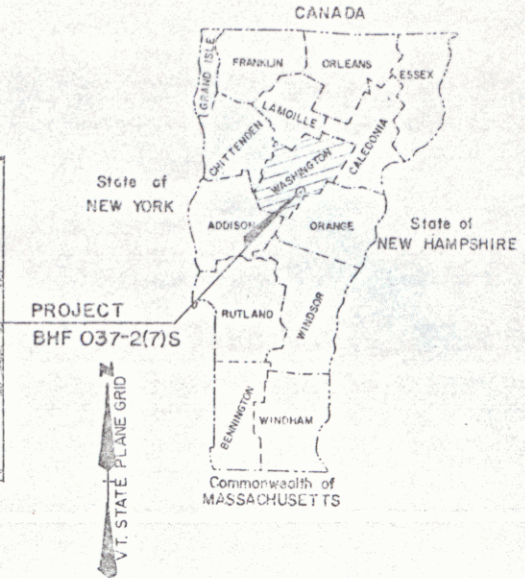
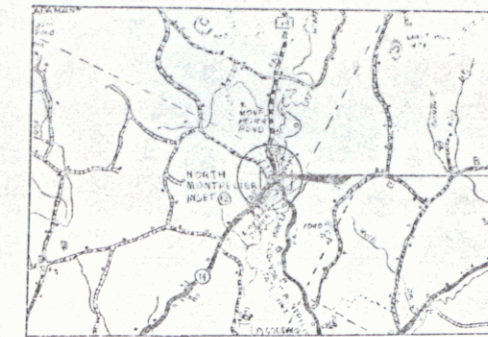


INDEX OF SHEETS

STATE OF VERMONT AGENCY OF TRANSPORTATION



PROPOSED IMPROVEMENT TOWN OF EAST MONTPELIER COUNTY OF WASHINGTON VT. RTE. 14 (E.A.P.)



R.O.W. PLANS

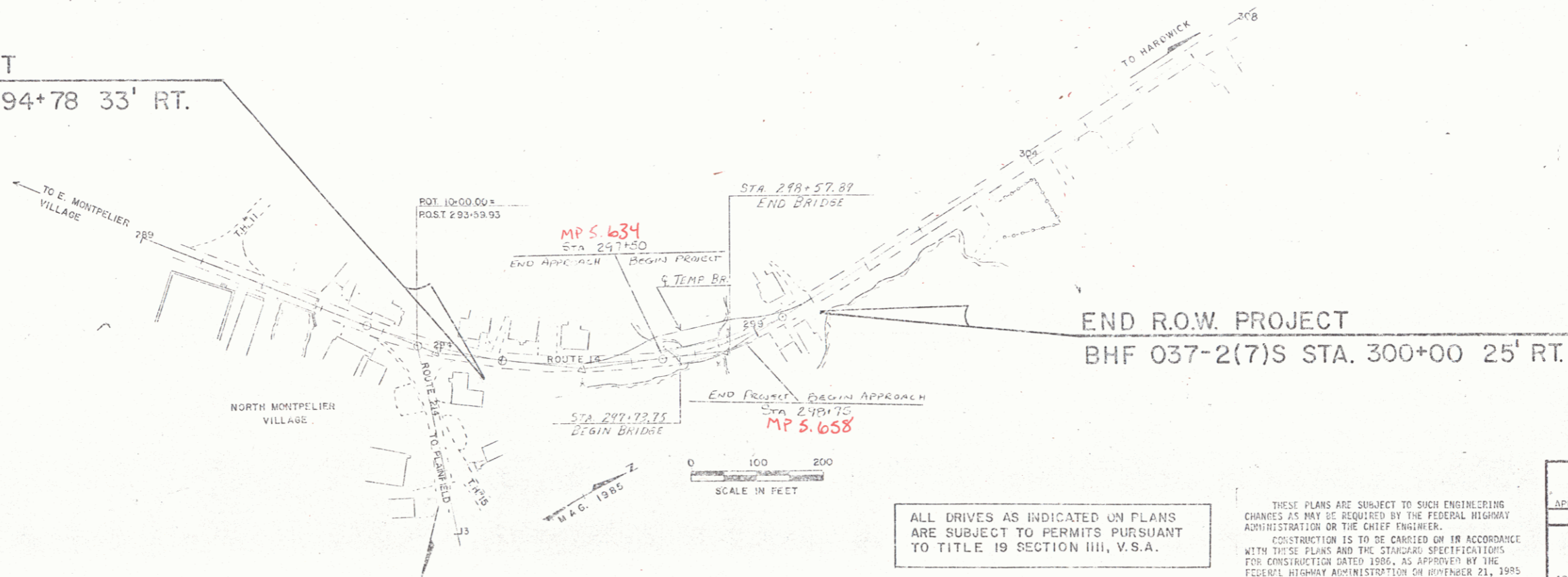
IN EAST MONTPELIER, BEGINNING AT A POINT ON EXISTING VT. ROUTE 14 WHICH IS LOCATED APPROXIMATELY 0.187 MILES SOUTHERLY OF THE EAST MONTPELIER-CALAIS TOWN LINE, AND EXTENDING NORTHERLY FOR APPROXIMATELY 0.024 MILES. -
LENGTH OF R.O.W. 322 FEET 0.098 MILES
LENGTH OF ROADWAY 45 FEET 0.009 MILES
LENGTH OF BRIDGE 80 FEET 0.015 MILES
LENGTH OF PROJECT 125 FEET 0.024 MILES

PROJECT WORK TO CONSIST OF REHABILITATION AND WIDENING OF BRIDGE NO. 72 AS WELL AS ASSOCIATED ROADWAY APPROACH AND CHANNEL WORK.

BEGIN R.O.W. PROJECT
BHF 037-2(7)S STA. 294+78 33' RT.

- CONVENTIONAL SIGNS
- COUNTY LINE
 - TOWN LINE
 - LIMITS OF ACCESS
 - POINT OF ACCESS
 - FENCE LINE
 - STONE WALL
 - TRAVELED WAY
 - GUARD RAIL
 - RAILROAD
 - SURVEY LINE
 - CULVERT
 - POWER POLE
 - TELEPHONE POLE
 - TREES
 - CONTROL OF ACCESS
 - PROPERTY LINE
 - R.O.W. TAKING LINE
 - SLOPE RIGHTS
 - TOP OF CUT
 - TCE OF SLOPE

DATUM
VERTICAL N/A
HORIZONTAL N/A



END R.O.W. PROJECT
BHF 037-2(7)S STA. 300+00 25' RT.

ALL DRIVES AS INDICATED ON PLANS ARE SUBJECT TO PERMITS PURSUANT TO TITLE 19 SECTION III, V.S.A.

THESE PLANS ARE SUBJECT TO SUCH ENGINEERING CHANGES AS MAY BE REQUIRED BY THE FEDERAL HIGHWAY ADMINISTRATION OR THE CHIEF ENGINEER. CONSTRUCTION IS TO BE CARRIED ON IN ACCORDANCE WITH THESE PLANS AND THE STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 1986, AS APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION ON NOVEMBER 21, 1985 FOR USE ON THIS PROJECT, INCLUDING ALL SUBSEQUENT REVISIONS AND SUCH REVISED SPECIFICATIONS AND SPECIAL PROVISIONS AS ARE INCORPORATED IN THESE PLANS.

