

R.O.W. PLANS

INDEX OF SHEETS

- 1 TITLE
- 2 LEGEND
- 3 DETAIL SHEET
- 4 LAYOUT SHEET
- 5 PRELIMINARY INFORMATION SHEET
- 6 TYPICAL BRIDGE SECTION
- 7 TYPICAL ROADWAY SECTION
- 8 TIE SHEET
- 9 ALIGNMENT SHEET
- 10 PROFILE SHEET
- 11 EPSC SHEET
- 12 PLAN & ELEVATION

STATE OF VERMONT AGENCY OF TRANSPORTATION



PROPOSED IMPROVEMENT BRIDGE PROJECT TOWN OF ROCHESTER COUNTY OF WINDSOR

ROUTE: VT 73 (RURAL MAJOR COLLECTOR), BRIDGE NO. 16

PROJECT LOCATION: LOCATED IN THE COUNTY OF WINDSOR, TOWN OF ROCHESTER, ON VT 73; BRIDGE NO. 16 OVER CORPORATION BROOK, APPROXIMATELY 2.50 MILES WEST OF THE INTERSECTION WITH VT 73 AND VT 100.

PROJECT DESCRIPTION: WORK TO BE PERFORMED UNDER THIS PROJECT INCLUDES THE REMOVAL AND REPLACEMENT OF EXISTING BRIDGE NO. 16 ON THE EXISTING ALIGNMENT, WITH ASSOCIATED ROADWAY AND CHANNEL WORK.

LENGTH OF STRUCTURE: 62.41 FT
LENGTH OF ROADWAY: 107.59 FT
LENGTH OF PROJECT: 170.00 FT
LENGTH OF ROW PROJECT: 393.00 FT

**BEGIN ROW PROJECT
BRF 0162(17)
STA. 331+57 24.75' LT**

**BEGIN BRIDGE
STA. 333+72.79**

**BEGIN PROJECT
STA. 333+20.00**

**END BRIDGE
STA. 334+35.20**

**END PROJECT
STA. 334+90.00**

**END ROW PROJECT
BRF 0162(17)
STA. 335+50 24.75' RT**

CONVENTIONAL SYMBOLS

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	
TOE OF SLOPE	

ALL DRIVES AS INDICATED ON PLANS
ARE SUBJECT TO PERMITS PURSUANT
TO TITLE 19 V.S.A. § 1111.

SURVEYED BY : VTRANS
SURVEYED DATE : JUNE 2011

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (07)

0 40 80
SCALE

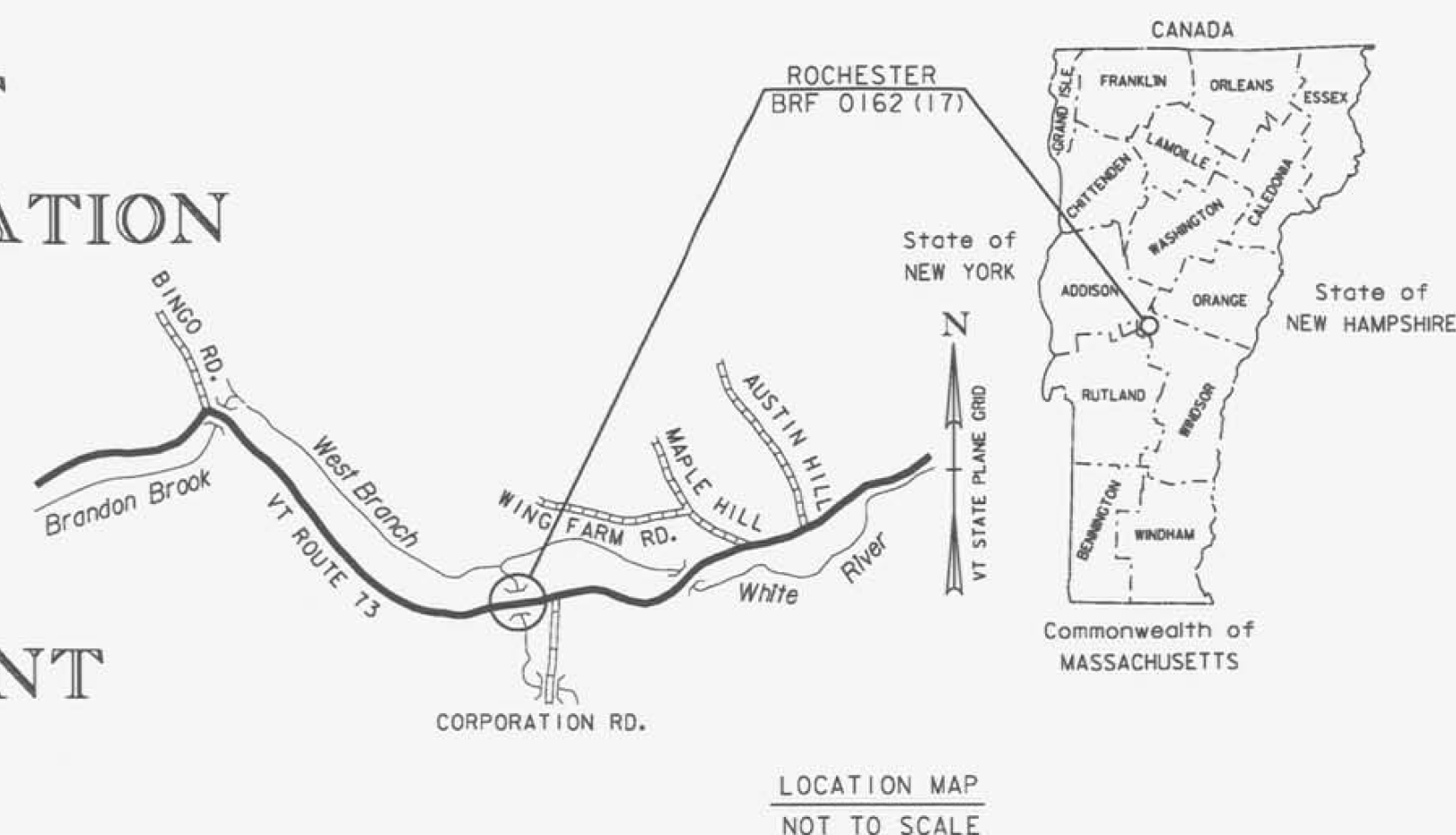
THESE PLANS ARE SUBJECT TO SUCH ENGINEERING
CHANGES AS MAY BE REQUIRED BY THE FEDERAL HIGHWAY
ADMINISTRATION OR THE DIRECTOR OF PROGRAM
DEVELOPMENT.

CONSTRUCTION IS TO BE CARRIED ON IN ACCORDANCE
WITH THESE PLANS AND THE STANDARD SPECIFICATIONS
FOR CONSTRUCTION DATED 2011, AS APPROVED BY THE
FEDERAL HIGHWAY ADMINISTRATION ON JULY 20, 2011
FOR USE ON THIS PROJECT, INCLUDING ALL SUBSEQUENT
REVISIONS AND SUCH REVISED SPECIFICATIONS AND
SPECIAL PROVISIONS AS ARE INCORPORATED IN THESE
PLANS.

APPROVED RICHARD TETREAU DATE 03-25-13
Director of Program Development

APPROVED ROBERT M. WHITE DATE 03-25-13
Chief of Right of Way

ROCHESTER
BRF 0162(17)
ROW SHEET 1 OF 12 SHEETS



GENERAL INFORMATION

SYMBOLS LEGEND NOTE

THE SYMBOLS ON THIS SHEET IS INTENDED TO COVER STANDARD CONVENTIONAL SYMBOLS. THE SYMBOLS ARE USED FOR EXISTING & PROPOSED FEATURES WITH HEAVIER LINEWEIGHT, IN COMBINATION WITH PROJECT ANNOTATION, AS NOTED ON PROJECT PLAN SHEETS. THIS LEGEND SHEET COVERS THE BASICS. SYMBOLS ON PLANS MAY VARY, PLAN ANNOTATIONS AND NOTES SHOULD BE USED TO CLARIFY AS NEEDED.

COMMON TOPOGRAPHIC POINT SYMBOLS

POINT	CODE	DESCRIPTION
*	APL	BOUND APPARENT LOCATION
□	BM	BENCH MARK
□	BND	BOUND
☐	CB	CATCH BASIN
⊕	COMB	COMBINATION POLE
☐	DTHR	DROP INLET THROATED DNC
⊕	EL	ELECTRIC POWER POLE
•	FPOLE	FLAGPOLE
○	GASFIL	GAS FILLER
○	GP	GUIDE POST
✕	GSO	GAS SHUT OFF
•	GUY	GUY POLE
•	GUYW	GUY WIRE
✕	GV	GATE VALVE
⊕	H	TREE HARDWOOD
△	HCTRL	CONTROL HORIZONTAL
△	HVCTRL	CONTROL HORIZ. & VERTICAL
◇	HYD	HYDRANT
•	IP	IRON PIN
•	IPIPE	IRON PIPE
⊕	LI	LIGHT - STREET OR YARD
⊕	MB	MAILBOX
○	MH	MANHOLE (MH)
□	MM	MILE MARKER
•	PM	PARKING METER
□	PMK	PROJECT MARKER
•	POST	POST STONE/WOOD
⊕	RRSIG	RAILROAD SIGNAL
•	RRSL	RAILROAD SWITCH LEVER
✕	S	TREE SOFTWOOD
•	SAT	SATELLITE DISH
⊕	SHRUB	SHRUB
⊕	SIGN	SIGN
⊕	STUMP	STUMP
⊕	TEL	TELEPHONE POLE
•	TIE	TIE
⊕	TSIGN	SIGN W/DOUBLE POST
⊕	VCTRL	CONTROL VERTICAL
•	WELL	WELL
✕	WSO	WATER SHUT OFF

THESE ARE COMMON VAOT SURVEY POINT SYMBOLS FOR EXISTING FEATURES, ALSO USED FOR PROPOSED FEATURES WITH HEAVIER LINEWEIGHT, IN COMBINATION WITH PROPOSED ANNOTATION.

