

SEE SHEET 2 FOR
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STATE OF VERMONT AGENCY OF TRANSPORTATION



R.O.W. PLANS

PROPOSED IMPROVEMENT BRIDGE PROJECT

TOWN OF EAST MONTPELIER

COUNTY OF WASHINGTON

ROUTE NO : U.S. ROUTE 2 PRINCIPAL ARTERIAL BRIDGE NO: 74

PROJECT LOCATION : BEGINNING ON U.S. ROUTE 2 AT A POINT 1.835 KILOMETERS EASTERLY OF THE INTERSECTION OF VT. ROUTE 14 N. AND U.S. ROUTE 2 AND EXTENDING EASTERLY ALONG U.S. ROUTE 2 0.125 KILOMETERS.

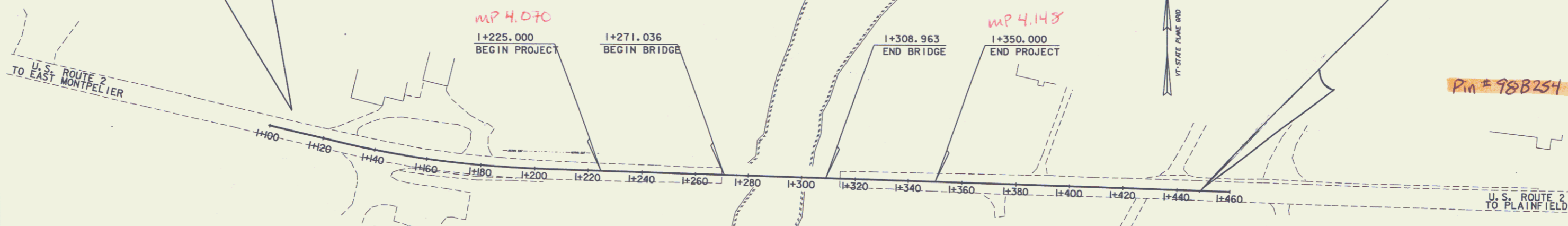
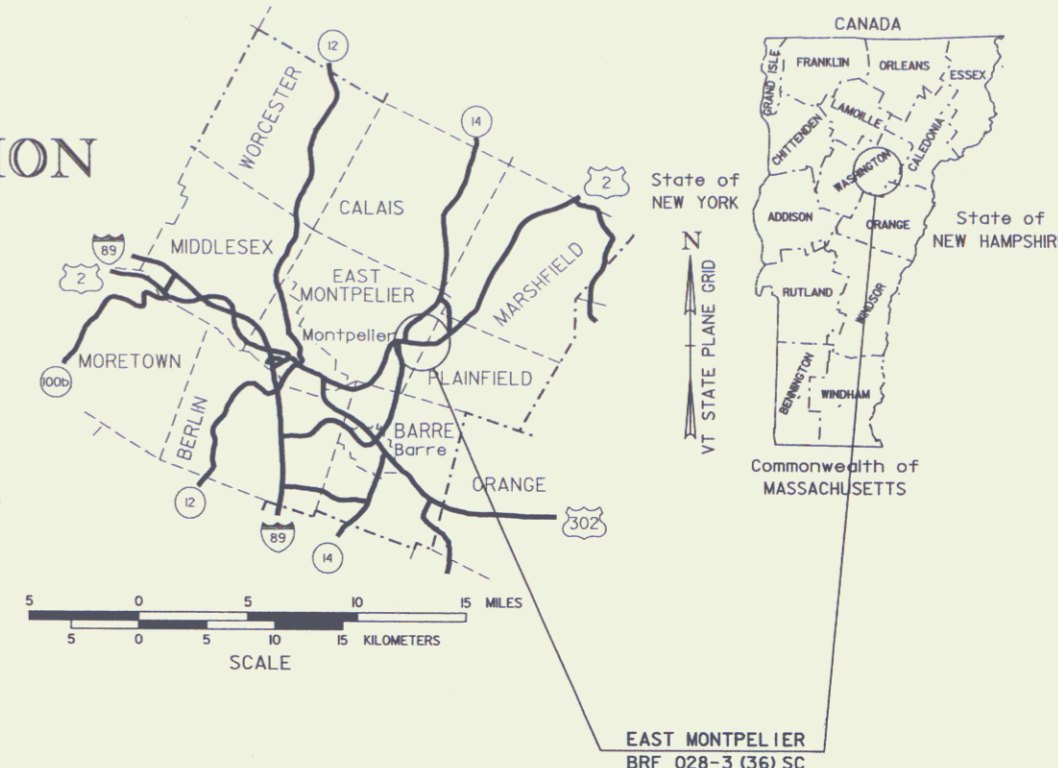
PROJECT DESCRIPTION : REPLACEMENT OF EXISTING BRIDGE ON EXISTING ALIGNMENT ALONG WITH NECESSARY APPROACH WORK.

LENGTH OF STRUCTURE : 37.927 METERS = 0.0379 KILOMETERS
LENGTH OF ROADWAY : 87.073 METERS = 0.0870 KILOMETERS
LENGTH OF PROJECT : 125.000 METERS = 0.1250 KILOMETERS

LENGTH OF R.O.W. PROJECT = 341.65 METERS (1121') = 0.342 KILOMETERS (0.21 MILES)

BEGIN R.O.W. PROJECT
BRF 028-3(36)SC STA. I+106.66
7.54M (24.75') LT.

END R.O.W. PROJECT
BRF 028-3(36)SC
STA. I+448.31 CL

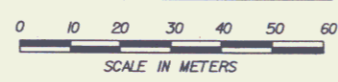


CONVENTIONAL SYMBOLS	
COUNTY LINE	--- --- ---
TOWN LINE	--- --- ---
LIMITS OF ACCESS	--- --- ---
POINT OF ACCESS	--- --- ---
FENCE LINE	--- --- ---
STONE WALL	--- --- ---
TRAVELED WAY	--- --- ---
GUARD RAIL	--- --- ---
RAILROAD	--- --- ---
SURVEY LINE	--- --- ---
CULVERT	--- --- ---
POWER POLE	--- ---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

ROW AGENT: BOB FERLAZO
SURVEYED BY : VT AOT
SURVEYED DATE : 7/3/96, 10/8/98 & 10/19/98
DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (96)

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.



THE FOLLOWING RIGHT OF WAY PLAN SHEETS PERTAIN DIRECTLY TO THE ACQUISITION OF LAND AND RIGHTS NECESSARY TO CONSTRUCT THIS TRANSPORTATION PROJECT. SHEETS REGARDING SPECIFIC CONSTRUCTION DETAILS ARE NOT INCLUDED IN THIS RECORDED SET.

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

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.
/98b254/stf/sb2541L.dgn sb2541L 07-JAN-2008

APPROVED *Paul J. Stewart* DATE 1-18-08
Director of Program Development

APPROVED *Robert Ch. Wood* DATE 2/13/08
Chief of Right of Way

EAST MONTPELIER
BRF 028-3(36) SC
R. O. W. SHEET 1 OF 20 SHEETS

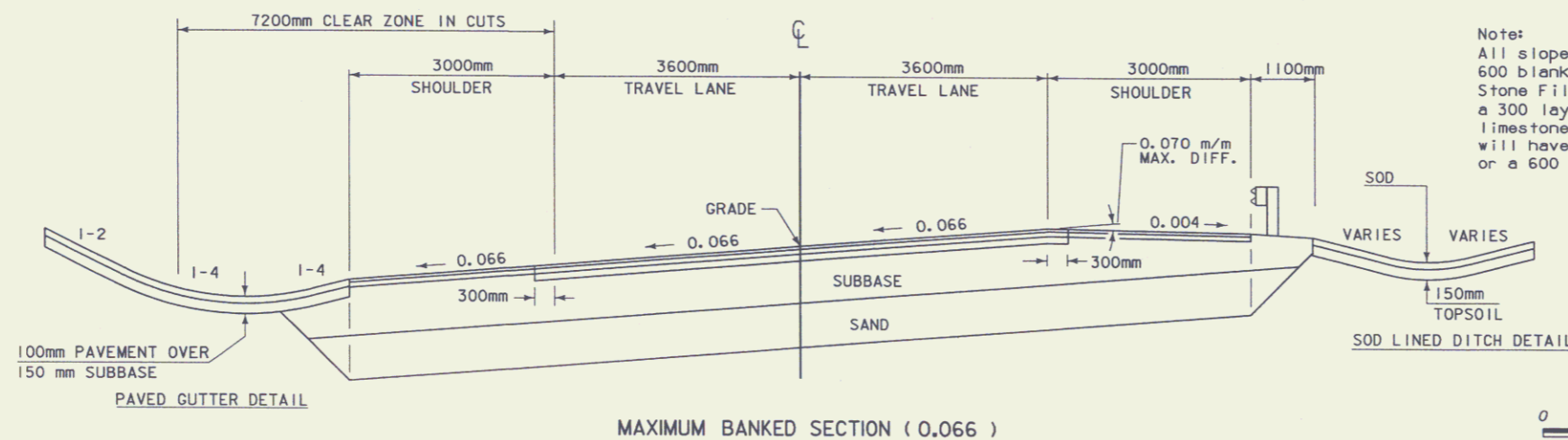
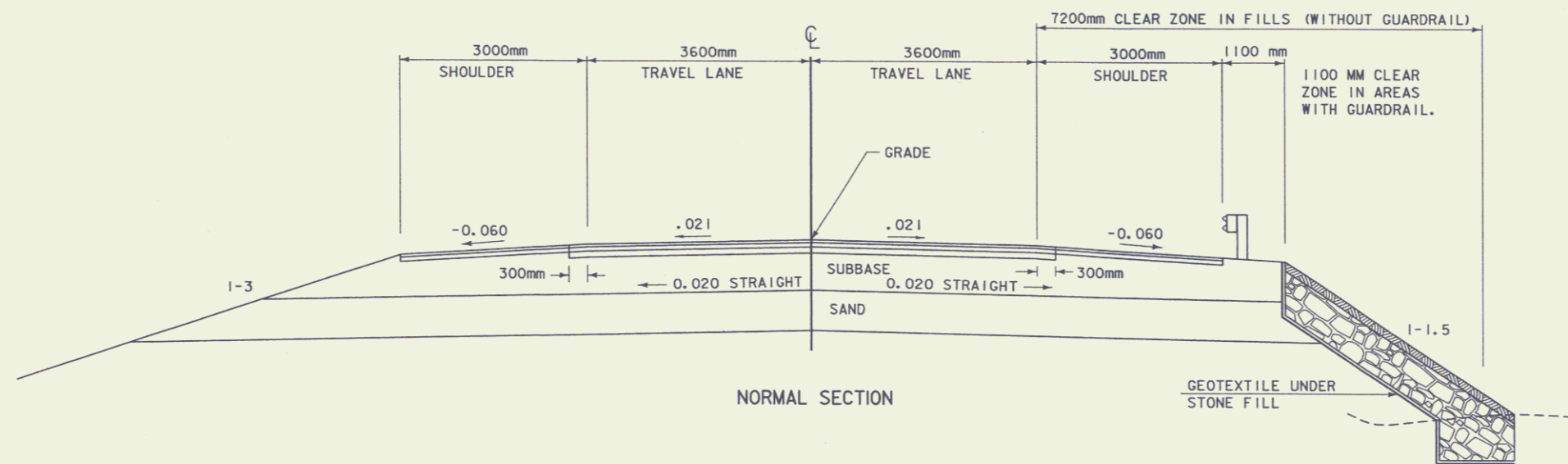
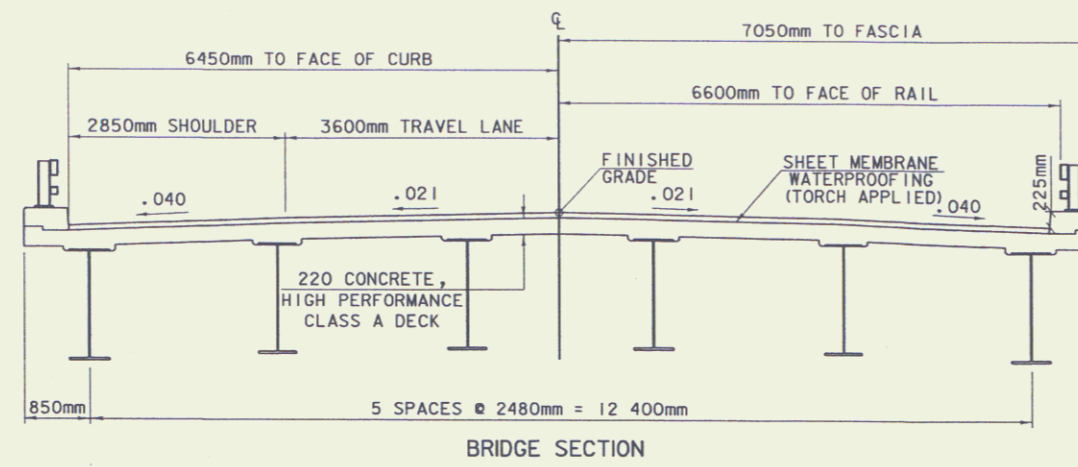
TYPICAL SECTIONS