Pin# 78F201
PROJECT PROCESSED UNDER
SECONDARY ROAD PLAN

APPROVED: [Signature] DATE: 12-7-88
Dir. Div. of Engineering and Construction

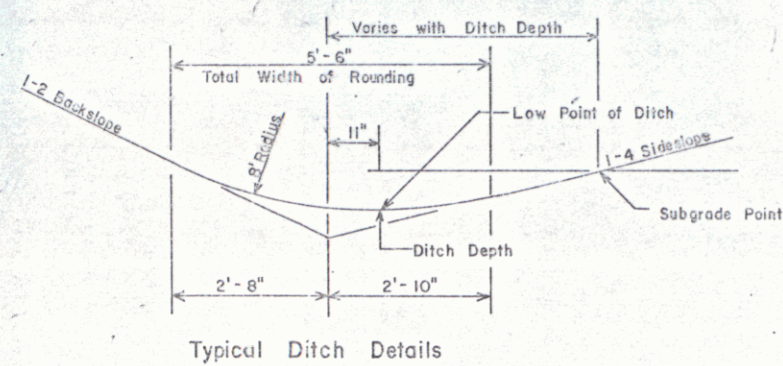
APPROVED: [Signature] DATE: 12/6/88
Chief, Property Administration

EAST MONTPELIER
BHF 037-2(7)S
R.O.W. SHEET 1 OF 9

0-10 SRS 12/17/70

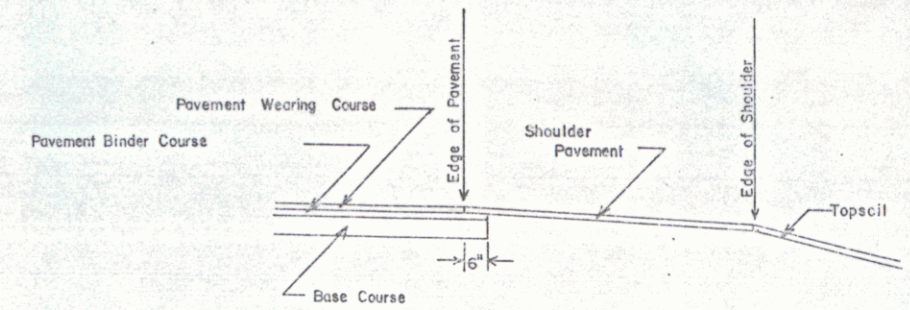
FEB 05 1992

VT. 14 TYPICAL SECTIONS

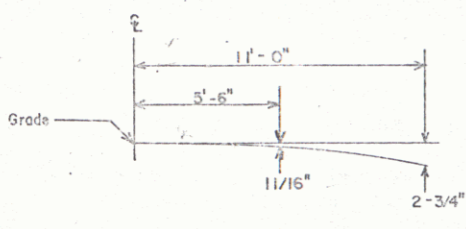


Typical Ditch Details

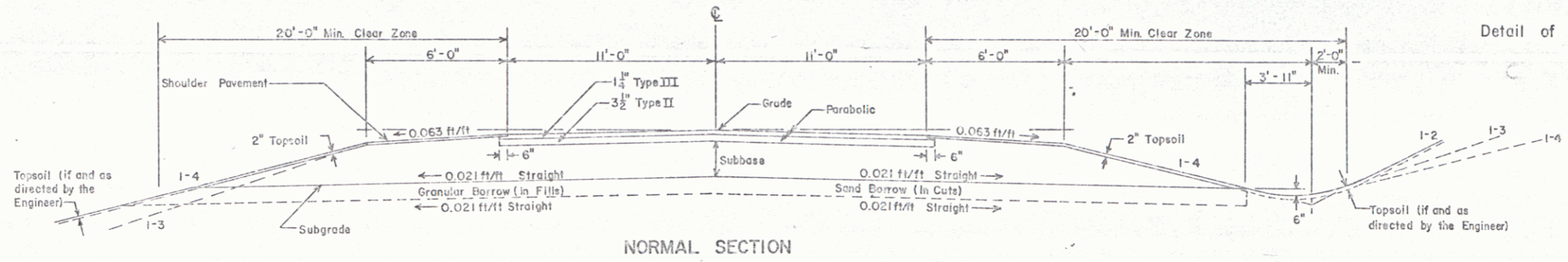
4 3/4" Bituminous Concrete Pavement (2-1 1/2" Lifts of Type II)
 2 3/8" Subbase of Gravel
 Shoulders: 1 1/4" Bituminous Concrete Pavement
 0"-12" Granular Borrow (In Fills) } as indicated on the plans or
 0"-24" Sand Borrow (In Cuts) } as directed by the Engineer



Detail of Shoulder Paving

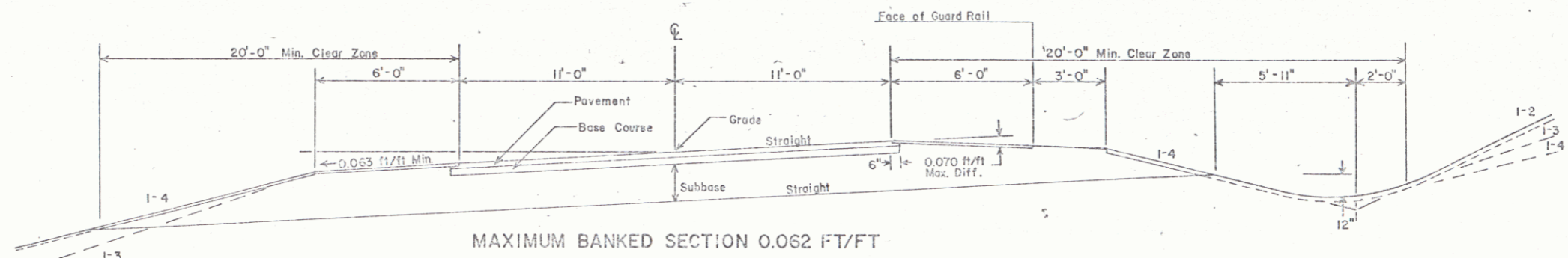


Parabolic Detail



NORMAL SECTION

Material Item	Thickness	Tolerance
Pavement	± 1/4"	
Base Course	± 1/2"	
Subbase	± 1"	
Granular Borrow	± 1"	
Sand Borrow	± 1"	



MAXIMUM BANKED SECTION 0.062 FT/FT

SEEDING FORMULA, ITEM 651.10 URBAN AREAS

% WT	LBS/A	NAME	PUR%	SERM%
37.50	30	CREEPING RED FESCUE	90	85
31.25	25	KENTUCKY BLUEGRASS	85	75
31.25	25	PERENNIAL RYE GRASS	95	90
100.00	80			

