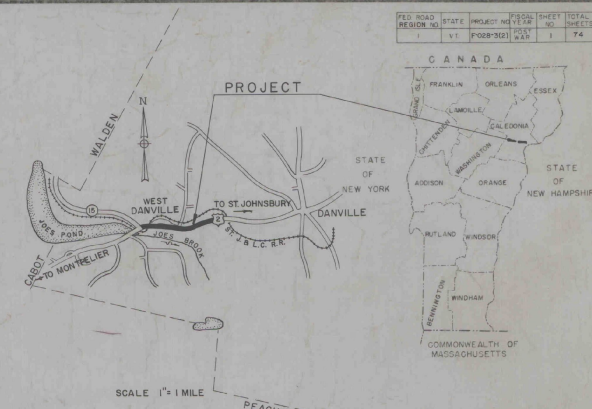


INDEX OF SHEETS		
SHEET NO.	TITLE SHEET	BITUMINOUS CONCRETE PAVEMENT ITEM 2-81-B, MO.
1	TYPICAL SECTIONS OF IMPROVEMENT	
2	QUANTITY SHEET (ITEMS)	
3	ITEM DETAIL & DRAINAGE SHEET	
4	EARTHWORKS	
5-6	PLAN & PROFILE SHEETS	
7-11	CULVERT DETAILS AT STA. 115+4.79	
12	A-61 DRILLING & BLASTING	
13	B-1 BANKING TABLES	
14	B-5 TYPICAL SLOPE GRADING	
15	B-6 MUCK EXCAVATION	
16	B-10 EMBANKMENT	
17	B-11 SLOPE STABILIZATION	
18	B-12 SIDE ROAD INTERSECTION	
19	B-13 DRIVE INTERSECTION	
20	D-2 CEMENT RUBBLE MASONRY	
21	D-3 GUTTERS	
22	D-4 A.C.C.G. METAL PLATE PIPE	
23	D-8 DROP INLETS	
24-A	D-11 CAST IRON GRATES	
24-B	E-1 BARRICADES, SIGNS, & LIGHTS	
24-C	G-3 THREE CABLE GUARD RAIL WITH STEEL POSTS	
24-D	G-4 STEEL MARKER POSTS	
24-E	J-1 ERECTION OF PROJECT MARKERS	
25-74	CROSS SECTIONS	
74-B	PLAN & PROFILE - R.R. WARNING SIGN	
74-C	WIRING DIAGRAM FOR FLASHING DEVICES	
74-D	FLASHING LIGHT ASSEMBLY	
74-E	RAILROAD CROSS SECTION	

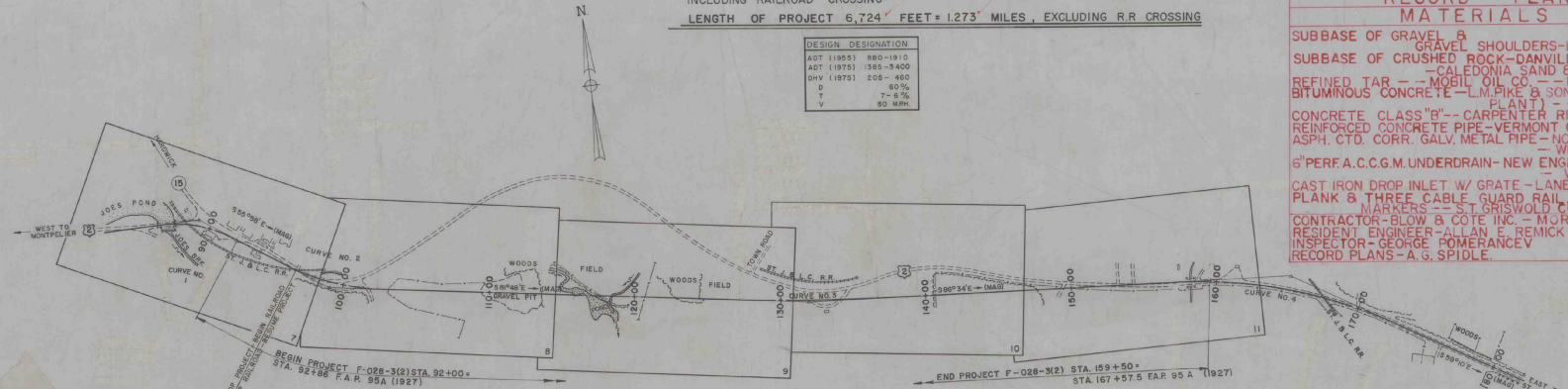
STATE OF VERMONT
DEPARTMENT OF HIGHWAYS
PROPOSED IMPROVEMENT
FEDERAL AID PROJECT
TOWN OF DANVILLE
COUNTY OF CALEDONIA
U.S. ROUTE 2

FED. ROAD REGION NO.	STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
1	VT	F028-3(2)	548	1	74



BEGINNING 440 FEET EASTERLY OF THE HIGHWAY BRIDGE OVER JOES BROOK ON U.S. ROUTE 2 IN THE VILLAGE OF WEST DANVILLE AND EXTENDING 6,750 FEET EASTERLY ALONG U.S. ROUTE 2, INCLUDING RAILROAD CROSSING
LENGTH OF PROJECT 6,724 FEET = 1.273 MILES, EXCLUDING R.R. CROSSING

DESIGN	DESIGNATION
ADT (1955)	860-1810
ADT (1975)	1365-3400
DIV (1975)	205-460
D	60%
T	7-15%
V	80 MPH



PROJECT NAME & NUMBER TYPE PAVEMENT AREA
DANVILLE F 028-3(2) BIT CONC. PAV'T 21,056 s.y.

RECORD PLANS MATERIALS

SUBBASE OF GRAVEL & SHOULDERS- LUSSIER PIT - HARDWICK, VERMONT.
SUBBASE OF CRUSHED ROCK - DANVILLE QUARRY - WEST DANVILLE, VT.
CALEDONIA SAND & GRAVEL CO. - WATERFORD, VERMONT.
REFINED TAR - MOBIL OIL CO. - EAST PROVIDENCE, RHODE ISLAND.
BITUMINOUS CONCRETE - L.M. PIKE & SON (LISBON, N.H. & PLAINFIELD, VT. PLANT) - LACONIA, NEW HAMPSHIRE.
CONCRETE CLASS "B" - CARPENTER READY MIX - ST. JOHNSBURY, VERMONT.
REINFORCED CONCRETE PIPE - VERMONT CONCRETE PIPE CO. - WINDSOR, VERMONT.
ASPH. CTD. CORR. GALV. METAL PIPE - NORTHEASTERN CULVERT CO. - WESTMINSTER, VERMONT.
6" PERF. A.C.C.G.M. UNDERDRAIN - NEW ENGLAND METAL CULVERT CO. - WHITE RIVER JUNCTION, VERMONT.
CAST IRON DROP INLET W/ GRATE - LANE MFG. CO. - MONTPELIER, VERMONT.
PLANK & THREE CABLE GUARD RAIL MARKER POSTS & BOUNDARY MARKERS - ST. GEORGE RD. INC. - ESSEX JUNCTION, VERMONT.
CONTRACTOR - BLOW & COTE INC. - MORRISVILLE, VERMONT.
RESIDENT ENGINEER - ALLAN E. REMICK
INSPECTOR - GEORGE POMERANCEY
RECORD PLANS - A. G. SPIDLE

CONTRACT DATED - MAY 29, 1959
CONTRACT STARTED - JUNE 17, 1959
CONTRACT COMPLETED - OCT. 3, 1960
CONTRACT ACCEPTED - OCT. 3, 1960

NOTE: ANY FURTHER INFORMATION CONCERNING FINAL QUANTITIES, PROVIDED TO OTHERS, RELATIVE TO THIS PROJECT MAY BE OBTAINED EITHER THE FIELD BOOKS OR THE ESTIMATE FILE.

PROJECT: DANVILLE
PREPARED BY: F. C. SPIDLE
TITLE: BITUMINOUS CONCRETE PAVEMENT

CONTRACTOR: BLOW & COTE, INC.
MORRISVILLE, VERMONT.
ADDRESS: U.S. Route 2, in the village of Morrisville, Vermont.
FIRST auxiliary station U.S. Route 2, including railroad crossing.

DANVILLE F 028-3(2)
CONTRACTOR - BLOW & COTE INC. - MORRISVILLE, VT.
RECORD PLANS - ALEXANDER G. SPIDLE
CONTRACT COMPLETED - OCTOBER 3, 1960.

GROUND ELEVATION	DATUM	LINE
GRADE ELEVATION	DATUM	LINE

SCALES

TITLE	1" = 400'
TYPICAL	1" = 20'
PLAN	1" = 50'
PROFILE HORIZONTAL	1" = 10'
PROFILE VERTICAL	1" = 10'
CROSS-SECTIONS	1" = 5 & 10'

THESE PLANS ARE SUBJECT TO SUCH REVISIONS AS MAY BE REQUIRED BY THE BUREAU OF PUBLIC ROADS OR THE COMMISSIONER OF HIGHWAYS.

CONSTRUCTION IS TO BE CARRIED ON IN ACCORDANCE WITH THE PLANS AND THE STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION OF JANUARY 1956 SUBMITTED TO THE BUREAU OF PUBLIC ROADS AS APPROVED JULY 5, 1956, INCLUDING ALL SUBSEQUENT APPROVED REVISIONS AND SUCH REVISED SPECIFICATIONS AND SPECIAL PROVISIONS AS ARE SUBMITTED WITH THE PLANS.

DEPARTMENT OF COMMERCE BUREAU OF PUBLIC ROADS	
APPROVED	DATE
DIVISION ENGINEER	DATE
PROJECT F NO 028-3(2)	SHEET 1 OF 74 SHEETS

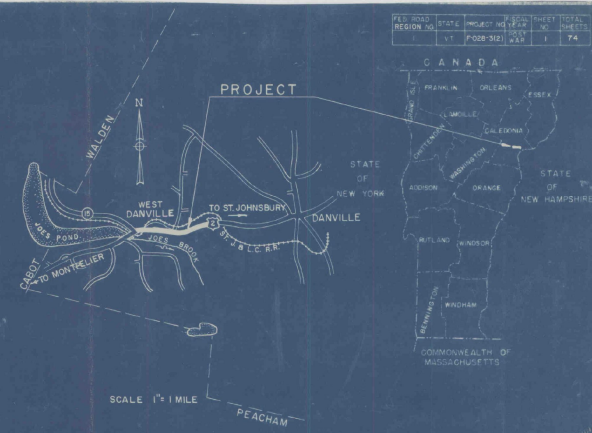
APPROVED	APPROVED	APPROVED	APPROVED	APPROVED	APPROVED
SECONDARY ENGINEER	CONSTRUCTION ENGINEER	BRIDGE ENGINEER	DRYING ENGINEER	ROADWAY ENGINEER	SUBMITTED BY ORDER OF THE STATE HIGHWAY BOARD
DATE 19 Feb. 1959	DATE 19 Feb. 1959	DATE 12 JANUARY 1959	DATE 19 Feb. 1959	DATE 20 FEB. 1959	

INDEX OF SHEETS

SHEET NO.	1	TITLE SHEET
	2	TYPICAL SECTIONS OF IMPROVEMENT BITUMINOUS CONCRETE PAVEMENT
	3	QUANTITY SHEET (ITEMS) ITEM 541-B, MOD.
	4	ITEM DETAIL & DRAINAGE SHEET
5-6		EARTHWORKS
7-11		PLAN & PROFILE SHEETS
12		CULVERT DETAILS AT STA. 115+79
13	A-61	DRILLING & BLASTING
14	B-1	BANKING TABLES
15	B-2	TYPICAL SLOPE GRADING
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18	B-11	SLOPE STABILIZATION
19	B-12	SIDE ROAD INTERSECTION
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21	D-2	CEMENT RUBBLE MASONRY
22	D-3	GUTTERS
23	D-4	A.C.C.G. METAL PLATE PIPE
24	D-8	DROP INLETS
24-A	D-11	CAST IRON GRATES
24-B	E-1	BARRIERES, SIGNS, & LIGHTS
24-C	G-3	THREE CABLE GUARD RAIL WITH STEEL POSTS
24-D	G-4	STEEL MARKER POSTS
24-E	J-1	ERECTION OF PROJECT MARKERS
25-74		GROSS SECTIONS
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74-C		WIRING DIAGRAM FOR FLASHING DEVICES
74-D		FLASHING LIGHT ASSEMBLY
74-E		RAILROAD CROSS SECTION

