

STATE OF VERMONT  
DEPARTMENT OF HIGHWAYS



PROPOSED IMPROVEMENT  
BRIDGE PROJECT

TOWN OF FERDINAND Pin# 00R182  
COUNTY OF ESSEX

ROUTE NO: VT 105 BRIDGE NO: 94

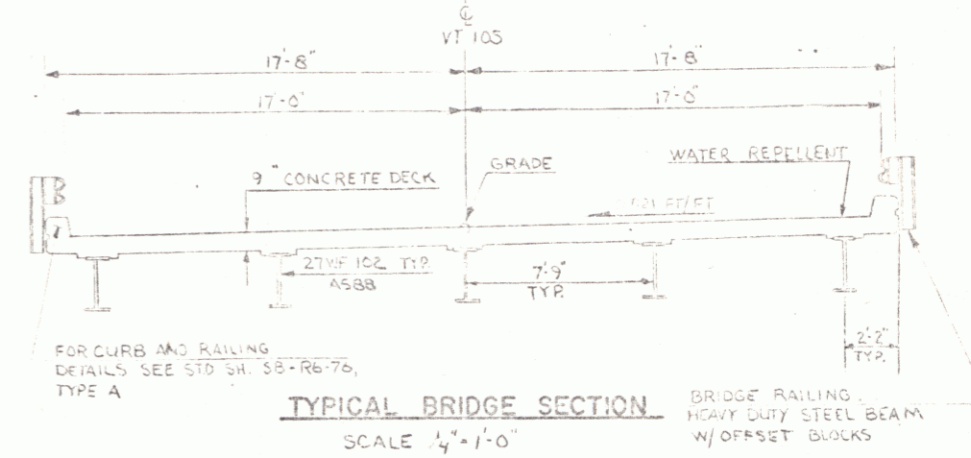
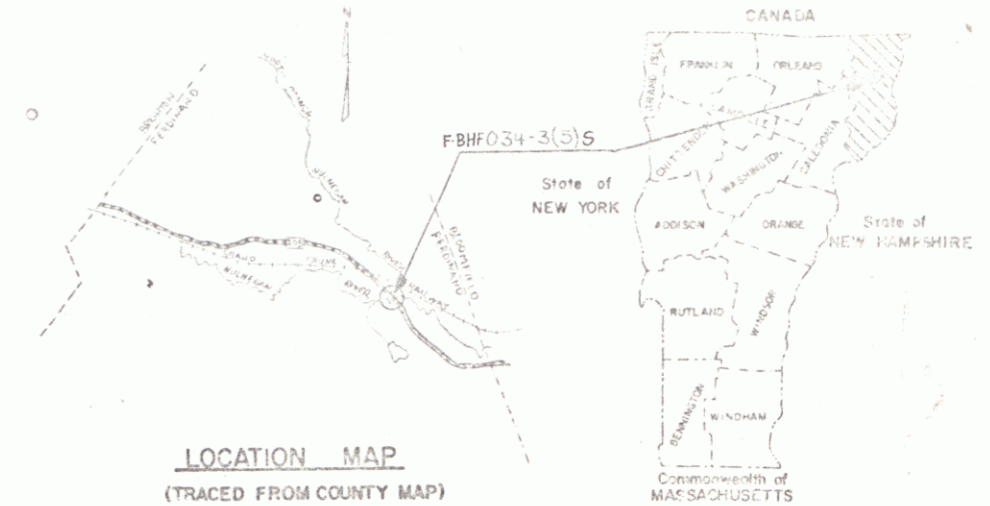
PROJECT LOCATION: ON VT 105 7.6 MILES WESTERLY  
FROM JUNCTION VT 102 AND VT 105.

PROJECT DESCRIPTION: REMOVAL OF EXISTING SUPERSTRUCTURE AND WINGS,  
CONSTRUCTION OF A SIMPLE SPAN ROLLED BEAM SUPERSTRUCTURE WITH CONCRETE DECK,  
EXTENSION OF EXISTING ABUTMENTS AND CONSTRUCTION OF NEW WINGS, RELATED  
ROAD APPROACH AND CHANNEL WORK.