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

MARKER POSTS, (WOOD OR STEEL AS SPECIFIED) TO BE PLACED AS DIRECTED BY THE ENGINEER

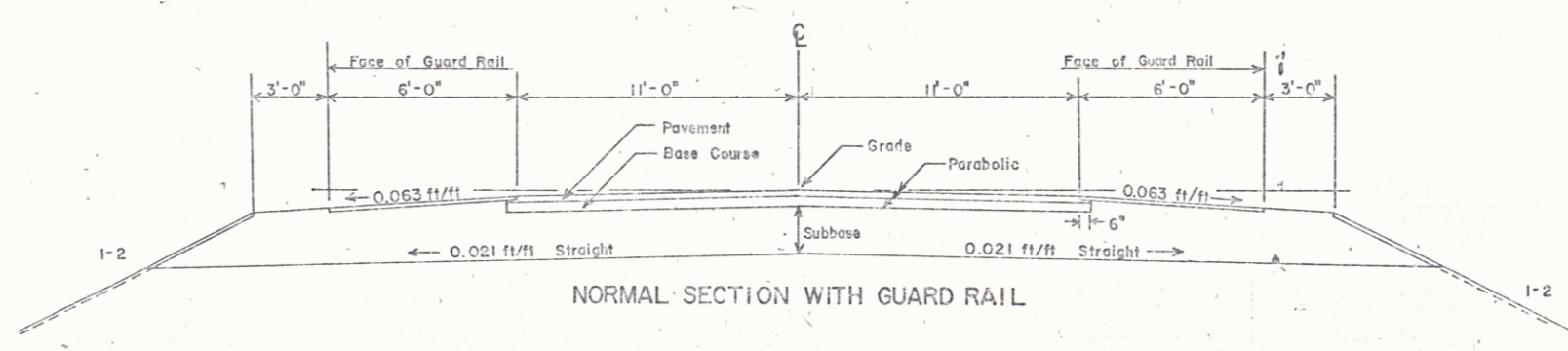
FERTILIZER, ITEM 651.101
 FORMULA 10-20-10 TO BE USED WITH SEED, ITEM 651.10 APPLIED AT THE RATE OF 500 LBS/ACRE

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

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

TOPSOIL, ITEM 653.35 TO BE USED WITH SEED, ITEM 651.10 IN RESIDENTIAL AREAS, AS DIRECTED BY THE ENGINEER

SEE STANDARD SHEET B-5 FOR TYPICAL SLOPE ROUNDING
 SEE STANDARD SHEET D-2 FOR PAY LIMITS OF SAND BORROW WHEN USED IN CONJUNCTION WITH UNDERDRAIN



NORMAL SECTION WITH GUARD RAIL

FEB 05 1992

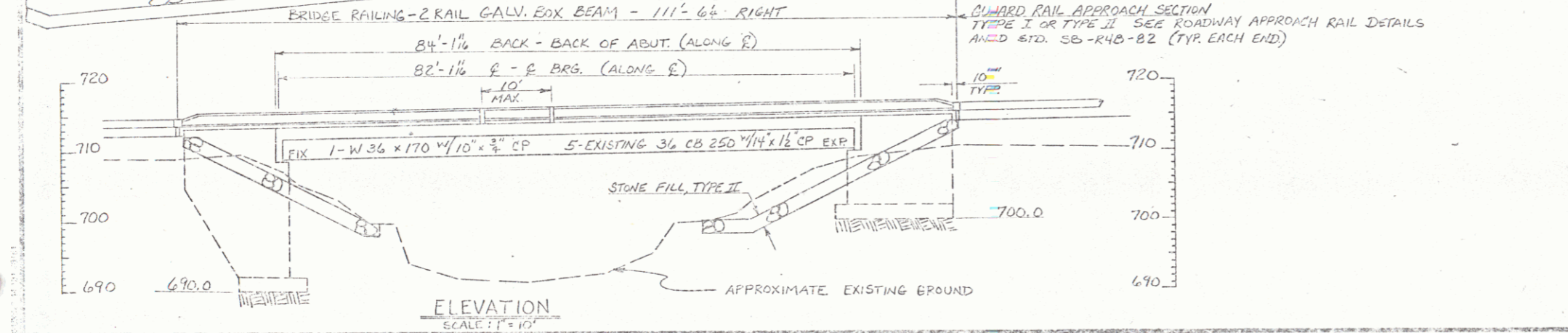
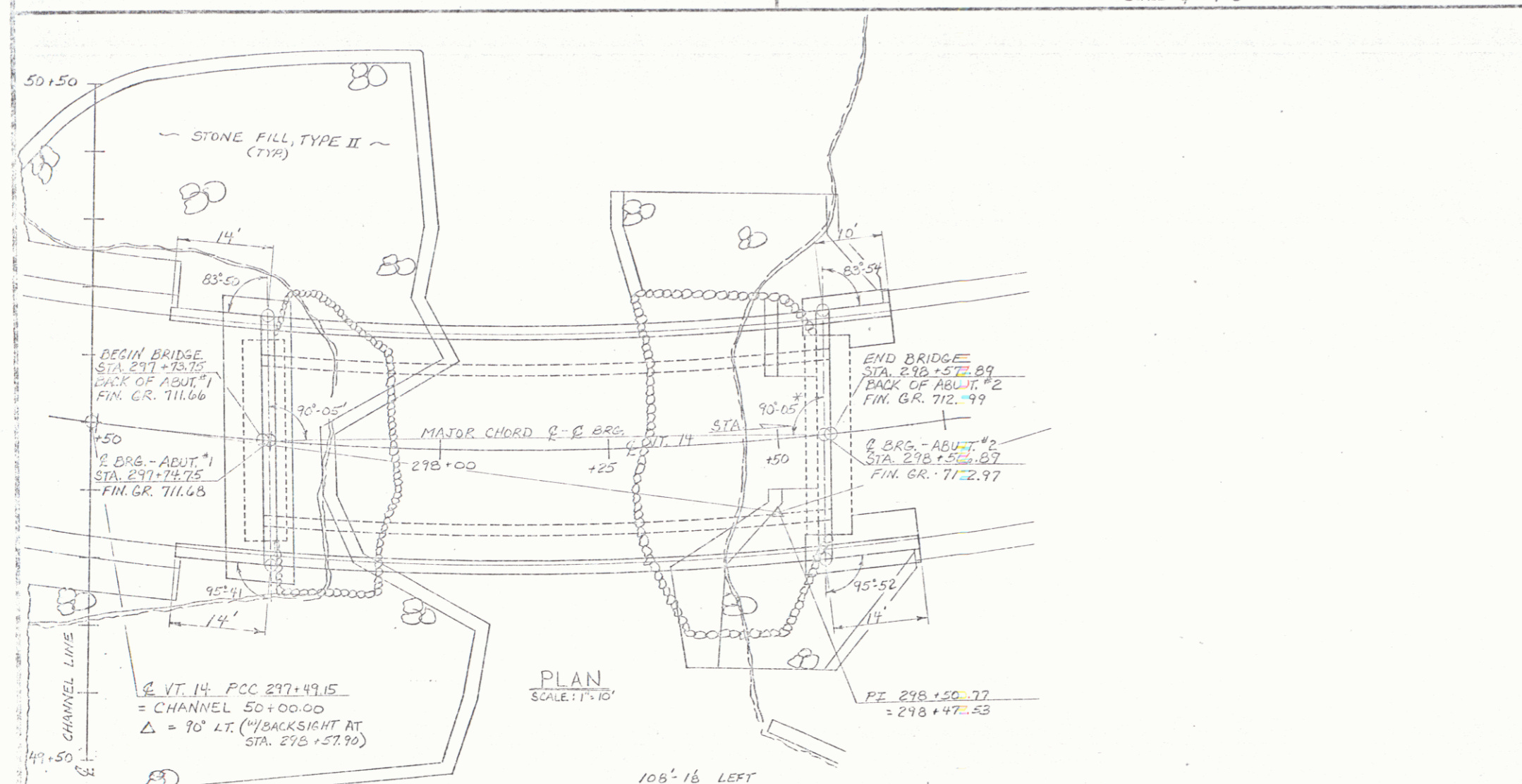
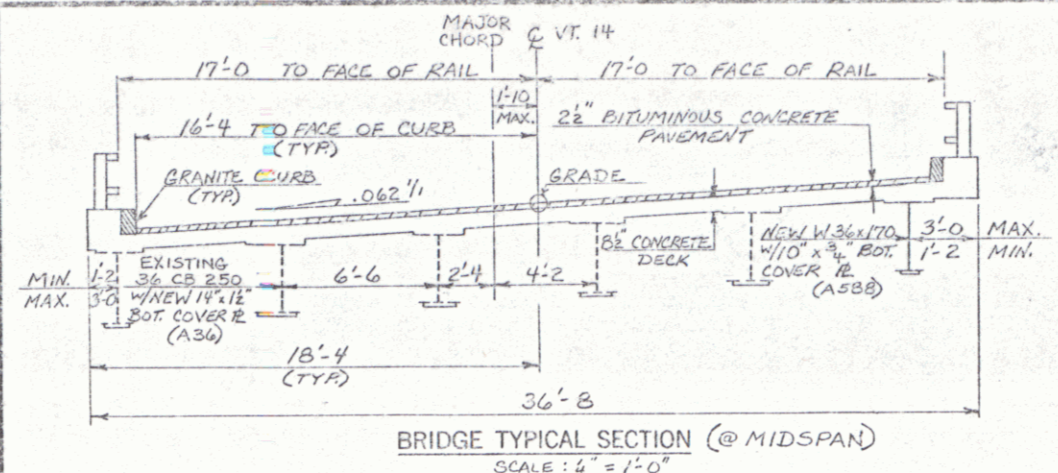
ROW PLANS