STATE OF VERMONT
DEPARTMENT OF HIGHWAYS

PROPOSED IMPROVEMENT
 FEDERAL AID PROJECT
TOWN OF DANVILLE
 COUNTY OF CALEDONIA
 U.S. ROUTE 2

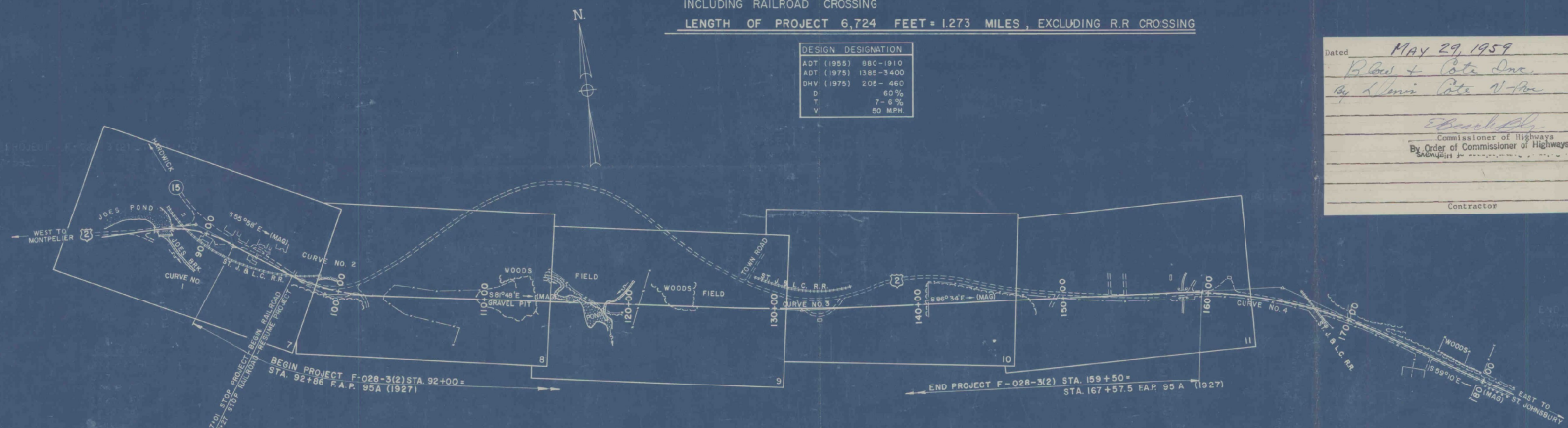


BEGINNING 440 FEET EASTERLY OF THE HIGHWAY BRIDGE OVER JOES BROOK ON U.S. ROUTE 2
 IN THE VILLAGE OF WEST DANVILLE AND EXTENDING 6,750 FEET EASTERLY ALONG U.S. ROUTE 2
 INCLUDING RAILROAD CROSSING
 LENGTH OF PROJECT 6,724 FEET = 1.273 MILES, EXCLUDING R.R. CROSSING

DESIGN DESIGNATION

DOT (1955)	180-1910
ADT (1975)	1385-1400
DIV (1975)	205-460
D	6.0%
T	7-6.5%
V	50 MPH

Dated May 29, 1959
Robert L. Bates
By Louis Bates
 Commissioner of Highways
 By Order of Commissioner of Highways
 [Signature]
 CONTRACTOR



CONVENTIONAL SIGNS

RIGHT OF WAY LINE	---
COUNTY LINE	---
TOWN LINE	---
BRIDGE LINE	---
STONE WALL	---
UNFENCED PROPERTY	---
GUARD RAIL	---
TRAVELED WAY	---
RAILROAD	---
RETAINING	---
CENTER LINE	---
SURVEY LINE	---
CULVERT	---
DROP INLET	---
TROLLEY POLE	---
POWER POLE	---
TELEPHONE POLE	---
TREES	---
MEDE	---

SCALES

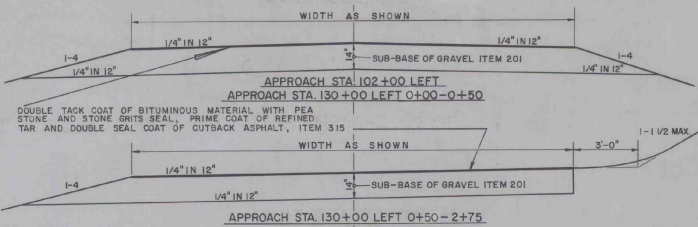
TITLE	1" = 400'
TYPICAL	1" = 25'
PLAN	1" = 90'
PROFILE	1" = 80'
HORIZONTAL	1" = 10'
VERTICAL	1" = 10'
CROSS-SECTIONS	1" = 8' 0"

THESE PLANS ARE SUBJECT TO SUCH REVISIONS AS MAY BE REQUIRED BY THE BUREAU OF PUBLIC ROADS OR THE COMMISSIONER OF HIGHWAYS.
 CONSTRUCTION IS TO BE CARRIED ON IN ACCORDANCE WITH THE PLANS AND THE STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION OF JANUARY 1948 SUBMITTED TO THE BUREAU OF PUBLIC ROADS AS APPROVED JULY 5, 1956, INCLUDING ALL SUBSEQUENT APPROVED REVISIONS AND SUCH REVISED SPECIFICATIONS AND SPECIAL PROVISIONS AS ARE SUBMITTED WITH THE PLANS.

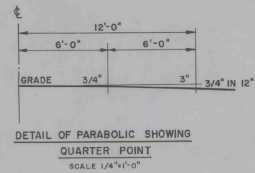
DEPARTMENT OF COMMERCE BUREAU OF PUBLIC ROADS	
APPROVED	DATE
DIVISION ENGINEER	DATE
PROJECT F. NO. 028-3(2)	
SHEET 1 OF 74 SHEETS	

APPROVED [Signature] SECONDARY ENGINEER DATE 19 FEB. 1959	APPROVED [Signature] CONSTRUCTION ENGINEER DATE 19 FEB. 1959	APPROVED [Signature] BRIDGE ENGINEER DATE 12 JANUARY 1959	APPROVED [Signature] DISTRICT ENGINEER DATE 19 FEB. 1959	APPROVED [Signature] PROJECT ENGINEER DATE 19 FEB. 1959	APPROVED [Signature] CHIEF ENGINEER DATE 20 FEB. 1959
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TYPICAL SECTIONS



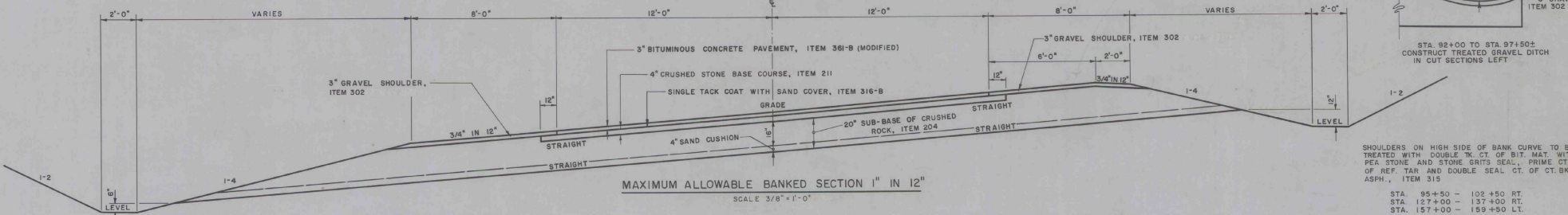
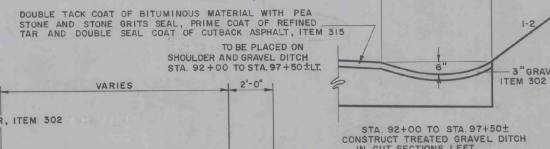
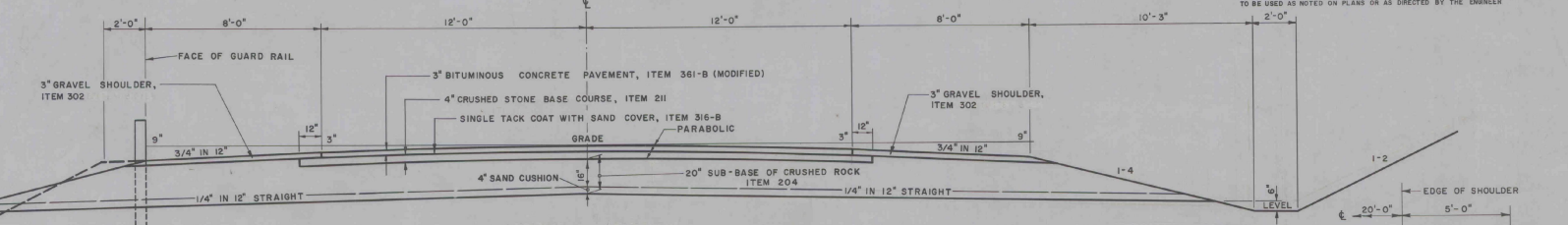
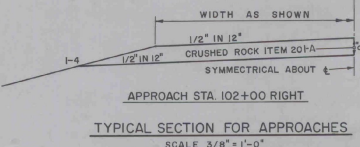
3" BITUMINOUS CONCRETE PAVEMENT, ITEM 361-B (MODIFIED)
4" CRUSHED STONE BASE COURSE, ITEM 211
20" SUB-BASE OF CRUSHED ROCK, ITEM 204
SINGLE TACK COAT OF CUTBACK ASPHALT WITH SAND COVER, ON CRUSHED STONE BASE COURSE, ITEM 316-B
GRAVEL SHOULDERS, ITEM 302
CONSTRUCTED AS DESIGNED



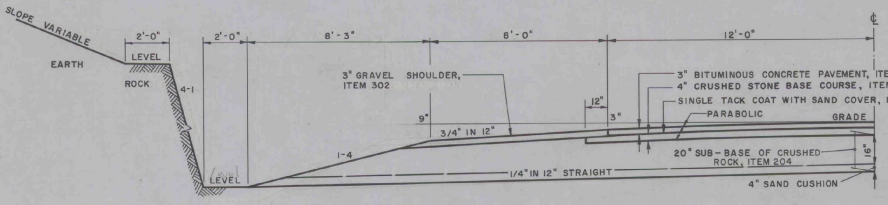
GENERAL NOTES
TOPSOIL, ITEM 621, TO BE PLACED AT A DEPTH OF 2" AS DIRECTED BY THE ENGINEER
MULCH, ITEM 622, TO BE PLACED ON ALL EARTH SLOPES
WINTER RYE, ITEM 610, TO BE USED BEFORE MULCH ON EARTH SLOPES
200 LBS PER ACRE
STEEL MARKER POSTS, ITEM 549-D TO BE PLACED AS DIRECTED BY THE ENGINEER

