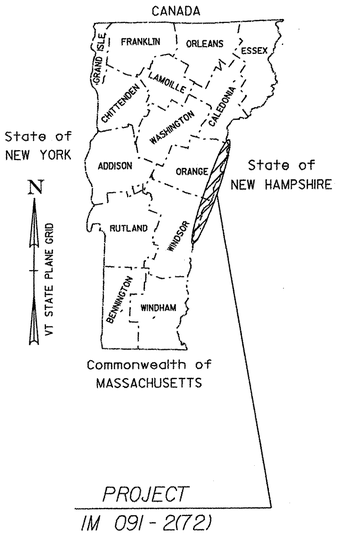
INDEX OF SHEETS
(SEE SHEET 2)

STATE OF VERMONT
AGENCY OF TRANSPORTATION



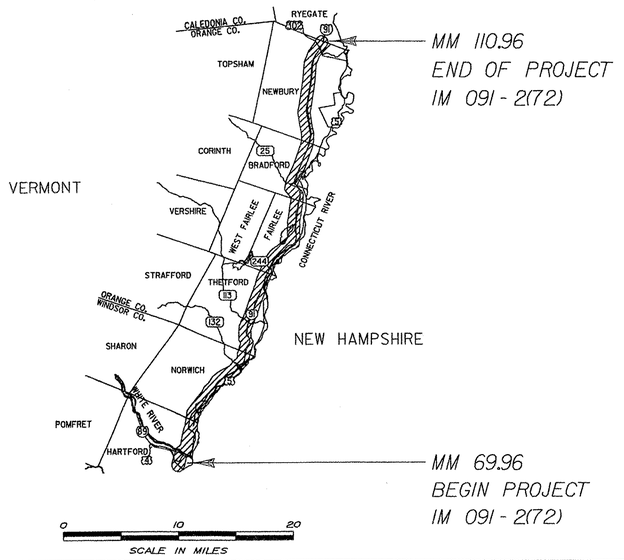
PROPOSED IMPROVEMENT

TOWNS OF HARTFORD - NEWBURY
COUNTIES OF WINDSOR & ORANGE
INTERSTATE 91 - LEDGE

PROJECT LOCATION: NORTHBOUND & SOUTHBOUND INTERSTATE BARRELS BEGINNING AT MM 69.96 AND EXTENDING NORTHERLY 41.00 MILES TO MM 110.96 AT THE NEWBURY/RYEGATE TOWNLINE AND EXIT 11 SOUTHBOUND OFF RAMP.

PROJECT DESCRIPTION: WORK TO BE PERFORMED UNDER THIS PROJECT INCLUDES SOLID ROCK EXCAVATION, SCALING, TRIM BLASTING, ROCK DOWELING, TRAFFIC CONTROL AND OTHER RELATED ITEMS.

LENGTH OR ROADWAY:	216,480.00 FT	41.00 MILES
LENGTH OF PROJECT:	216,480.00 FT	41.00 MILES



N
VT STATE PLANE GRID

RECORD PLANS

CONTRACTOR: J. A. MCDONALD INC. – LYNDON CENTER, VT
RESIDENT ENGINEER: PAUL PERRY
CONSTRUCTION BEGAN: SEPTEMBER 23, 2009
CONSTRUCTION COMPLETE: AUGUST 12, 2010
RECORD PLANS BY: PAUL PERRY & AMOS KEMPTON

I HEREBY CERTIFY THAT ALL THE CONSTUCTION REQUIRED BY THIS SET OF DRAWINGS HAS BEEN ACCOMPLISHED AS INDICATED HEREIN.

BY Paul K. Perry RESIDENT ENGINEER
DATE 8-1-11

NOTE: Any further information concerning final quantities, amounts or other details relative to this project may be found at Central Files in the electronic archives.

CONVENTIONAL SYMBOLS

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

SURVEYED BY :	VAOT- R. GILMAN
SURVEYED DATE :	2-2007
DATUM	
VERTICAL	NAVD83
HORIZONTAL	NAVD83 (CONUS)

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

CONSTRUCTION IS TO BE CARRIED ON IN ACCORDANCE WITH THESE PLANS AND THE STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 2006, AS APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION ON JUNE 15, 2006 FOR USE ON THIS PROJECT, INCLUDING ALL SUBSEQUENT REVISIONS AND SUCH REVISED SPECIFICATIONS AND SPECIAL PROVISIONS AS ARE INCORPORATED IN THESE PLANS.

DIRECTOR OF PROGRAM DEVELOPMENT
APPROVED Richard Farnsworth DATE 7-27-09

PROJECT MANAGER : KEN UPMAL

PROJECT NAME : HARTFORD-NEWBURY
PROJECT NUMBER : IM 091 - 2(72)

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PROJECT NAME:	HARTFORD - NEWBURY		
PROJECT NUMBER:	IM 091- 2(72)		
FILE NAME:	d99a052_frm.dgn	PLOT DATE:	21-JUL-2009
PROJECT LEADER:	K. UPMAL	DRAWN BY:	N. PAPPAS
DESIGNED BY:	N. PAPPAS	CHECKED BY:	A. BOMBARDIER
IPARM FILE NAME:	d99a052_Index	SHEET	2 OF 45

GPS CONTROL POINTS

HVCTRL #1

THET AZ MK

NORTH = 488643.734
EAST = 1720093.915
ELEV. = 540.309

General location, Thetford, VT. To reach from the intersection of VT route 113 west and US route 5 in East Thetford, go north along route 5 for 1.8 mi to the intersection of Latham Road left. Turn left and go southwest along Latham Road for 0.1 mi to the intersection of School House Hill Road right. Turn right and go northwest along School House Hill Road for 0.2 mi to the intersection of Clay Road right. Continue straight ahead and go northwest along School House Hill Road 0.1 mi to the site of the mark on the left. The mark is set 4" below ground surface in the top of a 12" diameter concrete monument. It is 19' south southwest of and about 2' lower than the centerline of School House Hill Road, 30.5' west northwest of a 10" apple, 140' east southeast of a 40" pine, 90' southeast of the center of a gate, and 1' south southwest of a fiberglass witness post.

HVCTRL #2

THET

NORTH = 490202.789
EAST = 1719655.856
ELEV. = 575.8230

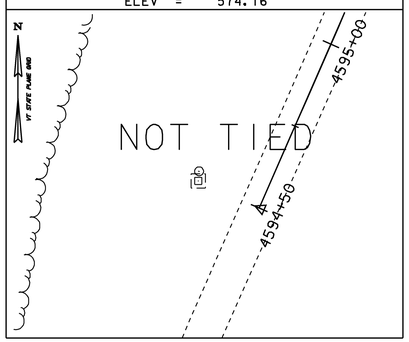
General location, Thetford VT. To reach from the VT route 113 bridge over I-91 northbound at exit 14 go north along I-91 for 2.4 mi to mile marker 86.60 and the site of the mark on the left in the median. The mark is set flush with the ground surface in the top of a 12" diameter concrete monument. It is about 49' northeast of the centerline of a large drainage ditch in the median. It is 42' southeast of and about 3' higher than the I-91 southbound edge of pavement, 96' northwest of the I-91 northbound northwest edge of pavement, 49' east northeast of the center of the southeast (outlet) end of a 24" diameter concrete pipe, 61' north of the center of the northwest (inlet) end of a 24" diameter metal pipe with a concrete headwall, 61' west of 10" apple.

* The above control points are in the project area vicinity MM 86.6 [file 99a052b]

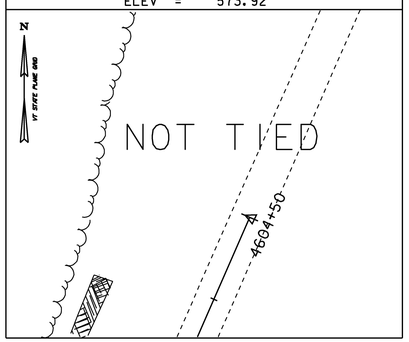
GPS CONTROL POINTS

ALIGNMENT TIES

POB 4594+50.00
NORTH = 490188.93
EAST = 1719567.80
ELEV = 574.16



POE 4604+50.00
NORTH = 491105.27
EAST = 1719968.21
ELEV = 573.92



NORTH =
EAST =

NORTH =
EAST =

NORTH =
EAST =

TIE SHEET

DATUM

VERTICAL NAVD 88

HORIZONTAL NAD 83(Conus)

ADJUSTMENT none

PROJECT NAME: HARTFORD - NEWBURY
PROJECT NUMBER: IM 091-2(72)

FILE NAME: d99a052_frm.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY:
IPARM FILE NAME: d99a052_tie

PLOT DATE: 21-JUL-2009
DRAWN BY: R. Bullock
CHECKED BY:
SHEET 3 OF 45

GENERAL NOTES

1. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE STATE OF VERMONT AGENCY OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION, DATED 2006 AND ITS LATEST REVISIONS.

2. EXISTING DIMENSIONS SHOWN IN THE PLANS WERE DEVELOPED FROM LIMITED FIELD SURVEY AND ORIGINAL DESIGN PLANS AND ARE SHOWN FOR INFORMATION ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD CHECKING ALL DIMENSIONS APPLICABLE TO THIS WORK.

3. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT THE EXISTING PAVEMENT, PAVEMENT MARKINGS, GUARDRAIL, PIPES, DROP INLETS, CONCRETE SIGN FOUNDATIONS AND HEADWALLS FROM DAMAGE. THE CONTRACTOR, AT NO ADDITIONAL COMPENSATION, SHALL REPAIR ALL EXISTING PAVEMENT, PAVEMENT MARKINGS, GUARDRAIL, PIPES, DROP INLETS, CONCRETE SIGN FOUNDATIONS AND HEADWALLS DAMAGED DURING CONSTRUCTION ACTIVITIES TO THE SATISFACTION OF THE ENGINEER.

4. THE CONTRACTOR SHALL REMOVE, STOCKPILE, AND REINSTALL SIGNS, GUARDRAIL, MILE MARKER POSTS, DELINEATORS, AND DELINEATOR POSTS WHERE REQUIRED WORK MAY CAUSE DAMAGE TO THEM. SALVAGED DELINEATOR POSTS, SIGNS, SIGN POST AND MILE MARKER PLAQUES NOT REUSED ON THE PROJECT WILL BE SALVAGED TO THE GOVERNING VAOT DISTRICT.

LEDGE REMOVAL NOTES

1. IT IS STRONGLY RECOMMENDED THAT ALL BIDDING CONTRACTORS VISIT THE SITE AND FAMILIARIZE THEMSELVES WITH THE CURRENT SITE CONDITIONS AND ACCESSIBILITY PRIOR TO PREPARATION OF A BID.

2. FOR ALL LEDGE CUT SLOPES THROUGHOUT THE PROJECT AREA (MM. 69.96 TO MM. 110.96) THE LIMITS OF CLEARING SHALL START AT THE DITCH LINE, EXTEND UP THE FACE OF THE LEDGE AND CONTINUE FOR A DISTANCE OF 20 FT. BEYOND THE FINAL CREST OF THE LEDGE.

3. ALL VEGETATION SHALL BE CLEARED AND DISPOSED OF IN ACCORDANCE WITH SECTION 201 OF THE STANDARD SPECIFICATIONS. PAYMENT WILL BE MADE UNDER CONTRACT ITEM 201.11 "CLEARING AND GRUBBING, INCLUDING INDIVIDUAL TREES AND STUMPS".

4. THE LIMIT OF LEDGE REMOVAL IS SHOWN IN THESE PLANS FOR SOUTHBOUND OUTSIDE MILE MARKER 86.63 TO 86.75 TYPICAL 17. THE ACTUAL EXTENT OF WORK FOR ALL SITES HAS BEEN ESTIMATED AND SHALL BE DETERMINED IN THE FIELD BY THE VTRANS GEOLOGIST AND/OR THE ENGINEER BY ACTUAL FIELD CONDITIONS. THE CONTRACTOR SHALL PERFORM ANY ADDITIONAL WORK AT THE UNIT PRICES PROVIDED IN THE CONTRACT. LEDGE REMOVAL SHALL BE COMPLETED THROUGH MEANS OF HIGH SCALING, TRIM BLASTING, BLASTING AND/OR MECHANICAL METHODS. SPECIFIC METHODS OF LEDGE REMOVAL HAVE BEEN IDENTIFIED ON EACH INDIVIDUAL LEDGE REMOVAL TYPICAL SHEET AND LAYOUT SHEET.

5. a.) SOLID ROCK EXCAVATION SHALL BE COMPLETED IN ACCORDANCE WITH SECTION 203 AND SHALL BE PAID FOR UNDER CONTRACT ITEM 203.16 "SOLID ROCK EXCAVATION".

   b.) ALL LEDGE REMOVAL SHALL BE CONDUCTED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS BY PERSONNEL EXPERIENCED WITH THE REMOVAL METHODS BEING USED.

   c.) LEDGE REMOVAL USING METHODS OF HIGH SCALING, TRIM BLASTING, MACHINE SCALING, WASHING, OR HYDRAULIC SPLITTERS SHALL BE PAID FOR UNDER CONTRACT ITEMS "900.630 SPECIAL PROVISION (HIGH SCALING)", "900.630 SPECIAL PROVISION (MACHINE SCALING" AND "900.608 SPECIAL PROVISION (REMOVAL OF LEDGE WASTE MATERIAL)".

   d.) LEDGE REMOVAL USING METHODS OF TRIM BLASTING SHALL BE PAID UNDER "900.630 SPECIAL PROVISION (HIGH SCALING)".

6. PERIODS OF BLASTING OPERATIONS SHALL BE LIMITED TO MONDAY THROUGH SATURDAYS AND SHALL NOT BE ALLOWED AT ANY OTHER TIMES UNLESS APPROVED BY THE ENGINEER.

7. EXCESS MATERIAL MAY BE DISPOSED OFIN THE PROJECT AREA UNDER PERMITS APPROVED BY THE VAOT ENVIRONMENTAL SECTION AND AS APPROVED BY THE ENGINEER. THE CONTRACTOR MAY PROPOSE OTHER DISPOSAL AREAS TO THE ENGINEER. THE CONTRACTOR MUST RECEIVE WRITTEN PERMISSION FROM THE ENGINEER PRIOR TO USING DISPOSAL AREAS. EXCESS MATERIAL NOT WASTED ON SITE SHALL BE REMOVED FROM THE PROJECT SITE AND DISPOSED OF PROPERLY.

8. 3,000 CUBIC YARDS OF LEDGE MATERIAL REMOVED WILL BE SALVAGED TO THE BRADFORD RAIL ROAD YARD. SEE SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

SEEDING FORMULA
RURAL AREAS

% WT.	LBS./A.	NAME	PUR %	GERM %
37.5	22.5	CREEPING RED FESCUE	98	85
37.5	22.5	TALL FESCUE	95	90
5.0	3.0	RED TOP	95	90
15.0	9.0	BIRDSFOOT TREFOIL	98	85
5.0	3.0	ANNUAL RYEGRASS	95	85
100.0	60.0			

GENERAL NOTES

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

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

FERTILIZER: FORMULA 10-20-10, TO BE USED WITH SEED, APPLIED AT THE RATE OF 500 LBS./ACRE. (HYDRO SEEDERS MAY USE 19-19-19 FORMULA).

AGRICULTURAL LIMESTONE: TO BE APPLIED AT THE RATE OF 2 TONS/ACRE, OR AS DIRECTED BY THE ENGINEER.

HAY MULCH: TO BE PLACED ON EARTH SLOPES AT THE RATE OF 2 TONS/ACRE, OR AS DIRECTED BY THE ENGINEER.

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

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

GENERAL NOTES

PROJECT NAME:	HARTFORD - NEWBURY
PROJECT NUMBER:	IM 091- 2(72)

FILE NAME:	d99a052_frm.dgn	PLOT DATE:	27-JUL-2009
PROJECT LEADER:	K. UPMAL	DRAWN BY:	N. PAPPAS
DESIGNED BY:	N. PAPPAS	CHECKED BY:	A. BOMBARDIER
IPARM FILE NAME:	d99a052_general_notes	SHEET 4	OF 45

EROSION CONTROL NARRATIVE

1.1 PROJECT DESCRIPTION

THIS PROJECT INVOLVES THE REMOVAL OF EXPOSED LEDGE AT IDENTIFIED LOCATIONS FOR SAFETY ENHANCEMENTS.

NOTE: AREA OF DISTURBANCE SHALL INCLUDE LIMITS OF EARTH DISTURBANCE WITHIN THE PROJECT AREA AT SPECIFIC LEDGE REMOVAL LOCATIONS

TOTAL AREA OF DISTURBANCE IS APPROXIMATELY TWO ACRES.

IT IS ANTICIPATED THAT THIS PROJECT WILL LAST TWO CONSTRUCTION SEASONS.

1.2 SITE INVENTORY

1.2.1 OFF SITE DRAINAGE CHARACTERISTICS (UP AND DOWN-GRADIENT)

THE PROPERTY SURROUNDING THE PROJECT SITE CONSISTS OF WELL ESTABLISHED FOREST WITH MODERATE SLOPES AT THE PROJECT SITE. DUE TO THE NATURE OF THE SURROUNDING TERRAIN THE PROJECT SITE COULD RECEIVE RUNOFF WATER FROM A FEW NEARBY SLOPES. IF THIS IS THE CASE, IT SHOULD BE MINIMAL.

1.2.2 DRAINAGE, WATERWAYS, BODIES OF WATER, AND PROXIMITY TO NATURAL OR MAN-MADE WATER FEATURES

UNNAMED TRIBUTARY TO THE CONNECTICUT RIVER.

1.2.3 TOPOGRAPHY, EXISTING ROADS, BUILDINGS, UTILITIES

THE TOPOGRAPHY OF THE WORK AREAS IS OF LEDGE (SOLID ROCK). INTERSTATE 91 NORTH AND SOUTHBOUND ARE THE ONLY ROADS WITHIN THE DESIGNATED LEDGE REMOVAL SITES.

1.2.4 VEGETATION

THE VEGETATION IN THE PROJECT AREA CONSISTS OF SOFT AND HARDWOOD TREES, UNDERGROWTH, AND GRASS LINED DITCHES. THE IMPACT TO VEGETATION WILL BE LIMITED TO THAT WHICH IS DIRECTLY AFFECTED BY LEDGE REMOVAL. DISTURBED VEGETATION WILL BE REESTABLISHED WITH STANDARD SEED & MULCH PRACTICES AND EROSION MATTING.

1.2.5 SOILS

ALL SOIL DATA CAME FROM THE U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE FOR THE COUNTIES OF WINDSOR & ORANGE, VERMONT. SOILS ON THE PROJECT SITE ARE

BARREL/MILE MARKER	OUTSIDE OR MEDIAN	MUNAME - SOIL NAME, SLOPE, K
SB EXIT 11 TO RT 5	OUT	Vershire-Dummerston complex, 8 to 15 percent slopes, rocky, k=.28/.32
		Glover-Vershire complex, 15 to 35 percent slopes, very rocky, k=.32/.28
SB 71.25 TO BRIDGE	OUT	Glover-Vershire complex, 35 to 60 percent slopes, very rocky, k=.37/.28
		Hitchcock silt loam, 15 to 25 percent slopes, k=0.49
NB 71.55 TO 71.65	MED	Glover-Vershire complex, 15 to 35 percent slopes, very rocky, k=.32/.28
SB 71.55 TO 71.70	MED	Glover-Vershire complex, 15 to 35 percent slopes, very rocky, k=.32/.28
NB 71.55 TO 71.70	OUT	Glover-Vershire complex, 15 to 35 percent slopes, very rocky, k=.32/.28
SB 71.60 TO 71.68	OUT	Glover-Vershire complex, 15 to 35 percent slopes, very rocky, k=.32/.28
SB 77.28 TO 77.52	OUT	Hitchcock silt loam, 8 to 15% slopes, k=0.49 Hitchcock silt loam, 15 to 25% slopes, k=0.49 Hitchcock silt loam, 25 to 50% slopes, k=0.49 Glover-Vershire complex, 15 to 35% slopes, very rocky, k=.32/.28
BARREL/MILE MARKER	OUTSIDE OR MEDIAN	MUNAME - SOIL NAME, SLOPE, K
SB 86.63 TO 86.75	OUT	Belgrade silt loam, 8 to 15 % slopes k=0.49 Colrain stony fine sandy loam, 8 to 15 percent slopes, k=0.24 Tunbridge-Woodstock very rocky fine sandy loams, 8 to 25 % slopes, k=0.2
SB 89.45 TO 89.62	OUT	Belgrade silt loam, 8 to 15 % slopes, k=0.49 Tunbridge-Woodstock very rocky fine sandy loams, 8 to 25 % slopes, k=0.2
SB 89.65 TO 89.92	OUT	Belgrade silt loam, 0 to 8 % slopes k=0.49 Belgrade silt loam, 8 to 15 % slopes k=0.49 Tunbridge-Woodstock complex, 25 to 50 % slopes, k=0.2
SB 95.5 TO 96.0	OUT	Cabot very stony silt loam, 3 to 5 % slope, k=0.28 Colrain very stony fine sandy loam, 8 to 25% slope, k=0.2
NB 95.65 TO 95.75	OUT	Colrain very stony fine sandy loam, 8 to 25% slope, k=0.2 Tunbridge-Woodstock complex, 25 to 50 % slopes, k=0.2
NB 95.73 TO 95.95	MED	Colrain very stony fine sandy loam, 8 to 25% slope, k=0.2

NOTE: K-VALUES GENERALLY INDICATE THE FOLLOWING: 0.0-0.23 = LOW EROSION POTENTIAL; 0.24-0.36 = MODERATE EROSION POTENTIAL: 0.37 AND HIGHER = HIGH EROSION POTENTIAL.

1.2.6 SENSITIVE RESOURCE AREAS

CRITICAL HABITATS: NO
HISTORICAL OR ARCHEOLOGICAL AREAS: NO
PRIME AGRICULTURAL LAND: NO
THREATENED AND ENDANGERED SPECIES: NO
WATER RESOURCE: NO
WETLANDS: NO

1.3 RISK EVALUATION

THIS PROJECT FALLS UNDER THE JURISDICTION OF THE CONSTRUCTION GENERAL PERMIT 3-9020 (2006) ISSUED BY THE VT ANR. BASED ON THE RISK ASSESSMENT THIS PROJECT IS CONSIDERED LOW RISK. *THE LOW RISK SITE HANDBOOK FOR EROSION PREVENTION AND SEDIMENT CONTROL* SHALL BE KEPT ON-SITE AND COMPLIED WITH ALONG WITH THE EPSC PLAN. ANY MODIFICATIONS TO THE PROJECT THAT WOULD POTENTIALLY INCREASE THE RISK TO THE ENVIRONMENT SHALL BE RE-EVALUATED. SHOULD THE RISK CHANGE THE CONTRACTOR WILL BE RESPONSIBLE FOR ADDITIONAL PERMITTING WITH VANR VIA FILING OF THE APPROPRIATE NOTICE OF INTENT UNDER THE CONSTRUCTION GENERAL PERMIT PROCESS. THE CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH THE CONSTRUCTION GENERAL PERMIT 3-9020 (2006) LOW RISK AUTHORIZATION STIPULATIONS INCLUDED IN THE CONTRACT DOCUMENTS.

1.4 EROSION PREVENTION AND SEDIMENT CONTROL

THE EROSION CONTROL PLANS ARE MEANT AS A GUIDELINE FOR PREVENTING EROSION AND CONTROLLING SEDIMENT TRANSPORT. THE WORK OUTLINED IN THIS NARRATIVE CONSISTS OF APPLYING MEASURES THROUGHOUT THE LIFE OF THE PROJECT MINIMIZING SEDIMENT TRANSPORT TO THE RECEIVING WATERS. THE MEASURES INCLUDE STABILIZATION AND STRUCTURAL PRACTICES, STORM WATER CONTROLS AND OTHER POLLLUTION PREVENTION CONTROLS.

ALL MEASURES SHALL BE REGULARLY MAINTAINED AND SHALL BE CHECKED FOR SEDIMENT BUILD-UP. SEDIMENT SHALL BE DISPOSED AT AN APPPROVED SITE WHERE IT WILL NOT BE SUBJECT TO EROSION.

(REFER TO THE LOW RISK SITE HANDBOOK AND APPROPRIATE DETAIL SHEETS FOR EACH PRACTICE REQUIRED ON THE PROJECT TO INCLUDE BUT NOT LIMITED TO THE FOLLOWING.)

1.4.1 MARK SITE BOUNDARIES

PROJECT DEMARCATION FENCING, DENOTED ON THE PLANS AS -PDF- IS USED TO DELINEATE THE LIMIT THE CONTRACTOR CAN WORK TO WITH CONSTRUCTION EQUIPMENT. INSIDE THIS LIMIT, THE AREA CAN BE DISTURBED.

1.4.2 LIMIT DISTURBANCE AREA

EMPLOY TEMPORARY STABILIZATION PRACTICES IN INCREMENTAL STAGES (PHASING) AS CONSTRUCTION PROCEEDS. ADDITIONAL MEASURES MAY BE NEEDED DUE TO THE PHASING OF THE PROJECT AND AS DIRECTED BY THE ENGINEER.

1.4.3 STABILIZE CONSTRUCTION EXIT

NOT APPLICABLE

1.4.4 INSTALL SILT FENCE

NOT APPLICABLE

1.4.5 DIVERT UPLAND RUNOFF

NOT APPLICABLE

1.4.6 SLOW DOWN CHANNELIZED RUNOFF

NOT APPLICABLE

1.4.7 CONSTRUCT PERMANENT CONTROLS

NOT APPLICABLE

1.4.8 STABILIZE EXPOSED SOILS

SEED AND MULCH
EROSION MATTING

TRACKING OF ALL EXPOSED SLOPES, COMBINED WITH TEMPORARY MULCHING, WILL BE UTILIZED ON A REGULAR BASIS. SLOPES SHALL BE STABILIZED WITHIN 48 HOURS OF FORECASTED RAIN.

SEEDING, MULCHING AND BIODEGRADABLE EROSION CONTROL MATTING OR AN EQUIVALENT SHALL BE USED TO STABILIZE ALL SLOPES STEEPER THAN 1:3. THESE SLOPES SHALL BE STABILIZED WITHIN 48 HOURS OF REACHING INTERMITTENT PHASES OF CONSTRUCTION.

1.4.9 WINTER STABILIZATION

VARIOUS MEASURES SPECIFIC TO WINTER (SEE LOW RISK HANDBOOK)

1.4.10 STABILIZE SOIL AT FINAL GRADE

SEED AND MULCH
EROSION MATTTING

SEEDING, MULCHING AND BIODEGRADABLE EROSION CONTROL MATTING OR AN EQUIVALENT SHALL BE USED TO STABILIZE ALL SLOPES STEEPER THAN 1:3. THESE SLOPES SHALL BE STABILIZED WITHIN 48 HOURS OF REACHING FINAL GRADE.

1.4.11 DE-WATERING ACTIVITIES

NOT APPLICABLE

1.4.12 INSPECT YOUR SITE

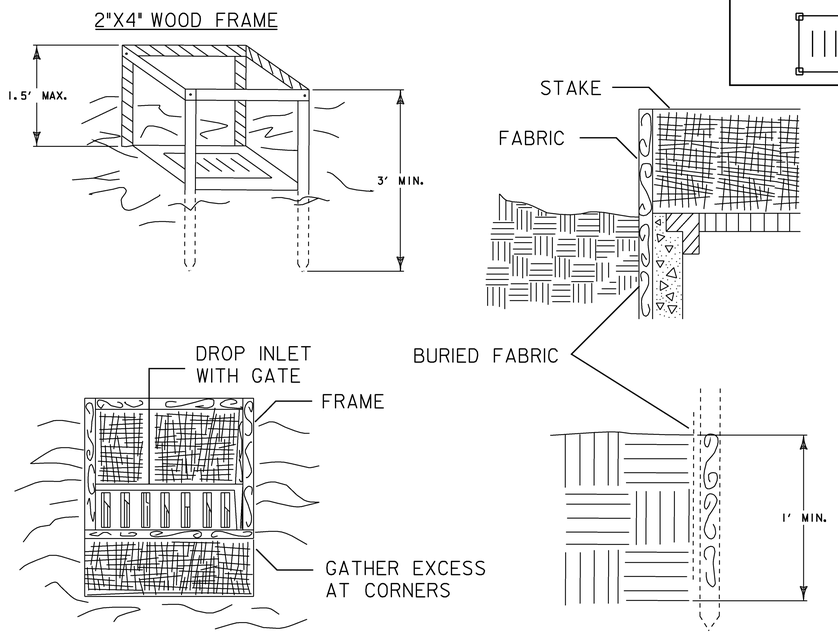
THE SITE SHALL BE INSPECTED AT LEAST ONCE EVERY 7 DAYS AND AFTER EVERY RAIN EVENT OR SNOW MELT THAT RESULTS IN A DISCHARGE FROM THE SITE.

EROSION CONTROL NOTES

PROJECT NAME:	HARTFORD - NEWBURY
PROJECT NUMBER:	IM 091- 2(72)

FILE NAME:	d99a052_frm.dgn	PLOT DATE:	21-JUL-2009
PROJECT LEADER:	K. UPMAL	DRAWN BY:	N. PAPPAS
DESIGNED BY:	N. PAPPAS	CHECKED BY:	A. BOMBARDIER
IPARM FILE NAME:	d99a052_ero_notes	SHEET 5	OF 45

SYMBOL



CONSTRUCTION SPECIFICATIONS

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

MAXIMUM DRAINAGE AREA ONE ACRE

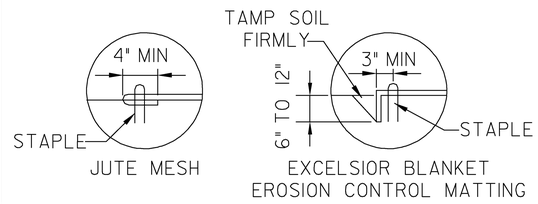
ADAPTED FROM DETAILS PROVIDED BY: NEW YORK STATE DEC
ORIGINALLY DEVELOPED BY USDA-NRCS
VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION

FILTER FABRIC
DROP INLET
PROTECTION

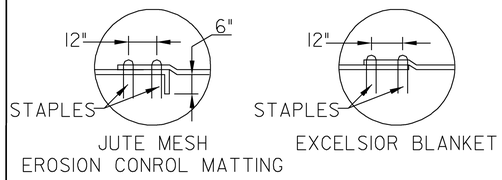
NOTES:
REFER TO "THE VERMONT STANDARDS & SPECIFICATIONS FOR EROSION PREVENTION & SEDIMENT CONTROL -2006- "FROM THE VT AGENCY OF NATURAL RESOURCES FOR ADDITIONAL GUIDANCE.

