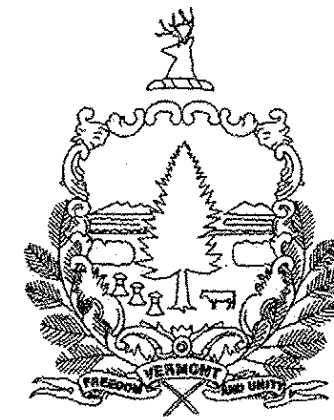


INDEX OF SHEETS  
SEE SHEET 2

# STATE OF VERMONT AGENCY OF TRANSPORTATION



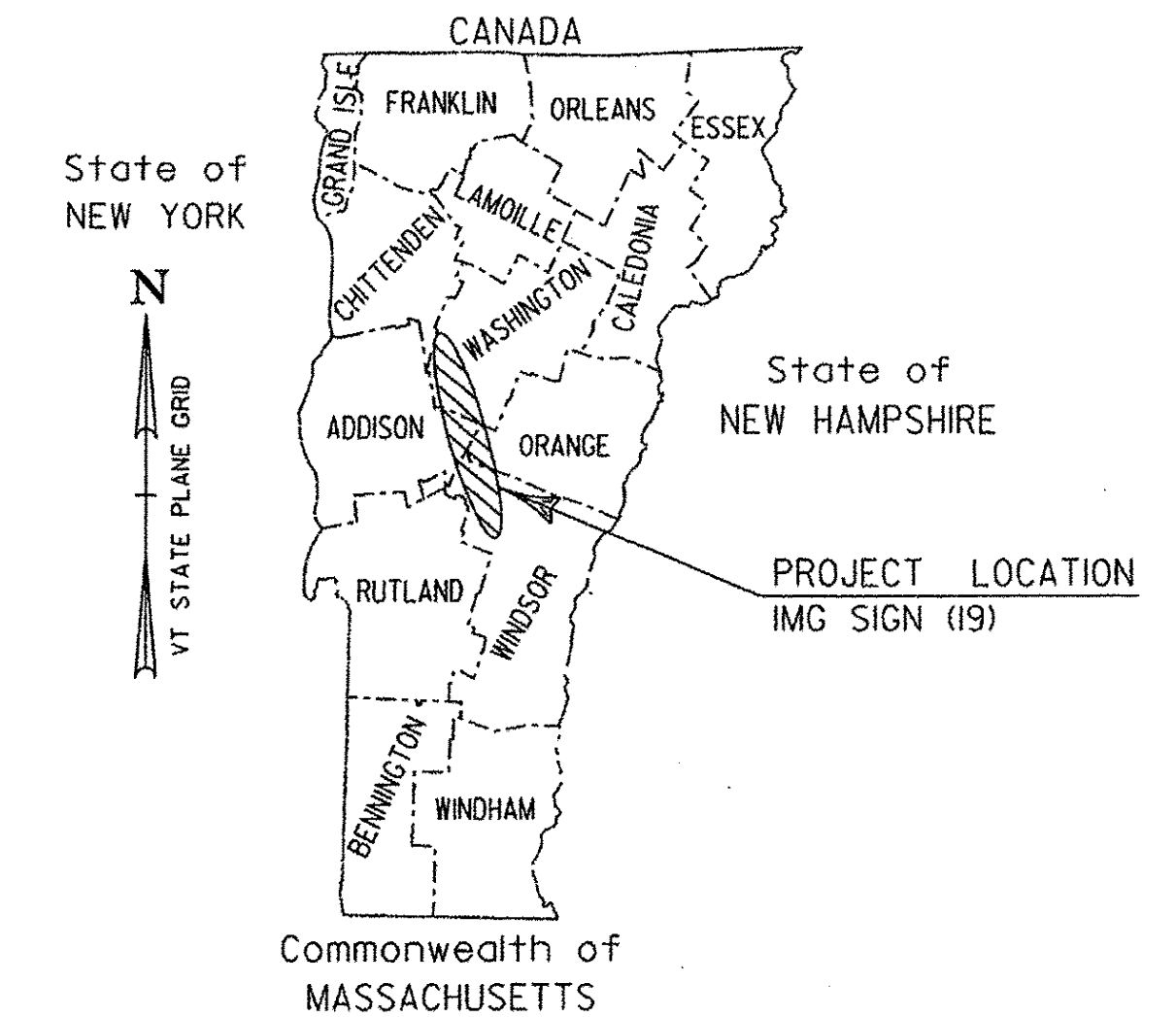
## PROPOSED IMPROVEMENT TOWNS OF ROYALTON, BETHEL, RANDOLPH, BROOKFIELD, WILLIAMSTOWN, BERLIN, MONTPELIER & MIDDLESEX COUNTIES OF WINDSOR, ORANGE & WASHINGTON

### VERMONT INTERSTATE ROUTE 89

BEGINNING AT THE ROYALTON EXIT 3 INTERCHANGE ON INTERSTATE 89 AT MILE MARKER 22.000 AND  
EXTENDING NORTHERLY FOR BOTH THE NORTHBOUND AND SOUTHBOUND LANES A DISTANCE OF 38.880 MILES  
AND ENDING AT THE MIDDLESEX-WATERBURY TOWN LINE AT MILE MARKER 60.880.

LENGTH OF ROADWAY = 38.880 MILES  
LENGTH OF PROJECT = 38.880 MILES

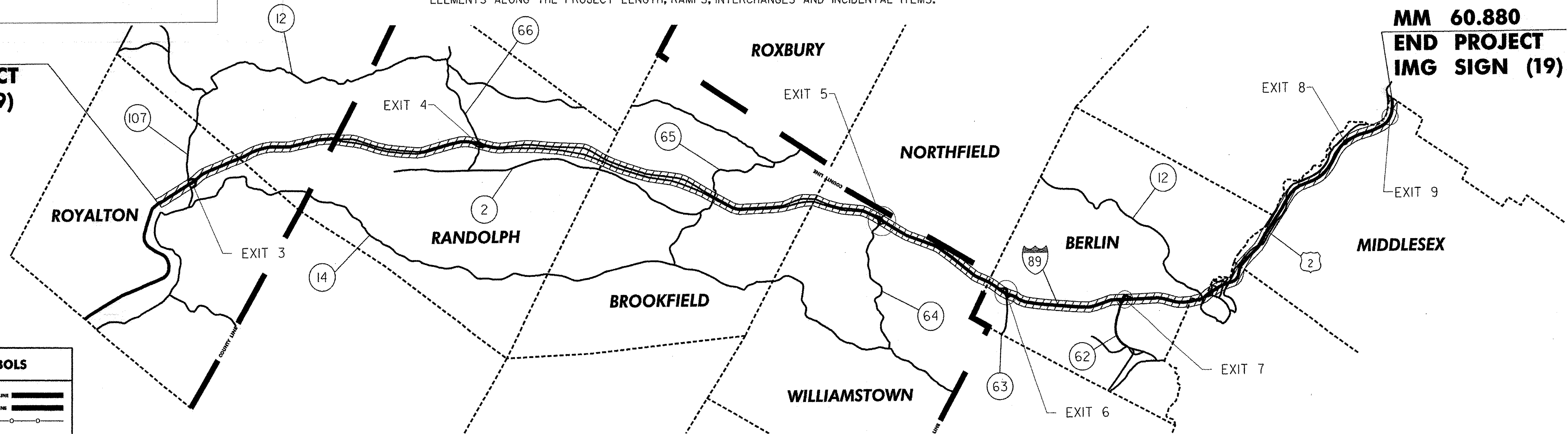
WORK TO BE PERFORMED UNDER THIS PROJECT INCLUDES THE REMOVAL OF EXISTING SIGNS  
AND POSTS AND THE INSTALLATION OF NEW SIGNS AND SIGN POSTS AND ASSOCIATED  
ELEMENTS ALONG THE PROJECT LENGTH, RAMPS, INTERCHANGES AND INCIDENTAL ITEMS.



RECORD PLANS	
CONTRACTOR:	CCS CONSTRUCTORS LLC - MORRISVILLE, VT
RESIDENT ENGINEER:	AL JONES
CONSTRUCTION BEGAN:	APRIL 6, 2010
CONSTRUCTION COMPLETE:	MAY 23, 2011
RECORD PLANS BY:	AL JONES & JENNA HYDE
I HEREBY CERTIFY THAT ALL THE CONSTRUCTION REQUIRED BY THIS SET OF DRAWINGS HAS BEEN ACCOMPLISHED AS INDICATED HEREIN.	
BY:	<i>Al Jones</i> RESIDENT ENGINEER
DATE:	3/29/13
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.	

**MM 22.000  
BEGIN PROJECT  
IMG SIGN (19)**

**MM 60.880  
END PROJECT  
IMG SIGN (19)**

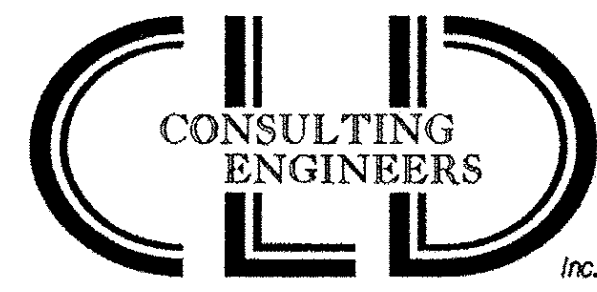


**CONVENTIONAL SYMBOLS**

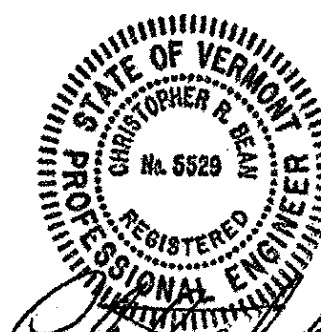
COUNTY LINE		COUNTY LINE
TOWN LINE		TOWN LINE
LIMITS OF ACCESS		
POINT OF ACCESS		
FENCE LINE		
STONE WALL		
TRAVELED WAY		
GUARD RAIL		
RAILROAD		
SURVEY LINE		
CULVERT		
POWER POLE		
TELEPHONE POLE		
TREES		
CONTROL OF ACCESS		
PROPERTY LINE		
R.O.W. TAKING LINE		
SLOPE RIGHTS		
TOP OF CUT		
TOE OF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

SURVEYED BY : N/A  
SURVEYED DATE : N/A

DATUM  
VERTICAL N/A  
HORIZONTAL N/A



540 Commercial Street Manchester, NH 03101  
(603) 668-8223 • Fax: (603) 668-8802  
email: oide@cdengineering.com • www.cdengineering.com  
Maine • New Hampshire • Vermont



*Al Jones*  
SCALE IN MILES  
0 2

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

DIRECTOR OF PROGRAM DEVELOPMENT	APPROVED: <i>Paula Fisher</i> DATE: 8-19-09
PROJECT MANAGER :	AMY GAMBLE
PROJECT NAME :	ROYALTON - MIDDLESEX
PROJECT NUMBER :	IMG SIGN (19)
SHEET 1	OF 163 SHEETS

# INDEX OF SHEETS

## INDEX OF STANDARD PLANS

STD	DATE	DESCRIPTION
E-100	1/2/2004	CONSTRUCTION APPROACH SIGNS
E-100A	1/2/2004	SIDE ROAD CONSTRUCTION APPROACH SIGNS
E-101	5/30/2003	CONSTRUCTION SIGN DETAILS
E-102	6/30/2003	CONSTRUCTION SIGN DETAILS
E-102A	5/1/2004	CONSTRUCTION SIGN DETAILS
E-103	3/1/2004	MAINLINE TRAFFIC CONTROL DIVIDED HIGHWAY ONE LANE CLOSED
E-106	3/1/2004	TRAFFIC CONTROL MISCELLANEOUS DETAILS
E-107	6/30/2003	DELINEATION, BARRICADES AND DETOURS FOR U-TURNS ON DIVIDED HIGHWAY
E-107A	6/8/2009	BREAKAWAY BARRICADE DETAILS
E-110	8/8/1995	MAJOR MAINTENANCE OPERATION LANE CLOSURE
E-120	8/8/1995	STANDARD SIGN PLACEMENT - EXPRESSWAY AND FREEWAY
E-121	8/8/1995	STANDARD SIGN PLACEMENT - CONVENTIONAL ROAD
E-123	3/16/2004	GUIDE SIGN PLACEMENT - MISCELLANEOUS DETAILS
E-126	2/1/2000	TYPICAL FREEWAY INTERCHANGE SIGNING
E-127	8/8/1995	ROUTE MARKINGS AT RURAL INTERSECTIONS
E-130	8/8/1995	TYPE "B" GUIDE SIGN ATTACHMENT DETAILS
E-131	8/8/1995	GUIDE SIGN DETAILS
E-132	8/18/1995	GENERAL MOTORIST SERVICE SIGN DETAILS
E-133	8/8/1995	SERVICE SIGN DETAILS
E-135	8/18/1995	INTERSTATE ROUTE MARKER SIGN DETAIL
E-136A	8/8/1995	U.S. ROUTE MARKER SIGN DETAILS
E-136B	8/8/1995	STATE ROUTE MARKER SIGN DETAILS
E-139	5/1/2004	MILEMARKER DETAILS - INTERSTATE
E-141	9/20/1995	REGULATORY SIGN DETAILS
E-142	9/20/1995	REGULATORY SIGN DETAILS
E-143	6/15/2004	REGULATORY SIGN DETAILS
E-144	3/29/1999	REGULATORY SIGN DETAILS
E-145A	12/23/1994	REGULATORY SIGN DETAILS - LANE USE CONTROL SIGNS (TWO AND FOUR LANE APPROACHES)
E-145B	12/23/1994	REGULATORY SIGN DETAILS - LANE USE CONTROL SIGNS (THREE LANE APPROACHES)
E-146	9/20/1995	REGULATORY SIGN DETAILS
E-150	5/1/2004	WARNING SIGN DETAILS
E-151	5/1/2004	WARNING SIGN DETAILS
E-152	5/1/2004	WARNING SIGN DETAILS
E-153	5/1/2004	WARNING SIGN DETAILS
E-154	5/1/2004	WARNING SIGN DETAILS
E-155	5/1/2004	WARNING SIGN DETAILS
E-161	8/18/1995	W-SHAPED STEEL SIGN POST
E-162	5/20/1999	TUBULAR ALUMINUM SIGN POST
E-163	5/20/1999	TUBULAR STEEL SIGN POST
E-164	6/8/2009	SQUARE STEEL SIGN POST
E-197	4/1/2005	DELINEATOR PLACEMENT TYPICAL
E-199	4/1/2005	FREEWAY-EXPRESSWAY DELINEATOR AND MILEPOST MOUNTING ON BRIDGE RAIL
G-1	1/3/2000	STEEL BEAM GUARDRAIL WITH STEEL POSTS, STEEL BEAM GUARDRAIL WITH WOOD POSTS
G-1d	1/3/2000	STEEL BEAM GUARDRAIL APPROACH AND TRAILING END TERMINAL, ANCHOR FOR STEEL BEAM RAIL, STEEL BEAM MEDIAN BARRIER
G-19	11/15/2002	GENERIC PLANS FOR GUARDRAIL END TERMINALS

## INDEX OF SHEETS

SHT	DESCRIPTION
1	TITLE SHEET
2	INDEX OF SHEETS
3	GENERAL NOTES AND MISCELLANEOUS DETAILS
4	DELINEATOR AND MILEPOST DETAILS
5	QUANTITY SHEET
6	INTENTIONALLY LEFT BLANK
7-14	EXISTING SIGNS - MAINLINE
15-24	EXISTING SIGNS - INTERCHANGE/REST AREA
25-32	NEW SIGNS - MAINLINE
33-42	NEW SIGNS - INTERCHANGE/REST AREA
43-52	DELINEATOR LAYOUTS
53-130	TRAFFIC SIGN SUMMARY SHEETS
131	INTENTIONALLY LEFT BLANK
132-146	SIGN DETAIL SHEETS
147-153	CROSS SECTIONS
154	OVERHEAD SIGN SUPPORT NOTES
155-157	OVERHEAD TRAFFIC SIGN BRIDGE / FOOTING DETAIL SHEETS
158-163	TRAFFIC CONTROL DETAILS

PROJECT NAME: ROYALTON-MIDDLESEX

PROJECT NUMBER: IMG SIGN(19)

FILE NAME: z09a020index.dgn

PLOT DATE: 8/12/2009

PROJECT LEADER: CRB

DRAWN BY: JBZ

DESIGNED BY: BDB

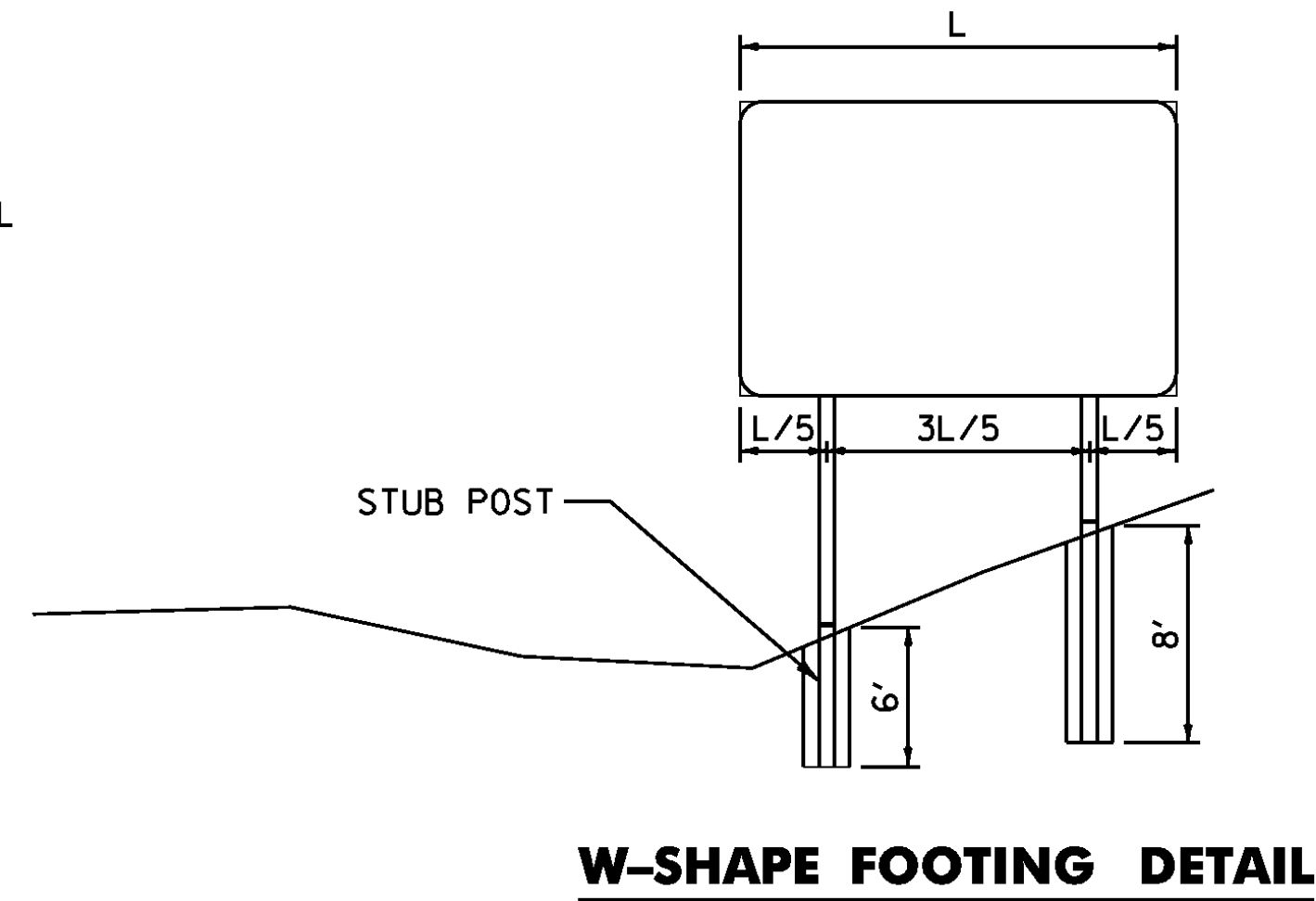
CHECKED BY: DAM

CLD REF. NO.: 09-0106

SHEET 2 OF 163

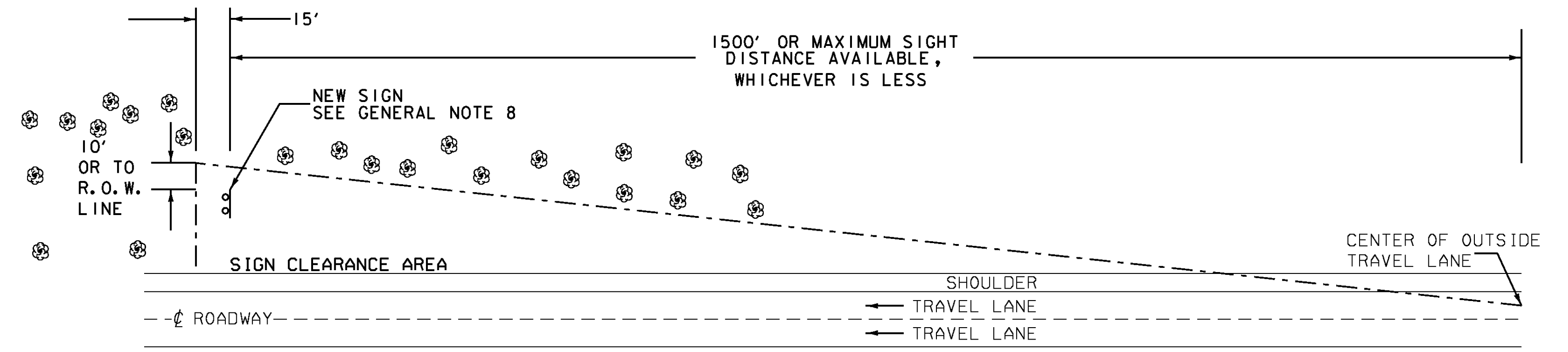
**GENERAL NOTES**

- ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE STATE OF VERMONT AGENCY OF TRANSPORTATION (VTRANS) STANDARD SPECIFICATIONS FOR CONSTRUCTION, DATED 2006, AND ITS LATEST REVISIONS, THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), DATED 2003, AND ITS LATEST REVISIONS AND THE STANDARD HIGHWAY SIGNS BOOK, DATED 2004, AND ITS LATEST REVISIONS.
- ALL EXISTING SIGNS WITHIN THE PROJECT LIMITS ARE TO BE REMOVED UNLESS OTHERWISE NOTED OR AS DIRECTED BY THE ENGINEER. ALL NEW SIGNS SHALL BE INSTALLED IN ACCORDANCE WITH THESE PLANS, MUTCD, APPLICABLE VTRANS E-SERIES STANDARDS OR AS DIRECTED BY THE ENGINEER.
- REFER TO SIGN DETAIL SHEETS FOR GUIDE SIGN CLEARVIEW FONT AND RETROREFLECTIVE SHEETING REQUIREMENTS.
- TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH THESE PLANS, APPLICABLE VTRANS E-SERIES STANDARDS AND PART 6 OF THE MUTCD OR AS DIRECTED BY THE ENGINEER.
- TEXT LAYOUT DIMENSIONS AND DESIGN OF SYMBOLS FOR STANDARD SIGNS NOT DETAILED ON THESE PLANS OR IN THE E-SERIES STANDARDS CAN BE FOUND IN THE LATEST PUBLICATION OF THE MUTCD STANDARD HIGHWAY SIGNS.
- THE CONTRACTOR SHALL REVIEW AND UNDERSTAND ALL APPLICABLE PERMITS PRIOR TO CONSTRUCTION AND ENSURE THAT ALL CONSTRUCTION CONDITIONS ARE MET.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING ANY DAMAGE TO PRIVATE OR PUBLIC PROPERTY CAUSED BY THE CONTRACTOR, AT THE SOLE COST OF THE CONTRACTOR.
- THINNING AND TRIMMING MAY BE REQUIRED AT VARIOUS SIGN LOCATIONS THROUGHOUT THE PROJECT. THIS WORK SHALL INCLUDE REMOVAL OF ANY TREES, SHRUBS OR OVERGROWTH NECESSARY FOR PLACEMENT OF SIGNS IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND AS DIRECTED BY THE ENGINEER. THIS WORK SHALL BE PAID UNDER ITEM 201.31, "THINNING AND TRIMMING FOR SIGNS".
- ALL NEW 2-INCH SQUARE STEEL SIGN POST SHALL BE 12-GUAGE.
- THE CONTRACTOR SHALL ERECT NEW POSTS AND MOUNT NEW SIGNS BEHIND EXISTING SIGNS PRIOR TO REMOVING THE OLD SIGN AND POSTS, WHERE APPLICABLE, OR AS DIRECTED BY THE ENGINEER.
- THE ABBREVIATIONS "OUT" AND "MED" REFER TO LOCATIONS OUTSIDE OF THE NORTHBOUND OR SOUTHBOUND INTERSTATE BARREL OR IN THE MEDIAN, RESPECTIVELY. ANY REFERENCE TO "LEFT" AND/OR "RIGHT" REFERS TO THE DIRECTION OF STATIONING AND NOT THE DIRECTION OF TRAFFIC.
- DELINEATORS: NEW MAINLINE DELINEATORS WITH OR WITHOUT MILEPOST PLAQUES ARE NOT SHOWN ON THE PLANS. REFER TO STANDARD E-197 AND DETAILS ON NEXT SHEET FOR GENERAL PLACEMENT AND SPACING CRITERIA. AN ESTIMATED QUANTITY OF DELINEATORS W/STEEL POSTS AND REMOVAL OF EXISTING DELINEATORS HAS BEEN INCLUDED. POSTS FOR DELINEATORS TO BE REMOVED SHALL NOT BE CUT BUT SHALL BE COMPLETELY REMOVED FROM THE GROUND.
- PROPOSED RAMP MILE MARKER PLAQUES ARE NOT DEPICTED ON THE PLANS. REFER TO THE SIGN DETAIL SHEETS FOR THE PLAQUE DETAIL AND A LIST OF PROPOSED LOCATIONS. EXISTING MILEMARKERS ON NON-INTERSTATE HIGHWAYS ARE TO BE SALVAGED AND INSTALLED ON POSTS FOR NEW SIGNS OR RETAINED IF ON SEPARATE POSTS OR AS DIRECTED BY THE ENGINEER. NOT ALL EXISTING MILEMARKER LOCATIONS ARE DEPICTED ON THE PLANS. PAYMENT FOR ATTACHING TO NEW POSTS WILL BE CONSIDERED INCIDENTAL TO THE APPROPRIATE SIGN POST PAY ITEM IN THE CONTRACT.
- ALL STATIONING ALONG RAMPS AND STATE/TOWN HIGHWAYS IN MILES ARE APPROXIMATE ONLY. REFER TO STANDARD SHEETS FOR APPROPRIATE SIGN PLACEMENT GUIDELINES.
- PROPOSED BRIDGE PLAQUES ARE NOT DEPICTED ON THE PLANS. REFER TO THE SIGN DETAIL SHEETS FOR THE BRIDGE PLAQUE DETAIL AND A LIST OF PROPOSED LOCATIONS.

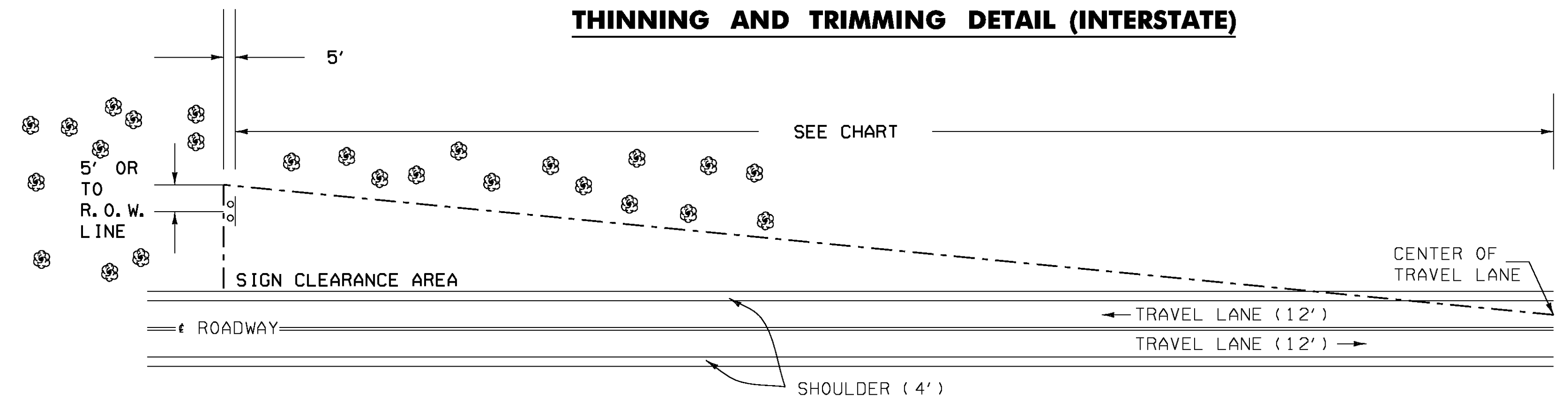


**NOTES**

- THE LONGER CONCRETE FOOTINGS SHALL BE USED AT POST LOCATIONS ON STEEP SIDE SLOPES AS IDENTIFIED ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
- FORMS/TUBES FOR THE LONGER CONCRETE FOOTINGS SHALL BE SMOOTH. CORRUGATED PIPE SHALL NOT BE USED.
- REFER TO VTRANS STANDARD E-161 FOR ADDITIONAL NOTES AND DETAILS REGARDING CONCRETE FOOTINGS.
- PAYMENT FOR THE LONGER CONCRETE FOOTINGS SHALL BE PAID FOR UNDER ITEM 900.620 SPECIAL PROVISION (FOUNDATION FOR W-SHAPE STEEL POST, 24 INCH DIAMETER.)



THE CONTRACTOR SHALL REMOVE ALL WOODY STEMMED GROWTH INCLUDING BRUSH, SAPLINGS, TREE LIMBS GROWING WITHIN OR PROJECTING INTO THE CLEARANCE AREA AND DOWN TO GROUND LEVEL OR AT LEAST 10'-0" BELOW THE BOTTOM OF THE SIGN, WHICH EVER IS LESS. PAYMENT WILL BE FOR ITEM 201.31 THINNING AND TRIMMING FOR SIGNS AND PAID FOR PER EACH SIGN ASSEMBLY LOCATION.



**SEEDING FORMULA - RURAL AREAS**

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

**SEEDING 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 RESIDENT 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 RESIDENT ENGINEER.

HAY MULCH: TO BE PLACED ON THE EARTH SLOPES AT THE RATE OF 2 TONS/ACRE, 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.

**MINIMUM SIGN SIGHT DISTANCE CHART**

APPROACH SPEED (mph)	SIGHT DISTANCE (feet)
30 OR LESS	300
35	350
40	400
45	450
50	500
55	550

**THINNING AND TRIMMING DETAIL (CONVENTIONAL ROADS)**

**GENERAL NOTES & MISCELLANEOUS DETAILS**

PROJECT NAME: ROYALTON-MIDDLESEX

PROJECT NUMBER: IMG SIGN(19)

FILE NAME: z09a020miscdet.dgn

PROJECT LEADER: CRB

DESIGNED BY: BDB

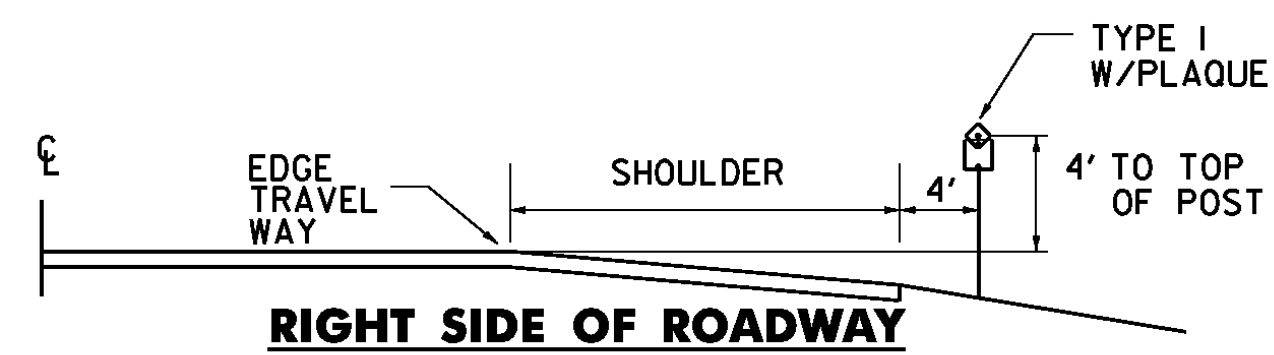
CLD REF. NO.: 09-0106

PLOT DATE: 8/12/2009

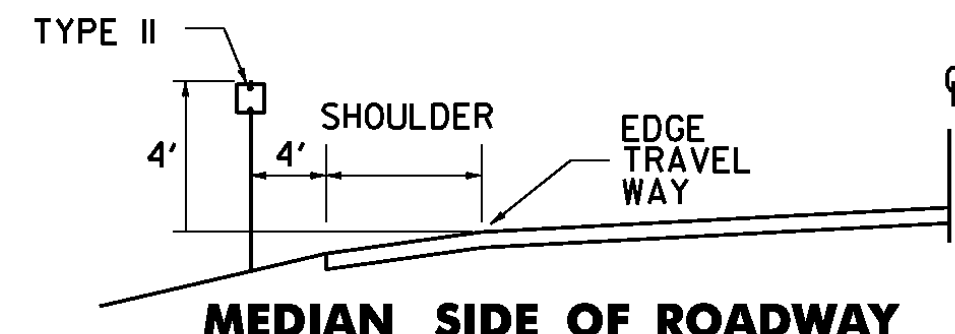
DRAWN BY: JBZ

CHECKED BY: DAM

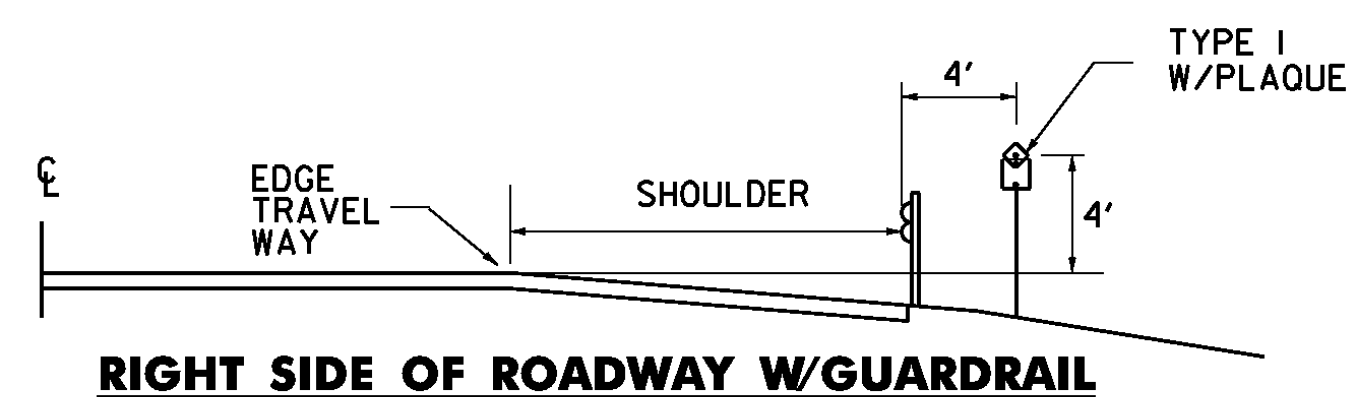
SHEET 3 OF 163



**RIGHT SIDE OF ROADWAY**



**MEDIAN SIDE OF ROADWAY**



**RIGHT SIDE OF ROADWAY W/GUARDRAIL**

**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 IN THE DIRECTION OF TRAVEL OF THE DIVIDED HIGHWAY BETWEEN MILE MARKERS AT 0.05 MILE INTERVALS.

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.

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."

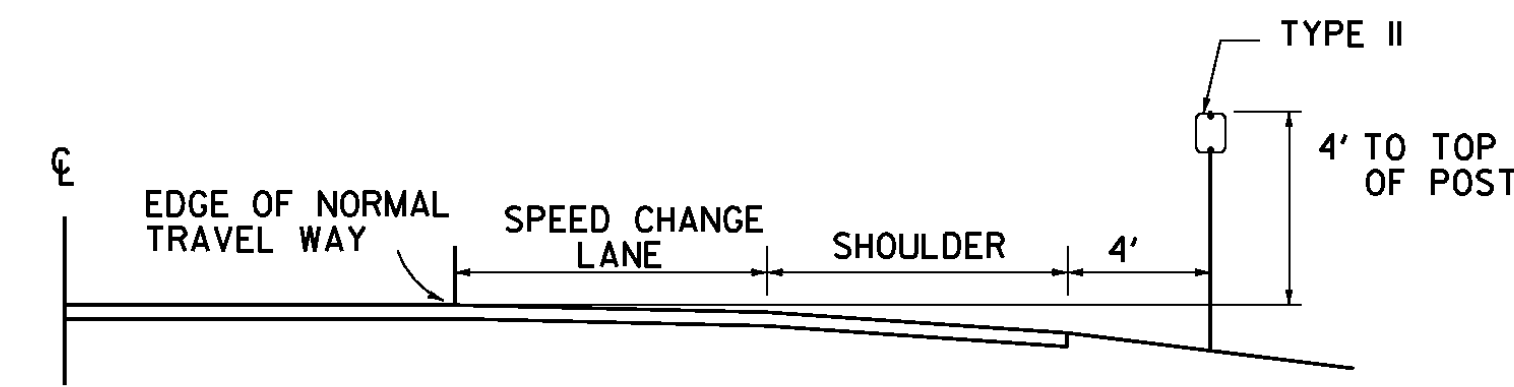
YELLOW TYPE II DELINEATORS SHALL BE ERECTED CONTINUOUSLY ALONG THE LEFT (MEDIAN) SIDE OF THE DIVIDED HIGHWAY AT 0.10 MILE INTERVALS AND CONTINUED AT APPROXIMATELY THE SAME SPACING THROUGH INTERCHANGES AND REST AREAS WHERE THERE MAY NOT BE ANY TYPE I DELINEATORS ON THE RIGHT SIDE. PLACEMENT OF TYPE II DELINEATORS SHALL BE FOLLOWED ON THE LEFT AS ON THE RIGHT.

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 REVERSE 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'-0" FROM THE WRONG WAY SIGNS AND EXTEND EVERY 50'-0" TO A POINT NOT LESS THAN 25'-0" FROM THE INTERSECTING ROAD. SEE STANDARD E-197.

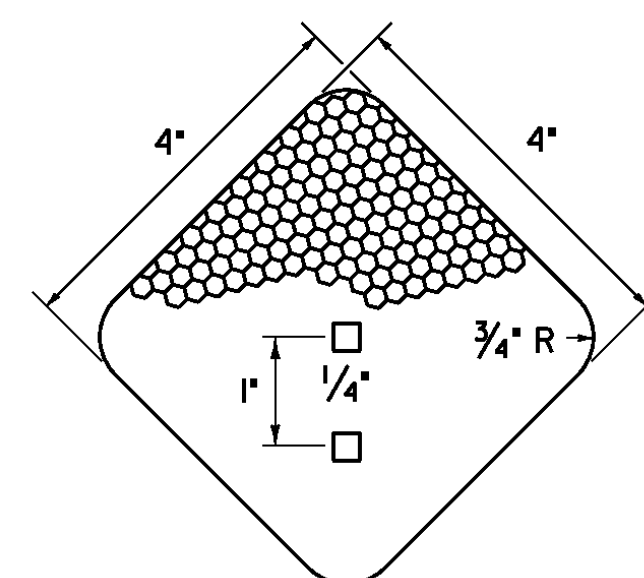


**TYPICAL PLACEMENT OF TYPE II DELINEATORS ON SPEED CHANGE LANES**

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.

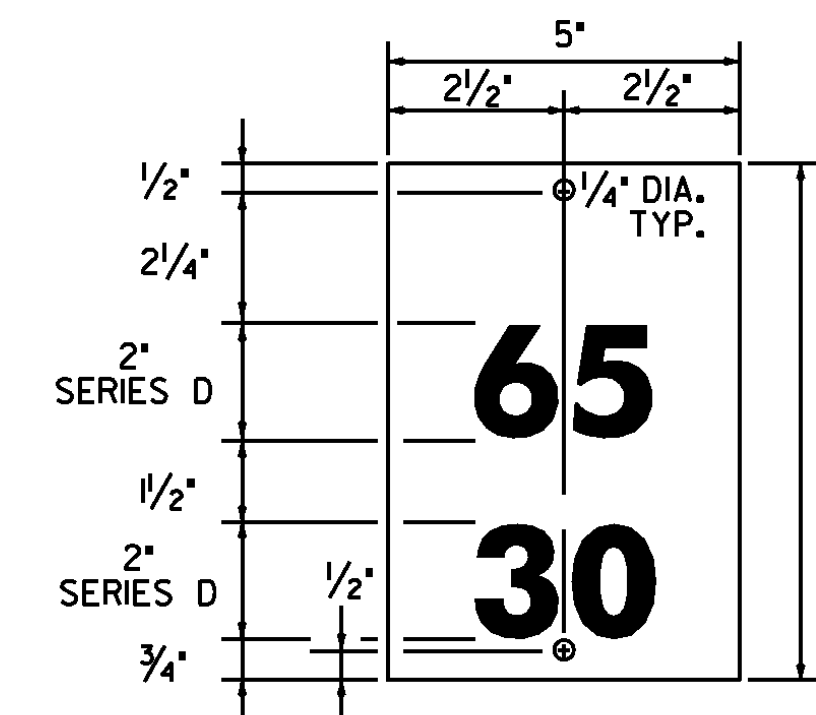
**NOTES**

1. 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.
2. FOR MOUNTING DELINEATORS AND MILEPOSTS ON BRIDGES, SEE STANDARD E-199
3. DELINEATOR POSTS SHALL BE 1.75" X 1.88 LB/FT SQUARE STEEL, AND A MINIMUM OF 8 FEET LONG.
4. DELINEATOR POSTS SHALL HAVE A MINIMUM EMBEDMENT OF 2'-6" IN THE GROUND.
5. WHEN USING DELINEATORS AND MILEPOSTS ON STEEP SLOPES (1 ON 2 OR STEEPER) OR ERODED SOILS ADD ONE FOOT FOR GREATER STABILITY.



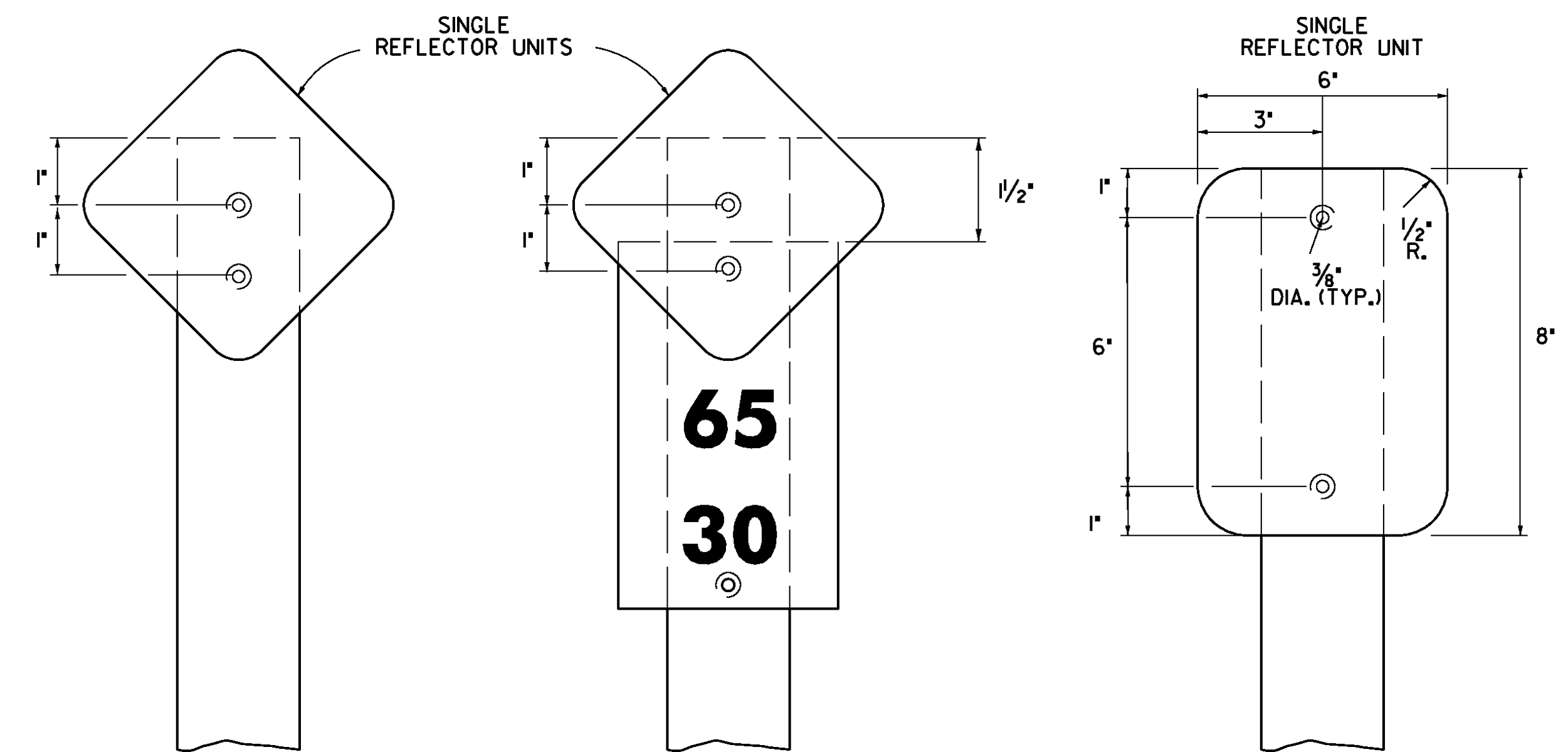
**DELINEATOR REFLECTIVE SHEETING UNIT**

- MATERIAL FOR DELINEATORS:
- 1/16" ALUMINUM BACKING.
  - WHITE/BLUE/GREEN: ASTM TYPE III RETROREFLECTIVE SHEETING.
  - RED/YELLOW: ASTM TYPE VII, VIII, OR IX RETROREFLECTIVE SHEETING.



**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.



**TYPE I WITHOUT PLAQUE**

TO BE USED ALONG RAMP

**TYPE I WITH PLAQUE**

TO BE USED ALONG MAINLINE

**TYPE II**

TO BE USED ALONG MAINLINE

**DELINEATORS WITH RETROREFLECTIVE SHEETING**

**DELINEATOR AND MILEPOST DETAILS**

PROJECT NAME: ROYALTON-MIDDLESEX

PROJECT NUMBER: IMG SIGN(19)

FILE NAME: z09a020miscdet.dgn

PLOT DATE: 8/12/2009

PROJECT LEADER: CRB

DRAWN BY: JBZ

DESIGNED BY: BDB

CHECKED BY: DAM

CLD REF. NO.: 09-0106

SHEET 4 OF 163

# QUANTITY SHEET 1

SUMMARY OF ESTIMATED QUANTITIES												TOTALS		DESCRIPTIONS				DETAILED SUMMARY OF QUANTITIES		
										ROADWAY	EROSION CONTROL	GRAND TOTAL	FNAL	UNIT	ITEMS	ITEM NUMBER	ROUND	QUANTITIES	UNIT	ITEMS
										41		41		EACH	THINNING AND TRIMMING FOR SIGNS	201.31	EST.			
										1		1		CY	TRENCH EXCAVATION OF EARTH, EXPLORATORY (N.A.B.I.)	204.22	EST.			
										875		875		HR	UNIFORMED TRAFFIC OFFICERS	630.10	8			
										175		175		HR	FLAGGERS	630.15	2			
										1		1		LS	TESTING EQUIPMENT, CONCRETE	631.16	-			
										1		1		LS	MOBILIZATION/DEMOLIBILIZATION	635.11	-			
										1		1		LS	TRAFFIC CONTROL	641.10	-			
										4		4		EACH	PORTABLE CHANGEABLE MESSAGE SIGN	641.15	-			
										2		2		EACH	PORTABLE ARROW BOARD	641.16	-			
											8	8		LB	SEED	651.15	-			
											80	80		LB	FERTILIZER	651.18	-			
											1	1		TON	AGRICULTURAL LIMESTONE	651.20	0.7			
											1	1		TON	HAY MULCH	651.25	0.7			
											80	80		CY	TOPSOIL	651.35	4			
										8100		8100		SF	TRAFFIC SIGNS, TYPE A	675.20	0.66			
										12444		12444		SF	TRAFFIC SIGNS, TYPE B	675.21	0.75			
										52305		52305		LB	W-SHAPE STEEL SIGN POST	675.31	-			
										4556		4556		LB	TUBULAR ALUMINUM SIGN POST	675.32	0.2			
										36147		36147		LB	TUBULAR STEEL SIGN POST	675.33	0.8			
										9810		9810		LF	SQUARE TUBE SIGN POST AND ANCHOR	675.341	0.2			
										114		114		EACH	FOUNDATION FOR W-SHAPE STEEL POST, 24 INCH DIAMETER	675.41	-			
										316		316		EACH	FOUNDATION FOR TUBULAR STEEL POST	675.43	-			
										1286		1286		EACH	REMOVING SIGNS (TYPE A)	675.50	-			
										127		127		EACH	REMOVING SIGNS (TYPE B)	675.50	-			
										36		36		EACH	ERECTING SALVAGED SIGNS	675.60	-			
										3375		3375		EACH	DELINEATOR WITH STEEL POST	676.10	EST.			
										2975		2975		EACH	REMOVAL OF EXISTING DELINEATOR	676.12	EST.			
										3		3		EACH	OVERHEAD TRAFFIC SIGN SUPPORT, MULTI-SUPPORT	677.13	-			
										10		10		EACH	SPECIAL PROVISION (FOUNDATION FOR W-SHAPE STEEL POST, 24 INCH DIAMETER)	900.620	-			

MODEL: Default

## QUANTITY SHEET

PROJECT NAME: ROYALTON-MIDDLESEX

PROJECT NUMBER: IMG SIGN(19)

FILE NAME: z09a020quantity sheet.dgn PLOT DATE: 8/26/2009

PROJECT LEADER: CRB DRAWN BY: SRB

DESIGNED BY: BDB CHECKED BY: DAM

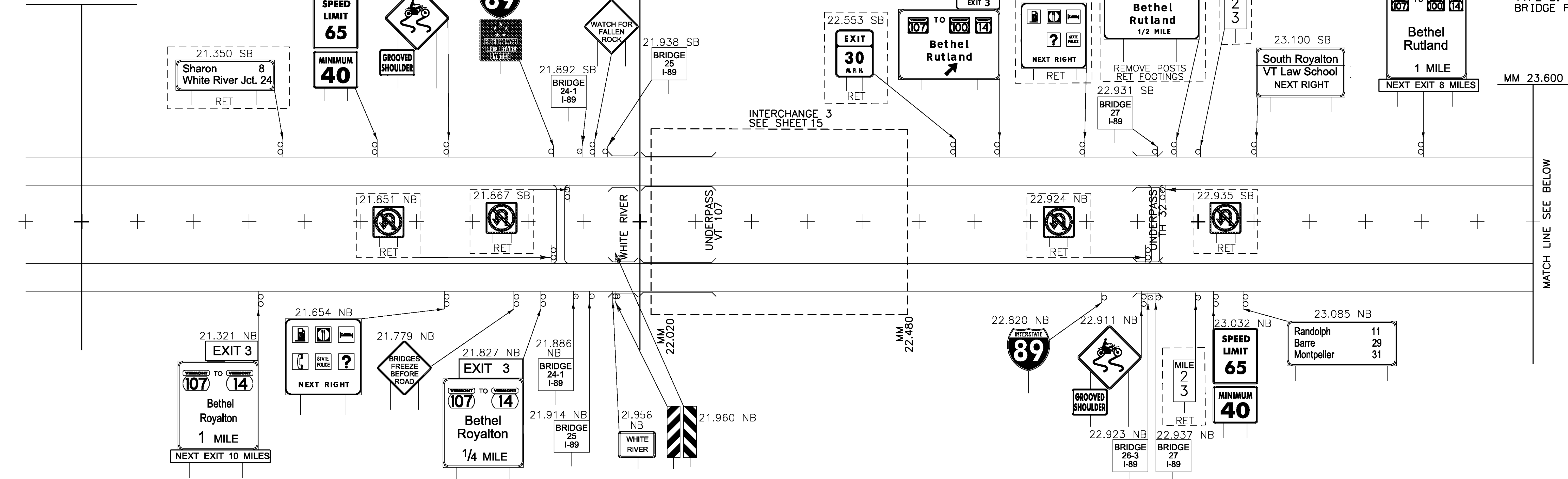
CLD REF. NO.: 09-0106 SHEET 5 OF 163

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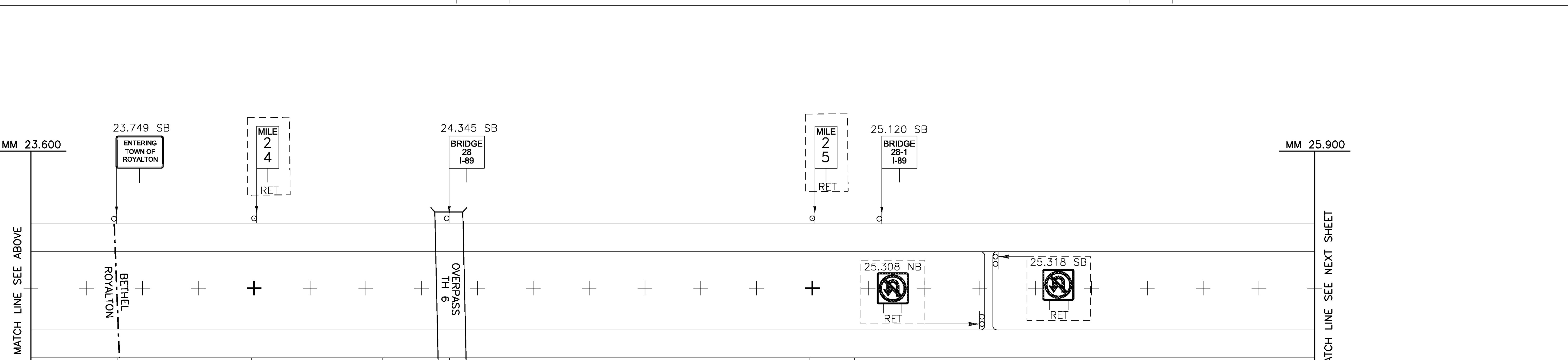
**BEGIN APPROACH  
IMG SIGN(19)  
(MM 21.000)**

**BEGIN PROJECT  
IMG SIGN(19)  
(MM 22.000)**

**REMOVING SIGNS**  
 NB- TYPE A: 12  
 TYPE B: 5  
 BRIDGE PLAQUE: 7  
 SB- TYPE A: 12  
 TYPE B: 5  
 BRIDGE PLAQUE: 5



MATCH LINE SEE BELOW



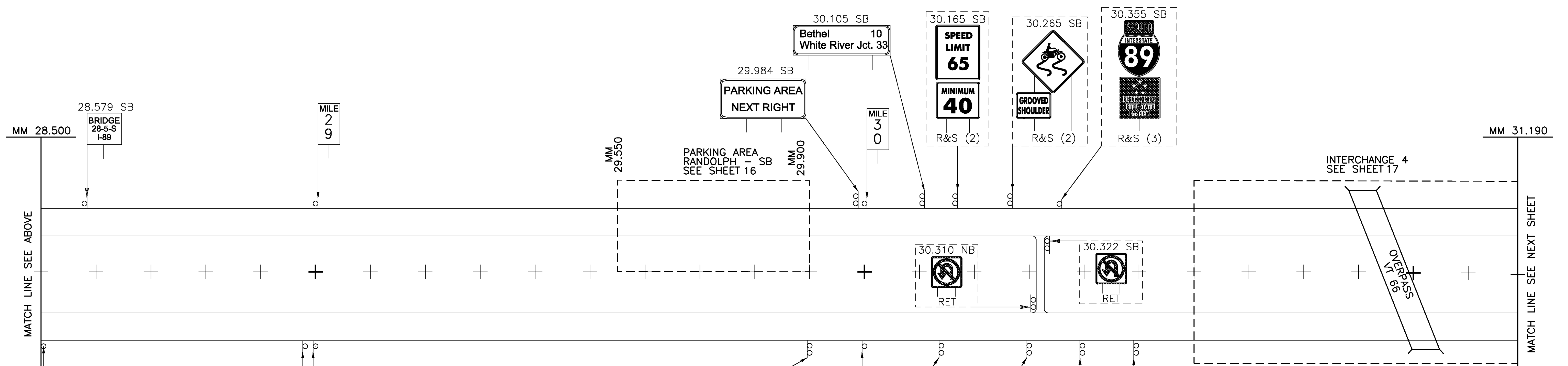
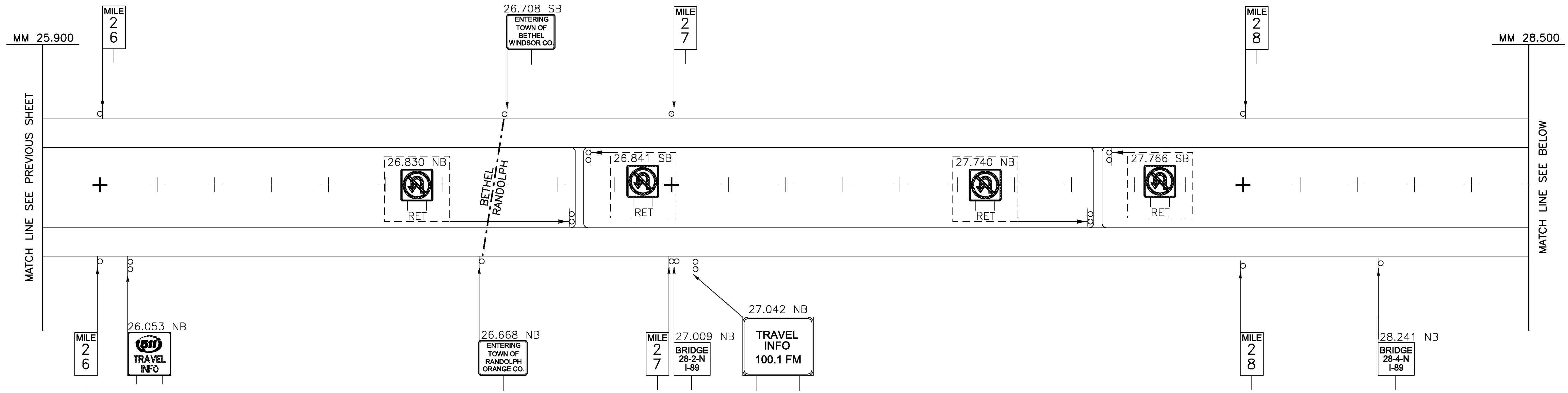
**LEGEND**  
 [RET] - RETAIN  
 [R&S] - REMOVE AND SALVAGE

RETAINED SIGNS THIS SHEET INSTALLED UNDER IM 089-I(54)  
 ALL SIGNS AND POSTS WILL BE REMOVED UNLESS OTHERWISE NOTED

<b>EXISTING SIGNS MAINLINE (1) 22.000 - 25.900</b>	PROJECT NAME: ROYALTON-MIDDLESEX
	PROJECT NUMBER: IMG SIGN(19)
FILE NAME: z09a020mainline.dgn	PLOT DATE: 8/12/2009
PROJECT LEADER: CRB	DRAWN BY: JBZ
DESIGNED BY: BDB	CHECKED BY: DAM
CLD REF. NO.: 09-0106	SHEET 7 OF 163

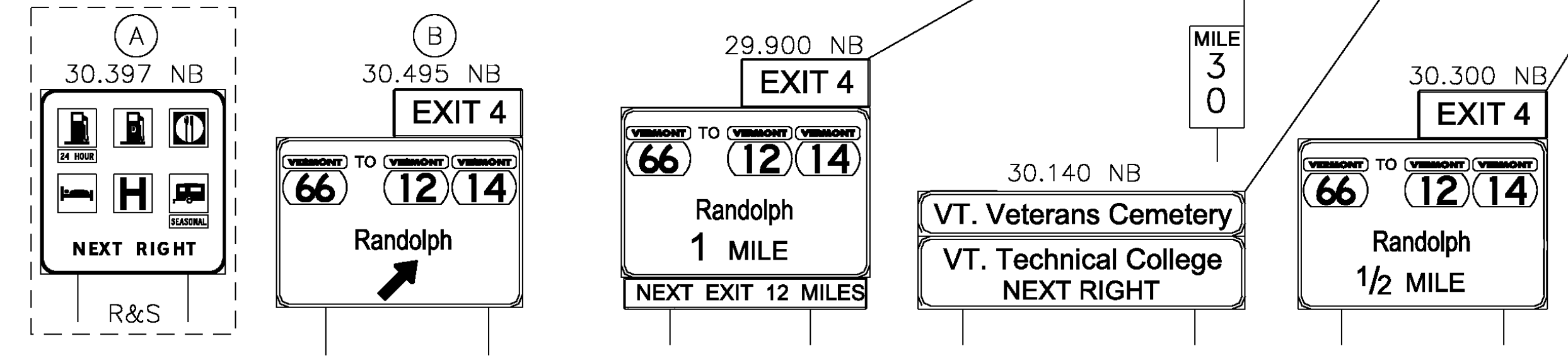
MODEL: 01-Exist

REMOVING SIGNS  
 NB- TYPE A: 9  
 TYPE B: 8  
 BRIDGE PLAQUE: 4  
 SB- TYPE A: 13  
 TYPE B: 2  
 BRIDGE PLAQUE: 1



LEGEND  
 [RET] - RETAIN  
 [R&S] - REMOVE AND SALVAGE

ALL SIGNS AND POSTS WILL BE REMOVED UNLESS OTHERWISE NOTED

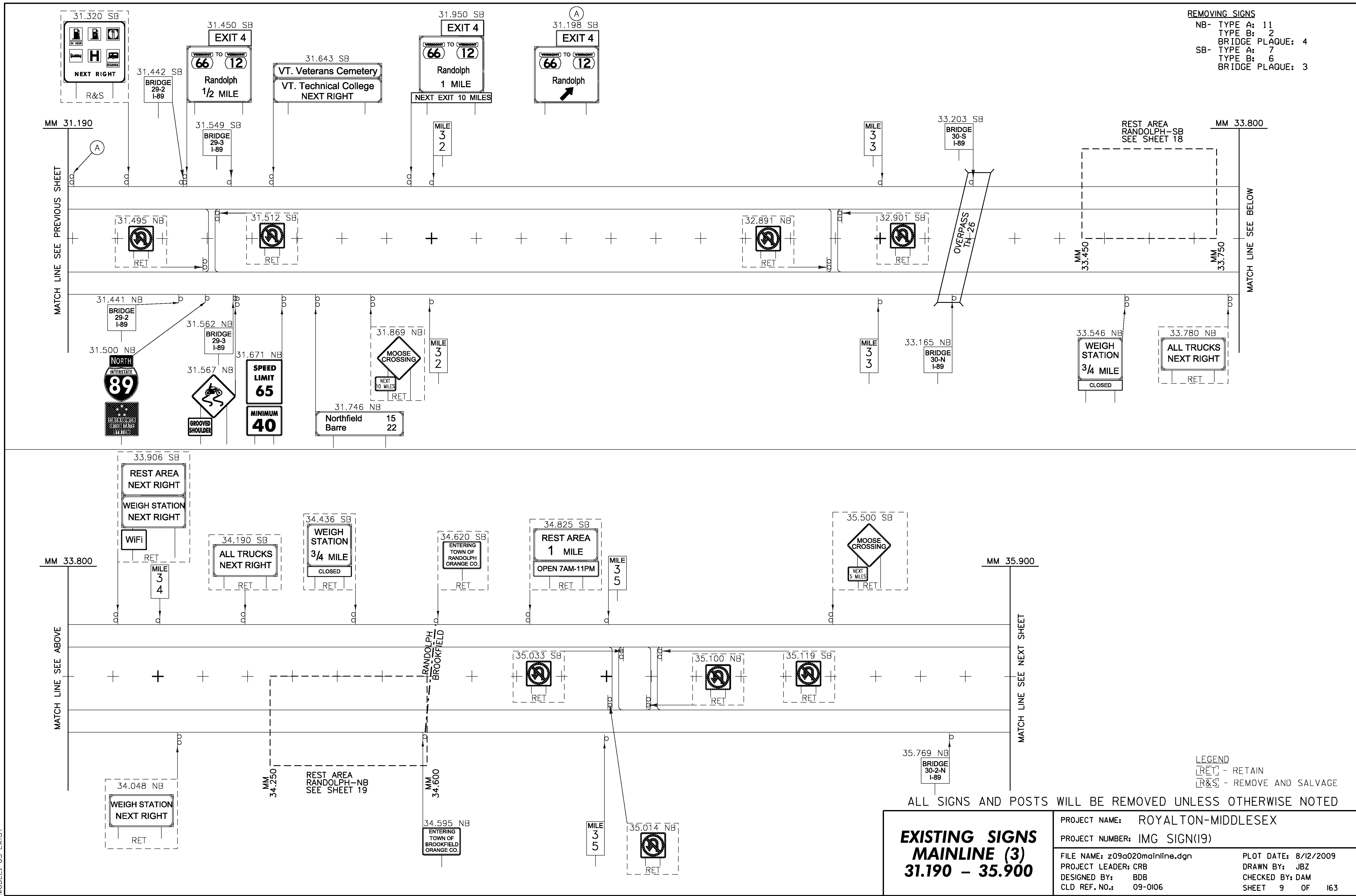


**EXISTING SIGNS  
 MAINLINE (2)  
 25.900 - 31.190**

PROJECT NAME: ROYALTON-MIDDLESEX  
 PROJECT NUMBER: IMG SIGN(19)  
 FILE NAME: z09a020mainline.dgn  
 PROJECT LEADER: CRB  
 DESIGNED BY: BDB  
 CLD REF. NO.: 09-0106  
 PLOT DATE: 8/12/2009  
 DRAWN BY: JBZ  
 CHECKED BY: DAM  
 SHEET 8 OF 163

MODEL: 02-Exist

**REMOVING SIGNS**  
 NB- TYPE A: 11  
 TYPE B: 2  
 BRIDGE PLAQUE: 4  
 SB- TYPE A: 7  
 TYPE B: 6  
 BRIDGE PLAQUE: 3



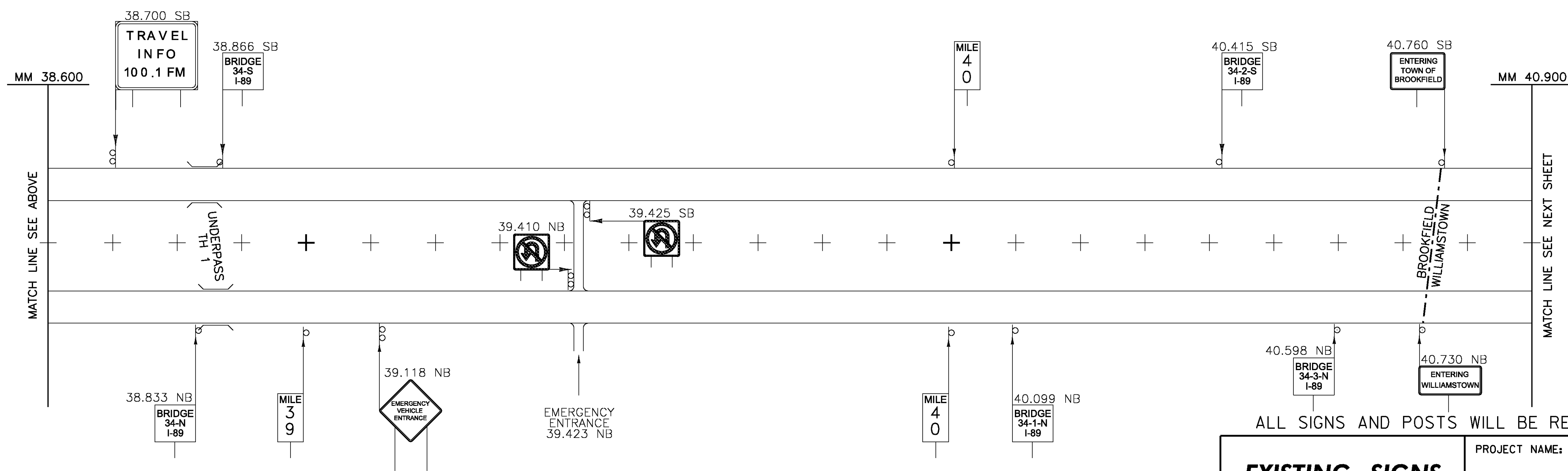
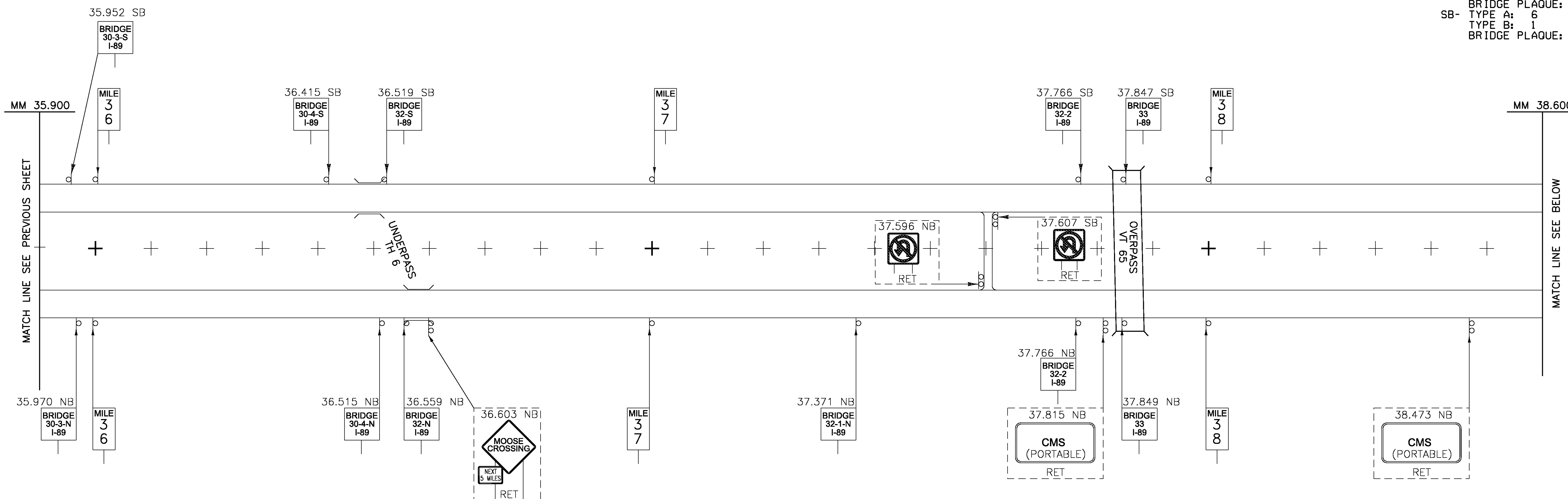
ALL SIGNS AND POSTS WILL BE REMOVED UNLESS OTHERWISE NOTED

<p><b>EXISTING SIGNS          MAINLINE (3)          31.190 - 35.900</b></p>	PROJECT NAME: ROYALTON-MIDDLESEX
	PROJECT NUMBER: IMG SIGN(19)
	FILE NAME: z09a020mainline.dgn
	PLOT DATE: 8/12/2009
PROJECT LEADER: CRB	DRAWN BY: JBZ
DESIGNED BY: BDB	CHECKED BY: DAM
CLD REF. NO.: 09-0106	SHEET 9 OF 163

MODEL: 03-Exist

**LEGEND**  
 [RET] - RETAIN  
 [R&S] - REMOVE AND SALVAGE

REMOVING SIGNS  
 NB- TYPE A: 8  
 TYPE B: 0  
 BRIDGE PLAQUE: 9  
 SB- TYPE A: 6  
 TYPE B: 1  
 BRIDGE PLAQUE: 7



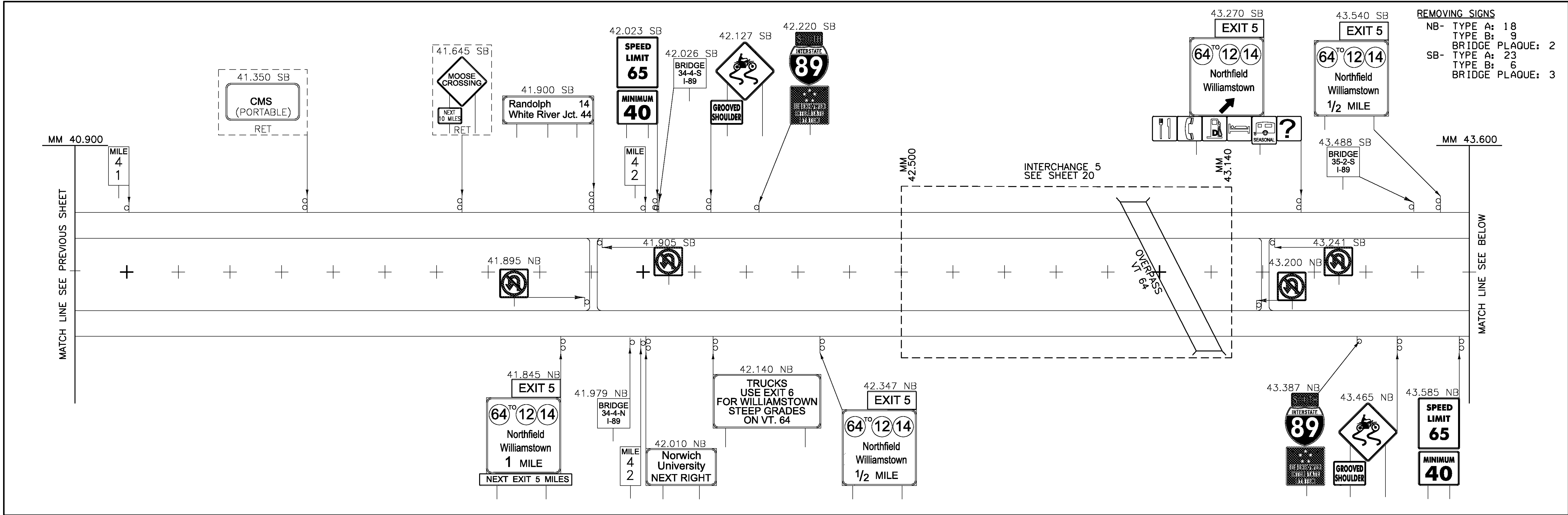
LEGEND  
 [RET] - RETAIN  
 [R&S] - REMOVE AND SALVAGE

ALL SIGNS AND POSTS WILL BE REMOVED UNLESS OTHERWISE NOTED

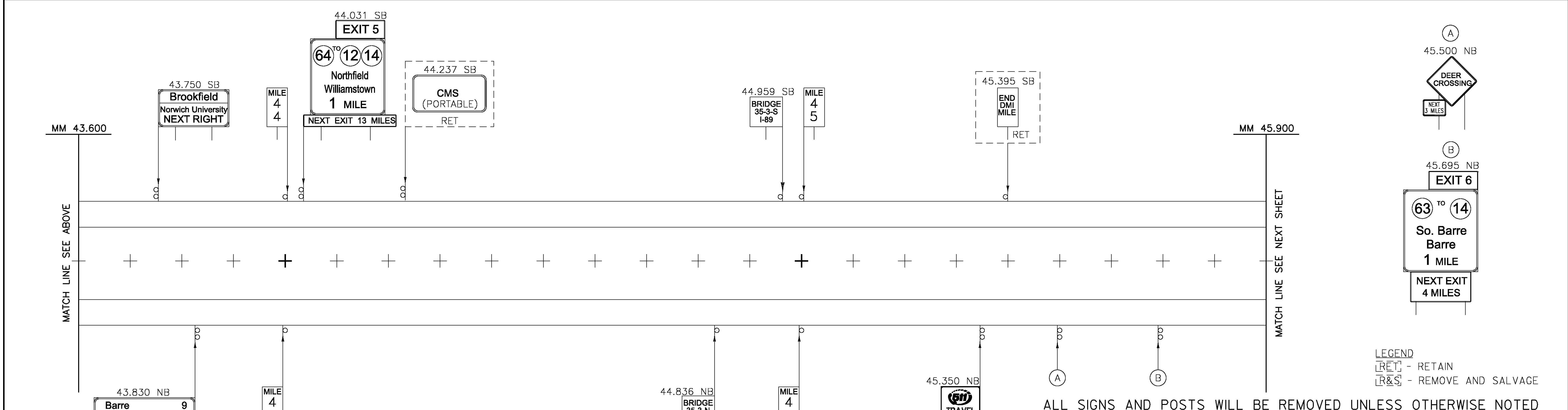
<b>EXISTING SIGNS          MAINLINE (4)          35.900 - 40.900</b>	PROJECT NAME: ROYALTON-MIDDLESEX	
	PROJECT NUMBER: IMG SIGN(19)	
FILE NAME: z09a020mainline.dgn	PLOT DATE: 8/12/2009	
PROJECT LEADER: CRB	DRAWN BY: JBZ	
DESIGNED BY: BDB	CHECKED BY: DAM	
CLD REF. NO.: 09-0106	SHEET 10 OF 163	

MODEL: 04-Exist

MODEL: 05-Exist



**REMOVING SIGNS**  
 NB- TYPE A: 18  
 TYPE B: 9  
 BRIDGE PLAQUE: 2  
 SB- TYPE A: 23  
 TYPE B: 6  
 BRIDGE PLAQUE: 3

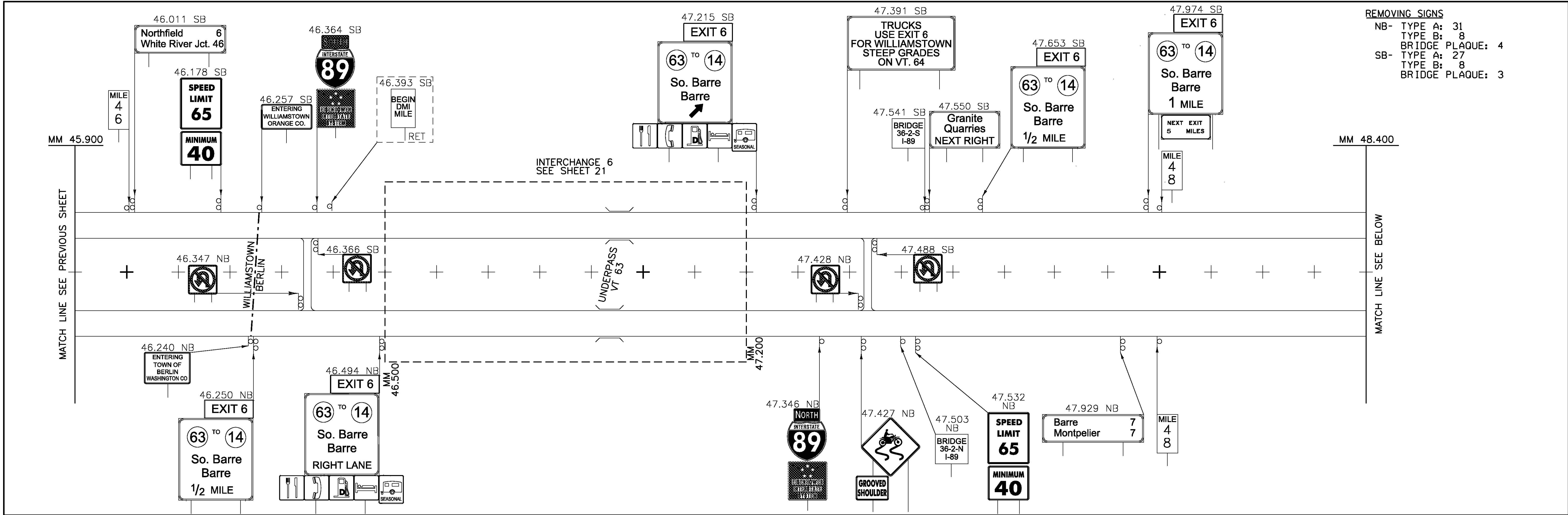


**LEGEND**  
 [RET] - RETAIN  
 [R&S] - REMOVE AND SALVAGE

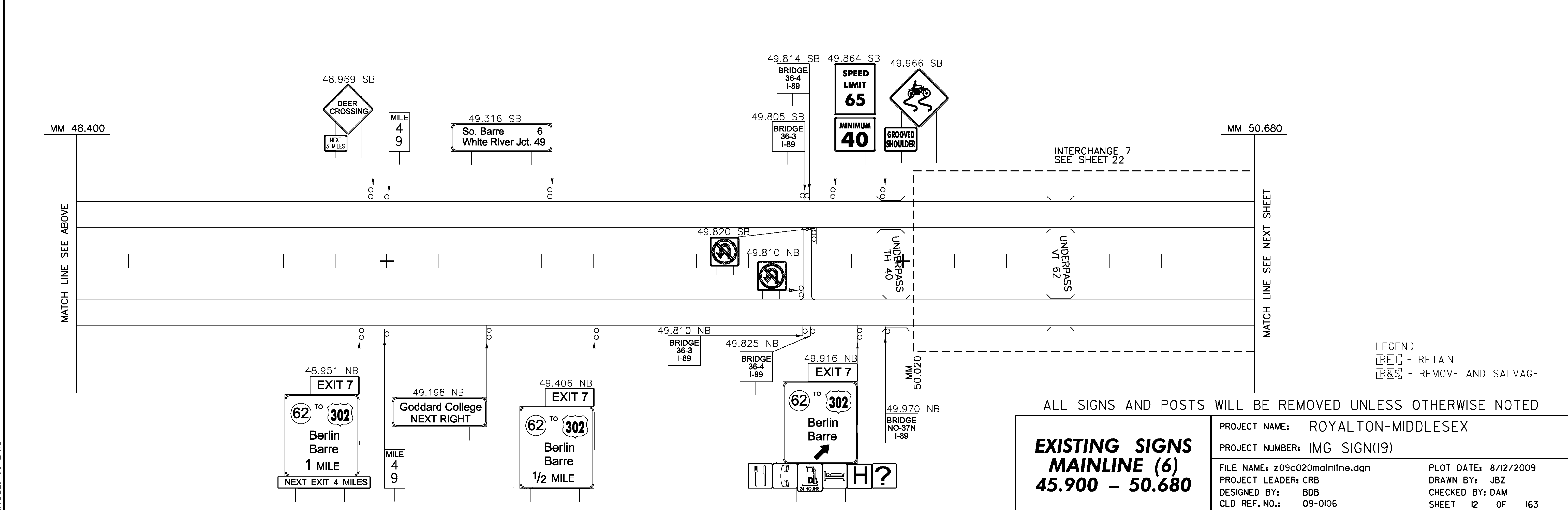
ALL SIGNS AND POSTS WILL BE REMOVED UNLESS OTHERWISE NOTED

<b>EXISTING SIGNS MAINLINE (5) 40.900 - 45.900</b>	PROJECT NAME: ROYALTON-MIDDLESEX
	PROJECT NUMBER: IMG SIGN(19)
FILE NAME: z09a020mainline.dgn	PLOT DATE: 8/12/2009
PROJECT LEADER: CRB	DRAWN BY: JBZ
DESIGNED BY: BDB	CHECKED BY: DAM
CLD REF. NO.: 09-0106	SHEET II OF 163

MODEL: 06-Exist



**REMOVING SIGNS**  
 NB- TYPE A: 31  
 TYPE B: 8  
 BRIDGE PLAQUE: 4  
 SB- TYPE A: 27  
 TYPE B: 8  
 BRIDGE PLAQUE: 3

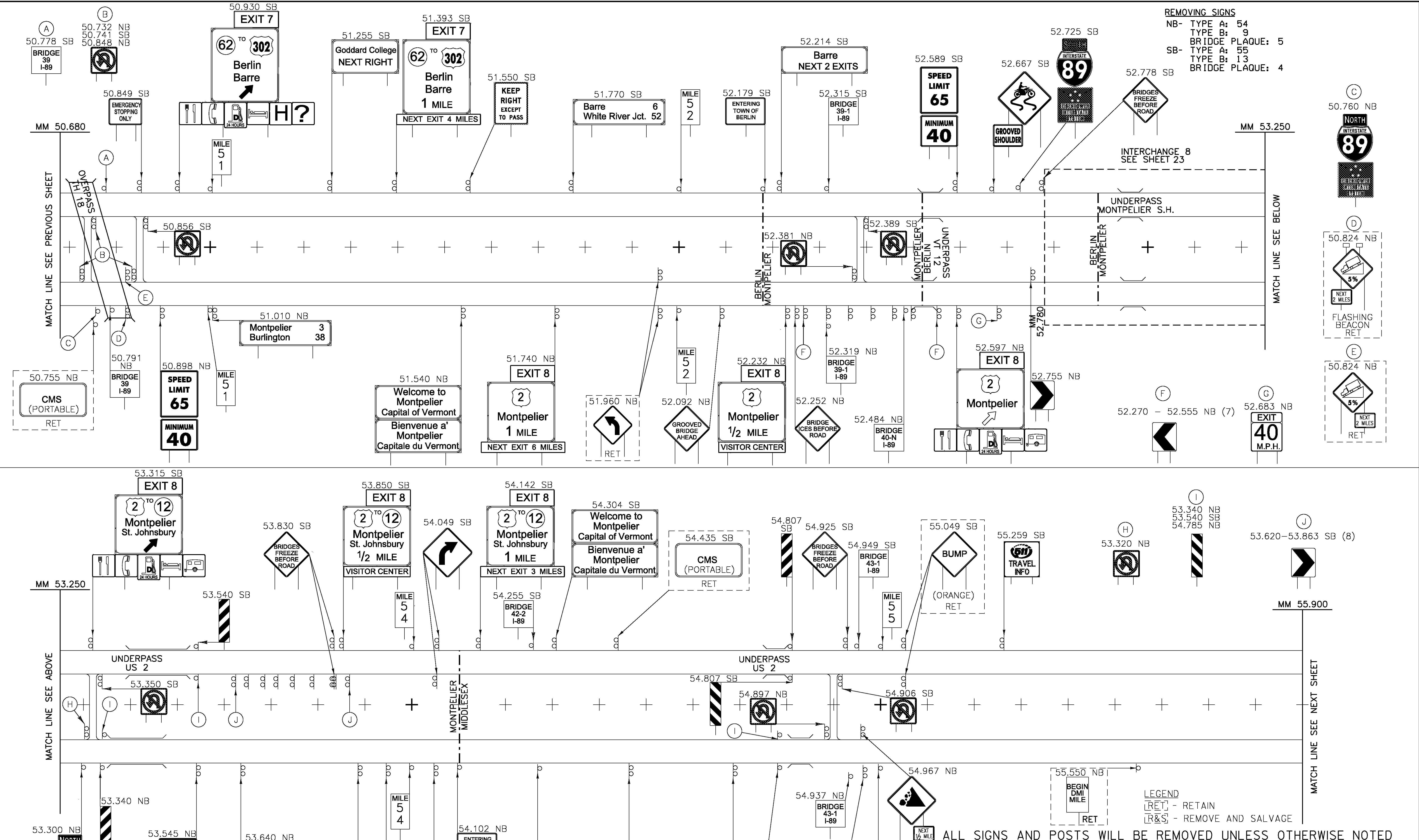


**LEGEND**  
 [RET] - RETAIN  
 [R&S] - REMOVE AND SALVAGE

ALL SIGNS AND POSTS WILL BE REMOVED UNLESS OTHERWISE NOTED

<b>EXISTING SIGNS          MAINLINE (6)          45.900 - 50.680</b>	PROJECT NAME: ROYALTON-MIDDLESEX
	PROJECT NUMBER: IMG SIGN(19)
FILE NAME: z09a020mainline.dgn	PLOT DATE: 8/12/2009
PROJECT LEADER: CRB	DRAWN BY: JBZ
DESIGNED BY: BDB	CHECKED BY: DAM
CLD REF. NO.: 09-0106	SHEET 12 OF 163

MODEL: 07-Exist



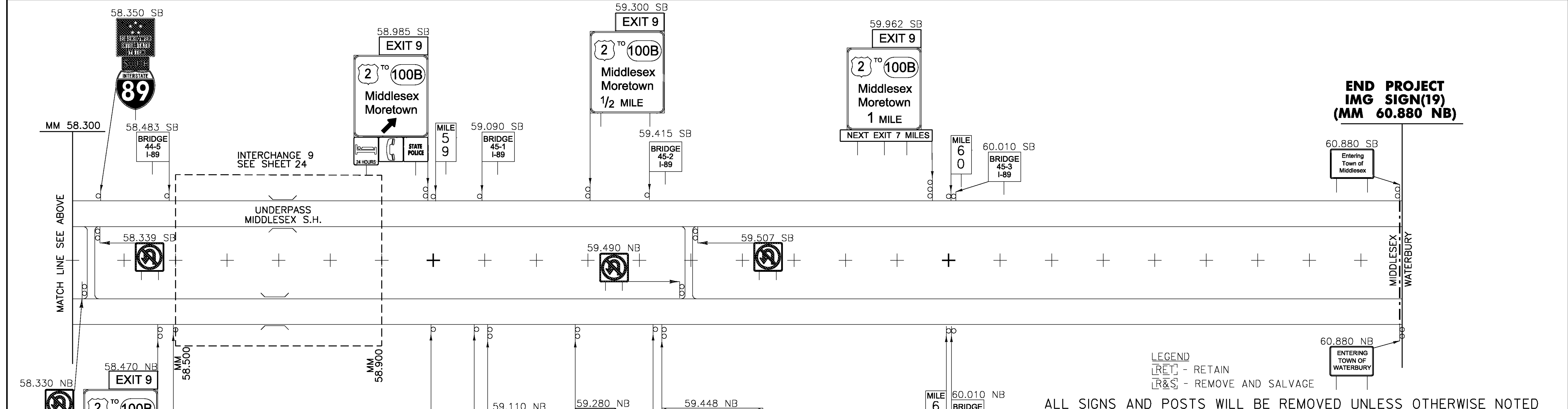
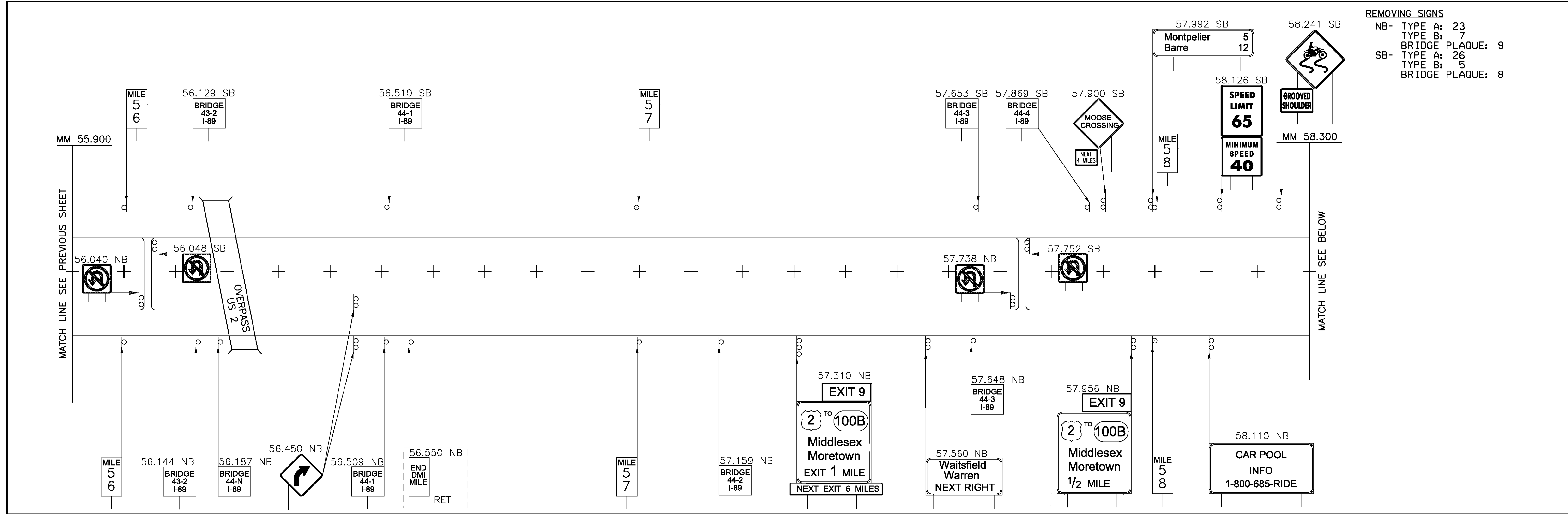
**REMOVING SIGNS**  
 NB- TYPE A: 54  
 BRIDGE PLAQUE: 5  
 SB- TYPE A: 55  
 TYPE B: 13  
 BRIDGE PLAQUE: 4

**LEGEND**  
 [RET] - RETAIN  
 [R&S] - REMOVE AND SALVAGE

ALL SIGNS AND POSTS WILL BE REMOVED UNLESS OTHERWISE NOTED

<b>EXISTING SIGNS MAINLINE (7) 50.680 - 55.900</b>		PROJECT NAME: ROYALTON-MIDDLESEX
		PROJECT NUMBER: IMG SIGN(19)
FILE NAME: z09a020mainline.dgn	PLOT DATE: 8/12/2009	
PROJECT LEADER: CRB	DRAWN BY: JBZ	
DESIGNED BY: BDB	CHECKED BY: DAM	
CLD REF. NO.: 09-0106	SHEET 13 OF 163	

**REMOVING SIGNS**  
 NB- TYPE A: 23  
 TYPE B: 7  
 BRIDGE PLAQUE: 9  
 SB- TYPE A: 26  
 TYPE B: 5  
 BRIDGE PLAQUE: 8



**LEGEND**  
 [RET] - RETAIN  
 [R&S] - REMOVE AND SALVAGE

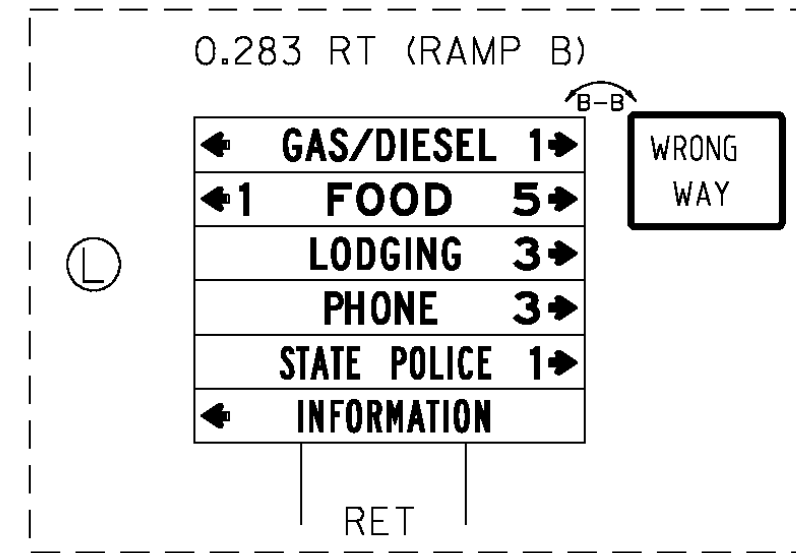
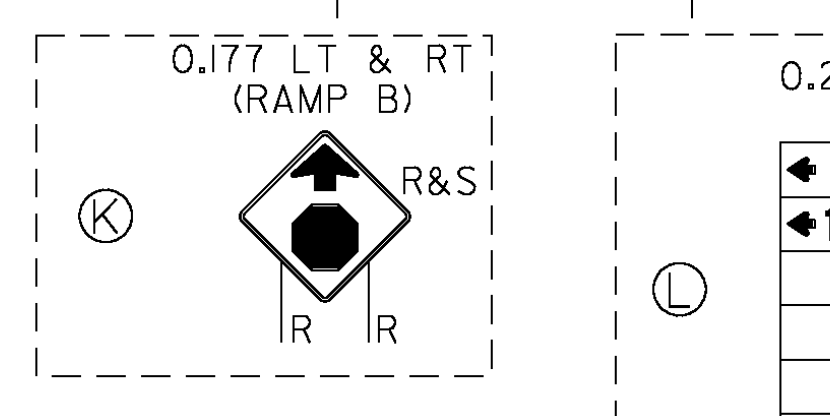
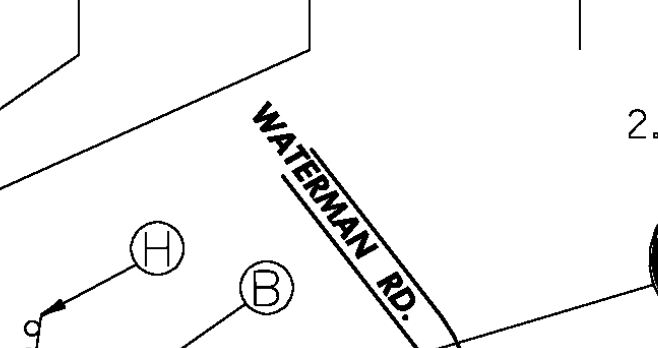
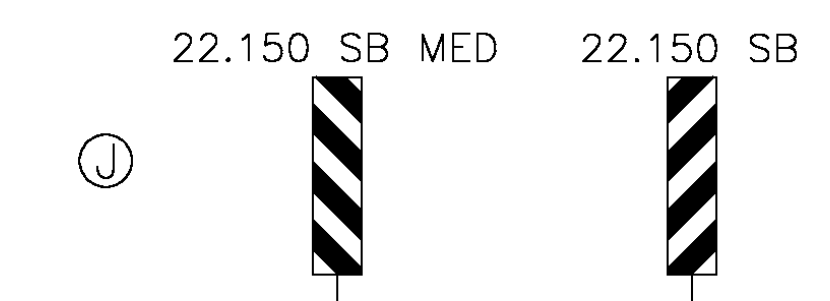
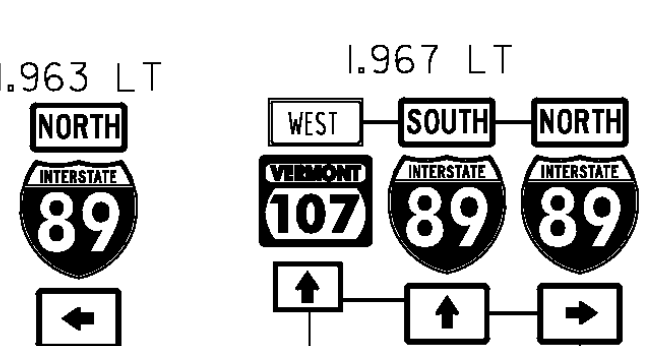
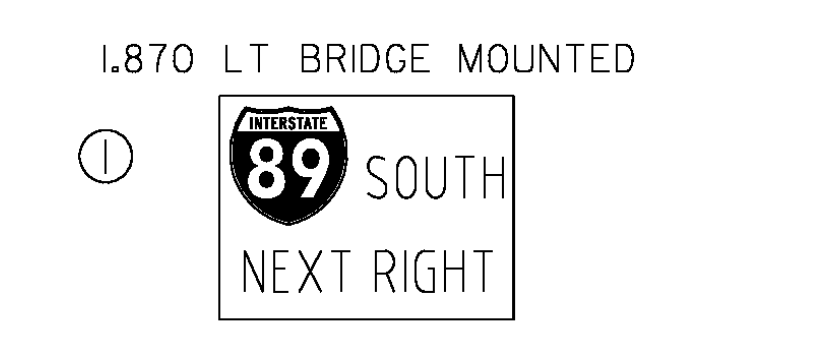
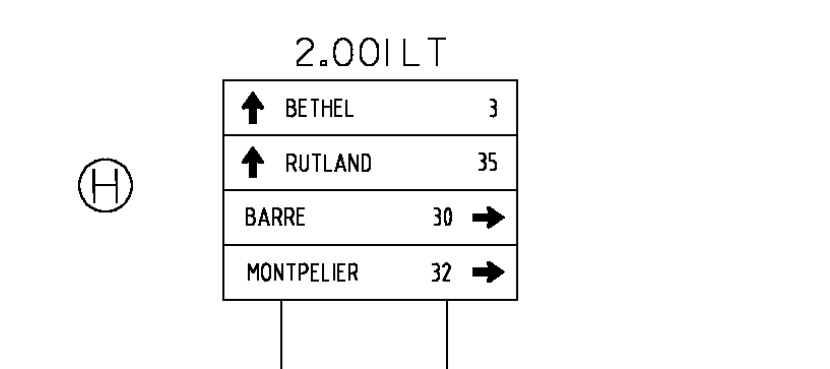
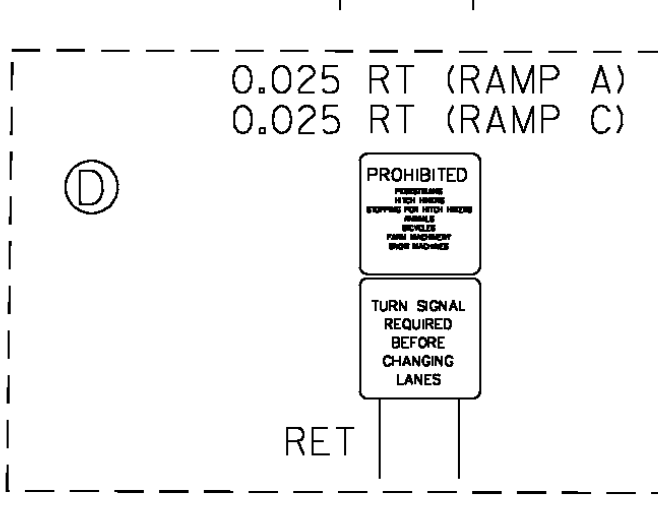
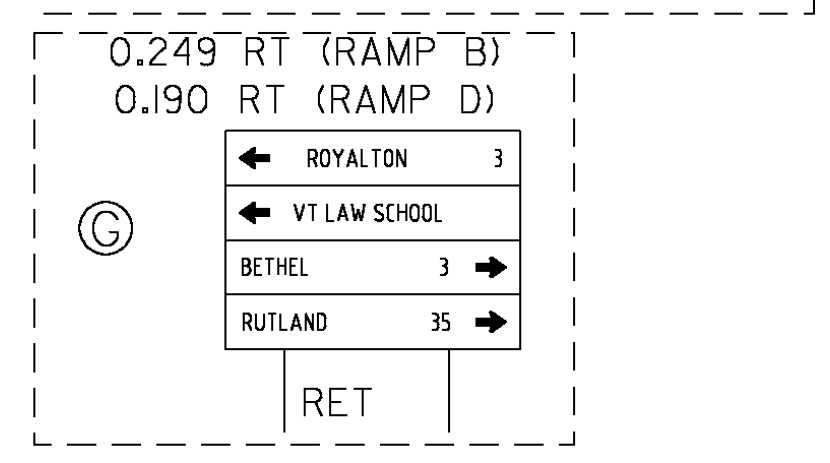
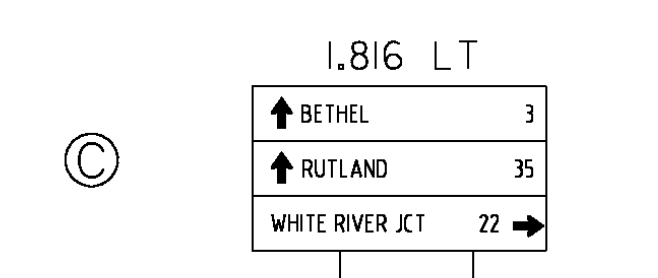
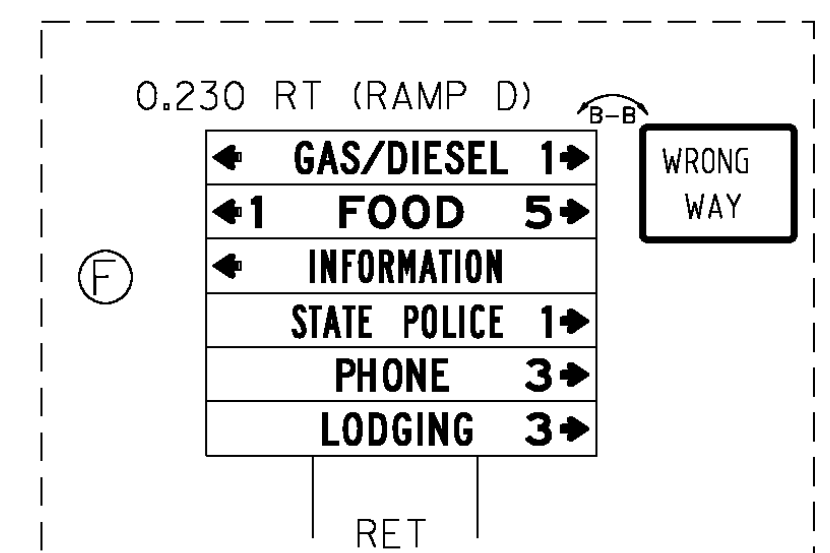
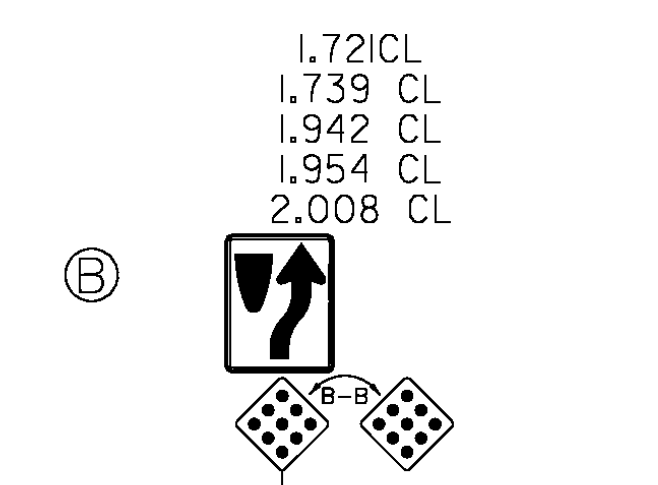
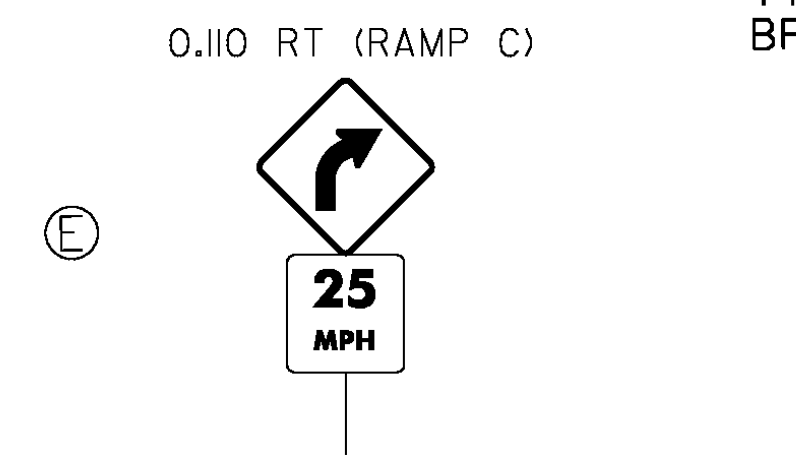
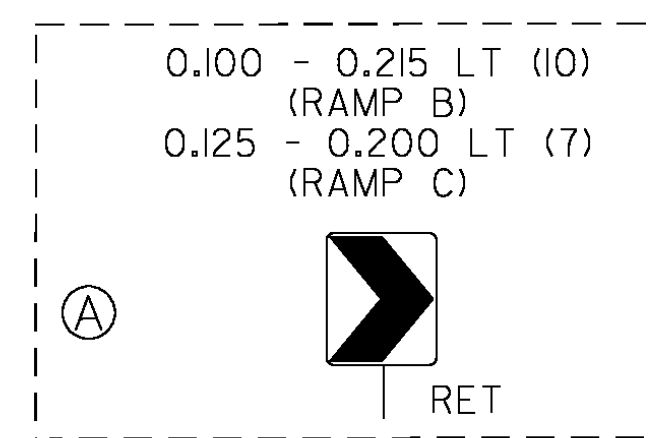
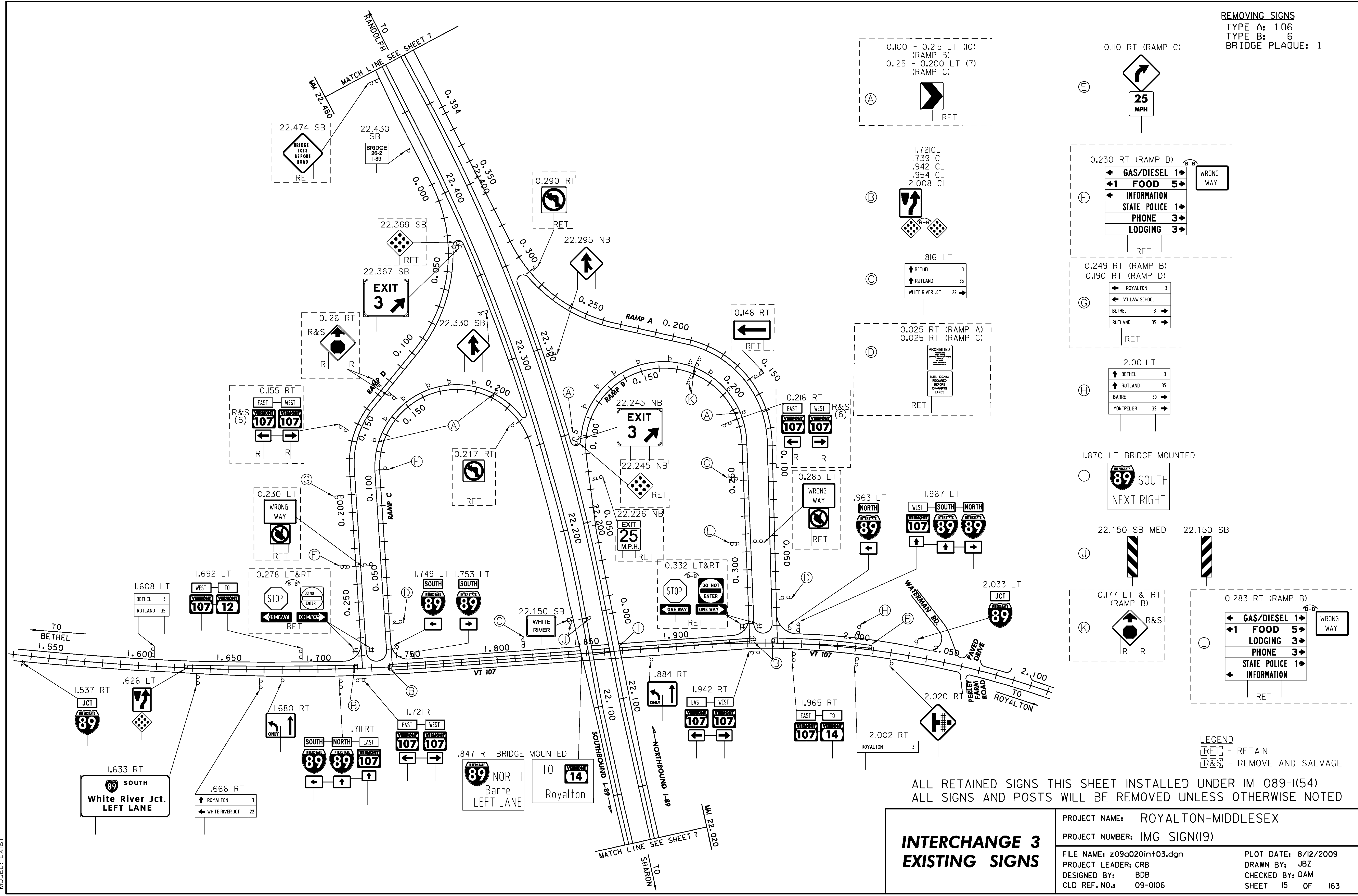
ALL SIGNS AND POSTS WILL BE REMOVED UNLESS OTHERWISE NOTED

**EXISTING SIGNS  
 MAINLINE (8)  
 55.900 - 60.880**

PROJECT NAME: ROYALTON-MIDDLESEX	
PROJECT NUMBER: IMG SIGN(19)	
FILE NAME: z09a020mainline.dgn	PLOT DATE: 8/12/2009
PROJECT LEADER: CRB	DRAWN BY: JBZ
DESIGNED BY: BDB	CHECKED BY: DAM
CLD REF. NO.: 09-0106	SHEET 14 OF 163

MODEL: 08-Exist

REMOVING SIGNS  
 TYPE A: 106  
 TYPE B: 6  
 BRIDGE PLAQUE: 1



LEGEND  
 [RET] - RETAIN  
 [R&S] - REMOVE AND SALVAGE

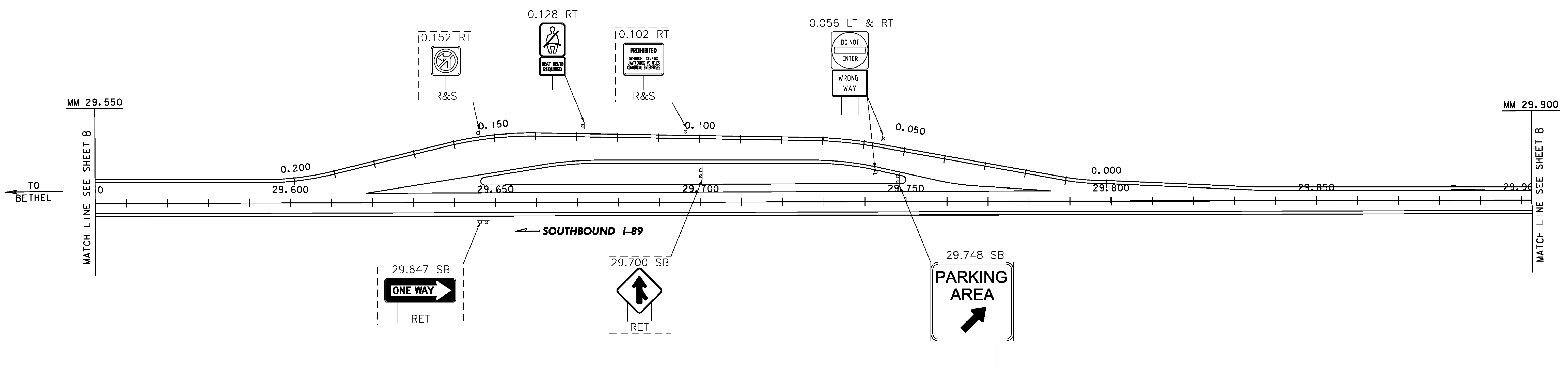
ALL RETAINED SIGNS THIS SHEET INSTALLED UNDER IM 089-I(54)  
 ALL SIGNS AND POSTS WILL BE REMOVED UNLESS OTHERWISE NOTED

**INTERCHANGE 3  
 EXISTING SIGNS**

PROJECT NAME:	ROYALTON-MIDDLESEX
PROJECT NUMBER:	IMG SIGN(19)
FILE NAME:	z09a020in+03.dgn
PROJECT LEADER:	CRB
DESIGNED BY:	BDB
CLD REF. NO.:	09-0106
PLOT DATE:	8/12/2009
DRAWN BY:	JBZ
CHECKED BY:	DAM
SHEET	15 OF 163

MODEL: Exist

REMOVING SIGNS  
 TYPE A: 8  
 TYPE B: 1  
 BRIDGE PLAQUE: 0



LEGEND  
 [RET] - RETAIN  
 [R&S] - REMOVE AND SALVAGE

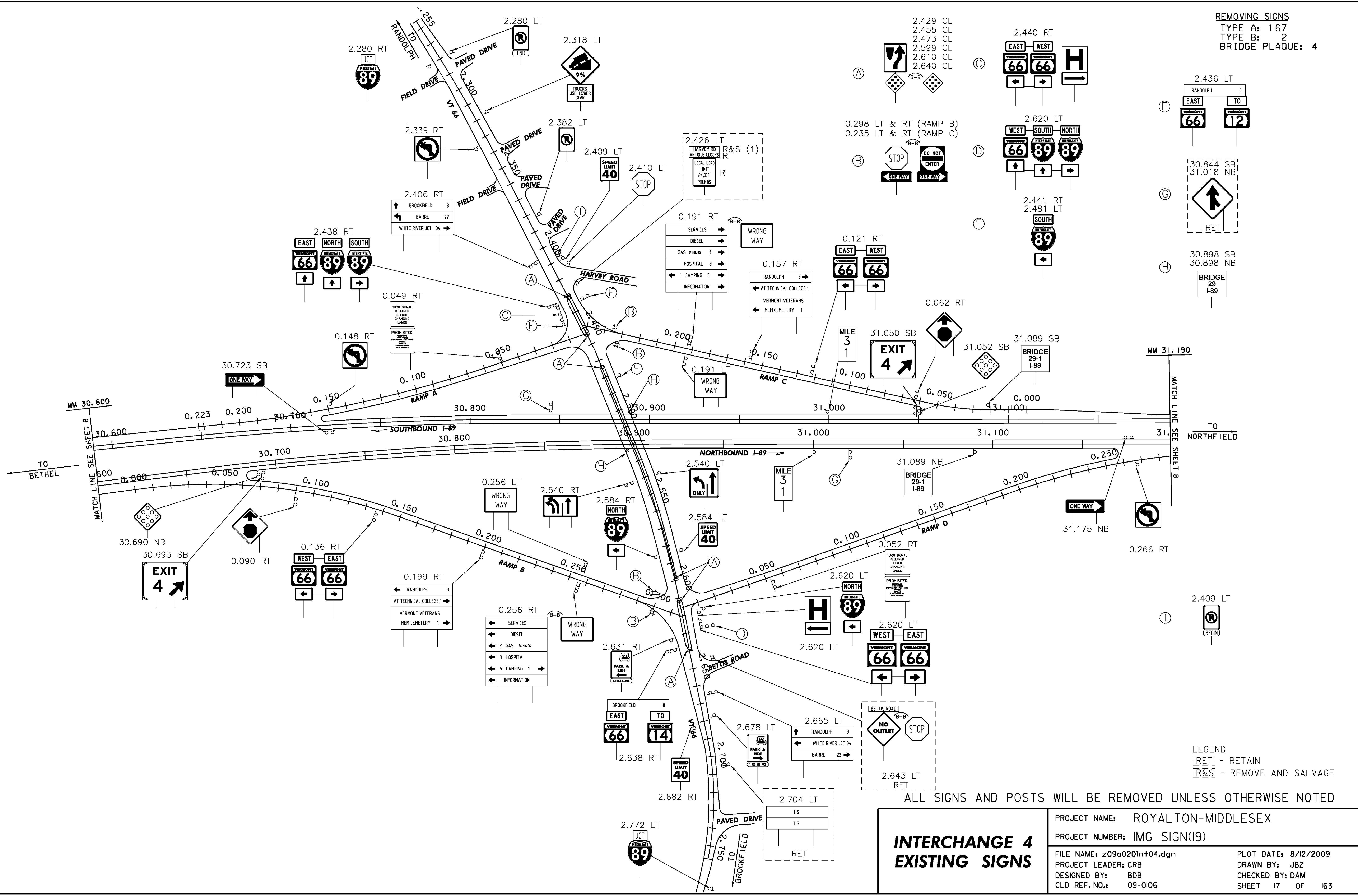
ALL SIGNS AND POSTS WILL BE REMOVED UNLESS OTHERWISE NOTED

**PARKING AREA  
 RANDOLPH - SB  
 EXISTING SIGNS  
 MM 29.675**

PROJECT NAME:	ROYALTON-MIDDLESEX
PROJECT NUMBER:	IMG SIGN(19)
FILE NAME:	z09a020rest-SB(29.70).dgn
PLOT DATE:	8/12/2009
PROJECT LEADER:	CRB
DRAWN BY:	JBZ
DESIGNED BY:	BDB
CHECKED BY:	DAM
CLD REF. NO.:	09-0106
SHEET	16 OF 163

MODEL: Exist+

MODEL: Exist+

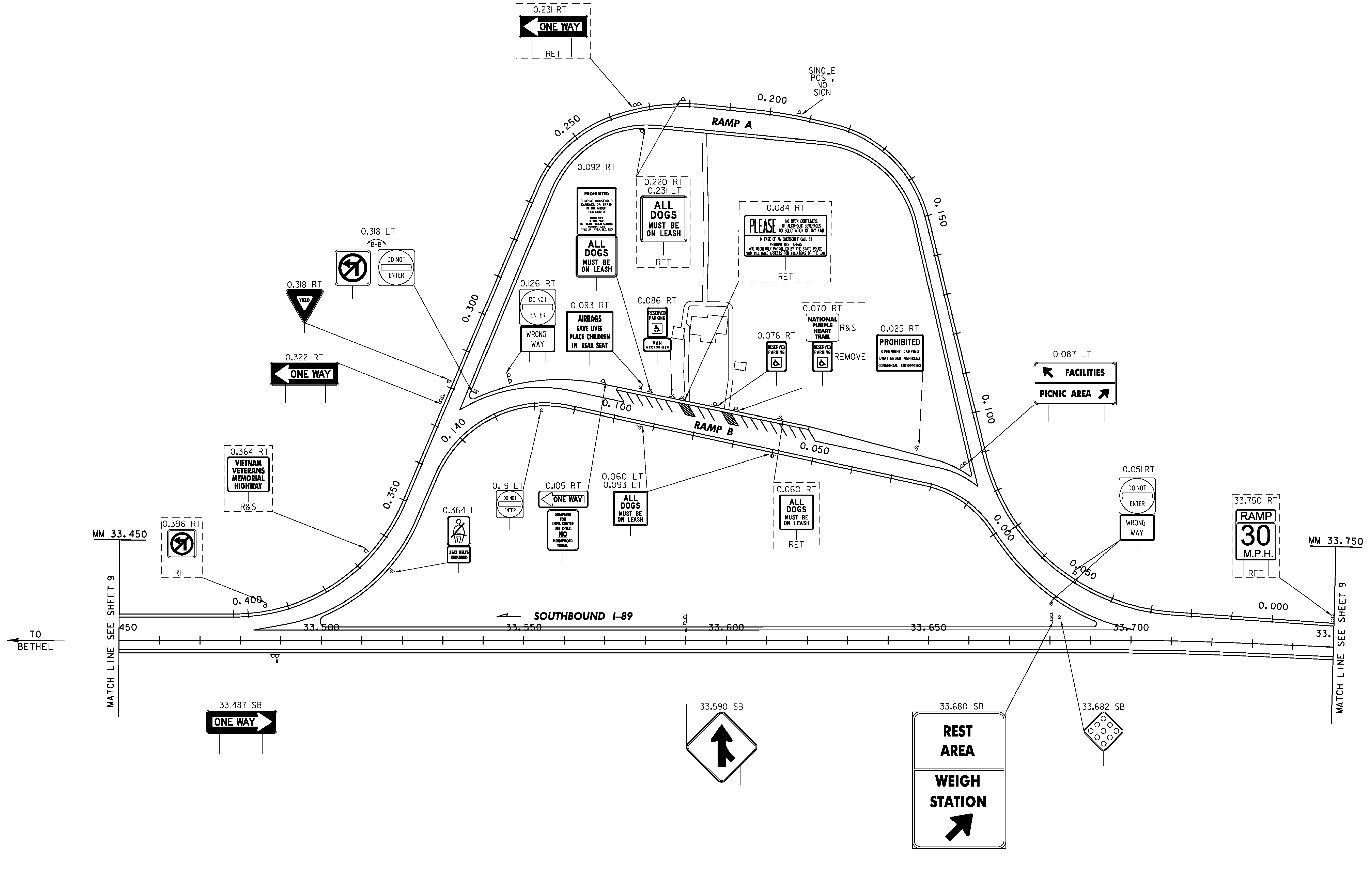


**REMOVING SIGNS**  
 TYPE A: 167  
 TYPE B: 2  
 BRIDGE PLAQUE: 4

**INTERCHANGE 4  
 EXISTING SIGNS**

PROJECT NAME: ROYALTON-MIDDLESEX  
 PROJECT NUMBER: IMG SIGN(19)  
 FILE NAME: z09a020int04.dgn  
 PROJECT LEADER: CRB  
 DESIGNED BY: BDB  
 CLD REF. NO.: 09-0106  
 PLOT DATE: 8/12/2009  
 DRAWN BY: JBZ  
 CHECKED BY: DAM  
 SHEET 17 OF 163

REMOVING SIGNS  
 TYPE A: 30  
 TYPE B: 2  
 BRIDGE PLAQUE: 0



ALL SIGNS AND POSTS WILL BE REMOVED UNLESS OTHERWISE NOTED

**REST AREA  
 RANDOLPH - SB  
 EXISTING SIGNS  
 MM 33.600**

PROJECT NAME: ROYALTON-MIDDLESEX

PROJECT NUMBER: IMG SIGN(19)

FILE NAME: z09a020rest-SB(34).dgn

PLOT DATE: 8/12/2009

PROJECT LEADER: CRB

DRAWN BY: JBZ

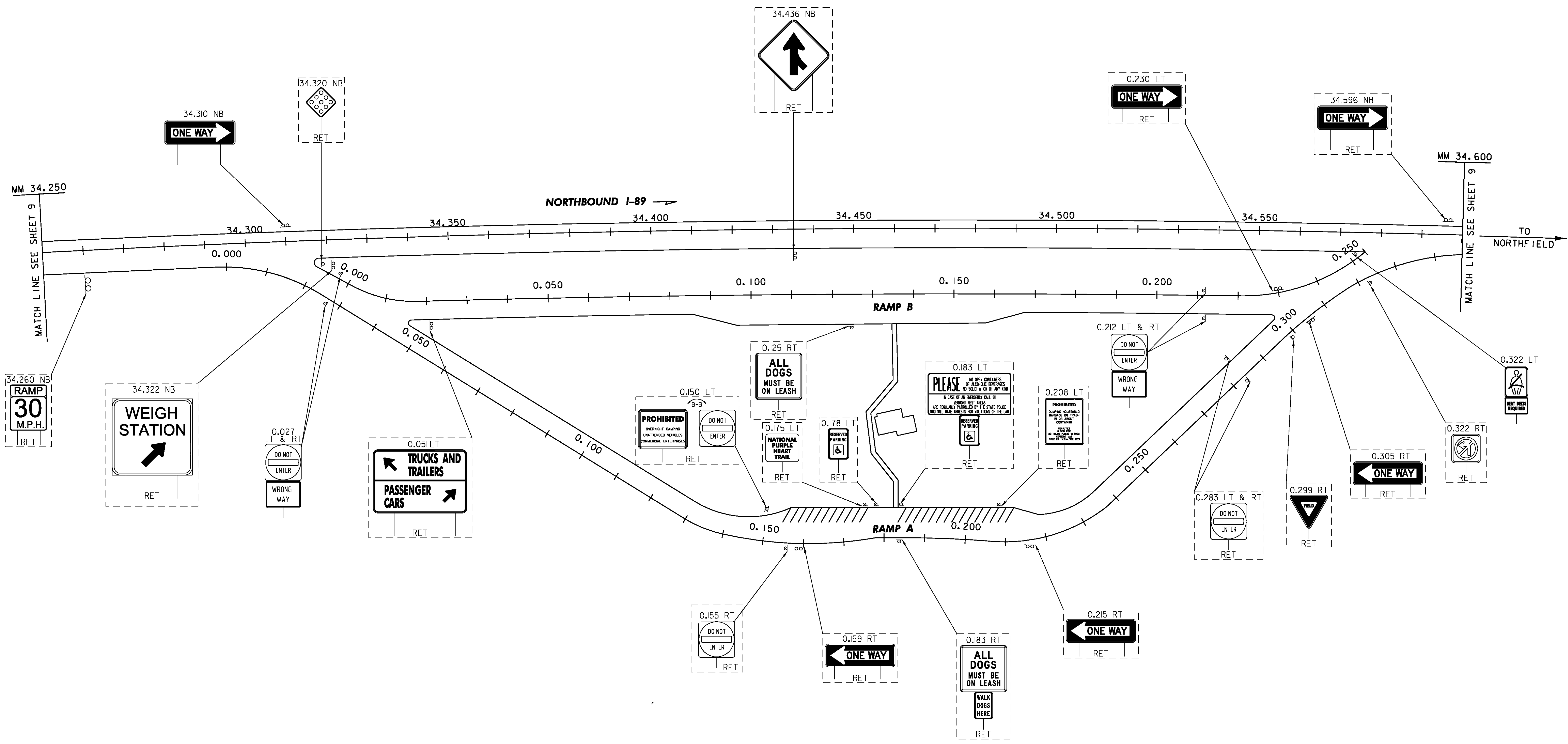
DESIGNED BY: BDB

CHECKED BY: DAM

CLD REF. NO.: 09-0106

SHEET 18 OF 163

REMOVING SIGNS  
 TYPE A: 11  
 TYPE B: 0  
 BRIDGE PLAQUE: 0



LEGEND  
 [RET] - RETAIN  
 [R&S] - REMOVE AND SALVAGE

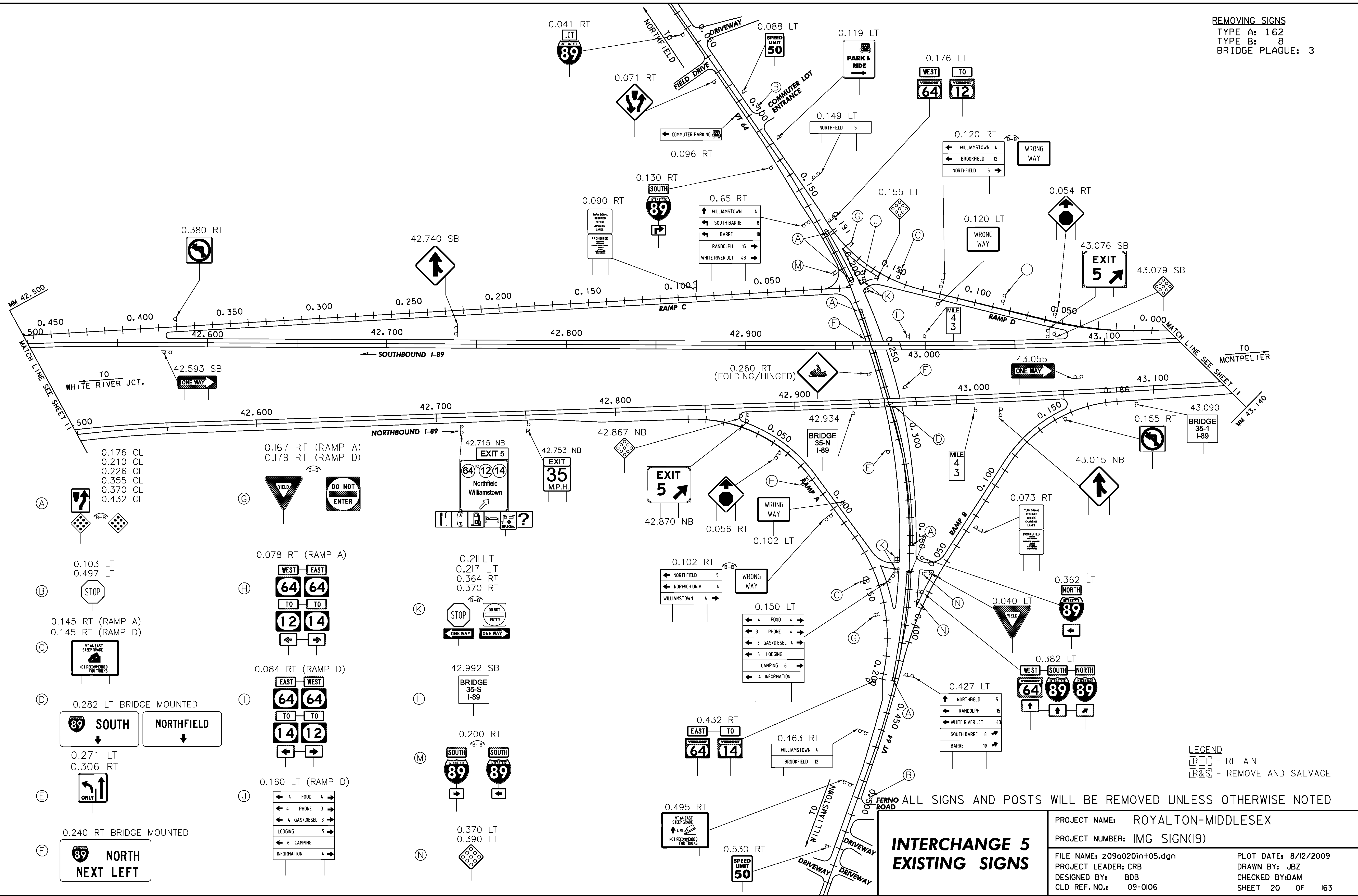
ALL SIGNS AND POSTS WILL BE REMOVED UNLESS OTHERWISE NOTED

**REST AREA  
 RANDOLPH - NB  
 EXISTING SIGNS  
 MM 34.450**

PROJECT NAME: ROYALTON-MIDDLESEX	FILE NAME: z09a020rest-NB(34).dgn	PLOT DATE: 8/12/2009
PROJECT NUMBER: IMG SIGN(19)	PROJECT LEADER: CRB	DRAWN BY: JBZ
DESIGNED BY: BDB	CLD REF. NO.: 09-0106	CHECKED BY: DAM
		SHEET 19 OF 163

MODEL: Exist+

REMOVING SIGNS  
 TYPE A: 162  
 TYPE B: 8  
 BRIDGE PLAQUE: 3



MODEL: Exist

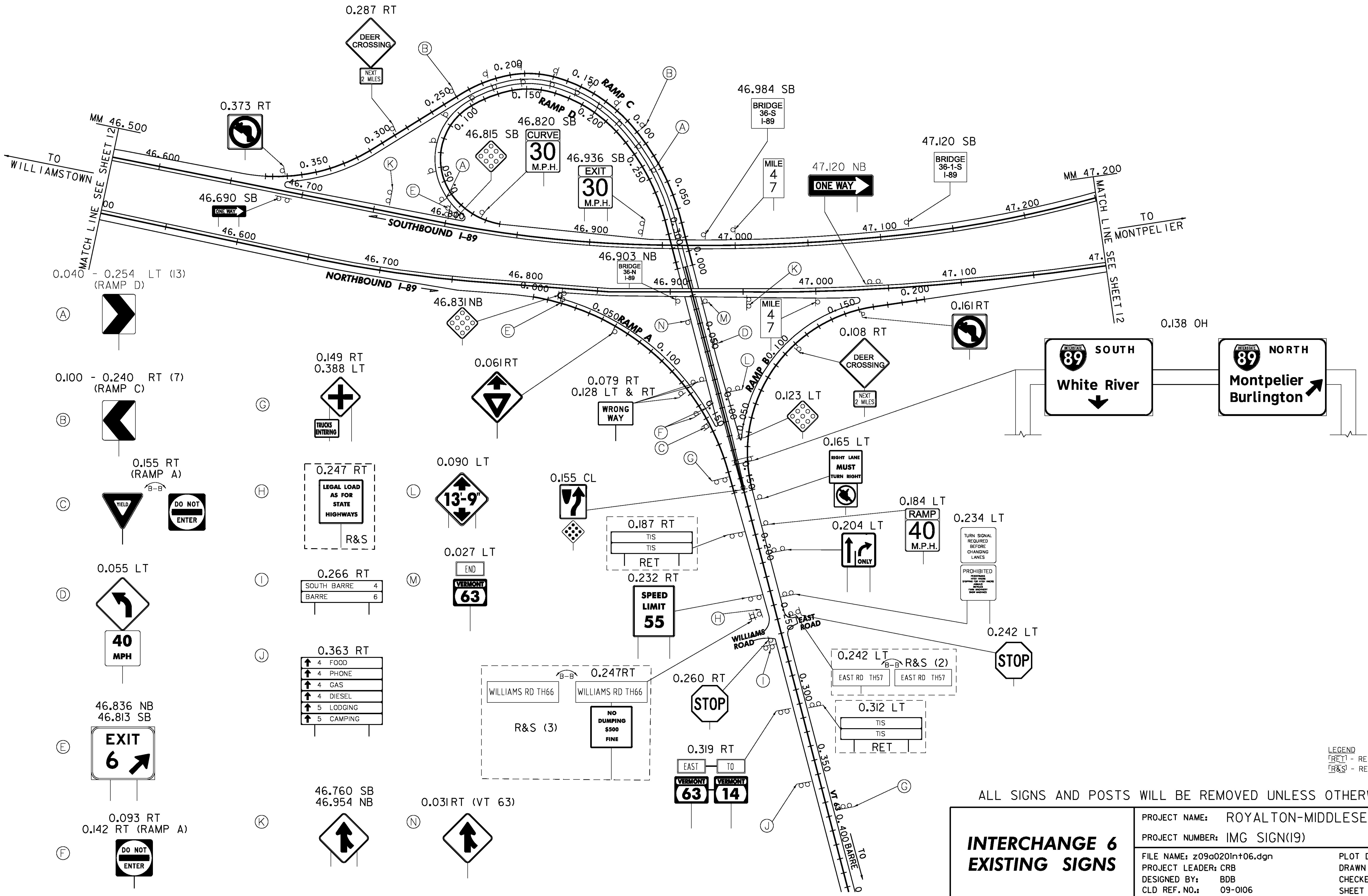
ALL SIGNS AND POSTS WILL BE REMOVED UNLESS OTHERWISE NOTED

**INTERCHANGE 5 EXISTING SIGNS**

PROJECT NAME: ROYALTON-MIDDLESEX  
 PROJECT NUMBER: IMG SIGN(19)  
 FILE NAME: z09a020in+05.dgn  
 PROJECT LEADER: CRB  
 DESIGNED BY: BDB  
 CLD REF. NO.: 09-0106

PLOT DATE: 8/12/2009  
 DRAWN BY: JBZ  
 CHECKED BY: DAM  
 SHEET 20 OF 163

REMOVING SIGNS  
 TYPE A: 85  
 TYPE B: 4  
 BRIDGE PLAQUE: 3



MODEL: Exist+

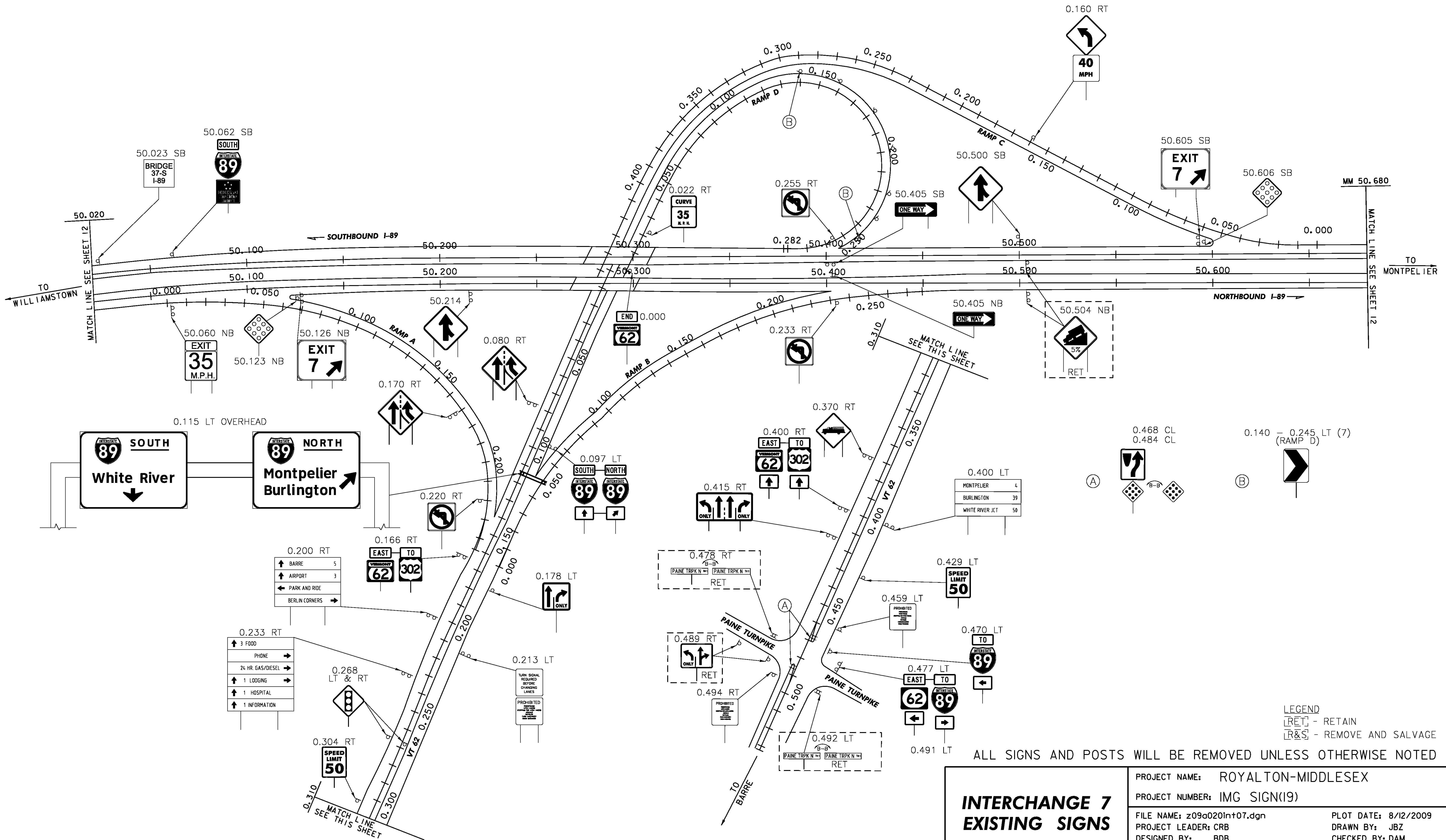
LEGEND  
 [RET] - RETAIN  
 [R&S] - REMOVE AND SALVAGE

ALL SIGNS AND POSTS WILL BE REMOVED UNLESS OTHERWISE NOTED

**INTERCHANGE 6  
 EXISTING SIGNS**

PROJECT NAME: ROYALTON-MIDDLESEX	
PROJECT NUMBER: IMG SIGN(19)	
FILE NAME: z09a020in+06.dgn	PLOT DATE: 8/12/2009
PROJECT LEADER: CRB	DRAWN BY: JBZ
DESIGNED BY: BDB	CHECKED BY: DAM
CLD REF. NO.: 09-0106	SHEET 21 OF 163

REMOVING SIGNS  
 TYPE A: 81  
 TYPE B: 4  
 BRIDGE PLAQUE: 1



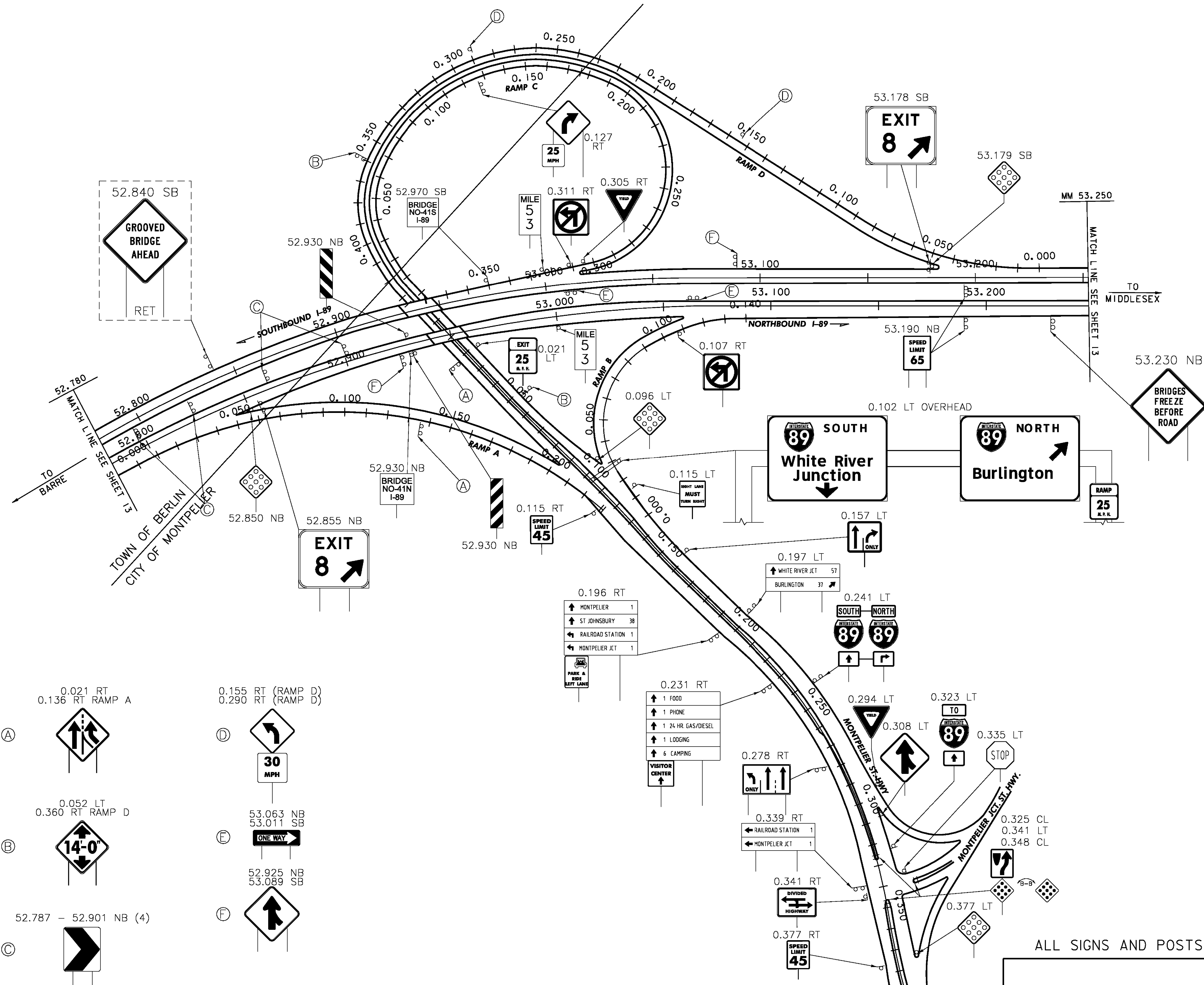
ALL SIGNS AND POSTS WILL BE REMOVED UNLESS OTHERWISE NOTED

### INTERCHANGE 7 EXISTING SIGNS

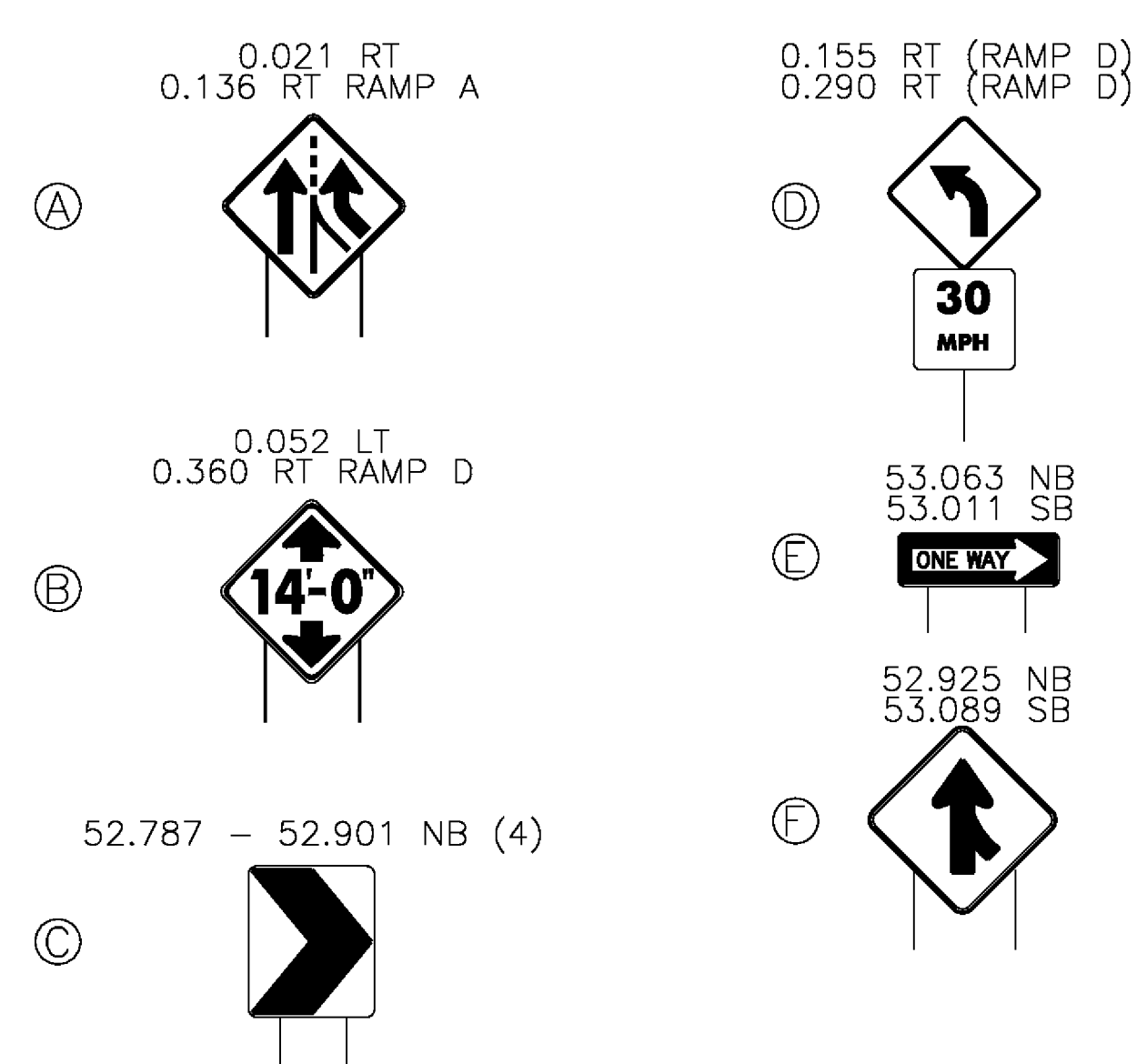
PROJECT NAME:	ROYALTON-MIDDLESEX
PROJECT NUMBER:	IMG SIGN(19)
FILE NAME:	z09a020int07.dgn
PROJECT LEADER:	CRB
DESIGNED BY:	BDB
CLD REF. NO.:	09-0106
PLOT DATE:	8/12/2009
DRAWN BY:	JBZ
CHECKED BY:	DAM
SHEET	22 OF 163

MODEL: Exist

REMOVING SIGNS  
 TYPE A: 76  
 TYPE B: 4  
 BRIDGE PLAQUE: 2



REMOVAL OF 2 SIGNS NOT SHOWN ON PLANS.  
 REPLACED WITH NEW: SEE SHEET 41L 2.0 EACH



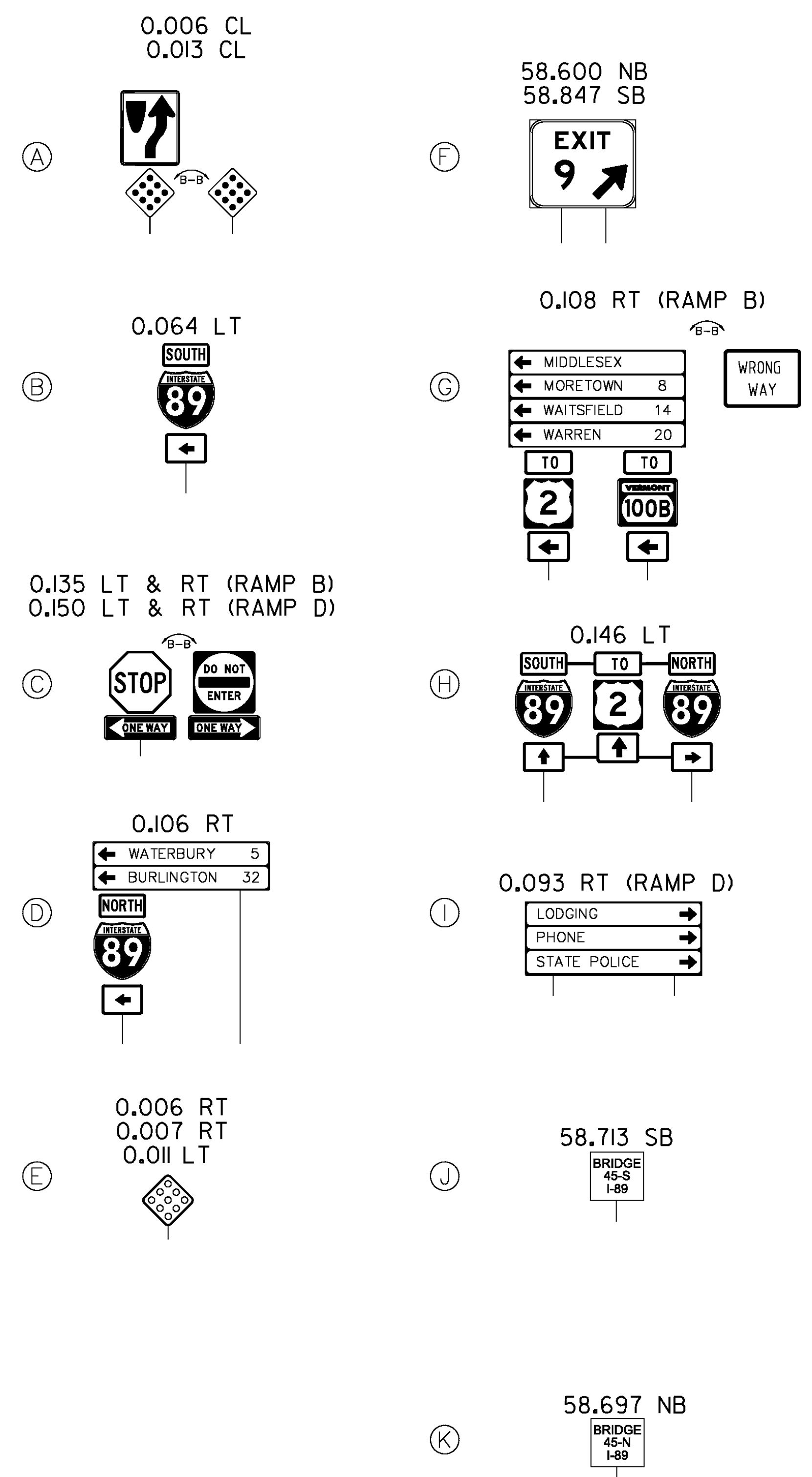
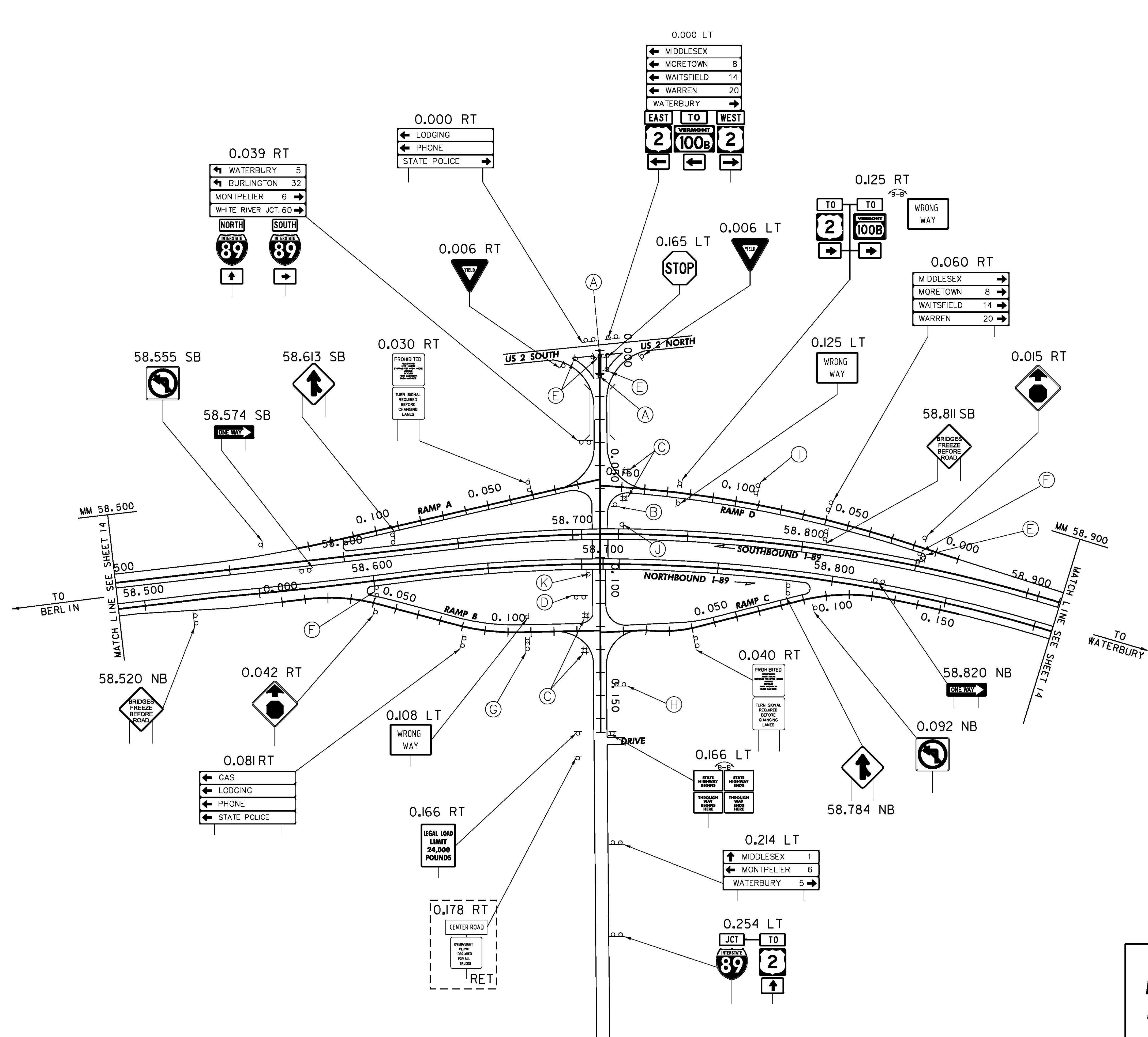
LEGEND  
 [RET] - RETAIN  
 [R&S] - REMOVE AND SALVAGE

ALL SIGNS AND POSTS WILL BE REMOVED UNLESS OTHERWISE NOTED

<h3>INTERCHANGE 8 EXISTING SIGNS</h3>	PROJECT NAME: ROYALTON-MIDDLESEX
	PROJECT NUMBER: IMG SIGN(I9)
	FILE NAME: z09a020in+08.dgn
	CLD REF. NO.: 09-0106
DESIGNED BY: BDB	PLOT DATE: 8/12/2009
PROJECT LEADER: CRB	DRAWN BY: JBZ
CHECKED BY: DAM	SHEET 23 OF 163

MODEL: Exist

REMOVING SIGNS  
 TYPE A: 131  
 TYPE B: 2  
 BRIDGE PLAQUE: 2



LEGEND  
 [RET] - RETAIN  
 [R&S] - REMOVE AND SALVAGE

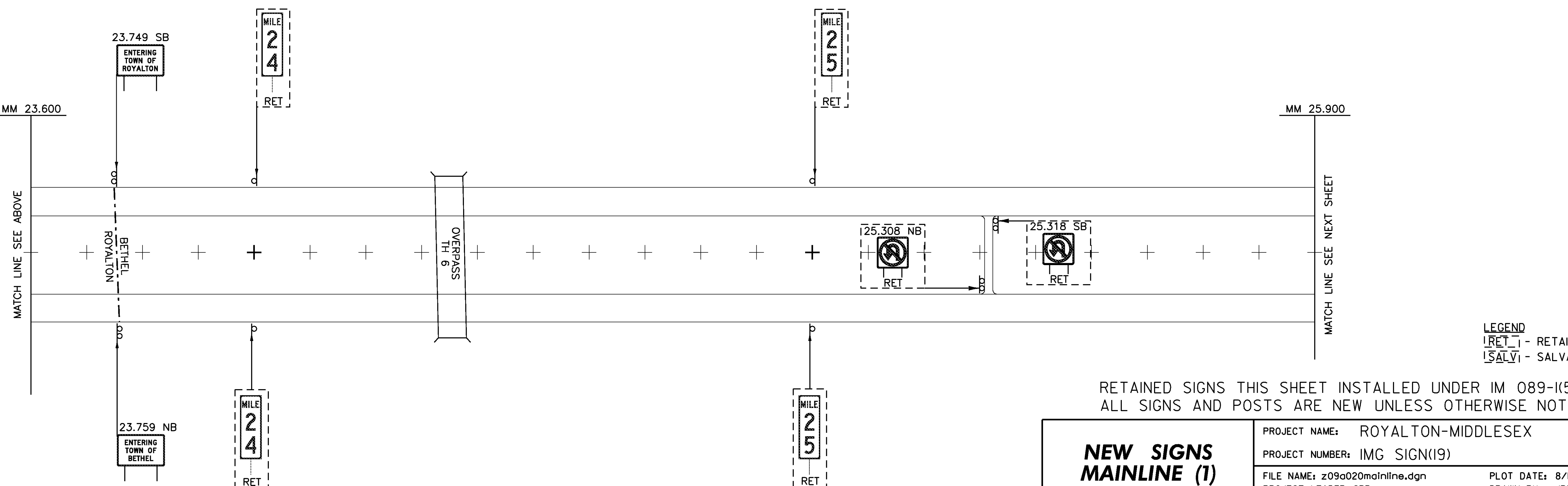
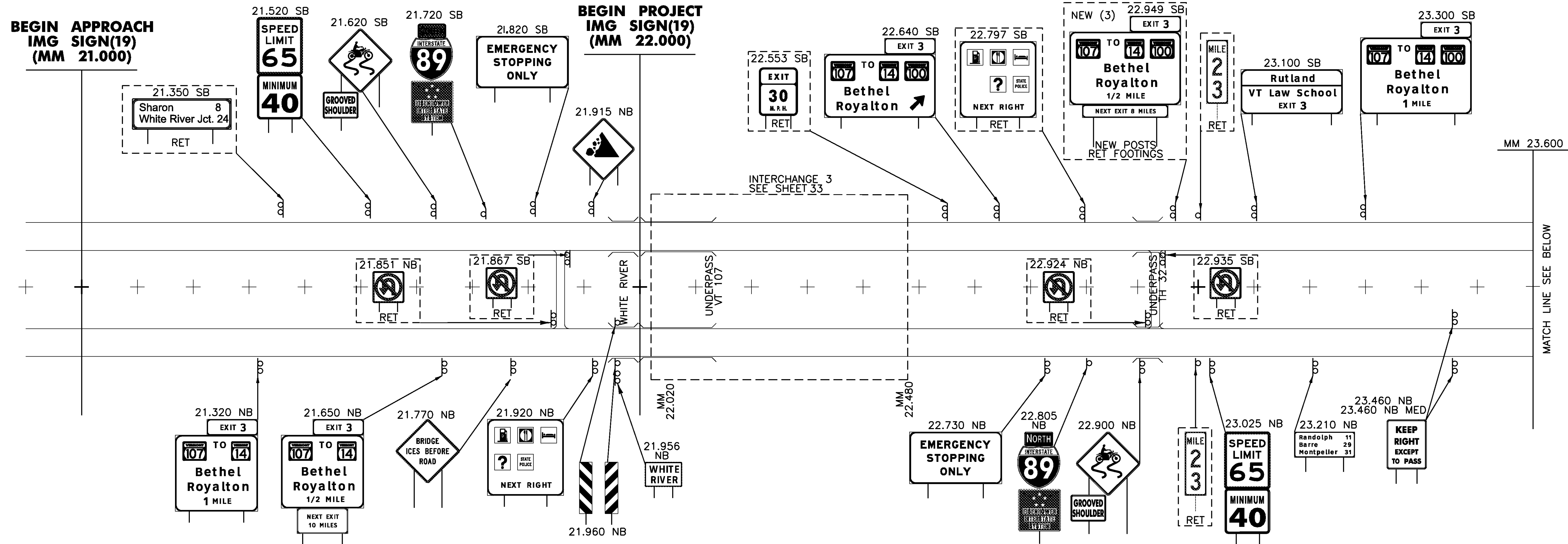
ALL SIGNS AND POSTS WILL BE REMOVED UNLESS OTHERWISE NOTED

<h3>INTERCHANGE 9</h3> <h3>EXISTING SIGNS</h3>	PROJECT NAME: ROYALTON-MIDDLESEX
	PROJECT NUMBER: IMG SIGN(19)
	FILE NAME: z09a020int09.dgn
	PLOT DATE: 8/12/2009
PROJECT LEADER: CRB	DRAWN BY: JBZ
DESIGNED BY: BDB	CHECKED BY: DAM
CLD REF. NO.: 09-0106	SHEET 24 OF 163

MODEL: Exist

**BEGIN APPROACH  
IMG SIGN(19)  
(MM 21.000)**

**BEGIN PROJECT  
IMG SIGN(19)  
(MM 22.000)**



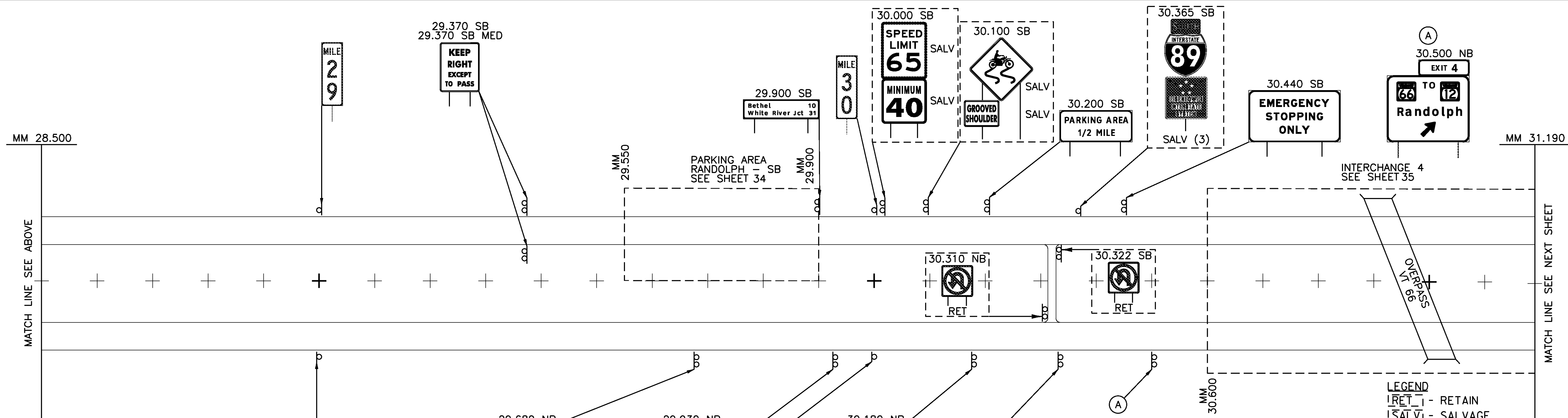
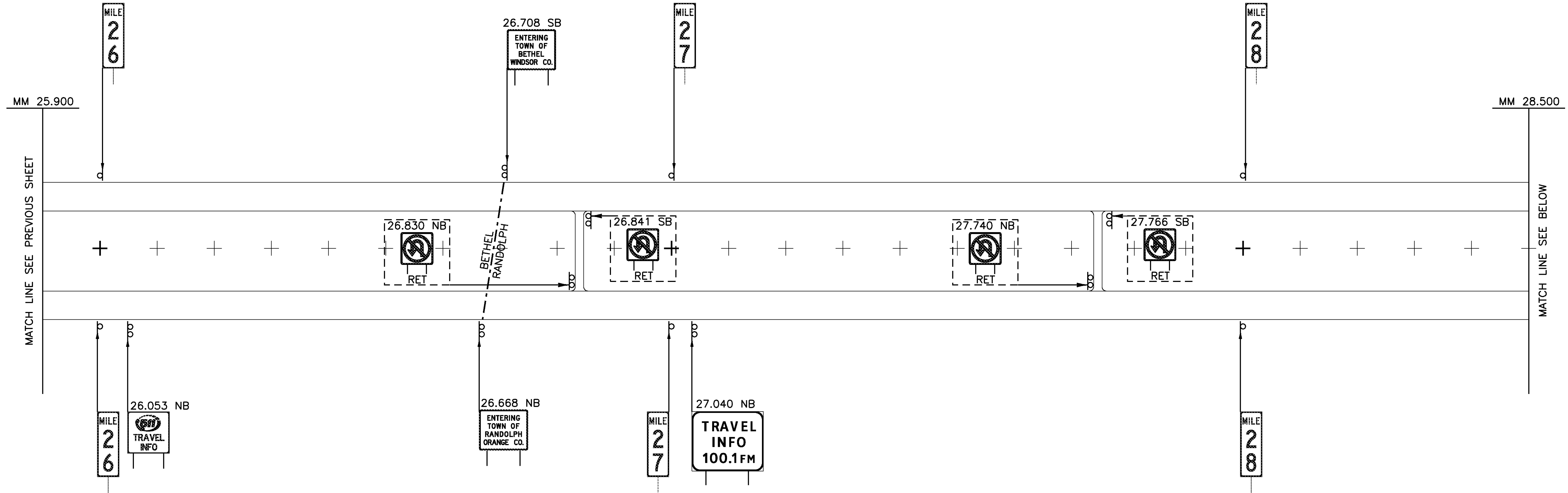
**LEGEND**  
[RET] - RETAIN  
[SALV] - SALVAGE

RETAINED SIGNS THIS SHEET INSTALLED UNDER IM 089-I(54)  
ALL SIGNS AND POSTS ARE NEW UNLESS OTHERWISE NOTED

<b>NEW SIGNS MAINLINE (1) 22.000 - 25.900</b>		PROJECT NAME: ROYALTON-MIDDLESEX
		PROJECT NUMBER: IMG SIGN(19)
FILE NAME: z09a020mainline.dgn	DESIGNED BY: BDB	PLOT DATE: 8/12/2009
PROJECT LEADER: CRB	CLD REF. NO.: 09-0106	DRAWN BY: JJB
		CHECKED BY: DAM
		SHEET 25 OF 163

MODEL: 01-New

MODEL: 02-New



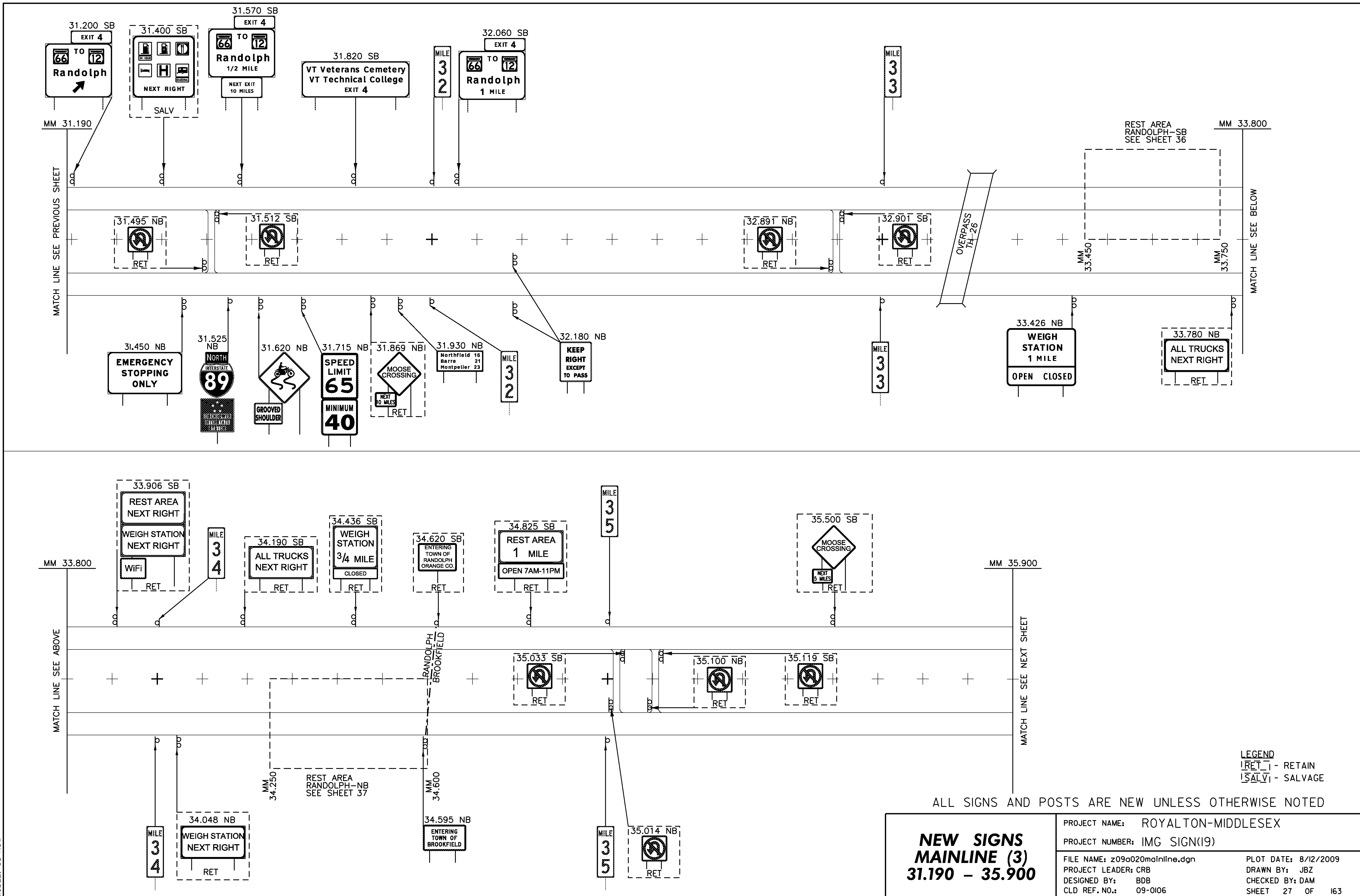
LEGEND  
 RET - RETAIN  
 SALV - SALVAGE

ALL SIGNS AND POSTS ARE NEW UNLESS OTHERWISE NOTED

**NEW SIGNS  
 MAINLINE (2)  
 25.900 - 31.190**

PROJECT NAME: ROYALTON-MIDDLESEX	
PROJECT NUMBER: IMG SIGN(19)	
FILE NAME: z09a020mainline.dgn	PLOT DATE: 8/12/2009
PROJECT LEADER: CRB	DRAWN BY: JBZ
DESIGNED BY: BDB	CHECKED BY: DAM
CLD REF. NO.: 09-0106	SHEET 26 OF 163

MODEL: 03-New

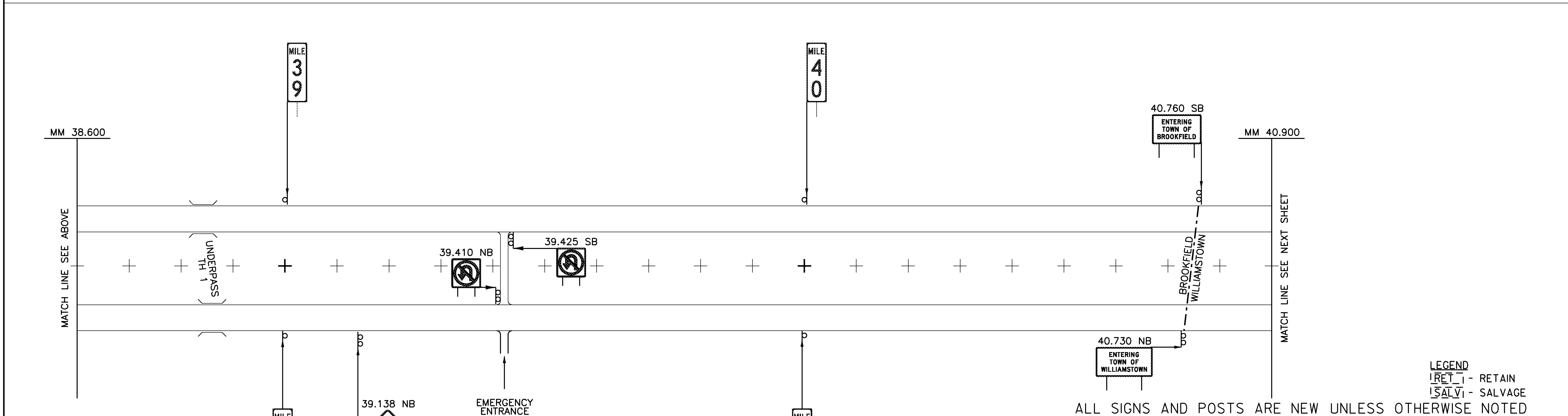
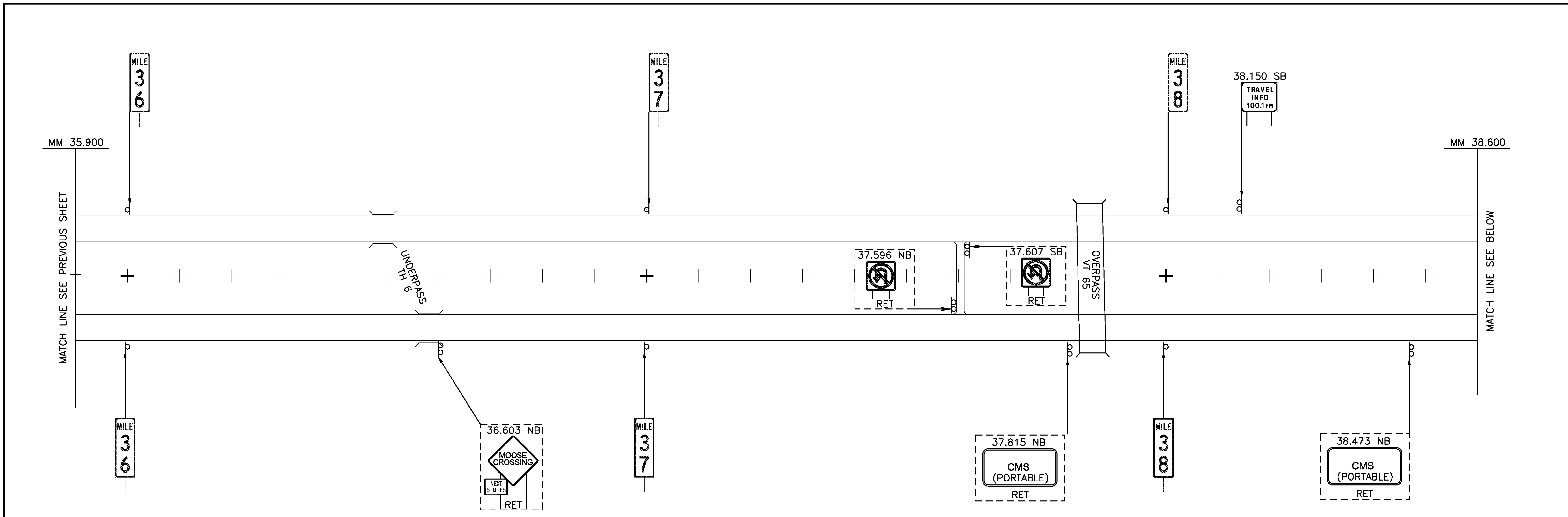


**LEGEND**  
 [RET] - RETAIN  
 [SALV] - SALVAGE

ALL SIGNS AND POSTS ARE NEW UNLESS OTHERWISE NOTED

<b>NEW SIGNS          MAINLINE (3)          31.190 - 35.900</b>	PROJECT NAME: ROYALTON-MIDDLESEX
	PROJECT NUMBER: IMG SIGN(19)
	FILE NAME: z09a020mainline.dgn
PROJECT LEADER: CRB	PLOT DATE: 8/12/2009
DESIGNED BY: BDB	DRAWN BY: JBZ
CLD REF. NO.: 09-0106	CHECKED BY: DAM
	SHEET 27 OF 163

MODEL: 04-New

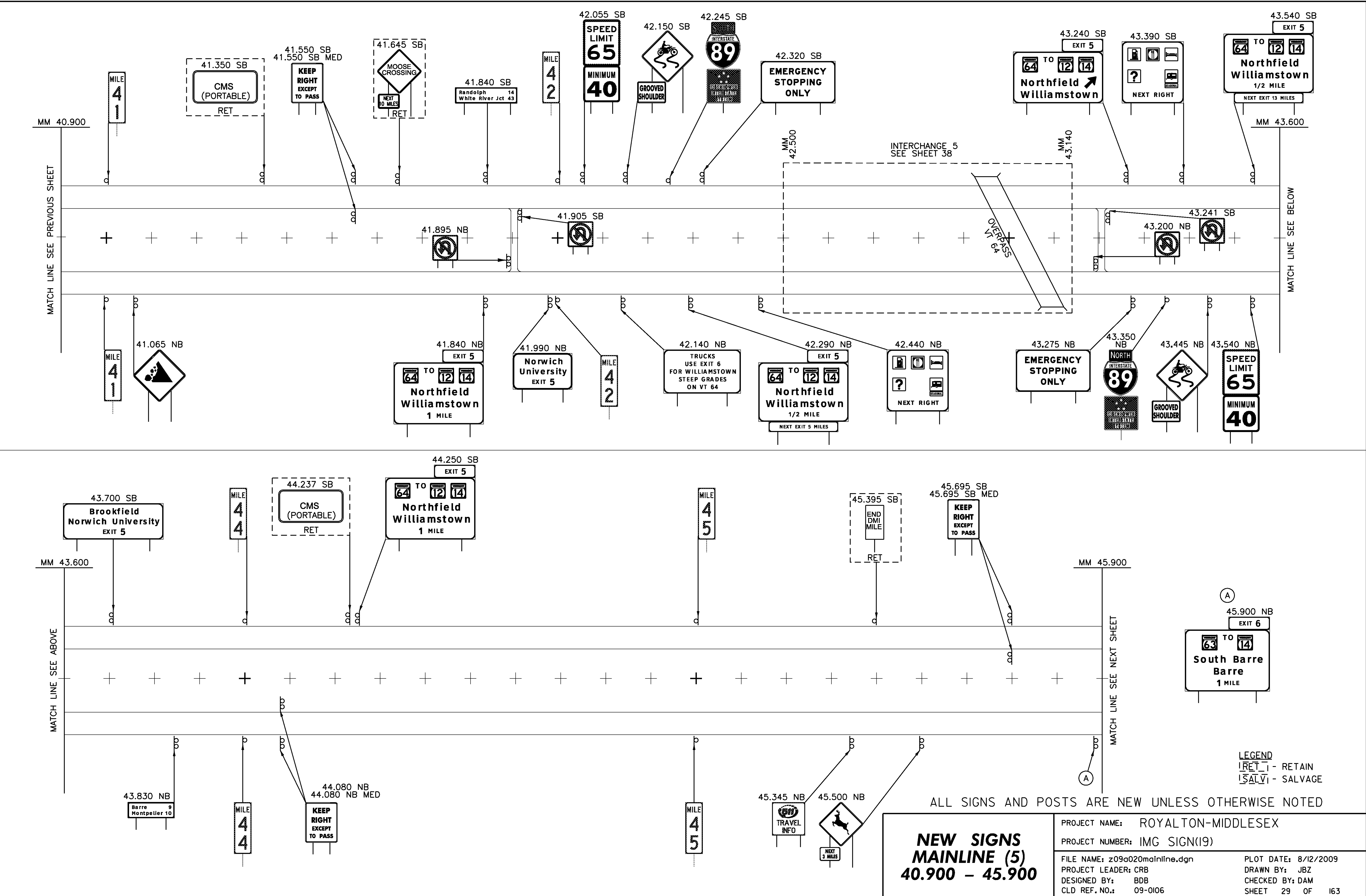


LEGEND  
 RET - RETAIN  
 SALV - SALVAGE

ALL SIGNS AND POSTS ARE NEW UNLESS OTHERWISE NOTED

<p><b>NEW SIGNS          MAINLINE (4)          35.900 - 40.900</b></p>	PROJECT NAME: ROYALTON-MIDDLESEX
	PROJECT NUMBER: IMG SIGN(19)
	FILE NAME: z09a020mainline.dgn
PROJECT LEADER: CRB	PLOT DATE: 8/12/2009
DESIGNED BY: BDB	DRAWN BY: JBZ
CLD REF. NO.: 09-0106	CHECKED BY: DAM
	SHEET 28 OF 163

MODEL: 05-New



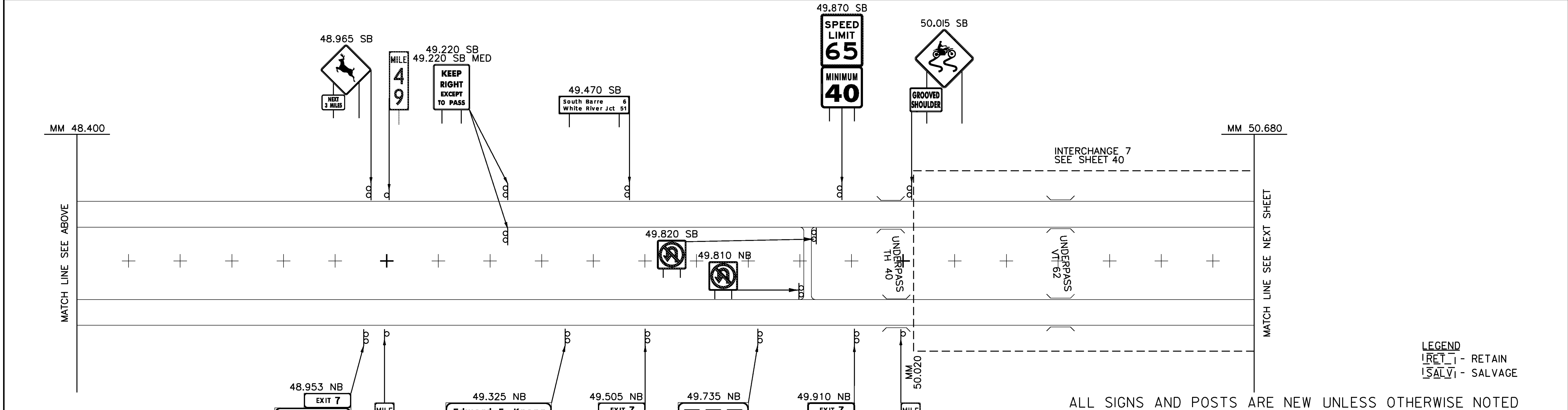
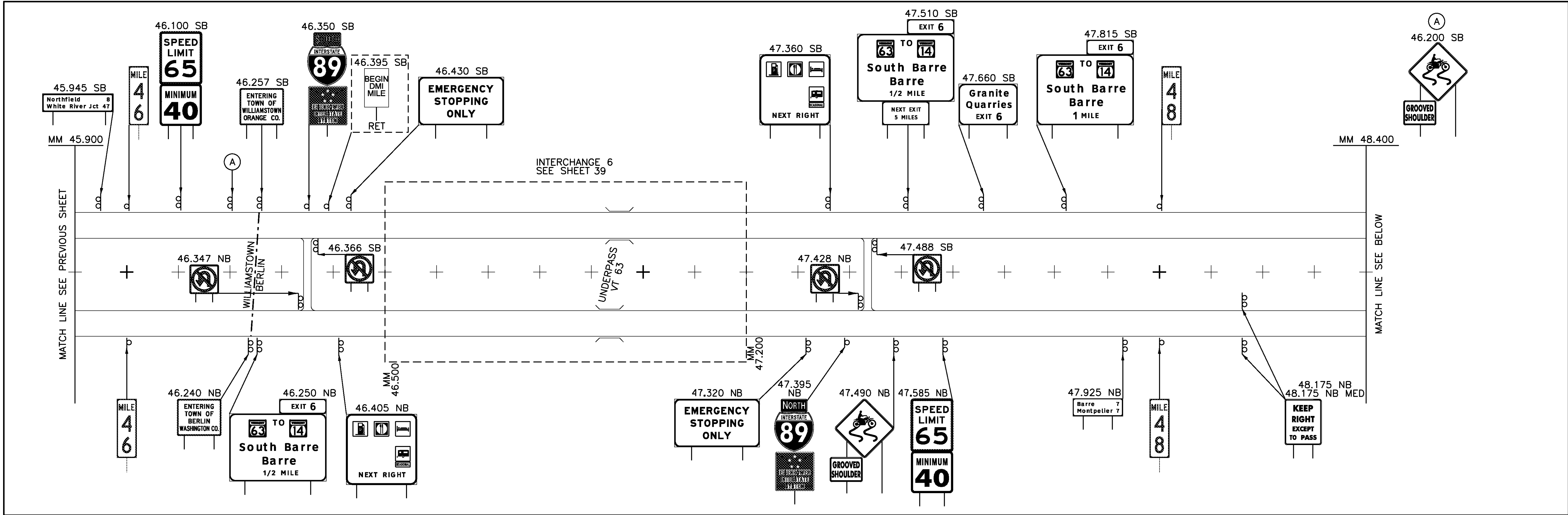
**NEW SIGNS  
MAINLINE (5)  
40.900 - 45.900**

PROJECT NAME: ROYALTON-MIDDLESEX  
 PROJECT NUMBER: IMG SIGN(19)  
 FILE NAME: z09a020mainline.dgn  
 PLOT DATE: 8/12/2009  
 PROJECT LEADER: CRB  
 DRAWN BY: JBZ  
 DESIGNED BY: BDB  
 CHECKED BY: DAM  
 CLD REF. NO.: 09-0106  
 SHEET 29 OF 163

LEGEND  
 RET - RETAIN  
 SALV - SALVAGE

ALL SIGNS AND POSTS ARE NEW UNLESS OTHERWISE NOTED

MODEL: 06-New

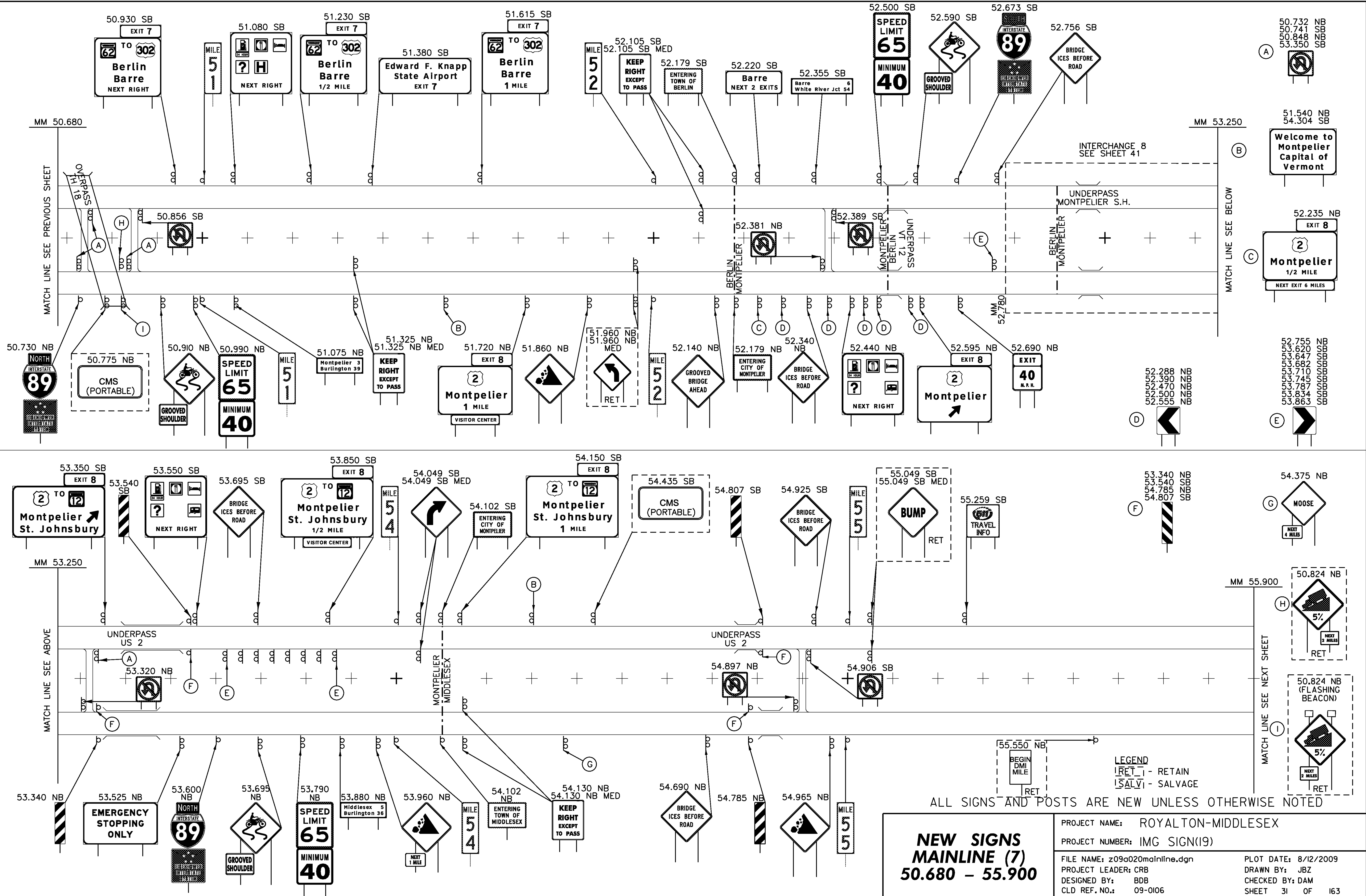


LEGEND  
 RET - RETAIN  
 SALV - SALVAGE

ALL SIGNS AND POSTS ARE NEW UNLESS OTHERWISE NOTED

<b>NEW SIGNS MAINLINE (6) 45.900 - 50.680</b>		PROJECT NAME: ROYALTON-MIDDLESEX
		PROJECT NUMBER: IMG SIGN(19)
FILE NAME: z09a020mainline.dgn	PLOT DATE: 8/12/2009	
PROJECT LEADER: CRB	DRAWN BY: JBZ	
DESIGNED BY: BDB	CHECKED BY: DAM	
CLD REF. NO.: 09-0106	SHEET 30 OF 163	

MODEL: 07-New



**NEW SIGNS  
MAINLINE (7)  
50.680 - 55.900**

PROJECT NAME: ROYALTON-MIDDLESEX	
PROJECT NUMBER: IMG SIGN(19)	
FILE NAME: z09a020mainline.dgn	PLOT DATE: 8/12/2009
PROJECT LEADER: CRB	DRAWN BY: JJB
DESIGNED BY: BDB	CHECKED BY: DAM
CLD REF. NO.: 09-0106	SHEET 31 OF 163

ALL SIGNS AND POSTS ARE NEW UNLESS OTHERWISE NOTED

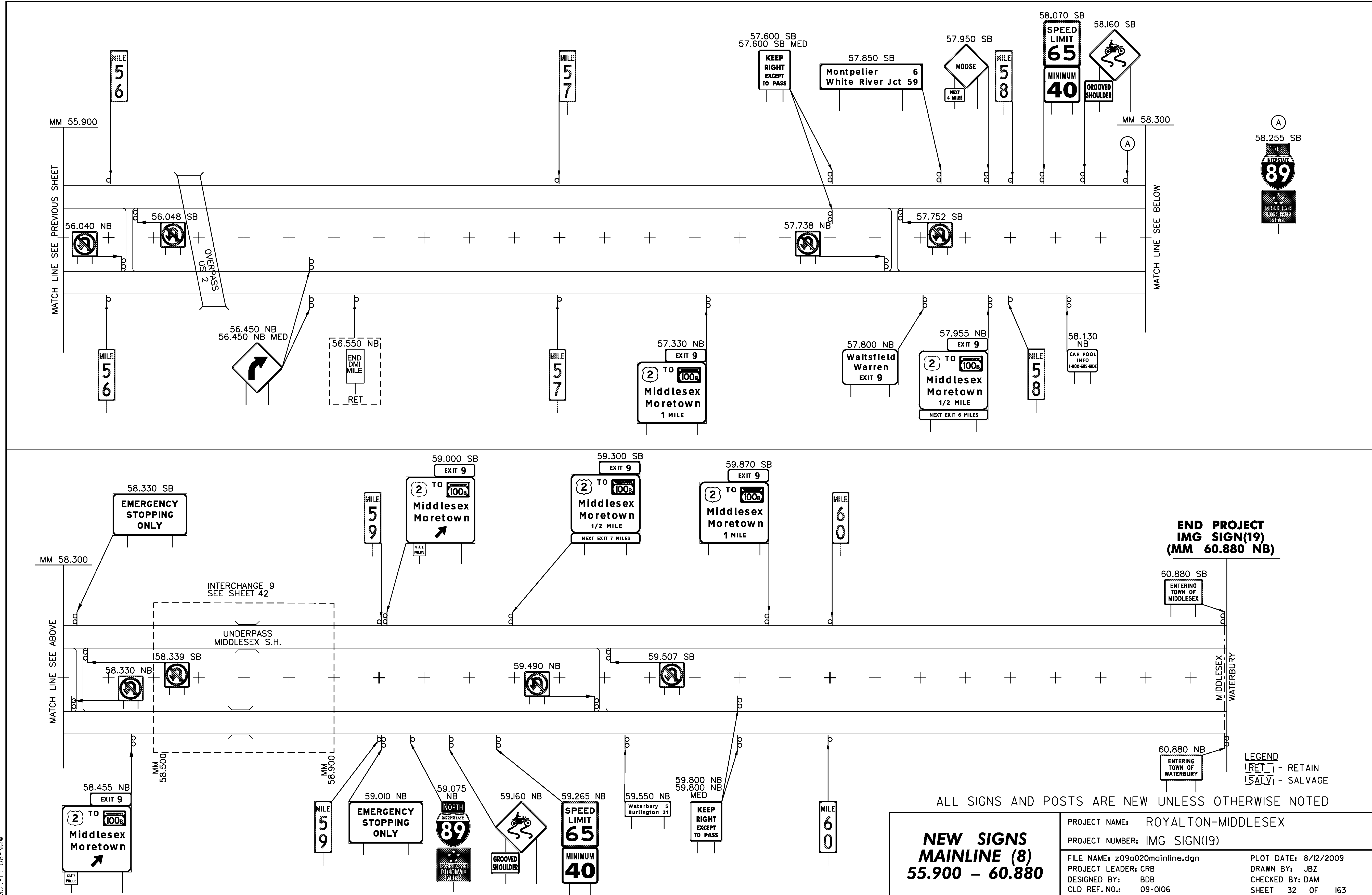
LEGEND  
[RET] - RETAIN  
[SALV] - SALVAGE

MATCH LINE SEE NEXT SHEET

MATCH LINE SEE PREVIOUS SHEET

MATCH LINE SEE BELOW

MODEL: 08-New



MATCH LINE SEE PREVIOUS SHEET

MATCH LINE SEE BELOW

MATCH LINE SEE ABOVE

LEGEND  
 [RET] - RETAIN  
 [SALV] - SALVAGE

ALL SIGNS AND POSTS ARE NEW UNLESS OTHERWISE NOTED

<b>NEW SIGNS MAINLINE (8) 55.900 - 60.880</b>		PROJECT NAME: ROYALTON-MIDDLESEX
		PROJECT NUMBER: IMG SIGN(19)
FILE NAME: z09a020mainline.dgn	PLOT DATE: 8/12/2009	
PROJECT LEADER: CRB	DRAWN BY: JBZ	
DESIGNED BY: BDB	CHECKED BY: DAM	
CLD REF. NO.: 09-0106	SHEET 32 OF 163	



**END PROJECT  
 IMG SIGN(19)  
 (MM 60.880 NB)**

60.880 SB  
 ENTERING TOWN OF MIDDLESEX

60.880 NB  
 ENTERING TOWN OF WATERBURY

MIDDLESEX WATERBURY

MM 55.900

MM 58.300

MM 58.300

MM 58.500

MM 58.900

MM 59.075

MM 59.265

MM 59.550

MM 60.000

MILE 56

MILE 57

MILE 58

MILE 56

MILE 57

MILE 58

MILE 59

MILE 60

57.600 SB  
57.600 SB MED

57.850 SB  
Montpelier  
White River Jct 59

57.950 SB  
MOOSE  
NEXT 4 MILES

58.070 SB  
SPEED LIMIT 65  
MINIMUM 40

58.160 SB  
GROOVED SHOULDER

56.450 NB  
56.450 NB MED

56.550 NB  
END DMI MILE  
RET

57.330 NB  
EXIT 9  
Middlesex Moretown  
1 MILE

57.800 NB  
Waitfield Warren  
EXIT 9

57.955 NB  
EXIT 9  
Middlesex Moretown  
1/2 MILE  
NEXT EXIT 6 MILES

58.130 NB  
CAR POOL INFO  
1-800-685-8806

59.000 SB  
EXIT 9  
Middlesex Moretown

59.300 SB  
EXIT 9  
Middlesex Moretown  
1/2 MILE  
NEXT EXIT 7 MILES

59.870 SB  
EXIT 9  
Middlesex Moretown  
1 MILE

58.330 SB  
EMERGENCY STOPPING ONLY

58.339 SB

58.330 NB

59.490 NB

59.507 SB

59.010 NB  
EMERGENCY STOPPING ONLY

59.075 NB  
NORTH INTERSTATE 89

59.160 NB  
GROOVED SHOULDER

59.265 NB  
SPEED LIMIT 65  
MINIMUM 40

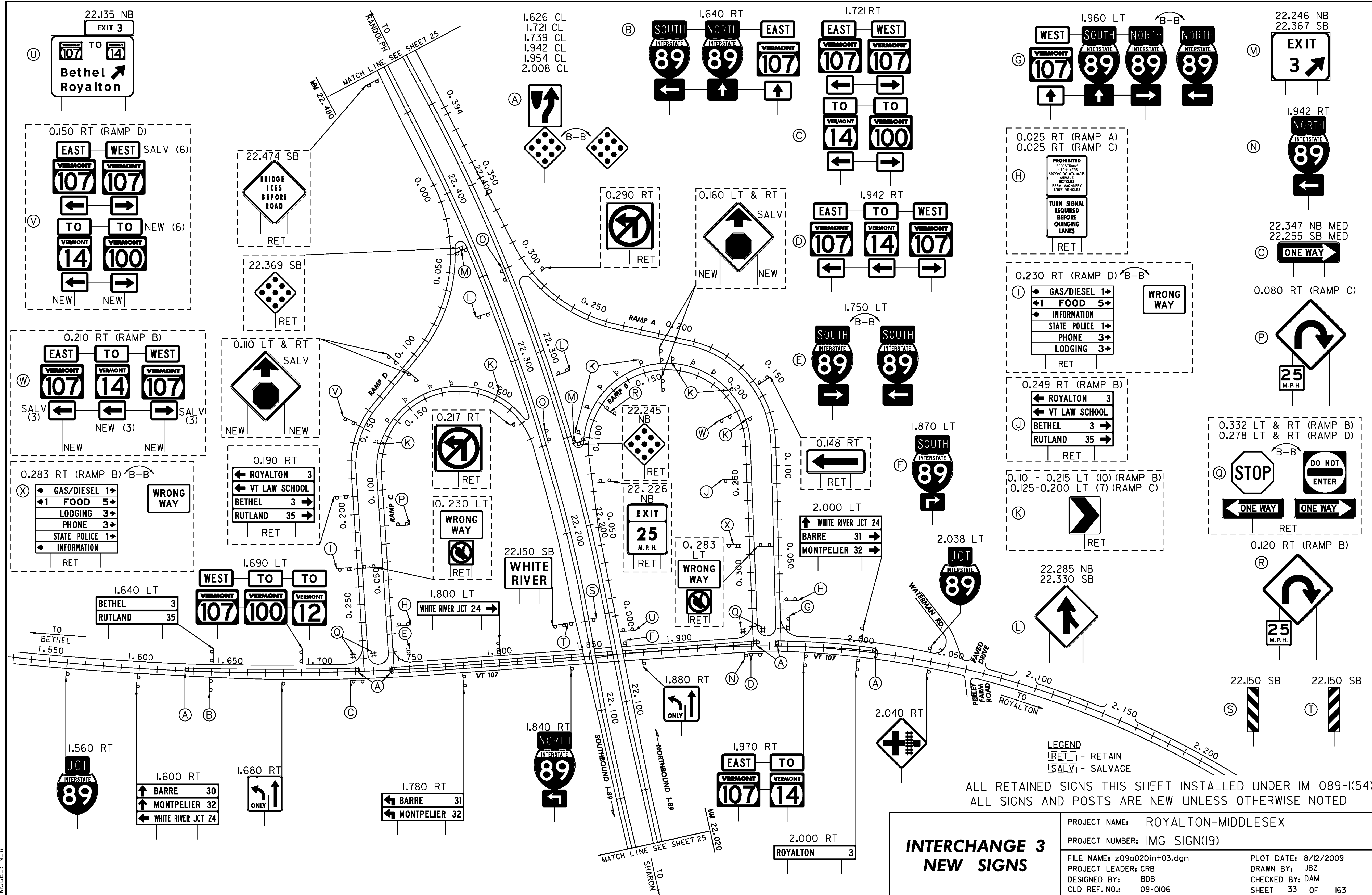
59.550 NB  
Waterbury 5  
Burlington 31

59.800 NB  
59.800 NB MED  
KEEP RIGHT EXCEPT TO PASS

60.880 SB  
ENTERING TOWN OF MIDDLESEX

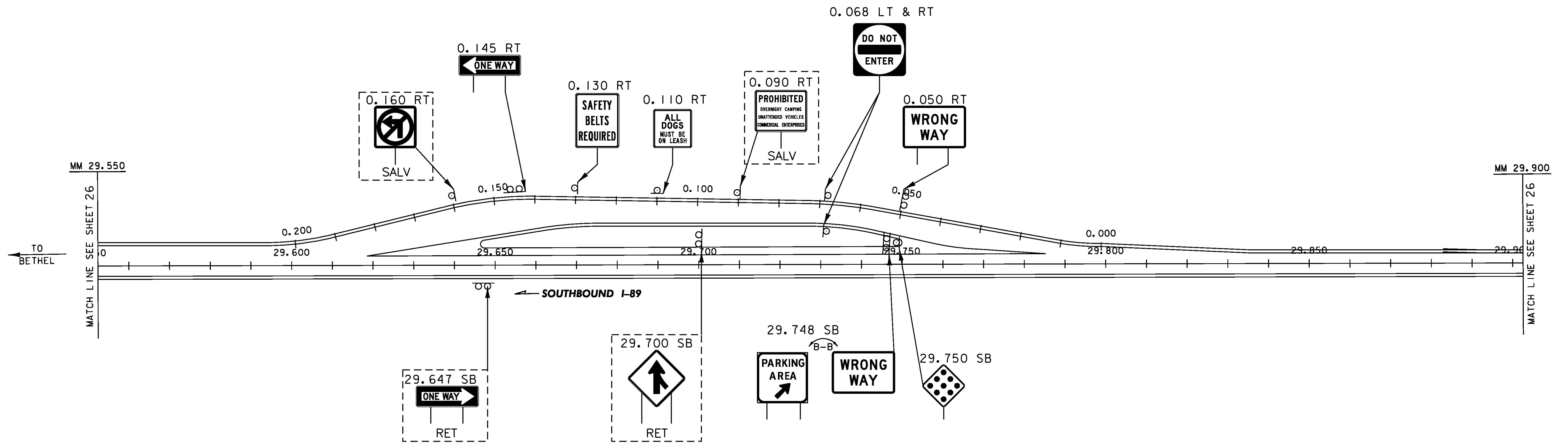
60.880 NB  
ENTERING TOWN OF WATERBURY

MODEL: NEW



PROJECT NAME:	ROYALTON-MIDDLESEX
PROJECT NUMBER:	IMG SIGN(19)
FILE NAME:	z09a020in+03.dgn
PROJECT LEADER:	CRB
DESIGNED BY:	BDB
CLD REF. NO.:	09-0106
PLOT DATE:	8/12/2009
DRAWN BY:	JBZ
CHECKED BY:	DAM
SHEET	33 OF 163

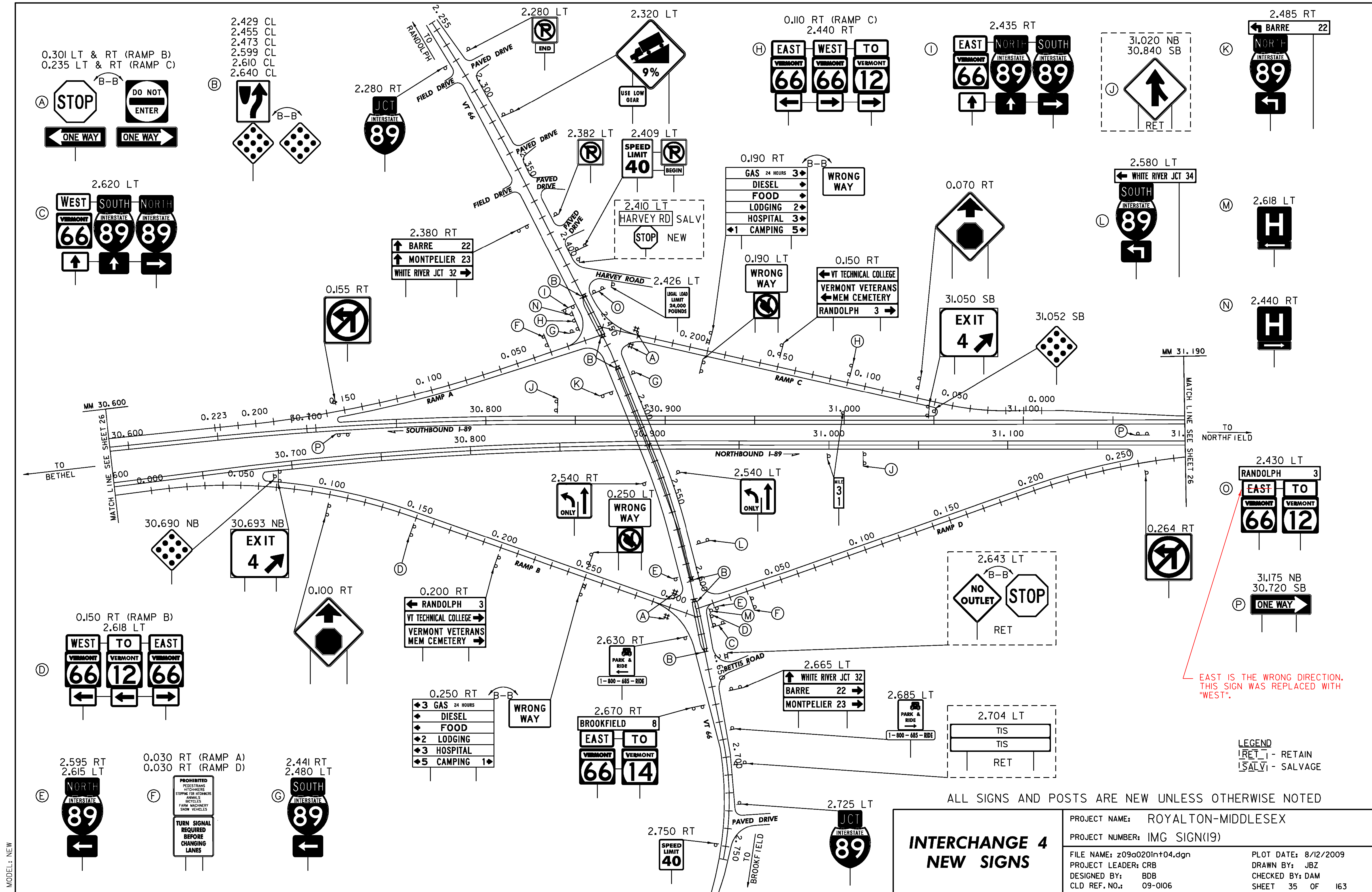
MODEL: NEW



**LEGEND**  
 [RET] - RETAIN  
 [SALV] - SALVAGE

ALL SIGNS AND POSTS ARE NEW UNLESS OTHERWISE NOTED

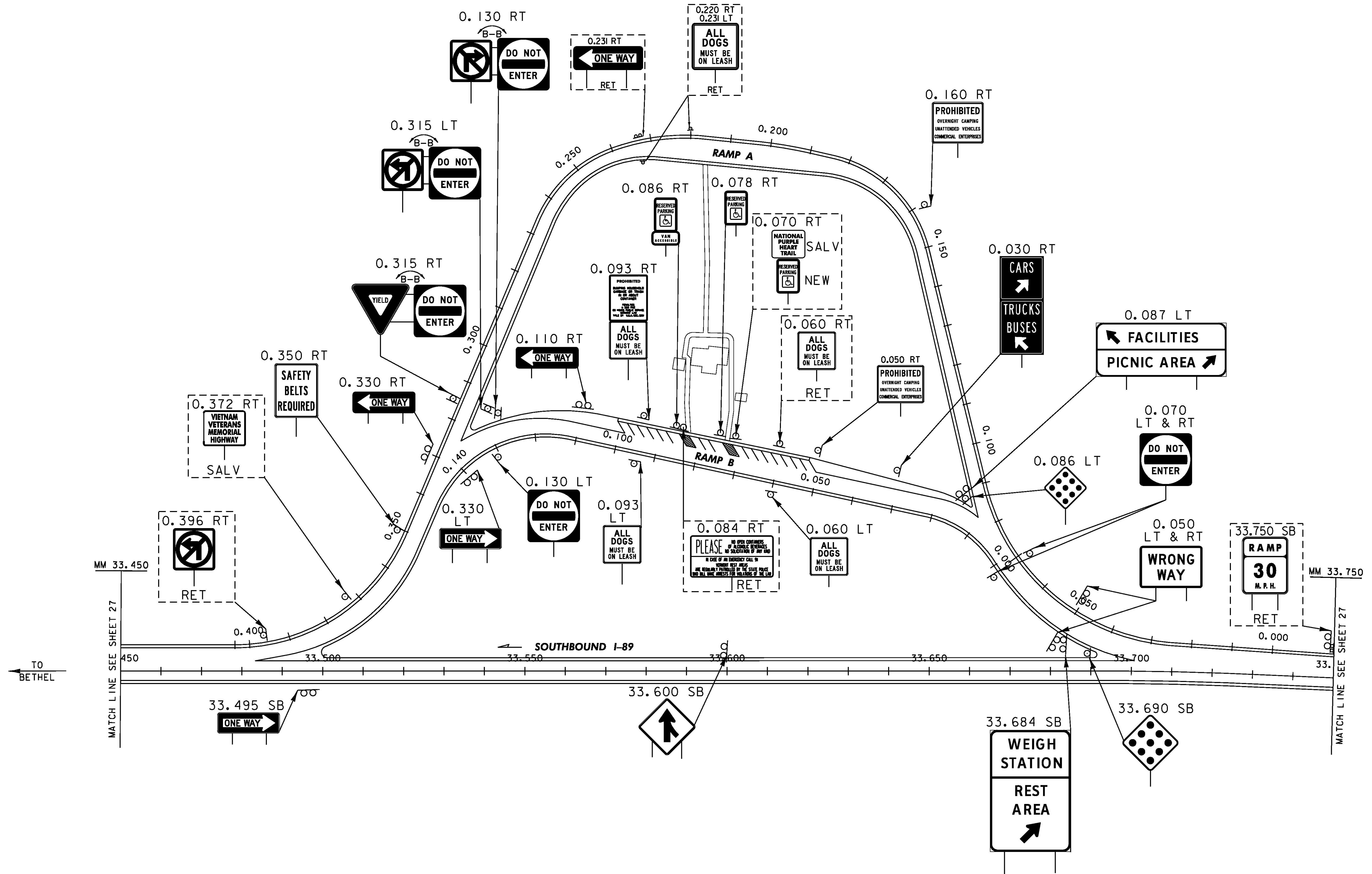
<b>PARKING AREA          RANDOLPH - SB          NEW SIGNS          MM 29.675</b>	PROJECT NAME: ROYALTON-MIDDLESEX
	PROJECT NUMBER: IMG SIGN(19)
	FILE NAME: z09a020rest-SB(29.70).dgn
	CLD REF.NO.: 09-0106
	PLOT DATE: 8/12/2009
	DRAWN BY: JBZ
	CHECKED BY: DAM
	SHEET 34 OF 163



EAST IS THE WRONG DIRECTION. THIS SIGN WAS REPLACED WITH "WEST".

