

R.O.W. PLANS

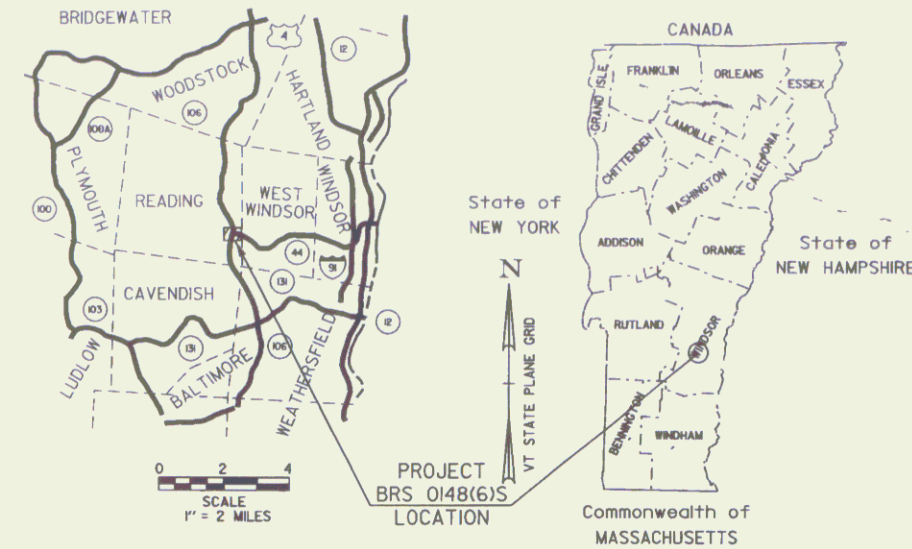
STATE OF VERMONT AGENCY OF TRANSPORTATION



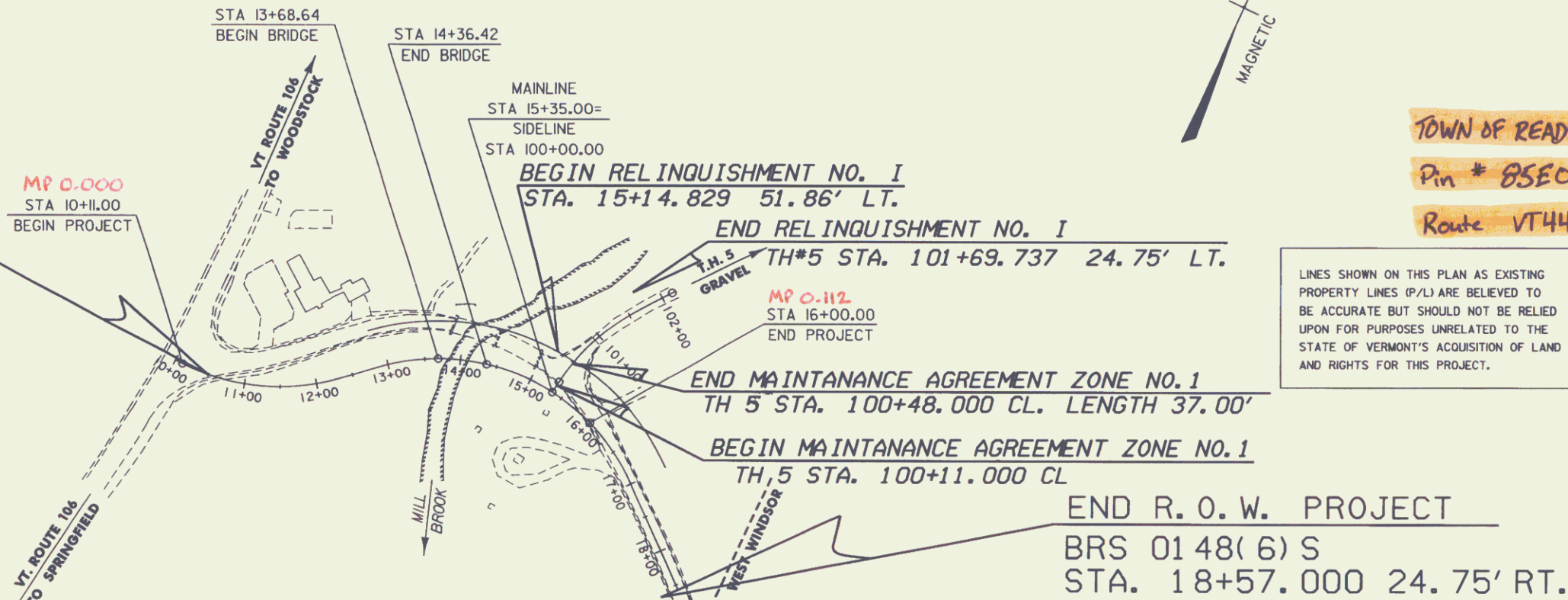
PROPOSED IMPROVEMENT BRIDGE PROJECT

THE PROJECT BEGINS ON VT. 44 AT THE INTERSECTION OF
VT. 106 AND CONTINUES EASTERLY ALONG VT. 44 FOR 0.112 MILES

ROADWAY LENGTH = 521.22 FEET
BRIDGE LENGTH = 67.78 FEET
PROJECT LENGTH = 589.00 FEET
R.O.W. PROJECT LENGTH = 807.00 FEET
THE PROJECT CONSISTS OF REPLACING BRIDGE NO. 1 ON VT. 44
OVER MILL BROOK WITH A NEW SINGLE SPAN BRIDGE INCLUDING
NECESSARY ROADWAY APPROACH WORK ON MINOR RELOCATION.



BEGIN R.O.W. PROJECT
BRS 0148(6)S STA. 10+50.000 CL



TOWN OF READING
Pin # B5E034
Route VT44

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.

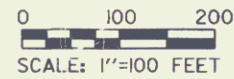
CONVENTIONAL SYMBOLS	
COUNTY LINE	— — — — —
TOWN LINE	— — — — —
LIMITS OF ACCESS	— — — — —
POINT OF ACCESS	X
FENCE LINE	X — X — X — X —
STONE WALL	— — — — —
TRAVELED WAY	— — — — —
GUARD RAIL	— — — — —
RAILROAD	— — — — —
SURVEY LINE	— — — — —
CULVERT	— — — — —
POWER POLE	⊕
TELEPHONE POLE	⊕
TREES	⊕
CONTROL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

RIGHT-OF-WAY AGENT OF PROJECT: TIM FRENCH

SURVEYED BY : C. REED
SURVEYED DATE : FEBRUARY 1991

DATUM
VERTICAL NGVD 1929
HORIZONTAL NA

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

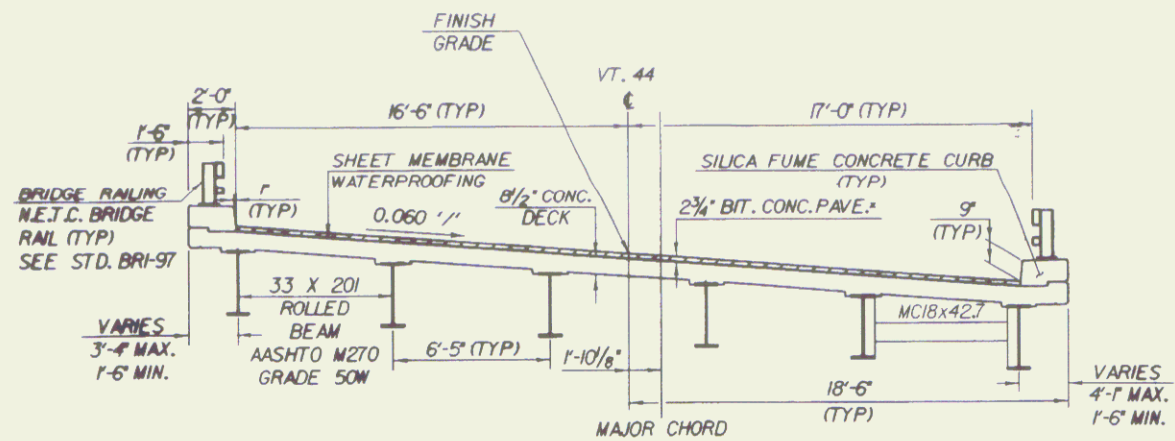


THESE PLANS ARE SUBJECT TO SUCH ENGINEERING CHANGES AS MAY BE REQUIRED BY THE FEDERAL HIGHWAY ADMINISTRATION OR THE DIRECTOR OF PROJECT DEVELOPMENT.
CONSTRUCTION IS TO BE CARRIED ON IN ACCORDANCE WITH THESE PLANS AND THE STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 2001, AS APPROVED BY THE FEDERAL 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.
se03411.1
/str/1/85e034/se034bdr.dgn

APPROVED *[Signature]* DATE 5/2/02
Director of Program Development

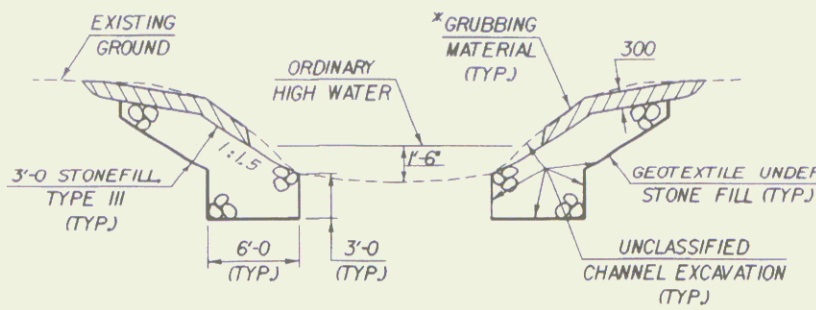
APPROVED *[Signature]* DATE 5/12/03
Chief of Right of Way

READING
BRS 0148(6)S
R.O.W. SHEET 1 OF 17 SHEETS



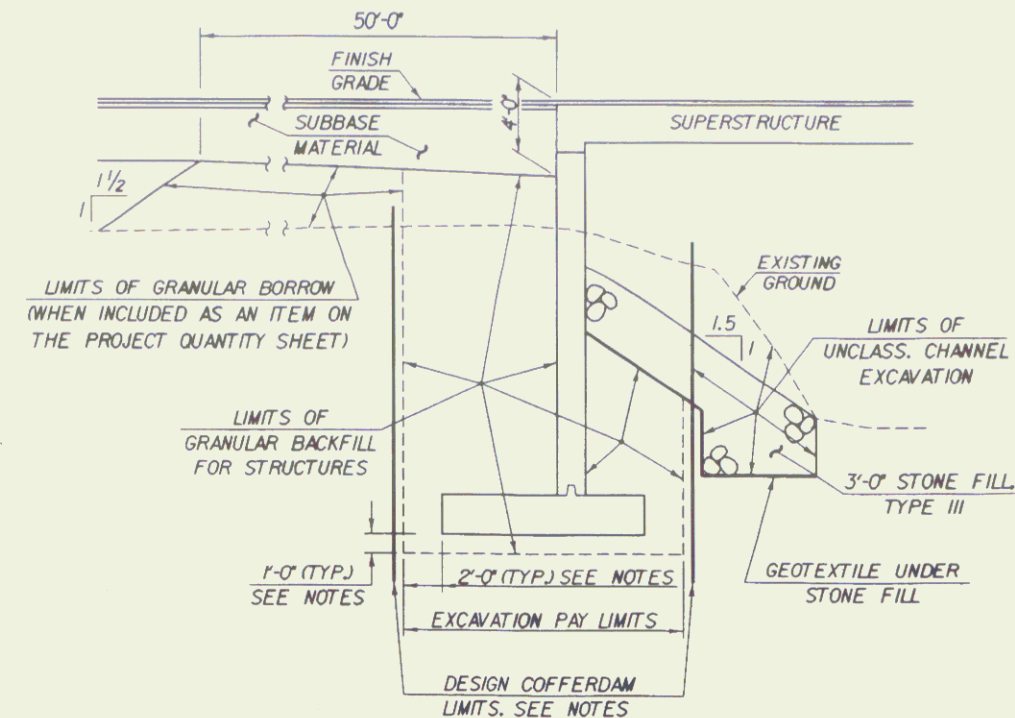
TYPICAL BRIDGE SECTION
(NOT TO SCALE)