SURVEYED BY _____ DATE _____
 DRAWN BY J. REDMOND DATE 9-69
 TRACED BY _____ DATE _____

EAST MONTEPELIER
 BHF 037-2(7)S
 SHEET 2 OF 9

(SEE TYPICAL ROADWAY SECTION)

NEW HIGHWAY SECTION — BRIDGE APPROACHES



EXISTING STRUCTURE

1. STRUCTURE TYPE	SINGLE SPAN ROLLED BEAM	OVERALL LENGTH	84.12 FT.	INVENTORY RATING	H-13
2. SPAN LENGTH(S) CENTER TO CENTER OF BEARINGS	84.12 FT.				
3. CLEAR SPAN LENGTH(S) NORMAL TO STREAM	84.12 FT.				
4. WATERWAY AREA OF FULL OPENING (NORMAL TO STREAM)	1410.50 SQ. FT.	VERTICAL CLEARANCE ABOVE STREAMBED	17 FT.		
5. WATER SURFACE ELEVATION @ Q 233	705.7	WATER SURFACE ELEVATION @ Q			
6. WATER SURFACE ELEVATION AT FLOOD OF RECORD	708.3	YEAR		ESTIMATED DISCHARGE	
7. DOES ALL WATER PASS THROUGH EXISTING STRUCTURE	YES	IF NOT, AT WHAT FREQUENCY AND ELEVATION DOES RELIEF OCCUR?			
8. TYPE OF SUBSTRUCTURE FOUNDATION MATERIAL	20# GRAV. - ABUT. #1			LEDGE - ABUT. #2	
9. DISPOSITION OF STRUCTURE	RELIABILITY				

NEW STRUCTURE

1. STRUCTURE TYPE	SINGLE SPAN COMPOSITE BEAM	OVERALL LENGTH	84.14 ALONG Q
2. SPAN LENGTH(S) CENTER TO CENTER OF BEARINGS	84.14 FT.		
3. VERTICAL CLEARANCE ABOVE STREAMBED OR ROAD UNDER	17 FT.		
4. CLEAR SPAN LENGTH(S) NORMAL TO STREAM	84.14 FT.		
5. WATERWAY AREA OF FULL OPENING (NORMAL TO STREAM)	1410.50 SQ. FT.		
6. ARE PROVISIONS TO BE MADE FOR PUBLIC UTILITIES?	NO		

HYDRAULIC DATA:

Q 233	1450 CFS	WATER ELEVATION	705.7	VELOCITY	2.0 FPS
Q 10	650	WATER ELEVATION	706.9	VELOCITY	3.2
Q 25	1700	WATER ELEVATION	707.7	VELOCITY	4.1
Q 50	1900	WATER ELEVATION	708.3	VELOCITY	4.0
Q 100	2650	WATER ELEVATION	708.3	VELOCITY	5.8

2. DRAINAGE AREA: 501 SQ. MI. CHARACTER OF TERRAIN: ROLLING TO MOUNTAINOUS

3. ARE THERE OBSTRUCTIONS TO A PIER IN THE STREAM? NO

4. DOES STREAM REACH ITS MAXIMUM HIGH WATER ELEVATION RAPIDLY? NO

5. NATURE OF NATURAL STREAMBED: SAND AND GRAVEL (MUCH SEDIMENT DEPOSITED)

6. ESTIMATED SCOUR DEPTH: 1.2 FT. COMMENT ON: SLIGHT

7. WILL ALL WATER PASS THROUGH NEW STRUCTURE? YES

8. VERTICAL CLEARANCE ABOVE Q 50: 17.0 FT. LIMITED BY: BOTTOM OF BEAMS

9. IS DESIGN STAGE AFFECTED BY UPSTREAM OR DOWNSTREAM CONDITIONS? YES

10. AVERAGE DAILY LOW FLOW: 1/2 CS. DEPTH: 7.0 FT. AVERAGE DAILY HIGH FLOW: 100 CFS. DEPTH: 7.1 FT.

11. STREAMBANK OR CHANNEL PROTECTION REQUIRED: STONE FILL TYPE II

12. DISTANCE TO EXISTING UPSTREAM STRUCTURE: 1 MI. SPAN: 84.14 FT. WATERWAY AREA OF FULL OPENING: 1410.50 SQ. FT.

13. DISTANCE TO EXISTING DOWNSTREAM STRUCTURE: 2.1 MI. SPAN: 87.77 FT. WATERWAY AREA OF FULL OPENING: 200 SQ. FT.

ALLOWABLE STRESSES:

