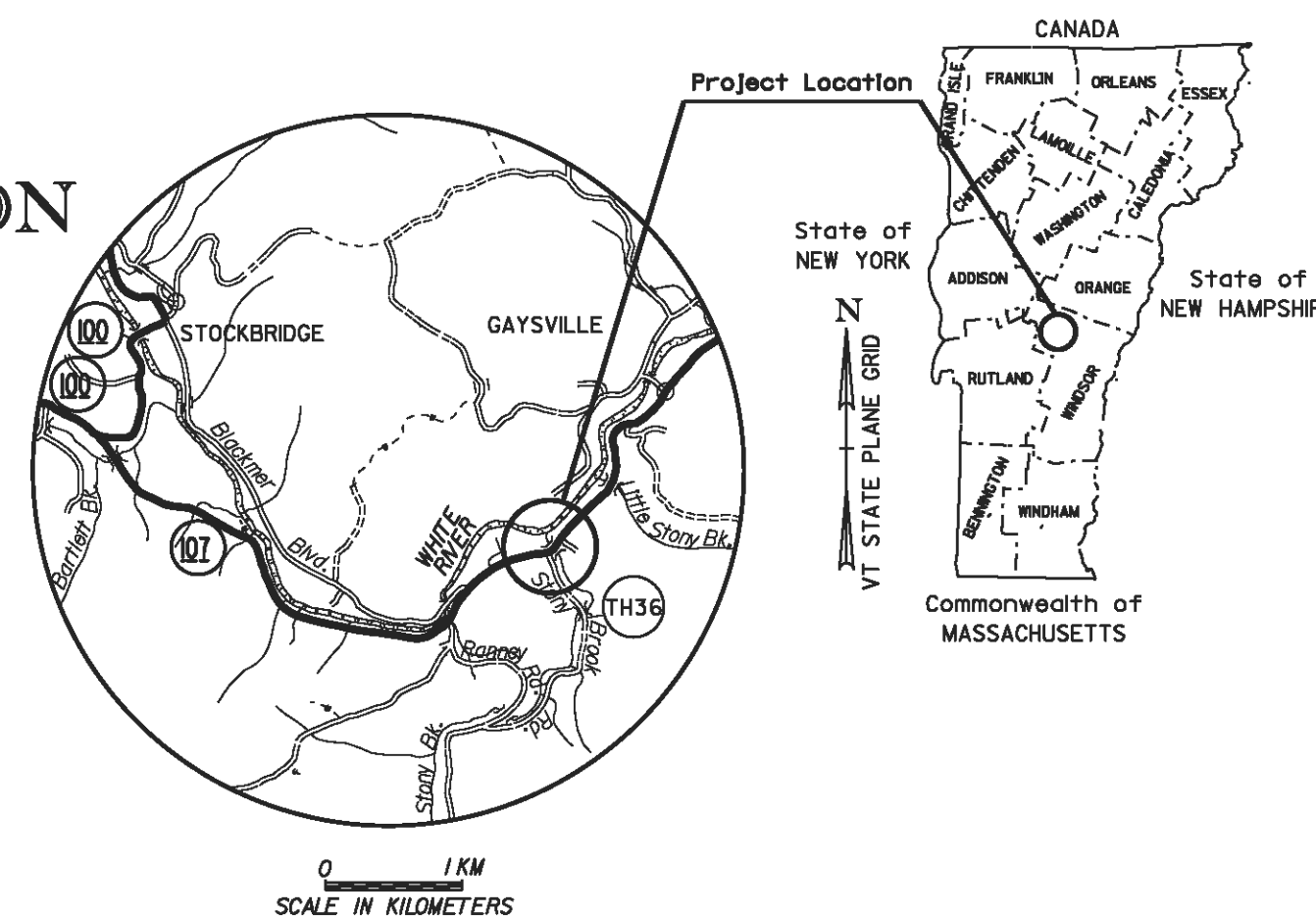


SEE SHEET 2 FOR INDEX OF SHEETS
AND LIST OF STANDARDS

STATE OF VERMONT AGENCY OF TRANSPORTATION



R. O. W. PLANS



PROPOSED IMPROVEMENT BRIDGE PROJECT TOWN OF STOCKBRIDGE COUNTY OF WINDSOR VT ROUTE 107, BRIDGE 9 MINOR ARTERIAL HIGHWAY

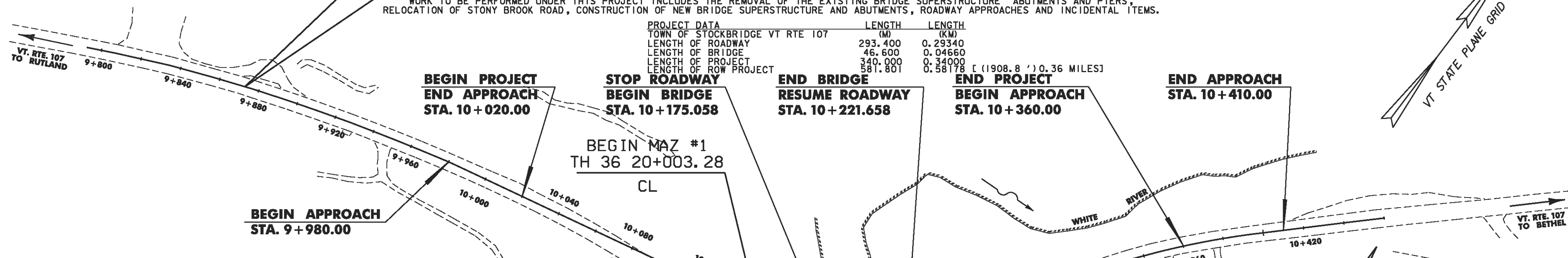
BEGIN R. O. W. PROJECT

BRF 022-1(20)

STA. 9+872.87 CL

BEGINNING AT A POINT, ON VERMONT ROUTE 107, IN THE TOWN OF STOCKBRIDGE, APPROXIMATELY 5.15 KILOMETERS EAST OF THE VERMONT ROUTE 107/VERMONT ROUTE 100 JUNCTION AND EXTENDING EASTERLY APPROXIMATELY 0.340 KILOMETERS ON VERMONT ROUTE 107.
WORK TO BE PERFORMED UNDER THIS PROJECT INCLUDES THE REMOVAL OF THE EXISTING BRIDGE SUPERSTRUCTURE, ABUTMENTS AND PIERS, RELOCATION OF STONY BROOK ROAD, CONSTRUCTION OF NEW BRIDGE SUPERSTRUCTURE AND ABUTMENTS, ROADWAY APPROACHES AND INCIDENTAL ITEMS.

PROJECT DATA	LENGTH (M)	LENGTH (KM)
TOWN OF STOCKBRIDGE VT RTE 107		
LENGTH OF ROADWAY	293.400	0.29340
LENGTH OF BRIDGE	46.600	0.04660
LENGTH OF PROJECT	340.000	0.34000
LENGTH OF ROW PROJECT	581.801	0.58178 [(1908.8') 0.36 MILES]



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

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.

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	

SURVEYED BY : L. ORVIS
SURVEYED DATE : JAN 2000

DATUM
VERTICAL NAVD88
HORIZONTAL NAD83 (96)

VT RTE 107 STA 10+146.023 =
STONY BROOK RD STA SB 20+000.000

BEGIN REL #1
10+139.62

16.41M (53.8') RT

END REL #1
TH36 20+060.80

7.54M (24.7') RT TH*36

**LIMIT OF WORK
STA. SB 20+100**

Right of Way Agent
Frank J. Mainati Jr.



END R. O. W. PROJECT

BRF 022-1(20)
STA. 10+454.671
13.52M (44.36') RT.

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

CONSTRUCTION IS TO BE CARRIED ON IN ACCORDANCE
WITH THESE PLANS AND THE STANDARD SPECIFICATIONS
FOR CONSTRUCTION DATED 2001, AS APPROVED BY THE
FEDERAL HIGHWAY ADMINISTRATION ON JANUARY 4, 2001
FOR USE ON THIS PROJECT, INCLUDING ALL SUBSEQUENT
REVISIONS AND SUCH REVISED SPECIFICATIONS AND
SPECIAL PROVISIONS AS ARE INCORPORATED IN THESE
PLANS.

Metric

UNLESS NOTED OTHERWISE
STATIONS ARE IN KILOMETERS
ELEVATIONS ARE IN METERS
DIMENSIONS ARE IN MILLIMETERS

APPROVED _____ DATE _____
Director of Program Development

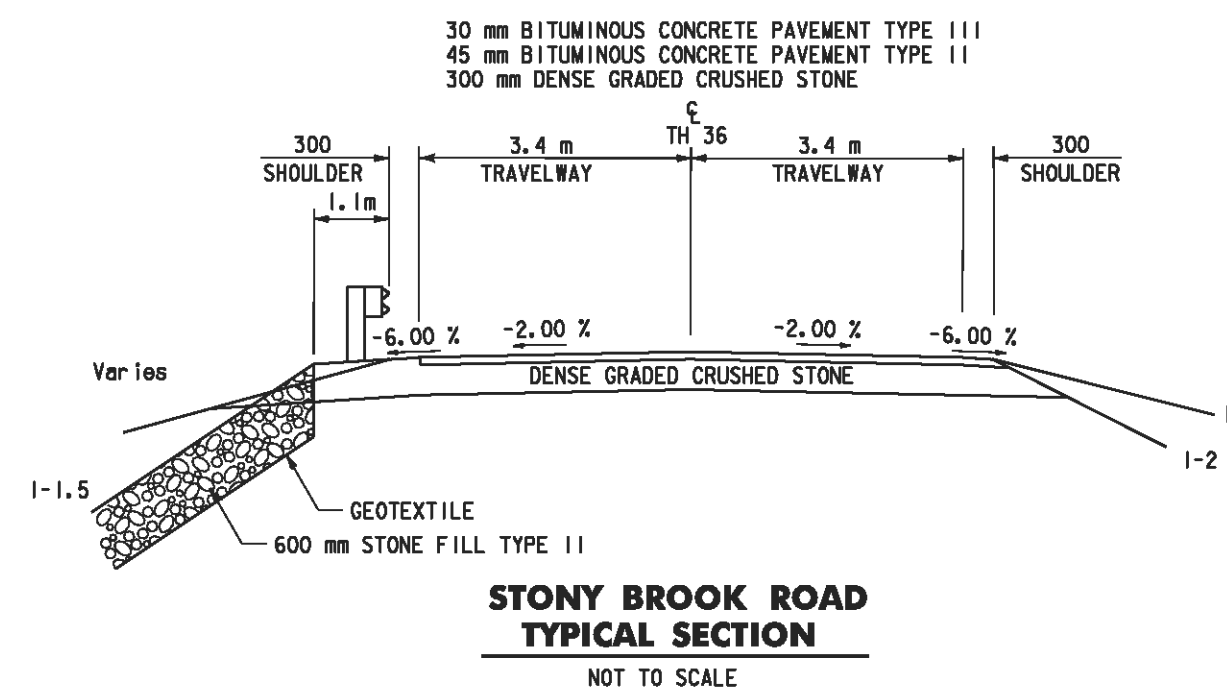
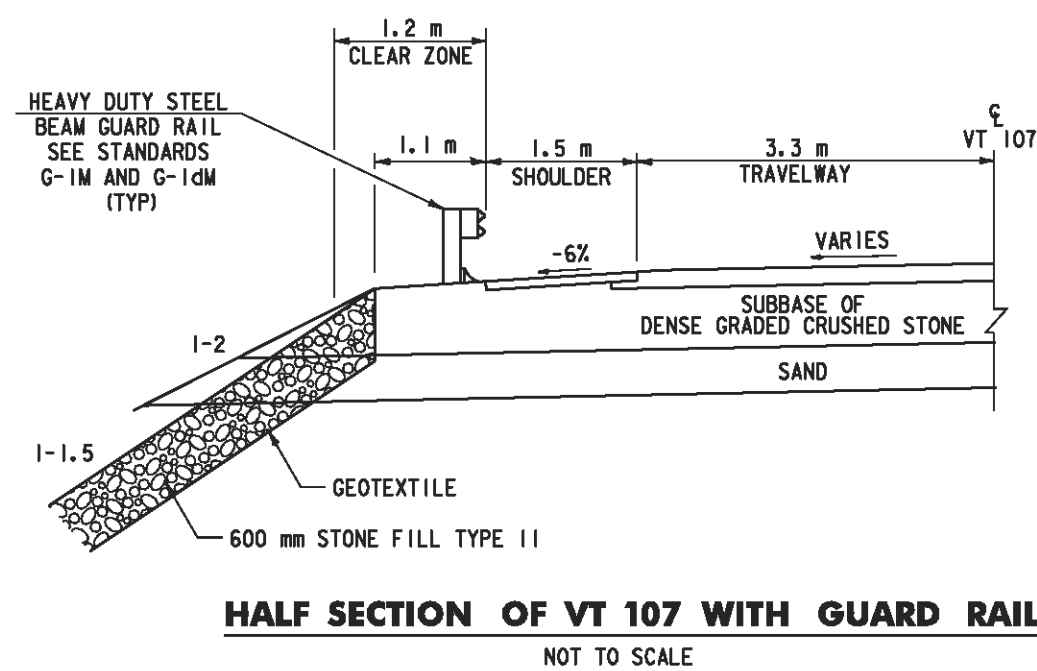
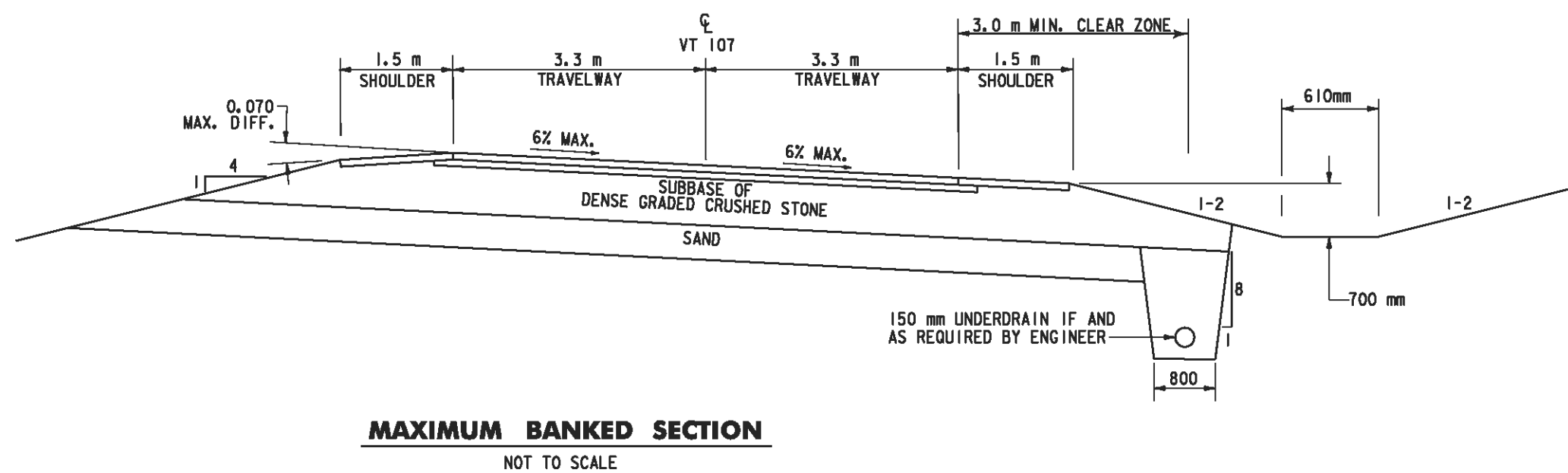
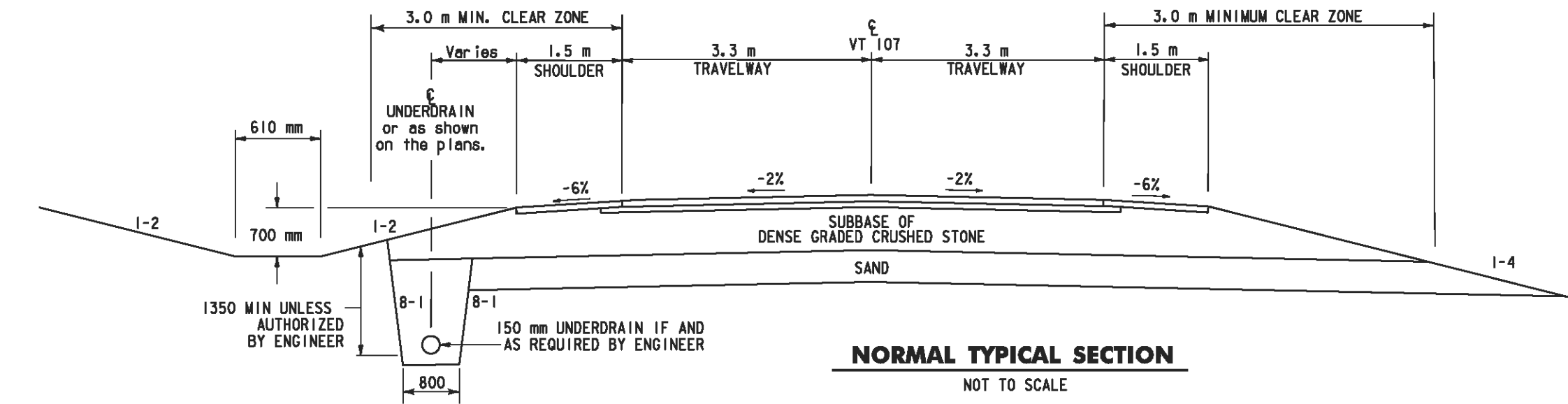
APPROVED _____ DATE _____
Chief of Right of Way

STOCKBRIDGE
BRF 022-1(20) S
R. O. W. SHEET 1 OF 33 SHEETS

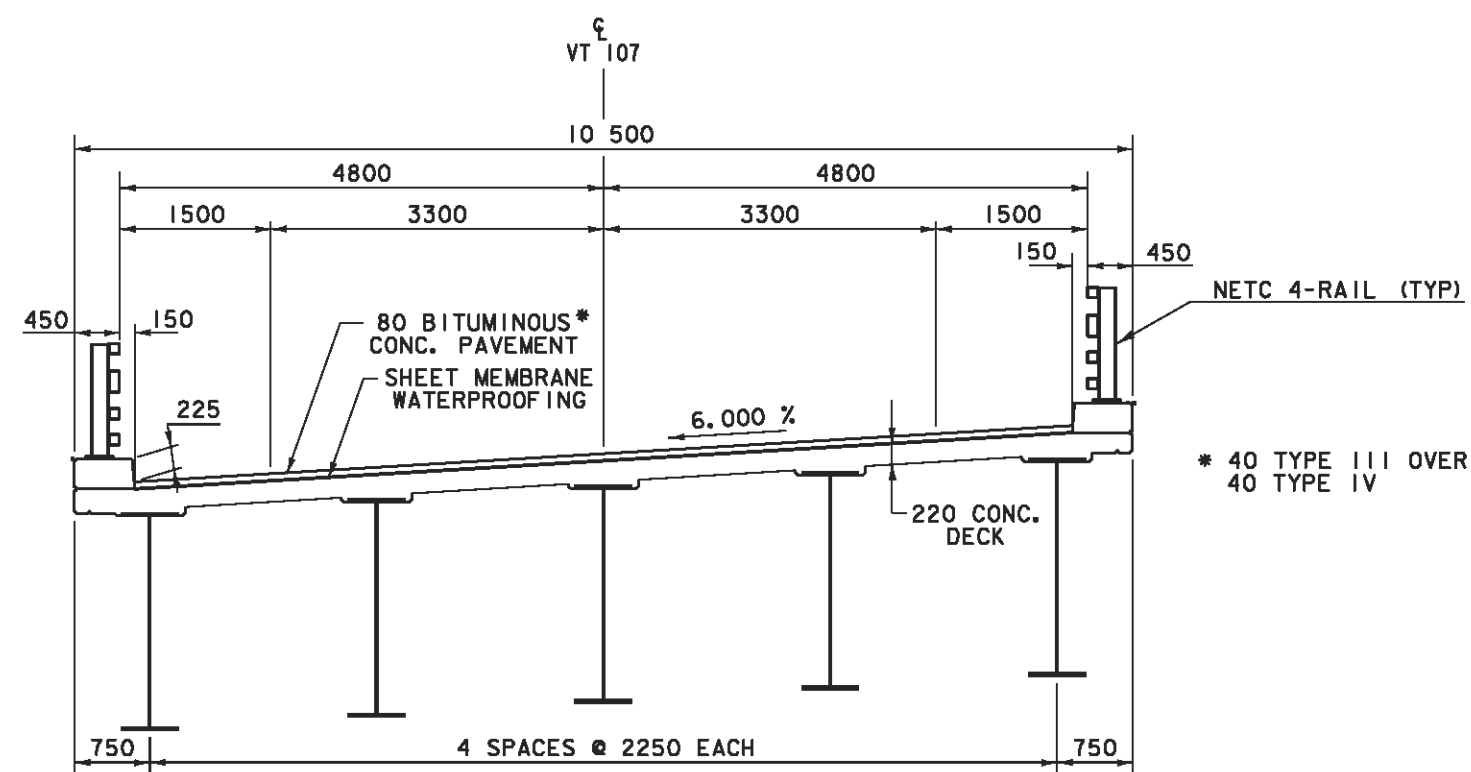
de0391t.1 04-MAR-2010

TYPICAL ROADWAY SECTIONS

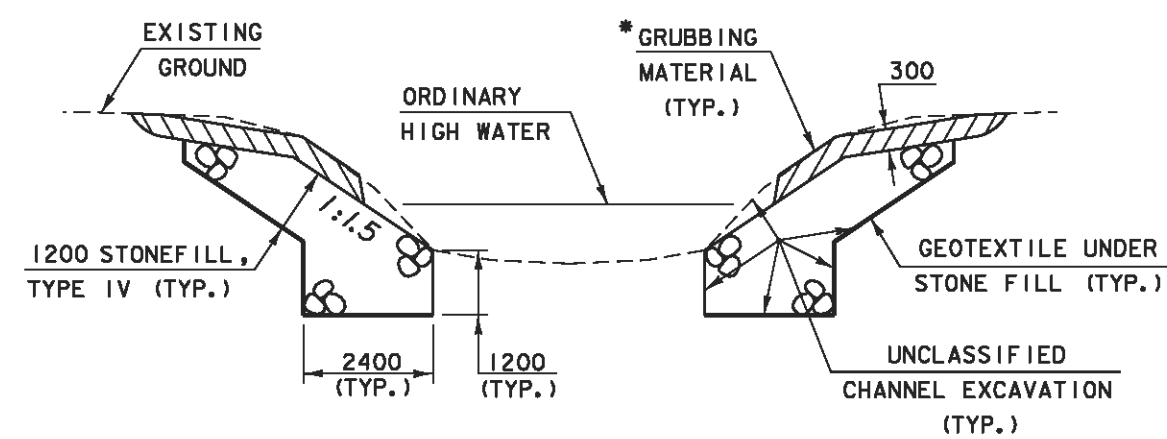
40 mm BITUMINOUS CONCRETE PAVEMENT TYPE III
 75 mm BITUMINOUS CONCRETE PAVEMENT TYPE II
 90 mm BITUMINOUS CONCRETE PAVEMENT TYPE I
 Shoulders: 115 mm BITUMINOUS CONCRETE PAVEMENT (40 mm TYPE III over 75 mm TYPE II)
 610 mm DENSE GRADED CRUSHED STONE
 450 mm SAND



PROJECT NAME:	STOCKBRIDGE	PLOT DATE:	04-MAR-2010
PROJECT NUMBER:	BRF 022-1(20)SC	DRAWN BY:	M DRAPER
FILE NAME:	str5/85e039/de039typ.dgn	DESIGNED BY:	G. Shangraw
PROJECT LEADER:	C.P. Williams	CHECKED BY:	R GINGRAS
ROW SHEET	2	OF	33



TYPICAL BRIDGE SECTION
NOT TO SCALE



TYPICAL CHANNEL SECTION
NOT TO SCALE

* GRUBBING MATERIAL SHALL NOT BE PLACED ON THE STONE FILL IN THE AREA UNDER THE BRIDGE. WHENEVER CHANNEL SLOPE INTERSECTS ROADWAY SUBBASE, GRUBBING MATERIAL SHALL BEGIN AT THE BOTTOM OF SUBBASE.