PROPOSED GEOMETRY CODES

CODE	DESCRIPTION
PC	POINT OF CURVATURE
PI	POINT OF INTERSECTION
CC	CENTER OF CURVE
PT	POINT OF TANGENCY
PCC	POINT OF COMPOUND CURVE
PRC	POINT OF REVERSE CURVE
POB	POINT OF BEGINNING
POE	POINT OF ENDING
STA	STATION PREFIX
AH	AHEAD STATION SUFFIX
BK	BACK STATION SUFFIX
D	CURVE DEGREE OF (100FT)
R	CURVE RADIUS OF
T	CURVE TANGENT LENGTH
L	CURVE LENGTH OF
E	CURVE EXTERNAL DISTANCE

UTILITY SYMBOLS

UNDERGROUND UTILITIES

— UT —	TELEPHONE
— UE —	ELECTRIC
— UC —	CABLE
— UEC —	ELECTRIC
— UET —	ELECTRIC
— UCT —	CABLE
— UECT —	ELECTRIC
— G —	GAS
— W —	WATER
— S —	SEWER

ABOVE GROUND UTILITIES

— T —	TELEPHONE
— E —	ELECTRIC
— C —	CABLE
— EC —	ELECTRIC
— ET —	ELECTRIC
— AER E&T —	ELECTRIC
— CT —	CABLE
— ECT —	ELECTRIC
— .. —	UTILITY

PROJECT CONSTRUCTION

PROJECT DESIGN & LAYOUT

— — — CZ — — —	CL
— — — — —	PL

PROJECT CONSTRUCTION

△ — △ — △ — △ — △	TO
○ — ○ — ○ — ○ — ○	TO
⊕ — ⊕ — ⊕ — ⊕ — ⊕	ST
— — — — —	BO
— — — — —	CU
— — — — —	ST
PDF — PDF —	PR
BF — — — BF — — —	BA
—————	TR
—————	ST
—————	SH

CONVENTIONAL BOUNDARY

BOUNDARY LINES

—————	TOWN LINE	TO
—————	COUNTY LINE	CO
—————	STATE LINE	ST
—————	PR	PR
—————	PR	PR
—————	ST	ST
—————	ST	ST
—————	TO	TO
—————	PE	PE
—————	TE	TE
—————	SL	SL
—————	PR	PR
—————	SL	SL
—————	6F	6F
—————	4F	4F
—————	HAZ	HAZ

R.O.W. ABBREVIATIONS (CODES) & SYMBOLS

POINT	CODE	DESCRIPTION
	CH	CHANNEL EASEMENT
	CONST	CONSTRUCTION EASEMENT
	CUL	CULVERT EASEMENT
	D&C	DISCONNECT & CONNECT
	DIT	DITCH EASEMENT
	DR	DRAINAGE EASEMENT
	DRIVE	DRIVEWAY EASEMENT
	EC	EROSION CONTROL
	I&M	INSTALL & MAINTAIN EASEMENT
	LAND	LANDSCAPE EASEMENT
	SR	SLOPE RIGHT
	UE	UTILITY EASEMENT
	(P)	PERMANENT EASEMENT
	(T)	TEMPORARY EASEMENT
■	BNDNS	BOUND SET
□	BNDNS	BOUND TO BE SET
●	IPNS	IRON PIN SET
○	IPNS	IRON PIN TO BE SET
⊕	CALC	CALCULATED ROW POINT
[DISTANCE]		DISTANCE CARRIED ON NEXT SHEET

RIGHT - OF - WAY DETAIL SHEET

TABLE OF REVISIONS

[illegible]

PROJECT NAME:	ROCHESTER		
PROJECT NUMBER:	BRF 0162(17)		
FILE NAME:	r8e035Detail.xls	PLOT DATE:	25-MAR-2013
PROJECT LEADER:	J. FITCH	DRAWN BY:	M. TROTTIER
DESIGNED BY:	C.L. CILLEY	CHECKED BY:	J. BLANCHARD
R.O.W. DETAIL SHEET #1		SHEET	3 OF 12

**GUARDRAIL APPROACH SECTION,
GALVANIZED 2 RAIL BOX BEAM**

STA. 333+37 - 333+66 LT
STA. 333+70 - 333+80 RT
STA. 334+28 - 334+52 LT
STA. 334+42 - 334+71 RT

**BRIDGE RAILING, GALVANIZED
2 RAIL BOX BEAM**

STA. 333+66 - 334+28 LT
STA. 333+80 - 334+42 RT

**MANUFACTURED TERMINAL SECTION,
TANGENT**

STA. 332+30 - 332+81 LT

CONSTRUCT 8.0' PAVED APRON
STA. 334+72, LT - 55.0' WIDE

CONSTRUCT 5.0' PAVED APRON
STA. 333+64, RT - 28.0' WIDE
STA. 335+06, RT - 16.5' WIDE

CONSTRUCT 10.0' GRAVEL DRIVE
STA. 334+66, LT - 10.0' WIDE

CONSTRUCT 13.0' GRAVEL DRIVE
STA. 333+64, RT - 13.0' WIDE

CONSTRUCT 16.5' GRAVEL DRIVE
STA. 335+06, RT - 16.5' WIDE

**CAST-IN-PLACE
CONCRETE CURB, TYPE B**

STA. 333+34 - 333+67 LT
STA. 333+69 - 333+80 RT
STA. 334+28 - 334+50 LT
STA. 334+41 - 334+82 RT

**STEEL BEAM GUARDRAIL,
GALVANIZED W/ 8 FEET POSTS**

STA. 332+81 - 333+37 LT
STA. 334+71 - 334+95, 21.2 RT

REMOVAL AND DISPOSAL OF GUARDRAIL

STA. 332+61 - 333+88 LT
STA. 333+84 - 333+94 RT
STA. 334+15 - 334+52 RT
STA. 334+21 - 334+94 LT

LIMITS OF COLD PLANING

STA. 332+30 - 332+80 LT & RT
STA. 335+30 - 335+80 LT & RT

RELOCATE MAILBOX, SINGLE SUPPORT

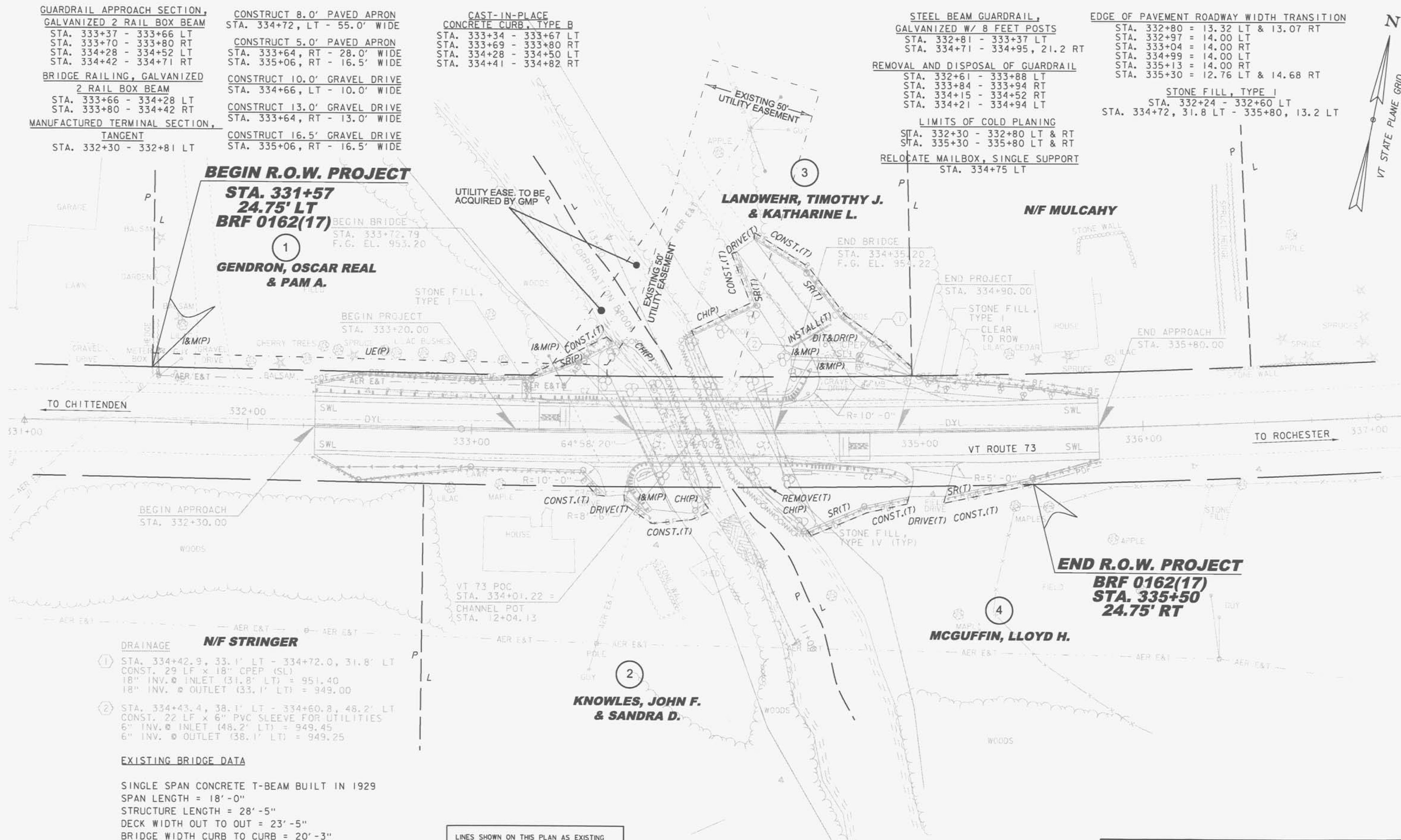
STA. 334+75 LT

EDGE OF PAVEMENT ROADWAY WIDTH TRANSITION

STA. 332+80 = 13.32 LT & 13.07 RT
STA. 332+97 = 14.00 LT
STA. 333+04 = 14.00 RT
STA. 334+99 = 14.00 LT
STA. 335+13 = 14.00 RT
STA. 335+30 = 12.76 LT & 14.68 RT