MODEL: NEW

MODEL: NEW

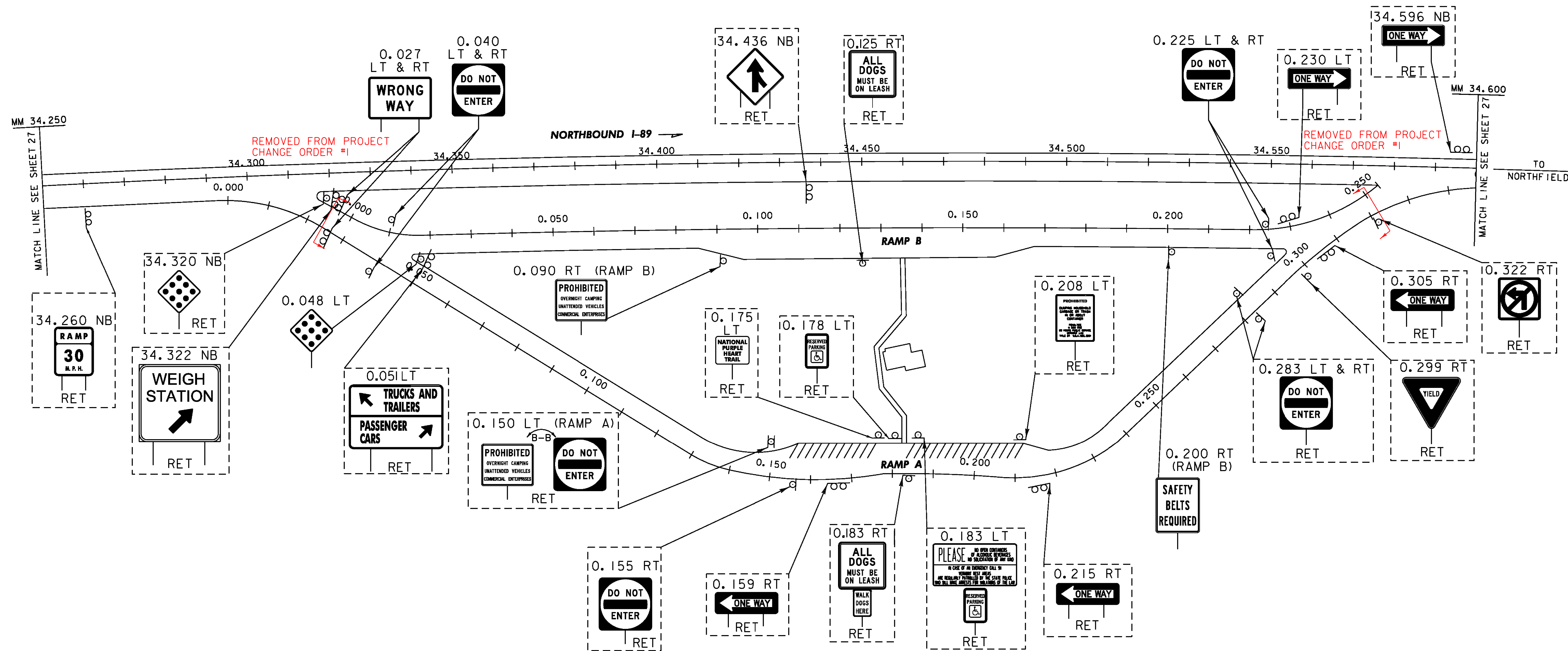


**LEGEND**  
 [RET] - RETAIN  
 [SALV] - SALVAGE

ALL SIGNS AND POSTS ARE NEW UNLESS OTHERWISE NOTED

<b>REST AREA          RANDOLPH - SB          NEW SIGNS          MM 33.600</b>	PROJECT NAME: ROYALTON-MIDDLESEX
	PROJECT NUMBER: IMG SIGN(19)
	FILE NAME: z09a020rest-SB(34).dgn
	PLOT DATE: 8/12/2009
	PROJECT LEADER: CRB
	DESIGNED BY: BDB
	CLD REF. NO.: 09-0106
	DRAWN BY: JBZ
	CHECKED BY: DAM
	SHEET 36 OF 163

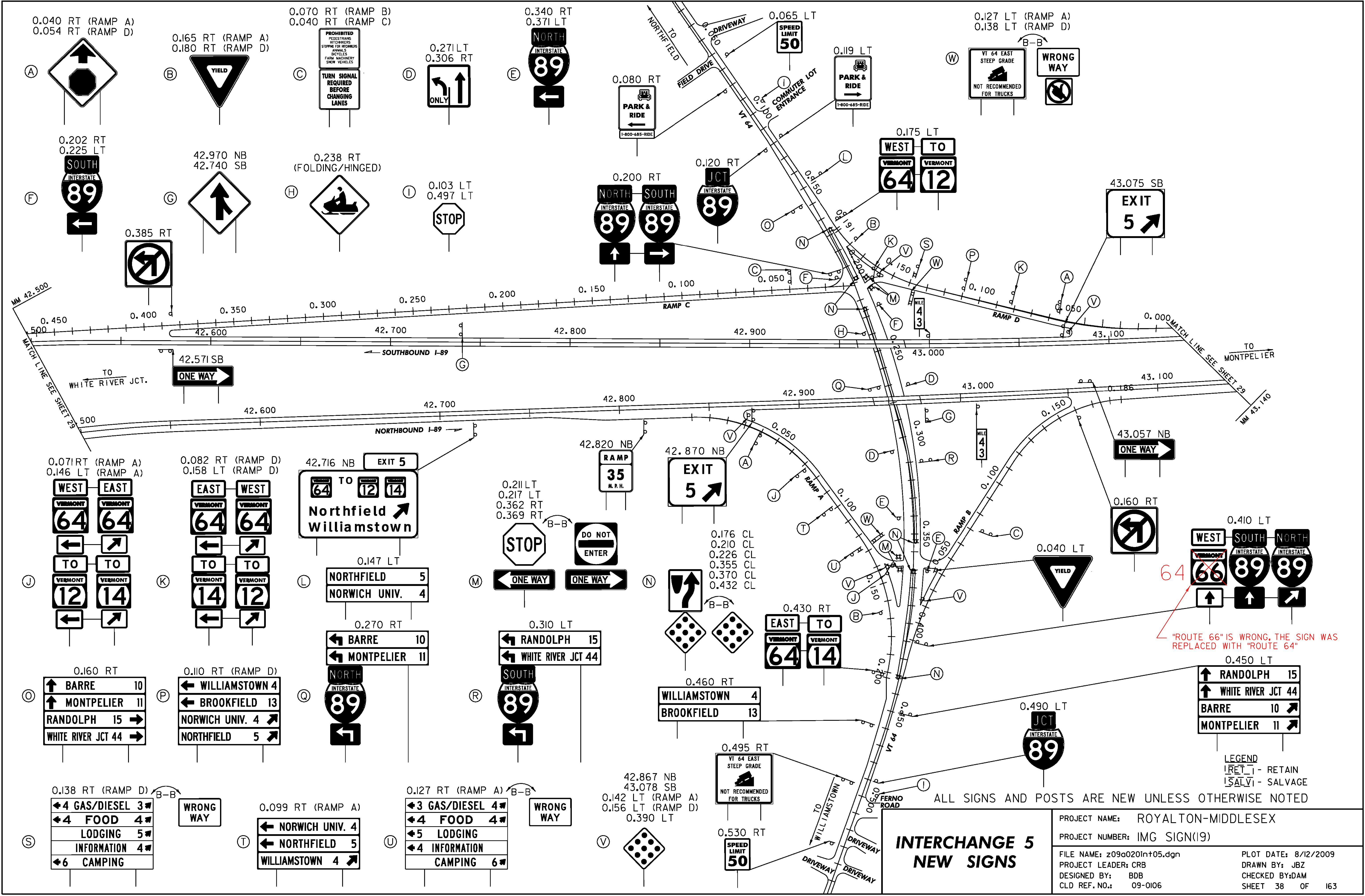
MODEL: NEW



LEGEND  
 [RET] - RETAIN  
 [SALV] - SALVAGE

ALL SIGNS AND POSTS ARE NEW UNLESS OTHERWISE NOTED

<b>REST AREA          RANDOLPH - NB          NEW SIGNS          MM 34.450</b>	PROJECT NAME: ROYALTON-MIDDLESEX
	PROJECT NUMBER: IMG SIGN(19)
	FILE NAME: z09a020rest-nb(34).dgn
	CLD REF. NO.: 09-0106
	PLOT DATE: 8/12/2009
	DRAWN BY: JBZ
	CHECKED BY: DAM
	SHEET 37 OF 163



**INTERCHANGE 5  
NEW SIGNS**

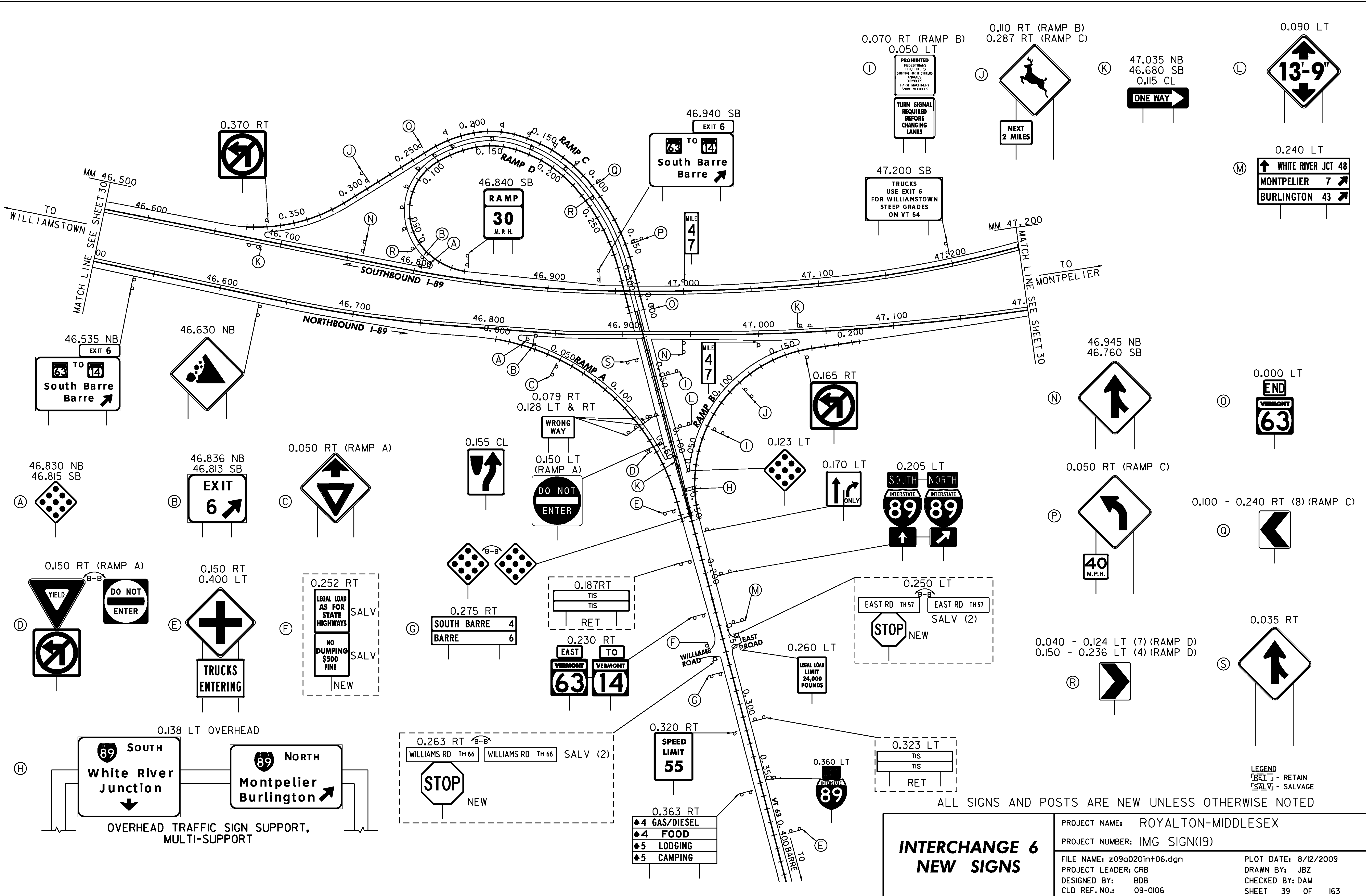
PROJECT NAME:	ROYALTON-MIDDLESEX
PROJECT NUMBER:	IMG SIGN(19)
FILE NAME:	z09a020in105.dgn
PROJECT LEADER:	CRB
DESIGNED BY:	BDB
CLD REF. NO.:	09-0106
PLOT DATE:	8/12/2009
DRAWN BY:	JBZ
CHECKED BY:	DAM
SHEET	38 OF 163

LEGEND  
 RET - RETAIN  
 SALV - SALVAGE

ALL SIGNS AND POSTS ARE NEW UNLESS OTHERWISE NOTED

MODEL: NEW

MODEL: NEW



46.535 NB  
EXIT 6  
South Barre

46.630 NB  
46.836 NB  
46.813 SB  
EXIT 6

0.050 RT (RAMP A)

0.155 CL  
WRONG WAY  
0.150 LT (RAMP A)  
DO NOT ENTER

0.230 RT  
EAST TO  
VERMONT VERMONT  
63 14

0.363 RT  
4 GAS/DIESEL  
4 FOOD  
5 LODGING  
5 CAMPING

0.205 LT  
SOUTH NORTH  
INTERSTATE INTERSTATE  
89 89

0.250 LT  
EAST RD TH 57 EAST RD TH 57  
STOP NEW  
SALV (2)

0.138 LT OVERHEAD  
89 SOUTH  
White River Junction  
89 NORTH  
Montpelier Burlington

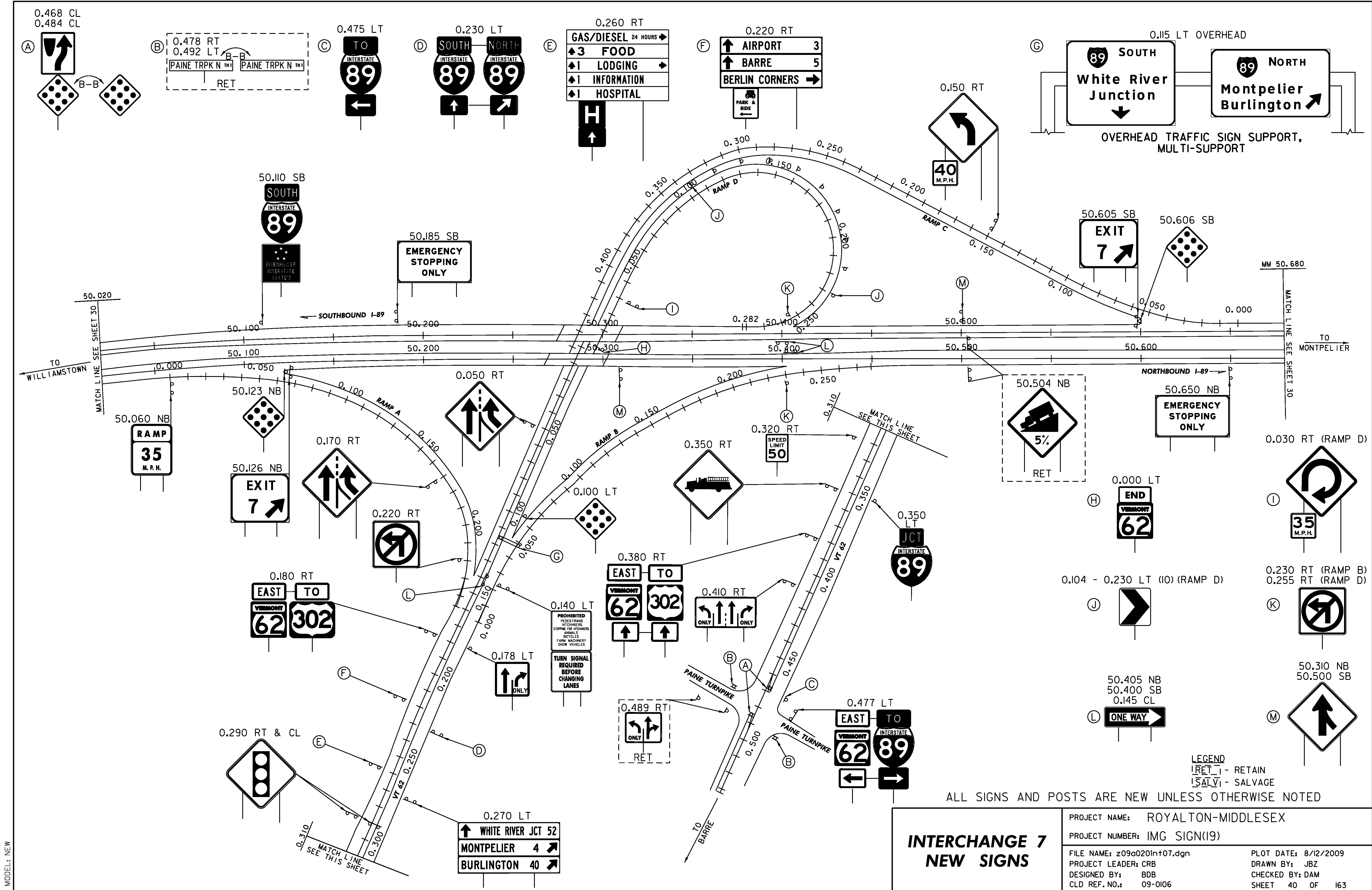
OVERHEAD TRAFFIC SIGN SUPPORT, MULTI-SUPPORT

**INTERCHANGE 6  
NEW SIGNS**

PROJECT NAME: ROYALTON-MIDDLESEX  
PROJECT NUMBER: IMG SIGN(19)  
FILE NAME: z09a020in+06.dgn  
PLOT DATE: 8/12/2009  
PROJECT LEADER: CRB  
DRAWN BY: JJB  
DESIGNED BY: BDB  
CHECKED BY: DAM  
CLD REF. NO.: 09-0106  
SHEET 39 OF 163

LEGEND  
[RET] - RETAIN  
[SALV] - SALVAGE

ALL SIGNS AND POSTS ARE NEW UNLESS OTHERWISE NOTED



LEGEND  
 IRET\_1 - RETAIN  
 ISALV\_1 - SALVAGE

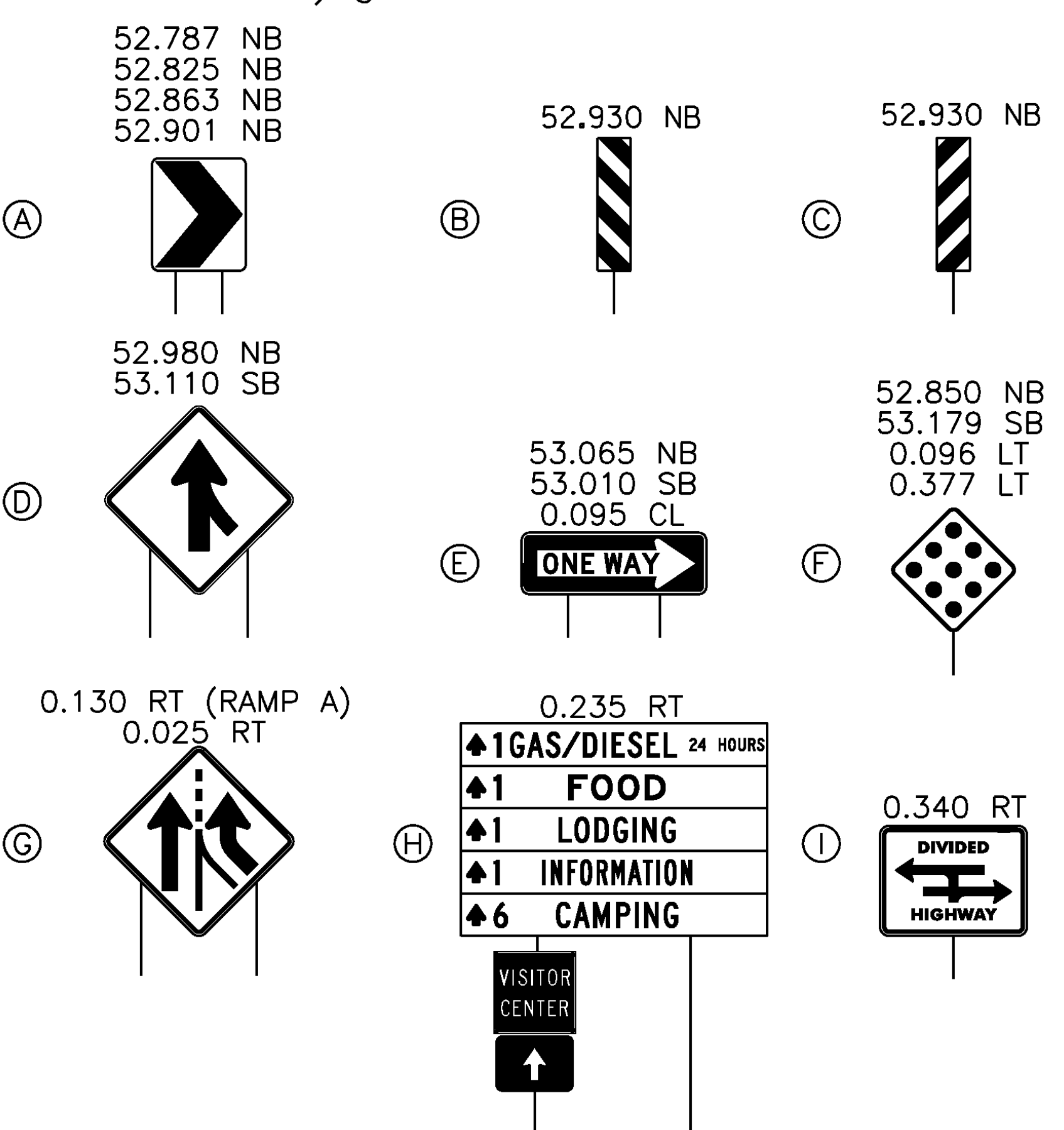
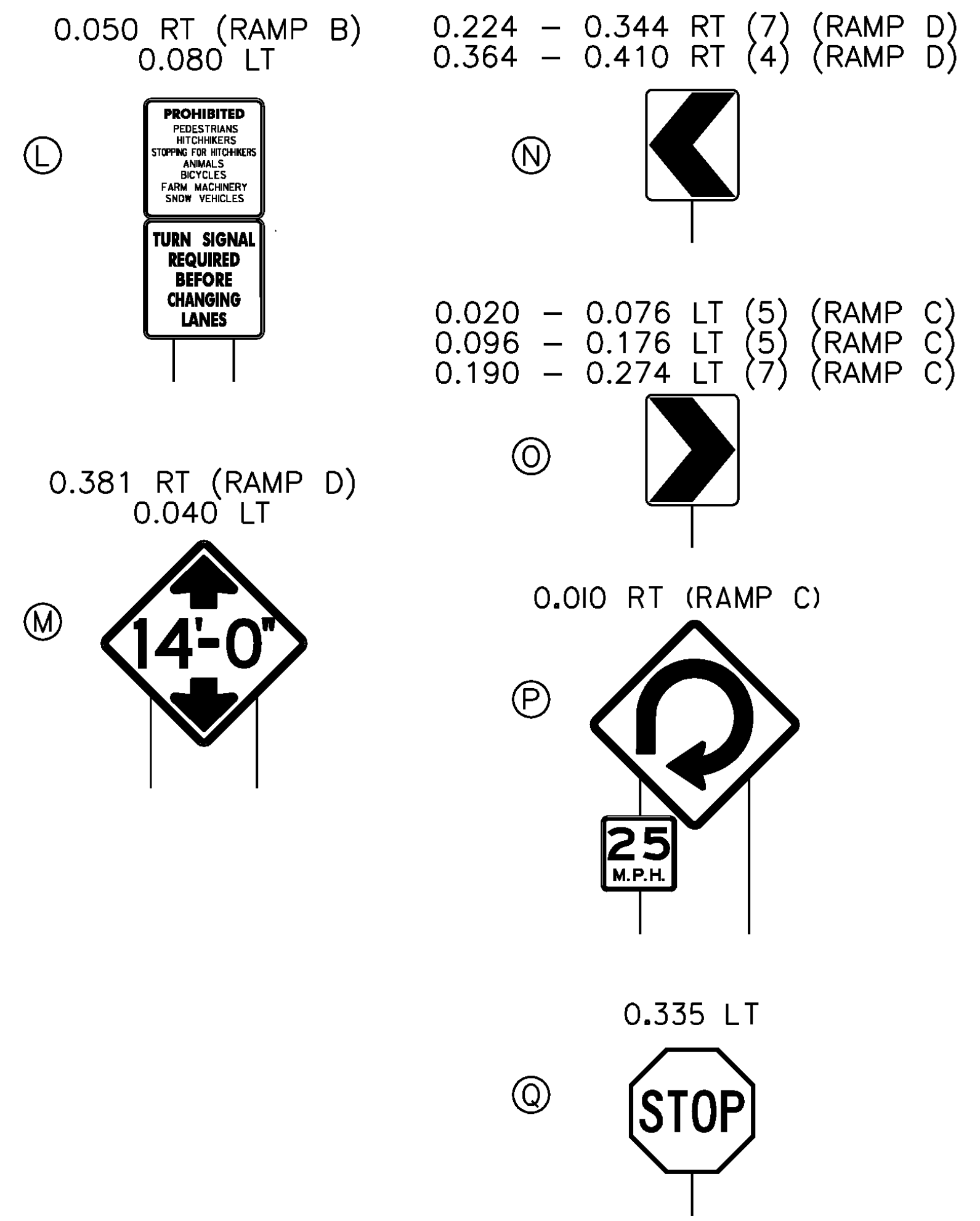
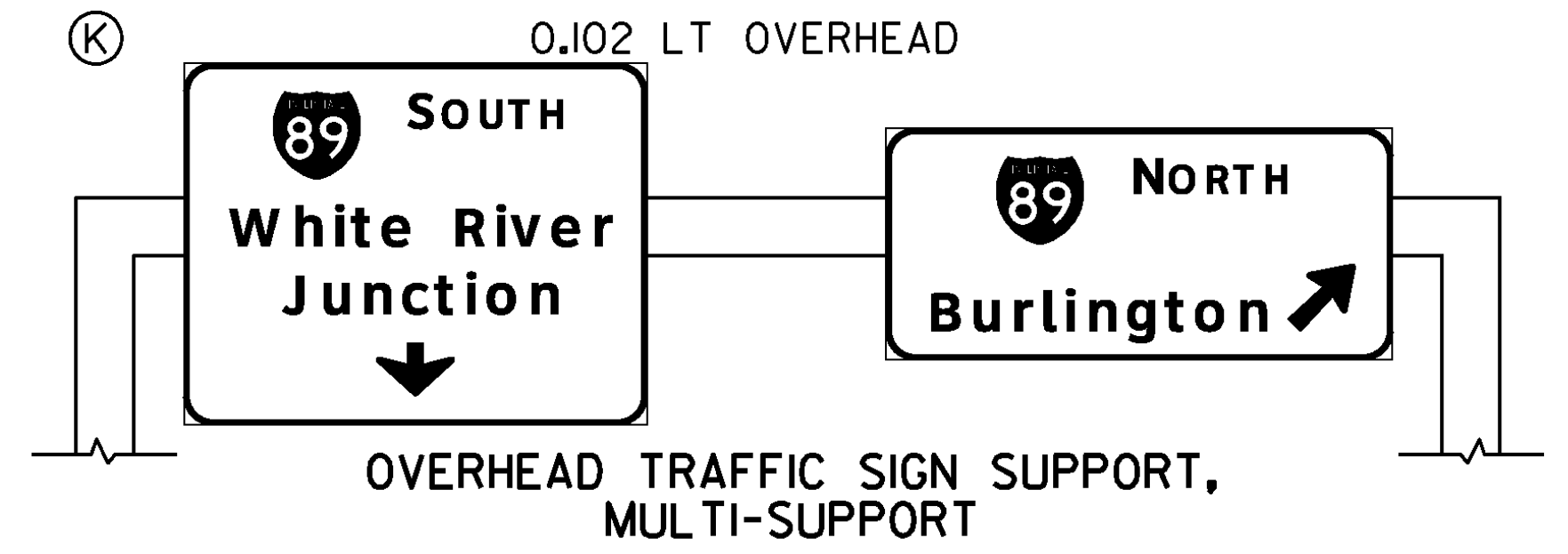
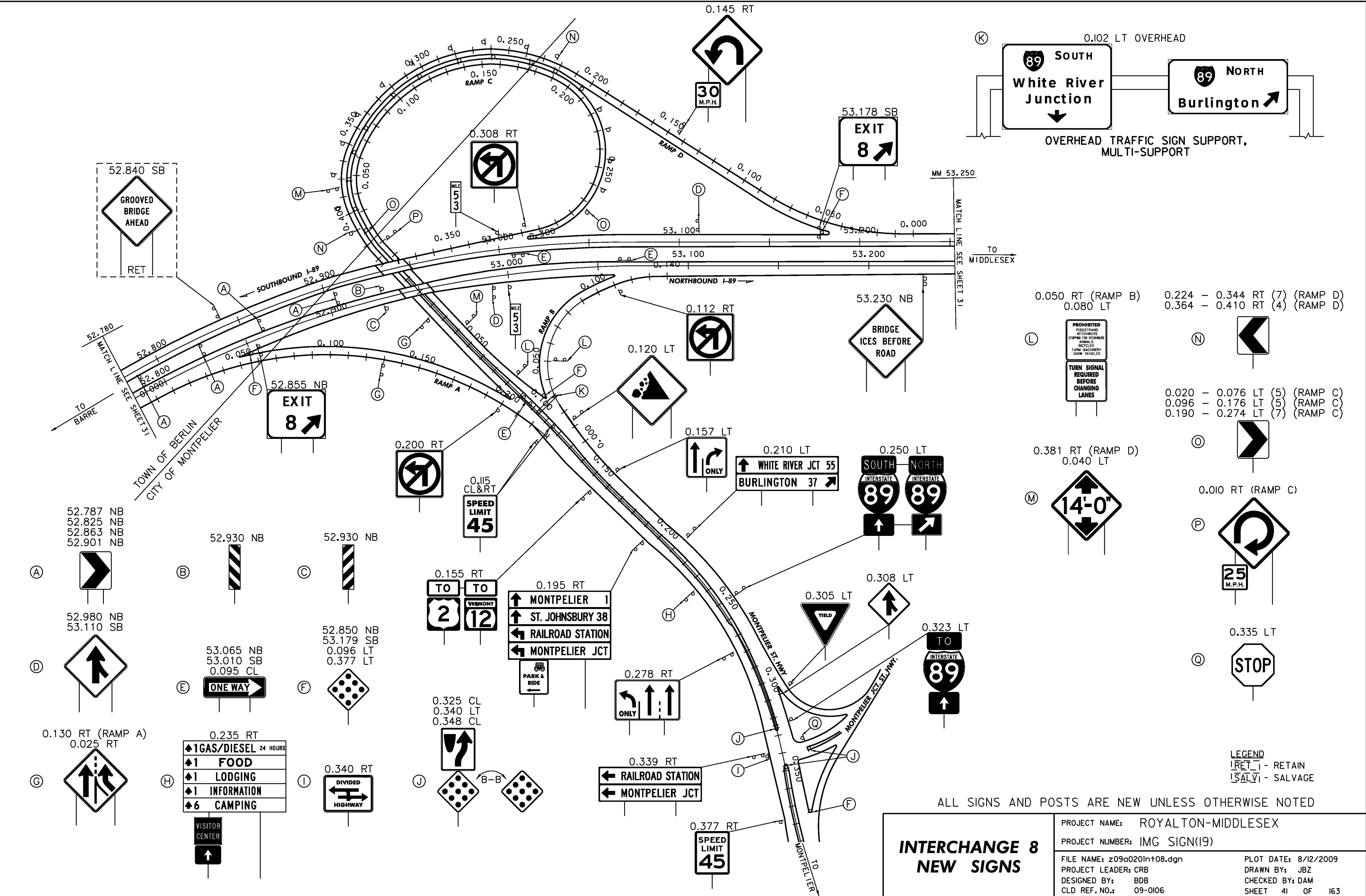
ALL SIGNS AND POSTS ARE NEW UNLESS OTHERWISE NOTED

### INTERCHANGE 7 NEW SIGNS

PROJECT NAME:	ROYALTON-MIDDLESEX
PROJECT NUMBER:	IMG SIGN(19)
FILE NAME:	z09a020in+07.dgn
PROJECT LEADER:	CRB
DESIGNED BY:	BDB
CLD REF. NO.:	09-0106
PLOT DATE:	8/12/2009
DRAWN BY:	JBZ
CHECKED BY:	DAM
SHEET	40 OF 163

MODEL: NEW

MODEL: NEW



**INTERCHANGE 8  
NEW SIGNS**

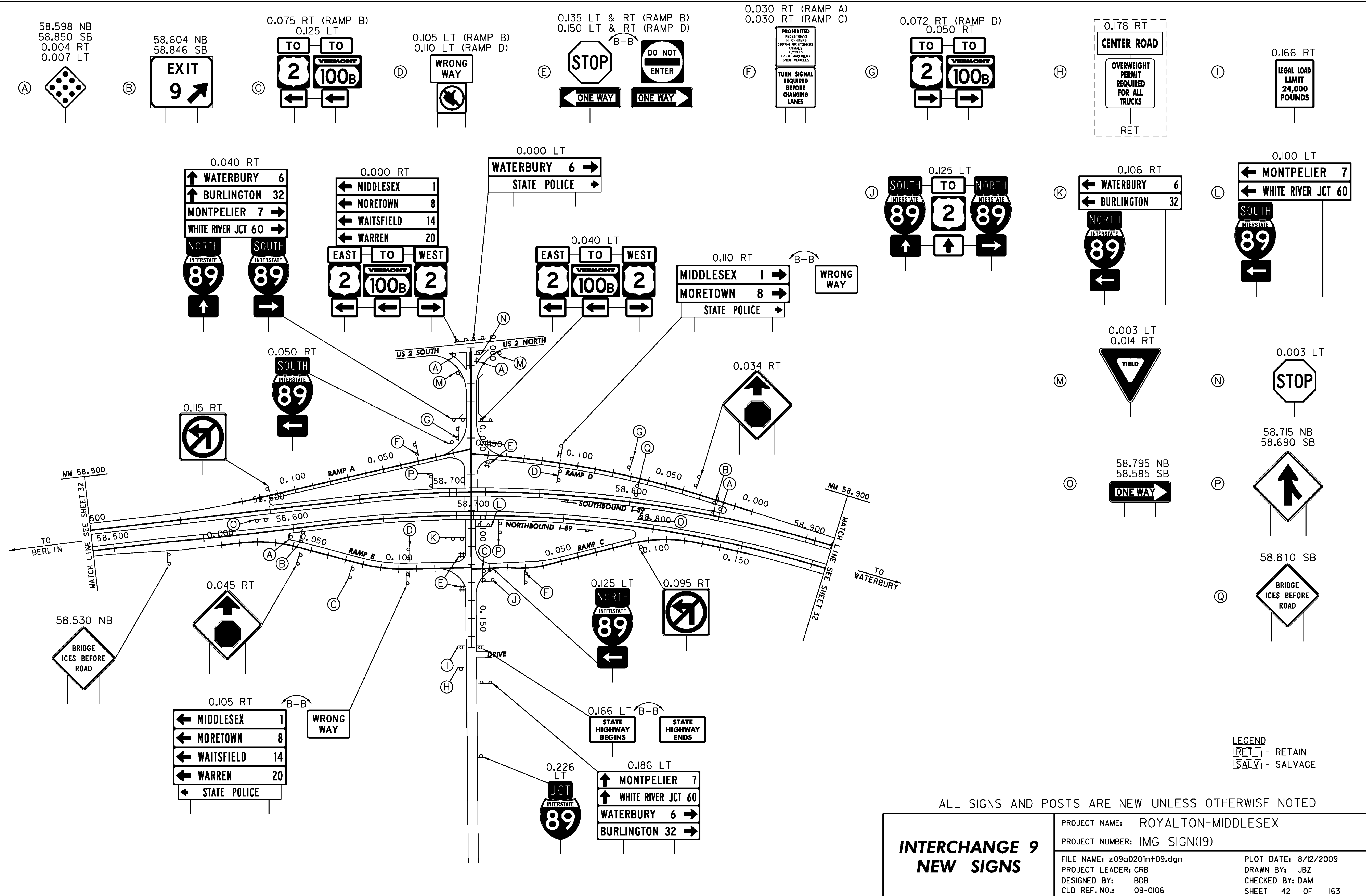
PROJECT NAME: ROYALTON-MIDDLESEX  
PROJECT NUMBER: IMG SIGN(19)

FILE NAME: z09a020in+08.dgn  
PROJECT LEADER: CRB  
DESIGNED BY: BDB  
CLD REF. NO.: 09-0106

PLOT DATE: 8/12/2009  
DRAWN BY: JBZ  
CHECKED BY: DAM  
SHEET 41 OF 163

ALL SIGNS AND POSTS ARE NEW UNLESS OTHERWISE NOTED

MODEL: NEW



58.598 NB  
58.850 SB  
0.004 RT  
0.007 LT

58.604 NB  
58.846 SB

0.075 RT (RAMP B)  
0.125 LT

0.105 LT (RAMP B)  
0.110 LT (RAMP D)

0.135 LT & RT (RAMP B)  
0.150 LT & RT (RAMP D)

0.030 RT (RAMP A)  
0.030 RT (RAMP C)

0.072 RT (RAMP D)  
0.050 RT

0.178 RT

0.166 RT

0.040 RT

0.000 RT

0.000 LT

0.040 LT

0.110 RT

0.125 LT

0.106 RT

0.100 LT

0.050 RT

0.115 RT

0.034 RT

0.003 LT  
0.014 RT

0.003 LT

MM 58.500

MM 58.900

58.530 NB

0.045 RT

0.125 LT

0.095 RT

0.105 RT

0.166 LT

0.186 LT

0.226 LT

LEGEND  
RET - RETAIN  
SALV - SALVAGE

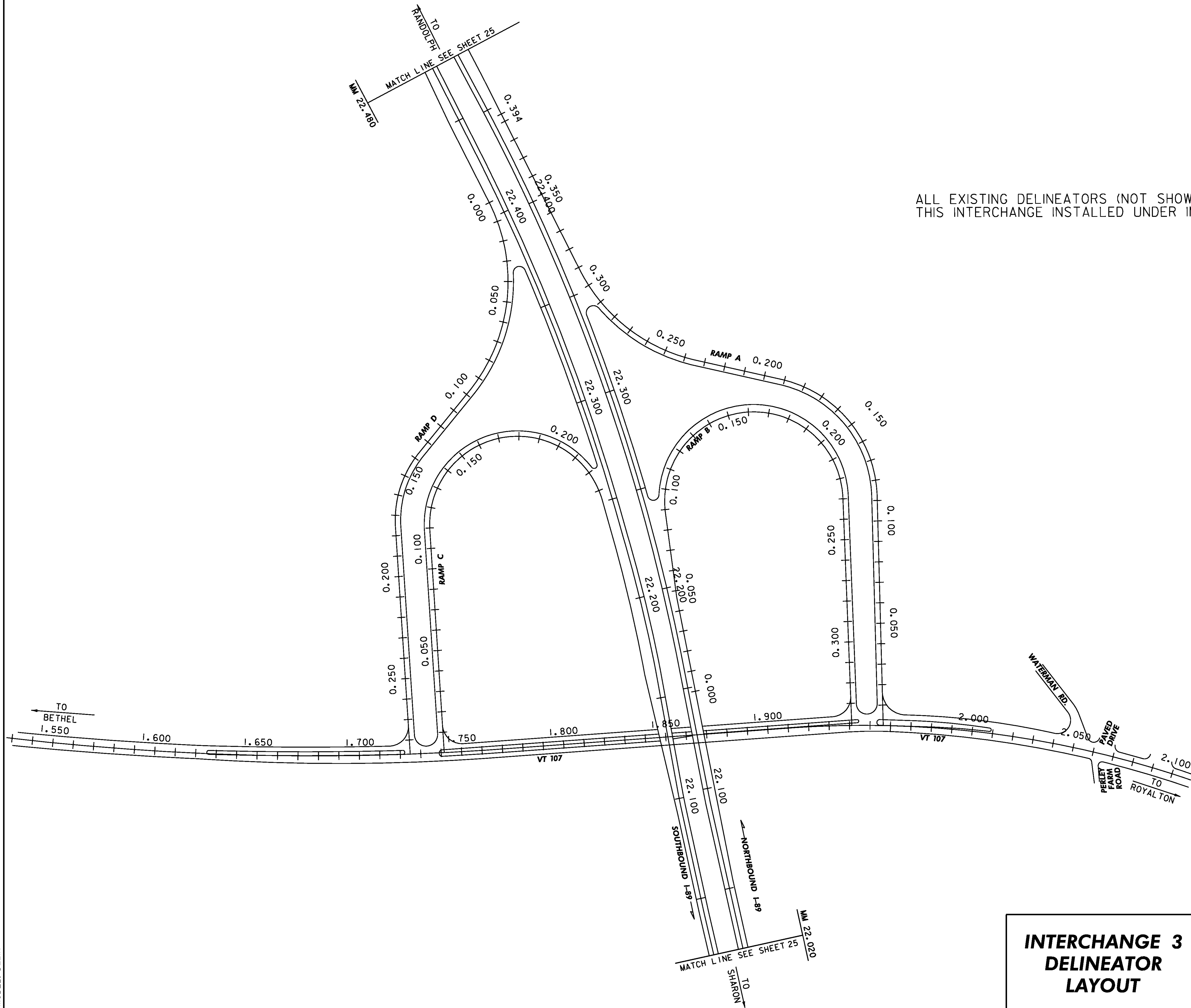
ALL SIGNS AND POSTS ARE NEW UNLESS OTHERWISE NOTED

**INTERCHANGE 9  
NEW SIGNS**

PROJECT NAME:	ROYALTON-MIDDLESEX
PROJECT NUMBER:	IMG SIGN(19)
FILE NAME:	z09a020int+09.dgn
PROJECT LEADER:	CRB
DESIGNED BY:	BDB
CLD REF. NO.:	09-0106
PLOT DATE:	8/12/2009
DRAWN BY:	JBZ
CHECKED BY:	DAM
SHEET	42 OF 163

NOTE  
 FOR TYPICAL PLACEMENT OF DELINEATORS  
 SEE STANDARDS E-197 AND SHEET 4.

ALL EXISTING DELINEATORS (NOT SHOWN) ON THE INTERCHANGE RAMP AT  
 THIS INTERCHANGE INSTALLED UNDER IM 089-(K54) ARE TO BE RETAINED.

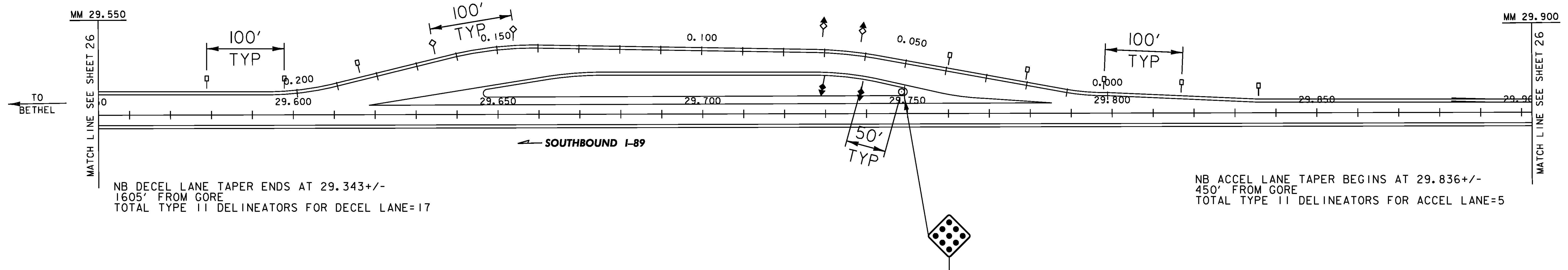


**INTERCHANGE 3  
 DELINEATOR  
 LAYOUT**

PROJECT NAME: ROYALTON-MIDDLESEX	
PROJECT NUMBER: IMG SIGN(19)	
FILE NAME: z09a020int03.dgn	PLOT DATE: 8/12/2009
PROJECT LEADER: CRB	DRAWN BY: JBZ
DESIGNED BY: BDB	CHECKED BY: BDB
CLD REF. NO.: 09-0106	SHEET 43 OF 163

MODEL: DELIN

NOTE  
FOR TYPICAL PLACEMENT OF DELINEATORS  
SEE STANDARDS E-197 AND SHEET 4.



NB DECEL LANE TAPER ENDS AT 29.343+/-  
1605' FROM GORE  
TOTAL TYPE II DELINEATORS FOR DECEL LANE=17

NB ACCEL LANE TAPER BEGINS AT 29.836+/-  
450' FROM GORE  
TOTAL TYPE II DELINEATORS FOR ACCEL LANE=5

**LEGEND**

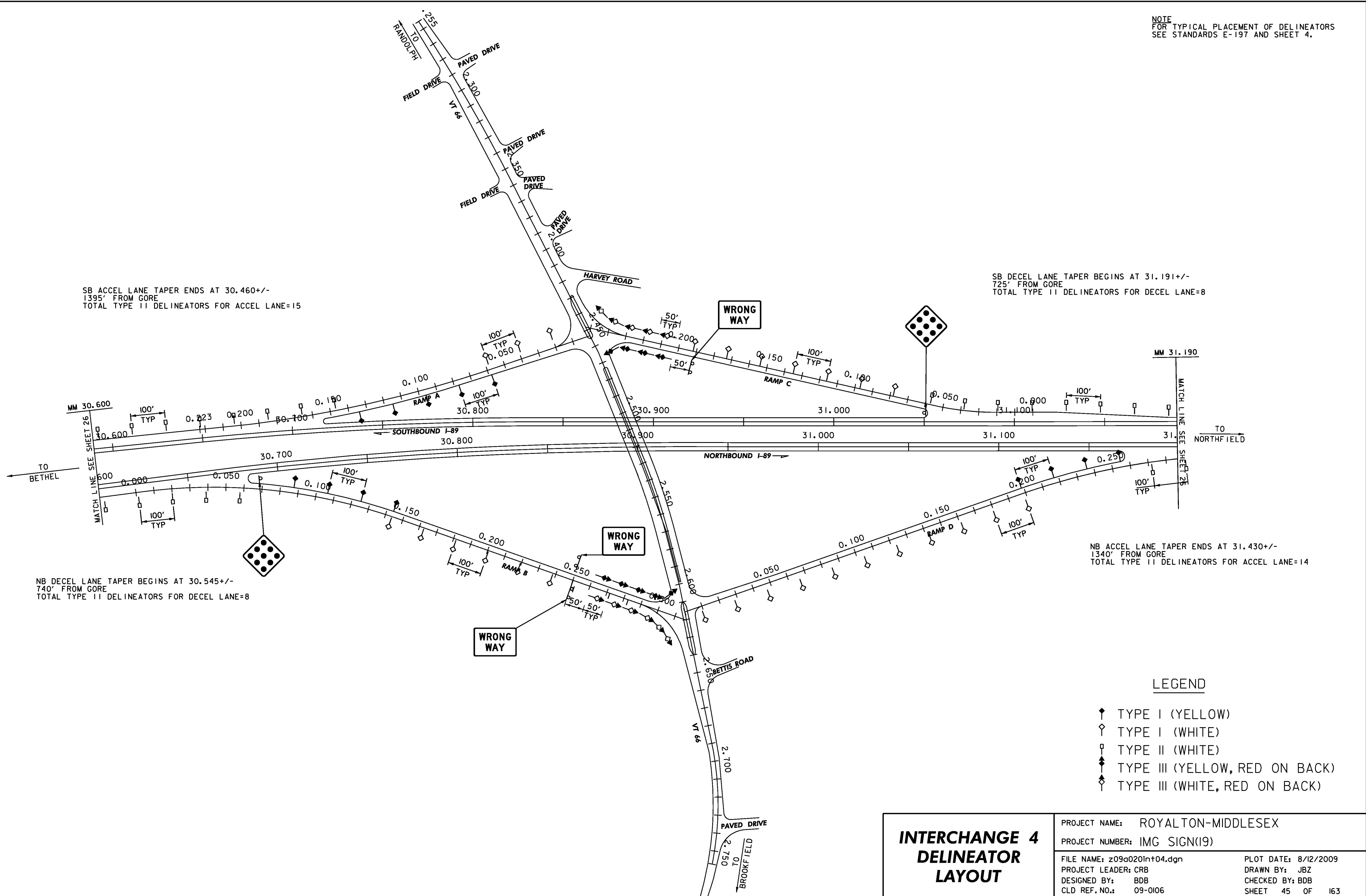
- ↑ TYPE I (YELLOW)
- ◇ TYPE I (WHITE)
- ⊥ TYPE II (WHITE)
- ⬆ TYPE III (YELLOW, RED ON BACK)
- ⬆ TYPE III (WHITE, RED ON BACK)

**REST AREA  
RANDOLPH - SB  
DELINEATOR  
LAYOUT  
MM 29.675**

PROJECT NAME:	ROYALTON-MIDDLESEX
PROJECT NUMBER:	IMG SIGN(19)
FILE NAME:	z09a020rest-SB(29.70).dgn
PROJECT LEADER:	CRB
DESIGNED BY:	BDB
CLD REF.NO.:	09-0106
PLOT DATE:	8/12/2009
DRAWN BY:	JBZ
CHECKED BY:	BDB
SHEET	44 OF 163

MODEL: DELIN

NOTE  
FOR TYPICAL PLACEMENT OF DELINEATORS  
SEE STANDARDS E-197 AND SHEET 4.



SB ACCEL LANE TAPER ENDS AT 30.460+/-  
1395' FROM GORE  
TOTAL TYPE II DELINEATORS FOR ACCEL LANE=15

SB DECEL LANE TAPER BEGINS AT 31.191+/-  
725' FROM GORE  
TOTAL TYPE II DELINEATORS FOR DECEL LANE=8

NB DECEL LANE TAPER BEGINS AT 30.545+/-  
740' FROM GORE  
TOTAL TYPE II DELINEATORS FOR DECEL LANE=8

NB ACCEL LANE TAPER ENDS AT 31.430+/-  
1340' FROM GORE  
TOTAL TYPE II DELINEATORS FOR ACCEL LANE=14

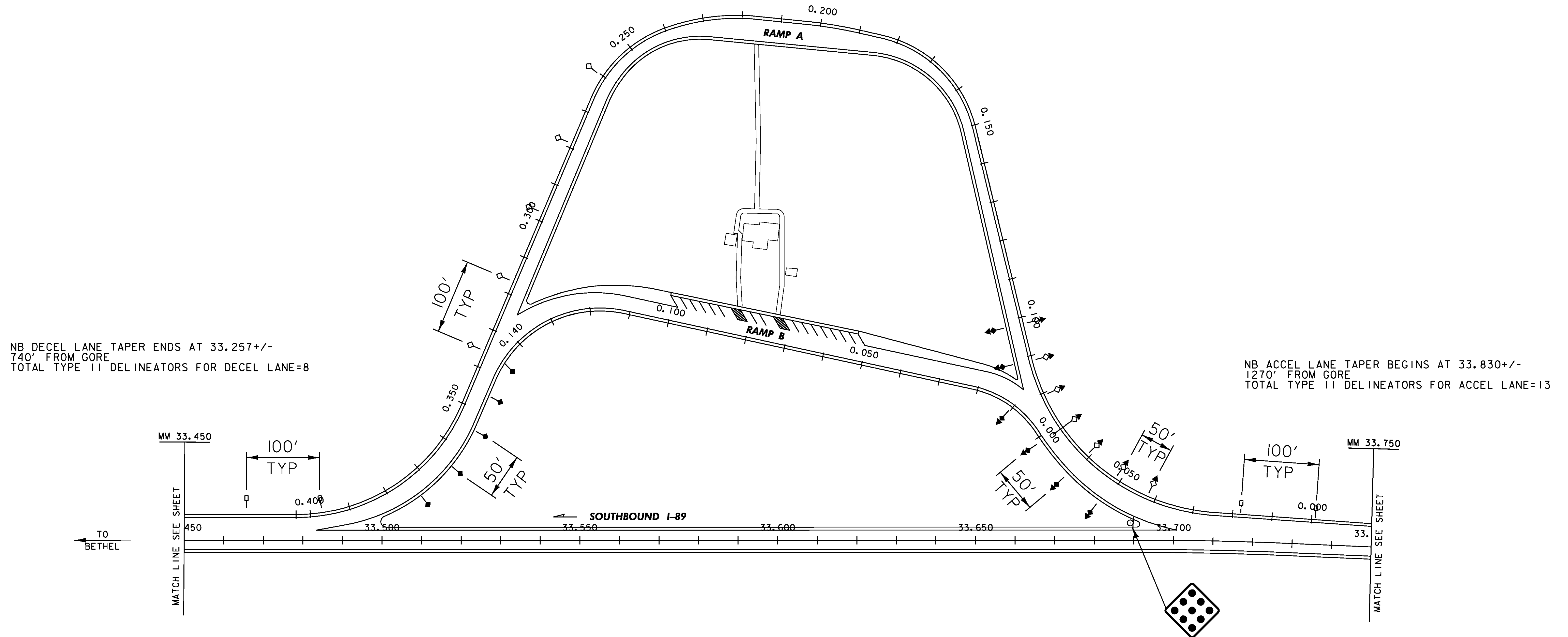
**LEGEND**

- ◆ TYPE I (YELLOW)
- ◇ TYPE I (WHITE)
- TYPE II (WHITE)
- ◆ TYPE III (YELLOW, RED ON BACK)
- ◇ TYPE III (WHITE, RED ON BACK)

<h3>INTERCHANGE 4 DELINEATOR LAYOUT</h3>	PROJECT NAME: ROYALTON-MIDDLESEX	
	PROJECT NUMBER: IMG SIGN(19)	
	FILE NAME: z09a020in+04.dgn	PLOT DATE: 8/12/2009
	PROJECT LEADER: CRB	DRAWN BY: JBZ
DESIGNED BY: BDB	CHECKED BY: BDB	
CLD REF. NO.: 09-0106	SHEET 45 OF 163	

MODEL: DELIN

NOTE  
FOR TYPICAL PLACEMENT OF DELINEATORS  
SEE STANDARDS E-197 AND SHEET 4.



NB DECEL LANE TAPER ENDS AT 33.257+/-  
740' FROM GORE  
TOTAL TYPE II DELINEATORS FOR DECEL LANE=8

NB ACCEL LANE TAPER BEGINS AT 33.830+/-  
1270' FROM GORE  
TOTAL TYPE II DELINEATORS FOR ACCEL LANE=13

TO  
BETHEL

MM 33.450

MM 33.750

SOUTHBOUND I-89

**LEGEND**

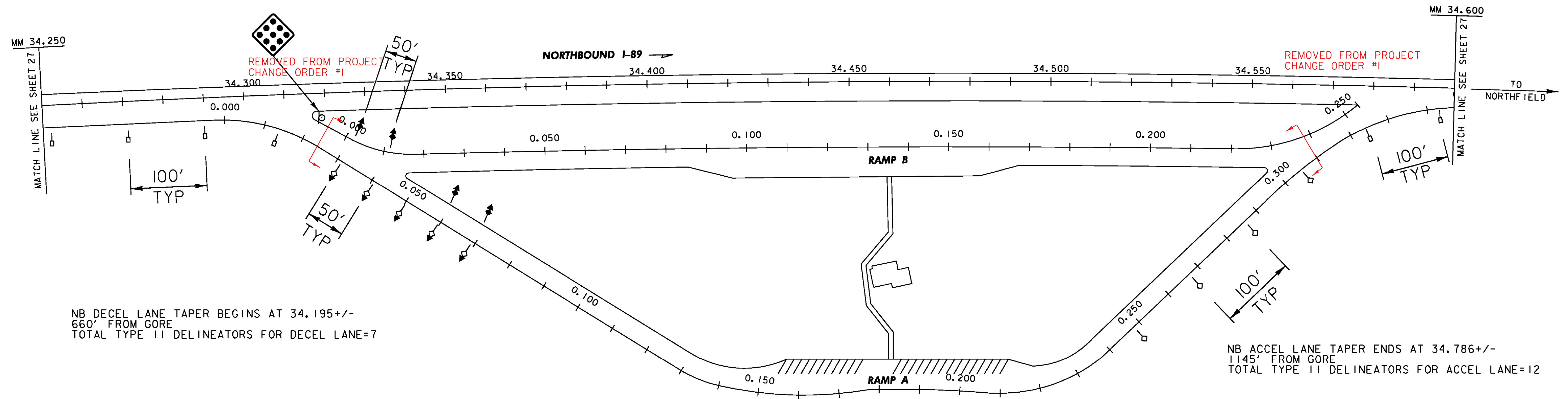
- ↑ TYPE I (YELLOW)
- ◇ TYPE I (WHITE)
- ⊥ TYPE II (WHITE)
- ◆ TYPE III (YELLOW, RED ON BACK)
- ◇ TYPE III (WHITE, RED ON BACK)

**REST AREA  
RANDOLPH - SB  
DELINEATOR  
LAYOUT  
MM 33.600**

PROJECT NAME: ROYALTON-MIDDLESEX	PLOT DATE: 8/12/2009
PROJECT NUMBER: IMG SIGN(19)	DRAWN BY: JBZ
FILE NAME: z09a020rest-SB(34).dgn	CHECKED BY: BDB
PROJECT LEADER: CRB	SHEET 46 OF 163
DESIGNED BY: BDB	
CLD REF.NO.: 09-0106	

MODEL: DELIN

NOTE  
FOR TYPICAL PLACEMENT OF DELINEATORS  
SEE STANDARDS E-197 AND SHEET 4.



**LEGEND**

- ↑ TYPE I (YELLOW)
- ◇ TYPE I (WHITE)
- ⊥ TYPE II (WHITE)
- ⬆ TYPE III (YELLOW, RED ON BACK)
- ⬆ TYPE III (WHITE, RED ON BACK)

<b>REST AREA RANDOLPH - NB DELINEATOR LAYOUT MM 34.450</b>	PROJECT NAME: ROYALTON-MIDDLESEX
	PROJECT NUMBER: IMG SIGN(19)
	FILE NAME: z09a020rest-nb(34).dgn
PROJECT LEADER: CRB	PLOT DATE: 8/12/2009
DESIGNED BY: BDB	DRAWN BY: JBZ
CLD REF. NO.: 09-0106	CHECKED BY: BDB
	SHEET 47 OF 163

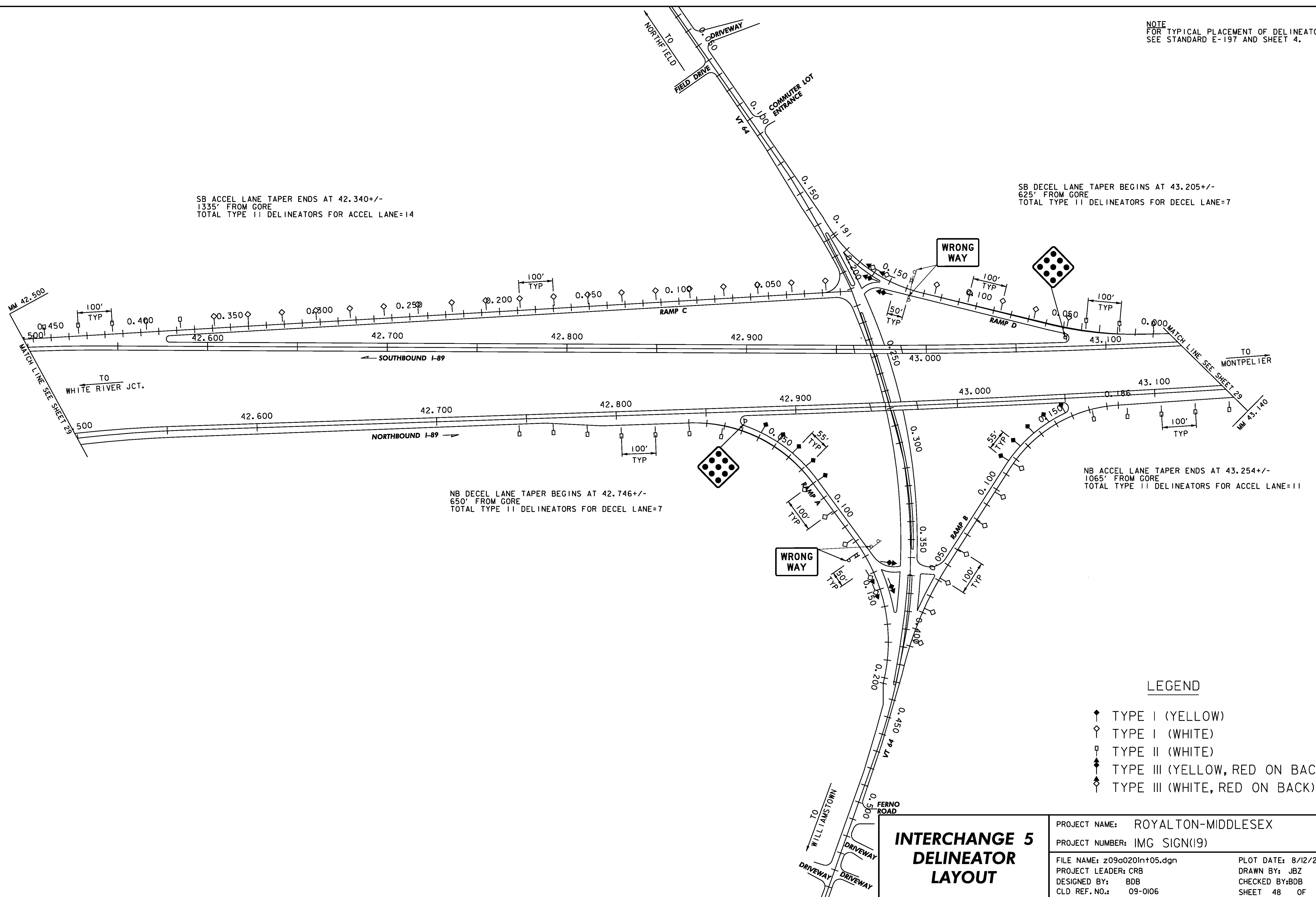
NOTE  
FOR TYPICAL PLACEMENT OF DELINEATORS  
SEE STANDARD E-197 AND SHEET 4.

SB ACCEL LANE TAPER ENDS AT 42.340+/-  
1335' FROM GORE  
TOTAL TYPE II DELINEATORS FOR ACCEL LANE=14

SB DECEL LANE TAPER BEGINS AT 43.205+/-  
625' FROM GORE  
TOTAL TYPE II DELINEATORS FOR DECEL LANE=7

NB DECEL LANE TAPER BEGINS AT 42.746+/-  
650' FROM GORE  
TOTAL TYPE II DELINEATORS FOR DECEL LANE=7

NB ACCEL LANE TAPER ENDS AT 43.254+/-  
1065' FROM GORE  
TOTAL TYPE II DELINEATORS FOR ACCEL LANE=11



**LEGEND**

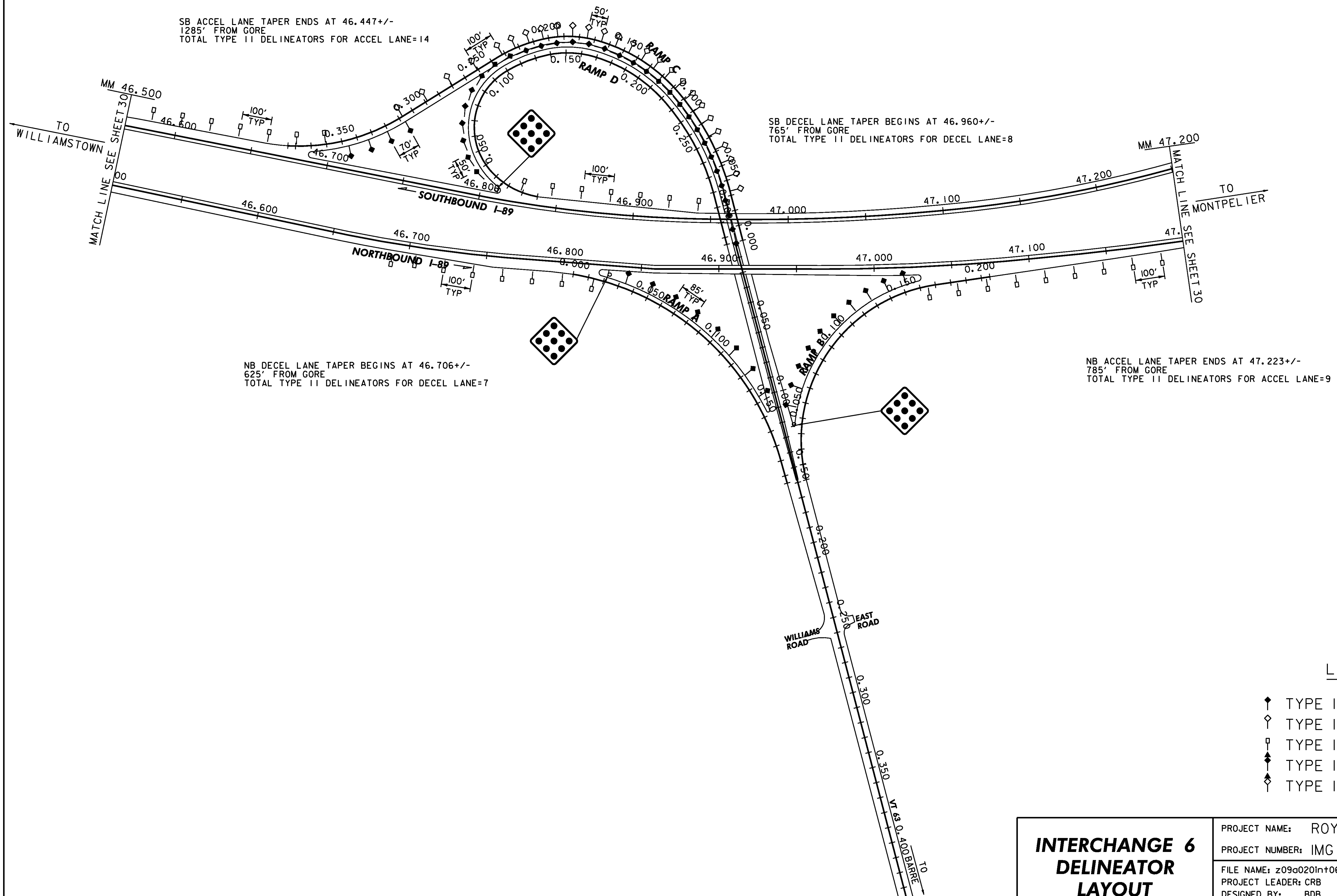
- ◆ TYPE I (YELLOW)
- ◇ TYPE I (WHITE)
- TYPE II (WHITE)
- ◆ TYPE III (YELLOW, RED ON BACK)
- ◇ TYPE III (WHITE, RED ON BACK)

**INTERCHANGE 5  
DELINEATOR  
LAYOUT**

PROJECT NAME: ROYALTON-MIDDLESEX	
PROJECT NUMBER: IMG SIGN(19)	
FILE NAME: z09a020in+05.dgn	PLOT DATE: 8/12/2009
PROJECT LEADER: CRB	DRAWN BY: JBZ
DESIGNED BY: BDB	CHECKED BY: BDB
CLD REF. NO.: 09-0106	SHEET 48 OF 163

MODEL: DELIN

NOTE  
FOR TYPICAL PLACEMENT OF DELINEATORS  
SEE STANDARD E-197 AND SHEET 4.



LEGEND

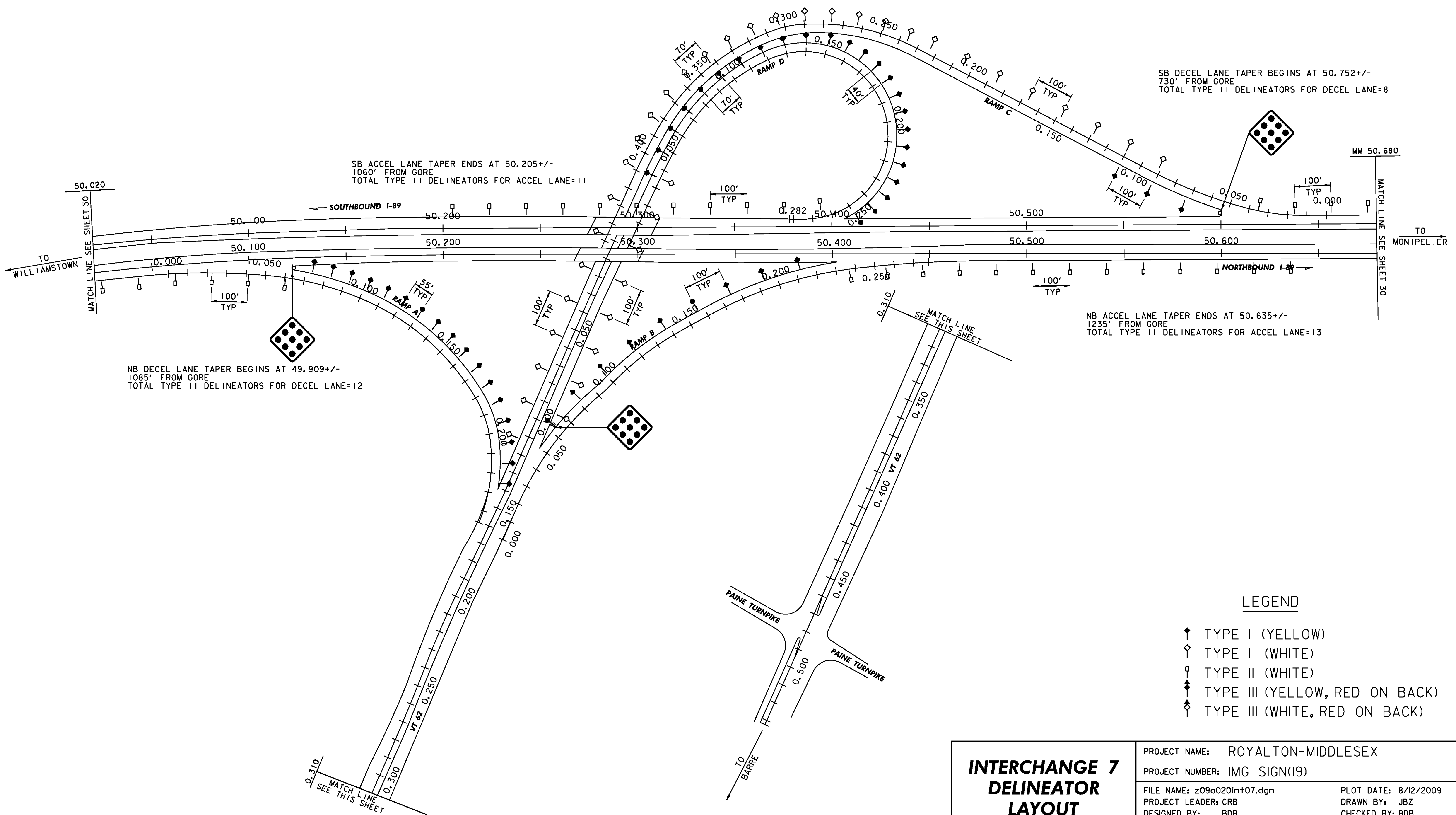
- ◆ TYPE I (YELLOW)
- ◇ TYPE I (WHITE)
- TYPE II (WHITE)
- ◆ TYPE III (YELLOW, RED ON BACK)
- ◇ TYPE III (WHITE, RED ON BACK)

**INTERCHANGE 6  
DELINEATOR  
LAYOUT**

PROJECT NAME: ROYALTON-MIDDLESEX	
PROJECT NUMBER: IMG SIGN(19)	
FILE NAME: z09a020int+06.dgn	PLOT DATE: 8/12/2009
PROJECT LEADER: CRB	DRAWN BY: JBZ
DESIGNED BY: BDB	CHECKED BY: BDB
CLD REF. NO.: 09-0106	SHEET 49 OF 163

MODEL: DELIN

NOTE  
FOR TYPICAL PLACEMENT OF DELINEATORS  
SEE STANDARD E-197 AND SHEET 4.



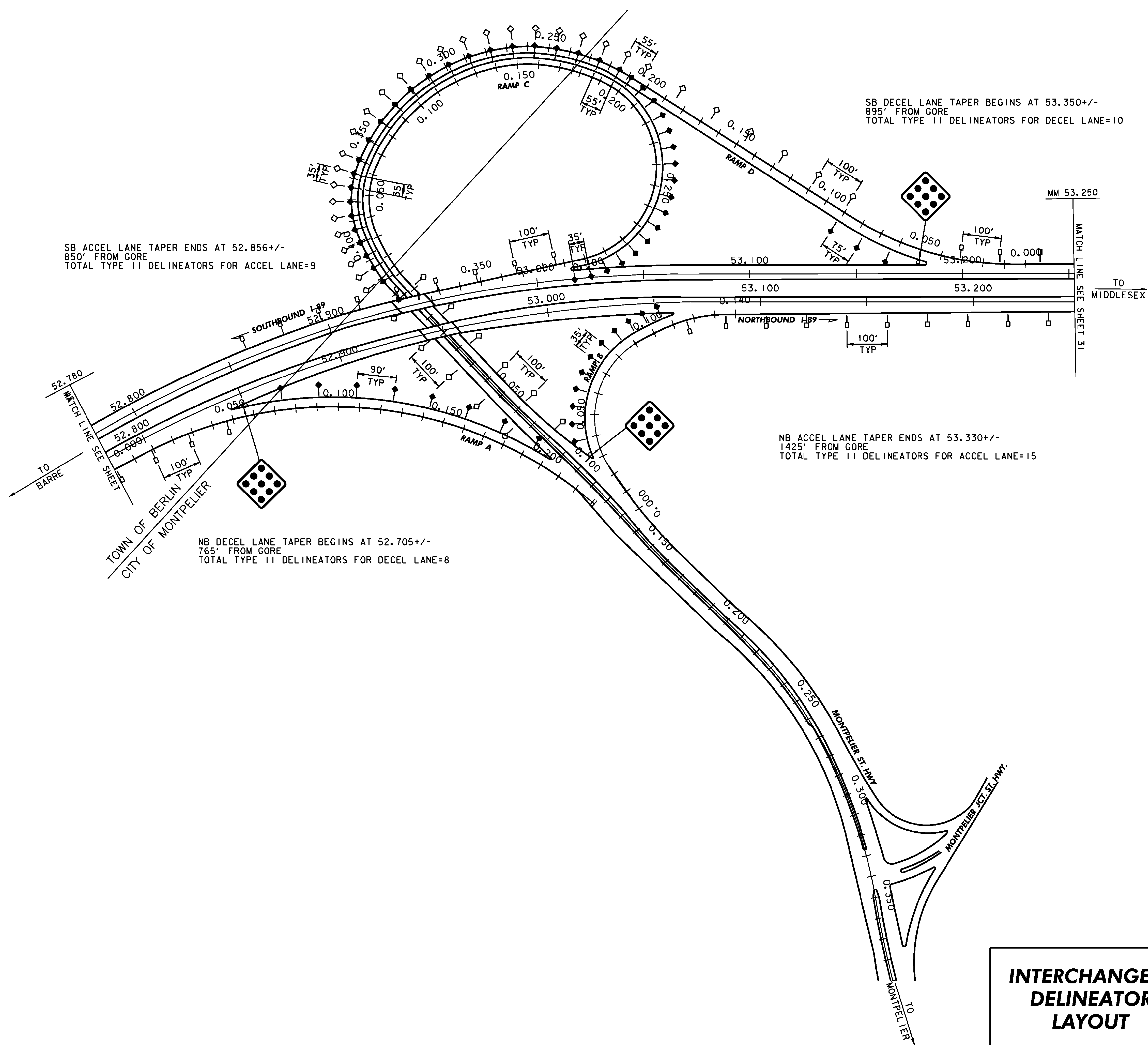
LEGEND

- ◆ TYPE I (YELLOW)
- ◇ TYPE I (WHITE)
- TYPE II (WHITE)
- ◆ TYPE III (YELLOW, RED ON BACK)
- ◇ TYPE III (WHITE, RED ON BACK)

<h3>INTERCHANGE 7 DELINEATOR LAYOUT</h3>	PROJECT NAME: ROYALTON-MIDDLESEX
	PROJECT NUMBER: IMG SIGN(19)
	FILE NAME: z09a020in+07.dgn
PROJECT LEADER: CRB	PLOT DATE: 8/12/2009
DESIGNED BY: BDB	DRAWN BY: JBZ
CLD REF. NO.: 09-0106	CHECKED BY: BDB
	SHEET 50 OF 163

MODEL: DELIN

NOTE  
FOR TYPICAL PLACEMENT OF DELINEATORS  
SEE STANDARD E-197 AND SHEET 4.



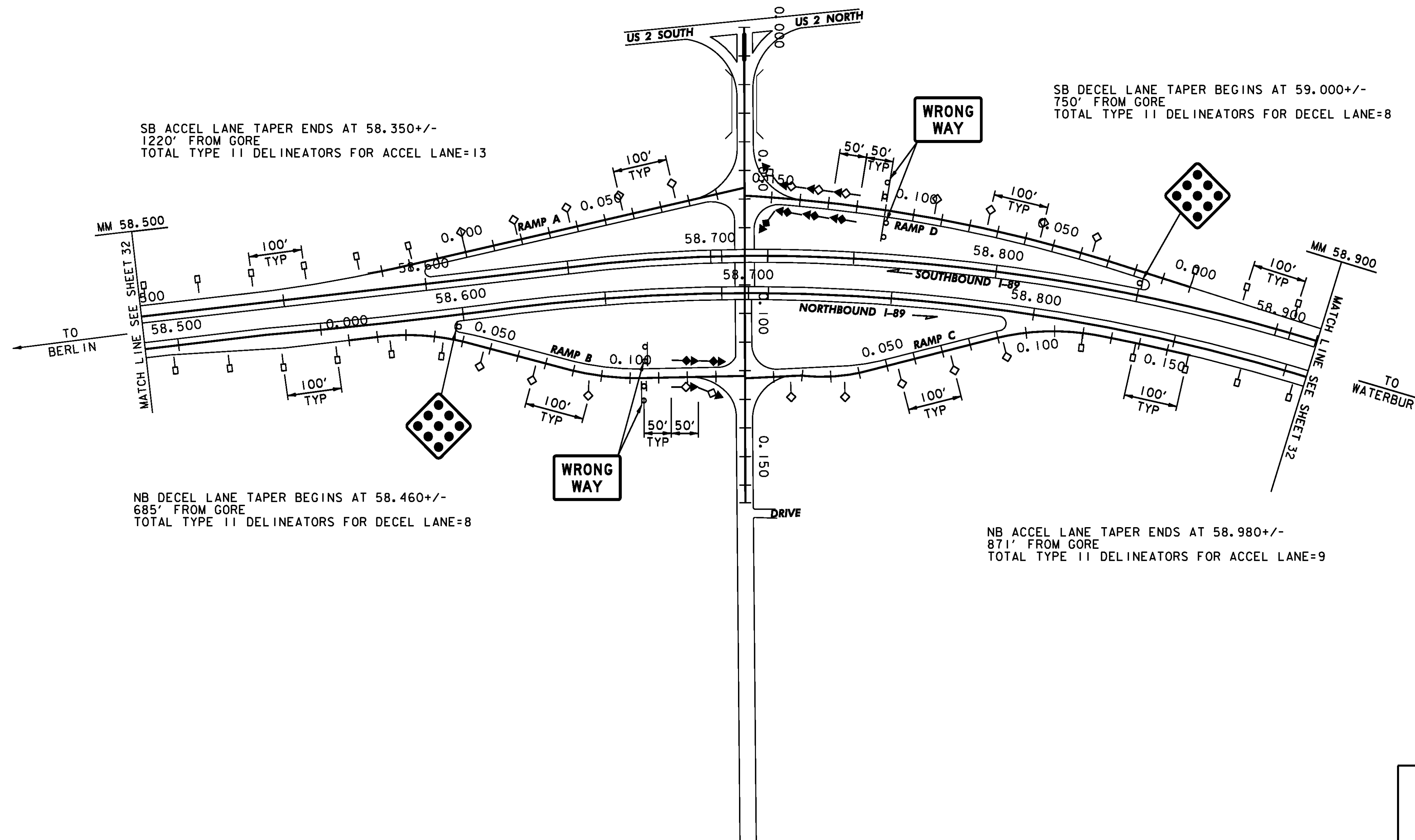
LEGEND

- ◆ TYPE I (YELLOW)
- ◇ TYPE I (WHITE)
- TYPE II (WHITE)
- ◆ TYPE III (YELLOW, RED ON BACK)
- ◇ TYPE III (WHITE, RED ON BACK)

<h3>INTERCHANGE 8 DELINEATOR LAYOUT</h3>	PROJECT NAME: ROYALTON-MIDDLESEX
	PROJECT NUMBER: IMG SIGN(19)
	FILE NAME: z09a020in+08.dgn
PROJECT LEADER: CRB	PLOT DATE: 8/12/2009
DESIGNED BY: BDB	DRAWN BY: JBZ
CLD REF. NO.: 09-0106	CHECKED BY: BDB
	SHEET 51 OF 163

MODEL: DELIN

NOTE  
FOR TYPICAL PLACEMENT OF DELINEATORS  
SEE STANDARD E-197 AND SHEET 4.



**LEGEND**

- ◆ TYPE I (YELLOW)
- ◇ TYPE I (WHITE)
- TYPE II (WHITE)
- ▲ TYPE III (YELLOW, RED ON BACK)
- ▼ TYPE III (WHITE, RED ON BACK)

**INTERCHANGE 9  
DELINEATOR  
LAYOUT**

PROJECT NAME: ROYALTON-MIDDLESEX	
PROJECT NUMBER: IMG SIGN(19)	
FILE NAME: z09a020in+09.dgn	PLOT DATE: 8/12/2009
PROJECT LEADER: CRB	DRAWN BY: JBZ
DESIGNED BY: BDB	CHECKED BY: BDB
CLD REF. NO.: 09-0106	SHEET 52 OF 163

MODEL: DELIN

# TRAFFIC SIGN SUMMARY SHEET 1

MILE MARKER, STATION OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS			NEW & SALVAGED SIGNS				EXISTING POSTS	NEW SIGN POSTS													REMARKS	SIGN DETAIL									
		EA	WIDTH (in)	HEIGHT (in)	"A"	"B"	SALV SIGN	SALV TIS		NO. OF POSTS	FLANGED CHANNEL			SQUARE STEEL (in)			ANCHOR SLEEVE	TUBULAR ALUMINUM DIA (in)			TUBULAR STEEL DIA (in)				W-SHAPE STEEL		FRAMING SIGN	DETAIL ON SHEET NUMBER	STD. SHEET NUMBER				
											1.12	2.0	3.0	1.75	2.0	2.5		3.0	4.0	4.0Mod	3.0	3.5		4.0	5.0	FTG. SIZE				WEIGHT	POST SIZE		
21.320 NB		1	96	30	20.00																								145				
		1	156	144		156.00			2													2		929	W8X21			Fuse-Plate Bolt Tension 28.4 kips	132				
21.650 NB		1	96	30	20.00																									145			
		1	156	138		149.50																								132			
		1	96	48		32.00			2																					145			
21.770 NB		1	48	48	16.00				2							X														W8-13			
21.886 - 59.417 NB		33	6	10	13.86				33			X																		146			
21.920 NB		1	144	144		144.00			2																2		882	W8X18			Fuse-Plate Bolt Tension 20.8 kips SEE FOOTING DETAIL ON SHEET 3	132	
21.956 NB		1	42	38	11.08				2				X																	144			
21.960 NB		1	12	36	3.00				1				X																	OM-3R			
21.960 NB MED		1	12	36	3.00				1				X																	OM-3L			
22.135 NB		1	96	30	20.00																									145			
		1	162	120		135.00			2																2		908	W8X21			Fuse-Plate Bolt Tension 28.4 kips SEE FOOTING DETAIL ON SHEET 3	132	
22.150 - 58.845 NB		14	6	8	4.62				14			X																		146			
22.246 NB		1	72	60		30.00			2															2		X			145				
22.285 NB		1	48	48	16.00				2																					W4-1R			
22.347 NB MED		1	36	12	3.00				2				X																	R6-1R			

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".	SUBTOTALS SHEET 1	SF	SF	EA.	SF		FT	FT	FT	EA.	LB	LB	LB	EA.	EA.	LB	PROJECT NAME: ROYALTON - MIDDLESEX PROJECT NUMBER: IMG SIGN(19)				
		130.56	646.50				474.0	410.6	63.4		49.6				387.6			FILE NAME: 090106_tss_main_NB.xls	PLOT DATE: 8/12/2009	PROJECT LEADER: CRB	DRAWN BY: SRB
																	DESIGNED BY: BDB	CHECKED BY: DAM	TRAFFIC SIGN SUMMARY SHEET # 1		SHEET 53 OF 163

# TRAFFIC SIGN SUMMARY SHEET 2

MILE MARKER, STATION OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS			NEW & SALVAGED SIGNS				EXIST POST NO. OF P O S T S	NEW SIGN POSTS													REMARKS	SIGN DETAIL							
		E	A	WIDTH (in) HEIGHT (in)	"A"	"B"	SALV SIGN	SALV TIS		FLANGED CHANNEL			SQUARE STEEL (in)			ANCHOR SLEEVE	TUBULAR ALUMINUM DIA (in)			TUBULAR STEEL DIA (in)				W-SHAPE STEEL		SIGN FRAME	DETAIL ON SHEET NUMBER	STD. SHEET NUMBER			
										1.12	2.0	3.0	1.75	2.0	2.5		3.0	4.0	4.0Mod	3.0	3.5	4.0		5.0	FTG. SIZE				WEIGHT	POST SIZE	
22.730 NB		1		48	36	12.00			2								2	X										R8-7			
22.805 NB		1		30	15	3.13																						M3-1 WHITE ON BLUE			
		1		36	36	9.00																						M1-1			
		1		36	36	9.00			1								1	X										M1-10			
22.900 NB		1		48	48	16.00																						VW-397	144		
		1		24	18	3.00			2					X														VP-396	144		
23.025 NB		1		48	60	20.00																						R2-1			
		1		48	48	16.00			2								2		X									VR-141		E-142	
23.210 NB		1		114	48			38.00	2								2		X										132		
23.460 NB		1		48	60	20.00			2						X													VR-132	144		
23.460 NB MED		1		48	60	20.00			2								2	X										VR-132	144		
23.759 NB		1		36	24	6.00			2			X				2												I-2		E-131	
26.000 NB		1		12	36	3.00 4.00			1			X				1													D10-2		E-139
26.053 NB		1		48	48	16.00			2								2	X											145		
26.668 NB		1		36	30	7.50			2			X				2												I-2		E-131	
27.000 NB		1		12	36	3.00 4.00			1			X				1													D10-2		E-139
27.040 NB		1		72	60			30.00	2									X											132		
										FT	FT	FT	FT	FT	EA.	EA.	LB	LB	LB	LB	LB	LB	EA.	EA.	EA.	EA.	EA.	EA.			
													86.1								719.0	613.8									

**PROJECT NAME:** ROYALTON - MIDDLESEX  
**PROJECT NUMBER:** IMG SIGN(19)  
**FILE NAME:** 090106 tss main NB.xls    **PLOT DATE:** 8/12/2009  
**PROJECT LEADER:** CRB    **DRAWN BY:** SRB  
**DESIGNED BY:** BDB    **CHECKED BY:** DAM  
**TRAFFIC SIGN SUMMARY SHEET # 2**    **SHEET 54 OF 163**

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".

<b>SUBTOTALS</b>	SF <del>151.63</del> 163.63	SF 68.00	EA.	SF	FT	FT 86.1	EA.	LB	LB 212.6	EA.	EA.	EA.	LB	LB 1332.8
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# TRAFFIC SIGN SUMMARY SHEET 3

MILE MARKER, STATION OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS			NEW & SALVAGED SIGNS				EXISTING 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 DIA (in)			TUBULAR STEEL DIA (in)					W-SHAPE STEEL				SIGN FRAME	DETAIL ON SHEET NUMBER	STD. SHEET NUMBER	
												1.12	2.0	3.0	1.75	2.0	2.5	3.0	4.0	4.0Mod	3.0	3.5	4.0	5.0		FTG. SIZE	24"	30"	WEIGHT				POST SIZE
28.000 NB		1		12	36	3.00 4.00				1				X													D10-2	E-139					
29.000 NB		1		12	36	3.00 4.00				1				X													D10-2	E-139					
29.680 NB		1		96	30	20.00																						145					
		1		156	114		123.50			2											2	783	W8X18			Fuse-Plate Bolt Tension 19.2 kips	133						
29.930 NB		1		252	84		147.00			2											2	519	W6X15			Fuse-Plate Bolt Tension 19.2 kips	133						
30.000 NB		1		12	36	3.00 4.00				1				X													D10-2	E-139					
30.180 NB		1		96	30	20.00																						145					
		1		156	114		123.50																						133				
		1		96	48		32.00			2											2	738	W8X18			Fuse-Plate Bolt Tension 23.3 kips	145						
30.335 NB										2											2	771	W8X18			Fuse-Plate Bolt Tension 19.8 kips							
30.500 NB		1		96	30	20.00																						145					
		1		156	126		136.50			2											2	710	W8X18			Fuse-Plate Bolt Tension 21.8 kips	133						
30.690 NB		1		18	18	2.25				1				X													OM1-1						
30.693 NB		1		72	60		30.00			2											2	X						145					
31.000 NB		1		12	36	3.00 4.00				1				X													D10-2	E-139					
31.175 NB MED		1		36	12	3.00				2				X													R6-1R						
31.450 NB		1		48	36	12.00				2											2	X					R8-7						

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".

SUBTOTALS SHEET 3	SF	SF	EA.	SF		FT	FT	FT	EA.	LB	LB	LB	EA.	EA.	LB
	77.25 89.25	592.50	1			9.5	70.0						372.4	10	3521

PROJECT NAME: ROYALTON - MIDDLESEX  
PROJECT NUMBER: IMG SIGN(19)

FILE NAME: 090106 tss main NB.xls  
PROJECT LEADER: CRB  
DESIGNED BY: BDB  
TRAFFIC SIGN SUMMARY SHEET # 3

PLOT DATE: 8/12/2009  
DRAWN BY: SRB  
CHECKED BY: DAM  
SHEET 55 OF 163

# TRAFFIC SIGN SUMMARY SHEET 4

MILE MARKER, STATION OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS			NEW & SALVAGED SIGNS				EXISTING 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 DIA (in)			TUBULAR STEEL DIA (in)				W-SHAPE STEEL			SIGN FRAME	DETAIL ON SHEET NUMBER	STD. SHEET NUMBER
												1.12	2.0	3.0	1.75	2.0	2.5	3.0	4.0	4.0Mod	3.0	3.5	4.0	5.0	FTG. SIZE	WEIGHT				
31.525 NB		1	30	15	3.13																				M3-1 WHITE ON BLUE					
		1	36	36	9.00																				M1-1					
		1	36	36	9.00				1									1	X						M1-10					
31.620 NB		1	48	48	16.00																				VW-397	144				
		1	24	18	3.00					2								X							VP-396	144				
31.715 NB		1	48	60	20.00																				R2-1					
		1	48	48	16.00					2									2		X				VR-141		E-142			
31.930 NB		1	108	48		36.00				2									2		X					133				
32.000 NB		1	12	36	<del>3.00</del> 4.00					1			X		1										D10-2		E-139			
32.180 NB		1	48	60	20.00					2									2		X				VR-132	144				
32.180 NB MED		1	48	60	20.00					2									2		X				VR-132	144				
33.000 NB		1	12	36	<del>3.00</del> 4.00					1			X		1										D10-2		E-139			
33.426 NB		1	102	84		59.50				2									2			X				133				
34.000 NB		1	12	36	<del>3.00</del> 4.00					1			X		1										D10-2	NB 34.320 PLACED NEW OMI-1 2.25 SF AND POST @ 10.25' (SEE NOTES 8-27-10)				
34.595 NB		1	36	24	6.00					2			X		2										I-2		E-131			
35.000		1	12	36	<del>3.00</del> 4.00					1			X		1										D10-2		E-139			
36.000 NB		1	12	36	<del>3.00</del> 4.00					1			X		1										D10-2		E-139			
												FT	FT	FT	FT	FT	EA	LB	LB	LB	LB	LB	EA	EA	EA	EA	EA	EA	EA	
												86.6			69.9			547.2				590.4		344.6						
												86.6			69.9			1482.2												

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".

SUBTOTALS SHEET 4

SF 122.13  
137.13  
95.50  
EA.  
SF  
FT  
86.6  
FT  
69.9  
EA.  
LB  
1482.2  
EA.  
EA.  
EA.  
EA.

PROJECT NAME: ROYALTON - MIDDLESEX  
PROJECT NUMBER: IMG SIGN(19)  
FILE NAME: 090106 tss main NB.xls  
PROJECT LEADER: CRB  
DESIGNED BY: BDB  
TRAFFIC SIGN SUMMARY SHEET # 4  
PLOT DATE: 8/12/2009  
DRAWN BY: SRB  
CHECKED BY: DAM  
SHEET 56 OF 163

# TRAFFIC SIGN SUMMARY SHEET 5

MILE MARKER, 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 DIA (in)			TUBULAR STEEL DIA (in)				W-SHAPE STEEL				SIGN FRAME	DETAIL ON SHEET NUMBER	STD. SHEET NUMBER			
											1.12	2.0	3.0	1.75	2.0	2.5	3.0	4.0	4.0 Mod	FND-AT-ION	3.0	3.5	4.0	5.0		FTG. SIZE	24"				30"	WEIGHT	POST SIZE
37.000 NB		1	12	36	3.00 <del>3.00</del> 4.00					1				X	1												D10-2		E-139				
38.000 NB		1	12	36	3.00 <del>3.00</del> 4.00					1				X	1												D10-2		E-139				
39.000 NB		1	12	36	3.00 <del>3.00</del> 4.00					1				X	1												D10-2		E-139				
39.138 NB		1	48	48	16.00																						VW-544	144					
		1	24	18	3.00					2						2	X										W16-2						
39.410 NB MED		1	36	36	9.00					2				X	2												R3-4						
40.000 NB		1	12	36	3.00 <del>3.00</del> 4.00					1				X	1												D10-2		E-139				
40.730 NB		1	36	24	6.00					2				X	2												I-2		E-131				
41.000 NB		1	12	36	3.00 <del>3.00</del> 4.00					1				X	1												D10-2		E-139				
41.065 NB		1	48	48	16.00					2						2	X										VW-285	144					
41.840 NB		1	96	30	20.00																							145					
		1	210	144			210.00			2										2	901	W8X21				Fuse-Plate Bolt Tension 35 kips	134						
41.895 NB MED		1	36	36	9.00					2				X	2												R3-4						
41.990 NB		1	138	84			80.50			2						2			X									134					
42.000 NB		1	12	36	3.00 <del>3.00</del> 4.00					1				X	1												D10-2		E-139				
42.140 NB		1	180	102			127.50			2										2	503	W6X15				Fuse-Plate Bolt Tension 19.2 kips	135						
												FT	FT	FT	FT	EA.	LB	LB	LB			LB	LB	LB	LB								
												161.9					418.0					436.6											
												FT	FT	FT	EA.	LB	LB	LB	EA.	EA.	LB												
												161.9			6	854.6			4	EA.	LB	1404											

PROJECT NAME: **ROYALTON - MIDDLESEX**  
 PROJECT NUMBER: **IMG SIGN(19)**  
 FILE NAME: **090106 tss main NB.xls**    PLOT DATE: **8/12/2009**  
 PROJECT LEADER: **CRB**    DRAWN BY: **SRB**  
 DESIGNED BY: **BDB**    CHECKED BY: **DAM**  
 TRAFFIC SIGN SUMMARY SHEET # 5    SHEET **57** OF **163**

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".

SUBTOTALS SF 79.00 418.00 EA. SF

# TRAFFIC SIGN SUMMARY SHEET 6






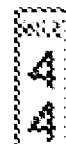
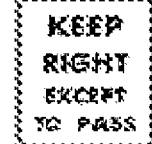
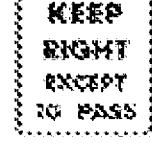
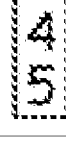
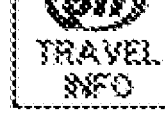

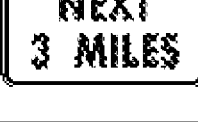

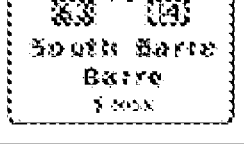

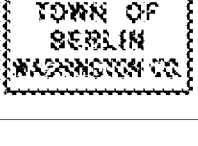
MILE MARKER, STATION OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS		NEW & SALVAGED SIGNS				EXISTING POST TYPE	NO. OF POSTS	NEW SIGN POSTS													REMARKS	SIGN DETAIL				
		EA	WIDTH (in)	HEIGHT (in)	"A"	"B"	SALV SIGN			SALV TIS	FLANGED CHANNEL			SQUARE STEEL (in)			TUBULAR ALUMINUM DIA (in)			TUBULAR STEEL DIA (in)				W-SHAPE STEEL		DETAIL ON SHEET NUMBER	STD. SHEET NUMBER	
											lb/ft	2.0	3.0	1.75	2.0	2.5	3.0	4.0	4.0Mod	3.0	3.5	4.0		5.0	FTG. SIZE			WEIGHT
42.290 NB		1	96	30	20.00																					145		
		1	210	138		201.25																				135		
		1	162	24		27.00			2										2	1085	W10X22			Fuse-Plate Bolt Tension 31 kips		145		
42.440 NB		1	144	144		144.00			2										2	715	W8X18			Fuse-Plate Bolt Tension 19.8 kips		135		
42.716 NB		1	96	30	20.00																						145	
		1	210	120		175.00			2										2	803	W8X21			Fuse-Plate Bolt Tension 28.4 kips		135		
42.820 NB		1	48	60	20.00				2									2	X							W13-3		
42.867 NB		1	18	18	2.25				1	X			1													OM1-1		
42.870 NB		1	72	60		30.00			2									2	X							145		
42.970 NB		1	48	48	16.00				2				X													W4-1R		
43.000 NB		1	12	36	<del>3.00</del> 4.00				1		X		1													D10-2	E-139	
43.057 NB MED		1	36	12	3.00				2		X		2													R6-1R		
43.200 NB MED		1	36	36	9.00				2		X		2													R3-4		
43.275 NB		1	48	36	12.00				2									2	X							R8-7		
43.350 NB		1	30	15	3.13																					M3-1 WHITE ON BLUE		
		1	36	36	9.00																					M1-1		
		1	36	36	9.00				1									1	X							M1-10		

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".

										FT	FT	FT	FT	FT	EA	LB	LB	LB	LB	EA	EA	LB					
														9.5	70.7	49.6			691.6								
<b>SUBTOTALS SHEET 6</b>		SF	SF	EA	SF		FT			FT	EA	LB	EA	EA	LB												
		127.38	577.25				80.2				7	691.6	6		2603												

<b>PROJECT NAME: ROYALTON - MIDDLESEX</b> <b>PROJECT NUMBER: IMG SIGN(19)</b>									
FILE NAME:	090106 tss main NB.xls	PLOT DATE:	8/12/2009						
PROJECT LEADER:	CRB	DRAWN BY:	SRB						
DESIGNED BY:	BDB	CHECKED BY:	DAM						
<b>TRAFFIC SIGN SUMMARY SHEET # 6</b>		SHEET	58 OF 163						

# TRAFFIC SIGN SUMMARY SHEET 7

MILE MARKER, STATION OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS			NEW & SALVAGED SIGNS				NEW SIGN POSTS																	SIGN DETAIL			
									REMARKS																				
		EA	WIDTH (in)	HEIGHT (in)	"A"	"B"	SALV SIGN	SALV TIS	NO. OF POSTS	FLANGED CHANNEL			SQUARE STEEL (in)			TUBULAR ALUMINUM DIA (in)			TUBULAR STEEL DIA (in)				W-SHAPE STEEL				DETAIL ON SHEET 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
43.445 NB		1	48	48	16.00																				VW-397	144			
		1	24	18	3.00															2	X					VP-396	144		
43.540 NB		1	48	60	20.00																						R2-1		
		1	48	48	16.00															2			X				VR-141	E-142	
43.830 NB		1	108	36		27.00																						135	
44.000 NB		1	12	36	<del>3.00</del> 4.00							X								1							D10-2	E-139	
<del>44.080 NB</del> 44.086		1	48	60	20.00															2			X				VR-132	144	
44.080 NB MED		1	48	60	20.00															2			X				VR-132	144	
45.000 NB		1	12	36	<del>3.00</del> 4.00							X								1							D10-2	E-139	
45.345 NB		1	48	48	16.00										X													145	
45.500 NB		1	48	48	16.00																						W11-3		
		1	30	24	5.00										X													144	
45.900 NB		1	96	30	20.00																							145	
		1	198	144		198.00														2			855	W8X21			Fuse-Plate Bolt Tension 33.3 kips	135	
46.000 NB		1	12	36	<del>3.00</del> 4.00							X								1							D10-2	E-139	
46.240 NB		1	36	30	7.50							X								2							I-2	E-131	

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".

FT	FT	FT	FT	FT	EA	EA	EA	EA	EA	EA	EA	
}			}				}			}		
63.7			63.7				121.2			1134.3		

PROJECT NAME: **ROYALTON - MIDDLESEX**  
PROJECT NUMBER: **IMG SIGN(19)**

FILE NAME:	<b>090106 tss main NB.xls</b>	PLOT DATE:	<b>8/12/2009</b>
PROJECT LEADER:	<b>CRB</b>	DRAWN BY:	<b>SRB</b>
DESIGNED BY:	<b>BDB</b>	CHECKED BY:	<b>DAM</b>
TRAFFIC SIGN SUMMARY SHEET # 7		SHEET	<b>59</b> OF <b>163</b>

# TRAFFIC SIGN SUMMARY SHEET 8

MILE MARKER, STATION OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS		NEW & SALVAGED SIGNS				EXISTING POST	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 DIA (in)			TUBULAR STEEL DIA (in)			W-SHAPE STEEL			FRAMING	DETAIL ON SHEET 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								
46.250 NB	EXIT 6	1		96	30	20.00																										145						
	South Barre Barre	1		198	138		189.75																										136					
46.347 NB MED	R3-4	1		36	36	9.00								X																								
46.405 NB	Fuse-Plate Bolt Tension 20.5 kips	1		144	144		144.00																												136			
46.535 NB	EXIT 6	1		96	30	20.00																													145			
	South Barre Barre	1		198	126		173.25																													136		
46.630 NB	VW-285	1		48	48	16.00																														144		
46.830 NB	OM1-1	1		18	18	2.25								X																								
46.836 NB	EXIT 6	1		72	60		30.00																														145	
46.945 NB	W4-1R	1		48	48	16.00																																
47.000 NB	D10-2	1		12	36	3.00 4.00																															E-139	
47.035 NB MED	R6-1R	1		36	12	3.00																																
47.320 NB	R8-7	1		48	36	12.00																																
47.395 NB	M3-1 WHITE ON BLUE	1		30	15	3.13																																
	M1-1	1		36	36	9.00																																
	M1-10	1		36	36	9.00																																
47.428 NB MED	R3-4	1		36	36	9.00																																

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".

SUBTOTALS SHEET 8	SF	EA	SF	EA	SF	FT			EA			LB			EA			LB				
						9.5	104.6		49.6			684.0										
						114.1	49.6	7	684.0	6	2468											

PROJECT NAME: ROYALTON - MIDDLESEX			
PROJECT NUMBER: IMG SIGN(19)			
FILE NAME: 090106 tss main NB.xls	PLOT DATE: 8/12/2009		
PROJECT LEADER: CRB	DRAWN BY: SRB		
DESIGNED BY: BDB	CHECKED BY: DAM		
TRAFFIC SIGN SUMMARY SHEET # 8		SHEET 60	OF 163

# TRAFFIC SIGN SUMMARY SHEET 9

MILE MARKER, STATION OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS			NEW & SALVAGED SIGNS				EXISTING POST	NO. OF POSTS	NEW SIGN POSTS																SIGN DETAIL				
		E	A	WIDTH (in)	HEIGHT (in)	"A"	"B"	SALV SIGN			SALV TIS	FLANGED CHANNEL			SQUARE STEEL (in)			TUBULAR ALUMINUM DIA (in)			TUBULAR STEEL DIA (in)				W-SHAPE STEEL				REMARKS	DETAIL ON SHEET NUMBER	STD. SHEET NUMBER
												1.12	2.0	3.0	1.75	2.0	2.5	3.0	4.0	4.0	4.0	3.0	3.5	4.0	5.0	FTG. SIZE	WEIGHT	POST SIZE			
												lb/ft	lb/ft	lb/ft	lb/ft	lb/ft	lb/ft	lb/ft	lb/ft	lb/ft	lb/ft	lb/ft	lb/ft	lb/ft	lb/ft	lb/ft					
47.490 NB		1		48	48	16.00																			VW-397	144					
	GROOVED SHOULDER	1		24	18	3.00				2								X								VP-396	144				
47.585 NB		1		48	60	20.00																				R2-1					
	SPEED LIMIT 65	1		48	48	16.00				2										2		X				VR-141		E-142			
47.925 NB		1		102	36		25.50			2								X									136				
	Barre Montpelier 7	1		102	36		25.50			2								X									136				
48.000 NB		1		12	36	3.00				1			X													D10-2		E-139			
	MINIMUM 40	1		12	36	3.00				1			X													D10-2		E-139			
48.175 NB		1		48	60	20.00				2											2		X			VR-132	144				
	KEEP RIGHT EXCEPT TO PASS	1		48	60	20.00				2											2		X			VR-132	144				
48.175 NB MED		1		48	60	20.00				2											2		X			VR-132	144				
	KEEP RIGHT EXCEPT TO PASS	1		48	60	20.00				2											2		X			VR-132	144				
48.953 NB		1		96	30	20.00																					145				
	EXIT 7	1		96	30	20.00																					145				
		1		156	144		156.00			2											2			868	W8X21	Fuse-Plate Bolt Tension 28.4 kips	136				
	BERLIN BARRE	1		156	144		156.00			2											2			868	W8X21	Fuse-Plate Bolt Tension 28.4 kips	136				
49.000 NB		1		12	36	3.00				1			X													D10-2		E-139			
	MINIMUM 49	1		12	36	3.00				1			X													D10-2		E-139			
49.325 NB		1		216	84		126.00			2											2			370	W6X12	Fuse-Plate Bolt Tension 14.5 kips	136				
	Edward F. Knapp State Airport EXIT 7	1		216	84		126.00			2											2			370	W6X12	Fuse-Plate Bolt Tension 14.5 kips	136				
49.505 NB		1		96	30	20.00																					145				
	EXIT 7	1		96	30	20.00																					145				
		1		156	138		149.50			2											2			817	W8X21	Fuse-Plate Bolt Tension 28.4 kips	136				
	BERLIN BARRE	1		156	138		149.50			2											2			817	W8X21	Fuse-Plate Bolt Tension 28.4 kips	136				
49.735 NB		1		144	144		144.00			2											2			762	W8X18	Fuse-Plate Bolt Tension 19.8 kips	137				
	7H	1		144	144		144.00			2											2			762	W8X18	Fuse-Plate Bolt Tension 19.8 kips	137				
49.810 NB MED		1		36	36	9.00				2			X														R3-4				
	NO U-TURN	1		36	36	9.00				2			X														R3-4				
48.5 NB	MOVE OVER SIGN						60.5																				POST REPLACED 9-22-10 TOO LOW				

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".		SUBTOTALS SHEET 9		SF	SF	EA.	SF		FT	FT	FT	FT	EA.	LB	EA.	LB	EA.	EA.	LB	PROJECT NAME: ROYALTON - MIDDLESEX PROJECT NUMBER: IMG SIGN(19)	
		144.00	601.00						54.0	54.0	129.4	6		129.4	6	765.7	8	2817	FILE NAME: 090106 tss main NB.xls PROJECT LEADER: CRB DESIGNED BY: BDB TRAFFIC SIGN SUMMARY SHEET # 9		
		150.00																		PLOT DATE: 8/12/2009 DRAWN BY: SRB CHECKED BY: DAM SHEET 61 OF 163	

# TRAFFIC SIGN SUMMARY SHEET 10

MILE MARKER, STATION OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS		NEW & SALVAGED SIGNS				EXISTING POST	NEW SIGN POSTS															REMARKS	SIGN DETAIL						
		EA	WIDTH (in)	HEIGHT (in)	"A"	"B"	SALV SIGN		SALV TIS	FLANGED CHANNEL			SQUARE STEEL (in)			ANCHOR SLEEVE	TUBULAR ALUMINUM DIA (in)			TUBULAR STEEL DIA (in)					W-SHAPE STEEL		SIGN FRAME	DETAIL ON SHEET NUMBER	STD. SHEET NUMBER		
										1.12	2.0	3.0	1.75	2.0	2.5		3.0	4.0	4.0 Mod	FND- ACTION	3.0	3.5	4.0		5.0	FTG. SIZE				WEIGHT	POST SIZE
49.910 NB	EXIT 7	1	96	30	20.00																						145				
		1	156	120		130.00			2											2	805	W8X18						Fuse-Plate Bolt Tension 20.7 kips	137		
50.000 NB		1	12	36	<del>3.00</del> 4.00				1		X																	D10-2		E-139	
50.060 NB		1	48	60	20.00				2					X														W13-3			
50.123 NB		1	18	18	2.25				1		X																	OM1-1			
50.126 NB	EXIT 7	1	72	60		30.00			2											2	X								145		
50.310 NB		1	48	48	16.00				2				X															W4-1R			
50.405 NB MED	ONE WAY	1	36	12	3.00				2		X																	R6-1R			
50.650 NB	EMERGENCY STOPPING ONLY	1	48	36	12.00				2				X															R8-7			
50.730 NB	NORTH	1	30	15	3.13																							M3-1 WHITE ON BLUE			
		1	36	36	9.00																							M1-1			
		1	36	36	9.00				1												1	X						M1-10			
50.732 NB MED		1	36	36	9.00				2		X																	R3-4			
50.848 NB MED		1	36	36	9.00				2		X																	R3-4			
50.910 NB		1	48	48	16.00																							VW-397		144	
	GROOVED SHOULDER	1	24	18	3.00				2												2	X						VP-396		144	

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".

SUBTOTALS SHEET 10	EA	WIDTH	HEIGHT	"A"	"B"	SALV SIGN	SALV TIS	EXISTING POST	NO. OF POSTS	FLANGED CHANNEL	SQUARE STEEL	ANCHOR SLEEVE	TUBULAR ALUMINUM	TUBULAR STEEL	W-SHAPE STEEL	SIGN FRAME	REMARKS	DETAIL ON SHEET NUMBER	STD. SHEET NUMBER
	131	134.38		160.00						FT	FT	EA	LB	EA	EA	EA			
										9.5	103.1		96.6	68.2	501.6				

PROJECT NAME: ROYALTON - MIDDLESEX  
PROJECT NUMBER: IMG SIGN(19)  
FILE NAME: 090106 tss main NB.xls  
PROJECT LEADER: CRB  
DESIGNED BY: BDB  
TRAFFIC SIGN SUMMARY SHEET # 10  
PLOT DATE: 8/12/2009  
DRAWN BY: SRB  
CHECKED BY: DAM  
SHEET 62 OF 163

# TRAFFIC SIGN SUMMARY SHEET 11

MILE MARKER, STATION OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS		NEW & SALVAGED SIGNS				NEW SIGN POSTS																SIGN DETAIL				
		E A	WIDTH (in)	HEIGHT (in)	"A"	"B"	SALV SIGN	SALV TIS	FLANGED CHANNEL			SQUARE STEEL (in)			TUBULAR ALUMINUM DIA (in)			TUBULAR STEEL DIA (in)				W-SHAPE STEEL		REMARKS	DETAIL ON SHEET NUMBER	STD. SHEET NUMBER		
									1.12	2.0	3.0	1.75	2.0	2.5	3.0	4.0	4.0Mod	3.0	3.5	4.0	5.0	FTG. SIZE	WEIGHT				POST SIZE	
50.990 NB <del>51.004</del>		1	48	60	20.00																			R2-1	HIT UNDER DRAIN - REPAIRED.			
		1	48	48	16.00																				VR-141		E-142	
51.000 NB		1	12	36	<del>3.00</del> 4.00						X															D10-2		E-139
51.075 NB		1	108	36			27.00																					137
51.325 NB <del>51.375</del>		1	48	60	20.00																							144
51.325 NB MED		1	48	60	20.00								X															144
51.540 NB		1	156	108			117.00																2	510	W6X15	Fuse-Plate Bolt Tension 19.2 kips		137
51.720 NB		1	96	30	20.00																							145
		1	174	114			137.75																					137
		1	114	24	19.00																		2	627	W8X18	Fuse-Plate Bolt Tension 22.3 kips		145
51.860 NB		1	48	48	16.00																							144
52.000 NB		1	12	36	3.00						X																	144
52.140 NB		1	48	48	16.00								X															144
52.179 NB		1	36	24	6.00						X																	E-131
52.235 NB		1	96	30	20.00																							145
		1	174	114			137.75																					137
		1	162	24			27.00																2	683	W8X18	Fuse-Plate Bolt Tension 23.4 kips		145

			FT	FT	FT	FT	FT	EA	LB	LB	LB	EA	LB	LB	LB	EA	EA	LB
			54.5						49.6	71.6			591.3	315.0				
<b>SUBTOTALS SHEET 11</b>	SF	SF	EA	SF	EA	SF	EA	SF	EA	SF	EA	SF	EA	SF	EA	SF	EA	SF
	173.00	485.5		179.00		446.50												
								54.5					121.2					1820

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".

**PROJECT NAME: ROYALTON - MIDDLESEX**  
**PROJECT NUMBER: IMG SIGN(19)**

FILE NAME: 090106 tss main NB.xls  
 PROJECT LEADER: CRB  
 DESIGNED BY: BDB  
 TRAFFIC SIGN SUMMARY SHEET # 11

PLOT DATE: 8/12/2009  
 DRAWN BY: SRB  
 CHECKED BY: DAM  
 SHEET 63 OF 163

# TRAFFIC SIGN SUMMARY SHEET 12

MILE MARKER, STATION OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS		NEW & SALVAGED SIGNS				EXISTING POST	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 DIA (in)			TUBULAR STEEL DIA (in)				W-SHAPE STEEL				SIGN FRAME	DETAIL ON SHEET NUMBER	STD. SHEET NUMBER	
											1.12	2.0	3.0	1.75	2.0	2.5	3.0	4.0	4.0Mod	3.0	3.5	4.0	5.0	FTG. SIZE		WEIGHT					POST SIZE
52.288 NB		1	36	48	12.00								X															W1-8L FLUORESCENT YELLOW TYPE IX SHEETING			
52.340 NB		1	48	48	16.00											X												W8-13			
52.381 NB MED		1	36	36	9.00								X															R3-4			
52.390 NB		1	36	48	12.00								X															W1-8L FLUORESCENT YELLOW TYPE IX SHEETING			
52.440 NB		1	144	144		144.00															2	755	W8X18				Fuse-Plate Bolt Tension 19.8 kips	137			
52.470 NB		1	36	48	12.00								X															W1-8L FLUORESCENT YELLOW TYPE IX SHEETING			
52.500 NB		1	36	48	12.00								X															W1-8L FLUORESCENT YELLOW TYPE IX SHEETING			
52.555 NB		1	36	48	12.00								X															W1-8L FLUORESCENT YELLOW TYPE IX SHEETING			
52.595 NB		1	96	30	20.00																								145		
52.690 NB		1	174	132		159.50															2	798	W8X21				Fuse-Plate Bolt Tension 28.4 kips	138			
52.755 NB MED		1	36	48	12.00								X								2							W13-2			
52.787 NB MED		1	36	48	12.00								X															W1-8R FLUORESCENT YELLOW TYPE IX SHEETING			
52.825 NB MED		1	36	48	12.00								X															W1-8R FLUORESCENT YELLOW TYPE IX SHEETING			
52.850 NB		1	18	18	2.25								X															OM1-1			
52.855 NB		1	72	60		30.00															2								145		
52.863 NB MED		1	36	48	12.00								X															W1-8R FLUORESCENT YELLOW TYPE IX SHEETING			

SIGNS FALL ON BRIDGE, EXISTING POSTS WERE USED.

FT	FT	FT	FT	FT	FT	EA	LB	LB	LB	EA	LB	LB	LB	EA	EA	LB
9.5	682.4						49.6				395.2					
SUBTOTALS SHEET 12	SF	SF	EA	SF	FT	FT	EA	LB	EA	EA	LB	EA	EA	EA	EA	LB
	175.25	333.50			691.9		4	49.6	4	4	395.2	4	4	4	1553	

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".

PROJECT NAME: ROYALTON - MIDDLESEX  
 PROJECT NUMBER: IMG SIGN(19)  
 FILE NAME: 090106 tss main NB.xls  
 PROJECT LEADER: CRB  
 DESIGNED BY: BDB  
 TRAFFIC SIGN SUMMARY SHEET # 12  
 PLOT DATE: 8/12/2009  
 DRAWN BY: SRB  
 CHECKED BY: DAM  
 SHEET 64 OF 163

# TRAFFIC SIGN SUMMARY SHEET 13

MILE MARKER, STATION OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS			NEW & SALVAGED SIGNS				EXISTING 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 DIA (in)			TUBULAR STEEL DIA (in)				W-SHAPE STEEL					FRAMING SIGN	DETAIL ON SHEET 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		24"	30"	WEIGHT				POST SIZE		
																																		lb/ft	lb/ft
52.901 NB MED		1	36	48	12.00					2			X														W1-8R FLUORESCENT YELLOW TYPE IX SHEETING								
52.930 NB		1	12	36	3.00					1			X														OM-3R								
52.930 NB MED		1	12	36	3.00					1			X														OM-3L								
52.980 NB		1	48	48	16.00					2				X													W4-1R								
53.000 NB		1	12	36	<del>3.00</del> 4.00					1			X														D10-2		E-139						
53.065 NB MED		1	36	12	3.00					2			X														R6-1R								
53.230 NB		1	48	48	16.00					2				X													W8-13								
53.320 NB MED		1	36	36	9.00					2			X														R3-4								
53.340 NB		1	12	36	3.00					1			X														OM-3R								
53.340 NB MED		1	12	36	3.00					1			X														OM-3L								
53.525 NB		1	48	36	12.00					2				X													R8-7								
53.600 NB		1	30	15	3.13																						M3-1 WHITE ON BLUE								
		1	36	36	9.00																						M1-1								
		1	36	36	9.00					1					1	X											M1-10								
53.695 NB		1	48	48	16.00																						VW-397		144						
		1	24	18	3.00					2						2	X										VP-396		144						
												FT	FT	FT	FT	FT	EA	LB	LB	LB	LB	LB	LB	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA		
												50.4	141.2					146.2																	
												FT	FT			FT		EA	LB	LB	LB	LB	LB	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	
												191.6	191.6			146.2		3	319.2	319.2															

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".

SUBTOTALS  
SHEET 13

SF 120.13  
123.13

SF EA. SF


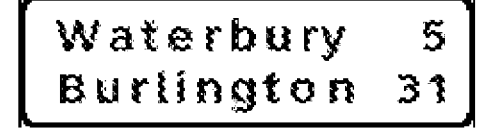
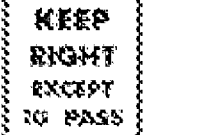
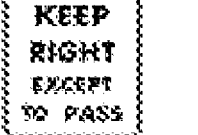

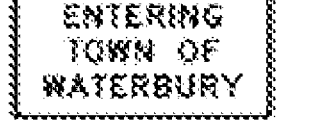
PROJECT NAME: ROYALTON - MIDDLESEX  
PROJECT NUMBER: IMG SIGN(19)  
FILE NAME: 090106 tss main NB.xls  
PROJECT LEADER: CRB  
DESIGNED BY: BDB  
TRAFFIC SIGN SUMMARY SHEET # 13  
PLOT DATE: 8/12/2009  
DRAWN BY: SRB  
CHECKED BY: DAM  
SHEET 65 OF 163







# TRAFFIC SIGN SUMMARY SHEET 17

MILE MARKER, STATION OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS			NEW & SALVAGED SIGNS				EXIST. POST	NEW SIGN POSTS														REMARKS	SIGN DETAIL					
		EA	WIDTH (in)	HEIGHT (in)	"A"	"B"	SALV SIGN	SALV TIS		FLANGED CHANNEL			SQUARE STEEL (in)			TUBULAR ALUMINUM DIA (in)			TUBULAR STEEL DIA (in)				W-SHAPE STEEL				SIGN FRAME	DETAIL ON SHEET NUMBER	STD. SHEET NUMBER	
										1.12	2.0	3.0	1.75	2.0	2.5	3.0	4.0	4.0Mod	3.0	3.5	4.0	5.0	FTG. SIZE		WEIGHT	POST SIZE				
																							lb/ft							lb/ft
59.490 NB MED		1	36	36	9.00				2			X		2												R3-4				
59.550 NB		1	108	36		27.00			2					X													138			
59.800 NB		1	48	60	20.00				2						2	X										VR-132	144			
59.800 NB MED		1	48	60	20.00				2						2	X										VR-132	144			
60.000 NB		1	12	36	<del>3.00</del> 4.00				1		X		1													D10-2		E-139		
60.880 NB		1	36	24	6.00				2		X		2													I-2		E-131		

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".		FT	FT	FT	FT	FT	EA	LB	LB	LB	LB	EA	EA	LB
						73.7		54.4			440.8			
<b>SHEET TOTALS</b>	SF <del>55.00</del> 58.00	SF 27.00	EA	SF		FT 73.7		LB 54.4	EA 4	LB 440.8	EA	EA	LB	

PROJECT NAME: **ROYALTON - MIDDLESEX**  
PROJECT NUMBER: **IMG SIGN(19)**  
FILE NAME: **090106 tss main NB.xls** PLOT DATE: **8/12/2009**  
PROJECT LEADER: **CRB** DRAWN BY: **SRB**  
DESIGNED BY: **BDB** CHECKED BY: **DAM**  
TRAFFIC SIGN SUMMARY SHEET # 17 SHEET **69** OF **163**



# TRAFFIC SIGN SUMMARY SHEET 19

MILE MARKER, STATION OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS			NEW & SALVAGED SIGNS				EXIST. POST RELATIVE TO ALTERNATIVE	NEW SIGN POSTS														REMARKS	SIGN DETAIL							
		EA	WIDTH (in)	HEIGHT (in)	"A"	"B"	SALV SIGN	SALV TIS		FLANGED CHANNEL			SQUARE STEEL (in)			TUBULAR ALUMINUM DIA (in)			TUBULAR STEEL DIA (in)				W-SHAPE STEEL				DETAIL ON SHEET NUMBER	STD. SHEET NUMBER				
										1.12	2.0	3.0	1.75	2.0	2.5	3.0	4.0	4.0Mod	3.0	3.5	4.0	5.0	FTG. SIZE		24"	30"			WEIGHT	POST SIZE		
													lb/ft	lb/ft	lb/ft																lb/ft	lb/ft
22.640 SB		1	96	30	20.00																						145					
		1	210	120		175.00															2			780	W8X21		Fuse-Plate Bolt Tension 28.4 kips	139				
22.949 SB		1	96	30	20.00																							145				
		1	210	138		201.25																						139				
		1	162	24		27.00																						145				
<del>23.100 SB</del> 22.098		1	192	84		112.00																						139				
<del>23.300 SB</del> 23.295		1	96	30	20.00																								145			
		1	210	144		210.00																						139				
23.749 SB		1	36	24	6.00						X																		E-131			
26.000 SB		1	12	36	<del>3.00</del> 4.00						X																		E-139			
26.708 SB		1	36	30	7.50						X																		E-131			
27.000 SB		1	12	36	<del>3.00</del> 4.00						X																		E-139			
28.000 SB		1	12	36	<del>3.00</del> 4.00						X																		E-139			
29.000 SB		1	12	36	<del>3.00</del> 4.00						X																		E-139			
29.370 SB		1	48	60	20.00																								144			
29.370 SB MED		1	48	60	20.00																								144			
29.748 SB		1	78	78		42.25																							145			
		1	36	24	6.00	6.00	+42.25																							145		

DAMAGED BY VEHICLE

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".

SUBTOTALS SHEET 19	SF	SF	EA.	SF	EA.	SF	EA.	SF	EA.	SF	EA.	SF	EA.	SF	EA.	SF	EA.	SF	EA.	SF	EA.	SF	EA.	SF	EA.	SF	EA.	SF	EA.	
	125.50	809.75				104.8																								
	131.50	767.50				104.8																								

PROJECT NAME: **ROYALTON - MIDDLESEX**  
PROJECT NUMBER: **IMG SIGN(19)**

FILE NAME: **090106 tss\_main\_SB.xls** PLOT DATE: **8/12/2009**  
PROJECT LEADER: **CRB** DRAWN BY: **SRB**  
DESIGNED BY: **BDB** CHECKED BY: **DAM**  
**TRAFFIC SIGN SUMMARY SHEET # 19** SHEET **71** OF **163**





# TRAFFIC SIGN SUMMARY SHEET 22

MILE MARKER, STATION OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS			NEW & SALVAGED SIGNS				EXIST POST	NEW SIGN POSTS															SIGN DETAIL															
		E A	WIDTH (in)	HEIGHT (in)	"A"	"B"	SALV SIGN	SALV TIS		FLANGED CHANNEL			SQUARE STEEL (in)			TUBULAR ALUMINUM DIA (in)			TUBULAR STEEL DIA (in)			W-SHAPE STEEL			REMARKS	DETAIL ON SHEET NUMBER	STD. SHEET NUMBER													
										lb/ft			lb/ft			lb/ft			lb/ft			FTG. SIZE																		
										1.12	2.0	3.0	1.75	2.0	2.5	3.0	4.0	4.0Mod	3.0	3.5	4.0	5.0	24"	30"				WEIGHT	POST SIZE											
36.000 SB		1	12	36	<del>3.00</del> 4.00								X		1											D10-2	E-139													
37.000 SB		1	12	36	<del>3.00</del> 4.00								X		1											D10-2	E-139													
38.000 SB		1	12	36	<del>3.00</del> 4.00								X		1											D10-2	E-139													
38.150 SB		1	72	60		30.00			2													2		X			132													
39.000 SB		1	12	36	<del>3.00</del> 4.00								X		1											D10-2	E-139													
39.425 SB MED		1	36	36	9.00				2				X		2											R3-4														
40.000 SB		1	12	36	<del>3.00</del> 4.00								X		1											D10-2	E-139													
40.760 SB		1	36	24	6.00				2				X		2											I-2	E-131													
41.000 SB		1	12	36	<del>3.00</del> 4.00								X		1											D10-2	E-139													
41.550 SB		1	48	60	20.00				2													2		X			VR-132	144												
41.550 SB MED		1	48	60	20.00				2													2		X			VR-132	144												
41.840 SB		1	144	36		36.00			2													2		X			140													
41.905 SB MED		1	36	36	9.00				2				X		2											R3-4														
42.000 SB		1	12	36	<del>3.00</del> 4.00								X		1											D10-2	E-139													
42.055 SB		1	48	60	20.00																					R2-1														
		1	48	48	16.00				2													2		X			VR-141	E-142												
													EA	LB	EA	EA	EA	EA	EA	EA																				
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".											SUBTOTALS SHEET 22		SF	SF	EA	SF	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA
											100.00	121.00	66.00																											

<b>PROJECT NAME:</b>	ROYALTON - MIDDLESEX
<b>PROJECT NUMBER:</b>	IMG SIGN(19)
<b>FILE NAME:</b>	090106 tss main_SB.xls
<b>PROJECT LEADER:</b>	CRB
<b>DESIGNED BY:</b>	BDB
<b>TRAFFIC SIGN SUMMARY SHEET #</b>	22
<b>PLOT DATE:</b>	8/12/2009
<b>DRAWN BY:</b>	SRB
<b>CHECKED BY:</b>	DAM
<b>SHEET</b>	74
<b>OF</b>	163

# TRAFFIC SIGN SUMMARY SHEET 23

MILE MARKER, STATION OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS E A WIDTH (in) HEIGHT (in)		NEW & SALVAGED SIGNS				EXISTING POST RE TA I N	NO. OF POSTS	NEW SIGN POSTS																REMARKS	SIGN DETAIL		
				"A"	"B"	SALV SIGN	SALV TIS			FLANGED CHANNEL			SQUARE STEEL (in)			TUBULAR ALUMINUM DIA (in)			TUBULAR STEEL DIA (in)				W-SHAPE STEEL				DETAIL ON SHEET NUMBER	STD. SHEET NUMBER	
										1.12	2.0	3.0	1.75	2.0	2.5	3.0	4.0	4.0 Mod	FND- ATION	3.0	3.5	4.0	5.0	FTG. SIZE	WEIGHT				POST SIZE
													lb/ft	lb/ft	lb/ft	lb/ft	lb/ft	lb/ft		lb/ft	lb/ft	lb/ft	lb/ft						
42.150 SB		1	48	48	16.00																			VW-397	144				
	GROOVED SHOULDER	1	24	18	3.00									X											VP-396	144			
42.245 SB		1	30	15	3.13																				M3-3 WHITE ON BLUE				
		1	36	36	9.00																				M1-1				
		1	36	36	9.00				1							1	X								M1-10				
42.320 SB	EMERGENCY STOPPING ONLY	1	48	36	12.00				2							2	X									R8-7			
42.571 SB MED		1	36	12	3.00				2			X														R6-1R			
42.740 SB		1	48	48	16.00				2					X												W4-1R			
43.000 SB		1	12	36	3.00 4.00				1				X													D10-2	E-139		
43.075 SB		1	72	60		30.00			2							2	X										145		
43.078 SB		1	18	18	2.25				1				X														OM1-1		
43.240 SB		1	96	30	20.00																						145		
		1	210	120		175.00			2										2	1067	W10X22					Fuse-Plate Bolt Tension 28.4 kips SEE FOOTING DETAIL ON SHEET 3	135		
43.241 SB MED		1	36	36	9.00				2					X													R3-4		
43.390 SB		1	144	144		144.00			2										2	843	W8X18						Fuse-Plate Bolt Tension 20.4 kips	135	

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".

FT	FT	FT	FT	EA	LB	EA	LB	EA	EA	LB
9.5	70.5	70.5	70.5		49.6	69.9	478.8			
FT	FT	EA	EA	EA	EA	EA	EA	EA	EA	EA
80.0	119.5	5	4	4	4	4	4	4	4	4
LB	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA
1910	4	4	4	4	4	4	4	4	4	4

SUBTOTALS	SF	SF	EA	SF
SHEET 23	102.38	349.00		

PROJECT NAME: ROYALTON - MIDDLESEX  
 PROJECT NUMBER: IMG SIGN(19)  
 FILE NAME: 090106 tss main\_SB.xls  
 PROJECT LEADER: CRB  
 DESIGNED BY: BDB  
 TRAFFIC SIGN SUMMARY SHEET # 23  
 PLOT DATE: 8/12/2009  
 DRAWN BY: SRB  
 CHECKED BY: DAM  
 SHEET 75 OF 163



# TRAFFIC SIGN SUMMARY SHEET 25

MILE MARKER, STATION OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS			NEW & SALVAGED SIGNS				EXISTING 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 DIA (in)			TUBULAR STEEL DIA (in)					W-SHAPE STEEL				DETAIL ON SHEET NUMBER	STD. SHEET NUMBER	
												1.12	2.0	3.0	1.75	2.0	2.5	3.0	4.0	4.0Mod	3.0	3.5	4.0	5.0		FTG. SIZE	24"	30"	WEIGHT			POST SIZE
46.350 SB		1		30	15	3.13																				M3-3 WHITE ON BLUE						
		1		36	36	9.00																				M1-1						
		1		36	36	9.00			1									1	X							M1-10						
46.366 SB MED		1		36	36	9.00			2				X													R3-4						
46.430 SB		1		48	36	12.00			2									2	X							R8-7						
46.680 SB MED		1		36	12	3.00			2				X													R6-1R						
46.760 SB		1		48	48	16.00			2									2	X							W4-1R						
46.813 SB		1		72	60				2									2	X									145				
46.815 SB		1		18	18	2.25			1				X													OM1-1						
46.840 SB		1		48	60	20.00			2										X							W13-3						
46.940 SB		1		96	30	20.00																						145				
		1		198	126				2													2	899	W8X21	Fuse-Plate Bolt Tension 28.4 kips	136						
47.000 SB		1		12	36	<del>3.00</del> 4.00			1				X													D10-2		E-139				
47.200 SB		1		180	102	127.50			2													2	798	W8X18	Fuse-Plate Bolt Tension 19.2 kips SEE FOOTING DETAIL ON SHEET 3	135						
<del>47.360 SB</del> 47.382	<b>MOVED</b>	1		144	144	144.00			2													2	720	W8X18	Fuse-Plate Bolt Tension 19.8 kips	136						
47.488 SB MED		1		36	36	9.00			2				X													R3-4						

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".										FT	FT	FT	FT	FT	FT	EA	LB	LB	LB	LB	LB	EA	EA	LB
										9.5	103.1		68.2	684.0										
										FT	FT	EA	EA	LB	LB									
										112.6	68.2	7	684.0	6	2417									

PROJECT NAME: **ROYALTON - MIDDLESEX**  
PROJECT NUMBER: **IMG SIGN(19)**  
FILE NAME: **090106 tss\_main\_SB.xls** PLOT DATE: **8/12/2009**  
PROJECT LEADER: **CRB** DRAWN BY: **SRB**  
DESIGNED BY: **BDB** CHECKED BY: **DAM**  
TRAFFIC SIGN SUMMARY SHEET # 25 SHEET **77** OF **163**

# TRAFFIC SIGN SUMMARY SHEET 26

MILE MARKER, STATION OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS		NEW & SALVAGED SIGNS				EXIST. SIGN 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 DIA (in)			TUBULAR STEEL DIA (in)				W-SHAPE STEEL		DETAIL ON SHEET NUMBER	STD. SHEET NUMBER	
										lb/ft	2.0	3.0	1.75	2.0	2.5	3.0	4.0	4.0Mod	3.0	3.5	4.0		5.0	FTG. SIZE			WEIGHT
47.510 SB	EXIT 6	1	96	30	20.00																				145		
	South Barre Barre 02 2004	1	198	138		189.75																				136	
	NEXT EXIT 5 MILES	1	96	48		32.00			2										2	1217	W10X26				Fuse-Plate Bolt Tension 30.1 kips	145	
47.660 SB	Granite Quarries EXIT 6	1	120	84		70.00			2						2									X		141	
47.815 SB	EXIT 6	1	96	30	20.00																					145	
	South Barre Barre 1100	1	198	144		198.00			2										2	920	W8X21				Fuse-Plate Bolt Tension 33.4 kips	135	
48.000 SB	4 8	1	12	36	<del>3.00</del> 4.00				1			X	1												D10-2		E-139
48.965 SB		1	48	48	16.00																				W11-3		
	NEXT 3 MILES	1	30	24	5.00				2					X												144	
49.000 SB	4 9	1	12	36	<del>3.00</del> 4.00				1			X	1												D10-2		E-139
49.220 SB	KEEP RIGHT EXCEPT TO PASS	1	48	60	20.00				2						2	X									VR-132	144	
49.220 SB MED	KEEP RIGHT EXCEPT TO PASS	1	48	60	20.00				2						2	X									VR-132	144	
49.470 SB	South Barre White River Jct 6 51	1	144	36		36.00			2						2	X										141	
49.820 SB MED		1	36	36	9.00				2			X	2												R3-4		
49.870 SB	SPEED LIMIT 65	1	48	60	20.00																				R2-1		
	MINIMUM 40	1	48	48	16.00				2						2		X								VR-141		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 VTRANS "SIGN POST DESIGN GUIDELINE".

SUBTOTALS SHEET 26	SF	SF	EA.	SF			FT	FT	EA.	LB	EA.	EA.	LB	EA.	EA.	LB
	145.00 152.00	525.75					53.8	53.8	10	71.6	4	4	1493.3	4	4	2137

PROJECT NAME: ROYALTON - MIDDLESEX  
PROJECT NUMBER: IMG SIGN(19)

FILE NAME: 090106 tss main\_SB.xls  
PROJECT LEADER: CRB  
DESIGNED BY: BDB  
TRAFFIC SIGN SUMMARY SHEET # 26

PLOT DATE: 8/12/2009  
DRAWN BY: SRB  
CHECKED BY: DAM  
SHEET 78 OF 163



# TRAFFIC SIGN SUMMARY SHEET 28

MILE MARKER, STATION OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS		NEW & SALVAGED SIGNS				EXISTING 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 DIA (in)			TUBULAR STEEL DIA (in)				W-SHAPE STEEL		DETAIL ON SHEET NUMBER	STD. SHEET NUMBER	
												lb/ft	2.0	3.0	1.75	2.0	2.5	3.0	4.0	4.0Mod	3.0	3.5		4.0	5.0	FTG. SIZE			WEIGHT
51.230 SB		1	96	30	20.00																					145			
51.302 SB		1	156	138	149.50				2												2	830	W8X21	Fuse-Plate Bolt Tension 28.4 kips	136				
51.380 SB		1	216	84	126.00				2												2	516	W6X15	Fuse-Plate Bolt Tension 19.2 kips	136				
51.615 SB		1	96	30	20.00																					145			
51.702 SB		1	156	144	156.00				2												2	1015	W8X21	Fuse-Plate Bolt Tension 28.6 kips	136				
52.000 SB		1	12	36	3.00 4.00				1				X	1												D10-2	E-139		
52.105 SB		1	48	60	20.00				2												2	X				VR-132	144		
52.105 SB MED		1	48	60	20.00				2												2	X				VR-132	144		
52.179 SB		1	36	24	6.00				2				X	2												I-2	E-131		
52.220 SB		1	132	54	49.50				2												2		X			141			
52.355 SB		1	144	36	36.00				2												2		X			141			
52.389 SB MED		1	36	36	9.00				2				X	2												R3-4			
52.500 SB		1	48	60	20.00																					R2-1			
52.590 SB		1	48	48	16.00				2												2		X			VR-141	E-142		
52.590 SB		1	48	48	16.00																					VW-397	144		
52.590 SB		1	24	18	3.00				2													X				VP-396	144		

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".																												
<b>SUBTOTALS SHEET 28</b>	SF	SF	EA.	SF																								
	153.00 153.00	517.00																										

PROJECT NAME: ROYALTON - MIDDLESEX  
 PROJECT NUMBER: IMG SIGN(19)  
 FILE NAME: 090106 tss main SB.xls  
 PROJECT LEADER: CRB  
 DESIGNED BY: BDB  
 TRAFFIC SIGN SUMMARY SHEET # 28

PLOT DATE: 8/12/2009  
 DRAWN BY: SRB  
 CHECKED BY: DAM  
 SHEET 80 OF 163

# TRAFFIC SIGN SUMMARY SHEET 29

MILE MARKER, STATION OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS		NEW & SALVAGED SIGNS				EXIST. POST	NEW SIGN POSTS												REMARKS	SIGN DETAIL												
		EA	WIDTH (in)	HEIGHT (in)	"A"	"B"	SALV SIGN		SALV TIS	FLANGED CHANNEL			SQUARE STEEL (in)			TUBULAR ALUMINUM DIA (in)			TUBULAR STEEL DIA (in)			W-SHAPE STEEL			DETAIL ON SHEET NUMBER	STD. SHEET NUMBER								
										lb/ft			lb/ft			lb/ft			lb/ft			FTG. SIZE												
52.673 SB		1	30	15	3.13																		M3-3 WHITE ON BLUE											
		1	36	36	9.00																			M1-1										
		1	36	36	9.00			1																	M1-10									
52.756 SB		1	48	48	16.00			2																		W8-13								
53.000 SB		1	12	36	<del>3.00</del> 4.00			1				X															D10-2		E-139					
53.010 SB MED		1	36	12	3.00			2				X																	R6-1R					
53.110 SB		1	48	48	16.00			2																						W4-1R				
53.178 SB		1	72	60		30.00		2																							145			
53.179 SB		1	18	18	2.25			1				X																			OM1-1			
53.350 SB		1	96	30	20.00			2																							145			
		1	216	120		180.00		2																	2	893	W8X21	Fuse-Plate Bolt Tension 28.4 kips		141				
53.350 SB MED		1	36	36	9.00			2				X																			R3-4			
53.540 SB		1	12	36	3.00			1				X																			OM-3L			
53.540 SB MED		1	12	36	3.00			1				X																			OM-3R			
53.550 SB		1	144	144		144.00		2																		2	1258	W8X21	<del>MOVED TO 6.0' OFF RAIL</del> Fuse-Plate Bolt Tension 28.4 kips		137			
53.620 SB MED		1	36	48	12.00			2				X																				W1-8R FLUORESCENT YELLOW TYPE IX SHEETING		
53.647 SB MED		1	36	48	12.00			2				X																				W1-8R FLUORESCENT YELLOW TYPE IX SHEETING		

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".

									FT	FT	FT	FT	FT	FT	EA	LB	LB	LB	LB	LB	EA	EA	LB
												34.7	146.6							699.2			
									FT	FT	FT	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA
												181.3			7					699.2			2151

PROJECT NAME: ROYALTON - MIDDLESEX  
 PROJECT NUMBER: IMG SIGN(19)  
 FILE NAME: 090106 tss\_main\_SB.xls  
 PROJECT LEADER: CRB  
 DESIGNED BY: BDB  
 TRAFFIC SIGN SUMMARY SHEET # 29

PLOT DATE: 8/12/2009  
 DRAWN BY: SRB  
 CHECKED BY: DAM  
 SHEET 81 OF 163



# TRAFFIC SIGN SUMMARY SHEET 31

MILE MARKER, STATION OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS			NEW & SALVAGED SIGNS				EXISTING 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 DIA (in)			TUBULAR STEEL DIA (in)				W-SHAPE STEEL			FRAMING SIGN	DETAIL ON SHEET 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					24"	30"	WEIGHT	POST SIZE
54.807 SB		1	12	36	3.00					1				X		1																OM-3R		
54.807 SB MED		1	12	36	3.00					1				X		1																OM-3L		
54.906 SB MED		1	36	36	9.00					2				X		2																R3-4		
54.925 SB		1	48	48	16.00					2							X															W8-13		
55.000 SB		1	12	36	<del>3.00</del> 4.00					1				X		1																D10-2	E-139	
55.259 SB		1	48	48	16.00					2								2	X													145		
56.000 SB		1	12	36	<del>3.00</del> 4.00					1				X		1																D10-2	E-139	
56.048 SB MED		1	36	36	9.00					2				X		2																R3-4		
57.000 SB		1	12	36	<del>3.00</del> 4.00					1				X		1																D10-2	E-139	
57.600 SB		1	48	60	20.00					2							X															VR-132	144	
57.600 SB MED		1	48	60	20.00					2								2	X													VR-132	144	
57.752 SB MED		1	36	36	9.00					2				X		2																R3-4		
57.850 SB		1	144	36		36.00				2								2		X												141		
57.950 SB		1	48	48	16.00																												VW-001	144
		1	30	24	5.00					2								X														144		
58.000 SB		1	12	36	<del>3.00</del> 4.00					1				X		1																D10-2	E-139	
54.500	MOVE OVER SIGN					60.5																												

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".	SUBTOTALS SHEET 31	SF	SF	EA.	SF	EA.	SF	EA.	SF	EA.	SF	EA.	SF	EA.	SF	EA.	SF	EA.	SF	EA.	SF	EA.	SF	EA.	SF	EA.	SF	EA.	SF	EA.	SF	EA.	SF	EA.
		126.00	96.50																															
		138.00	36.00																															

PROJECT NAME: ROYALTON - MIDDLESEX  
 PROJECT NUMBER: IMG SIGN(19)  
 FILE NAME: 090106 tss\_main\_SB.xls  
 PROJECT LEADER: CRB  
 DESIGNED BY: BDB  
 TRAFFIC SIGN SUMMARY SHEET # 31  
 PLOT DATE: 8/12/2009  
 DRAWN BY: SRB  
 CHECKED BY: DAM  
 SHEET 83 OF 163

# TRAFFIC SIGN SUMMARY SHEET 32

MILE MARKER, STATION OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS			NEW & SALVAGED SIGNS				EXIST. POST	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 DIA (in)			TUBULAR STEEL DIA (in)				W-SHAPE STEEL				DETAIL ON SHEET NUMBER	STD. SHEET NUMBER		
										lb/ft	lb/ft	lb/ft	1.75	2.0	2.5	3.0	4.0	4.0Mod	FTG. SIZE											
										1.12	2.0	3.0	1.88	2.42	3.35	1.3	1.7	1.7	FND- ATION	3.0	3.5	4.0	5.0		24"	30"			WEIGHT	POST SIZE
58.070 SB		1	48	60	20.00																				R2-1					
		1	48	48	16.00																					VR-141	E-142			
58.160 SB		1	48	48	16.00																						VW-397	144		
		1	24	18	3.00										X												VP-396	144		
58.255 SB		1	30	15	3.13																						M3-3 WHITE ON BLUE			
		1	36	36	9.00																						M1-1			
		1	36	36	9.00																						M1-10			
58.330 SB		1	48	36	12.00																							R8-7		
58.339 SB MED		1	36	36	9.00							X																R3-4		
58.585 SB MED		1	36	12	3.00							X																R6-1R		
58.690 SB		1	48	48	16.00										X													W4-1R		
58.810 SB		1	48	48	16.00										X													W8-13		
58.846 SB		1	72	60																									145	
58.850 SB		1	18	18	2.25							X																OM1-1		
59.000 SB		1	12	36	3.00 4.00																								D10-2	E-139

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".										FT	FT	FT	FT	FT	FT	EA	LB	LB	LB	EA	EA	EA	LB	
										9.5	70.5	70.5		99.2	69.9		478.8	315.0						
										FT	FT	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA
										80.0	169.1	7	793.8											

PROJECT NAME:	ROYALTON - MIDDLESEX	PLOT DATE:	8/12/2009
PROJECT NUMBER:	IMG SIGN(19)	DRAWN BY:	SRB
FILE NAME:	090106 tss main_SB.xls	CHECKED BY:	DAM
PROJECT LEADER:	CRB	SHEET	84 OF 163
DESIGNED BY:	BDB		
TRAFFIC SIGN SUMMARY SHEET #	32		

# TRAFFIC SIGN SUMMARY SHEET 33

MILE MARKER, 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 DIA (in)			TUBULAR STEEL DIA (in)				W-SHAPE STEEL					FR A ME	DETAIL ON SHEET NUMBER	STD. SHEET NUMBER		
											1.12	2.0	3.0	lb/ft			3.0	4.0	4.0 Mod	FND- ATION	FTG. SIZE				24"	30"	WEIGHT					POST SIZE	
														1.88	2.42	3.35					7.6	9.0	10.8	14.6									
59.000 SB	EXIT 9	1	96	30	20.00																								145				
	Middlesex Moretown	1	162	156		175.50																								138			
	STATE POLICE	1	30	30	6.25					2										2			1103		W10X22		Fuse-Plate Bolt Tension 28.4 kips SEE FOOTING DETAIL ON SHEET 3			E-132			
59.300 SB	EXIT 9	1	96	30	20.00																									145			
	Middlesex Moretown	1	162	138		155.25																									138		
	NEXT EXIT 7 MILES	1	162	24	27.00					2																					145		
59.507 SB MED	No Left Turn	1	36	36	9.00					2				X																	R3-4		
59.870 SB	EXIT 9	1	96	30	20.00																										145		
	Middlesex Moretown	1	162	144		162.00				2																						138	
60.000 SB	60	1	12	36	<del>3.00</del> 4.00					1				X																		E-139	
60.880 SB	ENTERING TOWN OF MIDDLESEX	1	36	24	6.00					2				X																		E-131	

FT    FT    FT    FT    FT    FT    EA    LB    LB    LB    LB    LB    LB    LB    LB    LB    LB    EA    EA    LB    LB


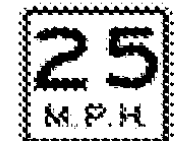


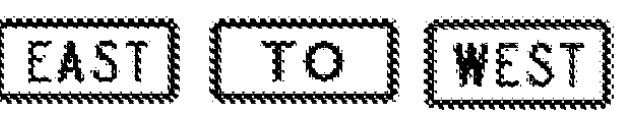

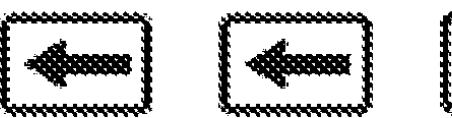

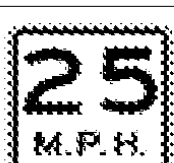

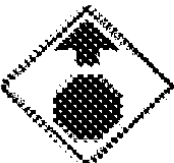
{                          }                          {                          }                          {                          }

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".

SUBTOTALS SHEET 33	SF	SF	EA.	SF	FT	FT	EA.	EA.	EA.	EA.	LB	LB	LB	EA.	EA.	EA.	EA.	EA.	LB	EA.	EA.	LB
	81.25	84.25	519.75		76.4	76.4								6	6	6	6	6				3059

PROJECT NAME:	ROYALTON - MIDDLESEX	PLOT DATE:	8/12/2009
PROJECT NUMBER:	IMG SIGN(19)	DRAWN BY:	SRB
FILE NAME:	090106 tss main_SB.xls	CHECKED BY:	DAM
PROJECT LEADER:	CRB	SHEET	85 OF 163
DESIGNED BY:	BDB		
TRAFFIC SIGN SUMMARY SHEET # 33			

# TRAFFIC SIGN SUMMARY SHEET 34

MILE MARKER, STATION OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS		NEW & SALVAGED SIGNS				EXISTING POST	NEW SIGN POSTS																	REMARKS	SIGN DETAIL					
				"A"	"B"	SALV SIGN	SALV TIS		FLANGED CHANNEL			SQUARE STEEL (in)			TUBULAR ALUMINUM DIA (in)			TUBULAR STEEL DIA (in)				W-SHAPE STEEL					FRAMING	DETAIL ON SHEET NUMBER	STD. SHEET NUMBER			
		EA	WIDTH (in)						HEIGHT (in)	1.12	2.0	3.0	1.75	2.0	2.5	3.0	4.0	4.0Mod	FTG. SIZE		WEIGHT		POST SIZE									
					lb/ft	lb/ft	lb/ft		ANCHOR	SLEEVE	1.3	1.7	1.7	FND-ATION	7.6	9.0	10.8	14.6	24"	30"												
INT #3 0.120 RAMP B RT		1	36	36	9.00																						W1-11R					
		1	24	24	4.00								X														W13-1					
0.160 RAMP B LT																																
0.160 RAMP B RT																																
0.210 RAMP B RT		1	24	12	2.00																										M4-5 GREEN ON WHITE	
		1	24	24	4.00																										M1-5	E-136B
		1	21	15	2.19										X											#3B				M6-1L GREEN ON WHITE		
INT #3 0.080 RAMP C RT		1	30	30	6.25																										W1-11R	
		1	18	18	2.25								X																		W13-1	
INT #3 0.110 RAMP D LT																																
0.110 RAMP D RT																																





# TRAFFIC SIGN SUMMARY SHEET 37

MILE MARKER, STATION OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS		NEW & SALVAGED SIGNS				EXISTING SIGN	NEW SIGN POSTS																REMARKS	SIGN DETAIL				
		E	WIDTH (in)	HEIGHT (in)	"A"	"B"	SALV SIGN	SALV TIS	NO. OF POSTS	FLANGED CHANNEL			SQUARE STEEL (in)			ANCHOR	SLEEVE	TUBULAR ALUMINUM DIA (in)			TUBULAR STEEL DIA (in)					W-SHAPE STEEL		FRAME SIGN	DETAIL ON SHEET NUMBER	STD. SHEET NUMBER
										1.12	2.0	3.0	1.75	2.0	2.5			3.0	4.0	4.0	3.0	3.5	4.0	5.0		24"	30"			
1.840 VT 107 RT		1	24	12	2.00																				M3-1 WHITE ON BLUE					
		1	24	24	4.00																				M1-1					
		1	21	15	2.19				1				X												M5-1L WHITE ON BLUE					
1.870 VT 107 LT		1	24	12	2.00																				M3-3 WHITE ON BLUE					
		1	24	24	4.00																				M1-1					
		1	21	15	2.19				1				X												M5-1R WHITE ON BLUE					
1.880 VT 107 RT		1	30	30	6.25				1				X												VR-921L		E-145A			
1.942 VT 107 CL		1	24	30	5.00																				R4-7					
		1	18	18	2.25				1				X												OM1-1 BACK TO BACK OM1-1					
1.942 VT 107 RT		1	24	12	2.00																				M3-2 GREEN ON WHITE M4-5 GREEN ON WHITE M3-4 GREEN ON WHITE					
		1	30	24	5.00																				M1-5 M1-5 M1-5		E-136B E-136B E-136B			
		1	21	15	2.19				2								X								M6-1L GREEN ON WHITE M6-1L GREEN ON WHITE M6-1R GREEN ON WHITE					
1.942 VT 107 RT		1	24	12	2.00																				M3-1 WHITE ON BLUE					
		1	24	24	4.00																				M1-1					
		1	21	15	2.19				1				X												M6-1L WHITE ON BLUE					
1.954 VT 107 CL		1	24	30	5.00																				R4-7					
		1	18	18	2.25				1				X												OM1-1 BACK TO BACK OM1-1					

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".

**SUBTOTALS SHEET 37**

SF	SF	EA.	SF		FT	FT	EA.	LB	EA.	LB	EA.	EA.	EA.	EA.	LB
76.39					88.4	88.4	2	65.8							

**PROJECT NAME: ROYALTON - MIDDLESEX  
PROJECT NUMBER: IMG SIGN(19)**

FILE NAME:	090106_tss_int3.xls	PLOT DATE:	8/12/2009
PROJECT LEADER:	CRB	DRAWN BY:	JH
DESIGNED BY:	BDB	CHECKED BY:	DAM
TRAFFIC SIGN SUMMARY SHEET # 37		SHEET	89 OF 163

# TRAFFIC SIGN SUMMARY SHEET 38

MILE MARKER, STATION OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS		NEW & SALVAGED SIGNS				EXIST. POST	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 DIA (in)			TUBULAR STEEL DIA (in)				W-SHAPE STEEL			FR S I G N E	DETAIL ON SHEET NUMBER	STD. SHEET NUMBER	
										lb/ft	lb/ft	lb/ft	3.0	4.0	4.0Mod	FND- ATION	3.0	3.5	4.0	5.0	FTG. SIZE	24"	30"	WEIGHT					POST SIZE
1.960 VT 107 LT	WEST SOUTH NORTH VERMONT 107 89 89 ↑ ↑ → NORTH 89 ←	1 1 1 1 1 1 1 1	24 24 24 30 24 24 21 21	12 12 12 24 24 15 15	2.00 2.00 2.00 5.00 4.00 4.00 2.19 2.19																			M3-4 GREEN ON WHITE M3-3 WHITE ON BLUE M3-1 WHITE ON BLUE M1-5 M1-1 M1-1 M6-3 GREEN ON WHITE M6-3 WHITE ON BLUE M6-1R WHITE ON BLUE M3-1 WHITE ON BLUE BACK TO BACK M1-1 BACK TO BACK M6-1L WHITE ON BLUE BACK TO BACK		E-136B			
1.970 VT 107 RT	EAST TO VERMONT 107 14	1 1	24 24	12 12	2.00 2.00																				M3-2 GREEN ON WHITE M4-5 GREEN ON WHITE M1-5		E-136B		
2.000 VT 107 LT	↑ WHITE RIVER JCT 24 BARRE 31 → MONTPELIER 32 →	1 1 1	72 72 72	12 12 12	6.00 6.00 6.00																				D1-1a D1-1a D1-1a		E-123		
2.000 VT 107 RT	ROYALTON 3	1	72	12	6.00																				D2-1		E-123		
2.008 VT 107 CL	↗ ♦♦ ♦♦	1 1	24 18	30 18	5.00 2.25																				R4-7 OM1-1 BACK TO BACK OM1-1				
2.038 VT 107 LT	JCT 89 +	1 1 1	21 24 30	15 24 30	2.19 4.00 6.25																				M2-1 WHITE ON BLUE M1-1 W10-2				

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".

SUBTOTALS SHEET 38	SF	SF	EA.	SF	FT	FT	EA.	LB	EA.	EA.	LB
	92.70										

PROJECT NAME: **ROYALTON - MIDDLESEX**  
 PROJECT NUMBER: **IMG SIGN(19)**  
 FILE NAME: 090106\_tss\_int3.xls  
 PROJECT LEADER: CRB  
 DESIGNED BY: BDB  
 TRAFFIC SIGN SUMMARY SHEET # 38

PLOT DATE: 8/12/2009  
 DRAWN BY: JH  
 CHECKED BY: DAM  
 SHEET 90 OF 163

# TRAFFIC SIGN SUMMARY SHEET 39

MILE MARKER, STATION OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS		NEW & SALVAGED SIGNS				EXISTING SIGN	NEW SIGN POSTS													REMARKS	SIGN DETAIL										
		E	WIDTH (in)	HEIGHT (in)	"A"	"B"	SALV SIGN		SALV TIS	NO. OF POSTS	FLANGED CHANNEL			SQUARE STEEL (in)			ANCHOR SLEEVE	TUBULAR ALUMINUM DIA (in)			TUBULAR STEEL DIA (in)				W-SHAPE STEEL		FRAME	DETAIL ON SHEET NUMBER	STD. SHEET NUMBER				
											1.12	2.0	3.0	1.75	2.0	2.5		3.0	4.0	4.0Mod	FND-ATION		3.0	3.5	4.0	5.0				24"	30"	WEIGHT	POST SIZE
INT #4 0.030 RAMP A RT		1	36	36	9.00																					VR-046	E-142						
		1	36	36	9.00			2																		VR-002	E-142						
0.155 RAMP A RT		1	30	30	6.25			1			X			1												R3-2							
INT #4 0.100 RAMP B RT		1	36	36	9.00			2			X			2												W3-1							
0.150 RAMP B RT	WEST TO EAST	1	24	12	2.00																						M3-4 GREEN ON WHITE						
		1	24	12	2.00																						M4-5 GREEN ON WHITE						
		1	24	12	2.00																						M3-2 GREEN ON WHITE						
0.200 RAMP B RT		1	24	24	4.00																						M1-5	E-136B					
		1	24	24	4.00																						M1-5	E-136B					
		1	24	24	4.00																						M1-5	E-136B					
0.250 RAMP B LT		1	21	15	2.19																						M6-1L GREEN ON WHITE						
		1	21	15	2.19																						M6-1L GREEN ON WHITE						
		1	21	15	2.19																						M6-1R GREEN ON WHITE						
0.200 RAMP B RT		1	72	12	6.00																						D1-1a	E-123					
		1	72	12	6.00																					D1-1	E-123						
0.250 RAMP B LT		1	72	20	10.00																					D1-2	E-123						
0.250 RAMP B LT		1	36	24	6.00																					R5-1a							
0.250 RAMP B RT		1	24	24	4.00							X															R9-4a						
		1	72	10	5.00																						VD-502G	E-133					
		1	72	10	5.00																						VD-502G	E-133					
		1	36	24	6.00																						R5-1a BACK TO BACK						
		1	72	10	5.00																							VD-502F	E-133				
		1	72	10	5.00																							VD-502L	E-133				
		1	72	10	5.00																							VD-502H	E-133				
1	72	10	5.00																							VD-502C	E-133						

PROJECT NAME: ROYALTON-MIDDLESEX  
PROJECT NUMBER: IMG SIGN(19)  
FILE NAME: 090106\_tss\_int4.xls PLOT DATE: 8/12/2009  
PROJECT LEADER: CRB DRAWN BY: JH  
DESIGNED BY: BDB CHECKED BY: DAM  
TRAFFIC SIGN SUMMARY SHEET # 39 SHEET 91 OF 163

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".

SUBTOTALS SHEET 39	SF	SF	EA.	SF		FT	FT	FT	EA.	LB	LB	LB	EA.	EA.	LB
	125.82					72.3				8					755.7

# TRAFFIC SIGN SUMMARY SHEET 40

MILE MARKER, STATION OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS		NEW & SALVAGED SIGNS				EXISTING POSTS	NEW SIGN POSTS																REMARKS	SIGN DETAIL			
		E	WIDTH (in)	HEIGHT (in)	"A"	"B"	SALV SIGN		SALV TIS	FLANGED CHANNEL			SQUARE STEEL (in)			ANCHOR SLEEVE	TUBULAR ALUMINUM DIA (in)			TUBULAR STEEL DIA (in)				W-SHAPE STEEL		FRAME	DETAIL ON SHEET NUMBER	STD. SHEET NUMBER	
										lb/ft	2.0	3.0	1.75	2.0	2.5		3.0	4.0	4.0Mod	3.0	3.5	4.0	5.0	FTG. SIZE					WEIGHT
0.301 RAMP B LT		1	30	30	6.25																					R1-1 BACK TO BACK R5-1			
		1	36	12	3.00				1			X		1												R6-1L BACK TO BACK R6-1R			
0.301 RAMP B RT		1	30	30	6.25																					R1-1 BACK TO BACK R5-1			
		1	36	12	3.00				1			X		1												R6-1L BACK TO BACK R6-1R			
INT #4 0.070 RAMP C RT		1	36	36	9.00							X		2												W3-1			
0.110 RAMP C RT		1	24	12	2.00																					M3-2 GREEN ON WHITE M3-4 GREEN ON WHITE M4-5 GREEN ON WHITE			
		1	24	24	4.00																					M1-5 M1-5 M1-5	E-136B E-136B E-136B		
		1	21	15	2.19									X											#3	M6-1L GREEN ON WHITE M6-1R GREEN ON WHITE M6-1R GREEN ON WHITE			
0.150 RAMP C RT		1	72	12	6.00																					D1-1	E-123		
		1	72	20	10.00																					D1-2	E-123		
		1	72	12	6.00									X												D1-1a	E-123		
0.190 RAMP C LT		1	36	24	6.00																					R5-1a			
		1	24	24	4.00							X		2												R9-4a			
0.190 RAMP C RT		1	72	10	5.00																					VD-502G	E-133		
		1	72	10	5.00																					VD-502G	E-133		
		1	36	24	6.00																					R5-1a BACK TO BACK			
		1	72	10	5.00																					VD-502F	E-133		
		1	72	10	5.00																					VD-502L	E-133		
		1	72	10	5.00									X												VD-502H	E-133		
		1	72	10	5.00																					VD-502C	E-133		

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".

SUBTOTALS SHEET 40

SF 138.57

SF

EA.

SF

FT

FT

FT

FT

FT

FT

EA.

LB

LB

LB

EA.

LB

EA.

EA.

EA.

LB

PROJECT NAME: ROYALTON-MIDDLESEX  
PROJECT NUMBER: IMG SIGN(19)











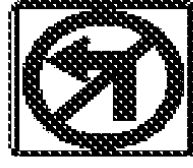

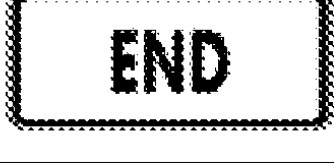

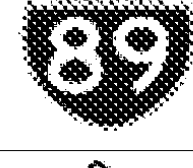

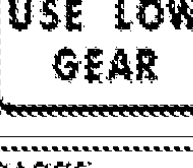
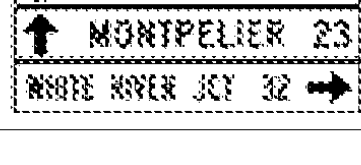
FILE NAME: 090106\_tss\_int4.xls  
PROJECT LEADER: CRB  
DESIGNED BY: BDB  
TRAFFIC SIGN SUMMARY SHEET # 40

PLOT DATE: 8/12/2009  
DRAWN BY: JH  
CHECKED BY: DAM  
SHEET 92 OF 163

89.6

192.8

# TRAFFIC SIGN SUMMARY SHEET 41

MILE MARKER, STATION OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS		NEW & SALVAGED SIGNS				EXISTING POSTS RELATIVE TO SALVAGED SIGN LINE	NEW SIGN POSTS															REMARKS	SIGN DETAIL							
		E	WIDTH (in)	HEIGHT (in)	"A"	"B"	SALV SIGN		SALV TIS	FLANGED CHANNEL			SQUARE STEEL (in)			ANCHOR SLEEVE	TUBULAR ALUMINUM DIA (in)			TUBULAR STEEL DIA (in)					W-SHAPE STEEL		FRAME SIGN	DETAIL ON SHEET NUMBER	STD. SHEET NUMBER			
										lb/ft	lb/ft	lb/ft	1.75	2.0	2.5		3.0	4.0	4.0Mod	FND- ATION	3.0	3.5	4.0		5.0	24"				30"	WEIGHT	POST SIZE
0.235 RAMP C LT	 	1	30	30	6.25																				R1-1 BACK TO BACK R5-1							
	 	1	36	12	3.00				1			X		1											R6-1L BACK TO BACK R6-1R							
0.235 RAMP C RT	 	1	30	30	6.25																				R1-1 BACK TO BACK R5-1							
	 	1	36	12	3.00				1						X										R6-1L BACK TO BACK R6-1R							
INT #4 0.030 RAMP D RT		1	36	36	9.00																				VR-046		E-142					
		1	36	36	9.00				2						X										VR-002		E-142					
0.264 RAMP D RT		1	30	30	6.25				1			X		1											R3-2							
INT #4 2.280 VT 66 LT		1	24	24	4.00																				R8-3a							
		1	24	12	2.00				1			X		1											M4-6 BLACK ON WHITE							
2.280 VT 66 RT		1	21	15	2.19																				M2-1 WHITE ON BLUE							
		1	24	24	4.00				1			X		1											M1-1							
2.320 VT 66 LT		1	30	30	6.25																				W7-1b "9%"							
		1	24	18	3.00				2			X		2											W7-2							
2.380 VT 66 RT		1	72	12	6.00				2																D1-1a D1-1a D1-1a		E-123 E-123 E-123					
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".		SUBTOTALS SHEET 41		SF	SF	EA.	SF			FT	FT	FT	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.				
		100.69								87.7		87.7		66.5		2																

PROJECT NAME: **ROYALTON-MIDDLESEX**  
 PROJECT NUMBER: **IMG SIGN(19)**  
 FILE NAME: **090106\_tss\_int4.xls** PLOT DATE: **8/12/2009**  
 PROJECT LEADER: **CRB** DRAWN BY: **JH**  
 DESIGNED BY: **BDB** CHECKED BY: **DAM**  
 TRAFFIC SIGN SUMMARY SHEET # 41 SHEET **93** OF **163**

# TRAFFIC SIGN SUMMARY SHEET 42

MILE MARKER, STATION OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS		NEW & SALVAGED SIGNS				EXIST. POST	NO. OF POSTS	NEW SIGN POSTS														REMARKS	SIGN DETAIL					
										FLANGED CHANNEL				SQUARE STEEL (in)			TUBULAR ALUMINUM DIA (in)			TUBULAR STEEL DIA (in)					W-SHAPE STEEL				DETAIL ON SHEET NUMBER	STD. SHEET NUMBER
										lb/ft			1.75	2.0	2.5	3.0	4.0	4.0 Mod	FTG. SIZE		WEIGHT		POST SIZE							
										1.12	2.0	3.0	1.88	2.42	3.35	1.3	1.7	1.7	3.0	4.0	4.0	5.0	24"		30"					
2.382 VT 66 LT		1	24	24	4.00						X													R8-3a						
2.409 VT 66 LT		1	24	30	5.00																				R2-1					
		1	24	24	4.00																				R8-3a					
		1	24	12	2.00						X													#1	M4-11 BLACK ON WHITE	E-140				
2.410 VT 66 LT																														
		1	30	30	6.25						X															R1-1				
2.426 VT 66 LT		1	24	30	5.00						X															VR-017	E-141			
2.429 VT 66 CL		1	24	30	5.00																					R4-7				
		1	18	18	2.25						X															OM1-1				
		1	18	18	2.25																					BACK TO BACK				
2.430 VT 66 LT		1	72	12	6.00																					D2-1	E-123			
WEST		1	24	12	2.00																						M3-2 GREEN ON WHITE			
		1	24	12	2.00																						M4-5 GREEN ON WHITE			
2.435 VT 66 RT		1	24	24	4.00																						M1-5	E-136B		
		1	24	24	4.00																						M1-5	E-136B		
		1	24	12	2.00																						M3-2 GREEN ON WHITE			
		1	24	12	2.00																						M3-1 WHITE ON BLUE			
		1	24	24	4.00																						M1-5	E-136B		
		1	24	24	4.00																						M1-1			
		1	24	24	4.00																						M1-1			
		1	21	15	2.19																						M6-3 GREEN ON WHITE			
		1	21	15	2.19																						M6-3 WHITE ON BLUE			
		1	21	15	2.19																						M6-1R WHITE ON BLUE			

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".

