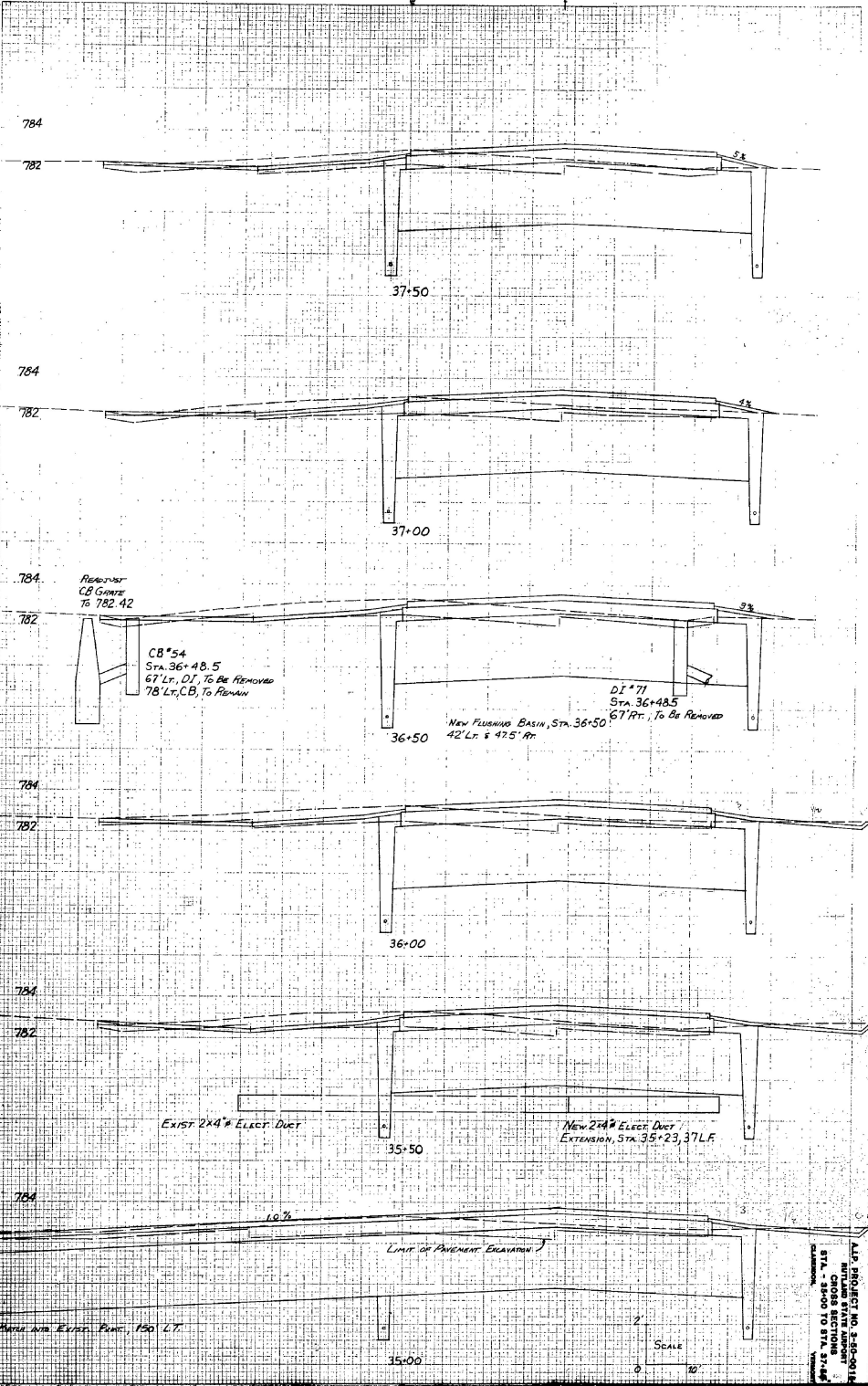




ALL PROJECT NO. S-80-013-4
 CROSS SECTIONS
 STA. 32+00 TO STA. 34+00
 (SEE DRAWING)

DATE	NO.

DATE	NO.



Remove
CB Channel
to 782+42

CB#54
Sta. 36+48.5
67' Lt. DI, To Be Removed
78' Lt. CB, To Remain

DI#71
Sta. 36+48.5
67' Rt. To Be Removed

New FLESHING BASIN, Sta. 36+50
42' Lt. & 42.5' Rt.