LENGTH OF STRUCTURE: 44.0 FEET  
LENGTH OF PARTICIPATION ROADWAY: 456.0 FEET  
LENGTH OF NON-PARTICIPATION ROADWAY: 0.0 FEET  
LENGTH OF PROJECT: 500.0 FEET

LENGTH OF R.O.W. PROJECT = 550 FEET = 0.104 MILES

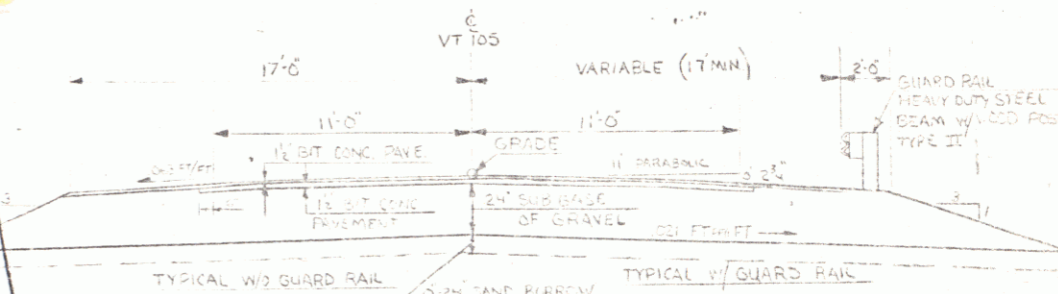
TRAFFIC DATA  
EST 1978 ADT = 540  
EST 1998 ADT = 770  
EST 1978 DHV = 135  
D = 56 %  
T = 7 %



FOR CURB AND RAILING  
DETAILS SEE STD. SH. 58-RB-76,  
TYPE A

TYPICAL BRIDGE SECTION

SCALE 1/4" = 1'-0"



TYPICAL ROADWAY SECTION

SCALE 1" = 1'-0"

PROJECT PROCESSED UNDER  
SECONDARY ROAD PLAN

SUBMITTED BY ORDER OF THE STATE HIGHWAY BOARD  
APPROVED: [Signature] DATE: 5-1-78

DEC 21 1981

STRESS LEVELS	LOAD RATING (Tons)					
	HL	H	SS	SA	SA	SA
INVENTORY	42	33				
OPERATING	46	71	52	54	78	
	108	101				

RIGHT-OF-WAY DIVISION  
TOWN FILE  
PERPETUAL  
Town of VT 105  
APPROVED: [Signature] DATE: 9-1-1978  
OPERATING

- INDEX OF SHEETS
- TITLE SHEET
  - QUANTITIES AND ESTIMATES
  - CONTRACTS
  - PLAN
  - PROFILE
  - PLAN AND ELEVATION
  - SUPERSTRUCTURE DETAILS
  - ABUTMENT NO. 1 PLAN AND ELEVATION
  - ABUTMENT NO. 2 PLAN AND ELEVATION
  - ABUTMENT NO. 3 AND 4 ELEVATION
  - REINFORCING STEEL SCHEDULE
  - ROADWAY CROSS SECTION
  - CHANNEL CROSS SECTION
  - STANDARD SHEETS
  - JULY 1978 R
  - APRIL 20 1978 R
  - SEPT 19 1978 R
  - JUNE 1 1978 R
  - SEPT 12 1978 R
  - APRIL 15 1978 R
  - JAN 8 1978 R
  - APRIL 3 1978 R
  - APRIL 15 1978 R
  - JAN 27 1978 R