SUBTOTALS  
SHEET 42

SF  
80.32  
~~78.32~~

SF EA. SF

1

EA. 1

FT

85.6

LB

EA. 4

LB

378.6

EA. EA. LB

PROJECT NAME: ROYALTON-MIDDLESEX  
PROJECT NUMBER: IMG SIGN(19)

FILE NAME: 090106 tss int4.xls  
PROJECT LEADER: CRB  
DESIGNED BY: BDB  
TRAFFIC SIGN SUMMARY SHEET # 42

PLOT DATE: 8/12/2009  
DRAWN BY: JH  
CHECKED BY: DAM  
SHEET 94 OF 163







# TRAFFIC SIGN SUMMARY SHEET 46

MILE MARKER, STATION OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS		NEW & SALVAGED SIGNS				EXISTING 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 DIA (in)			TUBULAR STEEL DIA (in)				W-SHAPE STEEL		FRAMING SIGN	DETAIL ON SHEET NUMBER	STD. SHEET NUMBER						
												lb/ft	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					24"	30"	WEIGHT	POST SIZE		
																																		1.12	2.0
2.630 VT 66 RT		1	30	36	7.50																								D4-2L "LEFT ARROW"						
		1	36	9	2.25				1								X														144				
2.640 VT 66 CL		1	24	30	5.00																											R4-7			
		1	18	18	2.25								X																			OM1-1 BACK TO BACK OM1-1			
2.665 VT 66 LT		1	72	12	6.00																											D1-1a <b>PER WRITTEN ORDER #1 SALVAGE BARRE SIGN</b> D1-1a	E-123  E-123		
2.670 VT 66 RT		1	72	12	6.00																												D2-1	E-123	
		1	24	12	2.00																												M3-2 GREEN ON WHITE		
		1	24	24	4.00																												M4-5 GREEN ON WHITE M1-5 M1-5	E-136B  E-136B	
2.685 VT 66 LT		1	30	36	7.50																												D4-2R "RIGHT ARROW"		
		1	39	9	2.44												X																	144	
2.725 VT 66 LT		1	21	15	2.19																													M2-1 WHITE ON BLUE	
		1	24	24	4.00								X																					M1-1	
2.750 VT 66 RT		1	24	30	5.00								X																					R2-1	
										FT		FT		FT		EA		LB		LB		LB		LB											
										42.4		42.4		38.0		38.0		371.0		371.0															
										SF		EA		SF																					
		SHEET TOTALS		SF		EA		SF																											

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".

PROJECT NAME: ROYALTON-MIDDLESEX  
 PROJECT NUMBER: IMG SIGN(19)  
 FILE NAME: 090106 tss int4.xls  
 PROJECT LEADER: CRB  
 DESIGNED BY: BDB  
 TRAFFIC SIGN SUMMARY SHEET # 46

PLOT DATE: 8/12/2009  
 DRAWN BY: JH  
 CHECKED BY: DAM  
 SHEET 98 OF 163







# TRAFFIC SIGN SUMMARY SHEET 50

MILE MARKER, STATION OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS		NEW & SALVAGED SIGNS				EXISTING POST TYPE	NO. OF POSTS	NEW SIGN POSTS														REMARKS	SIGN DETAIL						
		E	WIDTH (in)	HEIGHT (in)	"A"	"B"	SALV SIGN			SALV TIS	FLANGED CHANNEL			SQUARE STEEL (in)			TUBULAR ALUMINUM DIA (in)			TUBULAR STEEL DIA (in)					W-SHAPE STEEL		FRAME	DETAIL ON SHEET NUMBER	STD. SHEET NUMBER		
											lb/ft	2.0	3.0	1.75	2.0	2.5	3.0	4.0	4.0Mod	3.0	3.5	4.0	5.0		24"	30"				WEIGHT	POST SIZE
0.158 RAMP D LT		1	24	12	2.00																					M3-2 GREEN ON WHITE					
		1	24	24	4.00																					M3-4 GREEN ON WHITE		E-136B			
		1	24	24	4.00																					M1-5		E-136B			
		1	21	15	2.19																				#2	M6-1L GREEN ON WHITE					
		1	21	15	2.19																					M6-2R GREEN ON WHITE					
		1	24	12	2.00																					M4-5 GREEN ON WHITE					
		1	24	12	2.00																					M4-5 GREEN ON WHITE					
		1	24	24	4.00																					M1-5		E-136B			
		1	24	24	4.00																					M1-5		E-136B			
		1	21	15	2.19																					M6-1L GREEN ON WHITE					
		1	21	15	2.19				2																#2	M6-2R GREEN ON WHITE					
0.180 RAMP D RT		1			3.90				1				X														R1-2 36" X 36" X 36"				
INT #5 0.065 VT 64 LT		1	24	30	5.00				1				X														R2-1				
0.080 VT 64 RT		1	30	36	7.50																						D4-2L "LEFT ARROW"				
		1	36	9	2.25				1				X															144			
0.103 VT 64 LT		1	30	30	6.25				1				X														R1-1				
0.119 VT 64 LT		1	30	36	7.50																						D4-2R "RIGHT ARROW"				
		1	36	9	2.25				1				X															144			

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".

<b>SUBTOTALS SHEET 50</b>	SF	SF	EA.	SF		FT	FT	FT	EA.	LB	EA.	LB	EA.	EA.	LB
	67.41					71.2			2			234.9			

PROJECT NAME: ROYALTON-MIDDLESEX  
PROJECT NUMBER: IMG SIGN(19)  
FILE NAME: 090106\_tss\_int5.xls PLOT DATE: 8/12/2009  
PROJECT LEADER: CRB DRAWN BY: JH  
DESIGNED BY: BDB CHECKED BY: DAM  
TRAFFIC SIGN SUMMARY SHEET # 50 SHEET 102 OF 163





# TRAFFIC SIGN SUMMARY SHEET 53

MILE MARKER, STATION OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS		NEW & SALVAGED SIGNS				EXISTING POST	NEW SIGN POSTS																REMARKS	SIGN DETAIL					
		E	WIDTH (in)	HEIGHT (in)	"A"	"B"	SALV SIGN		SALV TIS	FLANGED CHANNEL			SQUARE STEEL (in)			TUBULAR ALUMINUM DIA (in)			TUBULAR STEEL DIA (in)				W-SHAPE STEEL			F R A M E	DETAIL ON SHEET NUMBER	STD. SHEET NUMBER			
										NO. OF POSTS	lb/ft	3.0	1.75	2.0	2.5	3.0	4.0	4.0Mod	FND-ATION	3.0	3.5	4.0	5.0	24"					30"	WEIGHT	POST SIZE
0.271 VT 64 LT		1	30	30	6.25				1				X														VR-921L	E-145A			
0.306 VT 64 RT		1	30	30	6.25				1				X														VR-921L	E-145A			
0.310 VT 64 LT		1	72	12	6.00																						D1-1a	E-123			
		1	72	12	6.00																						D1-1a	E-123			
		1	24	12	2.00																						M3-3 WHITE ON BLUE				
		1	24	24	4.00																						M1-1				
		1	21	15	2.19				2																		M5-1L WHITE ON BLUE				
0.340 VT 64 RT		1	24	12	2.00																						M3-1 WHITE ON BLUE				
		1	24	24	4.00																						M1-1				
		1	21	15	2.19				1				X														M6-1L WHITE ON BLUE				
0.355 VT 64 CL		1	24	30	5.00																						R4-7				
0.362 VT 64 RT		1	18	18	2.25				1				X														OM1-1 BACK TO BACK				
		1	18	18	2.25																						OM1-1				
0.362 VT 64 RT		1	30	30	6.25																						R1-1 BACK TO BACK				
		1	30	30	6.25																						R5-1				
0.362 VT 64 RT		1	36	12	3.00				1				X														R6-1L BACK TO BACK				
		1	36	12	3.00																						R6-1R				

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".	FT    FT    FT    FT    FT    FT    EA.    LB    LB    LB    LB    LB    LB    LB    LB		69.8    1    212.1		SUBTOTALS SHEET 53    SF 68.88    EA. 1    FT 69.8    LB 212.1	
	PROJECT NAME: <b>ROYALTON-MIDDLESEX</b> PROJECT NUMBER: <b>IMG SIGN(19)</b>		FILE NAME: <b>090106_tss_int5.xls</b> PLOT DATE: <b>8/12/2009</b> PROJECT LEADER: <b>CRB</b> DRAWN BY: <b>JH</b> DESIGNED BY: <b>BDB</b> CHECKED BY: <b>DAM</b> TRAFFIC SIGN SUMMARY SHEET # 53    SHEET <b>105</b> OF <b>163</b>			



# TRAFFIC SIGN SUMMARY SHEET 55

MILE MARKER, STATION OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS		NEW & SALVAGED SIGNS				EXISTING POST NO. OF POSTS	NEW SIGN POSTS															REMARKS	SIGN DETAIL		
									FLANGED CHANNEL			SQUARE STEEL (in)			TUBULAR ALUMINUM DIA (in)			TUBULAR STEEL DIA (in)			W-SHAPE STEEL						FR AME
									lb/ft	lb/ft	lb/ft	1.75	2.0	2.5	3.0	4.0	4.0Mod	3.0	3.5	4.0	5.0	FTG. SIZE	WEIGHT		POST SIZE		
									1.12	2.0	3.0	1.75	2.0	2.5	1.3	1.7	1.7	3.0	3.5	4.0	5.0	24"	30"		WEIGHT	POST SIZE	
0.450 VT 64 LT	RANDOLPH 15 WHITE RIVER JCT 44	1	72	12	6.00																D1-1a	E-123					
0.460 VT 64 RT	BARRE 10 MONTPELIER 11 WILLIAMSTOWN 4 BROOKFIELD 13	1	72	12	6.00																	D1-1a	E-123				
0.490 VT 64 LT	JCT	1	21	15	2.19																		M2-1 WHITE ON BLUE				
0.495 VT 64 RT	89 ROAD AHEAD ROAD WORK AHEAD	1	54	48	18.00																		M1-1	145			
0.497 VT 64 LT	STOP	1	30	30	6.25																			R1-1			
0.530 VT 64 RT	SPEED LIMIT 50	1	24	30	5.00																			R2-1			
								FT			FT			EA			LB			LB			EA				
								78.6			78.6			66.9			184.0										
								FT			EA			LB			EA			LB							
								78.6			66.9			2			184.0										

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".

SHEET TOTALS	SF 109.01 <del>71.44</del>	SF	EA	SF	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA
--------------	-------------------------------	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

**PROJECT NAME: ROYALTON-MIDDLESEX**  
**PROJECT NUMBER: IMG SIGN(19)**  
 FILE NAME: 090106 tss int5.xls  
 PROJECT LEADER: CRB  
 DESIGNED BY: BDB  
 TRAFFIC SIGN SUMMARY SHEET # 55

PLOT DATE: 8/12/2009  
 DRAWN BY: JH  
 CHECKED BY: DAM  
 SHEET 107 OF 163

# TRAFFIC SIGN SUMMARY SHEET 56

MILE MARKER, STATION OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS		NEW & SALVAGED SIGNS				EXISTING POSTS	NEW SIGN POSTS													REMARKS	SIGN DETAIL							
		E A	WIDTH (in)	HEIGHT (in)	"A"	"B"	SALV SIGN		SALV TIS	FLANGED CHANNEL			SQUARE STEEL (in)			A N C H O R	S L E E V E	TUBULAR ALUMINUM DIA (in)			TUBULAR STEEL DIA (in)				W-SHAPE STEEL		F R A M E S I G N	DETAIL ON SHEET NUMBER	STD. SHEET NUMBER	
										lb/ft			lb/ft					lb/ft			lb/ft				FTG. SIZE					
										1.12	2.0	3.0	1.75	2.0	2.5			3.0	4.0	4.0Mod	3.0		3.5	4.0	5.0	24"				30"
0.050 RAMP A RT		1	36	36	9.00				2			X		2												W3-2				
0.128 RAMP A LT		1	36	24	6.00				2			X		2												R5-1a				
0.128 RAMP A RT		1	36	24	6.00				2			X		2												R5-1a				
0.150 RAMP A LT		1	30	30	6.25				1			X		1												R5-1				
0.150 RAMP A RT		1			3.90																					R1-2 36" X 36" X 36"				
		1	30	30	6.25				1									1	X							R5-1				
		1	30	30	6.25				1																	R3-2				
0.070 RAMP B RT		1	36	36	9.00																					VR-046		E-142		
		1	36	36	9.00				2								X									VR-002		E-142		
0.110 RAMP B RT		1	36	36	9.00																					W11-3				
		1	24	18	3.00				2			X		2												W7-3a				
0.165 RAMP B RT		1	30	30	6.25				1			X		1												R3-2				
0.050 RAMP C RT		1	36	36	9.00																					W1-2L				
		1	24	24	4.00				2			X		2												W13-1				
0.100 - 0.240 RT RAMP C		8	18	24	24.00				8			X		8												W1-8L FLUORESCENT YELLOW TYPE IX SHEETING				

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".

<b>SUBTOTALS SHEET 56</b>	SF	SF	EA.	SF		FT	FT	FT	EA.	LB	LB	LB	EA.	EA.	LB
	116.90							285.0		45.4					72.2

**PROJECT NAME: ROYALTON-MIDDLESEX**  
**PROJECT NUMBER: IMG SIGN(19)**  
 FILE NAME: 090106\_tss\_int6.xls PLOT DATE: 8/12/2009  
 PROJECT LEADER: CRB DRAWN BY: JH  
 DESIGNED BY: BDB CHECKED BY: DAM  
 TRAFFIC SIGN SUMMARY SHEET # 56 SHEET 108 OF 163

# TRAFFIC SIGN SUMMARY SHEET 57

MILE MARKER, STATION OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS		NEW & SALVAGED SIGNS				EXISTING SIGN POST TYPE	NO. OF POSTS	NEW SIGN POSTS														REMARKS	SIGN DETAIL						
		E	WIDTH (in)	HEIGHT (in)	"A"	"B"	SALV SIGN			SALV TIS	FLANGED CHANNEL			SQUARE STEEL (in)			TUBULAR ALUMINUM DIA (in)			TUBULAR STEEL DIA (in)					W-SHAPE STEEL				FRAMING SIGN	DETAIL ON SHEET NUMBER	STD. SHEET NUMBER
											1.12	2.0	3.0	1.75	2.0	2.5	3.0	4.0	4.0Mod	3.0	3.5	4.0	5.0		FTG. SIZE	WEIGHT	POST SIZE				
0.287 RAMP C RT		1	36	36	9.00																							W11-3			
		1	24	18	3.00				2			X																W7-3a			
0.370 RAMP C RT		1	30	30	6.25				1			X																R3-2			
INT #6 0.040 - 0.124 LT RAMP D		7	18	24	21.00				7			X																W1-8R FLUORESCENT YELLOW TYPE IX SHEETING			
0.150 - 0.236 LT RAMP D		4	18	24	12.00				4			X																W1-8R FLUORESCENT YELLOW TYPE IX SHEETING			
INT #6 0.000 VT 63 LT		1	24	12	2.00																							M4-6 GREEN ON WHITE			
		1	24	24	4.00				1			X																M1-5	E-136B		
0.035 VT63 RT		1	36	36	9.00				2			X																W4-1R			
0.050 VT 63 LT		1	36	36	9.00																							VR-046	E-142		
		1	36	36	9.00				2											2	X							VR-002	E-142		
0.079 VT 63 RT		1	36	24	6.00				2			X																R5-1a			
0.090 VT 63 LT		1	36	36	9.00				2			X																W12-2			
0.115 VT 63 CL		1	36	12	3.00				2			X																R6-1R			
0.123 VT 63 LT		1	18	18	2.25				1			X																OM1-1			
0.138 VT 63 LT O/H		1	192	150		200.00																						OVERHEAD TRAFFIC SIGN SUPPORT, MULTI-SUPPORT	142		
		1	210	120		175.00																							142		
		SUBTOTALS SHEET 57		SF	SF	EA.	SF			FT	FT	FT	EA.	LB	LB	LB	EA.	EA.	LB												
			104.50	375.00									2																		

PROJECT NAME: **ROYALTON-MIDDLESEX**  
PROJECT NUMBER: **IMG SIGN(19)**  
FILE NAME: **090106\_tss\_int6.xls** PLOT DATE: **8/12/2009**  
PROJECT LEADER: **CRB** DRAWN BY: **JH**  
DESIGNED BY: **BDB** CHECKED BY: **DAM**  
TRAFFIC SIGN SUMMARY SHEET # 57 SHEET **109** OF **163**

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".



# TRAFFIC SIGN SUMMARY SHEET 59

MILE MARKER, STATION OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS		NEW & SALVAGED SIGNS				EXISTING POSTS	NEW SIGN POSTS												REMARKS	SIGN DETAIL						
				"A"	"B"	SALV SIGN	SALV TIS		FLANGED CHANNEL	SQUARE STEEL (in)			TUBULAR ALUMINUM DIA (in)			TUBULAR STEEL DIA (in)				W-SHAPE STEEL		FRAMING	DETAIL ON SHEET NUMBER	STD. SHEET NUMBER				
		E	WIDTH (in)	HEIGHT (in)	1.75	2.0	2.5		3.0	4.0	4.0Mod	3.0	3.5	4.0	5.0	FTG. SIZE	WEIGHT	POST SIZE										
		A			lb/ft	lb/ft	lb/ft		lb/ft	lb/ft	lb/ft	FND-ATION	lb/ft	lb/ft	lb/ft	lb/ft	24"	30"										
0.263 VT 63 RT							1																	BACK-TO-BACK				
		1	30	30	6.25																				R1-1			
0.275 VT 63 RT		1	72	12	6.00																				D2-1	E-123		
		1	72	12	6.00																				D2-1	E-123		
0.320 VT 63 RT		1	24	30	5.00																					R2-1		
0.360 VT 63 LT		1	21	15	2.19																					M2-1 WHITE ON BLUE		
		1	24	24	4.00																					M1-1		
0.363 VT 63 RT		1	72	10	5.00																					VD-502G	E-133	
		1	72	10	5.00																					VD-502F	E-133	
		1	72	10	5.00																					VD-502L	E-133	
		1	72	10	5.00																					VD-502C	E-133	
0.400 VT 63 LT		1	36	36	9.00																						W2-1	
		1	30	24	5.00																							144

# TRAFFIC SIGN SUMMARY SHEET 60

MILE MARKER, STATION OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS			NEW & SALVAGED SIGNS				EXIST POST REUSE	NEW SIGN POSTS													REMARKS	SIGN DETAIL					
		EA	WIDTH (in)	HEIGHT (in)	"A"	"B"	SALV SIGN	SALV TIS		FLANGED CHANNEL			SQUARE STEEL (in)			TUBULAR ALUMINUM DIA (in)			TUBULAR STEEL DIA (in)					W-SHAPE STEEL		FRAME SIGN	DETAIL ON SHEET 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
INT #7 0.170 RAMP A RT		1	36	36	9.00					2			X												W4-3R				
0.220 RAMP A RT		1	30	30	6.25					1			X												R3-2				
INT #7 0.230 RAMP B RT		1	30	30	6.25					1			X												R3-2				
INT #7 0.150 RAMP C RT		1	36	36	9.00																				W1-2L				
		1	24	24	4.00					2			X												W13-1				
INT #7 0.030 RAMP D RT		1	36	36	9.00																				W1-15R				
		1	24	24	4.00					2			X												W13-1				
0.104 - 0.230 LT RAMP D		10	18	24	30.00					10			X												W1-8R FLUORESCENT YELLOW TYPE IX SHEETING				
0.255 RAMP D RT		1	30	30	6.25					1			X												R3-2				
INT #7 0.000 VT 62 LT		1	24	12	2.00																				M4-6 GREEN ON WHITE				
		1	24	24	4.00					1			X												M1-5		E-136B		
0.050 VT 62 RT		1	36	36	9.00					2			X												W4-3R				
0.100 VT 62 LT		1	18	18	2.25					1			X												OM1-1				
									FT	FT	FT	FT	FT	FT	EA.	LB	LB	LB		LB	LB	LB	LB						
												9.5	318.9																
															EA.														
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".																													
									SUBTOTALS SHEET 60			SF	SF	EA.	SF		FT	FT			LB	EA.	LB	EA.	EA.	LB			
												101.00					328.4												

PROJECT NAME: ROYALTON-MIDDLESEX	
PROJECT NUMBER: IMG SIGN(19)	
FILE NAME: 090106_tss_int7.xls	PLOT DATE: 8/12/2009
PROJECT LEADER: CRB	DRAWN BY: JH
DESIGNED BY: BDB	CHECKED BY: DAM
TRAFFIC SIGN SUMMARY SHEET # 60	SHEET 112 OF 163

# TRAFFIC SIGN SUMMARY SHEET 61

MILE MARKER, STATION OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS			NEW & SALVAGED SIGNS				EXIST POST	NEW SIGN POSTS																REMARKS	SIGN DETAIL			
										NO. OF POSTS	FLANGED CHANNEL			SQUARE STEEL (in)			TUBULAR ALUMINUM DIA (in)			TUBULAR STEEL DIA (in)				W-SHAPE STEEL			FND-ATION	FRAM E	DETAIL ON SHEET NUMBER	STD. SHEET NUMBER
		lb/ft			lb/ft			lb/ft			lb/ft				FTG. SIZE															
		EA	WIDTH (in)	HEIGHT (in)	"A"	"B"	SALV SIGN	SALV TIS			1.12	2.0	3.0	1.75	2.0	2.5	3.0	4.0	4.0Mod	3.0	3.5	4.0	5.0	24"	30"					
0.115 VT 62 LT O/H		1	192	150		200.00																				OVERHEAD TRAFFIC SIGN SUPPORT, MULTI-SUPPORT	142			
		1	210	120		175.00																						142		
0.140 VT 62 LT		1	36	36	9.00																					VR-046		E-142		
		1	36	36	9.00				2						X											VR-002		E-142		
0.145 VT 62 CL		1	36	12	3.00				2			X														R6-1R				
0.178 VT 62 LT		1	30	30	6.25				1			X														VR-921R		E-145A		
0.180 VT 62 RT		1	24	12	2.00																					M3-2 GREEN ON WHITE				
		1	24	12	2.00																					M4-5 BLACK ON WHITE				
		1	24	24	4.00				2			X												#1A	M1-5		E-136B			
		1	30	24	5.00																					M1-4				
0.220 VT 62 RT		1	72	12	6.00																					D1-1a		E-123		
		1	72	12	6.00																					D1-1a		E-123		
		1	72	12	6.00																					D1-1		E-123		
		1	30	36	7.50				2						X											D4-2L "LEFT ARROW"				
0.230 VT 62 LT		1	24	12	2.00																					M3-3 WHITE ON BLUE				
		1	24	12	2.00																					M3-1 WHITE ON BLUE				
		1	24	24	4.00																					M1-1				
		1	24	24	4.00																					M1-1				
		1	21	15	2.19				2						X										#2	M6-3 WHITE ON BLUE				
		1	21	15	2.19																					M6-2R WHITE ON BLUE				
										FT	FT	FT	FT	FT	FT	EA.	LB	LB	LB	LB	LB	LB	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.
														74.1			138.8													
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".																														
<b>SUBTOTALS SHEET 61</b>					SF	SF	EA.	SF			FT	FT	EA.	LB	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	
					82.13	375.00					74.1		138.8																	
																				PROJECT NAME: ROYALTON-MIDDLESEX PROJECT NUMBER: IMG SIGN(19) FILE NAME: 090106_tss_int7.xls PROJECT LEADER: CRB DESIGNED BY: BDB TRAFFIC SIGN SUMMARY SHEET # 61 PLOT DATE: 8/12/2009 DRAWN BY: JH CHECKED BY: DAM SHEET 113 OF 163										



# TRAFFIC SIGN SUMMARY SHEET 63

MILE MARKER, STATION OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS			NEW & SALVAGED SIGNS				NEW SIGN POSTS															REMARKS	SIGN DETAIL							
		EA	WIDTH (in)	HEIGHT (in)	"A"	"B"	SALV SIGN	SALV TIS	EXIST POST RE-TAILING	FLANGED CHANNEL			SQUARE STEEL (in)			TUBULAR ALUMINUM DIA (in)			TUBULAR STEEL DIA (in)				W-SHAPE STEEL		FRAMING	DETAIL ON SHEET NUMBER	STD. SHEET NUMBER					
										lb/ft			lb/ft			lb/ft			lb/ft				FTG. SIZE									
										1.12	2.0	3.0	1.75	2.0	2.5	3.0	4.0	4.0Mod				3.0	3.5					4.0	5.0	24"	30"	WEIGHT
0.468 VT 62 CL		1	24	30	5.00																								R4-7			
		1	18	18	2.25					1			X																OM1-1 BACK TO BACK OM1-1			
0.475 VT 62 LT		1	24	12	2.00																								M4-5 WHITE ON BLUE			
		1	24	24	4.00																								M1-1			
		1	21	15	2.19					1				X															M6-1L WHITE ON BLUE			
0.477 VT 62 LT		1	24	12	2.00																								M3-2 GREEN ON WHITE			
		1	24	12	2.00																								M4-5 WHITE ON BLUE			
		1	24	24	4.00																								M1-5		E-136B	
		1	24	24	4.00																								M1-1			
		1	21	15	2.19					2																				M6-1L GREEN ON WHITE		
		1	21	15	2.19																									M6-1R WHITE ON BLUE		
0.484 VT 62 CL		1	24	30	5.00																									R4-7		
		1	18	18	2.25									X																OM1-1 BACK TO BACK OM1-1		
		1	18	18	2.25																											

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".																																	
SHEET TOTALS	SF	SF	EA.	SF	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.
	43.57				2																												

PROJECT NAME: **ROYALTON-MIDDLESEX**  
 PROJECT NUMBER: **IMG SIGN(19)**  
 FILE NAME: **090106\_tss\_int7.xls** PLOT DATE: **8/12/2009**  
 PROJECT LEADER: **CRB** DRAWN BY: **JH**  
 DESIGNED BY: **BDB** CHECKED BY: **DAM**  
 TRAFFIC SIGN SUMMARY SHEET # 63 SHEET **115** OF **163**

# TRAFFIC SIGN SUMMARY SHEET 64


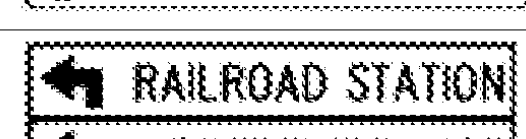

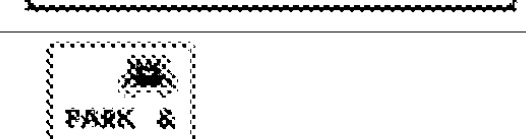

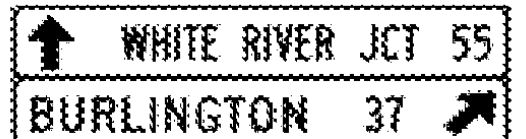
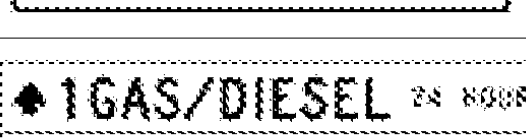
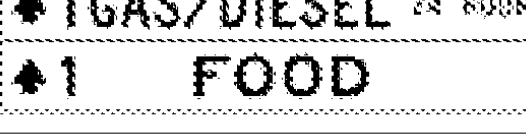
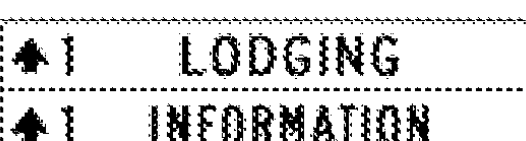









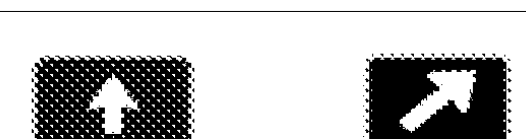
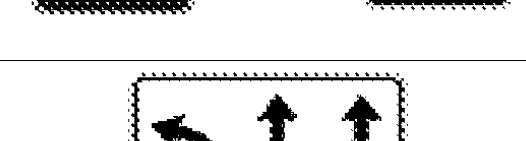


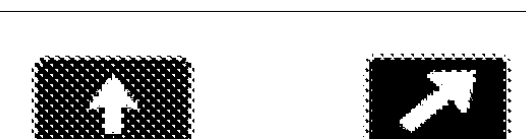
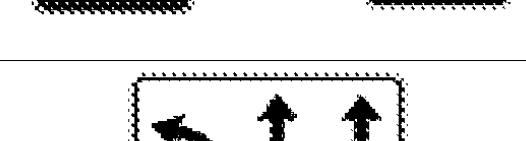


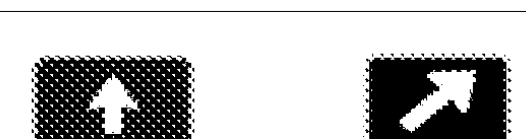
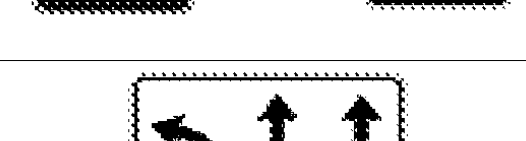
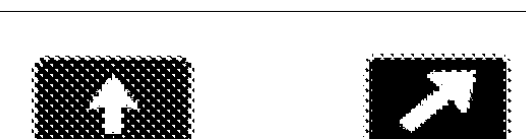
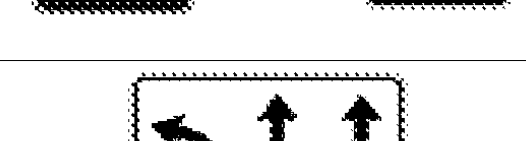
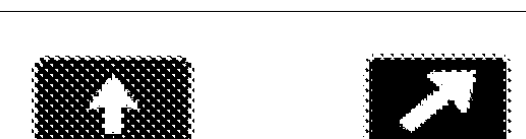
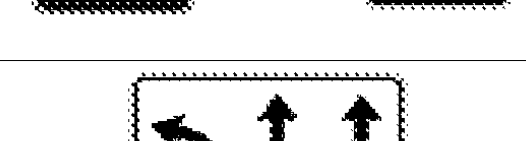
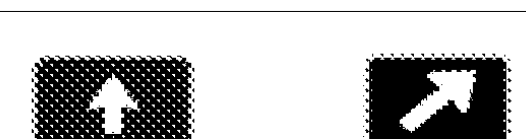
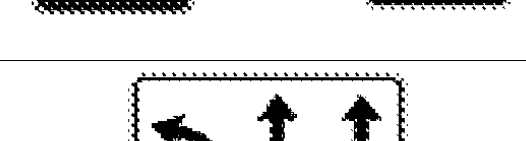

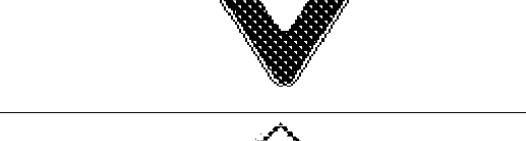

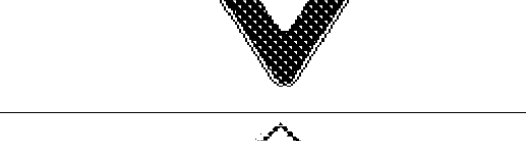



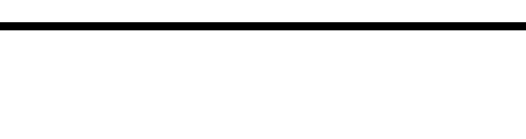
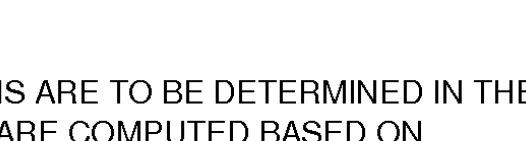
MILE MARKER, STATION OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS		NEW & SALVAGED SIGNS				EXISTING SIGN POST	NEW SIGN POSTS														REMARKS	SIGN DETAIL					
		E	WIDTH (in)	HEIGHT (in)	"A"	"B"	SALV SIGN		SALV TIS	NO. OF POSTS	FLANGED CHANNEL			SQUARE STEEL (in)			TUBULAR ALUMINUM DIA (in)			TUBULAR STEEL DIA (in)				W-SHAPE STEEL		FRAMING	DETAIL ON SHEET NUMBER	STD. SHEET NUMBER	
											1.12	2.0	3.0	1.75	2.0	2.5	3.0	4.0	4.0Mod	3.0	3.5	4.0		5.0	FTG. SIZE				WEIGHT
0.130 RAMP A RT		1	36	36	9.00				2				X														W4-3R		
0.200 RAMP A RT		1	30	30	6.25				1				X														R3-2		
INT #8 0.050 RAMP B RT		1	36	36	9.00																						VR-046	E-142	
		1	36	36	9.00				2										2	X							VR-002	E-142	
0.112 RAMP B RT		1	30	30	6.25				1				X														R3-2		
INT #8 0.010 RAMP C RT		1	36	36	9.00																						W1-15R		
		1	24	24	4.00				2				X														W13-1		
0.020 - 0.076 LT RAMP C		5	18	24	15.00				5				X														W1-8R FLUORESCENT YELLOW TYPE IX SHEETING		
0.096 - 0.176 LT RAMP C		5	18	24	15.00				5				X														W1-8R FLUORESCENT YELLOW TYPE IX SHEETING		
0.190 - 0.274 LT RAMP C		7	18	24	21.00				7				X														W1-8R FLUORESCENT YELLOW TYPE IX SHEETING		
0.308 RAMP C RT		1	30	30	6.25				1				X														R3-2		
INT #8 0.145 RAMP D RT		1	36	36	9.00																						W1-11L		
		1	24	24	4.00				2				X														W13-1		
0.224 - 0.344 RT RAMP D		7	18	24	21.00				7				X														W1-8L FLUORESCENT YELLOW TYPE IX SHEETING		
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".		SUBTOTALS SHEET 64		SF	SF	EA.	SF		FT	FT	FT	EA.	LB	LB	LB	EA.	EA.	LB											
		143.75						454.6				2	191.6																

PROJECT NAME: **ROYALTON-MIDDLESEX**  
 PROJECT NUMBER: **IMG SIGN(19)**  
 FILE NAME: **090106\_tss\_int8.xls** PLOT DATE: **8/12/2009**  
 PROJECT LEADER: **CRB** DRAWN BY: **JH**  
 DESIGNED BY: **BDB** CHECKED BY: **DAM**  
 TRAFFIC SIGN SUMMARY SHEET # 64 SHEET **116** OF **163**

# TRAFFIC SIGN SUMMARY SHEET 65

MILE MARKER, STATION OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS E WIDTH (in) HEIGHT (in)			NEW & SALVAGED SIGNS "A" "B" SALV SIGN SALV TIS				EXIST POST R E T A I N	NO. OF POSTS	NEW SIGN POSTS																REMARKS	SIGN DETAIL				
											FLANGED CHANNEL			SQUARE STEEL (in)			ANCHOR SLEEVE	TUBULAR ALUMINUM DIA (in)			TUBULAR STEEL DIA (in)				W-SHAPE STEEL				FRAMING	DETAIL ON SHEET NUMBER	STD. SHEET NUMBER	
											lb/ft			1.75	2.0	2.5		3.0	4.0	4.0Mod	FTG. SIZE			POST SIZE		WEIGHT						
											1.12	2.0	3.0	1.88	2.42	3.35		1.3	1.7	1.7	3.0	3.5	4.0	5.0	24"	30"		WEIGHT				POST SIZE
0.364 - 0.410 RT RAMP D		4	18	24	12.00					4				X		4								W1-8L FLUORESCENT YELLOW TYPE IX SHEETING								
0.381 RAMP D RT		1	36	36	9.00					2				X		2								W12-2								
INT #8 0.025 MSH RT		1	36	36	9.00					2				X		2								W4-3R								
0.040 MSH LT		1	36	36	9.00					2				X		2								W12-2								
0.080 MSH LT		1	36	36	9.00																			VR-046		E-142						
		1	36	36	9.00					2										2	X			VR-002		E-142						
0.095 MSH CL		1	36	12	3.00					2				X		2								R6-1R								
0.096 MSH LT		1	18	18	2.25					1			X			1								OM1-1								
0.102 MSH LT O/H		1	192	150		200.00																		OVERHEAD TRAFFIC SIGN SUPPORT, MULTI-SUPPORT	143							
		1	210	96		140.00																				143						
0.115 MSH CL		1	30	36	7.50					1				X		1											144					
0.115 MSH RT		1	30	36	7.50					1				X		1											144					
0.120 MSH LT		1	30	30	6.25					2				X		2								VW-285		144						
0.155 MSH RT		1	24	12	2.00																			M4-5 BLACK ON WHITE								
		1	24	12	2.00																			M4-5 GREEN ON WHITE								
		1	24	24	4.00					2				X		2						#1		M1-4								
		1	24	24	4.00																			M1-5		E-136B						
0.157 MSH LT		1	30	30	6.25					1				X		1								VR-921R		E-145A						
											FT	FT	FT	FT	EA.	EA.	LB	LB	LB	LB	LB	EA.	EA.	EA.	EA.	EA.	EA.	EA.				
											9.5	282.5																				

# TRAFFIC SIGN SUMMARY SHEET 66

MILE MARKER, STATION OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS		NEW & SALVAGED SIGNS				EXISTING SIGN POST	NEW SIGN POSTS															REMARKS	SIGN DETAIL				
		E	WIDTH (in)	HEIGHT (in)	"A"	"B"	SALV SIGN		SALV TIS	NO. OF POSTS	FLANGED CHANNEL			SQUARE STEEL (in)			TUBULAR ALUMINUM DIA (in)			TUBULAR STEEL DIA (in)					W-SHAPE STEEL		FRAME	DETAIL ON SHEET NUMBER	STD. SHEET NUMBER
											1.12	2.0	3.0	1.75	2.0	2.5	3.0	4.0	4.0Mod	3.0	3.5	4.0	5.0		24"	30"			
0.195 MSH RT	 	1	72	12	6.00																			D1-1a	E-123				
	 	1	72	12	6.00																			D1-1a	E-123				
		1	30	36	7.50									X										D1-1a	E-123				
0.210 MSH LT	 	1	72	12	6.00										X										D1-1a	E-123			
0.235 MSH RT	 	1	72	10	5.00																				VD-502G	E-133			
	 	1	72	10	5.00																				VD-502F	E-133			
		1	72	10	5.00																				VD-502L	E-133			
		1	24	24	4.00																				VD-502I	E-133			
	 	1	24	12	2.00																				VD-502C	E-133			
0.250 MSH LT	    	1	21	15	2.19																					144			
	   	1	24	12	2.00																					M6-3 WHITE ON BLUE	144		
	   	1	24	12	2.00																					M3-3 WHITE ON BLUE			
	 	1	24	12	2.00																					M3-1 WHITE ON BLUE			
	 	1	24	24	4.00																					M1-1			
	 	1	24	24	4.00																					M1-1			
	 	1	21	15	2.19																					M6-3 WHITE ON BLUE			
	 	1	21	15	2.19																					M6-2R WHITE ON BLUE			
0.278 MSH RT	  	1	48	30	10.00										X											VR-935L	E-145B		
0.305 MSH LT		1			3.90										X												R1-2 36" X 36" X 36"		
0.308 MSH LT		1	36	36	9.00										X												W4-1R		

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".

								FT	FT	FT	EA.	LB	LB	LB	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.
												104.8	134.3	177.1														
<b>SUBTOTALS SHEET 66</b>			SF	SF	EA.	SF		FT				LB			EA.													
			113.97									104.8	134.3	177.1	2													

**PROJECT NAME: ROYALTON-MIDDLESEX**  
**PROJECT NUMBER: IMG SIGN(19)**

FILE NAME:	090106_tss_int8.xls	PLOT DATE:	8/12/2009
PROJECT LEADER:	CRB	DRAWN BY:	JH
DESIGNED BY:	BDB	CHECKED BY:	DAM
TRAFFIC SIGN SUMMARY SHEET # 66		SHEET	118 OF 163

# TRAFFIC SIGN SUMMARY SHEET 67

MILE MARKER, STATION OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS		NEW & SALVAGED SIGNS				EXISTING POSTS	NEW SIGN POSTS																		REMARKS	SIGN DETAIL			
		E	WIDTH (in)	HEIGHT (in)	"A"	"B"	SALV SIGN		SALV TIS	FLANGED CHANNEL			SQUARE STEEL (in)			TUBULAR ALUMINUM DIA (in)			TUBULAR STEEL DIA (in)				W-SHAPE STEEL		FRAMING	DETAIL ON SHEET NUMBER		STD. SHEET NUMBER			
										lb/ft	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	
0.323 MSH LT		1	24	12	2.00																			M4-5 WHITE ON BLUE							
		1	24	24	4.00																				M1-1						
		1	21	15	2.19				1				X													M6-3 WHITE ON BLUE					
0.325 MSH CL		1	24	30	5.00																					R4-7					
		1	18	18	2.25				1				X														OM1-1 BACK-TO-BACK OM1-1				
0.335 MSH LT		1	30	30	6.25				1				X														R1-1				
0.339 MSH RT		1	72	12	6.00				2				X														D1-1		E-123		
		1	72	12	6.00																						D1-1		E-123		
0.340 MSH LT		1	24	30	5.00																							R4-7			
		1	18	18	2.25				1				X															OM1-1 BACK-TO-BACK OM1-1			
0.340 MSH RT		1	24	18	3.00				1				X															R6-3a			
0.348 MSH CL		1	24	30	5.00																							R4-7			
		1	18	18	2.25				1				X															OM1-1 BACK-TO-BACK OM1-1			
0.377 MSH LT		1	18	18	2.25				1				X																OM1-1		
0.377 MSH RT		1	30	36	7.50				1				X																	144	

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".

									FT	FT	FT	FT	FT	FT	EA.	LB	LB	LB	LB	LB	LB	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.		
										9.5			132.4			3																				
<b>SHEET TOTALS</b>		SF	SF	EA.	SF				FT				FT		EA.	LB				LB		EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.			
		67.69											141.9																							

**PROJECT NAME: ROYALTON-MIDDLESEX**  
**PROJECT NUMBER: IMG SIGN(19)**  
 FILE NAME: 090106\_tss\_int8.xls PLOT DATE: 8/12/2009  
 PROJECT LEADER: CRB DRAWN BY: JH  
 DESIGNED BY: BDB CHECKED BY: DAM  
 TRAFFIC SIGN SUMMARY SHEET # 67 SHEET 119 OF 163

# TRAFFIC SIGN SUMMARY SHEET 68


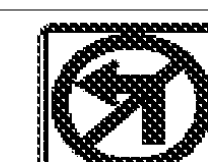
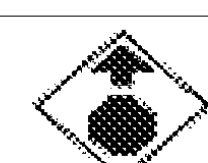
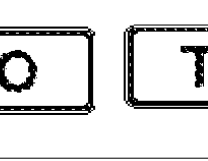

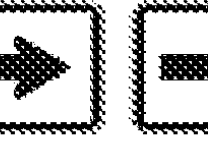
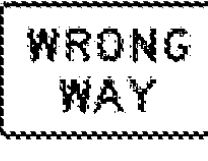

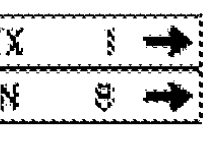







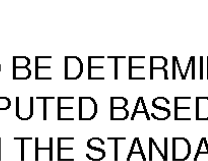


MILE MARKER, STATION OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS		NEW & SALVAGED SIGNS				EXISTING POST SIZE (in)	NEW SIGN POSTS													REMARKS	SIGN DETAIL						
		E	A	WIDTH (in)	HEIGHT (in)	"A"	"B"		SALV SIGN	SALV TIS	FLANGED CHANNEL			SQUARE STEEL (in)			TUBULAR ALUMINUM DIA (in)			TUBULAR STEEL DIA (in)				W-SHAPE STEEL		FRAMING SIGN	DETAIL ON SHEET 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				24"
INT #9 0.030 RAMP A RT		1		36	36	9.00																					VR-046	E-142	
		1		36	36	9.00			2							X											VR-002	E-142	
0.115 RAMP A RT		1		30	30	6.25			1								X										R3-2		
INT #9 0.045 RAMP B RT		1		36	36	9.00			2								X										W3-1		
0.075 RAMP B RT		1		24	12	2.00																					M4-5 BLACK ON WHITE		
		1		24	12	2.00																					M4-5 GREEN ON WHITE		
		1		24	24	4.00																					M1-4		
		1		30	24	5.00																					M1-5	E-136B	
		1		21	15	2.19																					M6-1L BLACK ON WHITE		
		1		21	15	2.19			2										2	X				#2A			M6-1L GREEN ON WHITE		
0.105 RAMP B LT		1		36	24	6.00																					R5-1a		
		1		24	24	4.00			2								X										R9-4a		
0.105 RAMP B RT		1		72	12	6.00																					D1-1a	E-123	
		1		72	12	6.00																					D1-1a	E-123	
		1		36	24	6.00																					R5-1a BACK TO BACK		
		1		72	12	6.00																					D1-1a	E-123	
		1		72	12	6.00																					D1-1a	E-123	
		1		72	10	5.00			2												2	X					VD-502SP	E-133	
0.135 RAMP B LT		1		30	30	6.25																					R1-1		
		1		30	30	6.25																					BACK TO BACK		
		1		36	12	3.00																					R5-1		
		1		36	12	3.00																					R6-1L		
		1		36	12	3.00																					BACK TO BACK		
0.135 RAMP B RT		1		30	30	6.25																					R1-1		
		1		30	30	6.25																					BACK TO BACK		
		1		36	12	3.00																					R5-1		
		1		36	12	3.00																					R6-1L		
		1		36	12	3.00																					BACK TO BACK		
		1		36	12	3.00																					R6-1R		

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".

SUBTOTALS SHEET 68	SF	SF	EA.	SF		FT	FT	FT	FT	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	
	132.63					102.4				45.4																						

PROJECT NAME:	ROYALTON-MIDDLESEX	PLOT DATE:	8/12/2009
PROJECT NUMBER:	IMG SIGN(19)	DRAWN BY:	SRB
FILE NAME:	090106_tss_int9.xls	CHECKED BY:	DAM
PROJECT LEADER:	CRB	SHEET	120 OF 163
DESIGNED BY:	BDB		
TRAFFIC SIGN SUMMARY SHEET #	68		

# TRAFFIC SIGN SUMMARY SHEET 69

MILE MARKER, STATION OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS		NEW & SALVAGED SIGNS				EXISTING POSTS	NEW SIGN POSTS															REMARKS	SIGN DETAIL			
				"A"	"B"	SALV SIGN	SALV TIS		FLANGED CHANNEL			SQUARE STEEL (in)			TUBULAR ALUMINUM DIA (in)			TUBULAR STEEL DIA (in)				W-SHAPE STEEL			FRAME SIGN	DETAIL ON SHEET NUMBER	STD. SHEET NUMBER	
		E	WIDTH (in)	HEIGHT (in)						1.12	2.0	3.0	1.75	2.0	2.5	3.0	4.0	4.0Mod	3.0	3.5	4.0	5.0	FTG. SIZE	WEIGHT		POST SIZE		
0.030 RAMP C RT		1	36	36	9.00																				VR-046	E-142		
0.095 RAMP C RT		1	36	36	9.00			2									2	X							VR-002	E-142		
0.034 RAMP D RT		1	36	36	6.25			1			X			1												R3-2		
0.072 RAMP D RT		1	24	12	2.00			2			X			2												W3-1		
0.110 RAMP D LT		1	24	12	2.00			1																		M4-5 BLACK ON WHITE		
0.110 RAMP D RT		1	24	12	2.00			1																		M4-5 GREEN ON WHITE		
		1	24	24	4.00			1																		M1-4		
		1	30	24	5.00			1																		M1-5	E-136B	
0.110 RAMP D LT		1	21	15	2.19			2									2	X					#2A			M6-1R BLACK ON WHITE		
		1	21	15	2.19			1																		M6-1R GREEN ON WHITE		
0.110 RAMP D LT		1	36	24	6.00			2																		R5-1a		
0.110 RAMP D RT		1	24	24	4.00			1			X			2												R9-4a		
0.110 RAMP D RT		1	72	12	6.00			1																		D1-1a	E-123	
		1	72	12	6.00			1																		D1-1a	E-123	
		1	36	24	6.00			1																		R5-1a BACK TO BACK		
0.150 RAMP D LT		1	72	10	5.00			2									2	X								VD-502SP	E-133	
0.150 RAMP D LT		1	30	30	6.25			1																		R1-1		
		1	30	30	6.25			1																			BACK TO BACK	
0.150 RAMP D RT		1	36	12	3.00			1			X			1												R6-1L		
		1	36	12	3.00			1																			BACK TO BACK	
		1	36	12	3.00			1																			R6-1R	
		1	36	12	3.00			1																			BACK TO BACK	
		1	36	12	3.00			1			X			1													R6-1L	
		1	36	12	3.00			1																			BACK TO BACK	
		1	36	12	3.00			1																			R6-1R	
		1	36	12	3.00			1																			BACK TO BACK	

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".

<b>SUBTOTALS SHEET 69</b>	SF	SF	EA.	SF		FT	FT	FT	EA.	LB	LB	LB	EA.	EA.	LB
	120.63									6					

FT	FT	FT	FT	FT	EA.	LB	LB	LB	EA.	EA.	LB
				101.8					531.4		

PROJECT NAME: **ROYALTON-MIDDLESEX**  
 PROJECT NUMBER: **IMG SIGN(19)**  
 FILE NAME: **090106\_tss\_int9.xls** PLOT DATE: **8/12/2009**  
 PROJECT LEADER: **CRB** DRAWN BY: **SRB**  
 DESIGNED BY: **BDB** CHECKED BY: **DAM**  
 TRAFFIC SIGN SUMMARY SHEET # 69 SHEET **121** OF **163**

# TRAFFIC SIGN SUMMARY SHEET 70

MILE MARKER, STATION OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS		NEW & SALVAGED SIGNS				EXISTING POSTS	NEW SIGN POSTS														REMARKS	SIGN DETAIL				
		E	WIDTH (in)	HEIGHT (in)	"A"	"B"	SALV SIGN		SALV TIS	FLANGED CHANNEL			SQUARE STEEL (in)			TUBULAR ALUMINUM DIA (in)			TUBULAR STEEL DIA (in)					W-SHAPE STEEL		FRAMING	DETAIL ON SHEET NUMBER	STD. SHEET NUMBER
										1.12	2.0	3.0	1.75	2.0	2.5	3.0	4.0	4.0Mod	3.0	3.5	4.0	5.0		24"	30"			
INT #9 0.000 MSH LT		1	72	12	6.00				2				X													D1-1a	E-123	
0.000 MSH RT		1	72	12	6.00																					D1-1a	E-123	
		1	72	12	6.00																					D1-1a	E-123	
		1	72	12	6.00																					D1-1a	E-123	
		1	72	12	6.00																					D1-1a	E-123	
		1	24	12	2.00																					M3-2 BLACK ON WHITE		
		1	24	12	2.00																					M4-5 GREEN ON WHITE		
		1	24	12	2.00																					M3-4 BLACK ON WHITE		
		1	24	24	4.00																					M1-4		
		1	30	24	5.00																					M1-5	E-136B	
		1	24	24	4.00																					M1-4		
		1	21	15	2.19				2																	M6-1L BLACK ON WHITE		
		1	21	15	2.19																					M6-1L GREEN ON WHITE		
		1	21	15	2.19																					M6-1R BLACK ON WHITE		
0.003 MSH LT		1	30	30	6.25								X														R1-1	
0.003 MSH LT		1			3.90								X														R1-2 36" X 36" X 36"	
0.004 MSH RT		1	18	18	2.25								X														OM1-1	
0.007 MSH LT		1	18	18	2.25								X														OM1-1	
0.014 MSH RT		1			3.90								X														R1-2 36" X 36" X 36"	
0.040 MSH RT		1	72	12	6.00																						D1-1a	E-123
		1	72	12	6.00																						D1-1a	E-123
		1	72	12	6.00																						D1-1a	E-123
		1	72	12	6.00																						D1-1a	E-123
		1	24	12	2.00																						M3-1 WHITE ON BLUE	
		1	24	12	2.00																						M3-3 WHITE ON BLUE	
		1	24	24	4.00																						M1-1	
		1	24	24	4.00																						M1-1	
		1	21	15	2.19				2																		M6-3 WHITE ON BLUE	
		1	21	15	2.19																						M6-1R WHITE ON BLUE	

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".

<b>SUBTOTALS SHEET 70</b>	SF	SF	EA.	SF		FT	FT	FT	EA.	LB	LB	LB	EA.	EA.	LB
	119.50					94.4			4			608.4			

PROJECT NAME: **ROYALTON-MIDDLESEX**  
 PROJECT NUMBER: **IMG SIGN(19)**  
 FILE NAME: **090106\_tss\_int9.xls** PLOT DATE: **8/12/2009**  
 PROJECT LEADER: **CRB** DRAWN BY: **SRB**  
 DESIGNED BY: **BDB** CHECKED BY: **DAM**  
 TRAFFIC SIGN SUMMARY SHEET # 70 SHEET **122** OF **163**

# TRAFFIC SIGN SUMMARY SHEET 71

MILE MARKER, STATION OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS		NEW & SALVAGED SIGNS				EXISTING POST RELATIVE TO SIGN	NEW SIGN POSTS																REMARKS	SIGN DETAIL	
				"A"	"B"	SALV SIGN	SALV TIS		FLANGED CHANNEL			SQUARE STEEL (in)			TUBULAR ALUMINUM DIA (in)			TUBULAR STEEL DIA (in)				W-SHAPE STEEL		FRAMING		DETAIL ON SHEET NUMBER	STD. SHEET NUMBER
									lb/ft	lb/ft	lb/ft	1.75	2.0	2.5	3.0	4.0	4.0Mod	FTG. SIZE		WEIGHT	POST SIZE						
		1.12	2.0	3.0	1.88	2.42	3.35		1.3	1.7	1.7	FND-ATION	3.0	3.5	4.0	5.0	24"	30"									
0.040 MSH LT	EAST TO WEST	1	24	12	2.00																			M3-2 BLACK ON WHITE M4-5 GREEN ON WHITE M3-4 BLACK ON WHITE			
	2 VERMONT 100B 2	1	24	24	4.00																			M1-4 M1-5 M1-4		E-136B	
	← ← →	1	21	15	2.19										X							#3B	M6-1L BLACK ON WHITE M6-1L GREEN ON WHITE M6-1R BLACK ON WHITE M4-5 BLACK ON WHITE				
0.050 MSH RT	TO TO	1	24	12	2.00																			M4-5 GREEN ON WHITE			
	2 VERMONT 100B	1	24	24	4.00																			M1-4		E-136B	
	→ →	1	21	15	2.19													2	X			#2A	M6-1R BLACK ON WHITE M6-1R GREEN ON WHITE				
0.050 MSH RT	SOUTH	1	24	12	2.00																			M3-3 WHITE ON BLUE			
	89	1	24	24	4.00																			M1-1			
	←	1	21	15	2.19						X					1							M6-1L WHITE ON BLUE				
0.100 MSH LT	← MONTPELIER 7 ← WHITE RIVER JCT 60	1	72	12	6.00																			D1-1a		E-123	
	← WHITE RIVER JCT 60	1	72	12	6.00																			D1-1a		E-123	
	SOUTH	1	24	12	2.00																			M3-3 WHITE ON BLUE			
	89	1	24	24	4.00																			M1-1			
	←	1	21	15	2.19										X								M6-1L WHITE ON BLUE				
0.106 MSH RT	← WATERBURY 6 ← BURLINGTON 32	1	72	12	6.00																			D1-1a		E-123	
	← BURLINGTON 32	1	72	12	6.00																			D1-1a		E-123	
	NORTH	1	24	12	2.00																			M3-1 WHITE ON BLUE			
	89	1	24	24	4.00																			M1-1			
	←	1	21	15	2.19										X								M6-1L WHITE ON BLUE				
		SUBTOTALS SHEET 71		SF	SF	EA.	SF	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.				
		SUBTOTALS SHEET 71		91.52				16.0							208.0						177.1						

PROJECT NAME: ROYALTON-MIDDLESEX  
 PROJECT NUMBER: IMG SIGN(19)  
 FILE NAME: 090106\_tss\_int9.xls PLOT DATE: 8/12/2009  
 PROJECT LEADER: CRB DRAWN BY: SRB  
 DESIGNED BY: BDB CHECKED BY: DAM  
 TRAFFIC SIGN SUMMARY SHEET # 71 SHEET 123 OF 163

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".

# TRAFFIC SIGN SUMMARY SHEET 72

MILE MARKER, STATION OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS		NEW & SALVAGED SIGNS				EXISTING 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 DIA (in)			TUBULAR STEEL DIA (in)					W-SHAPE STEEL				SIGN FRAME	DETAIL ON SHEET NUMBER	STD. SHEET NUMBER
												lb/ft	2.0	3.0	1.75	2.0	2.5	3.0	4.0	4.0Mod	3.0	3.5	4.0	5.0		FTG. SIZE	WEIGHT	POST SIZE				
																													1.12			
0.125 MSH LT		1	24	12	2.00																						M3-1 WHITE ON BLUE					
		1	24	24	4.00																						M1-1					
		1	21	15	2.19				1																		M6-1L WHITE ON BLUE					
0.125 MSH LT		1	24	12	2.00																						M3-3 WHITE ON BLUE					
		1	24	12	2.00																						M4-5 BLACK ON WHITE					
		1	24	12	2.00																						M3-1 WHITE ON BLUE					
		1	24	24	4.00																						M1-1					
		1	24	24	4.00																						M1-4					
		1	24	24	4.00																						M1-1					
		1	21	15	2.19				2																		M6-3 WHITE ON BLUE					
		1	21	15	2.19																						M6-3 BLACK ON WHITE					
		1	21	15	2.19																						M6-1L WHITE ON BLUE					
0.125 MSH LT		1	24	12	2.00																						M4-5 BLACK ON WHITE					
		1	24	12	2.00																						M4-5 GREEN ON WHITE					
		1	24	24	4.00																						M1-4					
		1	30	24	5.00																						M1-5		E-136B			
		1	21	15	2.19				2																		M6-1L BLACK ON WHITE					
		1	21	15	2.19																						M6-1L GREEN ON WHITE					
0.166 MSH LT		1	24	18	3.00				1																		VR-039		E-141			
		1	24	18	3.00																						BACK TO BACK		E-141			
		1	24	18	3.00																						VR-038		E-141			
0.166 MSH RT		1	24	30	5.00				1																		VR-017		E-141			
0.186 MSH LT		1	72	12	6.00																						D1-1a		E-123			
		1	72	12	6.00																						D1-1a		E-123			
		1	72	12	6.00																						D1-1a		E-123			
		1	72	12	6.00				2																		D1-1a		E-123			
0.226 MSH LT		1	21	15	2.19																							M2-1 WHITE ON BLUE				
		1	24	24	4.00				1																			M1-1				
0.178 MSH RT	SALVAGED SIGNS																											RESET EXISTING SIGN ON NEW POST				

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".	SUBTOTALS SHEET 72		SF	SF	EA.	SF		FT	FT	FT	EA.	LB	EA.	LB	EA.	EA.	LB	PROJECT NAME: ROYALTON-MIDDLESEX PROJECT NUMBER: IMG SIGN(19)	
	91.33						58.7						6				555.7	FILE NAME: 090106 tss int9.xls PROJECT LEADER: CRB DESIGNED BY: BDB TRAFFIC SIGN SUMMARY SHEET # 72	
																			PLOT DATE: 8/12/2009 DRAWN BY: SRB CHECKED BY: DAM SHEET 124 OF 163





# TRAFFIC SIGN SUMMARY SHEET 75

MILE MARKER, STATION OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS		NEW & SALVAGED SIGNS				EXISTING SIGN	NO. OF POSTS	NEW SIGN POSTS															REMARKS	SIGN DETAIL			
		E	WIDTH (in)	HEIGHT (in)	"A"	"B"	SALV SIGN			SALV TIS	FLANGED CHANNEL			SQUARE STEEL (in)			TUBULAR ALUMINUM DIA (in)			TUBULAR STEEL DIA (in)				W-SHAPE STEEL		FRAME	DETAIL ON SHEET NUMBER	STD. SHEET NUMBER	
											1.12	2.0	3.0	1.75	2.0	2.5	3.0	4.0	4.0Mod	3.0	3.5	4.0	5.0	FTG. SIZE					WEIGHT
0.030 RAMP B RT		1	24	24	4.00																						VD-10R	145	
		1	24	30	5.00				1			X			1													VD-239L	145
0.050 RAMP B RT		1	30	24	5.00				1			X			1													VR-032	E-144
0.060 RAMP B LT		1	24	24	4.00				1			X			1													VR-648	E-144
0.070 RAMP B RT																													
		1	12	18	1.50				1			X			1														145
0.078 RAMP B RT		1	12	18	1.50				1			X			1														145
0.086 RAMP B RT		1	12	18	1.50																								145
		1	12	6	0.50				1			X			1													R7-8b	
0.093 RAMP B LT		1	24	24	4.00				1			X			1													VR-648	E-144
0.093 RAMP B RT		1	24	36	6.00																							VR-278	E-144
		1	24	24	4.00				1					X														VR-648	E-144
0.110 RAMP B RT		1	36	12	3.00				2			X			2													R6-1L	
0.130 RAMP B LT		1	30	30	6.25				1			X			1													R5-1	
0.130 RAMP B RT		1	30	30	6.25				1			X			1														R3-2 BACK TO BACK R5-1
		1	30	30	6.25																								

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".

<b>SUBTOTALS SHEET 75</b>	SF	SF	EA.	SF		FT	FT	FT	EA.	LB	LB	LB	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.
	58.75		1							135.0			18.2																	

<b>PROJECT NAME: ROYALTON-MIDDLESEX</b>		
<b>PROJECT NUMBER: IMG SIGN(19)</b>		
FILE NAME: 090106_tss_restareas.xls	PLOT DATE: 8/12/2009	
PROJECT LEADER: CRB	DRAWN BY: JH	
DESIGNED BY: BDB	CHECKED BY: DAM	
TRAFFIC SIGN SUMMARY SHEET # 75		SHEET 127 OF 163



# TRAFFIC SIGN SUMMARY SHEET 77

MILE MARKER, STATION OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS		NEW & SALVAGED SIGNS				EXISTING SIGN 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 DIA (in)			TUBULAR STEEL DIA (in)				W-SHAPE STEEL				F R A M E S I G N E	DETAIL ON SHEET NUMBER	STD. SHEET NUMBER			
										lb/ft	1.12	2.0	3.0	1.75	2.0	2.5	3.0	4.0	4.0Mod	3.0	3.5	4.0	5.0		FTG. SIZE	24"				30"	WEIGHT	POST SIZE
	SUBTOTALS SHEET 1				130.56	646.50	0	0.00					474.0			49.6	4	387.6		8	0	3625										
	SUBTOTALS SHEET 2				163.63	68.00	0	0.00					86.1			212.6	11	1332.8		0	0	0										
	SUBTOTALS SHEET 3				89.25	592.50	1	0.00					0.0			0.0	4	372.4		10	0	3521										
	SUBTOTALS SHEET 4				137.13	95.50	0	0.00					86.6			69.9	11	1482.2		0	0	0										
	SUBTOTALS SHEET 5				97.00	418.00	0	0.00					161.9			0.0	6	854.6		4	0	1404										
	SUBTOTALS SHEET 6				126.38	577.25	0	0.00					80.2			49.6	7	691.6		6	0	2603										
	SUBTOTALS SHEET 7				168.50	225.00	0	0.00					63.7			121.2	10	1134.3		2	0	855										
	SUBTOTALS SHEET 8				131.38	537.00	0	0.00					114.1			49.6	7	684.0		6	0	2468										
	SUBTOTALS SHEET 9				150.00	601.00	0	0.00					54.0			129.4	6	765.7		8	0	2817										
	SUBTOTALS SHEET 10				134.38	160.00	0	0.00					112.6			164.8	5	501.6		2	0	805										
	SUBTOTALS SHEET 11				179.00	446.50	0	0.00					54.5			121.2	8	906.3		6	0	1820										
	SUBTOTALS SHEET 12				175.25	333.50	0	0.00					691.9			49.6	4	395.2		4	0	1553										
	SUBTOTALS SHEET 13				123.13	0.00	0	0.00					191.6			146.2	3	319.2		0	0	0										
	SUBTOTALS SHEET 14				177.00	27.00	0	0.00					109.6			244.7	8	970.9		0	0	0										
	SUBTOTALS SHEET 15				108.00	448.25	0	0.00					129.7			62.8	6	884.9		4	0	1685										
	SUBTOTALS SHEET 16				154.63	205.50	0	0.00					47.4			146.2	7	816.6		2	0	889										
	SUBTOTALS SHEET 17				58.00	27.00	0	0.00					73.7			54.4	4	440.8		0	0	0										
	SUBTOTALS SHEET 18				148.22	30.00	0	0.00					326.4			166.5	7	818.9		0	0	0										
	SUBTOTALS SHEET 19				131.50	767.50	0	0.00					104.8			0.0	6	646.0		6	0	3001										
	SUBTOTALS SHEET 20				25.50	123.50	7	0.00					67.8			0.0	13	1790.6		0	0	0										
	SUBTOTALS SHEET 21				93.25	647.50	1	0.00					79.7			0.0	4	741.1		10	0	3971										
	SUBTOTALS SHEET 22				121.00	66.00	0	0.00					170.1			0.0	10	1379.5		0	0	0										
	SUBTOTALS SHEET 23				105.38	349.00	0	0.00					80.0			119.5	5	478.8		4	0	1910										
	SUBTOTALS SHEET 24				151.50	610.75	0	0.00					63.1			71.6	8	1011.9		6	0	2779										
	SUBTOTALS SHEET 25				115.38	474.75	0	0.00					112.6			68.2	7	684.0		6	0	2417										
	SUBTOTALS SHEET 26				152.00	525.75	0	0.00					53.8			71.6	10	1493.3		4	0	2137										
	SUBTOTALS SHEET 27				114.38	323.50	0	0.00					112.8			69.9	7	684.0		4	0	1900										
	SUBTOTALS SHEET 28				153.00	517.00	0	0.00					73.9			69.9	10	1354.2		6	0	2361										
	SUBTOTALS SHEET 29				120.38	354.00	0	0.00					181.3			0.0	7	699.2		4	0	2151										
	SUBTOTALS SHEET 30				188.00	540.00	0	0.00					267.6			99.2	2	205.2		6	0	2574										
	SUBTOTALS SHEET 31				138.00	36.00	0	0.00					165.2			192.8	6	712.4		0	0	0										
	SUBTOTALS SHEET 32				137.38	30.00	0	0.00					80.0			169.1	7	793.8		0	0	0										
	SUBTOTALS SHEET 33				84.25	519.75	0	0.00					76.4			0.0	0	0.0		6	0	3059										
	SUBTOTALS SHEET 34				29.69	0.00	10	0.00					180.4			62.4	0	0.0		0	0	0										
	SUBTOTALS SHEET 35				94.89	0.00	6	0.00					73.9			111.7	2	234.9		0	0	0										
	SUBTOTALS SHEET 36				103.14	0.00	0	0.00					102.7			0.0	4	418.9		0	0	0										
	SUBTOTALS SHEET 37				76.39	0.00	0	0.00					88.4			65.8	0	0.0		0	0	0										
	SUBTOTALS SHEET 38				92.70	0.00	0	0.00					108.5			0.0	4	363.4		0	0	0										
	SUBTOTALS SHEET 39				125.82	0.00	0	0.00					72.3			0.0	8	755.7		0	0	0										
	SUBTOTALS SHEET 40				138.57	0.00	0	0.00					89.6			192.8	0	0.0		0	0	0										
	SUBTOTALS SHEET 41				100.69	0.00	0	0.00					87.7			66.5	2	177.9		0	0	0										
	SUBTOTALS SHEET 42				78.32	0.00	1	0.00					85.6			0.0	4	378.6		0	0	0										
	SUBTOTALS SHEET 43				64.95	0.00	0	0.00					71.3			0.0	2	185.5		0	0	0										
	SUBTOTALS SHEET 44				49.07	0.00	0	0.00					46.8			98.4	0	0.0		0	0	0										
	SUBTOTALS SHEET 45				81.33	0.00	0	0.00					57.3			131.6	0	0.0		0	0	0										
	SUBTOTALS SHEET 46				70.38	0.00	0	0.00					42.4			38.0	4	371.0		0	0	0										
	SUBTOTALS SHEET 47				121.01	0.00	0	0.00					38.7			0.0	6	785.3		0	0	0										
	SUBTOTALS SHEET 48				89.06	0.00	0	0.00					60.5			45.4	4	426.5		0	0	0										
	SUBTOTALS SHEET 49				127.01	0.00	0	0.00					40.4			137.0	2	380.1		0	0	0										
												FT	FT	FT	FT	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.				
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# TRAFFIC SIGN SUMMARY SHEET 78

MILE MARKER, STATION OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS		NEW & SALVAGED SIGNS				EXISTING POST TYPE	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 DIA (in)			TUBULAR STEEL DIA (in)				W-SHAPE STEEL				F R A M E S I G N	DETAIL ON SHEET NUMBER	STD. SHEET NUMBER									
											1.12	2.0	3.0	1.75	2.0	2.5	3.0	4.0	4.0	4.0	3.0	3.5	4.0	5.0	FTG. SIZE						WEIGHT	POST SIZE							
											lb/ft	lb/ft	lb/ft	lb/ft	lb/ft	lb/ft	lb/ft	lb/ft	lb/ft	lb/ft	lb/ft	lb/ft	lb/ft	24"	30"														
	SUBTOTALS SHEET 50				67.41	0.00	0	0.00			0.0		71.2			0.0	2		234.9		0	0	0																
	SUBTOTALS SHEET 51				88.26	0.00	0	0.00			0.0		103.7			0.0	4		370.2		0	0	0																
	SUBTOTALS SHEET 52				90.63	0.00	0	0.00			0.0		83.3			0.0	2		212.1		0	0	0																
	SUBTOTALS SHEET 53				68.88	0.00	0	0.00			0.0		69.8			0.0	2		212.1		0	0	0																
	SUBTOTALS SHEET 54				84.51	0.00	0	0.00			0.0		96.6			65.8	0		0.0		0	0	0																
	SUBTOTALS SHEET 55				71.44	0.00	0	0.00			0.0		78.6			66.9	2		184.0		0	0	0																
	SUBTOTALS SHEET 56				116.90	0.00	0	0.00			0.0		285.0			45.4	1		72.2		0	0	0																
	SUBTOTALS SHEET 57				104.50	375.00	0	0.00			0.0		329.2			0.0	2		199.2		0	0	0																
	SUBTOTALS SHEET 58				87.38	0.00	4	0.00			0.0		120.0			0.0	5		440.9		0	0	0																
	SUBTOTALS SHEET 59				63.44	0.00	2	0.00			0.0		134.0			0.0	0		0.0		0	0	0																
	SUBTOTALS SHEET 60				101.00	0.00	0	0.00			0.0		328.4			0.0	0		0.0		0	0	0																
	SUBTOTALS SHEET 61				82.13	375.00	0	0.00			0.0		74.1			138.8	0		0.0		0	0	0																
	SUBTOTALS SHEET 62				117.26	0.00	0	0.00			0.0		150.0			113.3	2		177.1		0	0	0																
	SUBTOTALS SHEET 63				43.57	0.00	0	0.00			0.0		41.0			0.0	2		177.1		0	0	0																
	SUBTOTALS SHEET 64				143.75	0.00	0	0.00			0.0		454.6			0.0	2		191.6		0	0	0																
	SUBTOTALS SHEET 65				101.75	340.00	0	0.00			0.0		292.0			0.0	2		199.1		0	0	0																
	SUBTOTALS SHEET 66				113.97	0.00	0	0.00			0.0		104.8			134.3	2		177.1		0	0	0																
	SUBTOTALS SHEET 67				67.69	0.00	0	0.00			0.0		141.9			0.0	0		0.0		0	0	0																
	SUBTOTALS SHEET 68				132.63	0.00	0	0.00			0.0		102.4			45.4	4		370.2		0	0	0																
	SUBTOTALS SHEET 69				120.63	0.00	0	0.00			0.0		101.8			0.0	6		531.4		0	0	0																
	SUBTOTALS SHEET 70				119.50	0.00	0	0.00			0.0		94.4			0.0	4		608.4		0	0	0																
	SUBTOTALS SHEET 71				91.52	0.00	0	0.00			0.0		16.0			208.0	2		177.1		0	0	0																
	SUBTOTALS SHEET 72				91.33	0.00	0	0.00			0.0		58.7			0.0	6		555.7		0	0	0																
	SUBTOTALS SHEET 73				30.50	0.00	2	0.00			0.0		122.5			0.0	0		0.0		0	0	0																
	SUBTOTALS SHEET 74				65.40	29.75	1	0.00			0.0		214.7			0.0	2		144.4		0	0	0																
	SUBTOTALS SHEET 75				58.75	0.00	1	0.00			0.0		135.0			18.2	0		0.0		0	0	0																
	SUBTOTALS SHEET 76				49.25	0.00	0	0.00			0.0		133.0			0.0	0		0.0		0	0	0																
	SUBTOTALS SHEET 77				5725.36	11323.50	26	0.00			0.0		5873.1			3719.7	262		30911.4		124	0	52305																
	SUBTOTAL				8099.34	12443.25	36	0.00			0.0		9809.8			4555.8	316		36146.2		124	0	52305																
	ROUNDING				0.66	0.75	0	0.00			0.0		0.2			0.2	0		0.8		0	0	0																

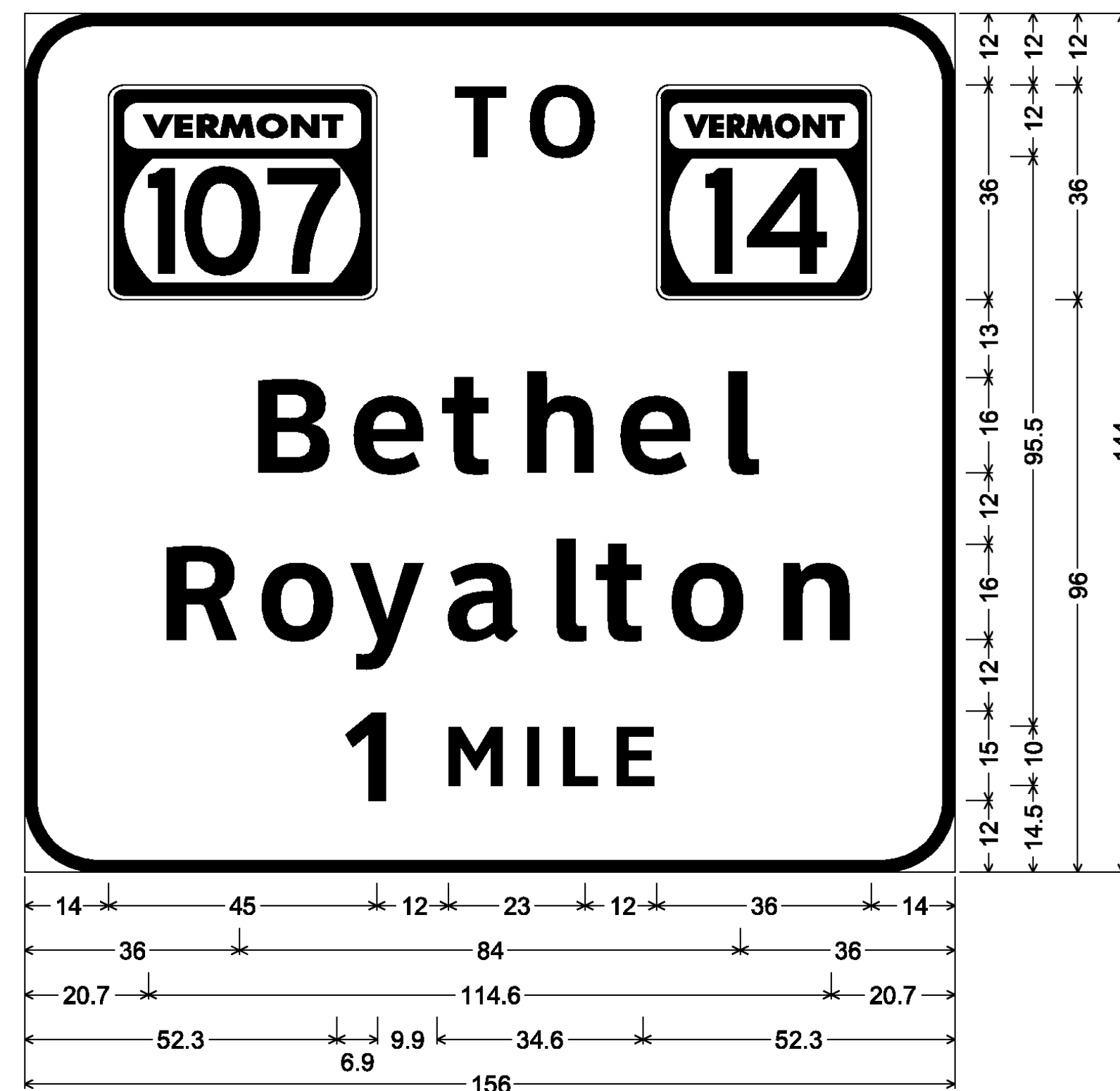
FINAL POST LENGTHS ARE TO BE DETERMINED IN THE FIELD. POST SIZES ARE COMPUTED BASED ON INFORMATION FURNISHED ON THE STANDARD SHEETS AND THE ROADWAY TRAFFIC AND SAFETY SECTION'S "SIGN POST DESIGN GUIDELINE".

	FT	FT	FT	FT	FT	FT	EA	LB	LB	LB	EA	LB	EA	EA	LB
PROJECT TOTALS	0.0	9,810.0	4556.0	316	36147.0	124	0	52305							

PROJECT NAME:	ROYALTON - MIDDLESEX		
PROJECT NUMBER:	IMG SIGN(19)		
FILE NAME:	090106 tss totals.xls	PLOT DATE:	8/12/2009
PROJECT LEADER:	CRB	DRAWN BY:	JH
DESIGNED BY:	BDB	CHECKED BY:	DAM
TRAFFIC SIGN SUMMARY SHEET # 78	SHEET	130	OF 163

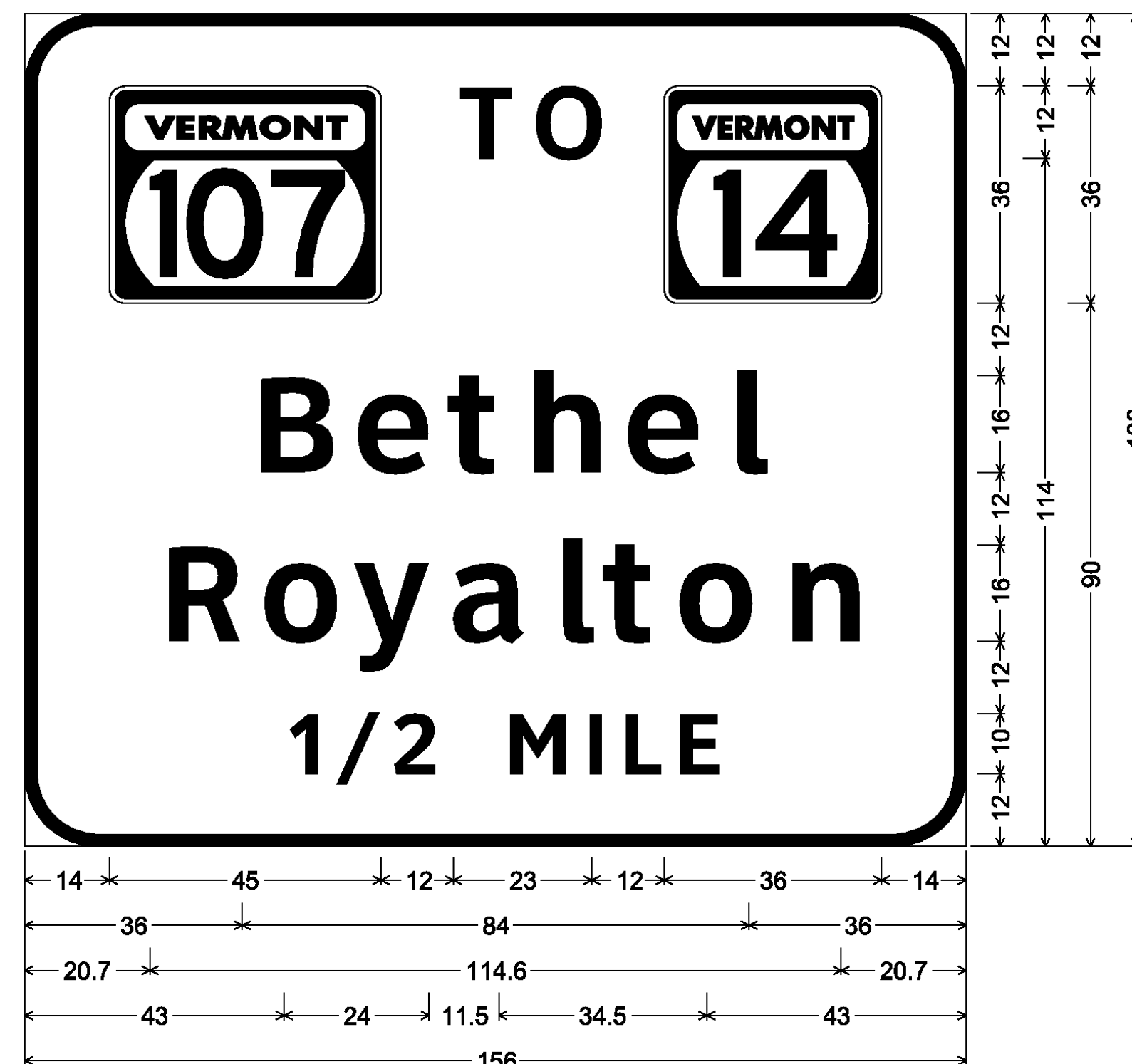
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MM 21.320 NB



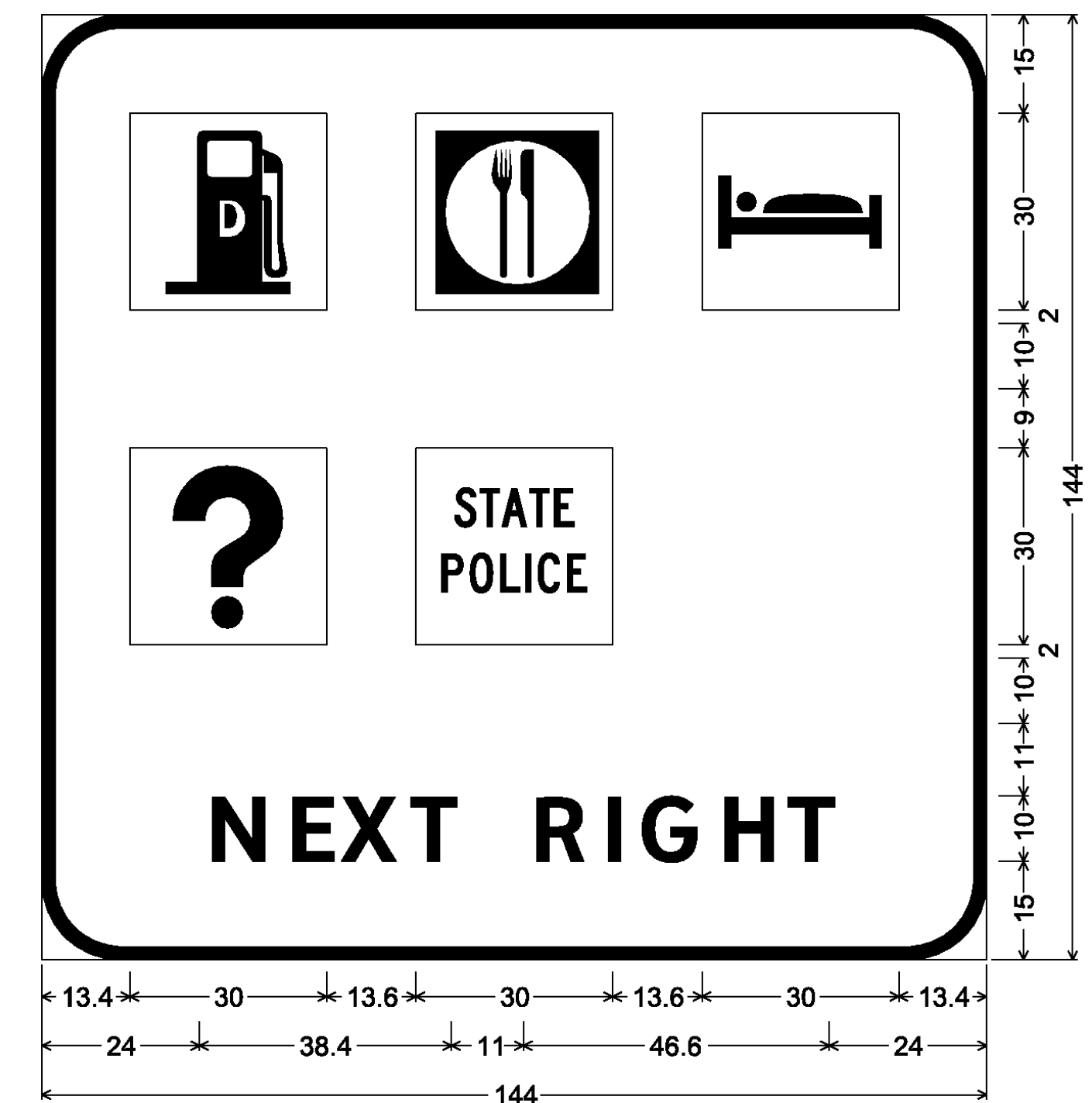
12.0" Radius, 2.0" Border, White on Green;  
 VT107; [TO] ClearviewHwy-5-W; 14; [Bethel] ClearviewHwy-5-W;  
 [Royalton] ClearviewHwy-5-W; [1 MILE] ClearviewHwy-5-W;

MM 21.650 NB



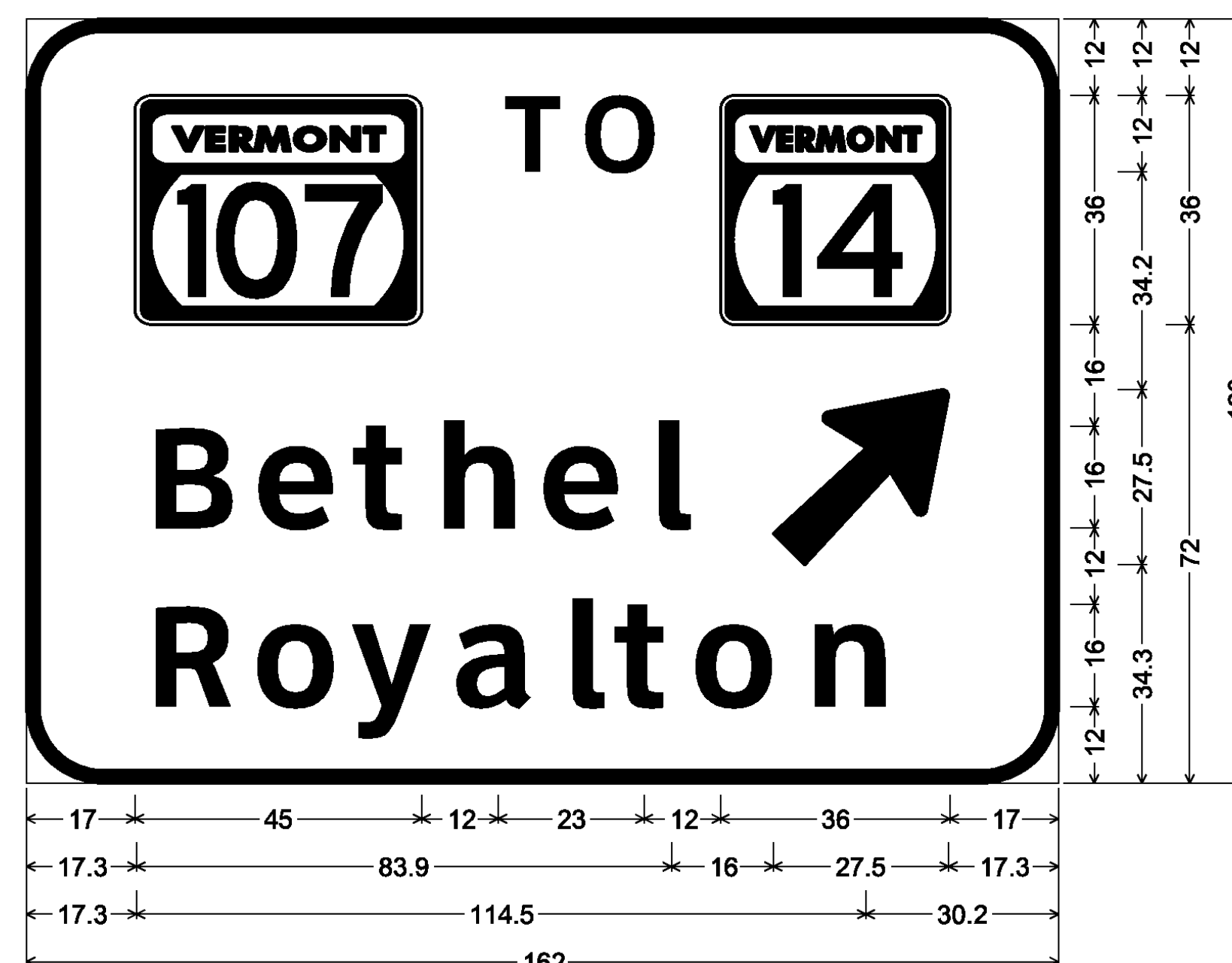
12.0" Radius, 2.0" Border, White on Green;  
 VT107; [TO] ClearviewHwy-5-W; 14; [Bethel] ClearviewHwy-5-W;  
 [Royalton] ClearviewHwy-5-W; [1/2 MILE] ClearviewHwy-5-W;

MM 21.920 NB



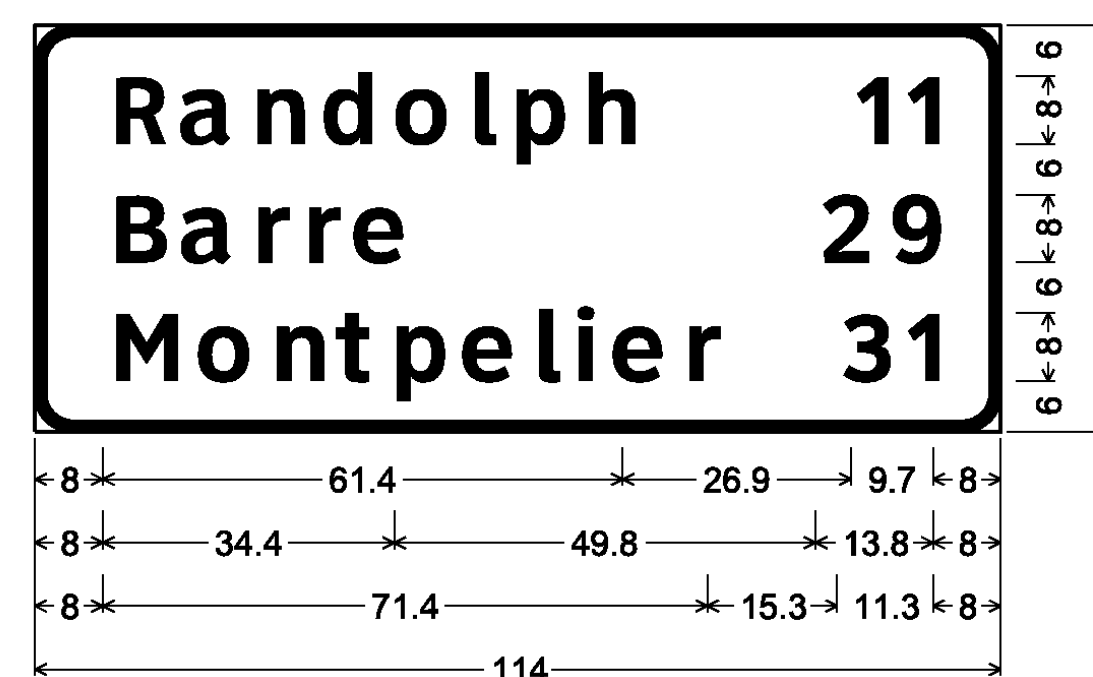
12.0" Radius, 2.0" Border, White on Blue;  
 [NEXT RIGHT] ClearviewHwy-5-W;

MM 22.135 NB



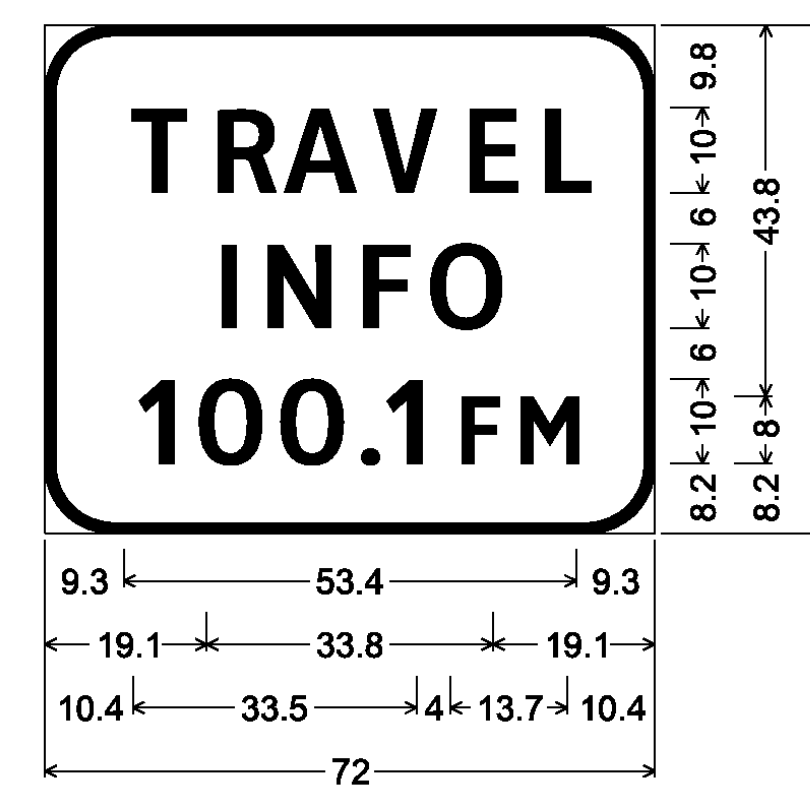
12.0" Radius, 2.0" Border, White on Green;  
 VT107; [TO] ClearviewHwy-5-W; 14; [Bethel] ClearviewHwy-5-W;  
 Arrow 160 - 35.0" 45°; [Royalton] ClearviewHwy-5-W;

MM 23.210 NB



4.5" Radius, 1.3" Border, White on Green;  
 [Randolph] ClearviewHwy-5-W;  
 [Barre] ClearviewHwy-5-W;  
 [Montpelier] ClearviewHwy-5-W;  
 [11] ClearviewHwy-5-W; [29] ClearviewHwy-5-W;  
 [31] ClearviewHwy-5-W;

MM 27.040 NB  
 MM 38.150 SB



8.0" Radius, 1.3" Border, White on Blue;  
 [TRAVEL] ClearviewHwy-4-W;  
 [INFO] ClearviewHwy-4-W;  
 [100.1] ClearviewHwy-4-W 70% spacing;  
 [FM] ClearviewHwy-4-W;

GENERAL SIGN DETAIL NOTES

1. THE NOTE BELOW EACH SIGN DETAIL INCLUDES THE CORNER RADIUS, BORDER WIDTH, TEXT COLOR, BACKGROUND COLOR AND TEXT SERIES TO BE USED.
2. COLORS: UNLESS NOTED OTHERWISE, WHITE ON GREEN AND WHITE ON BLUE SIGNIFIES WHITE ASTM TYPE IX RETROREFLECTIVE LEGEND AND BORDER ON GREEN OR BLUE ASTM TYPE III RETROREFLECTIVE BACKGROUND. BLACK ON YELLOW AND BLACK ON WHITE SIGNIFIES BLACK LEGEND AND BORDER ON YELLOW OR WHITE ASTM TYPE III (MINIMUM) RETROREFLECTIVE BACKGROUND. ALL COLORS SHALL CONFORM WITH THE COLORS ADOPTED BY AASHTO AND APPROVED BY FHWA.
3. TEXT LAYOUT DIMENSIONS ARE BASED ON THE CLEARVIEW FONT OR THE STANDARD ALPHABETS SPACING CHARTS FOUND IN THE MUTCD "STANDARD HIGHWAY SIGNS" PUBLICATION. MINOR VARIATIONS IN TEXT DIMENSIONS ARE ACCEPTABLE BASED ON INDIVIDUAL MANUFACTURER'S LETTER FABRICATION. SIGNIFICANT CHANGES WHICH AFFECT SIGN APPEARANCE SHALL BE BROUGHT TO THE ATTENTION OF THE VTRANS' TRAFFIC AND SAFETY SECTION BEFORE FABRICATION.
4. UNLESS NOTED OTHERWISE, THE DESIGN/DIMENSIONS FOR SYMBOLS SHOWN ON THESE SIGNS CAN BE FOUND IN VTRANS' STANDARDS OR IN THE STANDARD HIGHWAY SIGNS PUBLICATION.
5. FOR GUIDE SIGN ROUTE MARKER DETAILS SEE STD'S E-135, E-136A AND E-136B.
6. THE NOTE BELOW EACH GUIDE SIGN DETAIL SPECIFIES APPROPRIATE ARROW LENGTHS WHEN APPLICABLE. FOR ARROW DIMENSIONS REFER TO GUIDE SIGN ARROW DETAILS IN THE STANDARD HIGHWAY SIGNS PUBLICATION.

SIGN DETAIL SHEET 1

PROJECT NAME: ROYALTON-MIDDLESEX

PROJECT NUMBER: IMG SIGN(19)

FILE NAME: z09a020signde.t.dgn

PLOT DATE: 8/12/2009

PROJECT LEADER: CRB

DRAWN BY: JBJ

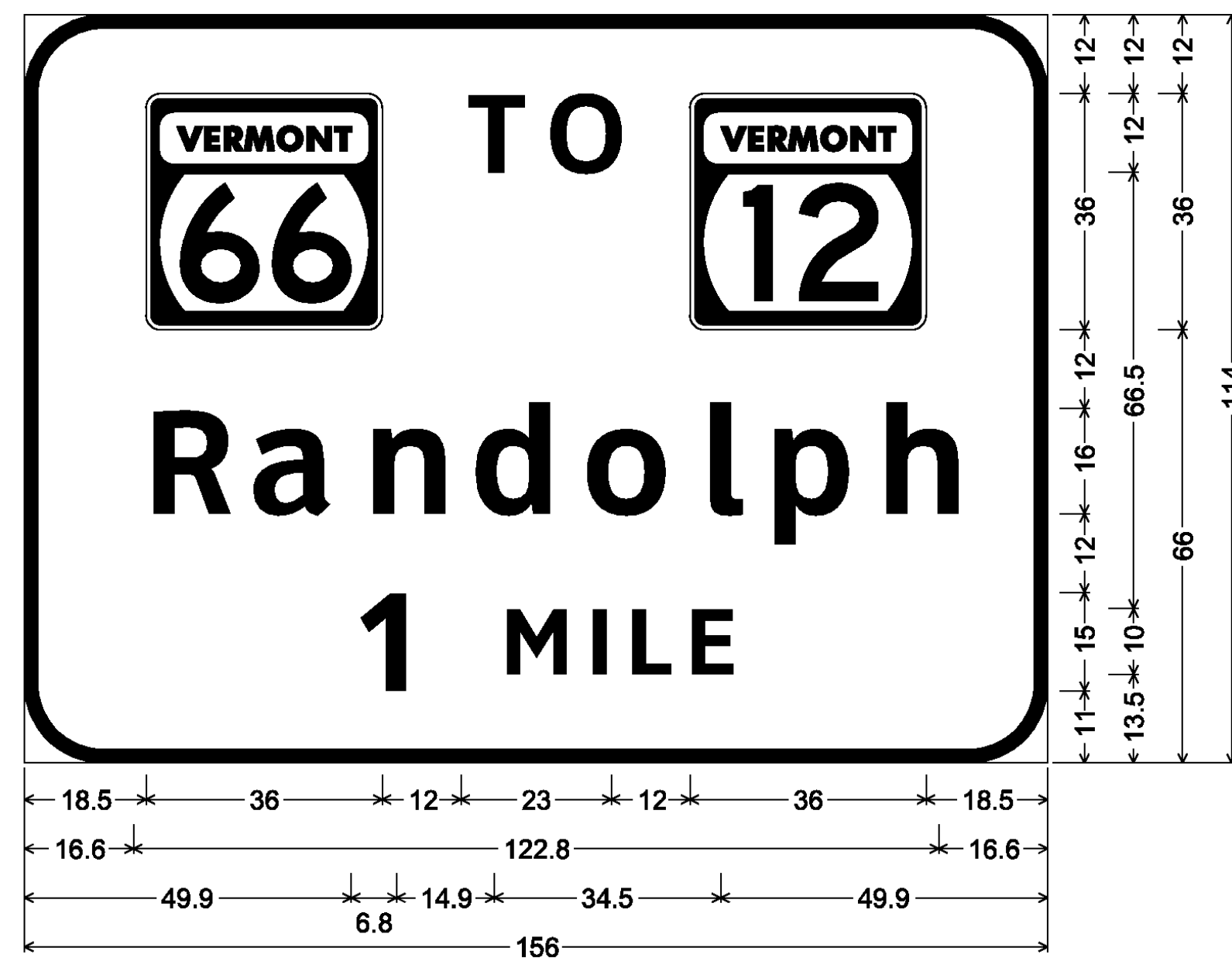
DESIGNED BY: JBJ

CHECKED BY: BDB

CLD REF. NO.: 09-0106

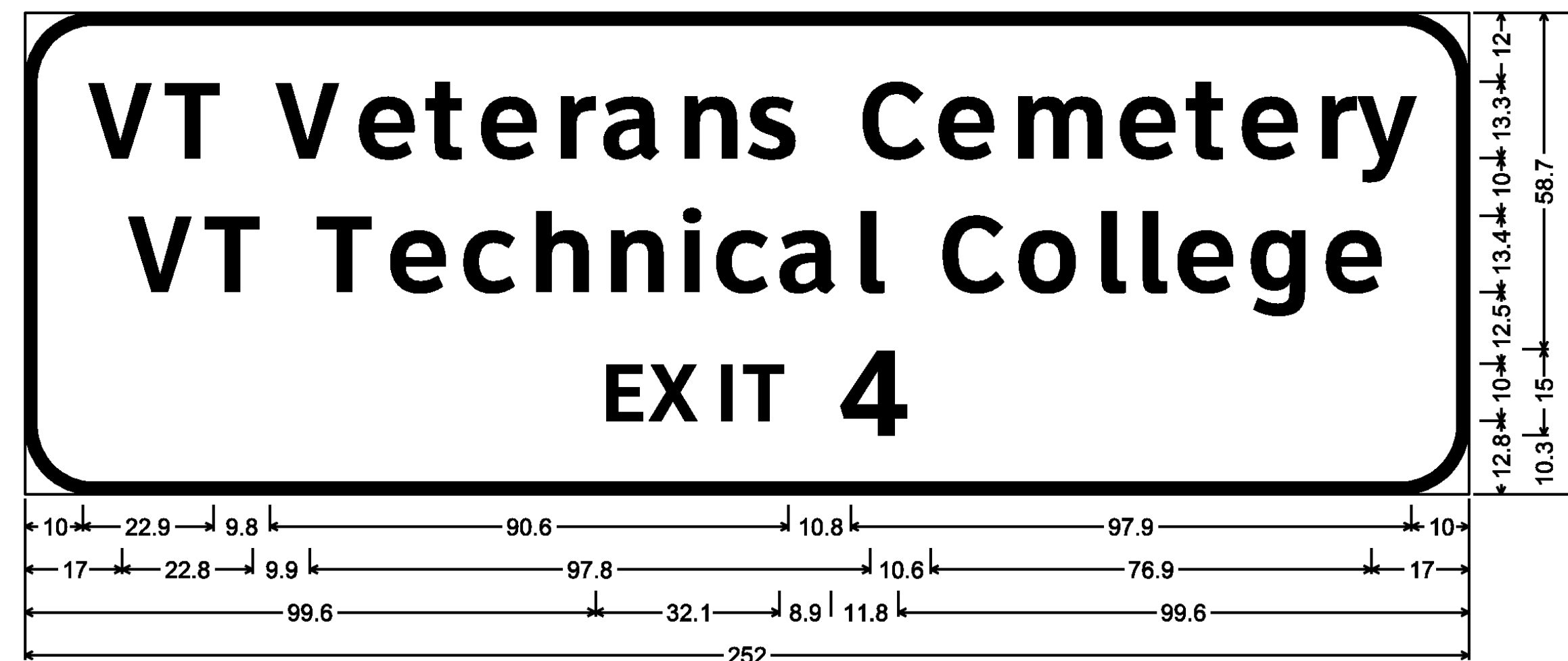
SHEET 132 OF 163

MM 29.680 NB  
MM 32.060 SB



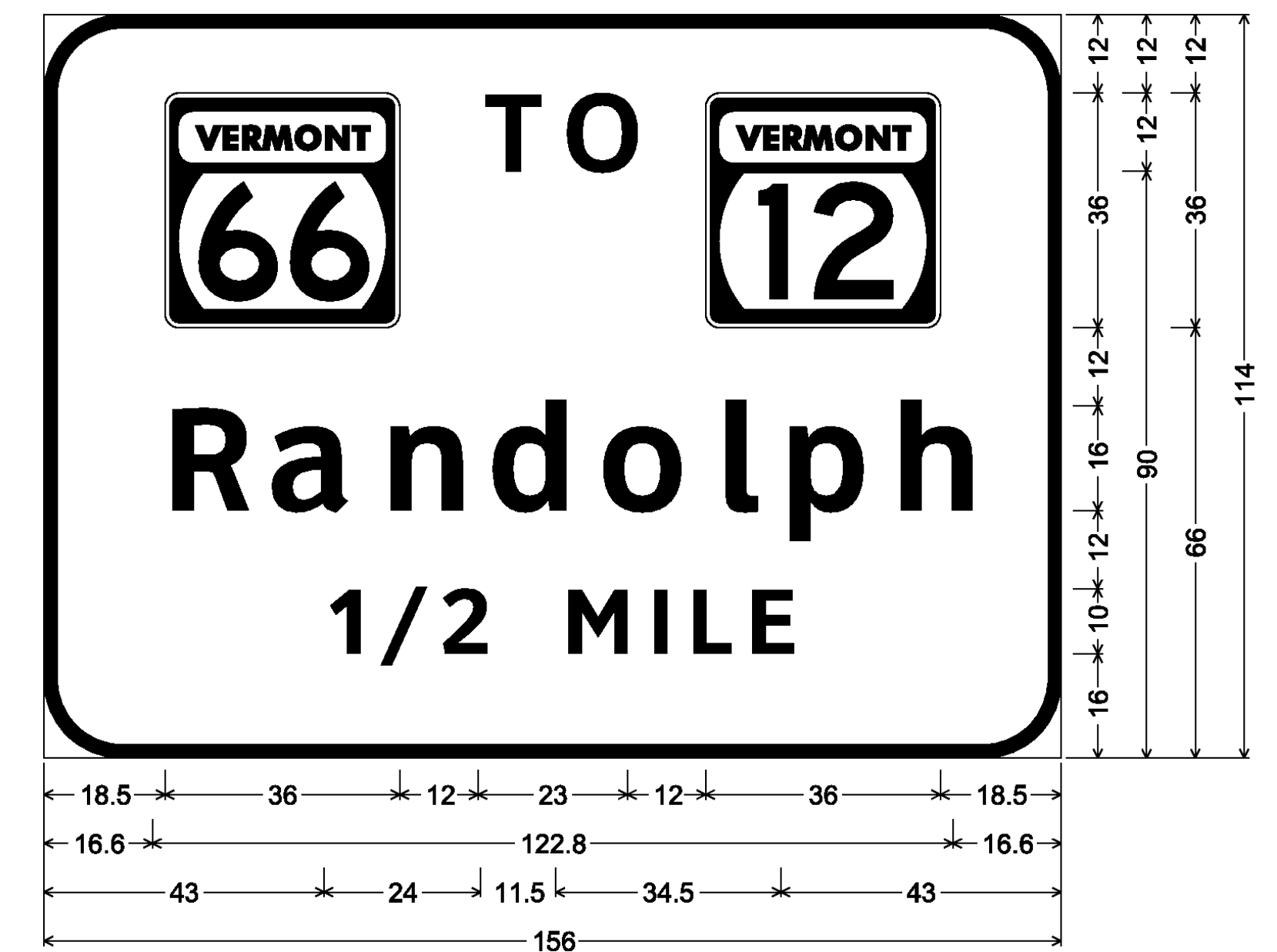
12.0" Radius, 2.0" Border, White on Green;  
[TO] ClearviewHwy-5-W; 14; [Randolph] ClearviewHwy-5-W;  
[1 MILE] ClearviewHwy-5-W;

MM 29.930 NB  
MM 31.820 SB



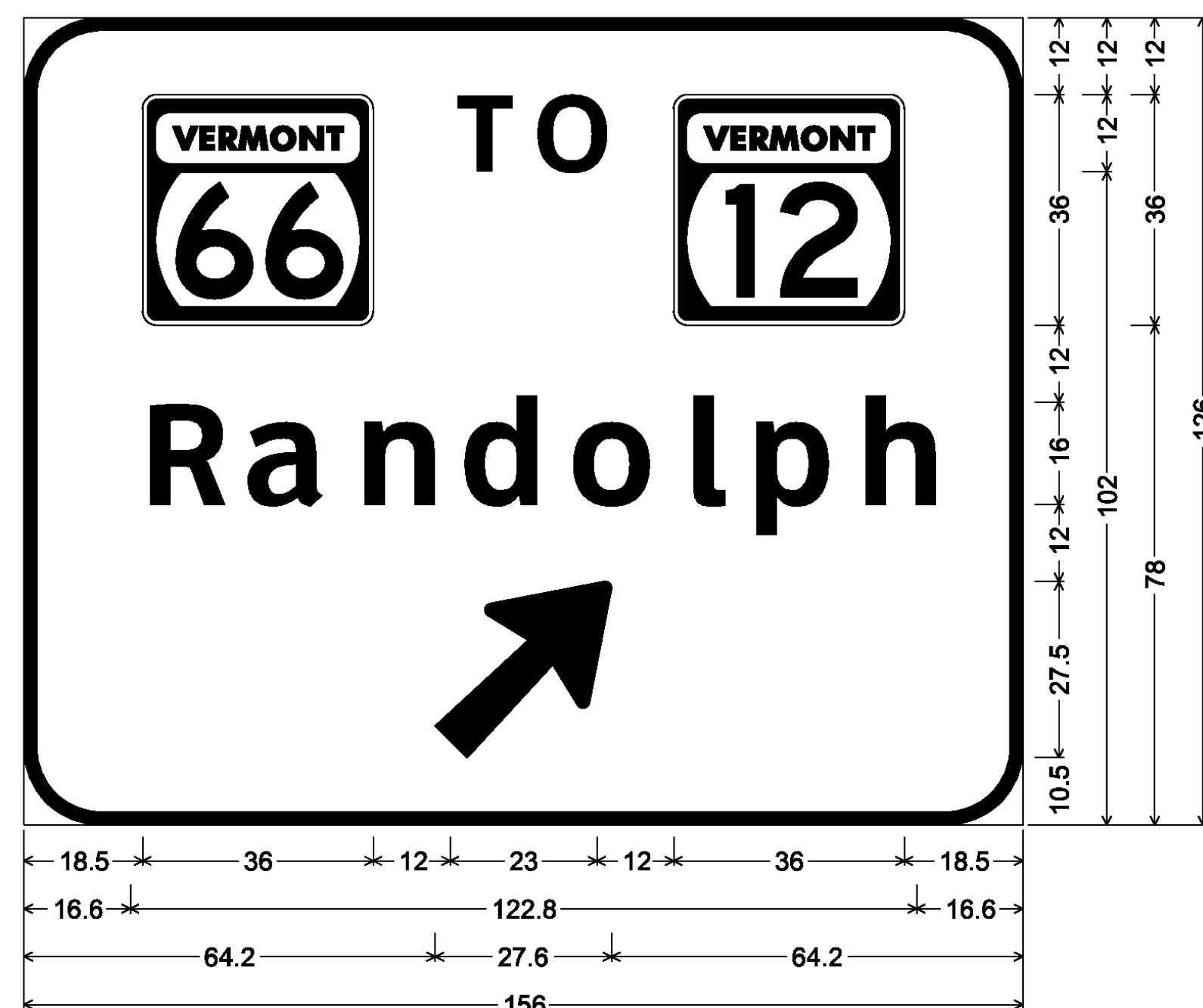
12.0" Radius, 2.0" Border, White on Green;  
[VT Veterans Cemetery] ClearviewHwy-5-W 75% spacing; [VT Technical College] ClearviewHwy-5-W 75% spacing;  
[EXIT 4] ClearviewHwy-5-W;

MM 30.180 NB  
MM 31.570 SB



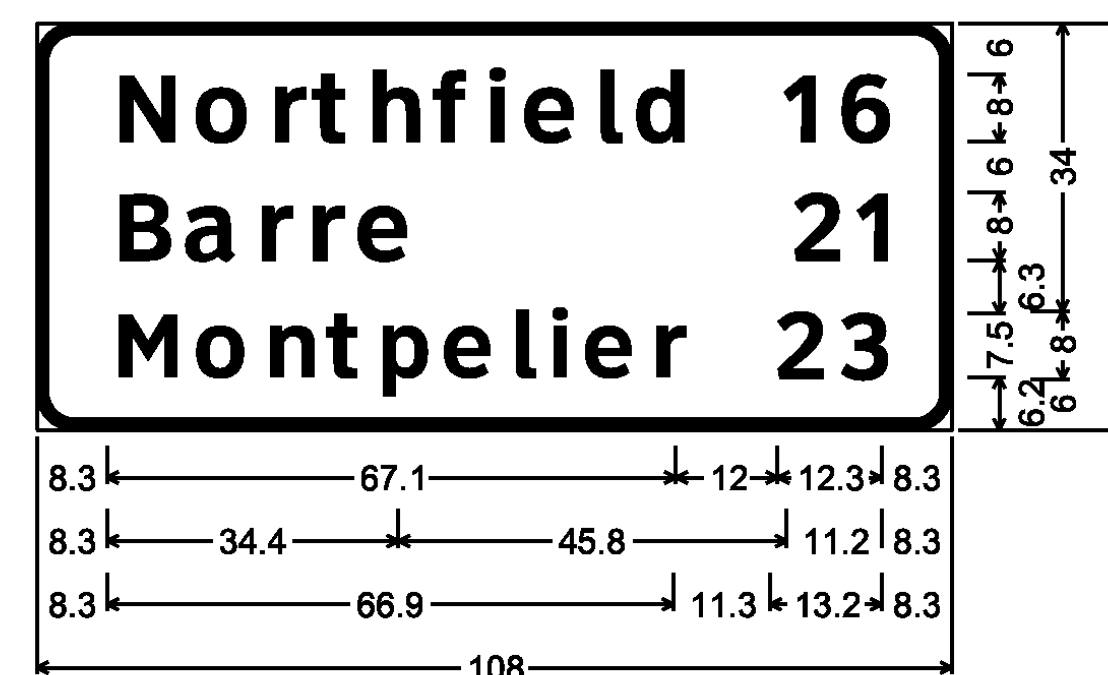
12.0" Radius, 2.0" Border, White on Green;  
[TO] ClearviewHwy-5-W; 14; [Randolph] ClearviewHwy-5-W;  
[1/2 MILE] ClearviewHwy-5-W;

MM 30.500 NB  
MM 31.200 SB



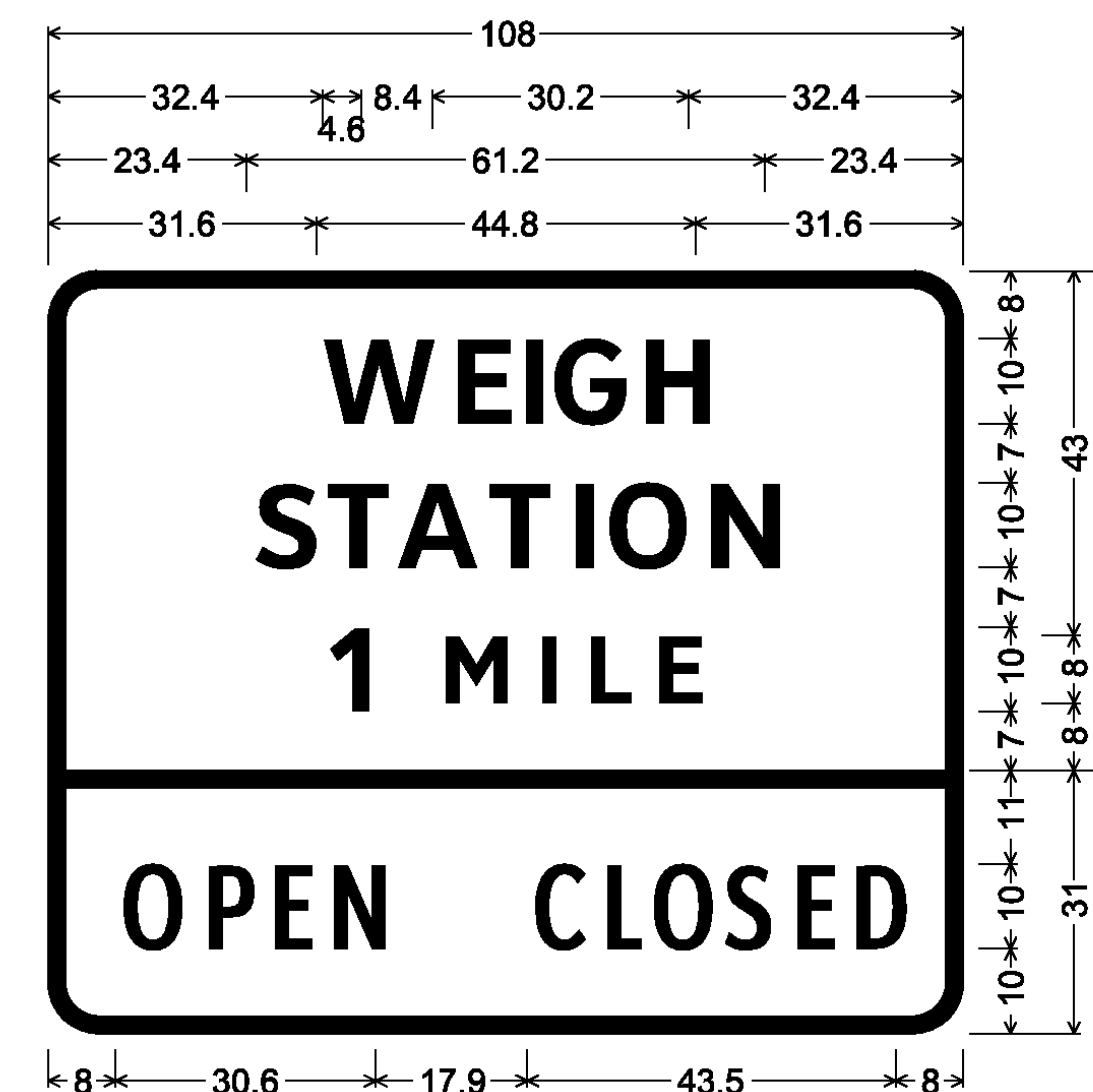
12.0" Radius, 2.0" Border, White on Green;  
[TO] ClearviewHwy-5-W; 14; [Randolph] ClearviewHwy-5-W;  
Arrow 160 - 35.0° 45°;

MM 31.930 NB

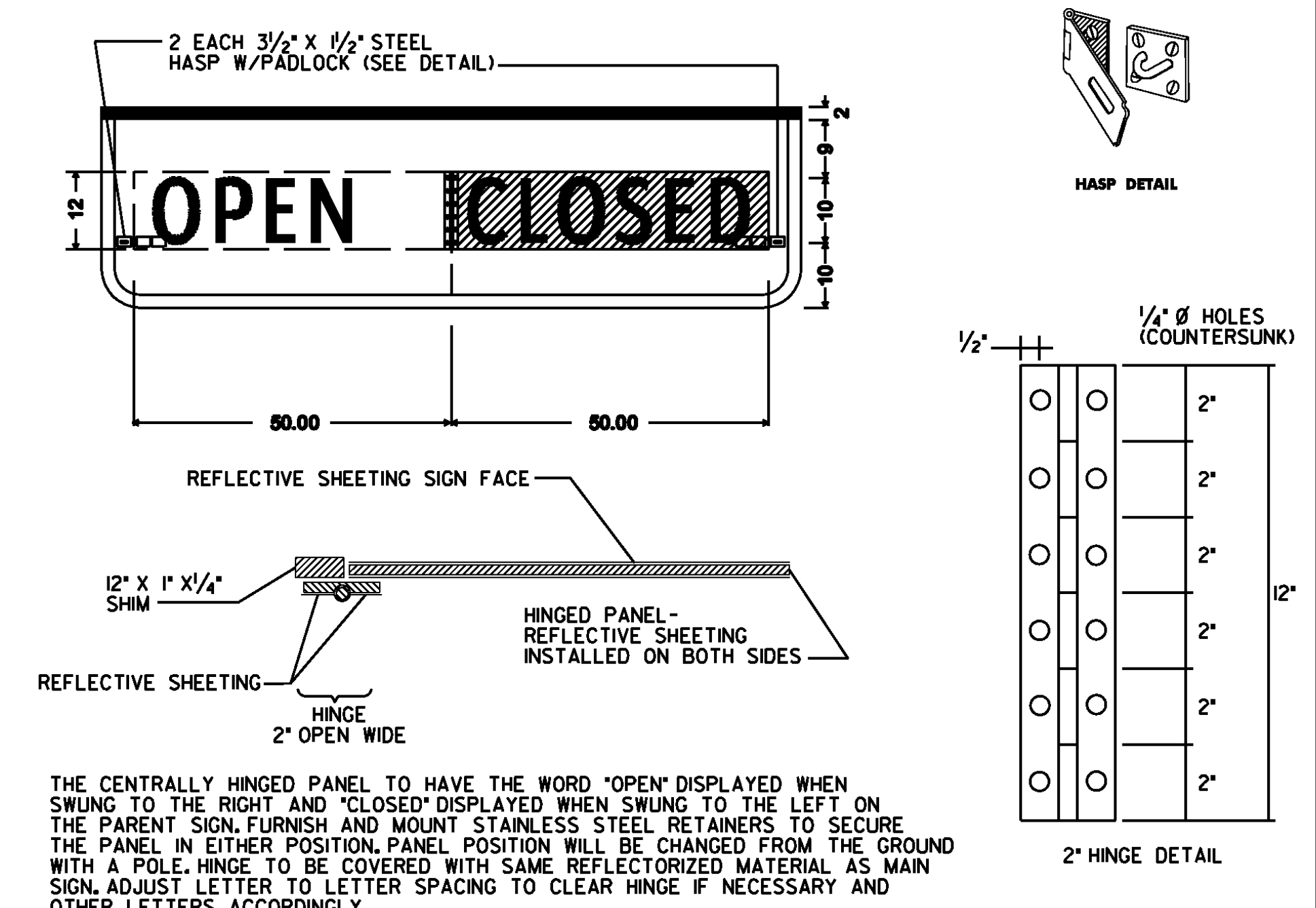


4.5" Radius, 1.3" Border, White on Green;  
[Northfield] ClearviewHwy-5-W;  
[Barre] ClearviewHwy-5-W; [16] ClearviewHwy-5-W;  
[21] ClearviewHwy-5-W;  
[Montpelier] ClearviewHwy-5-W;  
[23] ClearviewHwy-5-W;

MM 33.426 NB



6.0" Radius, 2.0" Border, White on Green;  
[WEIGH] ClearviewHwy-5-W specified length;  
[STATION] ClearviewHwy-5-W specified length;  
[1 MILE] ClearviewHwy-5-W specified length;  
6.0" Radius, 2.0" Border, White on Green;  
[OPEN] ClearviewHwy-2-W;  
[CLOSED] ClearviewHwy-2-W;



**SIGN DETAIL SHEET 2**

PROJECT NAME: ROYALTON-MIDDLESEX

PROJECT NUMBER: IMG SIGN(19)

FILE NAME: z09a020signdet.dgn

PROJECT LEADER: CRB

DESIGNED BY: JBZ

CLD REF. NO.: 09-0106

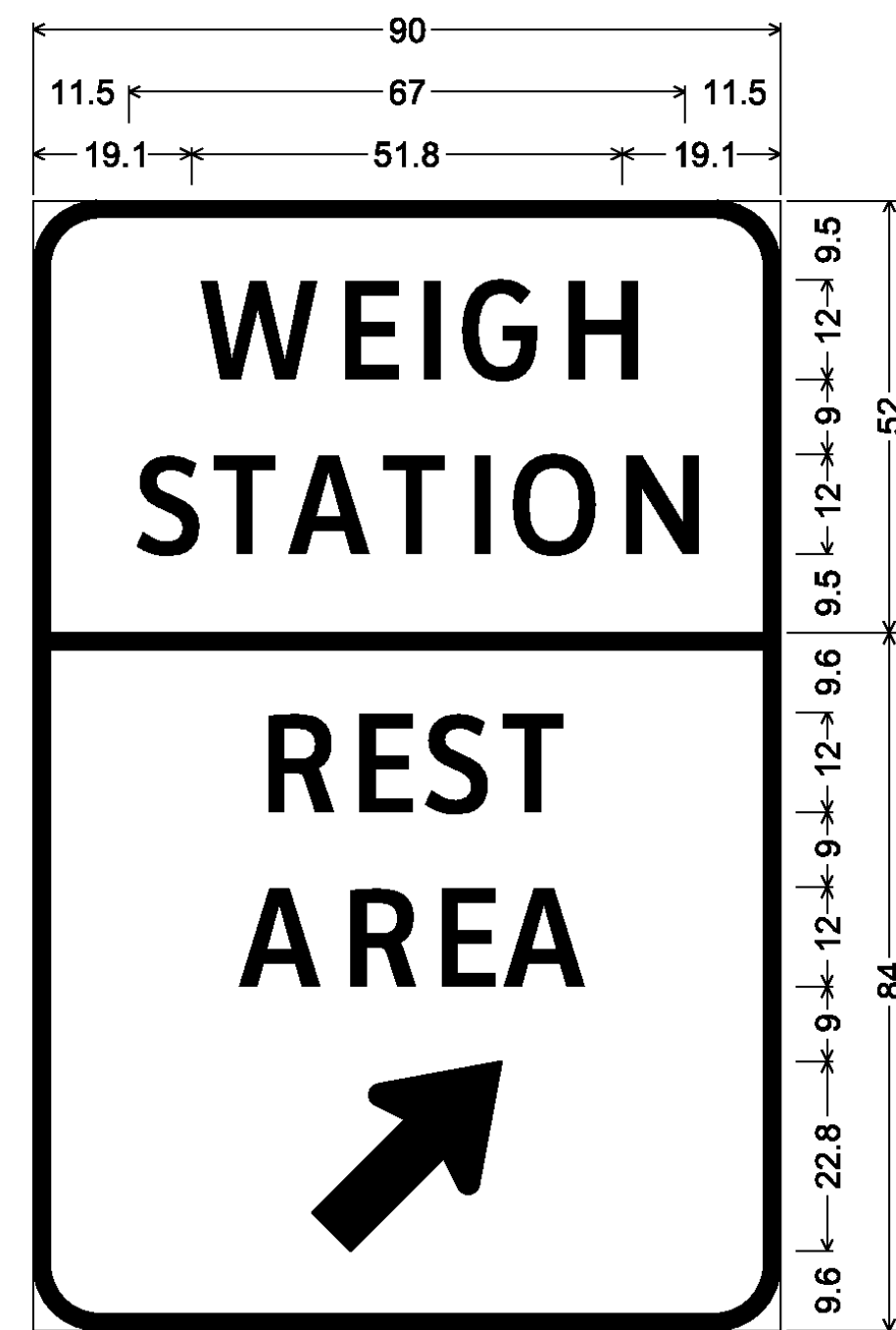
PLOT DATE: 8/12/2009

DRAWN BY: JBZ

CHECKED BY: BDB

SHEET 133 OF 163

MM 33.684 SB



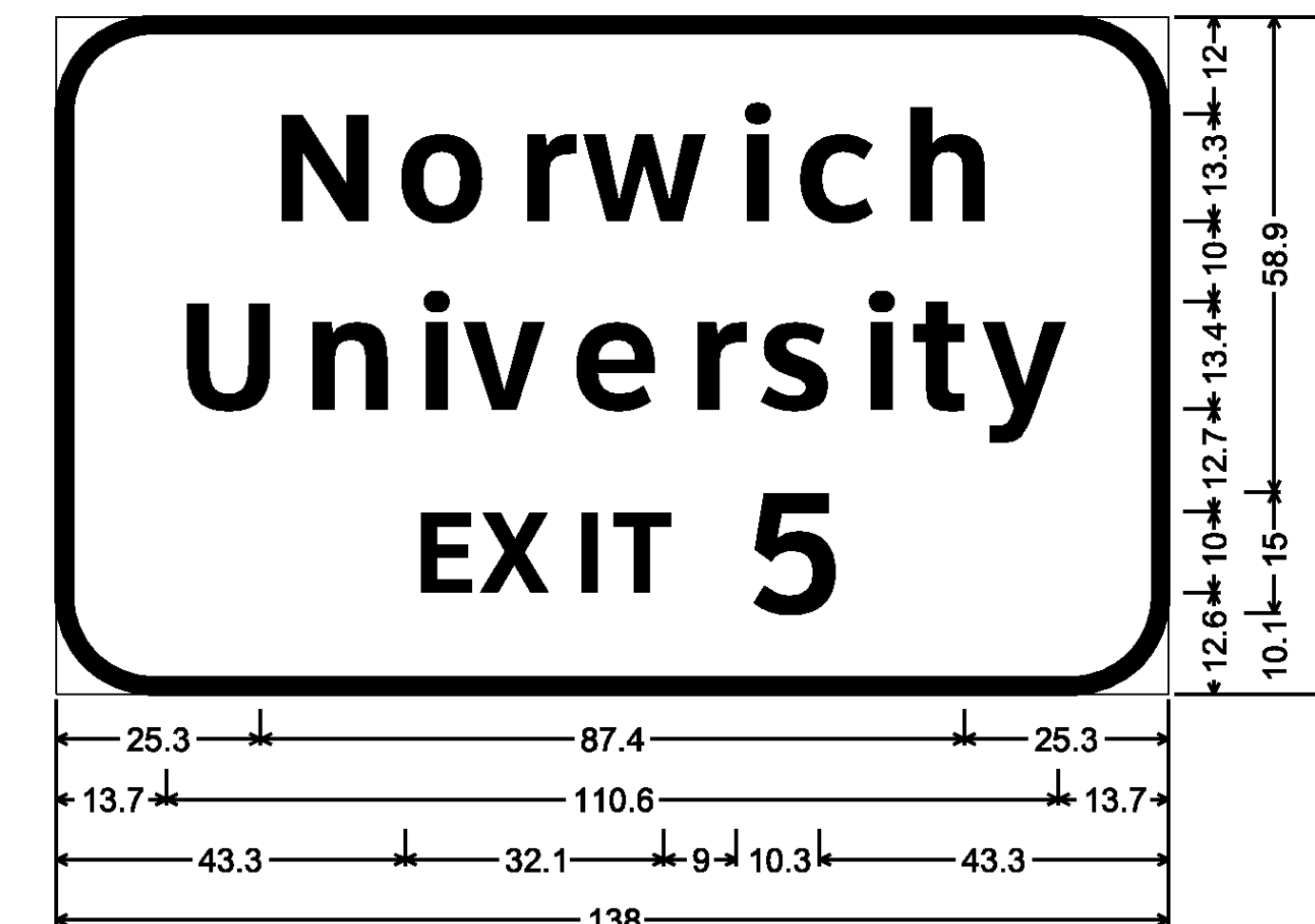
26.7 36.6 26.7  
 24.1 41.8 24.1  
 33.6 22.8 33.6  
 8.0" Radius, 2.0" Border, White on Green;  
 [WEIGH] ClearviewHwy-3-W;  
 [STATION] ClearviewHwy-3-W;  
 8.0" Radius, 2.0" Border, White on Blue;  
 [REST] ClearviewHwy-3-W;  
 [AREA] ClearviewHwy-3-W;  
 Standard Arrow Custom 29.0" X 17.6" 45°;

MM 41.840 NB  
 MM 44.250 SB



21.5 36 12 23 12 36 12 36 21.5  
 37.8 134.4 37.8  
 15.8 178.4 15.8  
 76.9 14.9 34.5 76.9  
 6.8 210  
 12.0" Radius, 2.0" Border, White on Green;  
 [TO] ClearviewHwy-5-W; 14; 14; [Northfield] ClearviewHwy-5-W; [Williamstown] ClearviewHwy-5-W;  
 [1 MILE] ClearviewHwy-5-W;

MM 41.990 NB



12.0" Radius, 2.0" Border, White on Green;  
 [Norwich] ClearviewHwy-5-W; [University] ClearviewHwy-5-W;  
 [EXIT 5] ClearviewHwy-5-W;

**SIGN DETAIL SHEET 3**

PROJECT NAME: ROYALTON-MIDDLESEX

PROJECT NUMBER: IMG SIGN(19)

FILE NAME: z09a020signdet.dgn

PLOT DATE: 8/12/2009

PROJECT LEADER: CRB

DRAWN BY: JBZ

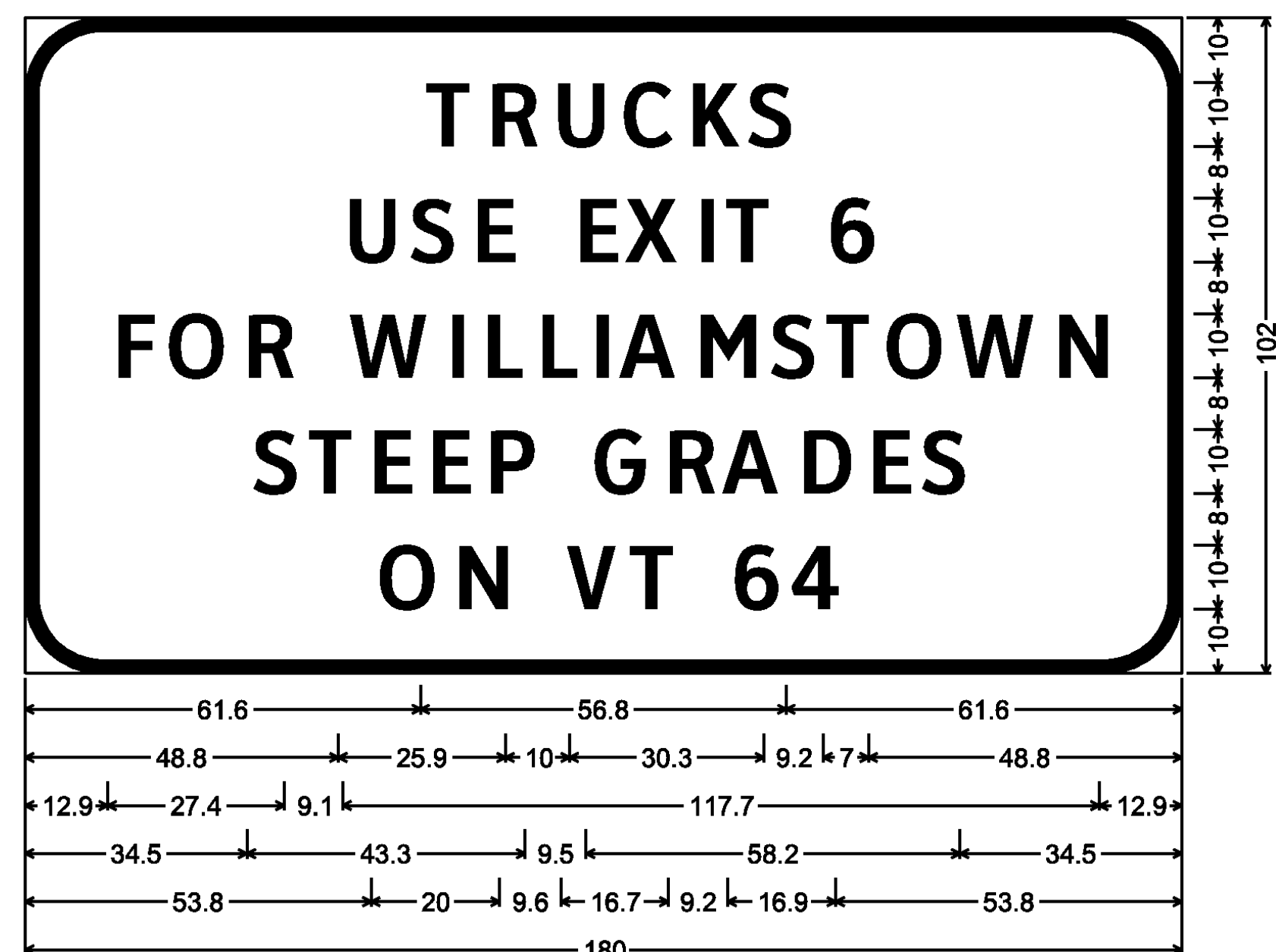
DESIGNED BY: JBZ

CHECKED BY: BDB

CLD REF. NO.: 09-0106

SHEET 134 OF 163

MM 42.140 NB  
MM 47.200 SB



12.0" Radius, 2.0" Border, Black on Yellow;  
[TRUCKS] ClearviewHwy-4-B; [USE EXIT 6] ClearviewHwy-4-B;  
[FOR WILLIAMSTOWN] ClearviewHwy-4-B; [STEEP GRADES] ClearviewHwy-4-B;  
[ON VT 64] ClearviewHwy-4-B;

MM 42.290 NB  
MM 43.540 SB



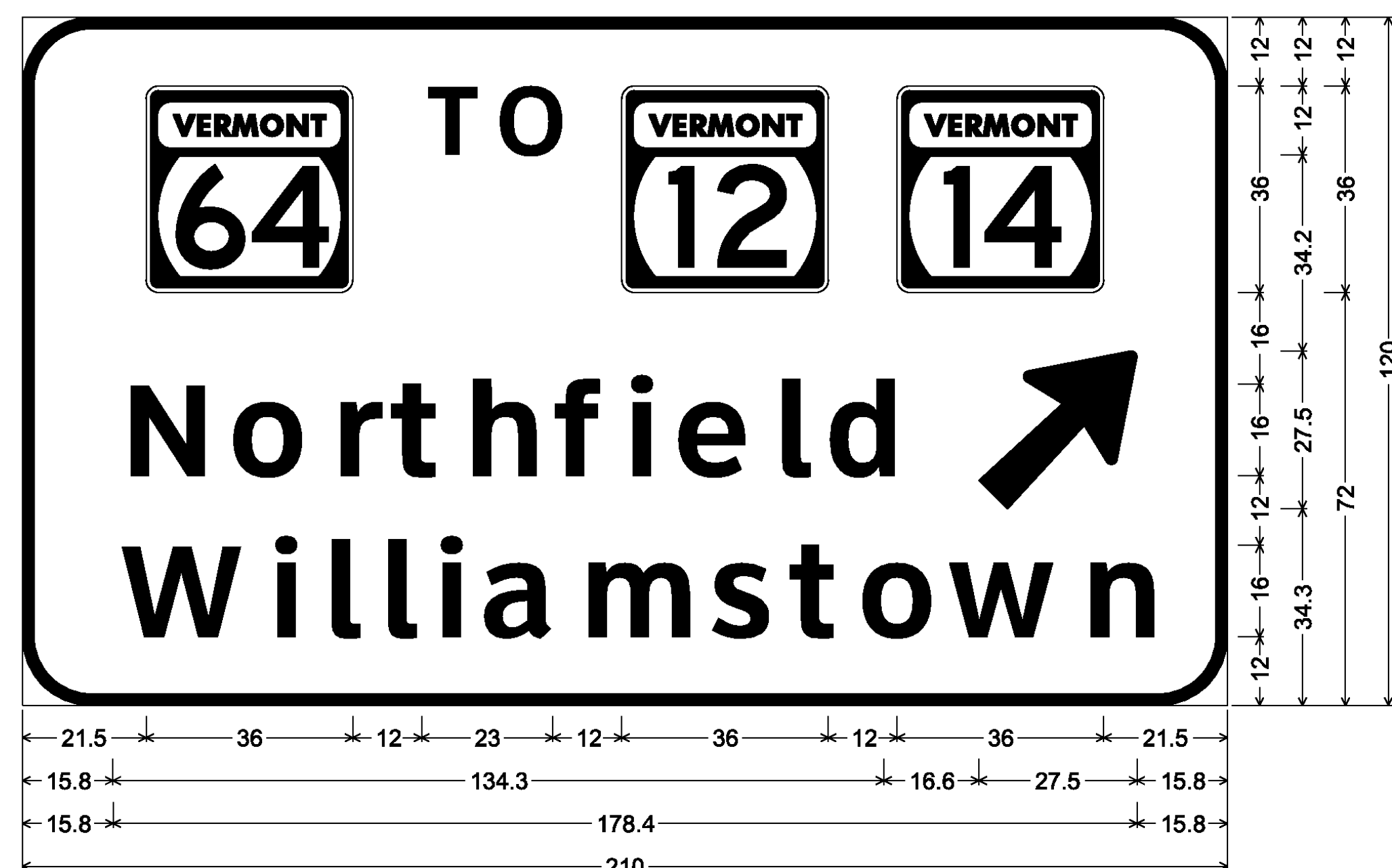
12.0" Radius, 2.0" Border, White on Green;  
[TO] ClearviewHwy-5-W; 14; 14; [Northfield] ClearviewHwy-5-W; [Williamstown] ClearviewHwy-5-W;  
[1/2 MILE] ClearviewHwy-5-W;

MM 42.440 NB  
MM 43.390 SB



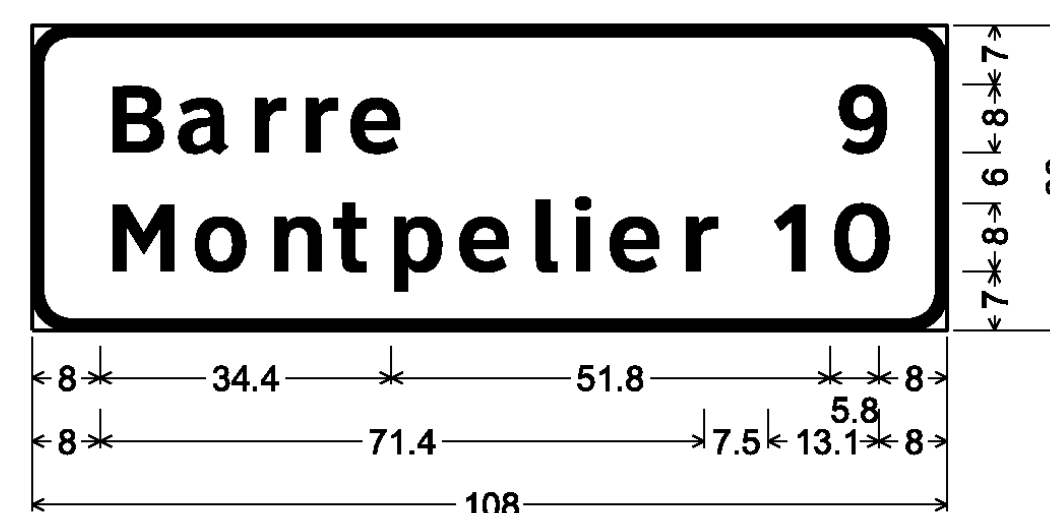
12.0" Radius, 2.0" Border, White on Blue;  
[NEXT RIGHT] ClearviewHwy-5-W;

MM 42.716 NB  
MM 43.240 SB



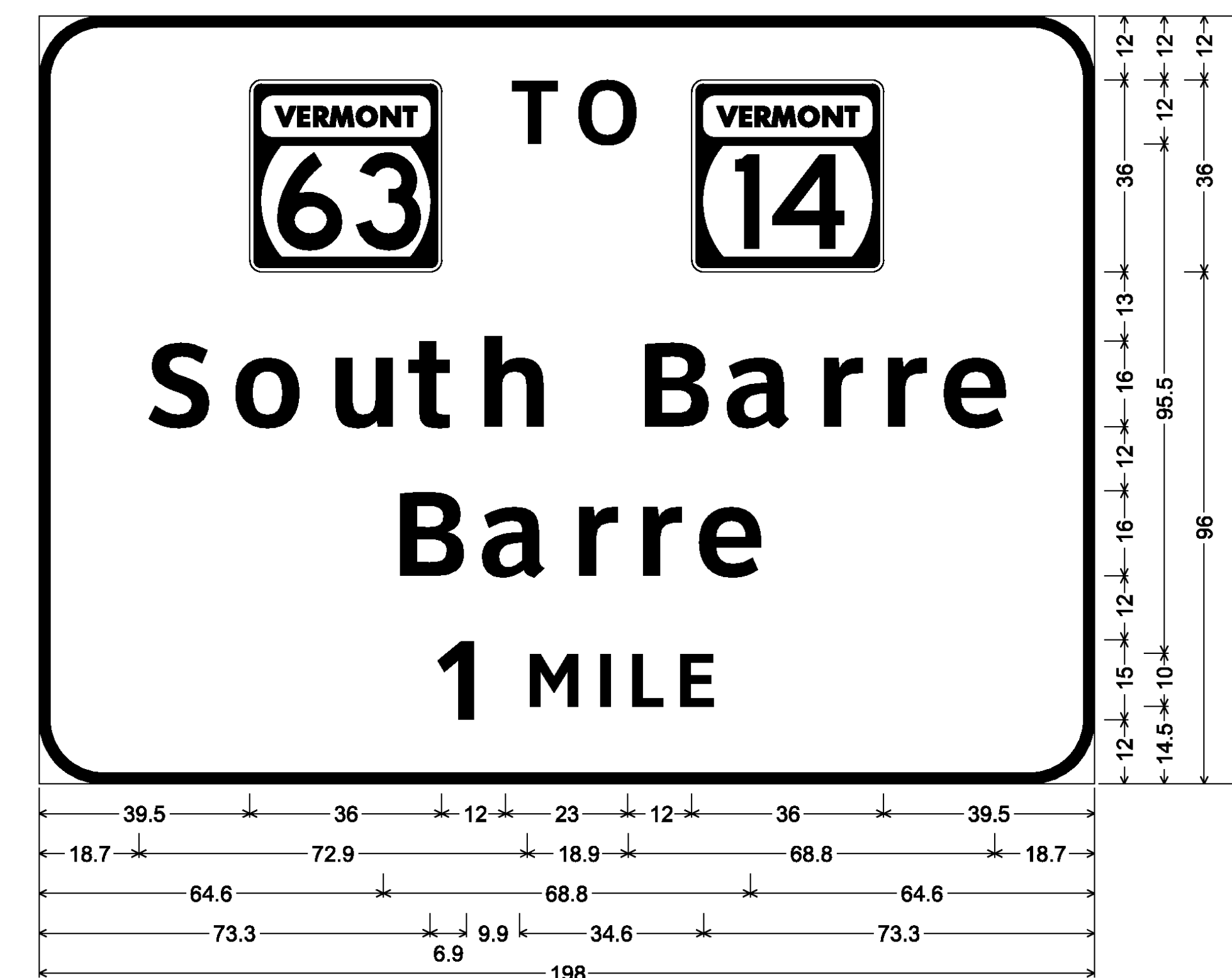
12.0" Radius, 2.0" Border, White on Green;  
[TO] ClearviewHwy-5-W; 14; 14; [Northfield] ClearviewHwy-5-W; [Arrow 160 - 35.0° 45°];  
[Williamstown] ClearviewHwy-5-W;

MM 43.830 NB



4.5" Radius, 1.3" Border, White on Green;  
[Barre] ClearviewHwy-5-W;  
[Montpelier] ClearviewHwy-5-W;  
[9] ClearviewHwy-5-W; [10] ClearviewHwy-5-W;

MM 45.900 NB  
MM 47.815 SB



12.0" Radius, 2.0" Border, White on Green;  
[TO] ClearviewHwy-5-W; 14; [South Barre] ClearviewHwy-5-W; [Barre] ClearviewHwy-5-W;  
[1 MILE] ClearviewHwy-5-W;

**SIGN DETAIL SHEET 4**

PROJECT NAME: ROYALTON-MIDDLESEX

PROJECT NUMBER: IMG SIGN(19)

FILE NAME: z09a020signdet.dgn

PLOT DATE: 8/12/2009

PROJECT LEADER: CRB

DRAWN BY: JBJ

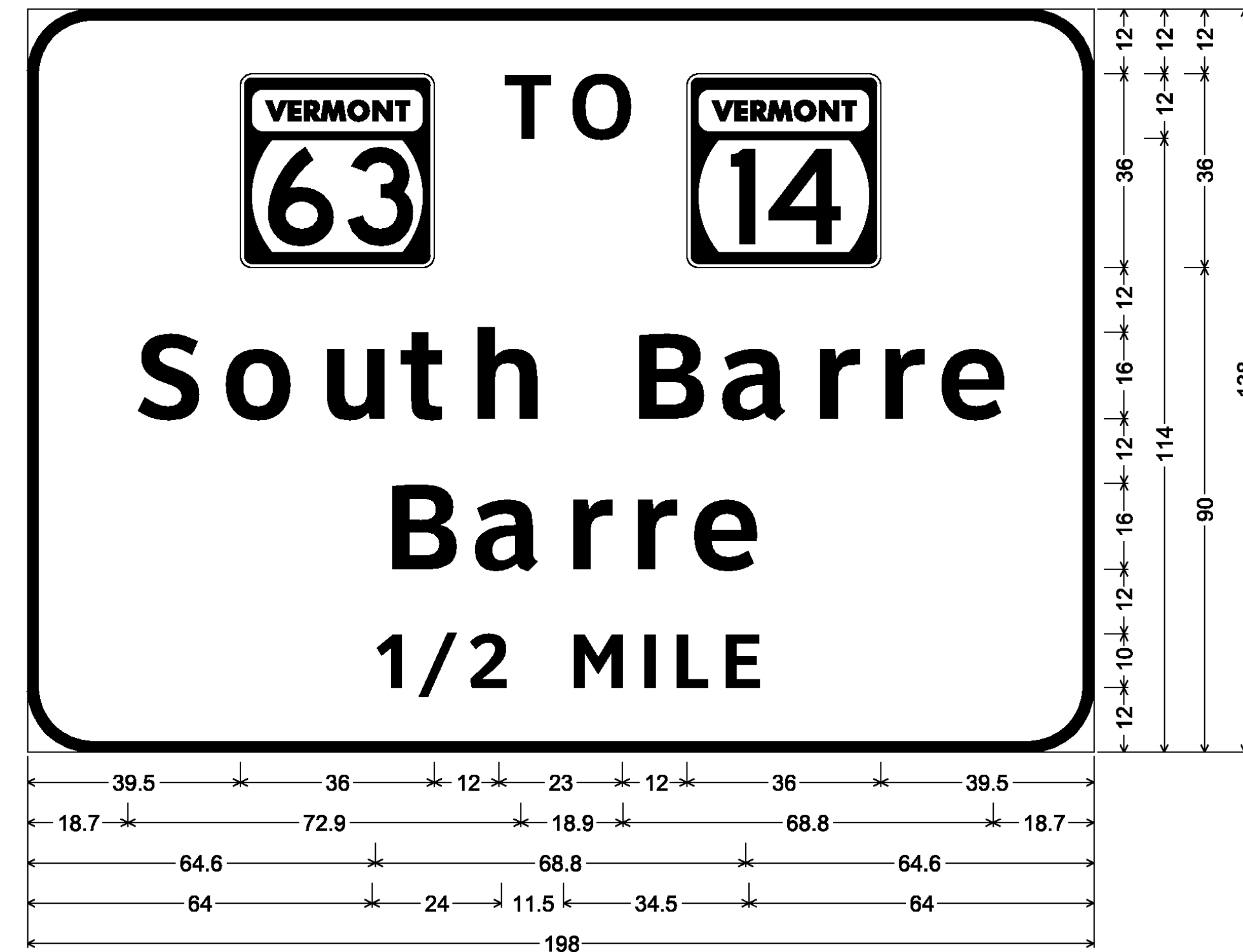
DESIGNED BY: JBJ

CHECKED BY: BDB

CLD REF. NO.: 09-0106

SHEET 135 OF 163

MM 46.250 NB  
MM 47.510 SB



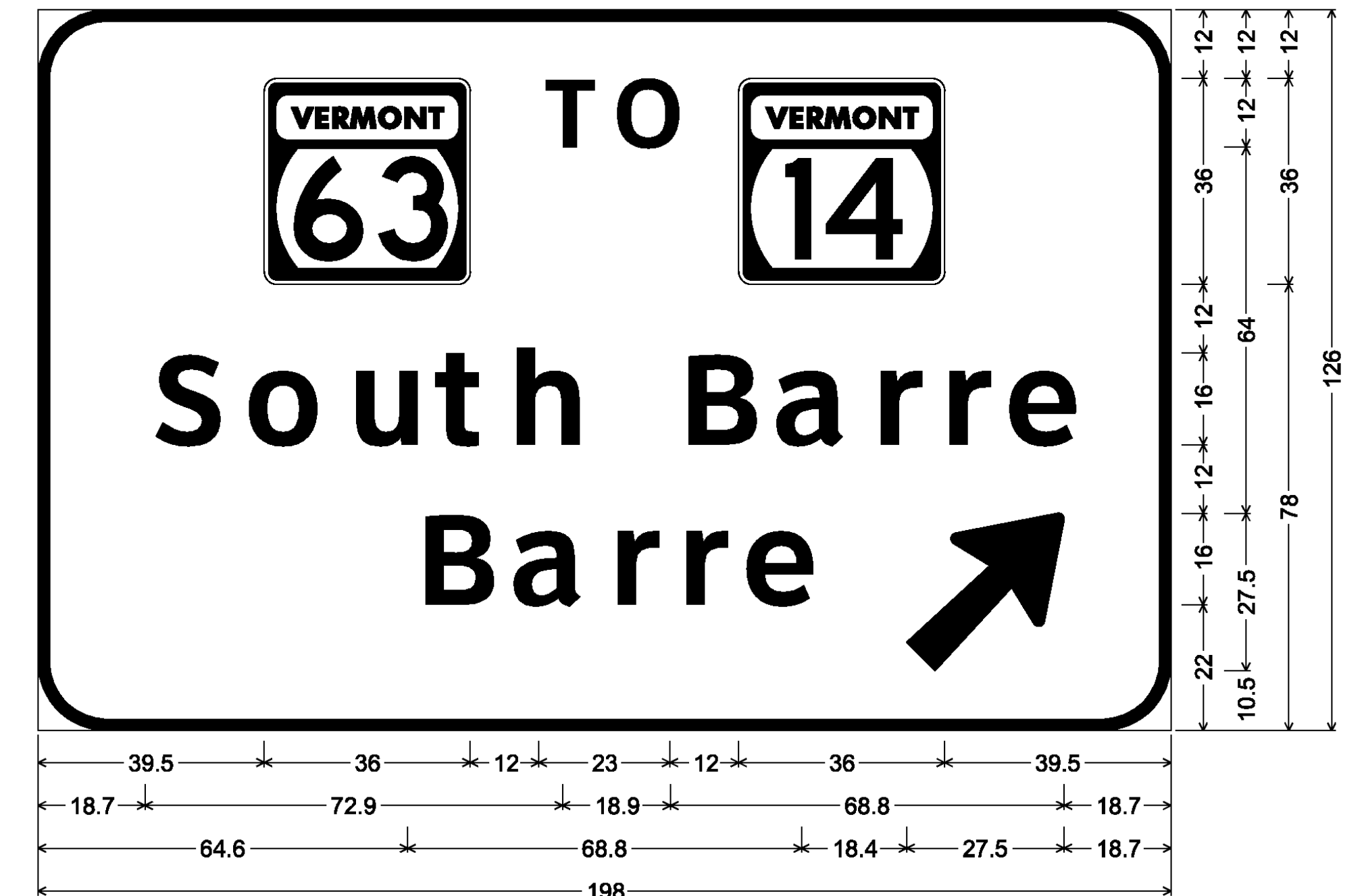
12.0" Radius, 2.0" Border, White on Green;  
[TO] ClearviewHwy-5-W; 14; [South Barre] ClearviewHwy-5-W; [Barre] ClearviewHwy-5-W;  
[1/2 MILE] ClearviewHwy-5-W;

MM 46.405 NB  
MM 47.360 SB



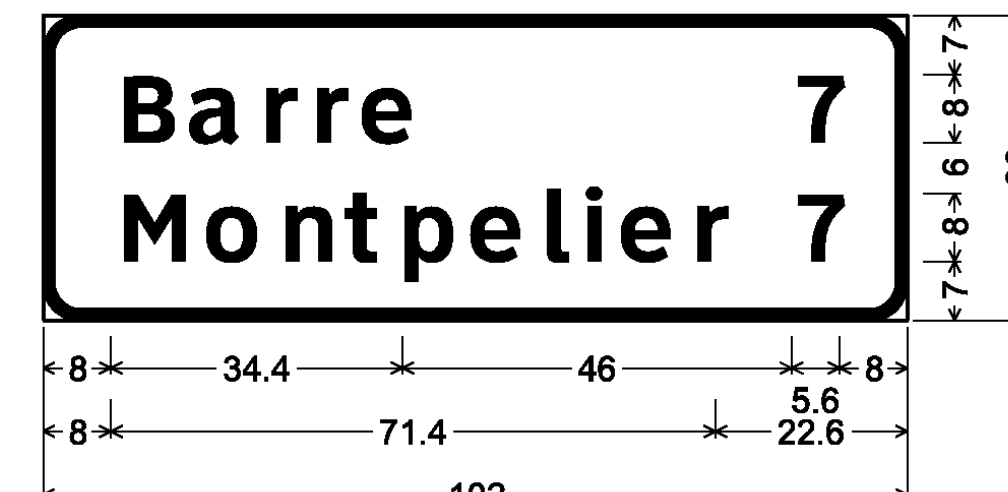
12.0" Radius, 2.0" Border, White on Blue;  
[NEXT RIGHT] ClearviewHwy-5-W;

MM 46.535 NB  
MM 46.940 SB



12.0" Radius, 2.0" Border, White on Green;  
[TO] ClearviewHwy-5-W; 14; [South Barre] ClearviewHwy-5-W; [Barre] ClearviewHwy-5-W;  
Arrow 160 - 35.0° 45°;

MM 47.925 NB



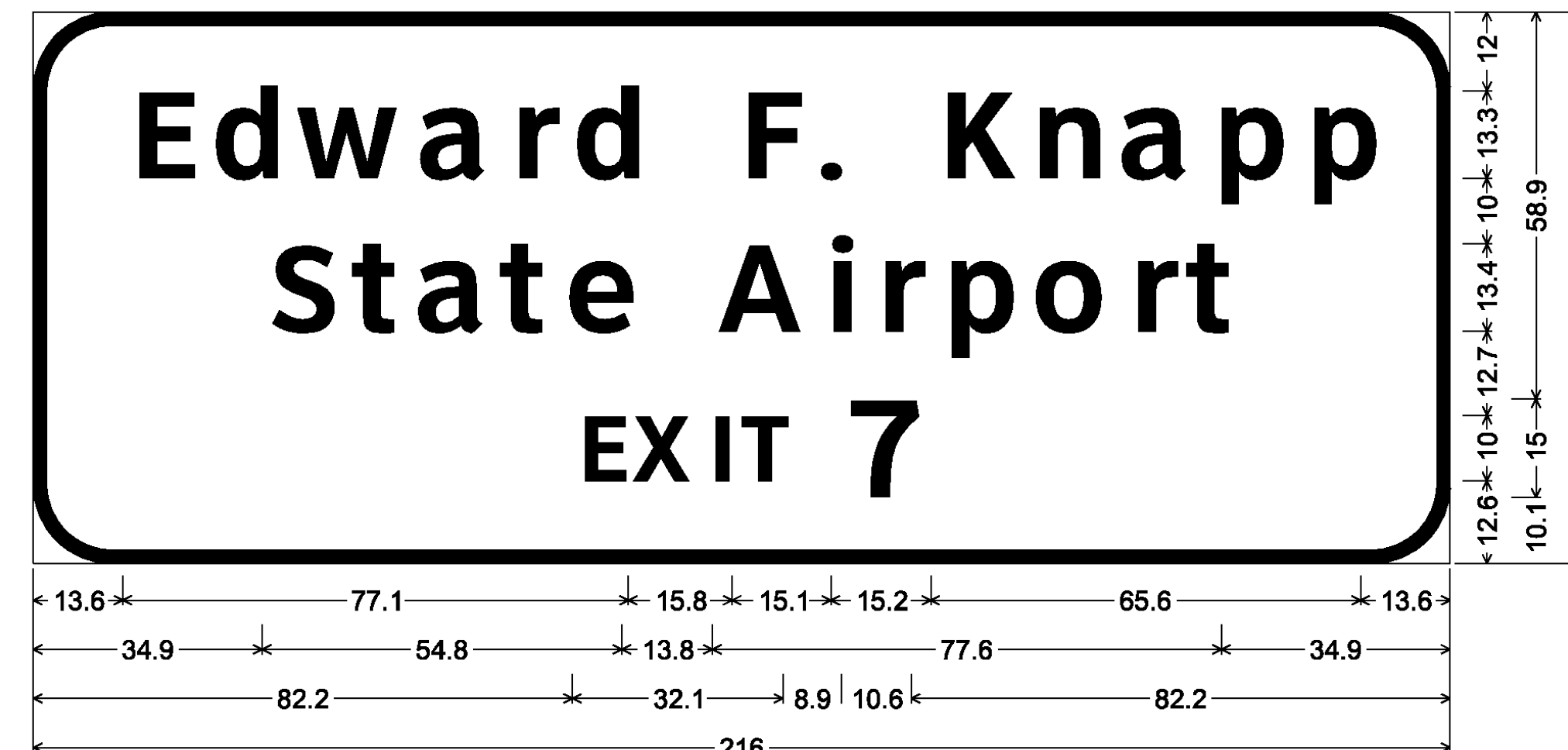
4.5" Radius, 1.3" Border, White on Green;  
[Barre] ClearviewHwy-5-W;  
[Montpelier] ClearviewHwy-5-W;  
[7] ClearviewHwy-5-W; [7] ClearviewHwy-5-W;

MM 48.953 NB  
MM 51.615 SB



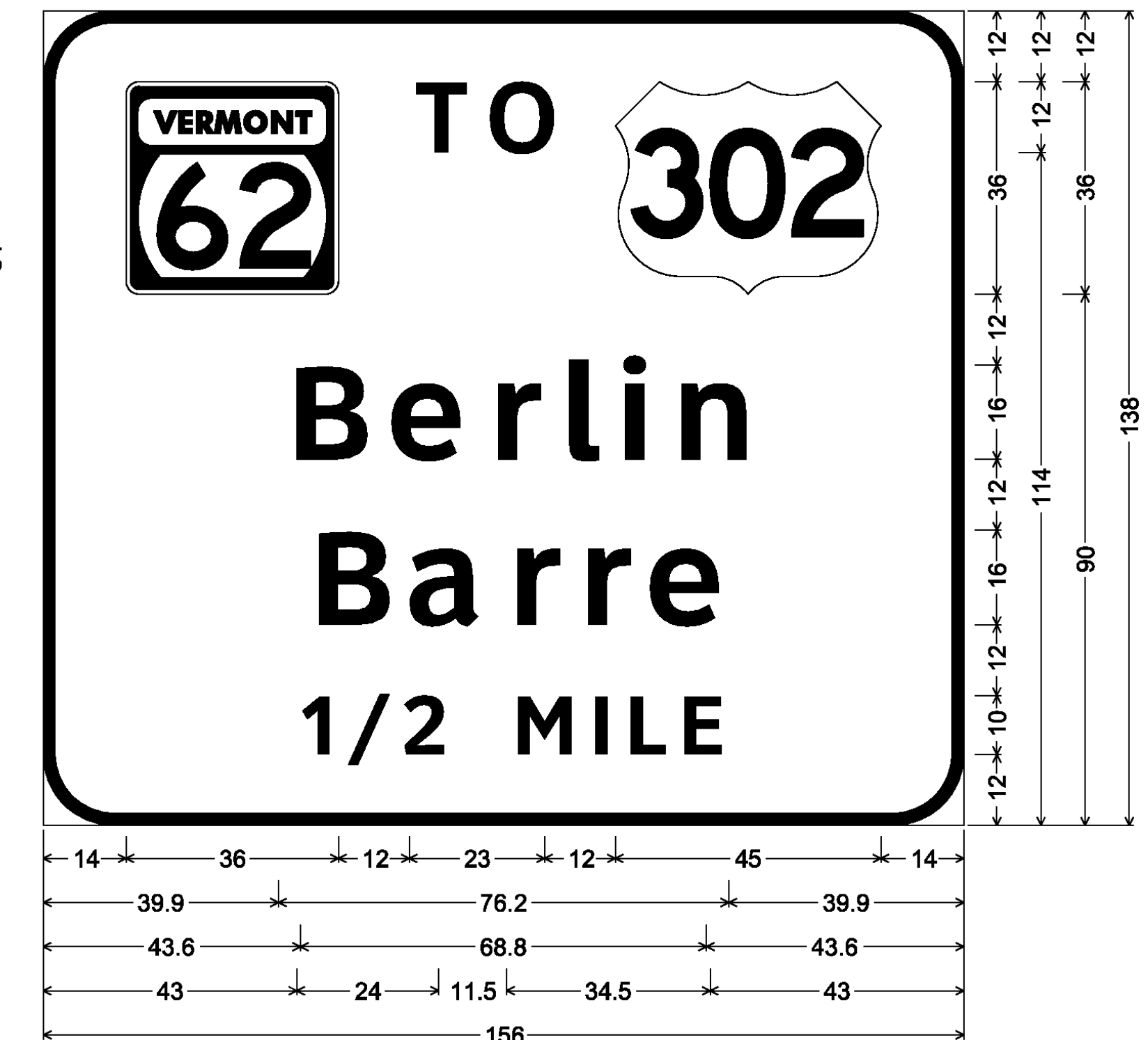
12.0" Radius, 2.0" Border, White on Green;  
[TO] ClearviewHwy-5-W; [Berlin] ClearviewHwy-5-W;  
[Barre] ClearviewHwy-5-W; [1 MILE] ClearviewHwy-5-W;

MM 49.325 NB  
MM 51.380 SB



12.0" Radius, 2.0" Border, White on Green;  
[Edward F. Knapp] ClearviewHwy-5-W; [State Airport] ClearviewHwy-5-W; [EXIT 7] ClearviewHwy-5-W;

MM 49.505 NB  
MM 51.230 SB



12.0" Radius, 2.0" Border, White on Green;  
[TO] ClearviewHwy-5-W; [Berlin] ClearviewHwy-5-W;  
[Barre] ClearviewHwy-5-W; [1/2 MILE] ClearviewHwy-5-W;

**SIGN DETAIL SHEET 5**

PROJECT NAME: ROYALTON-MIDDLESEX

PROJECT NUMBER: IMG SIGN(19)

FILE NAME: z09a020signdet.dgn

PLOT DATE: 8/12/2009

PROJECT LEADER: CRB

DRAWN BY: JBZ

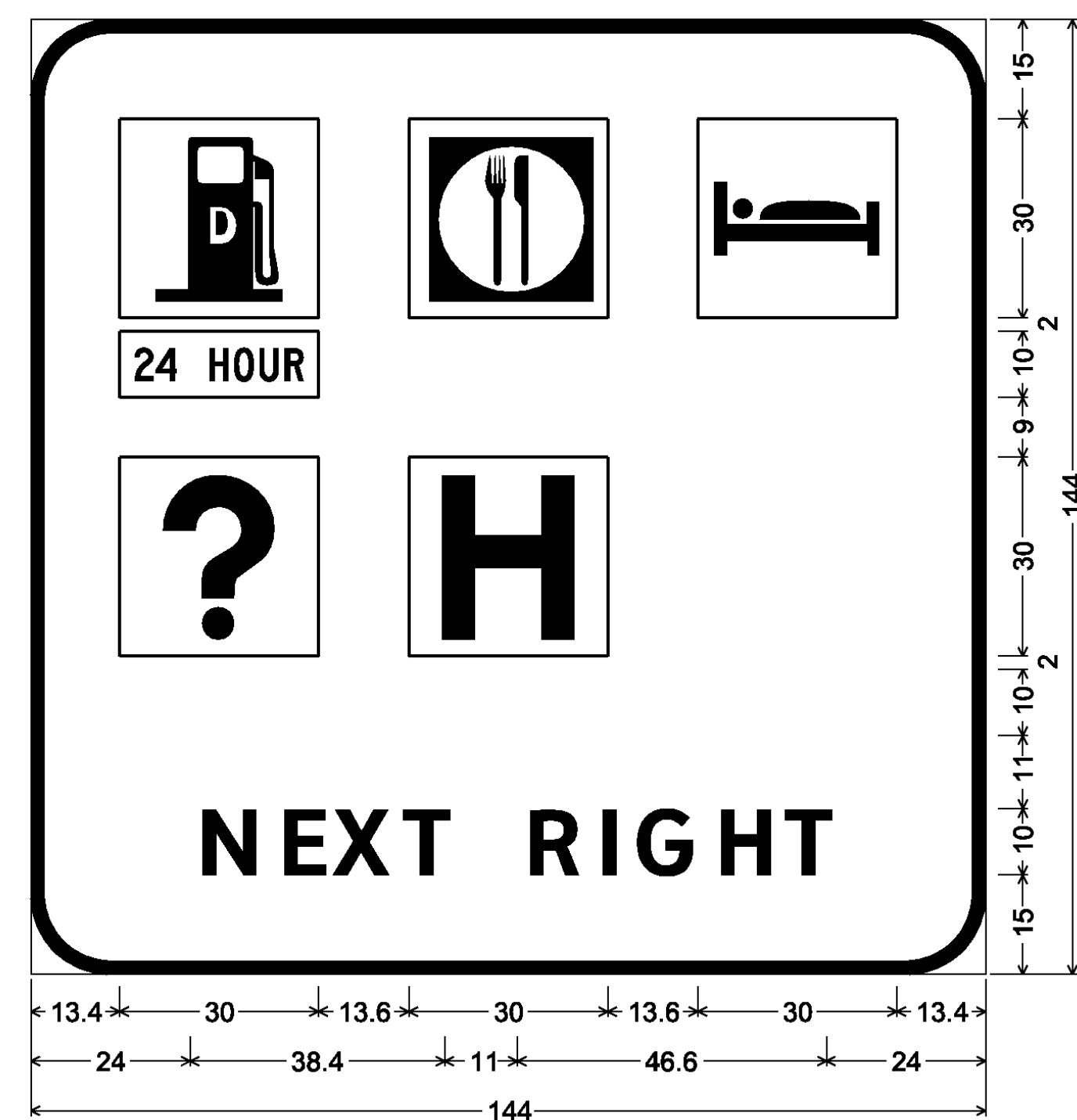
DESIGNED BY: JBZ

CHECKED BY: BDB

CLD REF. NO.: 09-0106

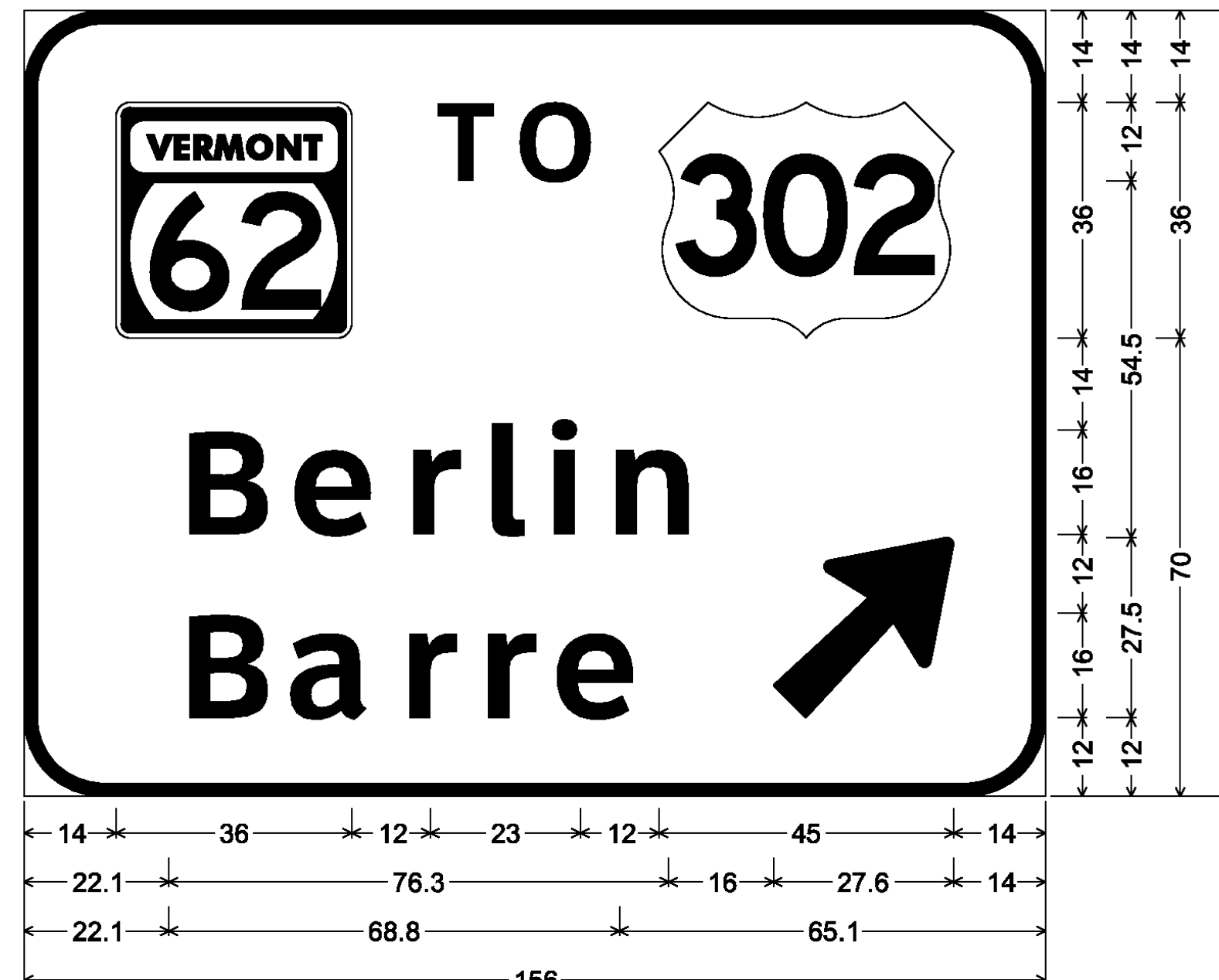
SHEET 136 OF 163

MM 49.735 NB  
MM 51.080 SB



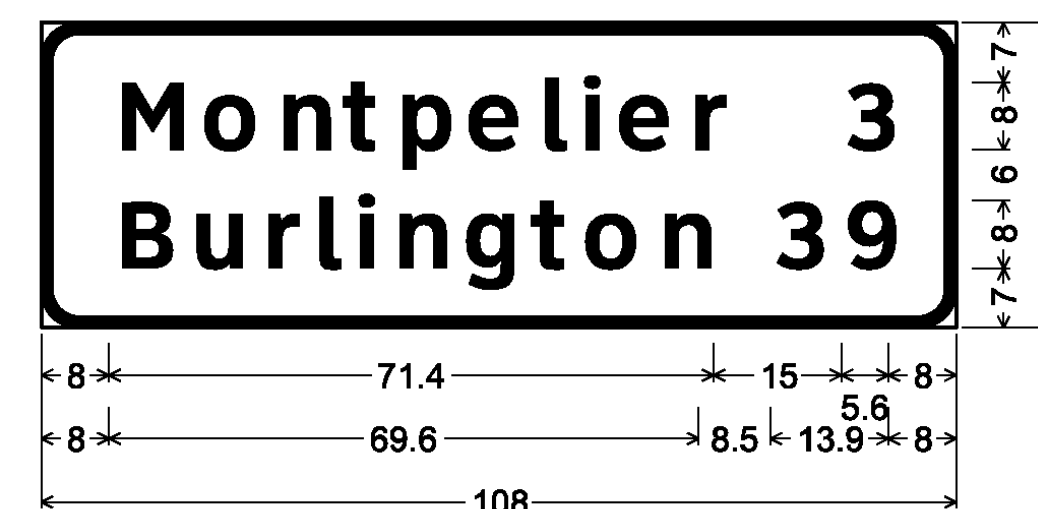
12.0" Radius, 2.0" Border, White on Blue;  
[NEXT RIGHT] ClearviewHwy-5-W;

MM 49.910 NB



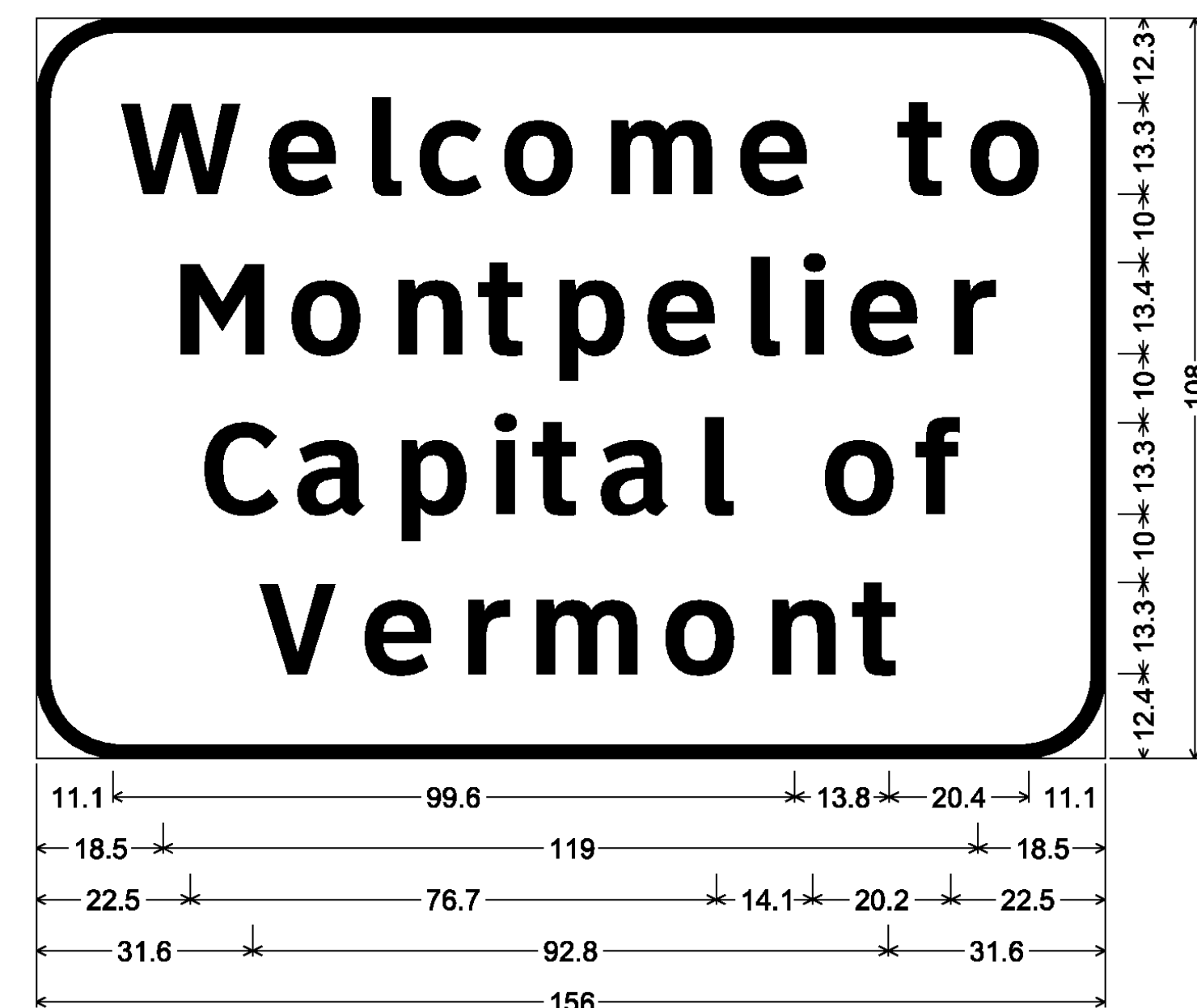
12.0" Radius, 2.0" Border, White on Green;  
[TO] ClearviewHwy-5-W; [Berlin] ClearviewHwy-5-W;  
[Barre] ClearviewHwy-5-W; Arrow 160 - 35.0" 45°;

MM 51.075 NB



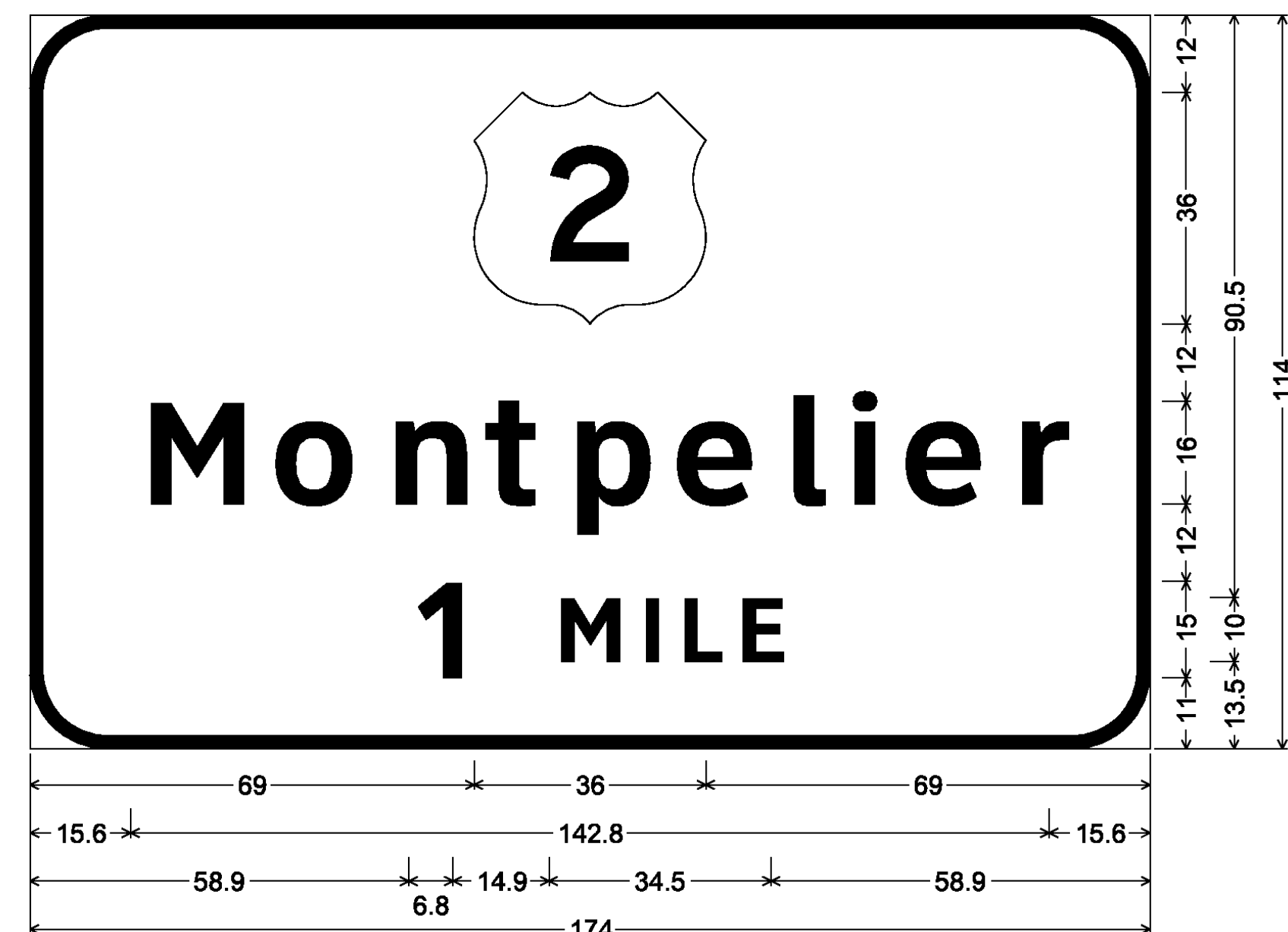
4.5" Radius, 1.3" Border, White on Green;  
[Montpelier] ClearviewHwy-5-W;  
[Burlington] ClearviewHwy-5-W;  
[3] ClearviewHwy-5-W; [39] ClearviewHwy-5-W;

MM 51.540 NB  
MM 54.304 SB



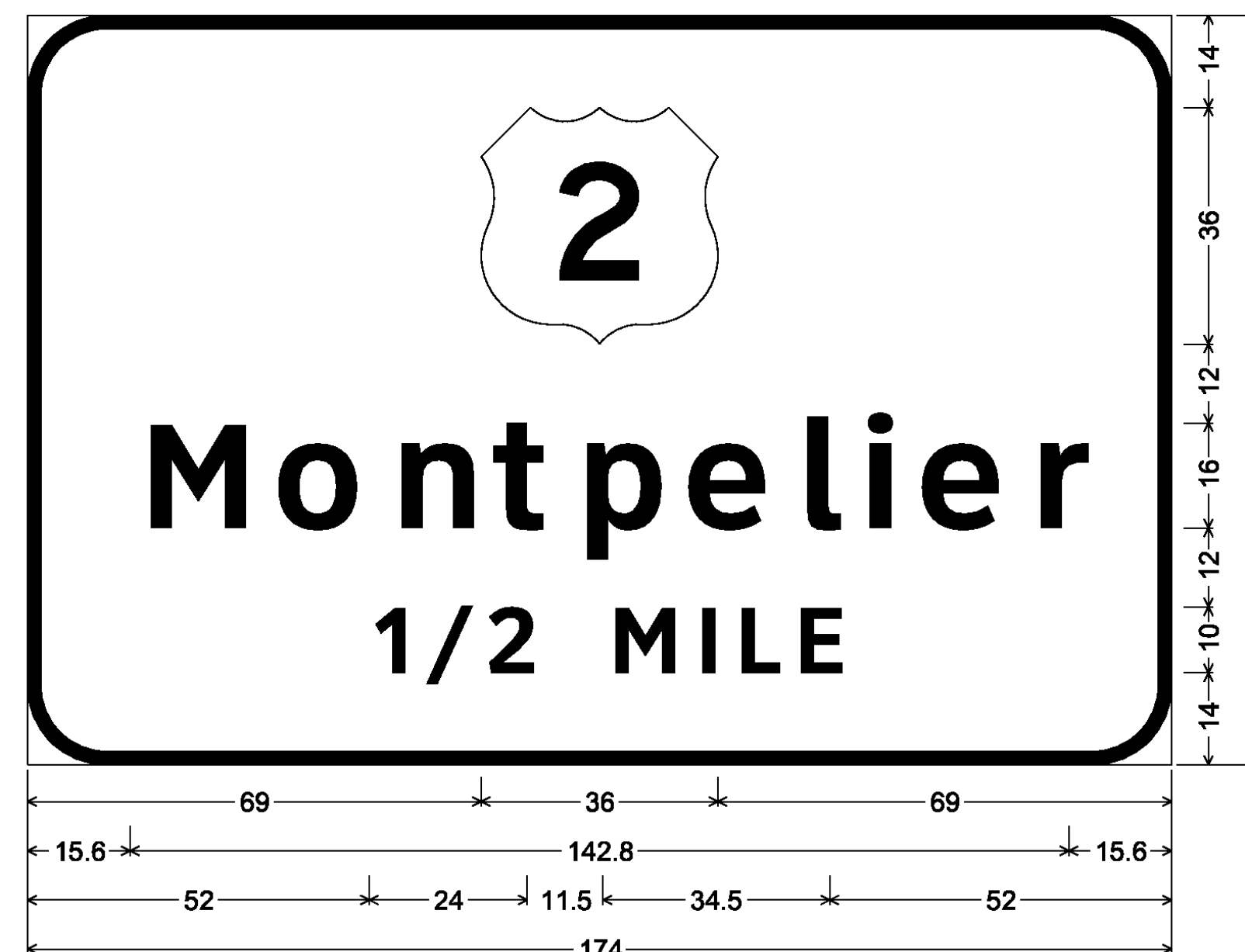
12.0" Radius, 2.0" Border, White on Green;  
[Welcome to] ClearviewHwy-5-W; [Montpelier] ClearviewHwy-5-W;  
[Capital of] ClearviewHwy-5-W; [Vermont] ClearviewHwy-5-W;

MM 51.720 NB



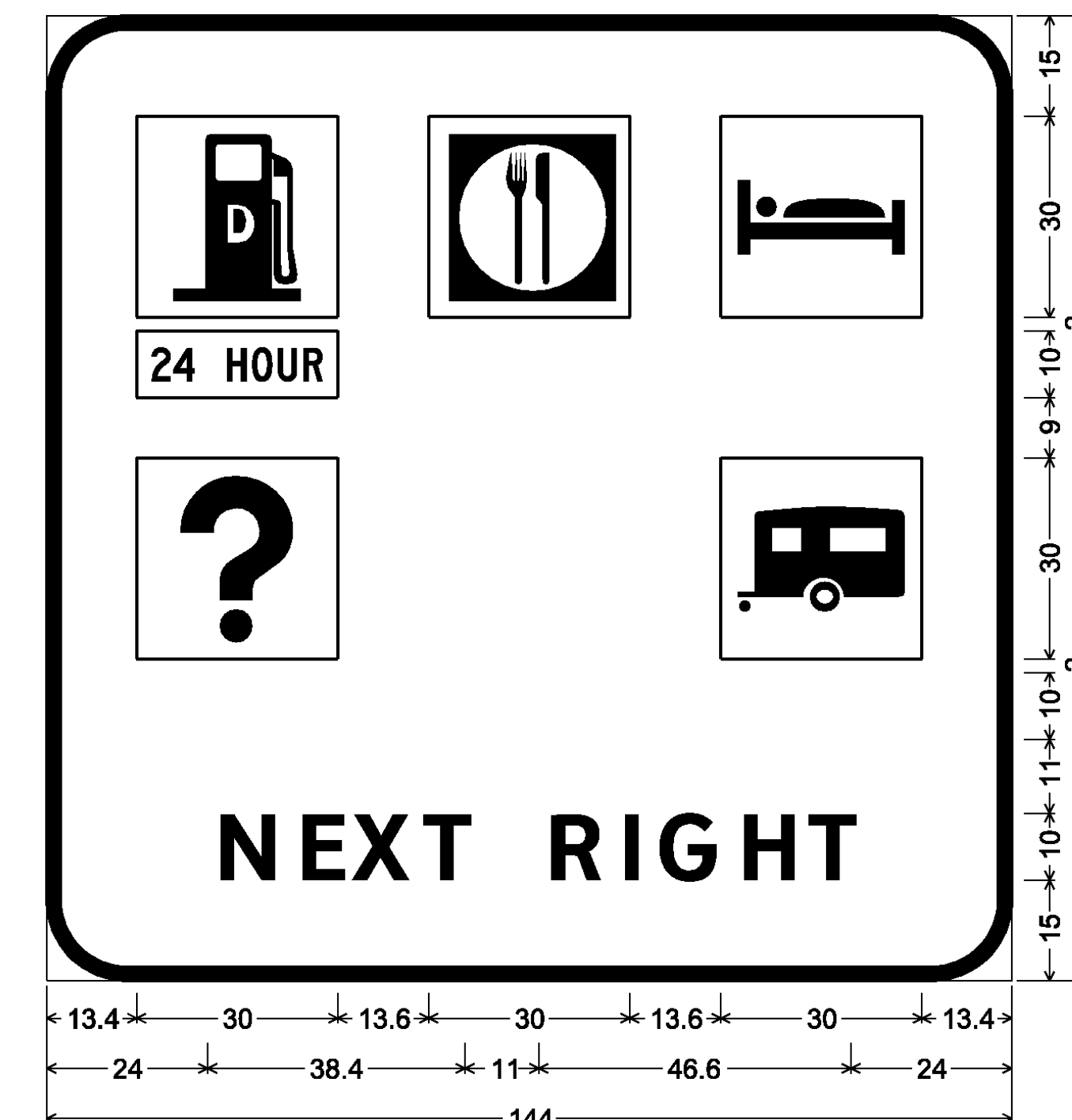
12.0" Radius, 2.0" Border, White on Green;  
[Montpelier] ClearviewHwy-5-W; [1 MILE] ClearviewHwy-5-W;

MM 52.235 NB



12.0" Radius, 2.0" Border, White on Green;  
[Montpelier] ClearviewHwy-5-W; [1/2 MILE] ClearviewHwy-5-W;

MM 52.440 NB  
MM 53.550 SB



12.0" Radius, 2.0" Border, White on Blue;  
[NEXT RIGHT] ClearviewHwy-5-W;

**SIGN DETAIL SHEET 6**

PROJECT NAME: ROYALTON-MIDDLESEX

PROJECT NUMBER: IMG SIGN(19)

