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# STATE OF VERMONT AGENCY OF TRANSPORTATION

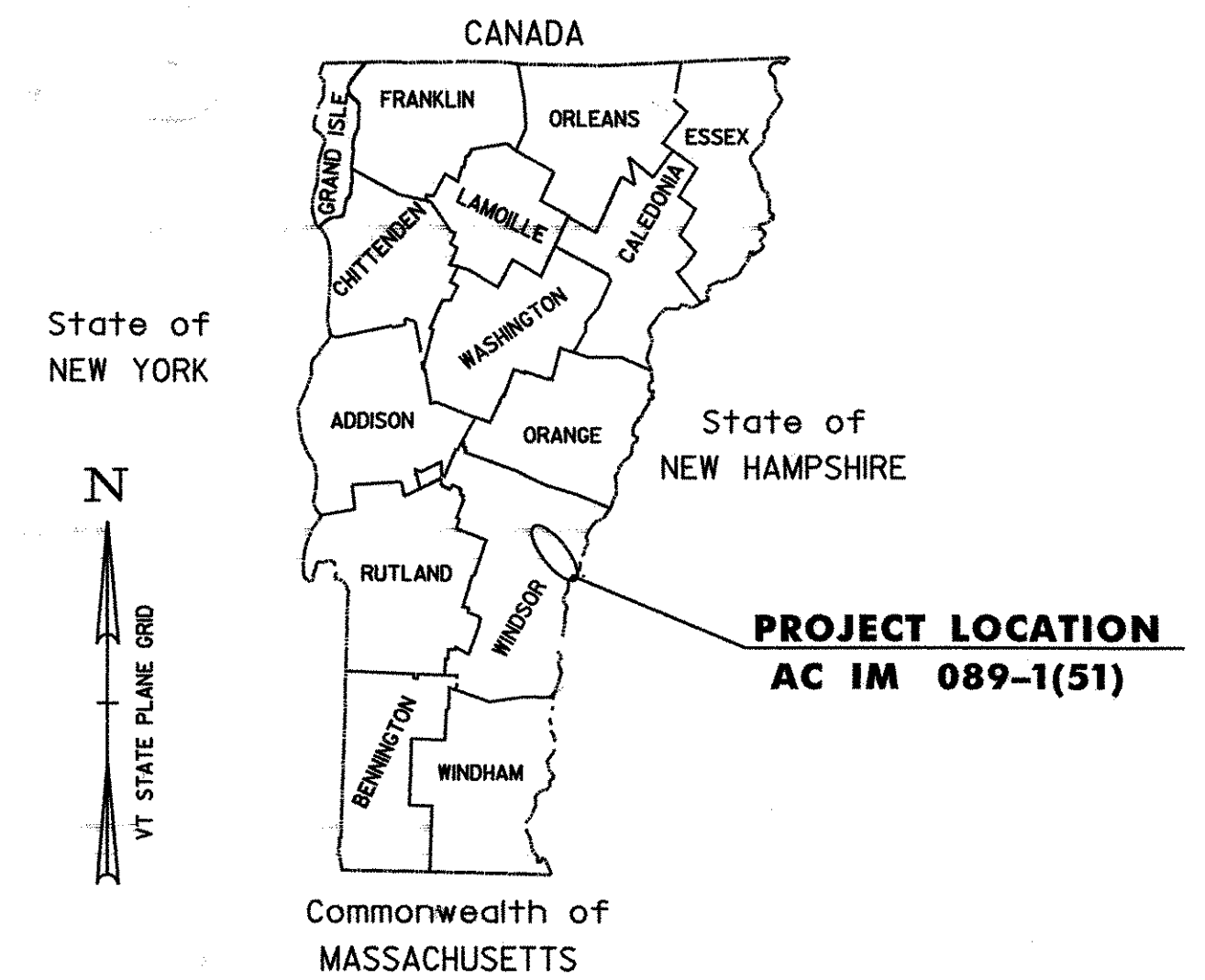


## PROPOSED IMPROVEMENTS TOWNS OF HARTFORD AND SHARON COUNTY OF WINDSOR INTERSTATE ROUTE 89 (NB)

BEGINNING AT STATION 0+080.467 (MM 0.050) (NORTH END OF THE BRIDGE OVER THE CONNECTICUT RIVER) IN THE TOWN OF HARTFORD, AND EXTENDING NORTHERLY ALONG INTERSTATE 89 (IN THE NORTHBOUND LANES) FOR A DISTANCE OF 19,633.997 METERS (12.200 MILES) TO STATION 19+714.464 (MM 12.250) IN THE TOWN OF SHARON.

PROJECT DATA	LENGTH
NORTHBOUND STA 0+080.467 TO 19+714.464 (MM 0.050 TO MM 12.250)	(METERS) (MILES)
LENGTH OF ROADWAY	19,633.997 12.200
LENGTH OF PROJECT	19,633.997 12.200

WORK TO BE PERFORMED UNDER THIS PROJECT INCLUDES COLD PLANING AND RESURFACING OF THE NORTHBOUND TRAVEL LANES, SHOULDERS, U-TURNS AND THE ACCELERATION/DECELERATION LANES AND THE ON/OFF RAMPS AT THE WHITE RIVER JCT. AND QUECHEE INTERCHANGES, WITH NEW PAVEMENT MARKINGS, GUARDRAIL IMPROVEMENTS, DRAINAGE IMPROVEMENTS AND INCIDENTAL ITEMS.

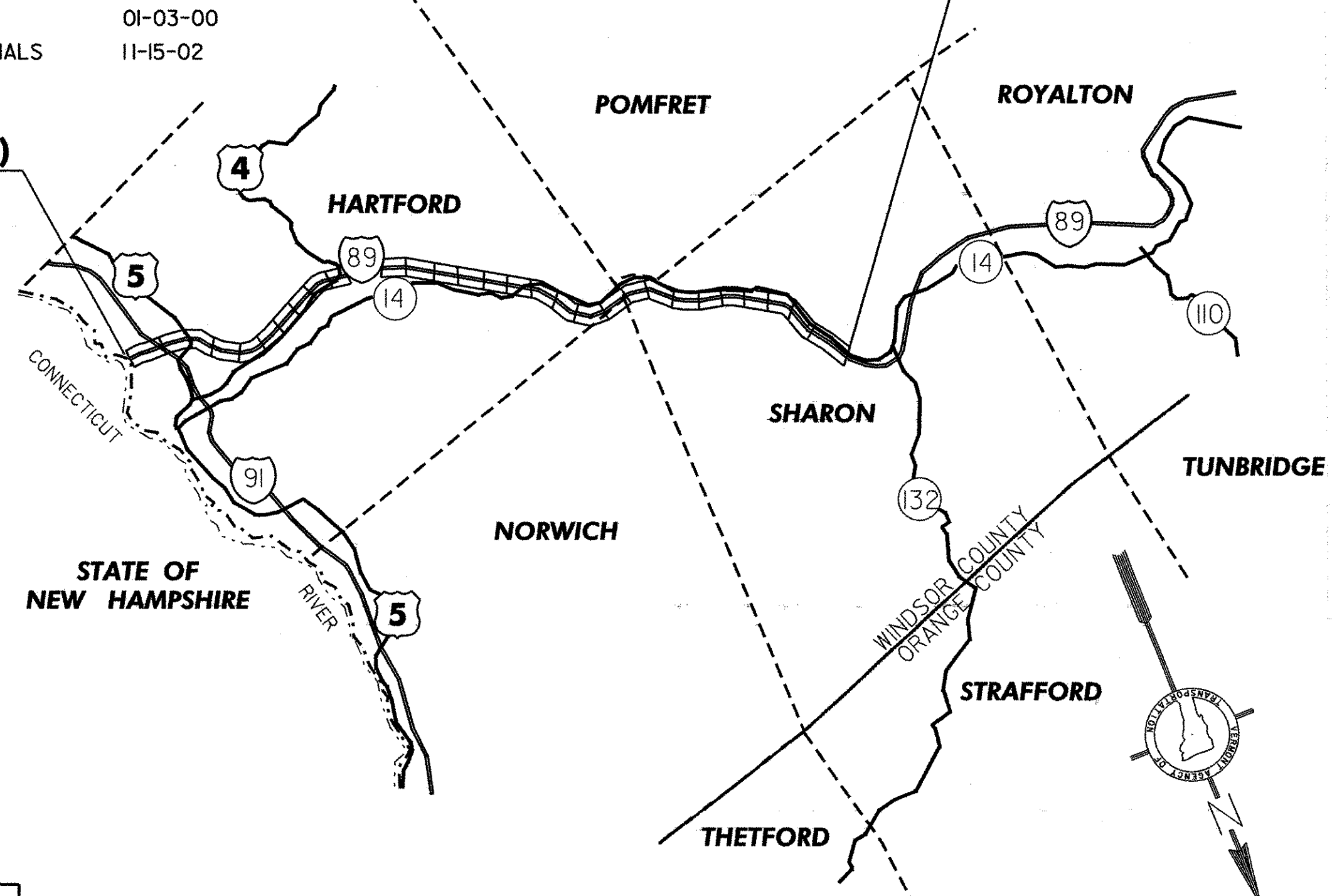


SECTION	ADT		DHV		ESAL's	ESAL's
	2005	2015	2005	2015	(2005-2015)	(2005-2025)
BEGIN PROJECT TO I-91 (NB)	21,500	26,300	2,400	2,900	5,824,000	14,287,000
I-91 TO EXIT 1 (NB)	11,300	13,900	1,500	1,800	9,169,000	22,917,000
EXIT 1 TO END PROJECT (NB)	8,800	10,700	1,200	1,400	7,090,000	17,621,000

HARTFORD - SHARON I-89, MM 0.050 TO MM 12.250 (NB)	
BITUMINOUS CONCRETE PAVEMENT SUPERPAVE MIXTURE DESIGN CRITERIA	
DESIGN LANE/DESIGN LIFE ESAL (20 YEAR)	22,917,000
DESIGN NUMBER OF GYRATIONS	100
PERFORMANCE GRADED ASPHALT BINDER	PG 64-34

**BEGIN AC IM 089-1(51)  
STA 0+080.467  
(MM 0.050)**

**END AC IM 089-1(51)  
STA 19+714.464  
(MM 12.250)**



**CONVENTIONAL SIGNS**

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

**DATUM**

VERTICAL	N/A
HORIZONTAL	N/A

**RECORD PLANS**

CONTRACTOR: PIKE INDUSTRIES, INC. - BERLIN VT

RESIDENT ENGINEER: CHRIS BARKER

CONSTRUCTION BEGAN: JUNE 16, 2005

CONSTRUCTION COMPLETE: DECEMBER 12, 2005

RECORD PLANS BY: CHRIS BARKER & E. FOSTER

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

BY: *[Signature]* RESIDENT ENGINEER

DATE: 01/23/06

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.

RIGHT-OF-WAY LIMITS, IF APPLICABLE, ARE PROVIDED SOLELY FOR THE CONVENIENCE OF THE STATE AND ITS CONTRACTOR DURING THE COURSE OF THIS PAVING PROJECT. ANY REFERENCES TO OFFSETS ON THESE PLANS ARE APPROXIMATE AND SHOULD NOT BE RELIED UPON FOR ANY OTHER PURPOSES.

UNLESS OTHERWISE NOTED, ALL DRAWINGS AND DETAILS ON THESE PLANS ARE DRAWN 'NOT TO SCALE'.



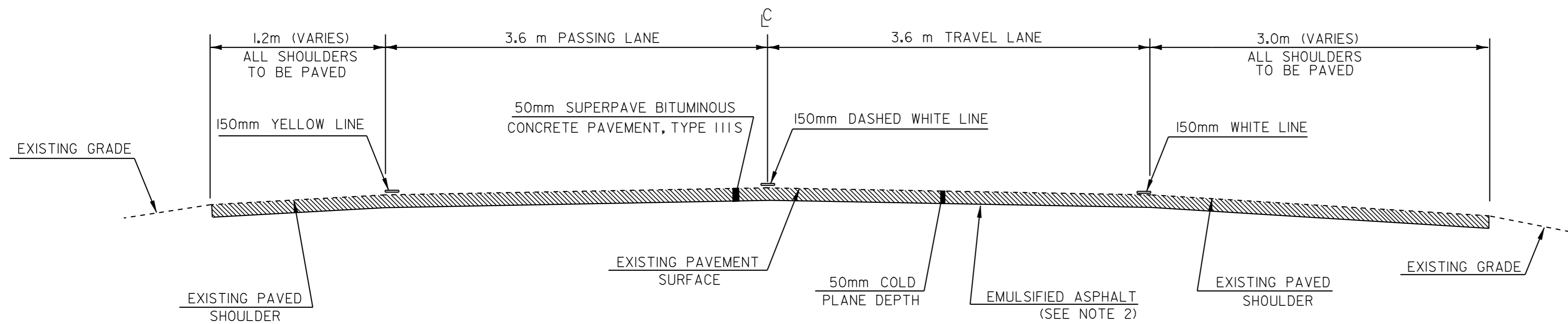
THESE PLANS ARE SUBJECT TO SUCH ENGINEERING CHANGES AS MAY BE REQUIRED BY THE FEDERAL HIGHWAY ADMINISTRATION OR THE DIRECTOR OF PROGRAM DEVELOPMENT.

CONSTRUCTION IS TO BE CARRIED ON IN ACCORDANCE WITH THESE PLANS AND THE STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 2001, AS APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION ON JANUARY 4, 2001 FOR USE ON THIS PROJECT, INCLUDING ALL SUBSEQUENT REVISIONS AND SUCH REVISED SPECIFICATIONS AND SPECIAL PROVISIONS AS ARE INCORPORATED IN THESE PLANS.

DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATOR	APPROVED <i>[Signature]</i> DATE 4-11-05
DIRECTOR OF PROGRAM DEVELOPMENT	APPROVED <i>[Signature]</i> DATE 4-5-05
PROJECT MANAGER : MARK WOOLAVER	
PROJECT NAME : HARTFORD - SHARON	
PROJECT NUMBER : AC IM 089-1(51)	
SHEET 1 OF 21 SHEETS	

**NOTES**

1. THE SINGLE PAVEMENT LIFT ( WEARING COURSE) SHALL BE TYPE 111S. ALL ASPHALT CEMENT USED IN THE SUPERPAVE BITUMINOUS CONCRETE PAVEMENT SHALL BE PG 64-34.
2. EMULSIFIED ASPHALT SHALL BE APPLIED ON EXISTING PAVEMENT SURFACES, BETWEEN ALL COURSES OF PAVEMENT AND ON COLD PLANED SURFACES AT THE RATE OF 0.12 L/SM OR AS DIRECTED BY THE RESIDENT ENGINEER.
3. SUPERPAVE BITUMINOUS CONCRETE PAVEMENT TOLERANCE = +/- 5 mm (TOTAL THICKNESS).
4. 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.
5. GRASS GROWING ADJACENT TO PAVEMENT, OR THROUGH CRACKS IN THE PAVEMENT, WHICH MAY HAMPER THE PLACEMENT OF NEW BITUMINOUS CONCRETE, SHALL BE REMOVED BY THE CONTRACTOR, AS DIRECTED BY THE ENGINEER. PAYMENT FOR THIS WORK WILL NOT BE MADE DIRECTLY, BUT WILL BE CONSIDERED INCIDENTAL TO ITEM 490.30, SUPERPAVE BITUMINOUS CONCRETE PAVEMENT (PG 64-34).
6. ALL EDGES OF PAVEMENT SHALL BE BACKED UP FULL HEIGHT WITH COLD PLANE GRINDINGS AS DIRECTED BY THE RESIDENT ENGINEER AND WILL BE PAID FOR UNDER ITEM 402.12, AGGREGATE SHOULDER (MOD.).
7. ITEM 616.47, BITUMINOUS CONCRETE GUTTERS AND TRAFFIC ISLANDS WILL BE PAID ONLY WHERE SPECIFIED IN THE PROJECT PLANS OR AT ALL OTHER LOCATIONS DIRECTED BY THE RESIDENT ENGINEER. ALL OTHER BITUMINOUS CONCRETE PAVEMENT WORK, WHICH COULD INVOLVE SOME HAND-WORK (SUCH AS AROUND DRAINAGE/UTILITY STRUCTURES) SHALL BE PAID FOR AT THE CONTRACT PRICE FOR ITEM 490.30, SUPERPAVE BITUMINOUS CONCRETE PAVEMENT (PG 64-34).
8. 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 UNDER ITEM 203.99, SHOULDER BERM REMOVAL.
9. ESTIMATED QUANTITIES OF ITEM 608.25, EXCAVATOR RENTAL AND 608.37, TRUCK RENTAL HAVE BEEN INCLUDED FOR THE PROVISION OF CONSTRUCTING GUARDRAIL FLARES WITH EARTH BORROW. THE GUARDRAIL FLARES SHALL BE CAPPED WITH AN ESTIMATED 75mm DEPTH OF AGGREGATE SHOULDER MATERIAL (MOD.), OR AS DIRECTED BY THE RESIDENT ENGINEER. THE QUANTITIES INCLUDED REFLECT 5 TONS OF AGGREGATE SHOULDER MATERIAL (MOD.) AND 20 CUBIC METERS OF EARTH BORROW FOR EACH GUARDRAIL TERMINAL.
10. ADDITIONALLY, ESTIMATED QUANTITIES OF ITEM 608.25, EXCAVATOR RENTAL AND 608.37, TRUCK RENTAL HAVE BEEN INCLUDED FOR THE PROVISION OF CLEANING DITCHES AND CLEANING PIPE INLET AND OUTLET LOCATIONS, AS DIRECTED BY THE RESIDENT ENGINEER.
11. THE CONTRACTOR SHALL USE CAUTION WHEN COLD PLANING AND PAVING OPERATIONS OCCUR ADJACENT TO EXISTING DROP INLETS. 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.



**MAINLINE TYPICAL SECTION  
NORTHBOUND**

STA 0+080.467 TO STA.19+714.464  
(MM 0.050 TO MM 12.250)

ESTIMATED VEHICLES PER HOUR  
(BETWEEN NH BORDER AND I-91)

HOUR	JUNE-05	JULY-05	AUG-05
12:00 AM	108	114	121
1:00 AM	74	78	83
2:00 AM	93	98	104
3:00 AM	80	84	90
4:00 AM	75	79	84
5:00 AM	145	153	162
6:00 AM	436	461	488
7:00 AM	1011	1068	1131
8:00 AM	993	985	1044
9:00 AM	908	959	1016
10:00 AM	1000	1056	1119
11:00 AM	1136	1199	1271
12:00 PM	1344	1419	1504
1:00 PM	1361	1437	1523
2:00 PM	1514	1599	1694
3:00 PM	1835	1938	2053
4:00 PM	2099	2217	2349
5:00 PM	2178	2301	2438
6:00 PM	1388	1466	1553
7:00 PM	1027	1085	1149
8:00 PM	810	856	907
9:00 PM	590	623	660
10:00 PM	317	335	355
11:00 PM	229	242	256

ESTIMATED VEHICLES PER HOUR  
(BETWEEN I-91 AND QUECHEE INTERCHANGE)

HOUR	JUNE-05	JULY-05	AUG-05
12:00 AM	101	107	113
1:00 AM	77	82	86
2:00 AM	55	58	62
3:00 AM	48	51	54
4:00 AM	70	74	79
5:00 AM	149	158	167
6:00 AM	295	311	330
7:00 AM	505	534	565
8:00 AM	604	638	676
9:00 AM	673	710	753
10:00 AM	751	793	840
11:00 AM	831	878	930
12:00 PM	890	940	996
1:00 PM	885	935	991
2:00 PM	964	1019	1079
3:00 PM	1124	1187	1258
4:00 PM	1177	1243	1317
5:00 PM	1160	1225	1298
6:00 PM	811	857	908
7:00 PM	616	650	689
8:00 PM	555	587	621
9:00 PM	454	480	508
10:00 PM	275	290	307
11:00 PM	173	183	194

ESTIMATED VEHICLES PER HOUR  
(NORTH OF QUECHEE INTERCHANGE)

HOUR	JUNE-05	JULY-05	AUG-05
12:00 AM	79	83	88
1:00 AM	52	55	58
2:00 AM	59	63	67
3:00 AM	47	50	53
4:00 AM	57	60	64
5:00 AM	124	131	138
6:00 AM	264	279	296
7:00 AM	420	443	470
8:00 AM	482	509	539
9:00 AM	522	551	584
10:00 AM	536	566	600
11:00 AM	595	628	665
12:00 PM	672	710	752
1:00 PM	621	656	695
2:00 PM	715	755	800
3:00 PM	820	866	918
4:00 PM	917	969	1026
5:00 PM	881	930	986
6:00 PM	575	607	644
7:00 PM	442	466	494
8:00 PM	332	351	372
9:00 PM	263	278	295
10:00 PM	142	150	159
11:00 PM	116	123	130

ESTIMATED VEHICLES PER HOUR  
(QUECHEE RAMP A)

HOUR	JUNE-05	JULY-05	AUG-05
12:00 AM	21	22	23
1:00 AM	18	19	21
2:00 AM	8	9	9
3:00 AM	7	7	8
4:00 AM	17	18	19
5:00 AM	31	33	35
6:00 AM	106	112	119
7:00 AM	206	218	231
8:00 AM	270	285	302
9:00 AM	245	258	274
10:00 AM	239	252	267
11:00 AM	295	312	330
12:00 PM	280	296	314
1:00 PM	294	311	329
2:00 PM	358	378	400
3:00 PM	397	419	444
4:00 PM	427	451	478
5:00 PM	431	456	483
6:00 PM	308	325	345
7:00 PM	191	202	214
8:00 PM	168	178	188
9:00 PM	134	141	150
10:00 PM	76	80	85
11:00 PM	46	49	52

ESTIMATED VEHICLES PER HOUR  
(QUECHEE RAMP B)

HOUR	JUNE-05	JULY-05	AUG-05
12:00 AM	3	4	4
1:00 AM	3	4	4
2:00 AM	0	0	0
3:00 AM	1	1	1
4:00 AM	3	4	4
5:00 AM	3	4	4
6:00 AM	30	31	33
7:00 AM	42	45	47
8:00 AM	45	47	50
9:00 AM	31	33	35
10:00 AM	39	41	44
11:00 AM	41	44	46
12:00 PM	46	48	51
1:00 PM	52	54	58
2:00 PM	63	67	71
3:00 PM	89	94	100
4:00 PM	100	105	112
5:00 PM	72	76	81
6:00 PM	34	36	38
7:00 PM	25	27	28
8:00 PM	24	25	27
9:00 PM	23	24	26
10:00 PM	11	12	13
11:00 PM	5	5	5

ESTIMATED VEHICLES PER HOUR  
(WRJ RAMP G)

HOUR	JUNE-05	JULY-05	AUG-05
12:00 AM	37	39	41
1:00 AM	23	24	24
2:00 AM	21	23	24
3:00 AM	12	13	14
4:00 AM	11	12	13
5:00 AM	24	25	26
6:00 AM	55	58	62
7:00 AM	104	110	117
8:00 AM	98	104	110
9:00 AM	117	123	131
10:00 AM	138	146	155
11:00 AM	155	163	173
12:00 PM	171	180	191
1:00 PM	196	208	220
2:00 PM	224	237	251
3:00 PM	316	334	354
4:00 PM	337	356	377
5:00 PM	346	365	387
6:00 PM	207	218	231
7:00 PM	153	162	172
8:00 PM	121	128	135
9:00 PM	98	104	110
10:00 PM	61	65	69
11:00 PM	60	64	68

NOTES:

AN ANALYSIS OF THE WORKZONE NORTHBOUND TRAFFIC VOLUMES INDICATES THAT TRAFFIC VOLUMES WILL EXCEED THE HIGHWAY CAPACITY MANUAL RECOMMENDED CAPACITY OF 1550 VEHICLES PER HOUR FROM THE NEW HAMPSHIRE BORDER TO THE I-91 RAMPS BETWEEN THE WEEKDAY HOURS OF 1:00 AND 6:00 PM.

THE CONTRACTOR SHALL RESTRICT WORK THROUGH THIS SECTION SO THAT BOTH NORTHBOUND TRAVEL LANES ARE OPEN TO TRAFFIC DURING THESE HOURS.

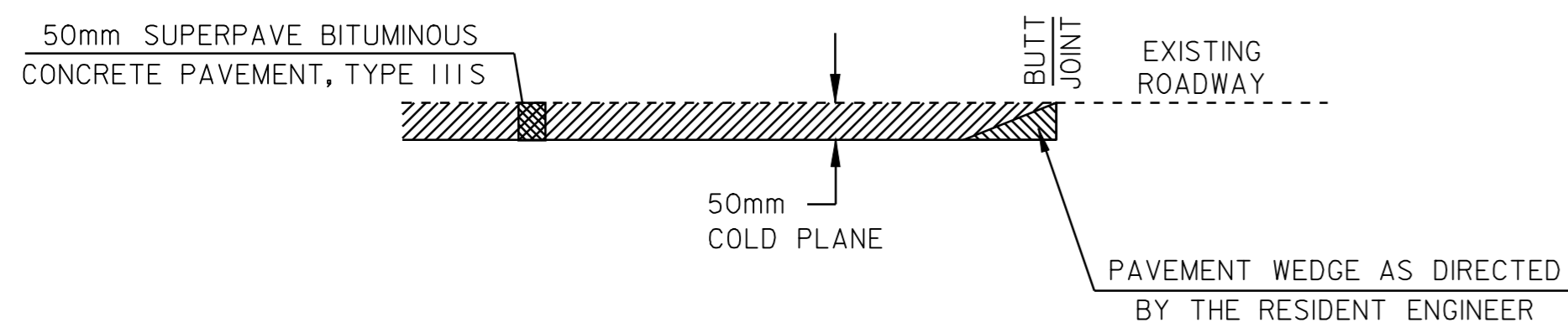
TRAFFIC VOLUMES NORTH OF WRJ RAMP H (TO THE END OF PROJECT) FALL BELOW THE RECOMMENDED CAPACITY OF 1550 VEHICLES PER HOUR.

AN ANALYSIS OF THE RAMP TRAFFIC VOLUMES HAS ALSO BEEN PROVIDED FOR BOTH RAMPS IN THE QUECHEE INTERCHANGE AND WRJ RAMP G. RELIABLE DATA FOR THE REMAINDER OF THE WRJ RAMPS (A,C,B AND H) IS NOT AVAILABLE AT THIS TIME.



**PROJECT  
TYPICAL  
SHEET #1**

DESIGNED BY LFW DATE 10-02  
 DRAWN BY LFW DATE 10-02  
 DESIGN FILE NO. /pave/01a028/p01a028.dgn  
 PRJ FILE p01a028+yl.i DATE 10-02 PLOTTE~~D~~<sub>E</sub> JAN-2006 13:4  
 PROJ. NAME **HARTFORD - SHARON**  
 PROJ. NO. **AC IM 089-1(51)**  
 SHEET **2** OF **21** SHEETS



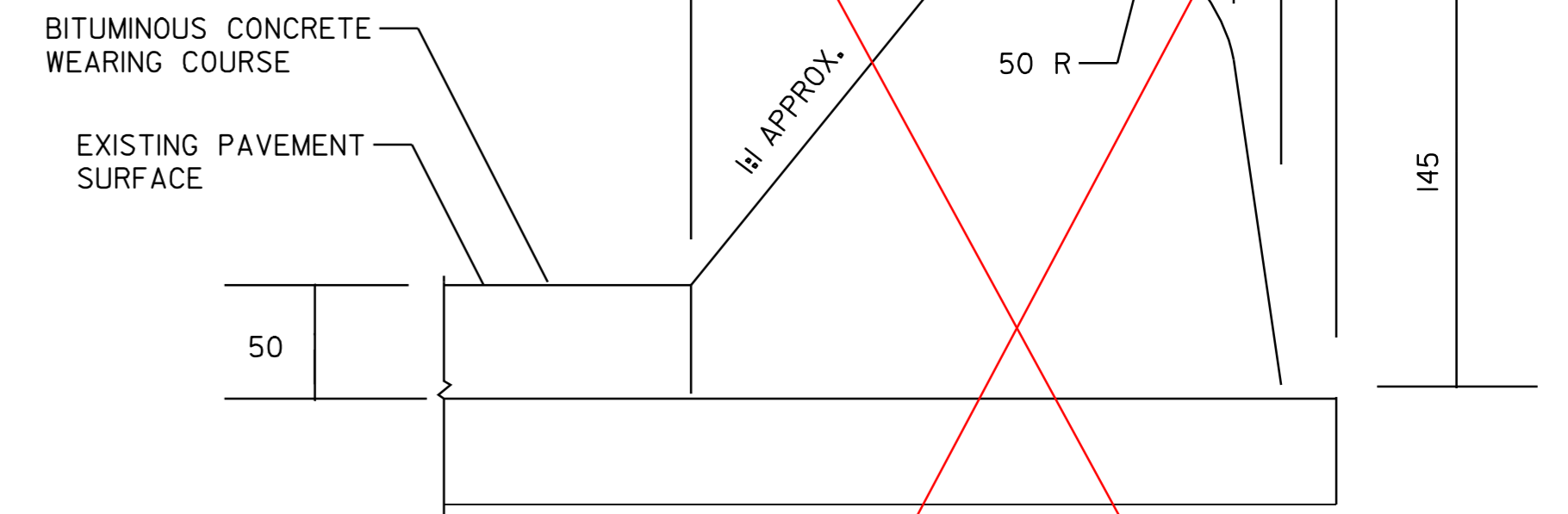
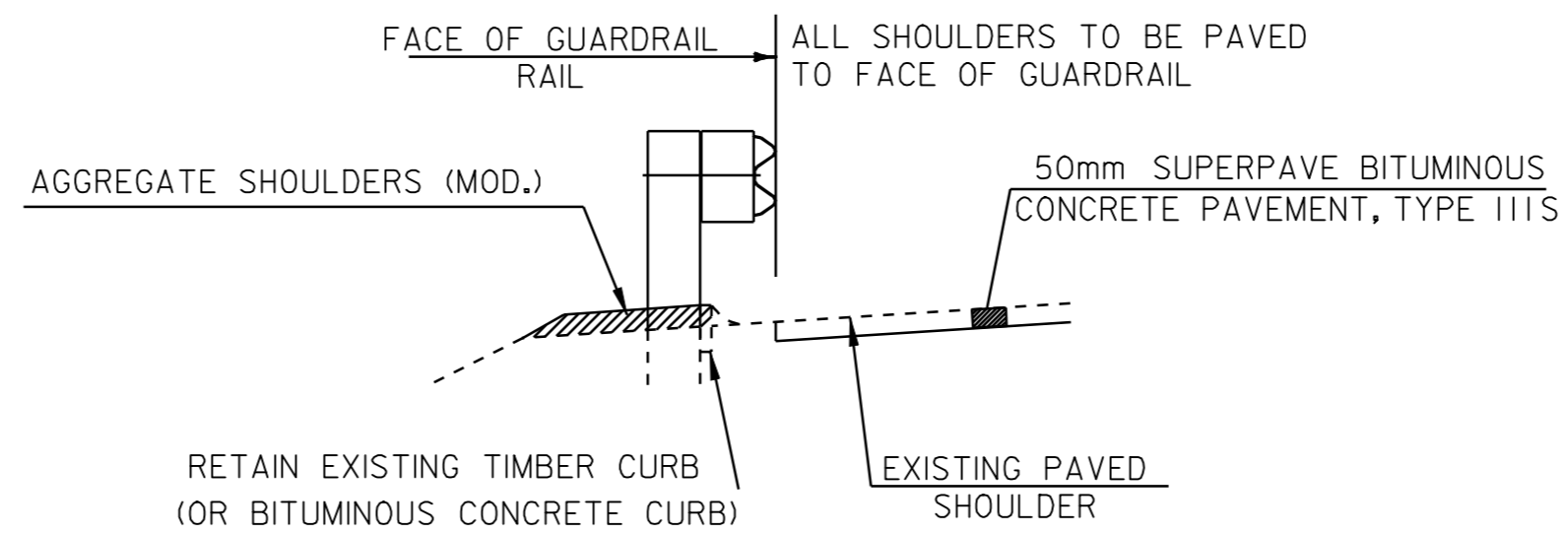
**MAINLINE APPROACH AREA DETAIL**

**LOCATION**

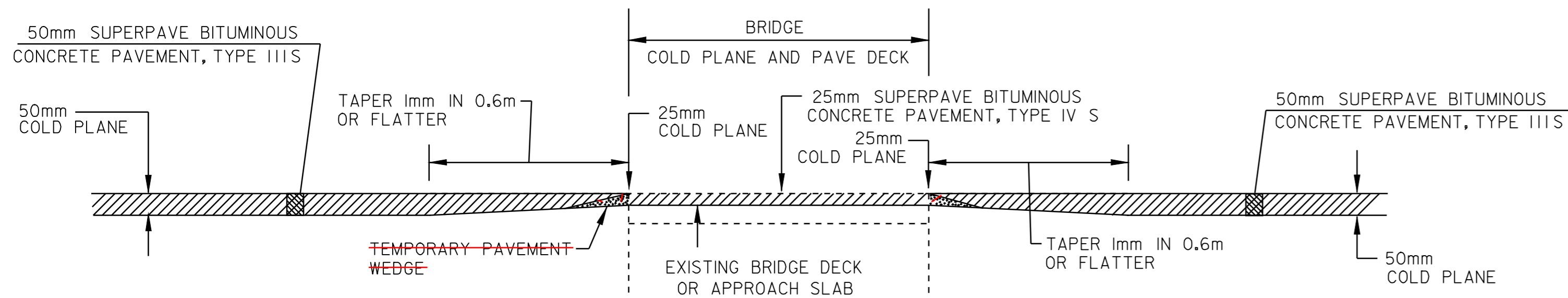
STA 0+080.467 (MM 0.050) - BEGINNING OF PROJECT  
 STA 19+714.464 (MM 12.250) - END OF PROJECT  
 EDGE OF SOUTHBOUND SHOULDER AT U-TURNS (SEE DETAIL THIS SHEET FOR LOCATIONS)

NOTE: ESTIMATED QUANTITIES OF BITUMINOUS CONCRETE CURB AND TREATED TIMBER CURB HAVE BEEN ADDED TO REPLACE DAMAGED OR MISSING CURB, AS DIRECTED BY THE RESIDENT ENGINEER. AN ESTIMATED QUANTITY OF EXISTING CURB REMOVAL HAS ALSO BEEN INCLUDED FOR THE PROVISION OF REMOVING DAMAGED TREATED TIMBER OR BITUMINOUS CURB, AS DIRECTED BY THE RESIDENT ENGINEER. SEE DETAIL FOR BITUMINOUS CURB ON THIS SHEET. REFER TO SHEET 7 FOR QUANTITIES.

