

ITEM NUMBERS	APPROX. QUANTITIES	ITEMS AND UNIT PRICES BID WRITTEN IN WORDS
		Clearing and Grubbing
201.10	1 L.S.	
		Common Excavation
203.15	5430 CY	
		Solid Rock Excavation
203.16	1 CY	NOTE: Not a Bid Item
		Muck Excavation
203.20	1417 C.Y.	
		Sand Borrow
		*Estimated Quantity
203.31	500 CY	
		Granular Borrow
203.32	3693 C.Y.	

ITEM NUMBERS	APPROX. QUANTITIES	ITEMS AND UNIT PRICES BID WRITTEN IN WORDS
		Trench Excavation of Earth
209.20	1577 CY	
		Trench Excavation of Rock
209.21	1 CY	NOTE: Not a Bid Item
		Granular Backfill for Structures
204.30	11 CY	NOTE: Not a Bid Item
		Subbase of Gravel
301.15	4746 CY	
		Subbase of Crushed Gravel (Fine Graded)
301.26	966 CY	
		Bituminous Concrete Pavement
406.25	2015 Ton	

ITEM NUMBERS	APPROX. QUANTITIES	ITEMS AND UNIT PRICES BID WRITTEN IN WORDS
		Concrete, Class B
501.25	45 C.Y.	
		Reinforcing Steel
507.15	5714 Lb.	
		Asphalt Coated Corrugated Galvanized Metal Pipe (2 2/3" x 1/2" corrugations) 12 Inch, 0.064" T.
601.1532	30 L.F.	
		Reinforced Concrete Pipe, 15 Inch, class III
601.2613	1059 L.F.	
		Reinforced Concrete Pipe 18 Inch, Class III
601.2623	255 L.F.	
		Metal End Sections for Asphalt Coated Corrugated Galvanized Metal Pipe (2 2/3" x 1/2" corrugations) 12 Inch, 0.064" T.
601.6202	1 each	

ITEM NUMBERS	APPROX. QUANTITIES	ITEMS AND UNIT PRICES BID WRITTEN IN WORDS
		Reinforced Concrete Pipe and Section, 18 Inch, Class III
601.6613	2 each	
		Concrete Manhole with Cast Iron Cover
606.11	1 each	
		Cast Iron Gate with Frame, Type A
606.45	22 each	
		6" Underdrain
609.101	300 LF	
		Underdrain Carrier Pipe
605.151	100 LF	
		Underdrain Flushing Basins
605.95	2 each	

ITEM NUMBERS	APPROX. QUANTITIES	ITEMS AND UNIT PRICES BID WRITTEN IN WORDS
		Dust Control with Water
609.10	300 GAL.	
		Dust and Ice Control with Calcium Chloride
609.15	12 Ton	
		Stone Fill, Type I
613.10	15 c.y.	
		Vertical Granite Curb
616.16	5990 L.F.	
		Portland Cement Concrete Sidewalk, 5 inch
618.10	200 S.Y.	
		Insulation Board (unit = thousand board feet)
622.10	.06 M.B.F.	

ITEM NUMBERS	APPROX. QUANTITIES	ITEMS AND UNIT PRICES BID WRITTEN IN WORDS
		1" Plastic Water Pipe rigid
629.33	385 L.F.	
		Uniformed Traffic Officer
630.10	40 IBS	
		Flagpersons
630.15	160 HRS	
		Field Office - Engineers
631.10	1 L.S.	
		Mobilization
635.10	LUMP SUM	
		Durable 4" ReflectORIZED White Lines
646.60	5615 L.F.	

ITEM NUMBERS	APPROX. QUANTITIES	ITEMS AND UNIT PRICES BID WRITTEN IN WORDS
		Durable 4" ReflectORIZED Yellow Lines
646.61	1500 L.F.	
		Durable 8" ReflectORIZED White Lines
646.62	70 L.F.	
		Durable Crosswalk Marking with Beveled Edges
646.63	24 L.F.	
		Durable 24" Stop Bar
646.64	24 L.F.	
		Durable Arrow Markings
646.65	34 EACH	
		Seed
		A = 180 lbs
		B = 65 lbs
651.20	245 lb	

ITEM NUMBERS	APPROX. QUANTITIES	ITEMS AND UNIT PRICES BID WRITTEN IN WORDS
		Fertilizer
651.15	1840 lb	
		Agricultural Limestone
651.20	3.8 T	
		Hay Mulch
651.25	3.8 T	
		Topsoil
653.10	800 c.y.	
		Erosion Matting
654.20	2000 S.Y.	
		Austrian Pine (Pinus nigra) 5'-6'
656.123	4 each	

ITEM NUMBERS	APPROX. QUANTITIES	ITEMS AND UNIT PRICES BID WRITTEN IN WORDS
		Dark Am. Arborvitae (Thuja Occidentalis Nigra) 80 @ 2'-2 1/2' in height 12 @ 3'-4' in height
656.1541	90 EACH	
		Creosote Japanese Yew (Taxus cuspidata "Cresmate") 12"-15"
656.154	28 each	
		Pinksterblom (Rhododendron multiflorum) 18"-24"
656.262	4 each	
		Japanese Flowering Crabapple (Malus floribunda) 4'-5"
656.370	8 each	
		Red Oak (Quercus borealis) 9'-11'
656.384	8 each	
		Transplanting Evergreen Trees
656.505	0	


ITEM NUMBERS	APPROX. QUANTITIES	ITEMS AND UNIT PRICES BID WRITTEN IN WORDS
		Traffic Signs, Type A
675.20	107.2 S.F.	
		Traffic Signs, Type B
675.25	102 SF	
		Traffic Sign Posts, Type A
675.35	1209 lb	
		Traffic Sign Posts, Type C
675.37	56 lb	
		Street Lighting
678.15	Lump Sum	
		Plastic Duct, Type I
863.01	300 L.F.	

ITEM NUMBERS	APPROX. QUANTITIES	ITEMS AND UNIT PRICES BID WRITTEN IN WORDS
		Multiple Plastic Duct in Earth, Type I
863.02	520 L.F.	
		Single Duct Concrete Encased
863.03	1 L.F.	NOTE: Not a Bid Item
		Multiple Duct, Concrete Encased
863.04	355 L.F.	
		Steel Conduit, Single
863.05	1 L.F.	NOTE: Not a Bid Item
		Steel Conduit, Multiple
863.06	1 L.F.	NOTE: Not a Bid Item

ITEM NUMBERS	APPROX. QUANTITIES	ITEMS AND UNIT PRICES BID WRITTEN IN WORDS
		Install Septic Tank
863.07	Lump Sum	
		Remove Dry Well
863.08	Lump Sum	
		Relocation of Existing Tower Mounted Airport Rotating Beacon
863.10	Lump Sum	
		New Sewage Pump Station
863.11	Lump Sum	
		Installation of Miscellaneous Electrical Facilities
863.12	Lump Sum	

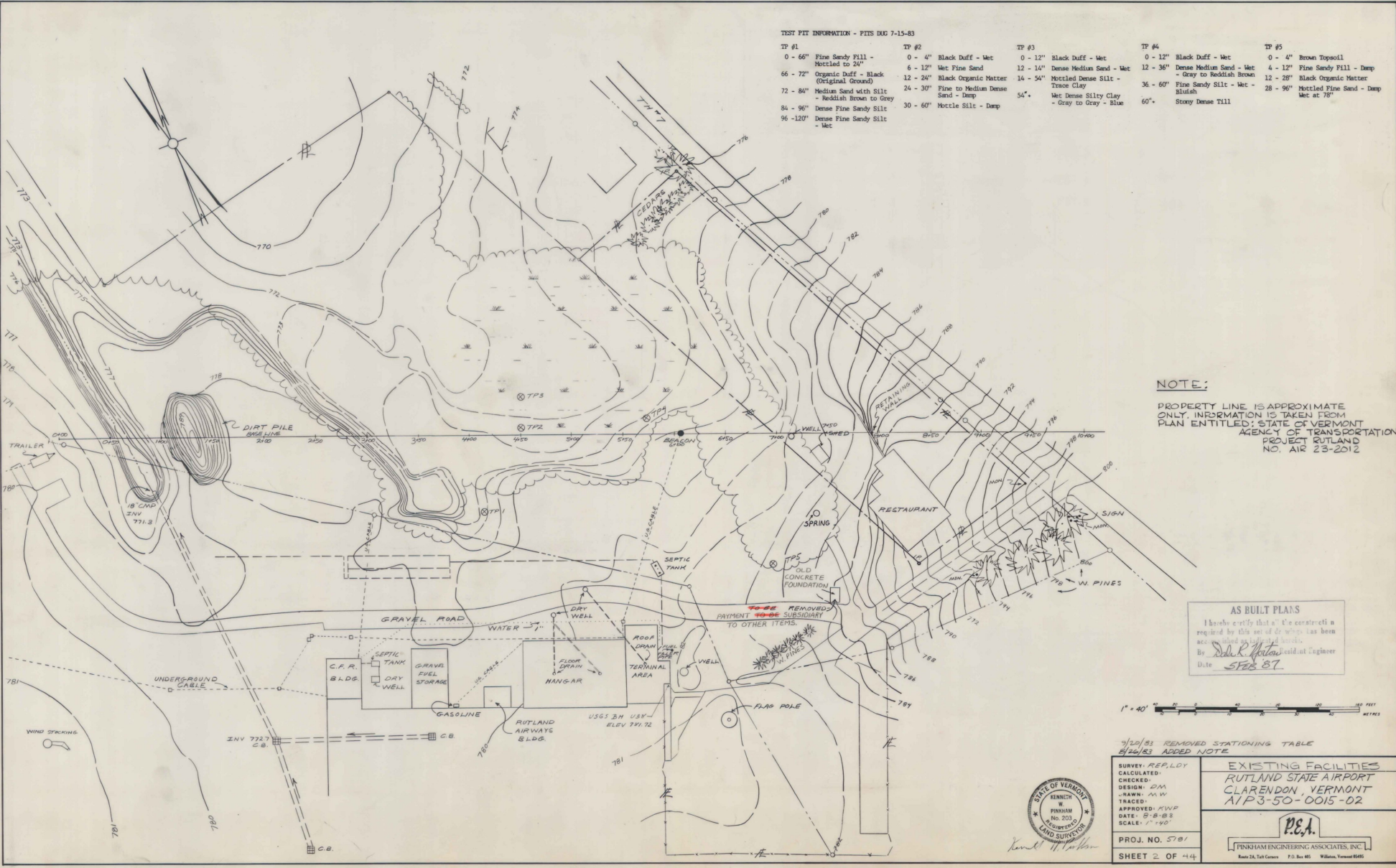
NOTE: Some of the Quantities shown above have been revised, to reflect the deletion of the Northern Access rd. from this contract. (See sheet 3 of 44)

AS BUILT PLATS
I have certified that the construction required by this set of drawings as herein shown and described is in accordance with the plans and specifications of the project.
By Dale R. Porter, Licensed Engineer
Date 5 Feb 87

SURVEY: CALCULATED, CHECKED DESIGN: DRAWN TRACED: APPROVED DATE: SCALE:	QUANTITY SHEET RUTLAND STATE AIRPORT CLARENDON, VERMONT AIP 3-50-0015-02
	PROJ. NO. 5181
	SHEET 1 OF 44
	 PENNHAM ENGINEERING ASSOCIATES, INC. <small>Road 214, Tull Center P.O. Box 485 Williston, Vermont 05696</small>

TEST PIT INFORMATION - PITS DUG 7-15-83

TP #1	TP #2	TP #3	TP #4	TP #5
0 - 66" Fine Sandy Fill - Mottled to 24"	0 - 4" Black Duff - Wet	0 - 12" Black Duff - Wet	0 - 12" Black Duff - Wet	0 - 4" Brown Topsoil
66 - 72" Organic Duff - Black (Original Ground)	6 - 12" Wet Fine Sand	12 - 14" Dense Medium Sand - Wet	12 - 36" Dense Medium Sand - Wet - Gray to Reddish Brown	4 - 12" Fine Sandy Fill - Dump
72 - 84" Medium Sand with Silt - Reddish Brown to Grey	12 - 24" Black Organic Matter	14 - 54" Mottled Dense Silt - Trace Clay	36 - 60" Fine Sandy Silt - Wet - Bluish	12 - 28" Black Organic Matter
84 - 96" Dense Fine Sandy Silt	24 - 30" Fine to Medium Dense Sand - Dump	54" Wet Dense Silty Clay - Gray to Gray - Blue	60" Stoney Dense Till	28 - 96" Mottled Fine Sand - Dump Wet at 78"
96 - 120" Dense Fine Sandy Silt - Wet	30 - 60" Mottled Silt - Dump			

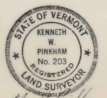


NOTE:
 PROPERTY LINE IS APPROXIMATE ONLY. INFORMATION IS TAKEN FROM PLAN ENTITLED: STATE OF VERMONT AGENCY OF TRANSPORTATION PROJECT RUTLAND NO. AIR 23-2012

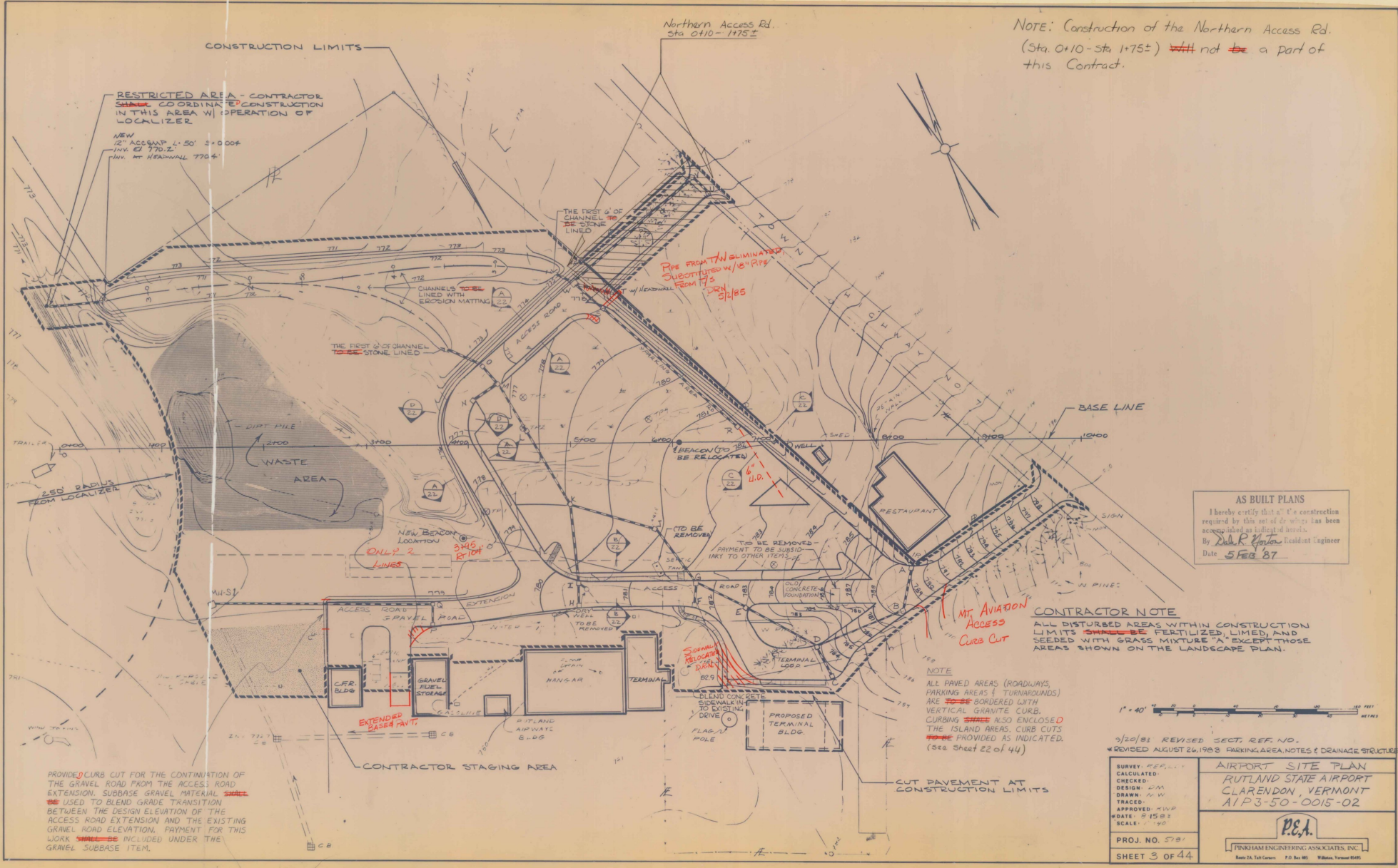
AS BUILT PLANS
 I hereby certify that all the conditions required by this set of drawings has been accomplished on the ground.
 By *Robert R. Patten* Resident Engineer
 Date *5/28/87*

1" = 40'

3/20/83 REMOVED STATIONING TABLE
 8/26/83 ADDED NOTE



SURVEY: REPLY CALCULATED: CHECKED: DESIGN: DM DRAWN: MMW TRACED: APPROVED: KWP DATE: 5-18-83 SCALE: 1"=40'	EXISTING FACILITIES RUTLAND STATE AIRPORT CLARENDON, VERMONT A/P 3-50-0015-02 PINKHAM ENGINEERING ASSOCIATES, INC. Route 1A, Tall Corners P.O. Box 481 Williston, Vermont 05495
PROJ. NO. 5781 SHEET 2 OF 44	



NOTE: Construction of the Northern Access Rd. (Sta. 0+10 - Sta. 1+75±) ~~will not be~~ a part of this Contract.

RESTRICTED AREA - CONTRACTOR STAGING COORDINATE CONSTRUCTION IN THIS AREA W/ OPERATION OF LOCALIZER

NEW 12" ACCESS 41.50' ± ± 0.006' INV. @ 770.2' INV. AT HEADWALL 770.4'

THE FIRST 2' OF CHANNEL TO BE STONE LINED

Pipe FROM 711 ELIMINATED SUBSTITUTED W/ 16" PIPE FROM 715 DEN 5/1/85

THE FIRST 2' OF CHANNEL TO BE STONE LINED

BEACON TO BE RELOCATED

250 RADIUS FROM LOCALIZER

NEW BEACON LOCATION ONLY 2 LINES 3145 BR101

AS BUILT PLANS
I hereby certify that all the construction required by this contract drawings has been accomplished as indicated herein.
By *Dale R. Spitzer* Resident Engineer
Date 5 FEB 87

CONTRACTOR NOTE
ALL DISTURBED AREAS WITHIN CONSTRUCTION LIMITS ~~SHALL BE~~ FERTILIZED, LIMED, AND SEEDED WITH GRASS MIXTURE "A" EXCEPT THOSE AREAS SHOWN ON THE LANDSCAPE PLAN.