FILE NAME: z09a020signdet.dgn

PLOT DATE: 8/12/2009

PROJECT LEADER: CRB

DRAWN BY: JBZ

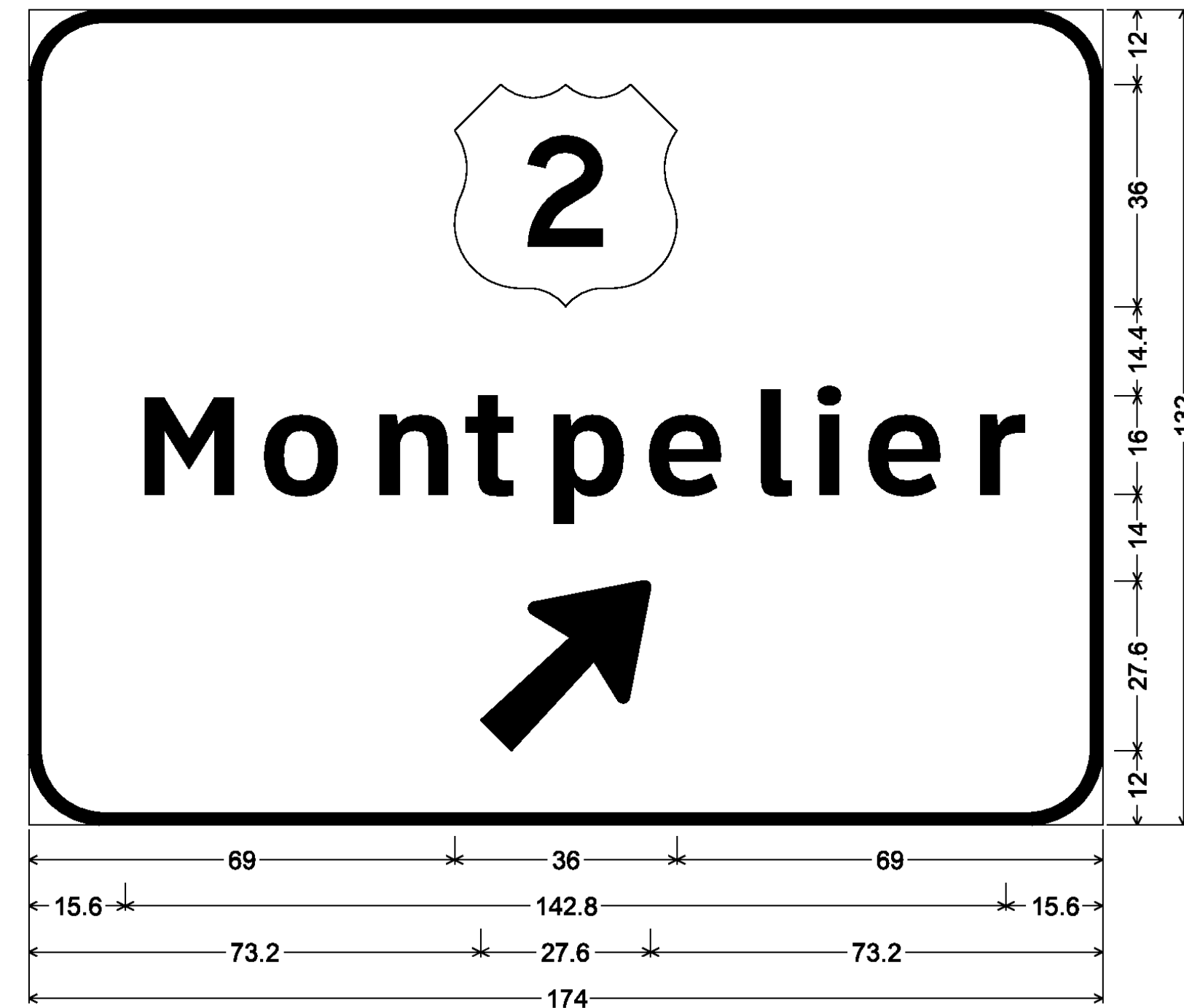
DESIGNED BY: JBZ

CHECKED BY: BDB

CLD REF. NO.: 09-0106

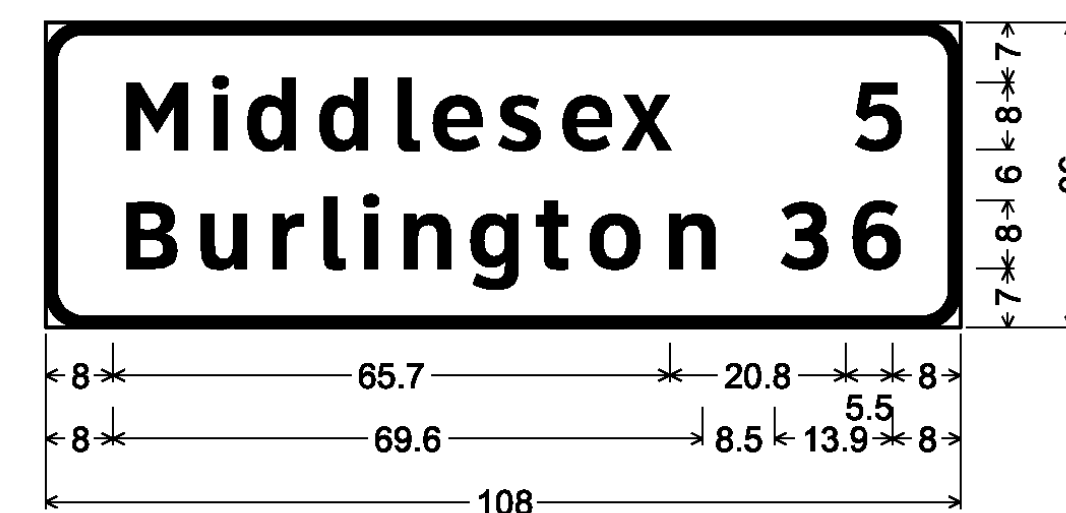
SHEET 137 OF 163

MM 52.595 NB



12.0" Radius, 2.0" Border, White on Green;  
[Montpelier] ClearviewHwy-5-W; Arrow 160 - 35.0° 45°;

MM 53.880 NB



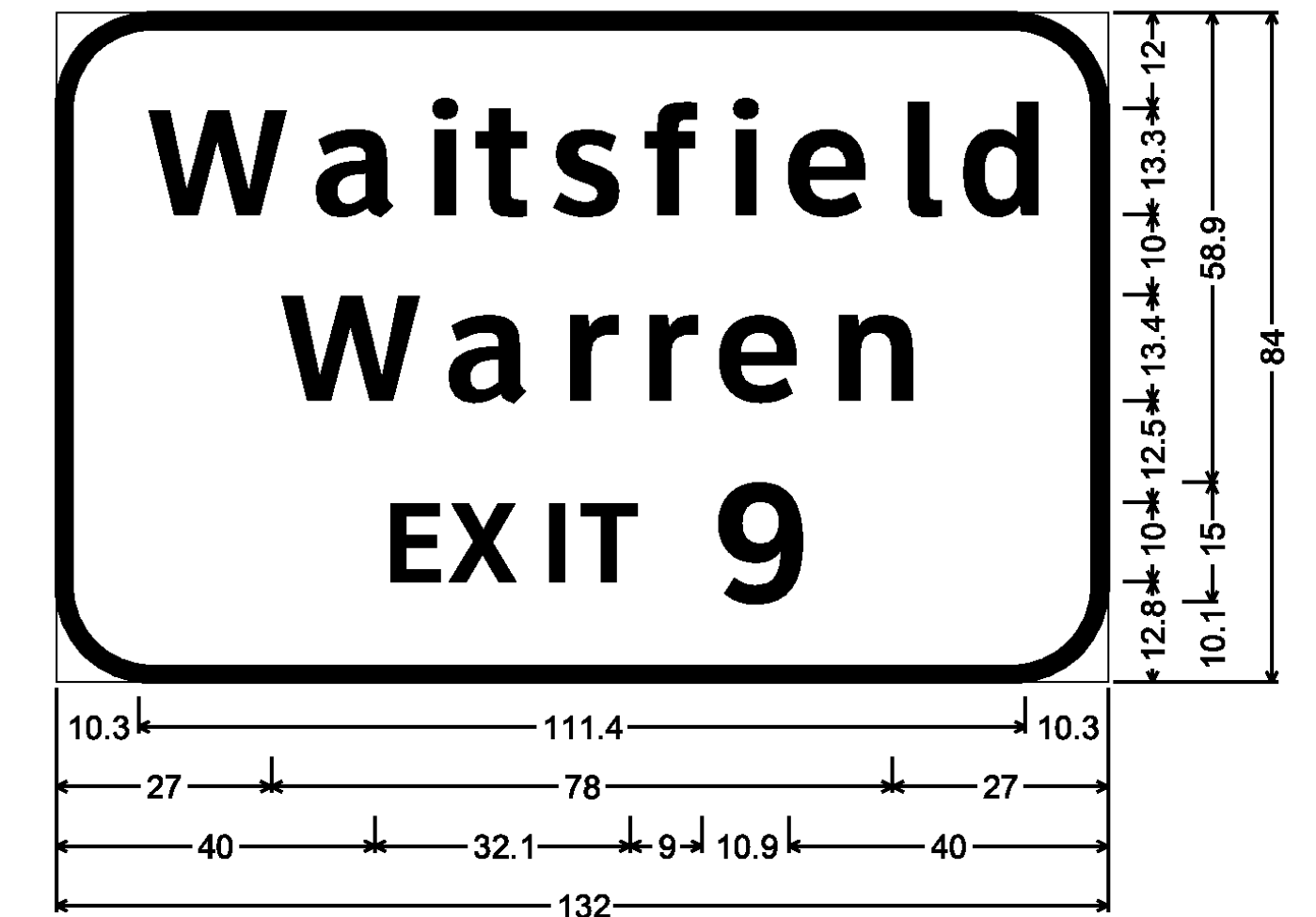
4.5" Radius, 1.3" Border, White on Green;  
[Middlesex] ClearviewHwy-5-W;  
[Burlington] ClearviewHwy-5-W;  
[5] ClearviewHwy-5-W; [36] ClearviewHwy-5-W;

MM 57.330 NB  
MM 59.870 SB



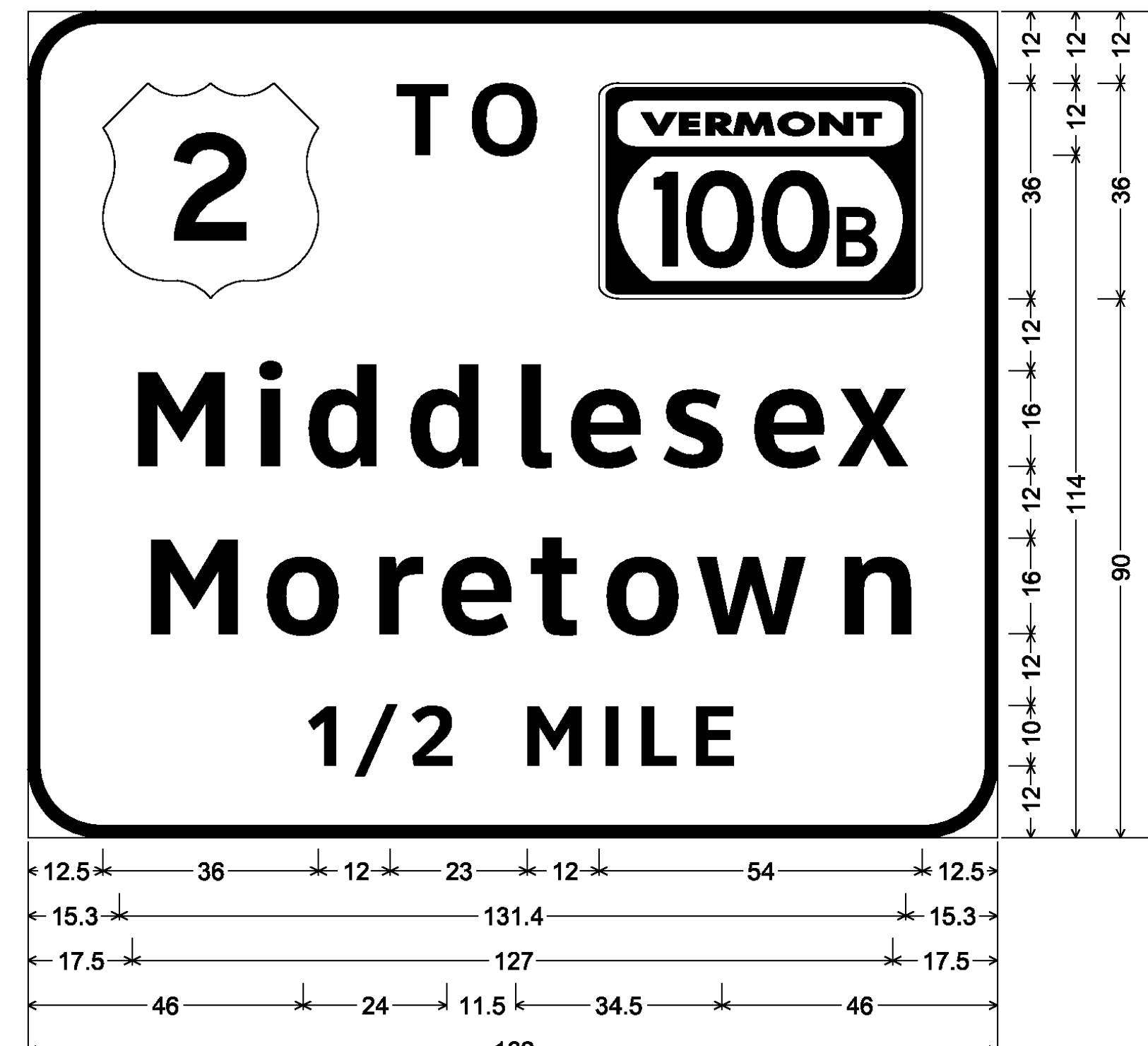
12.0" Radius, 2.0" Border, White on Green;  
[TO] ClearviewHwy-5-W; VT100B; [Middlesex] ClearviewHwy-5-W;  
[Moretown] ClearviewHwy-5-W; [1 MILE] ClearviewHwy-5-W;

MM 57.800 NB



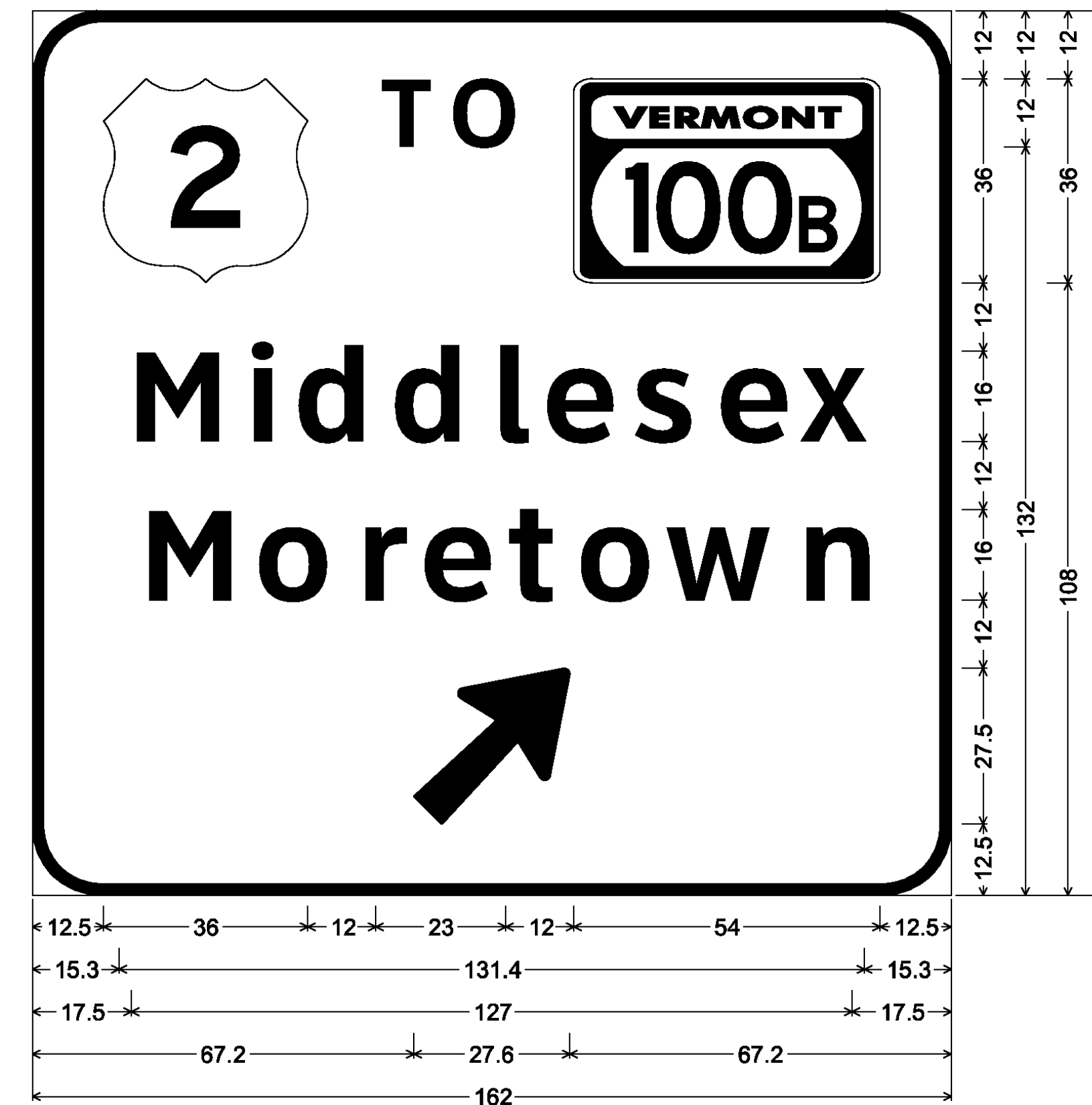
12.0" Radius, 2.0" Border, White on Green;  
[Waitsfield] ClearviewHwy-5-W; [Warren] ClearviewHwy-5-W;  
[EXIT 9] ClearviewHwy-5-W;

MM 57.955 NB  
MM 59.300 SB



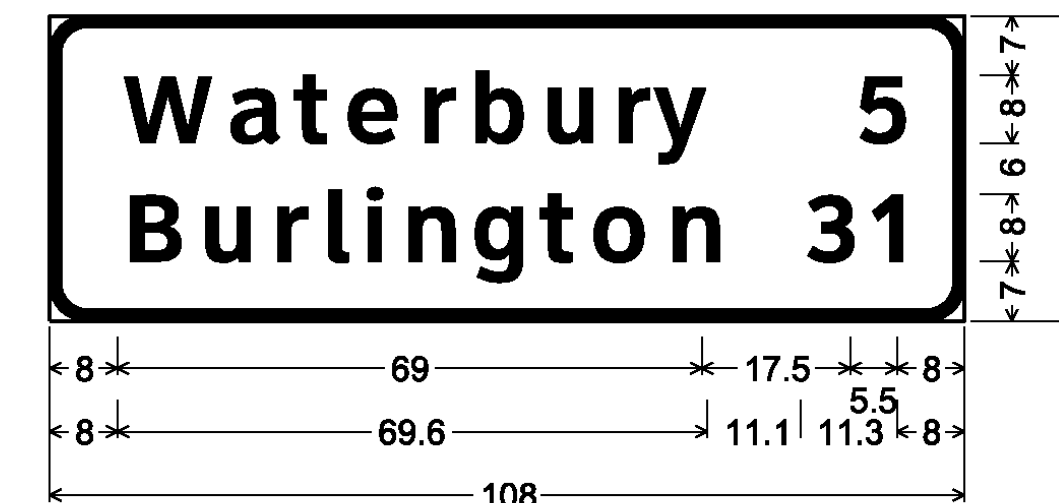
12.0" Radius, 2.0" Border, White on Green;  
[TO] ClearviewHwy-5-W; VT100B; [Middlesex] ClearviewHwy-5-W;  
[Moretown] ClearviewHwy-5-W; [1/2 MILE] ClearviewHwy-5-W;

MM 58.455 NB  
MM 59.000 SB



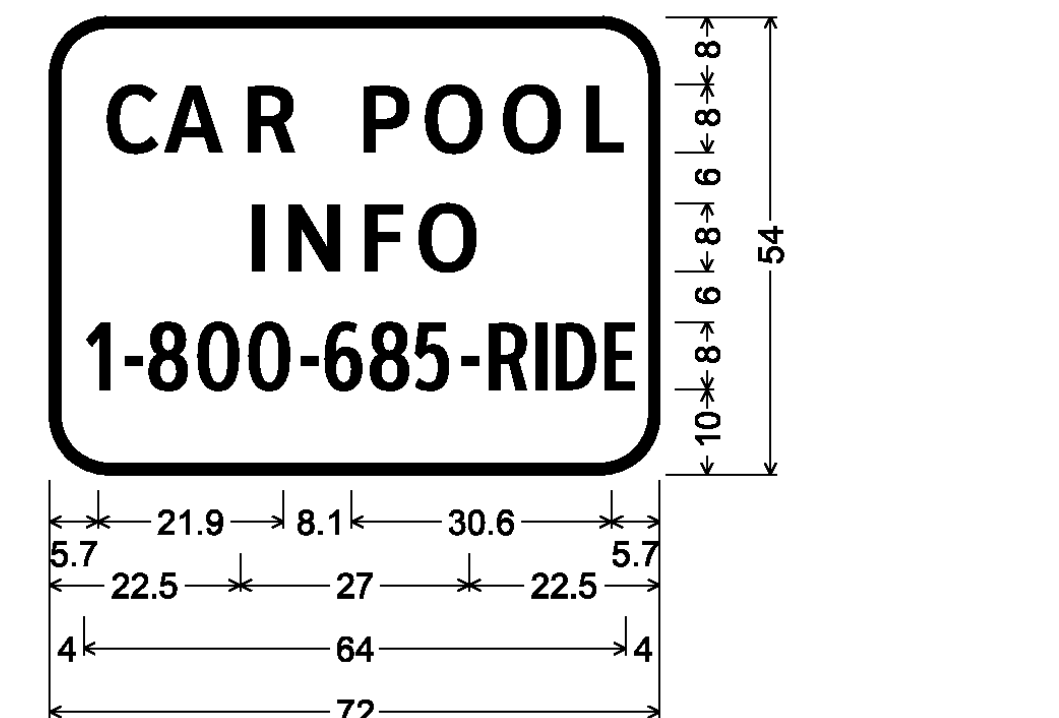
12.0" Radius, 2.0" Border, White on Green;  
[TO] ClearviewHwy-5-W; VT100B; [Middlesex] ClearviewHwy-5-W;  
[Moretown] ClearviewHwy-5-W; Arrow 160 - 35.0° 45°;

MM 59.550 NB



4.5" Radius, 1.3" Border, White on Green;  
[Waterbury] ClearviewHwy-5-W;  
[Burlington] ClearviewHwy-5-W;  
[5] ClearviewHwy-5-W; [31] ClearviewHwy-5-W;

MM 58.130 NB



7.0" Radius, 1.3" Border, White on Blue;  
[CAR POOL] ClearviewHwy-4-W;  
[INFO] ClearviewHwy-4-W;  
[1-800-685-RIDE] ClearviewHwy-2-W specified length;

**SIGN DETAIL SHEET 7**

PROJECT NAME: ROYALTON-MIDDLESEX

PROJECT NUMBER: IMG SIGN(19)

FILE NAME: z09a020signde+.dgn

PLOT DATE: 8/12/2009

PROJECT LEADER: CRB

DRAWN BY: JBZ

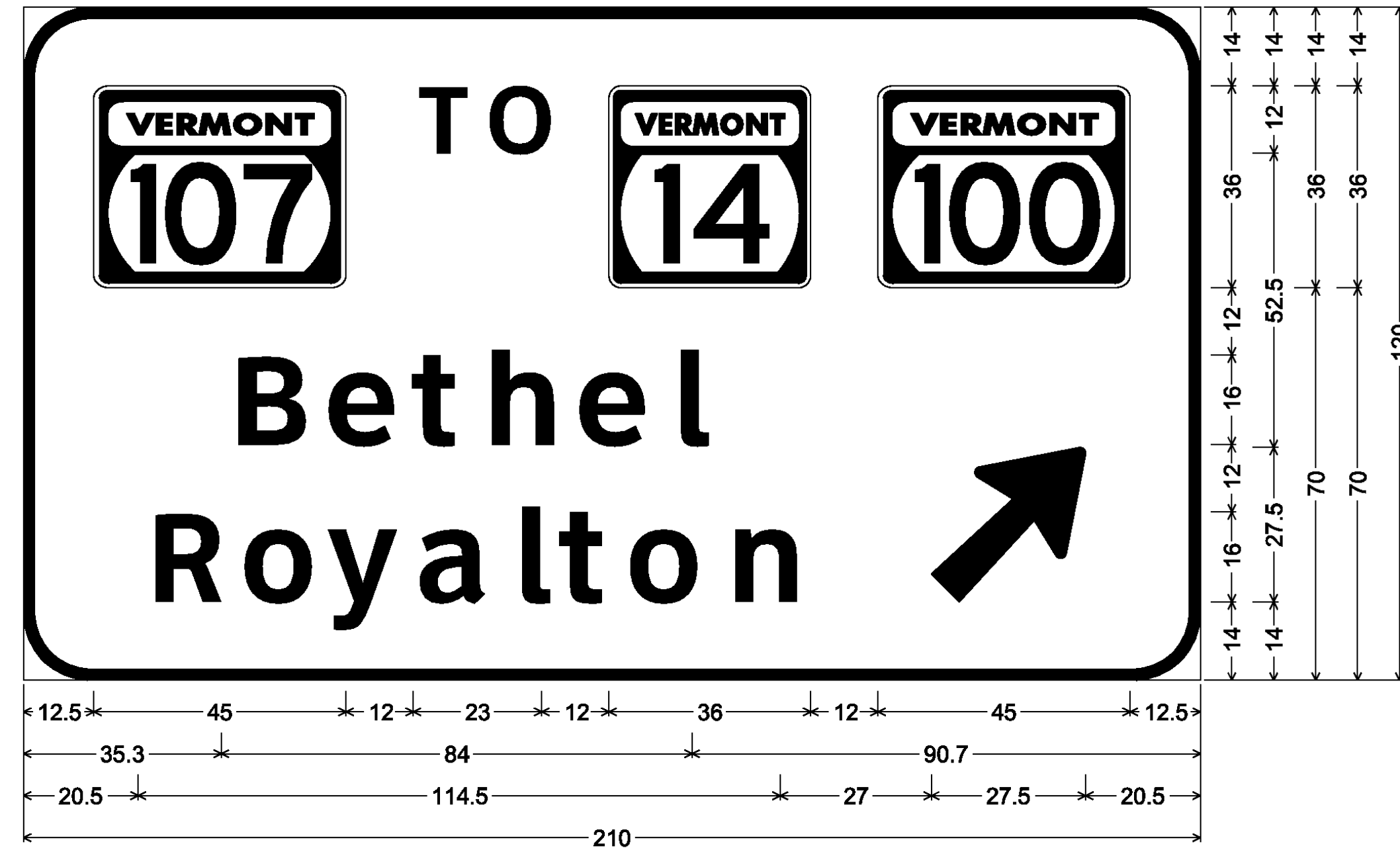
DESIGNED BY: JBZ

CHECKED BY: BDB

CLD REF. NO.: 09-0106

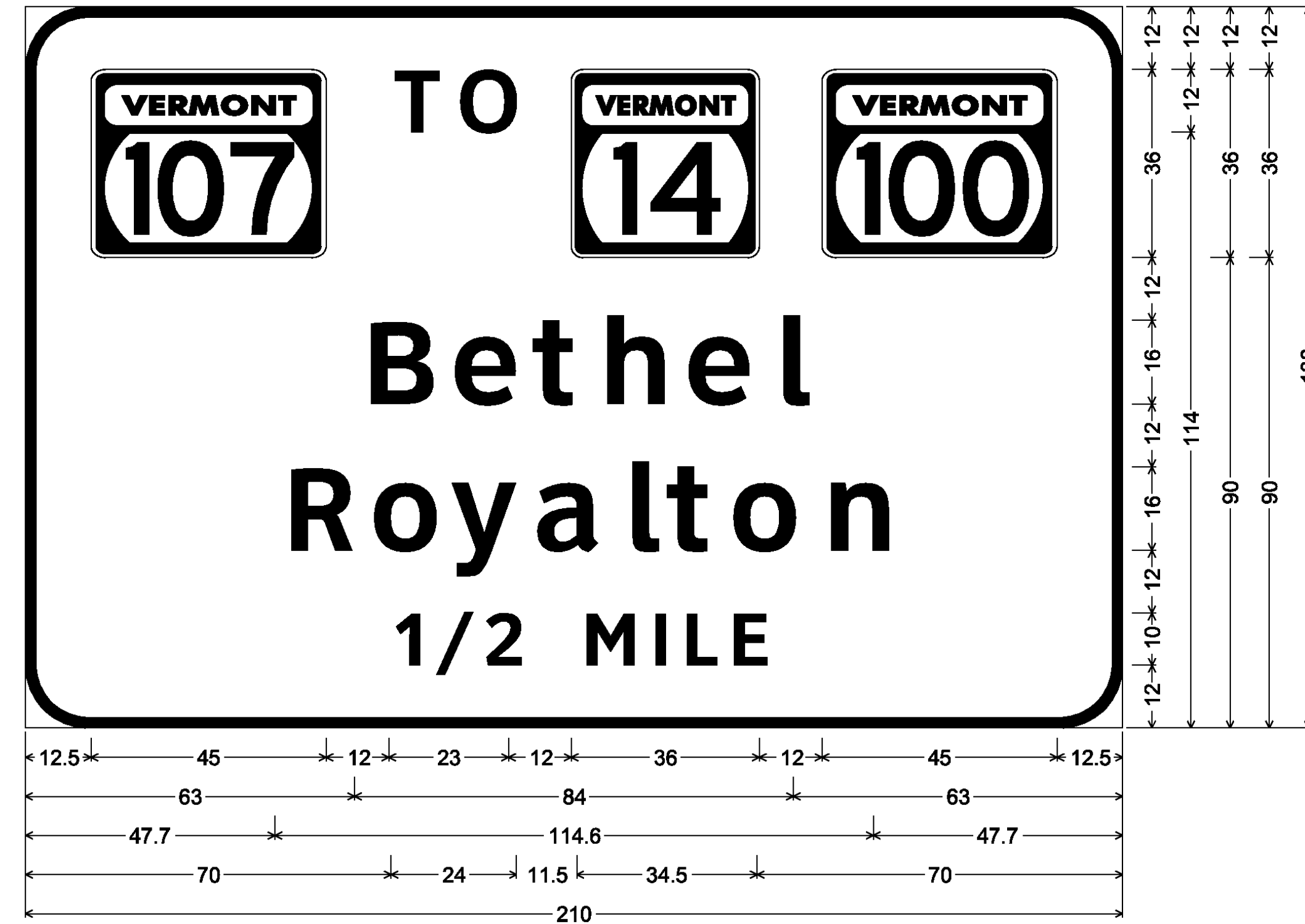
SHEET 138 OF 163

MM 22.640 SB



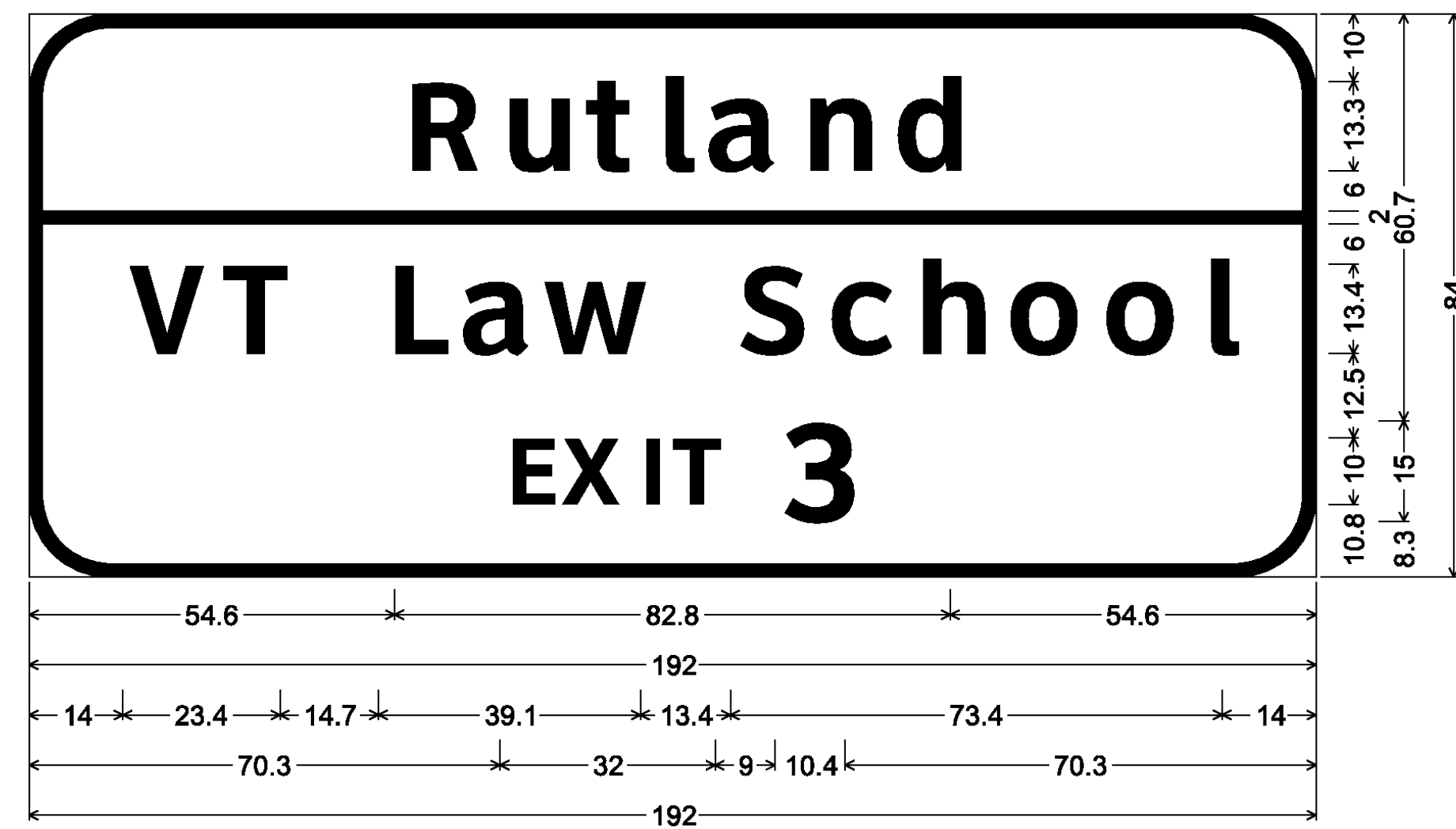
12.0" Radius, 2.0" Border, White on Green;  
 VT107; [TO] ClearviewHwy-5-W; 14; VT100; [Bethel ] ClearviewHwy-5-W;  
 [Royalton] ClearviewHwy-5-W; Arrow 160 - 35.0" 45°;

MM 22.949 SB



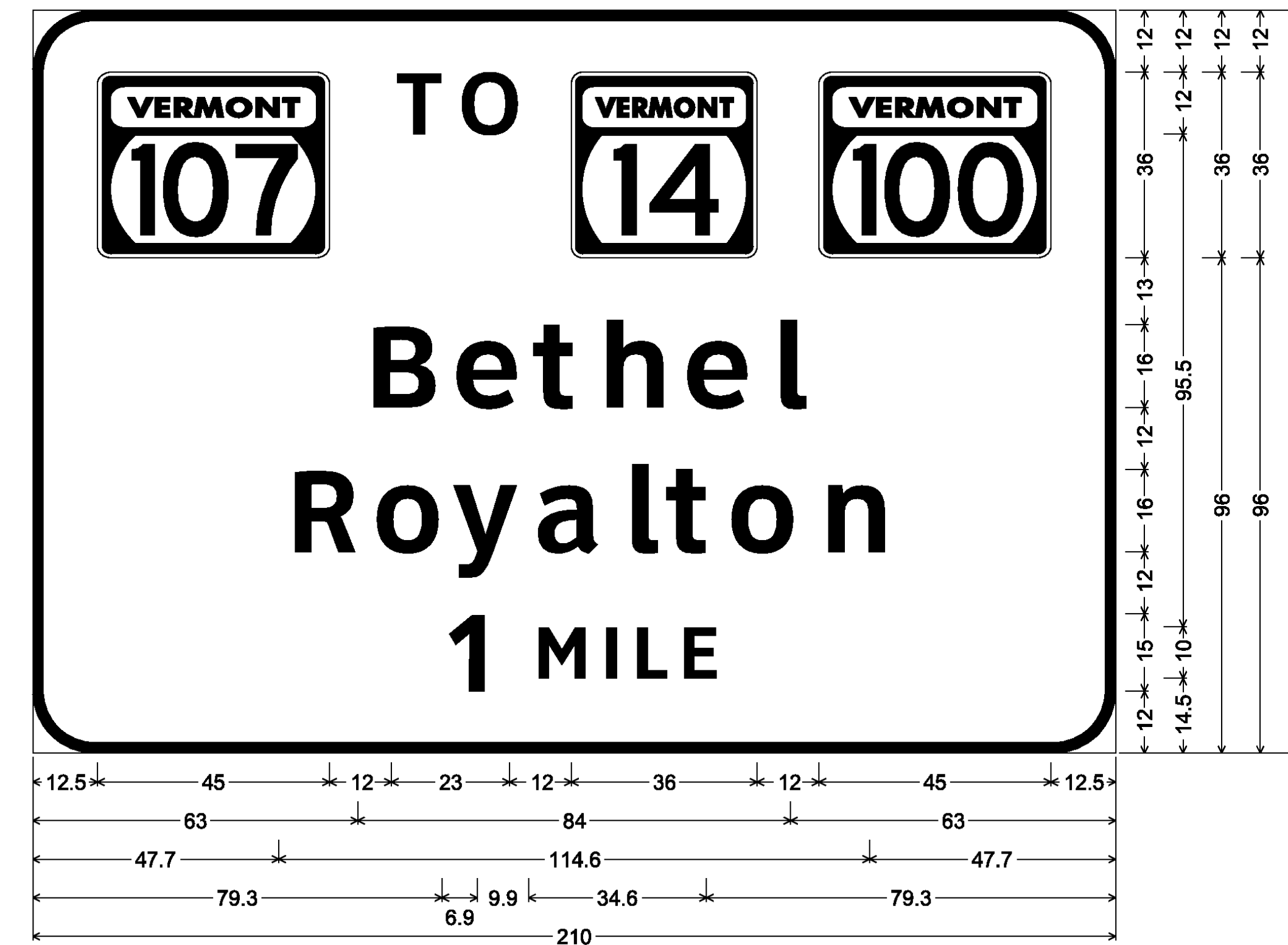
12.0" Radius, 2.0" Border, White on Green;  
 VT107; [TO] ClearviewHwy-5-W; 14; VT100; [Bethel] ClearviewHwy-5-W; [Royalton] ClearviewHwy-5-W;  
 [1/2 MILE] ClearviewHwy-5-W;

MM 23.100 SB



12.0" Radius, 2.0" Border, White on Green;  
 [Rutland] ClearviewHwy-5-W; [VT Law School] ClearviewHwy-5-W;  
 [EXIT 3] ClearviewHwy-5-W;

MM 23.300 SB



12.0" Radius, 2.0" Border, White on Green;  
 VT107; [TO] ClearviewHwy-5-W; 14; VT100; [Bethel] ClearviewHwy-5-W; [Royalton] ClearviewHwy-5-W;  
 [1 MILE] ClearviewHwy-5-W;

**SIGN DETAIL SHEET 8**

PROJECT NAME: ROYALTON-MIDDLESEX

PROJECT NUMBER: IMG SIGN(19)

FILE NAME: z09a020signde.t.dgn

PLOT DATE: 8/12/2009

PROJECT LEADER: CRB

DRAWN BY: JBZ

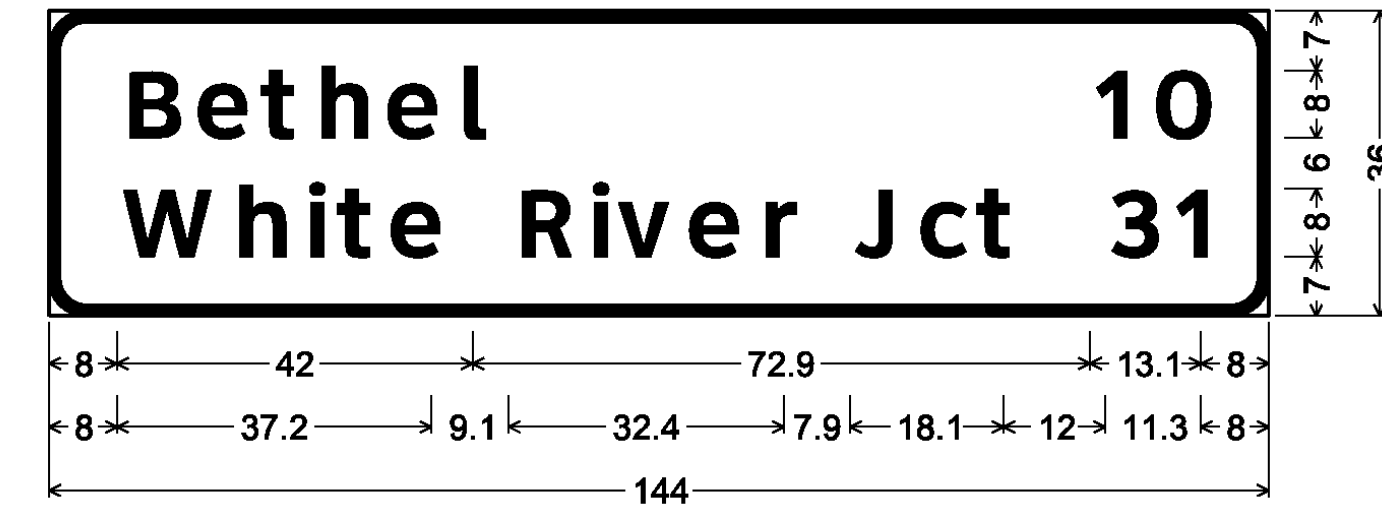
DESIGNED BY: JBZ

CHECKED BY: BDB

CLD REF. NO.: 09-0106

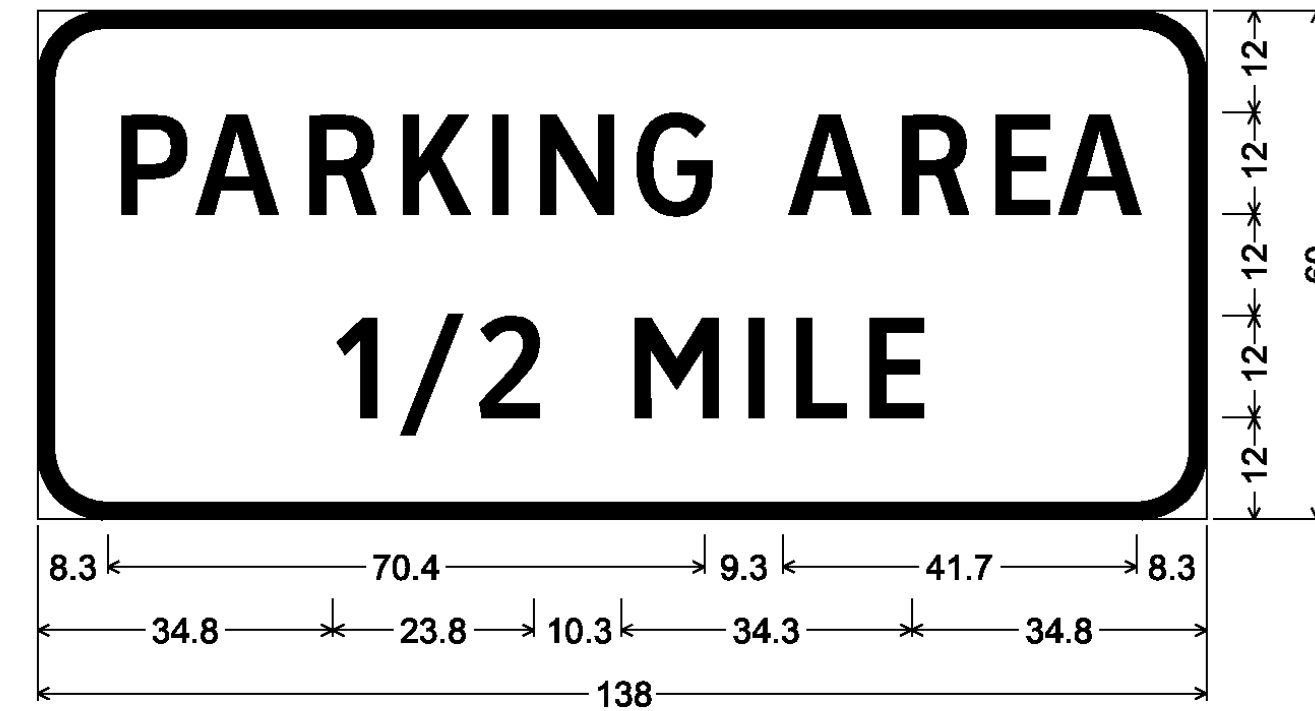
SHEET 139 OF 163

MM 29.900 SB



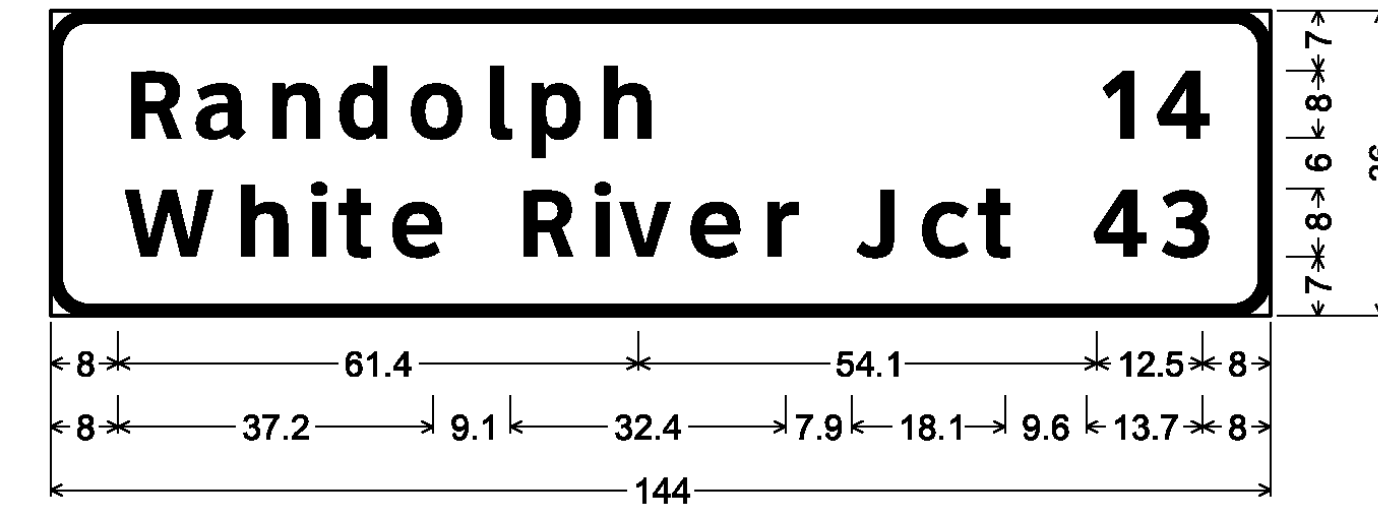
4.5" Radius, 1.3" Border, White on Green;  
 [Bethel] ClearviewHwy-5-W; [White River Jct] ClearviewHwy-5-W;  
 [10] ClearviewHwy-5-W; [31] ClearviewHwy-5-W;

MM 30.200 SB



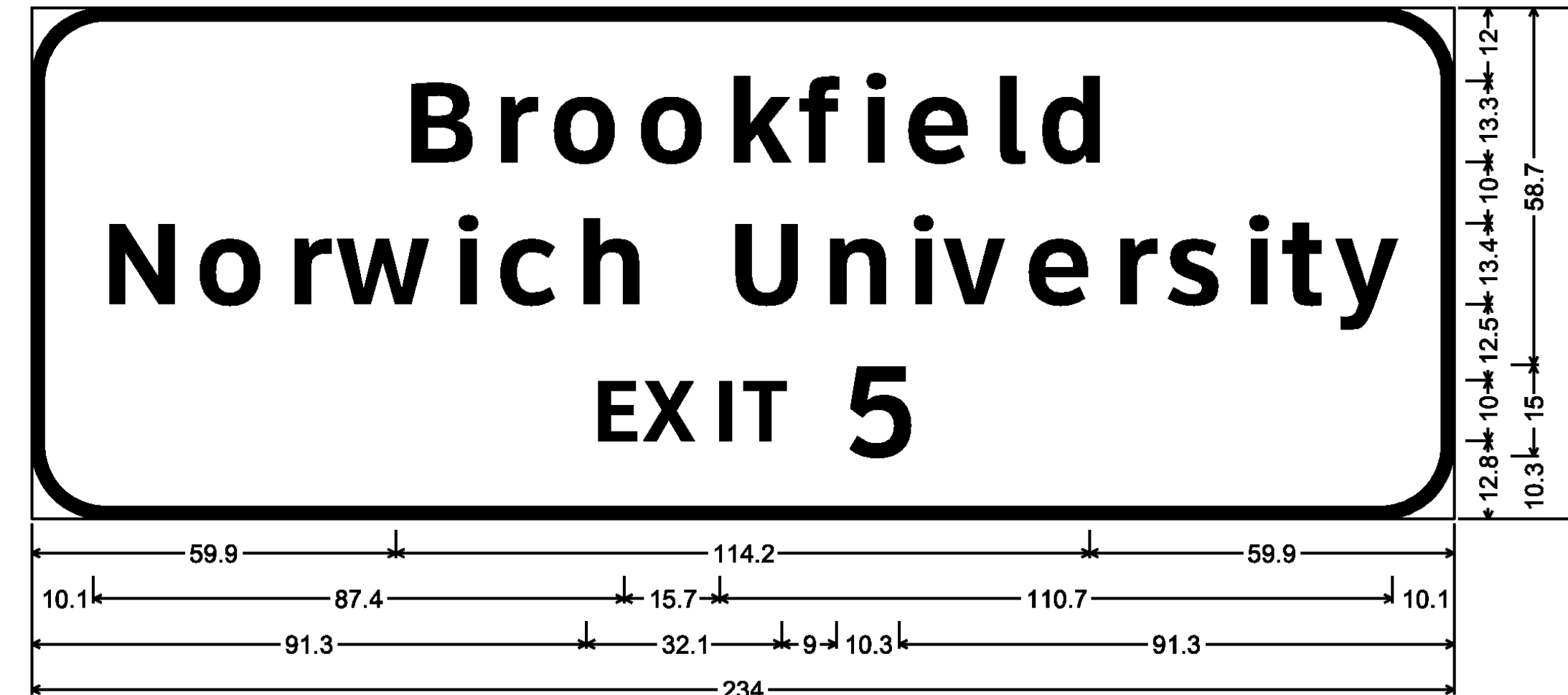
8.0" Radius, 2.0" Border, White on Blue;  
 [PARKING AREA] ClearviewHwy-3-W;  
 [1/2 MILE] ClearviewHwy-3-W;

MM 41.840 SB



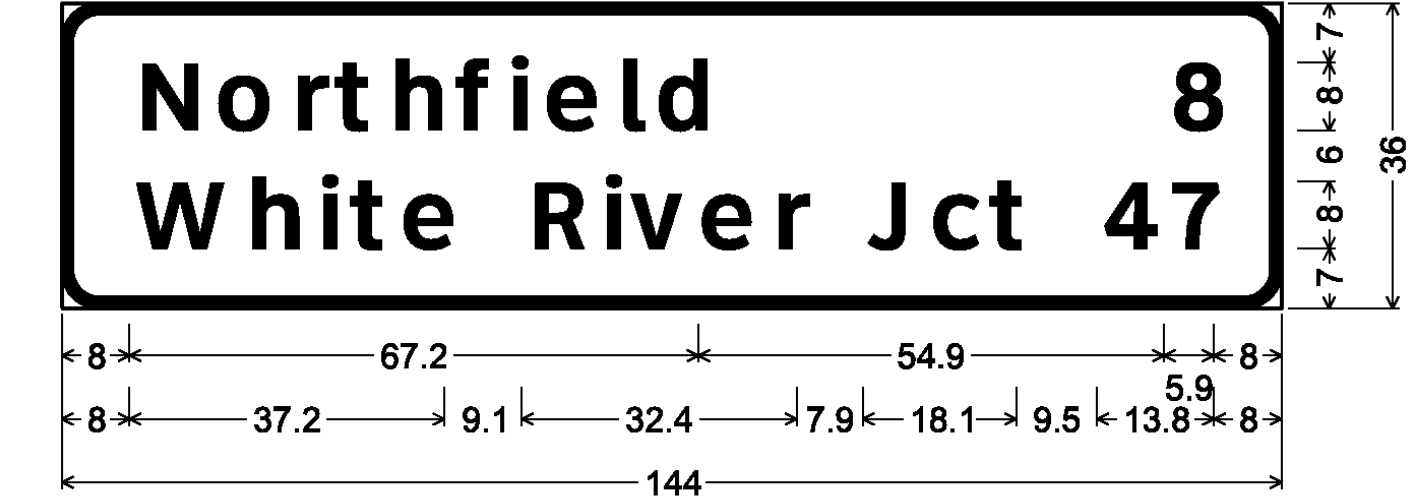
4.5" Radius, 1.3" Border, White on Green;  
 [Randolph] ClearviewHwy-5-W; [White River Jct] ClearviewHwy-5-W;  
 [14] ClearviewHwy-5-W; [43] ClearviewHwy-5-W;

MM 43.700 SB



12.0" Radius, 2.0" Border, White on Green;  
 [Brookfield] ClearviewHwy-5-W; [Norwich University] ClearviewHwy-5-W; [EXIT 5] ClearviewHwy-5-W;

MM 45.945 SB



4.5" Radius, 1.3" Border, White on Green;  
 [Northfield] ClearviewHwy-5-W; [White River Jct] ClearviewHwy-5-W;  
 [8] ClearviewHwy-5-W; [47] ClearviewHwy-5-W;

**SIGN DETAIL SHEET 9**

PROJECT NAME: ROYALTON-MIDDLESEX

PROJECT NUMBER: IMG SIGN(19)

FILE NAME: z09a020signdet.dgn

PLOT DATE: 8/12/2009

PROJECT LEADER: CRB

DRAWN BY: JBZ

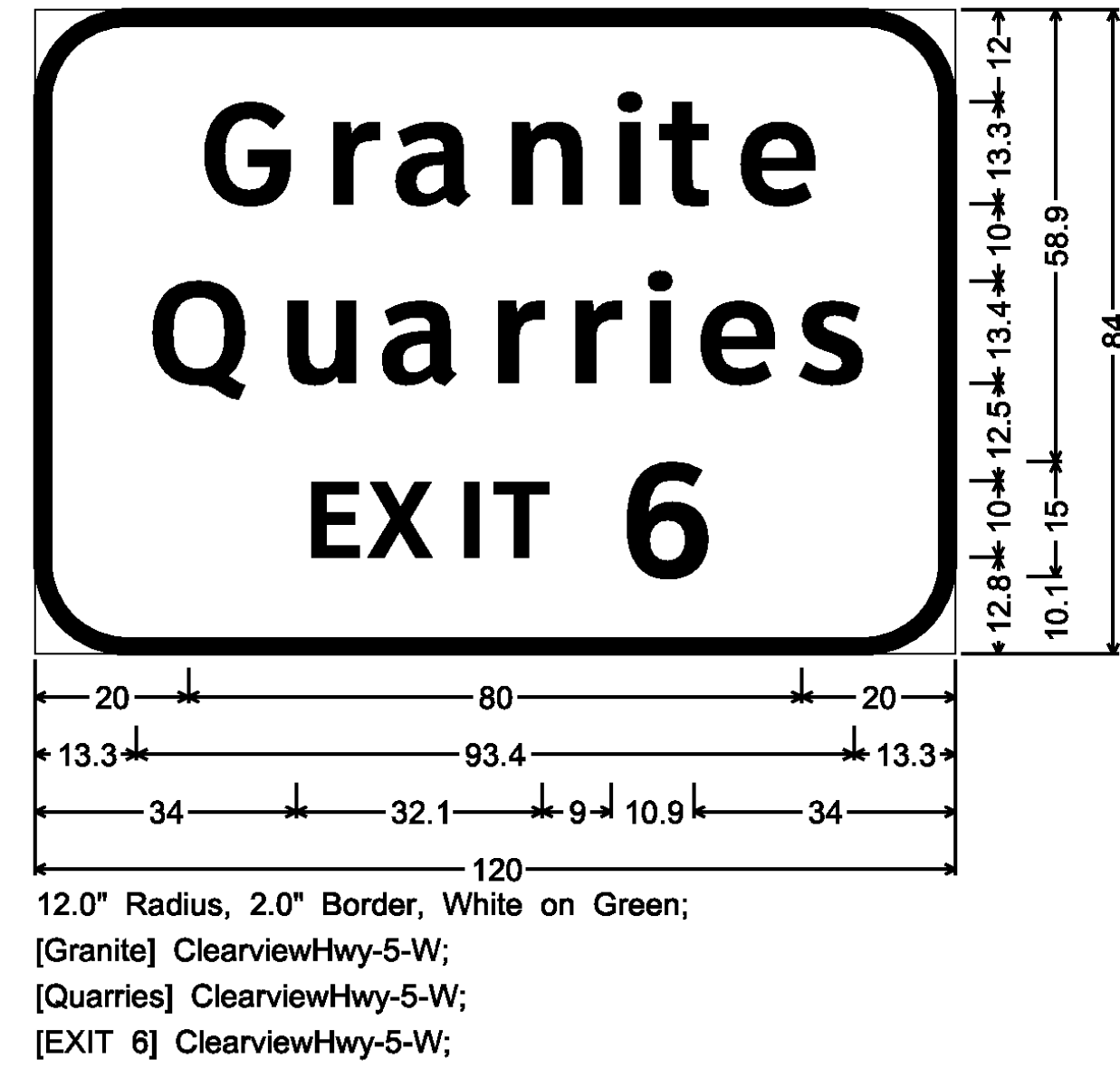
DESIGNED BY: JBZ

CHECKED BY: BDB

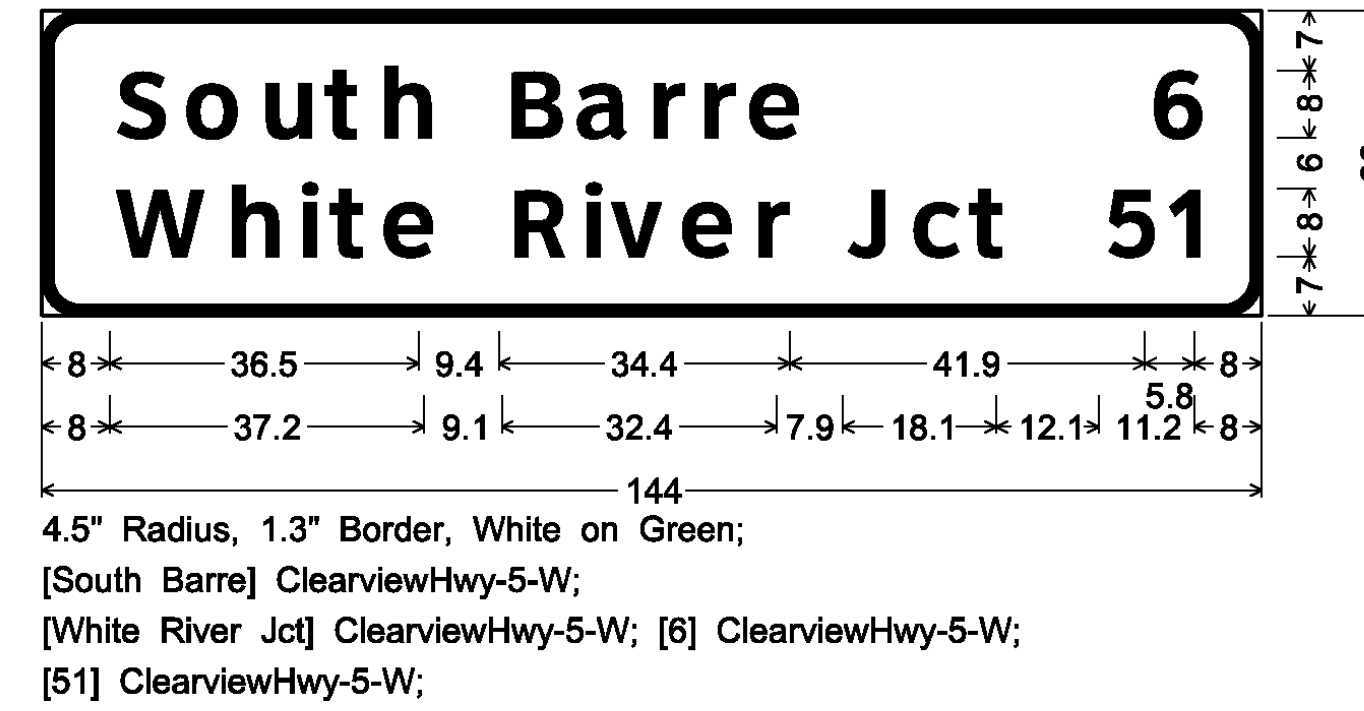
CLD REF. NO.: 09-0106

SHEET 140 OF 163

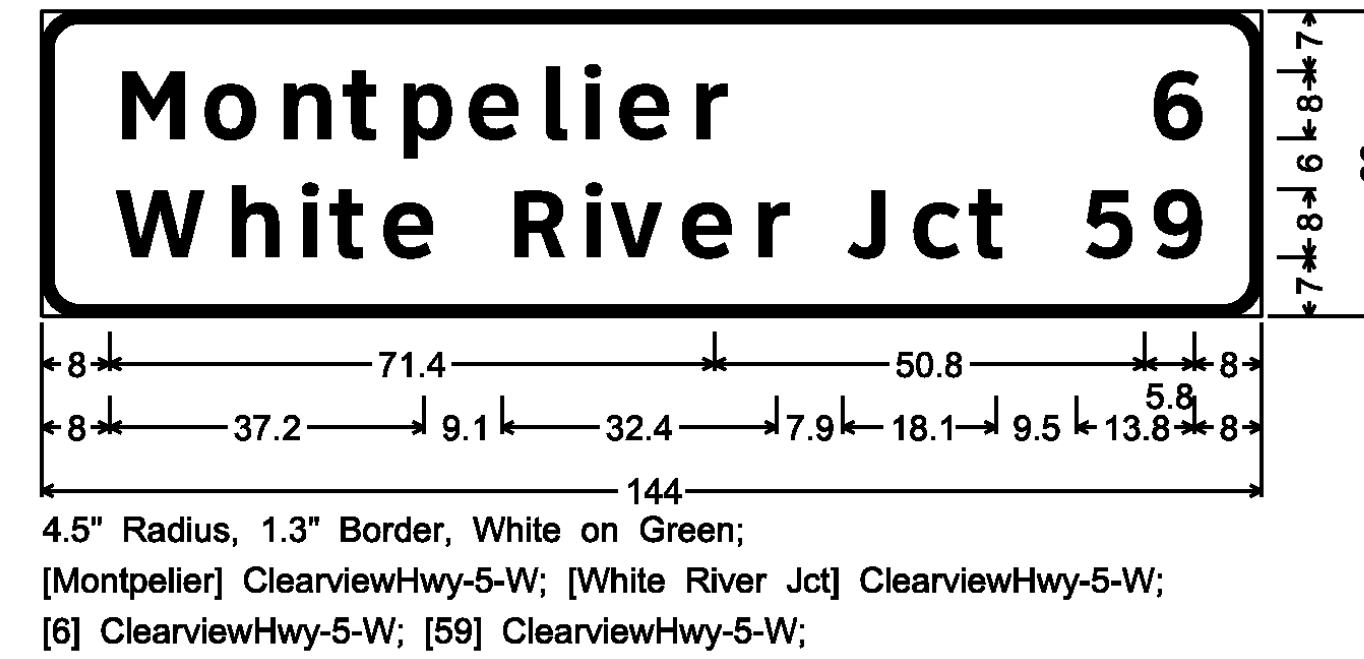
MM 47.660 SB



MM 49.470 SB



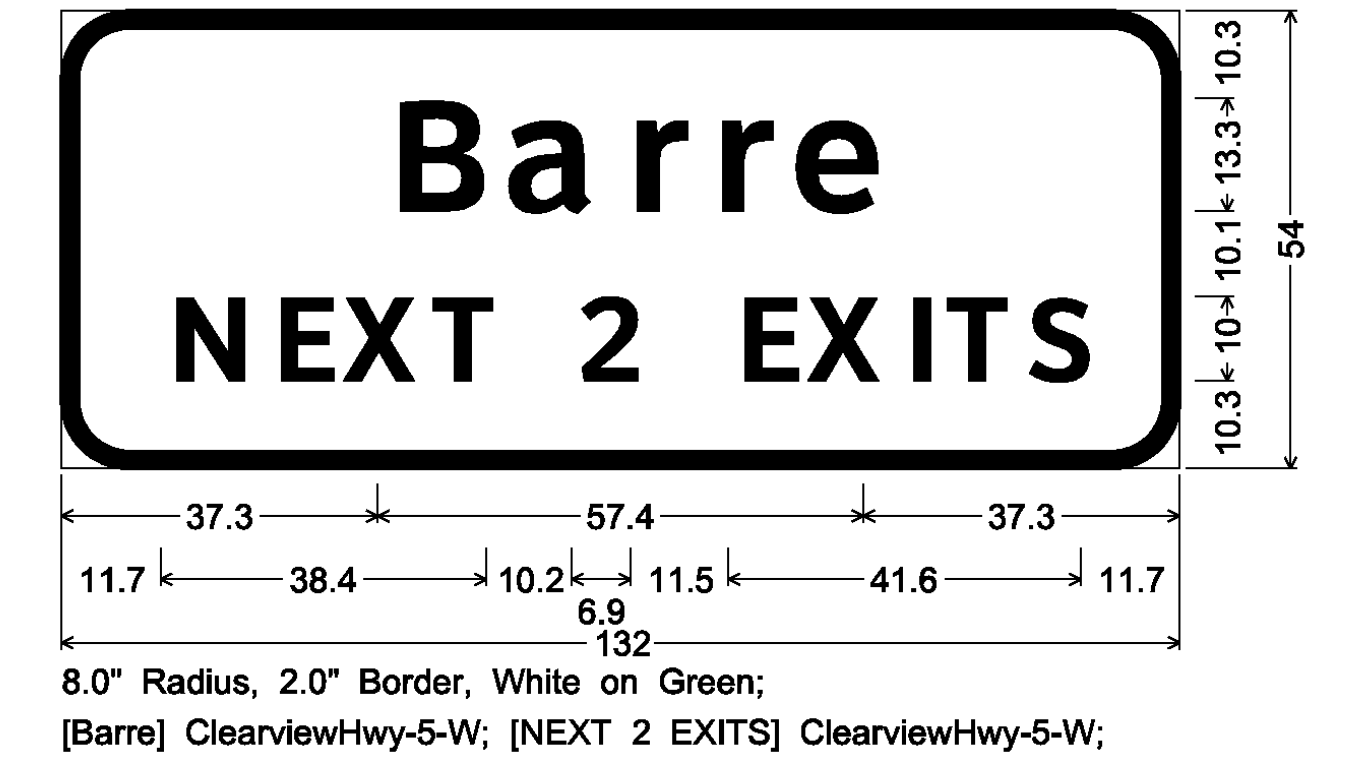
MM 57.850 SB



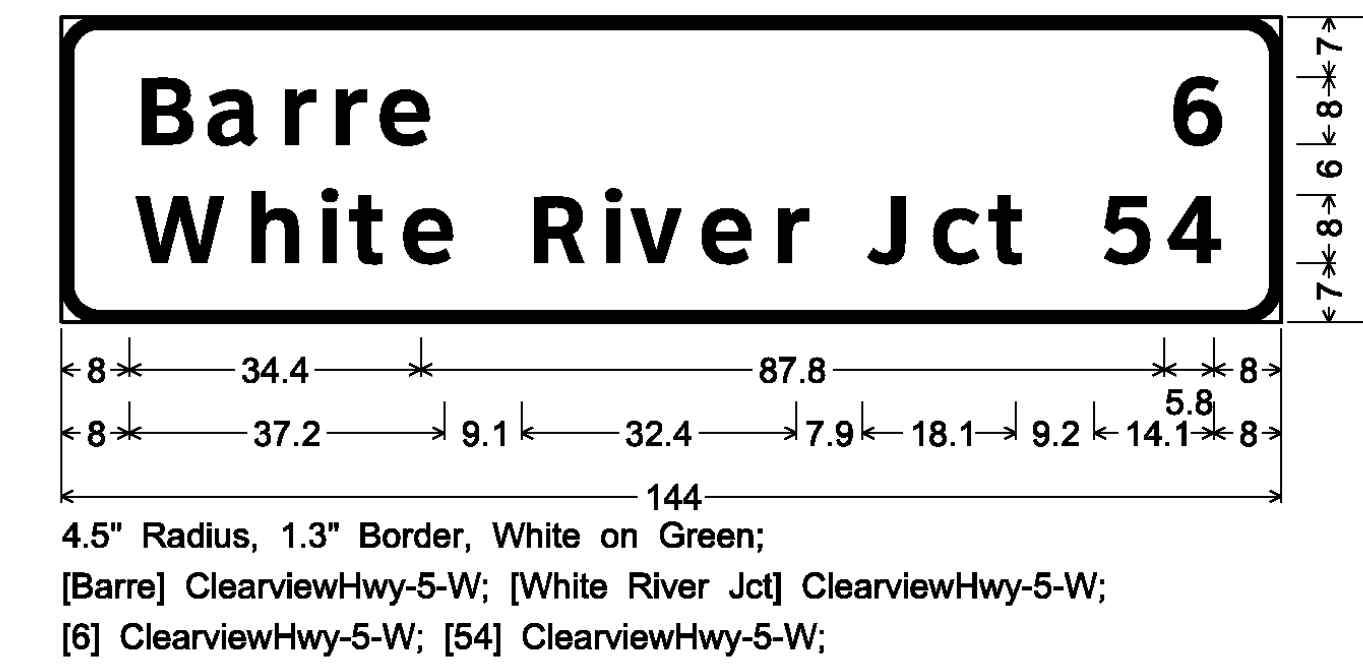
MM 50.930 SB



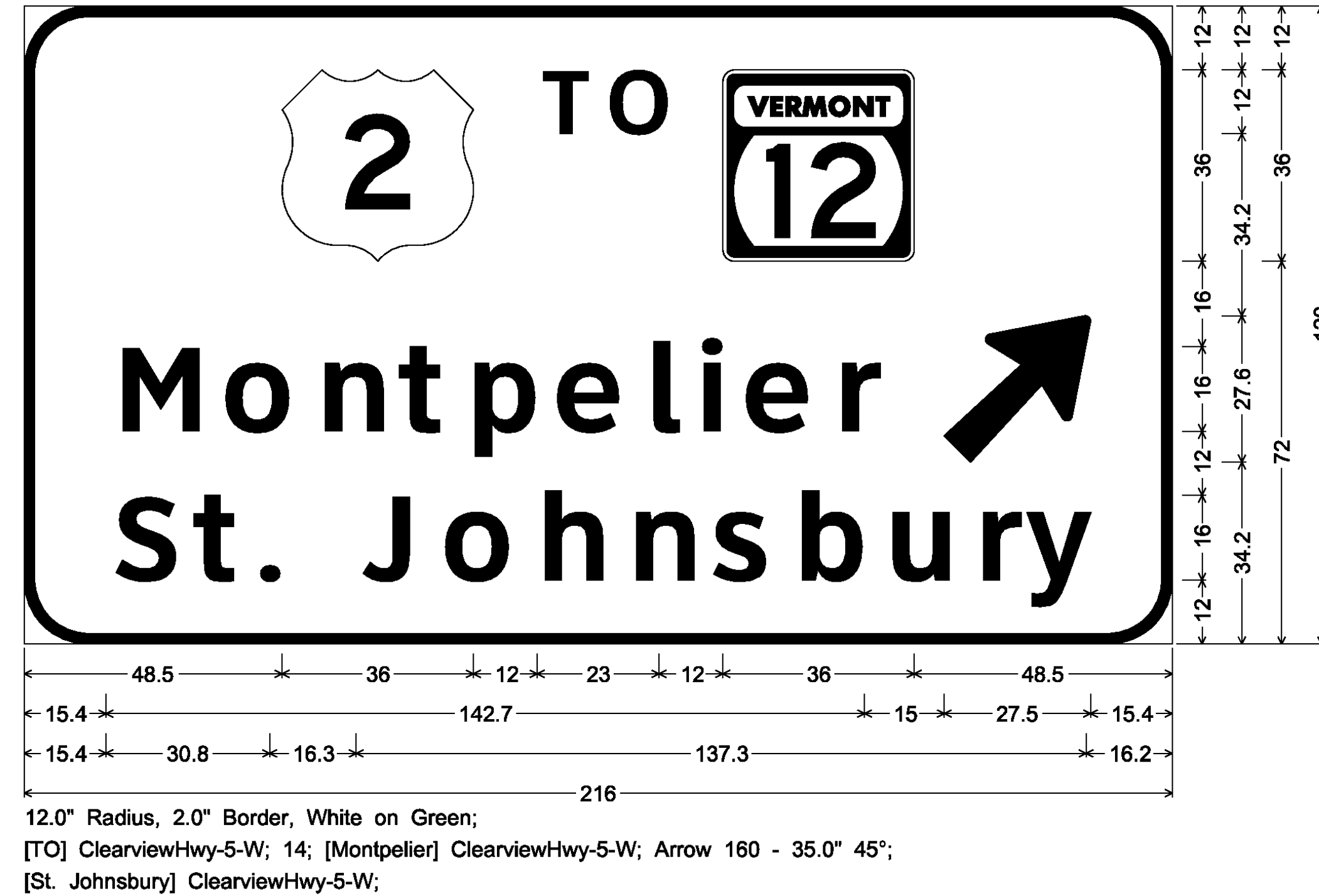
MM 52.220 SB



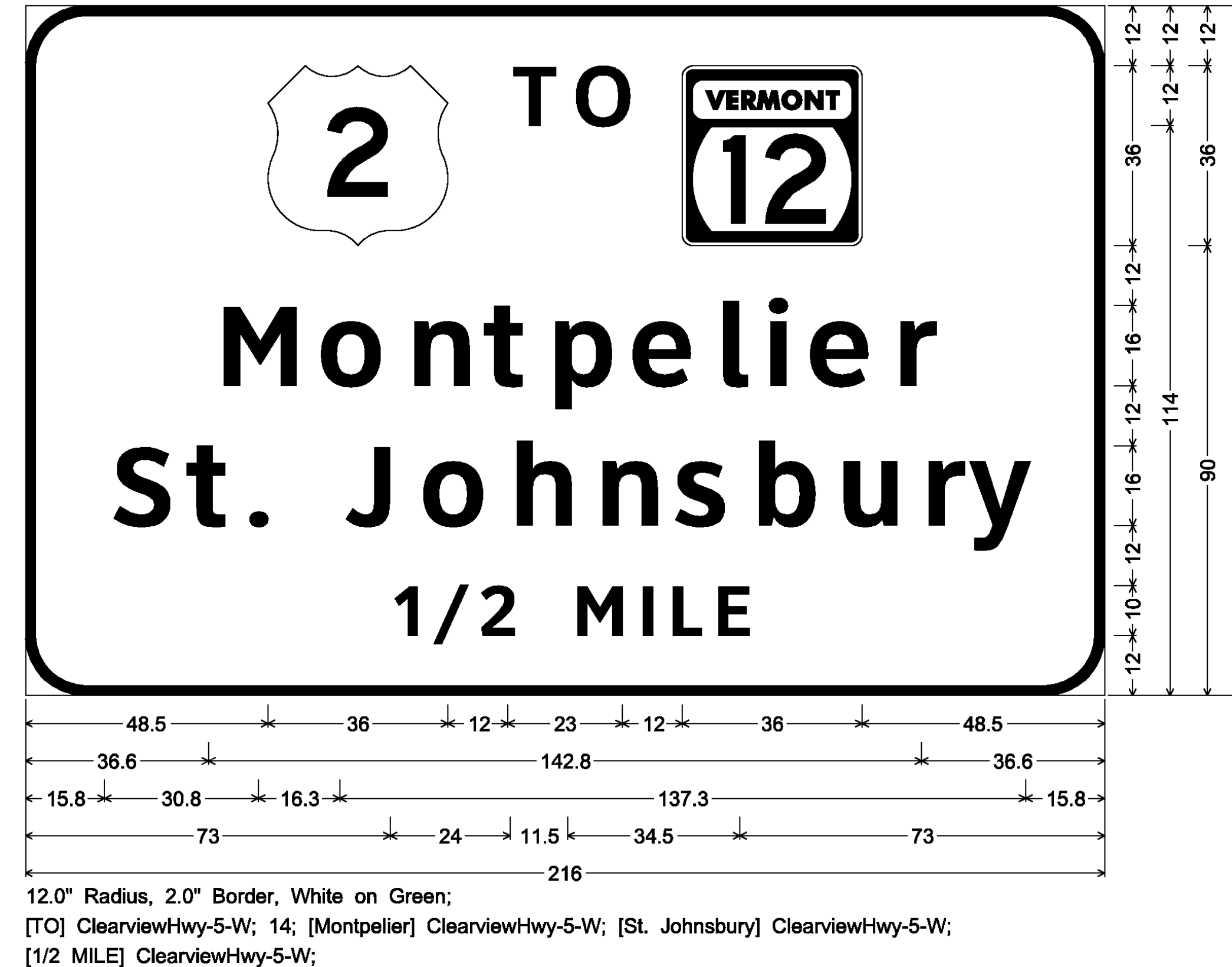
MM 52.355 SB



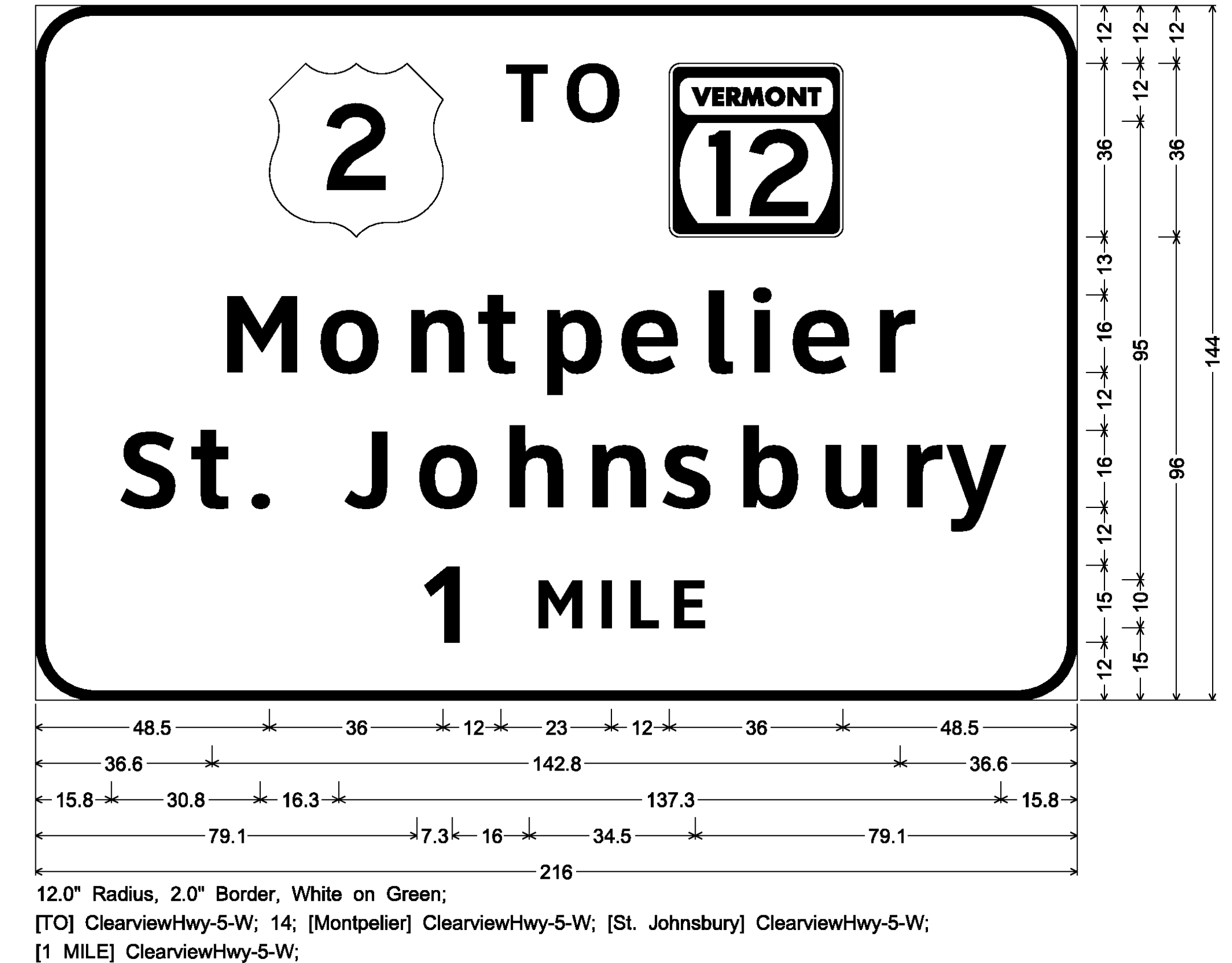
MM 53.350 SB



MM 53.850 SB



MM 54.150 SB



**SIGN DETAIL SHEET 10**

PROJECT NAME: ROYALTON-MIDDLESEX

PROJECT NUMBER: IMG SIGN(19)

FILE NAME: z09a020signdet.dgn

PLOT DATE: 8/12/2009

PROJECT LEADER: CRB

DRAWN BY: JBJ

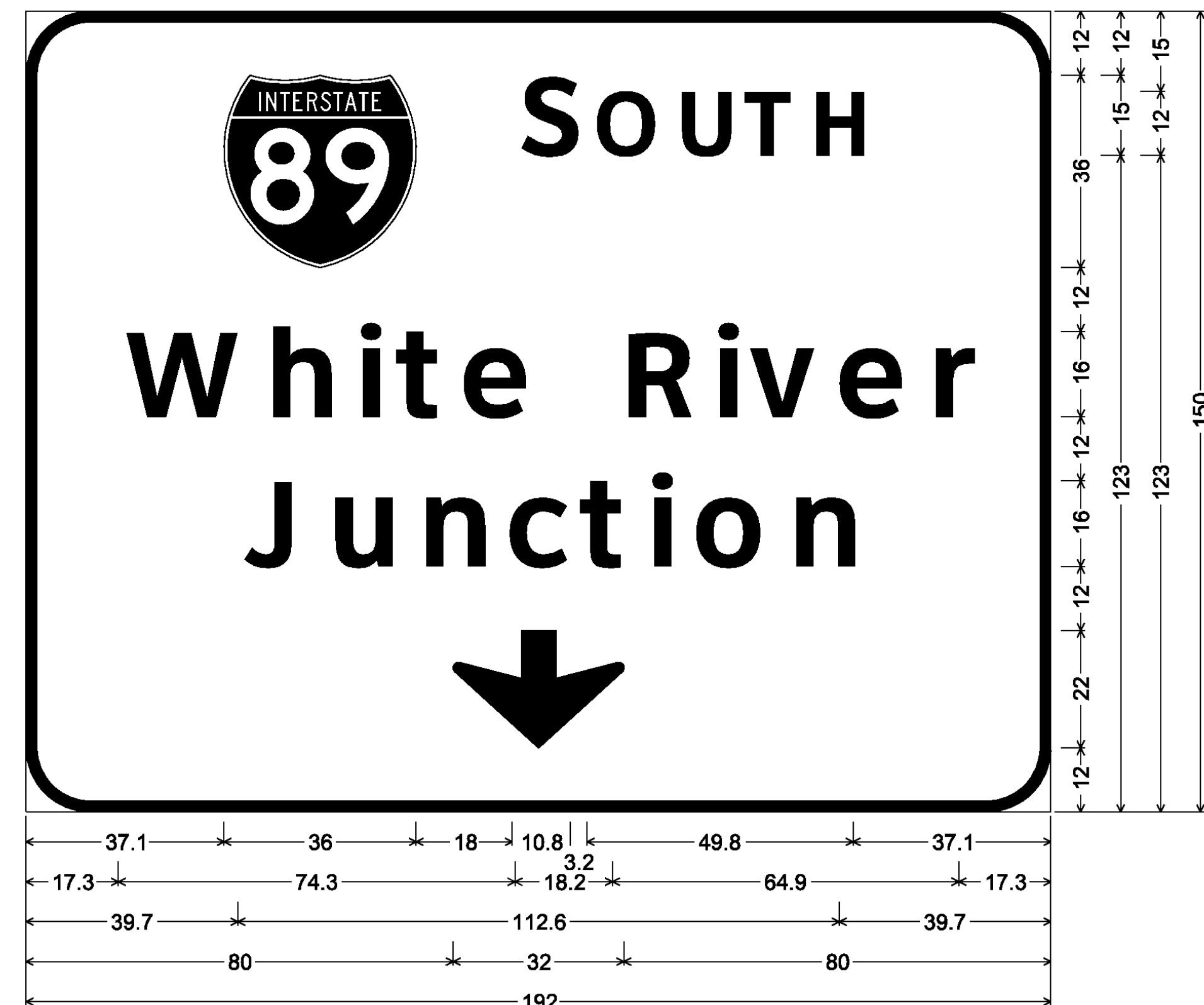
DESIGNED BY: JBJ

CHECKED BY: BDB

CLD REF. NO.: 09-0106

SHEET 141 OF 163

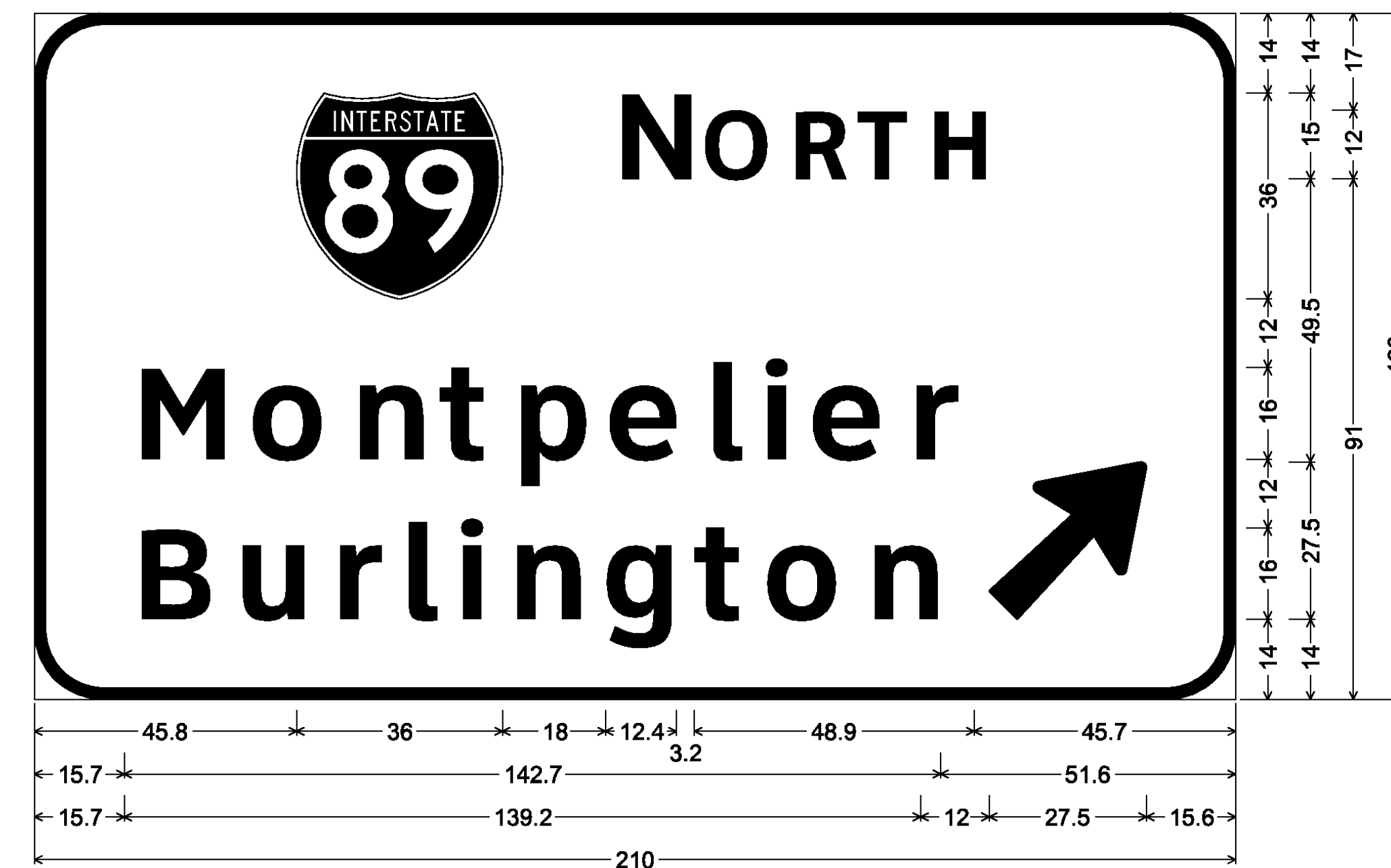
INT. 6 VT 63  
 0.138 LT OVERHEAD  
 INT. 7 VT 62  
 0.115 LT OVERHEAD



12.0" Radius, 2.0" Border, White on Green;  
 [S OUTH] ClearviewHwy-5-W; [White River] ClearviewHwy-5-W; [Junction] ClearviewHwy-5-W;  
 Down Arrow 22.0" 270°;

WHITE ASTM TYPE IX RETROREFLECTIVE LEGEND AND BORDER  
 ON GREEN ASTM TYPE IX RETROREFLECTIVE BACKGROUND

INT. 6 VT 63  
 0.138 LT OVERHEAD  
 INT. 7 VT 62  
 0.115 LT OVERHEAD



12.0" Radius, 2.0" Border, White on Green;  
 [N ORTH] ClearviewHwy-5-W; [Montpelier] ClearviewHwy-5-W; [Burlington] ClearviewHwy-5-W;  
 Arrow 160 - 35.0" 45°;

WHITE ASTM TYPE IX RETROREFLECTIVE LEGEND AND BORDER  
 ON GREEN ASTM TYPE IX RETROREFLECTIVE BACKGROUND

**SIGN DETAIL  
 SHEET 11**

PROJECT NAME: ROYALTON-MIDDLESEX

PROJECT NUMBER: IMG SIGN(19)

FILE NAME: z09a020signdet.dgn

PLOT DATE: 8/12/2009

PROJECT LEADER: CRB

DRAWN BY: JBZ

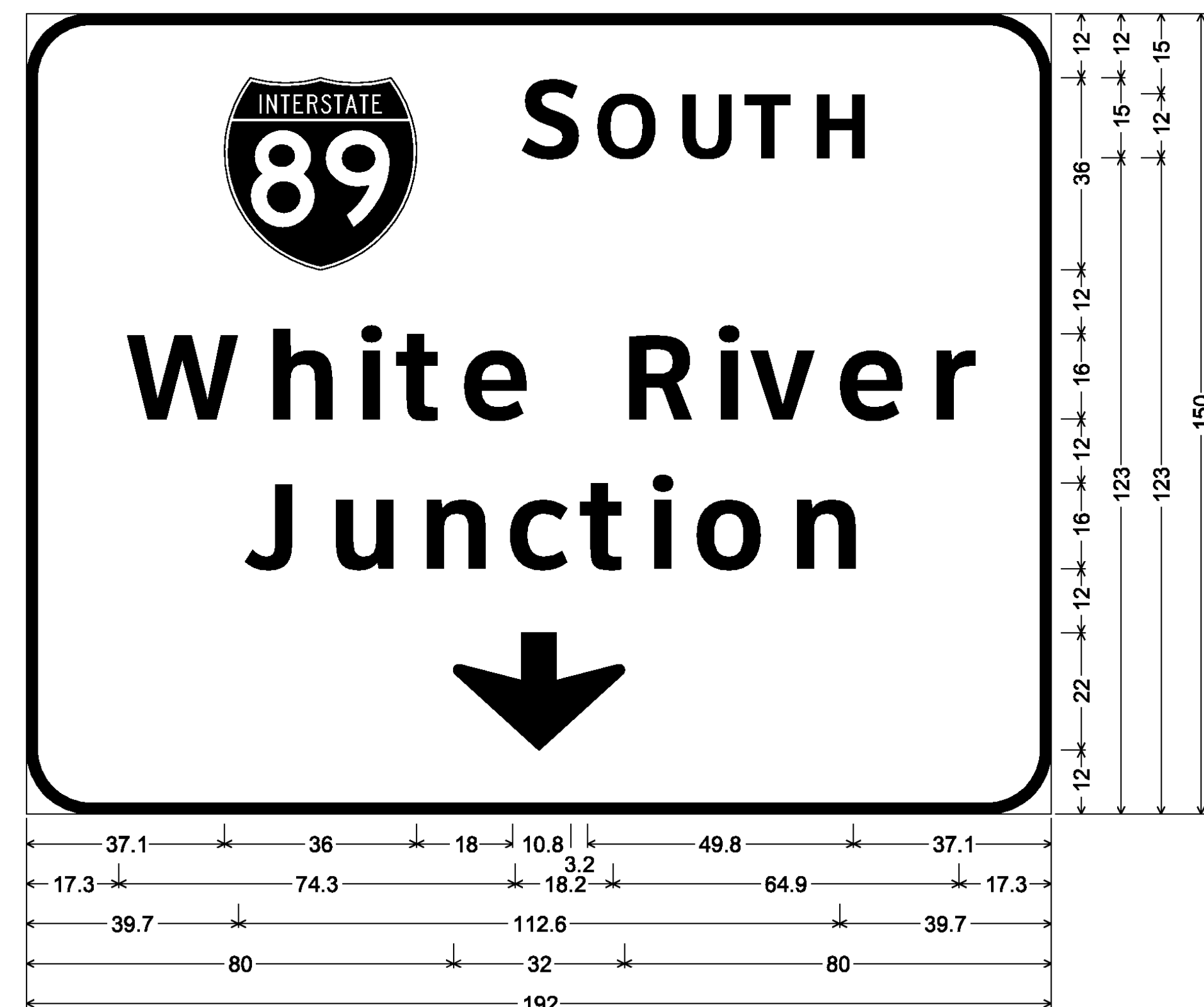
DESIGNED BY: JBZ

CHECKED BY: BDB

CLD REF. NO.: 09-0106

SHEET 142 OF 163

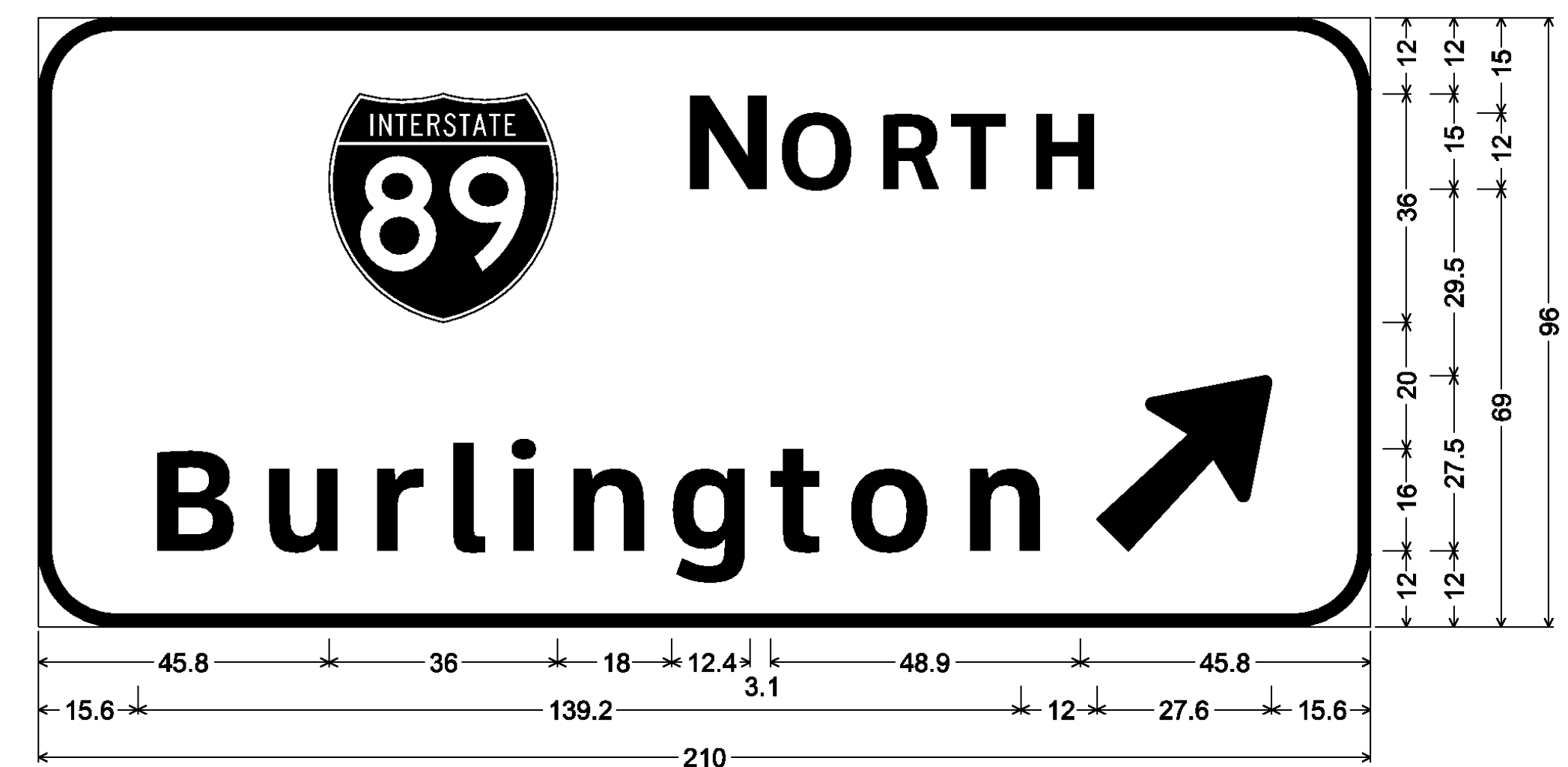
**INT. 8 MSH  
0.102 LT OVERHEAD**



12.0" Radius, 2.0" Border, White on Green;  
[S OUTH] ClearviewHwy-5-W; [White River] ClearviewHwy-5-W; [Junction] ClearviewHwy-5-W;  
Down Arrow 22.0° 270°;

WHITE ASTM TYPE IX RETROREFLECTIVE LEGEND AND BORDER  
ON GREEN ASTM TYPE IX RETROREFLECTIVE BACKGROUND

**INT. 8 MSH  
0.102 LT OVERHEAD**



12.0" Radius, 2.0" Border, White on Green;  
[N ORTH] ClearviewHwy-5-W; [Burlington] ClearviewHwy-5-W; Arrow 160 - 35.0° 45°;

WHITE ASTM TYPE IX RETROREFLECTIVE LEGEND AND BORDER  
ON GREEN ASTM TYPE IX RETROREFLECTIVE BACKGROUND

**SIGN DETAIL  
SHEET 12**

PROJECT NAME: ROYALTON-MIDDLESEX

PROJECT NUMBER: IMG SIGN(19)

FILE NAME: z09a020signdet.dgn

PLOT DATE: 8/12/2009

PROJECT LEADER: CRB

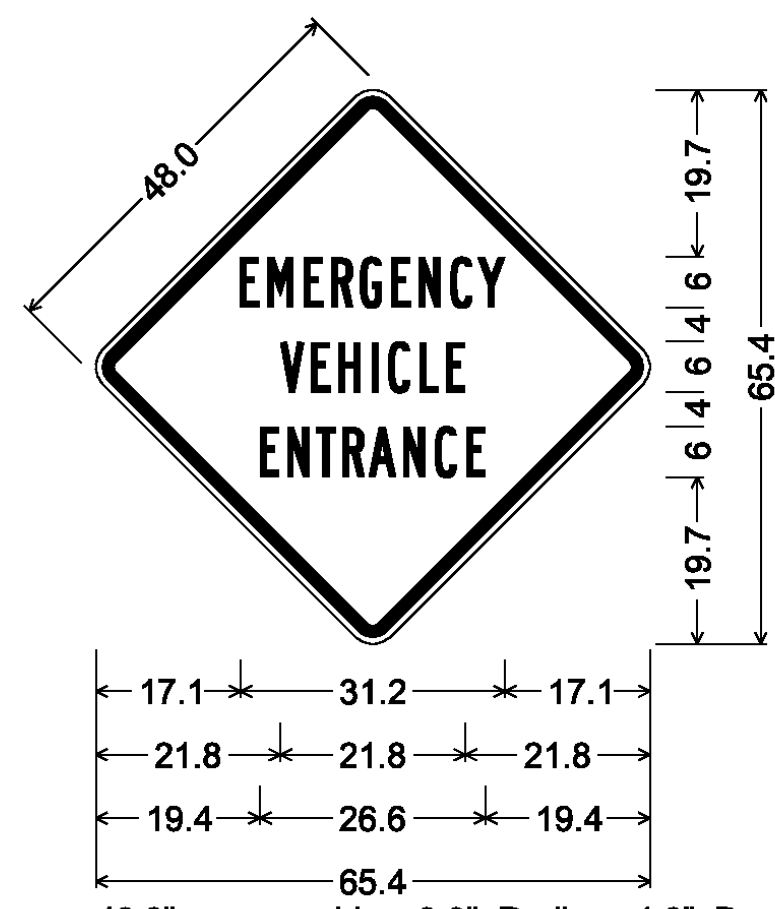
DRAWN BY: JBZ

DESIGNED BY: JBZ

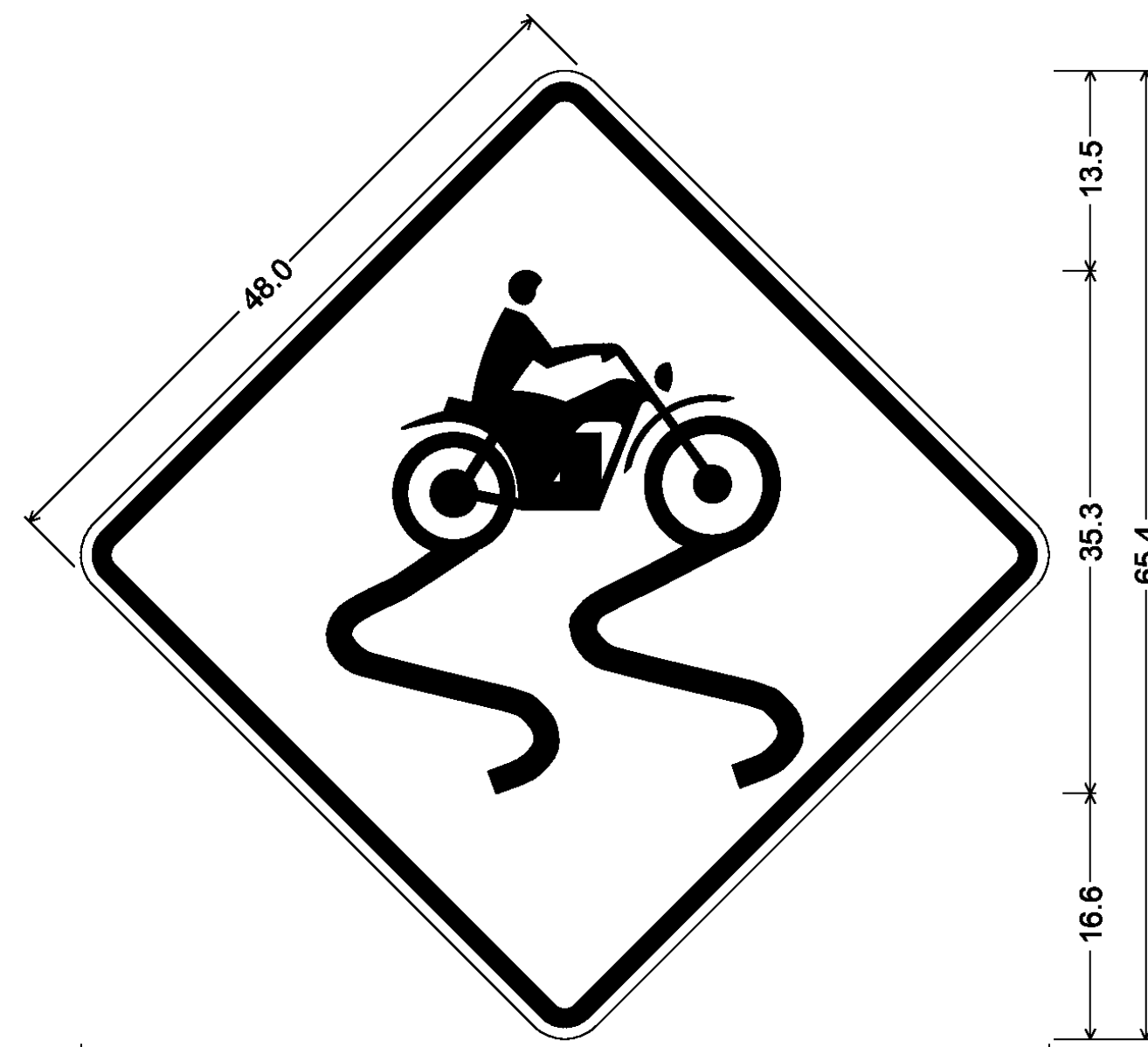
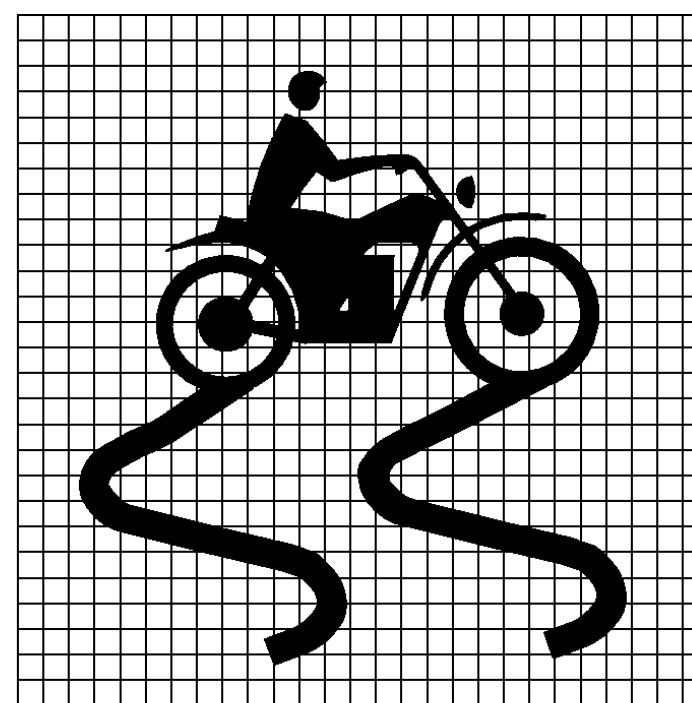
CHECKED BY: BDB

CLD REF. NO.: 09-0106

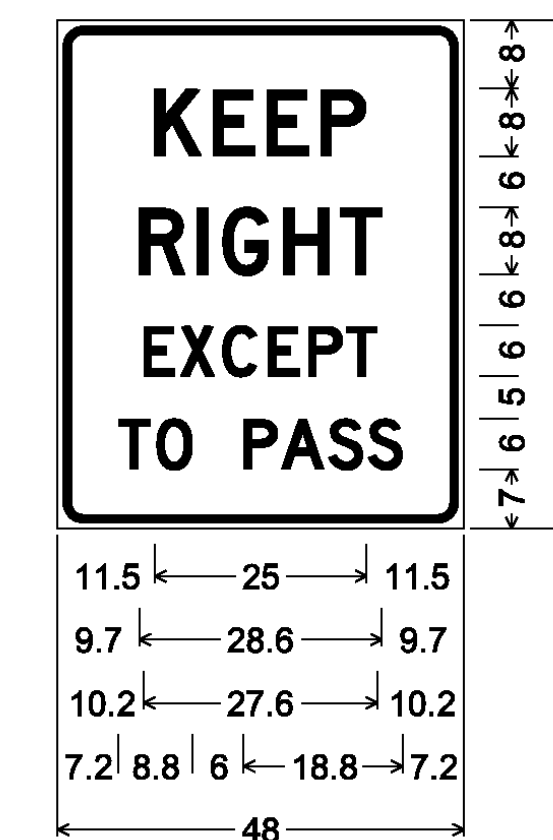
SHEET 143 OF 163



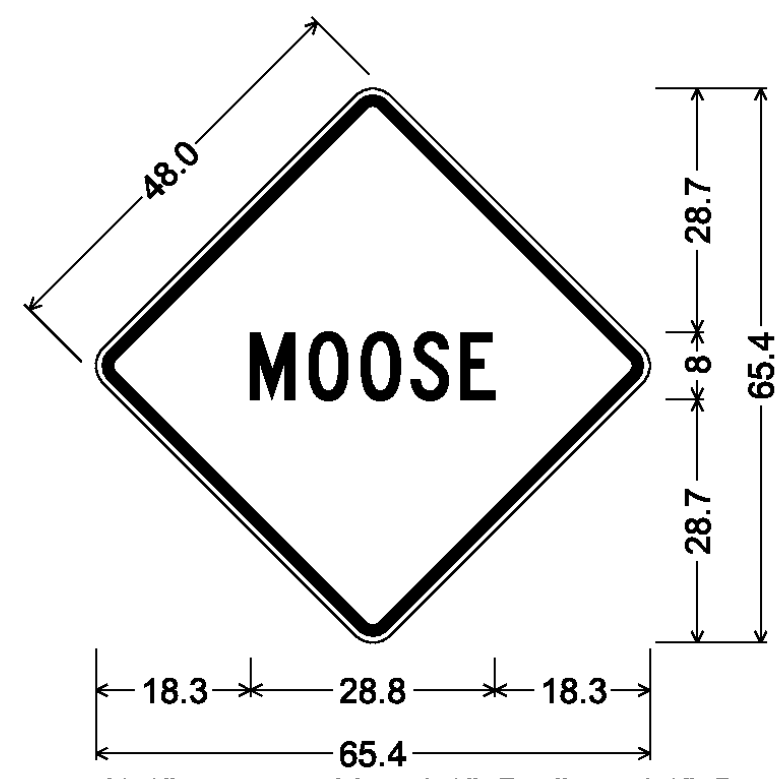
48.0" across sides 3.0" Radius, 1.3" Border, 0.8" Indent, Black on Yellow;  
 [EMERGENCY] B 2K;  
 [VEHICLE] B 2K;  
 [ENTRANCE] B 2K;



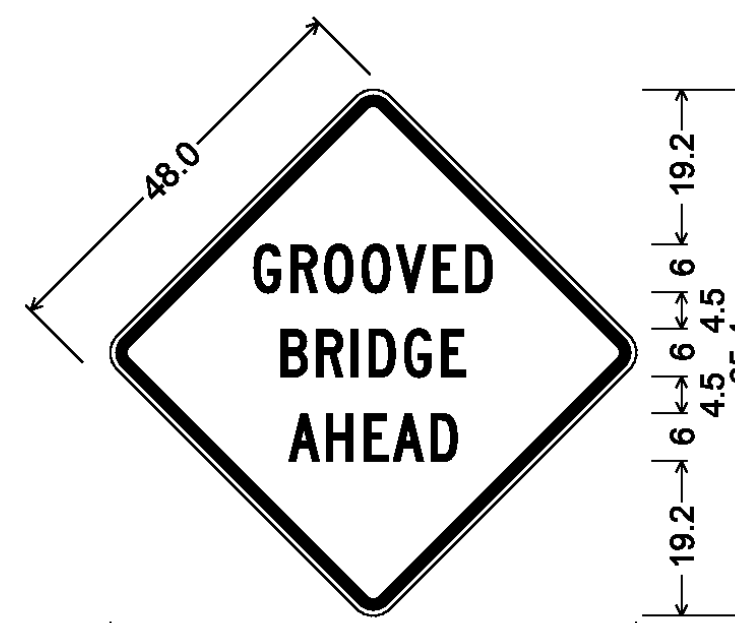
48.0" across sides 3.0" Radius, 1.2" Border, 0.8" Indent, Black on Yellow;  
 motorcycle;



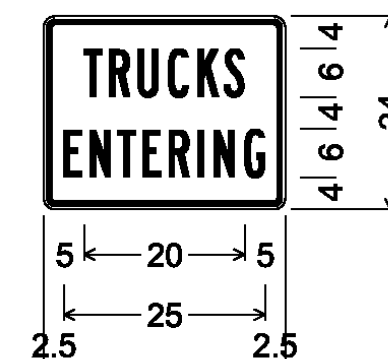
3.0" Radius, 0.9" Border, 0.8" Indent, Black on White;  
 [KEEP] D 2K;  
 [RIGHT] D 2K;  
 [EXCEPT] D 2K;  
 [TO PASS] D 2K;



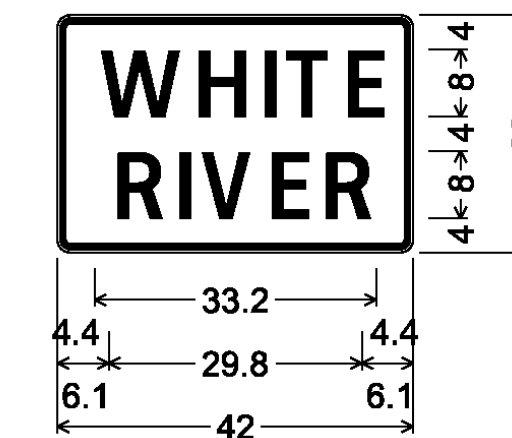
48.0" across sides 3.0" Radius, 1.2" Border, 0.8" Indent, Black on Yellow;  
 [MOOSE] C 2K;



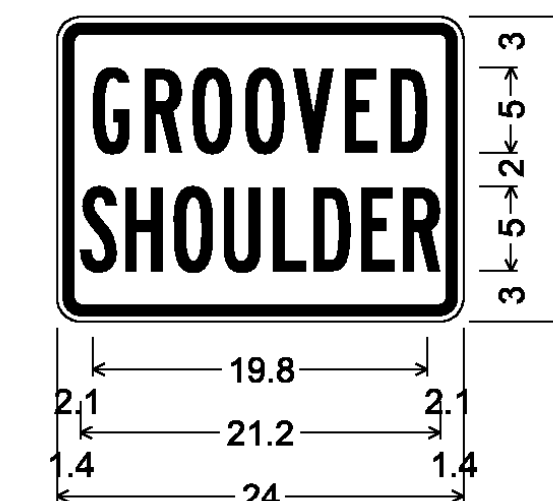
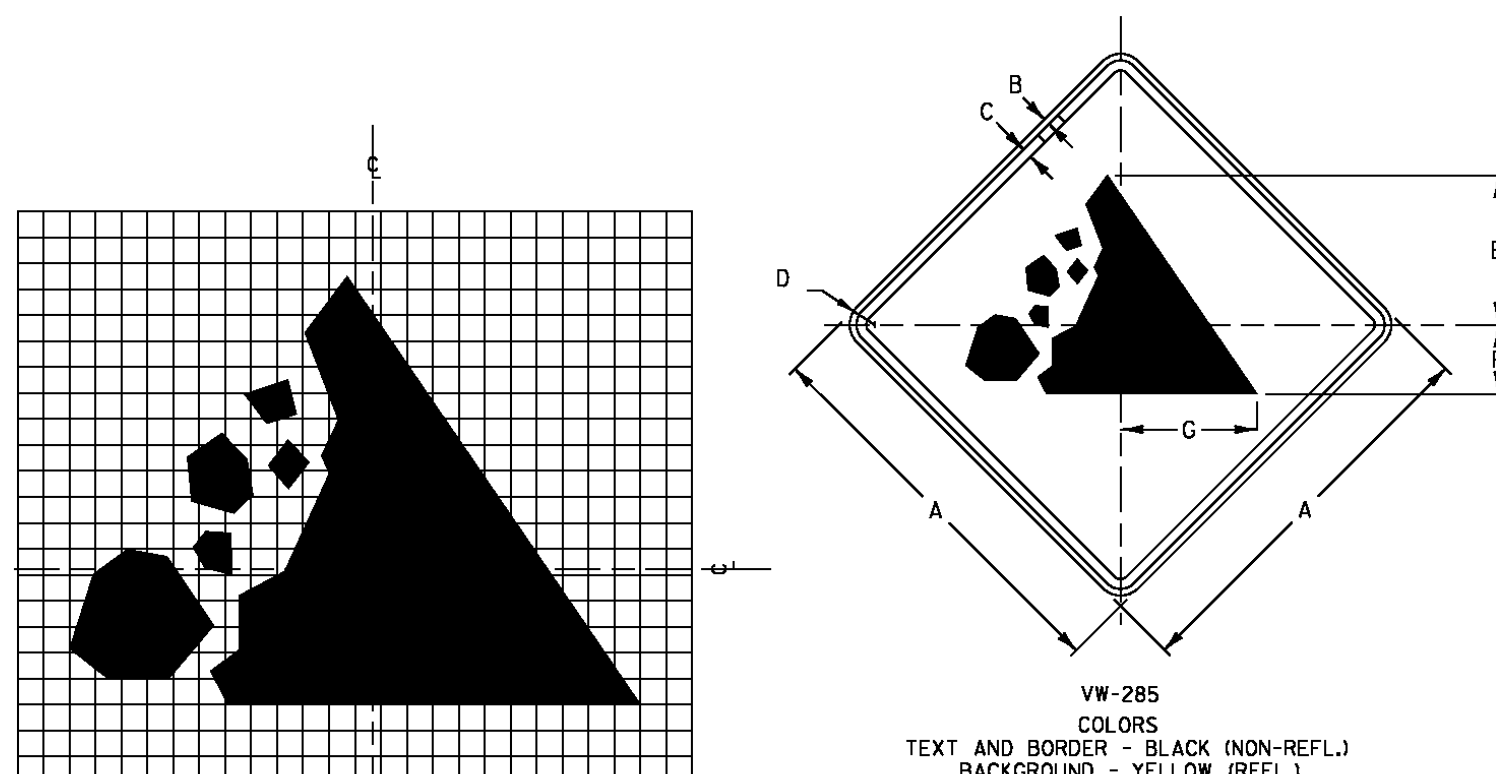
48.0" across sides 3.0" Radius, 1.3" Border, 0.8" Indent, Black on Yellow;  
 [GROOVED] C 2K;  
 [BRIDGE] C 2K;  
 [AHEAD] C 2K;



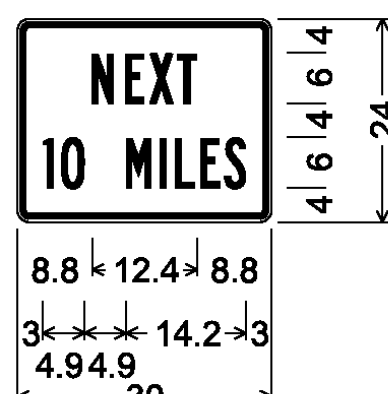
1.4" Radius, 0.6" Border, 0.4" Indent, Black on Yellow;  
 [TRUCKS] B 2K;  
 [ENTERING] B 2K;



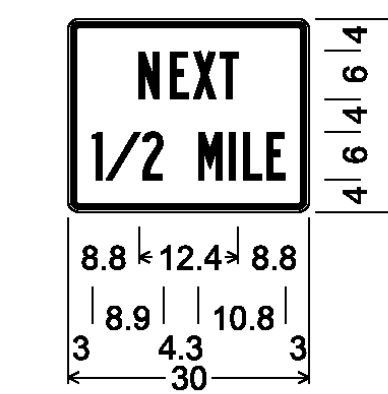
1.5" Radius, 0.6" Border, 0.4" Indent, White on Green;  
 [WHITE] ClearviewHwy-3-W;  
 [RIVER] ClearviewHwy-3-W;



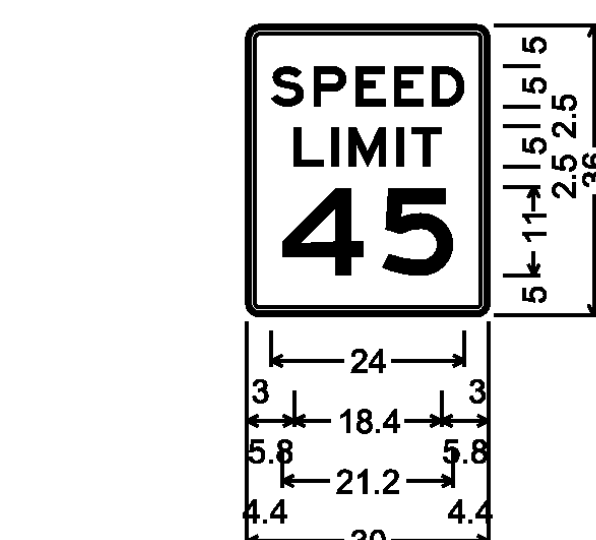
1.4" Radius, 0.6" Border, 0.4" Indent, Black on Yellow;  
 [GROOVED] B 2K;  
 [SHOULDER] B 2K 70% spacing;



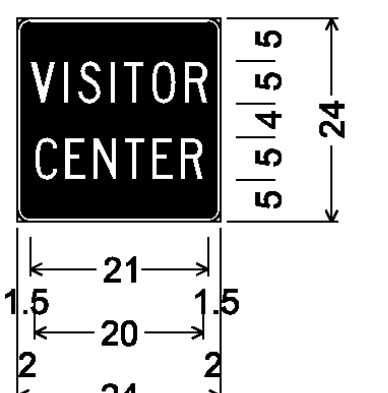
1.4" Radius, 0.6" Border, 0.4" Indent, Black on Yellow;  
 [NEXT] B 2K;  
 [10 MILES] B 2K specified length;



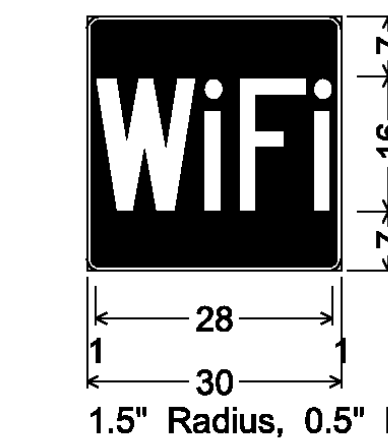
1.4" Radius, 0.6" Border, 0.4" Indent, Black on Yellow;  
 [NEXT] B 2K;  
 [1/2 MILE] B 2K specified length;



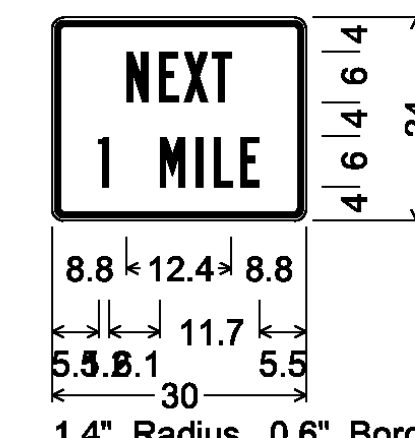
R2-1 STD;  
 1.5" Radius, 0.6" Border, 0.4" Indent, Black on White;  
 [SPEED] E;  
 [LIMIT] E;  
 [45] E;



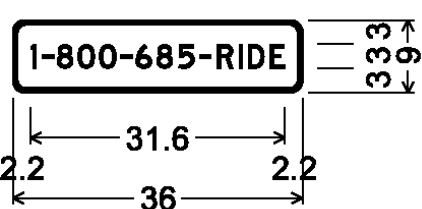
1.5" Radius, 0.5" Border, White on Blue;  
 [VISITOR] C;  
 [CENTER] C;



1.5" Radius, 0.5" Border, White on Blue;  
 [WiFi] C specified length;



1.4" Radius, 0.6" Border, 0.4" Indent, Black on Yellow;  
 [NEXT] B 2K;  
 [1 MILE] B 2K;



1.5" Radius, 0.6" Border, White on Green;  
 [1-800-685-RIDE] D;

## SIGN DETAIL SHEET 13

PROJECT NAME: ROYALTON-MIDDLESEX

PROJECT NUMBER: IMG SIGN(19)

FILE NAME: z09a020signdet.dgn

PROJECT LEADER: CRB

DESIGNED BY: JBZ

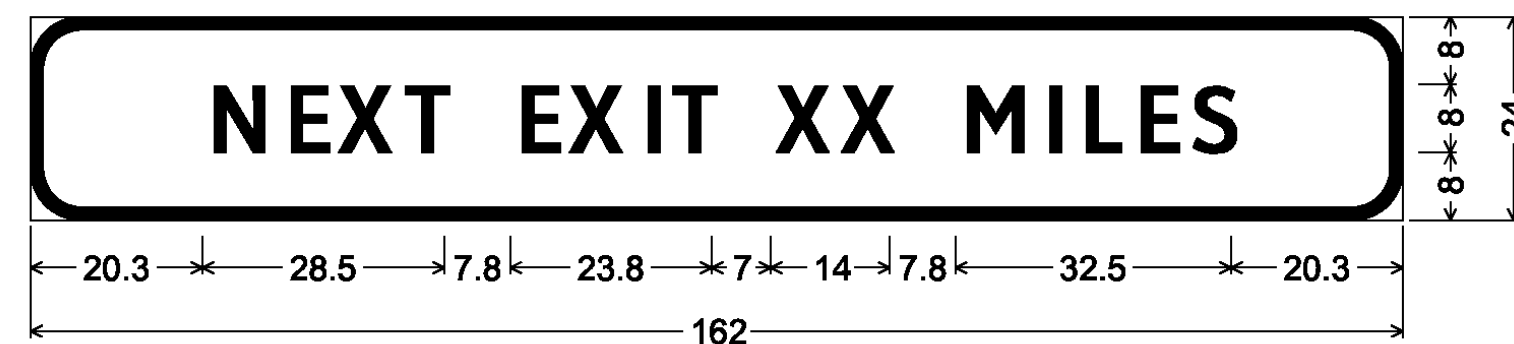
CLD REF. NO.: 09-0106

PLOT DATE: 8/12/2009

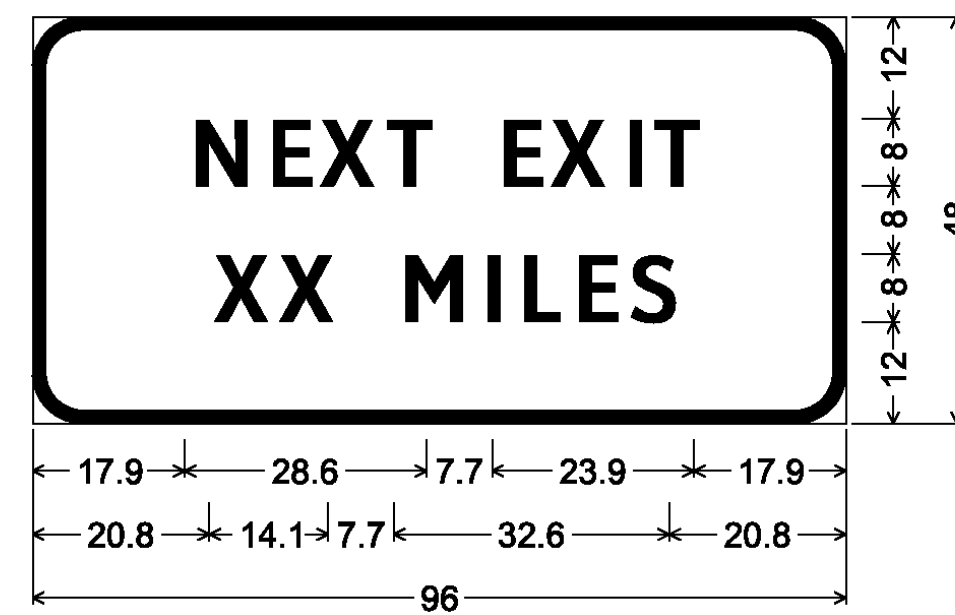
DRAWN BY: JBZ

CHECKED BY: BDB

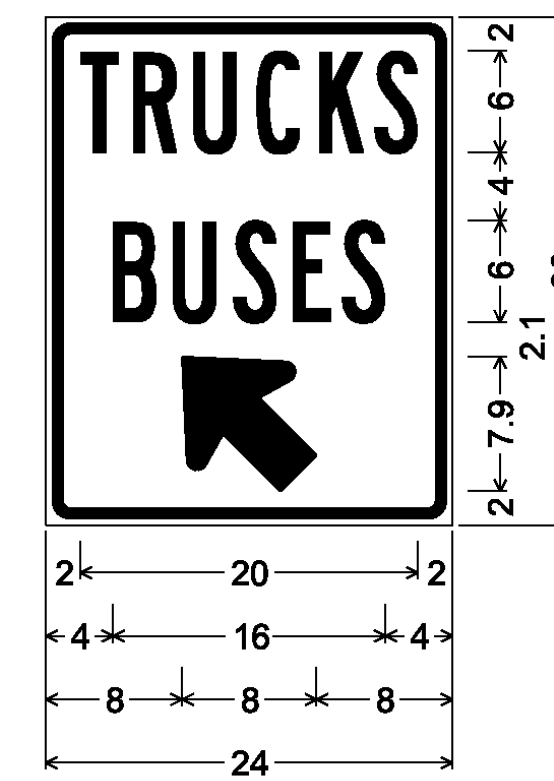
SHEET 144 OF 163



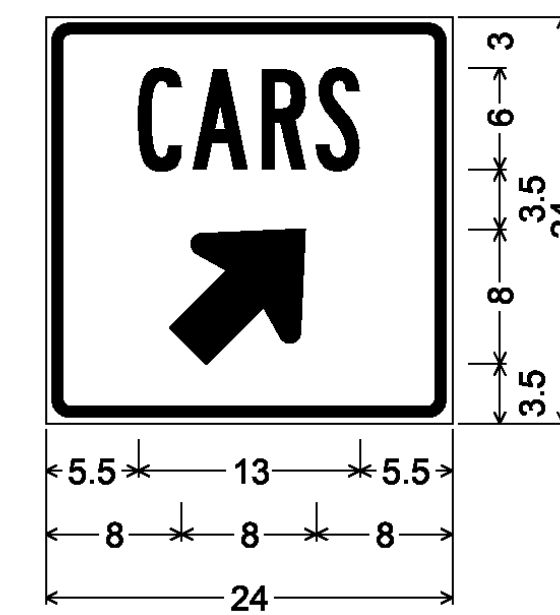
6.0" Radius, 1.5" Border, White on Green;  
[NEXT EXIT XX MILES] ClearviewHwy-4-W;



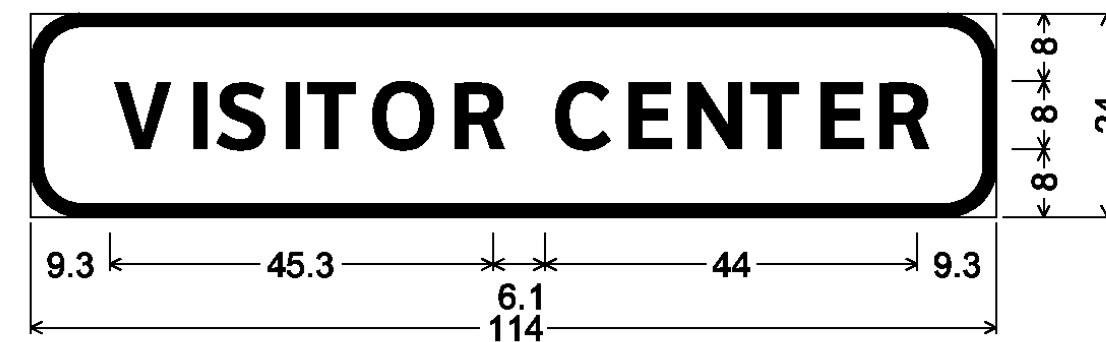
6.0" Radius, 1.5" Border, White on Green;  
[NEXT EXIT] ClearviewHwy-4-W;  
[XX MILES] ClearviewHwy-4-W;



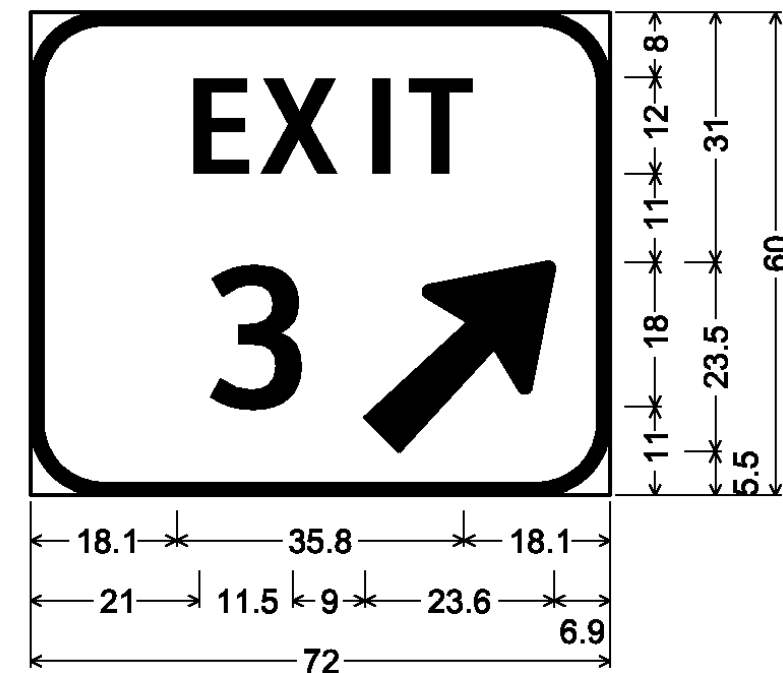
1.4" Radius, 0.6" Border, 0.4" Indent, White on Blue;  
[TRUCKS] B 2K;  
[BUSES] B 2K;  
Standard Arrow Custom 9.7" X 8.6" 135°;



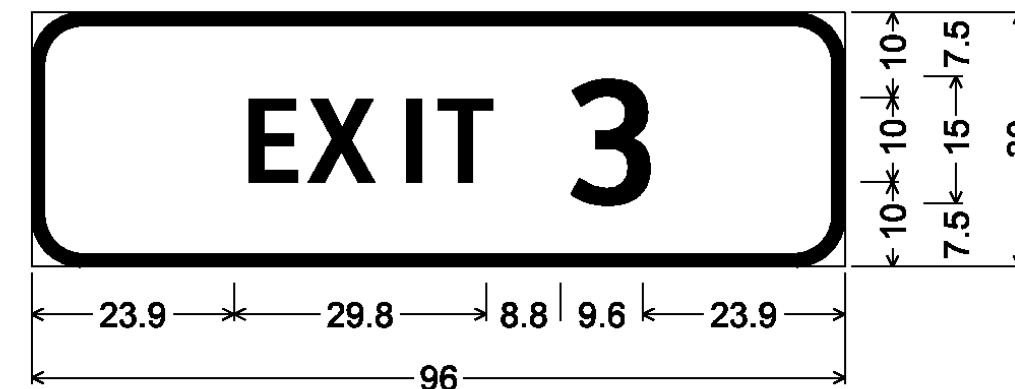
1.4" Radius, 0.6" Border, 0.4" Indent, White on Blue;  
[CARS] B 2K;  
Standard Arrow Custom 9.7" X 8.6" 135°;



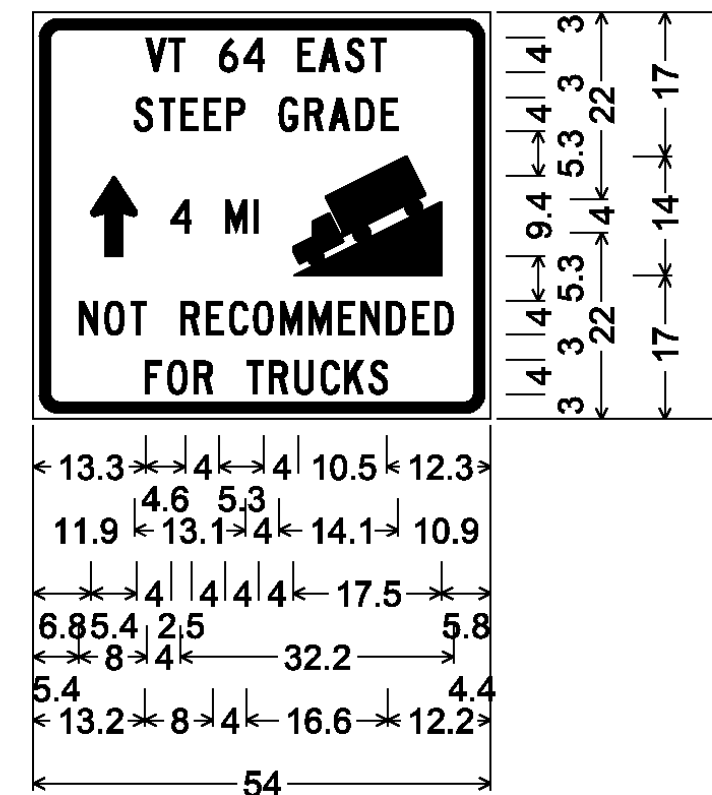
6.0" Radius, 1.5" Border, White on Blue;  
[VISITOR CENTER] ClearviewHwy-5-W 70% spacing;



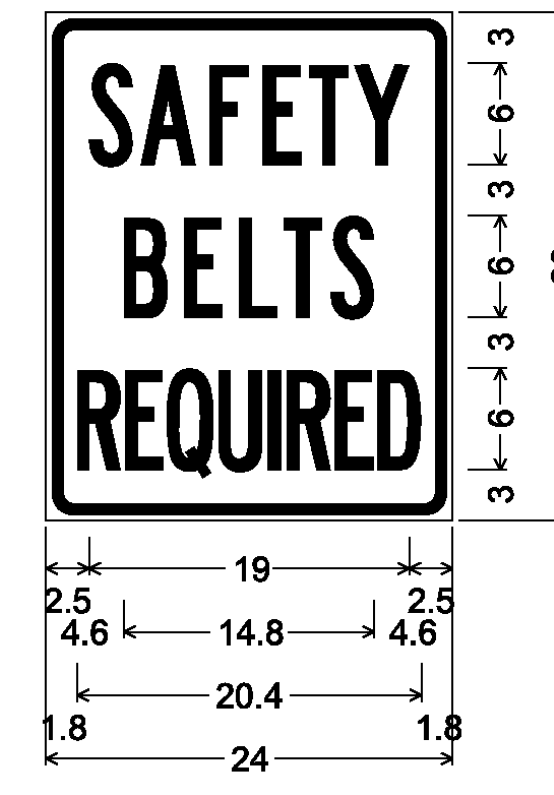
9.0" Radius, 1.5" Border, White on Green;  
[EXIT] ClearviewHwy-4-W;  
[3] ClearviewHwy-4-W;  
Arrow 133 - 30.0° 45°;



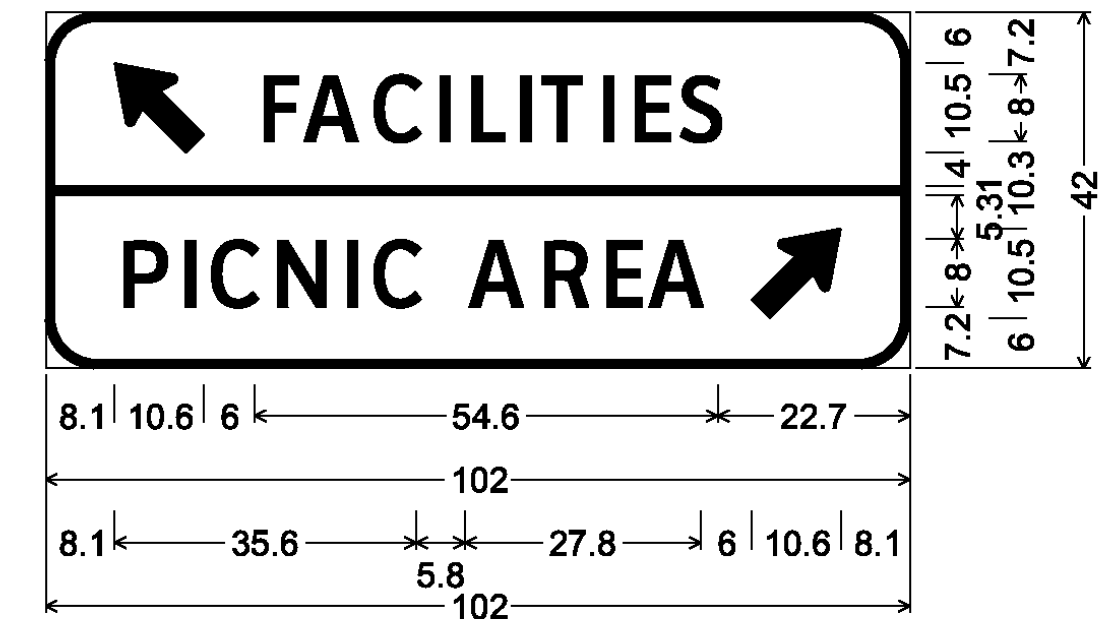
1.5" Border, White on Green;  
[EXIT 3] ClearviewHwy-4-W;



3.0" Radius, 1.3" Border, 0.8" Indent, Black on Yellow;  
[VT 64 EAST] C;  
[STEEP GRADE] C;  
Standard Arrow Custom 9.4" X 5.4" 90°;  
[4 MI] C;  
[NOT RECOMMENDED] C;  
[FOR TRUCKS] C;



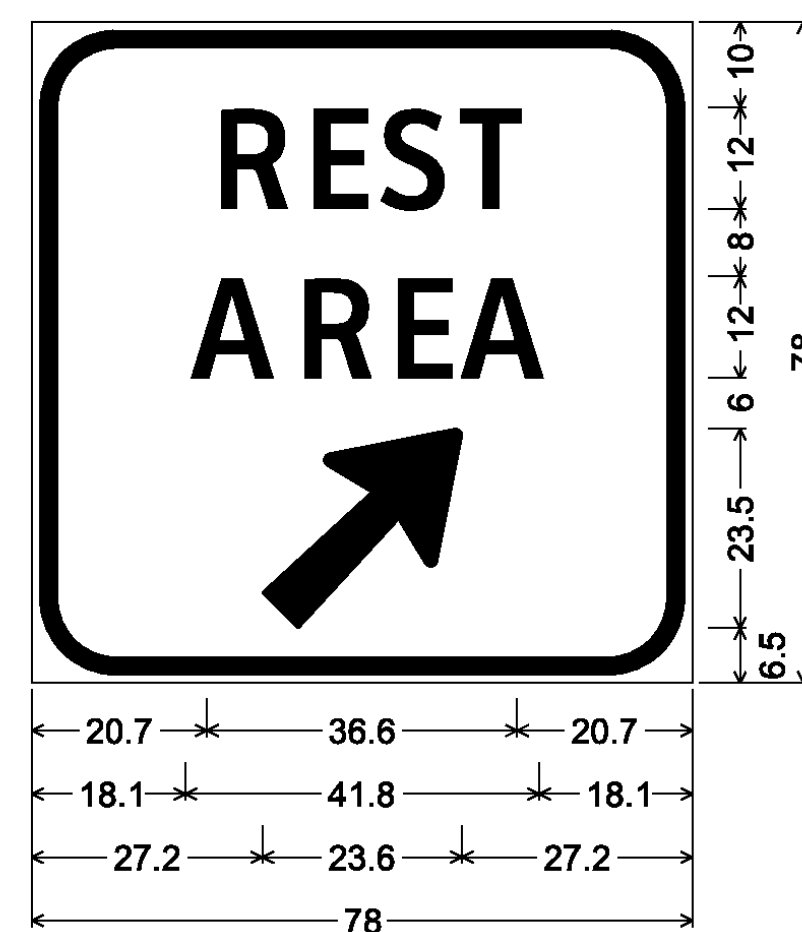
1.6" Radius, 0.6" Border, 0.4" Indent, Black on White;  
[SAFETY] B 2K;  
[BELTS] B 2K;  
[REQUIRED] B 2K 26% spacing;



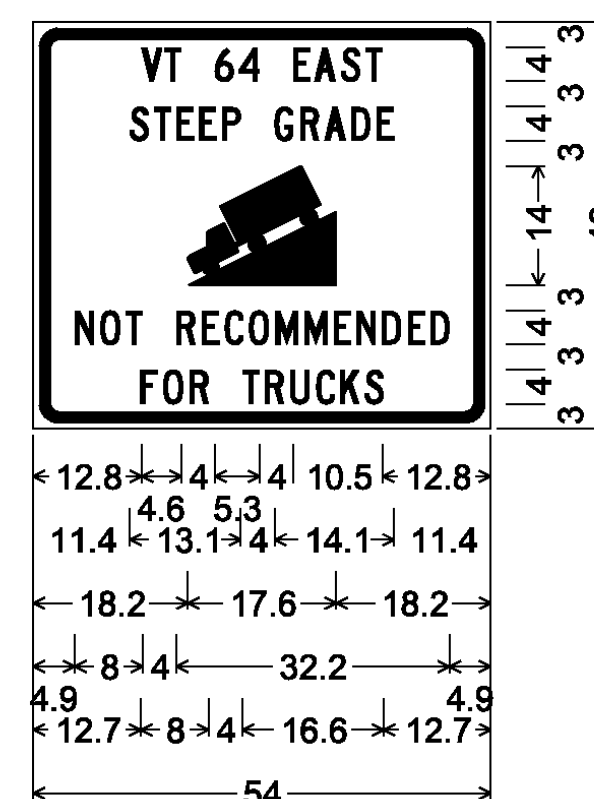
6.0" Radius, 1.0" Border, White on Blue;  
Standard Arrow Custom 13.4" X 8.1" 135°;  
[FACILITIES] ClearviewHwy-3-W;  
[PICNIC AREA] ClearviewHwy-3-W;  
Standard Arrow Custom 13.4" X 8.1" 45°;



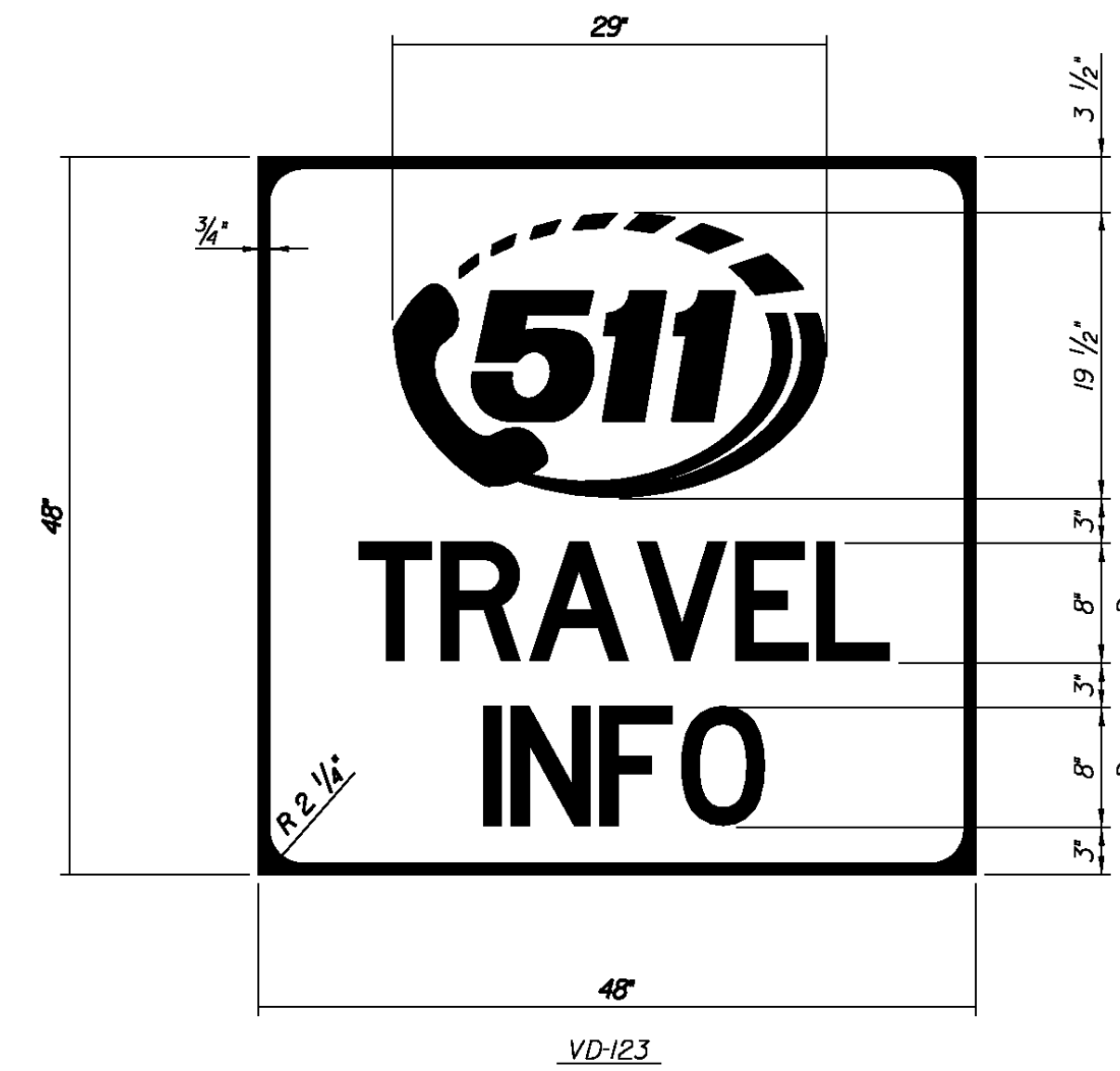
10.0" Radius, 2.0" Border, White on Blue;  
[PARKING] ClearviewHwy-3-W 75% spacing;  
[AREA] ClearviewHwy-3-W;  
Arrow 133 - 30.0° 45°;



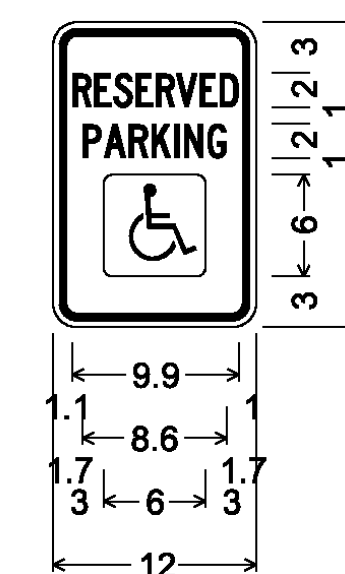
10.0" Radius, 2.0" Border, 1.0" Indent, White on Blue;  
[REST] ClearviewHwy-3-W;  
[AREA] ClearviewHwy-3-W;  
Arrow 133 - 30.0° 45°;



3.0" Radius, 1.3" Border, 0.8" Indent, Black on Yellow;  
[VT 64 EAST] C;  
[STEEP GRADE] C;  
[NOT RECOMMENDED] C;  
[FOR TRUCKS] C;



LEGEND: WHITE (RETROREFLECTIVE)  
BACKGROUND: BLUE (RETROREFLECTIVE)



1.4" Radius, 0.4" Border, 0.4" Indent, Green on White;  
[RESERVED] C 2K 51% spacing;  
[PARKING] C 2K 66% spacing;  
Rounded Rectangle 0.5" Radius Blue;

**SIGN DETAIL SHEET 14**

PROJECT NAME: ROYALTON-MIDDLESEX

PROJECT NUMBER: IMG SIGN(19)

FILE NAME: z09a020signde+.dgn

PLOT DATE: 8/12/2009

PROJECT LEADER: CRB

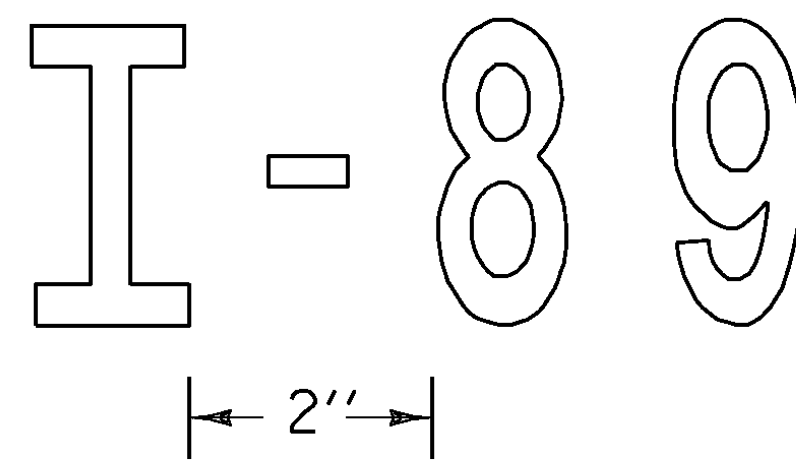
DRAWN BY: JBZ

DESIGNED BY: JBZ

CHECKED BY: BDB

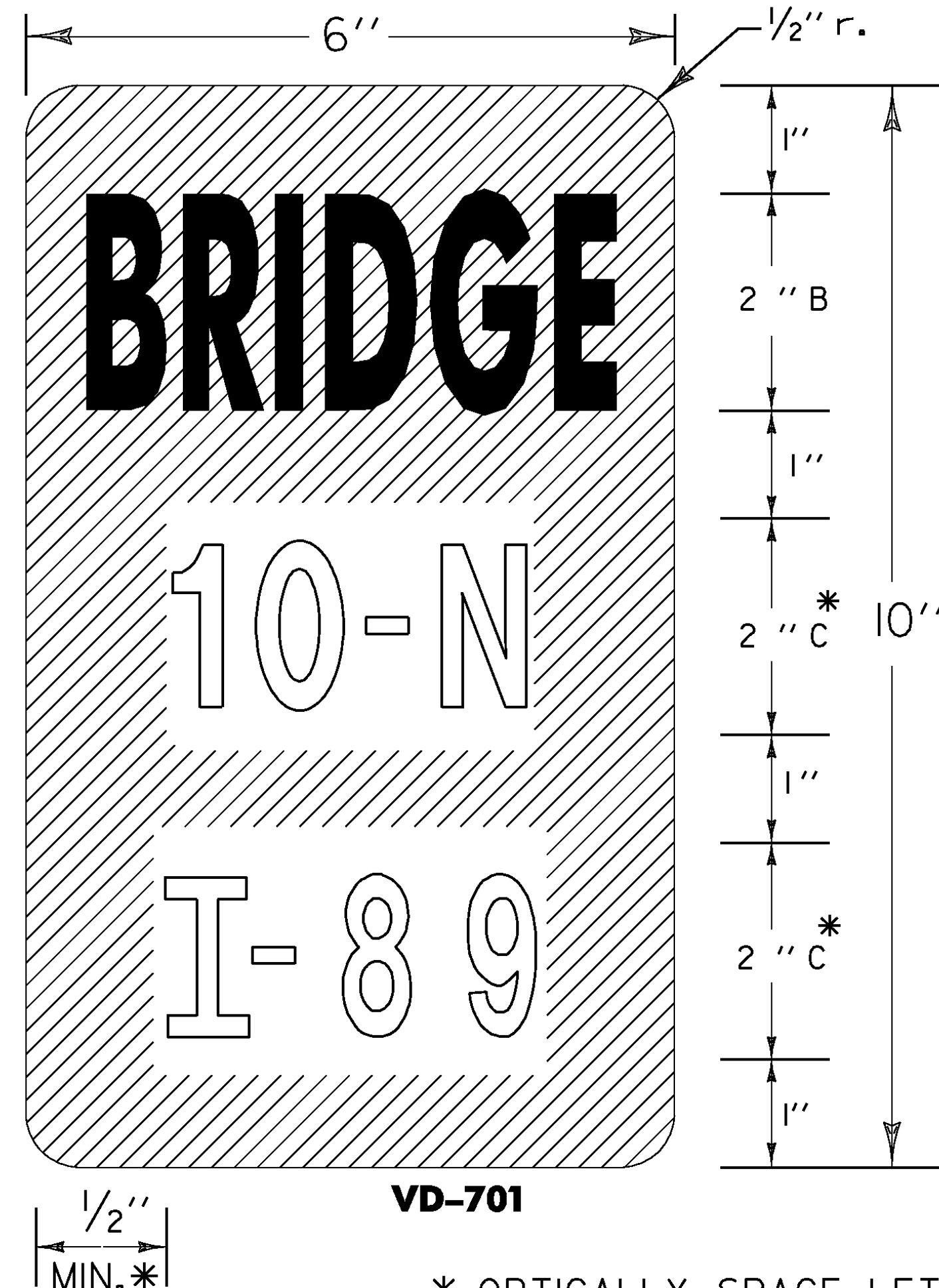
CLD REF. NO.: 09-0106

SHEET 145 OF 163



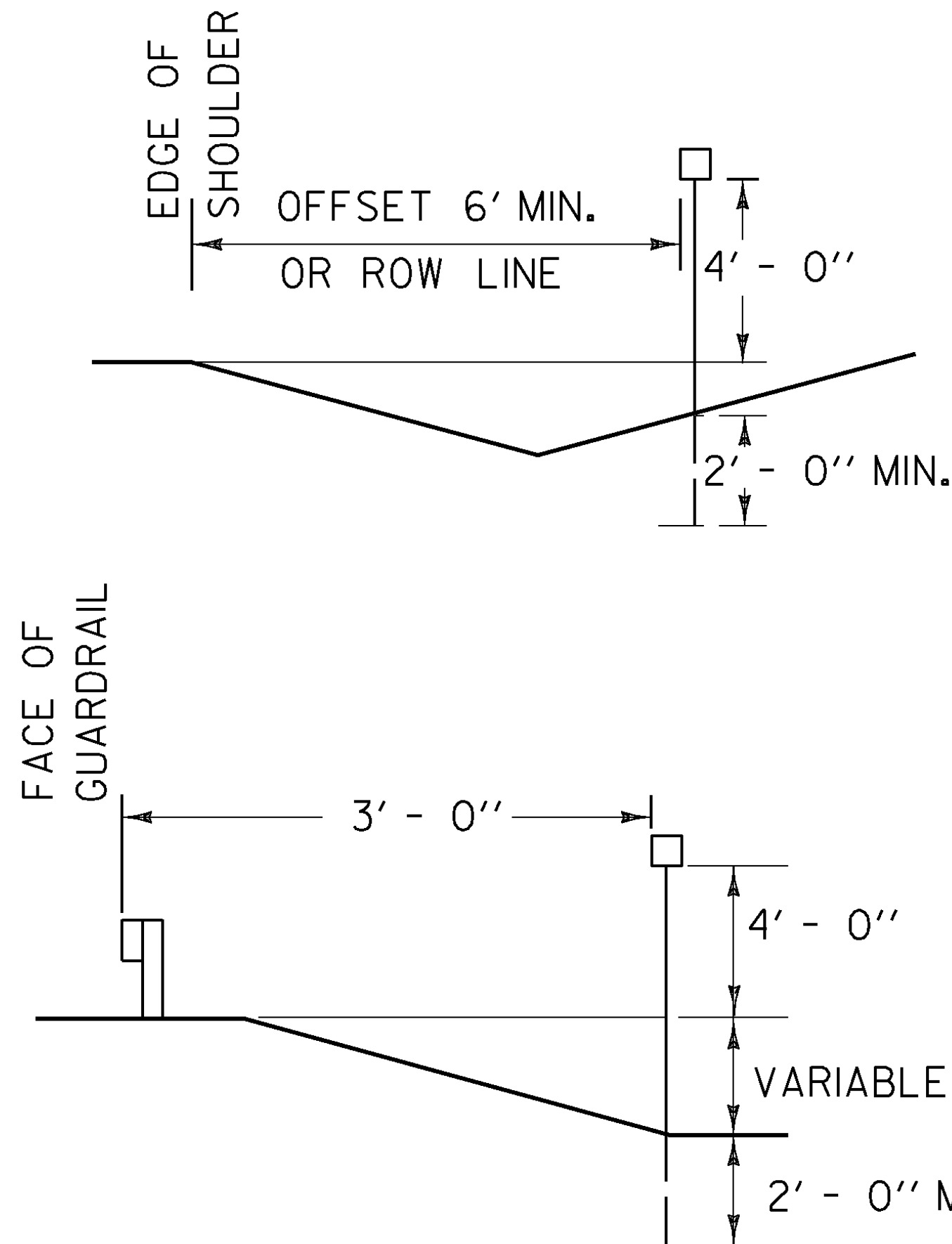
HYPHEN DETAIL

FOR EXAMPLE, ROUTE NUMBERS SHALL APPEAR AS: I-91, US5, VT22



VD-701

\* OPTICALLY SPACE LETTERS AND NUMERALS AS NEEDED. SERIES B LETTERS MAY BE USED TO MAINTAIN VISUAL INTEGRITY.



**NOTES:**

**GENERAL:**  
OUTLINED LETTERS AND NUMERALS INDICATE TEXT THAT VARIES.

**MATERIAL:**  
THE SIGN BASE MATERIAL SHALL BE 0.040 INCH FLAT SHEET ALUMINUM.

**COLORS:**  
THE SIGN SHALL HAVE A RETROREFLECTORIZED WHITE TEXT ON RETROREFLECTORIZED GREEN BACKGROUND. THE COLORS SHALL CONFORM WITH THOSE FOUND IN STANDARD COLOR TOLERANCE CHARTS AS APPROVED BY THE U.S. DEPARTMENT OF TRANSPORTATION, FEDERAL HIGHWAY ADMINISTRATION.

RETROREFLECTIVITY WILL BE EQUAL TO OR EXCEEDING ASTM TYPE III.

**LETTERING:**  
LETTERS AND DIGITS SHALL CONFORM WITH THE STANDARD ALPHABETS FOR HIGHWAY SIGNS AS PRINTED BY THE FEDERAL HIGHWAY ADMINISTRATION.

**POSTS:**  
1 3/4 INCH SQUARE STEEL POST WITH 2 INCH ANCHOR SHALL BE USED. POST SHALL BE A MINIMUM OF 8 FEET.

THE FOLLOWING BRIDGES REQUIRE BRIDGE PLAQUES.

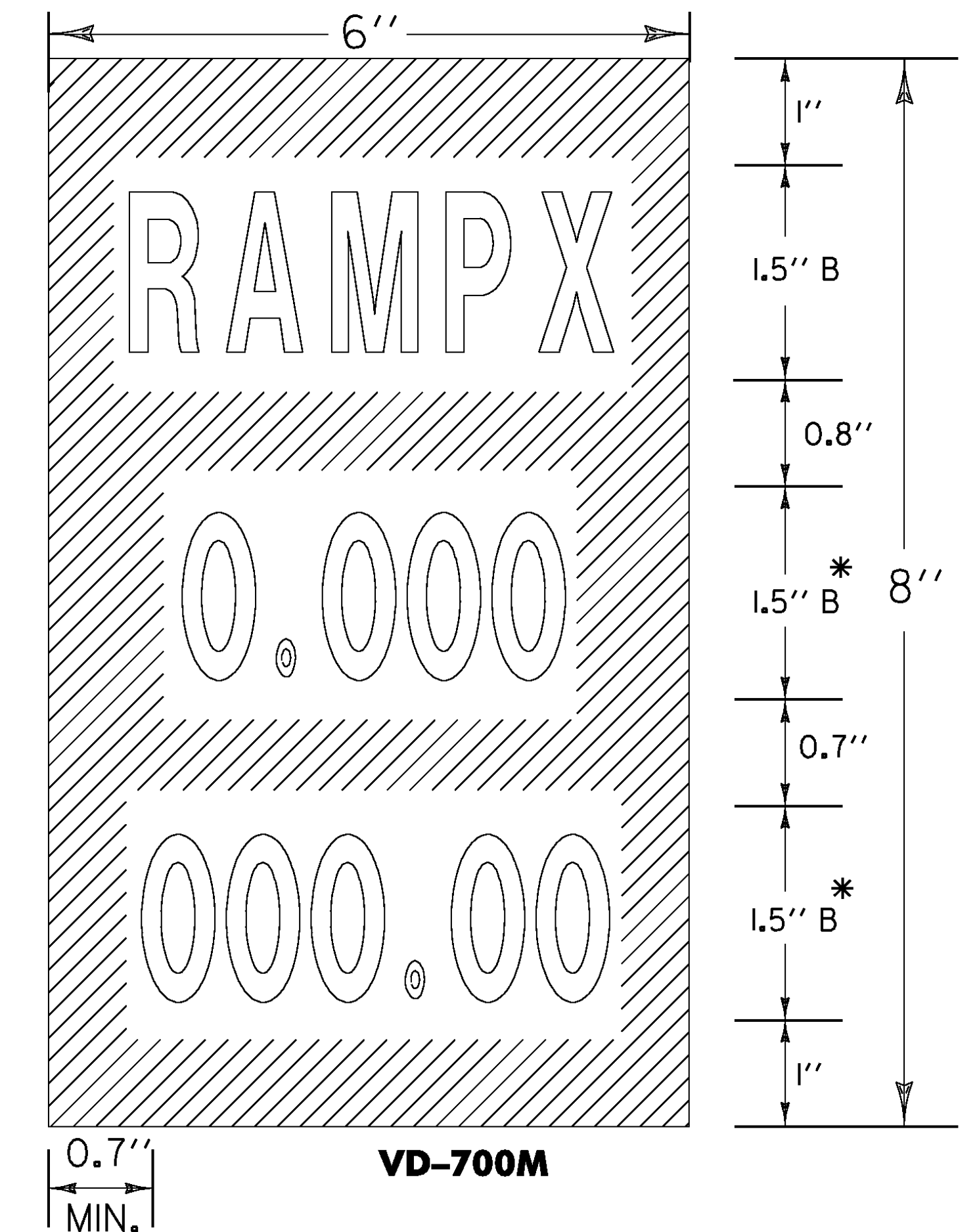
MILE MARKER	ROUTE	PLAQUE	CROSSING FEATURE
<b>NORTHBOUND</b>			
21.886	I-89-N	24-1	BROOK
21.914	I-89-N	25	BROOK
22.050	I-89-N	26N	I 89 OVER WR&NECR&107
22.287	I-89-N	26-1	BROOK
22.393	I-89-N	26-2	BROOK
30.898	I-89-N	29	I 89 UNDER VT 66
31.088	I-89-N	29-1	BROOK
31.559	I-89-N	29-3	BROOK
33.182	I-89-N	30N	I 89 UNDER TH NO 26
36.545	I-89-N	32N	I 89 OVER TH NO 6
37.775	I-89-N	32-2	BROOK
38.844	I-89-N	34N	I 89 OVER TH NO 1
40.441	I-89-N	34-2S	BROOK
42.952	I-89-N	35N	I 89 OVER VT 64
43.097	I-89-N	35-1	BROOK
46.920	I-89-N	36N	I 89 OVER VT 63
49.814	I-89-N	36-3	BERLIN POND OUTLET
49.821	I-89-N	36-4	WATER MAIN SLEEVE
50.000	I-89-N	37N	I 89 OVER TH NO 40
50.290	I-89-N	38N	I 89 OVER VT 62
52.528	I-89-N	40N	I 89 OVER VT 12
52.945	I-89-N	41N	I 89 OVER MONT. S.H.
53.436	I-89-N	42N	I 89 OVER US2 WR WCRR
53.996	I-89-N	42-1	BROOK
54.809	I-89-N	43N	I 89 OVER US 2
54.955	I-89-N	43-1	BROOK
56.147	I-89-N	43-2	BROOK
56.212	I-89-N	44	I 89 UNDER US 2
57.166	I-89-N	44-2	BROOK
57.866	I-89-N	44-4	GREAT BROOK
58.710	I-89-N	45N	I 89 OVER MDLSX S.H.
59.086	I-89-N	45-1	BROOK
59.417	I-89-N	45-2	BROOK

MILE MARKER	ROUTE	PLAQUE	CROSSING FEATURE
<b>SOUTHBOUND</b>			
21.892	I-89-S	24-1	BROOK
21.938	I-89-S	25	BROOK
22.050	I-89-S	26S	I 89 OVER WR&NECR&107
22.930	I-89-S	27	I 89 OVER TH NO 32
24.348	I-89-S	28	I 89 UNDER TH NO 6
33.182	I-89-S	30S	I 89 UNDER TH NO 26
36.545	I-89-S	31S	I 89 UNDER TH NO 6
37.845	I-89-S	33	I 89 UNDER VT 65
38.844	I-89-S	34S	I 89 OVER TH NO 1
42.952	I-89-S	35S	I 89 OVER VT 64
46.920	I-89-S	36S	I 89 OVER VT 63
50.000	I-89-S	37S	I 89 OVER TH NO 40
50.290	I-89-S	38S	I 89 OVER VT 62
50.782	I-89-S	39	I 89 UNDER TH NO 18
52.528	I-89-S	40S	I 89 OVER VT 12

THE FOLLOWING RAMPS REQUIRE MILE MARKER PLAQUES.