MATERIAL TOLERANCES	
PAVEMENT (TOTAL DEPTH)	±5 mm
SUBBASE	±30 mm
SAND	±30 mm

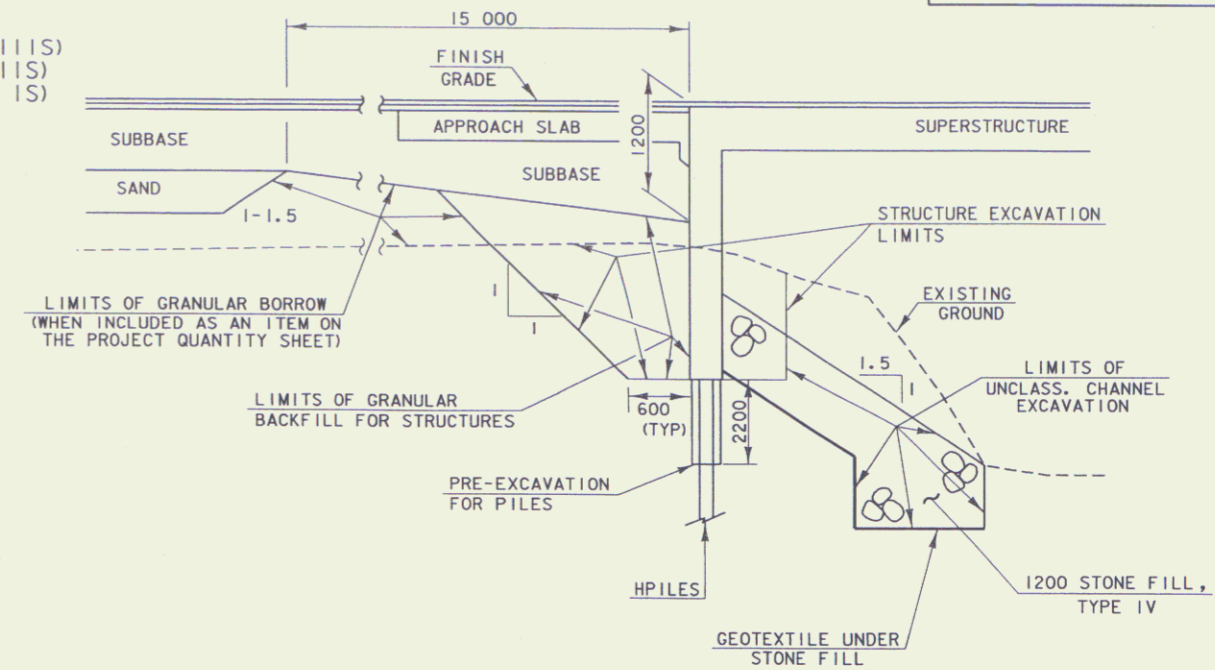
45mm SUPERPAVE BITUMINOUS CONCRETE PAVEMENT (TYPE III S)
 70mm SUPERPAVE BITUMINOUS CONCRETE PAVEMENT (TYPE IIS)
 150mm SUPERPAVE BITUMINOUS CONCRETE PAVEMENT (TYPE IS)
 760 mm DENSE GRADED CRUSHED STONE
 410mm SAND BORROW

SHOULDERS: 115mm SUPERPAVE BITUMINOUS CONCRETE PAVEMENT
 (45mm TYPE III OVER 70 mm TYPE IIS)

BRIDGE DECK: 80mm SUPERPAVE BITUMINOUS CONCRETE PAVEMENT
 (45 mm TYPE III S OVER 35mm TYPE IVS)

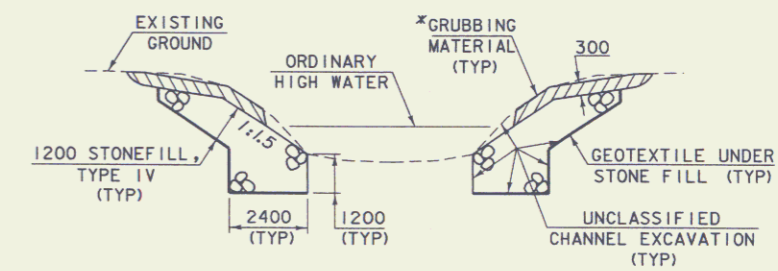


100mm PAVEMENT OVER
 150 mm SUBBASE
 PAVED GUTTER DETAIL



TYPICAL ABUTMENT SECTION
 NOT TO SCALE

- NOTES:
- MEASUREMENT OF STRUCTURE EXCAVATION SHALL BE MADE BELOW THE LOWER LIMITS OF COMMON EXCAVATION. MEASUREMENT FOR UNCLASSIFIED CHANNEL EXCAVATION SHALL BE MADE OUTSIDE OF THE LIMITS OF STRUCTURE EXCAVATION.
 - THE QUANTITY TO BE MEASURED FOR PAYMENT FOR THE ITEM 204.25 "STRUCTURE EXCAVATION" SHALL BE AS FOLLOWS:
 - VERTICALLY: AS DEFINED IN THE VAOT STANDARD SPECIFICATIONS 204.13 (b), EXCEPT AS NOTED IN NOTE 1.
 - HORIZONTALLY: BETWEEN A VERTICAL PLANE 600 mm OUTSIDE OF THE NEAT LINE OF THE FRONT OF THE ABUTMENT (CHANNEL SIDE) AND AN INCLINED PLANE COMMENCING FROM THE BOTTOM ELEVATION OF THE EXCAVATION OF A POINT 600 mm OUTSIDE THE NEAT LINE OF THE BACK OF THE ABUTMENT (APPROACH SIDE), AND EXTENDING 45° FROM HORIZONTAL.
 - ACTUAL EXCAVATION SHALL BE DETERMINED BY THE CONTRACTOR. HOWEVER, ONLY THE EXCAVATION BETWEEN THE LIMITS DESCRIBED IN NOTES 1 AND 2 WILL BE PAID FOR UNDER THE ITEM 204.25 "STRUCTURE EXCAVATION."



TYPICAL CHANNEL SECTION

(NTS)
 *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.

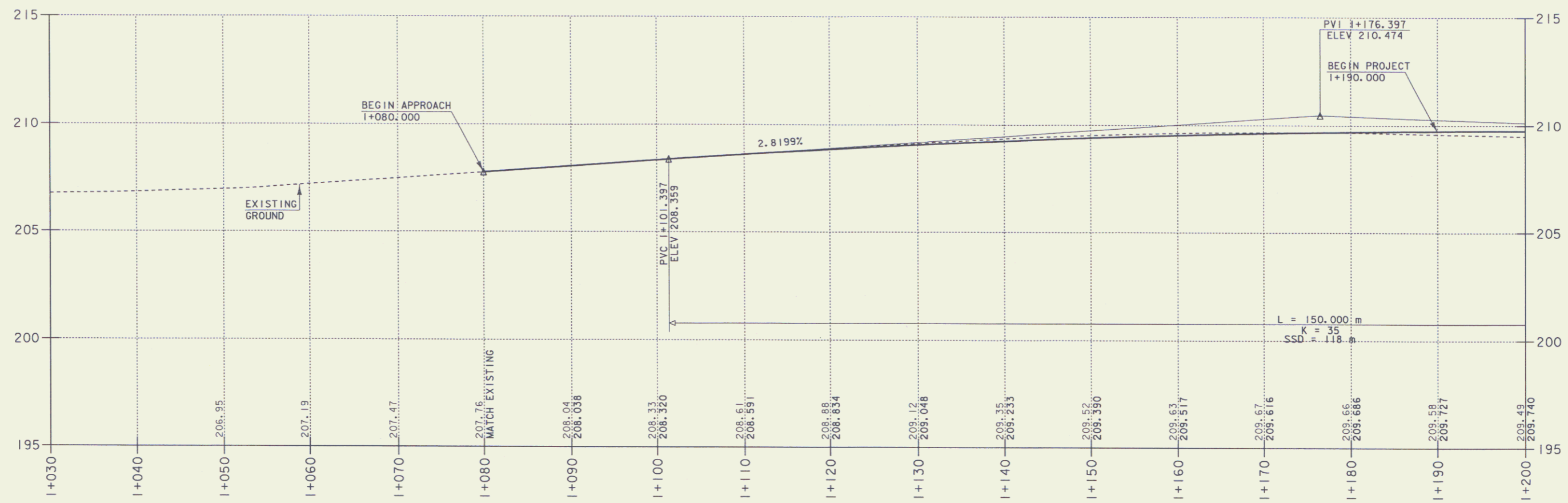
Note:
 All slopes steeper than 1-2 shall have a 600 blanket of Stone Fill, Type II. The Stone Fill blanket shall be covered with a 300 layer of grubbing material, fertilized, limed, seeded and mulched. Ditches will have a 300 blanket of Stone Fill, Type I, or a 600 blanket of Stone Fill, Type II.

TYPICAL SECTIONS

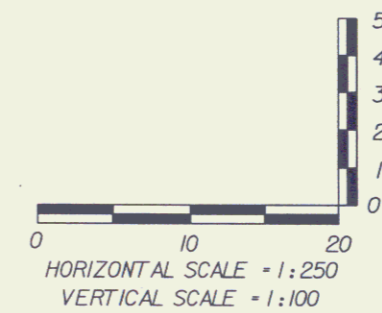
PROJECT NAME: EAST MONTPELIER
 PROJECT NUMBER: BRF 028-3(36)SC

FILE NAME: /str5/98b254/sb2541yp.dgn PLOT DATE: 07-JAN-2008
 PROJECT LEADER: C. Keller DRAWN BY: G. Shangraw
 DESIGNED BY: G. Shangraw CHECKED BY:
 sb2541yp.i R.O.W. SHEET 2 OF 20 SHEETS



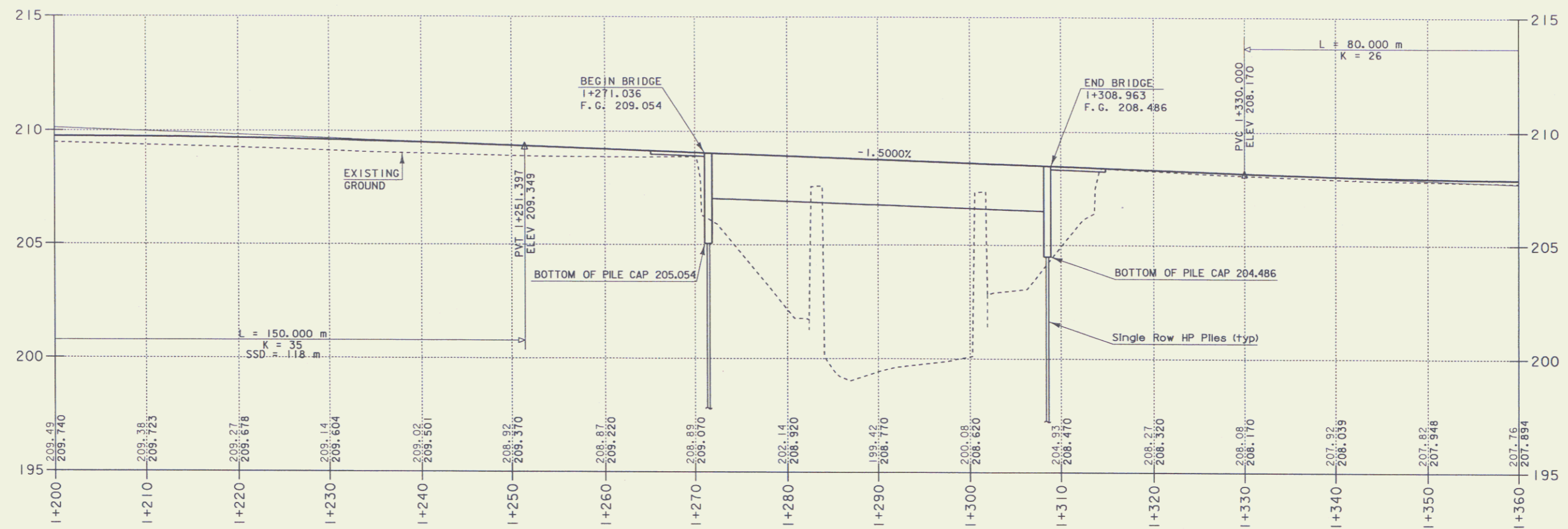


EXISTING GRADES SHOWN TO TWO DECIMAL PLACES
 PROPOSED GRADES SHOWN TO THREE DECIMAL PLACES

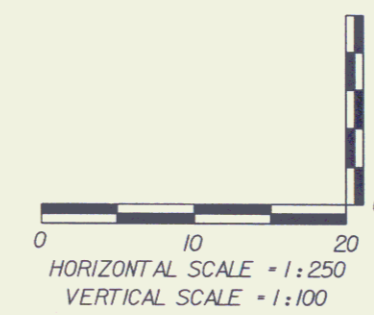


PROFILE SHEET

PROJECT NAME:	EAST MONTPELIER	
PROJECT NUMBER:	BRF 028-3 (36) SC	
FILE NAME:	/s/r/5/98b254/sb254bdr.dgn	PLOT DATE: 07-JAN-2008
PROJECT LEADER:	C. Keller	DRAWN BY: G. Shangraw
DESIGNED BY:	G. Shangraw	CHECKED BY:
sb254pr1.1		R.O.W. SHEET 3 OF 20 SHEETS