THIS ITEM SHALL BE PAID FOR UNDER ITEM
653.40 INLET PROTECTION DEVICE, TYPE I

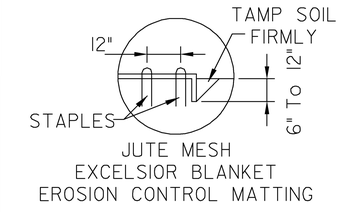
SYMBOL



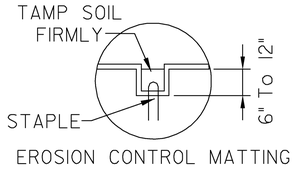
DETAIL#1 TERMINAL FOLD



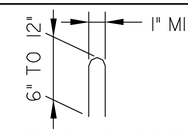
DETAIL#2 JUNCTION SLOT



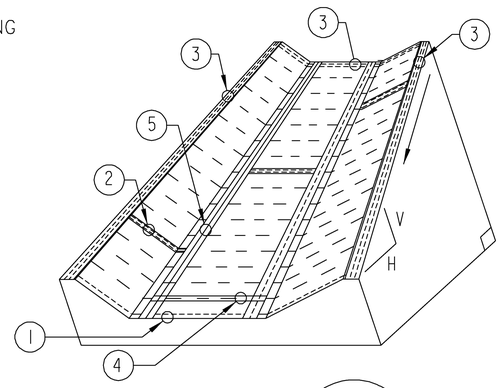
DETAIL#3 ANCHOR SLOT

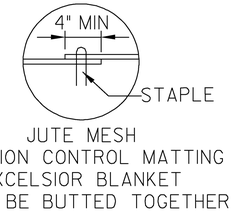


DETAIL#4 CHECK SLOT



STAPLE DETAIL





DETAIL#5 LAP JOINT

CONSTRUCTION SPECIFICATIONS

1. EROSION MATTING, CHECK SLOTS, SHALL BE SPACED IN DITCH CHANNEL SO THAT ONE OCCURS WITHIN EACH 50' ON SLOPES OF MORE THAN 4% AND LESS THAN 6%. ON SLOPES OF 6% OR MORE, THEY SHALL BE SPACED SO THAT ONE OCCURS WITHIN EACH 25'.
2. APPLY FERTILIZER, LIME SEED PRIOR TO PLACING MATTING.
3. STAPLES ARE TO BE PLACED ALTERNATELY, IN COLUMNS APPROXIMATELY 2' APART AND IN ROWS APPROXIMATELY 3' APART. APPROXIMATELY 175 STAPLES ARE REQUIRED PER 4'X225' ROLL OF MATERIAL AND 125 STAPLES ARE REQUIRED PER 4'X150' ROLL OF MATERIAL.
4. DISTURBED AREAS SHALL BE SMOOTHLY GRADED. EROSION CONTROL MATERIAL SHALL BE PLACED LOOSELY OVER GROUND SURFACE. DO NOT STRETCH.
5. ALL TERMINAL ENDS AND TRANSVERSE LAPS SHALL BE STAPLED AT APPROXIMATELY 12" INTERVALS.

ADAPTED FROM DETAILS PROVIDED BY: ILLINOIS USDA-NRCS
ORIGINALLY DEVELOPED BY USDA-NRCS
VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION

ROLLED EROSION
CONTROL PRODUCT
(RECP) DITCH

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

THIS ITEM SHALL BE PAID FOR UNDER ITEM
653.20 TEMPORARY EROSION MATTING
NOTE: EROSION MATTING SHALL BE NATURAL FIBER EROSION MATTING.

EROSION CONTROL DETAILS

PROJECT NAME:	HARTFORD - NEWBURY		
PROJECT NUMBER:	IM 091- 2(72)		
FILE NAME:	d99a052_frm.dgn	PLOT DATE:	21-JUL-2009
PROJECT LEADER:	K. UPMAL	DRAWN BY:	N. PAPPAS
DESIGNED BY:	N. PAPPAS	CHECKED BY:	A. BOMBARDIER
IPARM FILE NAME:	d99a052_ero_details	SHEET	6 OF 45

STATE OF VERMONT
AGENCY OF TRANSPORTATION

QUANTITY SHEET 1

SUMMARY OF ESTIMATED QUANTITIES									TOTALS		DESCRIPTIONS				DETAILED SUMMARY OF QUANTITIES		
						ROADWAY	EROSION CONTROL	TRAINING	FULL E&C ITEMS	GRAND TOTAL	FINAL	UNIT	ITEMS	ITEM NUMBER	ROUND	QUANTITIES	UNIT	ITEMS
						8				8		ACRE	CLEARING AND GRUBBING, INCLUDING INDIVIDUAL TREES AND STUMPS	201.11	EST			
						2000				2000		CY	COMMON EXCAVATION	203.15	EST			
						37000				37000		CY	SOLID ROCK EXCAVATION	203.16	479			
						150				150		HR	ALL PURPOSE EXCAVATOR RENTAL, TYPE II	608.26	EST			
						500				500		HR	POWER BROOM RENTAL, TYPE I	608.30	EST			
						150				150		HR	TRUCK RENTAL	608.37	EST			
						300				300		HR	LOADER RENTAL, TYPE II	608.41	EST			
						850				850		LF	WOVEN WIRE FENCE WITH STEEL POSTS	620.25	10			
						10				10		EACH	STEEL BRACE FOR WOVEN WIRE FENCE	620.40	EST			
						800				800		LF	REMOVAL OF EXISTING FENCE	620.55	EST			
						10				10		EACH	ENERGY ABSORPTION ATTENUATOR	621.56	EST			
						6000				6000		LF	TEMPORARY TRAFFIC BARRIER	621.90	112			
						11200				11200		LF	REMOVE AND RESET TEMPORARY TRAFFIC BARRIER	621.95	9			
						4000				4000		HR	UNIFORMED TRAFFIC OFFICERS	630.10	EST			
						3600				3600		HR	FLAGGERS	630.15	EST			
									1	1		LS	FIELD OFFICE, ENGINEERS	631.10	-			
									1	1		LU	FIELD OFFICE TELEPHONE (N.A.B.I.)	631.25	-			
								1040		1040		HR	EMPLOYEE TRAINEESHIP	634.10	EST			
						1				1		LS	MOBILIZATION/DEMOBILIZATION	635.11	-			
						1				1		LS	TRAFFIC CONTROL	641.10	-			
						3				3		EACH	PORTABLE CHANGEABLE MESSAGE SIGN	641.15	EST			
						4				4		EACH	PORTABLE ARROW BOARD	641.16	EST			
						108				108		DAY	PORTABLE CHANGEABLE MESSAGE SIGN RENTAL	641.17	EST			
						10900				10900		LF	TEMPORARY 6 INCH WHITE LINE, TYPE II TAPE	646.621	144			
						3700				3700		LF	TEMPORARY 6 INCH YELLOW LINE, TYPE II TAPE	646.631	80			
						2400				2400		SF	PAVEMENT MARKING MASK	646.86	29			
							500			500		LB	SEED	651.15	9			
							4100			4100		LB	FERTILIZER	651.18	47			
							17			17		TON	AGRICULTURAL LIMESTONE	651.20	0.8			
							17			17		TON	HAY MULCH	651.25	0.8			
						1000				1000		CY	TOPSOIL	651.35	43			
							1			1		LS	EPSC PLAN	652.10	EST			
							80			80		HR	MONITORING EPSC PLAN	652.20	EST			
							1			1		LU	MAINTENANCE OF EPSC PLAN (N.A.B.I.)	652.30	EST			
							4000			4000		SY	TEMPORARY EROSION MATTING	653.20	EST			
							3			3		EACH	INLET PROTECTION DEVICE, TYPE I	653.40	-			
						816				816		LF	PROJECT DEMARCATION FENCE	653.55	84			
						200				200		SF	TRAFFIC SIGNS, TYPE A	675.20	6.5			
						280				280		LB	TUBULAR STEEL SIGN POST	675.33	8.8			
						280				280		LF	SQUARE TUBE SIGN POST AND ANCHOR	675.341	6			

QUANTITY SHEET 1

PROJECT NAME:	HARTFORD - NEWBURY		
PROJECT NUMBER:	IM 091- 2(72)		
FILE NAME:	d99a052_frm.dgn	PLOT DATE:	21-JUL-2009
PROJECT LEADER:	K. UPMAL	DRAWN BY:	N. PAPPAS
DESIGNED BY:	N. PAPPAS	CHECKED BY:	A. BOMBARDIER
IPARM FILE NAME:	d99a052_qty_01	SHEET	7 OF 45

STATE OF VERMONT
AGENCY OF TRANSPORTATION

QUANTITY SHEET 2

SUMMARY OF ESTIMATED QUANTITIES									TOTALS		DESCRIPTIONS				DETAILED SUMMARY OF QUANTITIES		
						ROADWAY	TRAINING	EROSION CONTROL	FULL E&C ITEMS	GRAND TOTAL	FINAL	UNIT	ITEMS	ITEM NUMBER	ROUND	QUANTITIES	UNIT	ITEMS
						17				17		EACH	REMOVING SIGNS	675.50	-			
						67				67		EACH	DELINEATOR WITH STEEL POST	676.10	-			
						67				67		EACH	REMOVAL OF EXISTING DELINEATOR	676.12	-			
						1				1		LU	PRICE ADJUSTMENT, FUEL (N.A.B.I.)	690.50	-			
						3000				3000		CY	SPECIAL PROVISION (REMOVAL OF LEDGE SALVAGE MATERIAL)	900.608	-			
						8500				8500		CY	SPECIAL PROVISION (REMOVAL OF LEDGE WASTE MATERIAL)	900.608	EST			
						2730				2730		HR	SPECIAL PROVISION (HIGH SCALING)	900.630	EST			
						320				320		HR	SPECIAL PROVISION (MACHINE SCALING)	900.630	EST			
						230				230		LF	SPECIAL PROVISION (HYBRID ROCK FALL BARRIER/DRAPE SYSTEM, FENCE COMPONENT	900.640	-			
						1250				1250		LF	SPECIAL PROVISION (ROCK DOWELING)	900.640	EST			
						9144				9144		SF	SPECIAL PROVISION (HYBRID ROCK FALL BARRIER/DRAPE SYSTEM, DRAPE COMPONENT	900.670	-			

QUANTITY SHEET 2

PROJECT NAME:	HARTFORD - NEWBURY
PROJECT NUMBER:	IM 091 - 2(72)

FILE NAME:	d99a052_frm.dgn	PLOT DATE:	27-JUL-2009
PROJECT LEADER:	K. UPMAL	DRAWN BY:	N. PAPPAS
DESIGNED BY:	N. PAPPAS	CHECKED BY:	A. BOMBARDIER
IPARM FILE NAME:	d99a052_qty_02	SHEET	8 OF 45

FORMULA C+0.30R-F

EARTHWORKS

STATE OF VERMONT
AGENCY OF TRANSPORTATION

STATION	DIST	TOTAL EXCAVATION EARTH AND ROCK AREA	TOTAL EXCAVATION EARTH AND ROCK CU. YDS.	SOLID ROCK EXCAVATION AREA	SOLID ROCK EXCAVATION CU. YDS.	EMBANKMENT AREA	EMBANKMENT CU. YDS.	AREA	CU. YDS.
SOUTHBOUND	MM 86.63 - 86.75 (OUTSIDE)								
			0		0		0		
4594+50		64		64		25			
	50		152		152		54		
4595+00		100		100		34			
	50		235		235		62		
4595+50		153		153		34			
	50		361		361		58		
4596+00		236		236		29			
	50		592		592		55		
4596+50		403		403		31			
	50		911		911		65		
4597+00		581		581		40			
	50		1329		1329		74		
4597+50		855		855		40			
	50		2069		2069		176		
4598+00		1379		1379		151			
	50		2624		2624		208		
4598+50		1454		1454		74			
	50		2912		2912		133		
4599+00		1690		1690		70			
	50		3494		3494		128		
4599+50		2083		2083		69			
	50		3992		3992		131		
4600+00		2228		2228		73			
	50		4151		4151		137		
4600+50		2255		2255		75			
	50		3892		3892		127		
4601+00		1945		1945		62			
	50		3262		3262		104		
4601+50		1575		1575		51			
	50		2410		2410		85		
4602+00		1028		1028		41			
	50		1874		1874		81		
4602+50		996		996		46			
	50		1417		1417		86		
4603+00		535		535		47			
	50		579		579		66		
4603+50		90		90		24			
	50		150		150		13		
4604+00		71		71		14			
	50		115		115		28		
4604+50		53		53		30			
		TOTAL =	36521		36521		1871		

PROJECT NAME:	HARTFORD - NEWBURY		
PROJECT NUMBER:	IM 091- 2(72)		
FILE NAME:	d99a052_frm.dgn	PLOT DATE:	21-JUL-2009
PROJECT LEADER:	K. UPMAL	DRAWN BY:	N. PAPPAS
DESIGNED BY:	N. PAPPAS	CHECKED BY:	A. BOMBARDIER
IPARM FILE NAME:	d99a052_ew	SHEET	9 OF 45

EARTHWORKS SUMMARY

STATE OF VERMONT
AGENCY OF TRANSPORTATION

SUMMARY AND BALANCES

OUTSIDE OR MEDIAN/ MILE MARKER	MILE MARKER TO MILE MARKER	TOTAL EXCAV EARTH & ROCK CUBIC YARDS	COMMON EXCAVATION CUBIC YARDS	**900.608-REMOVAL OF LEDGE WASTE MATERIAL CUBIC YARDS	SOLID ROCK EXCAVATION	EXCESSES CUT	EXCESSES FILL	ACCUMULATIVE EXCESSES CUT	ACCUMULATIVE EXCESSES FILL
NORTHBOUND									
MED 71.55	71.65	450		450		450		450	
OUT 71.55	71.70	1700		1700		1700		2150	
OUT 95.65	95.75	250		250		250		2400	
MED 95.73	95.95	1200		1200		1200		3600	
SOUTHBOUND									
OUT 95.50	96.00	950		950		950		4550	
OUT 89.65	89.92	1000		1000		1000		5550	
OUT 89.45	89.62	3500		3500		3500		9050	
OUT 86.63	86.75	36521	*1871		34649	36521		45571	
OUT 77.28	77.52	1200		1200		1200		46771	
MED 71.55	71.70	100		100		100		46871	
OUT 71.60	71.69	300		300		300		47171	
OUT 71.25	BRIDGE	750		750		750		47921	
OUT EXIT 11	OFF RAMP	100		100		100		48021	
TOTAL		48021	*1871	**11500	34649	48021		48021	

*ASSUMED ONE FOOT OF OVERBURDEN FOR THIS LOCATION
**VISUALLY ESTIMATED

SUMMARY AND BALANCES

STATION TO STATION	TOTAL EXCAV EARTH & ROCK	ROCK EXCAV CUBIC YARDS	EMBANKMENT CUBIC YARDS	EXCESSES CUT	EXCESSES FILL	ACCUMULATIVE EXCESSES CUT	ACCUMULATIVE EXCESSES FILL
SITE #							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
21							

SHEET NO.	COL. NO.

SUMMARY BY COLUMNS

EXCAVATION TOTAL CY	EXCAVATION ROCK CY	EMBANKMENT CY

REMARKS

EARTH AND ROCK EXCAVATION	48020
SOLID ROCK EXCAVATION	46149
EARTH EXCAVATION (COMPUTATION BOOK)	1871
FACTORED SOLID ROCK (1.3)	59994
TOTAL FILL INCLUDING FACTOR	59994
TOTAL EARTH EXCAVATION	1872
BRADFORD R.R. YARD	-3000
EXCESS EXCAVATION	58866

PROJECT NAME: HARTFORD - NEWBURY
PROJECT NUMBER: IM 091- 2(72)

FILE NAME: d99a052_frm.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: N. PAPPAS
IPARM FILE NAME: d99a052_ews

PLOT DATE: 21-JUL-2009
DRAWN BY: N. PAPPAS
CHECKED BY: A. BOMBARDIER
SHEET 10 OF 45

STATE OF VERMONT
AGENCY OF TRANSPORTATION

RIGHT - OF - WAY DETAIL SHEET

TABLE OF PROPERTY ACQUISITION

PARCEL NO.	PROPERTY OWNER	SHEET NO.	BEGINNING STATION	ENDING STATION	TAKE	REMAINDER	RIGHT			RECORDING DATA					REMARKS
					AREA±	AREA±	TYPE	(T)/(P)	AREA ±	TITLE	DATE	TOWN / CITY	BOOK	PAGE	
1	HOOD, EMILY E.	4,5	I-91 SB 4597+38 LT.	I-91 SB 4602+38 LT.	0.23A										SBMM 8664 TO SBMM 8673
	EATON, SAMUEL M.		I-91 SB 4596+10 LT.	I-91 SB 4603+95 LT.			CONST.	(T)	.22A			THETFORD			INCLUDES EROSION CONTROL & PDF
	EATON, RUSSEL J.														
	EATON, THOMAS W.														
	EATON, ROBERT P.														
2	HOOD, EMILY E.											THETFORD			MONITOR WELL W-1
															.22 MILES LEFT OF MM 8668 SB I- 91
3	MILLER, DOUGLAS T. & VALERIE L.											THETFORD			MONITOR WELL W-2
															.22 MILES LEFT OF MM 8673 SB I- 91
4	POSTLER, BRIAN & JULIE											THETFORD			MONITOR WELL W-3
															700' LEFT OF MM 8643 SB I- 91

ALL STATIONS AND OFFSETS ARE FROM ACTUAL SOUTHBOUND CENTERLINE STATIONS, NOT OFFSETSURVEY BASELINE STATIONS.

TABLE OF REVISIONS

REVISION NO.	SHEET NO.	DESCRIPTION	DATE

PLOT DATE 04/08/08

PLAN LEGEND

EXISTING RIGHT-OF-WAY		TOE OF SLOPE	
TAKING WITH ACCESS		TOP OF CUT	
TAKING WITHOUT ACCESS		SLOPE RIGHT	SR (P)
CLEAR ZONE	CZ	CONSTRUCTION RIGHT	CONST.(T)
PROPERTY LINE	P / L	PROJECT DEMARCATION FENCE	PDF — PDF

EC	-EROSION CONTROL
(P)	-PERMANENT
(T)	-TEMPORARY
DR.	-DRAINAGE RIGHT
DIT.	-DITCHING RIGHT
CH.	-CHANNEL RIGHT
DRIVE	-DRIVE RIGHT
CUL.	-CULVERT RIGHT
C&T	-CLEARING & TRIMMING RIGHT
SR	-SLOPE RIGHT
UE	-UTILITY EASEMENT

APPROVED: HARRY PETROVS DATE: 11-08-07
CHIEF, PLANS & TITLES

PROJECT NAME: HARTFORD-NEWBURY
PROJECT NUMBER: IM 091-2(72)

FILE NAME: R 99A052 DETAIL.XLS
PROJECT LEADER: Art Bombardier
DESIGNED BY: NICK PAPPAS
R.O.W. SHEET 3 of 5

PLOT DATE:
DRAWN BY: MR
CHECKED BY: FM
SHEET 11 OF 45

N

VT STATE PLANE GRID

ALL STATIONS AND OFFSETS ARE FROM ACTUAL SOUTHBOUND CENTERLINE STATIONS(SB ℄), NOT OFFSET SURVEY BASELINE STATIONS.

BEGIN ROW PROJECT SB I-91 MM 8661
IM 091-2(72) STA. 4596+10 125.00' LT.

EMILY E. HOOD et al

I-91 SB 4597+38
145' LT.

I-91 SB 4597+38
125' LT.

mm8664

CONST. (T)

PDF

EXISTING ROW

(500')

CUT SLOPE LINE

20.0'

10.0'

1

POB
4594+50.00

TBD

DITCH ℄

MM @ 86.30

MM @ 86.35

OFFSET SURVEY BASELINE

36'

4594+50 4595+00 4596+00 4597+00 4598+00 4599+00

SB ℄

TO ROW SHEET 5 OF 5
MATCH LINE 4599+50

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

FOR R.O.W. USE ONLY

LEGEND

PDF———PDF PROJECT DEMARCATION FENCE

×—×—×—× WOVEN WIRE FENCE WITH STEEL POSTS

0 20 40
SCALE IN FEET

NOTE: ALIGNMENT IS THE CENTER POINT OF THE SHOULDER LINE AND EDGE OF PAVEMENT.

R.O.W. LAYOUT #1

PROJECT NAME: HARTFORD - NEWBURY
PROJECT NUMBER: IM 091-2(72)

FILE NAME: d99a052_bdr_nul.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: N. PAPPAS
ROW SHEET 4 OF 5

PLOT DATE: 21-JUL-2009
DRAWN BY: N. PAPPAS
CHECKED BY: A. BOMBARDIER
SHEET 12 OF 45

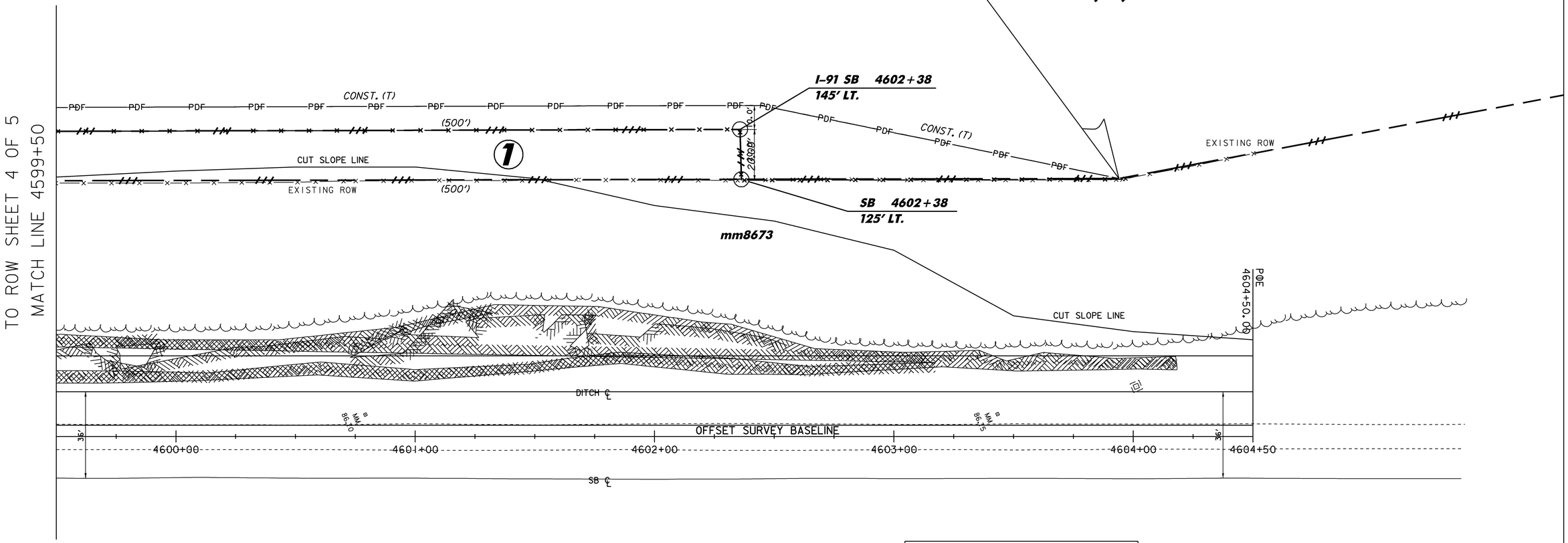
ALL STATIONS AND OFFSETS ARE FROM, ACTUAL SOUTHBOUND CENTERLINE STATIONS (SB ℄), NOT OFFSET SURVEY BASELINE STATIONS.

N

VT STATE PLANE GRID

EMILY E. HOOD et al

END ROW PROJECT SB I-91 MM 8676
IM 091-2(72) STA. 4603+95 125.00' LT.



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

FOR R.O.W. USE ONLY

LEGEND

PDF———PDF PROJECT DEMARCATION FENCE

×—×—×—× WOVEN WIRE FENCE WITH STEEL POSTS

0 20 40
SCALE IN FEET

NOTE: ALIGNMENT IS THE CENTER POINT OF THE SHOULDER LINE AND EDGE OF PAVEMENT.

R.O.W. LAYOUT #2

PROJECT NAME:	HARTFORD - NEWBURY
PROJECT NUMBER:	IM 091-2(72)
FILE NAME:	d99a052_bdr_nul.dgn
PROJECT LEADER:	K. UPMAL
DESIGNED BY:	N. PAPPAS
ROW SHEET	5 OF 5
PLOT DATE:	21-JUL-2009
DRAWN BY:	N. PAPPAS
CHECKED BY:	A. BOMBARDIER
SHEET	13 OF 45

GENERAL TRAFFIC CONTROL NOTES

1. TRAFFIC CONTROL FOR THIS PROJECT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CURRENT VTRANS E-SERIES STANDARDS AND THE CURRENT MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND ITS LATEST REVISIONS.

2. THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN INLUDING A TRAFFIC CONTROL PLAN FOR A ROLLING ROAD BLOCK TO THE ENGINEER AND VTRANS TRAFFIC SAFETY UNIT FOR REVIEW ONE-MONTH PRIOR TO PERFORMING ANY CONSTRUCTION ACTIVITY. THE PLAN SHALL INCLUDE PROVISIONS FOR IMPLEMENTATION AND MAINTENANCE OF TRAFFIC CONTROL FOR ALL WORK ASSOCIATED WITH THIS PROJECT. UPON WRITTEN APPROVAL FROM THE ENGINEER, THE CONTRACTOR SHALL IMPLEMENT THE TRAFFIC CONTROL PLAN AND COMMENCE CONSTRUCTION ACTIVITIES. ALL COSTS ASSOCIATED WITH THE DEVELOPMENT AND ANY NECESSARY REVISION OF A TRAFFIC CONTROL PLAN SHALL BE PAID FOR UNDER CONTRACT ITEM 641.10 "TRAFFIC CONTROL".

3. THE TRAFFIC CONTROL PLANS SHOWN HEREIN ARE APPROXIMATE AND INTENDED TO BE UTILIZED IN CONJUNCTION WITH APPLICABLE VTRANS STANDARD DRAWINGS AND AT THE DISCRETION OF THE ENGINEER. ADDITIONAL RAMP SIGNING MAY BE REQUIRED AS DIRECTED BY THE ENGINEER.

4. A PORTABLE CHANGEABLE MESSAGE SIGN SHALL BE PLACED AT THE BEGINNING (MM. 69.96) OF THE PROJECT ORIENTED IN THE MEDIAN FOR VIEWING BY NORTHBOUND TRAFFIC, RAMP C EXIT 10 ON RAMP NORTHBOUND AND AT END (MM. 110.96) OF THE PROJECT FOR VIEW BY THE SOUTHBOUND TRAFFIC. THE MESSAGE SIGNS SHALL BE PLACED ONE-WEEK PRIOR TO ANY CONSTRUCTION ACTIVITY TO WARN THE TRAVELING PUBLIC OF THE PROJECT. THE MESSAGE SIGNS SHALL BE MAINTAINED THROUGHOUT THE DURATION OF THE PROJECT. PAYMENT FOR THIS WORK SHALL BE MADE UNDER CONTRACT ITEM 641.15 "PORTABLE CHANGEABLE MESSAGE SIGN".

5. THE POSTED TEMPORARY SPEED LIMIT THROUGH CONSTRUCTION WORK ZONES SHALL BE POSTED FOR 55 MPH UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

6. INITIATION OF TRAFFIC CONTROL MEASURES WILL NOT BE PERMITTED BETWEEN THE DATES OF NOVEMBER 15 AND APRIL 15 UNLESS OTHERWISE APPROVED BY THE ENGINEER. ONCE TRAFFIC CONTROL DEVICES HAVE BEEN INSTALLED, THE CONTRACTOR SHALL BEGIN RELATED RECONSTRUCTION WORK IMMEDIATELY AND PROCEED IN A TIMELY MANNER THROUGH TO COMPLETION OF CONSTRUCTION IN ORDER TO MINIMIZE HAZARD AND INCONVENIENCE TO THE TRAVELING PUBLIC.

7. PRIVATE VEHICLES BELONGING TO THE CONTRACTOR OR ITS EMPLOYEES WILL NOT BE ALLOWED TO PARK ON THE INTERSTATE RIGHT OF WAY AND/OR THE TRAVELED WAY OF ANY OTHER PUBLIC THOROUGHFARE.

8. ALL SIGNS, BARRICADES, AND OTHER TRAFFIC CONTROL DEVICES SHALL BE CLEANED WEEKLY OR AS DIRECTED BY THE ENGINEER. EXISTING PERMANENT SIGNS THAT CONTRADICT TEMPORARY TRAFFIC CONTROL SIGNS SHALL BE REMOVED AND REPLACED OR COVERED FOR THE PERIOD OF TIME THAT THE TRAFFIC CONTROL PLAN IS IMPLEMENTED. COST FOR THIS WORK SHALL BE CONSIDERED INCIDENTAL TO CONTRACT ITEM 641.10 "TRAFFIC CONTROL".

9. WHEN WORK IS TO BE PERFORMED WITHIN FOUR MILES OF ANOTHER WORK ZONE, WORK IN EACH ZONE SHALL BE PERFORMED WITHIN THE SAME LANE (IE: TRAVEL OR PASSING LANE). FOR WORK ZONES SEPARATED BY A DISTANCE GREATER THAN FOUR MILES, THE CONTRACTOR MAY, WITH THE APPROVAL OF THE ENGINEER, CONDUCT WORK IN OPPOSITE LANES. THE ENGINEER MAY ALLOW WORK IN OPPOSITE LANES IF THE DISTANCE BETWEEN WORK ZONES IS SUFFICIENT TO AVOID CONFUSION TO THE TRAVELING PUBLIC. THE INSTALLATION OF A WEAVING PATTERN OF TRAFFIC CONTROL BETWEEN WORK ZONES WILL NOT BE ALLOWED.

10. ANY REMOVAL AND REINSTALLATION OF GUARDRAIL, FOR INSTALLATION OF TRAFFIC CONTROL WHICH IS REQUIRED TO COMPLETE WORK SHOWN IN THE TRAFFIC CONTROL PLANS SHALL BE INCIDENTAL TO CONTRACT ITEM 641.10 "TRAFFIC CONTROL" UNLESS OTHERWISE NOTED.

11. THE CONTRACTOR IS NOTIFIED THAT ALL ROADWAYS INCLUDED IN AND ASSOCIATED WITH THIS PROJECT ARE SUBJECT TO OCCASIONAL USE AND TRAVEL BY EMERGENCY RESPONSE VEHICLES. THE CONTRACTOR SHALL MAKE AND IMPLEMENT PLANS AND PROCEDURES DESIGNED TO ENSURE SWIFT AND UNIMPEDED TRAVEL OF EMERGENCY RESPONSE VEHICLES THROUGH CONSTRUCTION ZONES AND SHALL SUBMIT THEM TO THE ENGINEER. ANY COSTS ASSOCIATED WITH SUCH PLANS AND PROCEDURES SHALL BE INCLUDED IN THE UNIT PRICE BID FOR CONTRACT ITEM 641.10 "TRAFFIC CONTROL".