* FIRST LIFT: 1/4" BIT. CONC. PAVEMENT TYPE IV
SECOND LIFT: 1/2" BIT. CONC. PAVEMENT TYPE III



TYPICAL CHANNEL SECTION
(NOT TO SCALE)

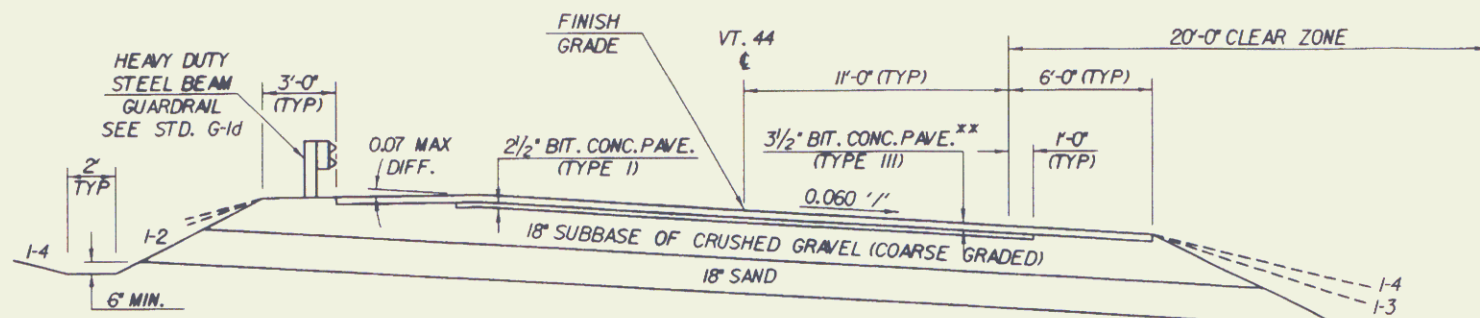
* GRUBBING MATERIAL SHALL NOT BE PLACED ON THE STONE FILL IN THE AREA UNDER THE BRIDGE. WHENEVER CHANNEL SLOPE INTERSECTS ROADWAY SUBBASE, GRUBBING MATERIAL SHALL BEGIN AT THE BOTTOM OF SUBBASE.



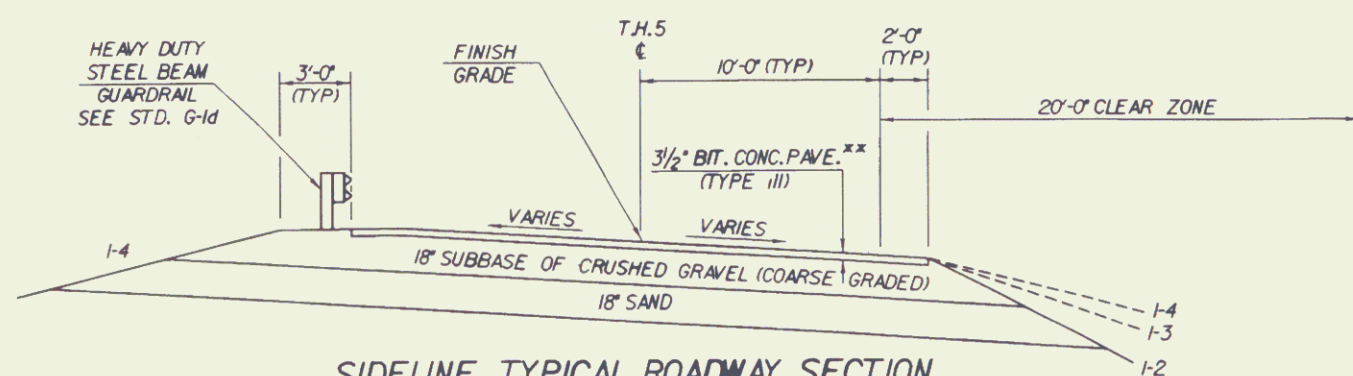
TYPICAL ABUTMENT SECTION
(NOT TO SCALE)

NOTES

1. COFFERDAM SIZE TO BE DETERMINED BY THE CONTRACTOR.
2. THE PAY LIMITS OF "COFFERDAM EXCAVATION, EARTH" AND "COFFERDAM EXCAVATION, ROCK" SHALL BE 2'-0" OUTSIDE THE PERIMETER OF THE FOOTING.
3. ONE FOOT UNDERCUT AS DETERMINED NECESSARY BY THE RESIDENT ENGINEER.
4. IF A COFFERDAM IS CONSTRUCTED WHICH IS LARGER THAN THE INDICATED COFFERDAM EXCAVATION PAY LIMITS, PAYMENT FOR ALL UNCLASSIFIED CHANNEL EXCAVATION, INCLUDING THAT PORTION WHICH IS INSIDE THE COFFERDAM BUT OUTSIDE THE COFFERDAM EXCAVATION PAY LIMITS, WILL BE MADE AT THE CONTRACT UNIT PRICE FOR UNCLASSIFIED CHANNEL EXCAVATION.



MAINLINE TYPICAL ROADWAY SECTION
(NOT TO SCALE)



SIDELINE TYPICAL ROADWAY SECTION
(NOT TO SCALE)

** SECOND LIFT: 1/2" TYPE III OVER FIRST LIFT: 2" TYPE III

MATERIAL TOLERANCES	
PAVEMENT	+/- 1/4" (TOTAL THICKNESS)
BASE COURSE	+/- 1/2"
SUBBASE	+/- 1"
SAND BORROW	+/- 1"
GRANULAR BORROW	+/- 1"

STATE OF VERMONT			
AGENCY OF TRANSPORTATION			
Town Of	READING	Bridge No.	1
Highway No.	VT. 44	Log Sta.	
		Surv. Sta.	
VT ROUTE 44 OVER THE MILL BROOK			
TYPICAL SECTION SHEET			
Designed By	C. MEUNIER	Drawn By	STR1
Checked By	C. MEUNIER	Bridge Design Supervisor	G.S. ROGERS
Date	3/99	Date	3/99
PROJECT	READING	PROJECT NO.	BRS 014816S
L.G.C. Info. /dri/856034/m034d.dgn		ss03.dwg.1	
R.O.W. Sheet No. 2 OF 17 Sheets			
PLOTTED 09-FEB-2001			

MAINLINE P.O.B. 10+00.00 N = 9996.0982 E = 49933.9249 	MAINLINE P.C. 10+13.78 N = 9995.5815 E = 49947.6932 	MAINLINE P.I. 11+28.44 N = 9991.2812 E = 50062.2792 	MAINLINE P.T. 12+31.89 N = 10067.3302 E = 50148.0988 	MAINLINE P.C. 12+87.16 N = 10103.9872 E = 50189.4656 	MAINLINE P.O.B. 10+00.00 N = 9996.0982 E = 49933.9249
MAINLINE P.I. 15+37.85 N = 10270.2526 E = 50377.85 	MAINLINE P.T. 16+98.83 N = 10106.0225 E = 50566.5038 	MAINLINE P.O.E. 18+57.43 N = 10002.1278 E = 50686.3285 	SIDELINE P.O.B. 100+00.00 N = 10173.0799 E = 50419.4708 	MAINLINE 10+75.00 N = 9999.8262 E = 50008.6508 	MAINLINE P.O.B. 10+00.00 N = 9996.0982 E = 49933.9249
SIDELINE P.I. 100+94.88 N = 10267.0158 E = 50432.8492 	SIDELINE P.T. 101+60.30 N = 10321.2487 E = 50474.6262 	SIDELINE P.O.E. 102+18.00 N = 10366.9563 E = 50509.8359 	CHANNEL P.O.B. 200+00.00 N = 10072.5083 E = 50337.3183 	CHANNEL P.O.E. 202+00.00 N = 10272.4429 E = 50332.2504 	SIDELINE P.C. 100+26.43 N = 10199.2415 E = 50423.1968

SIDELINE 100+75.00 N = 10246.4135 E = 5043434849 	MAINLINE 15+50.00 N = 10170.5766 E = 50434.2587 	SIDELINE 101+75.00 N = 10332.8914 E = 50483.5948
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DATE: _____
 VERTICAL: NGVD 1929
 HORIZONTAL: NA

PROJECT: READING PROJECT NO.: BRS 0148(6)S
 DESIGN FILE NAME: /s1r1/85e034/se034tie.dgn PLOT DATE: 09-FEB-2001
 IPARM FILE NAME: se034tie.i SURVEY DATE: 4/91
 SURVEYED BY: R. MOREAU DRAWN BY: STRI
 SQUAD LEADER: G.S. ROGERS
 TIE SHEET R.O.W Sheet No. 3 OF 17 Sheets

PRELIMINARY INFORMATION SHEET

INDEX OF SHEETS

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4. THE SHEET
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6. LAYOUT SHEET 2
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8. SIDELINE PROFILE SHEET
9. PARKING LOT DRIVE AND DRIVEWAY DRIVE PROFILE SHEET
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16. EROSION CONTROL SHEET 1
17. EROSION CONTROL SHEET 2
18. DRAINAGE AND UTILITY SHEET 1
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20. SIGN AND PAVEMENT MARKING SHEET #1
21. SIGN AND PAVEMENT MARKING SHEET #2
22. SIGN SUMMARY SHEET
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24. SUBBASE TRANSITION DIAGRAMS
25. MAINLINE CROSS SECTIONS (VT 44)
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31. MAINLINE CROSS SECTIONS (VT 44)
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33. SIDELINE CROSS SECTIONS (TH 5)
34. SIDELINE CROSS SECTIONS (TH 5)
35. PARKING LOT DRIVE CROSS SECTIONS (STA 11+25 LT)
36. DRIVE CROSS SECTIONS (STA 11+25 LT)
37. DRIVE CROSS SECTIONS (STA 11+25 LT)
38. WELL DRIVE CROSS SECTIONS (STA 17+04 RT)
39. CIRCLE DRIVE CROSS SECTIONS (STA 17+04 RT)
40. CIRCLE DRIVE CROSS SECTIONS (STA 17+04 RT)
41. CHANNEL CROSS SECTIONS
42. CHANNEL CROSS SECTIONS
43. CHANNEL CROSS SECTIONS
44. CHANNEL CROSS SECTIONS
45. CHANNEL CROSS SECTIONS

FINAL HYDRAULIC REPORT

HYDROLOGIC DATA Date: 6/9/99

DRAINAGE AREA: 15.8 sq mi
 CHARACTER OF TERRAIN: Mountainous, Rolling Hills to Open Fields
 STREAM CHARACTERISTICS: Perennial, Braided and Non Braided
 NATURE OF STREAMBED: Gravel to Cobble

PEAK FLOW DATA

Q 2.33 = 775 cfs	Q 50 = 3000 cfs
Q 10 = 1700 cfs	Q 100 = 3800 cfs
Q 25 = 2400 cfs	Q 500 = 4800 cfs

DATE OF FLOOD RECORD: Unknown
 ESTIMATED DISCHARGE: N/A
 WATER SURFACE ELEV.: N/A
 NATURAL STREAM VELOCITY: @ Q50 = 4.5 fps
 ICE CONDITIONS: Moderate
 DEBRIS: Moderate
 DOES THE STREAM REACH MAXIMUM HIGH-WATER ELEV RAPIDLY? Yes
 IS ORDINARY RISE RAPID? Yes
 IS STAGE AFFECTED BY UPSTREAM OR DOWNSTREAM CONDITIONS? No
 IF YES, DESCRIBE: _____

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

EXISTING STRUCTURE INFORMATION

STRUCTURE TYPE: Two Span Steel Beam Bridge with Concrete Deck
 YEAR BUILT: 1934
 CLEAR SPAN(NORMAL TO STREAM): 118 ft (Two Span)
 VERTICAL CLEARANCE ABOVE STREAMBED: 10 ft (Under Open Span)
 WATERWAY OF FULL OPENING: 650 sf
 DISPOSITION OF STRUCTURE: Remove
 TYPE OF MATERIAL UNDER STRUCTURE: Unknown