EXIST 24" ELECT DUCT

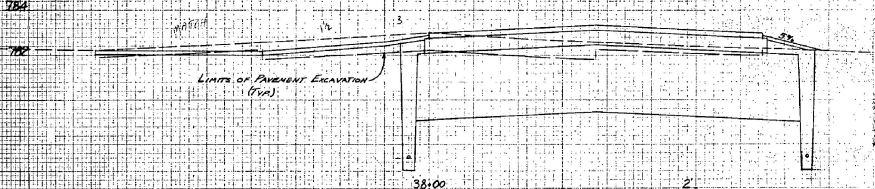
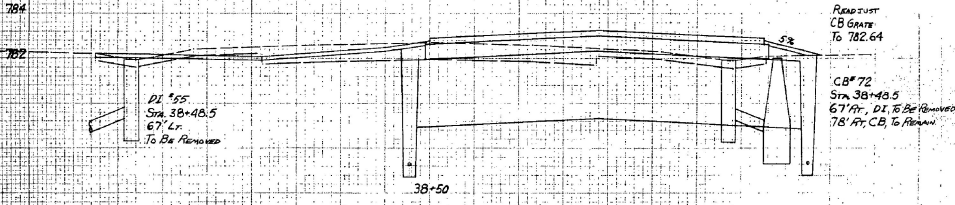
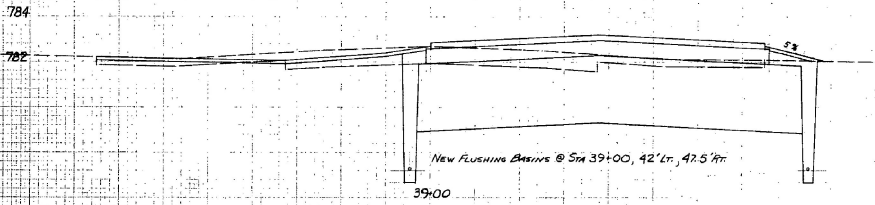
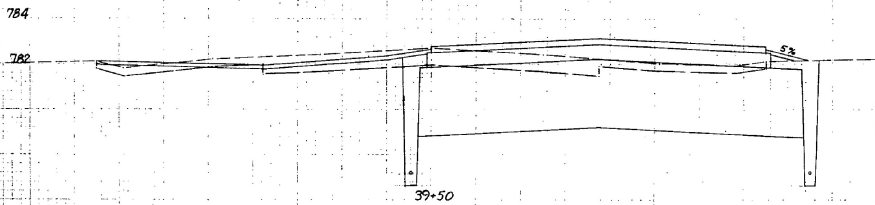
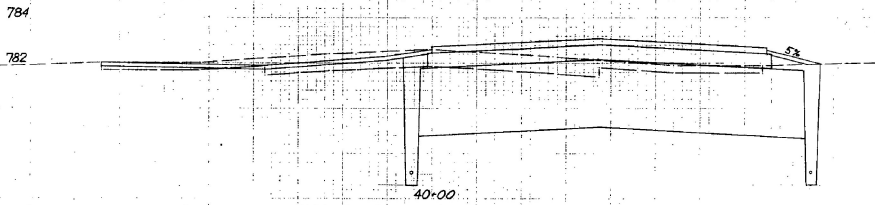
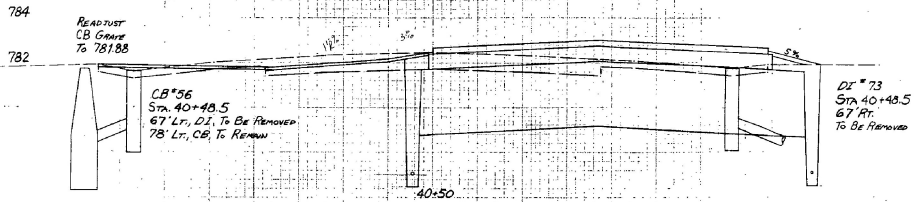
New 24" ELECT DUCT
EXTENSION, Sta. 35+23, 37LF

Match and EXIST. PAV. 150' LT.

ALP PROJECT NO. 2360-01A
MUNICIPAL WATER TREATMENT
PLANT CROSS SECTIONS
DATE: 10/01/00 TO 8/11/00
SCALE: 1" = 10'

DATE	BY	CHKD

DATE	BY	CHKD



ALL PROJECT NO. 2-80-011-04
SUTHERLAND STATE HIGHWAY
CROSS SECTIONS
STA. 38+00 TO STA. 40+00

784

782

REARREST
CB GRADE
TO 782.14

DI #57
Sta. 42+75.5
67' LF
To Be Removed

CB #74
Sta. 42+75.5
67' Pr., DI, 15' PE REMOVED
75' Pr., CB, 15' REMAIN

EXIST UNDERDRAIN
TO REMAIN

43+00

EXIST UNDERDRAIN
TO BE REMOVED

784

782

42+50

784

782

42+00

784

782

41+50

NEW FLUSHING BASINS @
Sta. 41+50, 42 LF, 47.5 Pr.

784

782

LIAR OF PAVEMENT EXCAVATION (5' Pr.)

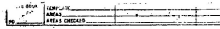
EXIST UNDERDRAIN
TO REMAIN

41+00

EXIST UNDERDRAIN
TO BE REMOVED

Scale
0 10'