STONE FILL, TYPE I

STA. 332+24 - 332+60 LT
STA. 334+72, 31.8 LT - 335+80, 13.2 LT

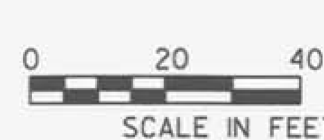


- DRAINAGE**
- ① STA. 334+42.9, 33.1' LT - 334+72.0, 31.8' LT
CONST. 29 LF x 18" CPEP (SL)
18" INV. Ø INLET (31.8' LT) = 951.40
18" INV. Ø OUTLET (33.1' LT) = 949.00
- ② STA. 334+43.4, 38.1' LT - 334+60.8, 48.2' LT
CONST. 22 LF x 6" PVC SLEEVE FOR UTILITIES
6" INV. Ø INLET (48.2' LT) = 949.45
6" INV. Ø OUTLET (38.1' LT) = 949.25

EXISTING BRIDGE DATA

SINGLE SPAN CONCRETE T-BEAM BUILT IN 1929
SPAN LENGTH = 18'-0"
STRUCTURE LENGTH = 28'-5"
DECK WIDTH OUT TO OUT = 23'-5"
BRIDGE WIDTH CURB TO CURB = 20'-3"

LINES SHOWN ON THIS PLAN AS EXISTING
PROPERTY LINES P/L ARE BELIEVED TO
BE ACCURATE BUT SHOULD NOT BE RELIED
UPON FOR PURPOSES UNRELATED TO THE
STATE OF VERMONT'S ACQUISITION OF LAND
AND RIGHTS FOR THIS PROJECT.



**FOR R.O.W.
USE ONLY**

PROJECT NAME:	ROCHESTER
PROJECT NUMBER:	BRF 0162(17)
FILE NAME:	r85e035.layout.dgn
PROJECT LEADER:	J. FITCH
DESIGNED BY:	C.L. CILLEY
ROW LAYOUT SHEET 1 OF 1	
PLOT DATE:	25-MAR-2013
DRAWN BY:	J. BLANCHARD
CHECKED BY:	H. PETROVS
SHEET	4 OF 12

PRELIMINARY INFORMATION SHEET (BRIDGE)

LRFD

FINAL HYDRAULIC REPORT

HYDROLOGIC DATA

Date: October 2012

DRAINAGE AREA : 6.0 sq. mi.
CHARACTER OF TERRAIN : Mountainous, forested, steep
STREAM CHARACTERISTICS : Incised, semi-alluvial
NATURE OF STREAMBED : Cobbles and gravel

PEAK FLOW DATA

Q 2.33 = 400 cfs
Q 10 = 860 cfs
Q 25 = 1150 cfs
Q 50 = 1400 cfs
Q 100 = 1650 cfs
Q 500 = 2300 cfs

DATE OF FLOOD OF RECORD : Unknown
ESTIMATED DISCHARGE : Unknown
WATER SURFACE ELEV. : Unknown
NATURAL STREAM VELOCITY : @ 50 = 11.4 fps
ICE CONDITIONS : Moderate
DEBRIS : Moderate
DOES THE STREAM REACH MAXIMUM HIGHWATER ELEV. RAPIDLY? No
IS ORDINARY RISE RAPID? No
IS STAGE AFFECTED BY UPSTREAM OR DOWNSTREAM CONDITIONS? No
IF YES, DESCRIBE :

WATERSHED STORAGE : <1%
HEADWATERS :
UNIFORM : X
IMMEDIATELY ABOVE SITE :

EXISTING STRUCTURE INFORMATION

STRUCTURE TYPE : Concrete T-beam
YEAR BUILT : 1929
CLEAR SPAN(NORMAL TO STREAM) : 18'
VERTICAL CLEARANCE ABOVE STREAMBED : 8'
WATERWAY OF FULL OPENING : 150 sq. ft.
DISPOSITION OF STRUCTURE : Replace
TYPE OF MATERIAL UNDER SUBSTRUCTURE : See borings

WATER SURFACE ELEVATIONS AT:

Q2.33 = 945.8'
Q10 = 947.7'
Q25 = 948.6'
Q50 = 950.5'
Q100 = 951.5'
VELOCITY = 9.0 fps
" 11.5 fps
" 12.8 fps
" 13.6 fps
" 14.3 fps

LONG TERM STREAMBED CHANGES : None noted

IS THE ROADWAY OVERTOPPED BELOW Q100: No
FREQUENCY : N/A
RELIEF ELEVATION : 952.6'
DISCHARGE OVER ROAD @Q100: N/A

UPSTREAM STRUCTURE

TOWN: Rochester
HIGHWAY #: TH 40 (NFS 226)
CLEAR SPAN: 23.5'
YEAR BUILT: 1929
STRUCTURE TYPE: I-beam bridge with wood deck
DISTANCE: 1900'
STRUCTURE #: 1900
CLEAR HEIGHT: ~7.5'
FULL WATERWAY: 1900'

DOWNSTREAM STRUCTURE

TOWN: Rochester
HIGHWAY #: 1900
CLEAR SPAN: 1900
YEAR BUILT: 1900
STRUCTURE TYPE: Confluence with West Branch White River
DISTANCE: 900'
STRUCTURE #: 900
CLEAR HEIGHT: 900
FULL WATERWAY: 900'

LRFD LOAD RATING FACTORS

LOADING LEVELS	TRUCK						
	H-20	HL-93	352	6 AXLE	3A STR	4A STR	5A SEMI
TONNAGE	20	36	36	66	30	34.5	38
INVENTORY							
POSTING							
OPERATING							
COMMENTS:							

AS BUILT "REBAR" DETAILS

LEVEL I	LEVEL II	LEVEL III
TYPE:	TYPE:	TYPE:
GRADE:	GRADE:	GRADE:

TRAFFIC DATA

YEAR	ADT	DHV	% D	% T	ADTT	20 year ESAL for flexible pavement from 2014 to 2034 : 398000
2014	770	160	65	8.7	65	40 year ESAL for flexible pavement from 2014 to 2054 : 950000
2034	810	160	65	12.6	100	Design Speed : 45 mph

PROPOSED STRUCTURE

STRUCTURE TYPE: Single span prestressed concrete next beam

CLEAR SPAN(NORMAL TO STREAM): 46'
VERTICAL CLEARANCE ABOVE STREAMBED: 8.5'
WATERWAY OF FULL OPENING: 315 sq. ft.

WATER SURFACE ELEVATIONS AT:

Q2.33 = 945.0'
Q10 = 946.5'
Q25 = 947.3'
Q50 = 947.9'
Q100 = 948.4'
VELOCITY = 9.4 fps
" 10.7 fps
" 11.0 fps
" 11.4 fps
" 12.0 fps

IS THE ROADWAY OVERTOPPED BELOW Q100: No
FREQUENCY: N/A
RELIEF ELEVATION: 952.6'
DISCHARGE OVER ROAD @Q100: N/A

AVERAGE LOW ELEVATION OF SUPERSTRUCTURE: 950.6'
VERTICAL CLEARANCE: @ Q50 = 2.7'

SCOUR: Contraction scour = 2.0' up to Q500

REQUIRED CHANNEL PROTECTION: Stone Fill, Type IV

PERMIT INFORMATION

AVERAGE DAILY FLOW: 12 cfs
ORDINARY LOW WATER: 6 cfs
ORDINARY HIGH WATER: 175 cfs
DEPTH OR ELEVATION: -0.5'
-1.5'

TEMPORARY BRIDGE REQUIREMENTS

STRUCTURE TYPE: None needed - detour will be in place during construction
CLEAR SPAN (NORMAL TO STREAM):
VERTICAL CLEARANCE ABOVE STREAMBED:
WATERWAY AREA OF FULL OPENING:

ADDITIONAL INFORMATION

TRAFFIC MAINTENANCE NOTES

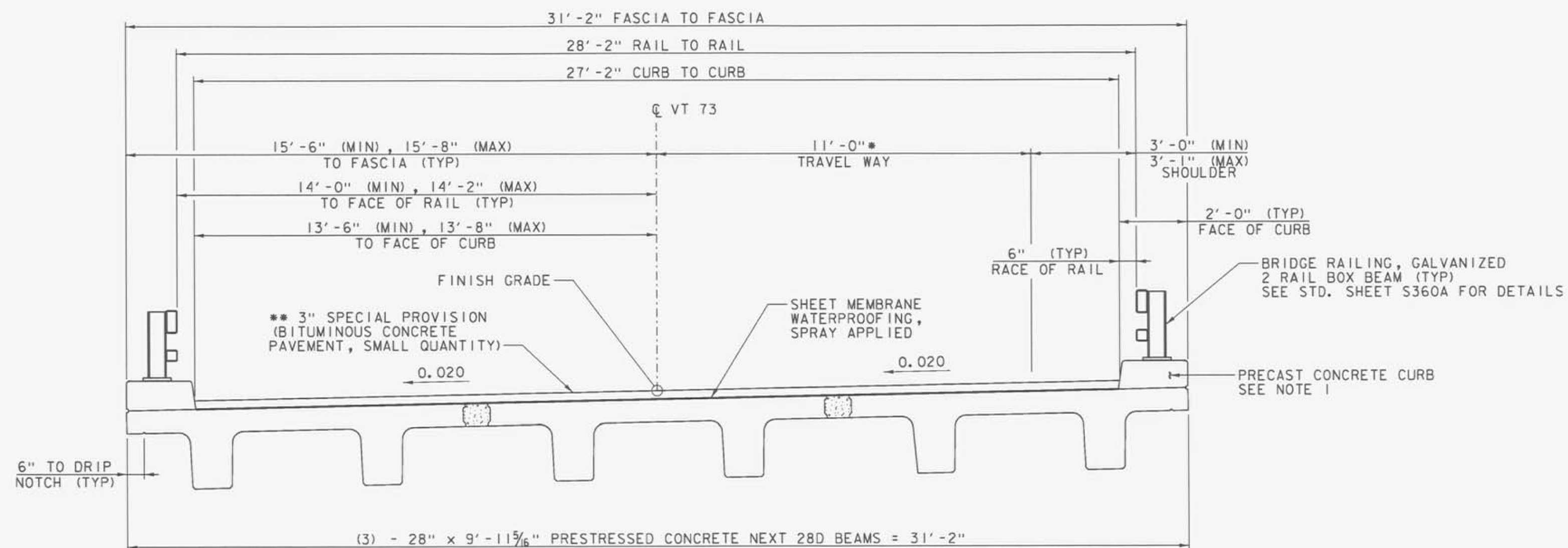
1. MAINTAIN TRAFFIC ON AN OFF SITE DETOUR.
2. TRAFFIC SIGNALS ARE NOT NECESSARY.
3. SIDEWALKS ARE NOT NECESSARY

