

STATE OF VERMONT
AGENCY OF TRANSPORTATION



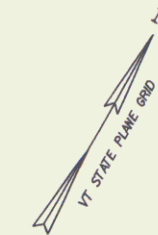
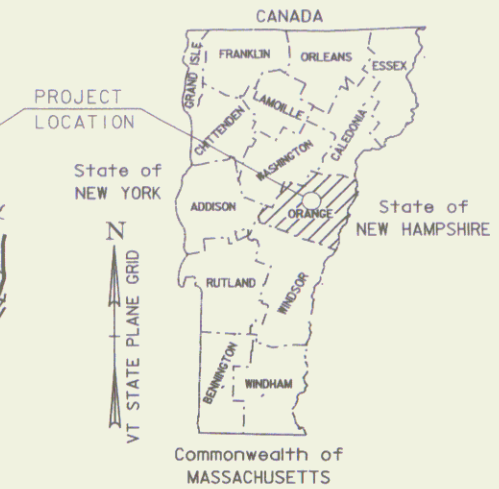
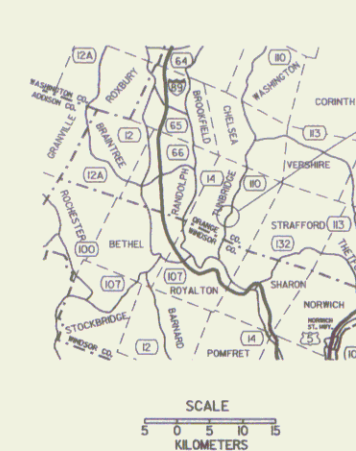
R.O.W. PLANS

PROPOSED IMPROVEMENT
BRIDGE PROJECT
TOWN OF TUNBRIDGE
COUNTY OF ORANGE
VT. RTE. 110
MAJOR COLLECTOR

BEGINNING AT A POINT IN THE TOWN OF TUNBRIDGE ALONG VT. RTE. 110 APPROXIMATELY 5.1 KILOMETERS NORTHERLY OF THE ROYALTON-TUNBRIDGE TOWN LINE AND EXTENDING NORTHERLY 223.5 METERS.

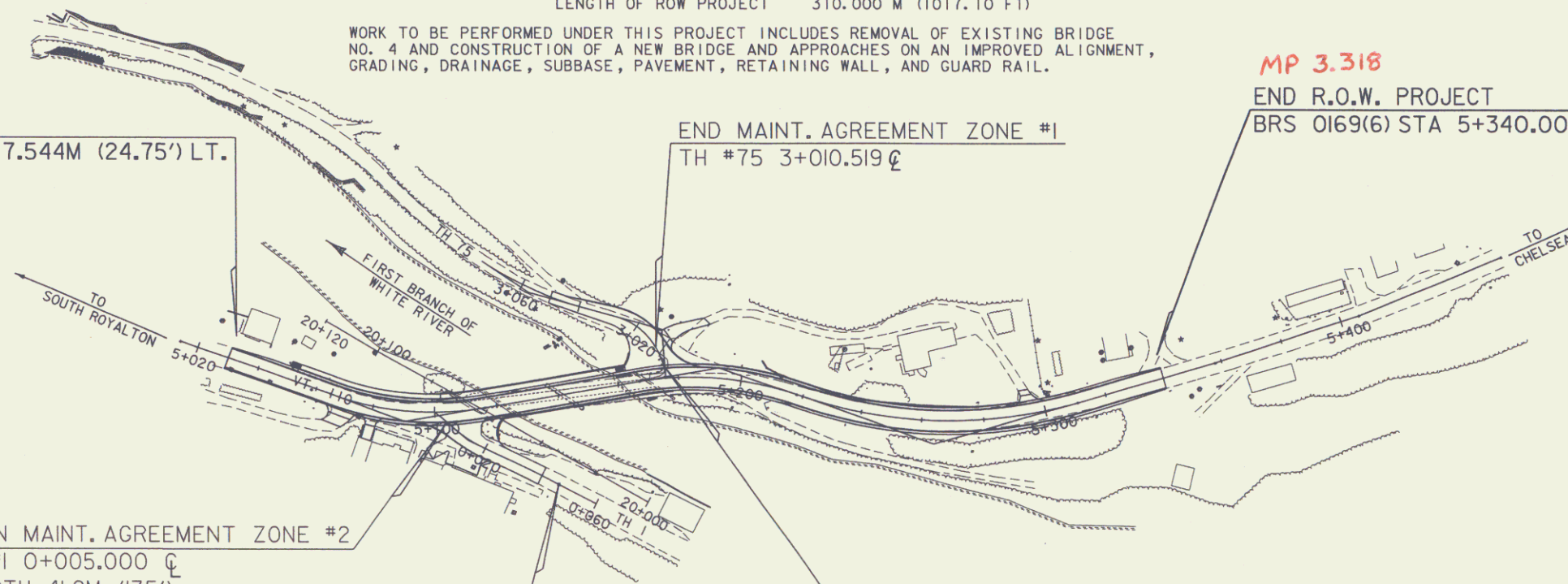
LENGTH OF ROADWAY 167.500 M
LENGTH OF BRIDGE 56.000 M
LENGTH OF PROJECT 223.500 M
LENGTH OF ROW PROJECT 310.000 M (1017.10 FT)

WORK TO BE PERFORMED UNDER THIS PROJECT INCLUDES REMOVAL OF EXISTING BRIDGE NO. 4 AND CONSTRUCTION OF A NEW BRIDGE AND APPROACHES ON AN IMPROVED ALIGNMENT, GRADING, DRAINAGE, SUBBASE, PAVEMENT, RETAINING WALL, AND GUARD RAIL.



MP 3.126
BEGIN ROW PROJECT
BRS 0169(6) STA 5+030.000 7.544M (24.75') LT.

MP 3.318
END R.O.W. PROJECT
BRS 0169(6) STA 5+340.000 7.544M (24.75') LT.



CONVENTIONAL SYMBOLS

COUNTY LINE	— — — — —
TOWN LINE	— — — — —
LIMITS OF ACCESS	— — — — —
POINT OF ACCESS	X
FENCE LINE	X — X — X — X —
STONE WALL	— — — — —
TRAVELED WAY	— — — — —
RAILROAD	— — — — —
SURVEY LINE	— — — — —
CULVERT	— — — — —
POWER POLE	⊕
TELEPHONE POLE	⊕
TREES	⊕
CONTROL OF ACCESS	— — — — —
PROPERTY LINE	— — — — —
R.O.W. TAKING LINE	— — — — —
SLOPE RIGHTS	SR
TOP OF CUT	△
TOE OF SLOPE	○

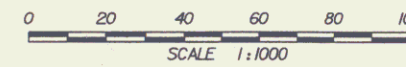
BEGIN MAINT. AGREEMENT ZONE #2
TH #1 0+005.000
LENGTH 41.2M (135')

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.

SURVEYED BY : GILMAN
SURVEYED DATE : 09/10/98

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD83 (96)

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



SCALE 1:1000
PLOT DATE: 10-MAR-2003

BEGIN MAINT. AGREEMENT ZONE #1
TH #75 3+004.226
LENGTH 6.293M (21')

END MAINT. AGREEMENT ZONE #2
TH #1 0+046.200

END MAINT. AGREEMENT ZONE #1
TH #75 3+010.519

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 1995, AS APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION ON AUGUST 21, 1995 FOR USE ON THIS PROJECT, INCLUDING ALL SUBSEQUENT REVISIONS AND SUCH REVISED SPECIFICATIONS AND SPECIAL PROVISIONS AS ARE INCORPORATED IN THESE PLANS.



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

Pin # 84E063

APPROVED DAVID J. SCOTT DATE 2-28-02
Director of Project Development

APPROVED ALLEN N. BLAKE DATE 2-28-02
Chief, Right of Way

TUNBRIDGE
BRS 0169 (6)
R. O. W. SHEET (1) OF 17 SHEETS

TYPICAL SECTIONS

MATERIAL ITEM	THICKNESS	TOLERANCE
PAVEMENT (TOTAL THICKNESS)	5 mm	
SUBBASE	30 mm	
SAND	30 mm	

- 40 mm BITUMINOUS CONCRETE PAVEMENT, TYPE III
- 50 mm BITUMINOUS CONCRETE PAVEMENT, TYPE II
- 65 mm BITUMINOUS CONCRETE PAVEMENT, TYPE I
- 450 mm SUBBASE OF DENSE GRADED CRUSHED STONE
- 450 mm SAND BORROW



SEEDING FORMULA URBAN AREAS

% MASS	kg/ha	NAME	PUR %	GERM %
42.5	38.0	CREEPING RED FESCUE	98	85
10.0	9.0	PERENNIAL RYE GRASS	95	90
42.5	38.0	KENTUCKY BLUE GRASS	85	85
5.0	5.0	ANNUAL RYE GRASS	95	85
100.0	90.0			

GENERAL NOTES

SEED MIXTURE: SHALL NOT HAVE A WEED CONTENT EXCEEDING 0.40% BY MASS 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.

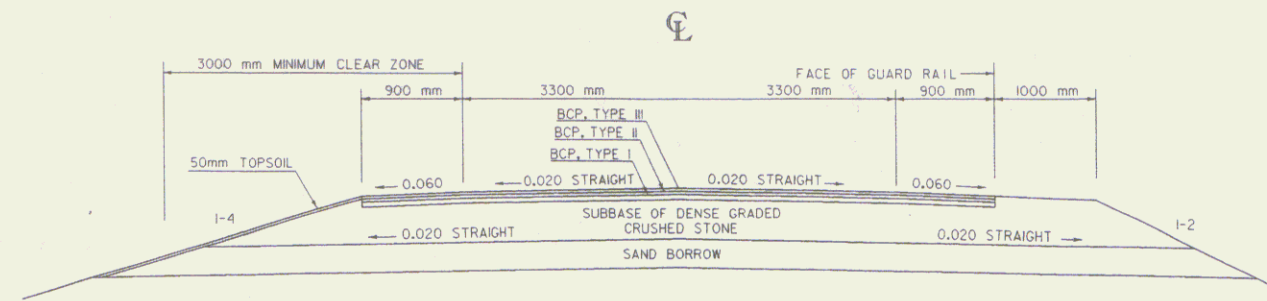
TOPSOIL: TO BE USED WITH SEED AS INDICATED ON THE PLANS, OR AS DIRECTED BY THE ENGINEER.

MARKER POSTS: TO BE PLACED AS INDICATED OR AS DIRECTED BY THE ENGINEER.

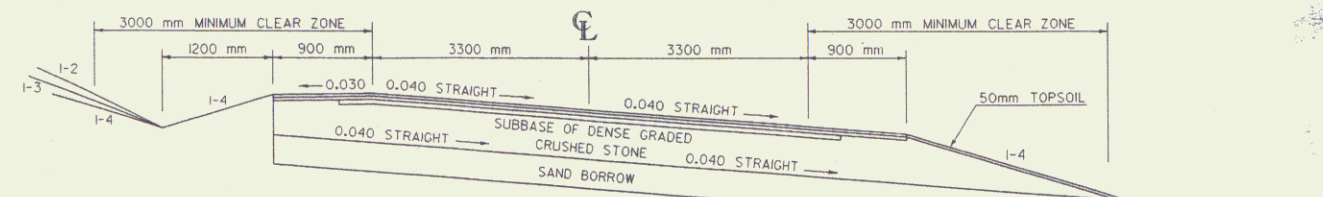
SLOPE ROUNDING: ALL CUT SLOPES TO BE ROUNDED IN ACCORDANCE WITH STANDARD SHEET B-5M.

PAY LIMITS OF SAND BORROW: WHEN USED IN CONJUNCTION WITH UNDERDRAIN - SEE STANDARD SHEET D-2M.

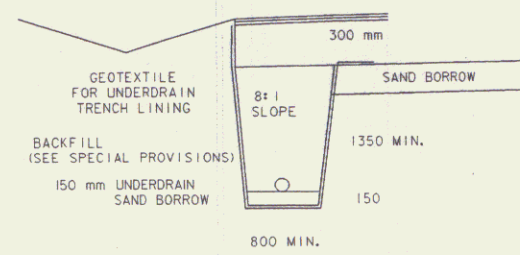
TACK COAT: EMULSIFIED ASPHALT IS TO BE APPLIED AT THE RATE OF 0.07 L/m² BETWEEN SUCCESSIVE COURSES OF PAVEMENT AS DIRECTED BY THE ENGINEER.



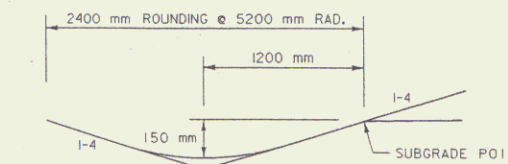
NORMAL ROADWAY SECTION
(NOT TO SCALE)



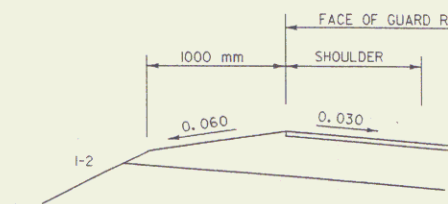
MAXIMUM BANKED ROADWAY SECTION 0.040
(NOT TO SCALE)



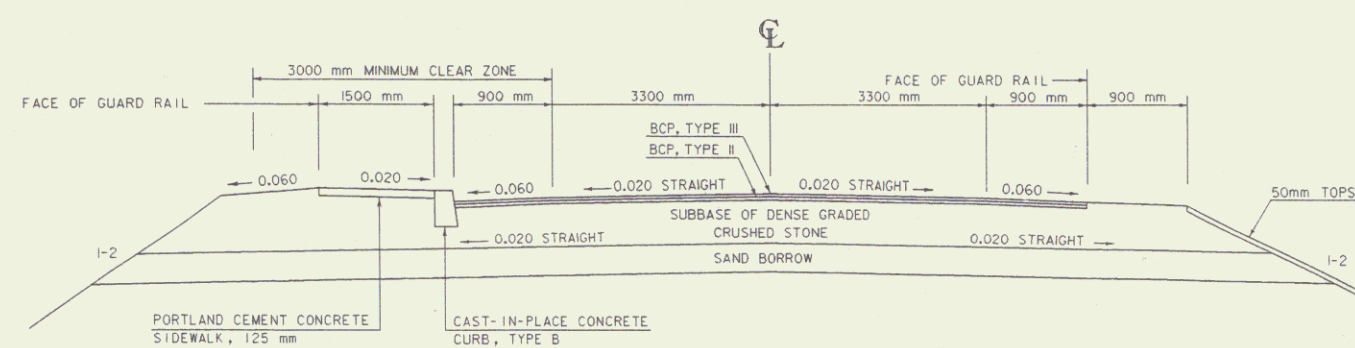
UNDERDRAIN DETAIL



TYPICAL DITCH DETAILS



DETAIL OF GUARD RAIL ON HIGH SIDE OF BANKED SECTION

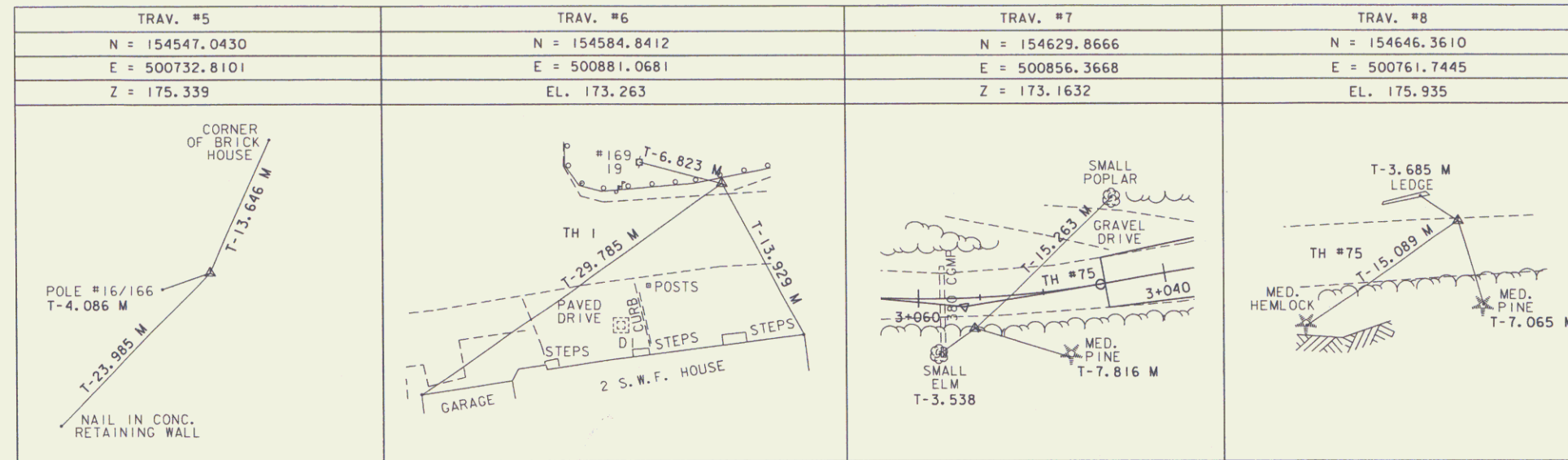


NORMAL ROADWAY SECTION WITH SIDEWALK
(NOT TO SCALE)