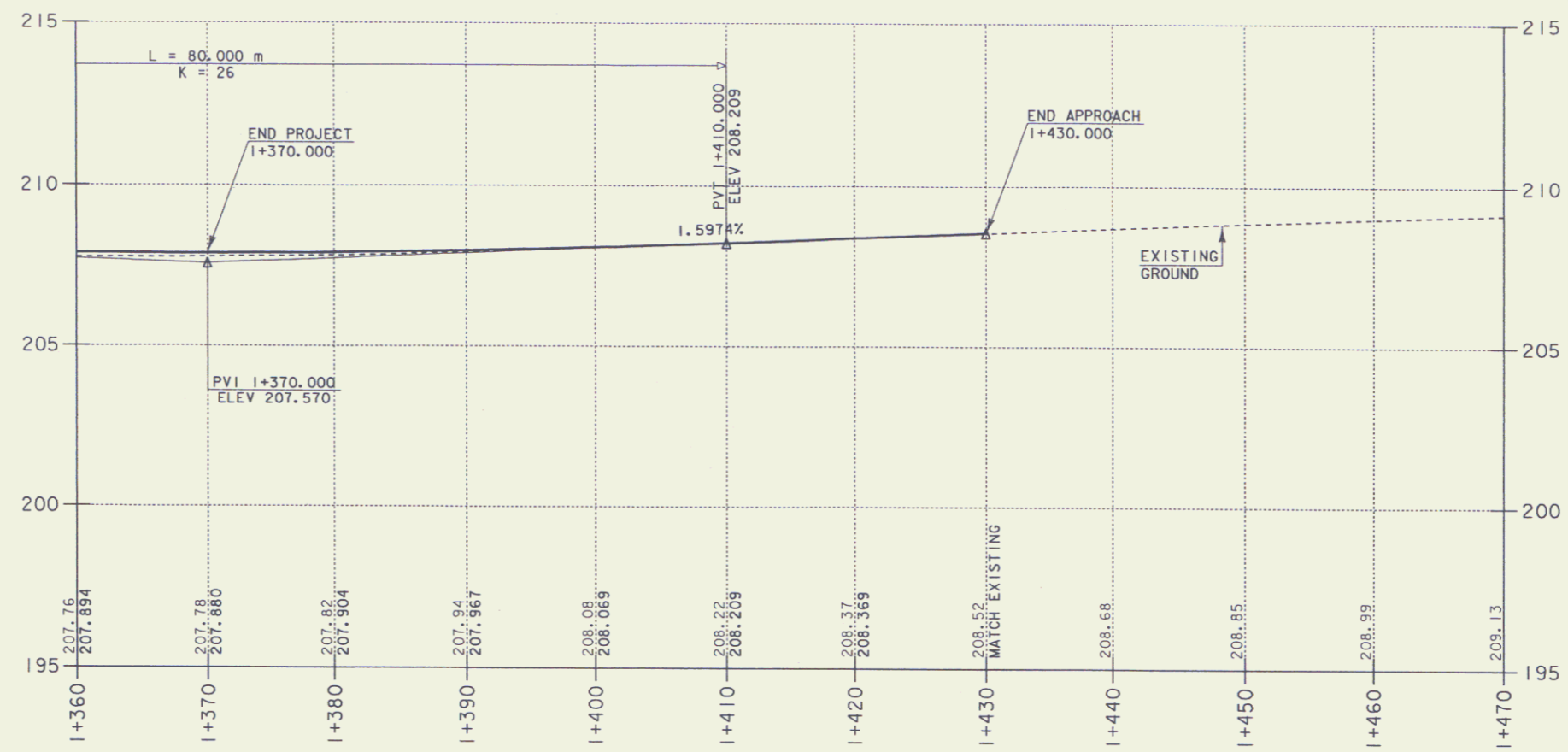


EXISTING GRADES SHOWN TO TWO DECIMAL PLACES
 PROPOSED GRADES SHOWN TO THREE DECIMAL PLACES

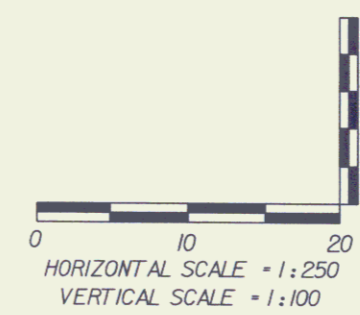


PROFILE SHEET

PROJECT NAME:	EAST MONTPELIER	PLOT DATE:	07-JAN-2008
PROJECT NUMBER:	BRF 028-3 (36) SC	DRAWN BY:	G. Shengraw
FILE NAME:	/str5/98b254/sb254bdr.dgn	DESIGNED BY:	G. Shengraw
PROJECT LEADER:	C. Keller	CHECKED BY:	
DESIGNED BY:	G. Shengraw	ROW SHEET:	4 OF 20 SHEETS

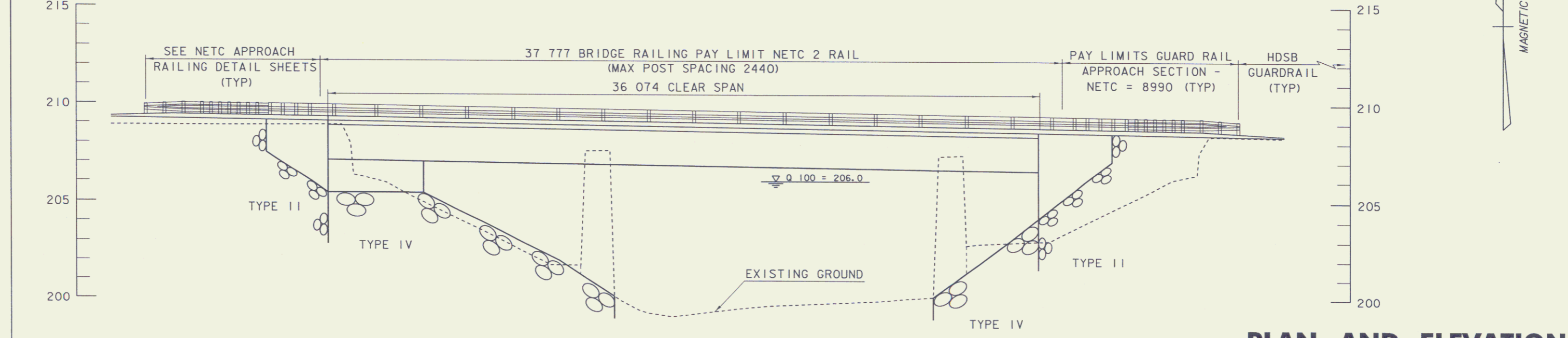
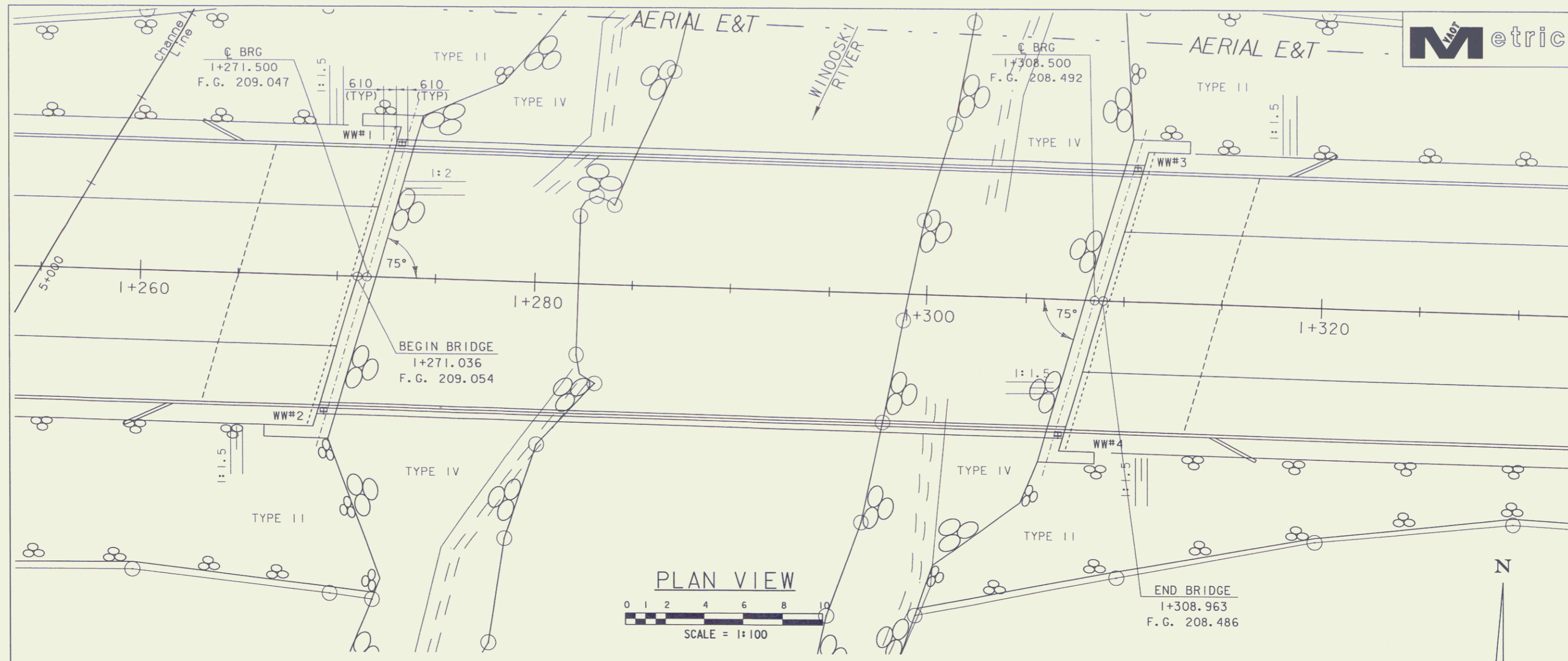


EXISTING GRADES SHOWN TO TWO DECIMAL PLACES.
 PROPOSED GRADES SHOWN TO THREE DECIMAL PLACES



PROFILE SHEET

PROJECT NAME:	EAST MONTEPELIER
PROJECT NUMBER:	BRF 028-3 (36) SC
FILE NAME: /str5/98b254/sb254bdr.dgn	PLOT DATE: 07-JAN-2008
PROJECT LEADER: C. Keller	DRAWN BY: G. Shangraw
DESIGNED BY: G. Shangraw	CHECKED BY:
sb254pr3.i	ROW SHEET 5 OF 20 SHEETS



PLAN AND ELEVATION

PROJECT NAME: EAST MONTPELIER	PLOT DATE: 07-JAN-2008
PROJECT NUMBER: BRF 028-3(36)SC	DRAWN BY: J. REED
FILE NAME: /STR5/98b254/sb254pe.dgn	CHECKED BY: T. SUMNER
PROJECT LEADER: C. KELLER	DESIGNED BY: J. REED
ROW SHEET: 6 OF 20 SHEETS	

PRELIMINARY INFORMATION SHEET



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43. DR/EWAYS
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- 45-51. DETOUR CROSS SECTIONS
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FINAL HYDRAULIC REPORT

HYDROLOGIC DATA

Date: April 2004

DRAINAGE AREA: 432 sq. km
 CHARACTER OF TERRAIN: Wide valley at site, with a hilly to mountainous watershed.
 STREAM CHARACTERISTICS: Incised, alluvial and sinuous channel with steep eroding banks.
 NATURE OF STREAMBED: Mostly sand and silt. See boring logs.

PEAK FLOW DATA

Q 2.33 = 95 cms	Q 50 = 327 cms
Q 10 = 200 cms	Q 100 = 385 cms
Q 25 = 269 cms	Q 500 = 573 cms

DATE OF FLOOD OF RECORD: November 1927
 ESTIMATED DISCHARGE: Unknown
 WATER SURFACE ELEV.: Approximately 207.0 m, per record plans.
 NATURAL STREAM VELOCITY: @ Q50 = 1.7 mps
 ICE CONDITIONS: Moderate to heavy
 DEBRIS: Moderate
 DOES THE STREAM REACH MAXIMUM HIGHWATER ELEV. RAPIDLY? Yes
 IS ORDINARY RISE RAPID? Yes
 IS STAGE AFFECTED BY UPSTREAM OR DOWNSTREAM CONDITIONS? Yes
 IF YES, DESCRIBE: Upstream ponds and reservoirs provide storage and reduce peak flood flows.

WATERSHED STORAGE: 3.0% HEADWATERS:
 UNIFORM: X
 IMMEDIATELY ABOVE SITE:

EXISTING STRUCTURE INFORMATION

STRUCTURE TYPE: 3 span concrete T-beam bridge
 YEAR BUILT: 1930
 CLEAR SPANNORMAL TO STREAM: 11.7 m + 16.2 m + 11.7 m = 39.6 m total
 VERTICAL CLEARANCE ABOVE STREAMBED: 8.0 m (209.4m - 199.4m)
 WATERWAY OF FULL OPENING: 205 sq. m
 DISPOSITION OF STRUCTURE: Remove and replace
 TYPE OF MATERIAL UNDER SUBSTRUCTURE: See boring logs.

WATER SURFACE ELEVATIONS AT:

Q2.33 = 202.4 m	VELOCITY = 2.9 mps
Q10 = 204.6 m	2.3 mps
Q25 = 205.1 m	2.6 mps
Q50 = 205.5 m	2.9 mps
Q100 = 205.9 m	3.1 mps

LONG TERM STREAMBED CHANGES: There is some scour through the bridge area and at the piers. Sheet piling has been placed around one pier due to scour problems.

IS THE ROADWAY OVERTOPPED BELOW Q100: No
 FREQUENCY: Above Q100
 RELIEF ELEVATION: 207.8 m, on the easterly approach.
 DISCHARGE OVER ROAD @ Q100: None

UPSTREAM STRUCTURE

TOWN: East Montpelier DISTANCE: 1.8 km
 HIGHWAY #: T.H. 30 STRUCTURE #: CB 22
 CLEAR SPAN: 17.7 m CLEAR HEIGHT: 4.4 m
 YEAR BUILT: 1951 FULL WATERWAY: 77 sq. m
 STRUCTURE TYPE: Single span covered bridge.

DOWNSTREAM STRUCTURE

TOWN: East Montpelier DISTANCE: 4.0 km
 HIGHWAY #: VT 14 STRUCTURE #: 68
 CLEAR SPAN: 36.3 m CLEAR HEIGHT: 6.0 m
 YEAR BUILT: 1936 FULL WATERWAY: 146 sq. m
 STRUCTURE TYPE: Two span steel beam bridge.