12. THE CONTRACTOR SHALL ASSURE THAT ALL GUARDRAIL IS LEFT IN A SAFE CONDITION WHENEVER THE CONTRACTOR IS NOT PRESENT. NO GUARDRAIL SHALL BE LEFT IN ANY STATE OF DISASSEMBLY WITHOUT APPROPRIATE TRAFFIC CONTROL AT ANY TIME. AT THE DISCRETION OF THE ENGINEER, THE CONTRACTOR MAY PLACE TEMPORARY TRAFFIC BARRIERS AT A DISASSEMBLED GUARDRAIL SEGMENT. NO ADDITIONAL COMPENSATION SHALL BE MADE TO THE CONTRACTOR FOR PLACEMENT OF TEMPORARY TRAFFIC CONTROL BARRIERS BEYOND THE LIMITS SHOWN ON THESE PLANS.

LONG TERM LANE CLOSURE NOTES

1. LONG TERM LANE CLOSURES "THREE DAYS OR GREATER" SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE LATEST VERSION OF THE MUTCD, THESE PLANS AND WITH ACCORDANCE WITH VTRANS STANDARD DRAWING E-103. SEE TRAFFIC CONTROL TABLE FOR SITE SPECIFIC APPLICATION, WHICH MAY BE MODIFIED BY THE ENGINEER.

2. TEMPORARY TRAFFIC BARRIER SHALL BE USED FOR ALL LONG TERM LANE CLOSURES. THE TEMPORARY TRAFFIC BARRIER SHALL BE PAID FOR UNDER CONTRACT ITEM 621.90 "TEMPORARY TRAFFIC BARRIER" AND ITEM 621.95 "REMOVE AND RESET TEMPORARY TRAFFIC BARRIER". THE COST FOR REMOVING OR COVERING SIGNS SHALL NOT BE PAID FOR SEPARATELY BUT SHALL BE CONSIDERED INCIDENTAL TO CONTRACT ITEM 641.10 "TRAFFIC CONTROL".

3. ALL SIGNS ASSOCIATED WITH THE LANE CLOSURE SHALL BE FIXED IN PLACE SIGNS AND SHALL BE VISIBLE TO THE TRAVELING PUBLIC FOR THE DURATION OF THE LANE CLOSURE. ALL SIGNS ASSOCIATED WITH SPECIFIC CONSTRUCTION ACTIVITIES WHICH MAY TAKE PLACE DURING ACTIVE CONSTRUCTION HOURS SHALL BE VISIBLE DURING SUCH HOURS AND EITHER REMOVED OR COVERED WHILE INDICATED ACTIVITIES ARE NOT TAKING PLACE (I.E. BLASTING ACTIVITIES). THE COST FOR REMOVING OR COVERING SIGNS SHALL NOT BE PAID FOR SEPARATELY BUT SHALL BE CONSIDERED INCIDENTAL TO CONTRACT ITEM 641.10 "TRAFFIC CONTROL".

SHORT TERM LANE CLOSURE NOTES

1. SHORT TERM LANE CLOSURES "TWO DAYS OR LESS" SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE LATEST VERSION OF THE MUTCD, THESE PLANS AND VTRANS STANDARD DRAWING E-103. SEE TRAFFIC CONTROL TABLE FOR SITE SPECIFIC APPLICATION, WHICH MAY BE MODIFIED BY THE ENGINEER.

2. SHORT TERM LANE CLOSURES SHALL BE USED BETWEEN EXIT 11 TO EXIT 13. BETWEEN THESE TWO EXITS, LANE CLOSURES WILL NOT BE PERMITTED DURING THE HOURS OF 7:00 AM TO 9:00 AM AND 4:00 PM TO 6:00 PM.

3. SHORT TERM LANE CLOSURES SHALL BE USED ONLY DURING APPROVED WORKING HOURS AND ONLY WHEN CONSTRUCTION ACTIVITIES ARE ACTIVELY BEING PERFORMED AT THE LANE CLOSURE SITE. AT TIMES WHEN SHORT TERM LANE CLOSURE ARE NOT NECESSARY, THE TRAFFIC CONTROL DEVICES USED FOR THE LANE CLOSURE SHALL BE REMOVED FROM THE TRAVELED WAY AND PLACED IN A SAFE MANNER SO AS NOT TO OBSTRUCT OR IMPEDE THE FLOW OF TRAFFIC. THE LOCATION OF TRAFFIC CONTROL DEVICES AFTER EACH SETUP AND REMOVAL OF THE SHORT TERM LANE CLOSURE SHALL BE APPROVED BY THE ENGINEER. THE COST OF REMOVING AND RESETTING SHORT TERM TRAFFIC CONTROL DEVICES SHALL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE COST OF CONTRACT ITEM 641.10 "TRAFFIC CONTROL".

4. ALL SIGNS ASSOCIATED WITH A SHORT TERM LANE CLOSURE SHALL BE VISIBLE ONLY WHILE THE LANE CLOSURE IS IN EFFECT. WHEN A SHORT TERM LANE CLOSURE IS NOT IN EFFECT, ALL SIGNS ASSOCIATED WITH THE LANE CLOSURE SHALL BE EITHER REMOVED FROM THE SITE OR COVERED. THE COST FOR REMOVING OR COVERING SIGNS SHALL NOT BE PAID FOR SEPARATELY BUT SHALL BE CONSIDERED INCIDENTAL TO CONTRACT ITEM 641.10 "TRAFFIC CONTROL".

LONG TERM SHOULDER CLOSURE NOTES

1. LONG TERM SHOULDER CLOSURES "THREE DAYS OR GREATER" SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE LATEST VERSION OF THE MUTCD, THESE PLANS AND IN ACCORDANCE WITH VTRANS STANDARD DRAWING E-103. SEE TRAFFIC CONTROL TABLE FOR SITE SPECIFIC APPLICATION, WHICH MAY BE MODIFIED BY THE ENGINEER.

2. SHOULDER CLOSURES SHALL ONLY BE CONSTRUCTED BETWEEN EXIT 11 TO EXIT 13 AND SHALL ONLY BE USED ON THE OUTSIDE OF THE INTERSTATE. NO MEDIAN SHOULDER CLOSURES SHALL BE CONSTRUCTED.

3. TEMPORARY TRAFFIC BARRIER SHALL BE USED FOR ALL LONG TERM SHOULDER CLOSURES. THE TEMPORARY TRAFFIC BARRIER SHALL BE PAID FOR UNDER CONTRACT ITEM 621.90 "TEMPORARY TRAFFIC BARRIER" AND ITEM 621.95 "REMOVE AND RESET TEMPORARY TRAFFIC BARRIER". THE COST OF REMOVING AND RESETTING LONG TERM SHOULDER TRAFFIC CONTROL DEVICES SHALL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE COST OF CONTRACT ITEM 641.10 "TRAFFIC CONTROL".

4. ALL SIGNS ASSOCIATED WITH THE SHOULDER CLOSURE SHALL BE FIXED IN PLACE SIGNS AND SHALL BE VISIBLE TO THE TRAVELING PUBLIC FOR THE DURATION OF THE SHOULDER CLOSURE. ALL SIGNS ASSOCIATED WITH SPECIFIC CONSTRUCTION ACTIVITIES WHICH MAY TAKE PLACE DURING ACTIVE CONSTRUCTION HOURS SHALL BE VISIBLE DURING SUCH HOURS AND EITHER REMOVED OR COVERED WHILE INDICATED ACTIVITIES ARE NOT TAKING PLACE (I.E. BLASTING ACTIVITIES).

ENERGY ABSORPTION ATTENUATOR NOTES

1. ENERGY ABSORPTION ATTENUATORS WILL BE PLACED AS SHOWN ON THE TRAFFIC CONTROL PLANS. ATTENUATORS WILL BE PAID FOR UNDER CONTRACT ITEM 621.56 "ENERGY ABSORPTION ATTENUATOR".

2. THE ATTENUATOR SHALL MEET THE REQUIREMENTS OF THE 2006 AASHTO "ROADSIDE DESIGN GUIDELINE", FOR TEST LEVEL-3.

EXIT 11 RAMP CLOSURE TRAFFIC CONTROL NOTES

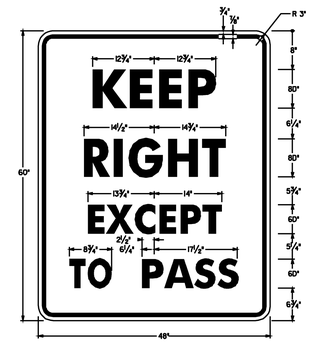
1. TRAFFIC CONTROL FOR EXIT 11 SOUTHBOUND ON RAMP (RAMP A) AND OFF RAMP (RAMP B) WILL BE REQUIRED DURING THE REMOVAL OF THE LEDGE ADJACENT TO THE OFF RAMP (RAMP B). THE INTENTION IS TO CONDUCT THE LEDGE REMOVAL WORK AT NIGHT AND CLOSE THE TWO RAMPS DURING THE LEDGE REMOVAL OPERATIONS.

2. THE CONTRACTOR SHALL PROVIDE, ERECT, MAINTAIN AND THEN REMOVE THE PORTABLE CHANGEABLE MESSAGE SIGNS TO NOTIFY MOTORISTS. REFER TO TRAFFIC CONTROL SHEET #3 FOR PLACEMENT.

3. THE CONTRACTOR SHALL CLOSE THE I-91 SOUTHBOUND TRAVEL LANE BETWEEN MILE MARKER 70.49 AND MILE MARKER 70.71 FOR A PERIOD OF ONE (1) HOUR PRIOR TO CLOSING THE ON AND OFF RAMPS UNTIL THE RAMPS ARE REOPENED AT 4:00 AM. THE COST FOR LIGHTING FOR NIGHT WORK SHALL NOT BE PAID FOR SEPARATELY BUT SHALL BE CONSIDERED INCIDENTAL TO CONTRACT ITEM 641.10 "TRAFFIC CONTROL". THE LANE CLOSURE SHALL BE IN ACCORDANCE WITH VTRANS STANDARD E-103. IN ADDITION, THE CONTRACTOR SHALL PROVIDE A UNIFORMED TRAFFIC OFFICER TO BE PRESENT ON I-91 SOUTHBOUND MAINLINE NEAR MILE MARKER 70.50. THE UNIFORMED TRAFFIC OFFICER SHALL REMAIN ON STATION WITH LIGHTS FLASHING DURING THE ENTIRE TIME THAT THE RAMPS ARE CLOSED TO TRAFFIC.

4. THE ON AND OFF RAMPS SHALL BE CLEANED TO THE SATISFACTION OF THE ENGINEER BEFORE THE RAMPS ARE REOPENED. THIS WILL INCLUDE THE REMOVAL OF ALL LEDGE FROM THE RAMP TRAVELED WAY, DITCH LINE AND SHOULDERS, INCLUDING REPAIRING DAMAGED PAVEMENT, PAVEMENT MARKINGS AND DELINEATORS.

5. PAYMENT FOR THE PORTABLE MESSAGE BOARDS SHALL BE PAID UNDER CONTRACT ITEM 641.17 "PORTABLE CHANGEABLE MESSAGE SIGN RENTAL." PAYMENT FOR THE UNIFORMED TRAFFIC OFFICER SHALL BE MADE UNDER CONTRACT ITEM 630.10 "UNIFORMED TRAFFIC OFFICER". PAYMENT FOR ALL OTHER WORK ASSOCIATED WITH CLOSING THE LANES, INCLUDING ALL EQUIPMENT ASSOCIATED WITH CLOSING THE TRAVELED LANE AND CLEANING THE RAMP SURFACE AND REPAIRING ANY DAMAGE SHALL BE PAID FOR UNDER CONTRACT ITEM 641.10 "TRAFFIC CONTROL."



VR-132

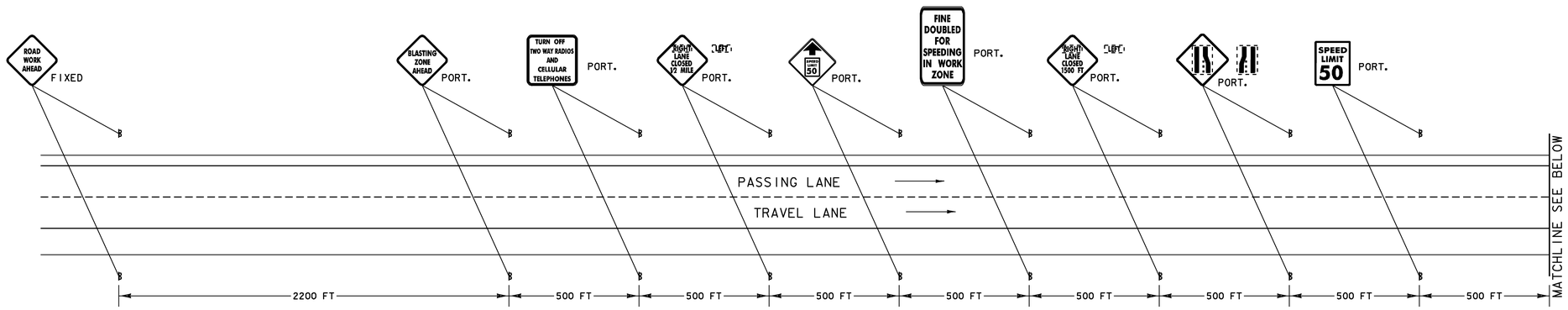
TRAFFIC CONTROL TABLE

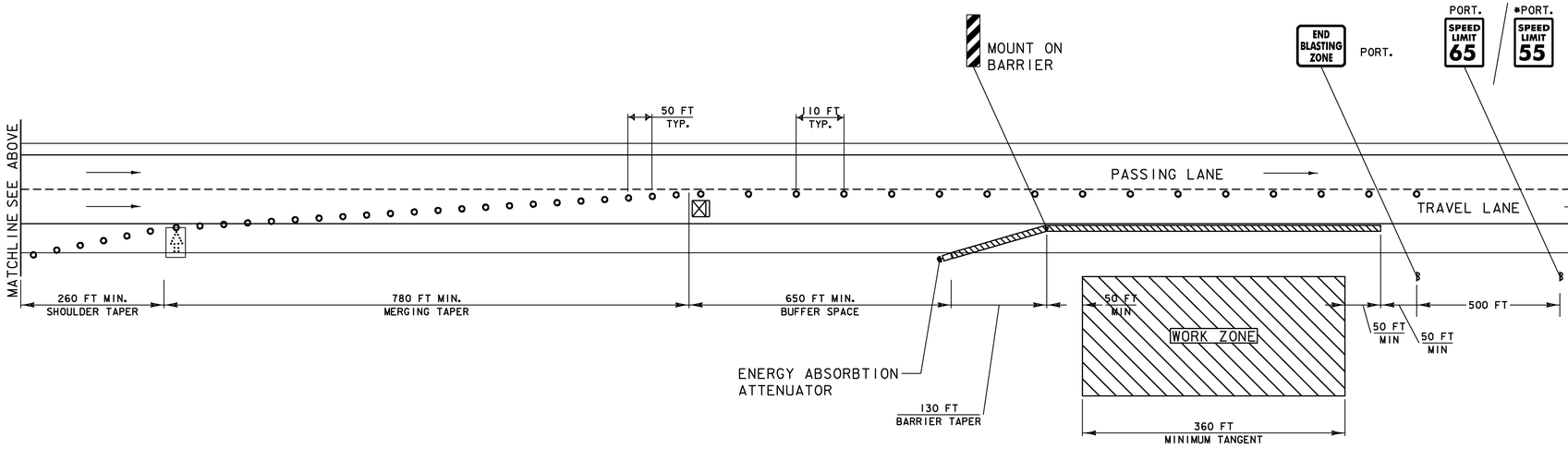
TYPICAL	LOCATION	TRAFFIC CONTROL REQUIRED	COMMENT
#10	NB MEDIAN MM 71.55 - 71.65	SHORT TERM PASSING LANE CLOSURE DURING WORKING HOURS	WORK DONE IN CONJUNCTION WITH SB MEDIAN MM 71.55 - 71.70, NO BLASTING
#11	NB OUTSIDE MM 71.55 - 71.70	LONG TERM SHOULDER CLOSURE, SHORT TERM TRAVEL LANE CLOSURE	SCALING, TRIM BLASTING, AND ROCK DOWELING, USE BLASTING SIGN PACKAGE
#12	NB OUTSIDE MM 95.65 - 95.75	SHORT TERM TRAVEL LANE CLOSURE	HAND SCALING ONLY, IF BLASTING OCCURS, USE BLASTING SIGN PACKAGE
#13	NB MEDIAN MM 95.73 - 95.95	SHORT TERM PASSING LANE CLOSURE	HAND SCALING, TRIM BLASTING AND ROCK DOWELING, USE BLASTING SIGN PACKAGE
#14	SB OUTSIDE MM 95.50 - 96.00	LONG TERM TRAVEL LANE CLOSURE WITH BLASTING SIGNS	HIGH SCALING, TRIM BLASTING AND MACHINE SCALING, NO BLASTING
#15	SB OUTSIDE MM 89.65 - 89.92	LONG TERM TRAVEL LANE CLOSURE	HAND SCALING ONLY, IF BLASTING OCCURS, USE BLASTING SIGN PACKAGE
#16	SB OUTSIDE MM 89.45 - 89.62	LONG TERM TRAVEL LANE CLOSURE WITH BLASTING SIGNS	TRIM BLASTING EXPECTED, ROCK DOWELING, USE BLASTING SIGN PACKAGE
#17	SB OUTSIDE MM 86.63 - 86.75	LONG TERM TRAVEL LANE CLOSURE WITH BLASTING SIGNS & ROLLING ROAD BLOCK	BLASTING ANTICIPATED AT SITE, USE BLASTING SIGN PACKAGE
#18	SB OUTSIDE MM 77.28 - 77.52	LONG TERM TRAVEL LANE CLOSURE	HAND SCALING ONLY, IF BLASTING OCCURS, USE BLASTING SIGN PACKAGE
#19	SB MEDIAN MM 71.55 - 71.70	SHORT TERM PASSING LANE CLOSURE DURING WORKING HOURS	WORK DONE IN CONJUNCTION WITH SB MEDIAN MM 71.55 - 71.70, NO BLASTING
#20	SB OUTSIDE MM 71.60 - 71.68	LONG TERM SHOULDER CLOSURE, SHORT TERM TRAVEL LANE CLOSURE	HAND SCALING ONLY, IF BLASTING OCCURS, USE BLASTING SIGN PACKAGE
#21	SB OUTSIDE MM 71.25 - BRIDGE	LONG TERM SHOULDER CLOSURE, SHORT TERM TRAVEL LANE CLOSURE	HAND SCALING ONLY, IF BLASTING OCCURS, USE BLASTING SIGN PACKAGE
#22	SB OUTSIDE EXIT 11 OFF RAMP	SHORT TERM RAMP CLOSURE, NIGHT WORK	HAND SCALING ONLY, MACHINE SCALING, NO BLASTING ALLOWED

TRAFFIC CONTROL NOTES

PROJECT NAME: HARTFORD - NEWBURY
PROJECT NUMBER: IM 091- 2(72)

FILE NAME:	d99a052_frm.dgn	PLOT DATE:	21-JUL-2009
PROJECT LEADER:	K. UPMAL	DRAWN BY:	N. PAPPAS
DESIGNED BY:	N. PAPPAS	CHECKED BY:	A. BOMBARDIER
IPARM FILE NAME:	d99a052_tc_notes	SHEET	15 OF 45





BLASTING SIGN PACKAGE
TYPICAL TRAFFIC CONTROL
TEMPORARY LANE CLOSURE / LONG TERM SHOULDER CLOSURE

LEGEND

- TEMPORARY DIRECTION OF FLOW
- NORMAL DIRECTION OF FLOW
- REFLECTORIZED PLASTIC DRUM
- TYPE III (MOD.) BARRICADE
- EXISTING PAVEMENT MARKINGS COVERED WITH BLACK PAVEMENT MARKING MASKING TAPE
- TEMPORARY TRAFFIC BARRIER
- ENERGY ABSORPTION ATTENUATOR
- EXISTING PAVEMENT MARKINGS
- TEMPORARY PAVEMENT MARKINGS
- ARROW BOARD

NOTE:
BEFORE BLASTING OCCURS, THE CONTRACTOR SHALL CONSTRUCT A BLASTING SIGN PACKAGE WITH A PORTABLE CHANGABLE MESSAGE SIGN (PAYMENT MADE UNDER CONTRACT ITEM 641.17 "PORTABLE CHANGABLE MESSAGE SIGN RENTAL") PLACED SEVEN DAYS IN ADVANCE THREE MILES AHEAD IN BOTH THE NORTH AND SOUTHBOUND DIRECTIONS. BEFORE A BLAST OCCURS, A ROLLING ROADBLOCK SHALL START AT LEAST THREE MILES AHEAD OF BLASTING AREA IN BOTH NORTH AND SOUTHBOUND DIRECTIONS WITH A SPEED TO BE DETERMINED BY BLASTING AND CLEANUP TIME, NOT TO EXCEED 10 MINUTES OR AS DIRECTED BY THE RESIDENT ENGINEER.

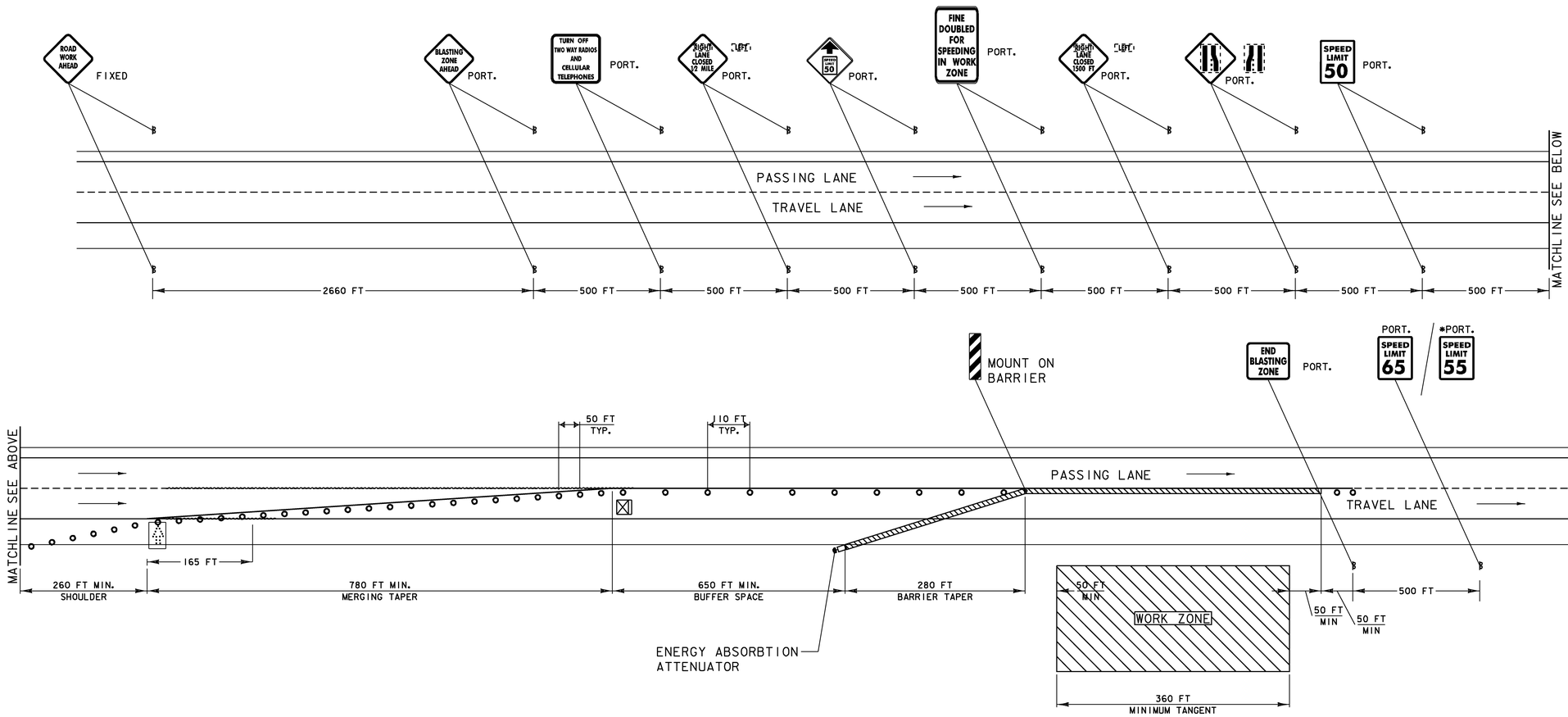
NOT TO SCALE

*AREAS WHERE THE POSTED SPEED LIMIT IS 55 MPH.

TRAFFIC CONTROL SHEET #1

PROJECT NAME:	HARTFORD - NEWBURY
PROJECT NUMBER:	IM 091-2(72)

FILE NAME:	d99a052_frm.dgn	PLOT DATE:	27-JUL-2009
PROJECT LEADER:	K. UPMAL	DRAWN BY:	N. PAPPAS
DESIGNED BY:	N. PAPPAS	CHECKED BY:	A. BOMBARDIER
IPARM FILE NAME:	d99a052_tc_01	SHEET	16 OF 45



BLASTING SIGN PACKAGE
TYPICAL TRAFFIC CONTROL
LONG TERM LANE CLOSURE

LEGEND

- TEMPORARY DIRECTION OF FLOW
- NORMAL DIRECTION OF FLOW
- REFLECTORIZED PLASTIC DRUM
- TYPE III (MOD.) BARRICADE
- EXISTING PAVEMENT MARKINGS COVERED WITH BLACK PAVEMENT MARKING MASKING TAPE
- TEMPORARY TRAFFIC BARRIER
- ENERGY ABSORPTION ATTENUATOR
- EXISTING PAVEMENT MARKINGS
- TEMPORARY PAVEMENT MARKINGS
- ARROW BOARD

NOTE:
BEFORE BLASTING OCCURS, THE CONTRACTOR SHALL CONSTRUCT A BLASTING SIGN PACKAGE WITH A PORTABLE CHANGABLE MESSAGE SIGN (PAYMENT MADE UNDER CONTRACT ITEM 641.17 "PORTABLE CHANGABLE MESSAGE SIGN RENTAL") PLACED SEVEN DAYS IN ADVANCE THREE MILES AHEAD IN BOTH THE NORTH AND SOUTHBOUND DIRECTIONS. BEFORE A BLAST OCCURS, A ROLLING ROADBLOCK SHALL START AT LEAST THREE MILES AHEAD OF BLASTING AREA IN BOTH NORTH AND SOUTHBOUND DIRECTIONS WITH A SPEED TO BE DETERMINED BY BLASTING AND CLEANUP TIME, NOT TO EXCEED 10 MINUTES OR AS DIRECTED BY THE RESIDENT ENGINEER.

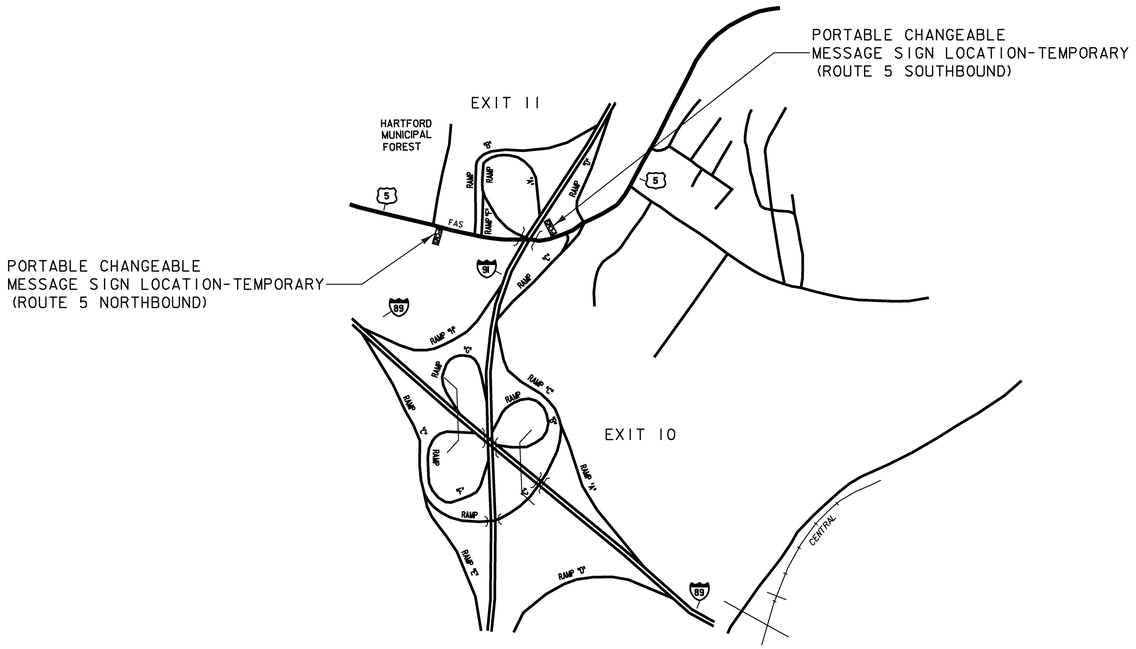
NOT TO SCALE

*AREAS WHERE THE POSTED SPEED LIMIT IS 55 MPH.