**- TYPICAL SECTION AT GUARDRAIL -**  
 (EXISTING STEEL BEAM W/CURBING)



**DETAIL FOR BITUMINOUS CONCRETE CURB TYPE A**



**COLD PLANE DETAIL @ BRIDGES**

**NORTHBOUND**

BRIDGE # 6-N - STA. 1+723.64 (MM 1.071)  
 BRIDGE # 11-N - STA. 11+042.29 (MM 6.861)

NOTES: REFER TO SHEET 4 FOR ASPHALTIC PLUG JOINT LOCATIONS AND DETAILS.

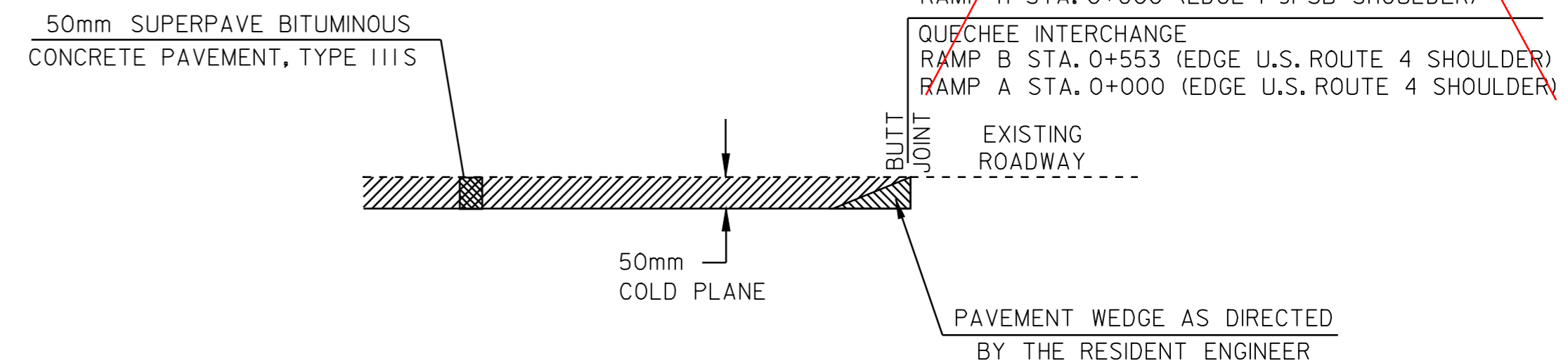
SPECIAL PRECAUTIONS MUST ALSO BE TAKEN DURING THE REMOVAL OF PAVEMENT FROM AREAS ADJACENT TO FINGER OR PLATE JOINTS.

BRIDGES 6-N AND 11-N HAVE DROP INLETS AND/OR DOWNSPOUT OPENINGS LOCATED AT THE CURB LINE. THESE DRAINAGE OPENINGS WILL NOT REQUIRE REHABILITATION OR HEIGHT ADJUSTMENT.

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.

SPECIAL PRECAUTIONS MUST BE TAKEN TO PREVENT DAMAGE TO THE EXISTING MEMBRANE ON BRIDGES 6-N AND 11-N.

THE CONTRACTOR SHALL PERFORM COLD PLANING WITH CAUTION AT THESE LOCATIONS. ANY DAMAGE WHICH OCCURS TO THESE MEMBRANES AS A RESULT OF COLD PLANE OPERATIONS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND THE MEMBRANE(S) WILL BE REPAIRED OR REPLACED AT NO COST TO THE STATE.

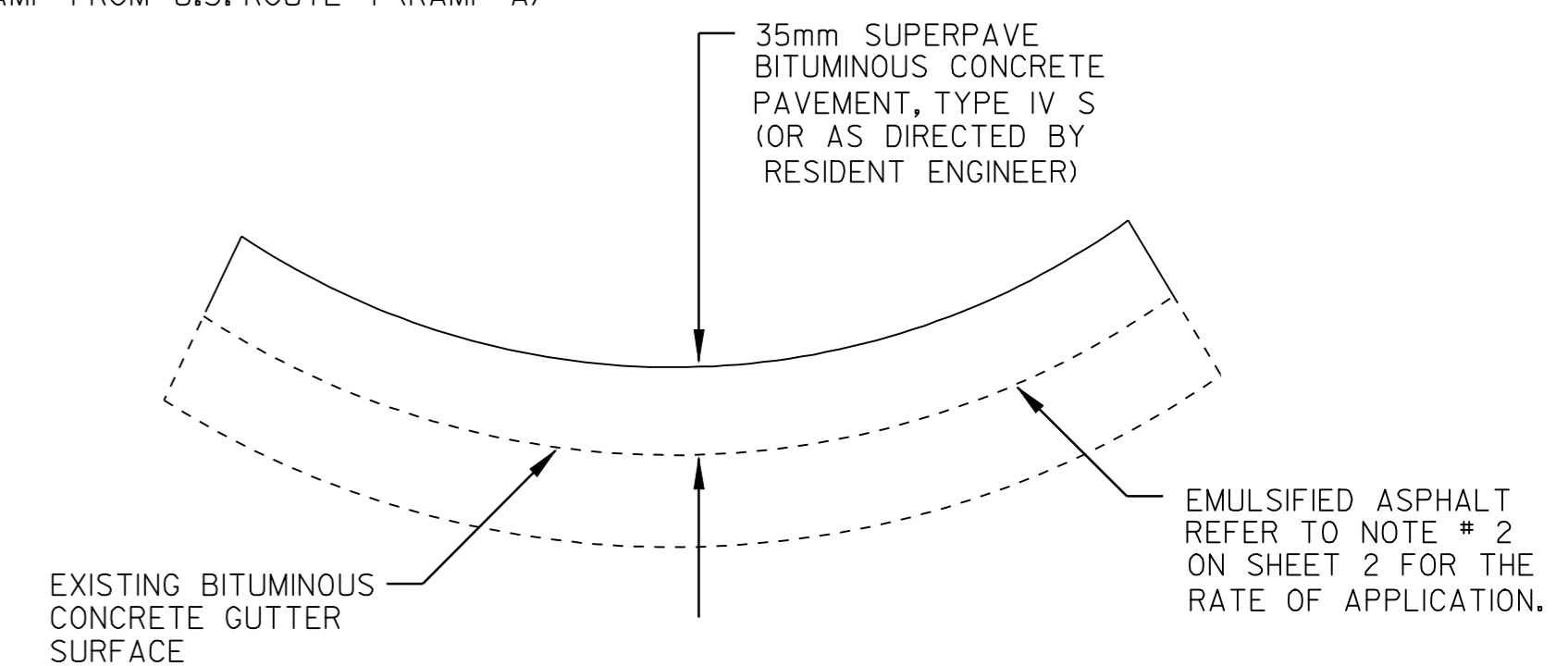


**RAMP APPROACH AREA DETAIL**

**LOCATION**

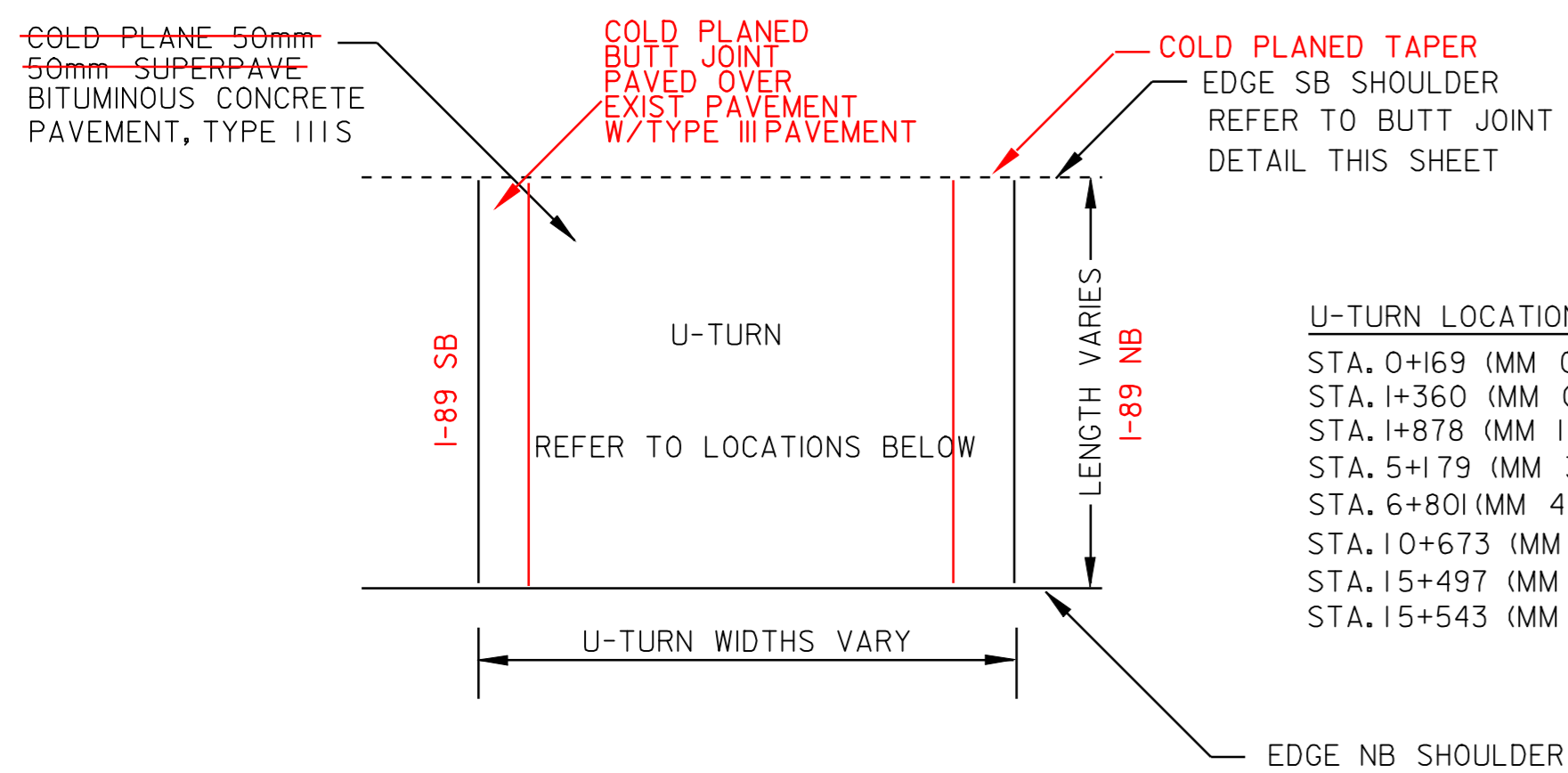
WHITE RIVER JCT. INTERCHANGE (REFER TO SHEETS 12, 13 AND 14 FOR DETAILS)  
 NORTHBOUND OFF RAMP TO I-91 NB (RAMP A AND RAMP C)  
 NORTHBOUND ON RAMP FROM I-91 NB (RAMP B)  
 NORTHBOUND OFF RAMP TO I-91 SB (RAMP G)  
 NORTHBOUND ON RAMP FROM I-91 SB (RAMP H)

QUECHEE INTERCHANGE (REFER TO SHEET 15 FOR DETAILS)  
 NORTHBOUND OFF RAMP TO U.S. ROUTE 4 (RAMP B)  
 NORTHBOUND ON RAMP FROM U.S. ROUTE 4 (RAMP A)



**BITUMINOUS CONCRETE GUTTER OVERLAY DETAIL**

(REFER TO SHEET 7 FOR LOCATIONS)



**CONSERVATION SEED MIX**

RURAL AREA - SEED MIXTURE					
% WT.	kg/ha.	NAME	PUR. %	GERM. %	
37.14	26.0	CREeping RED FESCUE		98	85
37.14	26.0	TALL FESCUE		95	90
5.71	4.0	RED TOP		95	90
14.30	10.0	BIRDSFOOT TREFOIL		98	85
5.71	4.0	ANNUAL RYEGRASS		95	85
100.0	70.0				

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

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

FERTILIZER:  
 FORMULA 10-20-10 TO BE USED WITH SEED, APPLIED AT THE RATE OF 560 kg/ha (HYDRO SEEDERS MAY USE 19-19-19 FORMULA).

AGRICULTURAL LIMESTONE:  
 TO BE APPLIED AT THE RATE OF 4.5 tons/ha OR AS DIRECTED BY THE RESIDENT ENGINEER.

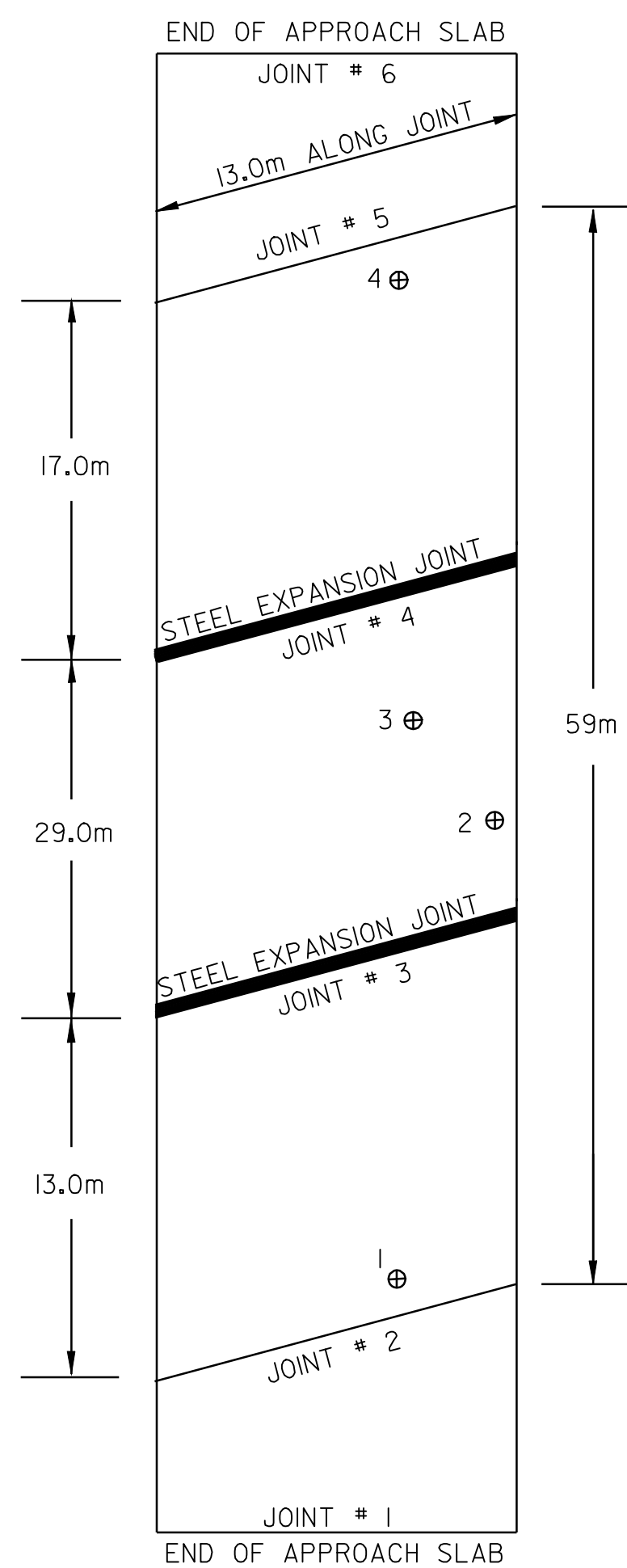
HAY MULCH:  
 TO BE APPLIED ON EARTH SLOPES AT THE RATE OF 4.5 tons/ha, OR AS DIRECTED BY THE RESIDENT ENGINEER.

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



**PROJECT TYPICAL SHEET #2**

DRAWN BY LFW DATE 10-02  
 DESIGN FILE NO. /pave/01a028/p01a028.dgn  
 PRF FILE p01a028+y2.i DATE PLOTTED JAN-2006 13:4  
 PROJ. NAME **HARTFORD - SHARON**  
 PROJ. NO. **AC IM 089-1(51)**  
 SHEET **3** OF **21** SHEETS

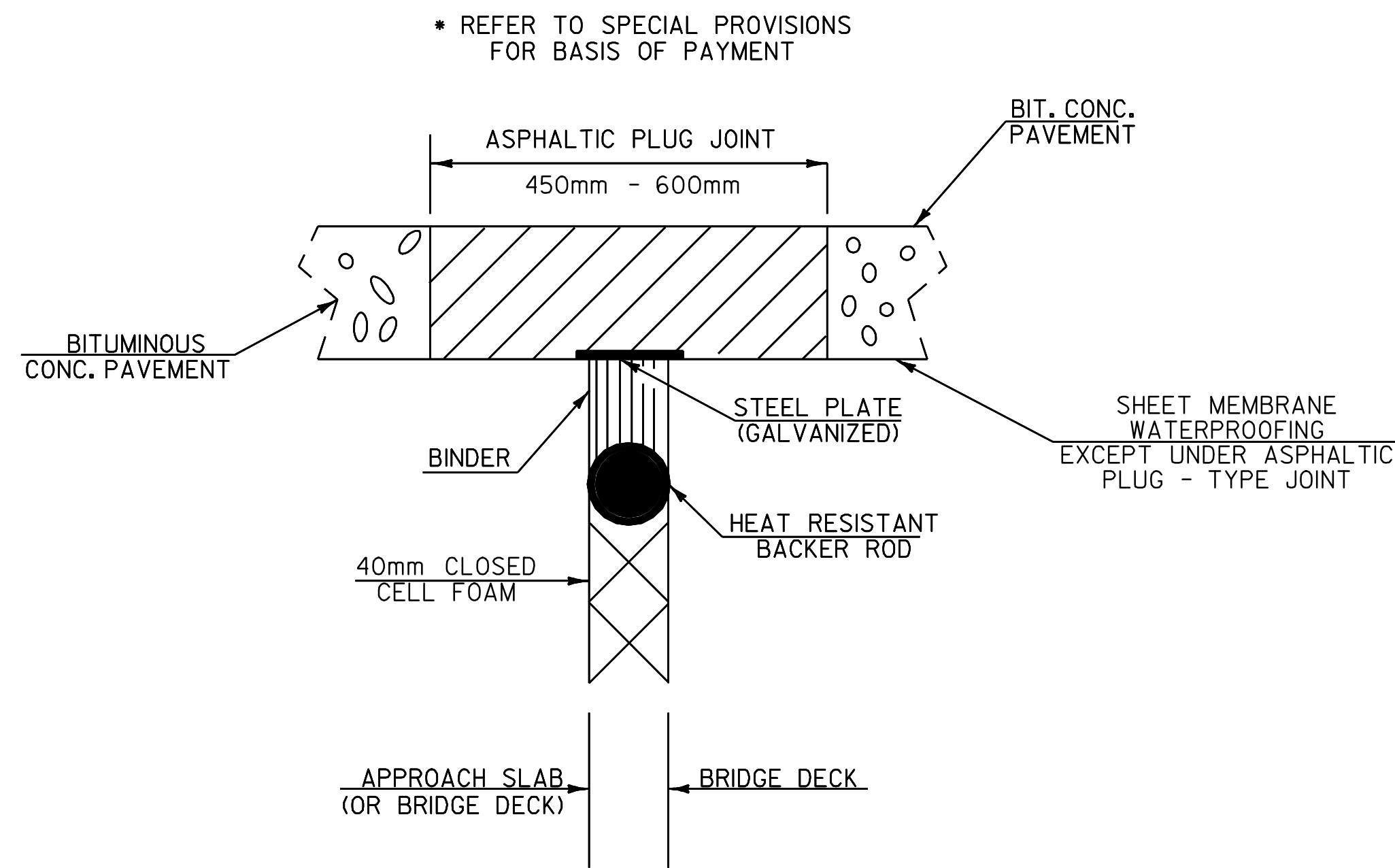


**BRIDGE 6 - N  
STA. 1+723.64 (MM 1.071)  
COLD PLANE AND PAVE**

JOINT	STATION	LENGTH (m)
1	1+677	11.5
2	1+685	13.0
3	1+698	--
4	1+727	--
5	1+744	13.0
6	1+752	11.5
	SUBTOTAL	49.0
	ROUNDING	1.0
	ITEM TOTAL	50.0

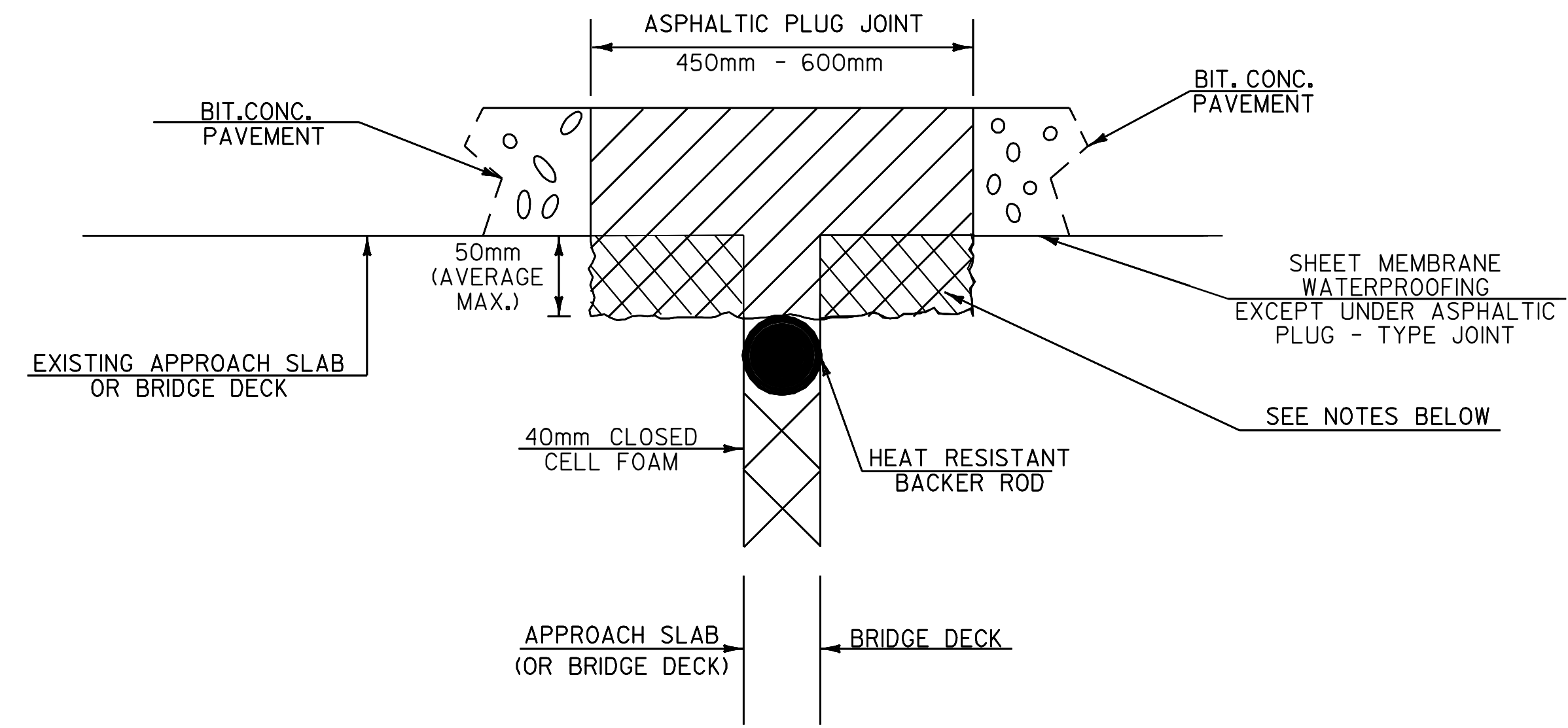
NOTES:  
1. REFER TO SHEET 3 FOR COLD PLANING TRANSITION AND OVERLAY DETAILS FOR BRIDGES 6-N AND 11-N.

CORE	STATION	POSITION	THICKNESS
1	1+687	RT. NB TRAVEL LANE	57mm
2	1+702	RT. NB SHOULDER	57mm
3	1+712	RT. NB TRAVEL LANE	57mm
4	1+742	RT. NB TRAVEL LANE	50mm



**ASPHALTIC PLUG-TYPE  
JOINT DETAIL**

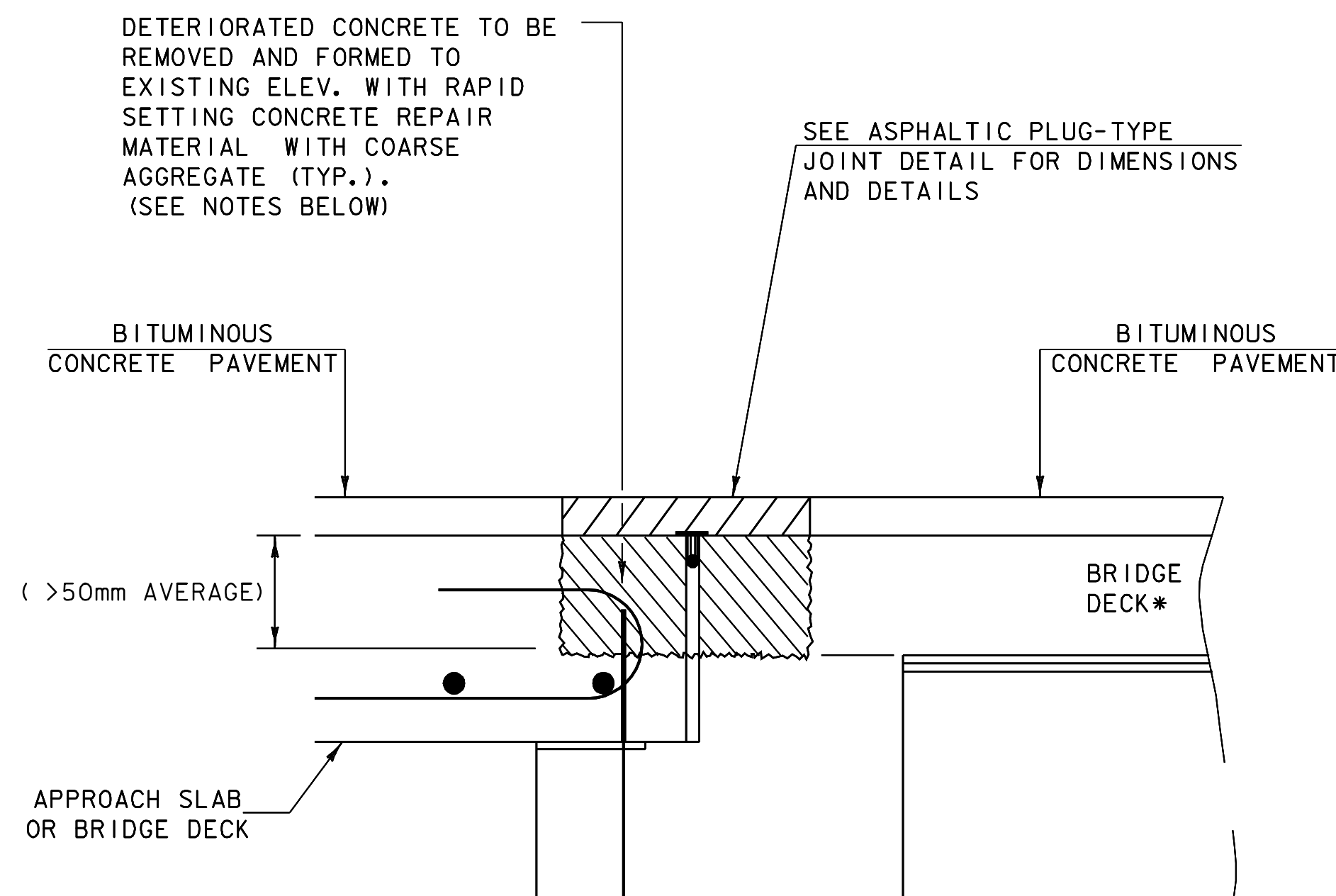
NOTE: REFER TO NOTE UNDER DETAIL AT RIGHT.



**ASPHALTIC PLUG-TYPE  
JOINT DETAIL  
REMOVAL OF UP TO  
50mm DETERIORATED CONCRETE**

NOTES:

- UPON ENCOUNTERING UP TO 50mm 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.
- 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.
- THE STEEL PLATE IN THE ASPHALTIC PLUG JOINT MAY BE OMITTED AS SHOWN IN THE DETAIL ABOVE IF DIRECTED BY THE RESIDENT ENGINEER.



\*BRIDGE DECK REINFORCEMENT NOT SHOWN FOR CLARITY

**ASPHALTIC PLUG-TYPE  
JOINT DETAIL  
REMOVAL OF > 50mm  
DETERIORATED CONCRETE**

NOTES:

- UPON ENCOUNTERING GREATER THAN 50mm AVERAGE OF DETERIORATED CONCRETE, THE CONTRACTOR SHALL REMOVE THE DETERIORATED MATERIAL AND REPLACE IT WITH RAPID SETTING CONCRETE REPAIR MATERIAL WITH COARSE AGGREGATE.
- REMOVAL OF THE DETERIORATED CONCRETE WILL BE INCLUDED IN THE UNIT BID PRICE FOR ITEM 580.20 "RAPID SETTING CONCRETE REPAIR MATERIAL WITH COARSE AGGREGATE".
- THE STEEL PLATE IN THE ASPHALTIC PLUG JOINT MAY BE OMITTED ONLY IF THE REPAIRED SURFACE IS SO IRREGULAR IT WILL CAUSE VERTICAL MOVEMENT AND IT IS DIRECTED BY THE RESIDENT ENGINEER.

NOT TO SCALE  
ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE INDICATED

**BRIDGE  
LOCATION  
& DETAIL  
SHEET**

DESIGNED BY LFW DATE 10-02  
DRAWN BY LFW DATE 10-02  
DESIGN FILE NO. /pave/01a028/p01a028.dgn  
PRF FILE p01a028bps.i DATE PLOTTED 08-JAN-2006 13:4  
PROJ. NAME HARTFORD - SHARON  
PROJ. NO. AC IM 089-1(51)  
SHEET 4 OF 21 SHEETS









TEMPORARY AND DURABLE 150 mm YELLOW LINE  
 STA 0+080 TO 9+656 LT (SOLID)

TEMPORARY AND DURABLE 150 mm WHITE LINE  
 STA 0+080 TO 9+656 C.L. (DASHED)  
 STA 0+080 TO 9+656 RT (SOLID)

STEEL BEAM GUARDRAIL  
 REFER TO SHEET 7 FOR LOCATIONS  
 AND QUANTITIES OF GUARDRAIL ITEMS.

BITUMINOUS CONCRETE GUTTERS  
 AND TRAFFIC ISLANDS  
 REFER TO SHEET 3 FOR PAVING  
 DETAILS AND SHEET 7 FOR LOC-  
 ATIONS AND QUANTITIES.