LOAD FACTOR - LOAD RATING (METRIC TONS)

LOADING LEVELS	TRUCK					
	M	MS	3S2	6 AXLE	3A. STR.	4A. STR. 6A. SEMI
INVENTORY						
POSTED						
OPERATING						

COMMENTS:

TRAFFIC DATA

YEAR	ADT	DHV	% D	% T	ADTT
2005	8400	1000	60	4	480
2025	11100	1200	60	4	740

20 year ESAL for flexible pavement from 2005 to 2025 : 5,300,000
 40 year ESAL for flexible pavement from 2005 to 2045 : 13,889,000
 Design Speed: 80 km/h

PROPOSED STRUCTURE

STRUCTURE TYPE: Single span plate girder bridge.
 CLEAR SPANNORMAL TO STREAM: 35.0 m
 VERTICAL CLEARANCE ABOVE STREAMBED: 7.5 m (206.9 m - 199.4 m)
 WATERWAY OF FULL OPENING: 198 sq. m

WATER SURFACE ELEVATIONS AT:

Q2.33 = 202.2 m	VELOCITY = 2.3 mps
Q10 = 204.4 m	1.9 mps
Q25 = 204.9 m	2.2 mps
Q50 = 205.3 m	2.4 mps
Q100 = 205.7 m	2.7 mps

IS THE ROADWAY OVERTOPPED BELOW Q100: No
 FREQUENCY: Above Q100
 RELIEF ELEVATION: 207.9 m, on the easterly approach.
 DISCHARGE OVER ROAD @ Q100: None

AVERAGE LOW ELEVATION OF SUPERSTRUCTURE: 206.9 m
 VERTICAL CLEARANCE: @ Q100 = 1.2 m
 SCOUR: Calculated contraction scour depths are 0.5 m at Q100 and 1.0 m at Q500.
 Abutments will be founded on piles and protected with stone fill.
 REQUIRED CHANNEL PROTECTION: Stone Fill, Type IV

PERMIT INFORMATION

AVERAGE DAILY FLOW: 5 cms DEPTH OR ELEVATION:
 ORDINARY LOW WATER: 3 cms Elevation 200.8 m
 ORDINARY HIGH WATER: 40 cms Elevation 202.0 m

TEMPORARY BRIDGE REQUIREMENTS

STRUCTURE TYPE: Single span bridge, downstream of existing bridge.*
 CLEAR SPAN NORMAL TO STREAM: 34 m minimum**
 VERTICAL CLEARANCE ABOVE STREAMBED: Bottom of beam elev. 205.3m min.
 WATERWAY AREA OF FULL OPENING: 140 sq. m minimum

ADDITIONAL INFORMATION

*The temporary bridge should be designed to resist high water and ice forces.
 The superstructure should be anchored and vented.
 **The channel banks are steep and potentially unstable. The abutments should be far enough back from the banks to not cause a bank failure and to ensure the stability of the abutments.

DESIGN CRITERIA

1. DESIGN LIVE LOAD AASHTO: MS 22.5
2. DESIGN SPAN: 37.0m
3. ALLOWABLE LOAD FOR SPREAD FOOTINGS ON SOIL: N/A ON LEDGE
4. ALLOWABLE LOAD FOR PILING: 310x125 TYPE ESTIMATED LENGTH: 32-34m
5. STRUCTURAL STEEL: AASHTO M270/M270 GRADE: 345W
6. REINFORCING STEEL GRADE: 420
7. CONCRETE, HIGH PERFORMANCE CLASS A f_c: 30 Mpa
 CONCRETE, HIGH PERFORMANCE CLASS B f_c: 25 Mpa
8. DESIGN SOIL UNIT WEIGHT: 22.00 kN/m³
9. DESIGN LOAD FOR SPREAD FOOTINGS ON SOIL:

TRAFFIC MAINTENANCE

1. IS TRAFFIC TO BE MAINTAINED? YES
- IF YES, ON EXISTING STRUCTURE? NO
- OR ON TEMPORARY BRIDGE? YES
- ONE OR TWO-WAY TRAVEL? TWO
2. TRAFFIC CONTROL SIGNALS REQUIRED? NO
3. ARE SIDEWALKS REQUIRED? NO
- IF SO, ON WHAT SIDE? N/A

PROJECT NAME: EAST MONTPELIER
 PROJECT NUMBER: BRF 028-3(36)SC

FILE NAME: /str508b254/sb254pl.xls PLOT DATE: 7/1/2004
 PROJECT MANAGER: C. KELLER DRAWN BY: J. GILMORE
 DESIGNED BY: T. SUMNER CHECKED BY: T. SUMNER
 PRELIMINARY INFORMATION SHEET SHEET 7 OF 20

GPS CONTROL POINTS

HVCTRL # 1
 Standard Disk Stamped
 Kingsbury
 NORTH = 197200.859
 EAST = 504349.789
 ELEV. = 208.606

To reach from the junction of VT route 14 and US route 2 in East Montpelier, proceed east on route 2 for 2.2 mi to the mark on the left.
 To reach from the intersection of US route 2 and VT route 14 in Plainfield go west along route 2 for 0.6mi to the mark on the right.
 The mark is set 2cm (.75in) below ground surface in the top of a 25cm (8in) diameter concrete monument. It is 14.6m (47.9ft) north of and about 0.5m (1.6ft) lower than the centerline of route 2, 37.1m (121.7ft) west of the centerline of a gravel field drive, 16.7m (54.8ft) southwest of a 90cm (3ft) pine, and 0.4m (1.3ft) south of a fiberglass witness post.

• Description provided by Vermont Agency of Transportation Geodetic Survey Unit

HVCTRL # 2
 Standard Disk Stamped
 Kingsbury Az Mk
 NORTH = 196957.866
 EAST = 503784.961
 ELEV. = 222.952

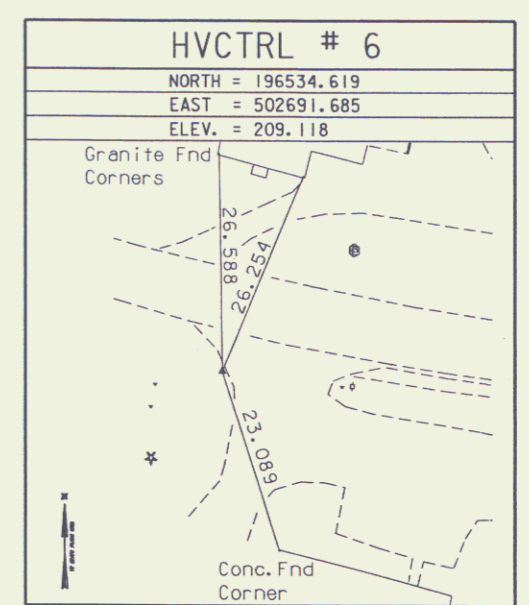
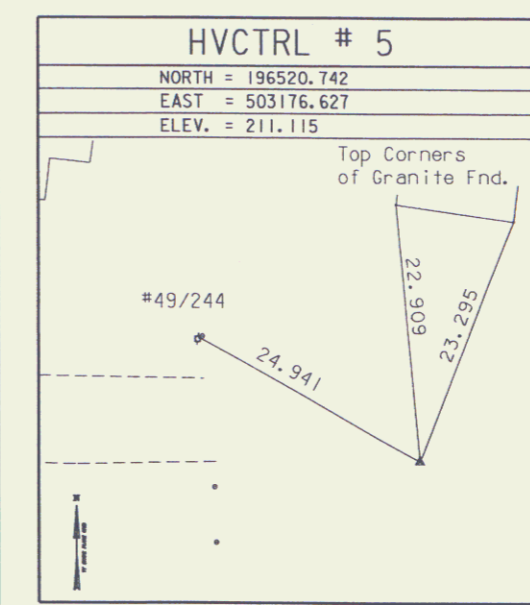
To reach from the junction of VT route 14 and US route 2 in East Montpelier, proceed east on route 2 for 1.85mi to the mark on the left, in a grass triangle formed by the drives leading to the Plain-Mont Cemetery.
 To reach from the intersection of US route 2 and VT route 14 in Plainfield go west along route 2 for 1.0mi to the mark on the right in a grass triangle formed by the paved drives leading to the Plain-Mont Cemetery.
 The mark is set flush with the ground surface in the top of a 30cm (1ft) diameter concrete monument. It is 22.8m (74.8ft) north of and about 1.5m (4.9ft) higher than the centerline of route 2, 7.3m (24.0ft) west of the most easterly paved entrance drive to the Plain-Mont Cemetery, 40.0m (131.2ft) southwest of center of entrance gate to cemetery, and 20.3m (66.6ft) east of a fiberglass witness post at the angle point in a chain link and woven wire fence.



BM# 7
 Standard Disk Stamped
 A96005
 NORTH = 196501.901
 EAST = 502755.485
 ELEV. = 209.409

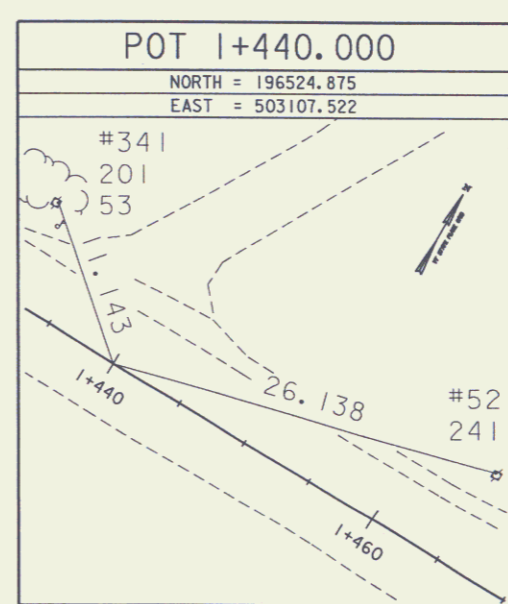
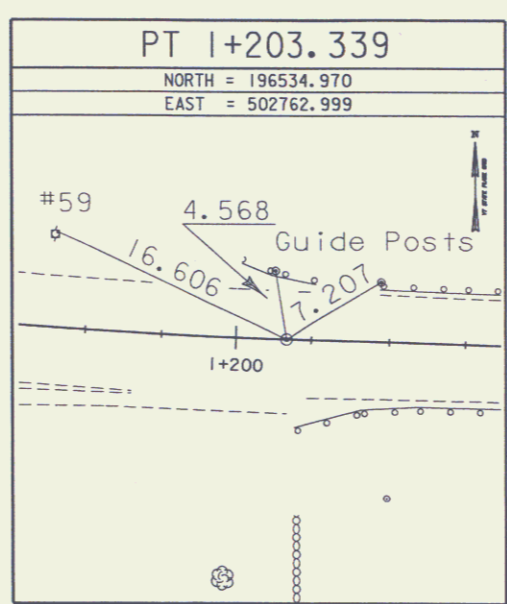
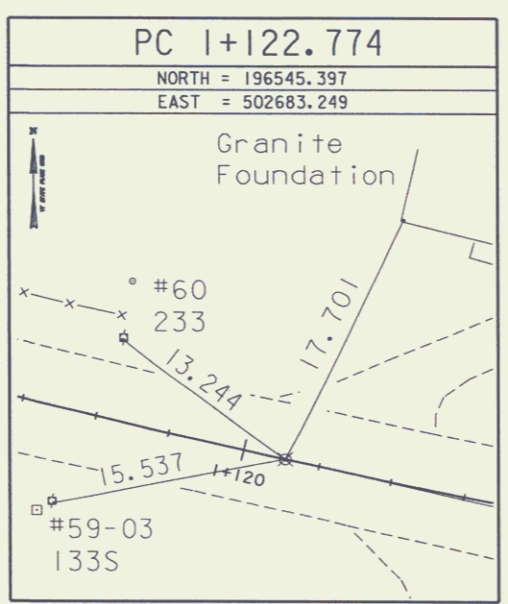
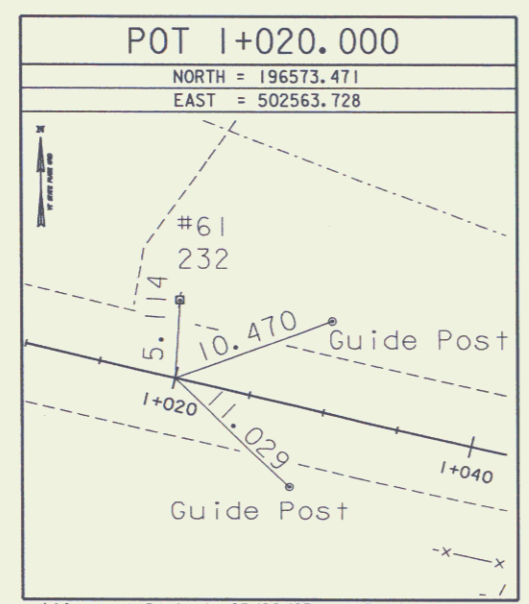
To reach from the intersection of U.S. route 2 and VT route 14 north in East Montpelier Village go east along route 2 for 1.1 mi to the Furniture Barn on the right and the mark on the right in a lawn east of the building. It is about 100m (328.1ft) west of the route 2 bridge over the Winooski River.
 To reach from the intersection of U.S. route 2 and VT route 214 in Plainfield, go west along route 2 for 1.7mi to the site of mark.
 The mark is set flush with ground surface in the top of a 30cm (1ft) diameter concrete monument. It is 33.0m (108.3ft) south of and about level with the centerline of route 2, 32.8m (107.6ft) east of the northeast foundation corner of the furniture barn, 24.9m (81.7ft) southeast of pole no. 59/01/234S, and 3.9m (12.8ft) west of a fiberglass witness post.
 NOTE: This point is intervisible with mark A96004.

