

R.O.W. PLANS

INDEX OF SHEETS

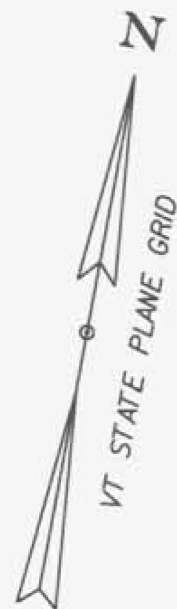
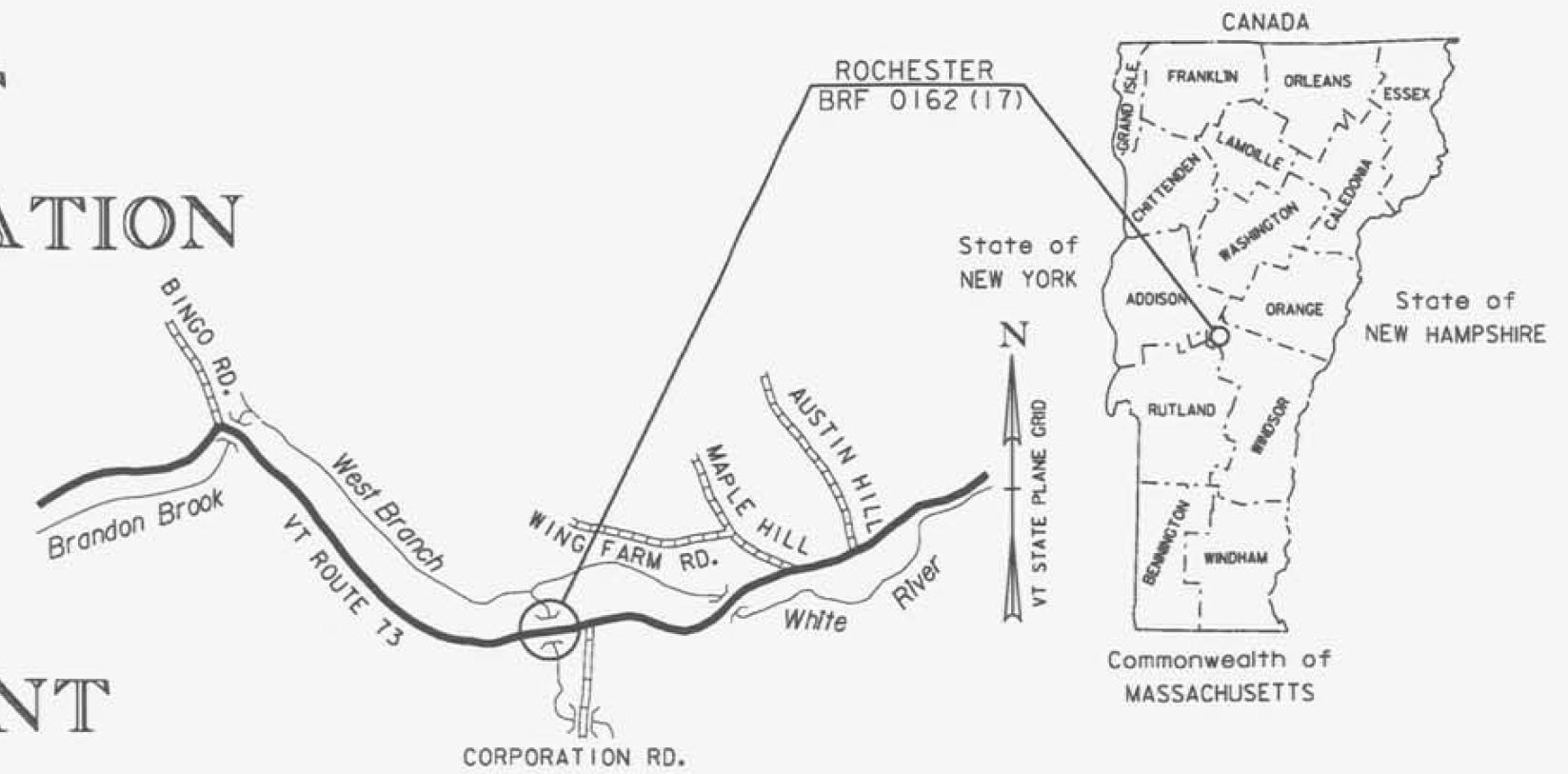
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STATE OF VERMONT AGENCY OF TRANSPORTATION



PROPOSED IMPROVEMENT BRIDGE PROJECT TOWN OF ROCHESTER COUNTY OF WINDSOR

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

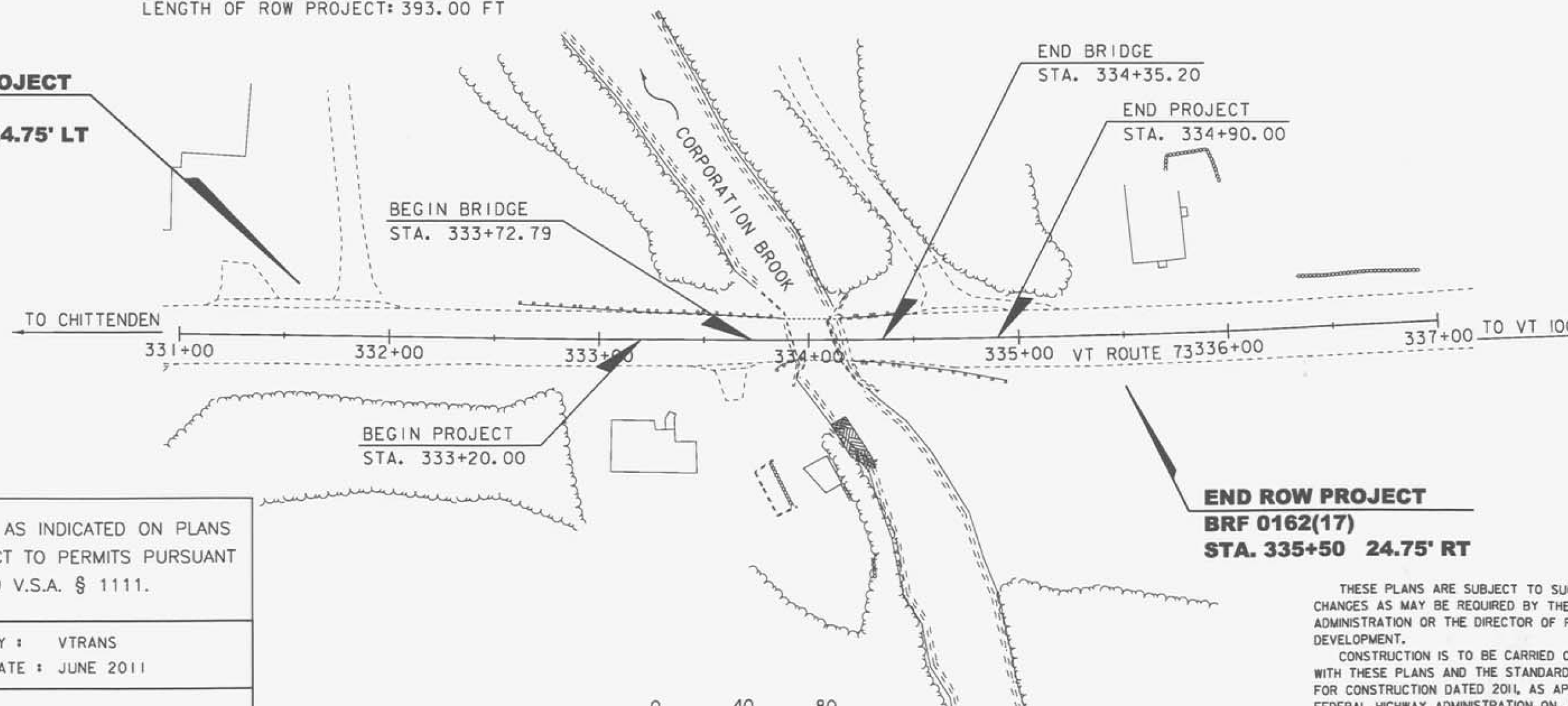


PROJECT LOCATION: LOCATED IN THE COUNTY OF WINDSOR, TOWN OF ROCHESTER, ON VT 73; BRIDGE NO. 16 OVER CORPORATION BROOK, APPROXIMATELY 2.50 MILES WEST OF THE INTERSECTION WITH VT 73 AND VT 100.

