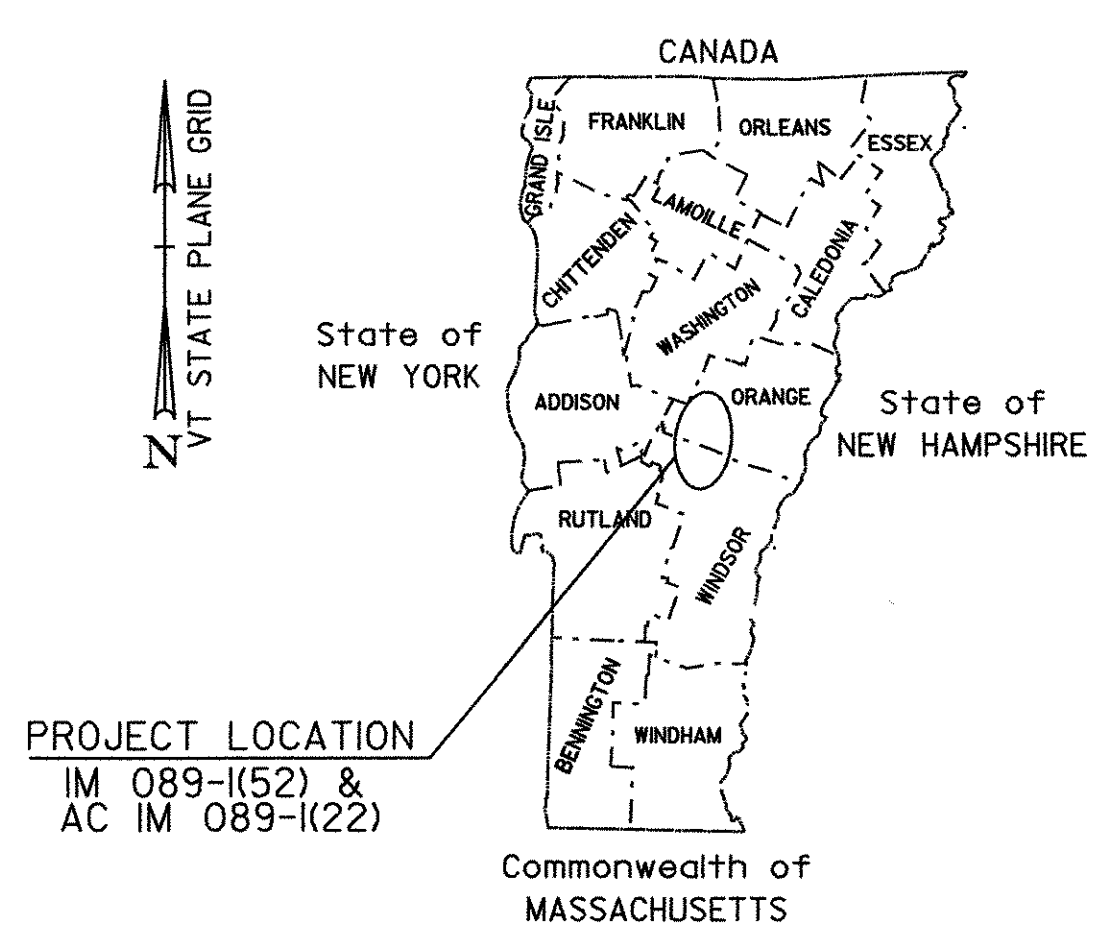


STATE OF VERMONT  
AGENCY OF TRANSPORTATION



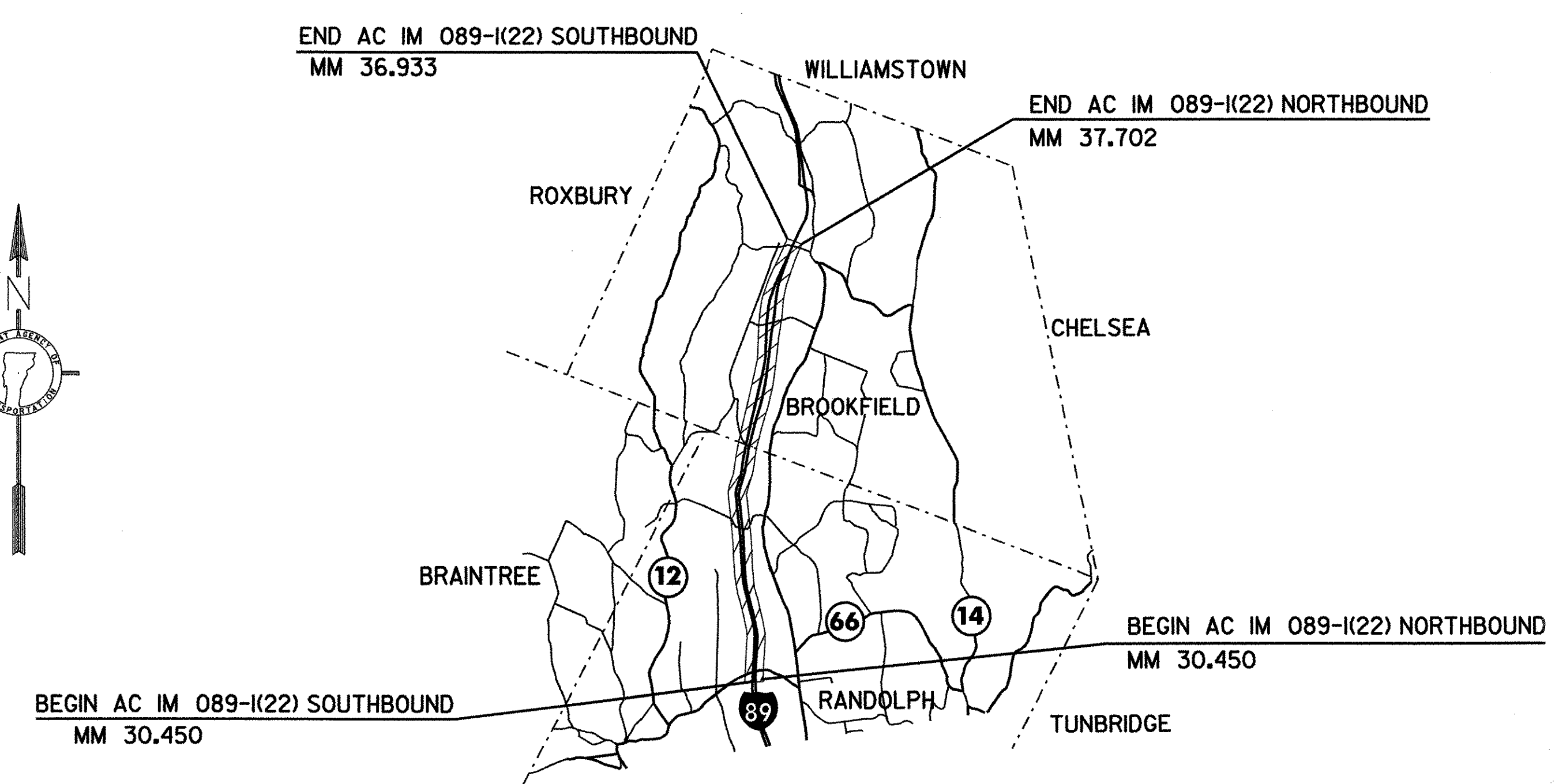
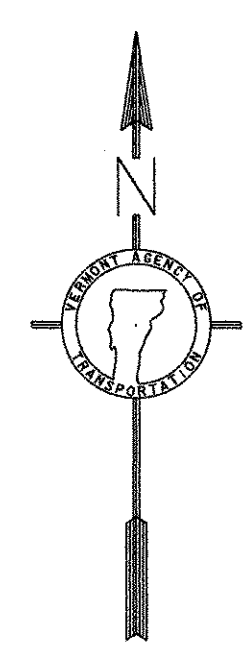
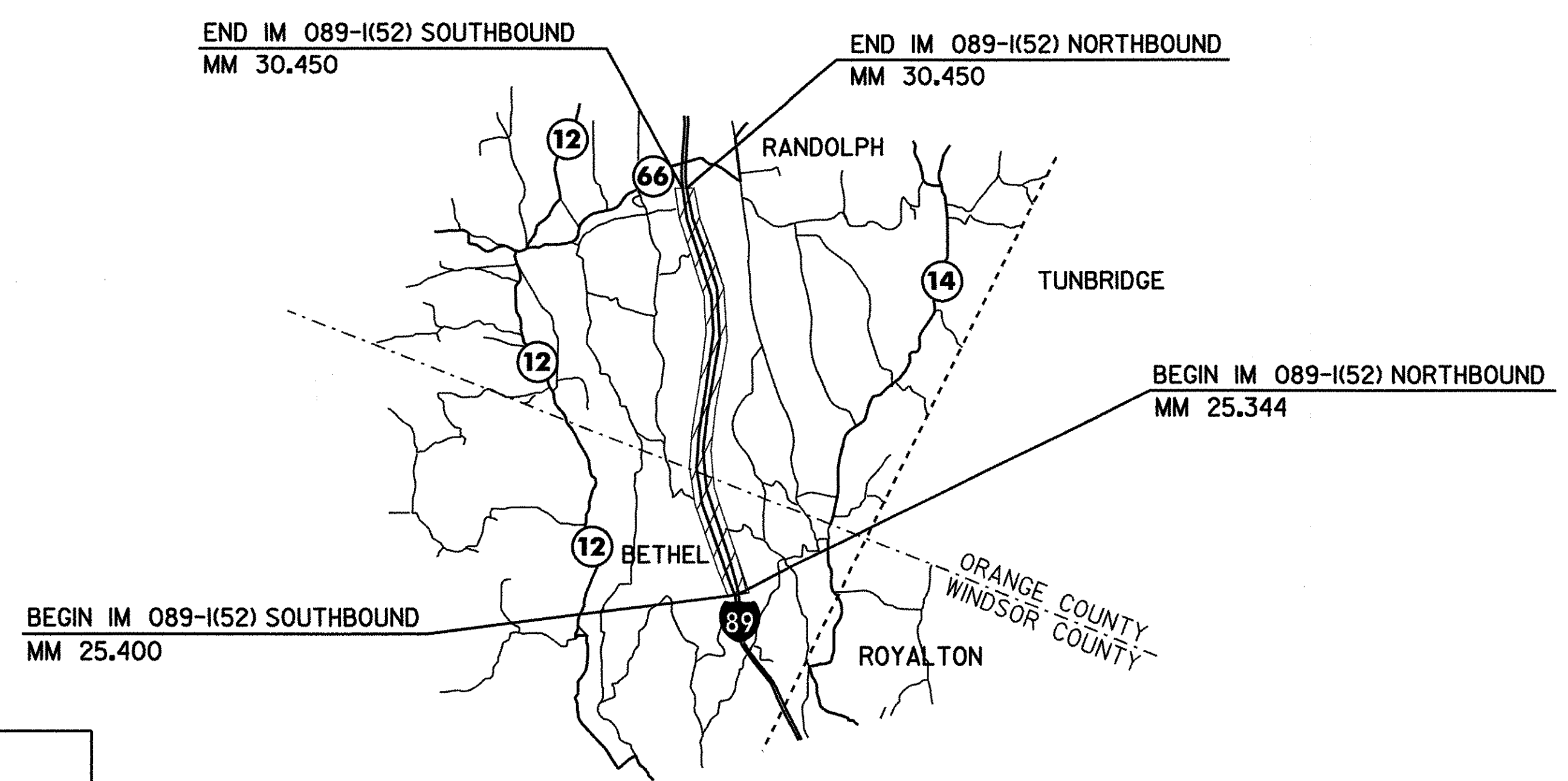
PROPOSED IMPROVEMENT  
TOWNS OF BETHEL, RANDOLPH & BROOKFIELD  
COUNTIES OF WINDSOR & ORANGE  
INTERSTATE ROUTE 89 (NB) & (SB)

INDEX OF SHEETS  
SEE SHEET 2



BETHEL - RANDOLPH  
IM 089-1(52)  
SEE SHEET 16  
FOR ADDITIONAL PROJECT  
INFORMATION AND THE  
SUPERPAVE DESIGN CRITERIA

RANDOLPH - BROOKFIELD  
AC IM 089-1(22)  
SEE SHEET 28  
FOR ADDITIONAL PROJECT  
INFORMATION AND THE  
SUPERPAVE DESIGN CRITERIA



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

PLANS PREPARED BY

SURVEYED BY : NA  
SURVEYED DATE : NA

DATUM  
VERTICAL NA  
HORIZONTAL NA

**CHA**  
CLOUGH HARBOUR & ASSOCIATES LLP  
111 Winners Circle, PO Box 6269, Albany, NY 12205  
Main: (518) 453-4500 • www.cloughharbour.com

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

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

DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATOR	APPROVED <i>Mark D. Keister</i> DATE 3-12-07
DIRECTOR OF PROGRAM DEVELOPMENT	APPROVED <i>Richard Johnson</i> DATE 3-1-07
PROJECT MANAGER : WOOLAVER	
PROJECT NAME : BETHEL - RANDOLPH & RANDOLPH - BROOKFIELD	
PROJECT NUMBER : IM 089-1(52) & AC IM 089-1(22)	
SHEET 1 OF 61 SHEETS	

# INDEX OF SHEETS

## INDEX OF COMPOSITE SHEETS

1	COMPOSITE TITLE SHEET
2	COMPOSITE INDEX OF SHEETS
3	COMPOSITE TYPICAL SECTION SHEET
4	COMPOSITE PAVING DETAILS SHEET
5-6	COMPOSITE QUANTITY SHEETS
7-II	TRAFFIC SIGN DETAIL SHEETS
12	MILLED RUMBLE STRIP DETAIL SHEET
13	PAVEMENT MARKINGS DETAIL SHEET
14	THINNING & TRIMMING DETAIL SHEET
15	CONSTRUCTION APPROACH SIGNING DETAIL SHEET

## INDEX OF BETHEL - RANDOLPH SHEETS

16	TITLE SHEET
17-18	QUANTITY SHEETS
19-20	ITEM DETAIL SUMMARY SHEETS
21	PROJECT LAYOUT SHEET
22	PARKING AREA DETAIL SHEET
23-27	TRAFFIC SIGN SUMMARY SHEETS

## INDEX OF RANDOLPH - BROOKFIELD SHEETS

28	TITLE SHEET
29-30	QUANTITY SHEETS
31-33	ITEM DETAIL SUMMARY SHEETS
34	PROJECT LAYOUT SHEET
35-36	INTERCHANGE #4 DETAIL SHEETS
37	NORTHBOUND REST AREA DETAIL
38	SOUTHBOUND REST AREA DETAIL
39	BULLNOSE REMOVAL DETAIL
40-58	TRAFFIC SIGN SUMMARY SHEETS
59-61	TRAFFIC SIGN CROSS SECTIONS

## VAOT STANDARDS

C-1	GRANITE SLOPE EDGING	01-03-00
	VERTICAL GRANITE CURB	
	PRECAST REINFORCED CONCRETE CURB	
	CAST IN PLACE CONCRETE CURB	
	TREATED TIMBER CURB	
D-3	TREATED GUTTERS	06-01-94
D-6	REINFORCED CONCRETE DROP INLET WITH GRATE FOR USE IN DITCHES	06-01-94
D-9	REINFORCED CONCRETE DROP INLET WITH VERTICAL CURB	06-01-94
	REINFORCED CONCRETE DROP INLET THROAT ADAPTER	
D-15	PRECAST REINFORCED CONCRETE CATCH BASIN W/ CAST IRON GRATE	06-01-94
	PRECAST REINFORCED CONCRETE MANHOLE W/ CAST IRON COVER	
	CAST IRON GRATE WITH FRAME, TYPE D	
	CAST IRON GRATE WITH FRAME, TYPE E	
E-100	CONSTRUCTION APPROACH SIGNS	01-02-04
E-100A	SIDE ROAD CONSTRUCTION APPROACH SIGNS	01-02-04
E-101	CONSTRUCTION SIGN DETAILS	05-30-03
E-102	CONSTRUCTION SIGN DETAILS	06-30-03
E-102A	CONSTRUCTION SIGN DETAILS	05-01-04
E-103	MAINLINE TRAFFIC CONTROL DIVIDED HIGHWAY - ONE LANE CLOSED	03-01-04
E-105	TRAFFIC CONTROL FOR CONSTRUCTION VEHICLE U-TURNS ON DIVIDED HIGHWAY	05-01-04
E-106	TRAFFIC CONTROL - MISCELLANEOUS DETAILS	03-01-04
E-107	DELINEATION, BARRICADES AND DETOURS FOR CONSTRUCTION AREAS	06-30-03
E-107A	BREAKAWAY BARRICADE DETAILS	08-08-95
E-110	MAJOR MAINTENANCE OPERATION LANE CLOSURE	08-08-95
E-111	MINOR MAINTENANCE OPERATION	03-11-97
E-120	STANDARD SIGN PLACEMENT - EXPRESSWAY & FREEWAY	08-08-95
E-123	GUIDE SIGN PLACEMENT - MISCELLANEOUS DETAILS	03-16-04
E-128A	VILLAGE SIGNS (A-M)	08-08-95
E-128B	VILLAGE SIGNS (N-W)	08-08-95
E-130	TYBE B GUIDE SIGN ATTACHMENT DETAIL	08-08-95
E-131	GUIDE SIGN DETAILS	08-08-95
E-133	SERVICE SIGN DETAILS	08-08-95
E-134	BRIDGE NUMBER PLAQUE	08-08-95
E-135	INTERSTATE ROUTE MARKER SIGN DETAILS	08-18-95
E-136B	STATE ROUTE MARKER SIGN DETAILS	08-08-95
E-139	MILE MARKER DETAILS - INTERSTATE	05-01-04
E-142	REGULATORY SIGN DETAILS	09-20-95
E-143	REGULATORY SIGN DETAILS	06-15-04
E-144	REGULATORY SIGN DETAILS	03-29-99
E-146	REGULATORY SIGN DETAILS	09-20-95
E-150	WARNING SIGN DETAILS	05-01-04
E-152	WARNING SIGN DETAILS	05-01-04
E-153	WARNING SIGN DETAILS	05-01-04
E-153B	WARNING SIGN DETAILS	05-30-03
E-160	FLANGED CHANNEL STEEL SIGN POST	05-20-99
E-163	TUBULAR STEEL SIGN POST	05-20-99
E-164	SQUARE STEEL SIGN POST	05-20-99
E-191	PAVEMENT MARKING DETAILS	02-01-99
E-192	PAVEMENT MARKING DETAILS	10-12-00
E-193	PAVEMENT MARKING DETAILS	08-18-95
E-197	DELINEATOR PLACEMENT TYPICAL	04-01-05
E-198	FREEWAY - EXPRESSWAY DELINEATORS AND MILEPOSTS	04-01-05
E-199	FREEWAY - EXPRESSWAY DELINEATOR AND MILEPOST MOUNTING ON BRIDGE RAIL	04-01-05
G-1	STEEL BEAM GUARDRAIL WITH STEEL POSTS	01-03-00
	STEEL BEAM GUARDRAIL WITH WOOD POSTS	
G-1D	STEEL BEAM GUARDRAIL APPROACH END TERMINAL	01-03-00
	STEEL BEAM GUARDRAIL TRAILING END TERMINAL	
	ANCHOR FOR STEEL BEAM GUARDRAIL	
	STEEL BEAM MEDIAN BARRIER	
G-19	GENERIC PLANS FOR GUARDRAIL END TERMINALS	11-15-02