TRAVERSE TIES



• Main Traverse Completed 10-12-99 by R. Gilman P.C. & R. Bullock & G. Hitchcock

ALIGNMENT TIES



• Alignment Staked 05/22/03 by R. Gilman P.C. & P. Winters & A. Somani

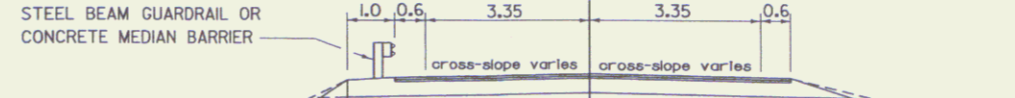
DATUM	
VERTICAL	NAVD 88
HORIZONTAL	NAD 83 (96)
ADJUSTMENT	Compass

TIE SHEET

PROJECT NAME:	EAST MONTPELIER
PROJECT NUMBER:	BRF 028-3 (36) SC
FILE NAME:	/s/r/5/98b254/sb254tie.dgn
PROJECT LEADER:	C. Keller
DESIGNED BY:	G. Shangraw
PLOT DATE:	07-JAN-2008
DRAWN BY:	R. BULLOCK
CHECKED BY:	
ROW SHEET	8 OF 20 SHEETS

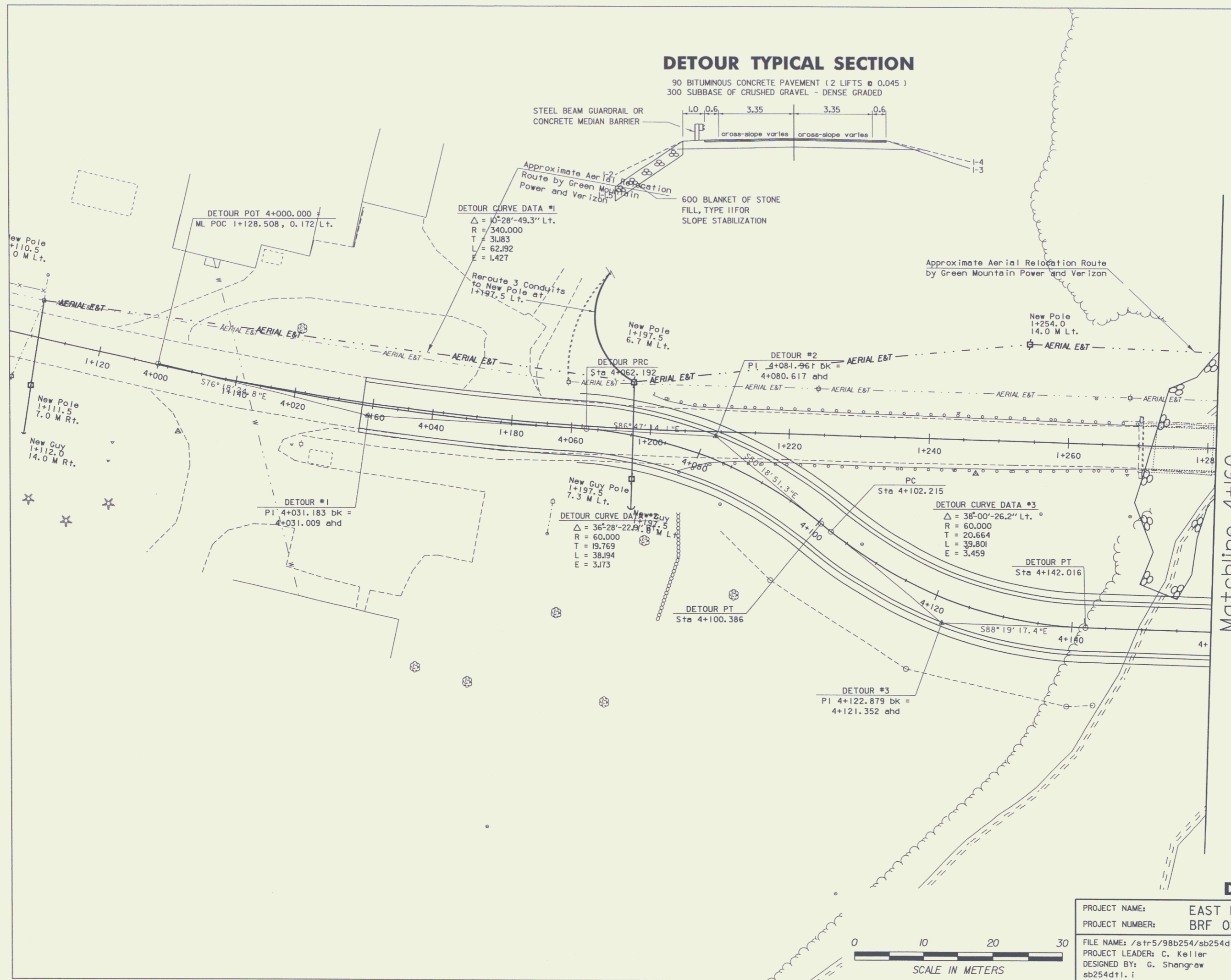
DETOUR TYPICAL SECTION

90 BITUMINOUS CONCRETE PAVEMENT (2 LIFTS @ 0.045)
300 SUBBASE OF CRUSHED GRAVEL - DENSE GRADED



STEEL BEAM GUARDRAIL OR CONCRETE MEDIAN BARRIER

600 BLANKET OF STONE FILL, TYPE II FOR SLOPE STABILIZATION

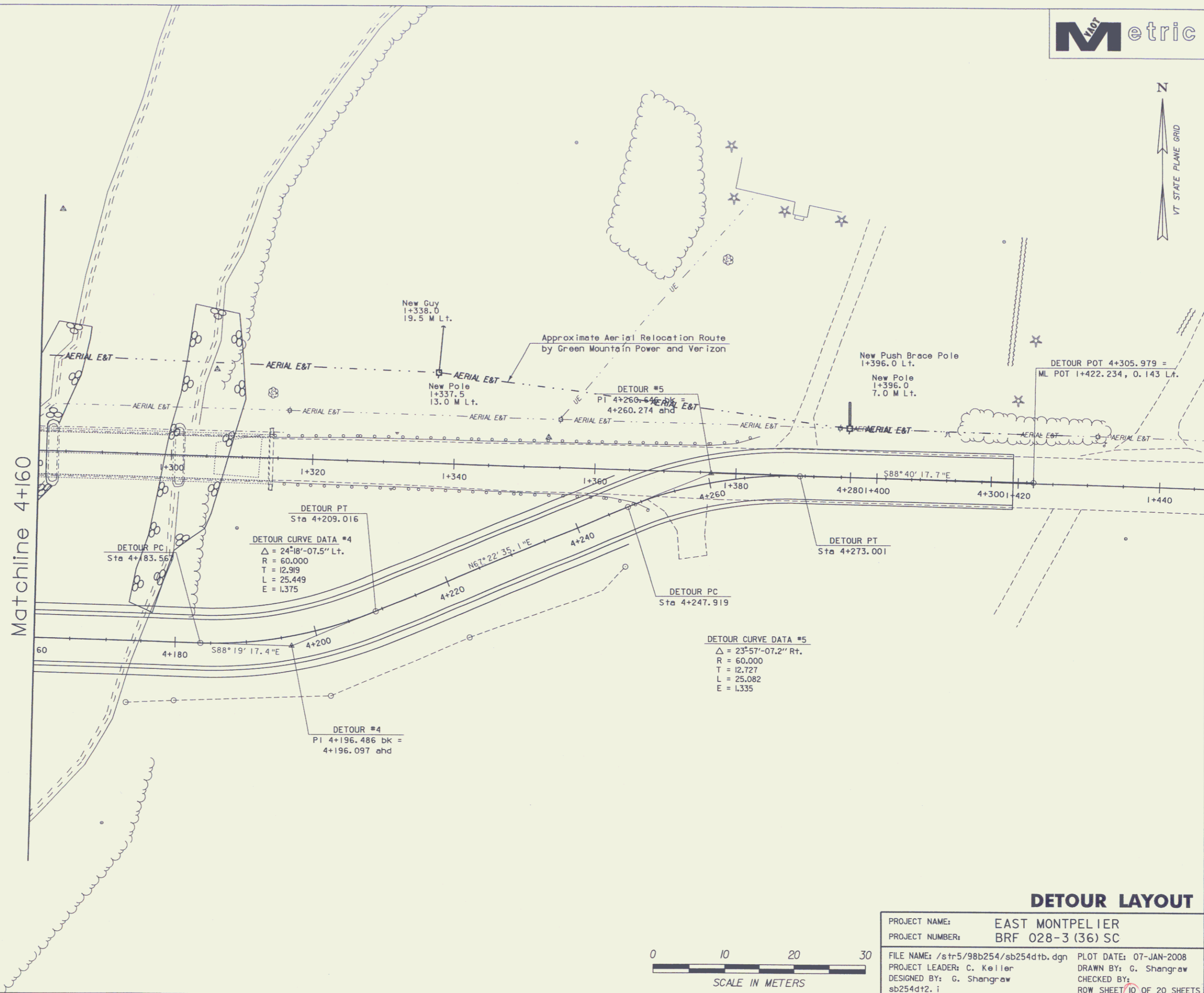


Matchline 4+160

DETOUR LAYOUT

PROJECT NAME:	EAST MONTPELIER
PROJECT NUMBER:	BRF 028-3 (36) SC
FILE NAME:	/s+r5/98b254/sb254d1b.dgn
PROJECT LEADER:	C. Keller
DESIGNED BY:	G. Shengraw
sb254d11.i	
PLOT DATE:	07-JAN-2008
DRAWN BY:	G. Shengraw
CHECKED BY:	
ROW SHEET:	9 OF 20 SHEETS





Matchline 4+160

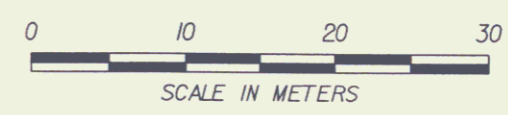
DETOUR CURVE DATA #4
 $\Delta = 24^{\circ}18'07.5''$ Lt.
 R = 60,000
 T = 12,919
 L = 25,449
 E = 1,375

DETOUR CURVE DATA #5
 $\Delta = 23^{\circ}57'07.2''$ Rt.
 R = 60,000
 T = 12,727
 L = 25,082
 E = 1,335

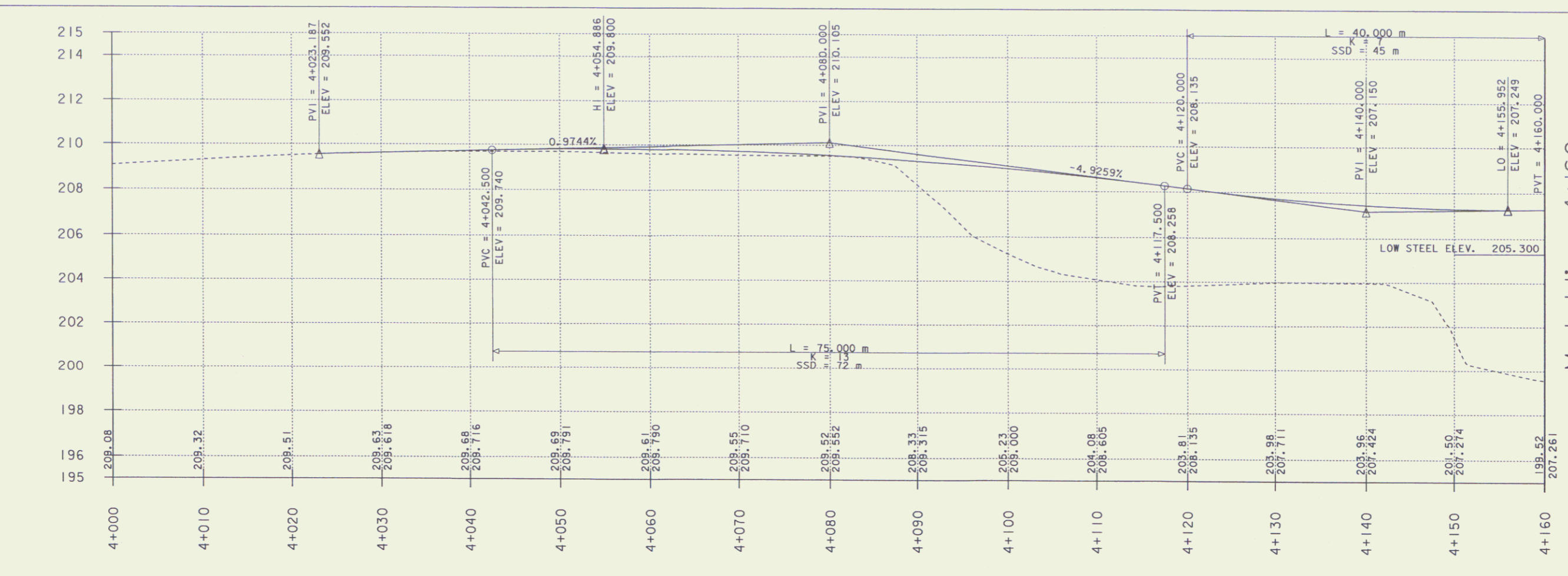
DETOUR #4
 PI 4+196.486 bk =
 4+196.097 ahd