NOTE
ALL PAVED AREAS (ROADWAYS, PARKING AREAS, TURNAROUNDS) ARE ~~TO BE~~ BORDERED WITH VERTICAL GRANITE CURB. CURBING ~~SHALL~~ ALSO ENCLOSE THE ISLAND AREAS. CURB CUTS ~~SHALL BE~~ PROVIDED AS INDICATED. (See Sheet 22 of 44)

1" = 40'

3/20/85 REVISED SECT. REF. NO. REVISED AUGUST 26, 1985 PARKING AREA, NOTES & DRAINAGE STRUCTURES

PROVIDED CURB CUT FOR THE CONTINUATION OF THE GRAVEL ROAD FROM THE ACCESS ROAD EXTENSION. SUBBASE GRAVEL MATERIAL ~~SHALL BE~~ USED TO BLEND GRADE TRANSITION BETWEEN THE DESIGN ELEVATION OF THE ACCESS ROAD EXTENSION AND THE EXISTING GRAVEL ROAD ELEVATION. PAYMENT FOR THIS WORK ~~SHALL BE~~ INCLUDED UNDER THE GRAVEL SUBBASE ITEM.

CONTRACTOR STAGING AREA

CUT PAVEMENT AT CONSTRUCTION LIMITS

SURVEY: REP. L. I.	AIRPORT SITE PLAN RUTLAND STATE AIRPORT CLARENDON, VERMONT AIP 3-50-0015-02 PENN HAM ENGINEERING ASSOCIATES, INC. Route 24, Fish Creek, P.O. Box 465, Whitehall, Vermont 05481
CALCULATED	
CHECKED	
DESIGN: J.M.	
DRAWN: A.W.	
TRACED	
APPROVED: R.W.P.	
DATE: 9/15/84	PROJ. NO. 5781
SCALE: 1" = 40'	SHEET 3 OF 44

DUCT SCHEDULE		
LOCATION	SERVICE	DUCT TYPE
OFF ROAD GRASSY AREA	POWER TELEPHONE	PLASTIC
UNDER ACCESS ROAD	POWER TELEPHONE	CONCRETE ENCASED PLASTIC
UNDER PARKING AREA	POWER TO LIGHTS	STEEL CONDUIT

LEGEND	
	POWER (UNDERGROUND) SINGLE DUCT
	TELEPHONE (UNDERGROUND) SINGLE DUCT
	POWER/TEL. (UNDERGROUND) MULTIPLE DUCT
	FORCE MAIN
	WATER LINE
	SANITARY SEWER
	STORM DRAIN
	TO BE REMOVED
	CONCRETE ENCASED UTILITY
	POWER TELEPHONE

ALL CONDUIT ~~SHALL~~ BE INSTALLED FOR THE BEACON WIRING, THE LIGHTING WIRING, AND THE PUMP STATION WIRING. ~~SHALL~~ BE STEEL CONDUIT AT THE DIAMETERS SPECIFIED, WHERE THE STEEL CONDUIT IS REQUIRED TO CROSS UNDER THE ACCESS ROAD THE CONDUIT ~~SHALL~~ BE ENCASED IN CONCRETE. ALL CONDUIT AND CONCRETE FOR ENCASEMENT ~~SHALL~~ BE PAID FOR UNDER THE RESPECTIVE LUMP SUM ITEM. SEE SHEETS 23 & 24 FOR ADDITIONAL DETAILS.

ESTIMATED QUANTITIES FOR THESE CONDUITS ARE AS FOLLOWS:

BEACON - LIGHTING -	200 LFT
PUMP STATION -	140 LFT
	65 LFT

- NOTES**
- SEE APPROPRIATE DETAIL SHEETS FOR INDIVIDUAL UTILITIES.
 - DUCT & CABLE MARKERS ARE TO BE PLACED AT HORIZONTAL CHANGES OF DIRECTION, BOTH SIDES OF ROADS, AND AS DIRECTED.
 - BEACON LIGHT AND TOWER TO BE RELOCATED AS IS TO NEW LOCATION INDICATED ON THIS PLAN - BASELINE STN. 3795.3, 90' BT EXISTING BEACON TOWER BASE ~~SHALL~~ BE REMOVED & DISPOSED OF OFF SITE.
 - INSTALLATION OF WATER AND SEWER PIPE ~~SHOULD~~ PROVIDE FOR 10' MINIMUM VERTICAL SEPARATION AT POINTS OF CROSSING AND WHERE THE PIPES ARE PARALLEL AND WITHIN 10' HORIZONTALLY.
 - EXISTING SEPTIC TANK TO BE MAINTAINED DURING CONSTRUCTION UNTIL NEW SYSTEM HAS BEEN INSTALLED. DISPOSAL OF TANK ~~SHALL~~ BE IN ACCORDANCE WITH THE SPECIFICATIONS.
 - THE LOCATION OF THE NEW SEPTIC TANK AND PUMP STATION ~~SHALL~~ BE AS SHOWN ON THIS DRAWING SUBJECT TO FIELD ADJUSTMENTS MADE BY THE ENGINEER. THE CONTRACTOR ~~SHALL~~ LABEL OR OTHERWISE POSITIVELY IDENTIFY EACH CABLE AND/OR CONDUIT AT EVERY TERMINAL POINT OR JUNCTION.
 - THE SANITARY SEWER LINE AND THE WATER MAIN ~~SHALL~~ BE SLEEVED WHERE WITHIN THE ROADWAY. REFER TO VERMONT DEPARTMENT OF HIGHWAYS STANDARDS D-20 FOR DESIGN DETAIL.
 - UNLESS SPECIFICALLY DIRECTED BY THE ENGINEER ~~SHALL~~ BE ALL CONCRETE ENCASED MULTIPLE DUCT ~~SHALL~~ BE INSTALLED WITH TWO CONDUITS.

AS BUILT PLANS
 I hereby certify that the construction required by this set of plans has been accomplished as indicated hereon.
 By Dale R. Norton, Resident Engineer
 Date 5 Feb 87

1" = 40'

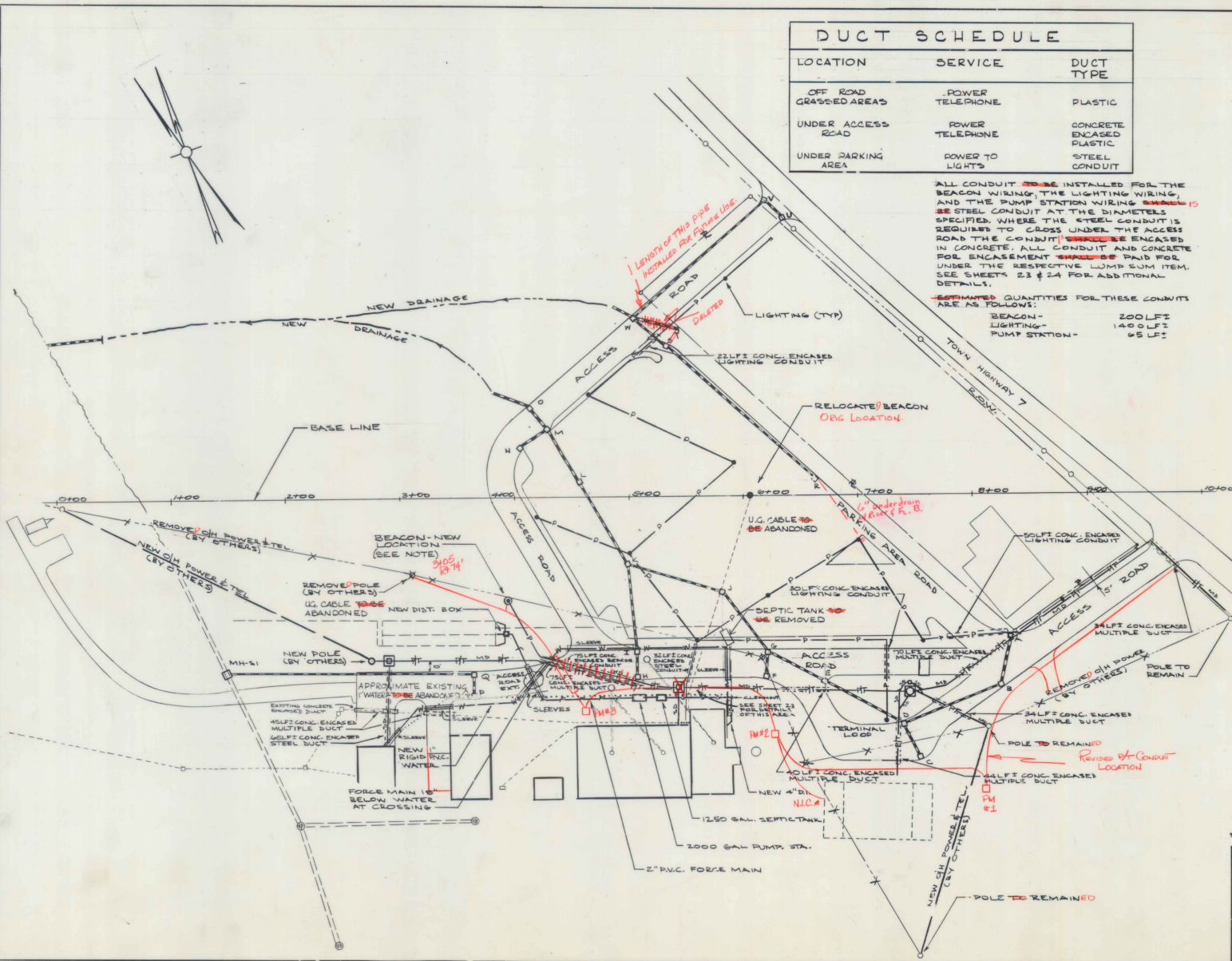
10/18/83 ADDED CONDUIT & DUCT INFO.
 2/10/85 ADDED CONDUIT & DUCT INFO.
 REVISED AUGUST 26, 1985 - PARKING AREA & LIGHT POLES

SURVEY: REP
 CALCULATED: DM
 CHECKED: DM
 DESIGN: DM
 DRAWN: CBY
 TRACED:
 APPROVED: JWP
 DATE: 01-25-83
 SCALE: 1" = 40'

UTILITY RELOCATION & INSTALLATION
 RUTLAND STATE AIRPORT
 C/ ARENDON, VERMONT
 AIP 3-SO-0015-02

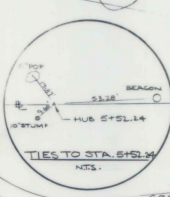
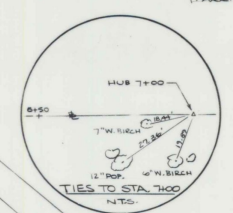
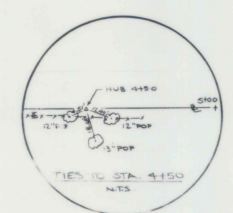
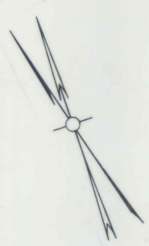
P.E.A.
 PINKHAM ENGINEERING ASSOCIATES, INC.
 Route 24, Tull Center, P.O. Box 805, Waterbury, Vermont 05671

PROJ. NO. 581
 SHEET: 41 OF 44



CURVE #1	CURVE #2	CURVE #3	CURVE #4	CURVE #5	CURVE #6
Δ 79°20'	Δ 106°54'33"	Δ 60°01'24"	Δ 13°04'03"	Δ 61°30'	Δ 118°30'
R 52.0'	R 28.48'	R 67.00'	R 337.90'	R 67.22'	R 22.00'
D 110.184'	D 199.7762'	D 85.5741'	D 16.9264'	D 80.3336'	D 260.43546'
T 32.12'	T 88.70'	T 38.70'	T 28.70'	T 40.00'	T 80.98'
L 72.00'	L 53.51'	L 70.14'	L 77.07'	L 72.16'	L 45.50'
PC 2412.86'	PC 2409.04'	PC 2409.04'	PC 1480.57'	PC 0400.616633'	PC 7442.11' (ACC. RD.)
PT 2484.86'	PT 1805' (ACC. RD. EXT.)	PT 2473.23'	PT 2427.64'	PT 0472.16'	PT 0460.14' (TERMINAL LOOP)
RI 3452.9861'	RI 5474.82' (ACCESS RD.)	RI 5473.23' (ACC. RD.)	RI 2472.27' (ACCESS EXT.)	RI 7406.23' (ACC. RD.)	RI 7406.23' (ACC. RD.)
3451.74 AND	2472.7' AND	2473.23' AND	2472.27' AND	0472.16' AND	0460.14' AND
	(ACC. RD. EXT.)	(ACC. RD.)	(ACC. RD.)	(TERMINAL LOOP)	(TERMINAL LOOP)

CURVE #7	CURVE #8	CURVE #9	CURVE #10	CURVE #11
Δ 61°30'	Δ 34°45'55"	Δ 102°27'19"	Δ 77°32'41"	Δ 13°04'03"
R 40.00'	R 90.00'	R 21.00'	R 30.00'	R 337.90'
D 143.2295'	D 95.493'	D 184.8226'	D 102.3139'	D 16.9264'
T 23.79'	T 18.78'	T 18.78'	T 44.98'	T 28.70'
L 42.494'	L 30.40'	L 55.493'	L 75.79'	L 77.07'
PC 1480.57'	PC 1480.57'	PC 3490.73' (PARK AREA)	PC 3490.73' (PARK AREA)	PC 1480.57'
PT 1472.54'	PT 1483.73'	PT 3473.12'	PT 3440.53' (ACC. RD.)	PT 1480.57'
RI 1408.3961'	RI 1466.1182'	RI 2472.27' (ACC. RD.)	RI 4735.71' (ACC. RD. EXT.)	RI 1742.2' (ACC. RD. EXT.)
1403.75 AND	1464.35 AND	2472.27' AND	4735.71' AND	1741.87' AND
		(PARK AREA RD.)	(PARK AREA RD.)	(ACC. RD. EXT.)



NOTE
SUPERELEVATE ACCESS
RD FROM STA 2475 TO
STA 4722 SEE SHEETS
6, 7, 8, 11

FOR ROCKS
UNDER
100'S DEN

NOTE
PROPERTY LINES ARE APPROXIMATE ONLY.
INFORMATION IS TAKEN FROM PLAN
ENTITLED: STATE DEPARTMENT
AGENCY OF TRANSPORTATION
PROJECT RUTLAND
NO. AIR 23-2012

AS BUILT PLANS
This set of plans was prepared in accordance
with the contract documents and as shown
on the drawings. It is the responsibility of the
client to verify the accuracy of the information
shown on these plans.
Date 5 FEB 87

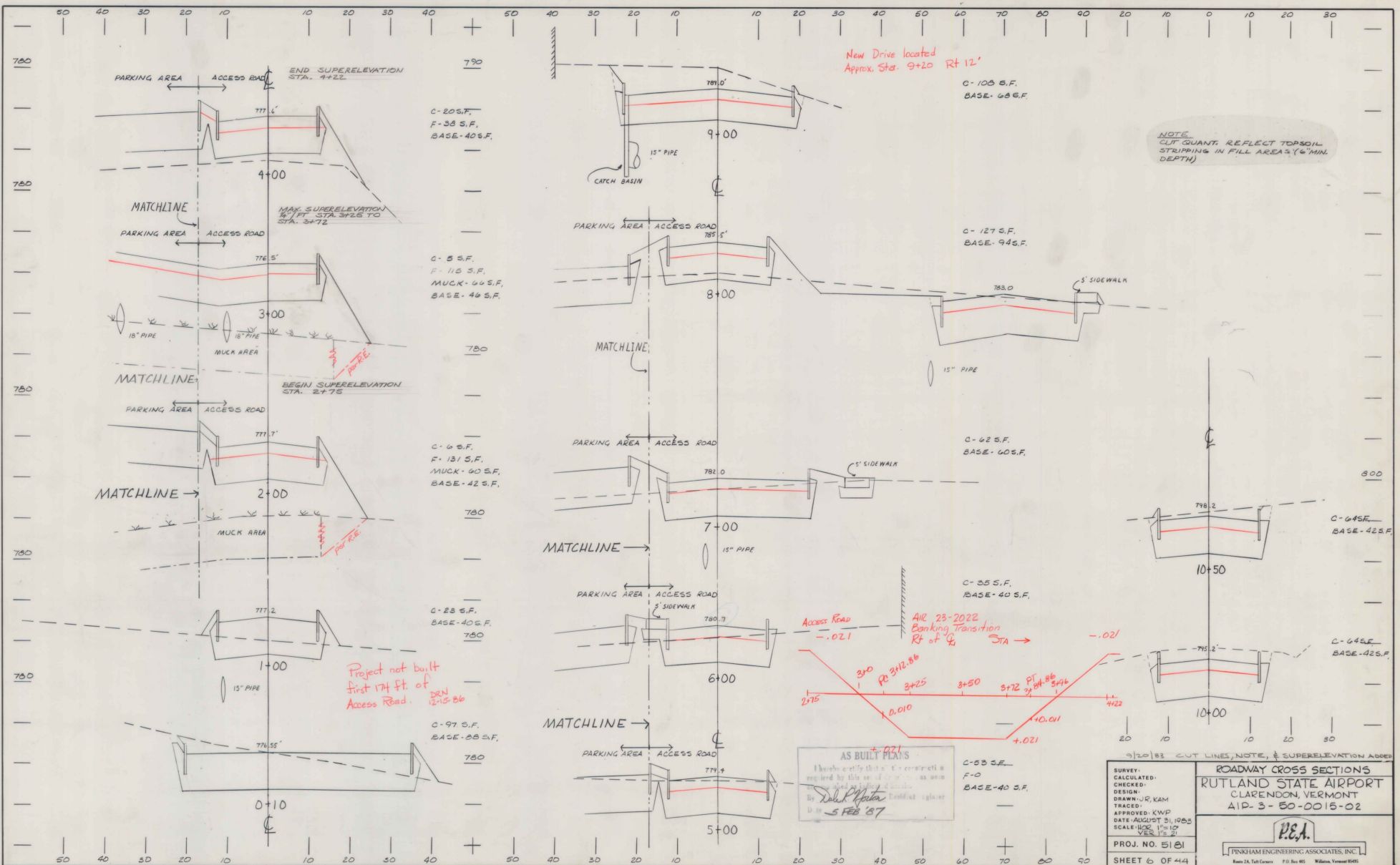
PROVIDE CURB CUT FOR THE CONTINUATION OF
THE GRAVEL ROAD FROM THE ACCESS ROAD
EXTENSION. SUBBASE GRAVEL MATERIAL SHALL
BE USED TO BLEND GRADE TRANSITION
BETWEEN THE DESIGN ELEVATION OF THE
ACCESS ROAD EXTENSION AND THE EXISTING
GRAVEL ROAD ELEVATION. PAYMENT FOR THIS
WORK SHALL BE INCLUDED UNDER THE
GRAVEL SUBBASE ITEM.



