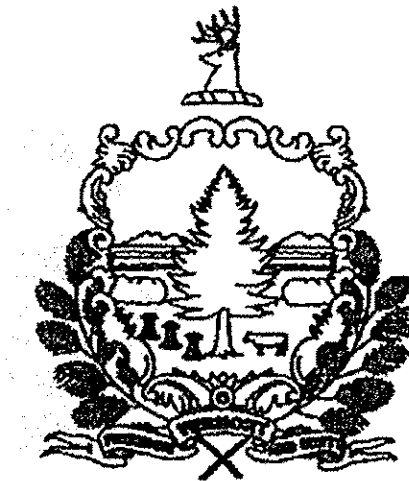


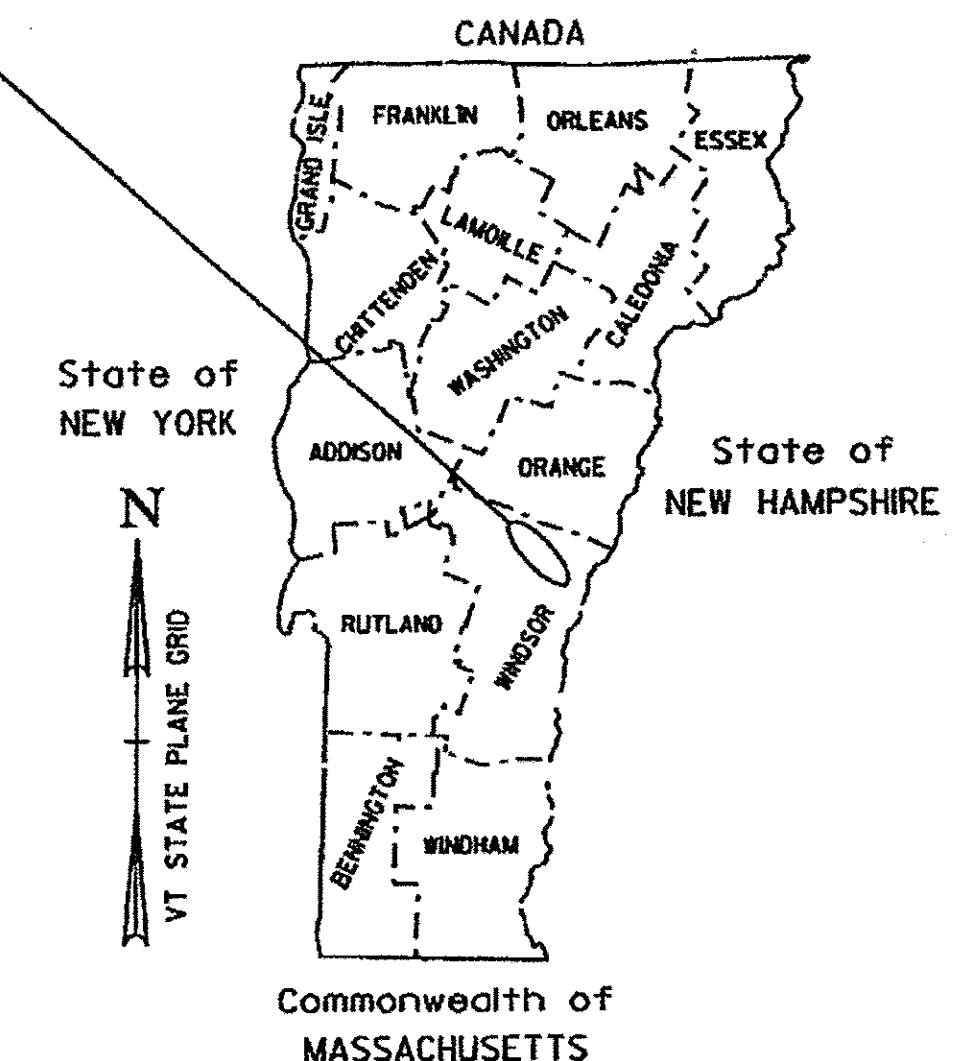
INDEX OF SHEETS
SEE SHEET 2

STATE OF VERMONT AGENCY OF TRANSPORTATION



PROPOSED IMPROVEMENT TOWNS OF HARTFORD, SHARON AND ROYALTON COUNTY OF WINDSOR

PROJECT LOCATION
HARTFORD-SHARON AC IM 089-I(57)
SHARON-ROYALTON AC IM 089-I(58)



RECORD PLANS

CONTRACTOR: PIKE INDUSTRIES, INC. - BERLIN, VT

RESIDENT ENGINEER: PAUL PERRY

CONSTRUCTION BEGAN: APRIL 27, 2011

CONSTRUCTION COMPLETE: NOVEMBER 3, 2011

RECORD PLANS BY: PAUL PERRY & J. HYDE

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

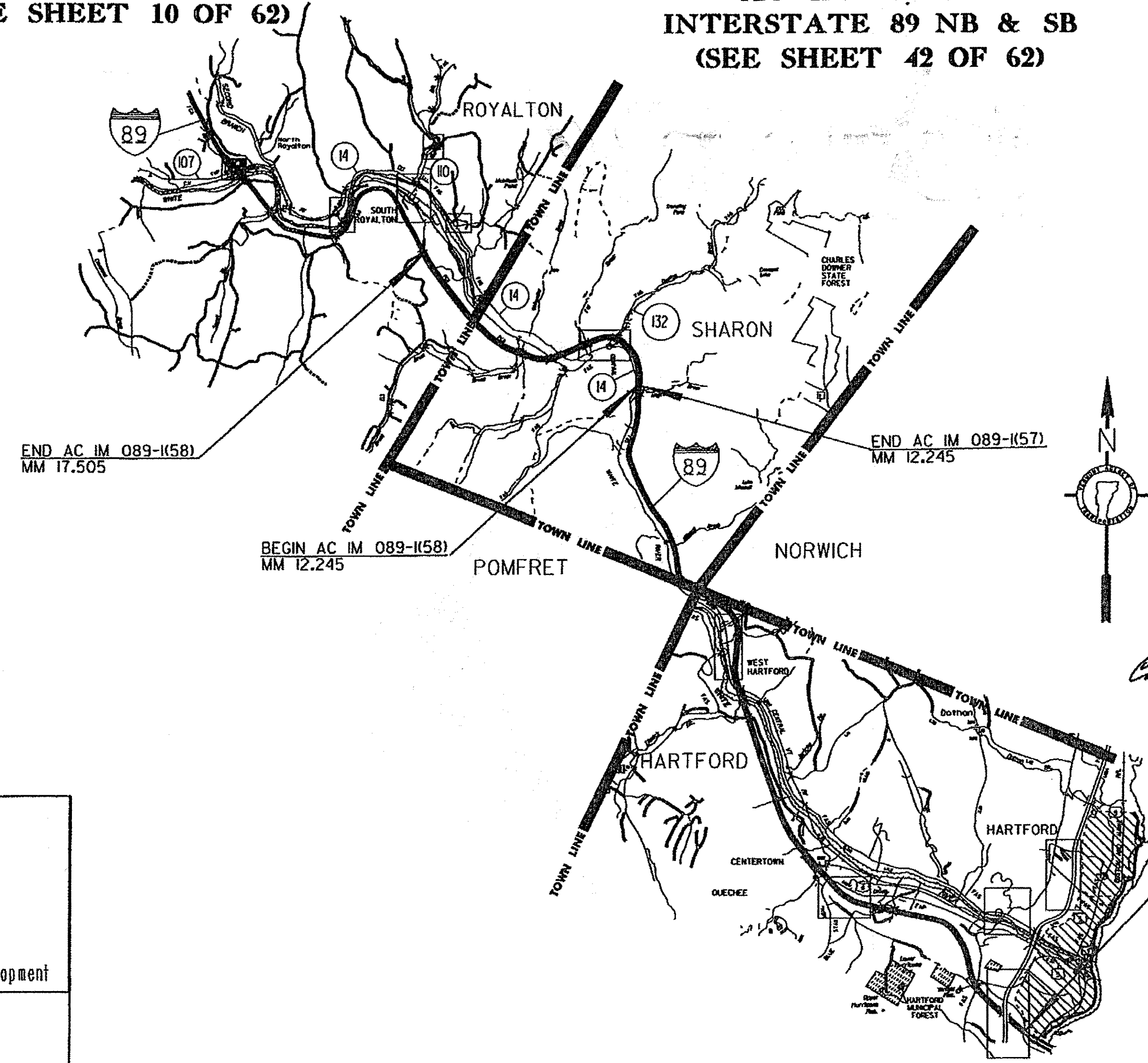
BY Paul K. Perry RESIDENT ENGINEER

DATE 12/17/12

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.

**HARTFORD-SHARON
AC IM 089-I(57)
INTERSTATE 89 SB
(SEE SHEET 10 OF 62)**

**SHARON-ROYALTON
AC IM 089-I(58)
INTERSTATE 89 NB & SB
(SEE SHEET 42 OF 62)**



TRAFFIC DATA

HIGHWAY SECTION	AADT		DHV		CUM. ESALS	CUM. ESALS
	2011	2021	2011	2021	(2011-2021)	(2011-2031)
BEGIN OF PROJECT TO I-91 EXIT 10 (MM 0.05 HARTFORD - MM 0.56 HARTFORD)	19600	21800	2500	2800	6,944,000	19,034,000
I-91 EXIT 10 TO I-89 EXIT 1 (MM 0.56 HARTFORD - MM 3.75 HARTFORD)	12300	13700	1600	1800	4,361,000	11,965,000
I-89 EXIT 1 TO END OF PROJECT (MM 3.75 HARTFORD - MM 12.25 SHARON)	9200	10200	1200	1300	5,027,000	13,338,000
NORTHBOUND BEGIN OF PROJECT TO I-89 EXIT 2 (MM 12.245 SHARON - MM 13.420 SHARON)	9,200	10,600	1,200	1,400	5,257,000	14,186,000
SOUTHBOUND BEGIN OF PROJECT TO I-89 EXIT 2 (MM 12.245 SHARON - MM 13.420 SHARON)	9,200	10,600	1,200	1,400	5,148,000	13,946,000
NORTHBOUND I-89 EXIT 2 TO END OF PROJECT (MM 13.420 SHARON - MM 17.500 ROYALTON)	7,600	8,800	1,100	1,200	5,470,000	14,858,000
SOUTHBOUND I-89 EXIT 2 TO END OF PROJECT (MM 13.420 SHARON - MM 17.505 ROYALTON)	7,600	8,800	1,100	1,300	5,696,000	15,380,000

HARTFORD-SHARON

BITUMINOUS CONCRETE PAVEMENT
SUPERPAVE MIXTURE DESIGN CRITERIA

DESIGN LANE / DESIGN LIFE ESAL	19,034,000
DESIGN NUMBER OF GYRATIONS	80
PERFORMANCE GRADE ASPHALT BINDER	SEE SECTION 490 GENERAL SPECIAL PROVISIONS

SHARON-ROYALTON

BITUMINOUS CONCRETE SUPERPAVE MIXTURE DESIGN CRITERIA

DESIGN LANE/DESIGN LIFE ESAL	15,380,000
DESIGN NUMBER OF GYRATIONS	80
PERFORMANCE GRADED ASPHALT BINDER	SEE SECTION 490 GENERAL SPECIAL PROVISIONS

QUALITY ASSURANCE PROGRAM: LEVEL 1

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	

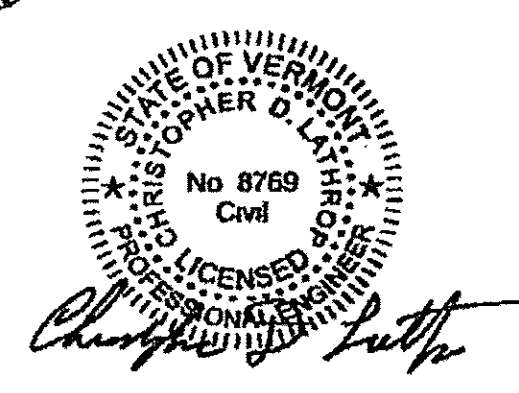
DuBois & King INC.

engineering planning management development

DATUM

VERTICAL N/A

HORIZONTAL N/A



BEGIN AC IM 089-I(57)
MM 0.050

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.

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATOR

APPROVED: Mark Richters DATE 9-2-10

DIRECTOR OF PROGRAM DEVELOPMENT

APPROVED: Paula Patten DATE 8-11-10

PROJECT MANAGER: MIKE FOWLER P.E.

PROJECT NAME: HARTFORD-SHARON/SHARON-ROYALTON

PROJECT NUMBER: AC IM 089-I (57) / AC IM 089-I (58)

SHEET 1 OF 62 SHEETS

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- 6 COMPOSITE BRIDGE DETAIL SHEET
- 7 COMPOSITE MILLED RUMBLE STRIP DETAILS
- 8 COMPOSITE DELINEATOR DETAIL SHEET
- 9 COMPOSITE CONSTRUCTION APPROACH SIGNING SHEET NOTES

HARTFORD-SHARON IM 089-1 (57)

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- 12 BRIDGE LOCATION AND DETAIL SHEET
- 13 CULVERT LOCATION TABLES SHEET
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- 17-19 ITEM DETAIL SUMMARY SHEETS
- 20 DITCH CLEANING DETAIL SHEET
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- 22 SHARON WEIGH STATION RAMP DETAIL SHEET
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SHARON-ROYALTON IM 089-1 (58)

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- 52 DITCH CLEANING DETAIL SHEET
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- 54 SOUTHBOUND PAVING PROJECT LAYOUT SHEET
- 55-56 INTERCHANGE 2 RAMP DETAIL SHEETS
- 57-59 TRAFFIC SIGN SUMMARY SHEETS
- 60 U-TURN DETAIL SHEET
- 61 DETAIL SHEET
- 62 CONSTRUCTION APPROACH SIGNING SHEET

SEEDING FORMULA

RATE: DOUBLE IF HYDROSEEDING

% WT.	LBS./A.	NAME	PUR %	GERM %
38	32	CREEPING RED FESCUE	98	90
29	24	SPARTAN HARD FESCUE	95	85
15	12	AZAY SHEEP'S FESCUE	95	87
15	12	ANNUAL RYE GRASS	95	90
3	--	INERTS	--	--
100.0	80 LB/A			

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.

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

NOTES:

1. ESTIMATED QUANTITIES OF ITEM 203.I5 COMMON EXCAVATION, ITEM 201.3I, THINNING AND TRIMMING FOR SIGNS, ITEM 204.22 TRENCH EXCAVATION OF EARTH EXPLORATORY (N.A.B.I.), ITEM 402.I2 AGGREGATE SHOULDERS, ITEM 402.I3 AGGREGATE SHOULDERS, RAP, ITEM 900.620 SPECIAL PROVISION (STEEL BEAM GUARDRAIL DELINEATOR) AND ITEM 900.620 SPECIAL PROVISION (STEEL BEAM GUARDRAIL OFFSET BLOCK), HAVE BEEN INCLUDED FOR USE AS DIRECTED BY THE ENGINEER.
2. COLD PLANING TO BE COMPLETED ACCORDING TO THE TYPICAL OR AS NOTED OTHERWISE ON THE PLANS. A FULL DEPTH BUTT JOINT SHALL BE CONSTRUCTED AT THE PROJECT BEGINNING/END AND AT ALL RAMP APPROACHES AS DENOTED ON THE PROJECT PLANS OR AS OTHERWISE DIRECTED BY THE RESIDENT ENGINEER. ALL BUTT JOINTS SHALL BE SAW CUT INCIDENTAL TO ITEM 210.I0, COLD PLANING, BITUMINOUS PAVEMENT.
3. THE CONTRACTOR SHALL USE CAUTION WHEN COLD PLANING AND PAVING OPERATIONS OCCUR ADJACENT TO EXISTING DROP INLETS OR CATCH BASINS. ANY DAMAGE WHICH OCCURS TO THESE DRAINAGE STRUCTURES AS A RESULT OF THESE OPERATIONS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE REPAIRED BY THE CONTRACTOR AT NO COST TO THE STATE OF VERMONT.
4. EMULSIFIED ASPHALT SHALL BE APPLIED ON ALL EXISTING PAVEMENT SURFACES, ON ALL COLD PLANED SURFACES AND BETWEEN ALL COURSES OF PAVEMENT AT A RATE OF 0.025 GAL / SY OR AS DIRECTED BY THE RESIDENT ENGINEER. PAYMENT WILL BE UNDER ITEM 406.65, "EMULSIFIED ASPHALT".

VAOT STANDARDS

B-17	DETAIL OF REST AREA DETAIL OF U-TURN TURNOUTS	02-23-95
D-3	TREATED GUTTERS	06-01-94
D-6	REINFORCED CONCRETE DROP INLET W/ GRATE FOR USE IN DITCHES	06-01-94
D-10	REINFORCED CONCRETE DROP INLET TOP WITH BITUMINOUS CONCRETE CURB TOP FOR A DROP INLET	06-01-94
D-15	GRANITE SLOPE EDGING PRECAST REINFORCED CONCRETE CATCH BASIN W/ CAST IRON GRATE, PRECAST REINFORCED CONCRETE MANHOLE W/ CAST IRON COVER, CAST IRON GRATE W/ FRAME, TYPE D CAST IRON GRATE W/ FRAME, TYPE E	06-01-94
E-100	CONSTRUCTION APPROACH SIGNS	01-02-04
E-100A	SIDE ROAD CONSTRUCTION - APPROACH SIGNS	01-02-04
E-101	CONSTRUCTION SIGN DETAILS	05-30-03
E-102	CONSTRUCTION SIGN DETAILS	06-30-03
E-102A	CONSTRUCTION SIGN DETAILS	05-01-04
E-103	MAINLINE TRAFFIC CONTROL DIVIDED HIGHWAY - ONE LANE CLOSED	03-01-04
E-105	TRAFFIC CONTROL FOR CONSTRUCTION VEHICLES U-TURNS ON DIVIDED HIGHWAYS	05-01-04
E-106	TRAFFIC CONTROL - MISCELLANEOUS DETAILS	03-01-04
E-107	DELINEATION, BARRICADES AND DETOURS FOR CONSTRUCTION AREAS	06-30-03
E-107A	BREAKAWAY BARRICADE DETAILS	06-08-09
E-108	CONSTRUCTION ZONE LONGITUDINAL DROP OFFS	06-08-09
E-108A	CONSTRUCTION ZONE LONGITUDINAL FOR PAVING	06-08-09
E-110	MAJOR MAINTENANCE OPERATION LANE CLOSURE	03-11-97
E-111	MINOR MAINTENANCE OPERATION	08-08-95
E-120	STANDARD SIGN PLACEMENT - EXPRESSWAY & FREEWAY	02-01-00
E-126	TYPICAL FREEWAY INTERCHANGE SIGNING	08-08-95
E-136B	STATE ROUTE MARKER SIGN DETAILS	05-01-04
E-139	MILEMARKER DETAILS, INTERSTATE	09-20-95
E-142	REGULATORY SIGN DETAILS	06-15-04
E-143	REGULATORY SIGN DETAILS	05-01-04
E-150	WARNING SIGN DETAILS	05-01-04
E-151	WARNING SIGN DETAILS	06-08-09
E-164	SQUARE STEEL SIGN POST	02-01-99
E-191	PAVEMENT MARKING DETAILS	10-12-00
E-192	PAVEMENT MARKING DETAILS	08-18-95
E-193	PAVEMENT MARKING DETAILS	04-01-05
E-197	DELINEATOR PLACEMENT DETAIL	04-01-05
E-198	FREEWAY-EXPRESSWAY DELINEATORS AND MILEPOSTS	04-01-05
E-199	FREEWAY-EXPRESSWAY DELINEATORS AND MILEPOSTS MOUNTING ON BRIDGE RAIL	04-01-05
G-1	STEEL BEAM GUARD RAIL W/STEEL POSTS	01-03-00
G-1D	STEEL BEAM GUARD RAIL APPROACH END TERMINAL	01-03-00
G-19	GENERIC PLANS FOR GUARDRAIL END TERMINALS	11-15-02

5. SUPERPAVE BITUMINOUS CONCRETE PAVEMENT TOLERANCE = +/- 1/4 INCH (TOTAL PAVEMENT THICKNESS EXCLUDING LEVELING).
6. 3'-7" OF BACKING IS REQUIRED BEHIND THE FACE OF GUARDRAIL WITH 6 FOOT POSTS. IF THIS CAN NOT BE OBTAINED THEN 8 FOOT POSTS SHALL BE USED. THESE ITEMS SHALL BE PAID UNDER ITEM 621.76 REPLACE GUARD RAIL POST ASSEMBLY. ADDITIONAL COSTS DUE TO 8 FOOT LENGTHS SHALL BE CONSIDERED INCIDENTAL TO ITEM 621.76, REPLACE GUARDRAIL POST ASSEMBLY.
7. ALL DI'S AND CB'S REHAB., AS SHOWN ON THE PLANS AND PAID FOR UNDER ITEMS 604.412, 604.415, 604.418, REHAB. DI, CB OR MH CLASS I, II, AND III, SHALL BE RAISED OR REHABILITATED SUCH THAT THE NEW GRATE ELEVATION IS LEVEL WITH THE SURROUNDING TERRAIN. TYPE B GRATES SHALL BE USED FOR ALL REHABILITATED DI'S AND CB'S IN PAVEMENT ADJACENT TO BITUMINOUS CURBING.
8. ESTIMATED QUANTITIES OF ITEMS 608.25, ALL PURPOSE EXCAVATOR RENTAL, TYPE I, 608.37, TRUCK RENTAL, AND 608.40, LOADER RENTAL, TYPE I HAVE BEEN INCLUDED FOR THE PROVISION OF CONSTRUCTING GUARDRAIL END SECTIONS WITH EXCAVATED DITCHING MATERIAL. AN ESTIMATED QUANTITY OF 203.30, EARTH BORROW HAS BEEN INCLUDED IN THE CASE THAT THE DITCHING MATERIAL IS NOT SUITABLE TO USE IN THE GUARDRAIL END SECTIONS. 25 CY OF ITEM 203.30, EARTH BORROW HAS BEEN ESTIMATED FOR EACH NEW GUARDRAIL END SECTION. ITEM 653.20, TEMPORARY EROSION MATTING SHALL BE PLACED ON SLOPES GREATER THAN 1:6 CREATED BY THE GUARDRAIL END SECTIONS. THE QUANTITIES INCLUDED REFLECT 25 SY OF ITEM 653.20, TEMPORARY EROSION MATTING FOR EACH NEW GUARDRAIL END SECTION. PRIOR TO THE PLACEMENT OF TEMPORARY EROSION MATTING, THE AREA SHALL BE TOPSOILED AND SEEDED USING ITEM 651.35, TOPSOIL, AND ITEM 651.I5, SEED.
9. BITUMINOUS CONCRETE PAVEMENT WORK WHICH COULD INVOLVE SOME HAND WORK (SUCH AS SIDE ROAD APPROACHES AND AROUND DRAINAGE AND UTILITY STRUCTURES) SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR ITEM 490.30, "SUPERPAVE BITUMINOUS CONCRETE PAVEMENT".
10. AREAS ADJACENT TO THE SHOULDER, WHERE EXISTING GUARDRAIL IS BEING RETAINED, THAT HAVE BUILT UP EXCESS MATERIAL ARE TO BE GRADED IN ORDER TO ALLOW THE SHOULDER TO DRAIN. PAYMENT IS TO BE INCLUDED UNDER ITEM 203.40, SHOULDER BERM REMOVAL.
11. AREAS ADJACENT TO THE SHOULDER WHERE NO GUARDRAIL EXISTS, THAT HAVE BUILT UP EXCESS MATERIAL ARE TO BE GRADED IN ORDER TO ALLOW THE SHOULDER TO DRAIN AS DIRECTED BY THE ENGINEER. PAYMENT WILL BE MADE UNDER ITEM 608.I5 POWER GRADER RENTAL.
12. ALL DELINEATORS WITHIN THE PROJECT AREA ARE TO BE REPLACED. THESE ARE TO BE PAID FOR UNDER ITEM 900.620 SPECIAL PROVISION (DELINEATOR WITH STEEL POST) AND ITEM 676.I2 REMOVAL OF EXISTING DELINEATOR.
13. AN ESTIMATED QUANTITY OF ITEM 619.I7, YIELDING MARKER POSTS HAS BEEN INCLUDED TO DELINEATE CULVERT ENDS AND DROP INLETS LOCATED OUTSIDE OF THE PAVEMENT SURFACE OR AS DIRECTED BY THE RESIDENT ENGINEER.
14. COMPACTION, GRADING, AND CLEAN UP OF ITEM 651.35 TOPSOIL, ITEM 402.I2 AGGREGATE SHOULDERS AND ITEM 402.I3 AGGREGATE SHOULDERS, RAP IS TO BE INCLUDED IN THE CONTRACT UNIT PRICE FOR EACH ITEM.
15. IN AREAS OF RUTTING THE COLD PLANE DEPTH SHOULD BE MEASURED FROM THE HIGH POINTS OF THE ROADWAY SECTION.
16. STEEL BEAM GUARDRAIL WITH STEEL POSTS SHALL BE USED ON THIS PROJECT.
17. WHERE A DRAINAGE PIPE HAS PREVENTED A GUARDRAIL POST FROM BEING DRIVEN AT 6'-3" SPACING, DOUBLE NESTING SHALL BE APPLIED AT THESE LOCATIONS AND SHALL BE PAID FOR UNDER ITEM 621.77, REPLACE GUARDRAIL BEAM UNIT.
18. REMOVAL OF BITUMINOUS GUTTERS SHALL BE PAID UNDER ITEM 608.25, ALL PURPOSE EXCAVATOR RENTAL, TYPE I.
19. THE PAVEMENT WEARING COURSE SHALL BE TYPE IVS ON THE ROADWAY AND BRIDGE SURFACES, ITEM 490.30 AS SHOWN ON THE TYPICALS UNLESS OTHERWISE DIRECTED BY THE ENGINEER. THE LEVELING COURSE SHALL BE TYPE IVS UNLESS OTHERWISE SHOWN IN THE PLANS OR DIRECTED BY THE ENGINEER. ALL ASPHALT CEMENT USED IN THE BITUMINOUS CONCRETE PAVEMENT SHALL BE AS SPECIFIED IN SECTION 490 OF THE GENERAL SPECIAL PROVISIONS.
20. EXISTING WOOD POSTS AT THE IMPACT HEAD ENDS OF THE MANUFACTURED TERMINAL END SECTIONS ARE TO BE REPLACED AT THE LOCATIONS SHOWN ON THE ITEM DETAIL SHEETS. THIS WORK SHALL BE PAID FOR UNDER ITEM 900.620 SPECIAL PROVISION (REPLACE MANUFACTURED TERMINAL SECTION WOOD POST).
21. EXISTING CABLE ANCHORS OF THE MANUFACTURED TERMINAL SECTIONS ARE TO BE TIGHTENED AT THE LOCATIONS SHOWN ON THE ITEM DETAIL SHEETS. THIS WORK SHALL BE PAID UNDER ITEM 900.620 SPECIAL PROVISION (TIGHTEN MANUFACTURED TERMINAL SECTION ANCHOR CABLE).

COMPOSITE INDEX OF SHEETS AND GENERAL NOTES	PROJECT NAME: HARTFORD-SHARON / SHARON-ROYALTON	
		PROJECT NUMBER: IM 089-1(57) / IM 089-1(58)
	FILE NAME: 97A184.dgn	PLOT DATE: 13-AUG-2010
	PROJECT LEADER: CDL	DRAWN BY: JDM
	DESIGNED BY: JDM	CHECKED BY: EPD
	PLOT FILE: 97A184.2.I	SHEET 2 OF 62

COMPOSITE QUANTITY SHEET #1

STATE OF VERMONT
AGENCY OF TRANSPORTATION

HARTFORD-SHARON IM 089-I(57)						SHARON-ROYALTON IM 089-I(58)					TOTALS		DESCRIPTIONS			DETAILED SUMMARY OF QUANTITIES		
EROSION CONTROL	ROADWAY	BRIDGE	TRAINING	FULL C.E.		EROSION CONTROL	ROADWAY	BRIDGE	FULL C.E.		QUANTITIES GRAND TOTAL	UNIT	ITEMS	ITEM NO.	ROUNDING	QUANTITIES	UNIT	ITEMS
	5						5				10	EA	THINNING AND TRIMMING FOR SIGNS	201.31	-			
	1260						100				1360	CY	COMMON EXCAVATION	203.15	-			
	1										1	CY	SOLID ROCK EXCAVATION	203.16	-			
	75						25				100	CY	EARTH BORROW	203.30	-			
	41500						28500				70000	LF	SHOULDER BERM REMOVAL	203.40	-			
	80										80	CY	TRENCH EXCAVATION OF EARTH	204.20	-			
	1						1				2	CY	TRENCH EXCAVATION OF EARTH, EXPLORATORY (N. A. B. I.)	204.22	-			
	440										440	CY	GRANULAR BACKFILL FOR STRUCTURES	204.30	-			
	284000						245000				529000	SY	COLD PLANING, BITUMINOUS PAVEMENT	210.10	-			
	126000						107500				233500	LF	MILLED RUMBLE STRIPS	213.10	-			
	700										700	CY	SUBBASE OF DENSE GRADED CRUSHED STONE	301.35	-			
	1700						1250				2950	TON	AGGREGATE SHOULDERS, RAP	402.13	-			
	1200						1200				2400	CWT	EMULSIFIED ASPHALT	404.65	-			
	1						1				2	LU	PRICE ADJUSTMENT, ASPHALT CEMENT (N. A. B. I.)	406.50	-			
	41000						35000				76000	TON	SUPERPAVE BITUMINOUS CONCRETE PAVEMENT	490.30	-			
	1						1				2	LU	AIR VOIDS PAY ADJUSTMENT (N. A. B. I.)	490.31	-			
	1						1				2	LU	MAT DENSITY PAY ADJUSTMENT (N. A. B. I.)	490.32	-			
	1						1				2	LU	SURFACE TOLERANCE PAY ADJUSTMENT (N. A. B. I.)	490.33	-			
	1						1				2	LU	LONGITUDINAL JOINT COMPACTION PAY ADJUSTMENT (N. A. B. I.)	490.34	-			
		97						650			747	LF	BRIDGE EXPANSION JOINT, ASPHALTIC PLUG	516.10	-			
		20						100			120	CF	RAPID SETTING CONCRETE REPAIR MATERIAL WITH COARSE AGGREGATE	580.20	-			
		25									25	LF	12" CSP .064 (2-2/3 X 1/2)	601.0005	-			
		1									1	EA	PRECAST REINFORCED CONCRETE DROP INLET WITH CAST IRON GRATE	604.18	-			
							1				1	EA	CHANGING ELEVATION OF DROP INLETS, CATCH BASINS, OR MANHOLES	604.40	-			
		31					42				73	EA	REHAB. DROP INLETS, CATCH BASINS, OR MANHOLES, CLASS I	604.412	-			
		4					5				9	EA	REHAB. DROP INLETS, CATCH BASINS, OR MANHOLES, CLASS II	604.415	-			
		4					5				9	EA	REHAB. DROP INLETS, CATCH BASINS, OR MANHOLES, CLASS III	604.418	-			
		160									160	LF	6 INCH UNDERDRAIN PIPE	605.10	-			
		340					275				615	HR	POWER GRADER RENTAL	608.15	-			
		56					10				66	HR	ALL PURPOSE EXCAVATOR RENTAL, TYPE I	608.25	-			
		200					180				380	HR	POWER BROOM RENTAL, TYPE I	608.30	-			
		10					10				20	HR	TRUCK RENTAL	608.37	-			
		10					10				20	HR	LOADER RENTAL, TYPE I	608.40	-			
		425					80				505	CY	STONE FILL, TYPE I	613.10	-			
		600									600	LF	BITUMINOUS CONCRETE CURB, TYPE B	616.315	-			
		600									600	LF	REMOVAL OF EXISTING CURB	616.41	-			
		320					58				378	EA	YIELDING MARKER POSTS	619.17	-			

PROJECT NAME: HARTFORD-SHARON / SHARON-ROYALTON
 PROJECT NUMBER: IM 089-I(57) / IM 089-I(58)
 FILE NAME: 97A184.dgn PLOT DATE: 13-AUG-2010
 PROJECT LEADER: CDL DRAWN BY: SJL
 DESIGNED BY: SJL CHECKED BY: EPD
 PLOT FILE: 97A184_3.I SHEET 3 OF 62

COMPOSITE QUANTITY SHEET #2

**STATE OF VERMONT
AGENCY OF TRANSPORTATION**

HARTFORD-SHARON IM 089-1(57)					SHARON-ROYALTON IM 089-1(58)					TOTALS		DESCRIPTIONS			DETAILED SUMMARY OF QUANTITIES		
EROSION CONTROL	ROADWAY	BRIDGE	TRAINING	FULL C.E.	EROSION CONTROL	ROADWAY	BRIDGE		FULL C.E.	QUANTITIES GRAND TOTAL	UNIT	ITEMS	ITEM NO.	ROUNDING	QUANTITIES	UNIT	ITEMS
	2625					2				2627	LF	STEEL BEAM GUARDRAIL, GALVANIZED	621.20	-			
	3					1				4	EA	MANUFACTURED TERMINAL SECTION, FLARED	621.50	-			
	3									3	EA	ENERGY ABSORPTION ATTENUATOR	621.56	-			
						1				1	EA	ANCHOR FOR STEEL BEAM RAIL	621.60	-			
						1				1	EA	GUARDRAIL APPRDACH SECTION, GALVANIZED NETC 2 RAIL	621.72	-			
	797					568				1365	EA	REPLACE GUARDRAIL POST ASSEMBLY	621.76	-			
	797					484				1281	EA	REPLACE GUARDRAIL BEAM UNIT	621.77	-			
	2100					37.5				2137.5	LF	REMOVAL AND DISPOSAL OF GUARDRAIL	621.80	-			
	2400									2400	LF	TEMPORARY TRAFFIC BARRIER	621.90	-			
	1900									1900	LF	REMOVAL AND RESET TEMPORARY TRAFFIC BARRIER	621.95	-			
	4000					3000				7000	HR	UNIFORMED TRAFFIC OFFICERS	630.10	-			
	3000					2000				5000	HR	FLAGGERS	630.15	-			
					0.5				0.5	1	LS	FIELD OFFICE, ENGINEERS	631.10	-			
					0.5				0.5	1	LS	TESTING EQUIPMENT, BITUMINOUS	631.17	-			
					1500				1500	3000	DL	FIELD OFFICE TELEPHONE (N. A. B. I.)	631.26	-			
			520							520	HR	EMPLOYEE TRAINEESHIP	634.10	-			
	0.5					0.5				1	LS	MOBILIZATION/DEMOBILIZATION	635.11	-			
	1									1	LS	TRAFFIC CONTROL (IM 089-1(57))	641.10	-			
						1				1	LS	TRAFFIC CONTROL (IM 089-1(58))	641.10	-			
	5					4				9	EA	PORTABLE CHANGEABLE MESSAGE SIGN	641.15	-			
	87000					73000				160000	LF	DURABLE 6 INCH WHITE LINE, RECESSED POLYUREA	646.426	-			
	67500					60000				127500	LF	DURABLE 6 INCH YELLOW LINE, RECESSED POLYUREA	646.436	-			
	3000					2300				5300	LF	DURABLE 12 INCH WHITE LINE, RECESSED POLYUREA	646.466	-			
						34				34	LF	DURABLE 24 INCH STOP BAR, THERMOPLASTIC	646.482	-			
	15					24				39	EA	DURABLE LETTER OR SYMBOL, THERMOPLASTIC	646.492	-			
	173500					146000				319500	LF	TEMPORARY 6 INCH WHITE LINE, PAINT	646.622	-			
	134520					119000				253520	LF	TEMPORARY 6 INCH YELLOW LINE, PAINT	646.632	-			
	6000					3600				9600	LF	TEMPORARY 12 INCH WHITE LINE, PAINT	646.662	-			
						68				68	LF	TEMPORARY 24 INCH STOP BAR, PAINT	646.682	-			
	30					48				78	EA	TEMPORARY LETTER OR SYMBOL, PAINT	646.692	-			
	5150					4500				9650	EA	LINE STRIPING TARGETS	646.76	-			
	1170					220				1390	SY	GEOTEXTILE UNDER STONE FILL	649.31	-			
	510									510	SY	GEOTEXTILE FOR SILT FENCE	649.51	-			
	30					2				32	LB	SEED	651.15	-			
	140					10				150	LB	FERTILIZER	651.18	-			
	1					1				2	TON	AGRICULTURAL LIMESTONE	651.20	-			
	1					1				2	TON	HAY MULCH	651.25	-			

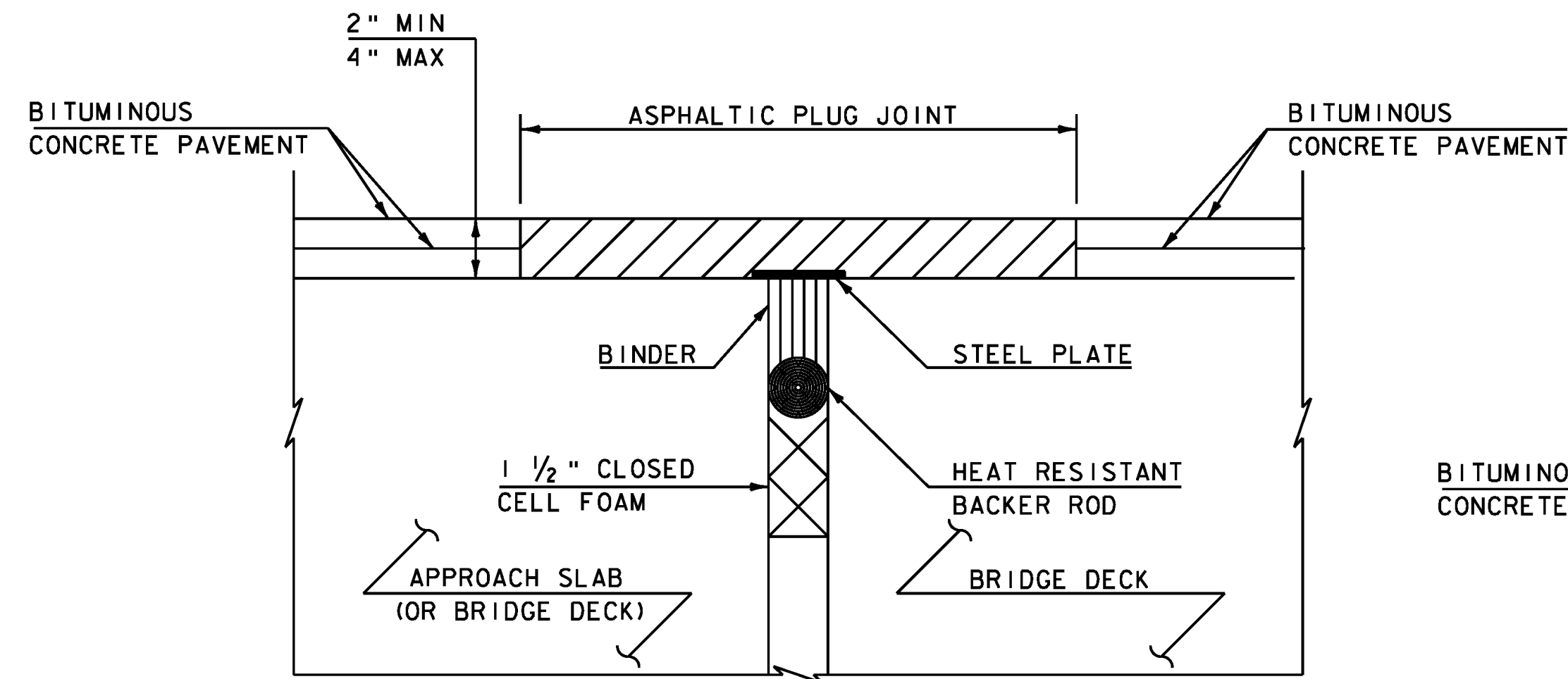
PROJECT NAME: HARTFORD-SHARON / SHARON-ROYALTON
 PROJECT NUMBER: IM 089-1(57) / IM 089-1(58)
 FILE NAME: 97A184.dgn PLOT DATE: 25-AUG-2010
 PROJECT LEADER: CDL DRAWN BY: SJL
 DESIGNED BY: SJL CHECKED BY: EPD
 PLOT FILE: 97A184_4.1 SHEET 4 OF 62

COMPOSITE QUANTITY SHEET #3

STATE OF VERMONT
AGENCY OF TRANSPORTATION

		HARTFORD-SHARON IM 089-1(57)					SHARON-ROYALTON IM 089-1(58)					TOTALS		DESCRIPTIONS			DETAILED SUMMARY OF QUANTITIES		
		EROSION CONTROL	ROADWAY	BRIDGE	TRAINING	FULL C.E.	EROSION CONTROL	ROADWAY	BRIDGE	TRAINING	FULL C.E.	QUANTITIES GRAND TOTAL	UNIT	ITEMS	ITEM NO.	ROUNDING	QUANTITIES	UNIT	ITEMS
		50					10				60	CY	TOPSOIL	651.35	-				
		1400					120				1520	SY	TEMPORARY EROSION MATTING	653.20	-				
		1									1	EA	INLET PROTECTION DEVICE, TYPE I	653.40					
			81								115	SF	TRAFFIC SIGNS, TYPE A	675.20	-				
			294								360	LF	SQUARE TUBE SIGN POST AND ANCHOR	675.341	-				
			16								16	EA	REMOVING SIGNS	675.50	-				
			3								2	EA	ERECTING SALVAGED SIGNS	675.60	-				
			642								549	EA	REMOVAL OF EXISTING DELINEATOR	676.12	-				
			1								1	LU	PRICE ADJUSTMENT, FUEL (N. A. B. I.)	690.50	-				
			640								549	EA	SPECIAL PROVISION (DELINEATOR WITH STEEL POST)	900.620	-				
			3								11	EA	SPECIAL PROVISION (REPLACE MANUFACTURED TERMINAL SECTION WOOD POST)	900.620	-				
			600								600	EA	SPECIAL PROVISION (STEEL BEAM GUARDRAIL DELINEATOR)	900.620	-				
			350								350	EA	SPECIAL PROVISION (STEEL BEAM GUARDRAIL OFFSET BLOCK)	900.620	-				
			33								30	EA	SPECIAL PROVISION (TIGHTEN MANUFACTURED TERMINAL SECTION ANCHOR CABLE)	900.620	-				
			1								1	LS	SPECIAL PROVISION (TEMPORARY ROADWAY WIDENING) (PHASE I)	900.645	-				
			1								1	LS	SPECIAL PROVISION (TEMPORARY ROADWAY WIDENING) (PHASE II)	900.645	-				

PROJECT NAME: HARTFORD-SHARON / SHARON-ROYALTON
 PROJECT NUMBER: IM 089-1(57) / IM 089-1(58)
 FILE NAME: 97A184.dgn PLOT DATE: 8/6/2010
 PROJECT LEADER: CDL DRAWN BY: SJL
 DESIGNED BY: SJL CHECKED BY: EPD
 PLOT FILE: 97A184.5.I SHEET 5 OF 62



ASPHALTIC PLUG-TYPE
JOINT DETAIL

(NOT TO SCALE)

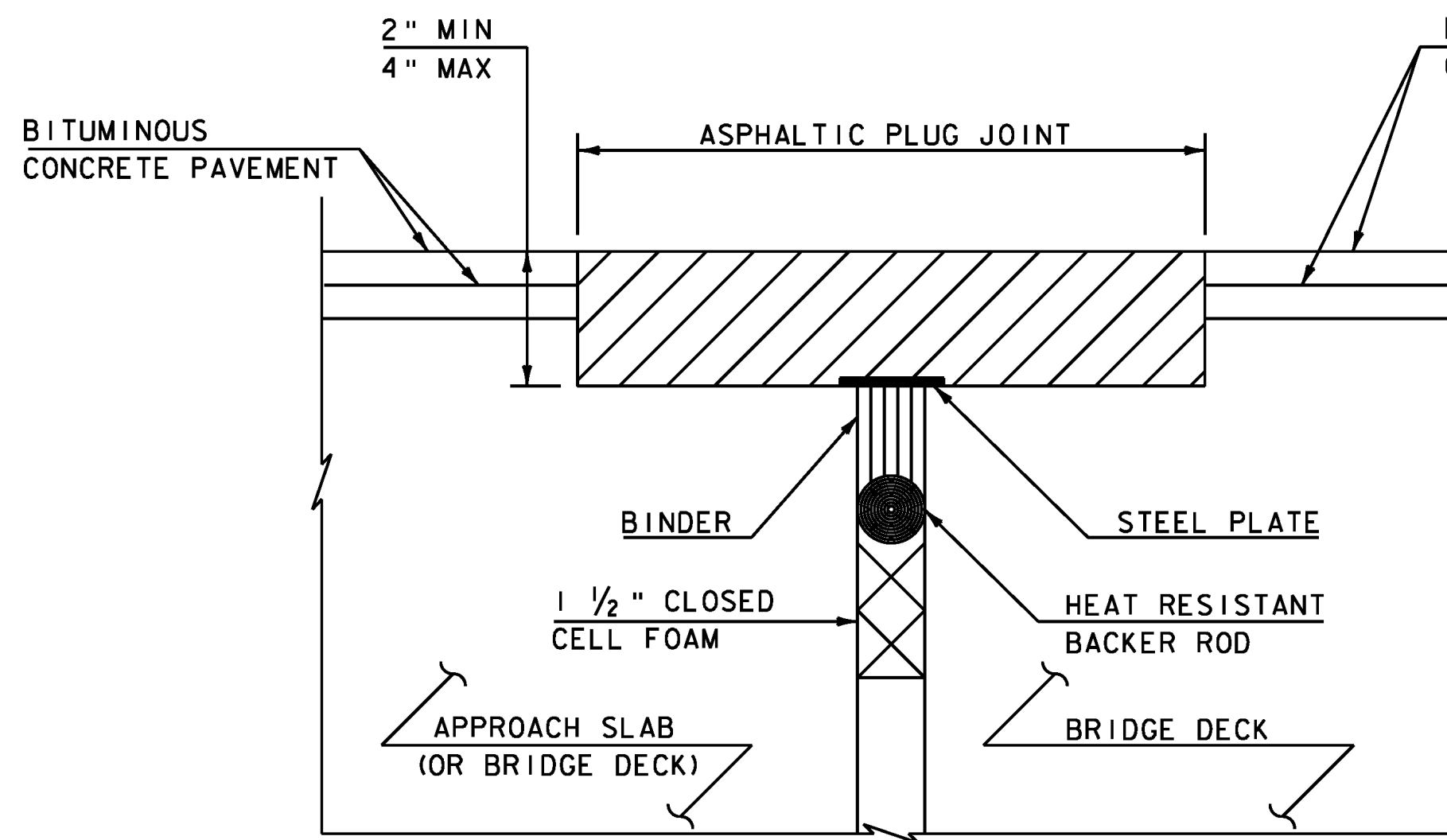
ASPHALTIC PLUG JOINT NOTES

INSTALLATION

1. LOCATE THE JOINT CENTRALLY OVER THE DECK OVERLAY EXPANSION GAP OR FIXED JOINT MARKED OUT TO THE MANUFACTURER'S RECOMMENDED WIDTH.
2. REMOVE THE BITUMINOUS CONCRETE PAVEMENT FULL DEPTH AS SHOWN ON THE PLANS. THE PAVEMENT SHALL BE DRY AND SAW CUT TO THE LIMITS REQUIRED TO PLACE THE JOINT. A PNEUMATIC HAMMER AND CHISEL MAY BE USED ADJACENT TO THE CURB ONLY WHEN SAW CUTTING IS NOT POSSIBLE.
3. BLAST CLEAN THE JOINT AREA OF DEBRIS, ASPHALT AND SHEET MEMBRANE. THOROUGHLY DRY THE JOINT AREA WITH COMPRESSED AIR PRIOR TO APPLYING BINDER MATERIAL.
4. REPAIR MATERIAL GREATER THAN 4 INCHES FROM FINISHED GRADE WITH RAPID SETTING CONCRETE REPAIR MATERIAL WITH COURSE AGGREGATE MEETING THE REQUIREMENTS OF SUBSECTION 780.04.
5. PLACE PROPERLY SIZED HEAT RESISTANT BACKER ROD IN THE MOVEMENT GAP ALLOWING FOR 1" +/- OF BINDER ABOVE THE ROD.
6. HEAT AND PLACE THE BINDER MATERIAL AS RECOMMENDED BY THE MANUFACTURER.
7. PLACE 1#4" THICK BY 8" WIDE SECTIONS OF STEEL PLATE OVER THE CENTER OF THE MOVEMENT GAP. SECURE THE PLATES FROM MOVING BY INSERTING LOCATING PINS THROUGH THE PRESTAMPED HOLES INTO BACKER ROD AND COVER WITH HOT BINDER. THE STEEL PLATES MAY BE OMITTED WHERE THE ENGINEER DETERMINES THAT THE APPROACH SLAB OR BRIDGE DECK WILL PROVIDE INADEQUATE SUPPORT AND WHERE VERTICAL MOVEMENT OF THE PLATES MIGHT OCCUR.
8. HEAT AND MIX THE BINDER MATERIAL AND AGGREGATE AS RECOMMENDED BY THE MANUFACTURER.
9. INSTALLATION OF MATERIAL, COMPACTION, AND TOP COATING SHALL BE AS RECOMMENDED BY THE MANUFACTURER.
10. IMMEDIATELY AFTER TOP COATING, CAST AN ANTI-SKID MATERIAL OVER THE JOINT TO REDUCE THE RISK OF TRACKING.
11. ONCE THE JOINT REACHES 82 DEG C (180 DEG F) +/-, WATER MAY BE USED TO EXPEDITE THE COOLING PROCESS.
12. PROTECT JOINT FROM TRAFFIC UNTIL THE MATERIAL HAS COOLED TO 51 DEG C (125 DEG F) +/-.

WEATHER LIMITATIONS

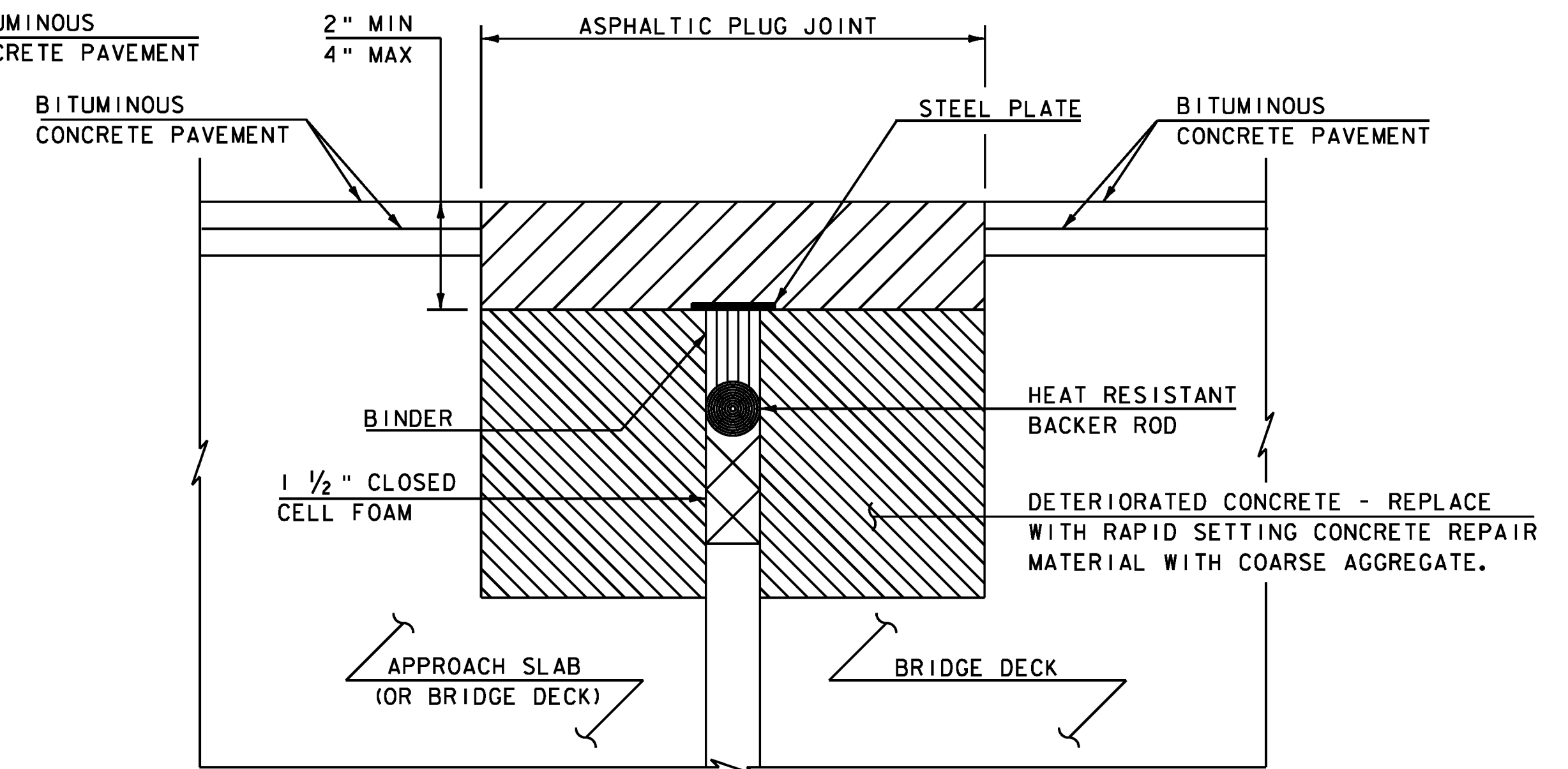
1. APPLY BINDER MATERIAL ONLY WHEN THE FOLLOWING CONDITIONS PREVAIL OR AS RECOMMENDED BY THE MANUFACTURER:
2. THE AMBIENT AIR TEMPERATURE IS AT LEAST 10 DEG C (50 DEG F) AND RISING.
3. THE ROAD SURFACE IS DRY.
4. WEATHER CONDITIONS OR OTHER CONDITIONS ARE FAVORABLE AND ARE EXPECTED TO REMAIN SO FOR THE PERFORMANCE OF SATISFACTORY WORK.



ASPHALTIC PLUG-TYPE JOINT DETAIL
REMOVAL OF < 2" DETERIORATED CONCRETE

NOTES: (NOT TO SCALE)

1. UPON ENCOUNTERING UP TO 2" AVERAGE OF DETERIORATED CONCRETE, THE CONTRACTOR SHALL REMOVE THE DETERIORATED MATERIAL AND REPLACE IT WITH THE ASPHALTIC PLUG JOINT MATERIAL AS DIRECTED BY THE RESIDENT ENGINEER.
2. REMOVAL OF THE DETERIORATED CONCRETE WILL NOT BE PAID SEPARATELY BUT WILL BE CONSIDERED INCIDENTAL TO THE UNIT BID PRICE FOR THE ITEM 516.10. THE ADDITIONAL PLUG JOINT MATERIAL BELOW THE DESIGN DEPTH TO REPLACE THE DETERIORATED CONCRETE WILL BE CONSIDERED INCIDENTAL TO THE UNIT BID PRICE FOR THE ITEM 516.10.



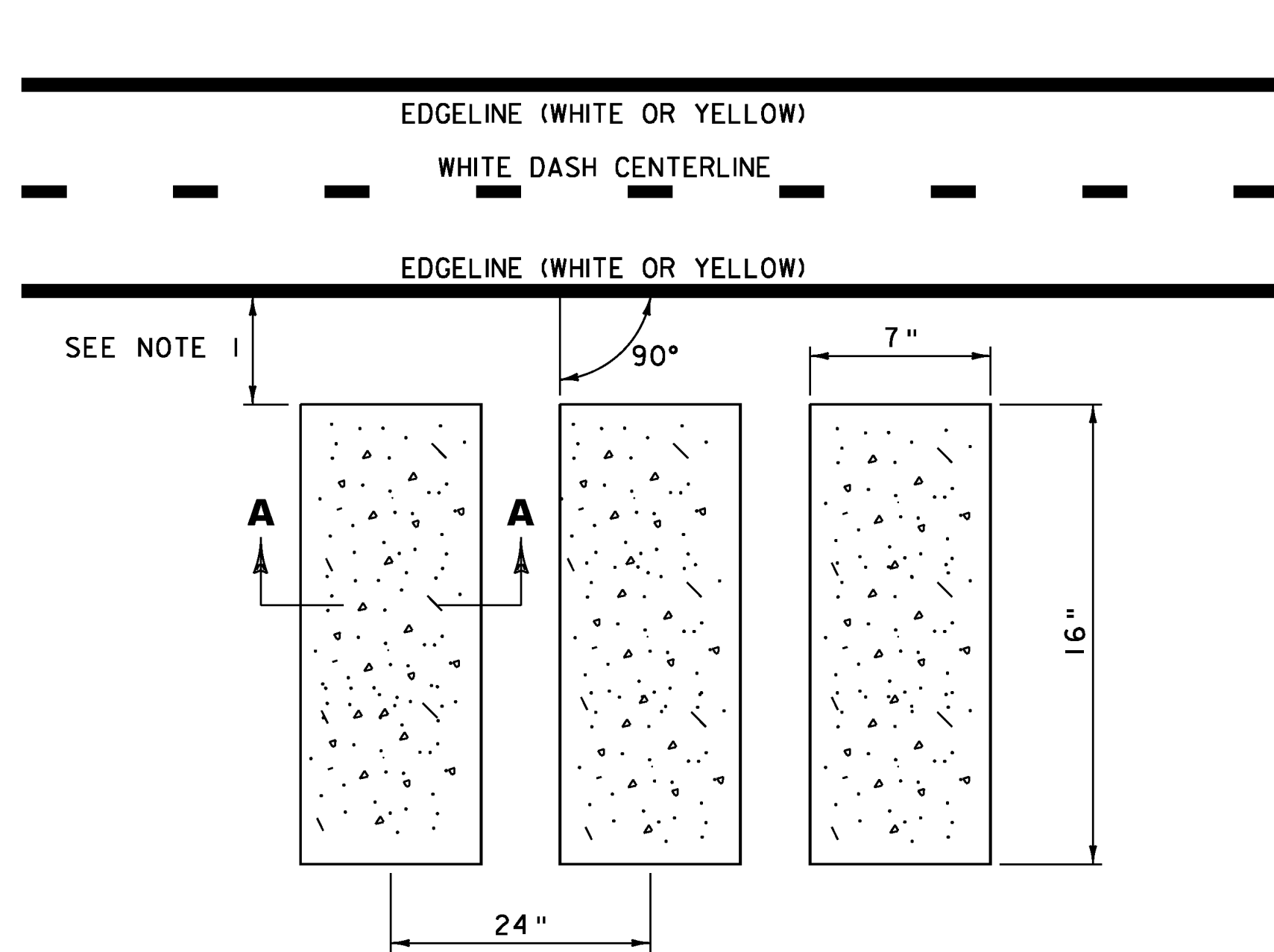
ASPHALTIC PLUG-TYPE JOINT DETAIL
REMOVAL OF > 2" DETERIORATED CONCRETE

NOTES: (NOT TO SCALE)

1. THE CONTRACTOR SHALL REMOVE ALL ASPHALTIC PLUG JOINT MATERIAL AND DETERIORATED CONCRETE AS DIRECTED BY THE ENGINEER. REMOVAL OF THE FIRST 4 INCHES OF MATERIAL SHALL BE INCLUDED IN THE BID PRICE FOR ITEM 516.10 BRIDGE EXPANSION JOINT, ASPHALTIC PLUG. ANY REMOVAL OF MATERIAL GREATER THAN 4 INCHES SHALL BE INCLUDED IN THE BID PRICE OF ITEM 580.20 RAPID SETTING CONCRETE REPAIR MATERIAL WITH COURSE AGGREGATE.
2. THE CONTRACTOR SHALL REPLACE REMOVED MATERIAL THAT IS LESS THAN 4" FROM FINISHED GRADE WITH ASPHALTIC PLUG JOINT MATERIAL MEETING THE REQUIREMENTS OF SUBSECTION 707.15. ALL REMOVED MATERIAL THAT IS GREATER THAN 4 INCHES FROM FINISHED GRADE SHALL BE REPLACED WITH RAPID SETTING CONCRETE REPAIR MATERIAL WITH COURSE AGGREGATE MEETING THE REQUIREMENTS OF SUBSECTION 780.04.
3. REINFORCING STEEL NOT SHOWN FOR CLARITY.