FILE NAME = \$FILES\$  
DATE/TIME = \$DATE\$  
USER = \$NTUSER\$

### COMPOSITE INDEX OF SHEETS

PROJECT NAME:	BETHEL - RANDOLPH & RANDOLPH - BROOKFIELD
PROJECT NUMBER:	IM 089-1(52) & IM 089-1(22)
FILE NAME:	p99a200.dgn
PROJECT LEADER:	D.E.G.
DESIGNED BY:	D.W.E.
IPARM FILE:	p06A048cind.i
PLOT DATE:	\$DATE\$
DRAWN BY:	C.A.K.
CHECKED BY:	D.W.E.
SHEET	2 OF 61

**NOTES**

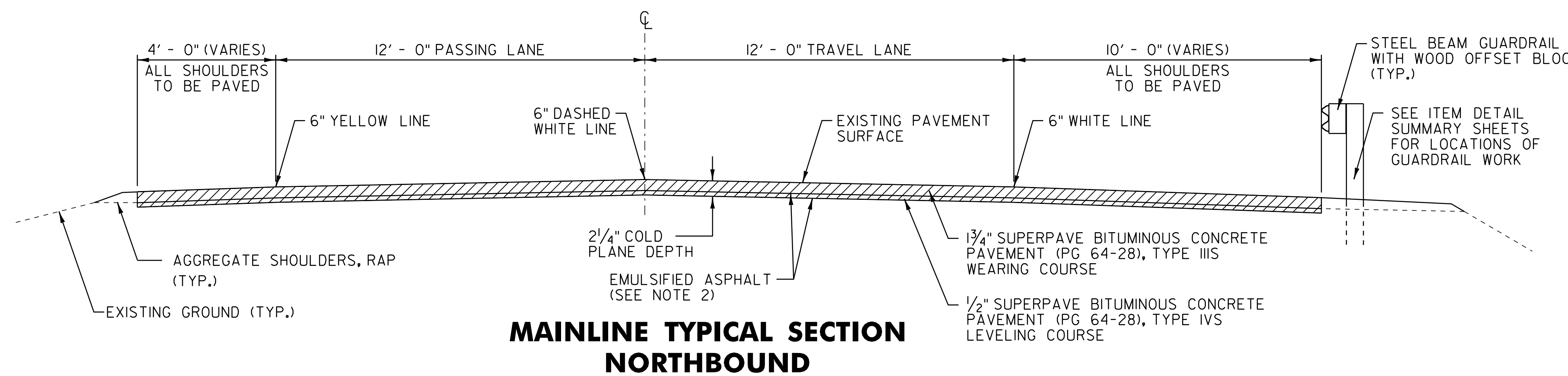
1. THE WEARING COURSE SHALL BE TYPE IIIS SUPERPAVE BITUMINOUS CONCRETE PAVEMENT. THE LEVEING COURSE SHALL BE TYPE IVS SUPERPAVE BITUMINOUS CONCRETE PAVEMENT. ASPHALT CEMENT USED IN THE SUPERPAVE BITUMINOUS CONCRETE SHALL BE PG 64-28.
2. EMULSIFIED ASPHALT SHALL BE APPLIED ON ALL COLD PLANED SURFACES AND BETWEEN ALL COURSES OF PAVEMENT AT A RATE OF 0.025 GAL/SY OR AS DIRECTED BY THE RESIDENT ENGINEER.
3. SUPERPAVE BITUMINOUS CONCRETE PAVEMENT TOLERANCE = +/- 1/4 INCH (TOTAL PAVEMENT THICKNESS EXCLUDING LEVELING).
4. COLD PLANING TO BE COMPLETED ACCORDING TO THE TYPICAL OR AS NOTED OTHERWISE ON THE PLANS. A FULL- DEPTH BUTT JOINT SHALL BE CONSTRUCTED AT ALL APPROACHES AS DIRECTED BY THE RESIDENT ENGINEER. THE CONTRACTOR SHALL USE CAUTION WHEN COLD PLANING AND PAVING OPERATIONS OCCUR ADJACENT TO EXISTING DROP INLETS OR CATCH BASINS. ANY DAMAGE WHICH OCCURS TO THESE DRAINAGE STRUCTURES AS A RESULT OF THESE OPERATIONS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE REPAIRED BY THE CONTRACTOR AT NO COST TO THE STATE OF VERMONT.
5. THE CONTRACTOR SHALL PAVE ALL U-TURNS LOCATED WITHIN THE PROJECT AREA AS DIRECTED BY THE RESIDENT ENGINEER.
6. ALL EDGES OF PAVEMENT AND TREATED TIMBER CURB SHALL BE BACKED UP FULL HEIGHT WITH COLD PLANE GRINDINGS AS DIRECTED BY THE RESIDENT ENGINEER AND WILL BE PAID FOR UNDER ITEM 402.13 AGGREGATE SHOULDERS, RAP.
7. ITEM 616.47 BITUMINOUS CONCRETE GUTTERS AND TRAFFIC ISLANDS WILL BE PAID ONLY WHERE SPECIFIED IN THE PLANS OR AS DIRECTED BY THE RESIDENT ENGINEER. ALL OTHER BITUMINOUS CONCRETE PAVEMENT WORK WHICH COULD INVOLVE SOME HAND-WORK (SUCH AS AROUND DROP INLETS) SHALL BE PAID FOR AT THE CONTRACT PRICE FOR ITEM 490.30 SUPERPAVE BITUMINOUS CONCRETE PAVEMENT (PG 64-28).
8. AREAS ADJACENT TO THE SHOULDER WHERE EXISTING GUARDRAIL IS BEING RETAINED THAT HAVE BUILT-UP EXCESS MATERIAL ARE TO BE GRADED IN ORDER TO ALLOW THE SHOULDER TO DRAIN AS DIRECTED BY THE RESIDENT ENGINEER. PAYMENT WILL BE MADE UNDER ITEM 203.40 SHOULDER BERM REMOVAL.
9. ESTIMATED QUANTITIES OF EARTH BORROW AND AGGREGATE SHOULDERS, RAP HAVE BEEN INCLUDED FOR CONSTRUCTING AND RESHAPING THE MANUFACTURED TERMINAL SECTION FLARES WHICH SHALL BE CAPPED WITH AN ESTIMATED 3" DEPTH OF AGGREGATE SHOULDER MATERIAL AS DIRECTED BY THE RESIDENT ENGINEER. THE QUANTITIES INCLUDED REFLECT 5 TONS OF AGGREGATE SHOULDER MATERIAL, RAP AND 10 CUBIC YARDS OF EARTH BORROW FOR EACH GUARDRAIL TERMINAL BEING RESHAPED AND 25 CUBIC YARDS OF EARTH BORROW FOR EACH NEW GUARDRAIL TERMINAL BEING INSTALLED.
10. ALL DELINEATORS WITHIN THE PROJECT AREA ARE TO BE REPLACED AS DIRECTED BY THE RESIDENT ENGINEER AND PAID FOR UNDER ITEM 676.10 DELINEATOR WITH STEEL POST.
11. AN ESTIMATED QUANTITY OF ITEM 619.17 YIELDING MARKER POSTS HAS BEEN INCLUDED TO DELINEATE PIPE INLETS, PIPE OUTLETS AND DROP INLETS LOCATED OUTSIDE OF THE PAVEMENT SURFACE OR AS DIRECTED BY THE RESIDENT ENGINEER.
12. AREAS ADJACENT TO THE SHOULDER THAT HAVE BUILT UP EXCESS MATERIAL ARE TO BE GRADED IN ORDER TO ALLOW THE SHOULDER TO DRAIN AS DIRECTED BY THE RESIDENT ENGINEER AND SHALL BE PAID FOR UNDER ITEM 608.15 POWER GRADER RENTAL.
13. ESTIMATED QUANTITIES OF ITEM 613.10 STONE FILL, TYPE I; ITEM 649.31 GEOTEXTILE UNDER STONE FILL; ITEM 653.20 TEMPORARY EROSION MATTING; AND ITEM 608.25 ALL PURPOSE EXCAVATOR RENTAL, TYPE I HAVE BEEN INCLUDED TO PROVIDE FOR THE REPAIR OF EXISTING STONE LINED DRAINAGE OUTLETS OR WASHOUTS LOCATED ALONG THE ROADWAY SIDE SLOPES AS DIRECTED BY THE RESIDENT ENGINEER.
14. EXISTING SHOULDER MATERIAL DEEMED UNSUITABLE BY THE RESIDENT ENGINEER SHALL BE EXCAVATED TO A DEPTH OF 3" OR AS DIRECTED BY THE RESIDENT ENGINEER. EXCAVATION WILL BE PAID FOR AS ALL PURPOSE EXCAVATOR RENTAL OR POWER GRADER RENTAL. MATERIAL REMOVED SHALL BE REPLACED WITH SUBBASE OF CRUSHED GRAVEL, FINE GRADED. EXCAVATED MATERIAL SHALL BE SPREAD ON THE ADJACENT SLOPES OR REMOVED FROM THE PROJECT AS DIRECTED BY THE RESIDENT ENGINEER.

**SEEDING FORMULA  
RURAL AREAS**

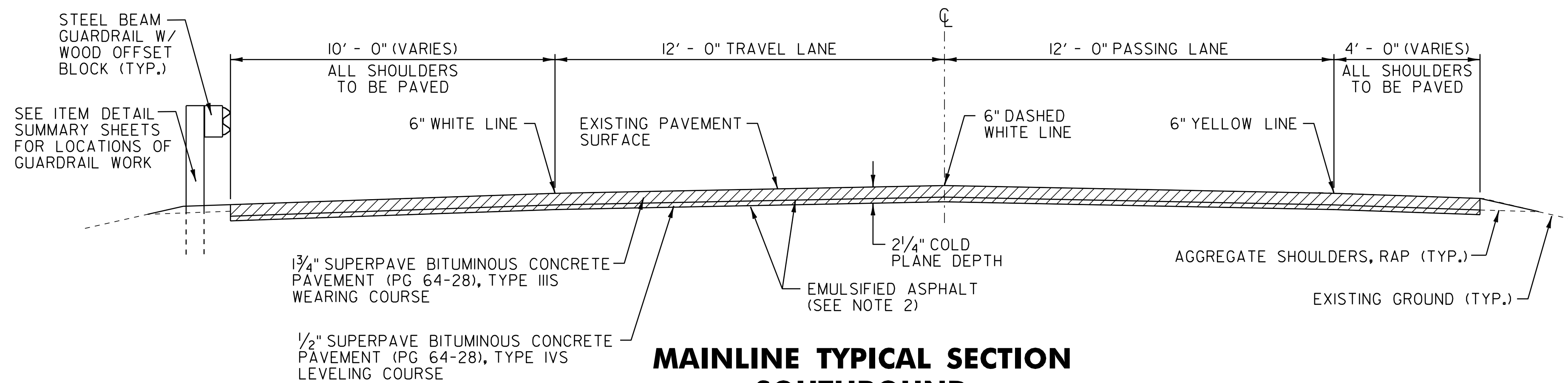
% WT.	LBS./A.	NAME	PUR %	GERM %
37.5	22.5	CREEPING RED FESCUE	98	85
37.5	22.5	TALL FESCUE	95	90
5.0	3.0	RED TOP	95	90
15.0	9.0	BIRDSFOOT TREFOIL	98	85
5.0	3.0	ANNUAL RYEGRASS	95	85
100.0	60.0			

**GENERAL NOTES**

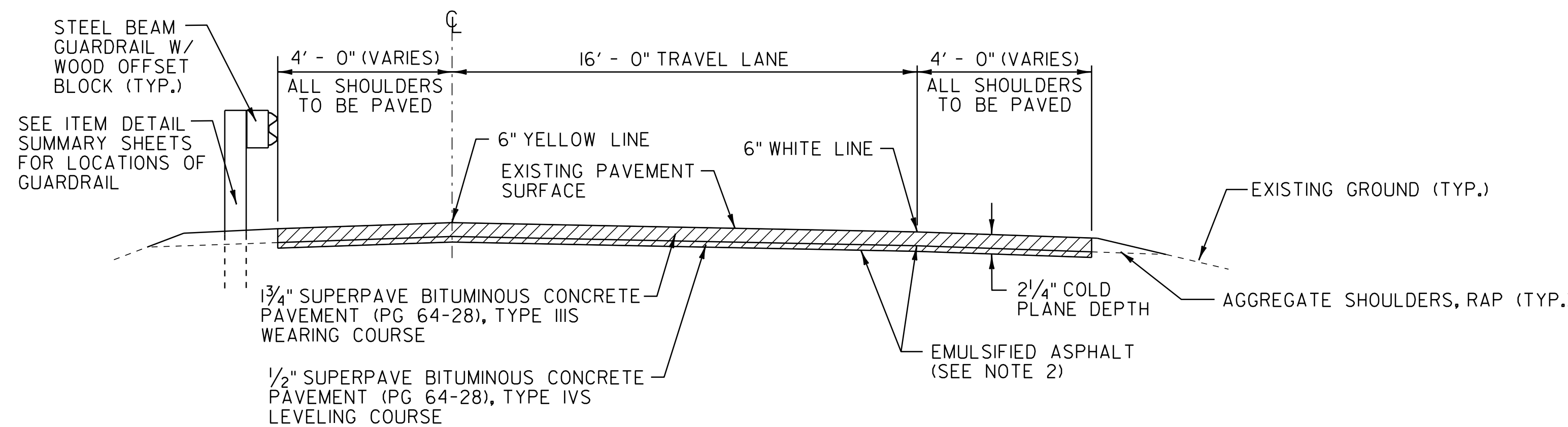
- SEED MIXTURE: SHALL NOT HAVE A WEED CONTENT EXCEEDING 0.40% BY WEIGHT AND SHALL BE FREE OF ALL NOXIOUS SEED.
- SEED: TO BE APPLIED PER SEEDING FORMULAS OR AS DIRECTED BY THE RESIDENT ENGINEER.
- FERTILIZER: FORMULA 10-20-10, TO BE USED WITH SEED APPLIED AT THE RATE OF 500 LBS/ACRE (HYDRO SEEDERS MAY 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 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.