3/20/83 ADDED MORE LAYOUT DETAIL
5/26/83 REVISED PARKING LOT CONFIGURATION

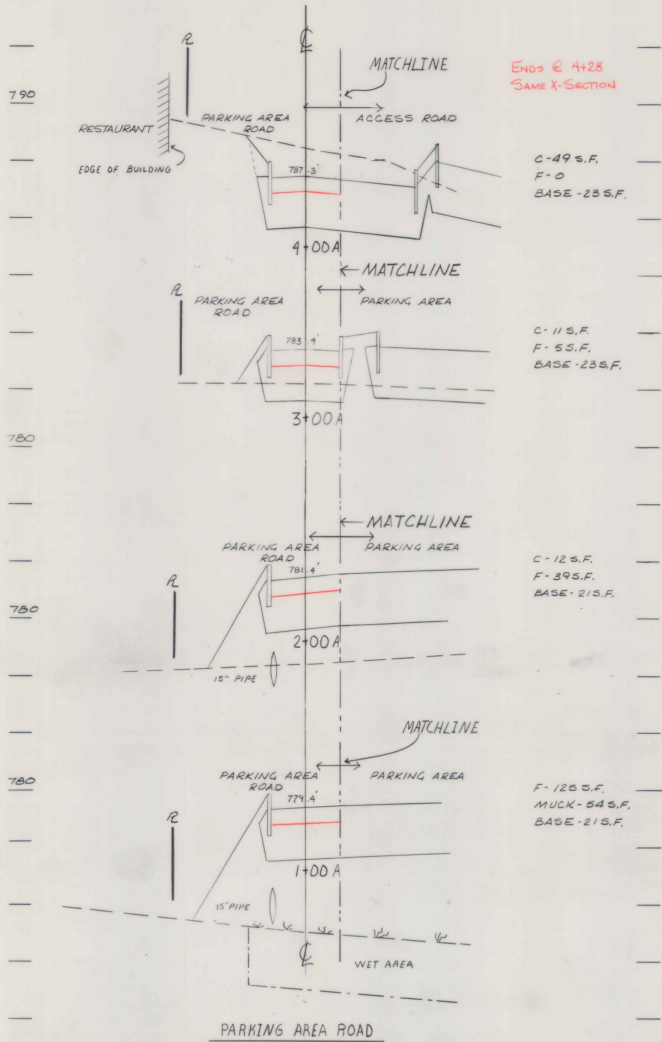
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CALCULATED: P.M.	RUTLAND STATE AIRPORT
CHECKED: P.M.	CLARENDON, VERMONT
DESIGN: P.M.	AIP 3-50-0015-02
DRAWN: P.M.	
TRACED: P.M.	
DATE: 8-8-83	
SCALE: 1"=40'	
PROJ. NO. 5781	
SHEET 5 OF 44	

P.E.A.
PINKHAM ENGINEERING ASSOCIATES, INC.
Route 24, Lot 6000 P.O. Box 881 Whitehall, Vermont 05481



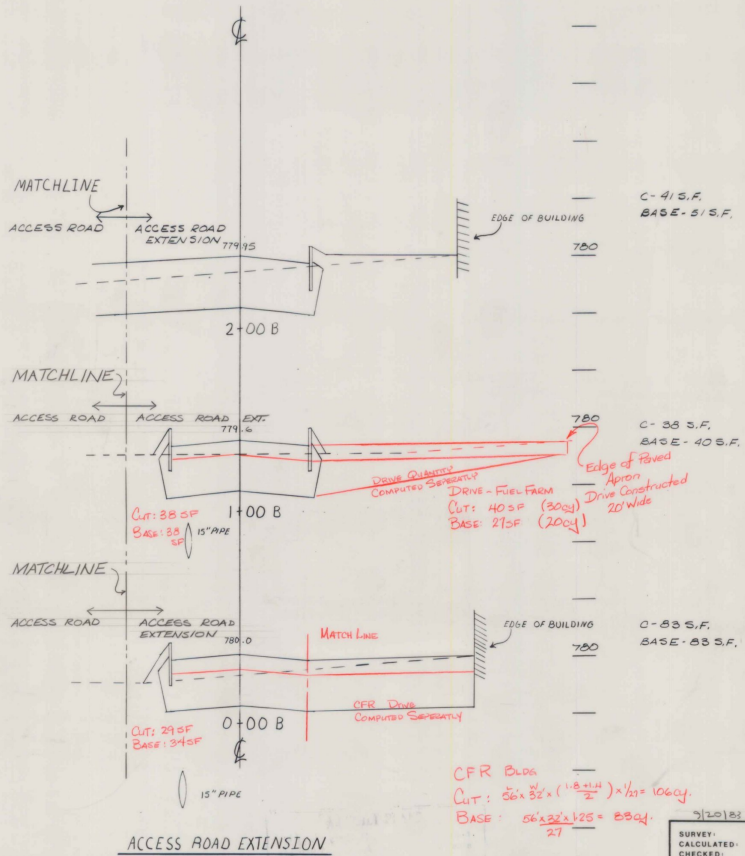
30 20 10 0 10 20 30

30 20 10 0 10 20 30 40 50



ENDS @ 4+28
SAME X-SECTION

NOTE
CUT QUANT. REFLECT TOPSOIL
STRIPPING IN FILL AREAS (6" MIN.
DEPTH)



AS BUILT PLANS
I hereby certify that the construction required by this set of drawings has been accomplished as indicated hereon.
By: *Dale K. Patton* Resident Engineer
Date: 5 Feb '87

30 20 10 0 10 20 30

30 20 10 0 10 20 30 40 50

ROADWAY CROSS SECTIONS
RUTLAND STATE AIRPORT
CLARENDON, VERMONT
AIP-3-50-0015-02

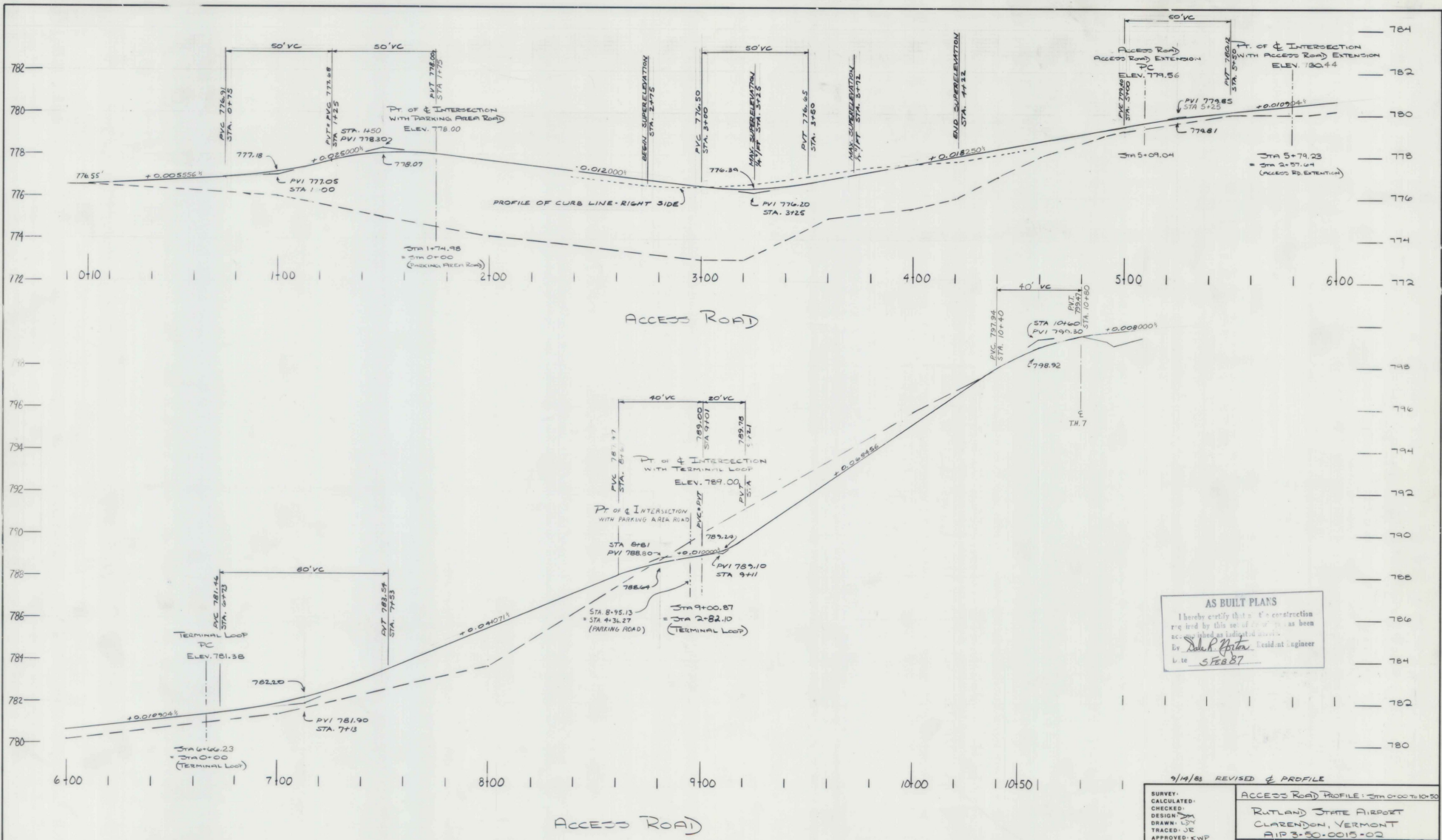
9/20/82 CUT LINES AND NOTE ADDED

SURVEY	✓
CALCULATED	✓
CHECKED	✓
DESIGN	✓
DRAWN - J.R. KAM	✓
TRACED	✓
APPROVED - K.W.P.	✓
DATE - AUGUST 31, 1983	✓
SCALE - HORIZ. 1" = 10'	✓
VERT. 1" = 2'	✓

PROJ. NO. 5181

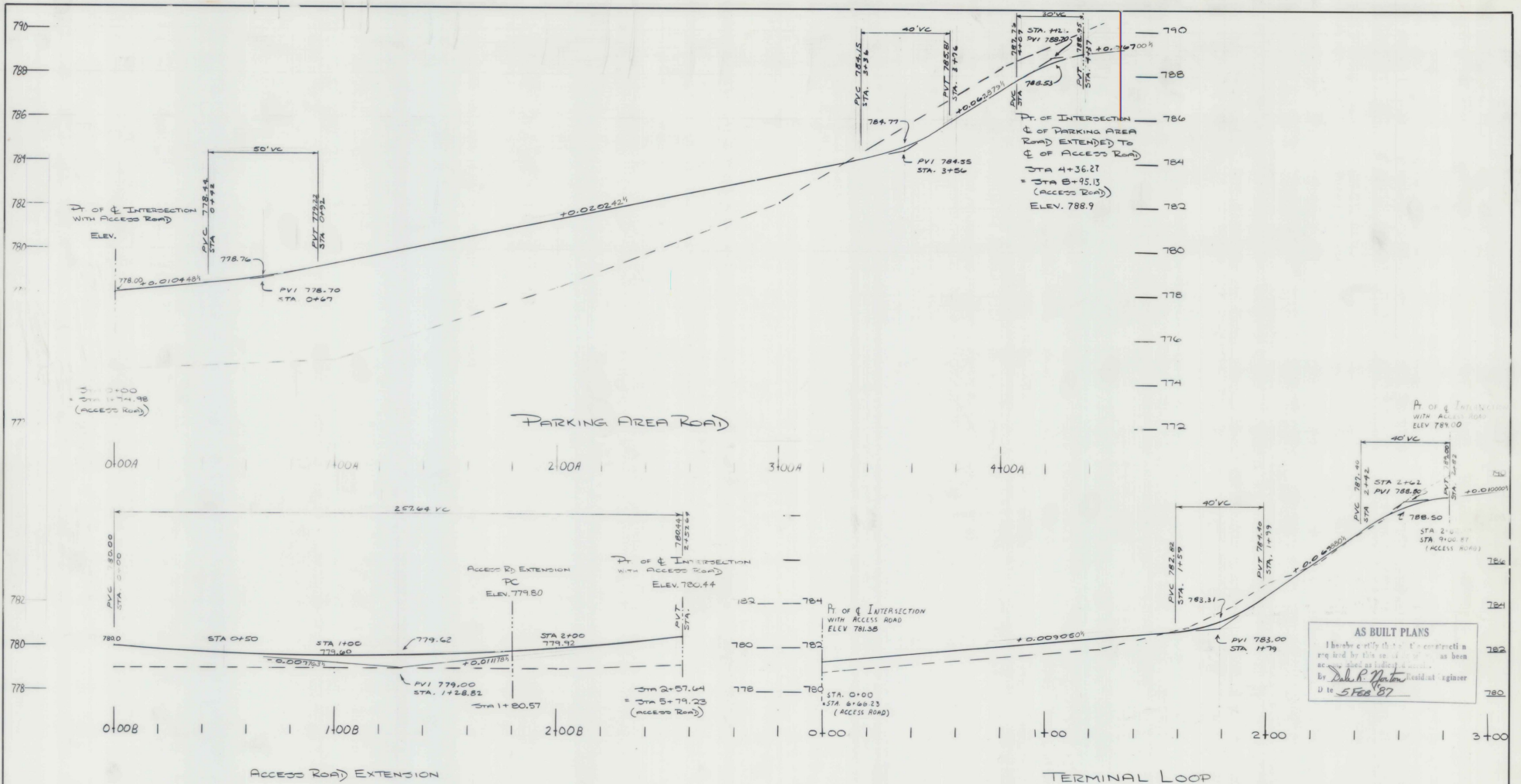
SHEET 7 OF 44

P.E.A.
PENNINGHAM ENGINEERING ASSOCIATES, INC.
Route 24, Tullahoma, T.N. 38465 Watauga, Vermont 05655



AS BUILT PLANS
 I hereby certify that the construction required by this set of plans has been accomplished as indicated herein.
 By *John R. Patten* Licensed Engineer
 L 10 5 FEB 87

9/14/83 REVISED & PROFILE	
SURVEY: _____	ACCESS ROAD PROFILE: STA 0+00 TO 10+50
CALCULATED: _____	
CHECKED: _____	RUTLAND STATE AIRPORT CLARENDON, VERMONT RIP 3-50-0015-02
DESIGN: _____	
DRAWN: _____	P.E.A. PENNINGHAM ENGINEERING ASSOCIATES, INC. Rt. 24, Tullahoma, TN 38361
TRACED: _____	
APPROVED: KWP	SHEET 6 OF 44
DATE: 8-7-83	
SCALE: 1" = 20' H 1" = 100' V	
PROJ. NO. 5181	



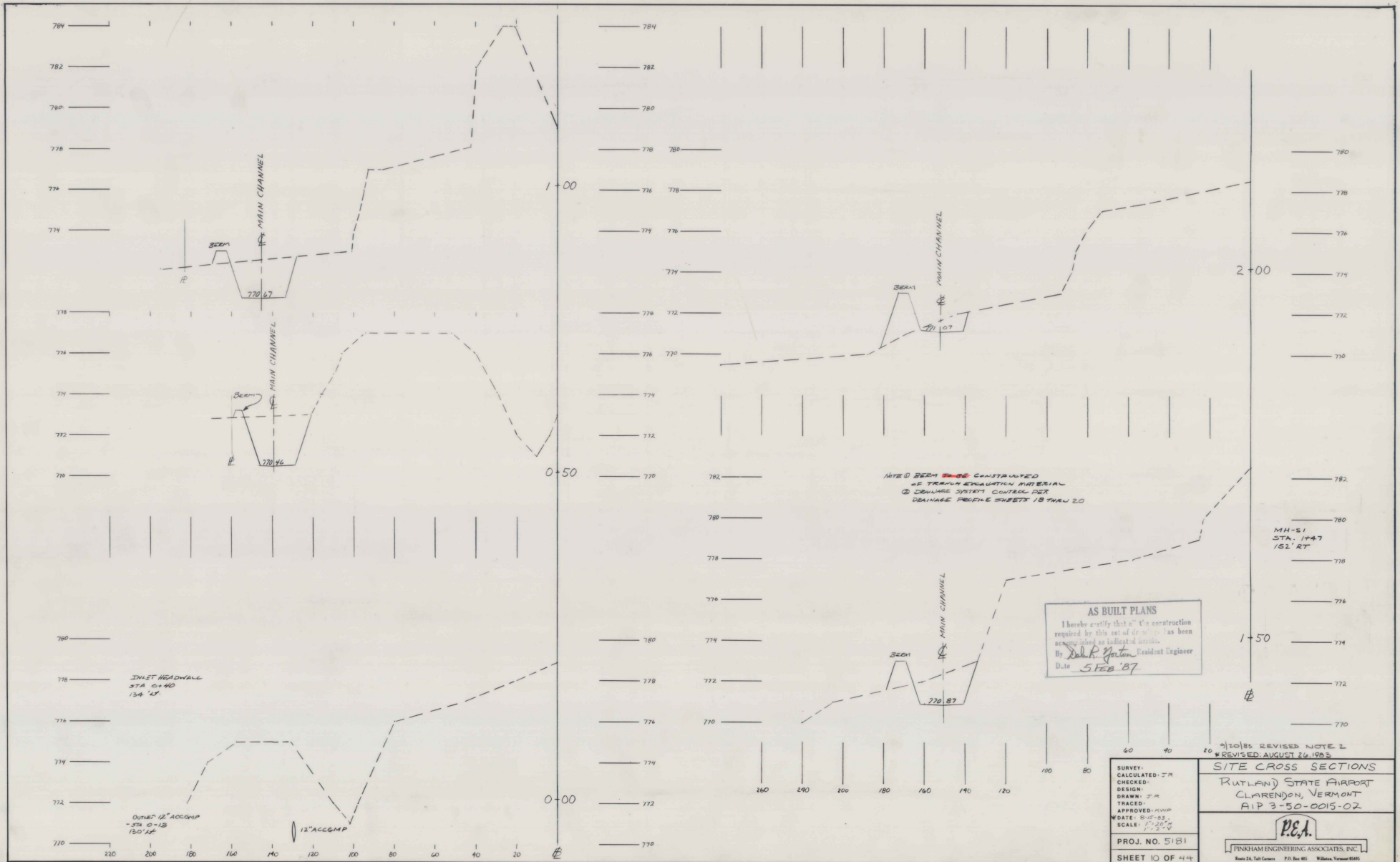
AS BUILT PLANS
 I have certified that the construction in
 accordance with these plans has been
 completed and is correct as shown
 by *Dale R. Norton* Registered Engineer
 D to 5 FEB 87