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**



**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)

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 TETREAULT 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

SYMBOLGY LEGEND NOTE

THE SYMBOLGY ON THIS SHEET IS INTENDED TO COVER STANDARD CONVENTIONAL SYMBOLGY. THE SYMBOLGY IS 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. SYMBOLGY 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
☐	DITHR	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 VALUE
⊕	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

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

UTILITY SYMBOLGY

UNDERGROUND UTILITIES

— UT —	TELEPHONE
— UE —	ELECTRIC
— UC —	CABLE (TV)
— UEC —	ELECTRIC+CABLE
— UET —	ELECTRIC+TELEPHONE
— UCT —	CABLE+TELEPHONE
— UECT —	ELECTRIC+CABLE+TELEP.
— G —	GAS LINE
— W —	WATER LINE
— S —	SANITARY SEWER (SEPTIC)

ABOVE GROUND UTILITIES (AERIAL)

— T —	TELEPHONE
— E —	ELECTRIC
— C —	CABLE (TV)
— EC —	ELECTRIC+CABLE
— ET —	ELECTRIC+TELEPHONE
— AER E&T —	ELECTRIC+TELEPHONE
— CT —	CABLE+TELEPHONE
— ECT —	ELECTRIC+CABLE+TELEP.
—	UTILITY POLE GUY WIRE

PROJECT CONSTRUCTION SYMBOLGY

PROJECT DESIGN & LAYOUT SYMBOLGY

— CZ —	CLEAR ZONE
—	PLAN LAYOUT MATCHLINE

PROJECT CONSTRUCTION FEATURES

—	TOP OF CUT SLOPE
—	TOE OF FILL SLOPE
—	STONE FILL
—	BOTTOM OF DITCH
—	CULVERT PROPOSED
—	STRUCTURE SUBSURFACE
PDF	PROJECT DEMARCATION FENCE
BF	BARRIER FENCE
—	TREE PROTECTION ZONE (TPZ)
—	STRIPING LINE REMOVAL
—	SHEET PILES

CONVENTIONAL BOUNDARY SYMBOLGY

BOUNDARY LINES

—	TOWN BOUNDARY LINE
—	COUNTY BOUNDARY LINE
—	STATE BOUNDARY LINE
—	PROPOSED STATE R.O.W. (LIMITED ACCESS)
—	PROPOSED STATE R.O.W.
—	STATE ROW (LIMITED ACCESS)
—	STATE ROW
—	TOWN ROW
—	PERMANENT EASEMENT LINE (P)
—	TEMPORARY EASEMENT LINE (T)
—	SURVEY LINE
—	PROPERTY LINE (P/L)
—	SLOPE RIGHTS
—	6F PROPERTY BOUNDARY
—	4F PROPERTY BOUNDARY
—	HAZARDOUS WASTE

EPSC LAYOUT PLAN SYMBOLGY

EPSC MEASURES

—	FILTER CURTAIN
—	SILT FENCE
—	SILT FENCE WOVEN WIRE
—	CHECK DAM
—	DISTURBED AREAS REQUIRING RE-VEGETATION
—	EROSION MATTING

ENVIRONMENTAL RESOURCES

—	WETLAND BOUNDARY
—	RIPARIAN BUFFER ZONE
—	WETLAND BUFFER ZONE
—	SOIL TYPE BOUNDARY
—	THREATENED & ENDANGERED SPECIES
HAZ	HAZARDOUS WASTE AREA
AG	AGRICULTURAL LAND
HABITAT	FISH & WILDLIFE HABITAT
—	FLOOD PLAIN
—	ORDINARY HIGH WATER (OHW)
—	STORM WATER
—	USDA FOREST SERVICE LANDS
—	WILDLIFE HABITAT SUIT/CONN

ARCHEOLOGICAL & HISTORIC

—	ARCHEOLOGICAL BOUNDARY
—	HISTORIC DISTRICT BOUNDARY
—	HISTORIC AREA
(H)	HISTORIC STRUCTURE

CONVENTIONAL TOPOGRAPHIC SYMBOLGY

EXISTING FEATURES

—	ROAD EDGE PAVEMENT
—	ROAD EDGE GRAVEL
—	DRIVEWAY EDGE
—	DITCH
—	FOUNDATION
—	FENCE (EXISTING)
—	FENCE WOOD POST
—	FENCE STEEL POST
—	GARDEN
—	ROAD GUARDRAIL
—	RAILROAD TRACKS
—	CULVERT (EXISTING)
—	STONE WALL
—	WALL
—	WOOD LINE
—	BRUSH LINE
—	HEDGE
—	BODY OF WATER EDGE
—	LEDGE EXPOSED

PROJECT NAME: ROCHESTER

PROJECT NUMBER: BRF 0162(17)