I-89 Ramp Milemarker Information			
EXIT	RAMP	Mainline MM	RAMP Length
3	A	22.437	0.395
	B	22.150	0.341
	C	22.245	0.241
	D	22.399	0.289
4	A	30.657	0.223
	B	30.619	0.317
	C	31.112	0.246
	D	31.213	0.315
5	A	42.837	0.203
	B	43.082	0.186
	C	42.494	0.473
	D	43.130	0.192
6	A	46.804	0.205
	B	47.174	0.301
	C	46.627	0.387
	D	46.811	0.325
7	A	50.063	0.246
	B	50.446	0.278
	C	50.656	0.450
	D	50.637	0.282
8	A	52.789	0.231
	B	53.088	0.140
	C	52.951	0.380
	D	53.221	0.434
9	A	58.542	0.134
	B	58.571	0.140
	C	58.845	0.158
	D	58.940	0.159

FOR EXAMPLE, RAMP IDENTIFICATION SHALL APPEAR AS: RAMPA, RAMPB



VD-700M

**SIGN DETAIL SHEET 15**

PROJECT NAME: ROYALTON-MIDDLESEX

PROJECT NUMBER: IMG SIGN(19)

FILE NAME: z09a020signde1.dgn

PLOT DATE: 8/12/2009

PROJECT LEADER: CRB

DRAWN BY: JBZ

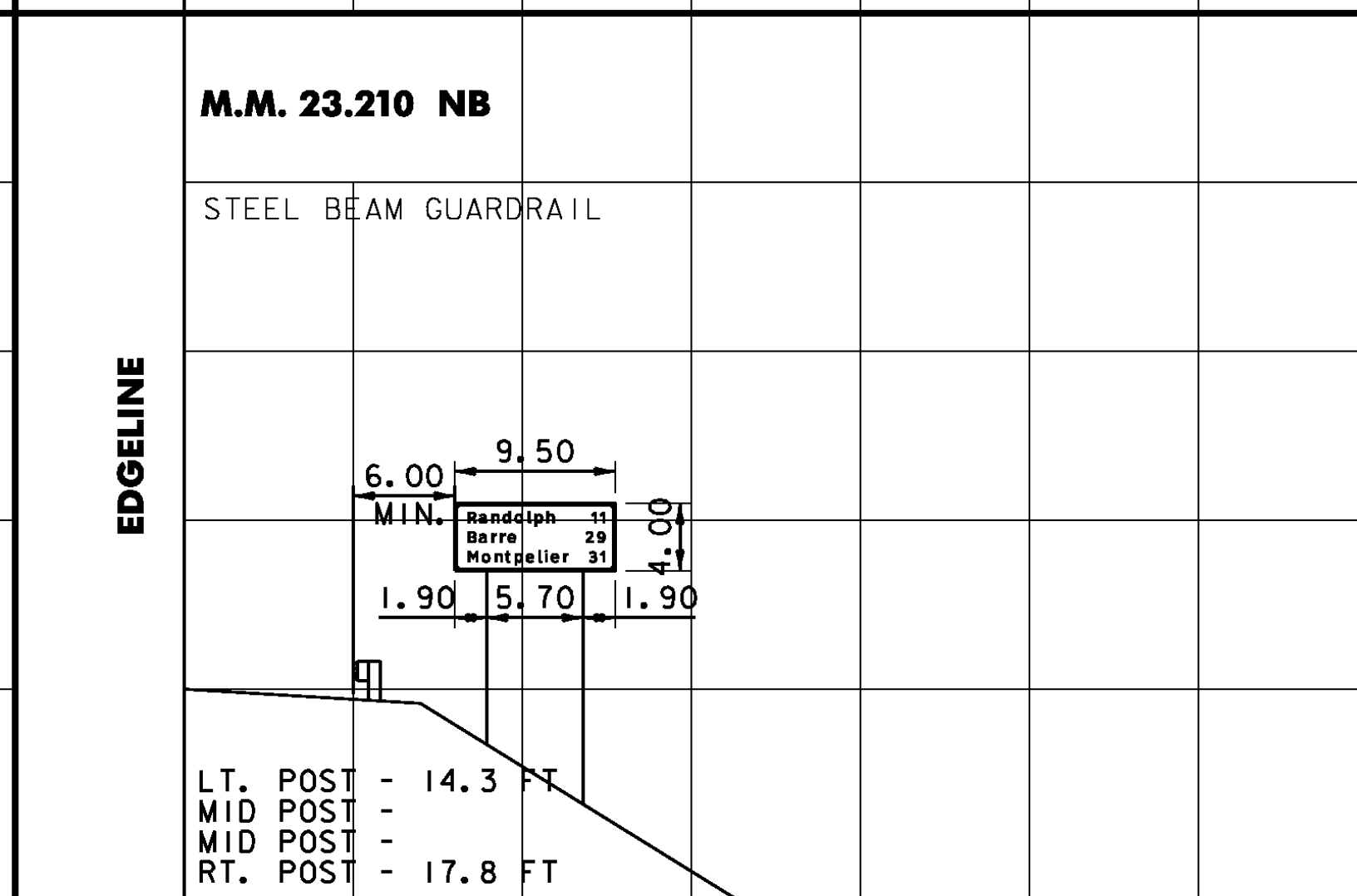
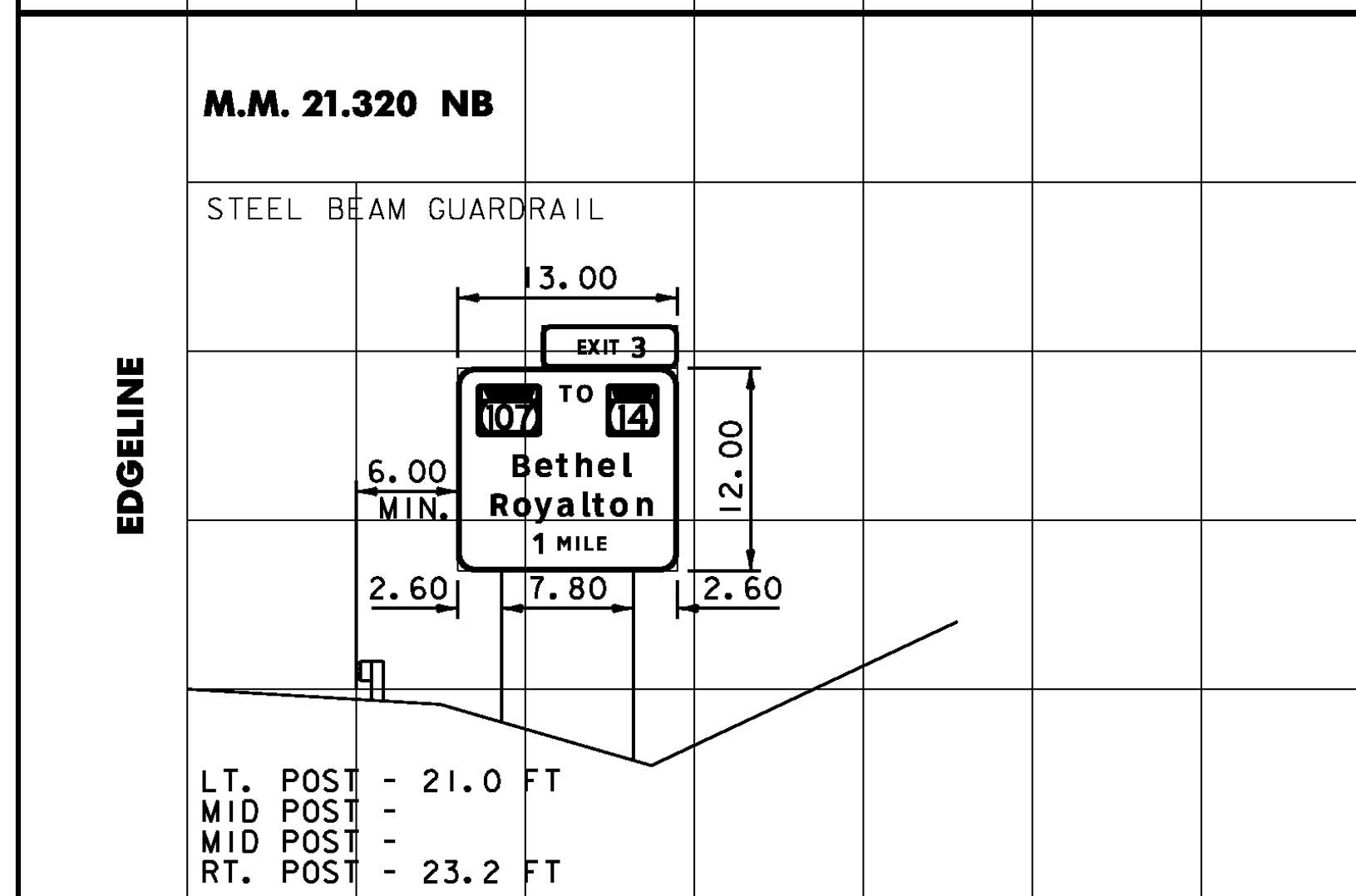
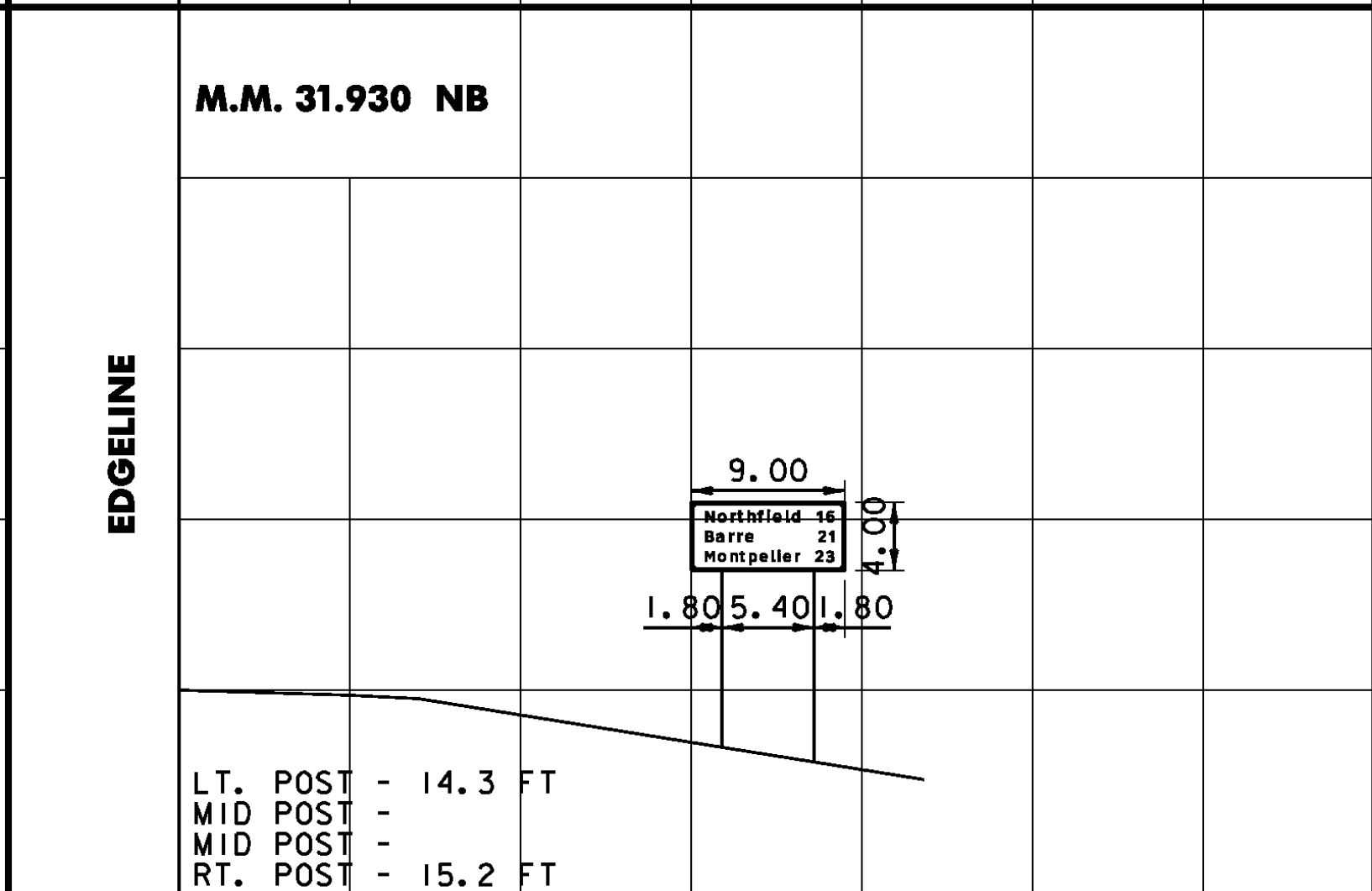
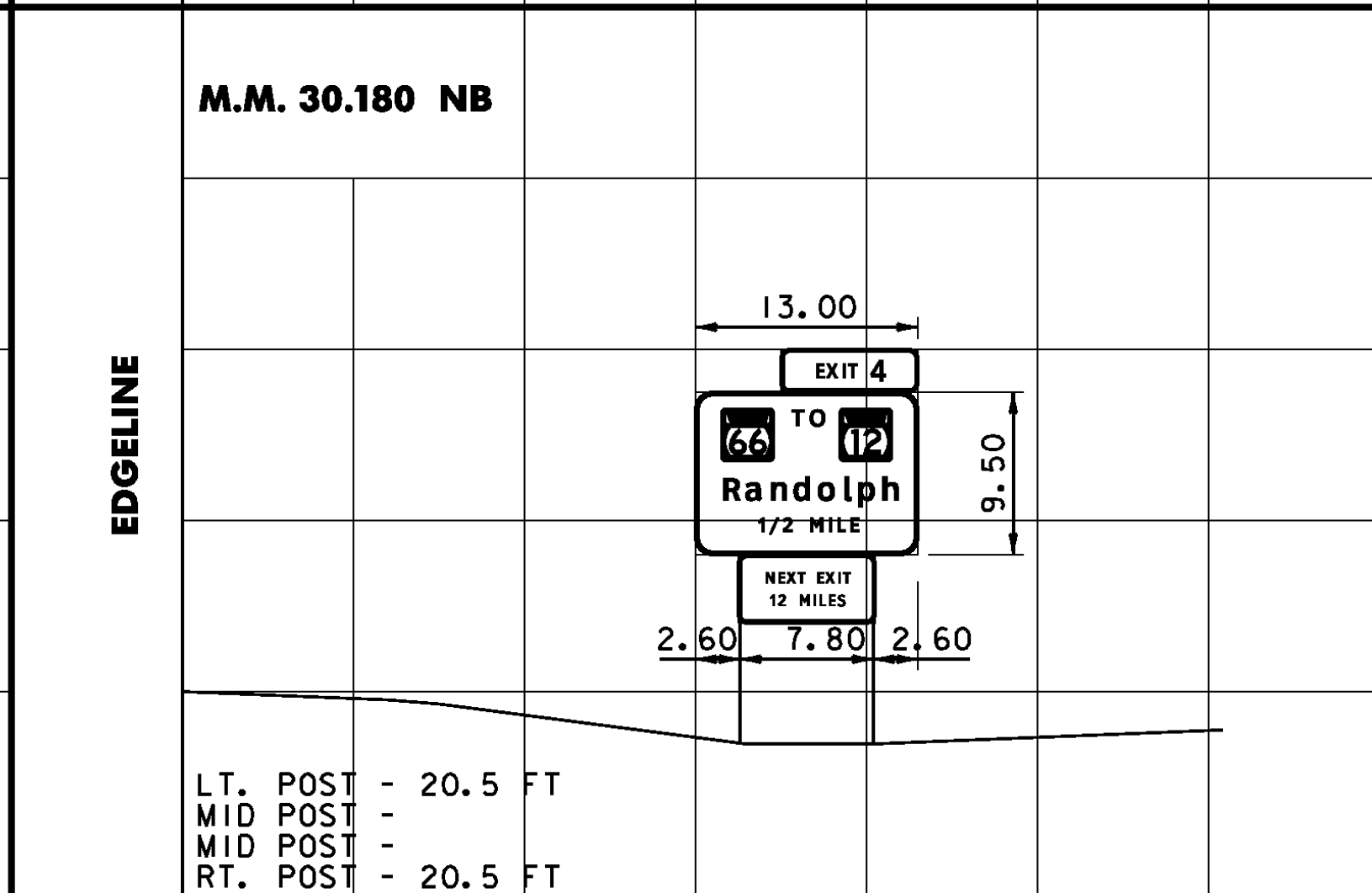
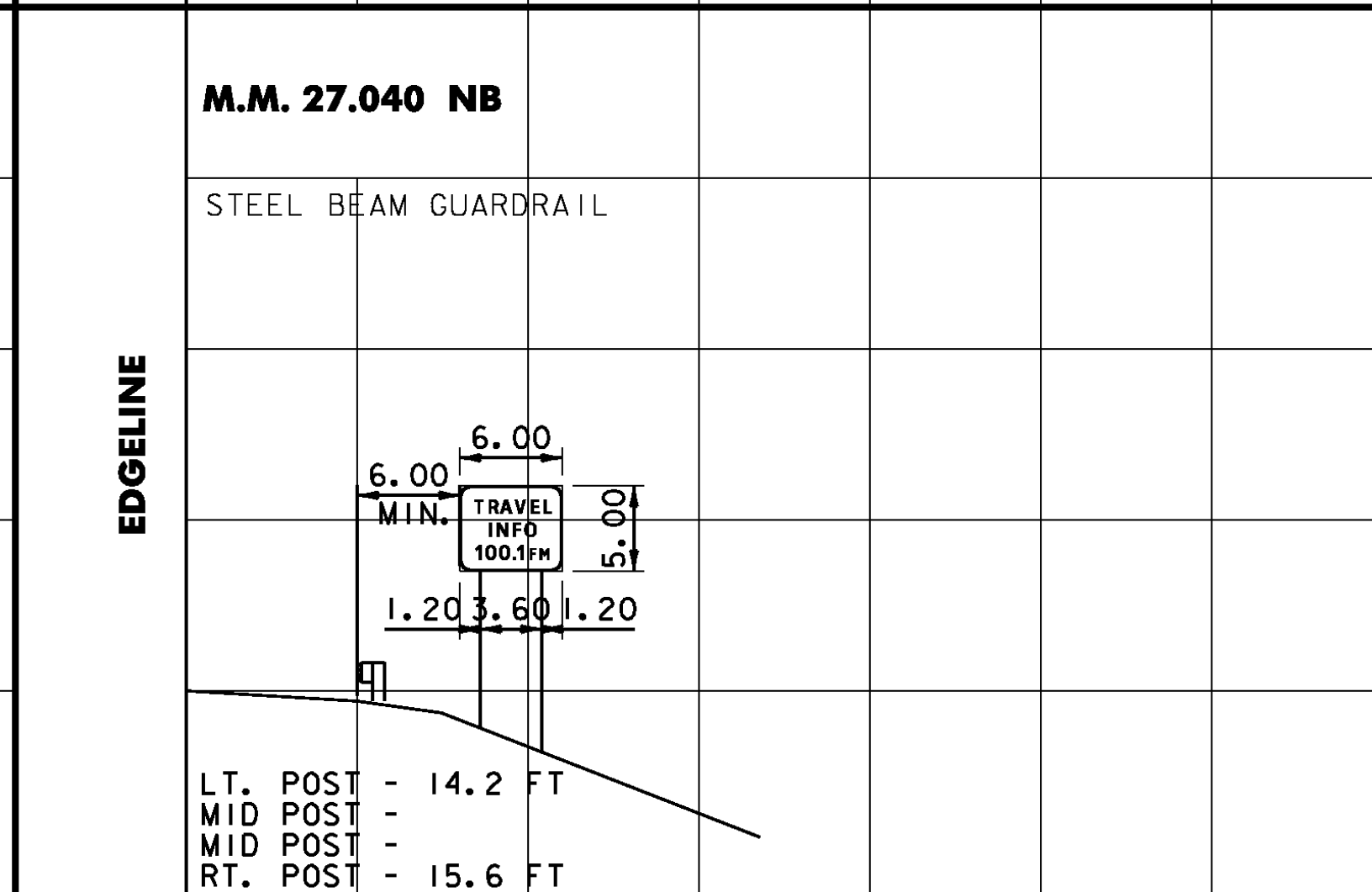
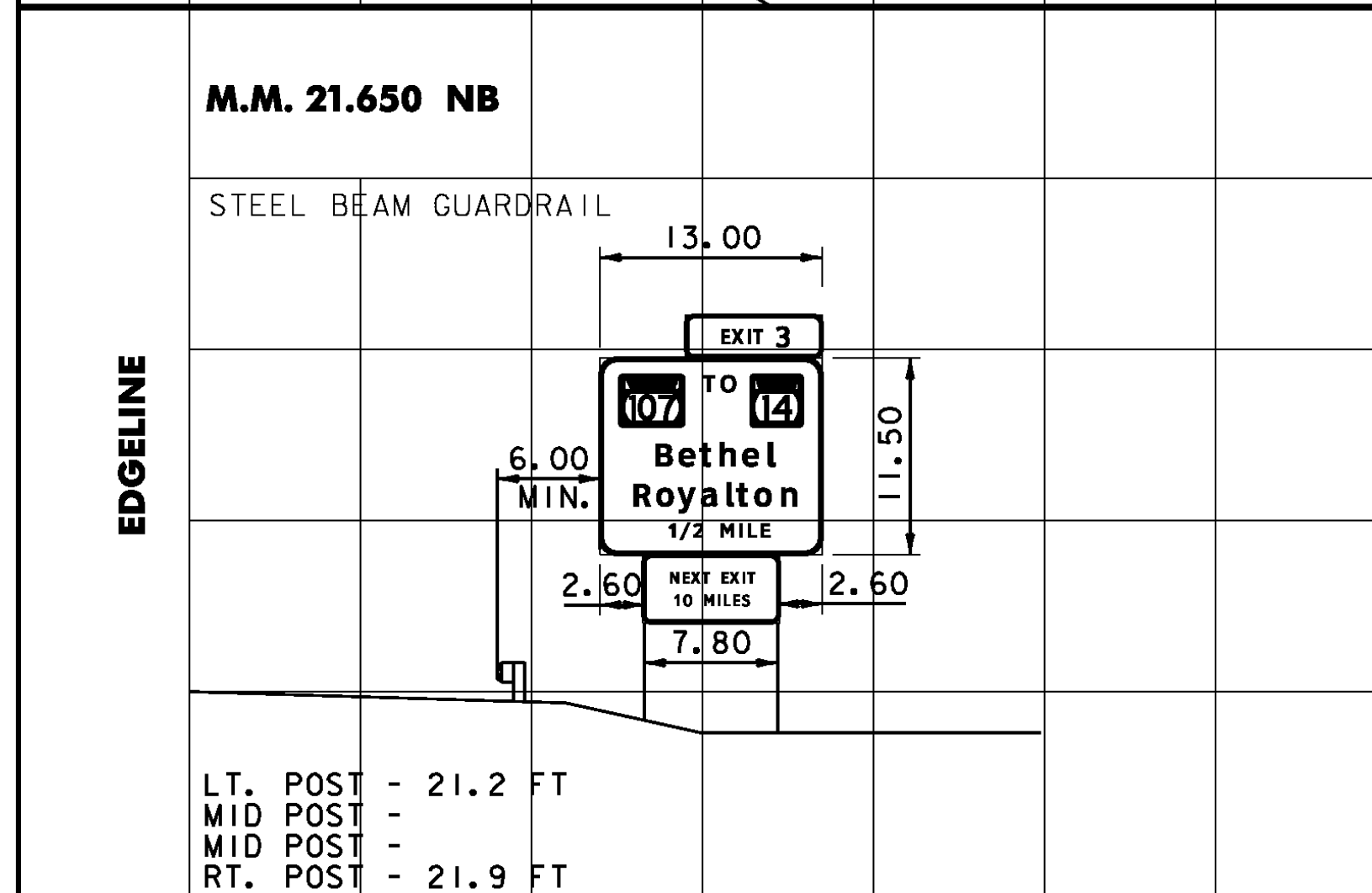
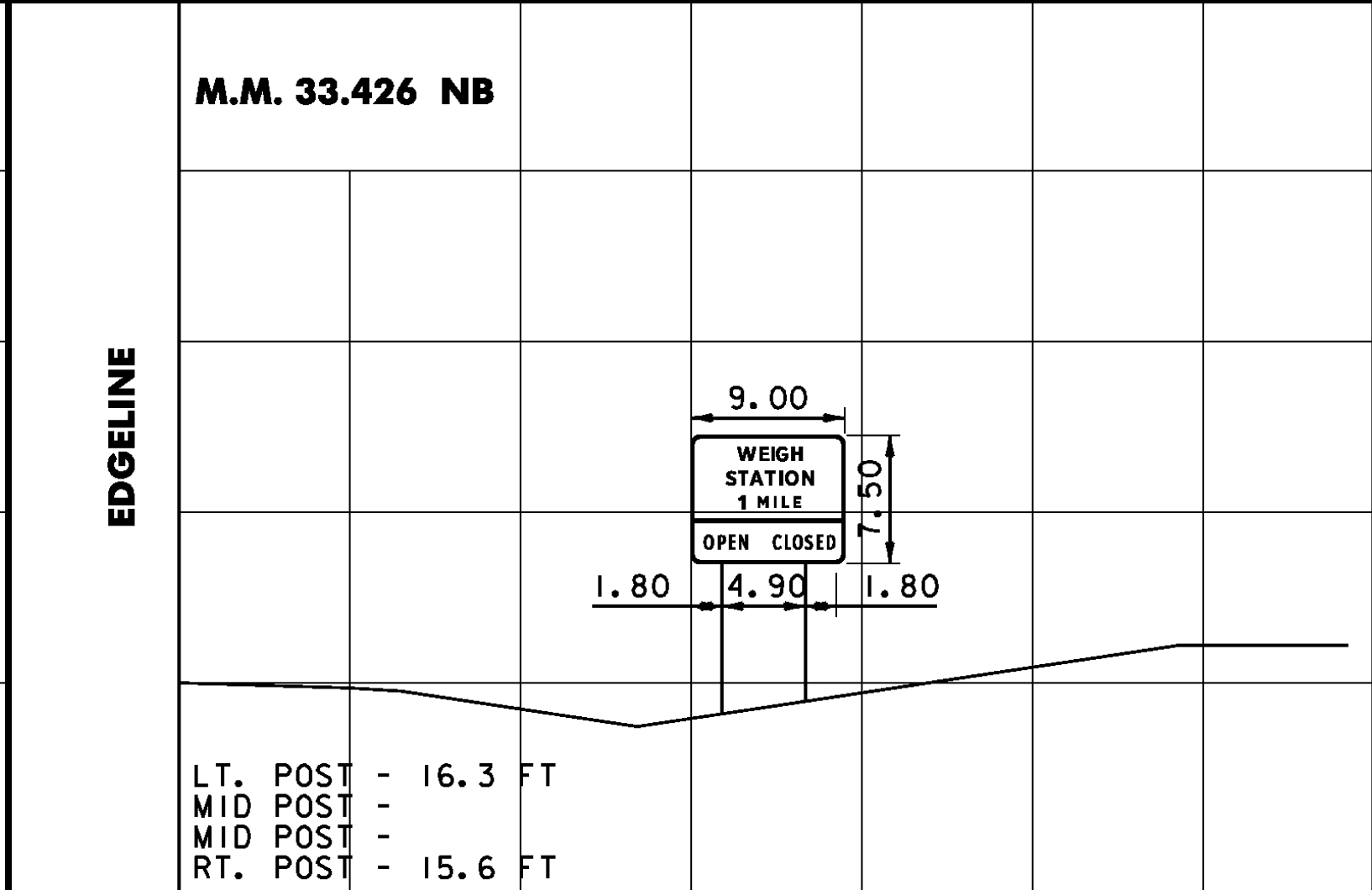
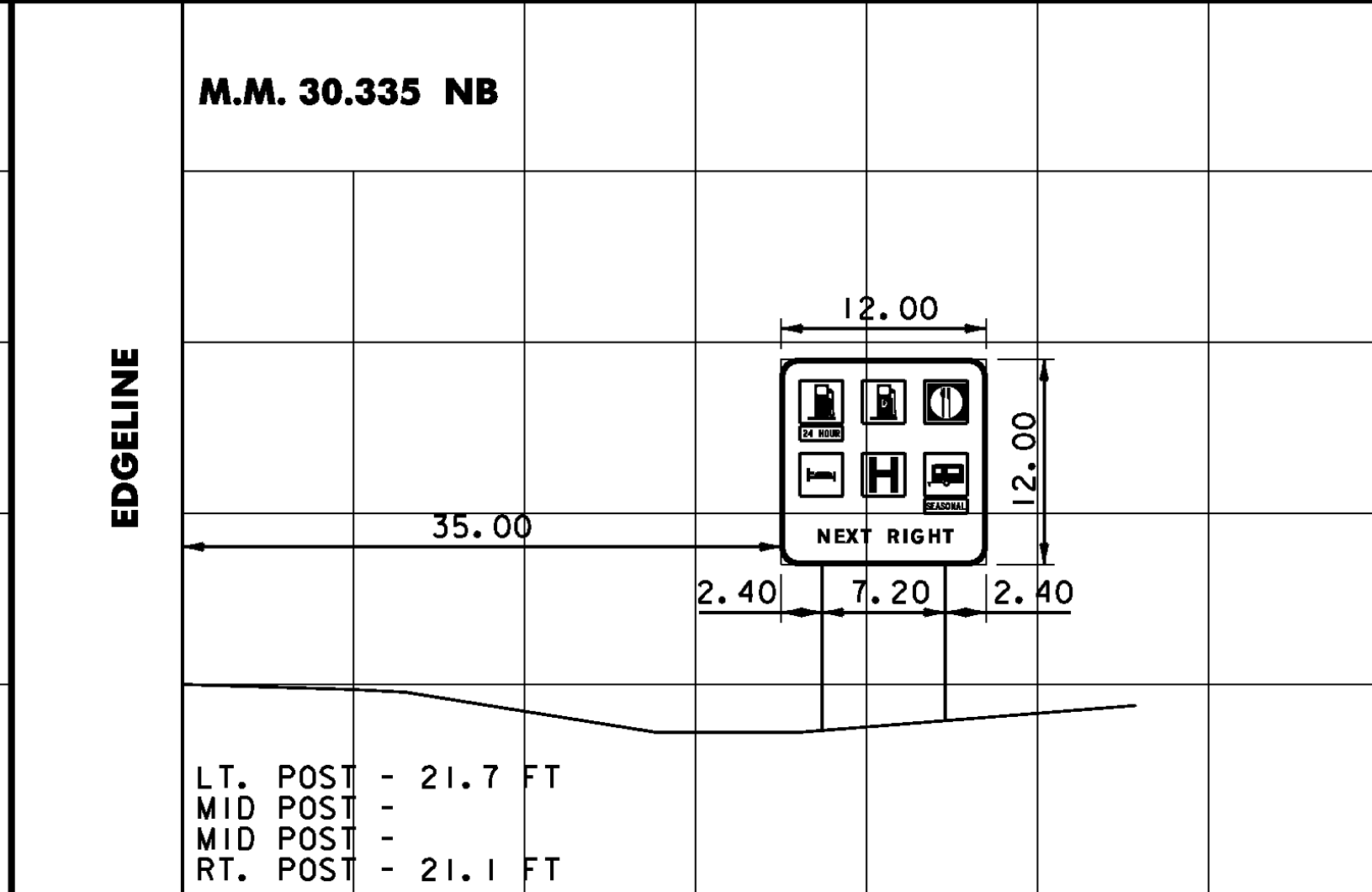
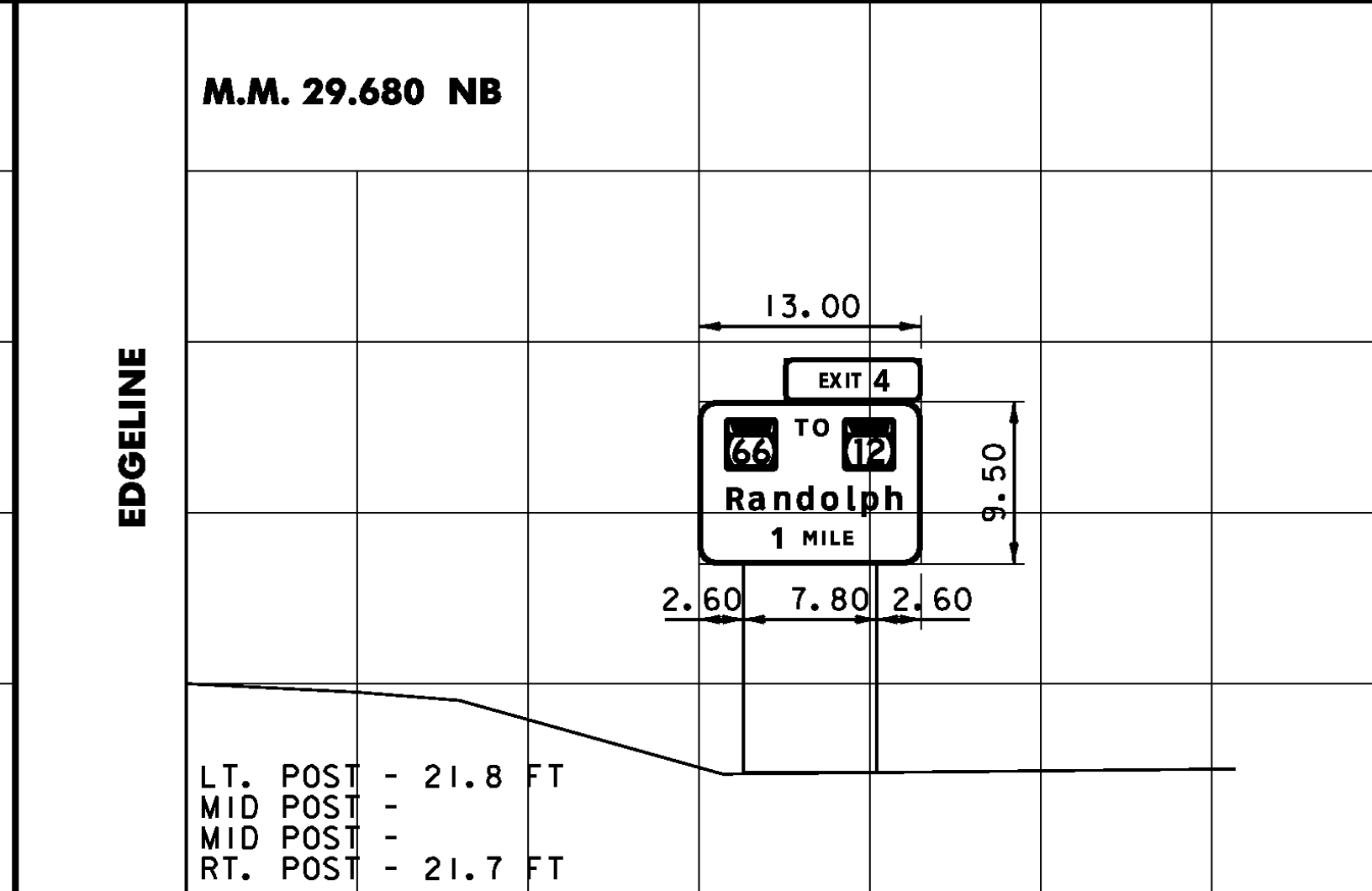
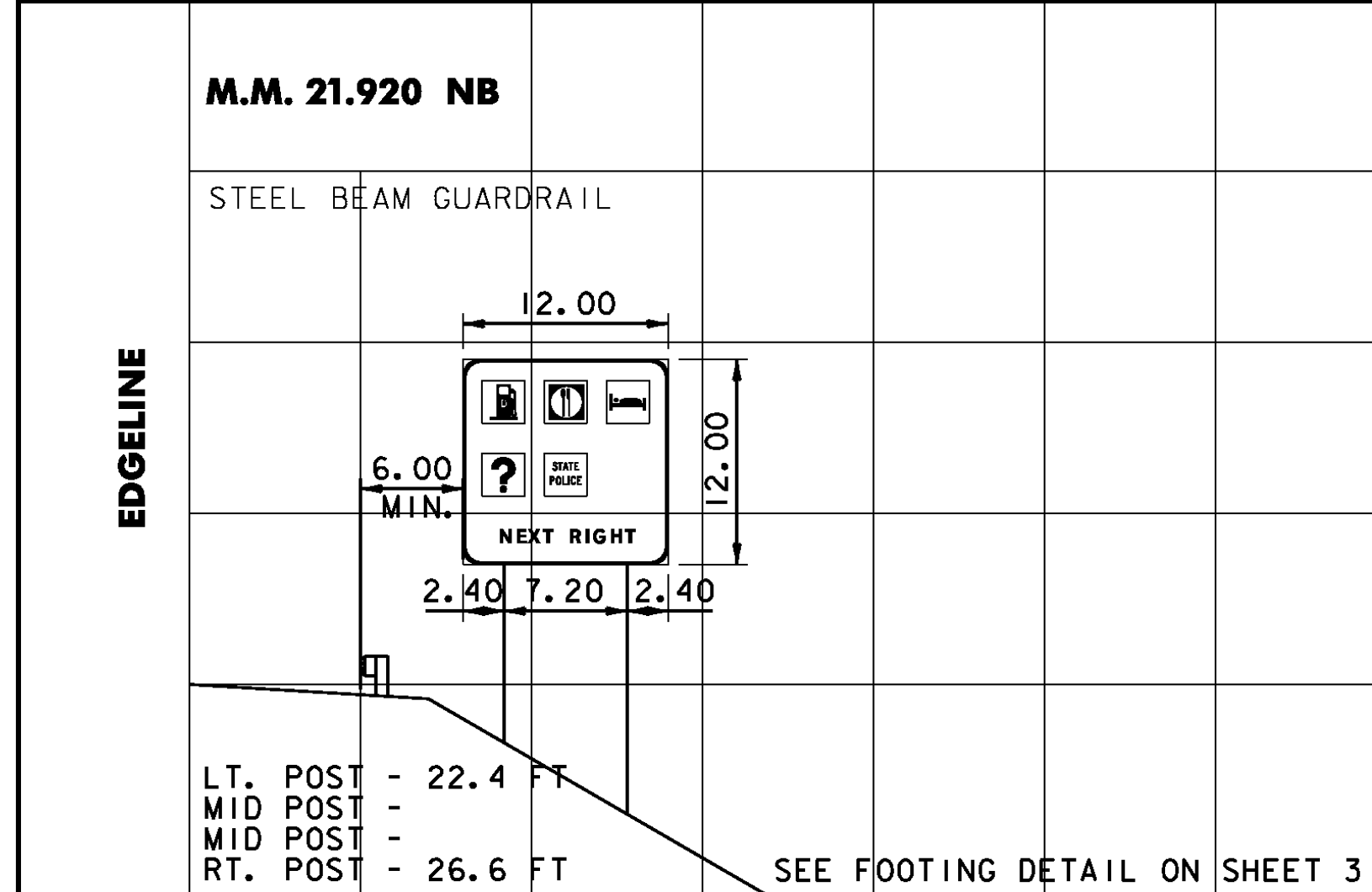
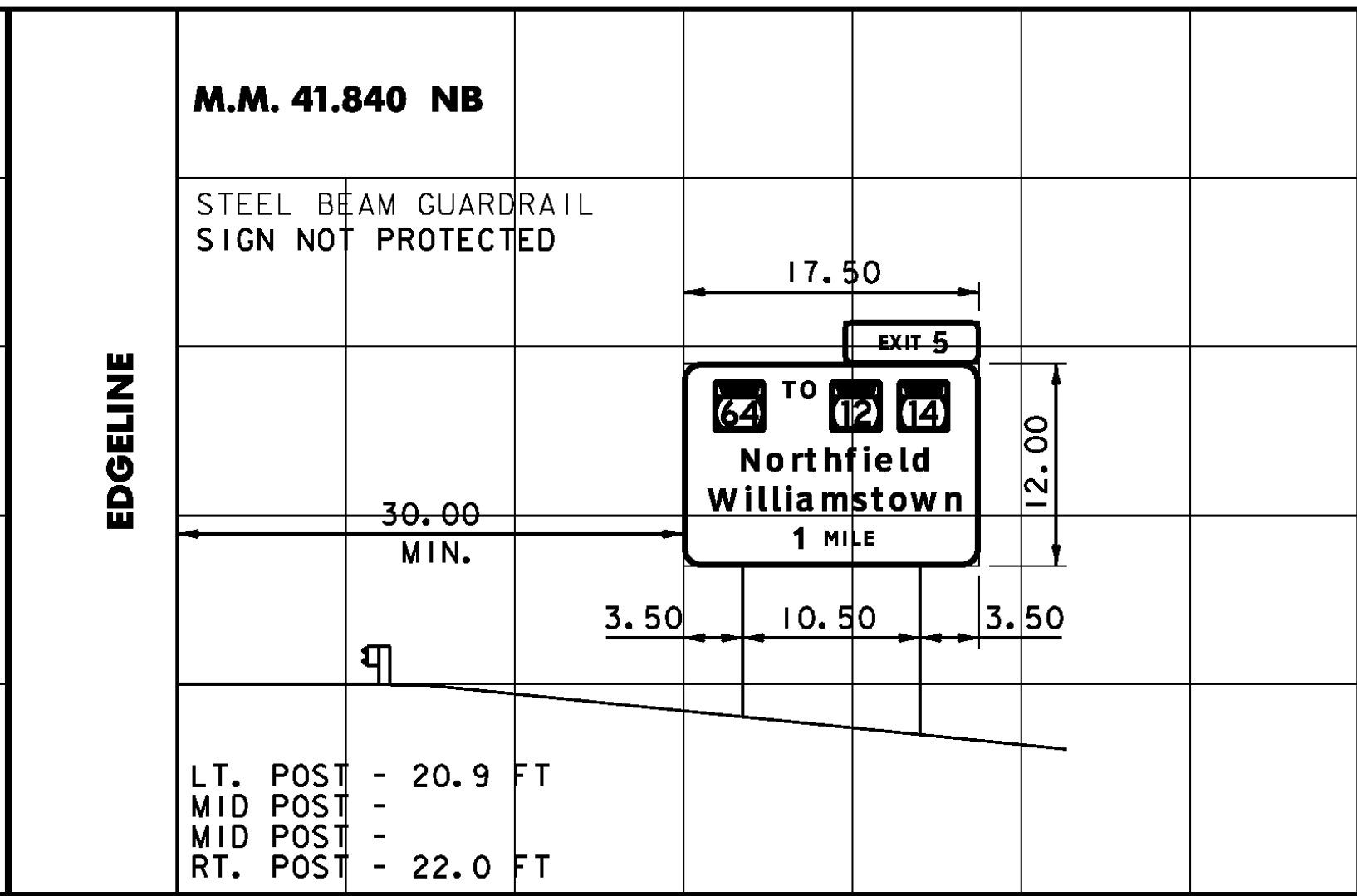
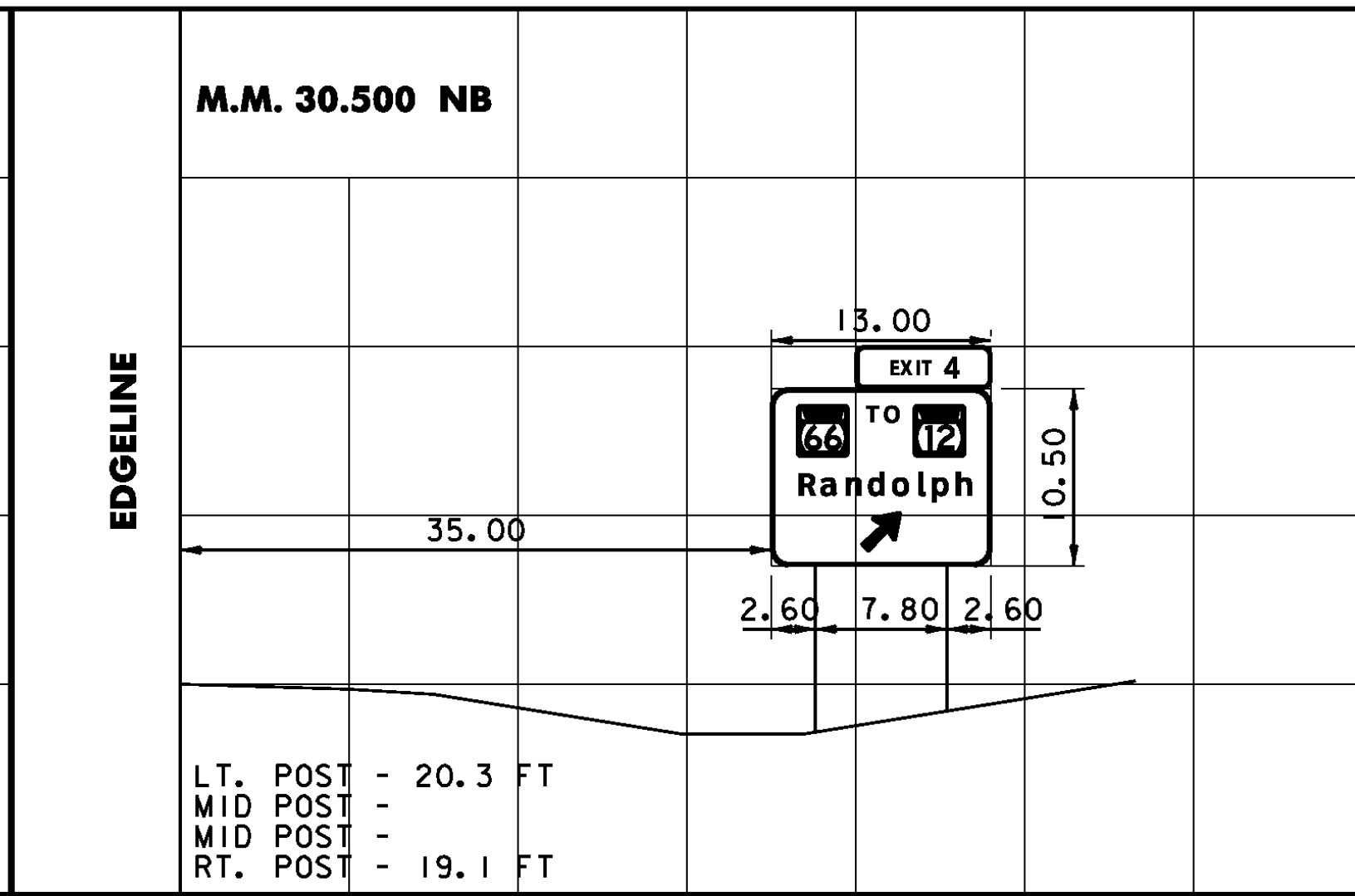
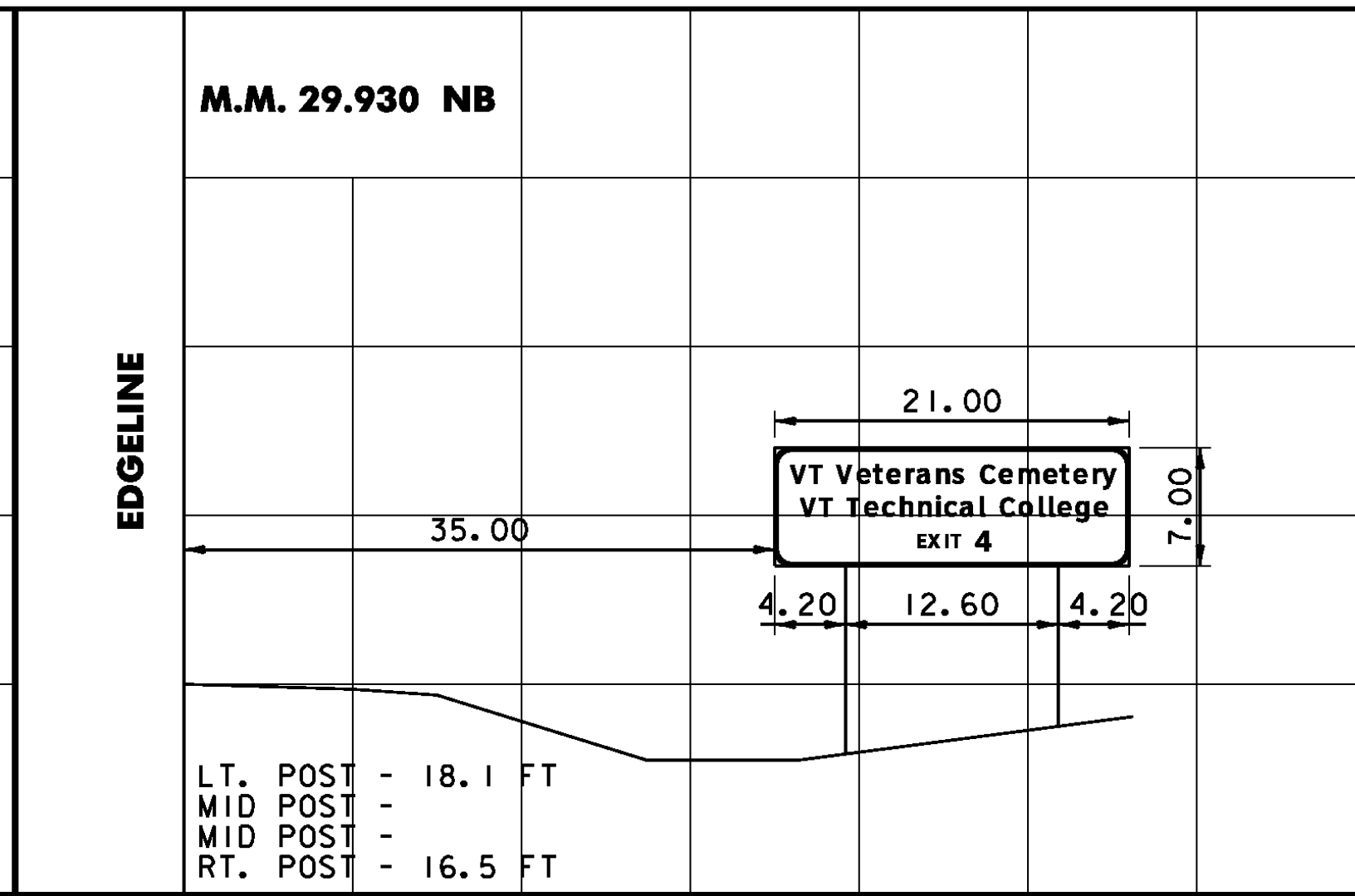
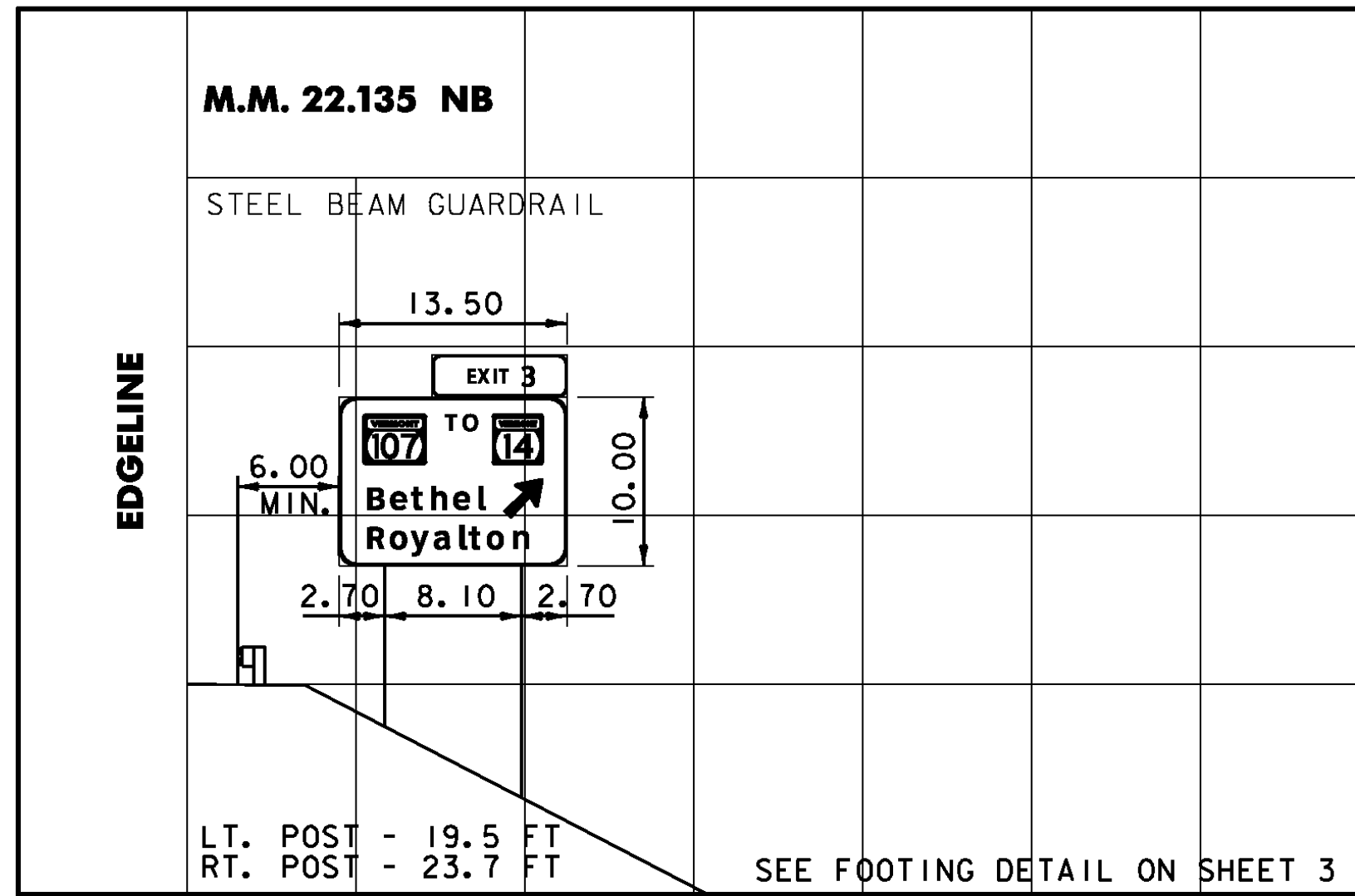
DESIGNED BY: JBZ

CHECKED BY: BDB

CLD REF. NO.: 09-0106

SHEET 146 OF 163

NOT TO SCALE

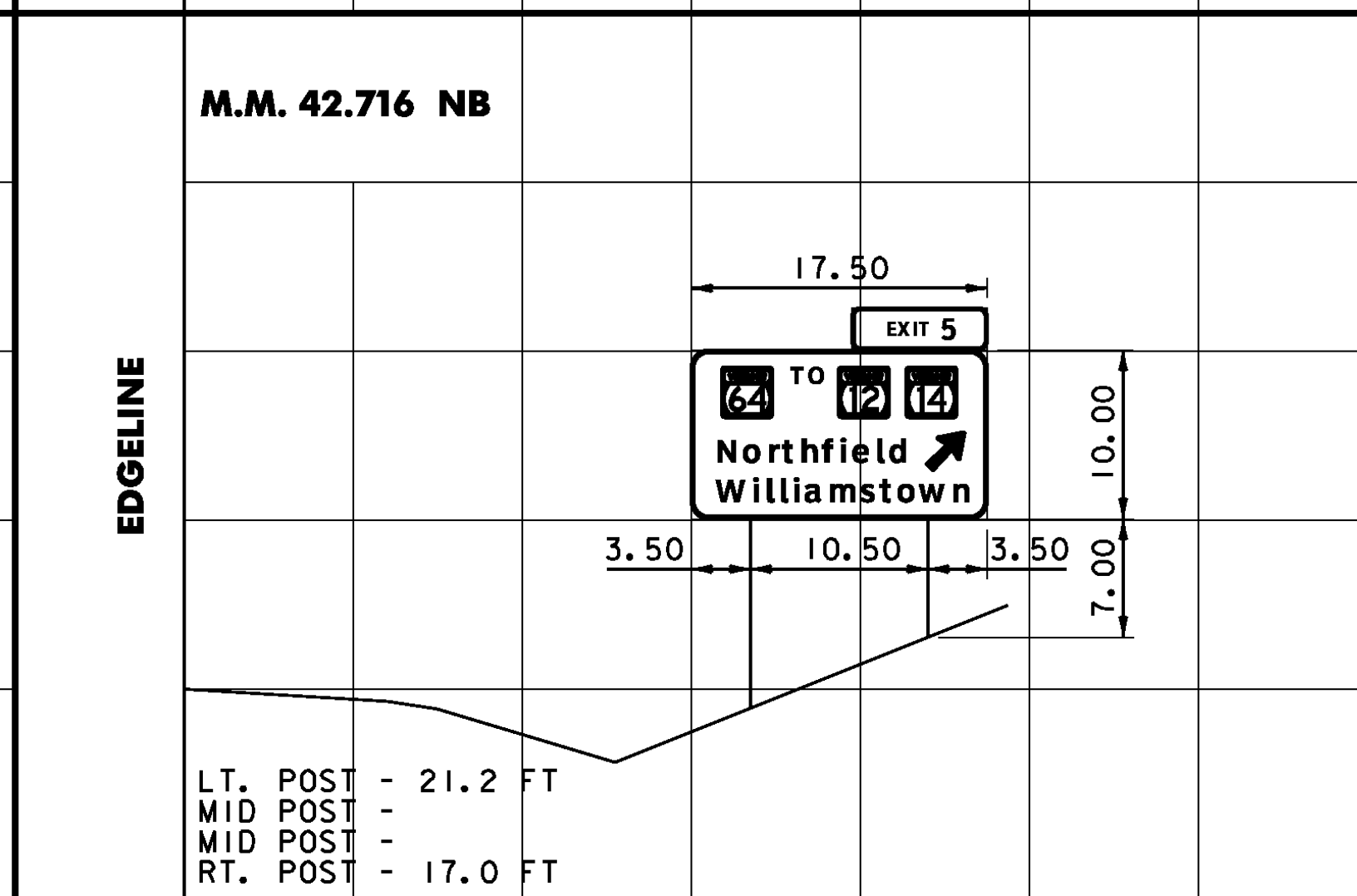
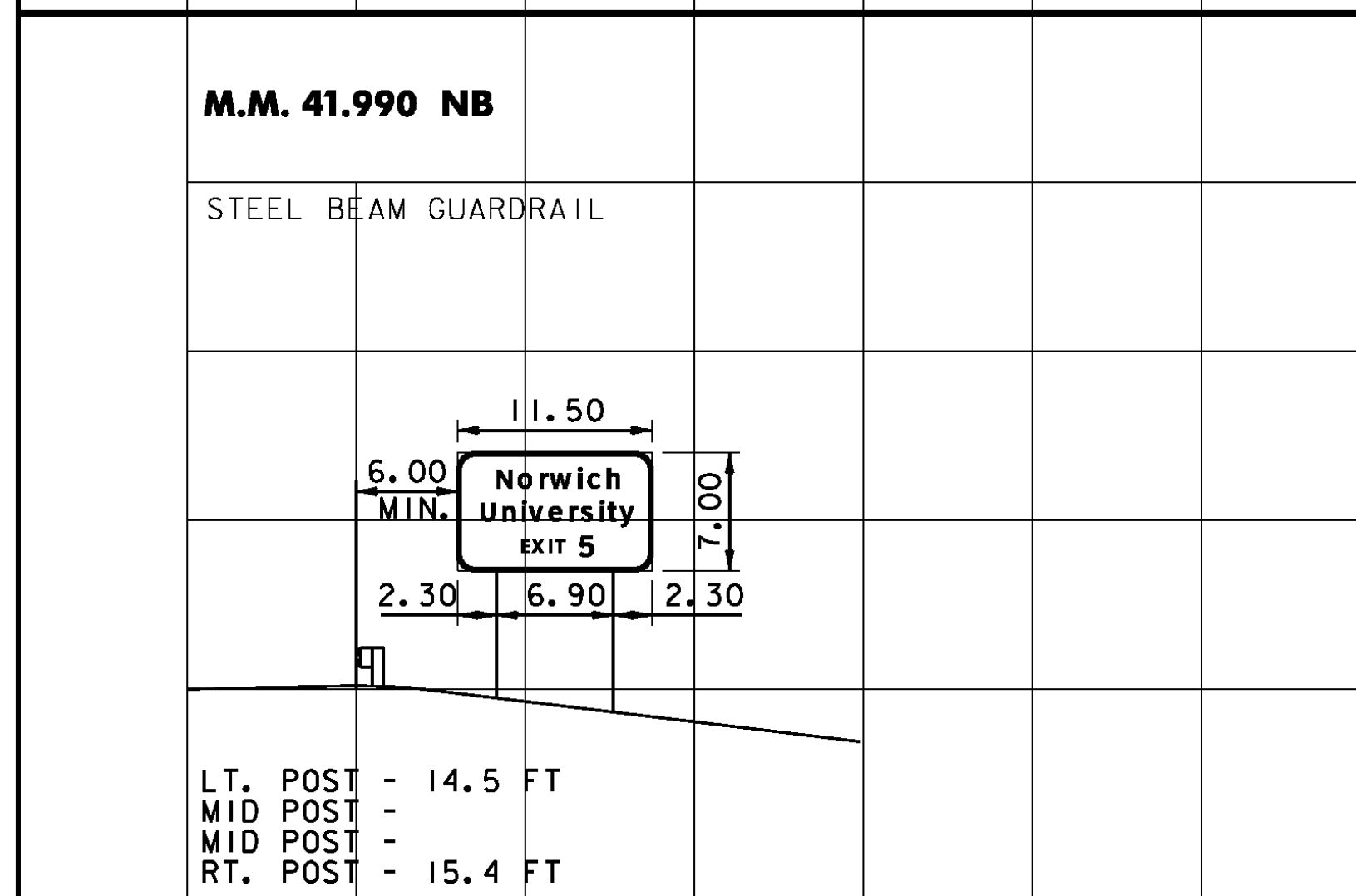
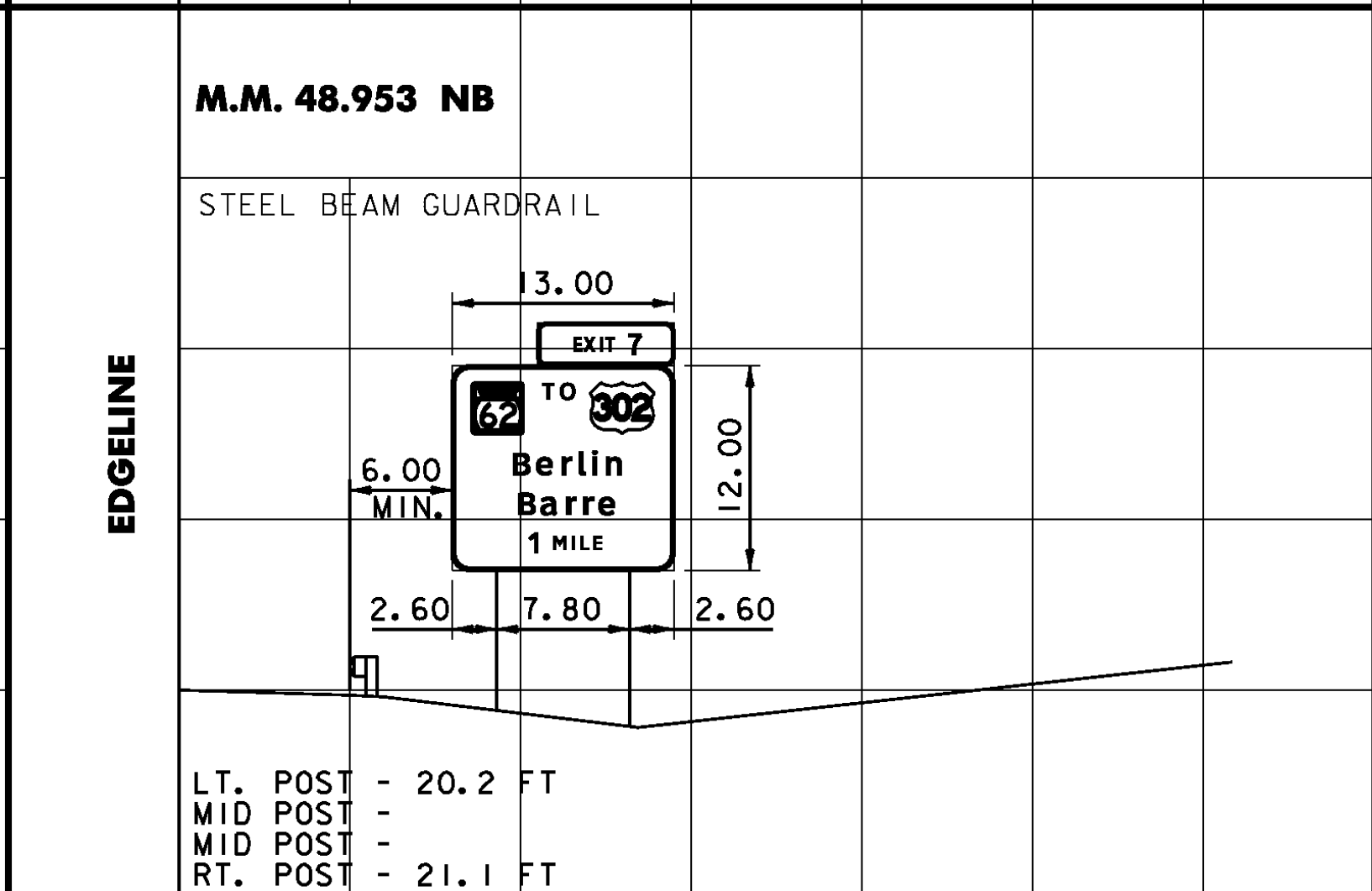
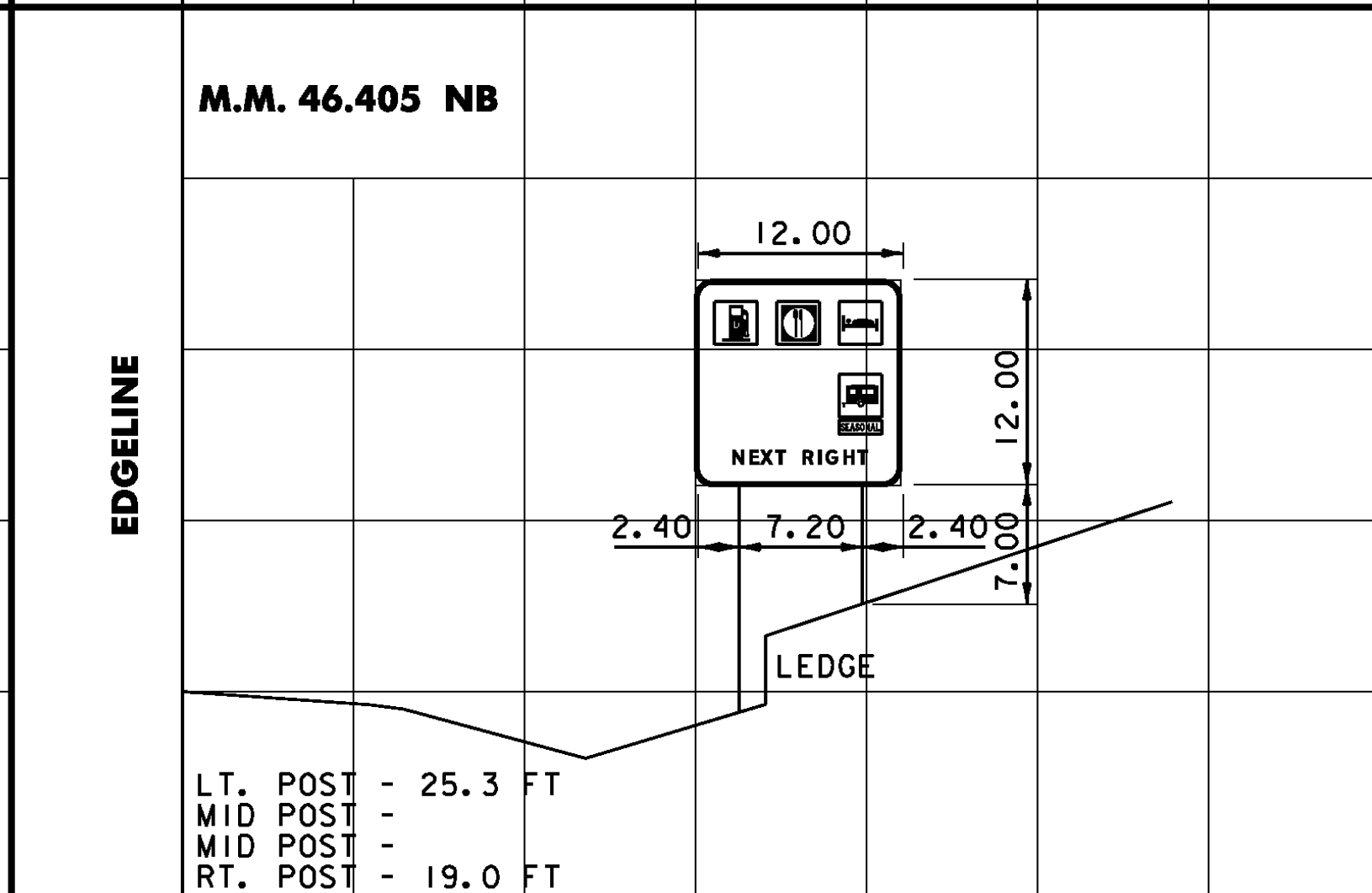
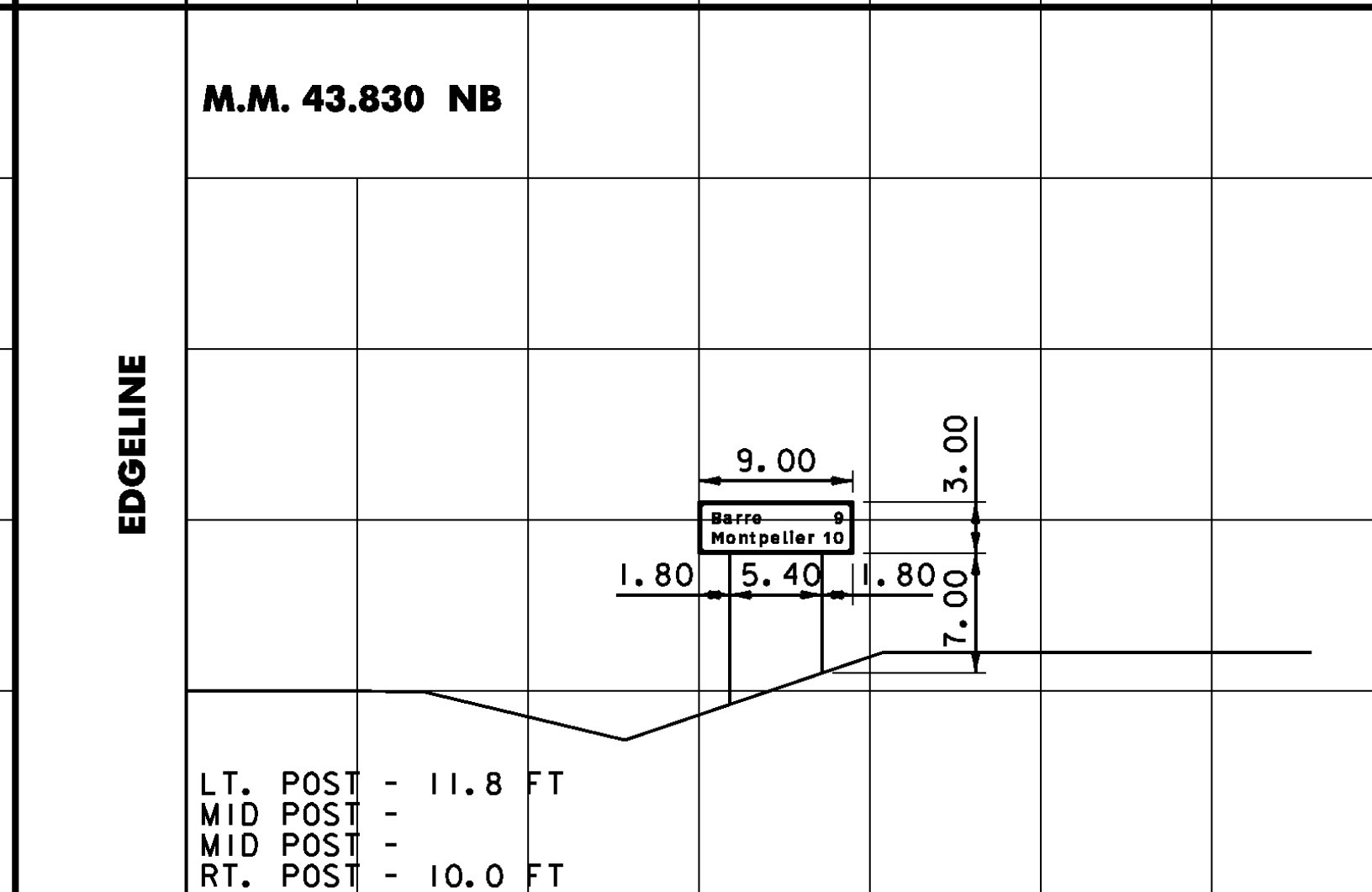
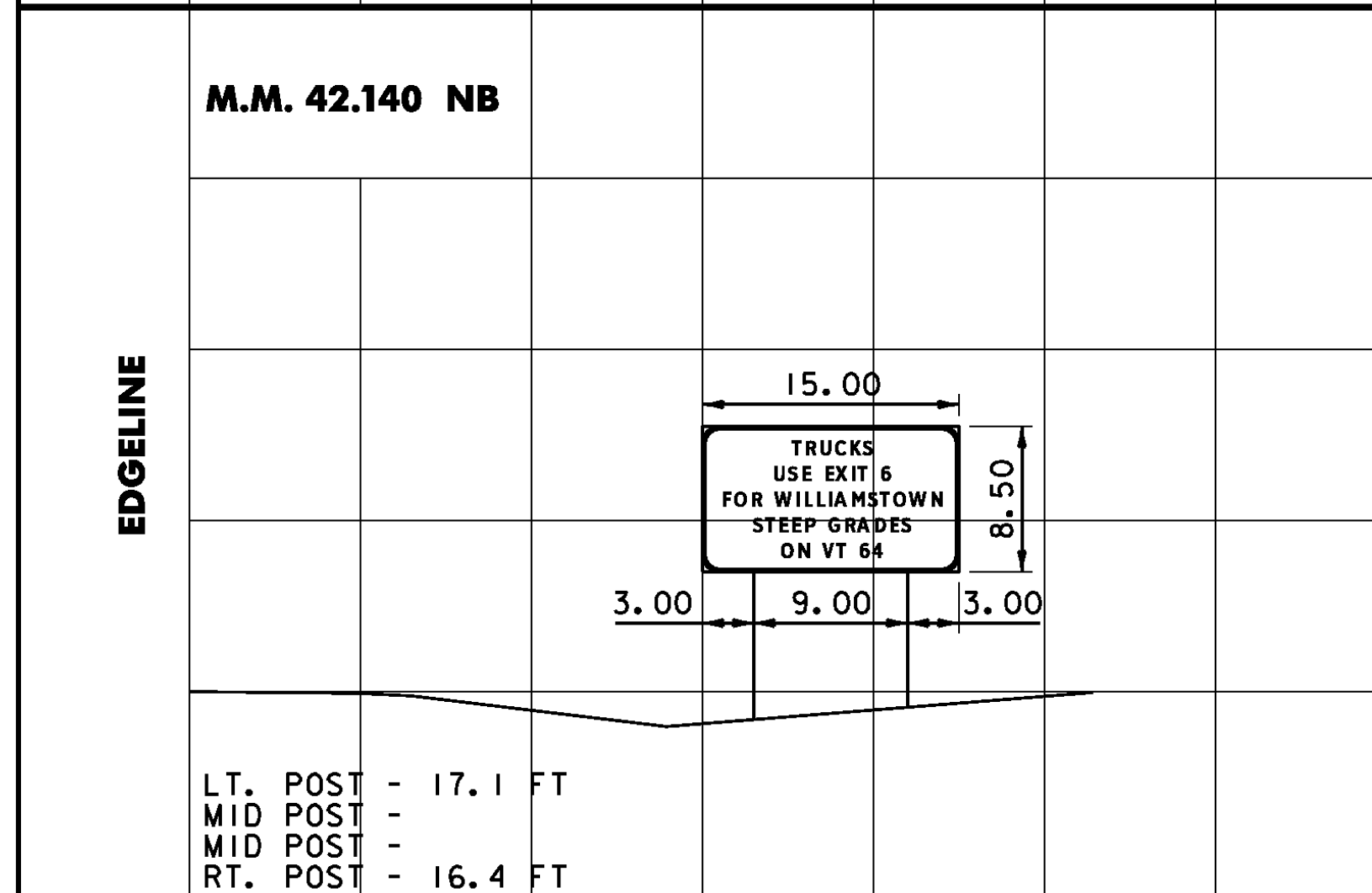
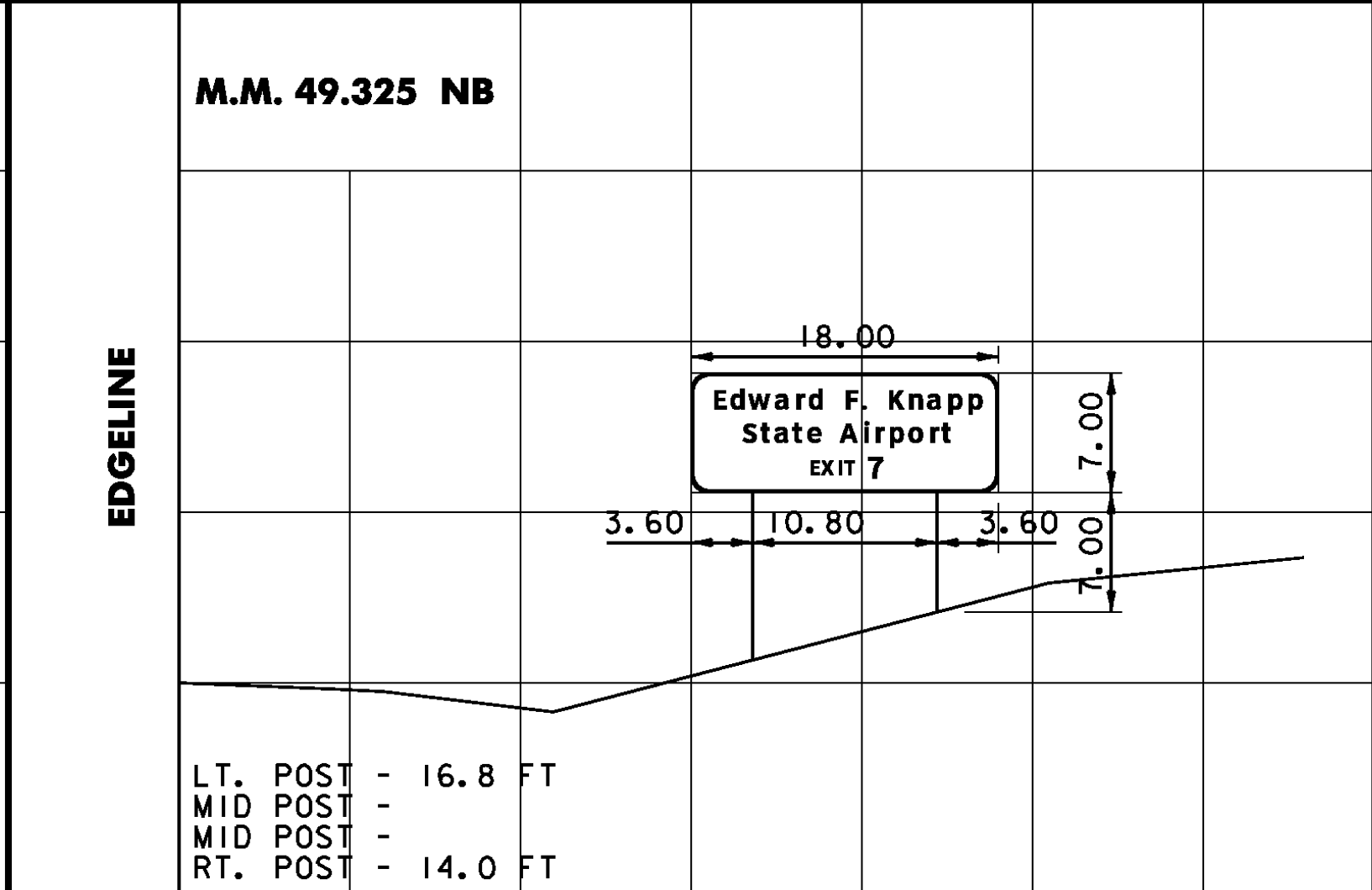
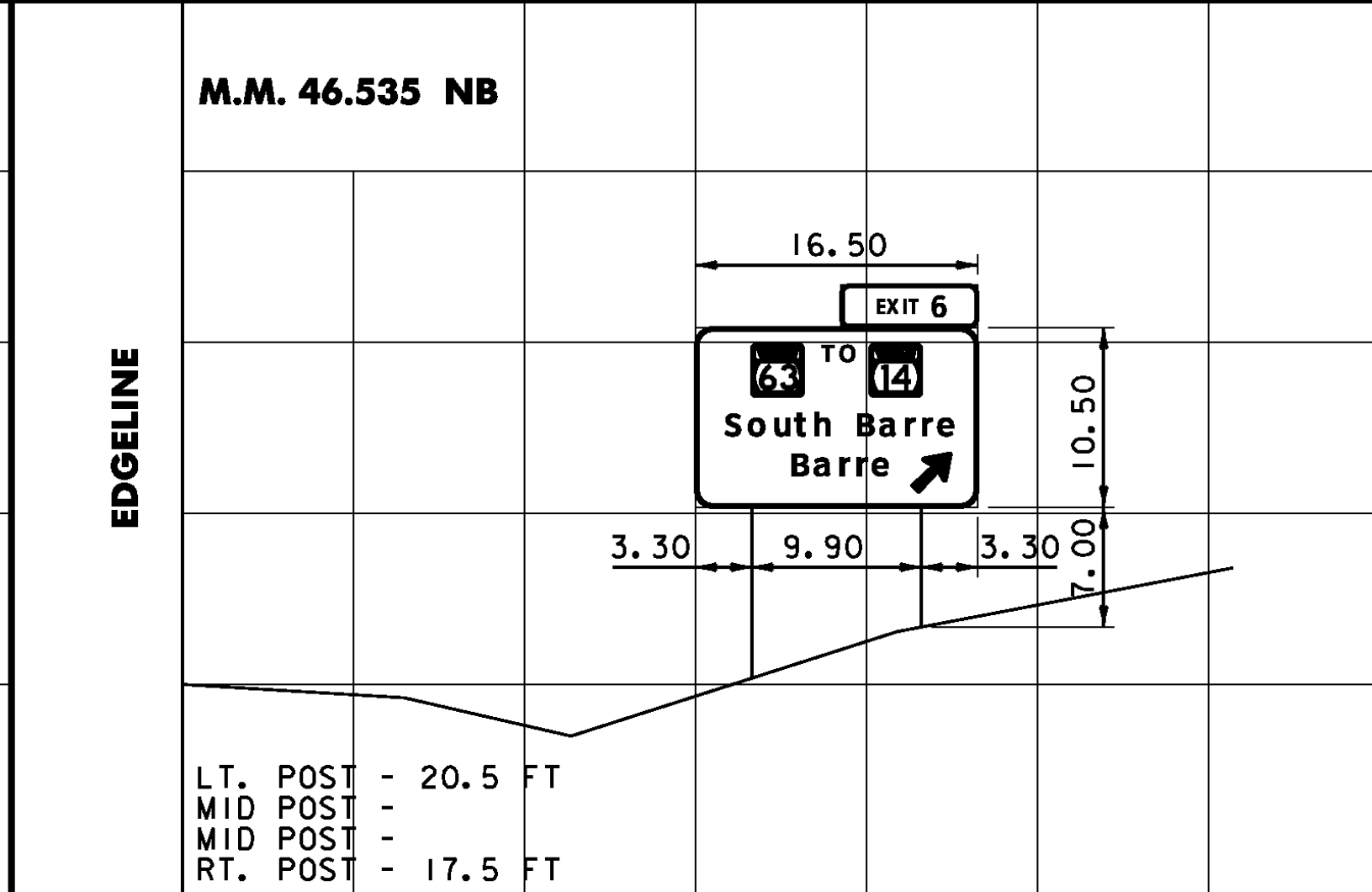
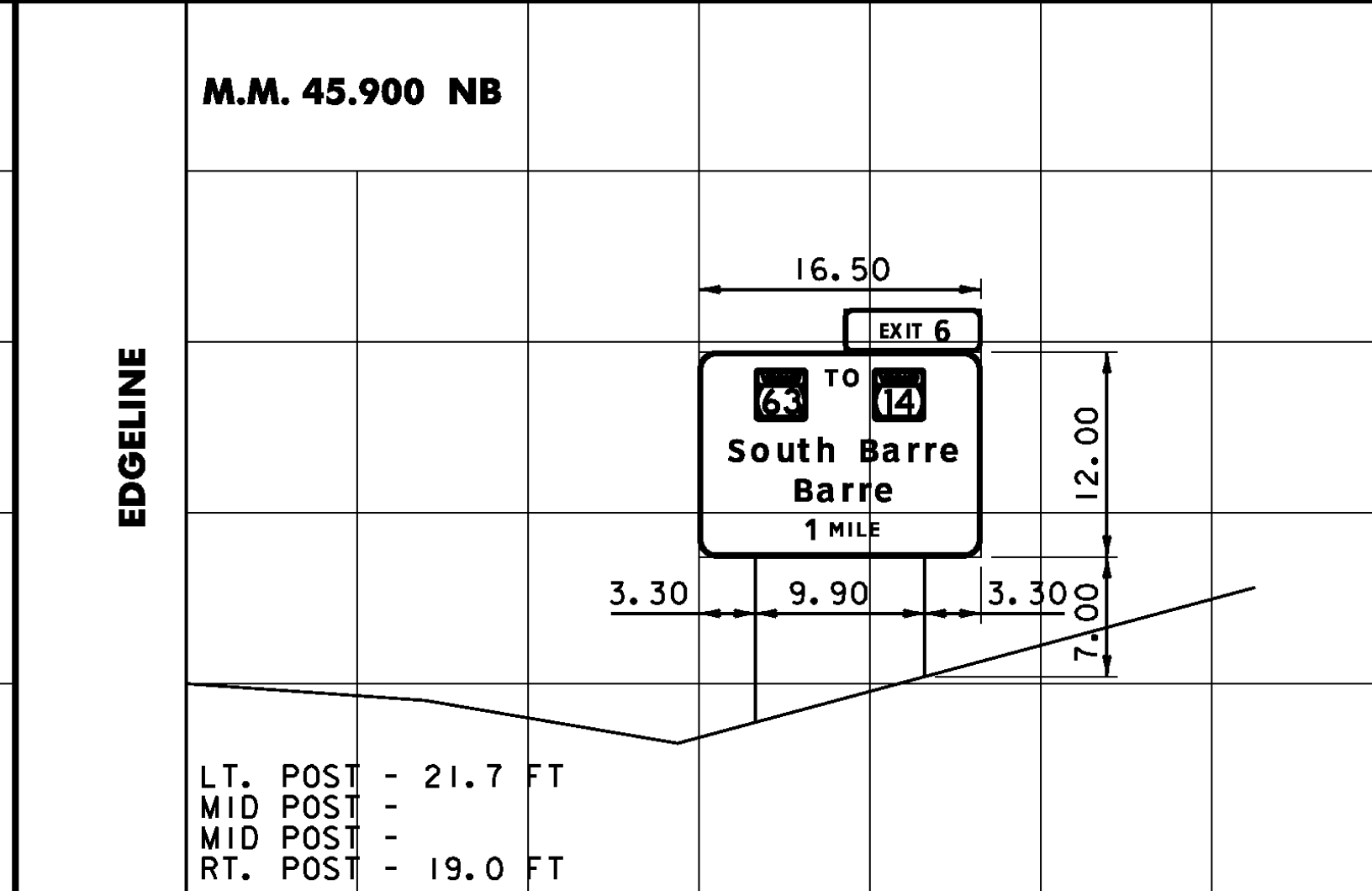
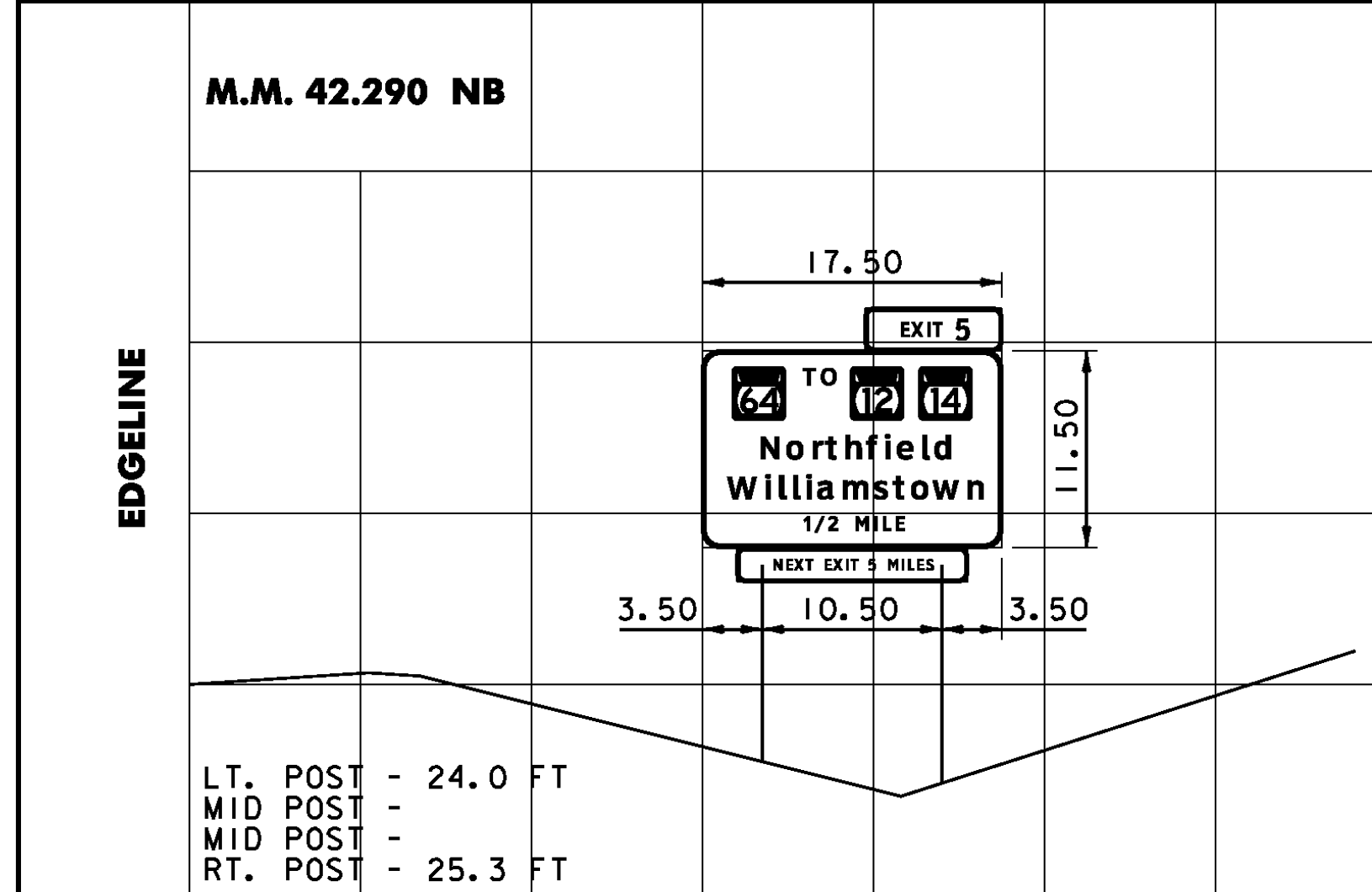
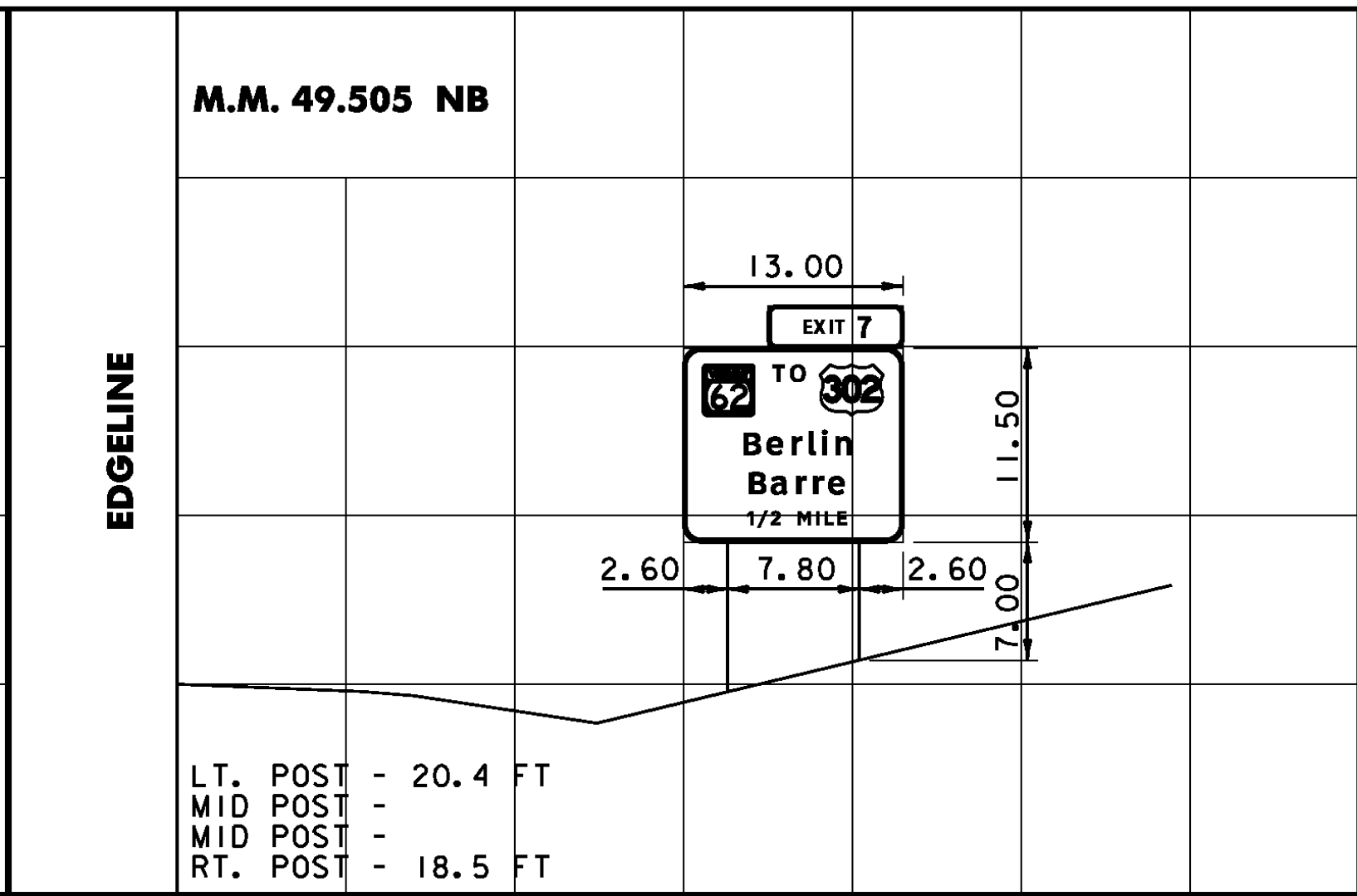
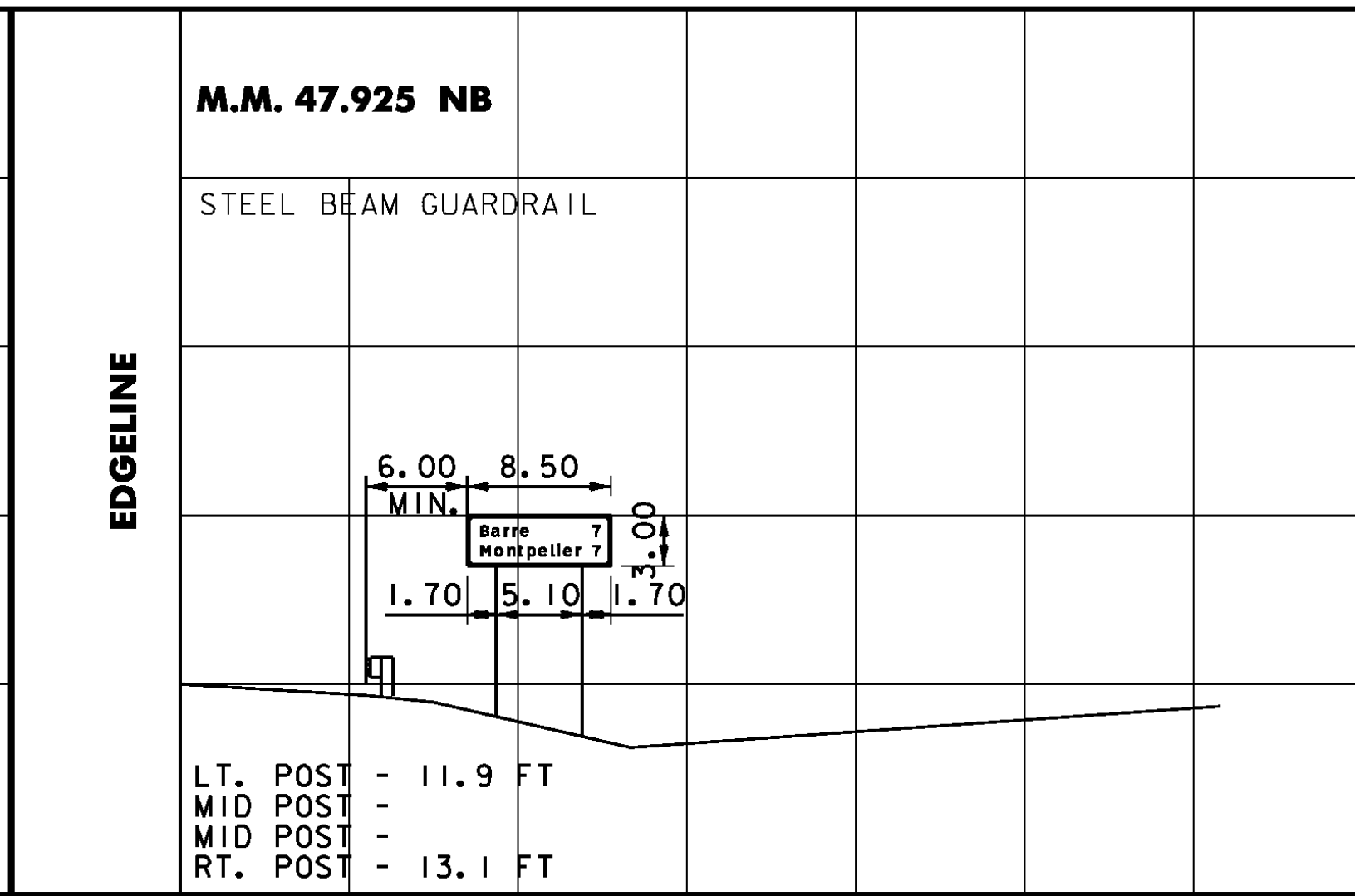
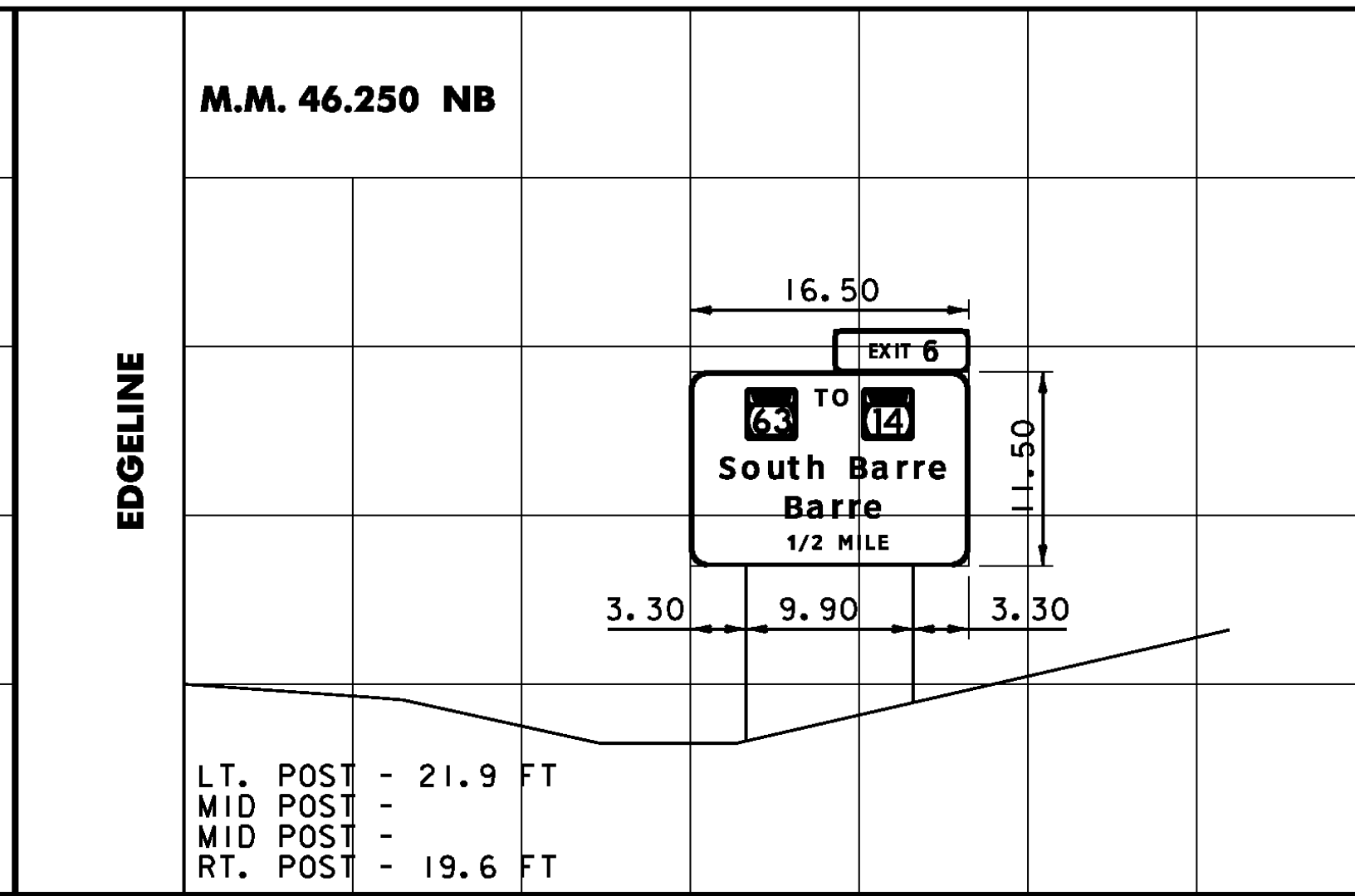
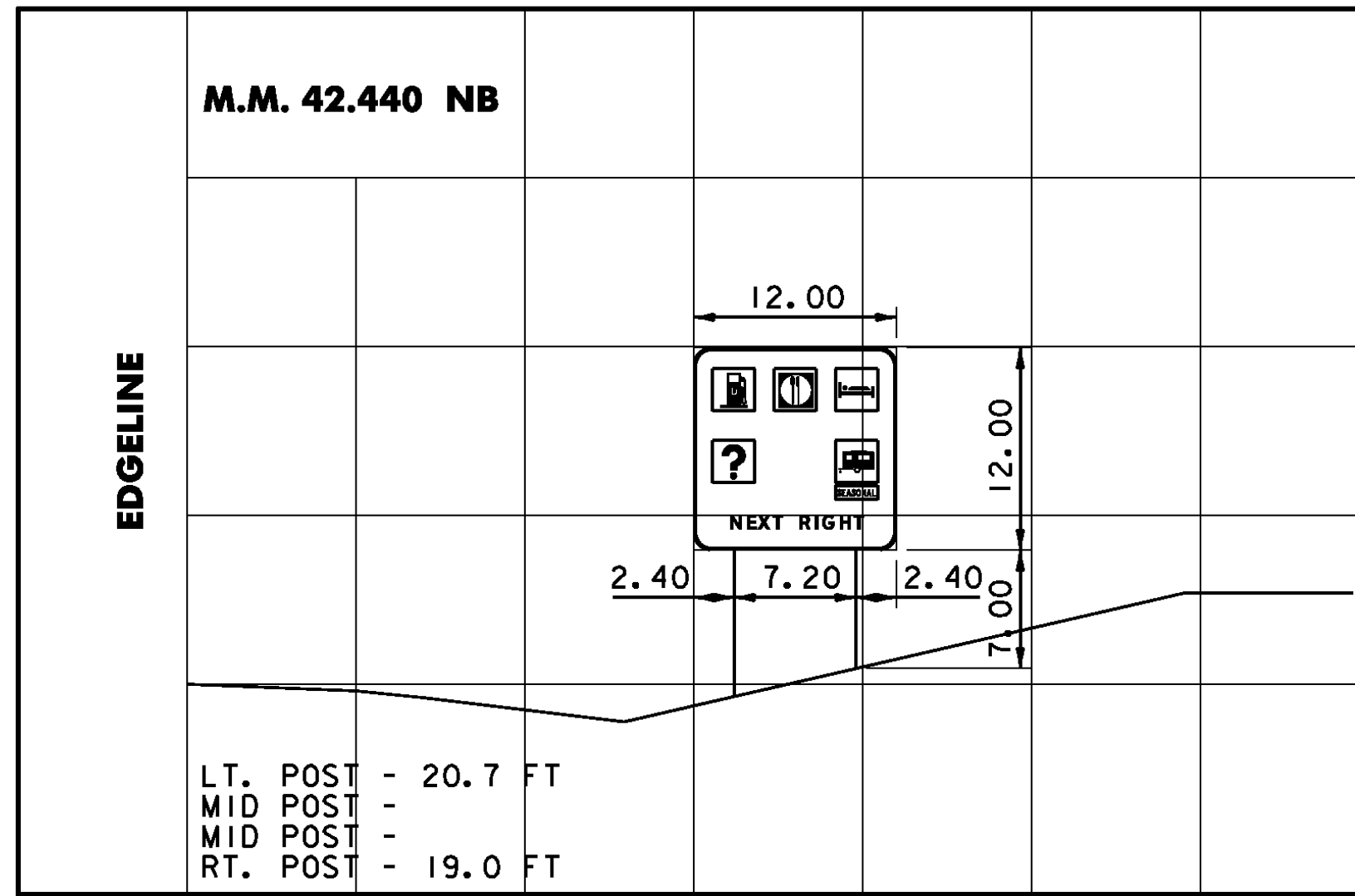


DIMENSIONS FOR CRITICAL OFFSETS OR CLEARANCES SHOWN FOR CONVENIENCE, REFER TO STANDARD SHEET E-120 FOR PLACEMENT GUIDELINES.

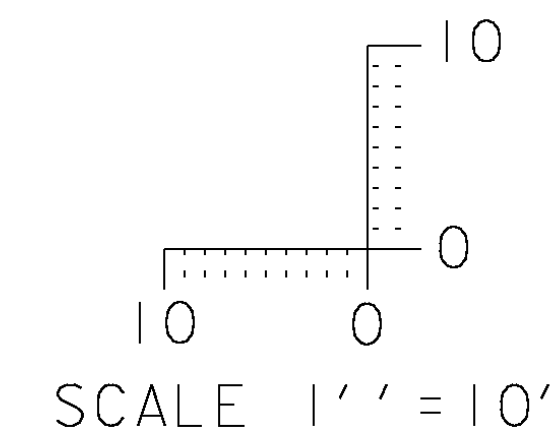
SCALE 1" = 10'

**CROSS SECTION SHEET 1**

PROJECT NAME: ROYALTON-MIDDLESEX	PLOT DATE: 8/12/2009
PROJECT NUMBER: IMG SIGN(19)	DRAWN BY: JBZ
FILE NAME: z09a020xs.dgn	CHECKED BY: BDB
PROJECT LEADER: CRB	SHEET 147 OF 163
DESIGNED BY: JBZ	
CLD REF. NO.: 09-0106	

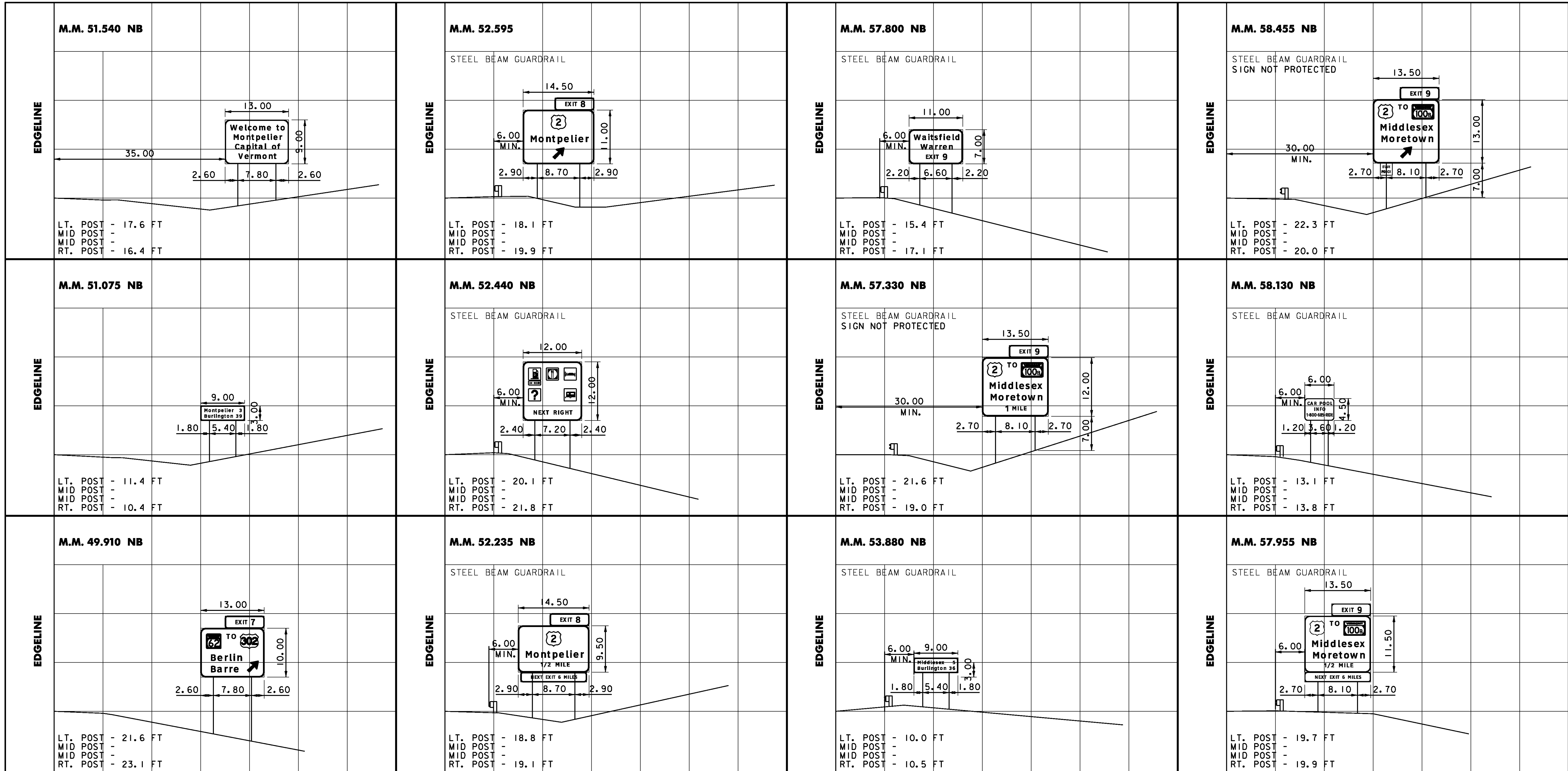


DIMENSIONS FOR CRITICAL OFFSETS OR CLEARANCES SHOWN FOR CONVENIENCE, REFER TO STANDARD SHEET E-120 FOR PLACEMENT GUIDELINES.

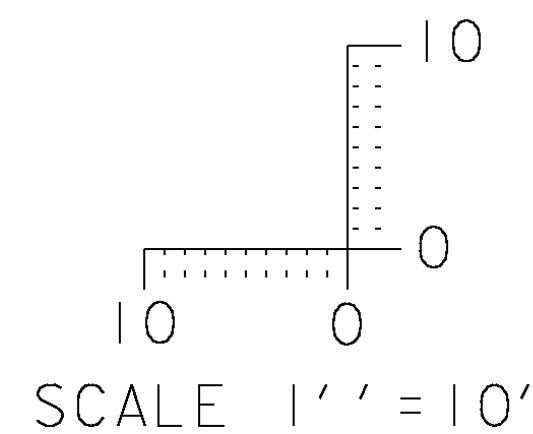
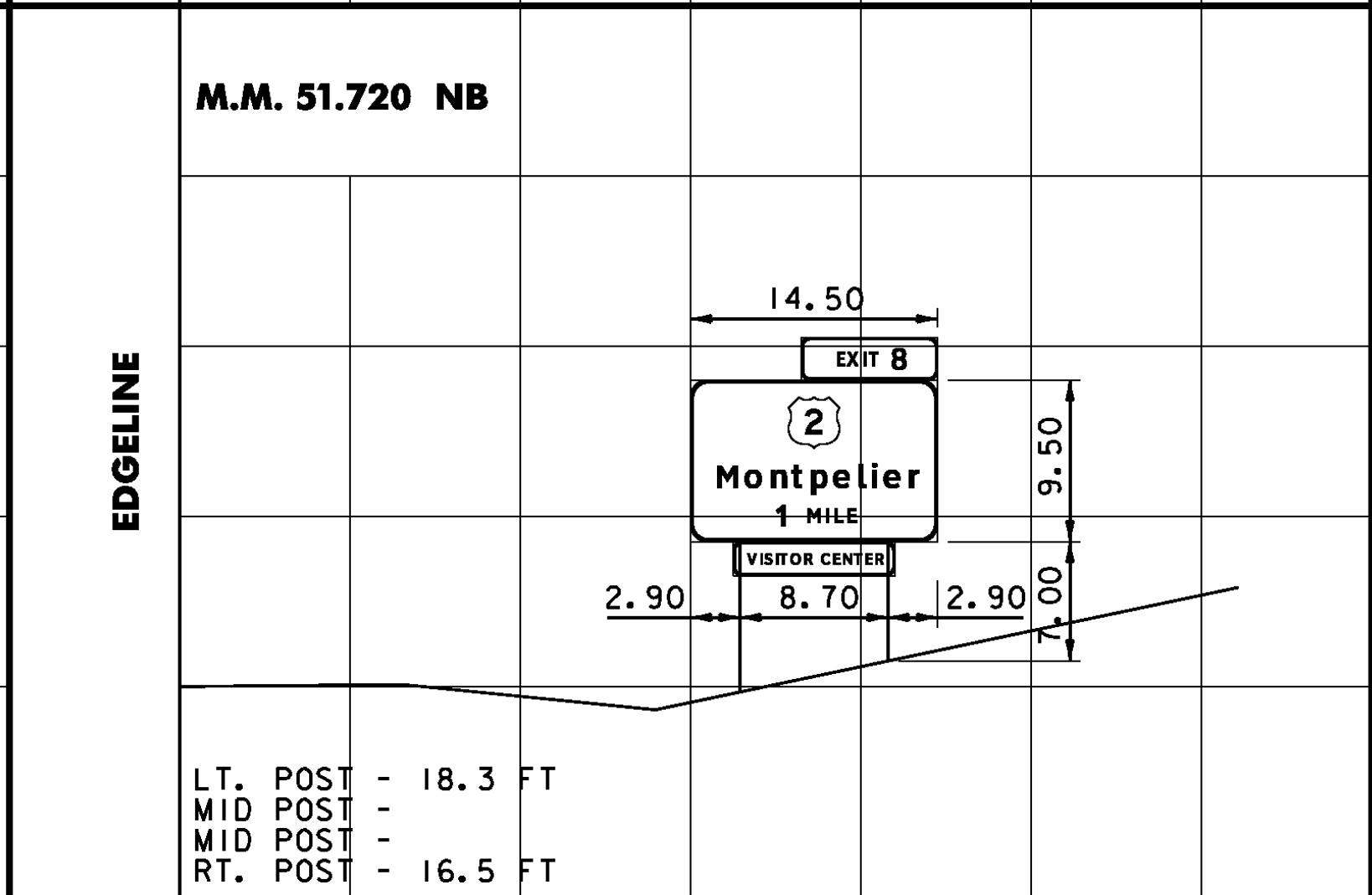
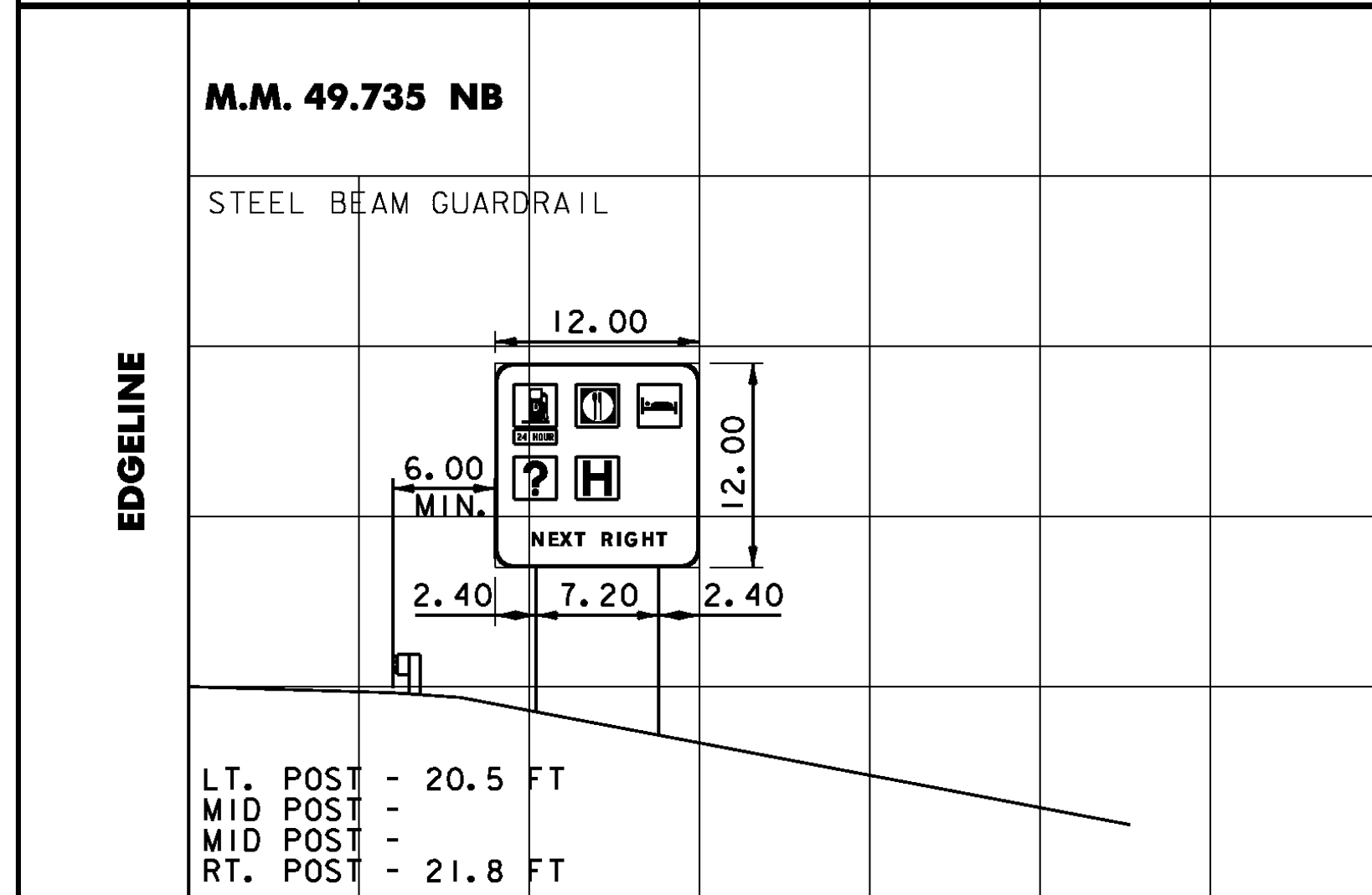


**CROSS SECTION SHEET 2**

PROJECT NAME: ROYALTON-MIDDLESEX	PLOT DATE: 8/12/2009
PROJECT NUMBER: IMG SIGN(19)	DRAWN BY: JBZ
FILE NAME: z09a020xs.dgn	CHECKED BY: BDB
PROJECT LEADER: CRB	SHEET 148 OF 163
DESIGNED BY: JBZ	
CLD REF. NO.: 09-0106	



DIMENSIONS FOR CRITICAL OFFSETS OR CLEARANCES SHOWN FOR CONVENIENCE, REFER TO STANDARD SHEET E-120 FOR PLACEMENT GUIDELINES.



**CROSS SECTION SHEET 3**

PROJECT NAME: ROYALTON-MIDDLESEX

PROJECT NUMBER: IMG SIGN(19)

FILE NAME: z09a020xs.dgn

PLOT DATE: 8/12/2009

PROJECT LEADER: CRB

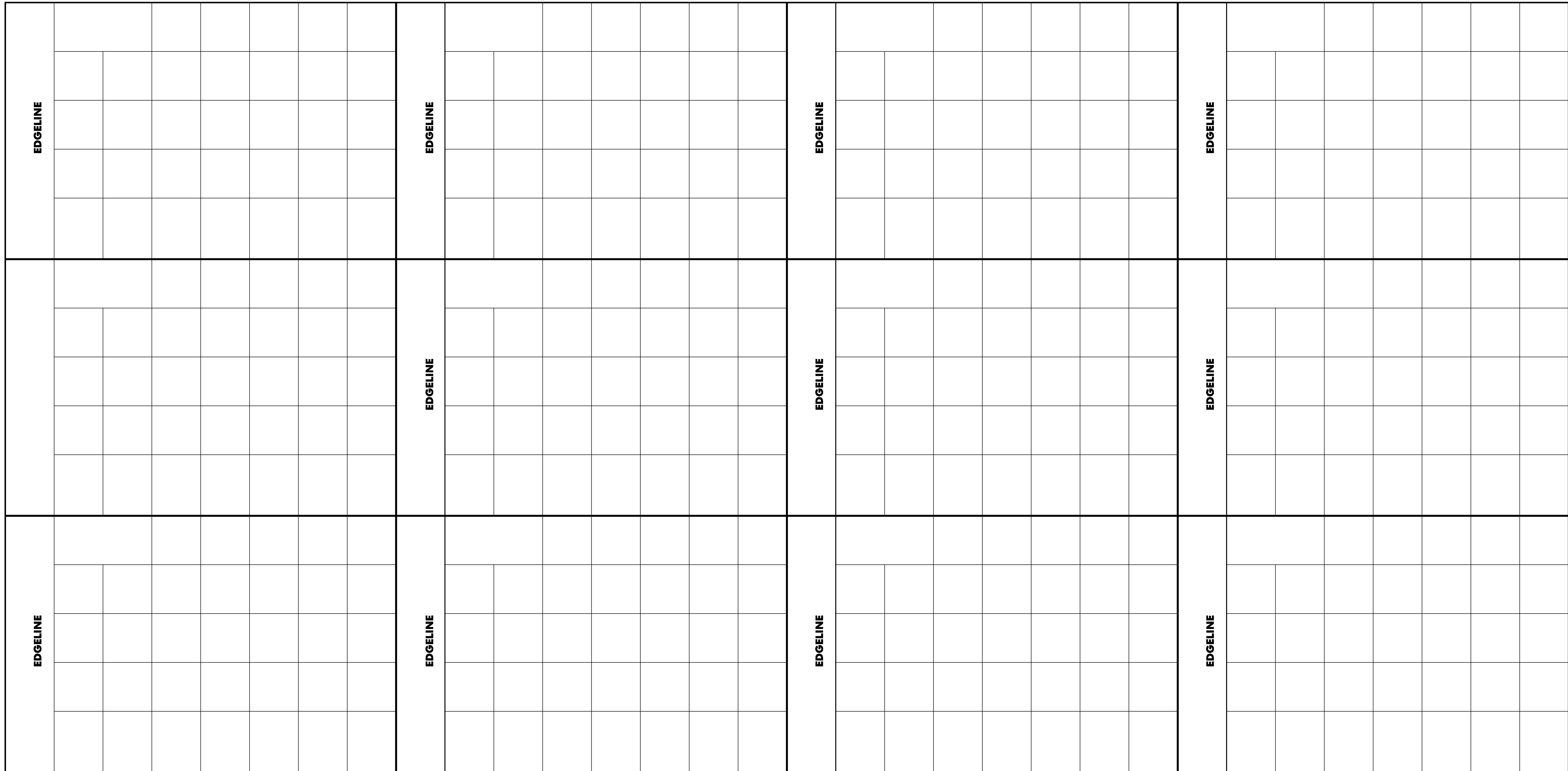
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DESIGNED BY: JBZ

CHECKED BY: BDB

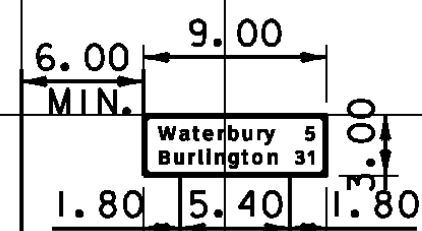
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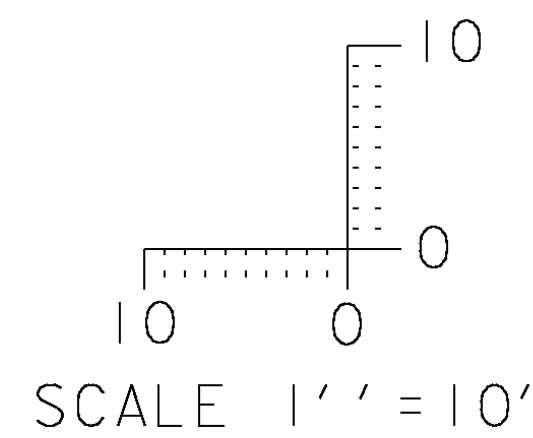
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STEEL BEAM GUARDRAIL



LT. POST - 10.6 FT  
 MID POST -  
 MID POST -  
 RT. POST - 11.4 FT

DIMENSIONS FOR CRITICAL OFFSETS OR CLEARANCES SHOWN FOR CONVENIENCE, REFER TO STANDARD SHEET E-120 FOR PLACEMENT GUIDELINES.



**CROSS SECTION SHEET 4**

PROJECT NAME: ROYALTON-MIDDLESEX

PROJECT NUMBER: IMG SIGN(19)

FILE NAME: z09a020xs.dgn

PROJECT LEADER: CRB

DESIGNED BY: BDB

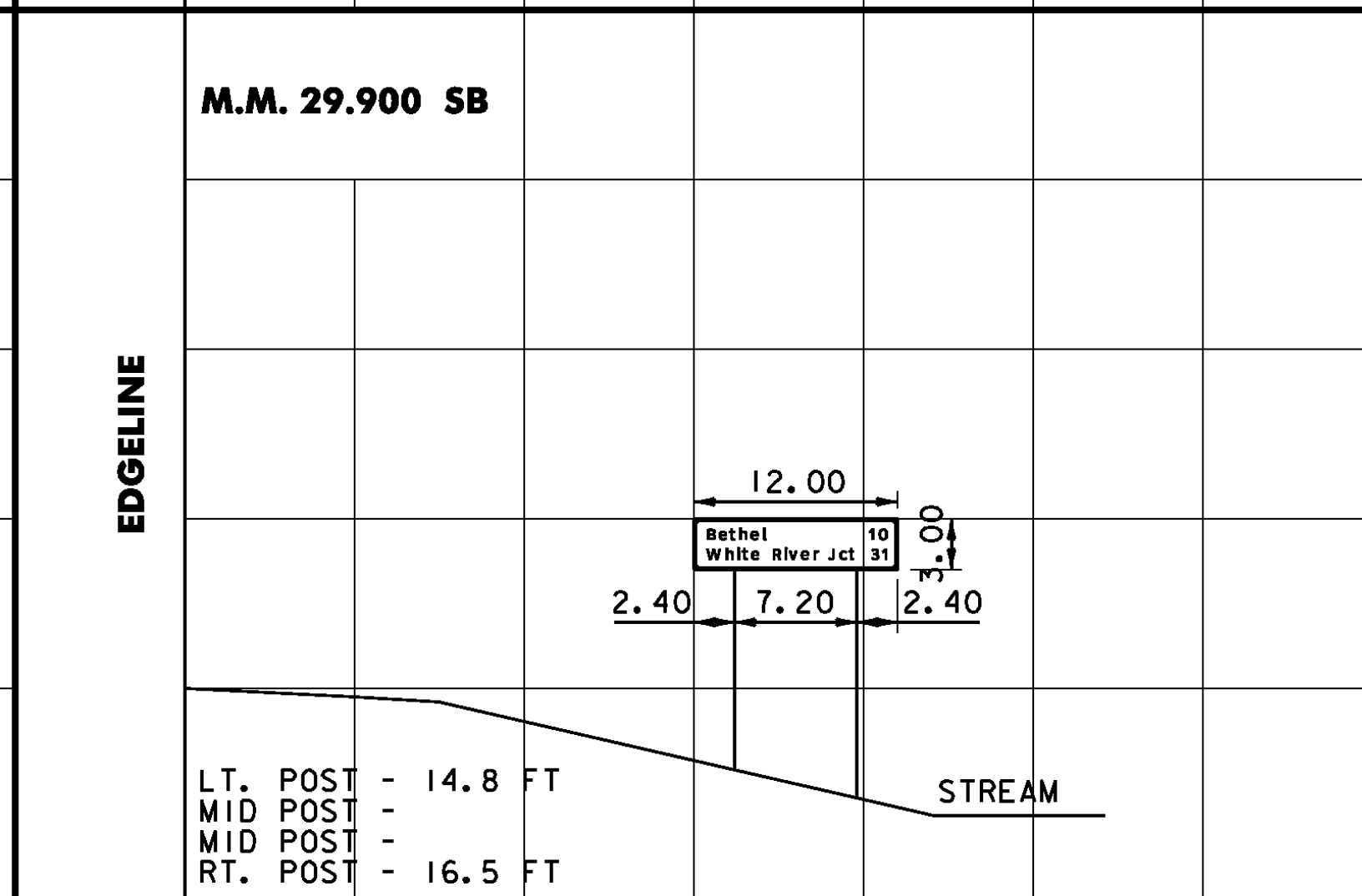
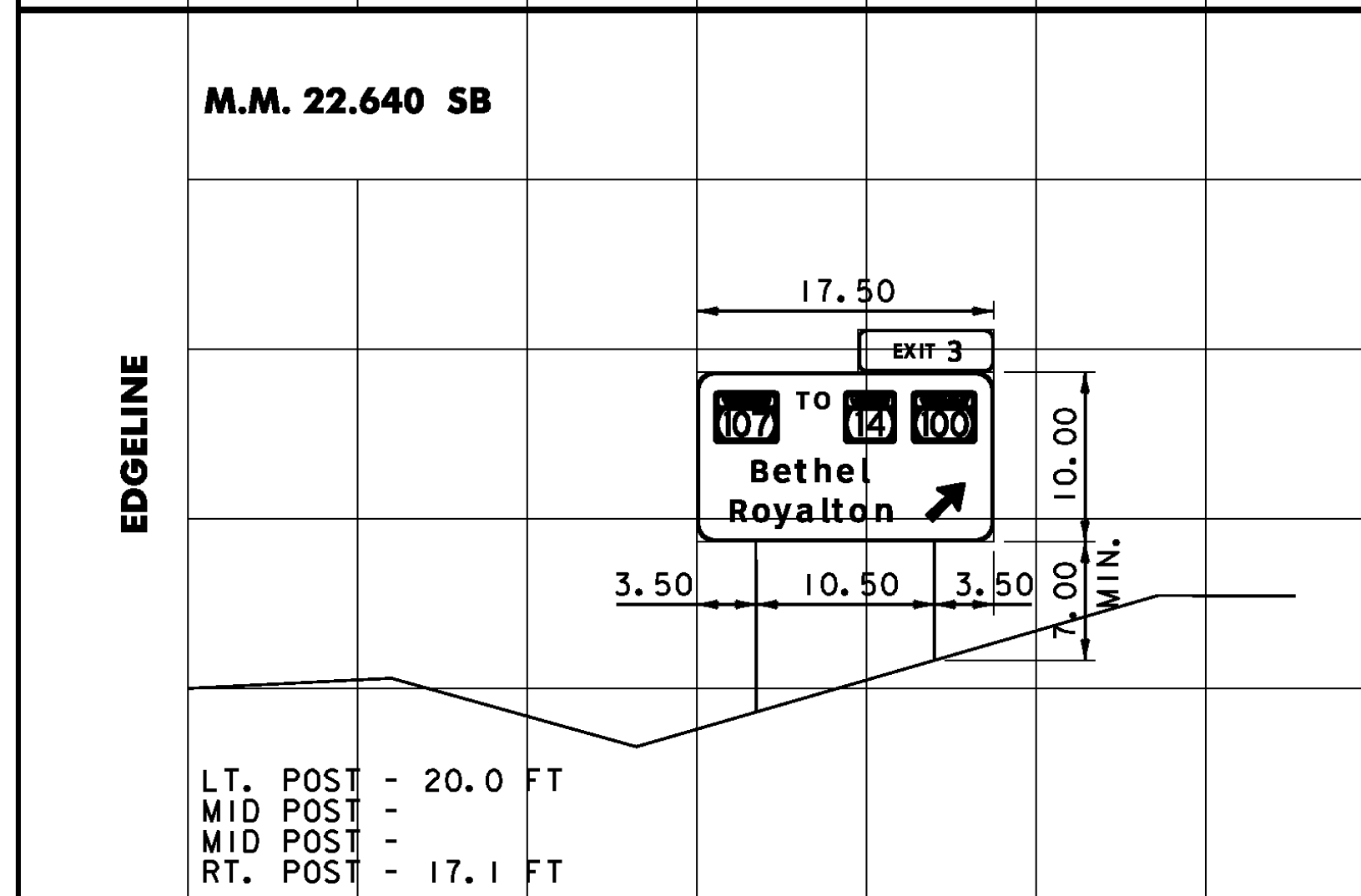
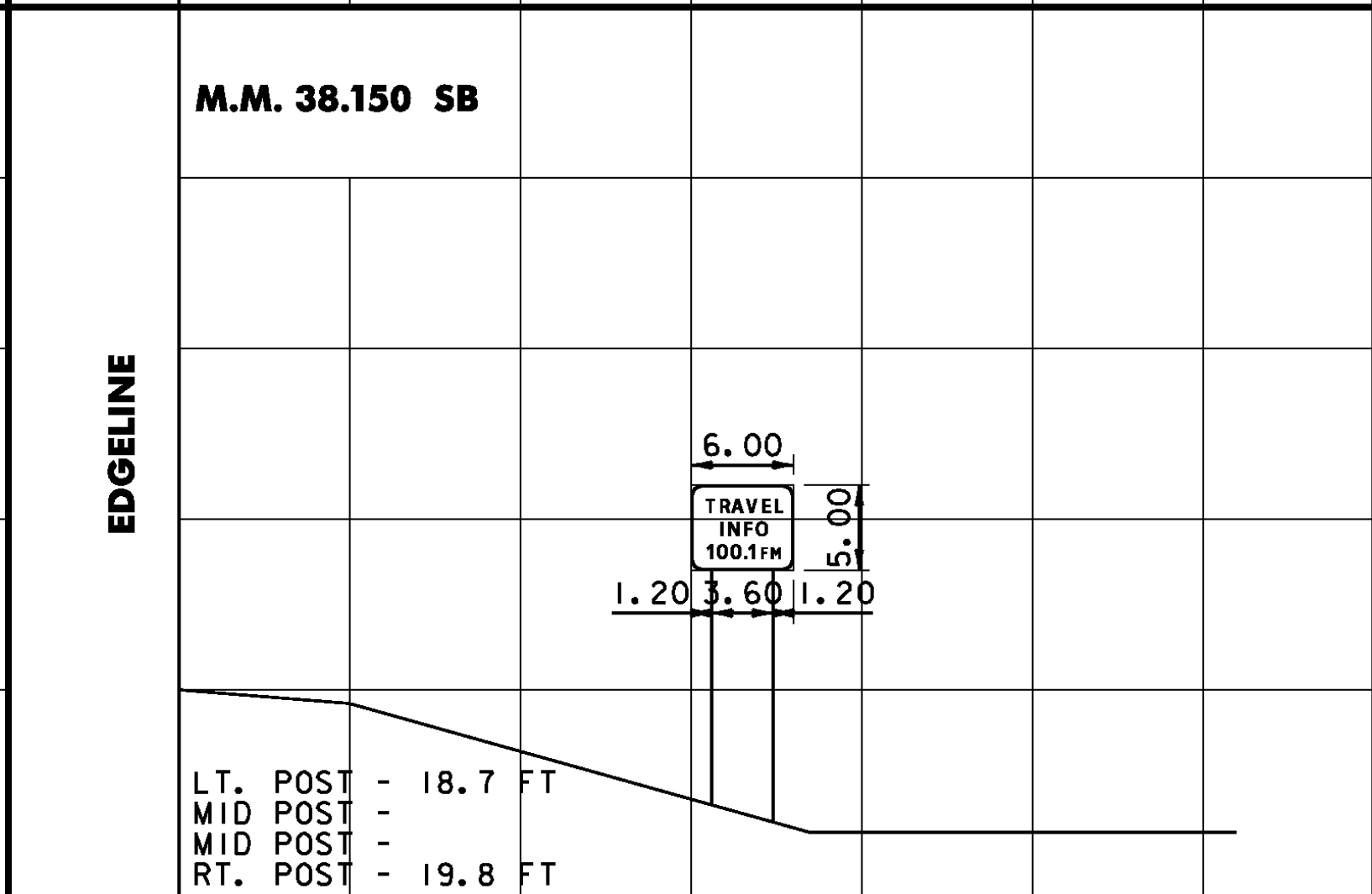
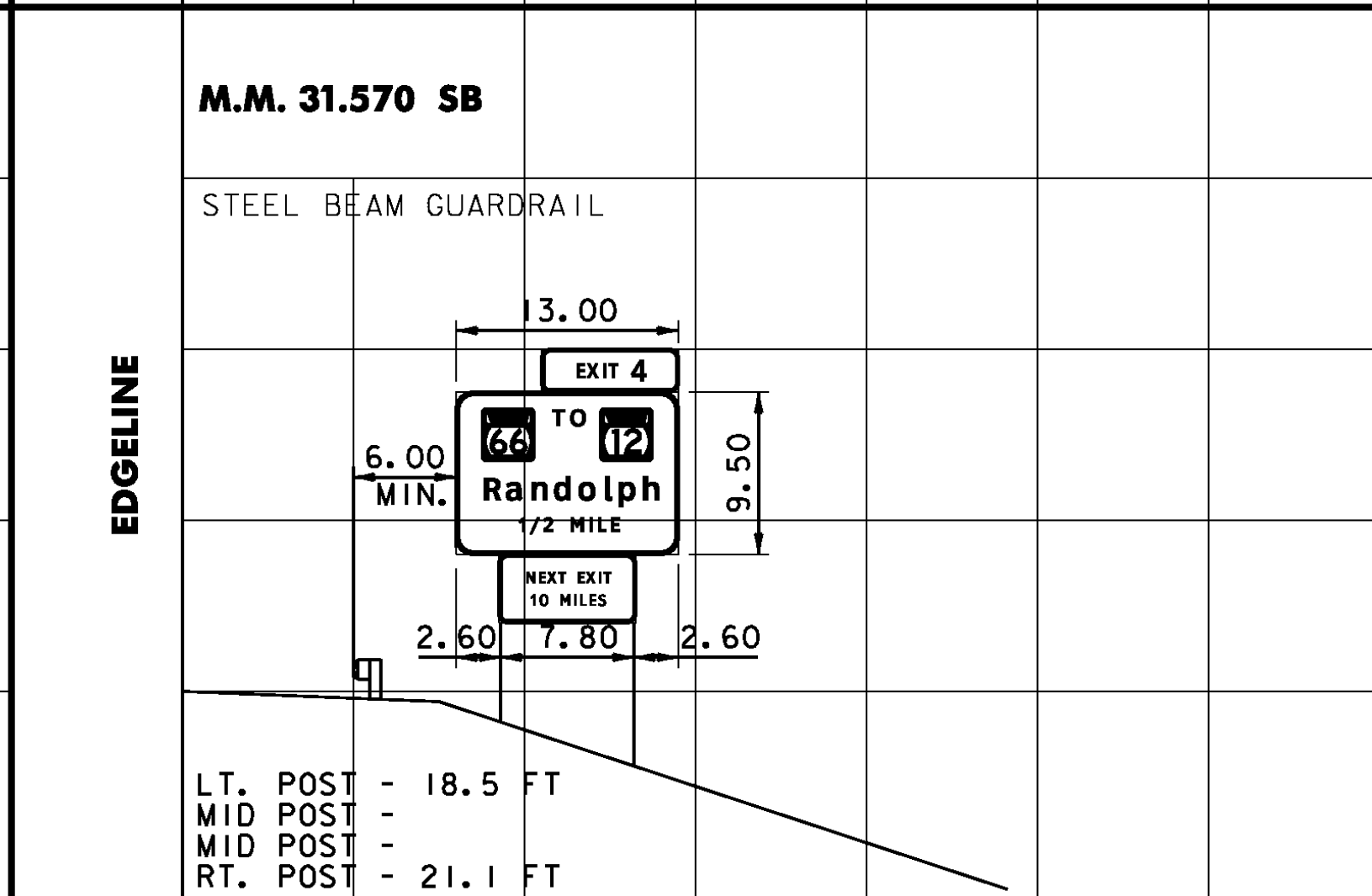
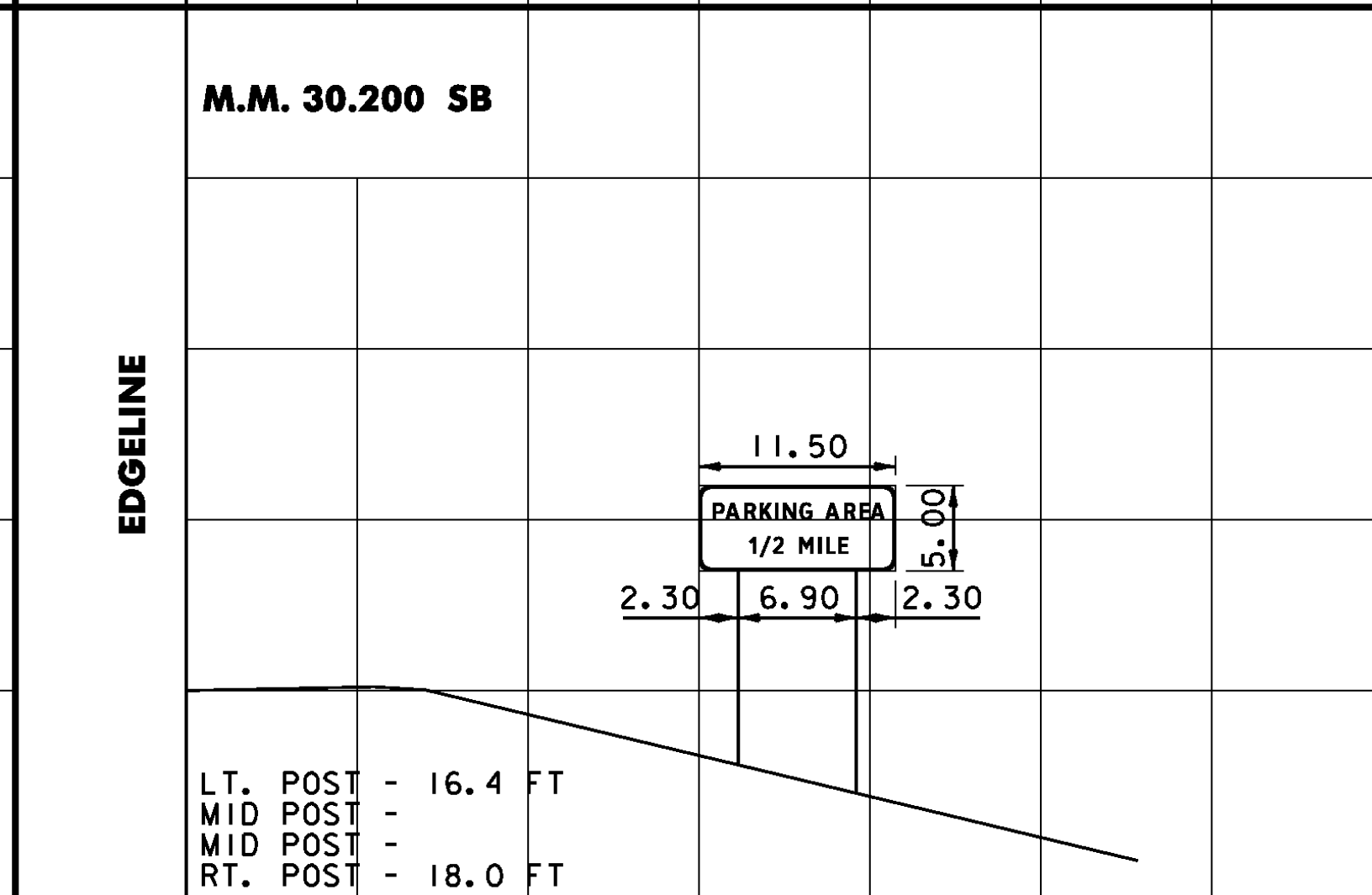
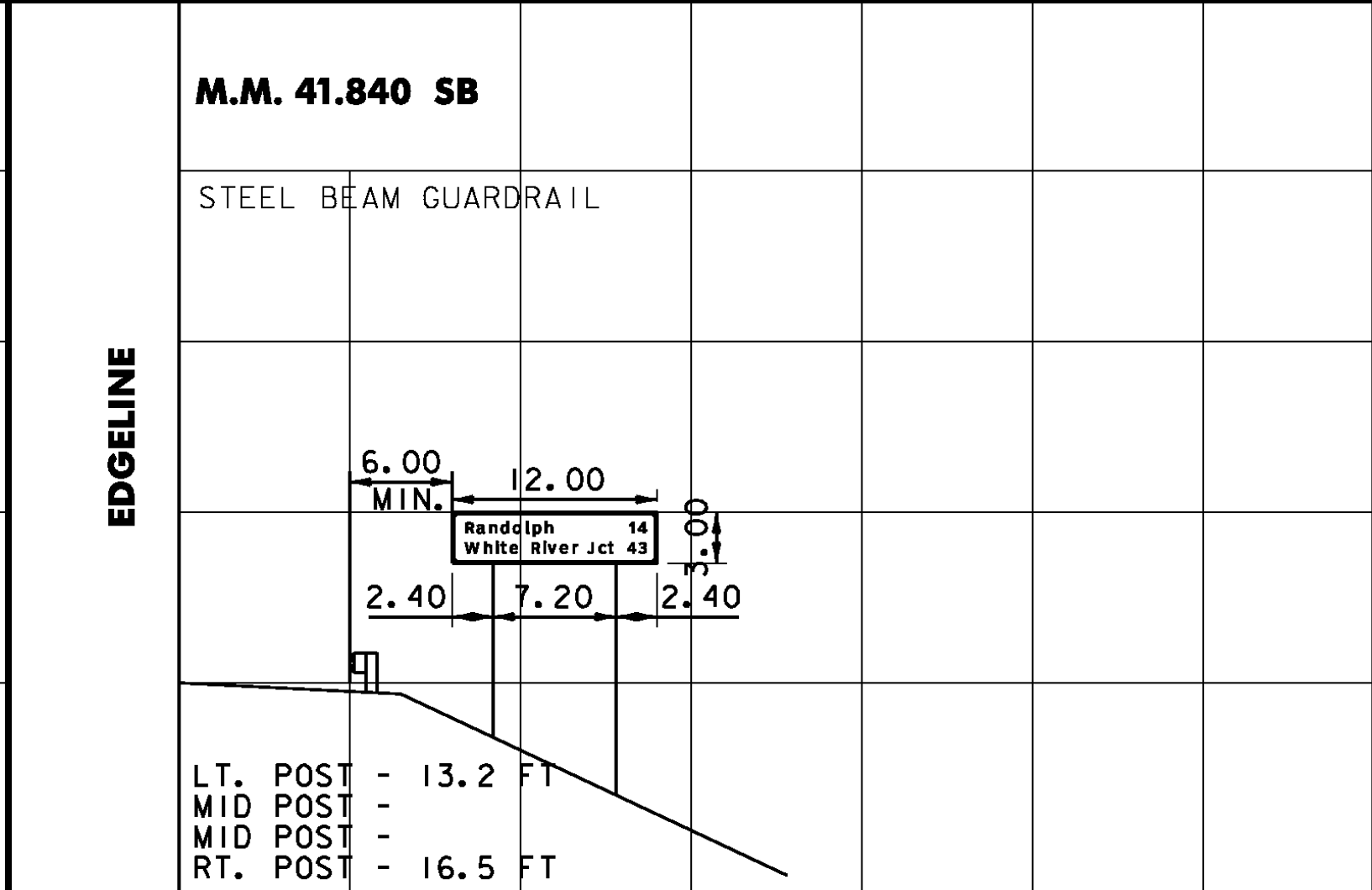
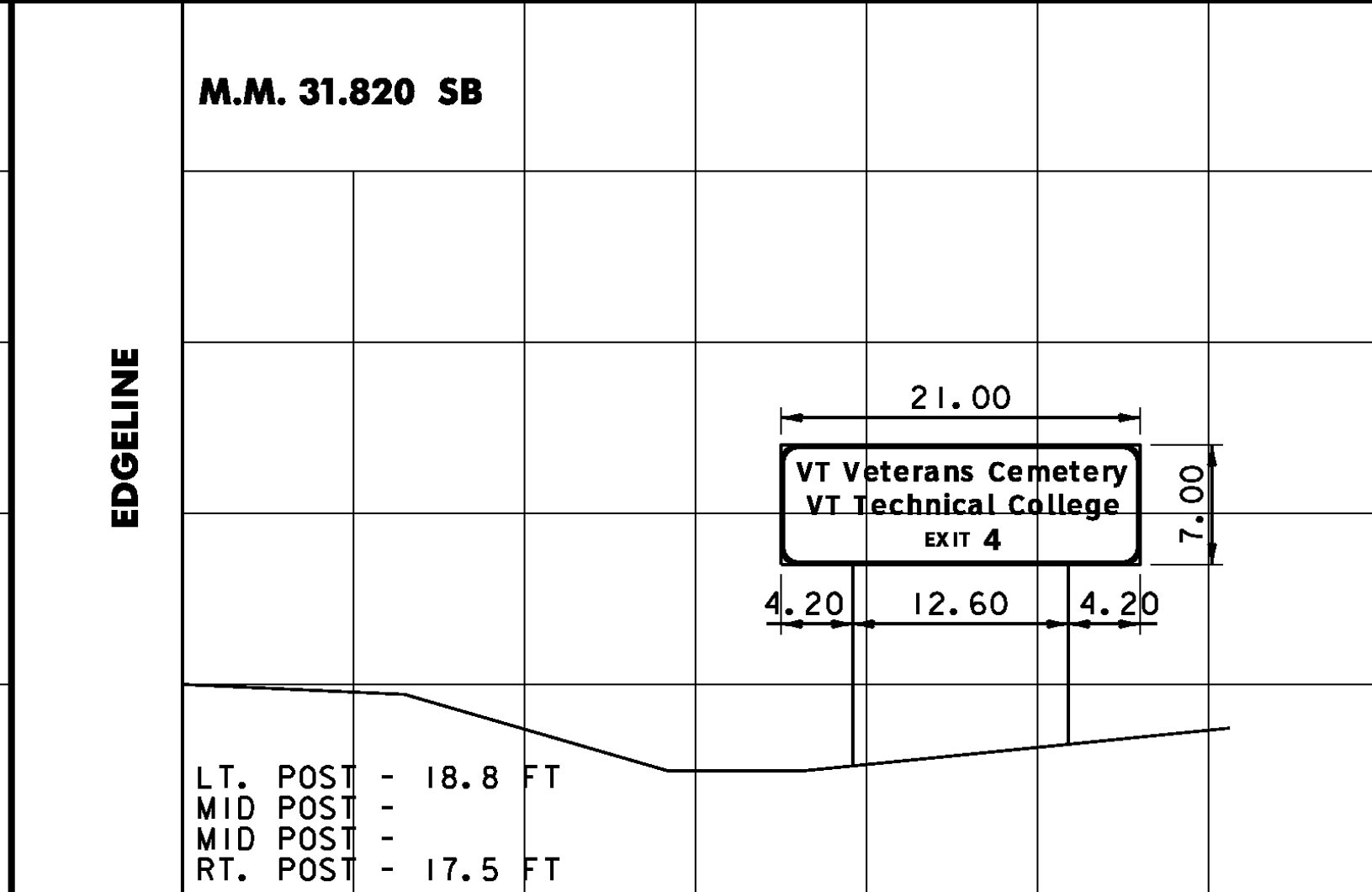
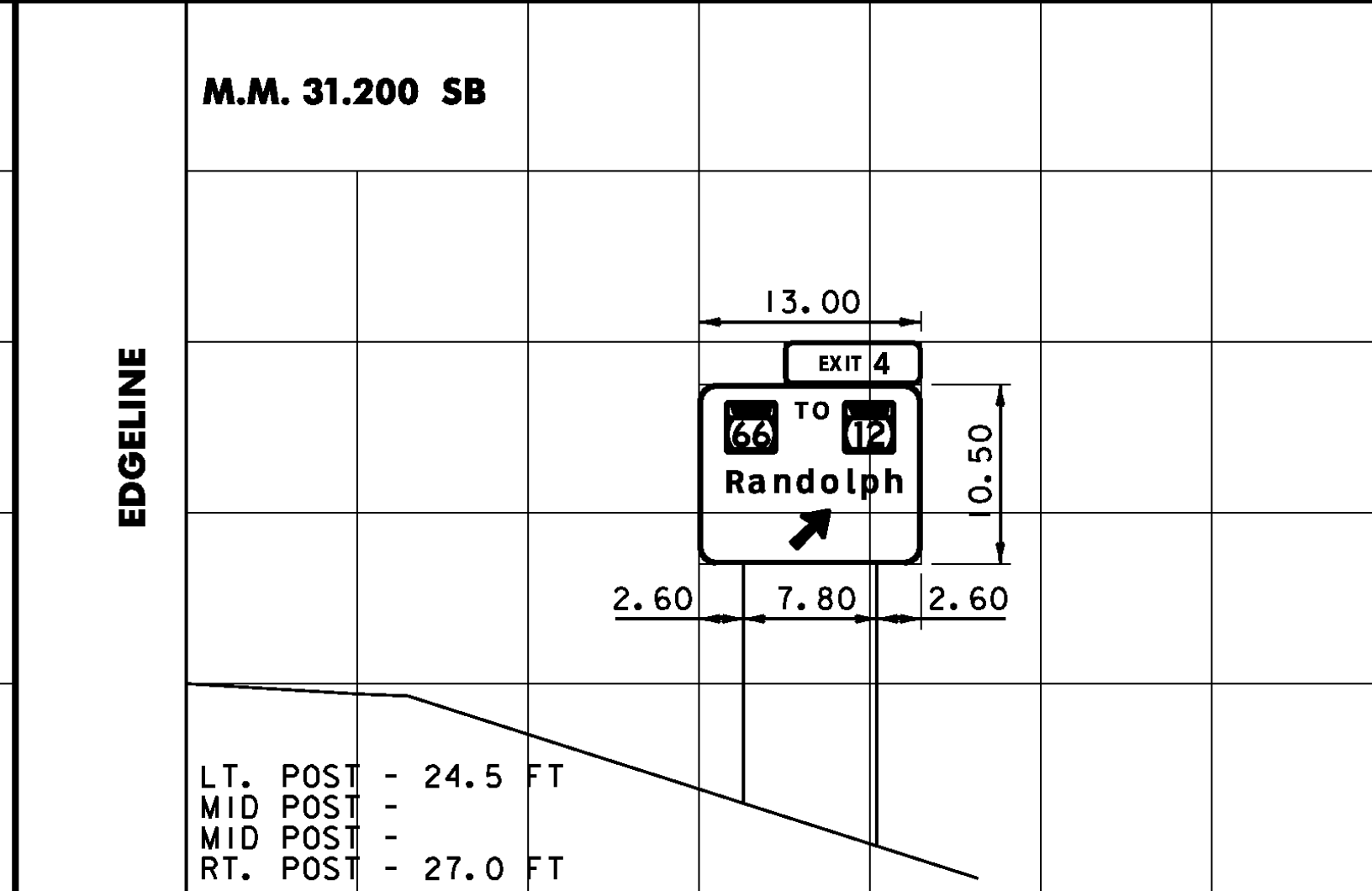
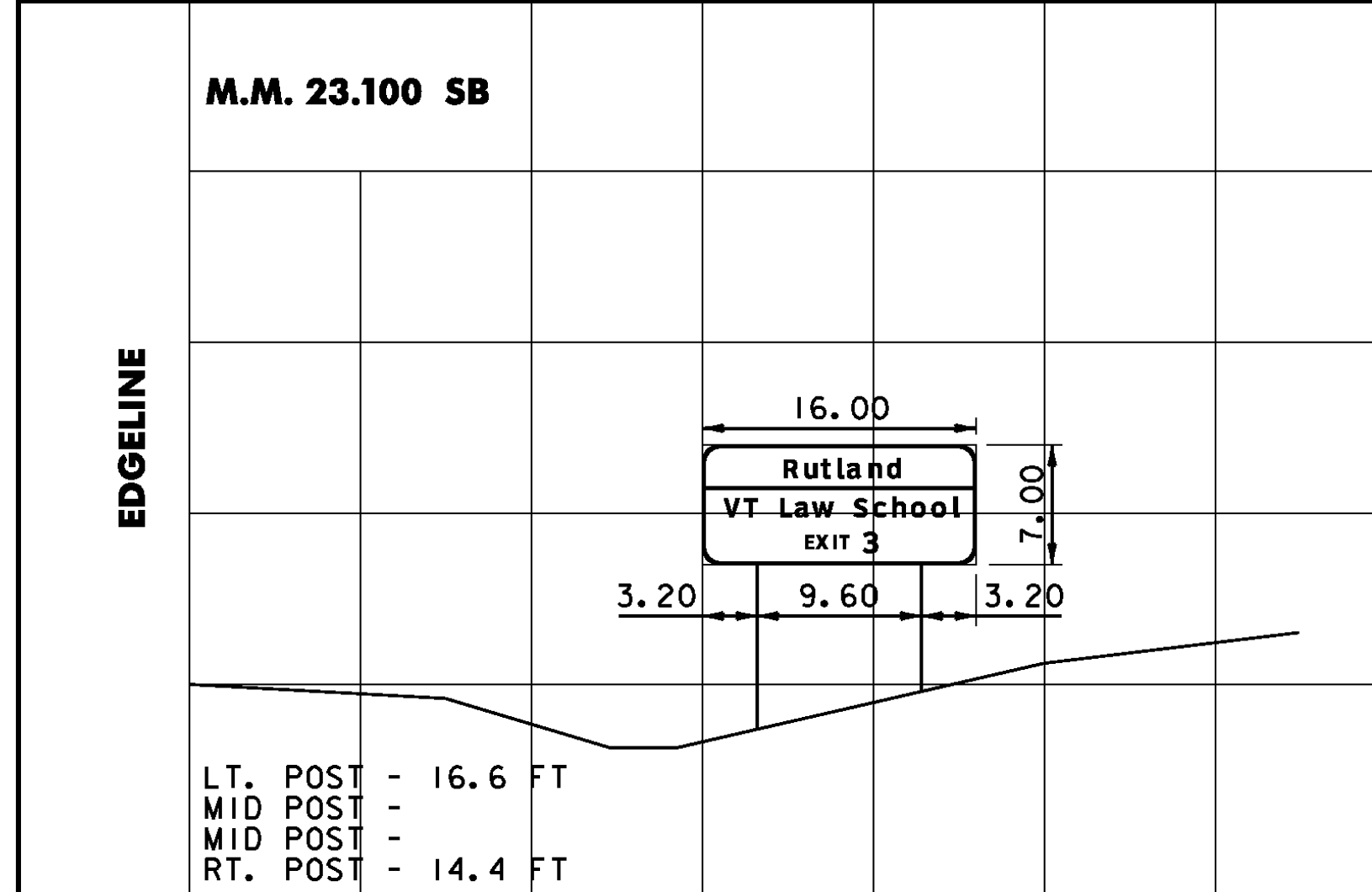
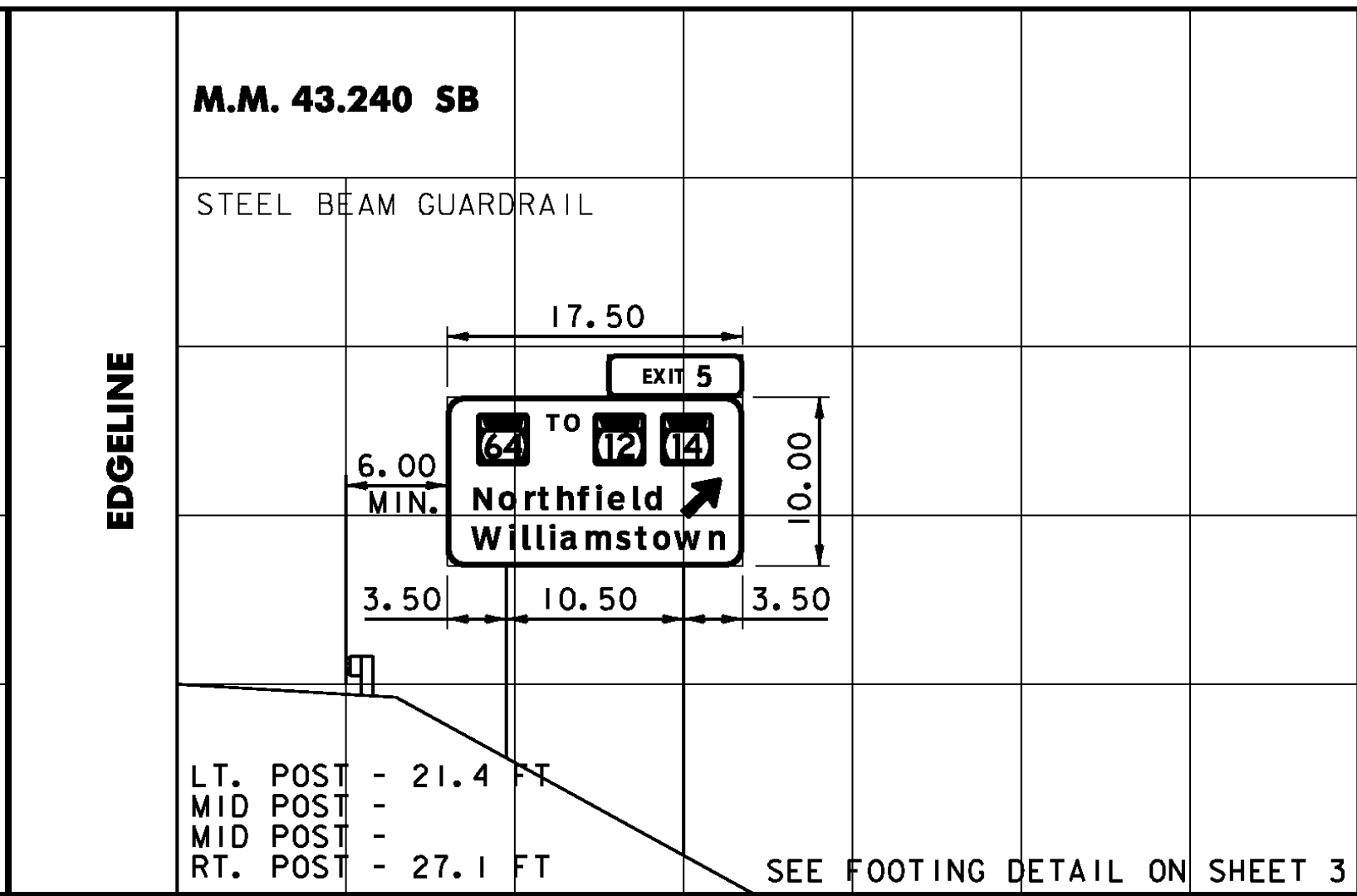
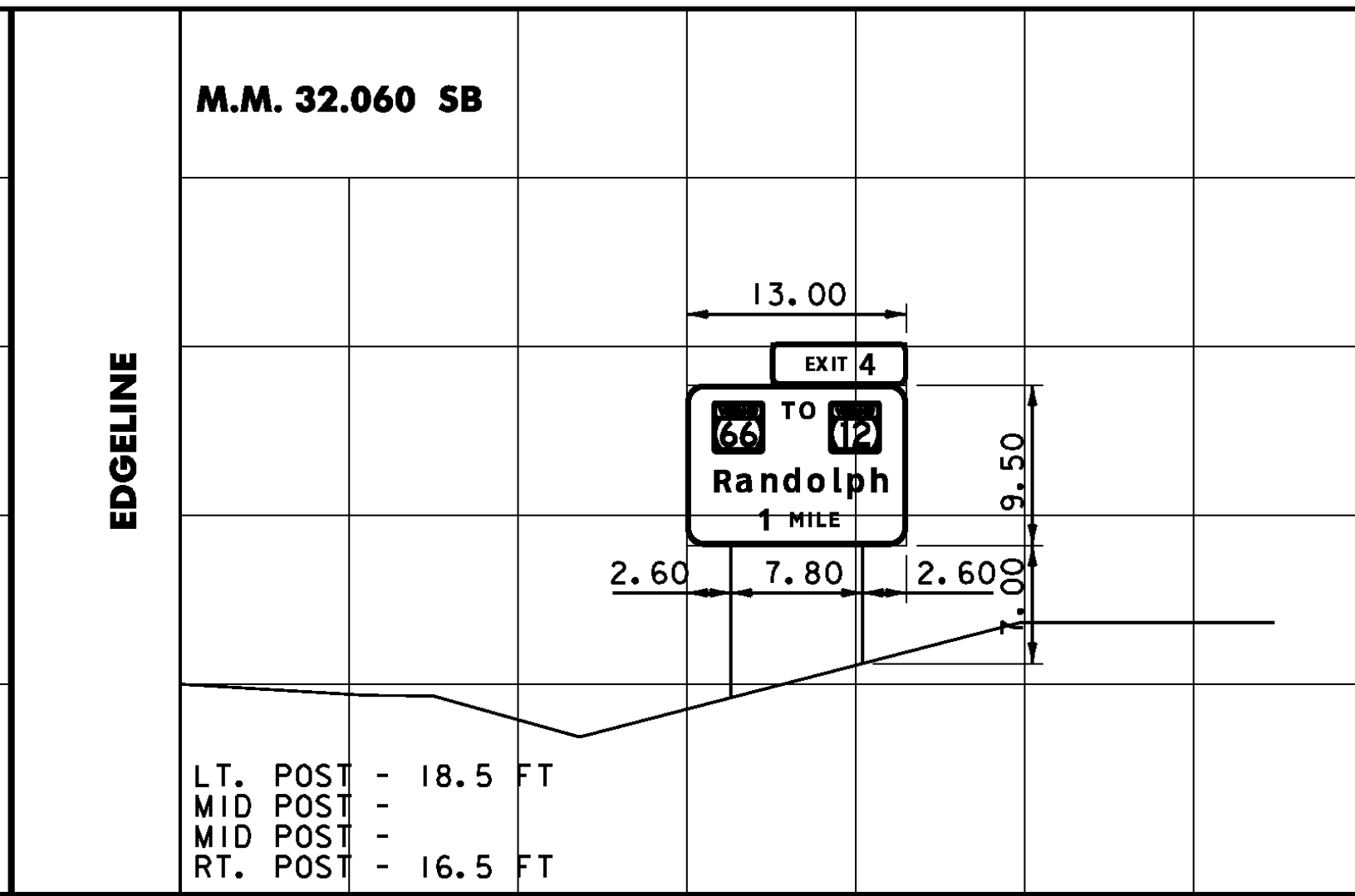
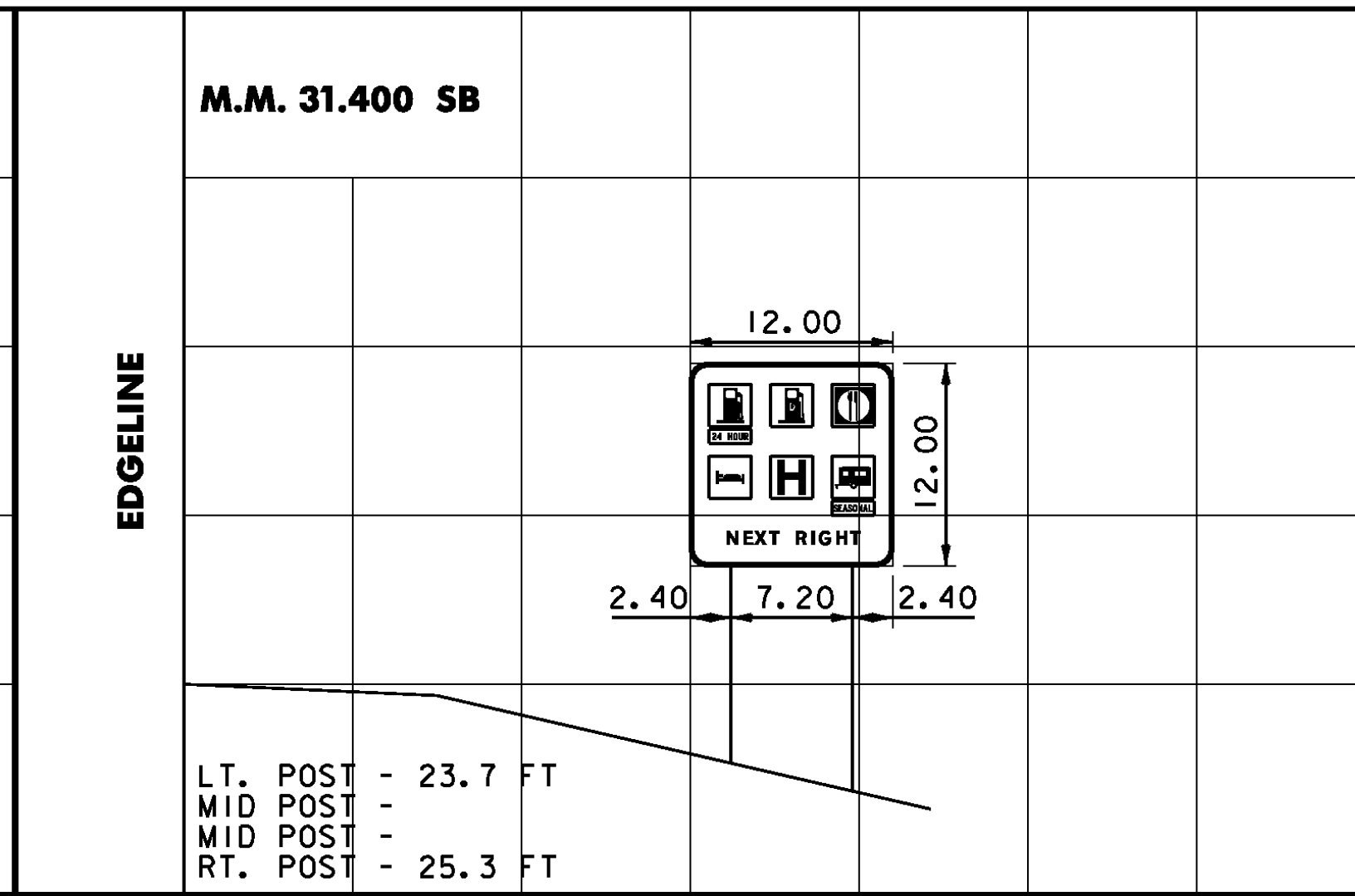
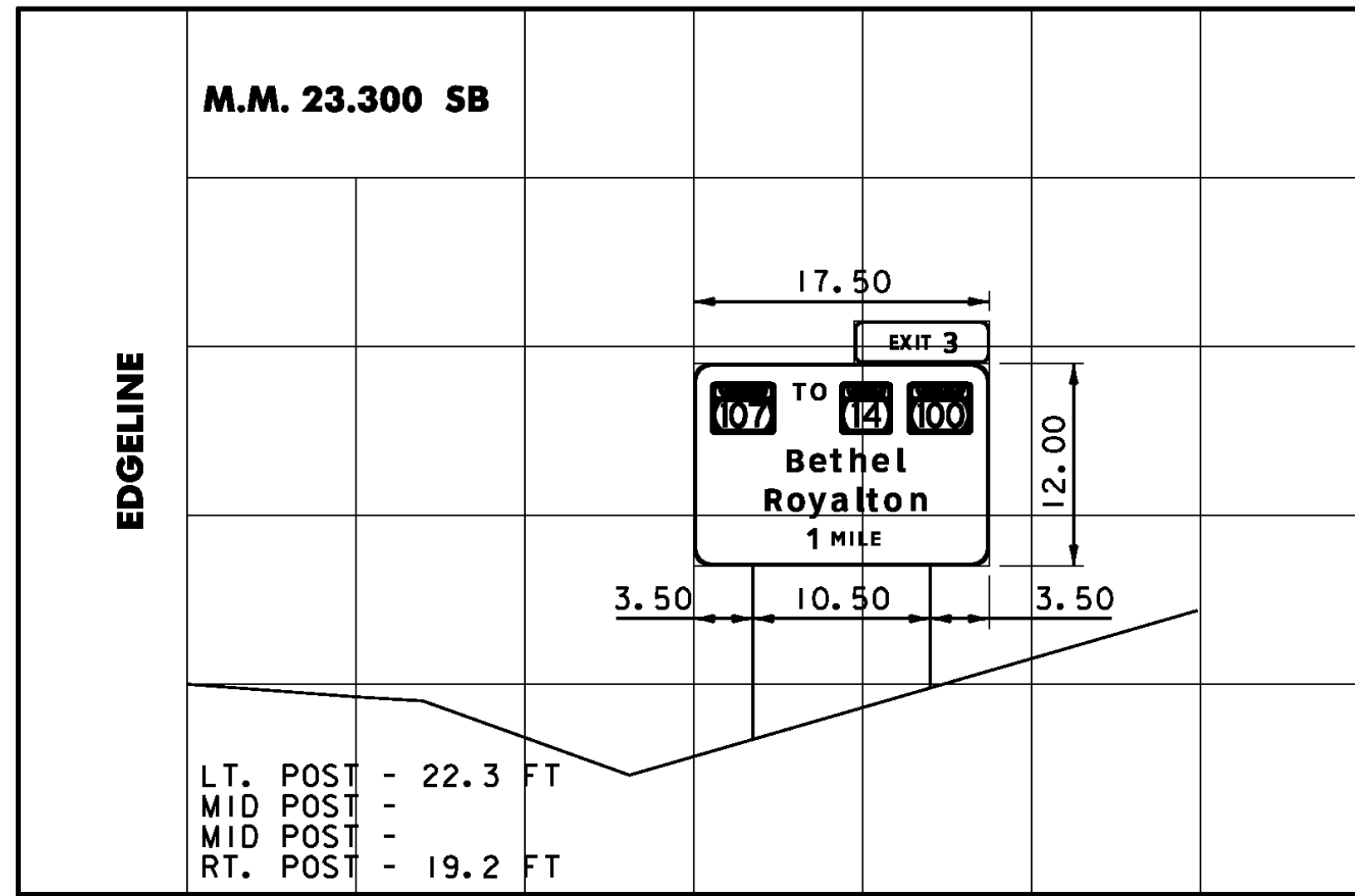
CLD REF. NO.: 09-0106

PLOT DATE: 8/12/2009

DRAWN BY: JBZ

CHECKED BY: BDB

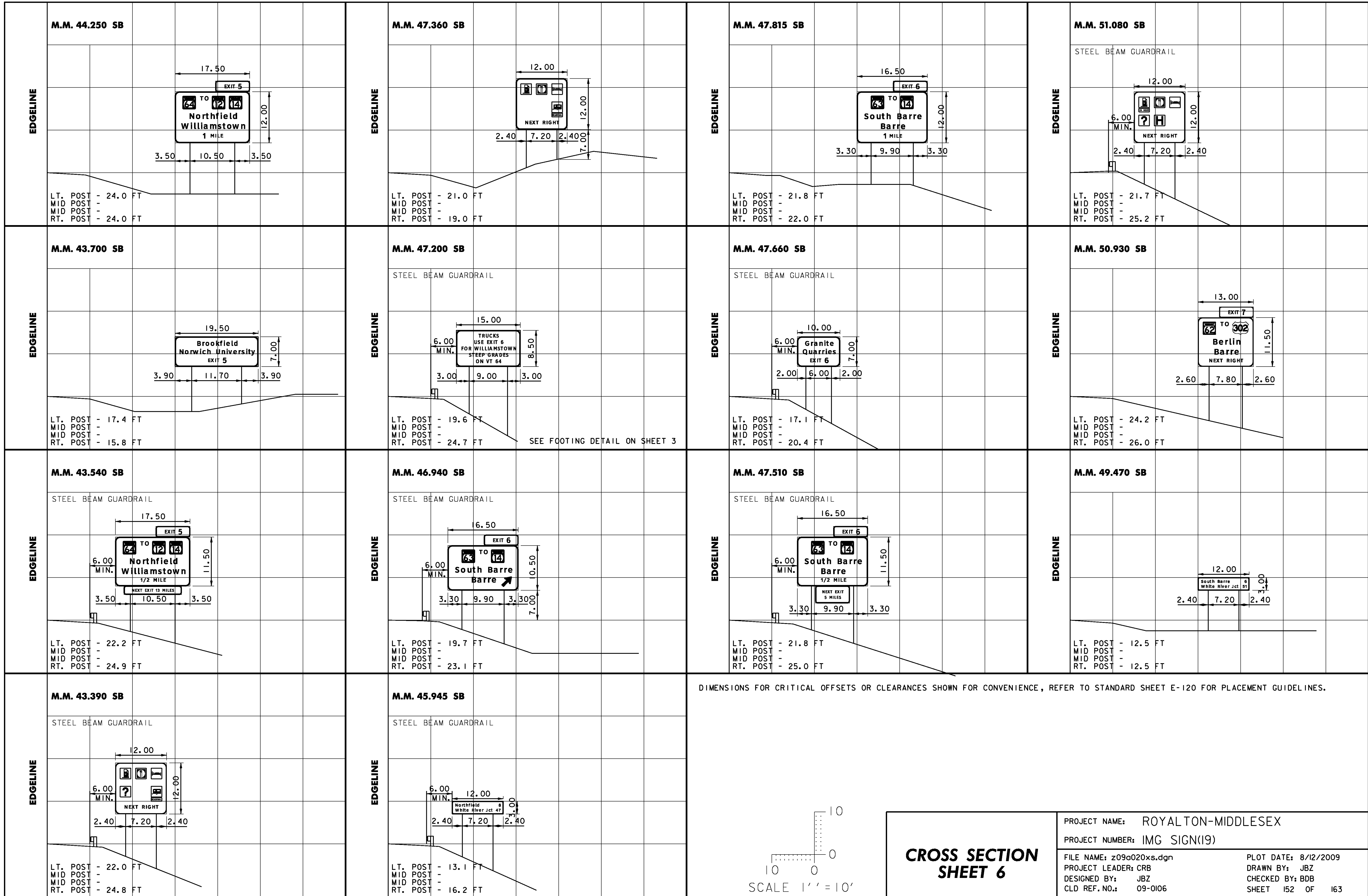
SHEET 150 OF 163

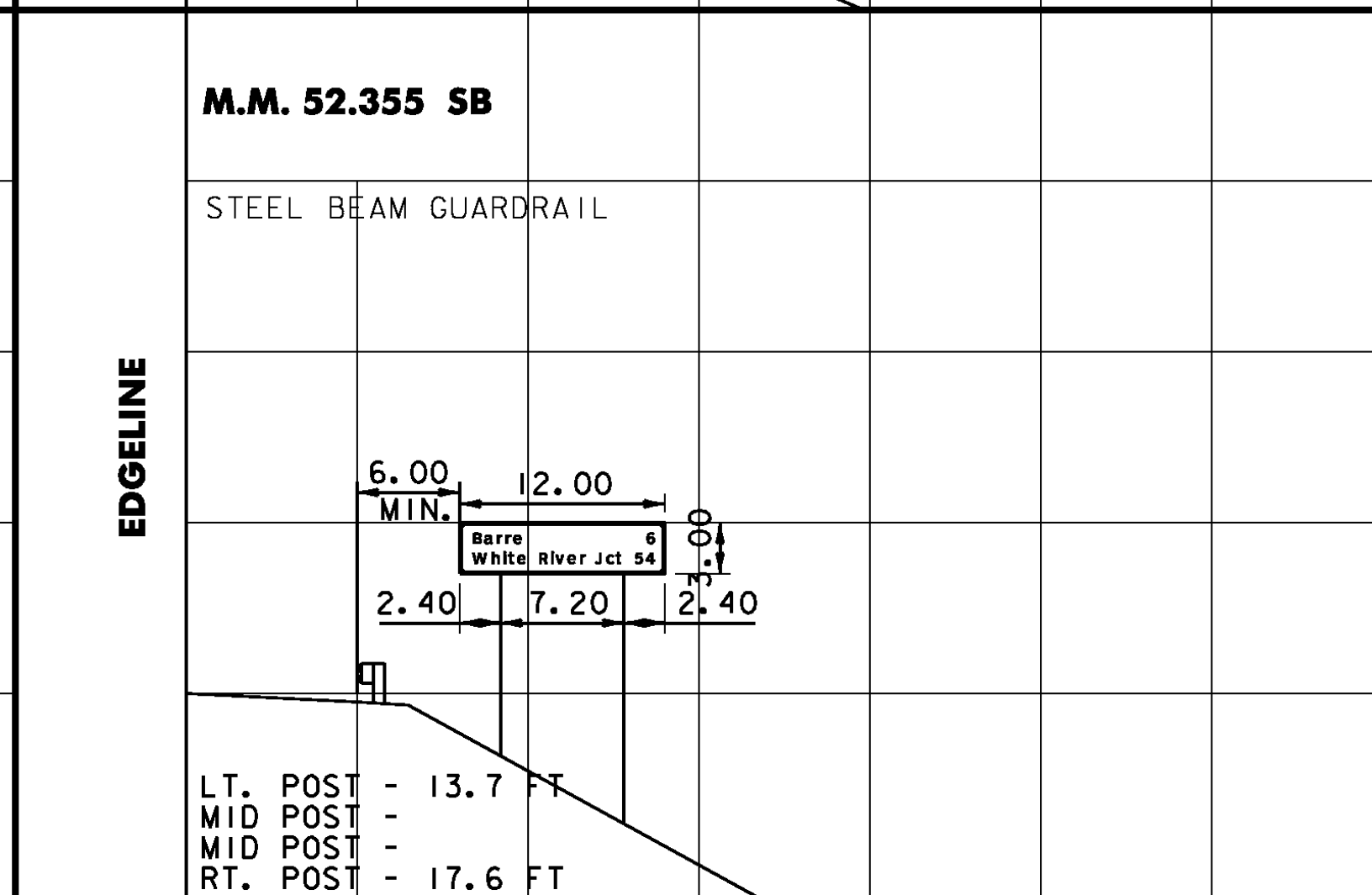
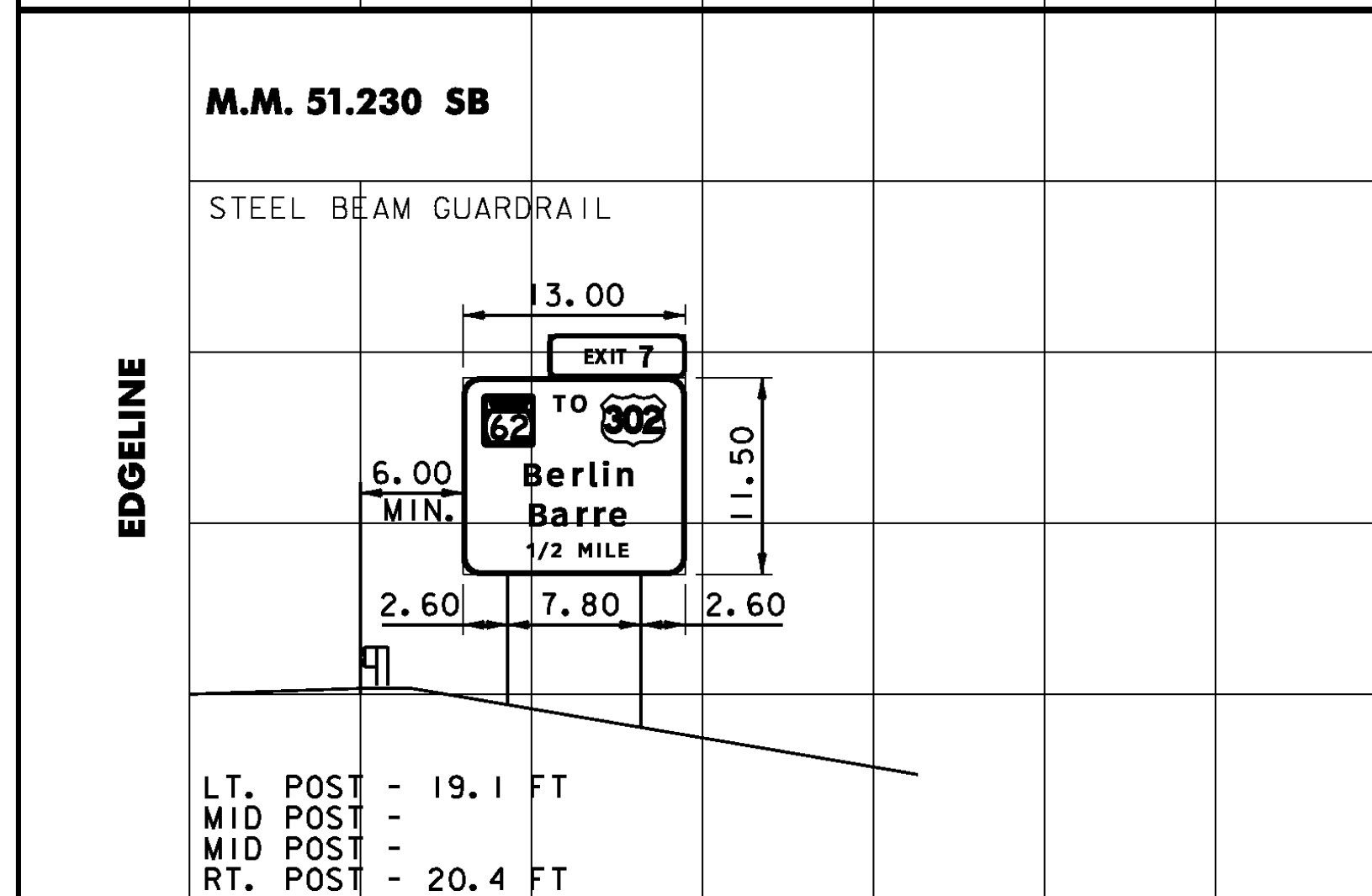
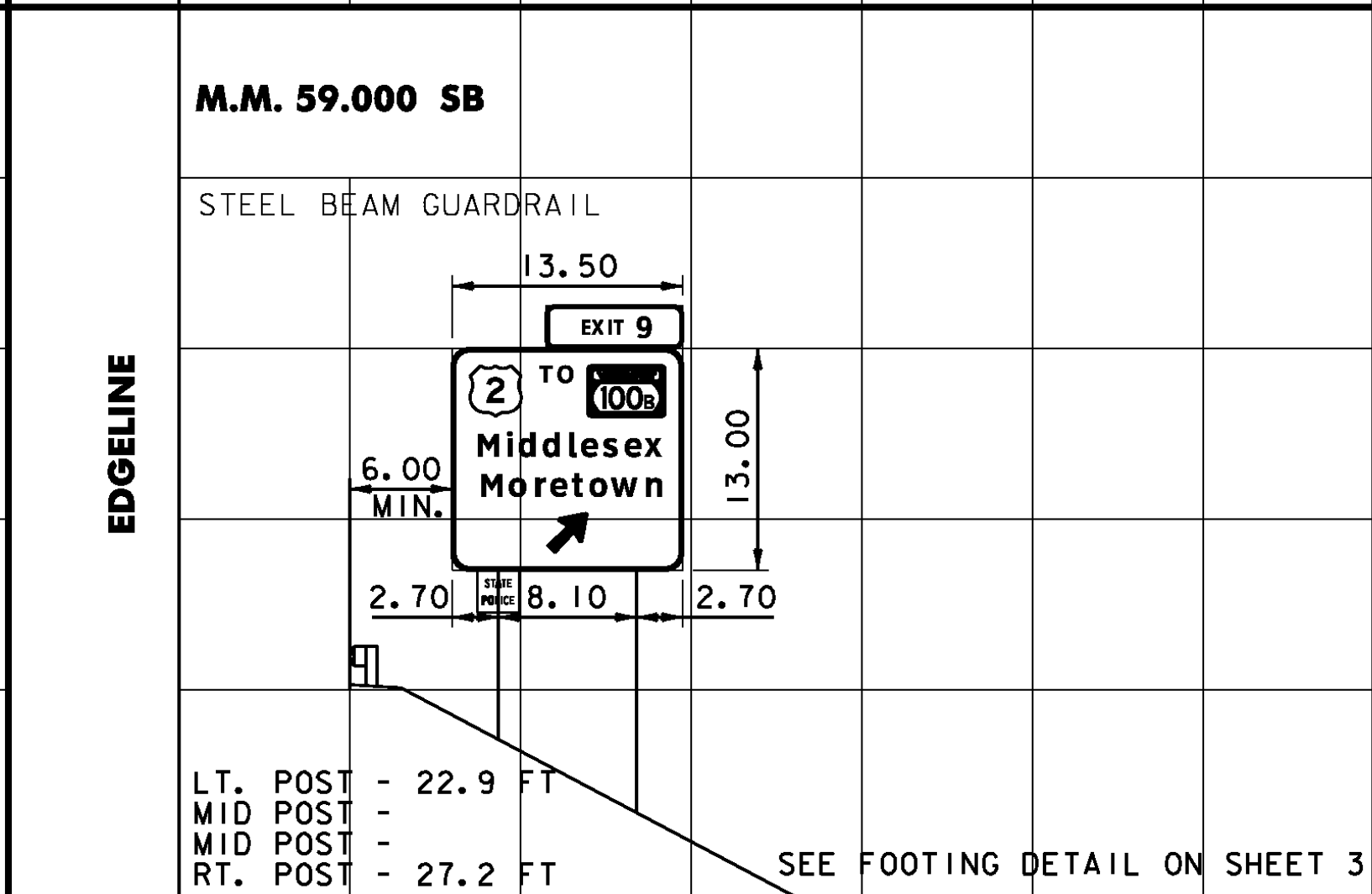
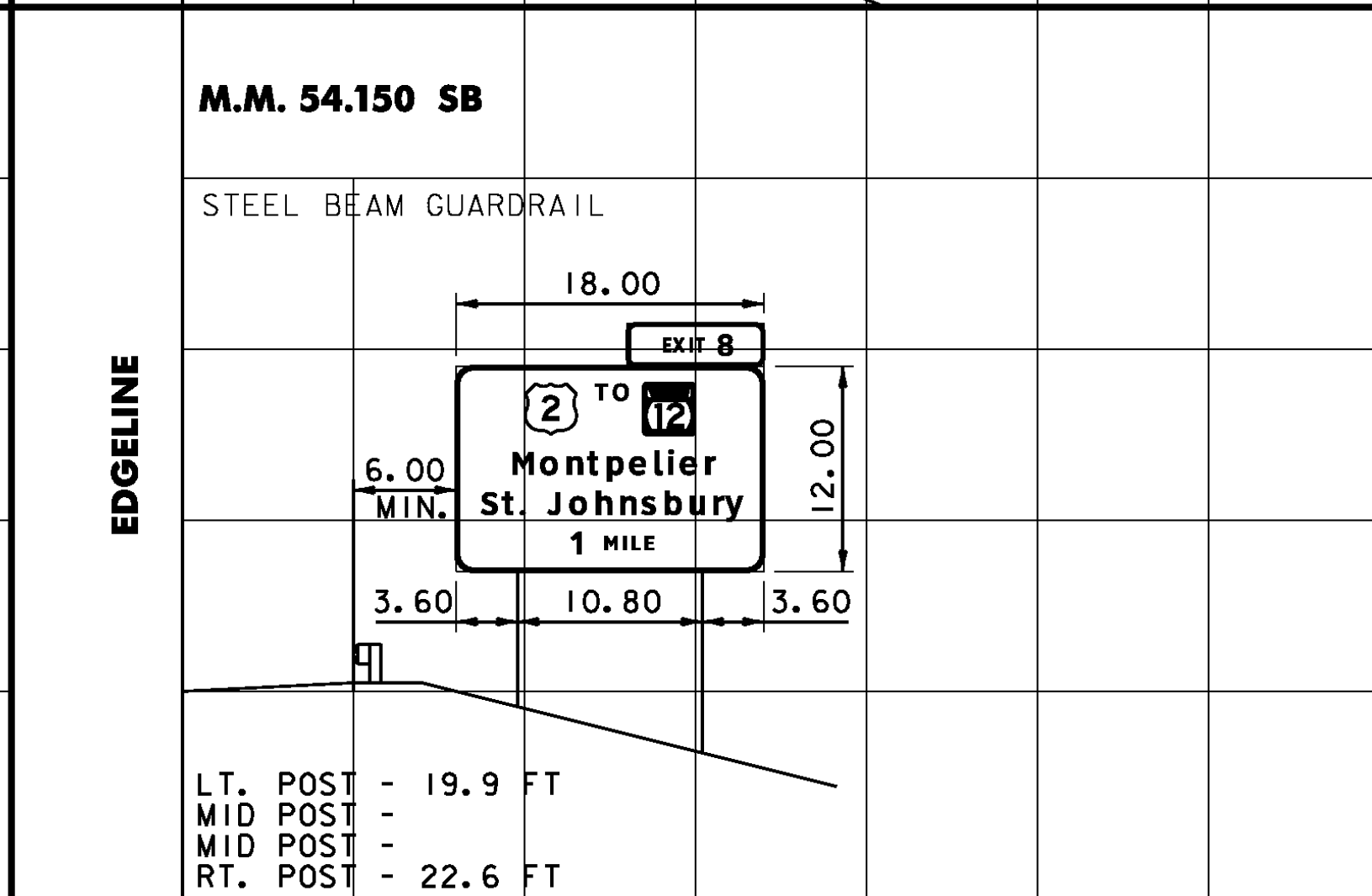
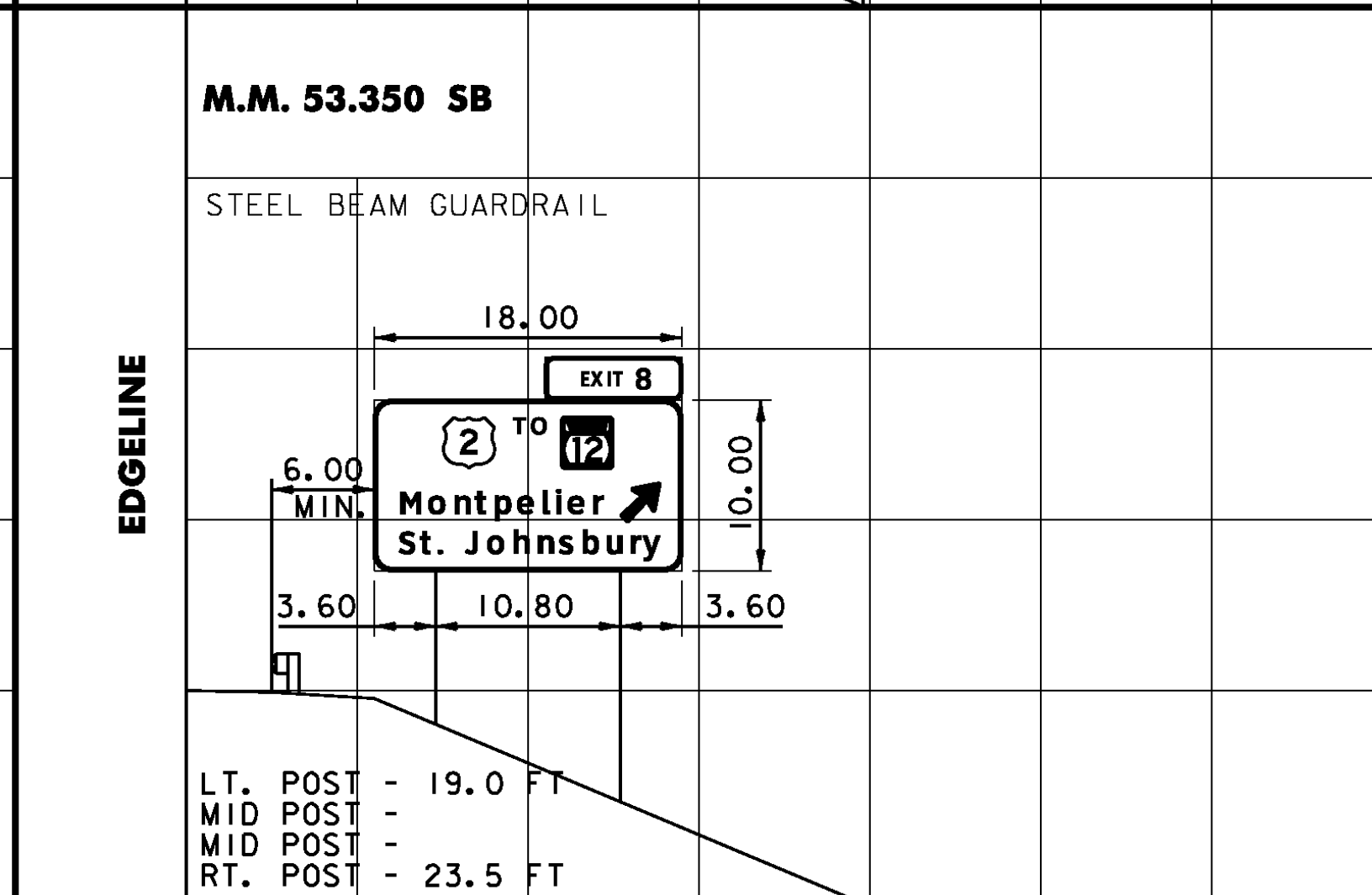
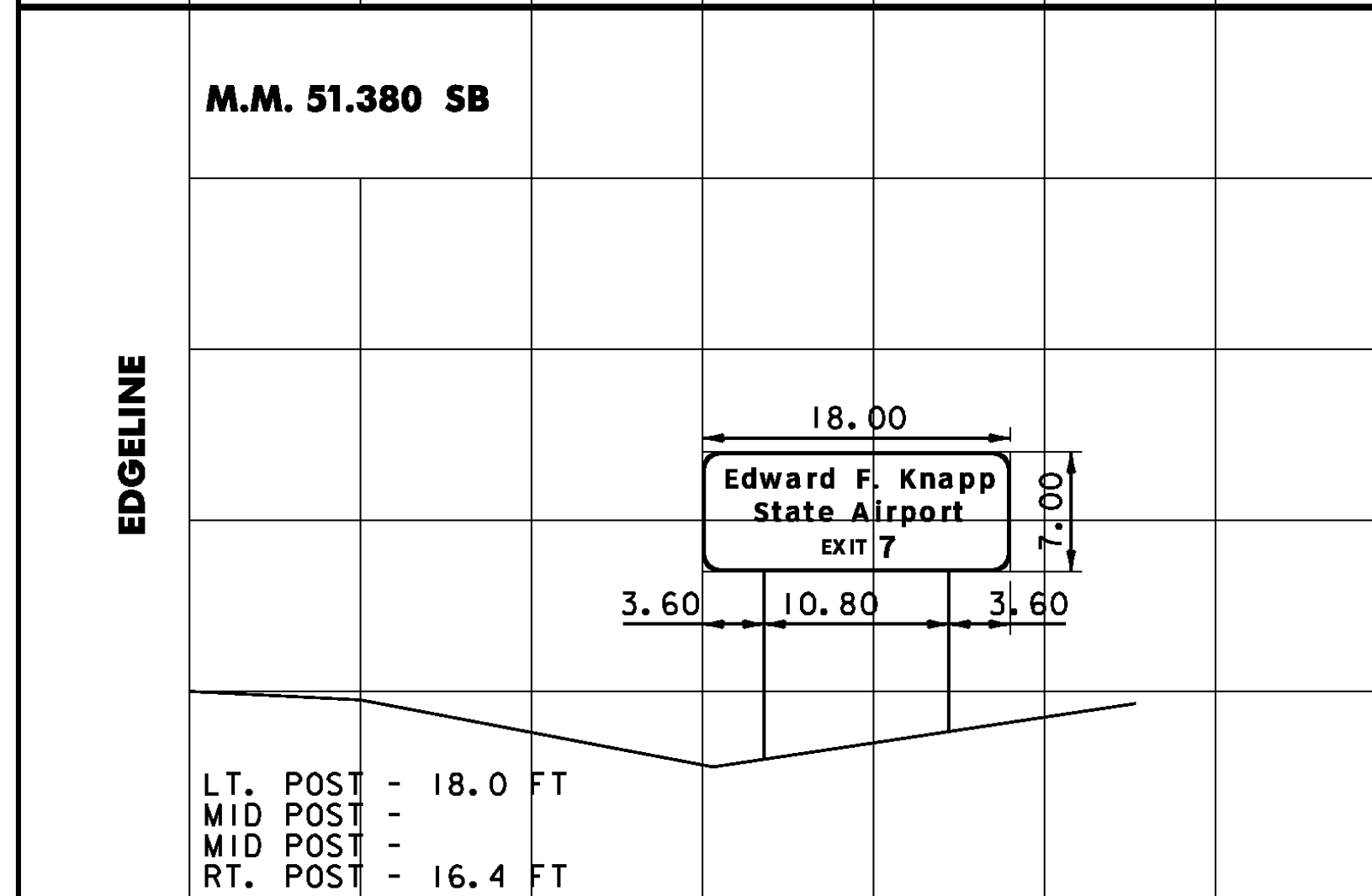
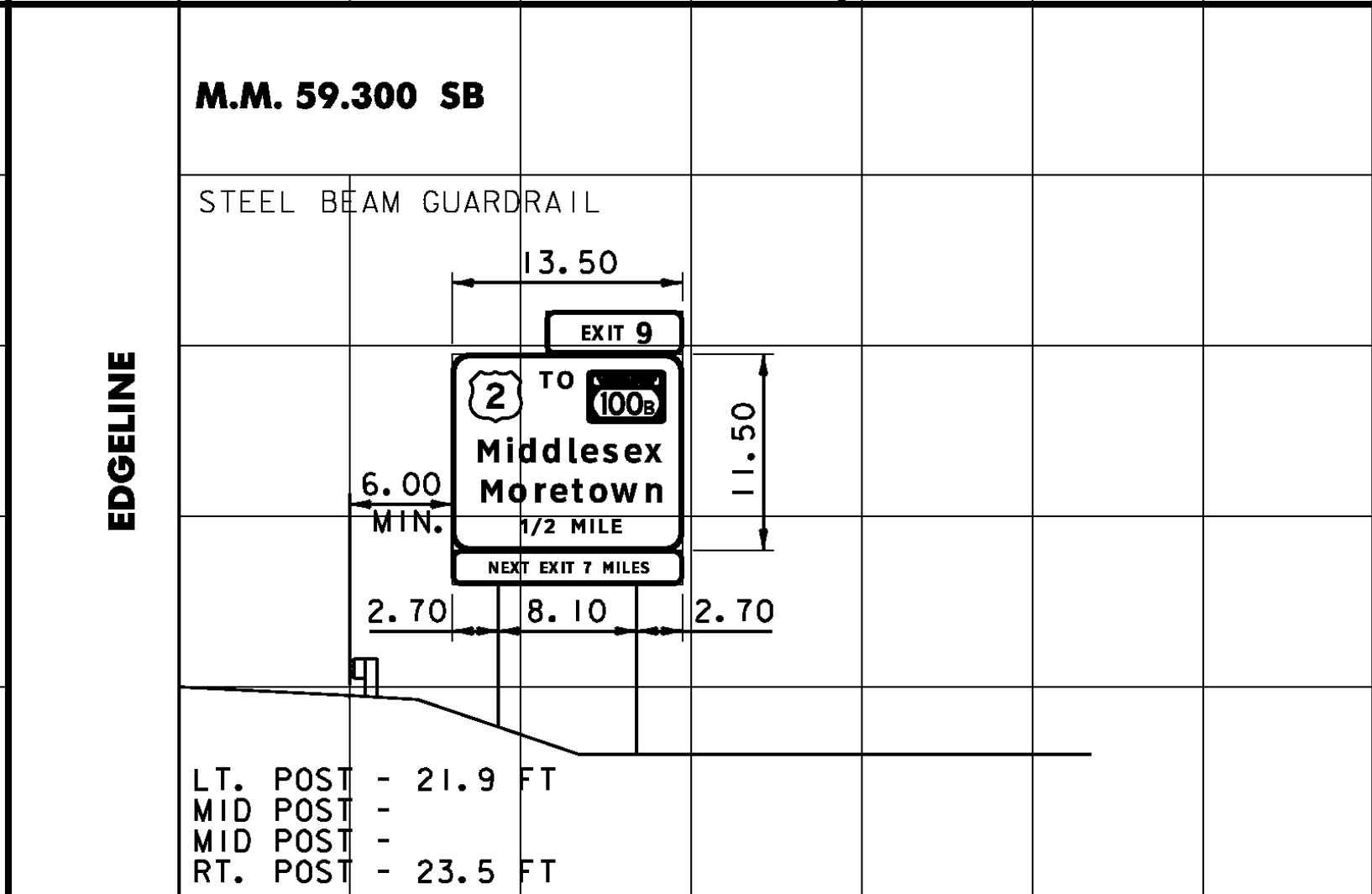
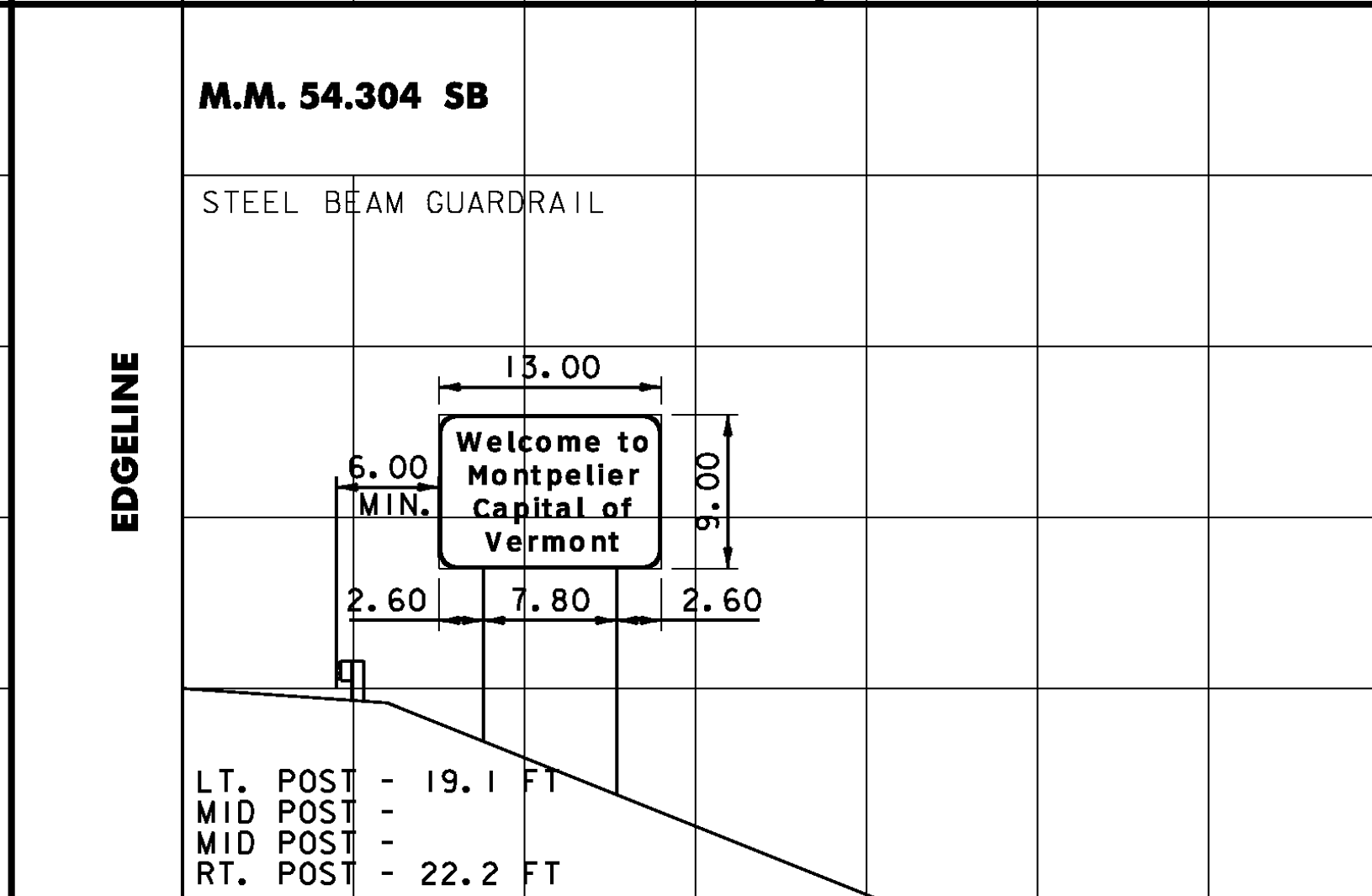
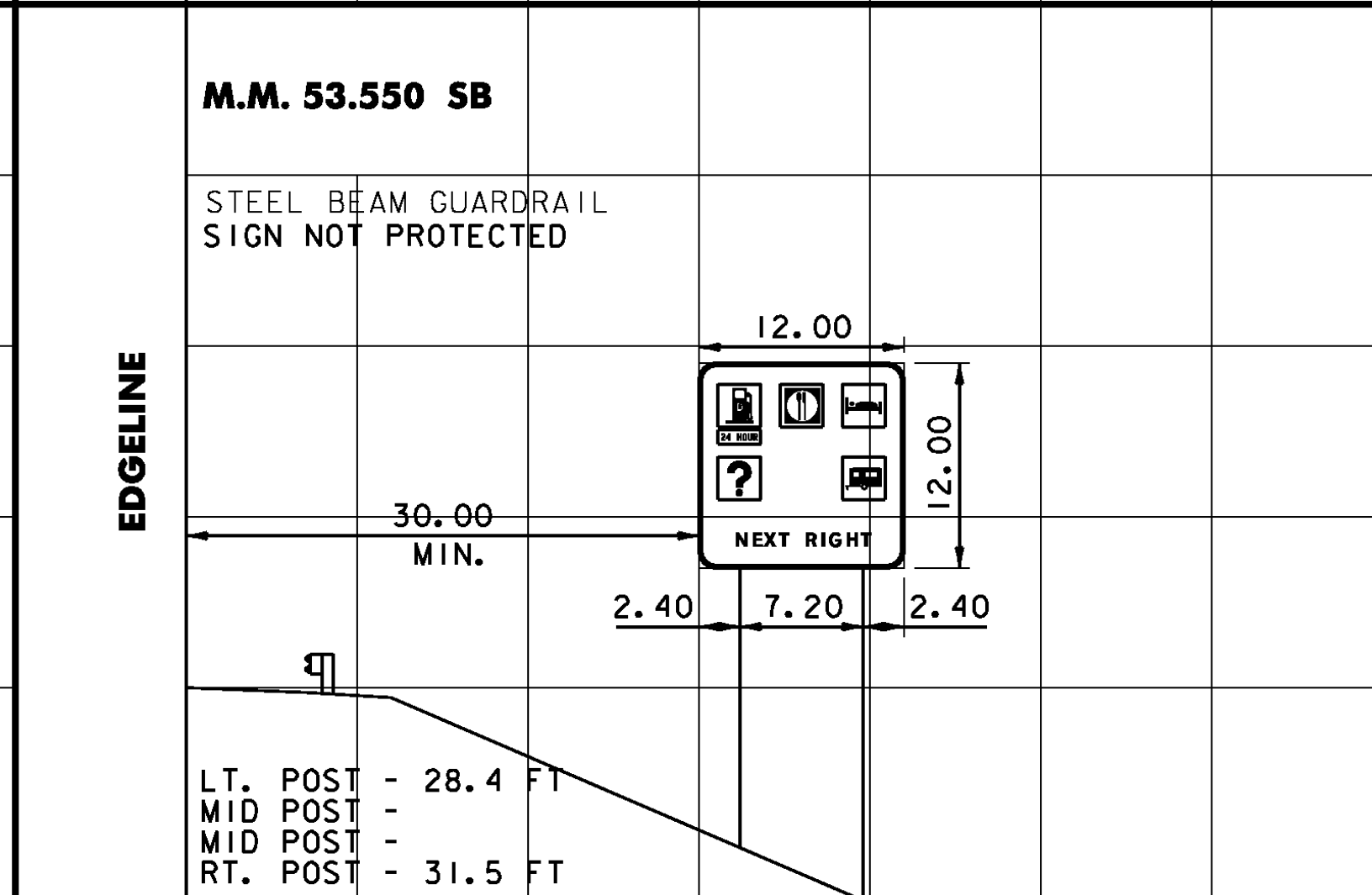
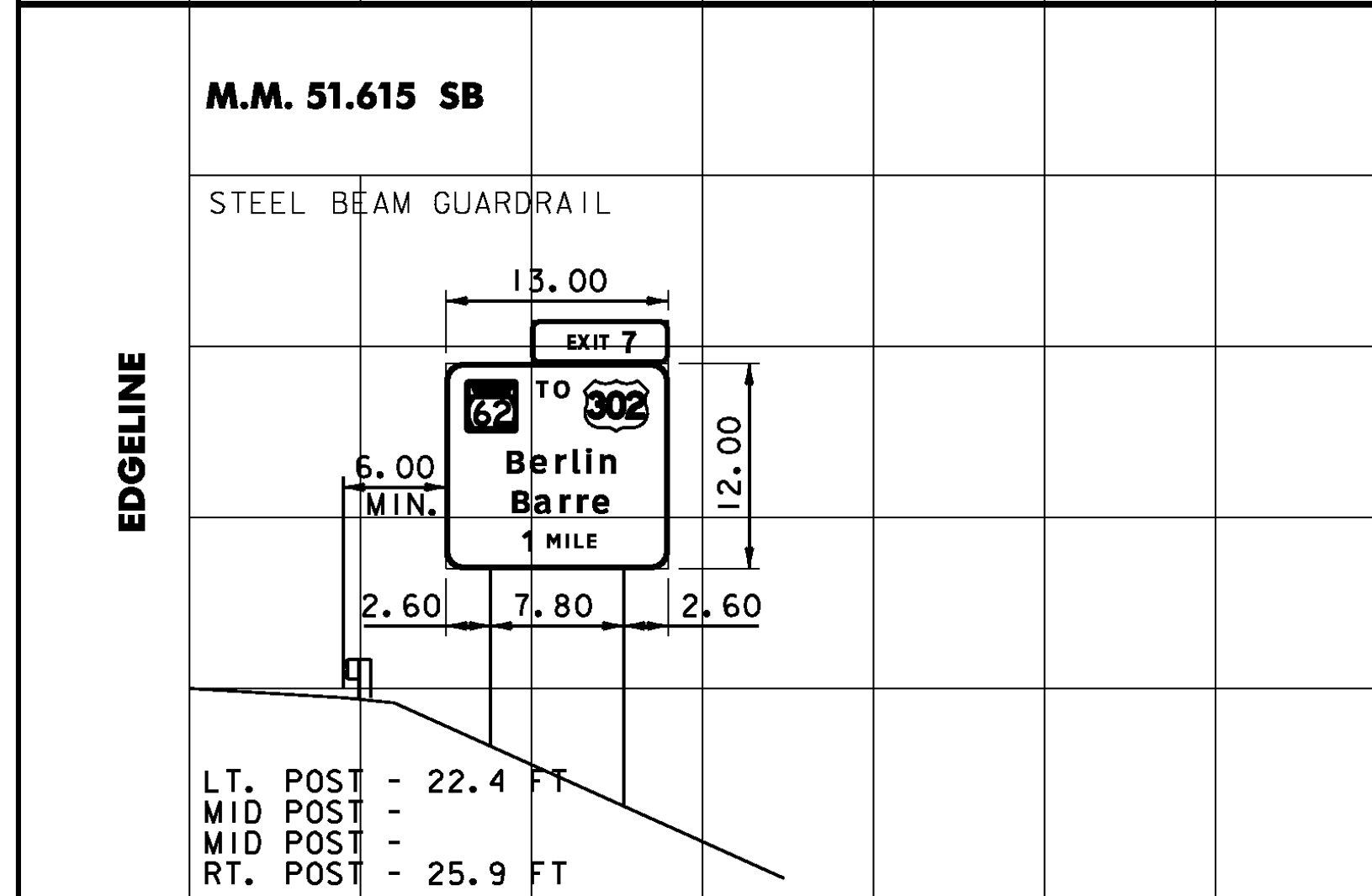
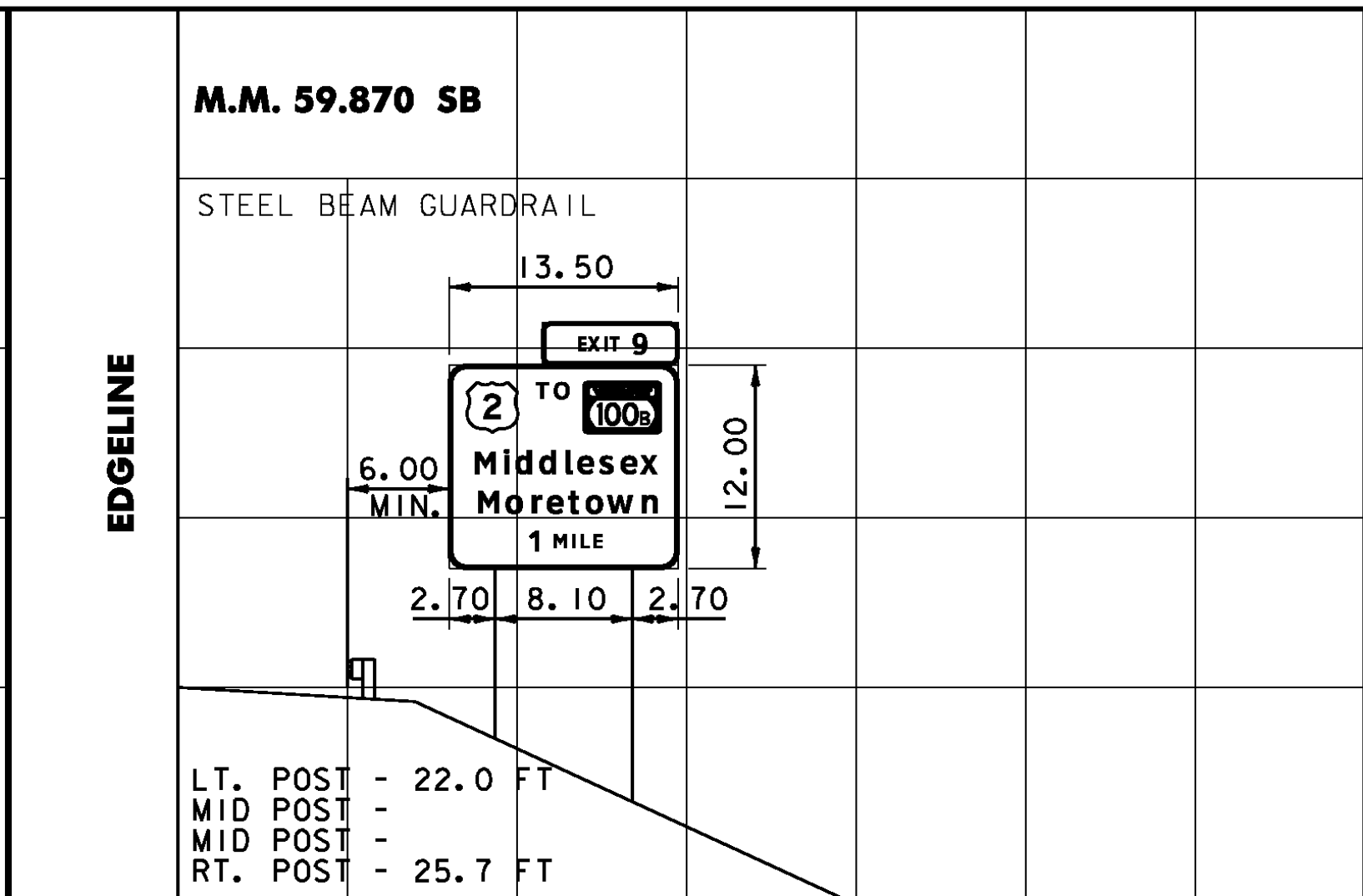
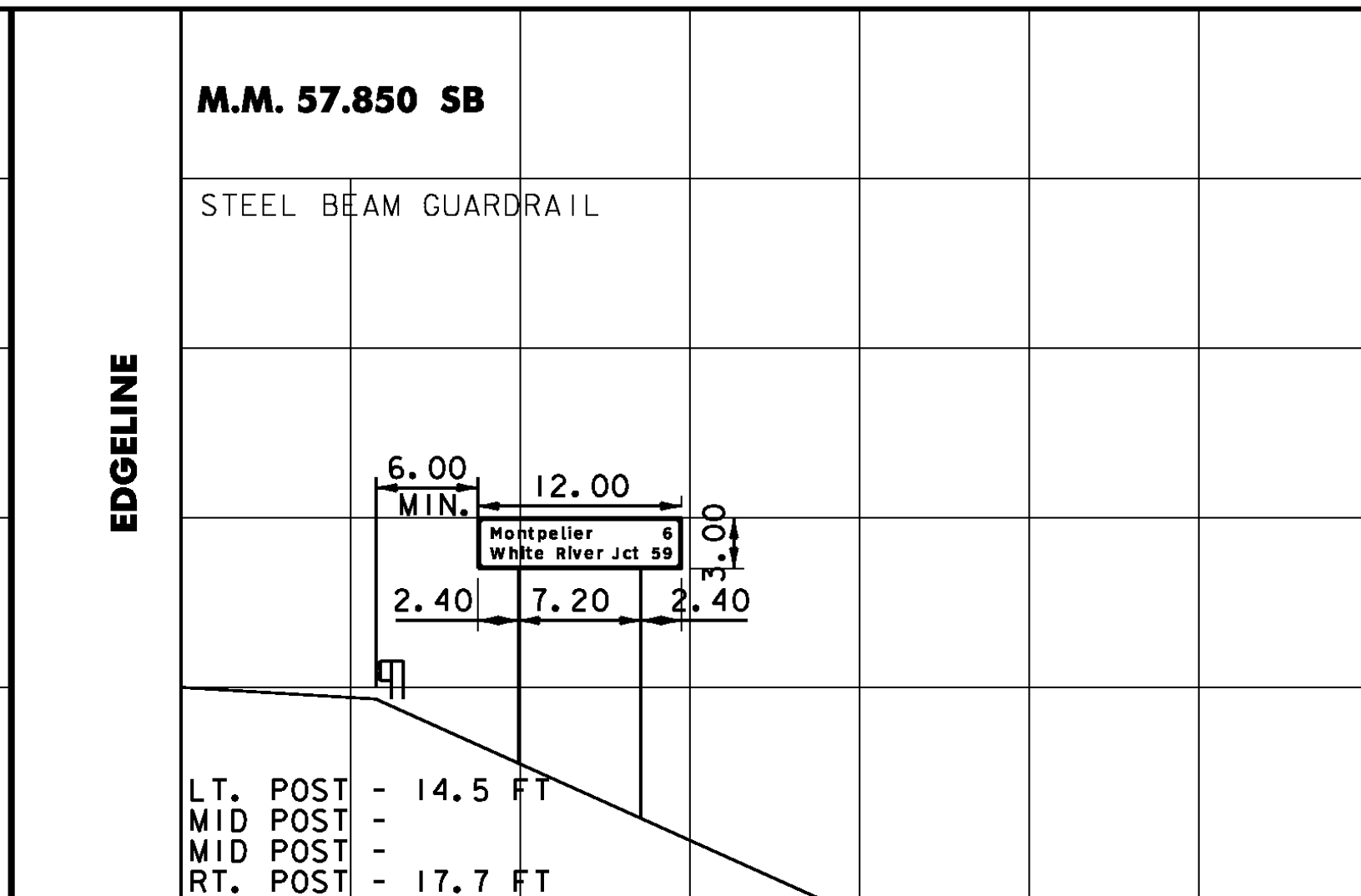
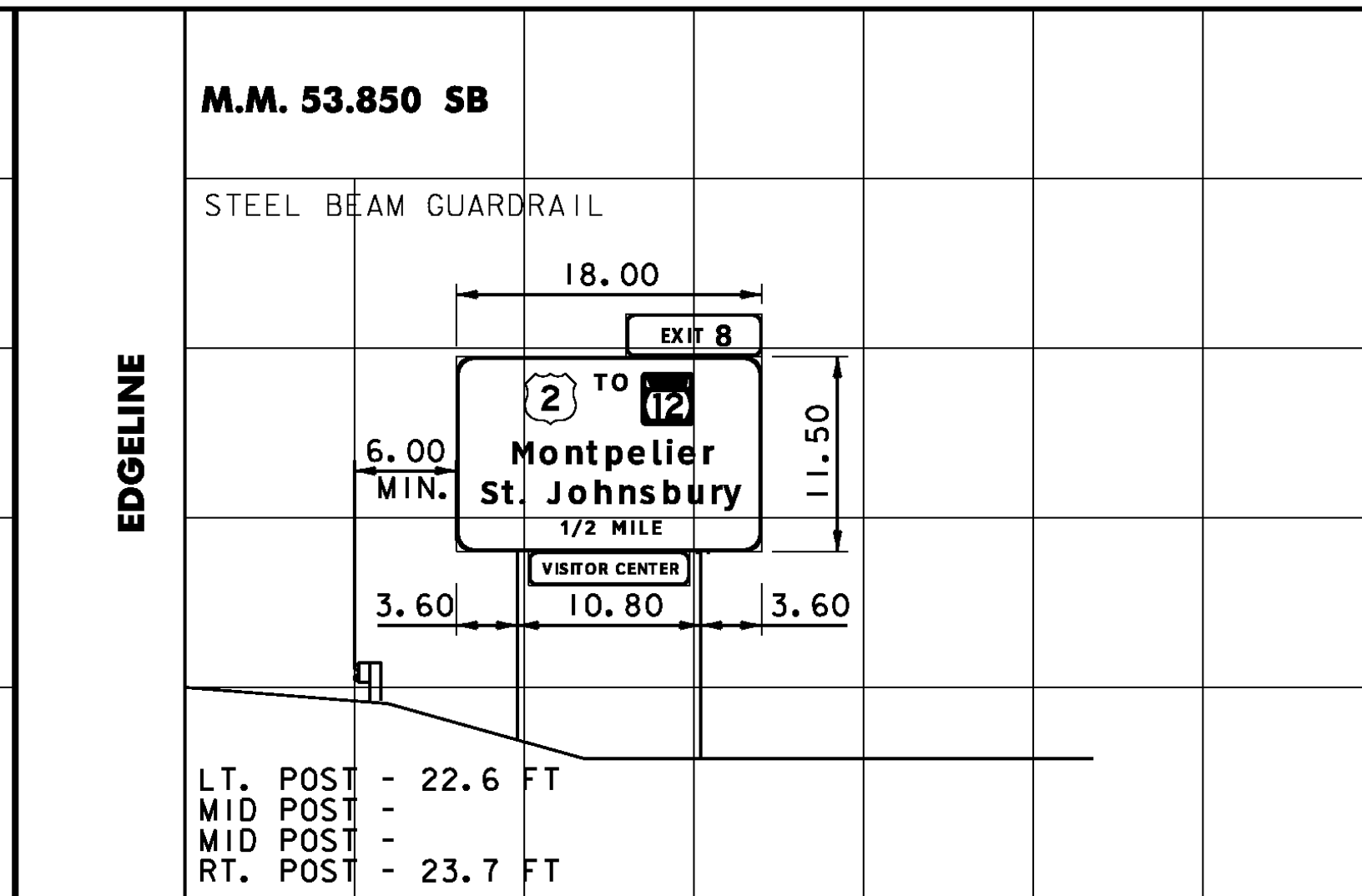
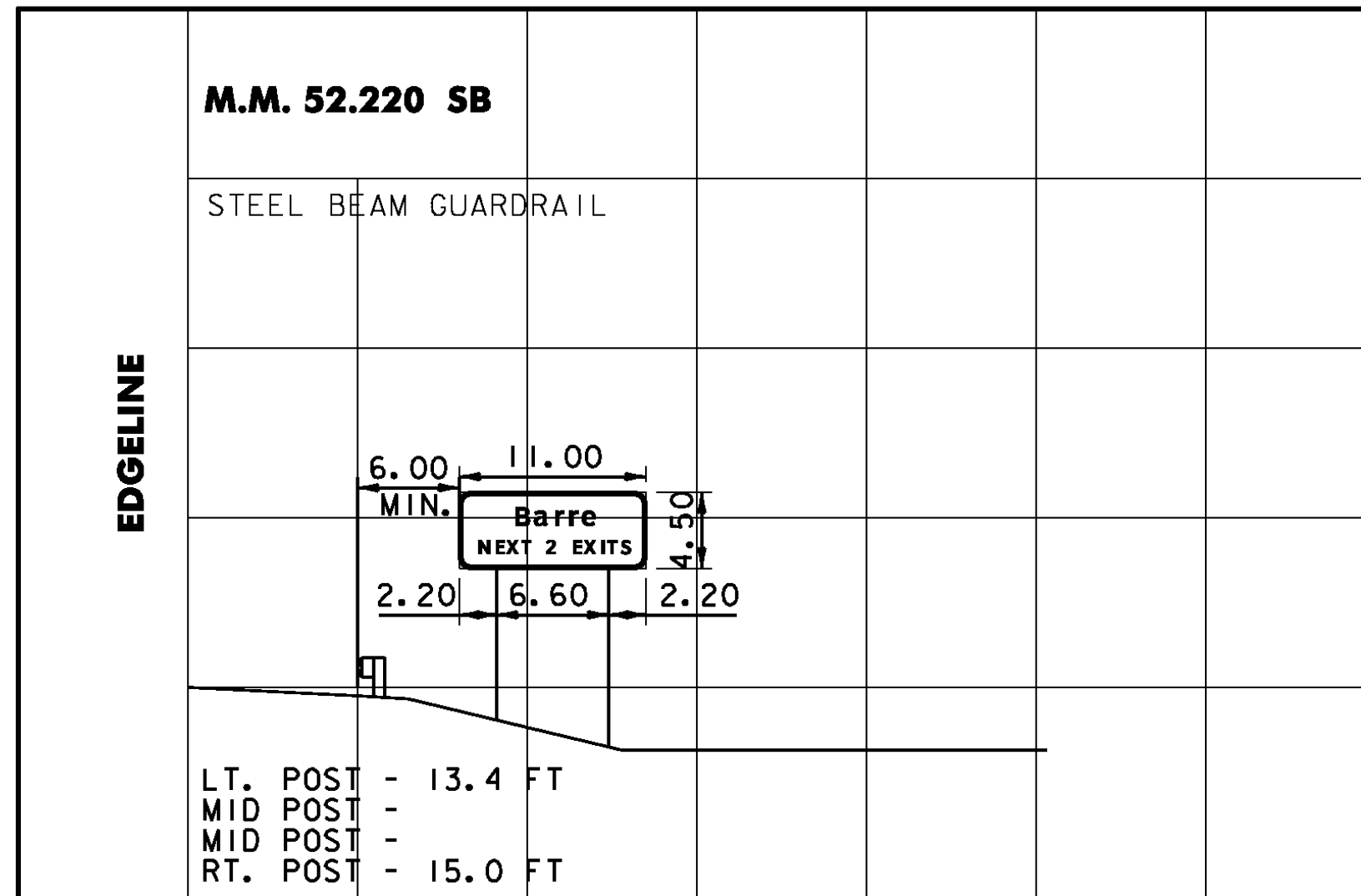


DIMENSIONS FOR CRITICAL OFFSETS OR CLEARANCES SHOWN FOR CONVENIENCE, REFER TO STANDARD SHEET E-120 FOR PLACEMENT GUIDELINES.