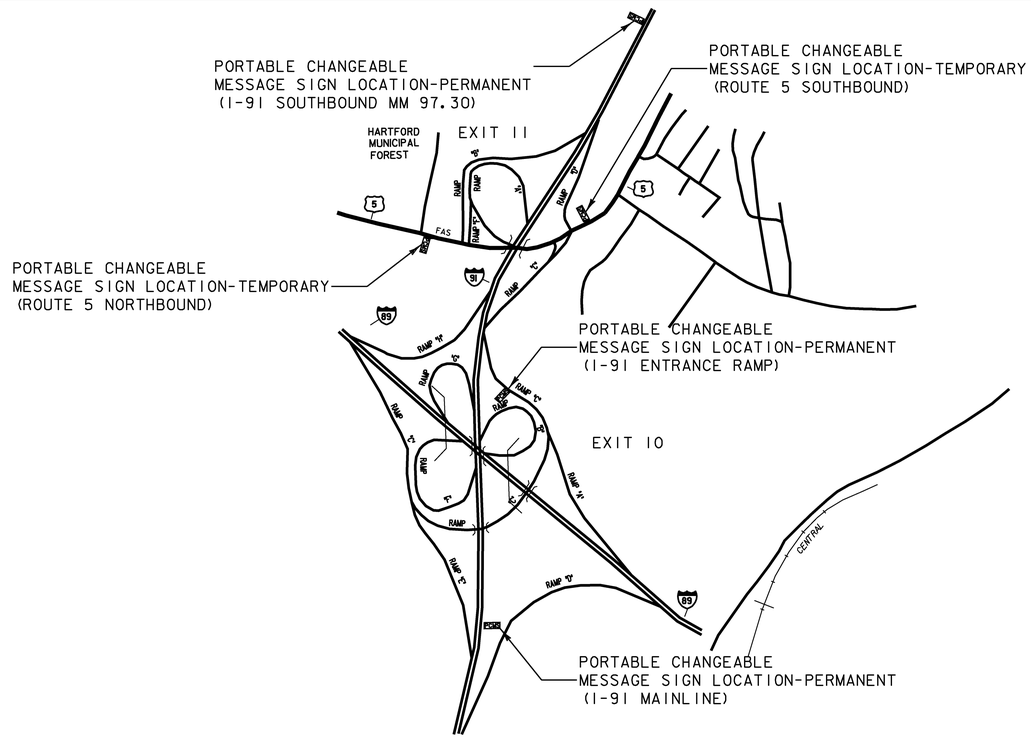
TRAFFIC CONTROL SHEET #2

PROJECT NAME:	HARTFORD - NEWBURY
PROJECT NUMBER:	IM 091- 2(72)

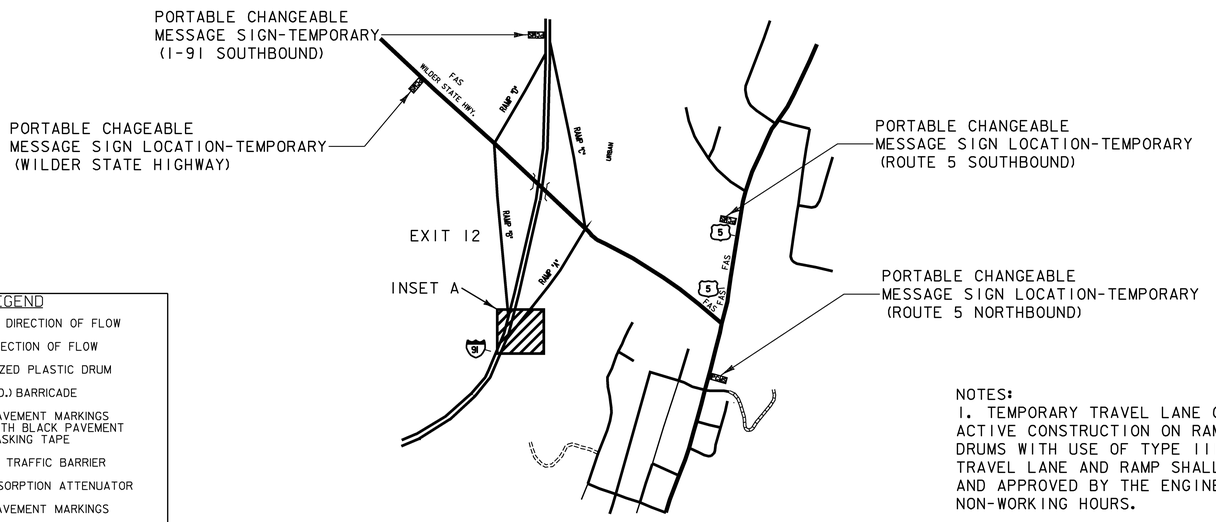
FILE NAME:	d99a052_frm.dgn	PLOT DATE:	27-JUL-2009
PROJECT LEADER:	K. UPMAL	DRAWN BY:	N. PAPPAS
DESIGNED BY:	N. PAPPAS	CHECKED BY:	A. BOMBARDIER
IPARM FILE NAME:	d99a052_tc_02	SHEET	17 OF 45



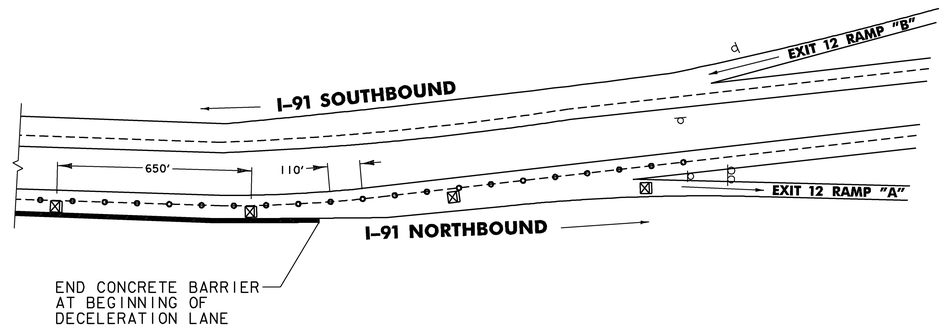
I-91 EXIT 11 RAMP CLOSURE
PORTABLE CHANGEABLE MESSAGE SIGN PLACEMENT



I-91 PERMANENT AND TEMPORARY
PORTABLE CHANGEABLE MESSAGE SIGN PLACEMENT



I-91 EXIT 12 TEMPORARY RAMP CLOSURE
PORTABLE CHANGEABLE MESSAGE SIGN PLACEMENT



EXIT 12 RAMP TEMPORARY CLOSURE
SEE INSET A AT EXIT 12
NOT TO SCALE

LEGEND

- TEMPORARY DIRECTION OF FLOW
- NORMAL DIRECTION OF FLOW
- REFLECTORIZED PLASTIC DRUM
- TYPE III (MOD.) BARRICADE
- EXISTING PAVEMENT MARKINGS COVERED WITH BLACK PAVEMENT MARKING MASKING TAPE
- TEMPORARY TRAFFIC BARRIER
- ENERGY ABSORPTION ATTENUATOR
- EXISTING PAVEMENT MARKINGS
- TEMPORARY PAVEMENT MARKINGS
- ARROW BOARD
- PCMS PORTABLE CHANGEABLE MESSAGE SIGN

NOTES:
1. TEMPORARY TRAVEL LANE CLOSURE AND RAMP "A" CLOSURE SHALL BE MADE DURING ACTIVE CONSTRUCTION ON RAMP "A". THE CLOSURES SHALL BE MADE WITH REFLECTORIZED DRUMS WITH USE OF TYPE III BARRICADES IN CLOSED LANE AND AT ENTRANCE TO RAMP. TRAVEL LANE AND RAMP SHALL BE CLEANED OF ALL DEBRIS AND OBSTRUCTIONS, INSPECTED AND APPROVED BY THE ENGINEER, AND SHALL BE OPEN TO THE PUBLIC DURING ALL NON-WORKING HOURS.

2. ALL PORTABLE CHANGABLE MESSAGE SIGNS-TEMPORARY ON THIS SHEET WILL BE PAID UNDER CONTRACT ITEM 641.17 "PORTABLE CHANGABLE MESSAGE SIGN RENTAL".

TRAFFIC CONTROL SHEET #3

PROJECT NAME:	HARTFORD - NEWBURY		
PROJECT NUMBER:	IM 091- 2(72)		
FILE NAME:	d99a052_frm.dgn	PLOT DATE:	21-JUL-2009
PROJECT LEADER:	K. UPMAL	DRAWN BY:	N. PAPPAS
DESIGNED BY:	N. PAPPAS	CHECKED BY:	A. BOMBARDIER
IPARM FILE NAME:	d99a052_tc_03	SHEET 18	OF 45

STATE OF VERMONT
AGENCY OF TRANSPORTATION

TRAFFIC SIGN SUMMARY SHEET

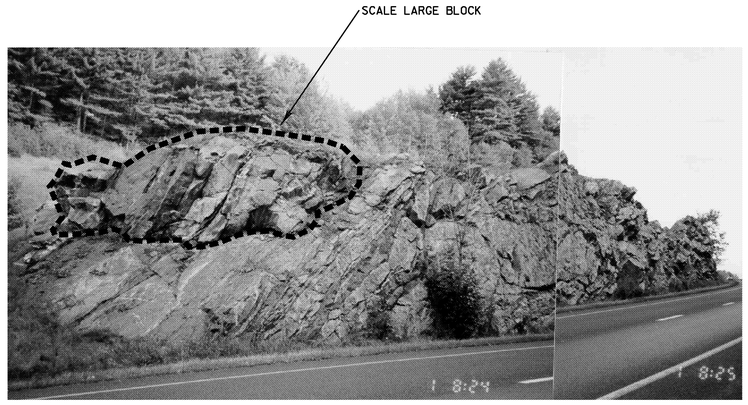
MILEMARKER, STATION, OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS EA	WIDTH (In)	HEIGHT (In)	NEW & SALVAGED SIGNS "A"	"B"	SALV SIGN	SALV TIS	EXIST POST RETAIN	EXIST POST SALVAGE	NEW SIGN POSTS NO. OF POSTS	FLANGED CHANNEL lb/ft 1.12	2.0	3.0	SQUARE STEEL (In) 1.75 lb/ft 1.88	2.0 lb/ft 2.42	2.5 lb/ft 3.35	ANCHOR	SLEEVE	TUBULAR ALUMINUM Ø (In) 3.0 lb/ft 1.3	4.0 lb/ft 1.7	4.0 MOD lb/ft 1.7	TUBULAR STEEL Ø (In) FOUND-ATION	3.0 lb/ft 7.6	3.5 lb/ft 9.0	4.0 lb/ft 10.8	5.0 lb/ft 14.6	W-SHAPE STEEL FTG. SIZE 24"	30"	WEIGHT	POST SIZE	SIGN REFRAME REQUIRED	REMARKS	SIGN DETAIL DETAIL ON SHEET NUMBER	STD. SHEET NUMBER
											OPTION ITEMS																									
SOUTHBOUND 71.00 RT	MILE 71	1	12	36	~~3.0~~ 0						~~1~~					~~X~~ 0																		D10-2 NOT INSTALLED MM 71.00 ON BR		E-139
NORTHBOUND 71.28 RT	KEEP RIGHT EXCEPT TO PASS	1	48	60	~~20.0~~ 0						~~2~~													~~X~~ 0										VR-132 NOT NECESSARY. EXISTING NEW SIGN	15	
SOUTHBOUND 96.00 RT	MILE 96	1	12	36	~~3.0~~ 0						~~1~~					~~X~~ 0																		D10-2 EXISTING WAS NOT DAMAGED		E-139
SOUTHBOUND 71.50 RT-LT	SPEED LIMIT 55	2	48	60	~~40.0~~ 0																												R2-1 NOT NECESSARY. EXISTING NEW SIGNS		E-142
	MINIMUM 40	2	48	48	~~32.0~~ 0						~~4~~													~~X~~ 0										VR-141		E-142
SOUTHBOUND 71.04 - 71.33 LT		~~7~~ 6	36	48	~~84.0~~ 72.0						~~14~~ 12					X 191.75' (SEE REMARKS)																		W1-8 (7 AT 0.05 SPACING END AT 71.33 SB)		E-150
																																		71.05 | 71.10 | 71.15 | 71.20 | 71.25 | 71.30 15.50' | 15.50' | 16.50' | 16.50' | 15.75' | 15.50' 15.75' | 16.00' | 16.75' | 16.00' | 16.00' | 16.00'		
SOUTHBOUND 71.04 LT		1	12	36	3.0						1					X 10.50'																		OM-3L	SHS	
INT #11 RAMP B STA. 0+280 RT		1	30	30	~~6.25~~ 0																												W1-2L		E-151
	30 M.P.H.	1	18	18	~~2.25~~ 0						~~2~~					~~X~~ 0																		W13-1 EXISTING NOT DAMAGED. EXISTING SIGN IS NEW		E-155
												FT	FT	FT	FT	~~274.0~~ 202.25	FT		EA	LB	LB	LB		~~271.2~~ 0	LB	LB	LB								
TOTALS			SF ~~193.5~~ 75.0	SF	EA.	SF			FT			FT ~~274.0~~ 202.25								LB	EA.	LB ~~271.2~~ 0					EA.	EA.	LB						

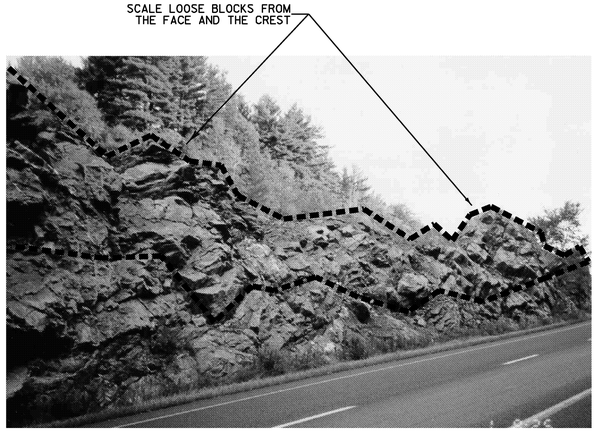
FINAL POST LENGTHS ARE TO BE DETERMINED IN THE FIELD. POST SIZES ARE COMPUTED BASED ON INFORMATION FURNISHED BY VTRANS STANDARD SHEETS AND "SIGN POST DESIGN GUIDELINE."

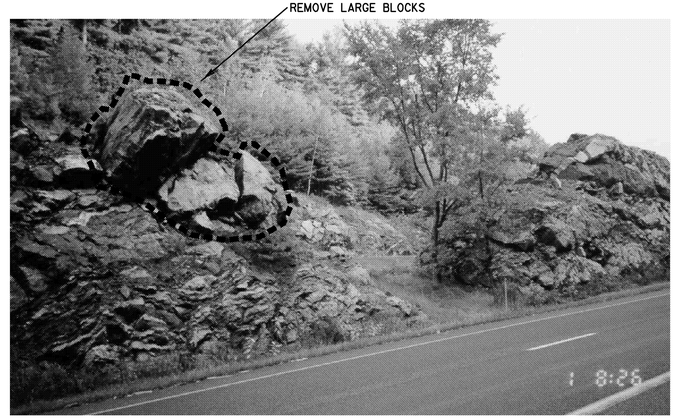
SHS- STANDARD HIGHWAY SIGN BOOK

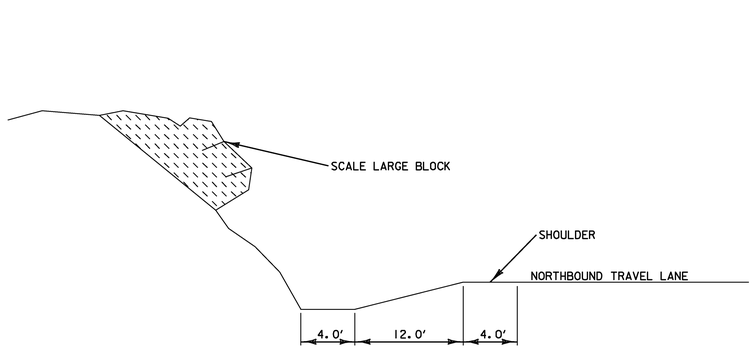
PROJECT NAME: HARTFORD - NEWBURY
PROJECT NUMBER: IM 091- 2(72)

FILE NAME:	d99a052_frm.dgn	PLOT DATE:	27-JUL-2009
PROJECT LEADER:	K. UPMAL	DRAWN BY:	N. PAPPAS
DESIGNED BY:	N. PAPPAS	CHECKED BY:	A. BOMBARDIER
IPARM FILE NAME:	d99a052_tss	SHEET	19 OF 45



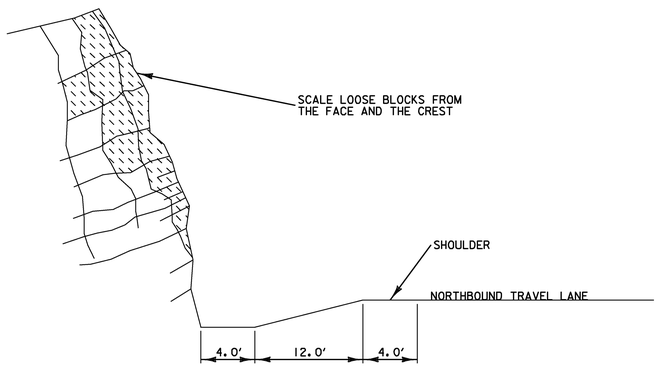






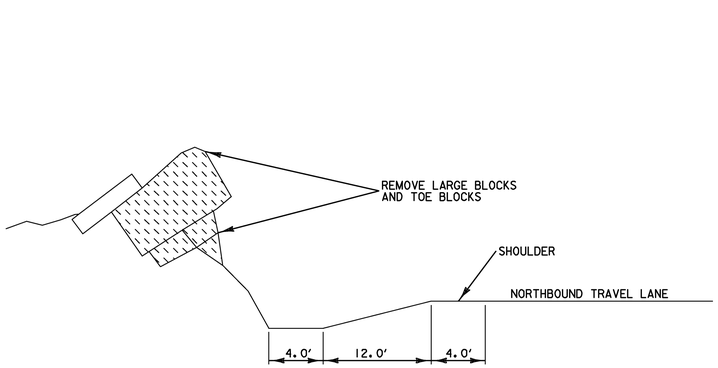
MM 71.57

A/10 SCHEMATIC - CROSS SECTION



MM 71.60

B/10 SCHEMATIC - CROSS SECTION



MM 71.64

C/10 SCHEMATIC - CROSS SECTION

LEGEND

ROCK TO BE EXCAVATED

ROCK SLOPE REPAIR NOTE

1. THE WORK CONSISTS OF MACHINE SCALING LOOSE ROCKS FROM THE CREST AND FACE OF THE MEDIAN SLOPE AS DIRECTED BY THE VAOT GEOLOGIST AND THE ENGINEER.

NOT TO SCALE

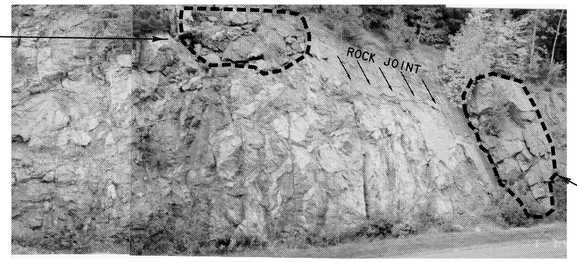
NOTE: PHOTOS SHALL BE USED AS A VISUAL REFERENCE ONLY. ACTUAL WORK REQUIREMENTS MAY BE MODIFIED BY VAOT GEOLOGIST AND/OR THE ENGINEER.

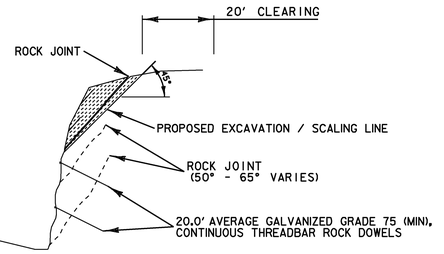
ROCK SLOPE REPAIRS
NORTHBOUND MEDIAN
MM 71.55 TO MM 71.65

TYPICAL #10

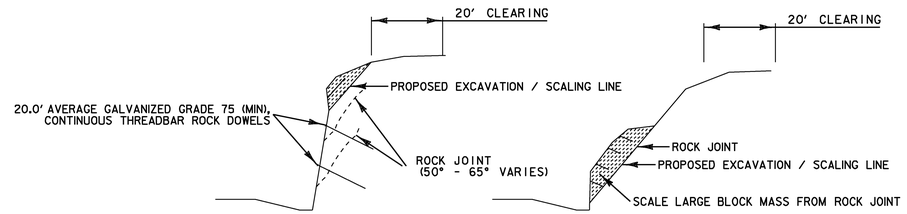
PROJECT NAME:	HARTFORD - NEWBURY		
PROJECT NUMBER:	IM 091- 2(72)		
FILE NAME:	d99a052_typicals.dgn	PLOT DATE:	21-JUL-2009
PROJECT LEADER:	K. UPMAL	DRAWN BY:	N. PAPPAS
DESIGNED BY:	N. PAPPAS	CHECKED BY:	A. BOMBARDIER
IPARM FILE NAME:	d99a052_typ_10	SHEET	20 OF 45



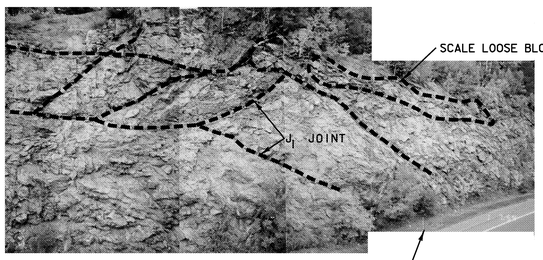


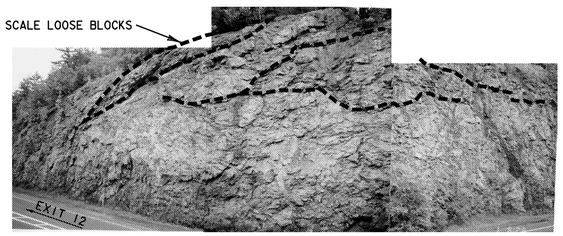


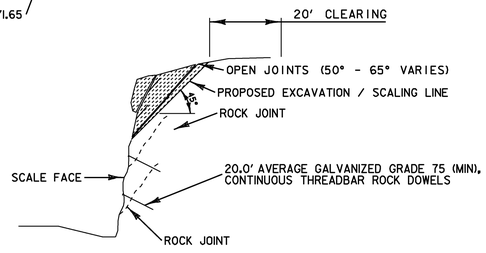
A/II SCHEMATIC - CROSS SECTION



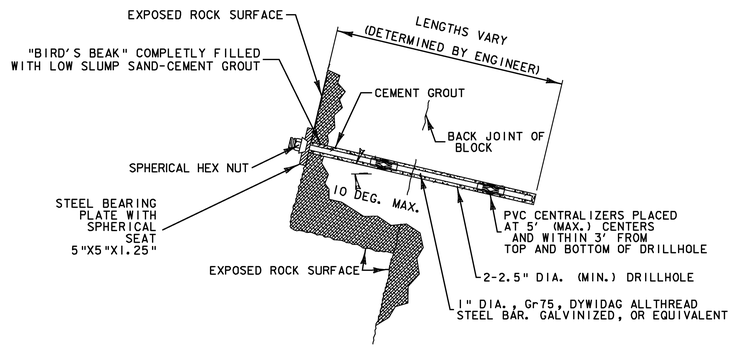
B/II SCHEMATIC - CROSS SECTION







C/II SCHEMATIC - CROSS SECTION



TYPICAL ROCK DOWEL DETAIL

LEGEND

ROCK TO BE EXCAVATED

ROCK SLOPE REPAIR NOTE

1. THE WORK CONSISTS OF HIGH SCALING, TRIM BLASTING AND MACHINE SCALING OF LOOSE & JOINTED ROCK FROM THE FACE AND CREST OF THE SLOPE WITH INSTALLATION OF ROCK DOWELS. THE WORK SHALL BE COMPLETED AS DIRECTED BY THE VAOT GEOLOGIST AND THE ENGINEER.

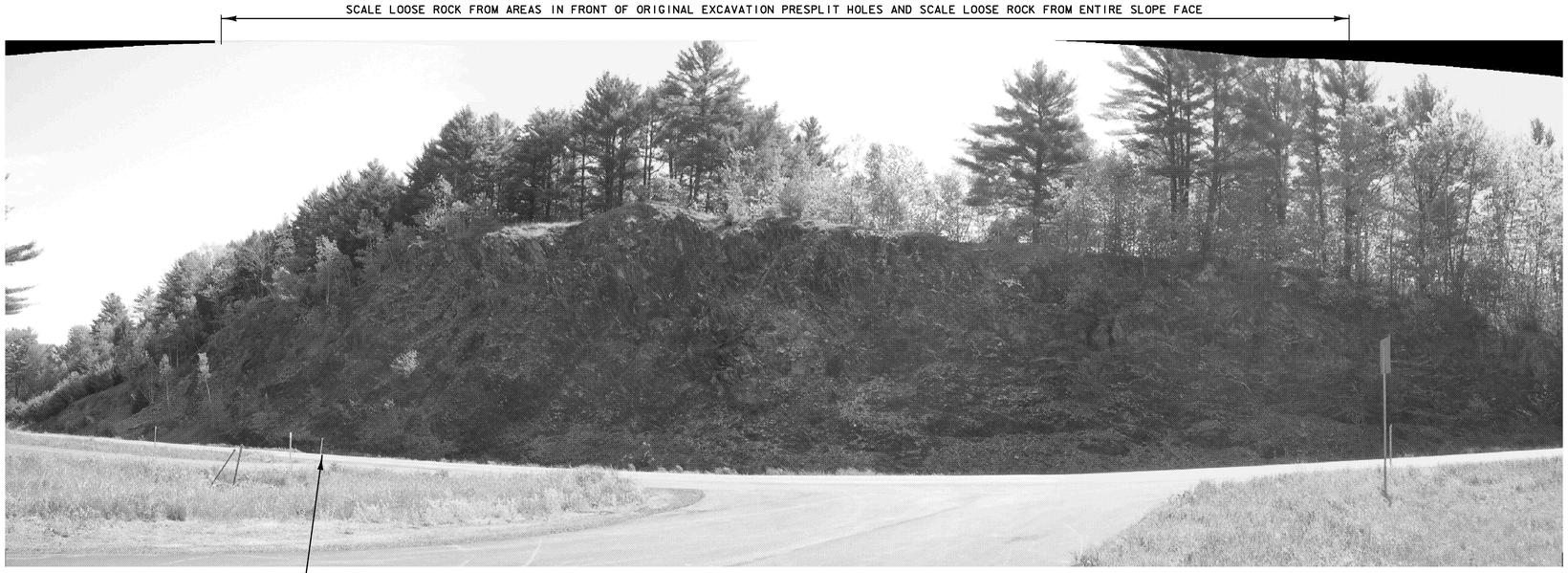
NOT TO SCALE

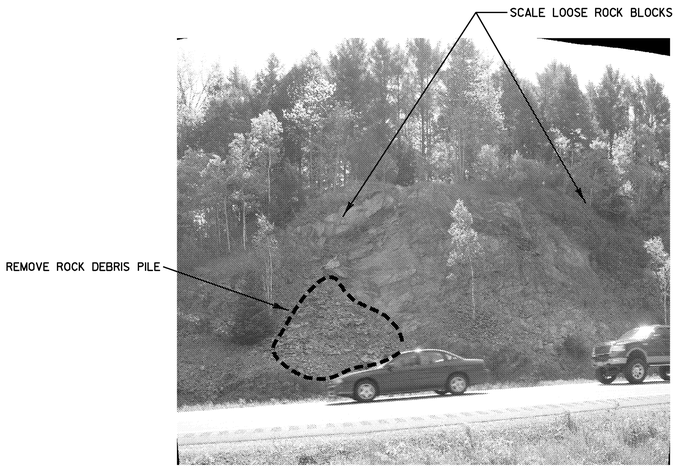
NOTE: PHOTOS SHALL BE USED AS A VISUAL REFERENCE ONLY. ACTUAL WORK REQUIREMENTS MAY BE MODIFIED BY VAOT GEOLOGIST AND/OR THE ENGINEER.

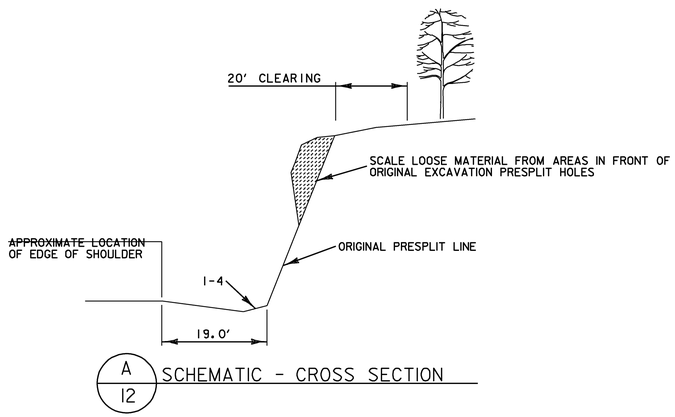
ROCK SLOPE REPAIRS
NORTHBOUND OUTSIDE
MM 71.55 TO MM 71.70

TYPICAL #11

PROJECT NAME:	HARTFORD - NEWBURY		
PROJECT NUMBER:	IM 091- 2(72)		
FILE NAME:	d99a052_typicals.dgn	PLOT DATE:	21-JUL-2009
PROJECT LEADER:	K. UPMAL	DRAWN BY:	N. PAPPAS
DESIGNED BY:	N. PAPPAS	CHECKED BY:	A. BOMBARDIER
IPARM FILE NAME:	d99a052_typ_11	SHEET	21 OF 45







A/12 SCHEMATIC - CROSS SECTION

LEGEND

ROCK TO BE EXCAVATED

ROCK SLOPE REPAIR NOTE

1. THE WORK CONSISTS OF HIGH SCALING LOOSE ROCK FROM AREAS IN FRONT OF PRESPLIT LINE AS DIRECTED BY THE VAOT GEOLOGIST AND THE ENGINEER.

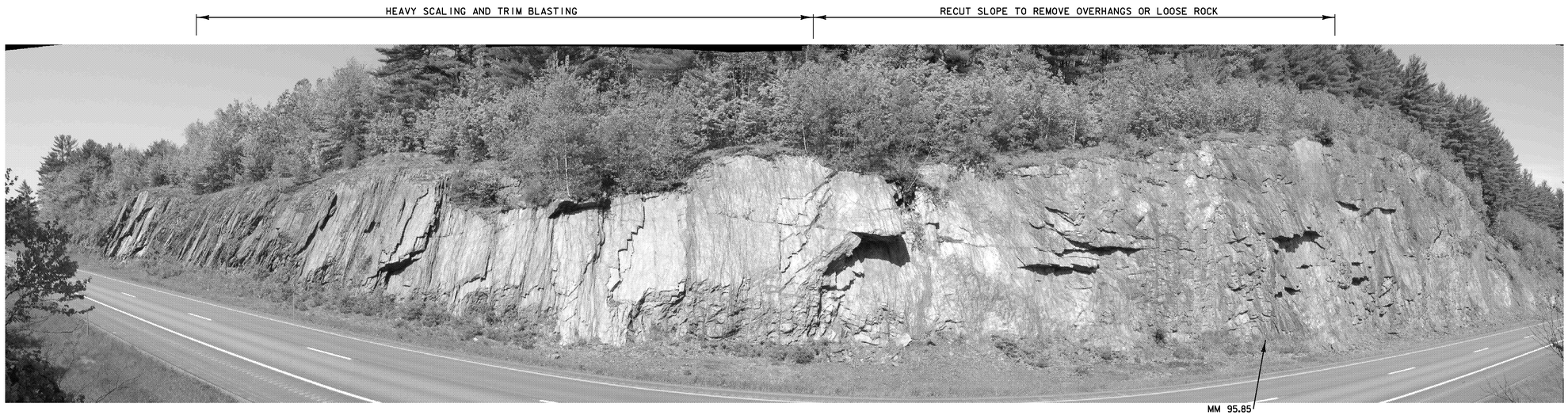
NOT TO SCALE

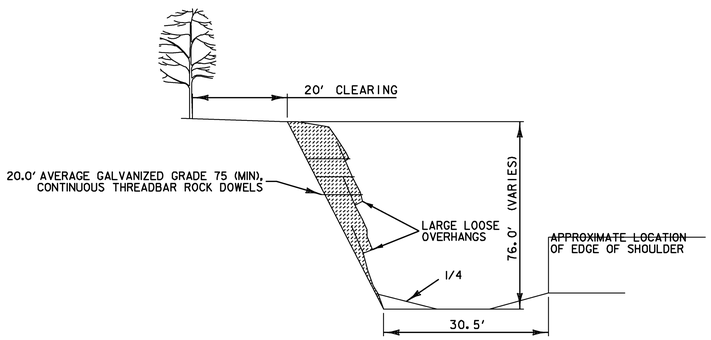
NOTE: PHOTOS SHALL BE USED AS A VISUAL REFERENCE ONLY. ACTUAL WORK REQUIREMENTS MAY BE MODIFIED BY VAOT GEOLOGIST AND/OR THE ENGINEER.