FILE NAME: r85e035.legend.dgn

PROJECT LEADER: J. FITCH

DESIGNED BY: M. LONGSTREET

PROJECT LEGEND SHEET

PLOT DATE: 25-MAR-2013

DRAWN BY: M. LONGSTREET

CHECKED BY: M. LONGSTREET

SHEET 2 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

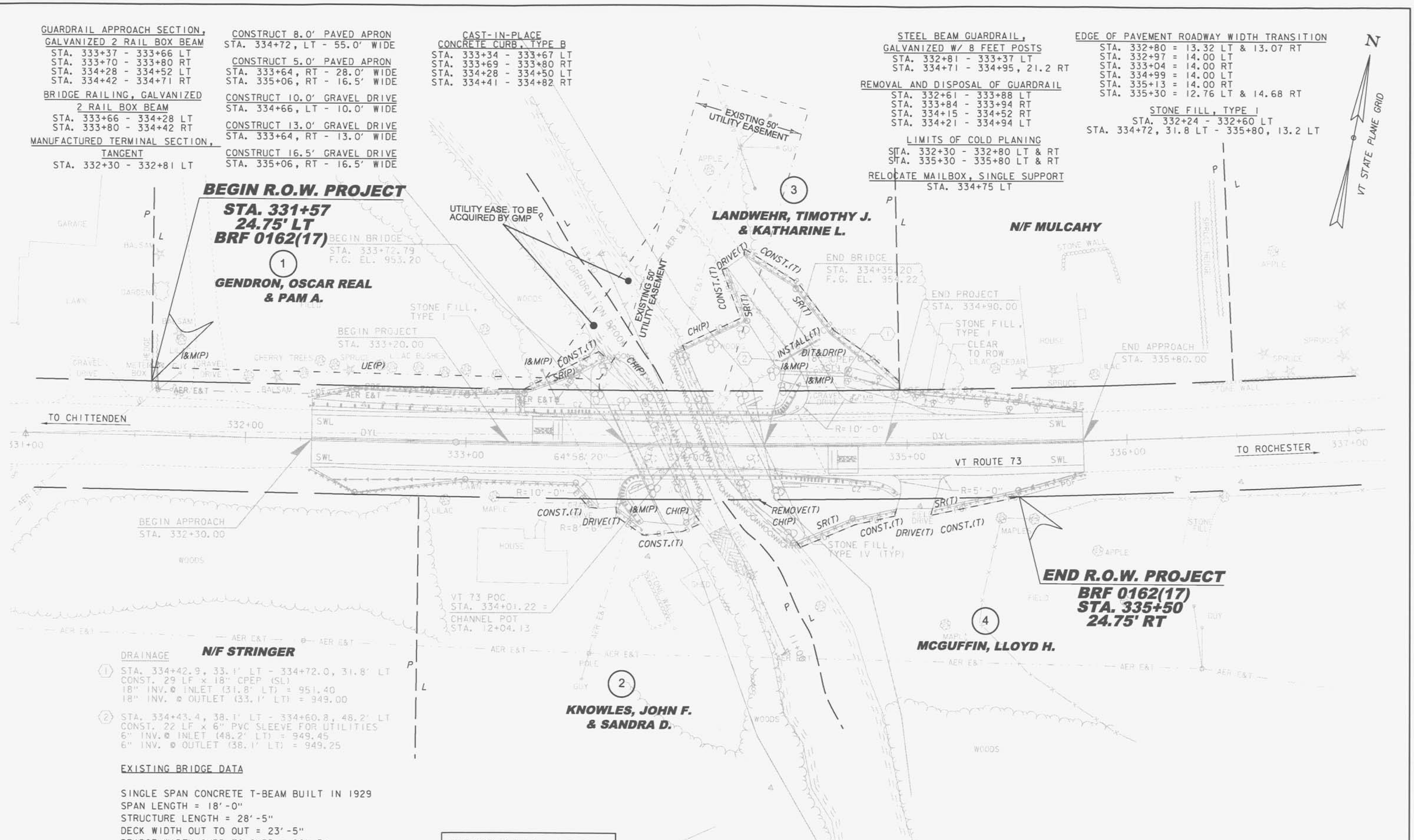
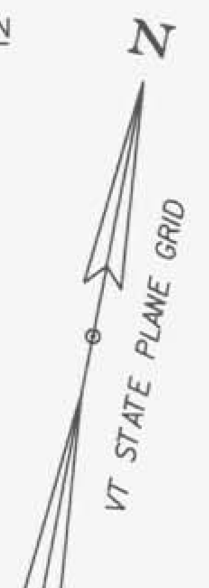
**STEEL BEAM GUARDRAIL,
GALVANIZED W/ 8 FEET POSTS**
STA. 332+81 - 333+37 LT
STA. 334+71 - 334+95, 21.2 RT

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



BEGIN R.O.W. PROJECT

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

**GENDRON, OSCAR REAL
& PAM A.**

**LANDWEHR, TIMOTHY J.
& KATHARINE L.**

N/F MULCAHY

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

MCGUFFIN, LLOYD H.

**KNOWLES, JOHN F.
& SANDRA D.**

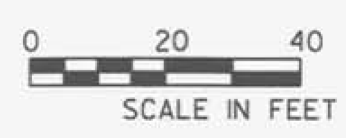
DRAINAGE N/F STRINGER

- 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	PLOT DATE: 25-MAR-2013
PROJECT NUMBER: BRF 0162(17)	DRAWN BY: J. BLANCHARD
FILE NAME: r85e035_layout.dgn	CHECKED BY: H. PETROVS
PROJECT LEADER: J. FITCH	SHEET 4 OF 12
DESIGNED BY: C.L. CILLEY	
ROW LAYOUT SHEET 10F 1	

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 50 = 1400 cfs
Q 10 = 860 cfs Q 100 = 1650 cfs
Q 25 = 1150 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' VELOCITY = 9.0 fps
Q10 = 947.7' " 11.5 fps
Q25 = 948.6' " 12.8 fps
Q50 = 950.5' " 13.6 fps
Q100 = 951.5' " 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 DISTANCE: 1900'
HIGHWAY #: TH 40 (NFS 226) STRUCTURE #: _____
CLEAR SPAN: 23.5' CLEAR HEIGHT: -7.5'
YEAR BUILT: _____
STRUCTURE TYPE: I-beam bridge with wood deck

DOWNSTREAM STRUCTURE

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

LRFR LOAD RATING FACTORS

LOADING LEVELS	TRUCK						
	H-20	HL-93	352	8 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:

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' VELOCITY = 9.4 fps
Q10 = 946.5' " 10.7 fps
Q25 = 947.3' " 11.0 fps
Q50 = 947.9' " 11.4 fps
Q100 = 948.4' " 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 DEPTH OR ELEVATION:
ORDINARY LOW WATER: 6 cfs -0.5'
ORDINARY HIGH WATER: 175 cfs -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

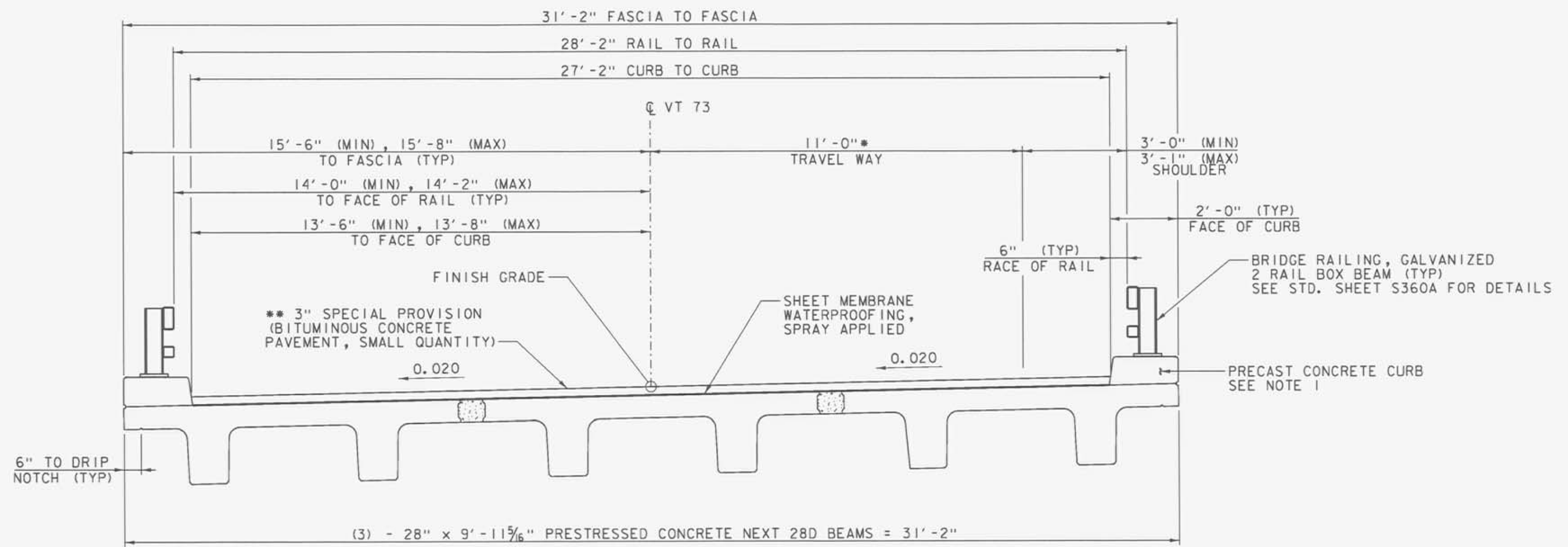
1. DESIGN LIVE LOAD	HL-93
2. FUTURE PAVEMENT	d _p : 3.0 INCH
3. DESIGN SPAN	L: 58.00 FT
4. MIN. MID-SPAN POS. CAMBER @ RELEASE (PRESTRESSED UNITS)	Δ: ---
5. PRESTRESSING STRAND (0.60 INCH DIAMETER - LOW RELAX)	f _y : 270 KSI
6. PRESTRESSED CONCRETE STRENGTH	f' _c : 8.0 KSI
7. PRESTRESSED CONCRETE RELEASE 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 _p : ---
16. SOIL BEARING RESISTANCE FACTOR (REFER TO AASHTO LRFD)	φ: ---
17. NOMINAL BEARING RESISTANCE OF ROCK	q _p : ---
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 : ---