PROJECT NAME:	IUNBRIDGE
PROJECT NUMBER:	BRS_Q169(6)
FILE NAME:	/849063/str/063tr.dwg
PROJECT LEADER:	POBIALVEI
DESIGNED BY:	/849063/str/063tyl.i
PLOT DATE:	24-DEC-2002
DRAWN BY:	L.BULLOCK
CHECKED BY:	
ROW SHEET	2 OF 17

GPS CONTROL POINTS

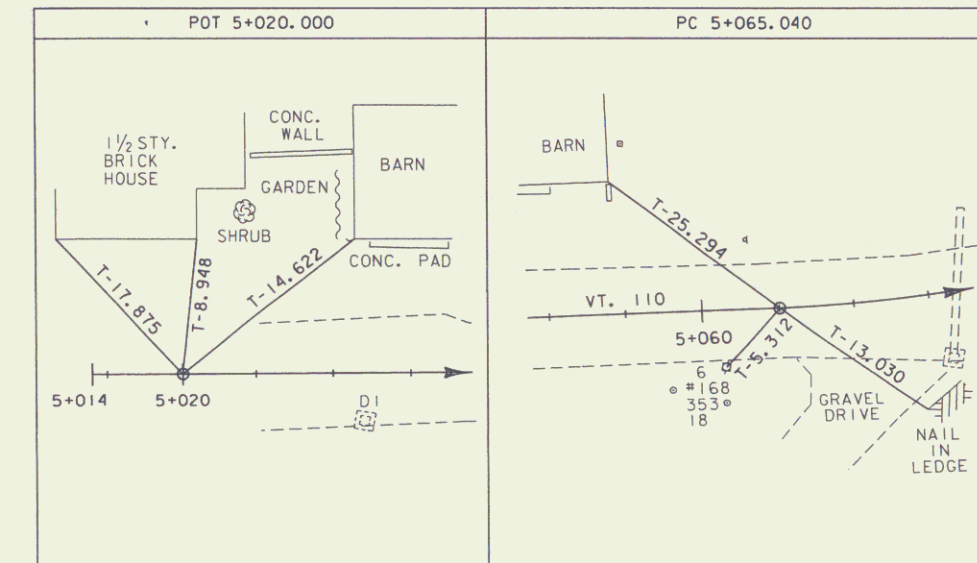
TRAVERSE TIES



ALIGNMENT TIES

BOUNDS TO BE SET			
STATION	OFFSET	NORTHING	EASTING
5+030.000 LT.	7.544M (24.75')	154571.4910	500784.5810
5+041.000 LT.	7.600M (24.93')	154573.5170	500795.3880
5+082.863 LT.	18.043M (59.20')	154591.9840	500831.2340
5+148.119 LT.	12.568M (41.23')	154621.8050	500882.7650
5+157.044 LT.	15.000M (49.21')	154629.3770	500888.0760
5+180.515 LT.	11.329M (37.17')	154628.7840	500893.0860
5+164.074 LT.	10.975M (36.00')	154630.7890	500896.0480
5+186.847 LT.	10.675M (35.02')	154644.7430	500916.6100
5+189.447 LT.	8.996M (29.51')	154644.5880	500919.9190
5+189.501 LT.	10.931M (35.86')	154646.3390	500919.0940
5+196.950 LT.	8.918M (29.26')	154647.9240	500927.3800
5+200.590 LT.	9.049M (29.69')	154649.5390	500930.9940
5+218.000 LT.	9.049M (29.69')	154654.6570	500949.2560
5+265.939 LT.	9.048M (29.69')	154669.8530	500991.4700
5+265.946 LT.	7.920M (25.98')	154668.8700	500992.0220
5+300.654 LT.	8.324M (27.31')	154688.2580	501018.4260
5+310.494 LT.	7.858M (25.78')	154694.4010	501025.4340
5+340.000 LT.	7.544M (24.75')	154715.3850	501046.1520
5+340.000 RT.	7.544M (24.75')	154704.9270	501057.0280
5+310.027 RT.	7.578M (24.86')	154683.3210	501036.1920
5+226.793 RT.	7.618M (24.89')	154640.2510	500961.3700
5+226.754 RT.	15.988M (52.45')	154632.2670	500963.3820
5+167.395 RT.	18.277M (59.96')	154610.4080	500917.2860
5+163.302 RT.	15.600M (51.18')	154609.8710	500912.4560
TH #1 0+056.325 LT.	15.719M (51.57')	154598.2720	500908.2700
TH #1 0+052.672 LT.	7.404M (24.29')	154589.7660	500905.0860
TH #1 0+032.659 RT.	7.537M (24.73')	154573.7320	500885.9380
TH #1 0+016.828 RT.	7.536M (24.72')	154572.9250	500869.7060
5+094.390 RT.	11.373M (37.31')	154569.6250	500853.2910
5+075.841 RT.	7.602M (24.94')	154565.5690	500833.0690
5+030.000 RT.	7.544M (24.75')	154556.6470	500787.2870

STATION	NORTHING	EASTING
VT. 110 POB 5+014.000	154561.2000	500770.1940
POT 5+020.000	154562.2760	500776.0970
PC 5+065.040	154570.3514	500820.4073
PI 5+091.319 BK=	154575.0630	500846.2600
5+090.156 AH		
PT 5+116.435	154591.8757	500866.4564
PC 5+167.190	154624.3478	500905.4640
PI 5+193.166 BK=	154547.4926	500969.4427
5+192.043 AH		
PRC 5+218.019	154645.7690	500950.9564
PI 5+265.779 BK=	154793.1837	500923.2271
5+262.734 AH		
PT 5+310.494	154688.9394	501031.0841
POE 5+357.938	154723.0540	501064.0560
TH #1 POT 0+000.000	154582.4430	500853.0200
PC 0+008.054	154581.1613	500860.9717
PI 0+014.007 BK=	154635.4605	500869.7238
0+013.961 AH		
PT 0+019.914	154580.5462	500872.7929
POE 0+060.000	154583.5320	500912.7740
TH #75 POB 3+000.000	154626.1150	500907.6480
PC 3+006.140	154630.6244	500903.4811
PI 3+016.979 BK=	154617.0510	500888.7922
3+015.167 AH		
PT 3+026.005	154636.7680	500885.4394
PC 3+045.369	154633.5218	500866.3495
PI 3+056.332 BK=	154715.3472	500852.4354
3+056.205 AH		
PT 3+067.169	154632.7152	500844.6279
POE 3+069.920	154632.9740	500841.8890



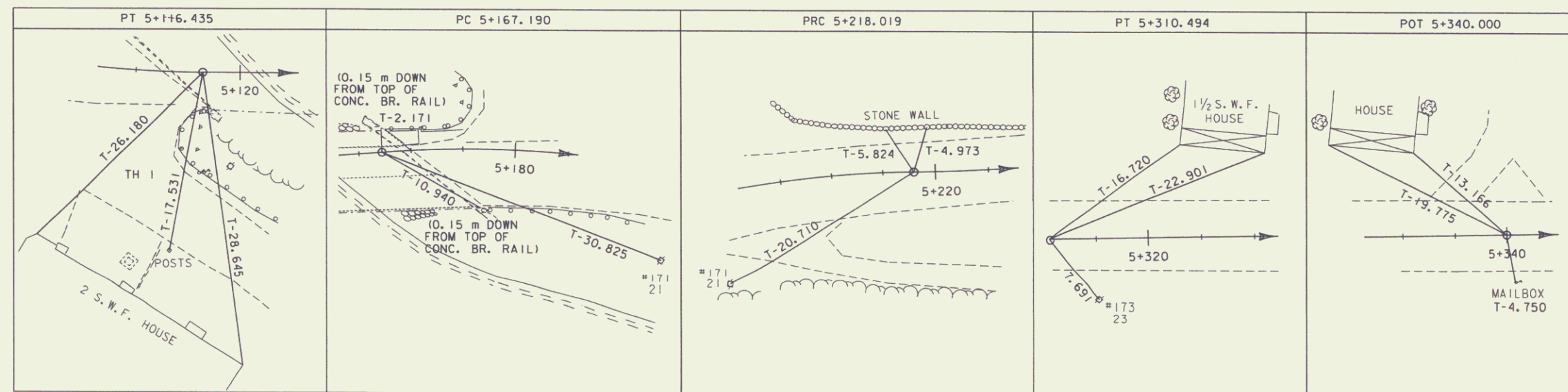
PROJECT NAME: TUNBRIDGE
 PROJECT NUMBER: BRS 0169(6)
 FILE NAME: /84e063/str/se063frm.dgn PLOT DATE: 16-MAY-2011
 PROJECT LEADER: PORTALUPI DRAWN BY: L. BULLOCK
 DESIGNED BY: CHECKED BY:
 /84e063/struct/se063fie.i Row SHEET 2A OF 17

DATUM
 VERTICAL NAVD 88
 HORIZONTAL NAD83 (96)

GPS CONTROL POINTS

TRAVERSE TIES

ALIGNMENT TIES



DATUM
 VERTICAL NAVD 88
 HORIZONTAL NAD83 (96)

PROJECT NAME: TUNBRIDGE
 PROJECT NUMBER: BRS 0169(6)
 FILE NAME: /84e063/str/se063frm.dgn PLOT DATE: 16-MAY-2011
 PROJECT LEADER: PORTALUPI DRAWN BY: L. BULLOCK
 DESIGNED BY: CHECKED BY:
 /84e063/struct/se063t1e2.1 Row SHEET 28 OF 17

TYPICAL SECTIONS



MATERIAL ITEM	THICKNESS	TOLERANCE
PAVEMENT (TOTAL THICKNESS)	5 mm	
SUBBASE	30 mm	

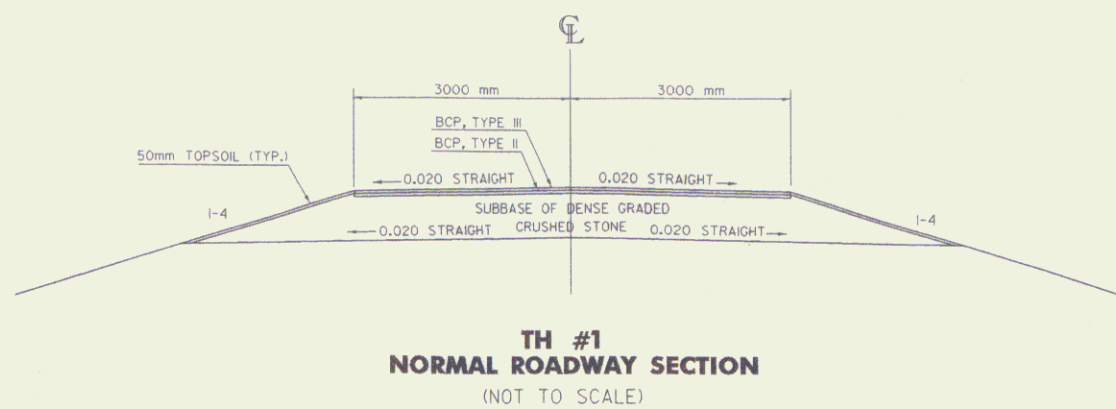
40 mm BITUMINOUS CONCRETE PAVEMENT, TYPE III
 50 mm BITUMINOUS CONCRETE PAVEMENT, TYPE II
 450 mm SUBBASE OF DENSE GRADED CRUSHED STONE

SEEDING FORMULA URBAN AREAS

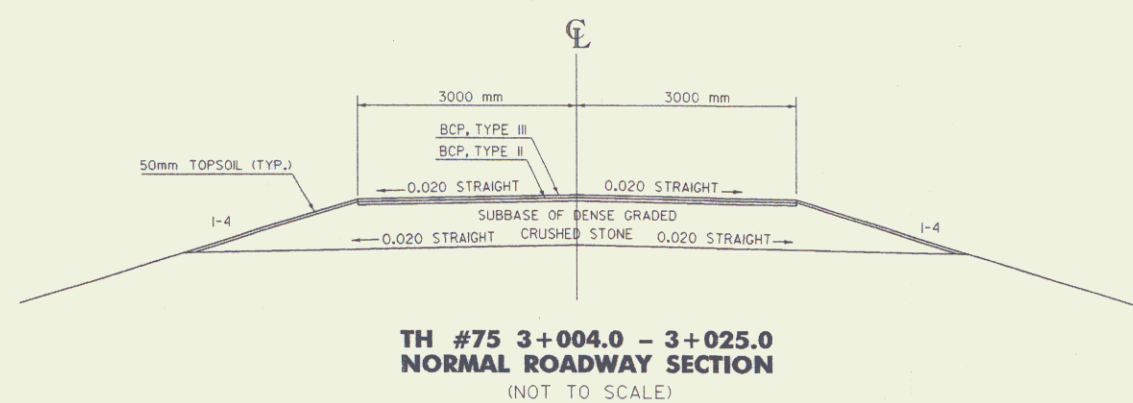
% MASS	Kg/ha	NAME	PUR %	GERM %
42.5	38.0	CREeping RED FESCUE	98	85
10.0	9.0	PERENNIAL RYE GRASS	95	90
42.5	38.0	KENTUCKY BLUE GRASS	85	85
5.0	5.0	ANNUAL RYE GRASS	95	85
100.0	90.0			