DESIGN VALUES

1. DESIGN LIVE LOAD	HL-93
2. FUTURE PAVEMENT	d _p : 3.0 INCH
3. DESIGN SPAN	L: 58.00 FT
4. MIN. MID-SPAN POS. CAMBER @ RELEASE (PRESTRESSED UNITS)	Δ: ---
5. PRESTRESSING STRAND (0.60 INCH DIAMETER - LOW RELAX)	f _y : 270 KSI
6. PRESTRESSED CONCRETE STRENGTH	f' _c : 8.0 KSI
7. PRESTRESSED CONCRETE RELEASE STRENGTH	f' _c : ---
8. CONCRETE, HIGH PERFORMANCE CLASS AA	f' _c : ---
9. CONCRETE, HIGH PERFORMANCE CLASS A	f' _c : ---
10. CONCRETE, HIGH PERFORMANCE CLASS B	f' _c : 3.5 KSI
11. CONCRETE, CLASS C	f' _c : ---
12. REINFORCING STEEL	f _y : 60 KSI
13. STRUCTURAL STEEL AASHTO M270	f _y : ---
14. SOIL UNIT WEIGHT	γ: ---
15. NOMINAL BEARING RESISTANCE OF SOIL	q _n : ---
16. SOIL BEARING RESISTANCE FACTOR (REFER TO AASHTO LRFD)	φ: ---
17. NOMINAL BEARING RESISTANCE OF ROCK	q _n : ---
18. ROCK BEARING RESISTANCE FACTOR (REFER TO AASHTO LRFD)	φ: ---
19. NOMINAL AXIAL PILE RESISTANCE	q _p : ---
20. PILE YIELD STRENGTH ASTM A572	f _y : ---
21. PILE SIZE	---
22. EST. PILE LENGTH	L _p : 14'
23. PILE RESISTANCE FACTOR	φ: ---
24. LATERAL PILE DEFLECTION	Δ: ---
25. BASIC WIND SPEED	V _{3s} : ---
26. MINIMUM GROUND SNOW LOAD	p _g : ---
27. SEISMIC DATA	PGA: --- S ₁ : ---

PROJECT NAME: ROCHESTER
PROJECT NUMBER: BRF 0162(17)

FILE NAME: r85e035.pl.dgn
PROJECT LEADER: J. FITCH
DESIGNED BY: E.A. FIALA
PRELIMINARY INFORMATION SHEET
PLOT DATE: 25-MAR-2013
DRAWN BY: E.A. FIALA
CHECKED BY: S.E. BURBANK
SHEET 5 OF 12



* - RADIAL DIMENSION
 ** - (2) - 1 1/2" LIFTS OF TYPE IVS

TYPICAL BRIDGE SECTION
 SCALE 1/2" = 1'-0"

NOTE:

1. COSTS FOR PRECAST CURB TO BE INCIDENTAL TO ITEM 900.640, "SPECIAL PROVISION (PRESTRESSED CONCRETE NEXT D BEAMS) (NEXT 28 D)".

PROJECT NAME: ROCHESTER

PROJECT NUMBER: BRF 0162(17)

FILE NAME: r85e035-tyt.dgn

PROJECT LEADER: J. FITCH

DESIGNED BY: G.S. GOODRICH

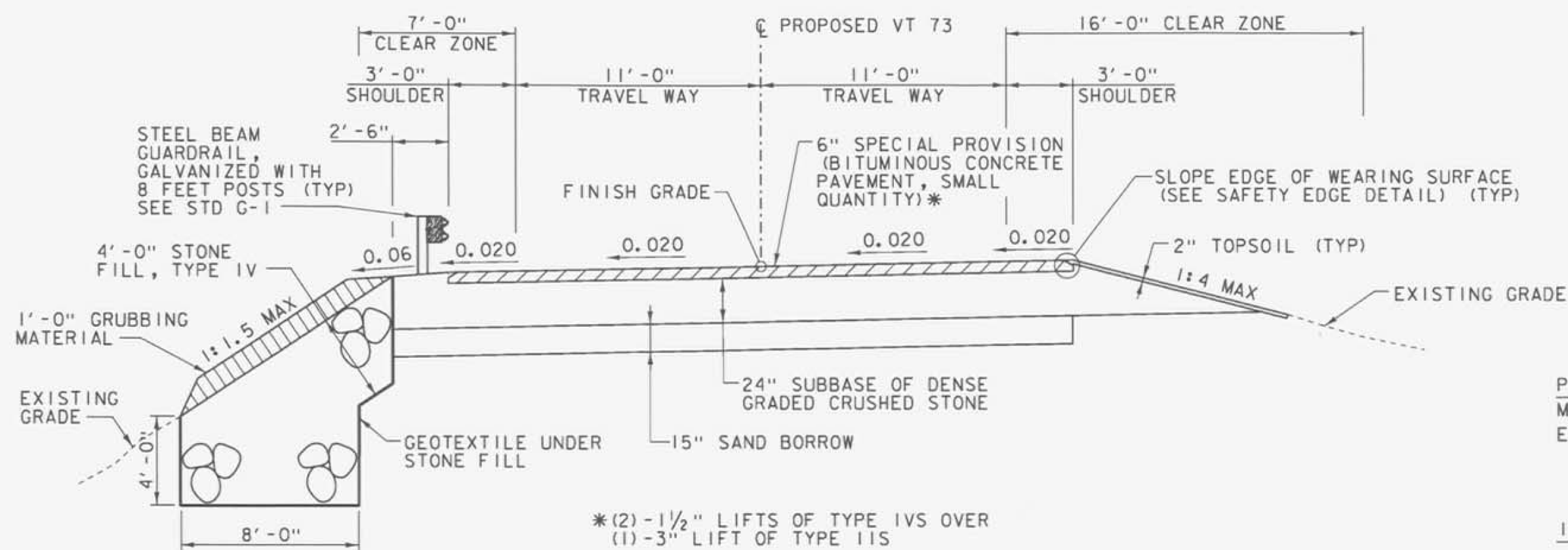
TYPICAL BRIDGE SECTION

PLOT DATE: 25-MAR-2013

DRAWN BY: E.A. FIALA

CHECKED BY: S.E. BURBANK

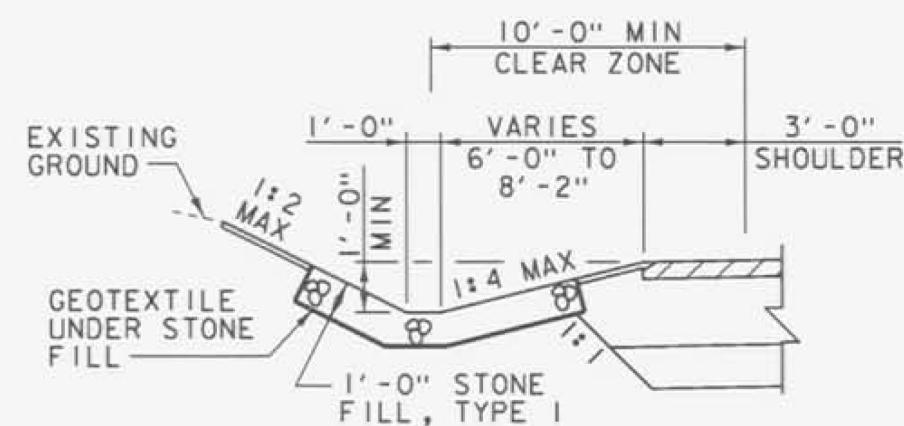
SHEET 6 OF 12



NOTE: SEE BANKING DIAGRAM ON PROFILE SHEET.

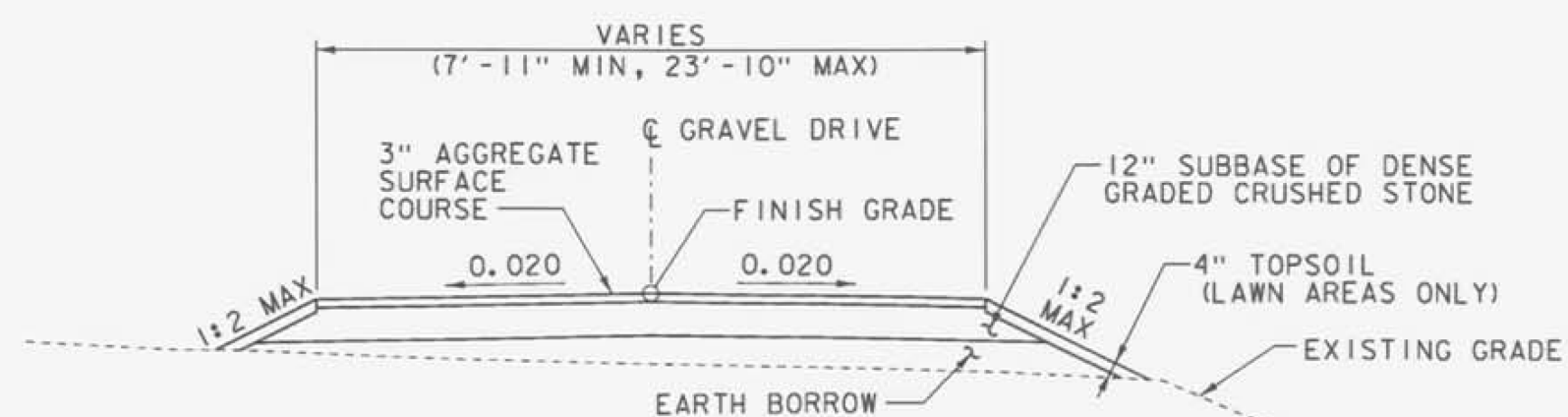
VT 73 TYPICAL ROADWAY SECTION

SCALE: 1/4" = 1'-0"