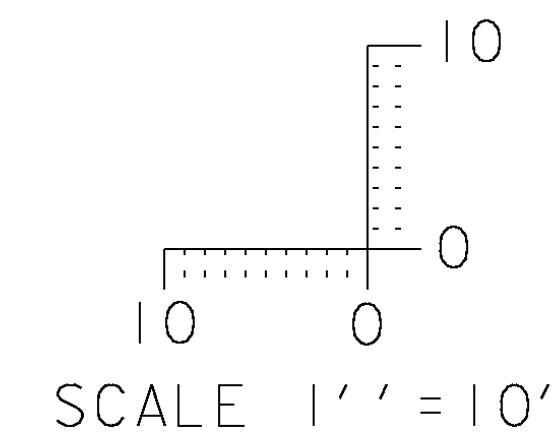
SCALE 1'' = 10''

<b>CROSS SECTION SHEET 5</b>		PROJECT NAME: ROYALTON-MIDDLESEX	PLOT DATE: 8/12/2009
		PROJECT NUMBER: IMG SIGN(19)	DRAWN BY: JBZ
		FILE NAME: z09a020xs.dgn	CHECKED BY: BDB
		PROJECT LEADER: CRB	SHEET 151 OF 163
		DESIGNED BY: JBZ	
		CLD REF. NO.: 09-0106	





DIMENSIONS FOR CRITICAL OFFSETS OR CLEARANCES SHOWN FOR CONVENIENCE, REFER TO STANDARD SHEET E-120 FOR PLACEMENT GUIDELINES.



**CROSS SECTION SHEET 7**

PROJECT NAME: ROYALTON-MIDDLESEX	PLOT DATE: 8/12/2009
PROJECT NUMBER: IMG SIGN(19)	DRAWN BY: JBZ
FILE NAME: z09a020xs.dgn	CHECKED BY: BDB
PROJECT LEADER: CRB	SHEET 153 OF 163
DESIGNED BY: JBZ	
CLD REF. NO.: 09-0106	

## GENERAL NOTES

1. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE STATE OF VERMONT AGENCY OF TRANSPORTATION'S 'STANDARD SPECIFICATIONS FOR CONSTRUCTION', DATED 2006, WITH CURRENT MODIFICATIONS.
2. OVERHEAD SIGN/SIGNAL SUPPORTS SHALL CONFORM TO AASHTO'S PUBLICATION ENTITLED 'STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS', DATED 2006 OR ITS LATEST REVISION.
3. ADDITIONAL DESIGN CRITERIA ARE AS FOLLOWS:
 

CONCRETE  $f_c = 1400$  PSI       $f'_c = 3500$  PSI  
 REINFORCING  $f_s = 24000$  PSI (GRADE 60)  
 FOOTING SOIL PRESSURE : 3000 PSF (MAXIMUM)

WIND LOAD AND ICE LOAD PER AASHTO 'STANDARD SPECIFICATIONS'
4. ANCHOR BOLTS
 

FOUR STAINLESS STEEL ANCHOR BOLTS WITH TWO HEXAGON NUTS, ONE WASHER AND ONE LOCK WASHER PER BOLT SHALL BE FURNISHED WITH EACH POLE. ANCHOR BOLT PLATES, WHEN USED, SHALL ALSO BE STAINLESS STEEL. SEE SUB-SECTION 714.09.
5. FLANGE BOLTS
 

ALL FLANGE BOLTS AND HEX NUTS SHALL BE HIGH STRENGTH STEEL AND SHALL CONFORM TO ASTM A325. THE FLANGE BOLTS SHALL BE CAPABLE OF RESISTING 133% OF THE FULL DESIGN STRESS OF THE TUBE AT ITS YIELD STRENGTH STRESS.
6. HORIZONTAL AND VERTICAL MEMBERS
 

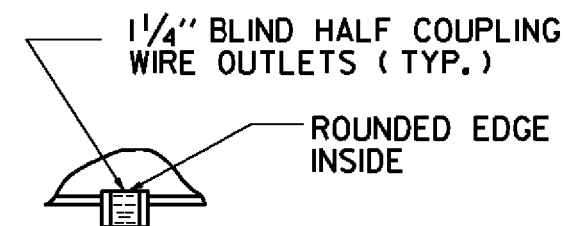
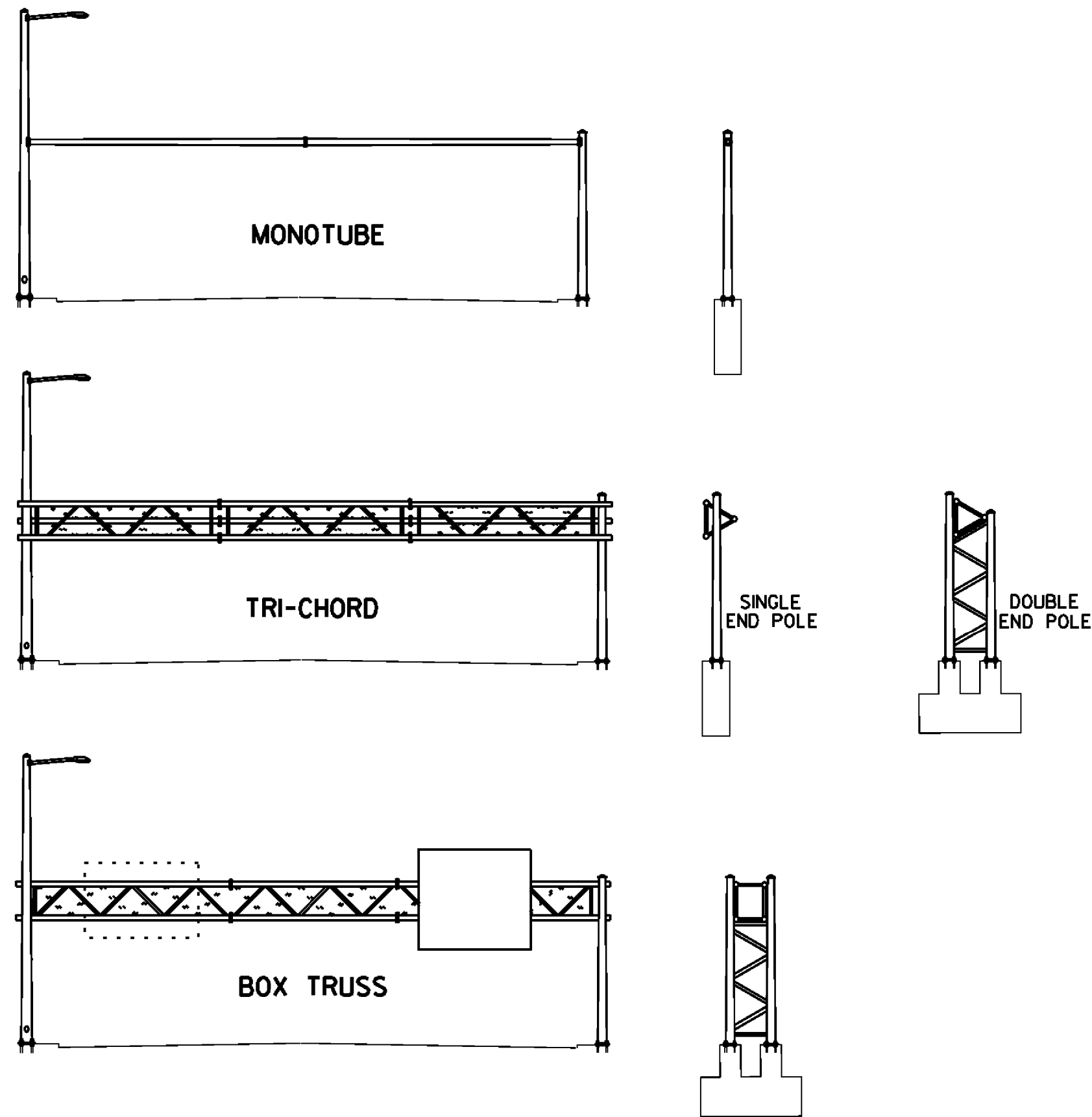
STEEL TUBES SHALL BE FORMED AND WELDED WITH ONE CONTINUOUS LONGITUDINAL WELD ONLY. AFTER FORMING AND WELDING THEY SHALL BE COLD ROLLED TO ENSURE UNIFORMITY OF SIZE AND SMOOTHNESS OF WELD. THEY SHALL HAVE A MINIMUM YIELD STRENGTH OF 48,000 PSI. THERE SHALL BE NO TRANSVERSE WELDING EXCEPT AT THE FLANGE CONNECTIONS AND POLE BASE PLATES, WHERE THE TUBES SHALL TELESCOPE THE FLANGES AND PLATES AND BE CONTINUOUSLY WELDED BOTH SIDES INSIDE AND OUT TO WITHSTAND THE FULL TRANSFER OF THE BENDING STRENGTH TO THE BOLTS
7. GALVANIZING
 

ALL STEEL COMPONENTS, EXCEPT CONCRETE REINFORCING AND STAINLESS STEEL HARDWARE, ARE TO BE HOT DIPPED GALVANIZED AFTER FABRICATION. THE ASSEMBLIES SHALL BE DESIGNED AND FABRICATED TO PERMIT GALVANIZING ON ALL INTERIOR AND EXTERIOR SURFACES AND SHALL BE FREE OF POCKETS AND OTHER STRUCTURAL OBSTRUCTIONS THAT WILL NOT PERMIT PROPER DEPOSITION OF ZINC COATING. GALVANIZING SHALL BE IN ACCORDANCE WITH ASTM A123 AND A153.
8. WELDING
  - A. ALL DESIGN DETAILS, WORKMANSHIP, PROCEDURES AND INSPECTION SHALL CONFORM WITH SUB-SECTION 506.10.
  - B. ALL WELDS SHALL BE AT LEAST AS STRONG AS THE MATERIAL(S) BEING WELDED.
9. FOOTINGS
  - A. FOOTINGS SHALL BE DESIGNED TO RESIST LOADS EQUAL TO, OR GREATER THAN, THE MAXIMUM LOADS THAT THE POLE IS DESIGNED FOR.
  - B. THREE TYPES OF FOUNDATIONS, AS OUTLINED IN AASHTO STANDARD SPECIFICATIONS (SEE NOTE 2) SECTION 1.8.2 (C) SHALL BE ALLOWED.
    1. DRILLED SHAFTS
    2. SPREAD FOOTINGS AND
    3. PILES.
  - C. DRILLED SHAFT FOOTINGS SHALL BE POURED IN DRILLED SHAFTS AGAINST UNDISTURBED MATERIAL. THE TOP TWO FEET OF SOIL SHALL BE NEGLECTED FOR DESIGN PURPOSES.
  - D. THE FOLLOWING DESIGN CRITERIA SHALL BE USED:
    1. ASSUME FRICTION ANGLE OF 30 DEGREES FOR ALL SOILS.
    2. DESIGN EMBEDMENT DEPTH IN ACCORDANCE WITH BROM'S METHOD (SECTION 13.6.1.1 AASHTO 'STANDARD SPECIFICATIONS') WITH 0.7 FOR UNDER CAPACITY FACTOR AND 2.5 FOR OVERLOAD FACTOR (OVERALL FACTOR OF SAFETY OF 3.5).
- E. AS AN ALTERNATIVE TO THE DRILLED HOLES, FOOTINGS MAY BE POURED IN EXCAVATED HOLES USING THE PROPER FORMS, WHICH MUST BE REMOVED. THE EXCAVATED HOLES SHALL BE AT LEAST TWO FEET CLEAR OF THE FOOTING SIDES AND ONE FOOT DEEPER THAN THE FOOTING. CARE SHALL BE TAKEN TO AVOID EXCAVATING AROUND THE TOP OF THE FOOTING. THE BACKFILL MATERIAL SHALL BE COMPACTED AS DESCRIBED IN SUB-SECTION 204.08. DESIGN LIMITS AS FOR AUGERED FOOTING APPLY.
- F. WHEN THE DESIGN DEPTH OF A FOOTING CANNOT BE OBTAINED DUE TO UNFORSEEN FIELD CONDITIONS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND OBTAIN A REVISED FOOTING DETAIL FROM THE ENGINEER.
- G. ANY BACKFILL PLACED ADJACENT TO THE FOOTING SHALL BE GRANULAR MATERIAL MEETING THE REQUIREMENTS FOR GRANULAR BACKFILL FOR STRUCTURES, SUB-SECTION 704.08. CONCRETE FOR FOOTING SHALL CONFORM TO THE REQUIREMENTS OF CONCRETE, CLASS B, SECTION 501, STRUCTURAL CONCRETE. GROUT MATERIAL SHALL BE NON-SHRINKING MORTAR CONFORMING TO SUB-SECTION 707.03 (MORTAR TYPE IV).
- H. SIGNALS/SIGNS SHALL BE INSTALLED AND LEVELED AND POLES SHALL BE PLUMB PRIOR TO PLACING GROUT UNDER POLE BASE.
10. SHOP DRAWINGS (6 COPIES OF EACH) SHALL BE SUBMITTED TO THE STATE OF VERMONT, AGENCY OF TRANSPORTATION, STRUCTURES DIVISION FOR APPROVAL PRIOR TO FABRICATION. THE SHOP DRAWINGS SHALL INCLUDE THE FOLLOWING INFORMATION:
  - A. DETAILED DRAWING OF EACH COMPONENT OF THE STRUCTURE.
  - B. MATERIAL SPECIFICATION FOR EACH COMPONENT OF THE STRUCTURE, EITHER BY COMPLETE SPECIFICATION OR REFERENCE TO APPLICABLE ASTM STANDARDS.
  - C. NOTATION OF PROJECT NAME, PROJECT NUMBER, ROUTE NUMBER, AND STRUCTURE STATIONING (TO BE INCLUDED ON EACH SHEET).
  - D. DETAILS FOR LOCATION OF SIGNS/SIGNALS AND ATTACHMENT HARDWARE FOR THE SUPPORT STRUCTURE.
  - E. ALL ELEVATIONS AND DIMENSIONS NECESSARY TO PROVIDE A COMPLETE SET OF RECORD PLANS.
  - F. DEAD LOAD DEFLECTION AND CAMBER INFORMATION.
  - G. WELDING DETAILS AND PROCEDURES ARE REQUIRED FOR ALL WELDS. PROCEDURES SHALL BE SUBMITTED FOR APPROVAL WITH REFERENCE TO EACH WELD IDENTIFIED ON THE SHOP DRAWINGS. (SEE SUB-SECTION 506.10)
11. EACH OVERHEAD TRAFFIC SIGN SUPPORT SHALL BE GROUNDED. THE GROUND SHALL CONSIST OF:
  - A) AN INTERNAL GROUND LUG OPPOSITE THE HAND HOLE.
  - B) A #6 (MIN.) SOFT DRAWN COPPER GROUNDING ELECTRODE CONDUCTOR.
  - C) A 5/8" X 8" (MIN.) COPPER CLAD GROUNDING ELECTRODE. THE RESISTANCE TO GROUND SHALL BE 25 OHMS OR LESS. ADDITIONAL GROUNDING ELECTRODES MAY BE REQUIRED (MINIMUM SPACING SHALL BE 6').

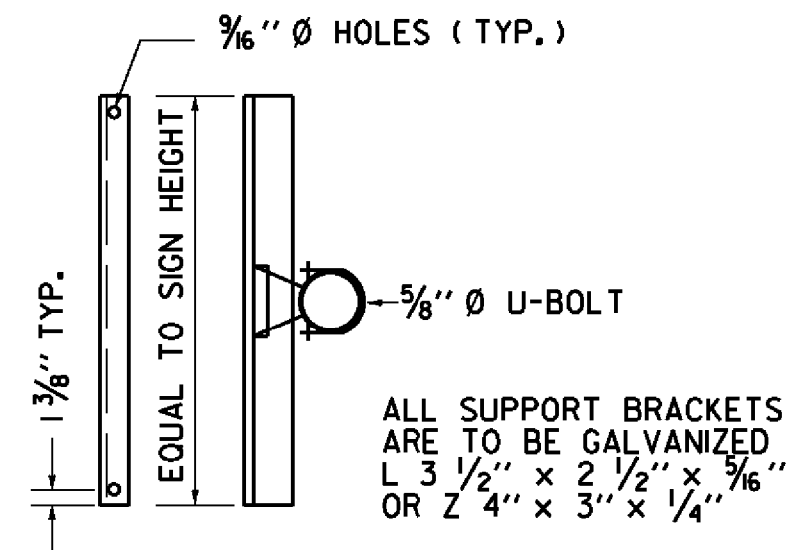
WHEN A POWER SERVICE, METER AND DISCONNECT ARE ATTACHED TO A POLE, THERE SHALL BE A CONTINUOUS GROUNDING ELECTRODE CONDUCTOR FROM THE METER AND DISCONNECT WHICH MAY RUN INTERNAL TO THE UP-RIGHT, THROUGH THE 1/2" FLEXIBLE TUBING IN THE CONCRETE BASE TO THE REQUIRED GROUNDING ELECTRODE(S). THE GROUNDING ELECTRODE CONDUCTOR FROM THE POLE GROUNDING LUG, CONTROLLER CABINET AND/OR LUMINAIRE MAY ATTACH TO THIS CONTINUOUS GROUNDING ELECTRODE CONDUCTOR FROM THE SERVICE METER AND DISCONNECT. THE CONTRACTOR SHALL PERFORM A RESISTANCE TO GROUND TEST ON THE CONTINUOUS GROUNDING ELECTRODE CONDUCTOR FROM THE SERVICE METER AND DISCONNECT AND PROVIDE A WRITTEN STATEMENT TO THE AREA ELECTRICAL INSPECTOR THAT THE GROUNDING ELECTRODE CONDUCTOR IS CONTINUOUS FROM THE SERVICE METER AND DISCONNECT AND THE RESISTANCE TO GROUND IS 25 OHMS OR LESS.
12. THE COST OF SIGN SUPPORTS, INCLUDING ALL HARDWARE, SIGN BRACKETS, FOOTINGS AND LUMINAIRE ARMS SHALL BE INCLUDED IN THE UNIT BID PRICE FOR ITEM 677.13, THESE COMPONENTS SHALL CONFORM TO ALL APPLICABLE PROVISIONS OF SECTION 677.
13. HORIZONTAL MEMBERS SHALL BE CAMBERED AND THE VERTICAL POLES BACK-RAKED (WHERE APPLICABLE) TO THE ANTICIPATED DEAD LOAD DEFLECTION PLUS THE CAMBER, IF ANY, SPECIFIED ON THE PLANS.
14. AN EQUIVALENT ALTERNATE DESIGN MAY BE SUBSTITUTED FOR THE DETAILS AND MATERIALS SHOWN.
15. THE DETAILS OF DESIGN FOR THE STRUCTURE AND FOOTINGS ARE TO BE SUPPLIED BY THE CONTRACTOR AND/OR BY THE MANUFACTURER. THE STRUCTURE SHALL BE DESIGNED TO RESIST THE MAXIMUM LOADING AS OUTLINED IN THE AASHTO STANDARD SPECIFICATIONS (SEE NOTE 2). ALL DETAILS OF THE STRUCTURE AND THE FOOTING SHALL BE CHECKED AND STAMPED BY A STRUCTURAL ENGINEER REGISTERED IN THE STATE OF VERMONT PRIOR TO SUBMITTAL OF THE SHOP DRAWINGS TO THE VERMONT AGENCY OF TRANSPORTATION.
16. IN ADDITION TO THE SHOP DRAWINGS OUTLINED IN NOTE 10, THE CONTRACTOR SHALL SUBMIT ALL DESIGN CALCULATIONS TO THE VERMONT AGENCY OF TRANSPORTATION, STRUCTURES DIVISION, SHOWING THE FOLLOWING INFORMATION FOR EACH OF THE VERTICAL AND HORIZONTAL COMPONENTS OF THE STRUCTURE AND FOOTING:
  - A. THE DESIGN AXIAL AND SHEAR FORCES AND BENDING AND TORSIONAL MOMENTS.
  - B. THE DESIGN AXIAL, BENDING AND SHEAR STRESSES AND THE COMBINED STRESS RATIO.
  - C. VIBRATION AND FATIGUE CALCULATIONS AS SET FORTH IN SECTION 9 OF THE AASHTO PUBLICATION REFERENCED IN NOTE 2.
  - D. THE ALLOWABLE AXIAL, BENDING, AND SHEAR STRESSES.
  - E. ITEMS A, B, D - SHALL BE SHOWN FOR EACH OF THE GROUP LOADINGS (I, II, III) AND FOR THE BASIC WIND LOAD APPLIED TO THE TWO CASES OUTLINED IN THE AASHTO STANDARD SPECIFICATIONS (SEE NOTE 2) SECTION 1.2.5 (D) (4).
  - F. FAILURE TO SUPPLY THE PROPER DESIGN INFORMATION SHALL BE CAUSE FOR REJECTION OF THE STRUCTURE.
  - G. A MINIMUM OF FOUR (4) WEEKS SHALL BE REQUIRED FOR REVIEW BY THE VERMONT AGENCY OF TRANSPORTATION, STRUCTURES DIVISION.
17. THE CONTRACTOR/MANUFACTURER SHALL BE RESPONSIBLE FOR COMPLETION OF THE STRUCTURE AND FOOTING DATA ON THE DETAIL SHEET(S).
18. FOR INSTALLATIONS WHERE BOTH 'EXISTING' AND 'FUTURE' CONDITIONS ARE SHOWN, THE SUPPORTS SHALL BE DESIGNED FOR THE MORE SEVERE OF THE TWO LOADING CONDITIONS. THE INFORMATION OUTLINED IN NOTE 16 ABOVE SHALL BE PROVIDED FOR BOTH THE LOADING CONDITIONS.
19. NOT USED.
20. BASE PLATES SHALL BE STAMPED WITH THE VERTICAL POLE DIAMETER, HEIGHT, YIELD STRENGTH, GAUGE AND THE HORIZONTAL MEMBER DIAMETER, LENGTH, YIELD STRENGTH, GAUGE. ALTERNATELY, THE INFORMATION MAY BE STAMPED ON A METAL TAG RIVETED TO THE POLE NEAR THE HANDHOLE.

### OVERHEAD SIGN SUPPORT NOTES

PROJECT NAME: ROYALTON-MIDDLESEX	
PROJECT NUMBER: IMG SIGN(19)	
FILE NAME: z09a020overhead.dgn	PLOT DATE: 8/12/2009
PROJECT LEADER: CRB	DRAWN BY: JBZ
DESIGNED BY: JBZ	CHECKED BY: DBB
CLD REF. NO.: 09-0106	SHEET 154 OF 163



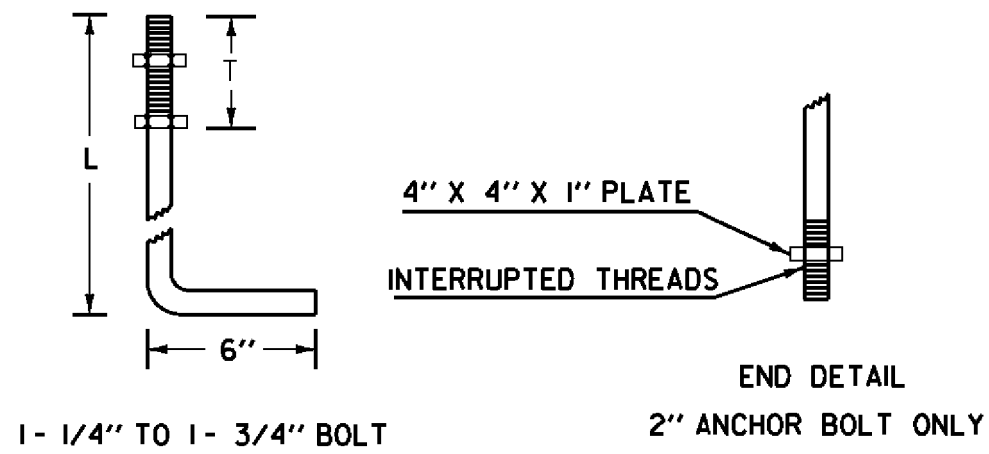
**DETAIL A**



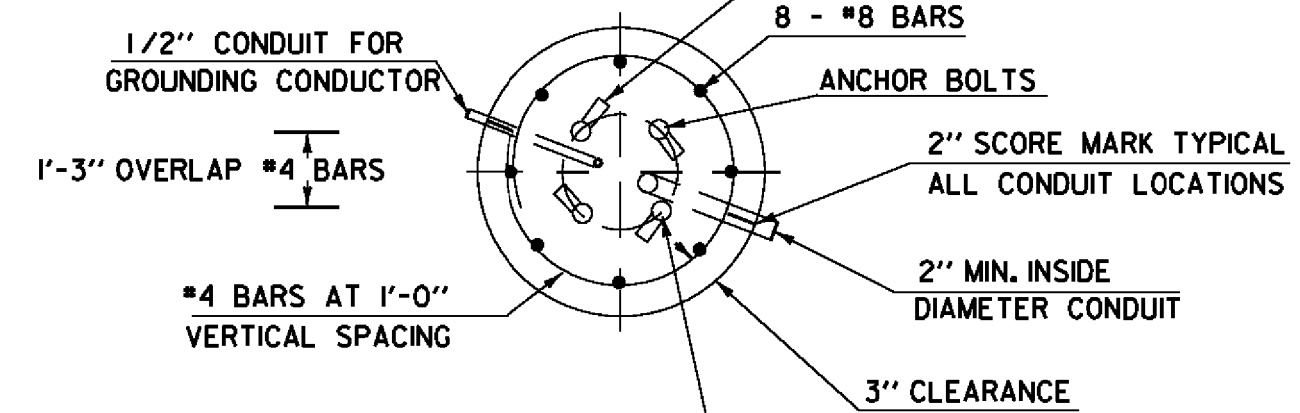
SIGN ON SINGLE MAST ARM

**SIGN BRACKET DETAILS**

ANCHOR BOLT DETAIL		
SIZE	L (IN)	T (IN)
1- 1/4" X 48"	42	8
1- 1/2" X 60"	54	9
1- 3/4" X 90"	84	9
2" X 96"	96	9



**ANCHOR BOLT DETAIL**



**SECTION**

**OVERHEAD TRAFFIC SIGN BRIDGE FOOTING DETAIL**

(SPREAD FOOTINGS OR PILES ARE OPTIONAL)

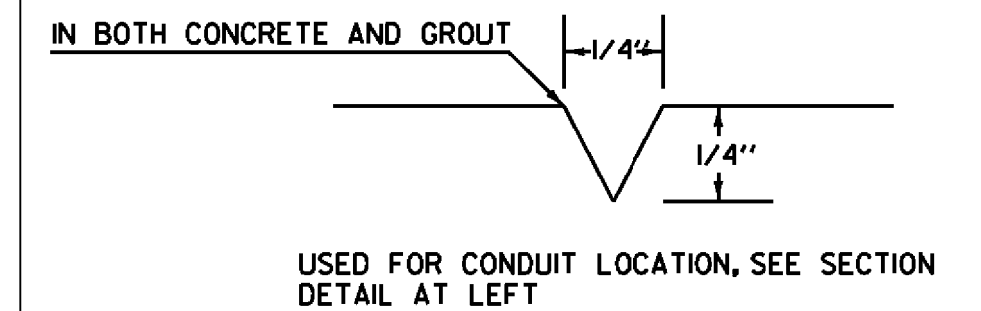
#6 SOFT DRAWN COPPER GROUNDING CONDUCTOR CONNECT TO GROUNDING LUG IN POLE

WEEP HOLE. INSTALL 1/2" FLEXIBLE PLASTIC CONDUIT FOR #6 AWG SOFT DRAWN COPPER GROUNDING CONDUCTOR. CONNECT TO GROUNDING ELECTRODE USING AN EXOTHERMIC WELD.

5/8" X 8" MIN. COPPER CLAD GROUNDING ELECTRODE. SEE NOTE #11 ON THE CANTILEVER/OVERHEAD SIGN/SIGNAL SUPPORT NOTE SHEET.

ANCHOR BOLT ORIENTATION MAY VARY (TOED-IN, TOED-OUT OR AS SHOWN) BUT THERE MUST BE A MINIMUM OF 3" OF COVER AND 3" OF CLEARANCE BETWEEN BOLTS.

**ELEVATION**

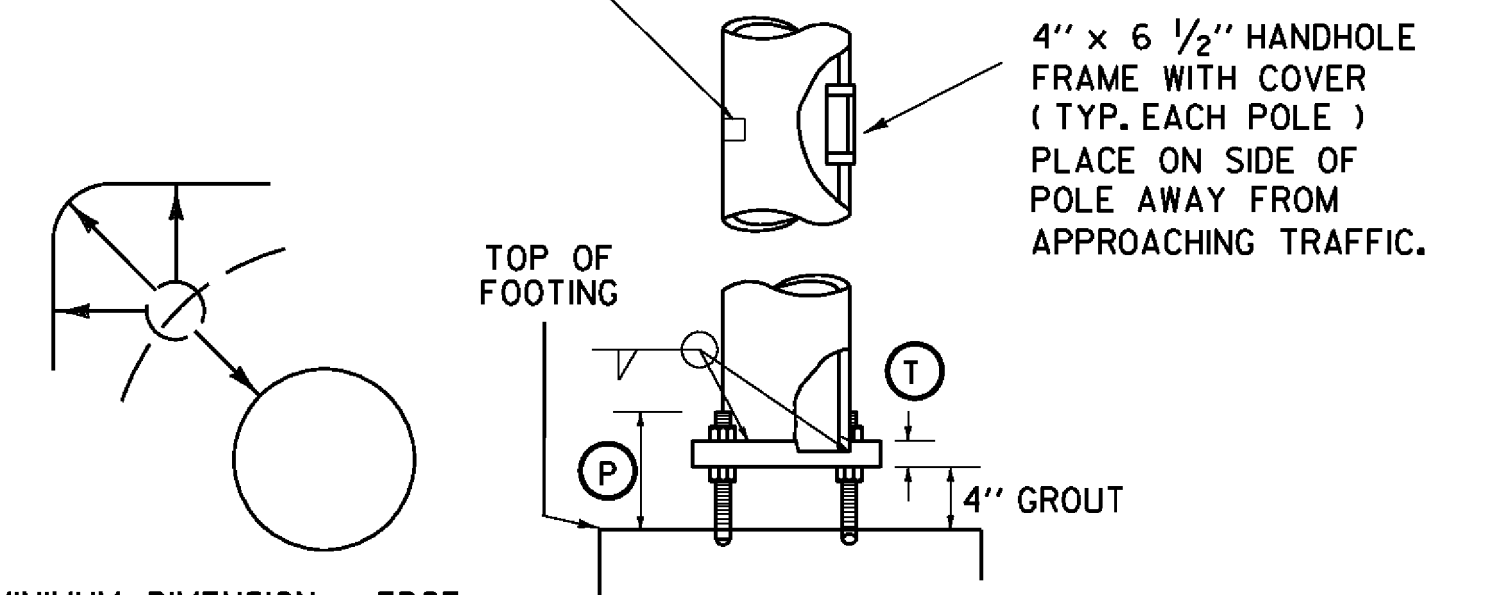


**2" SCORE MARK DETAIL**

**NOTES:**

- SEE OVERHEAD SIGN SUPPORT NOTES SHEET FOR ADDITIONAL INFORMATION.
- MANUFACTURER TO DETERMINE TYPE OF STRUCTURE REQUIRED.
- MONOTUBES SHALL NOT BE USED FOR SIGNS OVER 10' IN HEIGHT.
- MINIMUM CLEARANCE FROM SIGNS TO ROADWAY IS 17'.

GROUND WIRES SHALL BE CONNECTED TO THE GROUNDING LUG INSIDE THE HANDHOLE ACCESS.

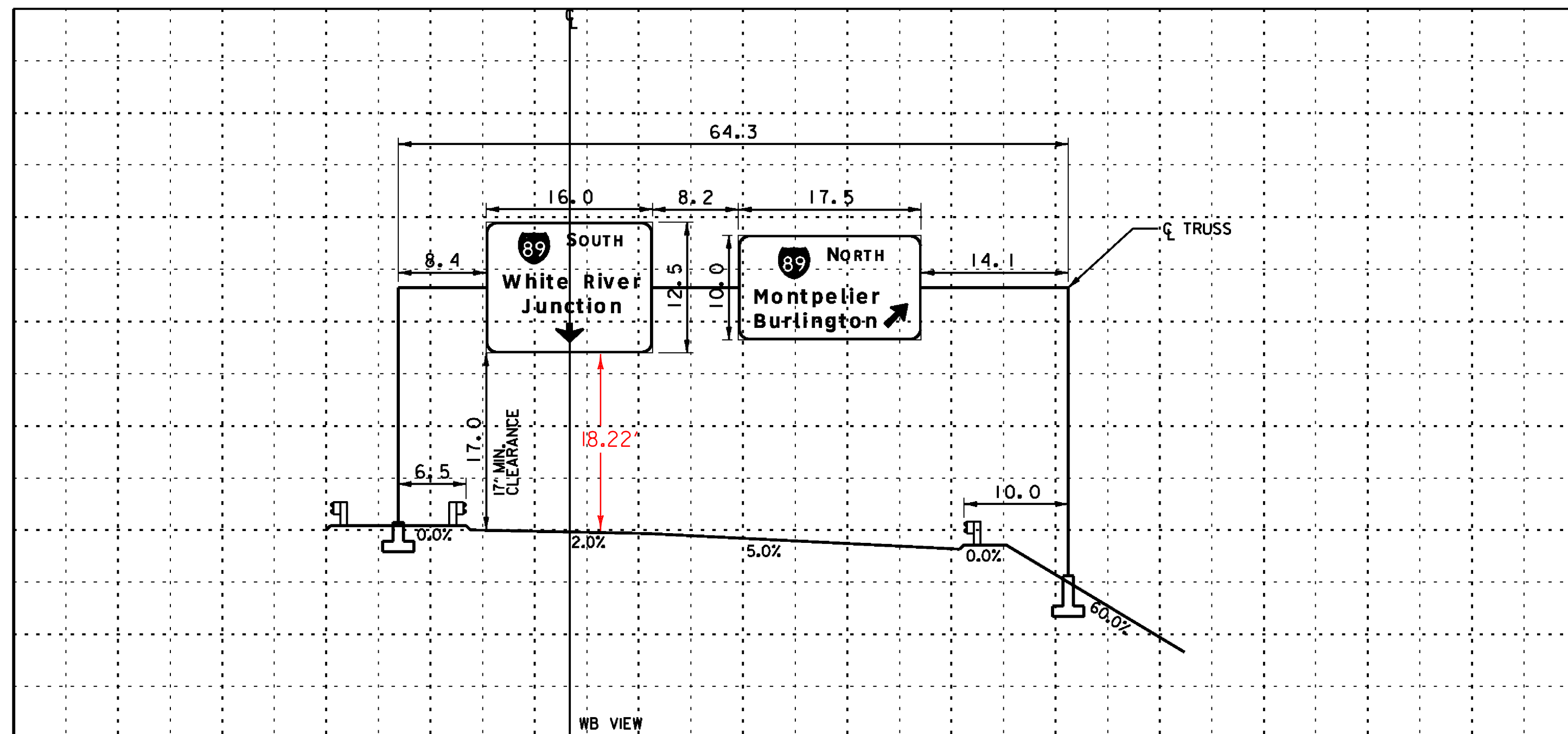


MINIMUM DIMENSION - EDGE OF BOLT HOLE TO EDGE OF BASE PLATE OR FACE OF UPRIGHT = ANCHOR BOLT DIA.

SEE DETAIL AT LEFT

ALIGN POLE BASE 90° TO HORIZONTAL MEMBER(S)

**POLE BASE AND BASE PLATE DETAIL**



(SEE SHEET 39 FOR LOCATION PLAN)

**OVERHEAD SIGN BRIDGE CROSS SECTION**

SCALE 1" = 10'

NOTE:  
DETAILS  
NTS

**OVERHEAD TRAFFIC SIGN BRIDGE / FOOTING DETAIL SHEET**

LAST REVISED 8/15/95

**INTERCHANGE #6**  
**VT 63**  
**M.M. 0.138 LT**

PROJECT NAME: ROYALTON-MIDDLESEX

PROJECT NUMBER: IMG SIGN(19)

FILE NAME: z09a020overhead.dgn

PROJECT LEADER: CRB

DESIGNED BY: JBJ

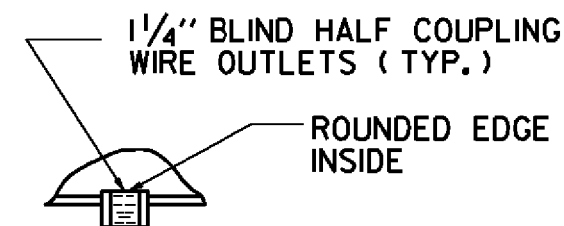
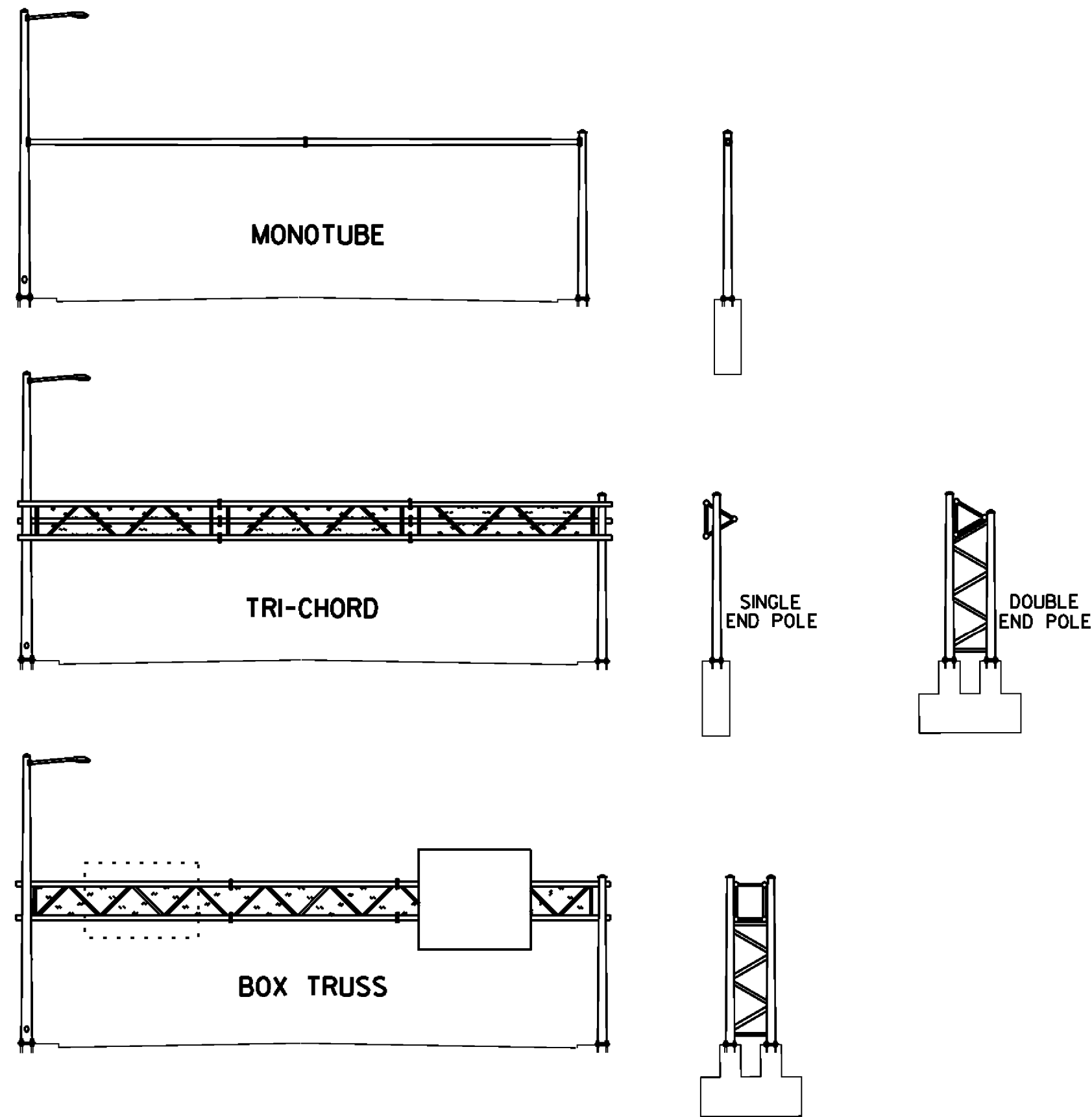
CLD REF. NO.: 09-0106

PLOT DATE: 8/12/2009

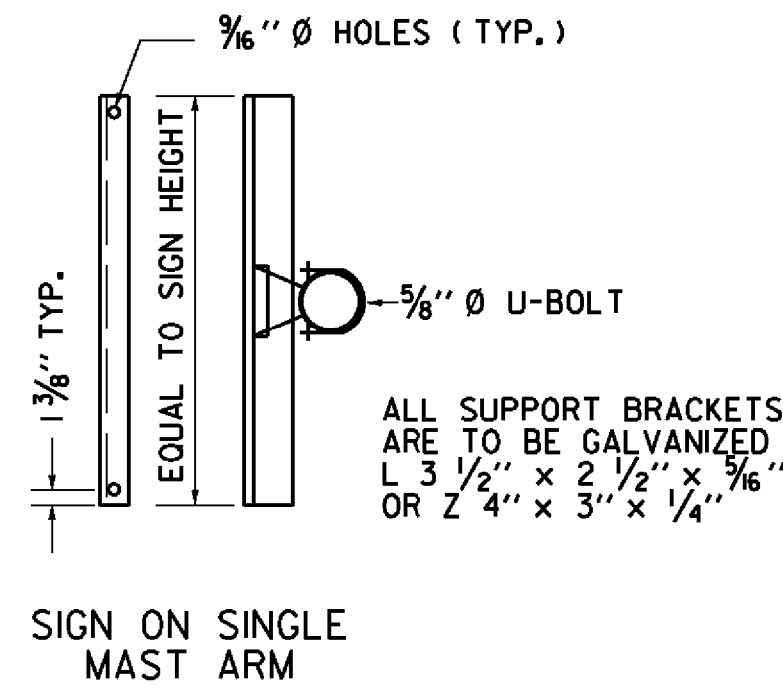
DRAWN BY: JBJ

CHECKED BY: BDB

SHEET 155 OF 163

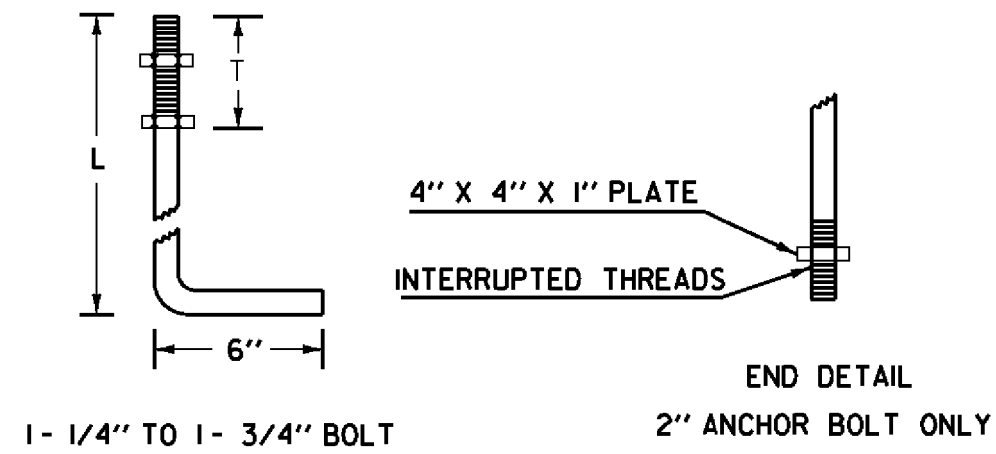


DETAIL A

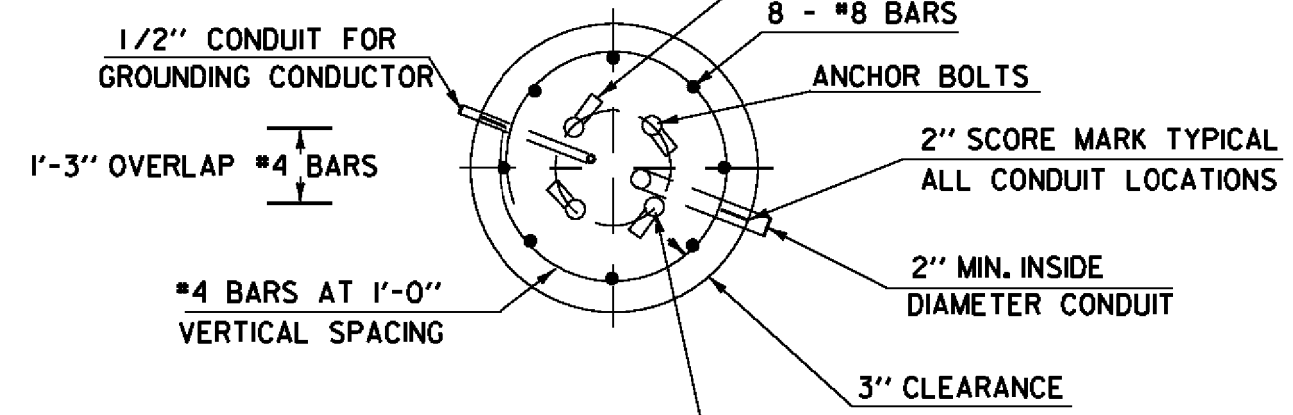


SIGN BRACKET DETAILS

ANCHOR BOLT DETAIL		
SIZE	L (IN)	T (IN)
1- 1/4" X 48"	42	8
1- 1/2" X 60"	54	9
1- 3/4" X 90"	84	9
2" X 96"	96	9



ANCHOR BOLT DETAIL



POSITION ANCHOR BOLTS TO ALLOW MINIMUM CLEARANCE OF 1-1/2" TO NEAREST REINFORCING STEEL.

SECTION

OVERHEAD TRAFFIC SIGN BRIDGE FOOTING DETAIL

(SPREAD FOOTINGS OR PILES ARE OPTIONAL)

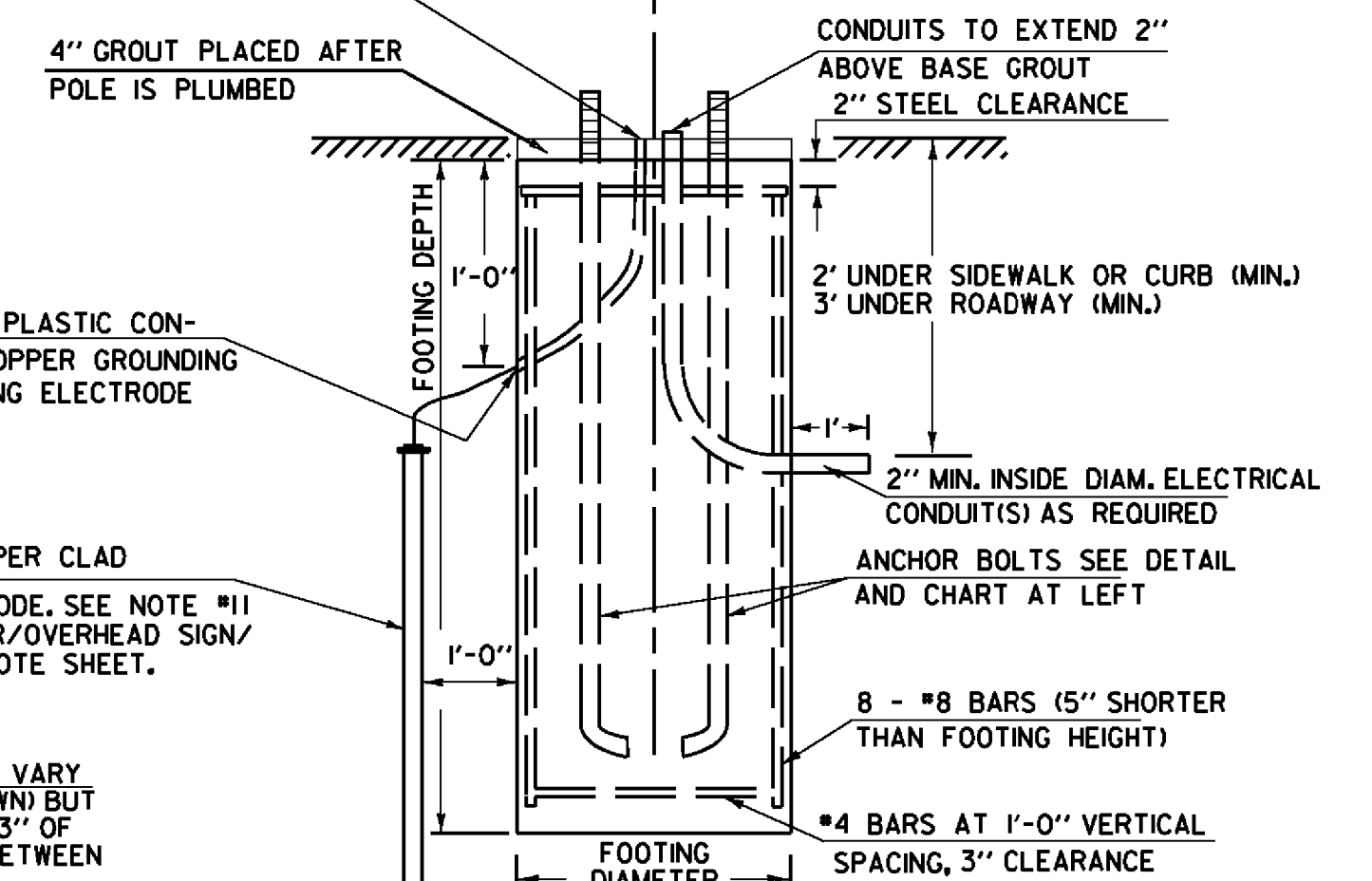
#6 SOFT DRAWN COPPER GROUNDING CONDUCTOR CONNECT TO GROUNDING LUG IN POLE

4" GROUT PLACED AFTER POLE IS PLUMBED

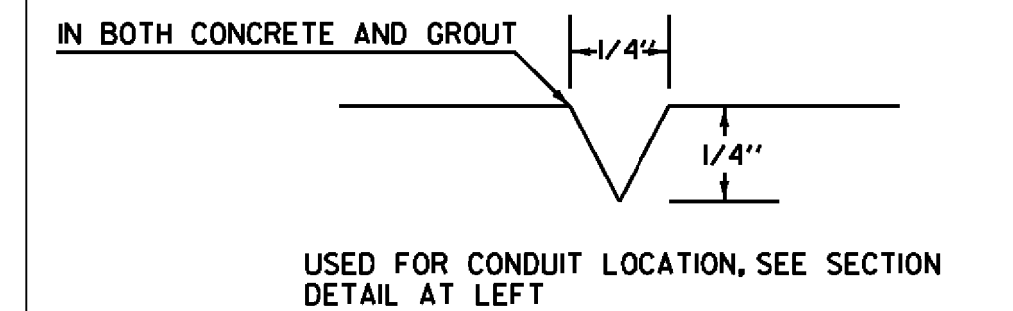
WEEP HOLE. INSTALL 1/2" FLEXIBLE PLASTIC CONDUIT FOR #6 AWG SOFT DRAWN COPPER GROUNDING CONDUCTOR. CONNECT TO GROUNDING ELECTRODE USING AN EXOTHERMIC WELD.

5/8" X 8" MIN. COPPER CLAD GROUNDING ELECTRODE. SEE NOTE #11 ON THE CANTILEVER/OVERHEAD SIGN/SIGNAL SUPPORT NOTE SHEET.

ANCHOR BOLT ORIENTATION MAY VARY (TOED-IN, TOED-OUT OR AS SHOWN) BUT THERE MUST BE A MINIMUM OF 3" OF COVER AND 3" OF CLEARANCE BETWEEN BOLTS.



ELEVATION

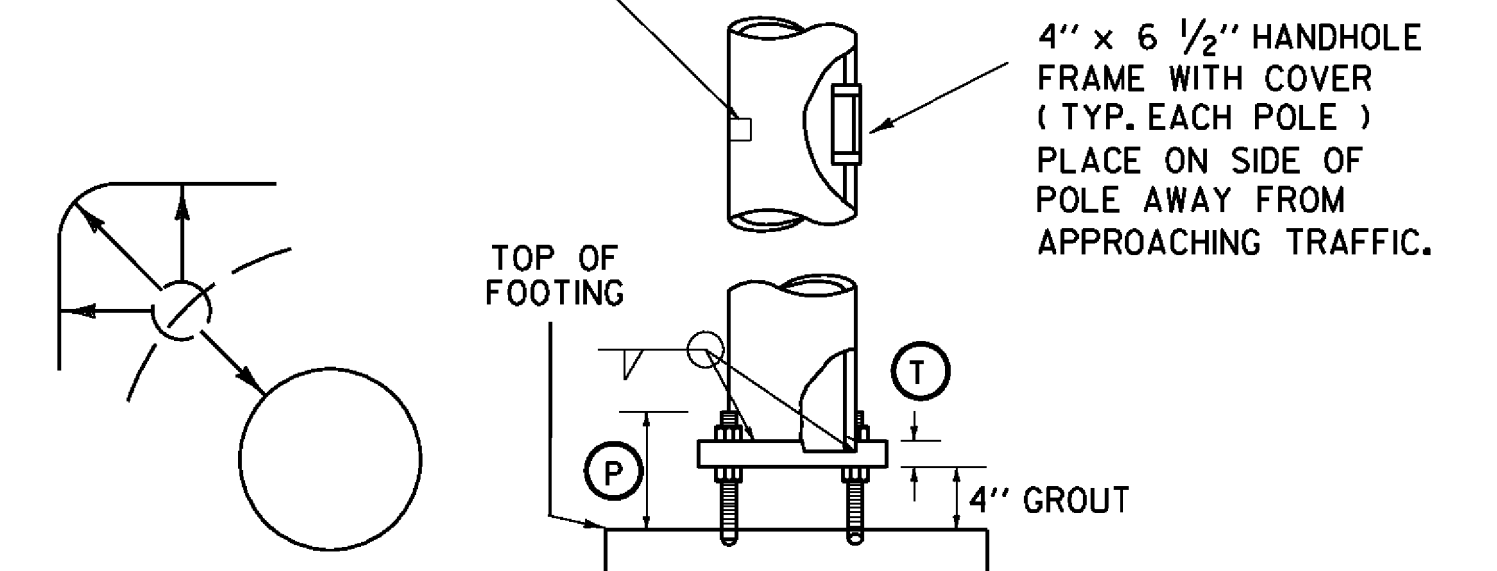


2" SCORE MARK DETAIL

NOTES:

- SEE OVERHEAD SIGN SUPPORT NOTES SHEET FOR ADDITIONAL INFORMATION.
- MANUFACTURER TO DETERMINE TYPE OF STRUCTURE REQUIRED.
- MONOTUBES SHALL NOT BE USED FOR SIGNS OVER 10' IN HEIGHT.
- MINIMUM CLEARANCE FROM SIGNS TO ROADWAY IS 17'.

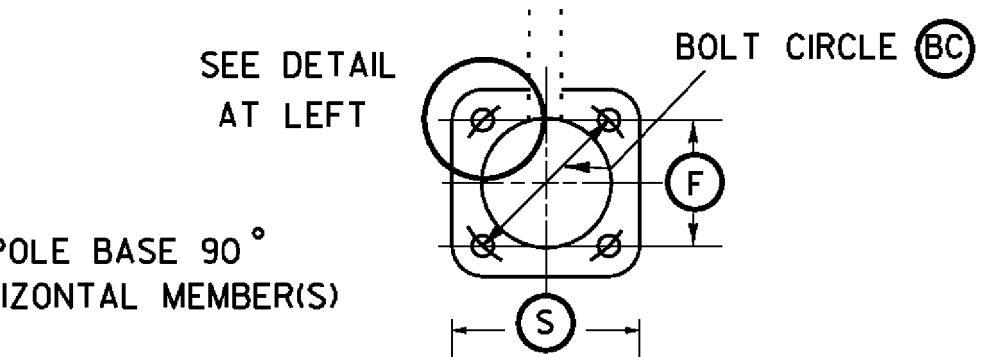
GROUND WIRES SHALL BE CONNECTED TO THE GROUNDING LUG INSIDE THE HANDHOLE ACCESS.



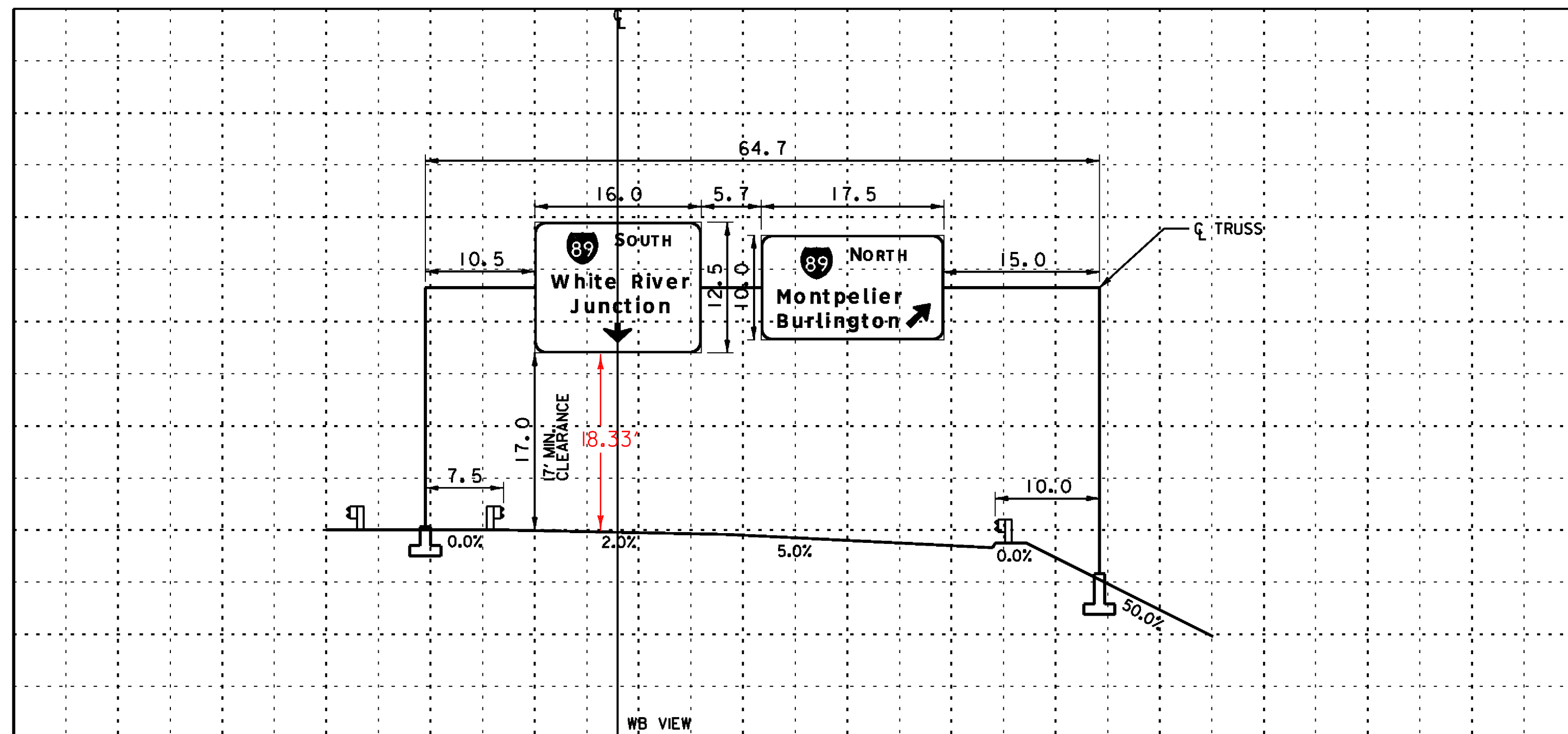
MINIMUM DIMENSION - EDGE OF BOLT HOLE TO EDGE OF BASE PLATE OR FACE OF UPRIGHT = ANCHOR BOLT DIA.

SEE DETAIL AT LEFT

ALIGN POLE BASE 90° TO HORIZONTAL MEMBER(S)



POLE BASE AND BASE PLATE DETAIL



(SEE SHEET 40 FOR LOCATION PLAN)

OVERHEAD SIGN BRIDGE CROSS SECTION

SCALE 1" = 10'

NOTE: DETAILS NTS

OVERHEAD TRAFFIC SIGN BRIDGE / FOOTING DETAIL SHEET

LAST REVISED 8/15/95

INTERCHANGE #7  
VT 62  
M.M. 0.115 LT

PROJECT NAME: ROYALTON-MIDDLESEX

PROJECT NUMBER: IMG SIGN(19)

FILE NAME: z09a020overhead.dgn

PROJECT LEADER: CRB

DESIGNED BY: JBJ

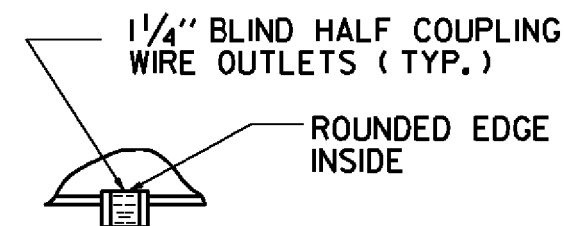
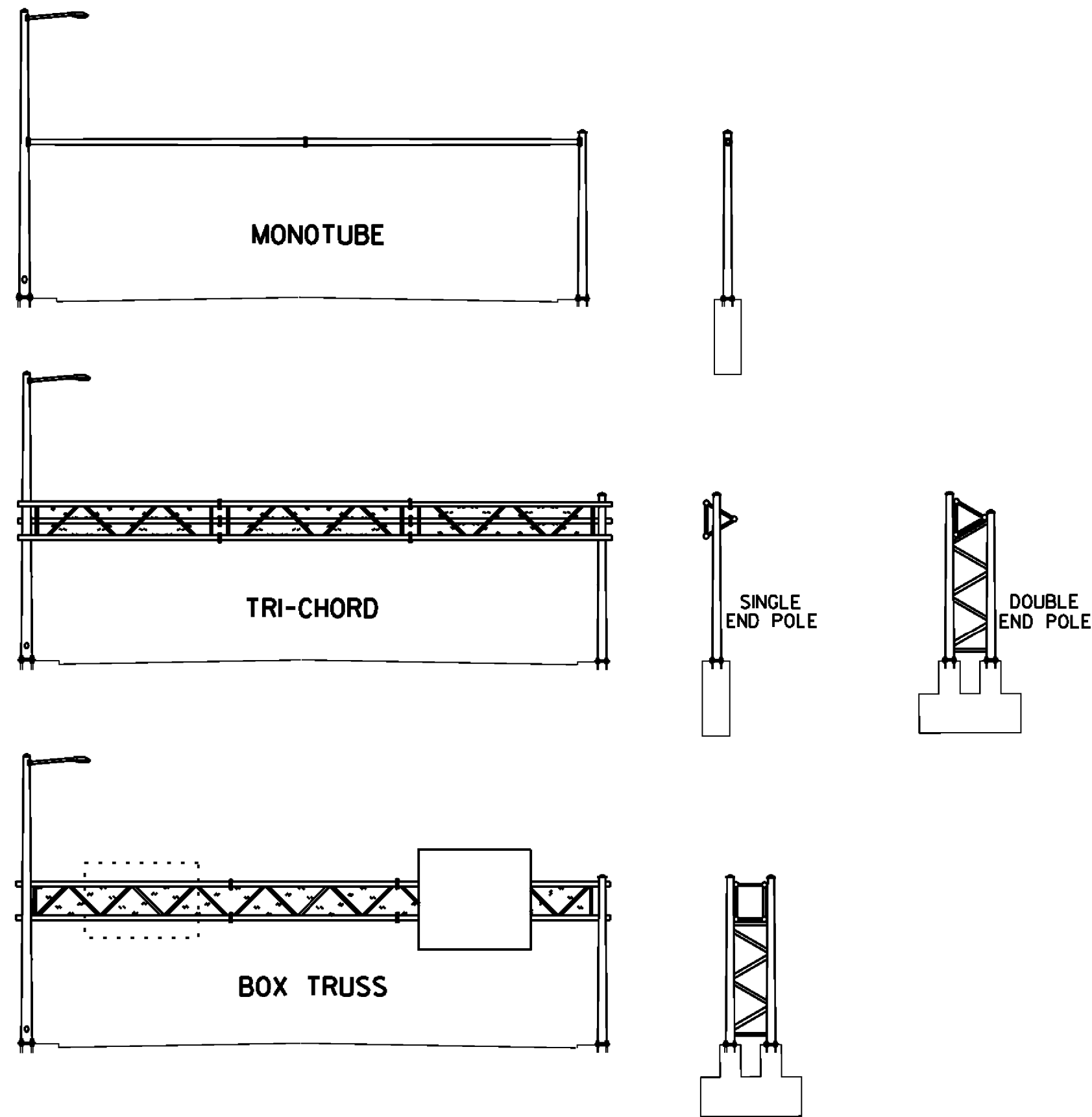
CLD REF. NO.: 09-0106

PLOT DATE: 8/12/2009

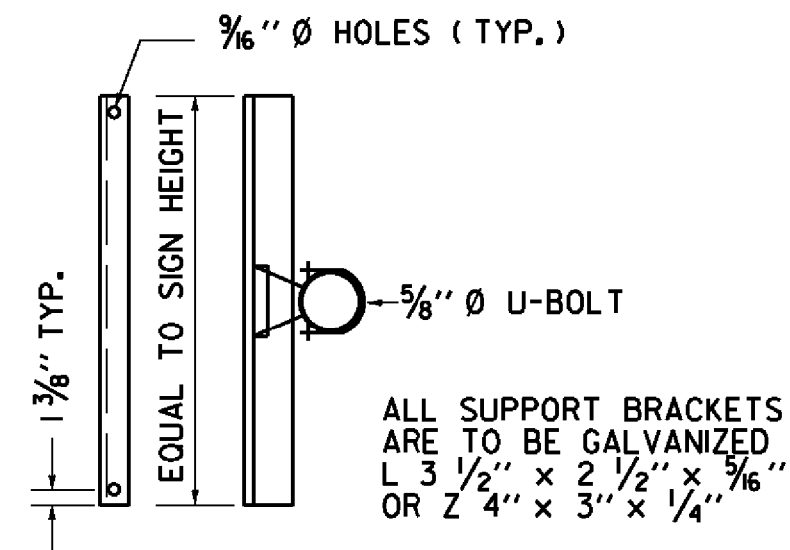
DRAWN BY: JBJ

CHECKED BY: BDB

SHEET 156 OF 163



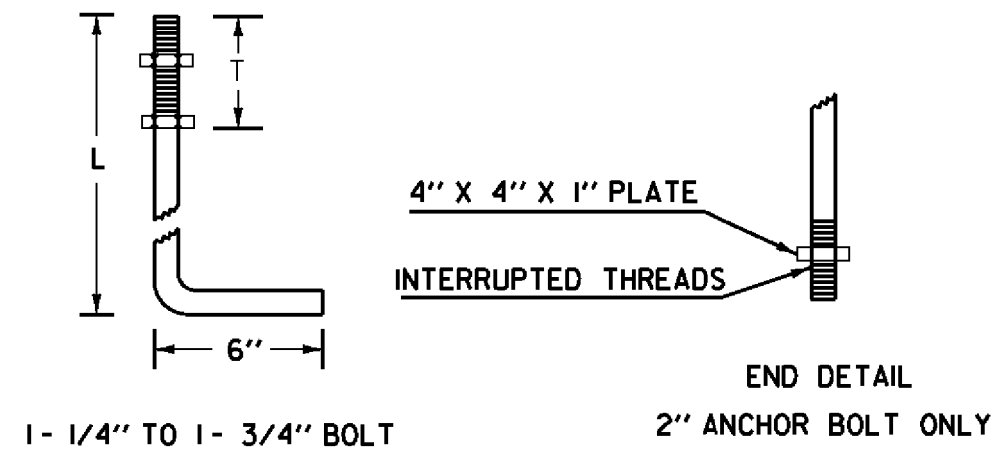
DETAIL A



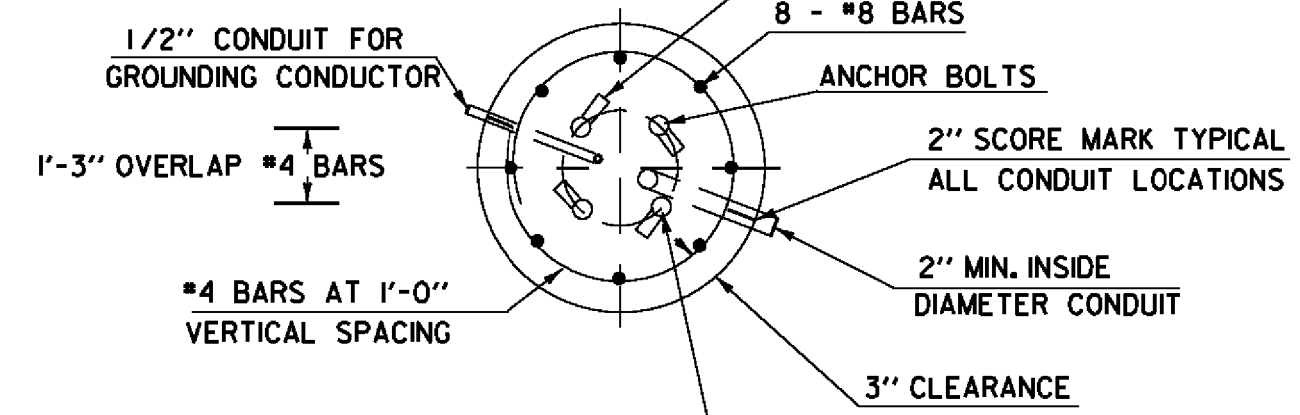
SIGN ON SINGLE MAST ARM

SIGN BRACKET DETAILS

ANCHOR BOLT DETAIL		
SIZE	L (IN)	T (IN)
1- 1/4" X 48"	42	8
1- 1/2" X 60"	54	9
1- 3/4" X 90"	84	9
2" X 96"	96	9



ANCHOR BOLT DETAIL



POSITION ANCHOR BOLTS TO ALLOW MINIMUM CLEARANCE OF 1-1/2" TO NEAREST REINFORCING STEEL.

SECTION

OVERHEAD TRAFFIC SIGN BRIDGE FOOTING DETAIL

(SPREAD FOOTINGS OR PILES ARE OPTIONAL)

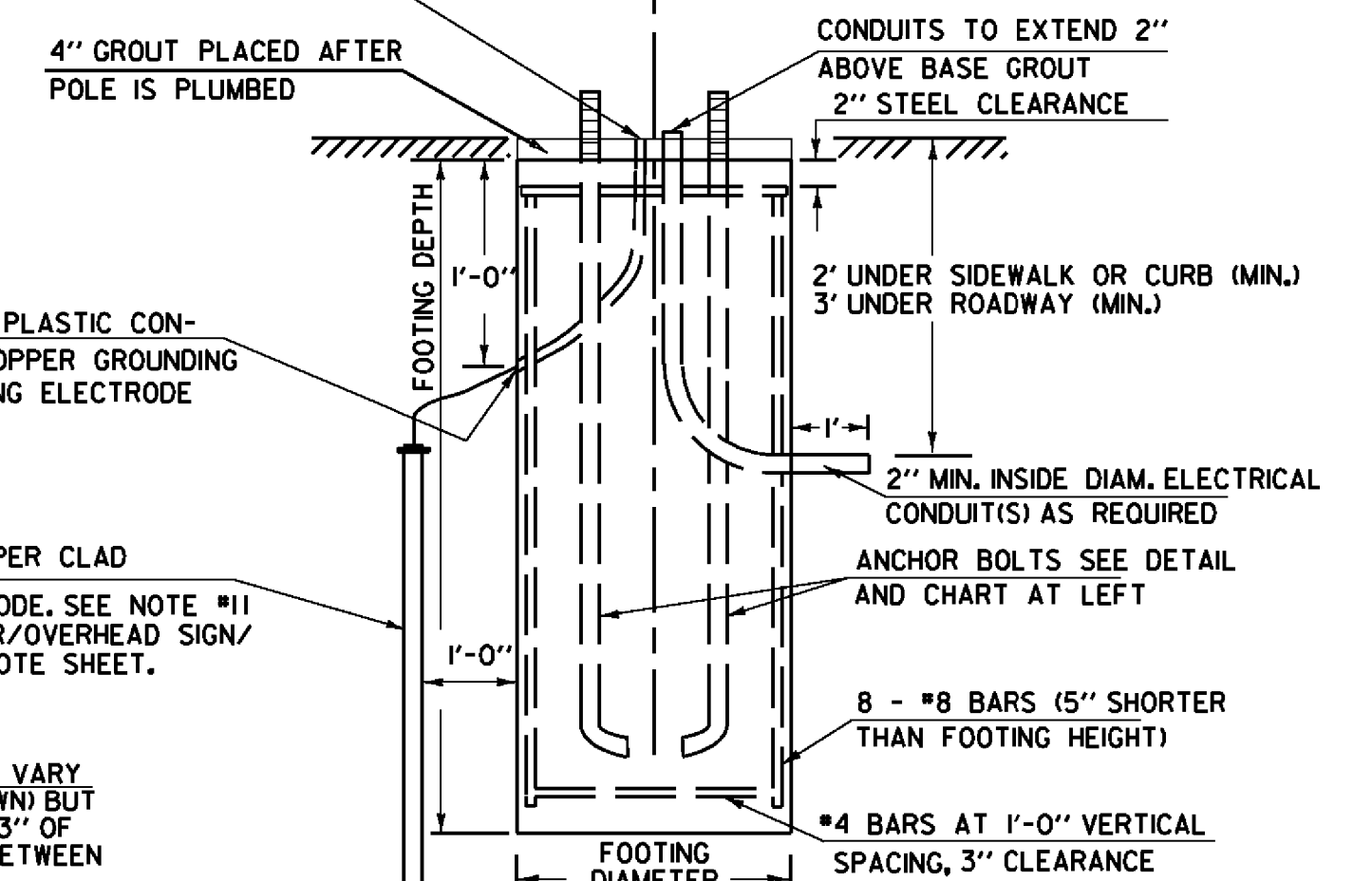
#6 SOFT DRAWN COPPER GROUNDING CONDUCTOR CONNECT TO GROUNDING LUG IN POLE

4" GROUT PLACED AFTER POLE IS PLUMBED

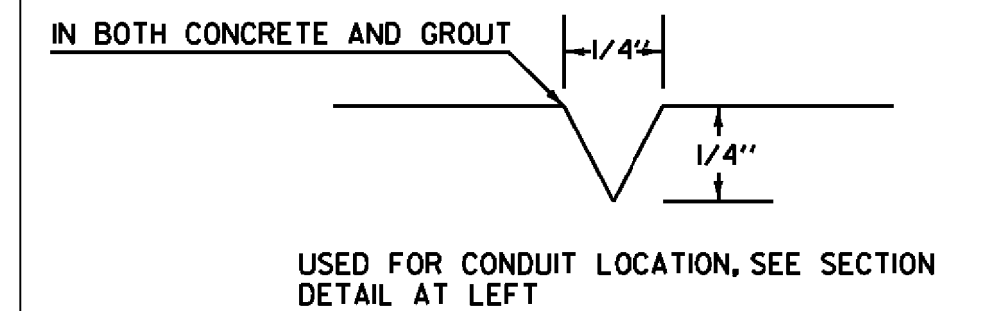
WEEP HOLE. INSTALL 1/2" FLEXIBLE PLASTIC CONDUIT FOR #6 AWG SOFT DRAWN COPPER GROUNDING CONDUCTOR. CONNECT TO GROUNDING ELECTRODE USING AN EXOTHERMIC WELD.

5/8" X 8" MIN. COPPER CLAD GROUNDING ELECTRODE. SEE NOTE #11 ON THE CANTILEVER/OVERHEAD SIGN/SIGNAL SUPPORT NOTE SHEET.

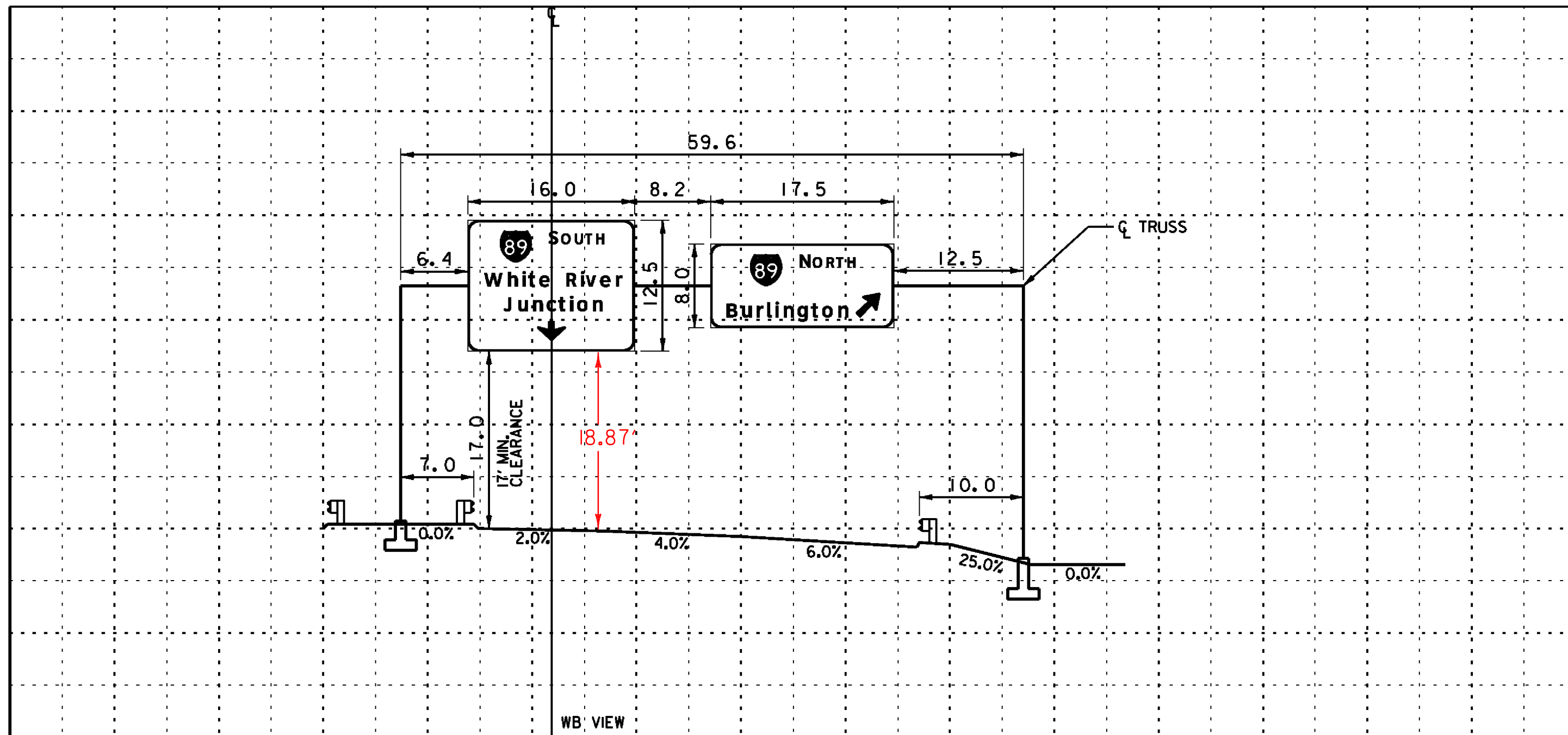
ANCHOR BOLT ORIENTATION MAY VARY (TOED-IN, TOED-OUT OR AS SHOWN) BUT THERE MUST BE A MINIMUM OF 3" OF COVER AND 3" OF CLEARANCE BETWEEN BOLTS.



ELEVATION



2" SCORE MARK DETAIL



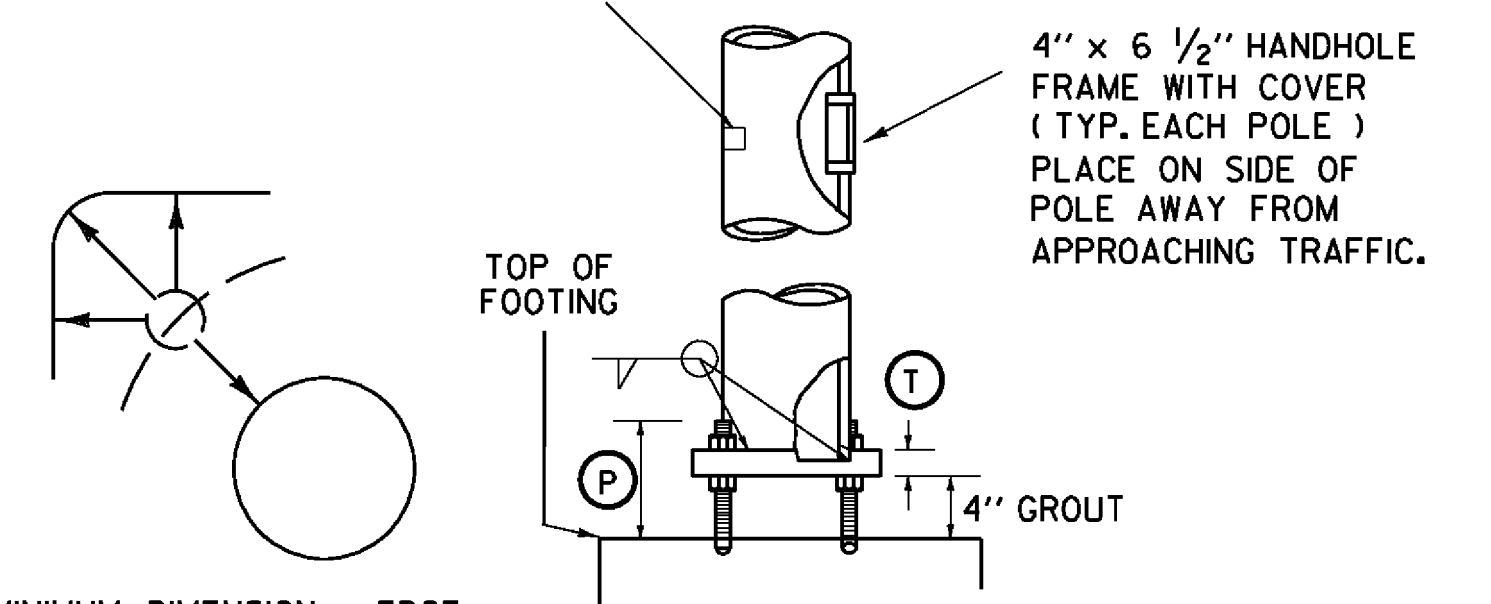
OVERHEAD SIGN BRIDGE CROSS SECTION

(SEE SHEET 41 FOR LOCATION PLAN)

NOTES:

- SEE OVERHEAD SIGN SUPPORT NOTES SHEET FOR ADDITIONAL INFORMATION.
- MANUFACTURER TO DETERMINE TYPE OF STRUCTURE REQUIRED.
- MONOTUBES SHALL NOT BE USED FOR SIGNS OVER 10' IN HEIGHT.
- MINIMUM CLEARANCE FROM SIGNS TO ROADWAY IS 17'.

GROUND WIRES SHALL BE CONNECTED TO THE GROUNDING LUG INSIDE THE HANDHOLE ACCESS.



POLE BASE AND BASE PLATE DETAIL

NOTE: DETAILS NTS

OVERHEAD TRAFFIC SIGN BRIDGE / FOOTING DETAIL SHEET

LAST REVISED 8/15/95

**INTERCHANGE #8**  
**MONTPELIER S.H.**  
**M.M. 0.102 LT**

PROJECT NAME: ROYALTON-MIDDLESEX

PROJECT NUMBER: IMG SIGN(19)

FILE NAME: z09a020overhead.dgn

PROJECT LEADER: CRB

DESIGNED BY: JBJ

CLD REF. NO.: 09-0106

PLOT DATE: 8/12/2009

DRAWN BY: JBJ

CHECKED BY: BDB

SHEET 157 OF 163

Table 6H-2. Meaning of Symbols on Typical Application Diagrams

	Arrow panel
	Arrow panel support or trailer (shown facing down)
	Changeable message sign or support trailer
	Channelizing device
	Crash Cushion
	Direction of temporary traffic detour
	Direction of traffic
	Flagger
	High level warning device (Flag tree)
	Luminaire
	Pavement markings that should be removed for a long term project
	Sign (shown facing left)
	Surveyor
	Temporary barrier
	Temporary barrier with warning lights
	Traffic or Pedestrian signal
	Truck mounted attenuator
	Type III Barricade
	Warning lights
	Work space
	Work vehicle

Figure 6E-1. Use of Hand-Signaling Devices by Flaggers

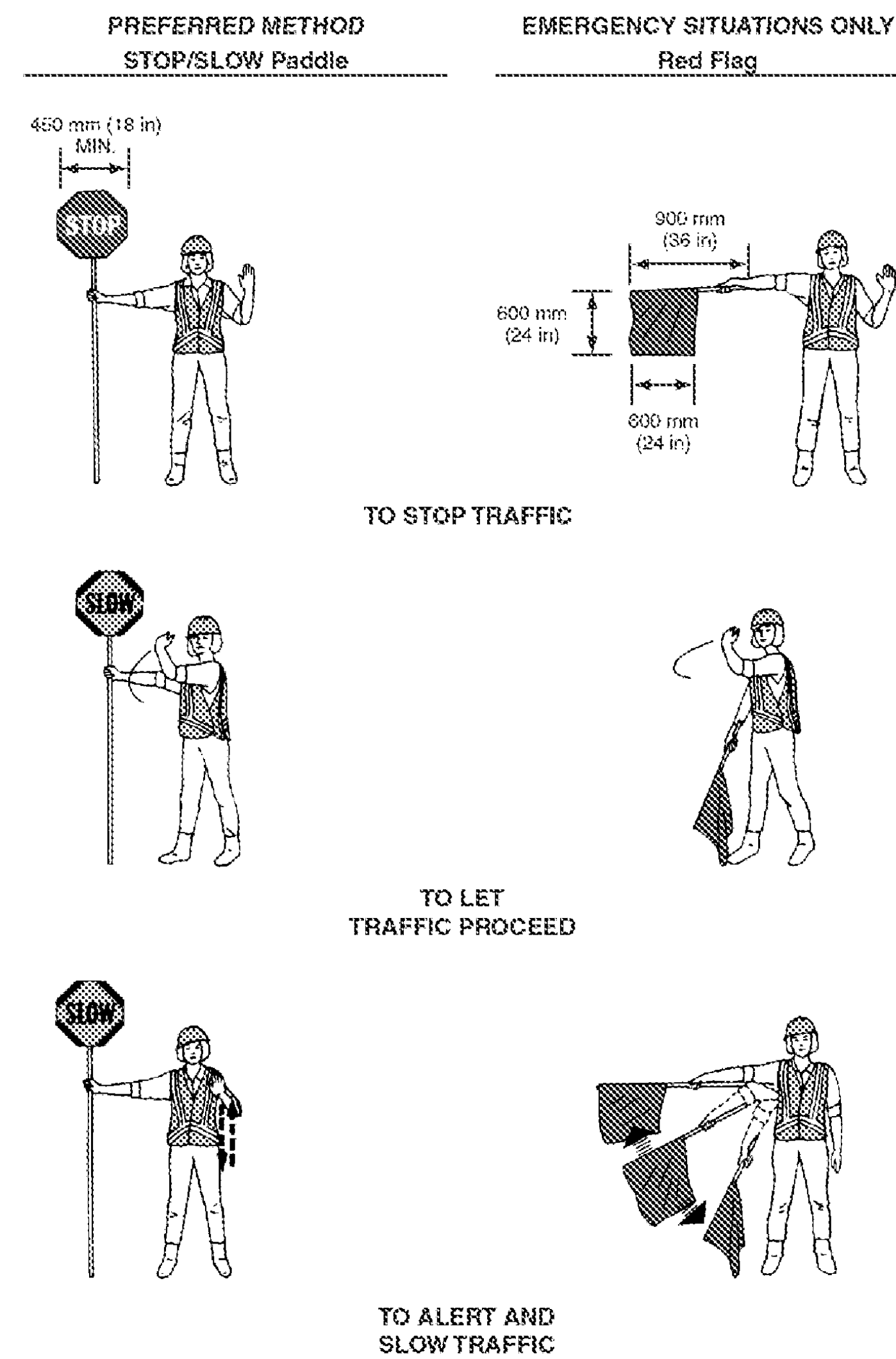


Figure 6C-2. Types of Tapers and Buffer Spaces

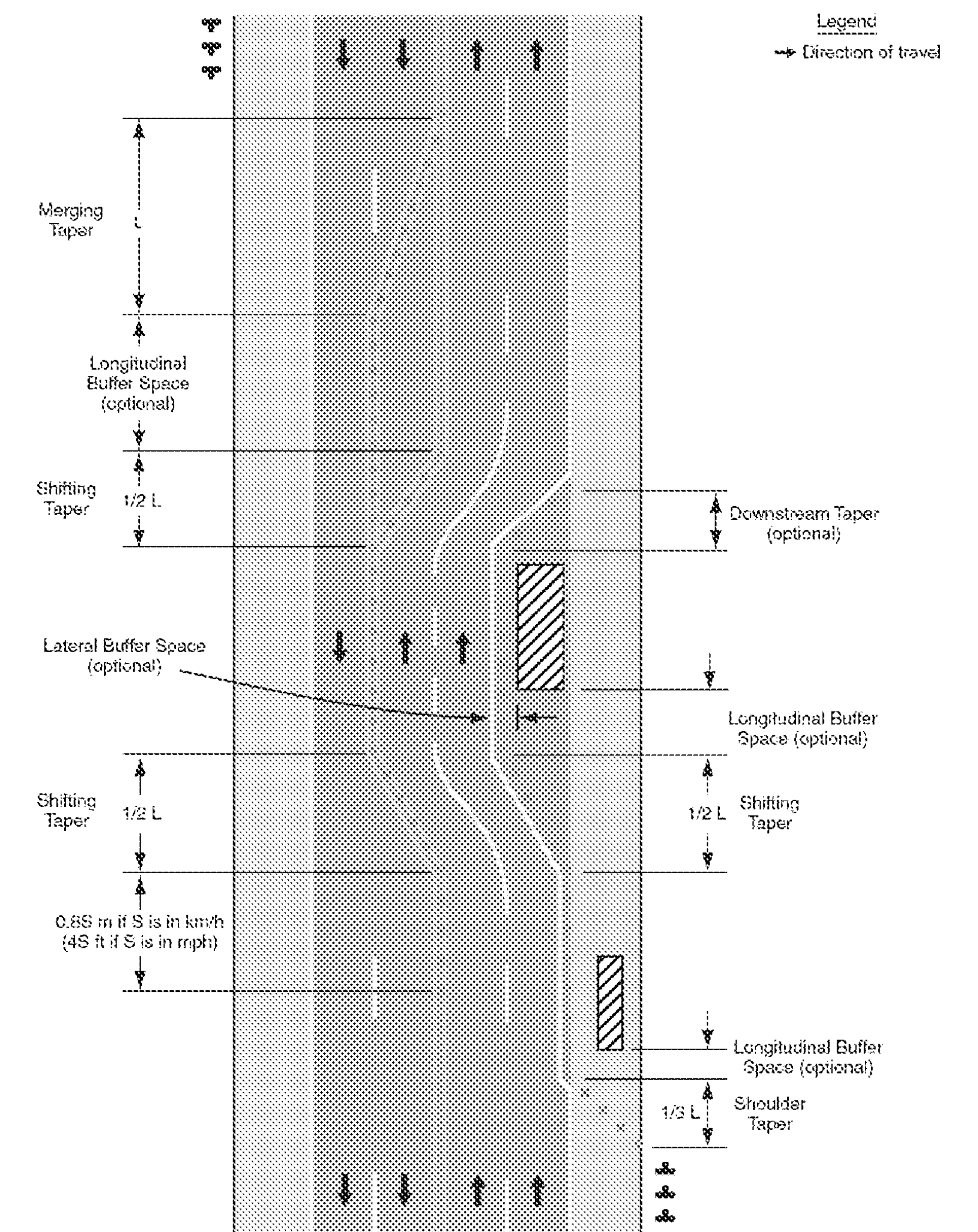


Figure 6F-7. Channelizing Devices (Sheet 1 of 2)

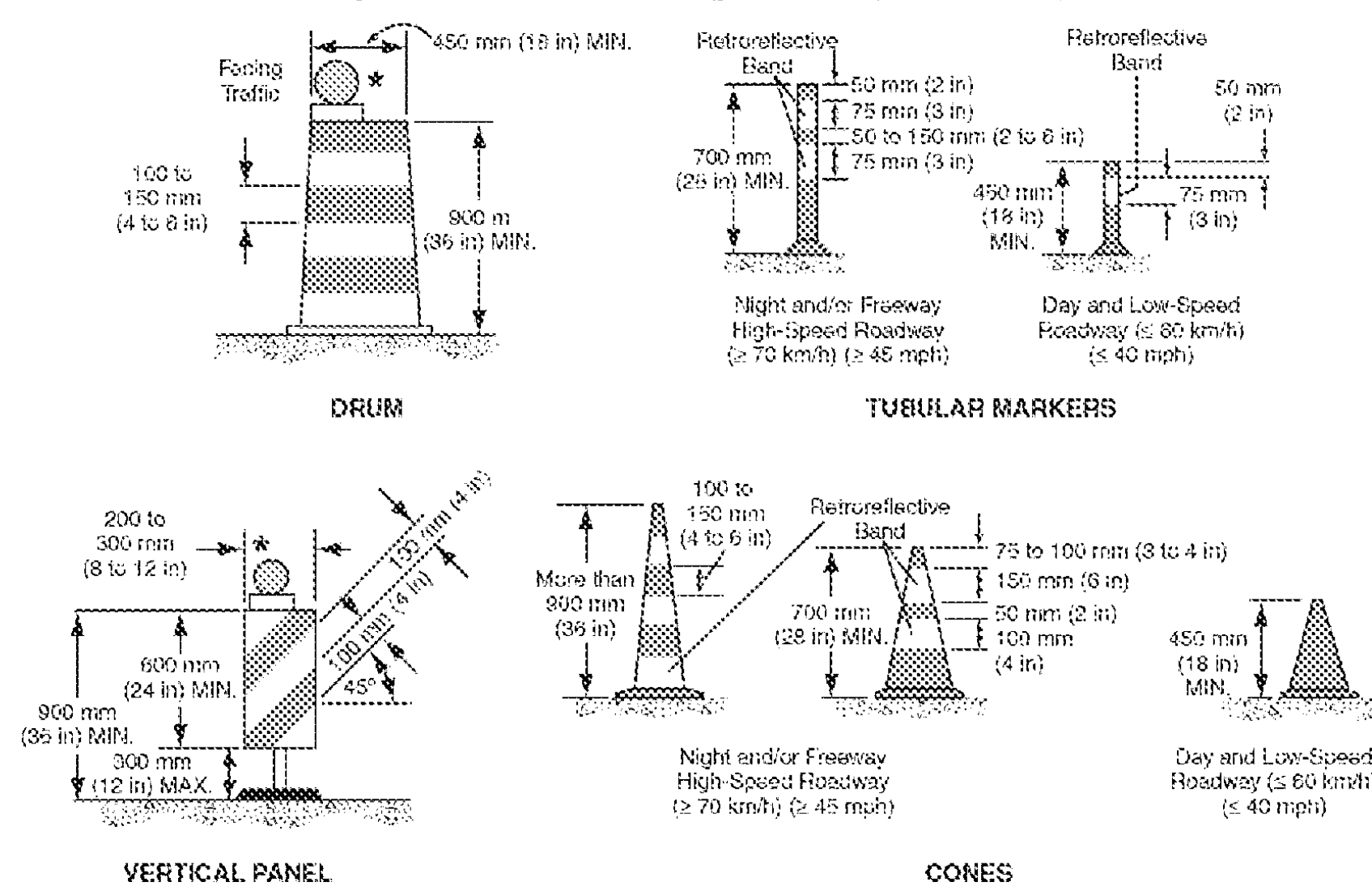


Table 6C-3. Taper Length Criteria for Temporary Traffic Control Zones

Type of Taper	Taper Length (L)*
Merging Taper	at least L
Shifting Taper	at least 0.5L
Shoulder Taper	at least 0.33L
One-Lane, Two-Way Traffic Taper	30 m (100 ft) maximum
Downstream Taper	30 m (100 ft) per lane

Table 6C-4. Formulas for Determining Taper Lengths

Speed Limit (S)	Taper Length (L) Meters	Speed Limit (S)	Taper Length (L) Feet
60 km/h or less	$L = \frac{WS^2}{155}$	40 mph or less	$L = \frac{WS^2}{60}$
70 km/h or more	$L = \frac{WS}{1.6}$	45 mph or more	$L = WS$

Where: L = taper length in meters (feet)  
 W = width of offset in meters (feet)  
 S = posted speed limit, or off-peak 85th-percentile speed prior to work starting, or the anticipated operating speed in km/h (mph)

TEMPORARY TRAFFIC CONTROL NOTES

- EMERGENCY RESPONSE UNITS SHALL BE GIVEN PRIORITY AND ACCESS SHALL BE PROVIDED AT ALL TIMES
- ALL TEMPORARY PAVEMENT MARKINGS, TRAFFIC CONTROL DEVICES, AND SIGNING SHALL CONFORM TO MUTCD AND VERMONT AGENCY OF TRANSPORTATION STANDARDS.
- TRAFFIC CONTROL SIGNING CONTRARY TO CONSTRUCTION SIGNING SHALL BE COVERED DURING CONSTRUCTION. TRAFFIC CONTROL SIGNING SHALL ONLY BE PRESENT WHEN ACTUAL SCENARIOS DEPICTED ARE PRESENT.
- ALL WORK SHALL BE EXECUTED IN A MANNER TO PROVIDE THE LEAST AMOUNT OF IMPACT TO TRAFFIC.
- ITEM 641.10 "TRAFFIC CONTROL" SHALL INCLUDE THE FOLLOWING: CONSTRUCTION SIGNING AND POSTS, CHANNELIZATION DEVICES AND ADJUSTING, RELOCATING AND REMOVAL OF THESE DEVICES, ITEM 630.10 "UNIFORMED TRAFFIC OFFICERS", ITEM 630.15 "FLAGGERS", ITEM 641.15 PORTABLE CHANGEABLE MESSAGE SIGNS, AND ITEM 641.16 PORTABLE ARROW BOARDS SHALL BE PAID SEPARATELY.
- CONTRACTOR SHALL SUBMIT A SITE SPECIFIC TRAFFIC CONTROL PLAN FOR REMOVAL AND INSTALLATION OF OVERHEAD STRUCTURES PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL ALLOW TWO WEEKS FOR APPROVAL OF THE TRAFFIC CONTROL PLAN. THE COST OF PREPARING THIS PLAN (AND MAKING CHANGES IF NECESSARY) SHALL BE CONSIDERED INCIDENTAL TO ITEM 641.10, TRAFFIC CONTROL. TRAFFIC CONTROL FOR INSTALLATION OF THE OVERHEAD SIGN STRUCTURES AT INTERCHANGE 6, INTERCHANGE 7, AND INTERCHANGE 8 SHALL BE IN ACCORDANCE WITH THE DETAILS PROVIDED AND APPROPRIATE SECTIONS OF THE MUTCD. THESE OPERATIONS WILL REQUIRE SHORT TERM TRAFFIC STOPPAGES, WHICH SHALL NOT EXCEED 15 MINUTES IN DURATION. STOPPAGES SHALL BE PERFORMED ON A SUNDAY PRIOR TO 10:00 AM. THE CONTRACTOR SHALL INFORM THE PUBLIC VIA PORTABLE CHANGEABLE MESSAGE SIGNS OF STOPPAGES AT LEAST ONE WEEK IN ADVANCE OF THE FIRST STOPPAGE.

**TRAFFIC CONTROL DETAILS SHEET 1**

PROJECT NAME: ROYALTON-MIDDLESEX

PROJECT NUMBER: IMG SIGN(19)

FILE NAME: z09a020+cp.dgn

PROJECT LEADER: CRB

DESIGNED BY: JJB

CLD REF. NO.: 09-0106

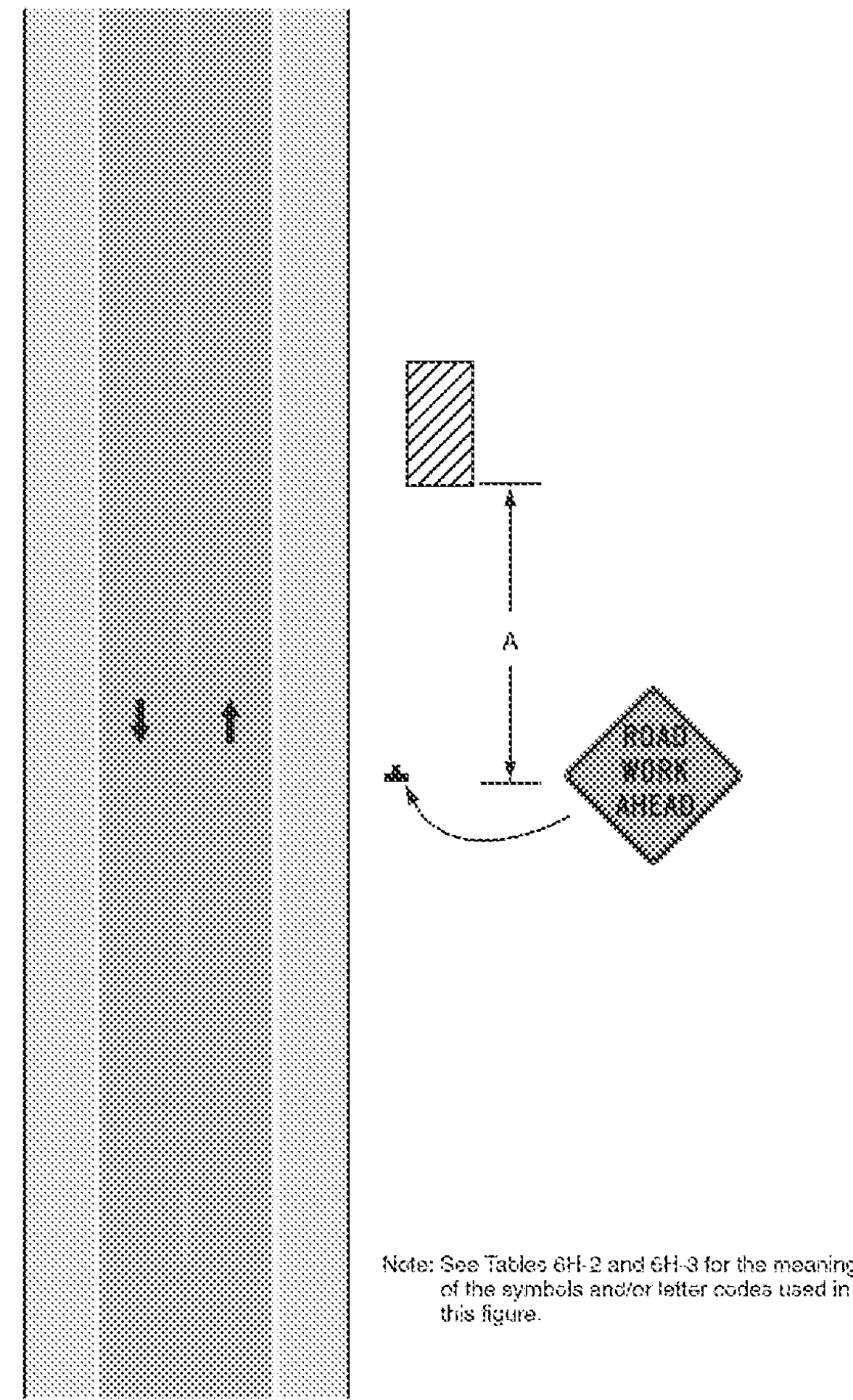
PLOT DATE: 8/12/2009

DRAWN BY: JJB

CHECKED BY: BDB

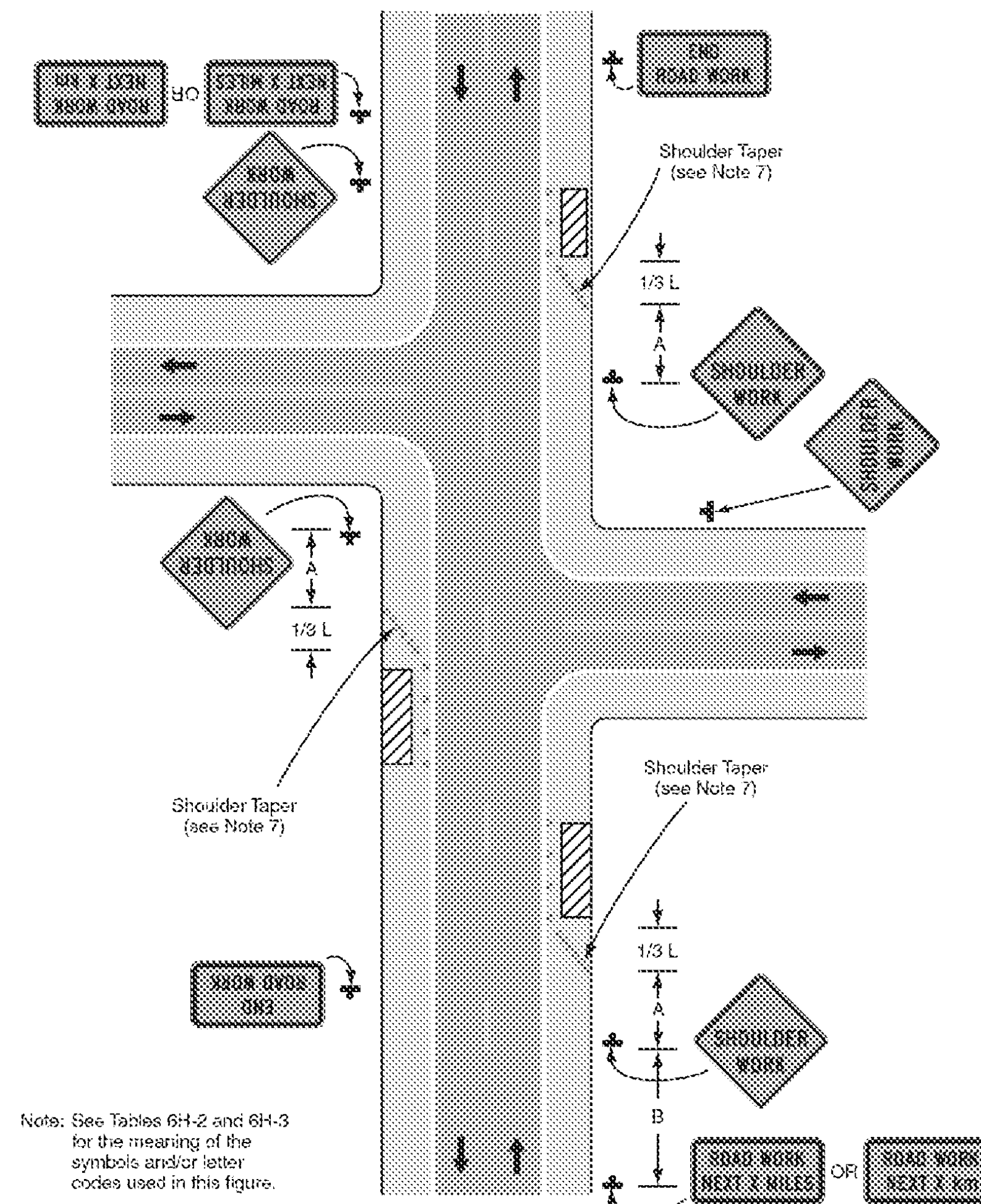
SHEET 158 OF 163

Figure 6H-1. Work Beyond the Shoulder (TA-1)



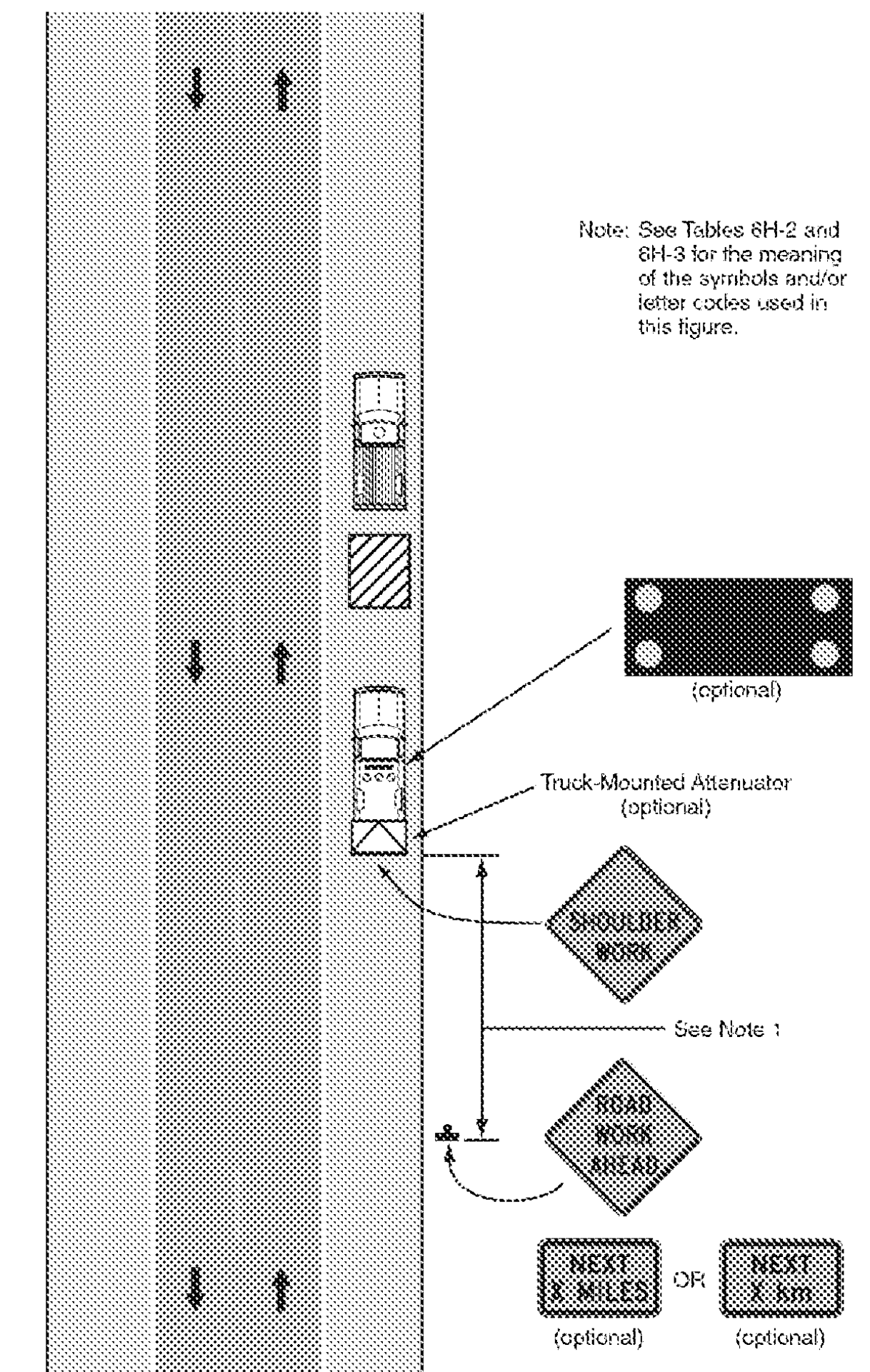
Typical Application 1

Figure 6H-3. Work on Shoulders (TA-3)



Typical Application 3

Figure 6H-4. Short-Duration or Mobile Operation on Shoulder (TA-4)



Typical Application 4

Table 6C-1. Suggested Advance Warning Sign Spacing

Road Type	Distance Between Signs**		
	A	B	C
Urban (low speed)*	30 (100)	30 (100)	30 (100)
Urban (high speed)*	100 (350)	100 (350)	100 (350)
Rural	150 (500)	150 (500)	150 (500)
Expressway / Freeway	300 (1,000)	450 (1,500)	800 (2,640)

\* Speed category to be determined by highway agency

\*\* Distances are shown in meters (feet). The column headings A, B, and C are the dimensions shown in Figures 6H-1 through 6H-4. The A dimension is the distance from the transition or point of restriction to the first sign. The B dimension is the distance between the first and second signs. The C dimension is the distance between the second and third signs. (The third sign is the first one in a three-sign series encountered by a driver approaching a TTC zone.)

**TRAFFIC CONTROL  
DETAILS  
SHEET 2**

PROJECT NAME: ROYALTON-MIDDLESEX

PROJECT NUMBER: IMG SIGN(19)

FILE NAME: z09a020+cp.dgn

PLOT DATE: 8/12/2009

PROJECT LEADER: CRB

DRAWN BY: JJB

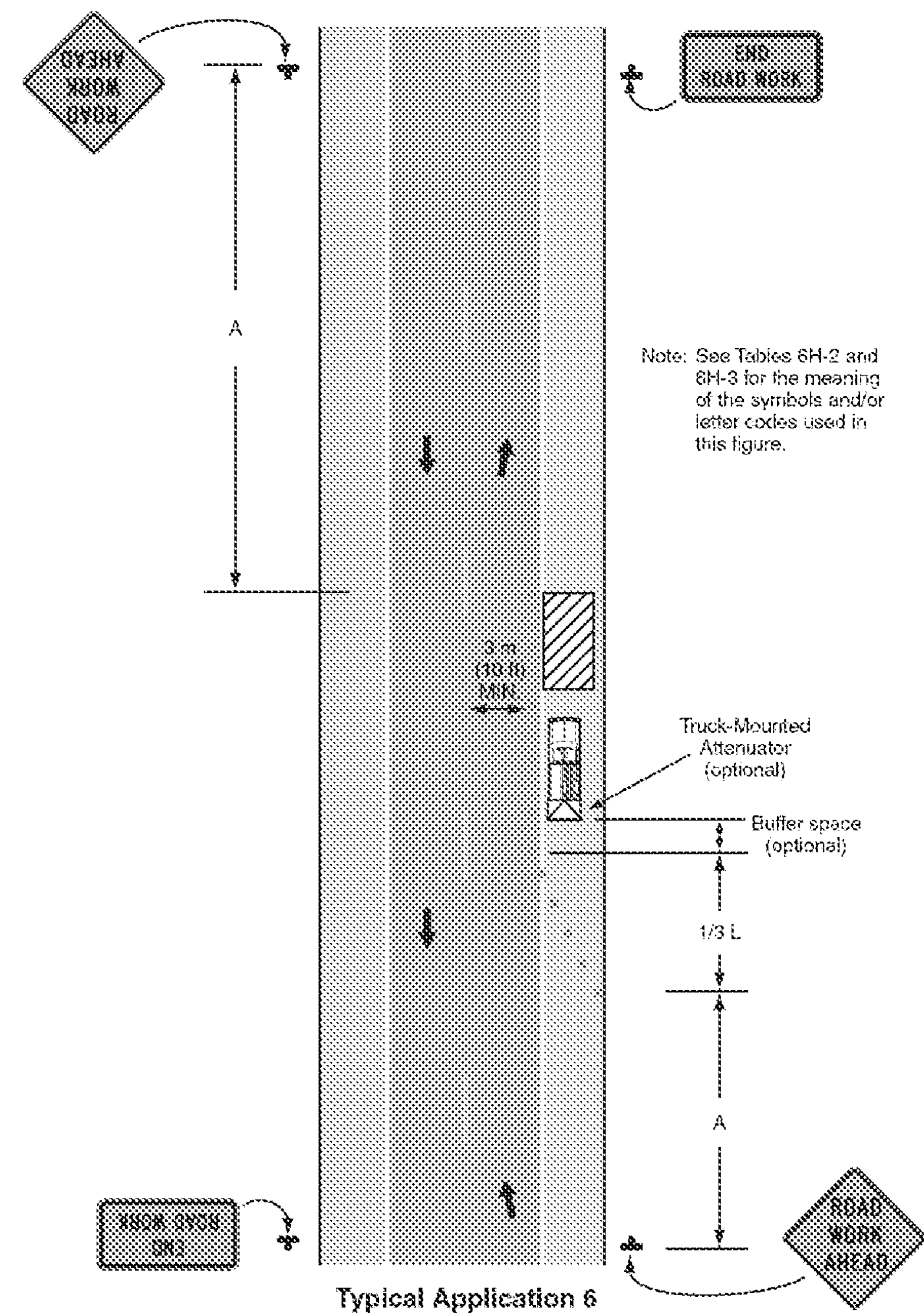
DESIGNED BY: JJB

CHECKED BY: BDB

CLD REF. NO.: 09-0106

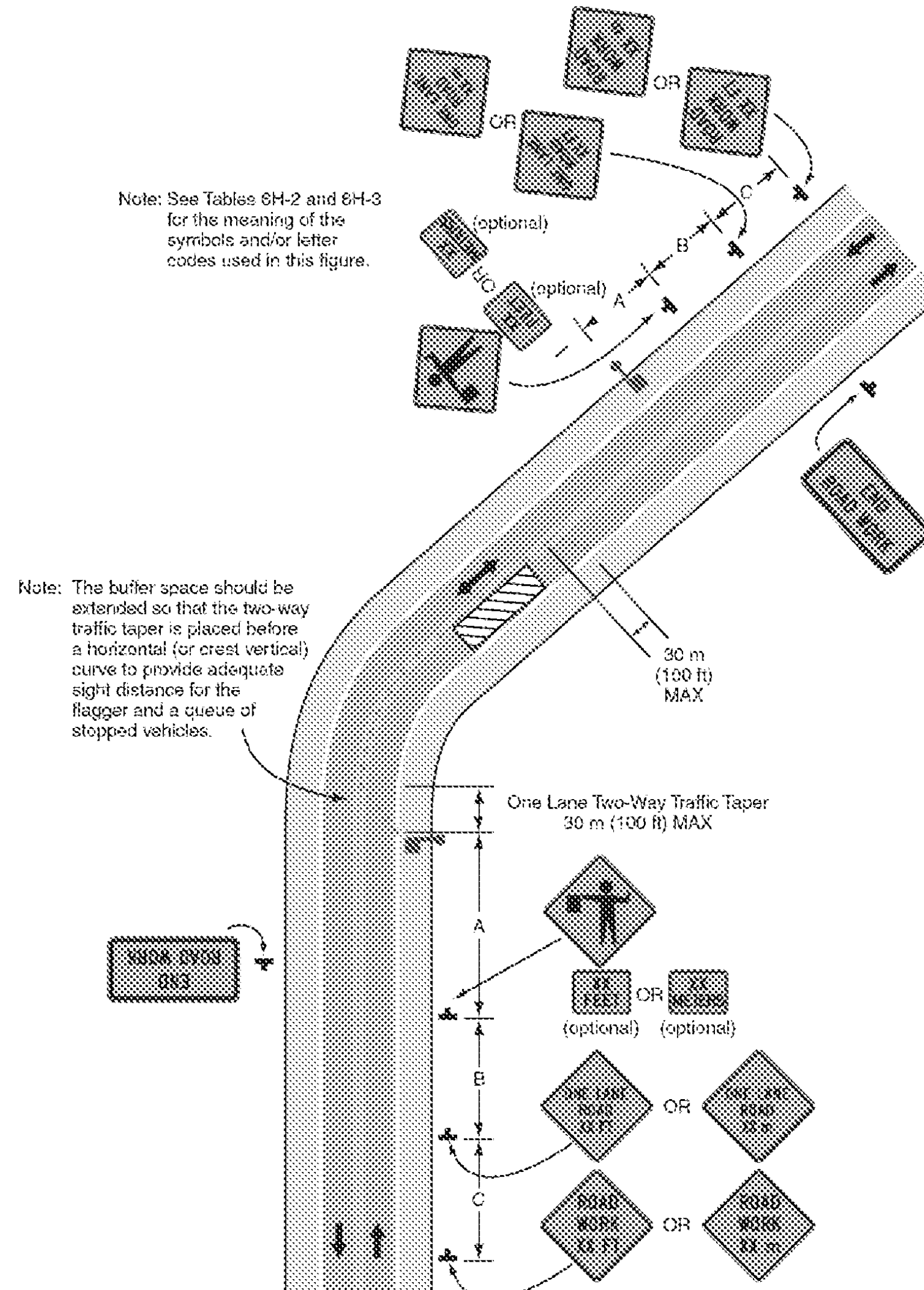
SHEET 159 OF 163

Figure 6H-6. Shoulder Work with Minor Encroachment (TA-6)



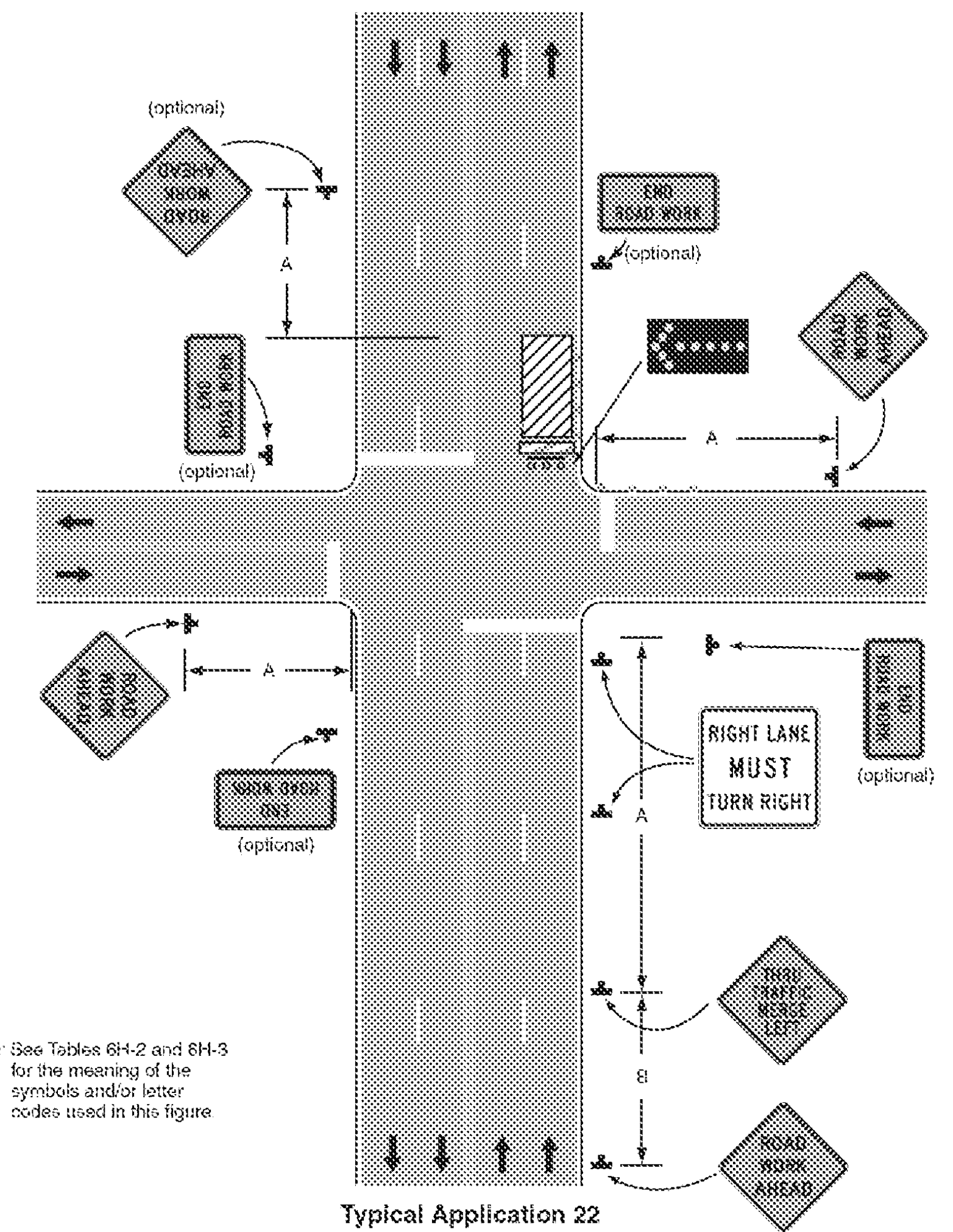
Typical Application 6

Figure 6H-10. Lane Closure on Two-Lane Road Using Flaggers (TA-10)



Typical Application 10

Figure 6H-22. Right Lane Closure on Far Side of Intersection (TA-22)



Typical Application 22

Notes for Figure 6H-22---Typical Application 22  
Right Lane Closure on Far Side of Intersection

- Guidance:
1. If the work space extends across a crosswalk, the crosswalk should be closed using the information and devices shown in Figure 6H-29.
- Option:
2. The normal procedure is to close on the near side of the intersection any lane that is not carried through the intersection. However, when this results in the closure of a right lane having significant right turning movements, then the right lane may be restricted to right turns only, as shown. This procedure increases the through capacity by eliminating right turns from the open through lane.
  3. For intersection approaches reduced to a single lane, left-turning movements may be prohibited to maintain capacity for through vehicular traffic.
  4. Flashing warning lights and/or flags may be used to call attention to the advance warning signs.
  5. Where the turning radius is large, it may be possible to create a right-turn island using channelizing devices or pavement markings.

**TRAFFIC CONTROL  
DETAILS  
SHEET 3**

PROJECT NAME: ROYALTON-MIDDLESEX

PROJECT NUMBER: IMG SIGN(19)

FILE NAME: z09a020+cp.dgn

PLOT DATE: 8/12/2009

PROJECT LEADER: CRB

DRAWN BY: JJB

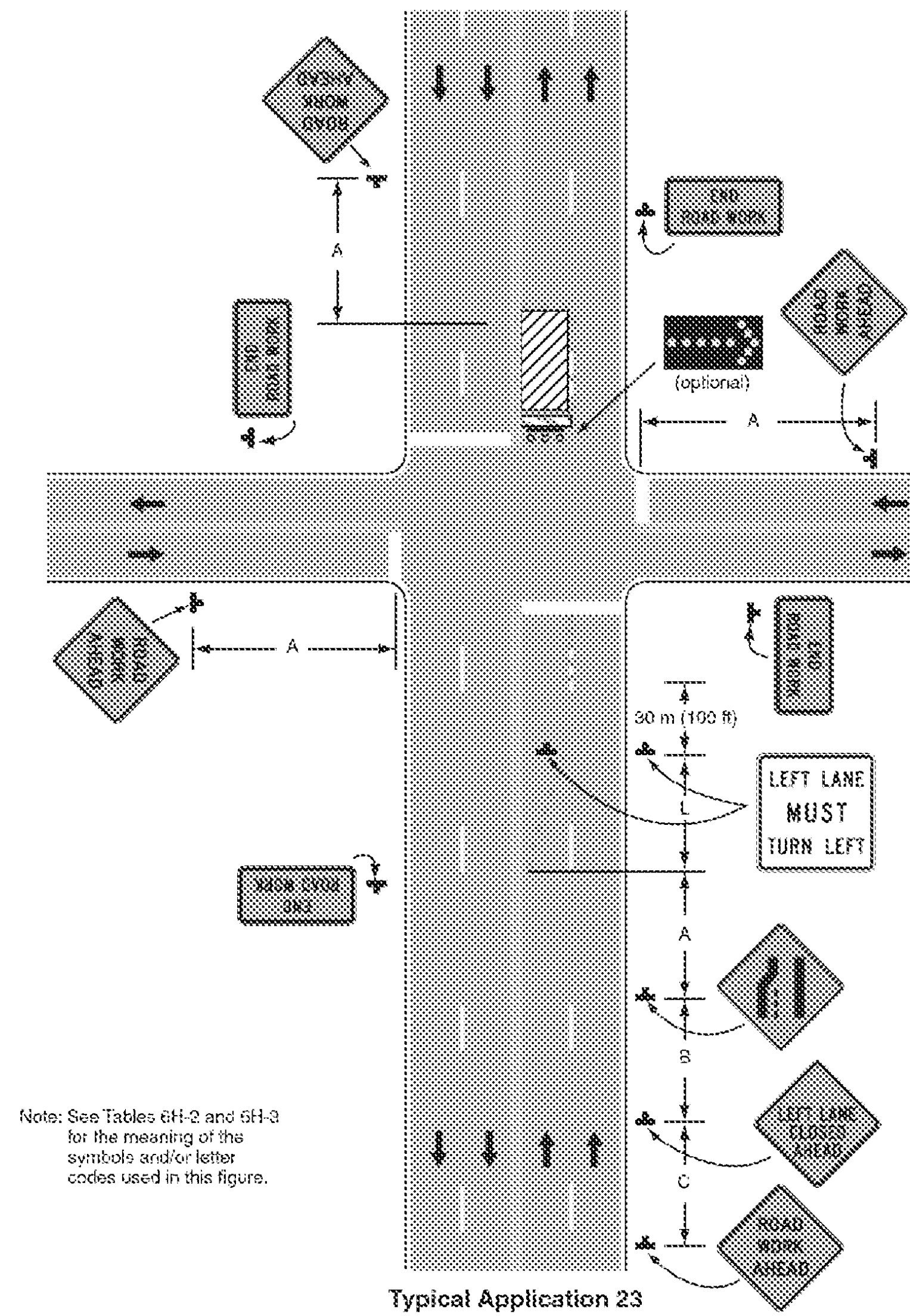
DESIGNED BY: JJB

CHECKED BY: BDB

CLD REF. NO.: 09-0106

SHEET 160 OF 163

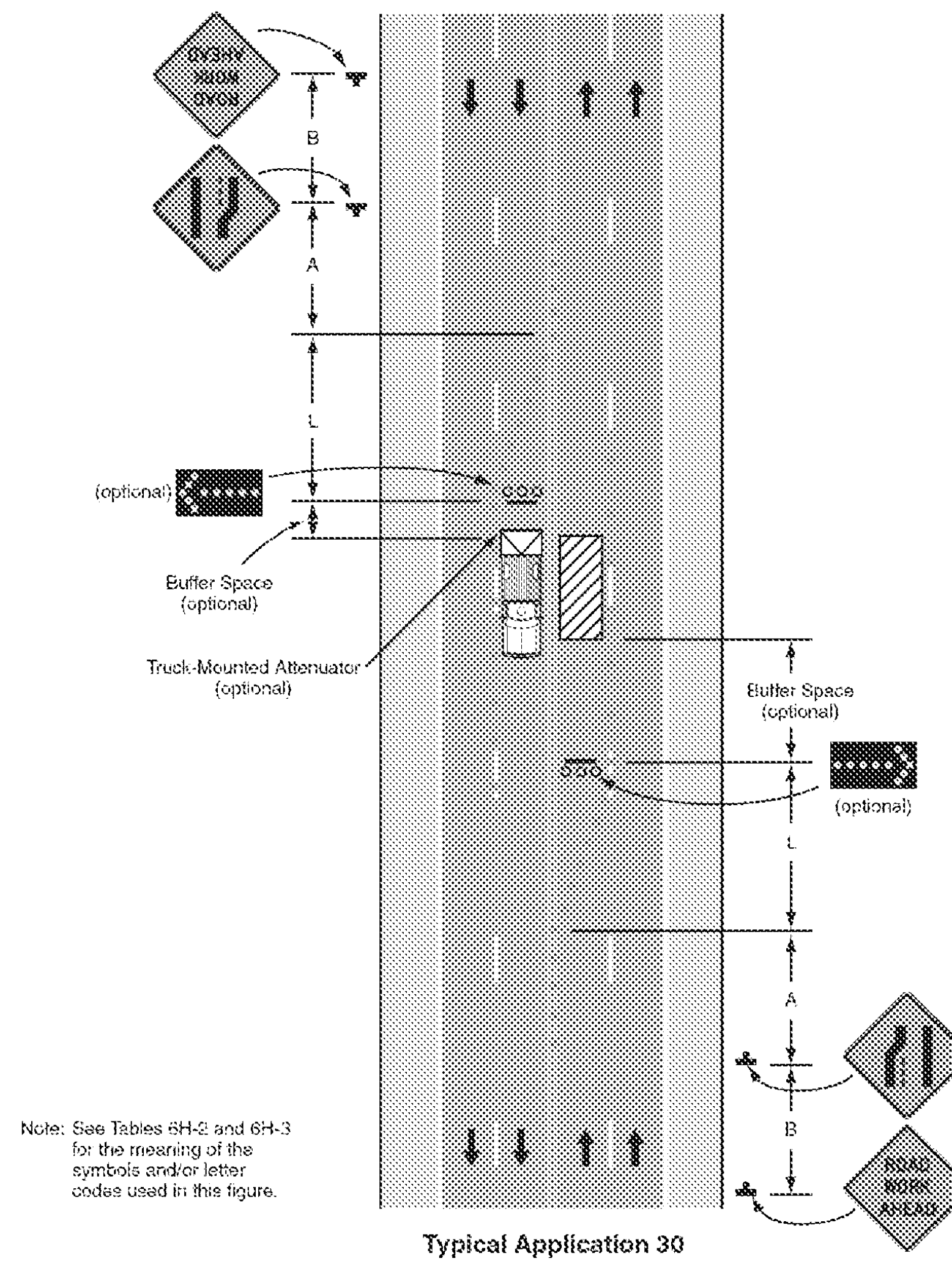
Figure 6H-23. Left Lane Closure on Far Side of Intersection (TA-23)



Notes for Figure 6H-23—Typical Application 23  
Left Lane Closure on Far Side of Intersection

- Guidance:
1. If the work space extends across a crosswalk, the crosswalk should be closed using the information and devices shown in Figure 6H-29.
- Option:
2. Flashing warning lights and/or flags may be used to call attention to the advance warning signs.
  3. The normal procedure is to close on the near side of the intersection any lane that is not carried through the intersection. However, when this results in the closure of a left lane having significant left-turning movements, then the left lane may be reopened as a turn bay for left turns only, as shown.
- Support:
4. By first closing off the left lane and then reopening it as a turn bay, an island is created with channelizing devices that allows the LEFT LANE MUST TURN LEFT sign to be repeated on the left adjacent to the lane that it controls.

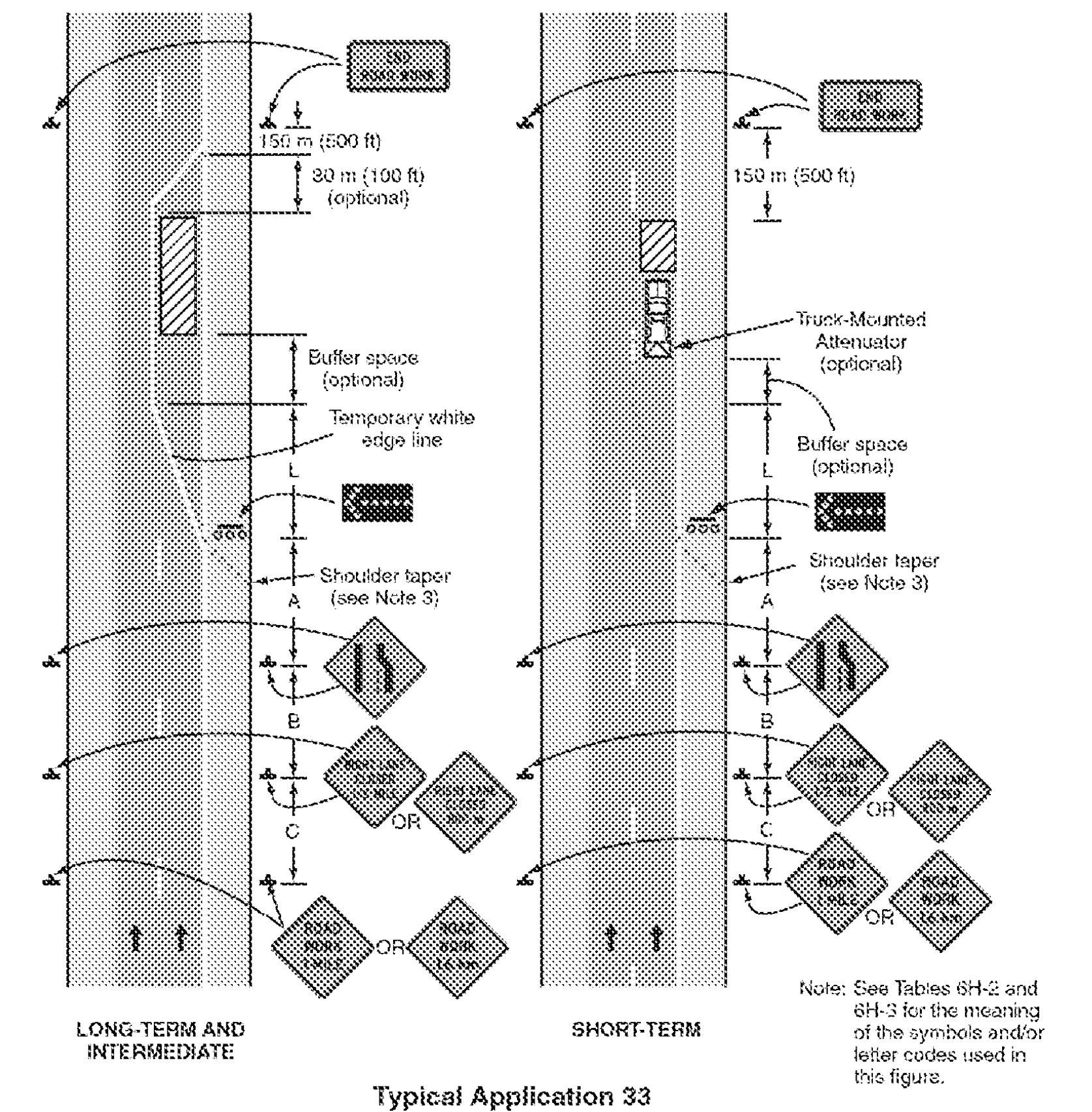
Figure 6H-30. Interior Lane Closure on Multi-lane Street (TA-30)



Notes for Figure 6H-30—Typical Application 30  
Interior Lane Closure on Multi-lane Street

- Guidance:
1. This information applies to low-speed, low-volume urban streets. Where speed or volume is higher, additional signing such as LEFT LANE CLOSED XX m (FT) should be used between the signs shown.
- Option:
2. The closure of the adjacent interior lane in the opposing direction may not be necessary, depending upon the activity being performed and the work space needed for the operation.
  3. Shadow vehicles with a truck-mounted attenuator may be used.
- Guidance:
4. When a highway-rail grade crossing exists within or upstream of the transition area and it is anticipated that backups resulting from the lane closure might extend through the highway-rail grade crossing, the TTC zone should be extended so that the transition area precedes the highway-rail grade crossing.
  5. Early coordination with the railroad company should occur before work starts.

Figure 6H-33. Stationary Lane Closure on Divided Highway (TA-33)



Notes for Figure 6H-33—Typical Application 33  
Stationary Lane Closure on Divided Highway

- Standard:
1. This information also shall be used when work is being performed in the lane adjacent to the median on a divided highway. In this case, the LEFT LANE CLOSED signs and the corresponding Lane Ends signs shall be substituted.
  2. When a side road intersects the highway within the TTC zone, additional TTC devices shall be placed as needed.
- Guidance:
3. When paved shoulders having a width of 2.4 m (8 ft) or more are closed, channelizing devices should be used to close the shoulder in advance of the merging taper to direct vehicular traffic to remain within the traveled way.
- Option:
4. A truck-mounted attenuator may be used on the work vehicle and/or shadow vehicle.
- Support:
5. Where conditions permit, restricting all vehicles, equipment, workers, and their activities to one side of the roadway might be advantageous.

**TRAFFIC CONTROL  
DETAILS  
SHEET 4**

PROJECT NAME: ROYALTON-MIDDLESEX

PROJECT NUMBER: IMG SIGN(19)

FILE NAME: z09a020+cp.dgn

PROJECT LEADER: CRB

DESIGNED BY: JJB

CLD REF. NO.: 09-0106

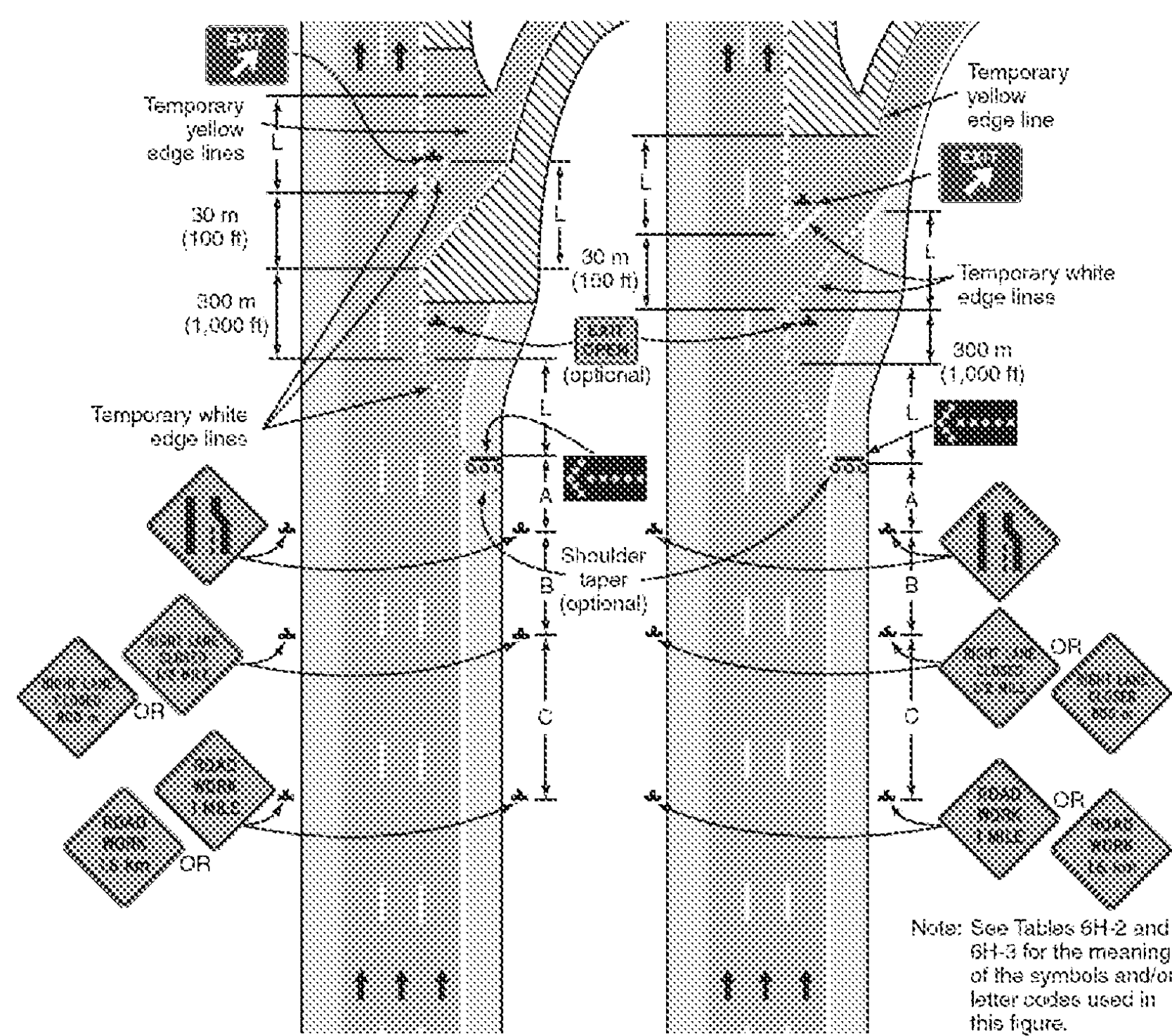
PLOT DATE: 8/12/2009

DRAWN BY: JJB

CHECKED BY: BDB

SHEET 161 OF 163

Figure 6H-42. Work in Vicinity of Exit Ramp (TA-42)



Typical Application 42

Notes for Figure 6H-42—Typical Application 42  
Work in Vicinity of Exit Ramp

Guidance:

1. The guide signs should indicate that the ramp is open, and where the temporary ramp is located. However, if the ramp is closed, guide signs should indicate that the ramp is closed.
2. When the exit ramp is closed, a black on orange EXIT CLOSED panel should be placed diagonally across the interchange/intersection guide signs.
3. The design criteria contained in the AASHTO "Policy on the Geometric Design of Highways and Streets" should be used for determining the alignment (see Section 1 A.11).

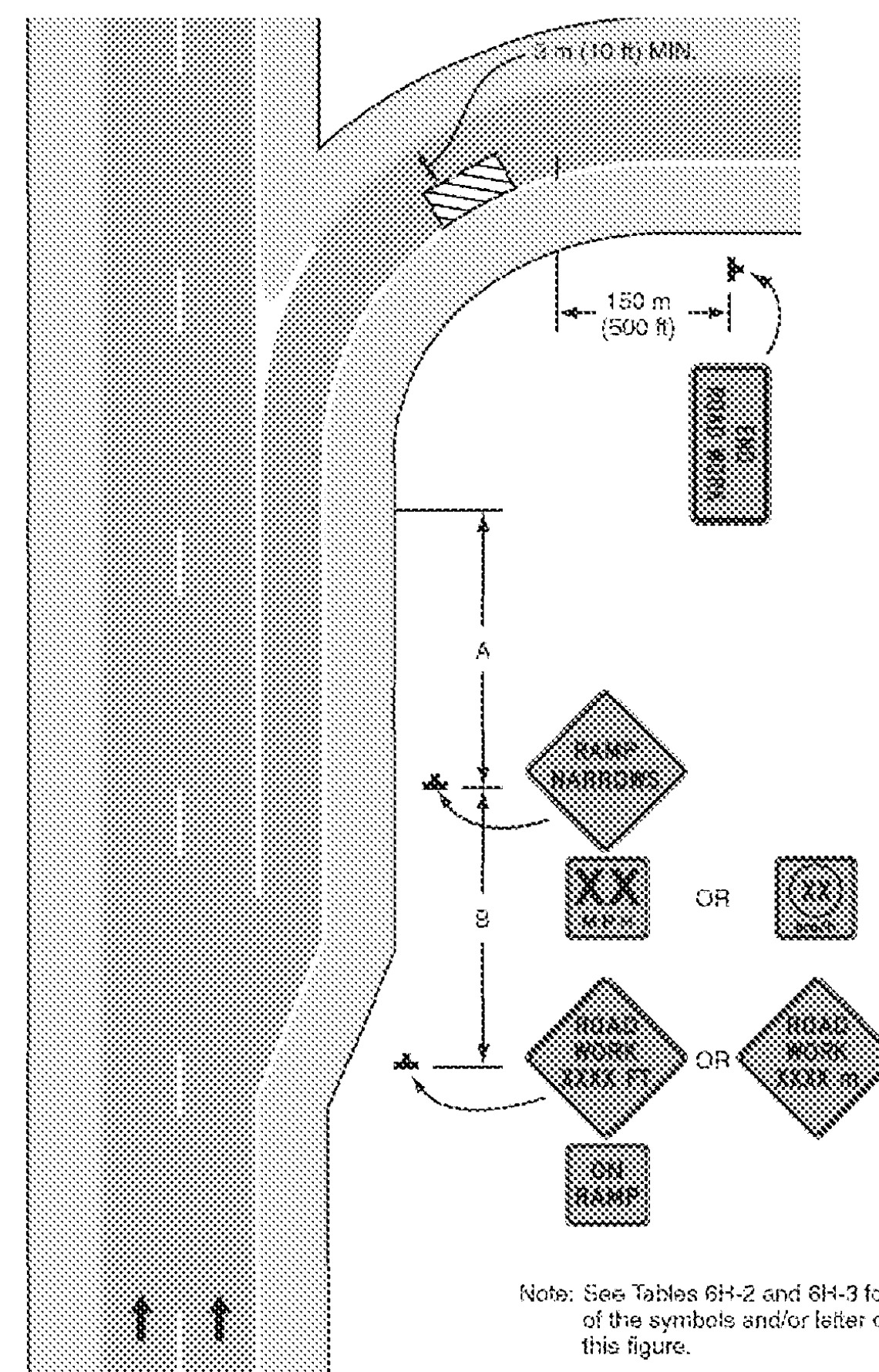
Standard:

4. A temporary EXIT sign shall be located in the temporary gore. For better visibility, it shall be mounted a minimum of 2.1 m (7 ft) from the pavement surface to the bottom of the sign.

Option:

5. An alternative procedure that may be used is to channelize exiting vehicular traffic onto the right shoulder and close the lane as necessary.

Figure 6H-43. Partial Exit Ramp Closure (TA-43)



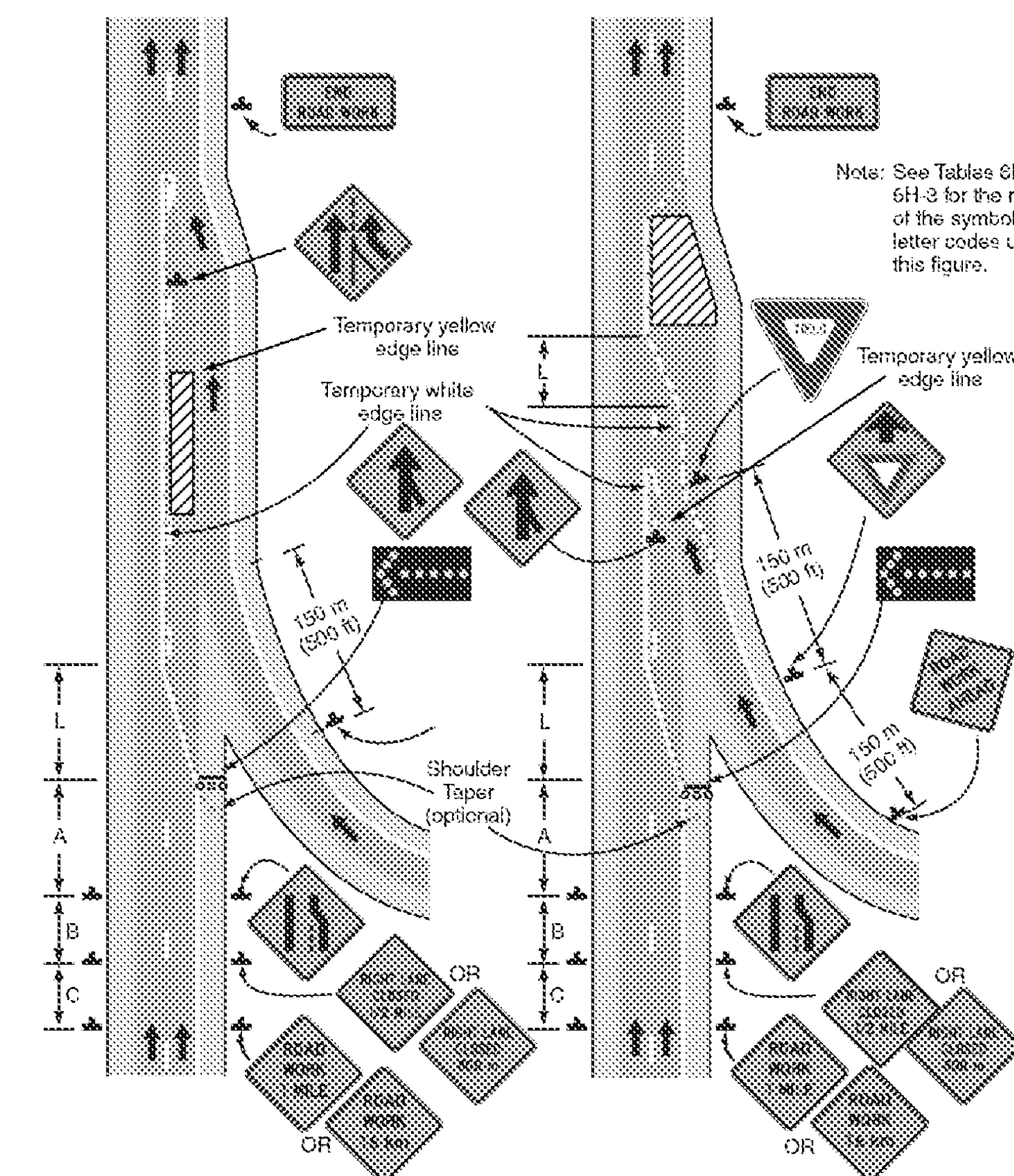
Typical Application 43

Notes for Figure 6H-43—Typical Application 43  
Partial Exit Ramp Closure

Guidance:

1. Truck off-tracking should be considered when determining whether the minimum lane width of 3 m (10 ft) is adequate (see Section 6G.07).

Figure 6H-44. Work in Vicinity of Entrance Ramp (TA-44)



Typical Application 44

Notes for Figure 6H-44—Typical Application 44  
Work in Vicinity of Entrance Ramp

Guidance:

1. An acceleration lane of sufficient length should be provided whenever possible as shown on the left diagram.

Standard:

2. For the information shown on the diagram on the right side of the typical application, where inadequate acceleration distance exists for the temporary entrance, the YIELD sign shall be replaced with STOP signs (one on each side of the approach).

Guidance:

3. When used, the YIELD or STOP sign should be located so that ramp vehicular traffic has adequate sight distance of oncoming mainline vehicular traffic to select a reasonably safe gap in the mainline vehicular traffic flow. Also, a longer acceleration lane should be provided beyond the sign to reduce the gap size needed. If insufficient gaps are available, consideration should be given to closing the ramp.
4. Where STOP signs are used, a temporary stop line should be placed across the ramp at the desired stop location.
5. The mainline merging taper with the arrow panel at its starting point should be located sufficiently in advance so that the arrow panel is not confusing to drivers on the entrance ramp, and so that the mainline merging vehicular traffic from the lane closure has the opportunity to stabilize before encountering the vehicular traffic merging from the ramp.
6. If the ramp curves sharply to the right, warning signs with Advisory Speed Limits located in advance of the entrance terminal should be placed in pairs (one on each side of the ramp).

Option:

7. A Type B high-intensity warning flasher with a red lens may be placed above the STOP sign.
8. Where the acceleration distance is significantly reduced, a supplemental plaque may be placed below the YIELD AHEAD sign reading NO MERGE AREA.

**TRAFFIC CONTROL DETAILS SHEET 5**

PROJECT NAME: ROYALTON-MIDDLESEX

PROJECT NUMBER: IMG SIGN(19)

FILE NAME: z09a020+cp.dgn

PLOT DATE: 8/12/2009

PROJECT LEADER: CRB

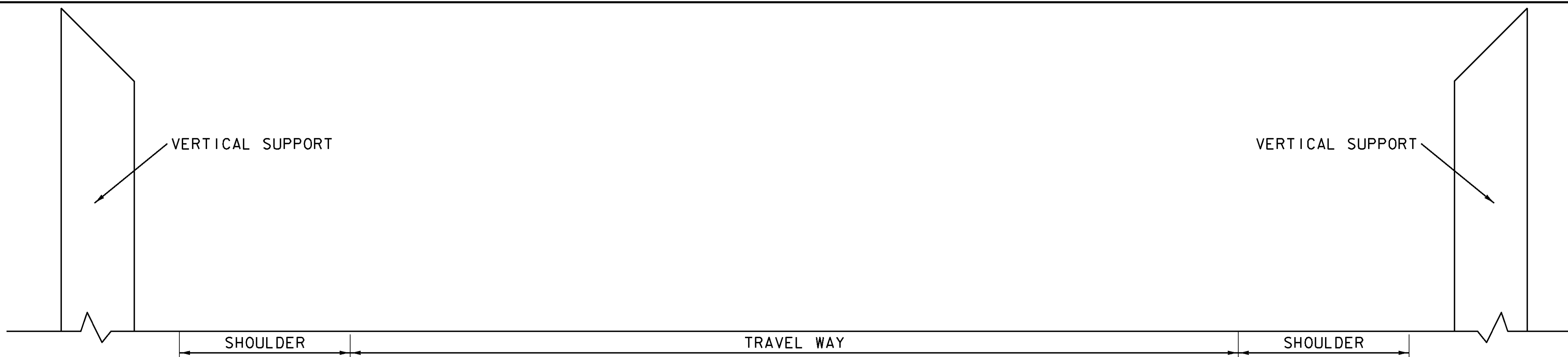
DRAWN BY: JJB

DESIGNED BY: JJB

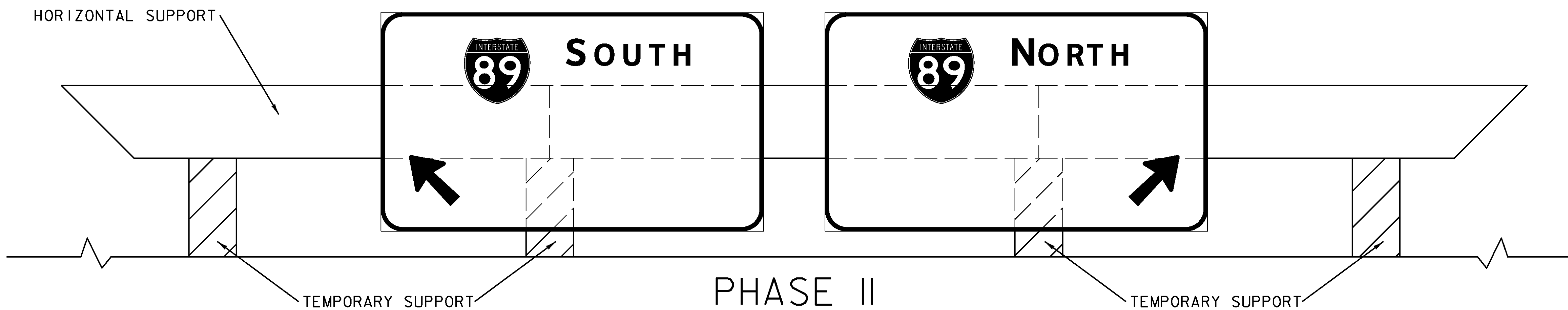
CHECKED BY: BDB

CLD REF. NO.: 09-0106

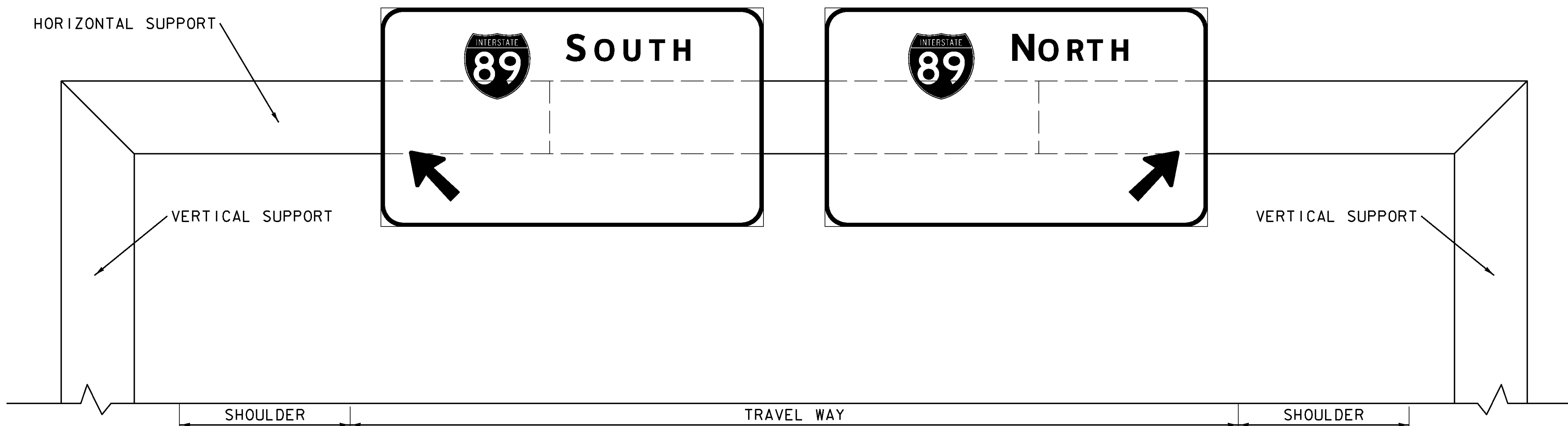
SHEET 162 OF 163



PHASE I



PHASE II



PHASE III

OVERHEAD STRUCTURE TRAFFIC CONTROL NOTES

DETAIL IS TO BE USED FOR THE REPLACEMENT OF THE OVERHEAD SIGN STRUCTURES AT INTERCHANGES 6, 7, AND 8.

THIS SHEET IS INTENDED AS A SUGGESTED CONSTRUCTION PHASING AND DOES NOT CONSTITUTE A SITE SPECIFIC TRAFFIC CONTROL PLAN.

CONTRACTOR SHALL SUBMIT A SITE SPECIFIC TRAFFIC CONTROL PLAN FOR REMOVAL AND INSTALLATION OF OVERHEAD STRUCTURES PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL ALLOW TWO WEEKS FOR APPROVAL OF THE TRAFFIC CONTROL PLAN. THE COST OF PREPARING THIS PLAN (AND MAKING CHANGES IF NECESSARY) SHALL BE CONSIDERED INCIDENTAL TO ITEM 641.10, TRAFFIC CONTROL. TRAFFIC CONTROL FOR INSTALLATION OF THE OVERHEAD SIGN STRUCTURES AT INTERCHANGE 6, INTERCHANGE 7, AND INTERCHANGE 8 SHALL BE IN ACCORDANCE WITH THE DETAILS PROVIDED AND APPROPRIATE SECTIONS OF THE MUTCD. THESE OPERATIONS WILL REQUIRE SHORT TERM TRAFFIC STOPPAGES, WHICH SHALL NOT EXCEED 15 MINUTES IN DURATION. STOPPAGES SHALL BE PERFORMED ON A SUNDAY PRIOR TO 10:00 AM. THE CONTRACTOR SHALL INFORM THE PUBLIC VIA PORTABLE CHANGABLE MESSAGE SIGNS OF STOPPAGES AT LEAST ONE WEEK IN ADVANCE OF THE FIRST STOPPAGE.

PHASE I

OVERHEAD STRUCTURE FOUNDATIONS AND VERTICAL SUPPORTS WILL BE CONSTRUCTED USING SINGLE LANE CLOSURES. SEE TRAFFIC CONTROL DETAILS SHEET 4.

PHASE II

HORIZONTAL SUPPORT WILL BE ASSEMBLED WITHIN THE SINGLE LANE CLOSURE. ONCE ASSEMBLED, ALL SIGNING WILL BE ATTACHED.

TEMPORARY SUPPORTS WILL BE USED TO ATTAIN MINIMUM HEIGHT NEEDED TO ATTACH SIGNAGE WITHOUT DAMAGE.

PHASE III

THE HORIZONTAL SUPPORT WITH SIGNAGE WILL BE ATTACHED TO THE VERTICAL SUPPORTS. TRAFFIC WILL BE STOPPED DURING THIS PROCESS BY THE USE OF A ROLLING ROAD BLOCK.

**TRAFFIC CONTROL  
DETAILS  
SHEET 6**

PROJECT NAME: ROYALTON-MIDDLESEX

PROJECT NUMBER: IMG SIGN(19)

FILE NAME: z09a020+cp.dgn

PLOT DATE: 8/12/2009

PROJECT LEADER: CRB

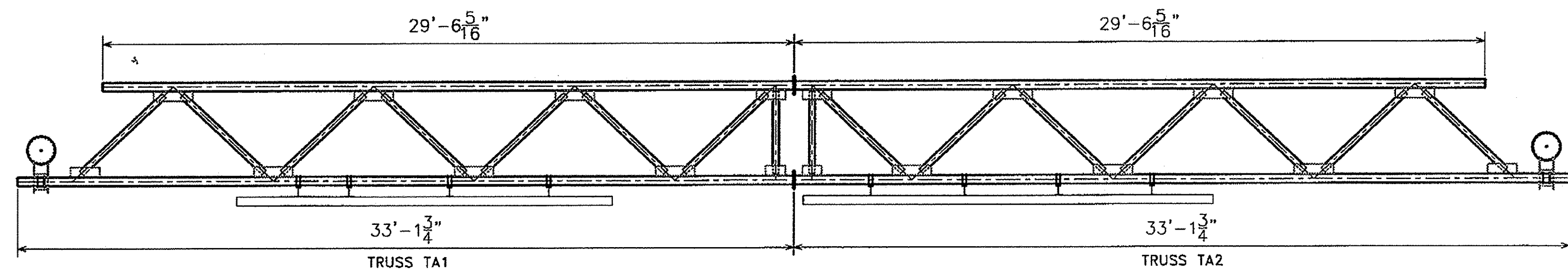
DRAWN BY: JJB

DESIGNED BY: JJB

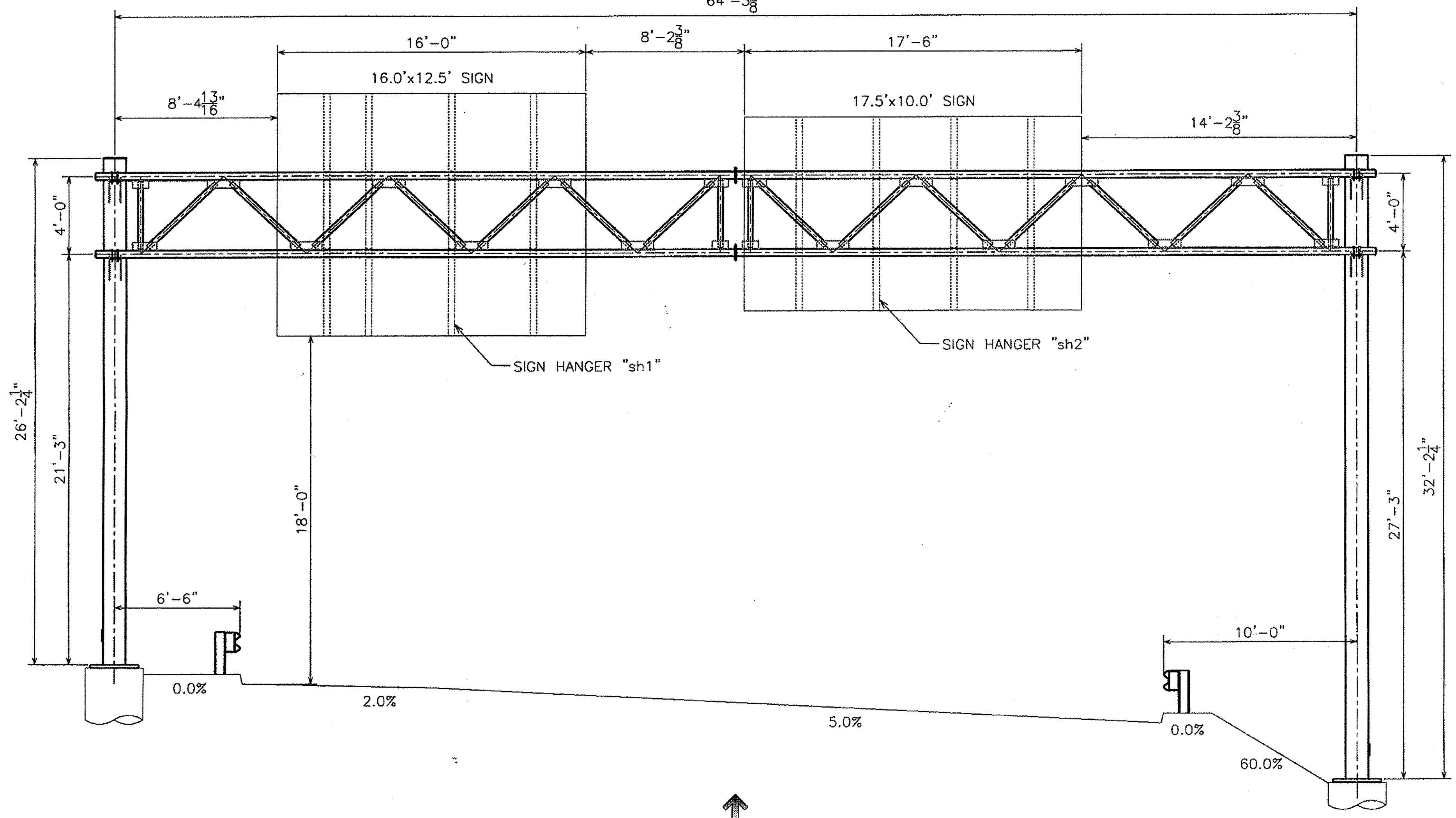
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CLD REF. NO.: 09-0106

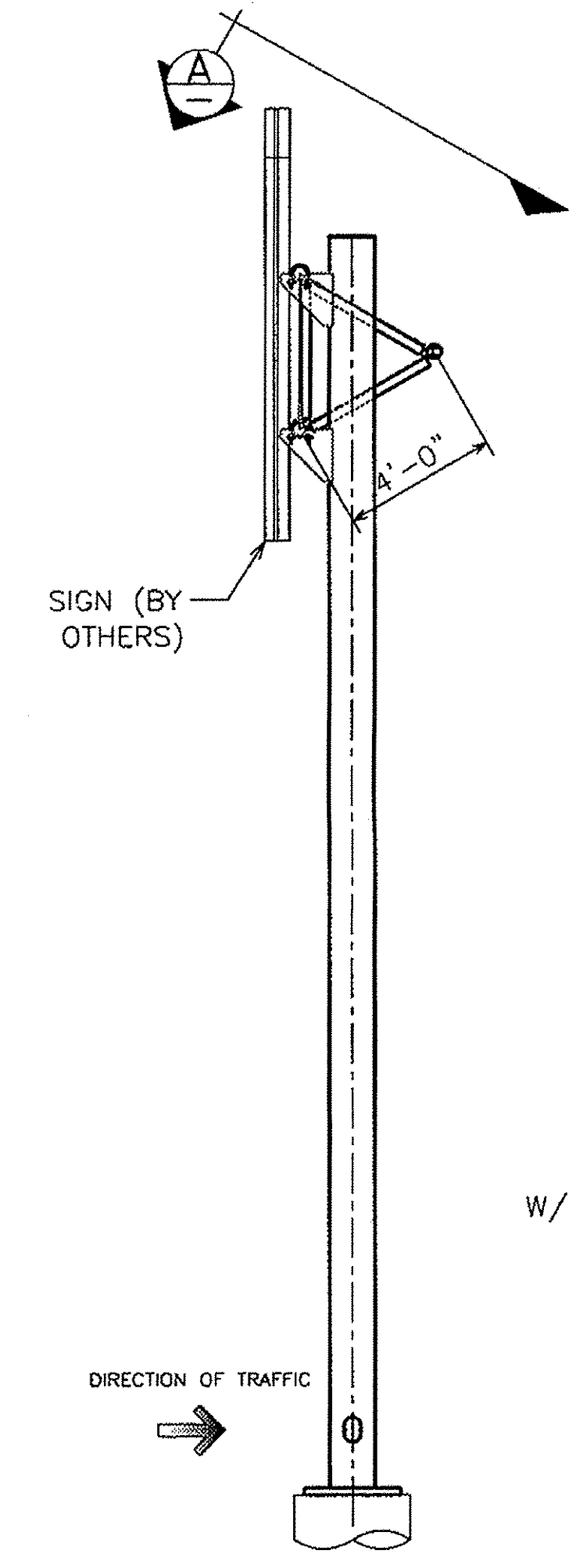
SHEET 163 OF 163



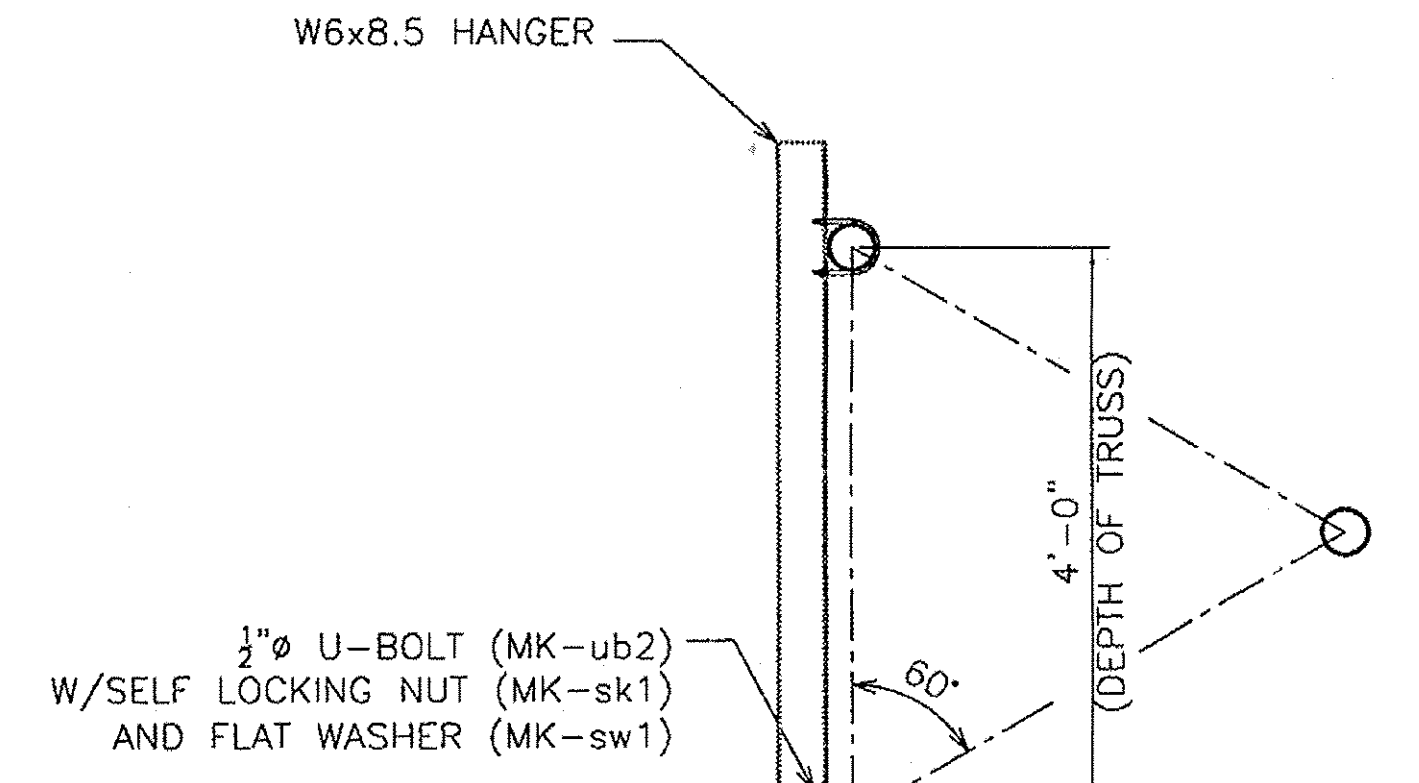
(A) VIEW  
64'-3 5/8"



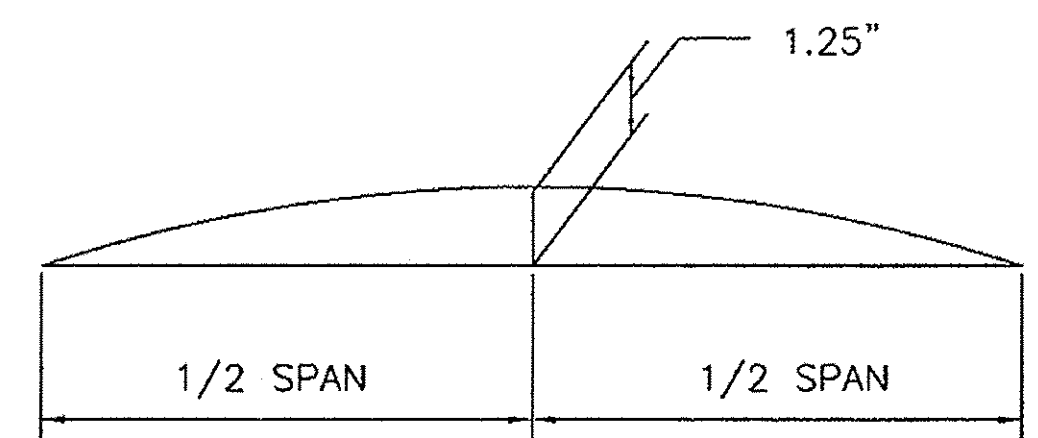
**ELEVATION**  
INTERCHANGE 6  
LOOKING AT FACE OF SIGN  
(OUT OF PLANE CHORDS NOT SHOWN FOR CLARITY)  
*So. BAITE*



**SIDE ELEVATION**



**SIGN MOUNTING DETAIL**  
VERTICAL HANGER BEAMS & U-BOLTS INCLUDED



**CAMBER DIAGRAM**

**NOTE:**  
CAMBER WILL BE ACHIEVED BY SHORTENING LOWER CHORD PIPES BY AN AMOUNT SUCH THAT POSITIVE UPWARD DEFLECTION IS PRODUCED WHEN TRUSSES ARE BROUGHT TOGETHER AT SPLICES.

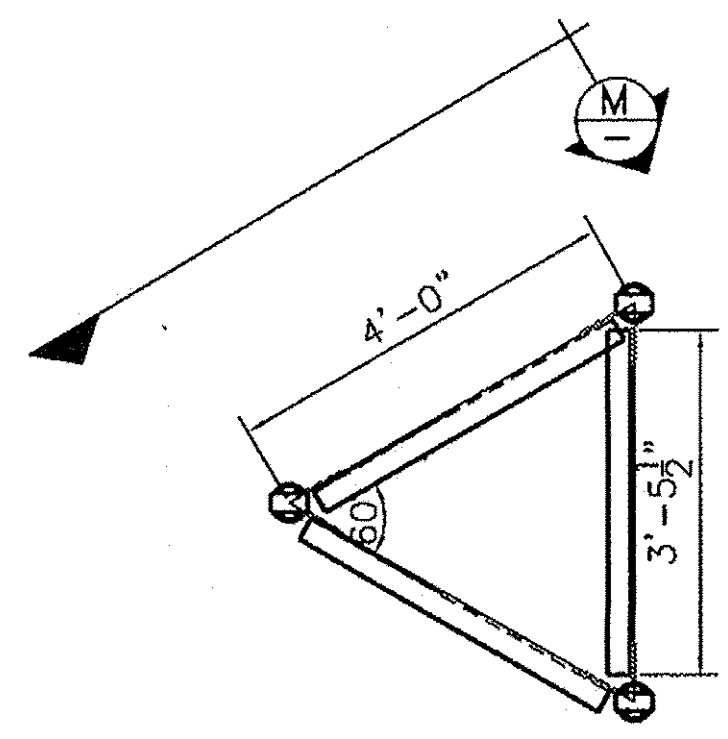
**NOTE:**  
POST HEIGHT WAS SCALED OF THE CONTRACT DRAWINGS, CONTRACTOR TO VERIFY POST HEIGHT PRIOR TO FABRICATION.