7/18/83 REVISED & PROFILE

SURVEY: REP	ROADWAY PROFILES: ACCESS ROAD EXTENSION
CALCULATED: ✓	TERMINAL LOOP
CHECKED: ✓	
DESIGN: JRM	
DRAWN: JTR	
TRACED: ✓	
APPROVED: KWP	
DATE: 8-30-83	
SCALE: 1" = 20' H	
PROJ. NO. 5181	
SHEET 9 OF 44	

RUTLAND STATE AIRPORT
 CLARENDON, VERMONT
 AIR 3-50-0019-02

P.E.A.
 PINKHAM ENGINEERING ASSOCIATES, INC.
 Route 24, Tull Cross, P.O. Box 40, Waterbury, Vermont 05671



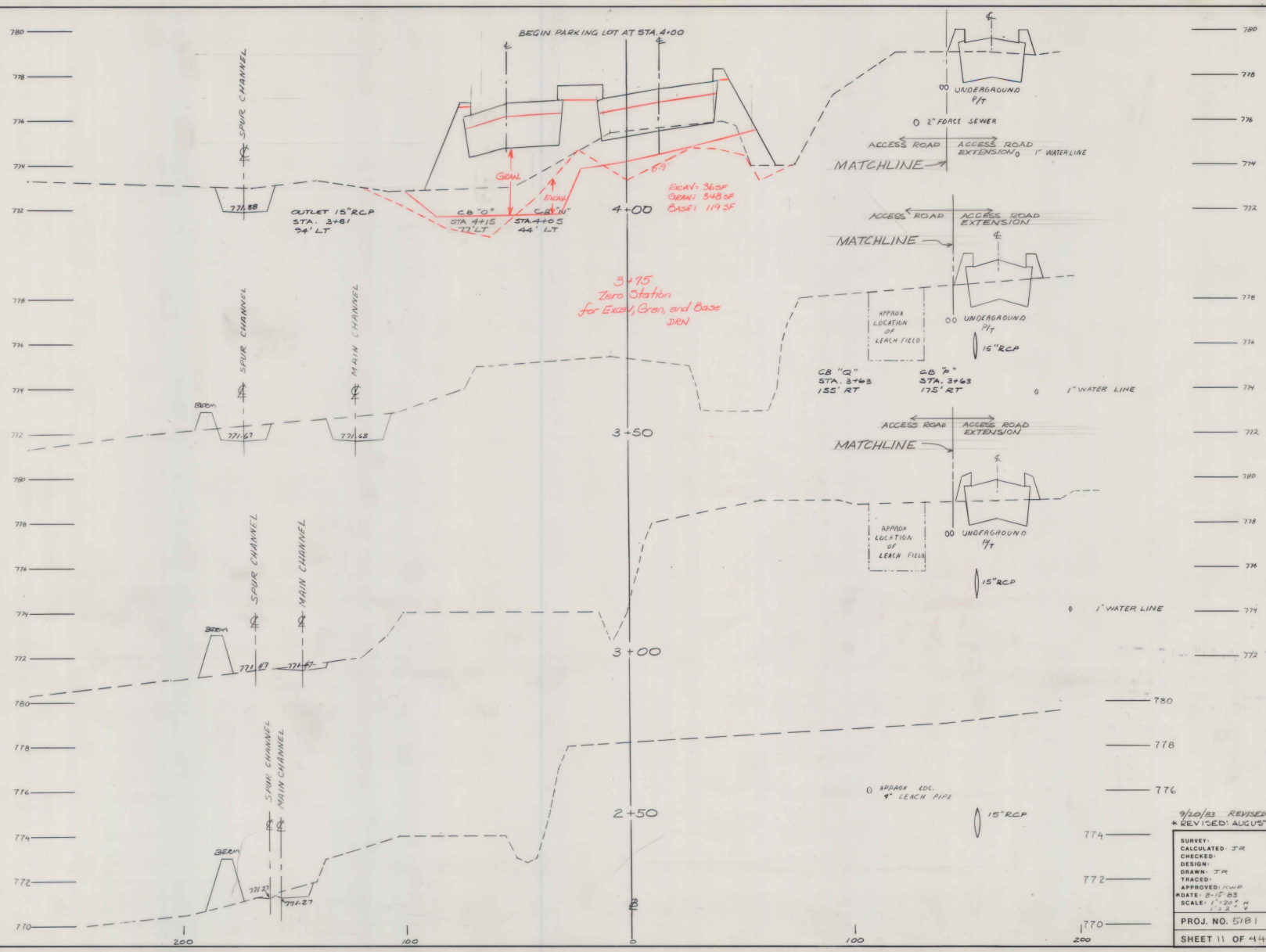
INLET SIDEWALK
37A C=40
134" W

OUTLET 12" ACCUMIP
37B C=18
130" W

NOTE: BERM SHALL BE CONSTRUCTED
OF TRIMMING EXCAVATION MATERIAL
& DRAINAGE SYSTEM CONTROL PER
DRAINAGE DESIGN SHEETS 18 THRU 20


AS BUILT PLANS
I hereby certify that all construction
required by this set of drawings has been
accomplished as indicated herein.
By *D. P. Gorton* Resident Engineer
Date 5 FEB '87

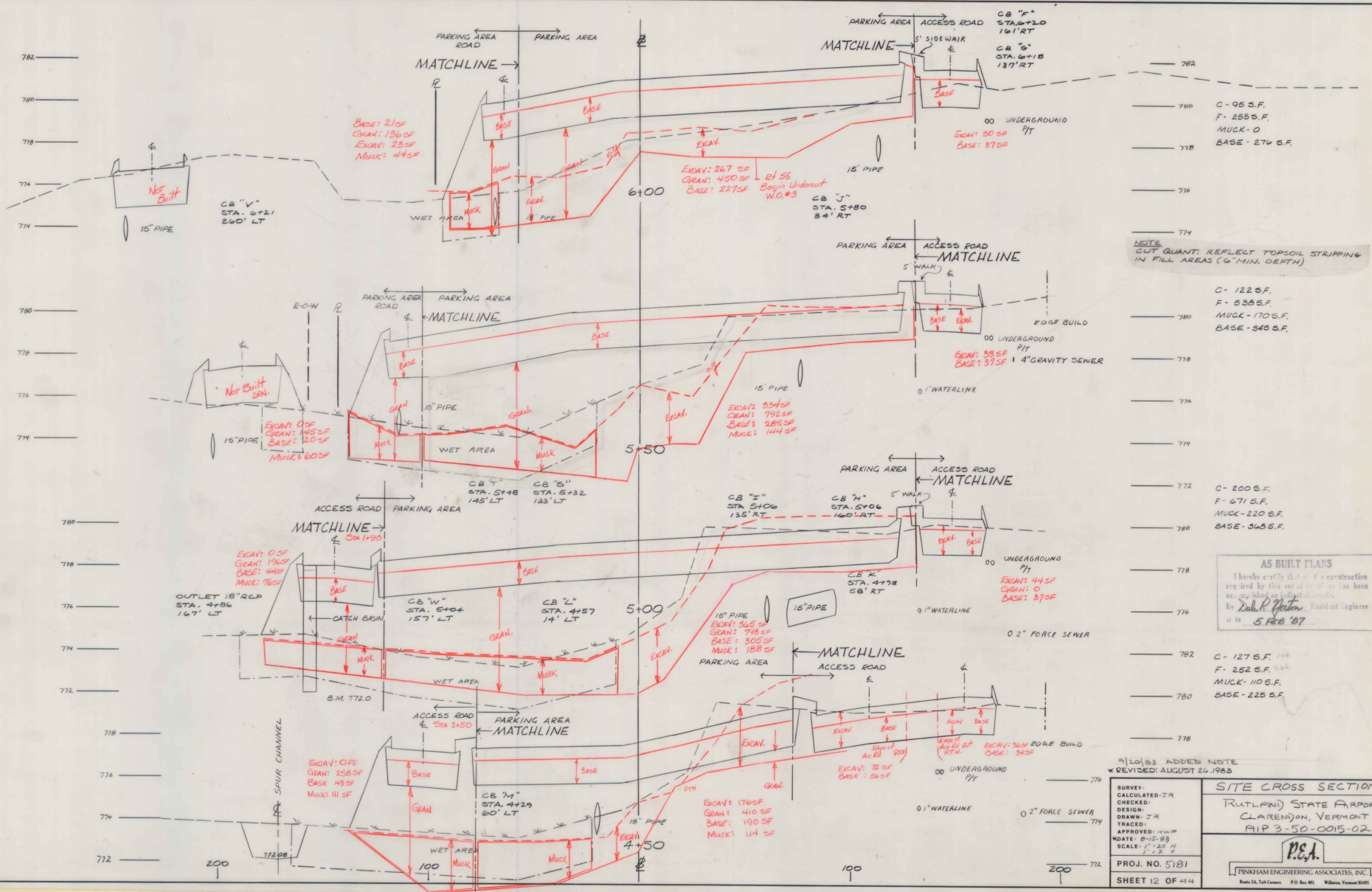
SURVEY: _____ CALCULATED: J.R. CHECKED: _____ DESIGN: J.R. DRAWN: J.R. TRACED: _____ APPROVED: _____ DATE: 8-15-83 SCALE: 1"=20' PROJ. NO. 5181 SHEET 10 OF 44	10/83 REVISED NOTE 2 *REVISED AUGUST 26, 1983 SITE CROSS SECTIONS RUTLAND STATE AIRPORT CLARENDON, VERMONT AIP 3-50-0015-02 PINKHAM ENGINEERING ASSOCIATES, INC. <small>Rt. 24, Tullahoma, Tenn. 37388 P.O. Box 985 Wilkes, Vermont 05375</small>
--	---



3+95
Zero Station
for ELEV, GRN, and Base
DEN

AS BUILT PLANS
I hereby certify that all the construction
required by this set of drawings has been
accurately installed as indicated herein.
By *John R. Hartman* Resident Engineer
Date *5 FEB 87*

9/20/83 REVISED SECTIONS * REVISED: AUGUST 26, 1983		SITE CROSS SECTIONS RUTLAND STATE AIRPORT CLARENDON, VERMONT AIP 3-50-0015-02
SURVEY: _____ CALCULATED: J.R. CHECKED: _____ DESIGN: _____ DRAWN: J.R. TRACED: _____ APPROVED: _____ DATE: 8-17-83 SCALE: 1" = 20' H 1" = 2' V	 PINKHAM ENGINEERING ASSOCIATES, INC. <small>Rte. 24, Toll Center P.O. Box 465 White, Vermont 05495</small>	
PROJ. NO. 5181 SHEET 11 OF 44		



NOTE
CUT QUANT: REFLECT TOPSOIL STRIPPING
IN FILL AREAS (6\"/>

C - 122 S.F.
F - 638 S.F.
MUCK - 170 S.F.
BASE - 345 S.F.

C - 200 S.F.
F - 671 S.F.
MUCK - 220 S.F.
BASE - 368 S.F.

C - 127 S.F.
F - 262 S.F.
MUCK - 110 S.F.
BASE - 225 S.F.

AS BUILT PLANS
I hereby certify that the construction
performed by this set of plans has been
accomplished as indicated herein.
By *Dale R. Johnson* Resident Engineer
on **5 FEB '87**

9/10/82 ADDED NOTE
REVISED: AUGUST 26, 1983

SURVEY: CALCULATED: J.R.
CHECKED:
DESIGN:
DRAWN: J.R.
TRACED:
APPROVED: K.W.P.
DATE: 8-12-83
SCALE: 1\"/>

SITE CROSS SECTIONS
RUTLAND STATE AIRPORT
CLARENDON, VERMONT
RIP 3-50-0015-02

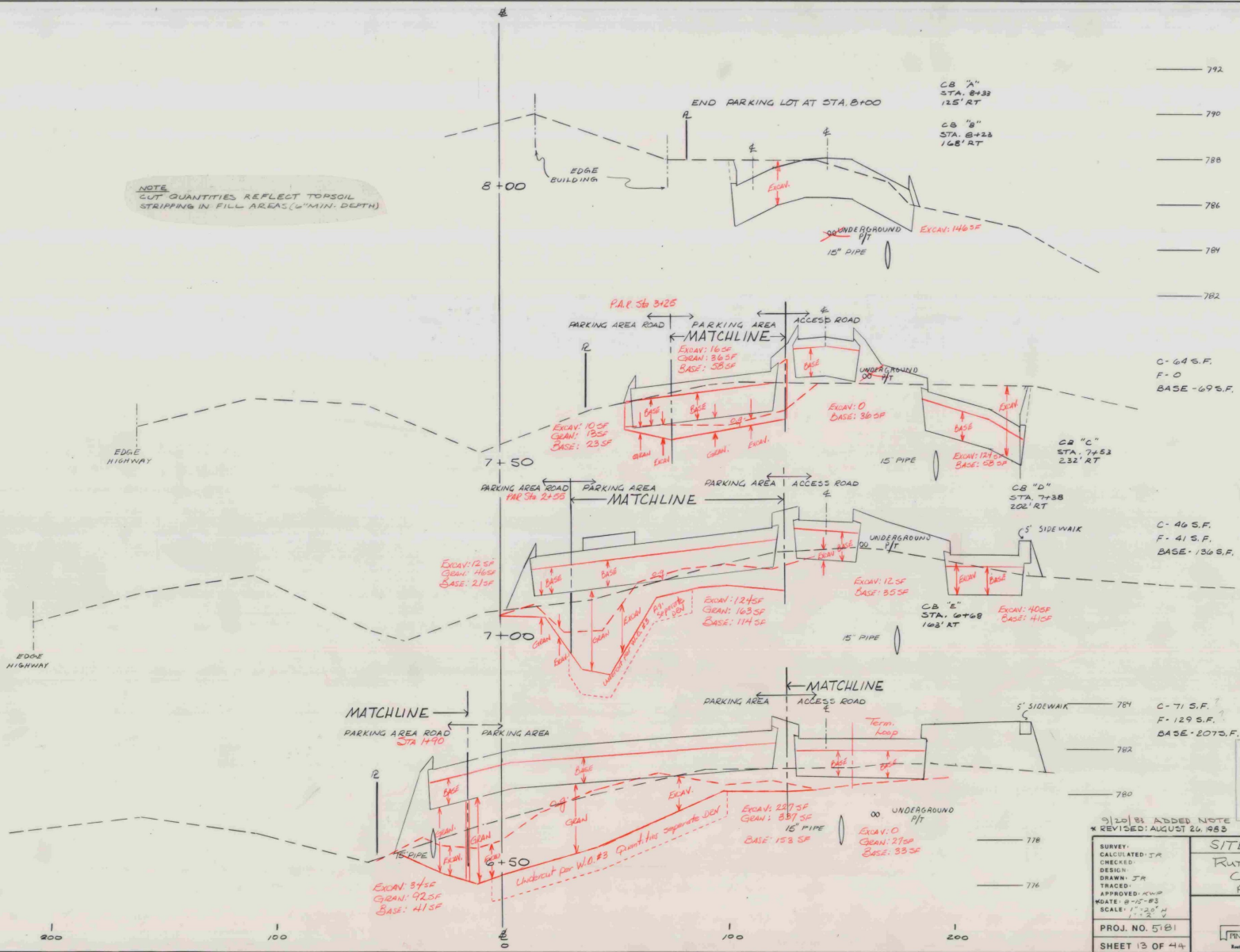
P.E.A.
PINKHAM ENGINEERING ASSOCIATES, INC.
Route 26, Toll Center P.O. Box 403 Winochi, Vermont 05791

PROJ. NO. 5181
SHEET 12 OF 44

792
790
788
786
784
782
780
778
776
774

792
790
788
786
784
782
780
778
776

NOTE
CUT QUANTITIES REFLECT TOPSOIL
STRIPPING IN FILL AREAS (6" MIN. DEPTH)



CB "A"
STA. 8+38
125' RT

CB "B"
STA. 8+28
168' RT

P.A.P. Sta 3+25
PARKING AREA ROAD
PARKING AREA
MATCHLINE
ACCESS ROAD
UNDERGROUND
15" PIPE

P.A.P. Sta 2+58
PARKING AREA ROAD
PARKING AREA
MATCHLINE
ACCESS ROAD
UNDERGROUND
15" PIPE

MATCHLINE
PARKING AREA ROAD
PARKING AREA
ACCESS ROAD
UNDERGROUND
15" PIPE

C-64 S.F.
F-0
BASE-69 S.F.

C-46 S.F.
F-41 S.F.
BASE-136 S.F.

C-71 S.F.
F-129 S.F.
BASE-207 S.F.