CHANGING ELEV. OF DI, CB, MH  
 REHABILITATION OF DI, CB, OR MH, CLASS I

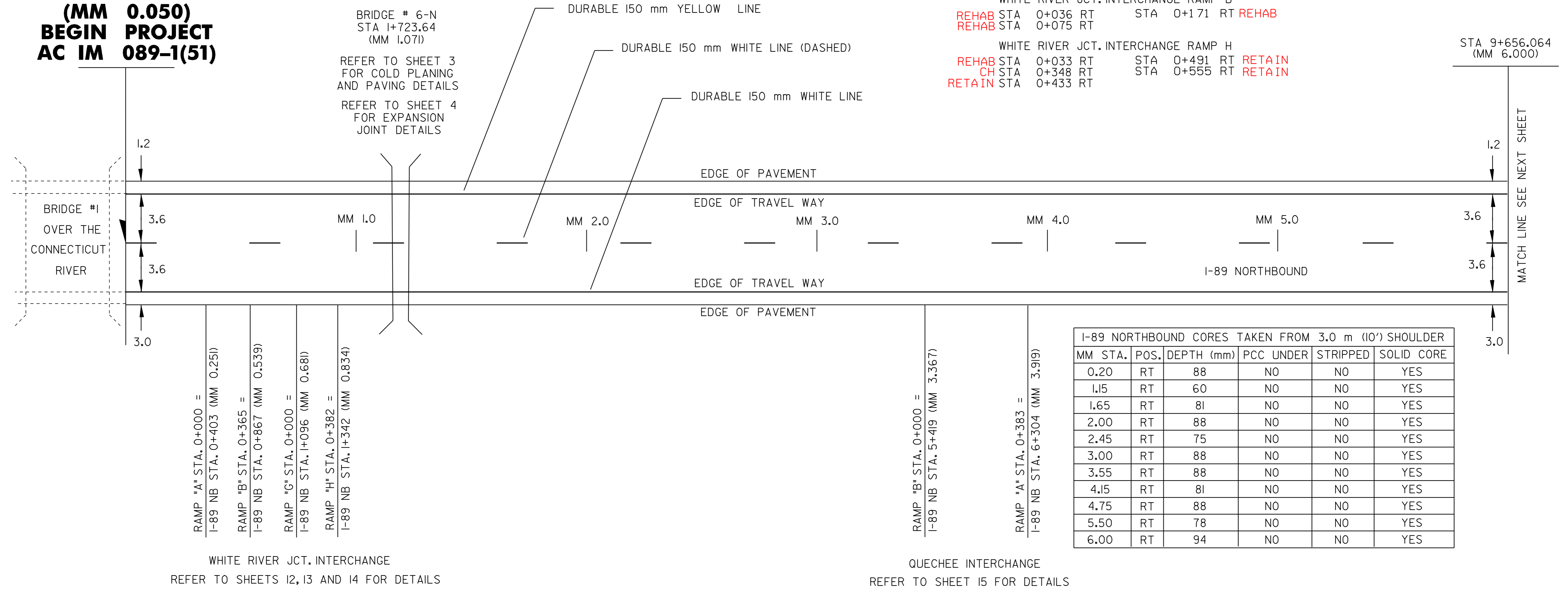
INTERSTATE 89 NORTHBOUND

STA 0+137 RT	STA 6+655 RT
STA 0+226 RT	STA 6+792 RT
STA 0+278 RT	STA 6+945 RT
STA 0+362 RT	STA 7+797 RT
STA 1+610 RT	STA 8+336 RT
STA 1+670 RT	STA 8+412 RT
STA 3+773 RT	STA 8+519 RT
STA 4+034 RT	STA 8+611 RT
STA 4+126 RT	STA 9+217 RT
STA 4+232 RT	STA 9+297 RT
STA 4+309 RT	STA 9+372 RT
STA 5+452 RT	STA 9+577 RT

U-TURN LOCATIONS  
 (REFER TO U-TURN PAVING  
 DETAILS ON SHEET 3)

STA. 0+169 (MM 0.108)  
 STA. 1+360 (MM 0.845)  
 STA. 1+878 (MM 1.155)  
 STA. 5+179 (MM 3.218)  
 STA. 6+801 (MM 4.226)

**INTERSTATE ROUTE 89**  
**STA 0+080.467**  
**(MM 0.050)**  
**BEGIN PROJECT**  
**AC IM 089-1(51)**



NOTE: ALL DIMENSIONS IN METERS EXCEPT AS INDICATED

NOT TO SCALE

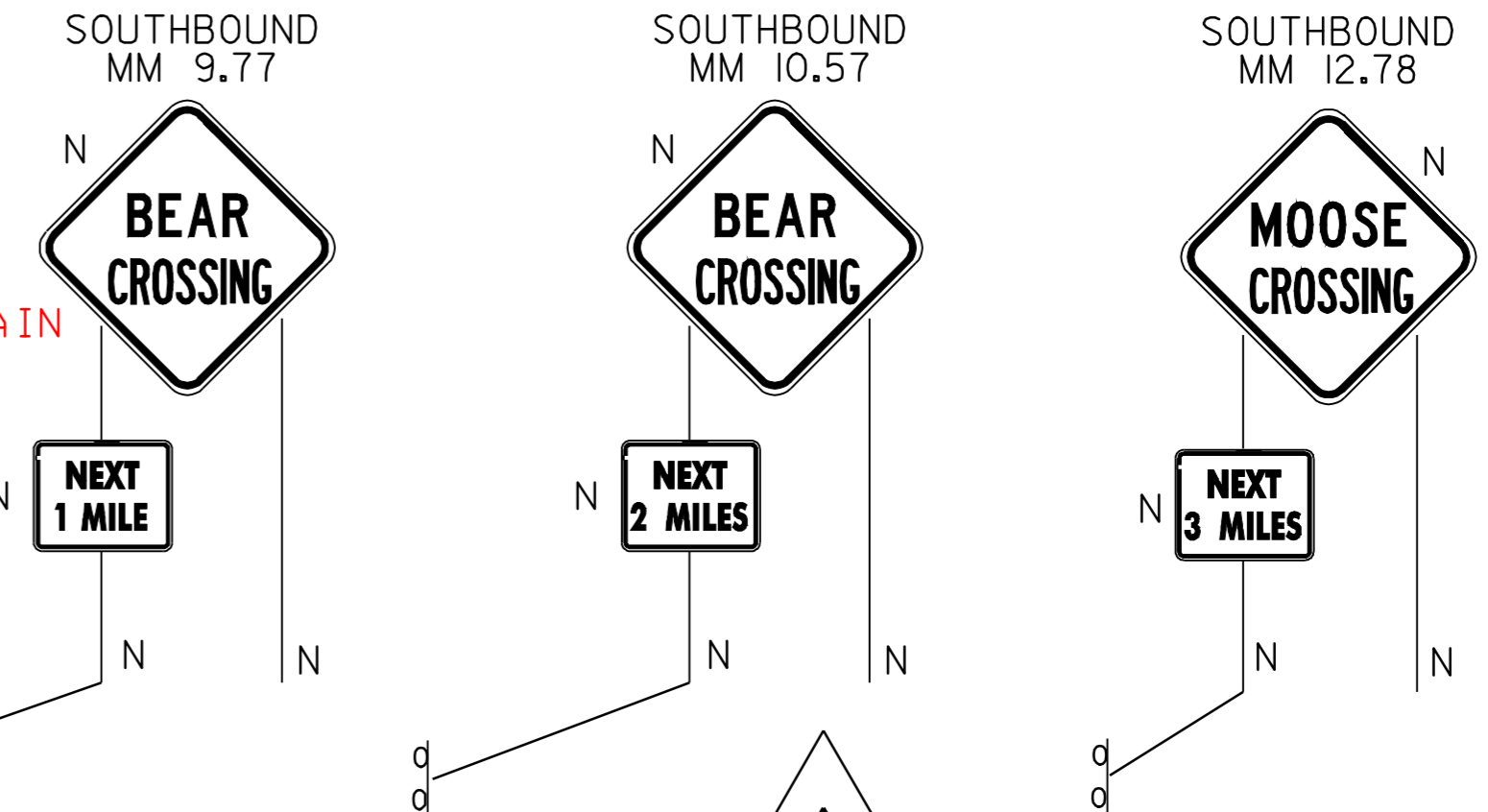
<b>PAVING PROJECT LAYOUT #1</b>	PROJECT: <b>HARTFORD - SHARON</b>	PROJECT NO.: <b>AC IM 089-1(51)</b>
	DESIGN FILE NAME: /pave/01a028/p01a028.dgn	PLOT DATE: 31-JAN-2006 13:
	IPARM FILE NAME: p01a028p01.i	SURVEY DATE: 9/01
	SURVEYED BY: CLD_ENGINEERS_INC	DRAWN BY: MPS
SQUAD LEADER: WRH	SHEET: <b>8</b> OF <b>21</b>	

TEMPORARY AND DURABLE 150 mm YELLOW LINE  
 STA 9+656 TO 19+715 LT (SOLID)  
 TEMPORARY AND DURABLE 150 mm WHITE LINE  
 STA 9+656 TO 19+715 C.L. (DASHED)  
 STA 9+656 TO 19+715 RT (SOLID)

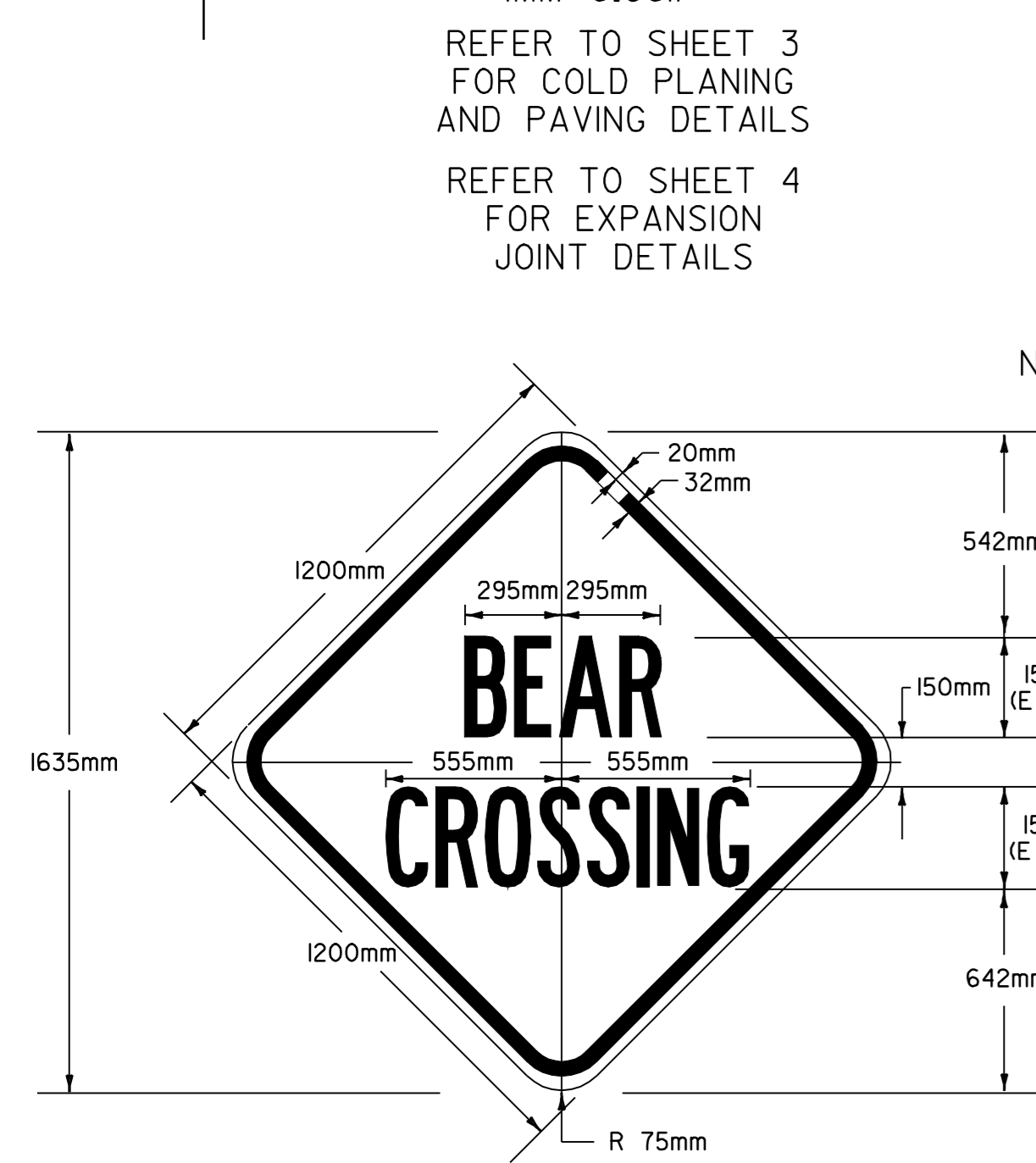
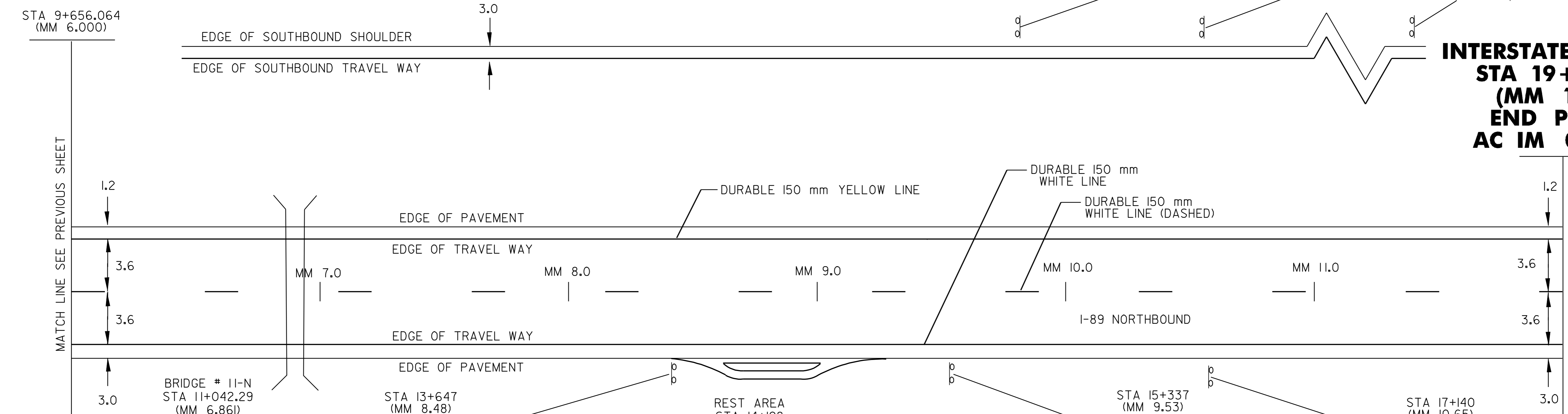
STEEL BEAM GUARDRAIL  
 REFER TO SHEET 7 FOR LOCATIONS  
 AND QUANTITIES OF GUARDRAIL ITEMS.  
 BITUMINOUS CONCRETE GUTTERS AND TRAFFIC ISLANDS  
 REFER TO SHEET 3 FOR PAVING DETAILS AND  
 SHEET 7 FOR LOCATIONS AND QUANTITIES.

CHANGING ELEV. OF DI, CB, MH  
 REHABILITATION OF DI, CB, OR MH, CLASS I

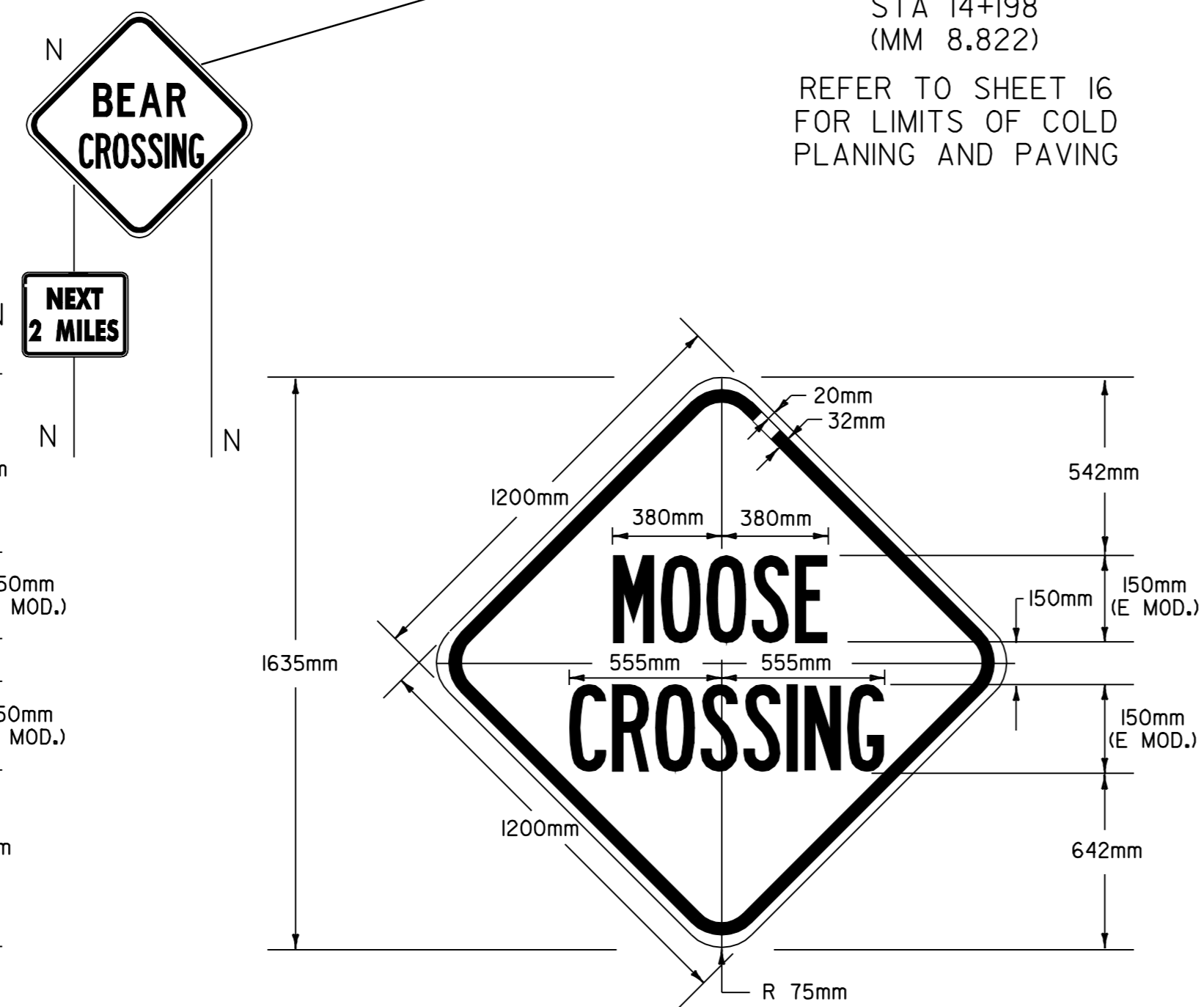
STA 10+726 RT	STA 13+837 RT
STA 12+089 LT	STA 13+913 RT
STA 12+164 LT	STA 13+913 LT
STA 12+532 LT	STA 13+986 LT
STA 12+745 LT	STA 14+062 LT
STA 12+838 LT	STA 15+283 LT
STA 12+923 LT	STA 16+002 LT
STA 13+067 LT	STA 16+154 LT
STA 13+814 LT	STA 16+173 LT
	STA 18+087 RT



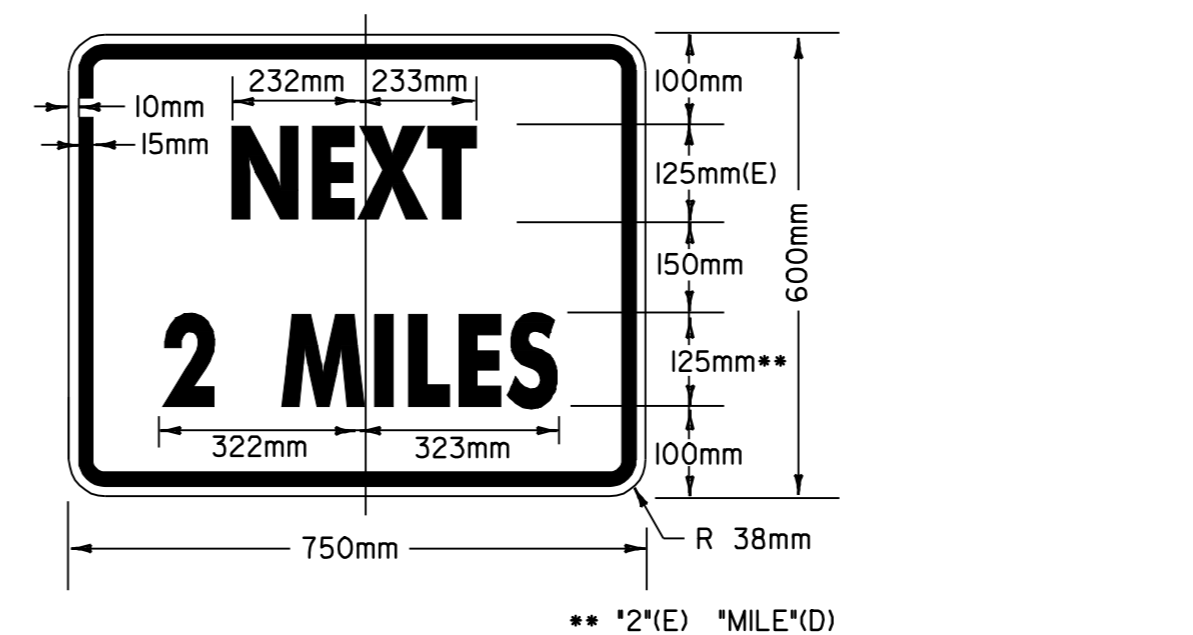
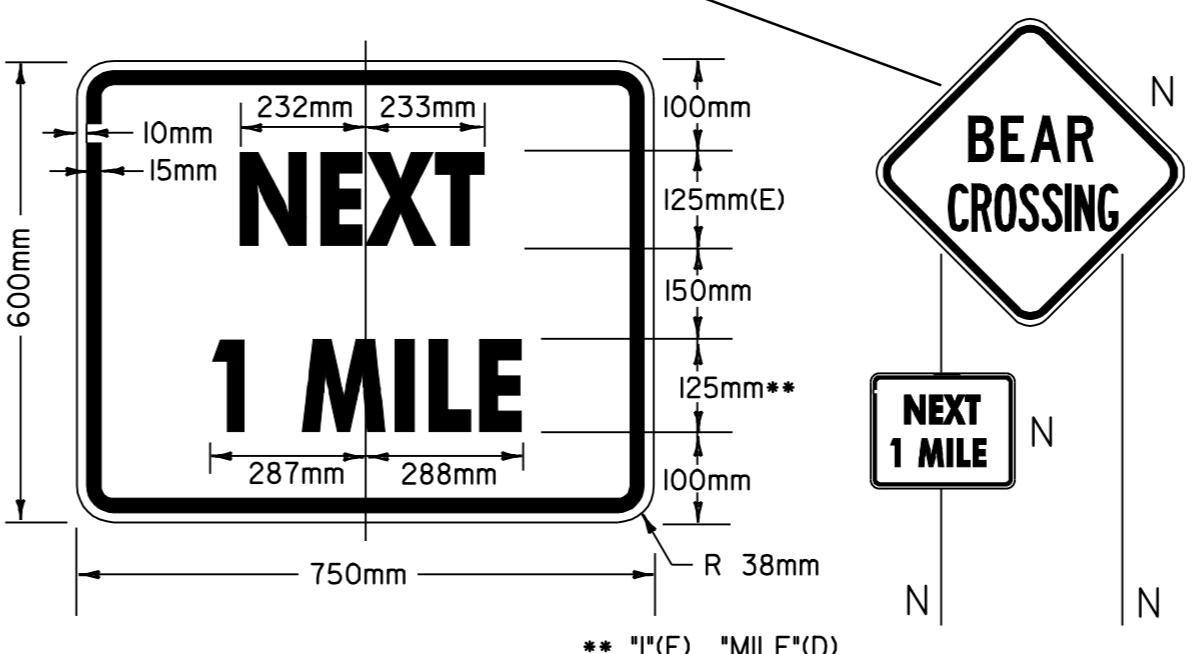
**INTERSTATE ROUTE 89**  
**STA 19+714.464**  
**(MM 12.250)**  
**END PROJECT**  
**AC IM 089-1(51)**



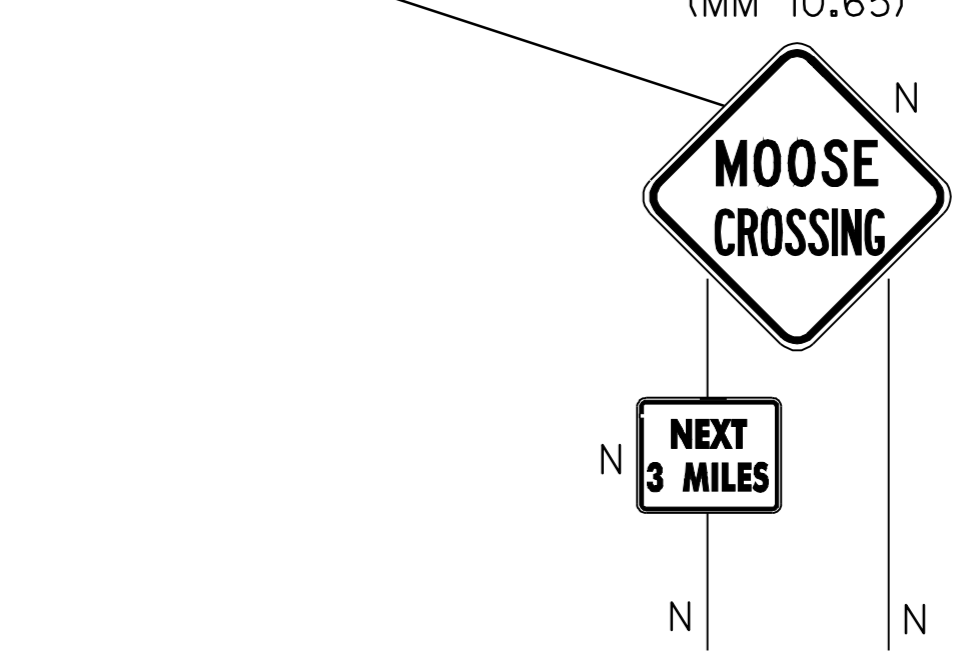
REFER TO STD. E-153  
 FOR MATERIALS AND COLORS



REFER TO STD. E-153  
 FOR MATERIALS AND COLORS



**OR 3 MILES**  
 REFER TO STD. E-152  
 FOR MATERIALS AND COLORS



U-TURN LOCATIONS  
 (REFER TO U-TURN PAVING  
 DETAILS ON SHEET 3)  
 STA. 10+673 (MM 6.632)  
 STA. 15+497 (MM 9.629)  
 STA. 15+543 (MM 9.658)

MM STA.	POS.	DEPTH (mm)	PCC UNDER	STRIPPED	SOLID CORE
6.50	RT	69	NO	NO	YES
7.10	RT	81	NO	NO	YES
7.70	RT	81	NO	NO	YES
8.20	RT	75	NO	NO	YES
9.30	RT	75	NO	NO	YES
9.90	RT	81	NO	NO	YES
10.40	RT	88	NO	NO	YES
11.00	RT	75	NO	NO	YES
11.50	RT	100	NO	NO	YES
11.90	RT	100	NO	NO	YES

NOTE: ALL DIMENSIONS IN METERS EXCEPT AS INDICATED

<b>PAVING PROJECT LAYOUT #2</b>	PROJECT: <b>HARTFORD - SHARON</b>	PROJECT NO.: <b>AC IM 089-1(51)</b>
	DESIGN FILE NAME: <i>/_pave/01a028/p01a028.dgn</i>	PLOT DATE: <b>31-JAN-2006 13:</b>
	IPARM FILE NAME: <i>_p01a028p02.i</i>	SURVEY DATE: <b>9/01</b>
	SURVEYED BY: <i>_CLD_ENGINEERS_INC</i>	DRAWN BY: <i>_MPS</i>
SQUAD LEADER: <i>_WRH</i>	SHEET: <b>9</b> OF <b>21</b>	

NOT TO SCALE

KILOMETER MARKER, STATION, OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS		NEW & SALVAGED SIGNS				EXIST POST RETAIN SALVAGE	NO. OF POSTS	NEW SIGN POSTS												REMARKS	SIGN DETAIL								
		EA	WIDTH (mm)	HEIGHT (mm)	"A"	"B"	SALV SIGN			SALV TIS	FLANGED CHANNEL			SQUARE STEEL (mm)			TUBULAR ALUMINUM Ø (mm)			TUBULAR STEEL Ø (mm)				W-SHAPE STEEL		DETAIL ON SHEET NUMBER	STD. SHEET NUMBER				
											1.7	3.0	4.5	44	50	63	75	100	100 MOD	75	89		100	125	FTG. SIZE			WEIGHT	POST SIZE		
																									kg/m					kg/m	kg/m
OPTION ITEMS																															
WHITE RIVER JCT. INTERCHANGE																															
RAMP A 0+100 RT		1	1200	1500	1.80				2		X	X																	E-150		
RAMP A 0+275 LT		1	1200	1200	1.44				2		X	X																	E-150		
RAMP A 0+275 RT		1	1200	1200	1.44				2		X	X																	E-150		
RAMP A 0+385 LT		1	1200 x 1200 x 1200		0.62				2		X	X																	E-146		
RAMP A 0+385 RT		1	1200 x 1200 x 1200		0.62				2		X	X																	E-146		
QUECHEE INTERCHANGE																															
RAMP B 0+248 LT		1	900	900	0.81				2		X	X																	E-150		
RAMP B 0+248 RT		1	900	900	0.81				2		X	X																	E-150		
RAMP B 0+308 LT		1	900	600	0.54				2		X	X																	E-143		
RAMP B 0+308 RT		1	900	600	0.54				2		X	X																	E-143		
RAMP B 0+549 RT	  	1	900	900	0.81				2		X	X																	MOUNT STOP SIGN BACK TO BACK WITH DO NOT ENTER SIGN.	E-143	
		1	900	900	0.81																									E-143	
		1	900	300	0.27																									MOUNT ONE WAY SIGNS BACK TO BACK.	E-142
		1	900	300	0.27																									E-142	

FINAL POST LENGTHS ARE TO BE DETERMINED IN THE FIELD. POST SIZES ARE COMPUTED BASED ON INFORMATION FURNISHED ON THE STANDARD SHEETS AND THE TRAFFIC & SAFETY DIVISION'S "SIGN POST DESIGN GUIDELINE."