GENERAL NOTES

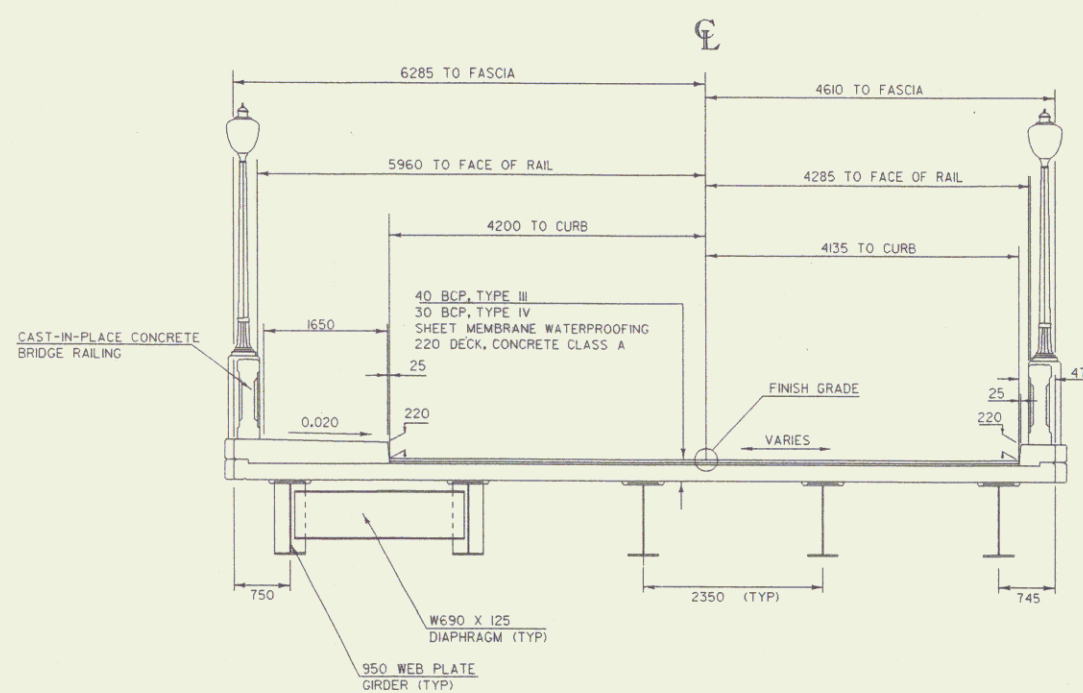
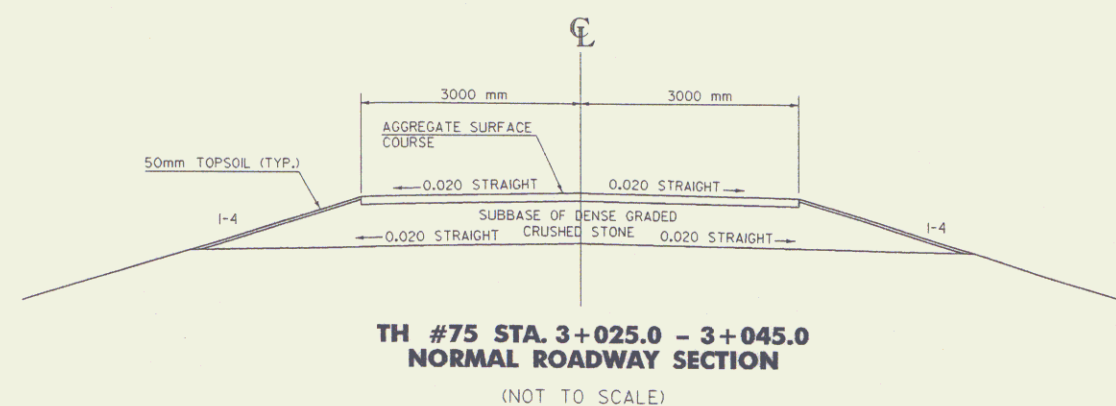
SEED MIXTURE SHALL NOT HAVE A WEED CONTENT EXCEEDING 0.40% BY MASS AND SHALL BE FREE OF ALL NOXIOUS SEED.
 SEEDS TO BE APPLIED PER SEEDING FORMULAS OR AS DIRECTED BY THE ENGINEER.
 FERTILIZER FORMULA 10-20-10, TO BE USED WITH SEED, APPLIED AT THE RATE OF 560 kg/ha. (HYDRO SEEDERS MAY USE 19-19-19 FORMULA).
 AGRICULTURAL LIMESTONE TO BE APPLIED AT THE RATE OF 4500 kg/ha, OR AS DIRECTED BY THE ENGINEER.
 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.
 MARKER POSTS TO BE PLACED AS INDICATED OR AS DIRECTED BY THE ENGINEER.
 SLOPE ROUNDING: ALL CUT SLOPES TO BE ROUNDED IN ACCORDANCE WITH STANDARD SHEET B-5M.
 PAY LIMITS OF SAND BORROW: WHEN USED IN CONJUNCTION WITH UNDERDRAIN - SEE STANDARD SHEET D-2M.
 TACK COAT: EMULSIFIED ASPHALT IS TO BE APPLIED AT THE RATE OF 0.07 L/m² BETWEEN SUCCESSIVE COURSES OF PAVEMENT AS DIRECTED BY THE ENGINEER.



40 mm BITUMINOUS CONCRETE PAVEMENT, TYPE III
 50 mm BITUMINOUS CONCRETE PAVEMENT, TYPE II
 450 mm SUBBASE OF DENSE GRADED CRUSHED STONE

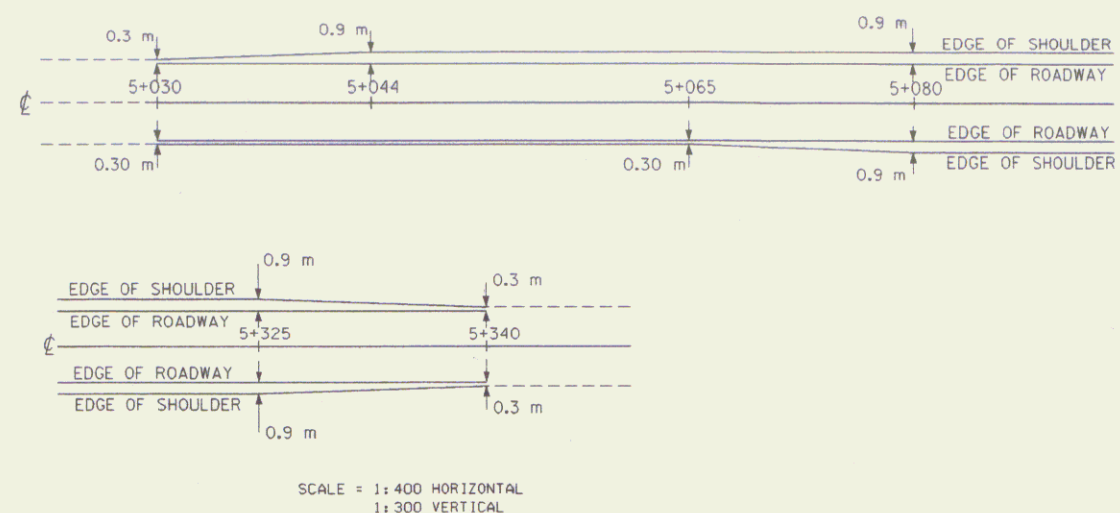


75 mm AGGREGATE SURFACE COURSE
 450 mm SUBBASE OF DENSE GRADED CRUSHED STONE

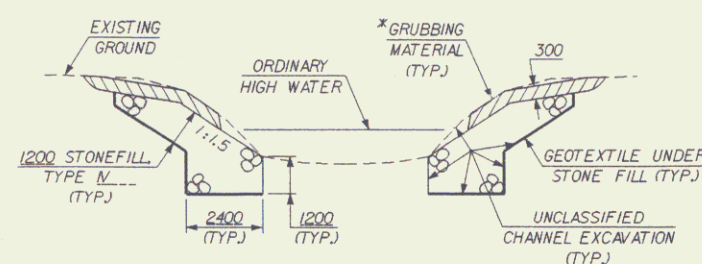
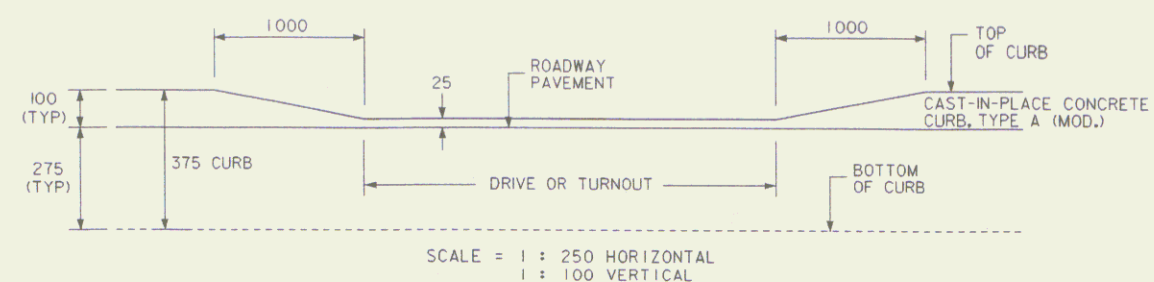


PROJECT NAME:	TUNBRIDGE
PROJECT NUMBER:	BRS_0169(6)
FILE NAME:	289e0633/str/990631ty2.dwg
PROJECT LEADER:	FORIALUMI
DESIGNED BY:	
PLOT DATE:	24-DEC-2002
DRAWN BY:	L.BULLOCK
CHECKED BY:	
ROW SHEET:	3 OF 17

SHOULDER WIDTH TRANSITIONS

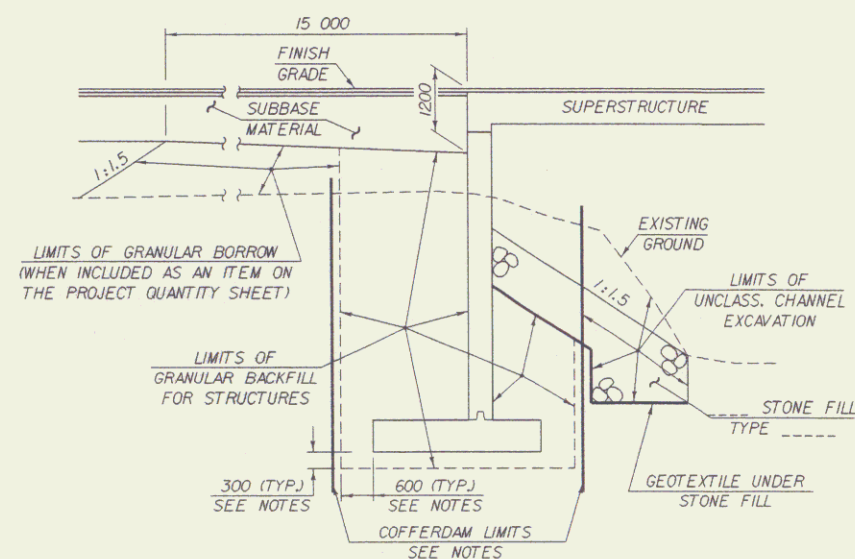


CURB TRANSITION AT DRIVES

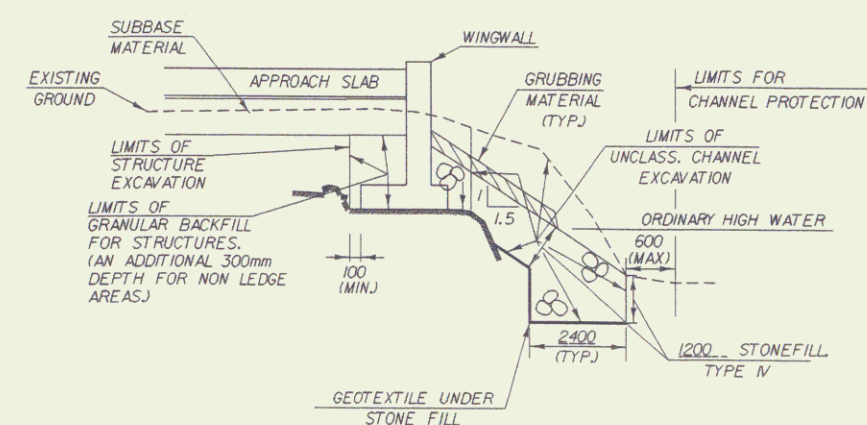


TYPICAL CHANNEL SECTION
(NOT TO SCALE)

* 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.



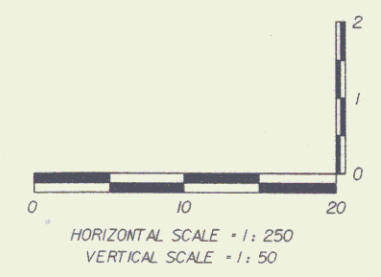
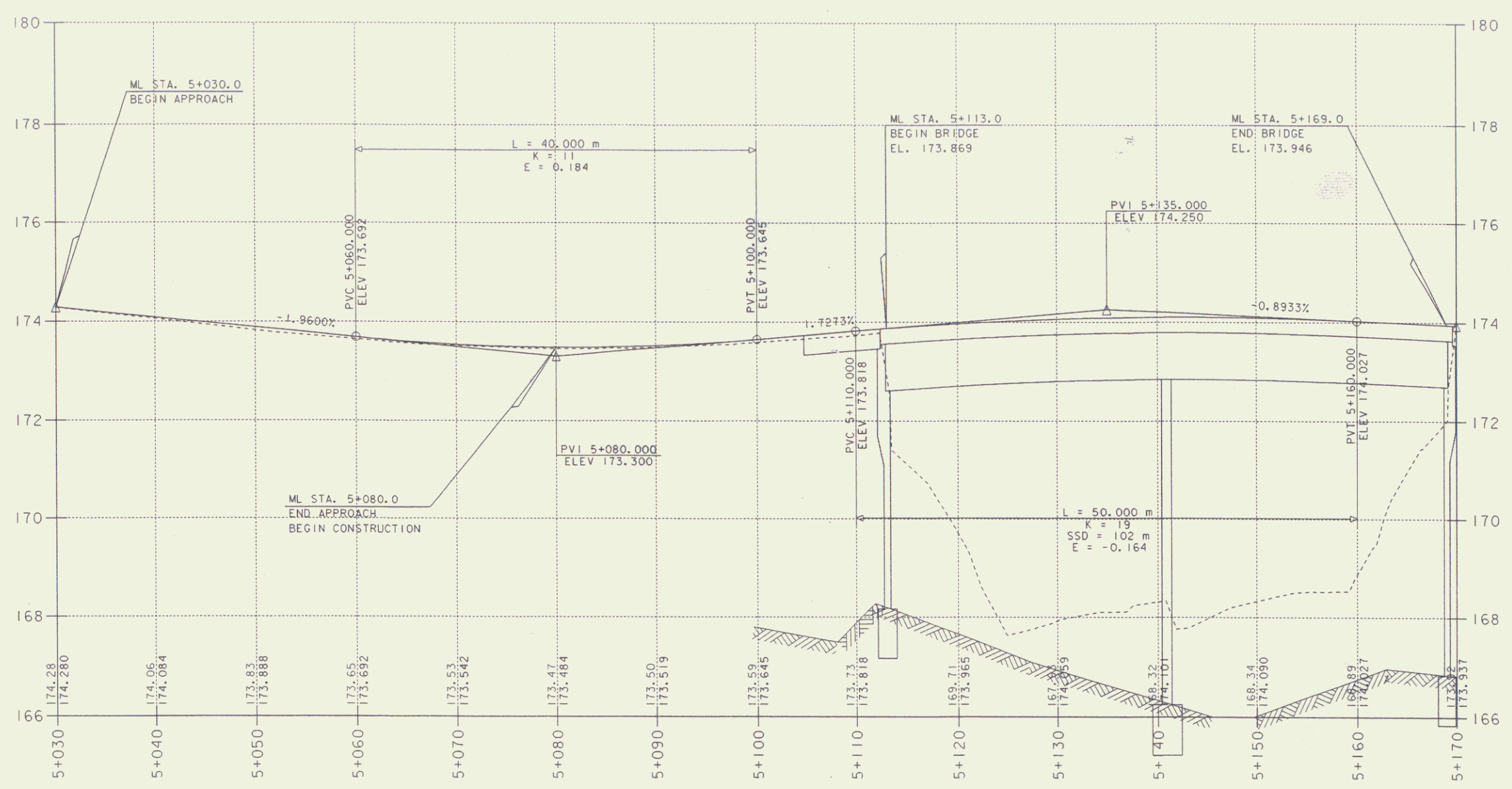
TYPICAL ABUTMENT SECTION
(NOT TO SCALE)



TYPICAL WINGWALL SECTION
(NOT TO SCALE)