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

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

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



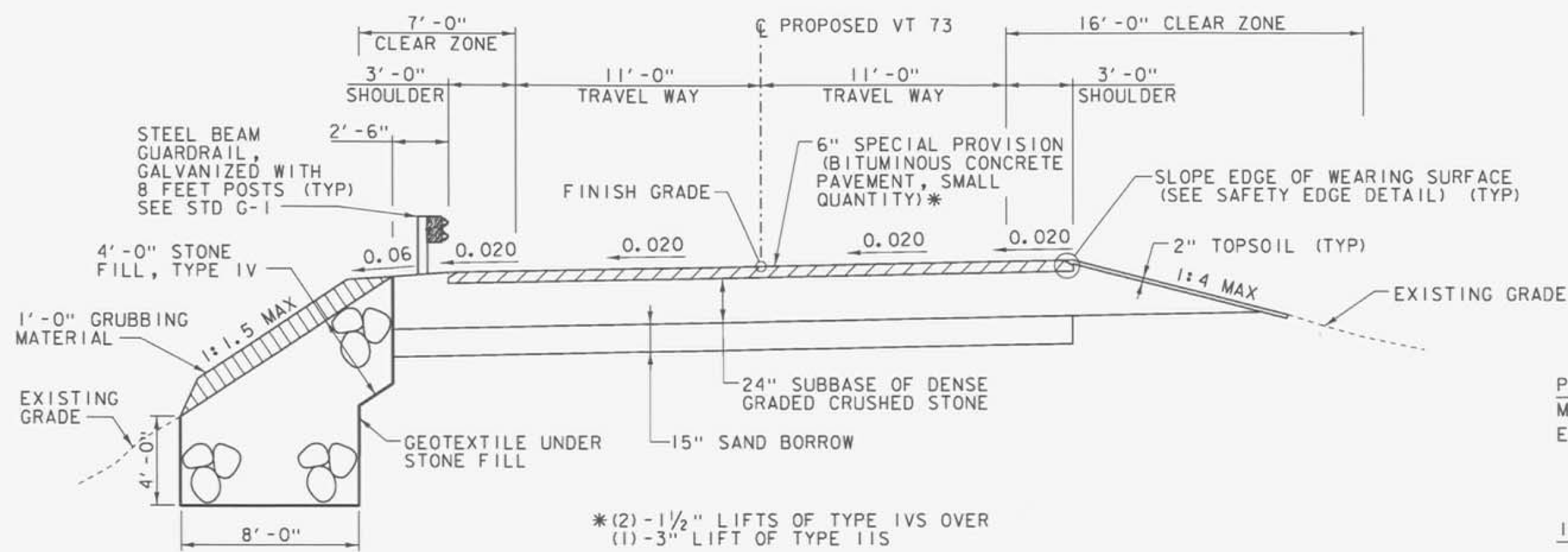
* - RADIAL DIMENSION
 ** - (2) - 1¹/₂" LIFTS OF TYPE IVS

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

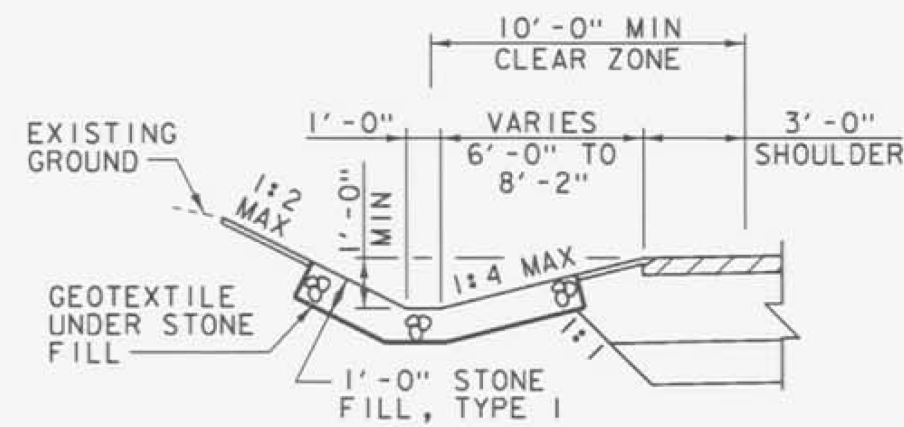
NOTE:

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

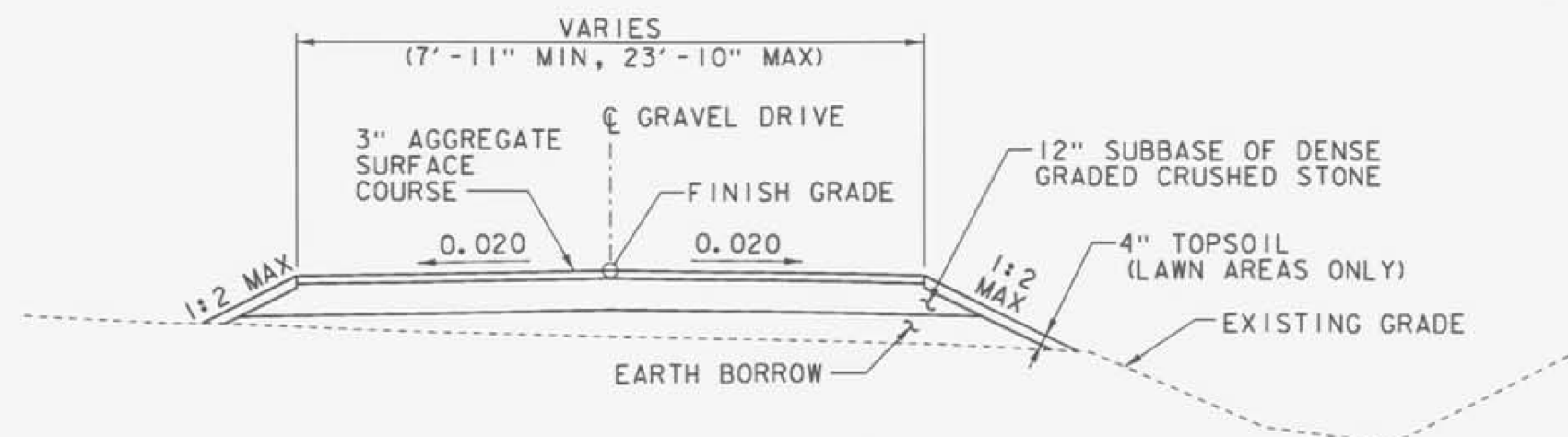
PROJECT NAME: ROCHESTER	PLOT DATE: 25-MAR-2013
PROJECT NUMBER: BRF 0162(17)	DRAWN BY: E.A. FIALA
FILE NAME: r85e035-typ.dgn	CHECKED BY: S.E. BURBANK
PROJECT LEADER: J. FITCH	SHEET 6 OF 12
DESIGNED BY: G.S. GOODRICH	
TYPICAL BRIDGE SECTION	