WATER SURFACE ELEVATIONS AT

Q2.33 = 844.7 ft	VELOCITY = 6.1 fps
Q10 = 845.5 ft	7.3 fps
Q25 = 847.4 ft	8.1 fps
Q50 = 848.0 ft	8.8 fps
Q100 = 848.3 ft	9.6 fps

LONG TERM STREAMBED CHANGES: Unknown

PROPOSED STRUCTURE

STRUCTURE TYPE: Single Span Steel Beam with Concrete Deck

CLEAR SPAN(NORMAL TO STREAM): 60.8 ft
 VERTICAL CLEARANCE ABOVE STREAMBED: 12.0 ft
 WATERWAY OF FULL OPENING: 620 sq ft

WATER SURFACE ELEVATIONS AT

Q2.33 = 844.7 ft	VELOCITY = 6.2 fps
Q10 = 845.4 ft	7.2 fps
Q25 = 847.4 ft	8.0 fps
Q50 = 848.1 ft	8.4 fps
Q100 = 848.8 ft	8.4 fps

IS THE ROADWAY OVERTOPPED BELOW Q100: No
 FREQUENCY: Above Q100
 RELIEF ELEVATION: 852.1 ft
 DISCHARGE OVER ROAD @Q100: None

AVERAGE LOW ELEVATION OF SUPERSTRUCTURE: 852.0 ft
 VERTICAL CLEARANCE: @ Q100 = 3.2 ft

SCOUR: Contraction Scour @ Q100 = 0.0 ft and @ Q500 = 2.2 ft

REQUIRED CHANNEL PROTECTION: Type III

PERMIT INFORMATION

AVERAGE DAILY FLOW: 30 cfs DEPTH OR ELEVATION: 0.3 ft
 ORDINARY LOW WATER: 15 cfs 0.3 ft
 ORDINARY HIGH WATER: 330 cfs 1.5 ft

TEMPORARY BRIDGE REQUIREMENTS

STRUCTURE TYPE: Traffic to be maintained on the Existing Bridge
 CLEAR SPAN (NORMAL TO STREAM): 118 ft (Two Span)
 VERTICAL CLEARANCE ABOVE STREAMBED: 10 ft (Under Open Span)
 WATERWAY AREA OF FULL OPENING: 628 sf

ADDITIONAL INFORMATION

IS THE ROADWAY OVERTOPPED BELOW Q100: No
 FREQUENCY: Above Q100
 RELIEF ELEVATION: 851.5 ft
 DISCHARGE OVER ROAD @Q100: None

UPSTREAM STRUCTURE

TOWN: Reading DISTANCE: 0.5 mi
 HIGHWAY #: VT 106 STRUCTURE #: Bridge 13
 CLEAR SPAN: 84 ft CLEAR HEIGHT: 10 ft
 YEAR BUILT: 1940 FULL WATERWAY: Unknown
 STRUCTURE TYPE: Single Span Steel Beam with Concrete Deck

DOWNSTREAM STRUCTURE

TOWN: West Windsor DISTANCE: 1.3 mi
 HIGHWAY #: TH-57 STRUCTURE #: Bridge 34
 CLEAR SPAN: 32 ft CLEAR HEIGHT: 9 ft
 YEAR BUILT: 1880 FULL WATERWAY: Unknown
 STRUCTURE TYPE: Single Span Wooden Covered Bridge

DESIGN CRITERIA

- DESIGN LIVE LOAD AASHTO: HS-25-44
- DESIGN SPAN: 65'-0"
- ALLOWABLE LOAD FOR SPREAD FOOTINGS ON SOIL: 6.7 tsf
- ALLOWABLE LOAD FOR PILING: N/A
- STRUCTURAL STEEL AASHTO GRADE: M270 GRADE 50
- REINFORCING STEEL GRADE: 60
- CONCRETE CLASS A: f'c: 4000 psi
- CONCRETE CLASS B: f'c: 3000 psi
- SILICA-FUME CONCRETE: f'c: 5000 psi
- SOIL UNIT WEIGHT: 140 pcf
- DESIGN LOAD FOR SPREAD FOOTINGS ON SOIL: _____

TRAFFIC MAINTENANCE

1. IS TRAFFIC TO BE MAINTAINED? YES
 IF YES, ON EXISTING STRUCTURE YES
 OR ON TEMPORARY BRIDGE NO

2. TEMPORARY BRIDGE REQUIREMENTS: ONE OF TWO WAY
 TRAFFIC CONTROL SIGNALS REQUIRED: NO
 MINIMUM CLEAR SPAN (NORMAL TO STREAM): _____
 WATERWAY OF FULL OPENING: _____
 VERTICAL CLEARANCE ABOVE STREAMBED: _____
 ARE SIDEWALKS REQUIRED? NO
 IF SO, ON WHAT SIDE? _____
 STRUCTURE TYPE: _____

LOAD RATING (TONS)

LOADING LEVEL	TRUCK						
	H	HS	3S2	5 AXLE	3A STR	4A STR	5A SEM
INVENTORY	0	0					
POSTED	0	0	0	0	0	0	0
OPERATING	0	0	0	0	0	0	0

COMMENTS: 0

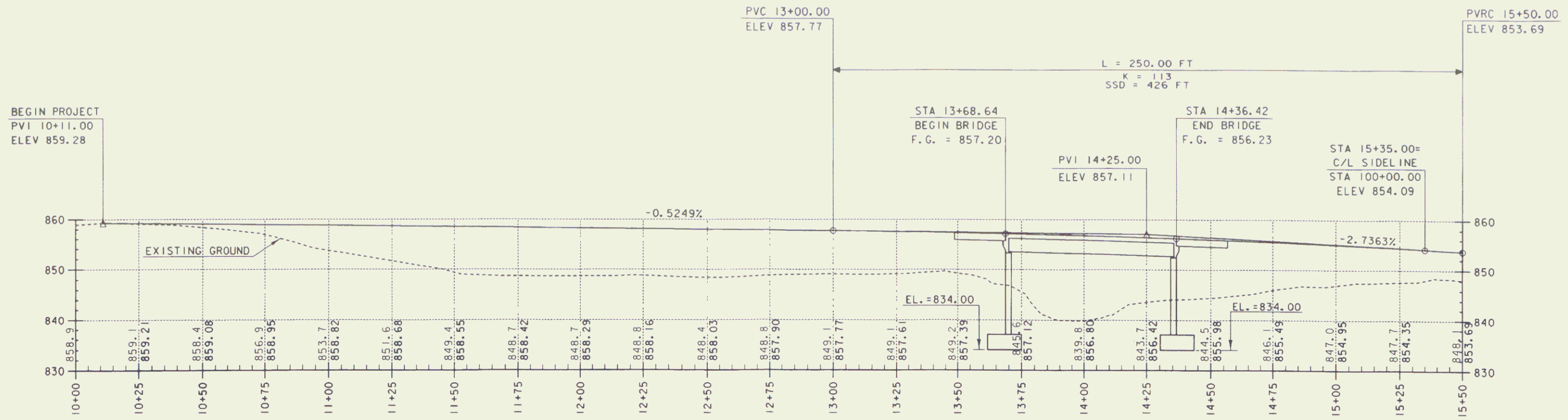
TRAFFIC DATA

YEAR	ADT	DHV	% D	% T	ADTT
1999	1480	-	56	3	90
2019	2000	280	56	2	110

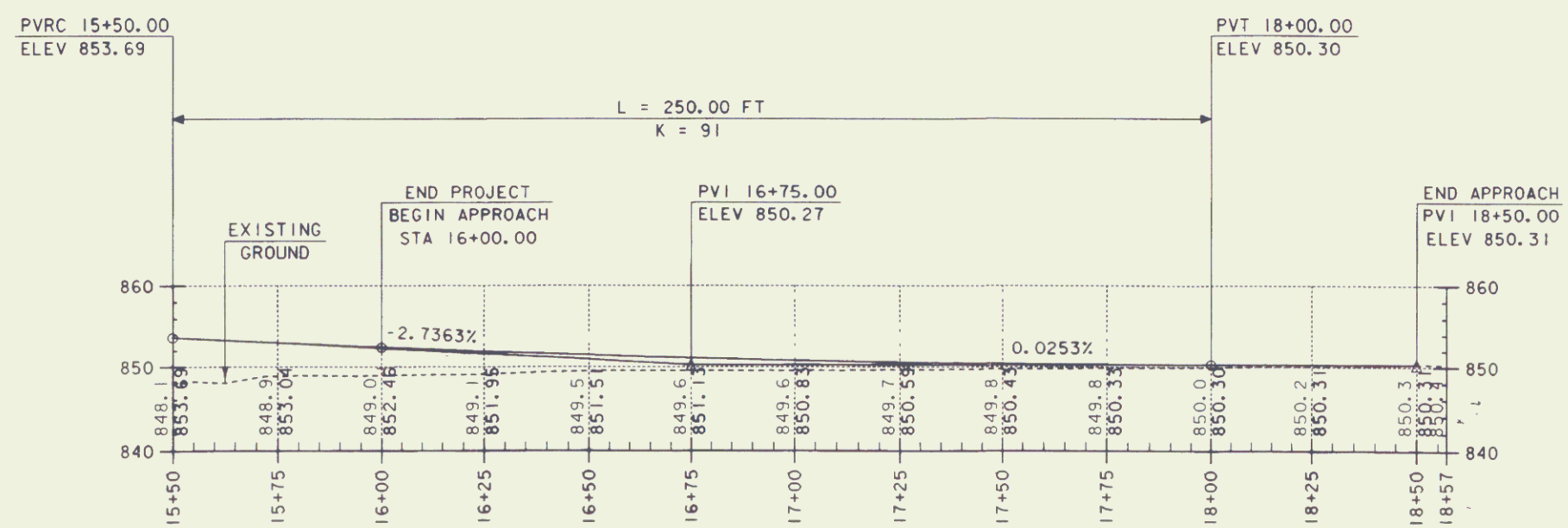
20 year ESAL for flexible pavement: 1999 to 2019 987,000
 20 year ESAL for flexible pavement: 1999 to 2039 3,192,000
 Design Speed: 50 mph

PROJECT NAME: READING
 PROJECT NUMBER: BRS 0148(6)S

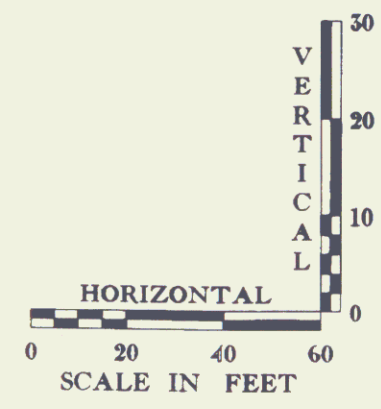
FILE NAME: /sfr1/086/0148/0148pl.dwg PLOT DATE: 2/8/01
 PROJECT LEADER: G.S. ROGERS DRAWN BY: J. OLSOWIE
 DESIGNED BY: C. MEUNIER CHECKED BY: C. MEUNIER
 PRELIMINARY INFORMATION SHEET R.O.W Sheet No. 4 OF 17 Sheets