AS BUILT PLAYS
I hereby certify that the construction
required by this set of drawings has been
accomplished in accordance with the
plans.
By *Del R. Horton* Resident Engineer
Date *5 FEB 87*

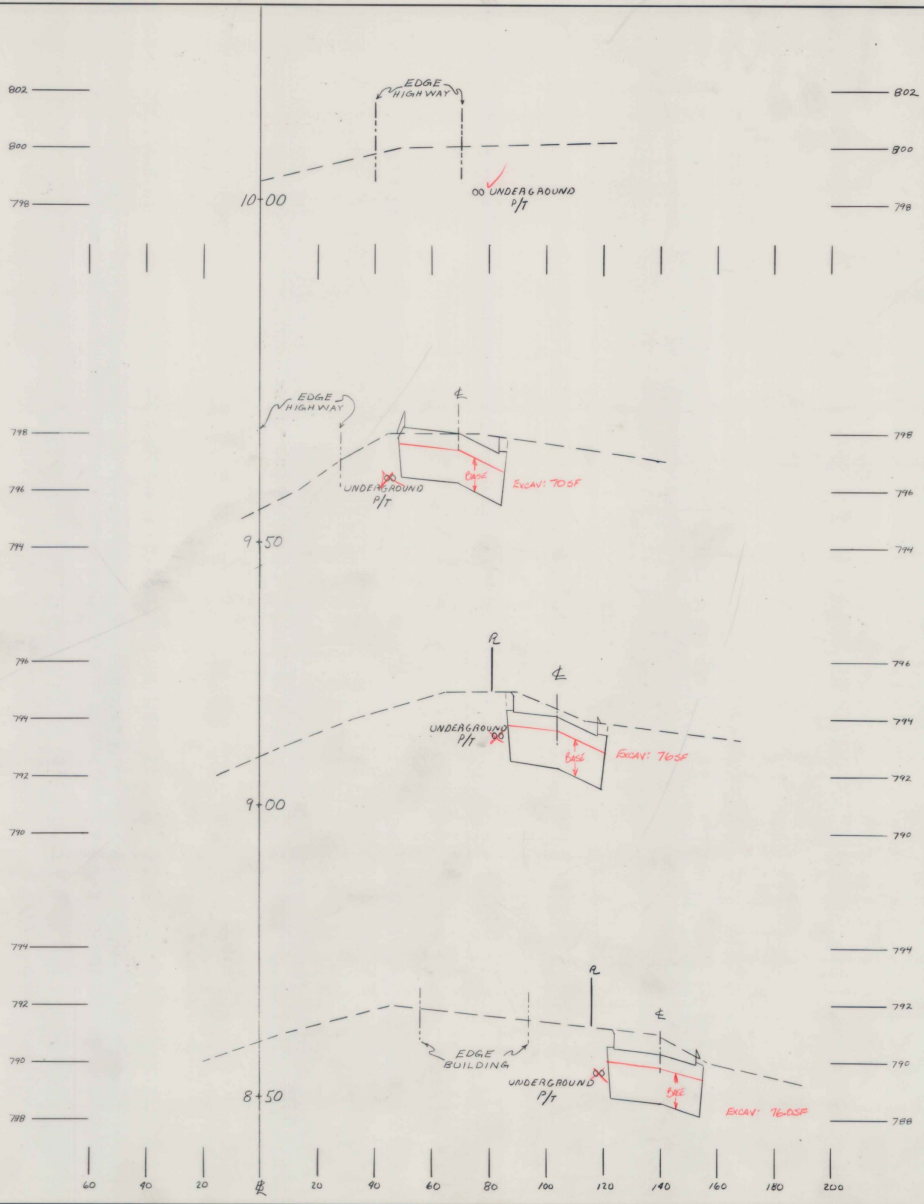
210128A ADDED NOTE
REVISED: AUGUST 20, 1983

SURVY:
CALCULATED: JR
CHECKED:
DESIGN:
DRAWN: JR
TRACED:
APPROVED: KWP
DATE: 8-15-83
SCALE: 1" = 20' H
PROJ. NO. 5181
SHEET 13 OF 44

SITE CROSS SECTIONS
RUTLAND STATE AIRPORT
CLARENDON, VERMONT
AIP 3-50-0015-02

PC&A
PENNSYLVANIA ENGINEERING ASSOCIATES, INC.
Route 24, Torrington 05860
P.O. Box 402, Winochi, Vermont 05490

200 100 0 100 200



AS BUILT PLANS
 I hereby certify that the work shown on these plans is as built and as required by this set of plans, as been accomplished on the ground.
 By: *Dale R. Hartman* Resident Engineer
 Date: *SEP 07*

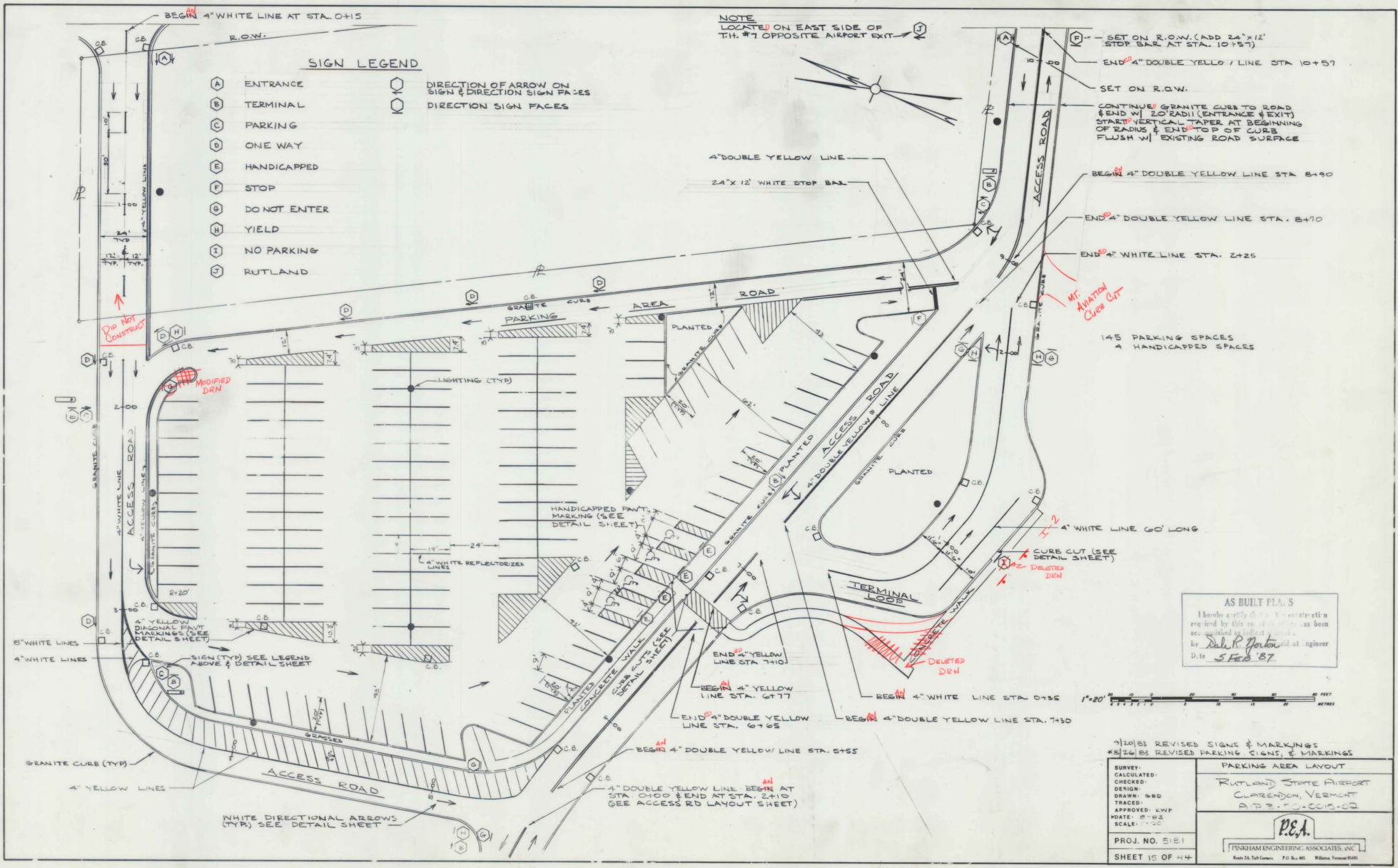
REVISED AUGUST 26, 1963

SURVEY:
 CALCULATED: J.R.
 CHECKED:
 DESIGN:
 DRAWN: J.M.
 TRACED:
 APPROVED: K.W.P.
 MO DATE: 8-15-63
 SCALE: 1/2" = 1'-0"

SITE CROSS SECTIONS
 RUTLAND STATE AIRPORT
 CLARENDON, VERMONT
 AIP 3-50-0015-02

PROJ. NO. 5181
 SHEET 14 OF 44

P.E.A.
 PENNHAM ENGINEERING ASSOCIATES, INC.
 Route 24, Tull Center P.O. Box 601, Williston, Vermont 05495

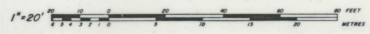


SIGN LEGEND

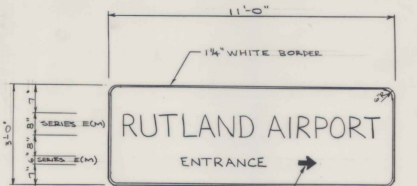
(A) ENTRANCE	(O) DIRECTION OF ARROW ON SIGN & DIRECTION SIGN FACES
(B) TERMINAL	(O) DIRECTION SIGN FACES
(C) PARKING	
(D) ONE WAY	
(E) HANDICAPPED	
(F) STOP	
(G) DO NOT ENTER	
(H) YIELD	
(I) NO PARKING	
(J) RUTLAND	

NOTE
 LOCATED ON EAST SIDE OF
 T.H. #7 OPPOSITE AIRPORT EXIT

AS BUILT PLANS
 I hereby certify that the construction required by this set of plans has been accomplished as indicated thereon.
 by Dale R. Parkton, Professional Engineer
 D. No. 5 Feb '87



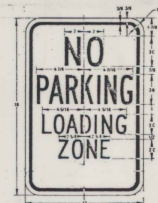
7/20/83 REVISED SIGNS & MARKINGS 8/26/83 REVISED PARKING SIGNS & MARKINGS	PARKING AREA LAYOUT RUTLAND STATE AIRPORT CLARENDON, VERMONT A17 B-70-0010-02
SURVEY: _____ CALCULATED: _____ CHECKED: _____ DESIGN: _____ DRAWN: S&B TRACED: _____ APPROVED: KWP DATE: 8-22 SCALE: 1"=20'	P.E.A. PINKHAM ENGINEERING ASSOCIATES, INC. Route 24, Tull Center, P.O. Box 405, Williston, Vermont 05696
PROJ. NO. 51E1 SHEET 15 OF 44	



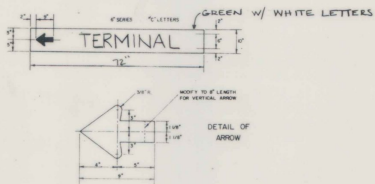
SIGN A (TYPE B)



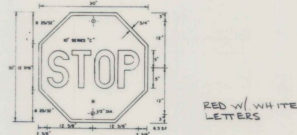
SIGN B (TYPE A)



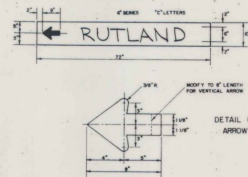
SIGN C (TYPE A)



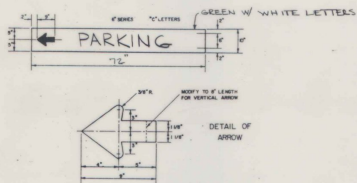
SIGN D (TYPE A)



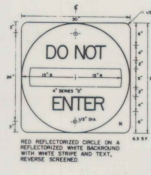
SIGN E (TYPE A)



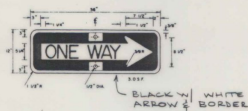
SIGN F (TYPE A)



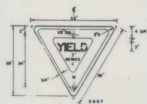
SIGN G (TYPE A)



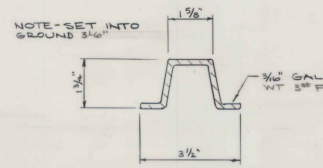
SIGN H (TYPE A)



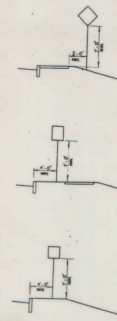
SIGN I (TYPE A)



SIGN J (TYPE A)



FOR TYPE A SIGNS
TYPE "A" SUPPORT



SIGN PLACEMENT

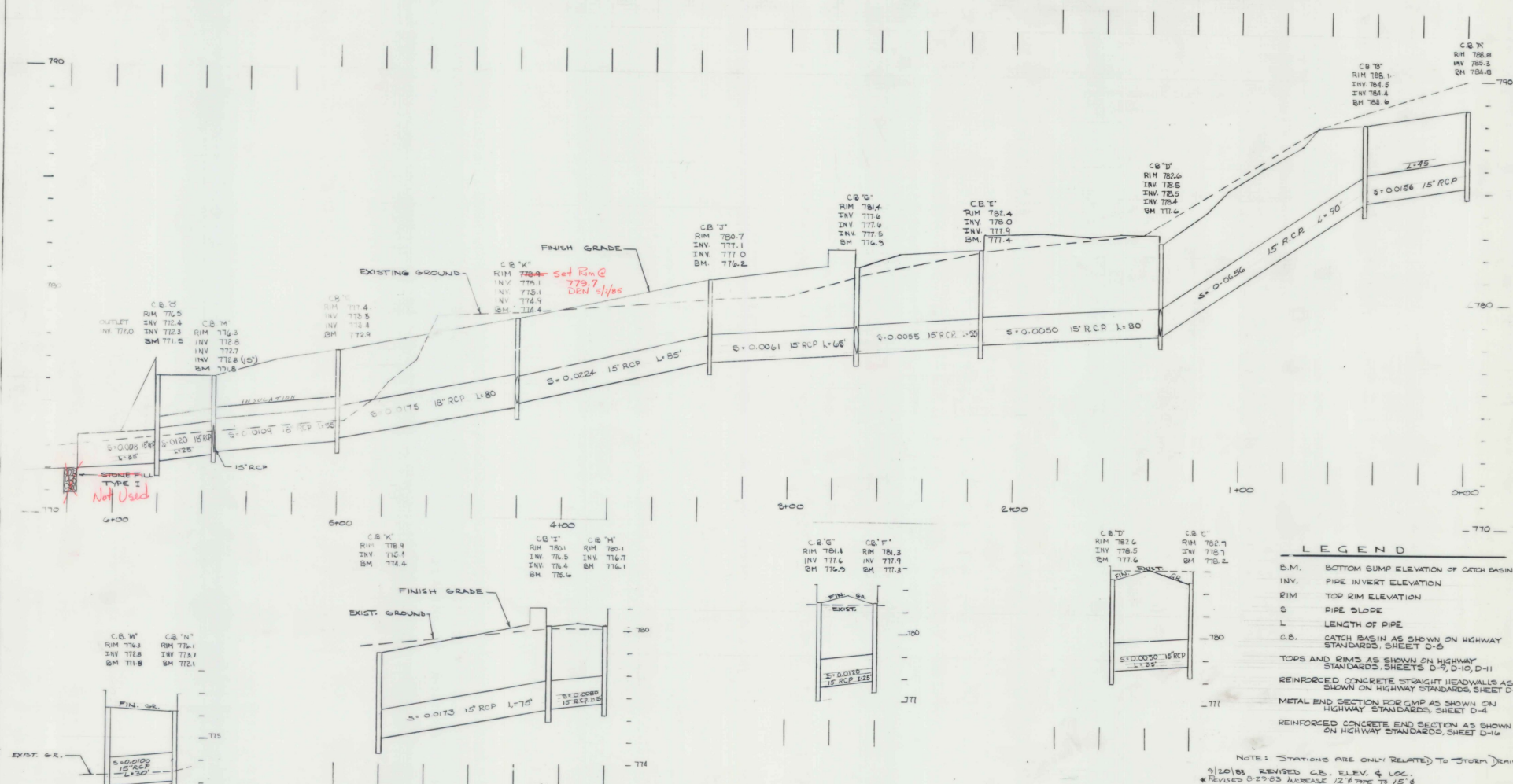
SIGN NOTES

- Reflective Material:**
 - This reflective material for the black and white signs ~~shall~~ be flat top silver reflective sheeting applied to the entire background of the sign.
 - The reflective material for the red and white signs ~~shall~~ have high intensity encapsulated lens reflective sheeting applied to the entire background of the sign.
 - The text of the STOP, DO NOT ENTER, and border of YIELD signs ~~shall~~ be reversed screened.
- Colors:**
 - The regulatory signs shown on this sheet, except the STOP, DO NOT ENTER, and YIELD signs, ~~shall~~ have black text on reflectorized white or silver background.
 - The STOP, and DO NOT ENTER, signs ~~shall~~ have a reflectorized white or silver text on a reflectorized red background.
 - The YIELD sign ~~shall~~ have a text on a reflectorized white background with a red border reversed screened.
 - The reflective material for green signs ~~shall~~ be green reflective sheeting applied to the entire background of the sign.
 - The red, white, green, blue and black ~~shall~~ conform with the standard colors adopted by the American Association of State Highway Officials and approved by the Department of Transportation, Federal Highway Administration.
- Text Design:**
 - Letters, digits, arrows, spacings, and text dimensions ~~must~~ conform with the standard alphabets and designs prescribed in the Manual on Uniform Traffic Control Devices prepared by the National Joint Committee on Uniform Traffic Control Devices.
- Specifications:**
 - All signs ~~shall~~ meet the standard state specifications for traffic signs.