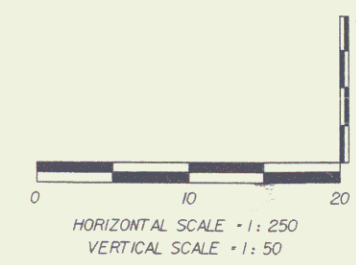
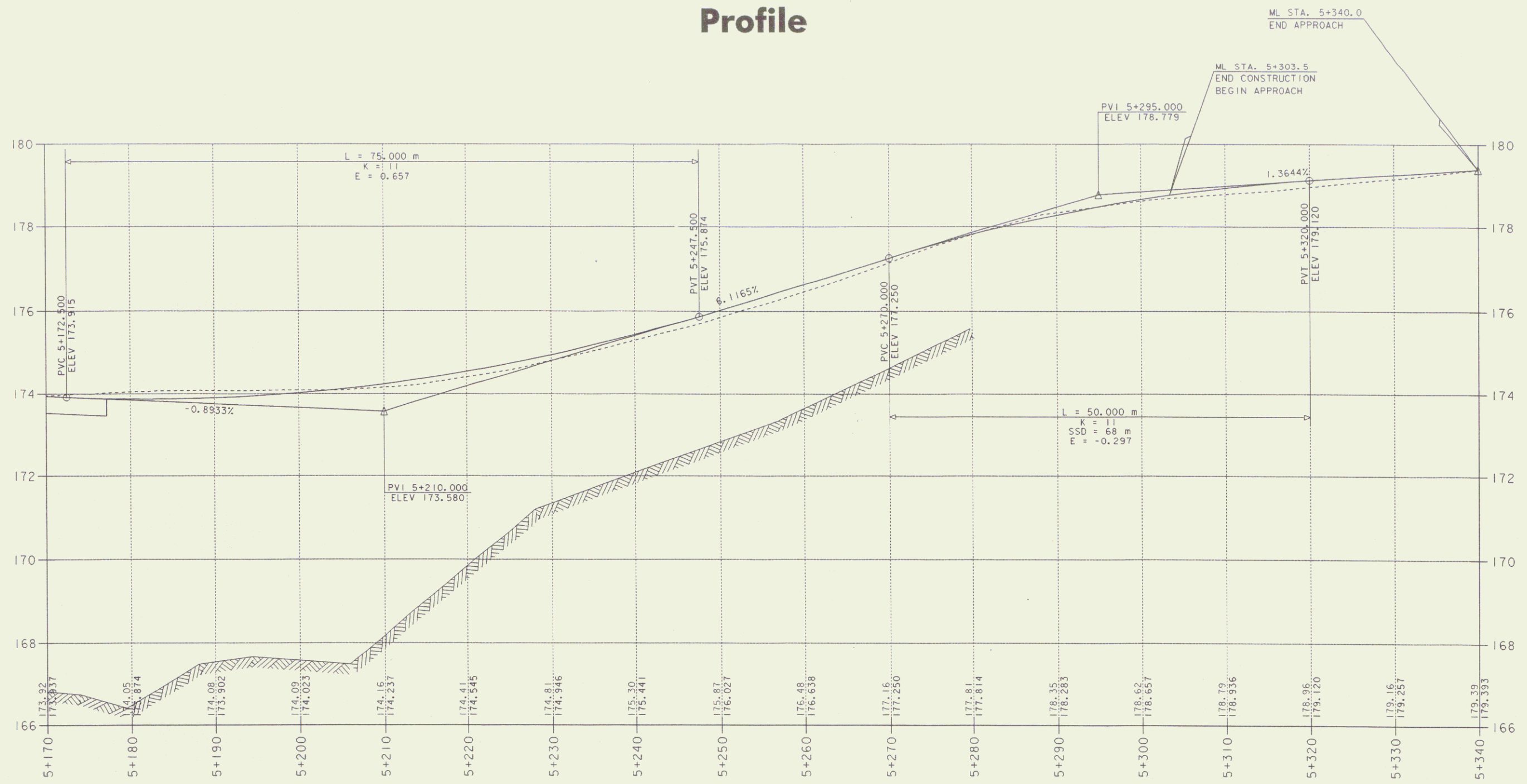
PROJECT NAME:	TUNBRIDGE
PROJECT NUMBER:	BRS_0169(6)
FILE NAME:	284#0632/sic/s0632c.dwg
PROJECT LEADER:	POBIALVEI
DESIGNED BY:	
PLOT DATE:	24-DEC-2002
DRAWN BY:	L.BULLOCK
CHECKED BY:	
ROW SHEET 4 OF 17	

Profile



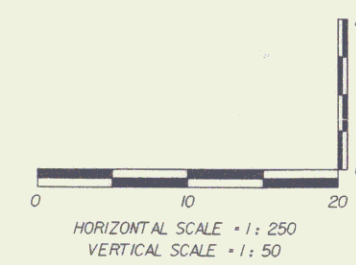
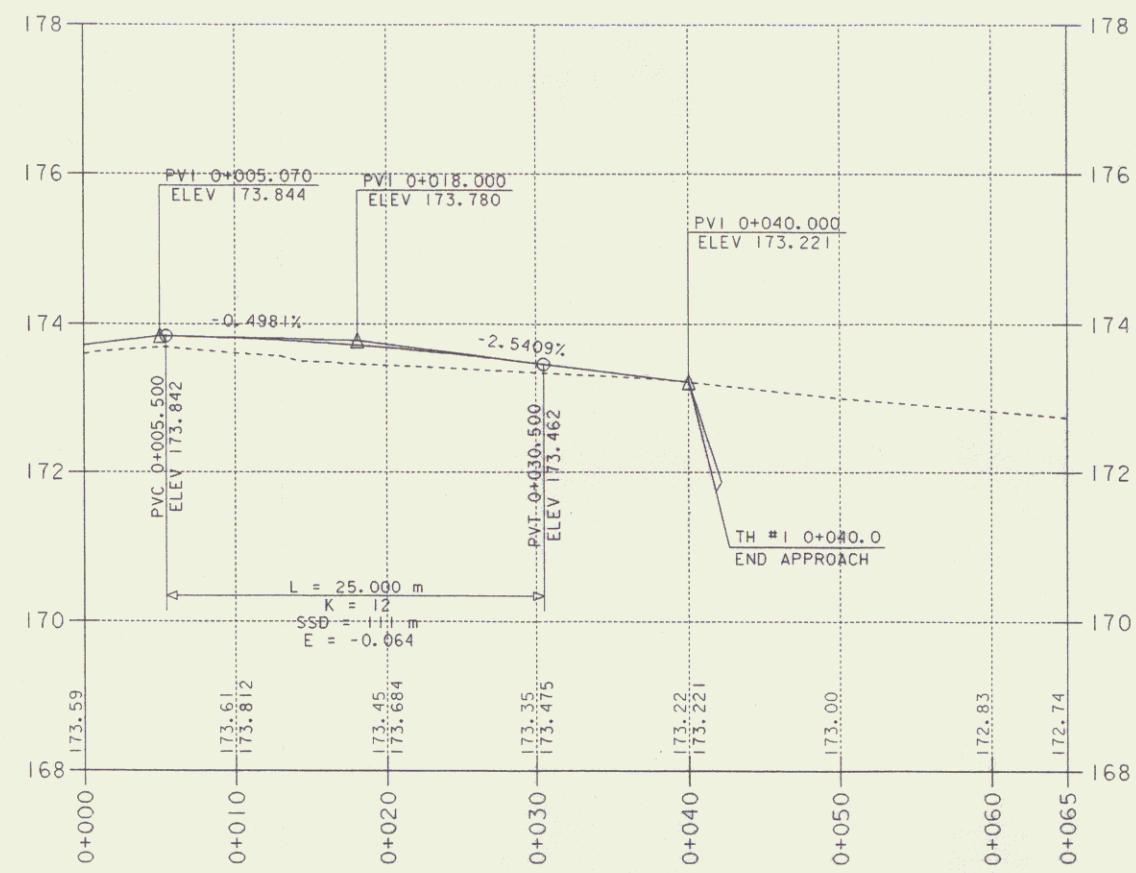
PROJECT NAME:	TUNBRIDGE
PROJECT NUMBER:	BRS_0169(6)
FILE NAME:	Z89e0632/stcvcit/se0632sl.dwg
PROJECT LEADER:	A.PORTALUPI
DESIGNED BY:	L.BULLOCK
CHECKED:	
PLOT DATE:	24-DEC-2002
DRAWN BY:	L.BULLOCK
CHECKED:	
ROW SHEET	5 OF 17

Profile



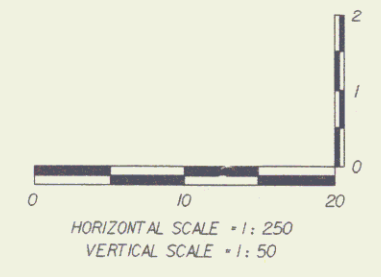
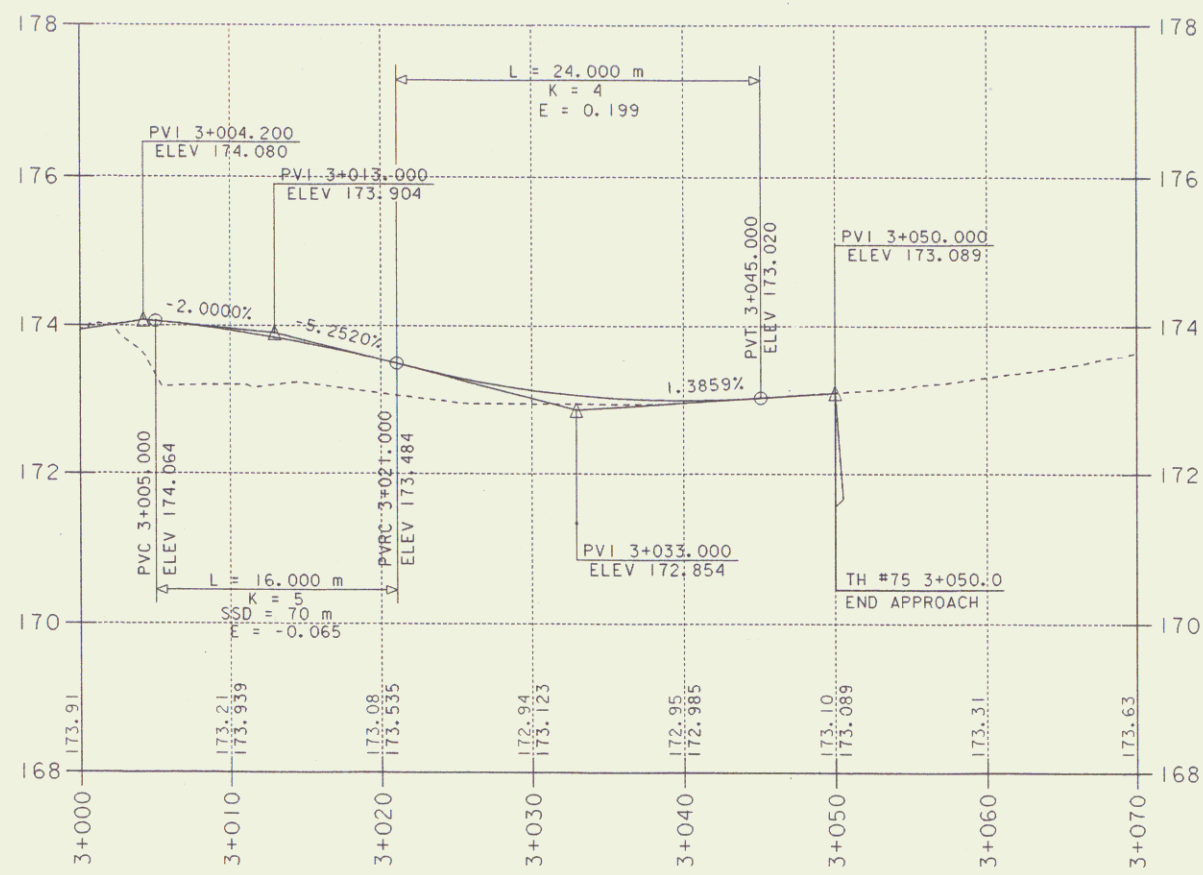
PROJECT NAME: IUNBRIDGE
 PROJECT NUMBER: BRS_0169(6)
 FILE NAME: Z:\89e063\struc\se063ssldg PLOT DATE: 24 DEC-2002
 PROJECT LEADER: A.ROBTALUPI DRAWN BY: .BULLOCK...
 DESIGNED BY: L.BULLOCK CHECKED BY:
 Z:\89e063\str\se063pf21 ROW SHEET 6 OF 17

TOWN HIGHWAY #1 Profile



PROJECT NAME:	TUNBRIDGE
PROJECT NUMBER:	BRS_0169(6)
FILE NAME:	z88e063/struc1/se063ssldo
PROJECT LEADER:	A. BOBIALUPE
DESIGNED BY:	L. BULLOCK
FILE NAME:	z88e063/str/se063pf31
PLOT DATE:	24-DEC-2002
DRAWN BY:	L. BULLOCK
CHECKED BY:	
ROW SHEET	7 OF 17

TOWN HIGHWAY #75 Profile



PROJECT NAME:	TUNBRIDGE
PROJECT NUMBER:	BBS_0169(6)
FILE NAME:	z89e063/str/wct/se063xsl.dwg
PROJECT LEADER:	A. PORTALURI
DESIGNED BY:	L. BULLOCK
FILE NAME:	z89e063/str/se063c1.dwg
PLOT DATE:	24-DEC-2002
DRAWN BY:	L. BULLOCK
CHECKED BY:	
ROW SHEET	8 OF 17

10

INDEX OF SHEETS

1	TITLE
2	PRELIMINARY INFORMATION SHEET
3	MAINLINE ROADWAY AND BRIDGE TYPICALS
4	SIDELINE ROADWAY TYPICALS
5	MISCELLANEOUS TYPICALS AND DETAILS
6-8	QUANTITY SHEETS
9	DRAINAGE DETAIL SHEET
10	EARTHWORKS SHEET
11	ITEM DETAIL SHEET
12-18	BLANK
19-20	TIE SHEET
21-22	LAYOUT SHEETS
23-24	MAINLINE PROFILES
25	MAINLINE BANKING DIAGRAMS
26	TH #1 PROFILE
27	TH #75 PROFILE
28	BLANK
29	MATERIAL TRANSITION DIAGRAM
30	GUARD RAIL TERMINAL DETAILS
31	PRECAST CONCRETE DROP INLET DETAILS
32	DRY HYDRANT DETAILS
33-37	PAVEMENT MARKINGS & SIGNS LAYOUT
38-39	TRAFFIC SIGN SUMMARY
40	CONSTRUCTION APPROACH SIGNING
41-42	UTILITY RELOCATION
43	BLANK
44-46	EROSION CONTROL SHEETS
47	BORING LAYOUT SHEET
48-51	BORING LOG SHEETS
52	PLAN AND ELEVATION
53-60	BLANK
61-68	MAINLINE CROSS SECTIONS
69	TH #1 CROSS SECTIONS
70-72	TH #75 CROSS SECTIONS
73-80	CHANNEL CROSS SECTIONS

FINAL HYDRAULICS REPORT



HYDROLOGIC DATA

DRAINAGE AREA: 205.6 sq. km.
 CHARACTER OF TERRAIN: hilly to mountainous
 CHARACTER & TYPE OF STREAM: Perennial, sinuous, alluvial, not braided or anabranching
 NATURE OF STREAMBED: Sandy Gravel, Some Cobbles & Small Boulders

02+33=	68 cms	050+	203 cms
010+	135 cms	0100+	243 cms
025+	175 cms	0500+	340 cms

DATE OF FLOOD OF RECORD: Unknown
 WATER SURFACE ELEV.: Unknown ESTIMATED DISCHARGE: Unknown
 NATURAL STREAM VELOCITY @ 050: 1.27 m/s
 ICE CONDITIONS: Moderate to heavy DEBRIS: Moderate
 DOES THE STREAM REACH MAXIMUM HIGHWATER ELEVATION RAPIDLY? No
 IS ORDINARY RISE RAPID? No
 IS STAGE AFFECTED BY UPSTREAM OR DOWNSTREAM CONDITIONS? Yes
 IF YES, DESCRIBE: Dams located approximately 150 m upstream and 165 m downstream may affect stage.
 WATERSHED STORAGE: 1% HEADWATERS UNIFORM THROUGHOUT WATERSHED X IMMEDIATELY ABOVE SITE

PROPOSED STRUCTURE

STRUCTURE TYPE: Two Span Steel Beam Bridge
 CLEAR SPAN (NORMAL TO STREAM): 2 Spans @ 17.56 m = 35.1 m
 VERTICAL CLEARANCE ABOVE STREAMBED: 4.3 m (ave. low beam = 172.05 m)
 WATERWAY OF FULL OPENING: 91.4 sq. m

WATER SURFACE ELEV. @ 02+33=	170.4 m	VELOCITY=	1.4 m/s
010+	171.1 m	"	2.0 m/s
025+	171.4 m	"	2.4 m/s
050+	171.6 m	"	2.6 m/s
0100+	171.8 m	"	2.9 m/s

IS THE ROADWAY OVERTOPPED BELOW THE 0100? No FREQUENCY: Above 0100
 RELIEF ELEVATION: 173.48 DISCHARGE OVER ROAD @ 0100: None
 AVERAGE LOW ELEVATION OF SUPERSTRUCTURE: 172.05 m
 VERTICAL CLEARANCE @ 050 = 0.5 m
 SCOUR: 0.2 m Contraction Scour + 2.1 m Pier Scour = 2.3 m total @ 050
 REQUIRED CHANNEL PROTECTION: Stone Fill, Type IV

EXISTING STRUCTURE

STRUCTURE TYPE: Two Span Steel Beam Bridge YEAR BUILT: 1938
 CLEAR SPAN (NORMAL TO STREAM): 2 Spans @ approx. 17.56 m = 35.1 m
 VERTICAL CLEARANCE ABOVE STREAMBED: 5 m (ave. low beam = 172.7 m)
 WATERWAY OF FULL OPENING: 117.3 sq. m
 DISPOSITION OF STRUCTURE: Remove

TYPE OF MATERIAL UNDER SUBSTRUCTURE: See Boring Information

WATER SURFACE ELEV. @ 02+33=	170.4 m	VELOCITY=	1.4 m/s
010+	171.1 m	"	2.1 m/s
025+	171.4 m	"	2.4 m/s
050+	171.6 m	"	2.6 m/s
0100+	171.8 m	"	2.9 m/s