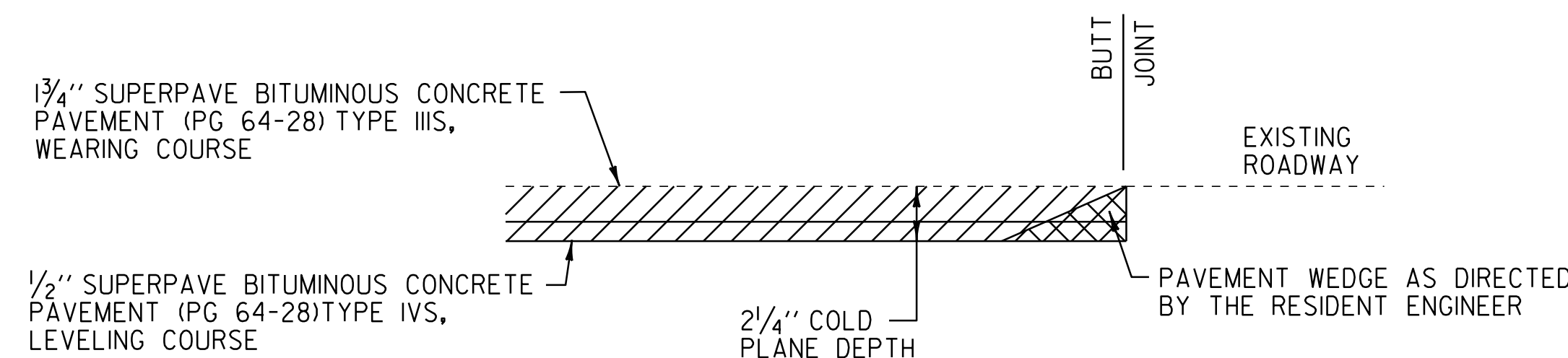
**MAINLINE TYPICAL SECTION  
NORTHBOUND**



**MAINLINE TYPICAL SECTION  
SOUTHBOUND**



**RAMP TYPICAL**



**TYPICAL APPROACH AREA DETAIL**

BETHEL: NORTHBOUND: MM 25.344 - BEGIN IM 089-(152)  
SOUTHBOUND: MM 25.400 - BEGIN IM 089-(152)

RANDOLPH: NORTHBOUND MM 30.450 - END IM 089-(152)/BEGIN IM 089-(122)  
SOUTHBOUND MM 30.450 - END IM 089-(152)/BEGIN IM 089-(122)  
RAMP A STA. A1+00.00 - INTERCHANGE #4  
RAMP B STA. B21+32.00 - INTERCHANGE #4  
RAMP C STA. C16+86.00 - INTERCHANGE #4  
RAMP D STA. D1+00.00 - INTERCHANGE #4

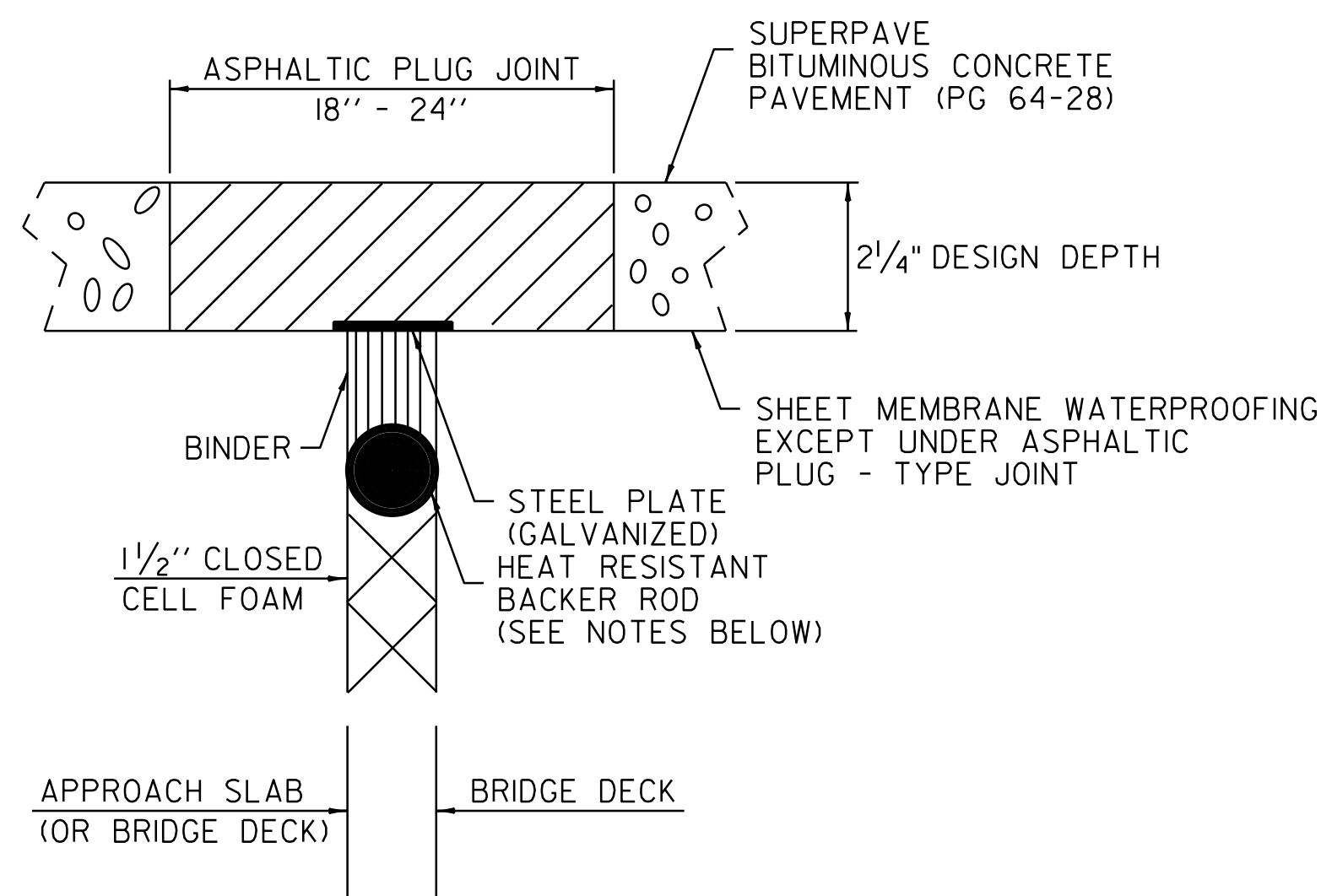
BROOKFIELD: NORTHBOUND MM 37.702 - END IM 089-(122)  
SOUTHBOUND MM 36.933 - END IM 089-(122)

**COMPOSITE  
TYPICAL  
SECTION  
SHEET**

PROJECT NAME: BETHEL - RANDOLPH & RANDOLPH - BROOKFIELD  
PROJECT NUMBER: IM 089-1(52) & IM 089-1(22)  
FILE NAME: p99a200.dgn  
PROJECT LEADER: D.E.G.  
DESIGNED BY: D.W.E.  
IPARM FILE: p06a048c+tpl.i  
PLOT DATE: \$DATE\$  
DRAWN BY: C.A.K.  
CHECKED BY: D.W.E.  
SHEET 3 OF 61

NOT TO SCALE

FILE NAME = \$FILES\$  
DATE/TIME USER = \$DATE\$ \$TIME\$ \$USER\$



**ASPHALTIC PLUG-TYPE JOINT DETAIL**

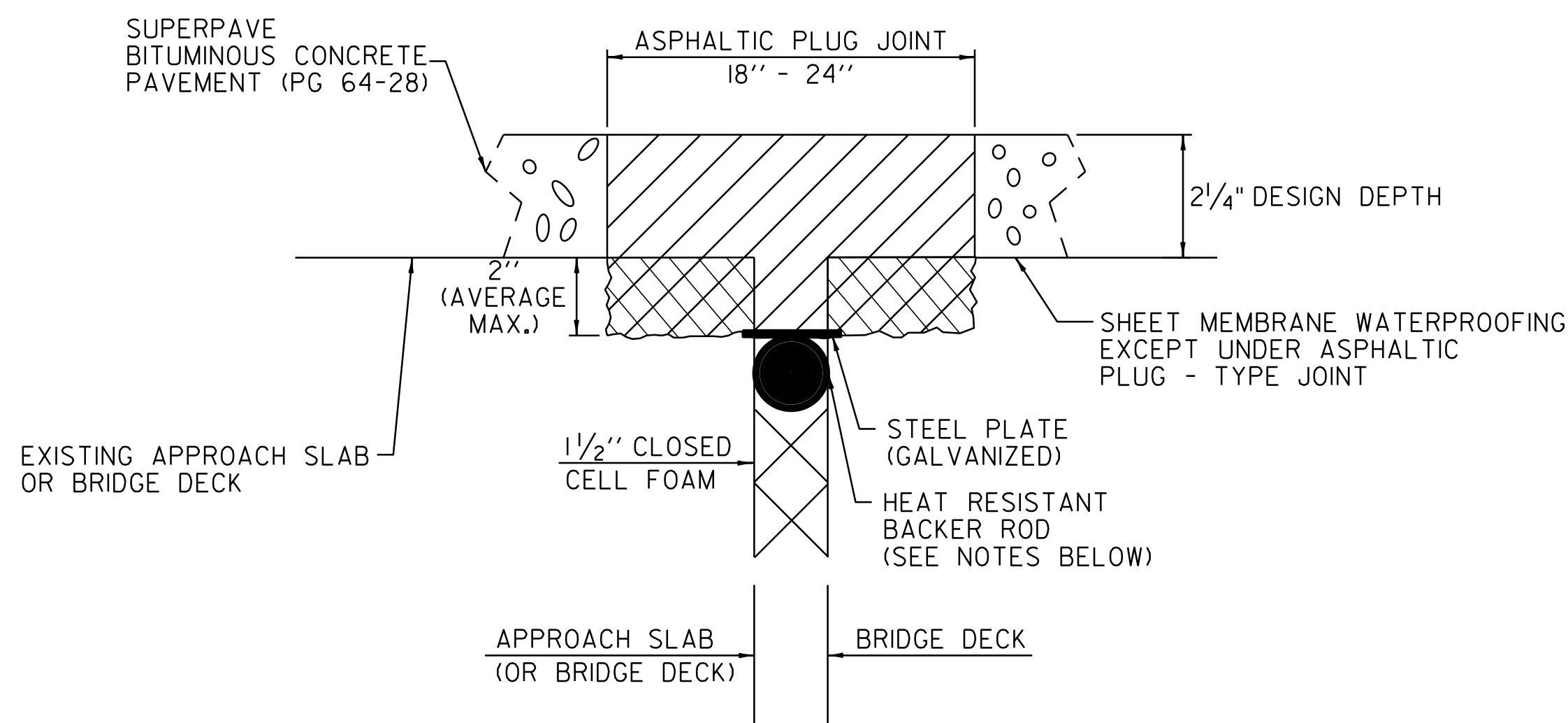
NOTES:

1. THE JOINT SHALL BE LOCATED CENTRALLY OVER THE DECK EXPANSION GAP OR FIXED JOINT MARKED OUT TO THE MANUFACTURER'S RECOMMENDED WIDTH.
2. THE JOINT SHALL BE EXCAVATED AS SHOWN ON THE PLANS BY USE OF SAWS AND PNEUMATIC HAMMER OR A HAMMER AND CHISEL.
3. THE JOINT AREA SHALL BE BLAST CLEANED OF DEBRIS AND ASPHALT. THE JOINT AREA SHALL BE THOROUGHLY DRIED USING HOT COMPRESSED AIR PRIOR TO APPLYING BINDER MATERIAL.
4. SPALLED AND DEFECTIVE CONCRETE SHALL BE REPAIRED WITH AN APPROVED MATERIAL AS AGREED UPON BY THE RESIDENT ENGINEER.
5. PROPERLY SIZED HEAT RESISTANT BACKER ROD SHALL BE PLACED IN THE MOVEMENT GAP ALLOWING FOR 1 INCH +/- OF BINDER ABOVE THE ROD.
6. THE BINDER MATERIAL SHALL BE HEATED AND PLACED AS RECOMMENDED BY THE MANUFACTURER.
7. PLACE 1/4 INCH THICK BY 8 INCH WIDE SECTIONS OF STEEL PLATE OVER THE CENTER OF THE MOVEMENT GAP. SECURE PLATES FROM MOVING BY INSERTING LOCATING PINS THROUGH THE PRESTAMPED HOLES INTO BACKER ROD AND COVER WITH HOT BINDER.
  - A. THE STEEL PLATES MAY BE OMITTED WHERE THE APPROACH SLAB IS COVERED WITH A STONE BASE OR BITUMINOUS PAVEMENT AND VERTICAL MOVEMENT OF THE PLATES MIGHT OCCUR.
8. THE BINDER MATERIAL AND AGGREGATE SHALL BE HEATED AND MIXED AS RECOMMENDED BY THE MANUFACTURER.
9. THE INSTALLATION OF MATERIAL, COMPACTION, AND TOPCOATING SHALL BE AS RECOMMENDED BY THE MANUFACTURER.
10. IMMEDIATELY AFTER TOPCOATING, AN ANTI-SKID MATERIAL SHALL BE CAST OVER THE JOINT TO REDUCE THE RISK OF TRACKING.
11. JOINT SHALL BE PROTECTED FROM TRAFFIC UNTIL THE MATERIAL HAS COOLED TO 125°F +/-.

WEATHER LIMITATIONS

BINDER MATERIAL SHALL BE APPLIED ONLY WHEN THE FOLLOWING CONDITIONS PREVAIL:

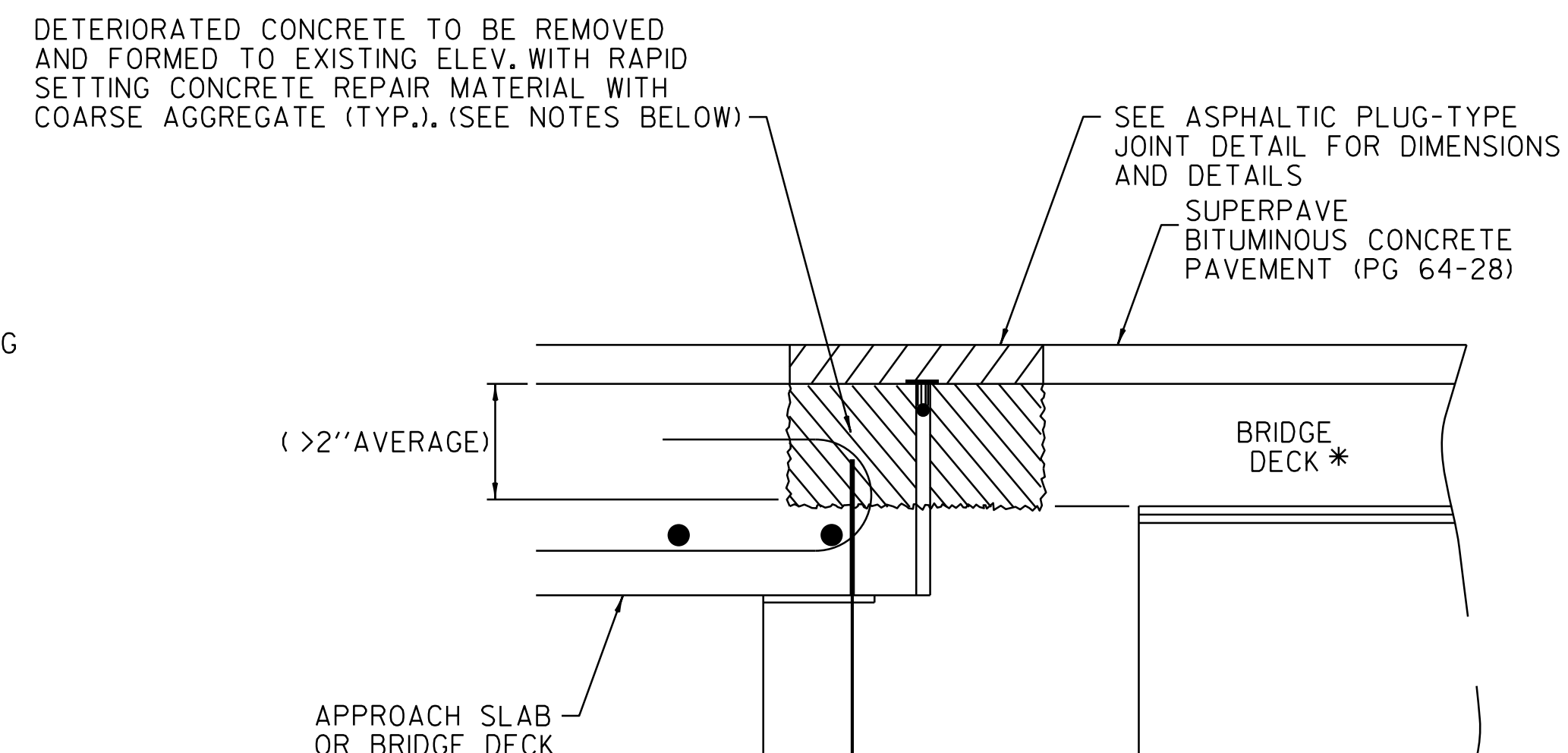
- A. THE AMBIENT AIR TEMPERATURE IS AT LEAST 50°F AND RISING.
- B. THE ROAD SURFACE IS SUFFICIENTLY DRY.
- C. WEATHER CONDITIONS OR OTHER CONDITIONS ARE FAVORABLE AND ARE EXPECTED TO REMAIN SO FOR THE PERFORMANCE OF SATISFACTORY WORK.



**ASPHALTIC PLUG-TYPE JOINT DETAIL REMOVAL OF UP TO 2\"/>**

NOTES:

1. UPON ENCOUNTERING UP TO 2\"/>
2. REMOVAL OF THE DETERIORATED CONCRETE WILL NOT BE PAID SEPARATELY BUT WILL BE CONSIDERED INCIDENTAL TO THE UNIT BID PRICE FOR THE ITEM 516.10. THE ADDITIONAL PLUG JOINT MATERIAL BELOW THE DESIGN DEPTH TO REPLACE THE DETERIORATED CONCRETE WILL BE CONSIDERED INCIDENTAL TO THE UNIT BID PRICE FOR THE ITEM 516.10.
3. THE STEEL PLATE IN THE ASPHALTIC PLUG JOINT MAY BE OMITTED ONLY IF THE REPAIRED SURFACE IS SO IRREGULAR IT WILL CAUSE VERTICAL MOVEMENT AND IT IS DIRECTED BY THE RESIDENT ENGINEER.