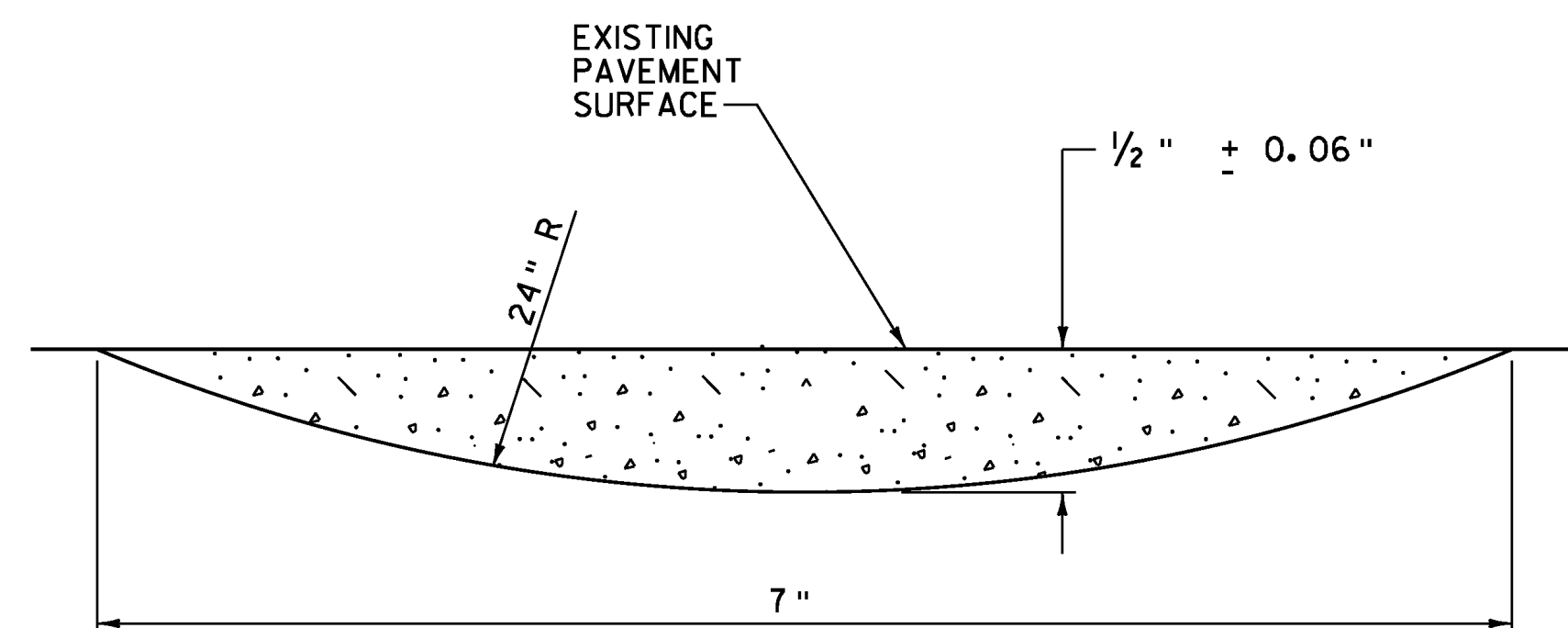
DETAILS ARE NOT TO SCALE

COMPOSITE BRIDGE DETAIL SHEET	PROJECT NAME: HARTFORD-SHARON / SHARON-ROYALTON	
	PROJECT NUMBER: IM 089-1(57) / IM 089-1(58)	
	FILE NAME: 97A184.dgn	PLOT DATE: 8/6/2010
	PROJECT LEADER: CDL	DRAWN BY: JDM
	DESIGNED BY: JDM	CHECKED BY: EPD
	PLOT FILE: 97A184_6.1	SHEET 6 OF 62

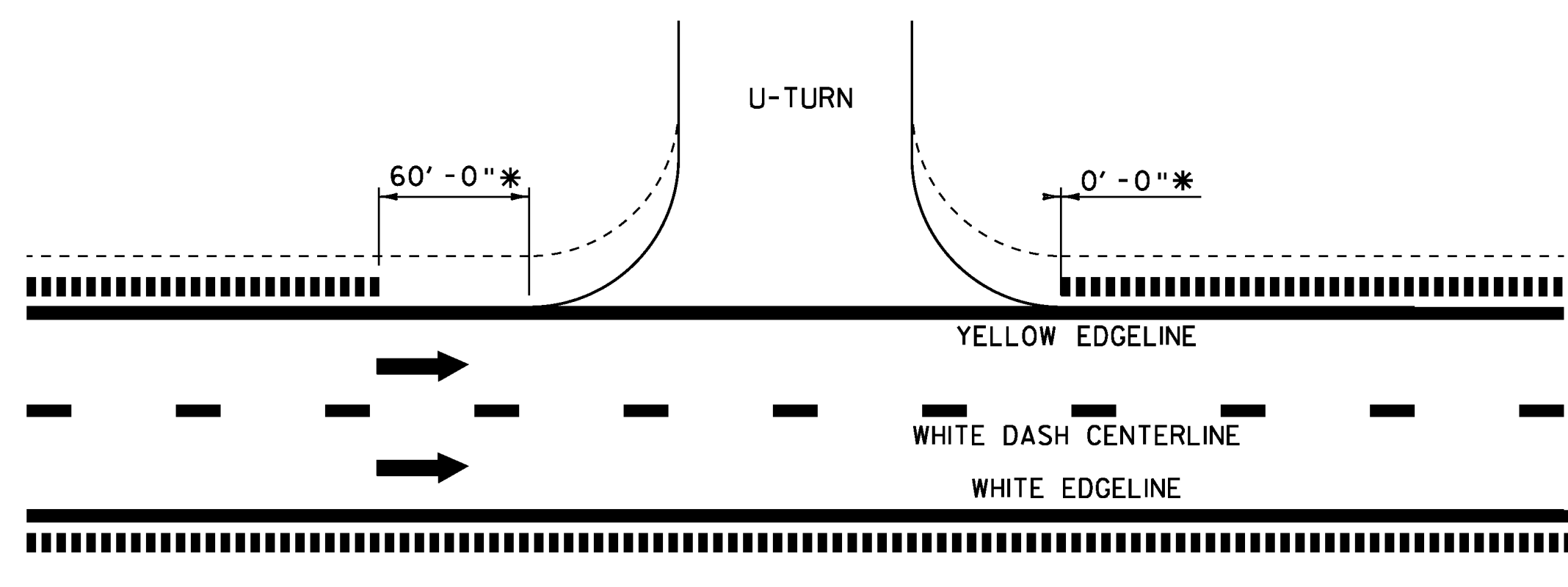


RUMBLE STRIP MILLING DETAIL

NOTES:
 1. MILL RUMBLE STRIPS 30 INCHES FROM EDGE LINE FOR ALL SHOULDERS 6 FEET OR WIDER; MILL RUMBLE STRIPS 6 INCHES FROM EDGE LINE FOR ALL SHOULDERS LESS THAN 6 FEET WIDE.
 2. IN GUARDRAIL AREAS, STOP MILLED RUMBLE STRIPS WHEN THE SHOULDER NARROWS TO 4 FEET WIDE.

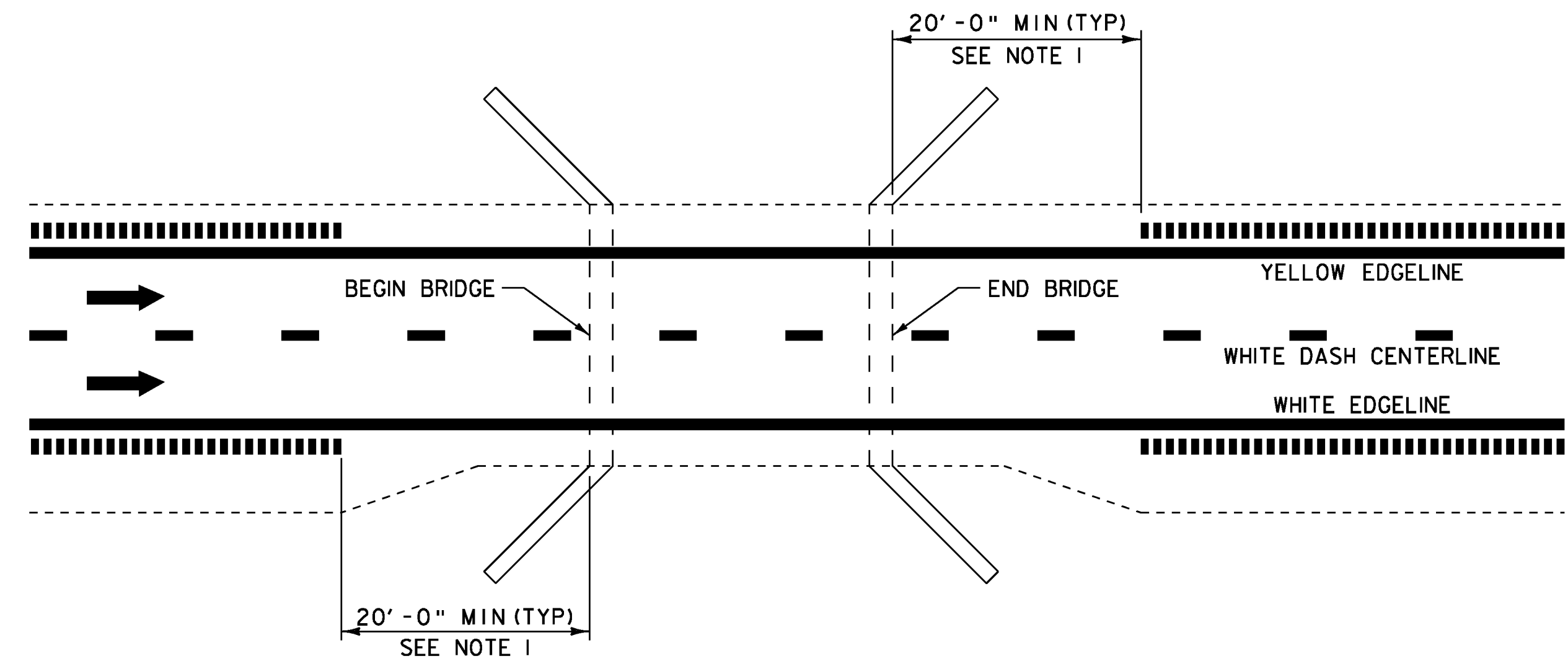


SECTION A-A



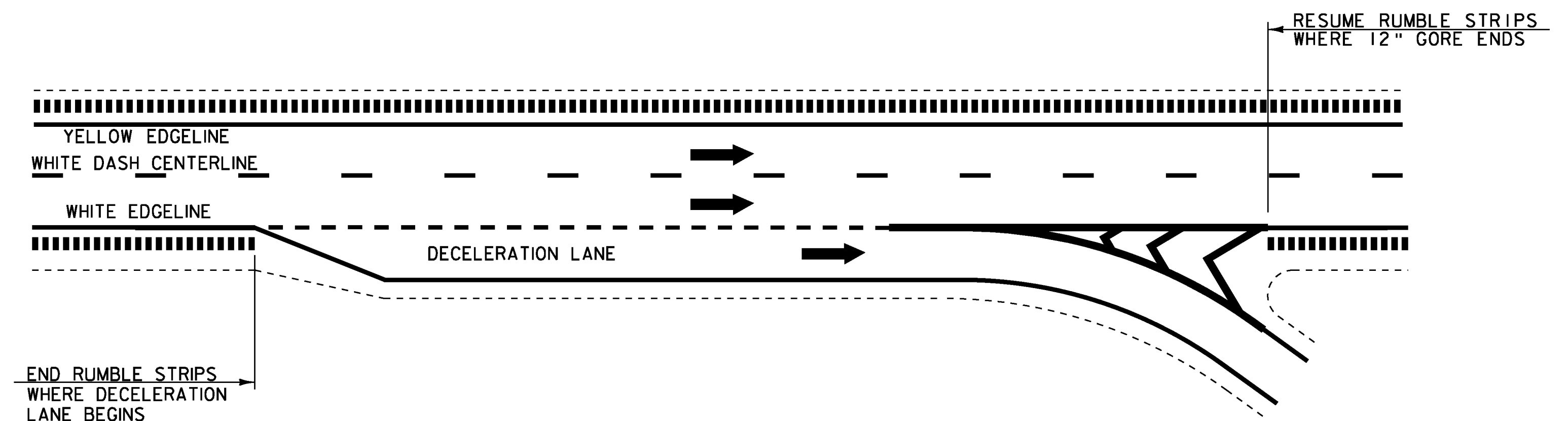
RUMBLE STRIP U-TURN DETAIL

* THE DIMENSIONS MAY VARY DEPENDING ON ACTUAL FIELD CONDITIONS, AND MAY BE MODIFIED AT THE RESIDENT ENGINEER'S DISCRETION.

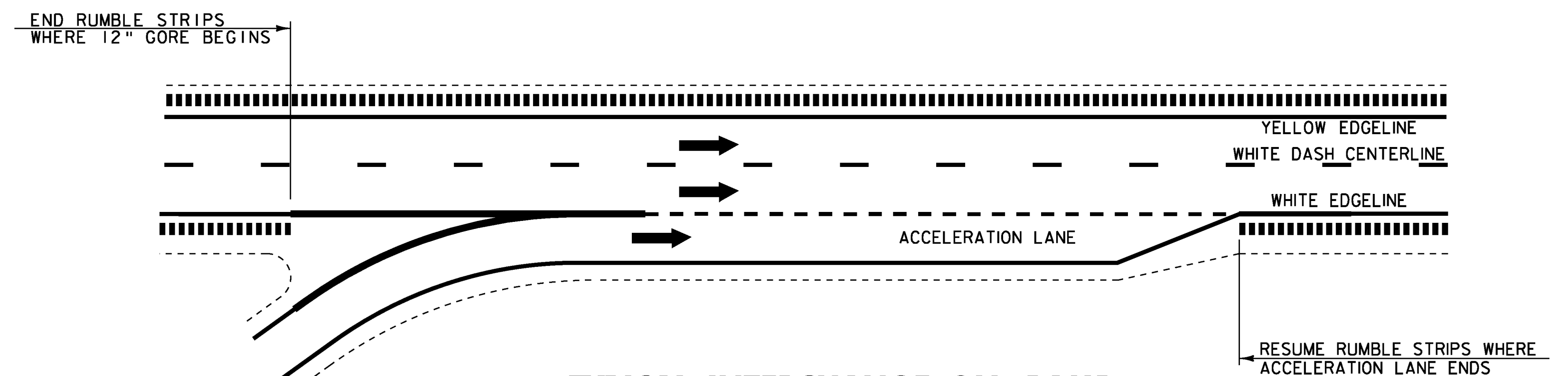


RUMBLE STRIP BRIDGE DETAIL

NOTES:
 1. NO RUMBLE STRIPS SHALL BE MILLED WITHIN 20 FEET OF THE BEGIN AND END OF BRIDGE. DO NOT BEGIN RUMBLE STRIPS UNTIL THE SHOULDER IS AT LEAST 4 FEET WIDE.
 2. AT NO TIME SHALL THE RUMBLE STRIPS BE MILLED INTO ANY APPROACH SLAB.



TYPICAL INTERCHANGE OFF RAMP



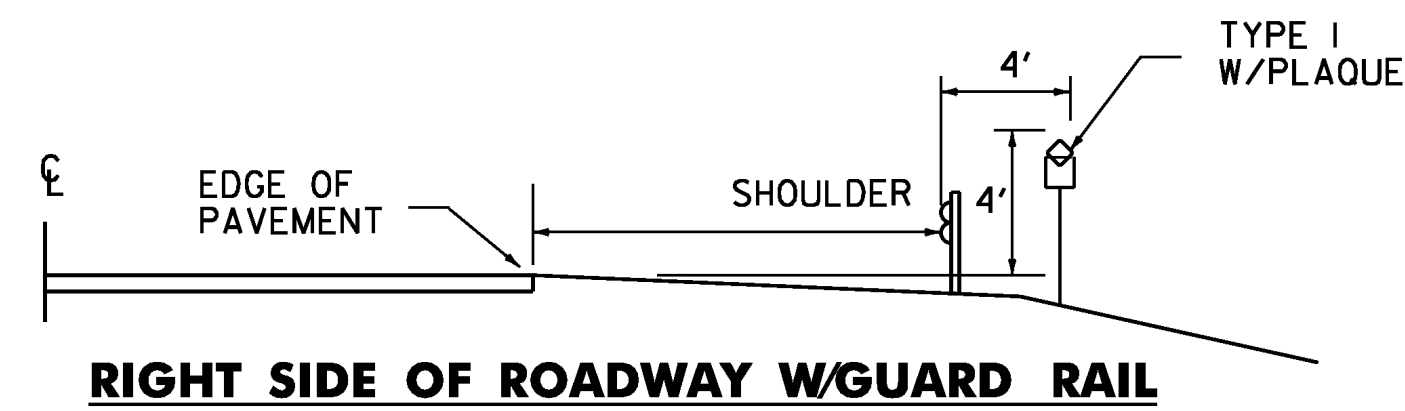
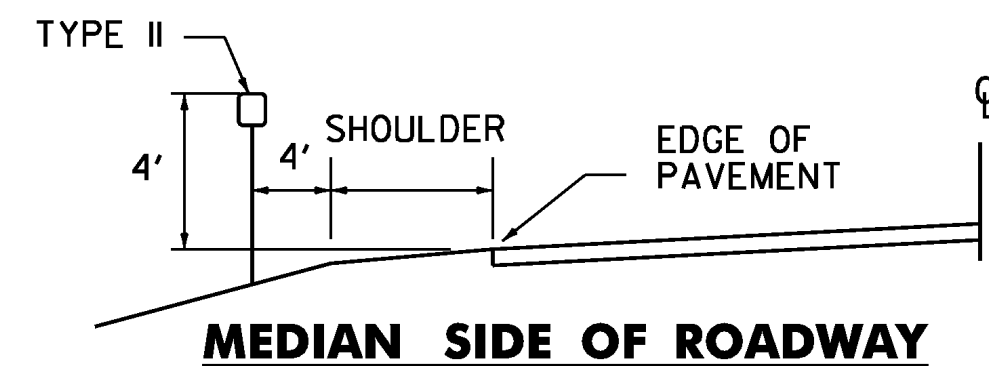
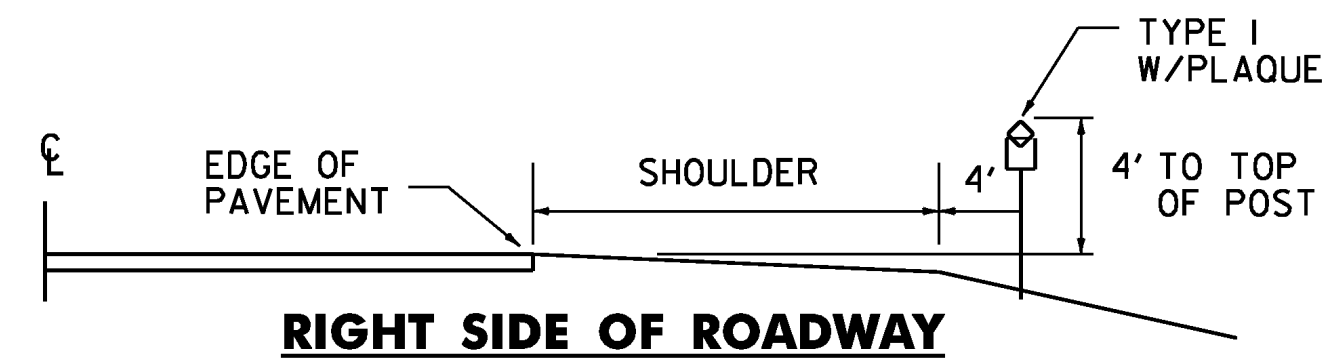
TYPICAL INTERCHANGE ON RAMP

LEGEND

- ← DIRECTION OF TRAFFIC FLOW
- MILLED RUMBLE STRIPS
- EDGE OF PAVEMENT

COMPOSITE MILLED RUMBLE STRIP DETAILS

PROJECT NAME:	HARTFORD-SHARON / SHARON-ROYALTON
PROJECT NUMBER:	IM 089-1(57) / IM 089-1(58)
FILE NAME:	97A184.dgn
PROJECT LEADER:	CDL
DESIGNED BY:	JDM
PLOT FILE:	97A184.7.1
PLOT DATE:	8/6/2010
DRAWN BY:	JDM
CHECKED BY:	EPD
SHEET	7 OF 62



TYPICAL PLACEMENT OF DELINEATORS AND MILEPOSTS ON DIVIDED HIGHWAY

TYPE I DELINEATORS WITH WHITE REFLECTOR UNITS AND APPROPRIATE MILEPOST PLAQUES SHALL BE ERECTED CONTINUOUSLY ALONG THE RIGHT SIDE OF DIRECTION OF TRAVEL OR ALONG DIVIDED HIGHWAYS BETWEEN MILEMARKERS, AT 0.050 MILE INTERVALS.

THE TYPE I DELINEATORS WITH OR WITHOUT MILEPOST PLAQUES SHALL BE OMITTED ALONG DECELERATION AND ACCELERATION LANES, BUT THE SUCCEEDING SPACING SHALL BE AS IF THE DELINEATORS HAD BEEN ERECTED CONTINUOUSLY AND SHALL BE SO INDICATED.

THE LOCATION OF TYPE I DELINEATORS AND MILEPOSTS ARE TO BE COMPUTED AND MARKED IN THE FIELD BY THE ENGINEER IN ACCORDANCE WITH THE LATEST REVISION OF THE AGENCY'S "POLICY ON LOCATION MARKING FOR VERMONT DIVIDED HIGHWAYS."

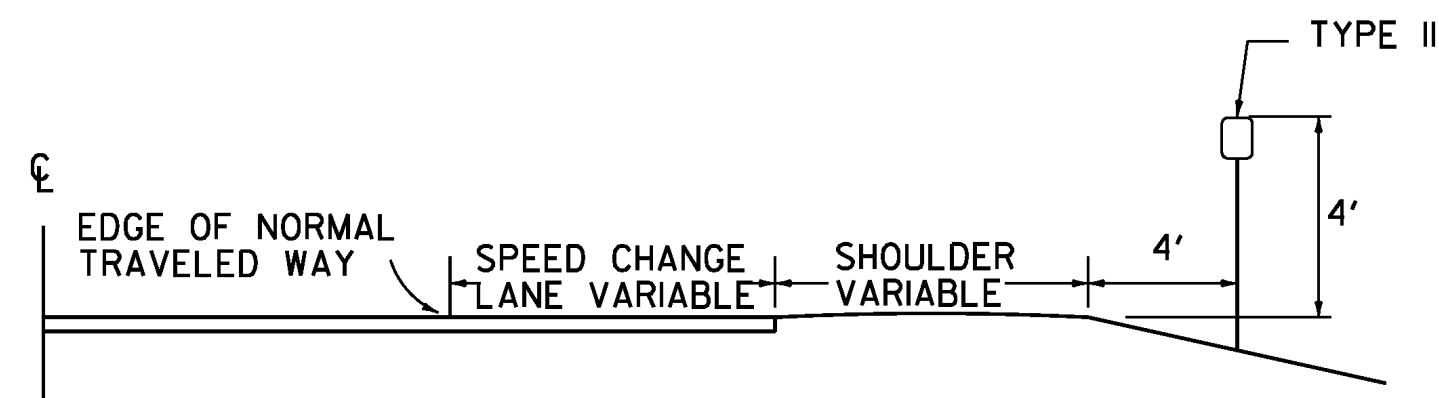
TYPE II YELLOW DELINEATORS SHALL BE ERECTED CONTINUOUSLY ALONG THE LEFT OR MEDIAN SIDE OF DIVIDED HIGHWAYS AT 0.05 INTERVALS, CONTINUED AT APPROXIMATELY THE SAME SPACING THROUGH INTERCHANGES AND REST AREAS WHERE THERE MAY NOT BE ANY TYPE I DELINEATORS ON THE RIGHT SIDE. PLACEMENT OF TYPE II DELINEATORS SHALL BE FOLLOWED ON THE LEFT AS ON THE RIGHT, THE SAME LATERAL TYPE I DELINEATORS WITHOUT MILEPOST PLAQUE SHALL BE INSTALLED ON INTERSTATE RAMP AS SHOWN ON THE PLANS.

TYPE I DELINEATORS WITHOUT PLAQUE SHALL BE ERECTED AT THE BEGINNING (BLUE) AND AT THE END (GREEN) OF EACH GUARDRAIL RUN.

TYPE III DELINEATORS

TYPE III DELINEATORS WILL BE TYPE I DELINEATORS WITH AN ADDITIONAL RED REFLECTIVE UNIT MOUNTED ON THE REVERSERE SIDE. THEY SHALL BE ERECTED ON THE RIGHT AND LEFT SIDE OF THE RAMP AS SHOWN ON THE PLANS.

TYPE III DELINEATORS SHALL BEGIN 50' FROM THE WRONG WAY SIGNS AND EXTEND EVERY 50' TO A POINT NOT LESS THAN 25' FROM THE DIVIDED HIGHWAY. SEE STANDARD E-197.

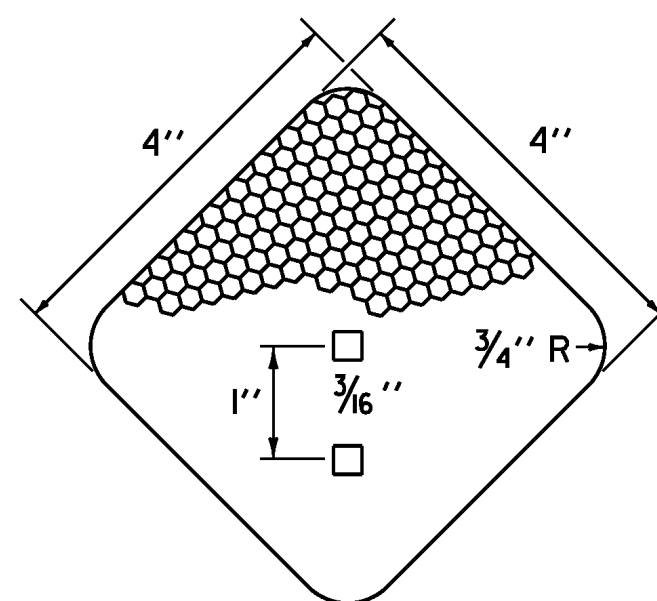


TYPICAL PLACEMENT OF TYPE II DELINEATORS ON SPEED CHANGE LANES

TYPE II DELINEATORS SHALL BE ERECTED CONTINUOUSLY ALONG THE RIGHT SIDE OF THE DECELERATION AND ACCELERATION LANES AT 100' INTERVALS INCLUDING GUARDRAIL SECTIONS. THE DELINEATORS SHALL START AT THE BEGINNING OF THE TAPER AND END AT THE NOSE OF THE EXIT OR ENTRANCE GORE. THEY SHALL HAVE WHITE REFLECTOR UNITS.

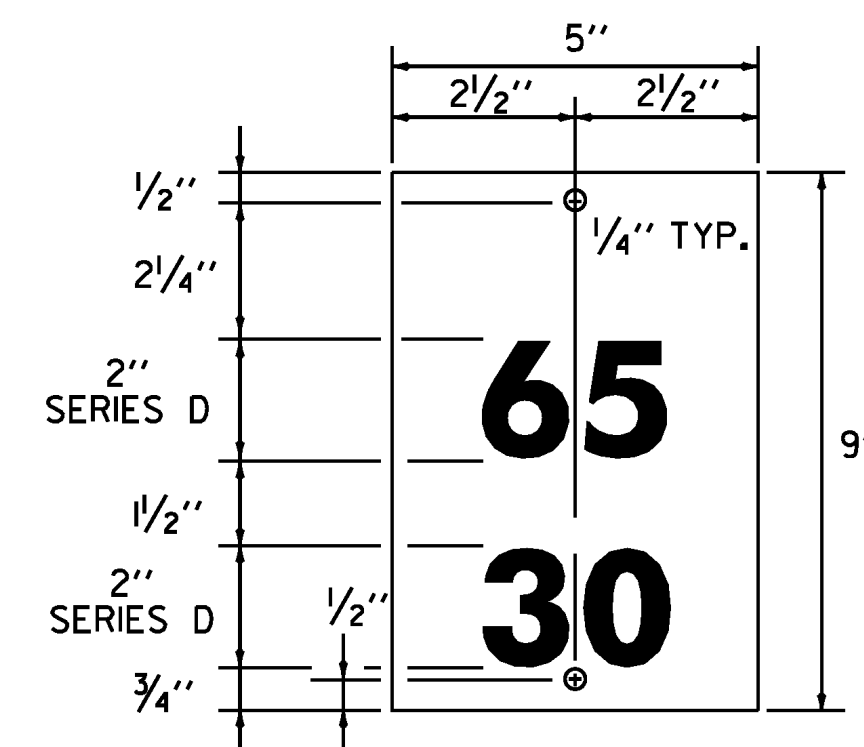
NOTES

- FOR MOUNTING DELINEATORS AND MILEPOSTS ON BRIDGES, SEE STANDARD E-199.
- REFER TO STANDARD E-197 FOR DELINEATOR PLACEMENT DETAILS, WHERE DISCREPANCIES EXIST BETWEEN E-197 AND THIS SHEET, THE DETAILS ON THIS SHEET SHALL GOVERN.
- DELINEATOR POSTS SHALL BE 1.75" x 1.88 LB/FT SQUARE STEEL SIGN POSTS WITH ANCHORS.
- FLEXIBLE DELINEATORS SHALL EXTEND 4 FEET ABOVE THE GROUND SURFACE WITH YELLOW RETROREFLECTIVE SHEETING ON THE FRONT AND BACK. FLEXIBLE DELINEATORS SHALL BE APPROVED BY THE MATERIALS AND RESEARCH SECTION.



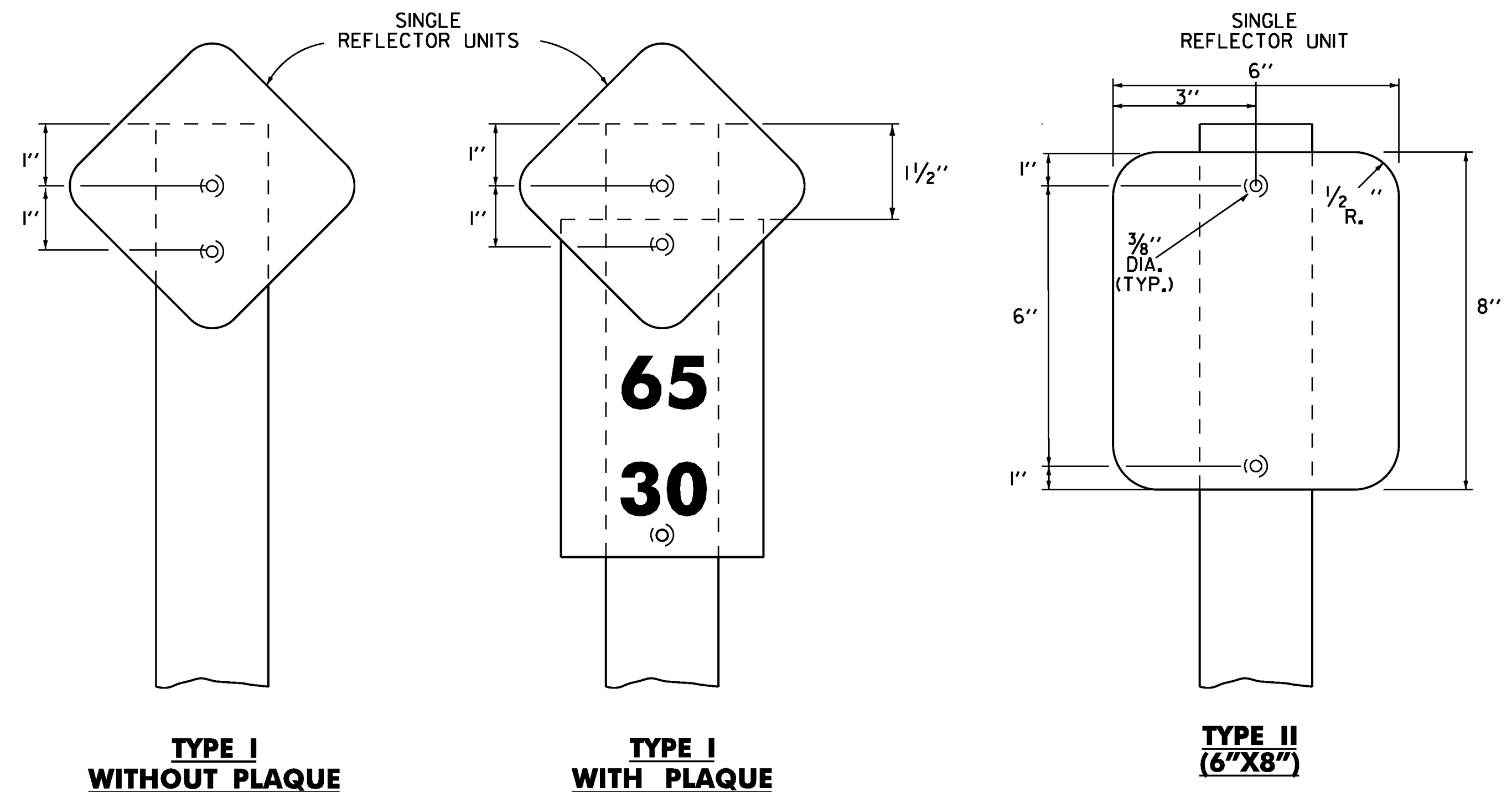
DELINEATOR REFLECTIVE SHEETING UNIT

MATERIAL FOR RETROREFLECTIVE SHEETING FOR DELINEATORS SHALL BE A 0.063" ALUMINUM BACKING WITH A WHITE/BLUE/GREEN REFLECTOR MEETING ASTM TYPE III, OR RED/YELLOW SHALL BE TYPE VII, TYPE VIII OR TYPE IX.



MILEPOST PLAQUE

MATERIAL FOR RETROREFLECTIVE SHEETING FOR DELINEATORS SHALL BE A 0.063" ALUMINUM BACKING WITH ASTM TYPE III RETROREFLECTIVE SHEETING GREEN LEGEND ON A WHITE BACKGROUND.



DELINEATORS WITH REFLECTIVE SHEETING

COMPOSITE DELINEATOR DETAIL SHEET

PROJECT NAME:	HARTFORD-SHARON / SHARON-ROYALTON
PROJECT NUMBER:	IM 089-1(57) / IM 089-1(58)
FILE NAME:	97A184.dgn
PLOT DATE:	8/6/2010
PROJECT LEADER:	CDL
DRAWN BY:	JDM
DESIGNED BY:	JDM
CHECKED BY:	EPD
PLOT FILE:	97A184_8.1
SHEET	8 OF 62

NOTES:

1. THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN FOR APPROVAL PRIOR TO THE START OF CONSTRUCTION. THE COST OF PREPARING THIS PLAN (AND MAKING CHANGES IF NECESSARY) SHALL NOT BE PAID SEPARATELY BUT SHALL BE INCIDENTAL TO ITEM 64I.0, TRAFFIC CONTROL.

2. THE CONTRACTOR SHALL INCLUDE A CONSTRUCTION SIGN APPROACH PACKAGE FOR EXPECTED LANE CLOSURES AND WORK ZONE SPEED REDUCTIONS IN COMPLIANCE WITH THE LATEST EDITION OF THE MUTCD AND VTRANS STANDARDS E-103 AND E-106. PAYMENT FOR PROVIDING THIS PACKAGE SHALL BE INCIDENTAL TO ITEM 64I.0, TRAFFIC CONTROL.

3. ADDITIONAL RAMP SIGNING MAY BE REQUIRED AS DIRECTED BY THE RESIDENT ENGINEER.

4. THE BID PRICE FOR TRAFFIC CONTROL, ITEM 64I.0, SHALL INCLUDE ALL APPROACH AND ON-PROJECT CONSTRUCTION SIGNING, PORTABLE ARROW BOARDS, BARRIERS, BARRELS, CONES, BARRICADES, TEMPORARY REGULATORY AND WARNING SIGNS, AND POSTS AS DETAILED IN VTRANS STANDARDS. ALL ADJUSTING, RELOCATING, AND REMOVING OF THESE DEVICES AS DIRECTED BY THE RESIDENT ENGINEER SHALL ALSO BE INCLUDED. THE FOLLOWING ITEMS WILL BE PAID FOR SEPARATELY:

- 646.622, 646.632, 646.662, 646.692 - TEMPORARY PAVEMENT MARKINGS
- 630.10 AND 630.15 - UNIFORMED TRAFFIC OFFICERS AND FLAGGERS
- 621.90 - TEMPORARY TRAFFIC BARRIER
- 621.95 REMOVE AND RESET TEMPORARY TRAFFIC BARRIER

5. PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS) SHALL BE PROVIDED FOR USE ALONG THIS PROJECT. THE PLACEMENT OF THESE UNITS AS WELL AS THE MESSAGE WILL BE APPROVED BY THE RESIDENT ENGINEER. THESE SIGNS WILL BE PAID FOR UNDER ITEM 64I.5, PORTABLE CHANGEABLE MESSAGE SIGN.

THE CONTRACTOR SHALL POSITION A PCMS PRIOR TO MM 13.25 WARNING SOUTHBOUND MOTORISTS OF EXPECTED ROADWAY CONDITIONS AND REDUCED ROADWAY WIDTHS.

PCMS SHOULD NOT REPLACE ANY OF THE SIGNING DETAILED IN THE MUTCD AND SHOULD NOT BE USED IF STANDARD TRAFFIC CONTROL DEVICES ADEQUATELY PROVIDE THE INFORMATION THE MOTORISTS NEED TO TRAVEL SAFELY.

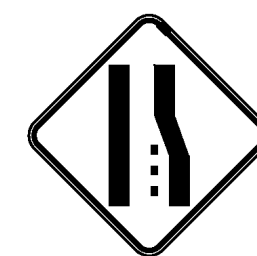
THE PCMS SHALL CONSIST OF EITHER ONE OR TWO PHASES. TYPICALLY, A PHASE SHALL CONSIST OF UP TO THREE LINES OF EIGHT CHARACTERS PER LINE. THE PCMS SHOULD BE USED AS A SUPPLEMENT AND NOT AS A SUBSTITUTE FOR CONVENTIONAL SIGNS AND PAVEMENT MARKINGS.

THE PCMS SHOULD COMMUNICATE WHAT INFORMATION MOTORISTS NEED TO KNOW. UNNECESSARY INFORMATION SHOULD BE AVOIDED. MESSAGES SHOULD BE UPDATED PERIODICALLY TO DESCRIBE THE WORK ACTIVITY OCCURRING SO THAT THE PCMS CONTINUES TO COMMAND THE ATTENTION OF MOTORISTS.

6. THE MUTCD 2009 SHALL BE THE STANDARD FOR ALL TRAFFIC CONTROL DEVICES. EXISTING SIGNS, SIGNALS AND MARKINGS SHALL BE VALID UNTIL SUCH TIME AS THEY ARE REPLACED OR RECONSTRUCTED. WHEN NEW TRAFFIC CONTROL DEVICES ARE ERECTED OR PLACED OR EXISTING TRAFFIC CONTROL DEVICES ARE REPLACED OR REPAIRED THE EQUIPMENT, DESIGN, METHOD OF INSTALLATION, PLACEMENT OR REPAIR SHALL CONFORM WITH THE MUTCD. WHERE VTRANS STANDARDS CONFLICT WITH THE MUTCD, THE MUTCD SHALL GOVERN.

7. NO CONSTRUCTION SIGNS SHALL BE INSTALLED AS TO INTERFERE OR OBSTRUCT THE VIEW OF EXISTING TRAFFIC CONTROL DEVICES, STOPPING SIGHT DISTANCE, AND CORNER SIGHT DISTANCE FROM DRIVES AND TOWN HIGHWAYS.

8. ON VTRANS STANDARD E-103, SIGN W4-2 MAY BE REPLACED WITH W9-2.



W4-2



W9-2



9. ALL SIGNS THAT ARE NOT BEING USED SHALL BE COVERED APPROPRIATELY. PAYMENT WILL BE CONSIDERED INCIDENTAL TO CONTRACT ITEM 64I.0.

10. BUFFER SPACE SHOWN ON VTRANS STANDARD E-103 SHALL BE REPLACED WITH VALUES FROM MUTCD TABLE 6C-2.

11. TEMPORARY SIGNS PLACED BEHIND GUARDRAIL SHALL BE RAISED SUCH THAT THE BOTTOM OF THE SIGN IS ABOVE THE GUARDRAIL.

12. "WORK ZONE" PLAQUES (G20-5aP) SHALL BE INCLUDED ON TEMPORARY SPEED LIMIT SIGNS IN ACCORDANCE WITH MUTCD FIGURE 6F-3.

13. BUFFER SPACE SHOWN ON VTRANS STANDARD E-103 SHALL BE REPLACED WITH VALUES FROM MUTCD TABLE 6C-2.

**COMPOSITE
CONSTRUCTION
APPROACH
SIGNING SHEET
NOTES**

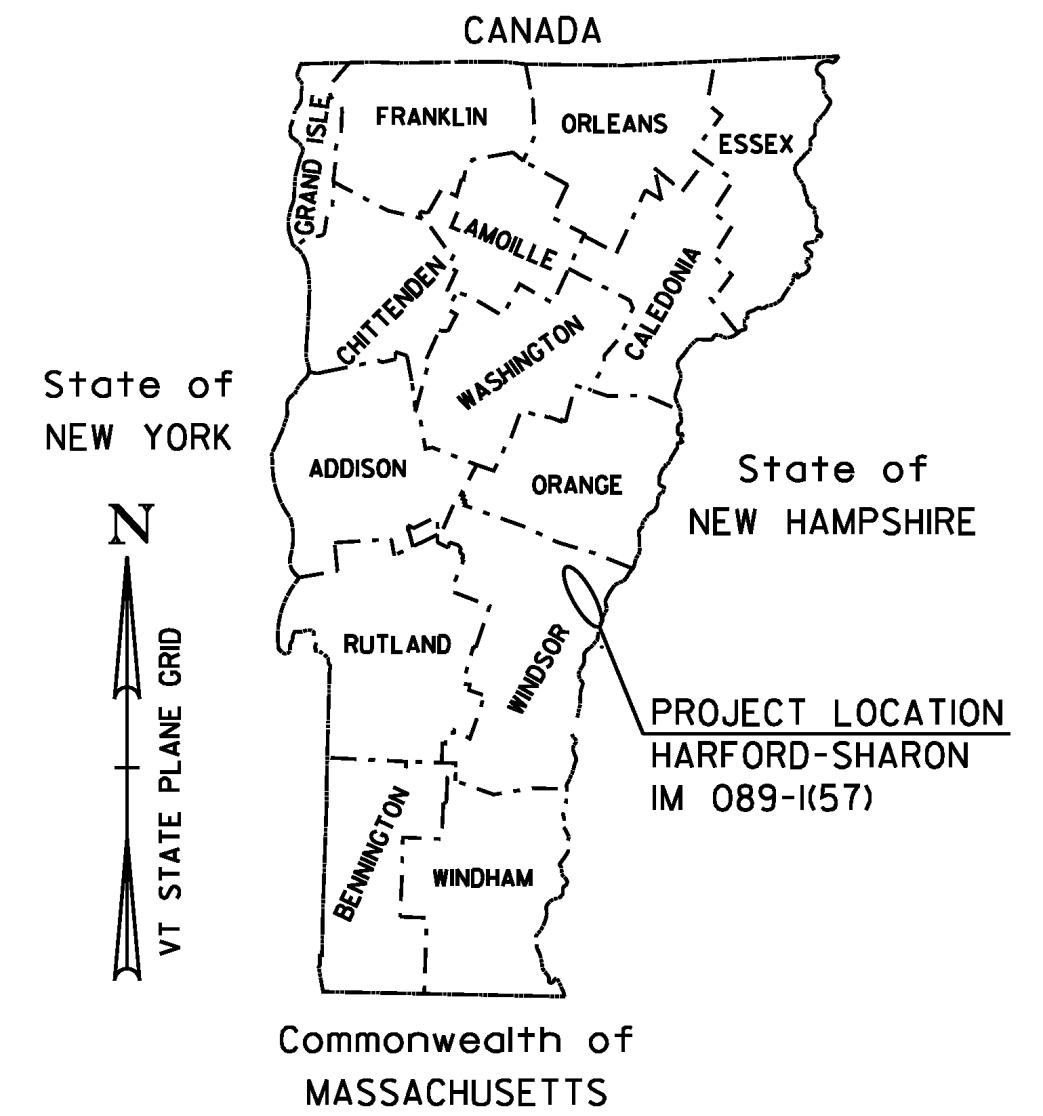
PROJECT NAME: HARTFORD-SHARON / SHARON-ROYALTON	
PROJECT NUMBER: IM 089-1(57) / IM 089-1(58)	
FILE NAME: 97A184.dgn	PLOT DATE: 8/6/2010
PROJECT LEADER: CDL	DRAWN BY: JDM
DESIGNED BY: JDM	CHECKED BY: EPD
PLOT FILE: 97A184_9.1	SHEET 9 OF 62

STATE OF VERMONT AGENCY OF TRANSPORTATION



PROPOSED IMPROVEMENT TOWNS OF HARTFORD AND SHARON COUNTY OF WINDSOR INTERSTATE ROUTE 89 (SB)

INDEX OF SHEETS
SEE SHEET 2



BEGINNING IN THE TOWN OF HARTFORD AT SOUTHBOUND MILE MARKER 0.050 AND EXTENDING NORTHERLY ALONG INTERSTATE ROUTE 89 FOR A DISTANCE OF 64,389.60 FT (12.195 MILES) TO AN ENDING POINT AT MILE MARKER 12.245.

LENGTH OF ROADWAY 64,389.60 FT (12.195 MILES)
LENGTH OF PROJECT 64,389.60 FT (12.195 MILES)

WORK TO BE PERFORMED UNDER THIS PROJECT INCLUDES COLD PLANING, RESURFACING WITH A LEVELING COURSE AND WEARING COURSE, NEW PAVEMENT MARKINGS, NEW SIGNS, GUARDRAIL IMPROVEMENTS, DRAINAGE IMPROVEMENTS AND INCIDENTAL ITEMS. WORK INCLUDES SOUTHBOUND MAINLINE AS WELL AS THE EXIT 1 RAMP C AND D, A PORTION OF THE I-89/I-91 INTERCHANGE RAMP C, D AND F AND A PORTION OF ONE U-TURN. ALSO INCLUDED IS THE RECONSTRUCTION OF I-89 BETWEEN MM 7.97 TO MM 8.01 (TIGERTOWN ROAD OVERPASS) AND ASSOCIATED DRAINAGE WORK.

TRAFFIC DATA

HIGHWAY SECTION	AADT		DHY		CUM. ESALS (2011-2021)	CUM. ESALS (2011-2031)
	2011	2021	2011	2021		
BEGIN OF PROJECT TO I-91 EXIT 10 (MM 0.05 HARTFORD - MM 0.56 HARTFORD)	19600	21800	2500	2800	6,944,000	19,034,000
I-91 EXIT 10 TO I-89 EXIT 1 (MM 0.56 HARTFORD - MM 3.75 HARTFORD)	12300	13700	1600	1800	4,361,000	11,965,000
I-89 EXIT 1 TO END OF PROJECT (MM 3.75 HARTFORD - MM 12.25 SHARON)	9200	10200	1200	1300	5,027,000	13,338,000

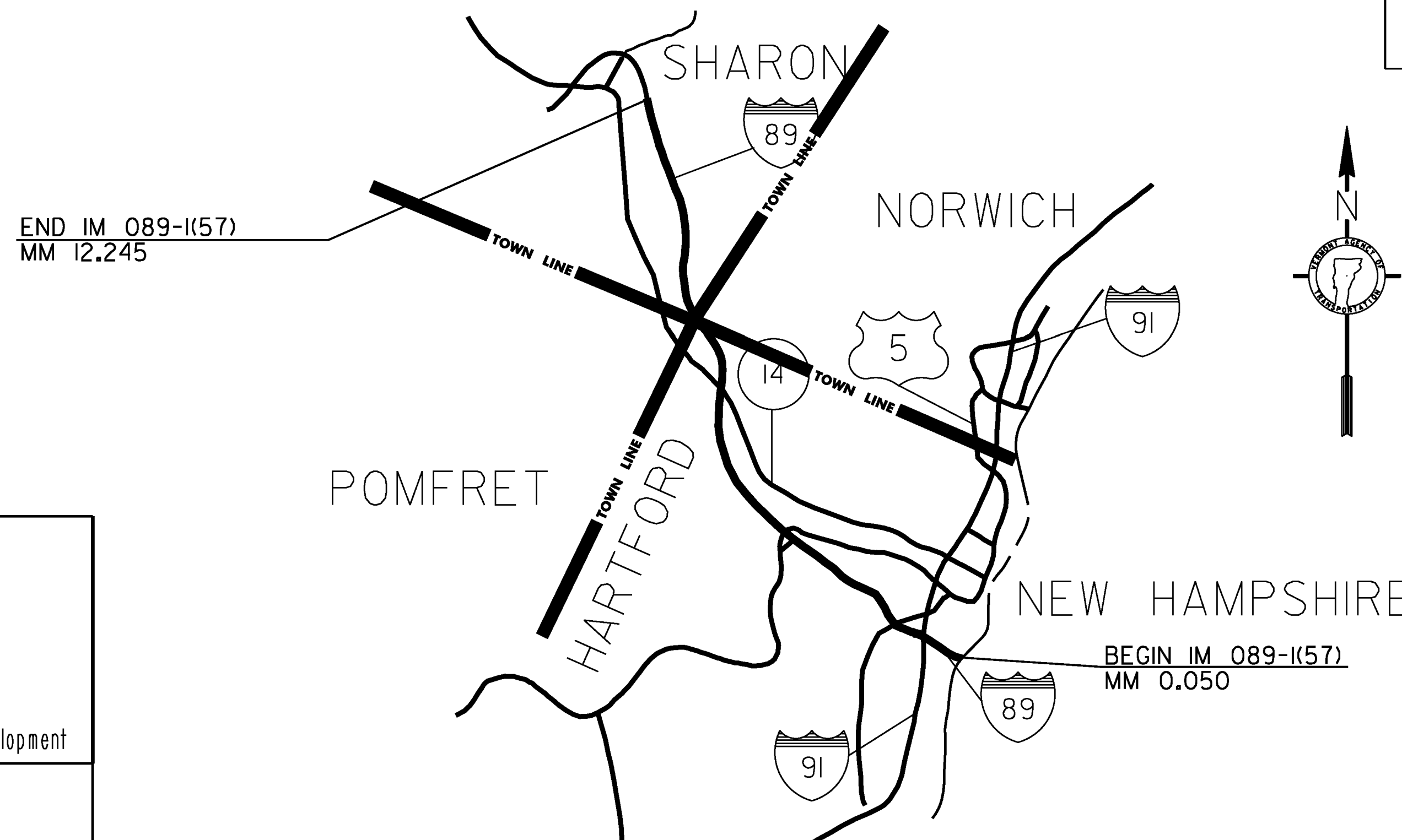
QUALITY ASSURANCE PROGRAM: LEVEL 1

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	



DATUM
VERTICAL N/A
HORIZONTAL N/A

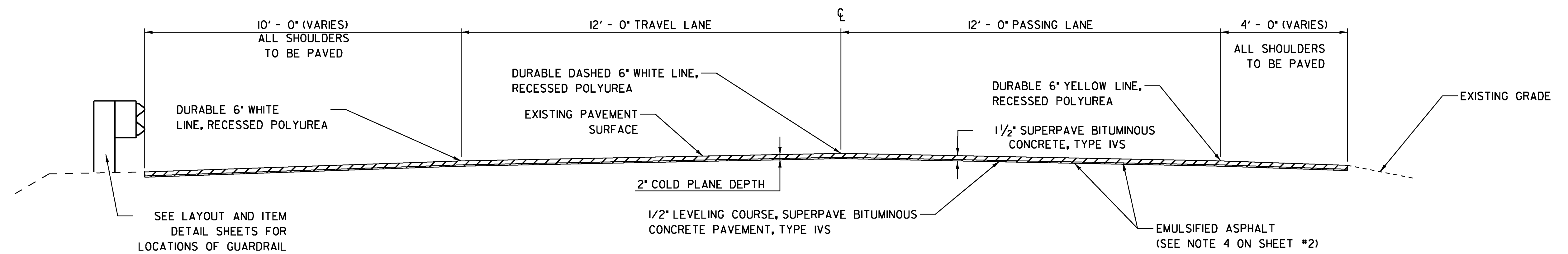


BITUMINOUS CONCRETE PAVEMENT SUPERPAVE MIXTURE DESIGN CRITERIA	
DESIGN LANE / DESIGN LIFE ESAL	19,034,000
DESIGN NUMBER OF GYRATIONS	80
PERFORMANCE GRADE ASPHALT BINDER	SEE SECTION 490 GENERAL SPECIAL PROVISIONS

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

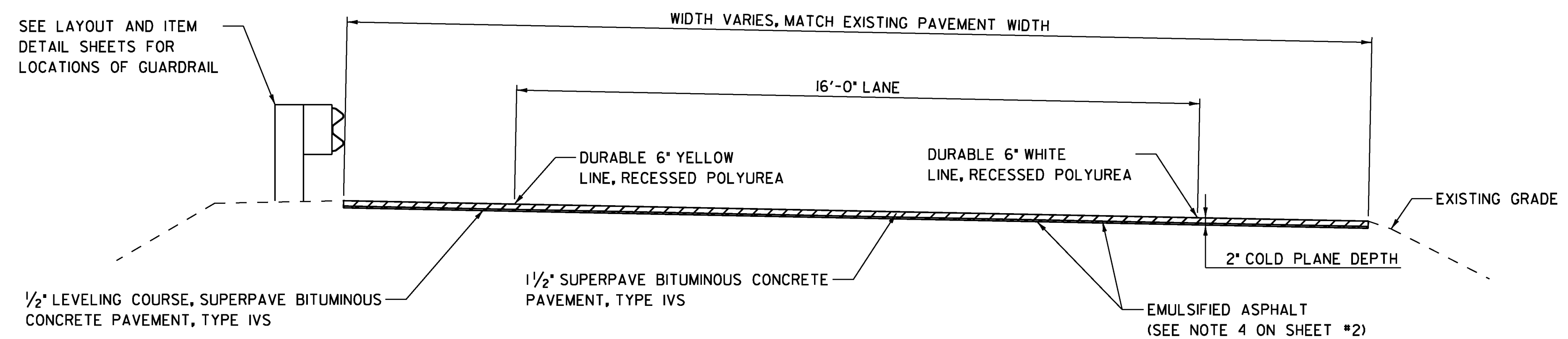
CONSTRUCTION IS TO BE CARRIED ON IN ACCORDANCE WITH THESE PLANS AND THE STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 2006, AS APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION ON JUNE 15, 2006 FOR USE ON THIS PROJECT, INCLUDING ALL SUBSEQUENT REVISIONS AND SUCH REVISED SPECIFICATIONS AND SPECIAL PROVISIONS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

PROJECT MANAGER :	MIKE FOWLER, P.E.
PROJECT NAME :	HARTFORD - SHARON
PROJECT NUMBER :	1M 089-1(57)
SHEET 10 OF 62 SHEETS	

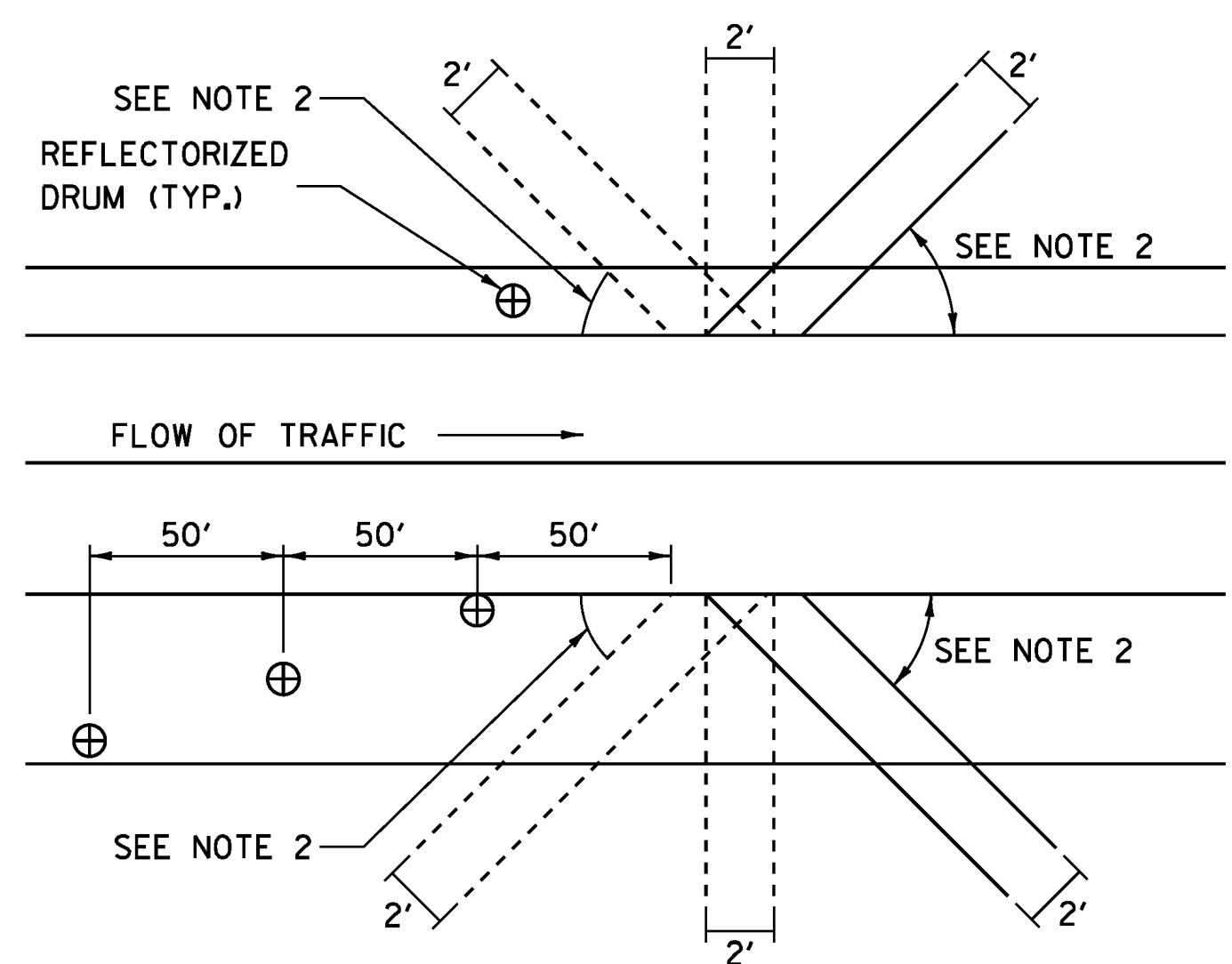


MAINLINE TYPICAL SECTION

MM 0.050 - MM 12.245



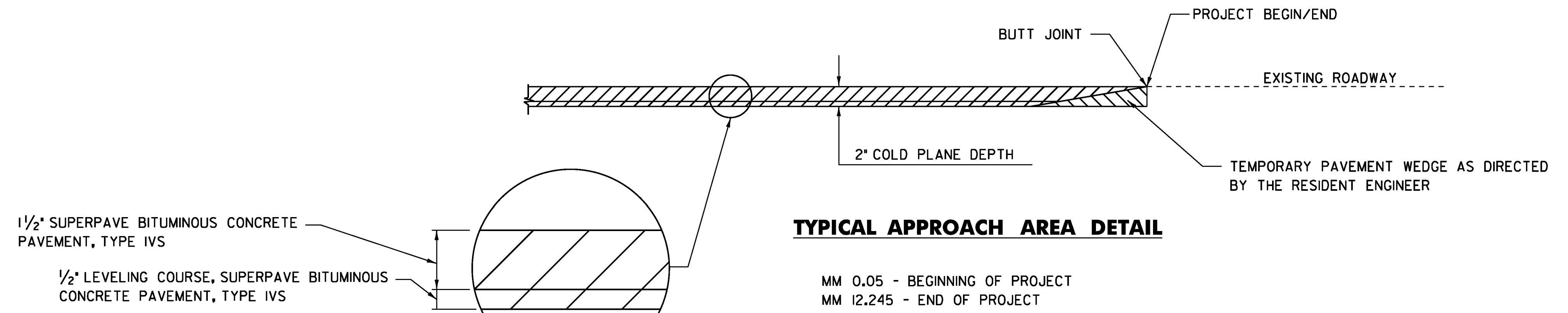
RAMP TYPICAL SECTION



BLEEDER DETAIL

BLEEDER DETAIL NOTES:

1. BLEEDERS ARE TO BE CUT WHILE COLD PLANING, AT LOCATIONS SPECIFIED BY THE RESIDENT ENGINEER.
2. ANGLE BLEEDERS TO BEST ACCEPT WATER FLOW.
3. CUT ALL BLEEDERS TO THE DEPTH OF COLD PLANING AND GRADE TO DRAIN. PAYMENT INCIDENTAL TO ITEM 210.10.
4. BLEEDERS ARE TO BE FILLED DURING PAVING WITH ITEM 490.30, OR AS DESIGNATED BY THE RESIDENT ENGINEER.
5. REFLECTORIZED DRUMS MUST BE PLACED AS SHOWN TO WARN MOTORISTS OF THE GAP IN THE SHOULDER.
6. BLEEDERS ARE NOT REQUIRED IF THE COLD PLANED AREAS ARE PAVED BACK THE SAME DAY.