AS BUILT PLANS
I have certified that the construction required by this set of plans has been reviewed and approved by me.
By *David P. Weston*, Civil Engineer
DATE: FEB 87

NOTE
FOR TYPE B SIGNS USE TYPE "C" SUPPORT.
(SEE STANDARD E-25)
3/10/83 REVISED TYPE "A" SUPPORT DETAIL
3/12/83 REVISED SIGNS

SURVEY: CALCULATED: CHECKED: DESIGN: DRAWN: GWD TRACED: APPROVED: KWP DATE: 87-02 SCALE: NONE	SIGNAGE DETAILS RUTLAND STATE AIRPORT CLARENDON, VERMONT AIP 3-80-0015-02 PINKHAM ENGINEERING ASSOCIATES, INC. Route 2A, Tullahoma, TN 38464
PROJ. NO. 3181 SHEET 16 OF 44	



LEGEND

B.M.	BOTTOM GUMP ELEVATION OF CATCH BASIN
INV.	PIPE INVERT ELEVATION
RIM	TOP RIM ELEVATION
S	PIPE SLOPE
L	LENGTH OF PIPE
C.B.	CATCH BASIN AS SHOWN ON HIGHWAY STANDARDS, SHEET D-6
TOPS AND RIMS AS SHOWN ON HIGHWAY STANDARDS, SHEETS D-9, D-10, D-11	
REINFORCED CONCRETE STRAIGHT HEADWALLS AS SHOWN ON HIGHWAY STANDARDS, SHEET D-4	
METAL END SECTION FOR CWP AS SHOWN ON HIGHWAY STANDARDS, SHEET D-2	
REINFORCED CONCRETE END SECTION AS SHOWN ON HIGHWAY STANDARDS, SHEET D-16	

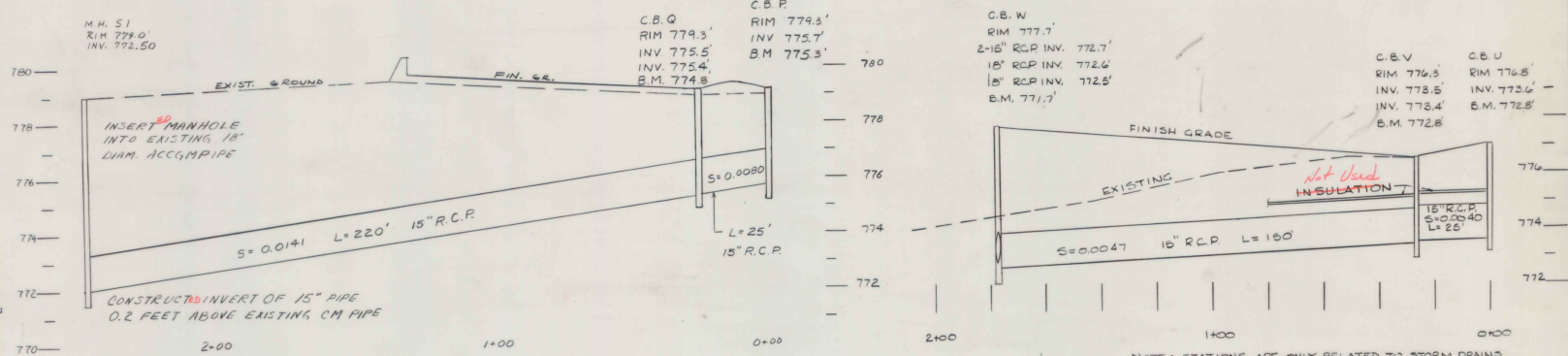
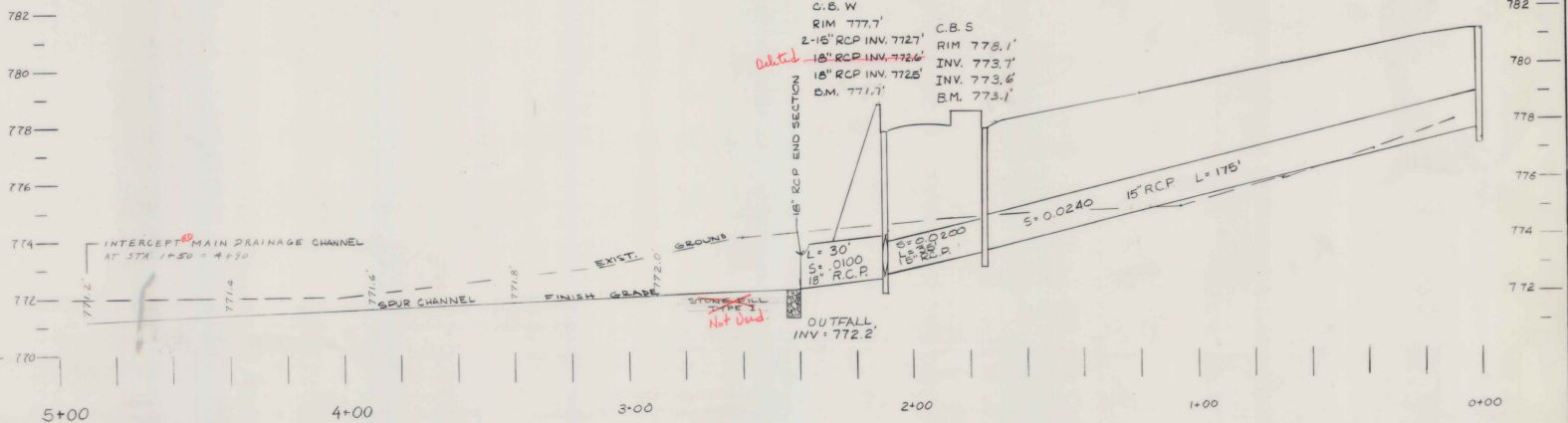
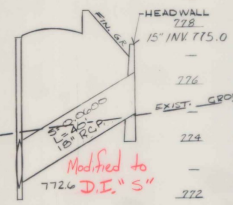
NOTE: STATIONS ARE ONLY RELATED TO STORM DRAIN
 9/20/83 REVISED C.B. ELEV. & LOC.
 *REVISED 8-29-83 INCREASE 12" PIPE TO 15"

AS BUILT PLANS
 I hereby certify that the information required by this title is true and correct as far as it goes.
 Date: 5/28/87

SURVEY: _____ CALCULATED: _____ CHECKED: <u>JJB</u> DESIGN: <u>DAT</u> TRACED: _____ APPROVED: _____ DATE: <u>5-15-83</u> SCALE: <u>1" = 20' VERT</u> <u>1" = 20' HORIZ</u>	DRAINAGE PROFILES RUTLAND STATE AIRPORT CLARENDON, VERMONT AIP 3-50-0015-02
PROJ. NO. 5181	
SHEET 1E OF 44	<small>Penningham Engineering Associates, Inc. Route 24, Tuff Cove, P.O. Box 405, Williston, Vermont 05696</small>

C.B. W
RIM 777.7'
2-15" RCP INV. 772.7'
18" RCP INV. 772.6'
18" RCP INV. 772.5'
B.M. 771.7'

C.B. R
RIM 781.3'
INV. 777.7'
B.M. 777.3'

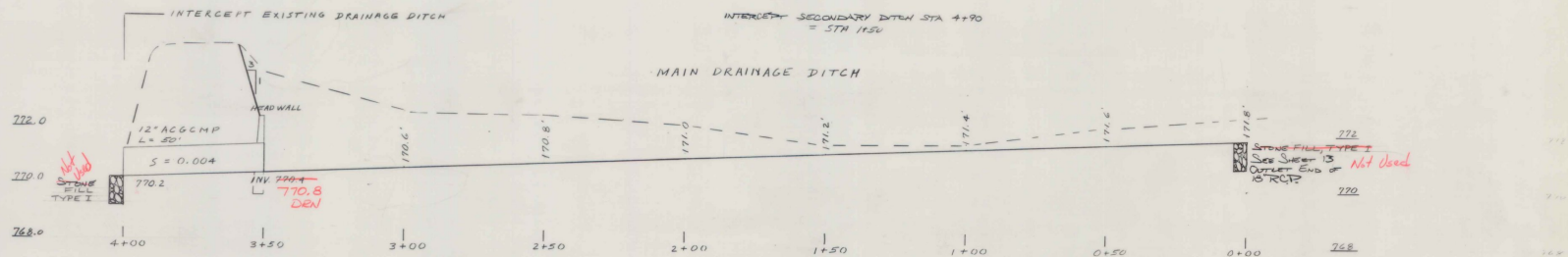


- LEGEND**
- B.M. BOTTOM BUMP ELEVATION OR CATCH BASIN
 - INV. PIPE INVERT ELEVATION
 - RIM TOP RIM ELEVATION
 - S PIPE SLOPE
 - L LENGTH OF PIPE
 - C.B. CATCH BASIN AS SHOWN ON HIGHWAY STANDARDS, SHEET D-5
 - TOPS AND RIMS AS SHOWN ON HIGHWAY STANDARDS, SHEETS D-4, D-1
 - REINFORCED CONCRETE STRAIGHT HEADWALLS AS SHOWN ON HIGHWAY STANDARDS, SHEET D-2
 - METAL END SECTION FOR CMP AS SHOWN ON HIGHWAY STANDARDS, SHEET D-4
 - REINFORCED CONCRETE END SECTION AS SHOWN ON HIGHWAY STANDARDS, SHEET D-16

NOTE: STATIONS ARE ONLY RELATED TO STORM DRAINS
 3/20/83 REVISED C.B. ELEV.
 * REVISED 8/29/83 INCREASE PIPE SIZES.

AS BUILT PLANS
 I hereby certify that all construction required by this set of drawings has been accomplished as indicated herein.
 By *Rob R. Fortin* Resident Engineer
 Date *5 FEB 87*

DRAINAGE PROFILES RUTLAND STATE AIRPORT CLARENDON, VERMONT AIP 3-50-0015-02	
SURVEY: _____ CALCULATED: _____ CHECKED: _____ DESIGN: JUB DRAWN: JGH TRACED: _____ APPROVED: RWP DATE: 8-15-83 SCALE: H 1"=50' V 1"=20'	 PENNSAC ENGINEERING ASSOCIATES, INC. <small>Rte. 24, Tullahoma, Tenn. 38381 P.O. Box 400 Williams, Vermont 05345</small>
PROJ. NO. 5181 SHEET 19 OF 44	



- LEGEND**
- B.M. BOTTOM BUMP ELEVATION OR CATCH BASIN
 - INV. PIPE INVERT ELEVATION
 - RIM TOP RIM ELEVATION
 - S PIPE SLOPE
 - L LENGTH OF PIPE
 - C.B. CATCH BASIN AS SHOWN ON HIGHWAY STANDARDS, SHEET D-8
 - TOPS AND RIMS AS SHOWN ON HIGHWAY STANDARDS, SHEETS D-9, D-11
 - REINFORCED CONCRETE STRAIGHT HEADWALLS AS SHOWN ON HIGHWAY STANDARDS, SHEET D-2
 - METAL END SECTION FOR CMP AS SHOWN ON HIGHWAY STANDARDS, SHEET D-4
 - REINFORCED CONCRETE END SECTION AS SHOWN ON HIGHWAY STANDARDS, SHEET D-16

NOTE: STATIONS ARE ONLY RELATED TO STORM DRAINS

3/20/83 STONE FILL
* REVISED 8/27/83 RIP, ROP ADDED

AS BUILT PLANS

I hereby certify that a C's construction required by this set of drawings has been accomplished as indicated herein.

By *Dale R. Horton* Resident Engineer
Date *FEB '87*

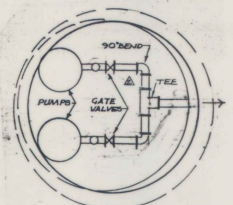
SURVEY: _____
CALCULATED: _____
CHECKED: _____
DESIGN: *J.E.B.*
DRAWN: *R.E.P.*
TRACED: _____
APPROVED: *K.W.P.*
DATE: *11/15/83*
SCALE: *1" = 20'*

PROJ. NO. *5181*
SHEET 20 OF 44

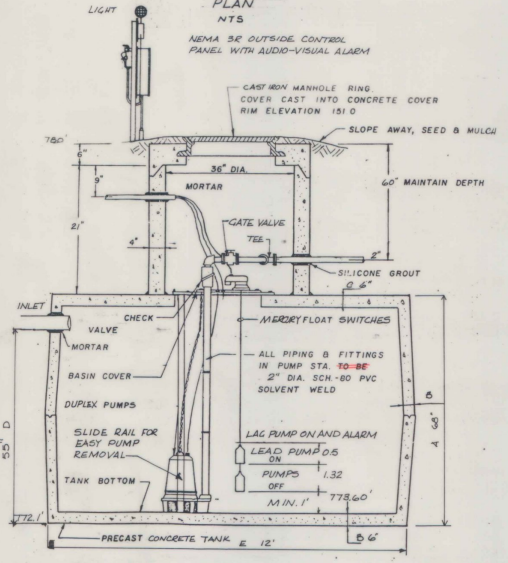
DRAINAGE PROFILES
RUTLAND STATE AIRPORT
CLARENDON, VERMONT
AIP3-50-0015-02

P.E.A.

PENNSHAM ENGINEERING ASSOCIATES, INC.
Route 24, Tull Center P.O. Box 465 Winochee, Vermont 05490

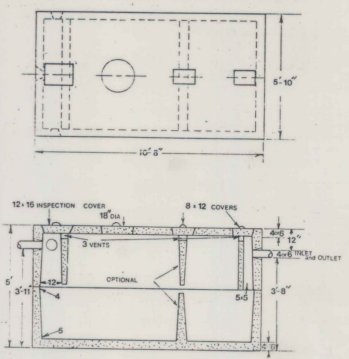


PLAN NTS
MEMA 5K OUTSIDE CONTROL PANEL WITH AUDIO-VISUAL ALARM



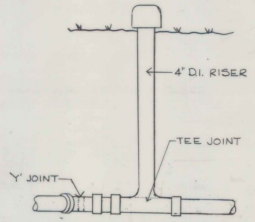
2000 GALLON PUMP STATION DETAIL
NOT TO SCALE

NOTE: CONTRACTOR'S OPTION TO SUPPLY COMPRESSIBLE PACKAGED STATION AS APPROVED BY ENGINEER.

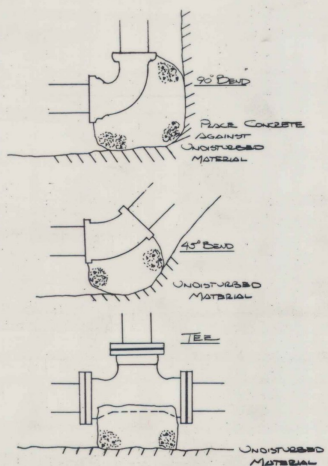


1250 GAL SEPTIC TANK

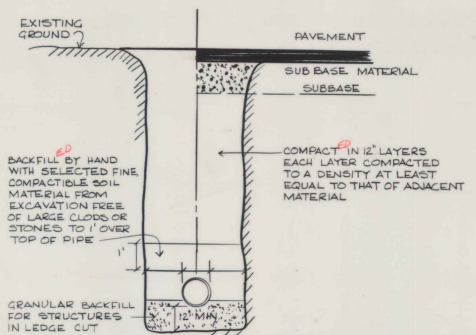
- NOTES
1. Cement 4000PSI @ 28 days
 2. Inlet baffle and outlet chamber are 278"-ast with top section of tank
 3. Keyed joint sealed with asphalt cement or equivalent, reinforced with 6x6x10 GA. steel wire
 4. Two compartment tank shown, smooth bottom tank available
 5. Excavation must be at least 12" longer and wider
 6. Three inlet positions standard



CLEANOUT DETAIL TYPICAL
NOT TO SCALE

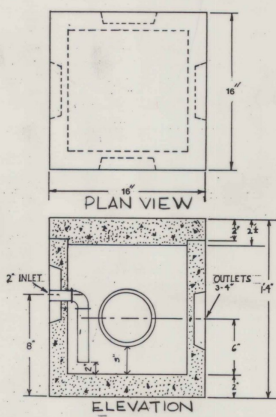


TRENCH BLOCK DETAIL
SCALE: 1"=1'
CONCRETE TO BE CLASS C
NOTE: CONCRETE REACTION BLOCKING SHALL BE PROVIDED AT ALL BENDS DEFLECTING 22 1/2" OR MORE, 1/4 CY MAIN.



TRENCH TYPICAL

NOT TO SCALE
THE SANITARY SEWER LINE AND THE WATER MAIN SHALL BE SLEEVED WHEN WITHIN THE ROADWAY REFER TO VERMONT DEPARTMENT OF HIGHWAYS STANDARDS D-20 FOR DESIGN DETAIL.



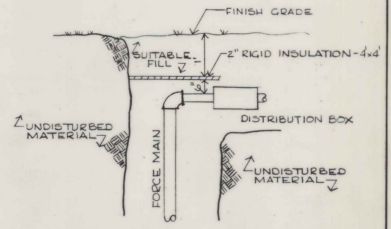
DISTRIBUTION BOX

- NOTE
1. Concrete 4000PSI @ 28 days

- DESIGN CRITERIA - SANITARY SYSTEM
1. THE EXISTING 1250 gal SEPTIC TANK ~~WILL BE~~ RELOCATED AND REPLACED WITH A NEW 1250 gal SEPTIC TANK.
 2. THE EFFLUENT FROM THE SEPTIC TANK ~~WILL BE~~ PUMPED UNDER THE ROAD MAINTAINING MINIMUM DEPTH OF 5 FEET BENEATH THE ROAD.
 3. PUMP STATION REQUIREMENTS:
483 passengers @ 5 GPP = 2415 CPD
4 doses per day - each dose 603 gal
USE 2000 gal PUMP STATION; EMERGENCY 4 HOUR STORAGE REQUIRED = 600 gal
EMERGENCY STORAGE AVAILABLE - VOLUME ABOVE PUMP ON AND BELOW INLET INVERT IS 107 C.F. = 800 gal
 4. PUMP REQUIREMENTS:
PEAK 20 MINUTE FLOW 194 gpm USE PUMP RATE OF 40 gpm
HEAD LOSS IN 2" DELIVERY LINE 4.51'
PUMP STATION PIPING LOSSES 0.93'
STATIC HEAD 2.90'
UNDESIRABLE LOSSES 1.0 "'
TOTAL HEAD 10.21'
PUMP REQUIREMENT 40 gpm AT TDH 10.3'.
 5. NEW DISTRIBUTION BOX REQUIRED. AT RISER WHERE FORCE MAIN ENTERS BOX 2", 4"x4" INSULATION ~~SHALL BE~~ USED TO PROTECT THE FORCE MAIN FROM FREEZING.