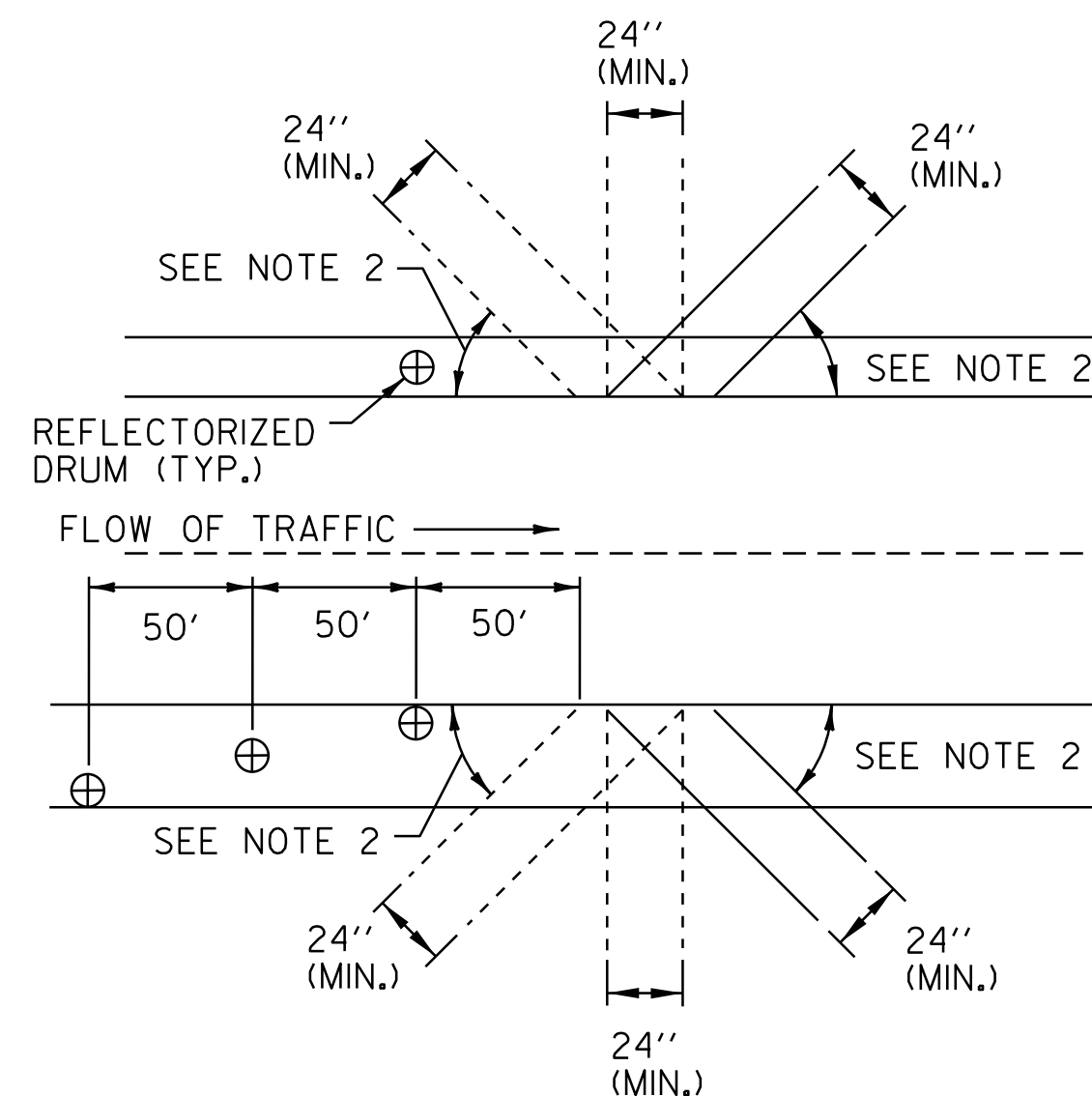


**ASPHALTIC PLUG-TYPE JOINT DETAIL REMOVAL OF >2\"/>**

NOTES:

1. UPON ENCOUNTERING GREATER THAN 2\"/>
2. REMOVAL OF THE DETERIORATED CONCRETE WILL BE INCLUDED IN THE UNIT BID PRICE FOR ITEM 580.20 RAPID SETTING CONCRETE REPAIR MATERIAL WITH COARSE AGGREGATE.
3. THE STEEL PLATE IN THE ASPHALTIC PLUG JOINT MAY BE OMITTED ONLY IF THE REPAIRED SURFACE IS SO IRREGULAR IT WILL CAUSE VERTICAL MOVEMENT AND IT IS DIRECTED BY THE RESIDENT ENGINEER.

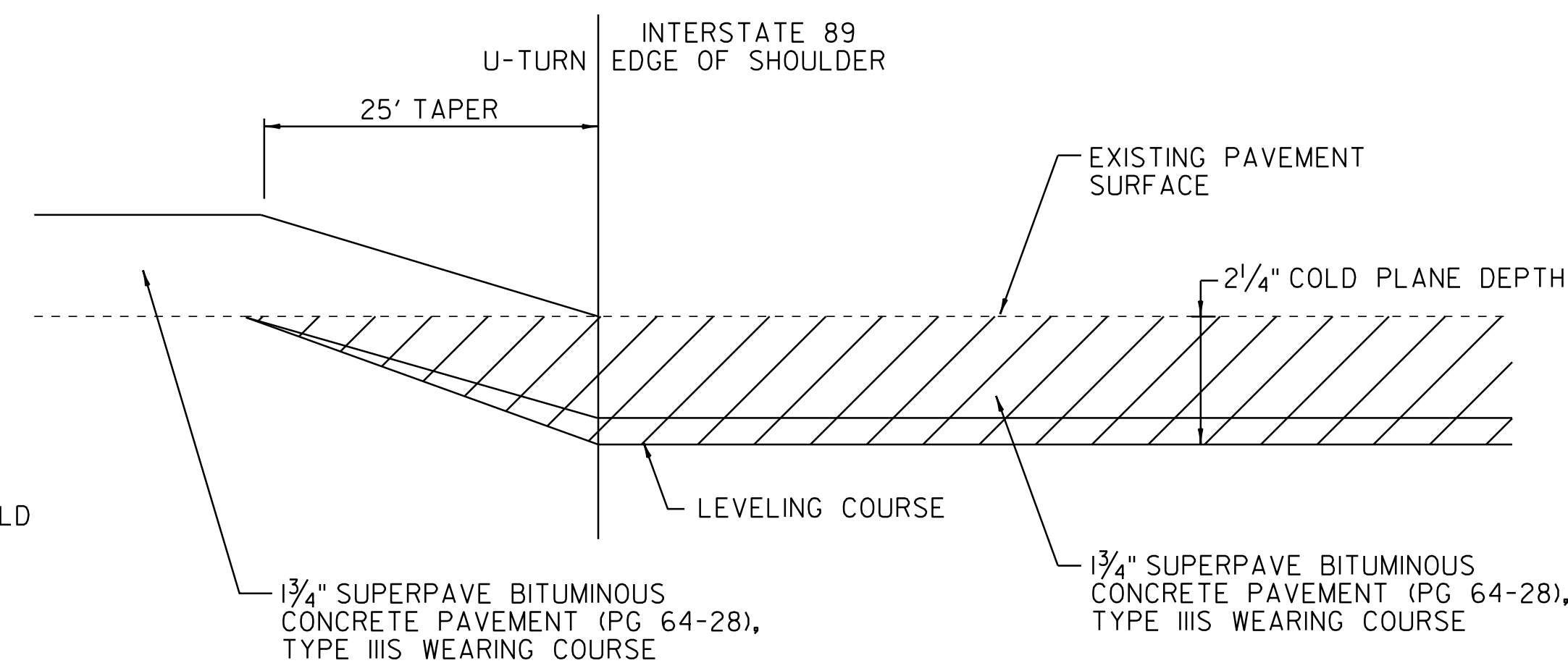
BRIDGE JOINTS	
BR 32-N INTERSTATE 89 NORTHBOUND MM 36,566 (40 FT)	
BR 32-N INTERSTATE 89 NORTHBOUND MM 36,579 (40 FT)	



**BLEEDER DETAIL**

NOTES:

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



**U-TURN PAVING TRANSITION DETAIL**

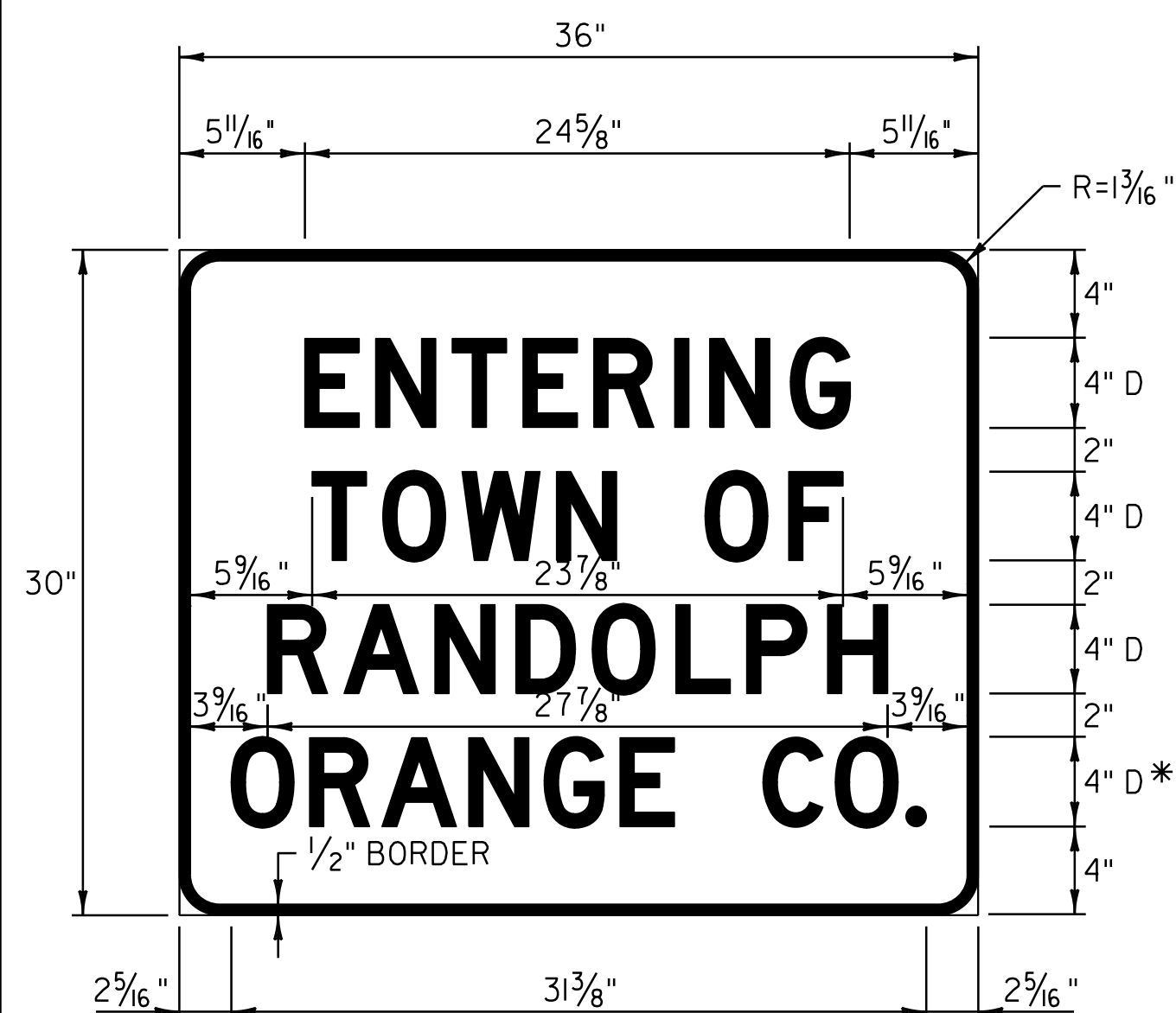
NOT TO SCALE

**COMPOSITE PAVING DETAILS SHEET**

PROJECT NAME: BETHEL - RANDOLPH & RANDOLPH - BROOKFIELD	PLOT DATE: \$DATE\$
PROJECT NUMBER: IM 089-1(52) & IM 089-1(22)	DRAWN BY: C.A.K.
FILE NAME: p99a200.dgn	CHECKED BY: D.W.E.
PROJECT LEADER: D.E.G.	SHEET 4 OF 61
DESIGNED BY: D.W.E.	
IPARM FILE: p99a20c+yp2.i	





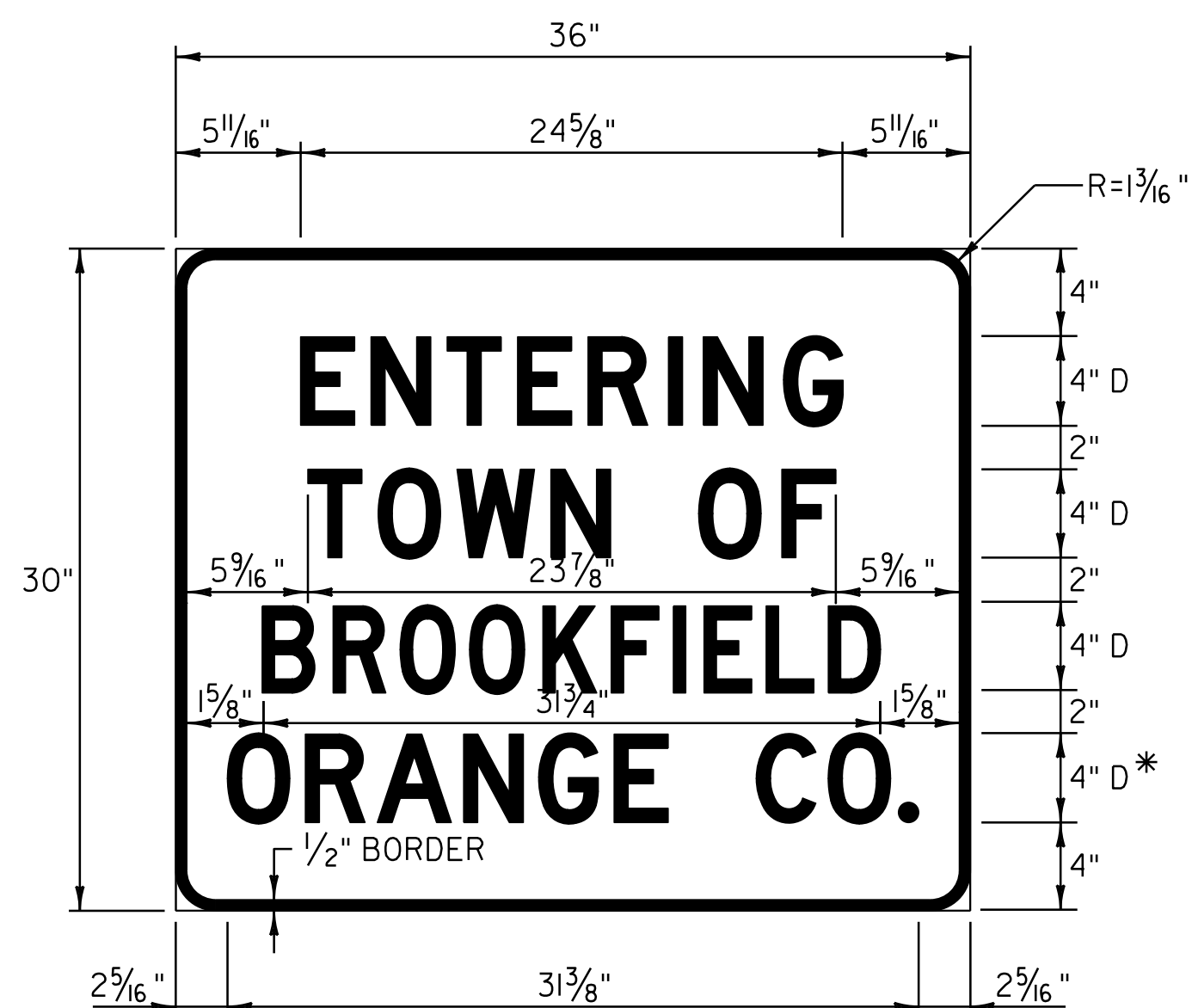


COLOR: WHITE BORDER & TEXT (REFLECTORIZED)  
GREEN BACKGROUND (REFLECTORIZED)