LONG TERM STREAM BED CHANGES: Approx. 1m scour through the bridge area
 IS THE ROADWAY OVERTOPPED BELOW THE 0100? No FREQUENCY: Above 0100
 RELIEF ELEVATION: 173.47 DISCHARGE OVER ROAD @ 0100: NONE

UPSTREAM STRUCTURE: TOWN: Tunbridge DISTANCE: 3 km
 HIGHWAY NO.: TH 25 STRUCTURE NO.: 31
 STRUCTURE TYPE: Steel Pony Truss with Wooden Deck
 CLEAR SPAN: 21.3 m CLEAR HEIGHT: 4.6 m
 YEAR BUILT: 1889 FULL WATERWAY: Unknown

DOWNSTREAM STRUCTURE: TOWN: Tunbridge DISTANCE: 213 M
 HIGHWAY NO.: TH 2 STRUCTURE NO.: 5
 STRUCTURE TYPE: Single Span Covered Bridge
 CLEAR SPAN: Approx. 18.2 m CLEAR HEIGHT: Unknown
 YEAR BUILT: 2000 FULL WATERWAY: Unknown

PERMIT INFORMATION

AVERAGE DAILY FLOW:	4.6 cms
ORDINARY LOW WATER:	2.1 cms DEPTH: 1.1 m
ORDINARY HIGH WATER:	29.2 cms DEPTH: 1.8 m

ADDITIONAL COMMENTS



DESIGN CRITERIA:

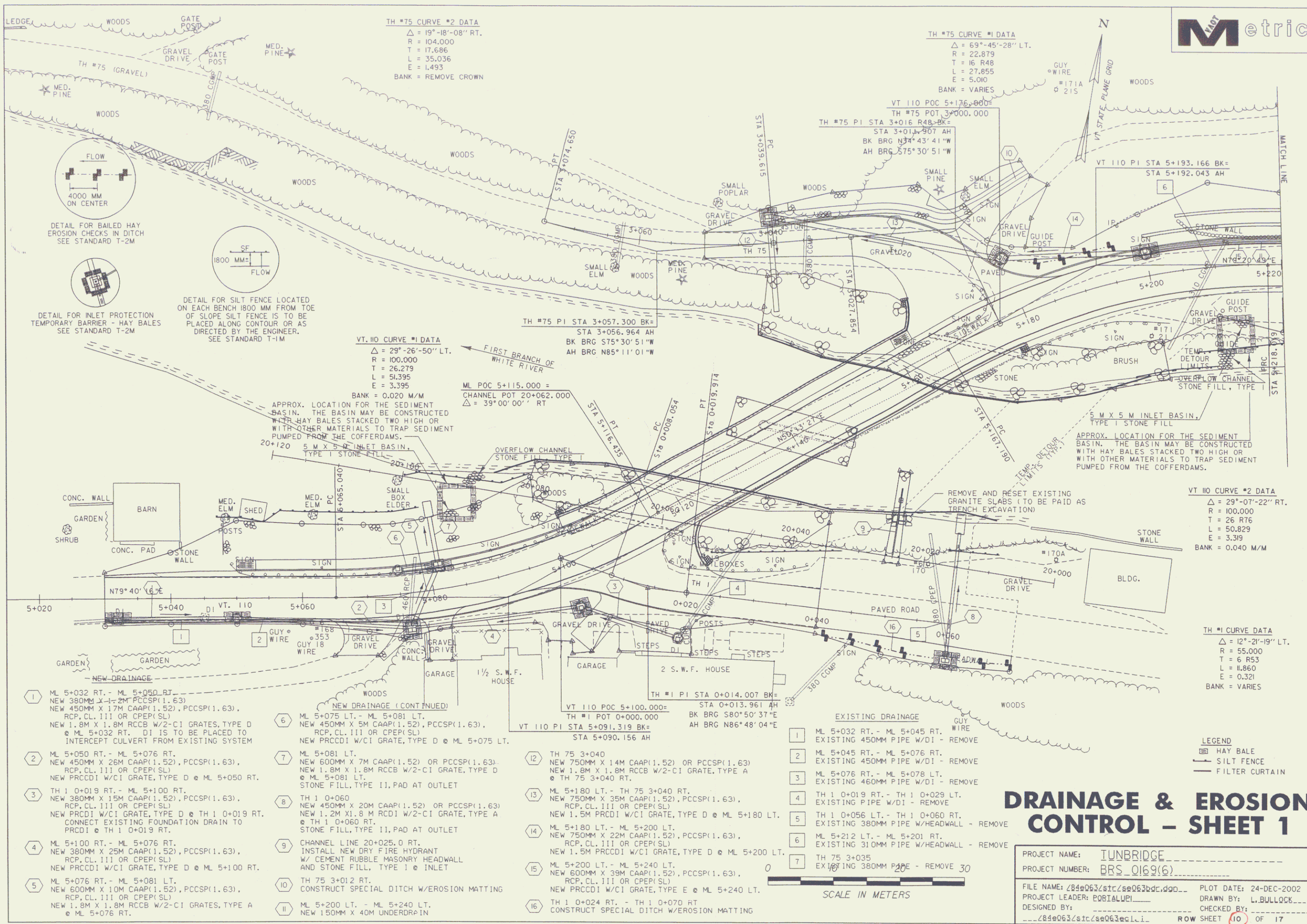
- DESIGN LIVE LOAD: AASHTO
- DESIGN SPAN
- ALLOWABLE LOAD FOR SPREAD FOOTINGS ON SOIL: N/A TYPE: N/A ON LEDGE ESTIMATED LENGTH: N/A
- ALLOWABLE LOAD FOR PILING: N/A TYPE: N/A ESTIMATED LENGTH: N/A
- ALLOWABLE STRESS FOR STRUCTURAL STEEL: AASHTO TENSION
- ALLOWABLE STRESS FOR REINFORCING STEEL: GRADE 400 TENSION
- ALLOWABLE STRESS FOR CONCRETE CLASS: f_c CLASS: f_c

TRAFFIC MAINTENANCE:

- IS TRAFFIC TO BE MAINTAINED? Yes IF YES, ON EXISTING STRUCTURE No OR ON TEMPORARY BRIDGE YES
- TEMPORARY BRIDGE REQUIREMENTS: ONE OR TWO WAY Two Way TRAFFIC CONTROL SIGNALS REQUIRED No
 MINIMUM CLEAR SPAN (NORMAL TO STREAM): 33 m VERTICAL CLEARANCE ABOVE STREAMBED: Min. Low Beam Elev. = 171.45 m
 WATERWAY OF FULL OPENING: 78.8 sq. m
 ARE SIDEWALKS REQUIRED? IF SO, ON WHAT SIDE?
 STRUCTURE TYPE:

STATE OF VERMONT
 AGENCY OF TRANSPORTATION

Town Of	TUNBRIDGE	Bridge No.	BR.4
Highway No.	VT. RTE. 110	Log Sta.	
		Surv. Sta.	
VT 110 OVER FIRST BRANCH OF WHITE RIVER			
PRELIMINARY INFORMATION			
Designed By	Drawn By L. BULLOCK		
Checked By	Date	Bridge Design Supervisor	
		A. PORTALUPI Date	
PROJECT	TUNBRIDGE	PROJECT NO.	BRS 0169(6)
I.G.C. Info.	/84063/structures/so063pl.dgn so063pl		
	ROW Sheet	9	of 17



TH #75 CURVE #2 DATA
 $\Delta = 19^\circ-18'-08''$ RT.
 R = 104.000
 T = 17.686
 L = 35.036
 E = 1.493
 BANK = REMOVE CROWN

TH #75 CURVE #1 DATA
 $\Delta = 69^\circ-45'-28''$ LT.
 R = 22.879
 T = 16.848
 L = 27.855
 E = 5.000
 BANK = VARIES

VT. 110 CURVE #1 DATA
 $\Delta = 29^\circ-26'-50''$ LT.
 R = 100.000
 T = 26.279
 L = 51.395
 E = 3.395
 BANK = 0.020 M/M

VT. 110 CURVE #2 DATA
 $\Delta = 29^\circ-07'-22''$ RT.
 R = 100.000
 T = 26.876
 L = 50.829
 E = 3.399
 BANK = 0.040 M/M

TH #1 CURVE DATA
 $\Delta = 12^\circ-21'-19''$ LT.
 R = 55.000
 T = 6.853
 L = 11.860
 E = 0.321
 BANK = VARIES

- | | | | |
|---|---|---|---|
| <p>1 ML 5+032 RT. - ML 5+050 RT.
 NEW 380MM X 1.2M PCCSP(1.63)
 NEW 450MM X 1.7M CAAP(1.52), PCCSP(1.63),
 RCP, CL. 111 OR CPEP(SL)
 NEW 1.8M X 1.8M RCCB W/2-CI GRATES, TYPE D
 @ ML 5+032 RT. DI IS TO BE PLACED TO
 INTERCEPT CULVERT FROM EXISTING SYSTEM</p> | <p>6 ML 5+075 LT. - ML 5+081 LT.
 NEW 450MM X 5M CAAP(1.52), PCCSP(1.63),
 RCP, CL. 111 OR CPEP(SL)
 NEW PRCCDI W/CI GRATE, TYPE D @ ML 5+075 LT.</p> | <p>12 TH 75 3+040
 NEW 750MM X 14M CAAP(1.52) OR PCCSP(1.63)
 NEW 1.8M X 1.8M RCCB W/2-CI GRATE, TYPE A
 @ TH 75 3+040 RT.</p> | <p>1 ML 5+045 RT. - ML 5+076 RT.
 EXISTING 450MM PIPE W/DI - REMOVE</p> |
| <p>2 ML 5+050 RT. - ML 5+076 RT.
 NEW 450MM X 26M CAAP(1.52), PCCSP(1.63),
 RCP, CL. 111 OR CPEP(SL)
 NEW PRCCDI W/CI GRATE, TYPE D @ ML 5+050 RT.</p> | <p>7 ML 5+081 LT.
 NEW 600MM X 7M CAAP(1.52) OR PCCSP(1.63),
 NEW 1.8M X 1.8M RCCB W/2-CI GRATE, TYPE D
 @ ML 5+081 LT.
 STONE FILL, TYPE II, PAD AT OUTLET</p> | <p>13 ML 5+180 LT. - TH 75 3+040 RT.
 NEW 750MM X 25M CAAP(1.52), PCCSP(1.63),
 RCP, CL. 111 OR CPEP(SL)
 NEW 1.5M PRCCDI W/CI GRATE, TYPE D @ ML 5+180 LT.</p> | <p>2 ML 5+076 RT. - ML 5+078 LT.
 EXISTING 460MM PIPE W/DI - REMOVE</p> |
| <p>3 TH 1 0+019 RT. - ML 5+100 RT.
 NEW 380MM X 15M CAAP(1.52), PCCSP(1.63),
 RCP, CL. 111 OR CPEP(SL)
 NEW PRCCDI W/CI GRATE, TYPE D @ TH 1 0+019 RT.
 CONNECT EXISTING FOUNDATION DRAIN TO
 PRCCDI @ TH 1 0+019 RT.</p> | <p>8 TH 1 0+060
 NEW 450MM X 20M CAAP(1.52) OR PCCSP(1.63)
 NEW 1.2M X 1.8M RCDI W/2-CI GRATE, TYPE A
 @ TH 1 0+060 RT.
 STONE FILL, TYPE II, PAD AT OUTLET</p> | <p>14 ML 5+180 LT. - ML 5+200 LT.
 NEW 750MM X 22M CAAP(1.52), PCCSP(1.63),
 RCP, CL. 111 OR CPEP(SL)
 NEW 1.5M PRCCDI W/CI GRATE, TYPE D @ ML 5+200 LT.</p> | <p>3 TH 1 0+019 RT. - TH 1 0+029 LT.
 EXISTING PIPE W/DI - REMOVE</p> |
| <p>4 ML 5+100 RT. - ML 5+076 RT.
 NEW 380MM X 25M CAAP(1.52), PCCSP(1.63),
 RCP, CL. 111 OR CPEP(SL)
 NEW PRCCDI W/CI GRATE, TYPE D @ ML 5+100 RT.</p> | <p>9 CHANNEL LINE 20+025.0 RT.
 INSTALL NEW DRY FIRE HYDRANT
 W/ CEMENT RUBBLE MASONRY HEADWALL
 AND STONE FILL, TYPE I @ INLET</p> | <p>15 ML 5+200 LT. - ML 5+240 LT.
 NEW 600MM X 39M CAAP(1.52), PCCSP(1.63),
 RCP, CL. 111 OR CPEP(SL)
 NEW PRCCDI W/CI GRATE, TYPE E @ ML 5+240 LT.</p> | <p>4 TH 1 0+056 LT. - TH 1 0+060 RT.
 EXISTING 380MM PIPE W/HEADWALL - REMOVE</p> |
| <p>5 ML 5+076 RT. - ML 5+081 LT.
 RCP, CL. 111 OR CPEP(SL)
 NEW 600MM X 10M CAAP(1.52), PCCSP(1.63),
 NEW 1.8M X 1.8M RCCB W/2-CI GRATES, TYPE A
 @ ML 5+076 RT.</p> | <p>10 TH 75 3+012 RT.
 CONSTRUCT SPECIAL DITCH W/EROSION MATTING</p> | <p>16 TH 1 0+024 RT. - TH 1 0+070 RT.
 CONSTRUCT SPECIAL DITCH W/EROSION MATTING</p> | <p>5 TH 1 0+056 LT. - ML 5+201 RT.
 EXISTING 310MM PIPE W/HEADWALL - REMOVE</p> |

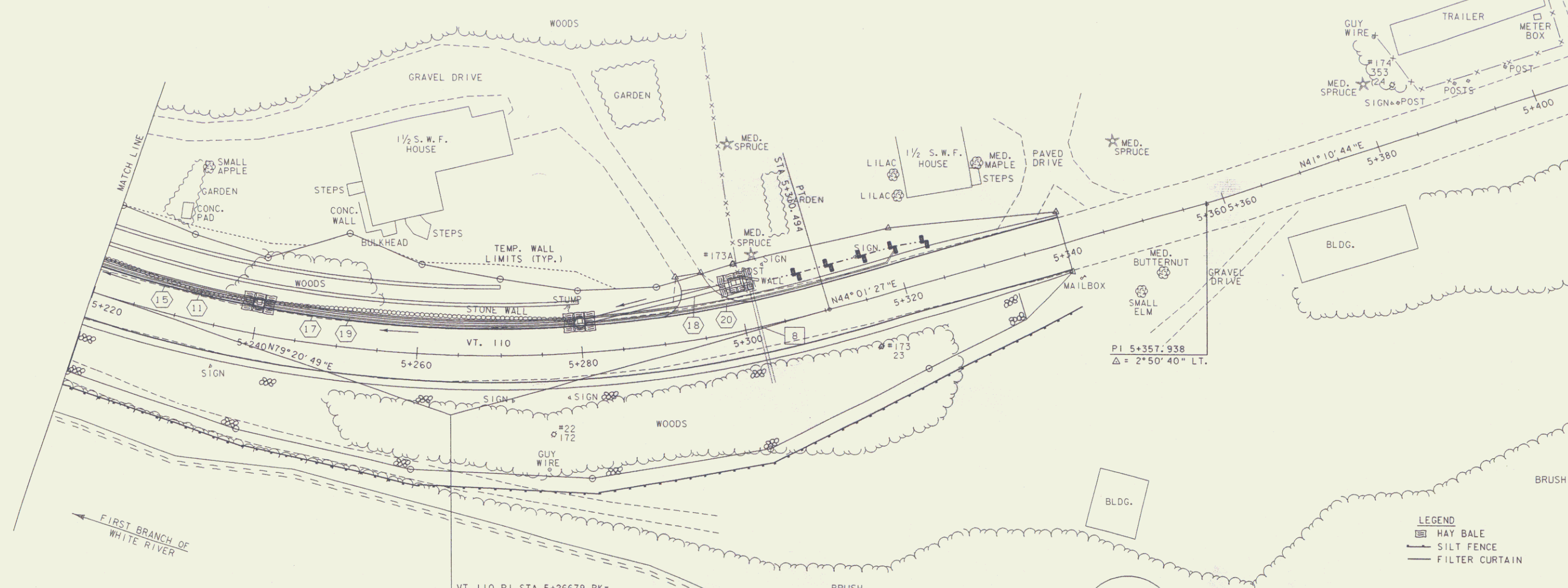
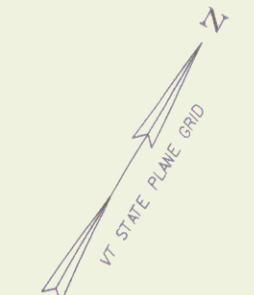
DRAINAGE & EROSION CONTROL - SHEET 1