ALL PROJECT NO. 2-80-0018-04
MIDLAND STATE HIGHWAY
STATION 4+00 TO STA. 4+00
DATE 11/11/80

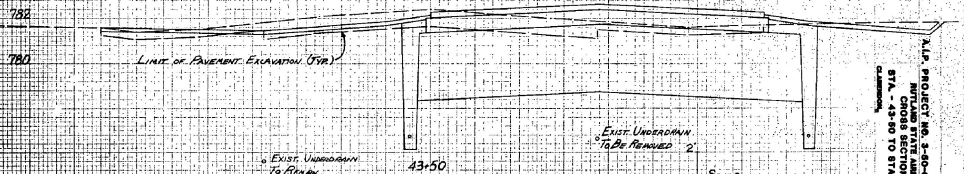
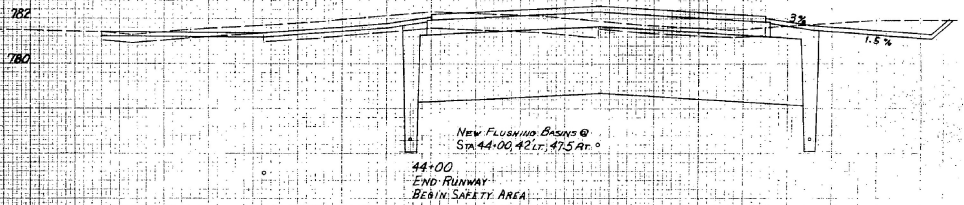
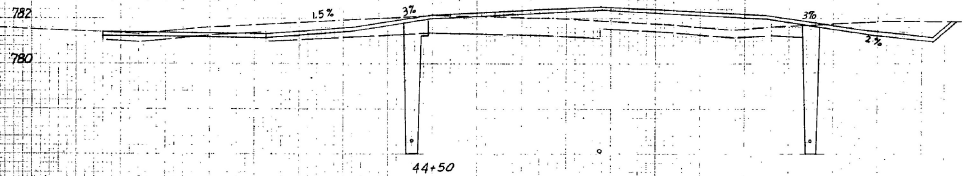
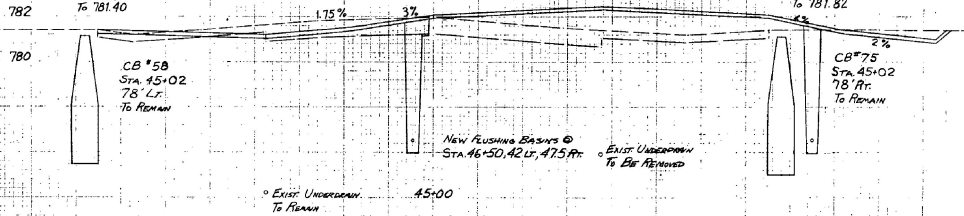


New UNDERDRAIN ENDS @ Sta 48+57 & 42' Lt., 47.5' Ft.

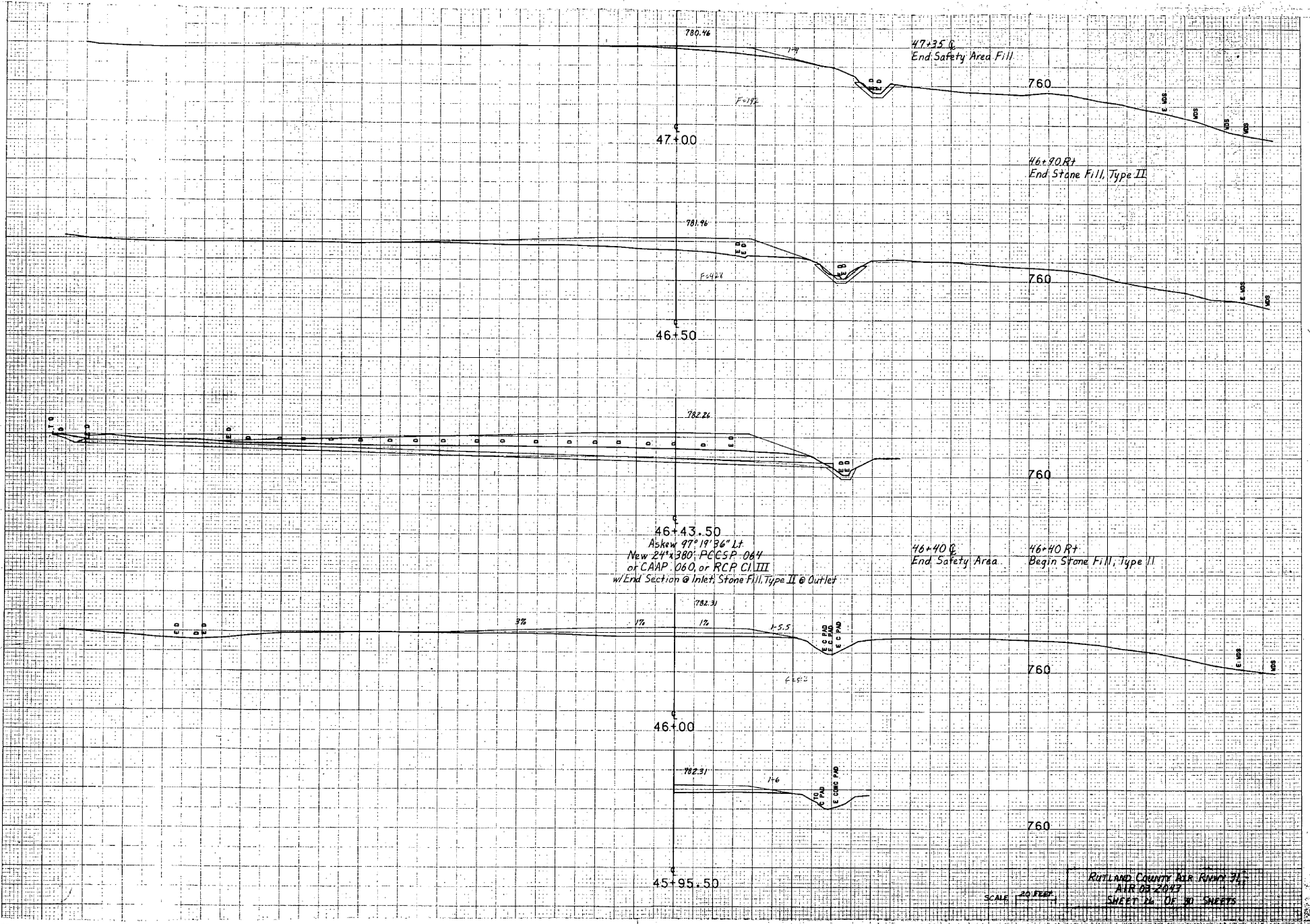
EXIST UNDERDRAIN ENDS @ Sta 46+50 & 37.5' Lt., 47.5' Ft.
To Be Removed