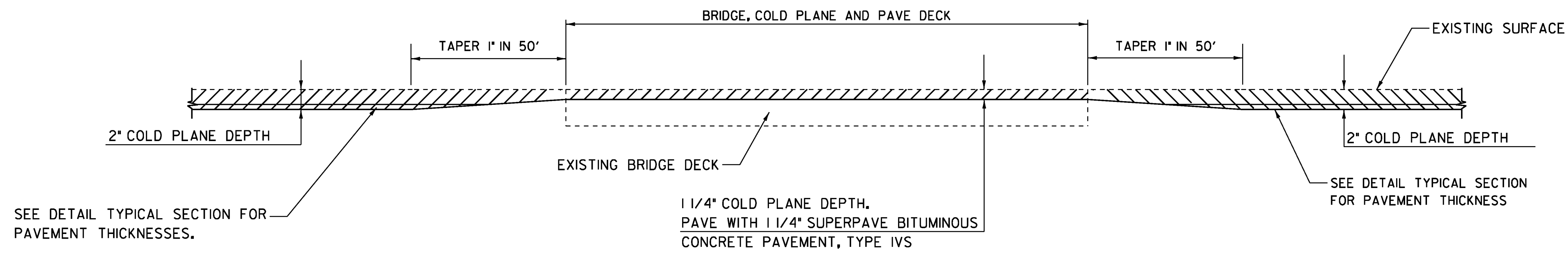


TYPICAL APPROACH AREA DETAIL

MM 0.05 - BEGINNING OF PROJECT
 MM 12.245 - END OF PROJECT
 STA. 115+44 - EXIT 1 RAMP D
 STA. 206+42- EXIT 1 RAMP C
 STA. 308+50 189/191 RAMP C
 STA. 514+85 189/191 RAMP F
 STA. 625+60 189/191 RAMP D

DETAILS ARE NOT TO SCALE

PROJECT TYPICAL SHEET	PROJECT NAME: HARTFORD - SHARON	
	PROJECT NUMBER: IM 089-(157)	
	FILE NAME: 97A184.dgn	PLOT DATE: 8/6/2010
	PROJECT LEADER: CDL	DRAWN BY: JDM
	DESIGNED BY: JDM	CHECKED BY: EPD
	PLOT FILE: 97A184.plt	SHEET 11 OF 62



BRIDGE COLD PLANE DETAIL

<u>BRIDGE #6-S LOCATION</u>	<u>BRIDGE #11-S LOCATION</u>
MM 1.05	MM 6.81

SEE DETAIL TYPICAL SECTION FOR PAVEMENT THICKNESSES.

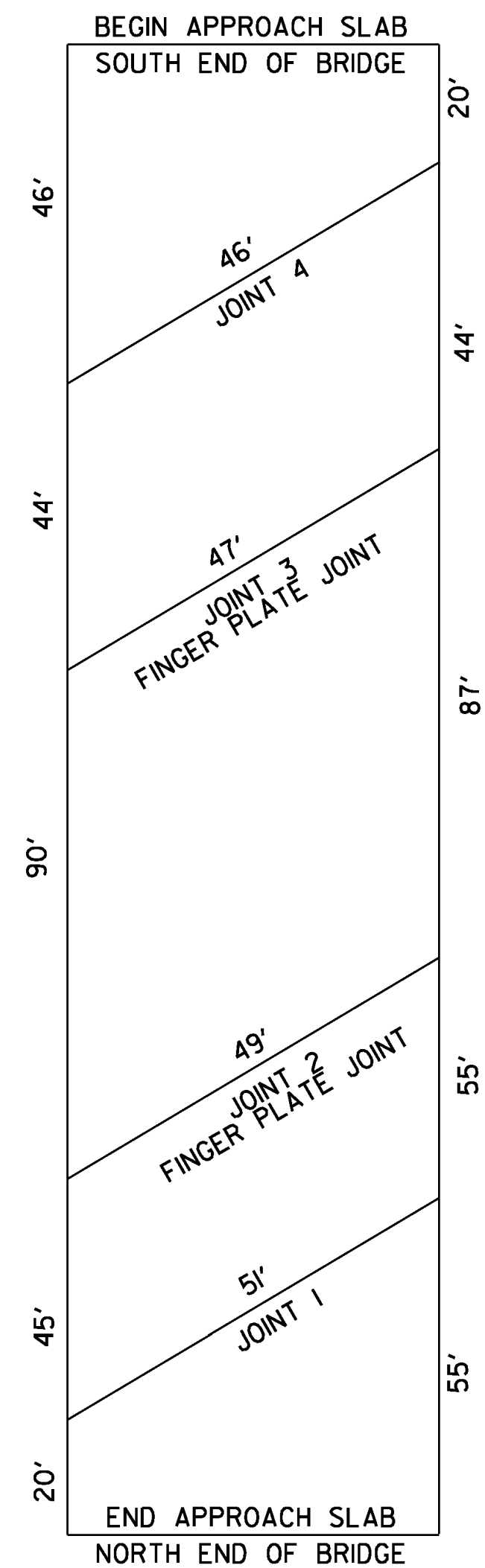
1 1/4" COLD PLANE DEPTH.
PAVE WITH 1 1/4" SUPERPAVE BITUMINOUS CONCRETE PAVEMENT, TYPE IVS

SEE DETAIL TYPICAL SECTION FOR PAVEMENT THICKNESS

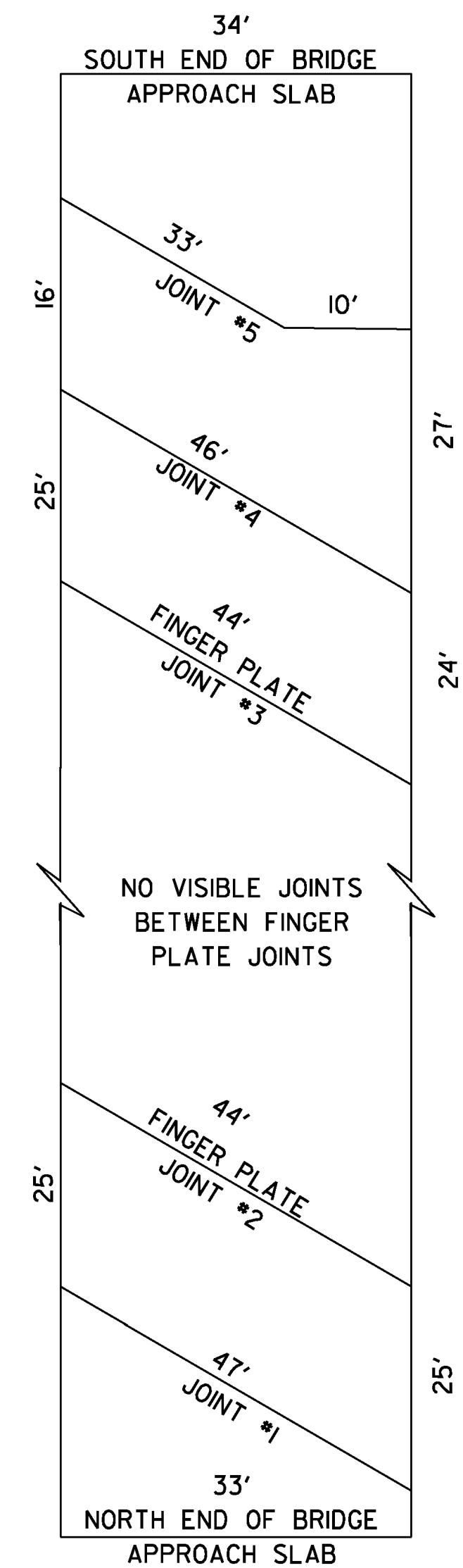
JOINT	LENGTH
1	51' - 0"
4	46' - 0"

BRIDGE #6-S
TOTAL LENGTH OF JOINT

NOTE: JOINTS #2 AND #3 ARE FINGER PLATE JOINTS AND DO NOT REQUIRE ASPHALTIC PLUGS



BRIDGE #6-S
MM 1.05
COLD PLANE AND PAVE



BRIDGE #11-S
NOTE: NO JOINTS WORK REQUIRED.

NOTES:

- REFER TO SHEET 6 FOR ASPHALTIC PLUG JOINT AND DETAILS. ALL NEW JOINTS TO BE PAID FOR UNDER ITEM 516.10, BRIDGE EXPANSION JOINT, ASPHALTIC PLUG.
- THE CONTRACTOR SHALL TAKE PRECAUTIONS TO AVOID THE ACCUMULATION OF DEBRIS IN THE DRAINAGE STRUCTURES LOCATED AT CURB LINE AND IN THE EXPANSION JOINTS. THE CONTRACTOR SHALL EXAMINE THESE BRIDGE FEATURES ON A REGULAR BASIS TO ENSURE THAT DEBRIS HAS NOT ACCUMULATED. ANY DEBRIS WHICH IS PRESENT SHALL BE REMOVED BY THE CONTRACTOR AT NO COST TO THE STATE.
- THE CONTRACTOR SHALL PERFORM COLD PLANING WITH CAUTION AT THESE LOCATIONS. ANY DAMAGE WHICH OCCURS TO BRIDGE DECK MEMBRANES AS A RESULT OF COLD PLANE OPERATIONS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND THE MEMBRANE WILL BE REPAIRED OR REPLACED AT NO COST TO THE STATE.

DETAILS ARE NOT TO SCALE

BRIDGE LOCATION AND DETAIL SHEET

PROJECT NAME: HARTFORD - SHARON
PROJECT NUMBER: IM 089-1(57)

FILE NAME: 97A184.dgn
PROJECT LEADER: CDL
DESIGNED BY: JDM
PLOT FILE: 97A184.J2.1

PLOT DATE: 8/6/2010
DRAWN BY: JDM
CHECKED BY: EPD
SHEET 12 OF 62

QUANTITY SHEET 3

STATE OF VERMONT
AGENCY OF TRANSPORTATION

SUMMARY OF ESTIMATED QUANTITIES								
EROSION CONTROL	FULL E&C	TRAINING	BRIDGE	ROADWAY	QUANTITIES GRAND TOTAL	UNIT	ITEMS	ITEM NO. ROUNDING
				81	81	SF	TRAFFIC SIGNS, TYPE A	675.20 -
				294	294	LF	SQUARE TUBE SIGN POST AND ANCHOR	675.341 -
				16	16	EA	REMOVING SIGNS	675.50 -
				3	3	EA	ERECTING SALVAGED SIGNS	675.60 -
				642	642	EA	REMOVAL OF EXISTING DELINEATOR	676.12 -
				1	1	LU	PRICE ADJUSTMENT, FUEL (N. A. B. I.)	690.50 -
				640	640	EA	SPECIAL PROVISION (DELINEATOR WITH STEEL POST)	900.620 -
				3	3	EA	SPECIAL PROVISION (REPLACE MANUFACTURED TERMINAL SECTION WOOD POST)	900.620 -
				600	600	EA	SPECIAL PROVISION (STEEL BEAM GUARDRAIL DELINEATOR)	900.620 -
				350	350	EA	SPECIAL PROVISION (STEEL BEAM GUARDRAIL OFFSET BLOCK)	900.620 -
				33	33	EA	SPECIAL PROVISION (TIGHTEN MANUFACTURED TERMINAL SECTION ANCHOR CABLE)	900.620 -
				1	1	LS	SPECIAL PROVISION (TEMPORARY ROADWAY WIDENING) (PHASE I)	900.645 -
				1	1	LS	SPECIAL PROVISION (TEMPORARY ROADWAY WIDENING) (PHASE II)	900.645 -

DETAILED SUMMARY OF QUANTITIES		
QUANTITIES	UNIT	ITEMS

DETAILED SUMMARY OF QUANTITIES		
QUANTITIES	UNIT	ITEMS

PROJECT NAME: HARTFORD - SHARON
PROJECT NUMBER: IM 089-1(57)
FILE NAME: 97A184.dgn
PROJECT LEADER: CDL
DESIGNED BY: JDM
PLOT FILE: 97A184_16.i
PLOT DATE: 8/6/2010
DRAWN BY: JDM
CHECKED BY: EPD
SHEET 16 OF 62

**STATE OF VERMONT
AGENCY OF TRANSPORTATION**

ITEM DETAIL SUMMARY SHEET 1

BEGIN MILE MARKER	END MILE MARKER	POS.	203.30	203.40	402.13	604.412	604.415	604.418	613.10	619.17	621.20	621.50	621.76	621.77	621.80	649.31	676.12	900.620					900.620	900.620	REMARKS
			EARTH BORROW	SHOULDER BERM REMOVAL	AGGREGATE SHOULDERS, RAP	REHAB. D.I. CLASS I	REHAB. D.I. CLASS II	REHAB. D.I. CLASS III	STONE FILL, TYPE I	YIELDING MARKER POSTS	STEEL BEAM G.R., GALV.	MANUF. TERMINAL SECTION FLARED	REPLACE G.R. POST	REPLACE G.R. BEAM	REMOVAL AND DISPOSAL OF G.R.	GEOTEXTILE UNDER STONE FILL	REMOVAL OF EXISTING DELINEATOR	TYPE I GUARD RAIL ENDS	TYPE I RAMPS	TYPE II	TYPE III	TYPE I WITH PLAQUE	TYPE I WITHOUT PLAQUE	TIGHTEN TERM. SECT. ANCHOR CABLE	
			CY	FT	TON	EACH	EACH	EACH	CY	EACH	LF	EACH	EA	EA	LF	SY	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	
MM 0.05	MM 12.25				1449	31	4	4		299							476					232	244	ESTIMATED QUANTITIES TO BE USED AS DIRECTED BY THE RESIDENT ENGINEER	
MM 0.05	MM 0.09	MED							43.5						130.6									REMOVE EXISTING BITUMINOUS GUTTER AND INSTALL STONE FILL TYPE I	
MM 0.05	MM 0.10	MED		212									4	4			2	2					1	REPLACE BEAMS AND POSTS AS NECESSARY	
MM 0.11	MM 0.40	MED							283.3						850.0									REMOVE EXISTING BITUMINOUS GUTTER AND INSTALL STONE FILL TYPE I	
MM 0.05	MM 0.19	OUT		636									13	13			2	2					1	REPLACE BEAMS AND POSTS AS NECESSARY	
MM 0.54	MM 0.61	OUT	25	300								1	6	6	37.5		2	2					1	REPLACE BEAMS AND POSTS AS NECESSARY.	
MM 0.45	MM 0.65	MED		872									18	18			2	2					1	REPLACE BEAMS AND POSTS AS NECESSARY	
MM 0.65	MM 0.65	MED							5.6						16.7									REMOVE EXISTING BITUMINOUS GUTTER AND INSTALL STONE FILL TYPE I	
MM 0.73	MM 0.73	MED							5.6						16.7									REMOVE EXISTING BITUMINOUS GUTTER AND INSTALL STONE FILL TYPE I	
MM 0.75	MM 0.79	MED		175									4	4			2	2						REPLACE BEAMS AND POSTS AS NECESSARY	
MM 0.79	MM 0.79	MED							5.6						16.7									REMOVE EXISTING BITUMINOUS GUTTER AND INSTALL STONE FILL TYPE I	
MM 0.75	MM 1.03	OUT		1184									24	24			1	1						REPLACE BEAMS AND POSTS AS NECESSARY USING 8' POSTS	
BRIDGE #6-S	MM 1.03	MM 1.04	MED		57								1	1			1	1						REPLACE BEAMS AND POSTS AS NECESSARY	
MM 1.07	MM 1.27	OUT		864									17	17			2	2					1	REPLACE BEAMS AND POSTS AS NECESSARY	
MM 1.07	MM 1.15	MED		288									6	6			2	2					1	1	REPLACE BEAMS AND POSTS AS NECESSARY
MM 1.42	MM 1.54	OUT		452									9	9			2	2					1	REPLACE BEAMS AND POSTS AS NECESSARY	
MM 1.37	MM 1.96	MED		2392	35								48	48			2	2					1	REPLACE BEAMS AND POSTS AS NECESSARY	
MM 2.59	MM 2.79	OUT		815									16	16			2	2					1	REPLACE BEAMS AND POSTS AS NECESSARY	
MM 2.99	MM 3.04	OUT							46.3						138.9									REMOVE EXISTING BITUMINOUS GUTTER AND INSTALL STONE FILL TYPE I	
MM 3.04	MM 3.16	OUT		523									11	11			2	2					1	REPLACE BEAMS AND POSTS AS NECESSARY	
MM 3.27	MM 3.53	OUT		1125									23	23			2	2					1	REPLACE BEAMS AND POSTS AS NECESSARY	
MM 3.94	MM 3.98	OUT	25	140						227	1	3	3	125			2	2						REPLACE TRAILING END SECTION, BEAMS AND POSTS AS NECESSARY. REMOVE EXISTING BURIED END SECTION, REPLACE WITH MTS.	
MM 3.93	MM 4.04	MED		464									9	9			2	2					1	REPLACE BEAMS AND POSTS AS NECESSARY	
MM 4.17	MM 4.42	OUT		1032									21	21			2	2					1	1	REPLACE BEAMS AND POSTS AS NECESSARY
SUBTOTAL			50	11531	1484	31	4	4	389.9	299	227	2	233	233	162.5	1169.6	508	32	-	-	-	232	244	13	2

ITEM DETAIL SUMMARY SHEET 1	PROJECT NAME: HARTFORD - SHARON
	PROJECT NUMBER: IM 089-(157)
	FILE NAME: 97A184.dgn
	PLOT DATE: 8/6/2010
PROJECT LEADER: CDL	DRAWN BY: JDM
DESIGNED BY: JDM	CHECKED BY: EPD
PLOT FILE: 97A184.I7.1	SHEET 17 OF 62

STATE OF VERMONT
AGENCY OF TRANSPORTATION

ITEM DETAIL SUMMARY SHEET 2

BEGIN STATION	END STATION	POS.	203.30	203.40	402.13	604.412	604.415	604.418	613.10	619.17	621.20	621.50	621.76	621.77	621.80	649.31	676.12	900.620					900.620	900.620	REMARKS	
			EARTH BORROW	SHOULDER BERM REMOVAL	AGGREGATE SHOULDERS, RAP	REHAB. D.L. CLASS I	REHAB. D.L. CLASS II	REHAB. D.L. CLASS III	STONE FILL, TYPE I	YIELDING MARKER POSTS	STEEL BEAM G.R., GALV.	MANUF. TERMINAL SECTION FLARED	REPLACE G.R. POST	REPLACE G.R. BEAM	REMOVAL AND DISPOSAL OF G.R.	GEOTEXTILE UNDER STONE FILL	REMOVAL OF EXISTING DELINEATOR	TYPE I GUARD RAIL ENDS	TYPE I RAMPS	TYPE II	TYPE III	TYPE I WITH PLAQUE	TYPE I WITHOUT PLAQUE	TIGHTEN TERM. SECT. ANCHOR CABLE		REPLACE TERMINAL SECT. WOOD POST
			CY	FT	TON	EACH	EACH	EACH	CY	EACH	LF	EACH	EA	EA	LF	SY	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH		
MM 4.76	MM 4.94	OUT		748									15	15			2	2						1	REPLACE POSTS AND BEAMS AS NECESSARY	
MM 5.19	MM 5.40	OUT		256									19	19			2	2						1	REPLACE POSTS AND BEAMS AS NECESSARY	
MM 5.71	MM 5.86	OUT		632									13	13			2	2						1	REPLACE BEAMS AND POSTS AS NECESSARY	
MM 5.95	MM 6.05	OUT		267									9	9			2	2					1	1	REPLACE BEAMS AND POSTS AS NECESSARY	
MM 6.20	MM 6.38	OUT		463									15	15			2	2						1	REPLACE POSTS AND BEAMS AS NECESSARY	
MM 5.03	MM 6.49	MED		6144	173								123	123			2	2						1	REPLACE BEAMS AND POSTS AS NECESSARY.	
MM 6.54	MM 6.57	MED	25	143							425	1			180		2	2							ESTIMATED QUANTITY TO REPAIR ERODED AREA	
MM 6.60	MM 6.72	OUT		442									10	10			2	2						1	REMOVE EXISTING G.R. INSTALL NEW G.R. AT PAVEMENT EDGE. TERMINAL OF NEW MTS SHOULD BE 412.5 FT NORTH OF BRIDGE PIER.	
MM 6.60	MM 6.72	OUT		442									10	10			2	2						1	REPLACE BEAMS AND POSTS AS NECESSARY	
MM 6.70	MM 6.73	MED		119									3	3			1	1							REPLACE BEAMS AND POSTS AS NECESSARY	
BRIDGE #11-S																										
MM 6.92	MM 7.00	MED		344									7	7			1	1						1	REPLACE BEAMS AND POSTS AS NECESSARY	
MM 6.93	MM 7.01	OUT		358									7	7			2	2						1	REPLACE BEAMS AND POSTS AS NECESSARY	
MM 7.13	MM 7.64	OUT		2232									45	45			2	2						1	REPLACE BEAMS AND POSTS AS NECESSARY	
MM 7.70	MM 8.10	MED		898	14						887.5		5	5	662.5		2	1						1	PARTIAL REMOVAL OF G.R. RUN FOR DETOUR	
MM 8.10	MM 8.24	MED		588									12	12			2	1							EXTEND G.R. NORTH TO NEXT G.R. RUN	
MM 8.10	MM 8.24	MED		588									12	12			2	1							REPLACE BEAMS AND POSTS AS NECESSARY	
MM 7.69	MM 8.57	OUT		3238	17						1075		17	17	1075		2	2						1	PARTIAL REMOVAL OF G.R. RUN FOR DETOUR	
MM 8.58	MM 8.79	OUT		924									19	19			2	2						1	REPLACE BEAMS AND POSTS AS NECESSARY	
MM 8.98	MM 9.39	OUT		1748									35	35			2	2						1	REPLACE BEAMS AND POSTS AS NECESSARY	
MM 9.46	MM 9.62	OUT		620									13	13			2	2						1	REPLACE BEAMS AND POSTS AS NECESSARY	
MM 9.46	MM 9.63	MED		670									13	13			2	2						1	REPLACE BEAMS AND POSTS AS NECESSARY	
MM 9.77	MM 9.89	OUT		488									10	10			2	2						1	REPLACE BEAMS AND POSTS AS NECESSARY	
MM 9.80	MM 9.91	MED		432					5				9	9			2	2						1	REPLACE BEAMS AND POSTS AS NECESSARY.	
MM 10.10	MM 11.10	OUT		4308					5				87	87			2	2						1	ESTIMATED QUANTITY TO REPAIR ERODED AREA AT MM. 9.83	
MM 10.10	MM 11.10	OUT		4308					5				87	87			2	2						1	REPLACE BEAMS AND POSTS AS NECESSARY.	
MM 11.12	MM 12.07	OUT		3880					15		2		78	78	2		2	2						1	ESTIMATED QUANTITY TO REPAIR ERODED AREA AT MM. 10.70	
MM 11.12	MM 12.07	OUT		3880					15		2		78	78	2		2	2						1	REPLACE TRAILING TERMINAL, BEAMS AND POSTS AS NECESSARY.	
MM 11.12	MM 12.07	OUT		3880					15		2		78	78	2		2	2						1	ESTIMATED QUANTITY TO REPAIR ERODED AREA AT MM. 11.70, MM. 11.75, MM. 11.85	
SUBTOTAL			25	29942	204	-	-	-	25	-	2389.5	1	564	564	1919.5	-	44	42	-	-	-	-	-	20	1	

ITEM DETAIL SUMMARY SHEET 2	PROJECT NAME: HARTFORD - SHARON
	PROJECT NUMBER: IM 089-(157)
	FILE NAME: 97A184.dgn
	PLOT DATE: 8/6/2010
PROJECT LEADER: CDL	DRAWN BY: JDM
DESIGNED BY: JDM	CHECKED BY: EPD
PLOT FILE: 97A184_18.1	SHEET 18 OF 62

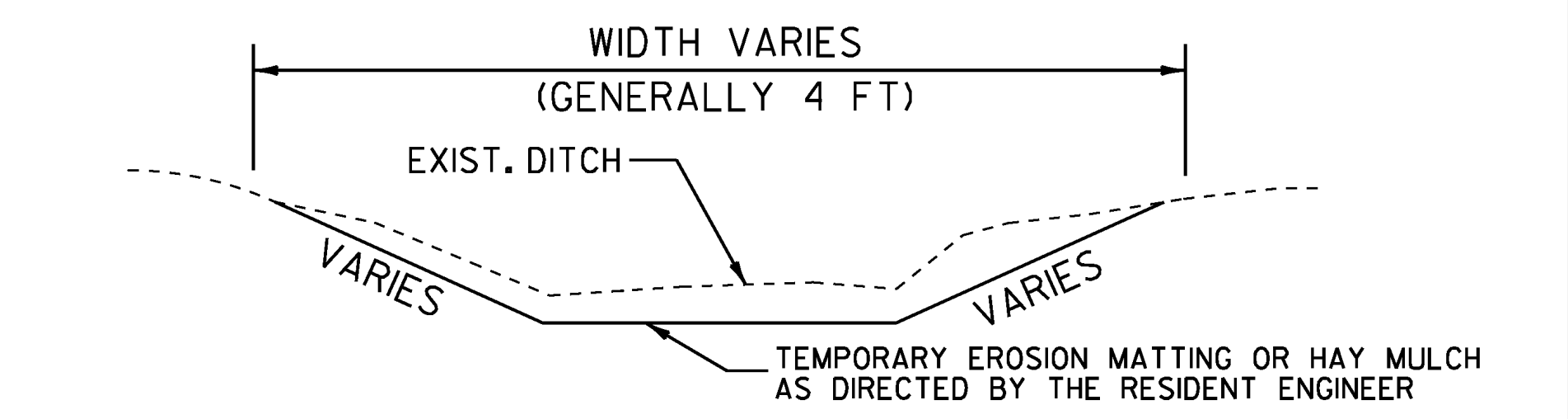
STATE OF VERMONT
AGENCY OF TRANSPORTATION

ITEM DETAIL SUMMARY SHEET 3

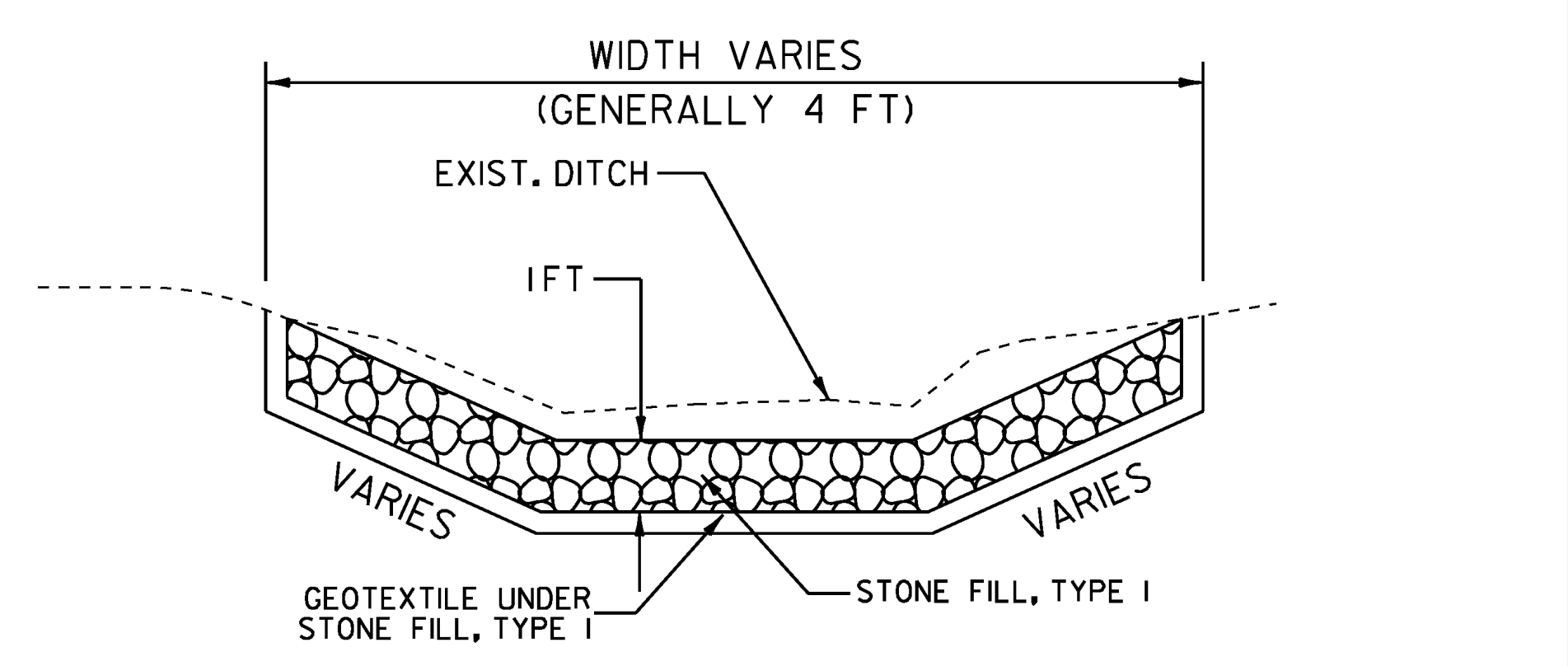
BEGIN STATION	END STATION	POS.	203.30	203.40	402.13	604.412	604.415	604.418	613.10	619.17	621.20	621.50	621.76	621.77	621.80	649.31	676.12	900.620					900.620	900.620	REMARKS
			EARTH BORROW	SHOULDER BERM REMOVAL	AGGREGATE SHOULDERS, RAP	REHAB. D.I. CLASS I	REHAB. D.I. CLASS II	REHAB. D.I. CLASS III	STONE FILL, TYPE I	YIELDING MARKER POSTS	STEEL BEAM G.R., GALV.	MANUF. TERMINAL SECTION FLARED	REPLACE G.R. POST	REPLACE G.R. BEAM	REMOVAL AND DISPOSAL OF G.R.	GEOTEXTILE UNDER STONE FILL	REMOVAL OF EXISTING DELINEATOR	TYPE I GUARD RAIL ENDS	TYPE I RAMPS	TYPE II	TYPE III	TYPE I WITH PLAQUE	TYPE I WITHOUT PLAQUE	TIGHTEN TERM. SECT. ANCHOR CABLE	
			CY	FT	TON	EACH	EACH	EACH	CY	EACH	LF	EACH	EA	EA	LF	SY	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	
WEIGH STATION	OFF RAMP																8			8					
WEIGH STATION	ON RAMP																8			8					
INTERCHANGE	RAMP C								5								28		20	8					
INTERCHANGE	RAMP D								5								21		12	5	4				
89/91 INTERCHANGE	RAMP C																9			9					
89/91 INTERCHANGE	RAMP D																8			8					
89/91 INTERCHANGE	RAMP F																8			8					
SUBTOTAL THIS SHEET			-	-	-	-	-	-	10	-	-	-	-	-	-	-	90	-	32	54	4	-	-	-	
SUBTOTAL ITEM DETAIL SHEET 1			50	11531	1484	31	4	4	389.9	299	227	2	233	233	162.5	1169.6	508	32	-	-	-	232	244	13	2
SUBTOTAL ITEM DETAIL SHEET 2			25	29942	204	-	-	-	25	-	2389.5	1	564	564	1919.5	-	44	42	-	-	-	-	-	20	1
ROUNDING				27	12	-	-	-	10.1	11	8.5	-	-	-	18.0	0.4	-	-	-	-	-	-	-	-	-
GRAND TOTAL			75	41500	1700	31	4	4	425	320	2625	3	797	797	2100	1170	642	74	32	54	4	232	244	33	3

ITEM DETAIL SUMMARY SHEET 3	PROJECT NAME: HARTFORD - SHARON
	PROJECT NUMBER: IM 089-(157)
	FILE NAME: 97A184.dgn
	PLOT DATE: 8/6/2010
	PROJECT LEADER: CDL
	DRAWN BY: JDM
	DESIGNED BY: JDM
	CHECKED BY: EPD
	PLOT FILE: 97A184_19.1
	SHEET 19 OF 62

LOCATION				FEET OF DITCHING			MISC. ITEMS			REMARKS	LOCATION				FEET OF DITCHING			MISC. ITEMS			REMARKS		
SITE	MILE MARKER	MILE MARKER	POS.	PERCENT GRADE			653.20 TEMP. EROS. MATT.	613.10 STONE FILL TYP. I	649.31 GEOT. UNDER STONE FILL		SITE	STATION	STATION	POS.	PERCENT GRADE			653.20 TEMP. EROS. MATT.	613.10 STONE FILL TYP. I	649.31 GEOT. UNDER STONE FILL			
				0-1	1-2.5	2.5-10									0-1	1-2.5	2.5-10						
HARTFORD - SHARON I-89							SY	CY	SY								SY	CY	SY				
1	0.05	0.09	LT	235				43.5	130.6	REMOVE EXISTING BITUMINOUS GUTTER AND INSTALL STONE FILL TYPE I													
2	0.11	0.40	LT	1530				283.3	850	REMOVE EXISTING BITUMINOUS GUTTER AND INSTALL STONE FILL TYPE I													
3	0.65	0.65	LT	30				5.6	16.7	REMOVE EXISTING BITUMINOUS GUTTER AND INSTALL STONE FILL TYPE I													
4	0.73	0.73	LT	30				5.6	16.7	REMOVE EXISTING BITUMINOUS GUTTER AND INSTALL STONE FILL TYPE I													
5	0.79	0.79	LT	30				5.6	16.7	REMOVE EXISTING BITUMINOUS GUTTER AND INSTALL STONE FILL TYPE I													
6	2.99	3.04	RT	250				46.3	138.9	REMOVE EXISTING BITUMINOUS GUTTER AND INSTALL STONE FILL TYPE I													
7	0.05	12.25	LT/RT	1000			444.4			ESTIMATED QUANTITY FOR USE AS DIRECTED BY RESIDENT													
SUB-TOTAL				3105			444.4	389.9	1169.6														
C. R. END SECTIONS							25																
MISC. DISTURBED AREAS							75																
ROAD RECONSTRUCTION							835.1																
ROUNDING							20.5	-	0.4														
TOTAL				3105			1400	389.9	1170														



**DITCH DETAIL < 2.5 PERCENT
NOT TO SCALE**



**DITCH DETAIL > 2.5 PERCENT
NOT TO SCALE**

NOTES:

- PIPE INLET AND OUTLET AREAS AND DITCH CLEANING THROUGHOUT THE PROJECT SHALL BE PERFORMED AT LOCATIONS IDENTIFIED ON THIS SHEET AND AS DIRECTED BY THE RESIDENT ENGINEER. PAYMENT WILL BE UNDER THE APPLICABLE EQUIPMENT RENTAL ITEM(S).
- ESTIMATED QUANTITIES OF TEMPORARY EROSION MATTING AND SEED HAVE BEEN INCLUDED AS NEEDED OR AS DIRECTED BY THE RESIDENT ENGINEER.
- ESTIMATED QUANTITIES OF STONE FILL TYPE I AND GEOTEXTILE UNDER STONE FILL HAVE BEEN INCLUDED AS NEEDED. STONE FILL TYPE I SHALL BE USED IN ALL DITCHES WITH A GRADE 2.5 PERCENT OR GREATER OR AS DIRECTED BY THE RESIDENT ENGINEER.

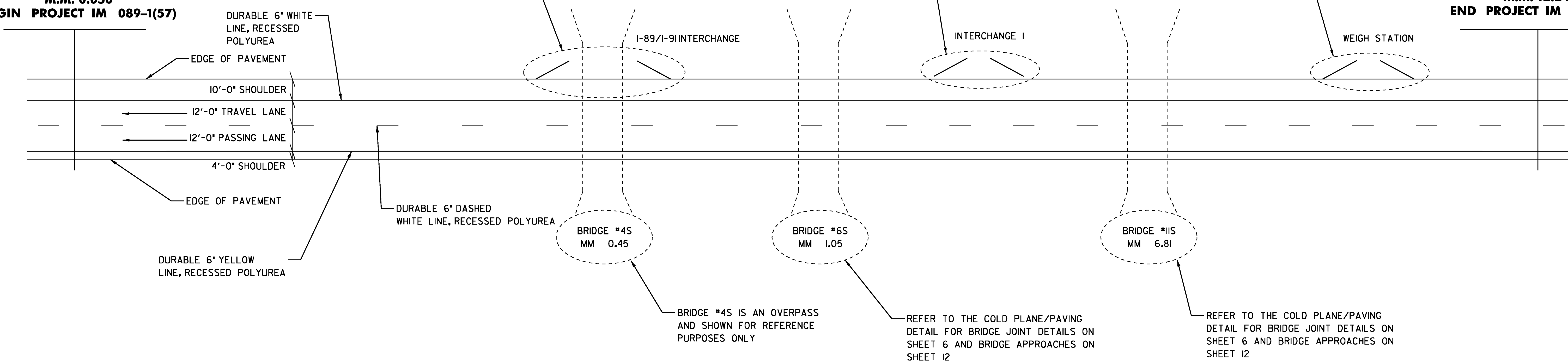
*SEE ITEM DETAIL SHEET FOR TOTAL QUANTITY OF ITEM 613.10 STONE FILL

**DITCH
CLEANING
DETAIL
SHEET**

PROJECT NAME: HARTFORD - SHARON
PROJECT NUMBER: IM 089-1(57)
FILE NAME: 97A184.dgn
PROJECT LEADER: CDL
DESIGNED BY: JDM
PLOT FILE: 97A184.20.1
PLOT DATE: 8/6/2010
DRAWN BY: JDM
CHECKED BY: EPD
SHEET 20 OF 62

**INTERSTATE ROUTE 89
SOUTHBOUND
M.M. 0.050
BEGIN PROJECT IM 089-1(57)**

**INTERSTATE ROUTE 89
SOUTHBOUND
M.M. 12.245
END PROJECT IM 089-1(57)**



604.412, 604.415, 604.418 REHABILITATION OF D.I. CB OR MH, CLASS I, CLASS II, AND CLASS III

MM 2.60	IN PAVEMENT	MM 8.59	IN PAVEMENT
MM 2.69	IN PAVEMENT	MM 8.63	IN PAVEMENT
MM 3.38	IN PAVEMENT	MM 9.47	IN PAVEMENT
MM 4.23	IN PAVEMENT	MM 9.52	IN PAVEMENT
MM 4.33	IN PAVEMENT	MM 10.67	IN PAVEMENT
MM 4.77	IN PAVEMENT	MM 10.72	IN PAVEMENT
MM 5.20	IN PAVEMENT	MM 10.79	IN PAVEMENT
MM 5.30	IN PAVEMENT	MM 10.84	IN PAVEMENT
MM 5.35	IN PAVEMENT	MM 10.88	IN PAVEMENT
MM 5.79	IN PAVEMENT	MM 10.97	IN PAVEMENT
MM 5.96	IN PAVEMENT	MM 11.02	IN PAVEMENT
MM 6.21	IN PAVEMENT	MM 11.08	IN PAVEMENT
MM 7.35	IN PAVEMENT	MM 11.61	IN PAVEMENT
MM 7.41	IN PAVEMENT	MM 11.67	IN PAVEMENT
MM 7.44	IN PAVEMENT	MM 11.72	IN PAVEMENT
MM 7.53	IN PAVEMENT	MM 11.76	IN PAVEMENT
MM 7.70	IN PAVEMENT	MM 11.81	IN PAVEMENT
MM 7.82	IN PAVEMENT	MM 11.86	IN PAVEMENT
MM 8.00	IN PAVEMENT	MM 11.92	IN PAVEMENT
MM 8.19	IN PAVEMENT		

646.426 DURABLE 6" WHITE LINE, RECESSED POLYUREA

MM 0.05	LT - MM 0.473	LT (SOLID)
MM 0.05	CTR - MM 12.245	CTR (DASHED)
MM 0.617	LT - MM 0.730	LT (SOLID)
MM 0.886	LT - MM 3.434	LT (SOLID)
MM 3.596	LT - MM 3.816	LT (SOLID)
MM 3.885	LT - MM 8.616	LT (SOLID)
MM 8.790	LT - MM 8.998	LT (SOLID)
MM 9.107	LT - MM 12.245	LT (SOLID)

646.622 TEMPORARY 6" WHITE LINE, PAINT

MM 0.05	LT - MM 0.473	LT (SOLID)
MM 0.05	CTR - MM 12.245	CTR (DASHED)
MM 0.617	LT - MM 0.730	LT (SOLID)
MM 0.886	LT - MM 3.434	LT (SOLID)
MM 3.596	LT - MM 3.816	LT (SOLID)
MM 3.885	LT - MM 8.616	LT (SOLID)
MM 8.790	LT - MM 8.998	LT (SOLID)
MM 9.107	LT - MM 12.245	LT (SOLID)

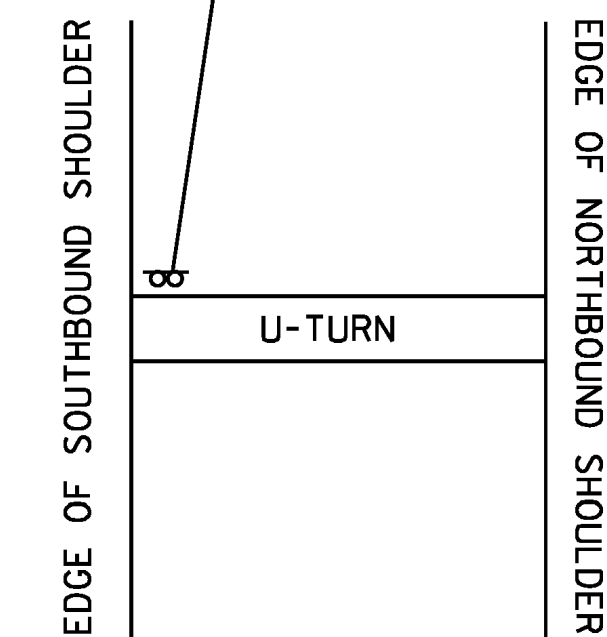
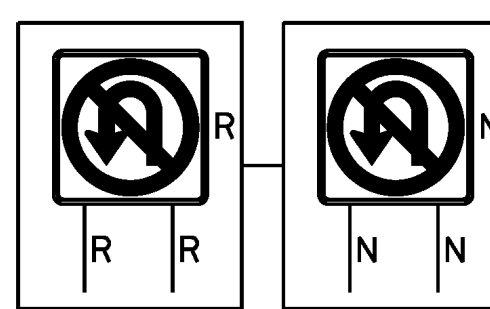
646.436 DURABLE 6" YELLOW LINE, RECESSED POLYUREA

MM 0.05	RT - MM 12.245	RT (SOLID)
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646.632 TEMPORARY 6" YELLOW LINE, PAINT

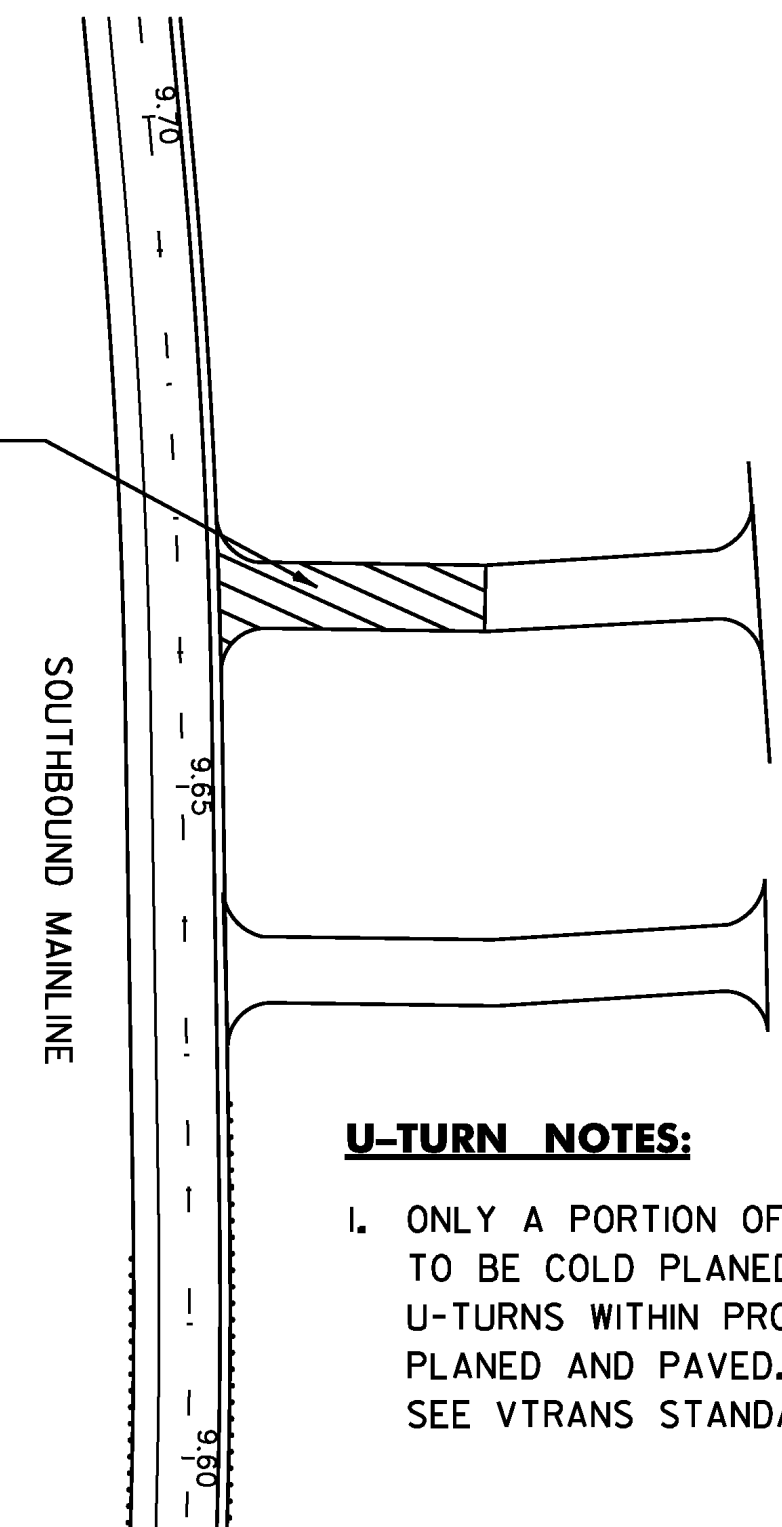
MM 0.05	RT - MM 12.245	RT (SOLID)
---------	----------------	------------

REPLACE U-TURN SIGNS AT THE LOCATIONS INDICATED BELOW



MM	0.11
MM	0.85
MM	1.18
MM	3.23
MM	4.23
MM	6.64
MM	9.65
MM	9.67

COLD PLANE AND PAVE TO EXISTING JOINT



U-TURN NOTES:

- 1. ONLY A PORTION OF THE U-TURN AT MM 9.67 IS TO BE COLD PLANED AND PAVED. NO OTHER U-TURNS WITHIN PROJECT LIMITS ARE TO COLD PLANED AND PAVED. SEE DETAIL ON THIS SHEET. SEE VTRANS STANDARD B-17 FOR U-TURN DETAILS.