ELEVATION KEY

BUILDING SEWER	780.00'
SEPTIC TANK INLET INV.	777.42'
SEPTIC TANK OUTLET INV.	776.83'
PUMP STATION INLET INV.	776.68'
PUMP OFF	773.60'
PUMP ON	774.92'
LAC PUMP ON & ALARM	773.42'
DISTRIBUTION BOX	776.50'



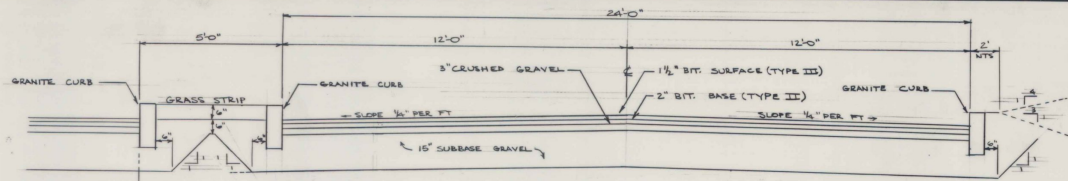
INSULATION TYPICAL
NOT TO SCALE

AS BUILT PLANS
I hereby certify that the construction required by this set of plans has been as shown and in accordance with the same.
By *David R. Horton* Field Engineer
Date 5/28/87

REVIS: AUGUST 26, 1983 - NOTE TO TYPICAL TRENCH

SURVEY	CALCULATED	CHECKED	DESIGN: GBS
DRAWN: KAW	TRACED:	APPROVED: KAW	DATE: AUGUST 16, 1983
SCALE: NONE	PROJ. NO. 5181	SEWER SYSTEM DETAILS	
RUTLAND STATE AIRPORT		CLARENDON, VERMONT	
AIP 3-50-0015-02		P.E.A.	
SHEET 21 OF 44		PINKHAM ENGINEERING ASSOCIATES, INC.	

Route 24, Tall Cedars P.O. Box 405 Winton, Vermont 05693

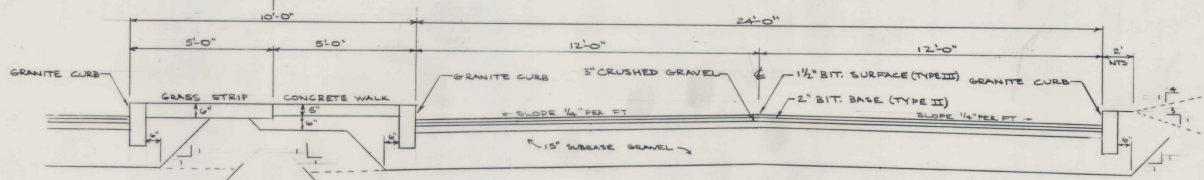


SECTION A
1"=2'-0"

24" SAND CUSHION IN CUT AS DIRECTED BY ENGINEER

GRANULAR BORROW (IN FILL)

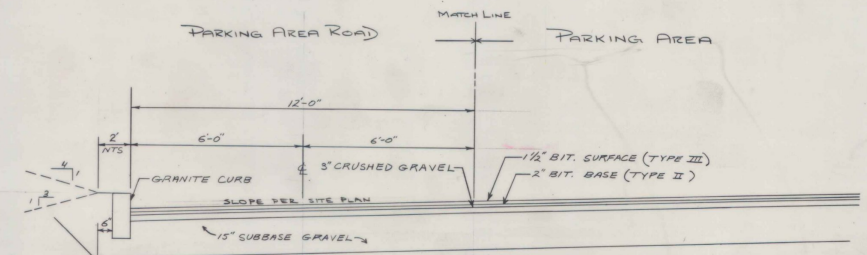
PARKING AREA ACCESS ROAD



SECTION B
1"=2'-0"

24" SAND CUSHION IN CUT AS DIRECTED BY ENGINEER

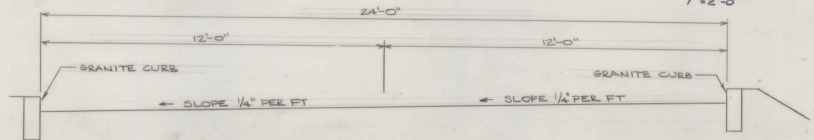
GRANULAR BORROW (IN FILL)



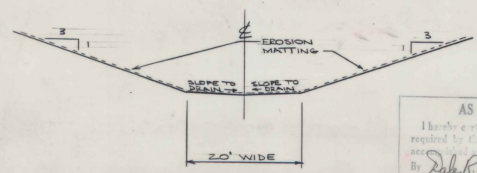
SECTION C
1"=2'-0"

24" SAND CUSHION IN CUT AS DIRECTED BY ENGINEER

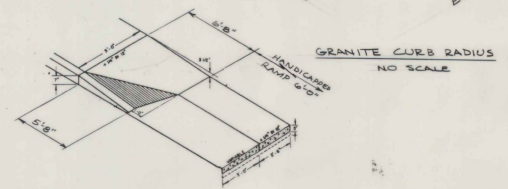
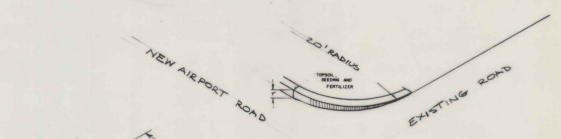
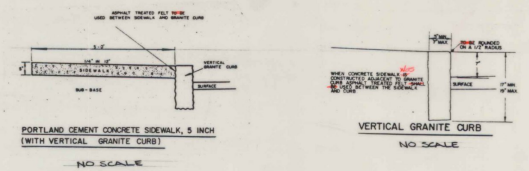
GRANULAR BORROW (IN FILL)



TYPICAL SUPER ELEVATION
SECTION D
1"=2'-0"

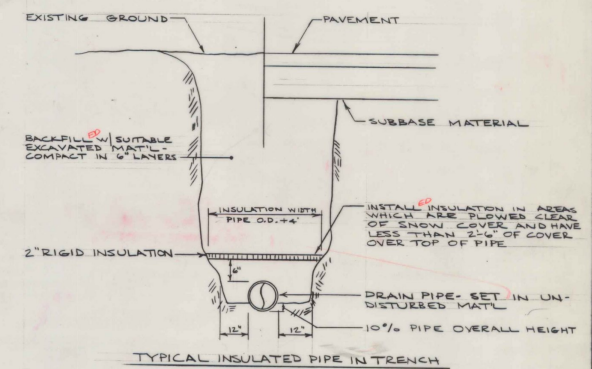


TYPICAL DRAINAGE CHANNEL



GRANITE CURB RADIUS
NO SCALE

CURB CUT FOR HANDICAPPED ACCESS
NO SCALE



TYPICAL INSULATED PIPE IN TRENCH

AS BUILT PLANS
I hereby certify that the construction required by the above drawings has been accomplished.
By *Debra P. Fortin*
Date 5/18/87

12/20/85 REVISED SECT. REF. NO. & ADD SECT.
4/9/24/85 ADDED SECTIONS

SURVEY - CALCULATED
CHECKED -
DESIGN -
DRAWN -
TRACED -
APPROVED -
DATE -
SCALE -

PROJ. NO. 5181

TYPICAL ROAD DETAILS
RUTLAND STATE AIRPORT
CLARENDON, VERMONT
AIP 3-50-0015-02

P.E.A.
PINKHAM ENGINEERING ASSOCIATES, INC.
Route 24, Fall Church P.O. Box 405 Winochet, Vermont 05475

ILLUMINATION DESIGN CRITERIA

DESIGN CRITERIA SHALL CONFORM TO RECOMMENDED PRACTICE FOR ROADWAY LIGHTING & PARKING FACILITIES AS OBTAINED IN THE IES LIGHTING HANDBOOK APPLICATIONS - VOLUME 1 CHAPTER 14 - 15-178.

THE FOLLOWING LEVELS SHALL BE MAINTAINED:

VEHICULAR TRAFFIC		
LOW ACTIVITY	FOOT CANDLES	UNIFORMITY RATIO
MEDIUM ACTIVITY	1.0	3 TO 1
HIGH ACTIVITY	2.0	3 TO 1

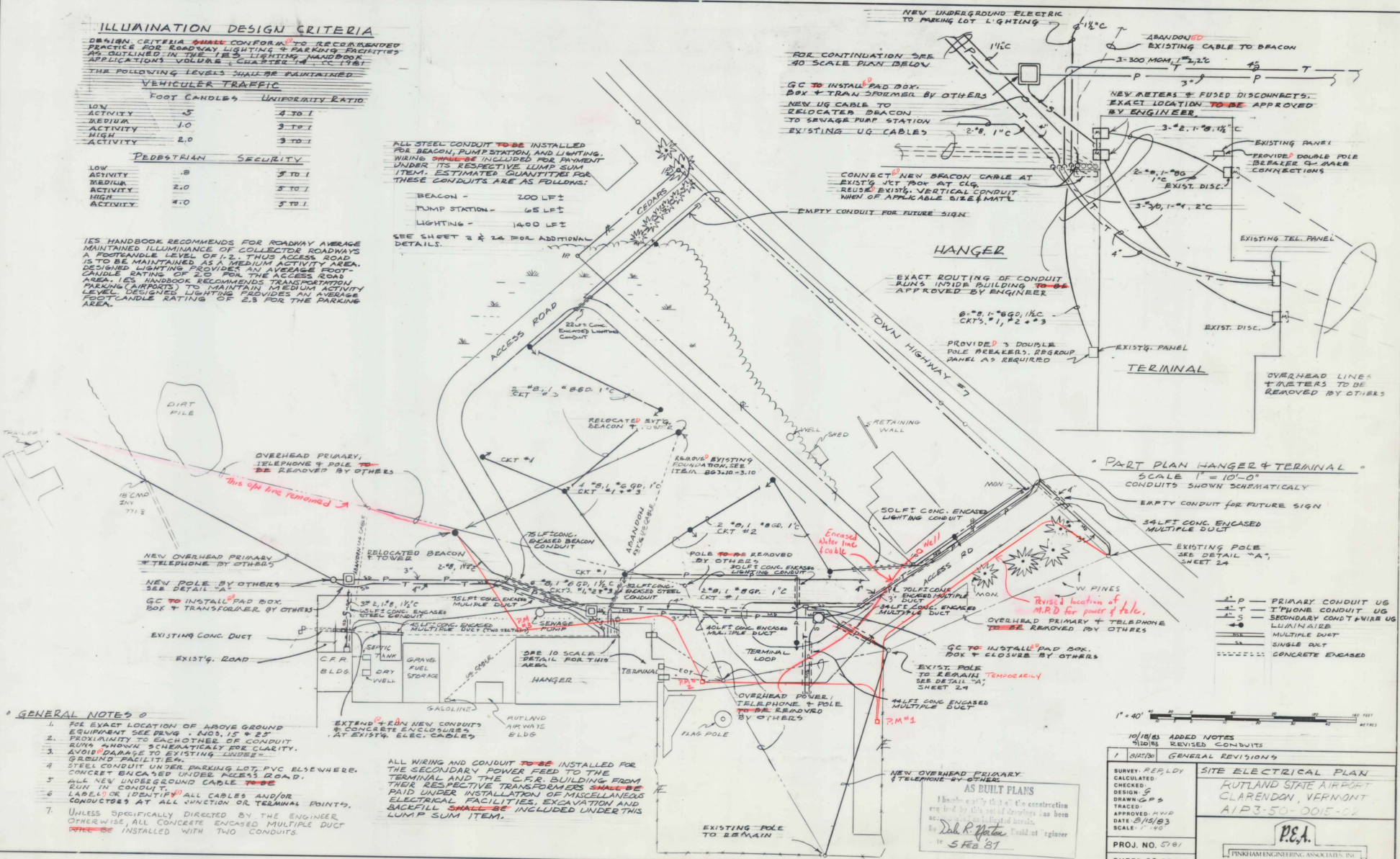
PEDESTRIAN SECURITY		
LOW ACTIVITY	FOOT CANDLES	UNIFORMITY RATIO
MEDIUM ACTIVITY	2.0	3 TO 1
HIGH ACTIVITY	4.0	3 TO 1

IES HANDBOOK RECOMMENDS FOR ROADWAY AVERAGE MAINTAINED ILLUMINANCE OF COLLECTOR ROADWAYS A FOOTCANDLE LEVEL OF 1.2. THIS ACCESS ROAD IS TO BE MAINTAINED AS A MEDIUM ACTIVITY AREA. DESIGNED LIGHTING PROVIDES AN AVERAGE FOOT-CANDLE RATING OF 2.0 FOR THE ACCESS ROAD AREA. IES HANDBOOK RECOMMENDS TRANSPORTATION PARKING (AIRPORTS) TO MAINTAIN MEDIUM ACTIVITY LEVEL. DESIGNED LIGHTING PROVIDES AN AVERAGE FOOT-CANDLE RATING OF 2.3 FOR THE PARKING AREA.

ALL STEEL CONDUIT TO BE INSTALLED FOR BEACON, PUMP STATION, AND LIGHTING. WIRING SHALL BE INCLUDED FOR PAYMENT UNDER ITS RESPECTIVE LUMP SUM ITEM. ESTIMATED QUANTITIES FOR THESE CONDUITS ARE AS FOLLOWS:

BEACON - 200 LF
PUMP STATION - 65 LF
LIGHTING - 1400 LF

SEE SHEET 2 & 24 FOR ADDITIONAL DETAILS.



- GENERAL NOTES**
1. FOR EXACT LOCATION OF ABOVE GROUND EQUIPMENT SEE DWG. 1, 2, 15 & 23.
 2. PROXIMITY TO EACH OTHER OF CONDUIT RUNS SHOWN SCHEMATICALLY FOR CLARITY.
 3. AVOID DAMAGE TO EXISTING UNDERGROUND FACILITIES.
 4. STEEL CONDUIT UNDER PARKING LOT, PCY ELSEWHERE.
 5. ALL NEW UNDERGROUND CABLE TO BE RUN IN CONDUIT.
 6. LABEL OR IDENTIFY ALL CABLES AND/OR CONDUITS AT ALL JUNCTION OR TERMINAL POINTS.
 7. UNLESS SPECIFICALLY DIRECTED BY THE ENGINEER OTHERWISE, ALL CONCRETE ENCASED MULTIPLE DUCT TO BE INSTALLED WITH TWO CONDUITS.

ALL WIRING AND CONDUIT TO BE INSTALLED FOR THE SECONDARY POWER FEED TO THE TERMINAL AND THE C.F.R. BUILDING FROM THEIR RESPECTIVE TRANSFORMERS SHALL BE PAID UNDER INSTALLATION OF MISCELLANEOUS ELECTRICAL FACILITIES, EXCAVATION AND BACKFILL SHALL BE INCLUDED UNDER THIS LUMP SUM ITEM.

PART PLAN HANGER & TERMINAL
SCALE 1" = 10'-0"
CONDUITS SHOWN SCHEMATICALLY

- P — PRIMARY CONDUIT UG
- T — TELEPHONE CONDUIT UG
- S — SECONDARY CONDUIT WIRE UG
- L — LUMINAIRE
- M — MULTIPLE DUCT
- S — SINGLE DUCT
- C — CONCRETE ENCASED

10/18/83 ADDED NOTES
SIZES REVISED CONDUITS

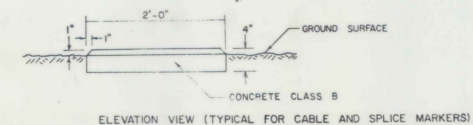
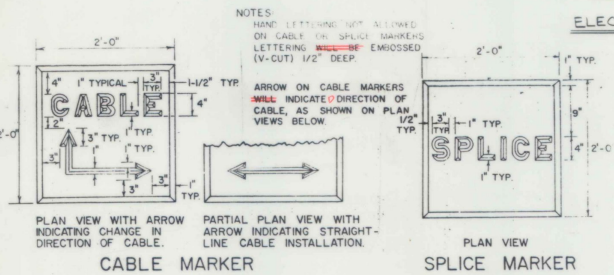
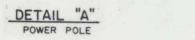
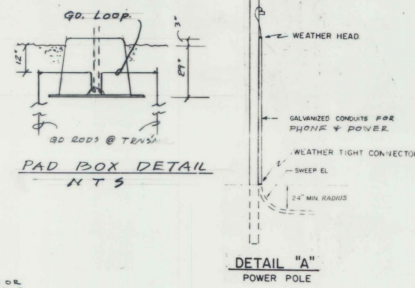
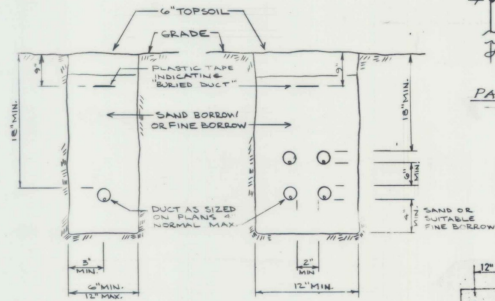
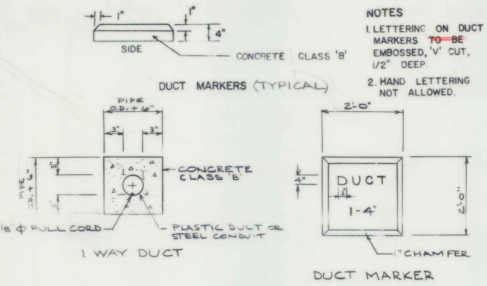
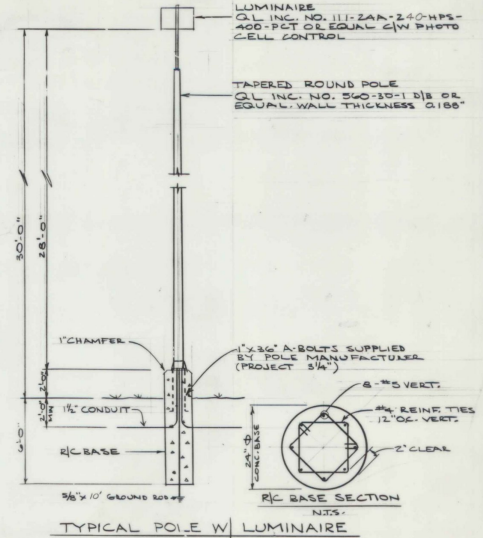
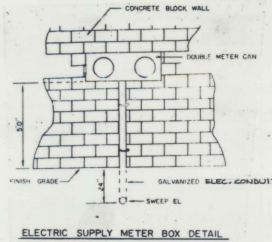
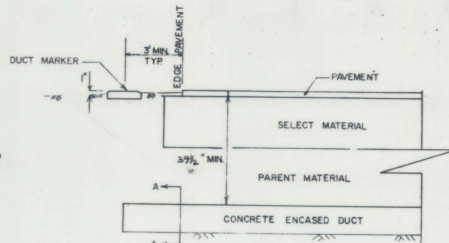
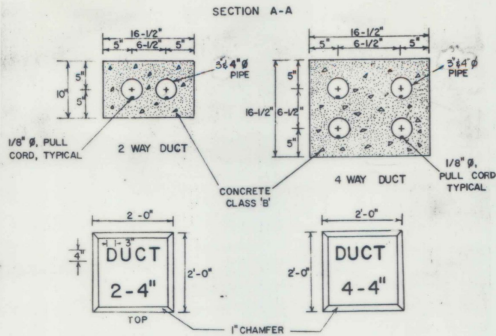
1	SIZE/2	GENERAL REVISIONS
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SITE ELECTRICAL PLAN
RUTLAND STATE AIRPORT
CLARENDON, VERMONT
AIP3-50-0015-02