PROPOSED
CB GRADE
To 781.40

PROPOSED
CB GRADE
To 781.82



THIS PROJECT IS A 2-DIMENSIONAL
CROSS SECTION
STA. 43+80 TO STA. 48+00
DATE: 11/11/11



780.46

47+35 G
End Safety Area Fill

47+00

760

46+90 Rt
End Stone Fill, Type II

781.96

46+50

760

782.26

46+43.50
As skew 47° 19' 36" LF
New 24" x 380' PEESP-064
of CAAP .060, or RCP C.I. III
w/End Section @ Inlet, Stone Fill, Type II @ Outlet

760

46+40 G
End Safety Area

46+40 Rt
Begin Stone Fill, Type II

782.31

46+00

760

782.31

45+95.50

760

SCALE 20 FEET

Rutland County Ark River 74
ARR 03-2047
SHEET 14 OF 30 SHEETS

50+32

50+00

49+50

49+00

48+64

740

740

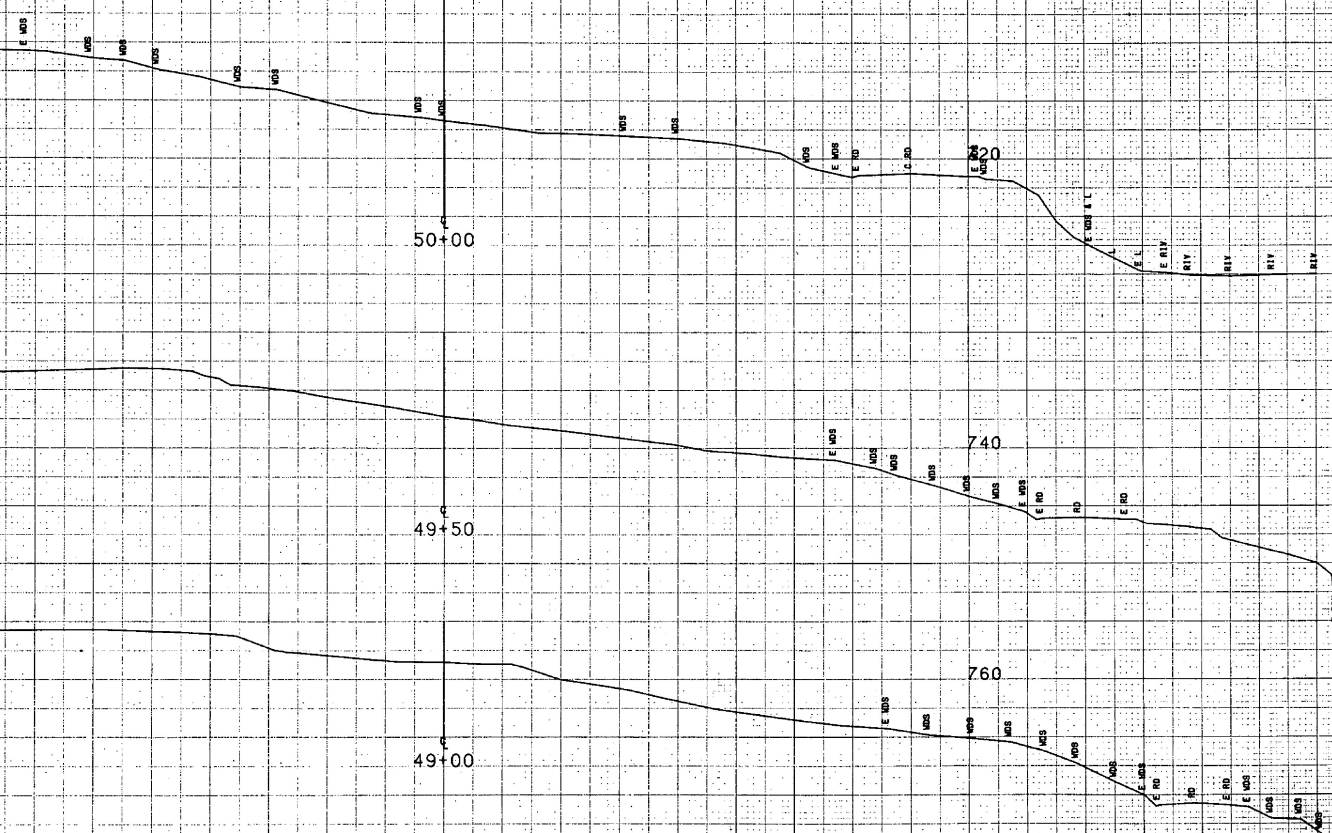
760

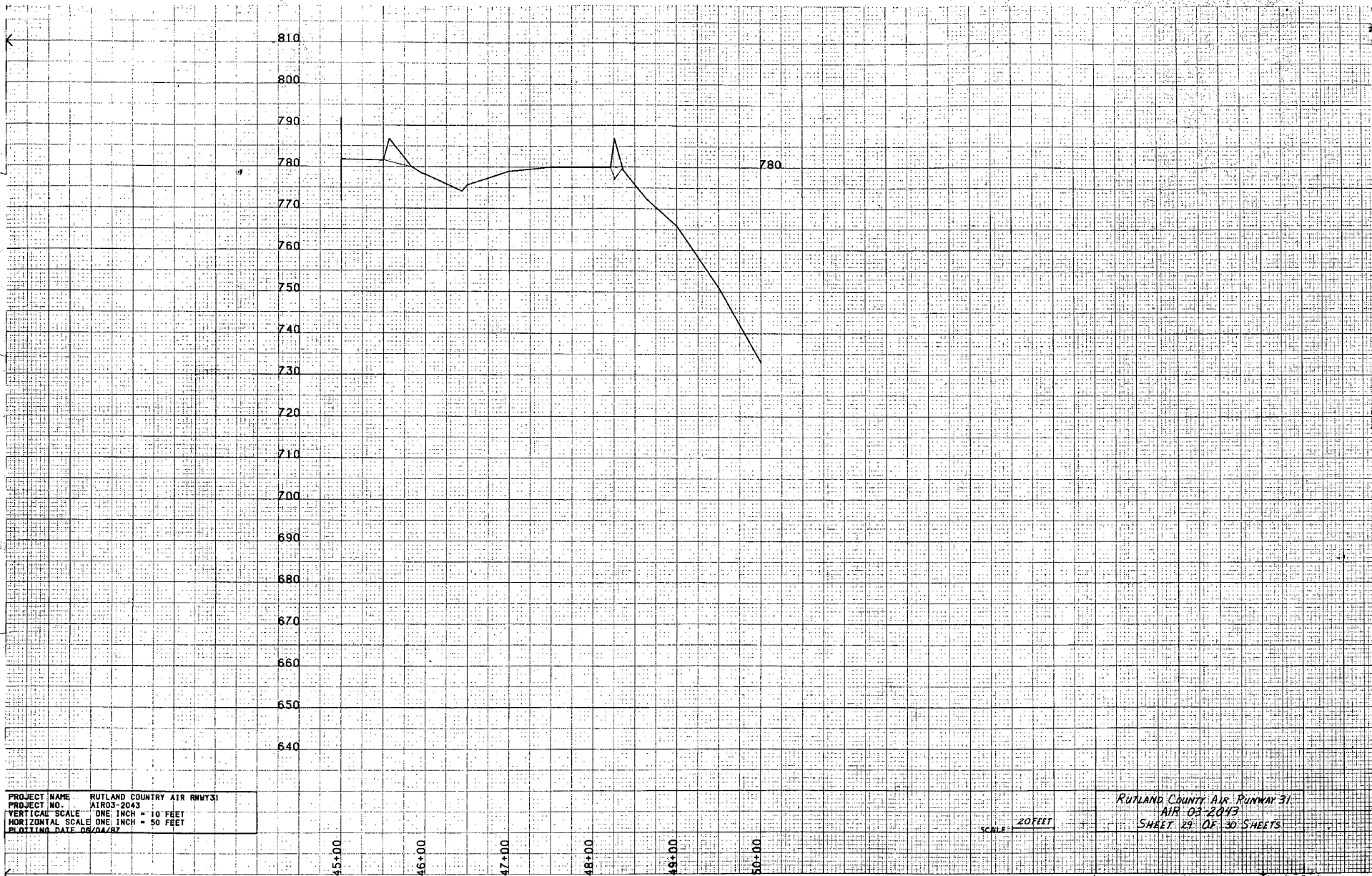