FOR ROUNDING OF SLOPES, SEE ROADWAY STANDARD B-5
THE COMMERCIAL FERTILIZER SHALL BE MIXED AS FOLLOWS:
NITROGEN 10 RATE OF APPLICATION
PHOSPHORUS 10 800 LBS/ACRE
POTASH 10
ALL PHOSPHORIC ACID TO BE DERIVED FROM BONE
FERTILIZER SHALL BE DELIVERED IN BAGS OF NOT TO EXCEED 100 LBS EACH
THE SEED MIXTURE SHALL BE COMPOSED BY WEIGHT AS FOLLOWS:
RED TOP 5 LBS/ACRE 45% RATE OF BROADCAST
CREEPING RED FESCUE 10 LBS/ACRE 37% 85 LBS/ACRE
KENTUCKY BLUE GRASS 35 LBS/ACRE 18%
DUTCH WHITE CLOVER 5 LBS/ACRE 10%
TOTAL 85 LBS/ACRE

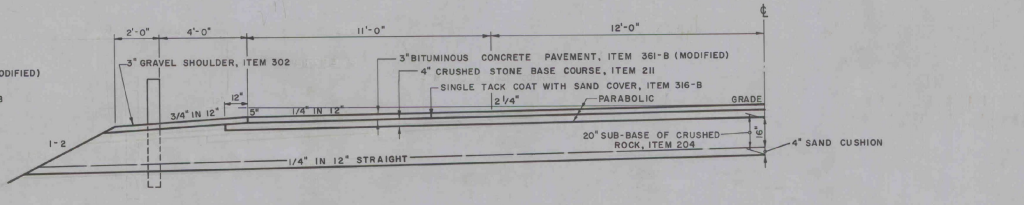
SEEDING, ITEM 611, COMMERCIAL FERTILIZER FOR GRASSES, ITEM 615, TO BE USED AS NOTED ON PLANS OR AS DIRECTED BY THE ENGINEER



SHOULDERS ON HIGH SIDE OF BANK CURVE TO BE TREATED WITH DOUBLE TACK COAT OF BIT. MAT. WITH PEA STONE AND STONE GRITS SEAL. PRIME CT. OF REF. TAR AND DOUBLE SEAL CT. OF CT. BK. ASPH., ITEM 315
STA. 95+50 - 102+50 RT.
STA. 127+00 - 137+00 RT.
STA. 157+00 - 159+50 LT.



THE ROCK WILL BE SHATTERED TO A DEPTH OF FOUR (4) FEET BELOW SUBGRADE AS PER DRILLING AND BLASTING OF SOLID ROCK SUBGRADE, ITEM 114, MODIFIED. REFER TO ROADWAY STANDARD SHEET A-61



DANVILLE F-02B-3(2)
SURVEYED BY VERMONT HIGHWAYS DEPT. 1958
DESIGNED BY FENTON G. KEYES ASSOC. 1958
DRAWN BY FENTON G. KEYES ASSOC. 1958
TRACED BY FENTON G. KEYES ASSOC. 1958
REVISED BY
SERIES F NO. 02B-3(2)
SHEET 2 OF 74

QUANTITY SHEET

STATE OF VERMONT DEPARTMENT OF HIGHWAYS
DANVILLE PROJECT NO. F-028-3(2)

SUMMARY SHEET NO. 1 OF 1 19

APPROXIMATE SUMMARY OF QUANTITIES

R.O.W.	BRIDGE	ROADWAY	QUANTITIES GRAND TOTAL	UNIT	ITEMS	ITEM NO.
			133600	CY.	COMMON EXCAVATION	101A
			6000	CY.	SOLID ROCK EXCAVATION	101B
			247400	C.Y.	BORROW	102
			2000	CY.	TRENCH EXCAVATION OF EARTH	103A
			790	CY.	TRENCH EXCAVATION OF ROCK	103B
			1	L.S.	CLEARING AND GRUBBING	104
			49440	CY.	FINE GRADING - SUBGRADE	105
			290	CY.	CHANNEL EXCAVATION OF EARTH	106A
			225	CY.	STRUCTURE EXCAVATION	107
			13	DAY	ROADWAY PATROL MAINTENANCE (EST.)	108
			30	CY.	CHANNEL EXCAVATION OF ROCK (EST.)	108B
			250	M/GAL	DUST CONTROL (EST.)	111
			8250	S.Y.	DRILLING & BLASTING OF SOLID ROCK SUBGRADE MODIFIED	114
			630	CY.	EXCAVATION & REMOVAL OF ROAD SURFACE ON ROADWAYS	118A
			1000	CY.	MUCK EXCAVATION (INCL. 75% CY. OVERRUN)	116
			40	HR.	BULLDOZER RENTAL (EST.)	119
			40	HR.	DRAGLINE RENTAL	123
			900	CY.	SUB-BASE OF GRAVEL	201A
			1250	CY.	SUB-BASE OF SAND (EST.)	202
			24200	CY.	SUB-BASE OF CRUSHED ROCK	204
			3090	CY.	CRUSHED STONE BASE COURSE	211
			15 650	CY./MI.	GRAVEL OVERHAUL, MODIFIED (EST.) 8 MILES	221
			500	CY.	GRAVEL BACKFILL	222
			322	CY.	STRIPPING OF GRAVEL PITS (EST.)	223
			980	C.Y.	GRAVEL SHOULDERS	302
			13730	GAL.	SINGLE TACK COAT OF CUTBACK ASPHALT WITH SAND COVER	316 B
			3110	GAL.	DOUBLE TACK COAT OF BITUMINOUS MATERIAL WITH PEA STONE AND STONE GRITS SEAL, PRIME COAT OF REFINED TAR AND DOUBLE SEAL COAT OF CUTBACK ASPHALT	315
			4300	TON	BITUMINOUS CONCRETE PAVEMENT, MOD.	361 B
			1070	GAL.	CUTBACK ASPHALT	322
			9	CY.	CONCRETE CLASS "B" MODIFIED	401-B
			620	LB.	REINFORCING STEEL	402
			45	CY.	CEMENT RUBBLE MASONRY	411
			416	L.F.	18" REINFORCED CONCRETE PIPE	421M
			118	L.F.	36" REINFORCED CONCRETE PIPE	421M
			198	L.F.	18" ASPHALT COATED CORRUGATED GALVANIZED METAL PIPE	424F
			782	L.F.	18" ASPHALT COATED CORRUGATED GALVANIZED METAL PIPE	424H
			240	L.F.	24" ASPHALT COATED CORRUGATED GALVANIZED METAL PIPE	424K
			1	L.S.	96" CORRUGATED GALVANIZED METAL PLATE PIPE, STA. 115+22 LT. - 116+48 RT. (20' x 70')	429A
			1	L.S.	96" CORRUGATED GALVANIZED METAL PLATE PIPE ARCH, STA. 158+25 - 159+25 (20' x 70')	429B
			2500	L.F.	6" PERFORATED ASPHALT COATED CORRUGATED GALVANIZED METAL UNDERDRAIN, MODIFIED	531A
			200	L.F.	SLEEVES FOR WATER PIPE (EST.)	431
			200	L.F.	RELAYING PIPE CULVERTS, ESTIMATED	428
			220	CY.	RIPRAP FOR BANK PROTECTION	526
			1	EA.	CAST IRON DROP INLET GRATES	539A
			100	L.F.	PLANK GUARD RAIL WITH PRESERVATIVE TREATMENT	541-A
			4384	L.F.	THREE CABLE GUARD RAIL WITH STEEL POSTS	543
			24	EA.	ANCHOR FOR THREE CABLE GUARD RAIL WITH STEEL POSTS	546
			36	EA.	STEEL MARKER POSTS	548-D
			80	L.F.	REMOVAL & DISPOSAL OF PRESENT 6 R.	550
			2	EA.	ERECTION OF PROJECT MARKERS	566
			32	EA.	BOUNDARY MARKERS (EST.)	567
			1	L.S.	DEMOLITION AND REMOVAL OF BUILDING AT STA. 132+80 RT. NO. 4	586
			430	S.Y.	BITUMINOUS GROUTED STONE GUTTER	583
			1	L.S.	DEMOLITION & REMOVAL OF BUILDING AT STA. 88+25 LT. NO. 1	586
			1	L.S.	DEMOLITION & REMOVAL OF BUILDING AT STA. 90+00 RT. NO. 2	586
			1	L.S.	DEMOLITION & REMOVAL OF BUILDING AT STA. 93+40 RT. NO. 3	586
			2990	LBS.	WINTER RYE (INCL. 270 LBS. O'N)	610
			55	LBS.	SEEDING (EST.)	611
			800	LBS.	COMMERCIAL FERTILIZER FOR GRASSES (EST.)	615
			125	CY.	TOPSOIL	621
			30	TON	MULCH, MODIFIED (INCL. 1.2 TON O'N)	622
			420	S.Y.	SODDING	612

DETAILED SUMMARY OF QUANTITIES

QUANTITIES	UNIT	ITEMS
COMMON EXCAVATION		
126800	C.Y.	MAINLINE INCLUDES 8291 C.Y. OVERRUN
5900	C.Y.	APPROACHES INCLUDES 387 C.Y. OVERRUN
900	C.Y.	DRIVES INCLUDES 46 C.Y. OVERRUN
133600	C.Y.	TOTAL
SOLID ROCK EXCAVATION		
6285	C.Y.	MAINLINE INCLUDES 418 C.Y. OVERRUN
314	C.Y.	PLUS 5% UNAVOIDABLE OVER BREAKAGE
6600	C.Y.	TOTAL
BORROW		
247400	C.Y.	ROADWAY INCLUDES 30392 C.Y. OVERRUN
247400	C.Y.	TOTAL
TRENCH EXCAVATION OF EARTH		
2000	C.Y.	PIPE CULVERTS INCLUDES 827 C.Y. OVERRUN
790	C.Y.	PIPE CULVERTS INCLUDES 800 C.Y. OVERRUN
FINE GRADING - SUBGRADE		
46540	S.Y.	MAINLINE INCLUDES 914 S.Y. OVERRUN
1650	S.Y.	APPROACHES INCLUDES 38 S.Y. OVERRUN
1050	S.Y.	DRIVES INCLUDES 18 S.Y. OVERRUN
49440	S.Y.	TOTAL
CHANNEL EXCAVATION OF EARTH		
290	C.Y.	STREAM REALIGNMENT INCLUDES 265 C.Y. OVERRUN
290	C.Y.	TOTAL
STRUCTURE EXCAVATION		
225	C.Y.	DRAINAGE STRUCTURES INCLUDES 22 C.Y. OVERRUN
225	C.Y.	TOTAL
DRILLING & BLASTING OF SOLID ROCK SUBGRADE MODIFIED		
8250	S.Y.	MAINLINE INCLUDES 409 S.Y. OVERRUN
8250	S.Y.	TOTAL
EXCAVATION AND REMOVAL OF ROAD SURFACE ON ROADWAYS		
630	C.Y.	ROADWAY INCLUDES 30 C.Y. OVERRUN
630	C.Y.	TOTAL
SUB-BASE OF CRUSHED ROCK		
24025	C.Y.	MAINLINE INCLUDES 1164 C.Y. OVERRUN
75	C.Y.	APPROACHES INCLUDES 3 C.Y. OVERRUN
24200	C.Y.	TOTAL
CRUSHED STONE BASE COURSE		
2950	C.Y.	MAINLINE INCLUDES 175 C.Y. OVERRUN
2950	C.Y.	TOTAL
GRAVEL BACKFILL		
500	C.Y.	DRAINAGE STRUCTURES INCLUDES 56 C.Y. OVERRUN
500	C.Y.	TOTAL
SUB-BASE OF GRAVEL		
630	C.Y.	APPROACHES INCLUDES 30 C.Y. OVERRUN
270	C.Y.	DRIVES INCLUDES 13 C.Y. OVERRUN
900	C.Y.	TOTAL
GRAVEL SHOULDERS		
980	C.Y.	MAINLINE INCLUDES 49 C.Y. OVERRUN
980	C.Y.	TOTAL
SINGLE TACK COAT OF CUTBACK ASPHALT WITH SAND COVER		
13730	GAL.	MAINLINE INCLUDES 1244 GAL. OVERRUN
13730	GAL.	TOTAL
BITUMINOUS CONCRETE PAVEMENT MODIFIED		
4300	TON	MAINLINE INCLUDES 957 TON OVERRUN
4300	TON	TOTAL
CUTBACK ASPHALT		
1070	GAL.	INCLUDES 55 GAL. OVERRUN