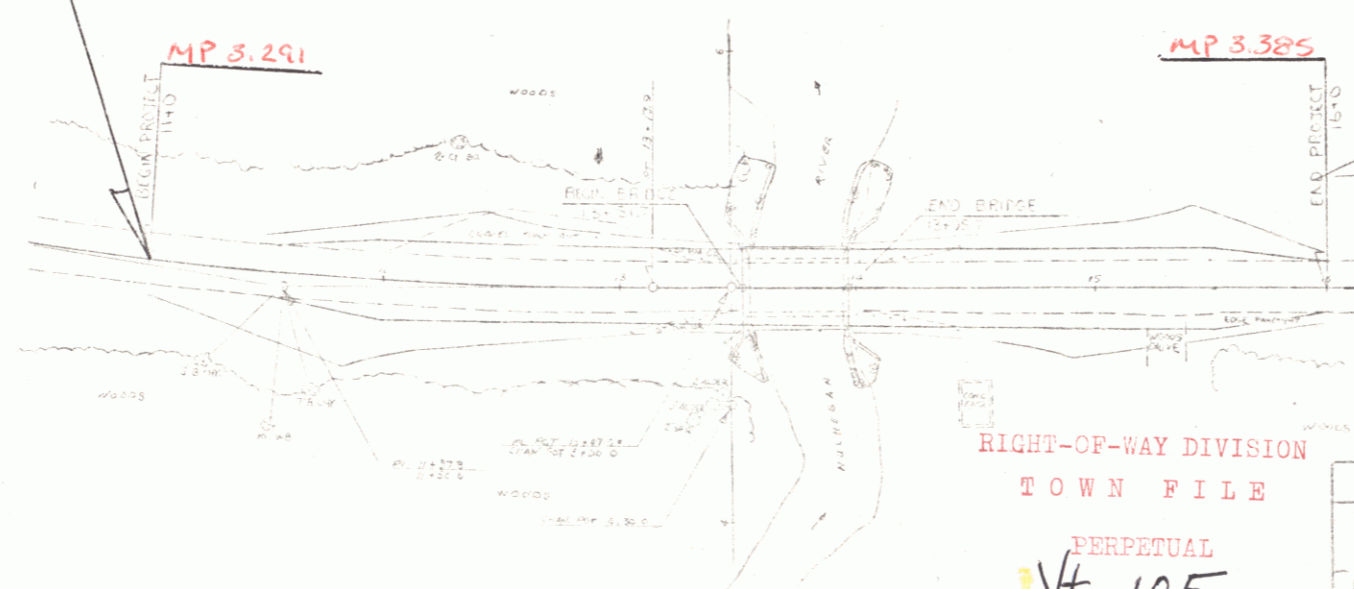
GENERAL NOTES:

- FOR ADDITIONAL NOTES SEE STD. SH. 58-RB-76, ALLIED UNIFORM SPEC. FOR LK15
- DESIGN IS FOR WASHTE 115-28 LIVE LOAD WITH ALLOWANCE FOR 2" FUTURE PAVEMENT
- THE CONTRACTOR SHALL FURNISH ALL MATERIALS AS SHOWN ON THIS SHEET. ALL MATERIALS SHALL BE SUBJECT TO INSPECTION AND APPROVAL BY THE ENGINEER. ALL MATERIALS SHALL BE SUBJECT TO INSPECTION AND APPROVAL BY THE ENGINEER.
- DURING THE CONSTRUCTION PERIOD THE CONTRACTOR SHALL FURNISH EROSION CONTROL MEASURES TO PREVENT POLLUTION OF THE ADJACENT WATERSHEDS AND TO PREVENT DAMAGE TO THE ADJACENT WATERSHEDS AND TO PREVENT DAMAGE TO THE ADJACENT WATERSHEDS.
- THE ESTABLISHMENT SHALL BE AS DIRECTED BY THE ENGINEER AND AS SHOWN ON THIS SHEET. ALL MATERIALS SHALL BE SUBJECT TO INSPECTION AND APPROVAL BY THE ENGINEER.

BEGIN R.O.W. PROJECT F-BHF034-3(5)S  
STA. 11+00 @

END R.O.W. PROJECT F-BHF034-3(5)S  
STA. 16+50 @

- CONVENTIONAL SIGNS
- COUNTY LINE
  - TOWN LINE
  - LIMITS OF ACCESS
  - POINT OF ACCESS
  - FENCE LINE
  - STONE WALL
  - TRAVELLED WAY
  - GUARD RAIL
  - RAILROAD
  - SURVEY LINE
  - CULVERT
  - POWER POLE
  - TELEPHONE POLE
  - TREE
  - P.A. CONST. IDENTIFICATION SIGNS
  - PROPERTY LINE
  - R.O.W. TAKING LINE
  - SLOPE RIGHTS
  - TOP OF CUT
  - TOP OF SLOPE