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"

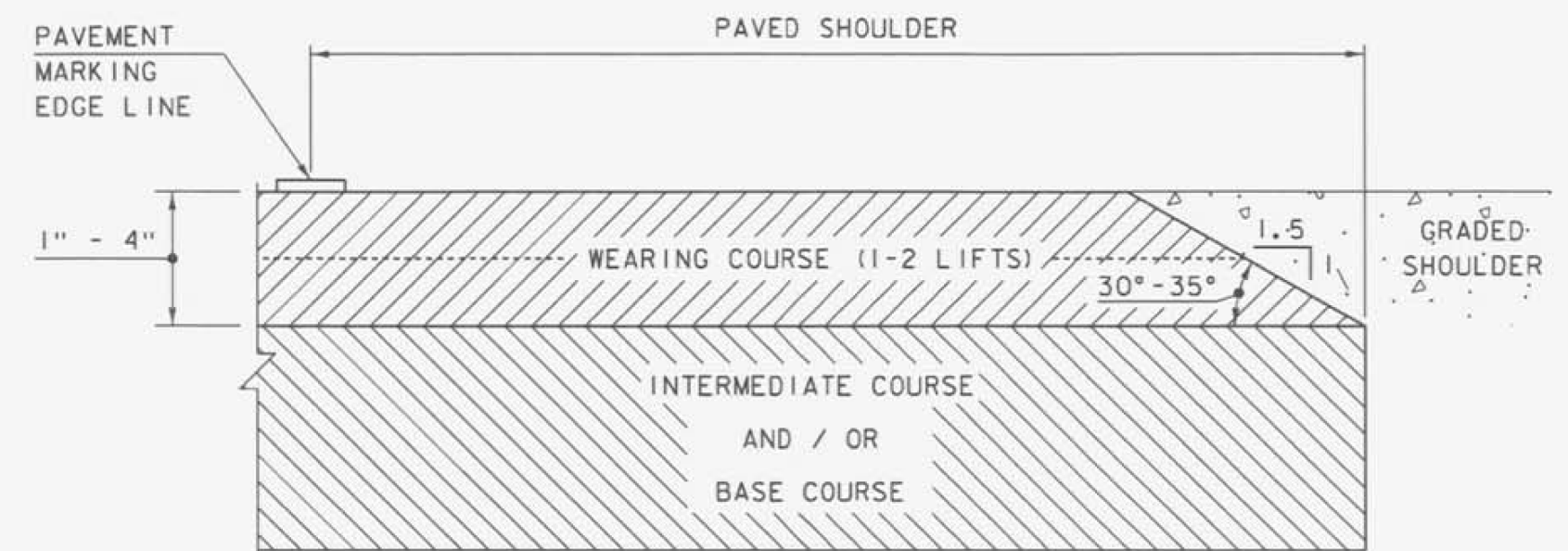


TYPICAL GRAVEL DRIVEWAY SECTION
 SCALE: 1/4" = 1'-0"

MATERIAL TOLERANCES
 (IF USED ON PROJECT)

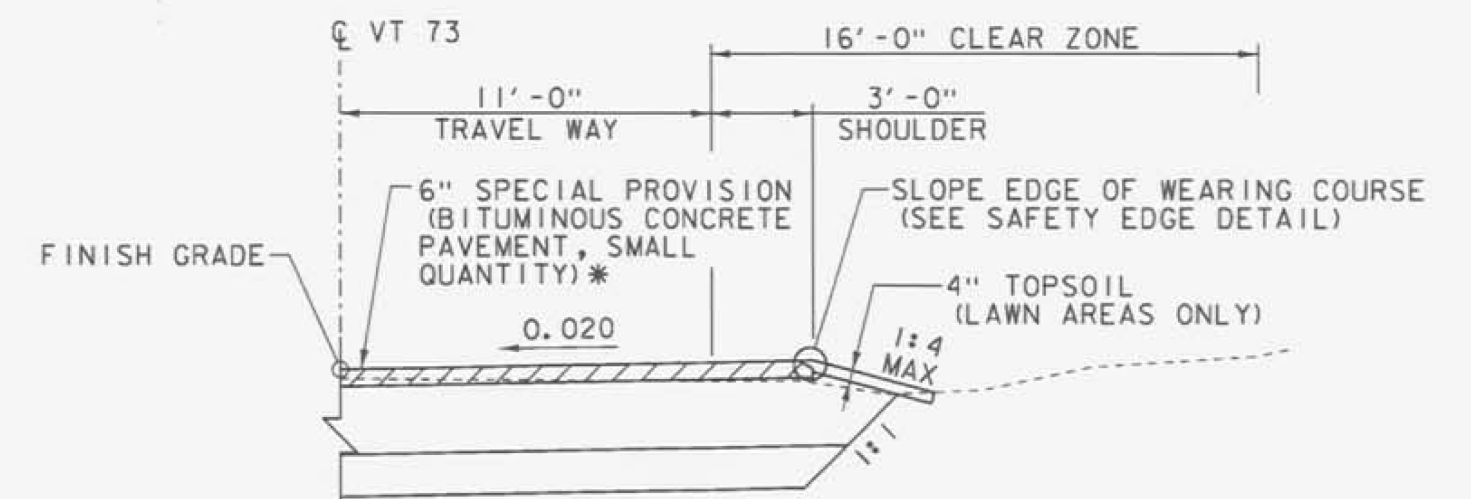
SURFACE	
PAVEMENT (TOTAL THICKNESS)	+/- 1/4"
SUBBASE	+/- 1"
SAND BORROW	+/- 1"