<b>TOTALS</b>	EA	m <sup>2</sup>	m <sup>2</sup>	EA	m <sup>2</sup>	EA	m	m	m	m	m	EA	kg	kg	kg	kg	kg	kg	kg	EA	EA	kg
		10.78					92.0	92.0	92.0	92.0												

PROJECT: <b>HARTFORD - SHARON</b>	PROJECT NO.: <b>AC IM 089-1(51)</b>
DESIGN FILE NAME: /pave/01a028/p01a028.dgn	PLOT DATE: 31-JAN-2006 13
IPARM FILE NAME: p01a028+sl.i	SURVEY DATE: 05-04
SURVEYED BY: LFW	DRAWN BY: LFW
SQUAD LEADER: _____	SHEET: <b>10</b> OF <b>21</b>



**TEMPORARY AND DURABLE 150 mm YELLOW LINE**

WHITE RIVER JCT. INTERCHANGE  
 RAMP A/RAMP C  
 NORTHBOUND OFF RAMP STA. 0+156 TO 0+395 LT (RAMP A STATIONS) (SOLID)  
 NORTHBOUND OFF RAMP STA. 0+395 TO 0+670 LT (RAMP A STATIONS) (SOLID)

**TEMPORARY AND DURABLE 150 mm WHITE LINE**

WHITE RIVER JCT. INTERCHANGE  
 RAMP A/RAMP C  
 NORTHBOUND OFF RAMP STA. 0+000 TO 0+106 RT (RAMP A STATIONS) (DOTTED)  
 NORTHBOUND OFF RAMP STA. 0+106 TO 0+670 RT (RAMP A STATIONS) (SOLID)

**TEMPORARY AND DURABLE 300 mm WHITE LINE**

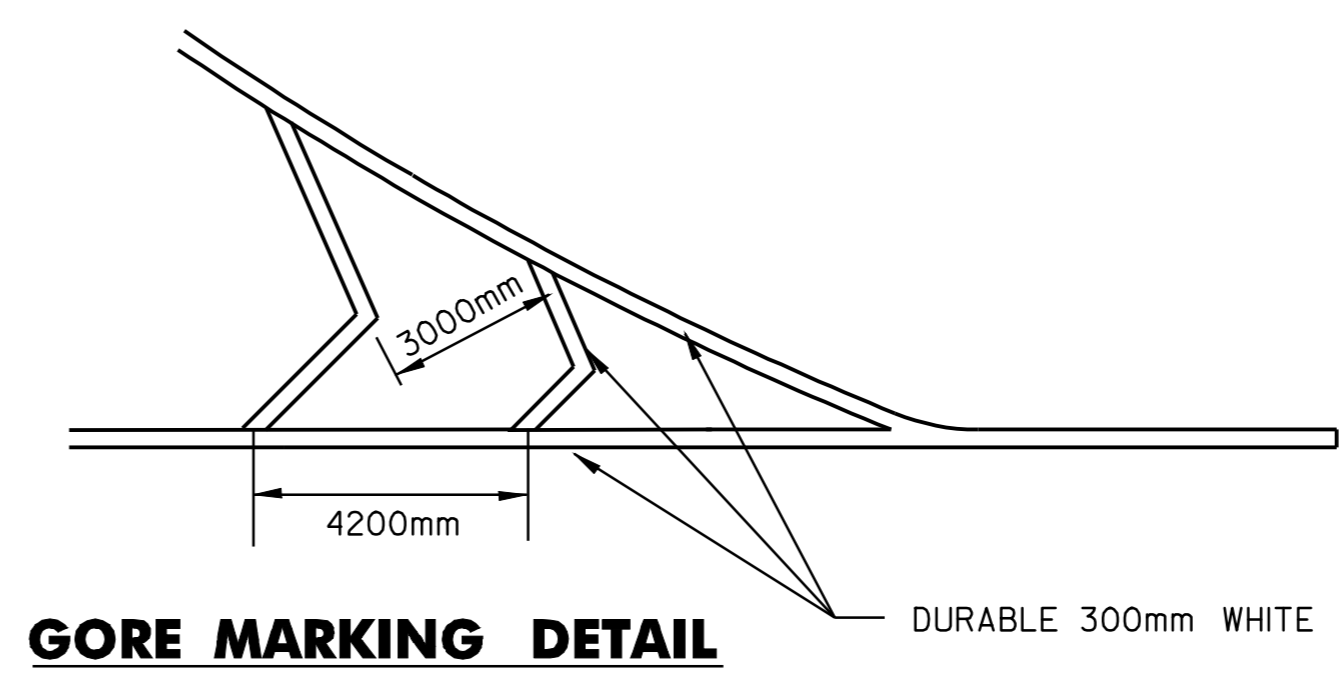
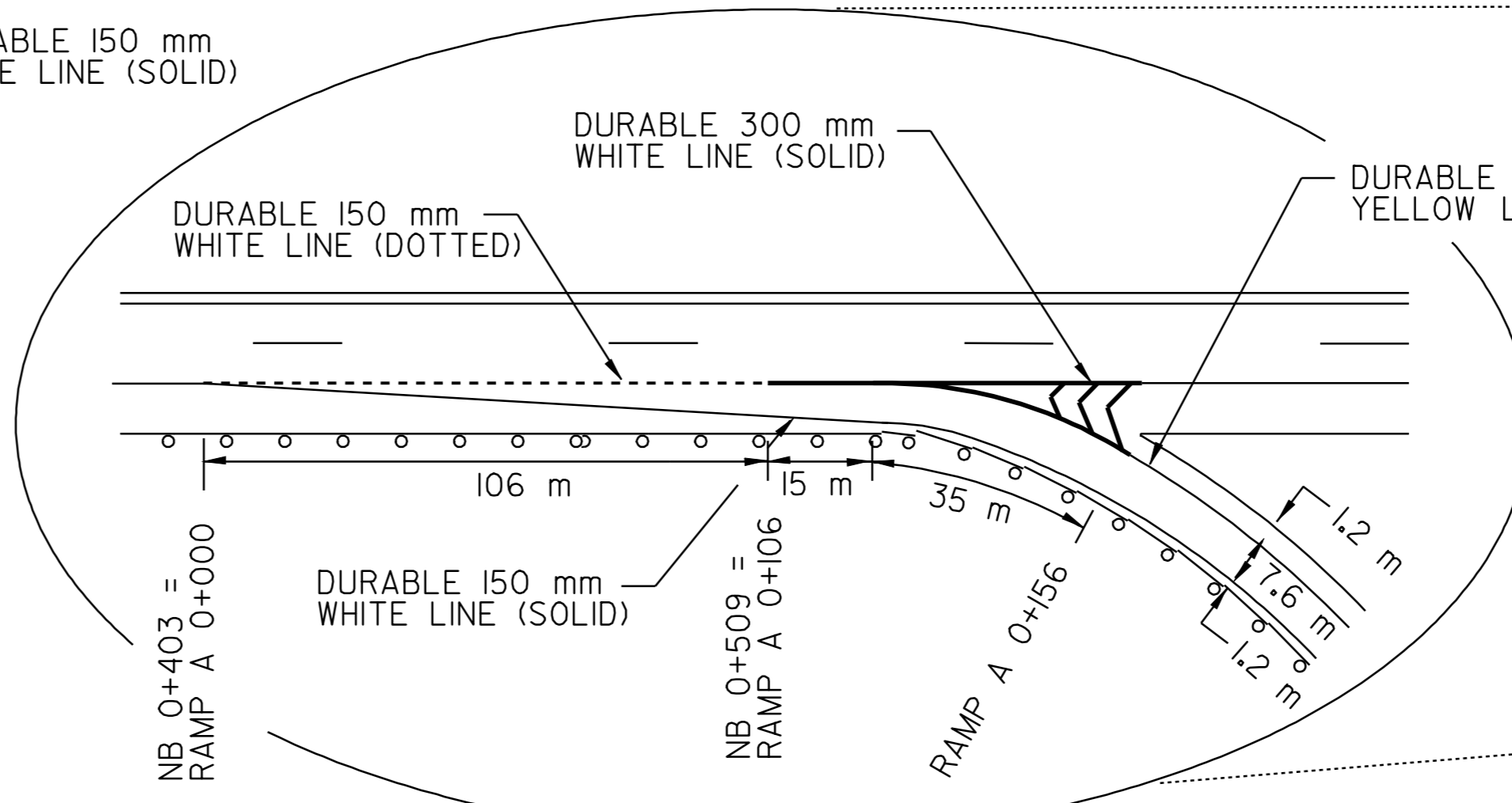
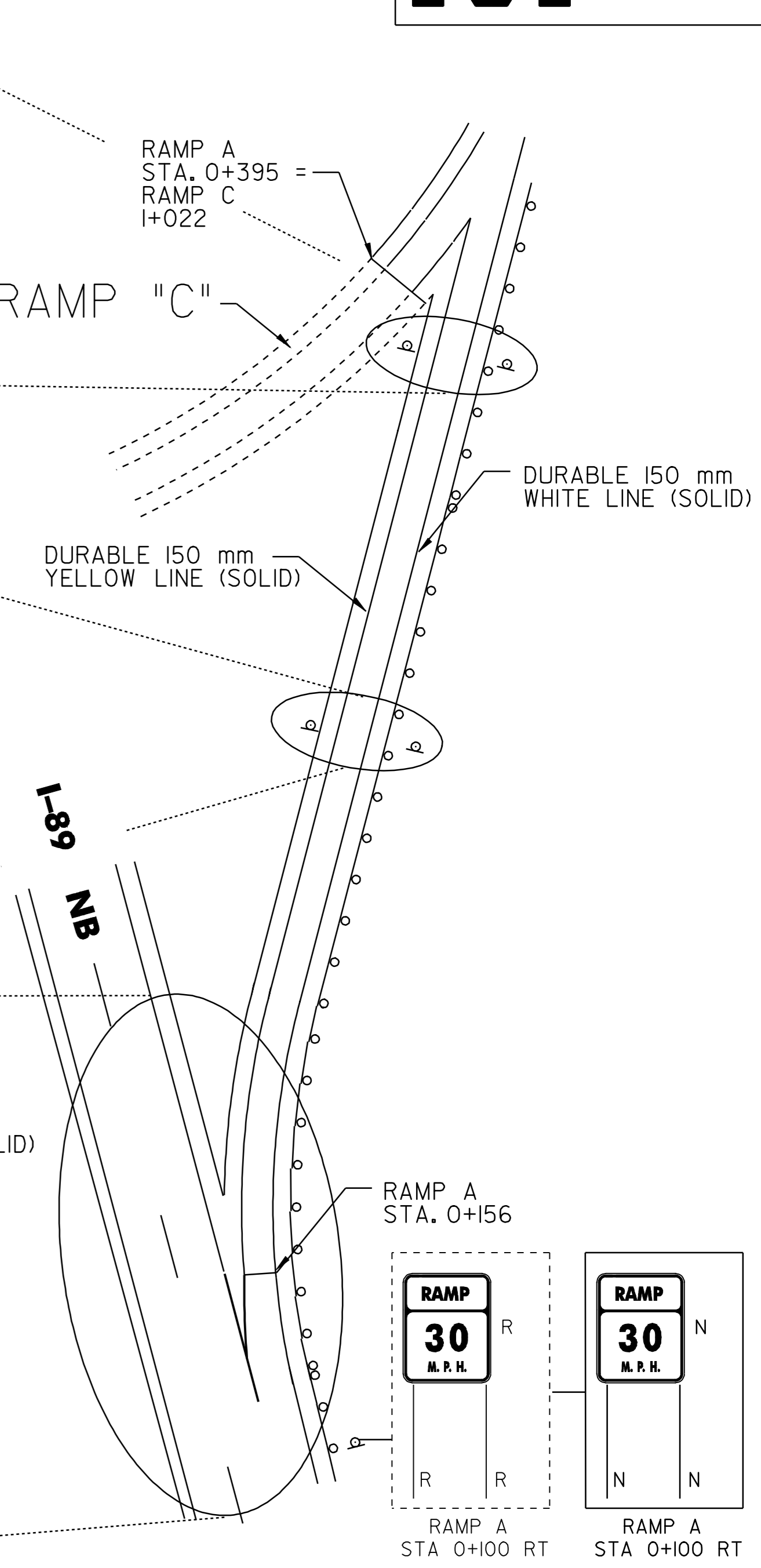
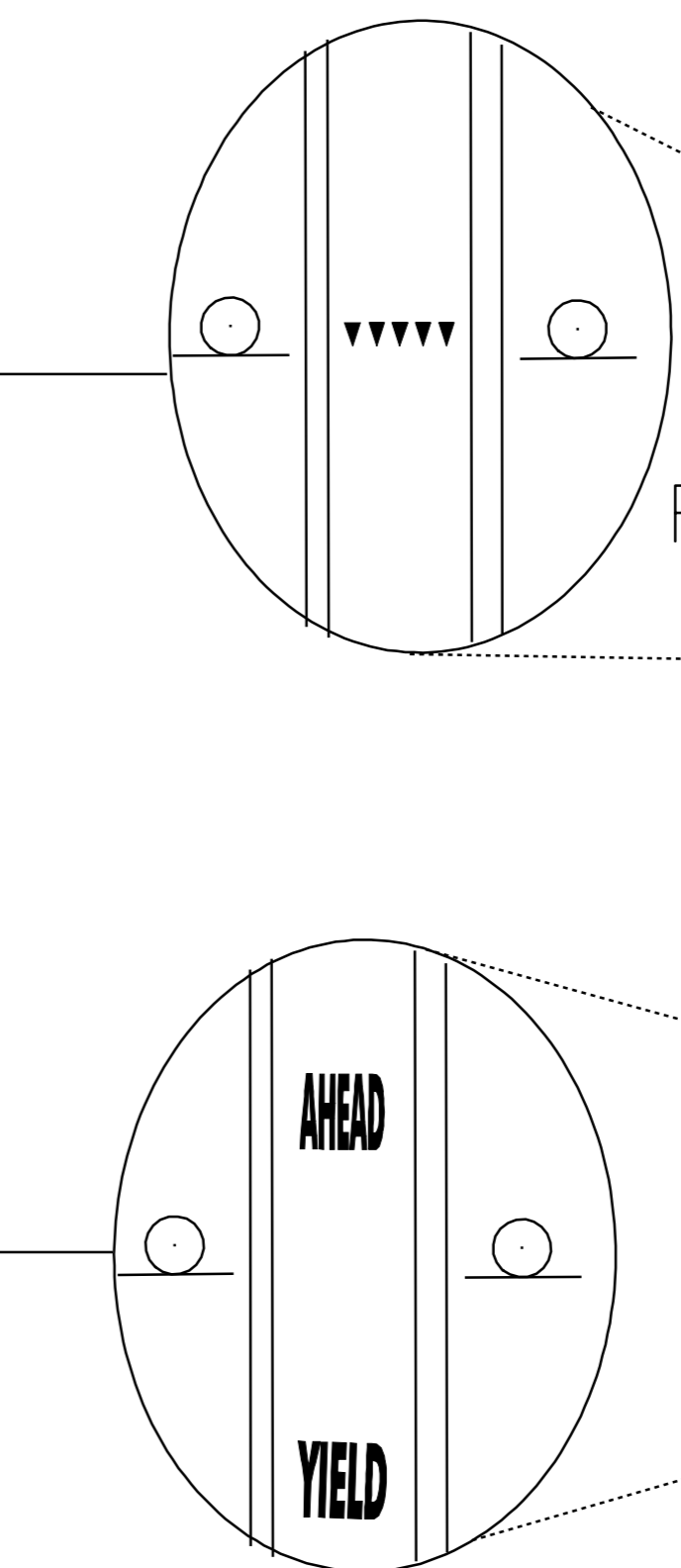
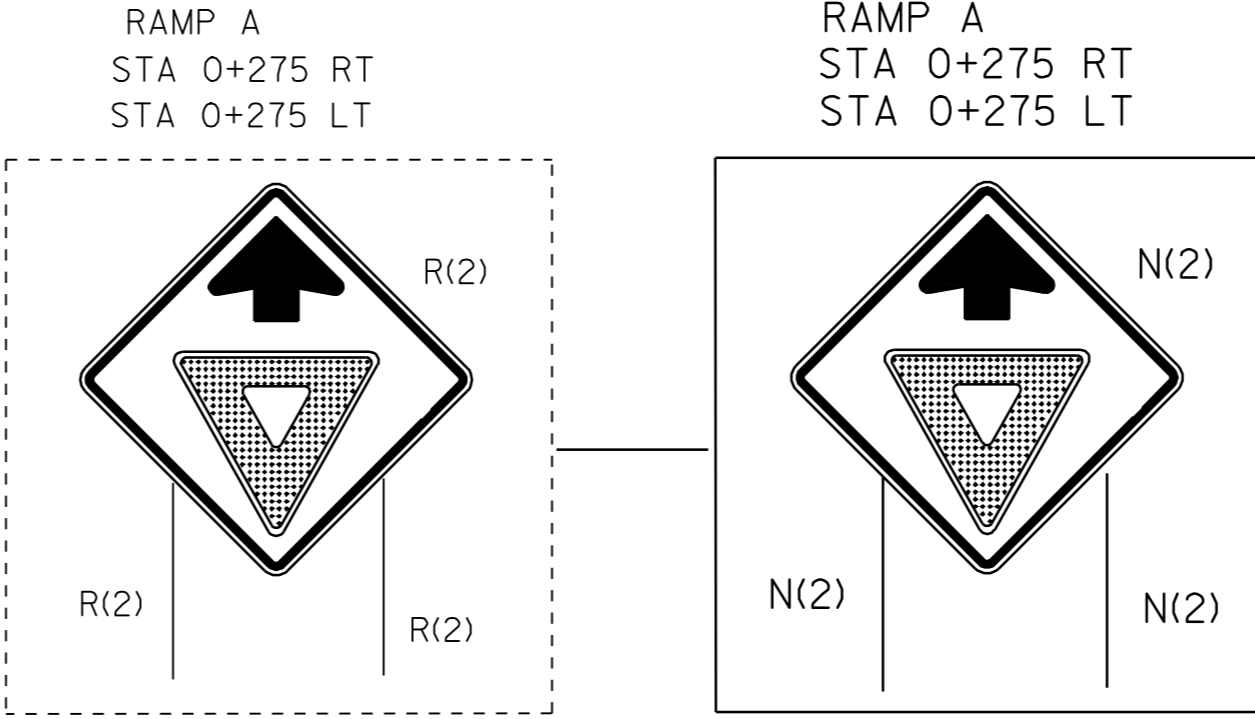
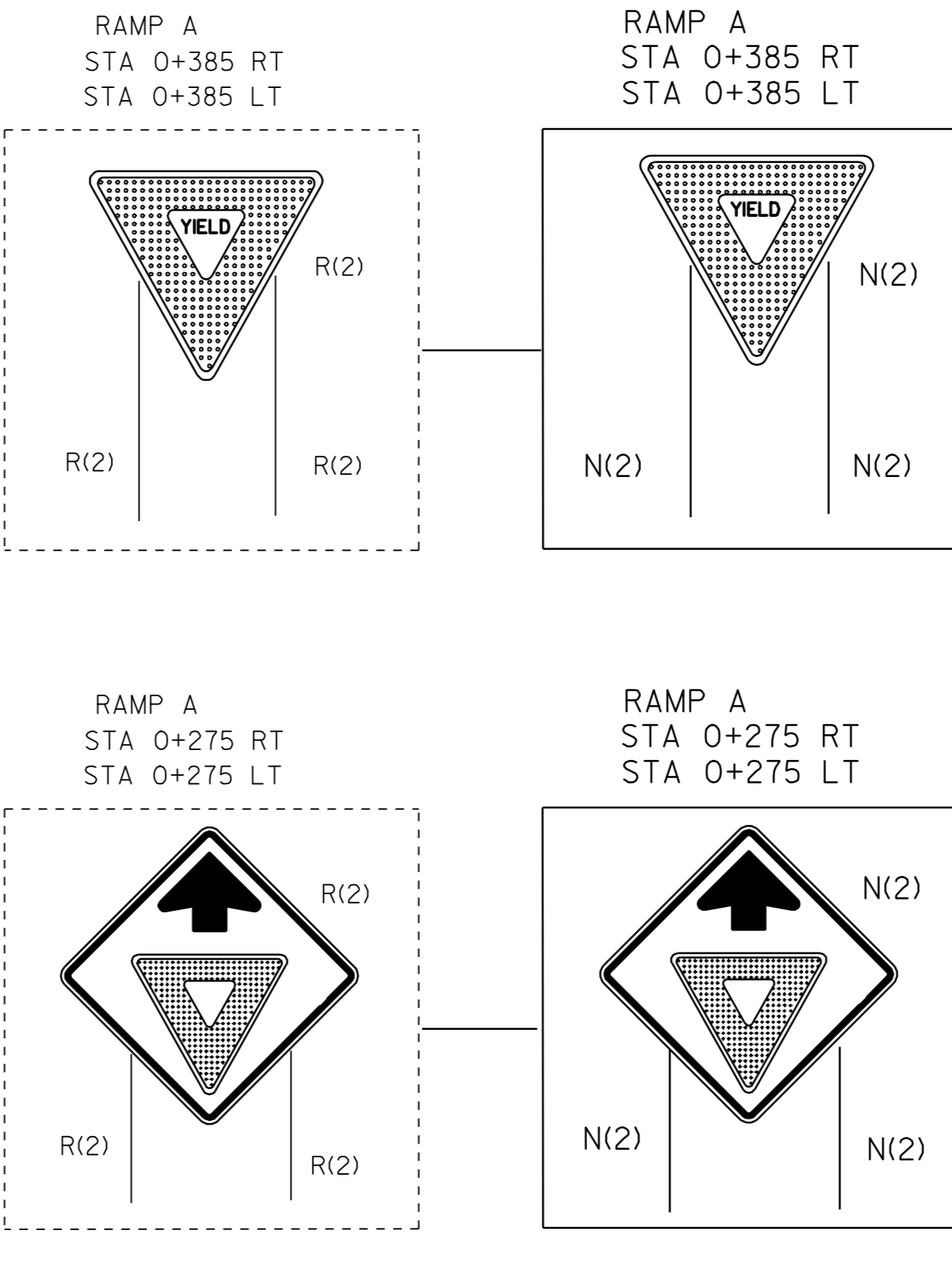
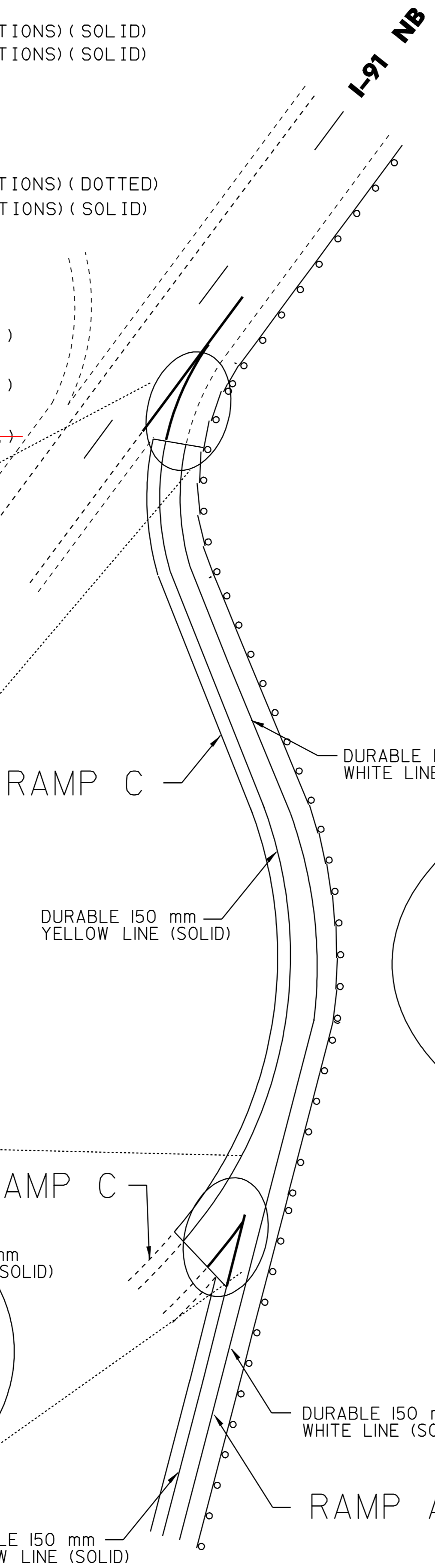
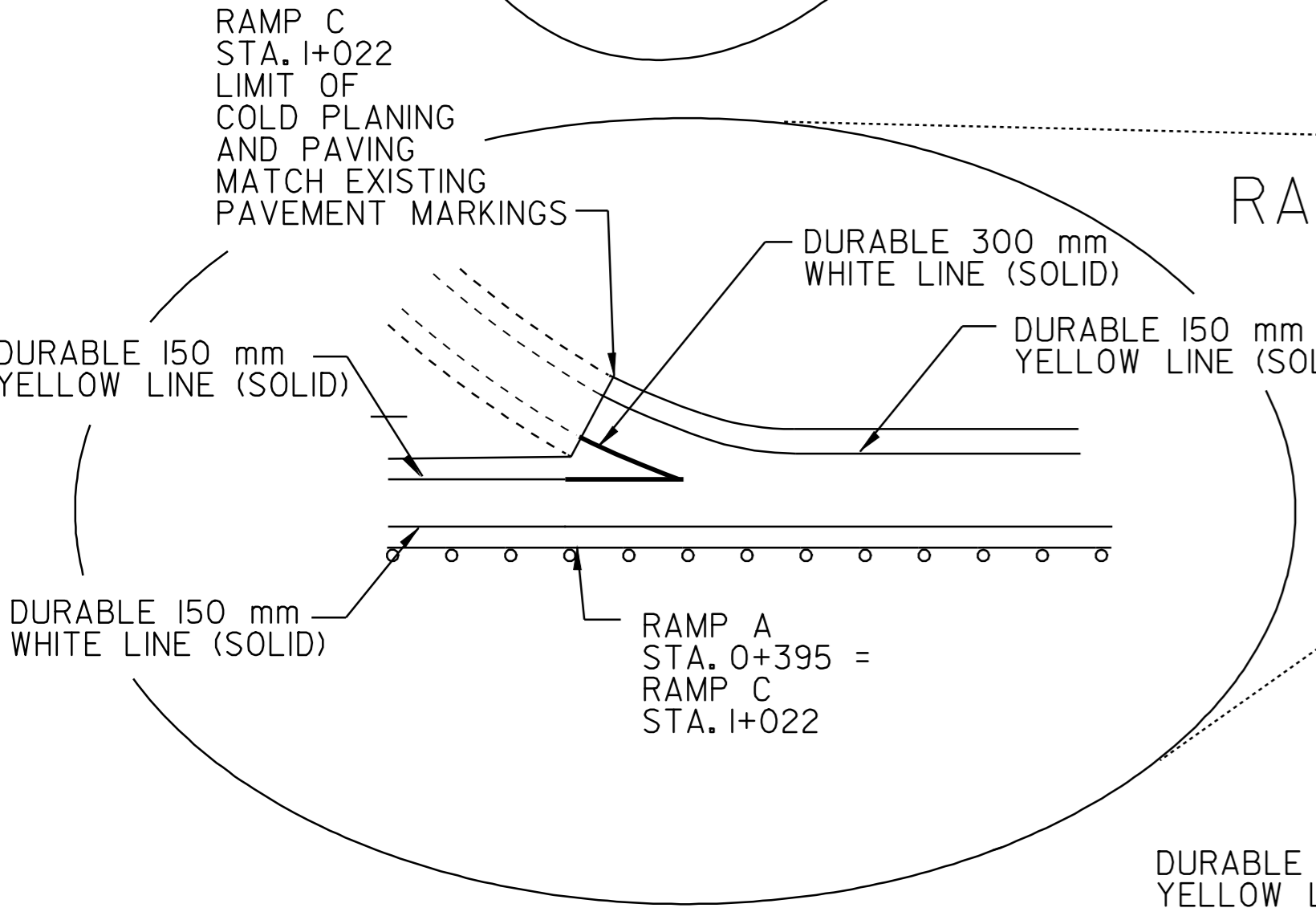
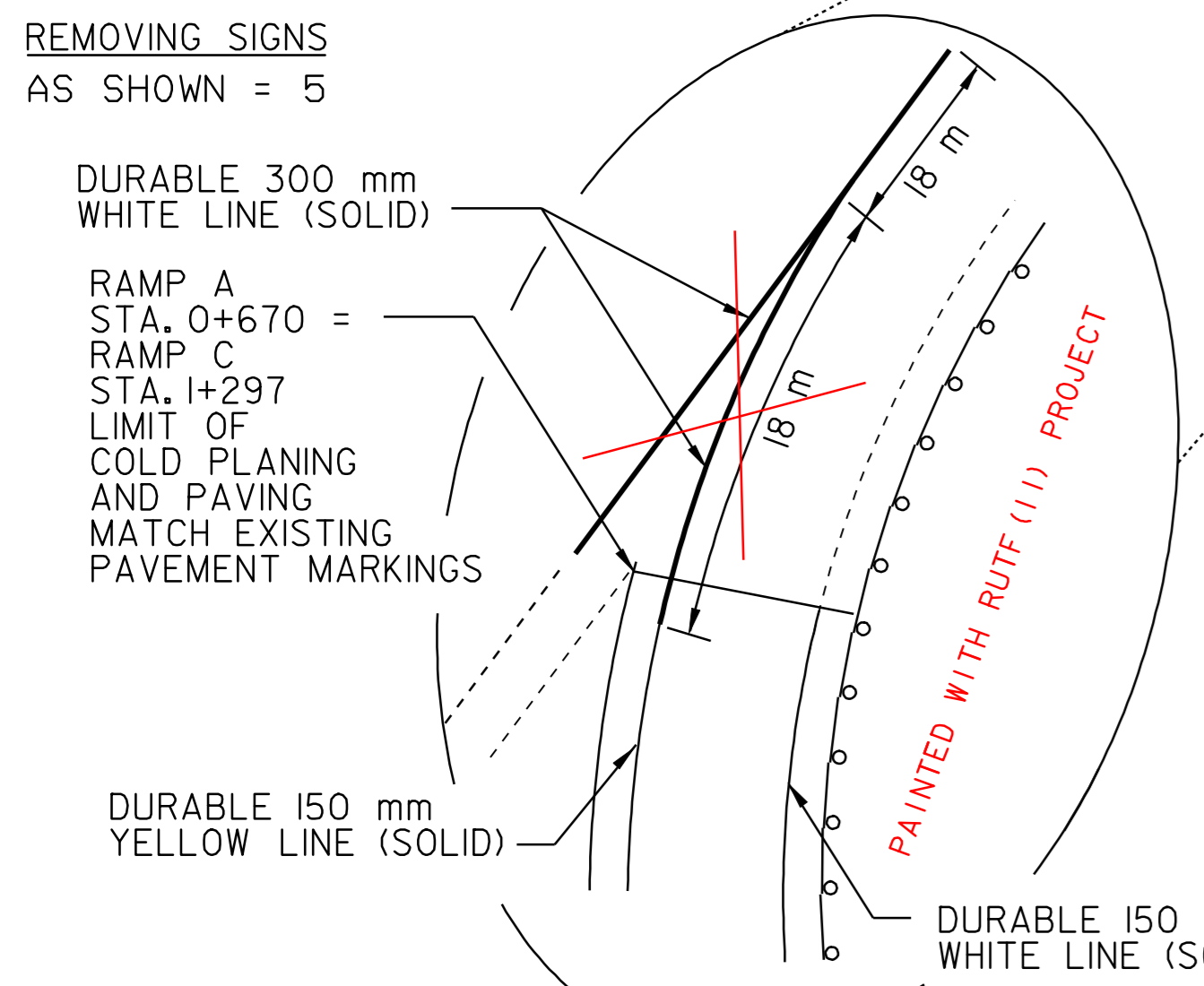
WHITE RIVER JCT. INTERCHANGE  
 RAMP A/RAMP C  
 NORTHBOUND OFF RAMP STA. 0+121 TO 0+156 LT (RAMP A STA.)  
 (GORE AREA W/DIAGONALS)  
 NORTHBOUND OFF RAMP STA. 1+022 TO 1+049 RT (RAMP C STA.)  
 (GORE AREA)

~~NORTHBOUND OFF RAMP STA. 1+297 TO 1+333 LT (RAMP C STA.)  
 (GORE AREA W/ I-91 NB)~~

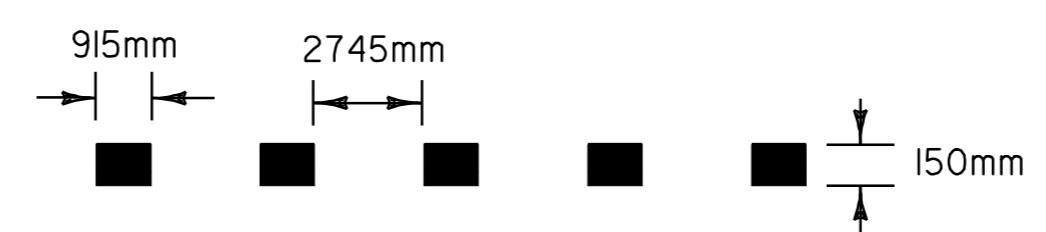
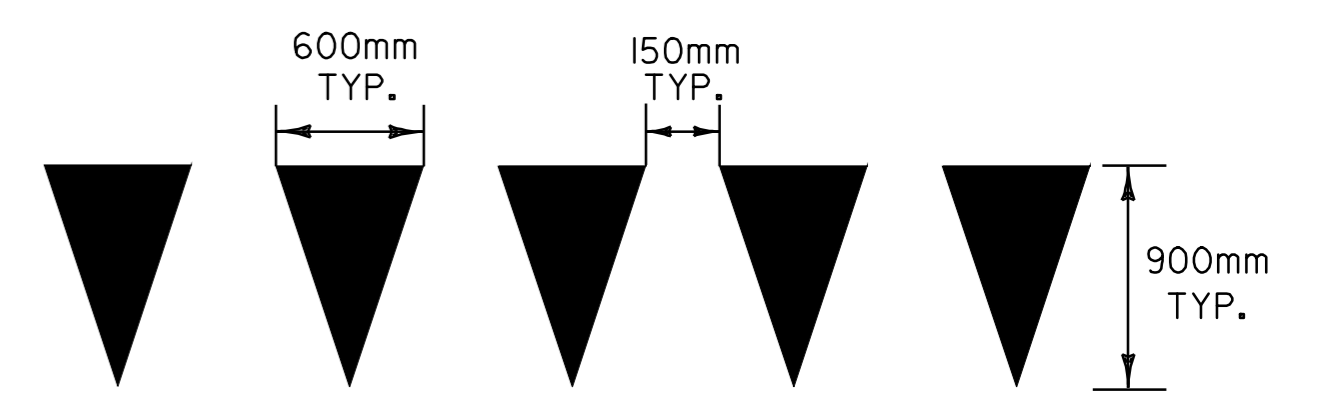
**TEMPORARY AND DURABLE LETTER OR SYMBOL**

WHITE RIVER JCT. INTERCHANGE  
 RAMP A  
 NORTHBOUND OFF RAMP A STA. 0+275 "YIELD AHEAD"  
 NORTHBOUND OFF RAMP A STA. 0+385 "YIELD LINE" (5 - ▼)

REMOVING SIGNS  
 AS SHOWN = 5



**WHITE RIVER JCT. INTERCHANGE  
 I-89 - RAMP A  
 NORTHBOUND OFF RAMP**



**DOTTED WHITE LINE DETAILS**  
 TO BE INSTALLED AS INDICATED IN THE PROJECT  
 PLANS OR AS DIRECTED BY THE RESIDENT ENGINEER.