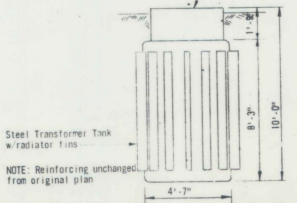
P.E.A.
PINKHAM ENGINEERING ASSOCIATES, INC.
Route 24, Tull Town, VT 05481

PROJ. NO. 5781
SHEET 23 OF 44

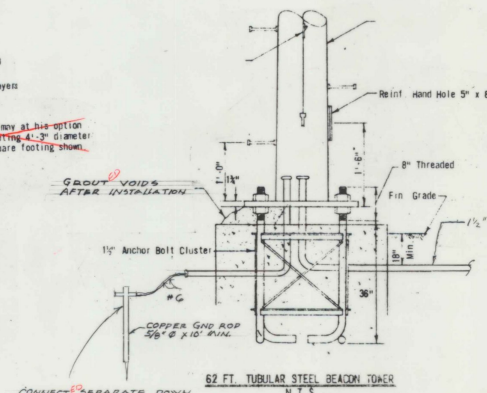
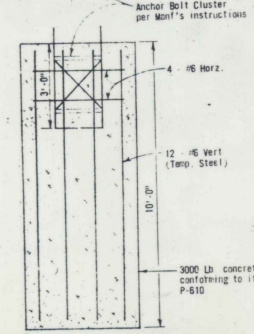
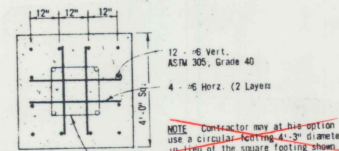
AS BUILT PLANS
I hereby certify that the construction was in accordance with the drawings as been approved by me.
Dated at Rutland, Vermont
this 5th day of February 1987
Dale R. [Signature]



CABLE AND SPLICE MARKERS



BEACON TOWER FOUNDATION EXISTING BASE (AS BUILT)



62 FT. TUBULAR STEEL BEACON TOWER

AS BUILT PLANS
I hereby certify that the construction required by the set of drawings, as been traced by me or under my direct supervision.
Date: 5 Feb 87
By: Dale R. [Signature] Resident Engineer

REVISIONS:
 (1) (2) REVISED DUCT & LIGHT DETAILS
 (3) (4) REVISED DUCT & LIGHT DETAILS

ELECTRICAL DETAILS
 RUTLAND AIRPORT
 CLARENDON, VERMONT
 AIR 3-50-0015-02

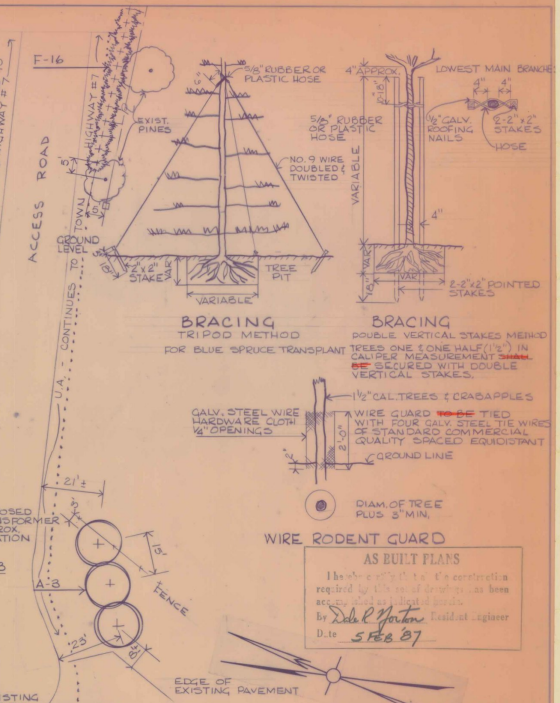
PROJ. NO. 5181
 SHEET 24 OF 44

PENKHAM ENGINEERING ASSOCIATES, INC.
 Route 2A, Tull Center P.O. Box 465 William, Vermont 05495

PLANT LIST

KEY	SCIENTIFIC NAME	COMMON NAME	QUANTITY	SIZE	MISC.
A	MALUS FLORIBUNDA	JAPANESE FLOWERING CRABAPPLE	8	4-5'	B & B
B	PINUS NIQRA	AUSTRIAN PINE	4	5-6'	CONT.
C	QUERCUS BOREALIS	RED OAK <i>Modified to Norway Maple</i>	8	9-11'	B & B
D	RHODODENDRON NUDIFLORUM	PINXTERBLOOM AZALEA	4	18"-24"	CONT.
E	TAXUS CUSPIDATA 'GREEN WAVE'	<i>Deleted</i> GREEN WAVE JAPANESE YEW	28	12'-15"	B & B
F	THUJA OCCIDENTALIS NIQRA	<i>Deleted</i> DARK AMERICAN ARBORVITAE	28	3-4'	B & B
G	THUJA OCCIDENTALIS NIQRA	<i>Deleted</i> DARK AMERICAN ARBORVITAE	80	2-2 1/2'	B & B

Mugo Pine ADDED 28



SEEDING FORMULAS:

URBAN AREAS - U.A.			
% WT.	LEBS/A	NAME	PUR. % GERMS
87.20	30	CREEPING RED FESCUE (VAR. PENNLANW)	95 65
11.88	25	HEALTHY BUREGRASS (COMMON)	95 65
1.92	20	PERENNIAL RYE GRASS (VAR. PENNINE)	95 65
TOTAL	100.00		95 65
RURAL AREAS - R.A.			
3.33	5	BROWN VETCH	97 75
50.00	20	CREEPING RED FESCUE	96 65
8.33	10	TIMOTHY	95 65
14.67	10	PERENNIAL RYE GRASS (VAR. PENNINE)	95 65
8.34	5	ALFALFA (VAR. SAGANAC)	95 65
8.33	5	BIRDSEED TREFOIL (VAR. EMPIRE)	95 65
6.00	5	HIGHLAND BENT GRASS	92 65
TOTAL	100.00		95 65

THE SEED MIXTURE ~~SHALL~~ NOT HAVE A WEED CONTENT EXCEEDING 2.0% BY WEIGHT AND ~~SHALL BE~~ FREE FROM ALL NOXIOUS WEED SEED.

FERTILIZER: NITROGEN 10 1/2%
PHOSPHORUS 20 1/2%

~~SHALL BE~~ DELIVERED IN BAGS OF NOT TO EXCEED 100 LBS. EACH AND IS TO BE APPLIED AT THE RATE OF 500 LBS. PER ACRE.

LIMESTONE: AGRICULTURAL ~~SHALL~~ APPLIED TO ALL EARTH SLOPES AT A RATE OF TWO TONS PER ACRE OR AS DIRECTED BY THE ENGINEER.

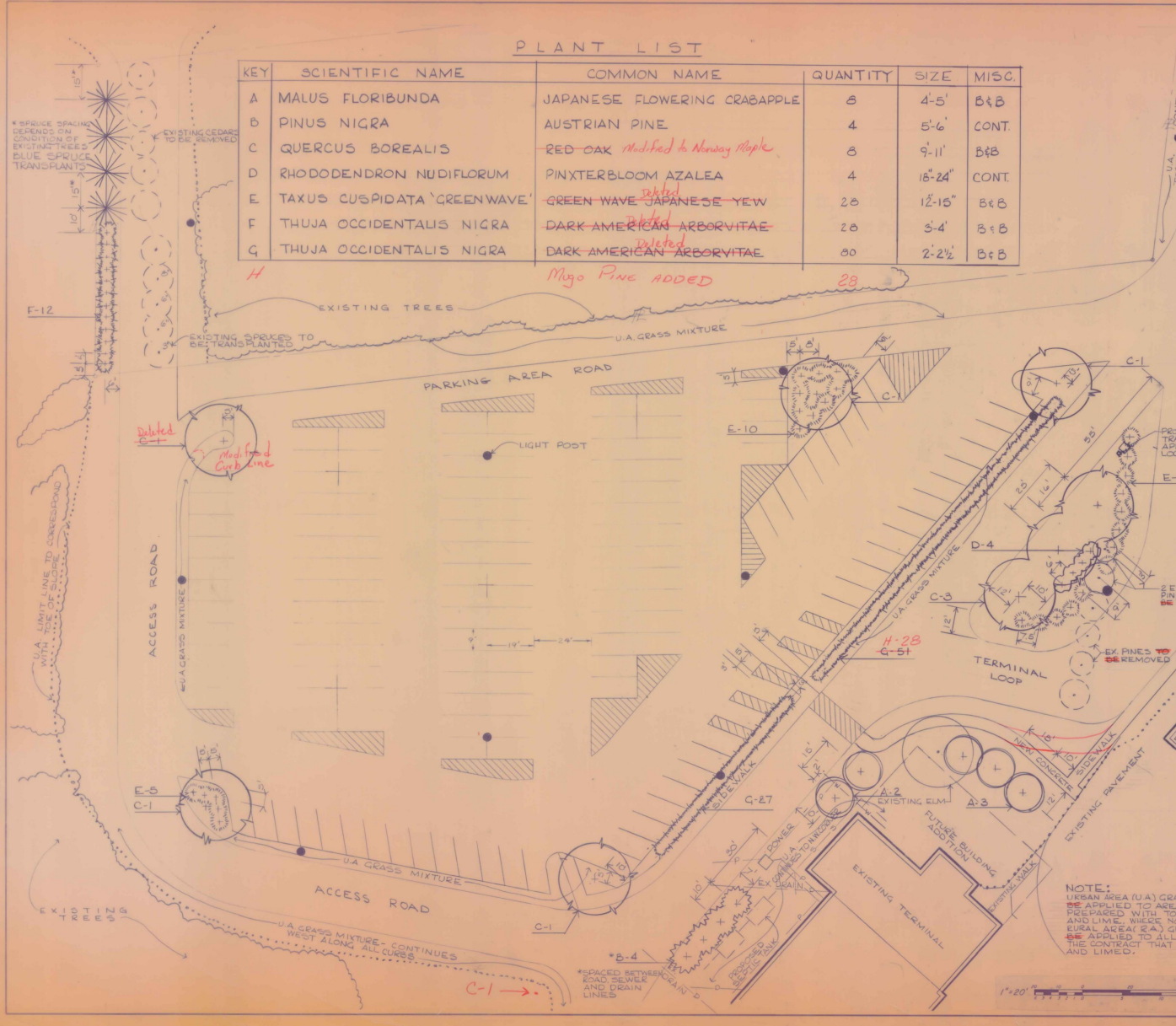
HAY MULCH: ~~SHALL~~ PLACED ON EARTH SLOPES AT A RATE OF TWO TONS PER ACRE.

NOTE:
URBAN AREA (U.A.) GRASS MIXTURE ~~SHALL~~ BE APPLIED TO AREAS THAT HAVE BEEN PREPARED WITH TOPSOIL, FERTILIZER, AND LIME. WHICH IS NOTED ON DRAWING.
RURAL AREA (R.A.) GRASS MIXTURE ~~SHALL~~ BE APPLIED TO ALL OTHER AREAS WITHIN THE CONTRACT THAT HAVE BEEN FERTILIZED AND LIMED.

REVISIONS: 8/24/83 1980/83 - UNLEADED ROADS/STREET TREES EMERGENCY

SURVEY CALCULATED:
CHECKED:
DESIGN: KAY
DRAWN: KAM
TRACED:
APPROVED: KWP
DATE: AUGUST, 1982
SCALE: 1"=20'

LANDSCAPE PLAN
Rutland State Park
GREENSBORO VERMONT
P.E.A.
PENSILAM ENGINEERING ASSOCIATES, INC.
PROJ. NO. 51-1
SHEET 25 OF 44

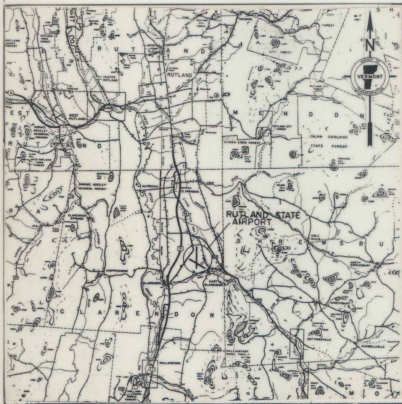


RUTLAND STATE AIRPORT

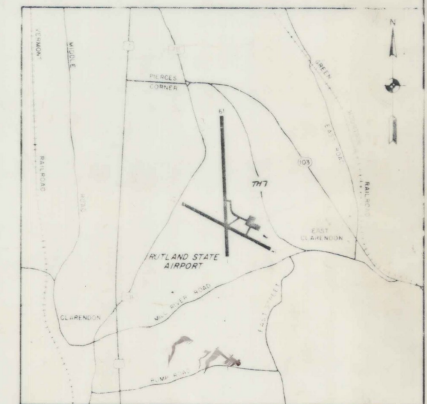
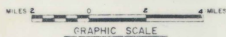
CLARENDON, VERMONT

PROJECT NO. AIP 3-50-0015-02

NEW ACCESS ROAD AND PARKING AREA
WITH RELATED UTILITY MODIFICATIONS



VICINITY MAP



LOCATION MAP



INDEX OF DRAWINGS	
SHEET 1 QUANTITY SHEET	SHEET 23 SITE ELECTRICAL PLAN
SHEET 2 EXISTING FACILITIES	SHEET 24 ELECTRICAL DETAILS
SHEET 3 AIRPORT SITE PLAN	SHEET 25 LANDSCAPE PLANS
SHEET 4 UTILITY RELOCATION AND INSTALLATION	SHEET 26 EARTHWORK QUANTITY SHEET
SHEET 5 ACCESS ROAD LAYOUT DATA	SHEET 27 B-5 SLOPE GRADING EMBANKMENTS MUCK 12-6-71
SHEET 6 ACCESS ROAD CROSS SECTION STA 0400 TO 10450	SHEET 28 D-2 C.R.M. HEADWALLS, UNDERDRAIN 12-16-76 R
SHEET 7 ROADWAY CROSS SECTIONS	SHEET 29 D-3 TREATED GUTTERS 4-27-73 R
SHEET 8 ACCESS ROAD PROFILE STA 0400 TO 10450	SHEET 30 D-4 FLOODING BASIN END SECTION ELBOWS 7-24-75 R
SHEET 9 ROADWAY PROFILES	SHEET 31 D-8 REINFORCED CONCRETE DROP INLET 12-6-71
SHEET 10 SITE CROSS SECTIONS STA 0400 TO 2400	SHEET 32 D-9 REINFORCED CONCRETE DROP INLET TOPS 12-6-71
SHEET 11 SITE CROSS SECTIONS STA 2400 TO 4400	SHEET 33 D-11 GRATE AND COVERS 8-28-81 R
SHEET 12 SITE CROSS SECTIONS STA 4400 TO 6400	SHEET 34 D-13 REINFORCED CONCRETE MANHOLE 8-10-81 R
SHEET 13 SITE CROSS SECTIONS STA 6400 TO 10400	SHEET 35 D-16 PRECAST CURB DROP INLET, GRATE, RCP END SECTION ETC. 11-24-72 R
SHEET 14 SITE CROSS SECTIONS STA 8450 TO 10400	SHEET 36 D-20 HIGHWAY CROSSINGS FOR UNDERGROUND UTILITIES 9-9-75 R
SHEET 15 PARKING AREA LAYOUT	SHEET 37 E-2 APPROACH SIGNS, ROAD CONSTRUCTION 3-4-81 R
SHEET 16 SIGNAGE DETAILS	SHEET 38 E-6 CONSTRUCTION SIGNS, ON PROJECT 4-1-80 R
SHEET 17 PAVEMENT MARKING DETAILS	SHEET 39 E-7 DELINEATION, BARRICADES, AND DETOURS 2-2-83 R
SHEET 18 DRAINAGE PROFILES	SHEET 40 E-2A TYPE III BARRICADE BREAKAWAY 4-8-82 R
SHEET 19 DRAINAGE PROFILES	SHEET 41 E-25 SIGN SUPPORTS, TUBULAR ALUMINUM, YIELDING 6-17-81 R
SHEET 20 DRAINAGE PROFILES	SHEET 42 E-29 SIGN PLACEMENT, NON-EXPRESSWAY 8-25-81 R
SHEET 21 SEWER SYSTEM DETAILS	SHEET 43 T-1 DETAILS 12-7-76 R
SHEET 22 TYPICAL ROAD DETAILS	SHEET 44 T-2 DETAILS 7-5-72

AS BUILT PLANS

I hereby certify that all the construction required by this set of drawings has been accepted as indicated herein.
By *Dale R. Foster* Resident Engineer
Date *5 FEB '87*

THESE PLANS AND SPECIFICATIONS ARE IN ACCORDANCE WITH CRITERIA CONTAINED IN CURRENT FAA ADVISORY CIRCULARS AS INDICATED IN AC CHECKLIST AC 00-24W DATED 03/15/83.

STATE OF VERMONT
AGENCY OF TRANSPORTATION

FEDERAL AVIATION
ADMINISTRATION
ENGINEERING AND
SAFETY BRANCH
Approved: _____
Date: _____

STATE OF VERMONT
AGENCY OF TRANSPORTATION
DIRECTOR OF ENGINEERING
AND CONSTRUCTION
Approved: *S. J. Gagne, P.E.*
Date: *11-4-85*

PREPARED BY:
PINKHAM ENGINEERING ASSOC.
WILLISTON, VERMONT