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

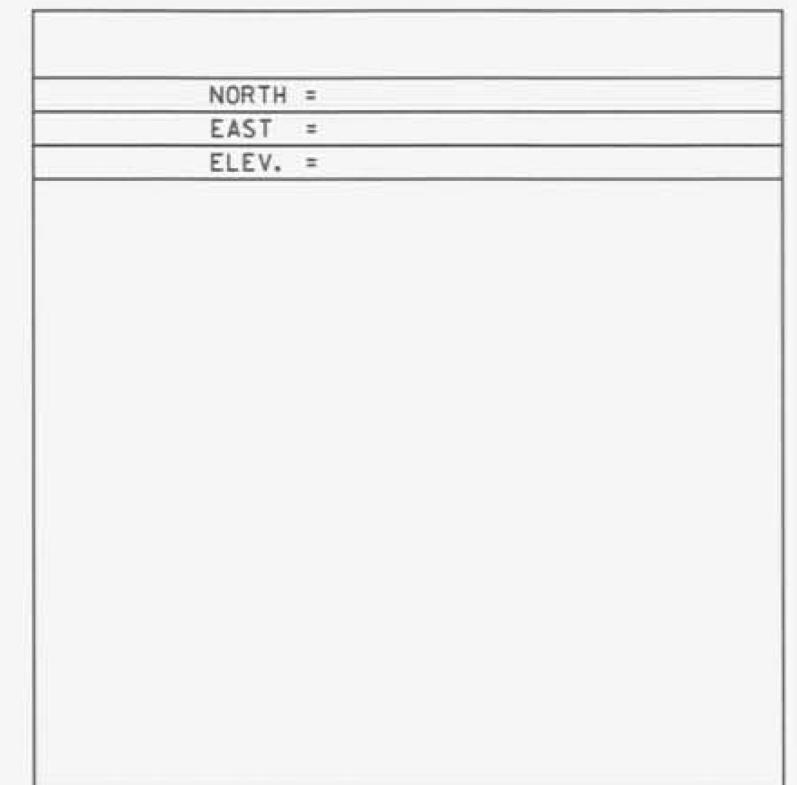
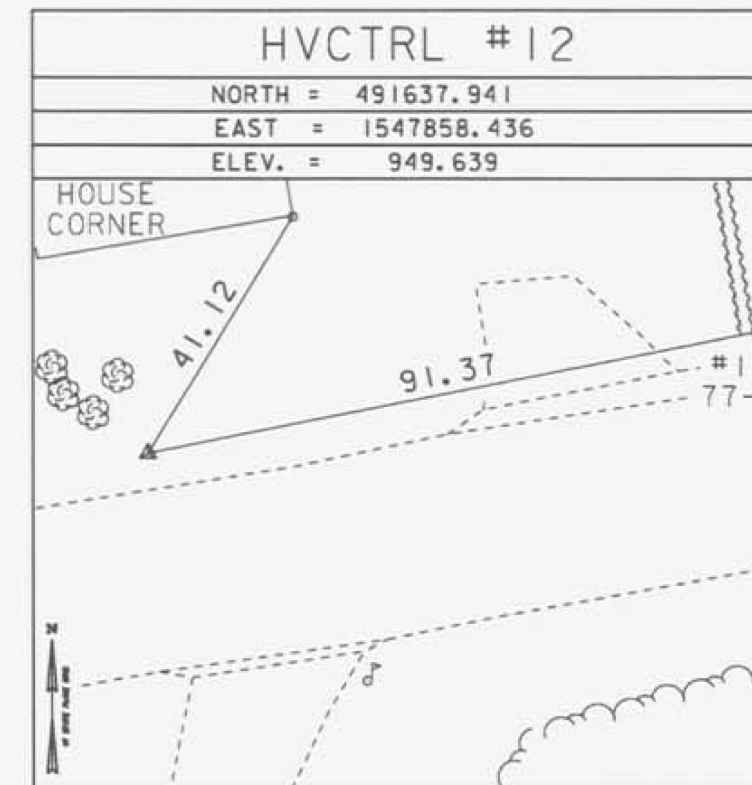
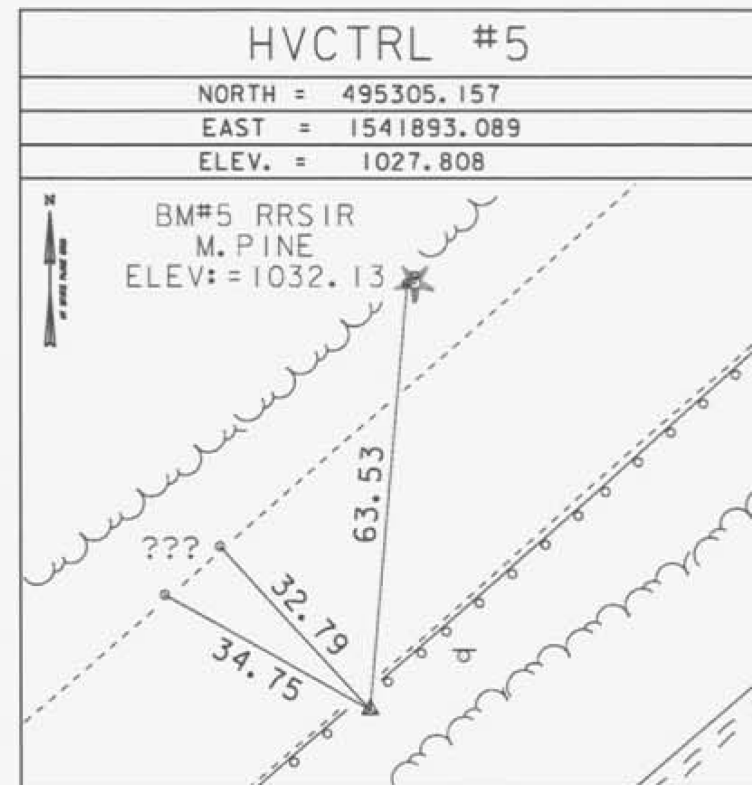
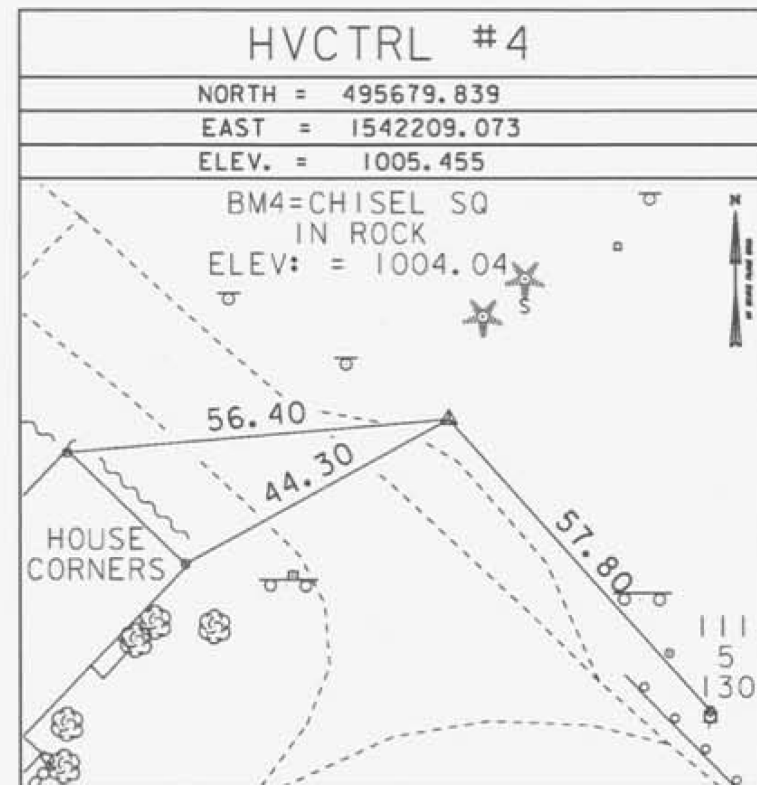
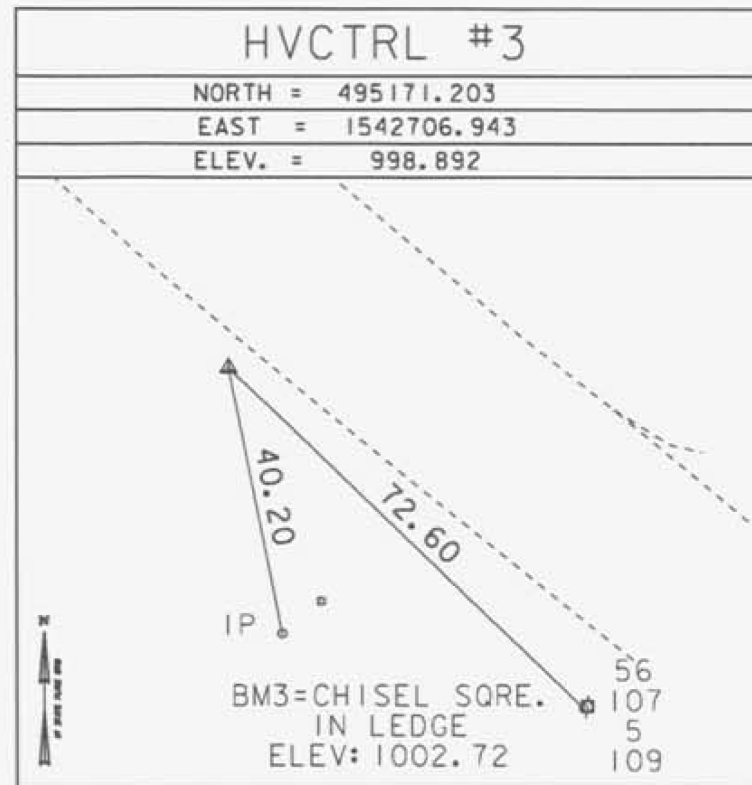
ROBINSON AZ MK
 NORTH = 492231.351
 EAST = 1545550.869
 ELEV. = 948.984

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.