U-TURN COLD PLANING AND PAVING DETAIL

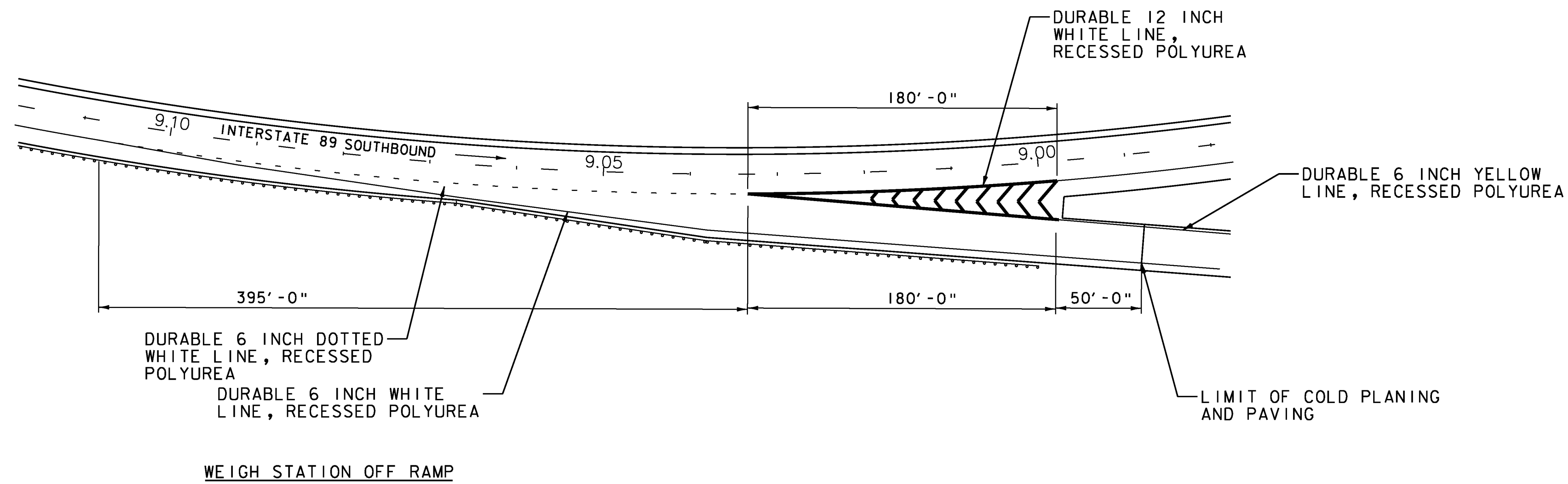
NOT TO SCALE

PAVING PROJECT LAYOUT SHEET

PROJECT NAME: HARTFORD - SHARON
PROJECT NUMBER: IM 089-1(57)

FILE NAME: 97A184.dgn
PROJECT LEADER: CDL
DESIGNED BY: JDM
PLOT FILE: 97A184.21.1

PLOT DATE: 8/6/2010
DRAWN BY: JDM
CHECKED BY: EPD
SHEET 21 OF 62



646.426 DURABLE 6 INCH WHITE LINE, RECESSED POLYUREA
 MAINLINE DOTTED MM 9.107 - MM 9.033 LT
 MAINLINE SOLID MM 9.107 - MM 8.988 LT
 MAINLINE SOLID MM 8.790 - MM 8.616 LT
 MAINLINE DOTTED MM 8.755 - MM 8.616 LT

646.436 DURABLE 6 INCH YELLOW LINE, RECESSED POLYUREA
 RAMP, SOLID, MAINLINE MM 8.998 - MM 8.988 LT

646.466 DURABLE 12 INCH WHITE LINE, RECESSED POLYUREA
 MAINLINE (GORE RT) MM 9.033 - MM 8.998
 MAINLINE (GORE LT) MM 9.033 - MM 8.998
 MAINLINE GORE MARKINGS MM 9.033 - MM 8.998
 MAINLINE (GORE RT) MM 8.790 - MM 8.755
 MAINLINE (GORE LT) MM 8.790 - MM 8.768

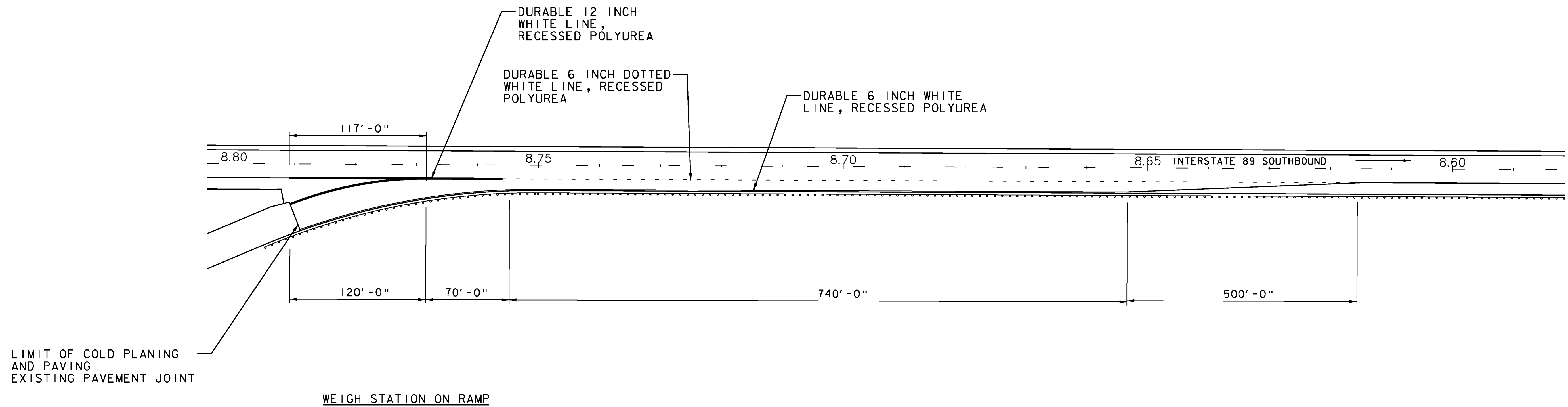
646.622 TEMPORARY 6 INCH WHITE LINE, PAINT

MAINLINE DOTTED MM 9.107 - MM 9.033 LT
 MAINLINE SOLID MM 9.107 - MM 8.988 LT
 MAINLINE SOLID MM 8.790 - MM 8.616 LT
 MAINLINE DOTTED MM 8.755 - MM 8.616 LT

646.632 TEMPORARY 6 INCH YELLOW LINE, PAINT
 RAMP, SOLID, MAINLINE MM 8.998 - MM 8.988

646.662 TEMPORARY 12 INCH WHITE LINE, PAINT

MAINLINE (GORE RT) MM 9.033 - MM 8.998
 MAINLINE (GORE LT) MM 9.033 - MM 8.998
 MAINLINE GORE MARKINGS MM 9.033 - MM 8.998
 MAINLINE (GORE RT) MM 8.790 - MM 8.755
 MAINLINE (GORE LT) MM 8.790 - MM 8.768



NOTE:
 1. ALL SIGNS ARE TO BE RETAINED
 UNLESS OTHERWISE INDICATED

**SHARON
 WEIGH STATION
 RAMP DETAIL
 SHEET**

PROJECT NAME: HARTFORD - SHARON
 PROJECT NUMBER: IM 089-1(57)

FILE NAME: 97A184.dgn
 PROJECT LEADER: CDL
 DESIGNED BY: JDM
 PLOT FILE: 97A184.22.t
 PLOT DATE: 8/6/2010
 DRAWN BY: JDM
 CHECKED BY: EPD
 SHEET 22 OF 62

NOT TO SCALE

RAMP RADII INFORMATION

RAMP	RADII, FT	DESCRIPTION
D	675	STA. 102+31 TO STA. 112+22
	900	STA. 112+84 TO STA. 114+84
	1200	STA. 115+13 TO STA. 119+86

RAMP RADII INFORMATION

RAMP	RADII, FT	DESCRIPTION
C	1200	STA. 202+15 TO STA. 208+55
	625	STA. 210+72 TO STA. 217+43

646.426 DURABLE 6 INCH WHITE LINE, RECESSED POLYUREA

MAINLINE DOTTED MM 3.885 - MM 3.839 LT
 MAINLINE SOLID MM 3.885 - MM 3.839 LT
 RAMP D STA. 102+40.00 - STA. 108+50.00 RT
 RAMP C STA. 216+50 - STA 222+50 RT
 RAMP C STA. 222+50 - STA. 222+92 RT
 RAMP C STA. 222+50 - STA. 222+92 LT
 MAINLINE SOLID MM 3.552 - MM 3.434 LT
 MAINLINE DOTTED MM 3.552 - MM 3.434 LT

646.436 DURABLE 6 INCH YELLOW LINE, RECESSED POLYUREA

RAMP D STA. 103+60.00 - STA. 108+50.00 LT
 RAMP C STA. 216+50 - STA. 220+75 LT

646.466 DURABLE 12 INCH WHITE LINE, RECESSED POLYUREA

MAINLINE MM 3.839 - MM 3.816 LT
 MAINLINE GORE MARKINGS MM 3.839 - MM 3.816 LT
 RAMP D STA. 102+40.00 - STA. 103+60.00 LT
 MAINLINE MM 3.596 - MM 3.552 LT
 RAMP C STA. 220+75 - STA. 222+50 LT

646.622 TEMPORARY 6 INCH WHITE LINE, PAINT

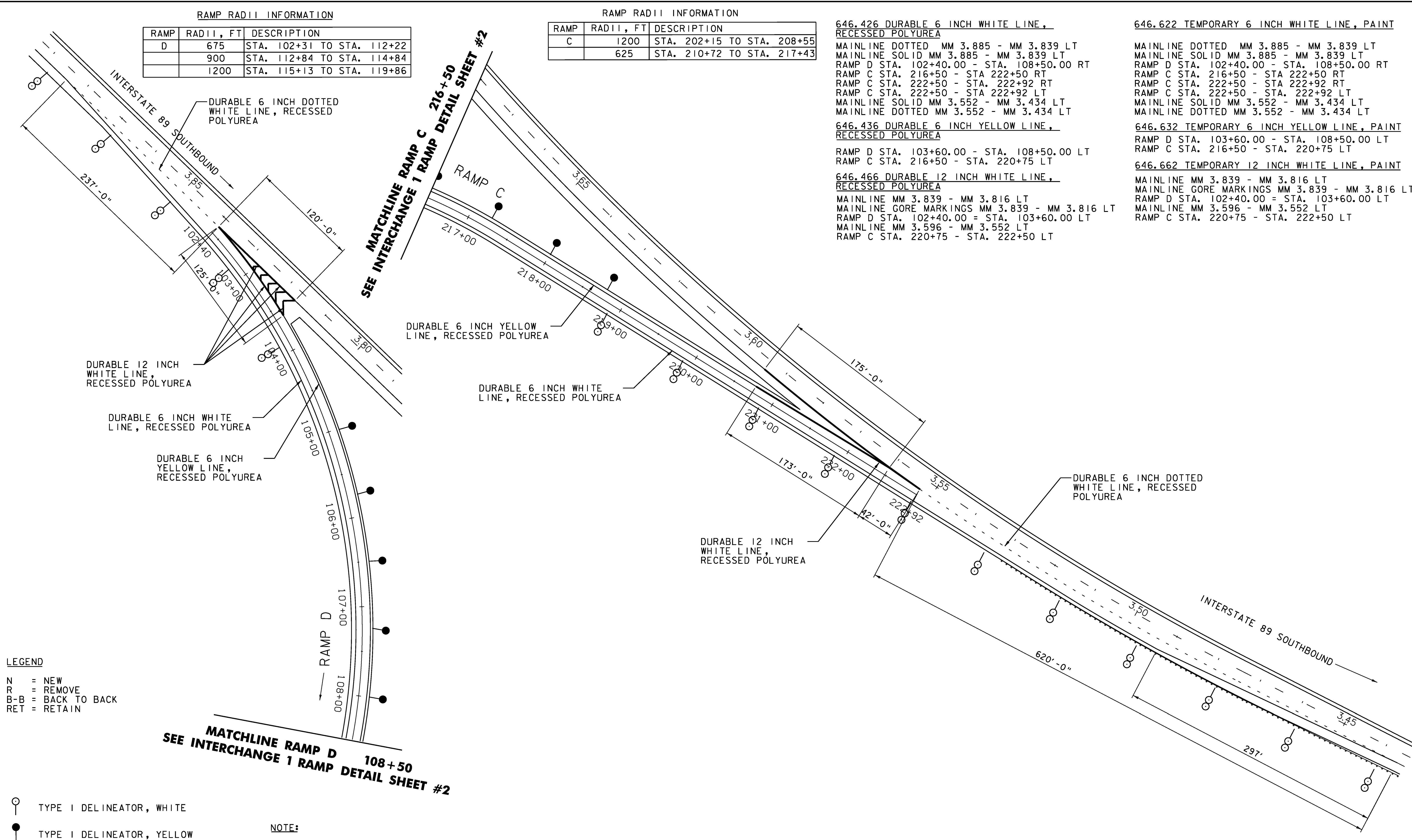
MAINLINE DOTTED MM 3.885 - MM 3.839 LT
 MAINLINE SOLID MM 3.885 - MM 3.839 LT
 RAMP D STA. 102+40.00 - STA. 108+50.00 RT
 RAMP C STA. 216+50 - STA 222+50 RT
 RAMP C STA. 222+50 - STA. 222+92 RT
 RAMP C STA. 222+50 - STA. 222+92 LT
 MAINLINE SOLID MM 3.552 - MM 3.434 LT
 MAINLINE DOTTED MM 3.552 - MM 3.434 LT

646.632 TEMPORARY 6 INCH YELLOW LINE, PAINT

RAMP D STA. 103+60.00 - STA. 108+50.00 LT
 RAMP C STA. 216+50 - STA. 220+75 LT

646.662 TEMPORARY 12 INCH WHITE LINE, PAINT

MAINLINE MM 3.839 - MM 3.816 LT
 MAINLINE GORE MARKINGS MM 3.839 - MM 3.816 LT
 RAMP D STA. 102+40.00 - STA. 103+60.00 LT
 MAINLINE MM 3.596 - MM 3.552 LT
 RAMP C STA. 220+75 - STA. 222+50 LT



- LEGEND**
- N = NEW
 - R = REMOVE
 - B-B = BACK TO BACK
 - RET = RETAIN

- TYPE I DELINEATOR, WHITE
- TYPE I DELINEATOR, YELLOW
- TYPE II DELINEATOR, WHITE
- TYPE III DELINEATOR, WHITE FRONT / RED BACK
- TYPE III DELINEATOR, YELLOW FRONT / RED BACK

NOTE:
 1. ALL SIGNS ARE TO BE RETAINED UNLESS OTHERWISE INDICATED

NOT TO SCALE

INTERCHANGE 1 RAMP DETAIL SHEET #1	PROJECT NAME: HARTFORD - SHARON
	PROJECT NUMBER: IM 089-(157)
	FILE NAME: 97A184.dgn
	PLOT DATE: 8/6/2010
PROJECT LEADER: CDL	DRAWN BY: JDM
DESIGNED BY: JDM	CHECKED BY: EPD
PLOT FILE: 97A184.23.1	SHEET 23 OF 62

RAMP RADIUS INFORMATION

RAMP	RADIUS, FT	DESCRIPTION
C	1200	STA. 202+15 TO STA. 208+55
	625	STA. 210+72 TO STA. 217+43

RAMP RADIUS INFORMATION

RAMP	RADIUS, FT	DESCRIPTION
D	675	STA. 102+31 TO STA. 112+22
	900	STA. 112+84 TO STA. 114+84
	1200	STA. 115+13 TO STA. 119+86

646.426 DURABLE 6 INCH WHITE LINE, RECESSED POLYUREA

RAMP D
STA. 108+50 TO STA. 115+44 (SOLID RT)
RAMP C
STA. 206+42 TO STA. 216+50 (SOLID RT)

646.436 DURABLE 6 INCH YELLOW LINE, RECESSED POLYUREA

RAMP D
STA. 108+50 TO STA. 115+44 (SOLID LT)
RAMP C
STA. 206+42 TO STA. 216+50 (SOLID LT)

646.622 TEMPORARY 6 INCH WHITE LINE, PAINT

RAMP D
STA. 108+50 TO STA. 115+44 (SOLID RT)
RAMP C
STA. 206+42 TO STA. 216+50 (SOLID RT)

646.632 TEMPORARY 6 INCH YELLOW LINE, PAINT

RAMP D
STA. 108+50 TO STA. 115+44 (SOLID LT)
RAMP C
STA. 206+42 TO STA. 216+50 (SOLID LT)

675.50 REMOVING SIGNS

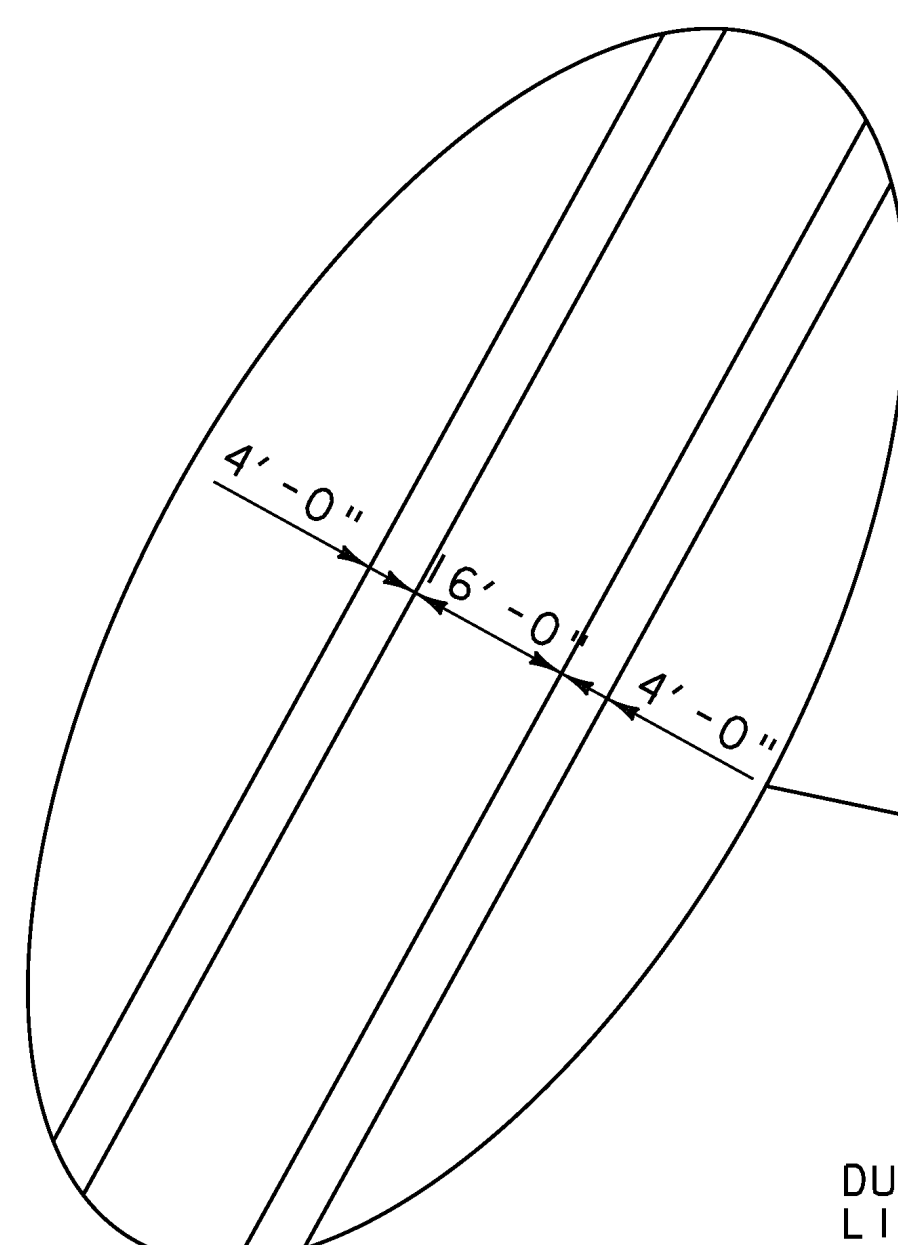
AS SHOWN - 1

646.492 DURABLE LETTER OR SYMBOL, THERMOPLASTIC

RAMP D STA. 112+75 WRONG WAY ARROW (1)
RAMP D STA. 113+93 "STOP" (4)
RAMP D STA. 114+25 "AHEAD" (5)

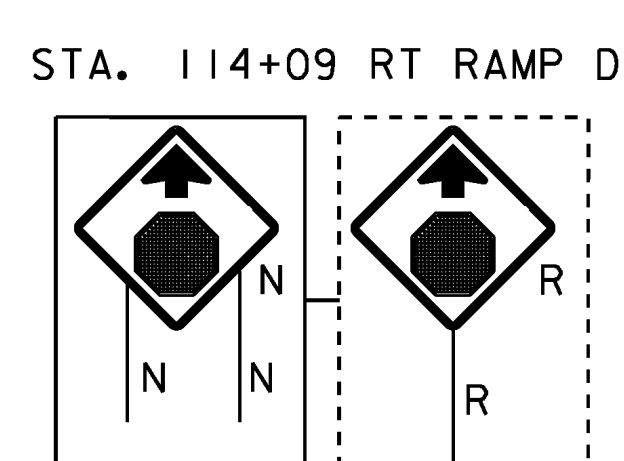
646.692 TEMPORARY LETTER OR SYMBOL, PAINT

RAMP D STA. 112+75 WRONG WAY ARROW (1)
RAMP D STA. 113+93 "STOP" (4)
RAMP D STA. 114+25 "AHEAD" (5)



**MATCHLINE RAMP D 108+50
SEE INTERCHANGE 1 RAMP DETAIL SHEET #1**

**MATCHLINE RAMP C 216+50
SEE INTERCHANGE 1 RAMP DETAIL SHEET #1**



DURABLE 6 INCH WHITE LINE, RECESSED POLYUREA
DURABLE 6 INCH YELLOW LINE, RECESSED POLYUREA

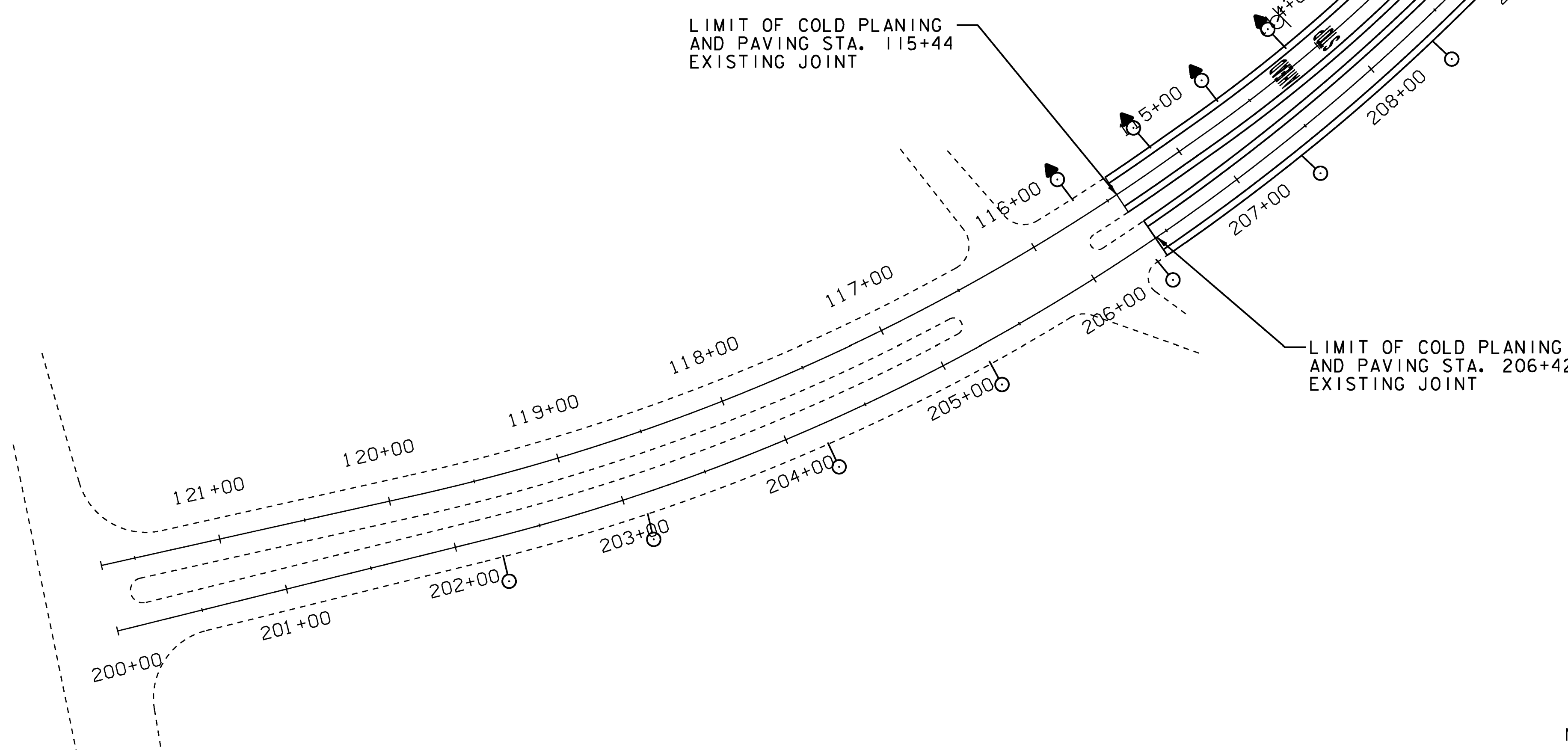
DURABLE 6 INCH WHITE LINE, RECESSED POLYUREA
DURABLE 6 INCH YELLOW LINE, RECESSED POLYUREA

LIMIT OF COLD PLANING AND PAVING STA. 115+44 EXISTING JOINT

LIMIT OF COLD PLANING AND PAVING STA. 206+42 EXISTING JOINT

NOTE:
1. ALL SIGNS ARE TO BE RETAINED UNLESS OTHERWISE INDICATED

- LEGEND**
- N = NEW
 - R = REMOVE
 - B-B = BACK TO BACK
 - RET = RETAIN
- TYPE I DELINEATOR, WHITE
 - TYPE I DELINEATOR, YELLOW
 - TYPE II DELINEATOR, WHITE
 - ⊙ TYPE III DELINEATOR, WHITE FRONT / RED BACK
 - ⊙ TYPE III DELINEATOR, YELLOW FRONT / RED BACK



NOT TO SCALE

INTERCHANGE 1 RAMP DETAIL SHEET #2	PROJECT NAME: HARTFORD - SHARON	PLOT DATE: 8/6/2010
	PROJECT NUMBER: IM 089-(157)	DRAWN BY: JDM
	FILE NAME: 97A184.dgn PROJECT LEADER: CDL DESIGNED BY: JDM PLOT FILE: 97A184_24.t	CHECKED BY: EPD SHEET 24 OF 62

646.426 DURABLE 6 INCH WHITE LINE, RECESSED POLYUREA

MAINLINE DOTTED MM 0.886 - MM 0.792
 MAINLINE SOLID MM 0.886 - MM 0.775
 RAMP C STA. 305+90.00 - STA. 308+50.00
 RAMP F STA. 514+85.00 - STA. 516+75.00
 MAINLINE DOTTED MM 0.589 - MM 0.473
 MAINLINE SOLID MM 0.589 - MM 0.473

646.436 DURABLE 6 INCH YELLOW LINE, RECESSED POLYUREA

RAMP C STA. 308+00.00 - STA. 308+50.00
 RAMP F STA. 514+85.00 - STA. 515+35.00

646.466 DURABLE 12 INCH WHITE LINE, RECESSED POLYUREA

MAINLINE MM 0.792 - MM 0.730
 MAINLINE GORE MARKINGS MM 0.760 - MM 0.730
 RAMP C STA. 305+90.00 - STA 308+25.00
 MAINLINE MM 0.617 - MM 0.589
 RAMP F STA. 515+35.00 - 515+85.00

646.622 TEMPORARY 6 INCH WHITE LINE, PAINT

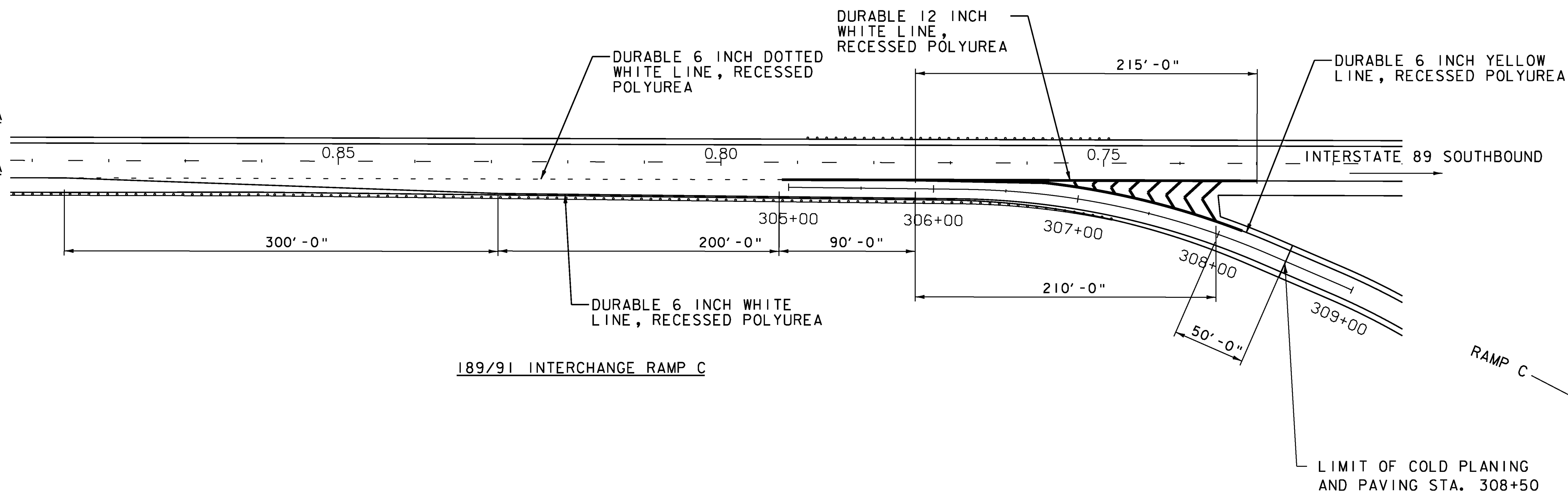
MAINLINE DOTTED MM 0.886 - MM 0.792
 MAINLINE SOLID MM 0.886 - MM 0.775
 RAMP C STA. 305+90.00 - STA. 308+50.00
 RAMP F STA. 514+85.00 - STA. 516+75.00
 MAINLINE DOTTED MM 0.589 - MM 0.473
 MAINLINE SOLID MM 0.589 - MM 0.473

646.632 TEMPORARY 6 INCH YELLOW LINE, PAINT

RAMP C STA. 308+00.00 - STA. 308+50.00
 RAMP F STA. 514+85.00 - STA. 515+35.00

646.662 TEMPORARY 12 INCH WHITE LINE, PAINT

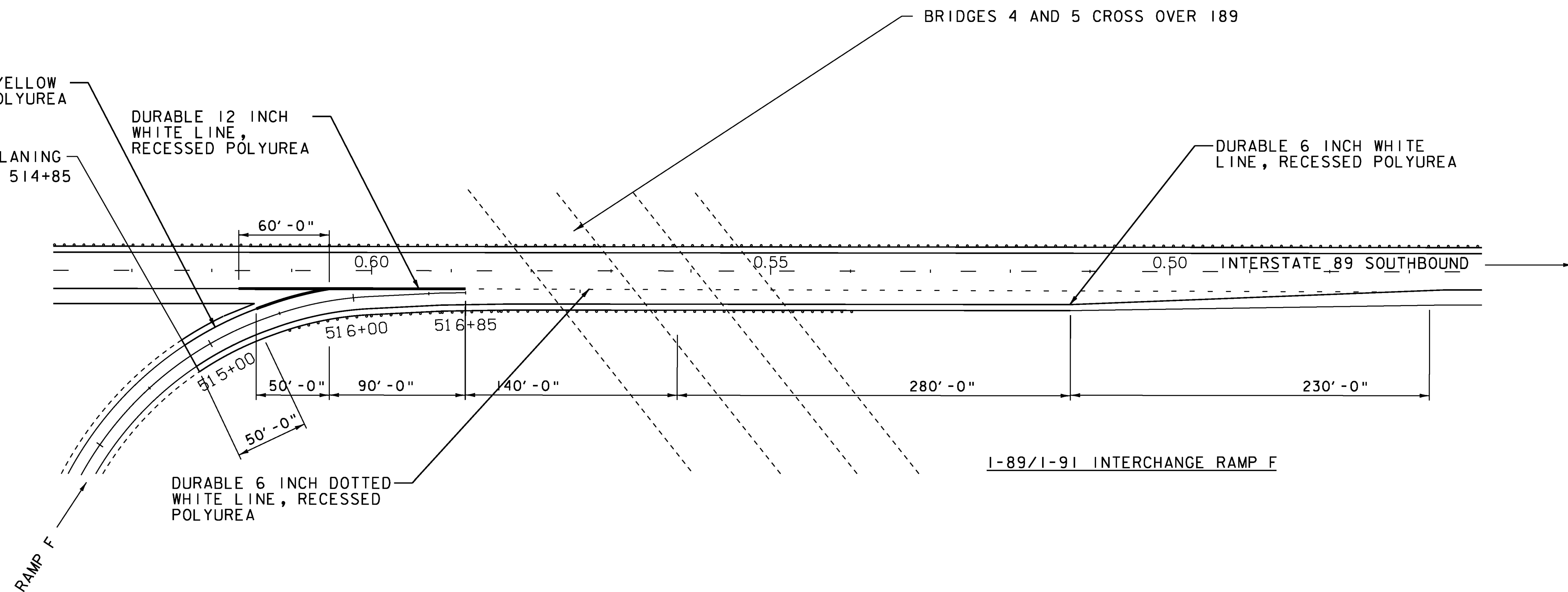
MAINLINE MM 0.792 - MM 0.730
 MAINLINE GORE MARKINGS MM 0.760 - MM 0.730
 RAMP C STA. 305+90.00 - STA 308+25.00
 MAINLINE MM 0.617 - MM 0.589
 RAMP F STA. 515+35.00 - 515+85.00



DURABLE 6 INCH YELLOW LINE, RECESSED POLYUREA

LIMIT OF COLD PLANING AND PAVING STA. 514+85

DURABLE 12 INCH WHITE LINE, RECESSED POLYUREA



I-89/I-91 INTERCHANGE RAMP F

NOTE:

- 1. ALL SIGNS ARE TO BE RETAINED UNLESS OTHERWISE INDICATED

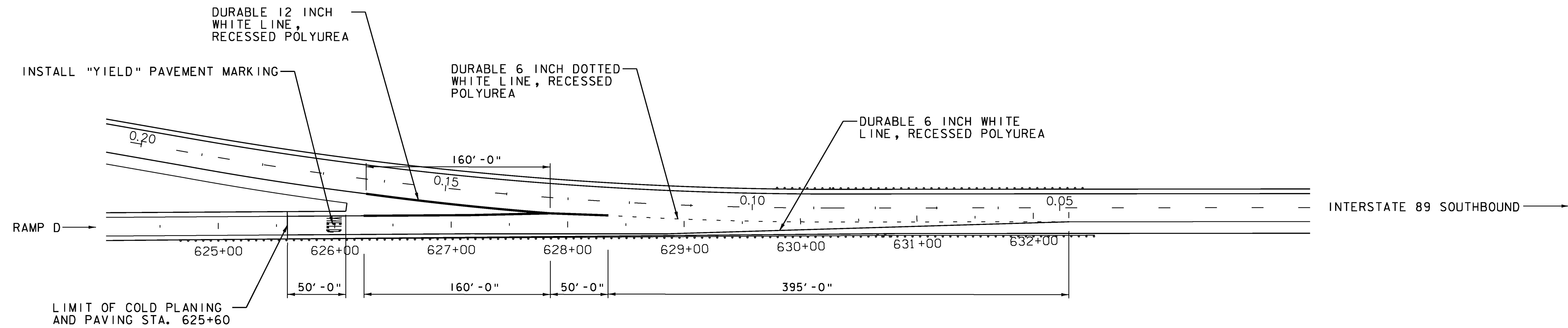
NOT TO SCALE

I-89/I-91 INTERCHANGE RAMP DETAIL SHEET 1

PROJECT NAME: HARTFORD - SHARON
 PROJECT NUMBER: IM 089-(157)

FILE NAME: 97A184.dgn
 PROJECT LEADER: CDL
 DESIGNED BY: JDM
 PLOT FILE: 97A184.25.1

PLOT DATE: 8/6/2010
 DRAWN BY: JDM
 CHECKED BY: EPD
 SHEET 25 OF 62



I-89/I-91 INTERCHANGE RAMP D

- 646.426 DURABLE 6 INCH WHITE LINE, RECESSED POLYUREA
 MAINLINE SOLID MM 0.123 - MM 0.05
 RAMP D STA. 625+60.00 - STA. 628+35.00
 MAINLINE DOTTED MM 0.123 - MM 0.05
- 646.436 DURABLE 6 INCH YELLOW LINE, RECESSED POLYUREA
 RAMP D STA. 625+60.00 - 626+10.00
- 646.466 DURABLE 12 INCH WHITE LINE, RECESSED POLYUREA
 MAINLINE MM 0.165 - MM 0.123
 RAMP D STA. 626+10.00 - 627+85.00
- 646.492 DURABLE LETTER OR SYMBOL, THERMOPLASTIC
 RAMP D STA. 626+00 "YIELD" (5)
- 646.622 TEMPORARY 6 INCH WHITE LINE, PAINT
 MAINLINE DOTTED MM 0.123 - MM 0.05
 RAMP D STA. 625+60.00 - STA. 628+35.00
 MAINLINE SOLID MM 0.123 - MM 0.05
- 646.632 TEMPORARY 6 INCH YELLOW LINE, PAINT
 RAMP D STA. 625+60.00 - 626+10.00
- 646.662 TEMPORARY 12 INCH WHITE LINE, PAINT
 MAINLINE MM 0.165 - MM 0.123
 RAMP D STA. 626+10.00 - 627+85.00
- 646.692 TEMPORARY LETTER OR SYMBOL, PAINT
 RAMP D STA. 626+00 "YIELD" (5)

NOTE:
 1. ALL SIGNS ARE TO BE
 RETAINED UNLESS
 OTHERWISE INDICATED

NOT TO SCALE

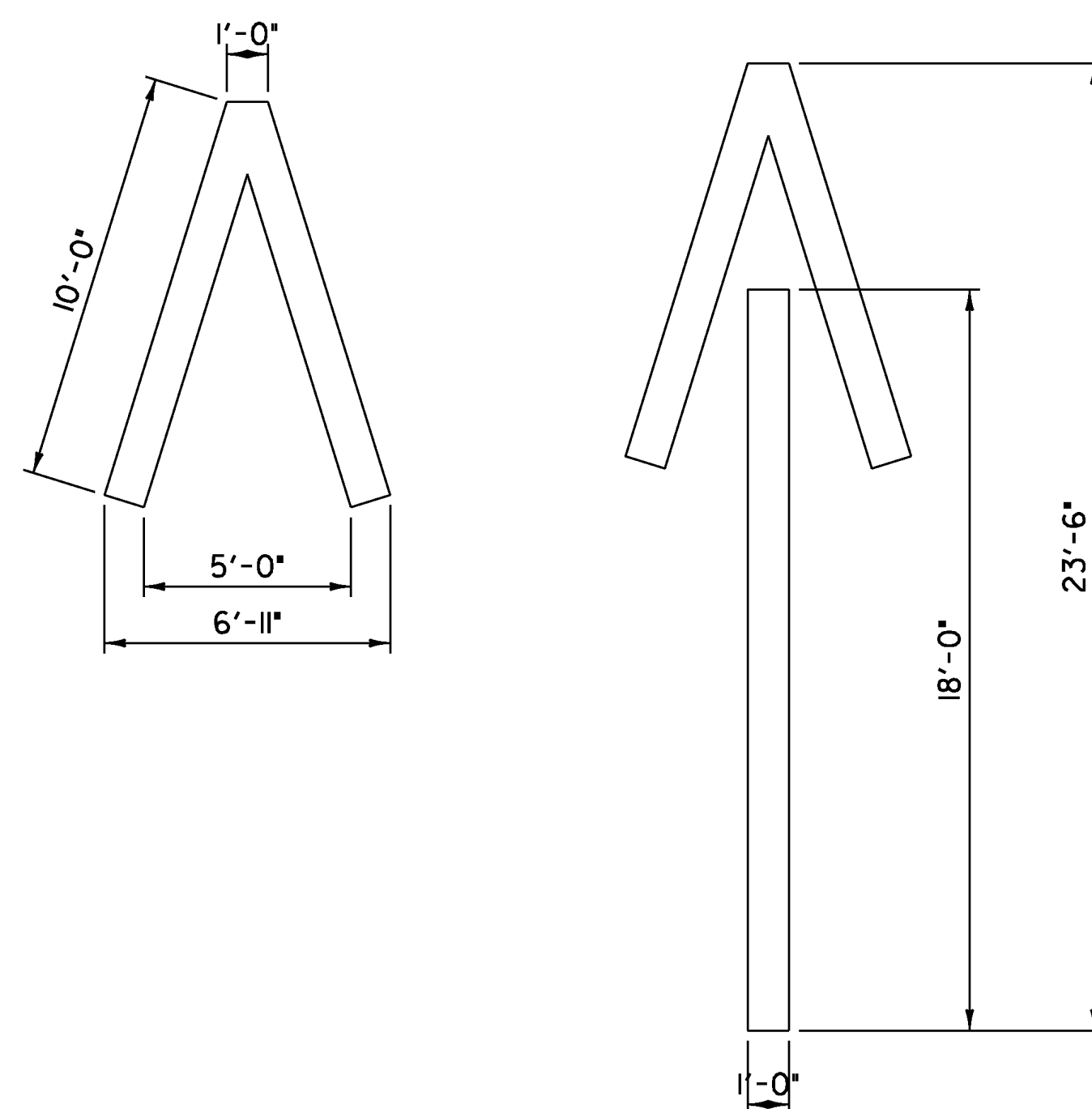
I-89/I-91 INTERCHANGE RAMP DETAIL SHEET 2	PROJECT NAME: HARTFORD - SHARON
	PROJECT NUMBER: IM 089-1(57)
FILE NAME: 97A184.dgn	PLOT DATE: 8/6/2010
PROJECT LEADER: CDL	DRAWN BY: JDM
DESIGNED BY: JDM	CHECKED BY: EPD
PLOT FILE: 97A184_26.1	SHEET 26 OF 62

TRAFFIC SIGN SUMMARY SHEET

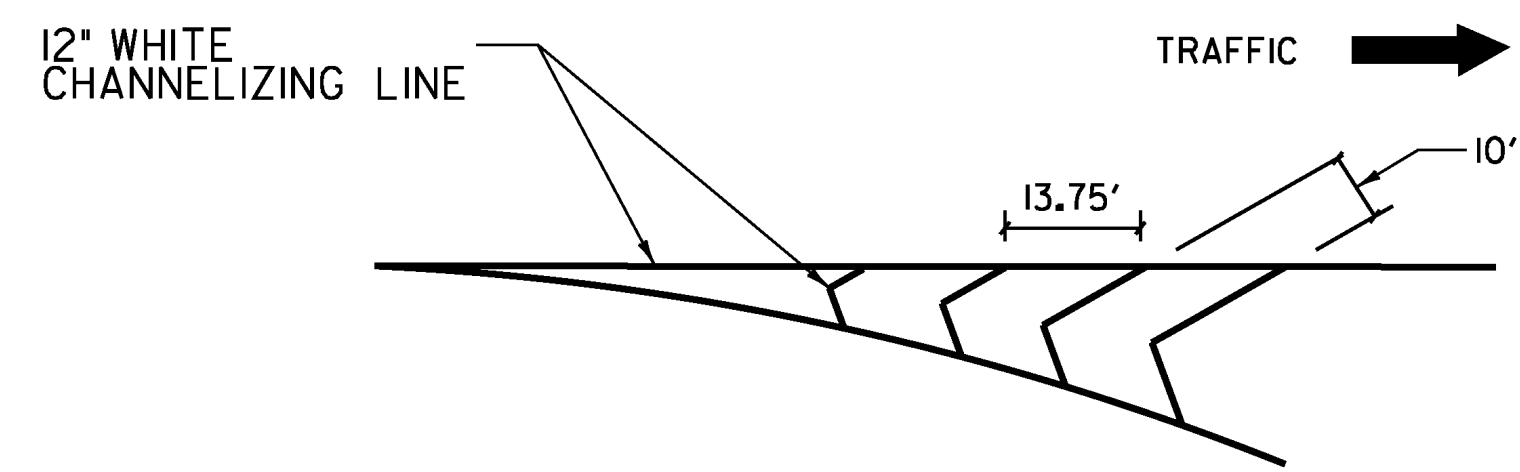
MILEMARKER, STATION, OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS		NEW & SALVAGED SIGNS				EXIST POST	NO. OF POSTS	NEW SIGN POSTS																		REMARKS	SIGN DETAIL				
		E A	WIDTH (in)	HEIGHT (in)	"A"	"B"	SALV SIGN			SALV TIS	FLANGED CHANNEL			SQUARE STEEL (in)			TUBULAR ALUMINUM (in)			TUBULAR STEEL (in)				W-SHAPE STEEL		REQUIRE SIGN	DETAIL ON DWG. NUMBER		STD. SHEET NUMBER				
											1.2	2.0	3.0	1.75	2.0	2.5	ANCHOR	SLEEVE	3.0	4.0	4.0 MOD	FOUNDATION	3.0	3.5	4.0					5.0	FTG. SIZE	WEIGHT	POST SIZE
SOUTHBOUND MM 0.11 RT		I	36	36	9.00				2				X		X												R3-4		SHS				
SOUTHBOUND MM 0.85 RT		I	36	36	9.00				2				X		X												R3-4		SHS				
SOUTHBOUND MM 1.18 RT		I	36	36	9.00				2				X		X												R3-4		SHS				
SOUTHBOUND MM 3.23 RT		I	36	36	9.00				2				X		X												R3-4		SHS				
SOUTHBOUND MM 4.23 RT		I	36	36	9.00				2				X		X												R3-4		SHS				
SOUTHBOUND MM 6.64 RT		I	36	36	9.00				2				X		X												R3-4		SHS				
SOUTHBOUND MM 6.81 LT							I		1				X		X																		
SOUTHBOUND STA 420+51 (MM 7.99 LT)							I		1				X		X													REFER TO SHEET 31 FOR ROADWAY RECONSTRUCTION PLAN					
SOUTHBOUND STA 422+40 (MM 8.00 LT)							0 +		0 +				0 -		X													REFER TO SHEET 31 FOR ROADWAY RECONSTRUCTION PLAN RETAIN SIGN					
SOUTHBOUND MM 9.65 RT		I	36	36	9.00				2				X		X												R3-4		SHS				
SOUTHBOUND MM 9.67 RT		I	36	36	9.00				2				X		X												R3-4		SHS				
EXIT I RAMP D STA. 114+09 RT		I	36	36	9.00				2				X		X												W3-1		SHS				
FINAL POST LENGTHS ARE TO BE DETERMINED IN THE FIELD. POST SIZES ARE COMPUTED BASED ON INFORMATION FURNISHED ON THE STANDARD SHEETS AND THE VTRANS "SIGN POST DESIGN GUIDELINE."		SUBTOTAL ROUNDING			81.00																												
		TOTALS			81.00	SF	SF	EA. 23			LF		LF 24	LF 270		EA.		LB	LB	LB					EA.	EA.	EA.	EA.	EA.	EA.	EA.		

TRAFFIC SIGN SUMMARY SHEET

PROJECT NAME: HARTFORD - SHARON
 PROJECT NUMBER: IM 089-1(57)
 FILE NAME: 97A184.dgn
 PROJECT LEADER: CDL
 DESIGNED BY: JDM
 PLOT FILE: 97A184.27.1
 PLOT DATE: 8/6/2010
 DRAWN BY: JDM
 CHECKED BY: EPD
 SHEET 27 OF 62



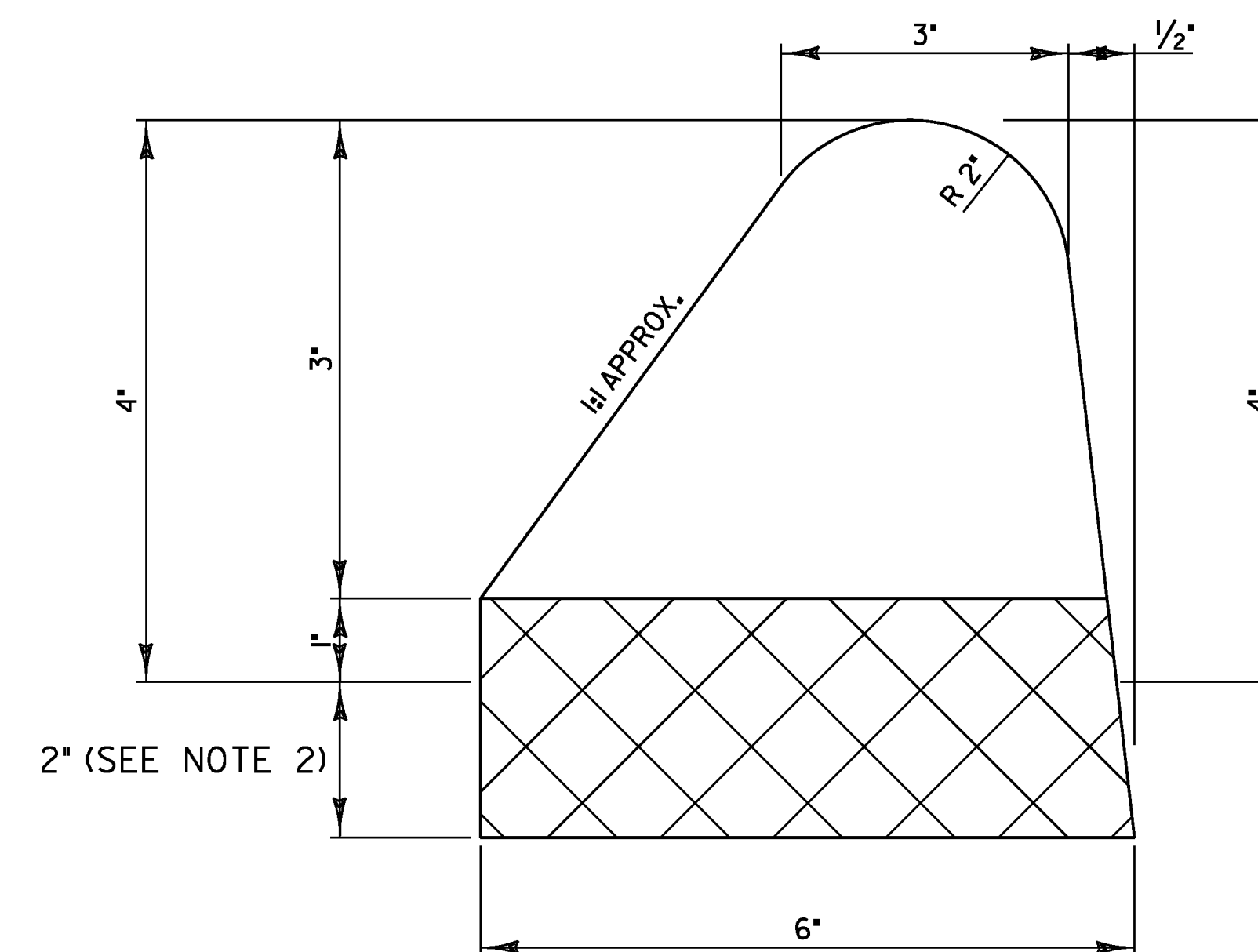
WRONG WAY ARROW



GORE MARKING DETAIL



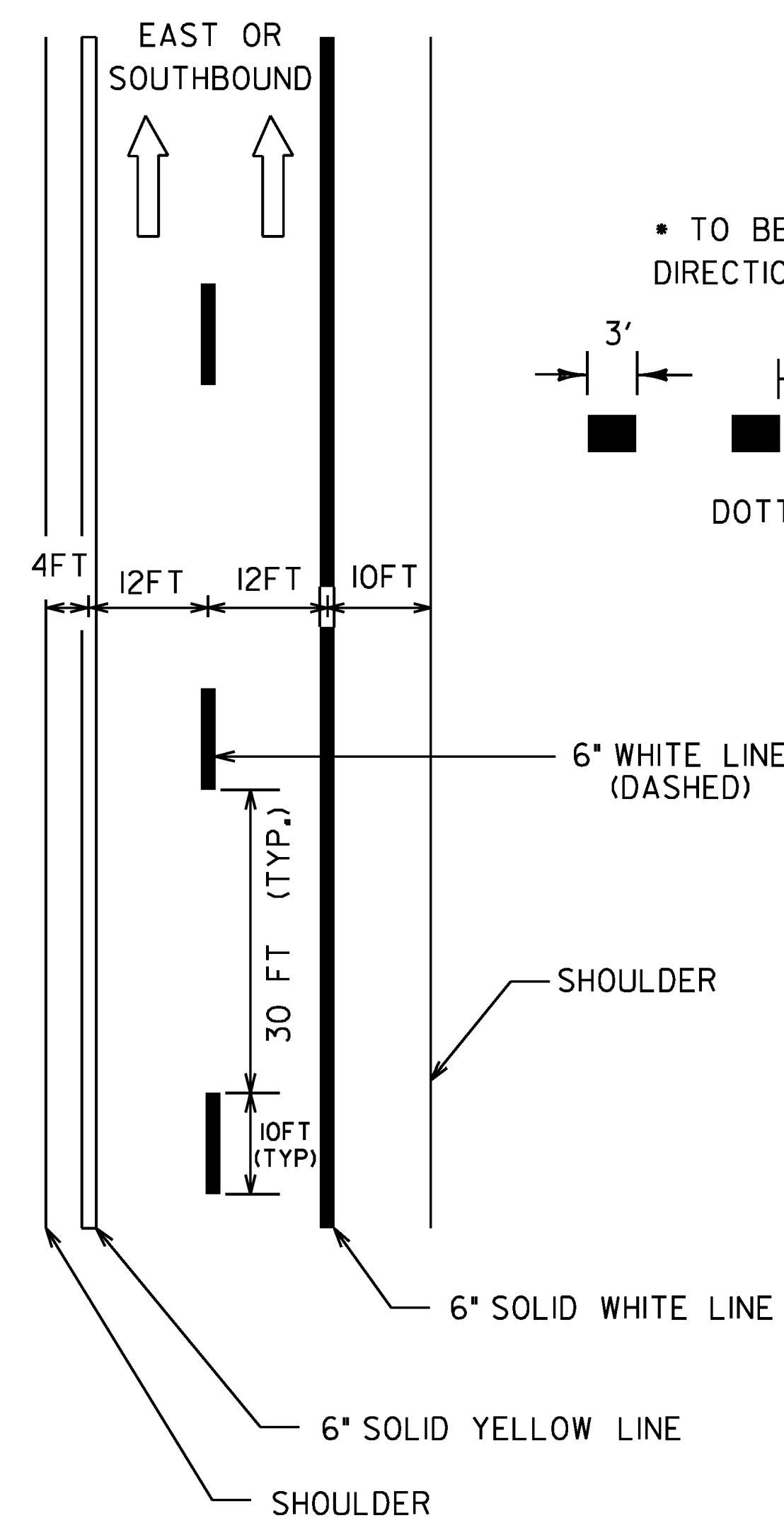
STOP BAR DETAIL



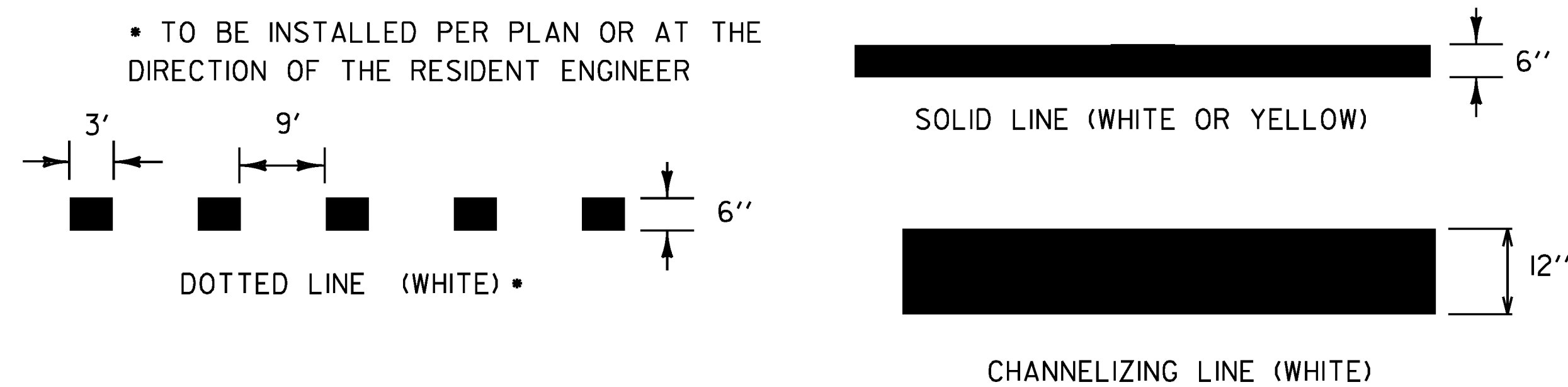
DETAIL FOR BITUMINOUS CONCRETE CURB, TYPE B

NOTE:

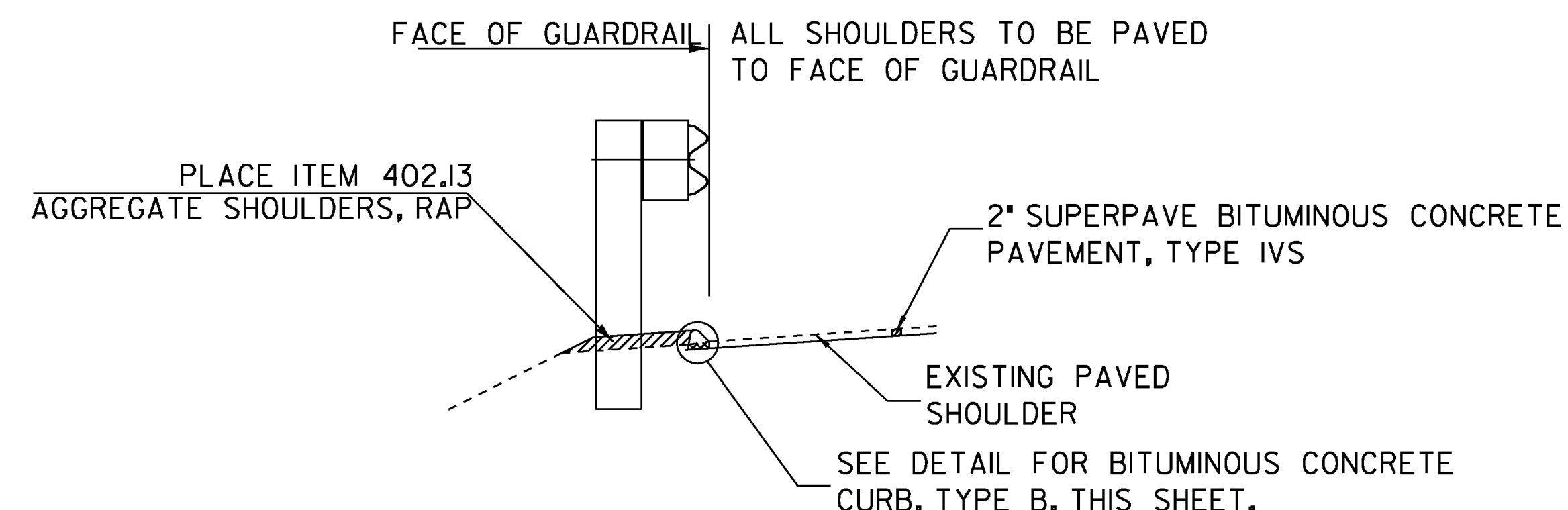
1. BITUMINOUS CONCRETE CURB IS TO BE PLACED PRIOR TO THE INSTALLATION OF GUARDRAIL AND THE PLACEMENT OF THE WEARING COURSE OR AS DIRECTED BY THE RESIDENT ENGINEER.
2. MATCH 2" FACE TO WEARING COURSE.
3. IN AREAS OF EXISTING BRIDGE CURB, BITUMINOUS CONCRETE CURB SHALL BE TRANSITIONED INTO THE EXISTING BRIDGE CURB AS DIRECTED BY THE RESIDENT ENGINEER.
4. REMOVAL OF EXISTING CURB TO BE PAID FOR UNDER ITEM 616.41, "REMOVAL OF EXISTING CURB". NEW CURB TO BE PAID FOR UNDER ITEM 616.315, "BITUMINOUS CONCRETE CURB, TYPE B".



TYPICAL MAINLINE MARKING PLAN



PAVEMENT MARKING LINE DETAILS

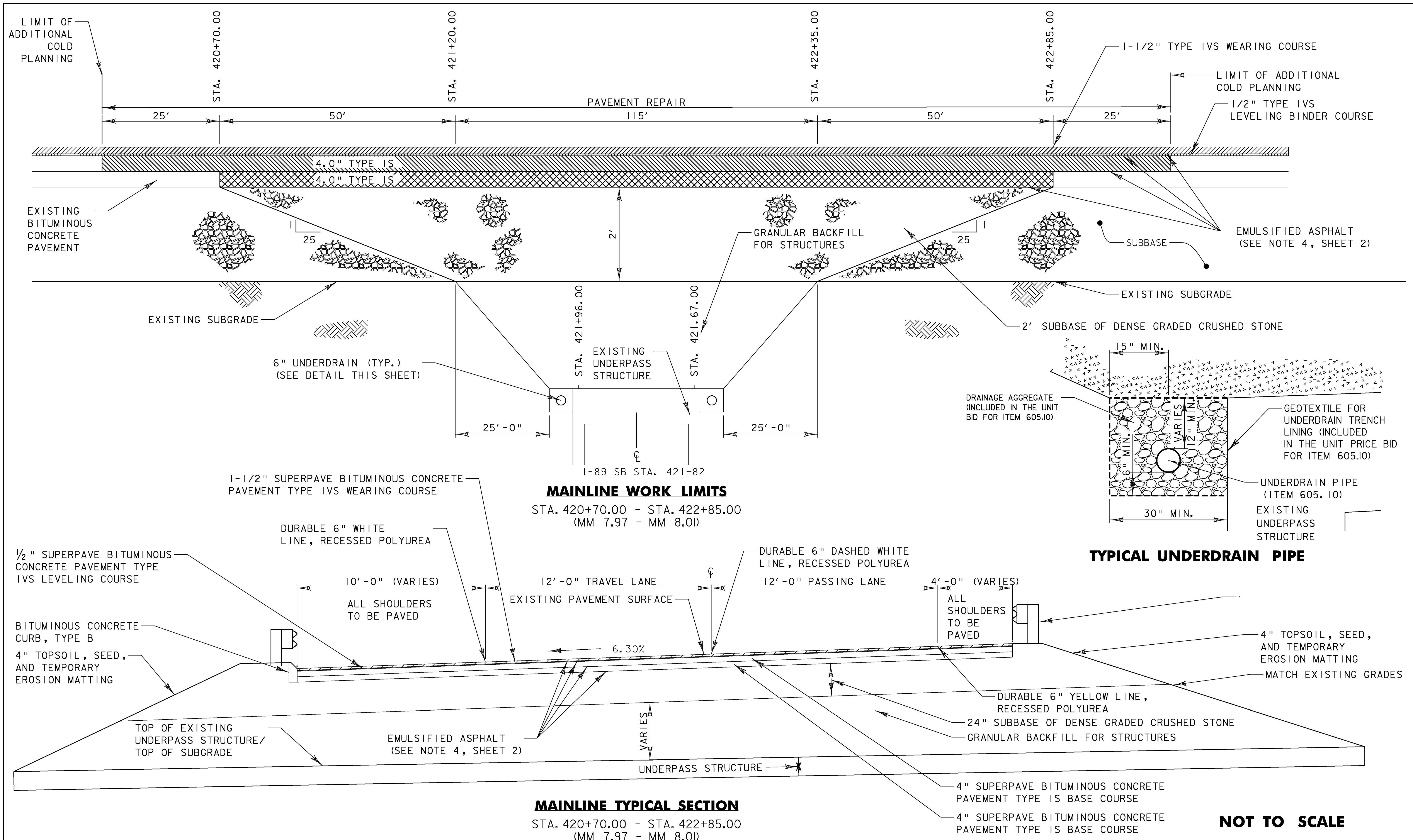


TYPICAL SECTION AT GUARDRAIL
(EXISTING STEEL BEAM WITH CURBING)

NOTE:

1. BITUMINOUS CONCRETE CURB, TYPE B, IS INCLUDED IN THE QUANTITIES TO REPLACE CURB IN ROADWAY RECONSTRUCTION AREA AS INDICATED ON THE PLANS OR AS DIRECTED BY THE RESIDENT ENGINEER.
2. THE CROSS HATCHED AREA SHALL BE CONSIDERED INCIDENTAL TO ITEM 616.315, "BITUMINOUS CONCRETE CURB, TYPE B".