MAINLINE PROFILE - VT. ROUTE 44



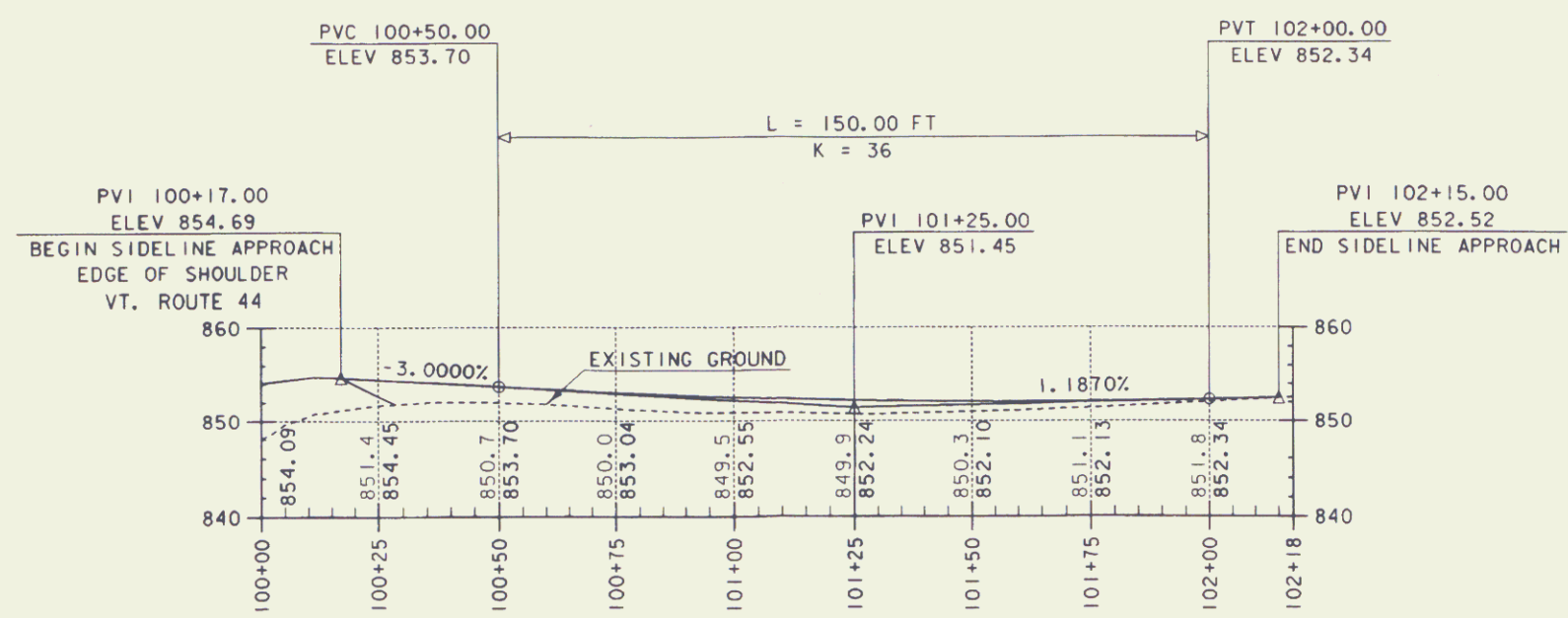
MAINLINE PROFILE (CONT'D) - VT. ROUTE 44



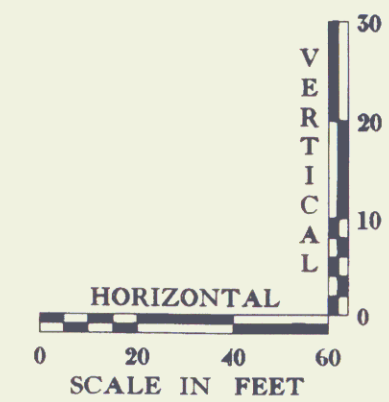
GRADES SHOWN TO THE NEAREST TENTH ARE OLD GROUND ALONG THE PROPOSED ALIGNMENT. GRADES SHOWN TO THE NEAREST HUNDREDTH ARE FINISHED GRADES ALONG THE PROPOSED ALIGNMENT.

DATUM
 VERTICAL _____
 HORIZONTAL _____

PROJECT: READING	PROJECT NO.: BRS 0148(6) S
DESIGN FILE NAME: /s/1/85e034/se034xsl.dgn	PLOT DATE: 09-FEB-2001
IPARM FILE NAME: se034mpl.i	
MAINLINE PROFILE SHEET	
R.O.W. Sheet No. 5 OF 17 Sheets	



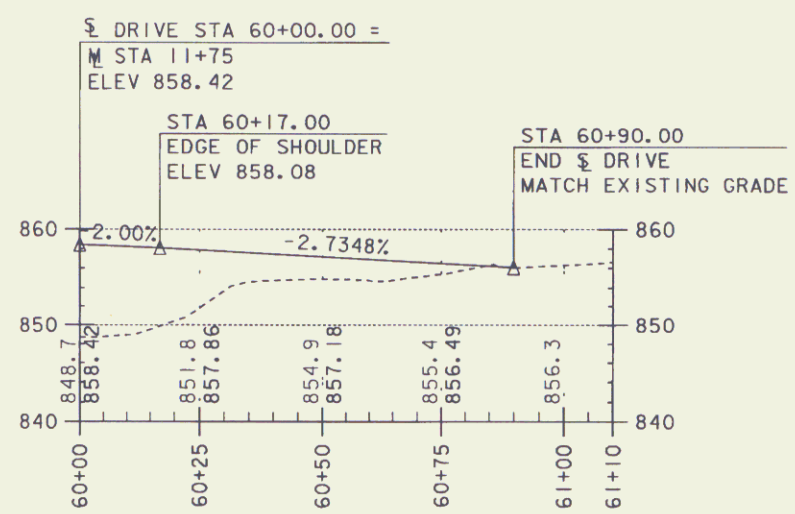
SIDELINE PROFILE - T.H. 5



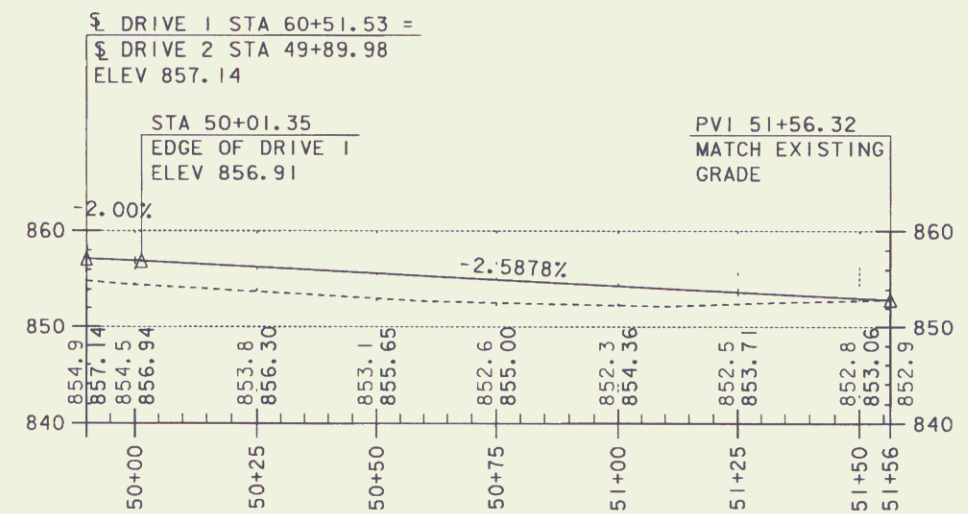
GRADES SHOWN TO THE NEAREST TENTH ARE OLD GROUND ALONG THE PROPOSED ALIGNMENT. GRADES SHOWN TO THE NEAREST HUNDREDTH ARE FINISHED GRADES ALONG THE PROPOSED ALIGNMENT.

DATUM
 VERTICAL _____
 HORIZONTAL _____

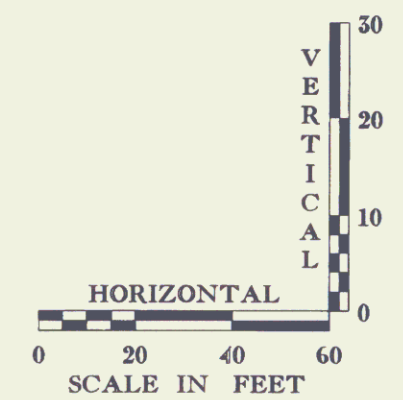
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DESIGN FILE NAME:	/str1/85e034/se034xsl.dgn	PLOT DATE:	09-FEB-2001
IPARM FILE NAME:	se034spl.l	SURVEY DATE:	2-91
SURVEYED BY:	C. REED	DRAWN BY:	STRI
SQUAD LEADER:	G.S. ROGERS		
SIDELINE PROFILE SHEET R.O.W. Sheet No. 6 OF 17 Sheets			



PARKING PROFILE
(DRIVE 1)

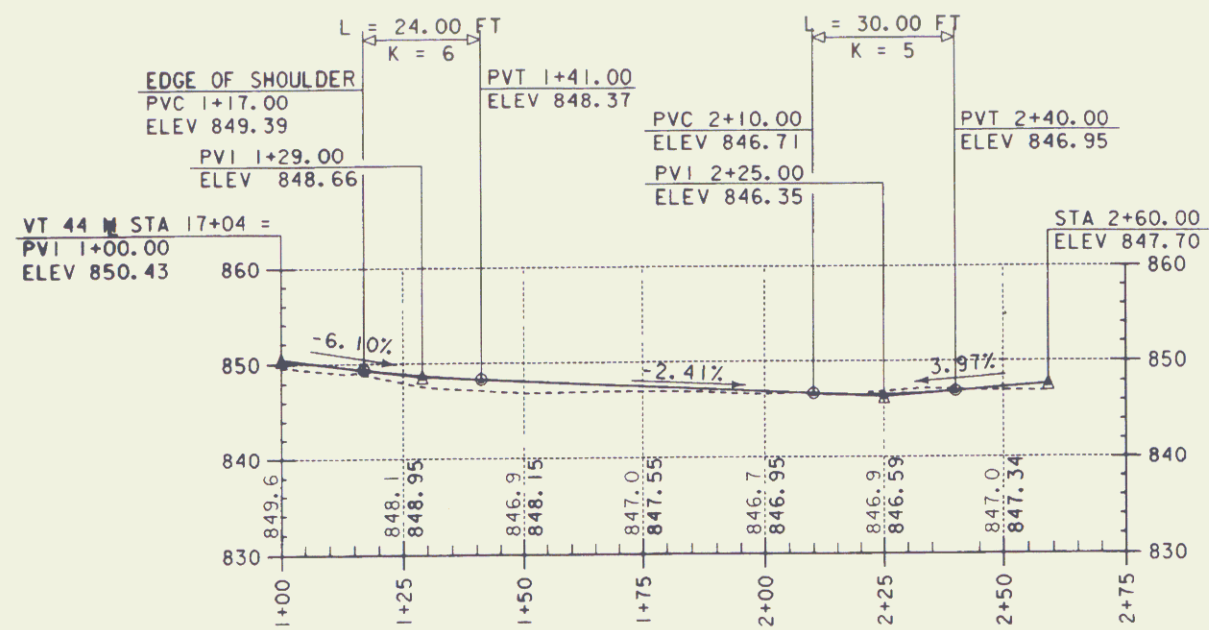


DRIVEWAY PROFILE
(DRIVE 2)

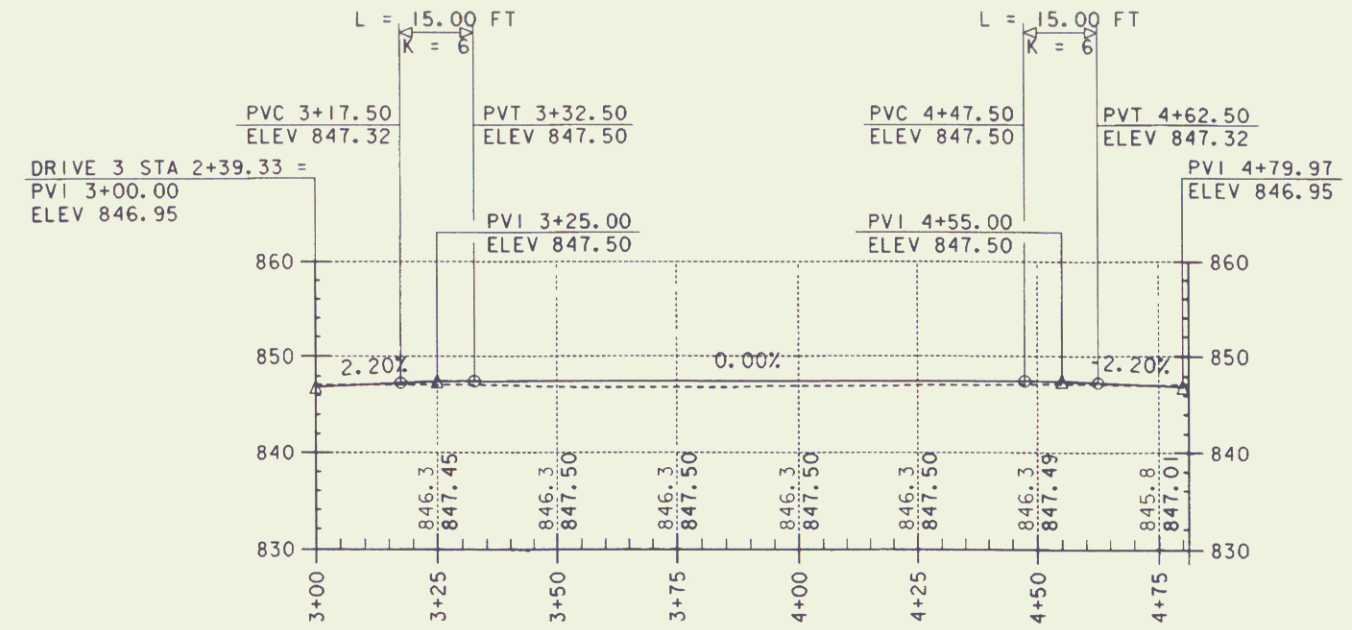


GRADES SHOWN TO THE NEAREST TENTH
ARE OLD GROUND ALONG THE PROPOSED ALIGNMENT.
GRADES SHOWN TO THE NEAREST HUNDREDTH ARE FINISHED
GRADES ALONG THE PROPOSED ALIGNMENT.