PROJECT NAME: TUNBRIDGE
 PROJECT NUMBER: BRS_Q169(6)
 FILE NAME: Z84e063/stc/se063bdc.dwg... PLOT DATE: 24-DEC-2002
 PROJECT LEADER: PORTALUPI... DRAWN BY: L.BULLOCK...
 DESIGNED BY: ... CHECKED BY: ...
 ROW SHEET 10 OF 17

LEGEND
 HAY BALE
 SILT FENCE
 FILTER CURTAIN

SCALE IN METERS

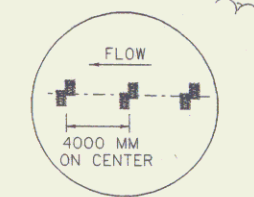
VT HO CURVE #3 DATA
 $\Delta = 35^{\circ}19'22''$ LT.
 R = 150.000
 T = 47.760
 L = 92.475
 E = 7.420
 BANK = 0.040 M/M



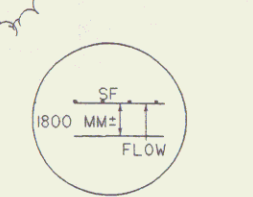
- NEW DRAINAGE**
- 11 ML 5+200 LT. - ML 5+240 LT.
NEW 150MM X 40M UNDERDRAIN
 - 15 ML 5+200 LT. - ML 5+240 LT.
NEW 600MM X 39M CAAP(1.52), PCCSP(1.63),
RCP, CL. 111 OR CPEP(SL)
NEW PRCCDI W/CI GRATE, TYPE E @ ML 5+240 LT.
 - 17 ML 5+240 LT. - ML 5+280 LT.
NEW 600MM X 39M CAAP(1.52), PCCSP(1.63),
RCP, CL. 111 OR CPEP(SL)
NEW PRCCDI W/CI GRATE, TYPE E @ ML 5+280 LT.
 - 18 ML 5+280 LT. - ML 5+300 LT.
NEW 600MM X 19M CAAP(1.52), PCCSP(1.63),
RCP, CL. 111 OR CPEP(SL)
NEW 1.8M X 1.8M RCCB W/2-CI GRATE, TYPE A
@ ML 5+300 LT.
 - 19 ML 5+240 LT. - ML 5+280 LT.
NEW 150MM X 39M UNDERDRAIN
 - 20 ML 5+280 LT. - ML 5+320 LT.
NEW 150MM X 40M UNDERDRAIN
W/FLUSHING BASIN @ 5+320 LT.

- EXISTING DRAINAGE**
- 8 ML 5+302 C/L
EXISTING 380MM PIPE W/ DI - REMOVE

STONE FILL, TYPE I
 ML 5+220.0 RT. - ML 5+320.0 RT.



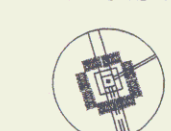
DETAIL FOR BAILED HAY
 EROSION CHECKS IN DITCH
 SEE STANDARD T-2M



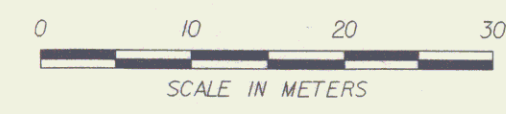
DETAIL FOR SILT FENCE LOCATED
 ON EACH BENCH 1800 MM FROM TOE
 OF SLOPE SILT FENCE IS TO BE
 PLACED ALONG CONTOUR OR AS
 DIRECTED BY THE ENGINEER.
 SEE STANDARD T-1M

- LEGEND**
- HAY BALE
 - SILT FENCE
 - FILTER CURTAIN

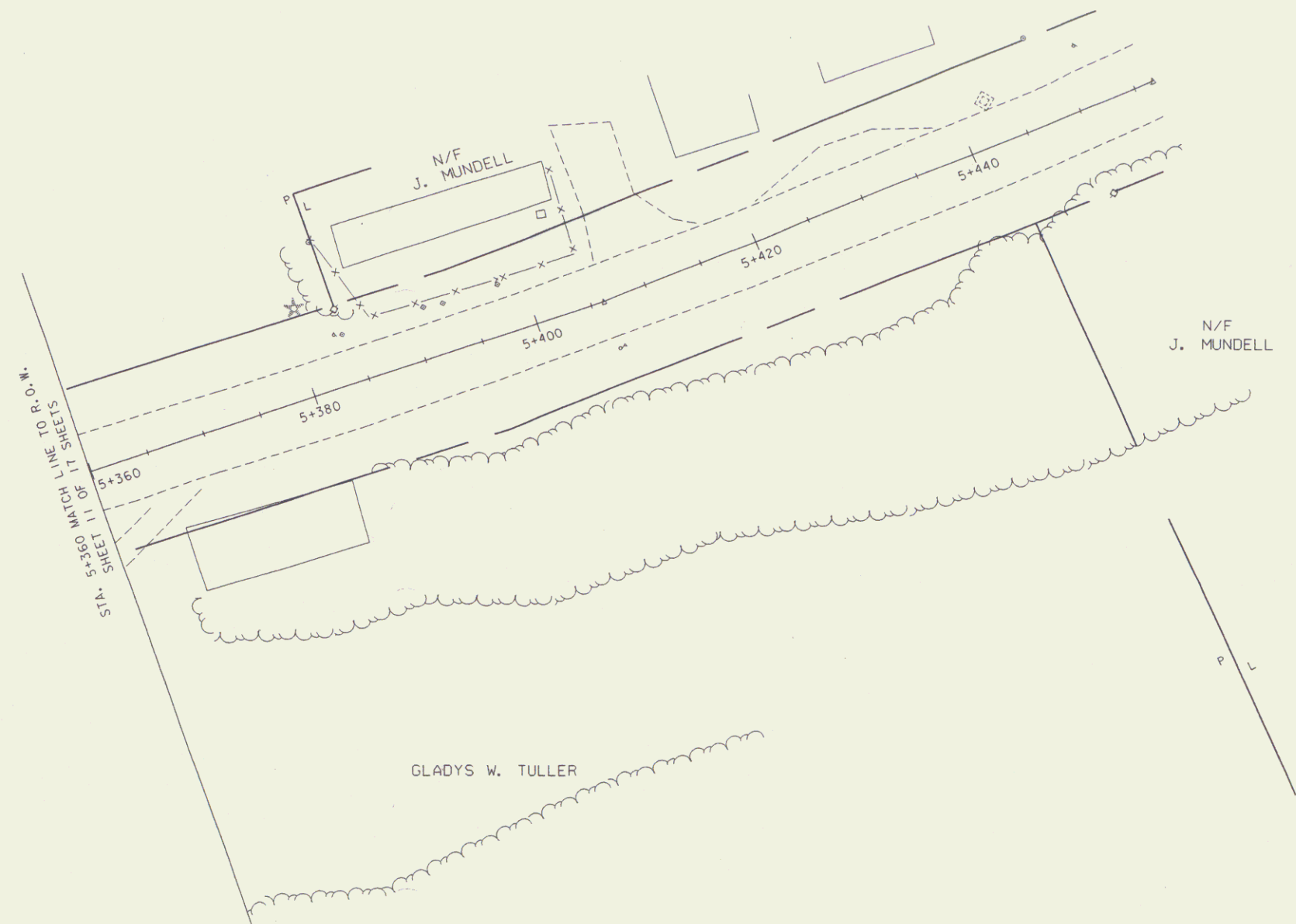
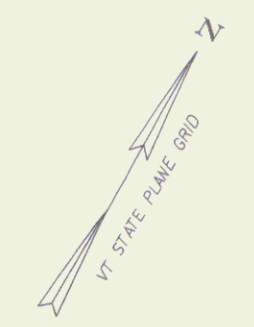
DETAIL FOR INLET PROTECTION
 TEMPORARY BARRIER - HAY BALES
 SEE STANDARD T-2M



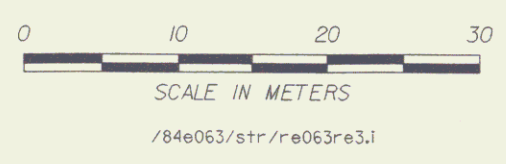
DRAINAGE & EROSION CONTROL - SHEET 2



PROJECT NAME: TUNBRIDGE
 PROJECT NUMBER: BRS_0169(6)
 FILE NAME: /84e063/str/84e063dc.dwg PLOT DATE: 24-DEC-2002
 PROJECT LEADER: BOB ALUEI DRAWN BY: L. BULLOCK
 DESIGNED BY: CHECKED BY:
 /84e063/str/84e063ec2.1 ROW SHEET 11 OF 17



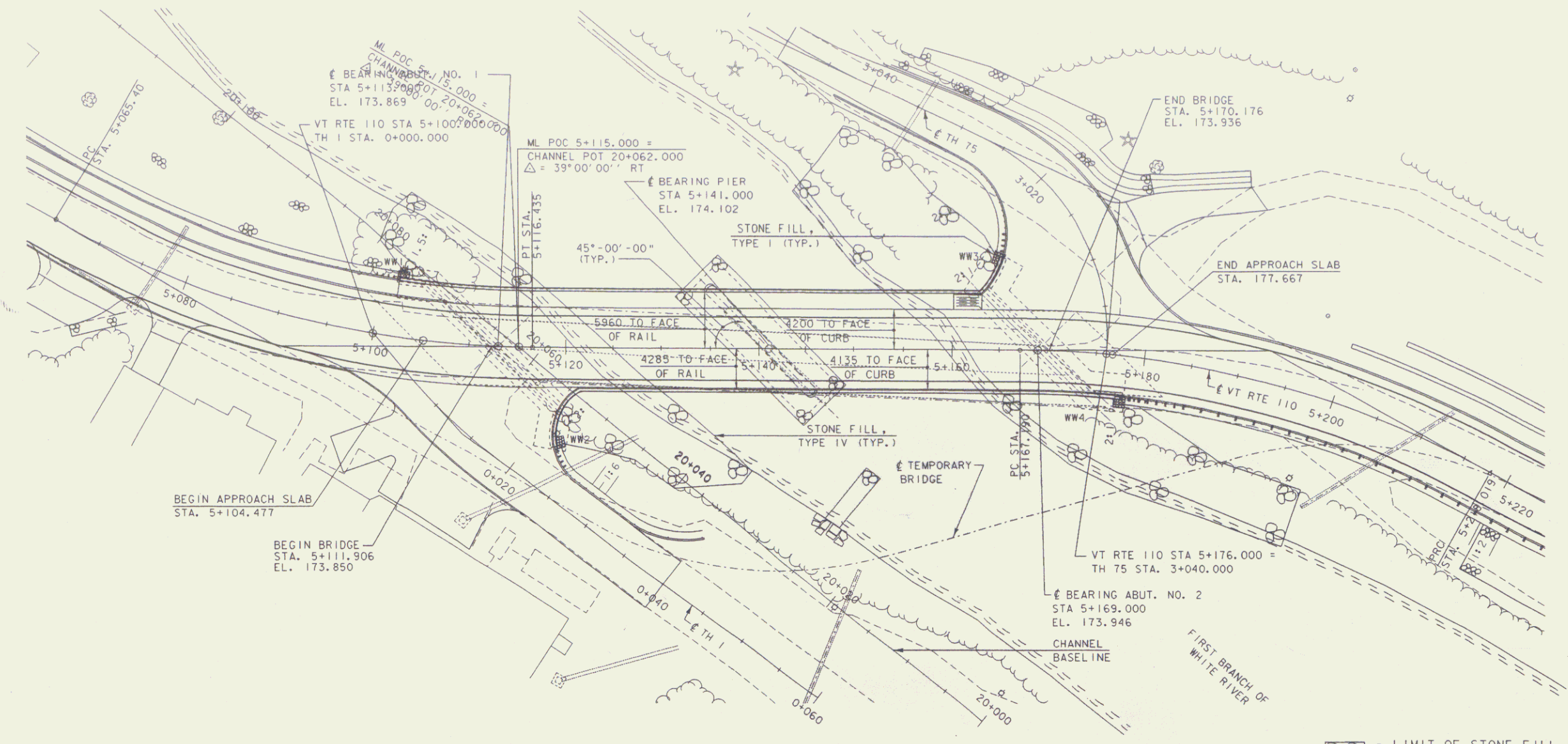
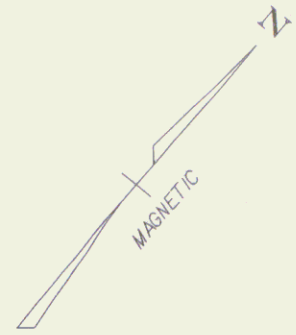
LEGEND
 HAY BALE
 SILT FENCE
 FILTER CURTAIN



DRAINAGE & EROSION CONTROL - SHEET 3

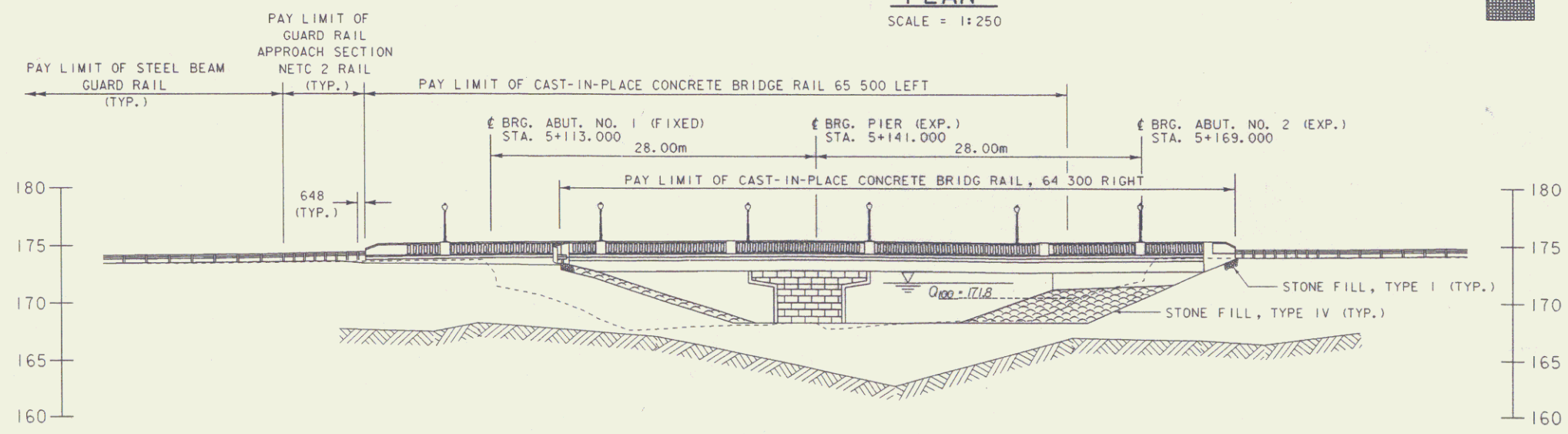
PROJECT NAME: IUNBRIDGE	PLLOT DATE: 24-DEC-2002
PROJECT NUMBER: BRS_Q169(6)	DRAWN BY: L.BULLOCK
FILE NAME: /84e063/str/re063re3.dwg	CHECKED BY:
PROJECT LEADER: EQBIALUP	
DESIGNED BY:	
R.O.W. SHEET 12 OF 17 SHEETS	

14

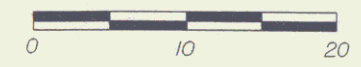


PLAN
SCALE = 1:250

- LIMIT OF STONE FILL, TYPE IV
- LIMIT OF STONE FILL, TYPE I



DOWNSTREAM ELEVATION
SCALE = 1:250



PLOT DATE: 24-DEC-2002

STATE OF VERMONT AGENCY OF TRANSPORTATION	
Town Of <u>TUNBRIDGE</u>	Bridge No. <u>4</u>
Highway No. <u>VT.110</u>	Co. Sta. <u> </u>
<u>VT.110 OVER THE FIRST BRANCH OF WHITE RIVER</u>	
PLAN AND ELEVATION	
Designed By <u> </u>	Drawn By <u>L.BULLOCK</u>
Checked By <u> </u>	Date <u> </u>
Bridge Design Supervisor <u>PORTALIPI</u> Date <u>10/02</u>	
PROJECT <u>TUNBRIDGE</u>	PROJECT NO. <u>BRS 0169(6)</u>
I:\G:\tunbr\cadd\11\m\p\brs\brs0169(6)\struc\sup\063\p.dgn	
ROW Sheet <u>13</u> of 17	