PROJECT NAME: STOCKBRIDGE
PROJECT NUMBER: BRF 022-1(20)SC

FILE NAME: xe039frm.dgn
PROJECT LEADER: C.P. Williams
DESIGNED BY: R GINGRAS

PLOT DATE: 04-MAR-2010
DRAWN BY: M DRAPER
CHECKED BY: R GINGRAS
ROW SHEET 3 OF 33



GPS CONTROL POINTS

HVCTRL #1

V.T.G.S. SURVEY DISK STAMPED
 * GODDARD *
 N = 140062.8520
 E = 482218.6380
 EL. = 240.600

GENERAL LOCATION, STOCKBRIDGE, VT. OWNERSHIP, EDITH GODDARD, 2678 VT RTE 107, STOCKBRIDGE, VT.05772. TO REACH FROM THE INTERSECTION OF VT ROUTES 100 AND 107 GO EAST ALONG VT ROUTE 107 FOR 2.7 MI (4.3 KM) TO THE INTERSECTION OF BLACKMER BOULEVARD LEFT AND A GRAVEL DRIVE RIGHT. TURN RIGHT AND GO SOUTHEAST ALONG THE GRAVEL DRIVE FOR ABOUT 75 M (246.1 FT) TO THE SITE OF THE MARK ON THE RIGHT IN THE FRONT LAWN OF THE GODDARD RESIDENCE. THE MARK IS SET FLUSH WITH GROUND SURFACE IN THE TOP OF A ROCK OUTCROP OF WHICH 0.2 M (0.7 FT) IS EXPOSED. IT IS 30.2 M (99.1 FT) WEST SOUTHWEST OF AND ABOUT 3.5 M (11.5 FT) HIGHER THAN THE CENTERLINE OF THE GRAVEL DRIVE, 19.4 M (63.6 FT) NORTHWEST OF THE NORTH CORNER OF THE HOUSE, 28.2 M (92.5 FT) NORTH OF THE WEST CORNER OF THE ADDITION ON THE HOUSE, 8.2 M (26.9 FT) SOUTHWEST OF A FLAG POLE, AND 25.2 M (82.7 FT) HEAST OF POLE NO 1C/79-1.

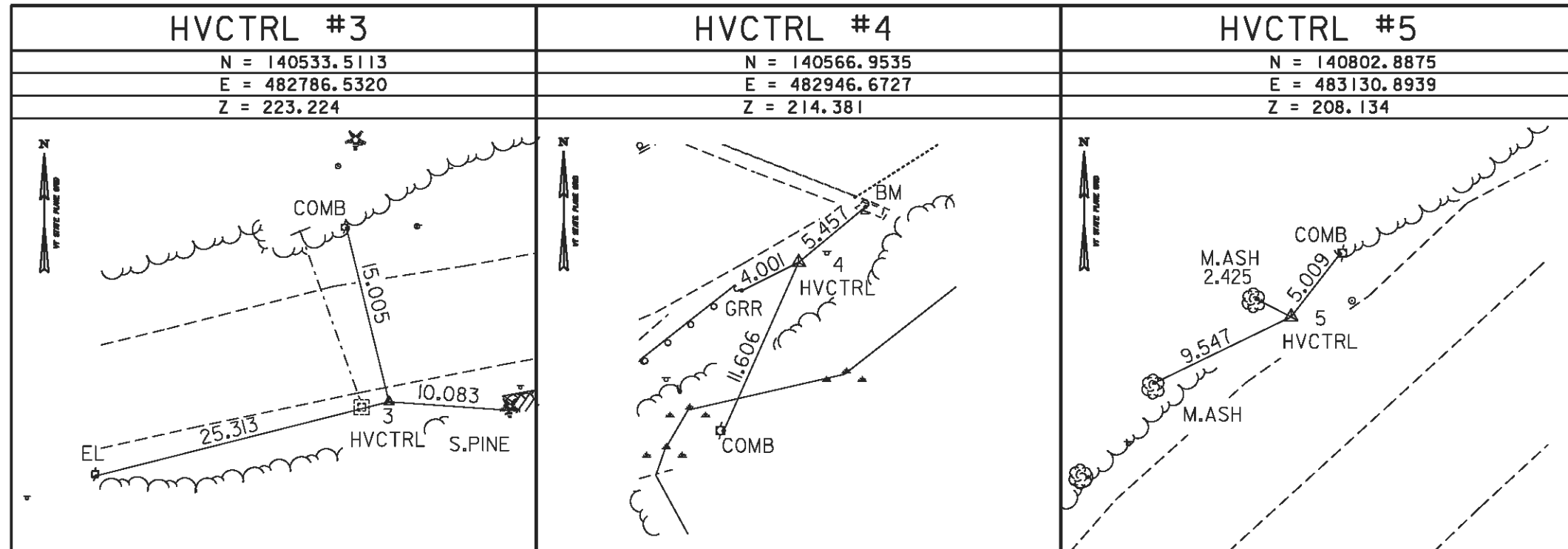
* DESCRIPTION PROVIDED BY VERMONT AGENCY OF TRANSPORTATION GEODETIC SURVEY UNIT.

HVCTRL #2

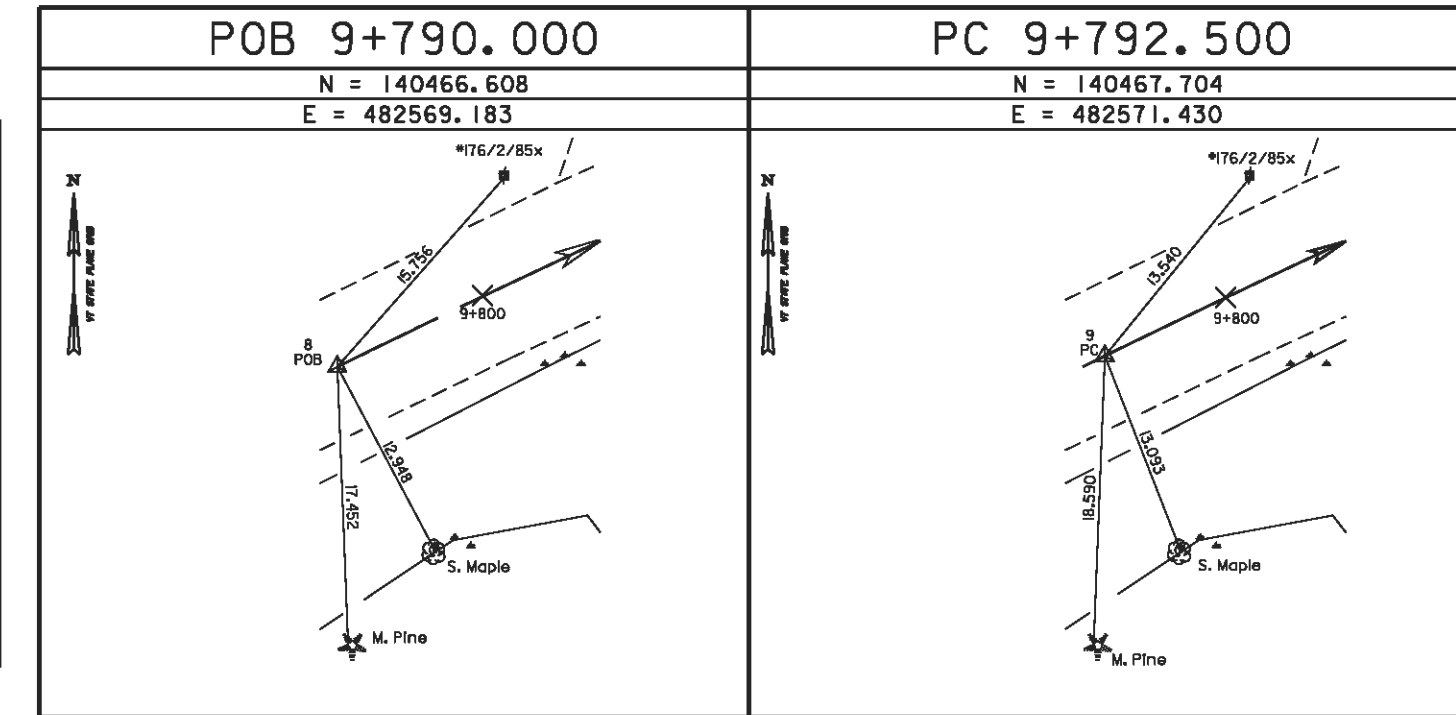
V.T.G.S. SURVEY DISK STAMPED
 * GODDARD AZ MK *
 N = 140489.2110
 E = 482565.4360
 EL. = 225.690

GENERAL LOCATION, STOCKBRIDGE, VT. OWNERSHIP, ELOISE THOMPSON, 3080 VT ROUTE 107, STOCKBRIDGE, VT.05772. TO REACH FROM THE INTERSECTION OF VT ROUTES 100 AND 107 GO EAST ALONG VT ROUTE 107 FOR 3.0 MI (4.8 KM) TO THE SITE OF THE MARK ON THE LEFT IN A LAWN. IT IS JUST EAST OF THE STOCKBRIDGE CENTRAL SCHOOL. THE MARK IS SET FLUSH WITH GROUND SURFACE IN THE TOP OF A 30 CM DIAMETER CONCRETE MONUMENT POURED 1.2 M (3.9 FT) DEEP. IT IS 17.6 M (57.7 FT) NORTH OF AND ABOUT 0.5 M (1.6 FT) LOWER THAN THE NORTH EDGE OF PAVEMENT OF VT ROUTE 107, 43.9 M (144.0 FT) NORTHEAST OF POLE NO 177/3/85, 21.0 M (68.9 FT) SOUTHWEST OF THE SOUTHWEST CORNER OF A FOUR BAY GARAGE, AND 17.6 M (57.7 FT) NORTH NORTHWEST OF POLE NO 1761/2 /85X AND

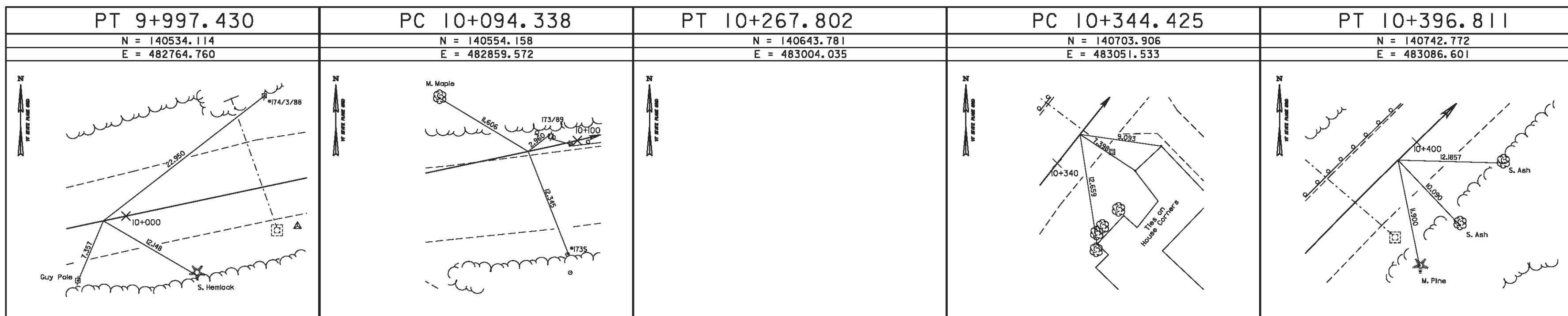
TRAVERSE TIES



ALIGNMENT TIES



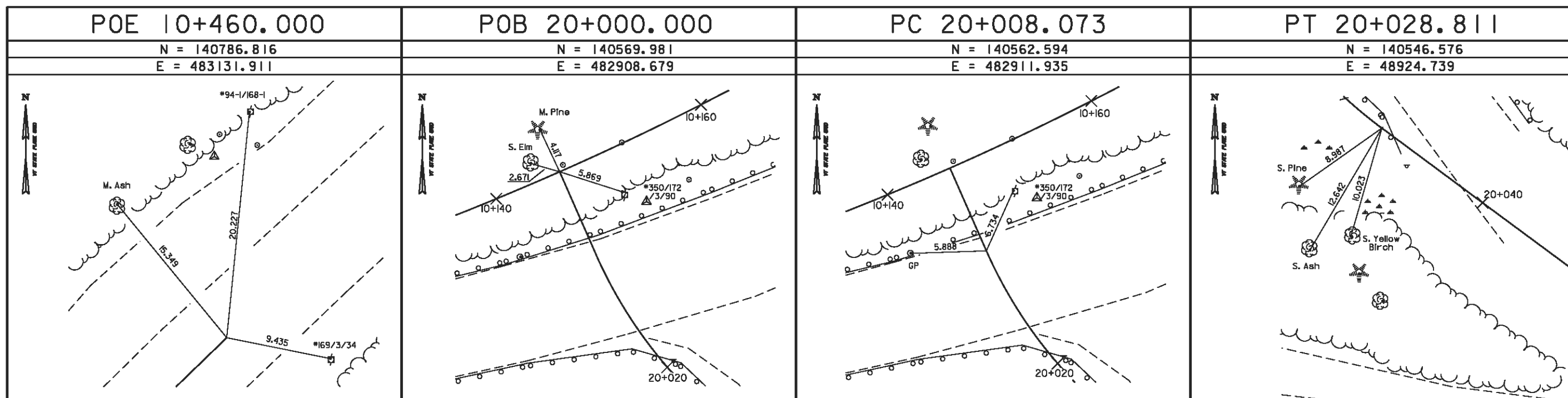
ALIGNMENT TIES



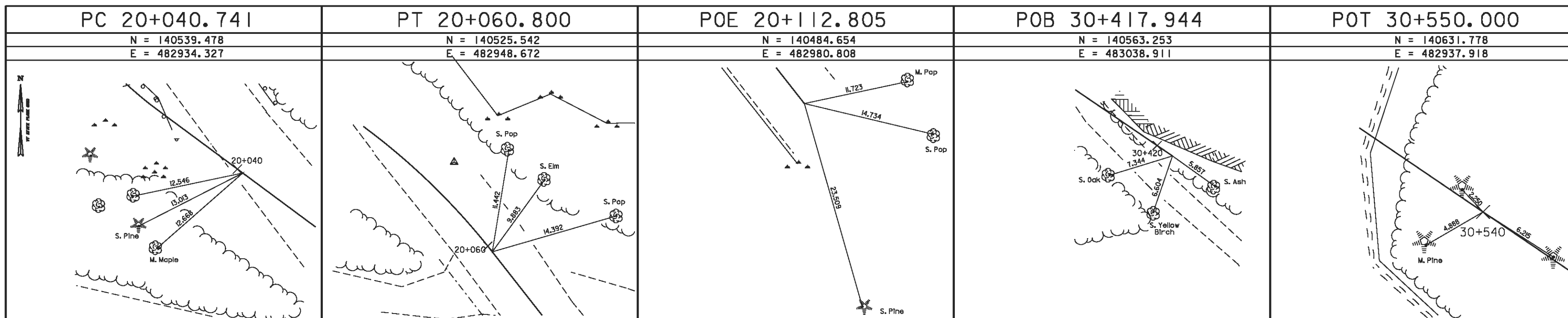
DATUM	
VERTICAL	NAVD 88
HORIZONTAL	NAD 83/96
ADJUSTMENT	none

PROJECT NAME:	STOCKBRIDGE	PLOT DATE:	04-MAR-2010
PROJECT NUMBER:	BRF 022-1(20)SC	DRAWN BY:	H.I. SALLS
FILE NAME:	str4/85e039/ds039t1.dgn	CHECKED BY:	R.S. YOUNG
PROJECT LEADER:	C.P. WILLIAMS	TIE SHEET 1	ROW SHEET 4 OF 33

ALIGNMENT TIES

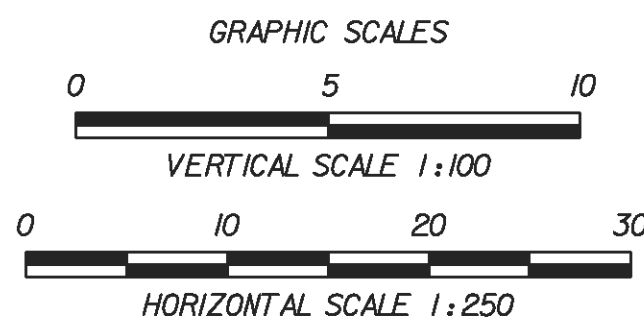


ALIGNMENT TIES



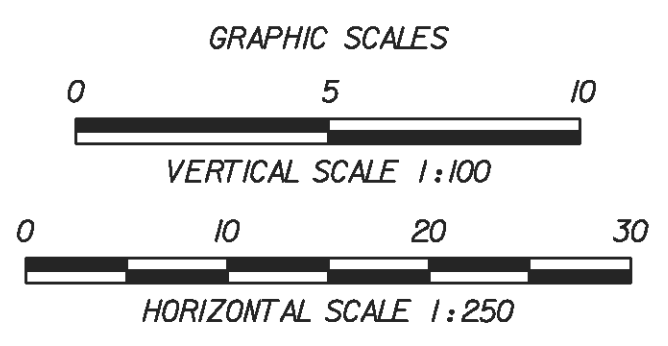
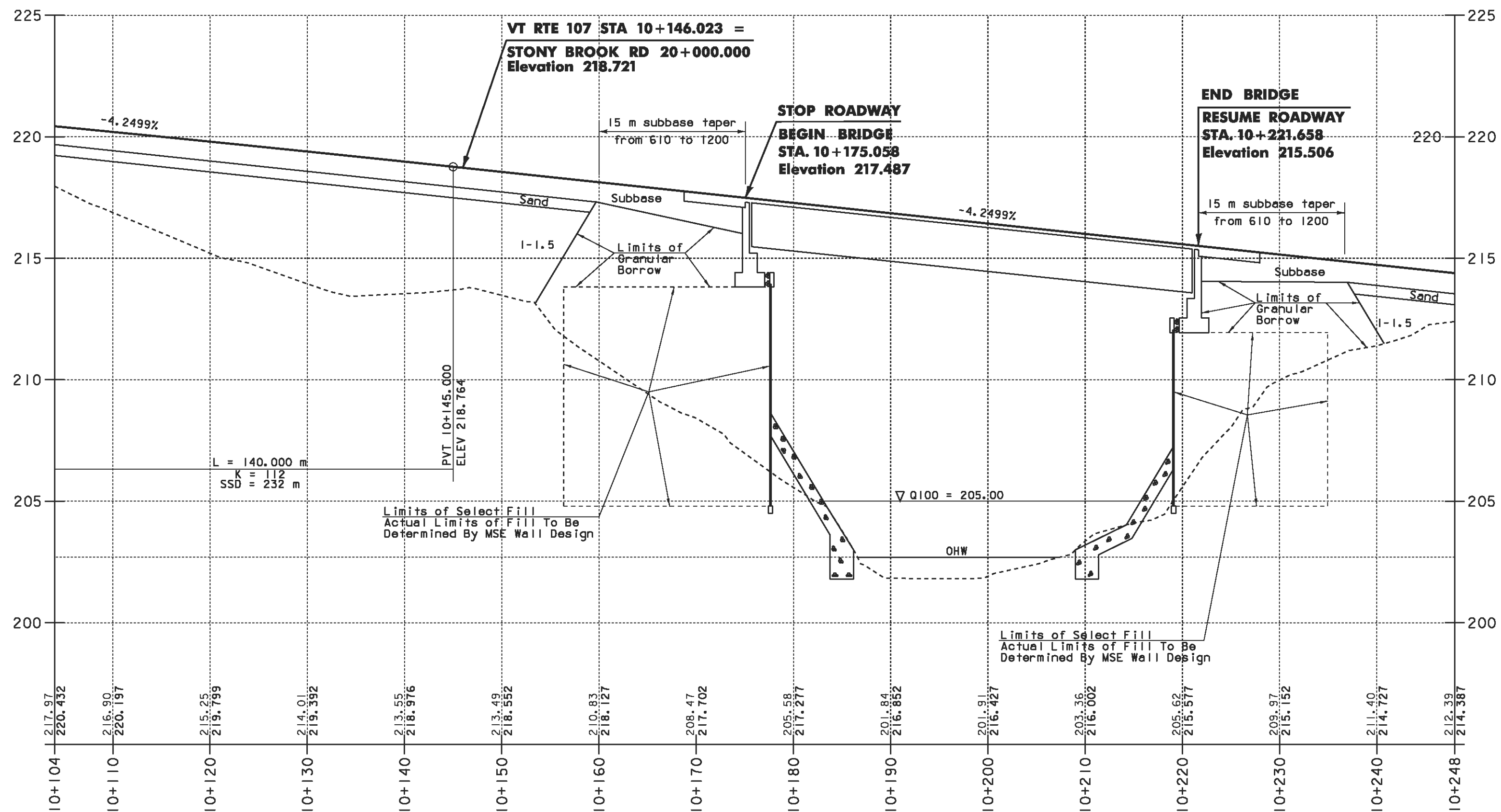
DATUM	
VERTICAL	NAVD 88
HORIZONTAL	NAD 83/96
ADJUSTMENT	none

PROJECT NAME:	STOCKBRIDGE	PLOT DATE:	04-MAR-2010
PROJECT NUMBER:	BRF 022-1(20)SC	DRAWN BY:	H.I. SALLSR.
FILE NAME:	str4/85e039/de039t1.dgn	DESIGNED BY:	H.I. SALLS
PROJECT LEADER:	C.P. WILLIAMS	CHECKED BY:	R.S. YOUNG
TIE SHEET 2		ROW SHEET	5 OF 33



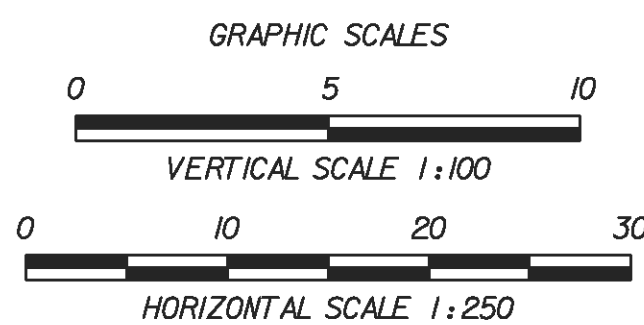
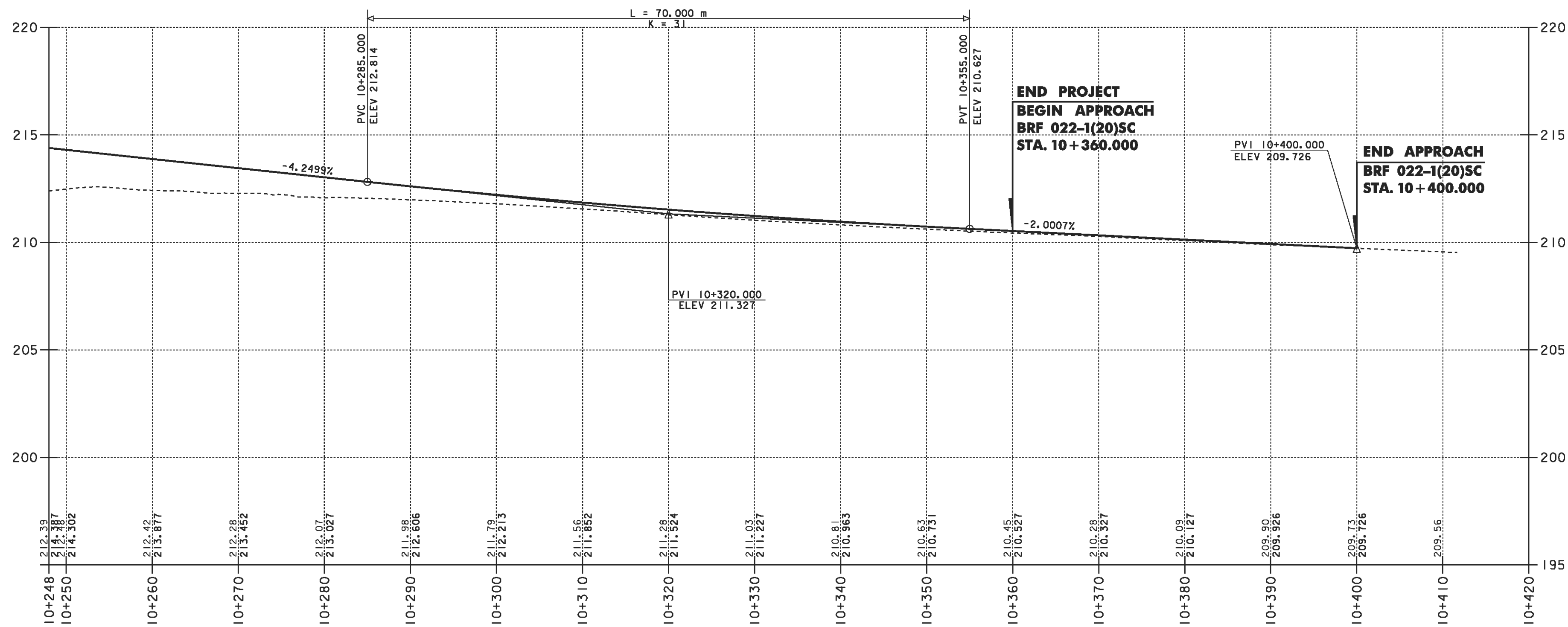
PROFILE SHEET