1. DESIGN LIVE LOAD	HS-20-44
2. ALLOWABLE LOAD FOR SPREAD FOOTINGS ON SOIL	N/A
3. ALLOWABLE LOAD FOR PILING	N/A
4. ALLOWABLE STRESS FOR STRUCTURAL STEEL	ASTM A 588, 60 TENSION 47,000 PSI; 10,000 PSI FOR EXISTING BEAMS
5. ALLOWABLE STRESS FOR REINFORCING STEEL	GRADE 60 TENSION 57,000 PSI; COMPRESSION 20,000 PSI
6. ALLOWABLE STRESS FOR CONCRETE	CLASS A 1: 3,500 PSI; CLASS B 1: 3,500 PSI

TRAFFIC MAINTENANCE:

1. IS TRAFFIC TO BE MAINTAINED? YES

2. TEMPORARY BRIDGE REQUIREMENTS: ONE OR TWO WAY: ONE

ADDITIONAL DESIGN CONSIDERATIONS

- COVER PLATES FOR EXISTING 36 CB 250 SHALL BE ASTM A 36 STEEL.
- COVER PLATE FOR NEW W 36 X 170 SHALL BE ASTM A 588 STEEL.

LOAD RATING (TONS)

STRESS LEVELS	TRUCK				
	H	HS	302	6 AXLE	30, 40, 50, 60, 70, 80, 90
INVENTORY					
0.55 F _v =					
POSTED					
0.67 F _v =					
OPERATING					
0.75 F _v =					

STATE OF VERMONT
AGENCY OF TRANSPORTATION

TOWN OF EAST MONTPELIER Bridge No. 72

HIGHWAY NO. VT 14 Surv. Sta. 298+16

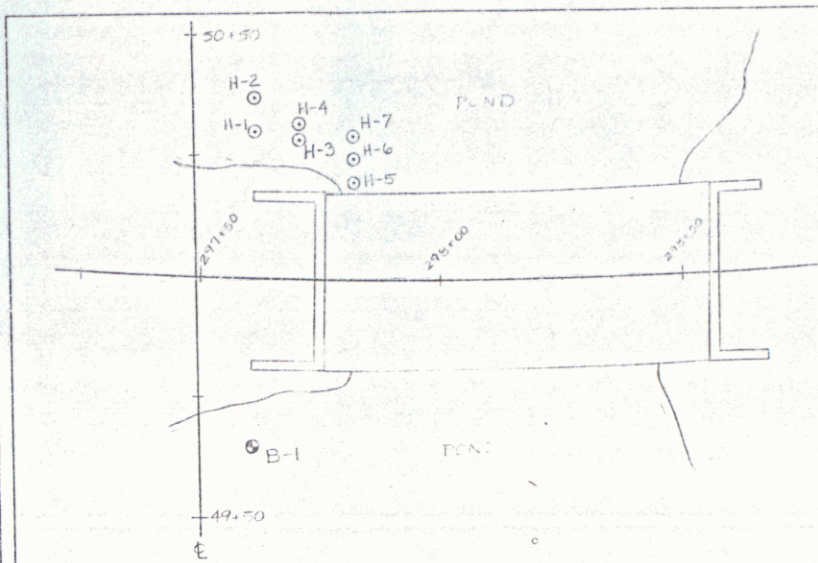
VT 14 OVER N. MONTPELIER POND

PRELIMINARY INFORMATION

Designed by J. B. MCCARTHY | Drawn by J. B. MCCARTHY

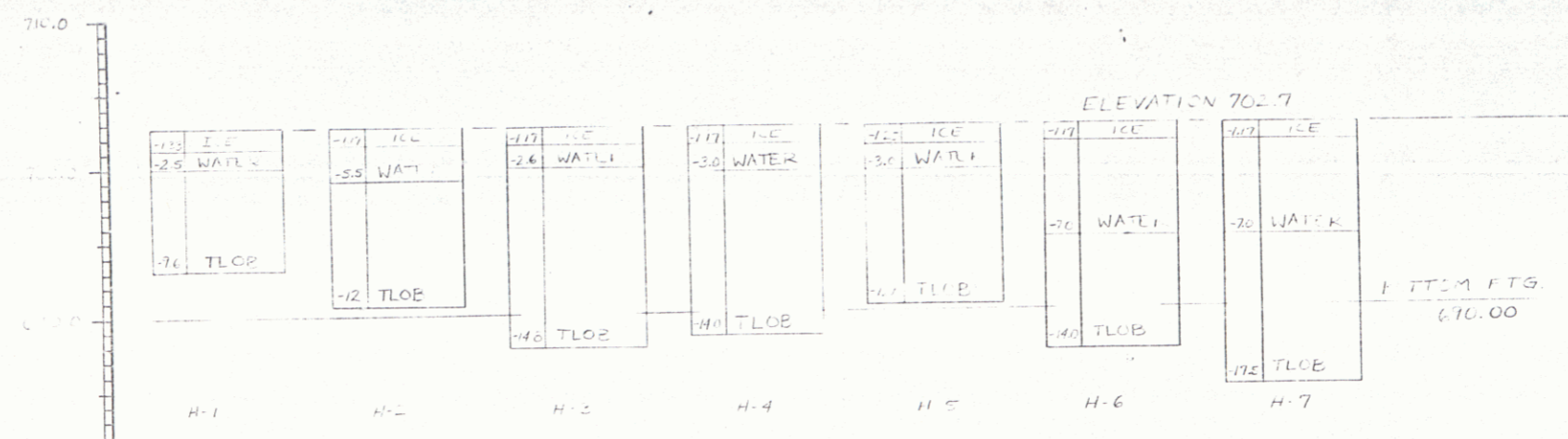
EAST MONTPELIER
BHF 037-2(7)S
SHEET 9 OF 9

DATE	2/27/86
BY	W. J. BROWN
CHECKED BY	W. J. BROWN
SCALE	AS SHOWN
PROJECT	VT. ADT E. MONTPELIER BHF 037-2(7)
SHEET NO.	4 OF 9



BORING LOCATIONS		
N#	STATION	OFF
B-1	297+61	RT 35
H-1	297+60	LT. 30
H-2	297+60	LT. 37
H-3	297+70	LT. 27
H-4	297+70	LT. 32
H-5	297+82	LT. 20
H-6	297+82	LT. 25
H-7	297+82	LT. 30