DETAILED SUMMARY OF QUANTITIES

QUANTITIES	UNIT	ITEMS
CONCRETE CLASS "B" MODIFIED		
8	C.Y.	DROP INLETS INCLUDES 0.7 C.Y. OVERRUN
8	C.Y.	TOTAL
REINFORCING STEEL		
620	LB.	DROP INLETS INCLUDES 30 LBS. OVERRUN
620	LB.	TOTAL
CEMENT RUBBLE MASONRY		
45	C.Y.	HEADWALLS - INCLUDE 2.1 C.Y. OVERRUN
45	C.Y.	TOTAL
REINFORCED CONCRETE PIPE TOTALS		
416	L.F.	18" R.C.P. CULVERT INCLUDES 60 L.F. OVERRUN
118	L.F.	36" R.C.P. CULVERT INCLUDES 30 L.F. OVERRUN
ASPHALT COATED CORRUGATED GALVANIZED METAL PIPE TOTALS		
198	L.F.	18" A.C.C.G.M.P. CULVERT INCLUDES 30 L.F. OVERRUN
782	L.F.	18" A.C.C.G.M.P. CULVERT INCLUDES 60 L.F. OVERRUN
240	L.F.	24" A.C.C.G.M.P. CULVERT INCLUDES 60 L.F. OVERRUN
METAL PLATE PIPE ARCH TOTALS		
1	L.S.	96" C.G.M. PLATE PIPE CULVERT BRIDGE STA. 115+22 LT. - 116+41 RT.
1	L.S.	96" C.G.M. PLATE PIPE CULVERT BRIDGE STA. 158+25 - 159+25
RIP RAP FOR BANK PROTECTION, INCL. 23 C.Y. OVERRUN		
220	C.Y.	TOTAL
STEEL MARKER POSTS		
36	EACH	CULVERT MARKERS INCLUDES 4 EACH OVERRUN
36	EACH	TOTAL
BITUMINOUS GROUTED STONE GUTTER		
430	S.Y.	MAIN LINE INCLUDES 40 S.Y. OVERRUN
PERFORATED ASPHALT COATED CORRUGATED GALVANIZED METAL PIPE UNDERDRAIN		
2500	L.F.	6" P.A.C.C.G.M.P. UNDERDRAIN INCL. 1212 L.F. OVERRUN
2500	L.F.	TOTAL
DOUBLE TACK COAT OF BITUMINOUS MATERIAL WITH PEA STONE AND STONE GRITS SEAL, PRIME COAT OF REFINED TAR AND DOUBLE SEAL COAT OF CUTBACK ASPHALT, INCL. 244 GALS. O'N.		
3110	GAL.	TOTAL

TYPE OF CONSTRUCTION 3" BITUMINOUS CONCRETE PAVEMENT ON 4" CRUSHED STONE BASE COURSE

STATIONS	PAVEMENT WIDTHS					EQUATIONS	REMARKS
	FROM	TO	24'	35'	46'		
3" BITUMINOUS CONCRETE PAVEMENT ON 4" CRUSHED STONE BASE COURSE							
90+70	92+00					130	APPROACH SECTION
92+00	94+50	250					
94+50	96+50					200	TRUCK LANE TAPER LT.
96+50	97+01		51				
RAILROAD CROSSING							
97+27	109+50			1223			
109+50	111+00				150		TRUCK LANE TAPER LT.
111+00	127+50	1650					
127+50	129+00				150		TRUCK LANE TAPER RT.
129+00	133+50		450				
133+50	136+50				200		TRUCK LANE TAPER LT.
136+50	137+50			200			
137+50	139+50				200		TRUCK LANE TAPER RT.
139+50	145+50		600				
145+50	147+00				150		TRUCK LANE TAPER LT.
147+00	159+50	1250					
159+50	162+00				250		APPROACH SECTION
TOTALS		3150	2324	200	1430		
H" GRAVEL SUB-BASE WITH DOUBLE TACK COAT OF CUTBACK ASPHALT WITH PEA STONE SEAL							
APPROACHES		20'	30'		VARIES		
APPROACH LINE 102+00 LT.		50				38	
APPROACH LINE 100+00 LT.			50			200	
TOTALS		50	50			298	
LENGTH OF PROJECT							
STATIONS		FEET		MILES		REMARKS	
92+00	97+01	501		0.094			RAILROAD CROSSING
97+27	159+50	6223		1.179			
TOTALS		6724		1.273			

EARTHWORK

EARTHWORK

EARTHWORK SUMMARY

STATE OF VERMONT
DEPARTMENT OF
HIGHWAYS

V.C.	% GRADE	GRADES				TOTAL EXCAVATION EARTH AND ROCK		EMBANKMENT		BASE	
		STATION	ELEVATION ON TANGENT	ELEVATION ON V. CURVES	CORR. V.C.	AREA	CU. YDS.	AREA	CU. YDS.	AREA	CU. YDS.
		148+00	1464.25					978	1734	82	152
		148+50	1461.25		50					82	152
		149+00	1458.25	1458.25	0					82	152
		149+50	1455.25	1455.36	+0.11					82	152
		150+00	1452.25	1452.67	+0.42					82	152
		150+50	1449.25	1450.20	+0.95					82	152
		151+00	1446.25	1447.94	+1.69					83	153
		151+50	1443.25	1445.89	+2.64					83	153
		152+00	1440.25	1444.05	+3.80					84	156
		152+50	1437.25	1442.42	+5.17					84	156
		152+85	1435.15	1441.41	+6.26	27	25			84	156
		153+00	1435.23	1441.00	+5.77	18	29			84	156
		153+18	1435.32	1440.55	+5.23	32	61			84	156
		153+50	1435.48	1439.80	+4.32	50	114			84	156
		154+00	1435.73	1438.80	+3.07	32	93			84	156
		154+32	1435.89	1438.28	+2.39	18	112			84	156
		154+50	1435.98	1438.02	+2.04	50	102			84	156
		155+00	1436.23	1437.45	+1.22	50	115			84	156
		155+50	1436.48	1437.08	+0.60	50	128			84	156
		156+00	1436.73	1436.93	+0.20	50	120			84	156
		156+50	1436.98	1436.99	+0.01	50	68			84	156
		157+00	1437.23	1437.08	-0.15	50	81			84	156
		157+50	1437.48			50	153			84	156
		157+89	1437.57			14	107			84	156
		157+83	1437.64			17	50			84	156
		158+00	1437.73			50	86			84	156
		158+50	1437.98			32	53			84	156
		158+82	1438.14			18	0			84	156
		159+00	1438.23			50	68			84	156
		159+50	1438.48			250	75			84	156
		162+00					0			0	390

V.C.	% GRADE	GRADES				TOTAL EXCAVATION EARTH AND ROCK		ROCK EXCAVATION		EMBANKMENT		BASE	
		STATION	ELEVATION ON TANGENT	ELEVATION ON V. CURVES	CORR. V.C.	AREA	CU. YDS.	AREA	CU. YDS.	AREA	CU. YDS.	AREA	CU. YDS.
		DRIVE AT STATION 92+50 TO STATION 96+00 LT											
		92+25				25	0						
		92+50				35	40						
		92+85				15	124						
		93+00				15	146						
		93+35				35	80						
		93+50				15	67						
		93+75				25	45						
		94+00				25	30						
		94+35				15	25						
		94+50				50	55						
		95+00				50	51						
		95+50				10	37						
		95+60				40	0						
		96+00					0						
		TOTAL					728						
		APPROACH AT STATION 130+00 LT.											
		128+00				50	0						
		128+50				50	70						
		129+00				50	475						
		129+50				50	770						
		130+00				50	907						
		130+50				50	600						
		131+00				50	0						
		TOTAL					5227						
		STATIONS INDICATED FOR APPROACH & DRIVE QUANTITIES ARE FOR MAINLINE. SEE CONSTRUCTION CROSS SECTIONS FOR PROFILE OF APPROACH SEE SHEET NO. 9.											

SUMMARY OF BALANCES												B A S E
STATION	TO	STATION	TOTAL EXCAV. EARTH & ROCK	ROCK EXCAV. CUBIC YARDS	EMBANKMENT CUBIC YARDS	EXCESSES CUT	EXCESSES FILL	ACCUMULATIVE EXCESSES CUT	ACCUMULATIVE EXCESSES FILL	CUMUL. YARDS		
92+00	95+00		623	622		6514		6514		1060		
95+00	100+00		2582		2749		717	5797		1601		
100+00	105+00		210	16590		19698		13901		1785		
105+00	110+00			48806		54967		68868		1776		
110+00	115+00					110220		201132		1539		
115+00	120+00					88195		105834		1520		
120+00	125+00		9060			14382		8198		1542		
125+00	130+00		28007	74	62	27982		287182		1650		
130+00	135+00		18260		20	18236		268946		1818		
135+00	140+00		24315	1979		25303		243643		1929		
140+00	145+00		* 27950	3168		29034		214109		1800		
145+00	150+00		5729	25	10062		6325	220434		1597		
150+00	155+00		744		4200		4296	224730		1550		
155+00	159+50		1319		1088	13		224717		1794		
TOTAL ROADWAY			124377	5868	293374					22361		
APPROACH LINE 102+00 RT			86		311		287	225004		70		
APPROACH LINE 102+00 LT			200		790		748	225752	SEE NOTE	210		
APPROACH LINE 130+00 LT			5227			5227		220525	SEE NOTE	390		
DRIVES (TOTAL)			855		143	683		219842		257		
F 028-3(2) TOTAL			130745	5868	294618					ITEM 204 ITEM 201	23888 600	

SHEET NO.	COL. NO.	SUMMARY BY COLUMNS			REMARKS
		EXCAVATION TOTAL CU. YDS.	EMBANKMENT ROCK CU. YDS. CUBIC YARDS	BASE CUBIC YARDS	
5	1	8995	622	12119	EARTH AND ROCK EXCAVATION 130745
5	2	14943		265823	SOLID ROCK EXCAVATION 5868
5	3	98376	5246	4155	EARTH EXCAVATION 124877
6	1	2063		11277	PLANIMETERED FILL 294618
ROADWAY TOTALS		124377	5868	293374	LESS FACTORED SOLID ROCK (X1.5) 8802
APPROACH 102+00 RT		86		311	LESS DISPLACEMENT OF ANY LARGE STRUCTURES 252
APPROACH 102+00 LT		200		790	NET PLANIMETERED FILL 285994
APPROACH 130+00 LT		5227			MATCH (X0.2) 57119
DRIVES		855		143	PLANIMETERED FILL INCLUDING FACTOR 342715
F 028-3(2) TOTALS		130745	5868	294618	MATERIALS AVAILABLE FOR FILL 124877
				ITEM 204	CHANNEL EXCAVATION 50% 133
				ITEM 201	UNDERBANK EXCAVATION 101
					ROAD SURFACE EXCAV. 600
					TOTAL MATERIAL AVAILABLE FOR FILL 125711
					TOTAL FILL INCLUDING FACTOR 342715
					TOTAL MATERIAL FOR FILL 125711
					BORROW 217008