MATERIAL: PER VAOT STANDARD E-128B  
\*75% REDUCTION IN SPACING  
SIGN - INTERSTATE 89

NORTHBOUND:  
MM 26.677, LT

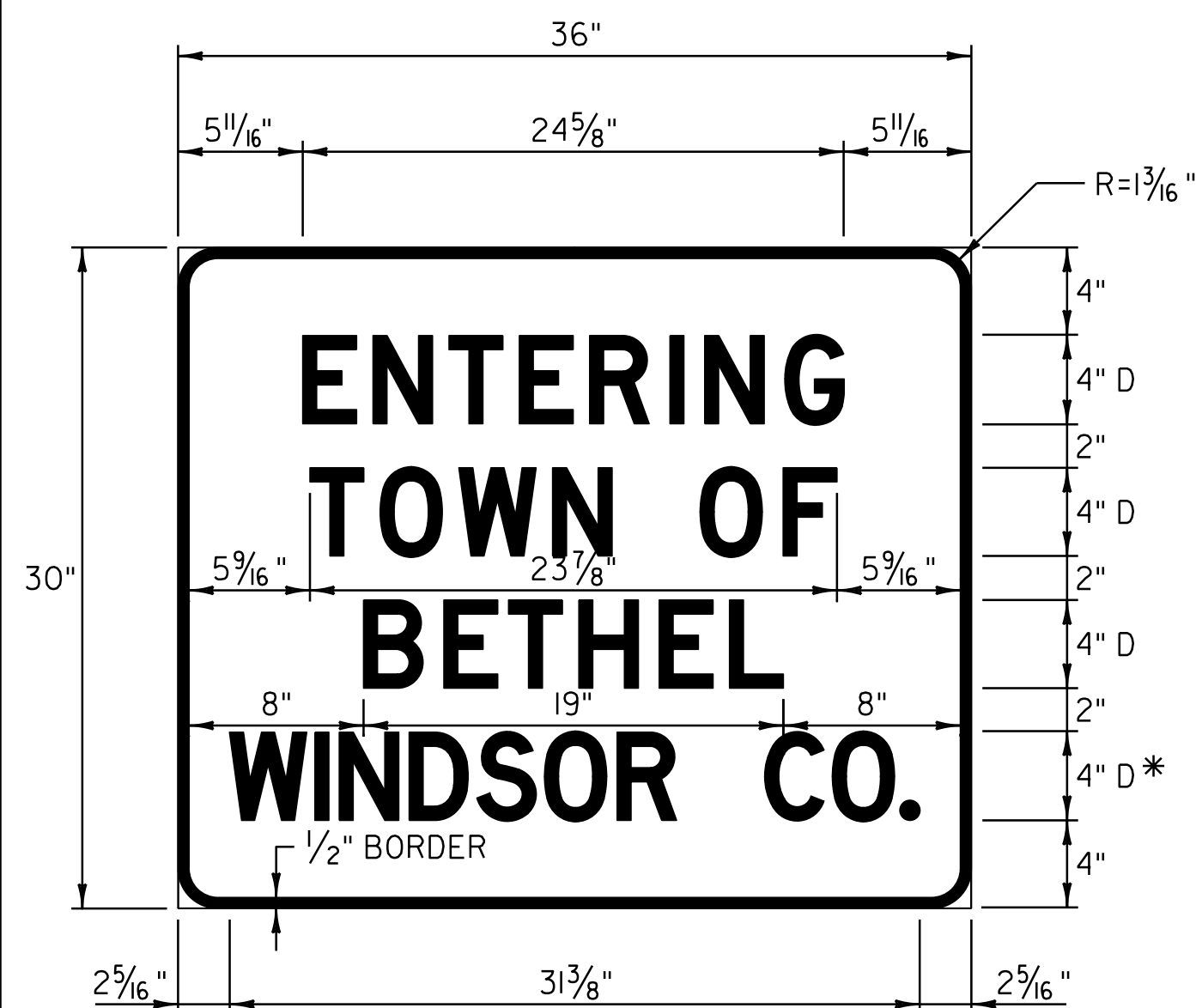
SOUTHBOUND:  
MM 34.663, RT



COLOR: WHITE BORDER & TEXT (REFLECTORIZED)  
GREEN BACKGROUND (REFLECTORIZED)

MATERIAL: PER VAOT STANDARD E-128A  
\*75% REDUCTION IN SPACING  
SIGN - INTERSTATE 89

NORTHBOUND:  
MM 34.592, RT



COLOR: WHITE BORDER & TEXT (REFLECTORIZED)  
GREEN BACKGROUND (REFLECTORIZED)

MATERIAL: PER VAOT STANDARD E-128A  
\*50% REDUCTION IN SPACING  
SIGN - INTERSTATE 89

SOUTHBOUND:  
MM 26.705, LT

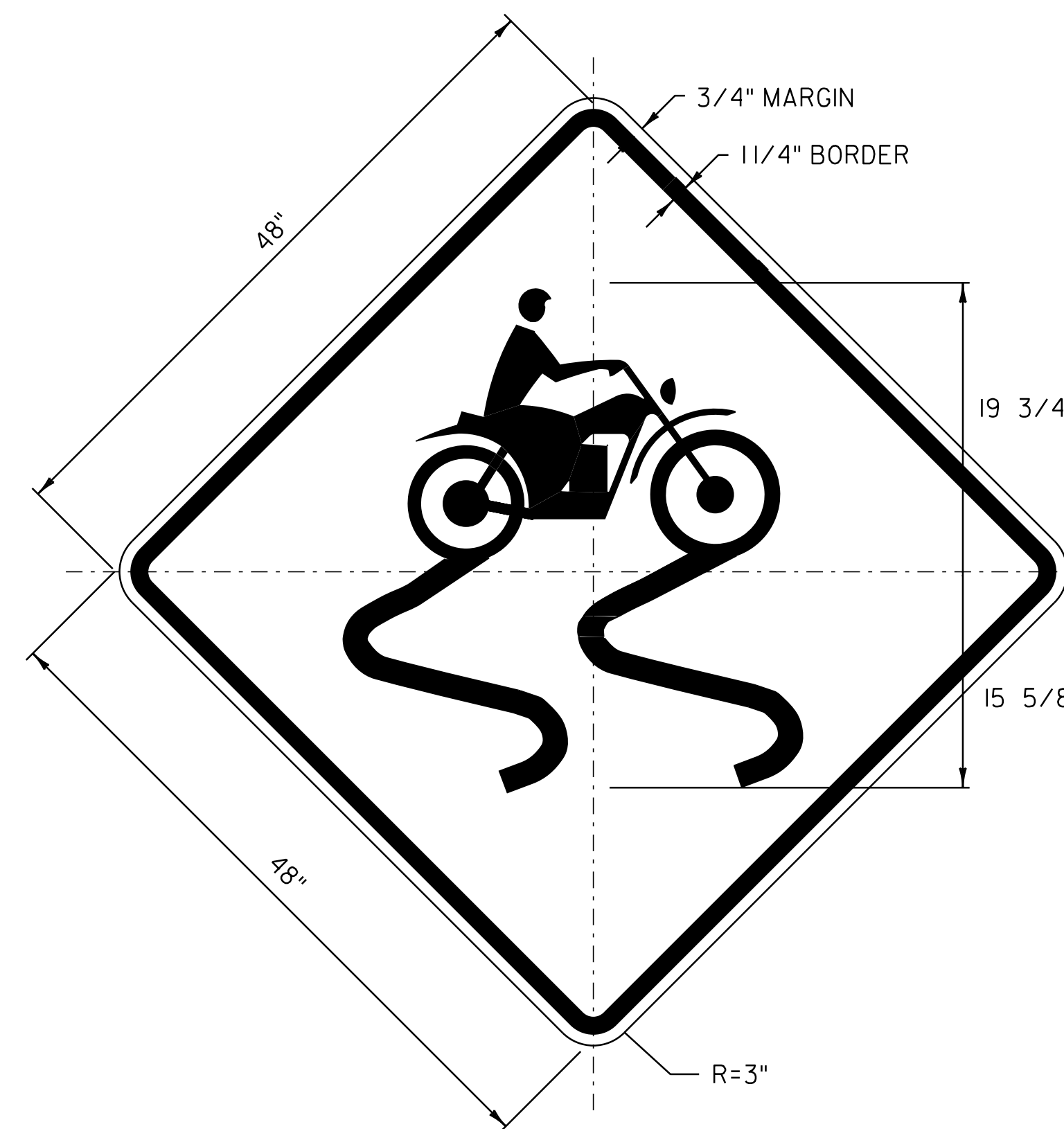


COLOR: GREEN BORDER & TEXT (REFLECTORIZED)  
WHITE BACKGROUND (REFLECTORIZED)  
WHITE SYMBOL ON BLUE BACKGROUND

MATERIAL: PER VAOT STANDARD E-143  
SIGN - INTERSTATE 89

NORTHBOUND REST AREA:  
STA. X16+09.0, LT  
STA. X16+37.0, LT

SOUTHBOUND REST AREA:  
STA. Y12+88.0, RT  
STA. Y13+26.0, RT  
STA. Y13+66.0, RT

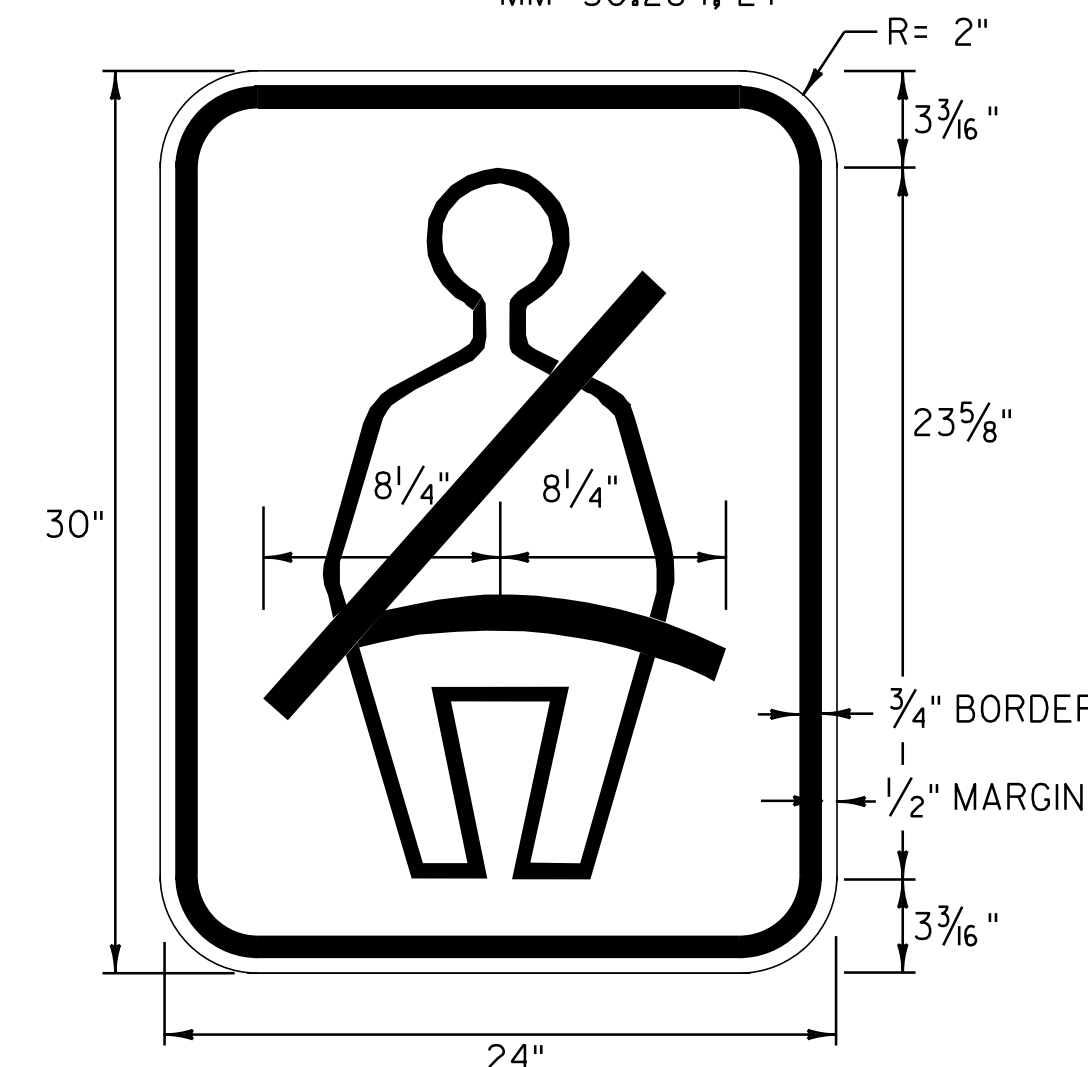


COLOR: BLACK BORDER & TEXT (REFLECTORIZED)  
YELLOW BACKGROUND (REFLECTORIZED)

MATERIAL: PER VAOT STANDARD E-153B  
SIGN - INTERSTATE 89

NORTHBOUND:  
MM 31.568, RT

SOUTHBOUND:  
MM 30.284, LT



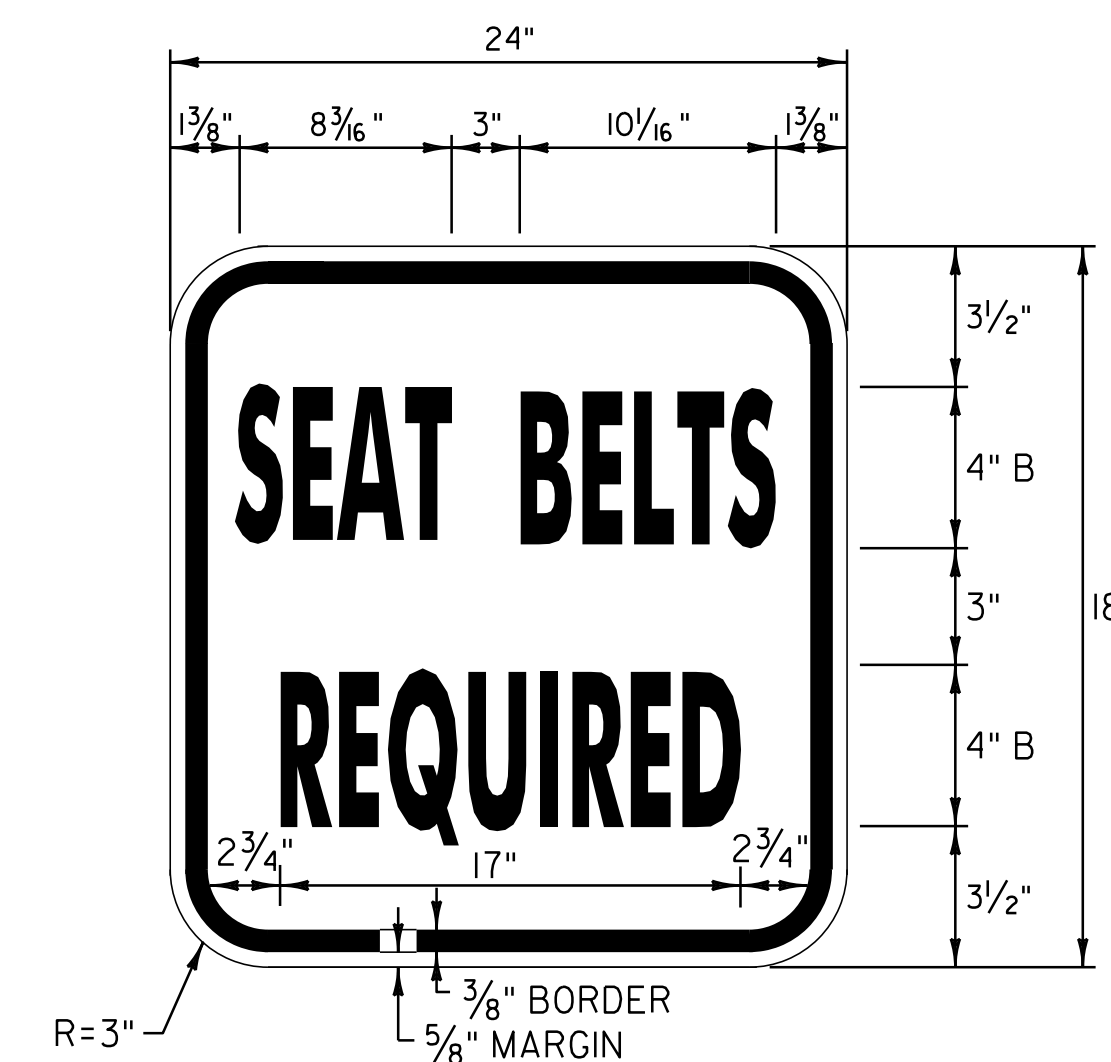
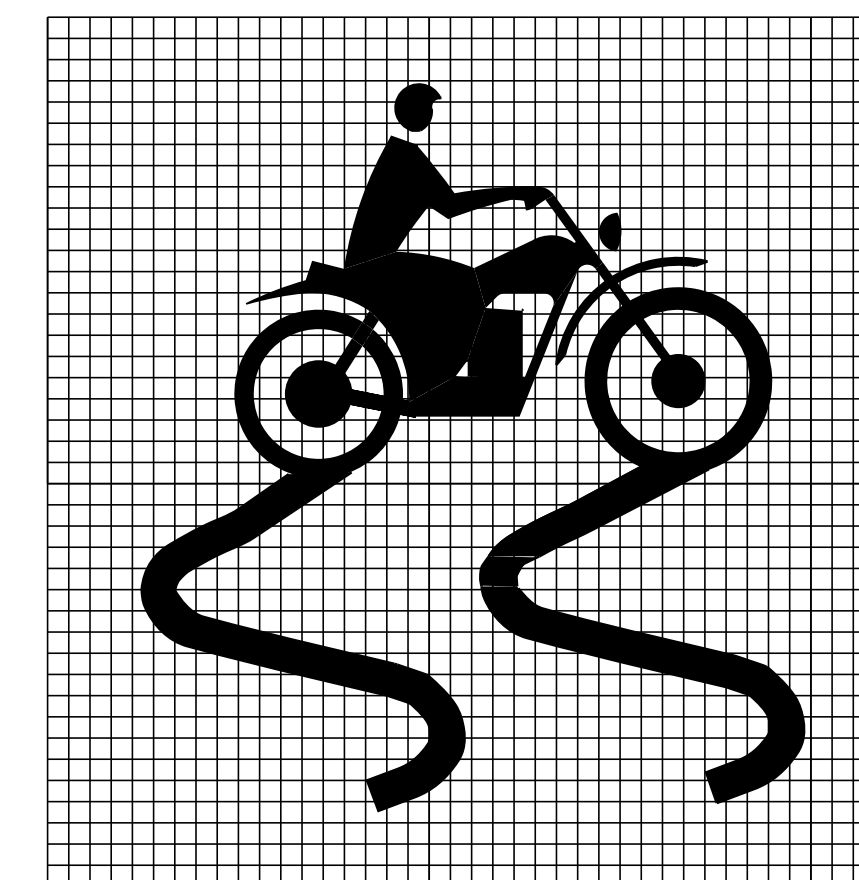
COLOR: BLACK BORDER & SYMBOL (REFLECTORIZED)  
WHITE BACKGROUND (REFLECTORIZED)