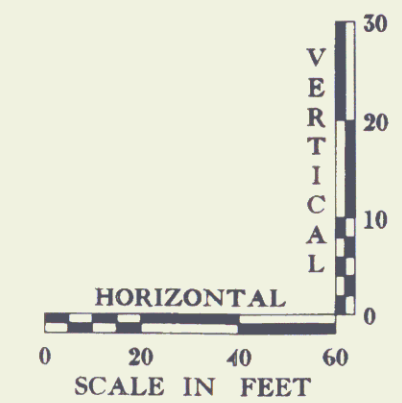
SHEET NAME: PARKING LOT DRIVE & DRIVEWAY PROFILE SHEET	
PROJECT NAME: READING	HIGHWAY NO.: VT 44
PROJECT NUMBER: BRS 0148(6)S	BRIDGE NO.: 1
	OVER: THE MILL BROOK
FILE NAME: /PW/85e034/se034xsl.dgn	PLOT DATE: 03-JAN-2005
PROJECT MANAGER: R. WHITCOMB	DRAWN BY: J. GILMORE
DESIGNED BY: C. MEUNIER	IPARM NAME: se034dpl
	R.O.W. SHEET 7 OF 17 SHEETS



WELL DRIVE PROFILE
(DRIVE 3)



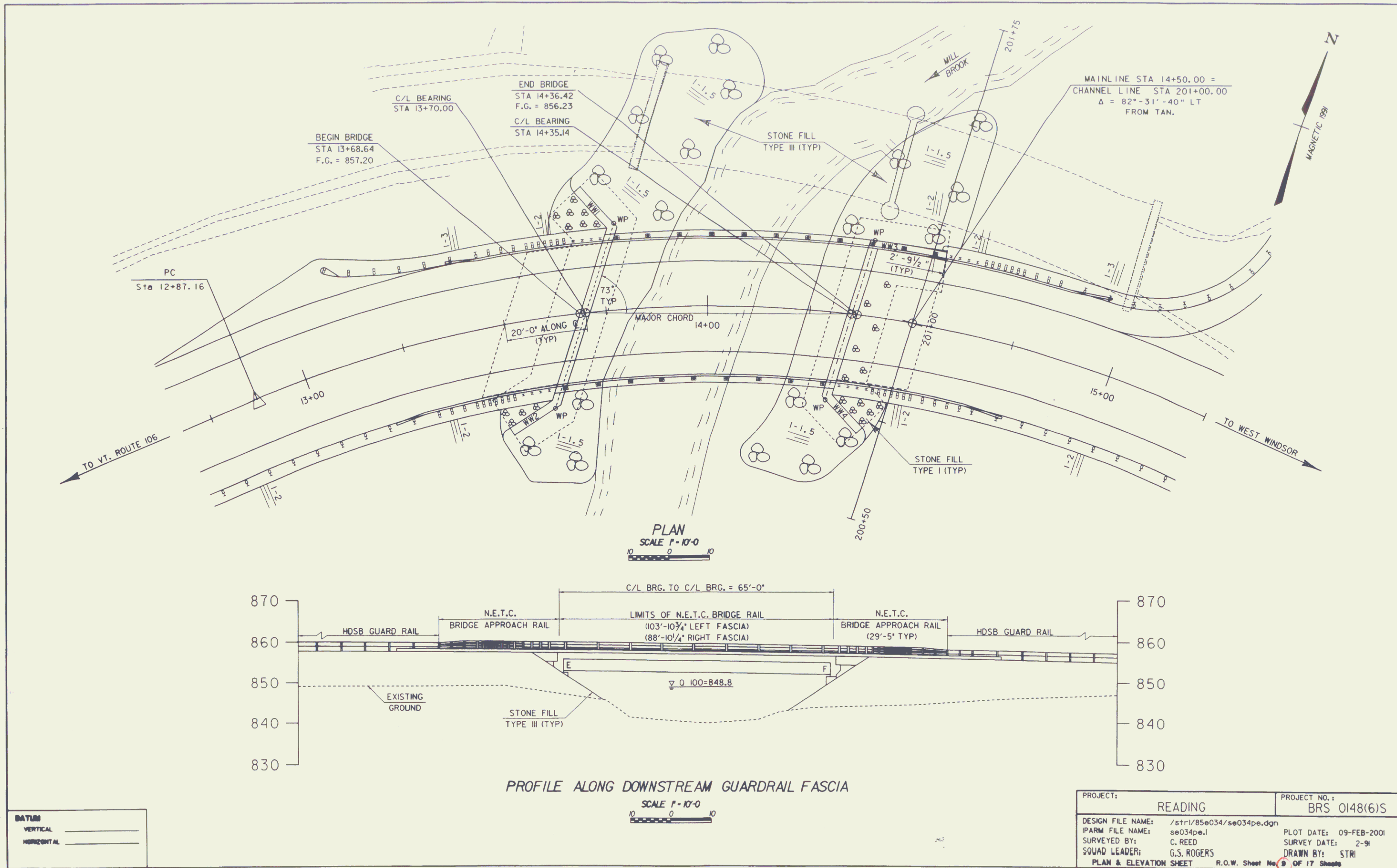
WELL CIRCLE PROFILE
(DRIVE 4)

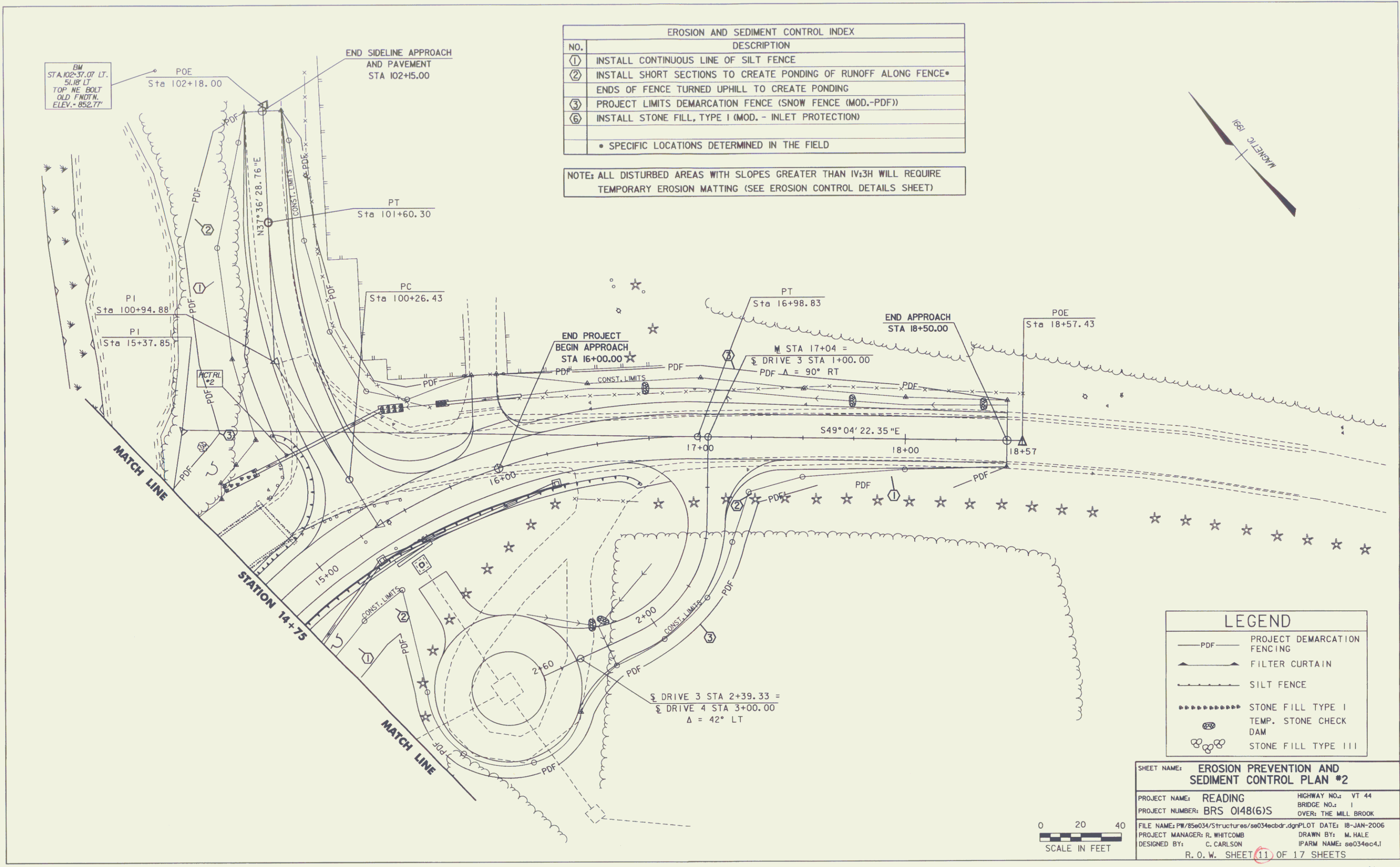


GRADES SHOWN TO THE NEAREST TENTH
ARE OLD GROUND ALONG THE PROPOSED ALIGNMENT.
GRADES SHOWN TO THE NEAREST HUNDREDTH ARE FINISHED
GRADES ALONG THE PROPOSED ALIGNMENT.