CARRIED FORWARD
COLUMN FOOTINGS

2063

11277

3952

GARRIED FORWARD
COLUMN FOOTINGS

PROJECT DANVILLE

PROJECT F NO 028-3(2)
SHEET 8 OF 74 SHEETS

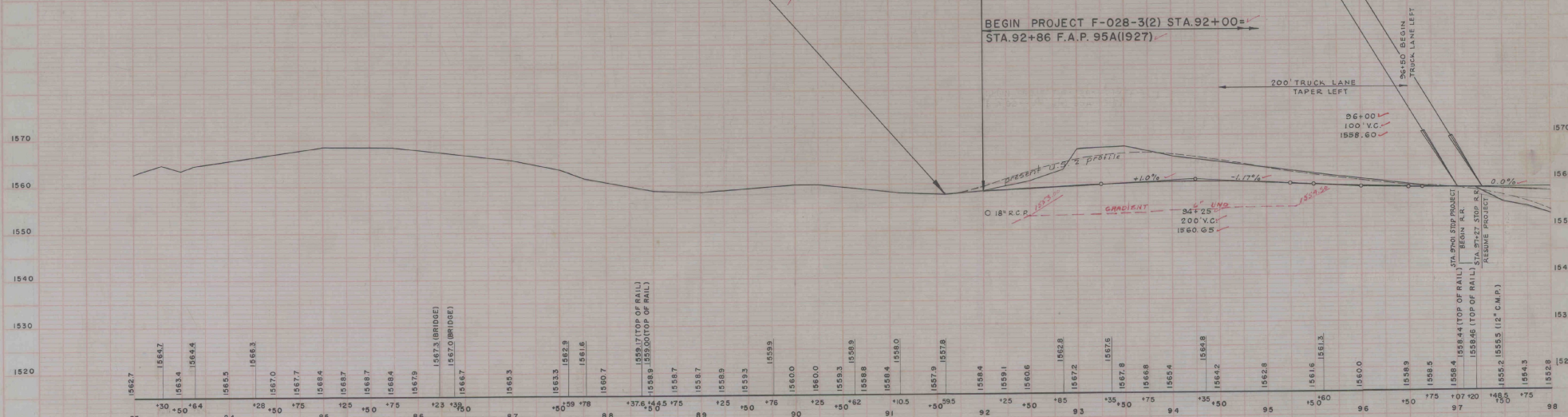
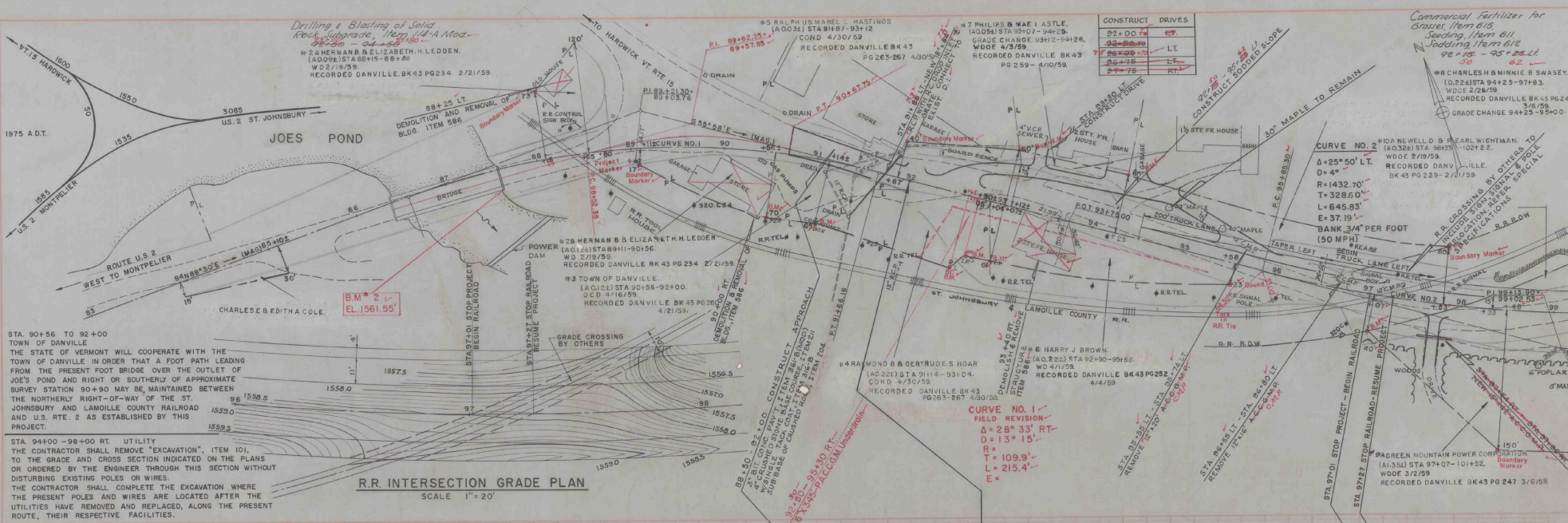
FINAL EARTHWORK SUMMARY SHEET

STATE OF VERMONT
DEPARTMENT OF HIGHWAYS

ITEM	CROWN-WEAR				GRAVY-CURB/ WASTE				SIDE				TOTAL				COLUMN SUMMARY				
	START	END	AMOUNT	UNIT	START	END	AMOUNT	UNIT	START	END	AMOUNT	UNIT	START	END	AMOUNT	UNIT	START	END	AMOUNT	UNIT	
85+00	92+00	0	600	+ 600																	
92+00	95+00	6523	62.03	0																	
95+00	100+00	2532	25.32	0																	
100+00	105+00	210	2.10	0																	
105+00	110+00	0	0	0																	
110+00	115+00	0	0	0																	
115+00	120+00	0	0	0																	
120+00	125+00	9080	90.80	0																	
125+00	130+00	28207	282.07	0																	
130+00	135+00	15260	152.60	0																	
135+00	140+00	24313	243.13	+ 394																	
140+00	145+00	27920	279.20	+ 2679																	
145+00	150+00	3723	37.23	+ 367																	
150+00	155+00	941	9.41	0																	
155+00	160+00	0	0	0																	
160+00	165+00	0	296	+ 296																	
Subtotal Roadway				124,571	128,703	+ 4326	5,868	10,032	+ 4,164												
Approaches																					
122+00 R		86	86	0																	
102+00 L		200	200	0																	
130+00 L		5227	5227	0																	
Subtotal Approaches				5913	5513	0															
Drives (No. 1)				855	856	+ 1															
Slope Stabilization				0	917.1	917															
Removal of Poor Subgrade				0	33	+ 33															
Boulders (Ded)						0	1046	+ 1046													
Grand Total				130,745	133,822	+ 3077	5,868	11,078	+ 5,210												
Minus 101 B						11,078															
75 Tol 101 B						124,724															

VT. HIGHWAYS DEPT.
FENTON G. KEYS ASBCC 6-38

VT. HIGHWAYS DEPT.
FENTON G. KEYS ASBCC 6-38



B.M. # 2 S.E. Corner of Bridge ELEV. 1561.55'

VT. HIGHWAYS DEPT.
PLANNING & RECON. DIVISION
DESIGN SECTION

VT. HIGHWAYS DEPT.
ELECTRONIC RECORDS SECTION

EXCAVATION and REMOVAL of ROAD SURFACES on ROADWAYS 100+75 - 101+75 LT.
*10A NEWELL D & PEARL WIGHTMAN

APPROACHES
LT. 100+0 RT. 100+0

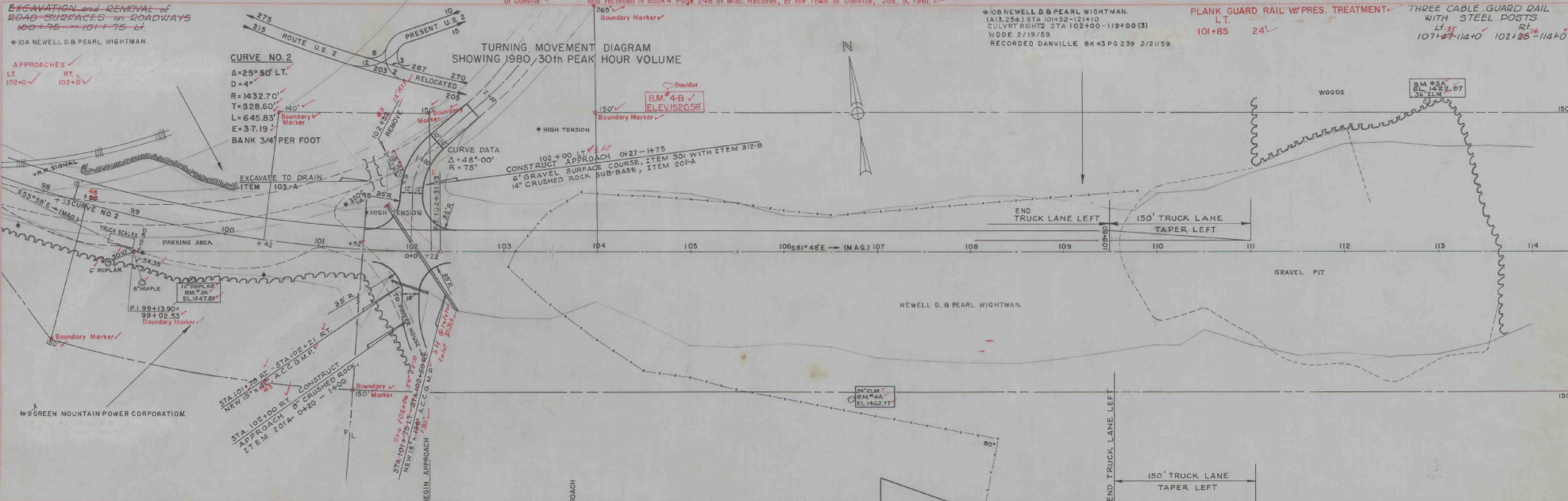
CURVE NO. 2
D=25° 50' LT.
D=41°
R=1432.70'
T=328.60'
L=645.83'
E=37.19'
BANK 3/4" PER FOOT

TURNING MOVEMENT DIAGRAM SHOWING 1980, 30th PEAK HOUR VOLUME

Section of Highway beginning at a point in the center of former U.S. Route 2, 280' left or northerly measured at right angle from survey point (V) left of Danville ✓
station 103+80 of Highway Project F-028-3(2); thence 0.49 mile, more or less, easterly in the center line of former U.S. Route 2, to a point northerly measured at right angle from survey station 103+80 of said Highway Project is hereby relinquished and returned to its owner and recorded in Book 4 Page 248 of Misc. Records, of the Town of Danville, Jan. 9, 1961. ✓

*10B NEWELL D & PEARL WIGHTMAN.
(113.25) STA. 104+52-104+10
CULVERT RIGHTS STA 102+00-119+00 (3)
WIDE 27/19/58
RECORDED DANVILLE BK 43 PG 239 2/21/59

PLANK GUARD RAIL W/PRES. TREATMENT THREE CABLE GUARD RAIL WITH STEEL POSTS
LT. 101+85 RT. 102+25
101+85 24' 102+25-114+0 12' 102+25-114+0



B.M. # 3A 54' RT. 99+72 12" POPLAR, ELEV. 1547.83 ✓
B.M. # 4A 159' RT. 106+73 24" ELM. ELEV. 1462.77 ✓
B.M. # 4-B Boulder 180' Lt. Sta. 104+75 ELEV. 1550.58 ✓
B.M. # 5A 162' LT. 112+85 36" ELM. ELEV. 1422.97 ✓