MATERIAL: PER VAOT STANDARD E-143  
SIGN - INTERSTATE 89

SOUTHBOUND PARKING AREA:  
RAMP P: STA. P13+75.0, RT

NORTHBOUND REST AREA:  
RAMP X: STA. X23+07.0, LT

SOUTHBOUND REST AREA:  
RAMP Y: STA. Y18+37.0, LT



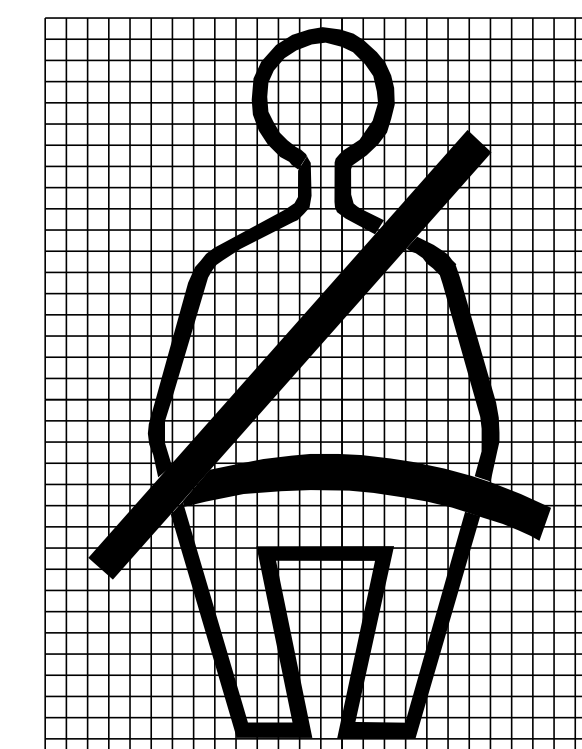
COLOR: BLACK BORDER & TEXT (REFLECTORIZED)  
WHITE BACKGROUND (REFLECTORIZED)

MATERIAL: PER VAOT STANDARD E-143  
SIGN - INTERSTATE 89

SOUTHBOUND PARKING AREA:  
RAMP P: STA. P13+75.0, RT

NORTHBOUND REST AREA:  
RAMP X: STA. X23+07.0, LT

SOUTHBOUND REST AREA:  
RAMP Y: STA. Y18+37.0, LT



NOT TO SCALE

**TRAFFIC SIGN  
DETAIL  
SHEET #1**

PROJECT NAME: BETHEL - RANDOLPH & RANDOLPH - BROOKFIELD

PROJECT NUMBER: IM 089-1(52) & IM 089-1(22)

FILE NAME: p99a200.dgn

PROJECT LEADER: D.E.G.

DESIGNED BY: D.W.E.

IPARM FILE: p06A048c+sd1.i

PLOT DATE: \$DATE\$

DRAWN BY: C.A.K.

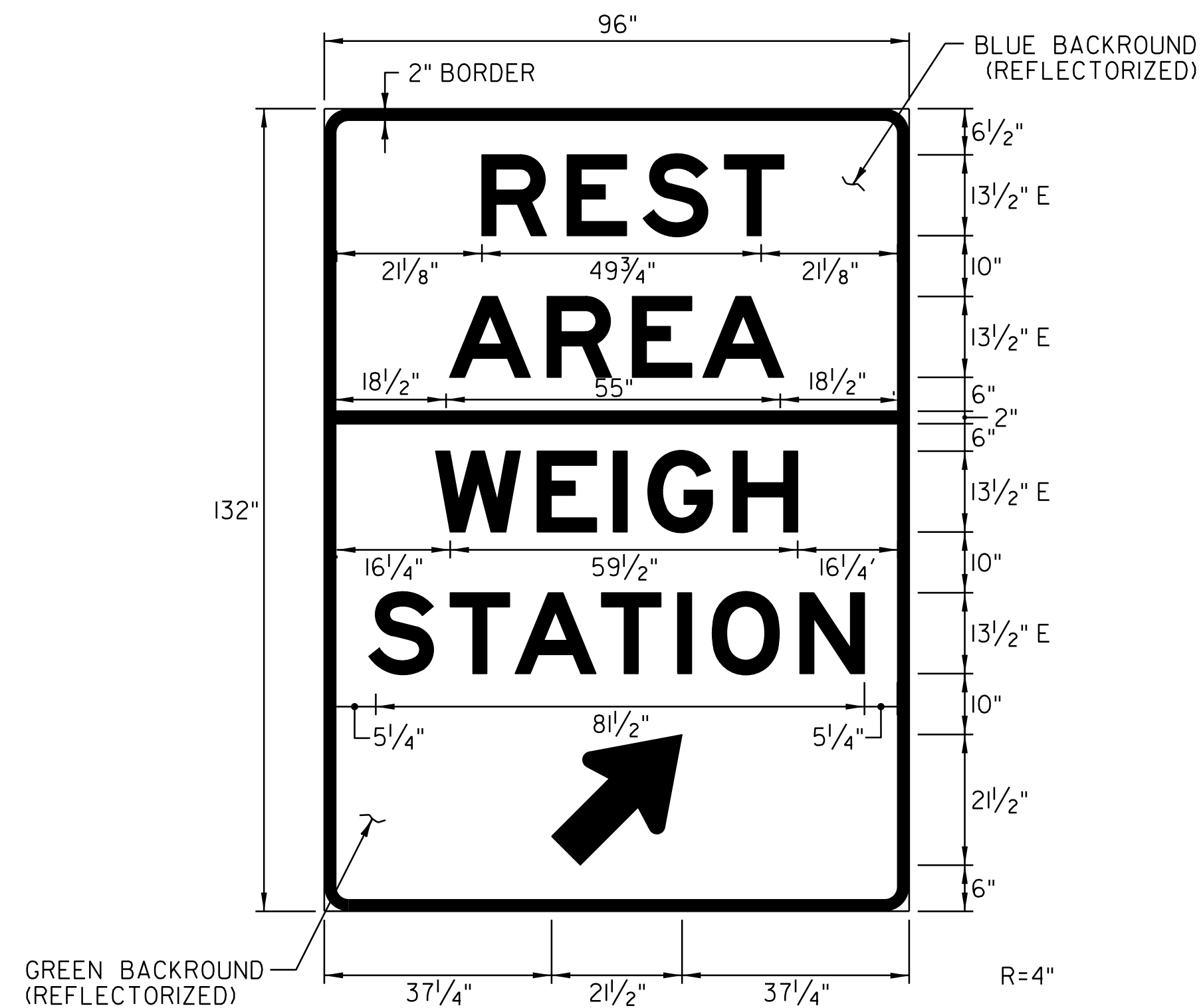
CHECKED BY: D.W.E.

SHEET 7 OF 61

FILE NAME = \$FILES\$  
DATE/TIME = \$DATE\$  
USER = \$NTUSER\$

NOTE:

TEXT LAYOUT DIMENSIONS ARE BASED ON THE "LETTER & NUMERAL WIDTHS & SPACE" TABLES FOUND IN THE "STANDARD HIGHWAY SIGNS" BOOK PUBLISHED BY FHWA. MINOR VARIATIONS IN TEXT DIMENSIONS ARE ACCEPTABLE BASED ON INDIVIDUAL MANUFACTURER'S LETTER FABRICATION. SIGNIFICANT CHANGES THAT AFFECT SIGN APPEARANCE SHALL BE BROUGHT TO THE ATTENTION OF THE VAOT'S TRAFFIC OPERATIONS SECTION BEFORE FABRICATION.

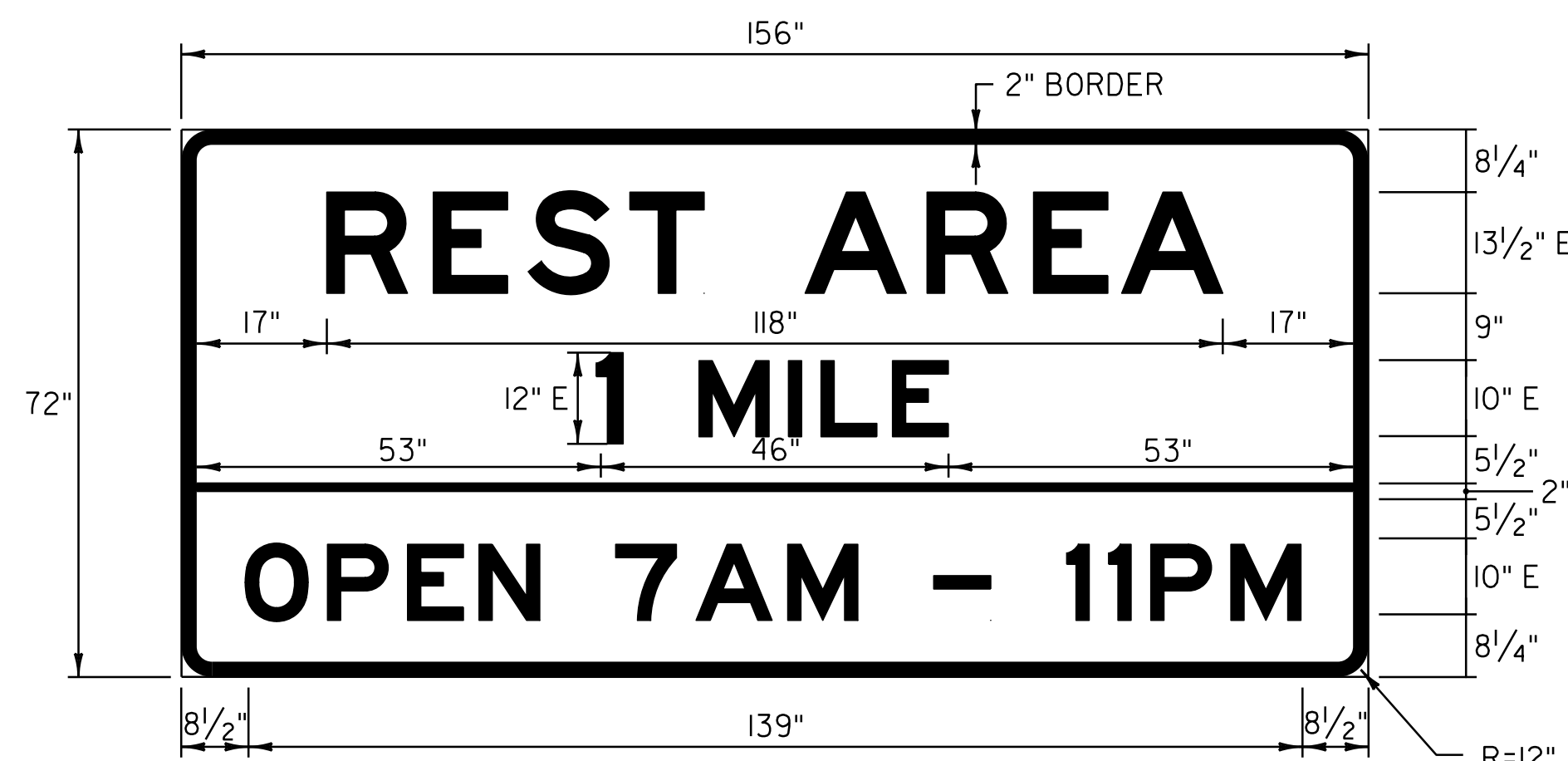


COLOR: WHITE BORDER & TEXT (REFLECTORIZED)  
 BLUE BACKGROUND (REFLECTORIZED)  
 GREEN BACKGROUND (REFLECTORIZED)

MATERIAL: PER VAOT STANDARD E-131

SIGN - INTERSTATE 89  
 NORTHBOUND REST AREA:  
 STA. X7+90.0, LT

SOUTHBOUND REST AREA:  
 STA. Y8+08.0, LT



COLOR: WHITE BORDER & TEXT (REFLECTORIZED)  
 BLUE BACKGROUND (REFLECTORIZED)

MATERIAL: PER VAOT STANDARD E-131

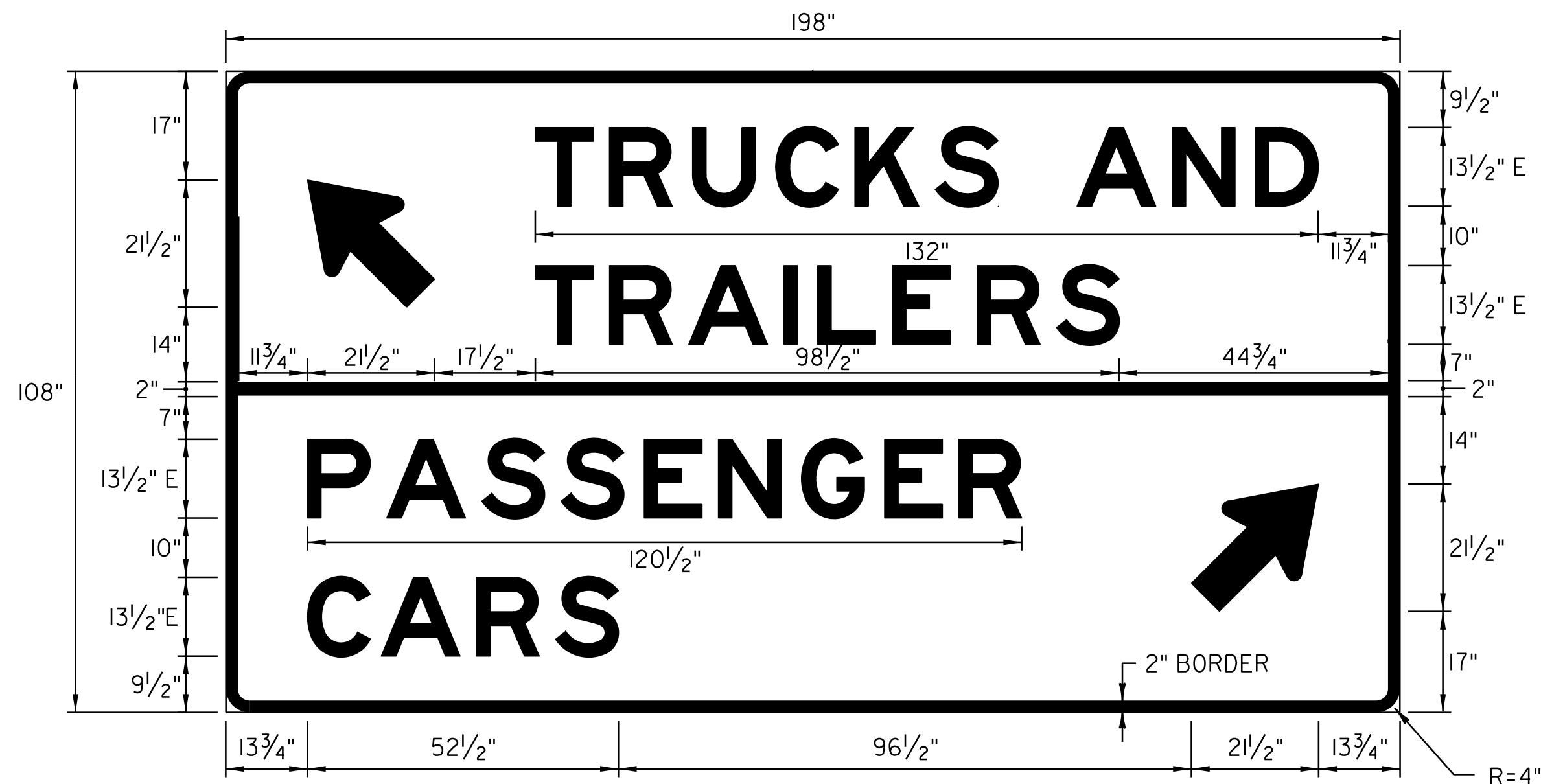
SIGN - INTERSTATE 89  
 NORTHBOUND:  
 MM 33.420, RT

SOUTHBOUND:  
 MM 34.830, LT

NOTE:

TEXT LAYOUT DIMENSIONS ARE BASED ON THE "LETTER & NUMERAL WIDTHS & SPACE" TABLES FOUND IN THE "STANDARD HIGHWAY SIGNS" BOOK PUBLISHED BY FHWA. MINOR VARIATIONS IN TEXT DIMENSIONS ARE ACCEPTABLE BASED ON INDIVIDUAL MANUFACTURER'S LETTER FABRICATION. SIGNIFICANT CHANGES THAT AFFECT SIGN APPEARANCE SHALL BE BROUGHT TO THE ATTENTION OF THE VAOT'S TRAFFIC OPERATIONS SECTION BEFORE FABRICATION.