VT 73 TYPICAL DITCH SECTIONS

SCALE: 1/4" = 1'-0"



TYPICAL GRAVEL DRIVEWAY SECTION

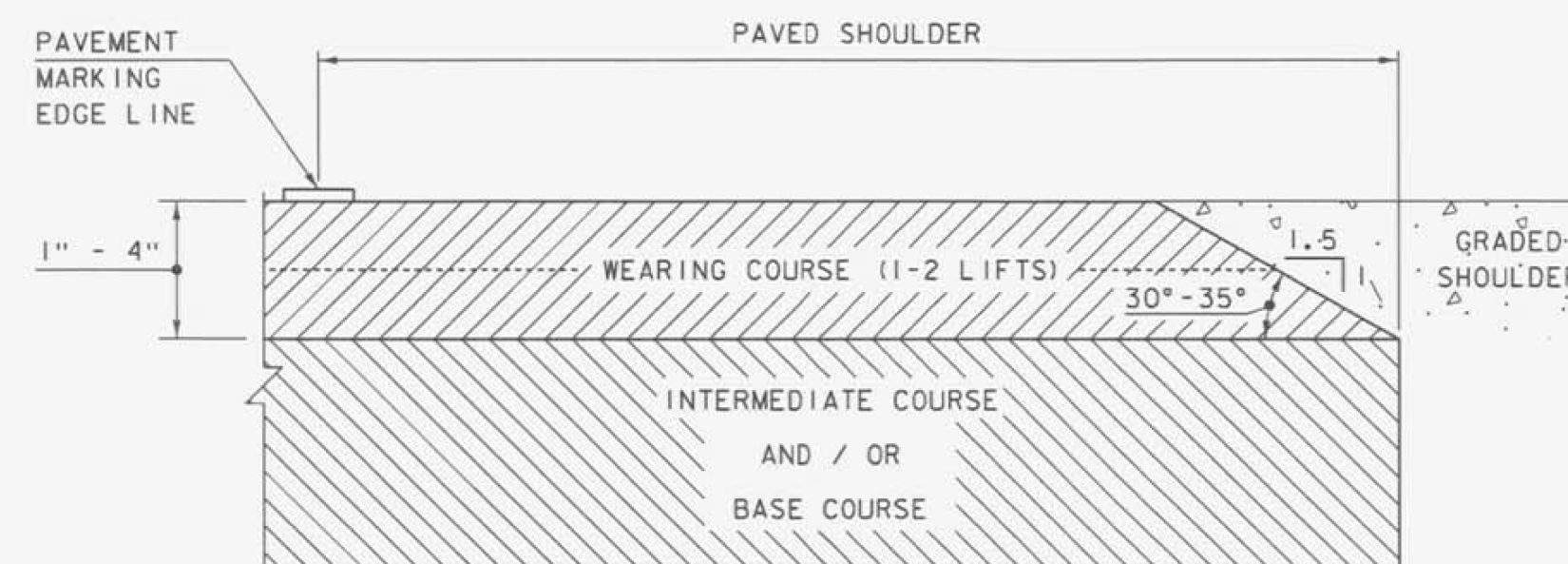
SCALE: 1/4" = 1'-0"

MATERIAL TOLERANCES

(IF USED ON PROJECT)

SURFACE	
PAVEMENT (TOTAL THICKNESS)	+/- 1/4"
SUBBASE	+/- 1"
SAND BORROW	+/- 1"

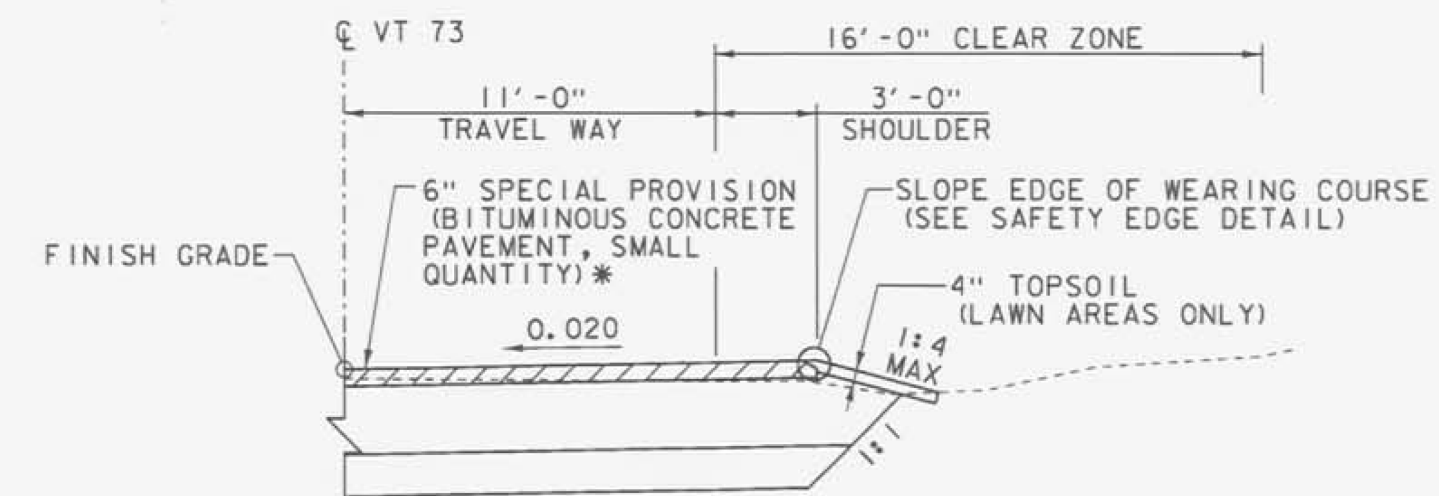
SCALE: 1/4" = 1'-0"



SAFETY EDGE DETAIL

NOT TO SCALE

NOTE: LEVELING COURSE MAY INCLUDE THE "SAFETY EDGE" AT THE CONTRACTOR'S CHOICE.



NOTE: SEE TYPICAL ROADWAY SECTION FOR INFORMATION NOT SHOWN

TYPICAL CUT SECTION

SCALE: 1/4" = 1'-0"

PROJECT NAME: ROCHESTER
PROJECT NUMBER: BRF 0162(17)

FILE NAME: r85e035.typ.dgn
PROJECT LEADER: J. FITCH
DESIGNED BY: G.S. GOODRICH
TYPICAL ROADWAY SECTION

PLOT DATE: 25-MAR-2013
DRAWN BY: E.A. FIALA
CHECKED BY: S.E. BURBANK
SHEET 7 OF 12

GPS CONTROL POINTS

HVCTRL #1

ROBINSON

NORTH = 494869.735
EAST = 1543279.273
ELEV. = 983.807

GENERAL LOCATION, ROCHESTER, VT. OWNERSHIP, RAY GENDRON, 3425 BRANDON MOUNTAIN ROAD, ROCHESTER, VT 05767.

TO REACH FROM THE INTERSECTION OF VT ROUTE 100 AND VT ROUTE 73 (BRANDON MOUNTAIN ROAD) GO WEST ALONG VT ROUTE 73 FOR 3.7 MI (6.0 KM) TO THE INTERSECTION OF A GRAVEL FIELD DRIVE AND THE SITE OF THE MARK ON THE RIGHT. IT IS 0.2 MI (0.3 KM) EAST OF THE INTERSECTION OF VT ROUTE 73 AND BINGO ROAD IN ROBINSON.

THE MARK IS SET 10 CM (4 INCHES) BELOW GROUND SURFACE IN THE TOP OF A 30 CM (12 INCH) DIAMETER CONCRETE MONUMENT. IT IS 9.0 M (29.5 FT) NORTHEAST OF AND 1.0 M (3.3 FT) LOWER THAN THE CENTERLINE OF VT ROUTE 73, 4.2 M (13.8 FT) NORTHWEST OF THE CENTERLINE OF THE FIELD DRIVE, 2.8 M (9.2 FT) SOUTH OF THE CENTER OF THE NORTHEAST (OUTLET) END OF A 45 CM (18 INCH) DIAMETER PLASTIC CULVERT WITH MARKER POST, 28.9 M (94.8 FT) NORTHEAST OF AND ACROSS THE ROAD FROM POLE NO 104A/1 AT HOUSE NO 3677, 17.8 M (58.4 FT) SOUTHWEST OF POLE NO 104/106 AND 0.3 M (1.0 FT) SOUTHWEST OF A FIBERGLASS WITNESS POST.

HVCTRL #2

ROBINSON AZ MK

NORTH = 492231.351
EAST = 1545550.869
ELEV. = 948.984

GENERAL LOCATION, ROCHESTER, VT.

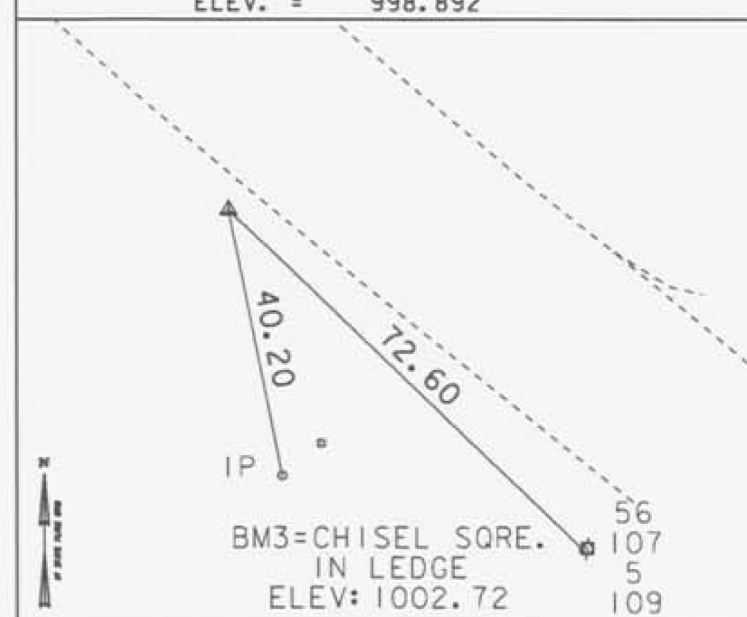
TO REACH FROM THE INTERSECTION OF VT ROUTE 100 AND VT ROUTE 73 (BRANDON MOUNTAIN ROAD) GO WEST ALONG VT ROUTE 73 FOR 3.0 MI (4.8 KM) TO THE SITE OF THE MARK ON THE RIGHT. IT IS 0.9 MI (1.4 KM) EAST OF THE INTERSECTION OF VT ROUTE 73 AND BINGO ROAD IN ROBINSON AND ABOUT 150 M (492.1 FT) NORTHWEST OF THE DRIVE LEADING TO A PARKING AREA FOR THE CLOSING CORNER CAMP AT THE GREEN MOUNTAIN NATIONAL FOREST (WHITE RIVER TRAVEL WAY) TRAIL.