PROJECT NAME:	STOCKBRIDGE	PLOT DATE:	04-MAR-2010
PROJECT NUMBER:	BRF 022-1(20)SC	DRAWN BY:	G. Shangraw
FILE NAME:	de039pro.dgn	CHECKED BY:	
PROJECT LEADER:	C.P. Williams	ROW SHEET	6 OF 33
DESIGNED BY:	G. Shangraw		



PROFILE SHEET

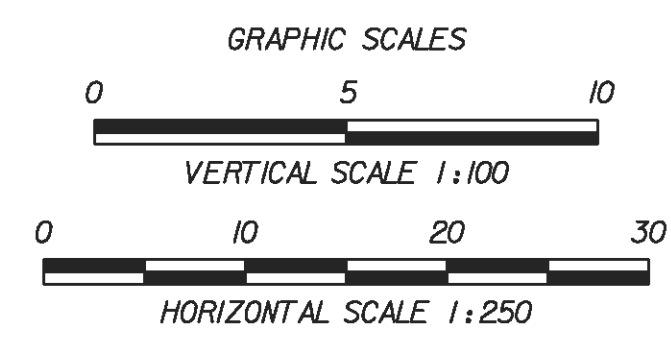
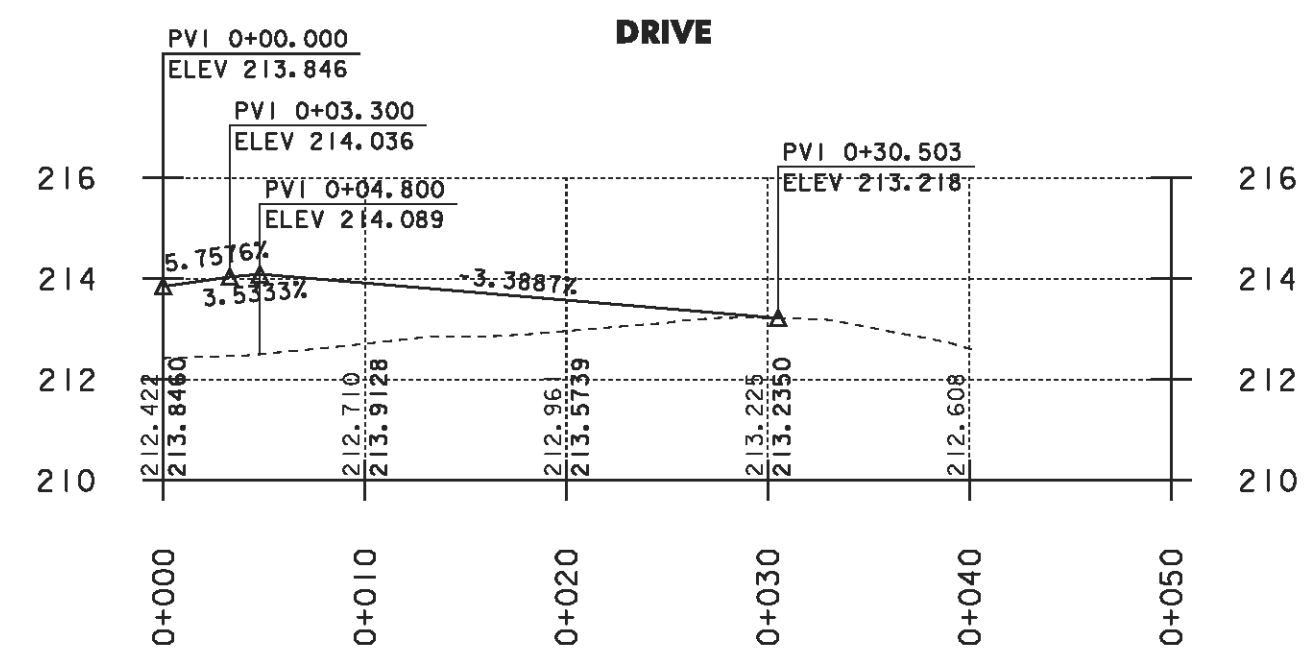
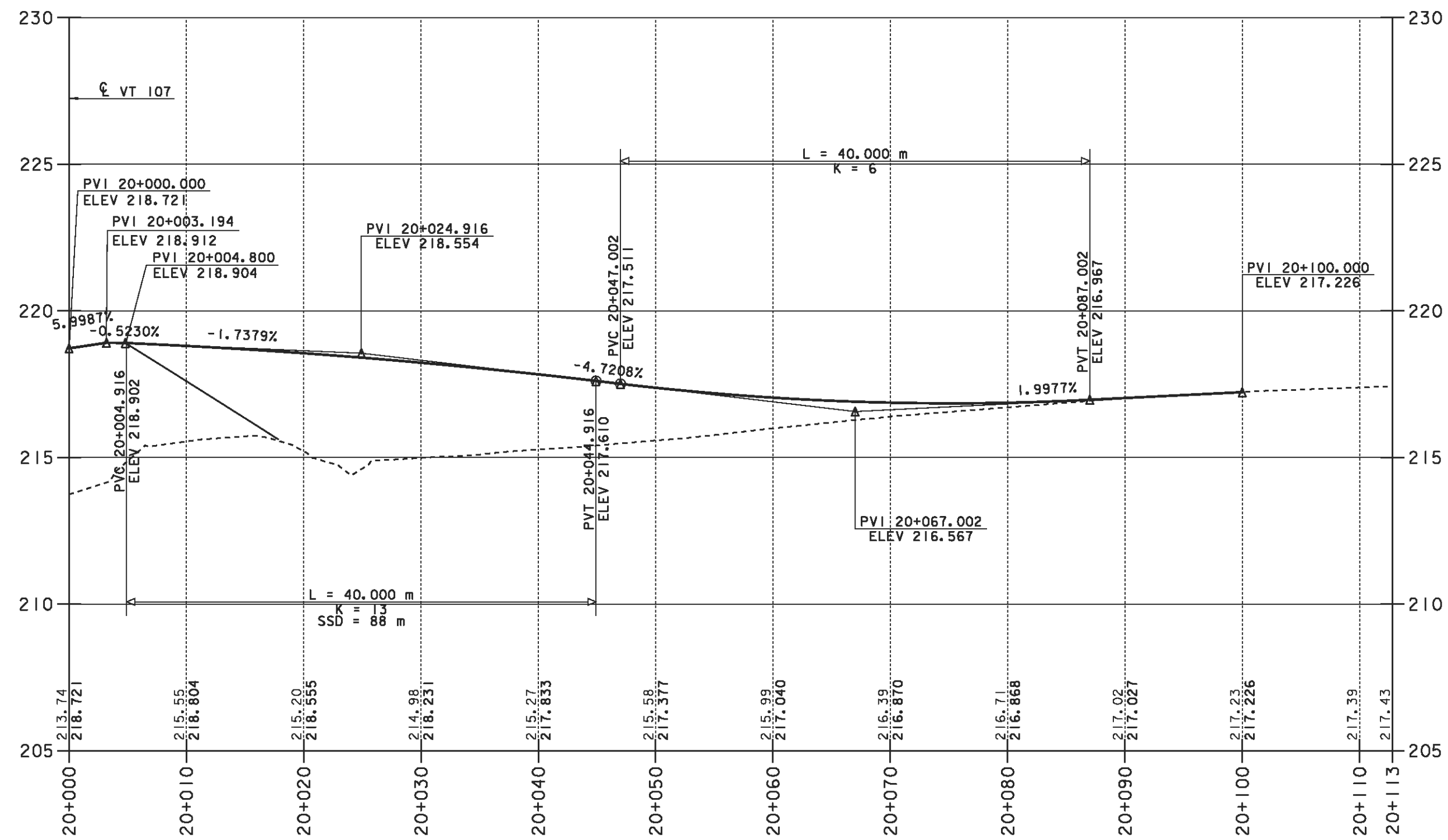
PROJECT NAME:	STOCKBRIDGE
PROJECT NUMBER:	BRF 022-1(20)SC
FILE NAME:	de039pro.dgn
PROJECT LEADER:	C.P. Williams
DESIGNED BY:	H.I.Salls
de039p02. i	
PLOT DATE:	04-MAR-2010
DRAWN BY:	H.I.Salls
CHECKED BY:	R. Young
ROW SHEET	7 OF 33



PROFILE SHEET

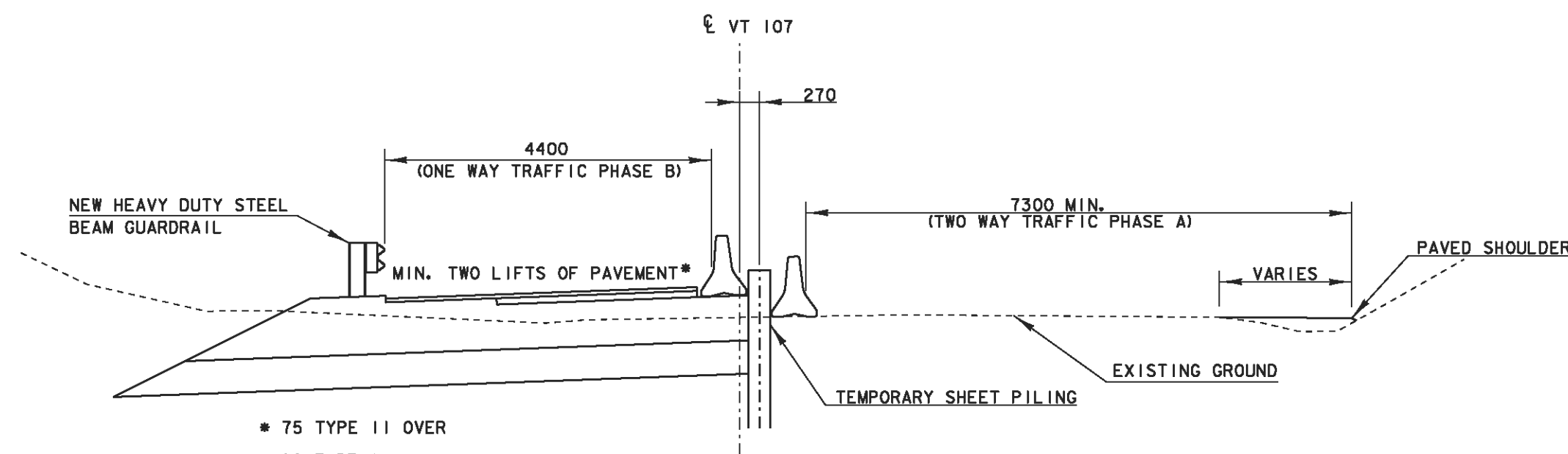
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PROJECT NUMBER:	BRF 022-1(20)SC	DRAWN BY:	G. Shangraw
FILE NAME:	de039pro.dgn	DESIGNED BY:	G. Shangraw
		CHECKED BY:	
		ROW SHEET	8 OF 33

STONEY BROOK RD

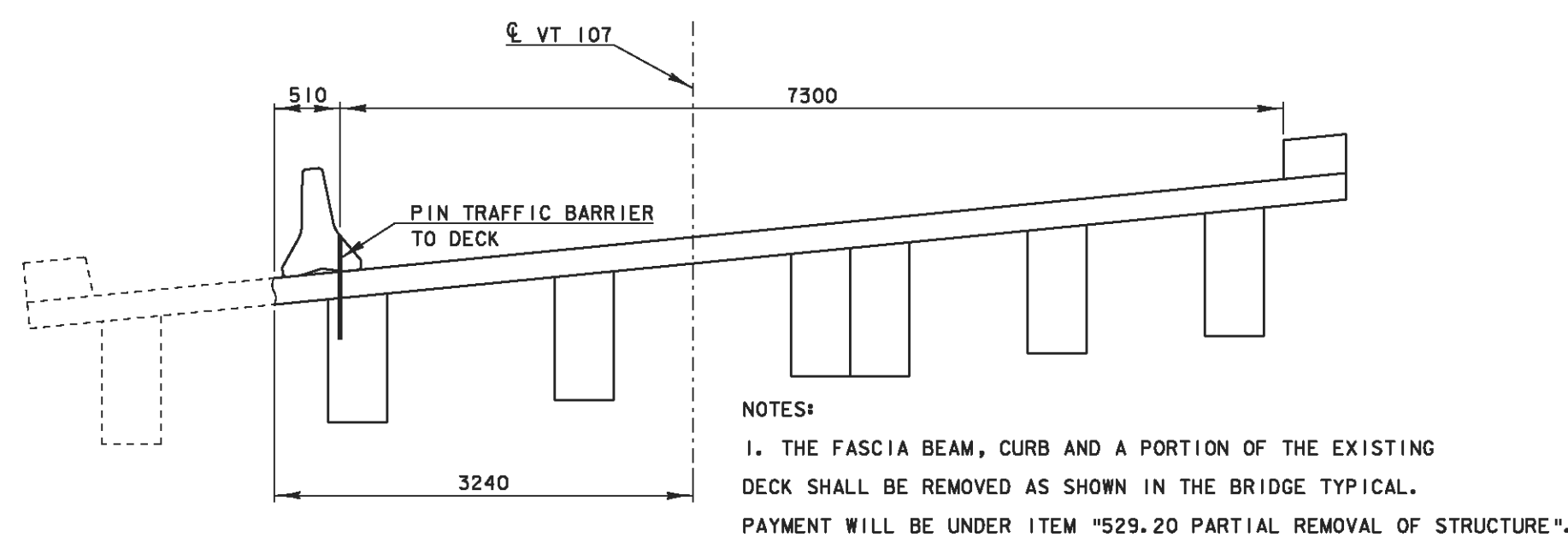


STONEY BROOK AND DRIVE PROFILE SHEET

PROJECT NAME:	STOCKBRIDGE	PLOT DATE:	04-MAR-2010
PROJECT NUMBER:	BRF 022-1(20)SC	DRAWN BY:	G. Shangraw
FILE NAME:	de039pro.dgn	DESIGNED BY:	G. Shangraw
		CHECKED BY:	
		ROW SHEET	9 OF 33

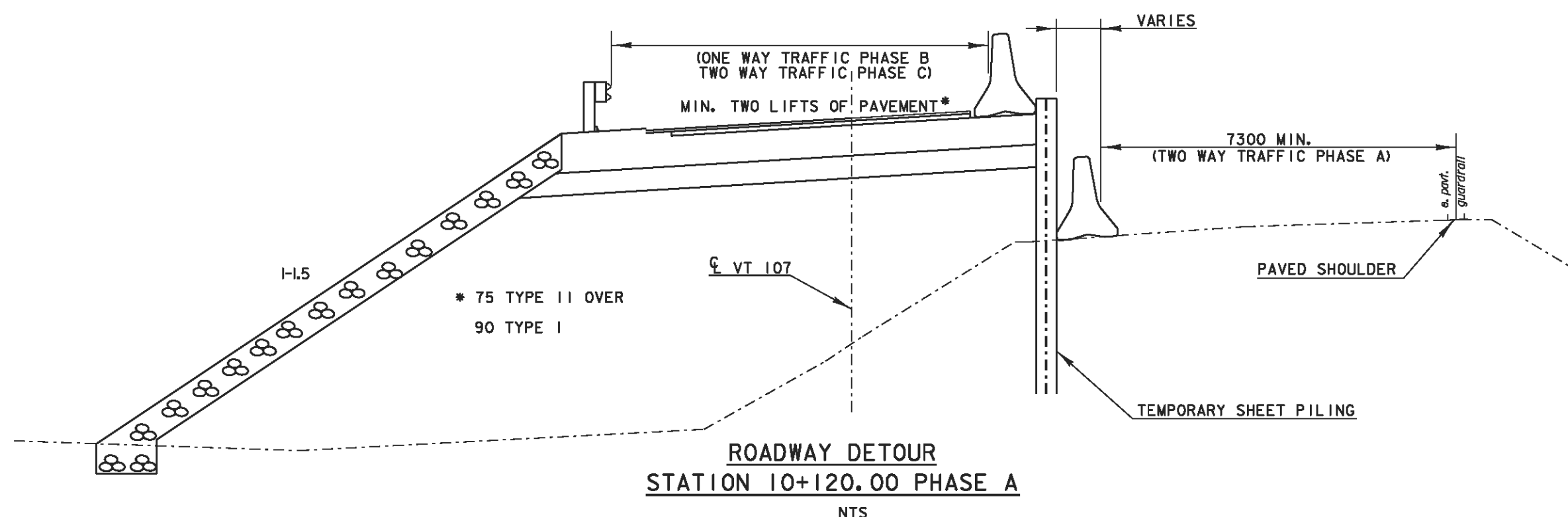


ROADWAY DETOUR
STA. 10+070 PHASE A
NTS



PHASE A
BRIDGE TYPICAL
NTS

THIS IS THE TYPICAL SECTION FOR ONLY ONE SPAN LOCATED AT THE NORTHERN END OF THE EXISTING BRIDGE.



ROADWAY DETOUR
STATION 10+120.00 PHASE A
NTS

TRAFFIC PHASE DESCRIPTION :

PHASE A (SEE SHEET 31 - 35)

PAVE A SMALL SECTION OF THE NORTH BOUND SHOULDER AND MAINTAIN TWO WAY TRAFFIC ON EXISTING ALIGNMENT WHILE CONSTRUCTING THE MSE WALLS, ABUTMENTS, BRIDGE, SOUTH BOUND LANE AND THE MAJORITY OF THE NORTH BOUND LANE.

PHASE B: (SEE SHEETS 36 - 40)

SWITCH SOUTH BOUND TRAFFIC ONTO NEW ALIGNMENT AND CLOSE THE OLD SOUTH BOUND LANE. MAINTAIN NORTH BOUND TRAFFIC ON OLD ALIGNMENT AND FINISH CONSTRUCTING THE ENDS OF THE NEW NORTH BOUND LANE. TRAFFIC EXITING STONEY BROOK ROAD WILL NOT BE ABLE TO TURN LEFT ONTO VT 107.

PHASE C: (SEE SHEETS 41 - 46)

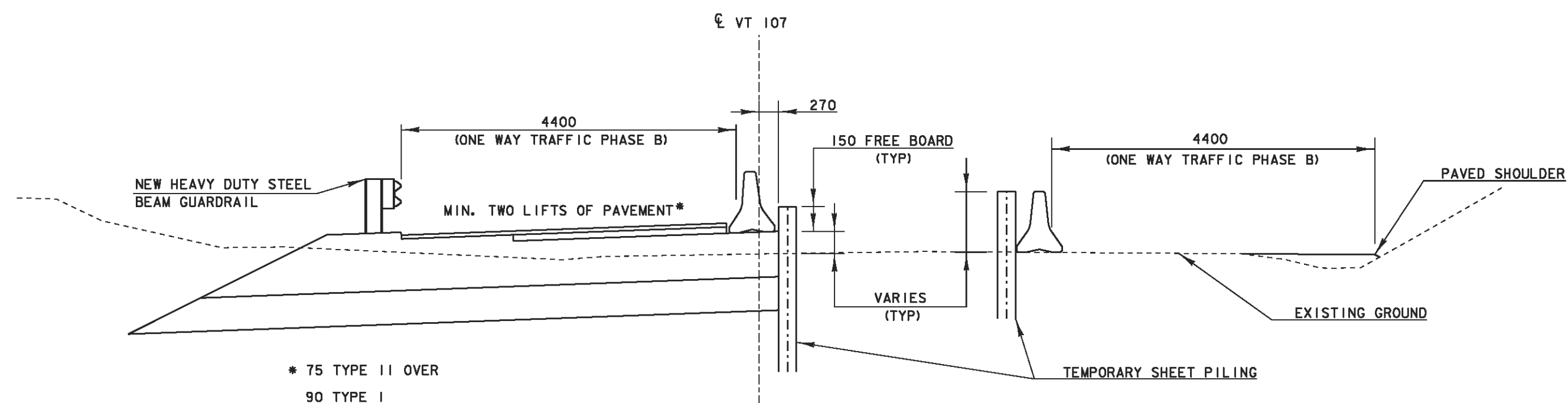
SWITCH NORTH BOUND TRAFFIC ONTO NEW ALIGNMENT AND CLOSE OFF OLD VT 107. ALL TRAFFIC WILL BE ON NEW ALIGNMENT AND STONEY BROOK ROAD TRAFFIC WILL BE REROUTED ONTO THE DETOUR LAYED OUT ON THE DETOUR SHEET. CONSTRUCT NEW APPROACHES FOR STONEY BROOK ROAD AND PRIVATE DRIVE TO MATCH INTO THE NEW VT 107 ALIGNMENT AND FINISH PROJECT

TEMPORARY SHEET PILE NOTES :

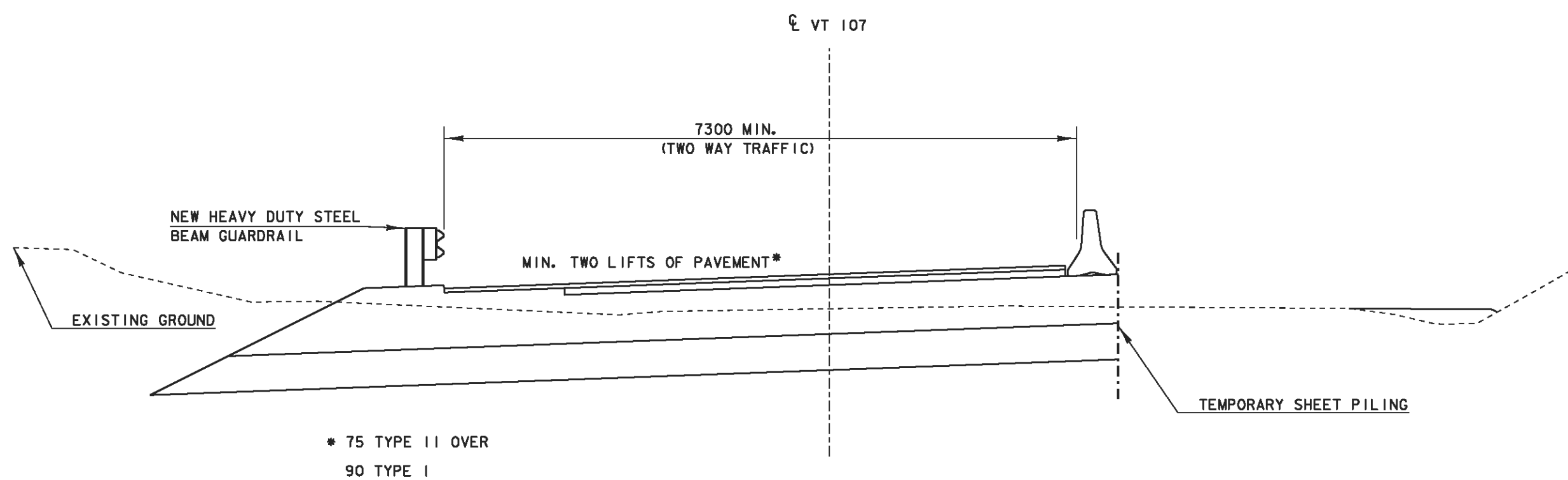
1. TEMPORARY SHEET PILING SHALL BE USED AS SHOWN ON SHEETS 31 - 46 TO MAINTAIN TRAFFIC.
2. THE TEMPORARY SHEET PILING SHALL BE PAID UNDER ITEM 505.36 "TEMPORARY STEEL SHEET PILING". SEE SPECIAL PROVISIONS FOR MODIFICATION INFORMATION.
3. THE TEMPORARY SHEET PILING SHALL BE DESIGNED AND DETAILED BY A REGISTERED PROFESSIONAL CIVIL OR STRUCTURAL ENGINEER.
4. THE TEMPORARY SHEET PILING SHALL BE INSTALLED BETWEEN THE LIMITS SHOWN ON SHEETS 31 - 46. THE TEMPORARY SHEET PILES SHALL BE LOCATED SUCH THAT TRAFFIC CAN BE MAINTAINED FOR BOTH PHASES A AND B, AND AS SUCH THE QUANTITY WILL ONLY BE PAID ONCE. EXTRA SHEET PILING FOR CONTRACTOR CONVENIENCE SHALL BE AT HIS/HER EXPENSE.
5. THE TEMPORARY SHEET PILING SHALL NOT DAMAGE DRAINAGE STRUCTURES THAT ARE TO BE LEFT IN PLACE. IF THE STRUCTURES ARE DAMAGED THEY SHALL BE REPLACED AT THE CONTRACTORS EXPENSE.
6. A TEMPORARY TRAFFIC BARRIER WILL PROTECT THE TRAVELLING PUBLIC FROM TEMPORARY SHEET PILING AT ALL TIMES. AN ENERGY ABSORPTION ATTENUATOR SHALL PROTECT THE TERMINATION OF THE TEMPORARY TRAFFIC BARRIER AT STA. 10+040 AND 10+320. THE ATTENUATOR SHALL BE PAID UNDER ITEM 621.56 "ENERGY ABSORPTION ATTENUATOR". THE ATTENUATOR SHALL BE DESIGNED AND INSTALLED TO SERVE PHASE B. THE COST FOR THE ATTENUATOR WILL ONLY BE PAID ONCE.
7. THE ATTENUATOR SHALL MEET THE REQUIREMENTS OF THE 1996 ROADSIDE DESIGN GUIDE AND SHALL BE DESIGNED FOR A 4500 LB DESIGN VEHICLE AT 60 KPH.
8. IF THE ATTENUATOR IS DAMAGED BY AN ERRANT VEHICLE, ANY COST TO THE CONTRACTOR FOR REPLACEMENT OF ANY PART OF OR ALL OF THE ATTENUATOR SHALL BE PAID AS "EXTRA WORK" PER SECTION 109.06.
9. THE CONTRACTOR SHALL HAVE, ON THE PROJECT, A SPARE ATTENUATOR FOR THE IMMEDIATE REPLACEMENT OF A DAMAGED ATTENUATOR. THE COST FOR STORAGE OF THE SPARE ATTENUATOR SHALL BE INCLUDED IN THE BID COST OF ITEM 621.56 "ENERGY ABSORPTION ATTENUATOR".