760

SCALE 20 FEET

RUTLAND COUNTY AIR RWY 31
AIR 03-2043
SHEET 26 OF 30 SHEETS

1" CONC

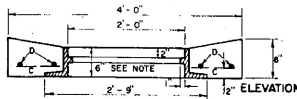
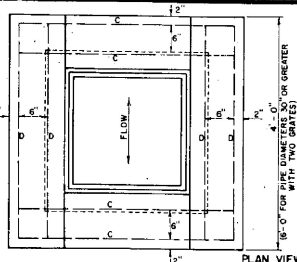




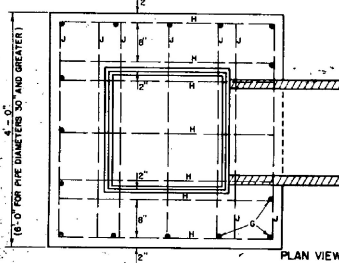
PROJECT NAME RUTLAND COUNTRY AIR RWYS
 PROJECT NO. AIR03-2043
 VERTICAL SCALE ONE INCH = 10 FEET
 HORIZONTAL SCALE ONE INCH = 50 FEET
 PLOTTING DATE 08/04/87

SCALE 20 FEET

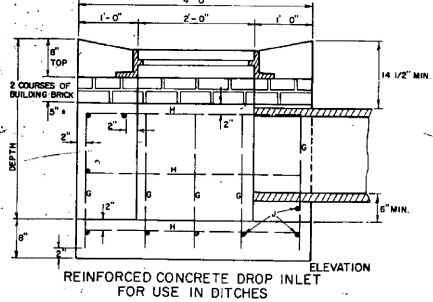
Rutland County Air Runway 31
 AIR 03-2043
 SHEET 29 OF 30 SHEETS



NOTE—FRAME SHOWN IS FOR TYPE A GRATE, SEE SHEET D-11. FOR TYPE B GRATE AND FRAME, SEE SHEET D-16 (EXCEPT THE FRAME DEPTH DIMENSION SHALL BE 6").
TOP FOR REINFORCED CONCRETE DROP INLET WITH GRATE FOR USE IN DITCHES