THE MARK IS SET 20 CM (8 INCHES) BELOW GROUND SURFACE IN THE TOP OF A 30 CM (12 INCH) DIAMETER CONCRETE MONUMENT. IT IS 7.2 M (23.6 FT) NORTHEAST OF AND 0.5 M (1.6 FT) LOWER THAN THE CENTERLINE OF VT ROUTE 73, 21.0 M (68.9 FT) NORTHWEST OF THE CENTER OF THE NORTHEAST (OUTLET) END OF A 90 CM (35 INCH) DIAMETER PLASTIC CULVERT, 25.6 M (84.0 FT) EAST OF AND ACROSS THE ROAD FROM POLE NO 88/5/90, 44.0 M (144.4 FT) NORTH OF AND ACROSS THE ROAD FROM A SIGN FOR THE CAMP, ABOUT 60 M (196.9 FT) WEST OF THE CENTER OF A SMALL BRIDGE WITH STONE HEADWALL AND 0.3 M (1.0 FT) SOUTHWEST OF A FIBERGLASS WITNESS POST.

TRAVERSE TIES

HVCTRL #3

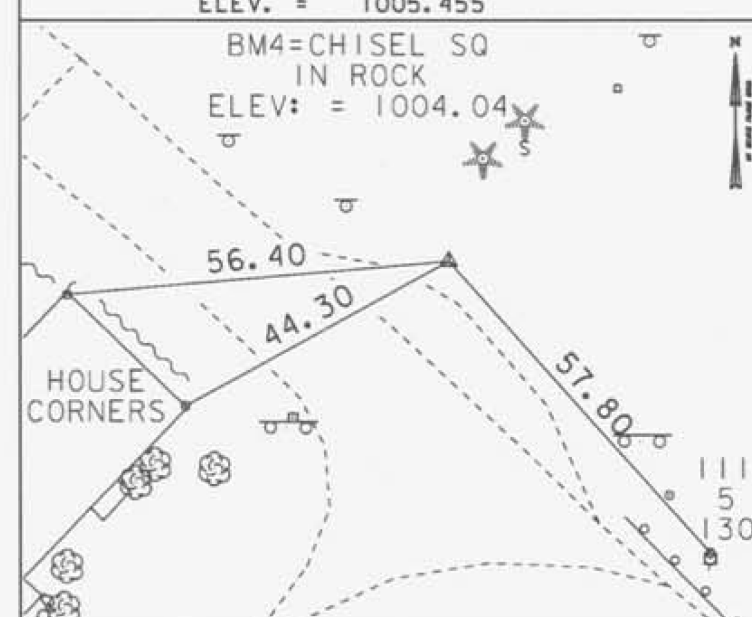
NORTH = 495171.203
EAST = 1542706.943
ELEV. = 998.892



*MAIN TRAVERSE COMPLETED 6/15/2011 BY L. ORVIS P.C. & G. HITCHCOCK

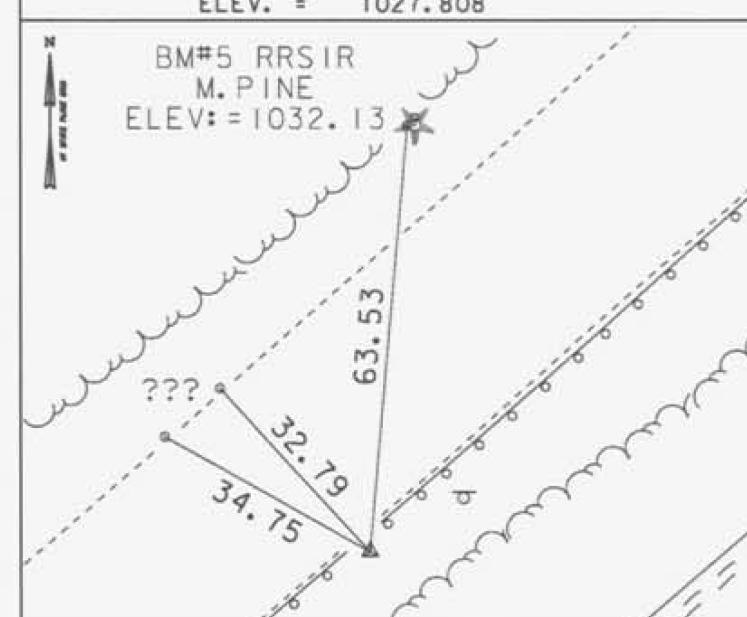
HVCTRL #4

NORTH = 495679.839
EAST = 1542209.073
ELEV. = 1005.455



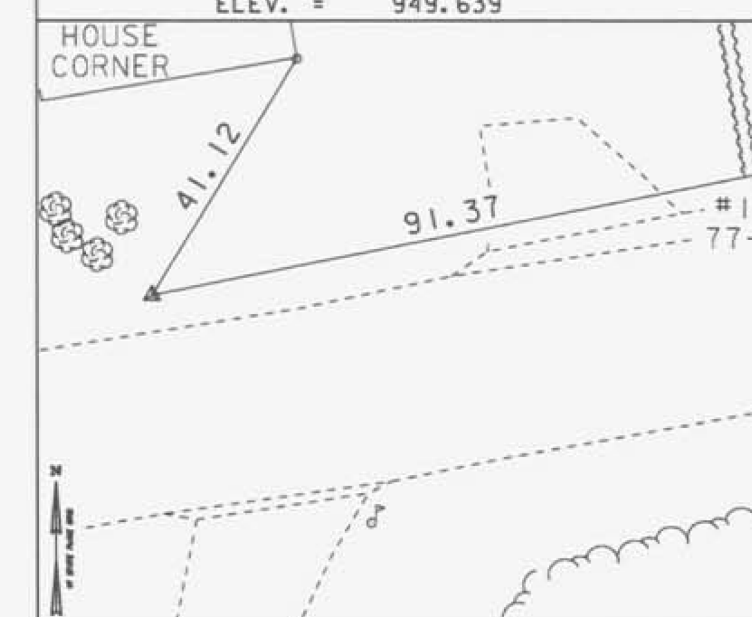
HVCTRL #5

NORTH = 495305.157
EAST = 1541893.089
ELEV. = 1027.808



HVCTRL #12

NORTH = 491637.941
EAST = 1547858.436
ELEV. = 949.639



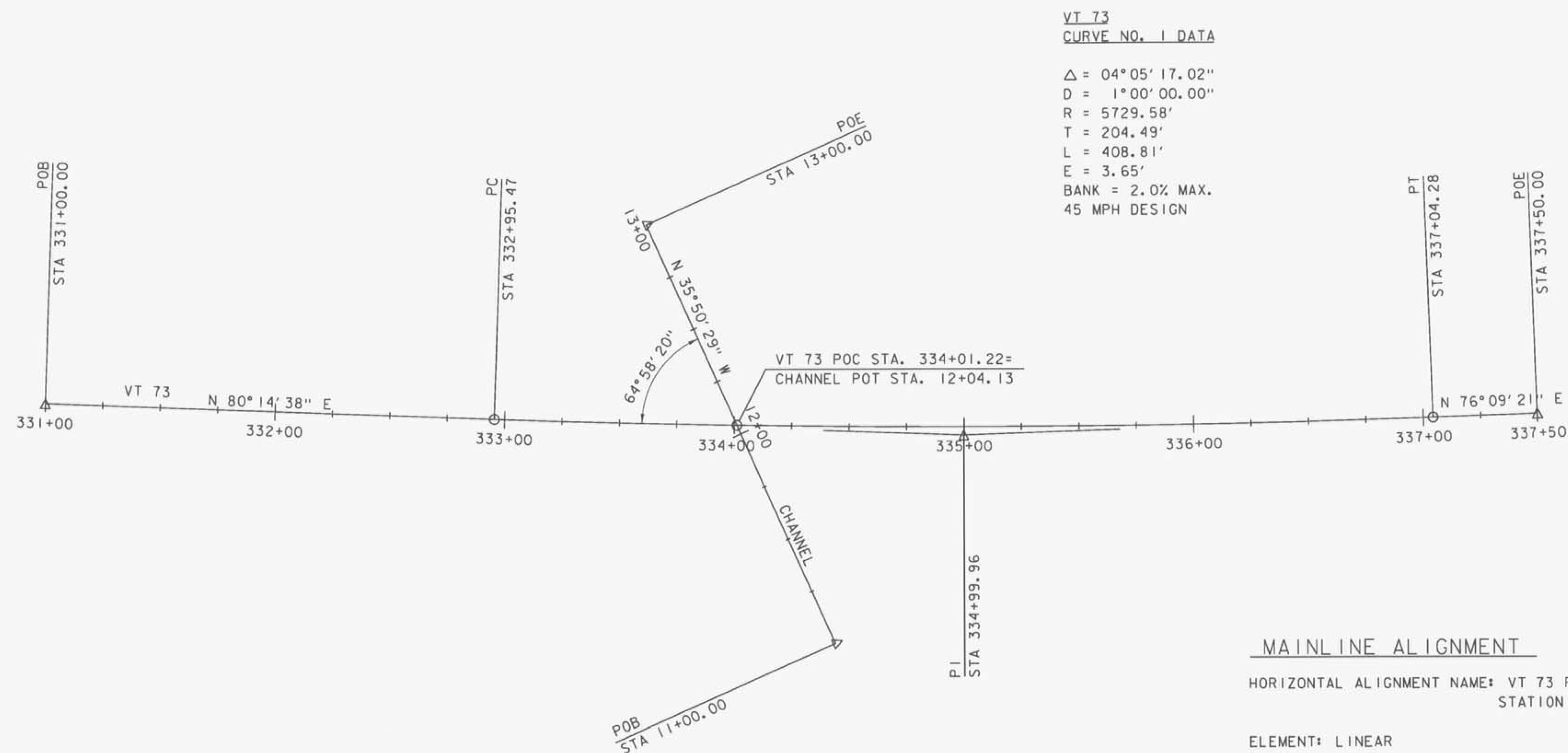
NORTH =
EAST =
ELEV. =

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (07)
ADJUSTMENT COMPASS

PROJECT NAME: ROCHESTER
PROJECT NUMBER: BRF 0162(17)