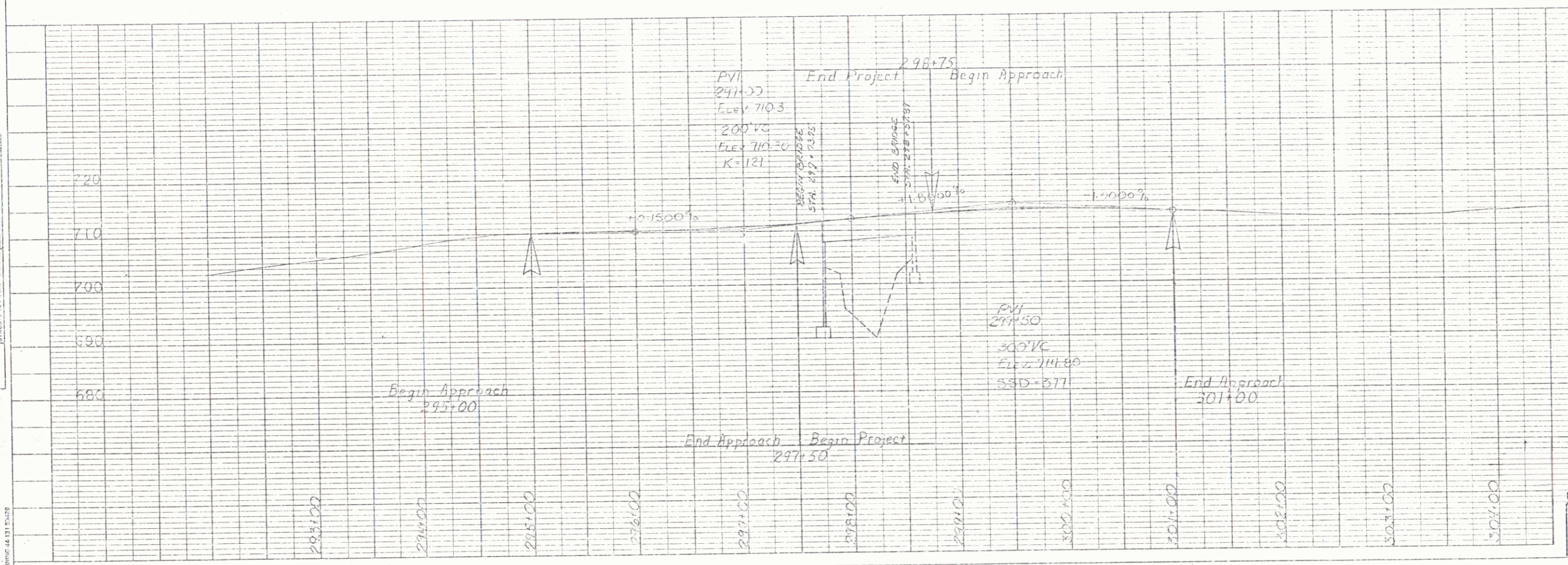
BORING DATA



VT. ADT E. MONTPELIER BHF 037-2(7)
 HOLE NO. 1 STA. 297+61 OFFSET RT 35'
 DRILLER: NICHOLS
 LOG APPROVED BY: G. BACHELDER-ADAMS
 DATE: START 2/27/86 FINISH
 SURFACE ELEVATION 702.7'

DEPTH	FLOW	STANDARD	PLASTICITY	MOISTURE	COLOR	CLASSIFICATION AND PROPERTIES OF SOIL AND ROCK TOP OF T.C.E. & R.O.
0						
10						RIVER BED @ 7.5'
15						NO SAMPLE, VERY SOFT
18.5						TOP OF BEDROCK @ 13.5'
18.5						AYMDC 13.5' - 18.5'
18.5						REC-90.4% ROD-80.2%
23.5						AYMDC 18.5' - 23.5'
23.5						REC-99.0% ROD-75.6%
23.5						ROCK TYPE - GRAY QUARTZITE & MICACEOUS Limestone
23.5						HOLE STOPPED @ 23.5' IN BEDROCK
30						

DATE	2/27/86
BY	W. J. BROWN
CHECKED BY	W. J. BROWN
SCALE	AS SHOWN
PROJECT	VT. ADT E. MONTPELIER BHF 037-2(7)
SHEET NO.	4 OF 9



ROW PLANS
 EAST MONTPELIER
 BHF 037-2(7)S
 SHEET 4 OF 9

PLATE 1 SINGLE PLAT - PROFILE
 CHARLES SHERRING CO.

FEB 05 1992

4

DATE	
PROJECT	
CONTRACT	
NO.	
DATE	
BY	
CHECKED	
APPROVED	

DATE	
PROJECT	
CONTRACT	
NO.	
DATE	
BY	
CHECKED	
APPROVED	

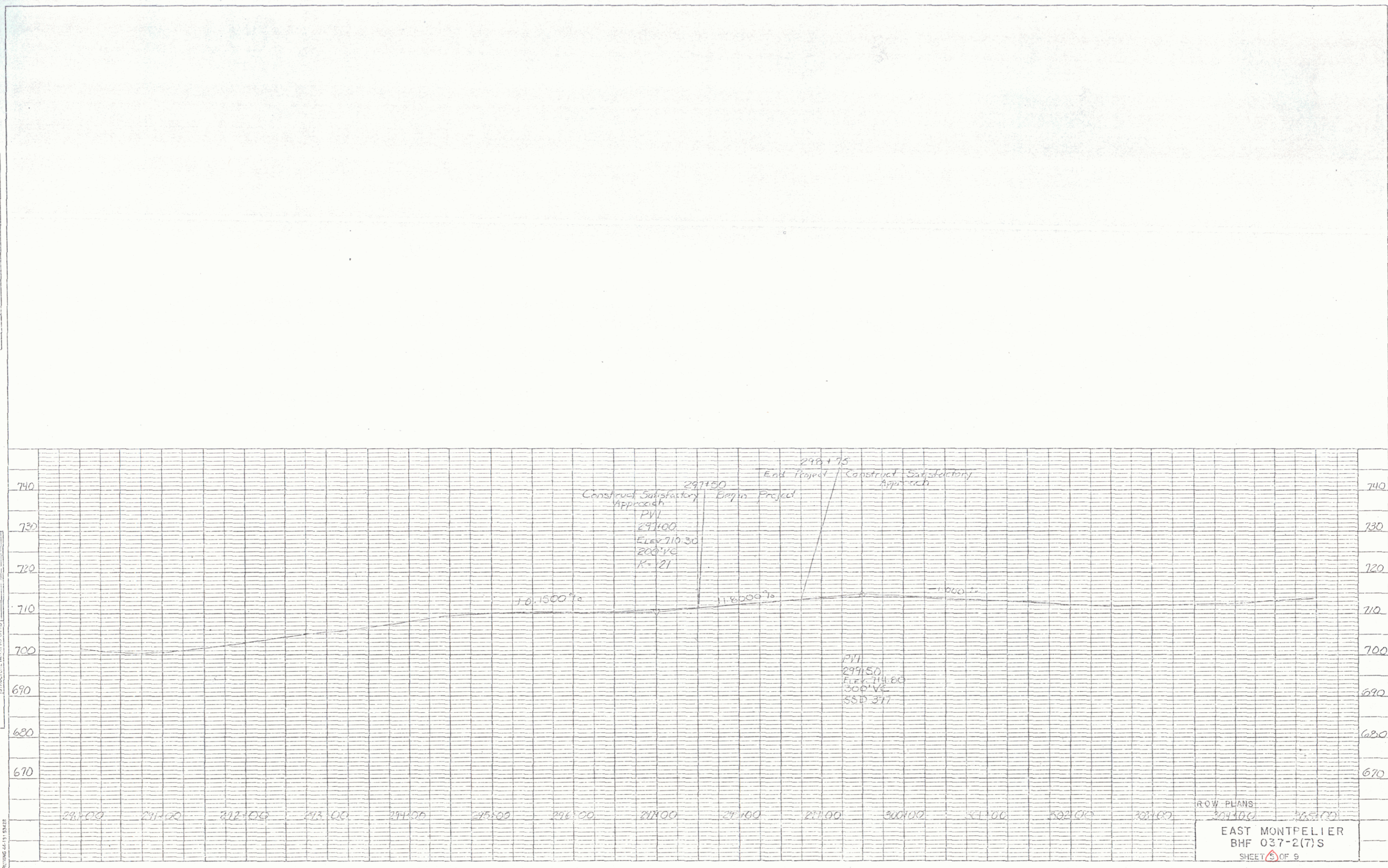


PLATE 1 SINGLE PLAN - PROFILE
CHARLES BRONING P.E.