ROCK SLOPE REPAIRS
NORTHBOUND OUTSIDE
MM 95.65 TO MM 95.75

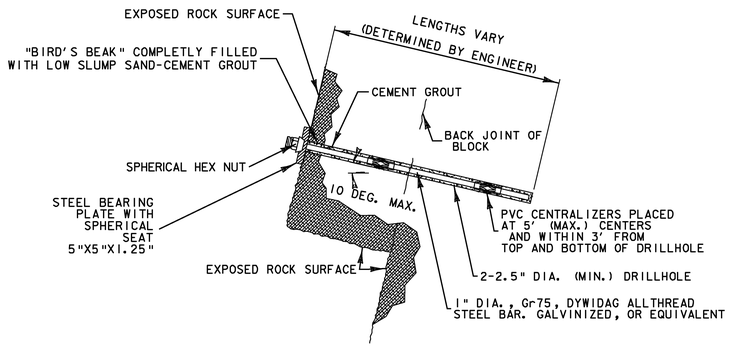
TYPICAL #12

PROJECT NAME:	HARTFORD - NEWBURY		
PROJECT NUMBER:	IM 091- 2(72)		
FILE NAME:	d99a052_typicals.dgn	PLOT DATE:	21-JUL-2009
PROJECT LEADER:	K. UPMAL	DRAWN BY:	N. PAPPAS
DESIGNED BY:	N. PAPPAS	CHECKED BY:	A. BOMBARDIER
IPARM FILE NAME:	d99a052_typ_12	SHEET	22 OF 45





A/13 SCHEMATIC - CROSS SECTION



TYPICAL ROCK DOWEL DETAIL

LEGEND

ROCK TO BE EXCAVATED

ROCK SLOPE REPAIR NOTE

1. DESCRIPTION OF WORK: THE WORK CONSISTS OF HIGH SCALING, TRIM BLASTING AND ROCK DOWELING, AS DIRECTED BY THE VAOT GEOLOGIST AND THE ENGINEER.

NOT TO SCALE

NOTE: PHOTOS SHALL BE USED AS A VISUAL REFERENCE ONLY. ACTUAL WORK REQUIREMENTS MAY BE MODIFIED BY VAOT GEOLOGIST AND/OR THE ENGINEER.

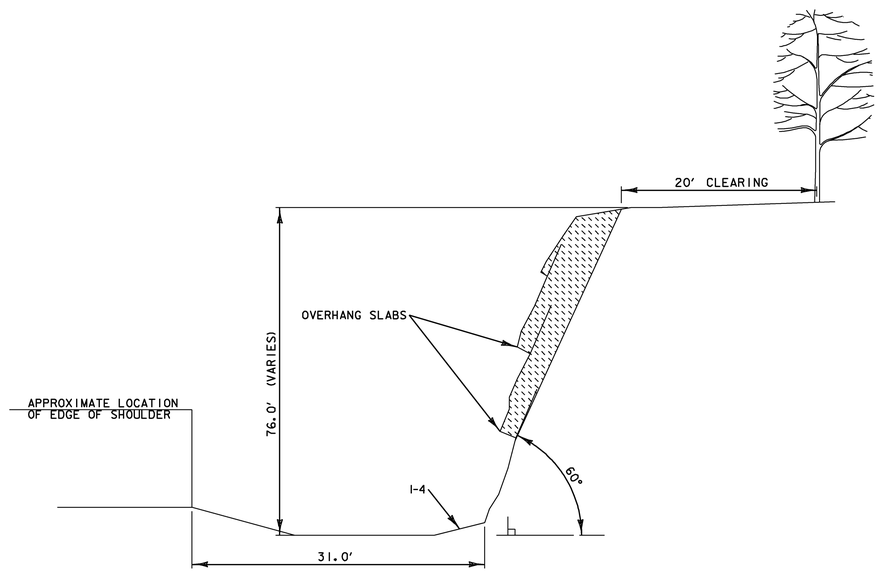
ROCK SLOPE REPAIRS
NORTHBOUND MEDIAN
MM 95.73 TO MM 95.95

TYPICAL #13

PROJECT NAME:	HARTFORD - NEWBURY		
PROJECT NUMBER:	IM 091- 2(72)		
FILE NAME:	d99a052_typicals.dgn	PLOT DATE:	21-JUL-2009
PROJECT LEADER:	K. UPMAL	DRAWN BY:	N. PAPPAS
DESIGNED BY:	N. PAPPAS	CHECKED BY:	A. BOMBARDIER
IPARM FILE NAME:	d99a052_typ_13	SHEET	23 OF 45







A/14 SCHEMATIC - CROSS SECTION

LEGEND

ROCK TO BE EXCAVATED

ROCK SLOPE REPAIR NOTE

1. DESCRIPTION OF WORK: THE WORK CONSISTS OF HIGH SCALING, TRIM BLASTING AND MACHINE SCALING, AS DIRECTED BY THE VAOT GEOLOGIST AND THE ENGINEER.

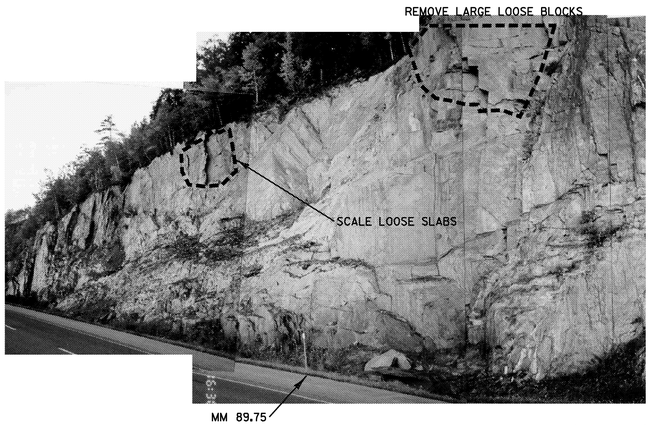
NOT TO SCALE

NOTE: PHOTOS SHALL BE USED AS A VISUAL REFERENCE ONLY. ACTUAL WORK REQUIREMENTS MAY BE MODIFIED BY VAOT GEOLOGIST AND/OR THE ENGINEER.

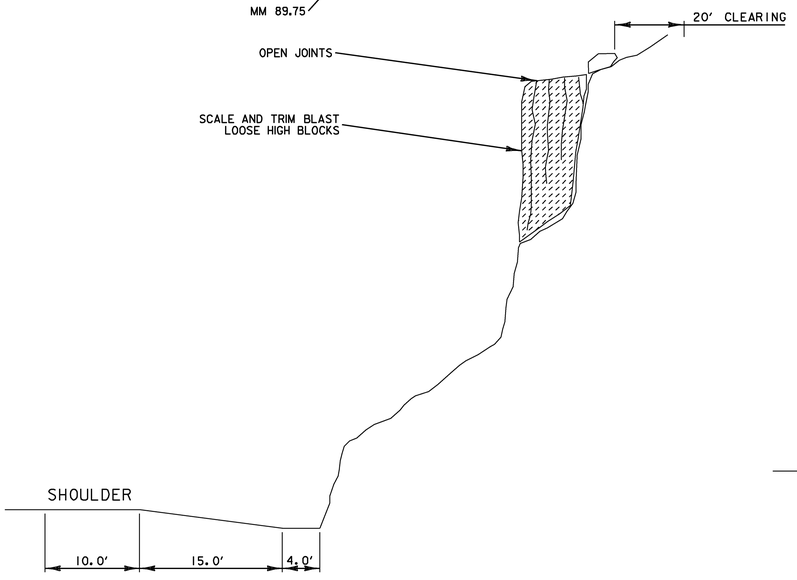
ROCK SLOPE REPAIRS
SOUTHBOUND OUTSIDE
MM 95.5 TO MM 96.0

TYPICAL #14

PROJECT NAME:	HARTFORD - NEWBURY		
PROJECT NUMBER:	IM 091- 2(72)		
FILE NAME:	d99a052_typicals.dgn	PLOT DATE:	21-JUL-2009
PROJECT LEADER:	K. UPMAL	DRAWN BY:	N. PAPPAS
DESIGNED BY:	N. PAPPAS	CHECKED BY:	A. BOMBARDIER
IPARM FILE NAME:	d99a052_typ_14	SHEET	24 OF 45

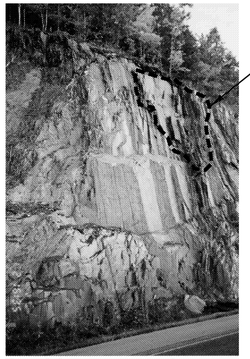


MM 89.75

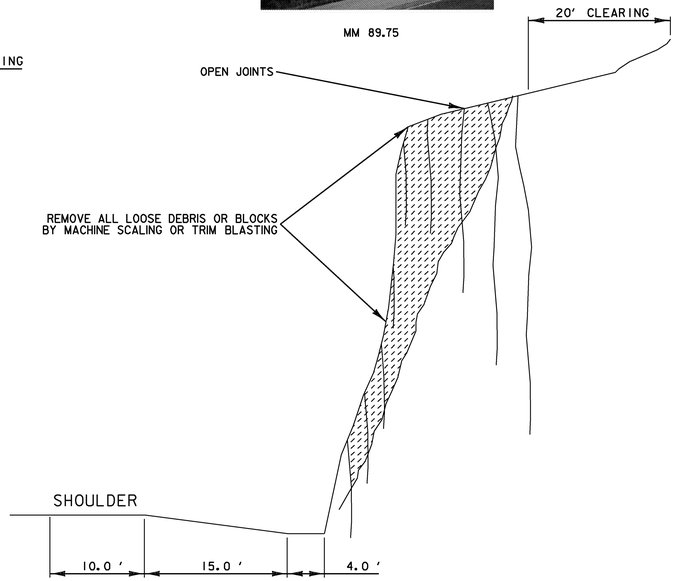


MM 89.73

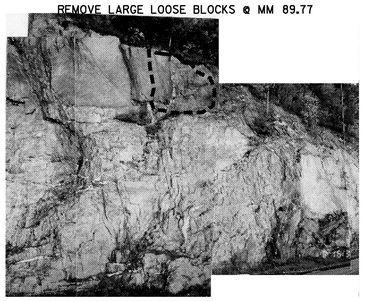
A/15 SCHEMATIC - CROSS SECTION



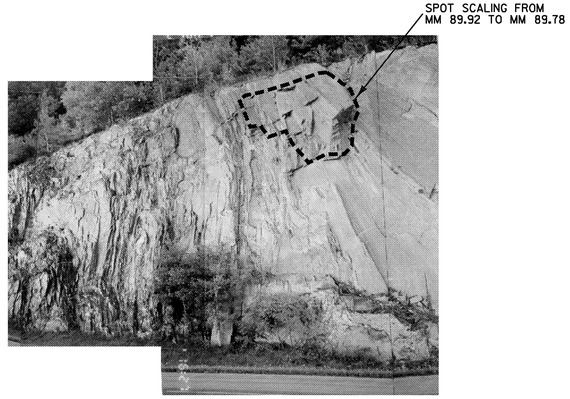
MM 89.75



B/15 SCHEMATIC - CROSS SECTION



MM 89.76 TO MM 89.78



MM 89.92 TO MM 89.78

LEGEND

ROCK TO BE EXCAVATED

ROCK SLOPE REPAIR NOTE

1. DESCRIPTION OF WORK TO BE PERFORMED BY HIGH SCALING AND MACHINE SCALING: SCALE LOOSE BLOCKS FROM SLOPE AT MM 89.78-89.74, 89.71-89.68, AND LOOSE BLOCKS AT THE TOP OF SLOPE AND CREST AT MM 89.74-89.71. SOME SPOT SCALING AT SELECTED LOCATIONS WILL ALSO BE REQUIRED. FINAL EXTENT OF SCALING SHALL BE FIELD DETERMINED BY THE VAOT GEOLOGIST AND THE ENGINEER.

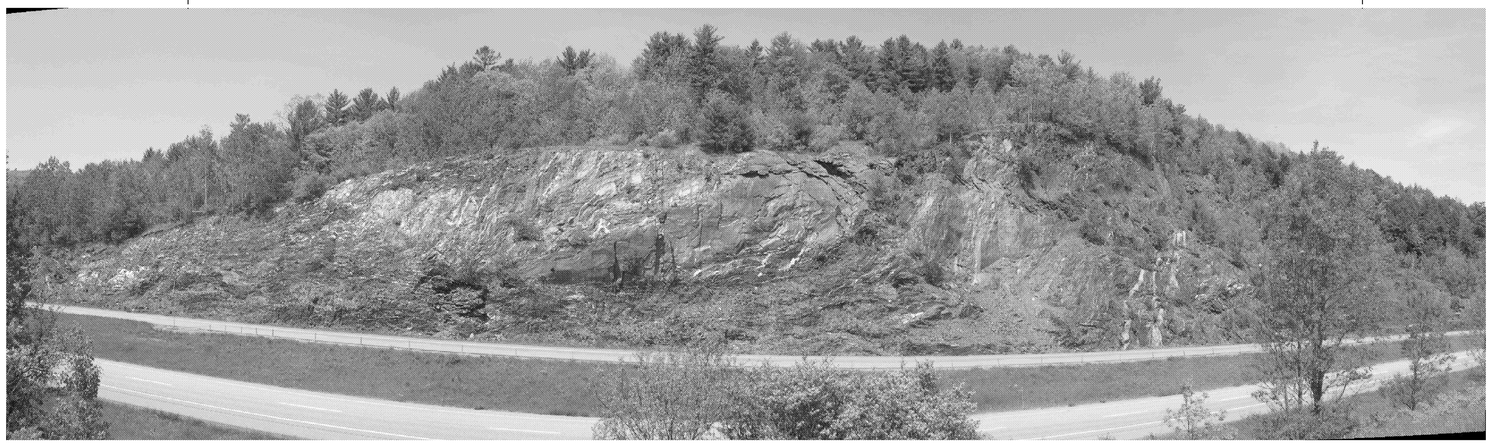
NOT TO SCALE

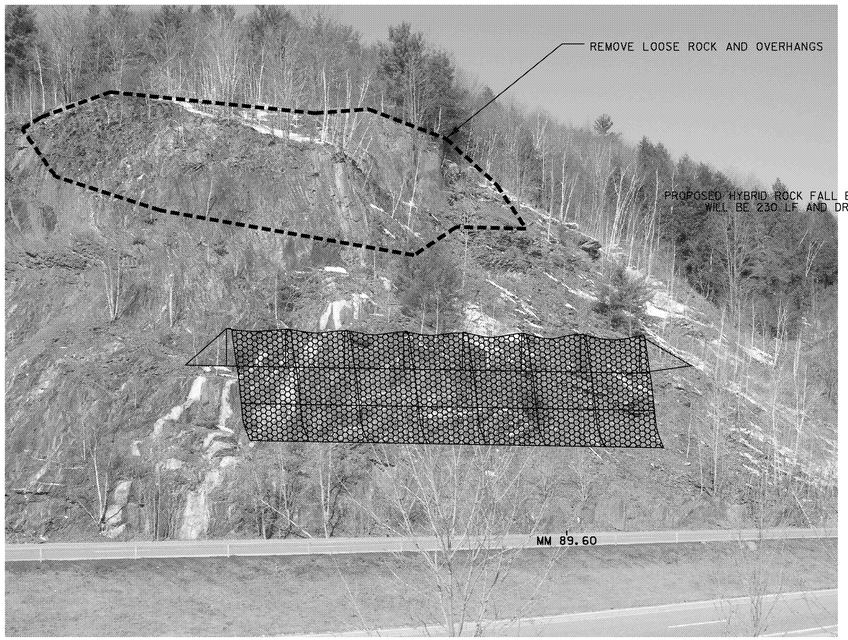
NOTE: PHOTOS SHALL BE USED AS A VISUAL REFERENCE ONLY. ACTUAL WORK REQUIREMENTS MAY BE MODIFIED BY VAOT GEOLOGIST AND/OR THE ENGINEER.

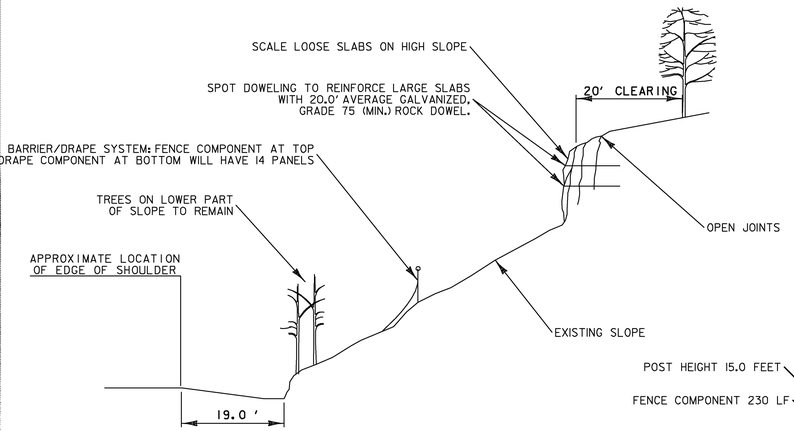
ROCK SLOPE REPAIRS
SOUTHBOUND OUTSIDE
MM 89.65 TO MM 89.92

TYPICAL #15

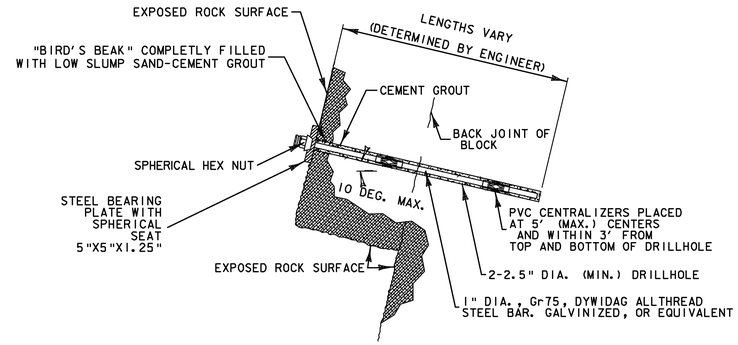
PROJECT NAME:	HARTFORD - NEWBURY		
PROJECT NUMBER:	IM 091- 2(72)		
FILE NAME:	d99a052_typicals.dgn	PLOT DATE:	21-JUL-2009
PROJECT LEADER:	K. UPMAL	DRAWN BY:	N. PAPPAS
DESIGNED BY:	N. PAPPAS	CHECKED BY:	A. BOMBARDIER
IPARM FILE NAME:	d99a052_typ_15	SHEET	25 OF 45



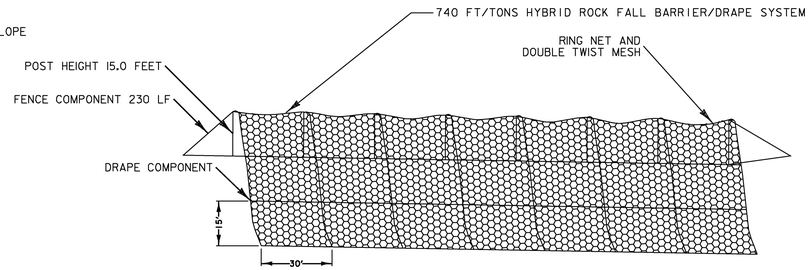




A/16 SCHEMATIC - CROSS SECTION



TYPICAL ROCK DOWEL DETAIL



TYPICAL HYBRID ROCK FALL BARRIER/DRAPE SYSTEM DETAIL

NOTE: PAYMENT FOR THIS ITEM WILL BE MADE UNDER ITEMS 900.640 SPECIAL PROVISION (HYBRID ROCK FALL BARRIER/DRAPE SYSTEM, FENCE COMPONENT) AND 900.670 SPECIAL PROVISION (HYBRID ROCK FALL BARRIER/DRAPE SYSTEM, DRAPE COMPONENT).

TYPICAL #16

ROCK SLOPE REPAIR NOTE

1. DESCRIPTION OF WORK: THE WORK CONSISTS OF HIGH SCALING & ROCK DOWELING OF LOOSE ROCK FROM THE CREST & FACE OF THE SLOPE AND HYBRID ROCK FALL BARRIER/DRAPE SYSTEM INSTALLATION AS DIRECTED BY THE VAOT GEOLOGIST OR ENGINEER. THE HYBRID DRAPE/FENCE RING NET SYSTEM IS TO BE INSTALLED PER MANUFACTURER'S DETAILED PLANS AND SPECIFICATION. FOUNDATIONS FOR HYBRID ROCK FALL BARRIER/DRAPE RING NET SYSTEM WILL BE ENGINEERED BY THE CONTRACTOR AND SHALL BE APPROVED BY VAOT. LOCATION TO BE DETERMINED IN THE FIELD BY THE VAOT GEOLOGIST AND ENGINEER.

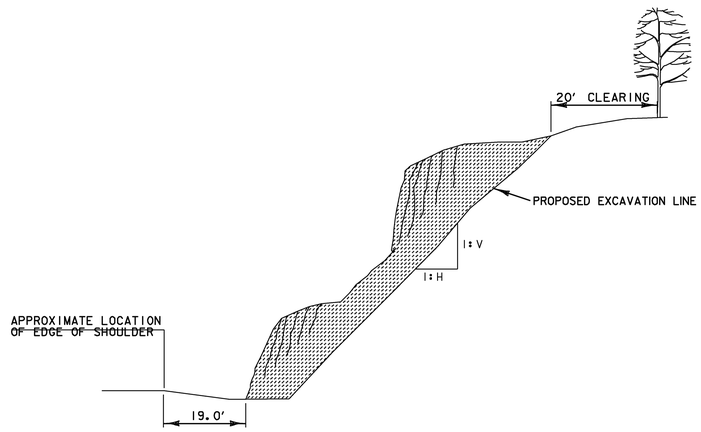
NOT TO SCALE

NOTE: PHOTOS SHALL BE USED AS A VISUAL REFERENCE ONLY. ACTUAL WORK REQUIREMENTS MAY BE MODIFIED BY VAOT GEOLOGIST AND/OR THE ENGINEER.

ROCK SLOPE REPAIRS
SOUTHBOUND OUTSIDE
MM 89.45 TO MM 89.62

PROJECT NAME:	HARTFORD - NEWBURY		
PROJECT NUMBER:	IM 091- 2(72)		
FILE NAME:	d99a052_typicals.dgn	PLOT DATE:	27-JUL-2009
PROJECT LEADER:	K. UPMAL	DRAWN BY:	N. PAPPAS
DESIGNED BY:	N. PAPPAS	CHECKED BY:	A. BOMBARDIER
IPARM FILE NAME:	d99a052_typ_16	SHEET	26 OF 45





TYPICAL NORTH END OF SLOPE

A/17 SCHEMATIC - CROSS SECTION

LEGEND

ROCK TO BE EXCAVATED

ROCK SLOPE REPAIR NOTE

1. THE WORK CONSISTS OF RECUTTING THE SLOPE AT 1H:1V BY MECHANICAL OR CONTROLLED BLASTING METHODS (PER COMMON AND SOLID ROCK EXCAVATION) AS DIRECTED BY THE VAOT GEOLOGIST AND THE ENGINEER.

NOT TO SCALE

NOTE: PHOTOS SHALL BE USED AS A VISUAL REFERENCE ONLY. ACTUAL WORK REQUIREMENTS MAY BE MODIFIED BY VAOT GEOLOGIST AND/OR THE ENGINEER.

ROCK SLOPE REPAIRS
SOUTHBOUND OUTSIDE
MM 86.63 TO MM 86.75

TYPICAL #17

PROJECT NAME:	HARTFORD - NEWBURY		
PROJECT NUMBER:	IM 091- 2(72)		
FILE NAME:	d99a052_typicals.dgn	PLOT DATE:	21-JUL-2009
PROJECT LEADER:	K. UPMAL	DRAWN BY:	N. PAPPAS
DESIGNED BY:	N. PAPPAS	CHECKED BY:	A. BOMBARDIER
IPARM FILE NAME:	d99a052_typ_17	SHEET	27 OF 45

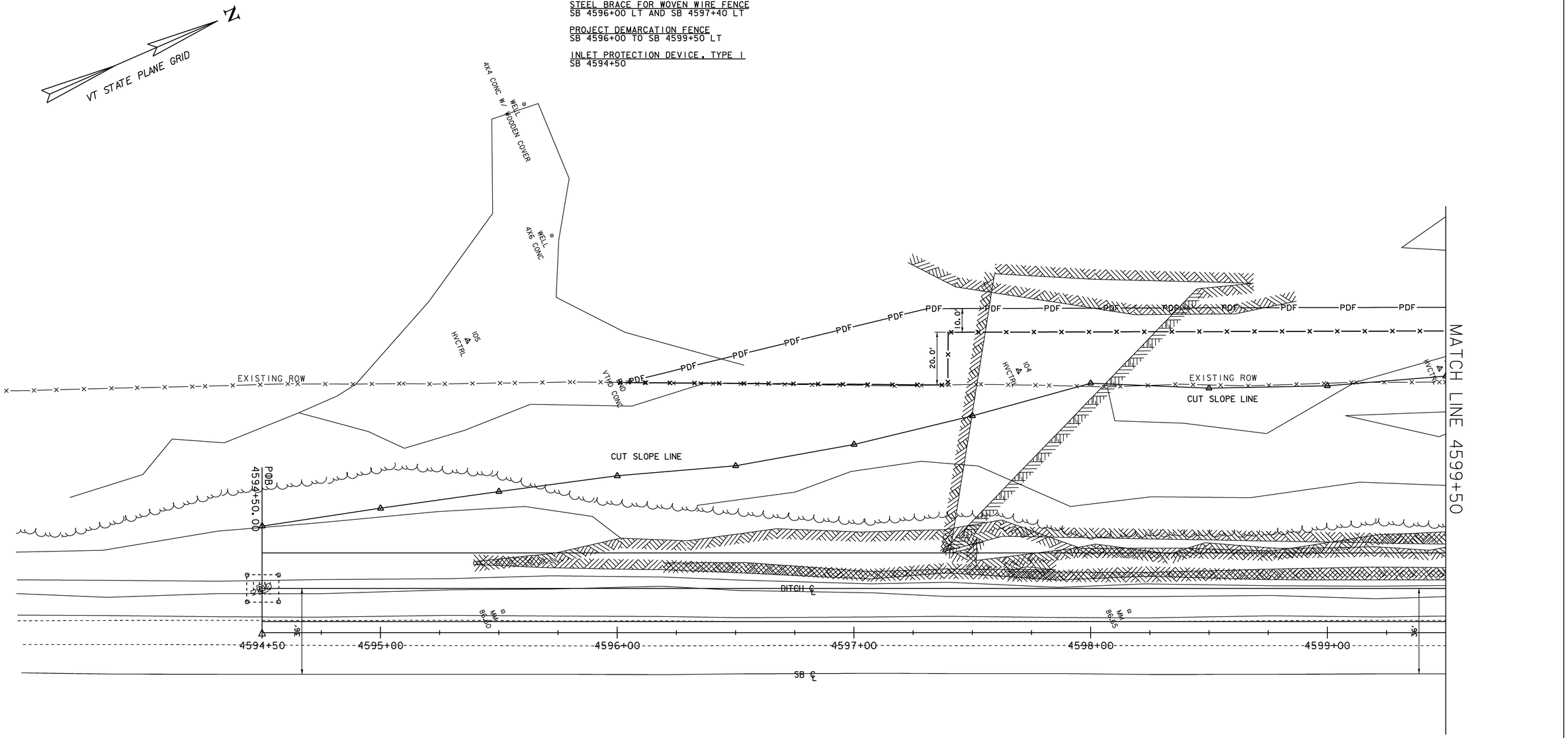
REMOVAL OF EXISTING FENCE
SB 4596+00 TO SB 4599+50 LT

WOVEN WIRE FENCE WITH STEEL POSTS
SB 4596+00 TO SB 4599+50 LT

STEEL BRACE FOR WOVEN WIRE FENCE
SB 4596+00 LT AND SB 4597+40 LT

PROJECT DEMARCATION FENCE
SB 4596+00 TO SB 4599+50 LT

INLET PROTECTION DEVICE, TYPE I
SB 4594+50



LEGEND

PDF———PDF	PROJECT DEMARCATION FENCE
×—×—×—×	WOVEN WIRE FENCE WITH STEEL POSTS
	INLET PROTECTION DEVICE, TYPE I

0 20 40
SCALE IN FEET

NOTE: ALIGNMENT IS THE CENTER POINT OF THE SHOULDER LINE AND EDGE OF PAVEMENT.