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STATE OF VERMONT  
DEPARTMENT OF HIGHWAYS  
RIGHT-OF-WAY PLANS  
DETAIL SHEET

TABLE OF PROJECT PROPERTY ACQUISITION

PARCEL NO.	GRANTOR	SHEET NO.	BEGINNING STATION	ENDING STATION	TAKING	REM.	RIGHTS	TITLE TAKEN	DATE	TOWN OR CITY RECORDED	BK.	PG.	REMARKS
1 A	KALENIAN, ALBA	3	11+00 LT. 12+00 LT.	16+50 LT. 13+11 LT.	0.32 A±		CONST. EASE.(T) (0.01A±)	W. D.	3-23-79	FERDINAND	22	323A	500 S.F.±
B		3	11+00 RT. 12+00 RT. 14+50 RT.	16+50 RT. DET. 15+66 RT.	0.29A±		RIGHT TO CONSTRUCT DETOUR (T) (0.35A±) ALL R.T. & I.						CONCRETE FOUNDATION

TABLE OF REVISIONS

REVISION NO.	SHEET NO.	DESCRIPTION OF REVISION	DATE	MADE BY	APPROVED BY

MADE BY: A.G.S. DATE 9/11/78  
CHECKED BY: W.E.B. DATE 9/11/78

DR RT - DRAINAGE RIGHT  
DIT RT - DITCHING RIGHT  
CH RT - CHANNEL RIGHT  
DRIVE RT - DRIVE RIGHT  
CUL. RT. - CULVERT RIGHT  
⊙ - DEMOLITION OR REMOVAL  
[W] - WATER SOURCES

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

LEGEND  
- - - - - CONST. EASE.      - - - - - CONST. EASEMENT  
SR      SR      SLOPE RIGHTS  
P      P      PROPERTY LINE  
Δ      Δ      TOP OF CUT  
○      ○      TOE OF SLOPE

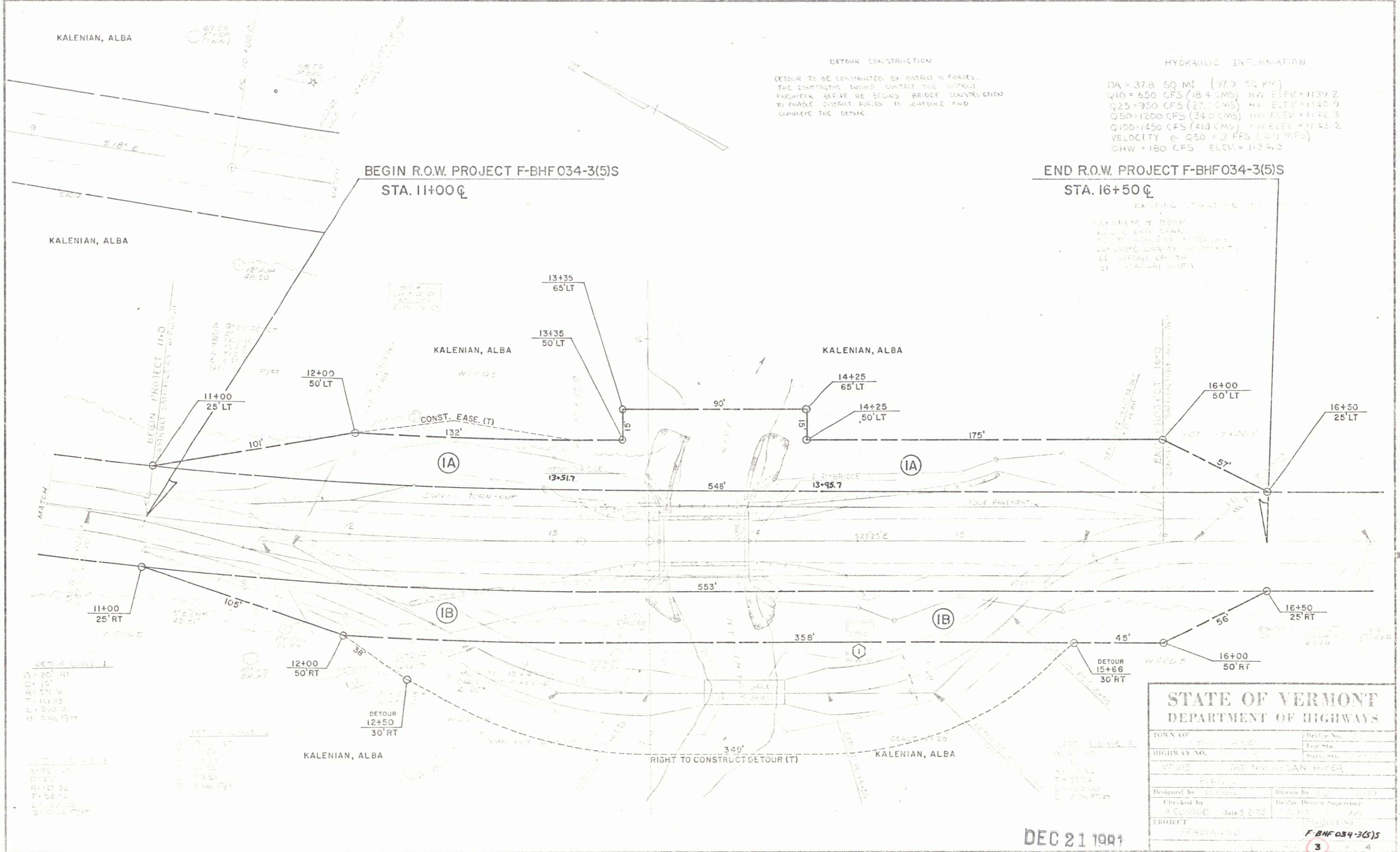
APPROVED Thomas P. West DATE 9-1-78  
CHIEF OF PLANS & TITLES