VT HIGHWAY DEPT.
SECTION 6, REVISION 6-59

VT HIGHWAY DEPT.
SECTION 6, REVISION 6-59

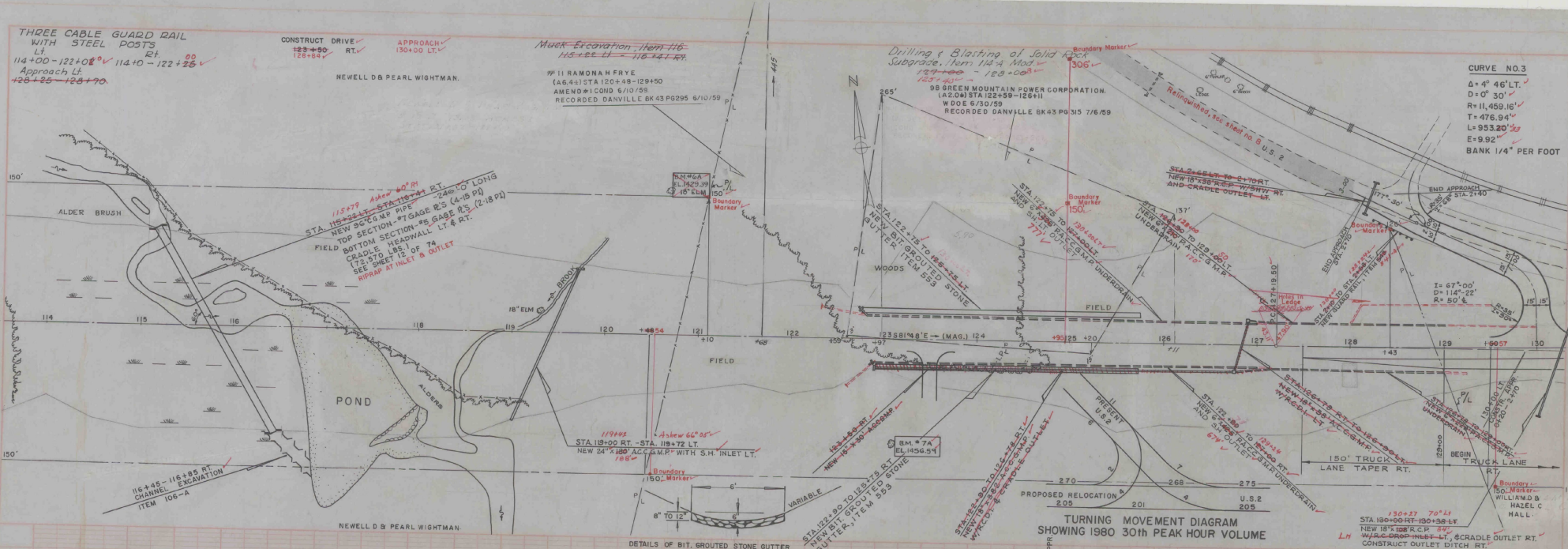
THREE CABLE GUARD RAIL WITH STEEL POSTS
Lt. 114+00 - 122+00 Rt. 114+00 - 122+25
Approach Lt. 125+25 - 125+70

CONSTRUCT DRIVE RT. 123+50 - 128+50
APPROACH RT. 130+00 LT.

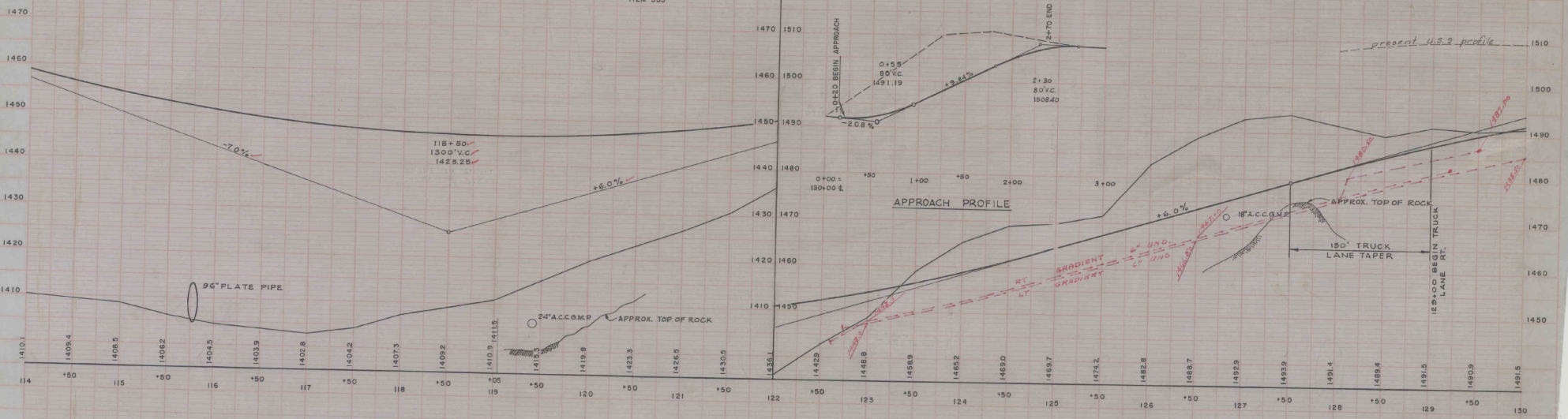
Muck Excavation Item 116
115+22 LT - 115+44 RT

Drilling & Blasting of Solid Rock
Subgrade Item 114 Mod.
123+00 - 128+00
123+40 - 128+00

CURVE NO. 3
Δ = 4° 46' LT.
D = 0° 30'
R = 11,459.16'
T = 476.94'
L = 953.20'
E = 9.92'
BANK 1/4" PER FOOT



TURNING MOVEMENT DIAGRAM SHOWING 1980 30th PEAK HOUR VOLUME



EXCAVATION AND REMOVAL OF ROAD SURFACES ON ROADWAYS - ITEM 119-A
146+00' - 149+25' LT. 148+50'

*14 RAYMOND R & MARTHA S SEVIGNY
(A0.573) STA 149+71-157+30
WDOE 2/21/59
RECORDED DANVILLE BK 43 PG 240 2/26/59

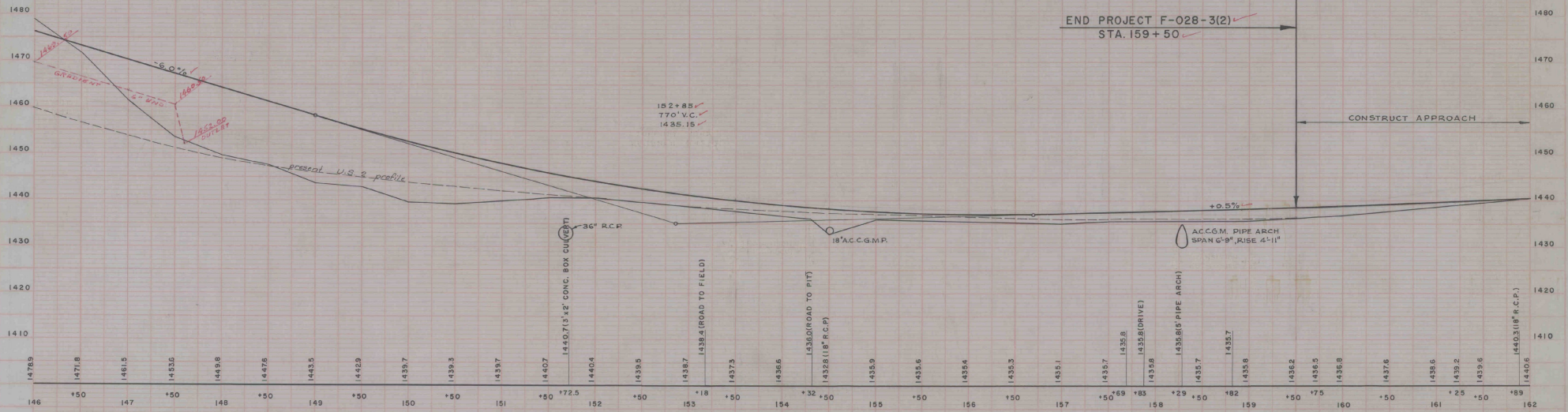
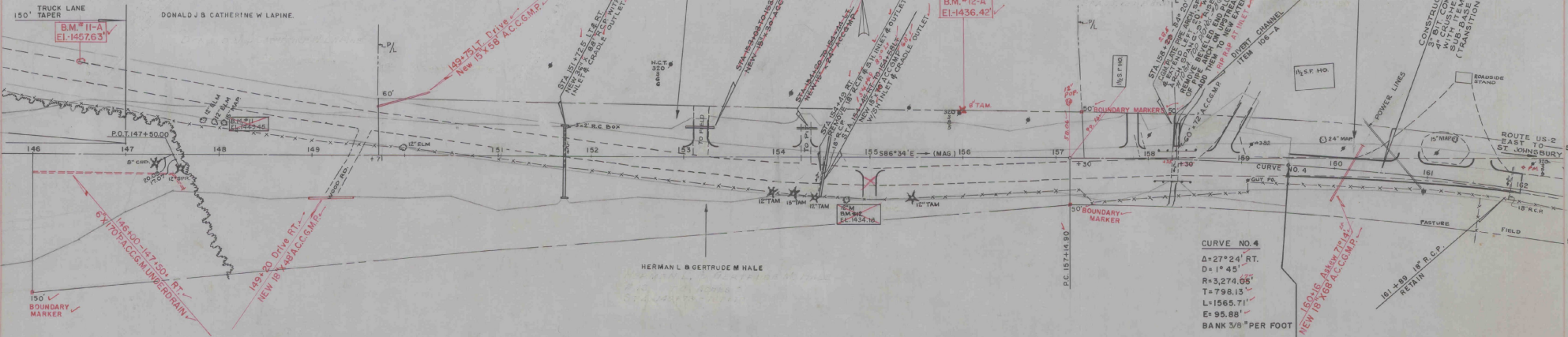
CONSTRUCT DRIVES	
153+18.5	LT
154+00	LT
157+85	LT
158+80	LT
160+50	LT
161+50	LT
155+00	RT

THREE CABLE GUARD RAIL MUCK EXCAVATION 154+75 to 156+75
WITH STEEL POSTS
LT. 44 149+30 CH
146+50-152+06 148+00-150+50
LT. 4 RT. 147+55-149+00
150+15-153+25 152+00-153+52
154+00-155+52

REMOVAL and DISPOSAL of PRESENT GUARD RAIL
LT. 4 RT.
158+06 - 158+50

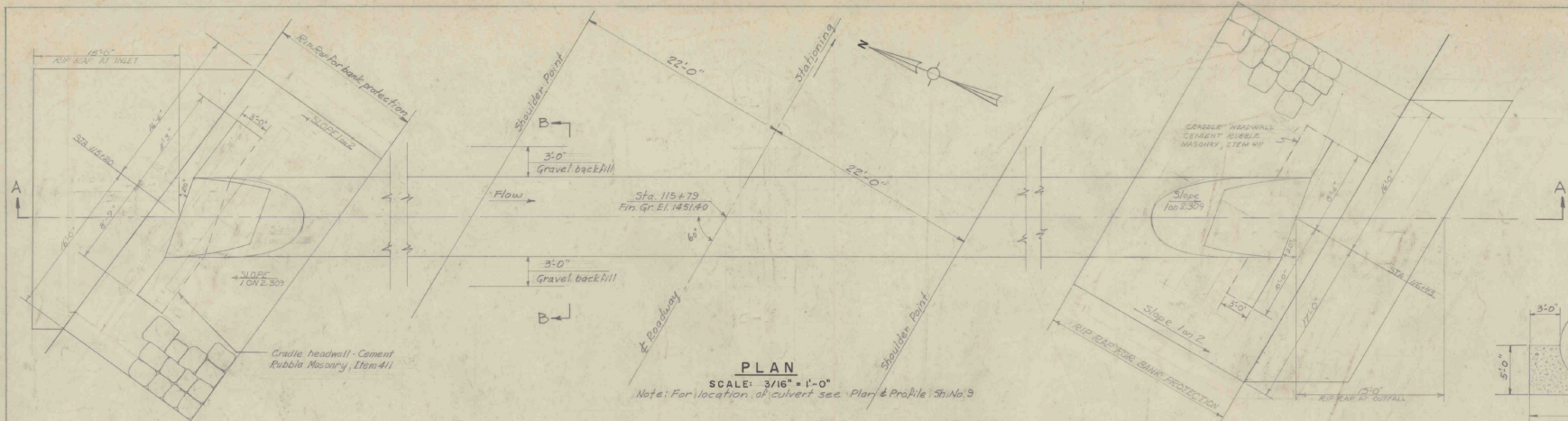
*15 PAUL & NILA S BERARD
(A0.093) STA 157+30-158+50
WDOE 2/21/59
RECORDED DANVILLE BK 43 PG 243
2/26/59