FILE NAME: r85e035_tie.dgn
PROJECT LEADER: J. FITCH
DESIGNED BY: VTRANS
TIE SHEET

PLOT DATE: 25-MAR-2013
DRAWN BY: R. BULLOCK
CHECKED BY: VTRANS
SHEET 8 OF 12

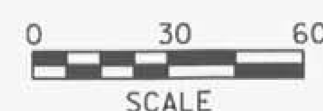


CHANNEL ALIGNMENT

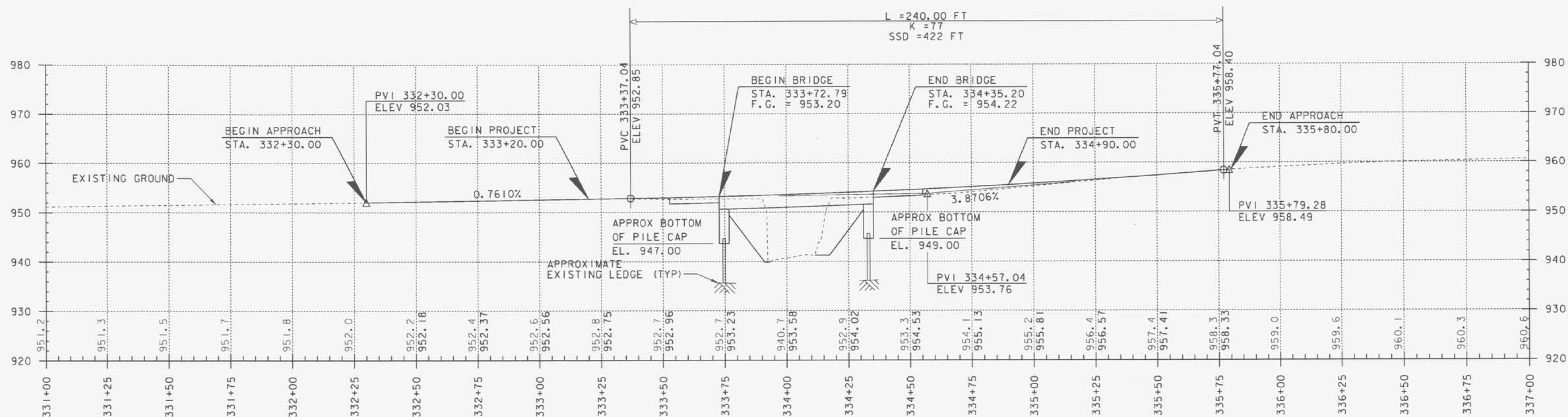
HORIZONTAL ALIGNMENT NAME: CHANNEL			
	STATION	NORTHING	EASTING
ELEMENT: LINEAR			
POB	11+00.00	491592.6684	1548250.4818
PI	13+00.00	491754.7965	1548133.3730
TANGENT DIRECTION:	N $35^{\circ}50'29.23''$ W		
TANGENT LENGTH:	200.00		

MAINLINE ALIGNMENT

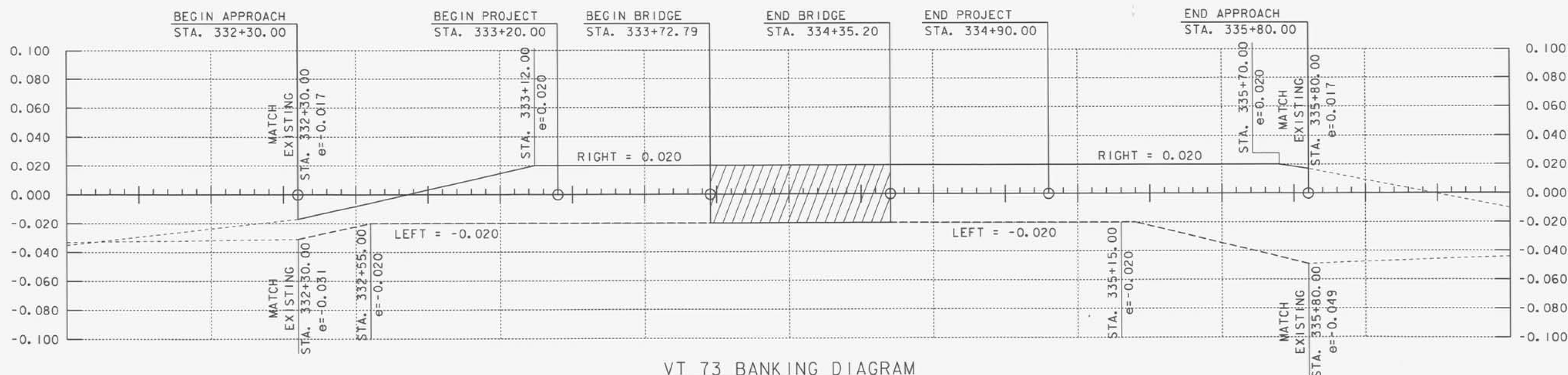
HORIZONTAL ALIGNMENT NAME: VT 73 PROPOSED			
	STATION	NORTHING	EASTING
ELEMENT: LINEAR			
POB	331+00.00	491625.0768	1547892.8199
PC	332+95.47	491658.2010	1548085.4666
TANGENT DIRECTION:	N 80° 14' 37.72" E		
TANGENT LENGTH:	195.47		
ELEMENT: CIRCULAR			
PC	332+95.47	491658.2010	1548085.4666
PI	334+99.96	491692.8530	1548286.9992
CC		497304.9184	1547114.5551
PT	337+04.28	491741.7841	1548485.5487
RADIUS:	5729.58		
DELTA:	4° 05' 17.02" LEFT		
DEGREE OF CURVATURE (ARC):	1° 00' 00.00"		
LENGTH:	408.81		
TANGENT:	204.49		
CHORD:	408.72		
MIDDLE ORDINATE:	3.65		
EXTERNAL:	3.65		
ELEMENT: LINEAR			
PT	337+04.28	491741.7841	1548485.5487
POE	337+50.00	491752.7241	1548529.9404
TANGENT DIRECTION:	N 76° 09' 20.69" E		
TANGENT LENGTH:	45.72		



PROJECT NAME:	ROCHESTER	PLOT DATE:	25-MAR-2013
PROJECT NUMBER:	BRF 0162(17)	DRAWN BY:	C.L. CILLEY
FILE NAME:	r85e035.allgn.dgn	CHECKED BY:	D.M. PECK
PROJECT LEADER:	J. FITCH	SHEET	9 OF 12
DESIGNED BY:	C.L. CILLEY		
ALIGNMENT LAYOUT SHEET			



VT 73 PROFILE
SCALE 1" = 20' HORIZONTAL
1" = 10' VERTICAL



VT 73 BANKING DIAGRAM
SCALE 1" = 20' HORIZONTAL
1" = 0.040 FT/FT VERTICAL

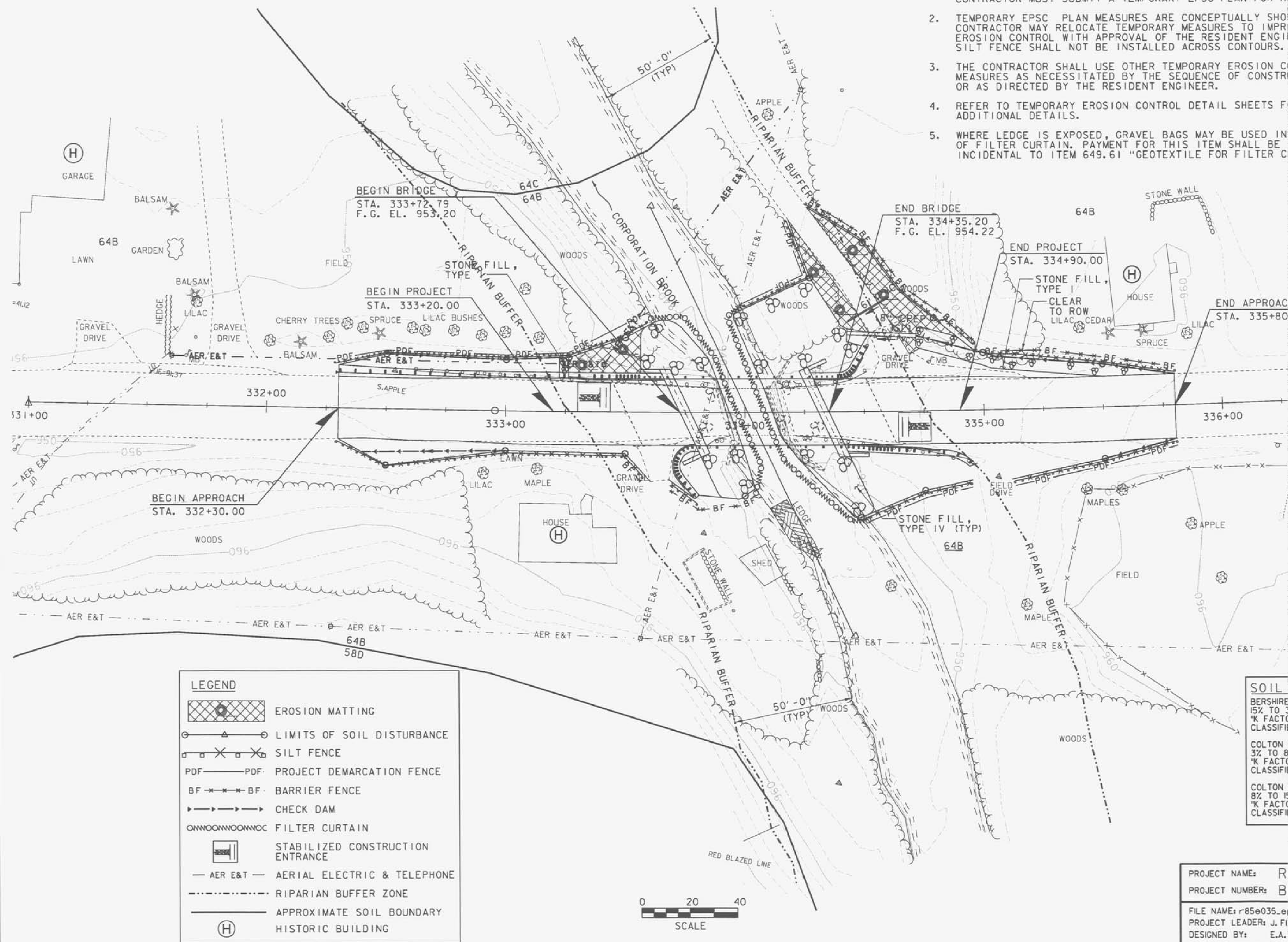
THE GRADES SHOWN TO THE NEAREST TENTH ARE THE ORIGINAL GROUND ELEVATIONS ALONG THE PROPOSED ALIGNMENT.