PHASED CONSTRUCTION DETAILS

PROJECT:	STOCKBRIDGE	PROJECT NO. :	BRF022-1 (20) SC
DESIGN FILE NAME:	85e039/de039phase.ing.dgn	PLOT DATE:	04-MAR-2010
SQUAD LEADER:	C.P. WILLIAMS	CHECKED BY:	R.S. YOUNG
DESIGNED BY:	H.I. SALLS	DRAWN BY:	H.I. SALLS
IPARM FILE NAME:	de039phase.i	ROW SHEET	10 OF 33
PHASED CONSTRUCTION DETAILS			



ROADWAY DETOUR
 STA. 10+070 PHASE B
 NTS



ROADWAY DETOUR
 STA. 10+070 PHASE C
 NTS

PHASED CONSTRUCTION DETAILS

PROJECT:	STOCKBRIDGE	PROJECT NO.:	BRF022-1 (20) SC
DESIGN FILE NAME:	85e039/de039phas ing. dgn	PLOT DATE:	04-MAR-2010
SQUAD LEADER:	C.P. WILLIAMS	CHECKED BY:	R.S. YOUNG
DESIGNED BY:	H.I. SALLS	DRAWN BY:	H.I. SALLS
IPARM FILE NAME:	de039phase2. i		
PHASED CONSTRUCTION DETAILS 2		ROW SHEET	11 OF 33

PRELIMINARY INFORMATION SHEET



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5-7	QUANTITY SHEETS	B-71 M 6/13/1997
8.	EARTH WORK SHEET	C-1 M 6/13/1997
9.	ITEM DETAIL SHEET	D-3 M 6/13/1997
10.	DRAINAGE SHEET	D-4 M 6/13/1997
11.	RIGHT OF WAY DETAILS	D-6 M 6/13/1997
12-16	RIGHT OF WAY LAYOUT SHEETS	D-8 M 6/13/1997
17-18	TE SHEETS	D-9 M 6/13/1997
19.	BANKING DIAGRAM & MATERIAL TRANSITION DIAGRAM	D-10 M 6/13/1997
20-24	LAYOUT SHEETS	D-15 M 6/13/1997
25-28	VT 107 PROFILE SHEETS	D-16 M 6/13/1997
29-30	PHASING SHEETS	D-30 9/14/2007
31-46	PHASING AND DETOUR SHEETS	E-100 M 6/13/1997
47.	BORING LAYOUT SHEET	E-101 M 6/13/1997
48-56	BORING SHEETS	E-102 M 6/13/1997
57.	PLAN AND ELEVATION	E-102A M 6/13/1997
58.	GENERAL NOTES	E-106 M 6/13/1997
59.	DECK REINFORCING DETAILS	E-107 M 6/13/1997
60.	DECK FRAMING PLAN	E-107A M 6/13/1997
61.	GIRDER DETAILS	E-108 M 6/13/1997
62.	CROSS FRAME DETAILS	E-121 M 6/13/1997
63-66	BEARING DETAILS	E-123 M 6/13/1997
67-69	EXPANSION JOINT DETAILS	E-134 M 6/13/1997
70.	DOWNSPOUT DETAILS	E-138 M 6/13/1997
71.	BRIDGE SCUPPER DETAILS	E-141 M 6/13/1997
72.	APPROACH SLAB DETAILS	E-142 M 6/13/1997
73.	ABUTMENT #1 PLAN AND ELEVATION SHEET	E-143 M 6/13/1997
74.	ABUTMENT #2 PLAN AND ELEVATION SHEET	E-153 M 6/13/1997
75.	ABUTMENT FOOTING DETAIL SHEET	E-155 M 6/13/1997
76.	MISCELLANEOUS EXPANSION JOINT DETAILS	E-160 M 6/13/1997
77.	ABUTMENT #1 MSE WALL ELEVATION SHEET	E-191 M 6/13/1997
78.	ABUTMENT #2 MSE WALL ELEVATION SHEET	E-193 M 6/13/1997
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83.	RAILING LAYOUT	G-1D M 1/3/2000
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87-91	TRAFFIC LAYOUT SHEETS	G-18 M 6/13/1997
92.	TRAFFIC SIGN SUMMARY SHEET	G-18A M 7/10/1997
93.	REINFORCING STEEL SHEET	G-19 M 10/21/1998
94-102	VT 107 CROSS SECTION SHEETS	J-3 M 6/13/1997
103-106	STONY BROOK ROAD CROSS SECTION SHEETS	L-1 M 6/13/1997
107.	DRIVE CROSS SECTIONS	L-2 M 6/13/1997
108-116	STONY BROOK CHANNEL CROSS SECTION SHEETS	T-1 M 6/13/1997
117.	EROSION NARRATIVE	T-2 M 6/13/1997
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119-123	EROSION CONTROL: EXISTING CONDITIONS	
124-128	EROSION CONTROL PLAN	
129-133	EROSION CONTROL: FILAL CONDITIONS	
134-139	EROSION DETAILS	
140-164	OLD PLANS (1964)	

FINAL HYDRAULIC REPORT

HYDROLOGIC DATA Date: 11-9-04

DRAINAGE AREA : 59.4 sq. km
 CHARACTER OF TERRAIN : Rolling to Mountainous with little to narrow flood plain.
 STREAM CHARACTERISTICS : Slight meander, channel bend upstream from bridge.
 NATURE OF STREAMBED : Gravel, cobbles and boulders

PEAK FLOW DATA

Q 2.33 =	20.0 cms	Q 50 =	100.1 cms
Q 10 =	67.3 cms	Q 100 =	143.8 cms
Q 25 =	94.0 cms	Q 500 =	177.0 cms

DATE OF FLOOD OF RECORD : 1927
 ESTIMATED DISCHARGE : unknown
 WATER SURFACE ELEV. : 205.3 m
 NATURAL STREAM VELOCITY : @ Q50 = 2.3 mps (maximum in the vicinity of the bridge)
 ICE CONDITIONS : Moderate
 DEBRIS : Moderate
 DOES THE STREAM REACH MAXIMUM HIGH-WATER ELEV. RAPIDLY? No
 IS ORDINARY RISE RAPID? No
 IS STAGE AFFECTED BY UPSTREAM OR DOWNSTREAM CONDITIONS? Yes
 IF YES, DESCRIBE : Confluence with the White River is located approximately 100 m downstream from the bridge.

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

EXISTING STRUCTURE INFORMATION

STRUCTURE TYPE : 3 span concrete T-beam bridge with spill thru abutments
 YEAR BUILT : Built in 1930, reconstructed in 1964
 CLEAR SPAN(NORMAL TO STREAM) : 47 m (with two 1 m wide piers)
 VERTICAL CLEARANCE ABOVE STREAMBED : 9 m
 WATERWAY OF FULL OPENING : 409 sm
 DISPOSITION OF STRUCTURE : To be removed
 TYPE OF MATERIAL UNDER SUBSTRUCTURE : See boring logs

WATER SURFACE ELEVATIONS AT:

Q2.33 =	202.9 m	VELOCITY =	2.6 mps
Q10 =	203.8 m	"	3.1 mps
Q25 =	204.4 m	"	2.9 mps
Q50 =	204.5 m	"	2.8 mps
Q100 =	205.0 m	"	3.4 mps

LONG TERM STREAMBED CHANGES : There is some minor local scour at the piers and through the bridge area. Other long term changes are unknown.

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

UPSTREAM STRUCTURE

TOWN: Stockbridge DISTANCE: 780 m
 HIGHWAY #: T.H. 36 STRUCTURE #: 5
 CLEAR SPAN: 14.6 m CLEAR HEIGHT: 4.6 m
 YEAR BUILT: 1992 FULL WATERWAY: Unknown
 STRUCTURE TYPE: Single span rolled beam bridge

DOWNSTREAM STRUCTURE

TOWN: N/A - Confluence with White River DISTANCE: N/A
 HIGHWAY #: N/A STRUCTURE #: N/A
 CLEAR SPAN: N/A CLEAR HEIGHT: N/A
 YEAR BUILT: N/A FULL WATERWAY: N/A
 STRUCTURE TYPE: N/A

LOAD RATING (TONS)

LOADING LEVELS	TRUCK						
	H	HS	3S2	6 AXLE	3A STR.	4A STR.	SA SEMI
INVENTORY	0	0					
POSTED	0	0	0		0	0	0
OPERATING		0	0	0	0	0	

COMMENTS: 0

TRAFFIC DATA

YEAR	ADT	DHV	% D	% T	ADTT
2005	3900	540	52.0	5.0	300
2025	5200	700	52.0	5.0	360

20 year ESAL for flexible pavement from 2005 to 2025 : 3,759,000
 40 year ESAL for flexible pavement from 2005 to 2045 : 9,232,000
 Design Speed : 80 km/h

PROPOSED STRUCTURE

STRUCTURE TYPE: Single span curved steel girder bridge.

CLEAR SPAN(NORMAL TO STREAM): 40.0 m
 VERTICAL CLEARANCE ABOVE STREAMBED: 11.8 m
 WATERWAY OF FULL OPENING: 386 sm

WATER SURFACE ELEVATIONS AT:

Q2.33 =	202.9 m	VELOCITY =	1.8 m
Q10 =	203.8 m	"	2.9 m
Q25 =	204.4 m	"	2.6 m
Q50 =	204.5 m	"	2.6 m
Q100 =	205.0 m	"	3.0 m

IS THE ROADWAY OVERTOPPED BELOW Q100: No
 FREQUENCY: N/A
 RELIEF ELEVATION: N/A
 DISCHARGE OVER ROAD @Q100: N/A
 AVERAGE LOW ELEVATION OF SUPERSTRUCTURE: 213.7 m
 VERTICAL CLEARANCE: @ Q50 = 9.2 m

SCOUR: The bridge abutments are above the Q500, so the bridge does not cause scour. There will be some local scour due to the existing piers and the roadway & stone fill construction.
 REQUIRED CHANNEL PROTECTION: Stone Fill, Type IV

PERMIT INFORMATION

AVERAGE DAILY FLOW: 11.0 cms DEPTH OR ELEVATION:
 ORDINARY LOW WATER: 0.6 cms 0.2 m
 ORDINARY HIGH WATER: 20.0 cms 0.9 m

TEMPORARY BRIDGE REQUIREMENTS

STRUCTURE TYPE: The existing bridge will be used during construction.
 CLEAR SPAN (NORMAL TO STREAM): N/A
 VERTICAL CLEARANCE ABOVE STREAMBED: N/A
 WATERWAY AREA OF FULL OPENING: N/A

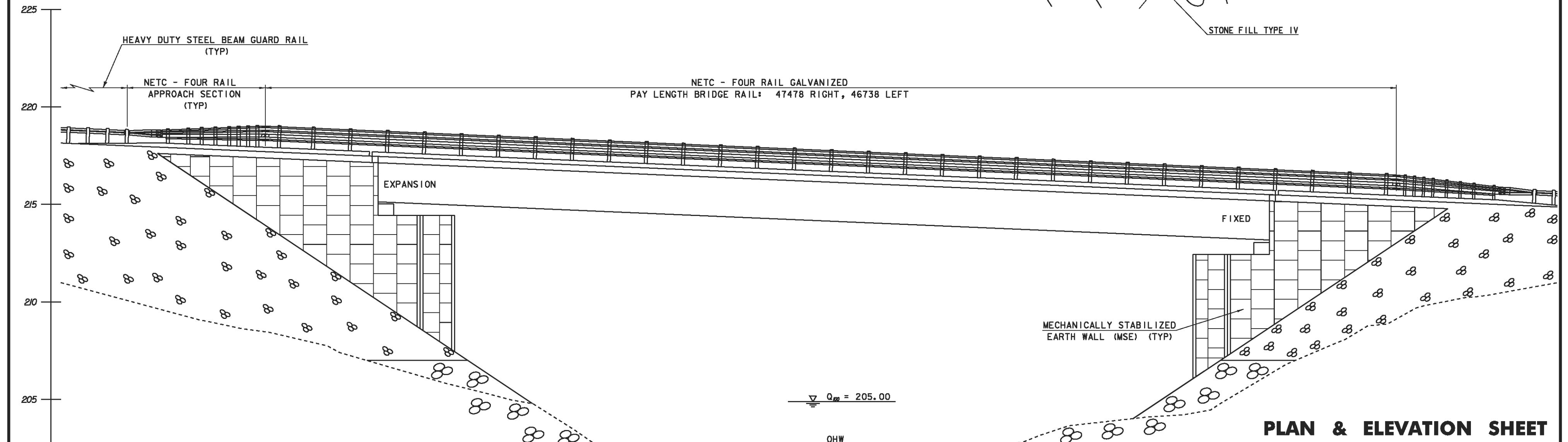
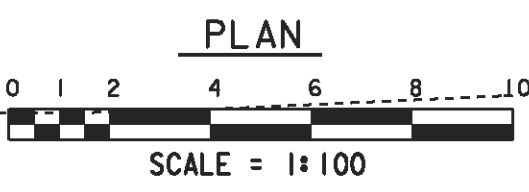
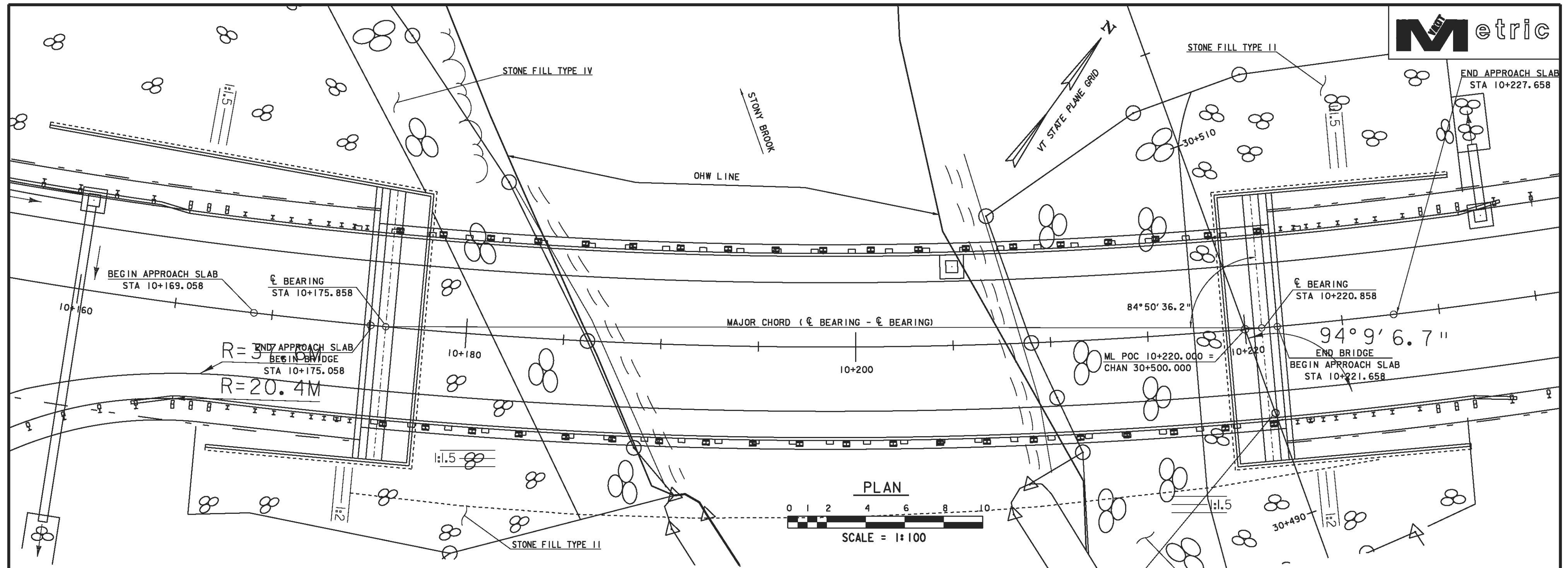
ADDITIONAL INFORMATION

Reported water surface elevations and velocities were obtained using water surface elevation information available from the White River FIS flood profile as a downstream boundary condition. HEC-RAS was run with equal frequency floods on Stony Brook and the White River. Velocities will be higher when the White River is lower.

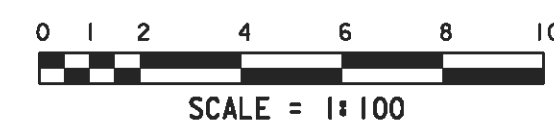
- DESIGN CRITERIA**
- DESIGN LIVE LOAD AASHTO MS-22.5
 - DESIGN SPAN 45 METERS
 - ALLOWABLE LOAD FOR SPREAD FOOTINGS ON SOIL ON LEDGE
 - ALLOWABLE LOAD FOR PILING TYPE ESTIMATED LENGTH
 - STRUCTURAL STEEL AASHTO GRADE M270M GRADE 345W
 - REINFORCING STEEL GRADE 420
 - CONCRETE, HIGH PERFORMANCE CLASS A fc: 30 Mpa
CONCRETE, HIGH PERFORMANCE CLASS B fc: 25 Mpa
 - SOIL UNIT WEIGHT
 - DESIGN LOAD FOR SPREAD FOOTINGS ON SOIL

- TRAFFIC MAINTENANCE**
- IS TRAFFIC TO BE MAINTAINED? YES
 IF YES, ON EXISTING STRUCTURE YES
 OR ON TEMPORARY BRIDGE EXISTING STRUCTURE
 - TEMPORARY BRIDGE REQUIREMENTS: ONE OR TWO WAY
 TRAFFIC CONTROL SIGNALS REQUIRED
 MINIMUM CLEAR SPAN (NORMAL TO STREAM):
 WATERWAY OF FULL OPENING:
 VERTICAL CLEARANCE ABOVE STREAMBED:
 ARE SIDEWALKS REQUIRED?
 IF SO, ON WHAT SIDE?
 STRUCTURE TYPE:

PROJECT NAME: STOCKBRIDGE
 PROJECT NUMBER: BRF 022-1(20)SC
 FILE NAME: de039excel.dgn PLOT DATE: 9/14/2007
 PROJECT LEADER: C.P. WILLIAMS DRAWN BY: H.J. SALLS
 DESIGNED BY: CHECKED BY: R.S. YOUNG
 PRELIMINARY INFORMATION SHEET #1 SHEET 2 OF 164



ELEVATION LOOKING DOWNSTREAM



PLAN & ELEVATION SHEET

PROJECT: STOCKBRIDGE	PROJECT NO. # BRF 022-1 (20)
DESIGN FILE NAME: 85e039\Structures\de039pe.dgn	PLOT DATE: 04-MAR-2010
IPARM FILE NAME: de039pe.i	DRAWN BY: H. I. SALLS
DESIGNED BY: H. I. SALLS	CHECKED BY: R. S. YOUNG
SQUAD LEADER: C. P. WILLIAMS	PLAN AND ELEVATION
	ROW SHEET 13 OF 33

EROSION PREVENTION AND SEDIMENT CONTROL NARRATIVE

PROJECT DESCRIPTION

This project involves the removal of bridge #9 along with its piers and abutments. Bridge #9 will then be relocated and replaced by a new steel girder with concrete slab bridge on new abutments and a new alignment. The new bridge will be relocated about 14.5 meters down stream from its current location. Bridge #9 is located in the town of Stockbridge on Vt. Rt. 107 at the intersection of Rt. 107 and the Stony Brook Road. The new bridge is going to be 50.4 meters long spanning the Stony Brook. This project will also involve the construction of 267 meters of new approaches. There are also a number of overhead utilities that are going to be relocated as a result of this project. There are also a number of drop inlets that are going to be removed with several new drop inlets being installed. There are no historical or archeological or archeologically sensitive sites on or near the project site, nor are there any 'Threatened & Endangered Species' on or near the project site as well. However, there are a number of different wetland areas located within the project site.

It is anticipated that this project will last two construction seasons.

Area of disturbance is 0.997 hectares (2.46 acres).

SITE INVENTORY AND ANALYSIS

OFF SITE DRAINAGE CHARACTERISTICS

The property surrounding the project site consists of steep slopes covered with trees. The road sides are steep with grass and a few trees. Due to the nature of the surrounding terrain the project site will see very little runoff onto it. The slopes in the project vicinity range from 0-18%.

DRAINAGE, WATERWAYS, BODIES OF WATER:

Stony Brook is the only water source on the project site. The brook is classified as slightly meandering, channel bend upstream from bridge with a streambed made up of gravel, cobbles, and boulders. The tributary area at the bridge crossing is 59.41 sq km. There are a number of drop inlets on site to help drain water from the roadway.

TOPOGRAPHY, EXISTING ROADS, BUILDINGS, UTILITIES:

The topography of the project site is rolling to mountainous with little to narrow flood plain. There are a few overhead utilities passing through the project site. Vt. Rt. 107, Stony Brook Road, and an old gravel drive are the only roadways located in the project site. There are no buildings located in the project site.

VEGETATION:

The vegetation in the project area is made up of mostly trees and some grass. The impact to vegetation will be limited to that which is affected by removal of bridge #9 along with its piers and abutments and the blending of the old approaches to match into the surrounding terrain, along with the construction of the new bridge, abutments, and approaches. After project completion, vegetation will be reestablished with standard seed and mulch practices.

SOILS:

All soil data came from the U.S. Department of Agriculture Soil Conservation Service for the county of Windsor, Vermont. There are two types of soils found in the project site, Croghan and Sheepscoot which are fine sandy loams with a k-value of 0.17 and slopes of 0 – 18%.

Note: Generally, K-values indicate the following: 0.0 – 0.23 = low erodibility; 0.24 – 0.36 = moderate erodibility; 0.37 and higher = higher erodibility.

SENSITIVE RESOURCE AREAS:

There are no 'Threatened & Endangered Species' living on or near the project site and there are no historical, archeological or archeologically sensitive areas on or near the project site. However, there are a number of small wetland areas located through out the project site and it is anticipated that 104.1 m² of class III wetlands will be affected by this project.

PROXIMITY TO NATURAL OR MAN-MADE FEATURES:

Disturbance of soils near natural or man-made waters consists of that which is necessary to the removal and relocation of bridge #9. Stabilization of disturbance to the stream banks will be accomplished with Stone Fill, Type IV under laid with erosion control matting. No erosion prevention is needed to protect the stream channel.

TEMPORARY EROSION PREVENTION & SEDIMENT CONTROL

TEMPORARY EROSION PREVENTION MEASURES TO BE UTILIZED INCLUDE:

"Project Demarcation Fencing," denoted -PDF- on the plans, to delineate the limits the contractor can access with construction equipment. This measure limits the area that can be disturbed and exposed to erosion.