REVISIONS		
No.	Remarks	Date
0	Initial submittal	

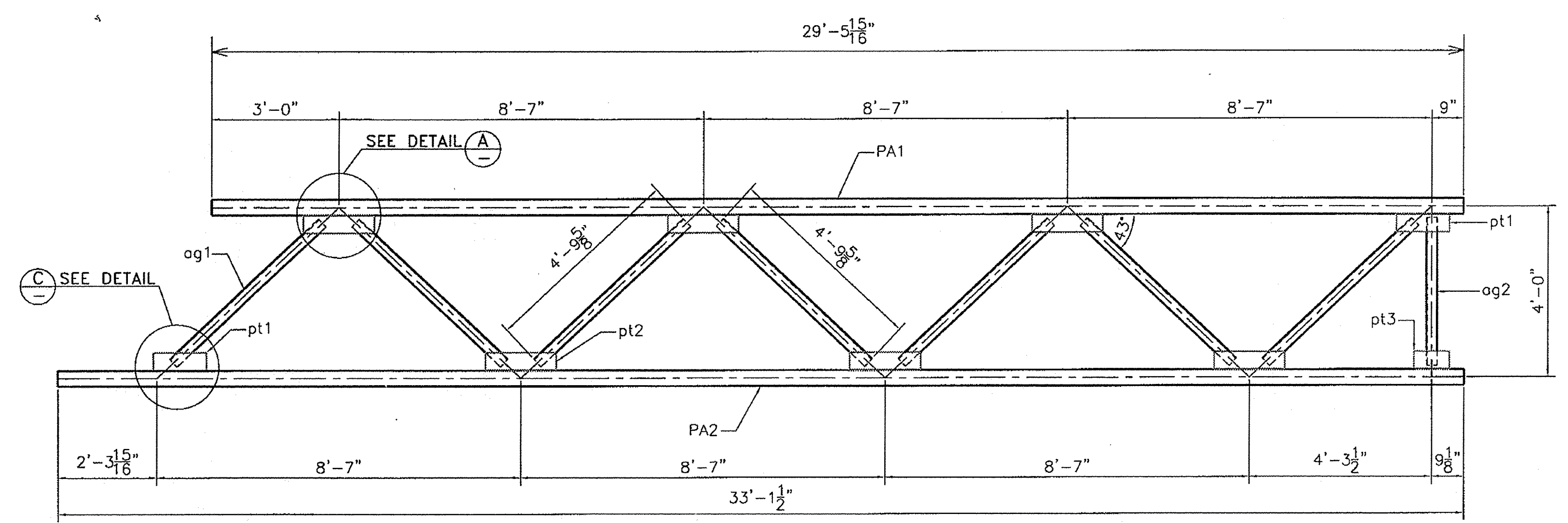


**HIGHWAY SAFETY CORP.**  
GLASTONBURY, CT

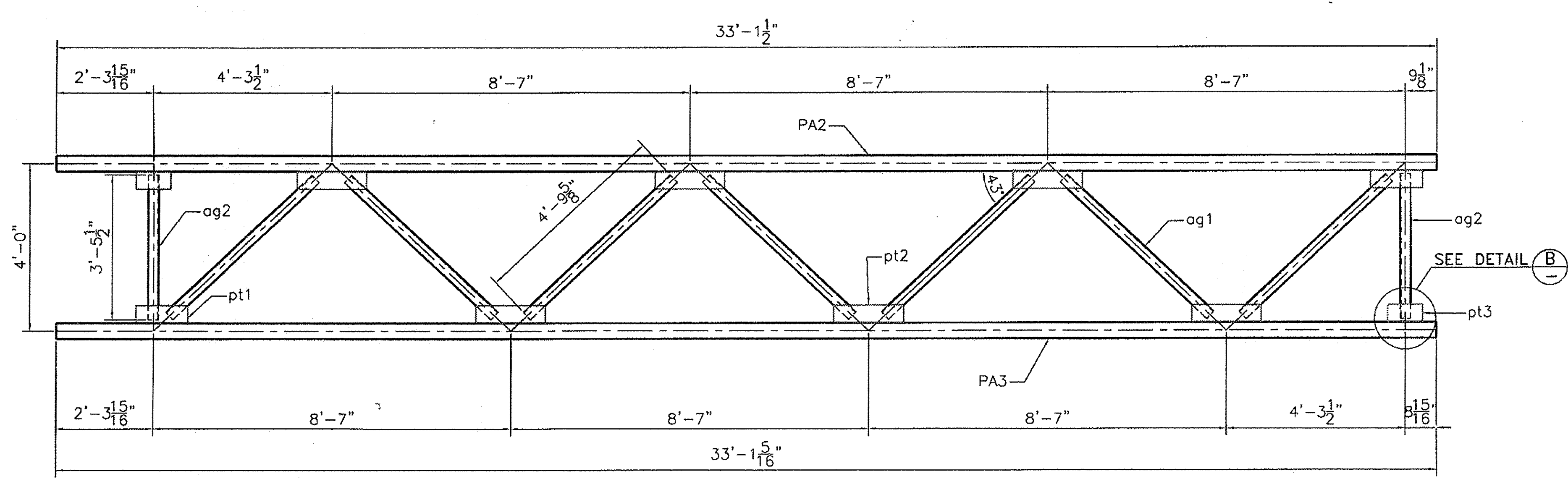
DRAWN	MHM
CHECKED	
DATE	12/22/09
SCALE	N.T.S.
HSC REFERENCE NO.	1729a
SIZE	D
REVISION	0
SUB CONTRACTOR	CCS Constructors LLC
SHEET NO.	1 of 6



SIDE VIEW

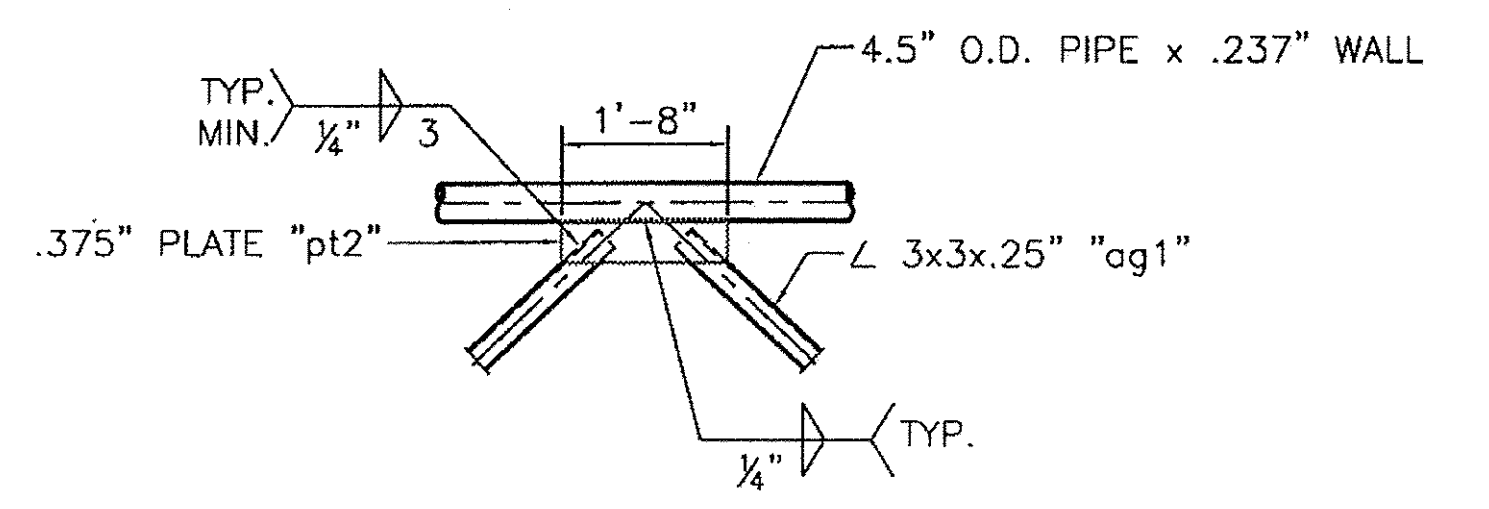


M VIEW

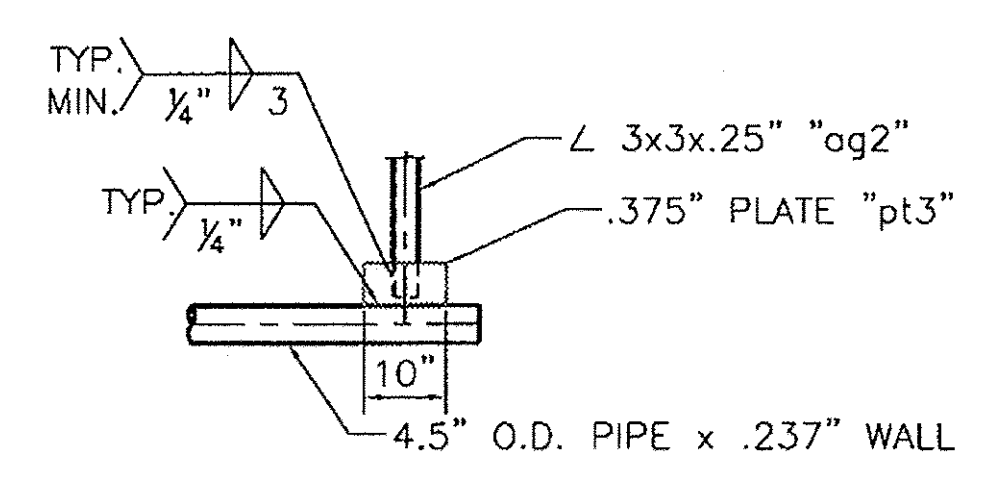


FRONT VIEW

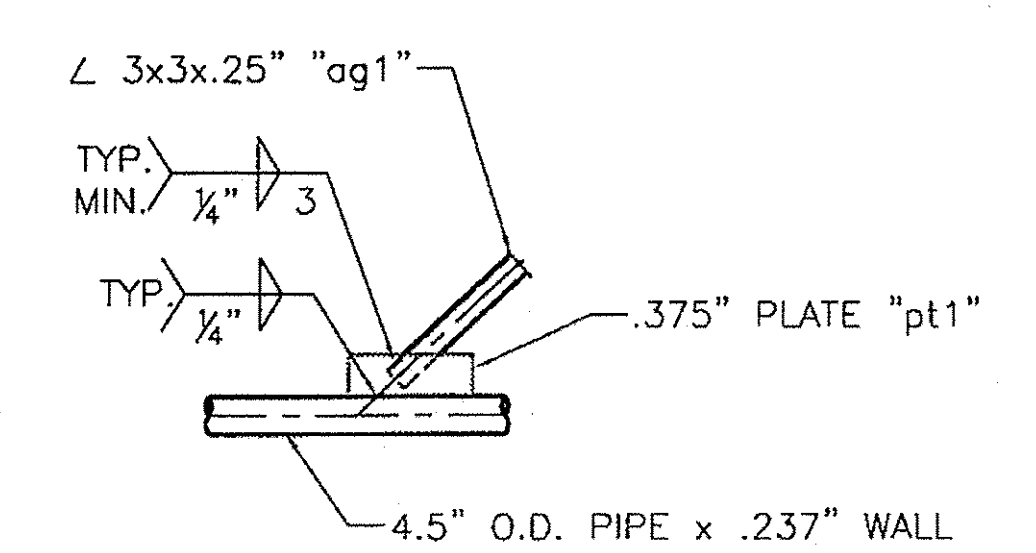
TRUSS TA1



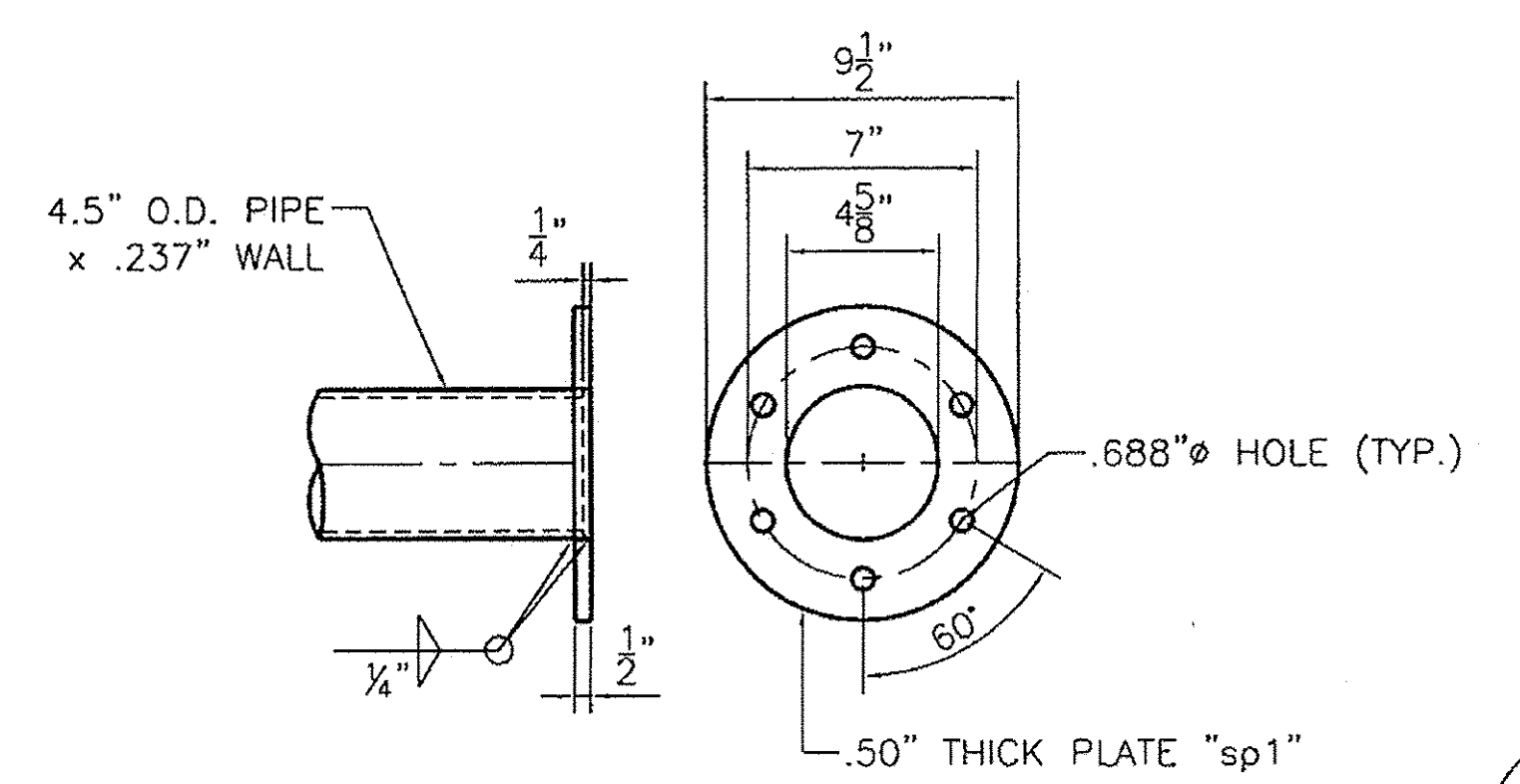
DETAIL "A"



DETAIL "B"



DETAIL "C"



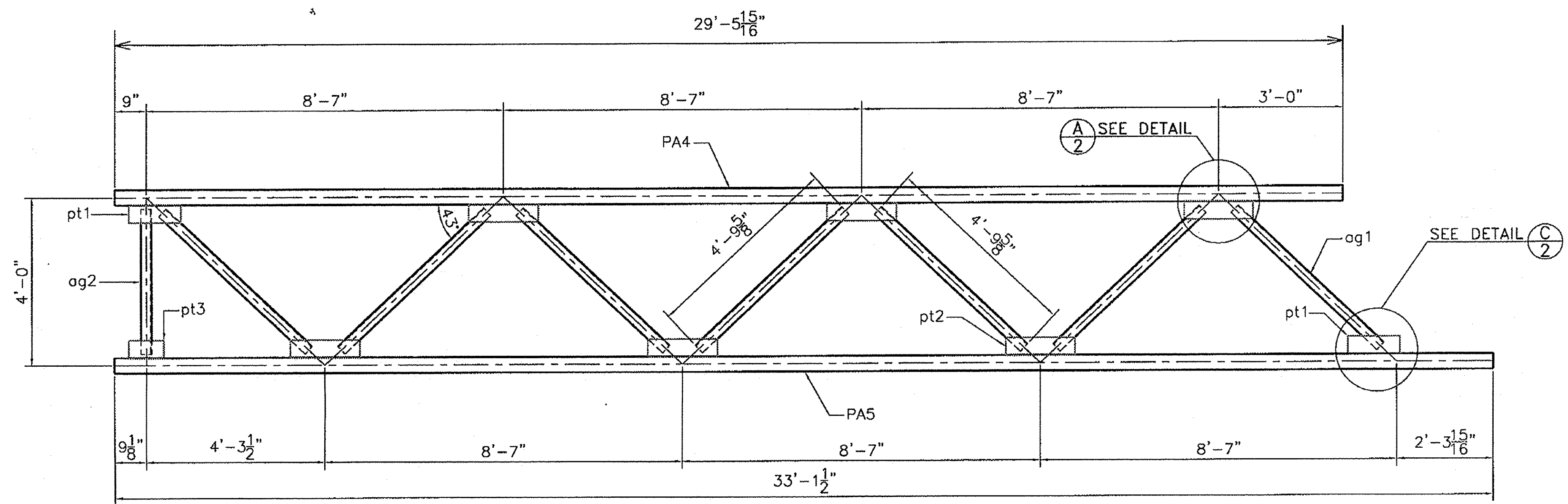
SPLICE DETAIL



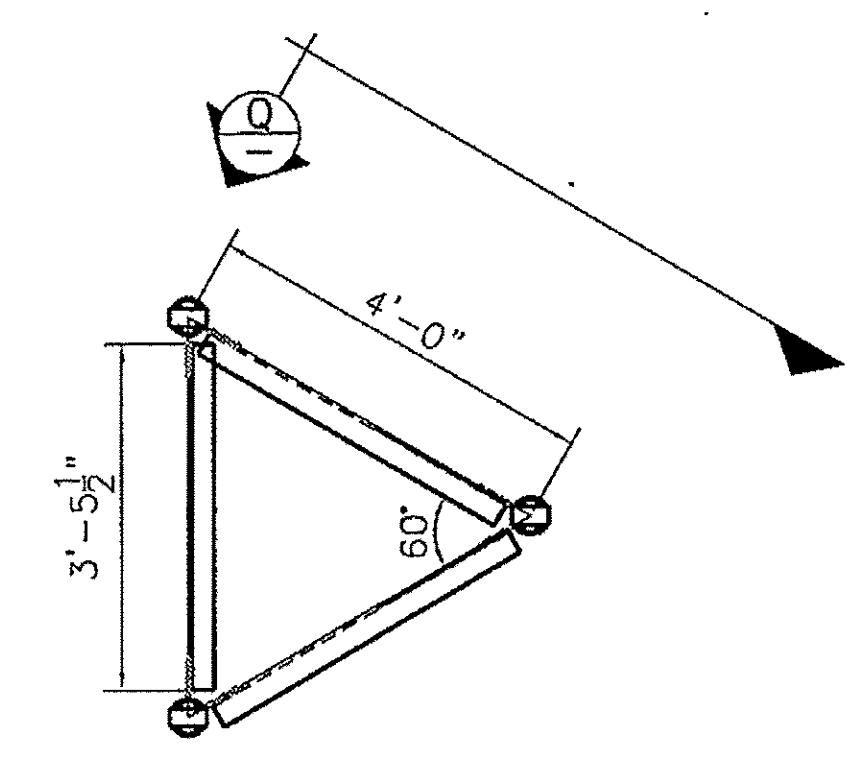
**HIGHWAY SAFETY CORP.**  
GLASTONBURY, CT

TRI CHORD OVERHEAD SIGN STRUCTURE		DATE	MHM
SIGN 0.138 OH INTERCHANGE #6		12/22/09	
PROJECT NUMBER IMG SIGN(19)		SCALE	NTS
ROYALTON - MIDDLESEX		HSC REFERENCE NO.	1729a
VERMONT AGENCY OF TRANSPORTATION		SIZE	D
GENERAL CONTRACTOR		REVISION	0
SUB CONTRACTOR		SHEET NO.	2 of 6
CCS Constructors LLC			

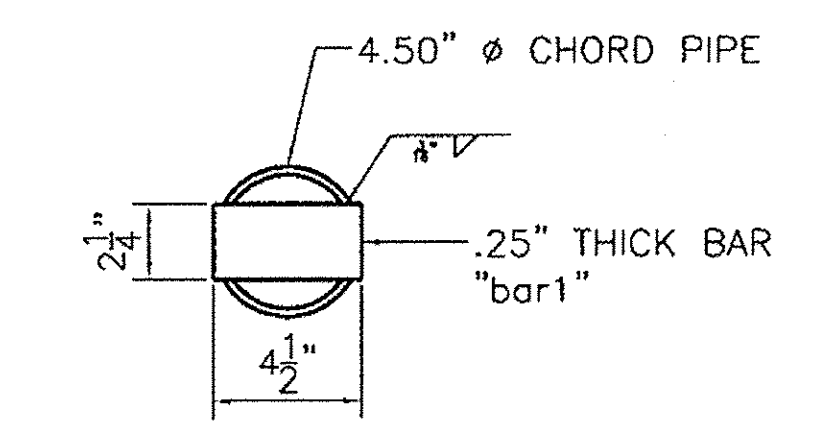
REVISIONS		
No.	Remarks	Date
0	Initial submittal	



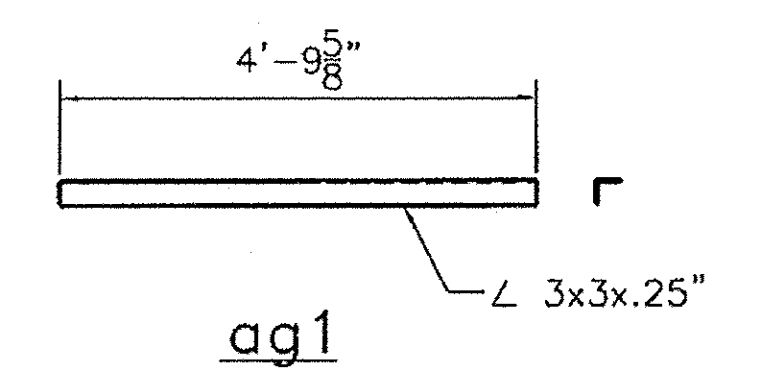
VIEW Q



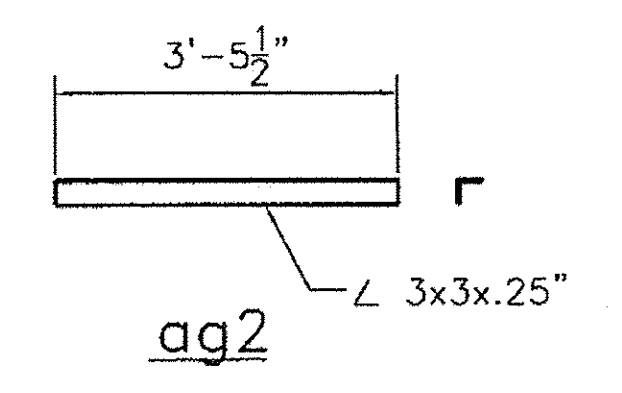
SIDE VIEW



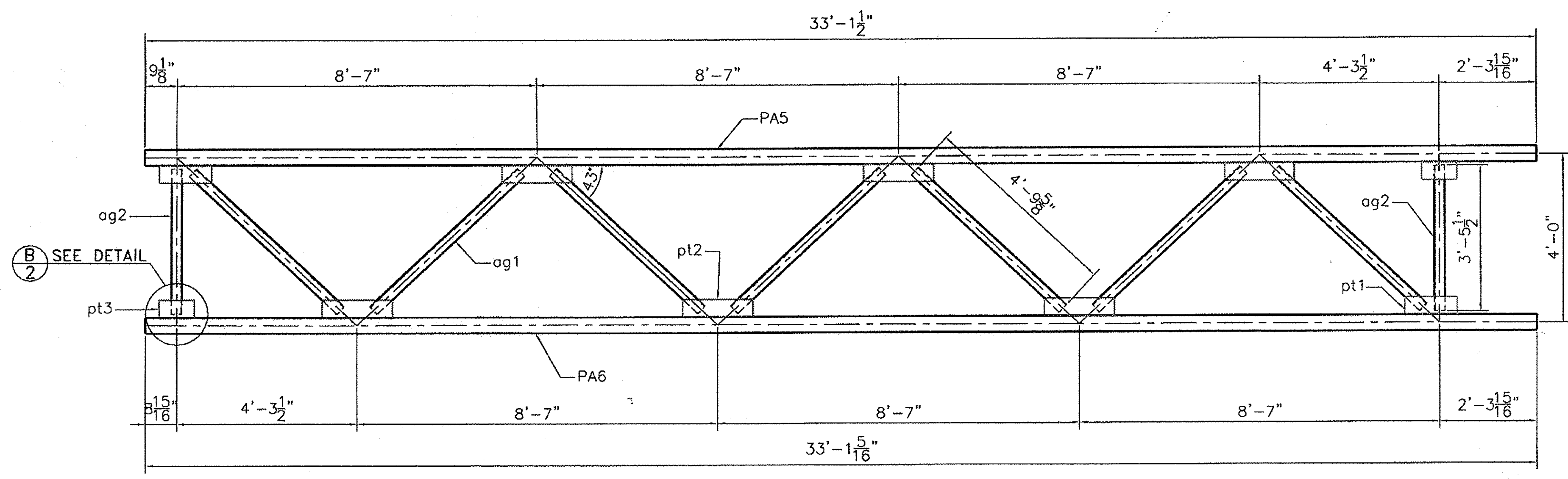
PIPE PLUG DETAIL  
"EACH END OF TRUSS CHORD"



ag1



ag2



FRONT VIEW

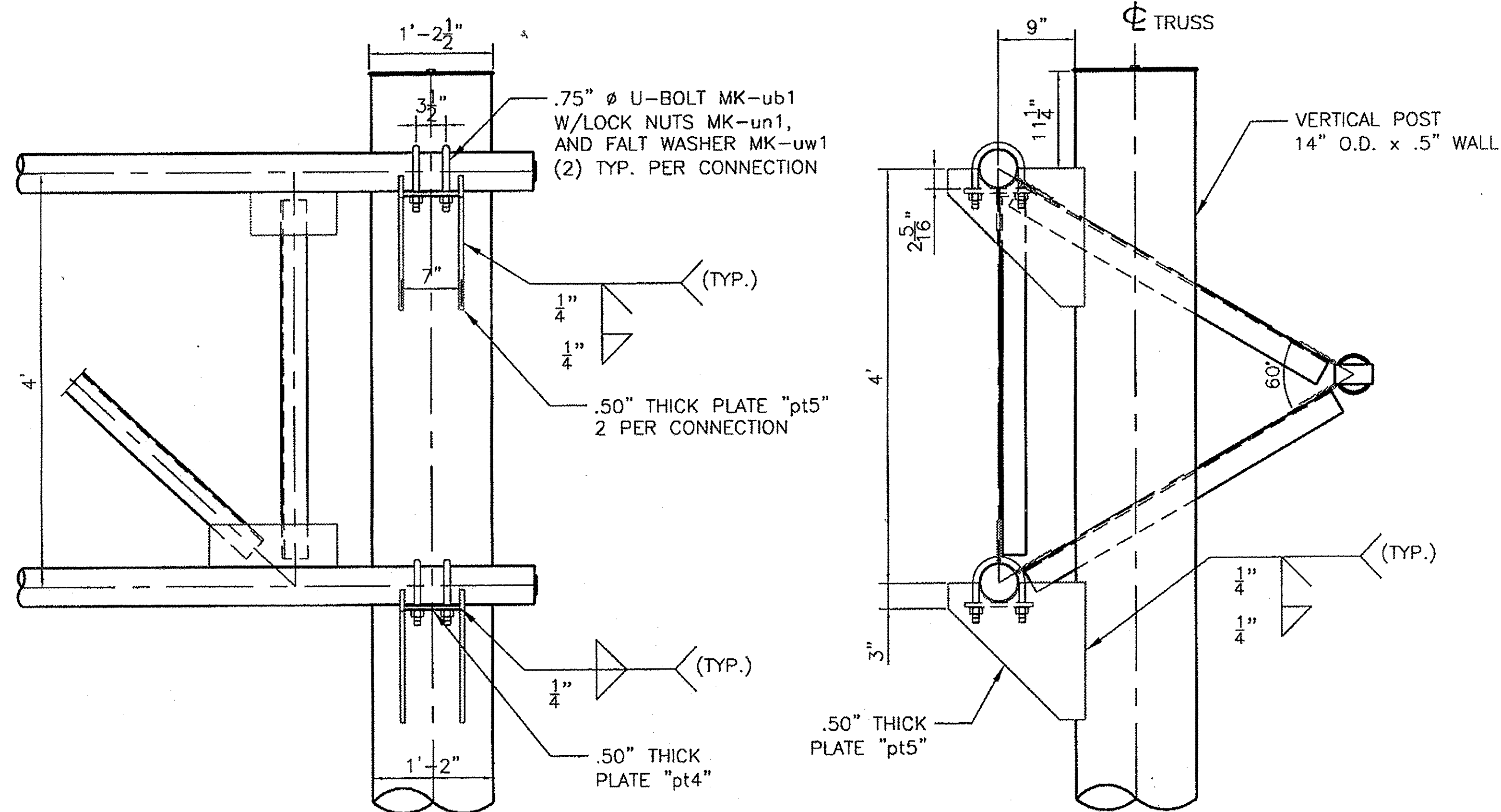
TRUSS TA2

REVISIONS		
No.	Remarks	Date
0	Initial submittal	

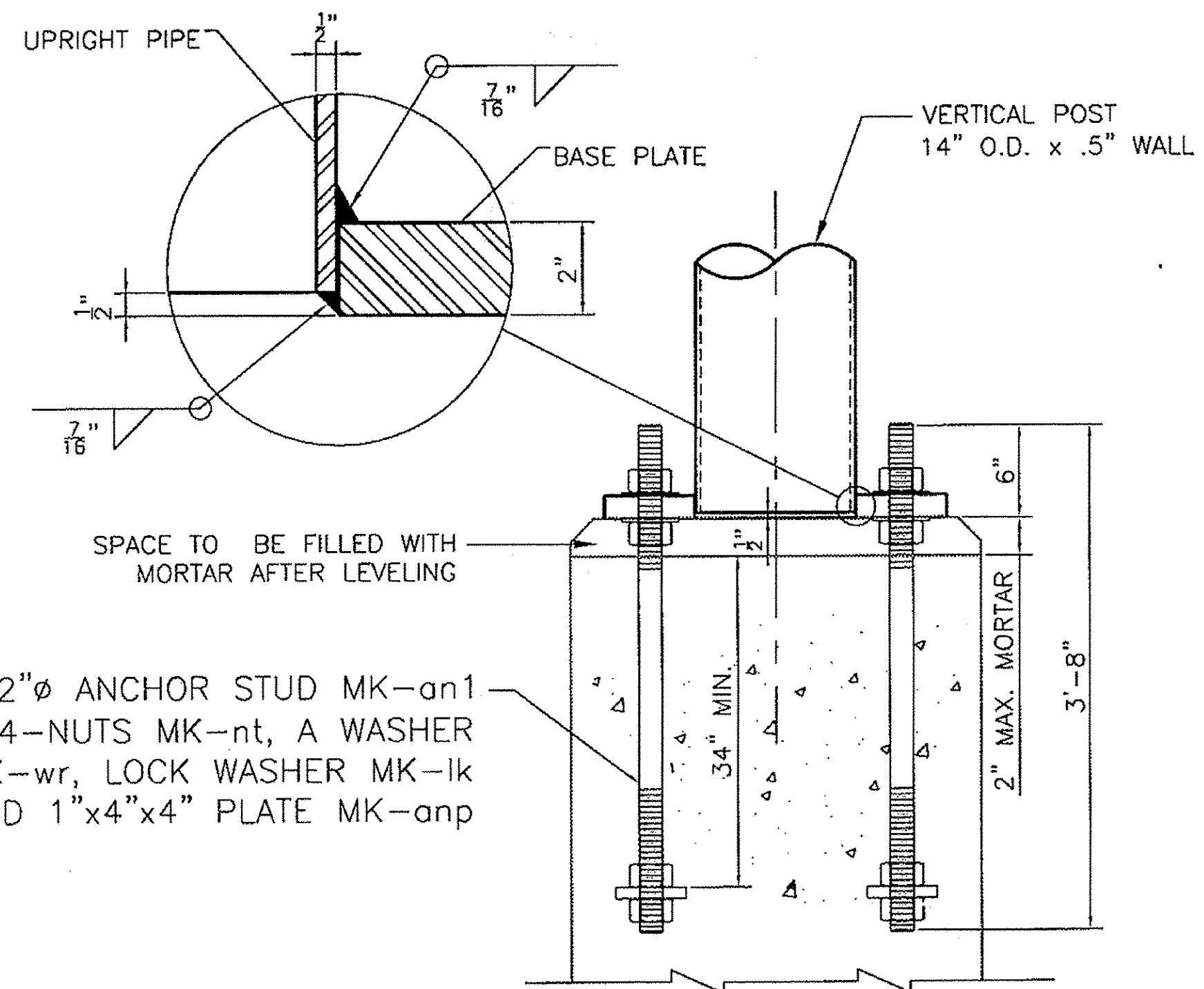


**HIGHWAY SAFETY CORP.**  
GLASTONBURY, CT

GENERAL CONTRACTOR	VERMONT AGENCY OF TRANSPORTATION	DATE	12/22/09
SUB CONTRACTOR	CCS Constructors LLC	SCALE	NTS
		MISC REFERENCE NO.	1729a
		SIZE	D
		REVISION	0
		SHEET NO.	3 of 6



TRUSS CONNECTION DETAIL



ANCHORAGE ASSEMBLY

**NOTE:**  
1. STRUCTURE DESIGNED IN ACCORDANCE WITH LATEST EDITION AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINARIES AND TRAFFIC SIGNALS.

2. ALL HOLES FOR HIGH STRENGTH FASTENERS SHALL BE DRILLED OR SUB-PUNCHED FULL SIZE. SLOTTED HOLES AND/OR VENT OR ACCESS HOLES MAY BE CUT WITH MECHANICALLY GUIDED PLASMA OR MECHANICALLY GUIDED FLAME TORCH.

3. GRIND SHARP CORNERS OF ALL PLATES TO A 1/16" MIN. RADIUS PRIOR TO GALVANIZING.

4. ALL WELDING SHALL BE PERFORMED BY QUALIFIED WELDERS IN ACCORDANCE WITH AWS D1.1.

5. ALL STEEL PLATES FOR STRUCTURAL COMPONENTS SHALL BE ASTM A709 GR. 50.

6. STEEL PLATES AND SHAPES FOR NON-STRUCTURAL COMPONENTS SHALL BE ASTM A709 GR. 36.

7. STEEL PIPES FOR STRUCTURAL MEMBERS SHALL HAVE MINIMUM YIELD OF 42 ksi AND SHALL CONFORM TO ONE OF THE FOLLOWING GRADES: ASTM A500 GR. B, OR API 5LX42.

8. UNLESS OTHERWISE NOTED, ALL BOLTS FOR STRUCTURAL CONNECTIONS SHALL BE M164 TYPE 1 (A325).

9. GALVANIZED U-BOLTS FOR CONNECTION OF SIGN HANGER BEAMS TO TRUSS SHALL BE ASTM F-1554 GR. 36.

10. ALL STRUCTURAL STEEL SHALL BE HOT-DIPPED GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH AASHTO M111 (ASTM A123).

11. ALL HARDWARE, UNLESS OTHERWISE NOTED, SHALL BE HOT-DIPPED GALVANIZED PER AASHTO M232 (ASTM A153).

12. ANCHOR HARDWARE SHALL BE STAINLESS STEEL AND MEET REQUIREMENTS OF VAOT STANDARD SPECIFICATION 714.09.

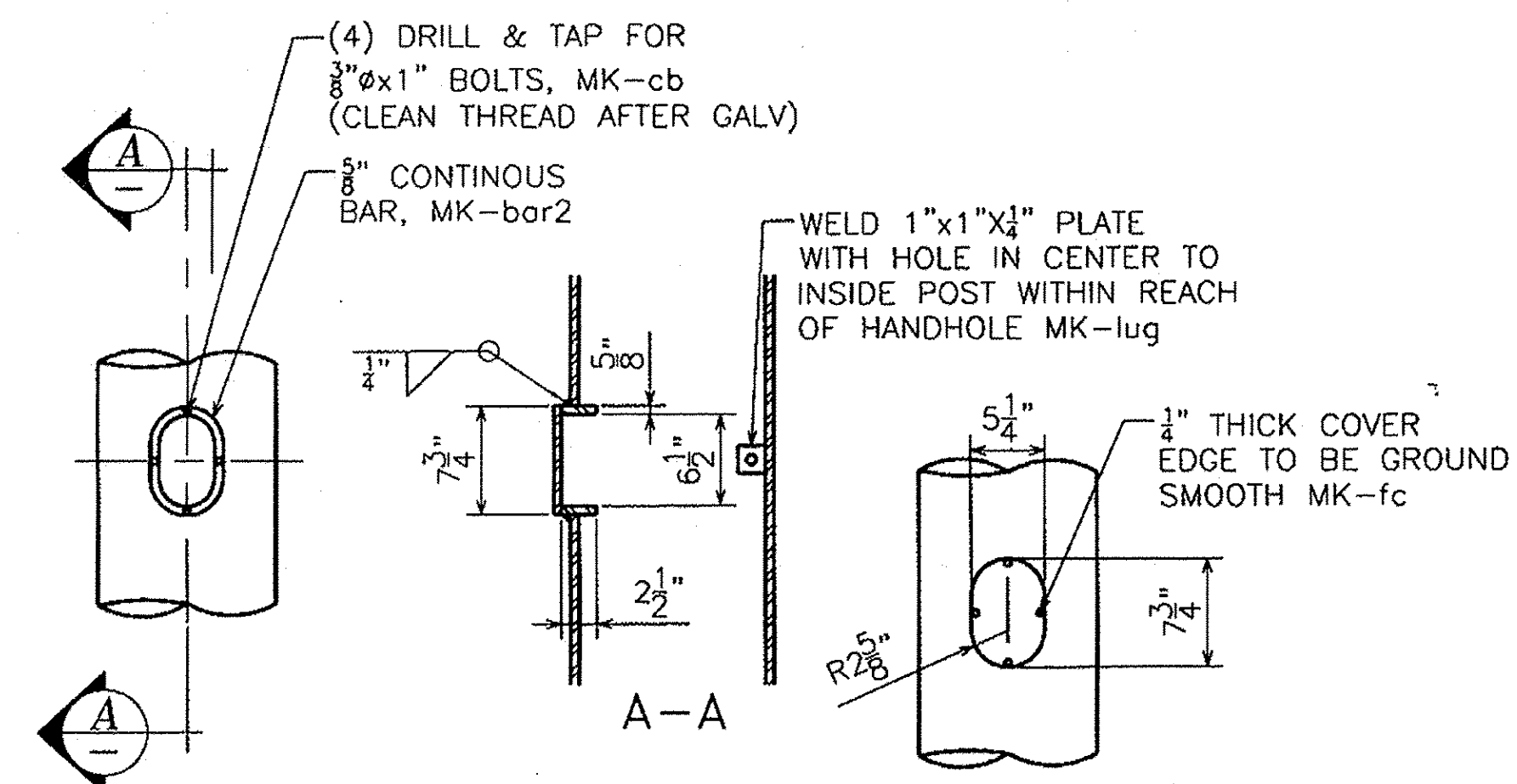
13. CONCRETE AND REBAR SHOWN IN FOOTING DESIGN TO BE FURNISHED BY OTHERS.

14. FOUNDATION DESIGN BASED ON USE OF 3000 psi MINIMUM CONCRETE.

15. SPACE BETWEEN THE TOP OF CONCRETE AND THE BOTTOM OF STEEL BASE PLATE SHALL BE FILLED WITH TYPE IV MORTAR AFTER LEVELING.

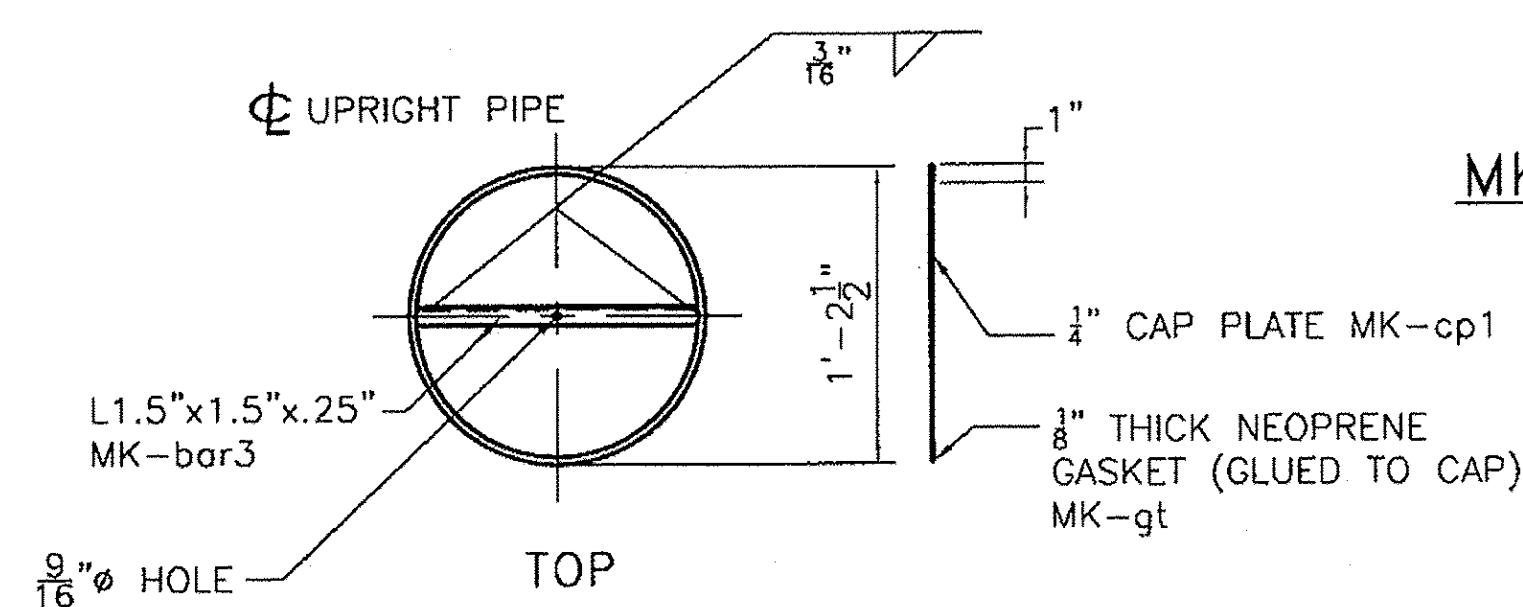
16. BOLTS INSTALLED IN STRUCTURAL CONNECTIONS SHALL BE PROVIDED AND TENSIONED PER APPLICABLE PROVISIONS OF VAOT STANDARD SPECIFICATIONS SECTION 506.

17. SEAL WELD ALL CONNECTIONS WHEN POSSIBLE PRIOR TO GALVANIZING.



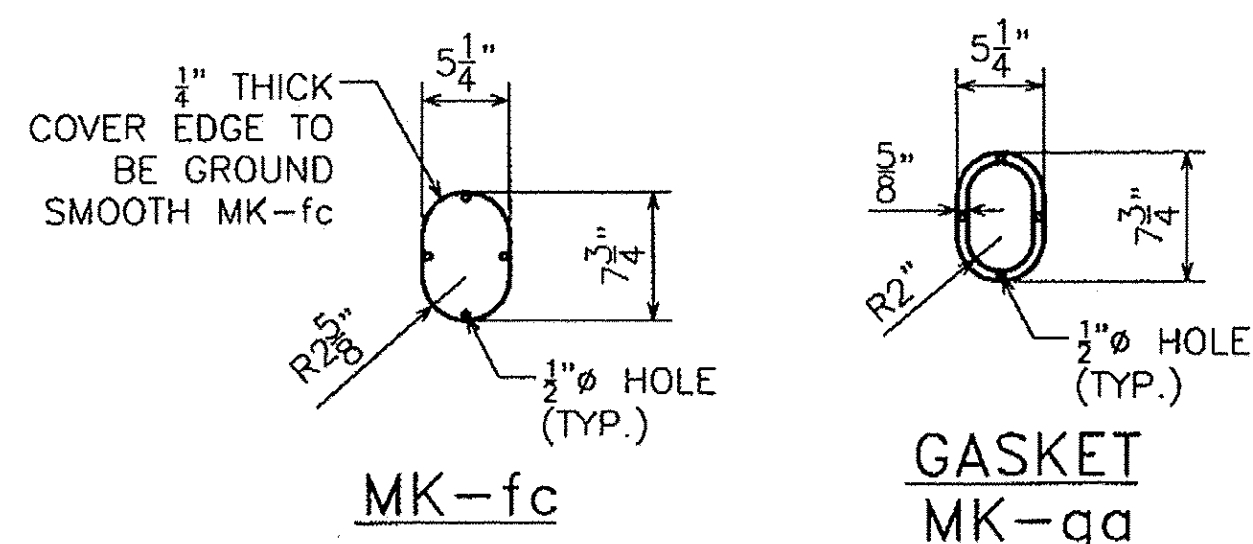
POST HANDHOLE DETAIL

PLACE ON SIDE OF POLE AWAY FROM APPROACHING TRAFFIC

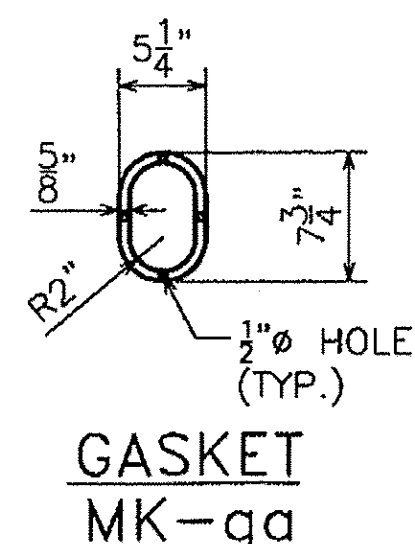


UPRIGHT CAP DETAIL

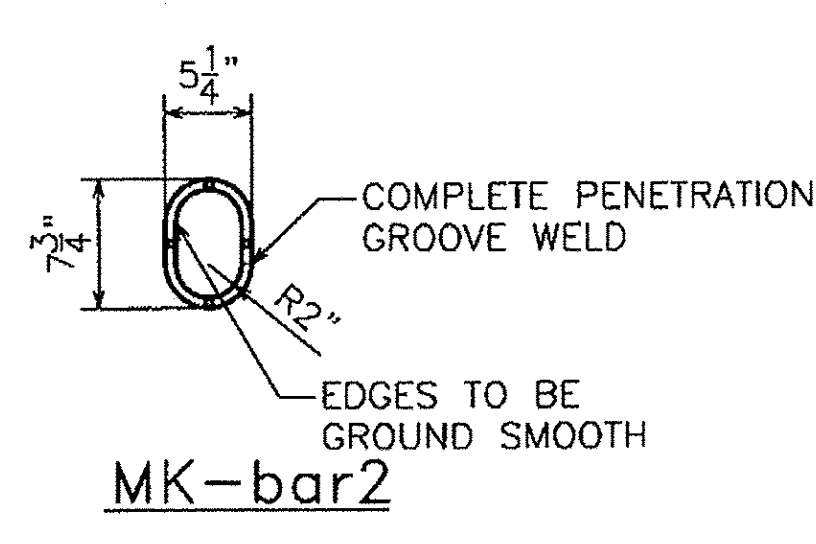
ASSEMBLE CAP TO POST PRIOR TO SHIPPING.



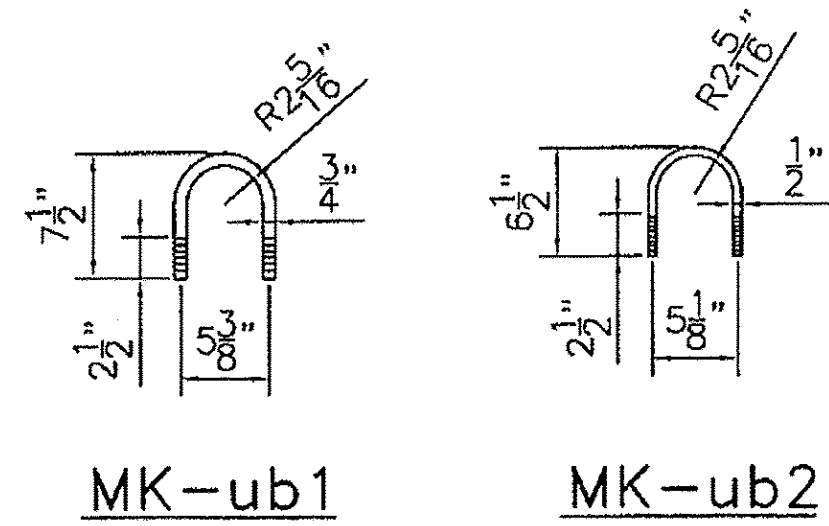
MK-fc



GASKET MK-ga

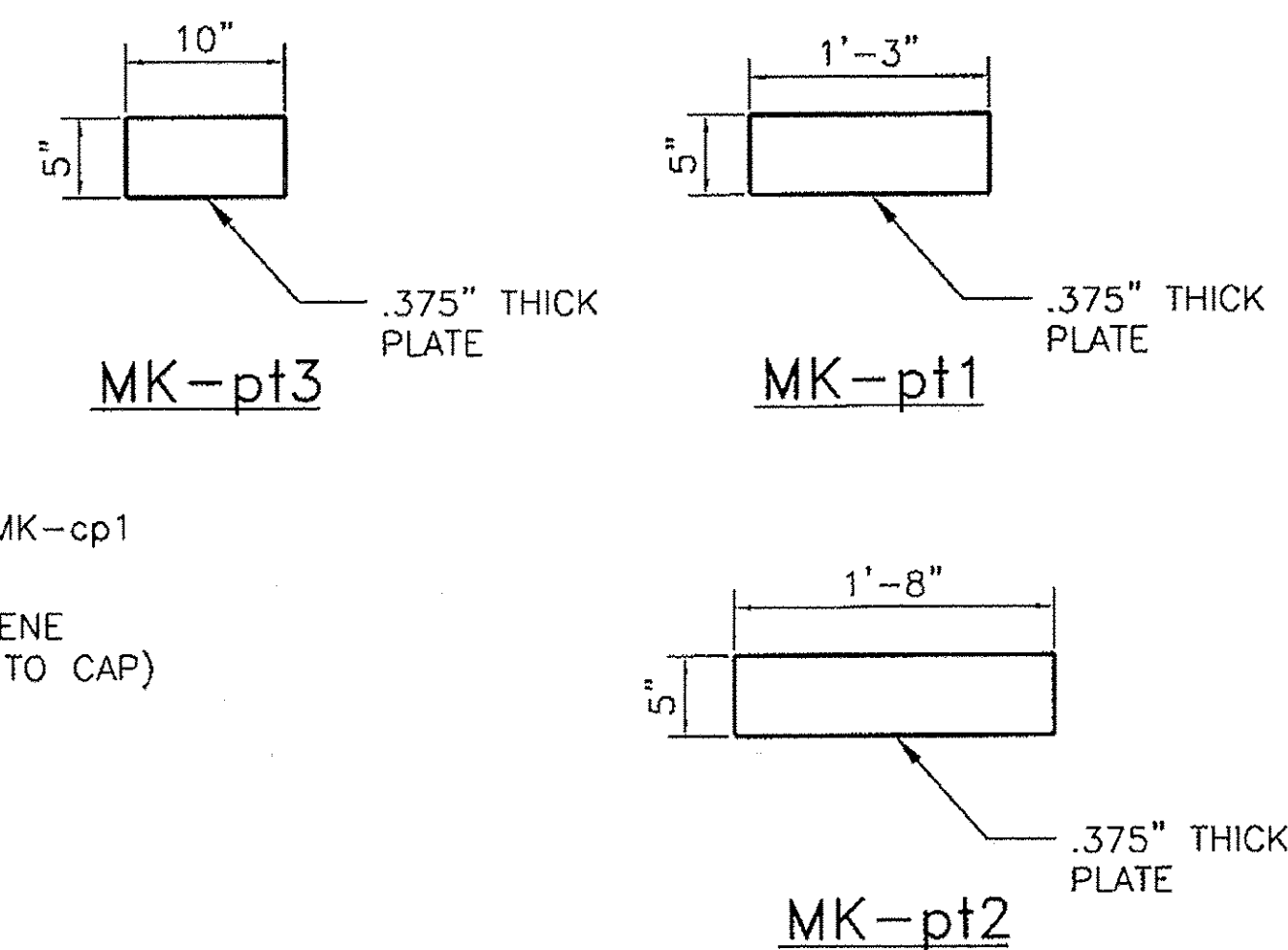


MK-bar2



MK-ub1

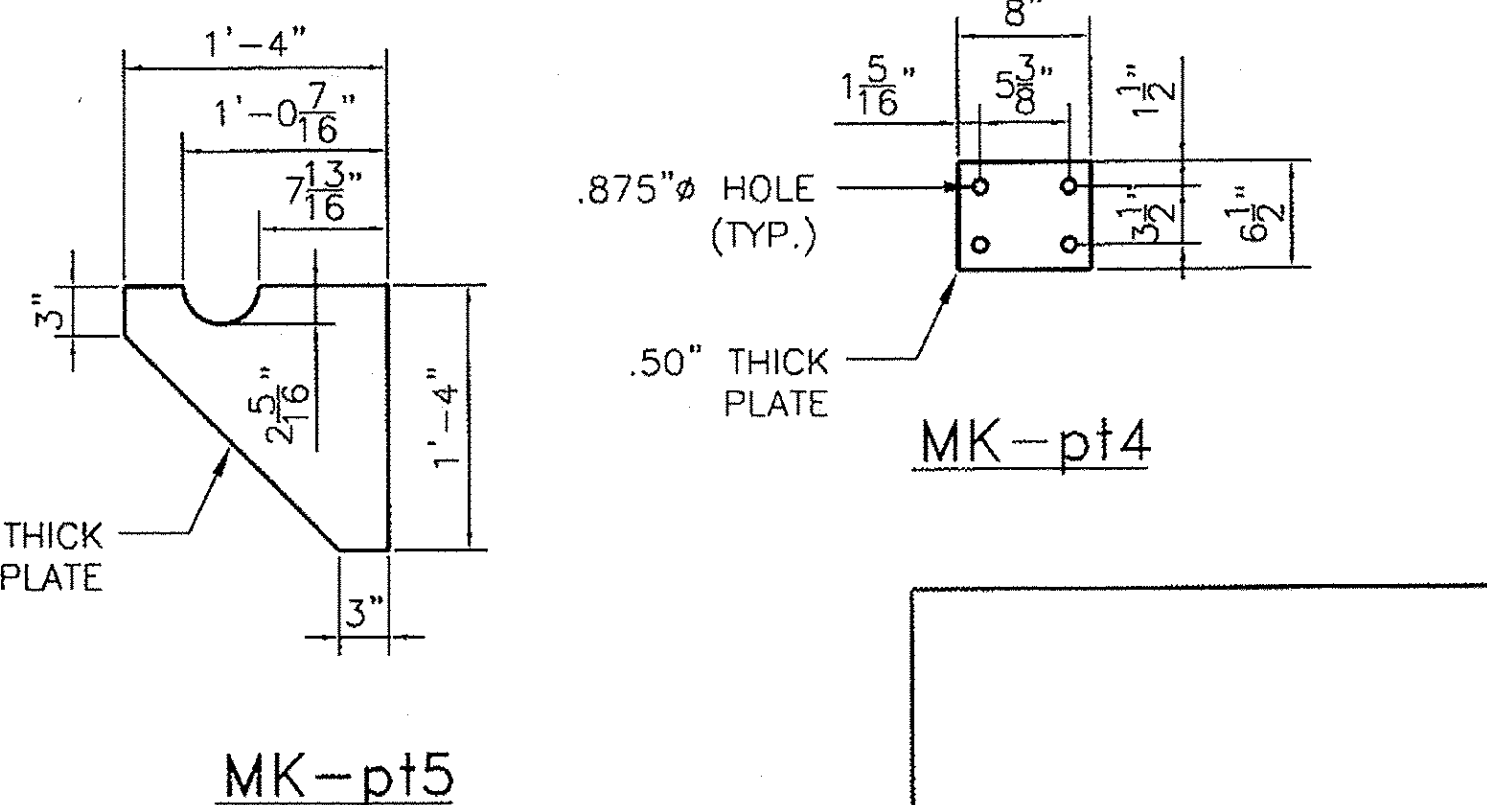
MK-ub2



MK-pt3

MK-pt1

MK-pt2



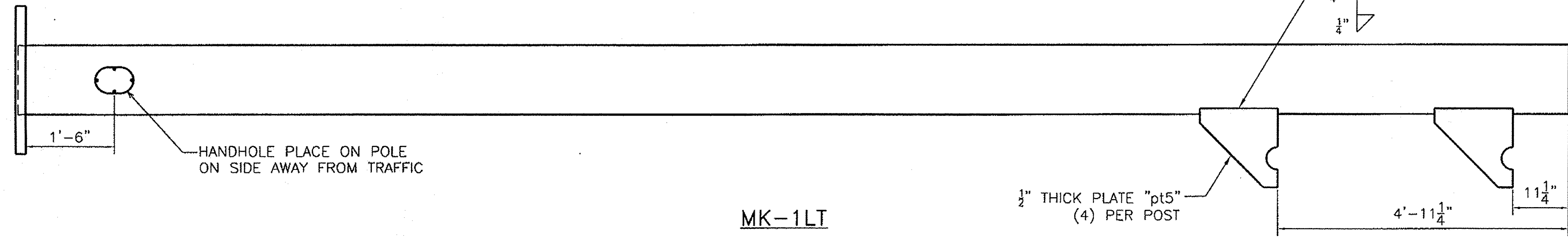
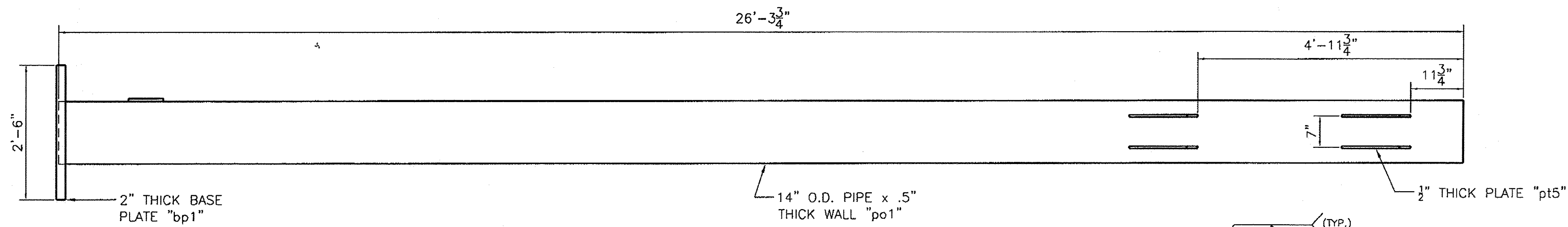
MK-pt5

REVISIONS		
No.	Remarks	Date
0	Initial submittal	

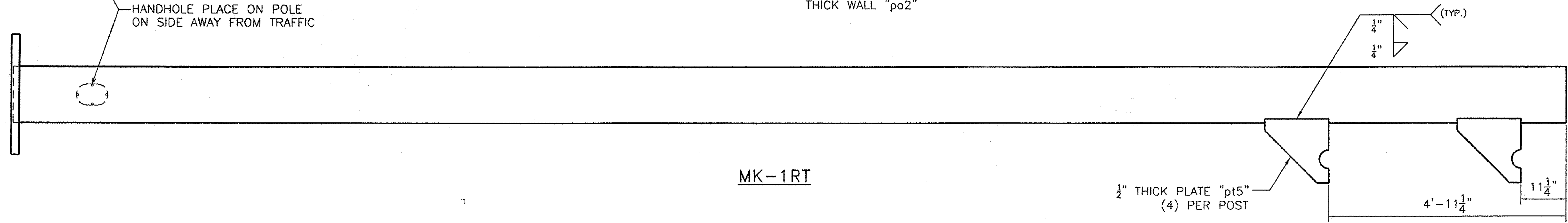
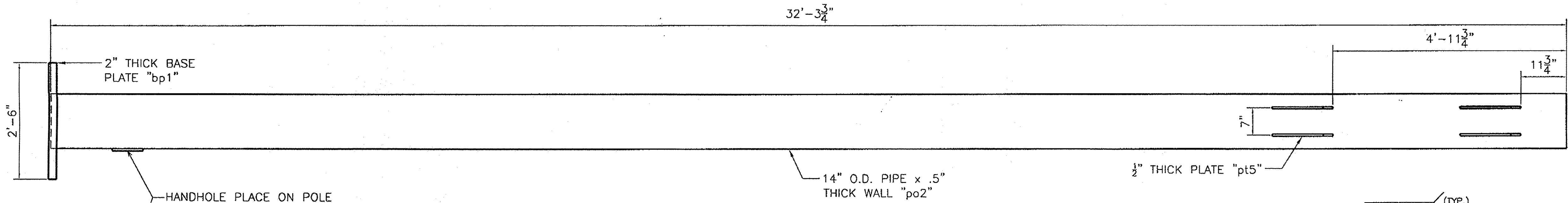


**HIGHWAY SAFETY CORP.**  
GLASTONBURY, CT

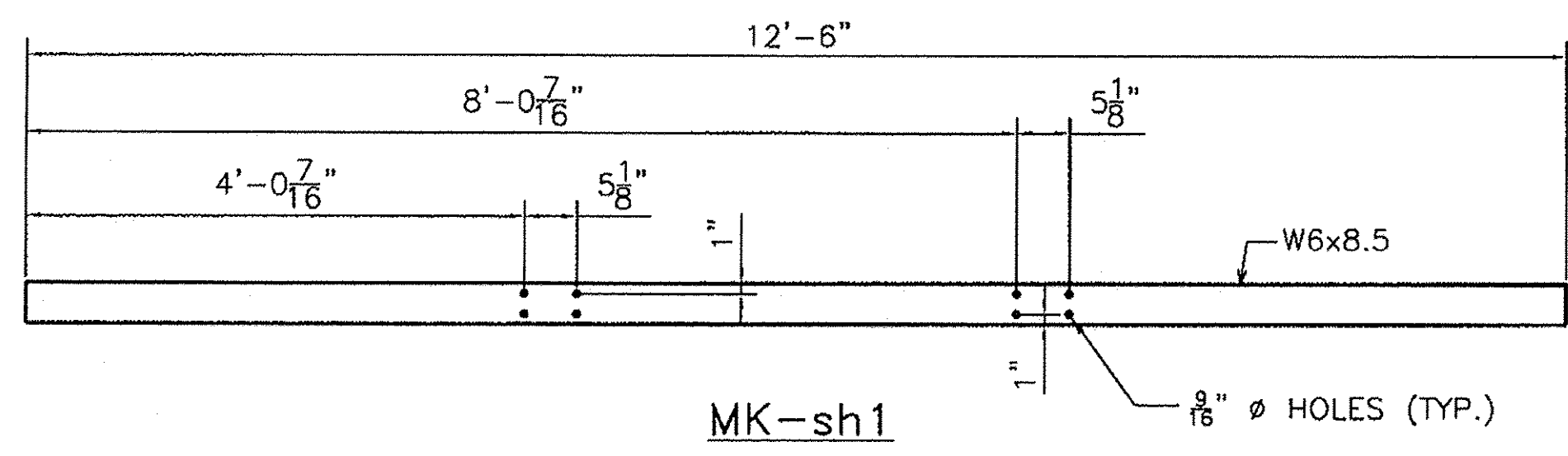
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SIGN 0.138 OH INTERCHANGE #6	CHECKED	
PROJECT NUMBER IMG SIGN(19)	DATE	12/22/09
ROYALTON - MIDDLESEX	SCALE	N.T.S.
VERMONT AGENCY OF TRANSPORTATION	NSC REFERENCE NO.	1729a
GENERAL CONTRACTOR	SIZE	D
SUB CONTRACTOR	SHEET NO.	0
CCS Constructors LLC		4 of 6



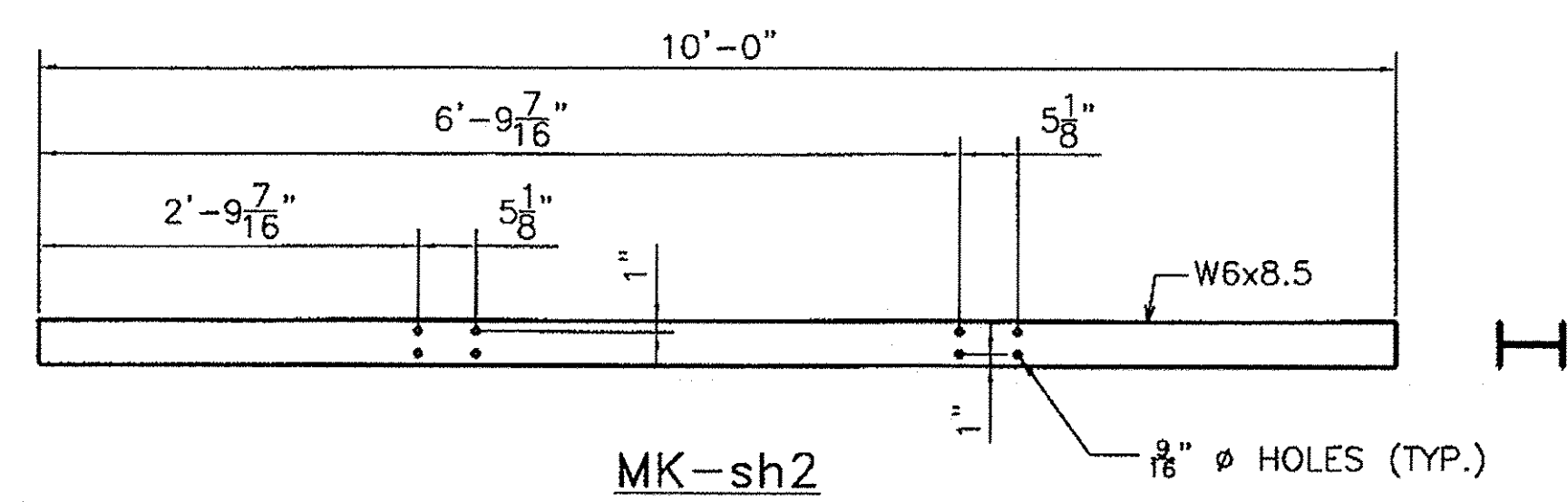
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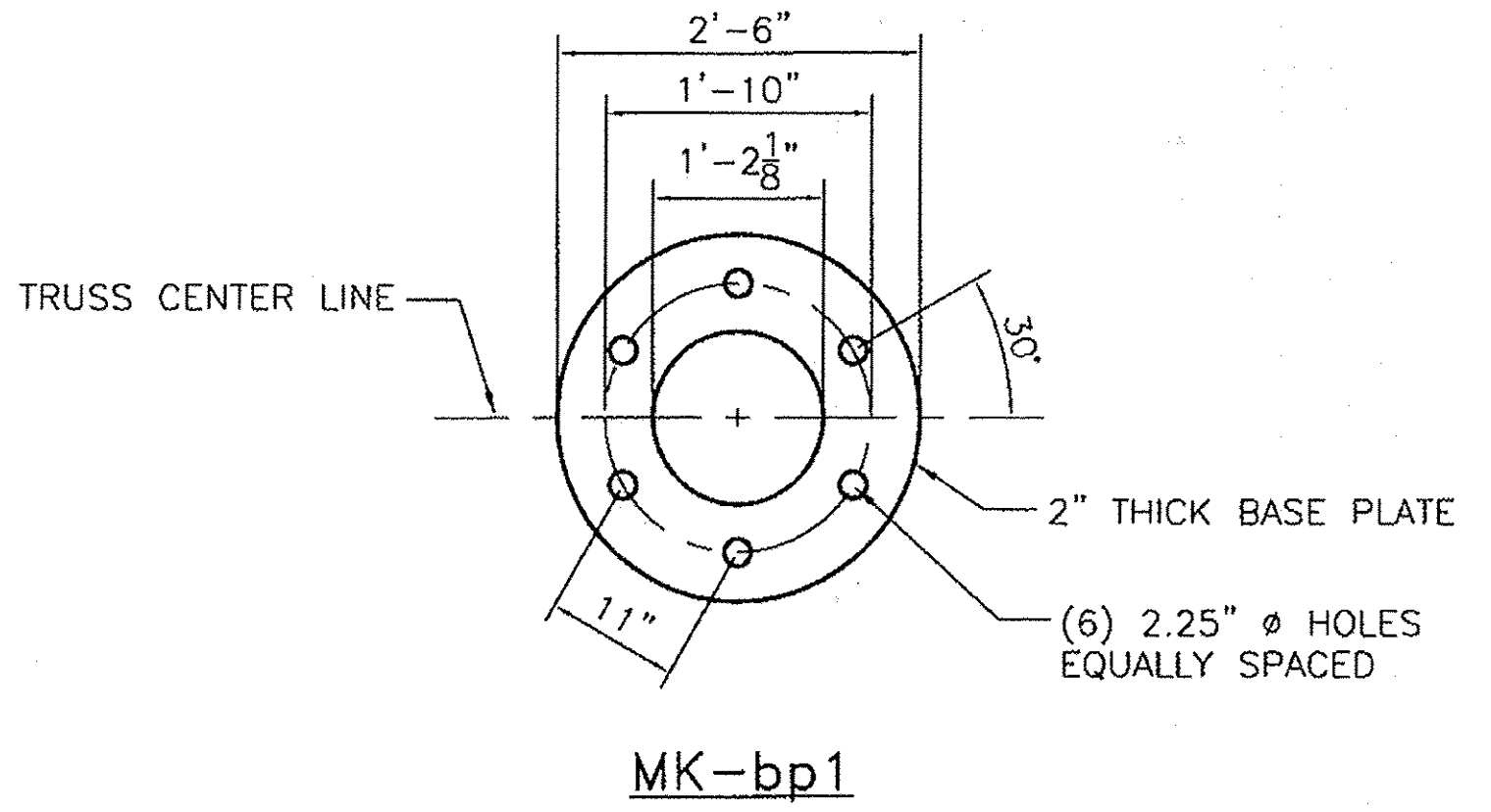
MK-1RT



MK-sh1



MK-sh2



MK-bp1

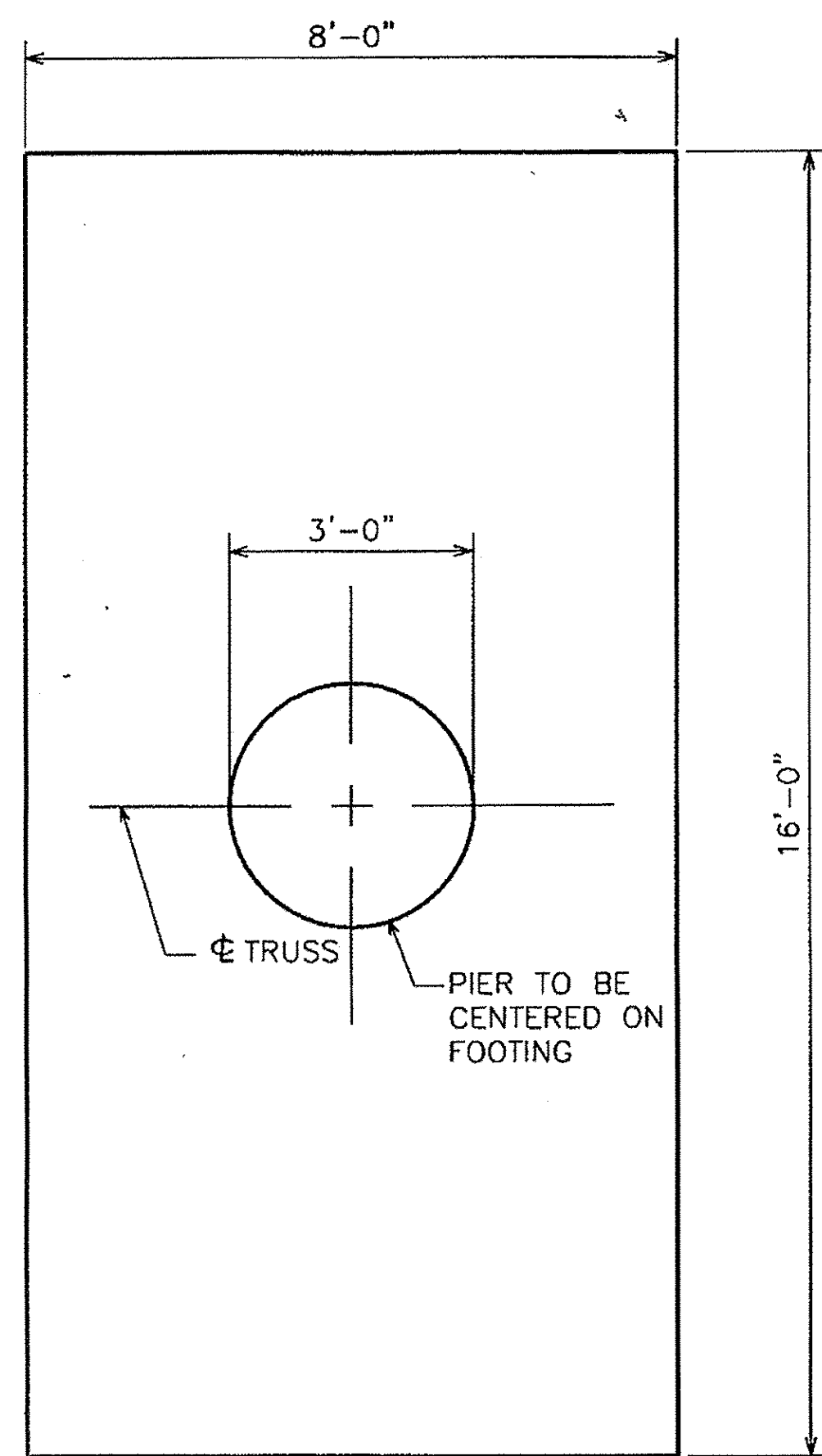
NOTE:  
 BASE PLATE SHALL BE STAMPED WITH THE VERTICAL POLE DIAMETER (VD.), HEIGHT (VHT.), YIELD STRENGTH (VYS.), GAUGE (VGE.), AND SAME FOR HORIZONTAL MEMBER (HD.), (HYS.), AND (HGE.).

REVISIONS		
No.	Remarks	Date
0	Initial submittal	

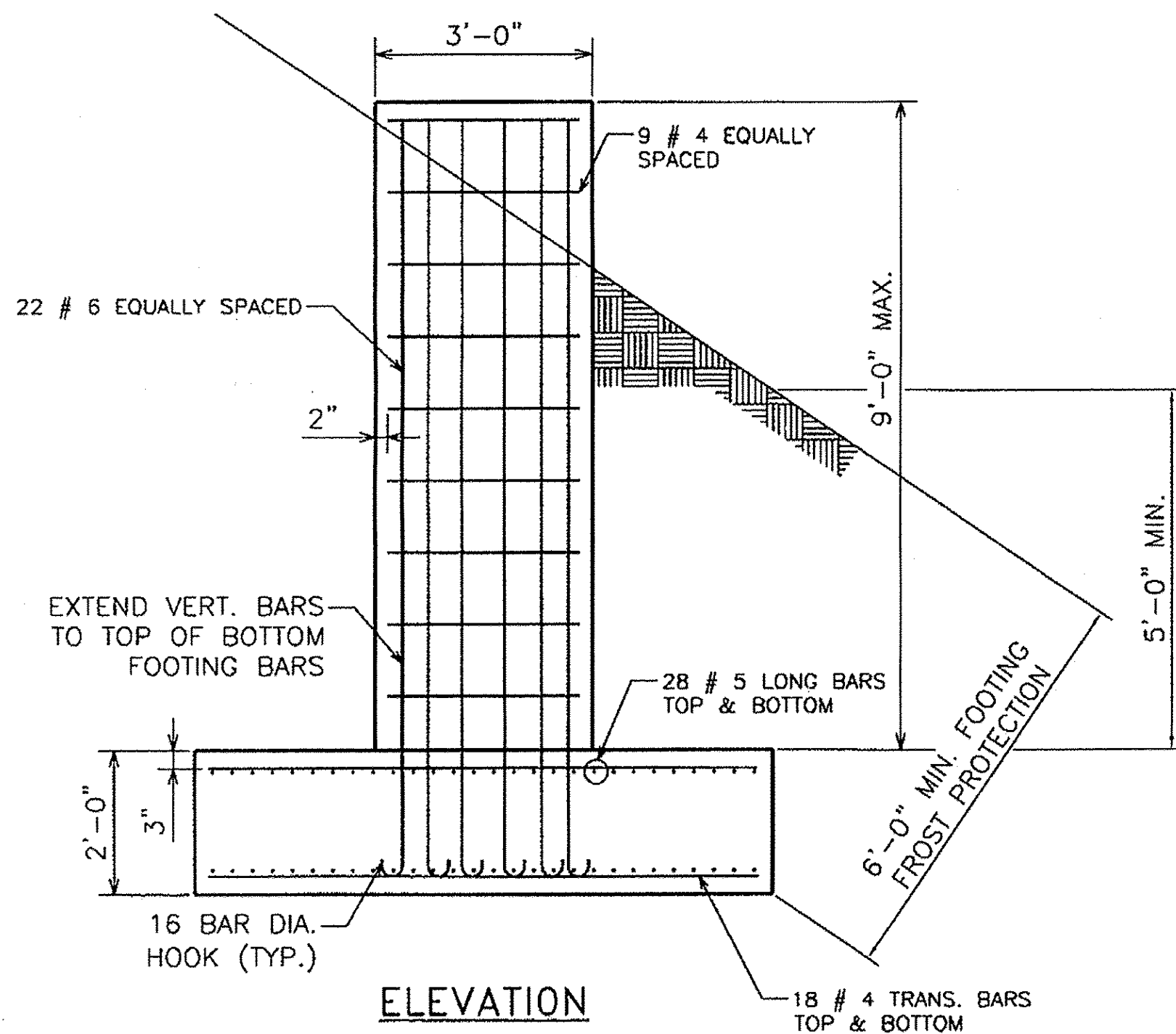


**HIGHWAY SAFETY CORP.**  
 GLASTONBURY, CT

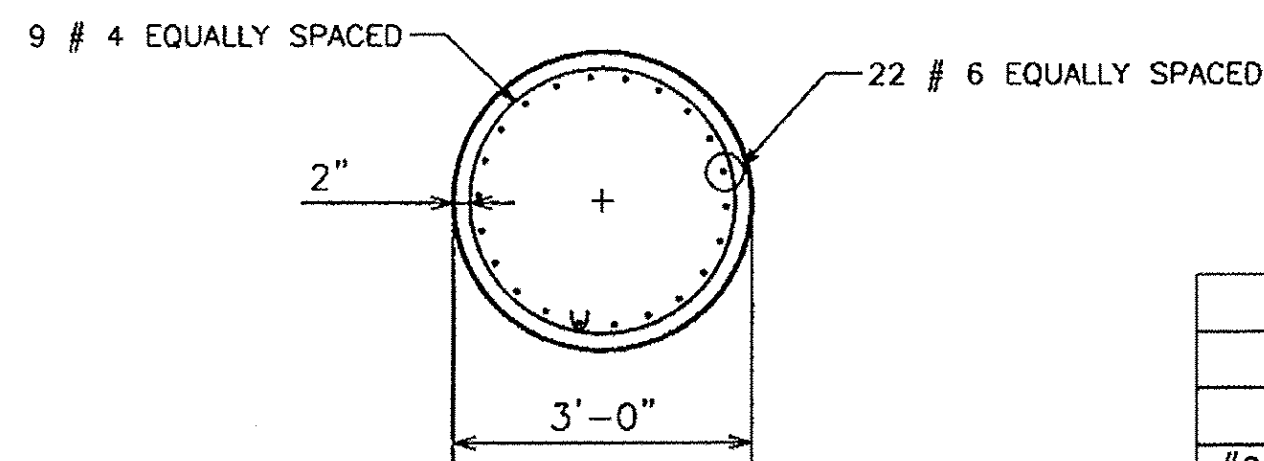
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SIGN 0.138 OH INTERCHANGE #6		CHECKED	
PROJECT NUMBER IMG SIGN(19)		DATE	12/22/09
ROYALTON - MIDDLESEX		SCALE	N.T.S.
VERMONT AGENCY OF TRANSPORTATION		HSC REFERENCE NO.	1729a
GENERAL CONTRACTOR		SIZE	D
		REVISION	0
SUB CONTRACTOR	CCS Constructors LLC	SHEET NO.	5 of 6



PLAN



ELEVATION



PLAN (STEM)

REBAR LIST

REBAR	PCS. REQD.	LENGTH	SPEC.
#4	18	9'-0"	A615 Gr. 60
#4	72	7'-6"	A615 Gr. 60
#6 (90° HOOK ONE END)	44	11'-6"	A615 Gr. 60
#5	112	15'-6"	A615 Gr. 60

INTERCHANGE #6 0.138 LT				
MK	QTY	DESCRIPTION	LENGTH	SPEC.
<b>TA1 TRUSS SECTION ASSEMBLY</b>				
PA1	1	4.500" O.D. x .237" WALL CHORD PIPE	29'-5.937"	A500 gr B, API 5LX42
PA2	1	4.500" O.D. x .237" WALL CHORD PIPE	33'-1.500"	A500 gr B, API 5LX42
PA3	1	4.500" O.D. x .237" WALL CHORD PIPE	33'-1.313"	A500 gr B, API 5LX42
ag1	21	L 3x3x.25"	4'-9.625"	A709 Gr 36
ag2	4	L 3x3x.25"	3'-5.500"	A709 Gr 36
pt1	6	0.375" THICK PLATE	5"x1'-3"	A709 Gr 50
pt2	18	0.375" THICK PLATE	5"x1'-8"	A709 Gr 50
pt3	4	0.375" THICK PLATE	5"x10"	A709 Gr 50
bar1	3	0.25" PLUG PLATE	2.25"x4.500"	A709 Gr 36
sp1	3	0.500" SPLICE PLATE	9.500" O.D.	A709 Gr 50
<b>TA2 TRUSS SECTION ASSEMBLY</b>				
PA4	1	4.500" O.D. x .237" WALL CHORD PIPE	29'-5.937"	A500 gr B, API 5LX42
PA5	1	4.500" O.D. x .237" WALL CHORD PIPE	33'-1.500"	A500 gr B, API 5LX42
PA6	1	4.500" O.D. x .237" WALL CHORD PIPE	33'-1.313"	A500 gr B, API 5LX42
ag1	21	L 3x3x.25"	4'-9.625"	A709 Gr 36
ag2	4	L 3x3x.25"	3'-5.500"	A709 Gr 36
pt1	6	0.375" THICK PLATE	5"x1'-3"	A709 Gr 50
pt2	18	0.375" THICK PLATE	5"x1'-8"	A709 Gr 50
pt3	4	0.375" THICK PLATE	5"x10"	A709 Gr 50
bar1	3	0.25" PLUG PLATE	2.25"x4.500"	A36
sp1	3	0.500" SPLICE PLATE	9.500" O.D.	A709 Gr 50
<b>1LT LEFT POST ASSEMBLY</b>				
po1	1	14" O.D. x .500" WALL PIPE	26'-3.750"	A500 gr B, API 5LX42
cp1	1	0.25" CAP PLATE	1'-2.500" O.D.	A36
gt	1	0.125" GASKET	14.5" O.D.-12.5" I.D.	50 DURO. NEOPRENE
bar3	1	L1.5x1.5x.25"	1'-1"	A36
hb1	1	0.500" DIA. HEX BOLT	2.500"	A307
wnt	1	0.500" DIA. HEX NUT		A563
rbw	1	0.500" DIA. RUBBER WASHER		50 DURO. NEOPRENE
gw	1	0.500" DIA. WASHER		F844
pt4	2	0.500" PLATE	8" x 6.500"	A709 Gr 50
pt5	4	0.500" PLATE	16" x 16"	A709 Gr 50
bar2	1	0.625" x 2.500" BAR	21.500"	A36
ga	1	0.125" GASKET	7.750" x 5.250"	50 DURO. NEOPRENE
fc	1	0.25" COVER PLATE	7.750" x 5.250"	A36
cb	4	0.375" DIA. HEX BOLT	1"	A307
lug	1	0.25" PLATE	1" x 1"	A36
bp1	1	2" BASE PLATE	2'-6" O.D.	A709 Gr 50

<b>1RT RIGHT POST ASSEMBLY</b>				
po2	1	14" O.D. x .500" WALL PIPE	32'-3.750"	A500 gr B, API 5LX42
cp1	1	0.25" CAP PLATE	1'-2.500" O.D.	A36
gt	1	0.125" GASKET	14.5" O.D.-12.5" I.D.	50 DURO. NEOPRENE
bar3	1	L1.5x1.5x.25"	1'-1"	A36
hb1	1	0.500" DIA. HEX BOLT	2.500"	A307
wnt	1	0.500" DIA. HEX NUT		A563
rbw	1	0.500" DIA. RUBBER WASHER		50 DURO. NEOPRENE
gw	1	0.500" DIA. WASHER		F844
pt4	2	0.500" PLATE	8" x 6.500"	A709 Gr 50
pt5	4	0.500" PLATE	16" x 16"	A709 Gr 50
bar2	1	0.625" x 2.500" BAR	21.500"	A36
ga	1	0.125" GASKET	7.750" x 5.250"	50 DURO. NEOPRENE
fc	1	0.25" COVER PLATE	7.750" x 5.250"	A36
cb	4	0.375" DIA. HEX BOLT	1"	A307
lug	1	0.25" PLATE	1" x 1"	A36
bp1	1	2" BASE PLATE	2'-6" O.D.	A709 Gr 50
<b>SIGN ASSEMBLY</b>				
sh1	4	W6x8.5	12'-6"	A36
sh2	4	W6x8.5	10'-0"	A36
ub2	32	0.5" DIA. U-BOLT	6.500"	F1554 Gr 36
sk1	64	0.5" DIA. SELF LOCKING NUT		A563 DH
sw1	64	0.5" DIA. FALT WASHER		F436
<b>HARDWARE</b>				
sbt1	24	0.625" DIA. SPLICE HEX BOLT	2.250"	A325
snt1	24	0.625" DIA. HEX NUT		A563 DH
swr1	48	0.625" DIA. WASHER		F436
ub1	8	0.75" DIA. U-BOLT	7.500"	F1554 Gr 36
un1	16	0.75" DIA. LOCK NUT		A563 DH
uw1	16	0.75" DIA. FALT WASHER		F436
<b>ANCHOR BOLT</b>				
an1	12	2" DIA. STUD	3'-8"	S/S A276 TY304
nt	48	2" DIA. HEX NUT		S/S A194B TY304
wr	12	2" DIA. WASHER		S/S TY304
lk	12	2" DIA. LOCK WASHER		S/S TY305
anp	12	1" PLATE WASHER	4" x 4"	S/S TY305



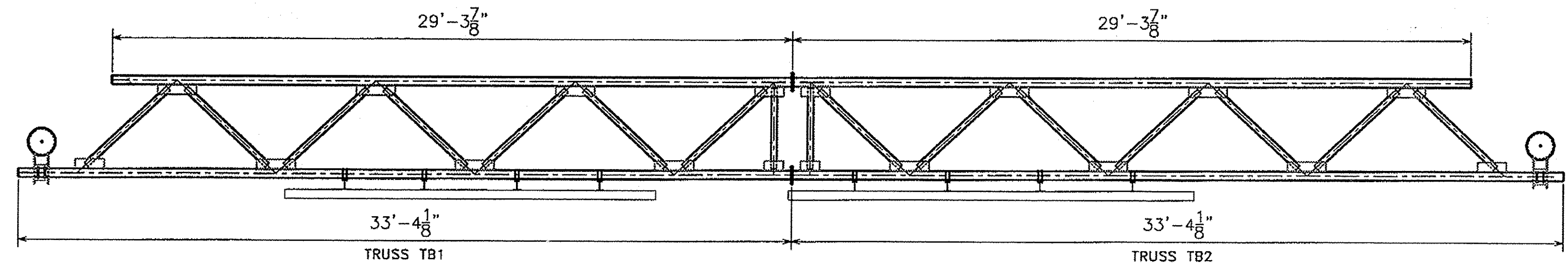
**HIGHWAY SAFETY CORP.**  
GLASTONBURY, CT

TRI CHORD OVERHEAD SIGN STRUCTURE  
SIGN 0.138 OH INTERCHANGE #6  
PROJECT NUMBER IMG SIGN(19)  
ROYALTON - MIDDLESEX  
VERMONT AGENCY OF TRANSPORTATION

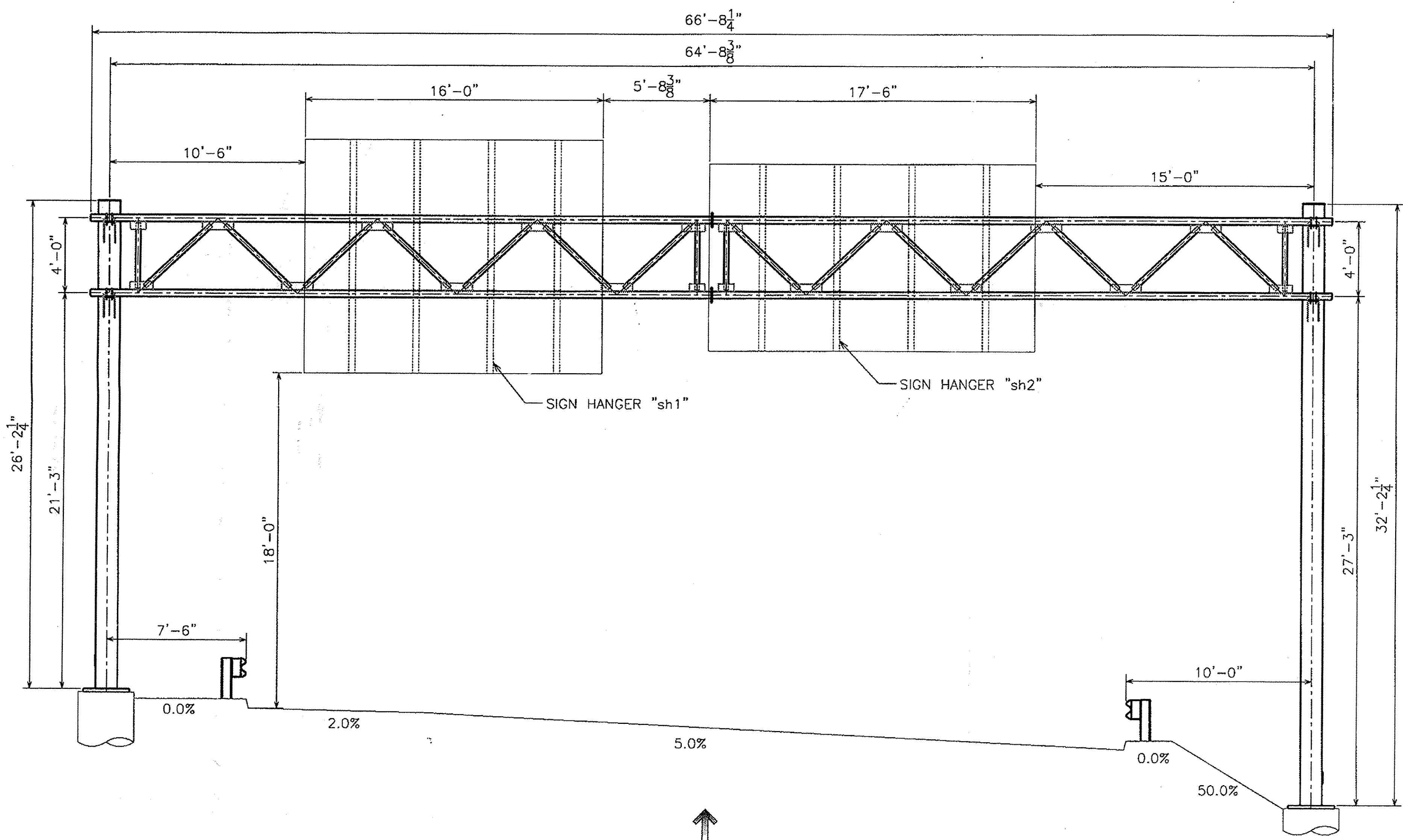
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SUB CONTRACTOR  
CCS Constructors LLC

DRAWN: MHM  
CHECKED:  
DATE: 12/22/09  
SCALE: NTS  
NSC REFERENCE NO.: 1729a  
SHEET NO.: 6 of 6

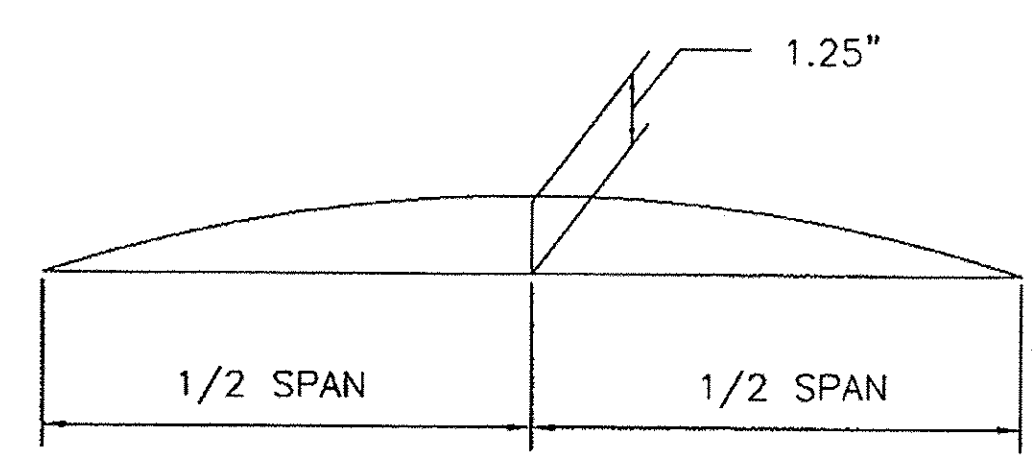
REVISIONS		
No.	Remarks	Date
0	Initial submittal	



(A) VIEW



ELEVATION  
INTERCHANGE 7  
LOOKING AT FACE OF SIGN  
(OUT OF PLANE CHORDS NOT SHOWN FOR CLARITY)  
*Berlin Exit 7*

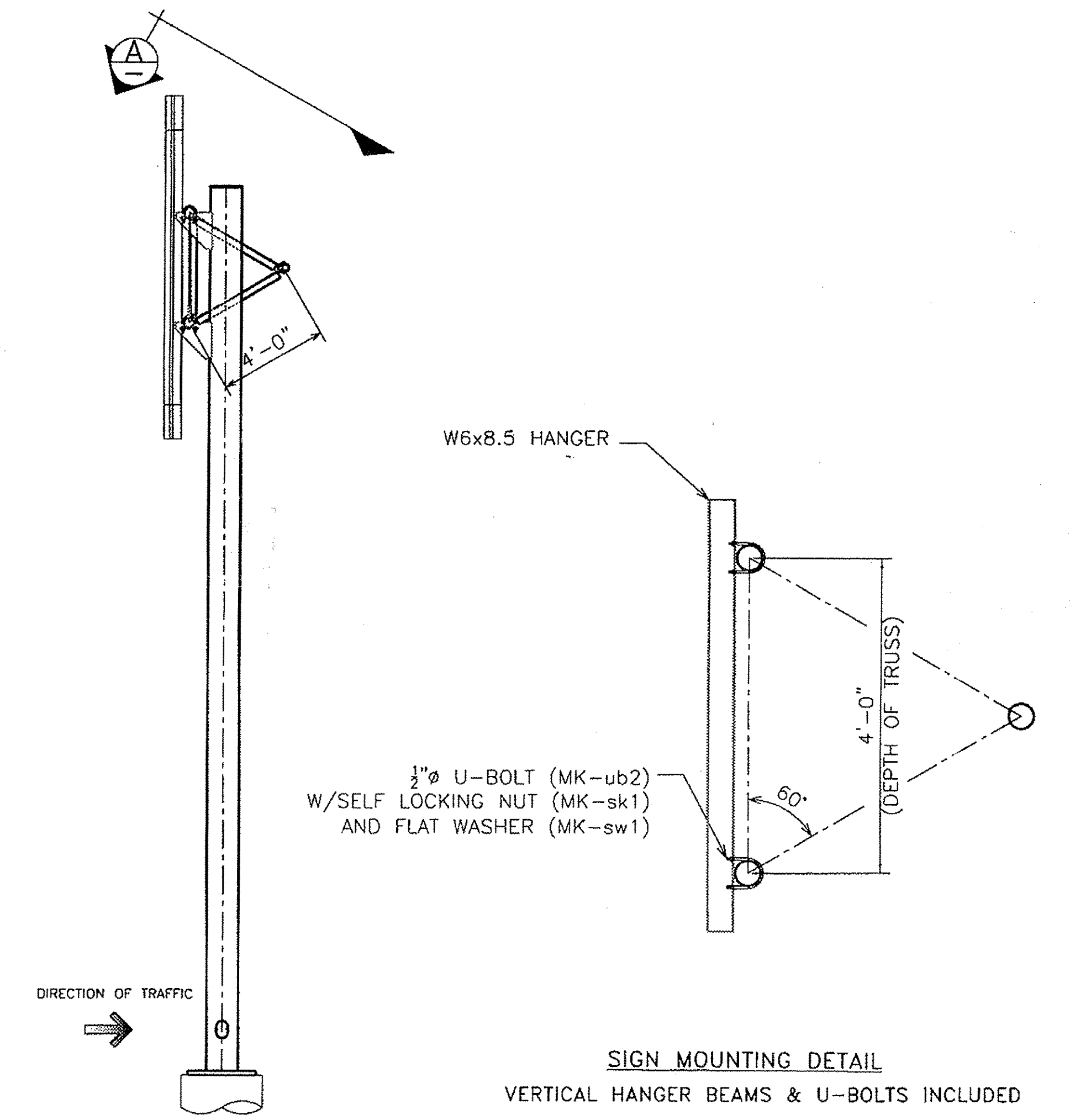


CAMBER DIAGRAM

NOTE:  
CAMBER WILL BE ACHIEVED BY SHORTENING LOWER CHORD PIPES BY AN AMOUNT SUCH THAT POSITIVE UPWARD DEFLECTION IS PRODUCED WHEN TRUSSES ARE BROUGHT TOGETHER AT SPLICES.

*Handwritten signature*

REVISIONS		
No.	Remarks	Date
0	Initial submittal	



SIDE ELEVATION

NOTE:  
POST HEIGHT WAS SCALED OF THE CONTRACT DRAWINGS. CONTRACTOR TO VERIFY POST HEIGHT PRIOR TO FABRICATION.

SIGN MOUNTING DETAIL  
VERTICAL HANGER BEAMS & U-BOLTS INCLUDED

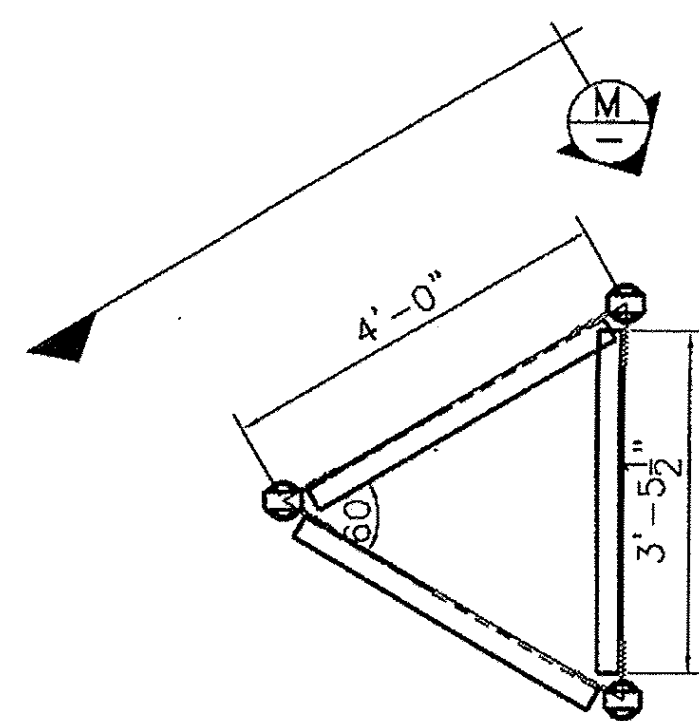
CCS Constructors LLC  
138 Munson Avenue  
Monroville VT 05361  
Ph: 802-858-7701 F: 802-888-4746



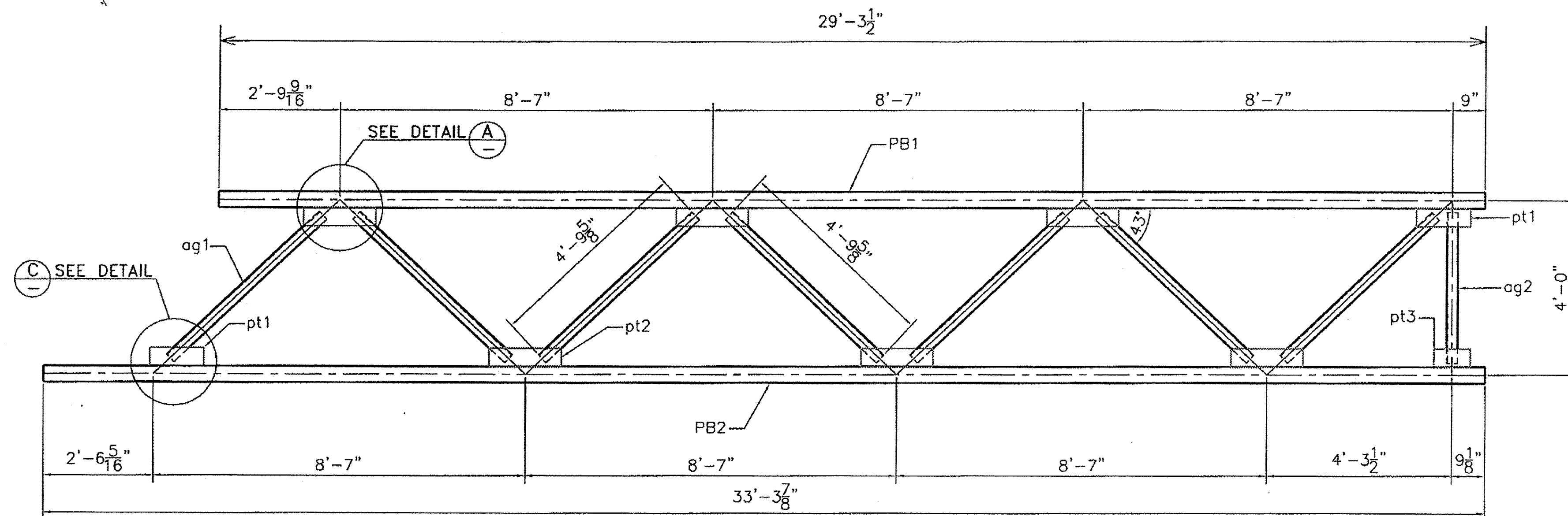
**HIGHWAY SAFETY CORP.**  
GLASTONBURY, CT

TRI CHORD OVERHEAD SIGN STRUCTURE  
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PROJECT NUMBER IMG SIGN(19)  
ROYALTON - MIDDLESEX  
VERMONT AGENCY OF TRANSPORTATION

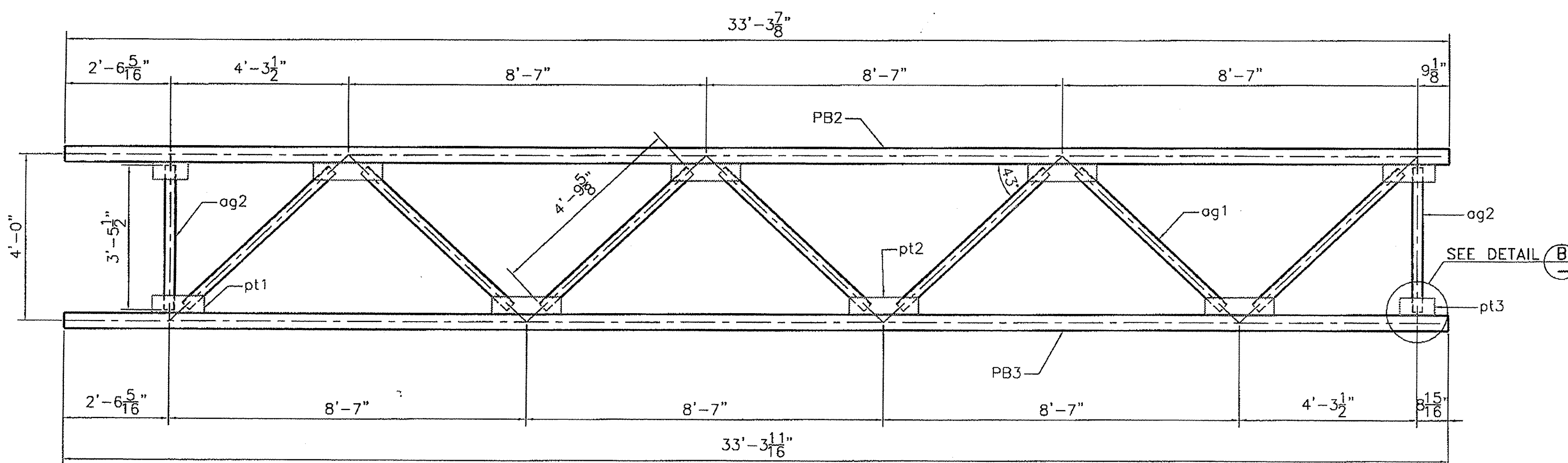
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DATE	12/22/09
SCALE	N.T.S.
PROJECT REFERENCE NO.	1729b
GENERAL CONTRACTOR	SIZE D REVISION 0
SUB CONTRACTOR	SHEET NO. 1 of 6



SIDE VIEW

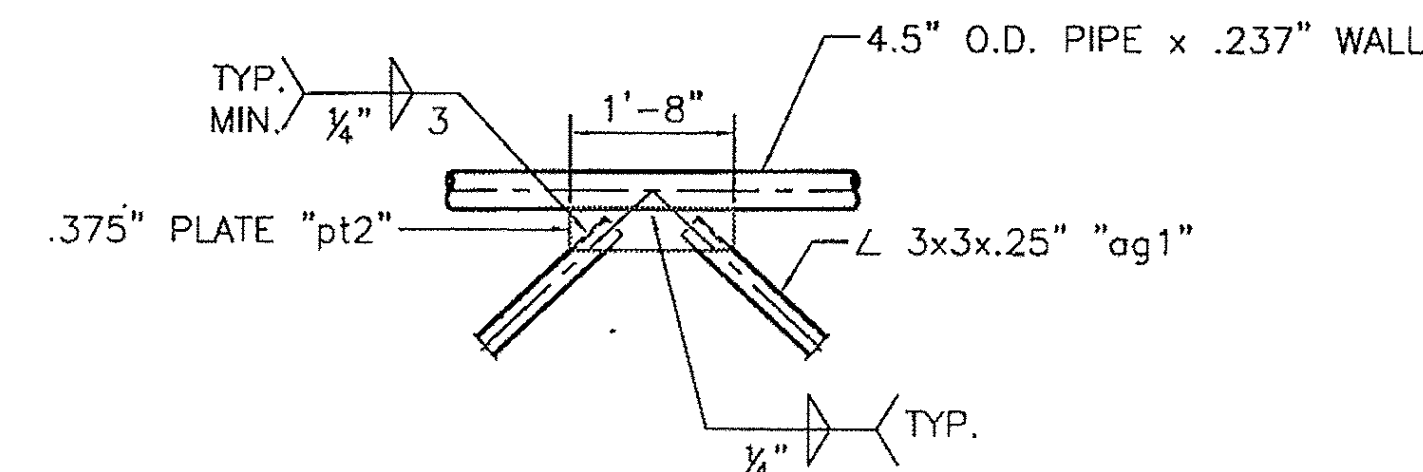


M VIEW

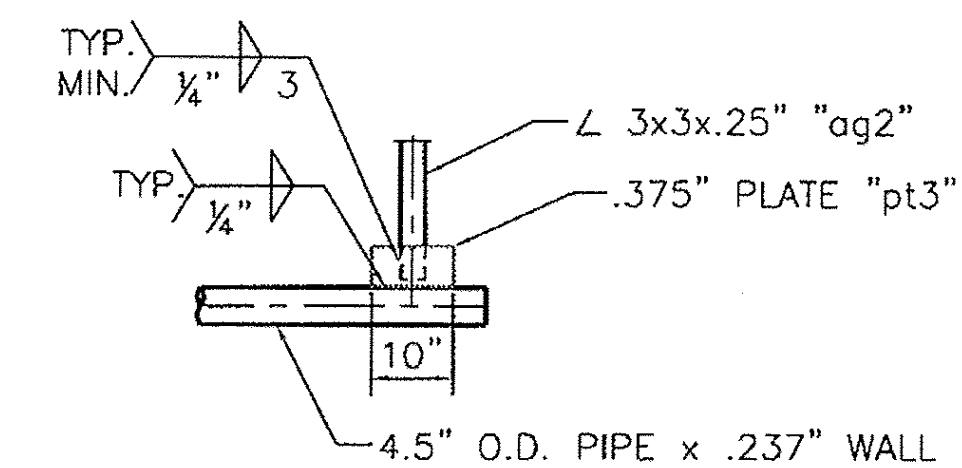


FRONT VIEW

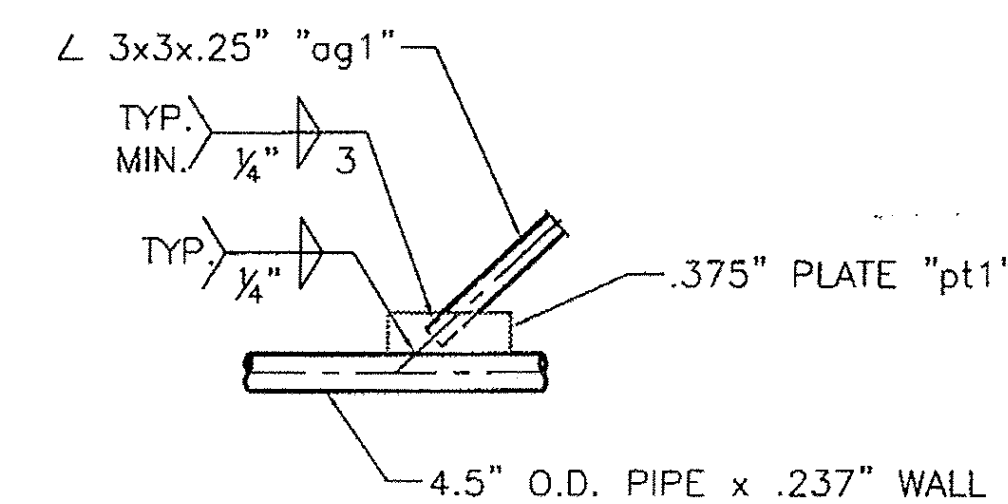
TRUSS TB1



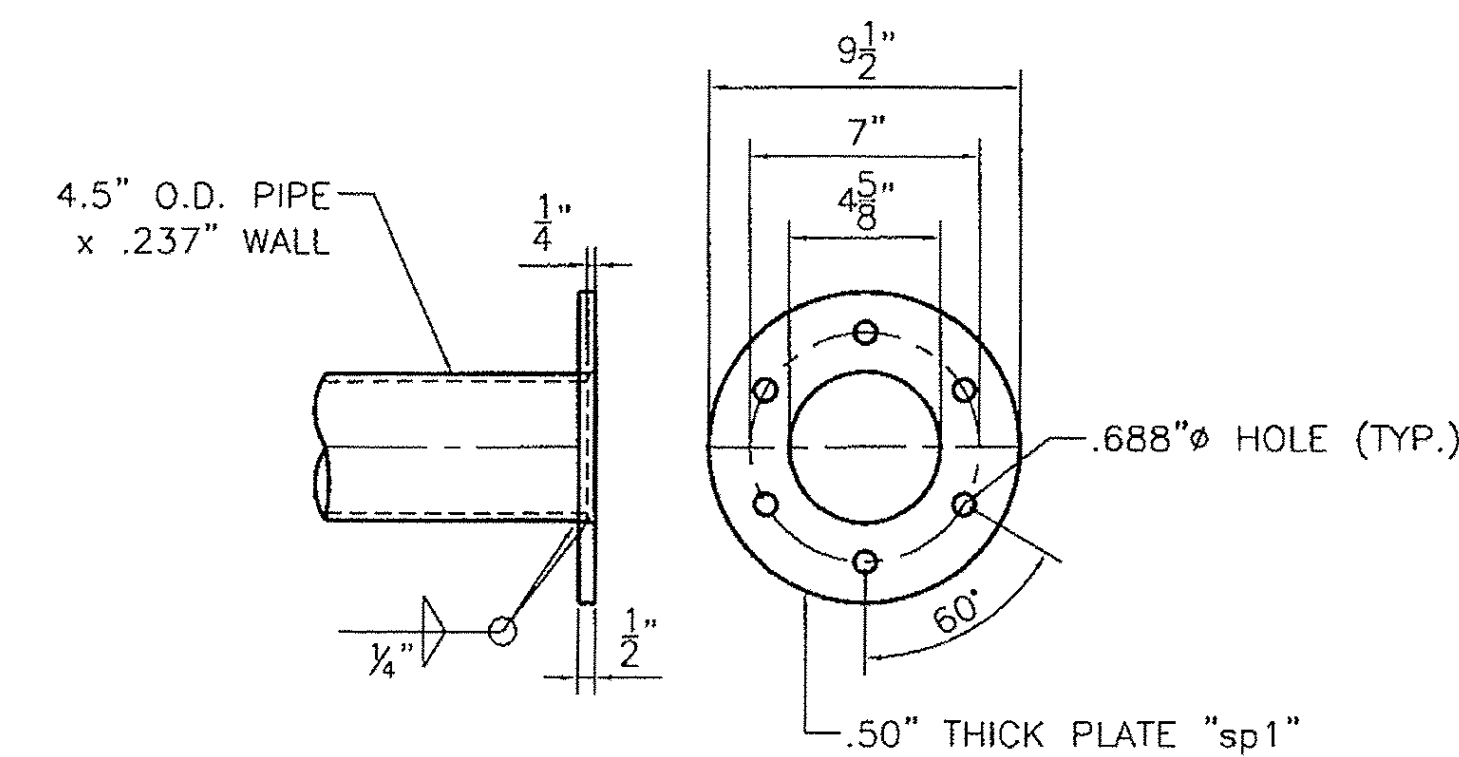
DETAIL "A"



DETAIL "B"



DETAIL "C"



SPLICE DETAIL



**HIGHWAY SAFETY CORP.**  
GLASTONBURY, CT

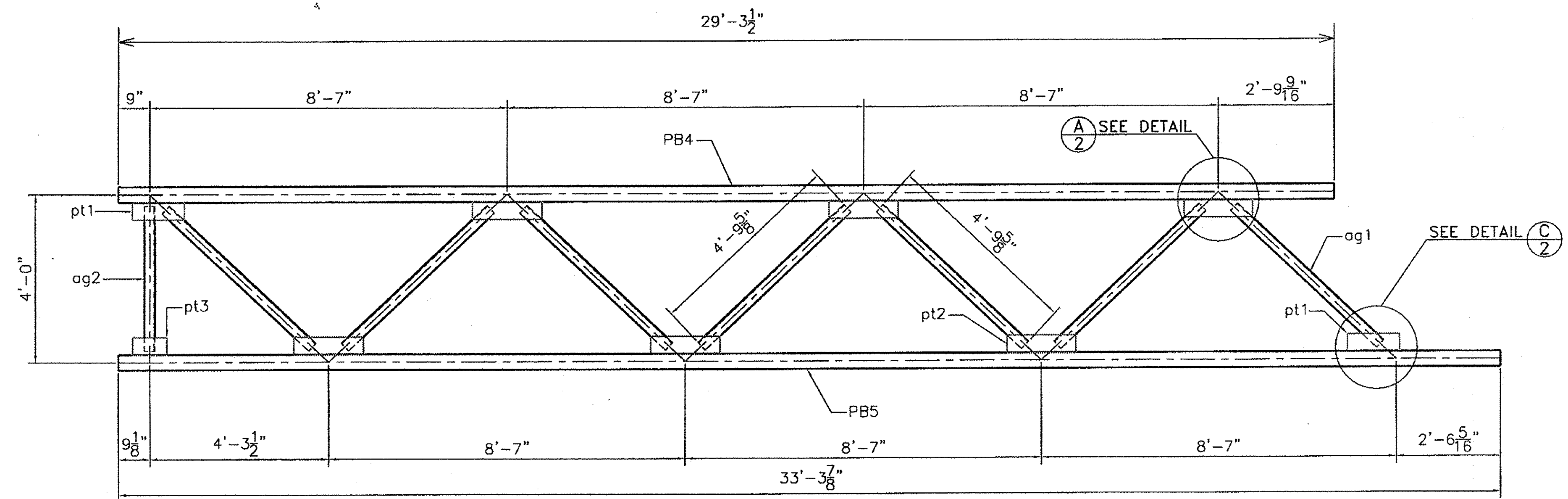
TRI CHORD OVERHEAD SIGN STRUCTURE  
SIGN 0.115 OH INTERCHANGE #7  
PROJECT NUMBER IMG SIGN(19)  
ROYALTON - MIDDLESEX  
VERMONT AGENCY OF TRANSPORTATION

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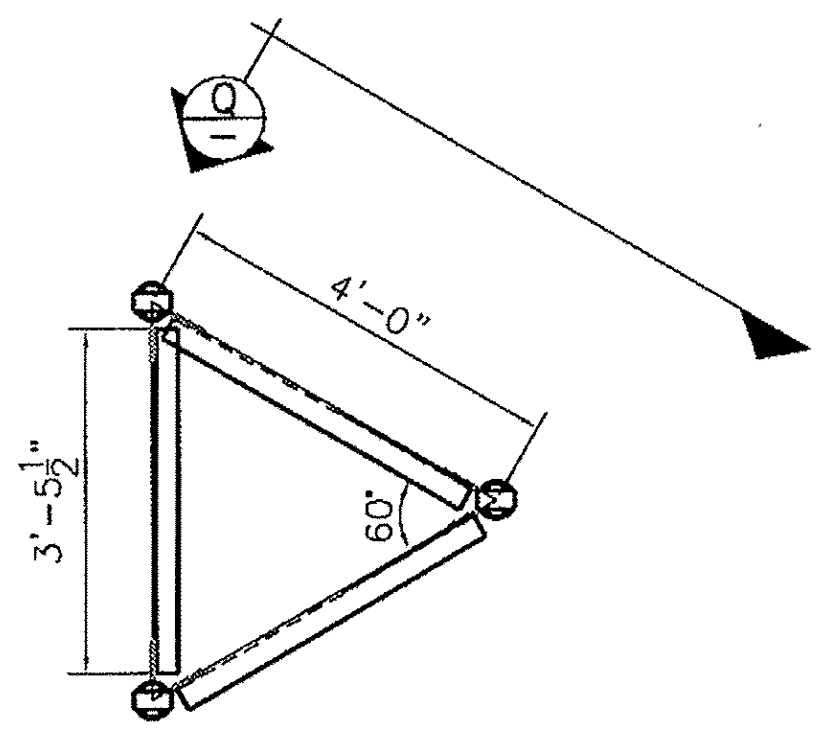
GENERAL CONTRACTOR:  
SUB CONTRACTOR: CCS Constructors LLC

SIZE: D REVISION: 0  
SHEET NO.: 2 of 6

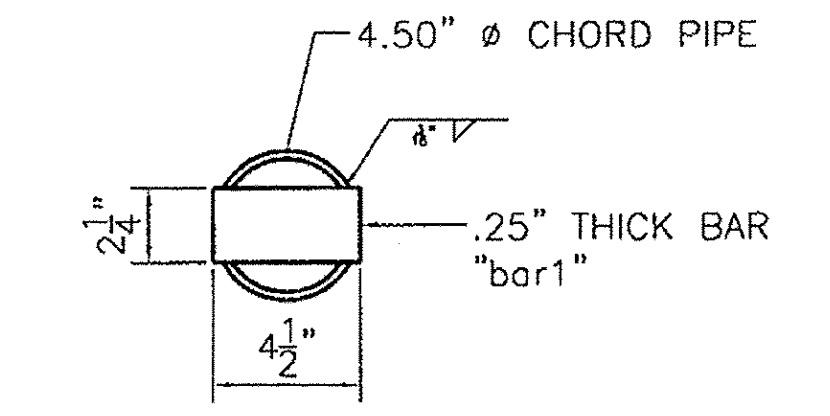
REVISIONS		
No.	Remarks	Date
0	Initial submittal	



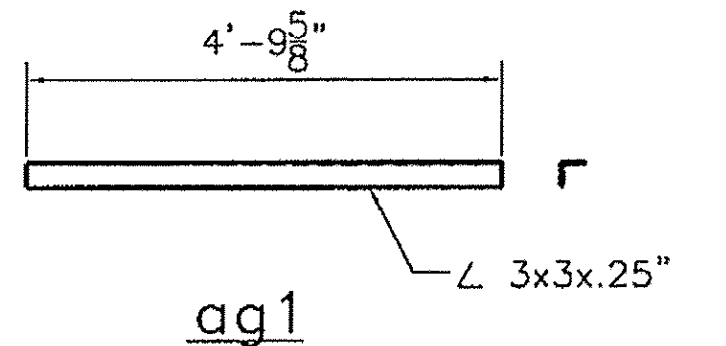
VIEW Q



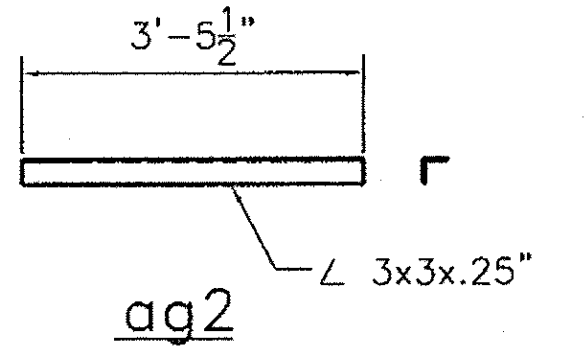
SIDE VIEW



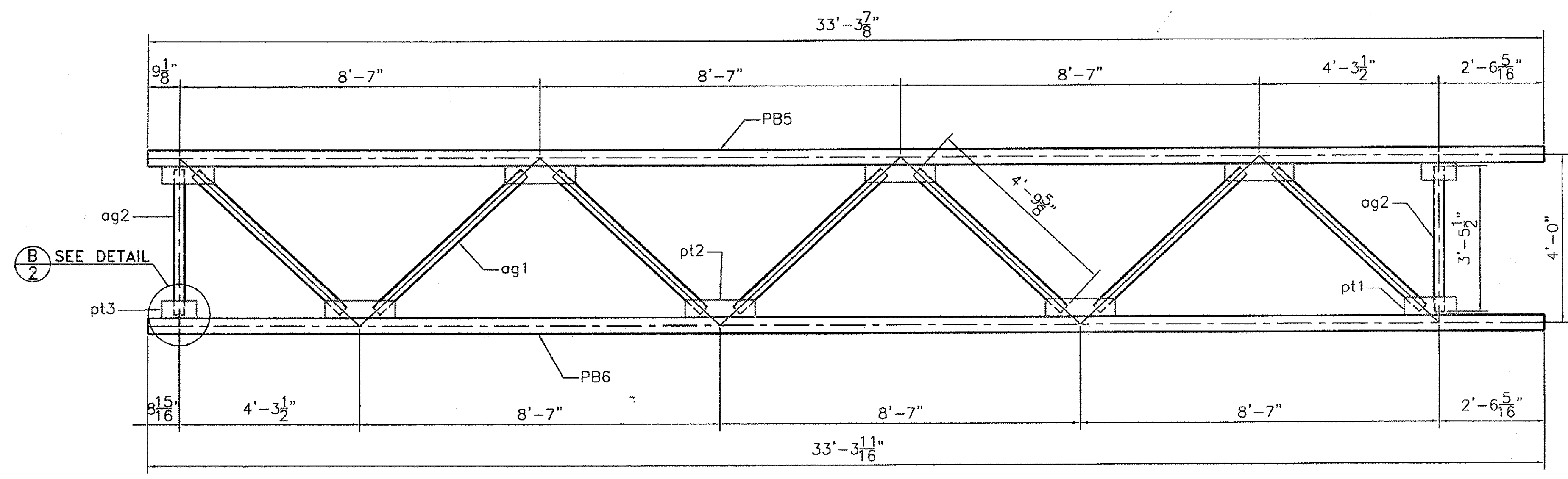
PIPE PLUG DETAIL  
"EACH END OF TRUSS CHORD"



ag1



ag2



FRONT VIEW

TRUSS TB2



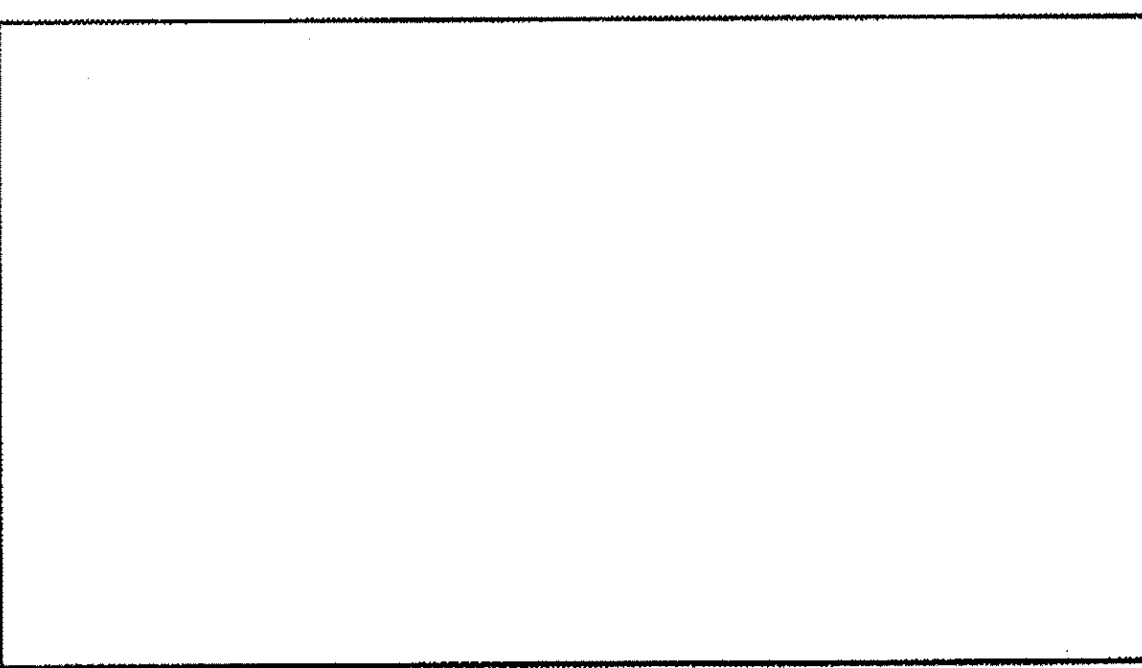
**HIGHWAY SAFETY CORP.**  
GLASTONBURY, CT

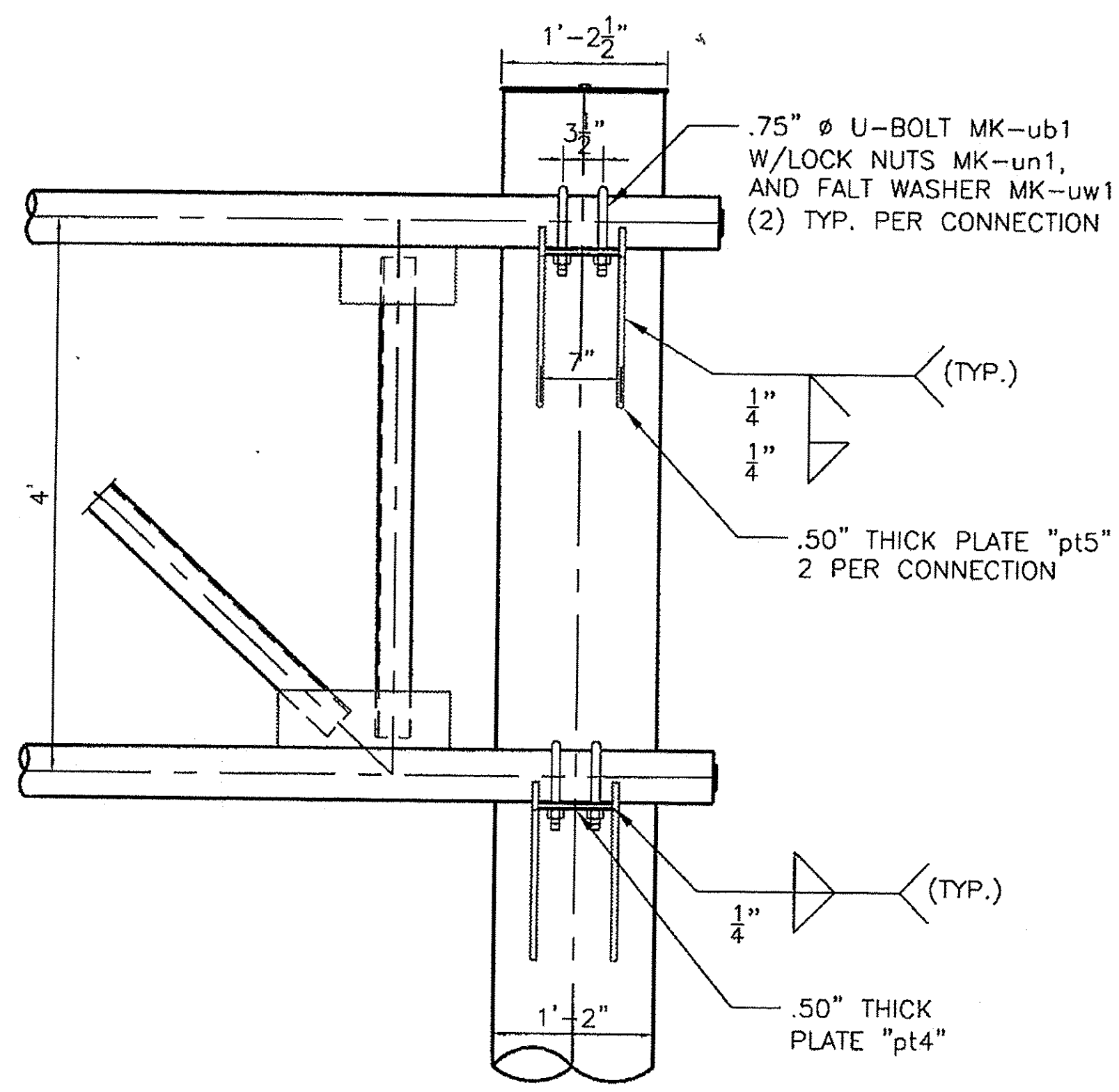
TRI CHORD OVERHEAD SIGN STRUCTURE  
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PROJECT NUMBER IMG SIGN(19)  
ROYALTON - MIDDLESEX  
VERMONT AGENCY OF TRANSPORTATION

GENERAL CONTRACTOR  
SUB CONTRACTOR

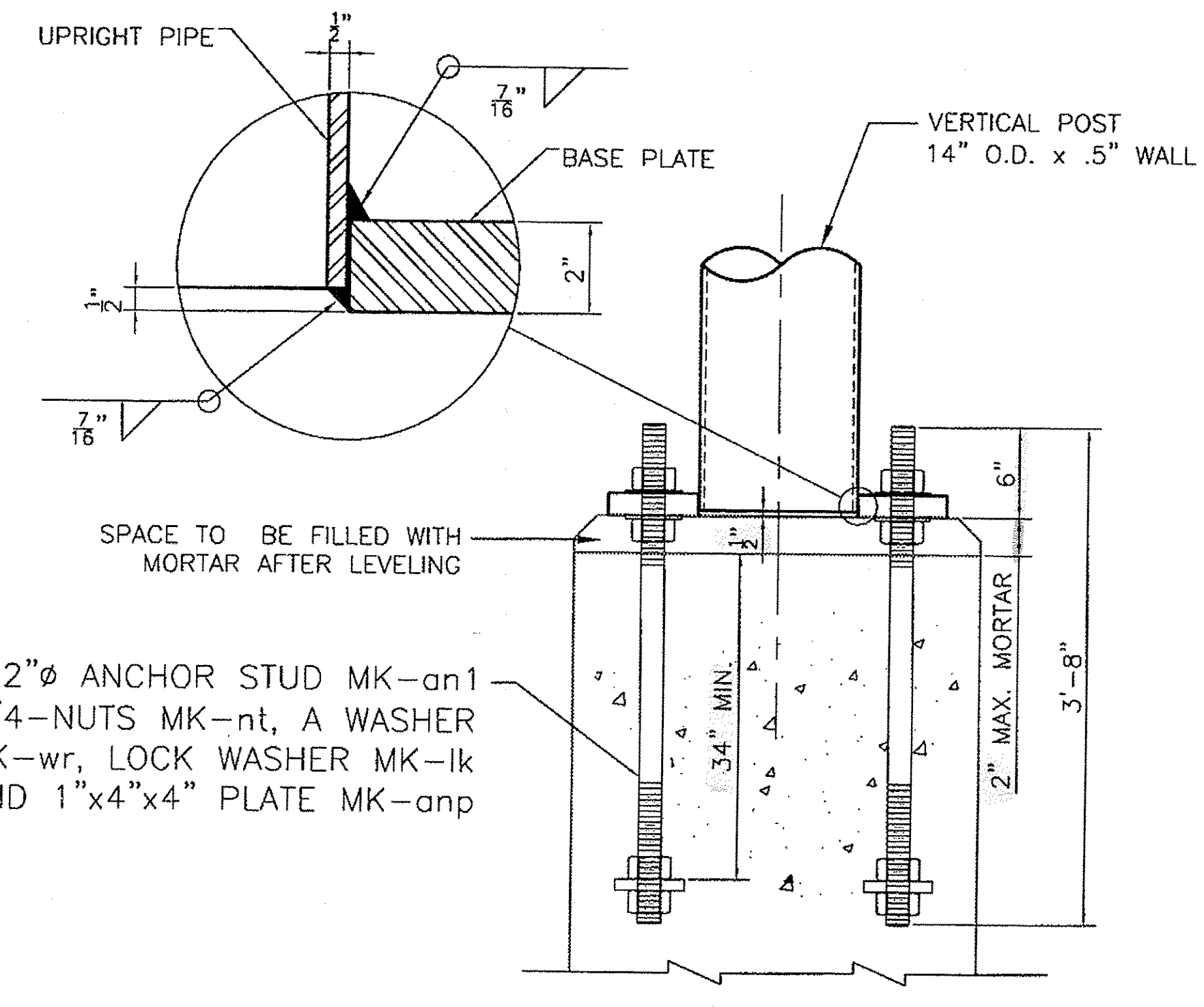
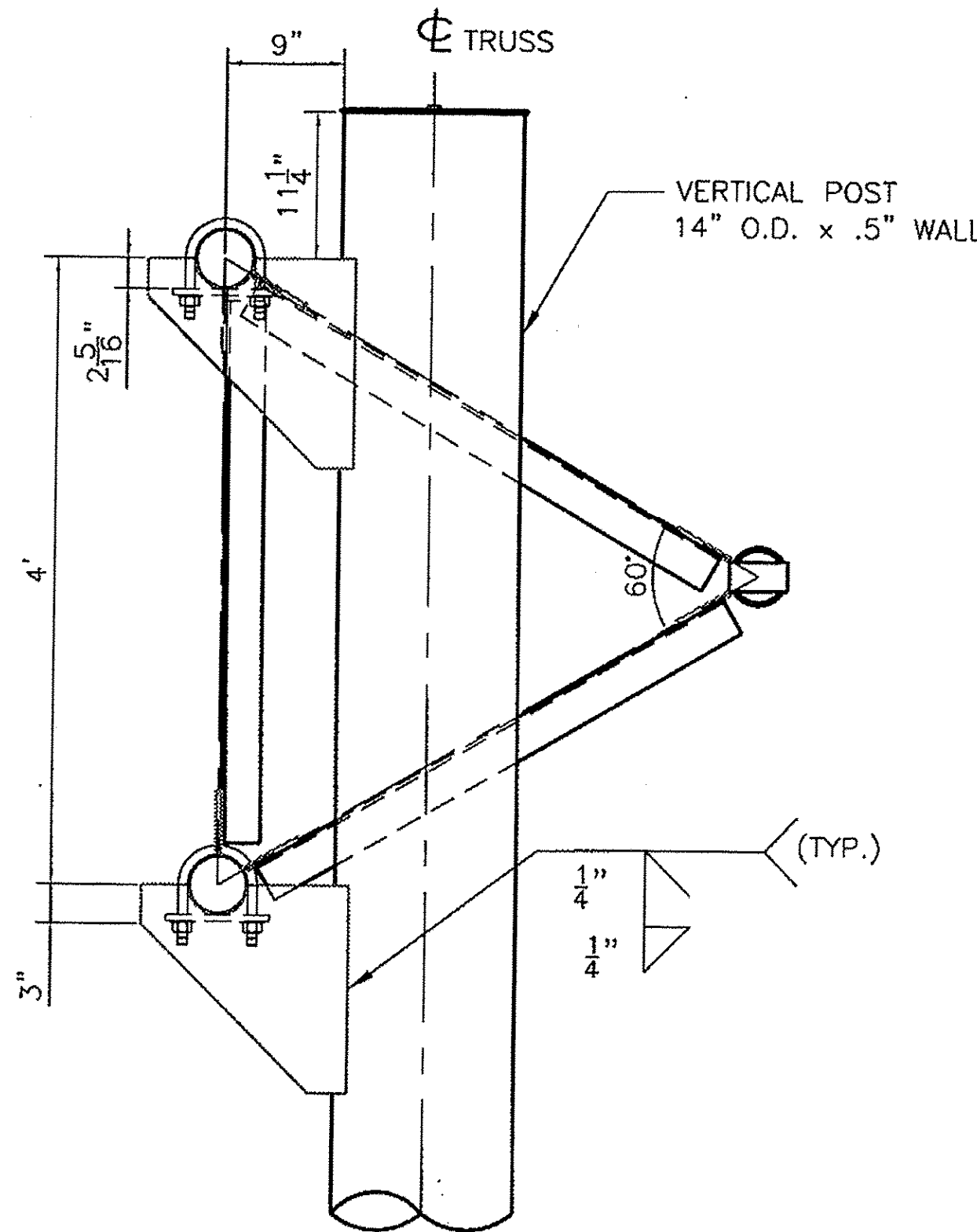
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SCALE: NTS  
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SHEET NO.: 3 of 6

REVISIONS		
No.	Remarks	Date
0	Initial submittal	



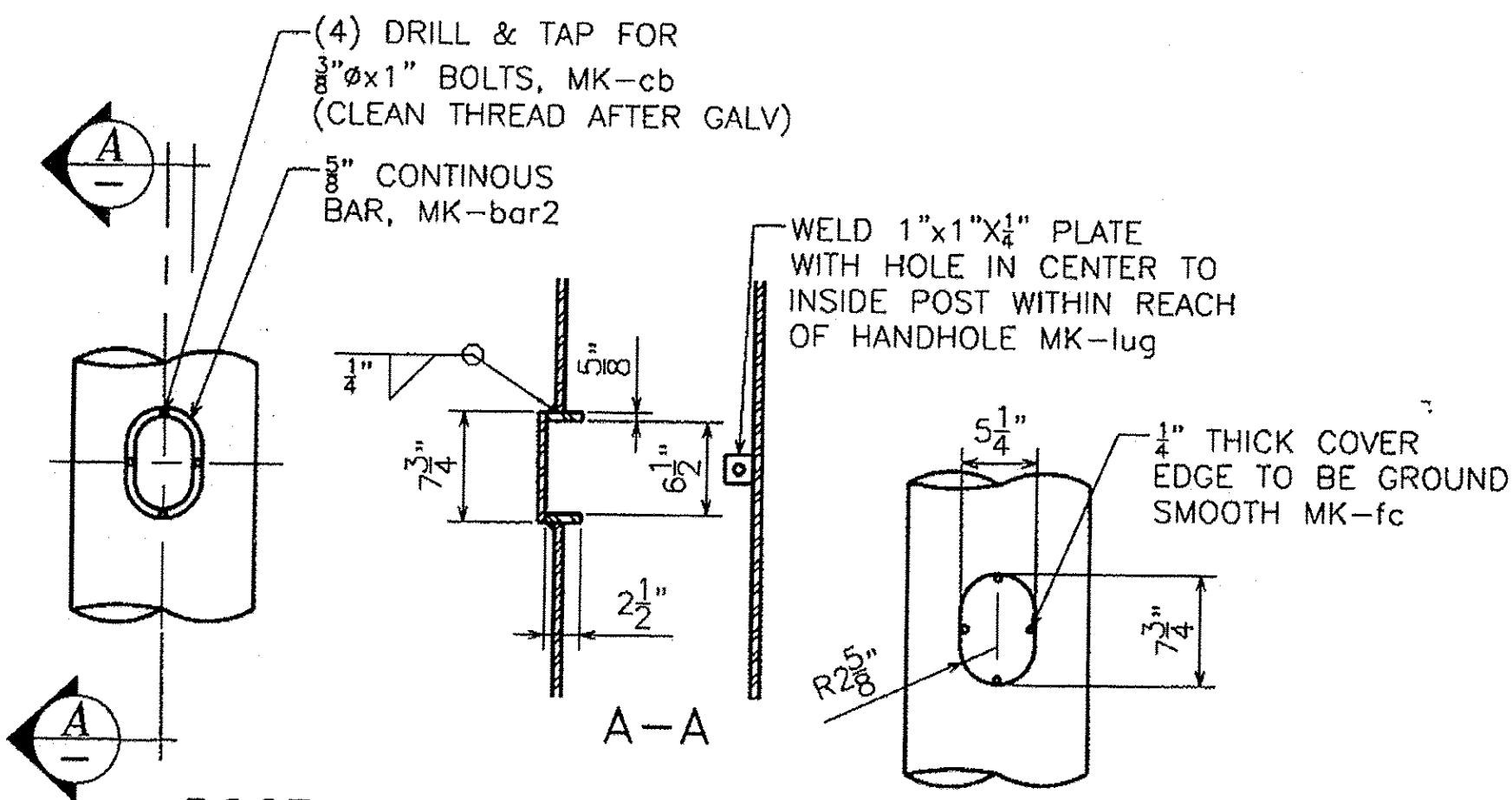


TRUSS CONNECTION DETAIL



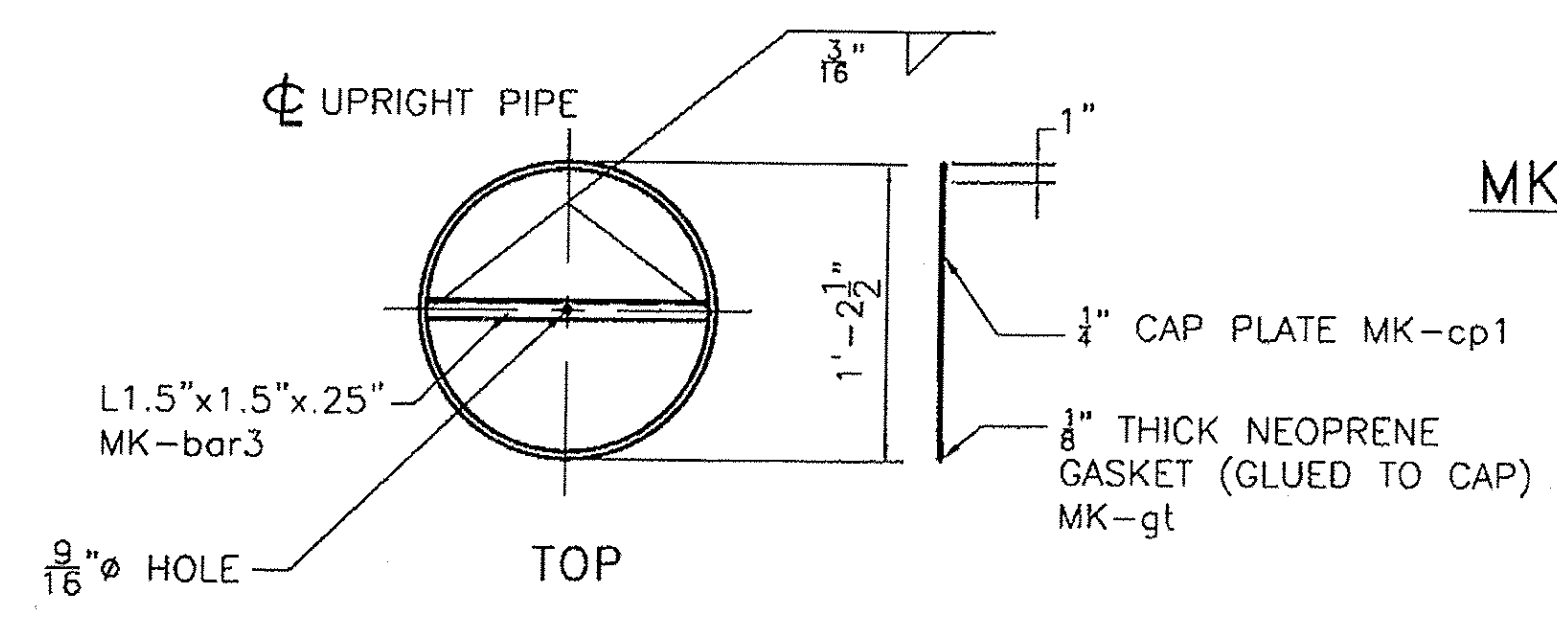
ANCHORAGE ASSEMBLY

- NOTE:**
1. STRUCTURE DESIGNED IN ACCORDANCE WITH LATEST EDITION AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINARIES AND TRAFFIC SIGNALS. DATED 2006 OR ITS LATEST REVISION.
  2. ALL HOLES FOR HIGH STRENGTH FASTENERS SHALL BE DRILLED OR SUB-PUNCHED FULL SIZE. SLOTTED HOLES AND/OR VENT OR ACCESS HOLES MAY BE CUT WITH MECHANICALLY GUIDED PLASMA OR MECHANICALLY GUIDED FLAME TORCH.
  3. GRIND SHARP CORNERS OF ALL PLATES TO A 1/16" MIN. RADIUS PRIOR TO GALVANIZING.
  4. ALL WELDING SHALL BE PERFORMED BY QUALIFIED WELDERS IN ACCORDANCE WITH AWS D1.1.
  5. ALL STEEL PLATES FOR STRUCTURAL COMPONENTS SHALL BE ASTM A709 GR. 50.
  6. STEEL PLATES AND SHAPES FOR NON-STRUCTURAL COMPONENTS SHALL BE ASTM A709 GR. 36.
  7. STEEL PIPES FOR STRUCTURAL MEMBERS SHALL HAVE MINIMUM YIELD OF 42 ksi AND SHALL CONFORM TO ONE OF THE FOLLOWING GRADES: ASTM A500 GR. B, OR API 5LX42.
  8. UNLESS OTHERWISE NOTED, ALL BOLTS FOR STRUCTURAL CONNECTIONS SHALL BE M164 TYPE 1 (A325).
  9. GALVANIZED U-BOLTS FOR CONNECTION OF SIGN HANGER BEAMS TO TRUSS SHALL BE ASTM F-1554 GR. 36.
  10. ALL STRUCTURAL STEEL SHALL BE HOT-DIPPED GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH AASHTO M111 (ASTM A123).
  11. ALL HARDWARE, UNLESS OTHERWISE NOTED, SHALL BE HOT-DIPPED GALVANIZED PER AASHTO M232 (ASTM A153).
  12. ANCHOR HARDWARE SHALL BE STAINLESS STEEL AND MEET REQUIREMENTS OF VAOT STANDARD SPECIFICATION 714.09.
  13. CONCRETE AND REBAR SHOWN IN FOOTING DESIGN TO BE FURNISHED BY OTHERS.
  14. FOUNDATION DESIGN BASED ON USE OF 3000 psi MINIMUM CONCRETE.
  15. SPACE BETWEEN THE TOP OF CONCRETE AND THE BOTTOM OF STEEL BASE PLATE SHALL BE FILLED WITH TYPE IV MORTAR AFTER LEVELING.
  16. BOLTS INSTALLED IN STRUCTURAL CONNECTIONS SHALL BE PROVIDED AND TENSIONED PER APPLICABLE PROVISIONS OF VAOT STANDARD SPECIFICATIONS SECTION 506.
  17. SEAL WELD ALL CONNECTIONS WHEN POSSIBLE PRIOR TO GALVANIZING.



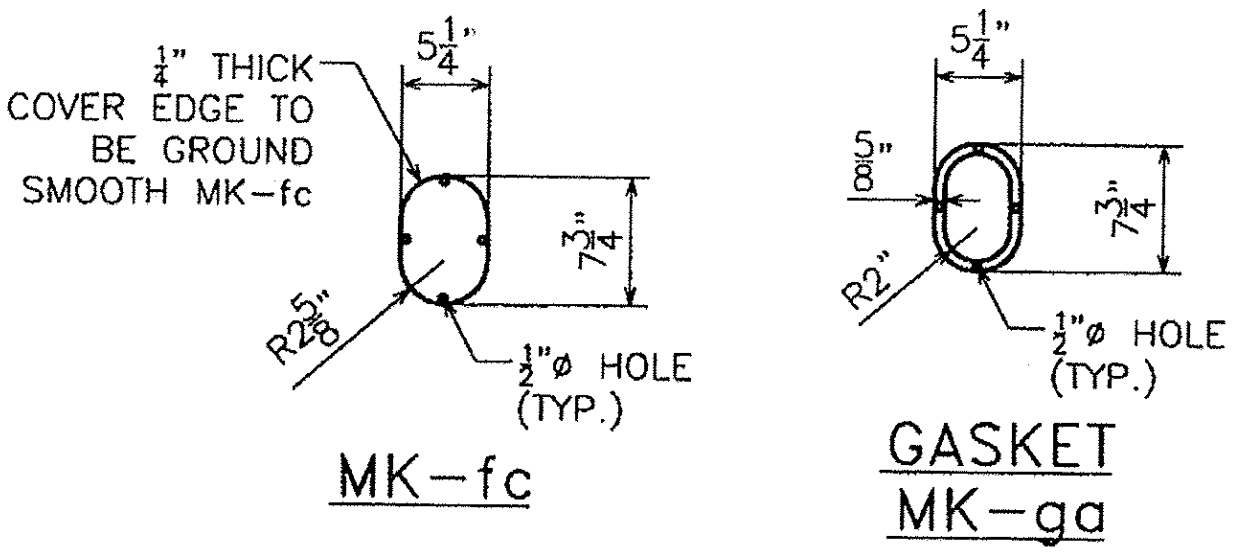
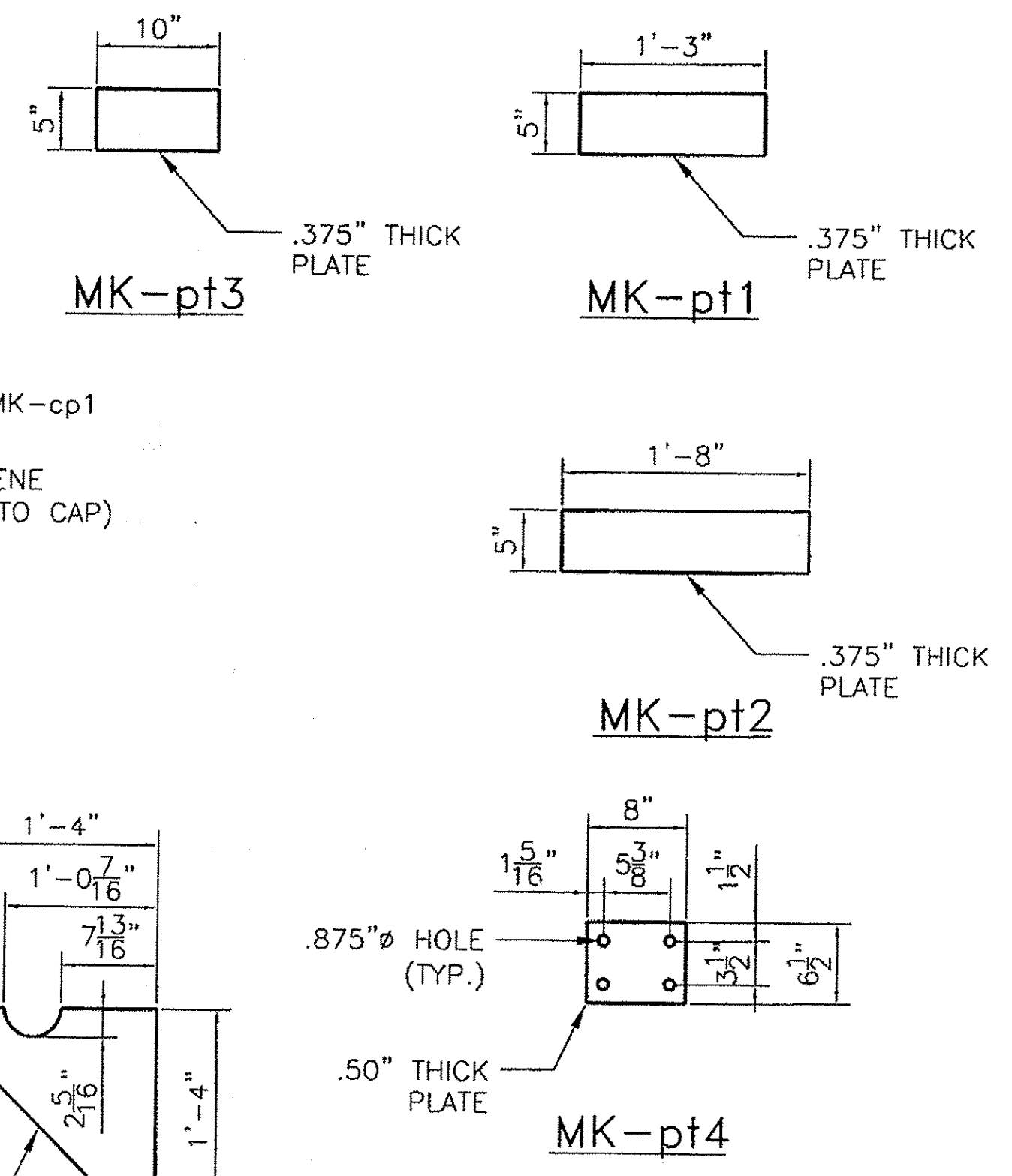
POST HANDHOLE DETAIL

PLACE ON SIDE OF POLE AWAY FROM APPROACHING TRAFFIC

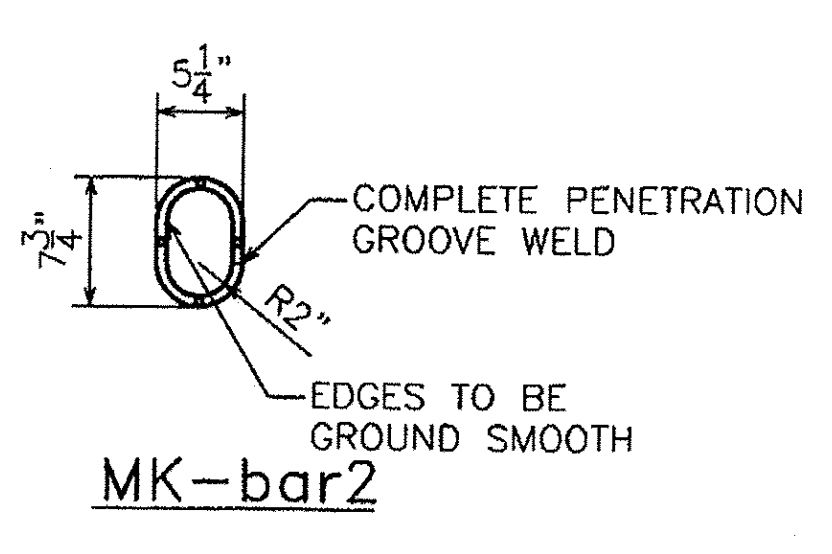


UPRIGHT CAP DETAIL

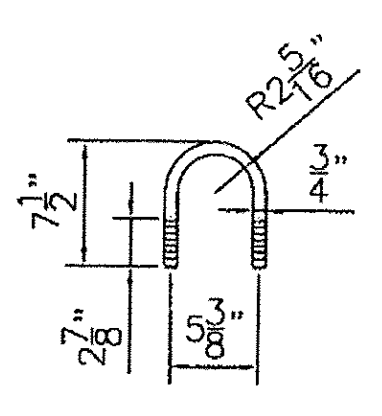
ASSEMBLE CAP TO POST PRIOR TO SHIPPING.



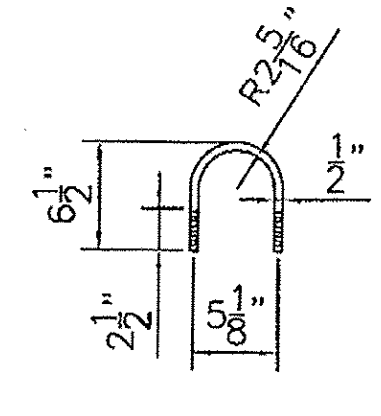
GASKET MK-ga



MK-bar2



MK-ub1



MK-ub2

REVISIONS		
No.	Remarks	Date
0	Initial submittal	

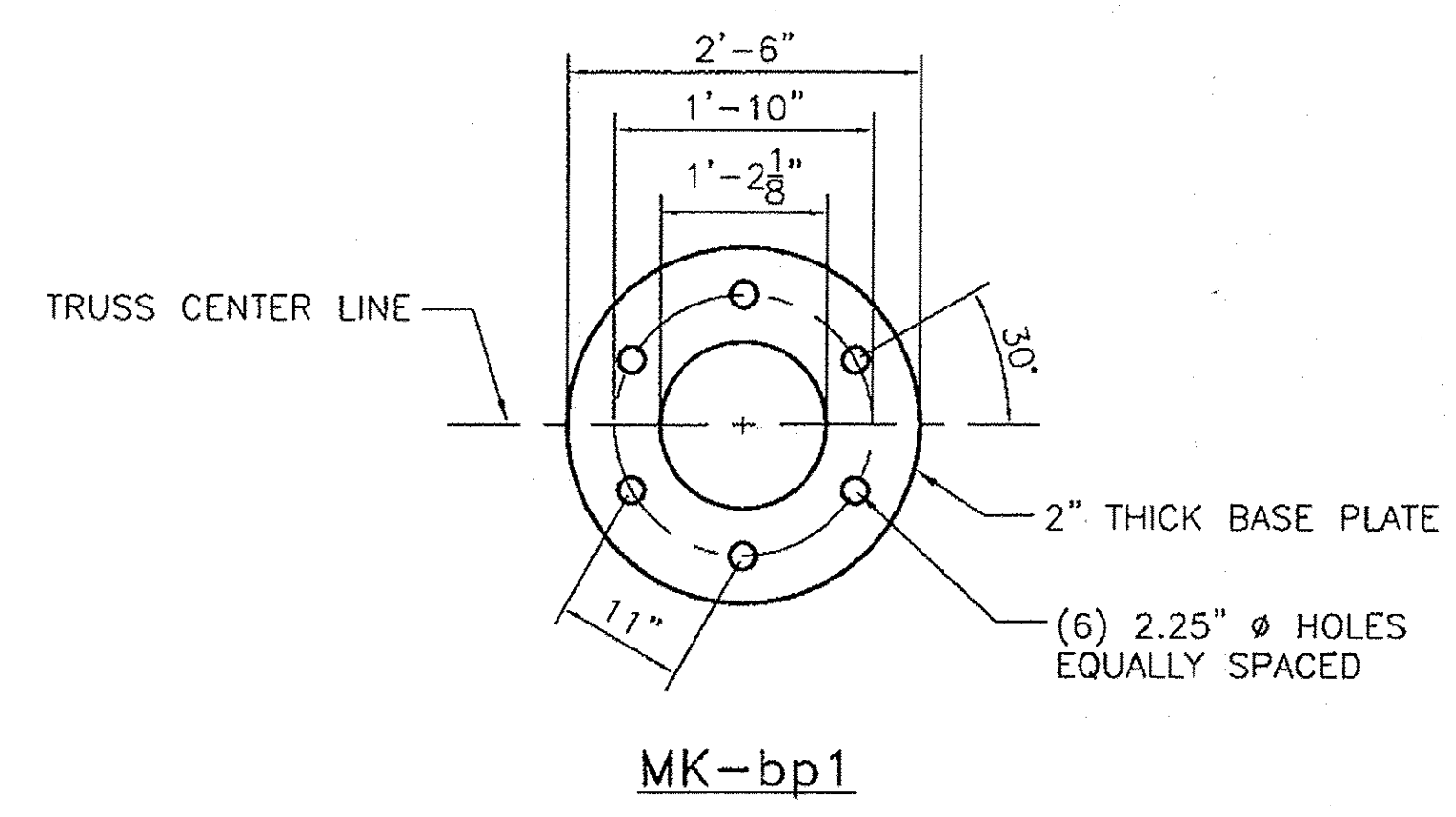
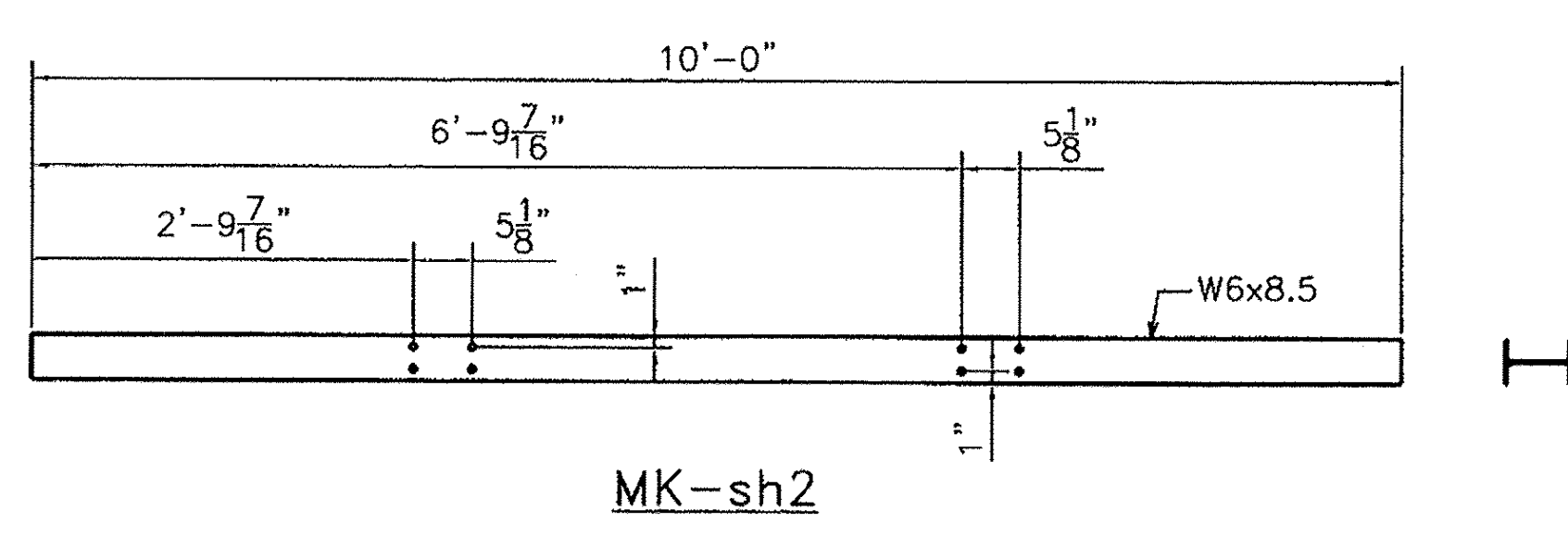
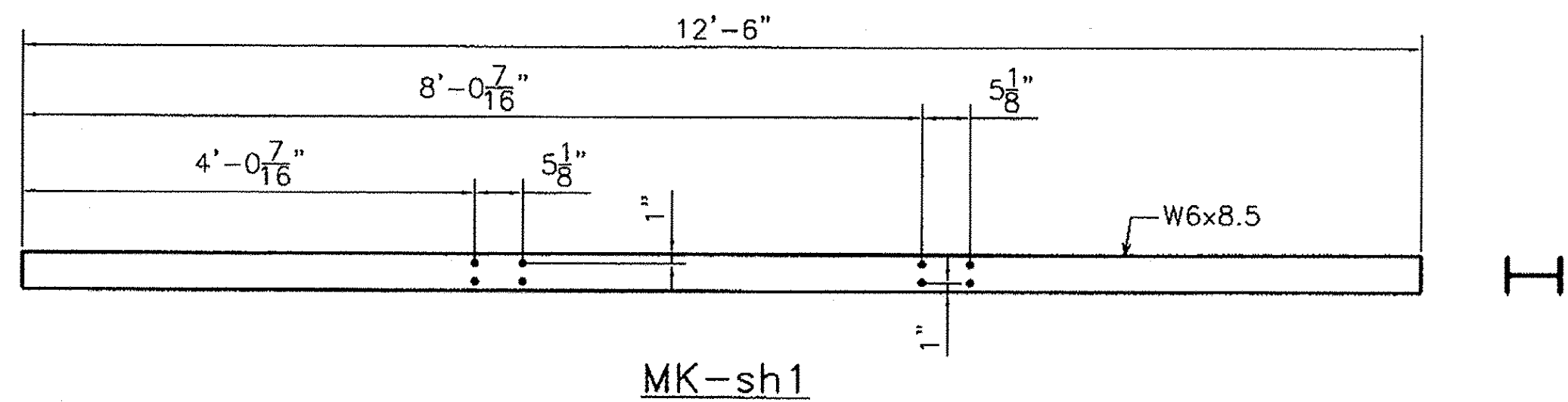
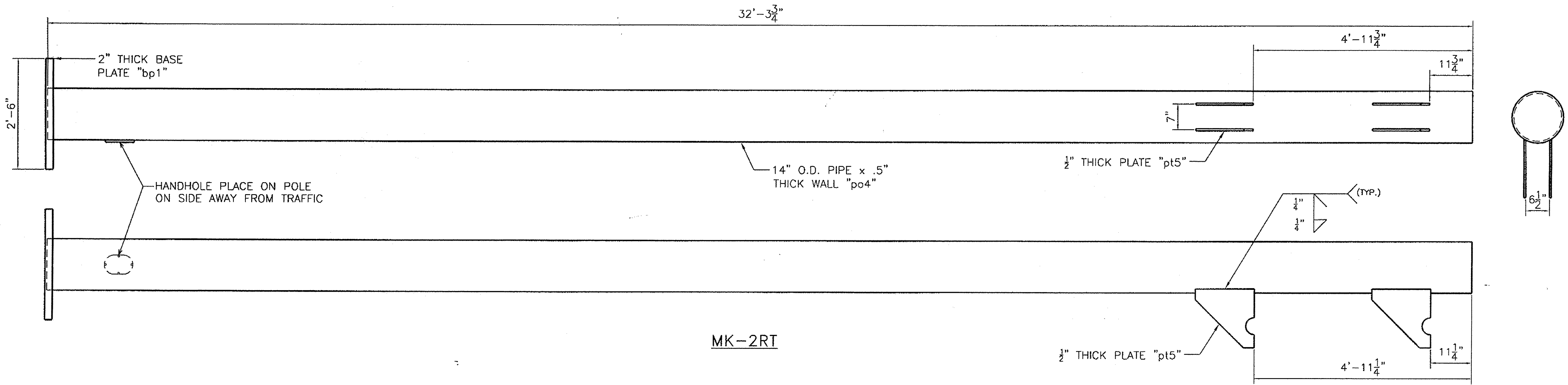
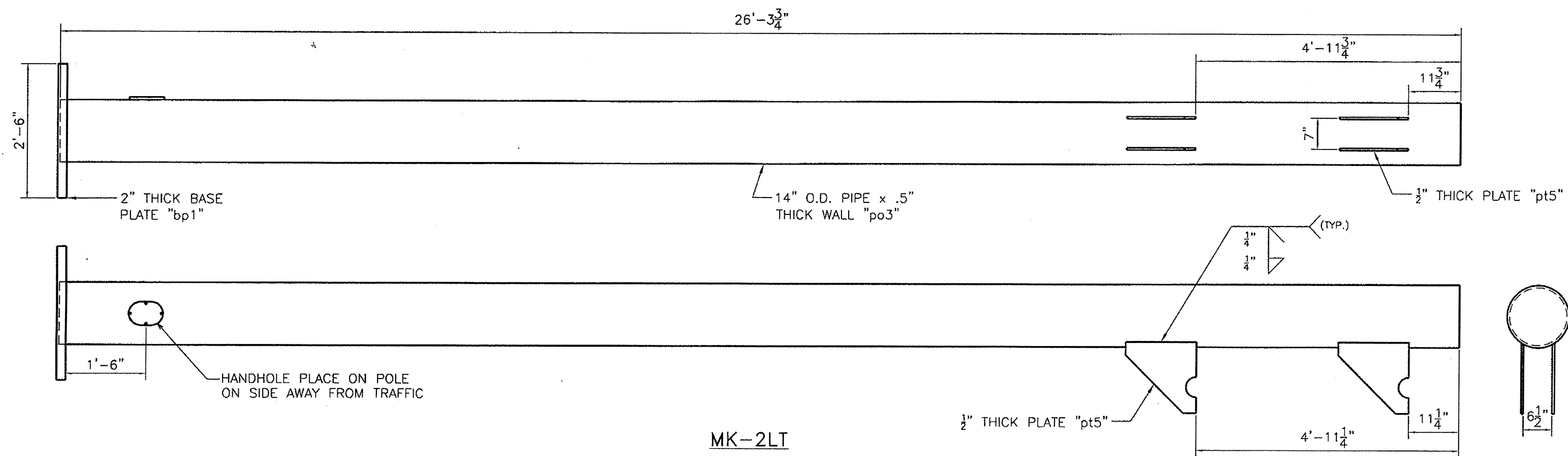


**HIGHWAY SAFETY CORP.**  
GLASTONBURY, CT

TRI CHORD OVERHEAD SIGN STRUCTURE  
SIGN 0.115 OH INTERCHANGE #7  
PROJECT NUMBER IMG SIGN(19)  
ROYALTON - MIDDLESEX  
VERMONT AGENCY OF TRANSPORTATION

GENERAL CONTRACTOR  
SUB CONTRACTOR  
CCS Constructors LLC

DRAWN: MHM  
CHECKED: [ ]  
DATE: 12/22/09  
SCALE: N.T.S.  
NSC REFERENCE NO.: 1729b  
SIZE: D  
REVISION: 0  
SHEET NO.: 4 of 6



NOTE:  
 BASE PLATE SHALL BE STAMPED WITH THE VERTICAL POLE DIAMETER (VD.), HEIGHT (VHT.), YIELD STRENGTH (VYS.), GAUGE (VGE.), AND SAME FOR HORIZONTAL MEMBER (HD.), (HYS.), AND (HGE.).

REVISIONS		
No.	Remarks	Date
0	Initial submittal	

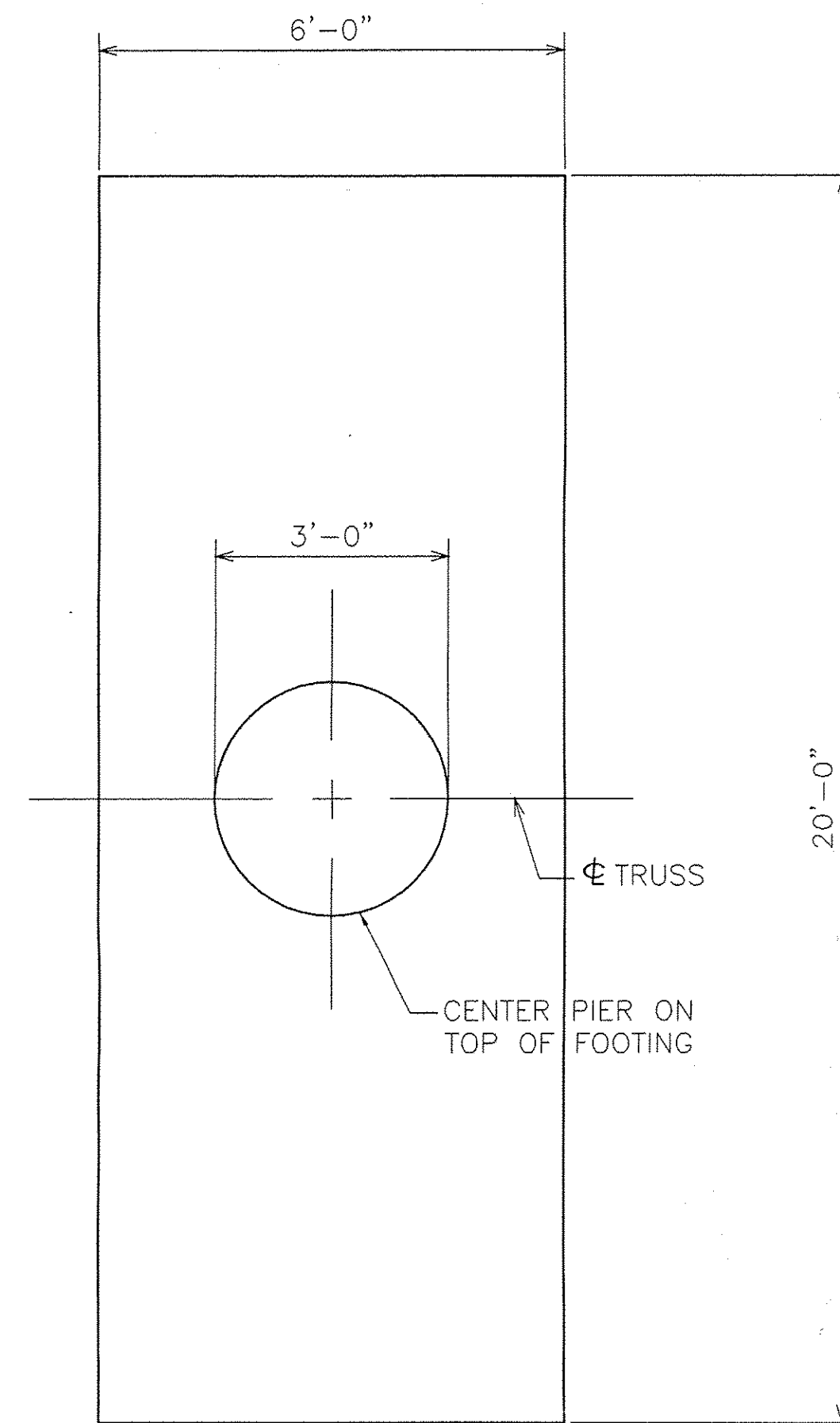


**HIGHWAY SAFETY CORP.**  
 GLASTONBURY, CT

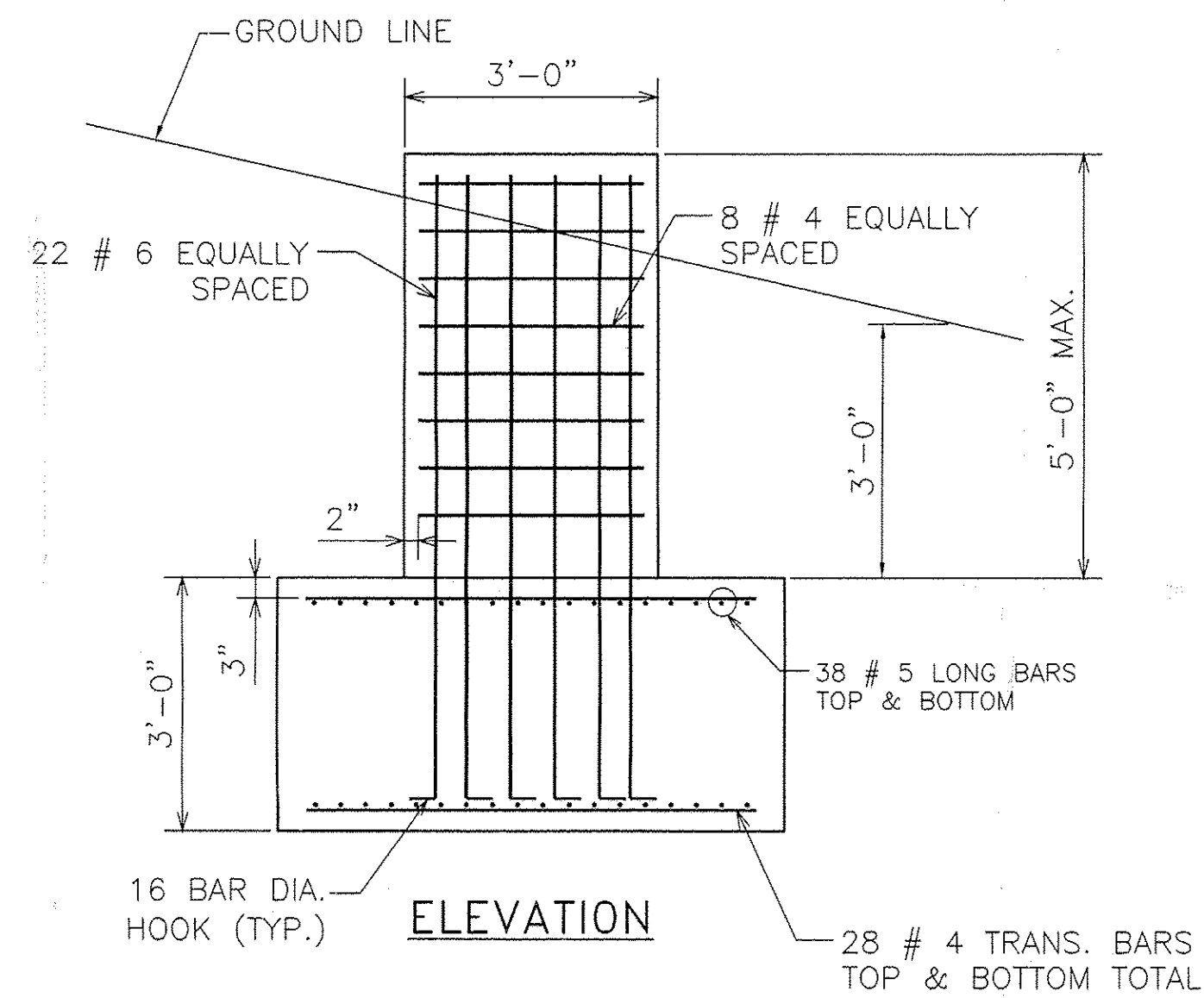
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 SIGN 0.115 OH INTERCHANGE #7  
 PROJECT NUMBER IMG SIGN(19)  
 ROYALTON - MIDDLESEX  
 VERMONT AGENCY OF TRANSPORTATION

GENERAL CONTRACTOR  
 SUB CONTRACTOR CCS Constructors LLC

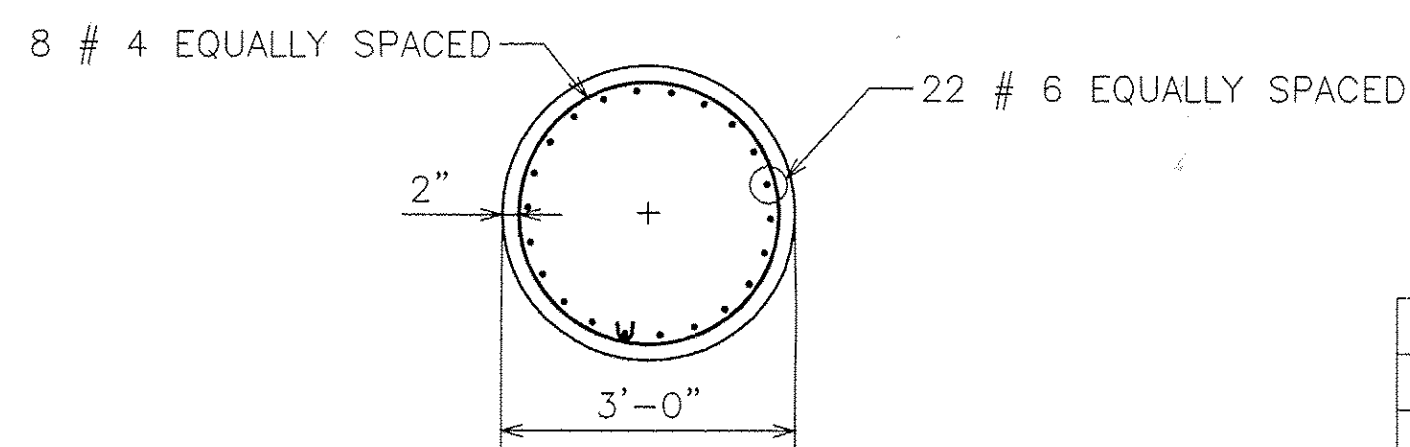
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 CHECKED:  
 DATE: 12/22/09  
 SCALE: N.T.S.  
 PROJECT REFERENCE NO.: 1729b  
 SIZE: D REVISION: 0  
 SHEET NO.: 5 of 6



PLAN



ELEVATION



PLAN (STEM)

INTERCHANGE #7 0.115 LT				
MK	QTY	DESCRIPTION	LENGTH	SPEC.
<b>TB1 TRUSS SECTION ASSEMBLY</b>				
PB1	1	4.500" O.D. x .237" WALL CHORD PIPE	29'-3.500"	A500 gr B, API 5LX42
PB2	1	4.500" O.D. x .237" WALL CHORD PIPE	33'-3.875"	A500 gr B, API 5LX42
PB3	1	4.500" O.D. x .237" WALL CHORD PIPE	33'-3.688"	A500 gr B, API 5LX42
ag1	21	L 3x3x.25"	4'-9.625"	A709 Gr 36
ag2	4	L 3x3x.25"	3'-5.500"	A709 Gr 36
pt1	6	0.375" THICK PLATE	5"x1'-3"	A709 Gr 50
pt2	18	0.375" THICK PLATE	5"x1'-8"	A709 Gr 50
pt3	4	0.375" THICK PLATE	5"x10"	A709 Gr 50
bar1	3	0.25" PLUG PLATE	2.25"x4.500"	A709 Gr 36
sp1	3	0.500" SPLICE PLATE	9.500" O.D.	A709 Gr 50
<b>TB2 TRUSS SECTION ASSEMBLY</b>				
PB4	1	4.500" O.D. x .237" WALL CHORD PIPE	29'-3.500"	A500 gr B, API 5LX42
PB5	1	4.500" O.D. x .237" WALL CHORD PIPE	33'-3.875"	A500 gr B, API 5LX42
PB6	1	4.500" O.D. x .237" WALL CHORD PIPE	33'-3.688"	A500 gr B, API 5LX42
ag1	21	L 3x3x.25"	4'-9.625"	A709 Gr 36
ag2	4	L 3x3x.25"	3'-5.500"	A709 Gr 36
pt1	6	0.375" THICK PLATE	5"x1'-3"	A709 Gr 50
pt2	18	0.375" THICK PLATE	5"x1'-8"	A709 Gr 50
pt3	4	0.375" THICK PLATE	5"x10"	A709 Gr 50
bar1	3	0.25" PLUG PLATE	2.25"x4.500"	A36
sp1	3	0.500" SPLICE PLATE	9.500" O.D.	A709 Gr 50
<b>2LT LEFT POST ASSEMBLY</b>				
po3	1	14" O.D. x .500" WALL PIPE	26'-3.750"	A500 gr B, API 5LX42
cp1	1	0.25" CAP PLATE	1'-2.500" O.D.	A36
gt	1	0.125" GASKET	14.5" O.D.-12.5" I.D.	50 DURO. NEOPRENE
bar3	1	L1.5x1.5x.25"	1'-1"	A36
hb1	1	0.500" DIA. HEX BOLT	2.500"	A307
wnt	1	0.500" DIA. HEX NUT		A563
rbw	1	0.500" DIA. RUBBER WASHER		50 DURO. NEOPRENE
gw	1	0.500" DIA. WASHER		F844
pt4	2	0.500" PLATE	8" x 6.500"	A709 Gr 50
pt5	4	0.500" PLATE	16" x 16"	A709 Gr 50
bar2	1	0.625" x 2.500" BAR	21.500"	A36
ga	1	0.125" GASKET	7.750" x 5.250"	50 DURO. NEOPRENE
fc	1	0.25" COVER PLATE	7.750" x 5.250"	A36
cb	4	0.375" DIA. HEX BOLT	1"	A307
lug	1	0.25" PLATE	1" x 1"	A36
bp1	1	2" BASE PLATE	2'-6" O.D.	A709 Gr 50

REBAR LIST

REBAR	PCS. REQD.	LENGTH	SPEC.
#4	16	9'-0"	A615 Gr. 60
#4	56	5'-6"	A615 Gr. 60
#6 (90° HOOK ONE END)	44	8'-6"	A615 Gr. 60
#5	76	19'-6"	A615 Gr. 60

REVISIONS		
No.	Remarks	Date
0	Initial submittal	
1	MK-ub2	10/3/10
2	Footing design	5/26/10

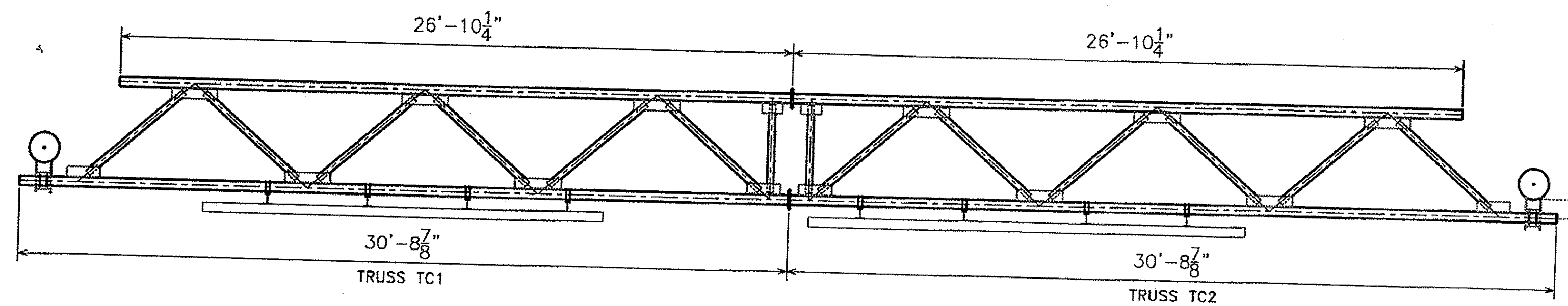
<b>2RT RIGHT POST ASSEMBLY</b>				
po4	1	14" O.D. x .500" WALL PIPE	32'-3.750"	A500 gr B, API 5LX42
cp1	1	0.25" CAP PLATE	1'-2.500" O.D.	A36
gt	1	0.125" GASKET	14.5" O.D.-12.5" I.D.	50 DURO. NEOPRENE
bar3	1	L1.5x1.5x.25"	1'-1"	A36
hb1	1	0.500" DIA. HEX BOLT	2.500"	A307
wnt	1	0.500" DIA. HEX NUT		A563
rbw	1	0.500" DIA. RUBBER WASHER		50 DURO. NEOPRENE
gw	1	0.500" DIA. WASHER		F844
pt4	2	0.500" PLATE	8" x 6.500"	A709 Gr 50
pt5	4	0.500" PLATE	16" x 16"	A709 Gr 50
bar2	1	0.625" x 2.500" BAR	21.500"	A36
ga	1	0.125" GASKET	7.750" x 5.250"	50 DURO. NEOPRENE
fc	1	0.25" COVER PLATE	7.750" x 5.250"	A36
cb	4	0.375" DIA. HEX BOLT	1"	A307
lug	1	0.25" PLATE	1" x 1"	A36
bp1	1	2" BASE PLATE	2'-6" O.D.	A709 Gr 50
<b>SIGN ASSEMBLY</b>				
sh1	4	W6x8.5	12'-6"	A36
sh2	4	W6x8.5	10'-0"	A36
ub2	32	0.625" DIA. U-BOLT	7"	F1554 Gr 36
sk1	64	0.625" DIA. SELF LOCKING NUT		A563 DH
sw1	64	0.625" DIA. FALT WASHER		F436
<b>HARDWARE</b>				
sbt1	24	0.625" DIA. SPLICE HEX BOLT	2.250"	A325
sn1	24	0.625" DIA. HEX NUT		A563 DH
swr1	48	0.625" DIA. WASHER		F436
ub1	8	0.75" DIA. U-BOLT	7.500"	F1554 Gr 36
un1	16	0.75" DIA. LOCK NUT		A563 DH
uw1	16	0.75" DIA. FALT WASHER		F436
<b>ANCHOR BOLT</b>				
an1	12	2" DIA. STUD	3'-8"	S/S A276 TY304
nt	48	2" DIA. HEX NUT		S/S A194B TY304
wr	12	2" DIA. WASHER		S/S TY304
lk	12	2" DIA. LOCK WASHER		S/S TY305
anp	12	1" PLATE WASHER	4" x 4"	S/S TY305



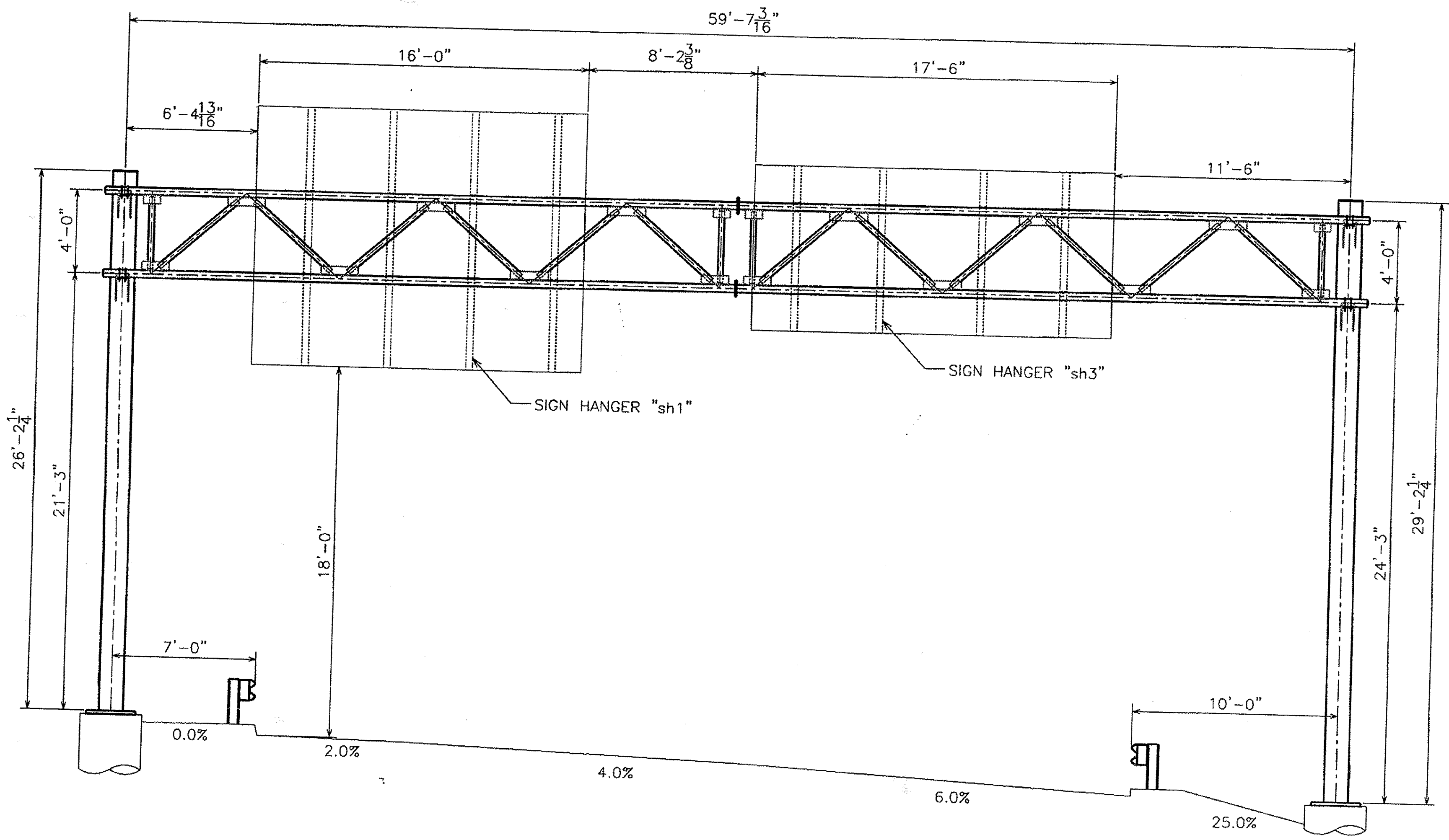
**HIGHWAY SAFETY CORP.**  
GLASTONBURY, CT

TRI CHORD OVERHEAD SIGN STRUCTURE  
SIGN 0.115 OH INTERCHANGE #7  
PROJECT NUMBER IMG SIGN(19)  
ROYALTON - MIDDLESEX  
VERMONT AGENCY OF TRANSPORTATION

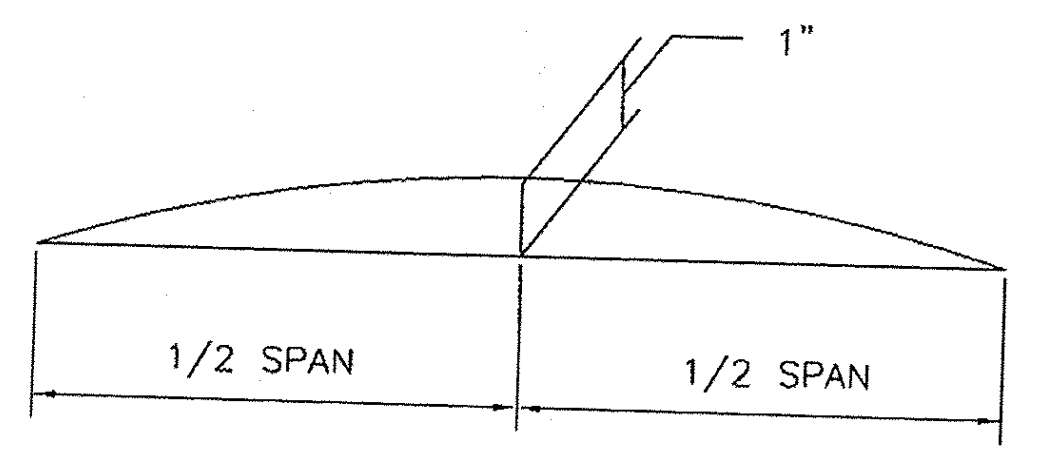
CHECKED: MHM  
DATE: 12/22/09  
SCALE: NTS  
HSC REFERENCE NO.: 1729b  
GENERAL CONTRACTOR: CCS Constructors LLC  
SUB CONTRACTOR: CCS Constructors LLC  
SHEET NO.: 6 of 6



(A) VIEW

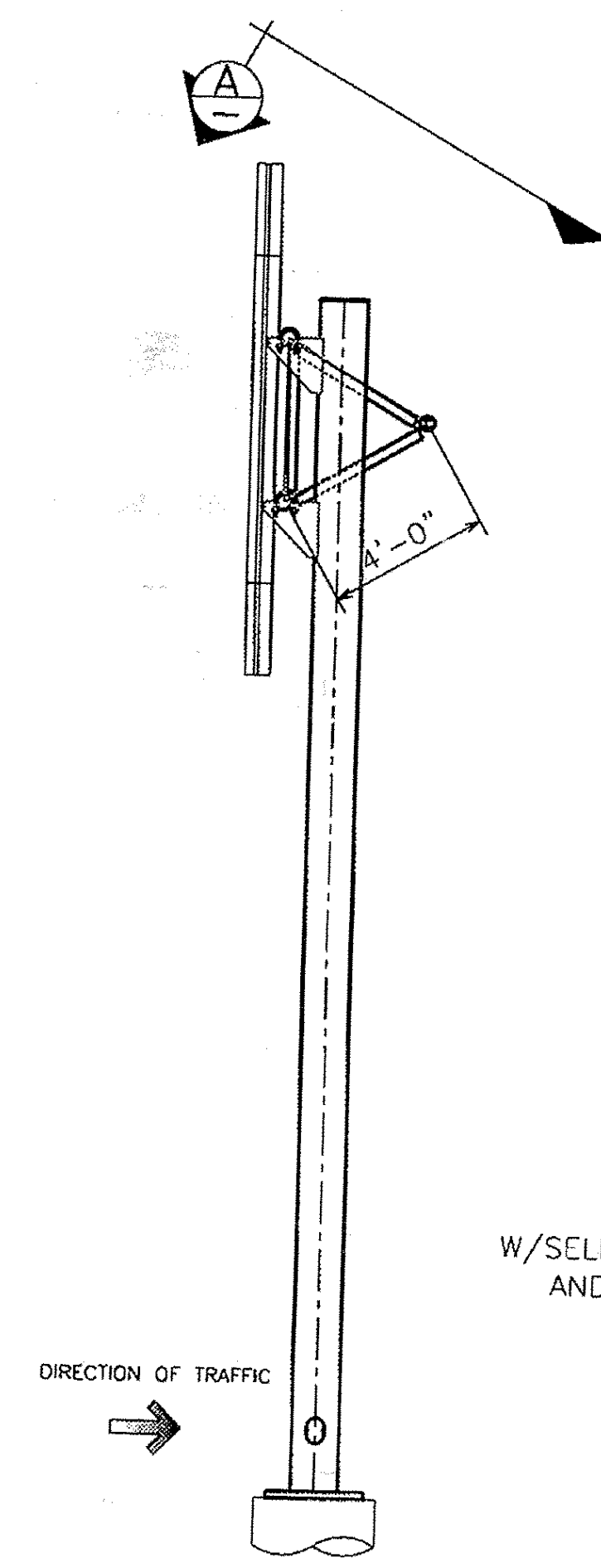


ELEVATION  
INTERCHANGE 8  
LOOKING AT FACE OF SIGN  
(OUT OF PLANE CHORDS NOT SHOWN FOR CLARITY)  
*Montpelier Exit 8*

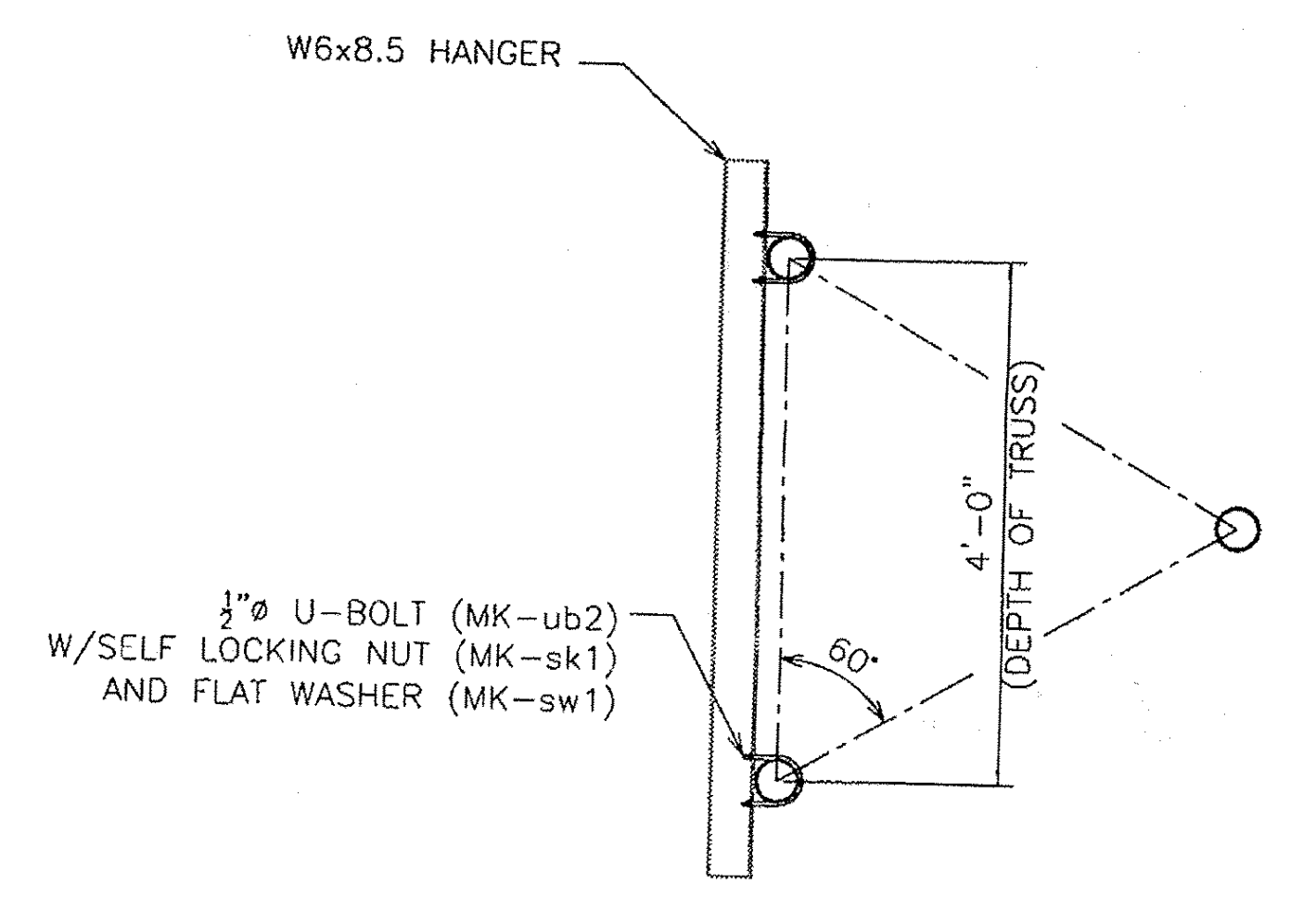


CAMBER DIAGRAM

NOTE:  
CAMBER WILL BE ACHIEVED BY SHORTENING LOWER CHORD PIPES BY AN AMOUNT SUCH THAT POSITIVE UPWARD DEFLECTION IS PRODUCED WHEN TRUSSES ARE BROUGHT TOGETHER AT SPLICES.