DETOUR LAYOUT

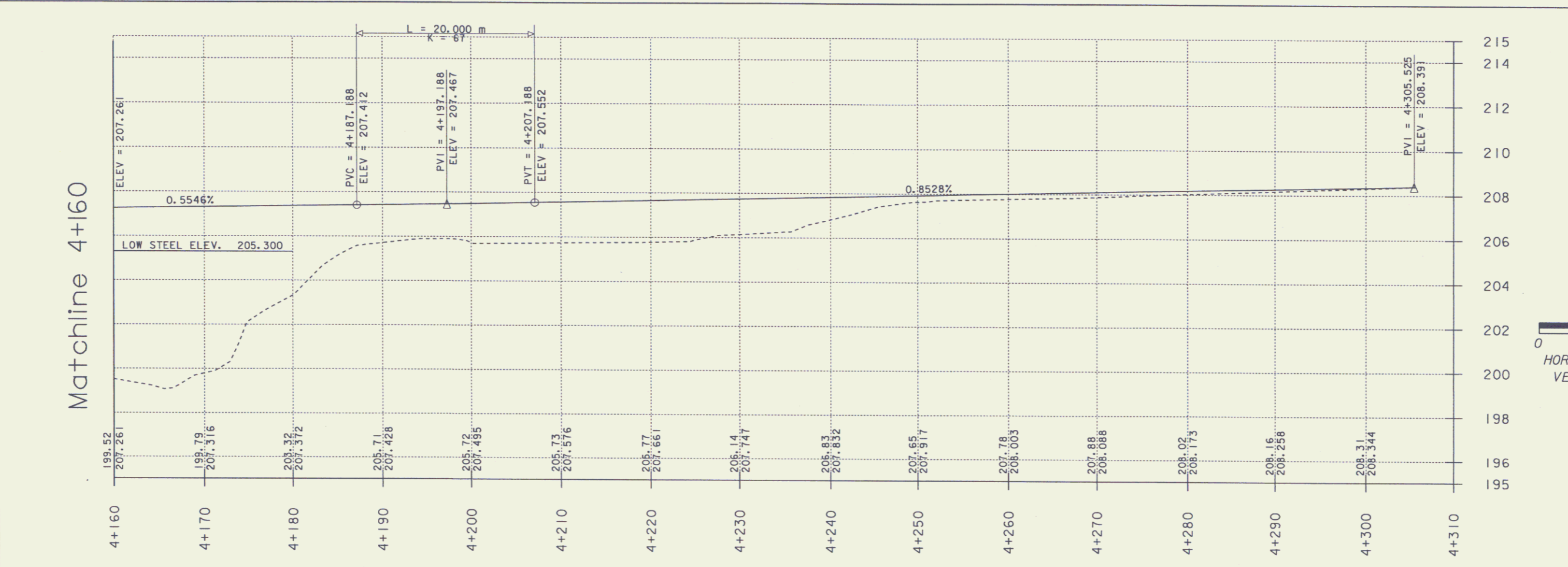
PROJECT NAME:	EAST MONTPELIER	PLOT DATE:	07-JAN-2008
PROJECT NUMBER:	BRF 028-3 (36) SC	DRAWN BY:	G. Shangraw
FILE NAME:	/str5/98b254/sb254dtb.dgn	CHECKED BY:	G. Shangraw
PROJECT LEADER:	C. Keller	ROW SHEET:	10 OF 20 SHEETS
DESIGNED BY:	G. Shangraw		



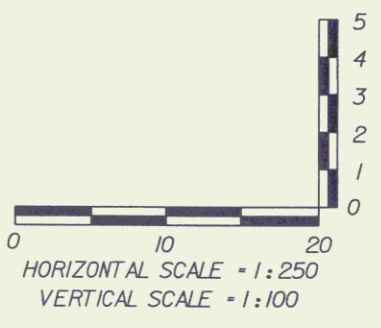
10



Matchline 4+160



Matchline 4+160

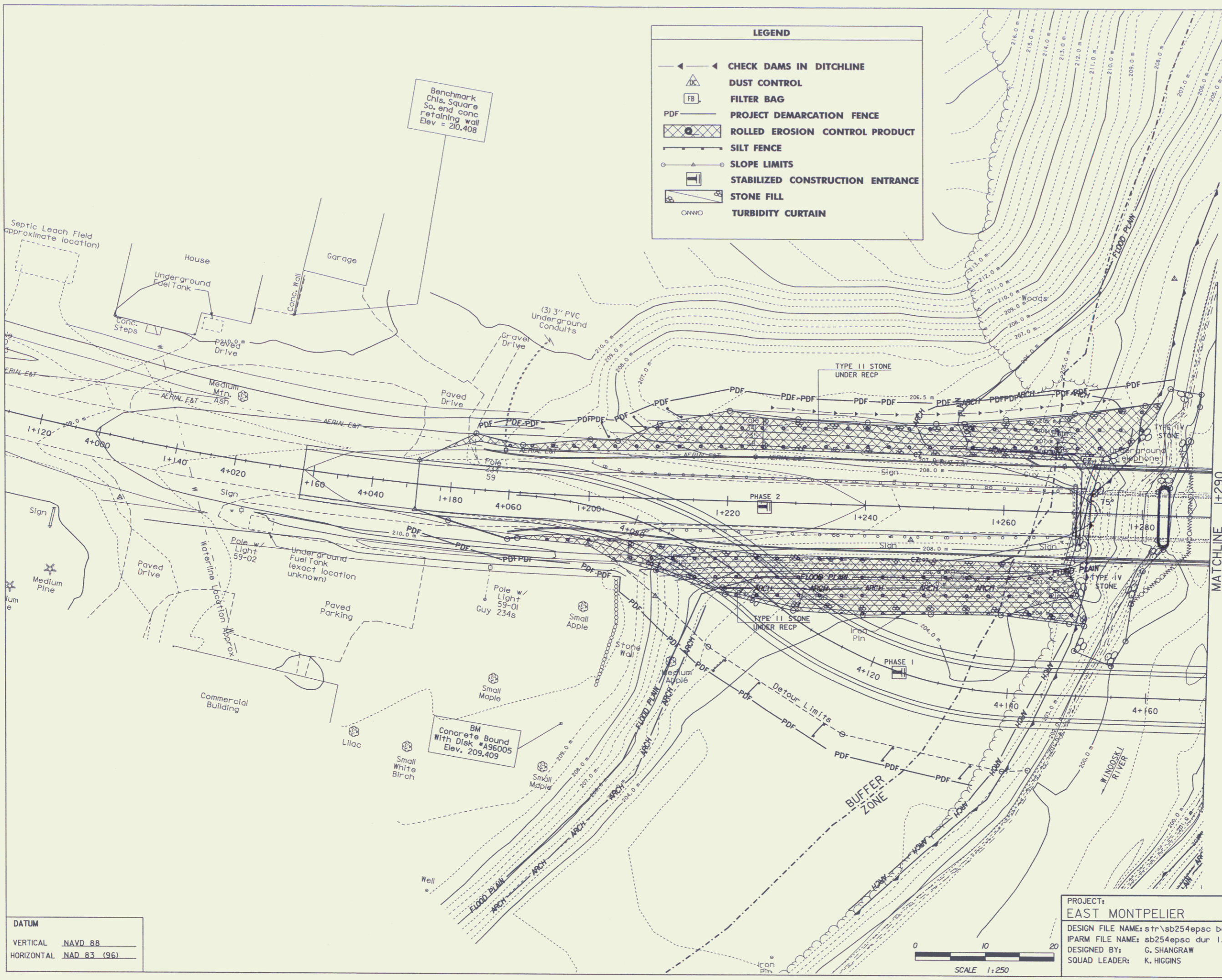


EXISTING GRADES SHOWN TO TWO DECIMAL PLACES
PROPOSED GRADES SHOWN TO THREE DECIMAL PLACES

PROJECT: EAST MONTPELIER	PROJECT NO. 1: BRF 028-3(36)
DESIGN FILE NAME: /98b254/str/sb254det.dgn	PLOT DATE: 07-JAN-2008
IPARM FILE NAME: sb254dpr.j	DRAWN BY: G. SHANGRAW
DESIGNED BY: G. SHANGRAW	CHCKFD BY: X. X
SQUAD LEADER: K. HIGGINS	ROW SHEET 11 OF 20 SHEETS
DETOUR PROFILE	

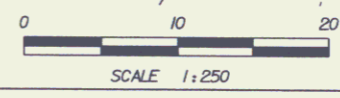


LEGEND	
	CHECK DAMS IN DITCHLINE
	DUST CONTROL
	FILTER BAG
	PROJECT DEMARCATION FENCE
	ROLLED EROSION CONTROL PRODUCT
	SILT FENCE
	SLOPE LIMITS
	STABILIZED CONSTRUCTION ENTRANCE
	STONE FILL
	TURBIDITY CURTAIN



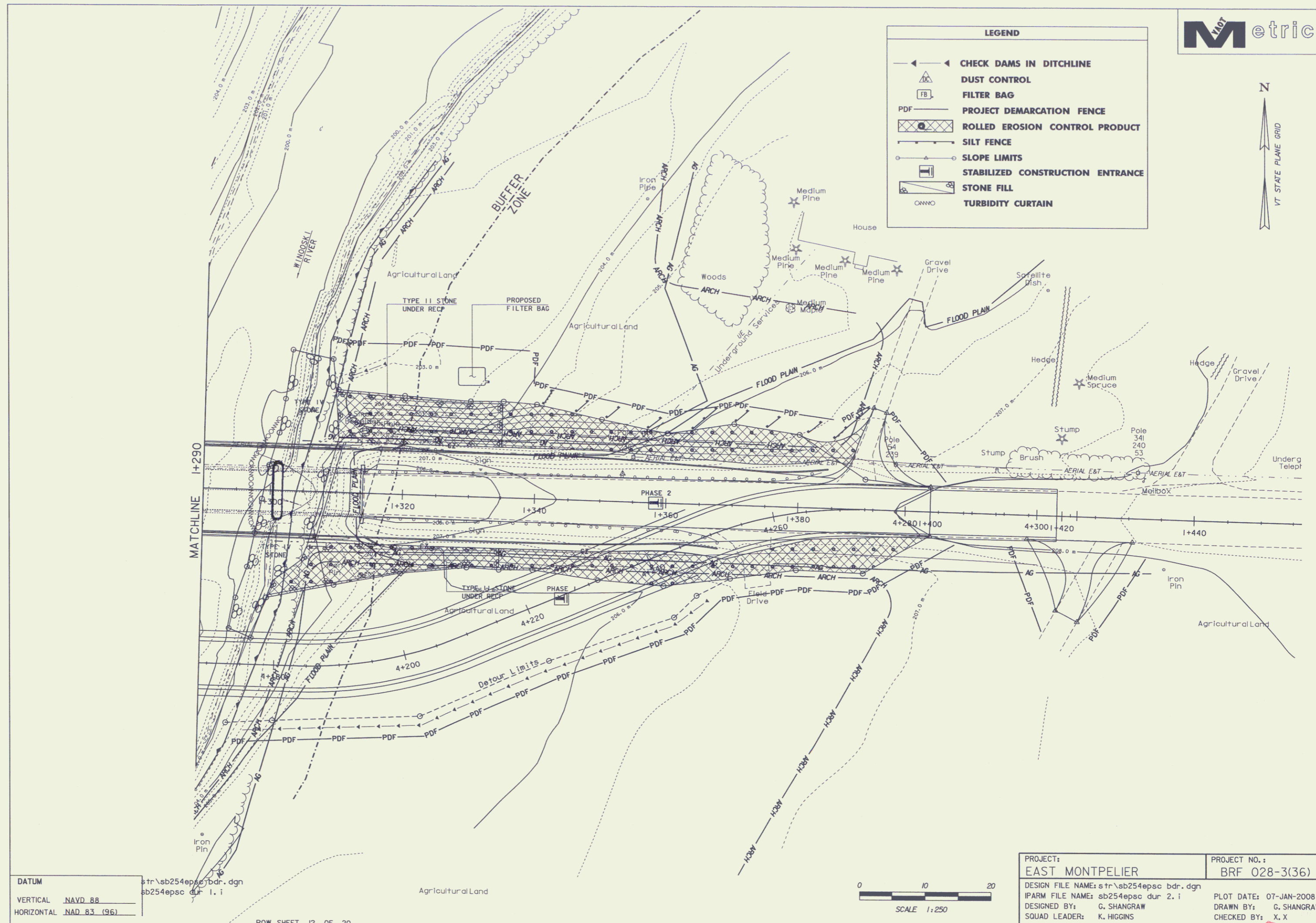
DATUM
 VERTICAL NAVD 88
 HORIZONTAL NAD 83 (96)

PROJECT: EAST MONTPELIER	PROJECT NO.: BRF 028-3(36)
DESIGN FILE NAME: str\sb254\epsc bdr.dgn	PLOT DATE: 07-JAN-2008
IPARM FILE NAME: sb254\epsc dur 1.i	DRAWN BY: G. SHANGRAW
DESIGNED BY: G. SHANGRAW	CHECKED BY: X. X
SQUAD LEADER: K. HIGGINS	ROW SHEET 12 OF 20





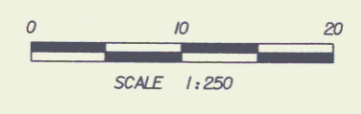
LEGEND	
	CHECK DAMS IN DITCHLINE
	DUST CONTROL
	FILTER BAG
	PROJECT DEMARCATION FENCE
	ROLLED EROSION CONTROL PRODUCT
	SLOPE LIMITS
	STABILIZED CONSTRUCTION ENTRANCE
	STONE FILL
	TURBIDITY CURTAIN