DETAILS SHEET	PROJECT NAME: HARTFORD - SHARON	PLOT DATE: 8/6/2010
	PROJECT NUMBER: IM 089-1(57)	DRAWN BY: JDM
	FILE NAME: 97A184.dgn	CHECKED BY: EPD
	PROJECT LEADER: CDL	SHEET 28 OF 62
	DESIGNED BY: JDM	
	PLOT FILE: 97A184.28.1	

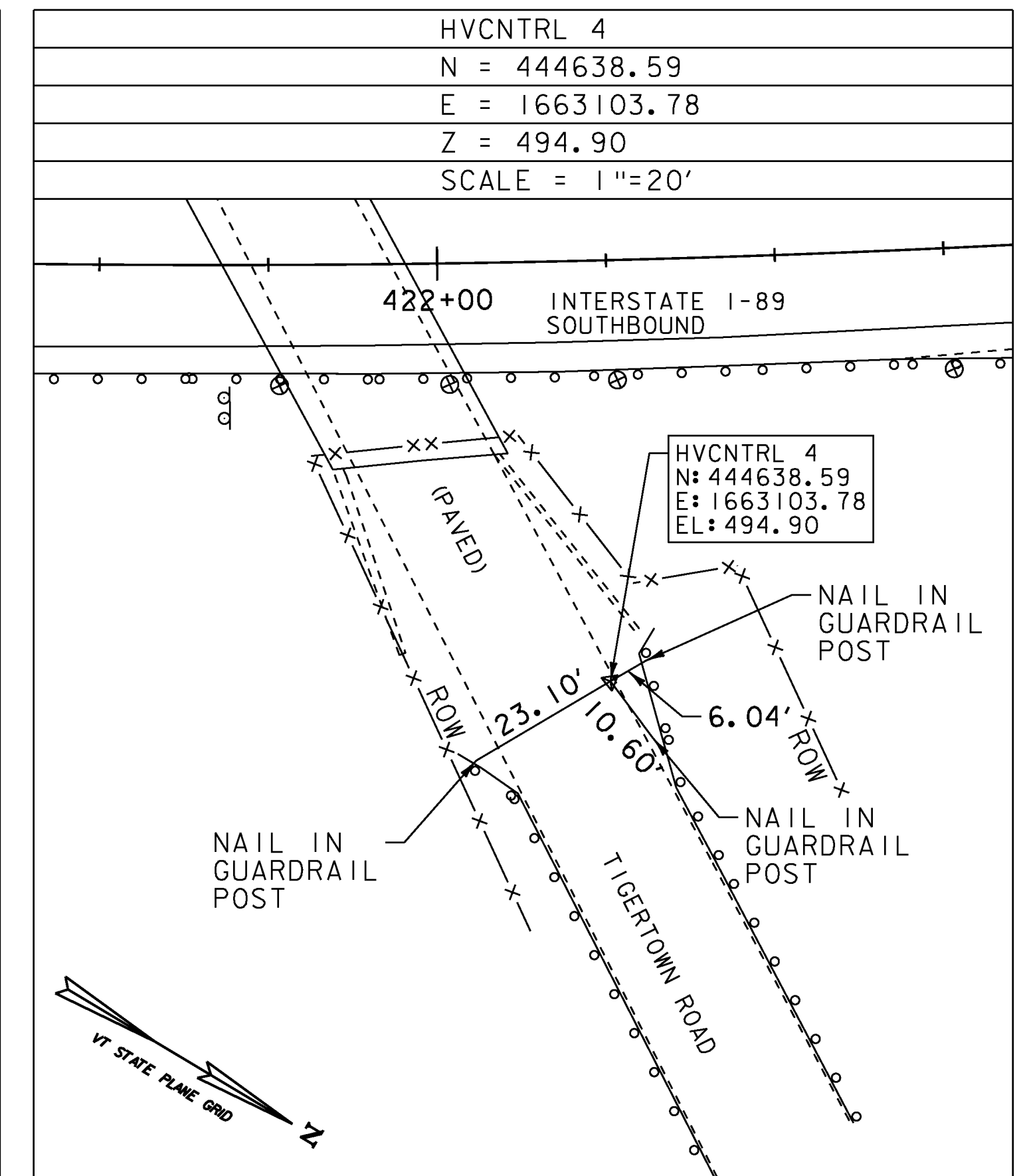
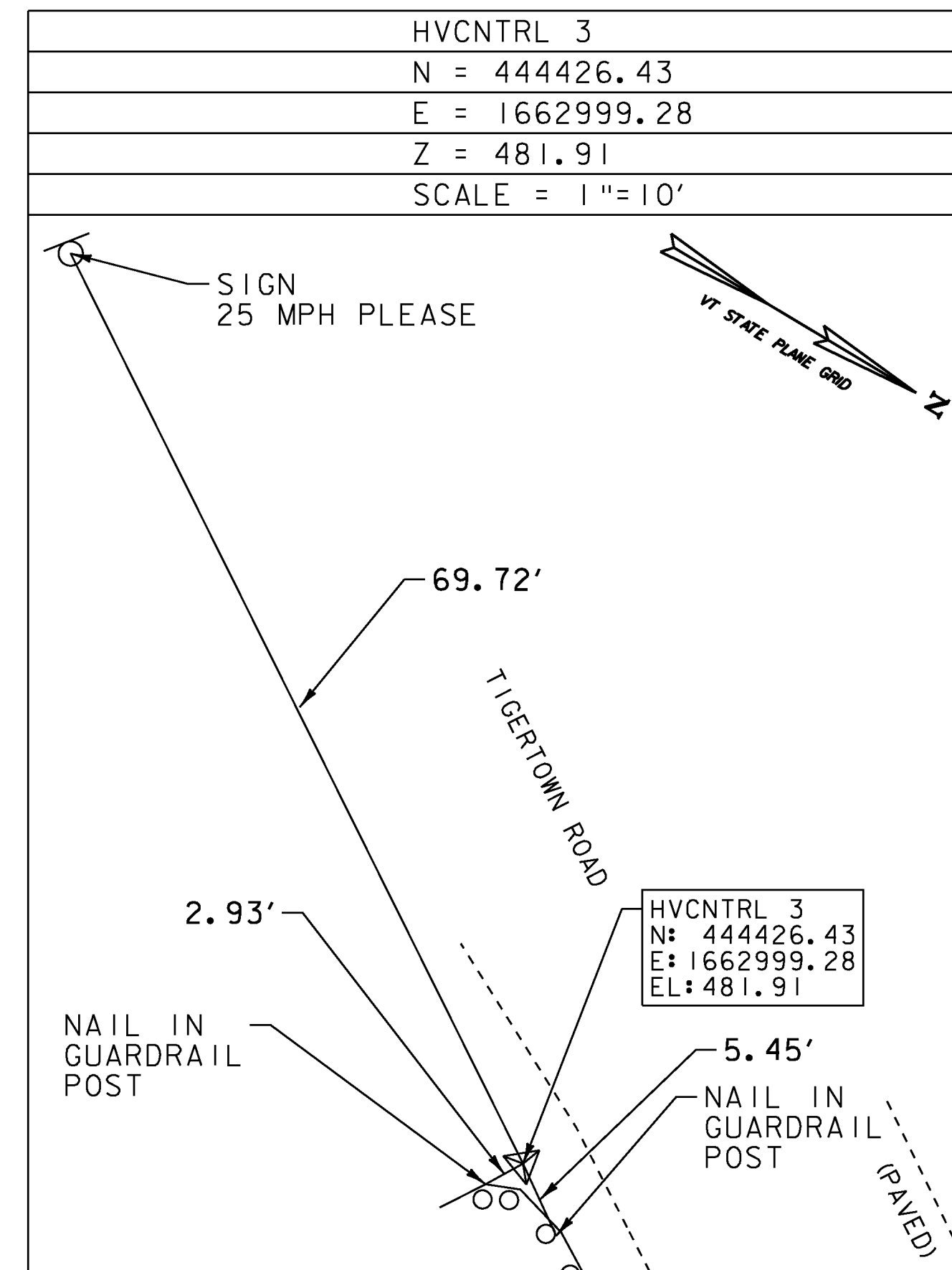
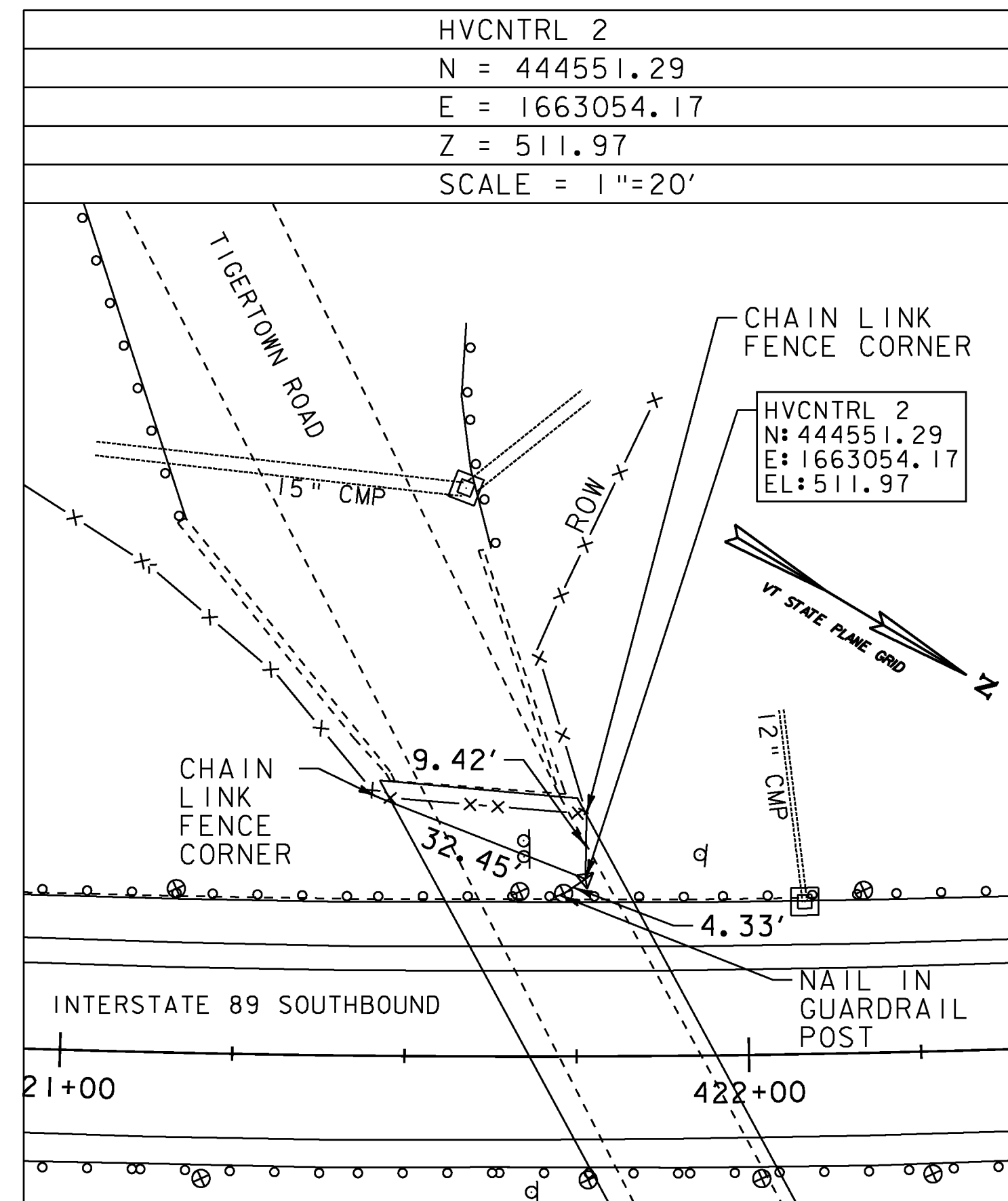
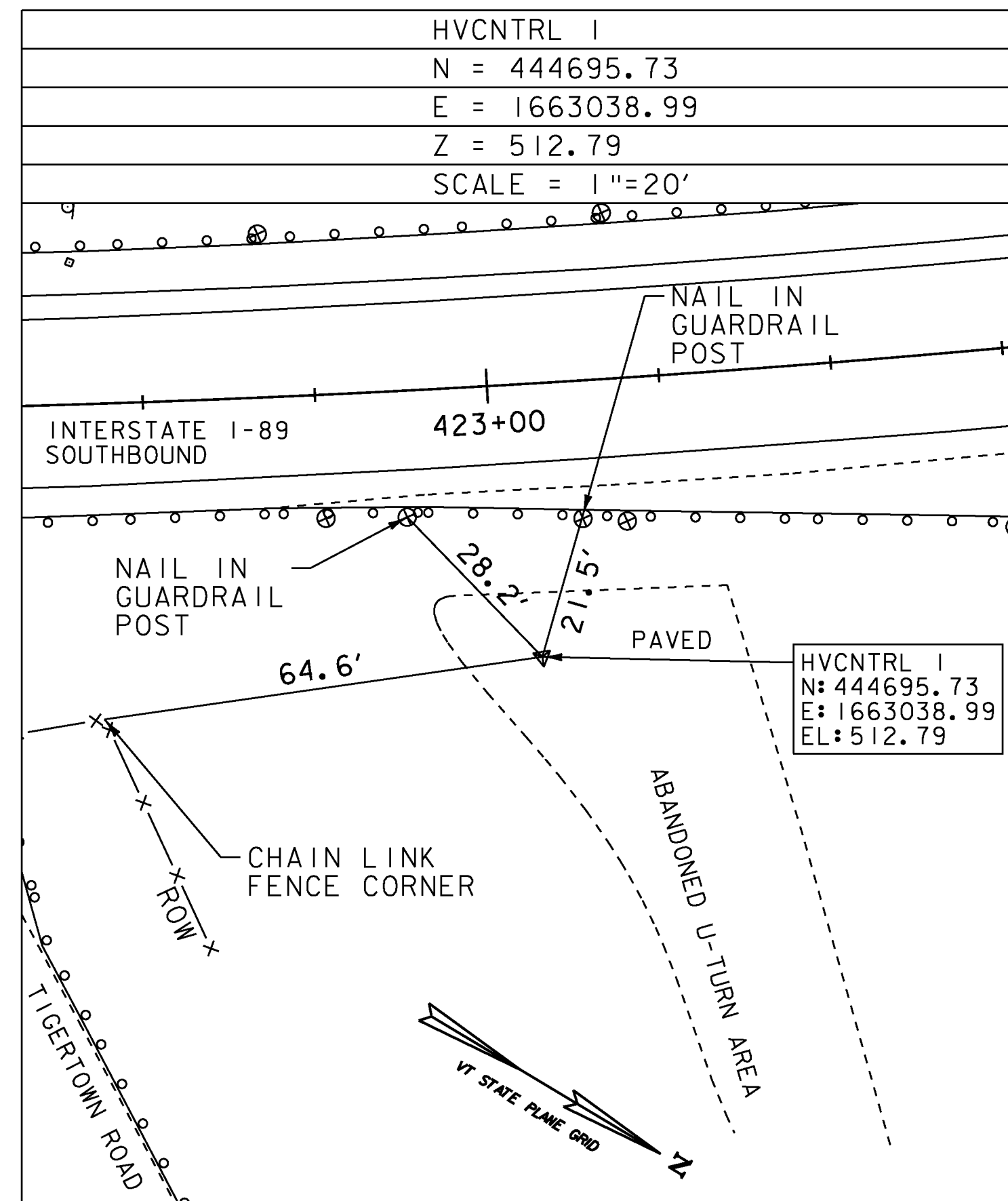


**ROADWAY
 RECONSTRUCTION
 TYPICAL SECTION
 AND DETAILS
 SHEET**

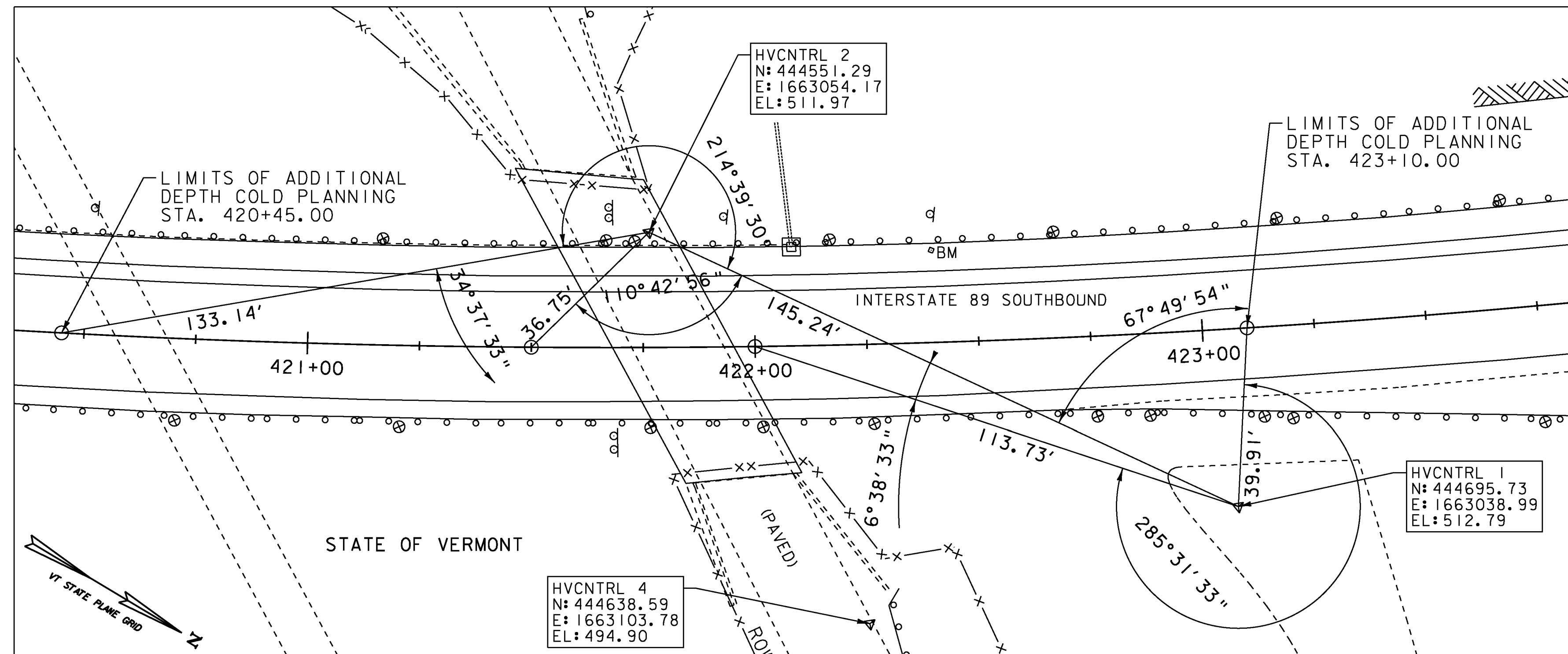
PROJECT NAME: HARTFORD - SHARON	PLOT DATE: 13-AUG-2010
PROJECT NUMBER: IM 089-1(57)	DRAWN BY: SJL
FILE NAME: 97A184.dgn	CHECKED BY: EPD
PROJECT LEADER: CDL	SHEET 29 OF 62
DESIGNED BY: SJL	
PLOT FILE: 97A184_29.1	

PLOTTED 13-AUG-2010

CONTROL TIES



ALIGNMENT TIES
SCALE = 1"=20'



POINT COORDINATES

POINT	STATION	NORTHING	EASTING
POC	STA. 420+45.00	444450.29	1663140.91
POC	STA. 421+50.00	444541.96	1663089.72
POC	STA. 422+00.00	444584.76	1663063.88
PI	STA. 422+20.28	444629.47	1663118.81
POC	STA. 423+10.00	444676.89	1663003.80

DATUM
VERTICAL NAVD 88 (GPS DERIVED)
HORIZONTAL NAD 83 (GPS DERIVED)

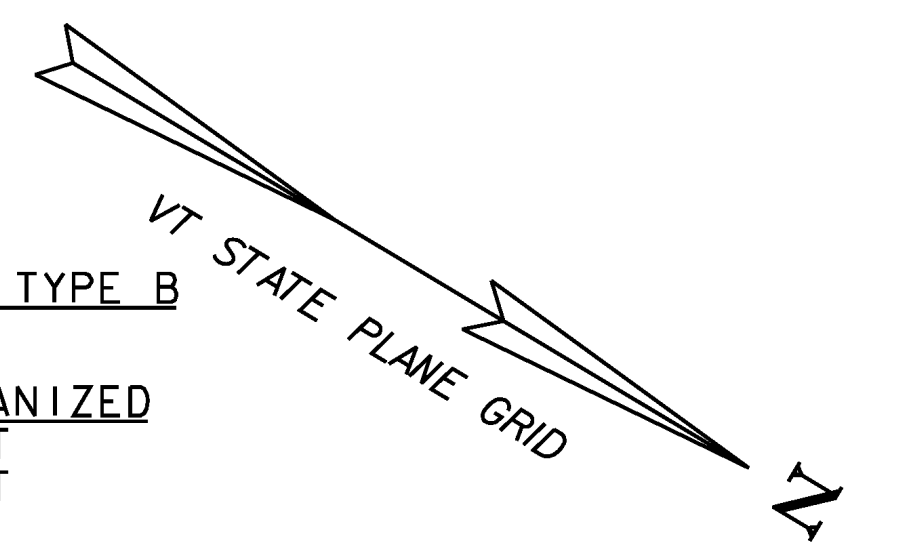
PLOTTED 8/6/2010

**ROADWAY
RECONSTRUCTION
TIE SHEET**

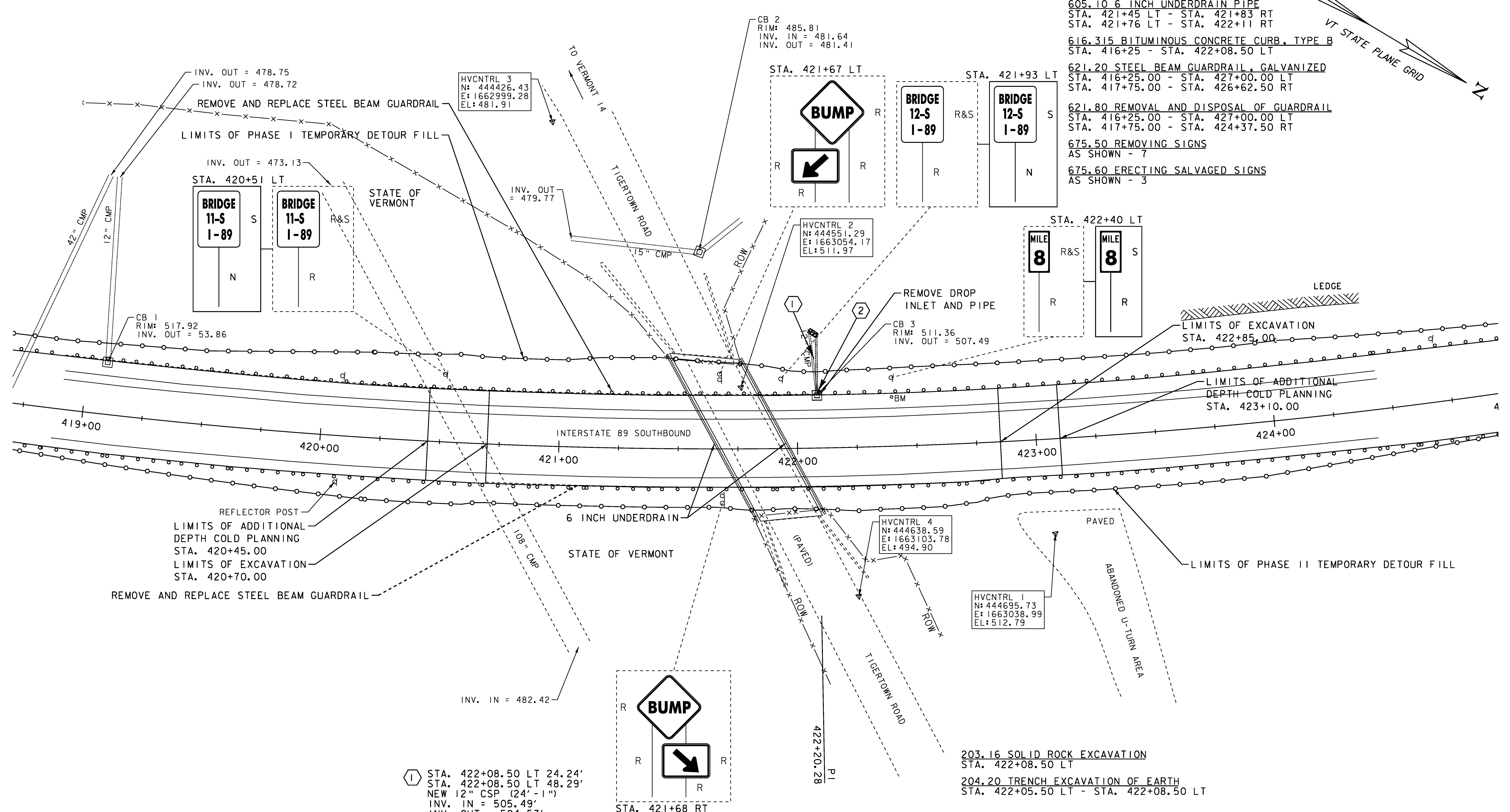
PROJECT NAME: HARTFORD - SHARON
PROJECT NUMBER: IM 089-1(57)

FILE NAME: 97A184.dgn
PROJECT LEADER: CDL
DESIGNED BY: SJL
PLOT FILE: 97A184_30.i

PLOT DATE: 8/6/2010
DRAWN BY: SJL
CHECKED BY: EPD
SHEET 30 OF 62

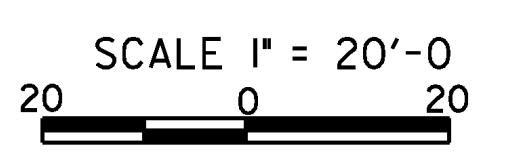


- 605.10 6 INCH UNDERDRAIN PIPE
STA. 421+45 LT - STA. 421+83 RT
STA. 421+76 LT - STA. 422+11 RT
- 616.315 BITUMINOUS CONCRETE CURB, TYPE B
STA. 416+25 - STA. 422+08.50 LT
- 621.20 STEEL BEAM GUARDRAIL, GALVANIZED
STA. 416+25.00 - STA. 427+00.00 LT
STA. 417+75.00 - STA. 426+62.50 RT
- 621.80 REMOVAL AND DISPOSAL OF GUARDRAIL
STA. 416+25.00 - STA. 427+00.00 LT
STA. 417+75.00 - STA. 424+37.50 RT
- 675.50 REMOVING SIGNS
AS SHOWN - 7
- 675.60 ERECTING SALVAGED SIGNS
AS SHOWN - 3



- ① STA. 422+08.50 LT 24.24'
STA. 422+08.50 LT 48.29'
NEW 12" CSP (24' - 1")
INV. IN = 505.49'
INV. OUT = 504.53'
RIPRAP OUTLET PROTECTION:
2' W X 4' L X 1' D
- ② STA. 422+08.50 LT 22.00'
NEW PRECAST REINFORCED
CONCRETE DROP INLET
WITH CAST IRON GRATE, TYPE E
RIM = 511.24'
INV. OUT = 505.49'

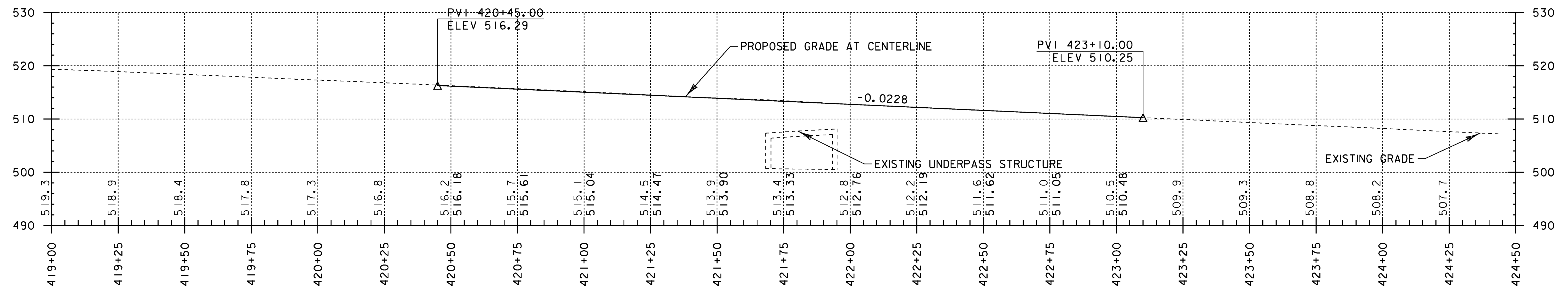
DELTA = 27°58'10"
D = 2°29'28"
R = 2300.00'
T = 572.81'
L = 1122.77'
E = 70.25'



PLOTTED 8/6/2010

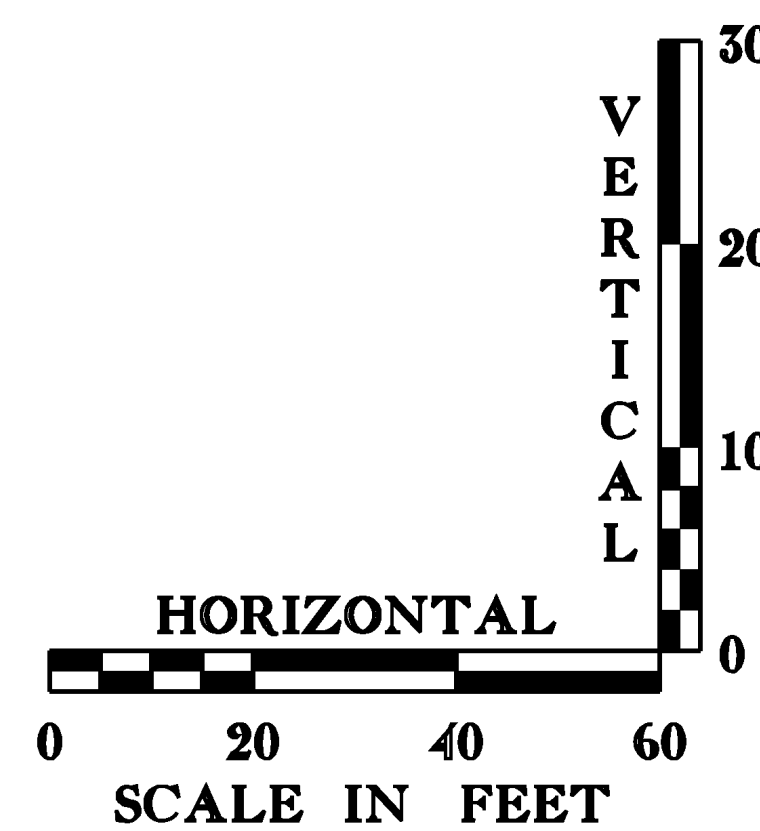
DATUM
VERTICAL NAVD 88 (GPS DERIVED)
HORIZONTAL NAD 83 (GPS DERIVED)

ROADWAY RECONSTRUCTION PLAN	PROJECT NAME: HARTFORD - SHARON	PLOT DATE: 8/6/2010
	PROJECT NUMBER: IM 089-(K57)	DRAWN BY: SJL
	FILE NAME: 97A184.dgn	CHECKED BY: EPD
	PLOT FILE: 97A184.31.i	SHEET 31 OF 62



NOTE
 1. ELEVATIONS SHOWN TO THE NEAREST TENTH ARE EXISTING GROUND
 ELEVATIONS SHOWN TO THE NEAREST HUNDRETH ARE PROPOSED GROUND

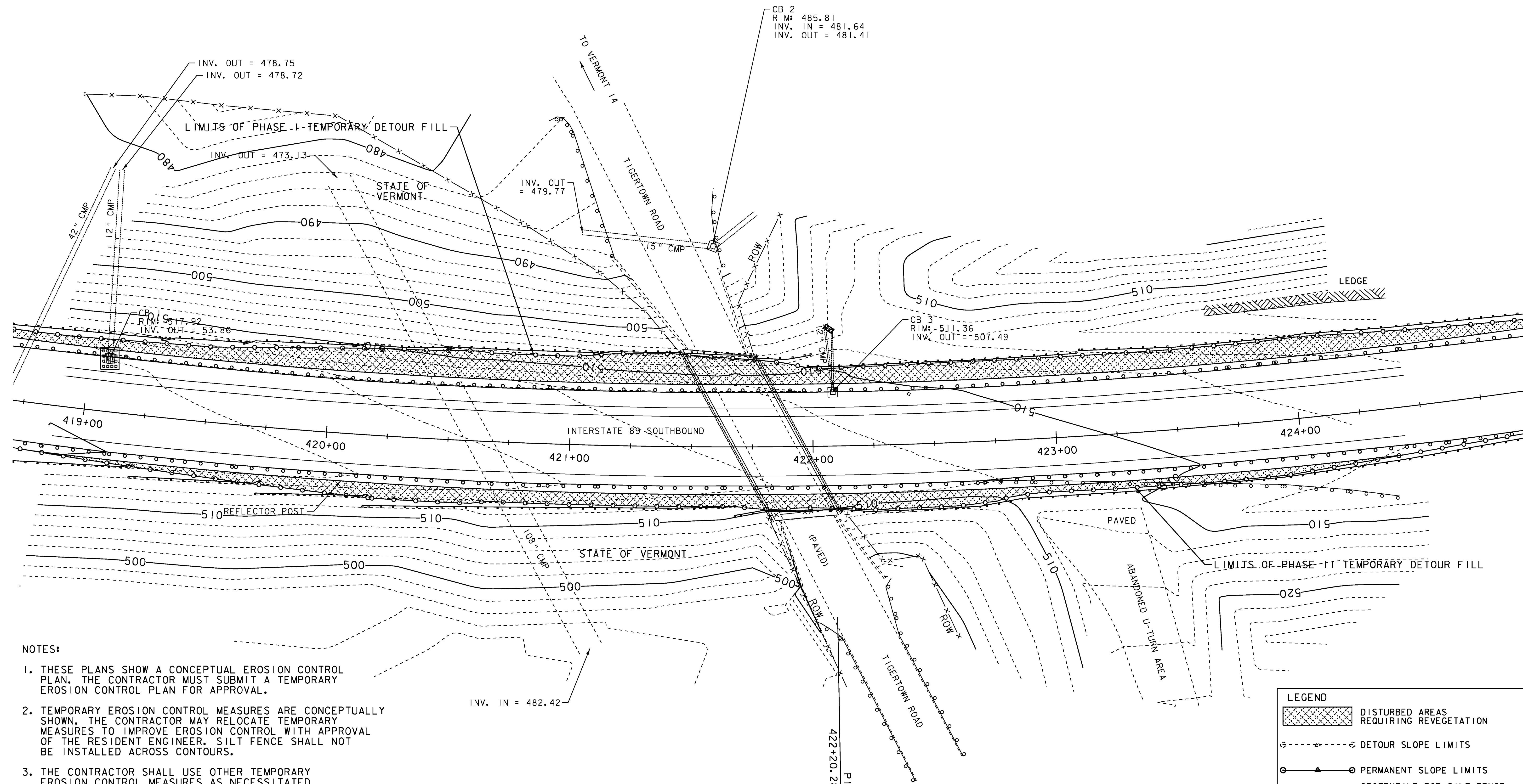
DATUM
 VERTICAL NAVD 88 (GPS DERIVED)
 HORIZONTAL NAD 83 (GPS DERIVED)



PLOTTED 8/6/2010

ROADWAY RECONSTRUCTION PROFILE	PROJECT NAME: HARTFORD - SHARON	PLOT DATE: 8/6/2010
	PROJECT NUMBER: IM 089-(57)	DRAWN BY: SJL
	FILE NAME: 97A184.dgn	CHECKED BY: EPD
	DESIGNED BY: SJL	SHEET 32 OF 62
	PLOT FILE: 97A184_32.1	

649.51 GEOTEXTILE FOR SILT FENCE
 STA. 417+49 - STA. 425+79 LT
 STA. 418+47 - STA. 425+37 RT



- NOTES:
1. THESE PLANS SHOW A CONCEPTUAL EROSION CONTROL PLAN. THE CONTRACTOR MUST SUBMIT A TEMPORARY EROSION CONTROL PLAN FOR APPROVAL.
 2. TEMPORARY EROSION CONTROL MEASURES ARE CONCEPTUALLY SHOWN. THE CONTRACTOR MAY RELOCATE TEMPORARY MEASURES TO IMPROVE EROSION CONTROL WITH APPROVAL OF THE RESIDENT ENGINEER. SILT FENCE SHALL NOT BE INSTALLED ACROSS CONTOURS.
 3. THE CONTRACTOR SHALL USE OTHER TEMPORARY EROSION CONTROL MEASURES AS NECESSITATED BY THE SEQUENCE OF CONSTRUCTION OR AS DIRECTED BY THE RESIDENT ENGINEER.
 4. REFER TO THE EROSION CONTROL DETAILS SHEET FOR ADDITIONAL DETAILS.
 5. ALL DISTURBED AREAS REQUIRING VEGETATION TO BE SEEDED, MULCHED AND TEMPORARY EROSION MATTING IN ACCORDANCE WITH THE LOW RISK HANDBOOK.

LEGEND	
	DISTURBED AREAS REQUIRING REVEGETATION
	DETOUR SLOPE LIMITS
	PERMANENT SLOPE LIMITS
	GEOTEXTILE FOR SILT FENCE
	RIGHT OF WAY FENCE
	INLET PROTECTION DEVICE, TYPE I

DATUM
 VERTICAL NAVD 88 (GPS DERIVED)
 HORIZONTAL NAD 83 (GPS DERIVED)

SCALE 1" = 20'-0"

EROSION CONTROL PLAN	PROJECT NAME: HARTFORD - SHARON	PLOT DATE: 8/6/2010
	PROJECT NUMBER: IM 089-(157)	DRAWN BY: SJL
	FILE NAME: 97A184.dgn	CHECKED BY: EPD
	DESIGNED BY: SJL	SHEET 33 OF 62
	PLOT FILE: 97A184_33.1	

EROSION CONTROL NARRATIVE

1.1 PROJECT DESCRIPTION

THIS PROJECT IS LOCATED ON I-89 IN SHARON, VERMONT BETWEEN MILE MARKERS 0.05 AND 12.25. THE SCOPE OF THE PROJECT INCLUDES ROADWAY REPAVING AND THE RECONSTRUCTION OF APPROXIMATELY 215' OF ROADWAY , SUBBASE AND SUBGRADE BETWEEN THE MILE MARKERS 7.97 AND 8.01. A TEMPORARY ROADWAY WIDENING WILL BE CONSTRUCTED ON EITHER SIDE OF THE ROADWAY RECONSTRUCTION AREA TO SHIFT TRAFFIC FROM THE TRAVEL AND PASSING LANES DURING RECONSTRUCTION EFFORTS.

NOTE: AREA OF DISTURBANCE SHALL INCLUDE LIMITS OF EARTH DISTURBANCE WITHIN THE PROJECT AREA, INCLUDING ANY WASTE, STAGING AND BORROW AREAS WITHIN OR DIRECTLY ADJACENT TO THE PROJECT LIMITS.

TOTAL AREA OF DISTURBANCE IS APPROXIMATELY 0.45 ACRES.

IT IS ANTICIPATED THAT THE WORK WITHIN THE AREA OF DISTURBANCE WILL LAST APPROXIMATELY ONE MONTH.

1.2 SITE INVENTORY

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

ALL PROPOSED WORK IS WITHIN THE EXISTING I-89 ROADWAY AND MEDIAN, THEREFORE SURROUNDING PROPERTY CONSISTS OF PAVED ROADWAY, GRASS MEDIAN, AND LEDGE CUT. AREAS OUTSIDE OF THE ROADWAY CORRIDOR ARE PRIMARILY WELL ESTABLISHED FOREST WITH MODERATE TO STEEP SLOPES. RUNOFF ENTERS THE CORRIDOR FROM THE EAST VIA SMALL STREAMS AND SHEET FLOW AND IS COLLECTED AND CONVEYED ACROSS THE CORRIDOR TO THE WEST VIA CLOSED DRAINAGE SYSTEMS AND CULVERTS.

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

THERE ARE NO WATERWAYS IN CLOSE PROXIMITY TO THE AREA OF PROPOSED DISTURBANCE. THE WHITE RIVER IS LOCATED APPROXIMATELY 1,500' TO THE WEST OF THE ROADWAY RECONSTRUCTION. TIGERTOWN BROOK IS LOCATED APPROXIMATELY 150' SOUTH OF THE ROADWAY RECONSTRUCTION.

1.2.3 TOPOGRAPHY, EXISTING ROADS, BUILDINGS, UTILITIES

THE TOPOGRAPHY OF THE AREA IS MODERATELY STEEP IN THE ROADWAY RECONSTRUCTION AREA. THE TOPOGRAPHY IS TYPICAL OF INTERSTATE HIGHWAYS WITH PAVED ROADWAYS, MOWED GRASS MEDIANS, LEDGE CUTS, ROCK FILLS, AND DRAINAGE STRUCTURES AND SYSTEMS. THERE ARE NO BUILDINGS OR UTILITIES WITHIN THE PROJECT AREA.

1.2.4 VEGETATION

VEGETATION IN THE PROJECT AREA CONSISTS OF MOWED GRASS IN THE MEDIANS AND HARDWOOD AND SOFTWOOD TREES AND UNDERGROWTH OUTSIDE OF THE ROADWAY CORRIDOR. THE IMPACT TO VEGETATION WILL BE LIMITED TO THAT WHICH IS DIRECTLY AFFECTED BY THE ROADWAY RECONSTRUCTION AREA. AS PROPOSED SLOPES ARE MODERATELY STEEP (3:1 TYPICAL) VEGETATION WILL BE REESTABLISHED WITH STANDARD SEED, MULCH AND TEMPORARY EROSION MATTING PRACTICES. SILT FENCE WILL BE USED TO CONTAIN SEDIMENT PRIOR TO REVEGETATION.

1.2.5 SOILS

SOIL CLASSIFICATION HAS NOT BEEN IDENTIFIED IN THE AREA AT THIS TIME.

IT IS IMPORTANT TO NOTE THAT ALL AREAS OF PROPOSED DISTURBANCE HAVE BEEN PREVIOUSLY DISTURBED AS PART OF THE ORIGINAL I-89 CONSTRUCTION. EXISTING SOILS ARE LIKELY ROCK, GRAVEL, SAND, AND LOAM PLACED AS PART OF THE ORIGINAL CONSTRUCTION.

1.2.6 SENSITIVE RESOURCE AREAS

THERE IS NO SIGNIFICANT IMPACT TO ANY "THREATENED & ENDANGERED SPECIES", PRIME AGRICULTURAL LANDS, JURISDICTIONAL WETLANDS, OR CRITICAL HABITATS WITHIN THE PROPOSED AREAS OF DISTURBANCE

1.3 RISK EVALUATION

ALTHOUGH A DETAILED RISK EVALUATION HAS NOT BEEN PERFORMED THIS PROJECT WILL LIKELY BE LOW RISK THEREFORE, THE LOW RISK HANDBOOK MUST BE ON SITE AND COMPLIED WITH DURING CONSTRUCTION.

SHOULD CHANGES PRIOR TO OR DURING CONSTRUCTION RESULT IN A POTENTIAL CHANGE IN THE RISK THEN THE SELECTED CONTRACTOR WILL BE RESPONSIBLE FOR ADDITIONAL PERMITTING WITH VANR VIA FILING OF THE APPROPRIATE NOTICE OF INTENT UNDER THE CONSTRUCTION PERMIT PROCESS.

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 POLLUTION PREVENTION CONTROLS.

PREVENTING INITIAL SOIL EROSION IS MUCH MORE EFFECTIVE THAN TREATING ERODED SEDIMENT. MAINTAINING VEGETATED BUFFERS ALONG STREAM BANKS, WETLANDS OR OTHER SENSITIVE AREAS IS A CRUCIAL EROSION AND SEDIMENT CONTROL MEASURE THAT SHOULD BE ESTABLISHED WHEREVER POSSIBLE.

ALL MEASURES SHALL BE REGULARLY MAINTAINED AND SHALL BE CHECKED FOR SEDIMENT BUILD-UP. SEDIMENT SHALL BE DISPOSED AT AN APPROVED 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 THOSE NOTED BELOW.

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

CONSTRUCTION WILL BE PRIMARILY FROM THE ROADWAY THEREFORE NO CONSTRUCTION ENTRANCE WILL BE UTILIZED.

1.4.4 INSTALL SILT FENCE

SILT FENCE SHALL BE INSTALLED PRIOR TO ANY UP SLOPE WORK AS SHOWN ON THE PLANS OR AS NECESSARY.

1.4.5 DIVERT UPLAND RUNOFF

NOT REQUIRED.

1.4.6 SLOW DOWN CHANNELIZED RUNOFF

NOT REQUIRED.

1.4.7 CONSTRUCT PERMANENT CONTROLS

DRAINAGE INLETS AND PIPES
SEE, MULCH AND TEMPORARY EROSION MATTING

1.4.8 STABILIZE EXPOSED SOILS

INLET PROTECTION DEVICE, TYPE I

1.4.9 WINTER STABILIZATION

VARIOUS MEASURES SPECIFIC TO WINTER (SEE LOW RISK HANDBOOK)

1.4.10 STABILIZE SOIL AT FINAL GRADE

SEED, MULCH AND TEMPORARY EROSION MATTING

1.4.11 DE-WATERING ACTIVITIES

NONE

1.4.12 INSPECT YOUR SITE

INSPECT SITE BASED ON PERMIT AUTHORIZATION REQUIREMENTS.

1.5 SEQUENCE AND STAGING

THIS SECTION WILL BE DEVELOPED BY THE CONTRACTOR USING THE GUIDANCE OUTLINED IN THE VTRANS EPSC PLAN CONTRACTOR CHECKLIST.

1.5.1 CONSTRUCTION SEQUENCE

1.5.2 OFF-SITE ACTIVITIES

IN ADDITION TO THE CONTRACTOR CHECKLIST ANY ACTIVITIES OUTSIDE THE CONSTRUCTION LIMITS SHALL FOLLOW SPECIFICATION 105.25 - 105.29 OF THE STANDARD SPECIFICATIONS FOR CONSTRUCTION.

1.5.3 UPDATES

EROSION CONTROL NARRATIVE SHEET

PROJECT NAME: HARTFORD-SHARON

PROJECT NUMBER: IM 089-(157)

FILE NAME: 97A184.dgn

PROJECT LEADER: CDL

DESIGNED BY: SJL

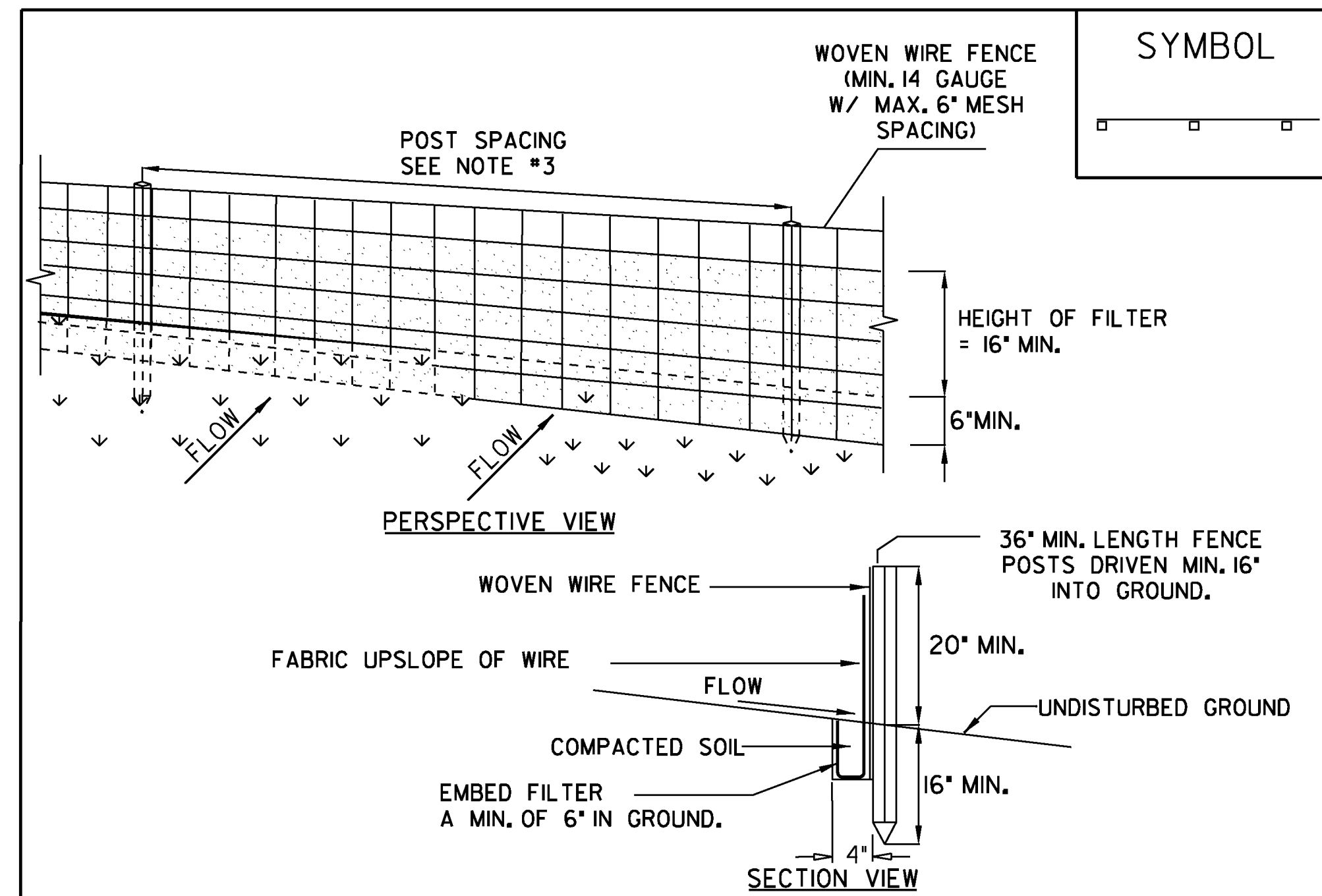
PLOT FILE: 97A184_34.1

PLOT DATE: 13-AUG-2010

DRAWN BY: SJL

CHECKED BY: EPD

SHEET 34 OF 62



CONSTRUCTION SPECIFICATIONS

1. WOVEN WIRE FENCE REINFORCEMENT IS ONLY REQUIRED WITHIN 100 FT UPSLOPE OF RECEIVING WATERS.
2. WHERE REQUIRED FENCE SHALL BE WOVEN WIRE, MIN. 14 GAUGE WITH A 6\"/>

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

SILT FENCE

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

THIS ITEM SHALL BE PAID FOR UNDER ITEM
649.51 GEOTEXTILE FOR SILT FENCE (FILTER FABRIC ONLY FENCE)

SEEDING FORMULA

RATE: DOUBLE IF HYDROSEEDING

% WT.	LBS./A.	NAME	PUR %	GERM %
38	32	CREEPING RED FESCUE	98	90
29	24	SPARTAN HARD FESCUE	95	85
15	12	AZAY SHEEP'S FESCUE	95	87
15	12	ANNUAL RYE GRASS	95	90
3	--	INERTS	--	--
100.0	80 LB/A			

GENERAL NOTES

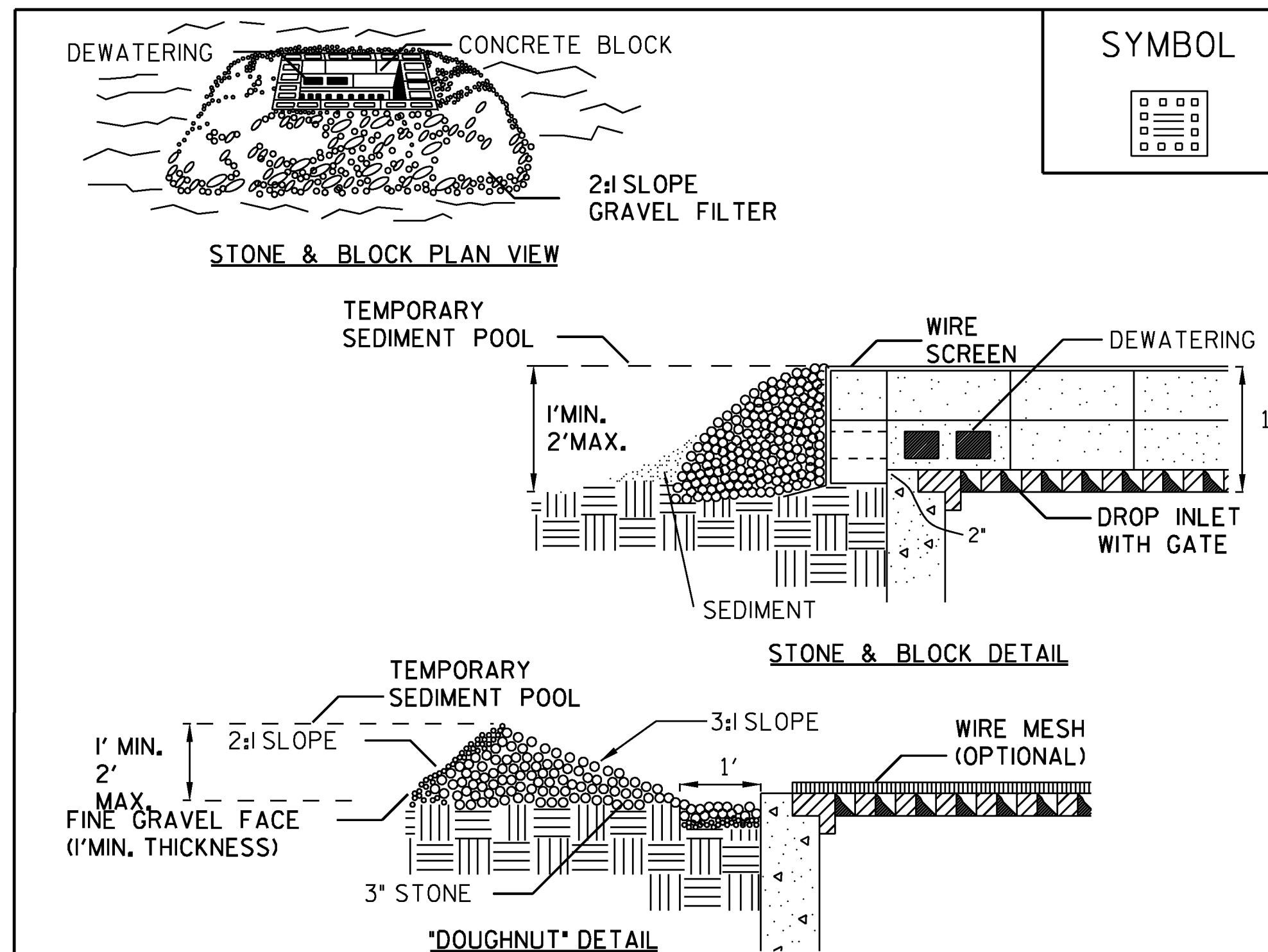
SEED MIXTURE: SHALL NOT HAVE A WEED CONTENT EXCEEDING 0.40% BY WEIGHT AND SHALL BE FREE OF ALL NOXIOUS SEED.

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.