Seeding, mulching, and biodegradable erosion control matting or equivalent product is needed on slopes greater than 1:3. In areas with large slopes, typically channel embankments, stone fill under laid with geo-textile fabric is required. All slopes shall be stabilized within 48 hours of reaching final grade or during intermittent phases of construction activity. . Mulch bare soil at the end of each construction day. Divert off-site and on-site storm water from disturbed soil each day.

Tracking of all exposed slopes, combined with temporary mulching, will also be utilized on a regular basis. Any slopes to be exposed for 48 hours prior to final grading shall be tracked and mulched. The forecast of rainfall events shall also trigger protection of exposed slopes.

Temporary stone check dams will be placed in ditches to reduce flow velocities and thus reduce the potential for erosion. Check dams will be placed along the ditches such that the elevation of the top of each check dam corresponds with the elevation of the toe of the preceding upslope check dam. See "Erosion Control Details" sheet. The check dams may be removed once the stone lining of the ditch is complete and the surrounding area stabilized.

TEMPORARY MEASURES TO CONTROL SEDIMENT TRANSPORT INCLUDE:

Silt fence will be installed per EPSC-1M Detail Sheet. Silt fence shall be installed prior to any upslope earthwork.

Drop inlets shall be protected per EPSC-3M Detail Sheet to create a temporary ponding area for particles to settle out as water drains through the barrier. Inlet protection shall be installed as soon as there is the possibility of water flowing to the structure. The height of the barrier shall be limited such that the ponding area does not present a hazard to the traveling public. Alternative inlet control measures shall be approved by the engineer prior to implementation.

All temporary erosion control measures shall be checked regularly for accumulation of sediment. Sediment build-up shall be removed when the level of sediment reaches one-half the height of the control measure. Sediments shall be disposed of in an approved waste disposal area.

Stabilized construction entrances to the project site, staging areas, as well as to waste and borrow areas shall be established. The minimum size of a stabilized construction entrance is 12'X50' (3700X15, 000). All surface water flowing to or diverted toward a construction entrance shall be piped under the stone. Pipes shall be appropriately sized for the contributing area, however, no pipe smaller than 6" (150) diameter shall be used. See typical detail on 'Erosion & Sediment Control Plan' sheet for materials and construction method to be utilized when constructing a stabilized entrance.

Temporary sediment settling basins may or may not be utilized on this project. If a sediment settling basin is to be used for dewatering a cofferdam. It should be sized based upon the following criteria: (See Sediment Settling Basin Sizing Criteria.) Special consideration must be given to the first pump-down of the cofferdams. This will contain the greatest volume of water with a high sediment load. The contractor may provide additional settling basins within the ROW if required or control the rate of draw-down. Additional settling basins must be approved by the resident engineer.

PERMANENT EROSION CONTROL MEASURES

SEVERAL PERMANENT EROSION CONTROL MEASURES WILL BE UTILIZED:

Stone lining of the stream banks with Stone Fill, Type IV as specified by VTtrans Hydraulics personnel. This stone will protect the stream bank from erosion during design storm events. Stone Fill, Type I will be utilized at culvert outlets to dissipate water velocities and reduce erosion potential. Grass or other suitable ground cover will be established outside of the roadway limits where stone lining has not been specified. All 1:3 slopes shall be seeded and mulched promptly upon achieving final grade.

GENERAL EROSION & SEDIMENT CONTROL GUIDELINES

The Erosion Control Plans are meant as a guideline for preventing erosion and controlling sediment transportation. The work outlined in this narrative consists of applying measures throughout the life of the project to control erosion and minimize the sediment to receiving waters. The measures include stabilization and structural practices, storm water controls and other pollution prevention controls.

Coordinate the installation, use, and removal of erosion and sediment control measures with construction activities to ensure economical, effective and continuous erosion and sediment control. Employ temporary stabilization practices in incremental stages as construction proceeds. The contractor will use additional erosion control measures as necessitated by the sequence of construction and as directed by the engineer. See section 105.23 of the Vermont AOT Standard Specifications for Construction, dated 2006.

Install all erosion and sediment control measures as shown in the Erosion Control Plan or as directed by the engineer. Do not modify the type, size or location of any control or practice without approval of the engineer. Any changes shall be noted on the plans, in the weekly inspection report, and reported to the appropriate authority in a timely manner. Inspect all control measures weekly and after each rainfall event. Repair measures shall be taken as needed.

Preventing initial soil erosion is much more effective than treating eroded sediment. Therefore, stabilize all disturbed areas within 48 hours after construction activity has temporarily or permanently ceased. Temporary vegetation shall be established if the area is to be without construction activity for a period of 14 days. Perimeter control measures shall be installed following clearing, but prior to the start of any grubbing or grading activity, install other temporary controls in incremental stages as construction proceeds.

Maintaining vegetated buffers along stream banks, wetlands or other sensitive areas is a crucial erosion and sediment control measure that should be established wherever possible.

Control only sediment-laden runoff generated by the project site using diversion berms, diversion channels, culverts and/or temporary pipes.

Do not allow construction equipment to operate on the down slope side of perimeter control measures.

SEDIMENT SETTLING BASIN SIZING CRITERIA

PUMP FLOW RATE		REQUIRED SURFACE AREA		LENGTH / WIDTH = 2:1			
Q (gpm)	Q (m ³ /s)	(ft ²)	(m ²)	L (ft)	W (ft)	L (m)	W (m)
50	0.0032	595	55	35.0	17.0	10.6	5.3
100	0.0063	1200	111	49.0	24.5	15.0	7.5
150	0.0095	1776	165	59.6	29.8	18.2	9.1
200	0.0126	2368	220	68.8	34.4	21.0	10.5
250	0.0158	2970	276	77.0	38.5	23.4	11.7
300	0.0189	3560	330	84.4	42.2	25.8	12.9
350	0.0221	4155	386	91.2	45.6	27.8	13.9

PROJECT NAME:	STOCKBRIDGE		
PROJECT NUMBER:	BRF 022-1 (20) S		
FILE NAME: s:\tr4\85e039\de039ero.dgn	PLOT DATE:	04-MAR-2010	
PROJECT LEADER: C. P. WILLIAMS	DRAWN BY:	H. I. SALLS	
DESIGNED BY: H. I. SALLS	CHECKED BY:		
EROSION CONTROL NARRATIVE	SHEET	14	OF 33

EROSION AND SEDIMENT CONTROL NOTES:

1. THE AREA OF DISTURBANCE IS .997 HA (2.46 ACRES).
2. AN UPGRADED TEMPORARY EROSION PREVENTION AND SEDIMENT CONTROL PLAN SHALL BE SUBMITTED BY THE CONTRACTOR FOR APPROVAL BY THE AGENCY OF TRANSPORTATION.
3. TIME ALL GRADING TO MINIMIZE SOIL EXPOSURE.
4. AT THE END OF EACH DAY'S GRADING OPERATIONS, SHAPE EARTHWORK TO MINIMIZE THE EROSION FROM STORM RUNOFF.
5. RETAIN EXISTING VEGETATION WHENEVER FEASIBLE.
6. TEMPORARILY MULCH AND SURFACE ROUGHEN ALL DISTURBED AREAS WHICH WILL NOT RECEIVE FURTHER DISTURBANCE FOR A PERIOD OF 7 DAYS
7. TEMPORARILY SEED AND MULCH ALL DISTURBED AREAS WHICH WILL NOT RECEIVE FURTHER DISTURBANCE FOR A PERIOD OF 30 DAYS OR MORE.
8. FINAL SEED AND COVER SHALL BE APPLIED WITHIN 48 HOURS OF FINAL GRADING.
9. KEEP RUNOFF VELOCITIES LOW, CONSTRUCT CHECK DAMS AS REQUIRED.
10. PREPARE TEMPORARY DRAINAGE WAYS TO HANDLE CONCENTRATED FLOW UNTIL PERMANENT DRAINAGE IS CONSTRUCTED AND STABILIZED.
11. ALL DISTURBED AREAS WITH SLOPES GREATER THAN 1:3 WILL REQUIRE EROSION MATTING (SEE EROSION AND SEDIMENT CONTROL DETAIL SHEET EPSC-5M).
12. SPECIAL CONSIDERATION MUST BE GIVEN TO THE FIRST PUMP-DOWN OF THE COFFERDAMS. THIS WILL CONTAIN THE GREATEST VOLUME OF WATER WITH A HIGH SEDIMENT LOAD. THE CONTRACTOR MAY PROVIDE ADDITIONAL SEDIMENT TRAPS WITHIN THE RIGHT-OF-WAY IF REQUIRED OR CONTROL THE RATE OF DRAW-DOWN. ADDITIONAL SEDIMENT TRAPS MUST BE APPROVED BY THE RESIDENT ENGINEER.
13. CLEAN SEDIMENT CONTROL MEASURES (SEDIMENT TRAPS, SILT FENCE, ETC.) WHEN HALF FULL OF SEDIMENT.
14. AFTER COMPLETION OF THE SUBSTRUCTURE, THE SEDIMENT IN THE TRAPS SHALL BE REMOVED AND THE GROUND RESTORED TO ITS ORIGINAL SLOPES OR GRADED AS SHOWN THE CONSTRUCTION DRAWINGS.
15. THE CONTRACTOR WILL USE TEMPORARY OR PERMANENT EROSION CONTROL MEASURES AS NECESSITATED BY THE SEQUENCE OF CONSTRUCTION AND AS DIRECTED BY THE RESIDENT ENGINEER. SEE SECTION 105.23 OF THE VERMONT AGENCY OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 2006.
16. MONITOR AND MAINTAIN ALL EROSION AND SEDIMENT CONTROL MEASURES DAILY AND AFTER EACH RAIN STORM.
17. ANY CHANGES MADE TO THE EROSION PREVENTION AND SEDIMENT CONTROL PLAN SHALL BE SUBMITTED BY THE CONTRACTOR FOR APPROVAL BY THE AGENCY OF TRANSPORTATION.
18. ASK FOR ASSISTANCE AND RECOMMENDATIONS AS NEEDED.

PERIMETER CONTROL NOTES:

1. IDENTIFY SENSITIVE AREAS AND AREAS PRONE TO EROSION BASED ON SITE EVALUATION.
2. CLEARLY DEMARCATe SENSITIVE AREA TO AVOID DISTURBANCE USING BRIGHTLY COLORED SNOW FENCE, MIN 8" WIDE FLAGGING OR SIMILAR.
3. PROTECT ALL SENSITIVE AREAS AND WATER FEATURES FROM SEDIMENT.
4. DIVERT OR OTHERWISE KEEP ALL CONCENTRATED OFF-SITE "RUN-ON" FROM AREAS TO BE DISTURBED.
5. PERIMETER CONTROLS (SILT FENCE, TURBIDITY CURTAIN, ETC.) TO BE INSTALLED PRIOR TO SOIL DISTURBANCE AND MAINTAINED UNTIL SITE IS PERMANENTLY STABILIZED TO THE SATISFACTION OF THE ENGINEER AND ON-SITE COORDINATOR.
6. SEEDING AND MULCH SHALL BE APPLIED IMMEDIATELY TO ALL LAWNS DISTURBED BEYOND THE WORK AREA DELINEATED ON THESE PLANS.
7. PREVENT SEDIMENT FROM LEAVING THE SITE BY MAINTAINING AND MODIFYING PERIMETER CONTROLS AS NEEDED.

GENERAL NOTES:

1. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL PROVIDE THE FOLLOWING ADDITIONAL INFORMATION FOR APPROVAL AND INCLUSION IN THE COMPLETE EROSION AND SEDIMENT CONTROL PLANS:
 - LOCATION OF WASTE, BORROW AND STAGING AREAS, MATERIAL STOCKPILES, REFUELING AND MAINTENANCE AREAS AND CONCRETE TRUCK WASHOUT LOCATION (ATTACH MAP IF NECESSARY). A DISCUSSION AND ADDITIONAL DETAILS NEEDED FOR PROTECTION AND STABILIZATION OF THESE AREAS SHALL BE INCLUDED AS WELL.
 - MODIFICATIONS REQUIRED TO THESE EROSION PREVENTION AND SEDIMENT CONTROL PLANS.
 - GRADING PLAN / CONSTRUCTION SEQUENCE (INCLUDING PROPOSED DATES ASSOCIATED WITH JOB MILESTONES AS INDICATED ON THE SEQUENCE CONSISTENT WITH PROJECT CRITICAL PATH METHOD SCHEDULE.)
 - REVISED NARRATIVE MATCHING THE GRADING PLAN AND CONSTRUCTION SEQUENCE (RE: TEMPORARY SEEDING AND MULCHING / STABILIZATION).
 - NAME, ADDRESS, PHONE NUMBER AND BASIC QUALIFICATIONS OF "ON-SITE COORDINATOR".
2. WORK SHALL BE GENERALLY CONSISTENT WITH GUIDANCE PROVIDED IN THE LATEST REVISION OF THE VERMONT HANDBOOK FOR SOIL EROSION AND SEDIMENT CONTROL ON CONSTRUCTION SITES AND THE ASSOCIATED GENERAL CONTRACTORS OF VERMONT FIELD HANDBOOK.

**SEEDING FORMULA
RURAL AREAS**

% WT.	kg/ha	NAME	PUR %	GERM %
37.5	26.0	CREEPING RED FESCUE	98	85
37.5	26.0	TALL FESCUE	95	90
5.0	4.0	RED TOP	95	90
15.0	10.0	BIRDSFOOT TREFOIL	98	85
5.0	4.0	ANNUAL RYE GRASS	95	85
100.0	70.0			

SEEDING GENERAL NOTES

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

SEED: TO BE APPLIED PER SEEDING FORMULAS OR AS DIRECTED BY THE ENGINEER.

FERTILIZER: FORMULA 10-20-10, TO BE USED WITH SEED, APPLIED AT THE RATE OF 560 kg/ha. (HYDRO SEEDERS MAY USE 19-19-19 FORMULA).

AGRICULTURAL LIMESTONE: TO BE APPLIED AT THE RATE OF 4500 kg/ha, OR AS DIRECTED BY THE ENGINEER.

HAY MULCH: TO BE PLACED ON EARTH SLOPES AT THE RATE OF 4500 kg/ha, OR AS DIRECTED BY THE ENGINEER.

TOPSOIL: TO BE USED WITH SEED AS INDICATED ON THE PLANS, OR AS DIRECTED BY THE ENGINEER.

PROJECT: STOCKBRIDGE	PROJECT NO. : BRF 022-1(20) S
DESIGN FILE NAME: /STR4/85e039/de039ero.dgn	PLOT DATE: 04-MAR-2010
IPARM FILE NAME: SJ039ecnotes.l	SURVEY DATE: JAN 2000
SURVEYED BY: L. ORVIS	DRAWN BY: M.FESSEL
SQUAD LEADER: C. P. WILLIAMS	ROW SHEET 15 OF 33
EROSION CONTROL NOTES	

SYMBOL

	SILT FENCE
	SILT FENCE WOVEN WIRE

NOT TO SCALE

CONSTRUCTION SPECIFICATIONS

- WOVEN WIRE REINFORCED FENCE IS REQUIRED WITHIN 100' UPSLOPE OF RECEIVING WATERS WHEN THE PROJECT FALLS UNDER A CONSTRUCTION STORMWATER PERMIT. WOVEN WIRE SHALL BE A MIN. 14 GAUGE WITH A 6" MAX. MESH OPENING.
- FILTER CLOTH SHALL BE EITHER FILTER X, MIRAF1100X, STABILINKA T140N OR APPROVED EQUIVALENT.
- POST SPACING FOR WIRE-BACKED FENCE SHALL BE 10' MAXIMUM. FOR FILTER-CLOTH FENCE, WHEN ELONGATION IS >50%, POST SPACING SHALL NOT EXCEED 4' AND WHEN ELONGATION IS <50%, POST SPACING SHALL NOT EXCEED 6'.
- WOVEN WIRE FENCE IS TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES. FILTER CLOTH IS TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION.
- WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVER-LAPPED BY 6" AND FOLDED.
- MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN SEDIMENT REACHES HALF OF FABRIC HEIGHT.

ADAPTED FROM DETAILS PROVIDED BY: NEW YORK STATE DEC
ORIGINALLY DEVELOPED BY USDA-NRCS
VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SILT FENCE

NOTES:
REFER TO 'THE VERMONT STANDARDS & SPECIFICATIONS FOR EROSION PREVENTION & SEDIMENT CONTROL -2006-' FROM THE VT AGENCY OF NATURAL RESOURCES FOR ADDITIONAL GUIDANCE.

REVISIONS		
MARCH 21, 2008	WHF	
DECEMBER 11, 2008	WHF	
JANUARY 13, 2009	WHF	

THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 649 AND AS SHOWN IN THE PLANS FOR GEOTEXTILE FOR SILT FENCE (PAY ITEM 649.51) OR GEOTEXTILE FOR SILT FENCE, WOVEN WIRE REINFORCED (PAY ITEM 649.515).

SYMBOL

	CHECK DAM
--	-----------

NOT TO SCALE

CONSTRUCTION SPECIFICATIONS

- STONE WILL BE PLACED ON A FILTER FABRIC FOUNDATION.
- CHECK DAMS SHALL BE SPACED SO THAT THE ELEVATION OF THE CREST OF THE DOWNSTREAM DAM IS AT THE SAME ELEVATION AS THE TOE OF THE UPSTREAM DAM.
- 3/4" FILTERING STONE MAY BE ADDED TO THE FACE OF THE CHECK DAM AS NECESSARY.
- EXTEND THE STONE A MINIMUM OF 1.5' BEYOND THE DITCH BANKS TO PREVENT CUTTING AROUND THE DAM.
- PROTECT CHANNEL DOWNSTREAM OF THE LOWEST CHECK DAM FROM SCOUR AND EROSION WITH STONE OR LINER AS APPROPRIATE.
- ENSURE THAT CHANNEL APPURTENANCES SUCH AS CULVERT ENTRANCES BELOW CHECK DAMS ARE NOT SUBJECT TO DAMAGE OR BLOCKAGE FROM DISPLACED STONE.
- MAXIMUM DRAINAGE AREA 2 ACRES.

ADAPTED FROM DETAILS PROVIDED BY: NEW YORK STATE DEC
ORIGINALLY DEVELOPED BY USDA-NRCS
VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION

CHECK DAM

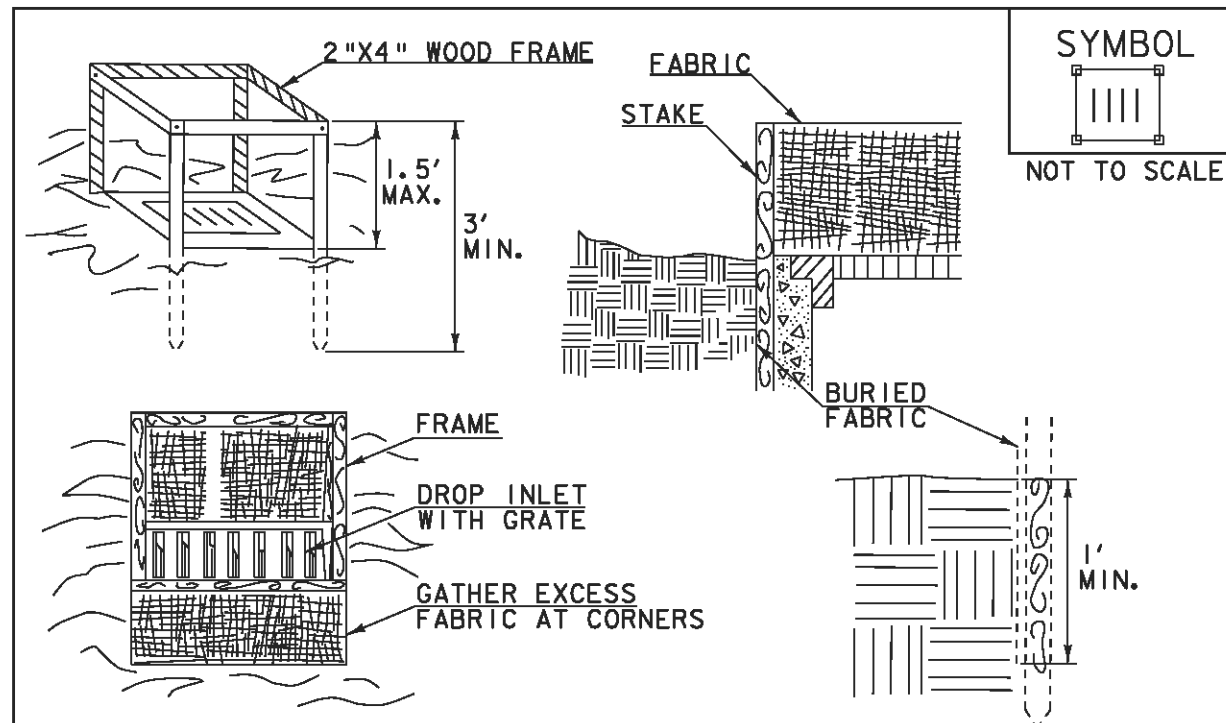
NOTES:
REFER TO 'THE VERMONT STANDARDS & SPECIFICATIONS FOR EROSION PREVENTION & SEDIMENT CONTROL -2006-' FROM THE VT AGENCY OF NATURAL RESOURCES FOR ADDITIONAL GUIDANCE.