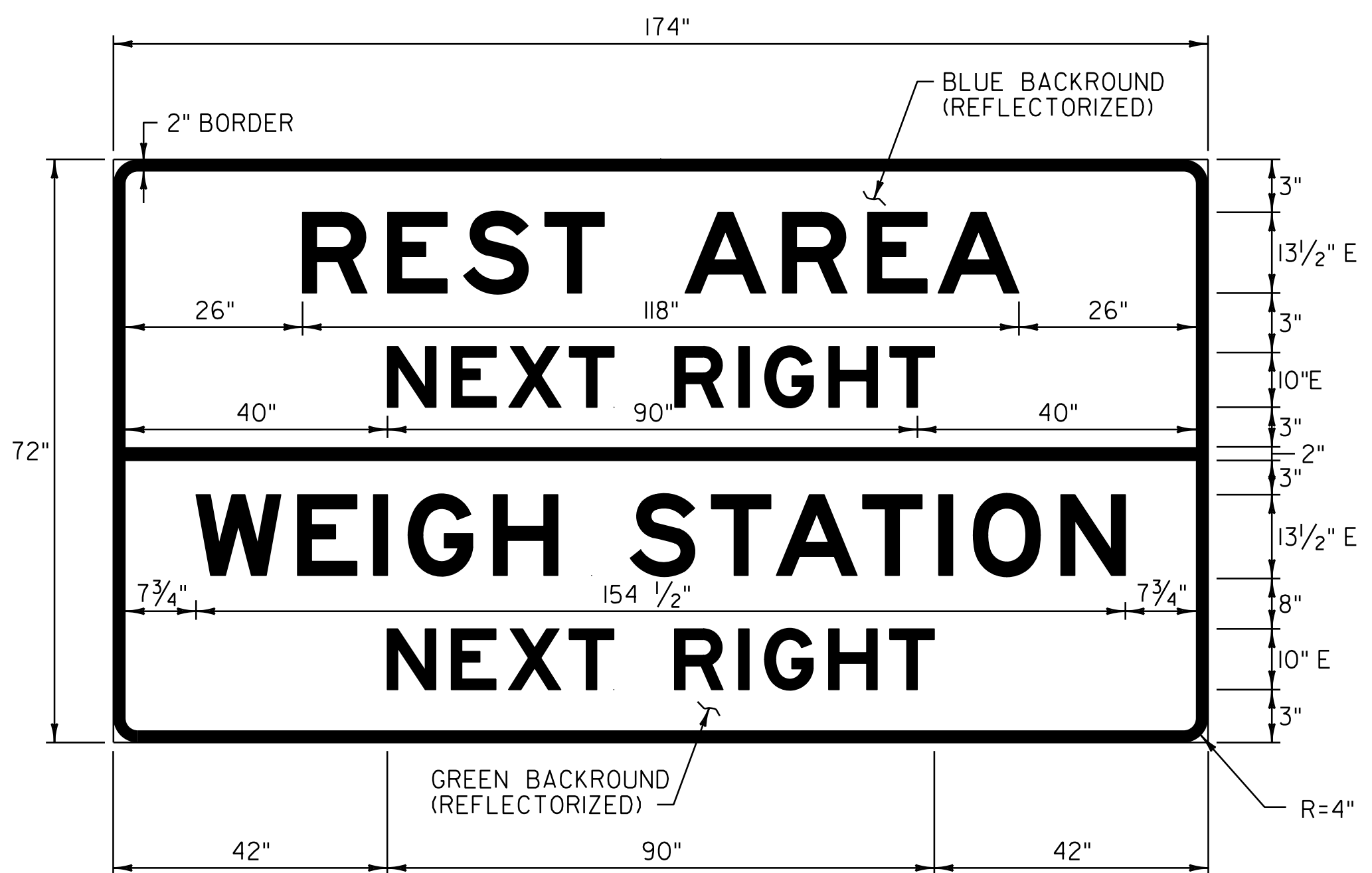
FILE NAME = \$FILES\$  
 DATE/TIME = \$DATE\$ \$TIME\$  
 USER = \$NTUSER\$



COLOR: WHITE BORDER & TEXT (REFLECTORIZED)  
 BLUE BACKGROUND (REFLECTORIZED)

MATERIAL: PER VAOT STANDARD E-131

SIGN - INTERSTATE 89  
 NORTHBOUND REST AREA:  
 STA. X9+27.0, LT

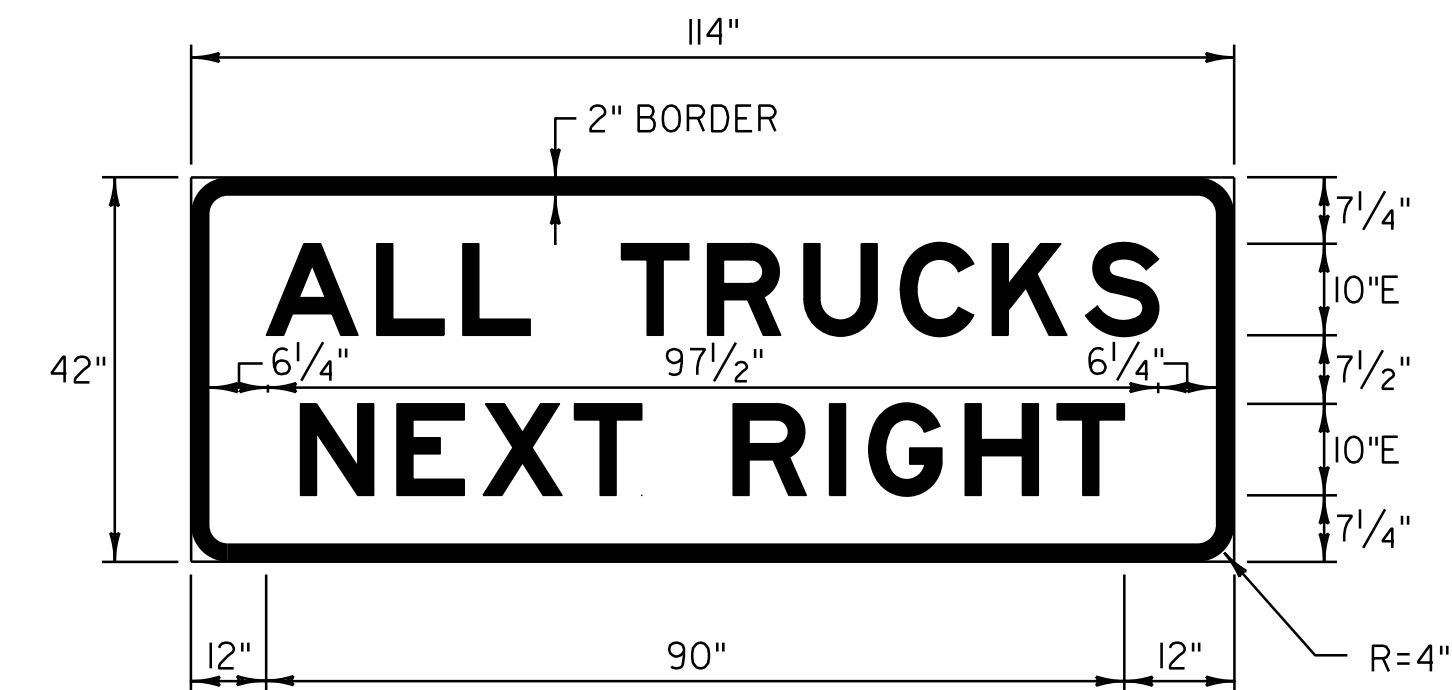


COLOR: WHITE BORDER & TEXT (REFLECTORIZED)  
 BLUE BACKGROUND (REFLECTORIZED)  
 GREEN BACKGROUND (REFLECTORIZED)

MATERIAL: PER VAOT STANDARD E-131

SIGN - INTERSTATE 89  
 NORTHBOUND:  
 MM 34.040, RT

SOUTHBOUND:  
 MM 33.940, LT



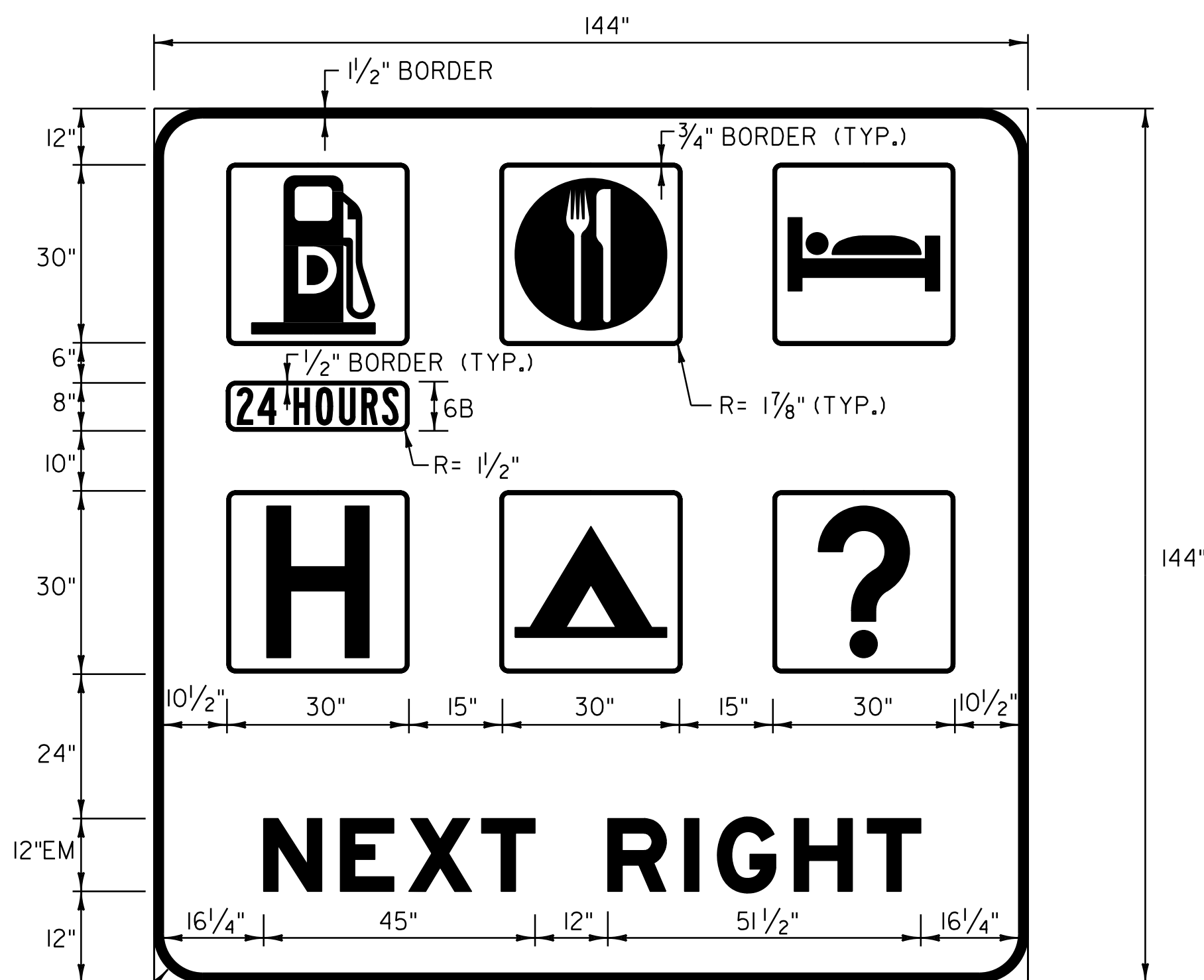
COLOR: WHITE BORDER & TEXT (REFLECTORIZED)  
 BLACK BACKGROUND (REFLECTORIZED)

MATERIAL: PER VAOT STANDARD E-131

SIGN - INTERSTATE 89

NORTHBOUND:  
 MM 33.780, RT

SOUTHBOUND:  
 MM 34.190, LT

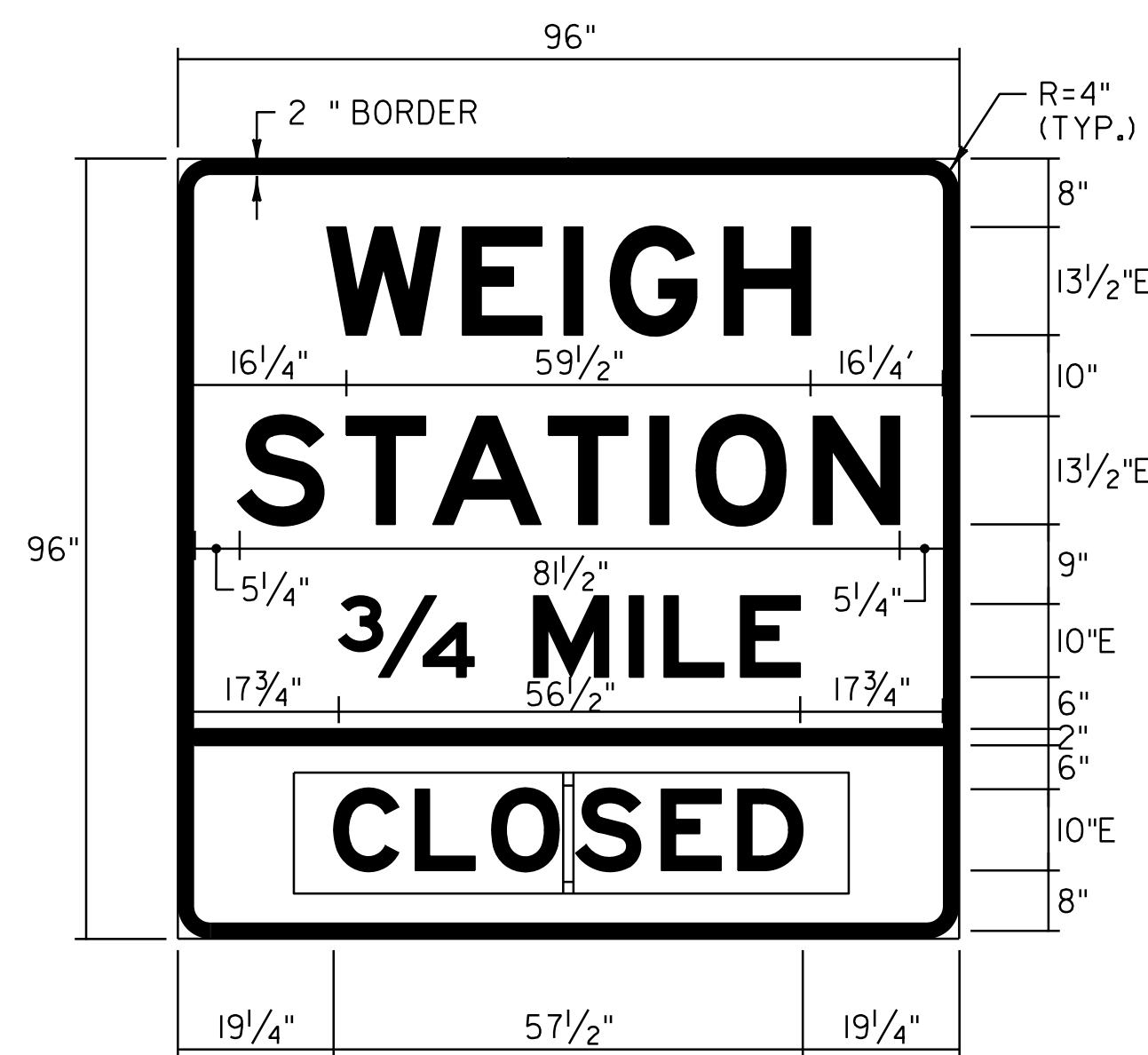


COLOR: WHITE BORDER, TEXT & SYMBOL (REFLECTORIZED)  
 BLUE BACKGROUND (REFLECTORIZED)

MATERIAL: PER VAOT STANDARD E-130

SIGN-INTERSTATE 89  
 NORTHBOUND:  
 MM 30.449, RT

<b>TRAFFIC SIGN DETAIL SHEET#2</b>	<b>NOT TO SCALE</b>	
	PROJECT NAME: BETHEL - RANDOLPH & RANDOLPH - BROOKFIELD	PLOT DATE: \$DATE\$
	PROJECT NUMBER: IM 089-1(52) & IM 089-1(22)	DRAWN BY: C.A.K.
FILE NAME: p99a200.dgn	DESIGNED BY: D.W.E.	CHECKED BY: D.W.E.
IPARM FILE: p06A048c+sd.1		SHEET 8 OF 61

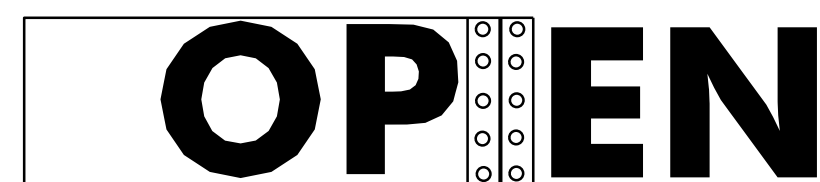
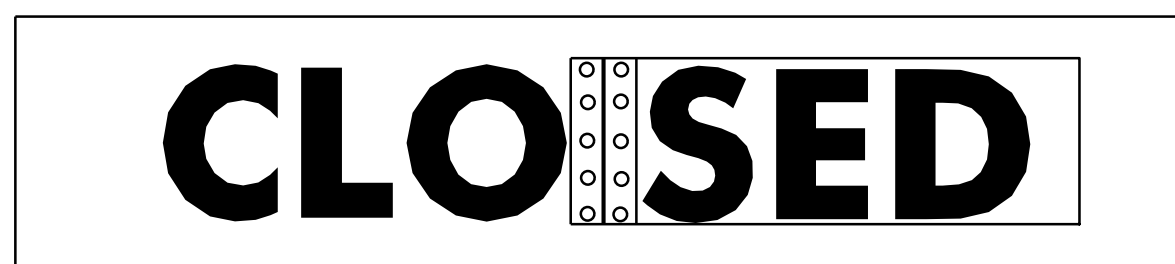