— TYPE A —

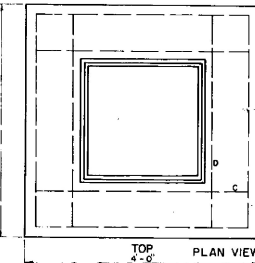


REINFORCED CONCRETE DROP INLET FOR USE IN DITCHES

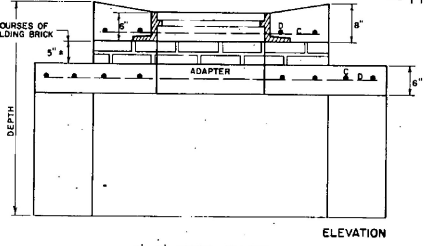
4'x4' DROP INLET WITH TWO GRATES		STEEL SCHEDULE																									
DEPTH	12' 15' 18' 24'			30'				36'				4'x6' DROP INLET WITH ONE GRATE WITH 4'x4' TOP															
	G	LENGTH	H, J	C, D	LENGTH	G	LENGTH	H	LENGTH	J	LENGTH	C	LENGTH	D	LENGTH	DEPTH	G	LENGTH	H	LENGTH	J	LENGTH	C	LENGTH	D	LENGTH	DEPTH
3'-0"	15	2'-3"	22	3'-0"	8	3'-8"											17	3'-7"	23	3'-8"	13	5'-8"	12	3'-8"	4	5'-8"	5'-0"
3'-6"	15	2'-9"	22	3'-6"	8	3'-8"											17	4'-1"	23	3'-8"	13	5'-8"	12	3'-8"	4	5'-8"	5'-6"
4'-0"	15	3'-3"	29	3'-8"	8	3'-8"	17	3'-5"	19	3'-8"	10	5'-8"	4	3'-8"	4	5'-8"	17	4'-2"	19	3'-8"	10	5'-8"	6	3'-8"	4	5'-8"	4'-0"
4'-6"	15	3'-9"	29	3'-8"	8	3'-8"	17	3'-9"	19	3'-8"	10	5'-8"	4	3'-8"	4	5'-8"	17	4'-8"	23	3'-8"	13	5'-8"	6	3'-8"	4	5'-8"	4'-6"
5'-0"	15	4'-3"	35	3'-8"	8	3'-8"	17	4'-3"	23	3'-8"	13	5'-8"	4	3'-8"	4	5'-8"	17	5'-2"	23	3'-8"	13	5'-8"	6	3'-8"	4	5'-8"	5'-0"
5'-6"	15	4'-9"	35	3'-8"	8	3'-8"	17	4'-9"	23	3'-8"	13	5'-8"	4	3'-8"	4	5'-8"	17	5'-8"	23	3'-8"	13	5'-8"	6	3'-8"	4	5'-8"	5'-6"
6'-0"	15	5'-3"	41	3'-8"	8	3'-8"	17	5'-3"	27	3'-8"	15	5'-8"	4	3'-8"	4	5'-8"	17	6'-0"	27	3'-8"	15	5'-8"	6	3'-8"	4	5'-8"	6'-0"
6'-6"	15	5'-9"	41	3'-8"	8	3'-8"	17	5'-9"	31	3'-8"	15	5'-8"	4	3'-8"	4	5'-8"	17	6'-6"	31	3'-8"	15	5'-8"	6	3'-8"	4	5'-8"	6'-6"
7'-0"	15	6'-3"	47	3'-8"	8	3'-8"	17	6'-3"	35	3'-8"	17	5'-8"	4	3'-8"	4	5'-8"	17	7'-0"	35	3'-8"	17	5'-8"	6	3'-8"	4	5'-8"	7'-0"
7'-6"	15	6'-9"	47	3'-8"	8	3'-8"	17	6'-9"	39	3'-8"	17	5'-8"	4	3'-8"	4	5'-8"	17	7'-6"	39	3'-8"	17	5'-8"	6	3'-8"	4	5'-8"	7'-6"
8'-0"	15	7'-3"	53	3'-8"	8	3'-8"	17	7'-3"	39	3'-8"	19	5'-8"	4	3'-8"	4	5'-8"	17	8'-0"	39	3'-8"	19	5'-8"	6	3'-8"	4	5'-8"	8'-0"

4'x4' DROP INLET		STEEL AND CONCRETE QUANTITIES				4'x6' DROP INLET WITH ONE GRATE				STEEL SCHEDULE											
DEPTH	12' 15' 18' 24'		30'		36'		30'		36'		30'			36'			4'x6' DROP INLET WITH ONE GRATE WITH 4'x4' TOP				
	CONCRETE C.Y.	STEEL LBS.	CONCRETE C.Y.	STEEL LBS.	CONCRETE C.Y.	STEEL LBS.	CONCRETE C.Y.	STEEL LBS.	CONCRETE C.Y.	STEEL LBS.	DEPTH	G	LENGTH	H	LENGTH	J	LENGTH	C	LENGTH	D	LENGTH
3'-0"	1.7	150									17	3'-7"	23	3'-8"	13	5'-8"	12	3'-8"	4	5'-8"	5'-0"
3'-6"	1.9	158									17	4'-1"	23	3'-8"	13	5'-8"	12	3'-8"	4	5'-8"	5'-6"
4'-0"	2.1	193	2.7	228			2.8	244			17	4'-7"	27	3'-8"	15	5'-8"	12	3'-8"	4	5'-8"	6'-0"
4'-6"	2.3	200	3.0	237	2.9	237	3.4	294	3.3	294	17	5'-1"	31	3'-8"	15	5'-8"	12	3'-8"	4	5'-8"	6'-6"
5'-0"	2.6	237	3.3	279	3.2	279	3.8	339	3.6	339	17	5'-7"	35	3'-8"	17	5'-8"	12	3'-8"	4	5'-8"	7'-0"
5'-6"	2.8	239	3.6	288	3.5	288	4.0	359	3.8	359	17	6'-1"	35	3'-8"	17	5'-8"	12	3'-8"	4	5'-8"	7'-6"
6'-0"	3.0	270	3.9	324	3.8	324	4.4	399	4.2	399	17	6'-7"	39	3'-8"	19	5'-8"	12	3'-8"	4	5'-8"	8'-0"
6'-6"	3.2	278	4.2	340	4.1	340	4.8	406	4.5	406											
7'-0"	3.5	308	4.5	384	4.4	384	5.2	444	5.1	444											
7'-6"	3.7	316	4.8	393	4.7	393	5.6	468	5.5	468											
8'-0"	3.9	347	5.1	429	5.0	429	5.8	486	5.7	486											