PROJECT FERDINAND

NO. F-BHF034-3(5)S

SHEET 2 OF 4

DEC 21 1981



**DETOUR CONSTRUCTION**  
 DETOUR TO BE CONSTRUCTED BY DISTRICT ENGINEER.  
 THE CONTRACTOR SHOULD CONTACT THE DISTRICT  
 ENGINEER BEFORE HE BEGINS BRIDGE CONSTRUCTION  
 TO ENABLE DISTRICT ENGINEER TO SCHEDULE AND  
 CONSIDER THE DETOUR.

**HYDRAULIC INFORMATION**  
 DA = 37.8 SQ MI (97.9 SQ KM)  
 Q10 = 650 CFS (18.4 CMS) HW ELEV = 1139.2  
 Q25 = 950 CFS (27.0 CMS) HW ELEV = 1140.9  
 Q50 = 1200 CFS (34.0 CMS) HW ELEV = 1142.3  
 Q100 = 1450 CFS (41.0 CMS) HW ELEV = 1143.2  
 VELOCITY @ Q50 = 3 FPS (0.9 MPS)  
 CHW = 180 CFS ELEV = 1134.3

**DETOUR CURVE 1**  
 Δ = 20° RT  
 CI = 10'  
 TA = 57.0°  
 DI = 104.0°  
 LI = 250.0'  
 CI = 5.06 FT/FT

**DETOUR CURVE 2**  
 Δ = 45° RT  
 CI = 15'  
 TA = 127.3°  
 DI = 154.7°  
 LI = 200.0'  
 CI = 5.06 FT/FT

<b>STATE OF VERMONT DEPARTMENT OF HIGHWAYS</b>	
TOWN OF <u>FERDINAND</u>	Bridge No. <u>        </u>
HIGHWAY NO. <u>        </u>	Log. Sta. <u>        </u>
VT 105 THE NEWNESAN RIVER	
FERDINAND	
Designed by <u>D. Woods</u>	Drawn by <u>        </u>
Checked by <u>A. Elwood</u>	Bridge Design Supervisor <u>        </u>
PROJECT <u>        </u>	PROJECT NO. <u>        </u>
DEC 21 1981	

PLAN  
 NOT BOOK  
 No.

PROFILE  
 NOT BOOK  
 No.