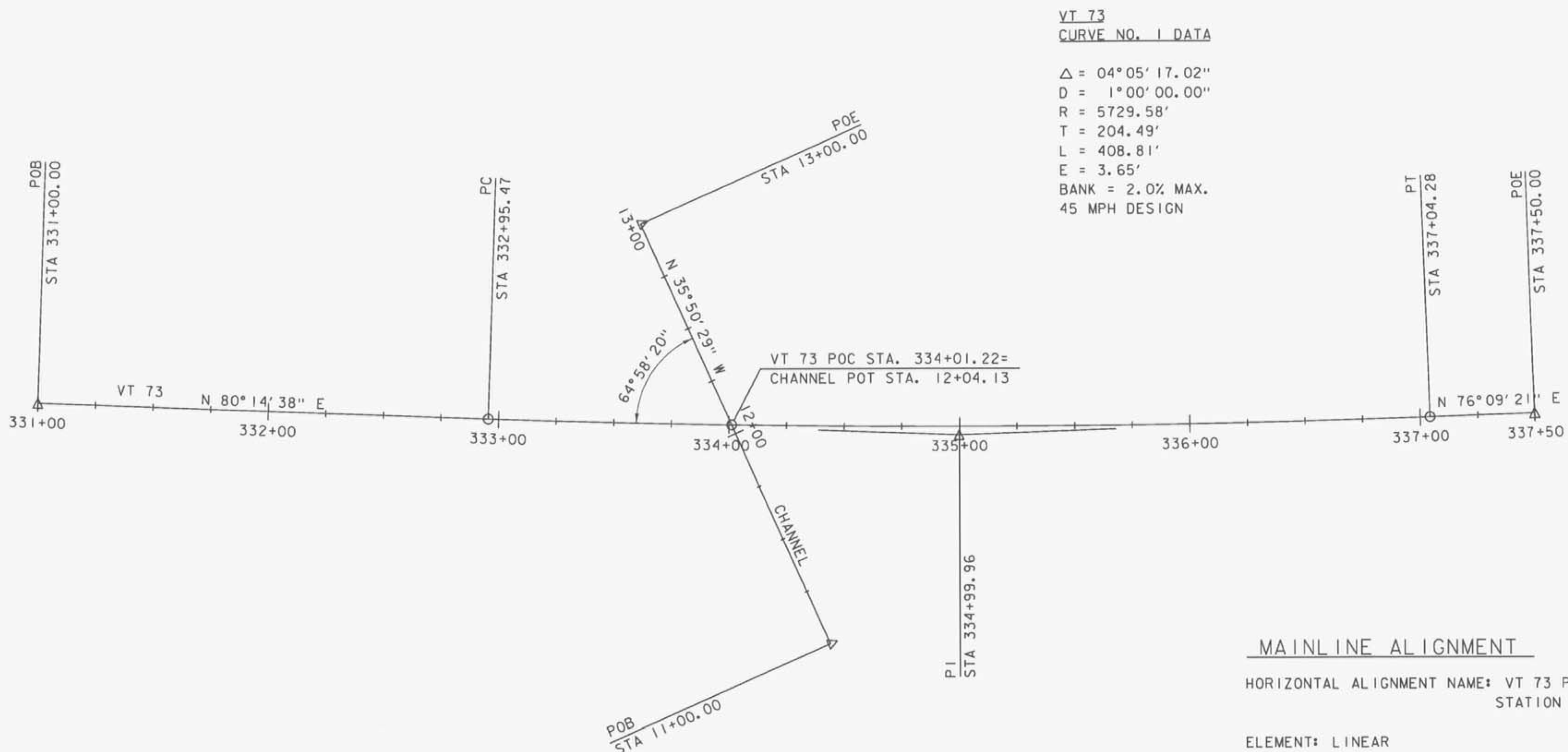
TRAVERSE TIES



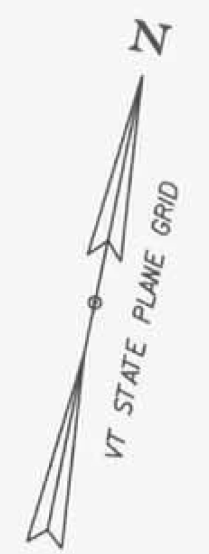
*MAIN TRAVERSE COMPLETED 6/15/2011 BY L. ORVIS P.C. & G. HITCHCOCK

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



VT 73
 CURVE NO. 1 DATA
 Δ = 04°05' 17.02"
 D = 1°00' 00.00"
 R = 5729.58'
 T = 204.49'
 L = 408.81'
 E = 3.65'
 BANK = 2.0% MAX.
 45 MPH DESIGN

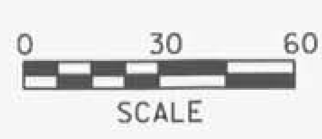


CHANNEL ALIGNMENT

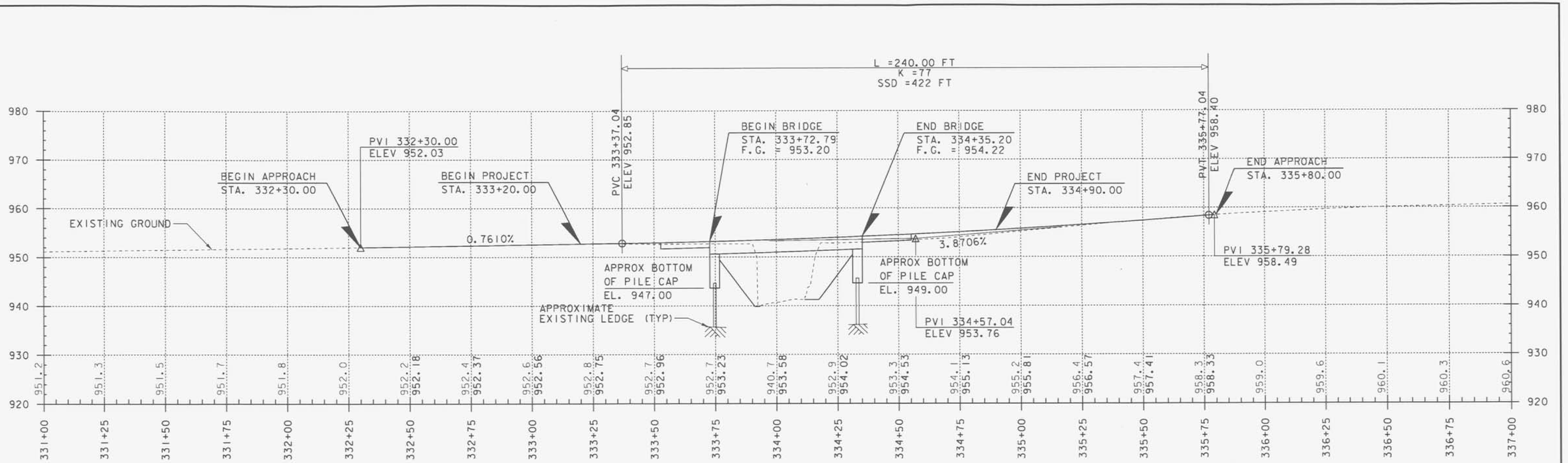
HORIZONTAL ALIGNMENT NAME: CHANNEL			
	STATION	NORTHING	EASTING
ELEMENT: LINEAR			
POB	11+00.00	491592.6684	1548250.4818
PI	13+00.00	491754.7965	1548133.3730
TANGENT DIRECTION:	N 35°50' 29.23" W		
TANGENT LENGTH:	200.00		