REVISIONS		
MARCH 21, 2008	WHF	
JANUARY 8, 2009	WHF	

THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 653 FOR TEMPORARY STONE CHECK DAM, TYPE 1 (PAY ITEM 653.25)

EROSION PREVENTION & SEDIMENT CONTROL DETAILS SILT FENCE AND CHECK DAMS

PROJECT: STOCKBRIDGE	PROJECT NO.: BRF 022-1(20)
DESIGN FILE NAME: re039epsodetail.dgn	PLOT DATE: 04-MAR-2010
IPARM FILE NAME: sj039epsclm.l	SURVEY DATE: JAN 2000
SURVEYED BY: L. ORVIS	DRAWN BY:
SQUAD LEADER: C. P. WILLIAMS	ROW SHEET 16 OF 33
SILT FENCE & CHECK DAMS	



CONSTRUCTION SPECIFICATIONS

1. FILTER FABRIC SHALL HAVE AN APPARENT OPENING SIZE OF 40-85. BURLAP MAY BE USED FOR SHORT TERM APPLICATIONS.
2. CUT FABRIC FROM A CONTINUOUS ROLL TO ELIMINATE JOINTS. IF JOINTS ARE NEEDED THEY WILL BE OVERLAPPED TO THE NEXT STAKE.
3. STAKE MATERIALS WILL BE STANDARD 2" x 4" WOOD OR EQUIVALENT METAL WITH A MINIMUM LENGTH OF 3'.
4. SPACE STAKES EVENLY AROUND INLET 3' APART AND DRIVE A MINIMUM 18" DEEP. SPANS GREATER THAN 3' MAY BE BRIDGED WITH THE USE OF WIRE MESH BEHIND THE FILTER FABRIC FOR SUPPORT.
5. FABRIC SHALL BE EMBEDDED 1' MINIMUM BELOW GROUND AND BACKFILLED. IT SHALL BE SECURELY FASTENED TO THE STAKES AND FRAME.
6. A 2" x 4" WOOD FRAME SHALL BE COMPLETED AROUND THE CREST OF THE FABRIC FOR OVER FLOW STABILITY.
7. MAXIMUM DRAINAGE AREA 1 ACRE

ADAPTED FROM DETAILS PROVIDED BY: NEW YORK STATE DEC ORIGINALLY DEVELOPED BY USDA-NRCS VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION	FILTER FABRIC DROP INLET PROTECTION										
NOTES: REFER TO "THE VERMONT STANDARDS & SPECIFICATIONS FOR EROSION PREVENTION & SEDIMENT CONTROL -2006-" FROM THE VT AGENCY OF NATURAL RESOURCES FOR ADDITIONAL GUIDANCE. THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 653 FOR INLET PROTECTION DEVICE, TYPE I(PAY ITEM 653.40).	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th colspan="2" style="text-align: left; padding: 2px;">REVISIONS</th> </tr> <tr> <td style="padding: 2px;">MARCH 7, 2008</td> <td style="padding: 2px;">WHF</td> </tr> <tr> <td style="padding: 2px;">JANUARY 13, 2009</td> <td style="padding: 2px;">WHF</td> </tr> <tr> <td style="padding: 2px;"> </td> <td style="padding: 2px;"> </td> </tr> <tr> <td style="padding: 2px;"> </td> <td style="padding: 2px;"> </td> </tr> </table>	REVISIONS		MARCH 7, 2008	WHF	JANUARY 13, 2009	WHF				
REVISIONS											
MARCH 7, 2008	WHF										
JANUARY 13, 2009	WHF										

EROSION PREVENTION & SEDIMENT CONTROL DETAILS DROP INLET PROTECTION

PROJECT: STOCKBRIDGE	PROJECT NO.: BRF 022-1(20)
DESIGN FILE NAME: re039epsdeta1.dgn IPARM FILE NAME: sj039eps2m.l SURVEYED BY: L. ORVIS SQUAD LEADER: C. P. WILLIAMS DROP INLET PROTECTION	PLOT DATE: 04-MAR-2010 SURVEY DATE: JAN 2000 DRAWN BY: ROW SHEET 17 OF 33

VAOT RURAL AREA MIX					
% WEIGHT	LBS/AC		NAME	GERM %	PURITY %
	BROADCAST	HYDROSEED			
37.5%	22.5	45	CREEPING RED FESCUE	85%	98%
37.5%	22.5	45	TALL FESCUE	90%	95%
5.0%	3	6	RED TOP	90%	95%
15.0%	9	18	BIRDSFOOT TREFOIL	85%	98%
5.0%	3	6	ANNUAL RYE GRASS	85%	95%
100%	60	120			

VAOT URBAN AREA MIX					
% WEIGHT	LBS/AC		NAME	GERM %	PURITY %
	BROADCAST	HYDROSEED			
42.5%	34	68	CREEPING RED FESCUE	85%	98%
10.0%	8	16	PERENNIAL RYE GRASS	90%	95%
42.5%	34	68	KENTUCKY BLUE GRASS	85%	85%
5.0%	4	8	ANNUAL RYE GRASS	85%	95%
100%	80	160			

GENERAL GUIDANCE			
FERTILIZER		LIME	
BROADCAST	HYDROSEED	BROADCAST	HYDROSEED
10-20-10	19-19-19	PELLETIZED	LIQUID
500 LBS/AC		2 TONS/AC	4.4 GAL/AC

CONSTRUCTION GUIDANCE

- RURAL SEED MIX: USE AS INDICATED IN THE PLANS AND/OR FOR ALL ESTABLISHED UPLAND (NON WETLAND) AREAS DISTURBED BY THE CONTRACTOR.
- URBAN SEED MIX: USE AS INDICATED IN THE PLANS AND/OR FOR ALL ESTABLISHED LAWN AREAS DISTURBED BY THE CONTRACTOR.
- ALL SEED MIXTURES: SHALL NOT HAVE A WEED CONTENT EXCEEDING 0.40% BY WEIGHT AND SHALL BE FREE OF ALL NOXIOUS SEED.
- FERTILIZER AND LIMESTONE: SHALL FOLLOW RATES SHOWN ON PLAN OR AS DIRECTED BY THE ENGINEER
- HAY MULCH: TO BE PLACED ON EARTH SLOPES AT THE RATE OF 2 TONS/ACRE, ACHIEVE 90% GROUND COVER OR AS DIRECTED BY THE ENGINEER.
- TOPSOIL: TO BE USED WITH SEED AS INDICATED ON THE PLANS, OR AS DIRECTED BY THE ENGINEER.
- HYDROSEEDING: ALTHOUGH GUIDANCE IS GIVEN ABOVE THE SITE CONDITIONS AND THE TYPE OF HYDROSEED WILL ULTIMATELY DICTATE THE AMOUNTS AND TYPES OF SOIL AMENDMENTS TO BE APPLIED
- TURF ESTABLISHMENT: PLACING SEED, FERTILIZER, LIME AND MULCH PRIOR TO SEPTEMBER 15 AND AFTER APRIL 15 CAN BETTER ENSURE A VIGOROUS GROWTH OF GRASS.

ADAPTED FROM VTRANS TECHNICAL LANDSCAPE MAUAL FOR ROADWAYS AND TRANSPORTATION FACILITIES	TURF ESTABLISHMENT										
	<table border="1"> <thead> <tr> <th colspan="2">REVISIONS</th> </tr> </thead> <tbody> <tr> <td>JUNE 23, 2009</td> <td>WHF</td> </tr> <tr> <td>JANUARY 15, 2010</td> <td>WHF</td> </tr> <tr> <td></td> <td></td> </tr> <tr> <td></td> <td></td> </tr> </tbody> </table>	REVISIONS		JUNE 23, 2009	WHF	JANUARY 15, 2010	WHF				
REVISIONS											
JUNE 23, 2009	WHF										
JANUARY 15, 2010	WHF										

EROSION PREVENTION & SEDIMENT CONTROL DETAILS SEED

PROJECT: STOCKBRIDGE	PROJECT NO. : BRF 022-1(20)
DESIGN FILE NAME: re039epscdetal.dgn	PLOT DATE: 04-MAR-2010
IPARM FILE NAME: sj039epsc3m.l	SURVEY DATE: JAN 2000
SURVEYED BY: L. ORVIS	DRAWN BY:
SQUAD LEADER: C. P. WILLIAMS	ROW SHEET 18 OF 33
SEED	

CONSTRUCTION SPECIFICATIONS

- EROSION MATTING, CHECK SLOTS, SHALL BE SPACED IN DITCH CHANNEL SO THAT ONE OCCURS WITHIN EACH 50' ON SLOPES OF MORE THAN 4% AND LESS THAN 6%. ON SLOPES OF 6% OR MORE, THEY SHALL BE SPACED SO THAT ONE OCCURS WITHIN EACH 25'.
- APPLY FERTILIZER, LIME SEED PRIOR TO PLACING MATTING.
- STAPLES ARE TO BE PLACED ALTERNATELY, IN COLUMNS APPROXIMATELY 2' APART AND IN ROWS APPROXIMATELY 3' APART. APPROXIMATELY 175 STAPLES ARE REQUIRED PER 4' X 225' ROLL OF MATERIAL AND 125 STAPLES ARE REQUIRED PER 4' X 150' ROLL OF MATERIAL.
- DISTURBED AREAS SHALL BE SMOOTHLY GRADED. EROSION CONTROL MATERIAL SHALL BE PLACED LOOSELY OVER GROUND SURFACE. DO NOT STRETCH.
- ALL TERMINAL ENDS AND TRANSVERSE LAPS SHALL BE STAPLED AT APPROXIMATELY 12" INTERVALS.

ADAPTED FROM DETAILS PROVIDED BY: NEW YORK STATE DEC ORIGINALLY DEVELOPED BY USDA-NRCS VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION	ROLLED EROSION CONTROL PRODUCT (RECP) DITCH
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NOTES:
REFER TO 'THE VERMONT STANDARDS & SPECIFICATIONS FOR EROSION PREVENTION & SEDIMENT CONTROL -2006-' FROM THE VT AGENCY OF NATURAL RESOURCES FOR ADDITIONAL GUIDANCE.
THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 653 AND AS SHOWN IN THE PLANS FOR TEMPORARY EROSION MATTING (PAY ITEM 653.20) OR PERMANENT EROSION MATTING (PAY ITEM 653.21).

REVISIONS		
MARCH 8, 2007	JMF	
APRIL 16, 2007	WHF	
JANUARY 13, 2009	WHF	

CONSTRUCTION SPECIFICATIONS

- APPLY TO SLOPES GREATER THAN 3H:1V OR WHERE NECESSARY TO AID IN ESTABLISHING VEGETATION.
- APPLY FERTILIZER, LIME SEED PRIOR TO PLACING MATTING.
- STAPLES ARE TO BE PLACED ALTERNATELY, IN COLUMNS APPROXIMATELY 2' APART AND IN ROWS APPROXIMATELY 3' APART. APPROXIMATELY 175 STAPLES ARE REQUIRED PER 4' X 225' ROLL OF MATERIAL AND 125 STAPLES ARE REQUIRED PER 4' X 150' ROLL OF MATERIAL.
- DISTURBED AREAS SHALL BE SMOOTHLY GRADED. EROSION CONTROL MATERIAL SHALL BE PLACED LOOSELY OVER GROUND SURFACE. DO NOT STRETCH.
- ALL TERMINAL ENDS AND TRANSVERSE LAPS SHALL BE STAPLED AT APPROXIMATELY 12" INTERVALS.

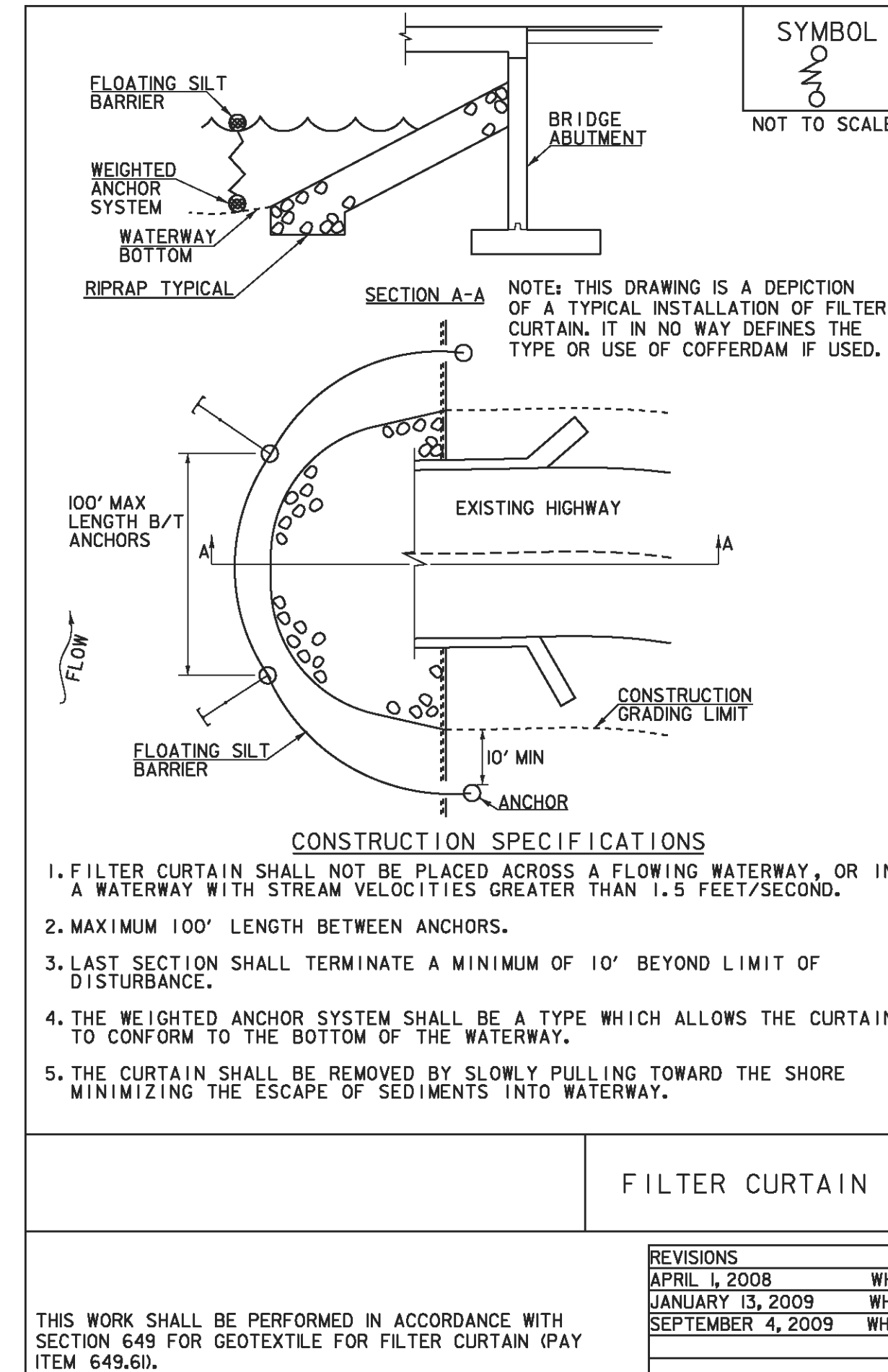
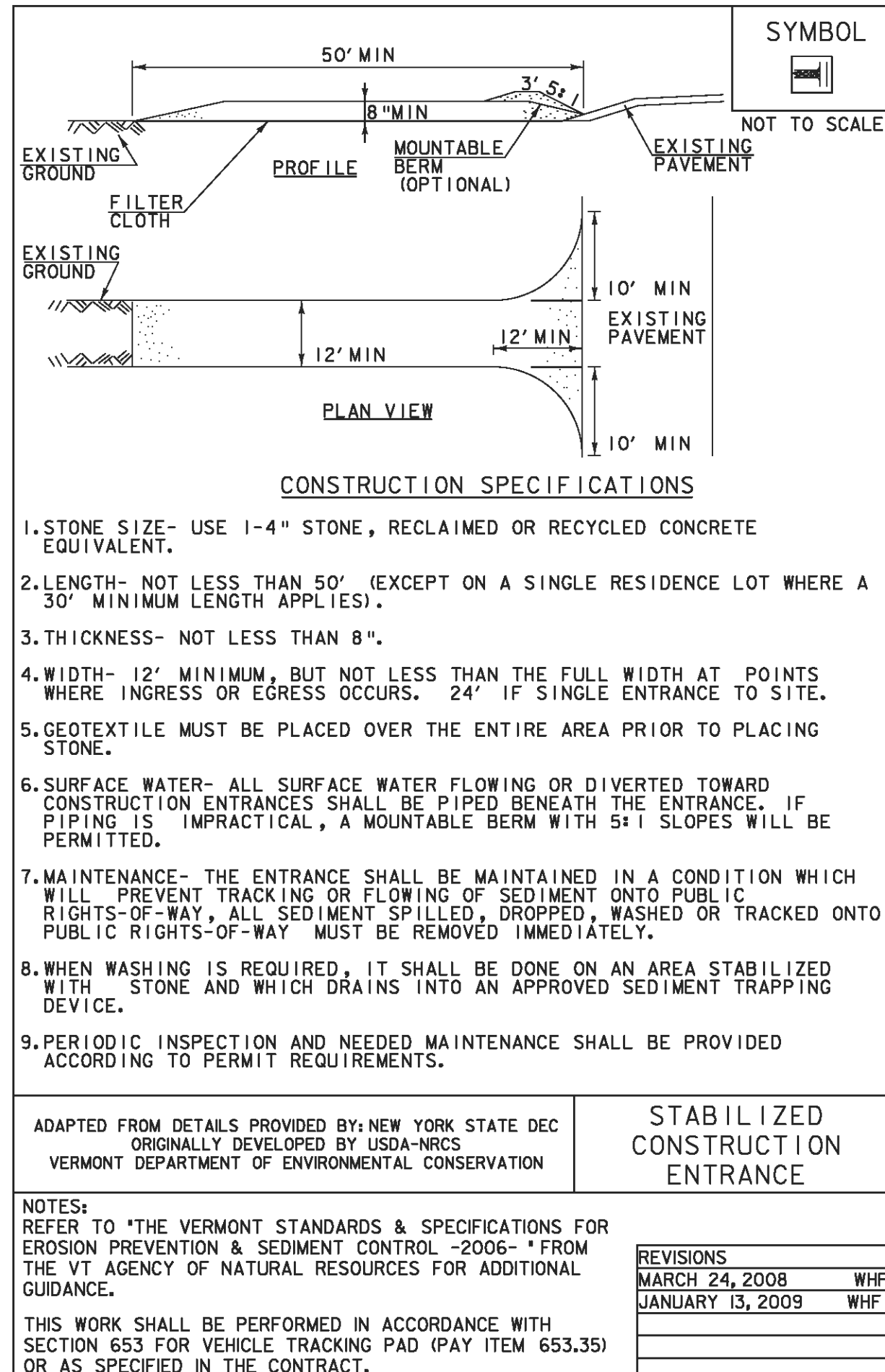
ADAPTED FROM DETAILS PROVIDED BY: NEW YORK STATE DEC ORIGINALLY DEVELOPED BY USDA-NRCS VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION	ROLLED EROSION CONTROL PRODUCT (RECP) SIDE SLOPE
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NOTES:
REFER TO 'THE VERMONT STANDARDS & SPECIFICATIONS FOR EROSION PREVENTION & SEDIMENT CONTROL -2006-' FROM THE VT AGENCY OF NATURAL RESOURCES FOR ADDITIONAL GUIDANCE.
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REVISIONS		
APRIL 16, 2007	JMF	
JANUARY 13, 2009	WHF	

EROSION PREVENTION & SEDIMENT CONTROL DETAILS DITCH & SIDE SLOPE PROTECTION

PROJECT: STOCKBRIDGE	PROJECT NO.: BRF 022-1(20)
DESIGN FILE NAME: re039epsdetail.dgn IPARM FILE NAME: sj039eps5m.l SURVEYED BY: L. ORVIS SQUAD LEADER: C. P. WILLIAMS DITCH & SIDE SLOPE PROTECTION	PLOT DATE: 04-MAR-2010 SURVEY DATE: JAN 2000 DRAWN BY: ROW SHEET 19 OF 33

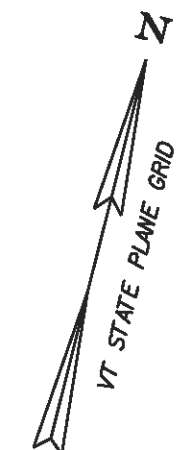


EROSION PREVENTION & SEDIMENT CONTROL DETAILS FILTER CURTAIN & CONSTRUCTION ENTRANCE

PROJECT: STOCKBRIDGE	PROJECT NO.: BRF 022-1(20)
DESIGN FILE NAME: re039epsdetail.dgn IPARM FILE NAME: sj039eps6m.l SURVEYED BY: L. ORVIS SQUAD LEADER: C. P. WILLIAMS FILTER CURTAIN & CONSTRUCTION ENTRANCE	PLOT DATE: 04-MAR-2010 SURVEY DATE: JAN 2000 DRAWN BY: ROW SHEET 20 OF 33

NOT
USED

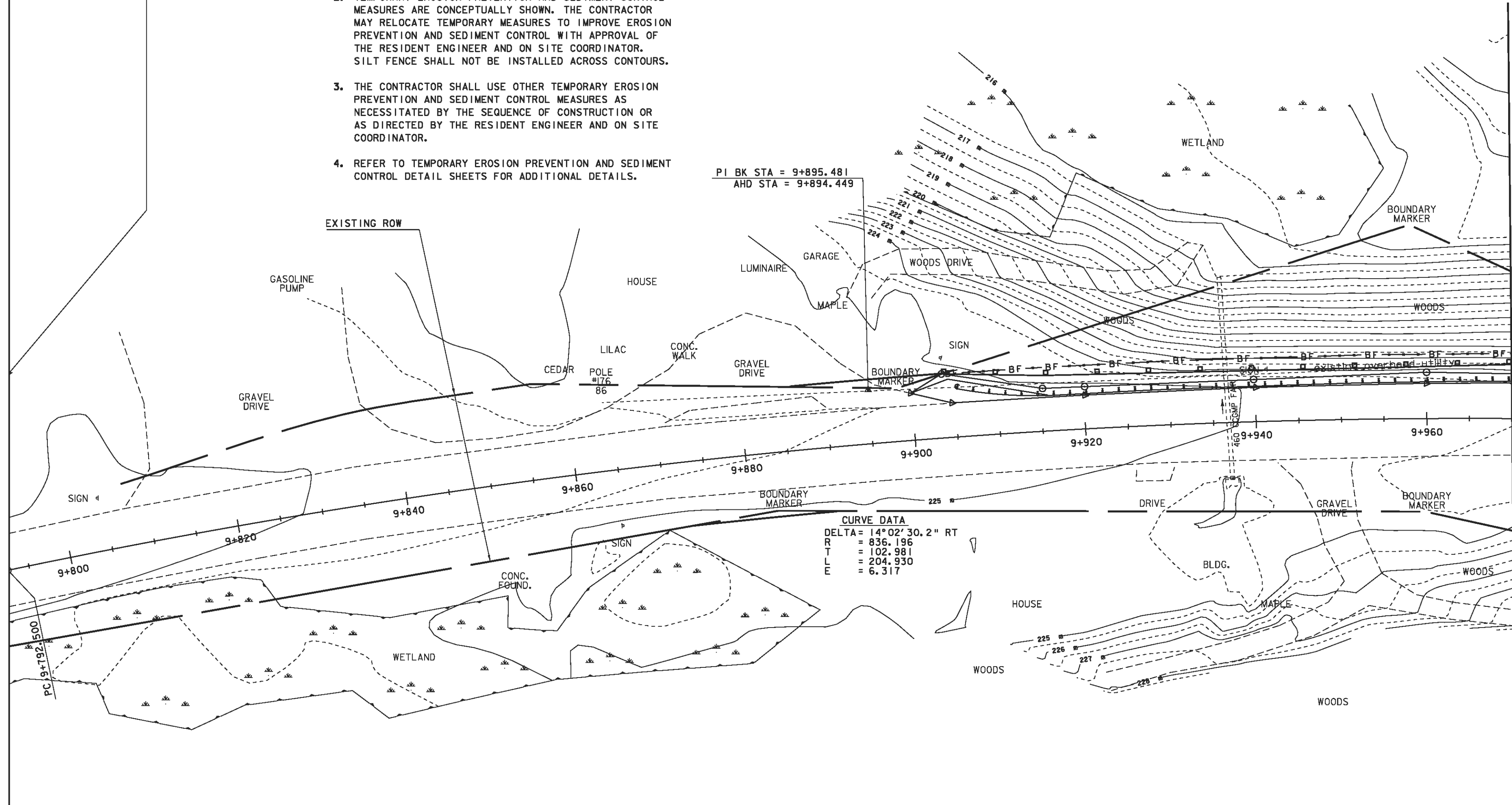
PROJECT: STOCKBRIDGE	PROJECT NO. : BRF 022-1(20) S
DESIGN FILE NAME: re039epscode1all.dgn	PLOT DATE: 04-MAR-2010
IPARM FILE NAME: sj039eps4m.l	SURVEY DATE: JAN 2000
SURVEYED BY: L. ORVIS	DRAWN BY:
SQUAD LEADER: C. P. WILLIAMS	ROW SHEET 21 OF 33



Benchmark #2
Goddard Az Merk
Elev. 225.690

- NOTES:
1. THESE PLANS SHOW A CONCEPTUAL EROSION PREVENTION AND SEDIMENT CONTROL PLAN, THE CONTRACTOR MUST SUBMIT A TEMPORARY EROSION PREVENTION AND SEDIMENT CONTROL PLAN FOR APPROVAL.
 2. TEMPORARY EROSION PREVENTION AND SEDIMENT CONTROL MEASURES ARE CONCEPTUALLY SHOWN. THE CONTRACTOR MAY RELOCATE TEMPORARY MEASURES TO IMPROVE EROSION PREVENTION AND SEDIMENT CONTROL WITH APPROVAL OF THE RESIDENT ENGINEER AND ON SITE COORDINATOR. SILT FENCE SHALL NOT BE INSTALLED ACROSS CONTOURS.
 3. THE CONTRACTOR SHALL USE OTHER TEMPORARY EROSION PREVENTION AND SEDIMENT CONTROL MEASURES AS NECESSITATED BY THE SEQUENCE OF CONSTRUCTION OR AS DIRECTED BY THE RESIDENT ENGINEER AND ON SITE COORDINATOR.
 4. REFER TO TEMPORARY EROSION PREVENTION AND SEDIMENT CONTROL DETAIL SHEETS FOR ADDITIONAL DETAILS.