PROJECT: READING	PROJECT NO.: BRS 0148(6) S
DESIGN FILE NAME: /str/1/85e034/se034xsl.dgn	PLOT DATE: 09-FEB-2001
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WELL DRIVE AND WELL CIRCLE DRIVE PROFILE SHEET	
R.O.W Sheet No. 8 OF 17 Sheets	

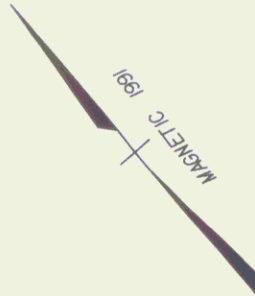






EROSION AND SEDIMENT CONTROL INDEX	
NO.	DESCRIPTION
①	INSTALL CONTINUOUS LINE OF SILT FENCE
②	INSTALL SHORT SECTIONS TO CREATE PONDING OF RUNOFF ALONG FENCE*
③	ENDS OF FENCE TURNED UPHILL TO CREATE PONDING
④	PROJECT LIMITS DEMARCATION FENCE (SNOW FENCE (MOD.-PDF))
⑤	INSTALL STONE FILL, TYPE I (MOD. - INLET PROTECTION)
* SPECIFIC LOCATIONS DETERMINED IN THE FIELD	

NOTE: ALL DISTURBED AREAS WITH SLOPES GREATER THAN 1V:3H WILL REQUIRE TEMPORARY EROSION MATTING (SEE EROSION CONTROL DETAILS SHEET)



LEGEND	
— PDF —	PROJECT DEMARCATION FENCING
—▲—▲—	FILTER CURTAIN
—●—●—	SILT FENCE
●●●●●●	STONE FILL TYPE I
⊗	TEMP. STONE CHECK DAM
⊗⊗⊗	STONE FILL TYPE III

SHEET NAME: **EROSION PREVENTION AND SEDIMENT CONTROL PLAN #2**

PROJECT NAME: **READING** HIGHWAY NO.: **VT 44**

PROJECT NUMBER: **BRS 0148(6)S** BRIDGE NO.: **1**

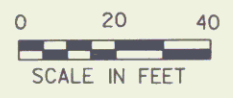
OVER: **THE MILL BROOK**

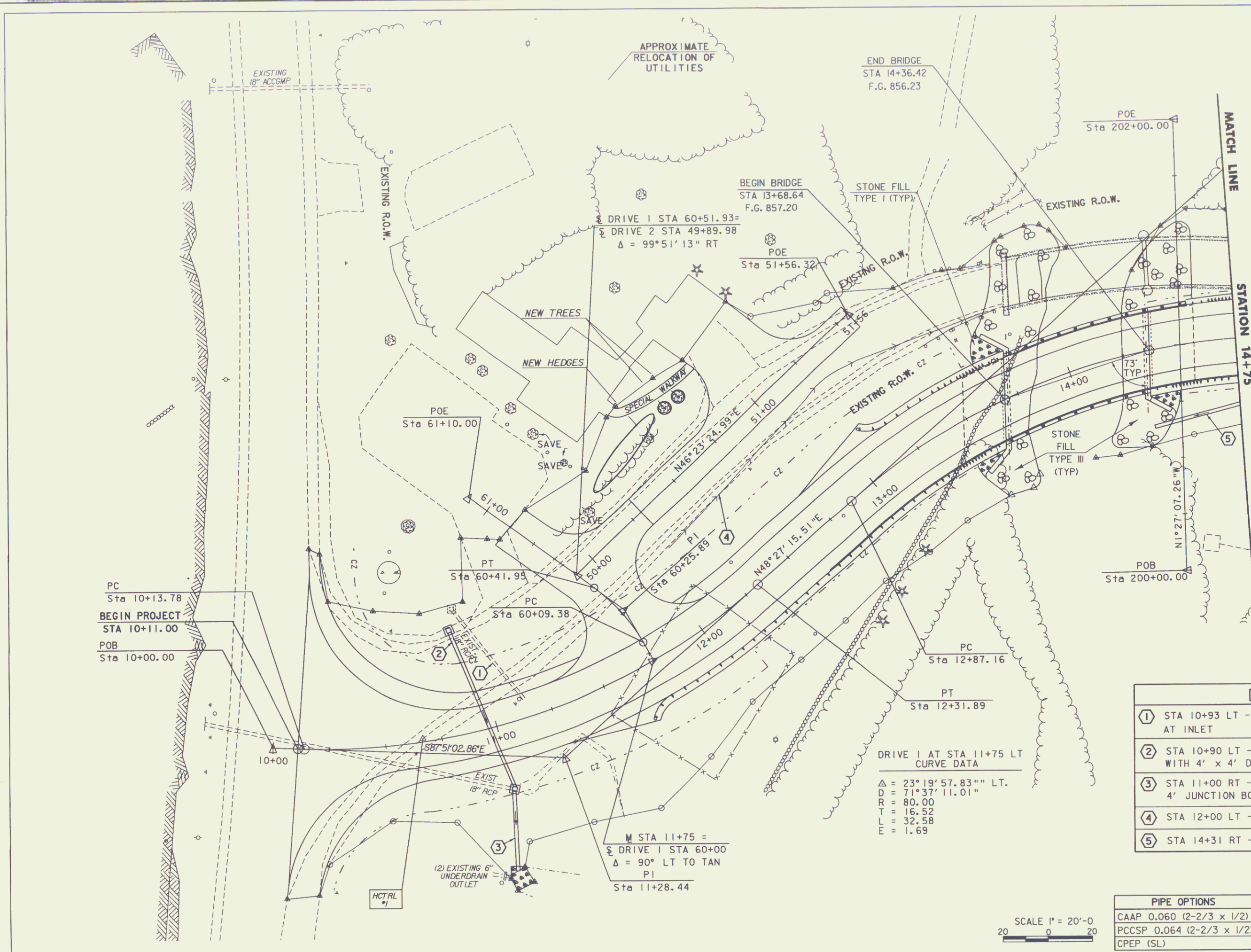
FILE NAME: **PW/856034/Structures/06034ecbdr.dgn** PLOT DATE: **18-JAN-2006**

PROJECT MANAGER: **R. WHITCOMB** DRAWN BY: **M. HALE**

DESIGNED BY: **C. CARLSON** IPARM NAME: **06034ec41**

R. O. W. SHEET **11** OF 17 SHEETS

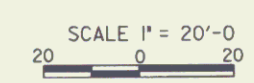




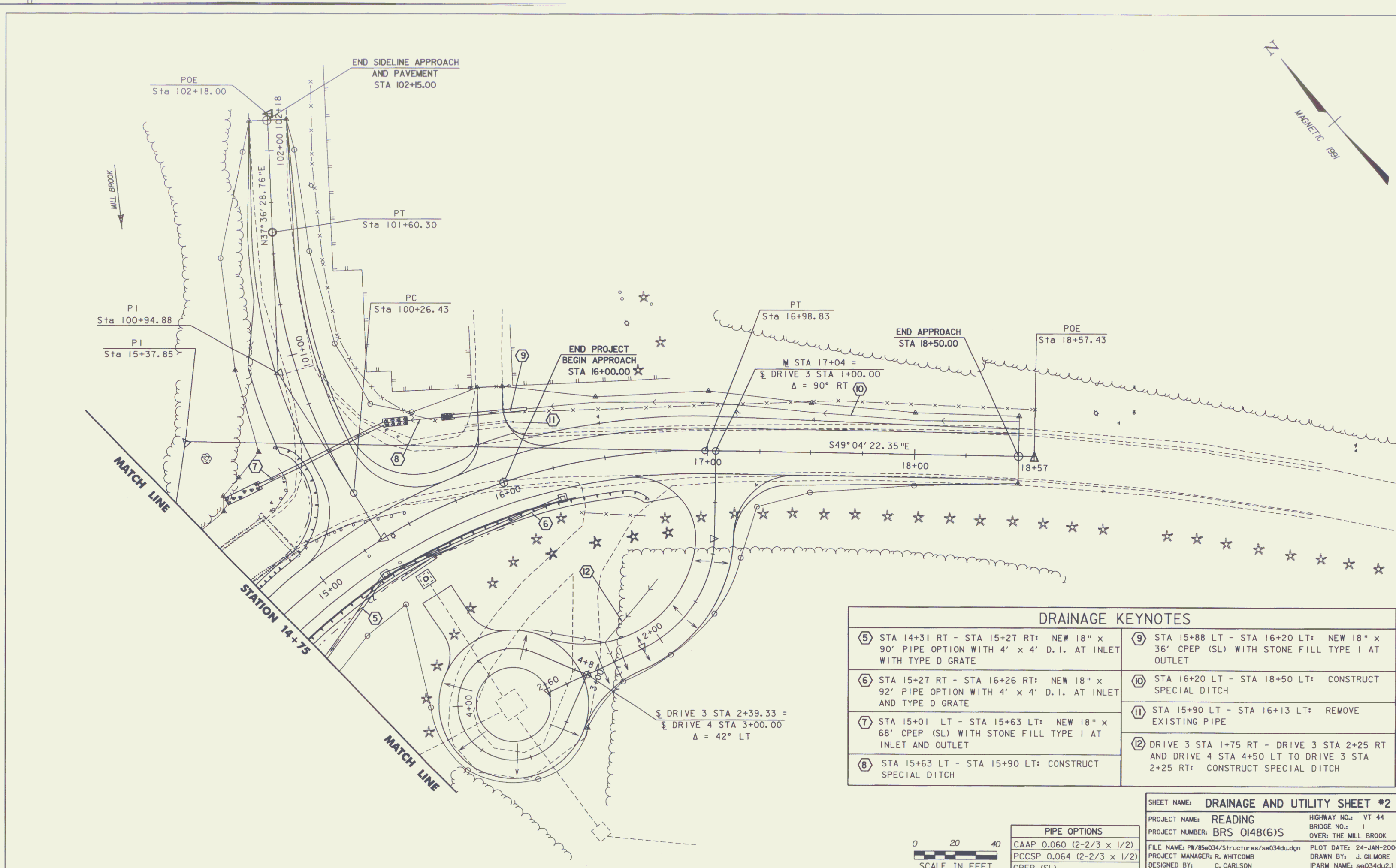
DRAINAGE KEYNOTES	
①	STA 10+93 LT - STA 11+16 LT: REMOVE EXISTING 18" RCP & D. I. AT INLET
②	STA 10+90 LT - STA 11+00 RT: NEW 18" X 74' PIPE OPTION WITH 4' X 4' DI WITH TYPE 'D' GRATE AT INLET
③	STA 11+00 RT - STA 10+93 RT: NEW 18" X 36' CPEP (SL) & 4' X 4' JUNCTION BOX AT INLET WITH STONE FILL TYPE I AT OUTLET
④	STA 12+00 LT - STA 13+74 LT: CONSTRUCT SPECIAL DITCH
⑤	STA 14+31 RT - STA 15+27 RT: NEW 18" X 90' PIPE OPTION

DRIVE 1 AT STA 11+75 LT
CURVE DATA
 $\Delta = 23^{\circ}19'57.83''$ LT.
 $D = 71^{\circ}37'11.01''$
 $R = 80.00$
 $T = 16.52$
 $L = 32.58$
 $E = 1.69$

PIPE OPTIONS	
CAAP	0.060 (2-2/3 x 1/2)
PCCSP	0.064 (2-2/3 x 1/2)
CPEP (SL)	

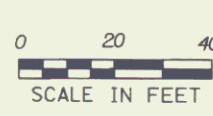


SHEET NAME: DRAINAGE AND UTILITY SHEET #1	
PROJECT NAME: READING	HIGHWAY NO.: VT 44
PROJECT NUMBER: BRS 0148(6)S	BRIDGE NO.: 1
	OVER: THE MILL BROOK
FILE NAME: P:\85e034\Structures\ee034du.dgn	PLOT DATE: 24-JAN-2006
PROJECT MANAGER: R. WHITCOMB	DRAWN BY: J. GILMORE
DESIGNED BY: C. CARLSON	IPARM NAME: ee034du.l
BRIDGE SHEET NUMBER:	ROW SHEET 12 OF 17



DRAINAGE KEYNOTES

⑤ STA 14+31 RT - STA 15+27 RT: NEW 18" x 90' PIPE OPTION WITH 4' x 4' D.I. AT INLET WITH TYPE D GRATE	⑨ STA 15+88 LT - STA 16+20 LT: NEW 18" x 36' CPEP (SL) WITH STONE FILL TYPE I AT OUTLET
⑥ STA 15+27 RT - STA 16+26 RT: NEW 18" x 92' PIPE OPTION WITH 4' x 4' D.I. AT INLET AND TYPE D GRATE	⑩ STA 16+20 LT - STA 18+50 LT: CONSTRUCT SPECIAL DITCH
⑦ STA 15+01 LT - STA 15+63 LT: NEW 18" x 68' CPEP (SL) WITH STONE FILL TYPE I AT INLET AND OUTLET	⑪ STA 15+90 LT - STA 16+13 LT: REMOVE EXISTING PIPE
⑧ STA 15+63 LT - STA 15+90 LT: CONSTRUCT SPECIAL DITCH	⑫ DRIVE 3 STA 1+75 RT - DRIVE 3 STA 2+25 RT AND DRIVE 4 STA 4+50 LT TO DRIVE 3 STA 2+25 RT: CONSTRUCT SPECIAL DITCH