MAINLINE ALIGNMENT

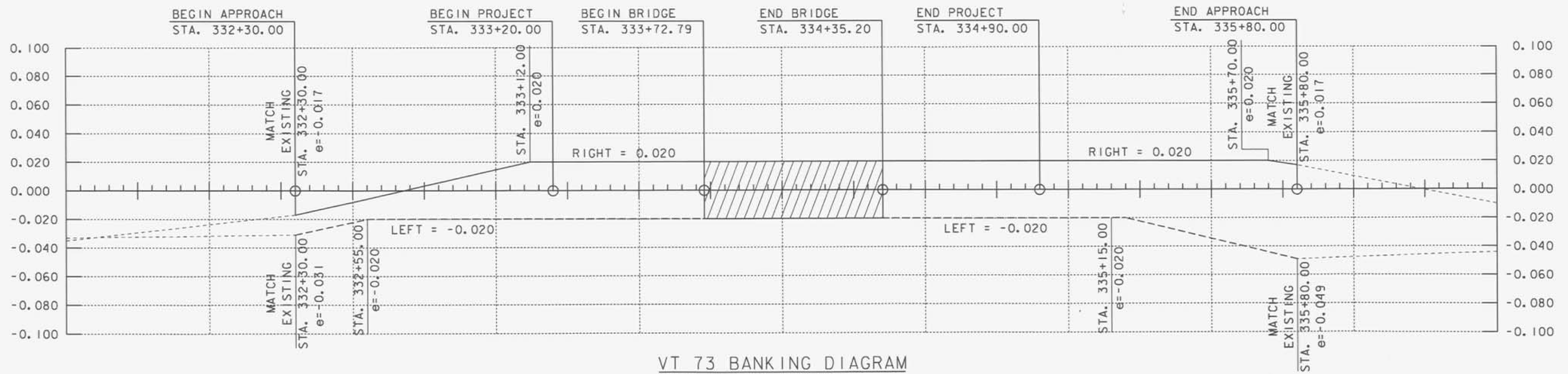
HORIZONTAL ALIGNMENT NAME: VT 73 PROPOSED			
	STATION	NORTHING	EASTING
ELEMENT: LINEAR			
POB	331+00.00	491625.0768	1547892.8199
PC	332+95.47	491658.2010	1548085.4666
TANGENT DIRECTION:	N 80°14' 37.72" E		
TANGENT LENGTH:	195.47		
ELEMENT: CIRCULAR			
PC	332+95.47	491658.2010	1548085.4666
PI	334+99.96	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	ALIGNMENT LAYOUT SHEET	SHEET 9 OF 12
DESIGNED BY:	C.L. CILLEY		



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

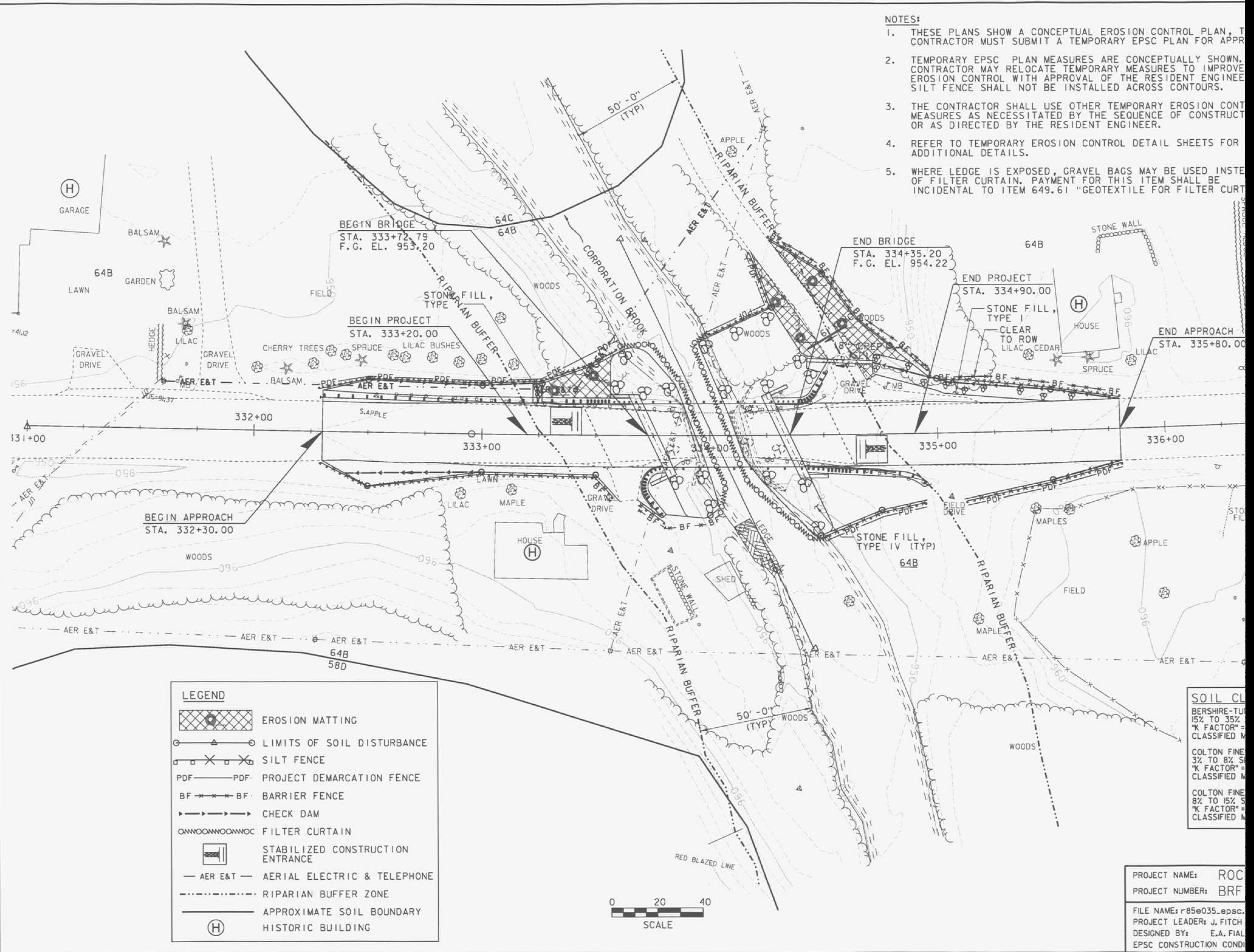


VT 73 BANKING DIAGRAM
 SCALE 1" = 20' HORIZONTAL
 1" = 0.040 FT/FT VERTICAL

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. 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



SOIL CLASSIFICATION
 BERSHIRE-TUN
 15% TO 35%
 "K FACTOR" =
 CLASSIFIED M
 COLTON FINE
 3% TO 8% S
 "K FACTOR" =
 CLASSIFIED M
 COLTON FINE
 8% TO 15% S
 "K FACTOR" =
 CLASSIFIED M

PROJECT NAME: ROC
 PROJECT NUMBER: BRF
 FILE NAME: r85e035.epsc
 PROJECT LEADER: J. FITCH
 DESIGNED BY: E.A. FIAL
 EPSC CONSTRUCTION COND