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



CONSTRUCTION SPECIFICATIONS

1. LAY ONE BLOCK ON EACH SIDE OF THE STRUCTURE ON ITS SIDE FOR DEWATERING. FOUNDATION SHALL BE 2 INCHES MINIMUM BELOW REST OF INLET AND BLOCKS SHALL BE PLACED AGAINST INLET FOR SUPPORT.
2. HARDWARE CLOTH OR 1/2\"/>

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

STONE & BLOCK 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 1

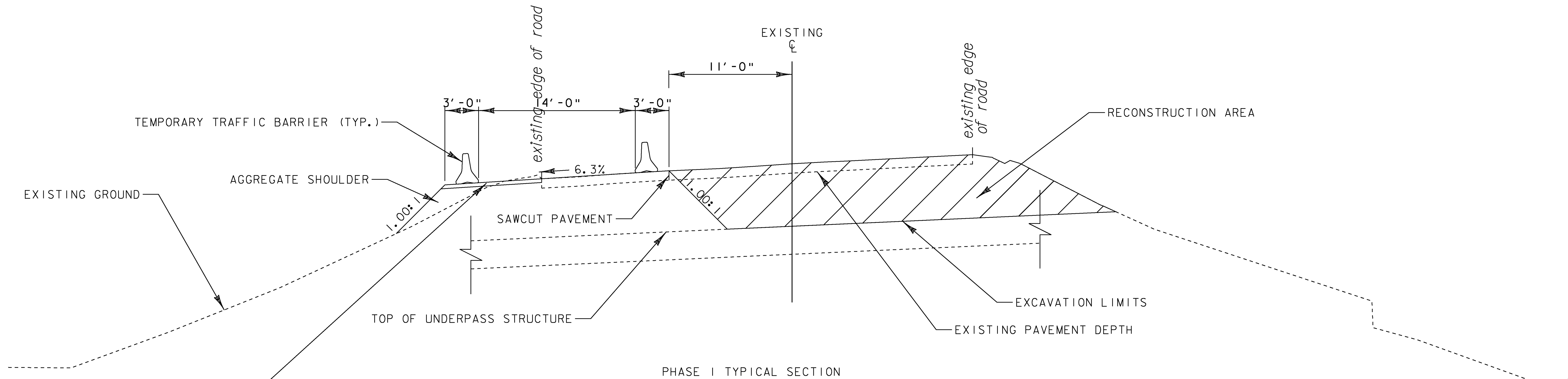
EROSION CONTROL DETAILS SHEET

PROJECT NAME: HARTFORD-SHARON

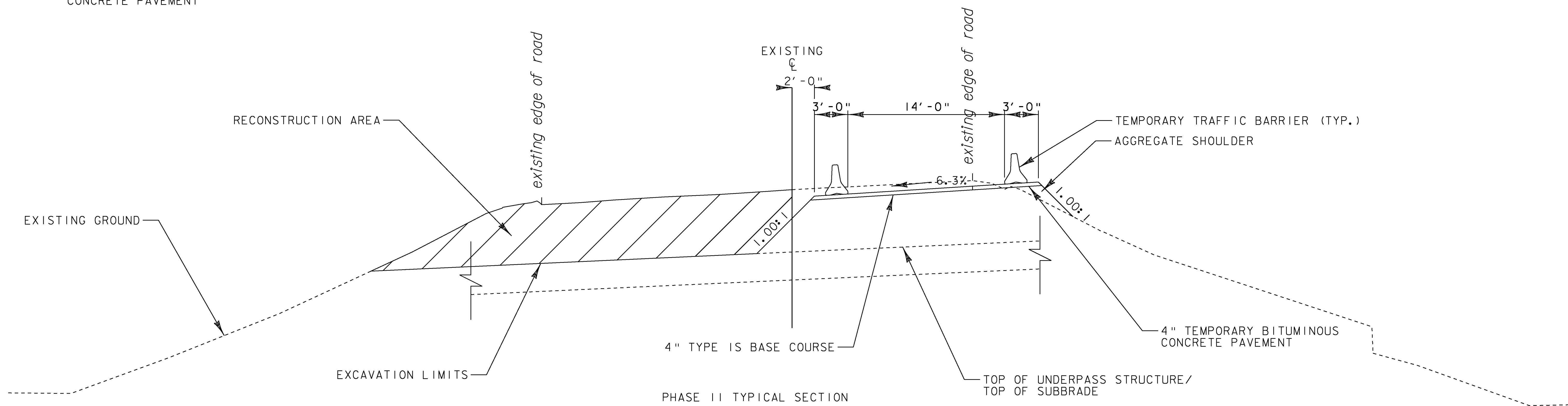
PROJECT NUMBER: IM 089-1(57)

FILE NAME: 97A184.dgn
PROJECT LEADER: CDL
DESIGNED BY: SJL
PLOT FILE: 97A184_35.t

PLOT DATE: 8/6/2010
DRAWN BY: SJL
CHECKED BY: EPD
SHEET 35 OF 62



PHASE I TYPICAL SECTION



PHASE II TYPICAL SECTION

NOT TO SCALE

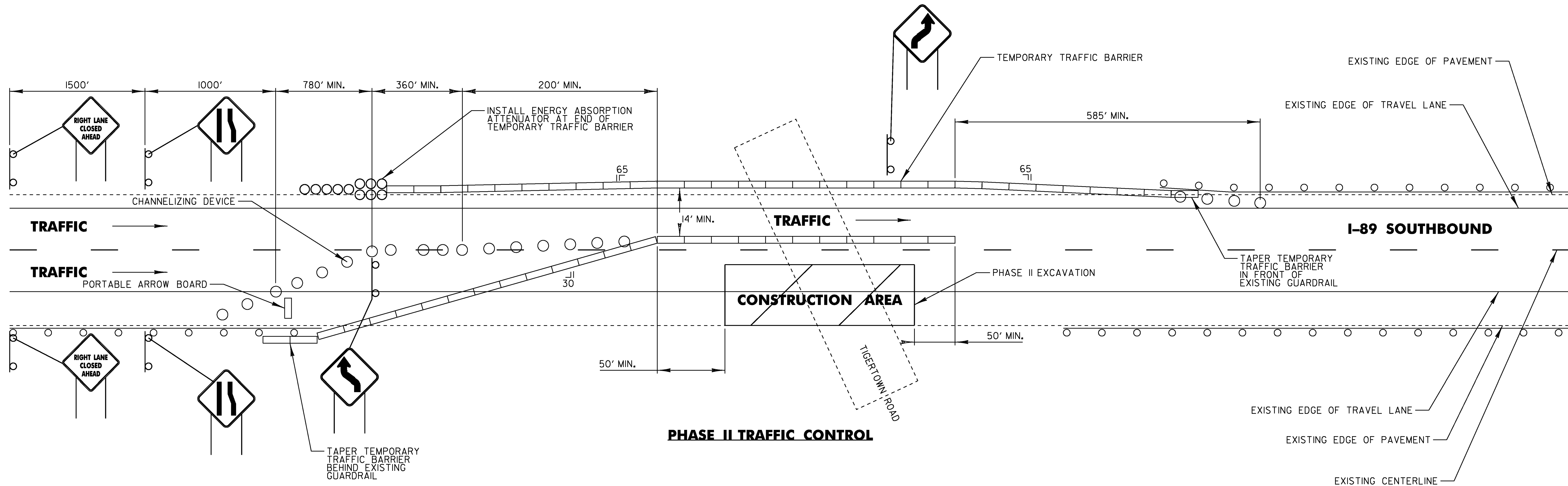
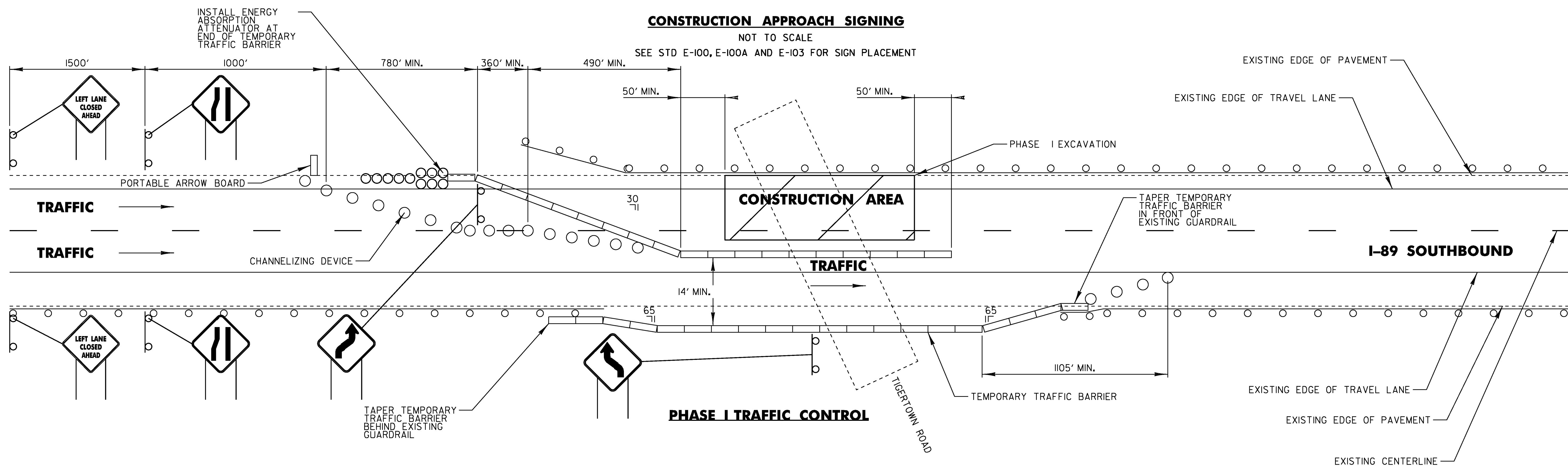
PHASE I AND II TRAFFIC CONTROL TYPICAL SECTIONS SHEET	PROJECT NAME: HARTFORD-SHARON	PLOT DATE: 8/6/2010
	PROJECT NUMBER: IM 089-1(57)	DRAWN BY: SJL
	FILE NAME: 97A184.dgn	CHECKED BY: EPD
	PROJECT LEADER: CDL	SHEET 36 OF 62
	DESIGNED BY: SJL	
	PLOT FILE: 97A184_36.i	

PLOTTED 8/6/2010

CONSTRUCTION APPROACH SIGNING

NOT TO SCALE

SEE STD E-100, E-100A AND E-103 FOR SIGN PLACEMENT



NOTES:

1. SEE SHEET 9 FOR CONSTRUCTION APPROACH SIGNING NOTES.

**CONSTRUCTION
APPROACH
SIGNING SHEET
PHASE I AND II**

PROJECT NAME: HARTFORD-SHARON

PROJECT NUMBER: IM 089-1(57)

FILE NAME: 97A184.dgn

PROJECT LEADER: CDL

DESIGNED BY: SJL

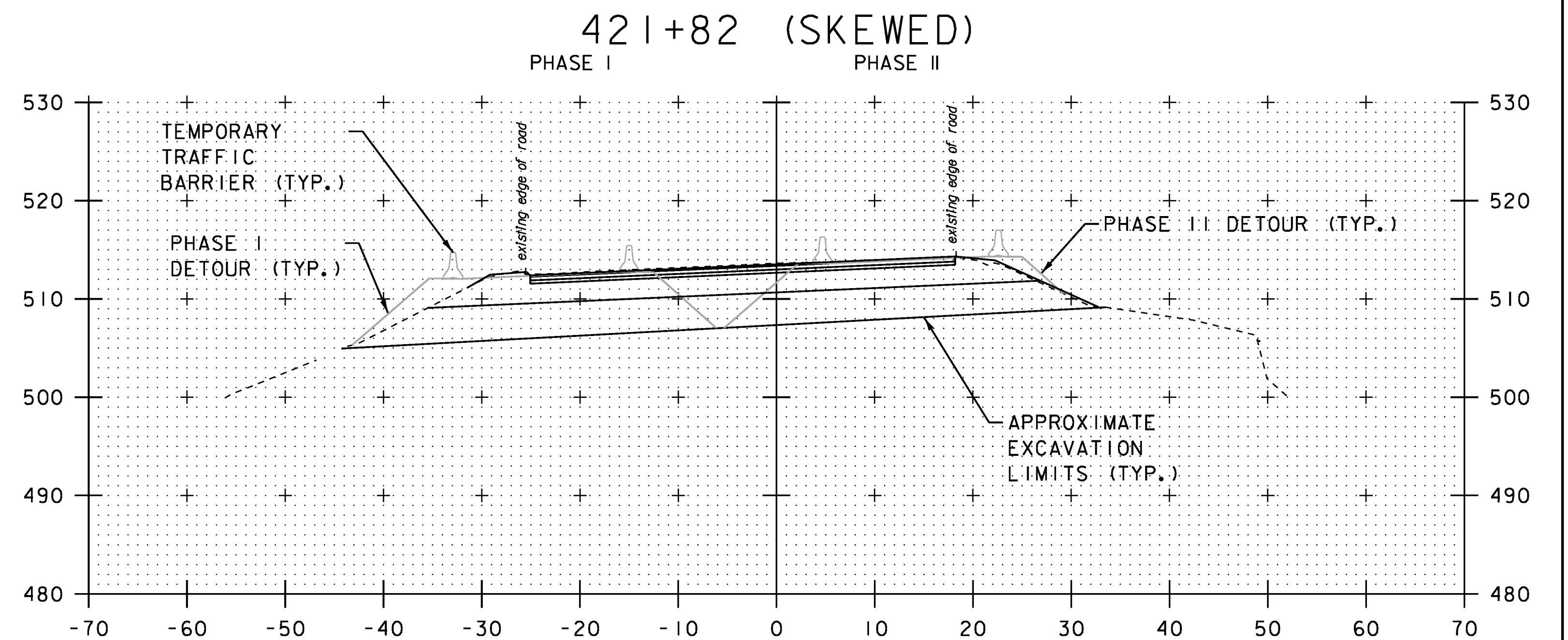
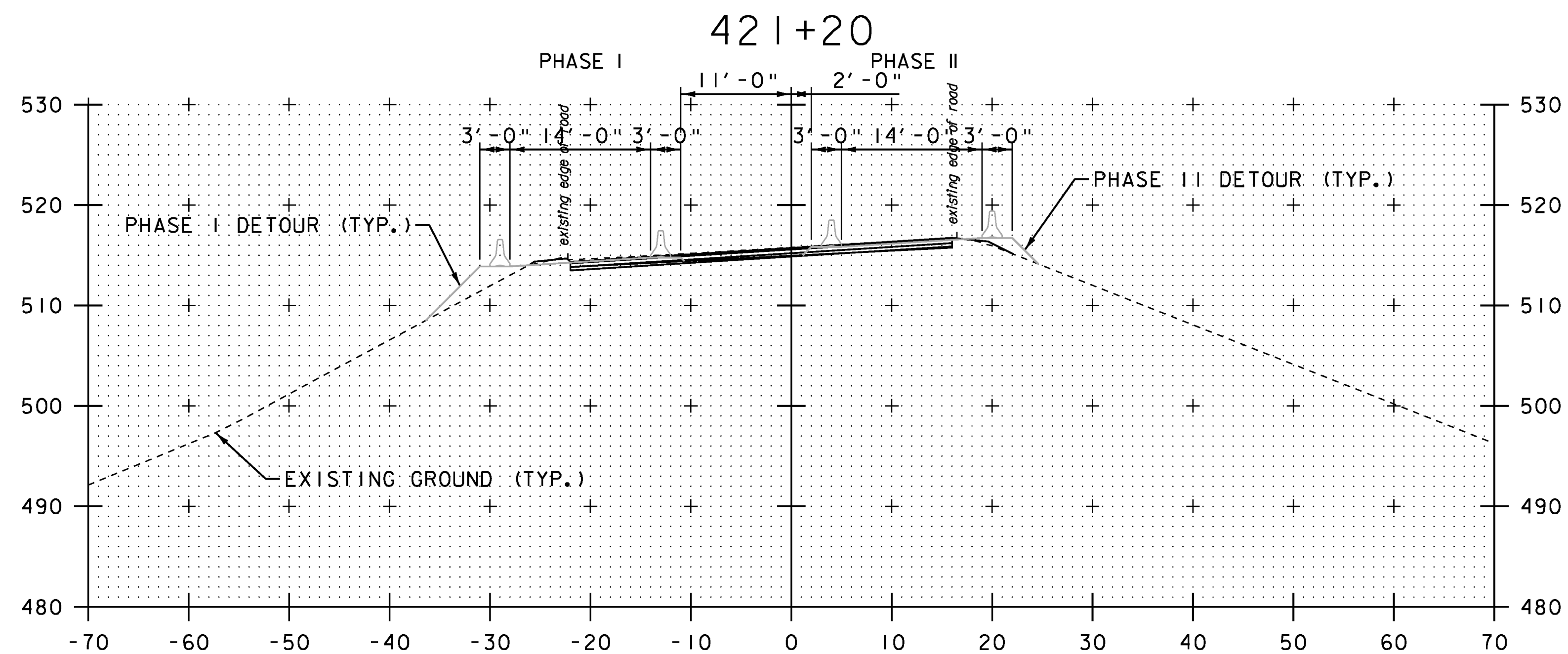
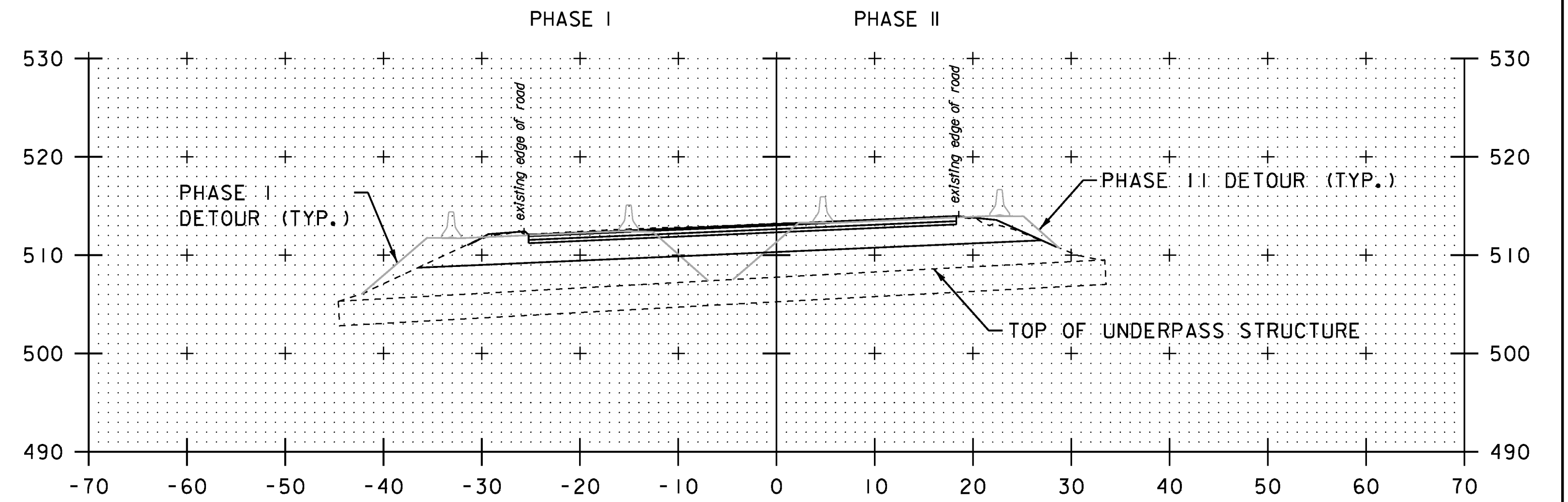
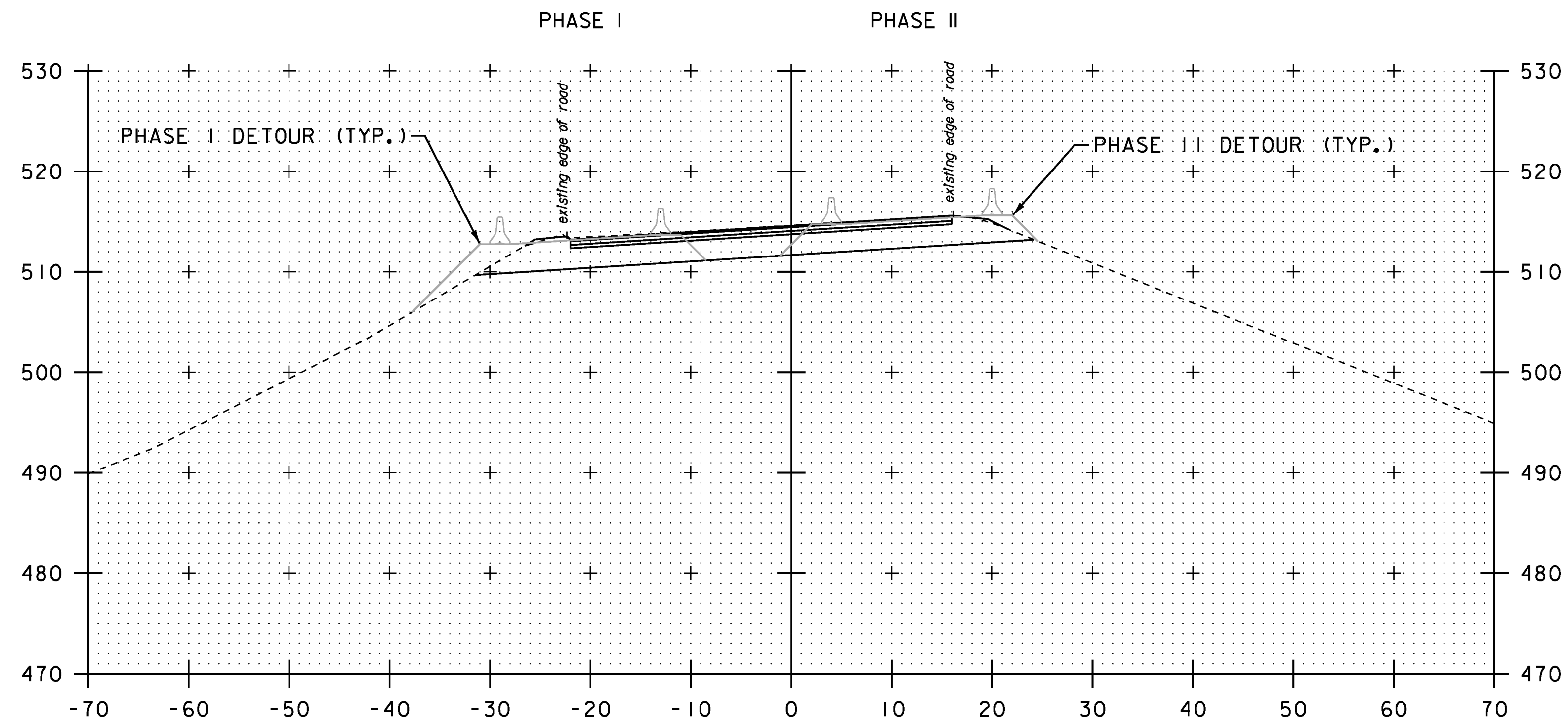
PLOT FILE: 97A184_37.1

PLOT DATE: 8/6/2010

DRAWN BY: BMB

CHECKED BY: EPD

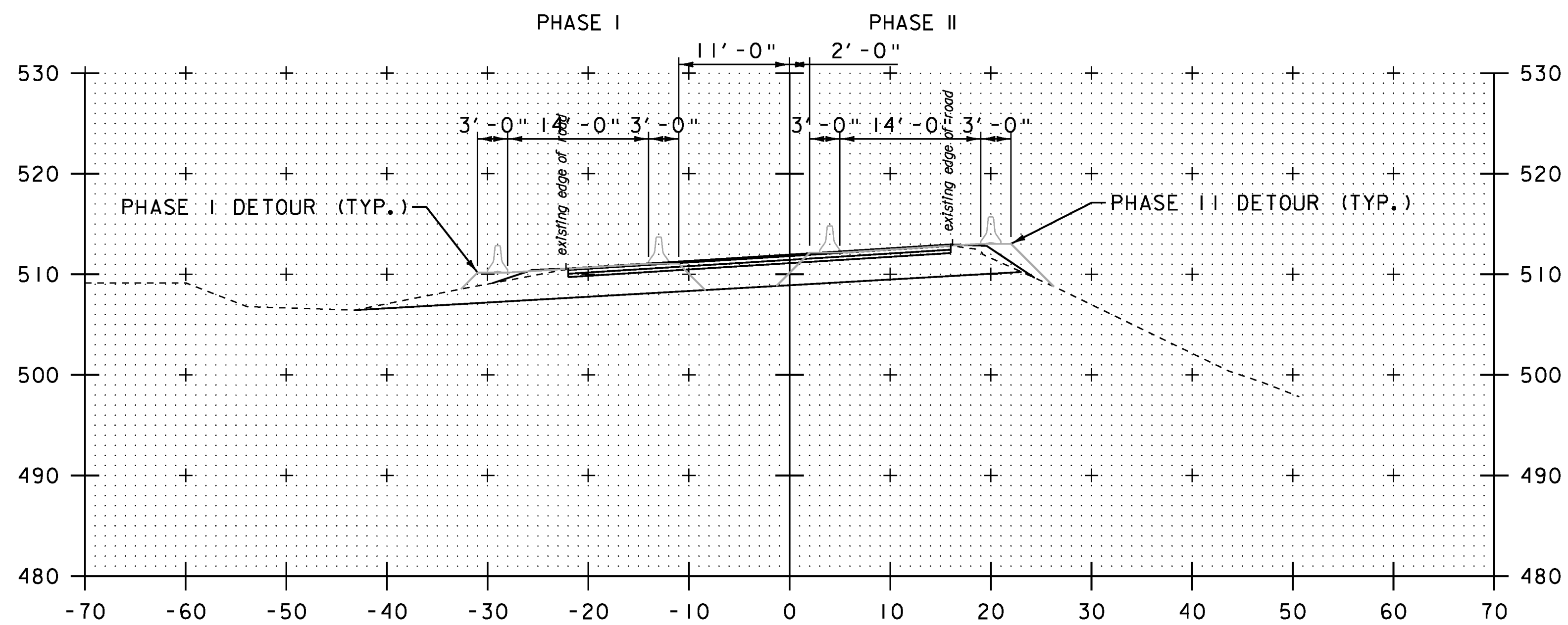
SHEET 37 OF 62



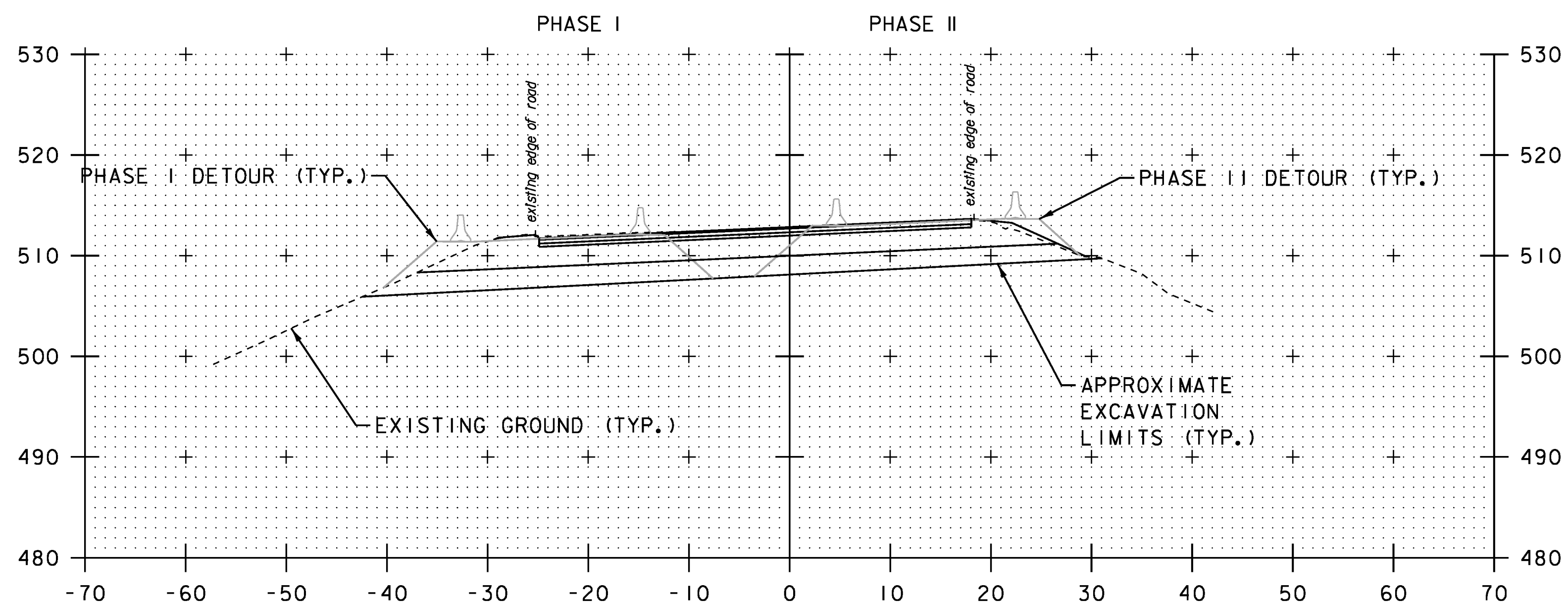
DATUM
 VERTICAL NAVD 88 (GPS DERIVED)
 HORIZONTAL NAD 83 (GPS DERIVED)

SCALE 1" = 10'-0"
 10 0 10
 PLOTTED 8/6/2010

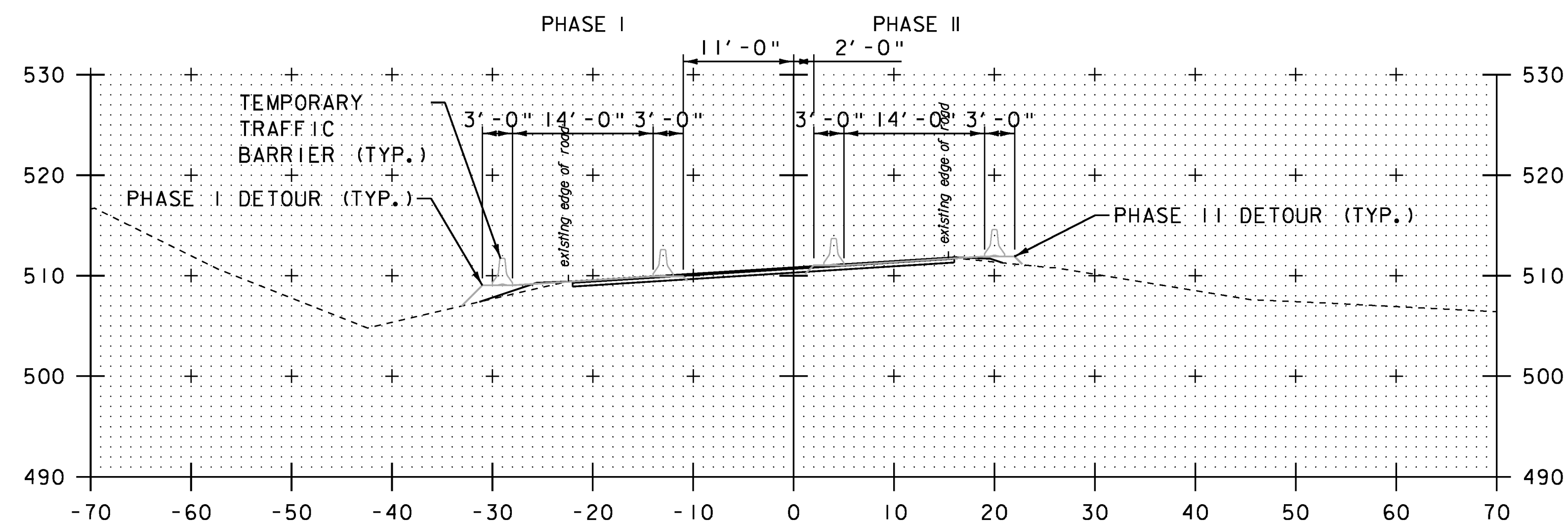
ROADWAY RECONSTRUCTION CRITICAL CROSS SECTIONS SHEET 1	PROJECT NAME: HARTFORD - SHARON	PLOT DATE: 8/6/2010
	PROJECT NUMBER: IM 089-1(57)	DRAWN BY: SJL
	FILE NAME: 97A184.dgn	CHECKED BY: EPD
	PROJECT LEADER: CDL	SHEET 38 OF 62
	DESIGNED BY: SJL	
	PLOT FILE: 97A184_38.t	



422+35



421+96 (SKEWED)



422+85

DATUM
 VERTICAL NAVD 88 (GPS DERIVED)
 HORIZONTAL NAD 83 (GPS DERIVED)

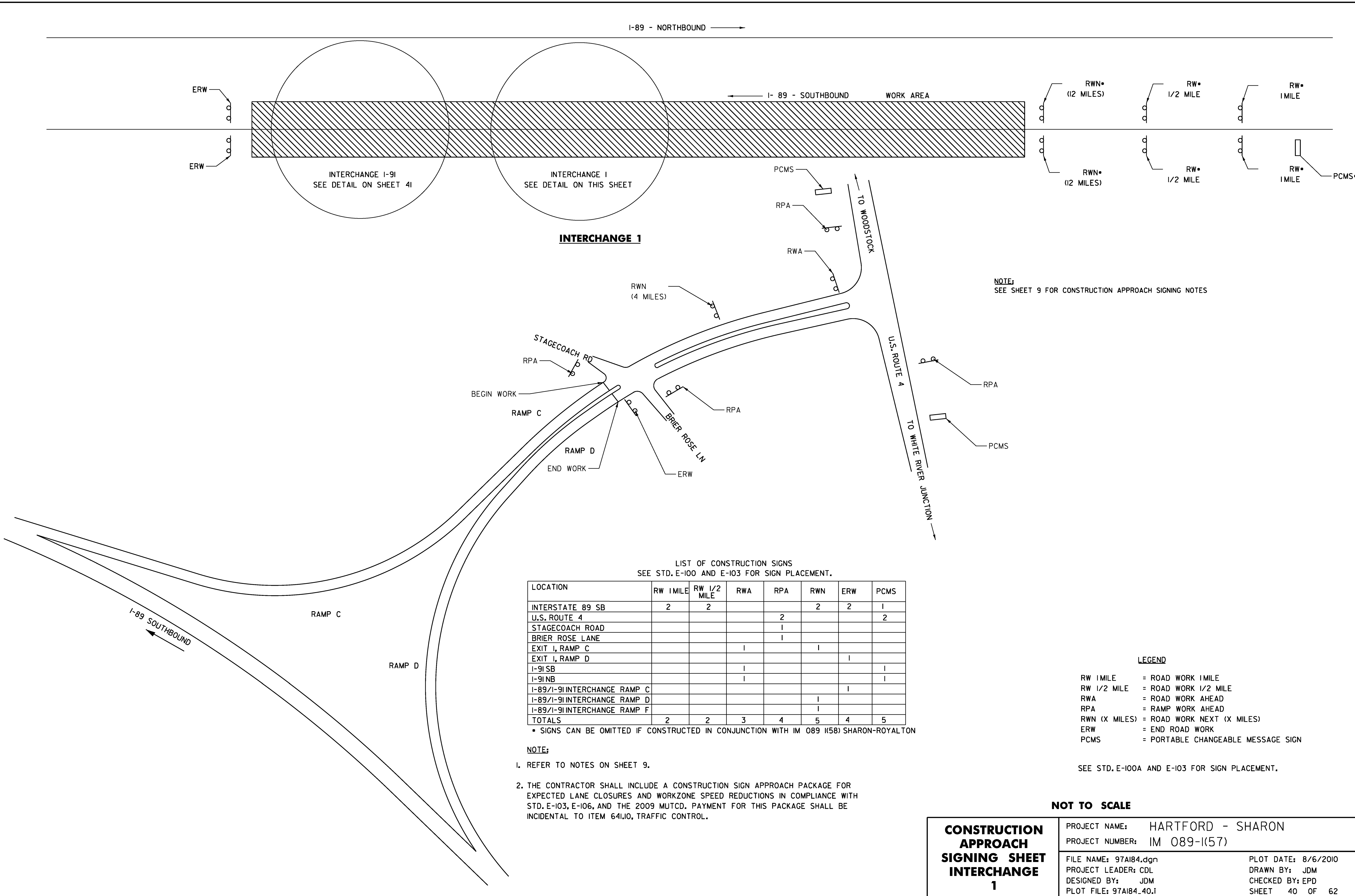
SCALE 1" = 10'-0"
 10 0 10
 PLOTTED 8/6/2010

**ROADWAY
 RECONSTRUCTION
 CRITICAL
 CROSS SECTIONS
 SHEET 2**

PROJECT NAME: HARTFORD - SHARON
 PROJECT NUMBER: IM 089-(157)

FILE NAME: 97A184.dgn
 PROJECT LEADER: CDL
 DESIGNED BY: SJL
 PLOT FILE: 97A184_39.1

PLOT DATE: 8/6/2010
 DRAWN BY: SJL
 CHECKED BY: EPD
 SHEET 39 OF 62



NOTE:
SEE SHEET 9 FOR CONSTRUCTION APPROACH SIGNING NOTES

LIST OF CONSTRUCTION SIGNS
SEE STD. E-100 AND E-103 FOR SIGN PLACEMENT.

LOCATION	RW 1 MILE	RW 1/2 MILE	RWA	RPA	RWN	ERW	PCMS
INTERSTATE 89 SB	2	2			2	2	1
U.S. ROUTE 4				1			2
STAGECOACH ROAD				1			
BRIAR ROSE LANE				1			
EXIT 1, RAMP C			1		1		
EXIT 1, RAMP D						1	
I-91 SB			1				1
I-91 NB			1				1
I-89/I-91 INTERCHANGE RAMP C						1	
I-89/I-91 INTERCHANGE RAMP D					1		
I-89/I-91 INTERCHANGE RAMP F					1		
TOTALS	2	2	3	4	5	4	5

* SIGNS CAN BE OMITTED IF CONSTRUCTED IN CONJUNCTION WITH IM 089 (I58) SHARON-ROYALTON

NOTE:

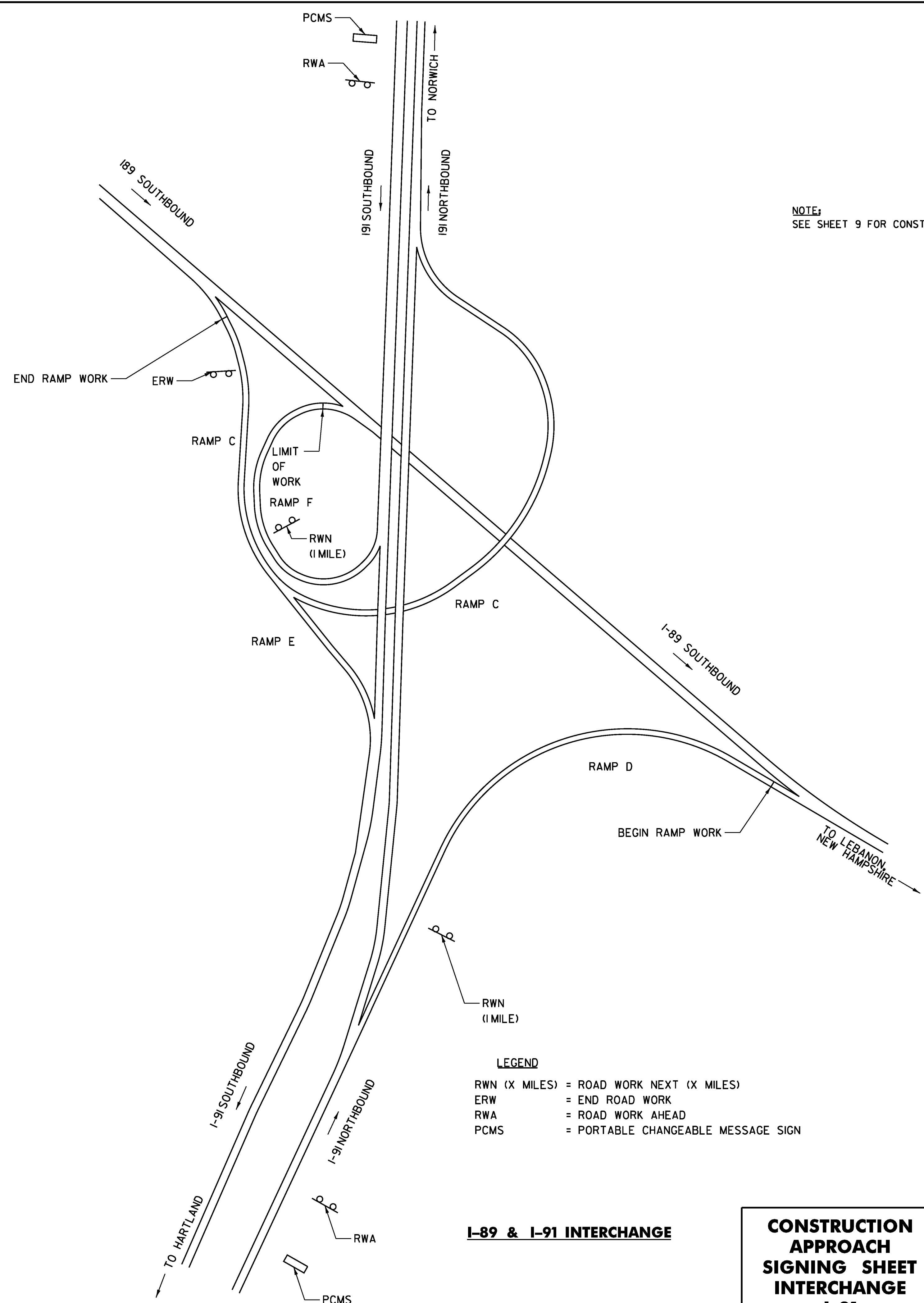
- REFER TO NOTES ON SHEET 9.
- THE CONTRACTOR SHALL INCLUDE A CONSTRUCTION SIGN APPROACH PACKAGE FOR EXPECTED LANE CLOSURES AND WORKZONE SPEED REDUCTIONS IN COMPLIANCE WITH STD. E-103, E-106, AND THE 2009 MUTCD. PAYMENT FOR THIS PACKAGE SHALL BE INCIDENTAL TO ITEM 641.10, TRAFFIC CONTROL.

- LEGEND**
- RW 1 MILE = ROAD WORK 1 MILE
 - RW 1/2 MILE = ROAD WORK 1/2 MILE
 - RWA = ROAD WORK AHEAD
 - RPA = RAMP WORK AHEAD
 - RWN (X MILES) = ROAD WORK NEXT (X MILES)
 - ERW = END ROAD WORK
 - PCMS = PORTABLE CHANGEABLE MESSAGE SIGN

SEE STD. E-100A AND E-103 FOR SIGN PLACEMENT.

NOT TO SCALE

CONSTRUCTION APPROACH SIGNING SHEET INTERCHANGE 1	PROJECT NAME: HARTFORD - SHARON
	PROJECT NUMBER: IM 089-I(57)
	FILE NAME: 97A184.dgn
	PLOT DATE: 8/6/2010
PROJECT LEADER: CDL	DRAWN BY: JDM
DESIGNED BY: JDM	CHECKED BY: EPD
PLOT FILE: 97A184_40.1	SHEET 40 OF 62



NOTE:
SEE SHEET 9 FOR CONSTRUCTION APPROACH SIGNING NOTES

- LEGEND**
- RWN (X MILES) = ROAD WORK NEXT (X MILES)
 - ERW = END ROAD WORK
 - RWA = ROAD WORK AHEAD
 - PCMS = PORTABLE CHANGEABLE MESSAGE SIGN

I-89 & I-91 INTERCHANGE

CONSTRUCTION APPROACH SIGNING SHEET INTERCHANGE I-91	PROJECT NAME: HARTFORD - SHARON	
	PROJECT NUMBER: IM 089-1(57)	
	FILE NAME: 97A184.dgn	PLOT DATE: 8/6/2010
	PROJECT LEADER: CDL	DRAWN BY: JDM
DESIGNED BY: JDM	CHECKED BY: EPD	
PLOT FILE: 97A184_41.i	SHEET 41 OF 62	

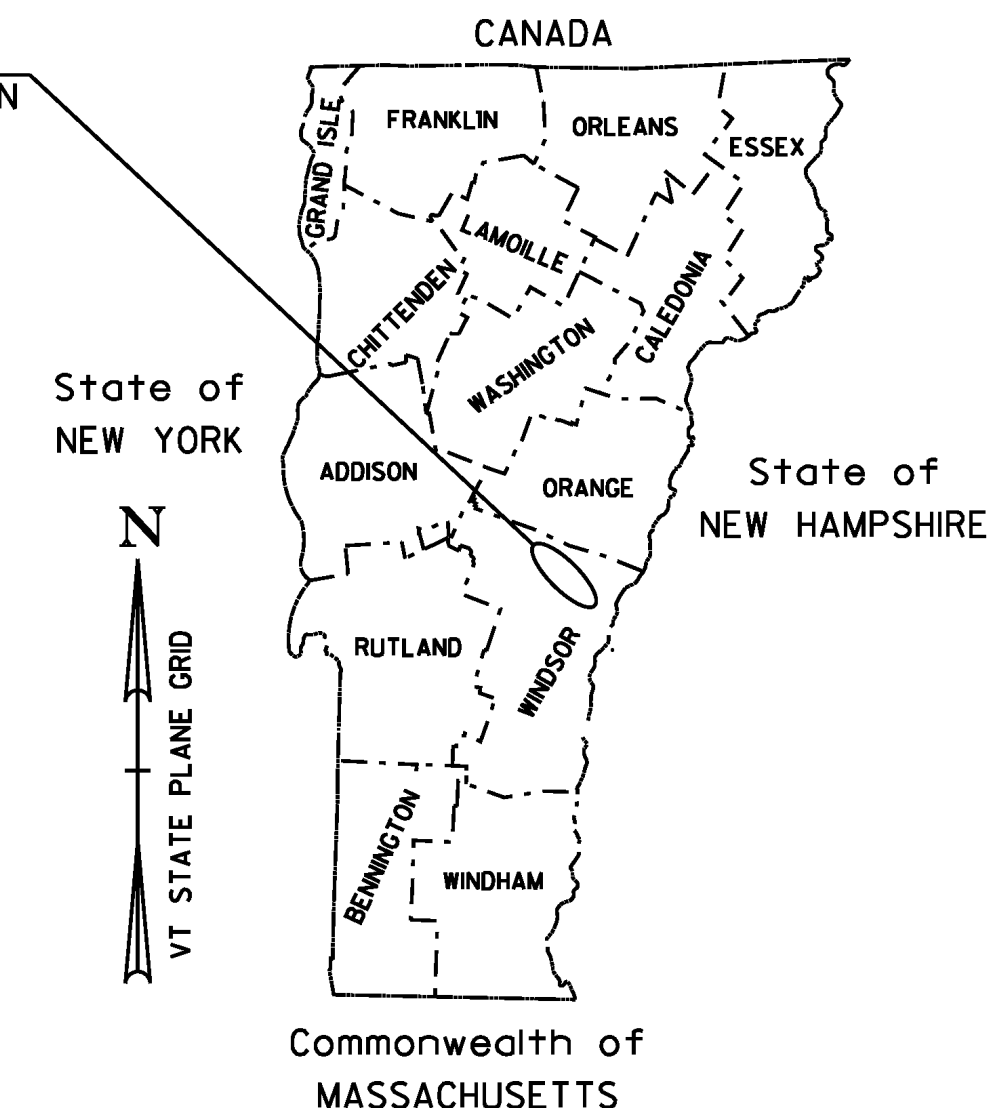
STATE OF VERMONT AGENCY OF TRANSPORTATION



PROPOSED IMPROVEMENT TOWNS OF SHARON AND ROYALTON COUNTY OF WINDSOR INTERSTATE ROUTE 89 (NB & SB)

INDEX OF SHEETS
SEE SHEET 2

PROJECT LOCATION
SHARON - ROYALTON
IM 089-1(58)



BEGINNING IN THE TOWN OF SHARON AT MILE MARKER 12.245 AND EXTENDING NORTHERLY ALONG INTERSTATE ROUTE 89 FOR A DISTANCE OF 27,772.80 FT (5.260 MILES) TO AN ENDING POINT AT MILE MARKER 17.505

LENGTH OF ROADWAY NB	27,772.80 FT	(5.260 MILES)
LENGTH OF ROADWAY SB	27,772.80 FT	(5.260 MILES)
LENGTH OF PROJECT	27,772.80 FT	(5.260 MILES)

WORK TO BE PERFORMED UNDER THIS PROJECT INCLUDES COLD PLANING, RESURFACING WITH A LEVELING COURSE AND WEARING COURSE, NEW PAVEMENT MARKINGS, NEW SIGNS, GUARDRAIL IMPROVEMENTS, DRAINAGE IMPROVEMENTS AND INCIDENTAL ITEMS. WORK INCLUDES NORTHBOUND AND SOUTHBOUND MAINLINES, U-TURNS AS WELL AS THE EXIT 2 NORTHBOUND RAMPS B & D AND SOUTHBOUND RAMPS A & C.

TRAFFIC DATA

HIGHWAY SECTION	AADT		DHV		CUM. ESALS (2011-2021)	CUM. ESALS (2011-2031)
	2011	2021	2011	2021		
NORTHBOUND BEGIN OF PROJECT TO I-89 EXIT 2 (MM 12.245 SHARON - MM 13.420 SHARON)	9,200	10,600	1,200	1,400	5,257,000	14,866,000
SOUTHBOUND BEGIN OF PROJECT TO I-89 EXIT 2 (MM 12.245 SHARON - MM 13.420 SHARON)	9,200	10,600	1,200	1,400	5,148,000	13,946,000
NORTHBOUND I-89 EXIT 2 TO END OF PROJECT (MM 13.420 SHARON - MM 17.500 ROYALTON)	7,600	8,800	1,100	1,200	5,470,000	14,858,000
SOUTHBOUND I-89 EXIT 2 TO END OF PROJECT (MM 13.420 SHARON - MM 17.505 ROYALTON)	7,600	8,800	1,100	1,300	5,696,000	15,380,000

QUALITY ASSURANCE PROGRAM: LEVEL 1

CONVENTIONAL SYMBOLS

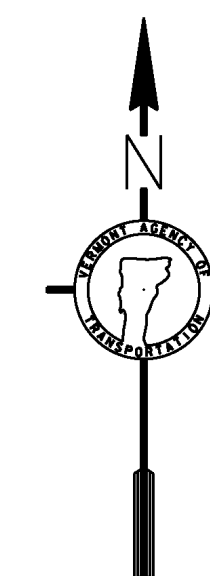
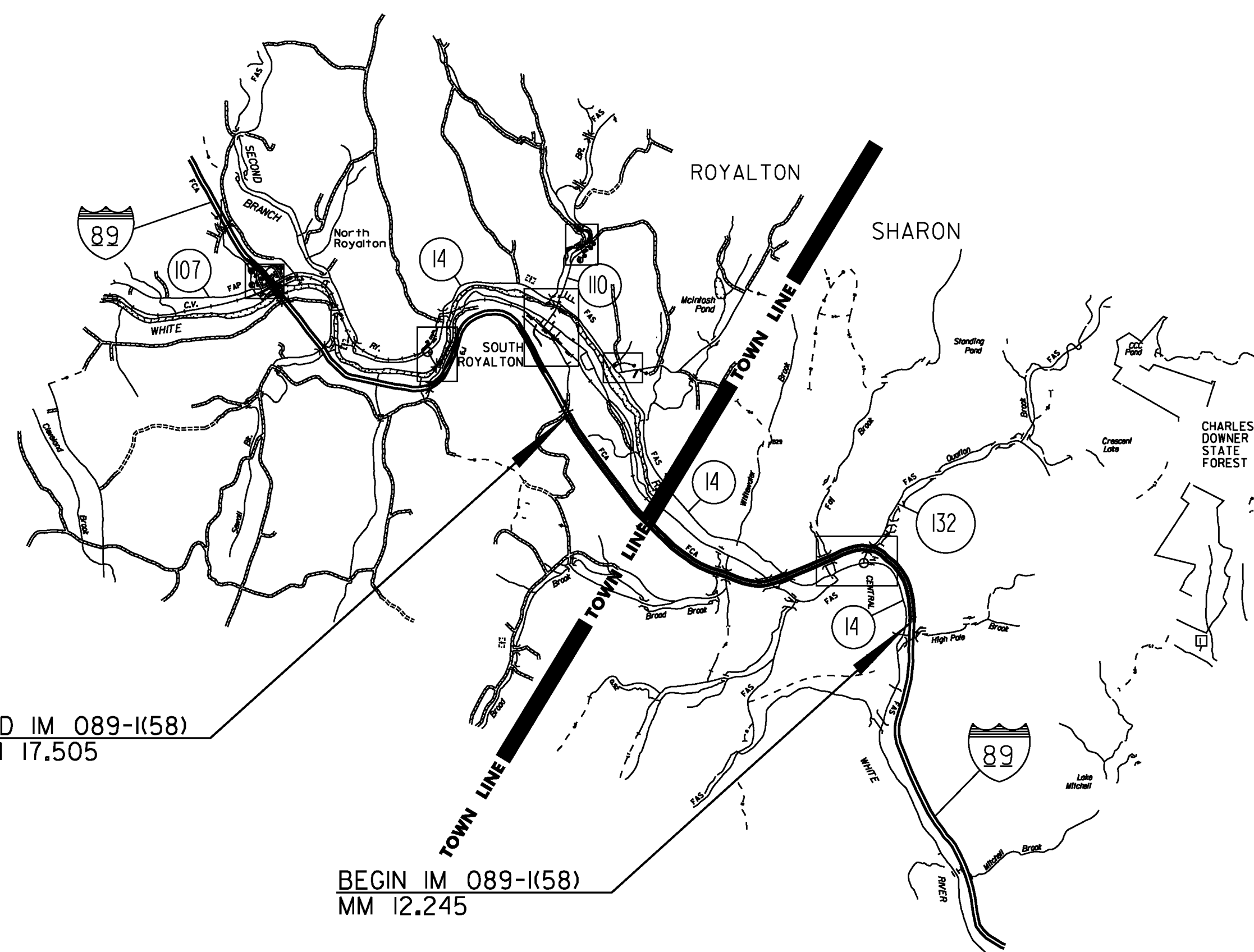
COUNTY LINE	
TOWN LINE	
LIMITS OF ACCESS	
POINT OF ACCESS	
FENCE LINE	
STONE WALL	
TRAVELED WAY	
GUARD RAIL	
RAILROAD	
SURVEY LINE	
CULVERT	
POWER POLE	
TELEPHONE POLE	
TREES	
CONTROL OF ACCESS	
PROPERTY LINE	
R.O.W. TAKING LINE	
SLOPE RIGHTS	
TOP OF CUT	
TOE OF SLOPE	

engineering planning management development

DATUM

VERTICAL N/A

HORIZONTAL N/A

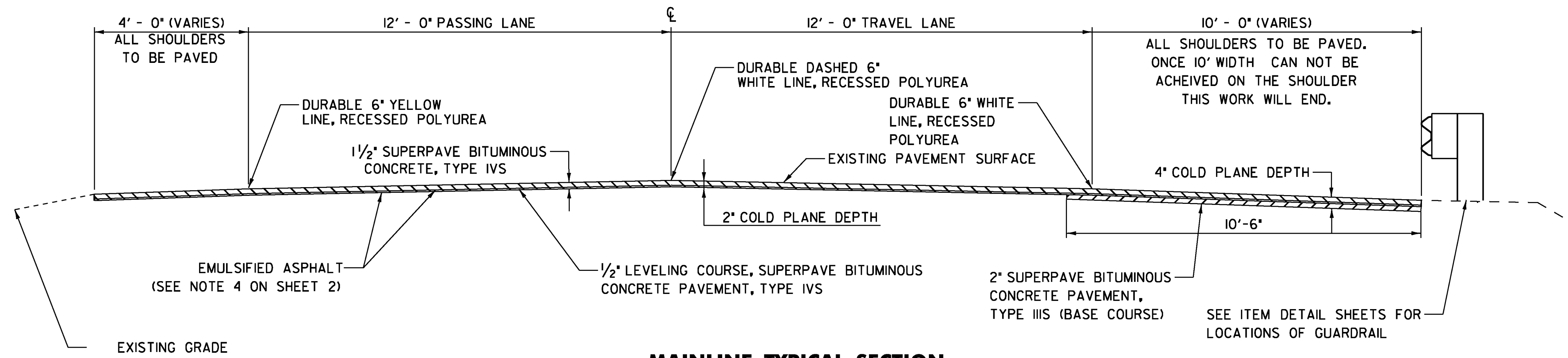


BITUMINOUS CONCRETE SUPERPAVE MIXTURE DESIGN CRITERIA	
DESIGN LANE/DESIGN LIFE ESAL	15,380,000
DESIGN NUMBER OF GYRATIONS	80
PERFORMANCE GRADED ASPHALT BINDER:	SEE SECTION 490 GENERAL SPECIAL PROVISIONS

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.

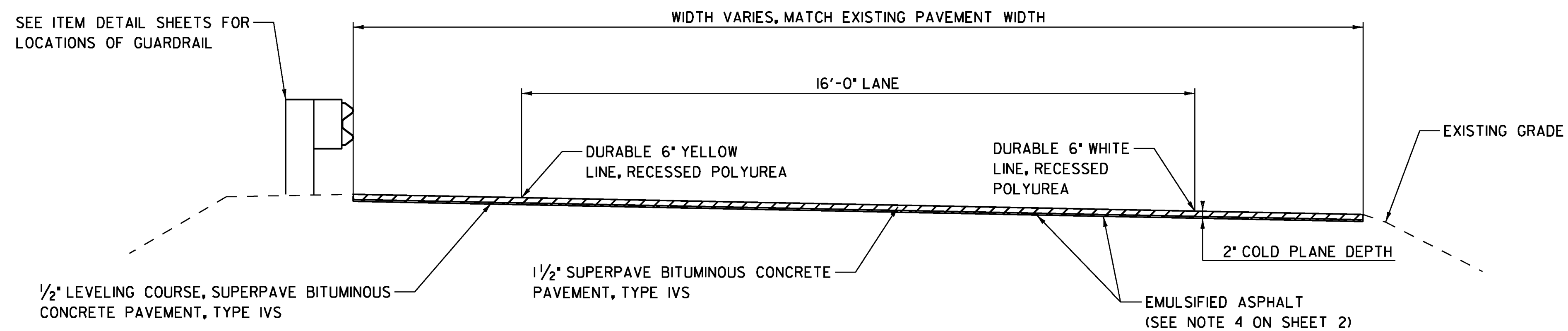
PROJECT MANAGER :	MIKE FOWLER P.E.
PROJECT NAME :	SHARON - ROYALTON
PROJECT NUMBER :	1M 089-1 (58)
SHEET	42 OF 62 SHEETS



MAINLINE TYPICAL SECTION

MM 12.245 - MM. 17.505

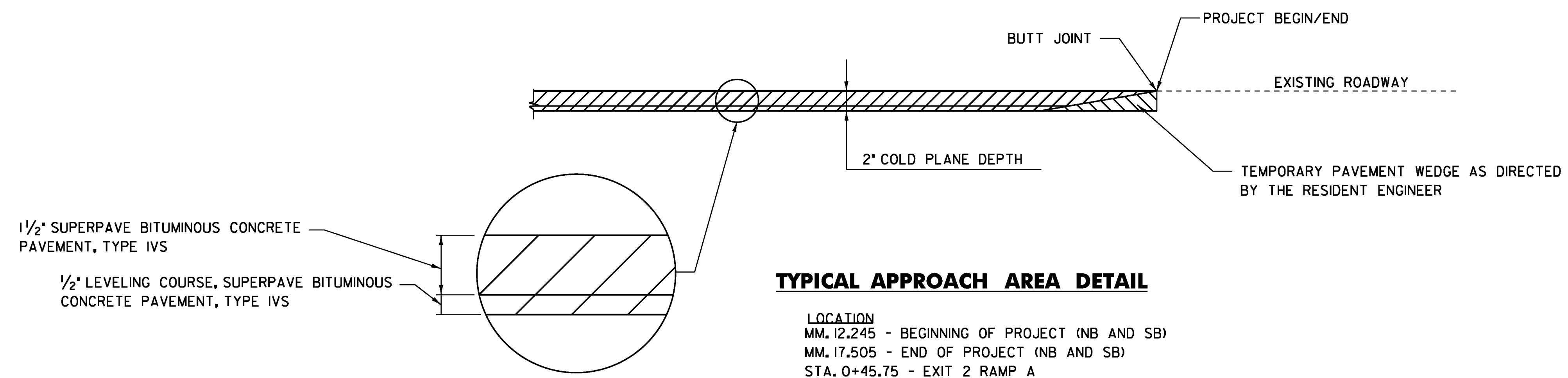
MIRROR IMAGE FOR SOUTHBOUND LANES



RAMP TYPICAL SECTION

NOT TO SCALE

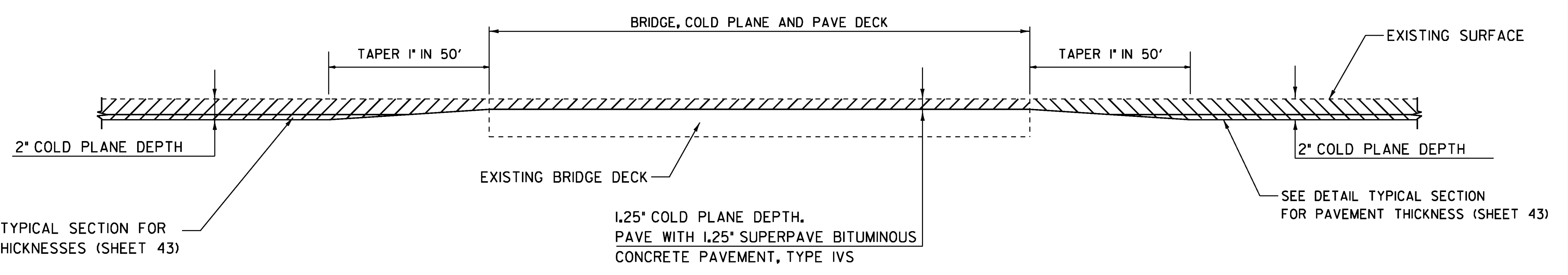
PROJECT TYPICAL SHEET	PROJECT NAME: SHARON - ROYALTON
	PROJECT NUMBER: IM 089-1(58)
	FILE NAME: 97A184.dgn
	PLOT DATE: 8/6/2010
	PROJECT LEADER: CDL
	DESIGNED BY: SJL
	PLOT FILE: 97A184_43.t
	DRAWN BY: SJL
	CHECKED BY: EPD
	SHEET 43 OF 62



TYPICAL APPROACH AREA DETAIL

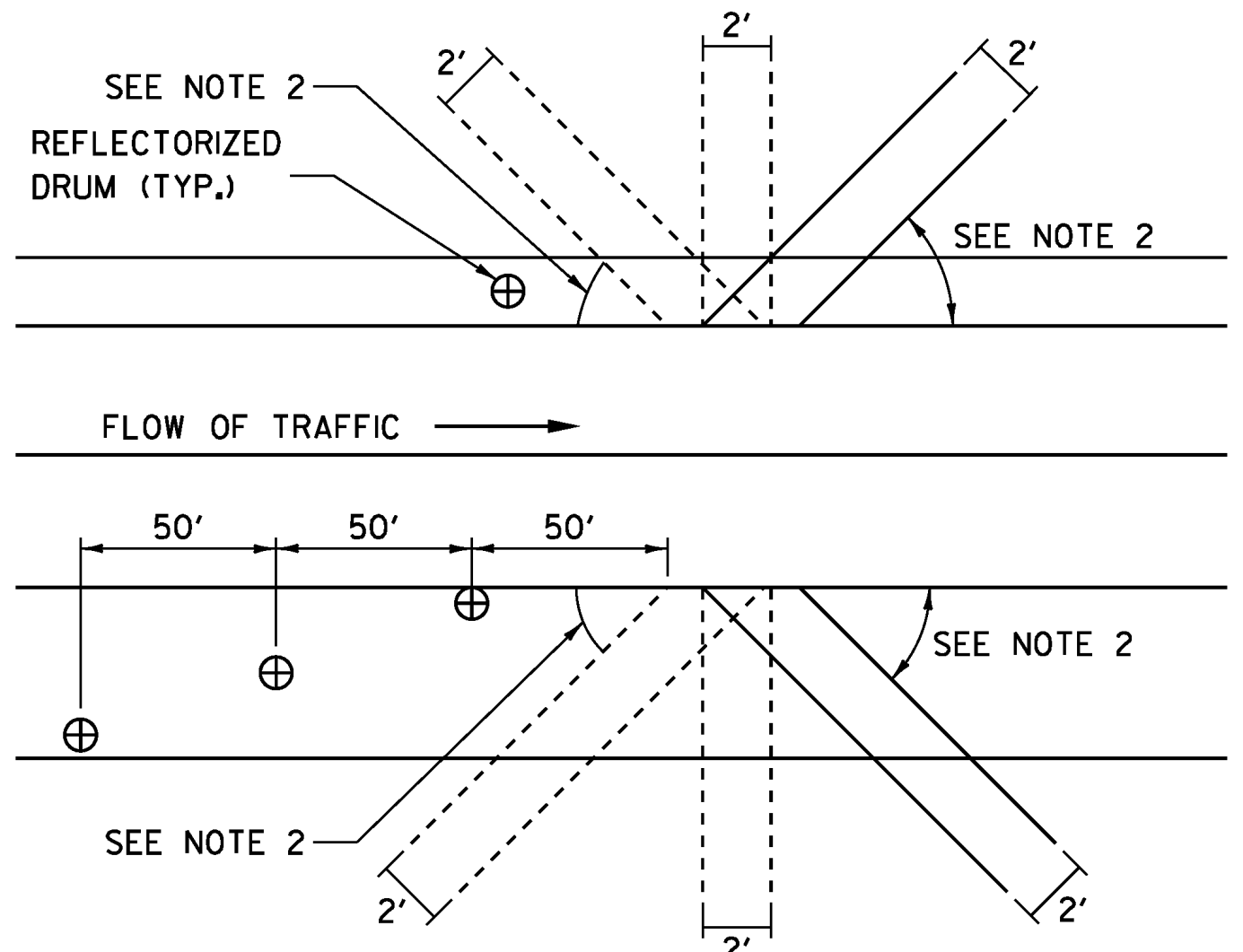
LOCATION
 MM. 12.245 - BEGINNING OF PROJECT (NB AND SB)
 MM. 17.505 - END OF PROJECT (NB AND SB)
 STA. 0+45.75 - EXIT 2 RAMP A
 STA. 20+57.73 - EXIT 2 RAMP B
 STA. 40+00.00 - EXIT 2 RAMP C
 STA. 61+11.18 - EXIT 2 RAMP D

1 1/2" SUPERPAVE BITUMINOUS CONCRETE PAVEMENT, TYPE IVS
 1/2" LEVELING COURSE, SUPERPAVE BITUMINOUS CONCRETE PAVEMENT, TYPE IVS



BRIDGE COLD PLANE DETAIL

BRIDGE # 15N LOCATION MM 13.414	BRIDGE #17N LOCATION MM 14.462
BRIDGE #15S LOCATION MM 13.425	BRIDGE #17S LOCATION MM 14.453
BRIDGE #16N LOCATION MM 13.909	BRIDGE #18N LOCATION MM 14.671
BRIDGE #16S LOCATION MM 13.899	BRIDGE #18S LOCATION MM 14.649



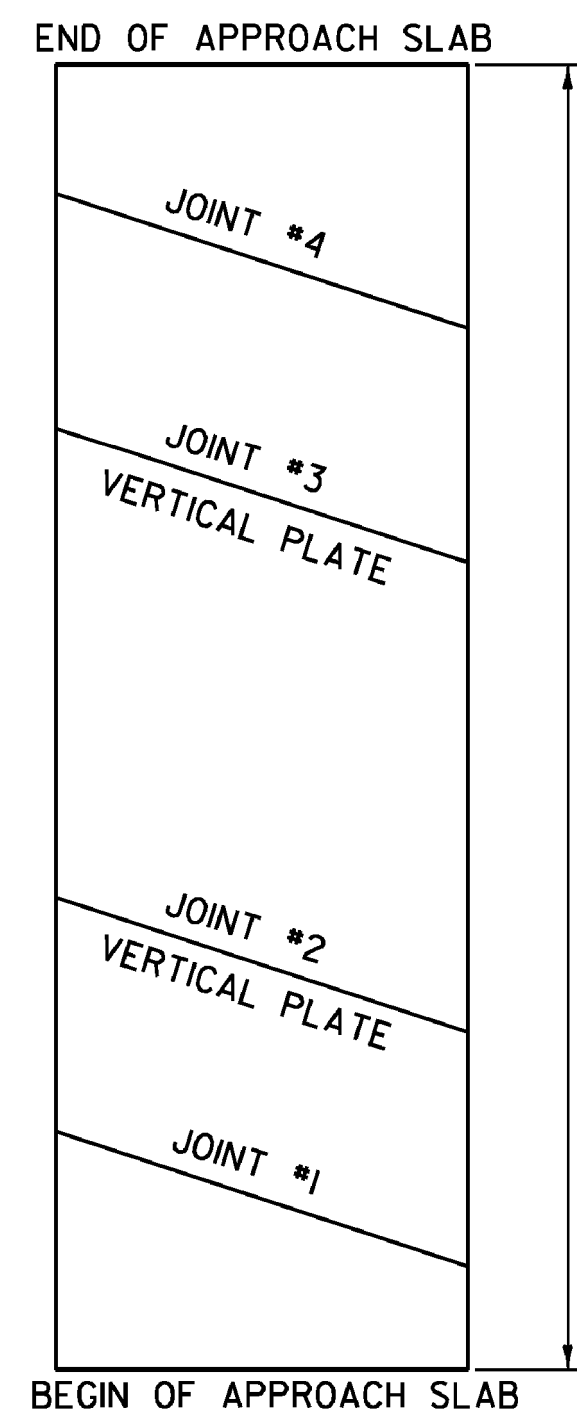
BLEEDER DETAIL

BLEEDER DETAIL NOTES:

1. BLEEDERS ARE TO BE CUT WHILE COLD PLANING, AT LOCATIONS SPECIFIED BY THE RESIDENT ENGINEER.
2. ANGLE BLEEDERS TO BEST ACCEPT WATER FLOW.
3. CUT ALL BLEEDERS TO THE DEPTH OF COLD PLANING AND GRADE TO DRAIN. PAYMENT INCIDENTAL TO ITEM 210.10.
4. BLEEDERS ARE TO BE FILLED DURING PAVING WITH ITEM 490.30, OR AS DESIGNATED BY THE RESIDENT ENGINEER.
5. REFLECTORIZED DRUMS MUST BE PLACED AS SHOWN TO WARN MOTORISTS OF THE GAP IN THE SHOULDER.
6. BLEEDERS ARE NOT REQUIRED IF THE COLD PLANED AREAS ARE PAVED BACK THE SAME DAY.