**RAMP  
 DETAIL #1**

PROJECT:	HARTFORD - SHARON	PROJECT NO.:	AC IM 089-(51)
DESIGN FILE NAME:	z_pave/01a028/p01a028.dgn	PLOT DATE:	31-JAN-2006 13:
IPARM FILE NAME:	p01a028int1.i	SURVEY DATE:	9/01
SURVEYED BY:	CLD_ENGINEERS_INC	DRAWN BY:	MPS
SQUAD LEADER:	WRH	SHEET:	12 OF 21

REFER TO STANDARDS E-191 AND E-192 FOR ADDITIONAL DETAILS  
 NOTE: ALL DIMENSIONS IN METERS EXCEPT AS INDICATED. DETAILS NOT TO SCALE

TEMPORARY AND DURABLE 300 mm WHITE LINE

WHITE RIVER JCT. INTERCHANGE

RAMP B  
 NORTHBOUND ON RAMP STA. 0+334 TO 0+365 LT (GORE AREA)  
~~NORTHBOUND ON RAMP STA. 0+000 LT (GORE AREA W/DIAG. AT I-91 NB)~~

RAMP G  
 NORTHBOUND OFF RAMP STA. 0+000 TO 0+036 LT (GORE AREA W/DIAGONALS)  
~~NORTHBOUND OFF RAMP STA. 0+254 TO 0+301 LT (GORE AREA W/I-91 SB)~~

TEMPORARY AND DURABLE 150 mm WHITE LINE

WHITE RIVER JCT. INTERCHANGE

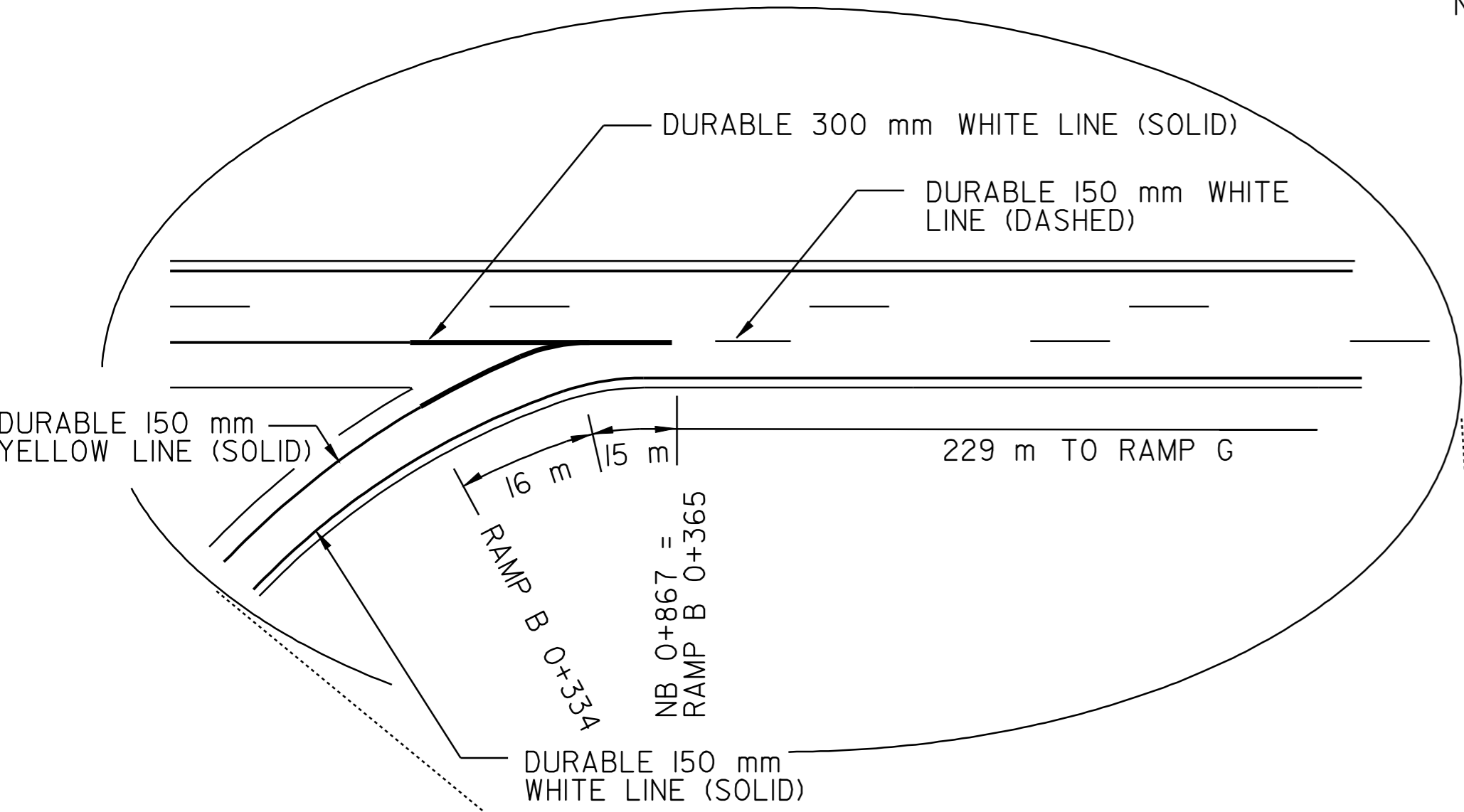
I-89 NORTHBOUND STA. 0+867 TO 1+096 RT (DASHED)  
 (RAMP B TO RAMP G)

RAMP B  
 NORTHBOUND ON RAMP STA. 0+000 TO 0+365 RT (SOLID)  
 RAMP G  
 NORTHBOUND OFF RAMP STA. 0+000 TO 0+254 RT (SOLID)

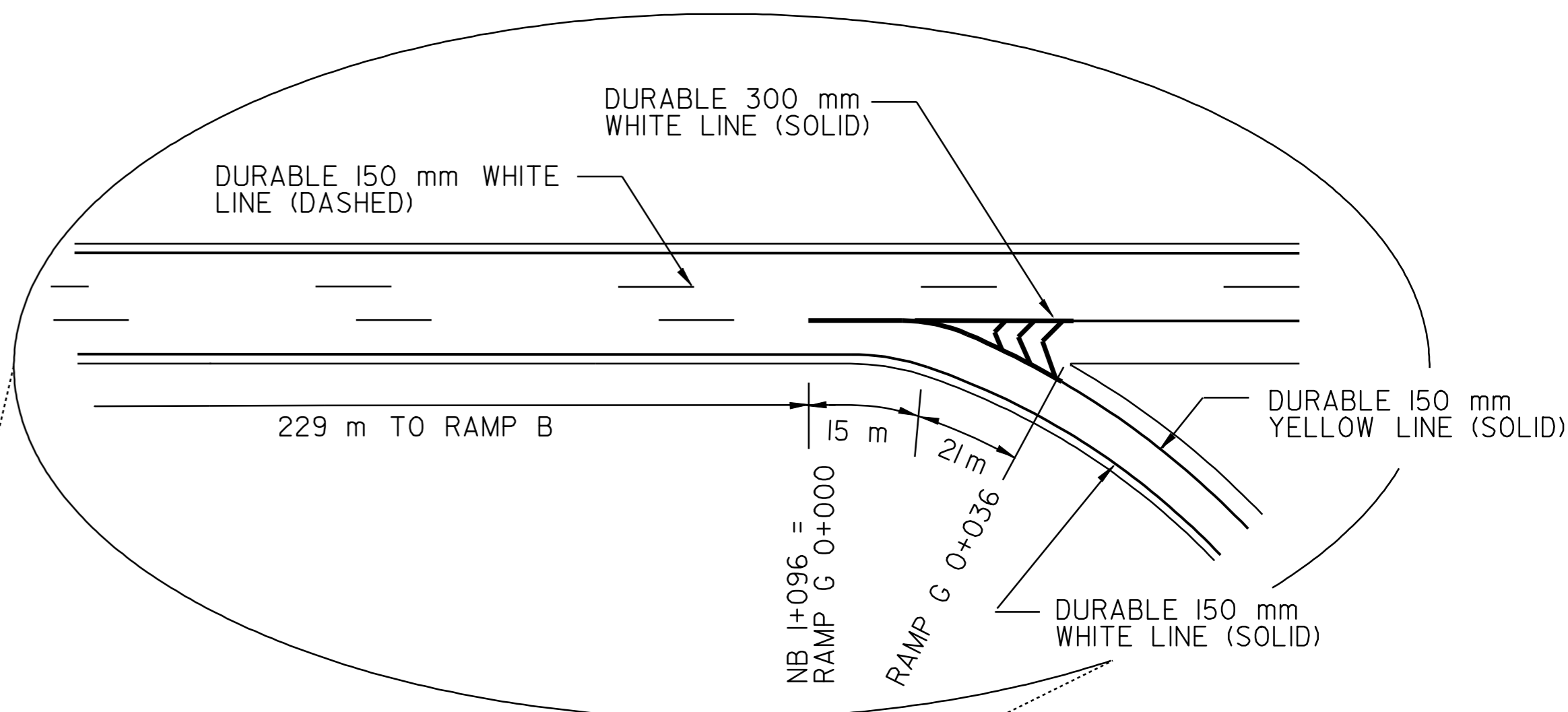
TEMPORARY AND DURABLE 150 mm YELLOW LINE

WHITE RIVER JCT. INTERCHANGE

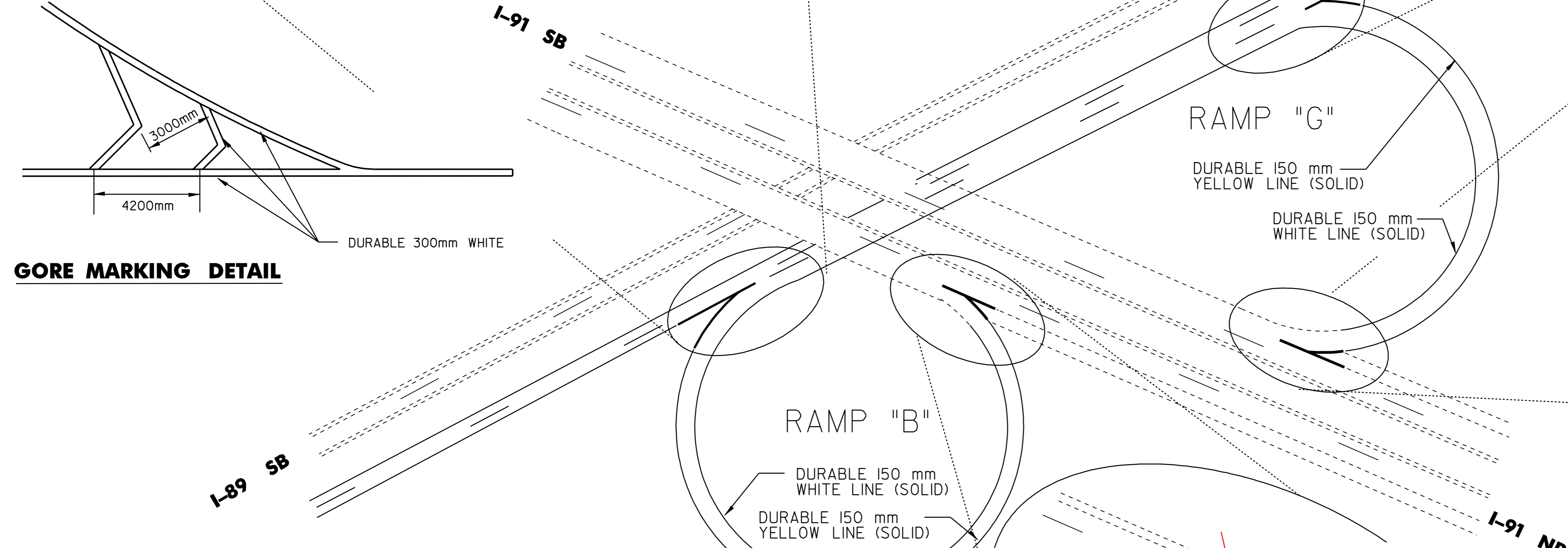
RAMP B  
 NORTHBOUND ON RAMP STA. 0+000 TO 0+344 LT (SOLID)  
 RAMP G  
 NORTHBOUND OFF RAMP STA. 0+036 TO 0+254 LT (SOLID)



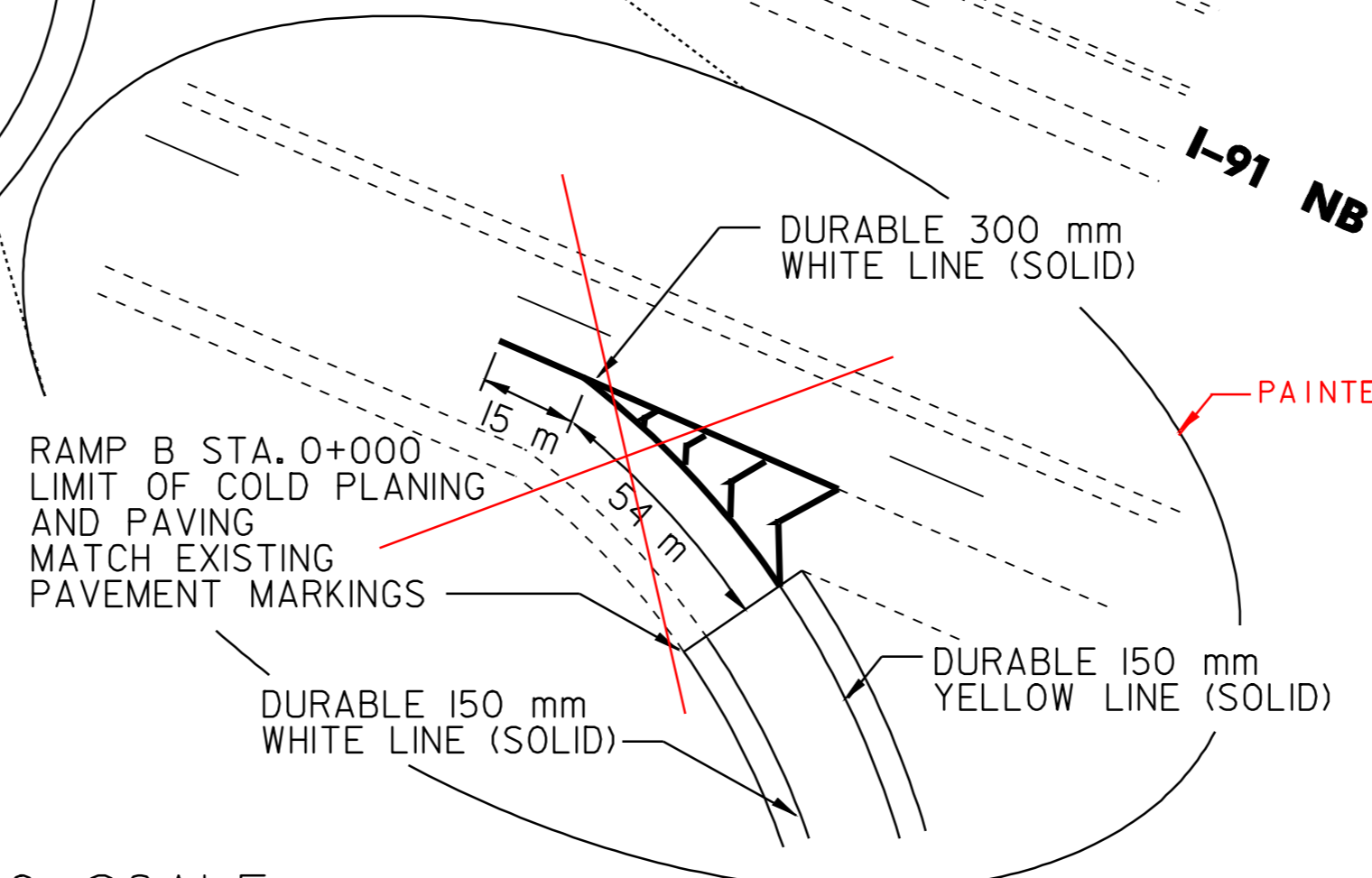
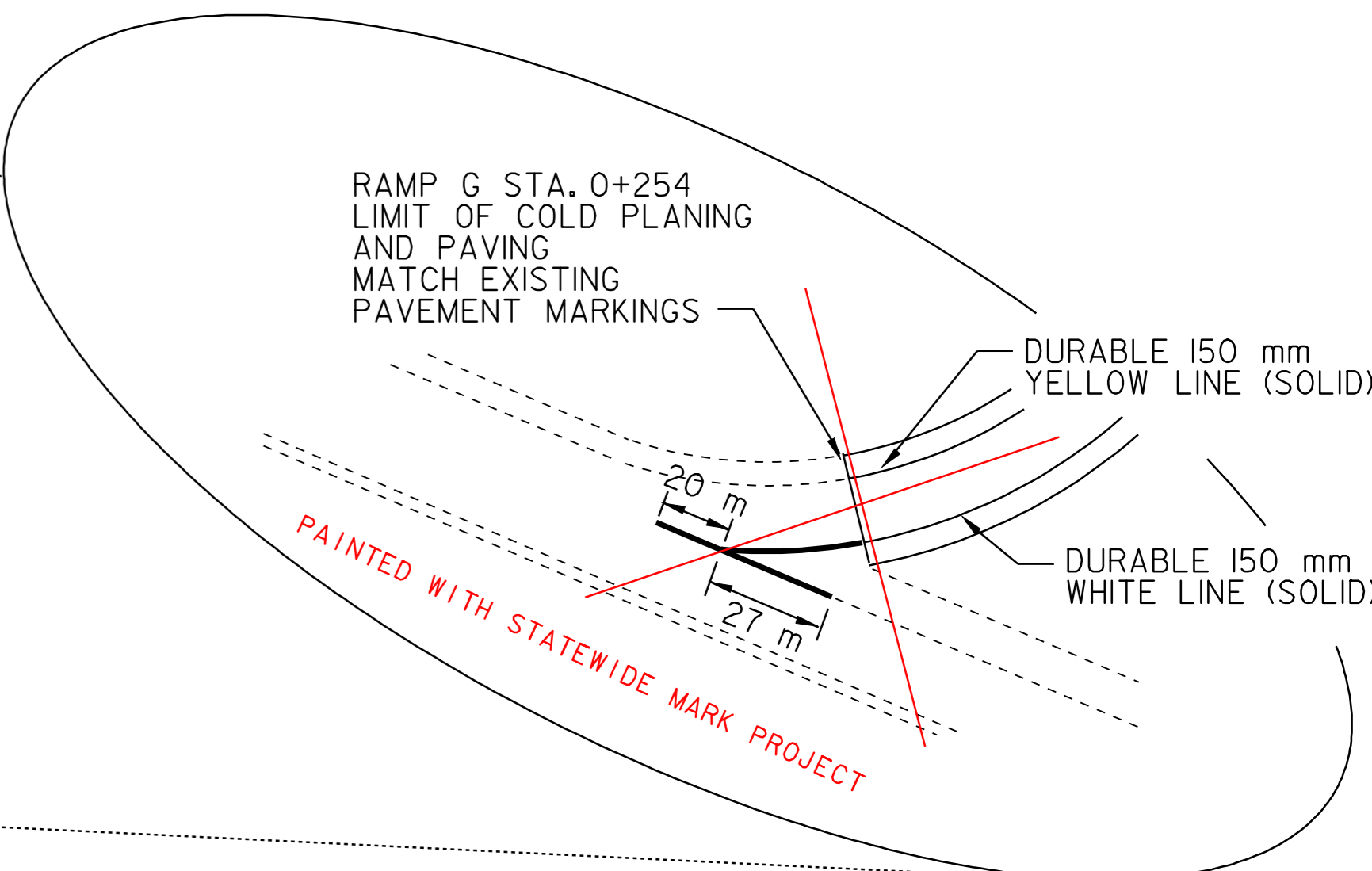
**GORE MARKING DETAIL**



**WHITE RIVER JCT. INTERCHANGE  
 I-89- RAMP G  
 NORTHBOUND OFF RAMP**



**WHITE RIVER JCT. INTERCHANGE  
 I-89 - RAMP B  
 NORTHBOUND ON RAMP**



<b>RAMP DETAIL #2</b>	PROJECT:	HARTFORD - SHARON	PROJECT NO.:	AC IM 089-I(51)
	DESIGN FILE NAME:	_/pave/01a028/p01a028.dgn	PLOT DATE:	31-JAN-2006 13:
	IPARM FILE NAME:	_p01a028int2.i	SURVEY DATE:	9/01
	SURVEYED BY:	_CLD_ENGINEERS_INC	DRAWN BY:	_MPS
	SQUAD LEADER:	_WRH	SHEET:	13 OF 21

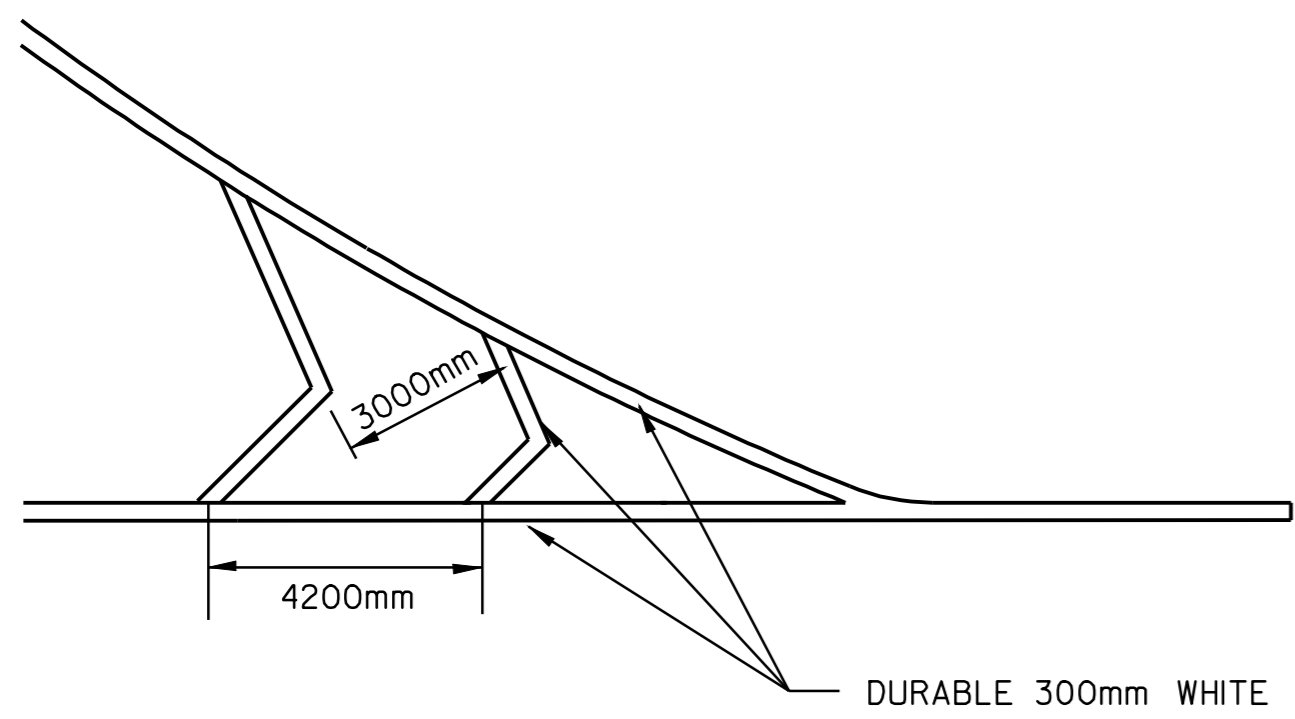
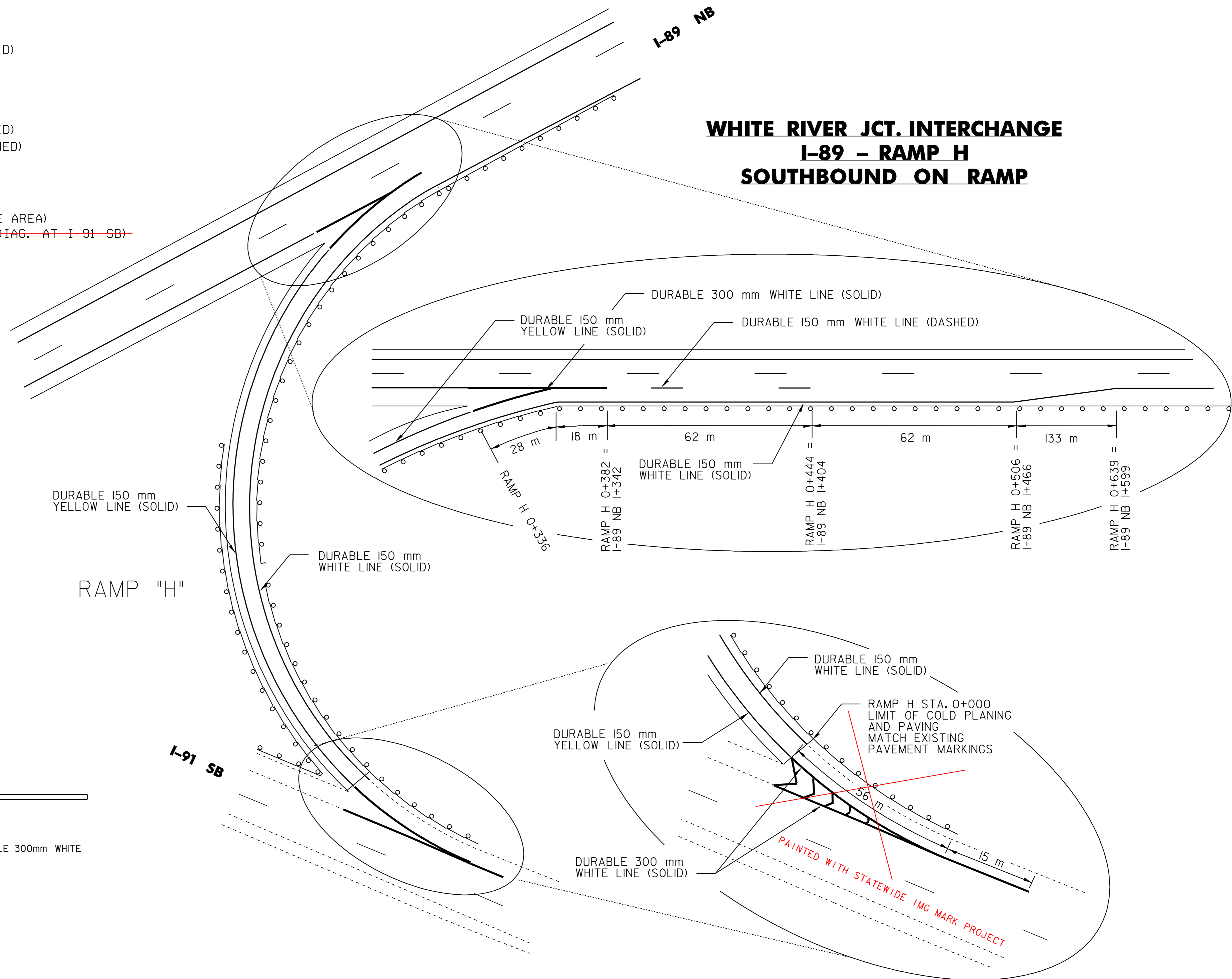
REFER TO STANDARDS E-191 AND E-192 FOR ADDITIONAL DETAILS  
 NOTE: ALL DIMENSIONS IN METERS EXCEPT AS INDICATED. DETAILS NOT TO SCALE

TEMPORARY AND DURABLE 150 mm YELLOW LINE  
 WHITE RIVER JCT, INTERCHANGE  
 RAMP H  
 NORTHBOUND ON RAMP STA. 0+000 TO 0+336 LT (SOLID)

TEMPORARY AND DURABLE 150 mm WHITE LINE  
 WHITE RIVER JCT, INTERCHANGE  
 RAMP H  
 NORTHBOUND ON RAMP STA. 0+000 TO 0+382 RT (SOLID)  
 NORTHBOUND ON RAMP STA. 0+382 TO 0+444 RT (DASHED)

TEMPORARY AND DURABLE 300 mm WHITE LINE  
 WHITE RIVER JCT, INTERCHANGE  
 RAMP H  
 NORTHBOUND ON RAMP STA. 0+336 TO 0+382 LT (GORE AREA)  
~~NORTHBOUND ON RAMP STA. 0+000 LT (GORE AREA W/DIAG. AT I-91 SB)~~

**WHITE RIVER JCT. INTERCHANGE**  
**I-89 - RAMP H**  
**SOUTHBOUND ON RAMP**



**GORE MARKING DETAIL**

REFER TO STANDARDS E-191 AND E-192 FOR ADDITIONAL DETAILS  
 NOTE: ALL DIMENSIONS IN METERS EXCEPT AS INDICATED. DETAILS NOT TO SCALE

<b>RAMP DETAIL #3</b>	PROJECT:	HARTFORD - SHARON	PROJECT NO.:	AC IM 089-(51)
	DESIGN FILE NAME:	_/pave/01a028/p01a028.dgn	PLOT DATE:	31-JAN-2006 13:
	IPARM FILE NAME:	_p01a028int3.i	SURVEY DATE:	9/01
	SURVEYED BY:	_CLD_ENGINEERS_INC_	DRAWN BY:	_MPS_
	SQUAD LEADER:	_WRH_	SHEET:	14 OF 21

**TEMPORARY AND DURABLE 150 mm YELLOW LINE**  
 QUECHEE INTERCHANGE  
 RAMP B STA. **0+169**  
 NORTHBOUND OFF RAMP STA. **0+126** TO 0+553 LT (SOLID)  
 RAMP A  
 NORTHBOUND ON RAMP STA. 0+000 TO 0+298 LT (SOLID)

**TEMPORARY AND DURABLE LETTER OR SYMBOL**  
 QUECHEE INTERCHANGE  
 RAMP B  
 NORTHBOUND OFF RAMP "STOP AHEAD" STA. 0+248  
 NORTHBOUND OFF RAMP "WRONG WAY ARROW" STA. 0+308 (→)  
 NORTHBOUND OFF RAMP "STOP" (2) STA. 0+550

**TEMPORARY AND DURABLE 150 mm WHITE LINE**  
 QUECHEE INTERCHANGE  
 RAMP B STA. 0+000 TO **0+122** RT (DOTTED)  
 NORTHBOUND OFF RAMP STA. ~~0+092~~ TO 0+553 RT (SOLID)  
 RAMP A  
 NORTHBOUND ON RAMP STA. 0+000 TO 0+383 RT (SOLID)  
 NORTHBOUND ON RAMP STA. 0+383 TO ~~0+0+442~~ RT (DASHED)  
**0+439**

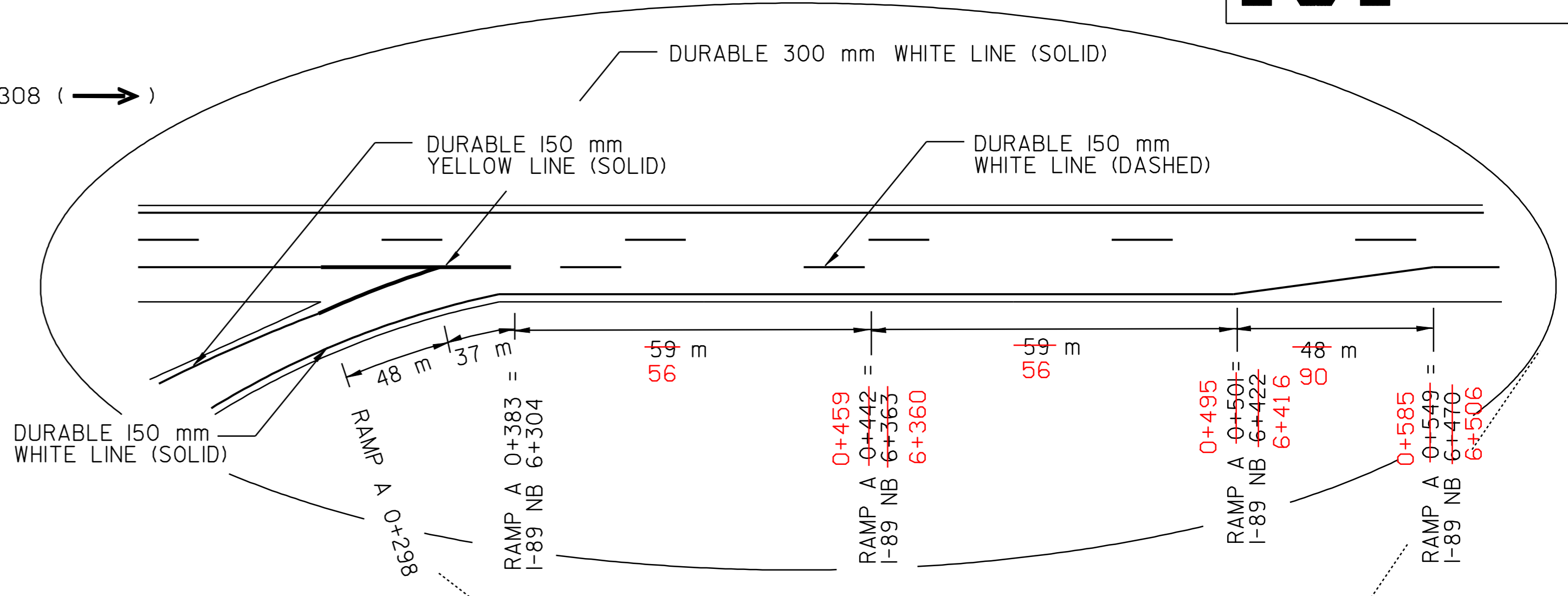
**TEMPORARY AND DURABLE 600 mm STOP BAR**  
 QUECHEE INTERCHANGE  
 RAMP B  
 NORTHBOUND OFF RAMP STA. 0+552

**PAINTED CURB**  
 QUECHEE INTERCHANGE  
 RAMP B/RAMP A NORTHBOUND ON/OFF RAMP  
 RAMP B STATIONS 0+529 TO 0+553 LT (50 M)

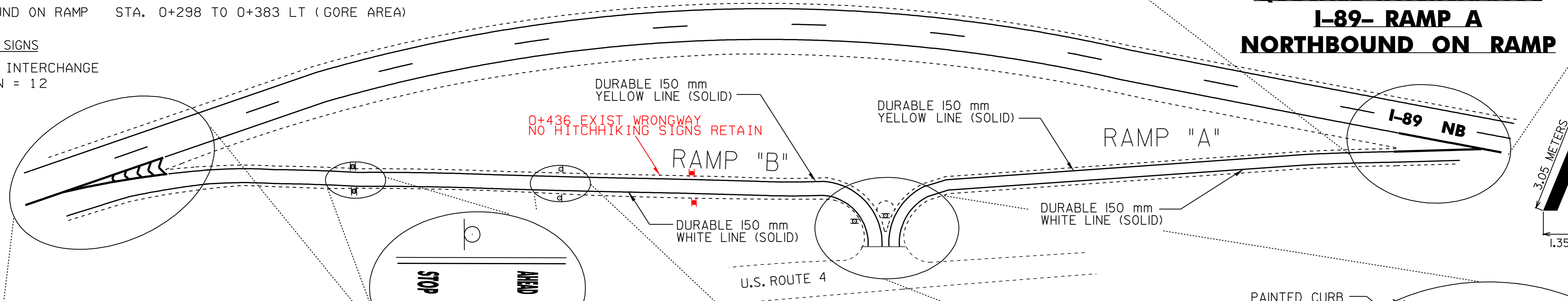
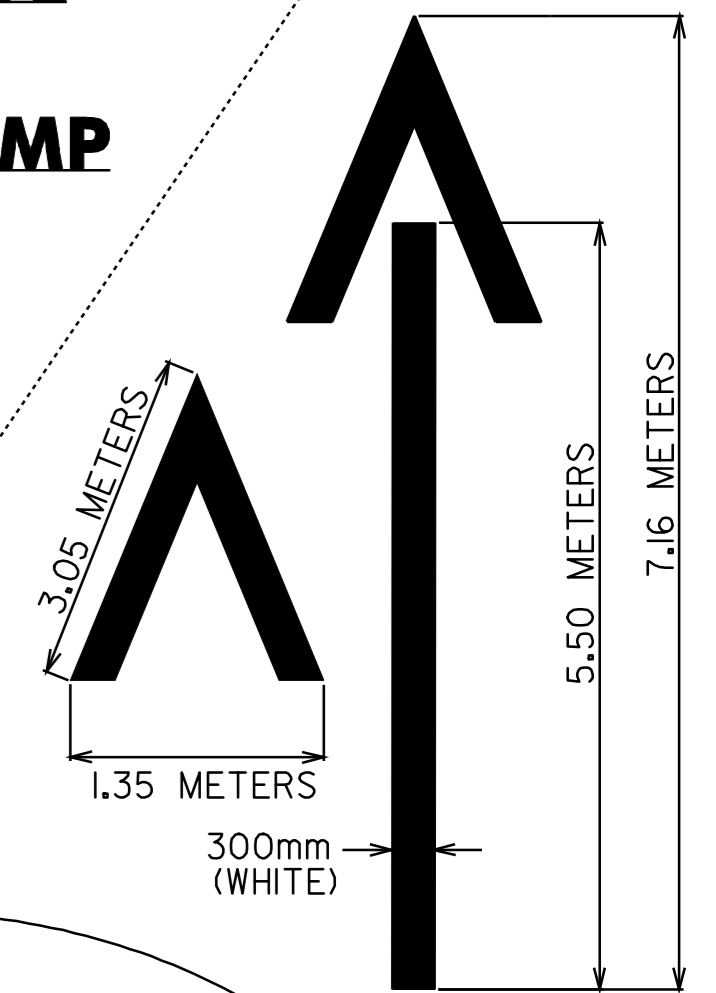
**PAINTED ISLAND**  
 QUECHEE INTERCHANGE  
 RAMP B/RAMP A NORTHBOUND ON/OFF RAMP  
 RAMP B STATIONS 0+529 TO 0+553 LT (24 SM)