*14 RAYMOND R & MARTHA S SEVIGNY
(A0.204) STA 158+30-166+56
WDOE 2/21/59
RECORDED DANVILLE BK 43 PG 240 2/26/59



END PROJECT F-028-3(2)
STA. 159+50

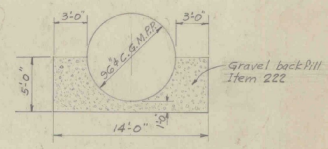
CONSTRUCT APPROACH



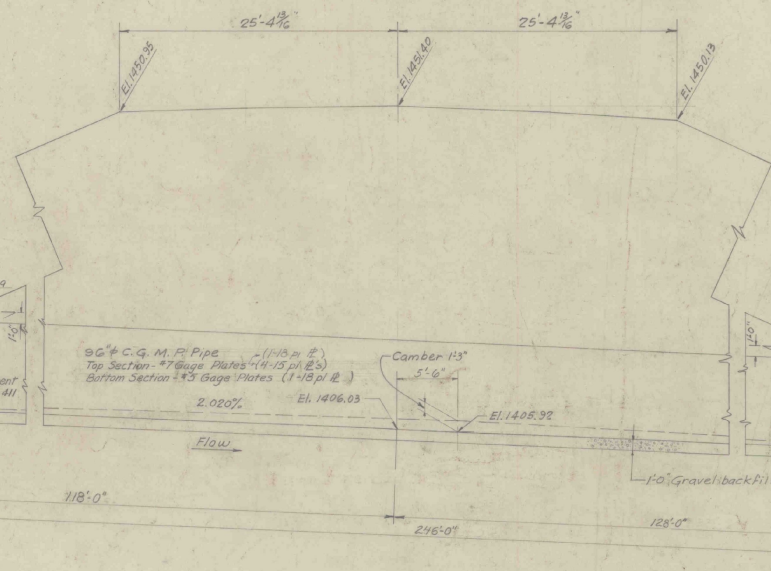
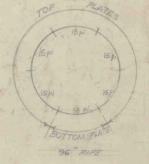
PLAN

SCALE: 3/16" = 1'-0"

Note: For location of culvert see Plan & Profile Sheet 3



SECT. "B-B"
SCALE: 3/16" = 1'-0"



ELEVATION "A-A"
SCALE: 3/16" = 1'-0"

ITEM NO.	DESCRIPTION	QUANTITY
106-A	Channel Excavation of Earth	244 CY
107	Structure Excavation	188 CY
116	Muck Excavation	249 CY
222	Gravel Backfill	400 CY
411	Cement Rubble Masonry	14.00 CY
429-A	36" Corrug. Galv. Metal Plate Pipe (Approx. Wgt. 72,500 lbs.)	1 L.S.
526	Rip-Rap For Bank & Inv. Protection	182 CY

STATE OF VERMONT
DEPARTMENT OF HIGHWAYS

TOWN OF DANVILLE

ROUTE No. U.S.-2 Log STA. _____

CULVERT DETAILS

AT STATION 115+79

SCALE AS SHOWN

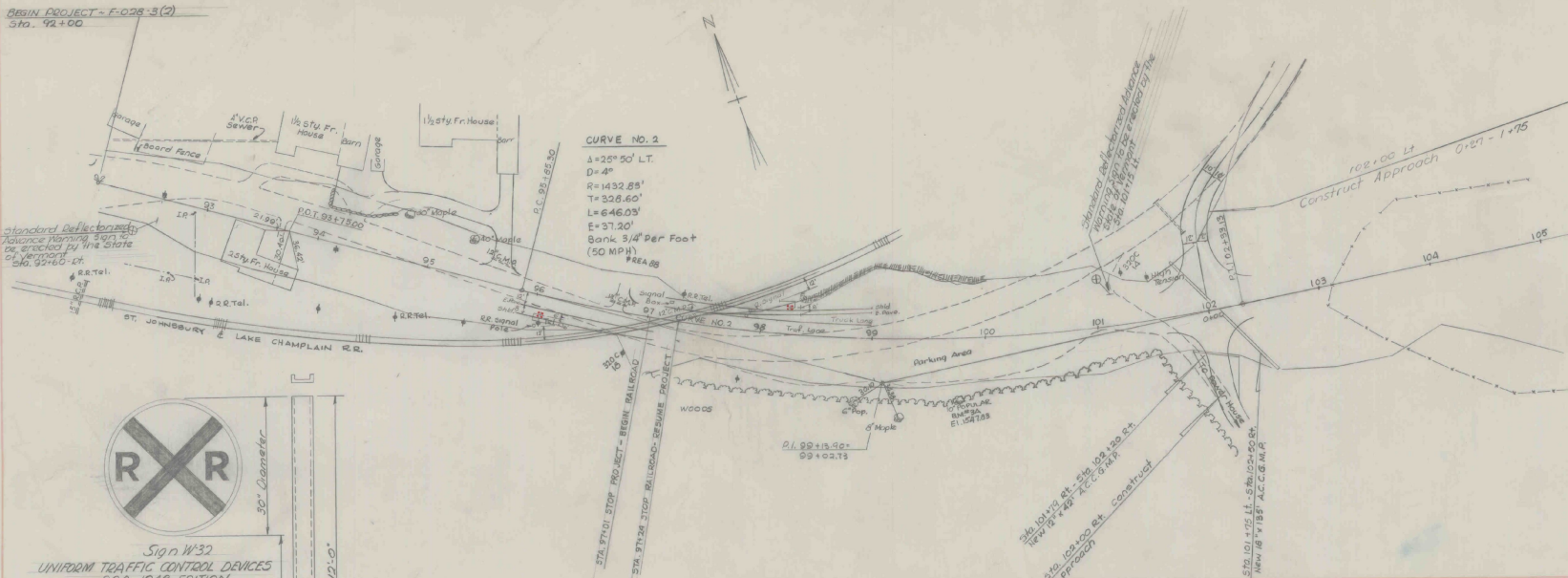
SURVEYED BY _____

DRAWN BY B.V.F. CHECKED BY _____

PROJECT No. F-028-3(2)

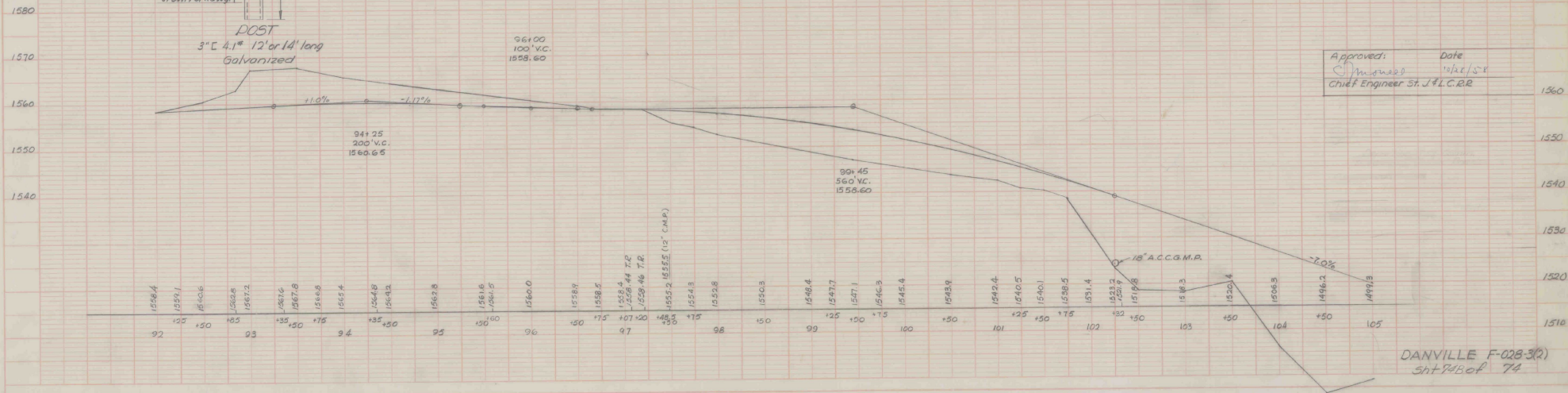
SHEET 12 OF 74

BEGIN PROJECT - F-028-3(2)
Sta. 92+00

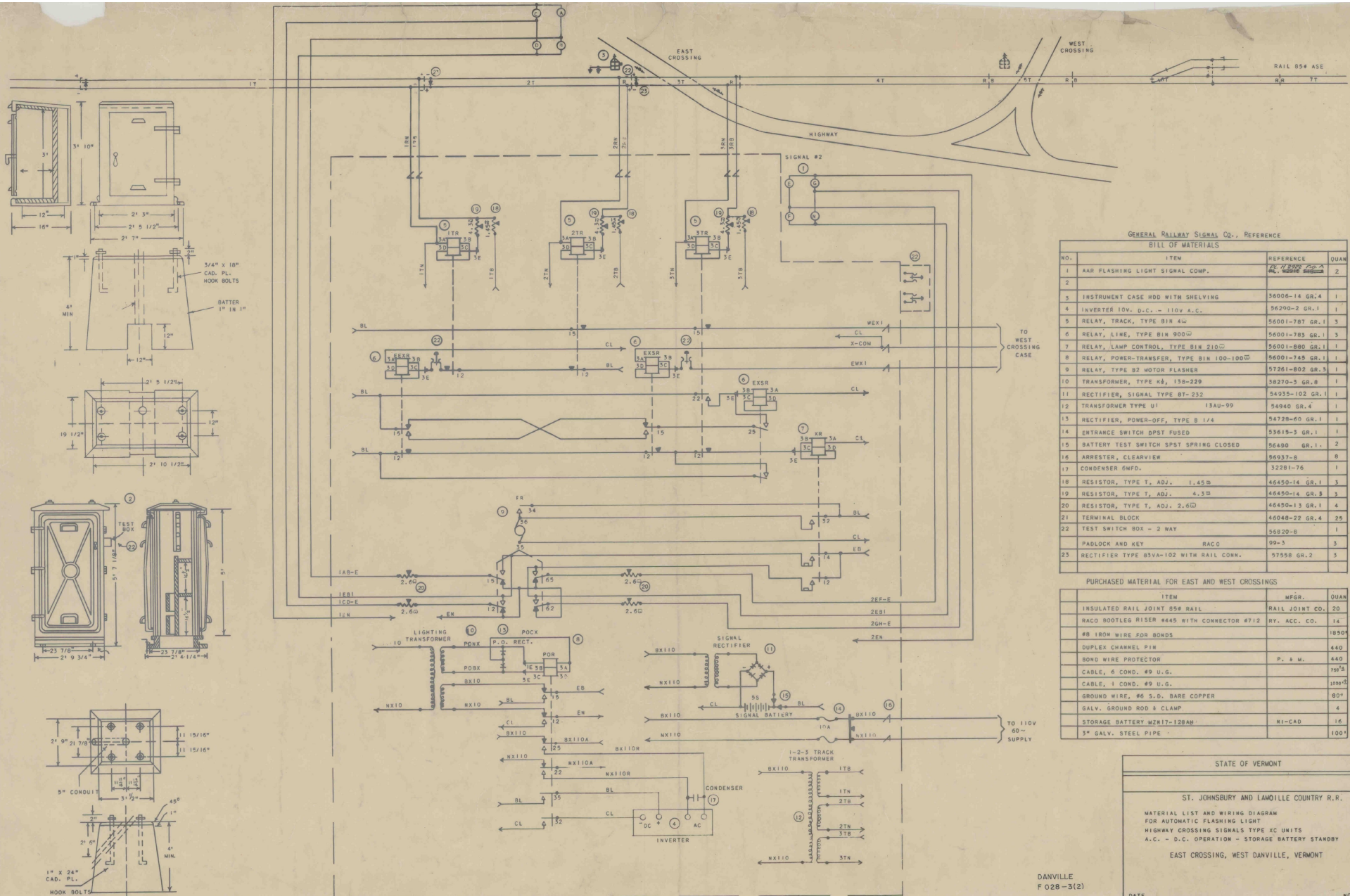


Sign W32
UNIFORM TRAFFIC CONTROL DEVICES
P.M.A. 1948 EDITION

REFLECTORIZED RAILROAD
ADVANCE WARNING SIGN



Approved: *[Signature]* Date: 10/15/54
Chief Engineer St. J. & L.C.R.R.