PI BK STA = 9+895.481
AHD STA = 9+894.449



MATCHLINE STA. 9+970

LEGEND

	SEED AND MULCH
	EROSION CONTROL MATTING
	SILT FENCE
	FILTER CURTAIN
	PDF FENCE
	BARRIER FENCE
	DI PROTECTION
	TEMPORARY STONE CHECK DAM

EROSION PREVENTION & SEDIMENT CONTROL PLAN - I

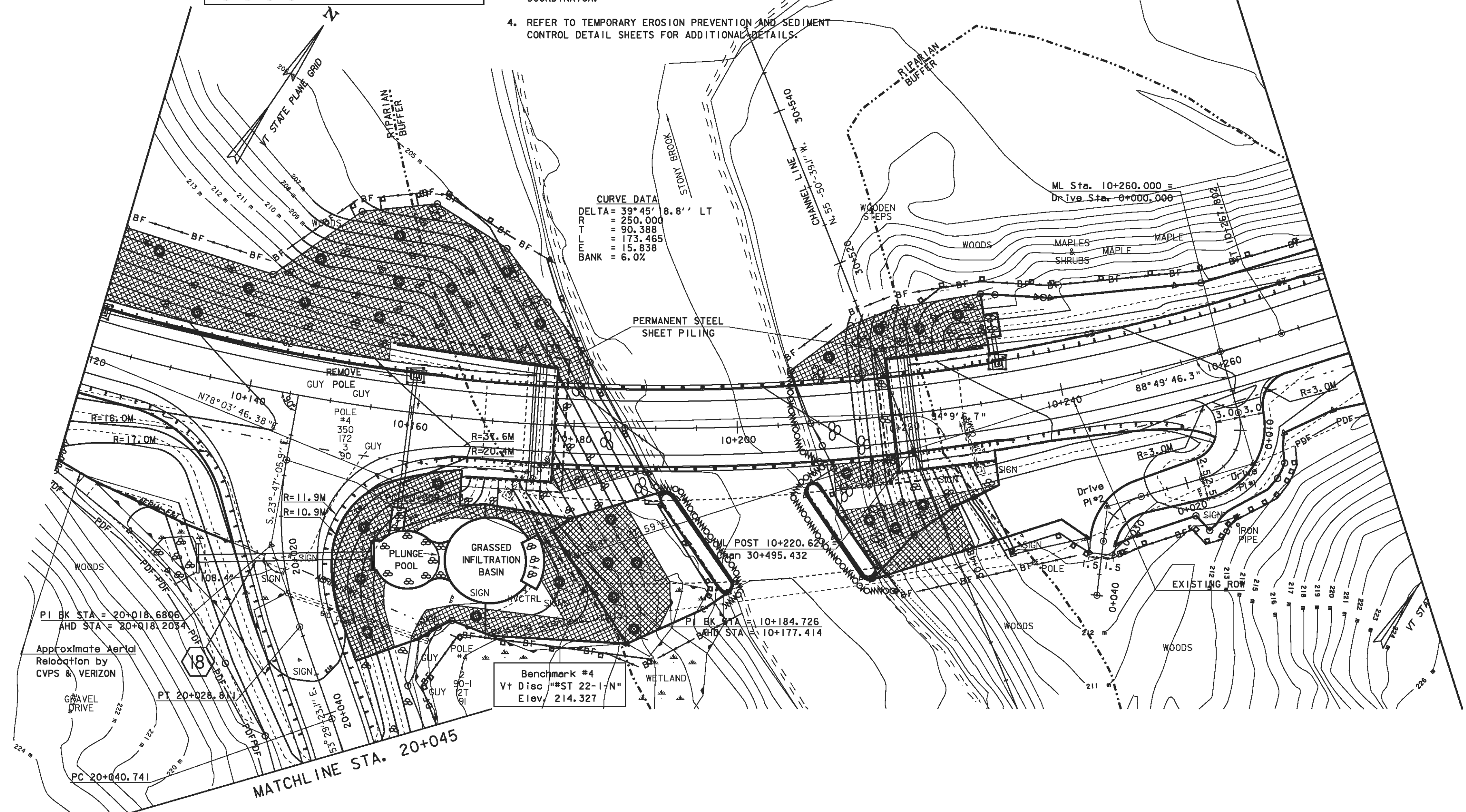


PROJECT NAME:	STOCKBRIDGE
PROJECT NUMBER:	BRF 022-1 (20) S
FILE NAME: /str5/85e039/de039bdr.dgn	PLOT DATE: 04-MAR-2010
PROJECT LEADER: C.P. Williams	DRAWN BY: M.FESSEL
DESIGNED BY: R.S.YOUNG	CHECKED BY: R.S.YOUNG
EROSION CONTROL PLAN - LAYOUT I	SHEET 22 OF 33

LEGEND

	SEED AND MULCH
	EROSION CONTROL MATTING
	SILT FENCE
	FILTER CURTAIN
	PDF FENCE
	BARRIER FENCE
	RIPARIAN BUFFER ZONE
	DI PROTECTION
	TEMPORARY STONE CHECK DAM
	STONE FILL TYPE II
	STONE FILL TYPE IV

- NOTES:**
1. THESE PLANS SHOW A CONCEPTUAL EROSION PREVENTION AND SEDIMENT CONTROL PLAN, THE CONTRACTOR MUST SUBMIT A TEMPORARY EROSION PREVENTION AND SEDIMENT CONTROL PLAN FOR APPROVAL.
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 4. REFER TO TEMPORARY EROSION PREVENTION AND SEDIMENT CONTROL DETAIL SHEETS FOR ADDITIONAL DETAILS.



PROJECT NAME:	STOCKBRIDGE
PROJECT NUMBER:	BRF 022-1 (20) S
FILE NAME: str5/85e039/de039bdr.dgn	PLOT DATE: 04-MAR-2010
PROJECT LEADER: C. P. Williams	DRAWN BY: M.FESSEL
DESIGNED BY: R.S.YOUNG	CHECKED BY: R.S. Young
EROSION CONTROL PLAN - LAYOUT 3	SHEET 24 OF 33

Disconnection Area
per Stormwater Permit #4233-INDS
10+275 - 10+330 Lt.

HD Steel Beam Guardrail, Galvanized
10+275.00 ~ 10+426.00 Lt.

Manufactured Terminal Section, Flared
10+426.00 ~ 10+436.80 Lt.

Cast In Place Concrete Curb, Type B
10+310.00 - 10+327.76 Rt.
10+333.76 - 10+347.25 Rt.

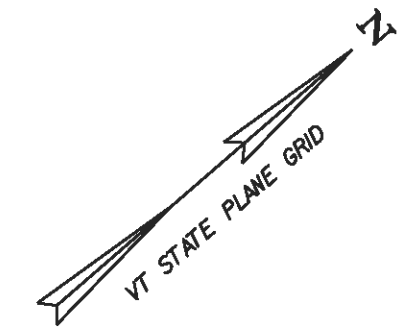
Removal and Disposal of Guardrail
10+311.44 - 10+413.47 Lt.

Removal of Stone Wall
(Included under
Item 203.50 "Common Excavation")
10+325 - 10+332 Rt.

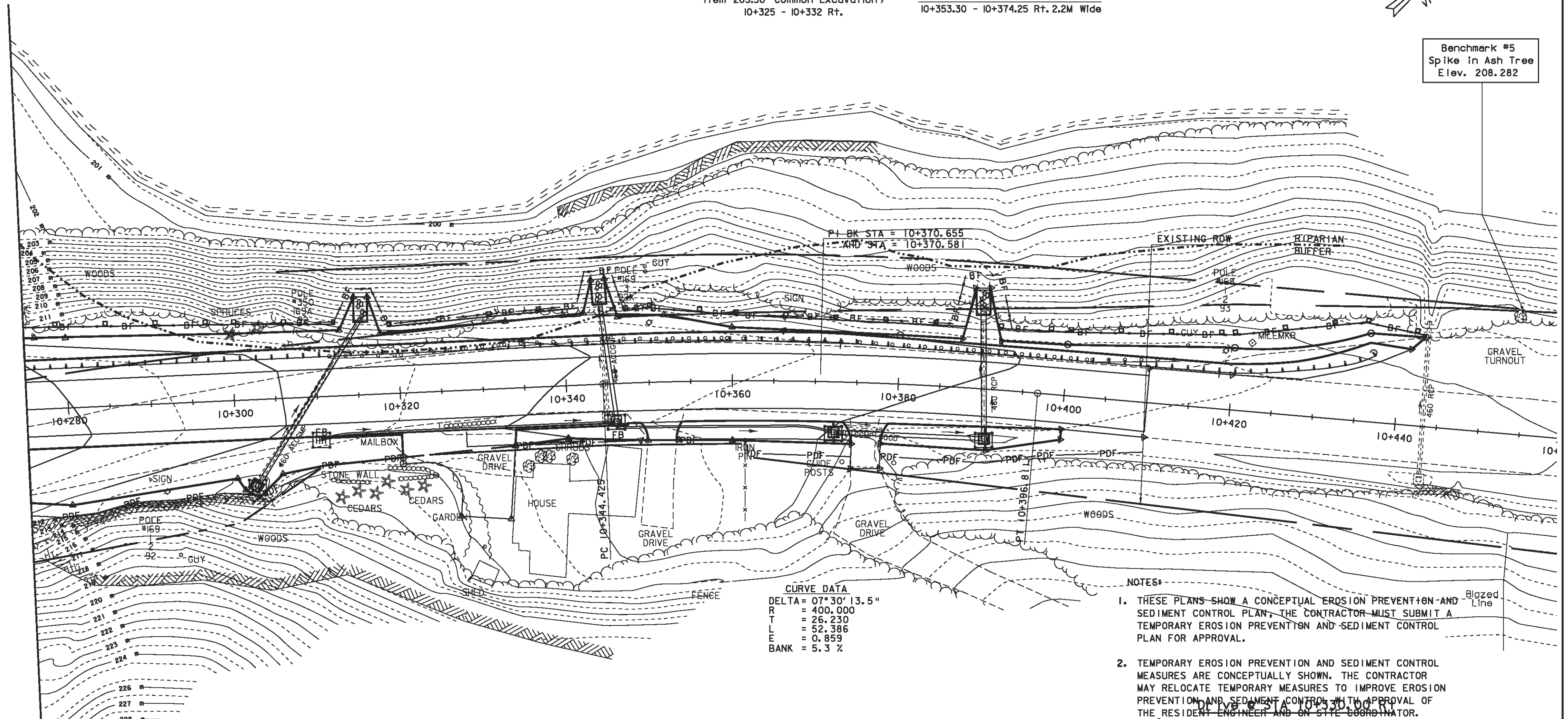
Construct Drives
10+330.000 Rt. - Gravel Drive w/2.0M Paved Apron, 6.0M Wide (See Chart Below)
10+352.000 Rt. - 2.0M Paved Apron, 5.0M Wide
10+376.000 Rt. - 5.0M Gravel Drive, 3.5M Wide w/1.0M Paved Apron, 5.0M Wide

Relocate Mailbox, Single Support
10+317.25 Rt.

Bituminous Concrete Gutter
10+353.30 - 10+374.25 Rt. 2.2M Wide



Benchmark #5
Spike in Ash Tree
Elev. 208.282



LEGEND

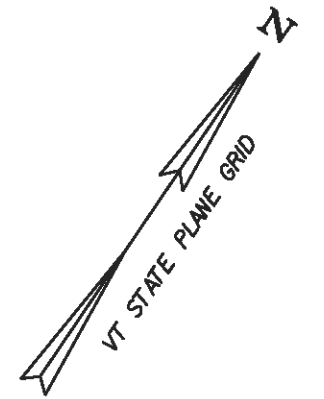
	SEED AND MULCH
	EROSION CONTROL MATTING
	SILT FENCE
	FILTER CURTAIN
	PDF FENCE
	BARRIER FENCE
	RIPARIAN BUFFER ZONE
	DI PROTECTION
	TEMPORARY STONE CHECK DAM
	STONE FILL TYPE II
	STONE FILL TYPE IV

- NOTES:
1. THESE PLANS SHOW A CONCEPTUAL EROSION PREVENTION AND SEDIMENT CONTROL PLAN. THE CONTRACTOR MUST SUBMIT A TEMPORARY EROSION PREVENTION AND SEDIMENT CONTROL PLAN FOR APPROVAL.
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 3. THE CONTRACTOR SHALL USE OTHER TEMPORARY EROSION PREVENTION AND SEDIMENT CONTROL MEASURES AS NECESSITATED BY THE SLOPING OF CONSTRUCTION OR AS DIRECTED BY THE RESIDENT ENGINEER AND ON SITE COORDINATOR.
 4. REFER TO TEMPORARY EROSION PREVENTION AND SEDIMENT CONTROL DETAIL SHEETS FOR ADDITIONAL DETAILS.

EROSION PREVENTION & SEDIMENT CONTROL PLAN - 4

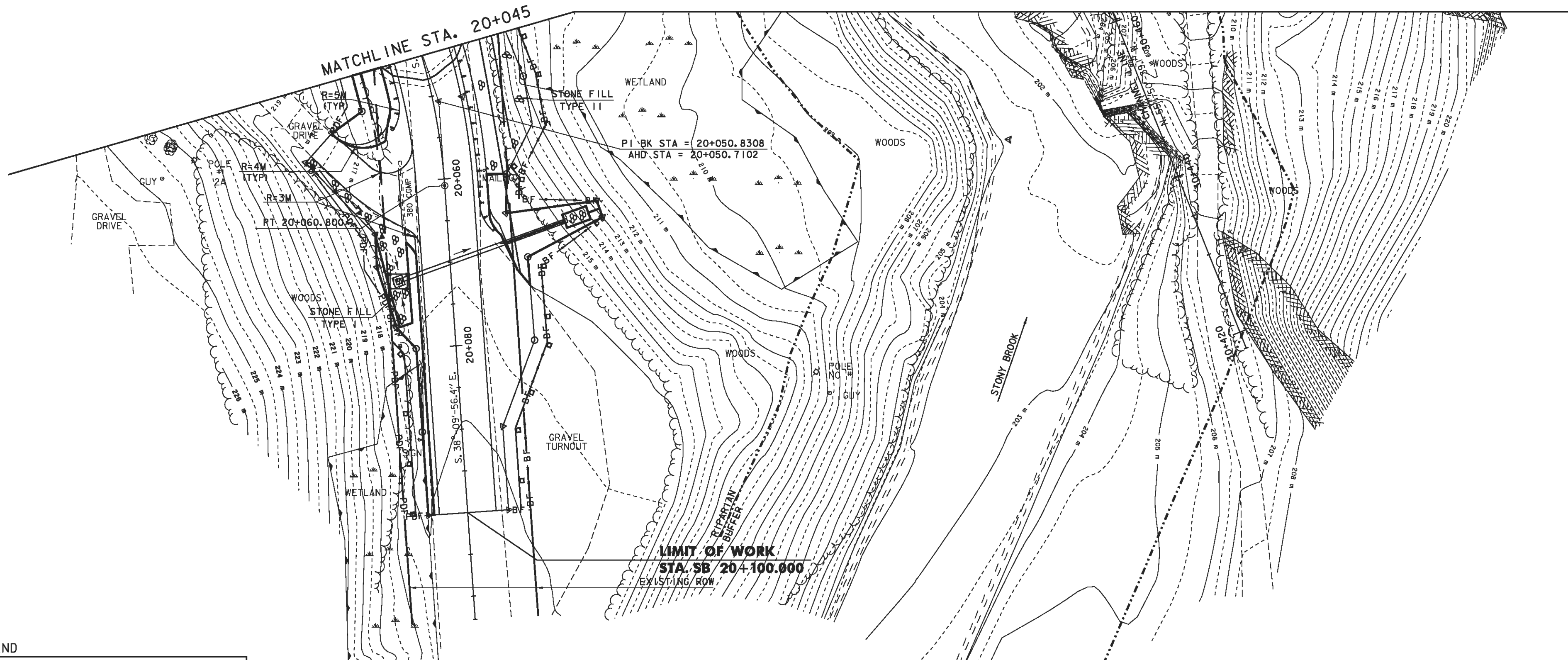


PROJECT NAME:	STOCKBRIDGE
PROJECT NUMBER:	BRF 022-1 (20) S
FILE NAME: str5/85e039/d039bdr.dgn	PLOT DATE: 04-MAR-2010
PROJECT LEADER: C.P. Williams	DRAWN BY: M.FESSEL
DESIGNED BY: R.S.YOUNG	CHECKED BY: R.S. Young
EROSION CONTROL PLAN - LAYOUT 4	SHEET 25 OF 33



NOTES:

- 1.
- 2.
- 3.
- 4.



LEGEND

	SEED AND MULCH
	EROSION CONTROL MATTING
	SILT FENCE
	FILTER CURTAIN
	PDF FENCE
	BARRIER FENCE
	RIPARIAN BUFFER ZONE
	DI PROTECTION
	TEMPORARY STONE CHECK DAM
	STONE FILL TYPE II
	STONE FILL TYPE IV

EROSION PEVENTION & SEDIMENT CONTROL PLAN - 5



PROJECT NAME:	STOCKBRIDGE
PROJECT NUMBER:	BRF 022-1 (20) S
FILE NAME: s:\tr5\85e039\de039bdr.dgn	PLOT DATE: 04-MAR-2010
PROJECT LEADER: C. P. Williams	DRAWN BY: M. FESSEL
DESIGNED BY: R. S. YOUNG	CHECKED BY: R.S. Young
EROSION CONTROL PLAN - LAYOUT 5	SHEET 26 OF 33

RIGHT - OF - WAY DETAIL SHEET



TABLE OF PROPERTY ACQUISITION

PARCEL NO.	PROPERTY OWNER	SHEET NO.	BEGINNING STATION	ENDING STATION	TAKE AREA ±	REMAINDER AREA ±	RIGHT			RECORDING DATA				REMARKS	
							TYPE	(T)(P)	AREA ±	TITLE	DATE	TOWN / CITY	BOOK		PAGE
1A	STATE OF VERMONT	30, 31 32	10+209.450 RT.	10+305.382 LT.	0.44HA	0				WD	1/2/2003	STOCKBRIDGE	60	575-576	FORMERLY WALKER, TOTAL TAKING 1.09A± WATERLINE SPRNG
	Note: Parcel #1 is required for stormwater treatment per Vermont Stormwater Discharge Permit #4233-INDS		10+252.819 LT. 10+303.034 RT.	10+303.034 RT.			ALL R.T. & I. EXCEPT & RESERVE								
1B		32	10+305.093 LT.	10+453.991 LT.	0.08HA										0.20A±
			10+316.125 LT. 10+344.434 LT. 10+389.598 LT.				DRAINAGE DRAINAGE DRAINAGE	(P) (P) (P)							
1C		31, 32	10+209.450 RT.	10+305.671 RT.			ALL R.T. & I.		0.09HA						HWY. EASE. VT. RTE. 107; 0.22A±
1D		32	10+305.382 LT.	10+454.671 RT.			ALL R.T. & I.		0.26HA						HWY. EASE. VT. RTE. 107; 0.64A±
1E		31, 32	10+202.098 RT.	10+304.890 LT.			ALL R.T. & I.								STONY BROOK, WHITE RIVER & VT. RTE. 107, AREA UNDEFINED
1F		31, 32	10+256.576 RT.	10+294.952 RT.			ALL R.T. & I.		399.66SM						HWY. EASE. VT. RTE. 107; 4.302 SF±
1G		32	10+377.000 RT.				DRIVE	(T)							4.2M (14') GRAVEL MM 0337
2A	ELOISE J. THOMPSON, TRUSTEE OF THE ELOISE THOMPSON FAMILY TRUST	29	9+885.33 LT.	9+903.76 LT.	11.71 SM					TRUSTEE	12/18/2009	STOCKBRIDGE	74	6-Apr	126 SF±
2B		29	9+872.87 RT.	9+890.72 RT.	6.73 SM										72 SF±
2C		30, 31	9+989.47 LT. 9+989.47 LT. 10+012.53 LT.	10+199.891 RT. 10+090.00 LT. 10+015.70 LT.	0.29 HA		CONST. DITCH & DRAINAGE	(T) (P)	70.3 SM 7.36 SM						0.73A± INCLUDES PDF & EC; 756 SF± 79 SF±
2D		31, 33	10+161.80 RT. 10+163.39 RT. TH 36 20+036.97 LT. TH 36 20+042.35 LT. TH 36 20+063.95 LT. TH 36 20+070.00 LT. 10+188.44 RT. 10+198.29 RT.	10+188.44 RT. TH 36 20+038.94 LT. TH 36 20+087.83 LT. TH 36 20+060.00 LT. TH 36 20+070.00 LT. TH 36 20+084.19 LT. 10+200.00 RT.	142.06 SM		SLOPE CONST. SLOPE CUL., DIT. & DR. SLOPE CONST. REMOVE	(P) (T) (P) (P) (P) (T) (T)	1.81 SM 92.44 SM 39.40 SM± 42.71 SM± 22.22 SM± 56.25 SM						1.529 SF± 19 SF± INCLUDES PDF & EC; 995 SF± 424SF± 460 SF± 239 SF± INCLUDES PDF & EC; 605 SF± OLD BRIDGE ABUTMENT
2E		29, 30 31	9+872.87 CL.	10+207.54 RT.	0.59 HA		ALL R.T. & I.								VT. RTE. 107; TH 36 & STONY BROOK 1.47A±

TABLE OF REVISIONS

REVISION NO.	SHEET NO.	DESCRIPTION	DATE
1	30,31	PARCEL NO. 3C BURCHYNS - ADDED NEW PARCEL 3C WITH UE(P) 252 SM± (2,712 SF±). ADDED STATIONS 10+088.51 RT. TO 10+141.49 RT. 4.5 m (15') PARALLEL TO UTILITY LINE. PER C.O. 9565 COMPLETED BY: MT APPROVED BY: HP	09/11/09
		ELECTRONIC FILES TO STRUCTURES	12/22/09

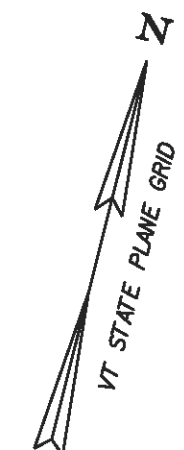
PLAN LEGEND

	EXISTING RIGHT-OF-WAY		TOE OF SLOPE	EC	-EROSION CONTROL
	TAKING WITH ACCESS		TOP OF CUT	(P)	-PERMANENT
	TAKING WITHOUT ACCESS		SLOPE RIGHT	(T)	-TEMPORARY
	CLEAR ZONE		CONSTRUCTION RIGHT	DR.	-DRAINAGE RIGHT
	PROPERTY LINE		PROJECT DEMARCATION FENCE	DIT.	-DITCHING RIGHT
				CH.	-CHANNEL RIGHT
				DRIVE	-DRIVE RIGHT
				CUL.	-CULVERT RIGHT
				C&T	-CLEARING & TRIMMING RIGHT
				SR	-SLOPE RIGHT
				UE	-UTILITY EASEMENT

APPROVED: HARRY PETROVS DATE: 03-26-08
CHIEF, PLANS & TITLES

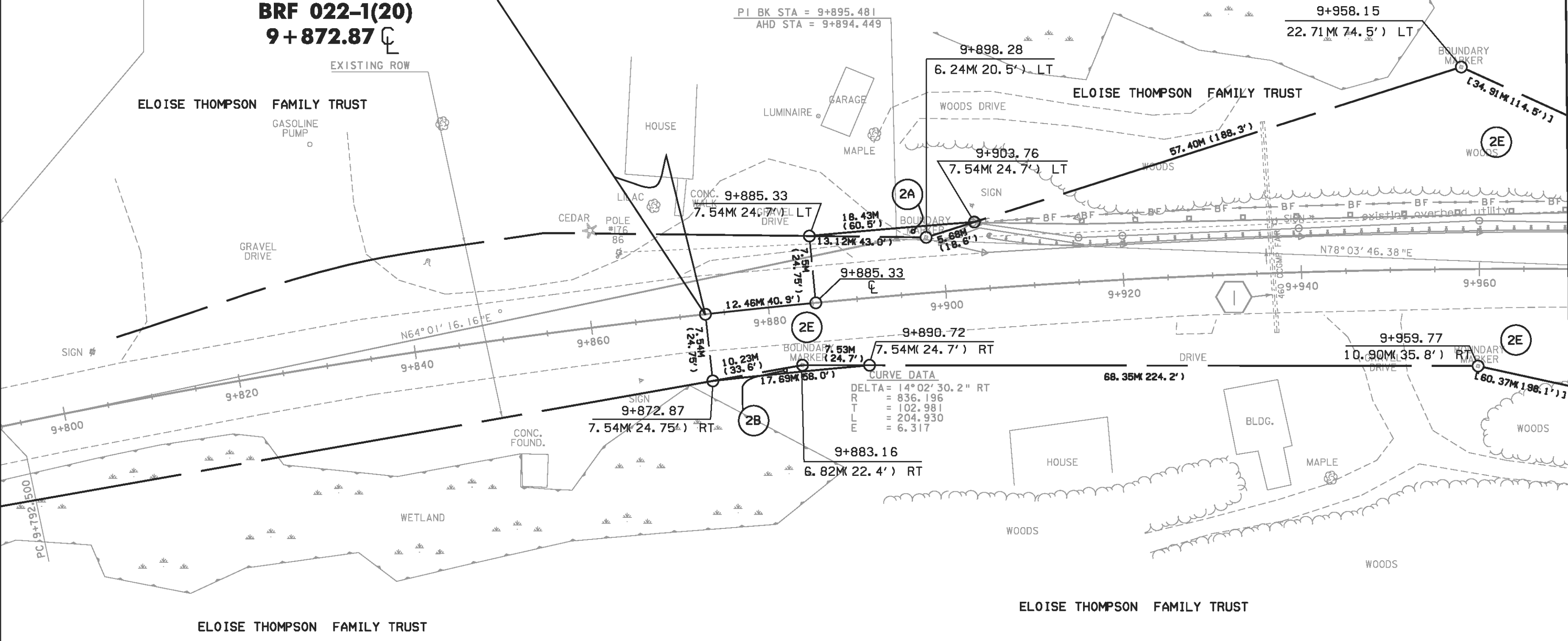
PLOT DATE 03/01/10

PROJECT NAME:	STOCKBRIDGE	PLOT DATE:	12/9/98
PROJECT NUMBER:	BRF 022-1(20)	DRAWN BY:	MR
FILE NAME:	85E039.XLS	CHECKED BY:	FM
PROJECT LEADER:	C. WILLIAMS	SHEET	88 OF 139
DESIGNED BY:	R. YOUNG		
R.O.W. SHEET 27 OF 33			