**TEMPORARY AND DURABLE 300 mm WHITE LINE**  
 QUECHEE INTERCHANGE  
 RAMP B STA. **0+122** **0+169**  
 NORTHBOUND OFF RAMP STA. ~~0+092~~ TO ~~0+126~~ LT (GORE AREA W/DIAG.)  
 RAMP A  
 NORTHBOUND ON RAMP STA. 0+298 TO 0+383 LT (GORE AREA)

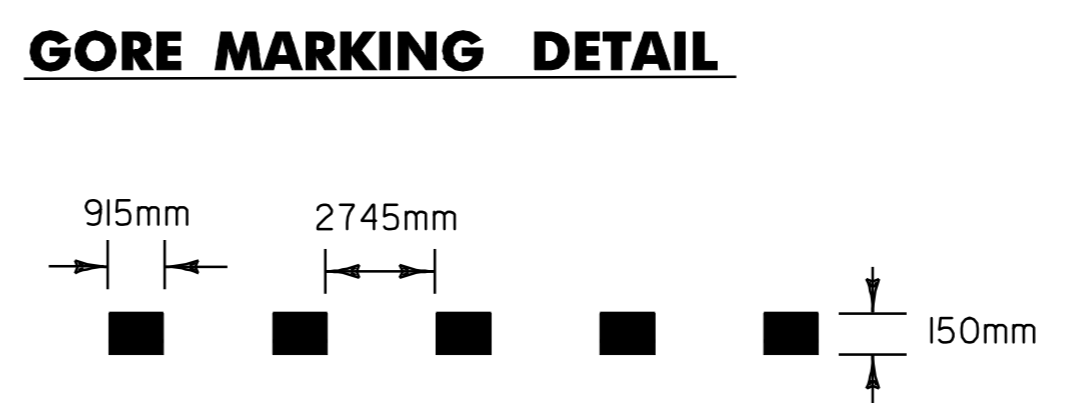
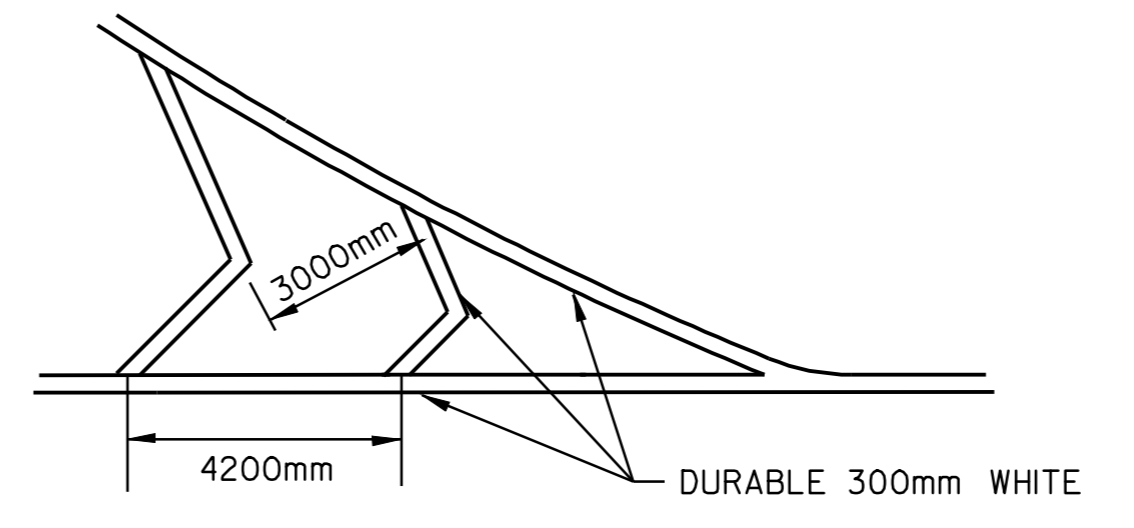
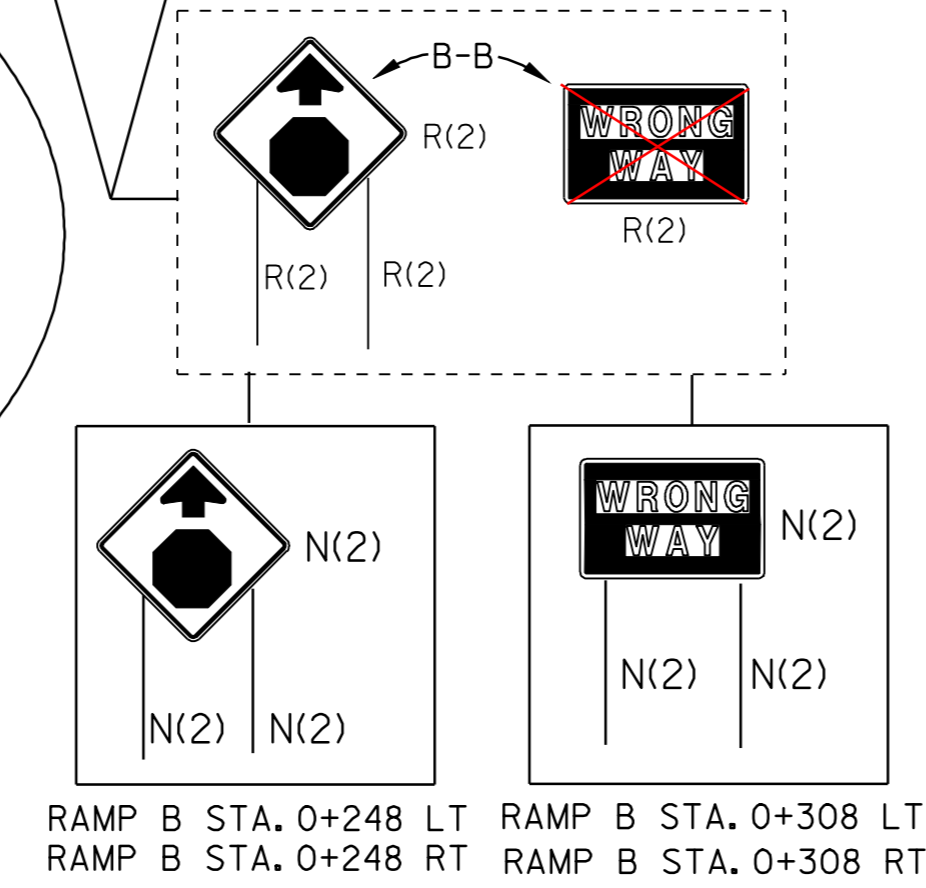
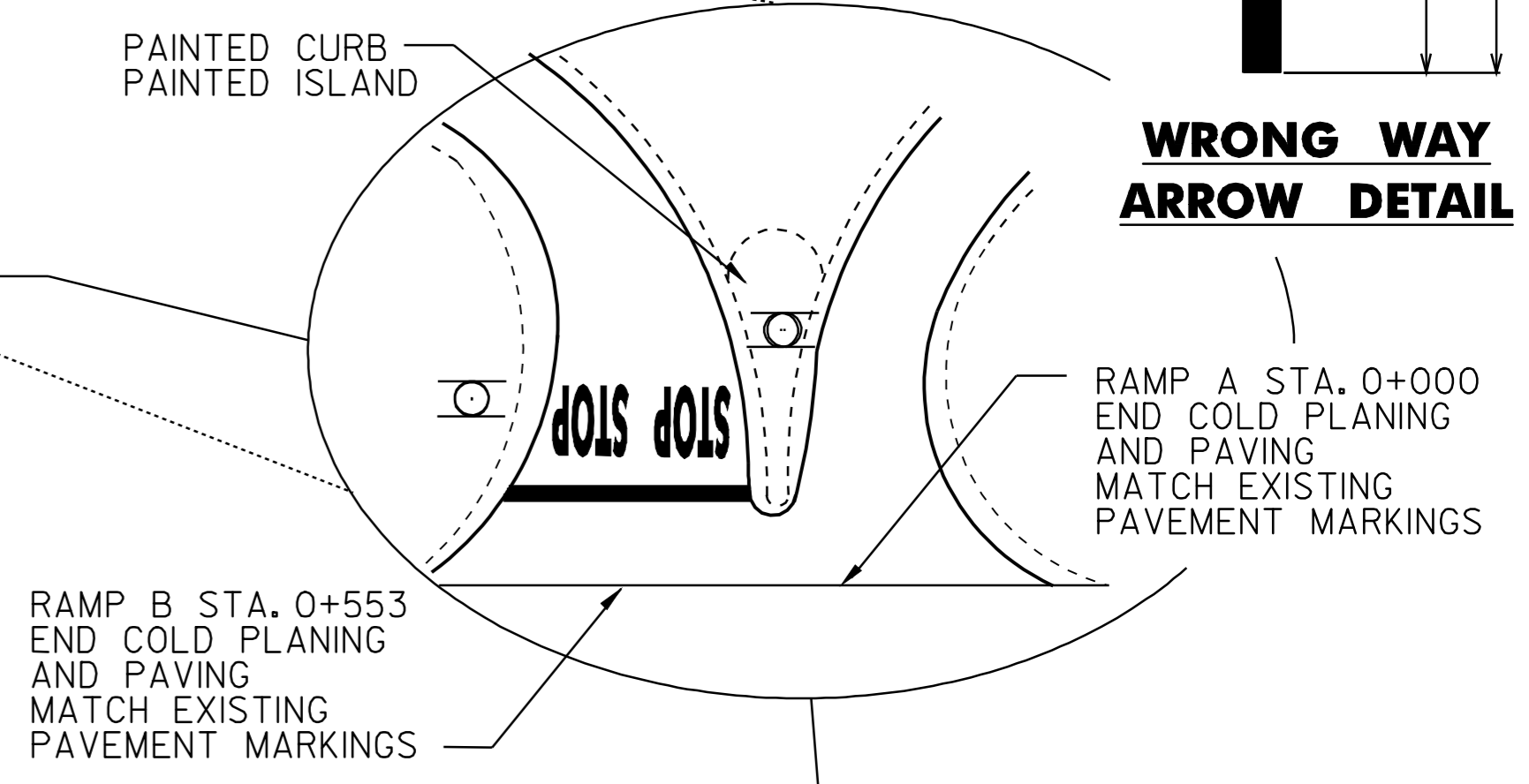
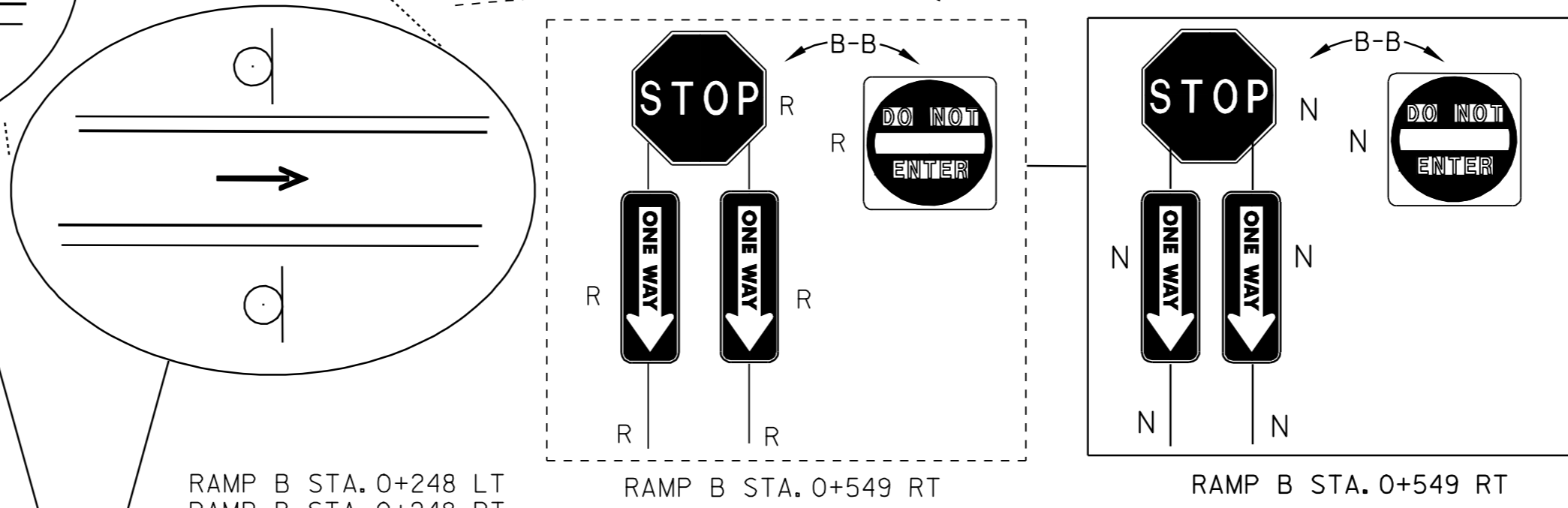
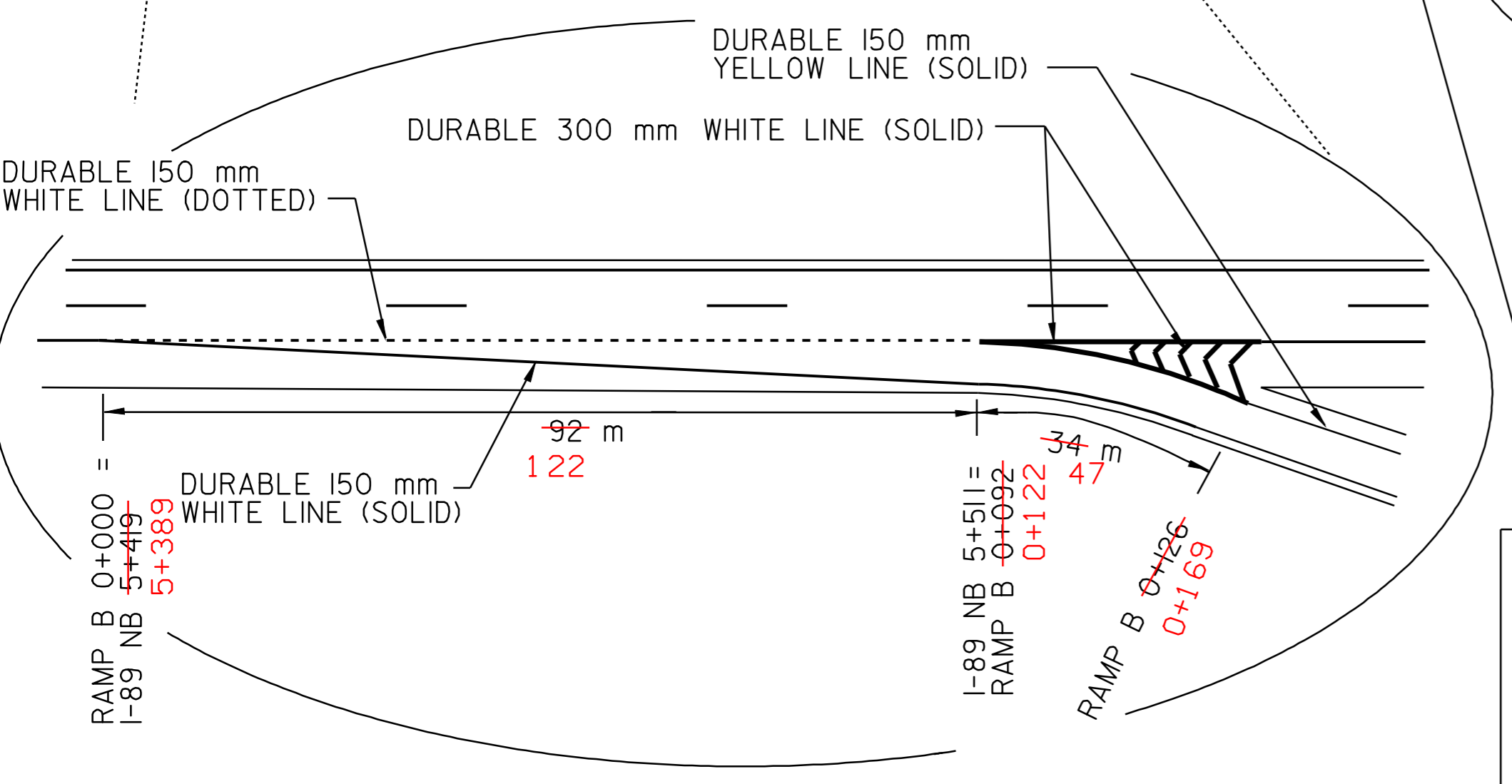
**REMOVING SIGNS**  
 QUECHEE INTERCHANGE  
 AS SHOWN = 12



**QUECHEE INTERCHANGE  
 I-89- RAMP A  
 NORTHBOUND ON RAMP**



**QUECHEE INTERCHANGE  
 I-89- RAMP B  
 NORTHBOUND OFF RAMP**



<b>RAMP DETAIL #4</b>	PROJECT:	HARTFORD - SHARON	PROJECT NO.:	AC IM 089-(51)
	DESIGN FILE NAME:	/pave/01a028/p01a028.dgn	PLOT DATE:	31-JAN-2006 13:
	IPARM FILE NAME:	_p01a028in+4.i	SURVEY DATE:	9/01
	SURVEYED BY:	_CLD_ENGINEERS_INC_	DRAWN BY:	_MPS_
	SQUAD LEADER:	_WRH_	SHEET:	15 OF 21

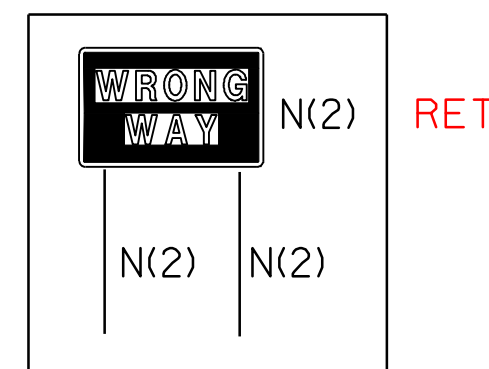
REFER TO STANDARDS E-191 AND E-192 FOR ADDITIONAL DETAILS  
 NOTE: ALL DIMENSIONS IN METERS EXCEPT AS INDICATED. DETAILS NOT TO SCALE

TEMPORARY AND DURABLE 150 mm WHITE LINE

NORTHBOUND

- I-89 REST AREA STA. 13+897 TO STA. 14+090 RT (SOLID)
- I-89 REST AREA STA. 13+897 TO STA. 13+969 RT (DOTTED)
- I-89 REST AREA STA. 13+969 TO STA. 14+045 RT (DASHED)
- I-89 REST AREA STA. 14+441 TO STA. 14+484 RT (DASHED)
- I-89 REST AREA STA. 14+373 TO STA. 14+608 RT (SOLID)

~~NB STA. 14+090 LT~~  
~~NB STA. 14+090 RT~~



TEMPORARY AND DURABLE 300 mm WHITE LINE

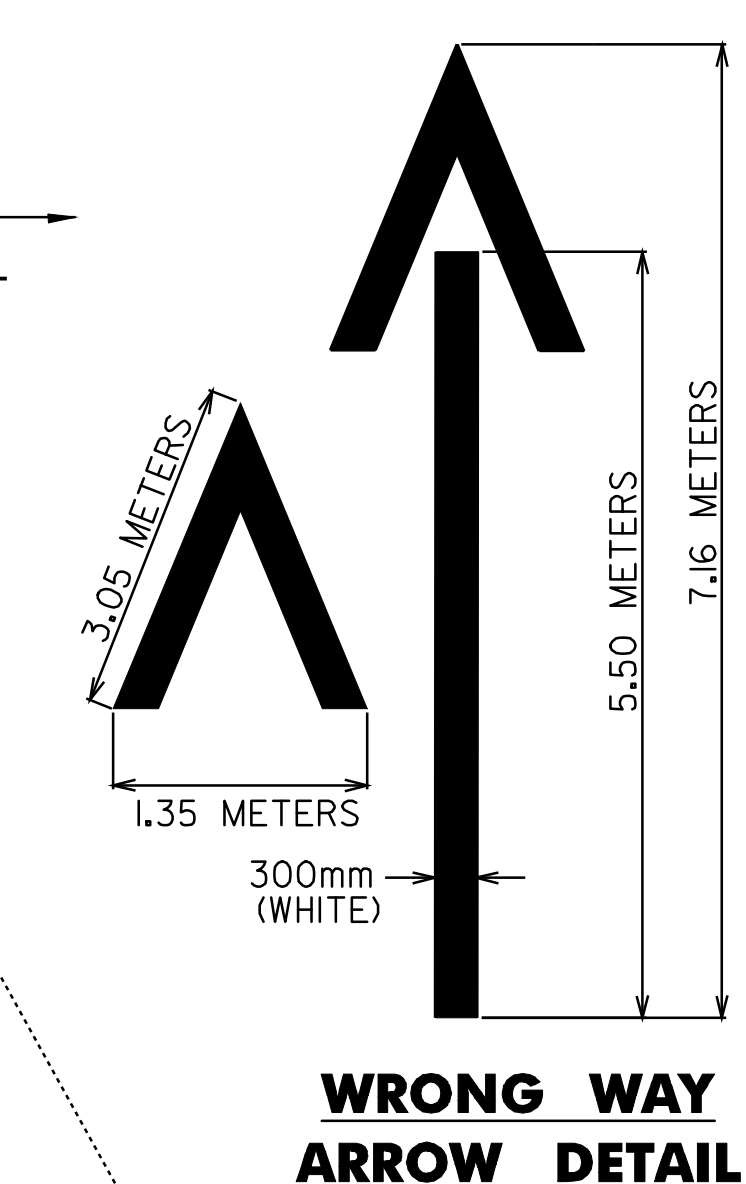
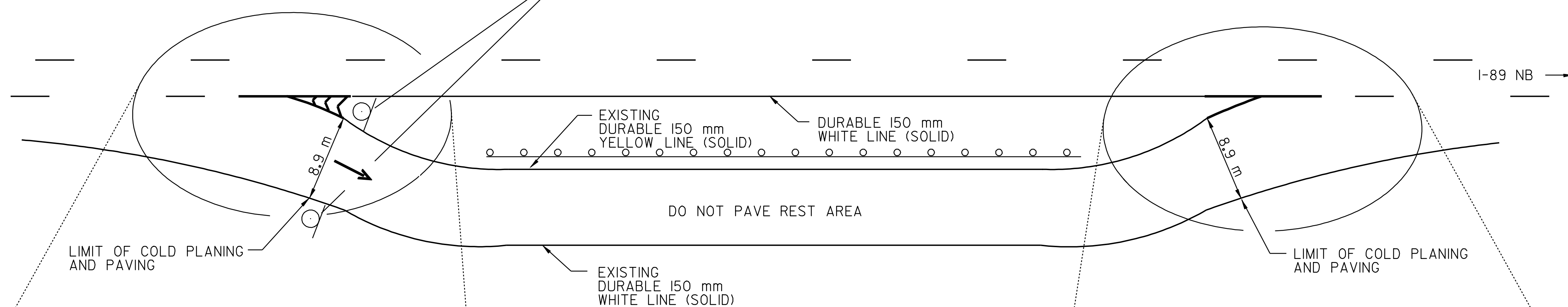
NORTHBOUND

- I-89 REST AREA STA. 14+045 TO STA. 14+090 RT (GORE AREA W/DIAGONALS)
- I-89 REST AREA STA. 14+373 TO STA. 14+441 RT (GORE AREA)

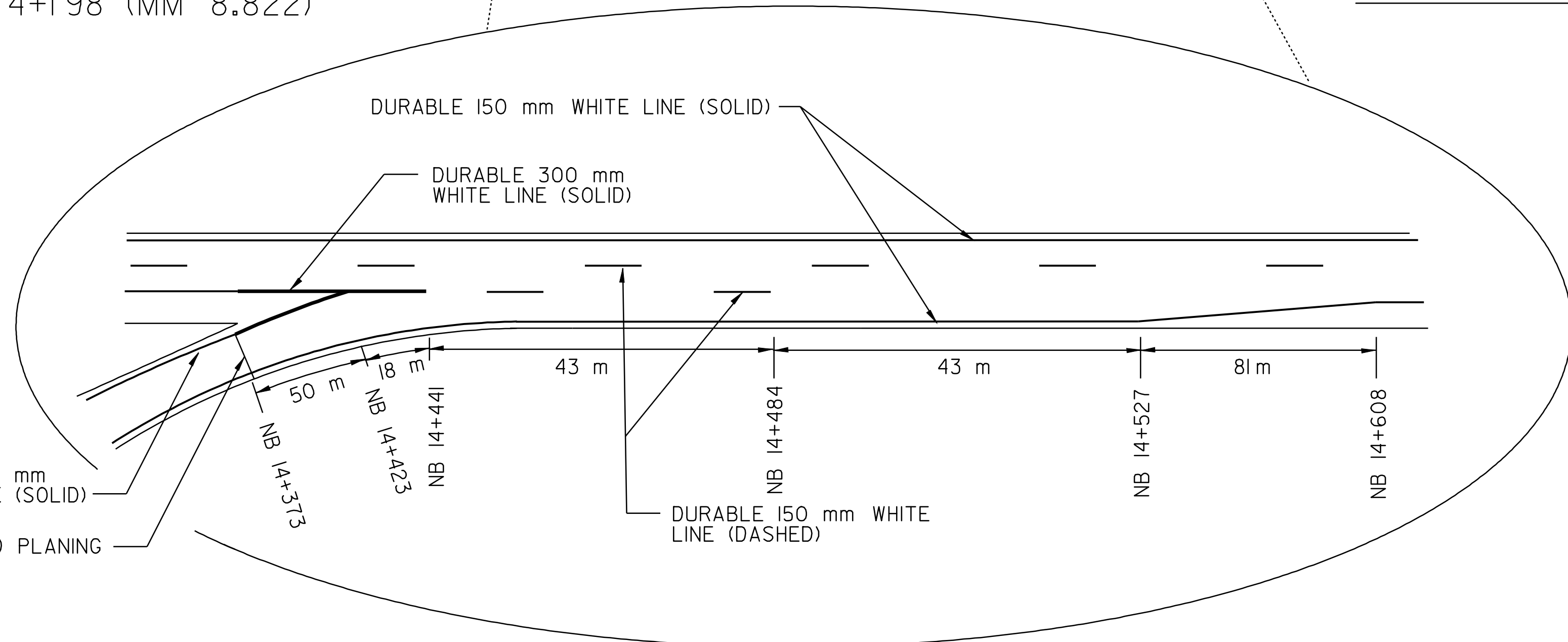
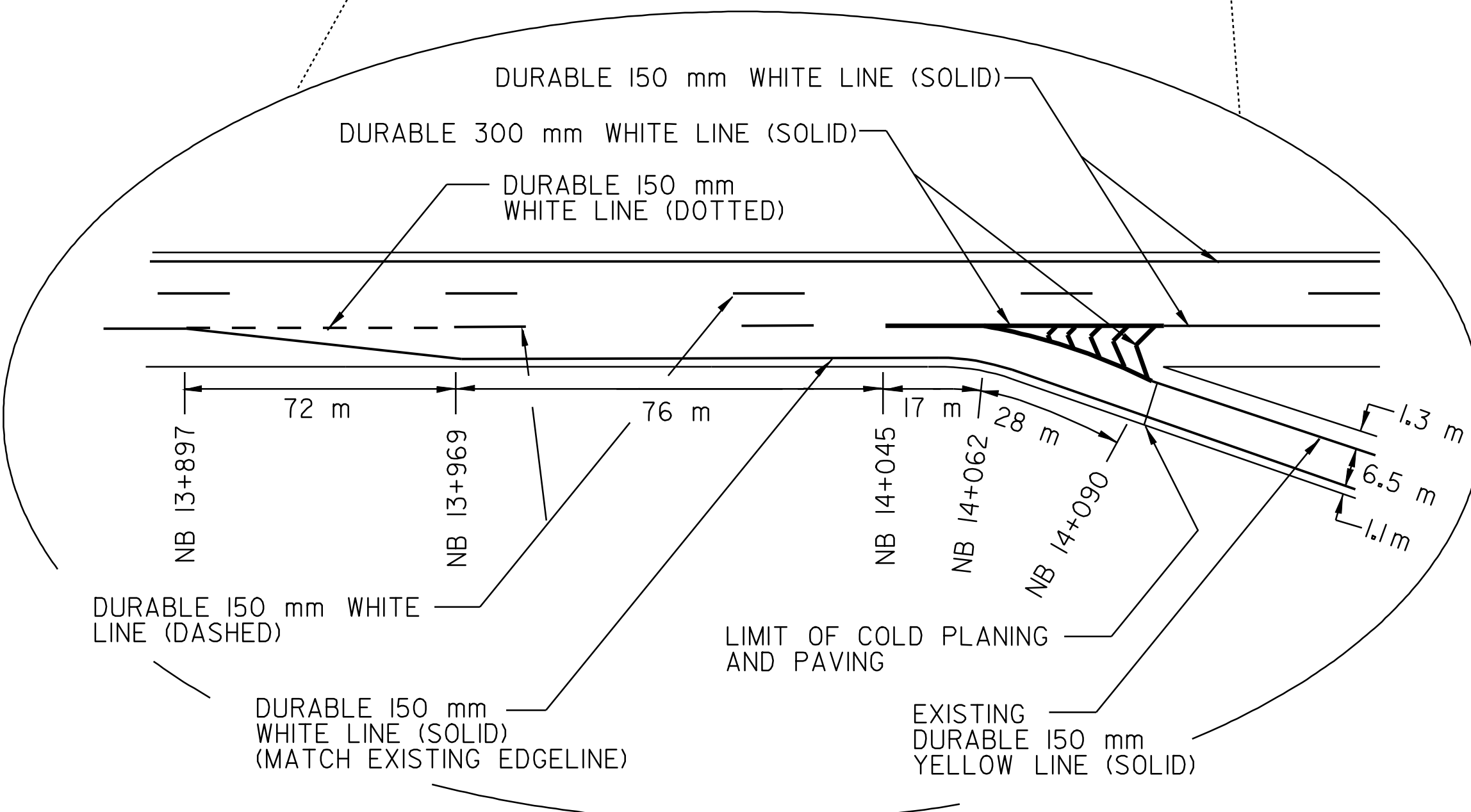
TEMPORARY AND DURABLE LETTER OR SYMBOL

REST AREA OFF RAMP

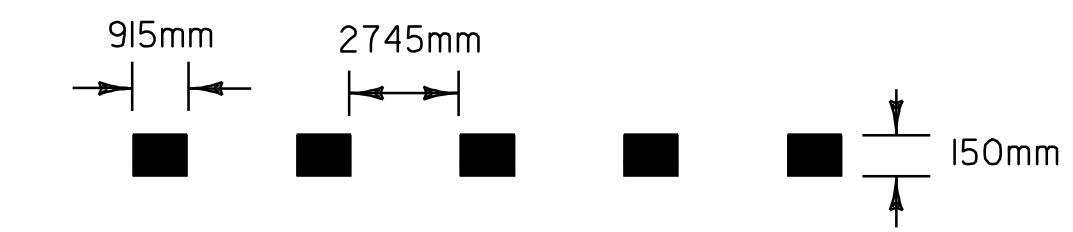
"WRONG WAY ARROW" NORTHBOUND STA. 14+090 RT ( → )



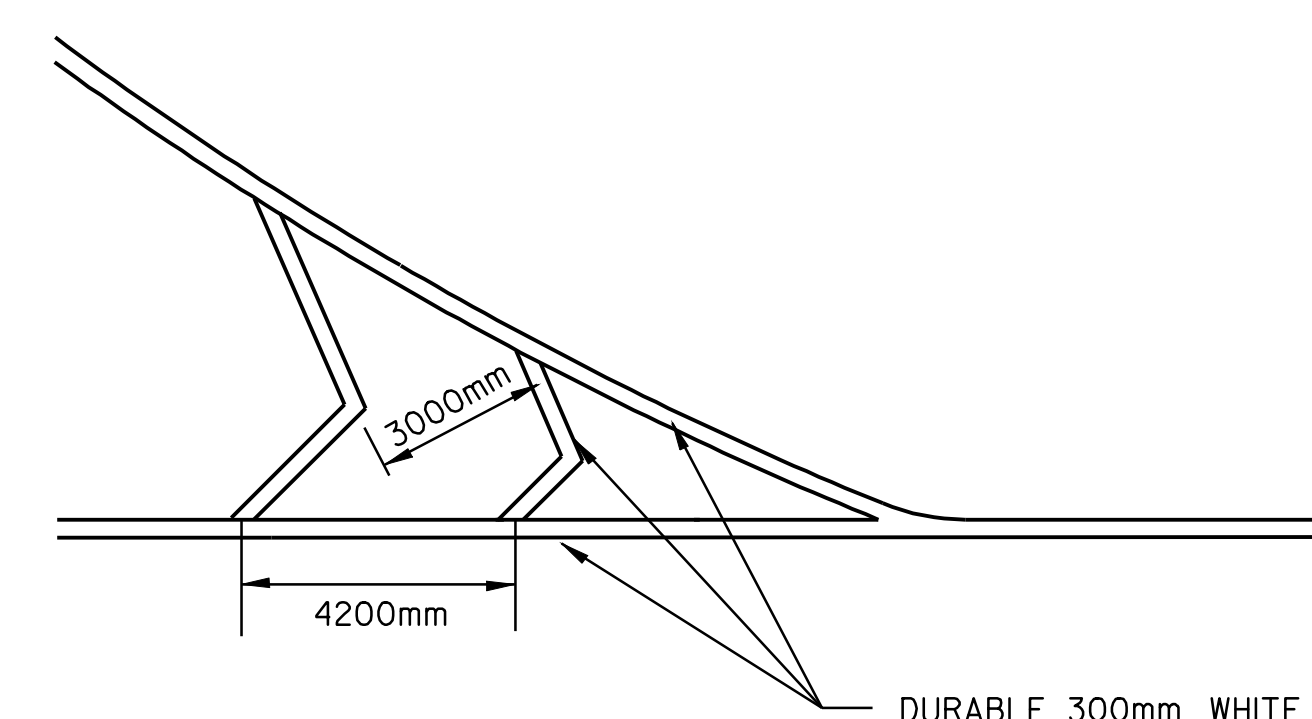
I-89 NORTHBOUND REST AREA  
STA. 14+198 (MM 8.822)



A REST AREA CONSTRUCTION PROJECT IS IN PROGRESS AT THIS LOCATION. THE CONTRACTOR SHALL COORDINATE ALL PAVING PROJECT ACTIVITIES IN THIS VICINTIY WITH THE CONTRACTOR FOR THE REST AREA PROJECT.