GENERAL RAILWAY SIGNAL CO., REFERENCE
BILL OF MATERIALS

NO.	ITEM	REFERENCE	QUAN
1	AAR FLASHING LIGHT SIGNAL COMP.	AC, 110V	2
2			
3	INSTRUMENT CASE HDD WITH SHELVING	36006-14 GR.4	1
4	INVERTER 10V. D.C. - 110V. A.C.	36290-2 GR.1	1
5	RELAY, TRACK, TYPE BIN 4W	56001-787 GR.1	3
6	RELAY, LINE, TYPE BIN 900	56001-793 GR.1	3
7	RELAY, LAMP CONTROL, TYPE BIN 210	56001-880 GR.1	1
8	RELAY, POWER-TRANSFER, TYPE BIN 100-100	56001-745 GR.1	1
9	RELAY, TYPE B2 MOTOR FLASHER	57261-802 GR.3	1
10	TRANSFORMER, TYPE K4, 138-220	38270-3 GR.8	1
11	RECTIFIER, SIGNAL TYPE 8T-232	54335-102 GR.1	1
12	TRANSFORMER TYPE U1	134U-99	54940 GR.4
13	RECTIFIER, POWER-OFF, TYPE B 1/4	54728-60 GR.1	1
14	ENTRANCE SWITCH DPST FUSED	53615-3 GR.1	1
15	BATTERY TEST SWITCH SPST SPRING CLOSED	56400 GR.1	2
16	ARRESTER, CLEARVIEW	56937-8	8
17	CONDENSER 5MF.	32281-76	1
18	RESISTOR, TYPE T, ADJ. 1.45Ω	46450-14 GR.1	3
19	RESISTOR, TYPE T, ADJ. 4.3Ω	46450-14 GR.3	3
20	RESISTOR, TYPE T, ADJ. 2.6Ω	46450-13 GR.1	4
21	TERMINAL BLOCK	46048-22 GR.4	25
22	TEST SWITCH BOX - 2 WAY	56820-8	1
	PADLOCK AND KEY	RACQ	99-3
23	RECTIFIER TYPE 83VA-102 WITH RAIL CONN.	57556 GR.2	3

PURCHASED MATERIAL FOR EAST AND WEST CROSSINGS

ITEM	MFGR.	QUAN
INSULATED RAIL JOINT 85# RAIL	RAIL JOINT CO.	20
RACQ BOOTLEG RISER #445 WITH CONNECTOR #712	RY. ACC. CO.	14
#8 IRON WIRE FOR BOWDS		1850
DUPLEX CHANNEL PIM		440
BOND WIRE PROTECTOR	P. & M.	440
CABLE, 6 COND. #9 U.G.		100
CABLE, 1 COND. #9 U.G.		100
GROUND WIRE, #6 S.D. BARE COPPER		80
GALV. GROUND ROD & CLAMP		4
STORAGE BATTERY M2R17-128AH	MI-CAD	16
3" GALV. STEEL PIPE		100

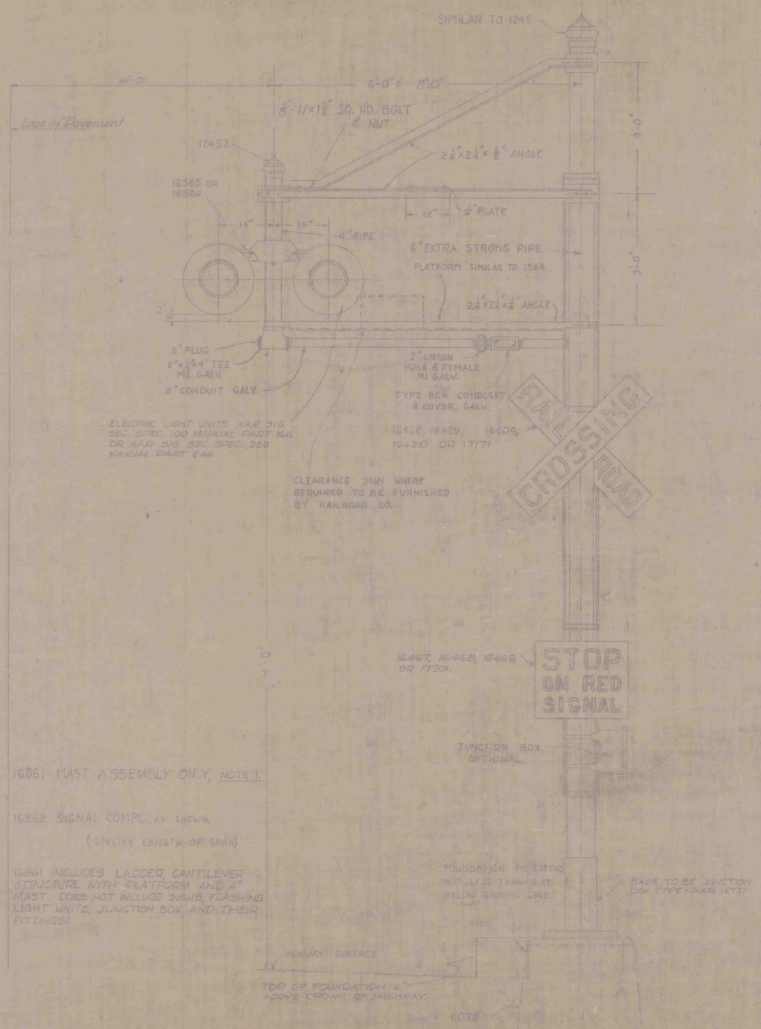
STATE OF VERMONT

ST. JOHNSBURY AND LAMOILLE COUNTRY R.R.
MATERIAL LIST AND WIRING DIAGRAM
FOR AUTOMATIC FLASHING LIGHT
HIGHWAY CROSSING SIGNALS TYPE AC UNITS
A.C. - D.C. OPERATION - STORAGE BATTERY STANDBY
EAST CROSSING, WEST DANVILLE, VERMONT

DANVILLE
F 028-3(2)

DATE
REVISED 6-21-54 8-24-54 5-1-59 NO SCALE
DISTANCE AS SHOWN

DRAWN BY HSB
TRACED BY JH
CHECKED BY JH
CHECKED BY HSB
APPROVED
HOOK BOLTS



HIGHWAY CROSSING FLASHING LIGHT SIGNAL ASSEMBLY

STATE OF VERMONT
DEPARTMENT OF HIGHWAYS

TOWN OF DANVILLE

ROAD NO. _____ BRIDGE NO. _____

AREA _____

SCALE _____

SURVEYED BY _____

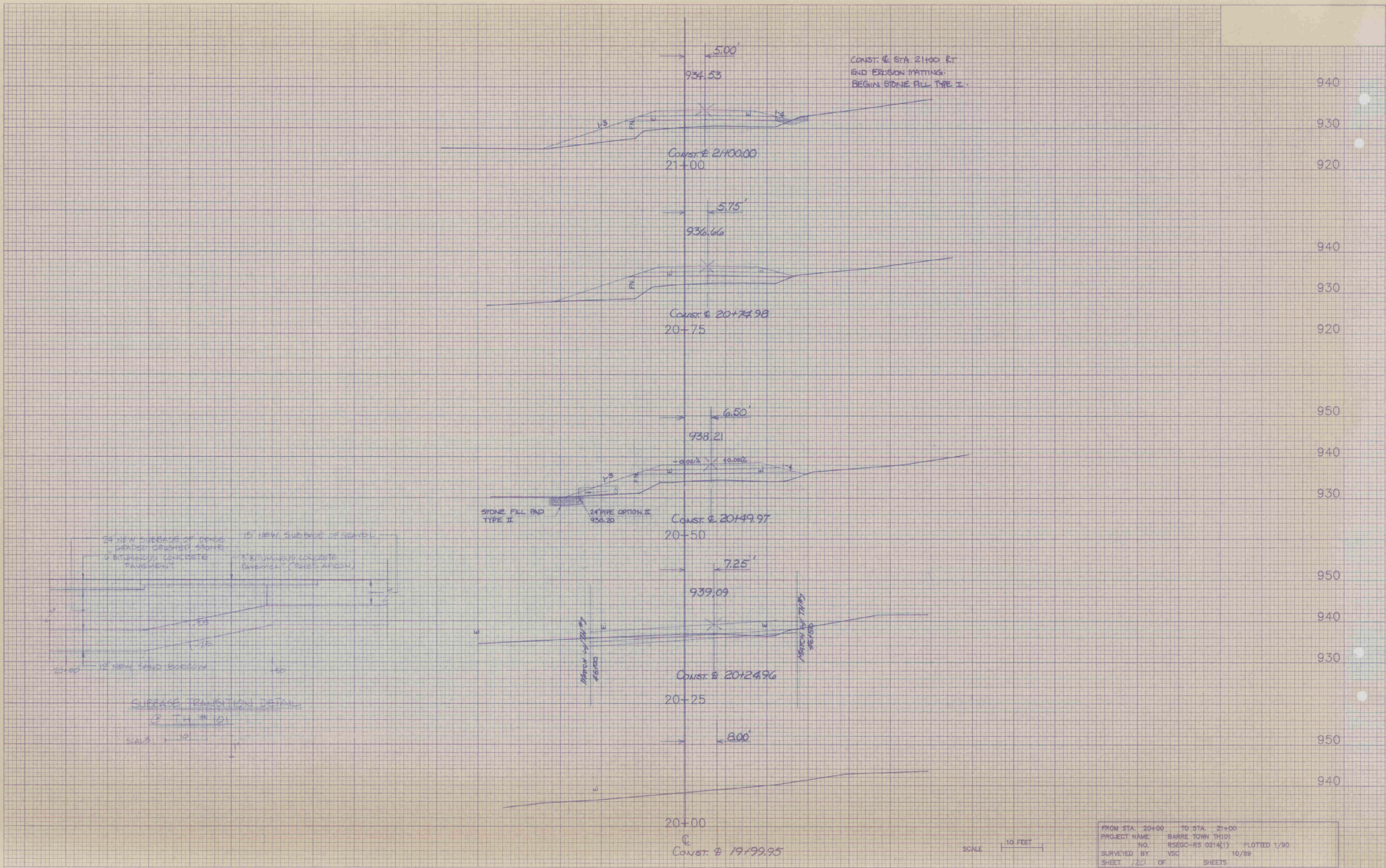
DRAWN BY _____ CHECKED BY _____

PROJECT NO. F 028-3 (2)

SHEET 740 OF _____

FINAL SURVEY
 DATE: _____
 BY: _____
 CHECKED BY: _____
 PROJECT NO.: _____
 SHEET NO.: _____

ORIGINAL SURVEY
 DATE: _____
 BY: _____
 CHECKED BY: _____
 PROJECT NO.: _____
 SHEET NO.: _____



Vermont Agency of
Transportation
INITIALS PHASE 1-INTERSTATE
#122302-01



INITIALS

Box 1705

Danville

19 59
60

F 028-3 (2)

19 56
60