Benchmark #2
Goddard Az Merk
Elev. 225.690

BEGIN R.O.W. PROJECT
BRF 022-1(20)
9+872.87



CURVE DATA

DELTA	= 14°02'30.2" RT
R	= 836.196
T	= 102.981
L	= 204.930
E	= 6.317

LEGEND

	SEED AND MULCH
	EROSION CONTROL MATTING
	SILT FENCE
	FILTER CURTAIN
	PDF FENCE
	BARRIER FENCE
	DI PROTECTION
	TEMPORARY STONE CHECK DAM

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 EROSION CONTROL
SEE SHEET 14-22 OF 33

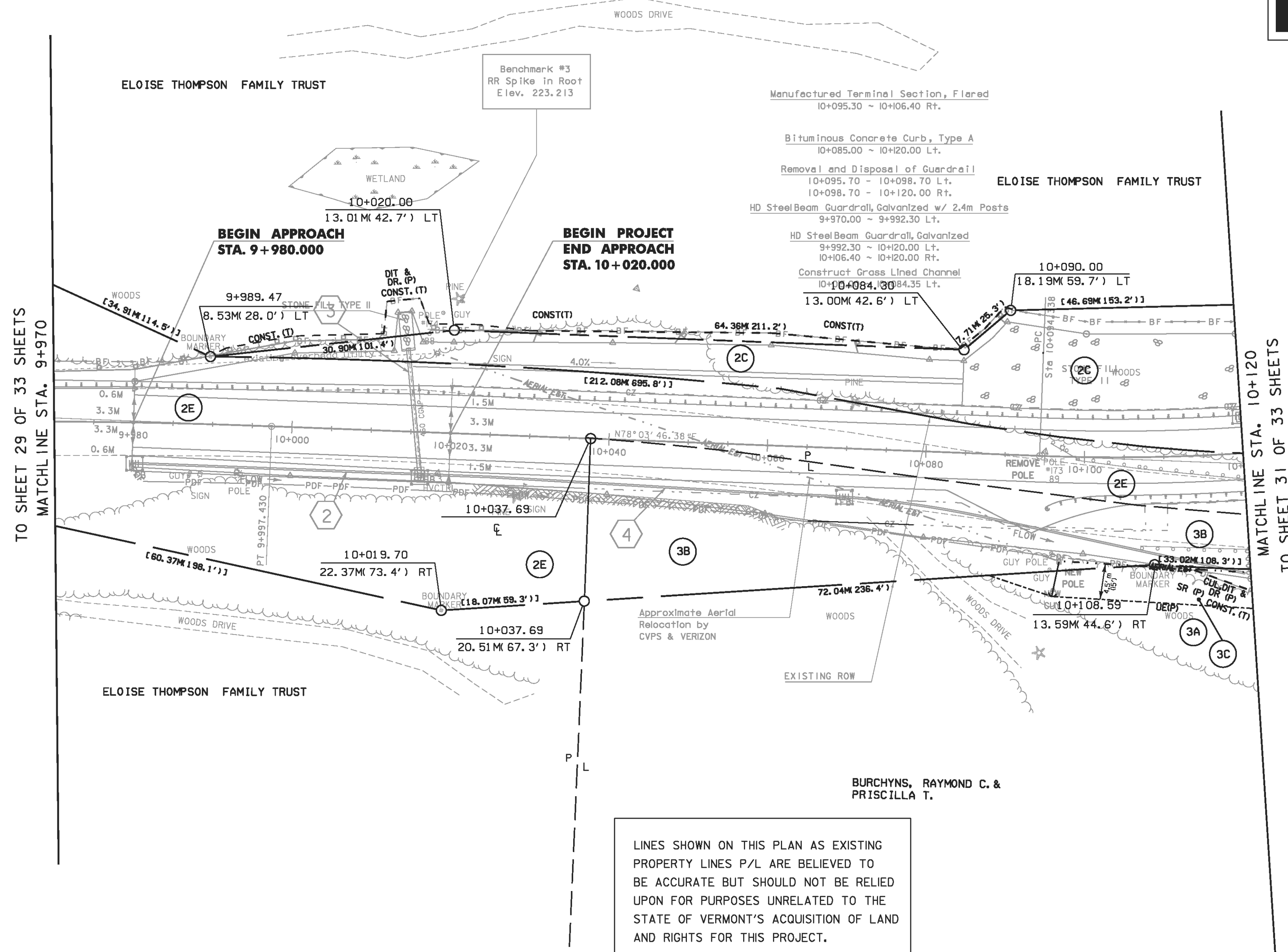
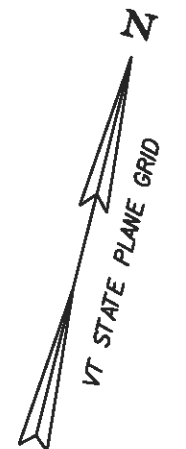
**FOR R.O.W.
USE ONLY**

SEE DRAINAGE DETAIL SHEET
FOR DRAINAGE FLAG DESCRIPTIONS



PROJECT NAME:	STOCKBRIDGE	PLOT DATE:	04-MAR-2010
PROJECT NUMBER:	BRF 022-1(20)	DRAWN BY:	H. I. SALLS
FILE NAME:	85e039/de039bdr.dgn	CHECKED BY:	R. S. YOUNG
PROJECT LEADER:	C. P. WILLIAMS	ROW SHEET 29 OF 33	SHEET 90 OF 139

LAYOUT 1



TO SHEET 29 OF 33 SHEETS
MATCHLINE STA. 9+970

MATCHLINE STA. 10+120
TO SHEET 31 OF 33 SHEETS

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.

SEE DRAINAGE DETAIL SHEET FOR DRAINAGE FLAG DESCRIPTIONS

FOR R.O.W. USE ONLY

FOR EROSION CONTROL
SEE SHEET 14-23 OF 33

LAYOUT 2



PROJECT NAME:	STOCKBRIDGE
PROJECT NUMBER:	BRF 022-1 (20)
FILE NAME:	85e039/de039bdr.dgn
PROJECT LEADER:	C.P. Williams
DESIGNED BY:	R.S. YOUNG
ROW SHEET	30 OF 33
PLOT DATE:	04-MAR-2010
DRAWN BY:	H.I. SALLS
CHECKED BY:	R.S. YOUNG
SHEET	91 OF 139

Bituminous Concrete
Curb, Type A
10+120.00 - 10+163.60 Lt.

Manufactured Terminal Section, Flared
10+245.08 - 10+256.19 Rt.

Construct Drive
10+260.00 Rt - 35M Gravel,
w/2.0M Paved Apron, 10.6M Wide

HD Steel Beam Guardrail, Galvanized *

10+120.00 - 10+165.10 Lt.
10+120.00 - 20+045.00 Rt. (10+154.19 Rt.)
20+045.00 Lt. (10+160.44 Rt.) - 10+165.52 Rt.
10+231.21 - 10+242.40 Rt.
10+231.62 - 10+275.00 Lt.

* SEE RAILING LAYOUT SHEET
FOR BRIDGE AND APPROACH RAIL LIMITS

SEE DRAINAGE DETAIL SHEET
FOR DRAINAGE FLAG DESCRIPTIONS



Construct Infiltration Basin/Plunge Pool
10+170.000 Rt.

Disconnection Area
per Stormwater Permit #4233-INDS
10+223 - 10+275 Lt.

Cast-in-place Concrete Curb, type B

10+163.60 - 10+175.05 Lt.
10+163.45 - 10+175.05 Rt.
10+221.64 - 10+233.35 Rt.
10+221.67 - 10+233.85 Lt.

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.

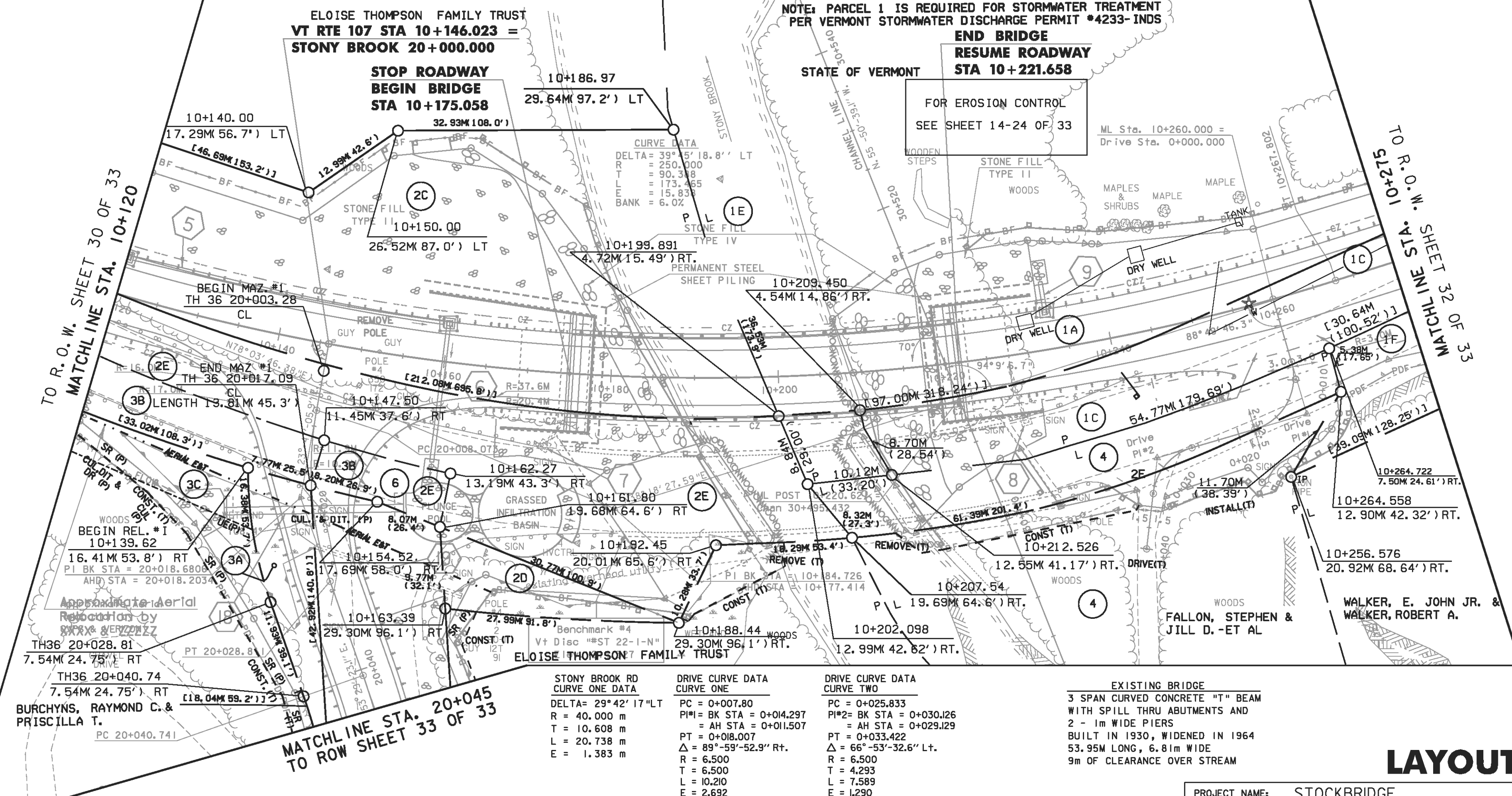
NOTE: PARCEL 1 IS REQUIRED FOR STORMWATER TREATMENT
PER VERMONT STORMWATER DISCHARGE PERMIT #4233-INDS

END BRIDGE
RESUME ROADWAY
STA 10+221.658

STATE OF VERMONT
FOR EROSION CONTROL
SEE SHEET 14-24 OF 33

TO R.O.W. SHEET 30 OF 33
MATCHLINE STA. 10+120

TO R.O.W. SHEET 32 OF 33
MATCHLINE STA. 10+275



Approximate Aerial
Relocation by
8/27/22

TH36 20+028.81
7.54M 24.75' RT

TH36 20+040.74
7.54M 24.75' RT

BURCHYNS, RAYMOND C. &
PRISCILLA T.
PC 20+040.741

MATCHLINE STA. 20+045
TO ROW SHEET 33 OF 33

STONY BROOK RD
CURVE ONE DATA

DELTA= 29°42'17"LT
R = 40.000 m
T = 10.608 m
L = 20.738 m
E = 1.383 m

DRIVE CURVE DATA
CURVE ONE

PC = 0+007.80
PI#1= BK STA = 0+014.297
= AH STA = 0+011.507
PT = 0+018.007
Δ = 89°-59'-52.9" Rt.
R = 6.500
T = 6.500
L = 10.210
E = 2.692
Bearings
S. 50°-31'-12.9" E. bk
S. 39°-28'-40.0" W. ah

DRIVE CURVE DATA
CURVE TWO

PC = 0+025.833
PI#2= BK STA = 0+030.126
= AH STA = 0+029.129
PT = 0+033.422
Δ = 66°-53'-32.6" Lt.
R = 6.500
T = 4.293
L = 7.589
E = 1.290
Bearings
S. 39°-28'-40.0" W. bk
S. 27°-24'-52.7" E. ah

EXISTING BRIDGE
3 SPAN CURVED CONCRETE "T" BEAM
WITH SPILL THRU ABUTMENTS AND
2 - 1m WIDE PIERS
BUILT IN 1930, WIDENED IN 1964
53.95M LONG, 6.81m WIDE
9m OF CLEARANCE OVER STREAM

FOR R.O.W.
USE ONLY

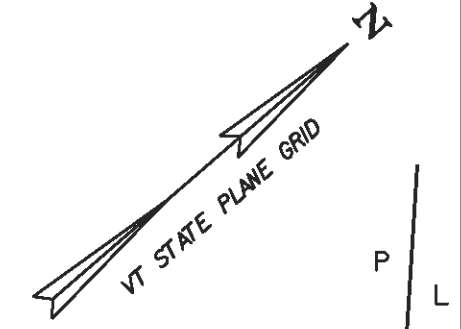


PROJECT NAME: STOCKBRIDGE
PROJECT NUMBER: BRF 022-I(20)

FILE NAME: 85e039/de039bdr.dgn
PROJECT LEADER: C. P. Williams
DESIGNED BY: R. S. YOUNG
ROW SHEET 31 OF 33

PLOT DATE: 04-MAR-2010
DRAWN BY: H. I. SALLS
CHECKED BY: R.S. Young
SHEET 92 OF 139

LAYOUT 3



Benchmark #5
Spike in Ash Tree
Elev. 208.282

WHITE RIVER

Disconnection Area
per Stormwater Permit #4233-INDS
10+275 - 10+330 Lt.

HD Steel Beam Guardrail, Galvanized
10+275.00 ~ 10+426.00 Lt.

Manufactured Terminal Section, Flared
10+426.00 ~ 10+436.80 Lt.

Cast In Place Concrete Curb, Type B
10+310.00 - 10+327.76 Rt.
10+333.76 - 10+347.25 Rt.

Construct Drives
10+330.000 Rt. - Gravel Drive w/2.0M Paved Apron, 6.0M Wide (See Chart Below)
10+352.000 Rt. - 2.0M Paved Apron, 5.0M wide
10+376.000 Rt. - 5.0M Gravel Drive, 3.5M Wide w/1.0M Paved Apron, 5.0M Wide

Removal and Disposal of Guardrail
10+311.44 - 10+413.47 Lt.

Relocate Mailbox, Single Support
10+317.25 Rt.

Removal of Stone Wall
(Included under
Item 203.50 "Common Excavation")
10+325 - 10+332 Rt.

Bituminous Concrete Gutter
10+353.30 - 10+374.25 Rt. 2.2M Wide

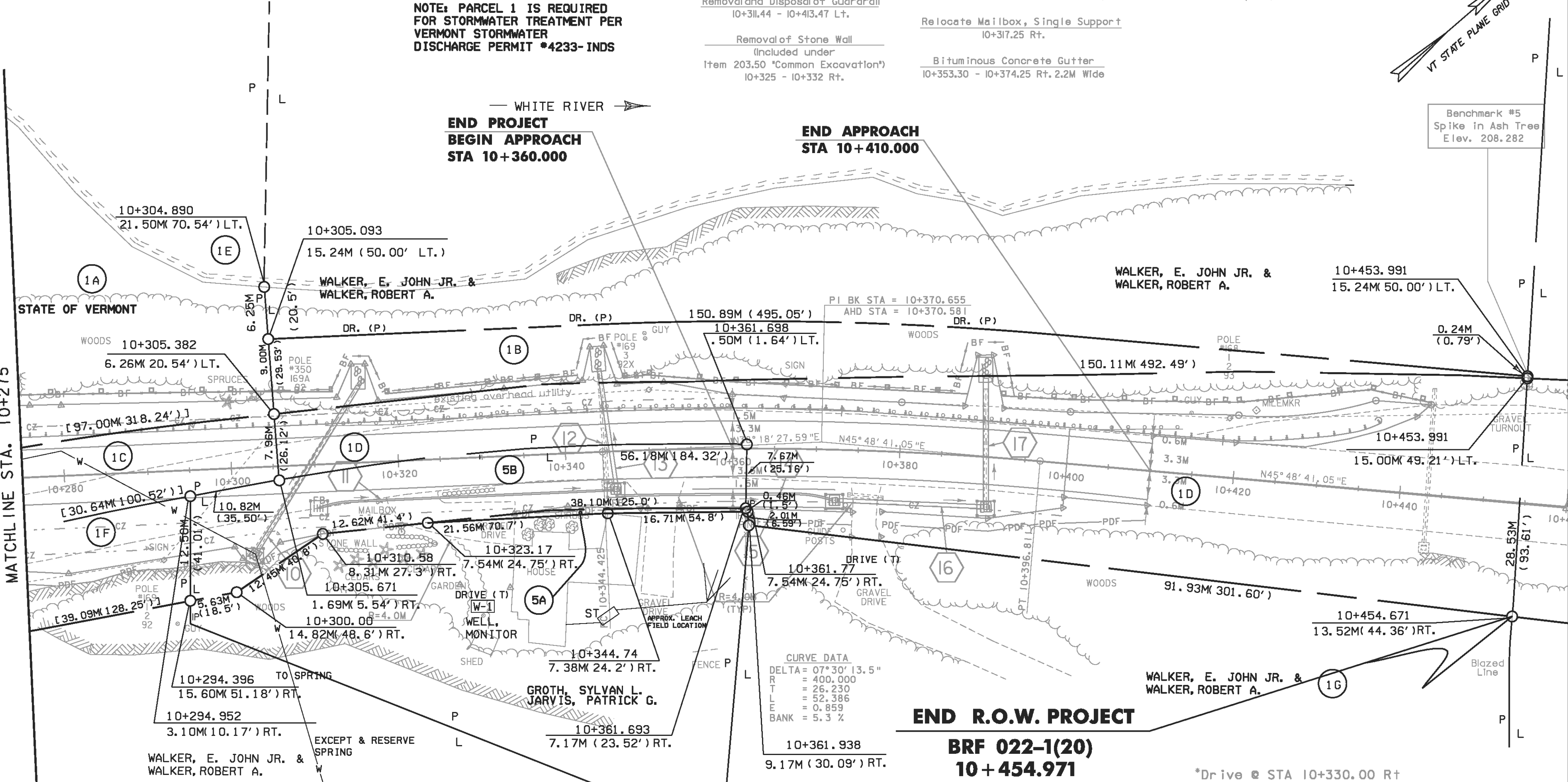
NOTE: PARCEL 1 IS REQUIRED FOR STORMWATER TREATMENT PER VERMONT STORMWATER DISCHARGE PERMIT #4233-INDS

WHITE RIVER

**END PROJECT
BEGIN APPROACH
STA 10+360.000**

**END APPROACH
STA 10+410.000**

TO R.O.W. SHEET 31 OF 33
MATCHLINE STA. 10+275



CURVE DATA
DELTA = 07°30'13.5"
R = 400.000
T = 26.230
L = 52.386
E = 0.859
BANK = 5.3 %

END R.O.W. PROJECT
BRF 022-1(20)
10+454.971
13.52M(44.36')RT.

*Drive @ STA 10+330.00 Rt

POINT	STA	OFFSET
1	10+320.00	4.99 Rt
2	10+320.00	8.49 Rt
3	10+326.72	15.13 Rt
4	10+332.69	15.73 Rt
5	10+333.58	6.80 Rt
6	10+333.76	4.80 Rt
7	10+327.76	4.80 Rt
8	10+327.76	6.80 Rt

SEE DRAINAGE DETAIL SHEET FOR DRAINAGE FLAG DESCRIPTIONS

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.

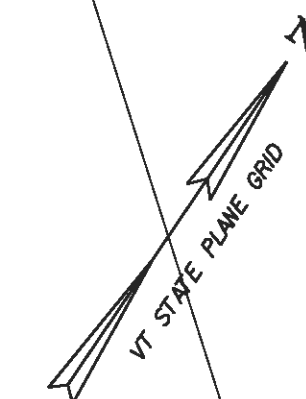
FOR EROSION CONTROL
SEE SHEET 14-25 OF 33



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

LAYOUT 4

PROJECT NAME: STOCKBRIDGE
PROJECT NUMBER: BRF 022-1(20)
FILE NAME: 85e039/de039bdr.dgn
PROJECT LEADER: C. P. WILLIAMS
DESIGNED BY: R. S. YOUNG
ROW SHEET 32 OF 33
PLOT DATE: 04-MAR-2010
DRAWN BY: H. I. SALLS
CHECKED BY: R.S. Young
SHEET 93 OF 139



TO ROW SHEET 31 OF 33
MATCHLINE STA. 20+045

P L WALKER, E. JOHN JR.
& WALKER, ROBERT A.

FALLON, STEPHEN &
JILL D. ET AL

END REL. # I
TH36 20+060.80
7.54M 24.75' RT
TH #36

BURCHYNS, RAYMOND C. &
PRISCILLA T.

ELOISE THOMPSON FAMILY TRUST

LIMIT OF WORK
STA. SB 20+100.000
EXISTING ROW

FOR EROSION CONTROL
SEE SHEET 14-26 OF 33

Construct Drive
20+060.000 Rt. - 13.5M Gravel Drive, 3.8M Wide
w/2.0M Paved Apron, 12.3M Wide

HD SteelBeam Guardrail, Galvanized
20+045.00 ~ 20+052.89 Rt.
20+045.00 ~ 20+066.70 Lt.

Anchor for SteelBeam Rail
20+050.00 Rt.
20+065.00 Lt.

Relocate Mailbox, Single Support
20+059.50 Lt.

SEE DRAINAGE DETAIL SHEET
FOR DRAINAGE FLAG DESCRIPTIONS

LINES SHOWN ON THIS PLAN AS EXISTING
PROPERTY LINES P/L ARE BELIEVED TO
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STATE OF VERMONT'S ACQUISITION OF LAND
AND RIGHTS FOR THIS PROJECT.

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



LAYOUT 5

PROJECT NAME:	STOCKBRIDGE	FILE NAME:	85e039/de039bdr.dgn	PLOT DATE:	04-MAR-2010
PROJECT NUMBER:	BRF 022-I(20)	PROJECT LEADER:	C. P. WILLIAMS	DRAWN BY:	H. I. SALLS
		DESIGNED BY:	R.S. YOUNG	CHECKED BY:	R.S. Young
		ROW SHEET 33 OF 33			SHEET 94 OF 139