MM 86.63 - MM 86.75

SOUTHBOUND LAYOUT #1

PROJECT NAME: HARTFORD - NEWBURY
PROJECT NUMBER: IM 091-2(72)

FILE NAME:	d99a052_bdr_nul.dgn	PLOT DATE:	21-JUL-2009
PROJECT LEADER:	K. UPMAL	DRAWN BY:	N. PAPPAS
DESIGNED BY:	N. PAPPAS	CHECKED BY:	A. BOMBARDIER
IPARM FILE NAME:	d99a052_sb_01	SHEET	28 OF 45

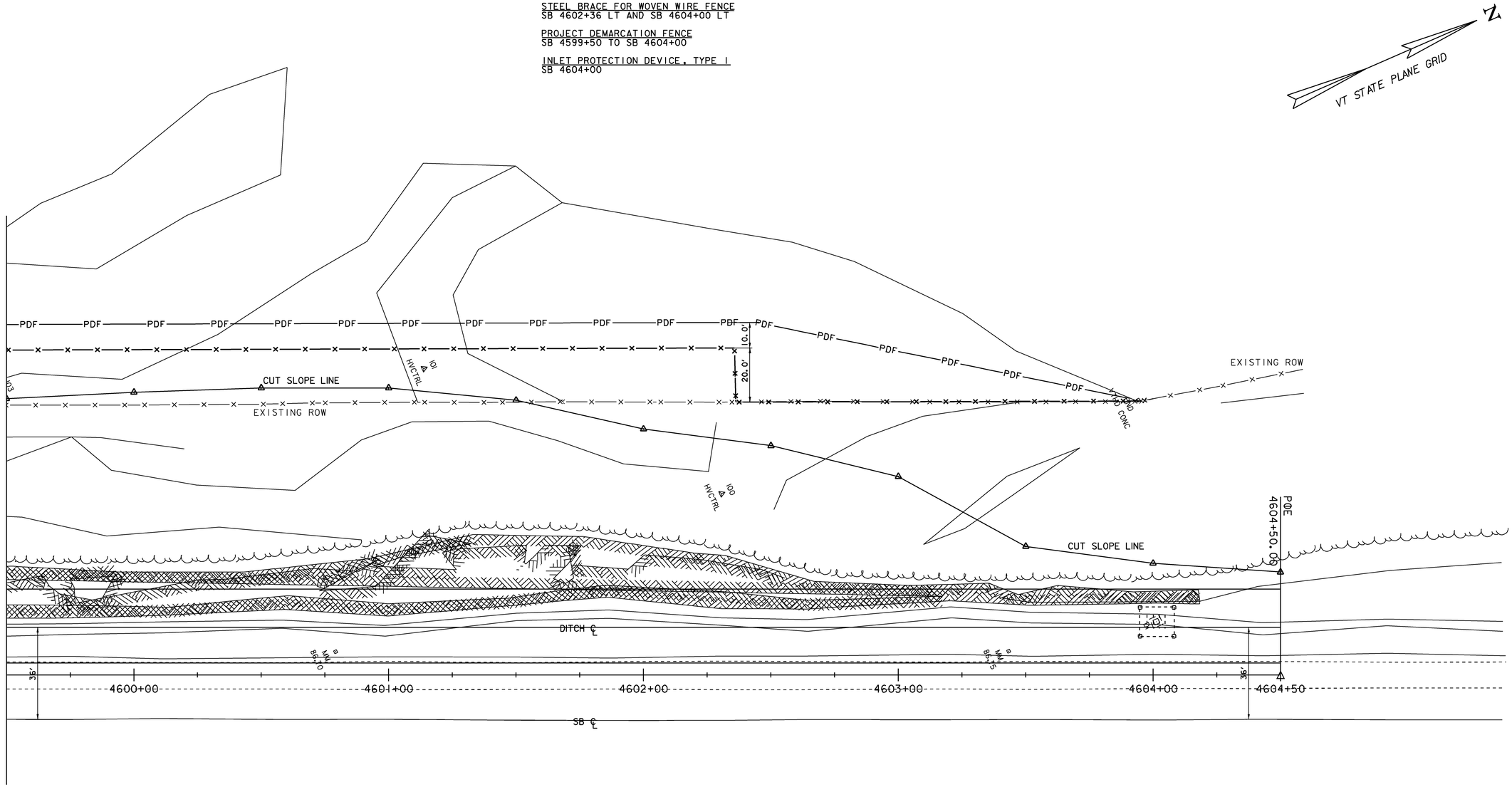
REMOVAL OF EXISTING FENCE
SB 4599+50 TO SB 4604+00 LT

WOVEN WIRE FENCE WITH STEEL POSTS
SB 4599+50 TO SB 4604+00 LT

STEEL BRACE FOR WOVEN WIRE FENCE
SB 4602+36 LT AND SB 4604+00 LT

PROJECT DEMARCATION FENCE
SB 4599+50 TO SB 4604+00

INLET PROTECTION DEVICE, TYPE I
SB 4604+00



LEGEND

PDF——PDF PROJECT DEMARCATION FENCE

×—×—×—× WOVEN WIRE FENCE WITH STEEL POSTS

INLET PROTECTION DEVICE, TYPE I

0 20 40
SCALE IN FEET

NOTE: ALIGNMENT IS THE CENTER POINT OF THE SHOULDER LINE AND EDGE OF PAVEMENT.

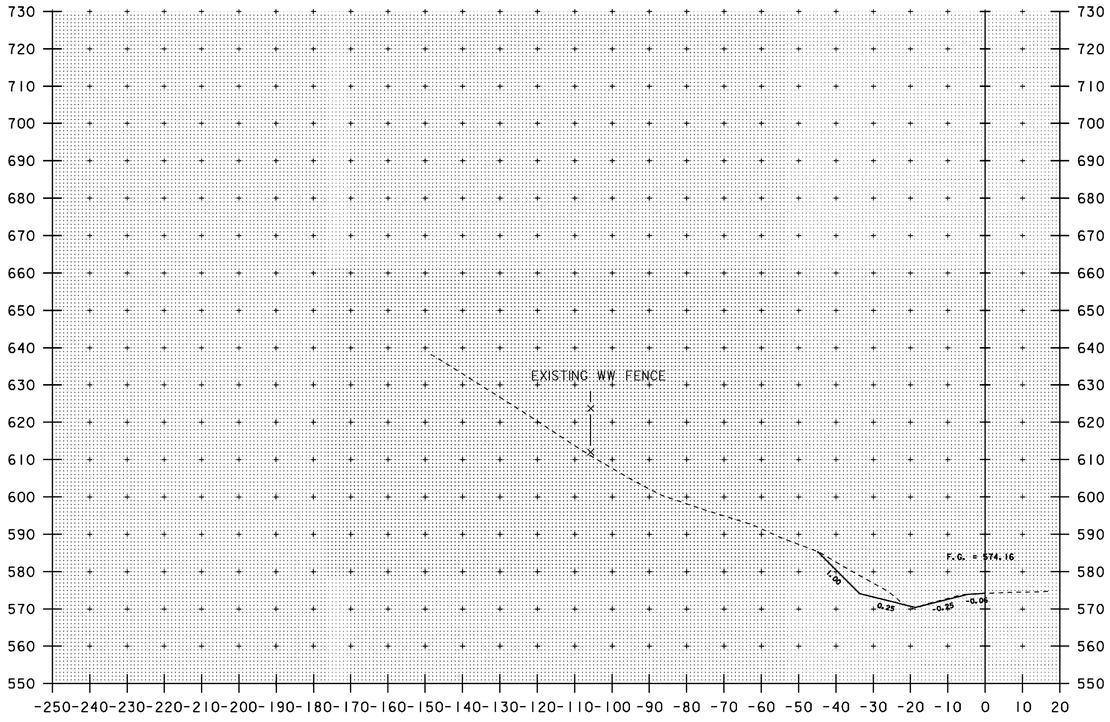
MM 86.63 - MM 86.75

SOUTHBOUND LAYOUT #2

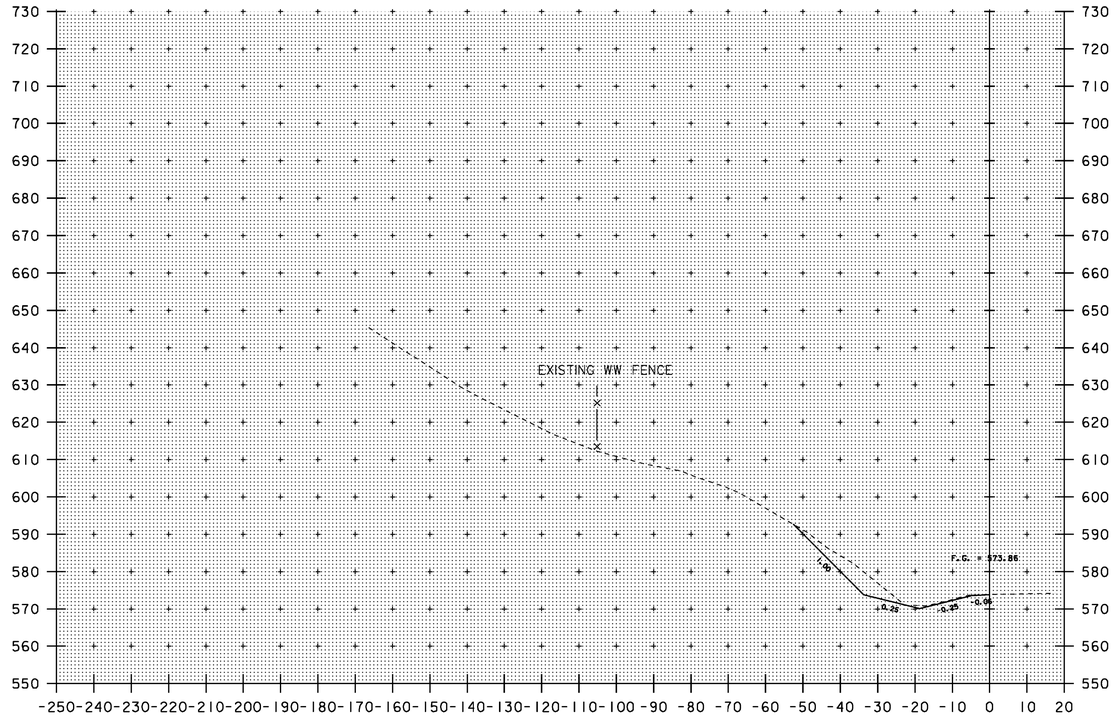
PROJECT NAME: HARTFORD - NEWBURY
PROJECT NUMBER: IM 091-2(72)

FILE NAME: d99a052_bdr_nul.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: N. PAPPAS
IPARM FILE NAME: d99a052_sb_02

PLOT DATE: 21-JUL-2009
DRAWN BY: N. PAPPAS
CHECKED BY: A. BOMBARDIER
SHEET 29 OF 45



4594+50



4595+00

FOR FINAL SECTIONS
SEE FOLDER/ENVELOPE
LABELED "CROSS SECTIONS"

0 20 40
SCALE IN FEET

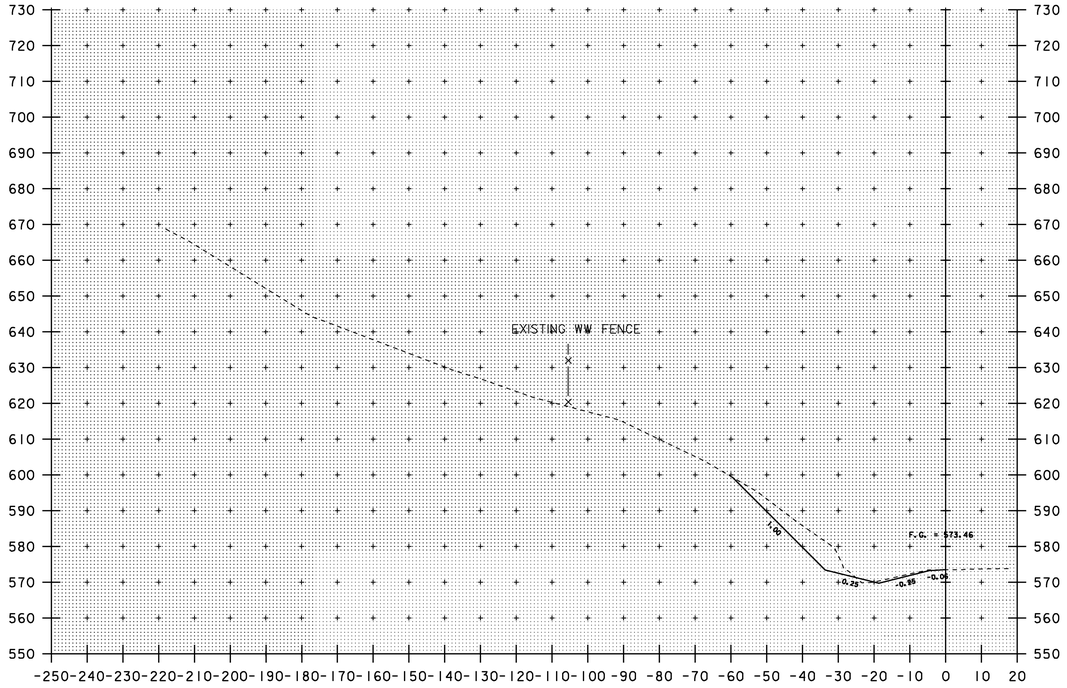
NOTE: ALIGNMENT IS THE CENTER OF THE SHOULDER LINE AND EDGE OF PAVEMENT.

MM 86.63 - MM 86.75

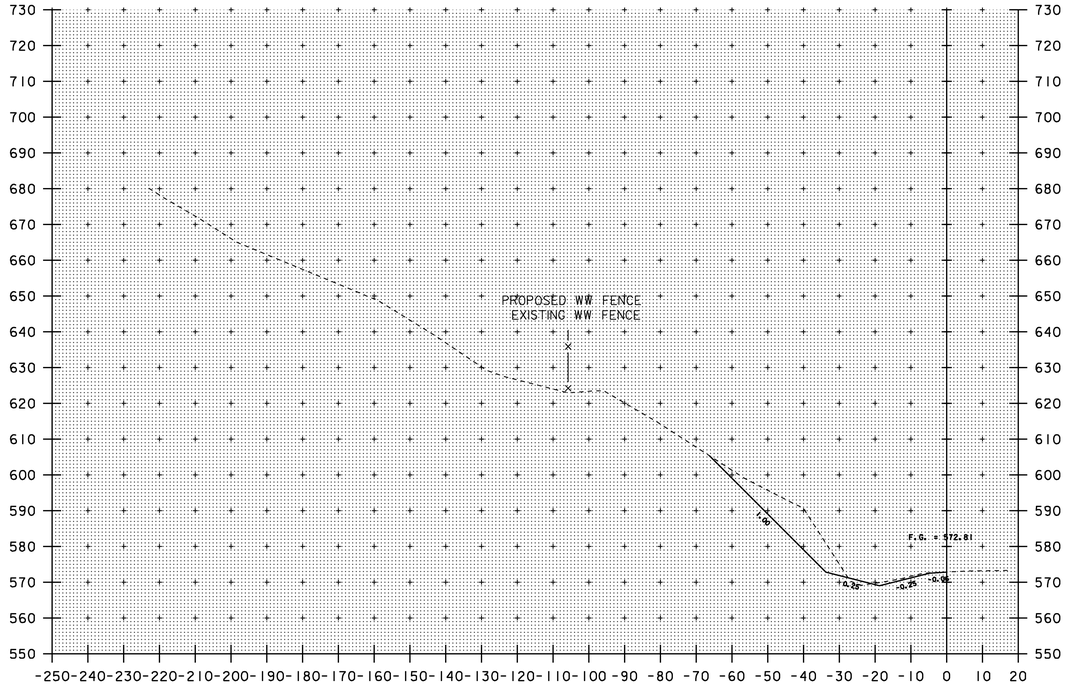
SOUTHBOUND CROSS SECTIONS #1

PROJECT NAME:	HARTFORD - NEWBURY
PROJECT NUMBER:	IM 091-2(72)

FILE NAME:	d99a052_bdr_xs.dgn	PLOT DATE:	21-JUL-2009
PROJECT LEADER:	K. UPMAL	DRAWN BY:	N. PAPPAS
DESIGNED BY:	N. PAPPAS	CHECKED BY:	ART BOMBARIER
IPARM FILE NAME:	d99a052_bdr_xs_sb_01	SHEET	30 OF 45



4595+50



4596+00

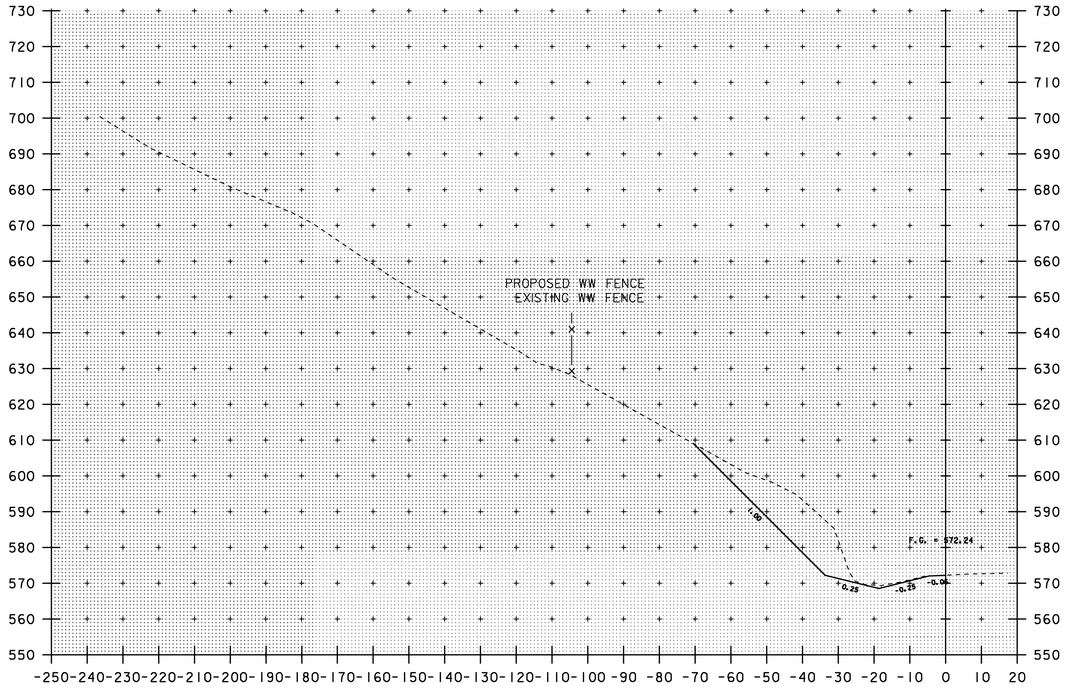
0 20 40
SCALE IN FEET

NOTE: ALIGNMENT IS THE CENTER OF THE SHOULDER LINE AND EDGE OF PAVEMENT.

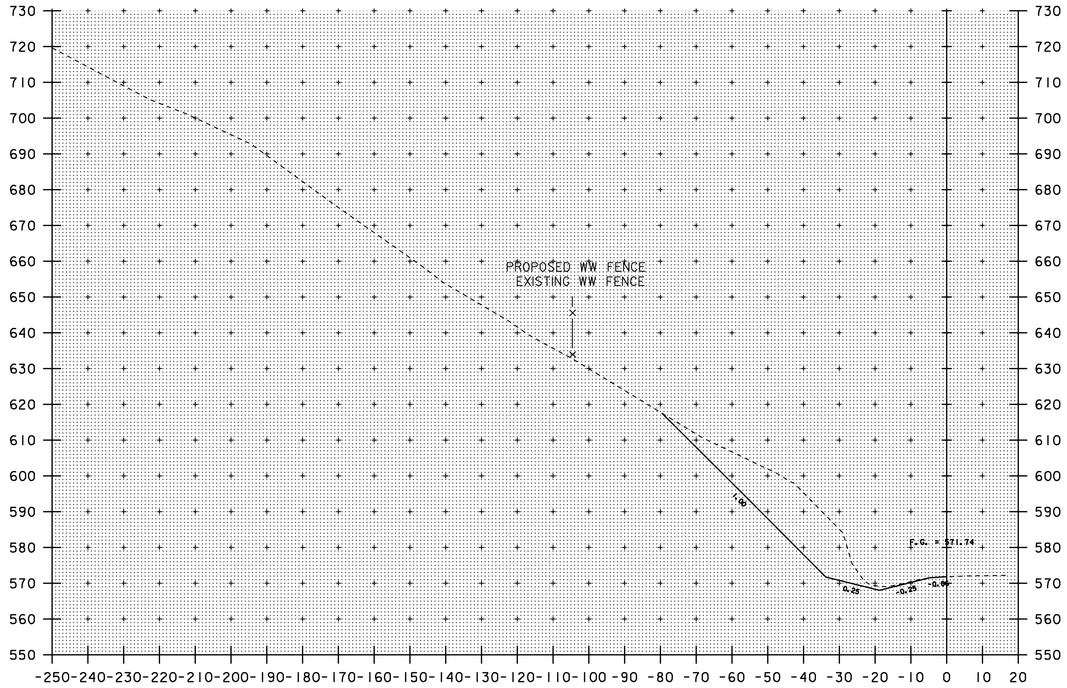
MM 86.63 - MM 86.75

SOUTHBOUND CROSS SECTIONS #2

PROJECT NAME:	HARTFORD - NEWBURY
PROJECT NUMBER:	IM 091-2(72)
FILE NAME:	d99a052_bdr_xs.dgn
PROJECT LEADER:	K. UPMAL
DESIGNED BY:	N. PAPPAS
IPARM FILE NAME:	d99a052_bdr_xs_sb_02
PLOT DATE:	21-JUL-2009
DRAWN BY:	N. PAPPAS
CHECKED BY:	ART BOMBARIER
SHEET	31 OF 45



4596+50



4597+00

0 20 40
SCALE IN FEET

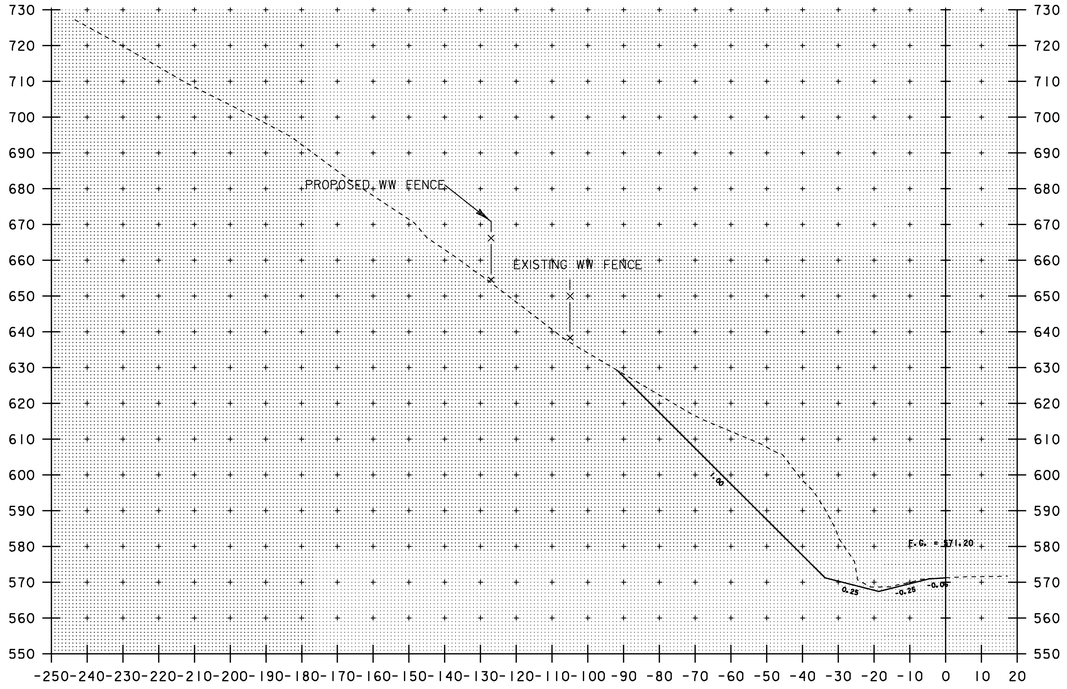
NOTE: ALIGNMENT IS THE CENTER OF THE SHOULDER LINE AND EDGE OF PAVEMENT.

MM 86.63 - MM 86.75

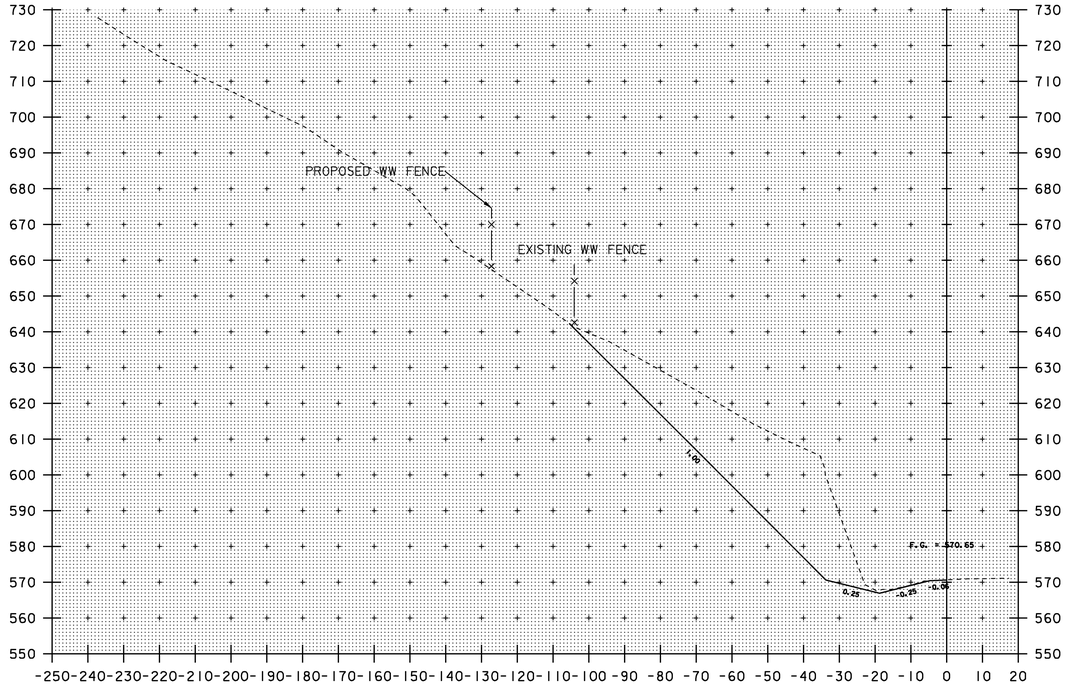
SOUTHBOUND CROSS SECTIONS #3

PROJECT NAME:	HARTFORD - NEWBURY
PROJECT NUMBER:	IM 091-2(72)

FILE NAME:	d99a052_bdr_xs.dgn	PLOT DATE:	21-JUL-2009
PROJECT LEADER:	K. UPMAL	DRAWN BY:	N. PAPPAS
DESIGNED BY:	N. PAPPAS	CHECKED BY:	A. BOMBARDIER
IPARM FILE NAME:	d99a052_bdr_xs_sb_03	SHEET	32 OF 45



4597+50



4598+00

0 20 40
SCALE IN FEET

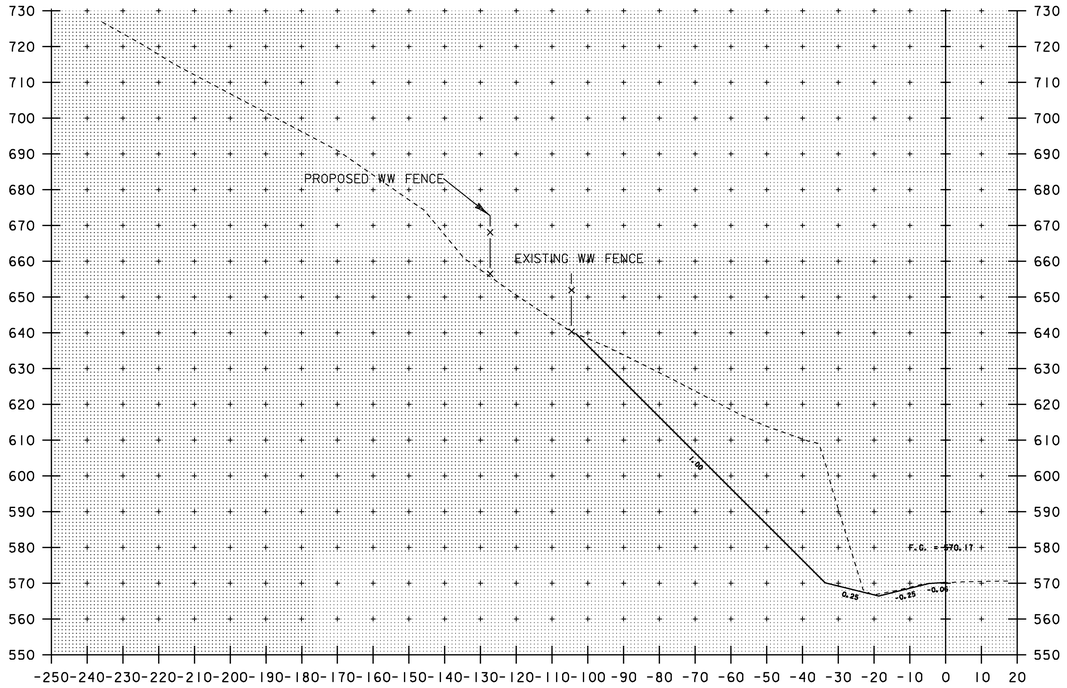
NOTE: ALIGNMENT IS THE CENTER OF THE SHOULDER LINE AND EDGE OF PAVEMENT.

MM 86.63 - MM 86.75

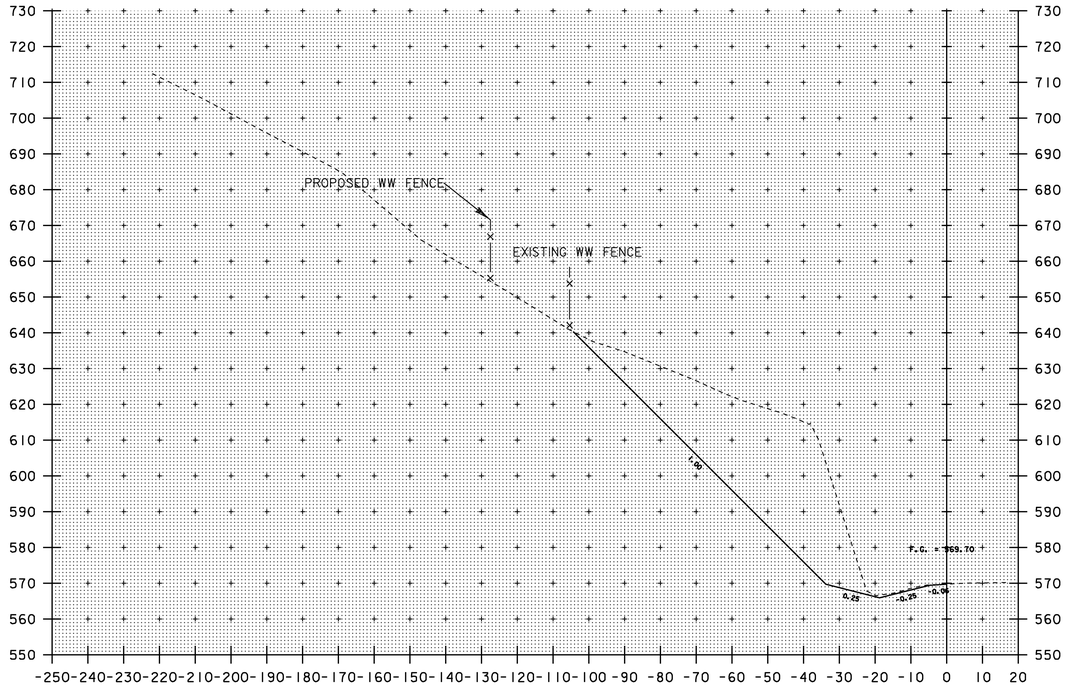
SOUTHBOUND CROSS SECTIONS #4

PROJECT NAME:	HARTFORD - NEWBURY
PROJECT NUMBER:	IM 091-2(72)

FILE NAME:	d99a052_bdr_xs.dgn	PLOT DATE:	21-JUL-2009
PROJECT LEADER:	K. UPMAL	DRAWN BY:	N. PAPPAS
DESIGNED BY:	N. PAPPAS	CHECKED BY:	A. BOMBARDIER
IPARM FILE NAME:	d99a052_bdr_xs_sb_04	SHEET	33 OF 45



4598+50



4599+00

0 20 40
SCALE IN FEET

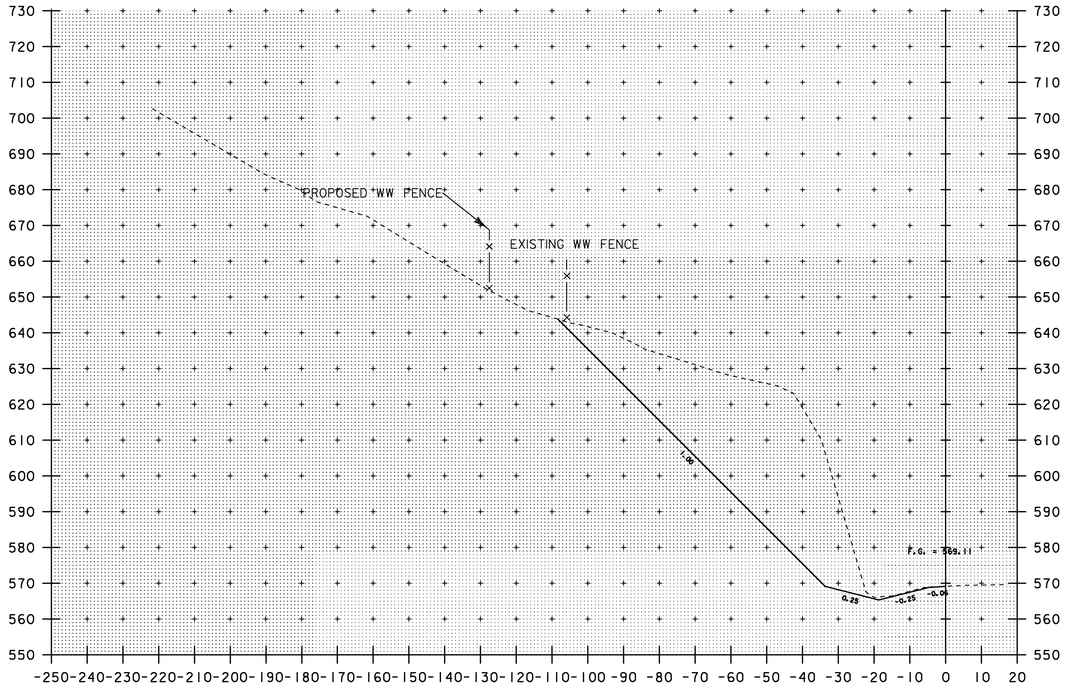
NOTE: ALIGNMENT IS THE CENTER OF THE SHOULDER LINE AND EDGE OF PAVEMENT.