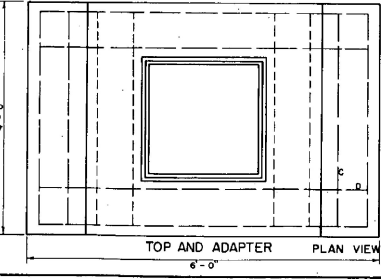
ALL REINFORCING STEEL TO BE NO. 5 DEFORMED BARS, EVENLY SPACED WITH A MAXIMUM SPACING OF 12" C/C.
 ALL STEEL TO HAVE 2" MIN. COVER.
 DROP INLET TO BE CONSTRUCTED IN ACCORDANCE WITH STRUCTURAL CONCRETE, SECTION 501.
 GRATES TO CONFORM TO DROP INLETS, CATCH BASINS, AND MANHOLES, SECTION 604.
 FURNISHING AND LAYING OF BRICKS FOR ADJUSTING ELEVATION OF GRATE SHALL BE INCLUDED IN UNIT BID QUANTITIES.
 PRICE FOR CONCRETE, CLASS B, PAY ITEM 501.05, AND THEIR VOLUME TO BE INCLUDED IN THE FINAL QUANTITIES.
 MORTAR, TYPE II, TO BE USED AS JOINT FILLER AND LAYING OF BRICK.
 FOR PIPES OF 30" OR MORE IN DIAMETER, ALLOWANCE SHALL BE MADE FOR THE OPENING IN COMPUTING CONCRETE VOLUMES. THIS DEDUCTION WILL BE BASED ON THE RATED DIAMETER OF THE PIPE USED, WITH THE SAME DEDUCTION FOR CONCRETE AND METAL PIPE. ABOVE TABLES INDICATE DEDUCTION FOR ONE PIPE.



TOP PLAN VIEW

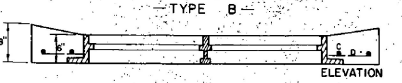


4'x6' DROP INLET WITH 4'x4' TOP TOP WITH ONE CAST IRON GRATE

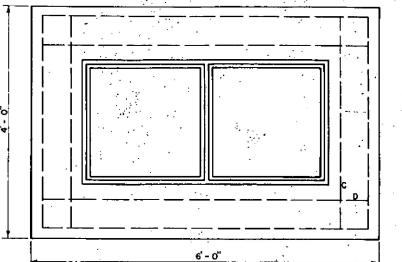


TOP AND ADAPTER PLAN VIEW

4'x6' DROP INLET WITH ONE GRATE		STEEL AND CONCRETE QUANTITIES			
DEPTH	30'		36'		
	CONCRETE C.Y.	STEEL LBS.	CONCRETE C.Y.	STEEL LBS.	
3'-0"	3.2	313	3.1	313	
5'-6"	3.9	329	3.4	322	
6'-0"	3.8	358	3.7	358	
6'-6"	4.1	382	4.0	382	
7'-0"	4.4	418	4.3	418	
7'-6"	4.7	427	4.6	427	
8'-0"	5.0	463	4.9	463	

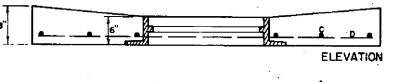


ELEVATION

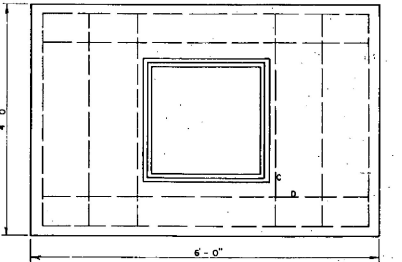


PLAN VIEW

4'x6' DROP INLET TOP WITH TWO CAST IRON GRATES



ELEVATION



PLAN VIEW

4'x6' DROP INLET TOP WITH ONE CAST IRON GRATE

REVISIONS AND CORRECTIONS
 APR. 2, 1973 - ORIGINAL D-6 REDRAWN.

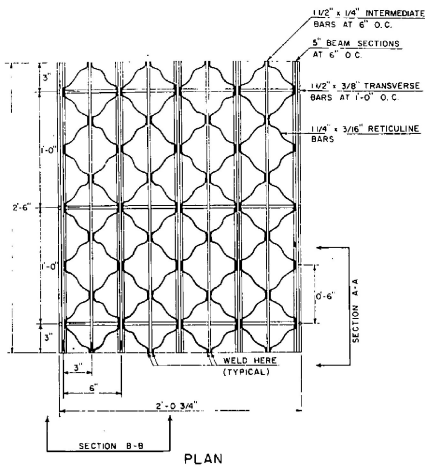
APPROVED
 April 4, 1973
 DATE
 R.H. Condit
 CHIEF ENGINEER
 E.H. Steiner, Jr.
 ASST. CHIEF ENGINEER
 M.M. Lowry
 HIGHWAY ENGINEER

REINFORCED CONCRETE DROP INLET WITH GRATE FOR USE IN DITCHES



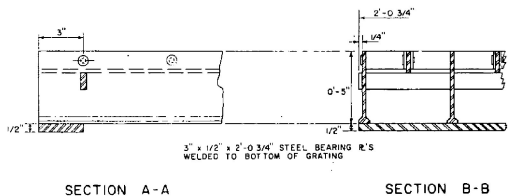
STANDARD D-6

STEEL GRATE



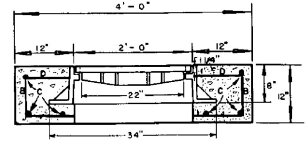
GRATE SIZE SINGLE 24 3/4" x 30"
DOUBLE 24 3/4" x 54"
WEIGHT 95 LBS OR MORE
GRATES SHALL BE CAPABLE OF SUPPORTING H-20 (32,000 LB. AXLE LOAD) INCLUDING 30% IMPACT.