ROW PLANS
304+00 305+00
EAST MONTPELIER
BHF 037-2(7)S
SHEET 5 OF 9

FEB 05 1992

5

**STATE OF VERMONT
AGENCY OF TRANSPORTATION
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	REVISION NO.	SHEET	DESCRIPTION OF REVISION	DATE	MADE BY	APPROVED BY
1	VANZANDT, ROBERT R. JR. & KAREN M.	9	294+78 CL. 295+40 RT. 295+45 RT. 296+39 RT.	296+35 CL. 296+39 RT.	0.12A±		ALL R.T. & I. EASE. (T) SLOPE (P) 0.01A± CUL. DIT. & DR. (P)	COND	07-16-90	EAST MONTPEL.	43	433-436	VT. RTE. 14 INSTALL WATER LINE & SLEEVE 225 S.F.±	1	6	PARCEL NO. 1, 2 & 3. REMOVE 'A' FROM PARCEL 1A & 2A. CHANGE TAKE AREA ON PARCEL NO. 3 FROM 0.01A± TO 0.10A±. PER C.O. 7556.	1-19-89	M.J.R.	L.W.B.
														2	7,9	PARCEL NO. 4 BROWN. CHANGE LANDSCAPE (T) TO REMOVE & RESET (T). PER C.O. 7692.	5-24-89	A.S.J.	J.D.P.
														3	6,9	PARCEL NO. 2 SOULE. CHANGE DRIVE WIDTH FROM 15' TO 10'. THUS SAVING TREE. PER C.O. 7732.	7-6-89	M.J.R.	L.W.B.
2	SCULE, ALLEN	9	294+78 CL. 295+60 LT. 296+66 LT.	295+65 CL.	0.05A±		ALL R.T. & I. EASE. (T) DRIVE (T)	COND	07-16-90	EAST MONTPEL.	43	433-436	VT. RTE. 14 2150 S.F.± INSTALL WATER LINE & SLEEVE 10' GRAVEL DRIVE MP 0560	4	7,8,9	PARCEL NO. 4 BROWN. CHANGE WIDTH OF DRIVE AT 299+86 TO 14'. CHANGE ENDING STA. OF EASE. (T) TO 299+29 LT. (950 S.F.±, 0.02A±) PER C.O. 7774.	9-26-89	M.J.R.	L.W.B.
														7,8,9	PARCEL NO. 5 HART. CHANGE WIDTH OF DRIVE AT 299+35 RT. TO 24'. ADD ADDITIONAL TOPO. PER C.O. 7774.	9-26-89	M.J.R.	L.W.B.	
														5	6,8,9	PARCEL NO. 3 KREIS. ADD ADDITIONAL STONE FILL AT STA. 296+94 LT. CHANGE BEGIN. STA. OF CHANNEL (P) FROM 297+20 LT. TO 296+94 LT., 0.02A±, 730 S.F.±. PER C.O. 7782.	12-04-89	M.J.R.	F.J.M.
3	WEBER, ROXANNA J.; KREIS, HENRY, J.; KREIS, ERWIN A.; KREIS, LISA E.; HILL, MIRIAM R.; KREIS, MARION A.-LIFE ESTATE	9	295+65 CL. 295+66 LT. 295+90 LT. 296+70 LT. 296+94 LT. 297+10 LT.	297+40 CL. 296+30 LT. 297+25 LT. 297+40 LT.	0.10A±		ALL R.T. & I. DRIVE (T) EXCEPT & RESERVE EASE. (T) 0.01A± CHANNEL (P) 0.02A± REMOVE & RESET (T)	WD		EAST MONTPEL.			VT. RTE. 14 15' GRAVEL DRIVE MP 0560 PORCH TEMP. BRIDGE & DETOUR 440 SF± 730 S.F.± LILAC TREES	6	9	PARCEL NO. 4 BROWN. ADD 'CAUTION' NOTE TO LAYOUT SHEET. (REFERING TO LEACH FIELD) PER C.O. 7835.	12-13-89	A.S.J.	F.J.M.
														7	7,9	PARCEL NO. 5 HART. CHANGE TITLE TO SMITH, GERALD P. & BARBARA J. PER C.O. 7934.	05-29-90	M.J.R.	L.W.B.
														8	7,8	PARCEL NO. 5 SMITH. ADD GUARDRAIL NOTE TO LAYOUT. ADD GUARDRAIL (P) AT STA. 299+40 RT. ~ 299+50 RT. ADD ALL R.T. & I. FOR WATERLINE AT STA. 299+26 LT. ~ 299+57 RT. PER C.O. 7940. <i>Myans to Design 7-30-90</i>	6-28-90	M.J.R.	L.W.B.

ACCT. RYAN
ZFHC70JH/8F20ID.DGN
PREF
DATE PLOTTED 27-JUN-1990

DR. (T)- DRAINAGE RIGHT
DIT. (T)- DITCHING RIGHT
CH. (T)- CHANNEL RT.
DRIVE (T)- DRIVE RIGHT
CUL. (T)- CULVERT RIGHT
W- WATER SOURCES

PRESENT R.O.W.
TAKING WITHOUT ACCESS
TAKING WITHOUT ACCESS ALONG PROPERTY LINE
TAKING WITH ACCESS
PERMANENT EASEMENT
TEMPORARY EASEMENT

LEGEND
--- CONST. (T) ---
SR SR
P
L
△ △ △
○ ○ ○

CONSTRUCTION EASEMENT
SLOPE RIGHTS
PROPERTY LINE
TOP OF CUT
TOE OF SLOPE
APPROVED: LAURENCE BLISS, L.S. DATE: 12-7-88
AGENT D. PLANS & TITLES