MM 86.63 - MM 86.75

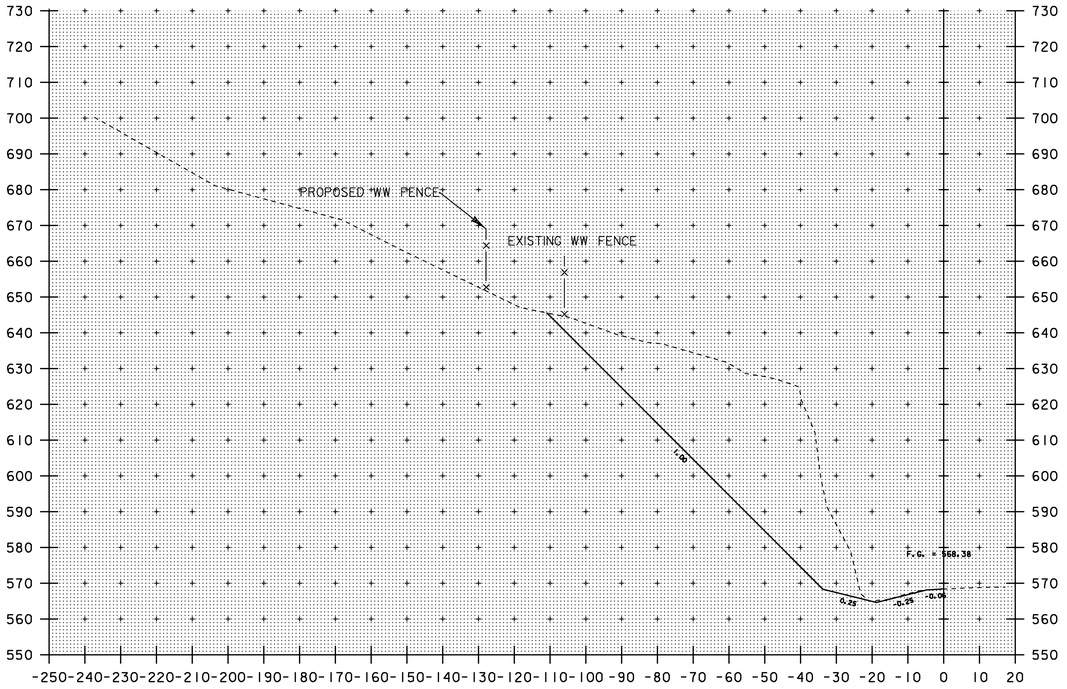
SOUTHBOUND CROSS SECTIONS #5

PROJECT NAME:	HARTFORD - NEWBURY
PROJECT NUMBER:	IM 091-2(72)

FILE NAME:	d99a052_bdr_xs.dgn	PLOT DATE:	21-JUL-2009
PROJECT LEADER:	K. UPMAL	DRAWN BY:	N. PAPPAS
DESIGNED BY:	N. PAPPAS	CHECKED BY:	A. BOMBARDIER
IPARM FILE NAME:	d99a052_bdr_xs_sb_05	SHEET	34 OF 45



4599+50



4600+00

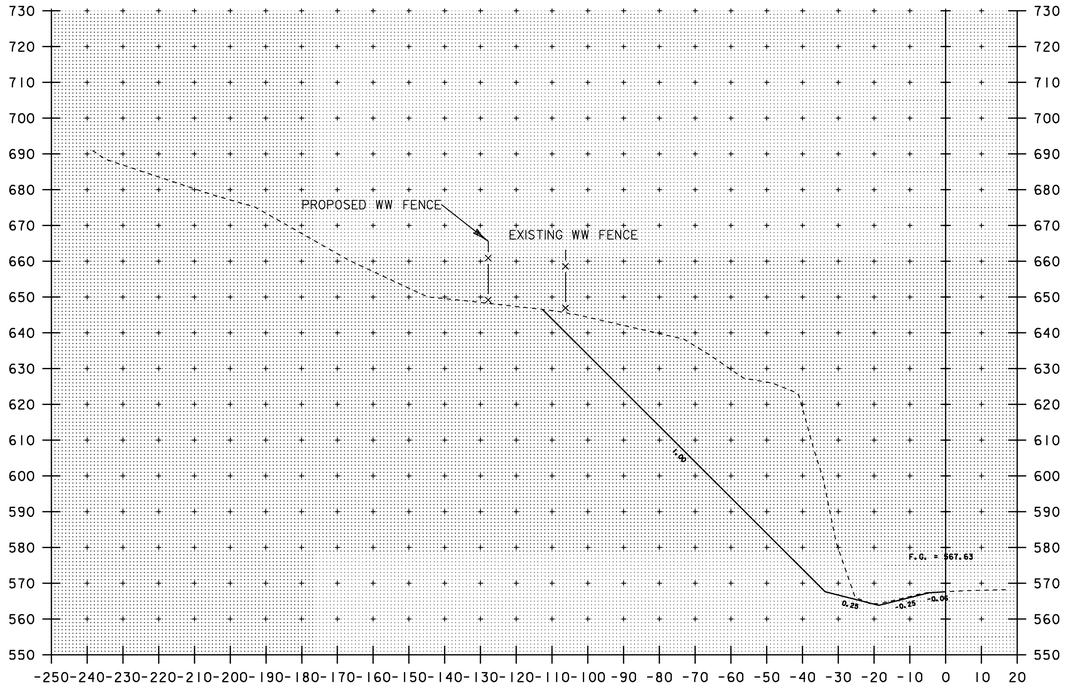
0 20 40
SCALE IN FEET

NOTE: ALIGNMENT IS THE CENTER OF THE SHOULDER LINE AND EDGE OF PAVEMENT.

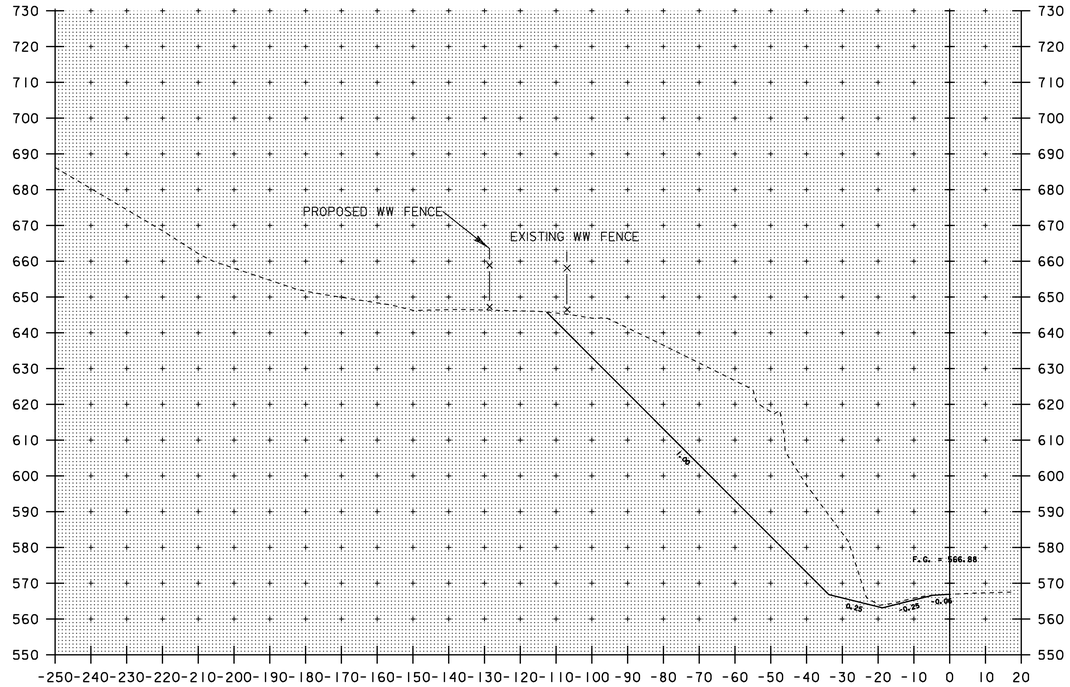
MM 86.63 - MM 86.75

SOUTHBOUND CROSS SECTIONS #6

PROJECT NAME:	HARTFORD - NEWBURY
PROJECT NUMBER:	IM 091-2(72)
FILE NAME:	d99a052_bdr_xs.dgn
PROJECT LEADER:	K. UPMAL
DESIGNED BY:	N. PAPPAS
IPARM FILE NAME:	d99a052_bdr_xs_sb_06
PLOT DATE:	21-JUL-2009
DRAWN BY:	N. PAPPAS
CHECKED BY:	A. BOMBARDIER
SHEET	35 OF 45



4600+50



4601+00

0 20 40
SCALE IN FEET

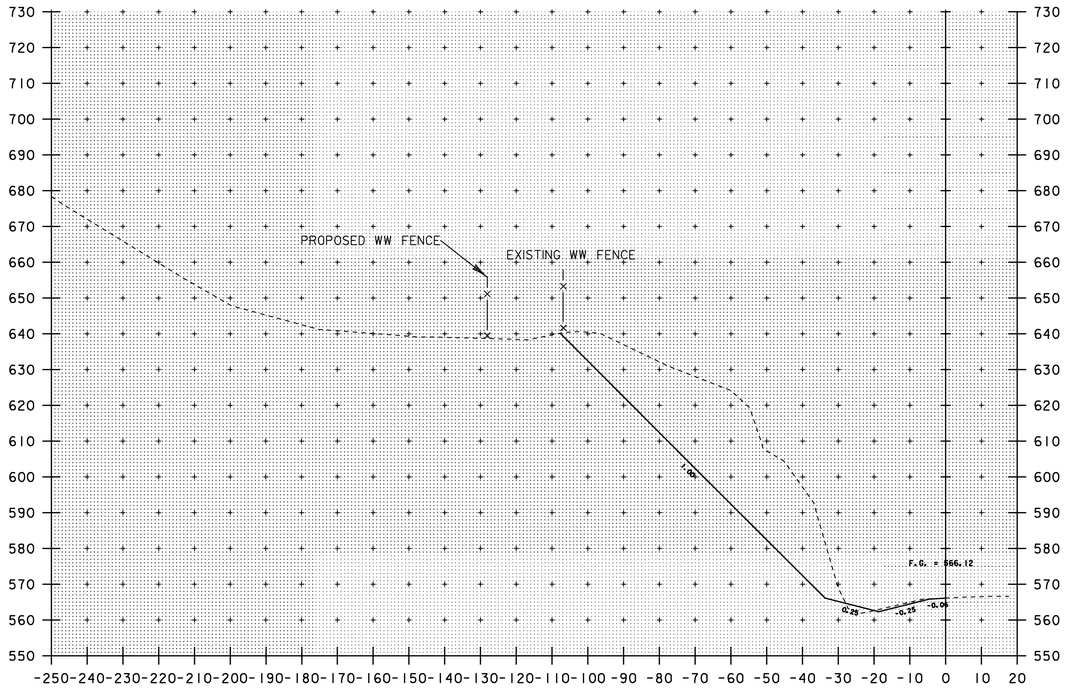
NOTE: ALIGNMENT IS THE CENTER OF THE SHOULDER LINE AND EDGE OF PAVEMENT.

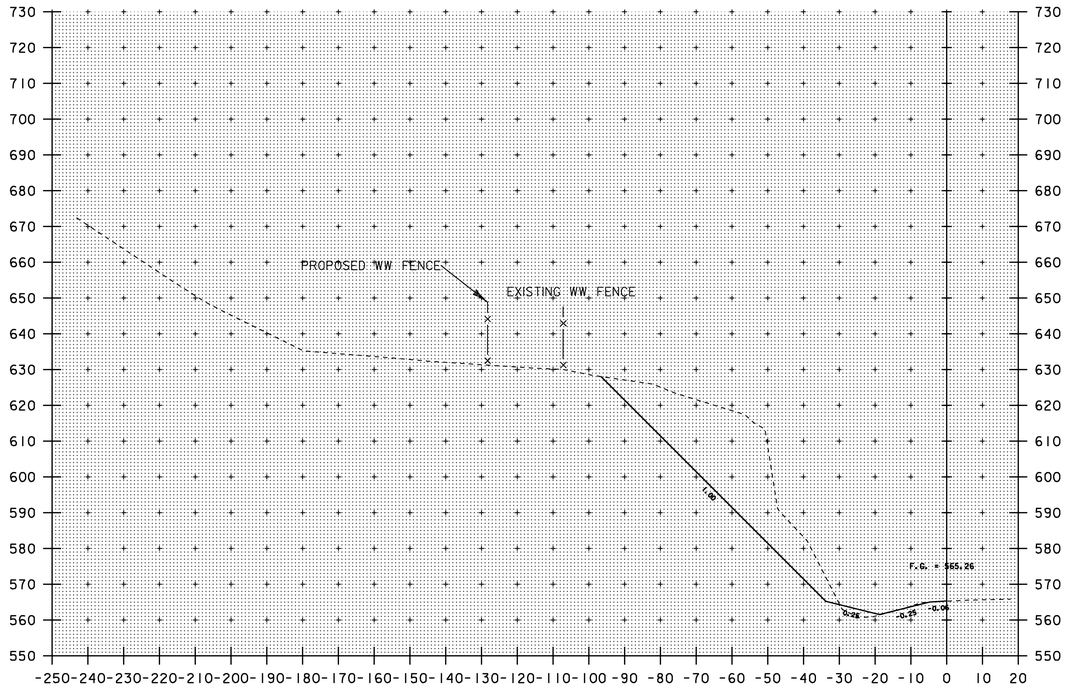
MM 86.63 - MM 86.75

SOUTHBOUND CROSS SECTIONS #7

PROJECT NAME:	HARTFORD - NEWBURY
PROJECT NUMBER:	IM 091-2(72)

FILE NAME:	d99a052_bdr_xs.dgn	PLOT DATE:	21-JUL-2009
PROJECT LEADER:	K. UPMAL	DRAWN BY:	N. PAPPAS
DESIGNED BY:	N. PAPPAS	CHECKED BY:	A. BOMBARDIER
IPARM FILE NAME:	d99a052_bdr_xs_sb_07	SHEET	36 OF 45





0 20 40
SCALE IN FEET

NOTE: ALIGNMENT IS THE CENTER OF THE SHOULDER LINE AND EDGE OF PAVEMENT.

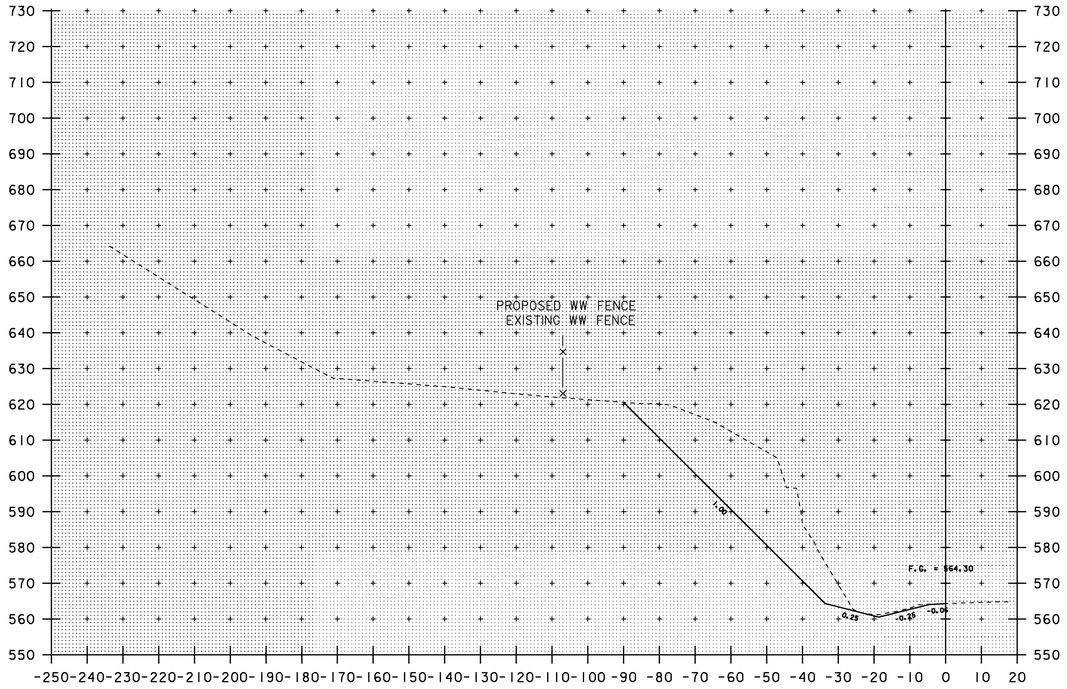
MM 86.63 - MM 86.75

SOUTHBOUND CROSS SECTIONS #8

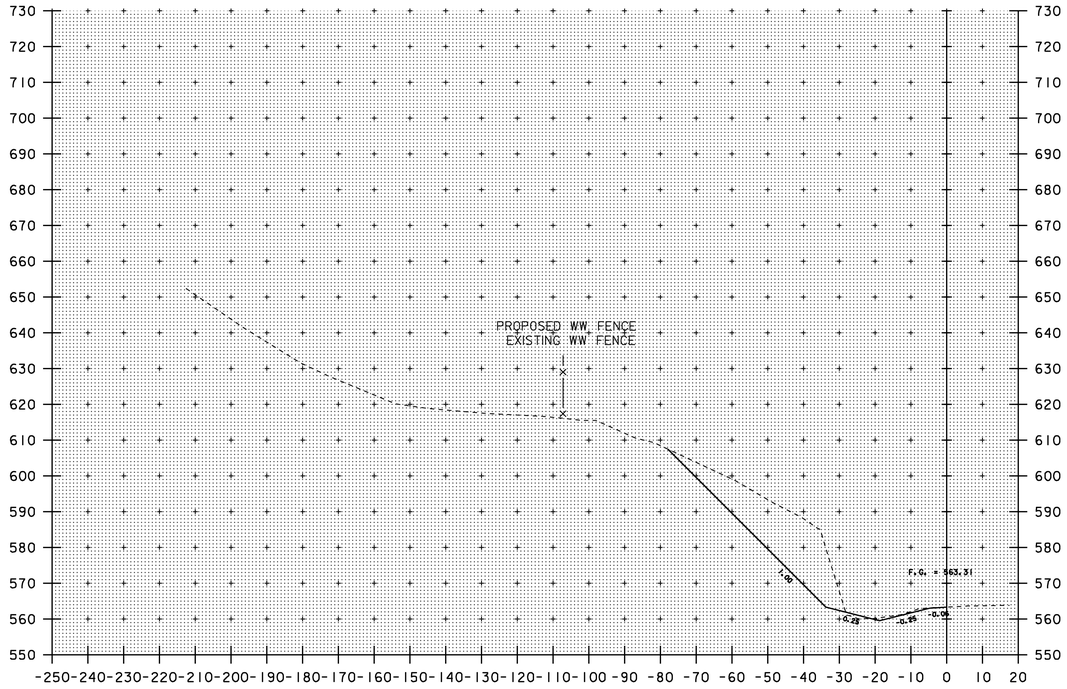
PROJECT NAME: HARTFORD - NEWBURY
PROJECT NUMBER: IM 091-2(72)

FILE NAME: d99a052_bdr_xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: N. PAPPAS
IPARM FILE NAME: d99a052_bdr_xs_sb_08

PLOT DATE: 21-JUL-2009
DRAWN BY: N. PAPPAS
CHECKED BY: A. BOMBARDIER
SHEET 37 OF 45



4602+50



4603+00

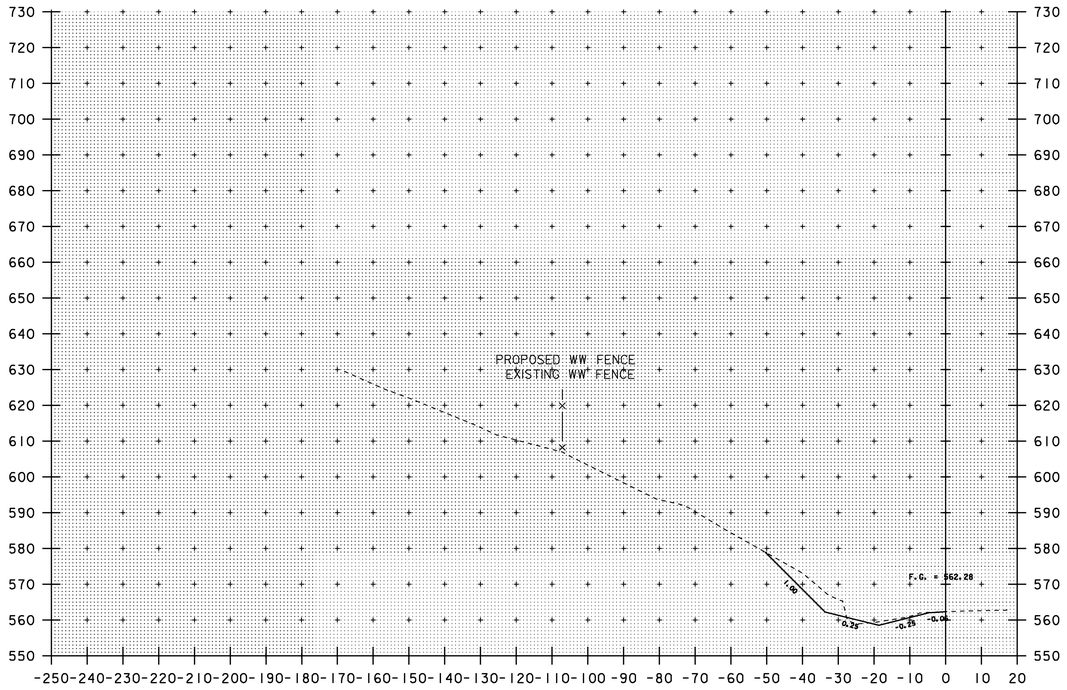
0 20 40
SCALE IN FEET

NOTE: ALIGNMENT IS THE CENTER OF THE SHOULDER LINE AND EDGE OF PAVEMENT.

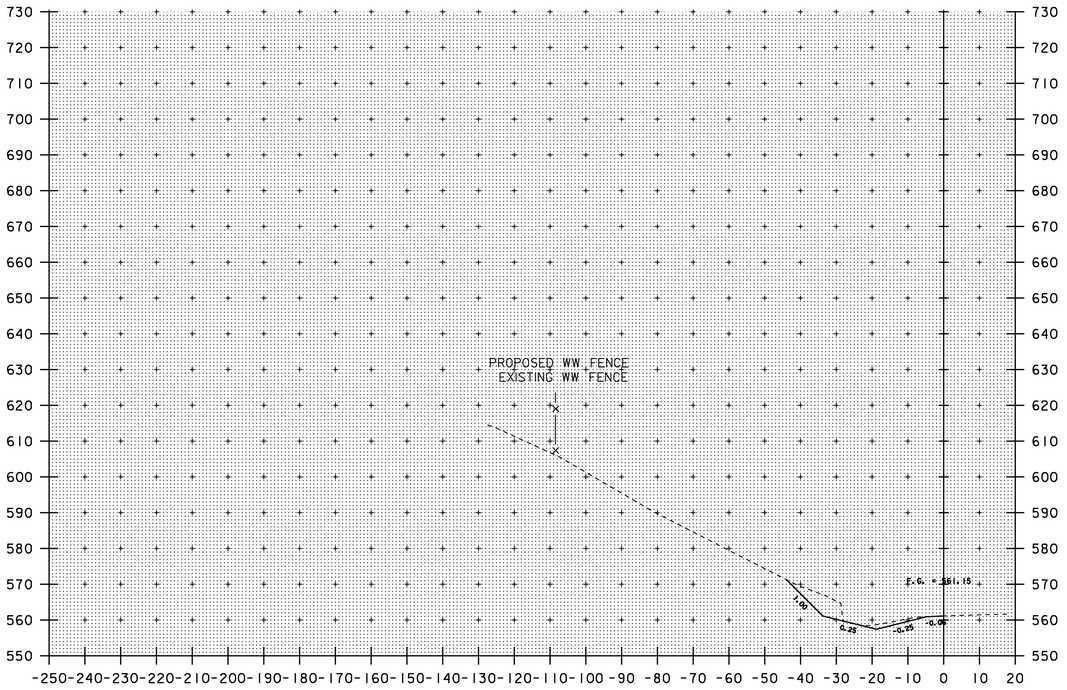
MM 86.63 - MM 86.75

SOUTHBOUND CROSS SECTIONS #9

PROJECT NAME:	HARTFORD - NEWBURY
PROJECT NUMBER:	IM 091-2(72)
FILE NAME:	d99a052_bdr_xs.dgn
PROJECT LEADER:	K. UPMAL
DESIGNED BY:	N. PAPPAS
IPARM FILE NAME:	d99a052_bdr_xs_sb_09
PLOT DATE:	21-JUL-2009
DRAWN BY:	N. PAPPAS
CHECKED BY:	A. BOMBARDIER
SHEET	38 OF 45



4603+50



4604+00

0 20 40
SCALE IN FEET

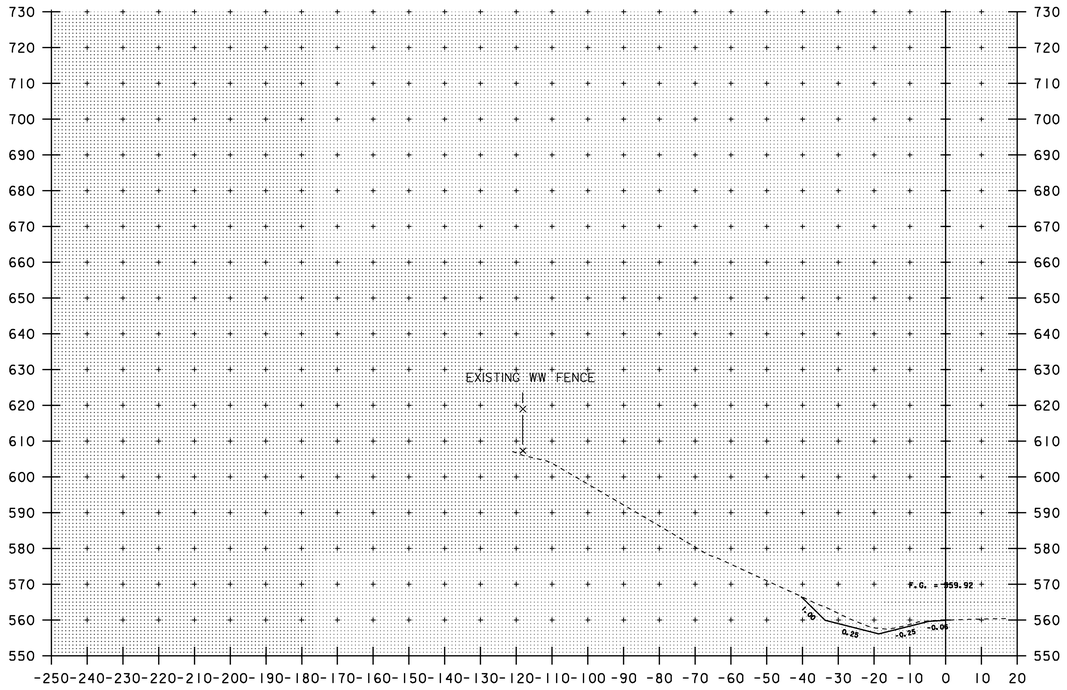
NOTE: ALIGNMENT IS THE CENTER OF THE SHOULDER LINE AND EDGE OF PAVEMENT.

MM 86.63 - MM 86.75

SOUTHBOUND CROSS SECTIONS #10

PROJECT NAME:	HARTFORD - NEWBURY
PROJECT NUMBER:	IM 091-2(72)

FILE NAME:	d99a052_bdr_xs.dgn	PLOT DATE:	21-JUL-2009
PROJECT LEADER:	K. UPMAL	DRAWN BY:	N. PAPPAS
DESIGNED BY:	N. PAPPAS	CHECKED BY:	A. BOMBARDIER
IPARM FILE NAME:	d99a052_bdr_xs_sb_10	SHEET	39 OF 45



4604+50

0 20 40
SCALE IN FEET

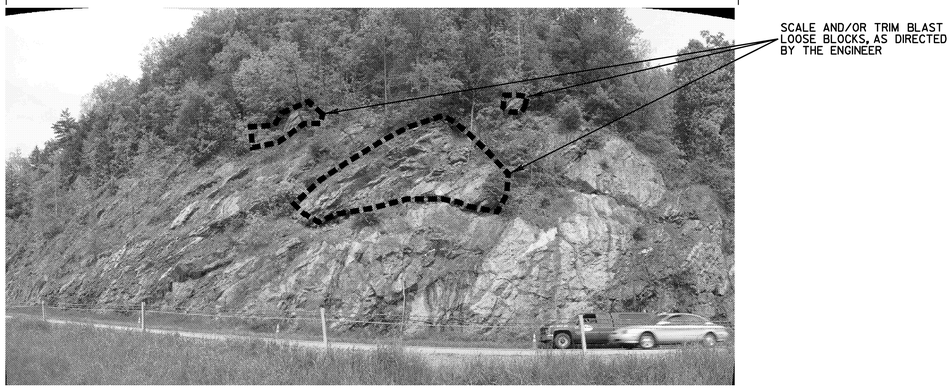
NOTE: ALIGNMENT IS THE CENTER OF THE SHOULDER LINE AND EDGE OF PAVEMENT.