NOT TO SCALE

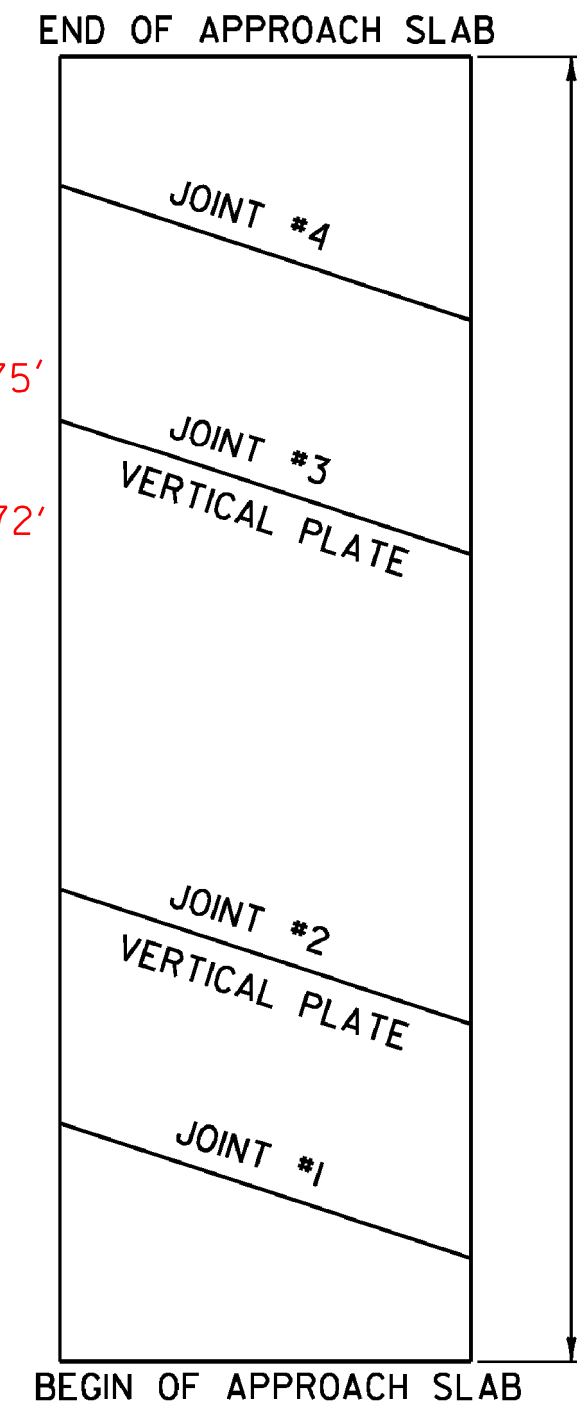
BRIDGE LOCATION AND DETAIL SHEET 1	PROJECT NAME: SHARON - ROYALTON
	PROJECT NUMBER: IM 089-1(58)
	FILE NAME: 97A184.dgn
	PLOT DATE: 8/6/2010
	DRAWN BY: SJL
	CHECKED BY: EPD
	SHEET 44 OF 62



JOINT	MM	LENGTH
1	13,398	48'-0"
2	13,406	
3	13,422	
4	13,429	44'-0"
BRIDGE #15N		92'-0"
TOTAL LENGTH OF JOINT		

JOINTS 2 AND 3 ARE VERTICAL PLATE JOINTS AND THEREFORE DO NOT REQUIRE ASPHALTIC PLUG JOINTS.

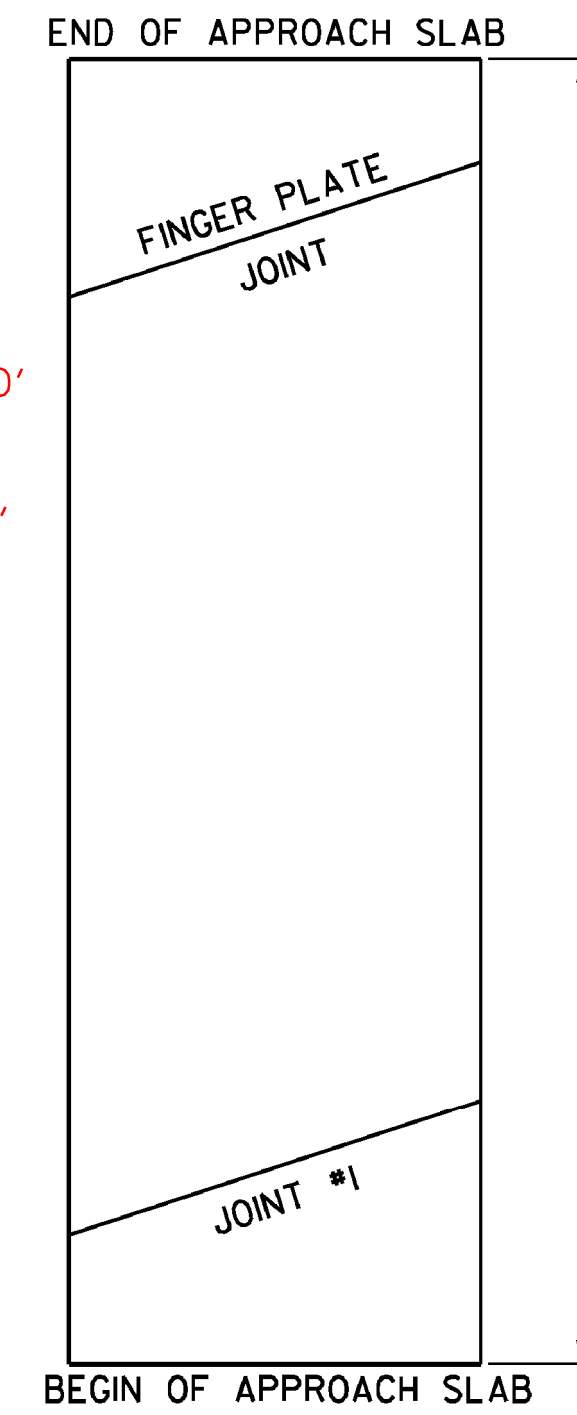
BRIDGE #15N
MM 13.414
COLD PLANE AND PAVE



JOINT	MM	LENGTH
1	13,410	48'-0"
2	13,419	
3	13,435	
4	13,444	45'-0"
BRIDGE #15S		93'-0"
TOTAL LENGTH OF JOINT		

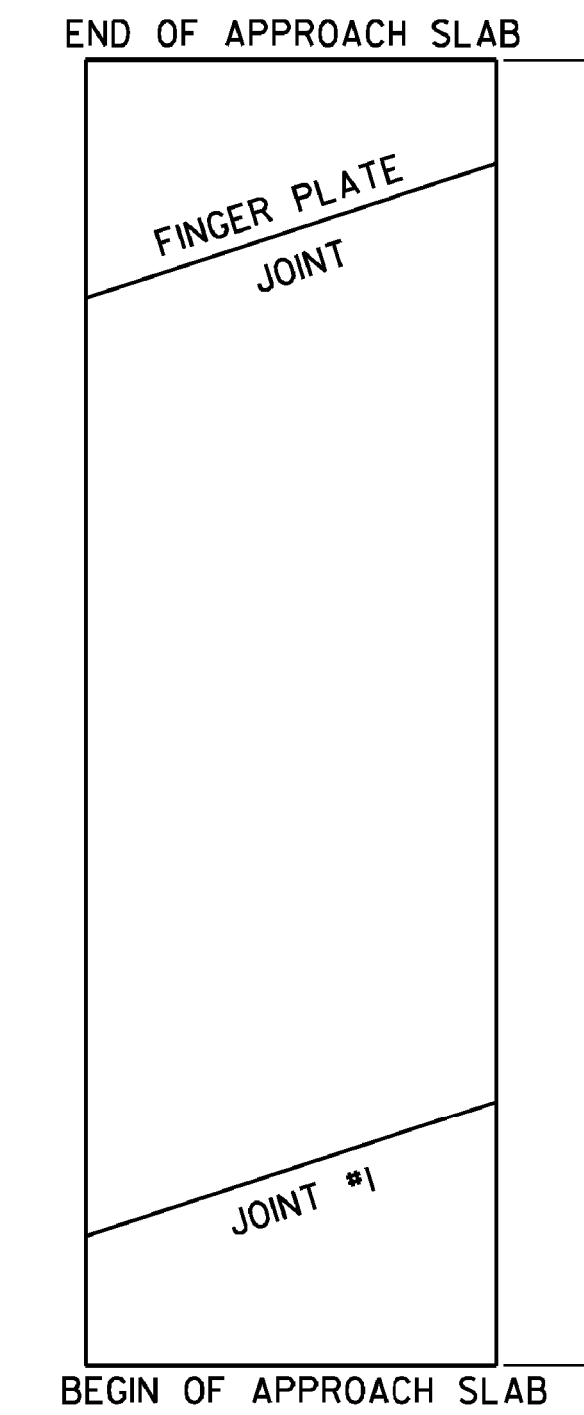
JOINTS 2 AND 3 ARE VERTICAL PLATE JOINTS AND THEREFORE DO NOT REQUIRE ASPHALTIC PLUG JOINTS.

BRIDGE #15S
MM 13.425
COLD PLANE AND PAVE



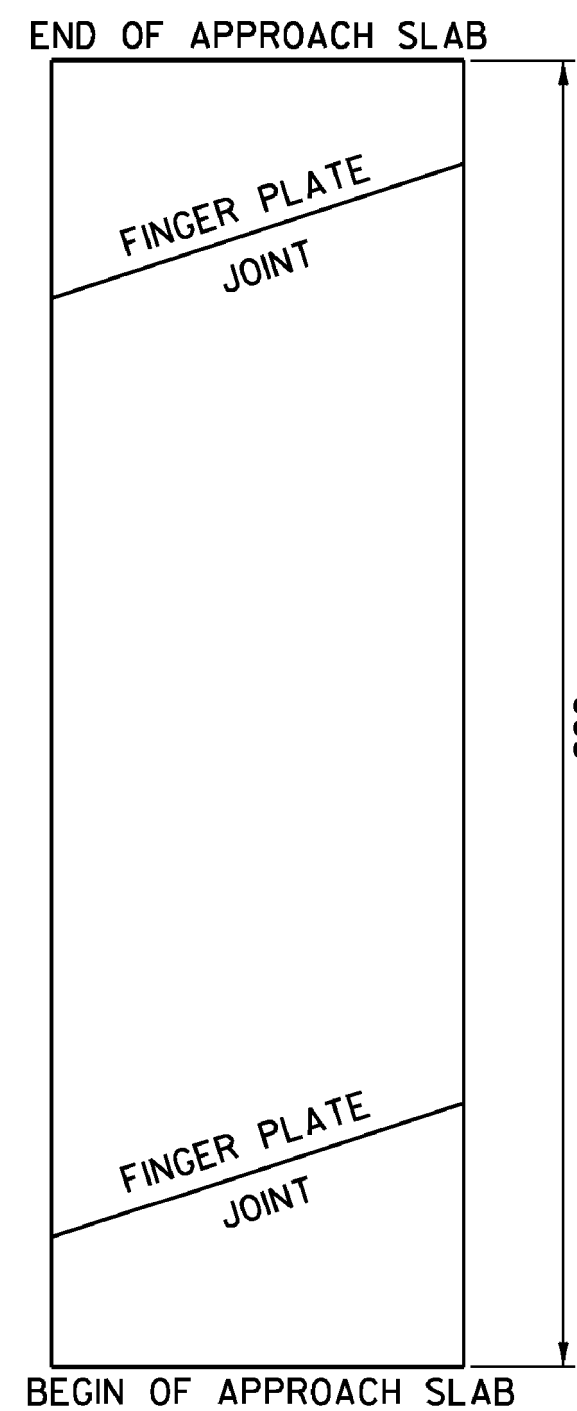
JOINT	MM	LENGTH
1	13,876	34'-0"
BRIDGE #16N		34'-0"
TOTAL LENGTH OF JOINT		

BRIDGE #16N
MM 13.909
COLD PLANE AND PAVE

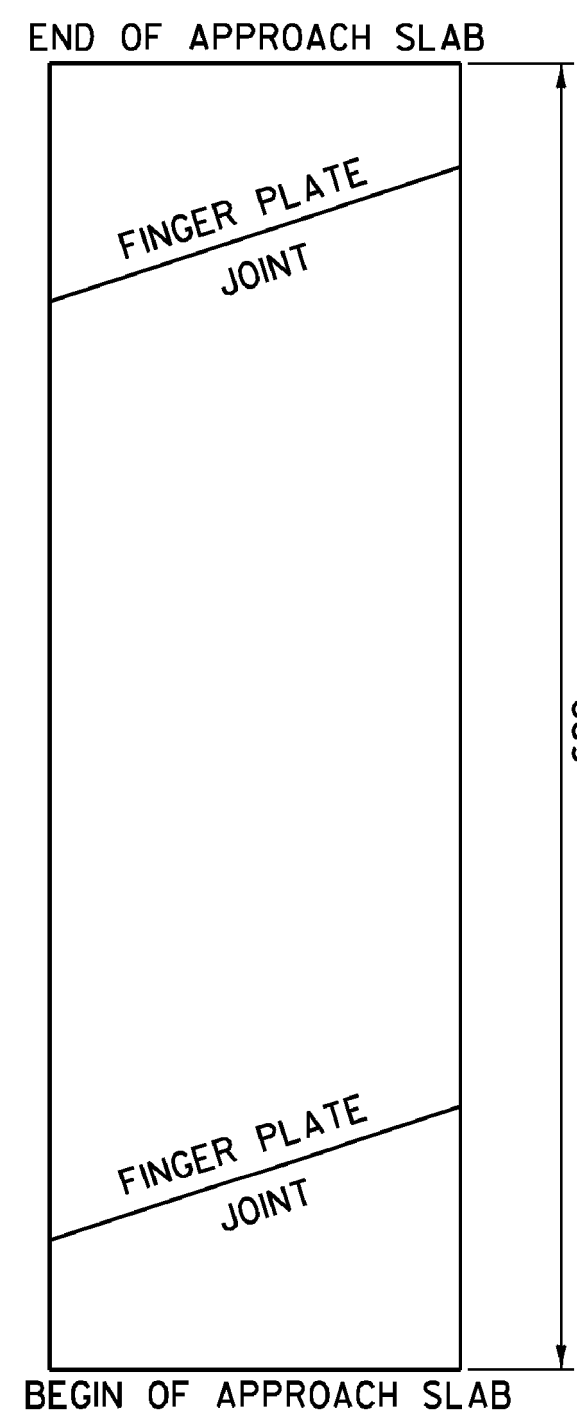


JOINT	MM	LENGTH
1	13,872	33'-0"
BRIDGE #16S		33'-0"
TOTAL LENGTH OF JOINT		

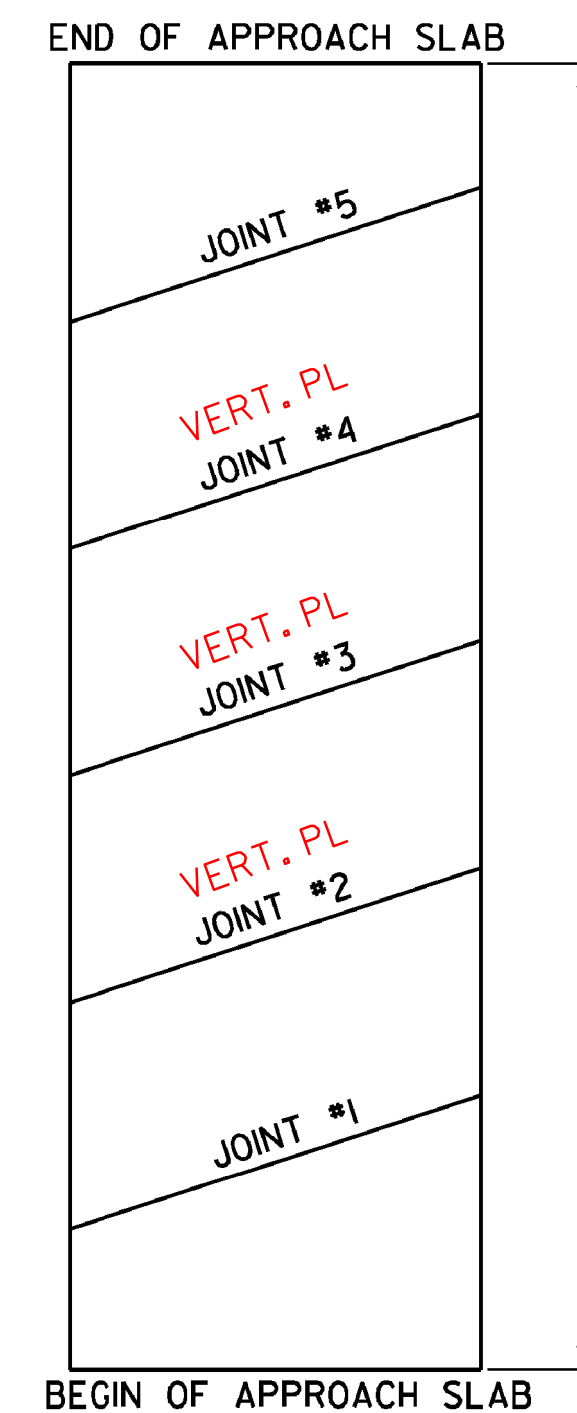
BRIDGE #16S
MM 13.899
COLD PLANE AND PAVE



BRIDGE #17N
MM 14.462
COLD PLANE AND PAVE

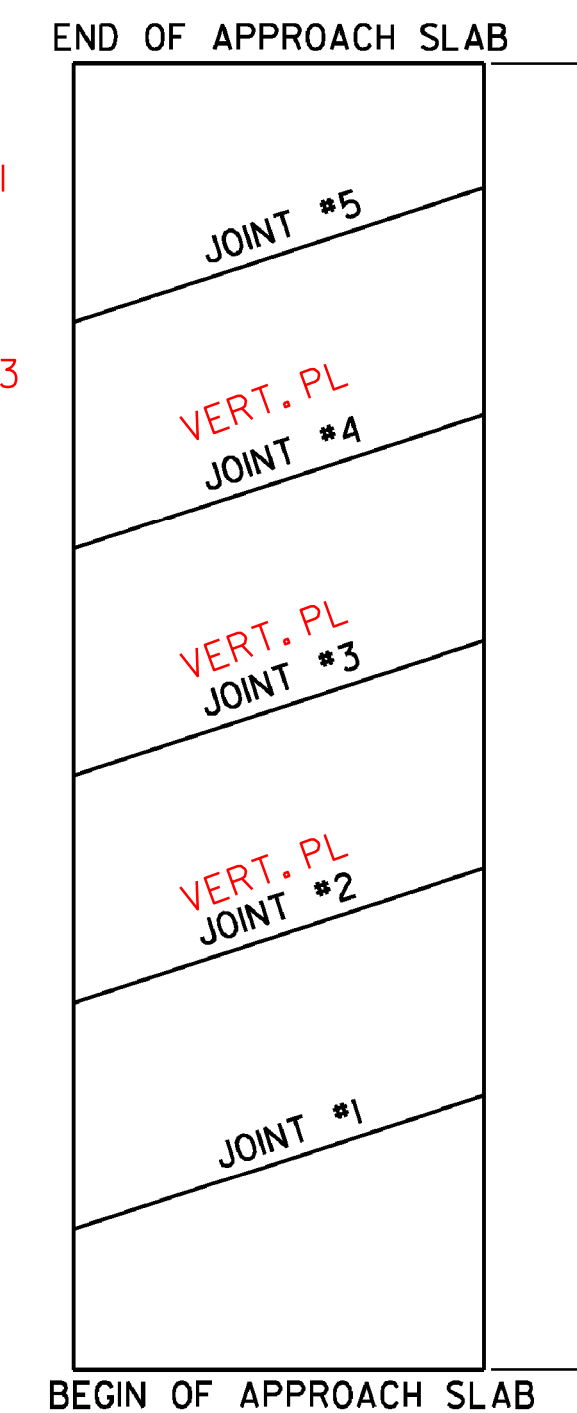


BRIDGE #17S
MM 14.453
COLD PLANE AND PAVE



JOINT	MM	LENGTH
1	14,640	39'-0"
2	14,650	39'-0"
3	14,664	39'-0"
4	14,675	39'-0"
5	14,686	39'-0"
BRIDGE #18N		195'-0"
TOTAL LENGTH OF JOINT		

BRIDGE #18N
MM 14.671
COLD PLANE AND PAVE



JOINT	MM	LENGTH
1	14,624	39'-0"
2	14,634	39'-0"
3	14,648	39'-0"
4	14,660	39'-0"
5	14,672	39'-0"
BRIDGE #18S		195'-0"
TOTAL LENGTH OF JOINT		

BRIDGE #18S
MM 14.649
COLD PLANE AND PAVE

NOTES:

- REFER TO SHEET 6 FOR ASPHALTIC PLUG JOINT AND DETAILS. ALL NEW JOINTS TO BE PAID FOR UNDER ITEM 516.10, BRIDGE EXPANSION JOINT, ASPHALTIC PLUG.
- THE CONTRACTOR SHALL TAKE PRECAUTIONS TO AVOID THE ACCUMULATION OF DEBRIS IN THE DRAINAGE STRUCTURES LOCATED AT CURB LINE AND IN THE EXPANSION JOINTS. THE CONTRACTOR SHALL EXAMINE THESE BRIDGE FEATURES ON A REGULAR BASIS TO ENSURE THAT DEBRIS HAS NOT ACCUMULATED. ANY DEBRIS WHICH IS PRESENT SHALL BE REMOVED BY THE CONTRACTOR AT NO COST TO THE STATE.
- THE CONTRACTOR SHALL PERFORM COLD PLANING WITH CAUTION AT THESE LOCATIONS. ANY DAMAGE WHICH OCCURS TO BRIDGE DECK MEMBRANES AS A RESULT OF COLD PLANE OPERATIONS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND THE MEMBRANE WILL BE REPAIRED OR REPLACED AT NO COST TO THE STATE.

NOT TO SCALE

BRIDGE LOCATION AND DETAIL SHEET 2

PROJECT NAME: SHARON - ROYALTON
PROJECT NUMBER: IM 089-1(58)

FILE NAME: 97A184.dgn
PROJECT LEADER: CDL
DESIGNED BY: SJL
PLOT FILE: 97A184_45.1

PLOT DATE: 8/6/2010
DRAWN BY: SJL
CHECKED BY: EPD
SHEET 45 OF 62

STATE OF VERMONT
AGENCY OF TRANSPORTATION

ITEM DETAIL SUMMARY SHEET 2

BEGIN MILEMARKER	END MILEMARKER	POS.	203.30	203.40	402.13	604.40	604.412	604.415	604.418	613.10	621.20	621.50	621.60	621.72	621.76	621.77	621.80	649.31	676.12	900.620						900.620	900.620	REMARKS
			EARTH BORROW	SHOULDER BERM REMOVAL	AGG. SHOULD. (RAP)	CHANGE ELEV. OF D. I.	REHAB. D. I. CLASS I	REHAB. D. I. CLASS II	REHAB. D. I. CLASS III	STONE FILL, TYPE I	STEEL BEAM G. R. GALV.	MANUF. TERMINAL SECTION FLARED	ANCHOR FOR S. B. RAIL	GRAIL APPROACH SECTION, NETC 2	REPLACE G. R. POST	REPLACE G. R. BEAM	REMOVE & DISP. OF G. R.	GEO. UNDER STONE FILL	REMOVAL OF EXIST. DEL IN.	TYPE I GUARD RAIL ENDS	TYPE I RAMPS	TYPE II	TYPE III	TYPE I WITH PLAQUE	TYPE I WITHOUT PLAQUE	TIGHTEN TERM. SECT. ANCHOR CABLE	REPLACE TERMINAL SECT. WOOD POST	
			CY	FT	TON	EACH	EACH	EACH	EACH	CY	LF	EACH	EACH	EA	EA	EA	LF	SY	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH		
14.973	15.213	OUT		1014											20	8									1	1	REPLACE BEAMS AND POSTS AS NECESSARY	
14.980		OUT								5																	TO BE USED FOR REPAIR OF ERODED AREAS	
15.554	15.658	OUT		439											9	6									1		REPLACE BEAMS AND POSTS AS NECESSARY	
16.198	16.307	OUT		460											9	6									1	1	REPLACE BEAMS AND POSTS AS NECESSARY	
16.637	16.732	OUT		401											8	2									1	1	REPLACE BEAMS AND POSTS AS NECESSARY	
16.952	17.337	OUT		1626											32	14									1	1	REPLACE BEAMS AND POSTS AS NECESSARY	
17.491	17.505	OUT		60											7	7									1		REPLACE BEAMS AND POSTS AS NECESSARY	
NORTHBOUND																												
12.245	17.505				625		18	2	2										285		14	10	10	106	106		ESTIMATED QUANTITIES TO BE USED AS DIRECTED BY RESIDENT ENGINEER	
12.245	12.793	MED		2315											46	72									1		REPLACE BEAMS AND POSTS AS NECESSARY	
12.276	12.419	OUT		604											12	10									1		REPLACE BEAMS AND POSTS AS NECESSARY	
12.560		MED								5																	TO BE USED FOR REPAIR OF ERODED AREAS	
13.116	STA. 21+36 LT	OUT		1073											23	9									1	1	REPLACE BEAMS AND POSTS AS NECESSARY	
13.251	13.387	OUT		575											12	15									1		REPLACE BEAMS AND POSTS AS NECESSARY	
13.298	13.394	MED		406											8	-									1		RETAIN EXISTING STEEL BEAM GUARDRAIL	
BRIDGE 15 N																												
13.434	13.530	OUT		406											8	11											REPLACE BEAMS AND POSTS AS NECESSARY	
13.441	13.451	MED		43											1	-											RETAIN EXISTING STEEL BEAM GUARDRAIL	
RAMP B, STA. 20+50 RT										9.26									27.78								TO BE USED FOR STONE LINED DITCH	
13.790	13.863	MED		309											6	-									1		RETAIN EXISTING STEEL BEAM GUARDRAIL	
13.802	13.868	OUT		279											6	-									1	1	RETAIN EXISTING STEEL BEAM GUARDRAIL	
BRIDGE 16 N																												
13.950	13.967	MED		72											1	-											RETAIN EXISTING STEEL BEAM GUARDRAIL	
SUBTOTAL THIS SHEET				10082	625		18	2	2	19.26	-	-	-	-	208	160	-	27.78	285	24	14	10	10	106	106	13	6	

ITEM DETAIL SUMMARY SHEET 2	PROJECT NAME: SHARON - ROYALTON
	PROJECT NUMBER: IM 089-1(58)
	FILE NAME: 97A184.dgn
	PLOT DATE: 8/6/2010
PROJECT LEADER: CDL	DRAWN BY: SJL
DESIGNED BY: SJL	CHECKED BY: EPD
PLOT FILE: 97A184.50.1	SHEET 50 OF 62

STATE OF VERMONT
AGENCY OF TRANSPORTATION

ITEM DETAIL SUMMARY SHEET 3

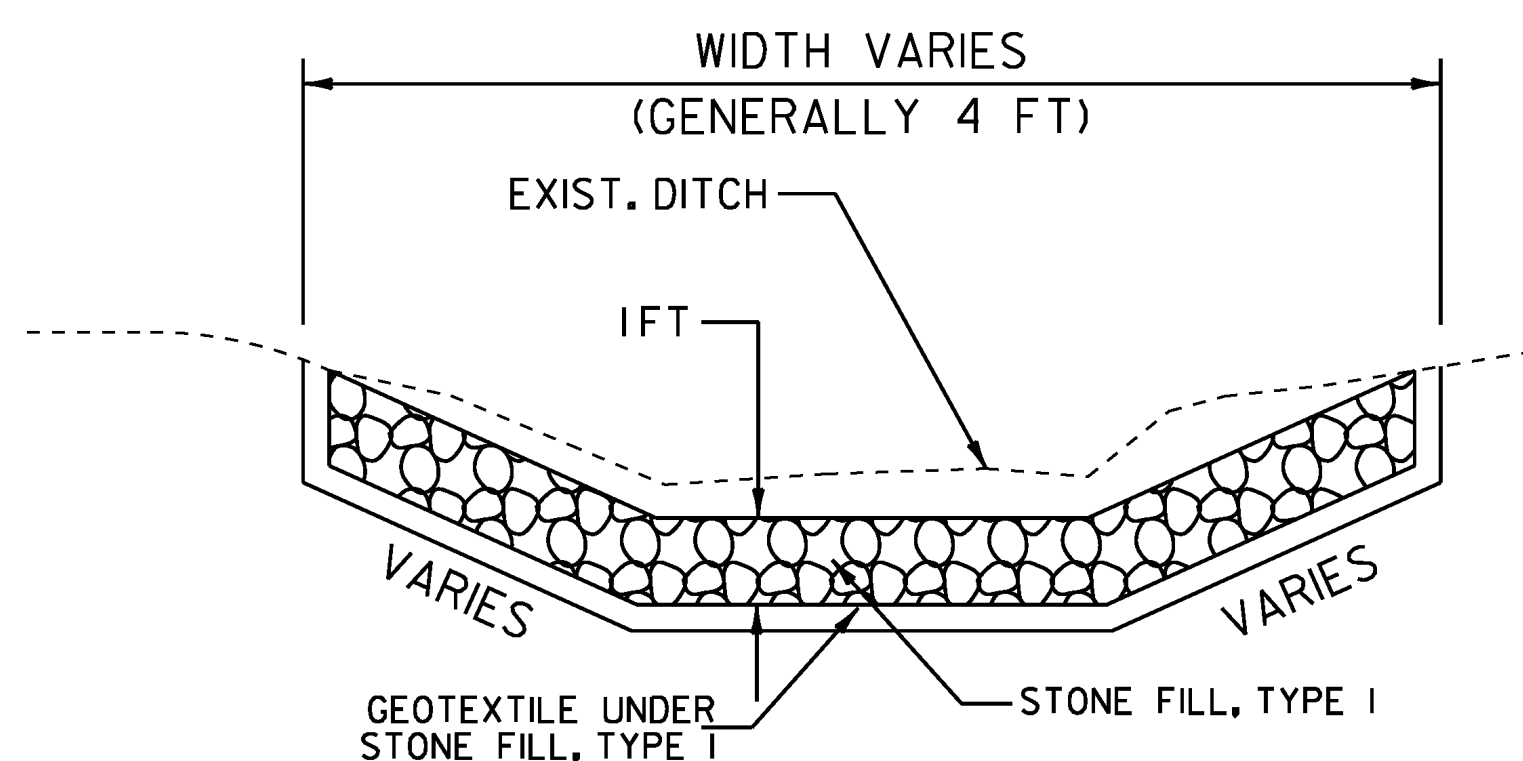
BEGIN MILEMARKER	END MILEMARKER	POS.	203.30	203.40	402.13	604.40	604.41 2	604.41 5	604.41 8	613.10	621.20	621.50	621.60	621.72	621.76	621.77	621.80	649.31	676.12	900.620						900.620	900.620	REMARKS
			EARTH BORROW	SHOULDER BERM REMOVAL	AGG. SHOULD. (RAP)	CHANGE ELEV. OF D. I.	REHAB. D. I. CLASS I	REHAB. D. I. CLASS II	REHAB. D. I. CLASS III	STONE FILL, TYPE I	STEEL BEAM G. R. GALV.	MANUF. TERMINAL SECTION FLARED	ANCHOR FOR S. B. RAIL	GRAIL APPROACH SECTION, NETC 2	REPLACE G. R. POST	REPLACE G. R. BEAM	REMOVE & DISP. OF G. R.	GEOT. UNDER STONE FILL	REMOVAL OF EXIST. DEL IN.	TYPE I GUARD RAIL ENDS	TYPE I RAMPS	TYPE II	TYPE III	TYPE I WITH PLAQUE	TYPE I WITHOUT PLAQUE	TIGHTEN TERM. SECT. ANCHOR CABLE	REPLACE TERMINAL SECT. WOOD POST	
			CY	FT	TON	EACH	EACH	EACH	EACH	CY	LF	EACH	EACH	EA	EA	EA	LF	SY	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH		
13.953	14.025	OUT		305											6	-											RETAIN EXISTING STEEL BEAM GUARDRAIL	
14.297	14.371	MED		313											6	2									1		REPLACE BEAMS AND POSTS AS NECESSARY	
14.309	14.376	OUT		283											6	3									1		REPLACE BEAM AND POSTS AS NECESSARY	
BRIDGE 17 N																												
14.545		MED								11.30								33.89									TO BE USED FOR STONE LINED DITCH	
14.546	14.637	OUT		385											8	3											REPLACE BEAM AND POSTS AS NECESSARY	
14.548	14.628	MED		338											7	2											REPLACE BEAMS AND POSTS AS NECESSARY	
BRIDGE 18 N																												
14.693	14.709	MED		68											1	1											REPLACE BEAMS AND POSTS AS NECESSARY	
14.701	14.718	OUT		72											1	1											REPLACE BEAM AND POSTS AS NECESSARY	
14.884	15.179	OUT		1246							2				25	25									1		REPLACE BEAM AND POSTS AS NECESSARY. 2' OF SB G-RAIL REPRESENTS BOXING GLOVE ON TRAIL END	
15.447	15.964	OUT		2184											44	26									1		REPLACE BEAM AND POSTS AS NECESSARY	
15.777		OUT								7.41								22.22									TO BE USED FOR STONE LINED DITCH	
16.148	16.302	OUT		650											13	20									1	1	REPLACE BEAMS AND POSTS AS NECESSARY	
16.452	16.817	OUT		1542											31	20									1	1	REPLACE BEAM AND POSTS AS NECESSARY	
16.923	17.247	OUT		1369											27	57									1	1	REPLACE BEAM AND POSTS AS NECESSARY	
17.463	17.505	OUT		156											4	-									1		RETAIN EXISTING STEEL BEAM GUARDRAIL	
17.490	17.505	MED		42											1	-									1		RETAIN EXISTING STEEL BEAM GUARDRAIL	
										30								133									FROM DITCHING SHEET	
SUBTOTAL THIS SHEET			-	8953	-	-	-	-	-	48.71	2	-	-	-	180	160	-	189.11	-	15	-	-	-	-	-	9	3	
SUBTOTAL IDSS #1			25	9306	625	1	24	3	3	5	-	1	1	1	180	164	37.5	-	264	16	15	12	9	106	106	8	2	
SUBTOTAL IDSS #2			-	10082	625	-	18	2	2	19.26	-	-	-	-	208	160	-	27.78	285	24	14	10	10	106	106	13	6	
ROUNDING			-	159	-	-	-	-	-	7.03	-	-	-	-	-	-	-	3.11	-	-	-	-	-	-	-	-	-	
TOTAL			25	28500	1250	1	42	5	5	80	2	1	1	1	568	484	37.5	220	549	55	29	22	19	212	212	30	11	

ITEM DETAIL SUMMARY SHEET 3	PROJECT NAME: SHARON - ROYALTON
	PROJECT NUMBER: IM 089-1(58)
	FILE NAME: 97A184.dgn
	PLOT DATE: 8/6/2010
	PROJECT LEADER: CDL
	DRAWN BY: SJL
	DESIGNED BY: SJL
	CHECKED BY: EPD
	PLOT FILE: 97A184.5L1
	SHEET 51 OF 62

LOCATION				FEET OF DITCHING			MISC. ITEMS			REMARKS	LOCATION				FEET OF DITCHING			MISC. ITEMS			REMARKS		
SITE	MILE MARKER	MILE MARKER	POS.	PERCENT GRADE			653.20 TEMP. EROS. MATT.	613.10 STONE FILL TYP. I	649.31 GEOT. UNDER STONE FILL		SITE	STATION	STATION	POS.	PERCENT GRADE			653.20 TEMP. EROS. MATT.	613.10 STONE FILL TYP. I	649.31 GEOT. UNDER STONE FILL			
				0-1	1-2.5	2.5-10									0-1	1-2.5	2.5-10						
SHARON - ROYALTON I-89							SY	CY	SY								SY	CY	SY				
1			NB		200		88.9																
2			SB			200		30	133														
3																							
4																							
5																							
6																							
7																							
8																							
9																							
10																							
11																							
12																							
13																							
14																							
15																							
16																							
17																							
18																							
19																							
20																							
SUB-TOTAL				-	200	200	88.9	30	133														
G. R. END SECTIONS							25																
ROUNDING				-	-	-	6.1	-	-														
TOTAL				-	200	200	120	30	133	FOR TOTAL QUANTITIES OF ITEMS 613.10 AND 649.31 REFER TO ITEM DETAIL SHEET													



**DITCH DETAIL < 2.5 PERCENT
NOT TO SCALE**



**DITCH DETAIL > 2.5 PERCENT
NOT TO SCALE**

NOTES:

1. PIPE INLET AND OUTLET AREAS AND DITCH CLEANING THROUGHOUT THE PROJECT SHALL BE PERFORMED AT LOCATIONS IDENTIFIED ON THIS SHEET AND AS DIRECTED BY THE RESIDENT ENGINEER. PAYMENT WILL BE UNDER THE APPLICABLE EQUIPMENT RENTAL ITEMS).
2. ESTIMATED QUANTITIES OF TEMPORARY EROSION MATTING AND SEED HAVE BEEN INCLUDED AS NEEDED OR AS DIRECTED BY THE RESIDENT ENGINEER.
3. ESTIMATED QUANTITIES OF STONE FILL TYPE I AND GEOTEXTILE UNDER STONE FILL HAVE BEEN INCLUDED AS NEEDED. STONE FILL TYPE I SHALL BE USED IN ALL DITCHES WITH A GRADE 2.5 PERCENT OR GREATER OR AS DIRECTED BY THE RESIDENT ENGINEER.

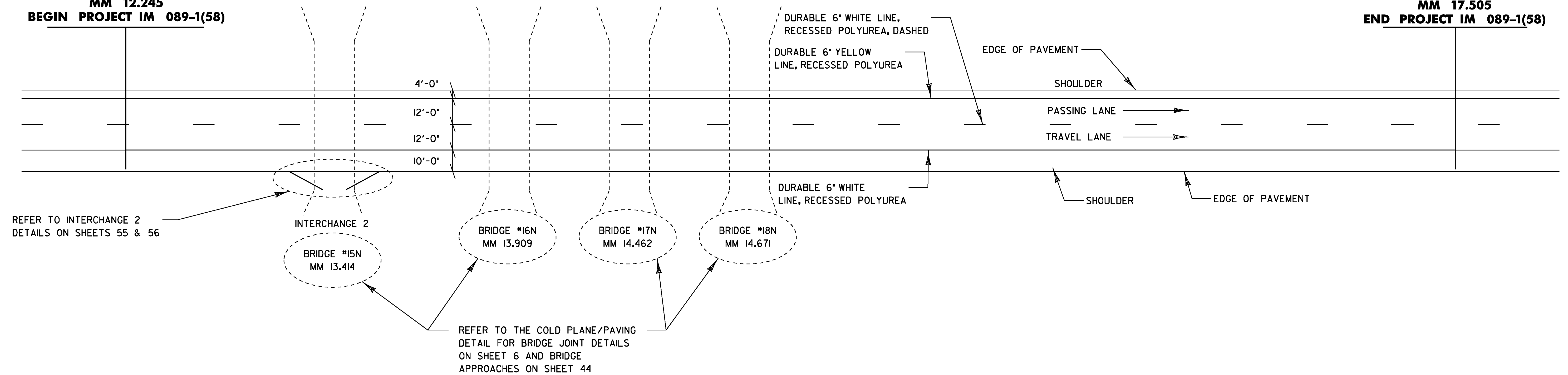
NOT TO SCALE

**DITCH
CLEANING
DETAIL
SHEET**

PROJECT NAME: SHARON - ROYALTON
PROJECT NUMBER: IM 089-1(58)
FILE NAME: 97A184.dgn PLOT DATE: 8/6/2010
PROJECT LEADER: CDL DRAWN BY: SJL
DESIGNED BY: SJL CHECKED BY: EPD
PLOT FILE: 97A184.52.1 SHEET 52 OF 62

**INTERSTATE ROUTE 89
NORTHBOUND
MM 12.245
BEGIN PROJECT IM 089-1(58)**

**INTERSTATE ROUTE 89
NORTHBOUND
MM 17.505
END PROJECT IM 089-1(58)**



604.412, 604.415, 604.418 REHABILITATION OF DI, CB OR MH, CLASS I, CLASS II, AND CLASS III

MM 12.289	IN PAVEMENT	MM 15.608	IN PAVEMENT
MM 12.409	IN PAVEMENT	MM 16.205	IN PAVEMENT
MM 12.411	IN PAVEMENT	MM 16.565	IN PAVEMENT
MM 12.459	IN PAVEMENT	MM 16.598	IN PAVEMENT
MM 12.517	IN PAVEMENT	MM 16.745	IN PAVEMENT
MM 12.564	IN PAVEMENT	MM 16.981	IN PAVEMENT
MM 13.880	IN PAVEMENT	MM 17.042	IN PAVEMENT
MM 13.951	IN PAVEMENT	MM 17.146	IN PAVEMENT
MM 14.583	IN PAVEMENT	MM 17.199	IN PAVEMENT
MM 15.021	IN PAVEMENT		
MM 15.070	IN PAVEMENT		
MM 15.106	IN PAVEMENT		
MM 15.561	IN PAVEMENT		

646.426 DURABLE 6 INCH WHITE LINE, RECESSED POLYUREA

MM 12.245 - MM 17.505 CENTERLINE (DASHED)
MM 12.245 - MM 13.150 OUT (SOLID)
MM 13.220 - MM 13.548 OUT (SOLID)
MM 13.688 - MM 17.505 OUT (SOLID)

646.436 DURABLE 6 INCH YELLOW LINE, RECESSED POLYUREA

MM 12.245 - MM 17.505 MED (SOLID)

646.622 TEMPORARY 6 INCH WHITE LINE, PAINT

MM 12.245 - MM 17.505 CENTERLINE (DASHED)
MM 12.245 - MM 13.150 OUT (SOLID)
MM 13.220 - MM 13.548 OUT (SOLID)
MM 13.688 - MM 17.505 OUT (SOLID)

646.632 TEMPORARY 6 INCH YELLOW LINE, PAINT

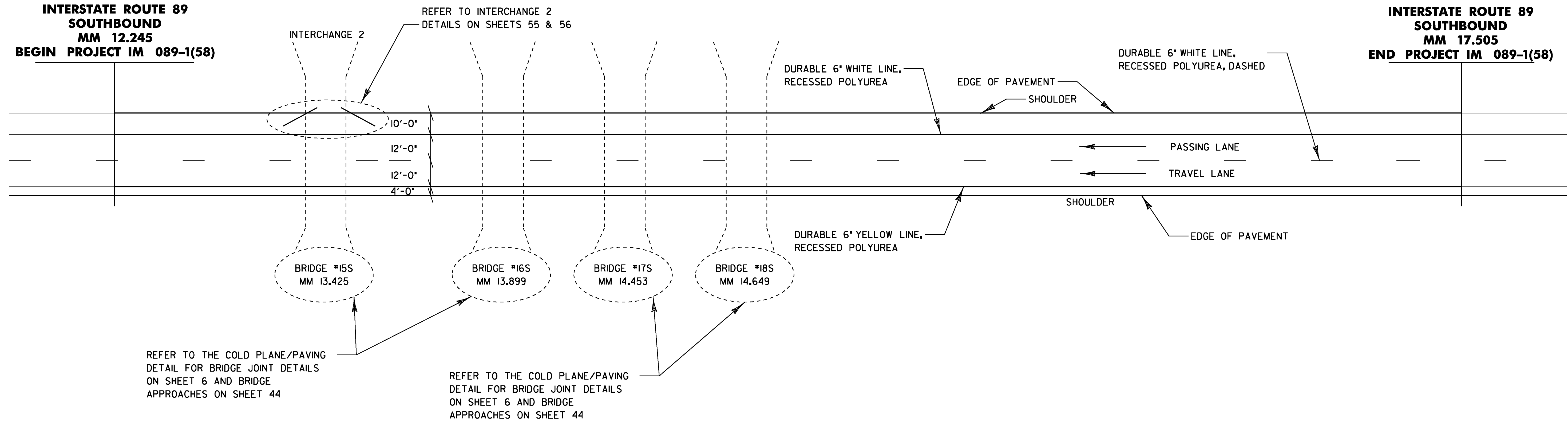
MM 12.245 - MM 17.505 MED (SOLID)

NOT TO SCALE

NORTHBOUND PAVING PROJECT LAYOUT SHEET	PROJECT NAME: SHARON - ROYALTON
	PROJECT NUMBER: IM 089-1(58)
	FILE NAME: 97A184.dgn
	PLOT DATE: 8/6/2010
	PROJECT LEADER: CDL
	DESIGNED BY: SJL
	PLOT FILE: 97A184_53.t
	CHECKED BY: EPD
	SHEET 53 OF 62

**INTERSTATE ROUTE 89
SOUTHBOUND
MM 12.245
BEGIN PROJECT IM 089-1(58)**

**INTERSTATE ROUTE 89
SOUTHBOUND
MM 17.505
END PROJECT IM 089-1(58)**



604.40 CHANGING ELEVATION OF DROP INLETS,
CATCH BASINS, OR MANHOLES
MM 15.188 IN PAVEMENT

646.426 DURABLE 6 INCH WHITE LINE, RECESSED POLYUREA
MM 12.245 - MM 17.505 CENTERLINE (DASHED)
MM 12.245 - MM 13.109 OUT (SOLID)
MM 13.234 - MM 13.584 OUT (SOLID)
MM 13.693 - MM 17.505 OUT (SOLID)

646.436 DURABLE 6 INCH YELLOW LINE, RECESSED POLYUREA
MM 12.245 - MM 17.505 MED (SOLID)

604.412, 604.415, 604.418 REHABILITATION OF D.I.,
CB OR MH, CLASS I, CLASS II, AND CLASS III

MM. 12.375	IN PAVEMENT	MM. 13.346	IN PAVEMENT
MM. 12.431	IN PAVEMENT	MM. 13.454	IN PAVEMENT
MM. 12.479	IN PAVEMENT	MM. 13.837	IN PAVEMENT
MM. 12.526	IN PAVEMENT	MM. 13.852	IN PAVEMENT
MM. 12.583	IN PAVEMENT	MM. 13.951	IN PAVEMENT
MM. 12.725	IN PAVEMENT	MM. 15.021	IN PAVEMENT
MM. 12.782	IN PAVEMENT	MM. 15.086	IN PAVEMENT
MM. 12.839	IN PAVEMENT	MM. 16.962	IN PAVEMENT
MM. 12.896	IN PAVEMENT	MM. 17.000	IN PAVEMENT
MM. 12.961	IN PAVEMENT	MM. 17.033	IN PAVEMENT
MM. 13.037	IN PAVEMENT	MM. 17.076	IN PAVEMENT
MM. 13.102	IN PAVEMENT	MM. 17.113	IN PAVEMENT
MM. 13.194	IN PAVEMENT	MM. 17.171	IN PAVEMENT
		MM. 17.199	IN PAVEMENT

646.622 TEMPORARY 6 INCH WHITE LINE, PAINT
MM 12.245 - MM 17.505 CENTERLINE (DASHED)
MM 12.245 - MM 13.109 OUT (SOLID)
MM 13.234 - MM 13.584 OUT (SOLID)
MM 13.693 - MM 17.505 OUT (SOLID)

646.632 TEMPORARY 6 INCH YELLOW LINE, PAINT
MM 12.245 - MM 17.505 MED (SOLID)

NOT TO SCALE

SOUTHBOUND PAVING PROJECT LAYOUT SHEET	PROJECT NAME: SHARON - ROYALTON
	PROJECT NUMBER: IM 089-1(58)
	FILE NAME: 97A184.dgn
PROJECT LEADER: CDL	PLOT DATE: 8/6/2010
DESIGNED BY: SJL	DRAWN BY: SJL
PLOT FILE: 97A184_54.t	CHECKED BY: EPD
	SHEET 54 OF 62

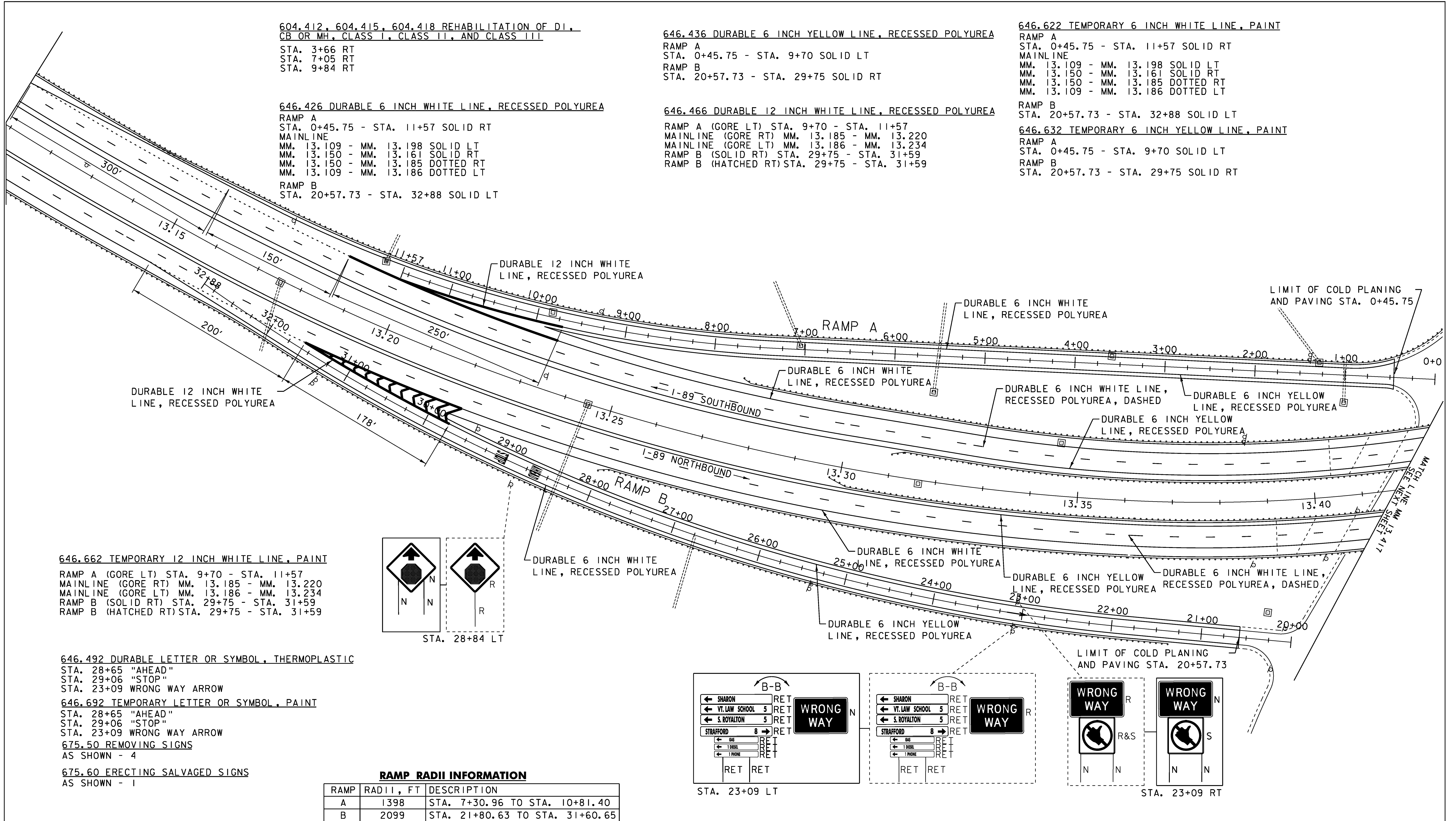
604.412, 604.415, 604.418 REHABILITATION OF DI,
CB OR MH, CLASS I, CLASS II, AND CLASS III
STA. 3+66 RT
STA. 7+05 RT
STA. 9+84 RT

646.426 DURABLE 6 INCH WHITE LINE, RECESSED POLYUREA
RAMP A
STA. 0+45.75 - STA. 11+57 SOLID RT
MAINLINE
MM. 13.109 - MM. 13.198 SOLID LT
MM. 13.150 - MM. 13.161 SOLID RT
MM. 13.150 - MM. 13.185 DOTTED RT
MM. 13.109 - MM. 13.186 DOTTED LT
RAMP B
STA. 20+57.73 - STA. 32+88 SOLID LT