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

TABLE OF PROJECT PROPERTY ACQUISITION

PARCEL NO.	GRANTOR	SHEET NO.	BEGINNING STATION	ENDING STATION	TAKING	REM.	RIGHTS	TITLE TAKEN	DATE	TOWN OR CITY RECORDED	BK.	PG.	REMARKS
1A	STATE OF VERMONT	16	5+227 RT.	5+340 RT.	87.4 S.M.±			WD	10-10-01	TUNBRIDGE	60	411-412	FORMERLY GLADYS W. TULLER & RANDALL G. TULLER 941.3 S.F.± 3,875.1 S.F.± ACCESS TO LAND & BUILDING .15A±
			5+227 RT.	5+340 RT.			CONST. EASE. (T) 360 S.M.±						
			5+200 RT.				ALL R.T. & I.						
			5+227 RT.	5+334.0 RT.			SLOPE (P) 0.06 HA±						
			5+256.5 RT.				INSTALL & MAINTAIN (P)						GUY ANCHOR
1B		16	5+314.3 LT.	5+323.3 LT.			SLOPE (T) 34.0 S.M.±						366 S.F.
1C		15,16	5+156.6 RT.	5+340 RT.	0.20 HA±		ALL R.T. & I.						HWY EASE. VT RTE 110 (.50A±)
2A	SINKLER, ELEANOR C.	15,16	5+200.580 LT.	5+271.000 LT.	54.7 S.M.±			WD	03-12-04	TUNBRIDGE	69	82-83	589 S.F.± 189 S.F.± 1668 S.F.± TO BE DETERMINED BY OWNER & RESIDENT ENGINEER, APPLE TREE LEACH FIELD & LEACH FIELD & POST FOR DOG RUN 1529 S.F.± 4.8M (16') GRAVEL R.O.W. OVER PARCEL # 3 14 SOIL NAIL(S) ANCHORS
			5+196.950 LT.	5+209.000 LT.			UTILITY EASE. (P) 17.6 S.M.±						
			5+197.370 LT.	5+278.556 LT.			SLOPE (T) 155 S.M.±						
			5+210.000 LT.	5+265.000 LT.			LANDSCAPE (T)						
			5+233.000 LT.	5+242.000 LT.			ALL R.T. & I.						
			5+224.000 LT.	5+243.000 LT.			INSTALL (T)						
			5+197.370 LT.	5+284.006 LT.			CONST. EASE. (T) 142 S.M.±						
			TH75 3+011.000 RT.				DRIVE (T)						
			5+200.000 LT.	5+281.065 LT.			INSTALL (T)						
2B		15,16	5+196.950 LT.	5+300.600 LT.	0.08 HA±		ALL R.T. & I.						VT RTE 110; 0.19A±
3A	DELETED												FORMERLY FRARY
3B	FRARY, ADRIAN W. & ELIZABETH L.	15	TH75 3+039.425 RT.	TH75 3+041.134 RT.			INSTALL & MAINT. (P)	WD	03-12-04	TUNBRIDGE	69	83A-83B	UTILITY GUY WIRE
			TH75 3+011.000 RT.				DRIVE (T)						4.8M (16') GRAVEL IN COMMON WITH PARCEL # 2
			5+184.600 LT.	5+200.315 LT.			UTILITY EASE (P) 153 S.M.±						1647 S.F.±
			TH75 3+016.953 RT.	TH75 3+034.779 RT.			SLOPE (P) 29 S.M.±						312 S.F.±
			TH75 3+010.760 RT.	TH75 3+017.414 RT.			DITCH (T) 20 S.M.±						215 S.F.±
3C		15	5+148.119 LT.	5+196.950 LT.	0.05 HA±		ALL R.T. & I.						VT RTE 110 & TH 75; 0.12A±

REVISION NO.	SHEET	DESCRIPTION OF REVISION	DATE	MADE BY	APPROVED BY
1	14A, 15, 16	PARCEL NO. 2 SINKLER. CHANGE STATIONS TO 5+224.00 LT. FROM 5+240.000 ADD STA. 5+243.000 LT. IN ENDING STATION COLUMN. ADD LEACH FIELD IN REMARKS COLUMN BEFORE DOG RUN. ADD STA. 5+200.000 LT. ~ 5+281.065 LT. INSTALL (T) AND '14 SOILNAILS (ANCHORS)' TO REMARKS COLUMN. ADD 'ALSO APPLE TREE' TO REMARKS COLUMN AFTER WORD 'ENGINEER.' PER C.O. 9270.	02-10-03	G. J. F.	R. P. D.
2	14A, 15	PARCEL NO. 3 FRARY. DELETE PARCEL 3A AND ALL RIGHTS; PUT IN REMARKS COLUMN 'DELETED' AFTER 3A. MODIFY LAYOUTS TO SHOW TOWN AS OWNING LAND NEXT TO RIVER. PER SURVEY OF LAND. PER C.O. 9271.	02-10-03	G. J. F.	R. P. D.
3	14B, 15	PARCEL NO. 4 GOODNOW. REMOVE UTILITY EASE. (P) FROM DETAIL & LAYOUT. REMOVE INSTALL & MAINT. (P) FROM DETAIL & LAYOUT. CHANGE STATIONS OF UTILITY EASE. (T) TO 5+156.420 RT. ~ 5+165.202 RT. ADD TO LAYOUTS 'RIGHTS TO BE ACQUIRED BY UTILITY CO.' TO ADDRESS NEW UTILITY LINE TO GOODNOW'S. PER C.O. 9272.	02-10-03	G. J. F.	R. P. D.
4	14B, 15	PARCEL NO. 5 MULVEY. CHANGE STATIONS FOR GUY WIRE TO 0+046.250 RT. ~ 0+048.150 RT. CHANGE ENDING STA. FOR SEPTIC AND LEACH FIELD TO 0+041.200 RT. AS SYSTEM WAS EXTENDED. PER C.O. 9273.	02-10-03	G. J. F.	R. P. D.
5	14B, 15	PARCEL NO. 6 BROOKS. ADD 'EXCEPT & RESERVE' TO DETAIL SHEET AND STA. 5+081.700 RT. ~ 5+093.900 RT. WITH 'SEPTIC SYSTEM.' ADD ANOTHER EXTENTION OF LINE ON LAYOUT TO SHOW IT IS INSIDE FENCE. PER C.O. 9274.	02-10-03	G. J. F.	R. P. D.
6	14B, 14C, 15	PARCEL NO. 9 TOWN OF TUNBRIDGE. ON PARCEL 9A CHANGE STATION OF ALL R.T. & I. TO 5+148.119 LT. AND ADJUST AREA TO 389.65M±. 1.0A±. ON PARCEL 9B CHANGE ENDING STA. OF UTILITY EASE. TO 5+156.420 AS LINE WAS CHANGED. PER C.O. 9275.	02-10-03	G. J. F.	R. P. D.
7	14C, 15	PARCEL NO. 10 TUNBRIDGE FIRE DEPT. REMOVE 'INSTALL (T)' FROM DETAIL AND LAYOUT SHEETS. PER C.O. 9276.	02-10-03	G. J. F.	R. P. D.
8	14B, 15	PARCEL NO. 7 SCHALL. DELETE TAKING OF ALL R.T. & I. INTO VT. 110 PER C.O. 9318.	09-19-03	M. J. R.	R. P. D.
9	14B, 15	PARCEL NO. 8 TOMLINSON. DELETE TAKING OF ALL R.T. & I. INTO VT. 110 & TH 1. PER C.O. 9317.	09-19-03	M. J. R.	R. P. D.
		PAPER PRINTS TO LEAD DIVISION	03-30-05		

ACCT: mryan
C:\VWork\king\mryan\dms03567\CONTRACT DETAIL.dgn
DATE PLOTTED 30-MAR-2005

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

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

LEGEND
--- C&T (P) --- CLEARING & TRIMMING
... C&T (P) ... CLEAR ZONE
--- CONST. (P) --- CONSTRUCTION
--- SR --- SLOPE RIGHTS
--- P --- PROPERTY LINE
--- L --- TOP OF CUT
--- O --- TOE OF SLOPE

APPROVED: ROGER P. DUMAS DATE: 02-28-02
CHIEF, PLANS & TITLES

R. O. W. PLANS
TUNBRIDGE
BRS 0169(6)
R.O.W. SHEET 14 OF 17 SHEETS
SHEET 20 OF 128



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

TABLE OF PROJECT PROPERTY ACQUISITION

PARCEL NO.	GRANTOR	SHEET NO.	BEGINNING STATION	ENDING STATION	TAKING	REM.	RIGHTS	TITLE TAKEN	DATE	TOWN OR CITY RECORDED	BK.	PG.	REMARKS	REVISION NO.	SHEET	DESCRIPTION OF REVISION	DATE	MADE BY	APPROVED BY	
4	GOODNOW, CHRISTOPHER B. & JOANNE B.	15	5+094.390 RT. THI 0+052.672 LT. THI 0+055.284 LT. 5+151.850 RT. 5+156.420 RT. THI 0+060.000 LT.	THI 0+056.325 LT. 5+157.777 RT. THI 0+057.427 LT. 5+158.150 RT. 5+165.202 RT.	0.05 HA±		ALL R.T. & I. DETOUR (T) 47.8 S.M.± REMOVE (T) INSTALL (T) UTILITY EASE (T) CUL., DR. & DIT. (P)	WD	05-17-04	TUNBRIDGE	69	434-436	OLD VT RTE 110& TH1; 0.12A± 515 S.F.± CULVERT EROSION CONTROL TEMPORARY LOCATION CONVEY TO TOWN							
5	MULVEY, DAVID J. & JERILYN Z.	15	5+094.390 RT. THI 0+010.000 RT. THI 0+015.000 RT. THI 0+025.396 RT. THI 0+046.250 RT. THI 0+020.000 RT. THI 0+019.474 RT. THI 0+023.445 RT.	THI 0+056.325 LT. 5+157.777 RT. 5+158.150 RT. THI 0+048.150 RT. THI 0+042.505 RT.	0.05 HA±		ALL R.T. & I. DRIVE (T) DRIVE (T) UTILITY EASE (T) INSTALL (T) REMOVE (T) INSTALL & MAINT. (P)	WD	05-06-04	TUNBRIDGE	69	391-392	VT RTE 110 & TH1; 0.12A± GRAVEL 4 M (13') PAVED 11 M (36') GUY WIRE DROP INLET DROP INLET EXCEPT & RESERVE SEPTIC TANK & LEACH FIELD							
6	BROOKS, CORA VAIL	15	5+075.841 RT. 5+080.000 RT. 5+092.000 RT. 5+077.880 RT. 5+081.700 RT.	5+096.431 RT. 5+092.690 RT. 5+093.900 RT.	160.0 S.M.±		ALL R.T. & I DRIVE (T) UTILITY EASE (T)						VT RTE 110 1722 S.F.± GRAVEL 3.4 M (11.2') MM0315 EXCEPT & RESERVE, CONC. WALL EXCEPT & RESERVE, FENCE & SEPTIC SYSTEM							
7	SCHALL, GARY H. & KIMIKO-KAWAKAMI & SCHALL, SUSAN E. & FRANKLIN M.	15	5+070.000 RT. 5+032.300 RT. 5+070.997 RT.	5+074.474 RT.			DRIVE (T) INSTALL & MAINT. (P) DITCH (T) 4 S.M.±	WDOE	05-17-04	TUNBRIDGE	69	428-430	GRAVEL 6.7 M (22') MM0314 GUY WIRE 43 S.F.±							
8	TOMLINSON, HARLEY & JOYCE E.	15	5+046.980 LT. 5+066.500 LT. 5+078.150 LT. 5+041.461 LT. 5+048.009 LT.	5+059.114 LT. 5+082.863 LT. 5+081.512 LT. 5+048.009 LT. 5+054.344 LT.			INSTALL (T) UTILITY EASE (P) INSTALL (T) SLOPE (T) 4 S.M.± SLOPE (P) 6 S.M.±	WDOE	03-24-04	TUNBRIDGE	69	155-156	EROSION CONTROL EROSION CONTROL 43 S.F.± 65 S.F.±							
9A	TOWN OF TUNBRIDGE	15	5+148.119 LT. TH75 3+010.600 CL.	5+186.847 LT. TH75 3+050.000 CL.	389.6 SM±		ALL R.T. & I. APPROACH (T)	OCD	10-22-03	TUNBRIDGE	68	33-34	VT RTE 110 & TH75; 0.10A± TH 75							
PARCEL 9 CONTINUED ON NEXT SHEET																				

ACCT.mf3ydr
C:\P\working\WRyon\dms03567\CONTRACT DETAIL.dgn
DATE PLOTTED 30-MAR-2005

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

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

LEGEND

--- C&T (P) --- CLEARING & TRIMMING
--- C2 (P) --- CLEAR ZONE
--- CONST (T) --- CONSTRUCTION EASEMENT
SR SLOPE RIGHTS
P PROPERTY LINE
L TOP OF CUT
O TOE OF SLOPE

--- UE (P) --- PERMANENT UTILITY EASEMENT

APPROVED: ROGER P. DUMBS DATE: 02-28-02
CHIEF, PLANS & TITLES

R. O. W. PLANS
TUNBRIDGE
BRS 0169(6)
R.O.W. SHEET 148 OF 17 SHEETS
SHEET 21 OF 128

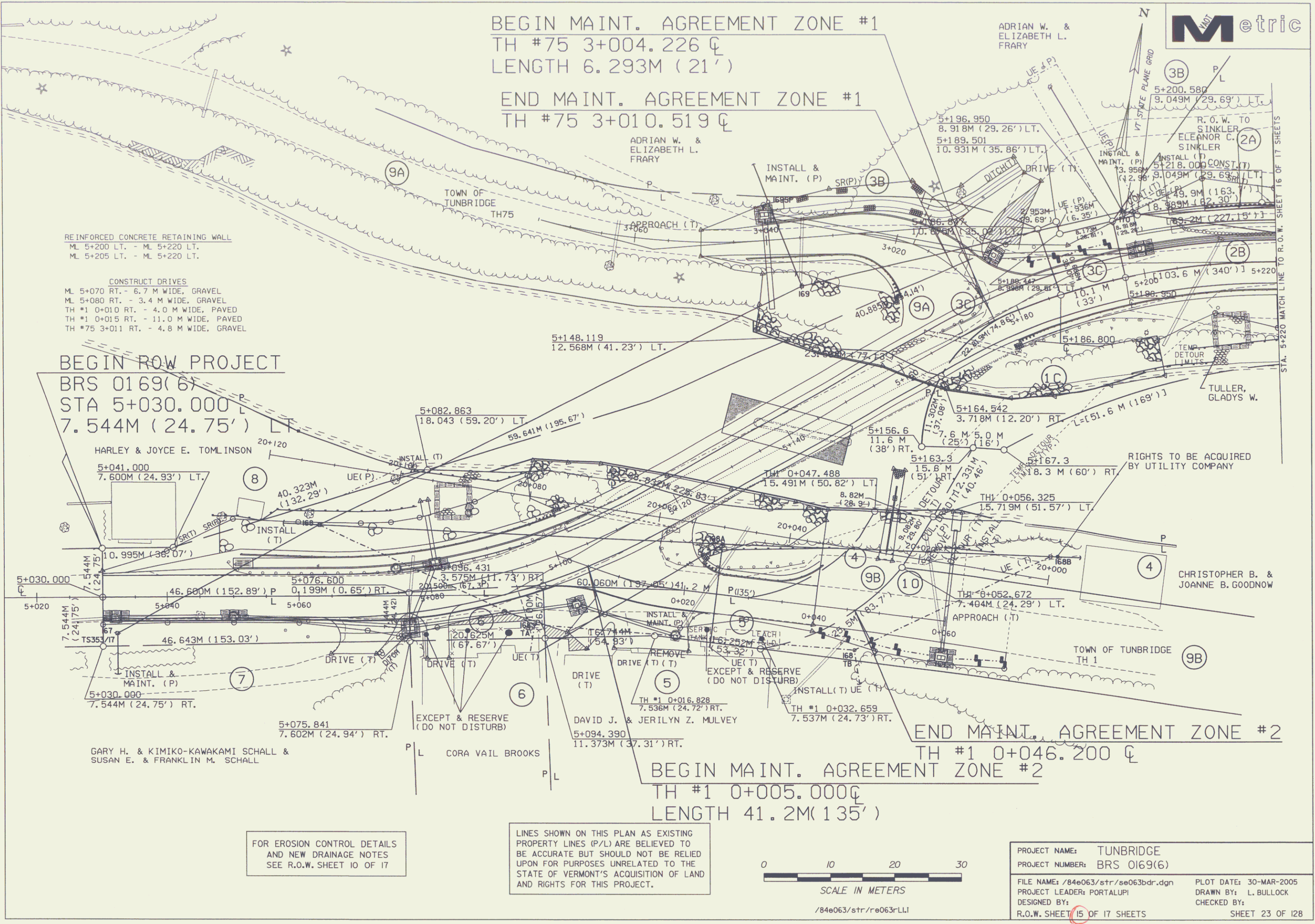


**STATE OF VERMONT
AGENCY OF TRANSPORTATION
RIGHT OF WAY PLANS
DETAIL SHEET**

TABLE OF PROJECT PROPERTY ACQUISITION

PARCEL NO.	GRANTOR	SHEET NO.	BEGINNING STATION	ENDING STATION	TAKING	REM.	RIGHTS	TITLE TAKEN	DATE	TOWN OR CITY RECORDED	BK.	PG.	REMARKS	REVISION NO.	SHEET	DESCRIPTION OF REVISION	DATE	MADE BY	APPROVED BY	
PARCEL 9 CONTINUED FROM PREVIOUS SHEET																				
9B		15	5+094.390 RT. TH1 0+046.000 CL. TH1 0+047.488 LT.	TH1 0+056.325 LT. TH1 0+060.000 CL. TH1 0+056.325 LT.	0.05HA±		ALL R.T. & I. APPROACH (T) DETOUR (T) 30.7 S.M.±						VT RTE 100 & TH1; 0.12A± TH 1 330 S.F.±							
10	TUNBRIDGE FIRE DEPT.	15	TH1 0+050.000 LT.										DRY HYDRANT							
11	CENTRAL VERMONT PUBLIC SERVICE CORP.												UTILITY							
12	VERIZON NEW ENGLAND, INC.												UTILITY							
13	CHARTER COMMUNICATION, LLC												UTILITY							
	MAINTENANCE AGREEMENT ZONE #1	15	TH75 3+004.226 CL.	TH75 3+010.519 CL.									TH 75 LENGTH 6.3M (21')							
	MAINTENANCE AGREEMENT ZONE #2	15	TH1 0+005.000 CL.	TH1 0+046.200 CL.									TH 1 LENGTH 41.2M (135')							