PIPE OPTIONS	
CAAP 0.060 (2-2/3 x 1/2)	
PCCSP 0.064 (2-2/3 x 1/2)	
CPEP (SL)	

SHEET NAME: DRAINAGE AND UTILITY SHEET #2	
PROJECT NAME: READING	HIGHWAY NO.: VT 44
PROJECT NUMBER: BRS 0148(6)S	BRIDGE NO.: 1
	OVER: THE MILL BROOK
FILE NAME: PW/85034/Structures/ee034du.dgn	PLOT DATE: 24-JAN-2006
PROJECT MANAGER: R. WHITCOMB	DRAWN BY: J. GILMORE
DESIGNED BY: C. CARLSON	IPARM NAME: ee034du2.j
BRIDGE SHEET NUMBER:	ROW SHEET 13 OF 17

**STATE OF VERMONT
AGENCY OF TRANSPORTATION
TABLE OF PROJECT PROPERTY ACQUISITION
RIGHT OF WAY PLANS
DETAIL SHEET**

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											
1A	BENNETT, PETER D.	16	11+12.969 RT.	13+85.686 LT.	0.28A±		CONST. (T) 0.08A±	MO	03-07-05	READING	71	387-389	INCLUDES EROSION CONTROL & PDF 3,576 S.F.± 2,490 S.F.±	1	14,16	PARCEL NO. 1 BENNETT. ADDED 2 CE(T) TO COVER PDF'S ON BOTH SIDES OF DRIVE. REMOVED SLOPE FOR DRIVE GRASSING. ADDED SLOPE(T) WHERE NEW TREES & HEDGES ARE GOING. CHANGED WALK ENDING STATION. ADDED 2 INSTALL(T) FOR MAPLE TREES. ADDED 1 LANDSCAPE(T) FOR HEDGES. CHANGED DRIVE STA. & WIDTH. PER C.O.#9330.	01-12-04	P. J. H.	R. P. D.											
			10+94.795 RT.	12+00.000 RT.		SLOPE (T) 0.06A±																								
			12+00.000 RT.	12+86.463 RT.		SLOPE (P) 467 S.F.±																								
			10+90.568 RT.	10+97.821 RT.		CUL., DIT. & DR. (P)																								
			11+58.968 RT.	12+24.066 RT.		REMOVE (T)																								
			12+80.171 RT.	12+86.463 RT.		ALL R.T. & I.																								
						REMOVE (T)																								
						10+61.704 LT.																								
						11+04.910 LT.	11+41.055 LT.																							
						11+75.000 LT.																								
1B		16																												
1C		16	10+50.000 CL.	14+15.573 LT.	0.55A±		ALL R.T. & I.																							
2A	WILLIAMS & CO. MINING, INC.	16,17	13+76.050 RT.	16+26.540 RT.	0.17A±			MO	03-22-05	READING	71	429-431		4	14	PARCEL NO. 2 WINDSOR MINERALS. ADD PDF IN REMARKS COLUMN, FOR A CONST(T), INSTALL(T), AND DRIVE(T). PER C.O. 9333.	01-26-04	M. J. R.	R. P. D.											
			13+94.826 RT.	15+27.586 RT.		CONST. (T) 1406 S.F.±																								
			14+83.236 RT.	17+57.000 RT.		INSTALL (T) 1883 S.F.±																								
			15+22.108 RT.	17+13.449 RT.		REMOVE (T)																								
			16+16.000 RT.	16+75.000 RT.		LANDSCAPE (T)																								
			16+50.000 RT.			REMOVE (T)																								
			17+04.000 RT.			DRIVE (T)																								
2B		16,17	14+05.980 LT.	18+57.000 RT.	0.26A±		ALL R.T. & I.							7	16,17	PARCEL NO. 2 WINDSOR MINERALS. CHANGE IN OWNERSHIP OF PARCELS 2A & 2B FROM WINDSOR MINERALS, INC. (D/B/A LUZENAC AMERICA, INC.) TO WILLIAMS & CO. MINING, INC. PER C.O.#9387	10-12-04	G. J. F.	R. P. D.											

ACCT.mr.yan
P:\PWP\dms02502\vr\034d.dgn
DATE PLOTTED 02-DEC-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
... CZ (P) ... CLEAR ZONE
--- CONST (T) --- CONSTRUCTION EASEMENT
SR SR SLOPE RIGHTS
P PROPERTY LINE
△ TOP OF CUT
○ TOE OF SLOPE

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

APPROVED: ROGER P. DUMAS DATE: 05-13-03
CHIEF, PLANS & TITLES

R. O. W. PLANS

READING
BRS 0148(6) S
R. O. W. SHEET 14 OF 17 SHEETS
SHEET 7 OF 83

**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	
3A	KAIJA, KEVIN J. & LISA Q.	16,17	15+14.829 LT. 14+58.282 LT.	TH 5 101+69.737 LT. TH 5 102+03.825 LT.	323 S.F. ±		CONST. (T) 0.07A±	WD	03-22-05	READING	71	433-434	INCLUDES EROSION CONTROL & PDF 2, 915 S.F. ±							
			14+58.282 LT. 14+86.923 LT.	15+14.829 LT. TH 5 101+54.979 LT.			CUL., DIT. & DR. (P) SLOPE (T) 613 S.F. ±													
3B		16,17	14+02.093 LT.	15+58.110 LT.	0.10A±		ALL R.T. & I.						Hwy. EASE. VT. RTE. 44 & TH 5							
4	TOWN OF READING JOINED BY WINDSOR MINERALS, INC. (D/B/A LUZENAC AMERICA, INC.)	17	15+13.194 LT. TH 5 102+50.000 RT. TH 5 100+96.506 RT. 15+58.179 LT. 15+59.836 LT. 15+88.253 LT. 15+99.000 LT. 16+00.000 LT. 16+12.418 LT. 16+12.418 LT.	18+57.000 LT. 18+57.000 LT. 16+02.464 LT. 15+90.000 LT. 16+02.464 LT. 16+20.261 LT. 15+99.000 LT. 16+00.000 LT. 17+28.212 LT. 18+03.339 LT.	0.20A±		ALL R.T. & I. REMOVE & RESET (T) INSTALL (T) 294 S.F. ± CUL., DIT. & DR. (P) SLOPE (P) 522 S.F. ± CULVERT (T) DRIVE (T) REMOVE & RESET (T) DITCH (P) 607 S.F. ± INSTALL (T) 934 S.F. ±	GCD	12-20-04	READING	71	208-211	Hwy. EASE. VT. RTE. 44 & TH 5 FENCE EROSION CONTROL & PDF 12" GRAVEL MM 0012 GATE EROSION CONTROL & PDF							
5A	TOWN OF READING	16	12+86.463 RT. 12+25.980 RT.	14+05.980 LT. 13+65.192 RT.	2941 S.F. ±		CONST. (T) 0.06A±	GCD	12-20-04	READING	71	206-207	INCLUDES EROSION CONTROL - SEDIMENT SETTLING BASIN, & PDF 2,678 S.F. ±							
			12+79.064 RT. 12+80.171 RT.	13+25.000 RT. 12+86.463 RT.			SLOPE (P) 105 S.F. ± ALL R.T. & I.						STONE WALL							
5B		16	13+85.686 LT.	14+18.500 LT.	508 S.F. ±		ALL R.T. & I.						HIGHWAY EASE. VT. RTE. 44							
5C		17	15+13.194 LT. TH 5 100+48.000 CL 15+14.829 LT.	15+58.110 LT. TH 5 102+15.00 CL 15+58.179 LT.	1176 S.F. ±		ALL R.T. & I. APPROACH (T) CUL. (P)						Hwy. EASE. TH 5 & VT. RTE. 44 TH 5 INCLUDES EROSION CONTROL & PDF							
6	VERIZON NEW ENGLAND, INC.												UTILITY							
7	CENTRAL VERMONT PUBLIC SERVICE CORP.												UTILITY							
8	VERMONT TELEPHONE COMPANY, INC.												UTILITY							
	MAINTENANCE AGREEMENT ZONE #1	17	TH 5 100+11.000 CL	TH 5 100+48.000 CL									TH 5 LENGTH 37.00'							
	RELINQUISHMENT NO. 1	17	15+14.829 LT.	TH 5 101+69.737 LT.						READING			323 S.F. ±							

ACCT: rpf-yen
P:\PWP\dms02502\02-034d.dgn
DATE PLOTTED 02-DEC-2005

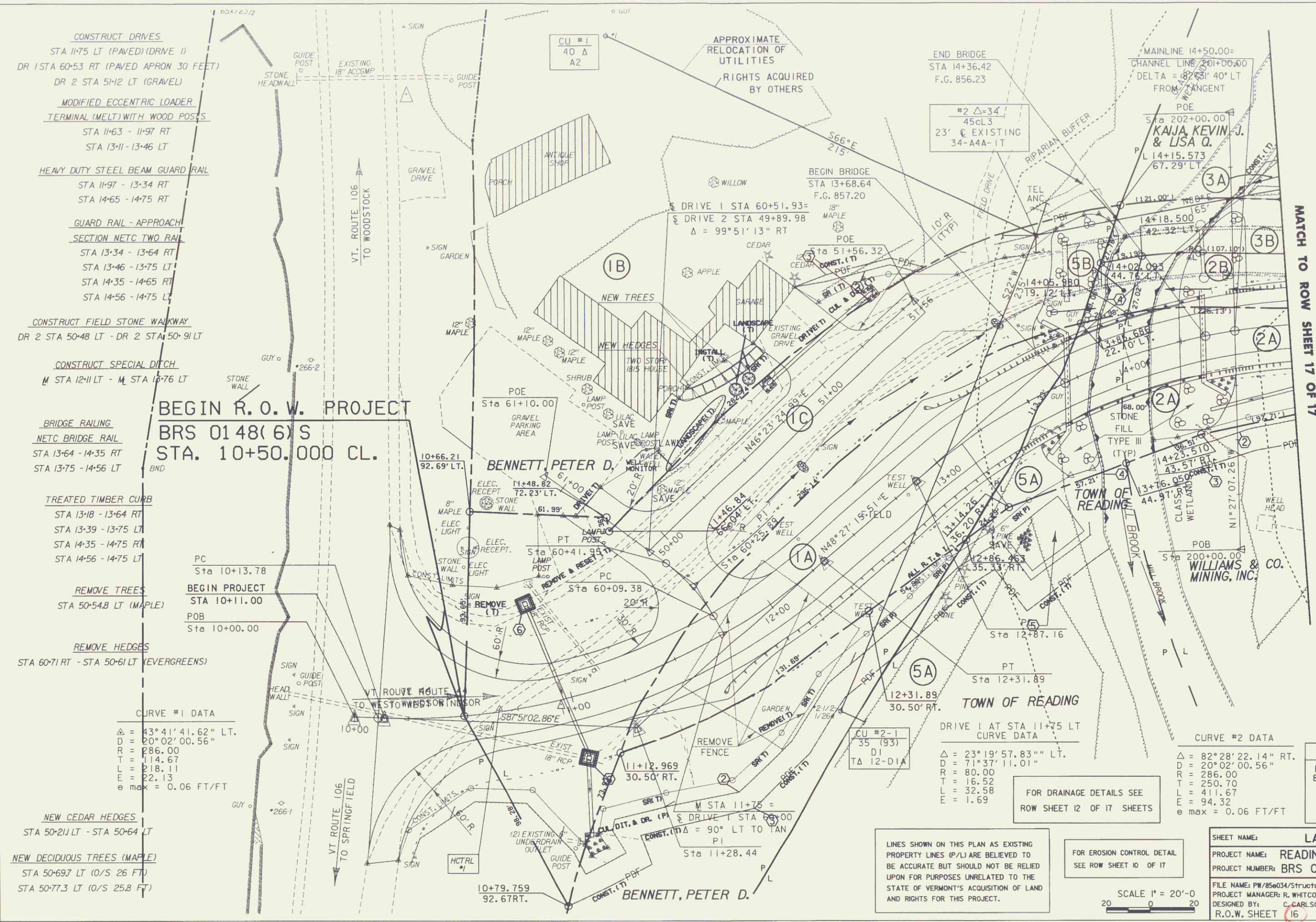
DR. (P)- DRAINAGE RIGHT
DIT. (P)- DITCHING RIGHT
CH. (P)- CHANNEL RT.
DRIVE (T)- DRIVE RIGHT
CUL. (P)- CULVERT RIGHT
[W]- WATER SOURCES