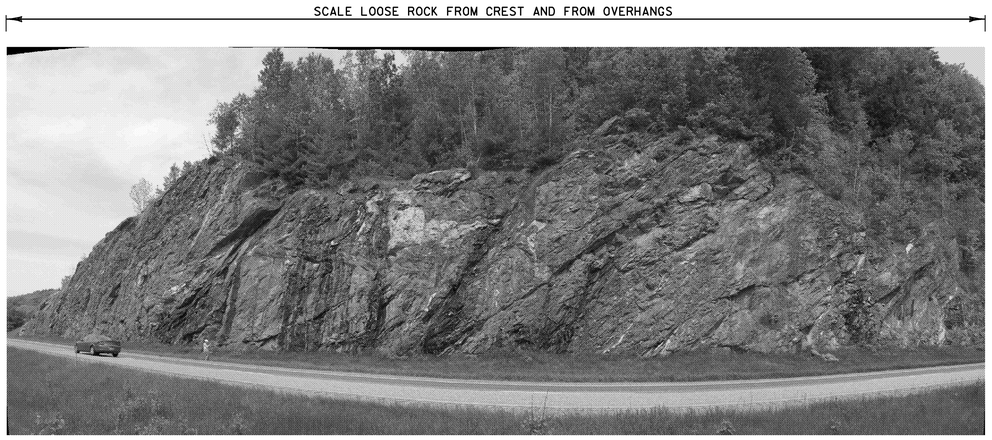
MM 86.63 - MM 86.75

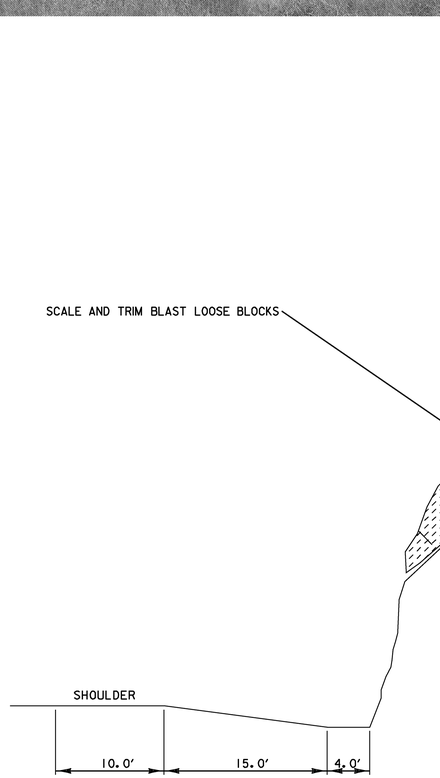
SOUTHBOUND CROSS SECTIONS #II

PROJECT NAME: HARTFORD - NEWBURY
PROJECT NUMBER: IM 091-2(72)

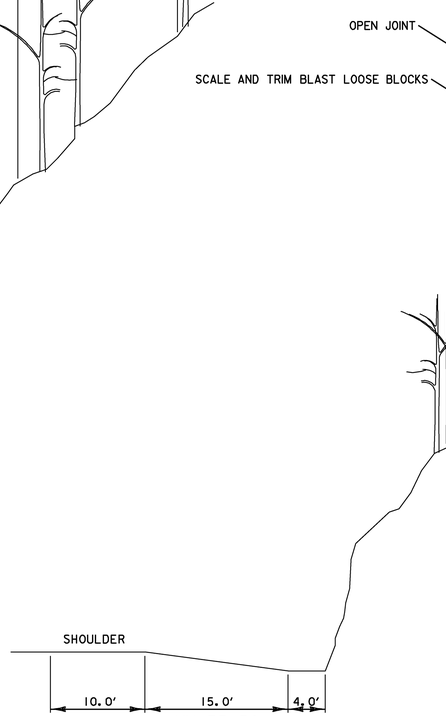
FILE NAME:	d99a052_bdr_xs.dgn	PLOT DATE:	21-JUL-2009
PROJECT LEADER:	K. UPMAL	DRAWN BY:	N. PAPPAS
DESIGNED BY:	N. PAPPAS	CHECKED BY:	A. BOMBARDIER
IPARM FILE NAME:	d99a052_bdr_xs_sb_II	SHEET	40 OF 45



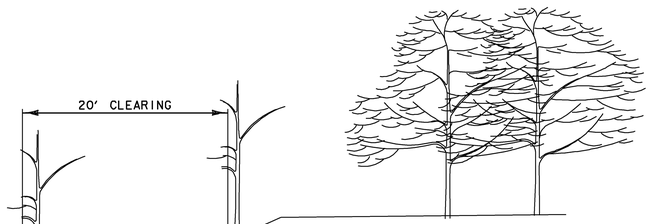




A/18 SCHEMATIC - CROSS SECTION



B/18 SCHEMATIC - CROSS SECTION



LEGEND

ROCK TO BE EXCAVATED

ROCK SLOPE REPAIR NOTE

1. THE WORK CONSISTS OF HIGH SCALING AND/OR TRIM BLASTING LOOSE ROCK FROM THE CREST AND FACE OF THE SLOPE AS DIRECTED BY THE VAOT GEOLOGIST AND THE ENGINEER.

ROCK SLOPE REPAIRS
SOUTHBOUND OUTSIDE
MM 77.28 TO MM 77.52

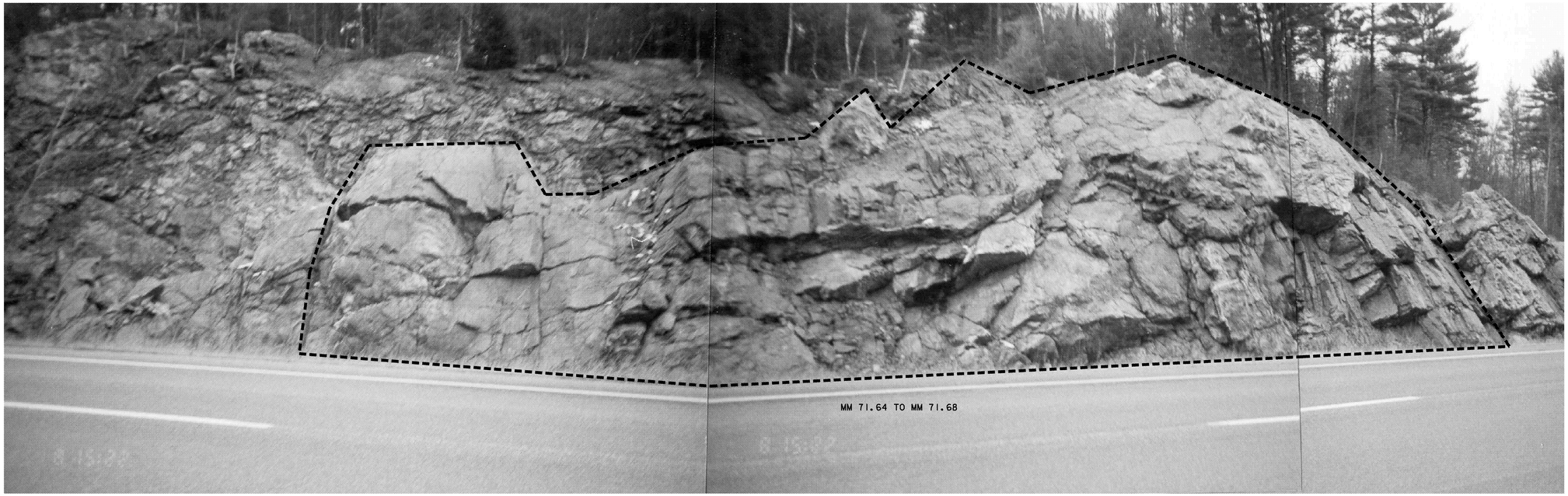
NOT TO SCALE

NOTE: PHOTOS SHALL BE USED AS A VISUAL REFERENCE ONLY. ACTUAL WORK REQUIREMENTS MAY BE MODIFIED BY VAOT GEOLOGIST AND/OR THE ENGINEER.

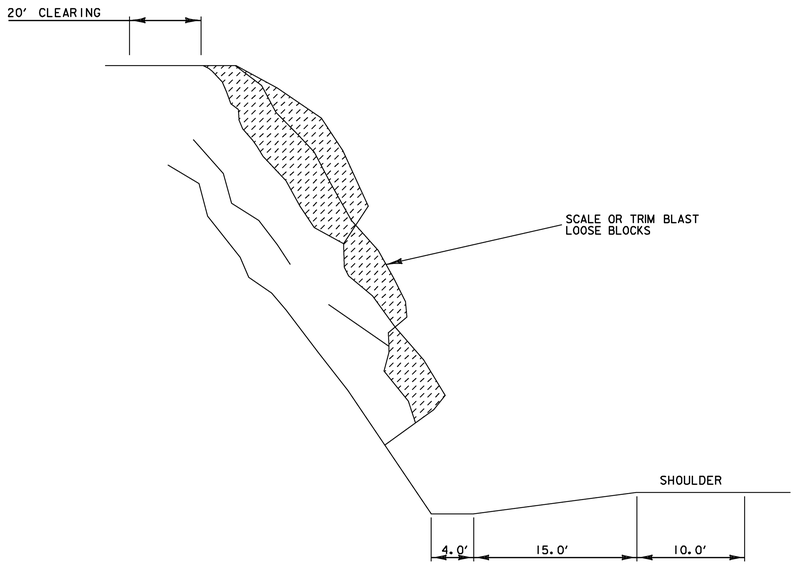
TYPICAL #18

PROJECT NAME:	HARTFORD - NEWBURY		
PROJECT NUMBER:	IM 091- 2(72)		
FILE NAME:	d99a052_typicals.dgn	PLOT DATE:	21-JUL-2009
PROJECT LEADER:	K. UPMAL	DRAWN BY:	N. PAPPAS
DESIGNED BY:	N. PAPPAS	CHECKED BY:	A. BOMBARDIER
IPARM FILE NAME:	d99a052_typ_18	SHEET 41	OF 45

SCALE OR TRIM BLAST LOOSE BLOCKS



MM 71.64 TO MM 71.68



MM 71.68 TO MM 71.64

A/19 SCHEMATIC - CROSS SECTION

NOT TO SCALE

NOTE: PHOTOS SHALL BE USED AS A VISUAL REFERENCE ONLY. ACTUAL WORK REQUIREMENTS MAY BE MODIFIED BY VAOT GEOLOGIST AND/OR THE ENGINEER.

LEGEND

ROCK TO BE EXCAVATED

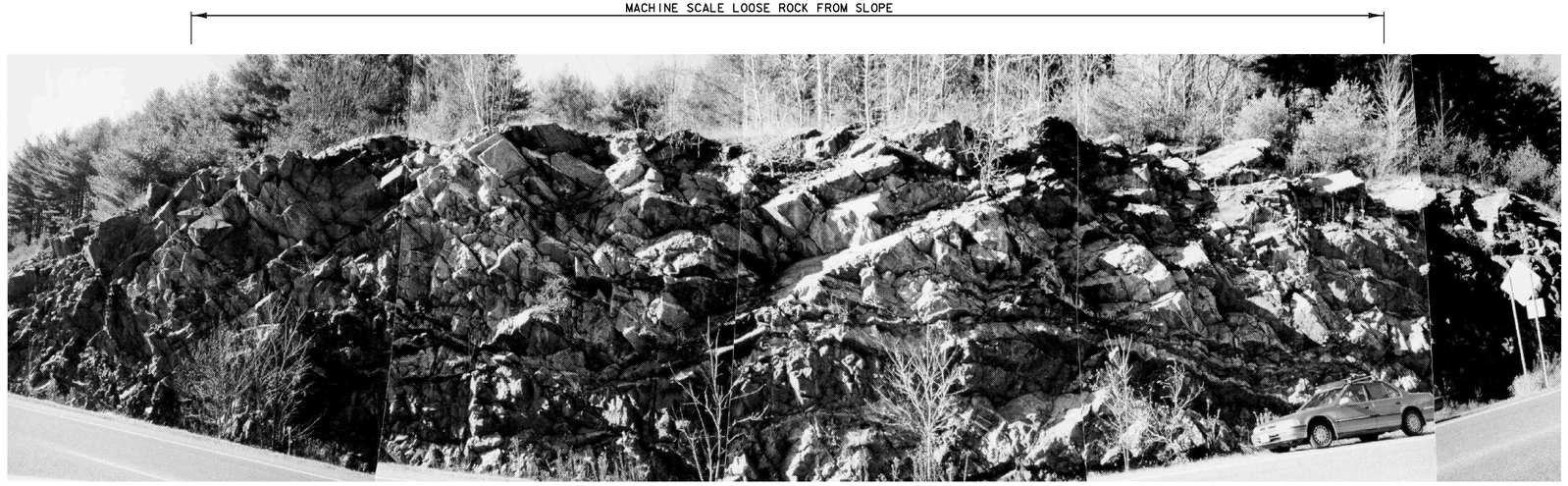
ROCK SLOPE REPAIR NOTE

1. THE WORK CONSISTS OF MACHINE SCALING LOOSE ROCKS FROM THE FACE OF THE CUT SLOPE AS DIRECTED BY THE VAOT GEOLOGIST AND THE ENGINEER.

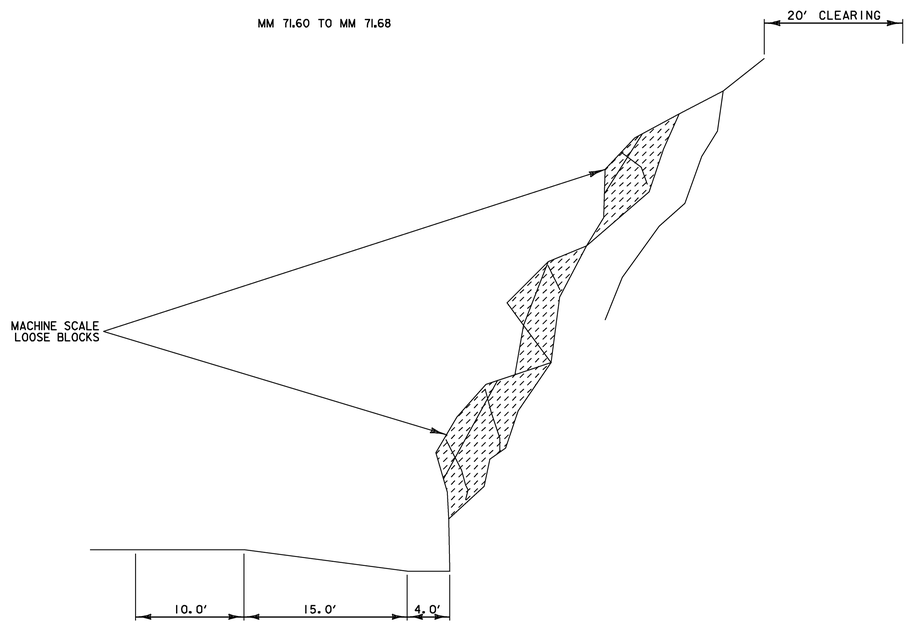
ROCK SLOPE REPAIRS
SOUTHBOUND MEDIAN
MM 71.55 TO MM 71.70

TYPICAL #19

PROJECT NAME:	HARTFORD - NEWBURY		
PROJECT NUMBER:	IM 091- 2(72)		
FILE NAME:	d99a052_typicals.dgn	PLOT DATE:	21-JUL-2009
PROJECT LEADER:	K. UPMAL	DRAWN BY:	N. PAPPAS
DESIGNED BY:	N. PAPPAS	CHECKED BY:	A. BOMBARDIER
IPARM FILE NAME:	d99a052_typ_19	SHEET	42 OF 45



MM 71.60 TO MM 71.68



MM 71.68 TO MM 71.64

A
20
SCHEMATIC - CROSS SECTION

LEGEND

ROCK TO BE EXCAVATED

ROCK SLOPE REPAIR NOTE

1. THE WORK CONSISTS OF MACHINE SCALING LOOSE ROCKS FROM THE FACE OF THE CUT SLOPE AS DIRECTED BY THE VAOT GEOLOGIST AND THE ENGINEER.

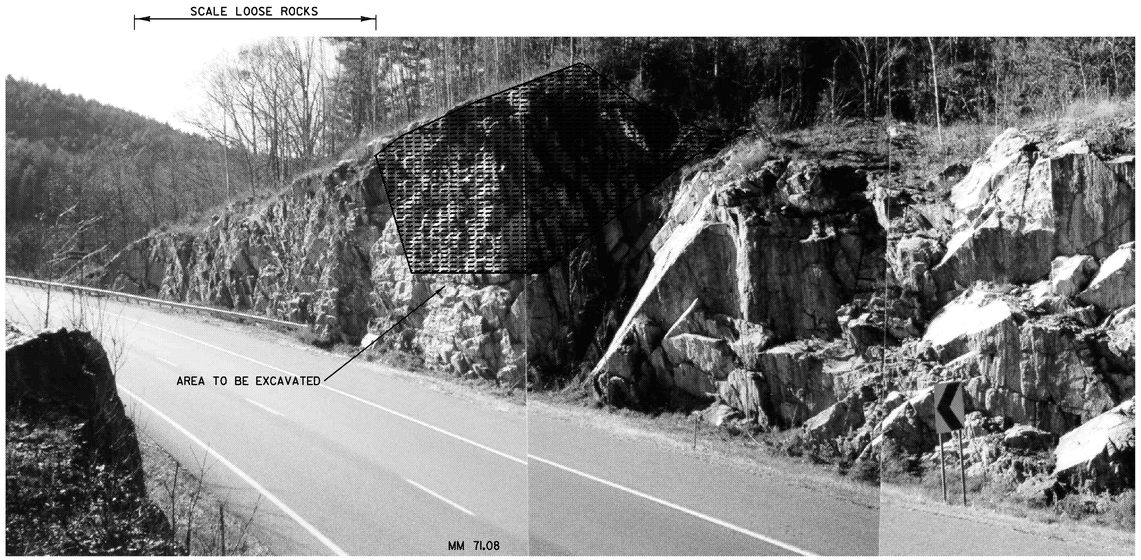
NOT TO SCALE

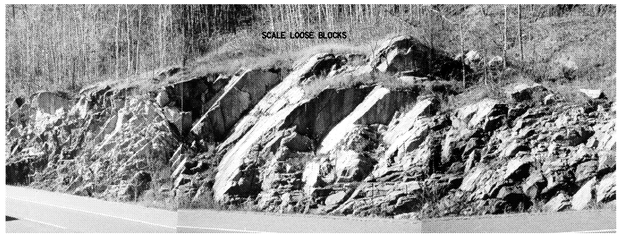
NOTE: PHOTOS SHALL BE USED AS A VISUAL REFERENCE ONLY. ACTUAL WORK REQUIREMENTS MAY BE MODIFIED BY VAOT GEOLOGIST AND/OR THE ENGINEER.

ROCK SLOPE REPAIRS
SOUTHBOUND OUTSIDE
MM 71.60 TO MM 71.68

TYPICAL #20

PROJECT NAME:	HARTFORD - NEWBURY		
PROJECT NUMBER:	IM 091- 2(72)		
FILE NAME:	d99a052_typicals.dgn	PLOT DATE:	21-JUL-2009
PROJECT LEADER:	K. UPMAL	DRAWN BY:	N. PAPPAS
DESIGNED BY:	N. PAPPAS	CHECKED BY:	A. BOMBARDIER
IPARM FILE NAME:	d99a052_typ_20	SHEET	43 OF 45

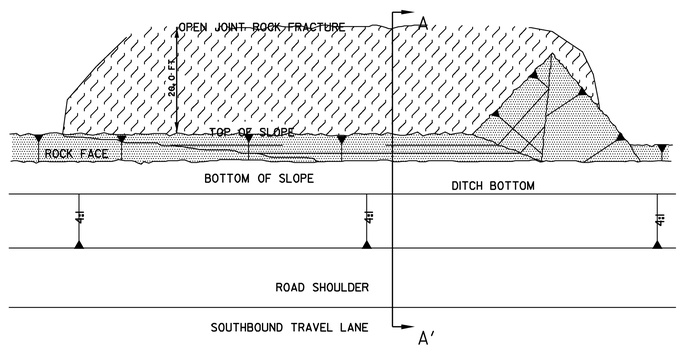




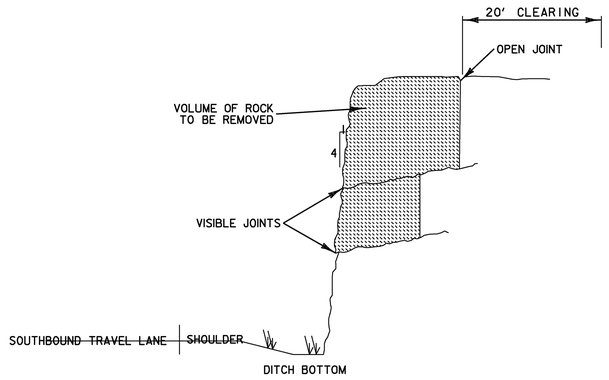
APPROXIMATE MM 71.17 SCALE LOOSE BLOCKS ON CREST



APPROXIMATE MM 71.18 SCALE LOOSE BLOCKS ON CREST



I/21 SCHEMATIC - PLAN VIEW



A/21 SCHEMATIC - CROSS SECTION A-A'

LEGEND

- ROCK FACE
- ROCK TO BE EXCAVATED
- AREA OF ROCK TO BE EXCAVATED

ROCK SLOPE REPAIR NOTE

1. THE WORK CONSISTS OF HIGH SCALING AND MACHINE SCALING ALONG THE ENTIRE SLOPE AS DIRECTED BY THE VAOT GEOLOGIST AND THE ENGINEER.

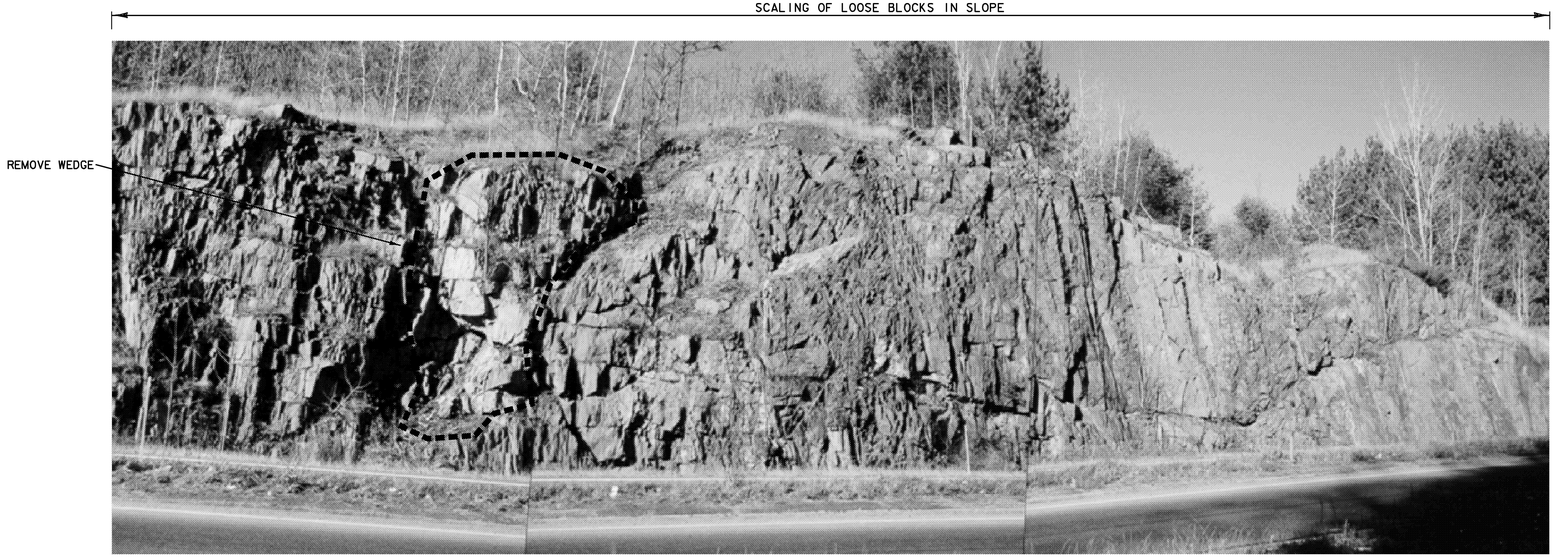
NOT TO SCALE

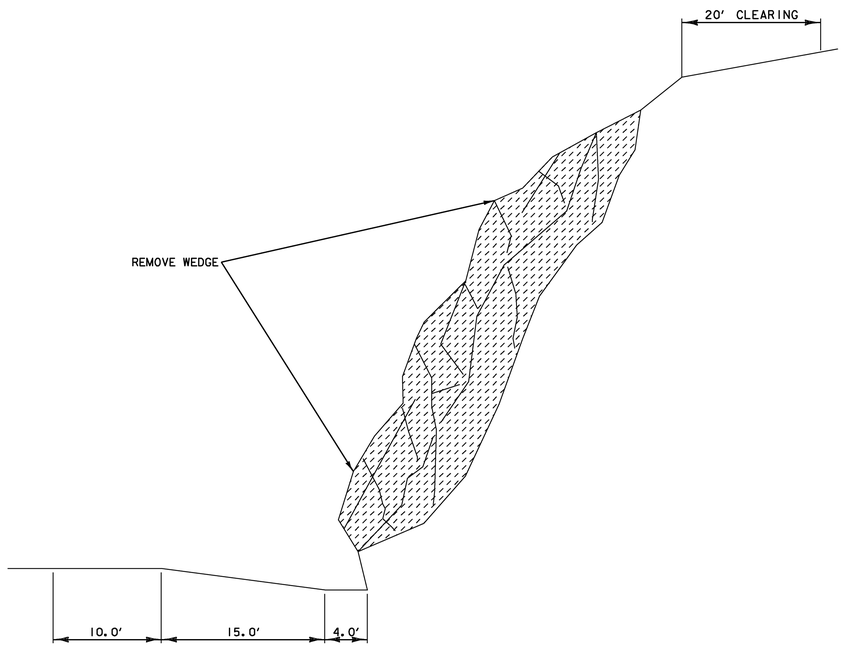
NOTE: PHOTOS SHALL BE USED AS A VISUAL REFERENCE ONLY. ACTUAL WORK REQUIREMENTS MAY BE MODIFIED BY VAOT GEOLOGIST AND/OR THE ENGINEER.

ROCK SLOPE REPAIRS
SOUTHBOUND OUTSIDE
MM 71.25 TO BRIDGE

TYPICAL #21

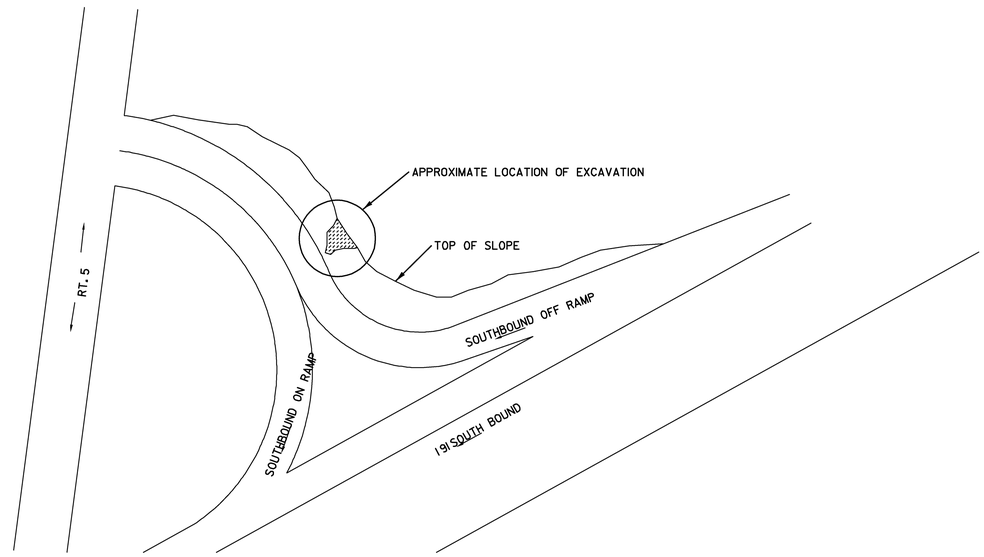
PROJECT NAME:	HARTFORD - NEWBURY		
PROJECT NUMBER:	IM 091- 2(72)		
FILE NAME:	d99a052_typicals.dgn	PLOT DATE:	21-JUL-2009
PROJECT LEADER:	K. UPMAL	DRAWN BY:	N. PAPPAS
DESIGNED BY:	N. PAPPAS	CHECKED BY:	A. BOMBARDIER
IPARM FILE NAME:	d99a052_typ_21	SHEET	44 OF 45





EXIT 11 OFF RAMP

A/22 SCHEMATIC - CROSS SECTION



B/22 SCHEMATIC - EXIT 11 PLAN

LEGEND

ROCK TO BE EXCAVATED

ROCK SLOPE REPAIR NOTE

1. THE WORK CONSISTS OF MACHINE SCALING A LOOSE WEDGE OF ROCK FROM THE FACE OF THE ROCK SLOPE AS DIRECTED BY THE VAOT GEOLOGIST AND THE ENGINEER.

ROCK SLOPE REPAIRS
SOUTHBOUND OUTSIDE
EXIT 11 OFF RAMP

NOT TO SCALE

NOTE: PHOTOS SHALL BE USED AS A VISUAL REFERENCE ONLY. ACTUAL WORK REQUIREMENTS MAY BE MODIFIED BY VAOT GEOLOGIST AND/OR THE ENGINEER.

TYPICAL #22

PROJECT NAME:	HARTFORD - NEWBURY		
PROJECT NUMBER:	IM 091- 2(72)		
FILE NAME:	d99a052_typicals.dgn	PLOT DATE:	21-JUL-2009
PROJECT LEADER:	K. UPMAL	DRAWN BY:	N. PAPPAS
DESIGNED BY:	N. PAPPAS	CHECKED BY:	A. BOMBARDIER
IPARM FILE NAME:	d99a052_typ_22	SHEET	45 OF 45