R. O. W. PLANS
EAST MONTPELIER
BHF 037-2 (7) S
SHEET 6 OF 9

FEB 05 1992

6

TABLE OF PROJECT PROPERTY ACQUISITION

STATE OF VERMONT
 AGENCY OF TRANSPORTATION
 RIGHT OF WAY PLANS
 DETAIL SHEET

PARCEL NO.	GRANTOR	SHEET NO.	BEGINNING STATION	ENDING STATION	TAKING	REM.	RIGHTS	TITLE TAKEN	DATE	TOWN OR CITY RECORDED	BK.	PG.	REMARKS	REVISION NO.	SHEET	DESCRIPTION OF REVISION	DATE	MADE BY	APPROVED BY	
4	BROWN, JOSEPH E. & LAURA R.	9	298+57 CL. 298+57 LT. 298+64 LT. 298+75 LT. 298+95 LT. 299+10 LT. 299+30 LT. 299+66 LT.	300+00 CL. 298+65 LT. 299+29 LT. 299+30 LT.	0.08A±		ALL R. T. & I. (P) CHANNEL (T) 0.02A± EASE. (P) CUL. & DR. (P) REMOVE & RESET (T) REMOVE & RESET (T) DRIVE (T)	COND	07-16-90	EAST.MONTPEL.	43	433-436	VT. RTE. 14 3500 S.F. ± TEMP. BRIDGE & DETOUR 950 S.F. ± FENCE WATERLINE LILAC TREES 14' GRAVEL DRIVE MP 0568							
5	SMITH, GERALD P. & BARBARA J.	9	298+40 CL. 298+40 RT. 299+55 RT. 299+26 LT. 299+35 RT. 299+40 RT. 299+55 RT.	300+00 CL. 298+60 RT. 299+15 RT. 299+57 RT. 299+50 RT. 299+75 RT.	0.09A±		ALL R. T. & I. (P) CHANNEL (T) 0.01A± SLOPE (T) ALL R. T. & I. (T) DRIVE (T) GUARDRAIL (P) EXCEPT & RESERVE	WD	03-13-90	EAST.MONTPEL.	44	30-40	VT. RTE. 14 4125 S.F. ± 200 S.F. ± WATERLINE 24' GRAVEL DRIVE MP 0567 HOUSE							
6	NEW ENGLAND TELEPHONE CO.												UTILITY							
7	GREEN MOUNTAIN POWER CORP.												UTILITY							

FEB 05 1992

ADCT, RYAN
 21-M70-0378F200.DGN
 PPR:
 DATE PLOTTED 27-JUN-1990

DR. (T)- DRAINAGE RIGHT
 DIT. (T)- DITCHING RIGHT
 CH. (T)- CHANNEL RT.
 DRIVE (T)- DRIVE RIGHT
 CUL. (T)- CULVERT RIGHT
 [W]- WATER SOURCES

PRESENT R.O.W.
 TAKING WITHOUT ACCESS
 TAKING WITHOUT ACCESS ALONG PROPERTY LINE
 TAKING WITH ACCESS
 PERMANENT EASEMENT
 TEMPORARY EASEMENT

LEGEND

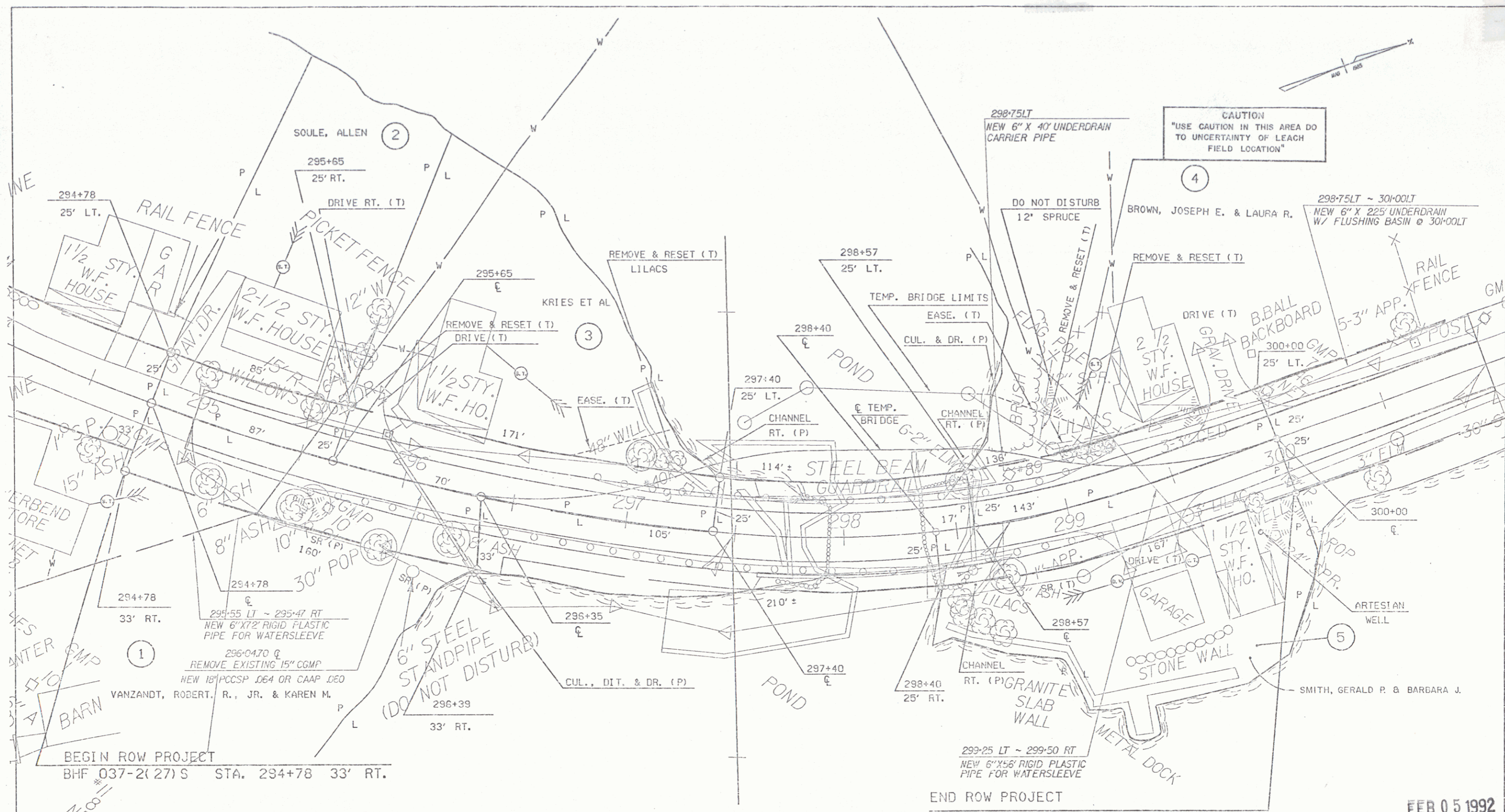
CONST. (T)
 SR SR
 P
 L
 △
 △
 △

CONSTRUCTION EASEMENT
 SLOPE RIGHTS
 PROPERTY LINE
 TOP OF CUT
 TOP OF SLOPE

APPROVED: LAWRENCE BLISS, L.S. DATE: 12-2-94
 AGENT D. PLANS & TITLES

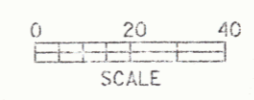
R. O. W. PLANS

EAST MONTPELIER
 BHF 037-2 (7) S
 SHEET 7 OF 9



ACCT. RYAN
 ZPLAFC.03718F20ROW.DGN
 PHE: YBF20ROW.FRT
 DATE PLOTTED 4-DEC-1992

○ DENOTES TREE REMOVAL



FEB 05 1992
 ROW PLANS
 EAST MONTPELIER
 BHF 037-2(7) S
 SHEET 9 OF 9