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
...CZ (P) ... CLEAR ZONE
---CONST. (T)--- CONSTRUCTION EASEMENT
SR SR SLOPE RIGHTS
P PROPERTY LINE
L TOP OF CUT
O O TOE OF SLOPE
---UE (P)--- PERMANENT UTILITY EASEMENT

APPROVED: ROGER P. DUMAS DATE: 05-13-03
CHIEF, PLANS & TITLES

R. O. W. PLANS
READING
BRS 0148(6) S
R. O. W. SHEET (15) OF 17 SHEETS
SHEET 8 OF 83



CONSTRUCT DRIVES
 STA 11+75 LT (PAVED) (DRIVE 1)
 DR 1 STA 60+53 RT (PAVED APRON 30 FEET)
 DR 2 STA 51+2 LT (GRAVEL)
MODIFIED ECCENTRIC LOADER
TERMINAL (MELT) WITH WOOD POSTS
 STA 11+63 - 11+97 RT
 STA 13+11 - 13+46 LT
HEAVY DUTY STEEL BEAM GUARD RAIL
 STA 11+97 - 13+34 RT
 STA 14+65 - 14+75 RT
GUARD RAIL - APPROACH
SECTION NETC TWO RAIL
 STA 13+34 - 13+64 RT
 STA 13+46 - 13+75 LT
 STA 14+35 - 14+65 RT
 STA 14+56 - 14+75 LT
CONSTRUCT FIELD STONE WALKWAY
 DR 2 STA 50+48 LT - DR 2 STA 50+91 LT
CONSTRUCT SPECIAL DITCH
 M STA 12+11 LT - M STA 12+76 LT

BRIDGE RAILING
NETC BRIDGE RAIL
 STA 13+64 - 14+35 RT
 STA 13+75 - 14+56 LT
TREATED TIMBER CURB
 STA 13+18 - 13+64 RT
 STA 13+39 - 13+75 LT
 STA 14+35 - 14+75 RT
 STA 14+56 - 14+75 LT
REMOVE TREES
 STA 50+54 RT (MAPLE)
REMOVE HEDGES
 STA 60+71 RT - STA 50+61 LT (EVERGREENS)

CURVE #1 DATA
 $\Delta = 43^\circ 41' 41.62''$ LT.
 $D = 20^\circ 02' 00.56''$
 $R = 286.00$
 $T = 114.67$
 $L = 22.13$
 $e_{max} = 0.06$ FT/FT

NEW CEDAR HEDGES
 STA 50+21 LT - STA 50+64 LT
NEW DECIDUOUS TREES (MAPLE)
 STA 50+69 LT (10/S 26 FT)
 STA 50+77.3 LT (10/S 25.8 FT)

BEGIN R.O.W. PROJECT
BRS 0148(6) S
STA. 10+50.000 CL.

BEGIN PROJECT
 STA 10+11.00
POB
 Sta 10+00.00

END BRIDGE
 STA 14+36.42
 F.G. 856.23

BEGIN BRIDGE
 STA 13+68.64
 F.G. 857.20

DRIVE 1 STA 60+51.93 =
DRIVE 2 STA 49+89.98
 $\Delta = 99^\circ 51' 13''$ RT

BENNETT, PETER D.
 STA 61+10.00
 STA 60+41.93
 STA 60+09.38

TOWN OF READING
 STA 12+31.89
 STA 12+87.16

DRIVE 1 AT STA 11+75 LT
CURVE DATA
 $\Delta = 23^\circ 19' 57.83''$ LT.
 $D = 71^\circ 37' 11.01''$
 $R = 80.00$
 $T = 16.52$
 $L = 32.58$
 $E = 1.69$

CURVE #2 DATA
 $\Delta = 82^\circ 28' 22.14''$ RT.
 $D = 20^\circ 02' 00.56''$
 $R = 286.00$
 $T = 250.70$
 $L = 411.67$
 $E = 94.32$
 $e_{max} = 0.06$ FT/FT

EXISTING BRIDGE DATA
 BUILT IN 1934 - TWO SPAN BRIDGE
 8" CONCRETE DECK W/ STEEL BEAM
 SKELETAL ABUTMENTS
 TOTAL SPAN=18 FEET.
 CURB TO CURB=20.2 FEET
 FASCIA TO FASCIA=23.4 FEET

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 DETAIL
 SEE ROW SHEET 10 OF 17

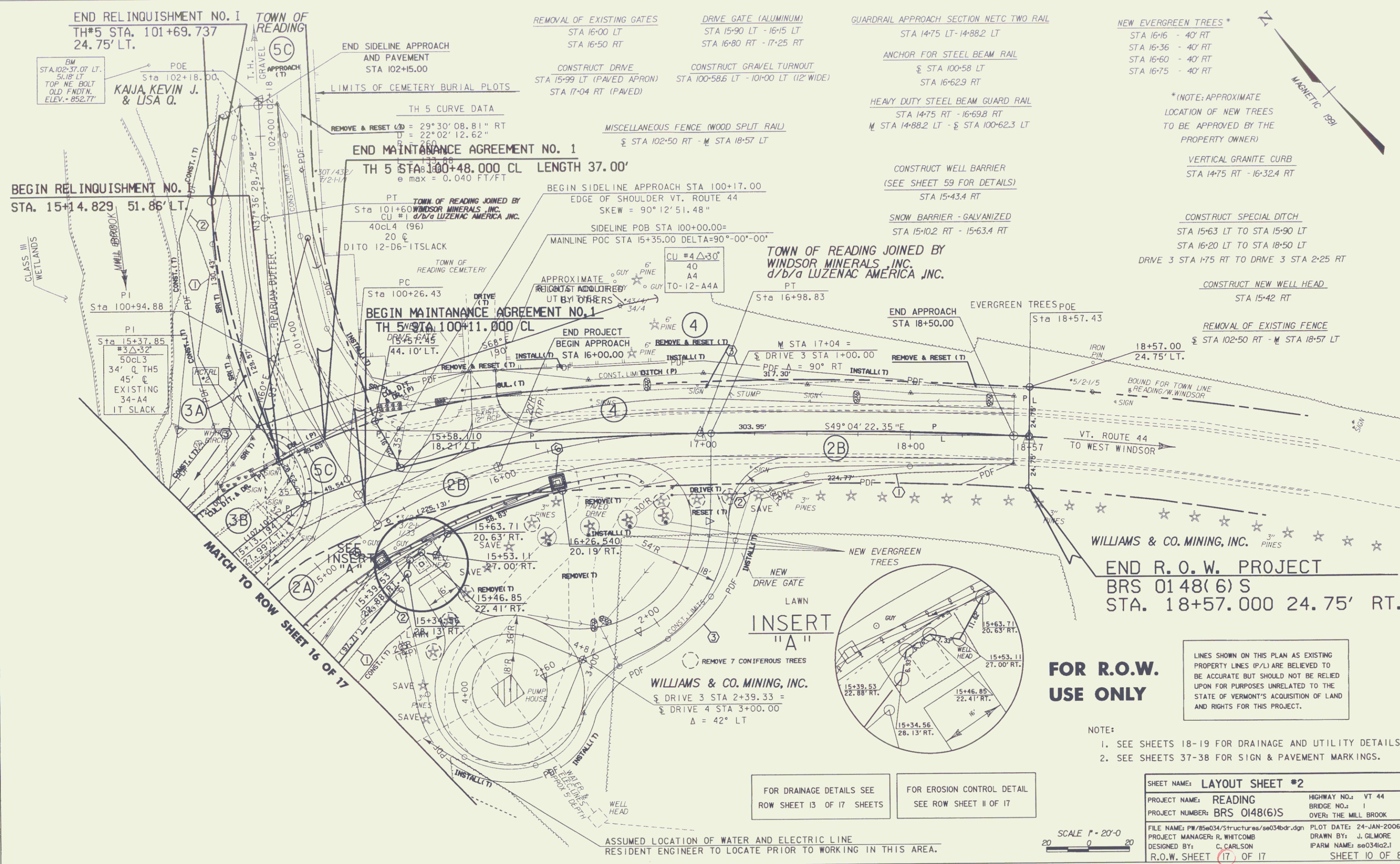
SCALE 1" = 20'-0"
 20 0 20

SHEET NAME: LAYOUT SHEET #1	
PROJECT NAME: READING	HIGHWAY NO.: VT 44
PROJECT NUMBER: BRS 0148(6)S	BRIDGE NO.: 1
FILE NAME: PW/854034/Structures/0034bdr.dgn	OVER: THE MILL BROOK
PROJECT MANAGER: R. WHITCOMB	PLOT DATE: 24-JAN-2006
DESIGNED BY: C. CARLSON	DRAWN BY: J. GILMORE
R.O.W. SHEET 16 OF 17	IPARM NAME: 0034bdr
	SHEET 9 OF 83



MATCH TO ROW SHEET 17 OF 17

FOR R.O.W. USE ONLY



END RELINQUISHMENT NO. 1
TH#5 STA. 101+69.737
24.75' LT.

BEGIN RELINQUISHMENT NO. 1
STA. 15+14.829 51.86' LT.

END MAINTENANCE AGREEMENT NO. 1
TH 5 STA 100+48.000 CL LENGTH 37.00'
e max = 0.040 FT/FT

BEGIN MAINTENANCE AGREEMENT NO. 1
TH 5 STA 100+11.000 CL
18+57.45
44.10' LT.

NEW EVERGREEN TREES*
STA 16+16 - 40' RT
STA 16+36 - 40' RT
STA 16+60 - 40' RT
STA 16+75 - 40' RT

*(NOTE: APPROXIMATE
LOCATION OF NEW TREES
TO BE APPROVED BY THE
PROPERTY OWNER)

VERTICAL GRANITE CURB
STA 14+75 RT - 16+32.4 RT

CONSTRUCT SPECIAL DITCH
STA 15+63 LT TO STA 15+90 LT
STA 16+20 LT TO STA 18+50 LT
DRIVE 3 STA 1+75 RT TO DRIVE 3 STA 2+25 RT

CONSTRUCT NEW WELL HEAD
STA 15+42 RT

REMOVAL OF EXISTING FENCE
STA 102+50 RT - STA 18+57 LT
24.75' LT.

END R.O.W. PROJECT
BRS 0148(6) S
STA. 18+57.000 24.75' RT.

FOR R.O.W.
USE ONLY

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:
1. SEE SHEETS 18-19 FOR DRAINAGE AND UTILITY DETAILS.
 2. SEE SHEETS 37-38 FOR SIGN & PAVEMENT MARKINGS.

FOR DRAINAGE DETAILS SEE
ROW SHEET 13 OF 17 SHEETS

FOR EROSION CONTROL DETAIL
SEE ROW SHEET 11 OF 17

SCALE 1" = 20'-0"

SHEET NAME: LAYOUT SHEET #2	
PROJECT NAME: READING	HIGHWAY NO.: VT 44
PROJECT NUMBER: BRS 0148(6)S	BRIDGE NO.: 1
	OVER: THE MILL BROOK
FILE NAME: PW/85e034/Structures/s6034bdr.dgn	PLOT DATE: 24-JAN-2006
PROJECT MANAGER: R. WHITCOMB	DRAWN BY: J. GILMORE
DESIGNED BY: C. CARLSON	IPARM NAME: s6034b2.1
R.O.W. SHEET 17 OF 17	SHEET 10 OF 83