DATUM
 VERTICAL NAVD 88
 HORIZONTAL NAD 83 (96)

str\sb254epsc\br.dgn
 sb254epsc.dur 1.i

ROW SHEET 12 OF 20



PROJECT:
EAST MONTPELIER

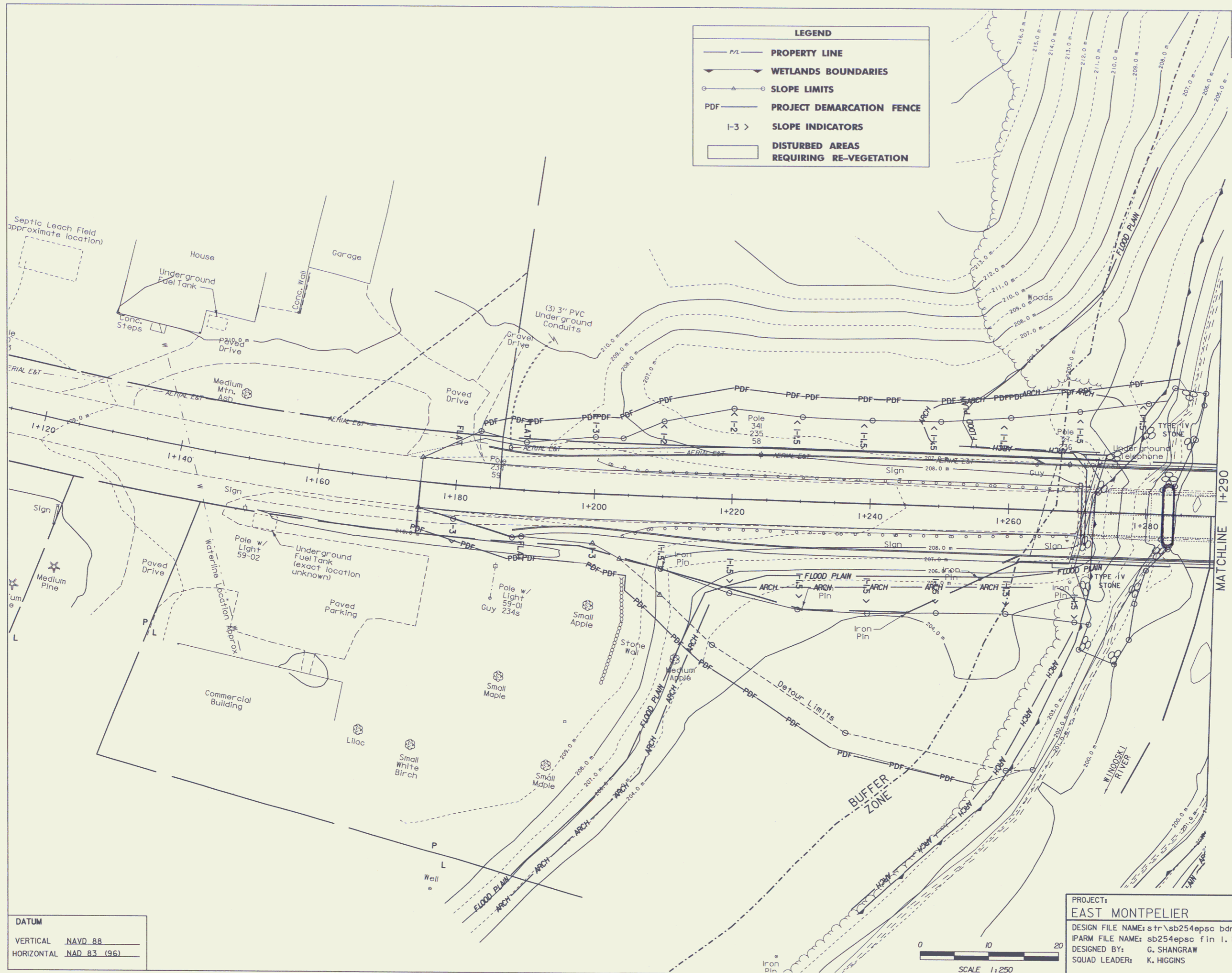
PROJECT NO.:
BRF 028-3(36)

DESIGN FILE NAME: str\sb254epsc br.dgn
 IPARM FILE NAME: sb254epsc dur 2.i
 DESIGNED BY: G. SHANGRAW
 SQUAD LEADER: K. HIGGINS

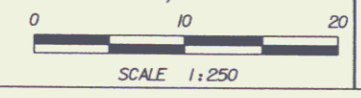
PLOT DATE: 07-JAN-2008
 DRAWN BY: G. SHANGRAW
 CHECKED BY: X, X
 ROW SHEET 13 OF 20



LEGEND	
	PROPERTY LINE
	WETLANDS BOUNDARIES
	SLOPE LIMITS
	PROJECT DEMARCATION FENCE
	SLOPE INDICATORS
	DISTURBED AREAS REQUIRING RE-VEGETATION



DATUM	
VERTICAL	NAVD 88
HORIZONTAL	NAD 83 (96)



PROJECT:	EAST MONTPELIER
DESIGN FILE NAME:	str\sb254epsc bdr.dgn
IPARM FILE NAME:	sb254epsc fin 1.i
DESIGNED BY:	G. SHANGRAW
SQUAD LEADER:	K. HIGGINS

PROJECT NO.:	BRF 028-3(36)
PLOT DATE:	07-JAN-2008
DRAWN BY:	G. SHANGRAW
CHECKED BY:	X. X
ROW SHEET	14 OF 20

RIGHT - OF - WAY DETAIL SHEET

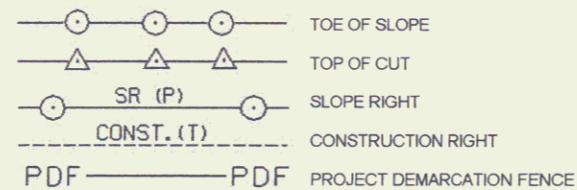
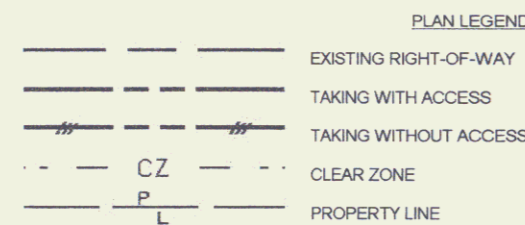


TABLE OF PROPERTY ACQUISITION

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
1	COTE, BARBARA G.	18	1+112.00 RT.				INSTALL & MAINTAIN	(P)		WDOE	9/22/2008	EAST MONTPELIER	103	378-379	GUY WIRE & ANCHOR
2A	COTE, MICHAEL B. & ANITA	18, 19	1+266.58 RT.	1+269.92 RT.	2.57 SM					WD	9/29/2008	EAST MONTPELIER	103	432-434	27 S.F. ±
2B		18, 19	1+178.21 RT.	1+264.15 RT.			CONST.	(T)	258.0 SM						INCLUDES EROSION CONTROL & PDF
			1+197.55 RT.				INSTALL & MAINTAIN	(P)							2,777 SF ±
			1+202.58 RT.	1+289.39 RT.			DETOUR	(T)	0.13 HA						GUY WIRE & ANCHOR
			1+203.35 RT.	1+208.90 RT.			SLOPE	(P)	0.83 SM						TWO WAY VEHICULAR; 0.32 A±
			1+210.13 RT.				REMOVE & RESET	(T)							9 S.F. ±
			1+210.16 RT.	1+272.58 RT.			SLOPE	(P)	152 SM						IRON PIN
			1+230.63 RT.				REMOVE & RESET	(T)							1636 S.F. ±
			1+245.87 RT.				REMOVE & RESET	(T)							IRON PIN
			1+256.26 RT.				REMOVE & RESET	(T)							IRON PIN
			1+269.18 RT.				REMOVE & RESET	(T)							IRON PIN
			1+269.74 RT.	1+280.86 RT.			CHANNEL	(P)	102.3 SM						1101 S.F. ±
2C		18, 19	1+175.00 CL.	1+289.39 RT.	0.12 HA		ALL R.T. & I.								HWY EASE: U.S. RTE. 2: 0.30 A±
3A	COTE, DONALD G.	19, 20	1+305.76 RT.	1+309.58 RT.	2.2 SM					WD	9/22/2008	EAST MONTPELIER	103	380-382	24 S.F. ±
			1+181.50 RT.				DETOUR	(T)	0.18 HA						MONITOR WELL
			1+279.76 RT.	1+377.10 RT.			CONST.	(T)	399.6 SM						TWO WAY VEHICULAR; 0.44 A±
			1+294.26 RT.	1+399.19 RT.											INCLUDES EROSION CONTROL & PDF;
			1+294.47 RT.	1+306.01 RT.			CHANNEL	(P)	78.6 SM						4,301 S.F. ±
			1+300.00 RT.	1+335.00 RT.			SLOPE	(P)	157 SM						846 S.F. ±
			1+335.00 RT.	1+394.70 RT.			SLOPE	(T)	200 SM						1,690 S.F. ±
			1+309.55 RT.				REMOVE & RESET	(T)							2,153 S.F. ±
			1+374.00 RT.				REMOVE	(T)							IRON PIN
			1+423.00 RT.				DRIVE	(T)							DRIVE
			1+413.17 RT.	1+417.62 RT.			INSTALL	(T)							4.5M (15') GRAVEL; IN COMMON WITH
			1+424.93 RT.	1+431.78 RT.			INSTALL	(T)							PARECL 11 MM 0419
															PDF & E.C.
															PDF & E.C.
3B		19, 20	1+289.39 CL.	1+414.75 RT.	0.09 HA		ALL R.T. & I.								HWY EASE: US 2: 0.23A±
4A	RUNNALLS, DONALD S. & ROSEMARIE A.	18, 19	1+270.41 LT.	1+274.16 LT.	2.2 SM					WD	11/26/2008	EAST MONTPELIER	104	186-188	24 S.F. ±
			1+186.36 LT.	1+286.00 LT.			CONST.	(T)	296.46 SM						INCLUDES EROSION CONTROL & PDF
			1+186.36 LT.	1+295.30 LT.			UTILITY	(P)	0.12 HA						3,180 SF ±
			1+187.65 LT.	1+190.23 LT.			REMOVE & RESET	(T)							30ACRE±
			1+183.77 LT.	1+292.54 LT.			SLOPE	(P)	0.04 HA						3 UNDERGROUND CONDUITS
			1+274.02 LT.	1+288.00 LT.			CHANNEL	(P)	44.8 SM						10 ACRE ±
															482 S.F. ±
4B		18, 19	1+186.36 CL.	1+293.10 LT.	0.08 HA		ALL R.T. & I.								HWY EASE: U.S. RTE 2: 20 ACRE±

TABLE OF REVISIONS

REVISION NO.	SHEET NO.	DESCRIPTION	DATE
1	16, 19, 20	PARCEL 3 COTE. DEPICT COTE'S 60' ROW OWNED BY FAIRMONT FARMS. ADJUST TAKING OF HWY EASEMENT CHANGE ENDING STATION OF ALL R.T. & I. FROM 1+435.58 RT. TO 1+414.75 RT. CHANGE AREA FROM 0.11 HA, 0.27 A TO 0.09 HA, 0.23 A. PER C.O. 9528. MADE BY: BF APPROVED BY: HP	6/16/2008
2	17, 20	PARCEL 11 FAIRMONT FARMS. CREATE NEW PARCEL. THIS PARCEL WILL CONSIST OF DRIVE (T) AT STA. 1+423.00 RT. - 4.5 M (15') GRAVEL. IN COMMON WITH COTE. INSTALL (T) AT STA. 1+413.17 RT. - 1+417.61 RT. - PDF & EC. INSTALL (T) AT STA. 1+424.93 RT. - 1+431.87 RT. - PDF & EC. PER C.O. 9529. MADE BY: BF APPROVED BY: HP	6/16/2008
		ELECTRONIC FILES TO STRUCTURES	1/15/2009



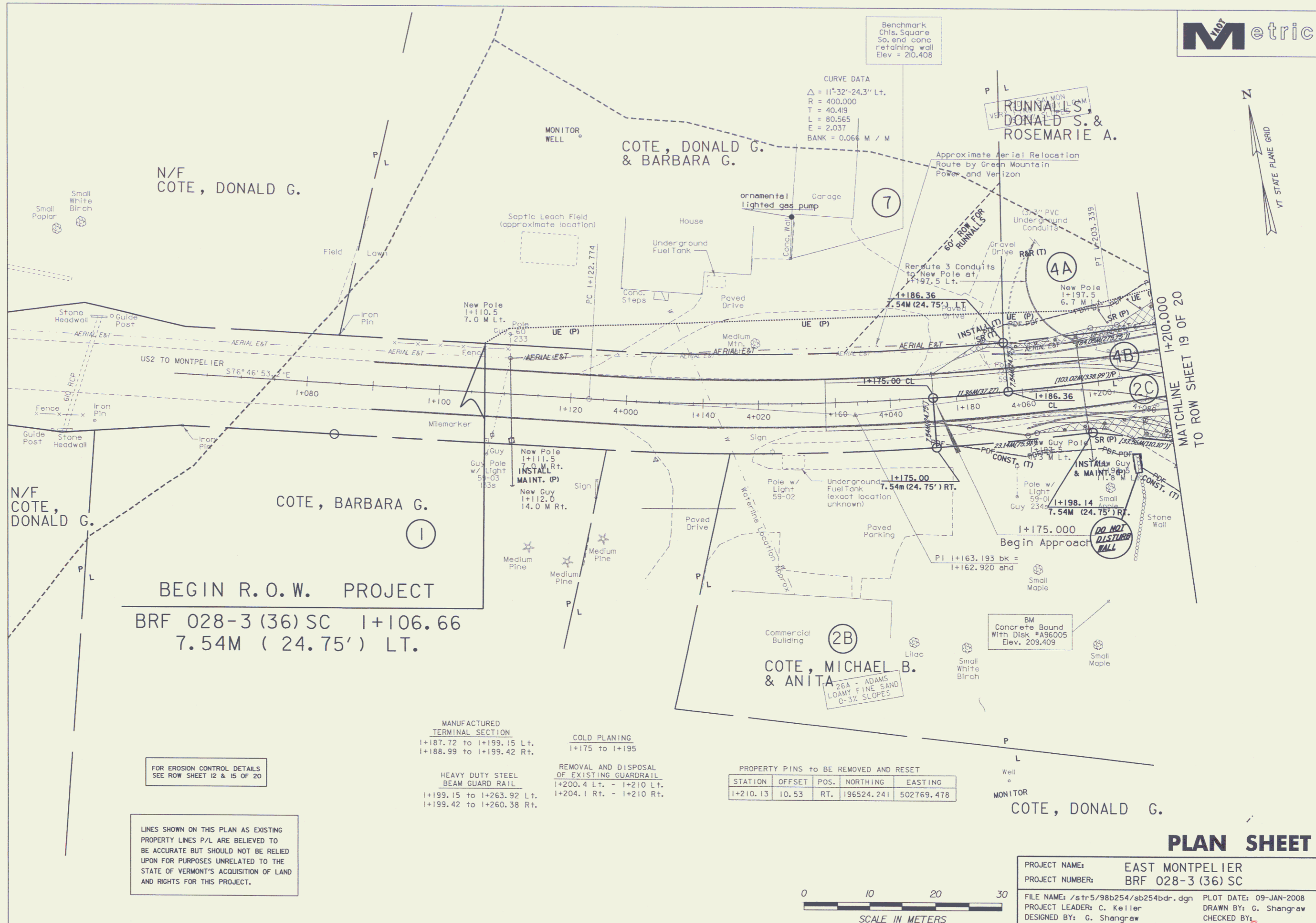
APPROVED: HARRY PETROVS DATE: 02-13-08
CHIEF, PLANS & TITLES

PROJECT NAME: EAST MONTPELIER
PROJECT NUMBER: BRF 028-3(36)

FILE NAME: 98b254.xls
PROJECT LEADER: K. Higgins
DESIGNED BY: J. LaCroix
R.O.W. SHEET 16 OF 20

PLOT DATE: 4/6/2009
DRAWN BY: MR
CHECKED BY: FM
SHEET 51 OF 68

16



Benchmark
Chis. Square
So. end conc.
retaining wall
Elev = 210.408

CURVE DATA
 $\Delta = 11^{\circ}32'24.3''$ Lt.
 $R = 400.000$
 $T = 40.419$
 $L = 80.565$
 $E = 2.037$
 $BANK = 0.066$ M / M

N/F
COTE, DONALD G.