UNIT STRESSES (LBS PER SQ. IN.)	8,000	20,000
MAIN BAR PARALLEL TO TRAFFIC	49"	53"
MAIN BAR PERPENDICULAR TO TRAFFIC	39"	42"



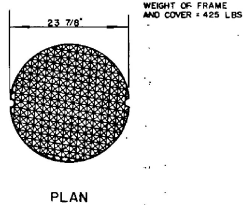
CAST IRON COVER WITH FRAME

BAR	NO.	LENGTH	SHAPE
B	4	3'-8"	STRAIGHT
C	6	3'-8"	STRAIGHT
D	4	3'-8"	STRAIGHT



ELEVATION

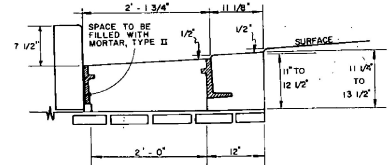
ALL REINFORCING STEEL TO BE NO. 5 DEFORMED BARS



PLAN

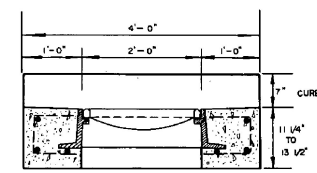
GENERAL NOTES:
WEIGHT OF FRAME AND COVER 425 LBS

CAST IRON GRATE WITH FRAME

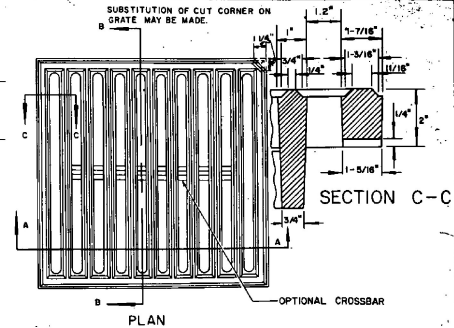


ELEVATION OF REINFORCED CONCRETE DROP INLET WITH VERTICAL GRANITE CURB AND 3 FLANGE CAST IRON FRAME FOR CAST IRON GRATE.

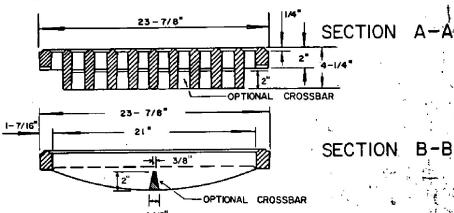
SEE STANDARD D-9 FOR CONCRETE VOLUME, REINFORCING STEEL SCHEDULE AND CURB JOINT DETAIL.



ELEVATION



SECTION C-C



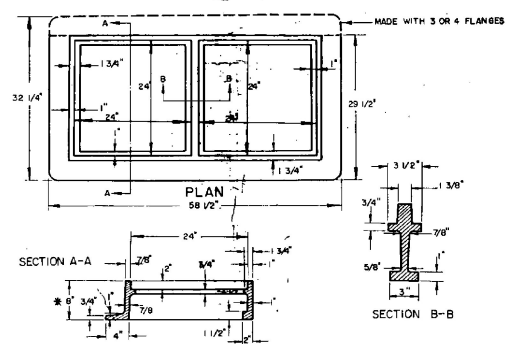
SECTION A-A

SECTION B-B

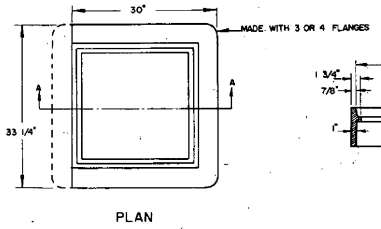
WEIGHT OF 3 FLANGED FRAME AND GRATE
GRATE 220 LBS
FRAME 260 LBS
TOTAL 480 LBS

CAST IRON GRATE, TYPE A

USE OF THE TYPE A GRATE IS PROHIBITED WHERE BICYCLE TRAFFIC IS EXPECTED.



RECTANGULAR CAST IRON FRAME FOR TWO 24" SQUARE CAST IRON GRATES



SQUARE CAST IRON FRAME FOR CAST IRON GRATE TYPE A

* NOTE: FRAME DEPTH TO BE 6" WHEN USED IN CONJUNCTION WITH DROP INLET DETAILED ON STANDARD D-6.

REVISIONS AND CORRECTIONS

APRIL 25, 1972 CAST IRON COVER CHANGED FROM SQUARE TO CIRCULAR
SEPT. 4, 1980 OPTIONAL CROSSBAR ADDED TO TYPE A GRATE.
NOTE ADDED TO TYPE A GRATE PROHIBITING USE OF TYPE A GRATE
AUG 24, 1981 NOTE ADDED RESTRICTING USE OF TYPE A GRATE

APPROVED DATE 10/6/1971
R. W. Carroll
CHIEF ENGINEER
E. W. O'Rourke
ASSIST. CHIEF ENGINEER
H. M. Lane
HIGHWAY ENGINEER

DRAWN: S. A. J.
TRACKED: A. J. A.

**STEEL GRATE
CAST IRON GRATE TYPE A
CAST IRON COVER**



STANDARD

D-11