**DOTTED WHITE LINE DETAILS**  
TO BE INSTALLED AS INDICATED IN THE PROJECT PLANS OR AS DIRECTED BY THE RESIDENT ENGINEER.

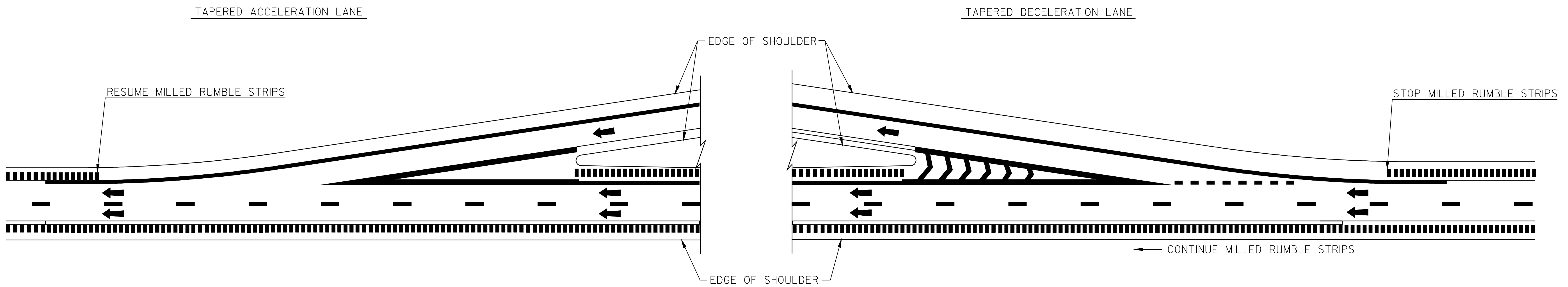
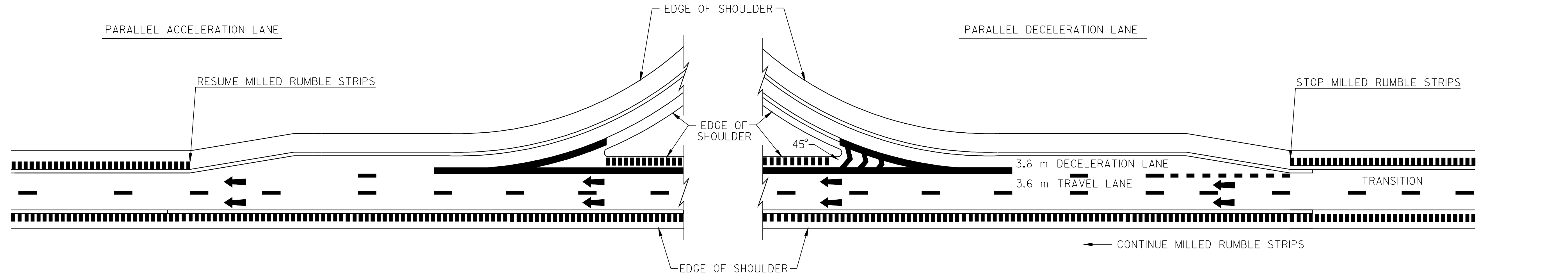


**GORE MARKING DETAIL**

REFER TO STANDARDS E-191 AND E-192 FOR ADDITIONAL DETAILS  
NOTE: ALL DIMENSIONS IN METERS EXCEPT AS INDICATED. DETAILS NOT TO SCALE

<b>REST AREA DETAIL SHEET</b>	DESIGNED BY	LFW	DATE	05-04
	DRAWN BY	LFW	DATE	05-04
	DESIGN FILE NO.	/pave/01a028/p01a028.dgn		
	PRF FILE	p01a028rst.i	DATE	05-04
	PROJECT NAME	HARTFORD - SHARON		
PROJECT NO.	AC IM 089-1(51)			
SHEET	16	OF	21	SHEETS

# TYPICAL MILLING AT INTERCHANGES & REST AREAS



NOTE:  
 1. THIS TYPICAL MAY BE MODIFIED AT THE DISCRETION OF THE RESIDENT ENGINEER IF ACTUAL FIELD CONDITIONS NECESSITATE SUCH ACTIONS.

LEGEND

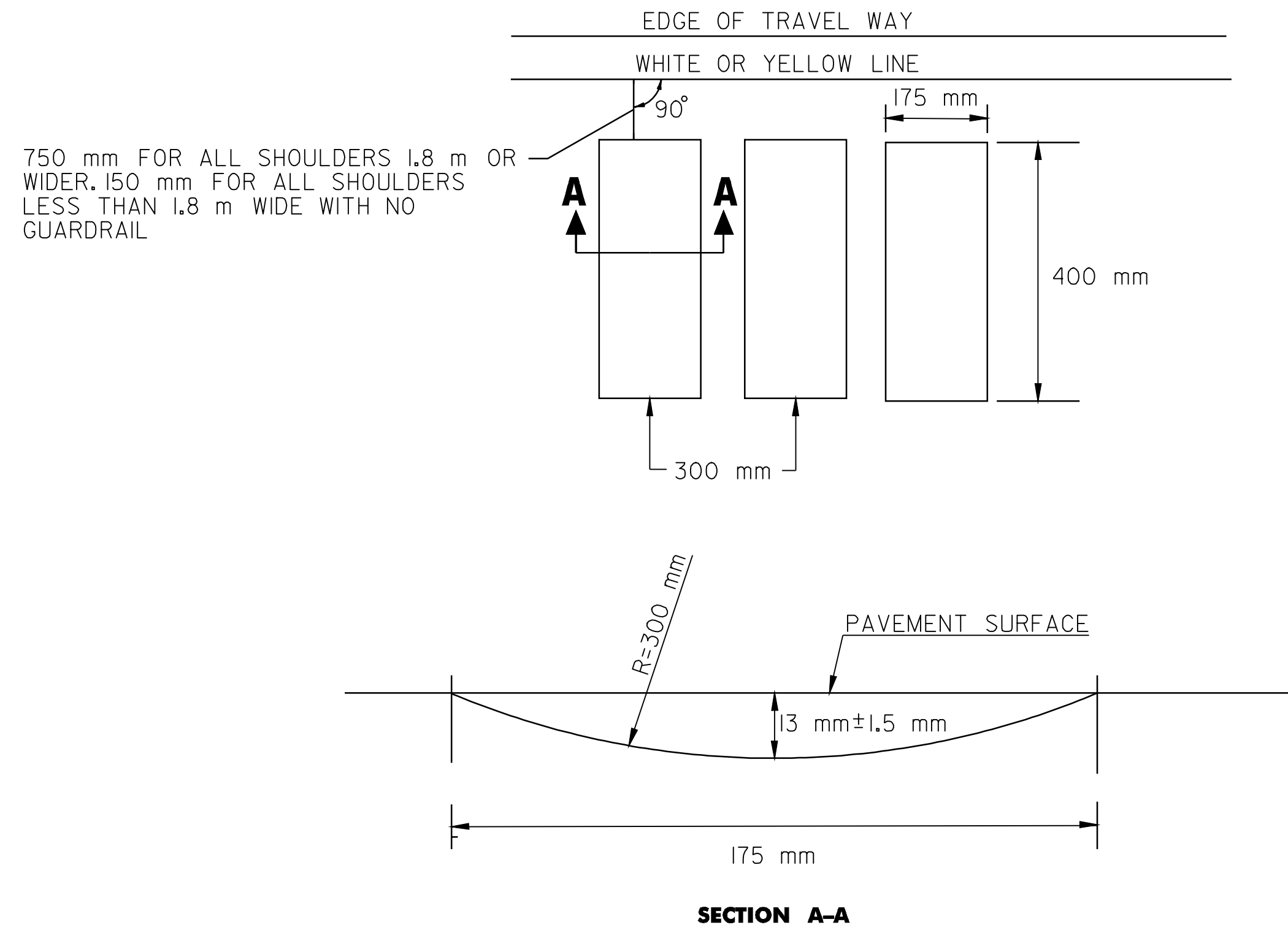
- DIRECTION OF TRAFFIC FLOW
- MILLED RUMBLE STRIPS

DATUM	
VERTICAL	N/A
HORIZONTAL	N/A

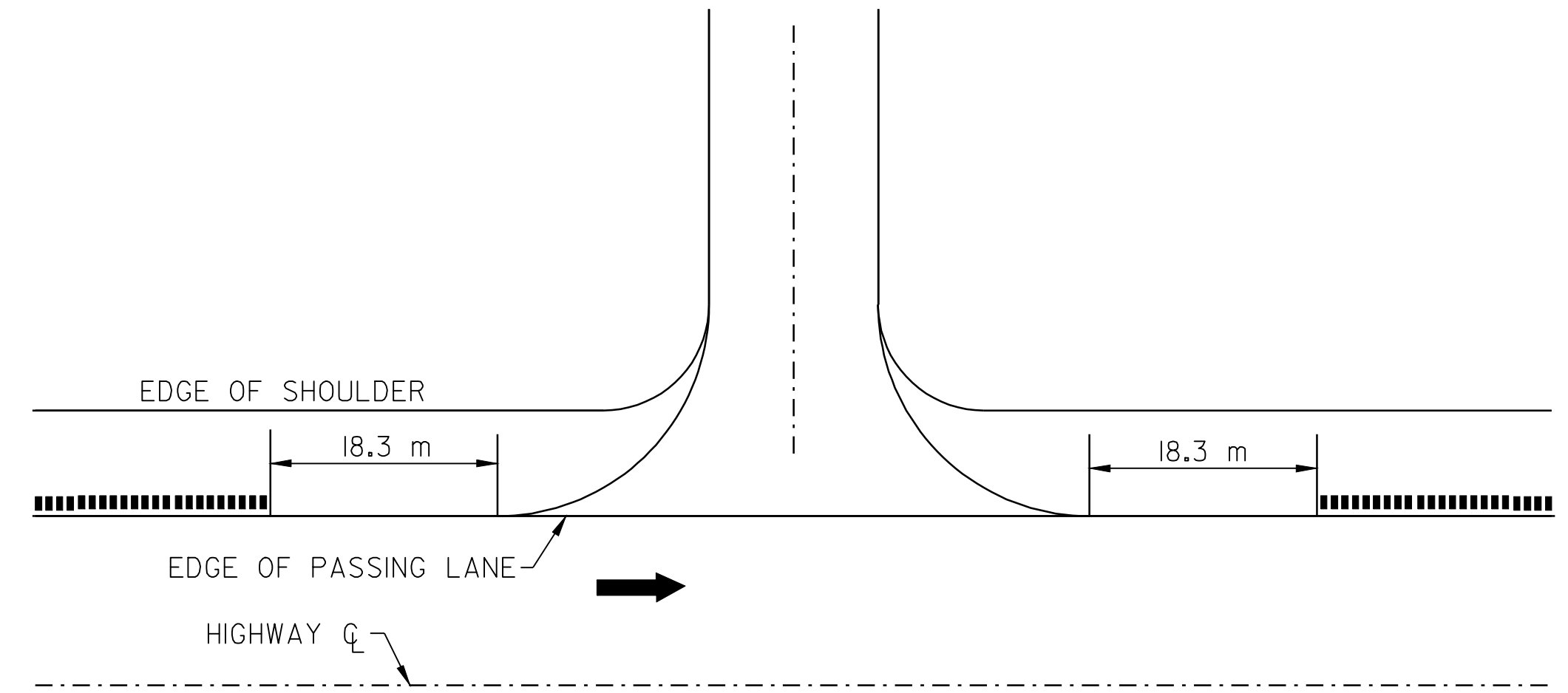
## MILLED RUMBLE STRIP DETAIL SHEET #1

DESIGNED BY	_____	DATE	10-02
DRAWN BY	_____	DATE	10-02
DESIGN FILE NO.	/pave/01a028/p01a028.dgn		
PRF FILE	p01a028rsl.i	DATE PLOTTED	01-JAN-2006 13:59
PROJ. NAME	HARTFORD - SHARON		
PROJ. NO.	AC IM 089-1(51)		
SHEET	17	OF	21 SHEETS

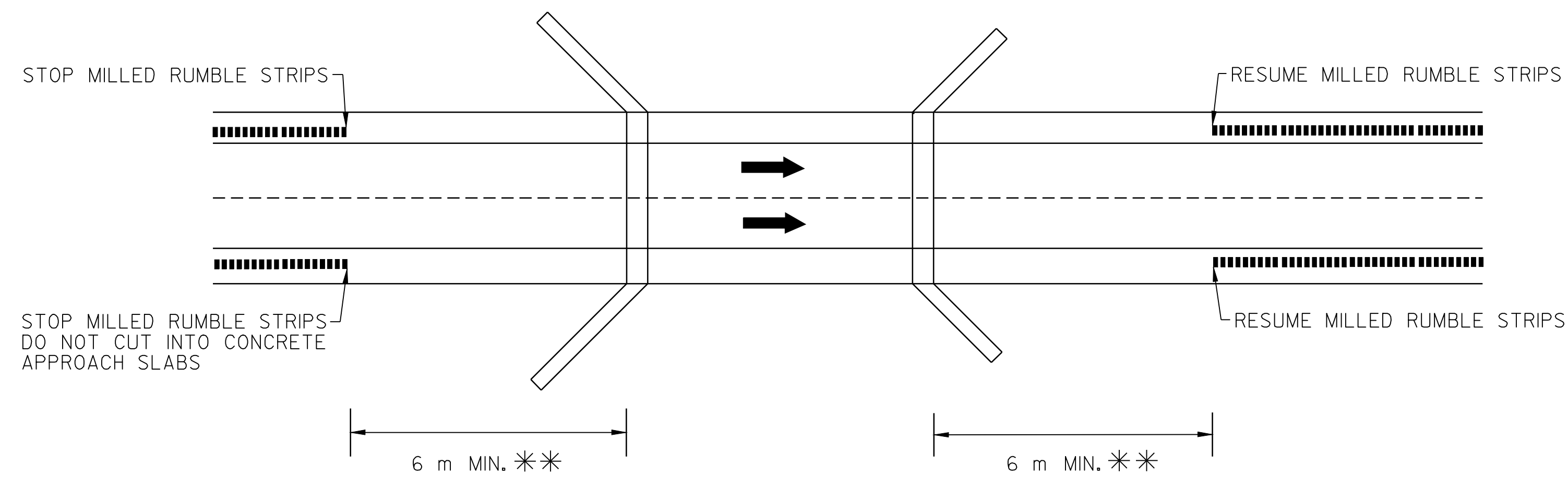
**TYPICAL MILLING DETAIL**



**U-TURN DETAIL**



**BRIDGE DETAIL**



\*\* BRIDGE RAIL WILL DETERMINE MINIMUM DISTANCE IN SOME CASES.

**NOTE:**

MILLED RUMBLE STRIPS WILL NOT BE REQUIRED IN GUARDRAIL AREAS ADJACENT TO THE 1.2 m SHOULDER.

**LEGEND**

- DIRECTION OF TRAFFIC FLOW
- MILLED RUMBLE STRIPS

DATUM	
VERTICAL	N/A
HORIZONTAL	N/A

**MILLED RUMBLE STRIP DETAIL SHEET #2**

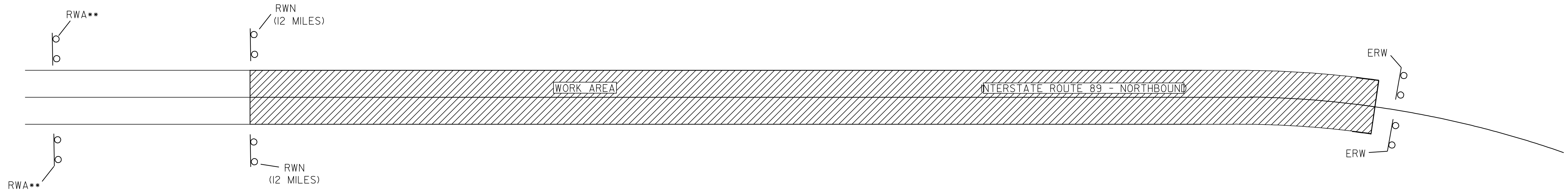
DESIGNED BY	DATE	10-02
DRAWN BY	DATE	10-02
DESIGN FILE NO.	/pave/01a028/p01a028.dgn	
PRF FILE	p01a028rs2.i	DATE PLOTTED: 1-JAN-2006 13:5
PROJ. NAME	HARTFORD - SHARON	
PROJ. NO.	AC IM 089-1(51)	
SHEET	18	OF 21 SHEETS

\*\*PLACE RWA SIGN ONE MILE PRIOR TO START OF TAPER.

REFER TO STANDARD E-103 FOR DETAILS OF CONSTRUCTION SIGN PACKAGE

# CONSTRUCTION APPROACH SIGNING

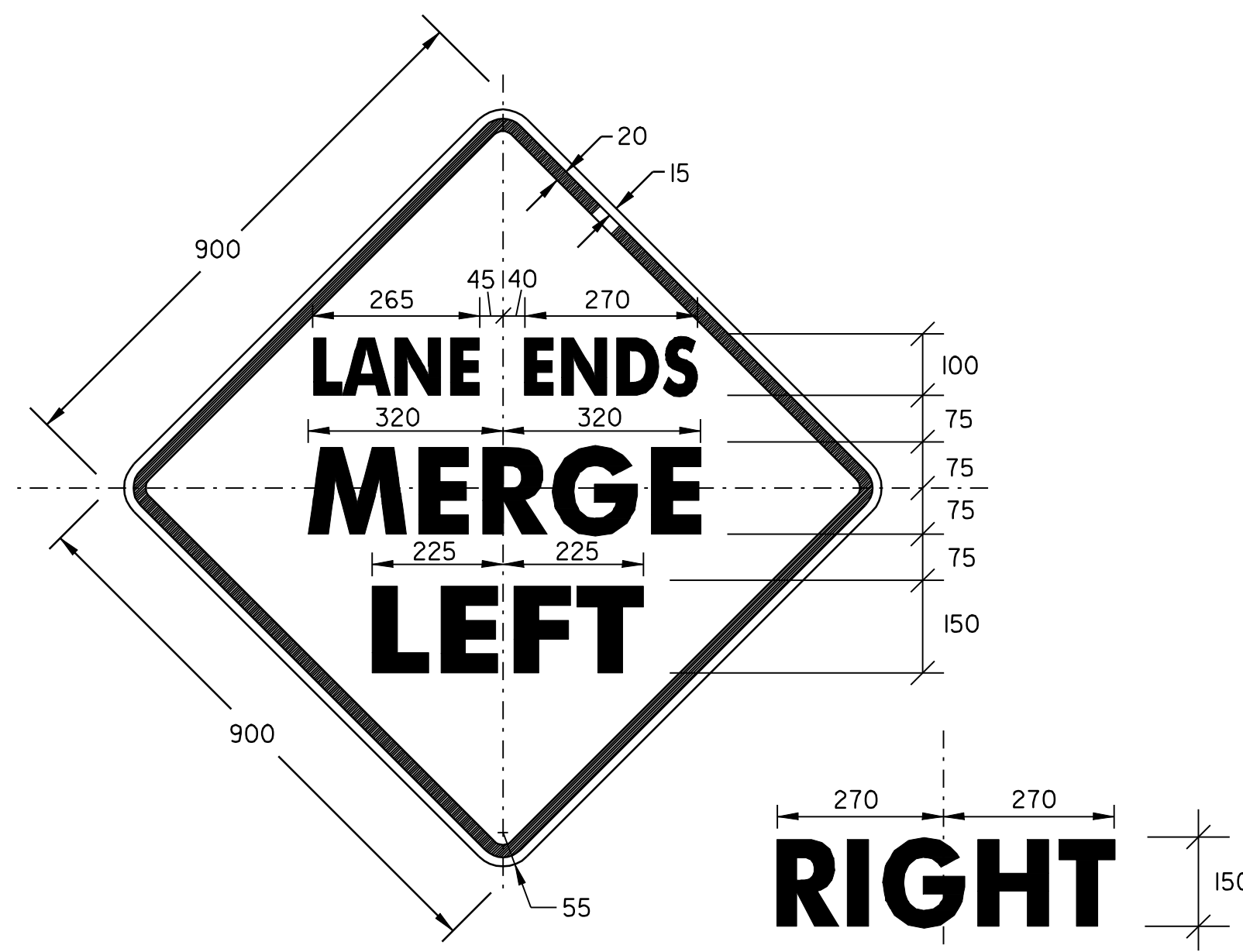
SEE STANDARDS E-100 AND E-103 FOR SIGN PLACEMENT



REFER TO NOTE 7 FOR THE PLACEMENT OF A CONSTRUCTION WARNING SIGN PACKAGE IN THE STATE OF NEW HAMPSHIRE.

**NOTES:**

- 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 FOR SEPARATELY BUT SHALL BE CONSIDERED INCIDENTAL TO ITEM 641.10, TRAFFIC CONTROL.
- ADDITIONAL RAMP SIGNING MAY BE REQUIRED AS DIRECTED BY THE RESIDENT ENGINEER.
- THE CONTRACTOR SHALL COVER THE CONSTRUCTION SIGNING FOR THE SOUTHBOUND LANES WHEN NO WORK IS EXPECTED TO OCCUR ADJACENT TO THE 1.2 METER SHOULDER, OR AS DIRECTED BY THE RESIDENT ENGINEER.
- THE BID PRICE FOR TRAFFIC CONTROL SHALL INCLUDE ARROW BOARDS, ALL APPROACH AND ON-PROJECT CONSTRUCTION SIGNING, BARRIERS, BARRELS, CONES, BARRICADES, TEMPORARY REGULATORY AND WARNING SIGNS, AND POSTS AS DETAILED IN STANDARD E-103, MAINLINE TRAFFIC CONTROL - DIVIDED HIGHWAY. ALL ADJUSTING, RELOCATING, AND REMOVING OF THESE DEVICES AS DIRECTED BY THE RESIDENT ENGINEER, SHALL ALSO BE INCLUDED. THE FOLLOWING ITEMS WILL BE PAID UNDER THEIR SPECIFIC BID PRICES:  
 646.614, 646.615 AND 646.64 - TEMPORARY PAVEMENT MARKINGS  
 630.10, AND 630.15 - UNIFORMED TRAFFIC OFFICERS AND FLAGGERS
- PORTABLE CHANGEABLE MESSAGE SIGNS WILL BE PROVIDED FOR USE ALONG THIS PROJECT. THE PLACEMENT OF THESE PORTABLE UNITS AS WELL AS THE MESSAGE WILL BE APPROVED BY THE RESIDENT ENGINEER. SUGGESTED LOCATIONS HAVE BEEN INCLUDED ON THIS SHEET. QUANTITIES WILL BE PAID UNDER ITEM 641.15, PORTABLE CHANGEABLE MESSAGE SIGNS.
- ON STANDARD E-103, SIGN #W4-2 MAY BE REPLACED WITH #W9-2:

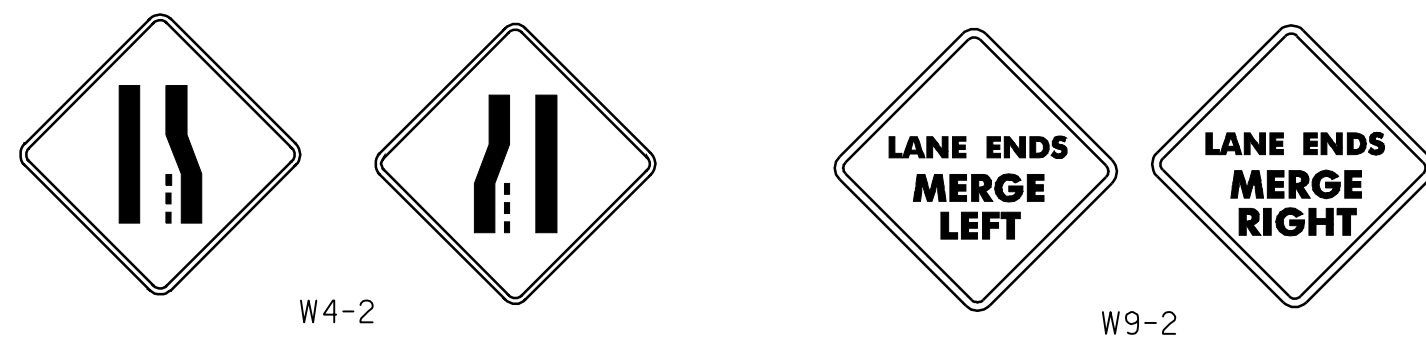


FOR CONSTRUCTION SIGNING AT INTERCHANGES SEE SHEETS 20 AND 21.

LIST OF CONSTRUCTION SIGNS

LOCATION	RWA	ERW	RWN
I-89 NORTHBOUND			
BEGIN PROJECT	2		2
END PROJECT		2	
I-89 SOUTHBOUND			
BEGIN PROJECT	2		2
END PROJECT		2	
**WHITE RIVER INTERCH.			
**QUECHEE INTERCHANGE			
TOTALS	4	4	4

\*\*WHITE RIVER INTERCHANGE REFER TO SHEET 20 FOR LOCATIONS  
 \*\*QUECHEE INTERCHANGE REFER TO SHEET 21 FOR LOCATIONS



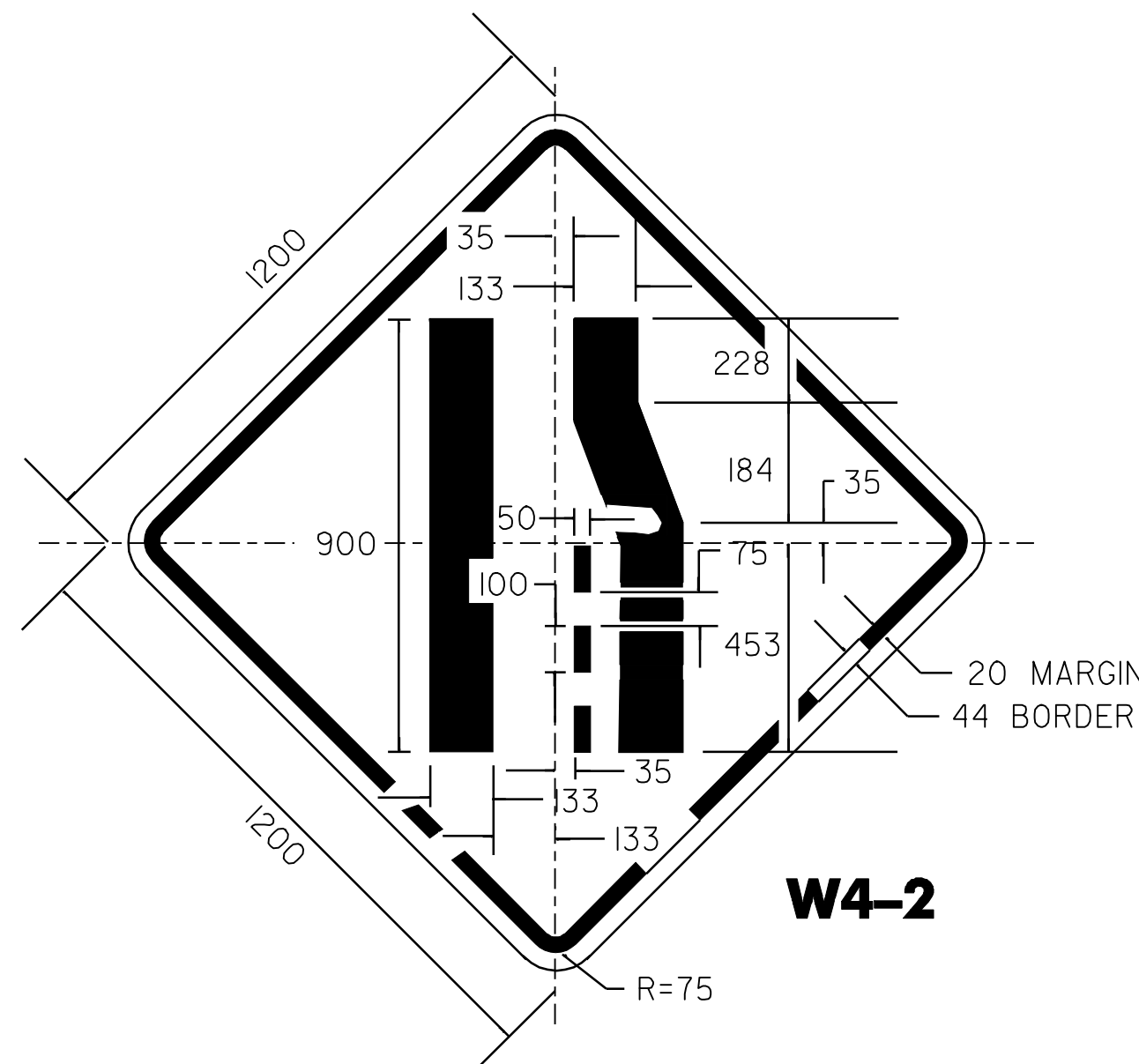
7. THE CONTRACTOR SHALL BE REQUIRED TO OBTAIN PERMITTING FROM THE NEW HAMPSHIRE STATE DEPARTMENT OF TRANSPORTATION FOR THE PLACEMENT OF AN MUTCD COMPLIANT CONSTRUCTION WARNING SIGN PACKAGE AND FOR THE PLACEMENT OF PORTABLE MESSAGE SIGNS WITHIN THE STATE OF NEW HAMPSHIRE. THE CONTACT PERSON FOR THIS SHALL BE:

ALAN HANSCOM, DISTRICT #2 ADMINISTRATOR  
 INTERSTATE I-89 EXIT # 16  
 P.O. BOX 232  
 LEBANON, NH 03766  
 (603) 448-2654

8. THE STATE OF NEW HAMPSHIRE HAS A PLANNED PAVING PROJECT IN THIS VICINITY WHICH COINCIDES WITH THIS CONSTRUCTION PROJECT. THE CONTRACTOR SHALL COORDINATE WITH THE PREVIOUSLY MENTIONED NHDOT DISTRICT #2 ADMINISTRATOR TO AVOID CONFLICTS AND CONFUSION IN THE SIGN PACKAGES.