COTE, DONALD G.
& BARBARA G.

RUNNALL'S
DONALD S. &
ROSEMARIE A.

N/F
COTE,
DONALD G.

COTE, BARBARA G.

Commercial Building
COTE, MICHAEL B.
& ANITA

BEGIN R.O.W. PROJECT
BRF 028-3 (36) SC 1+106.66
7.54M (24.75') LT.

MANUFACTURED
TERMINAL SECTION
1+187.72 to 1+199.15 Lt.
1+188.99 to 1+199.42 Rt.

COLD PLANING
1+175 to 1+195

HEAVY DUTY STEEL
BEAM GUARD RAIL
1+199.15 to 1+263.92 Lt.
1+199.42 to 1+260.38 Rt.

REMOVAL AND DISPOSAL
OF EXISTING GUARDRAIL
1+200.4 Lt. - 1+210 Lt.
1+204.1 Rt. - 1+210 Rt.

PROPERTY PINS TO BE REMOVED AND RESET

STATION	OFFSET	POS.	NORTHING	EASTING
1+210.13	10.53	RT.	196524.241	502769.478

FOR EROSION CONTROL DETAILS
SEE ROW SHEET 12 & 15 OF 20

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.



PLAN SHEET

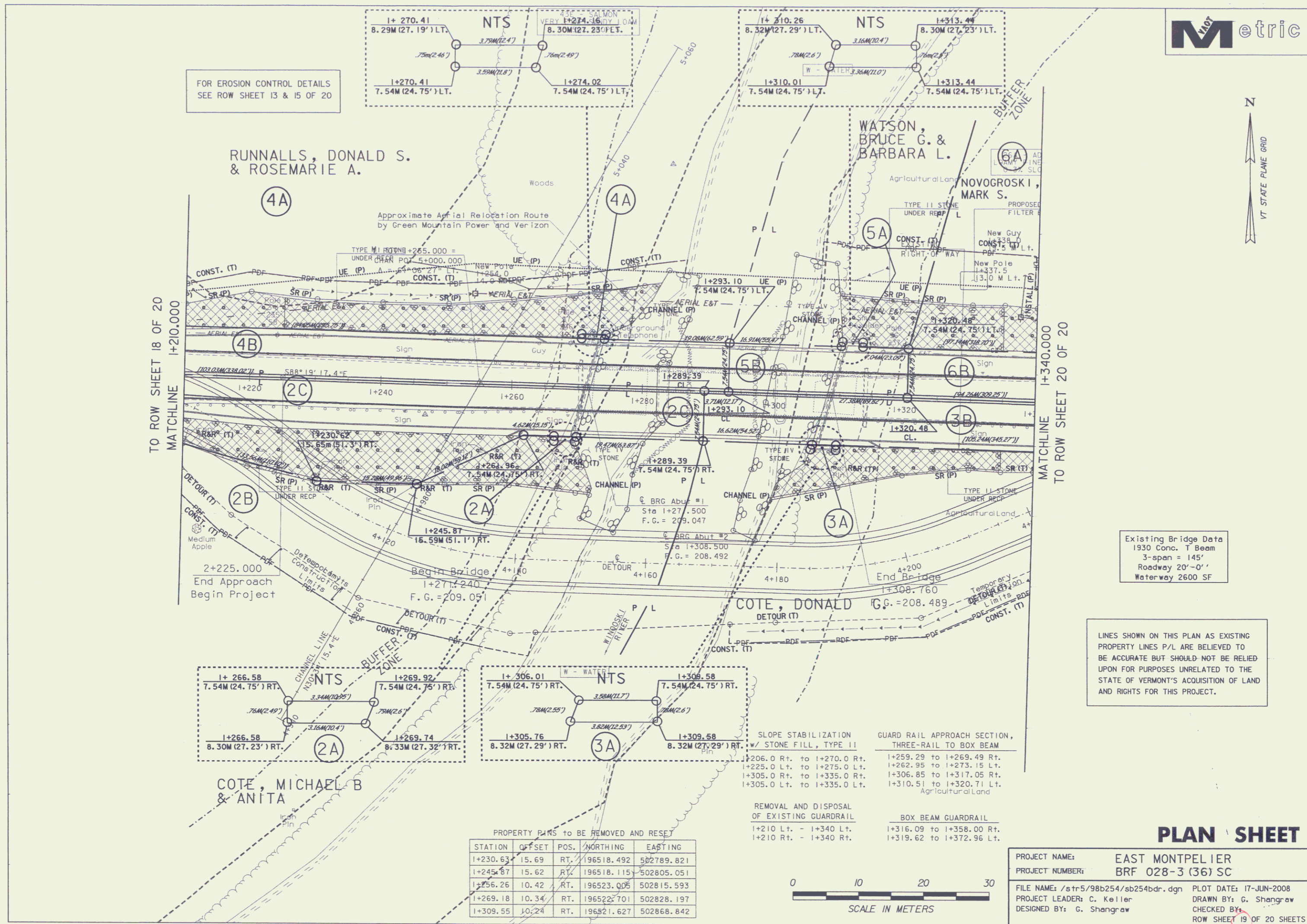
PROJECT NAME: EAST MONTPELIER
 PROJECT NUMBER: BRF 028-3 (36) SC
 FILE NAME: /str/5/98b254/ab254bdr.dgn
 PROJECT LEADER: C. Keller
 DESIGNED BY: G. Shangraw
 PLOT DATE: 09-JAN-2008
 DRAWN BY: G. Shangraw
 CHECKED BY:
 ROW SHEET 18 OF 20 SHEETS



FOR EROSION CONTROL DETAILS
SEE ROW SHEET 13 & 15 OF 20

TO ROW SHEET 18 OF 20
MATCHLINE +210.000

MATCHLINE +340.000
TO ROW SHEET 20 OF 20



Existing Bridge Data
1930 Conc. T Beam
3-span = 145'
Roadway 20'-0"
Waterway 2600 SF

LINES SHOWN ON THIS PLAN AS EXISTING
PROPERTY LINES P/L ARE BELIEVED TO
BE ACCURATE BUT SHOULD NOT BE RELIED
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AND RIGHTS FOR THIS PROJECT.

PROPERTY PLMS TO BE REMOVED AND RESET

STATION	OFFSET	POS.	NORTHING	EASTING
1+230.63	15.69	RT.	196518.492	502789.821
1+245.87	15.62	RT.	196518.115	502805.051
1+256.26	10.42	RT.	196523.006	502815.593
1+269.18	10.34	RT.	196522.701	502828.197
1+309.55	10.24	RT.	196521.627	502868.842

SLOPE STABILIZATION
w/ STONE FILL, TYPE II

GUARD RAIL APPROACH SECTION,
THREE-RAIL TO BOX BEAM

1+206.0 Rt. to 1+270.0 Rt.
1+225.0 Lt. to 1+275.0 Lt.
1+305.0 Rt. to 1+335.0 Rt.
1+305.0 Lt. to 1+335.0 Lt.

1+259.29 to 1+269.49 Rt.
1+262.95 to 1+273.15 Lt.
1+306.85 to 1+317.05 Rt.
1+310.51 to 1+320.71 Lt.

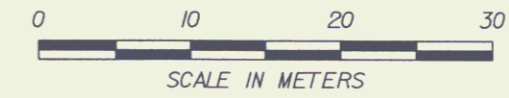
Agricultural Land

REMOVAL AND DISPOSAL
OF EXISTING GUARDRAIL

1+210 Lt. - 1+340 Lt.
1+210 Rt. - 1+340 Rt.

BOX BEAM GUARDRAIL

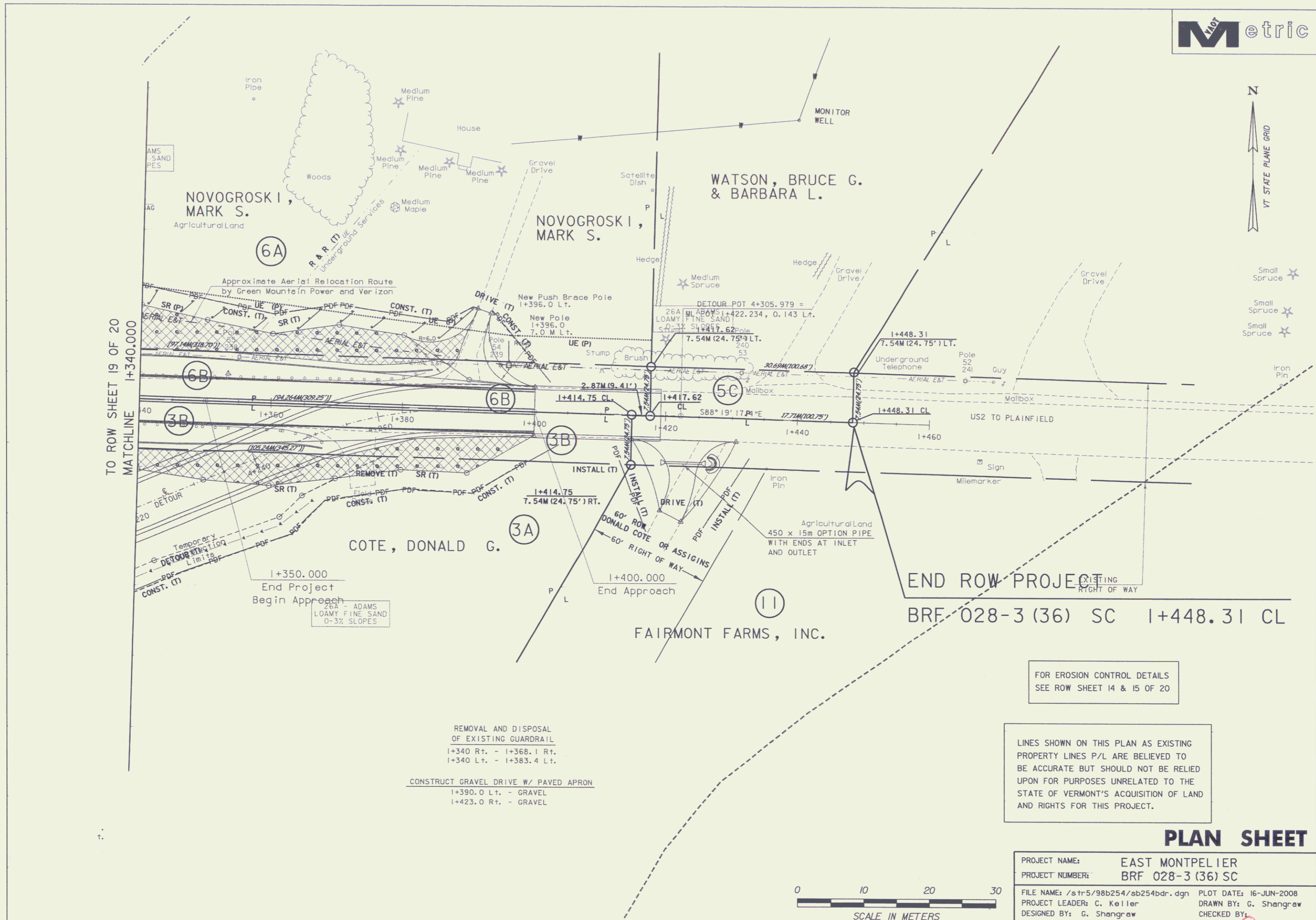
1+316.09 to 1+358.00 Rt.
1+319.62 to 1+372.96 Lt.



PLAN SHEET

PROJECT NAME: EAST MONTPELIER
PROJECT NUMBER: BRF 028-3 (36) SC

FILE NAME: /str5/98b254/sb254bdr.dgn PLOT DATE: 17-JUN-2008
PROJECT LEADER: C. Keller DRAWN BY: G. Shangraw
DESIGNED BY: G. Shangraw CHECKED BY: G. Shangraw
ROW SHEET 19 OF 20 SHEETS



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

PLAN SHEET

PROJECT NAME:	EAST MONTPELIER
PROJECT NUMBER:	BRF 028-3 (36) SC
FILE NAME: /s1+5/98b254/sb254bdr.dgn	PLOT DATE: 16-JUN-2008
PROJECT LEADER: C. Keller	DRAWN BY: G. Shangraw
DESIGNED BY: G. Shangraw	CHECKED BY: [Signature]
	ROW SHEET 20 OF 20 SHEETS