<p>ACCT.mf.yan G:\P\Working\MRyan\dms03567\CONTRACT DETAIL.dgn DATE PLOTTED 30-MAR-2005</p>	<p>DR. (P)- DRAINAGE RIGHT DIT. (P)- DITCHING RIGHT CH. (P)- CHANNEL RT. DRIVE (T)- DRIVE RIGHT CUL. (P)- CULVERT RIGHT [W]- WATER SOURCES</p>	<p>PRESENT R.O.W. TAKING WITHOUT ACCESS TAKING WITHOUT ACCESS ALONG PROPERTY LINE TAKING WITH ACCESS PERMANENT EASEMENT TEMPORARY EASEMENT</p>	<p>LEGEND</p> <p>--- C&T (P) --- CLEARING & TRIMMING --- C&T (P) --- CLEAR ZONE --- CONST. (T) --- CONSTRUCTION EASEMENT SR SR SLOPE RIGHTS --- L --- PROPERTY LINE --- L --- TOP OF CUT --- L --- TOE OF SLOPE</p>	<p>--- UE (P) --- PERMANENT UTILITY EASEMENT</p> <p>APPROVED: <u>ROGER P. DUMAS</u> DATE: <u>02-28-02</u> CHIEF, PLANS & TITLES</p>	<p>R. O. W. PLANS</p> <p style="text-align: center;">TUNBRIDGE BRS 0169(6)</p> <p>R. O. W. SHEET 140 OF 17 SHEETS SHEET 22 OF 128</p>
---	--	--	--	---	--



BEGIN MAINT. AGREEMENT ZONE #1
 TH #75 3+004.226 CL
 LENGTH 6.293M (21')

END MAINT. AGREEMENT ZONE #1
 TH #75 3+010.519 CL

REINFORCED CONCRETE RETAINING WALL
 M.L. 5+200 LT. - M.L. 5+220 LT.
 M.L. 5+205 LT. - M.L. 5+220 LT.

CONSTRUCT DRIVES
 M.L. 5+070 RT. - 6.7 M WIDE, GRAVEL
 M.L. 5+080 RT. - 3.4 M WIDE, GRAVEL
 TH #1 0+010 RT. - 4.0 M WIDE, PAVED
 TH #1 0+015 RT. - 11.0 M WIDE, PAVED
 TH #75 3+011 RT. - 4.8 M WIDE, GRAVEL

BEGIN ROW PROJECT
 BRS 0169(6)
 STA 5+030.000
 7.544M (24.75') LT.

HARLEY & JOYCE E. TOMLINSON
 5+041.000
 7.600M (24.93') LT.

5+030.000
 7.544M (24.75') RT.

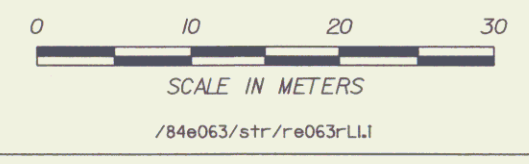
5+075.841
 7.602M (24.94') RT.

GARY H. & KIMIKO-KAWAKAMI SCHALL &
 SUSAN E. & FRANKLIN M. SCHALL

FOR EROSION CONTROL DETAILS
 AND NEW DRAINAGE NOTES
 SEE R.O.W. SHEET 10 OF 17

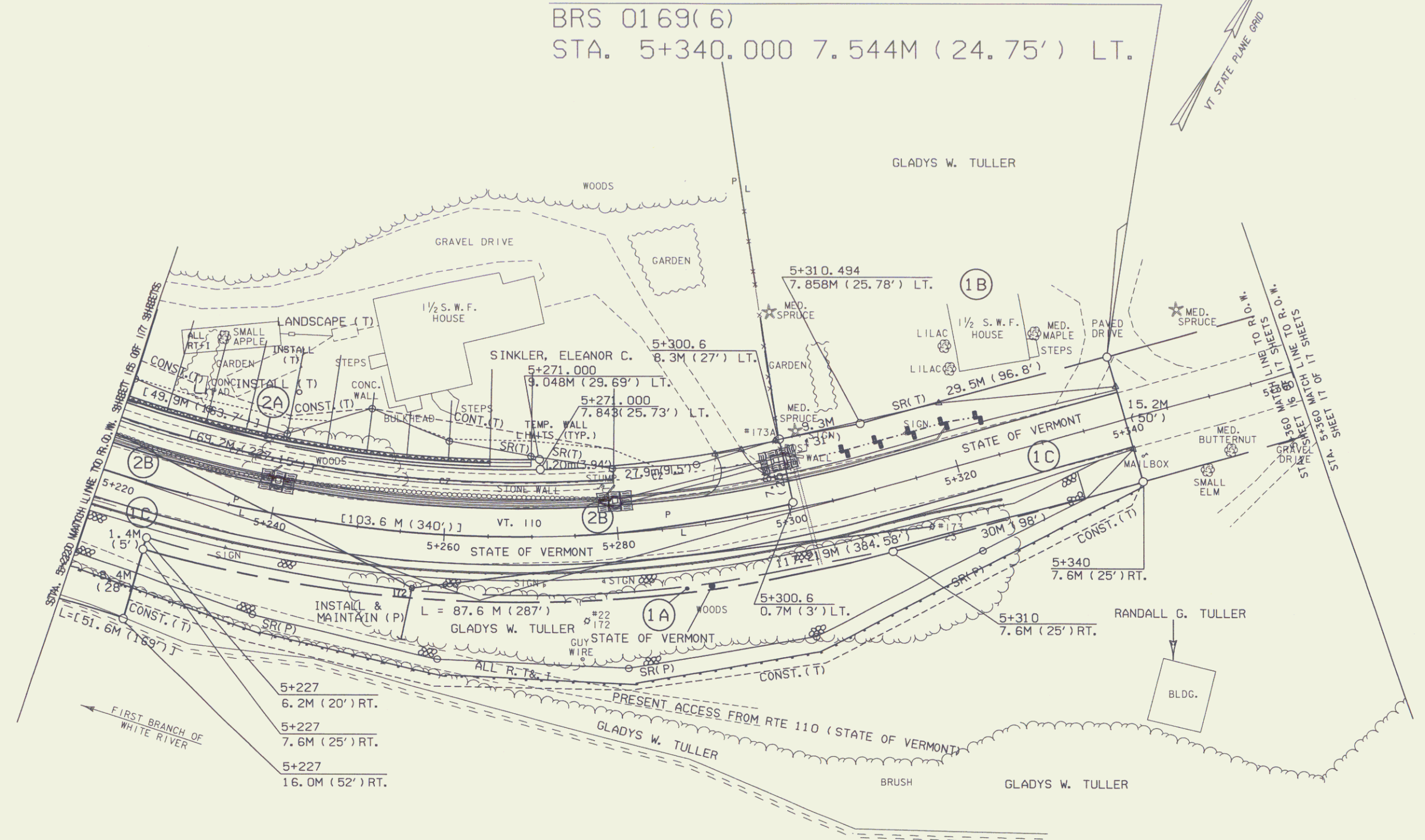
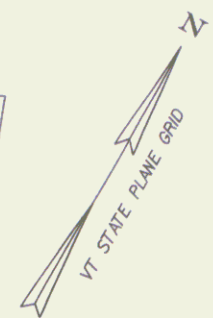
INES SHOWN ON THIS PLAN AS EXISTING
 PROPERTY LINES (P/L) ARE BELIEVED TO
 BE ACCURATE BUT SHOULD NOT BE RELIED
 UPON FOR PURPOSES UNRELATED TO THE
 STATE OF VERMONT'S ACQUISITION OF LAND
 AND RIGHTS FOR THIS PROJECT.

END MAINT. AGREEMENT ZONE #2
 TH #1 0+046.200 CL
 BEGIN MAINT. AGREEMENT ZONE #2
 TH #1 0+005.000 CL
 LENGTH 41.2M (135')



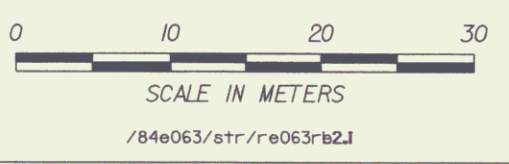
PROJECT NAME:	TUNBRIDGE
PROJECT NUMBER:	BRS 0169(6)
FILE NAME:	/84e063/str/se063bdr.dgn
PROJECT LEADER:	PORTALUP
DESIGNED BY:	
R.O.W. SHEET:	15 OF 17 SHEETS
PLOT DATE:	30-MAR-2005
DRAWN BY:	L. BULLOCK
CHECKED BY:	
	SHEET 23 OF 128

END ROW PROJECT
 BRS 0169(6)
 STA. 5+340.000 7.544M (24.75') LT.

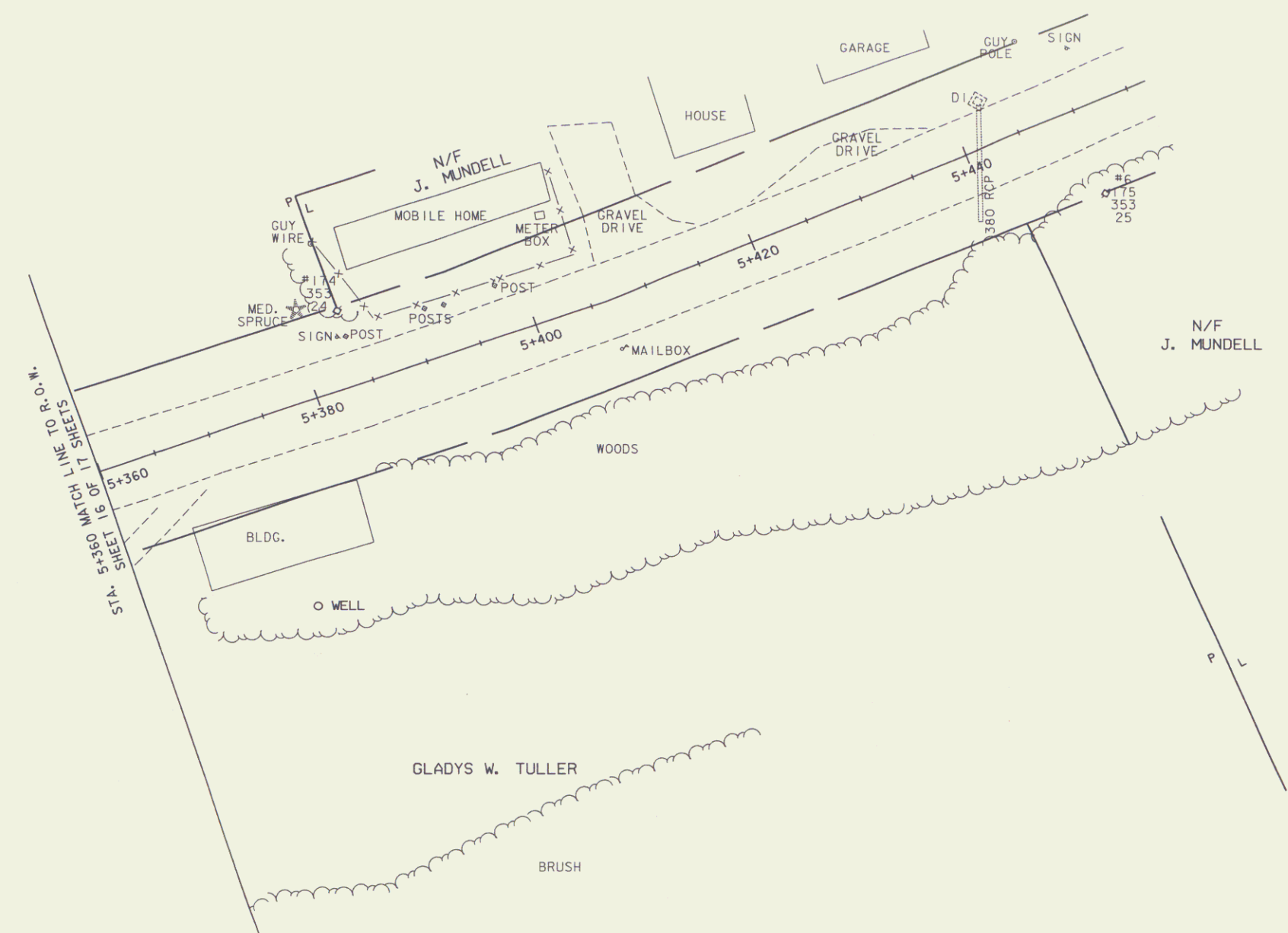
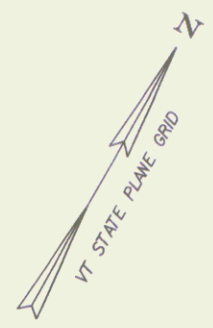


FOR EROSION CONTROL DETAILS
 AND NEW DRAINAGE NOTES
 SEE R.O.W. SHEET 11 OF 17

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.



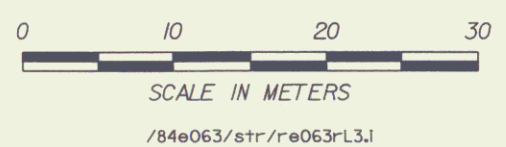
PROJECT NAME:	TUNBRIDGE	PLOT DATE:	30-MAR-2005
PROJECT NUMBER:	BRS 0169(6)	DRAWN BY:	L. BULLOCK
FILE NAME:	/84e063/str/ee063bdr.dgn	DESIGNED BY:	CHECKED BY:
R.O.W. SHEET:	16 OF 17 SHEETS		SHEET 24 OF 128



STA. 5+360 MATCH LINE TO R.O.W.
SHEET 16 OF 17 SHEETS

FOR EROSION CONTROL DETAILS
AND NEW DRAINAGE NOTES
SEE R.O.W. SHEET 11 OF 17

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.



PROJECT NAME:	TUNBRIDGE	PLOT DATE:	30-MAR-2005
PROJECT NUMBER:	BRS 0169(6)	DRAWN BY:	L. BULLOCK
FILE NAME:	/84e063/str/se063bdr.dgn	DESIGNED BY:	CHECKED BY:
R.O.W. SHEET:	17 OF 17 SHEETS		SHEET 25 OF 128