PROPOSED LOCATIONS FOR PORTABLE CHANGEABLE MESSAGE SIGNS

- I-89 NB (LOCATED IN NEW HAMPSHIRE PRIOR TO INTERCHANGE 20 IN LEBANON)
- I-89 NB ON-RAMP AT INTERCHANGE 20 IN LEBANON
- I-89 NB AT BEGINNING OF PROJECT
- I-91NB PRIOR TO RAMP B TO I-89 NB
- I-91SB PRIOR TO RAMP H TO I-89 NB
- I-89 SB OFF-RAMP C (PRIOR TO RAMP E LEADING TO I-91SB)
- U. S. ROUTE 4 EAST OF QUECHEE INTERCHANGE
- U. S. ROUTE 4 WEST OF QUECHEE INTERCHANGE



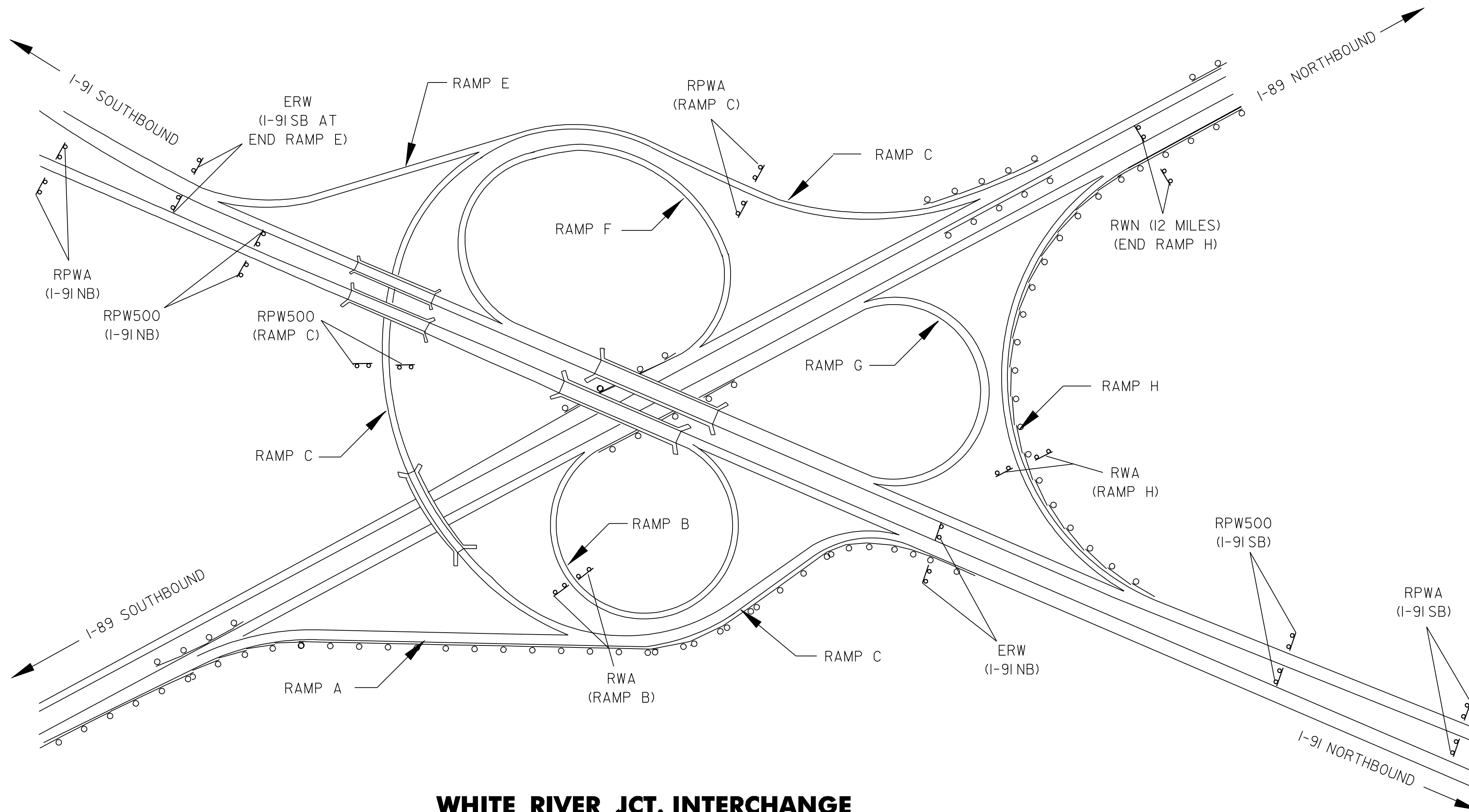
- LEGEND**
- RWA = ROAD WORK AHEAD
  - RW500 = ROAD WORK 500 FEET
  - RWN = ROAD WORK NEXT 12 MILES (8 MILES AT THE END OF RAMP A AT THE QUECHEE INTERCHANGE)
  - ERW = END ROAD WORK
  - RPWA = RAMP WORK AHEAD
  - RPW500 = RAMP WORK 500 FEET
- NOTE: ALL DIMENSIONS IN MILLIMETERS UNLESS NOTED OTHERWISE.

<h2>CONSTRUCTION APPROACH SIGNING</h2> <h3>DETAIL # 1</h3>	DESIGNED BY <u>    LFW    </u> DATE <u>10-02</u>
	DRAWN BY <u>    LFW    </u> DATE <u>10-02</u>
	DESIGN FILE NO. <u>./pave/01a028/p01a028.dgn</u>
	PRF FILE <u>p01a028csl.i</u> DATE <u>10-02-06</u>
	PLOT FILE <u>10-02-06</u>
PROJ. NAME <b>HARTFORD - SHARON</b>	
PROJ. NO. <b>AC IM 089-1(51)</b>	
SHEET <b>19</b> OF <b>21</b> SHEETS	

WHEN RAMP WORK IS TAKING PLACE THE CONTRACTOR SHALL INSTALL A CONSTRUCTION SIGN PACKAGE ON I-91 NB AND SB IN ACCORDANCE WITH STANDARD E-103.

# CONSTRUCTION APPROACH SIGNING

SEE STANDARDS E-100 AND E-103 FOR SIGN PLACEMENT



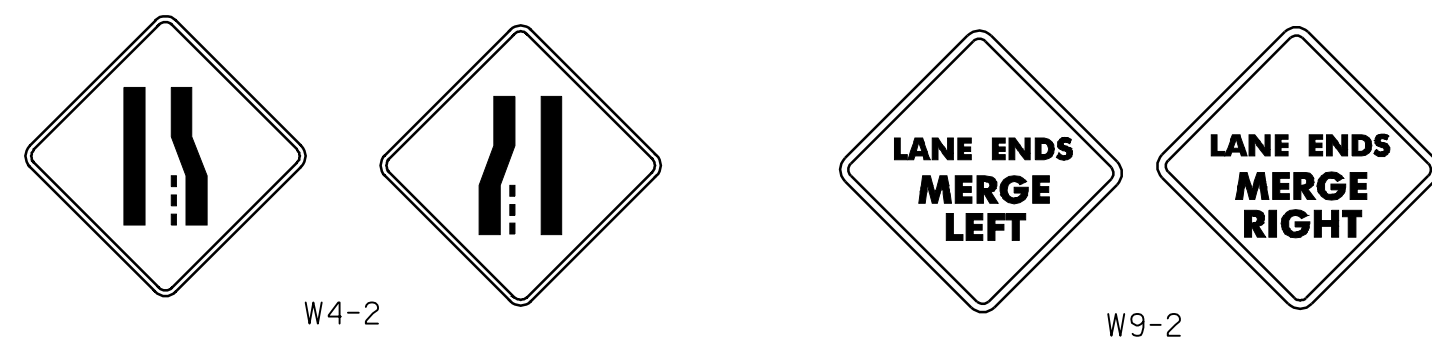
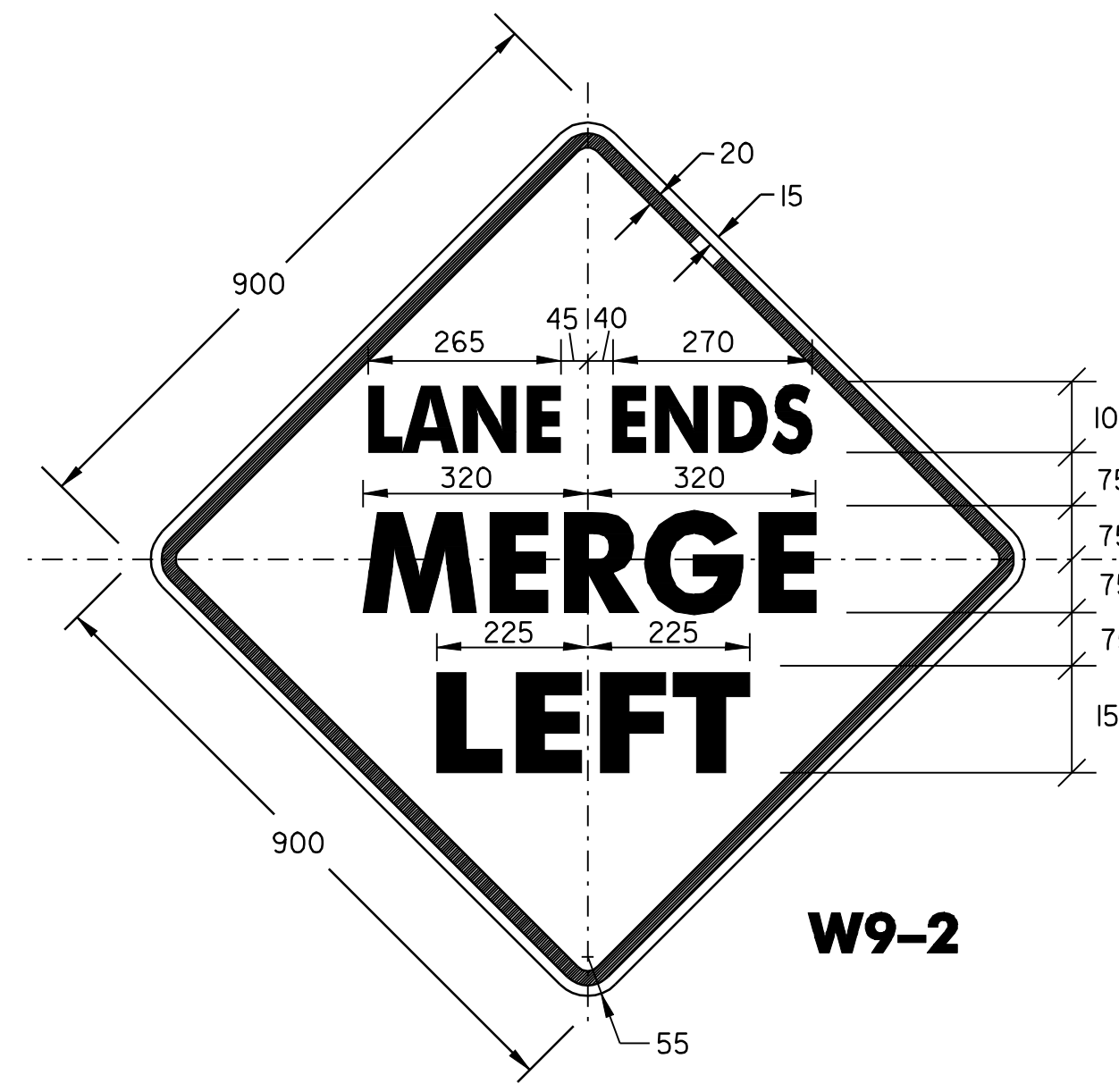
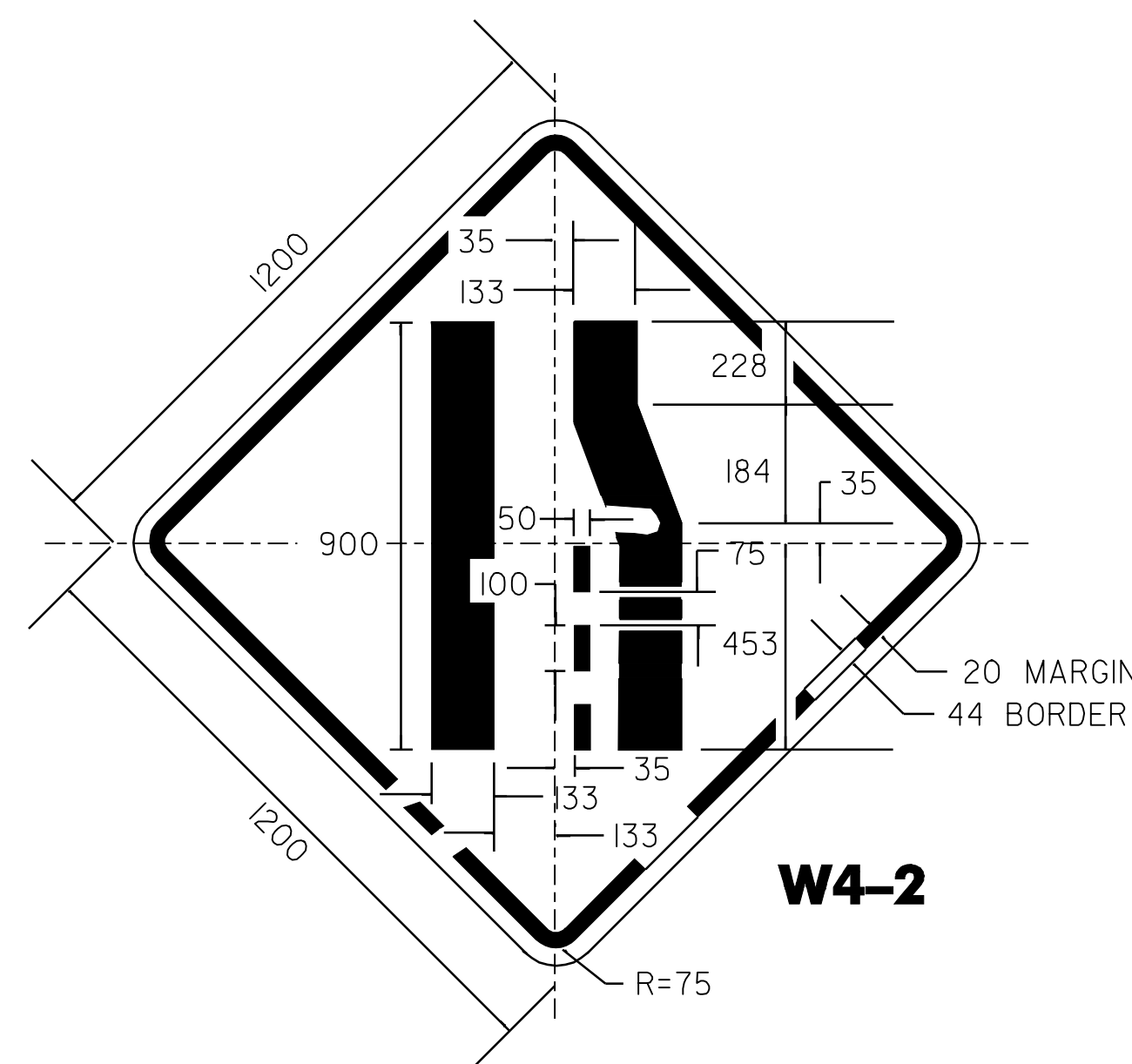
LIST OF CONSTRUCTION SIGNS AT THE WHITE RIVER JCT. INTERCHANGE

LOCATION	RWA	ERW	RWN	RPWA	RPW500
I-91 NORTHBOUND		2		2	2
I-91 SOUTHBOUND		2		2	2
RAMP B	2				
RAMP C				2	2
RAMP H	2		2		
TOTALS	4	4	2	6	6

## WHITE RIVER JCT. INTERCHANGE

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 FOR SEPARATELY BUT SHALL BE CONSIDERED INCIDENTAL TO ITEM 641.10, TRAFFIC CONTROL.
2. ADDITIONAL RAMP SIGNING MAY BE REQUIRED AS DIRECTED BY THE RESIDENT ENGINEER.
3. THE CONTRACTOR SHALL COVER THE CONSTRUCTION SIGNING FOR THE SOUTHBOUND LANES WHEN NO WORK IS EXPECTED TO OCCUR ADJACENT TO THE 1.2 METER SHOULDER, OR AS DIRECTED BY THE RESIDENT ENGINEER.
4. THE BID PRICE FOR TRAFFIC CONTROL SHALL INCLUDE ARROW BOARDS, ALL APPROACH AND ON-PROJECT CONSTRUCTION SIGNING, BARRIERS, BARRELS, CONES, BARRICADES, TEMPORARY REGULATORY AND WARNING SIGNS, AND POSTS AS DETAILED IN STANDARD E-103, MAINLINE TRAFFIC CONTROL - DIVIDED HIGHWAY. ALL ADJUSTING, RELOCATING, AND REMOVING OF THESE DEVICES AS DIRECTED BY THE RESIDENT ENGINEER, SHALL ALSO BE INCLUDED. THE FOLLOWING ITEMS WILL BE PAID UNDER THEIR SPECIFIC BID PRICES:  
 646.614, 646.615 AND 646.64 - TEMPORARY PAVEMENT MARKINGS  
 630.10, AND 630.15 - UNIFORMED TRAFFIC OFFICERS AND FLAGGERS
5. PORTABLE CHANGEABLE MESSAGE SIGNS WILL BE PROVIDED FOR USE ALONG THIS PROJECT. THE PLACEMENT OF THESE PORTABLE UNITS AS WELL AS THE MESSAGE WILL BE APPROVED BY THE RESIDENT ENGINEER. SUGGESTED LOCATIONS HAVE BEEN INCLUDED ON THIS SHEET. QUANTITIES WILL BE PAID UNDER ITEM 641.15, PORTABLE CHANGEABLE MESSAGE SIGNS.
6. ON STANDARD E-103, SIGN #W4-2 MAY BE REPLACED WITH #W9-2:



**RIGHT**

"LANE ENDS" - C  
 "MERGE" - D (101% SPACING)  
 "LEFT" - D

- LEGEND**
- RWA = ROAD WORK AHEAD
  - RW500 = ROAD WORK 500 FEET
  - RWN = ROAD WORK NEXT 12 MILES
  - ERW = END ROAD WORK
  - RPWA = RAMP WORK AHEAD
  - RPW500 = RAMP WORK 500 FEET
- NOTE: ALL DIMENSIONS IN MILLIMETERS UNLESS NOTED OTHERWISE.

## CONSTRUCTION APPROACH SIGNING DETAIL # 2

DESIGNED BY LFW DATE 10-02  
 DRAWN BY LFW DATE 10-02  
 DESIGN FILE NO. /pave/01a028/p01a028.dgn  
 PRF FILE p01a028cs2.1 DATE  
 FILE PLOTTE#1-JAN-2006 13:  
 PROJ. NAME HARTFORD - SHARON  
 PROJ. NO. AC IM 089-1(51)  
 SHEET 20 OF 21 SHEETS

# CONSTRUCTION APPROACH SIGNING

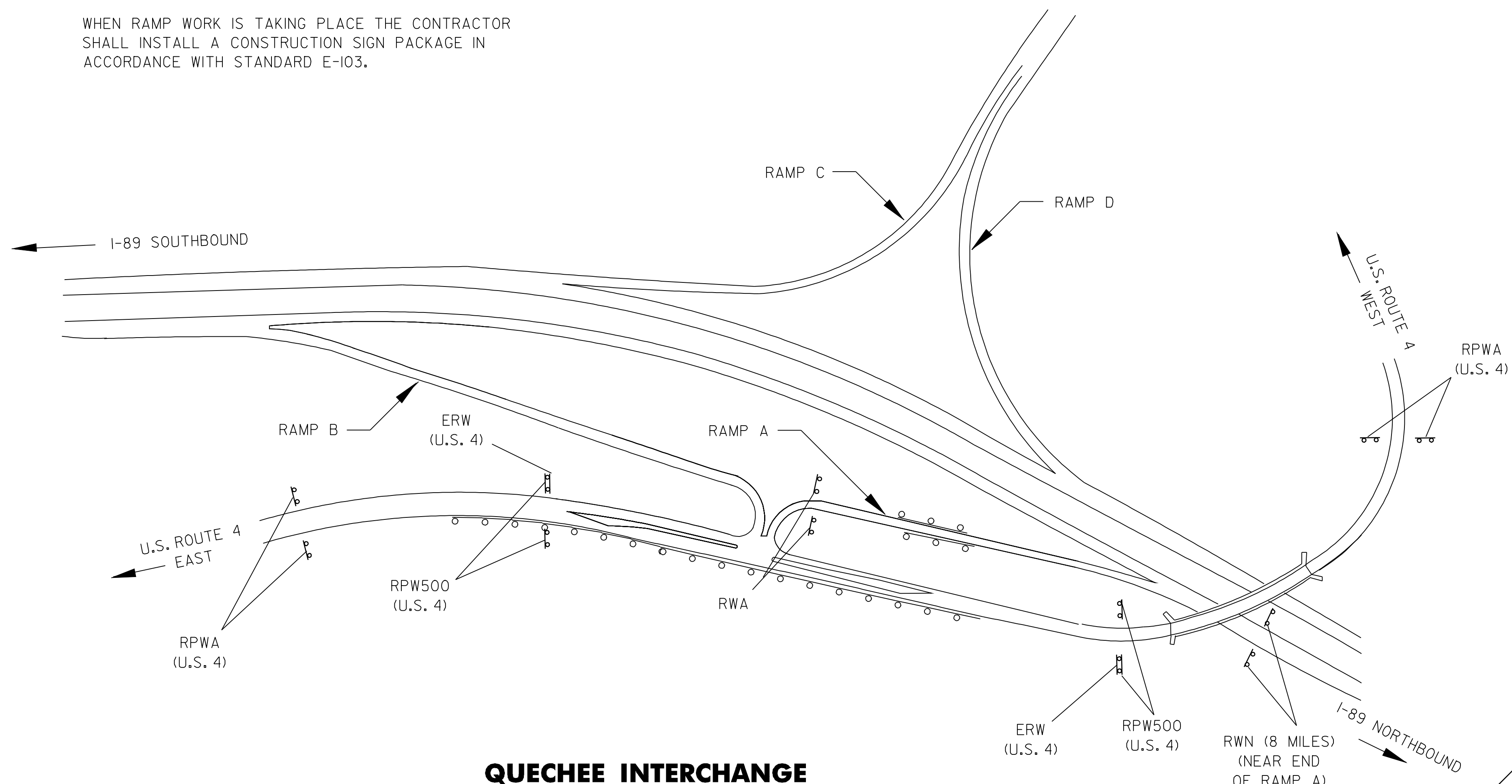
SEE STANDARDS E-100 AND E-103 FOR SIGN PLACEMENT



WHEN RAMP WORK IS TAKING PLACE THE CONTRACTOR SHALL INSTALL A CONSTRUCTION SIGN PACKAGE IN ACCORDANCE WITH STANDARD E-103.

**NOTES:**

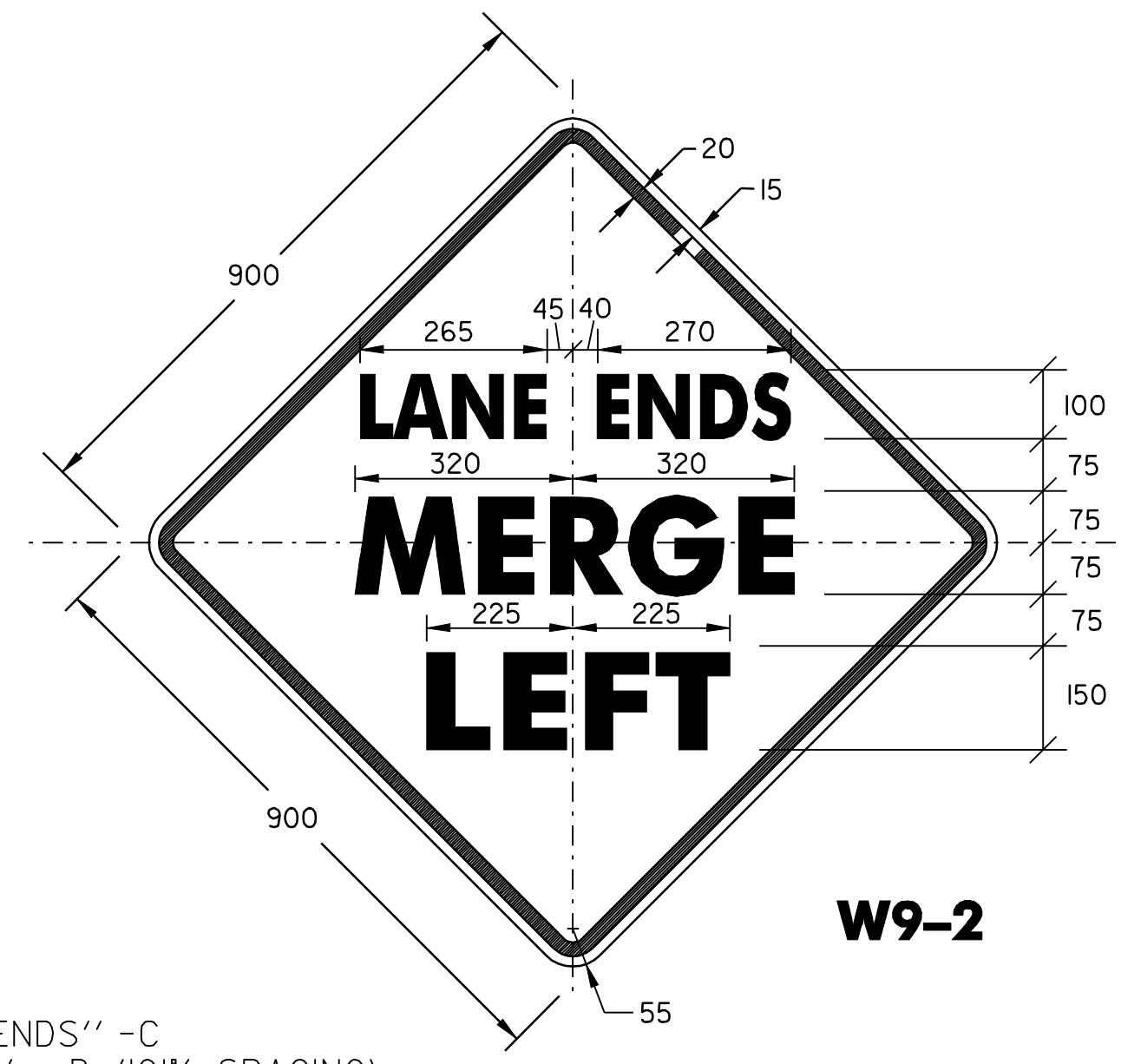
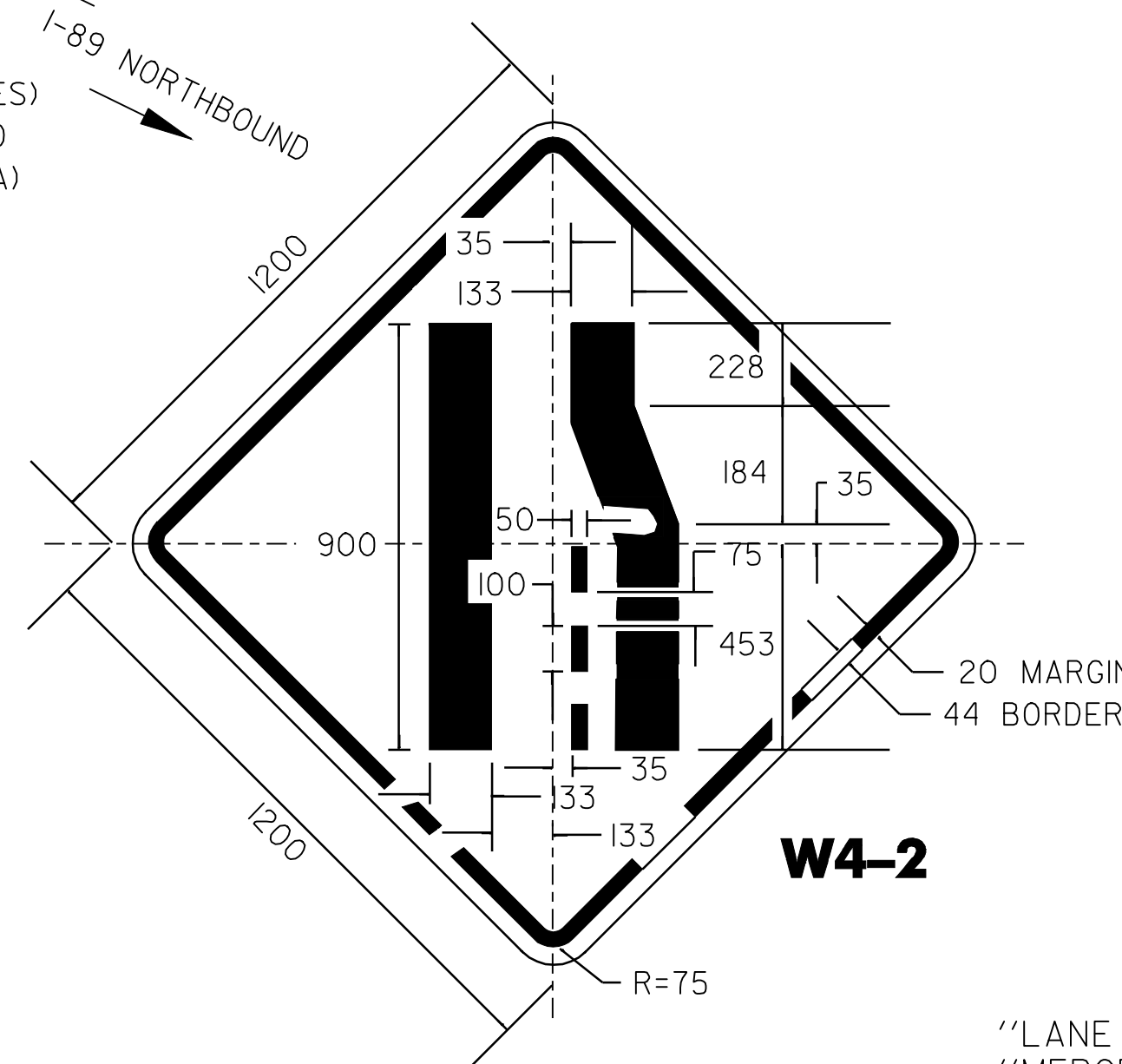
1. THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN FOR APPROVAL PRIOR TO THE START OF CONSTRUCTION. THE COST OF PREPARING THIS PLAN (AND MAKING CHANGES IF NECESSARY) SHALL NOT BE PAID FOR SEPARATELY BUT SHALL BE CONSIDERED INCIDENTAL TO ITEM 641.10, TRAFFIC CONTROL.
2. ADDITIONAL RAMP SIGNING MAY BE REQUIRED AS DIRECTED BY THE RESIDENT ENGINEER.
3. THE CONTRACTOR SHALL COVER THE CONSTRUCTION SIGNING FOR THE SOUTHBOUND LANES WHEN NO WORK IS EXPECTED TO OCCUR ADJACENT TO THE 1.2 METER SHOULDER, OR AS DIRECTED BY THE RESIDENT ENGINEER.
4. THE BID PRICE FOR TRAFFIC CONTROL SHALL INCLUDE ARROW BOARDS, ALL APPROACH AND ON-PROJECT CONSTRUCTION SIGNING, BARRIERS, BARRELS, CONES, BARRICADES, TEMPORARY REGULATORY AND WARNING SIGNS, AND POSTS AS DETAILED IN STANDARD E-103, MAINLINE TRAFFIC CONTROL - DIVIDED HIGHWAY. ALL ADJUSTING, RELOCATING, AND REMOVING OF THESE DEVICES AS DIRECTED BY THE RESIDENT ENGINEER, SHALL ALSO BE INCLUDED. THE FOLLOWING ITEMS WILL BE PAID UNDER THEIR SPECIFIC BID PRICES:  
646.614, 646.615 AND 646.64 - TEMPORARY PAVEMENT MARKINGS  
630.10, AND 630.15 - UNIFORMED TRAFFIC OFFICERS AND FLAGGERS
5. PORTABLE CHANGEABLE MESSAGE SIGNS WILL BE PROVIDED FOR USE ALONG THIS PROJECT. THE PLACEMENT OF THESE PORTABLE UNITS AS WELL AS THE MESSAGE WILL BE APPROVED BY THE RESIDENT ENGINEER. SUGGESTED LOCATIONS HAVE BEEN INCLUDED ON THIS SHEET. QUANTITIES WILL BE PAID UNDER ITEM 641.15, PORTABLE CHANGEABLE MESSAGE SIGNS.
6. ON STANDARD E-103, SIGN #W4-2 MAY BE REPLACED WITH #W9-2:



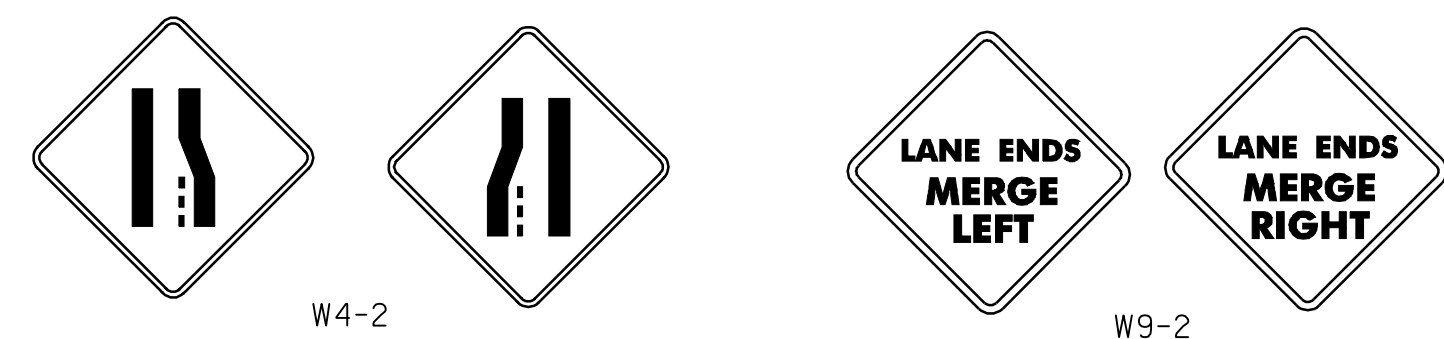
## QUECHEE INTERCHANGE

LIST OF CONSTRUCTION SIGNS AT THE QUECHEE INTERCHANGE

LOCATION	RWA	RWN	ERW	RPWA	RPW500
RAMP A	2	2			
U.S. ROUTE 4			2	4	4
TOTALS	2	2	2	4	4



"LANE ENDS" - C  
"MERGE" - D (101% SPACING)  
"LEFT" - D



**LEGEND**

- RWA = ROAD WORK AHEAD
  - RPW500 = ROAD WORK 500 FEET
  - RWN = ROAD WORK NEXT 12 MILES (8 MILES AT THE END OF RAMP A AT THE QUECHEE INTERCHANGE)
  - ERW = END ROAD WORK
  - RPWA = RAMP WORK AHEAD
  - RPW500 = RAMP WORK 500 FEET
- NOTE: ALL DIMENSIONS IN MILLIMETERS UNLESS NOTED OTHERWISE.

**CONSTRUCTION APPROACH SIGNING**

**DETAIL # 3**

DESIGNED BY LFW DATE 10-02

DRAWN BY LFW DATE 10-02

DESIGN FILE NO. /pave/01a028/p01a028.dgn

PRF FILE p01a028cs3.1 DATE 31-JAN-2006 13:5

PROJ. NAME **HARTFORD - SHARON**

PROJ. NO. **AC IM 089-1(51)**

SHEET **21** OF **21** SHEETS