THE GRADES SHOWN TO THE NEAREST HUNDREDTH ARE THE FINISH GRADES ALONG THE PROPOSED ALIGNMENT.

PROJECT NAME: ROCHESTER
PROJECT NUMBER: BRF 0162(17)

FILE NAME: r85e035-pro.dgn
PROJECT LEADER: J. FITCH
DESIGNED BY: C.L. CILLEY
VT 73 PROFILE SHEET

PLOT DATE: 25-MAR-2013
DRAWN BY: C.L. CILLEY
CHECKED BY: D.M. PECK
SHEET 10 OF 12



NOTES:

1. THESE PLANS SHOW A CONCEPTUAL EROSION CONTROL PLAN. THE CONTRACTOR MUST SUBMIT A TEMPORARY EPSC PLAN FOR APPROVAL.
2. TEMPORARY EPSC PLAN MEASURES ARE CONCEPTUALLY SHOWN. THE CONTRACTOR MAY RELOCATE TEMPORARY MEASURES TO IMPROVE EROSION CONTROL WITH APPROVAL OF THE RESIDENT ENGINEER. A SILT FENCE SHALL NOT BE INSTALLED ACROSS CONTOURS.
3. THE CONTRACTOR SHALL USE OTHER TEMPORARY EROSION CONTROL MEASURES AS NECESSITATED BY THE SEQUENCE OF CONSTRUCTION OR AS DIRECTED BY THE RESIDENT ENGINEER.
4. REFER TO TEMPORARY EROSION CONTROL DETAIL SHEETS FOR ADDITIONAL DETAILS.
5. WHERE LEDGE IS EXPOSED, GRAVEL BAGS MAY BE USED INSTEAD OF FILTER CURTAIN. PAYMENT FOR THIS ITEM SHALL BE INCIDENTAL TO ITEM 649.61 "GEOTEXTILE FOR FILTER CURTAIN".

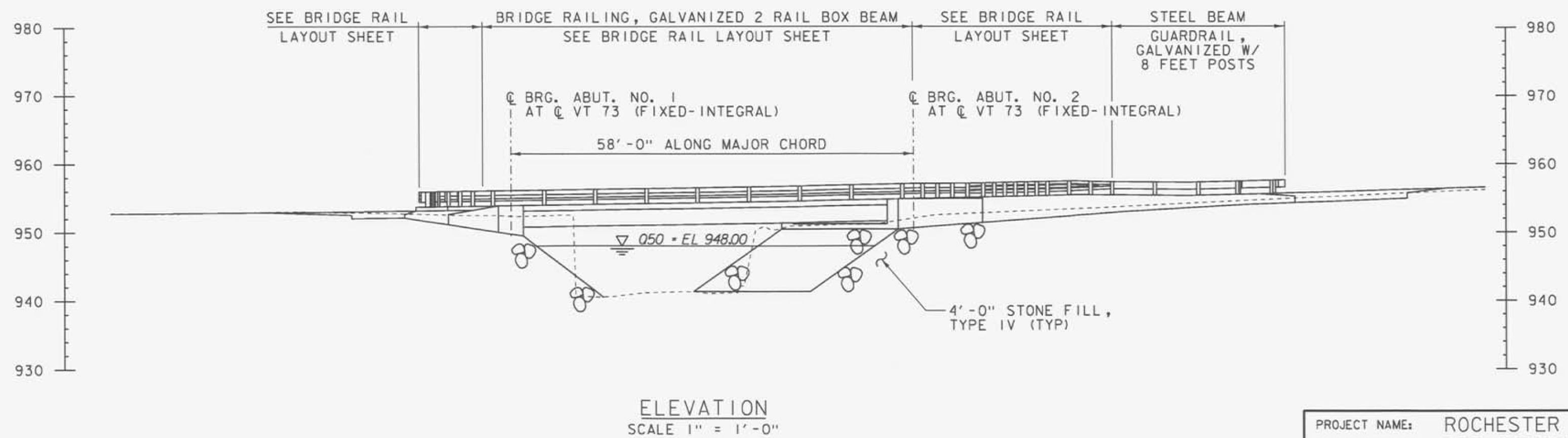
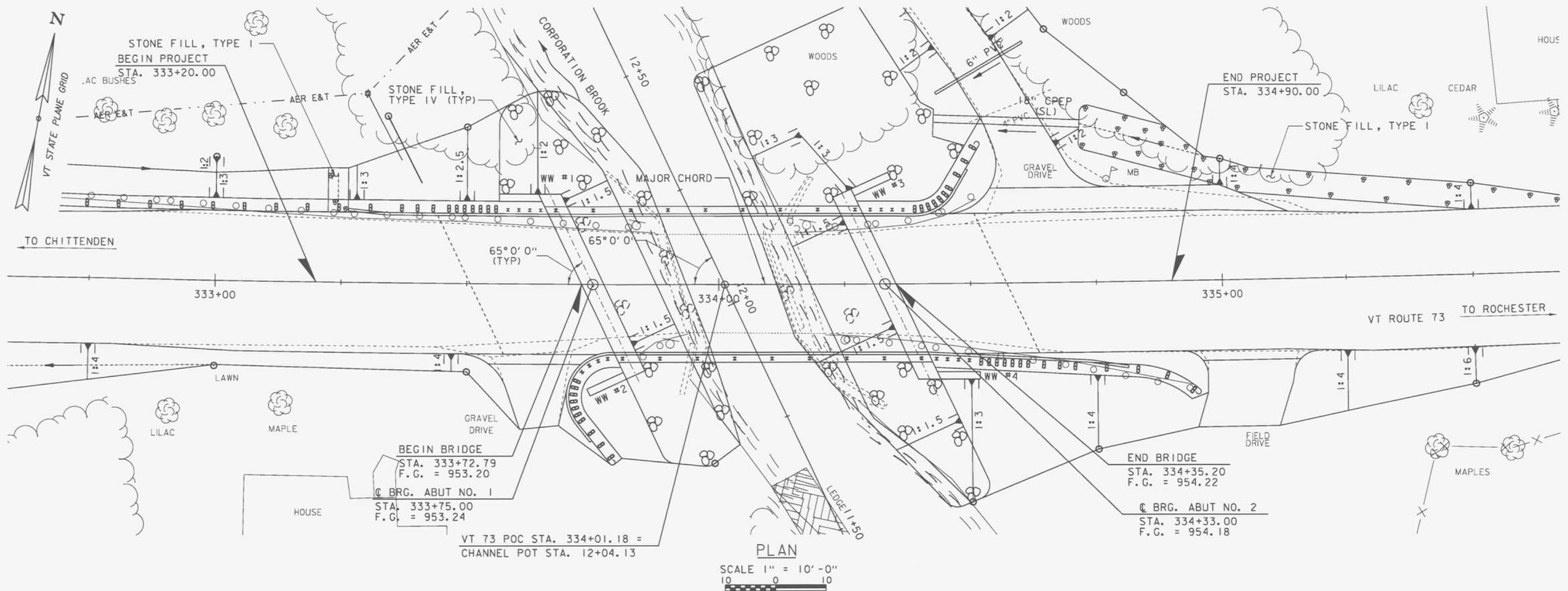
LEGEND

- EROSION MATTING
- LIMITS OF SOIL DISTURBANCE
- SILT FENCE
- PROJECT DEMARCATION FENCE
- BARRIER FENCE
- CHECK DAM
- FILTER CURTAIN
- STABILIZED CONSTRUCTION ENTRANCE
- AERIAL ELECTRIC & TELEPHONE
- RIPARIAN BUFFER ZONE
- APPROXIMATE SOIL BOUNDARY
- HISTORIC BUILDING

0 20 40
SCALE

SOIL
BERSHIRE
15% TO 3%
"K" FACTOR
CLASSIFICATION
COLTON
3% TO 8%
"K" FACTOR
CLASSIFICATION
COLTON
8% TO 15%
"K" FACTOR
CLASSIFICATION

PROJECT NAME: R
PROJECT NUMBER: B
FILE NAME: r85e035.e
PROJECT LEADER: J. F.
DESIGNED BY: E.A.
EPSC CONSTRUCTION C



PROJECT NAME: ROCHESTER
PROJECT NUMBER: BRO 0162(17)

FILE NAME: r85e035.pe.dgn
PROJECT LEADER: J. FITCH
DESIGNED BY: G.S. GOODRICH
PLAN & ELEVATION

PLOT DATE: 25-MAR-2013
DRAWN BY: E.A. FIALA
CHECKED BY: S.E. BURBANK
SHEET 12 OF 12