SIDE ELEVATION



SIGN MOUNTING DETAIL  
VERTICAL HANGER BEAMS & U-BOLTS INCLUDED

NOTE:  
POST HEIGHT WAS SCALED OF THE CONTRACT DRAWINGS, CONTRACTOR TO VERIFY POST HEIGHT PRIOR TO FABRICATION.

CCS Constructors LLC  
158 Nunsun Avenue  
Montpelier, VT 05601  
Ph: 802-885-7701 f: 802-888-4746



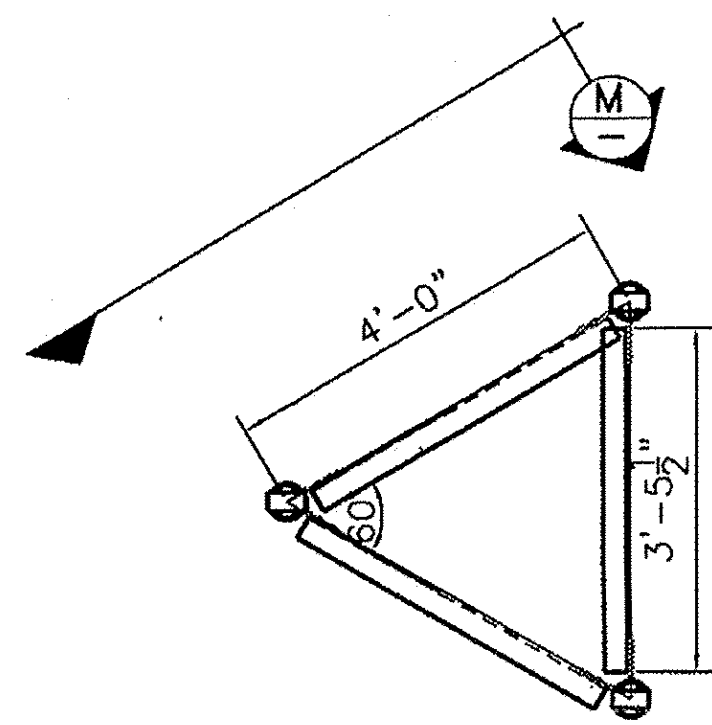
REVISIONS		
No.	Remarks	Date
0	Initial submittal	

**HIGHWAY SAFETY CORP.**  
GLASTONBURY, CT

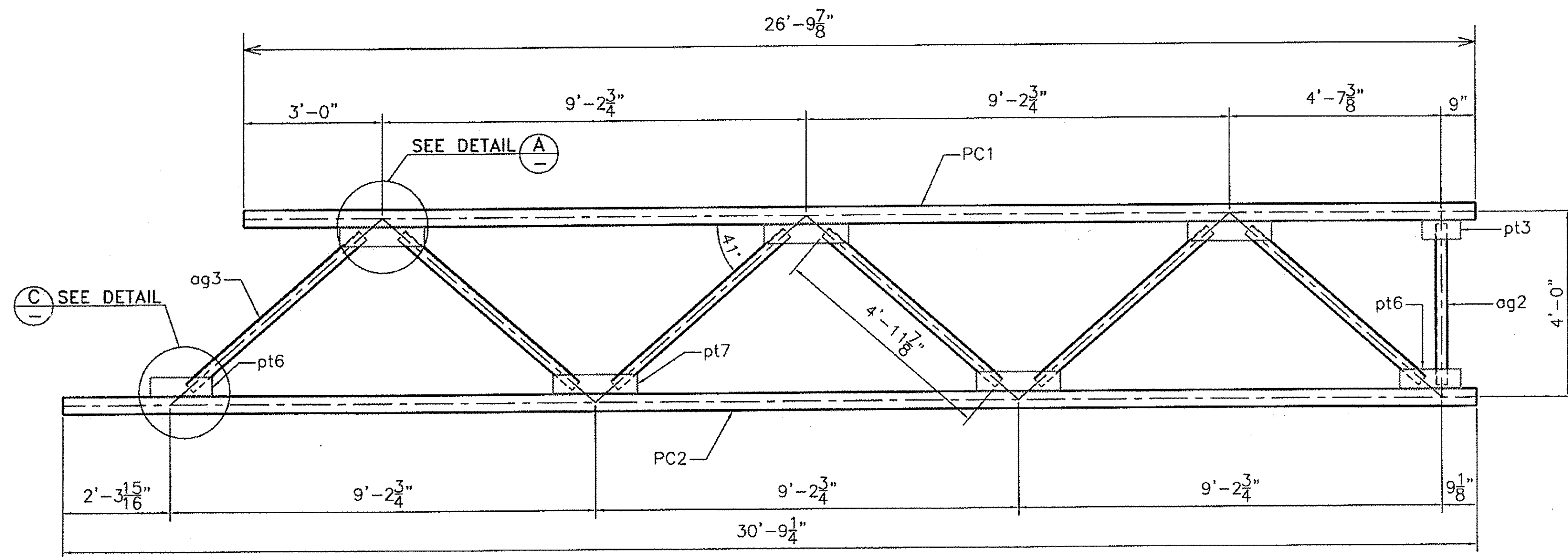
TRI CHORD OVERHEAD SIGN STRUCTURE  
SIGN 0.102 OH INTERCHANGE #8  
PROJECT NUMBER IMG SIGN(19)  
ROYALTON - MIDDLESEX  
VERMONT AGENCY OF TRANSPORTATION

DRAWN: MHM  
CHECKED: [ ]  
DATE: 12/22/09  
SCALE: N.T.S.  
FISC REFERENCE NO.: 1729c  
GENERAL CONTRACTOR: [ ]  
SUB CONTRACTOR: CCS Constructors LLC

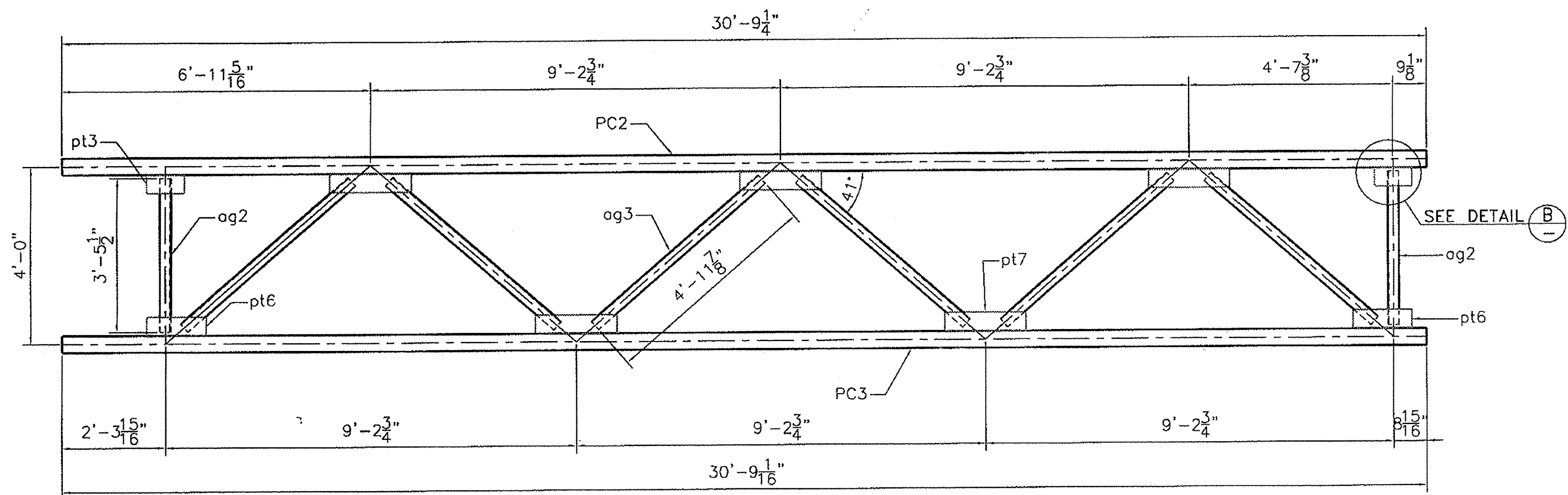
SHEET NO. 1 of 6



SIDE VIEW

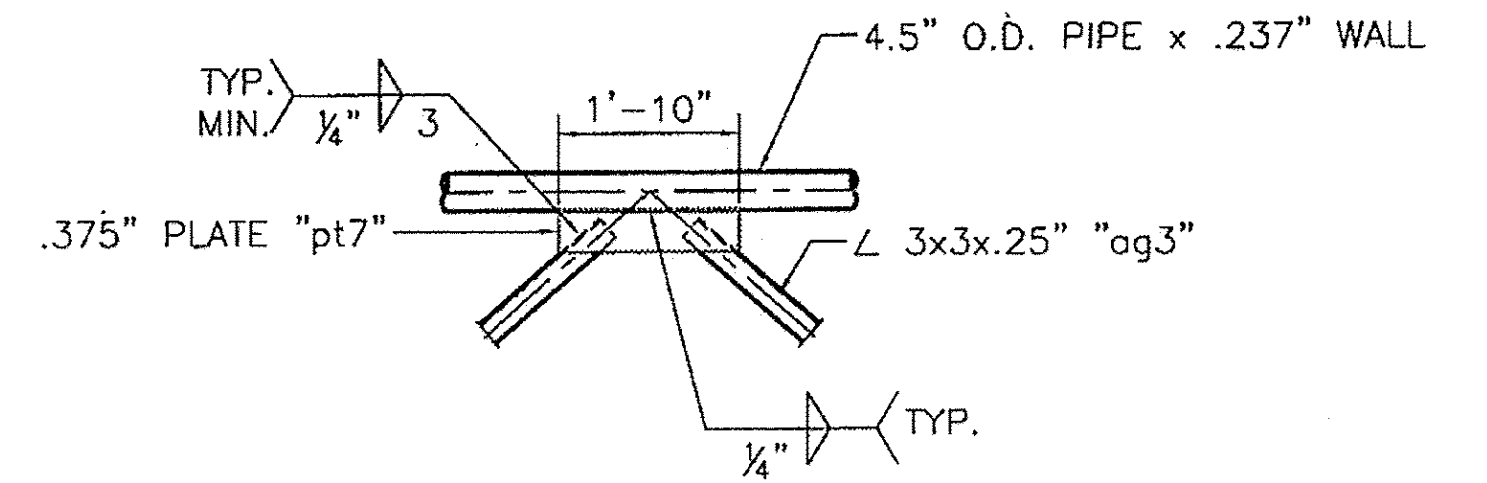


M VIEW

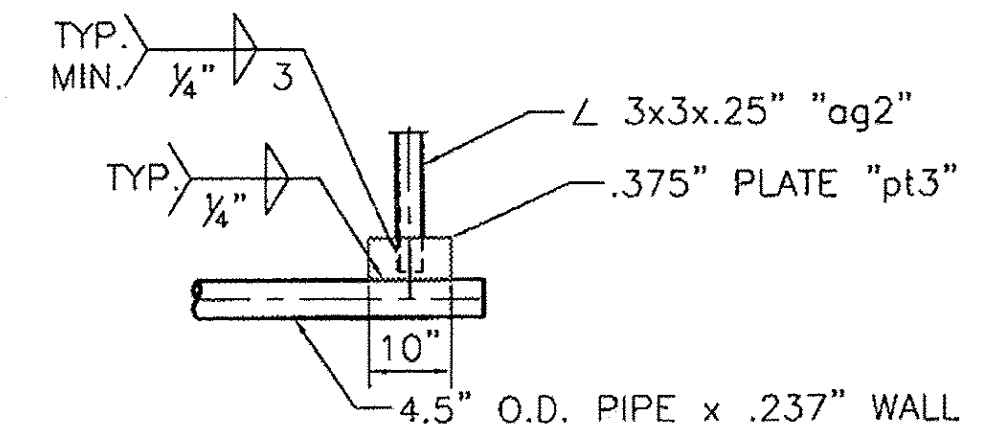


FRONT VIEW

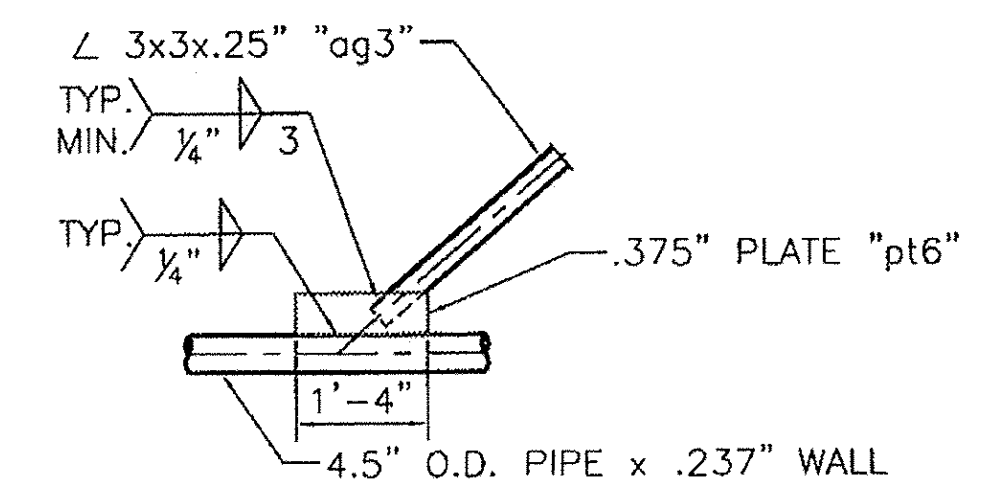
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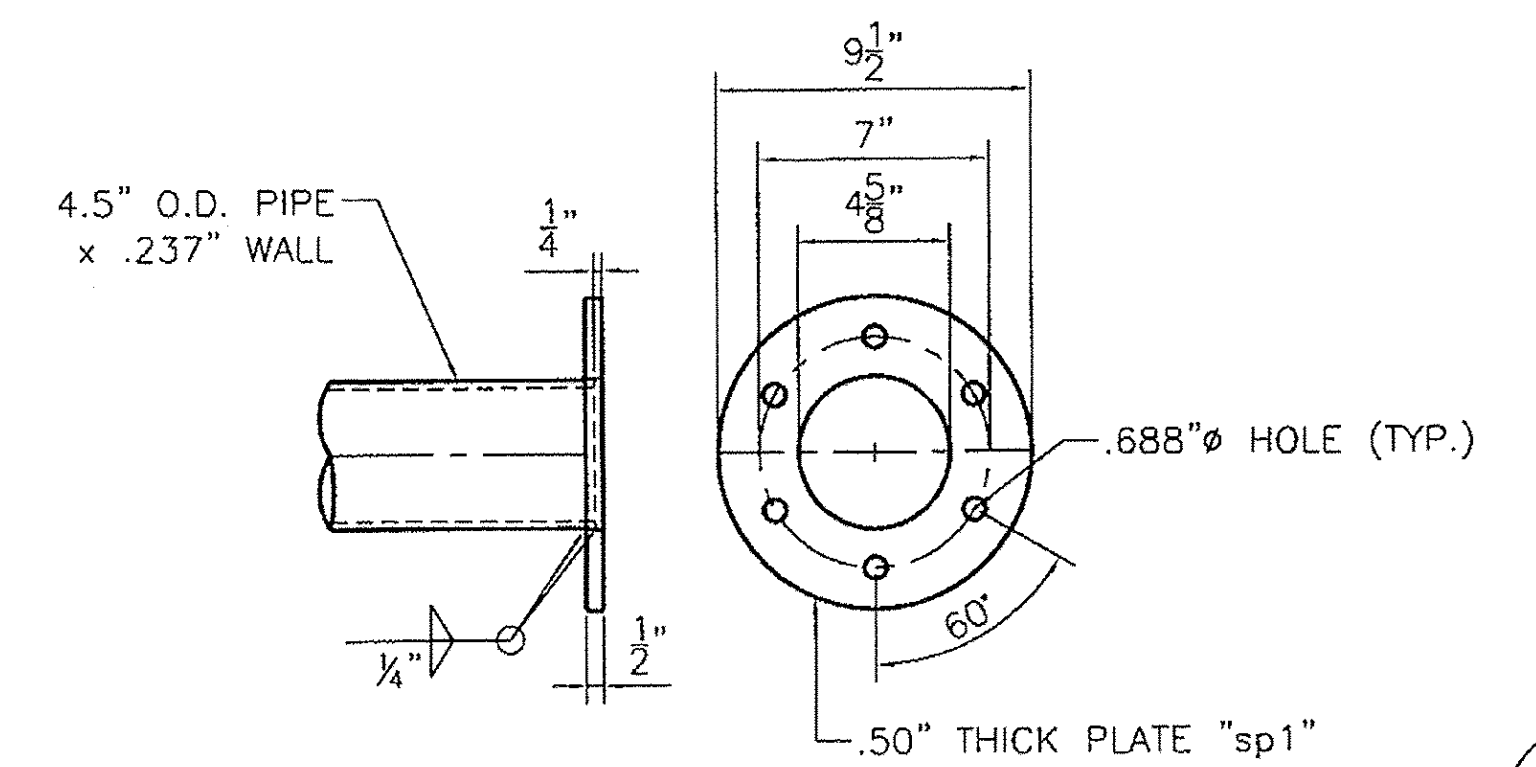
DETAIL "A"



DETAIL "B"



DETAIL "C"



SPLICE DETAIL



**HIGHWAY SAFETY CORP.**  
GLASTONBURY, CT

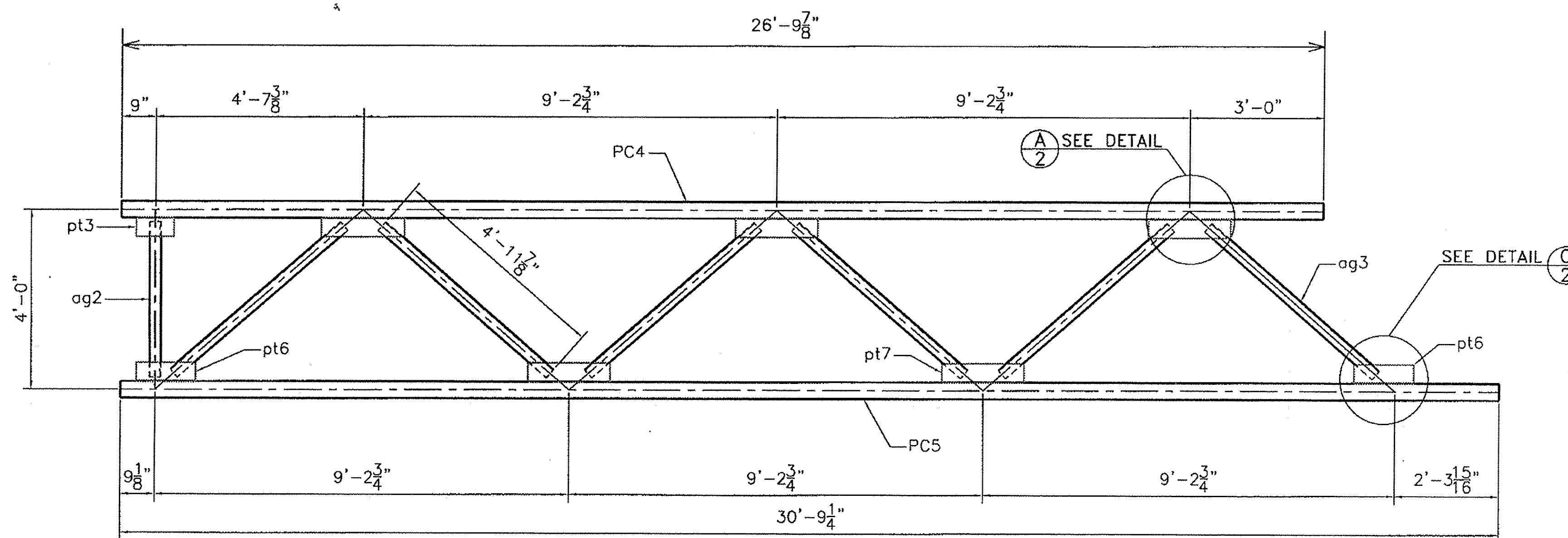
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SIGN 0.102 OH INTERCHANGE #8  
PROJECT NUMBER IMG SIGN(19)  
ROYALTON - MIDDLESEX  
VERMONT AGENCY OF TRANSPORTATION

DRAWN	MHM
CHECKED	
DATE	12/22/09
SCALE	NTS
HSC REFERENCE NO.	1729c
GENERAL CONTRACTOR	SIZE D REVISION 0
SUB CONTRACTOR	SHEET NO.

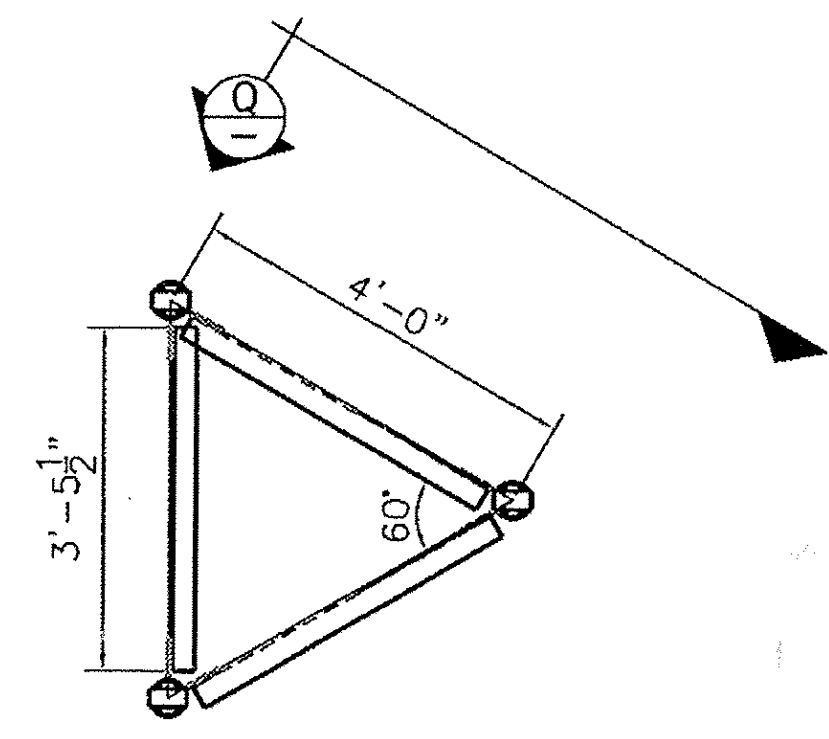
CCS Constructors LLC

2 of 6

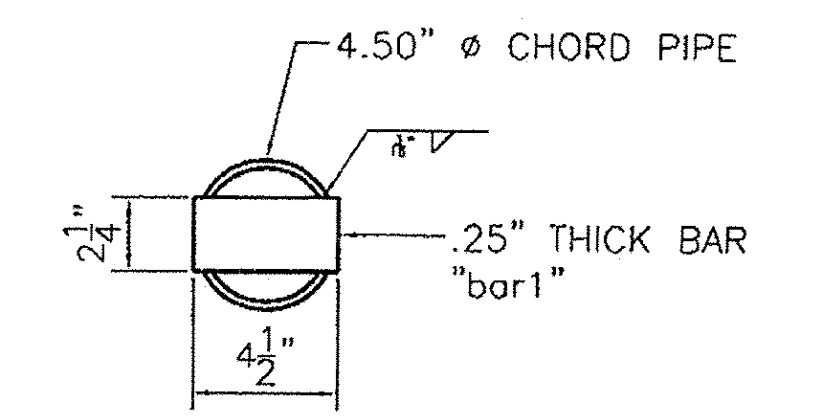
REVISIONS		
No.	Remarks	Date
0	Initial submittal	



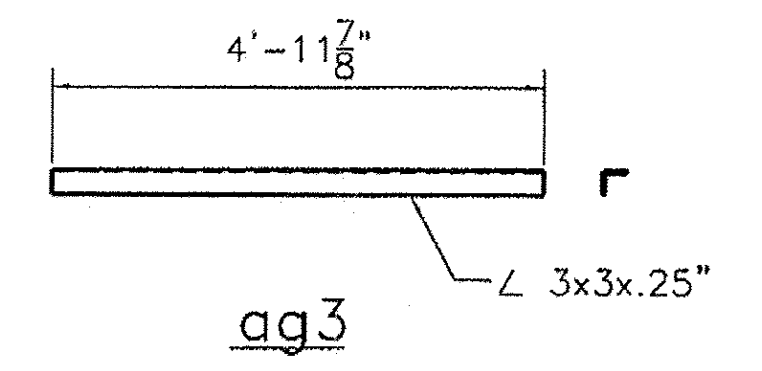
VIEW Q



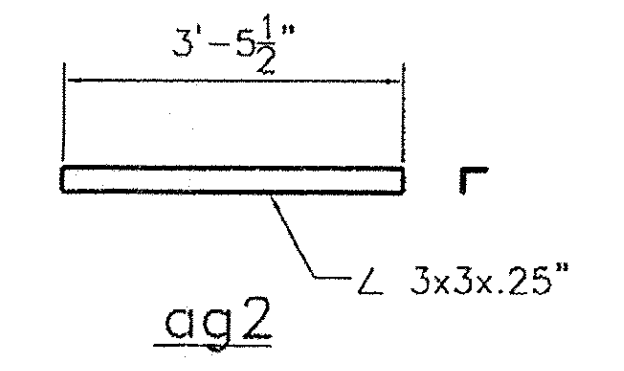
SIDE VIEW



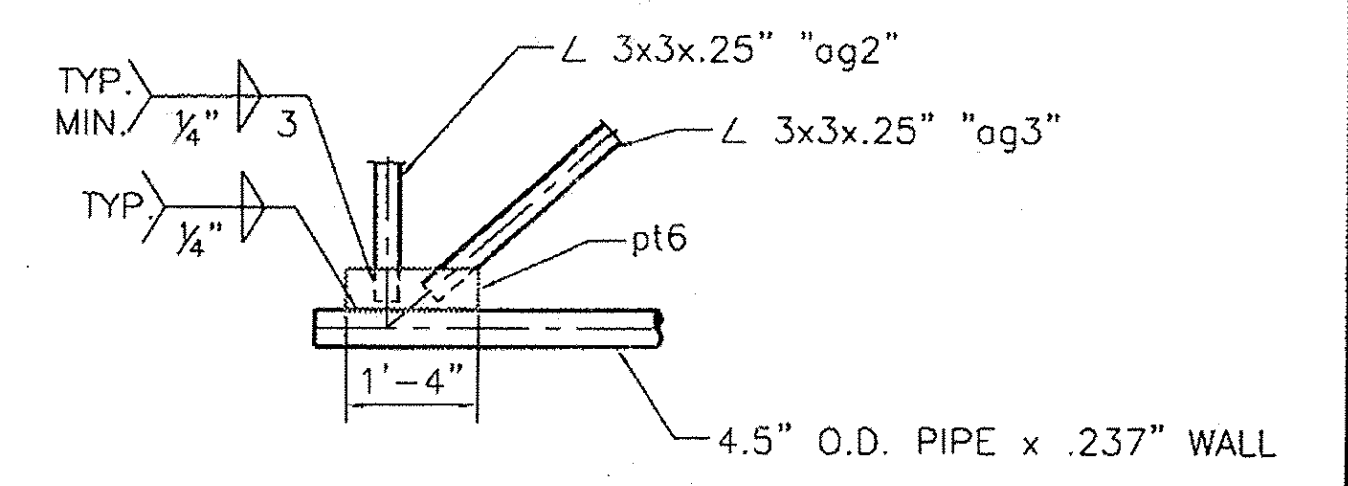
PIPE PLUG DETAIL  
"EACH END OF TRUSS CHORD"



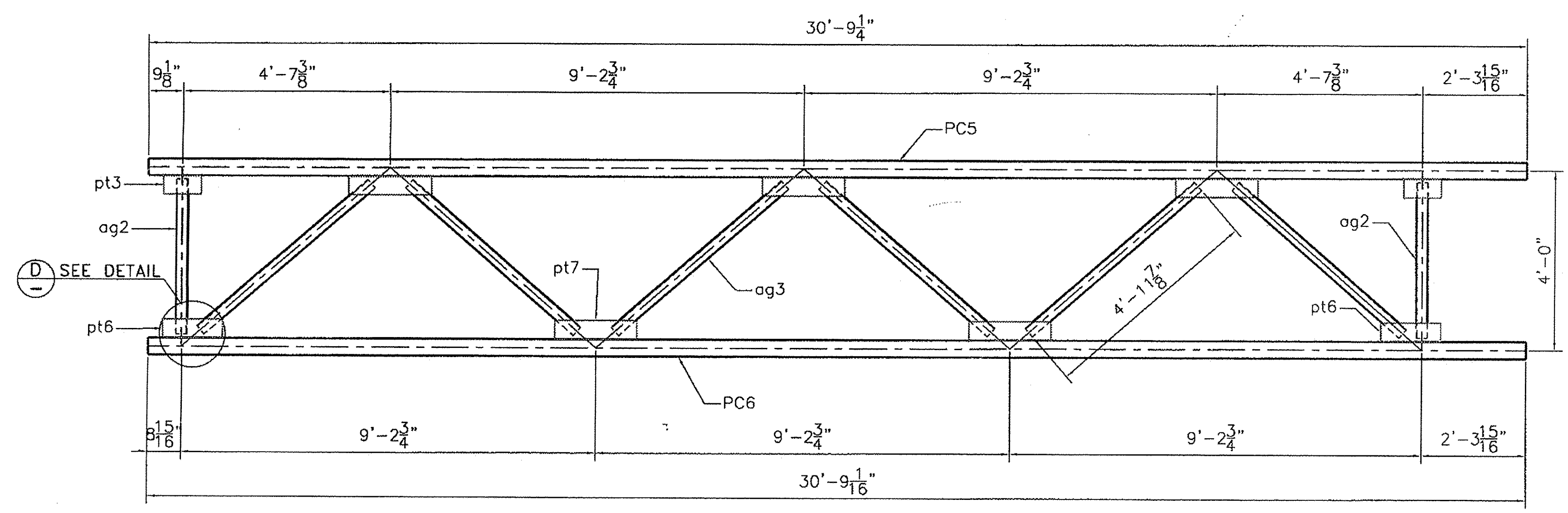
ag3



ag2



DETAIL "D"



FRONT VIEW

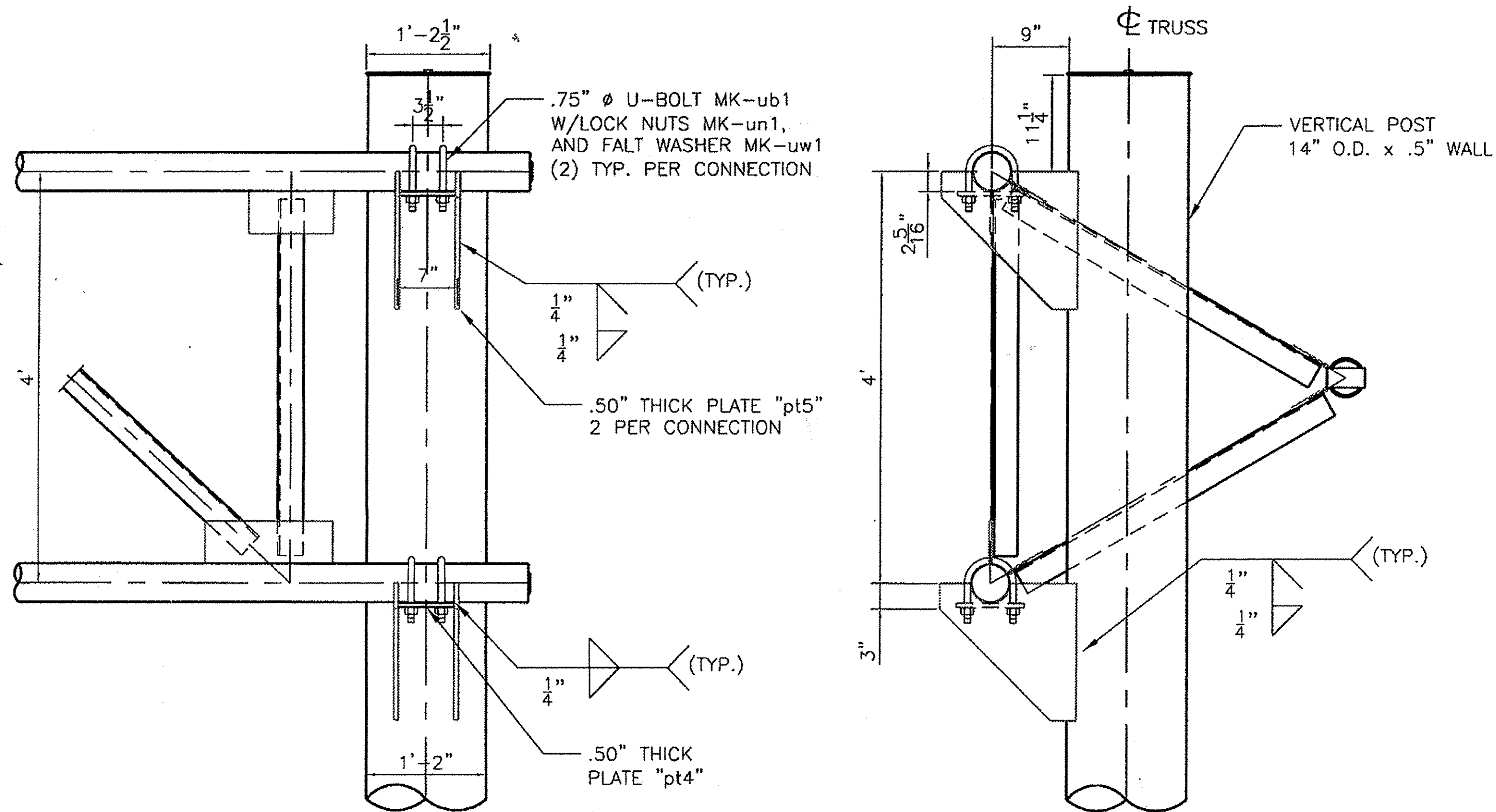
TRUSS TC2



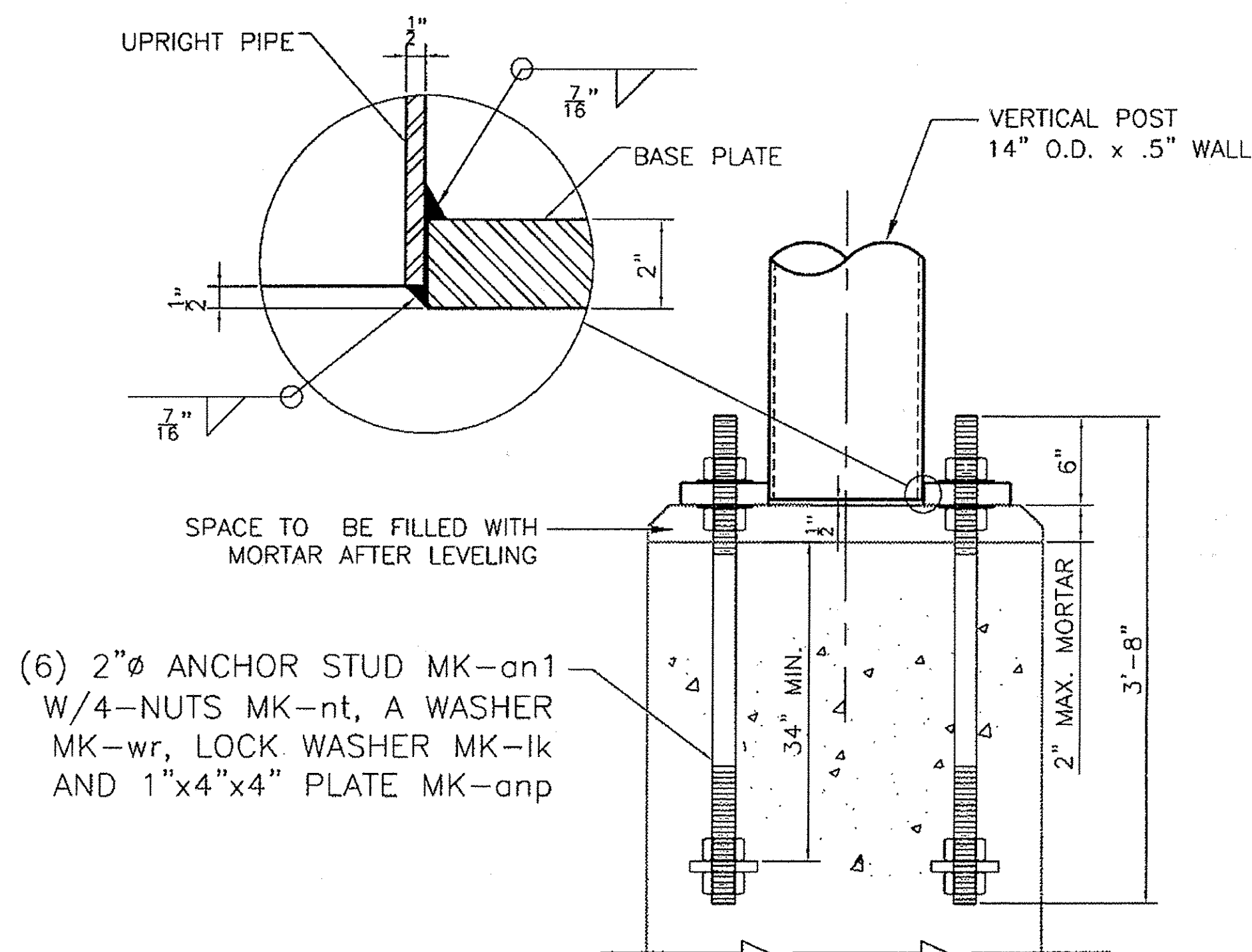
**HIGHWAY SAFETY CORP.**  
GLASTONBURY, CT

TRI CHORD OVERHEAD SIGN STRUCTURE		DRAWN	MHM
SIGN 0.102 OH INTERCHANGE #8		CHECKED	
PROJECT NUMBER IMG SIGN(19)		DATE	12/22/09
ROYALTON - MIDDLESEX		SCALE	NTS
VERMONT AGENCY OF TRANSPORTATION		FISC REFERENCE NO.	1729c
GENERAL CONTRACTOR		SIZE	D
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SUB CONTRACTOR	CCS Constructors LLC	SHEET NO.	3 of 6

REVISIONS		
No.	Remarks	Date
0	Initial submittal	

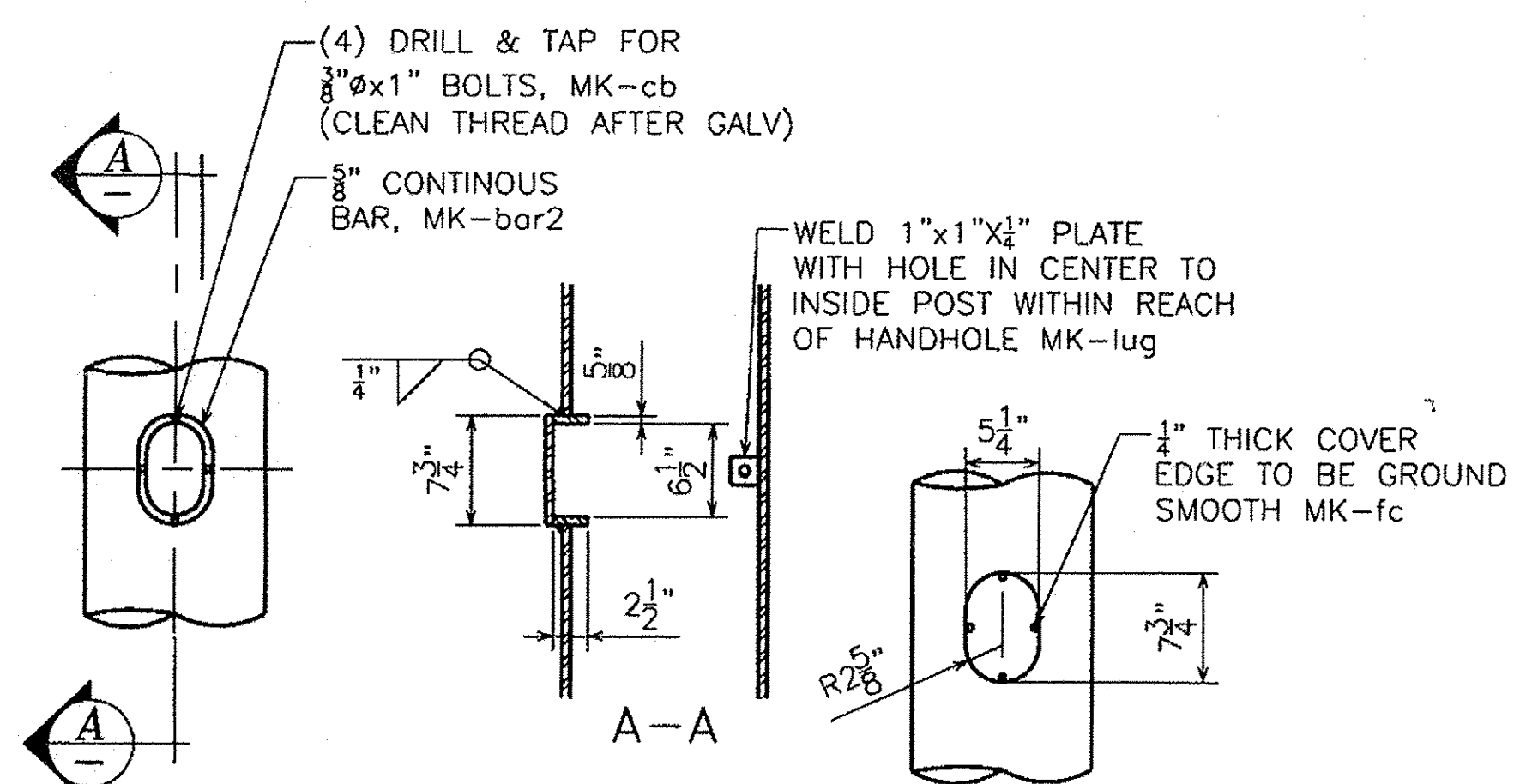


TRUSS CONNECTION DETAIL



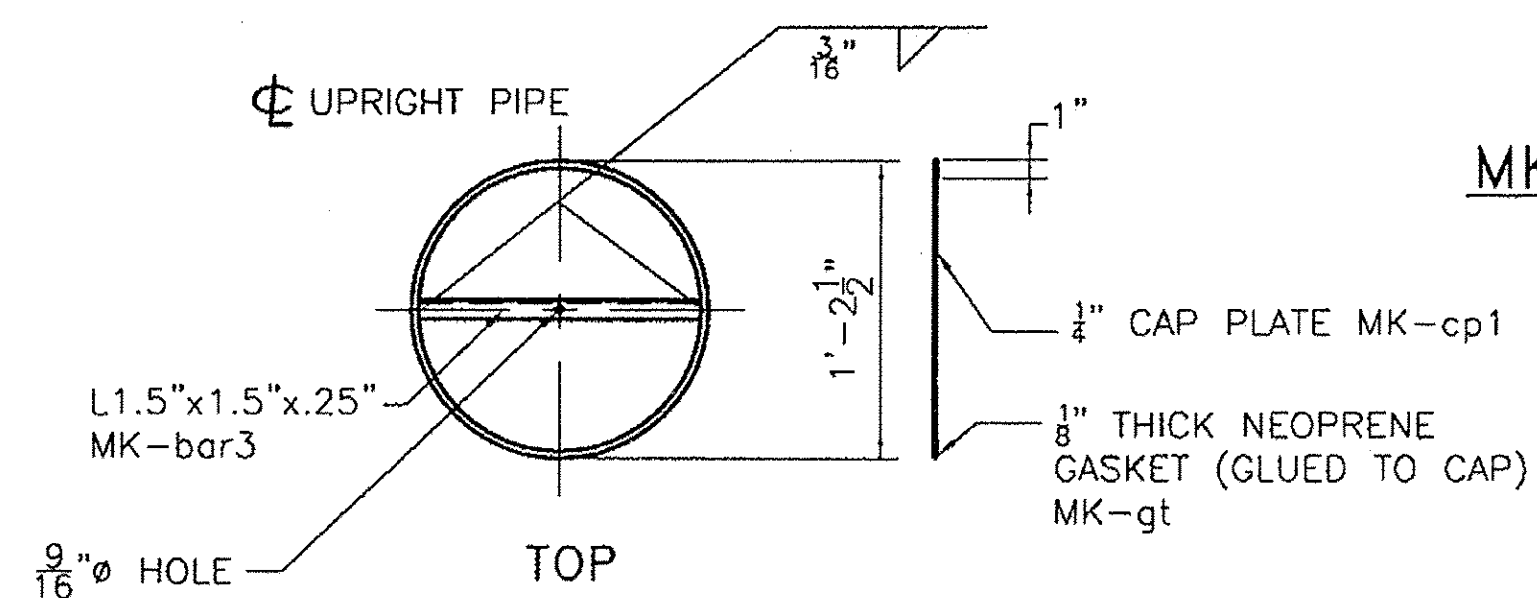
ANCHORAGE ASSEMBLY

- NOTE:**
- STRUCTURE DESIGNED IN ACCORDANCE WITH LATEST EDITION AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINARIES AND TRAFFIC SIGNALS.
  - ALL HOLES FOR HIGH STRENGTH FASTENERS SHALL BE DRILLED OR SUB-PUNCHED FULL SIZE. SLOTTED HOLES AND/OR VENT OR ACCESS HOLES MAY BE CUT WITH MECHANICALLY GUIDED PLASMA OR MECHANICALLY GUIDED FLAME TORCH.
  - GRIND SHARP CORNERS OF ALL PLATES TO A  $\frac{1}{16}$ " MIN. RADIUS PRIOR TO GALVANIZING.
  - ALL WELDING SHALL BE PERFORMED BY QUALIFIED WELDERS IN ACCORDANCE WITH AWS D1.1.
  - ALL STEEL PLATES FOR STRUCTURAL COMPONENTS SHALL BE ASTM A709 GR. 50.
  - STEEL PLATES AND SHAPES FOR NON-STRUCTURAL COMPONENTS SHALL BE ASTM A709 GR. 36.
  - STEEL PIPES FOR STRUCTURAL MEMBERS SHALL HAVE MINIMUM YIELD OF 42 ksi AND SHALL CONFORM TO ONE OF THE FOLLOWING GRADES: ASTM A500 GR. B, OR API 5LX42.
  - UNLESS OTHERWISE NOTED, ALL BOLTS FOR STRUCTURAL CONNECTIONS SHALL BE M164 TYPE 1 (A325).
  - GALVANIZED U-BOLTS FOR CONNECTION OF SIGN HANGER BEAMS TO TRUSS SHALL BE ASTM F-1554 GR. 36.
  - ALL STRUCTURAL STEEL SHALL BE HOT-DIPPED GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH AASHTO M111 (ASTM A123).
  - ALL HARDWARE, UNLESS OTHERWISE NOTED, SHALL BE HOT-DIPPED GALVANIZED PER AASHTO M232 (ASTM A153).
  - ANCHOR HARDWARE SHALL BE STAINLESS STEEL AND MEET REQUIREMENTS OF VAOT STANDARD SPECIFICATION 714.09.
  - CONCRETE AND REBAR SHOWN IN FOOTING DESIGN TO BE FURNISHED BY OTHERS.
  - FOUNDATION DESIGN BASED ON USE OF 3000 psi MINIMUM CONCRETE.
  - SPACE BETWEEN THE TOP OF CONCRETE AND THE BOTTOM OF STEEL BASE PLATE SHALL BE FILLED WITH TYPE IV MORTAR AFTER LEVELING.
  - BOLTS INSTALLED IN STRUCTURAL CONNECTIONS SHALL BE PROVIDED AND TENSIONED PER APPLICABLE PROVISIONS OF VAOT STANDARD SPECIFICATIONS SECTION 506.
  - SEAL WELD ALL CONNECTIONS WHEN POSSIBLE PRIOR TO GALVANIZING.



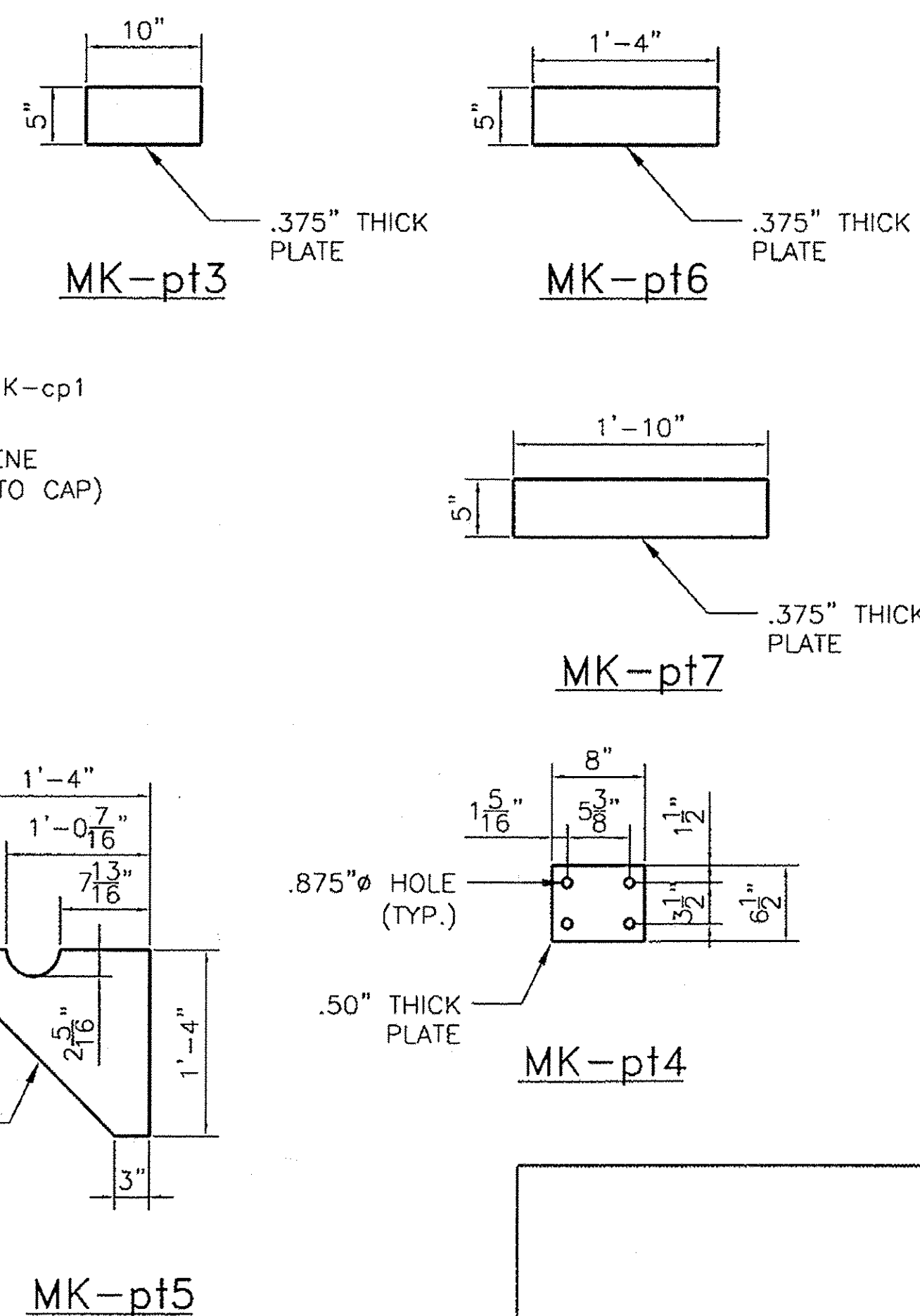
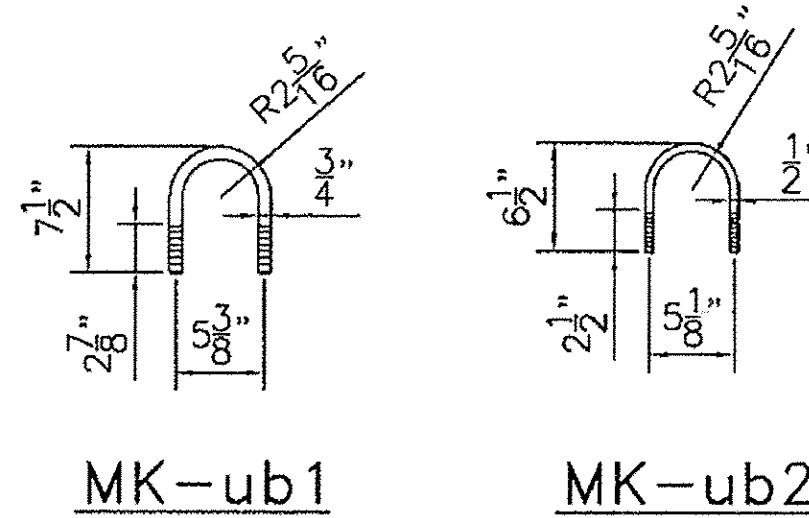
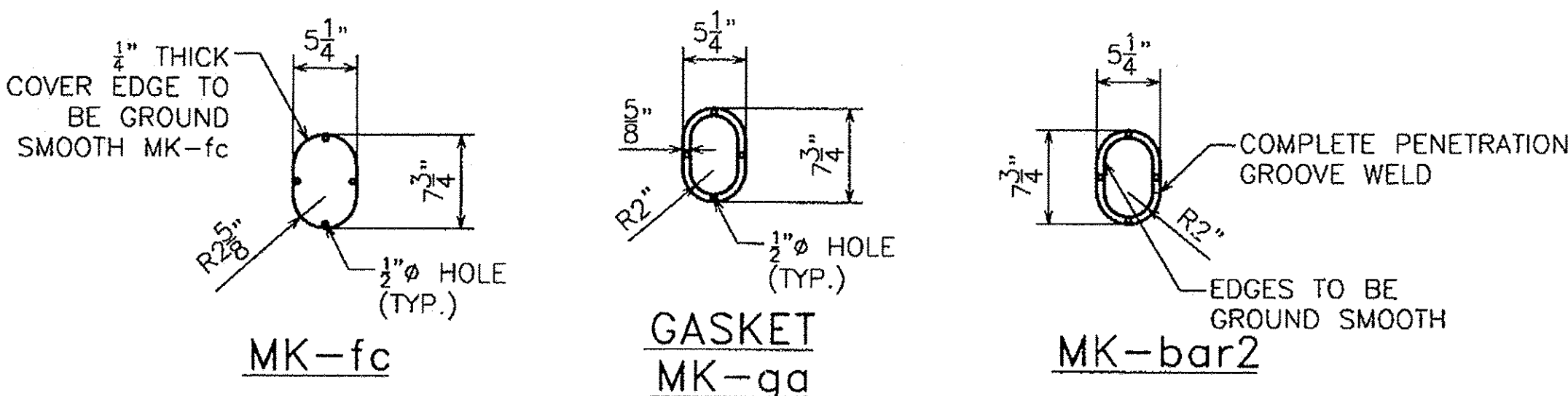
POST HANDHOLE DETAIL

PLACE ON SIDE OF POLE AWAY FROM APPROACHING TRAFFIC



UPRIGHT PIPE TOP DETAIL

ASSEMBLE CAP TO POST PRIOR TO SHIPPING.

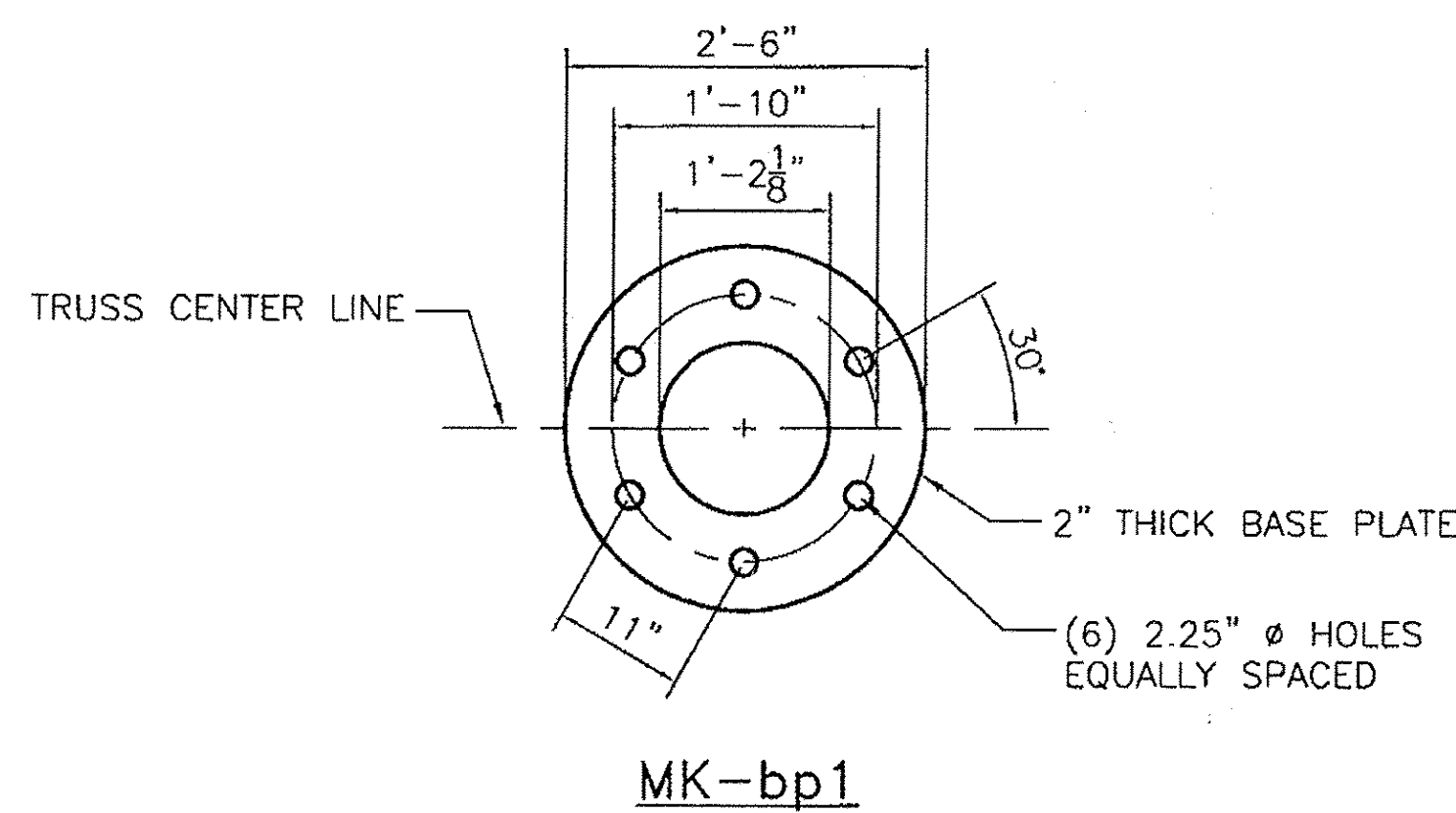
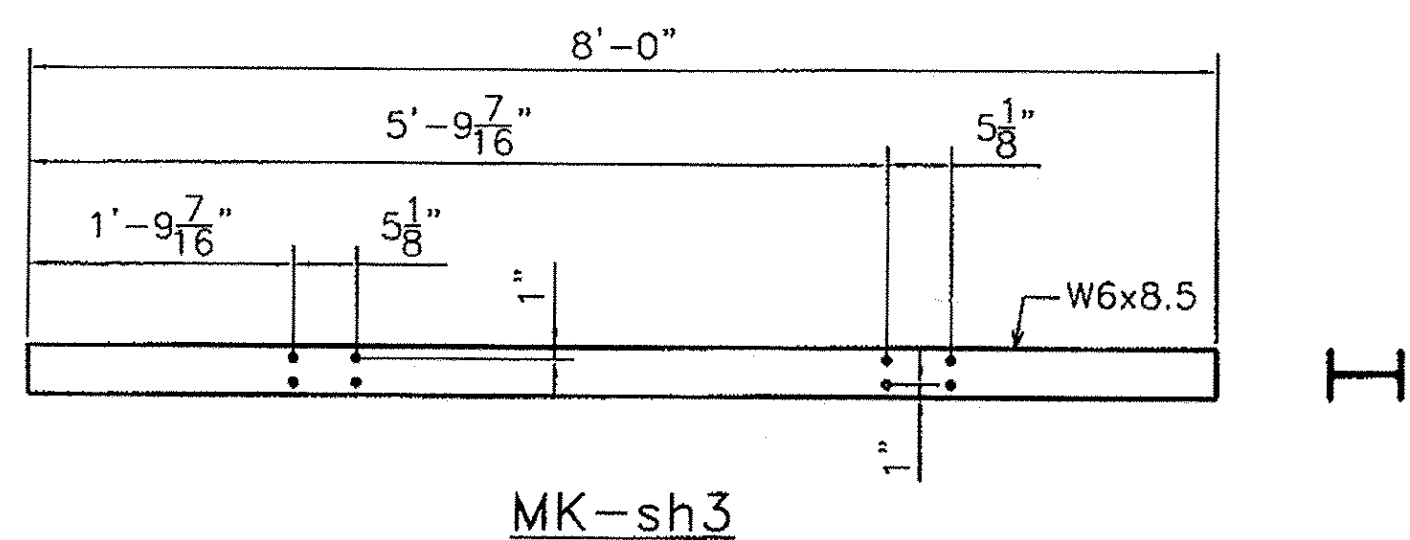
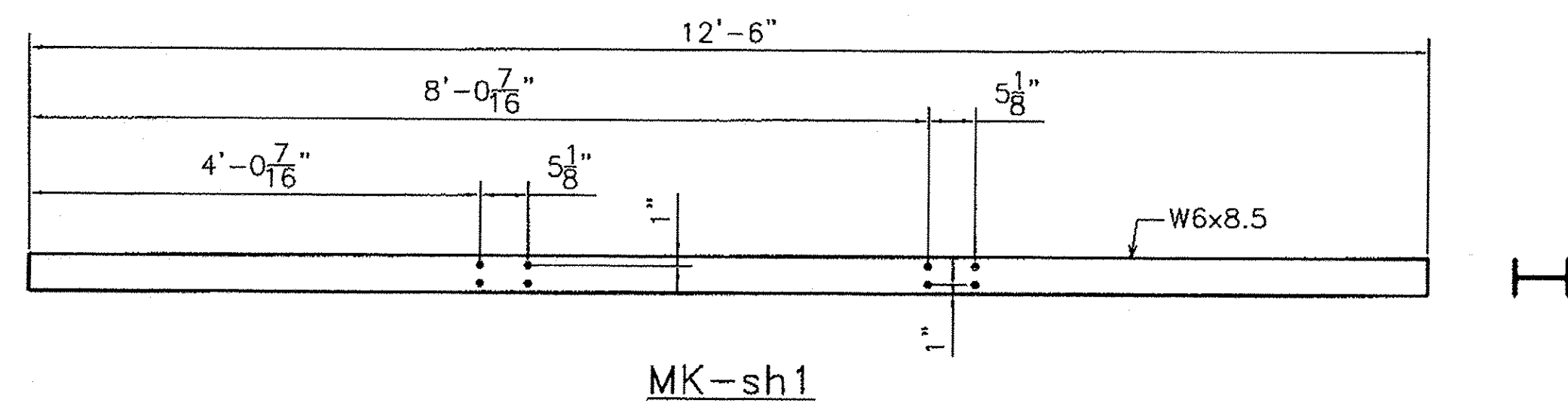
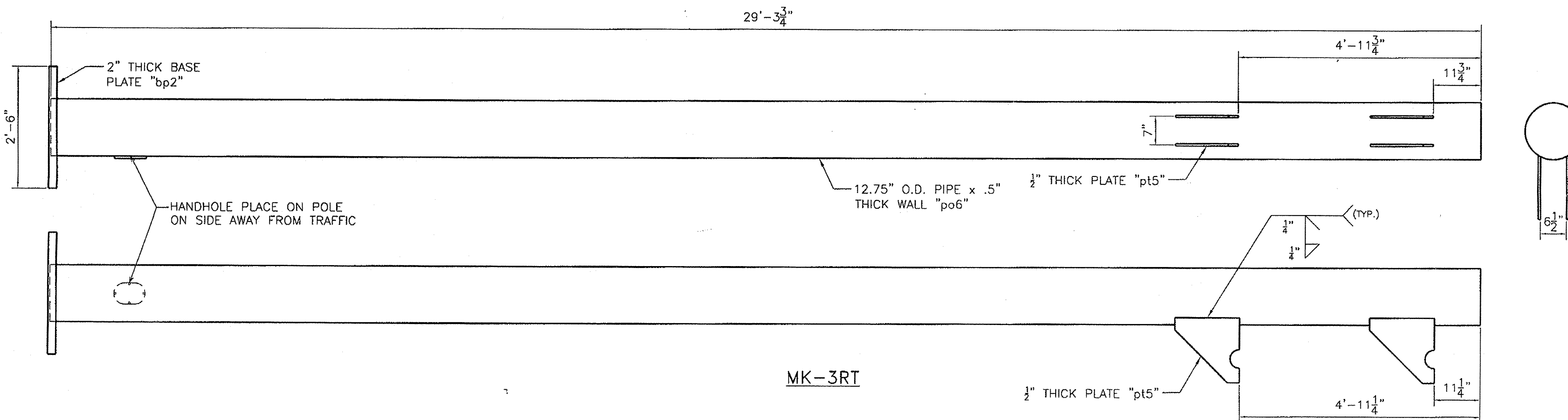
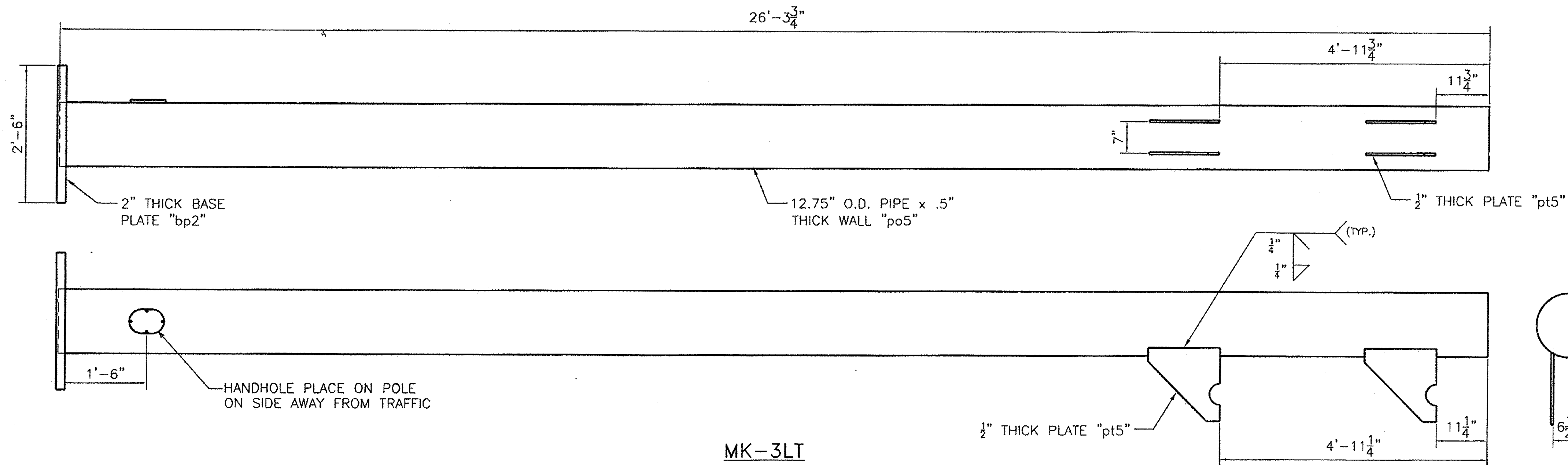


REVISIONS		
No.	Remarks	Date
0	Initial submittal	



**HIGHWAY SAFETY CORP.**  
GLASTONBURY, CT

TRI CHORD OVERHEAD SIGN STRUCTURE SIGN 0.102 OH INTERCHANGE #8 PROJECT NUMBER IMG SIGN(19) ROYALTON - MIDDLESEX VERMONT AGENCY OF TRANSPORTATION	DRAWN: MHM CHECKED: DATE: 12/22/09 SCALE: N.T.S. HSC REFERENCE NO.: 1729c SHEET NO.: 4 of 6
GENERAL CONTRACTOR	SIZE: D REVISION: 0
SUB CONTRACTOR: CCS Constructors LLC	



NOTE:  
BASE PLATE SHALL BE STAMPED WITH THE VERTICAL POLE DIAMETER (VD.), HEIGHT (VHT.), YIELD STRENGTH (VYS.), GAUGE (VGE.), AND SAME FOR HORIZONTAL MEMBER (HD.), (HYS.), AND (HGE.).

REVISIONS		
No.	Remarks	Date
0	Initial submittal	

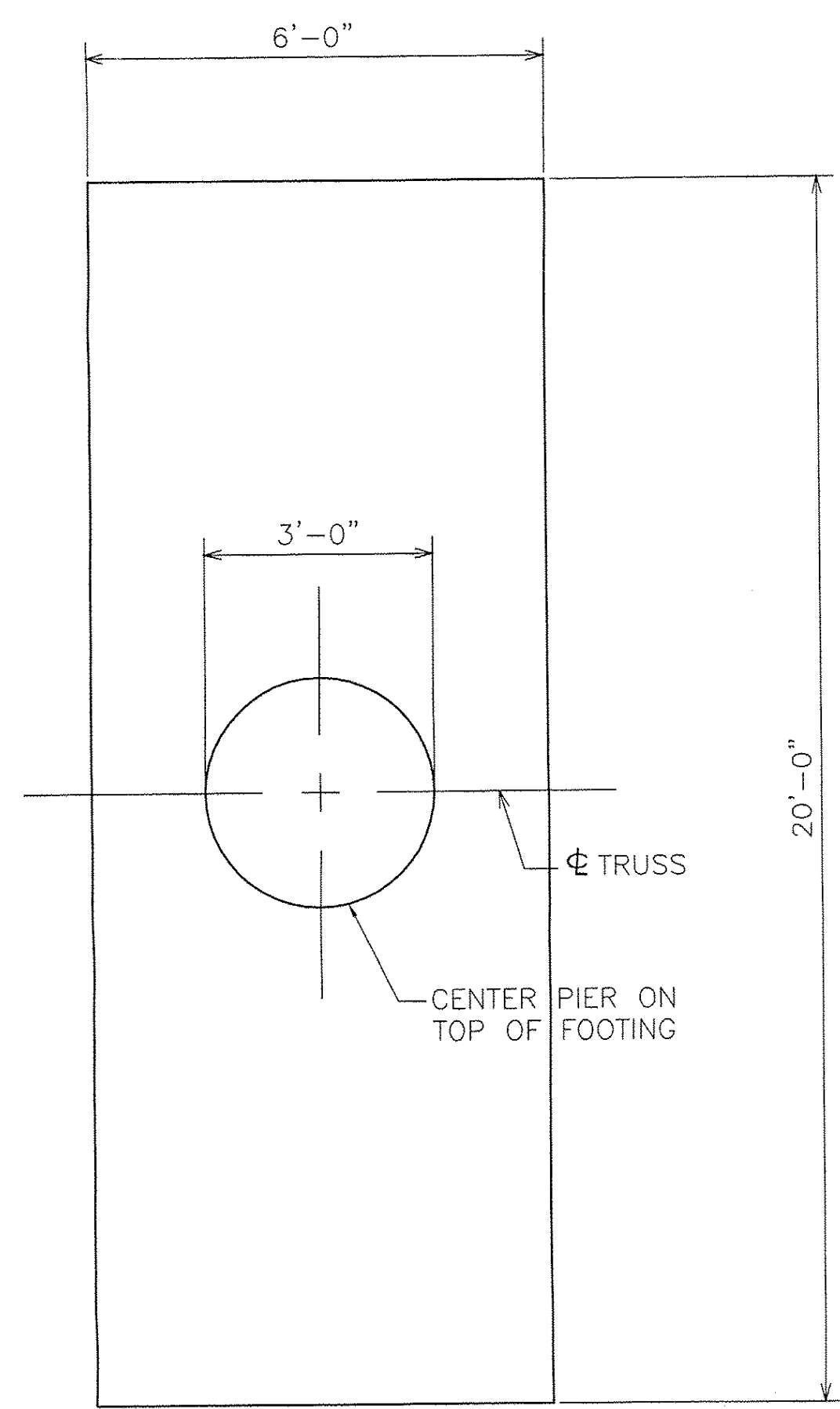


**HIGHWAY SAFETY CORP.**  
GLASTONBURY, CT

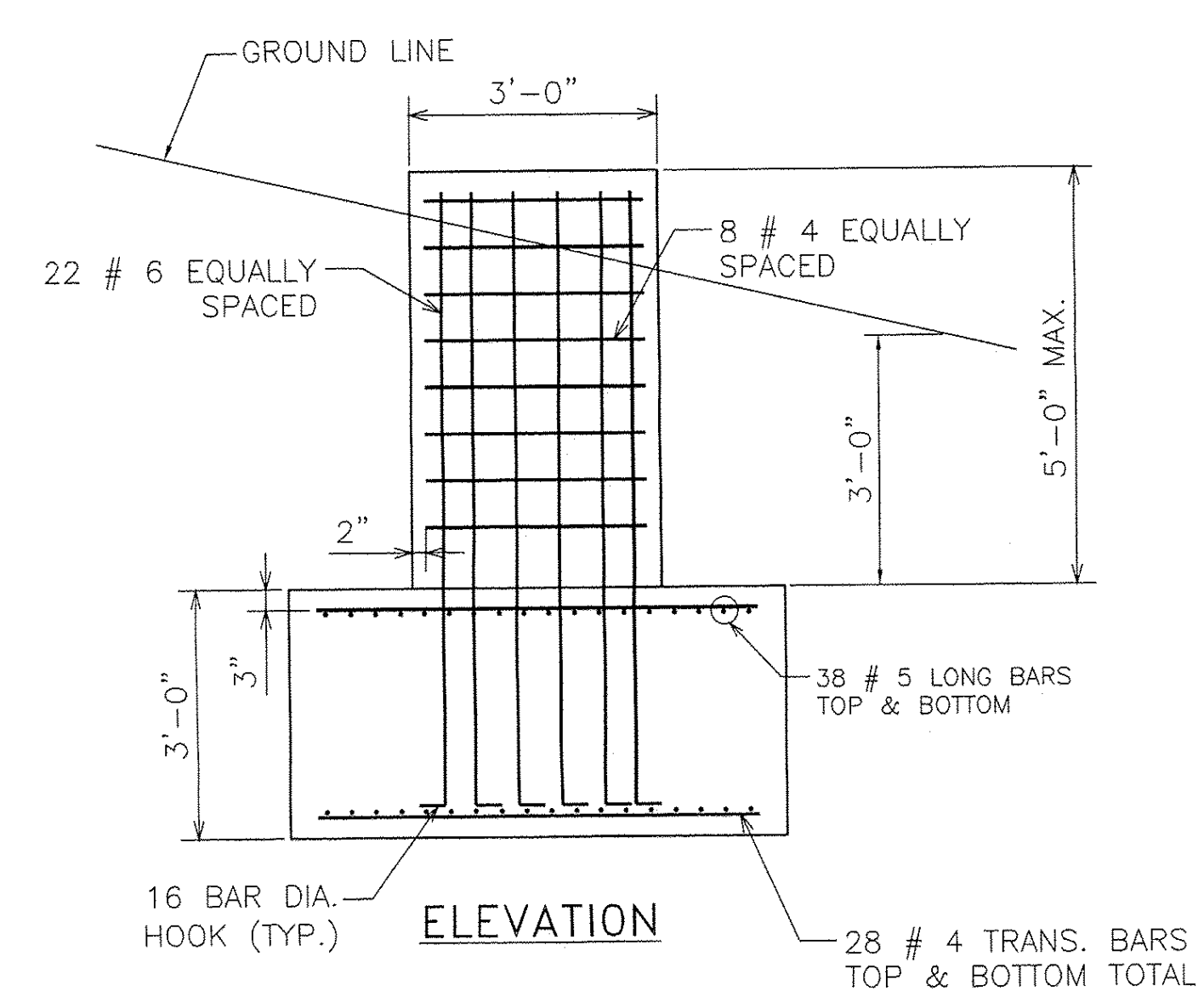
TRI CHORD OVERHEAD SIGN STRUCTURE  
SIGN 0.102 OH INTERCHANGE #8  
PROJECT NUMBER IMG SIGN(19)  
ROYALTON - MIDDLESEX  
VERMONT AGENCY OF TRANSPORTATION

GENERAL CONTRACTOR: CCS Constructors LLC

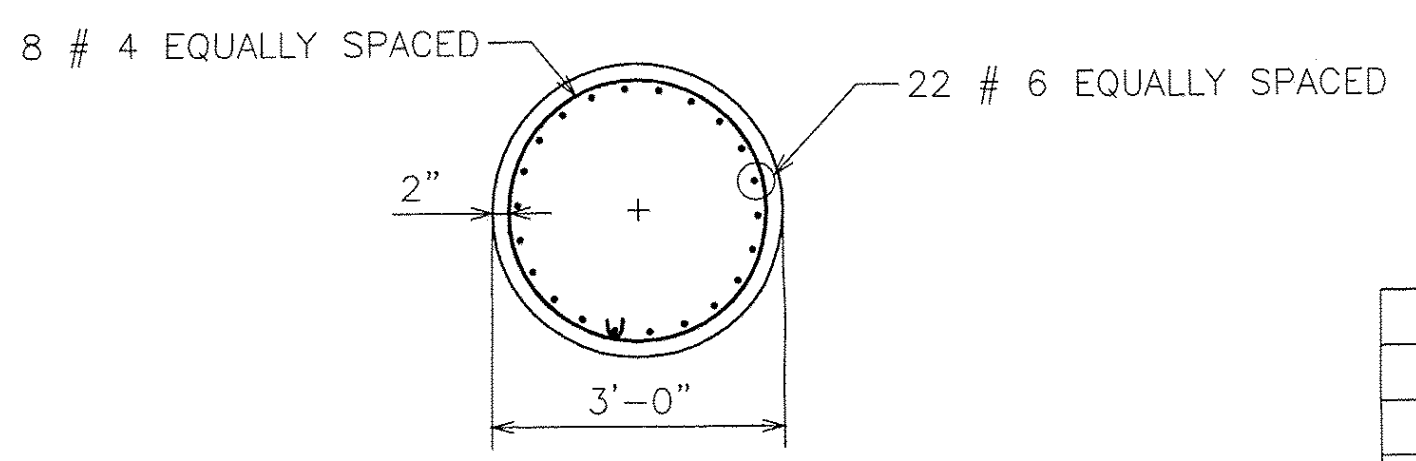
DATE: 12/22/09  
SCALE: N.T.S.  
MISC REFERENCE NO.: 1729c  
REVISION: 0  
SHEET NO.: 5 of 6



PLAN



ELEVATION



PLAN (STEM)

INTERCHANGE #6 0.138 LT				
MK	QTY	DESCRIPTION	LENGTH	SPEC.
<b>TA1 TRUSS SECTION ASSEMBLY</b>				
PA1	1	4.500" O.D. x .237" WALL CHORD PIPE	29'-5.937"	A500 gr B, API 5LX42
PA2	1	4.500" O.D. x .237" WALL CHORD PIPE	33'-1.500"	A500 gr B, API 5LX42
PA3	1	4.500" O.D. x .237" WALL CHORD PIPE	33'-1.313"	A500 gr B, API 5LX42
ag1	21	L 3x3x.25"	4'-9.625"	A709 Gr 36
ag2	4	L 3x3x.25"	3'-5.500"	A709 Gr 36
pt1	6	0.375" THICK PLATE	5"x1'-3"	A709 Gr 50
pt2	18	0.375" THICK PLATE	5"x1'-8"	A709 Gr 50
pt3	4	0.375" THICK PLATE	5"x10"	A709 Gr 50
bar1	3	0.25" PLUG PLATE	2.25"x4.500"	A709 Gr 36
sp1	3	0.500" SPLICE PLATE	9.500" O.D.	A709 Gr 50
<b>TA2 TRUSS SECTION ASSEMBLY</b>				
PA4	1	4.500" O.D. x .237" WALL CHORD PIPE	29'-5.937"	A500 gr B, API 5LX42
PA5	1	4.500" O.D. x .237" WALL CHORD PIPE	33'-1.500"	A500 gr B, API 5LX42
PA6	1	4.500" O.D. x .237" WALL CHORD PIPE	33'-1.313"	A500 gr B, API 5LX42
ag1	21	L 3x3x.25"	4'-9.625"	A709 Gr 36
ag2	4	L 3x3x.25"	3'-5.500"	A709 Gr 36
pt1	6	0.375" THICK PLATE	5"x1'-3"	A709 Gr 50
pt2	18	0.375" THICK PLATE	5"x1'-8"	A709 Gr 50
pt3	4	0.375" THICK PLATE	5"x10"	A709 Gr 50
bar1	3	0.25" PLUG PLATE	2.25"x4.500"	A36
sp1	3	0.500" SPLICE PLATE	9.500" O.D.	A709 Gr 50
<b>1LT LEFT POST ASSEMBLY</b>				
po1	1	14" O.D. x .500" WALL PIPE	26'-3.750"	A500 gr B, API 5LX42
cp1	1	0.25" CAP PLATE	1'-2.500" O.D.	A36
gt	1	0.125" GASKET	14.5" O.D.-12.5" I.D.	50 DURO. NEOPRENE
bar3	1	L1.5x1.5x.25"	1'-1"	A36
hb1	1	0.500" DIA. HEX BOLT	2.500"	A307
wnt	1	0.500" DIA. HEX NUT		A563
rbw	1	0.500" DIA. RUBBER WASHER		50 DURO. NEOPRENE
gw	1	0.500" DIA. WASHER		F844
pt4	2	0.500" PLATE	8" x 6.500"	A709 Gr 50
pt5	4	0.500" PLATE	16" x 16"	A709 Gr 50
bar2	1	0.625" x 2.500" BAR	21.500"	A36
ga	1	0.125" GASKET	7.750" x 5.250"	50 DURO. NEOPRENE
fc	1	0.25" COVER PLATE	7.750" x 5.250"	A36
cb	4	0.375" DIA. HEX BOLT	1"	A307
lug	1	0.25" PLATE	1" x 1"	A36
bp1	1	2" BASE PLATE	2'-6" O.D.	A709 Gr 50

REBAR LIST

REBAR	PCS. REQRD.	LENGTH	SPEC.
#4	16	9'-0"	A615 Gr. 60
#4	56	5'-6"	A615 Gr. 60
#6 (90° HOOK ONE END)	44	8'-6"	A615 Gr. 60
#5	76	19'-6"	A615 Gr. 60

REVISIONS

No.	Remarks	Date
0	Initial submittal	
1	MK-ub2	3/10/10
2	Footing design	5/26/10

<b>1RT RIGHT POST ASSEMBLY</b>				
po2	1	14" O.D. x .500" WALL PIPE	32'-3.750"	A500 gr B, API 5LX42
cp1	1	0.25" CAP PLATE	1'-2.500" O.D.	A36
gt	1	0.125" GASKET	14.5" O.D.-12.5" I.D.	50 DURO. NEOPRENE
bar3	1	L1.5x1.5x.25"	1'-1"	A36
hb1	1	0.500" DIA. HEX BOLT	2.500"	A307
wnt	1	0.500" DIA. HEX NUT		A563
rbw	1	0.500" DIA. RUBBER WASHER		50 DURO. NEOPRENE
gw	1	0.500" DIA. WASHER		F844
pt4	2	0.500" PLATE	8" x 6.500"	A709 Gr 50
pt5	4	0.500" PLATE	16" x 16"	A709 Gr 50
bar2	1	0.625" x 2.500" BAR	21.500"	A36
ga	1	0.125" GASKET	7.750" x 5.250"	50 DURO. NEOPRENE
fc	1	0.25" COVER PLATE	7.750" x 5.250"	A36
cb	4	0.375" DIA. HEX BOLT	1"	A307
lug	1	0.25" PLATE	1" x 1"	A36
bp1	1	2" BASE PLATE	2'-6" O.D.	A709 Gr 50
<b>SIGN ASSEMBLY</b>				
sh1	4	W6x8.5	12'-6"	A36
sh2	4	W6x8.5	10'-0"	A36
ub2	32	0.625" DIA. U-BOLT	7"	F1554 Gr 36
sk1	64	0.625" DIA. SELF LOCKING NUT		A563 DH
sw1	64	0.625" DIA. FALT WASHER		F436
<b>HARDWARE</b>				
sbt1	24	0.625" DIA. SPLICE HEX BOLT	2.250"	A325
snt1	24	0.625" DIA. HEX NUT		A563 DH
swr1	48	0.625" DIA. WASHER		F436
ub1	8	0.75" DIA. U-BOLT	7.500"	F1554 Gr 36
un1	16	0.75" DIA. LOCK NUT		A563 DH
uw1	16	0.75" DIA. FALT WASHER		F436
<b>ANCHOR BOLT</b>				
an1	12	2" DIA. STUD	3'-8"	S/S A276 TY304
nt	48	2" DIA. HEX NUT		S/S A194B TY304
wr	12	2" DIA. WASHER		S/S TY304
lk	12	2" DIA. LOCK WASHER		S/S TY305
anp	12	1" PLATE WASHER	4" x 4"	S/S TY305



**HIGHWAY SAFETY CORP.**  
GLASTONBURY, CT

TRI CHORD OVERHEAD SIGN STRUCTURE  
SIGN 0.138 OH INTERCHANGE #6  
PROJECT NUMBER IMG SIGN(19)  
ROYALTON - MIDDLESEX  
VERMONT AGENCY OF TRANSPORTATION

DATE 12/22/09  
SCALE NTS  
PROJECT REFERENCE NO. 1729a  
GENERAL CONTRACTOR  
SUB CONTRACTOR CCS Constructors LLC

DRAWN MHM  
CHECKED  
DATE 12/22/09  
SCALE NTS  
PROJECT REFERENCE NO. 1729a  
SIZE D REVISION 0  
SHEET NO. 6 of 6

**CCS Constructors LLC**

138 Munson Avenue  
 Morrisville, Vermont 05661  
 (802) 888-7701 FAX: (802) 888-4746

**LETTER OF TRANSMITTAL**

DATE:	2/23/2010
ATTN:	Al Jones
RE:	Royalton/ Middlesex IMG SIGN (19)

TO: Attn. Al Jones, Resident Engineer  
SE Regional Construction Office  
837 Reservoir Rd.  
Orange, VT 05641

WE ARE SENDING YOU  Attached  Under separate cover via \_\_\_\_\_ the following items:

Shop drawings  Prints  Plans  Samples  Specifications

Copy of letter  Change order  \_\_\_\_\_

COPIES	DATE	NO.	DESCRIPTION	STATUS
1	2/23/2010	2	Steel post uppers shop drawings	
1	2/23/2010	2	Revised steel post base shop drawings	
1			GMAW Welding Procedures	

THESE ARE TRANSMITTED as checked below:

1. For approval  5. Approved as submitted  9. Resubmit copies for approval

2. For your use  6. Approved as noted  10. Submit copies for distribution

3. As requested  7. Returned for corrections  11. Return corrected prints

4. For review and comment  8. Revise and resubmit  12. \_\_\_\_\_

13. FOR BID DUE \_\_\_\_\_  PRINTS RETURNED AFTER LOAN TO US

REMARKS: We added the S3 plates welded to PB10, added the 5" diameter hole on on PB4 of the 5" post uppers, and  
added the plate weight and total weight columns on the post upper tables.

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

COPY TO: 5 sets to Mike Hedges in Structures

SIGNED: Andrew White, P.E.

AASHTO/AWS D1.5 QUALIFICATION

ANNEX L

WELDING PROCEDURE SPECIFICATION (WPS)  
 PREQUALIFIED  QUALIFIED BY TESTING   
 or PROCEDURE QUALIFICATION RECORDS (PQR) Yes   
 AASHTO/AWS D1.5 Qualification Type 5.12.1  - 5.12.2  - 5.13

Contractor  
 Organization CCS Constructors  
 Welding Process(es) GMAW-P  
 Type: Manual  Semiautomatic   
 Machine  Automatic   
 Tandem  Parallel

Identification CCS-WPS-GMAWP  
 Revision 1st Date 1/13/2010 BER  
 Authorized by Tim Prevost Date 1/13/2010  
 Supporting PQR No.(s) CCS-PQR-GMAWP

JOINT DESIGN USED  
 Single  Double Weld   
 Backing: Yes  No  Material A36  
 Root Opening 5/8 Root Face Dimension \_\_\_\_\_  
 Groove Angle 20 Radius (J-U) \_\_\_\_\_  
 Backgouging: Yes  No  Method \_\_\_\_\_  
 Root Treatment \_\_\_\_\_

POSITION  
 Position of Groove 3G Fillet \_\_\_\_\_  
 Vertical Progression: Up  Down   
 ELECTRICAL CHARACTERISTICS  
 Transfer Mode (GMAW): Globular  Spray   
 Current: AC  DCEP  DCEN  Pulsed   
 Electrical Stick Out 3/8  
 Other \_\_\_\_\_

BASE METALS  
 Material Spec. A572  
 Type or Grade 50  
 Thickness: Groove 1" Fillet \_\_\_\_\_  
 Diameter (Pipe) \_\_\_\_\_

TECHNIQUE  
 Stringer or Weave Bead Stringer  
 Multi-pass or Single Pass (per side) Multi  
 Number of Electrodes one  
 Electrode Spacing: Longitudinal \_\_\_\_\_  
 Lateral \_\_\_\_\_ Angle \_\_\_\_\_  
 Interpass Cleaning Chip & Wire Brush

FILLER METALS  
 AWS Specification A5.28  
 AWS Classification ER80S-NiL  
 Manufacturer Trade Name Lincoln

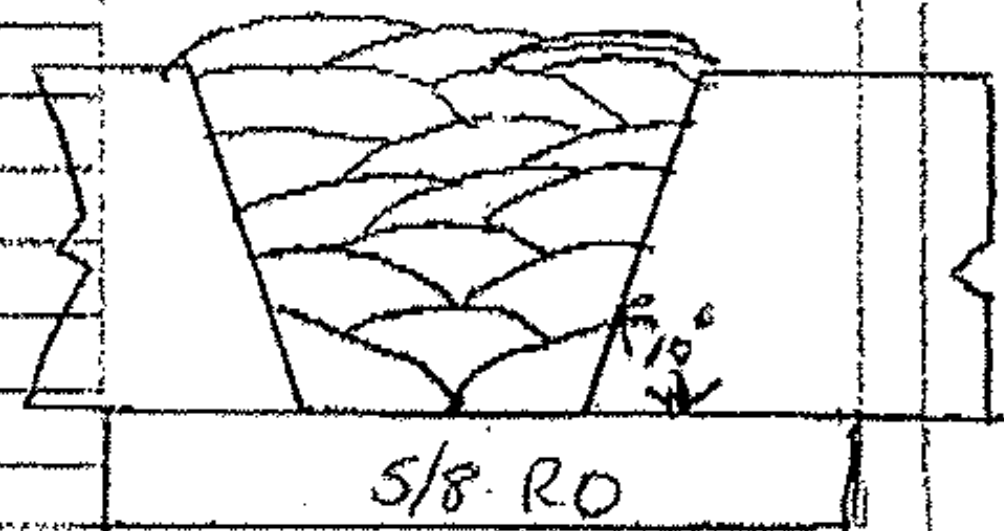
PREHEAT  
 Preheat Temp., Min. 70  
 Interpass Temp., Min. 70  
 Interpass Temp., Max. 400F

SHIELDING  
 Flux \_\_\_\_\_ Mfg. Trade Name \_\_\_\_\_  
 Electrode Flux (Class) \_\_\_\_\_  
 Gas Composition 84%Ar 16%CO2  
 Flow Rate 40CFH Gas Cup Size 5/8

POSTWELD HEAT TREATMENT  
 Temp. N/A Hold Time N/A  
 Heating/Cooling Rate \_\_\_\_\_  
 HEAT INPUT  
 Calculated Heat Input Value: kJ/in  kJ/mm   
 Max. Heat Input \_\_\_\_\_ Min. Heat Input \_\_\_\_\_

WELDING PROCEDURE

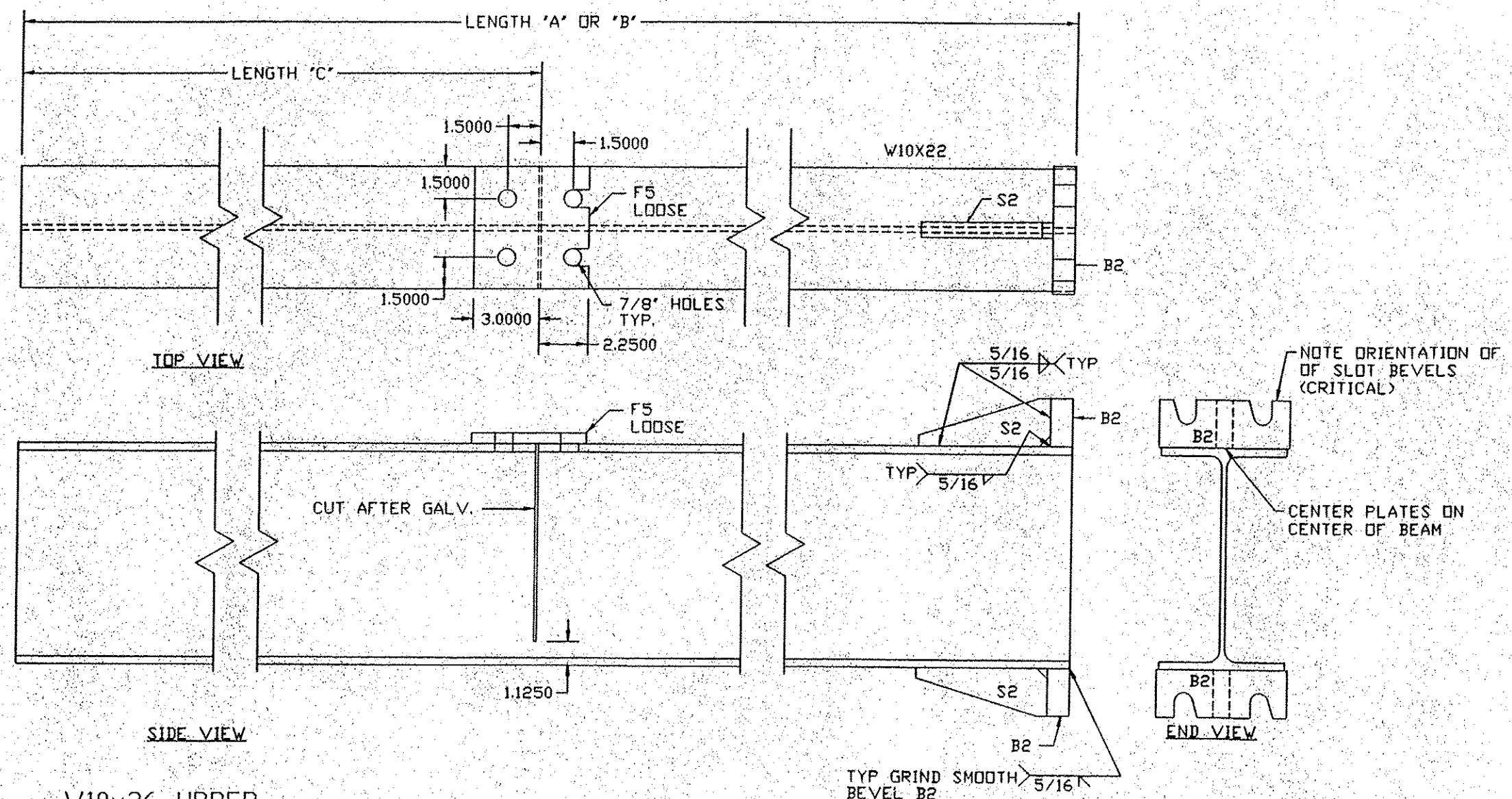
Pass or Weld Layer(s)	Process	Filler Metals Diam.	Current		Volts	Travel Speed	Joint Details
			Type & Polarity	Amps or Wire Feed Speed			
1-5	GMAW	.045	DCEP	111-115a	21-22	3.5 to 7 IPM	20°
5-17	GMAW	.045	DCEP	110-130	21-23		



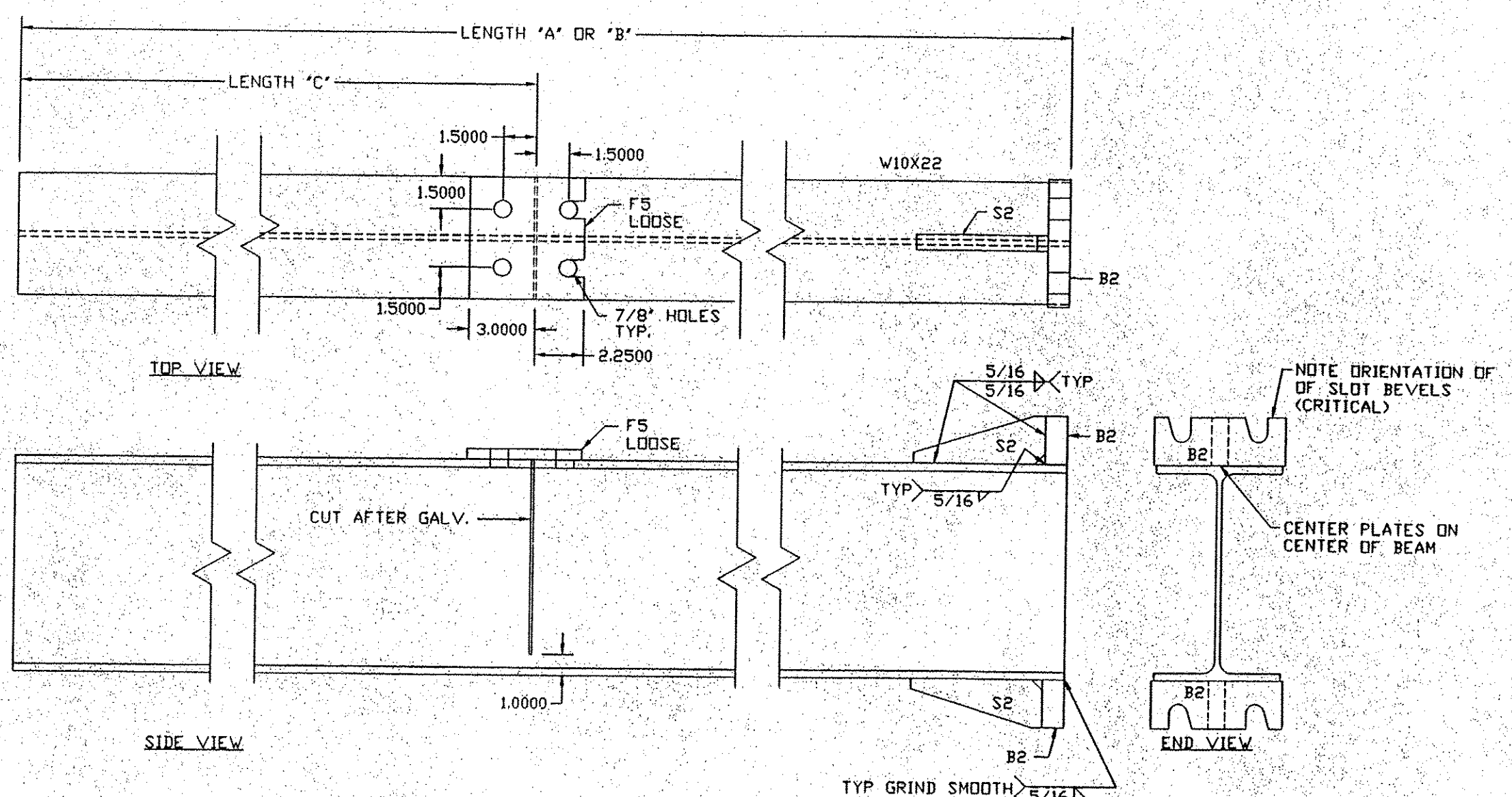
Form L-2—Sample Welding Procedure Specification

ad  
2/26/10

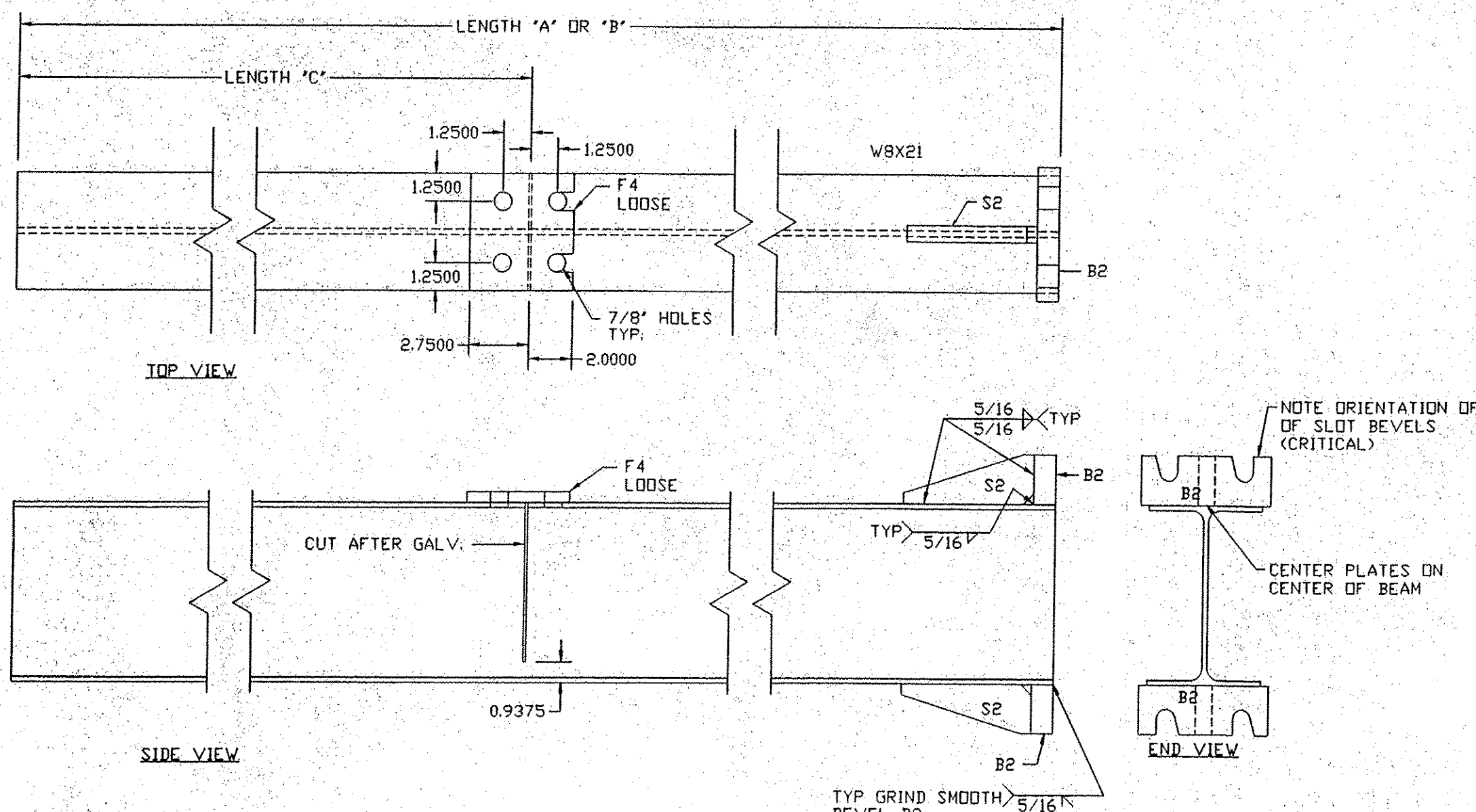




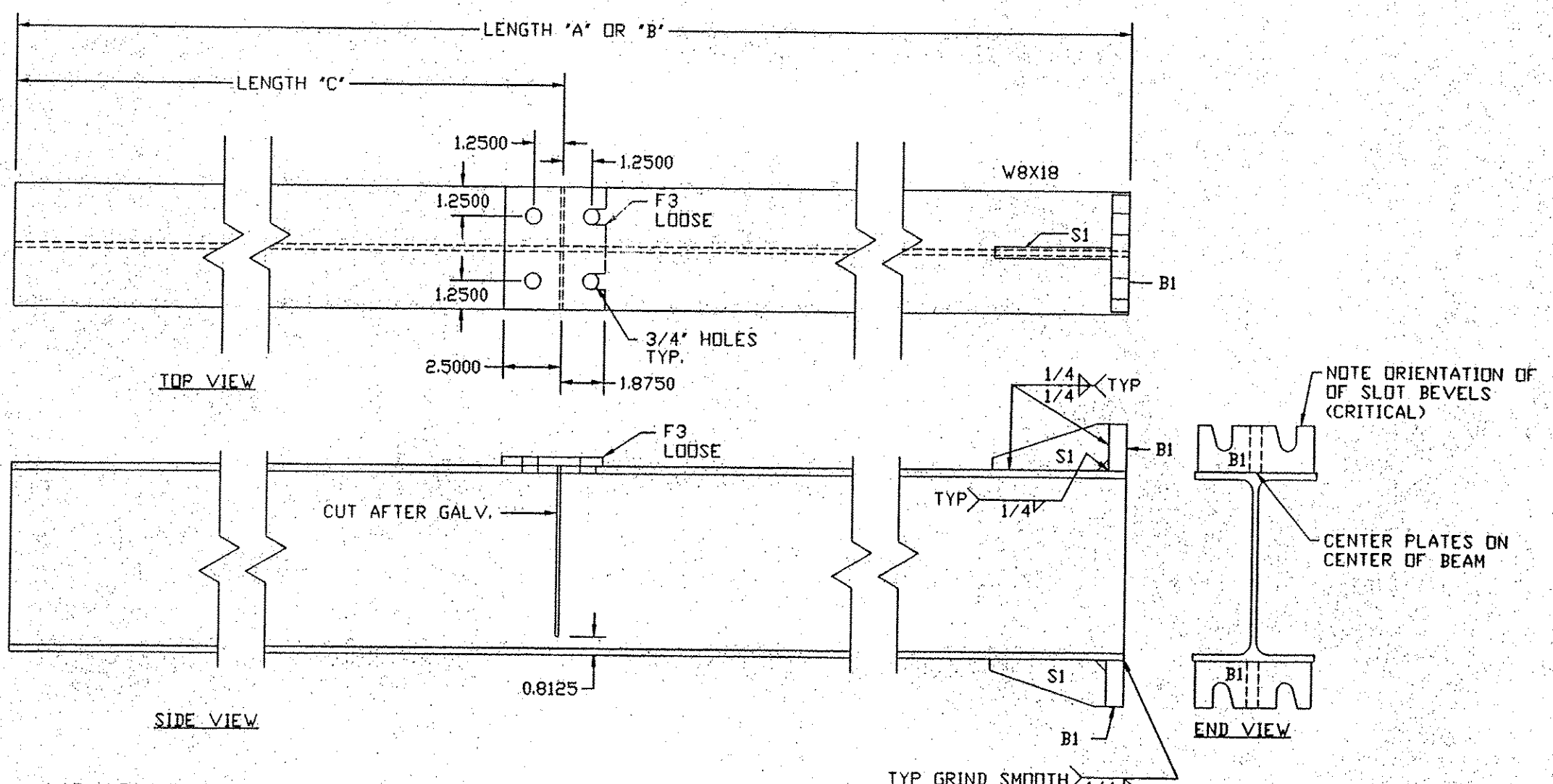
W10x26 UPPER  
4 REQ'D



W10x22 UPPER  
12 REQ'D



W8x21 UPPER  
53 REQ'D

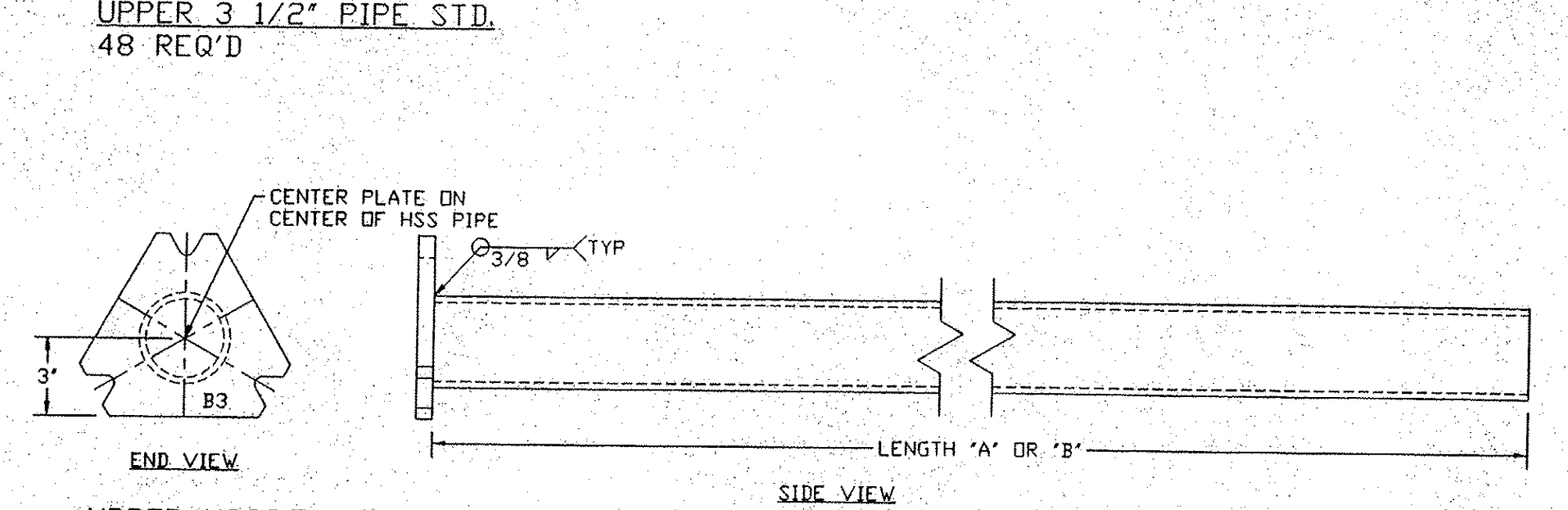
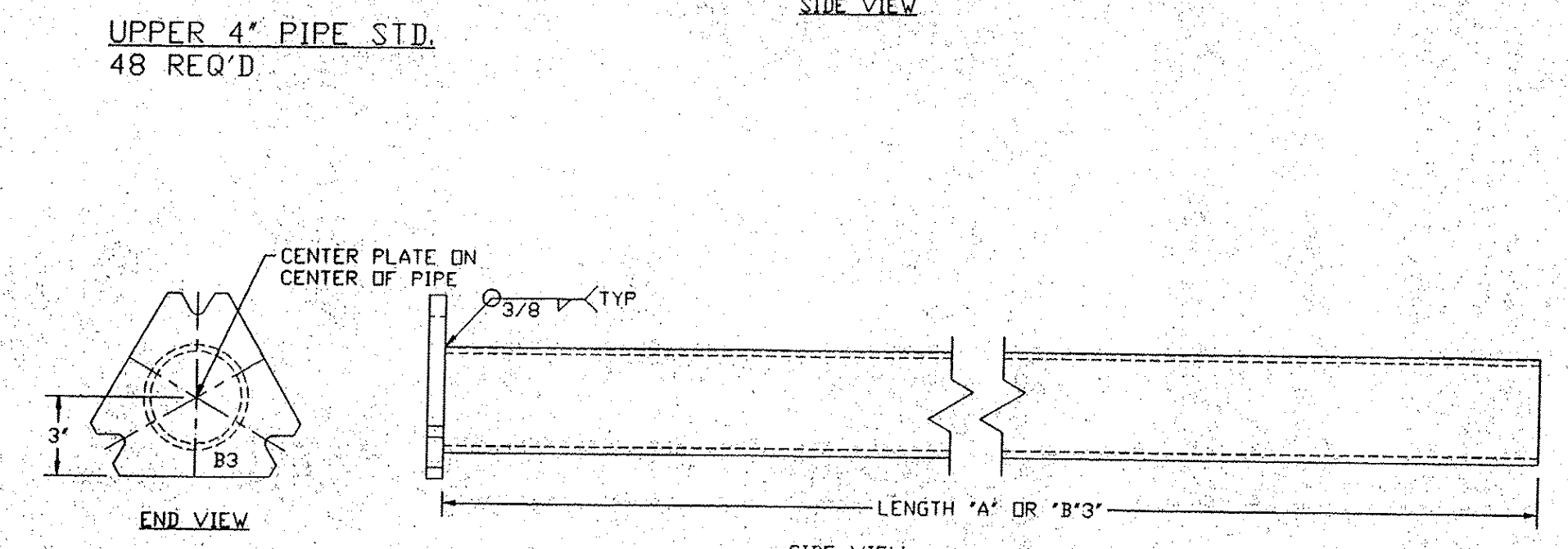
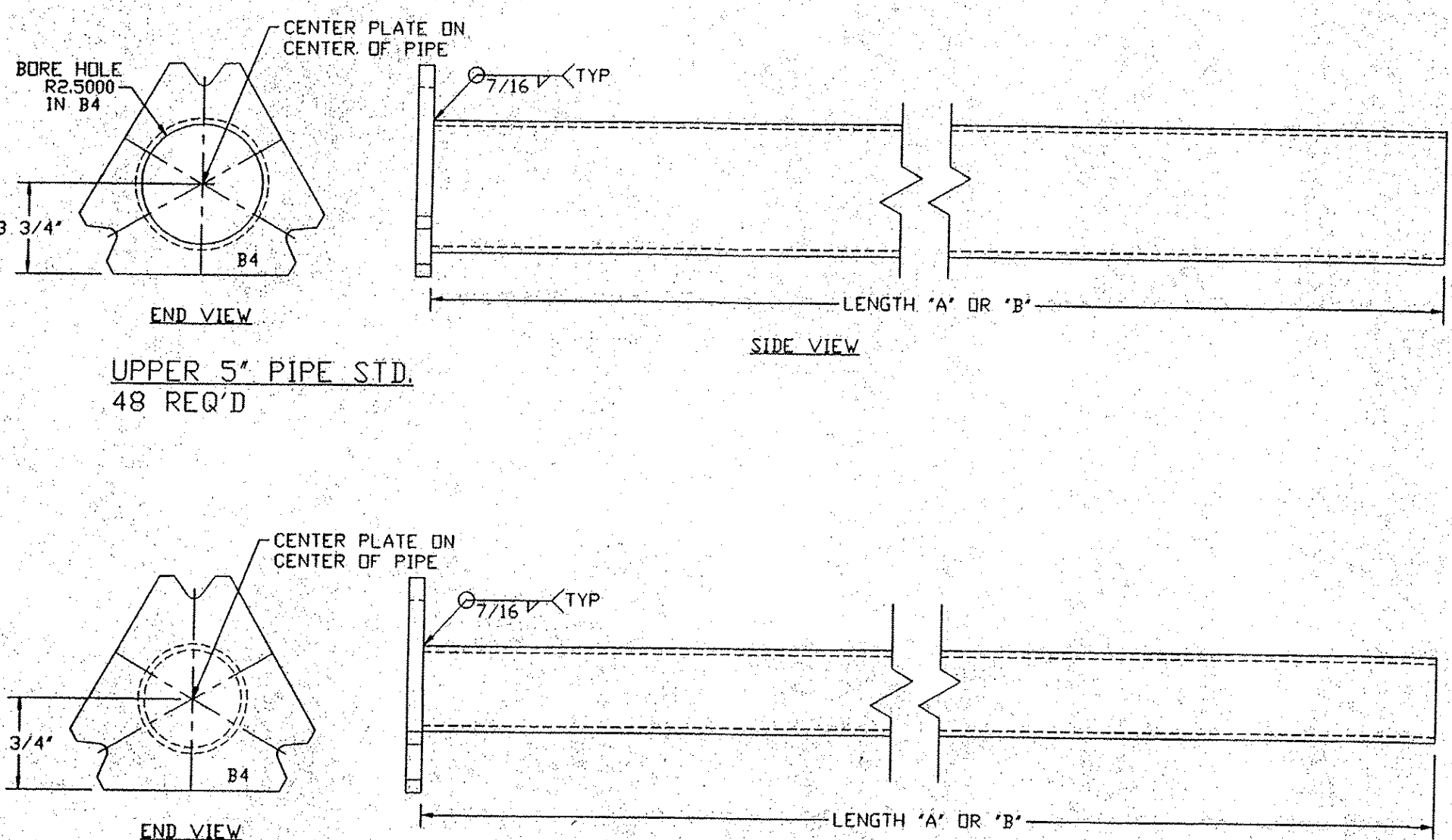
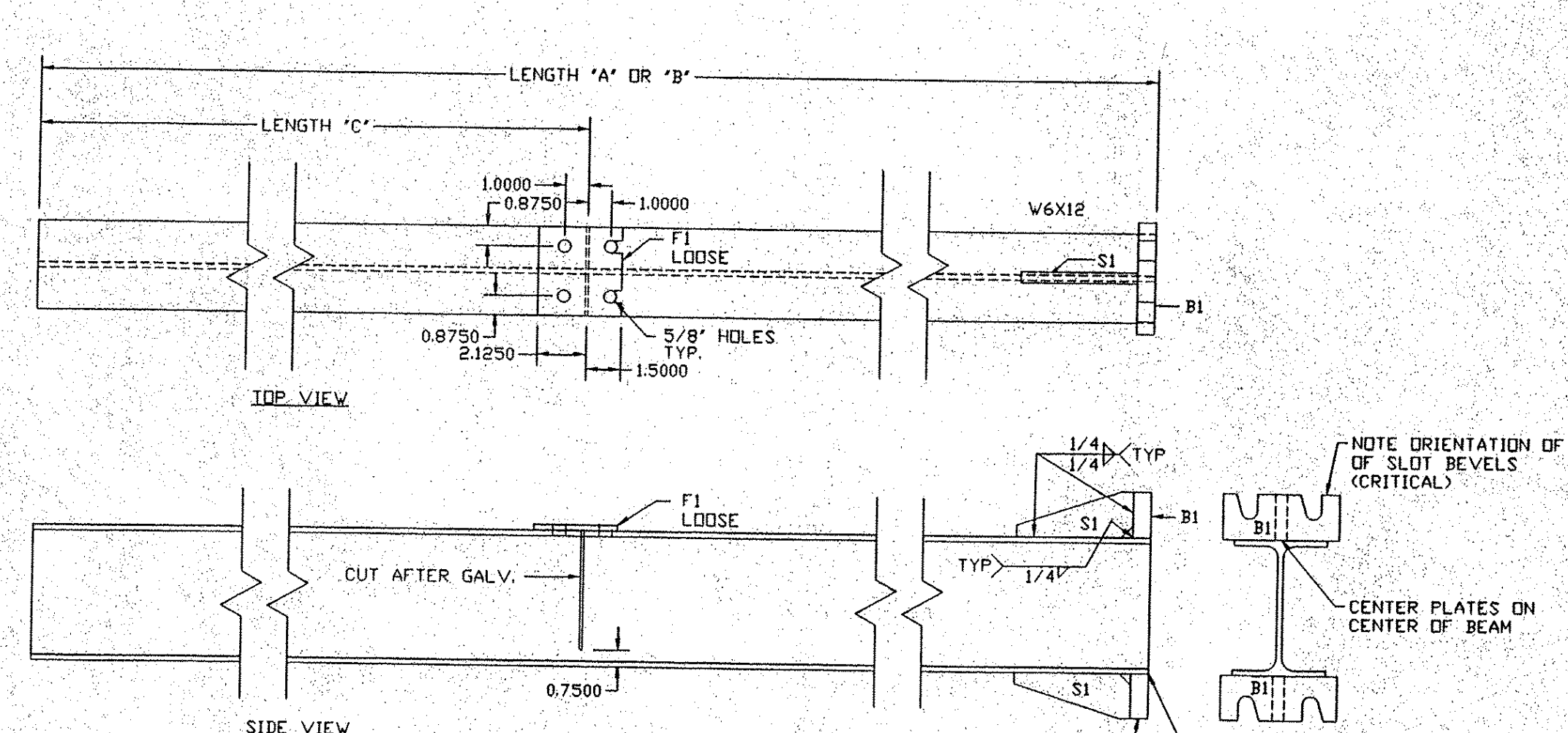
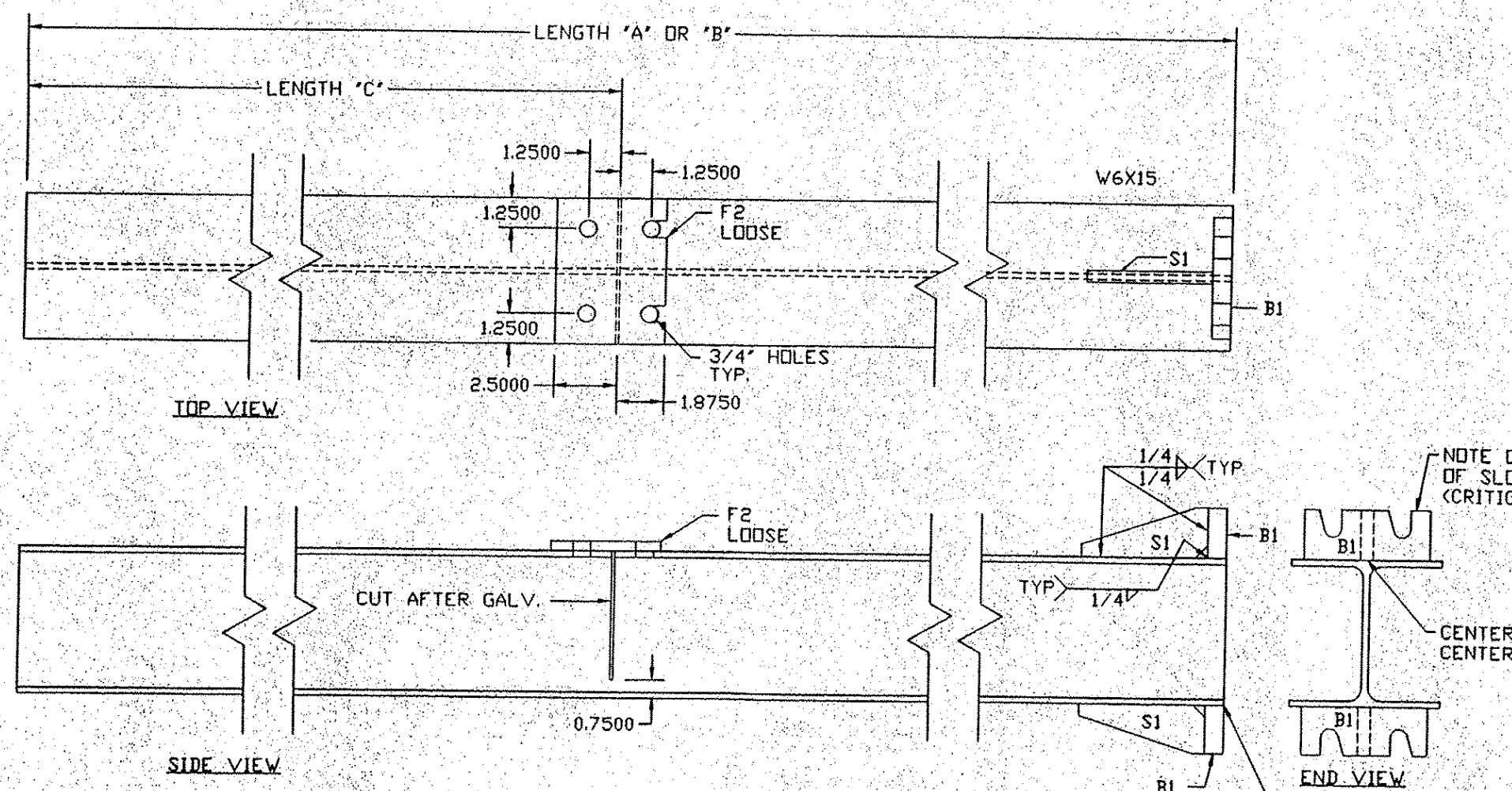


W8x18 UPPER  
34 REQ'D

Mile Marker	Sheet	sign	ht	Int above	wt A	wt B	PL wt	Total wt	Total wt	Size	delta A B	A length	B length	C length
			(in)	shoulder	(lbs)	(lbs)	(lbs)	(lbs)	(lbs)					
21.92NB	53	144	84	368.3	370.5	5.42	373.7	375.9	W8X18	0'-1 1/2"	20'-5 1/2"	20'-7"	12'-4"	
29.68NB	55	114	84	343.0	323.2	5.42	348.5	328.6	W8X18	1'-1 1/4"	19'-11 7/16"	17'-11 7/16"	9'-10"	
30.18NB	55	114	84	341.2	315.2	5.42	346.6	320.6	W8X18	1'-5 5/16"	18'-11 7/16"	17'-6 1/8"	9'-10"	
30.335NB	55	144	84	371.1	341.4	5.42	376.5	346.9	W8X18	1'-7 3/4"	21'-10 1/2"	20'-5 3/8"	12'-4"	
30.500NB	55	126	84	393.8	368.1	5.42	399.2	373.5	W8X18	1'-5 1/8"	20'-7 3/8"	18'-11 5/8"	12'-4"	
31.400SB	73	144	84	403.1	420.9	5.42	408.5	426.4	W8X18	0'-11 7/8"	22'-4 3/4"	23'-4 5/8"	12'-4"	
42.440NB	58	144	84	260.4	290.8	5.42	265.9	296.2	W8X18	1'-8 1/4"	14'-5 5/8"	16'-1 7/8"	12'-4"	
46.405NB	60	144	84	351.7	366.6	5.42	357.1	372.0	W8X18	0'-9 15/16"	19'-6 7/16"	20'-4 3/8"	12'-4"	
49.735NB	61	144	84	364.7	400.3	5.42	370.1	405.7	W8X18	1'-11 3/4"	20'-3 1/8"	22'-2 7/8"	12'-4"	
49.910NB	62	120	84	384.2	410.3	5.42	389.6	415.7	W8X18	1'-5 3/8"	21'-4 1/8"	22'-9 1/2"	10'-4"	
51.720NB	63	114	96	277.7	222.8	5.42	283.1	228.2	W8X18	3'-6/8"	15'-5 1/8"	12'-4 1/2"	9'-10"	
52.235NB	64	114	84	382.6	386.0	5.42	388.0	391.4	W8X18	0'-2 1/4"	21'-3 1/16"	21'-5 5/16"	9'-10"	
52.440NB	63	144	84	382.6	386.0	5.42	388.0	391.4	W8X18	0'-2 1/4"	21'-3 1/16"	21'-5 5/16"	9'-10"	
32.060SB	73	114	84	276.9	245.4	5.42	282.4	250.9	W8X18	1'-9"	15'-4 5/8"	13'-7 5/8"	9'-10"	
43.390SB	75	144	84	349.3	370.5	5.42	354.7	375.9	W8X18	1'-2 1/8"	19'-4 7/8"	20'-7"	12'-4"	
47.200 SB	77	102	84	304.9	287.4	5.42	310.3	292.9	W8X18	0'-11 5/8"	16'-11 1/4"	15'-11 5/8"	8'-10"	
47.360 SB	77	144	84	350.4	366.6	5.42	355.9	372.0	W8X18	0'-10 3/4"	19'-5 5/8"	20'-4 3/8"	12'-4"	
51.080 SB	79	144	84	354.3	382.8	5.42	359.7	388.2	W8X18	1'-7"	19'-8 3/16"	21'-3 3/16"	12'-4"	
21.320NB	53	138	84	434.8	369.7	10.22	445.0	379.9	W8X21	3'-3 3/16"	20'-8 7/16"	17'-7 1/4"	12'-4 1/4"	
22.135NB	63	120	96	412.1	427.1	10.22	422.3	437.3	W8X21	0'-8 9/16"	19'-7 1/2"	20'-4 1/16"	11'-10 1/4"	
41.840NB	57	144	84	404.7	440.1	10.22	414.9	450.3	W8X21	1'-8 1/4"	19'-3 1/4"	20'-11 1/2"	12'-4 1/4"	
42.716NB	58	120	84	260.5	297.3	10.22	270.8	307.5	W8X21	1'-9"	12'-4 7/8"	14'-1 7/8"	10'-4 1/4"	
45.900NB	59	144	84	387.4	347.8	10.22	397.6	358.0	W8X21	1'-10 5/8"	18'-5 3/8"	16'-6 3/4"	12'-4 1/4"	
46.250NB	60	138	84	415.8	390.3	10.22	426.1	400.5	W8X21	1'-2 5/8"	19'-9 5/8"	18'-7"	11'-10 1/4"	
46.535NB	60	126	84	366.8	340.2	10.22	377.1	350.4	W8X21	1'-3 1/4"	17'-5 5/8"	16'-2 3/8"	10'-10 1/4"	
48.953NB	61	144	84	423.0	402.3	10.22	433.2	412.5	W8X21	0'-11 13/16"	20'-11 1/16"	19'-1 7/8"	12'-4 1/4"	
49.505NB	61	138	84	300.1	292.5	10.22	310.3	302.7	W8X21	0'-4 1/4"	14'-3 1/2"	13'-11 1/8"	11'-10 1/4"	
52.596NB	64	132	84	428.3	420.9	10.22	438.5	431.1	W8X21	0'-4 1/4"	20'-4 3/4"	20'-1/2"	11'-4 1/4"	
57.330NB	67	144	84	457.4	398.3	10.22	467.6	408.6	W8X21	2'-9 3/4"	21'-9 3/8"	18'-11 5/8"	12'-4 1/4"	
57.955NB	67	138	96	426.9	458.5	10.22	436.1	468.7	W8X21	1'-6 5/8"	20'-3 3/8"	21'-10"	11'-10 1/4"	
58.455NB	68	156	96	437.9	374.3	10.22	448.2	384.5	W8X21	3'-3/8"	20'-10 1/4"	17'-9 7/8"	13'-4 1/4"	
22.640SB	71	120	84	371.4	298.2	10.22	381.7	308.4	W8X21	3'-5 7/8"	17'-8 1/4"	14'-2 3/8"	10'-4 1/4"	
23.300SB	71	144	84	402.8	332.9	10.22	413.0	343.2	W8X21	3'-3 15/16"	19'-2 3/16"	15'-10 1/4"	12'-4 1/4"	
31.200SB	73	126	84	450.0	476.8	10.22	460.2	487.0	W8X21	1'-3 5/16"	21'-5 1/8"	22'-8 7/16"	10'-10 1/4"	
31.570SB	73	114	96	417.4	483.7	10.22	427.6	493.9	W8X21	3'-1 7/8"	19'-10 1/2"	23'-3/8"	9'-10 1/4"	
46.940 SB	77	126	84	435.1	464.0	10.22	445.3	474.2	W8X21	1'-4 1/2"	20'-8 5/8"	22'-1 1/8"	10'-10 1/4"	
47.815 SB	78	144	84	433.1	463.2	10.22	443.3	473.4	W8X21	1'-5 3/16"	20'-7 1/2"	22'-11/16"	12'-4 1/4"	
50.930 SB	79	138	84	445.8	470.8	10.22	456.0	481.0	W8X21	1'-2 1/4"	21'-2 3/4"	22'-5"	11'-10 1/4"	
51.230 SB	80	138	84	436.2	480.4	10.22	446.4	490.6	W8X21	1'-2 1/4"	20'-9 1/4"	22'-10 1/2"	11'-10 1/4"	
51.615 SB	80	144	84	439.5	420.5	10.22	449.7	430.8	W8X21	0'-10 13/16"	20'-11 1/8"	20'-5/16"	12'-4 1/4"	
53.350 SB	81	120	84	350.0	347.8	10.22	360.2	358.0	W8X21	0'-1 1/4"	16'-8"	16'-6 3/4"	10'-4 1/4"	
53.550 SB	81	144	84	436.8	453.5	10.22	447.1	463.7	W8X21	0'-9 1/2"	20'-9 5/8"	21'-7 1/8"	12'-4 1/4"	
59.300 SB	86	138	96	463.1	481.3	10.22	473.3	491.5	W8X21	0'-10 3/8"	22'-5/8"	22'-11"	11'-10 1/4"	
59.870 SB	86	144	84	507.5	536.9	10.22	517.7	547.1	W8X21	1'-4 13/16"	24'-2"	25'-6 13/16"	12'-4 1/4"	
42.290NB	58	138	96	421.7	359.9	10.22	431.9	370.1	W10X22	2'-9 11/16"	19'-2"	16'-4 5/16"	11'-10 1/2"	
22.949SB	71	138	96	475.1	607.5	10.22	485.3	617.7	W10X22	6'-1/4"	21'-7 1/8"	27'-7 3/8"	11'-10 1/2"	
43.240SB	75	120	84	420.3	509.7	10.22	430.5	519.9	W10X22	4'-3/4"	19'-1 1/4"	23'-2"	10'-4 1/2"	
44.250SB	76	144	84	407.0	396.0	10.22	417.2	406.2	W10X22	0'-6"	18'-8"	18'-0"	12'-4 1/2"	
53.850 SB	82	138	96	458.3	531.0	10.22	468.6	541.2	W10X22	3'-3 5/8"	20'-10"	24'-1 5/8"	11'-10 1/2"	
54.150 SB	82	144	84	443.7	514.0	10.22	453.9	524.2	W10X22	3'-3 3/8"	20'-2"	23'-4 5/8"	12'-4 1/2"	
59.000 SB	85	138	96	535.8	589.6	10.22	546.0	599.9	W10X22	2'-5 3/8"	24'-4 1/4"	26'-9 5/8"	13'-4 1/2"	
43.540SB	76	138	96	535.0	619.9	10.22	545.3	630.2	W10X26	3'-3 3/16"	20'-6 15/16"	23'-10 1/8"	11'-10 1/2"	
47.510 SB	78	138	96	541.0	620.8	10.22	551.2	631.0	W10X26	3'-13/16"	20'-9 11/16"	23'-10 1/2"	11'-10 1/2"	

NOTE: ALL W-SHAPES AASHTO M270 GR. 36 DR 50  
 NOTE: ALL PLATES AASHTO M270 GR. 36 DR 50  
 NOTE: ALL ROUND HSS SHAPES ASTM A500 GR. B  
 NOTE: ALL PIPE SHAPES ASTM A53 GR. B

CCS CONSTRUCTORS, LLC 138 MUNSON AVE. MORRISVILLE, VT 05661 PH. 802-888-7701 FX. 802-888-4746	REVISION 1	2/23/10	UPPER 5'
	PROJECT NAME	ROYALTON-MIDDLESEX	PROJECT NO.
	UPPERS		IMG SIGN(19)
	SCALE 1"=1'	DATE 2/23/10	DRAWING NO.
FINISH: GALVANIZE TO AASHTO M111	DRAWN: EB	SUPERVISOR: AW	1 of 2
	TOWNS: ROYALTON, BETHEL, RANDOLF		
	NORTHFIELD, BARRE, MONTPELIER, MIDDLESEX		

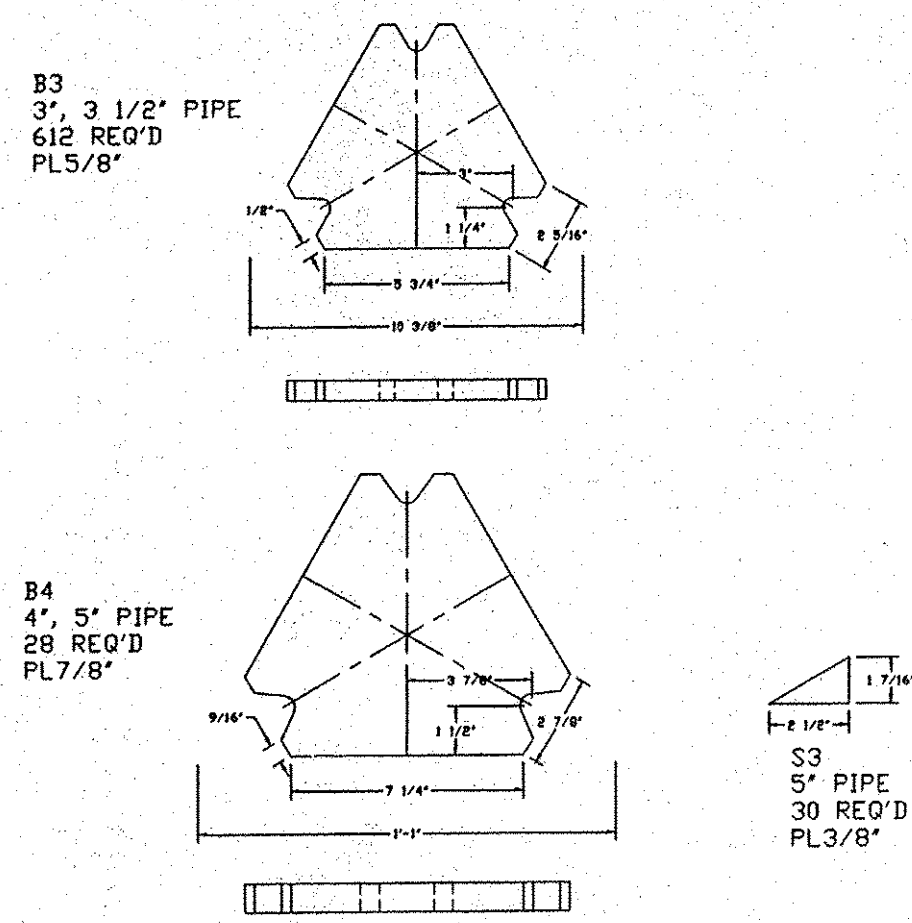
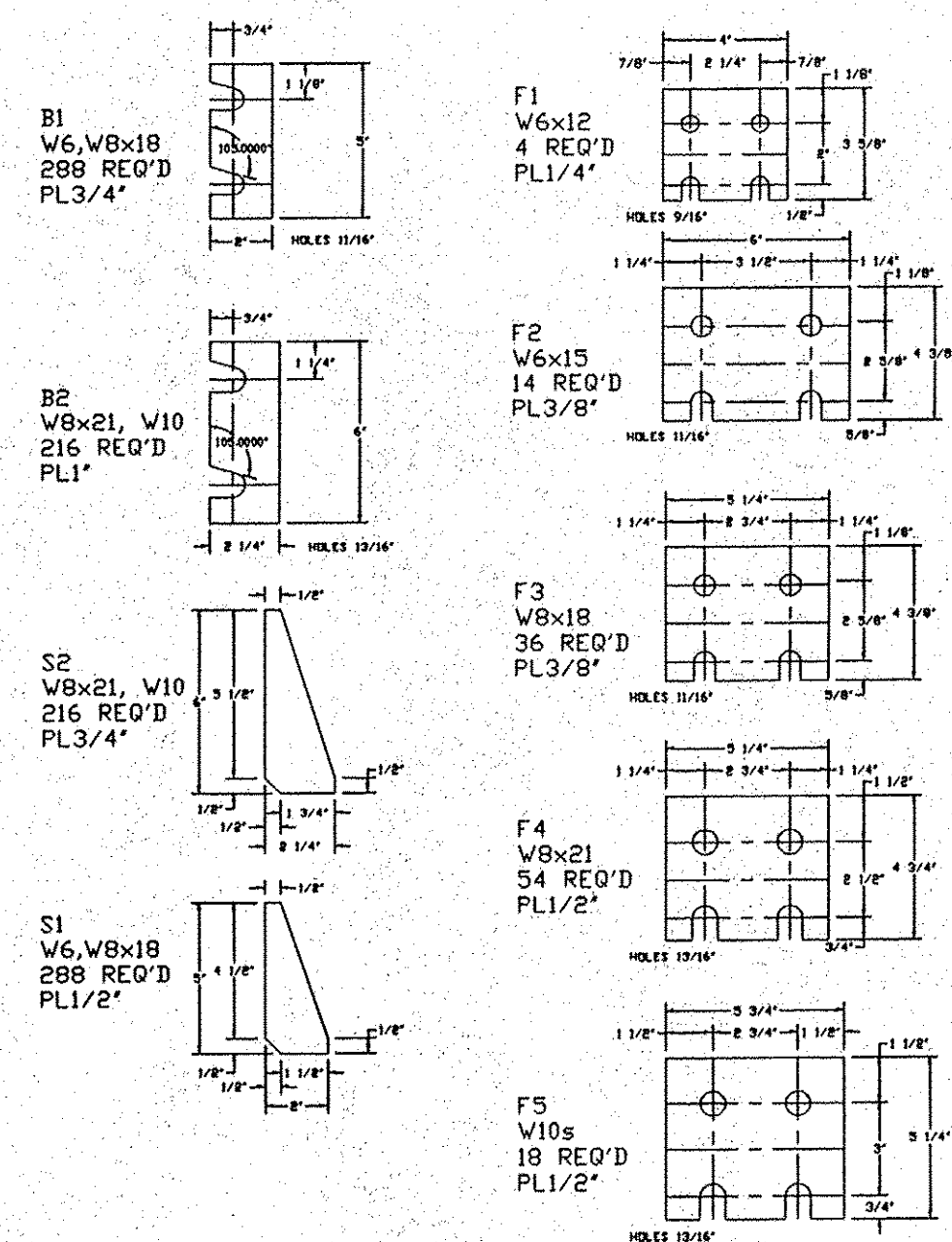


Mile Marker	Sheet	sign	ht above shoulder (in)	wt A stem (lbs)	wt B stem (lbs)	PL wt (lbs)	Total wt A (lbs)	Total wt B (lbs)	Size	delta A B	A length	B length	C length
49.325NB	61	84	84	151.6	118.1	5.42	157.0	123.5	W6X12	2-9 7/16"	12-7 9/16"	9-10 1/8"	7-3 3/8"
23.100SB	71	84	84	172.9	151.8	5.42	178.3	157.2	W6X12	1-9 1/8"	14-4 7/8"	12-7 3/4"	7-3 3/8"
29.930NB	55	84	84	215.9	189.1	5.42	221.4	194.6	W6X15	1-9 7/16"	14-4 3/4"	12-5 1/8"	7-4"
42.140NB	57	102	84	279.1	257.2	5.42	284.5	262.6	W6X15	1-5 1/2"	18-7 1/4"	16-5 1/8"	9-4"
51.540NB	63	108	84	264.7	246.4	5.42	270.1	251.9	W6X15	1-2 5/8"	17-7 3/4"	16-5 1/8"	9-4"
31.820SB	73	84	84	268.4	275.5	5.42	273.9	280.9	W6X15	0-5 5/8"	17-10 3/4"	18-4 3/8"	7-4"
43.700SB	76	84	84	207.2	195.3	5.42	212.6	200.7	W6X15	0-9 1/2"	13-9 3/4"	13-1 1/4"	7-4"
51.380 SB	80	84	84	226.4	238.1	5.42	231.8	243.5	W6X15	0-9 3/8"	15-1 1/8"	15-10 1/2"	7-4"
54.304 SB	82	108	84	276.6	301.6	5.42	282.0	307.0	W6X15	1-1 8"	18-5 1/4"	20-1 1/4"	9-4"
22.248NB	53	60	84	96.1	99.9	6.79	102.9	106.7	3\"/>				

Mile Marker	Sheet	sign	ht above shoulder (in)	wt A stem (lbs)	wt B stem (lbs)	PL wt (lbs)	Total wt A (lbs)	Total wt B (lbs)	Size	delta A B	A length	B length	C length
50.110 SB	79	87	72	109.0	NA	NA	115.8	NA	3\"/>				

NOTE: ALL V-SHAPES AASHTO M270 GR. 36 DR. 50  
 NOTE: ALL PLATES AASHTO M270 GR. 36 DR. 50  
 NOTE: ALL ROUND HSS SHAPES ASTM A500 GR. B  
 NOTE: ALL PIPE SHAPES ASTM A53 GR. B

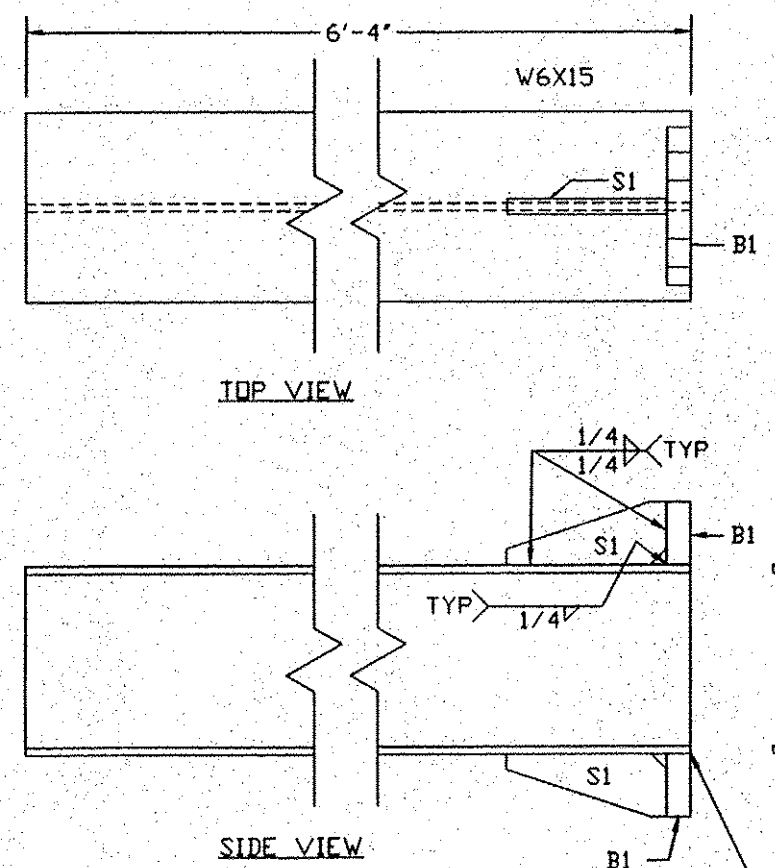
<b>CCS CONSTRUCTORS, LLC</b> 138 MUNSON AVE. MORRISVILLE, VT 05661 PH. 802-888-7701 FX. 802-888-4746		PROJECT NAME <b>ROYALTON-MIDDLESEX</b>	PROJECT NO. <b>IMG SIGN(19)</b>
FINISH: <b>GALVANIZE TO AASHTO M111</b>		UPPERS SCALE 1"=1'	DRAWING NO. <b>2 of 2</b>
DRAWN: <b>EB</b> TOWNS: <b>ROYALTON, BETHEL, RANDOLF</b> <b>NORTHFIELD, BARRE, MONTPELIER, MIDDLESEX</b>		SUPERVISOR: <b>AW</b>	



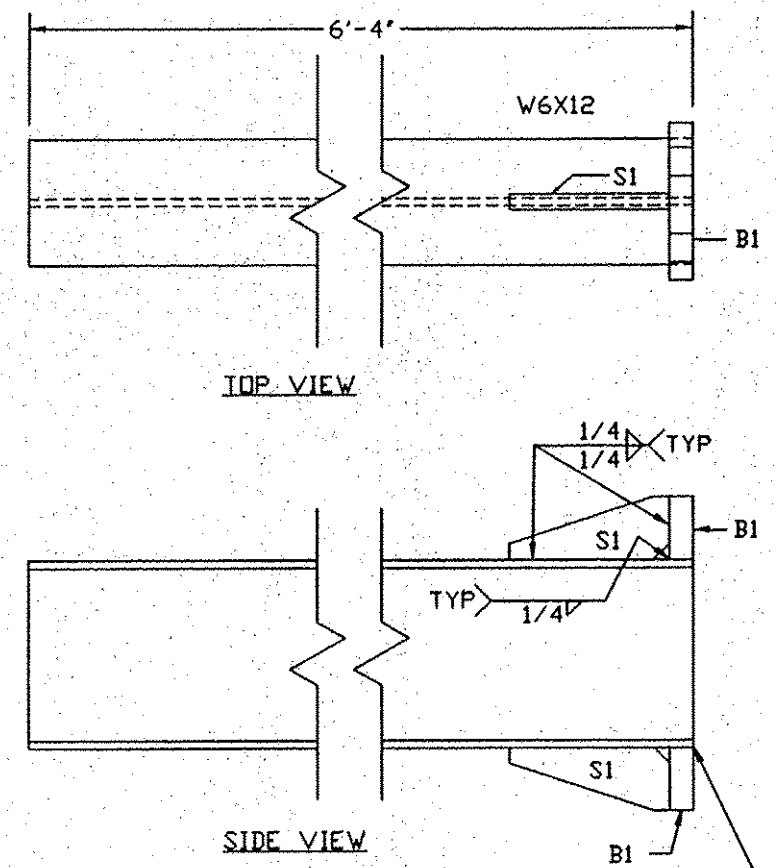
**PARTS**

PIECE	QUANTITY	ITEM	WEIGHT EA.
B1	288	PL3/4"	1.79 LBS
B2	216	PL1"	3.29 LBS
S1	288	PL1/2"	0.92 LBS
S2	216	PL3/4"	1.82 LBS
F1	4	PL1/4"	0.94 LBS
F2	14	PL3/8"	2.58 LBS
F3	36	PL3/8"	2.23 LBS
F4	54	PL1/2"	3.14 LBS
F5	18	PL1/2"	3.89 LBS
B3	612	PL5/8"	6.79 LBS
B4	28	PL7/8"	14.79 LBS
S3	30	PL3/8"	0.20 LBS
W6X12	4	6'-4"	76 LBS
W6X15	14	6'-4"	95 LBS
W8X18	34	6'-4"	114 LBS
W8X21	2	8'-4"	150 LBS
W8X21	53	6'-4"	133 LBS
W8X21	1	8'-4"	175 LBS
W10X22	12	6'-4"	139.33 LBS
W10X22	2	8'-4"	183.33 LBS
W10X26	4	6'-4"	164.66 LBS
HSS 3.500X0.216	258	6'-3"	47.38 LBS
PIPE 3 1/2" STD	48	6'-3"	57 LBS
PIPE 4" STD	4	6'-3"	67.5 LBS
PIPE 5" STD	10	6'-3"	91.25 LBS

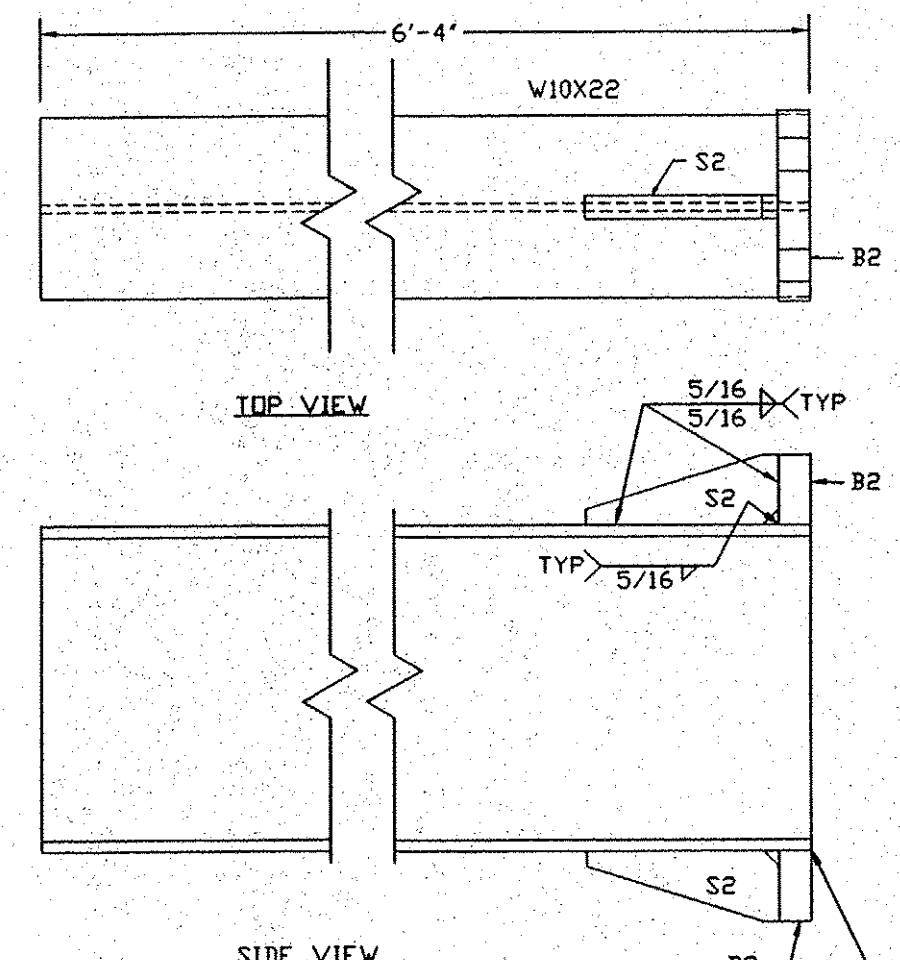
NOTE: ALL W-SHAPES AASHTO M270 GR. 36 OR 50  
 NOTE: ALL PLATES AASHTO M270 GR. 36 OR 50  
 NOTE: ALL ROUND HSS SHAPES ASTM A500 GR. B  
 NOTE: ALL PIPE SHAPES ASTM A53 GR. B



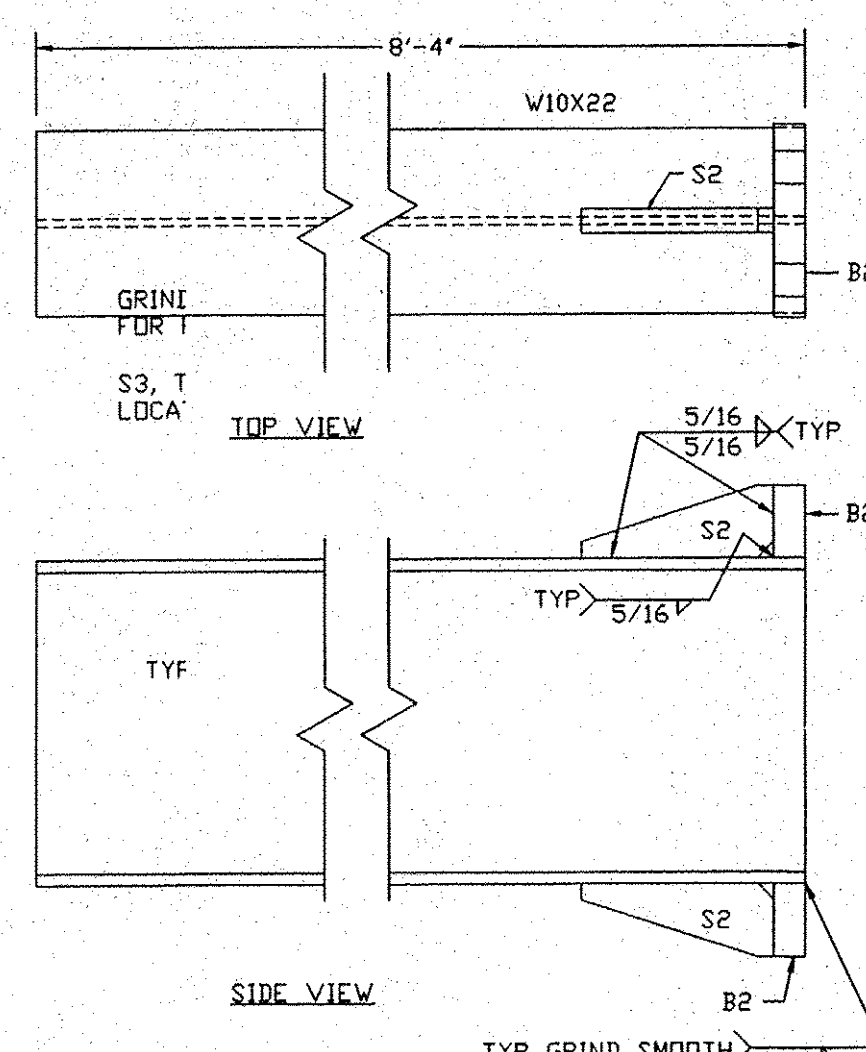
**BASE PB2**  
14 REQ'D  
W6X15



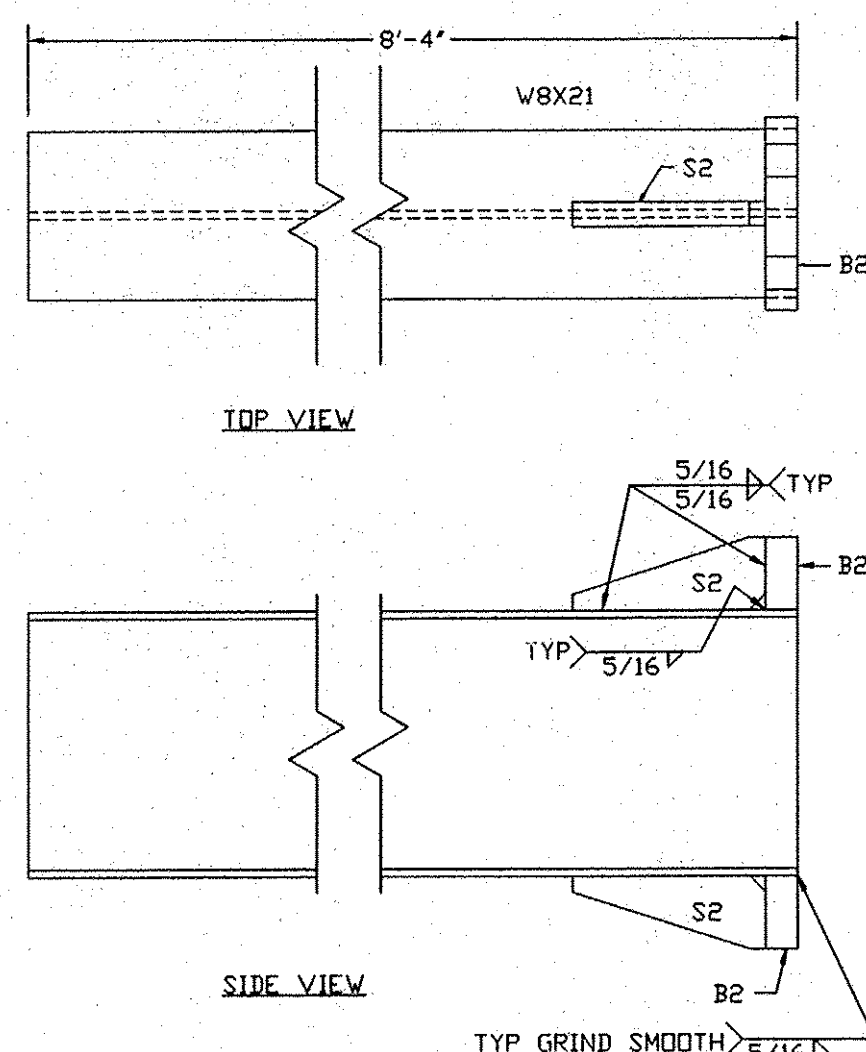
**BASE PB1**  
4 REQ'D  
W6X12



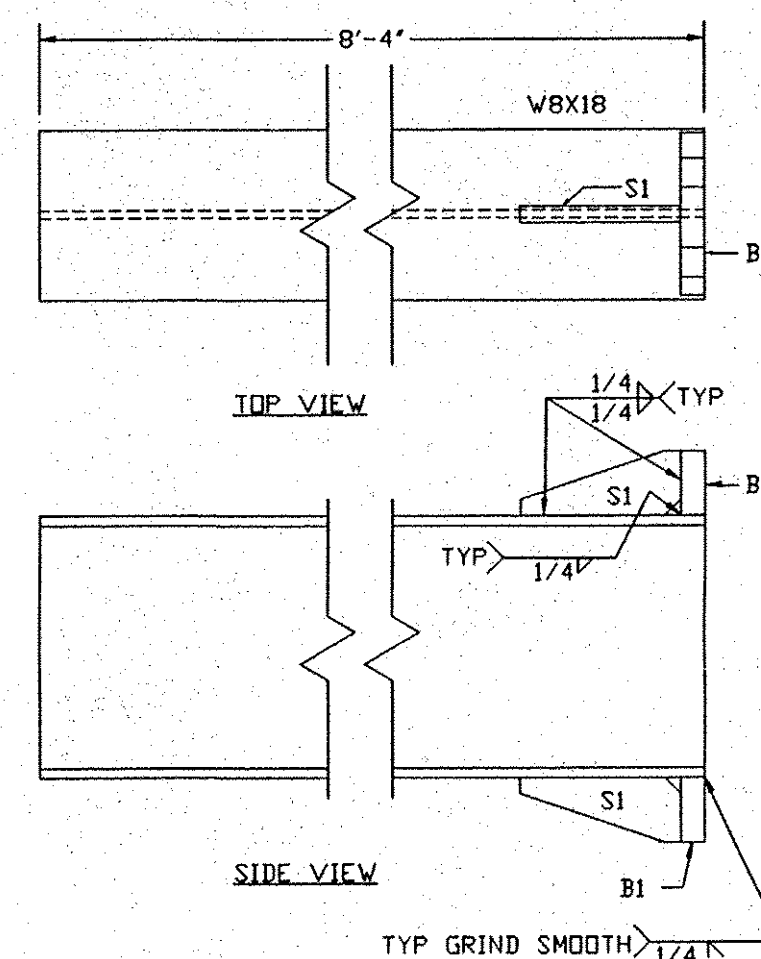
**BASE PB6**  
4 REQ'D  
W10X26



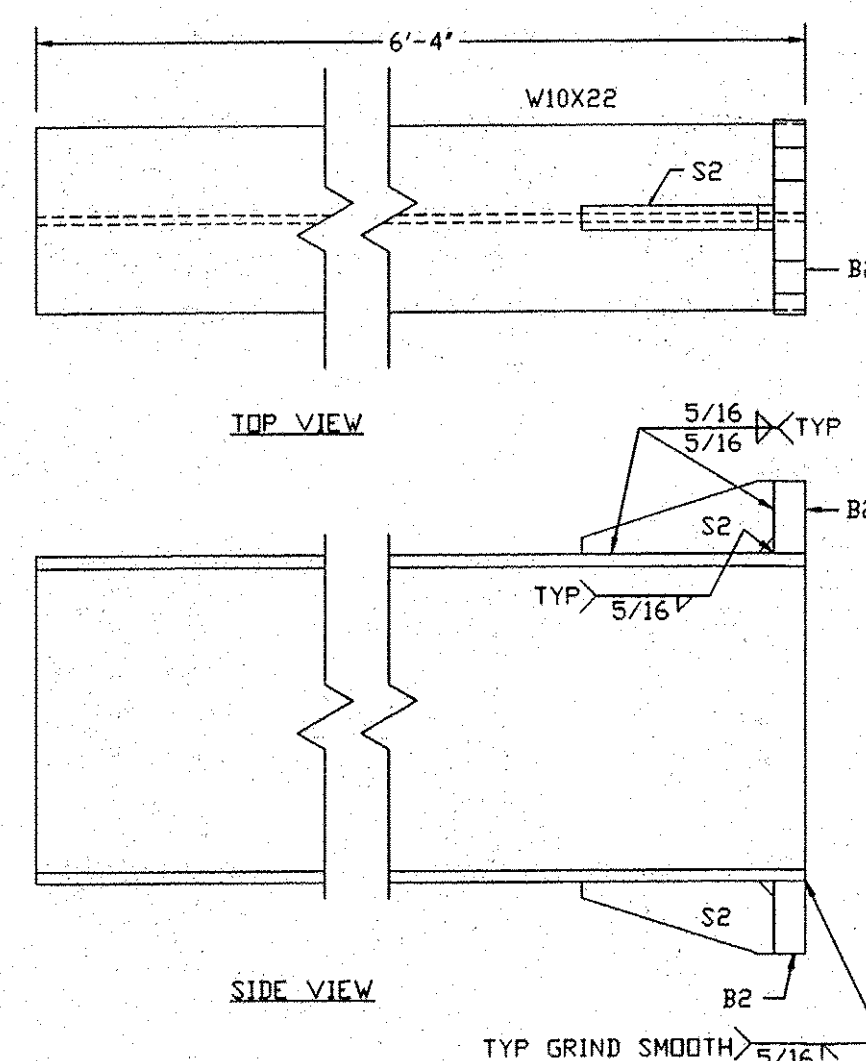
**BASE PB3A**  
2 REQ'D  
W10X22



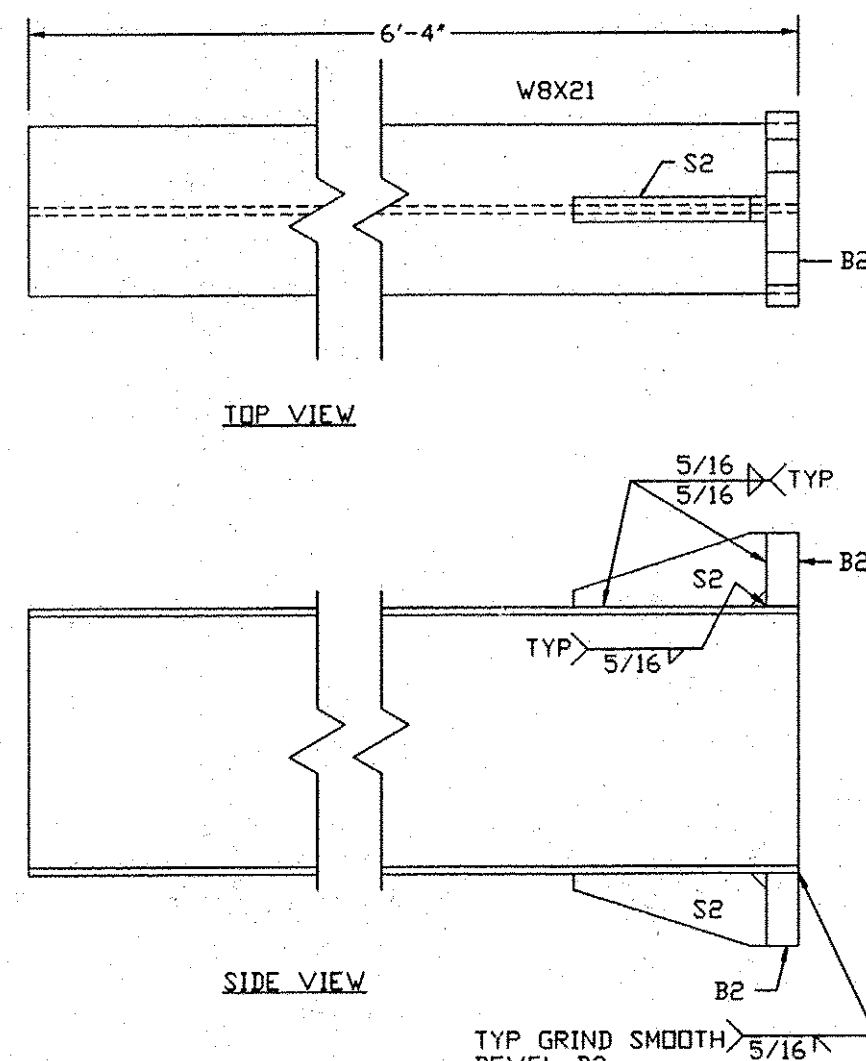
**BASE PB4A**  
1 REQ'D  
W8X21



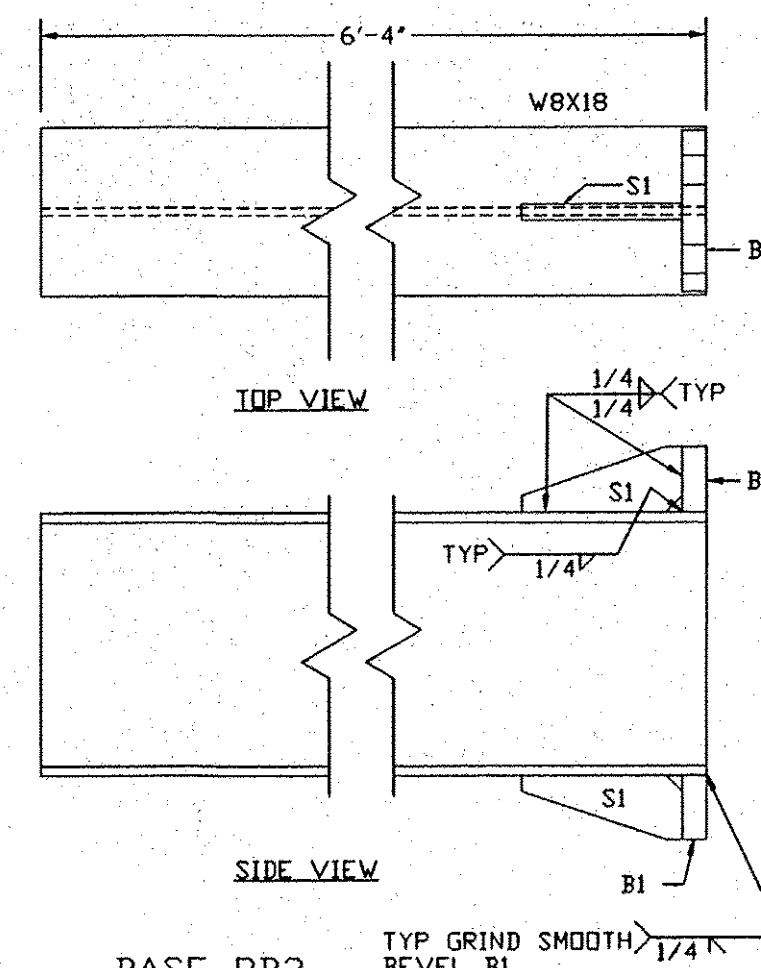
**BASE PB3B**  
2 REQ'D  
W8X18



**BASE PB5**  
12 REQ'D  
W10X22



**BASE PB4**  
53 REQ'D  
W8X21



**BASE PB3**  
34 REQ'D  
W8X18

**PB1: 4 REQ'D**

PIECE	QUANTITY	ITEM	WEIGHT EA.	TOTAL WT.
B1	2	PL3/4"	1.79 LBS	3.58 LBS
S1	2	PL1/2"	0.92 LBS	1.84 LBS
W6X12	1	W6X12	76 LBS	76 LBS

81.42 LBS EA.

**PB2: 14 REQ'D**

PIECE	QUANTITY	ITEM	WEIGHT EA.	TOTAL WT.
B1	2	PL3/4"	1.79 LBS	3.58 LBS
S1	2	PL1/2"	0.92 LBS	1.84 LBS
W6X15	1	W6X15	95 LBS	95 LBS

100.42 LBS EA.

**PB3: 34 REQ'D**

PIECE	QUANTITY	ITEM	WEIGHT EA.	TOTAL WT.
B1	2	PL3/4"	1.79 LBS	3.58 LBS
S1	2	PL1/2"	0.92 LBS	1.84 LBS
W8X18	1	W8X18	114 LBS	114 LBS

119.42 LBS EA.

**PB3A: 2 REQ'D**

PIECE	QUANTITY	ITEM	WEIGHT EA.	TOTAL WT.
B1	2	PL3/4"	1.79 LBS	3.58 LBS
S1	2	PL1/2"	0.92 LBS	1.84 LBS
W8X18	1	W8X18	150 LBS	150 LBS

155.42 LBS EA.

**PB4: 53 REQ'D**

PIECE	QUANTITY	ITEM	WEIGHT EA.	TOTAL WT.
B2	2	PL1"	3.29 LBS	6.58 LBS
S2	2	PL3/4"	1.82 LBS	3.64 LBS
W8X21	1	W8X21	133 LBS	133 LBS

143.22 LBS EA.

**PB4A: 1 REQ'D**

PIECE	QUANTITY	ITEM	WEIGHT EA.	TOTAL WT.
B2	2	PL1"	3.29 LBS	6.58 LBS
S2	2	PL3/4"	1.82 LBS	3.64 LBS
W8X21	1	W8X21	175 LBS	175 LBS

185.22 LBS EA.

**PB5: 12 REQ'D**

PIECE	QUANTITY	ITEM	WEIGHT EA.	TOTAL WT.
B2	2	PL1"	3.29 LBS	6.58 LBS
S2	2	PL3/4"	1.82 LBS	3.64 LBS
W10X22	1	W10X22	139.33 LBS	139.33 LBS

149.55 LBS EA.

**PB5A: 2 REQ'D**

PIECE	QUANTITY	ITEM	WEIGHT EA.	TOTAL WT.
B2	2	PL1"	3.29 LBS	6.58 LBS
S2	2	PL3/4"	1.82 LBS	3.64 LBS
W10X22	1	W10X22	183.33 LBS	183.33 LBS

193.55 LBS EA.

**PB6: 4 REQ'D**

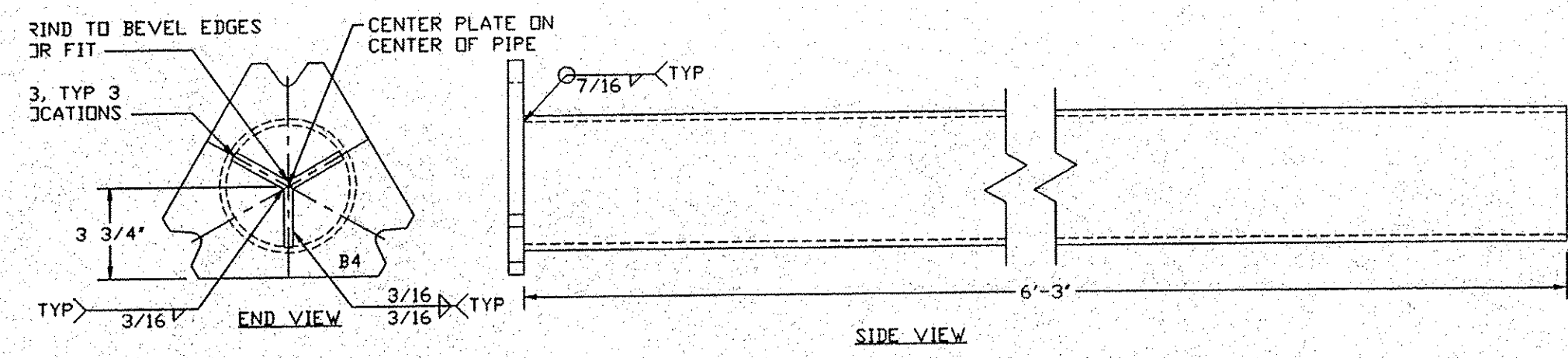
PIECE	QUANTITY	ITEM	WEIGHT EA.	TOTAL WT.
B2	2	PL1"	3.29 LBS	6.58 LBS
S2	2	PL3/4"	1.82 LBS	3.64 LBS
W10X26	1	W10X26	164.66 LBS	164.66 LBS

174.88 LBS EA.

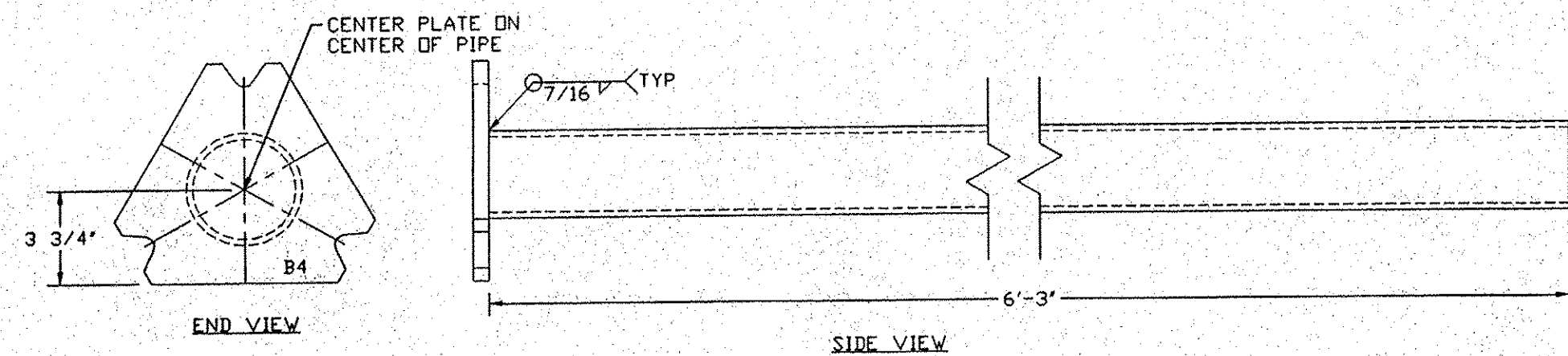
REVISION 1	2/23/10	PB10
PROJECT NAME ROYALTON-MIDDLESEX		PROJECT NO. IMG DRAWN(19)
PARTS, W BASES		DRAWING NO. 1 of 2
SCALE 1"=1'	DATE 2/23/10	
DRAWN: EB	SUPERVISOR: AW	
TOWNS: ROYALTON, BETHEL, RANDOLF NORTHFIELD, BARRE, MONTPELIER, MIDDLESEX		

CCS CONSTRUCTORS, LLC  
 138 MUNSON AVE.  
 MORRISVILLE, VT 05661  
 PH. 802-888-7701  
 FX. 802-888-4746

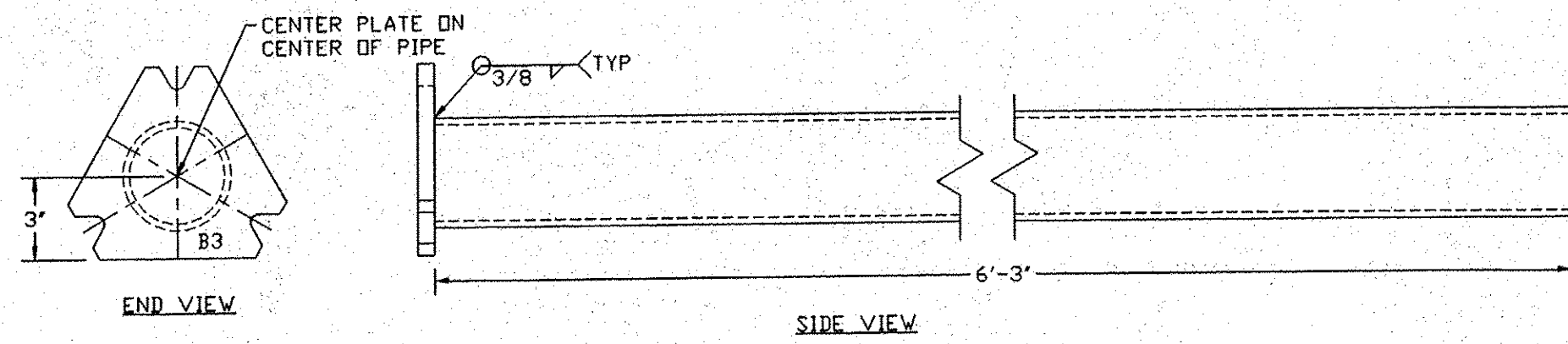
FINISH:  
 GALVANIZE TO AASHTO M111



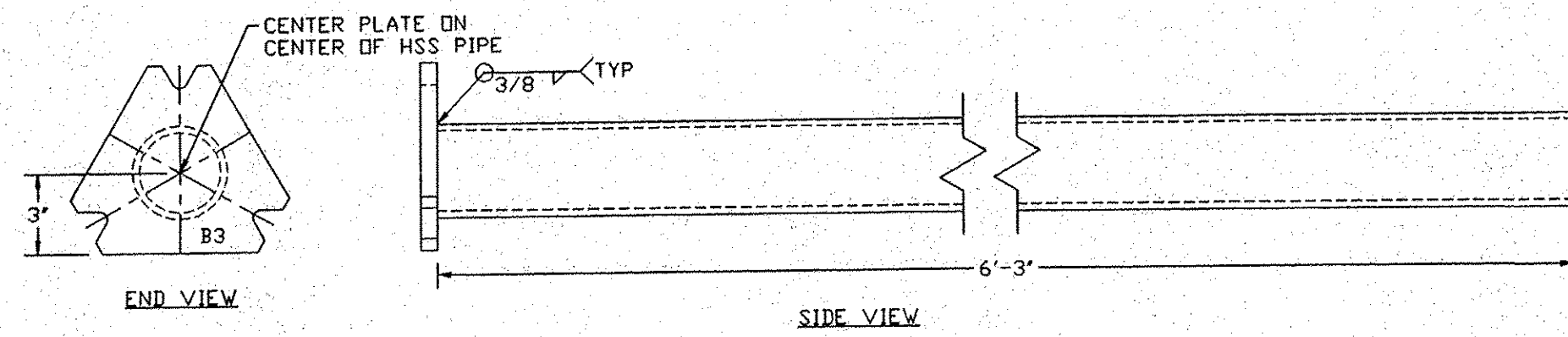
BASE PB10  
48 REQ'D  
PIPE 5" STD.



BASE PB9  
48 REQ'D  
PIPE 4" STD.



BASE PB8  
48 REQ'D  
PIPE 3 1/2" STD.



BASE PB7  
258 REQ'D  
HSS 3.500X0.216

PB7: 258 REQ'D

PIECE	QUANTITY	ITEM	WEIGHT EA.	TOTAL WT.
B3	1	PL 5/8"	6.79 LBS	6.79 LBS
HSS 3.500X0.216	1	-	47.38 LBS	47.38 LBS
				54.17 LBS

BOLTS:  
3- 5/8" X 3 1/4" A325 MG BOLTS

PB9: 48 REQ'D

PIECE	QUANTITY	ITEM	WEIGHT EA.	TOTAL WT.
B3	1	PL 5/8"	6.79 LBS	6.79 LBS
PIPE 3 1/2" STD	1	-	57 LBS	57 LBS
				63.79 LBS

BOLTS:  
3- 5/8" X 3 1/4" A325 MG BOLTS

PB9: 4 REQ'D

PIECE	QUANTITY	ITEM	WEIGHT EA.	TOTAL WT.
B4	1	PL 7/8"	1.79 LBS	1.79 LBS
PIPE 4" STD	1	-	67.5 LBS	67.5 LBS
				82.29 LBS

BOLTS:  
3- 3/4" X 3 3/4" A325 MG BOLTS

PB10: 10 REQ'D

PIECE	QUANTITY	ITEM	WEIGHT EA.	TOTAL WT.
S3	3	PL 3/8"	0.20 LBS	0.60 LBS
B4	1	PL 7/8"	1.79 LBS	1.79 LBS
PIPE 5" STD	1	-	91.25 LBS	91.25 LBS
				106.64 LBS

BOLTS:  
3- 3/4" X 3 3/4" A325 MG BOLTS

*Revised  
2/26/10*

REVISION 1		2/23/10	PB10
CCS CONSTRUCTORS, LLC 138 MUNSON AVE. MORRISVILLE, VT 05661 PH. 802-888-7701 FX. 802-888-4746		PROJECT NAME ROYALTON-MIDDLESEX	PROJECT NO. IMG SIGN(19)
SCALE 1"=1'		DATE 2/23/10	DRAWING NO. 2 of 2
FINISH GALVANIZE TO AASHTO M111		DRAWN: EB	SUPERVISOR: AW
		TOWNS: ROYALTON, BETHEL, RANDOLF NORTHFIELD, BARRE, MONTPELIER, MIDDLESEX	