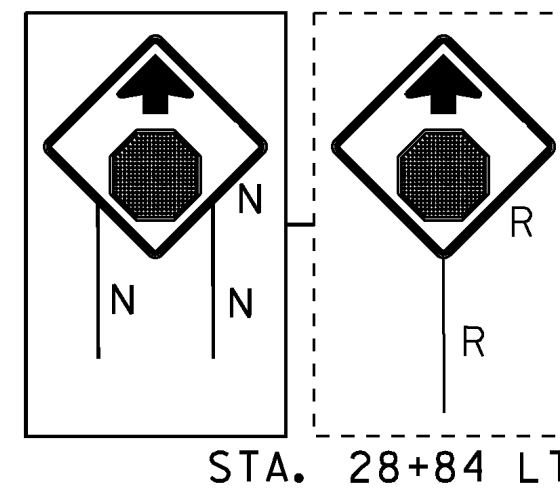
646.436 DURABLE 6 INCH YELLOW LINE, RECESSED POLYUREA
RAMP A
STA. 0+45.75 - STA. 9+70 SOLID LT
RAMP B
STA. 20+57.73 - STA. 29+75 SOLID RT

646.466 DURABLE 12 INCH WHITE LINE, RECESSED POLYUREA
RAMP A (GORE LT) STA. 9+70 - STA. 11+57
MAINLINE (GORE RT) MM. 13.185 - MM. 13.220
MAINLINE (GORE LT) MM. 13.186 - MM. 13.234
RAMP B (SOLID RT) STA. 29+75 - STA. 31+59
RAMP B (HATCHED RT) STA. 29+75 - STA. 31+59

646.622 TEMPORARY 6 INCH WHITE LINE, PAINT
RAMP A
STA. 0+45.75 - STA. 11+57 SOLID RT
MAINLINE
MM. 13.109 - MM. 13.198 SOLID LT
MM. 13.150 - MM. 13.161 SOLID RT
MM. 13.150 - MM. 13.185 DOTTED RT
MM. 13.109 - MM. 13.186 DOTTED LT
RAMP B
STA. 20+57.73 - STA. 32+88 SOLID LT
646.632 TEMPORARY 6 INCH YELLOW LINE, PAINT
RAMP A
STA. 0+45.75 - STA. 9+70 SOLID LT
RAMP B
STA. 20+57.73 - STA. 29+75 SOLID RT



646.662 TEMPORARY 12 INCH WHITE LINE, PAINT
RAMP A (GORE LT) STA. 9+70 - STA. 11+57
MAINLINE (GORE RT) MM. 13.185 - MM. 13.220
MAINLINE (GORE LT) MM. 13.186 - MM. 13.234
RAMP B (SOLID RT) STA. 29+75 - STA. 31+59
RAMP B (HATCHED RT) STA. 29+75 - STA. 31+59



646.492 DURABLE LETTER OR SYMBOL, THERMOPLASTIC
STA. 28+65 "AHEAD"
STA. 29+06 "STOP"
STA. 23+09 WRONG WAY ARROW

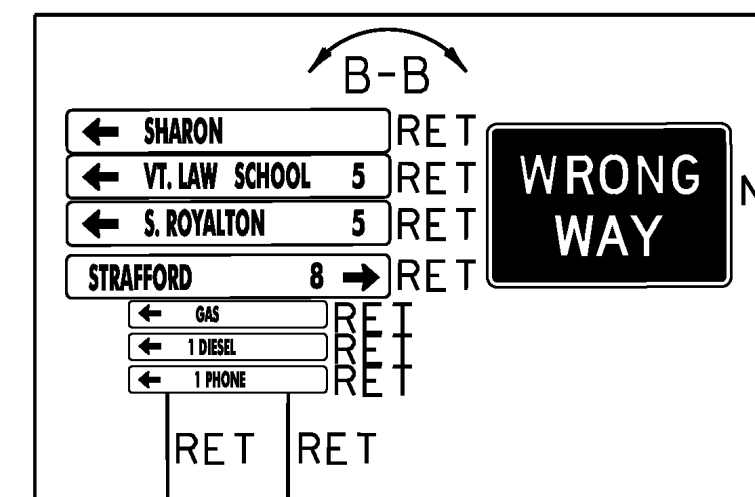
646.692 TEMPORARY LETTER OR SYMBOL, PAINT
STA. 28+65 "AHEAD"
STA. 29+06 "STOP"
STA. 23+09 WRONG WAY ARROW

675.50 REMOVING SIGNS
AS SHOWN - 4

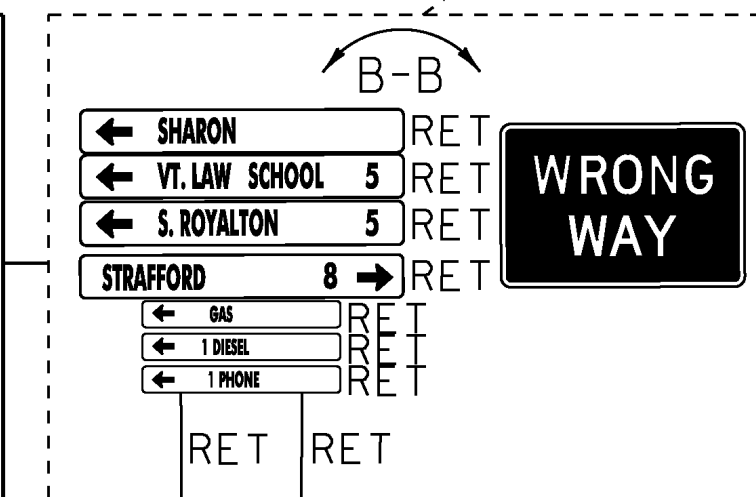
675.60 ERECTING SALVAGED SIGNS
AS SHOWN - 1

RAMP RADII INFORMATION

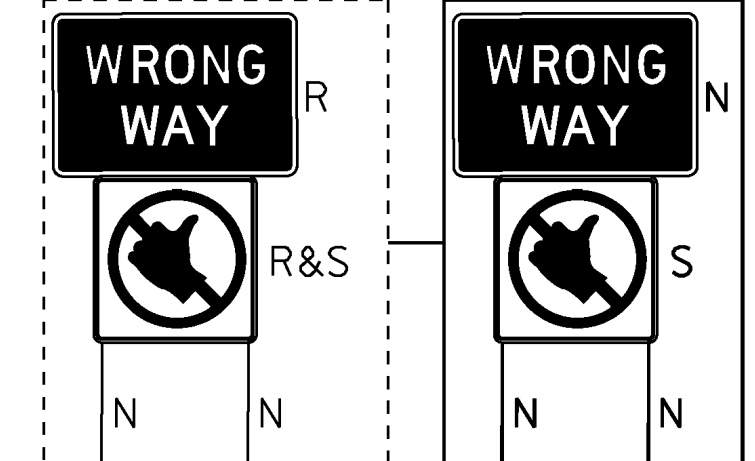
RAMP	RADII, FT	DESCRIPTION
A	1398	STA. 7+30.96 TO STA. 10+81.40
B	2099	STA. 21+80.63 TO STA. 31+60.65



STA. 23+09 LT



STA. 23+09 RT



LEGEND
N = NEW
R = REMOVE
B-B = BACK TO BACK
RET = RETAIN

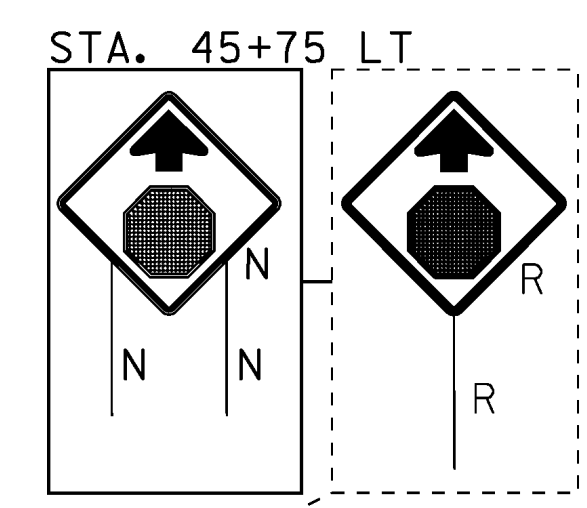
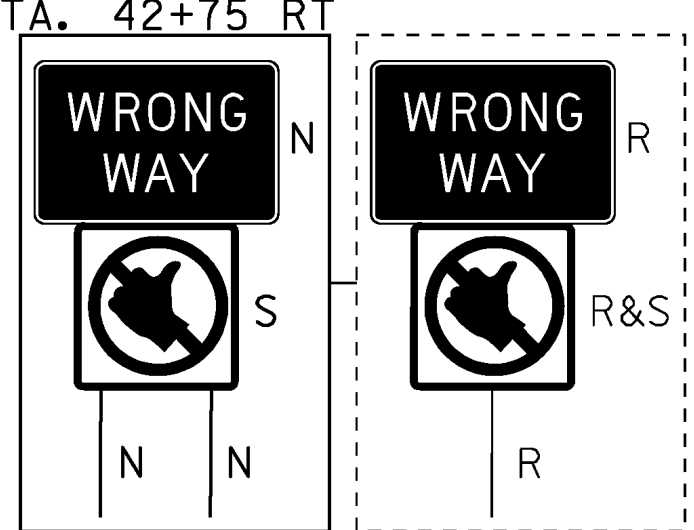
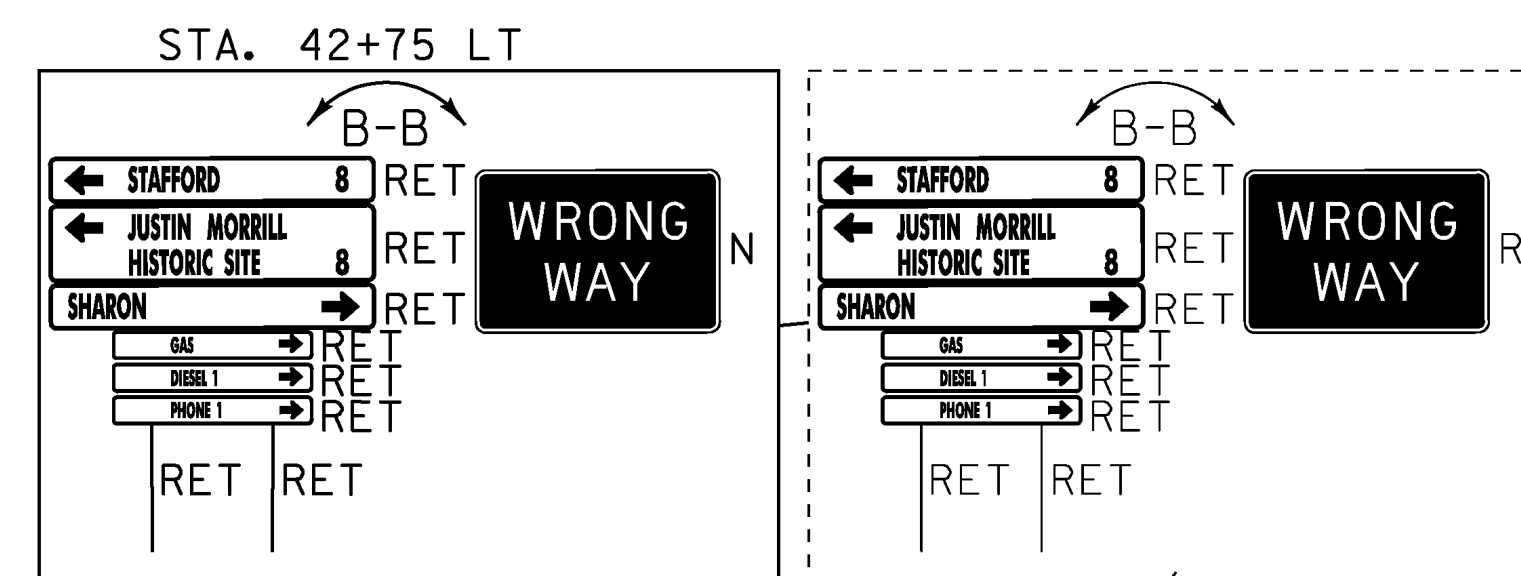
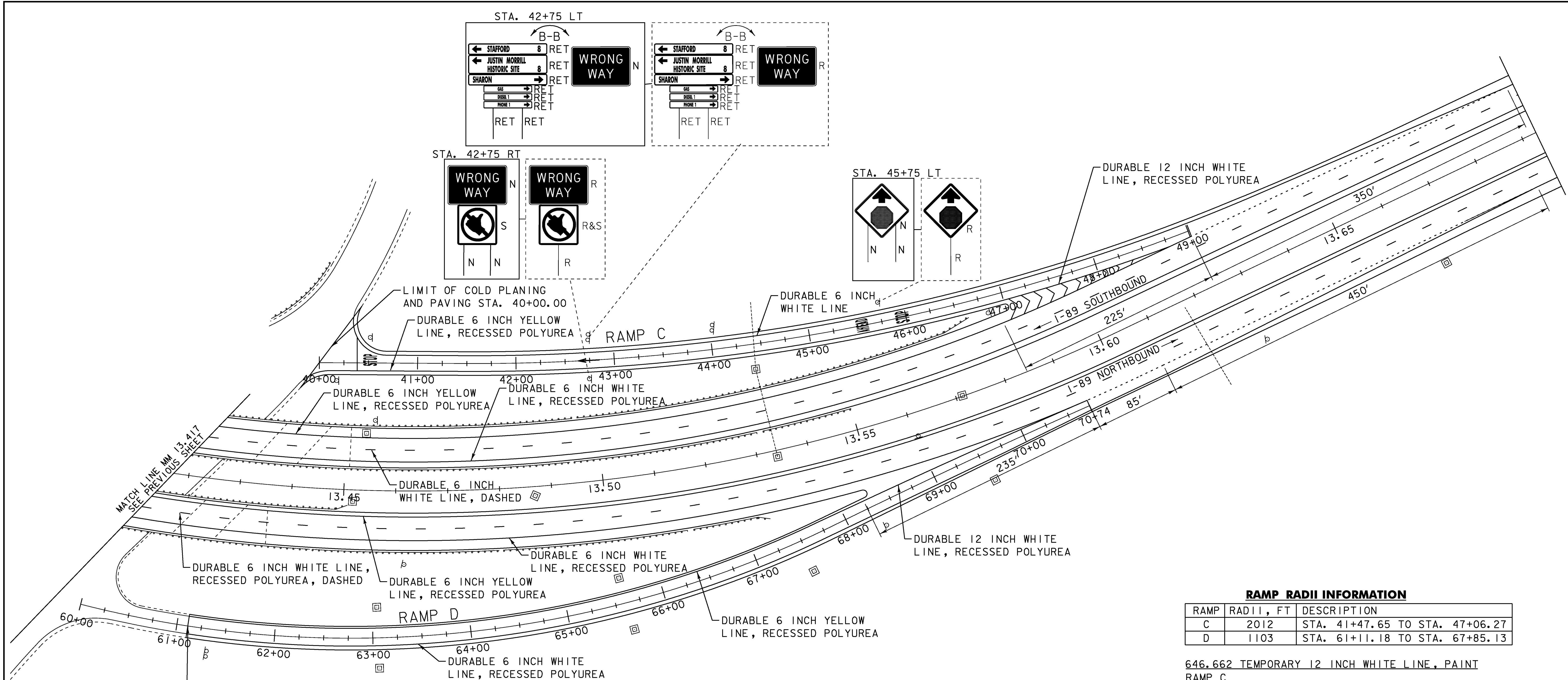
NOT TO SCALE

**INTERCHANGE 2
RAMP DETAIL
SHEET #1**

PROJECT NAME: SHARON - ROYALTON
PROJECT NUMBER: IM 089-1(58)

FILE NAME: 97A184.dgn
PROJECT LEADER: CDL
DESIGNED BY: SJL
PLOT FILE: 97A184.55.1

PLOT DATE: 8/6/2010
DRAWN BY: SJL
CHECKED BY: EPD
SHEET 55 OF 62



RAMP RADII INFORMATION

RAMP	RADII, FT	DESCRIPTION
C	2012	STA. 41+47.65 TO STA. 47+06.27
D	1103	STA. 61+11.18 TO STA. 67+85.13

LIMIT OF COLD PLANING AND PAVING STA. 61+11.18

646.466 DURABLE 12 INCH WHITE LINE, RECESSED POLYUREA
 RAMP C
 STA. 46+96 - STA. 49+01 SOLID RT
 STA. 46+94 - STA. 49+01 HATCHED RT
 RAMP D
 STA. 68+25 - STA. 70+74 SOLID LT
 MAINLINE
 MM 13.584 - STA. 13.624 SOLID LT
 MM 13.548 - STA. 13.593 SOLID RT

646.436 DURABLE 6 INCH YELLOW LINE, RECESSED POLYUREA
 RAMP C
 STA. 40+00 - STA. 46+96 SOLID RT
 RAMP D
 STA. 61+11.18 - STA. 68+25 SOLID LT

646.426 DURABLE 6 INCH WHITE LINE, RECESSED POLYUREA
 RAMP C
 STA. 40+35 - STA. 49+01 SOLID LT
 RAMP D
 STA. 61+11.18 - STA. 70+74 SOLID RT
 MAINLINE
 MM 13.624 - STA. 13.693 SOLID LT
 MM 13.624 - STA. 13.692 DOTTED LT
 MM 13.593 - STA. 13.688 DOTTED RT
 MM 13.593 - STA. 13.688 SOLID RT

646.632 TEMPORARY 6 INCH YELLOW LINE, PAINT
 RAMP C
 STA. 40+00 - STA. 46+96 SOLID RT
 RAMP D
 STA. 61+11.18 - STA. 68+25 SOLID LT

646.622 TEMPORARY 6 INCH WHITE LINE, PAINT
 RAMP C
 STA. 40+35 - STA. 49+01 SOLID LT
 RAMP D
 STA. 61+11.18 - STA. 70+74 SOLID RT
 MAINLINE
 MM 13.624 - STA. 13.693 SOLID LT
 MM 13.624 - STA. 13.692 DOTTED LT
 MM 13.593 - STA. 13.688 DOTTED RT
 MM 13.593 - STA. 13.688 SOLID RT

646.482 DURABLE 24 INCH STOP BAR, THERMOPLASTIC
 STA. 40+36 LT & RT
 646.682 TEMPORARY 24 INCH STOP BAR, PAINT
 STA. 40+36 LT & RT

646.492 DURABLE LETTER OR SYMBOL, THERMOPLASTIC
 RAMP C
 STA. 40+53 "STOP"
 STA. 42+75 WRONG WAY ARROW
 STA. 45+55 "AHEAD"
 STA. 45+96 "STOP"

LEGEND
 N = NEW
 R = REMOVE
 B-B = BACK TO BACK
 RET = RETAIN

646.662 TEMPORARY 12 INCH WHITE LINE, PAINT
 RAMP C
 STA. 46+96 - STA. 49+01 SOLID RT
 STA. 46+94 - STA. 49+01 HATCHED RT
 RAMP D
 STA. 68+25 - STA. 70+74 SOLID LT
 MAINLINE
 MM 13.584 - STA. 13.624 SOLID LT
 MM 13.548 - STA. 13.593 SOLID RT
 646.692 TEMPORARY LETTER OR SYMBOL, PAINT
 RAMP C
 STA. 40+53 "STOP"
 STA. 42+75 WRONG WAY ARROW
 STA. 45+55 "AHEAD"
 STA. 45+96 "STOP"
 675.50 REMOVING SIGNS
 AS SHOWN - 4
 675.60 ERECTING SALVAGED SIGNS
 AS SHOWN - 1

NOT TO SCALE

**INTERCHANGE 2
 RAMP DETAIL
 SHEET #2**

PROJECT NAME: SHARON - ROYALTON	FILE NAME: 97A184.dgn	PLOT DATE: 13-AUG-2010
PROJECT NUMBER: IM 089-(158)	PROJECT LEADER: CDL	DRAWN BY: SJL
	DESIGNED BY: SJL	CHECKED BY: EPD
	PLOT FILE: 97A184.56.1	SHEET 56 OF 62

TRAFFIC SIGN SUMMARY SHEET

MILEMARKER, STATION, OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS		NEW & SALVAGED SIGNS				EXIST POST	NO. OF POSTS	NEW SIGN POSTS																		REMARKS	SIGN DETAIL	
		EA	WIDTH (in)	HEIGHT (in)	"A"	"B"	SALV SIGN			SALV TIS	FLANGED CHANNEL			SQUARE STEEL (in)			TUBULAR ALUMINUM (in)			TUBULAR STEEL (in)				W-SHAPE STEEL		DETAIL ON DWG. NUMBER	STD. SHEET NUMBER			
											1.12	2.0	3.0	1.75	2.0	2.5	3.0	4.0	4.0 MOD	3.0	3.5	4.0	5.0	FTG. SIZE	WEIGHT				POST SIZE	
MM 13.104 MED NB		1	36	36	9.00				2					29.17													R3-4	SHS		
STA. 28+84 LT EXIT 2 RAMP B		1	36	36	9.00				2					31.50													W3-1	SHS		
STA. 23+09 RT EXIT 2, RAMP B		1	36	24	6.00				2					32.50													R5-1A	SHS		
																												MOUNT WITH WRONG WAY SIGN		
STA. 23+09 LT EXIT 2, RAMP B			36	24	6.00			2																			R5-1A	MOUNT WRONG WAY SIGN BACK TO BACK WITH RETAINED GUIDE SIGNS	SHS	
MM 13.730 MED NB		1	36	36	9.00				2					28.33													R3-4	SHS		

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

TOTALS	SF	SF	EA.	SF		LF	LF	LF	LF	LF	EA.	LB	LB	LB	EA.	EA.	LB
	39.00		1						121.50	120							

TRAFFIC SIGN SUMMARY SHEET 1

PROJECT NAME: SHARON - ROYALTON
PROJECT NUMBER: IM 089-1(58)
FILE NAME: 97A184.dgn
PROJECT LEADER: CDL
DESIGNED BY: SJL
PLOT FILE: 97A184.57.1

PLOT DATE: 8/6/2010
DRAWN BY: SJL
CHECKED BY: EPD
SHEET 57 OF 62

TRAFFIC SIGN SUMMARY SHEET

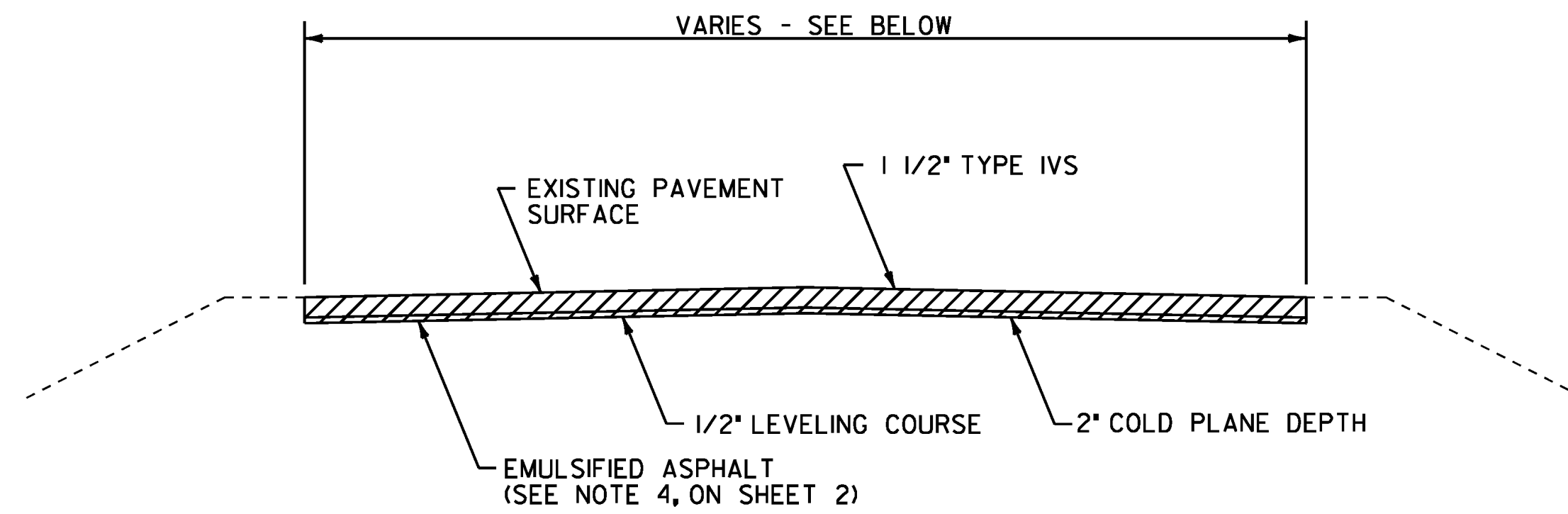
MILEMARKER, STATION, OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS		NEW & SALVAGED SIGNS				EXIST POST RETAIN	NO. OF POSTS	NEW SIGN POSTS																REMARKS	SIGN DETAIL				
				"A"	"B"	SALV SIGN	SALV TIS			FLANGED CHANNEL			SQUARE STEEL (in)			TUBULAR ALUMINUM (in)			TUBULAR STEEL (in)				W-SHAPE STEEL		DETAIL ON DWG. NUMBER		STD. SHEET NUMBER				
		lb/ft	1.75							2.0	2.5	ANCHOR	SLEEVE	3.0	4.0	4.0 MOD	FOUNDATION	3.0	3.5	4.0	5.0	FTG. SIZE		WEIGHT				POST SIZE			
			1.12							2.0	3.0			1.88	2.42	3.35		1.3	1.7	1.7	7.6	9.0	10.8						14.6	24"	30"
STA. 42+75 RT EXIT 2, RAMP C		1	36	24	6.00				2																		R5-1A		SHS		
																											MOUNT WITH WRONG WAY SIGN				
STA. 42+75 LT EXIT 2, RAMP C		1	36	24	6.00				2																		R5-1A	MOUNT WRONG WAY SIGN BACK TO BACK WITH RETAINED GUIDE SIGNS		SHS	
MM 14.776 MED SB		1	36	36	9.00				2																		R3-4		SHS		
MM 14.984 MED SB		1	36	36	9.00				2																		R3-4		SHS		
TOTAL THIS SHEET					30.00																										
TOTAL FROM TSSS 1					39.00																										
TOTAL FROM TSSS 2					45.00																										
FINAL POST LENGTHS ARE TO BE DETERMINED IN THE FIELD. POST SIZES ARE COMPUTED BASED ON INFORMATION FURNISHED ON THE STANDARD SHEETS AND THE VTRANS "SIGN POST DESIGN GUIDELINE."					114.00																										
SUBTOTAL ROUNDING					1.00																										
TOTALS					SF 114.00 115.00	SF	EA. 2	SF		LF	LF	LF	LF	LF	EA.	LB	LB	LB	EA.	LB	LB	LB	EA.	EA.	LB						

TRAFFIC SIGN SUMMARY SHEET 3

PROJECT NAME: SHARON - ROYALTON
PROJECT NUMBER: IM 089-1(58)

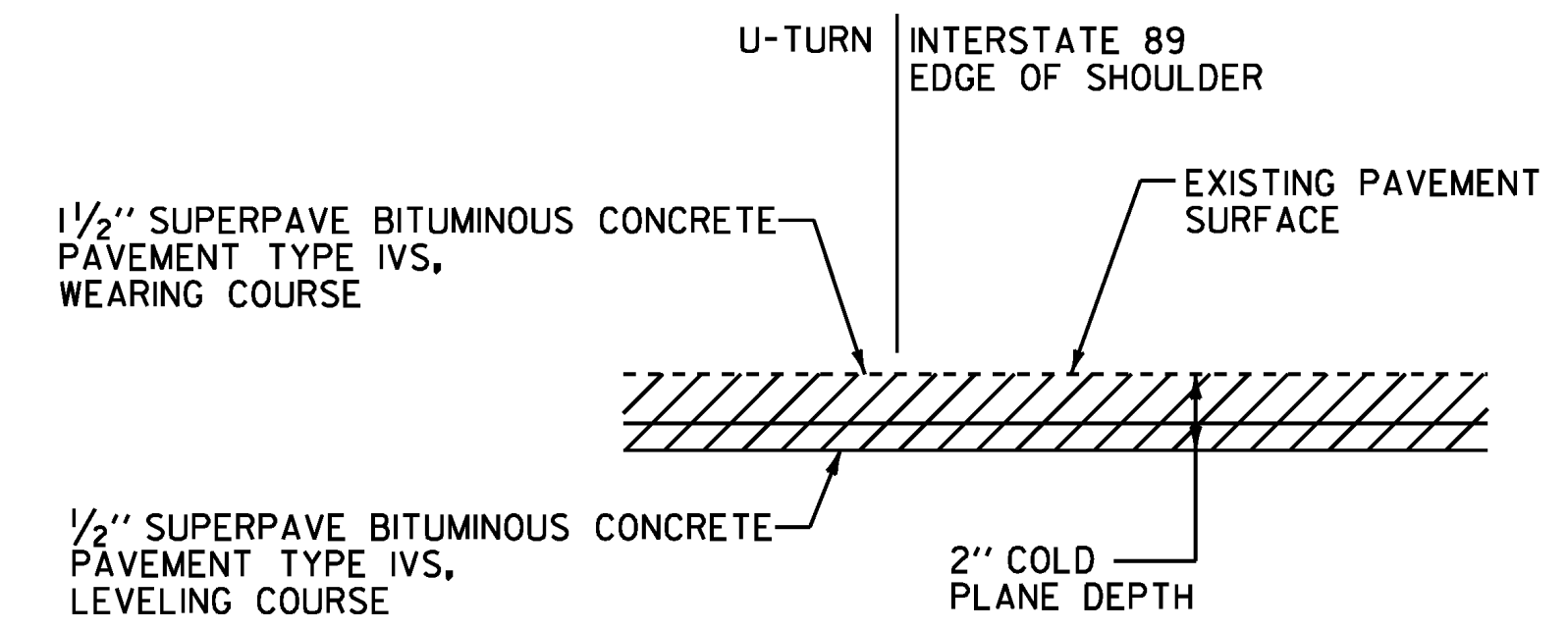
FILE NAME: 97A184.dgn
PROJECT LEADER: CDL
DESIGNED BY: SJL
PLOT FILE: 97A184.59.1

PLOT DATE: 8/6/2010
DRAWN BY: SJL
CHECKED BY: EPD
SHEET 59 OF 62

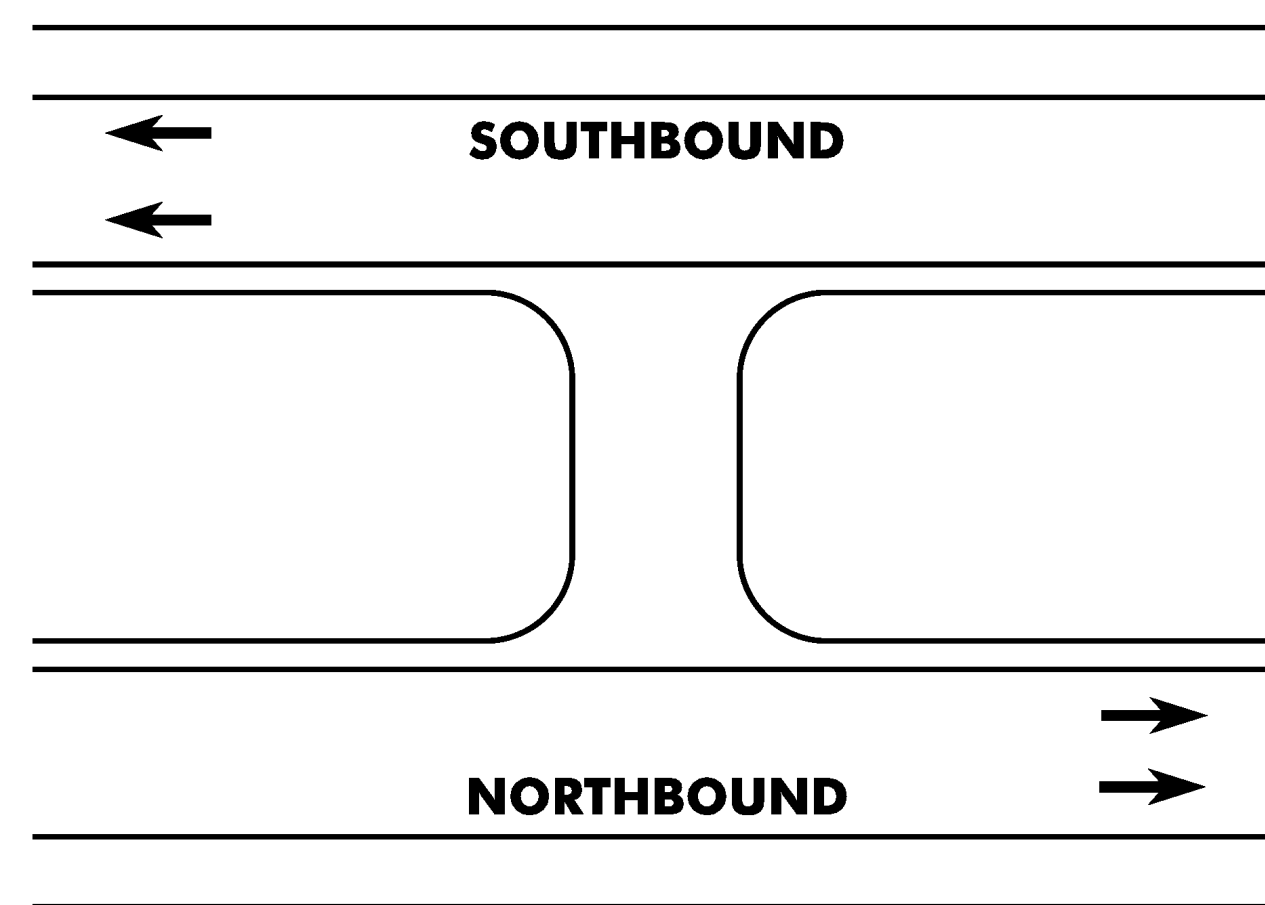


COLD PLANE U-TURN TYPICAL SECTION

MM	13.115	(90'X50')
MM	13.737	(35'X50')
MM	14.771	(25'X50')
MM	14.972	(36'X50')



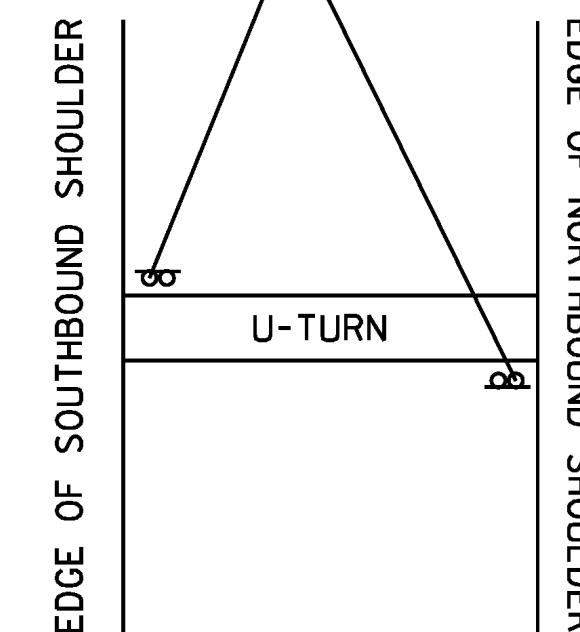
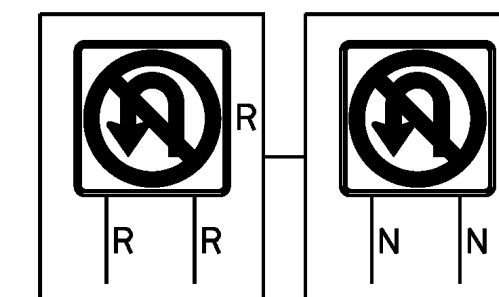
U-TURN PAVING DETAIL
U-TURN LENGTH LESS THAN 50 FEET



U-TURN DETAIL

MM	13.115	(90'X50')
MM	13.737	(35'X50')
MM	14.771	(25'X50')
MM	14.972	(36'X50')

REPLACE U-TURN SIGNS
AT THE LOCATIONS INDICATED BELOW



U-TURN DETAIL

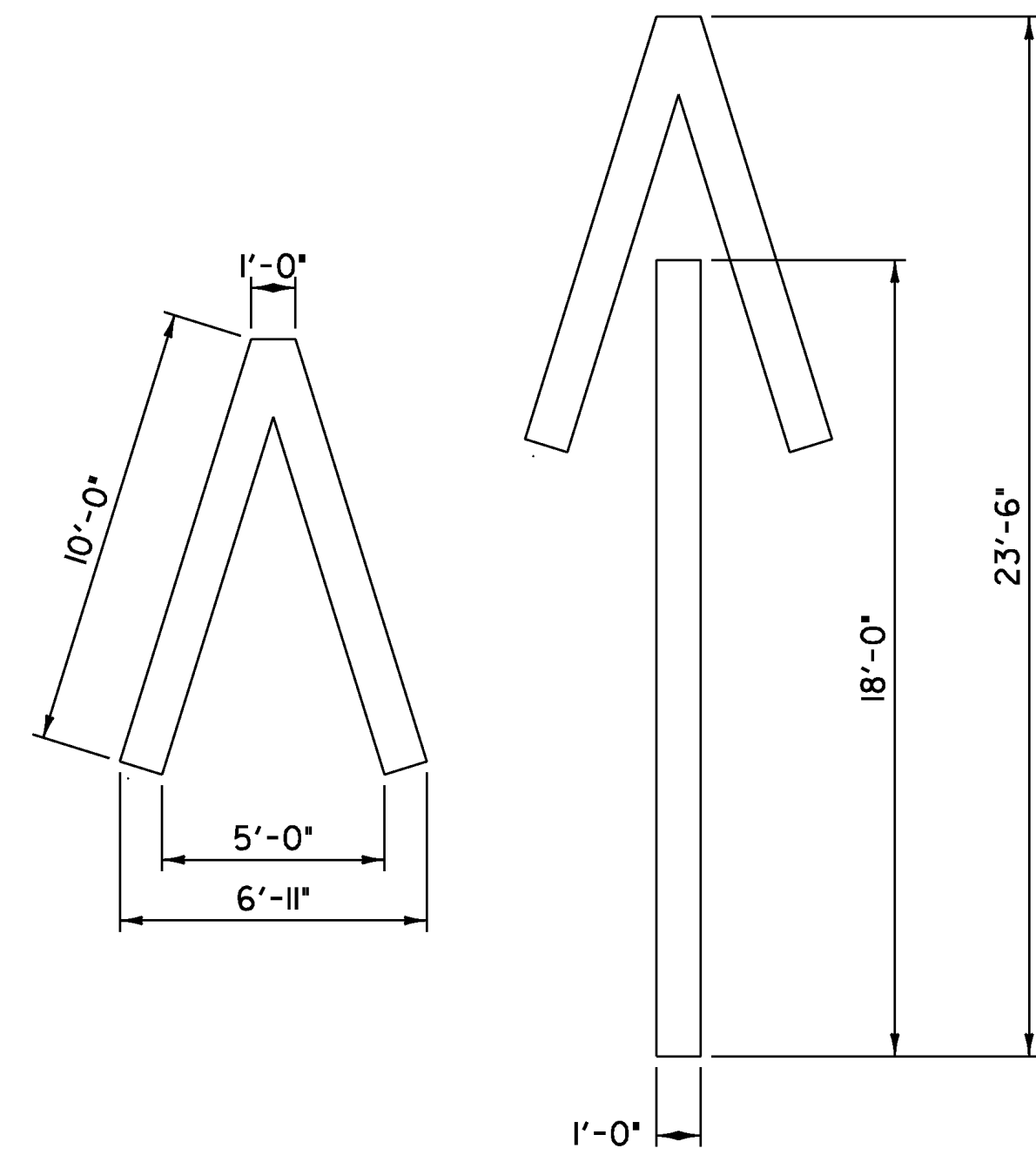
MM	13.115
MM	13.737
MM	14.771
MM	14.972

U-TURN NOTES:

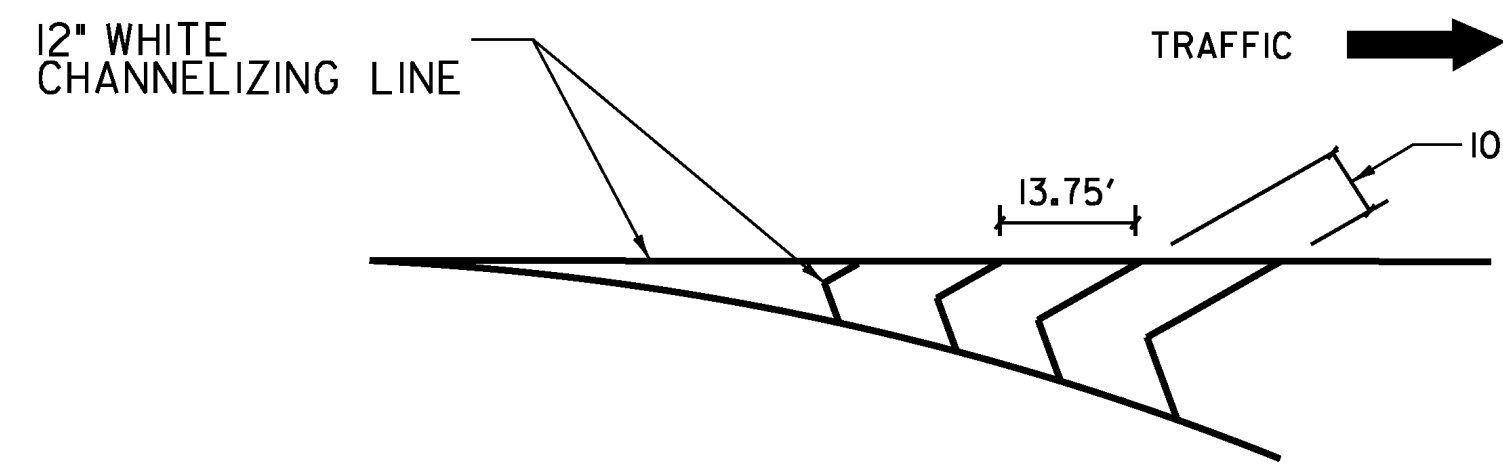
- EACH U-TURN AREA LOCATED WITHIN THE PROJECT LIMITS SHALL BE PAVED. SEE VTRANS STANDARD B-17 FOR U-TURN DETAILS.

NOT TO SCALE

U-TURN DETAIL SHEET	PROJECT NAME: SHARON - ROYALTON	
	PROJECT NUMBER: IM 089-1(58)	
	FILE NAME: 97A184.dgn	PLOT DATE: 8/6/2010
	PROJECT LEADER: CDL	DRAWN BY: SJL
	DESIGNED BY: SJL	CHECKED BY: EPD
	PLOT FILE: 97A184_60.1	SHEET 60 OF 62



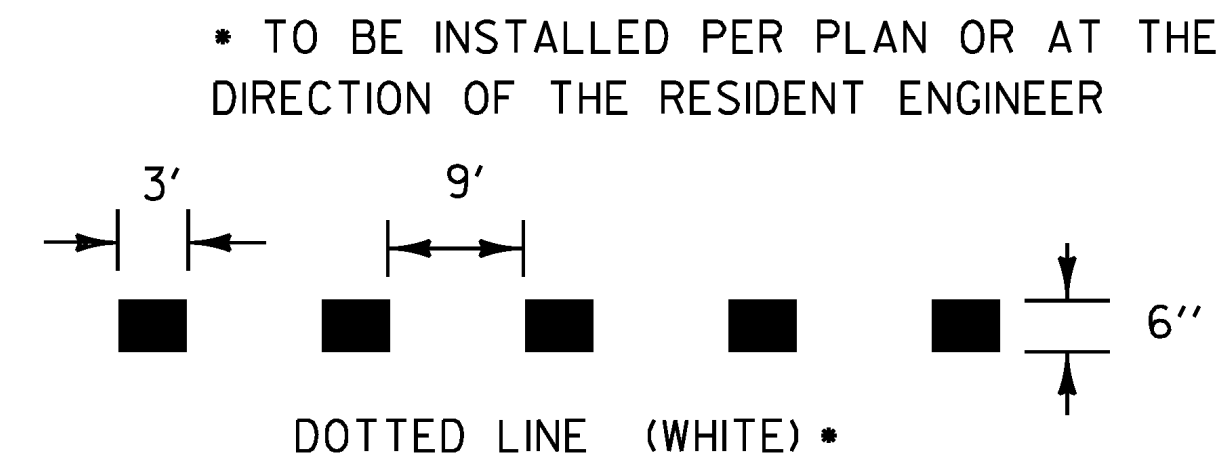
WRONG WAY ARROW



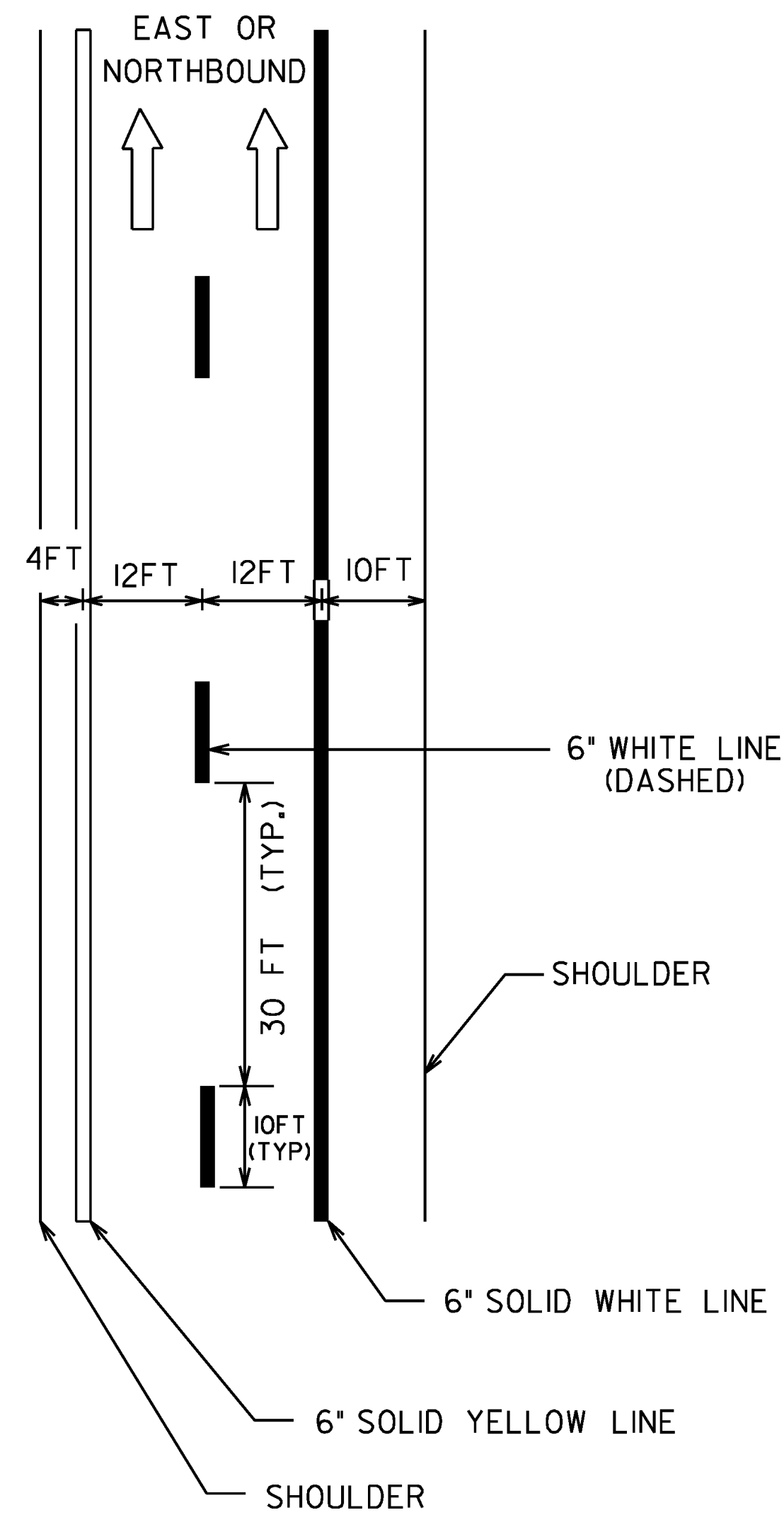
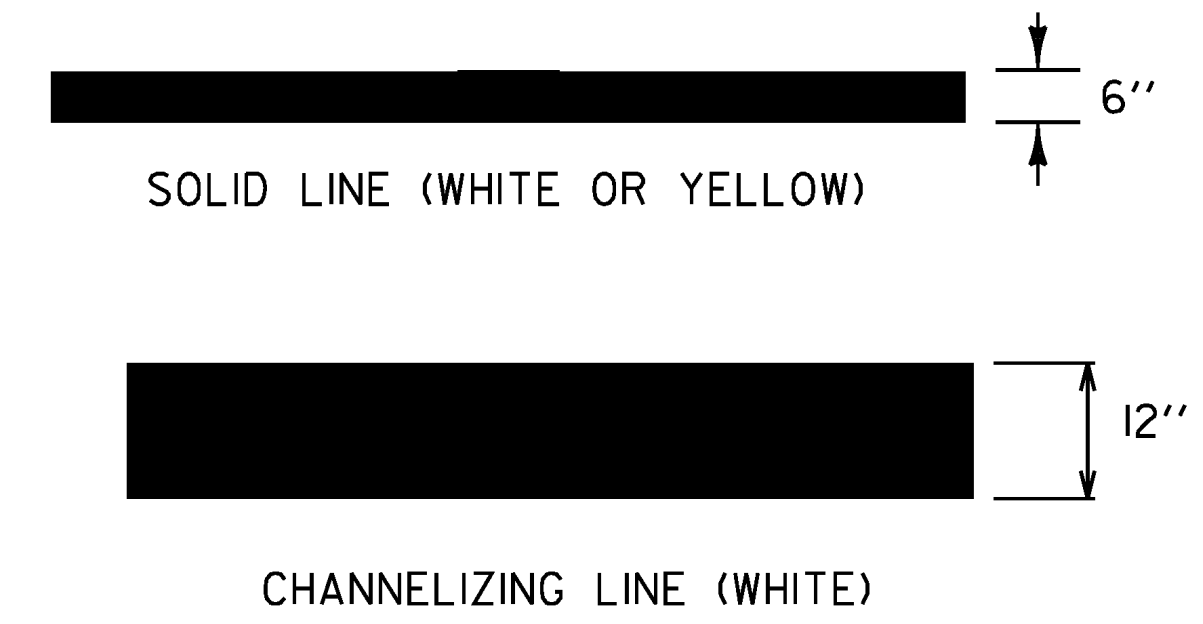
GORE MARKING DETAIL



STOP BAR DETAIL



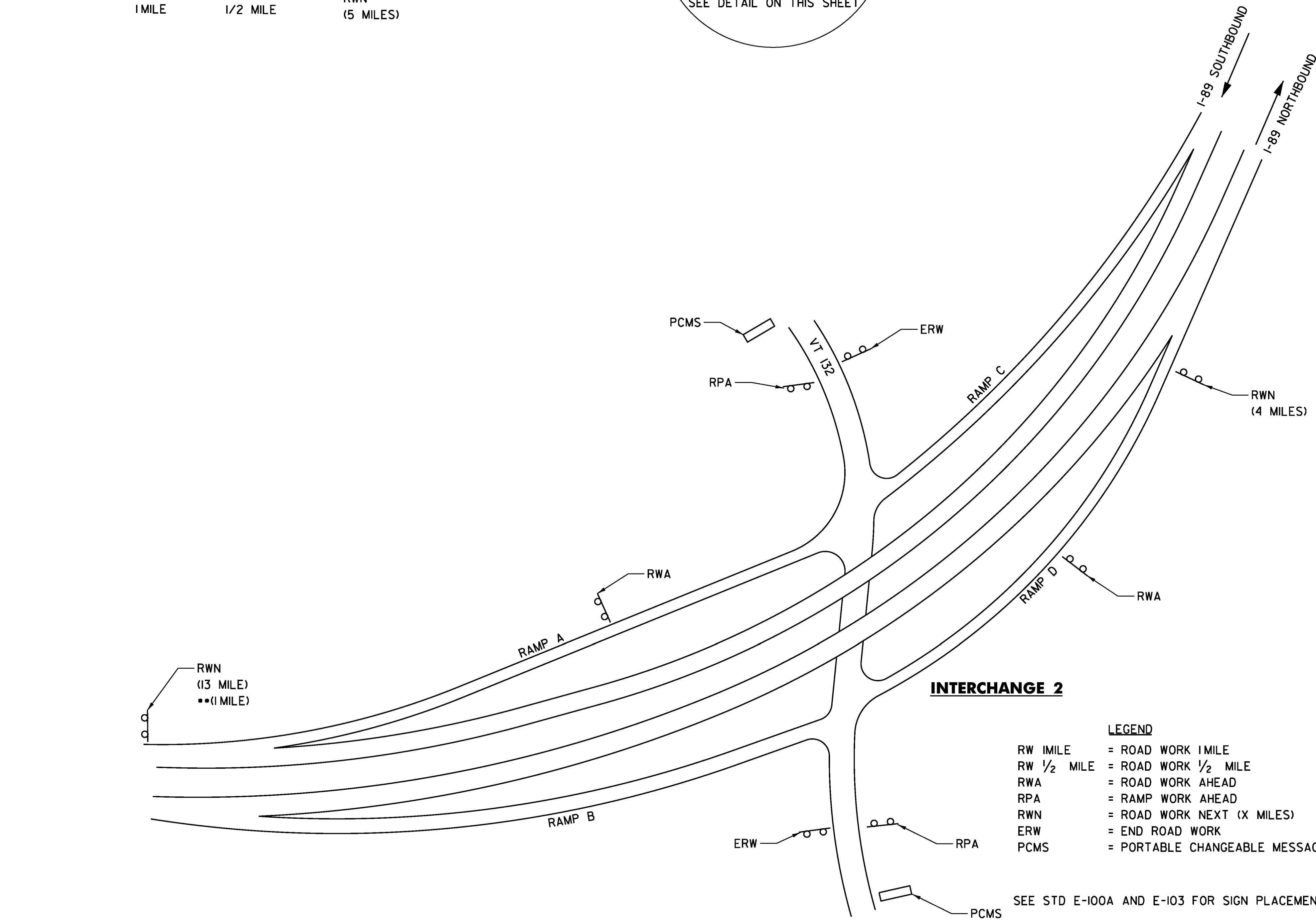
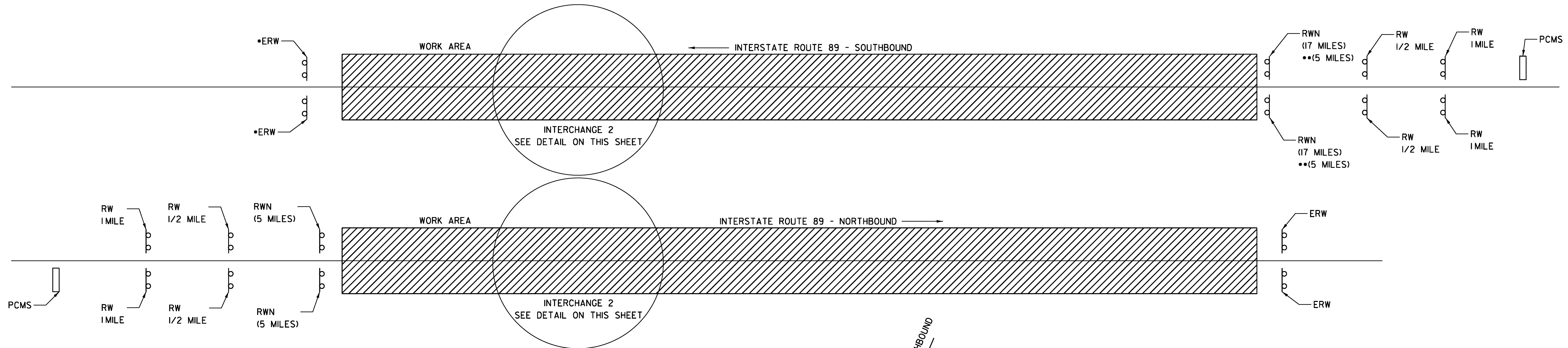
PAVEMENT MARKING LINE DETAILS



TYPICAL MAINLINE MARKING PLAN

DETAILS NOT TO SCALE

DETAIL SHEET	PROJECT NAME: SHARON - ROYALTON
	PROJECT NUMBER: IM 089-1(58)
FILE NAME: 97A184.dgn	PLOT DATE: 8/6/2010
PROJECT LEADER: CDL	DRAWN BY: SJL
DESIGNED BY: SJL	CHECKED BY: EPD
PLOT FILE: 97A184_61.i	SHEET 61 OF 62



LIST OF CONSTRUCTION SIGNS
SEE STD. E-100 AND E-103 FOR SIGN PLACEMENT.

LOCATION	RW 1 MILE	RW 1/2 MILE	RWA	RPA	RWN 5 MILES	RWN 4 MILES	RWN 1 MILE	ERW	PCMS
INTERSTATE 89 NB&SB	4	4		2	4			4	2
VT ROUTE 132				2				2	2
EXIT 2, RAMP A			1				1		
EXIT 2, RAMP D			1			1			
TOTALS	4	4	2	2	4	1	1	6	4

• CAN BE OMITTED IF CONSTRUCTED IN CONJUNCTION WITH IM 089 (K57) HARTFORD-SHARON
 •• MILES IF CONSTRUCTED SEPERATELY FROM IM 089 (K57) HARTFORD-SHARON

- NOTES:**
- THE CONTRACTOR SHALL INCLUDE A CONSTRUCTION SIGN APPROACH PACKAGE FOR EXPECTED LANE CLOSURES AND WORKZONE SPEED REDUCTIONS IN COMPLIANCE WITH STD. E-103, E-106, AND THE 2009 MUTCD. PAYMENT FOR THIS PACKAGE SHALL BE INCIDENTAL TO ITEM 641.10, TRAFFIC CONTROL.
 - SEE SHEET 9 FOR CONSTRUCTION APPROACH SIGNING NOTES.

LEGEND

RW 1 MILE = ROAD WORK 1 MILE
 RW 1/2 MILE = ROAD WORK 1/2 MILE
 RWA = ROAD WORK AHEAD
 RPA = RAMP WORK AHEAD
 RWN = ROAD WORK NEXT (X MILES)
 ERW = END ROAD WORK
 PCMS = PORTABLE CHANGEABLE MESSAGE SIGN

SEE STD E-100A AND E-103 FOR SIGN PLACEMENT.

NOT TO SCALE

CONSTRUCTION APPROACH SIGNING SHEET	PROJECT NAME: SHARON - ROYALTON
	PROJECT NUMBER: IM 089-(K58)
	FILE NAME: 97A184.dgn
PROJECT LEADER: CDL	PLOT DATE: 8/6/2010
DESIGNED BY: SJL	DRAWN BY: SJL
PLOT FILE: 97A184_62.t	CHECKED BY: EPD
	SHEET 62 OF 62