COLOR: WHITE BORDER & TEXT (REFLECTORIZED)  
GREEN BACKGROUND (REFLECTORIZED)

MATERIAL: PER VAOT STANDARD E-131

SIGN - INTERSTATE 89  
NORTHBOUND:  
MM 33.540, RT

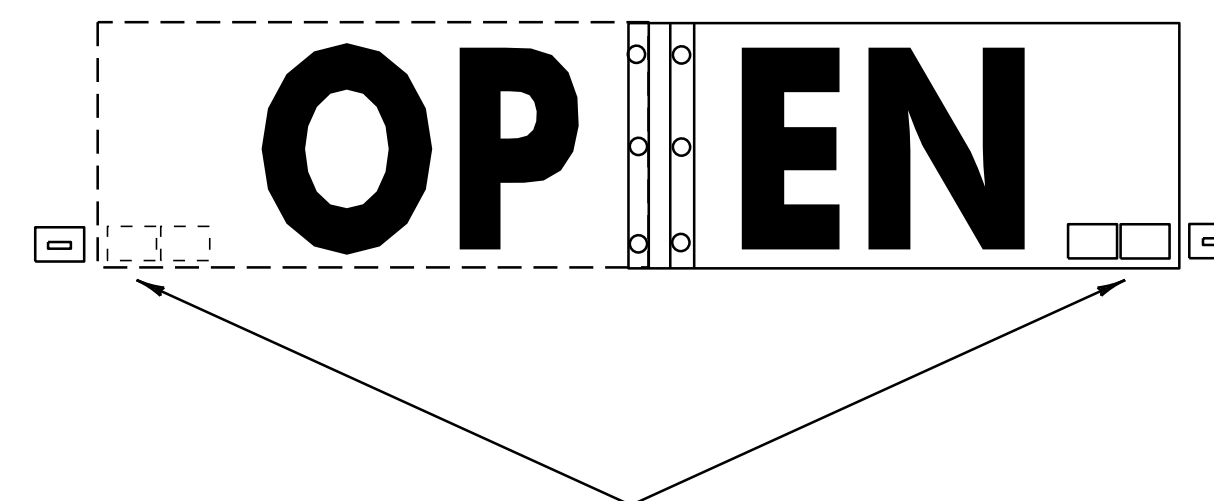
SOUTHBOUND:  
MM 34.440, LT



THE CENTRALLY HINGED PANEL TO HAVE THE LETTERS "OP" DISPLAYED WHEN SWUNG TO THE LEFT AND "SED" DISPLAYED WHEN SWUNG TO THE RIGHT AND THE PARENT SIGN TO HAVE "EN" RIGHT OF THE HINGE AND "CLO" TO THE LEFT, SO THAT SWINGING THE PANEL LEFT OR RIGHT FORMS THE WORDS "OPEN" OR "CLOSED". FURNISH AND MOUNT STAINLESS STEEL RETAINERS TO SECURE THE PANEL IN EITHER POSITION. PANEL POSITION WILL BE CHANGED FROM THE GROUND WITH A POLE. HINGE TO BE COVERED WITH SAME REFLECTORIZED MATERIAL AS MAIN SIGN. ADJUST LETTER TO LETTER SPACING TO CLEAR HINGE IF NECESSARY AND OTHER LETTERS ACCORDINGLY.

NOTE:

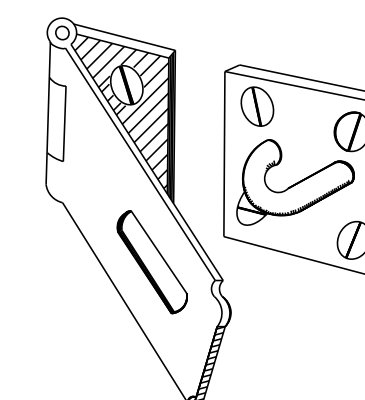
TEXT LAYOUT DIMENSIONS ARE BASED ON THE "LETTER & NUMERAL WIDTHS & SPACE" TABLES FOUND IN THE "STANDARD HIGHWAY SIGNS" BOOK PUBLISHED BY FHWA. MINOR VARIATIONS IN TEXT DIMENSIONS ARE ACCEPTABLE BASED ON INDIVIDUAL MANUFACTURER'S LETTER FABRICATION. SIGNIFICANT CHANGES THAT AFFECT SIGN APPEARANCE SHALL BE BROUGHT TO THE ATTENTION OF THE VAOT'S TRAFFIC OPERATIONS SECTION BEFORE FABRICATION.



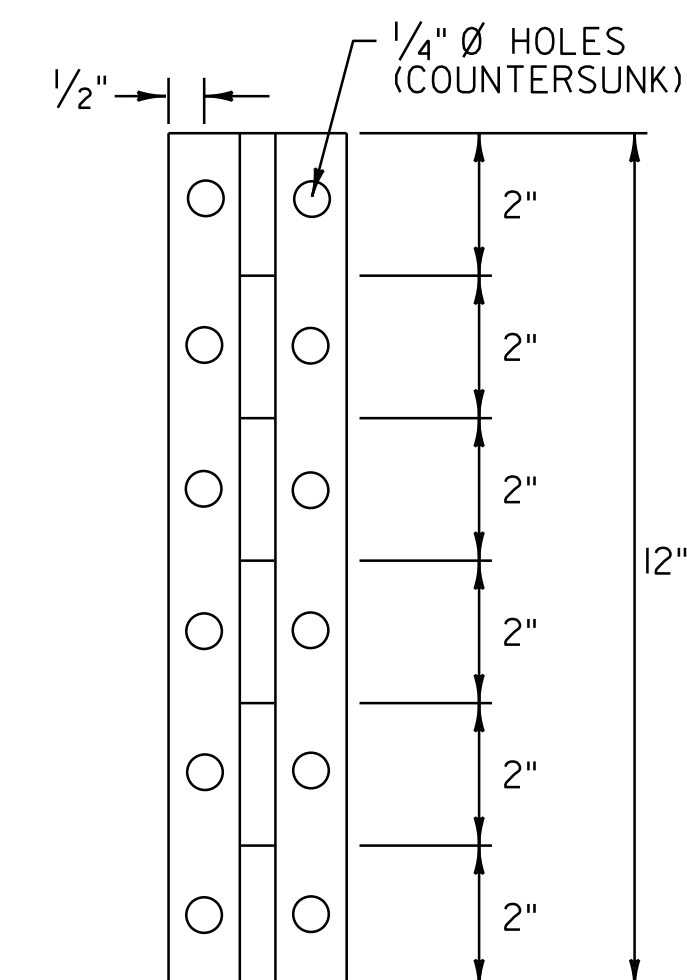
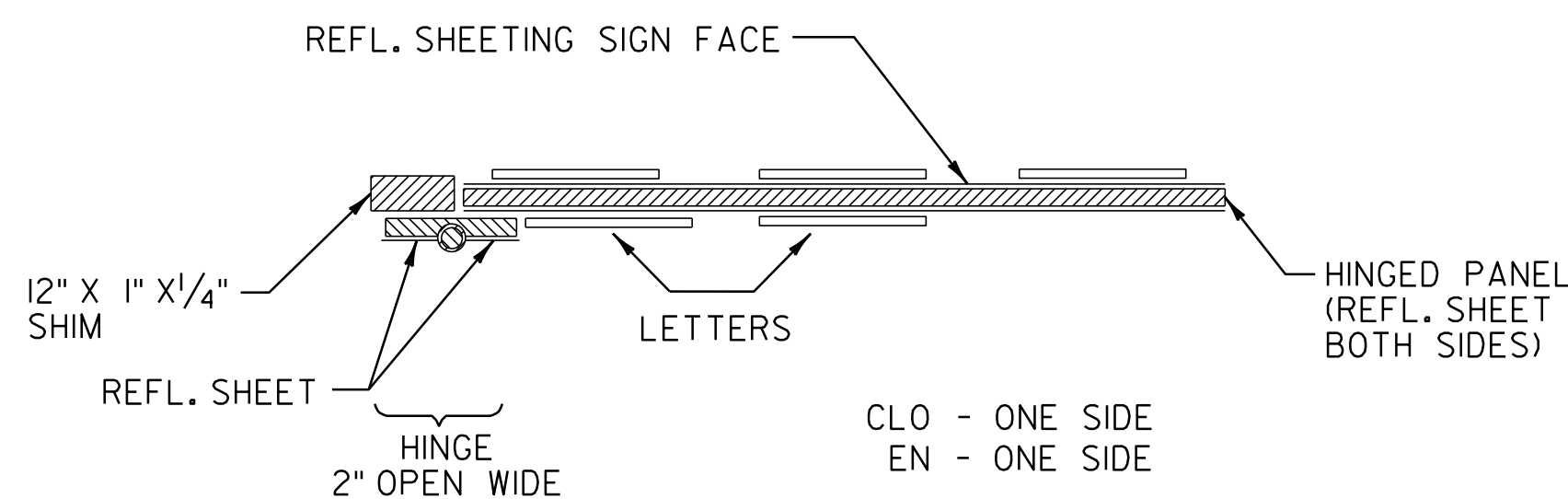
2 EACH 3/2" X 1/2" STEEL  
HASP W/PADLOCK (SEE DETAIL)

COLORS : BLACK TEXT (REFLECTORIZED)  
WHITE BACKGROUND (REFLECTORIZED)

MATERIALS: PER VAOT STANDARD E-150



HASP DETAIL



APPLY SIGN BACKGROUND  
COLOR TO HINGE

HINGE DETAIL

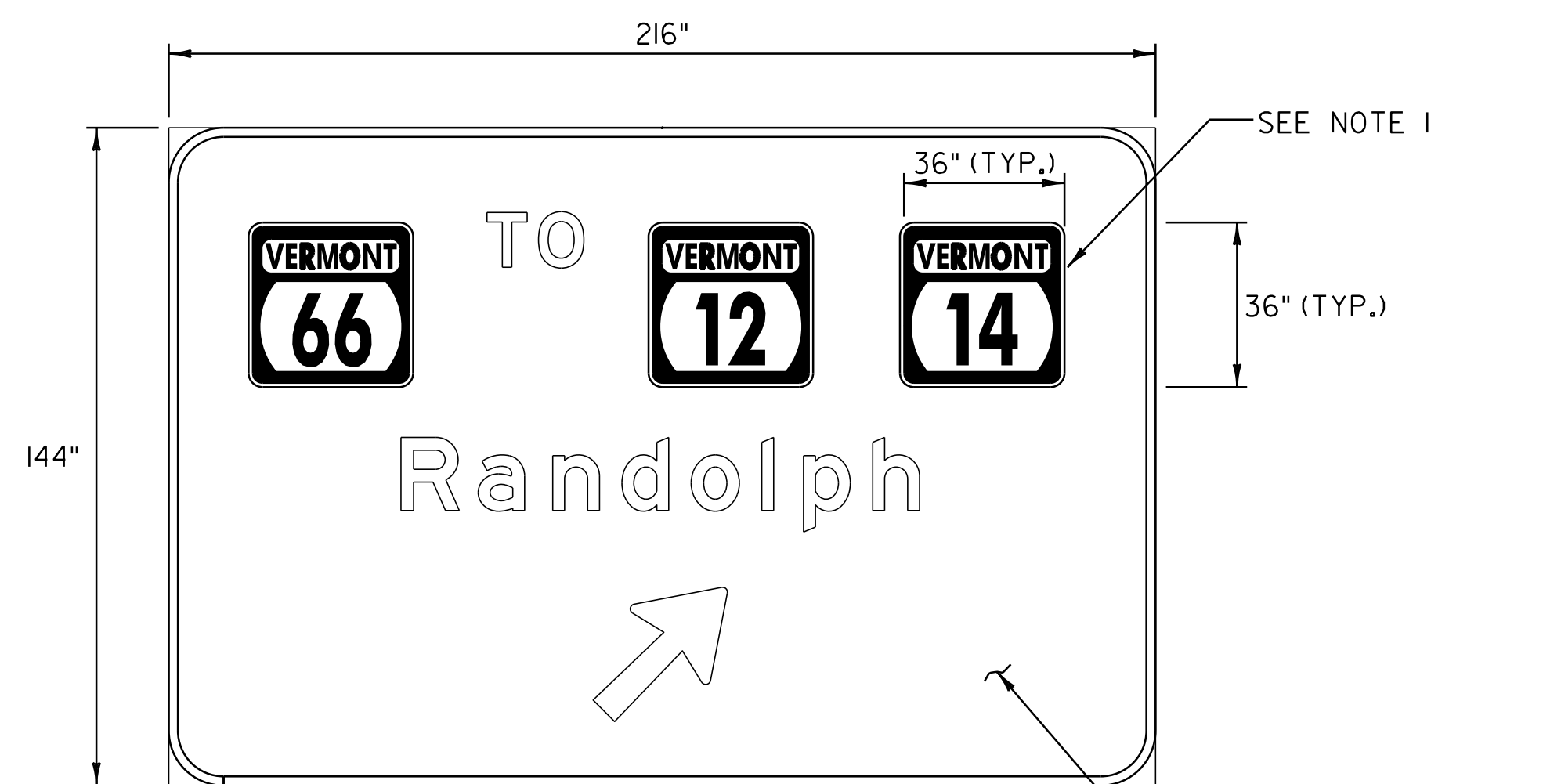
NOT TO SCALE

**TRAFFIC SIGN  
DETAIL  
SHEET#3**

PROJECT NAME: BETHEL - RANDOLPH &  
RANDOLPH - BROOKFIELD  
PROJECT NUMBER: IM 089-1(52) & IM 089-1(22)

FILE NAME: p99a200.dgn  
PROJECT LEADER: D.E.G.  
DESIGNED BY: D.W.E.  
IPARM FILE: p06A048c+sd3.1

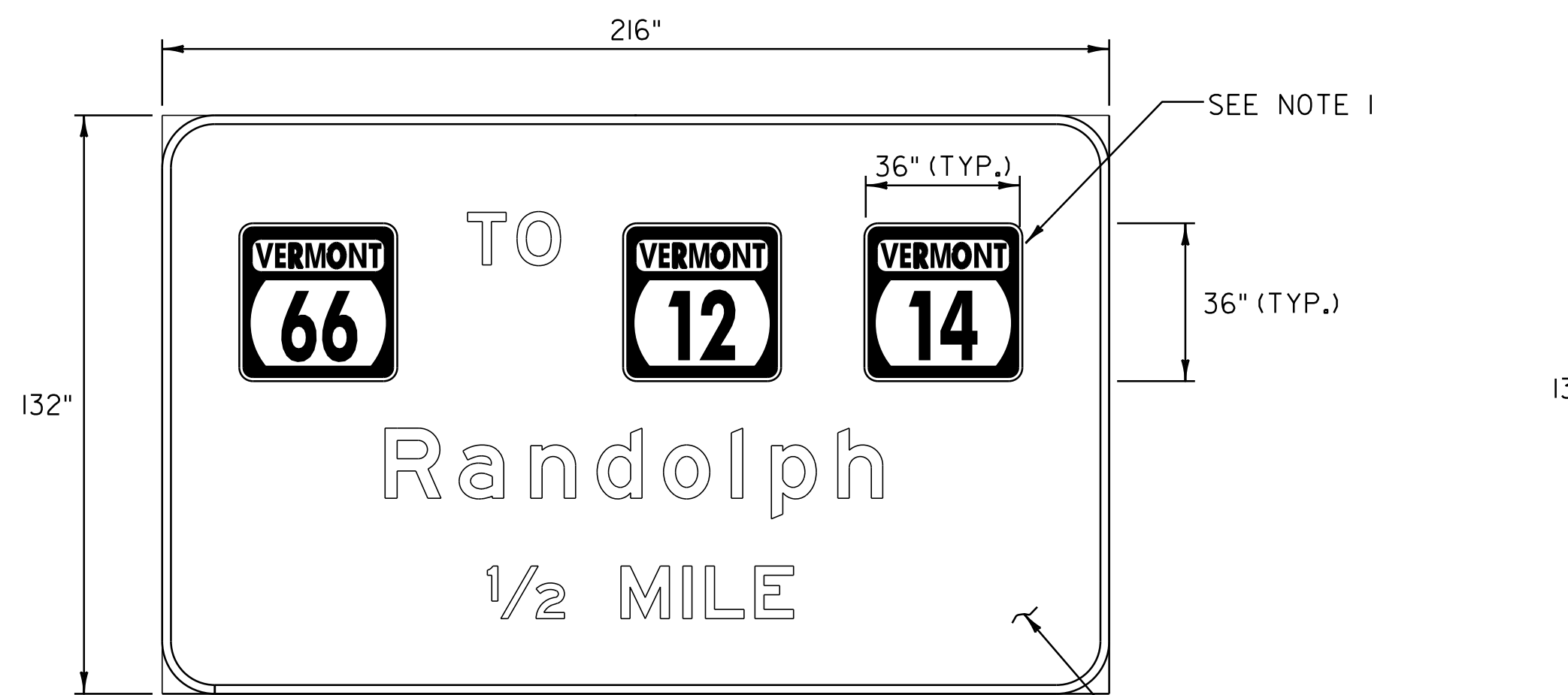
PLOT DATE: \$DATE\$  
DRAWN BY: C.A.K.  
CHECKED BY: D.W.E.  
SHEET 9 OF 61



COLOR: WHITE BORDER & BACKGROUND (REFLECTORIZED)  
GREEN LEGEND & TEXT (REFLECTORIZED)

MATERIAL: 0.060" FLAT SHEET ALUMINUM

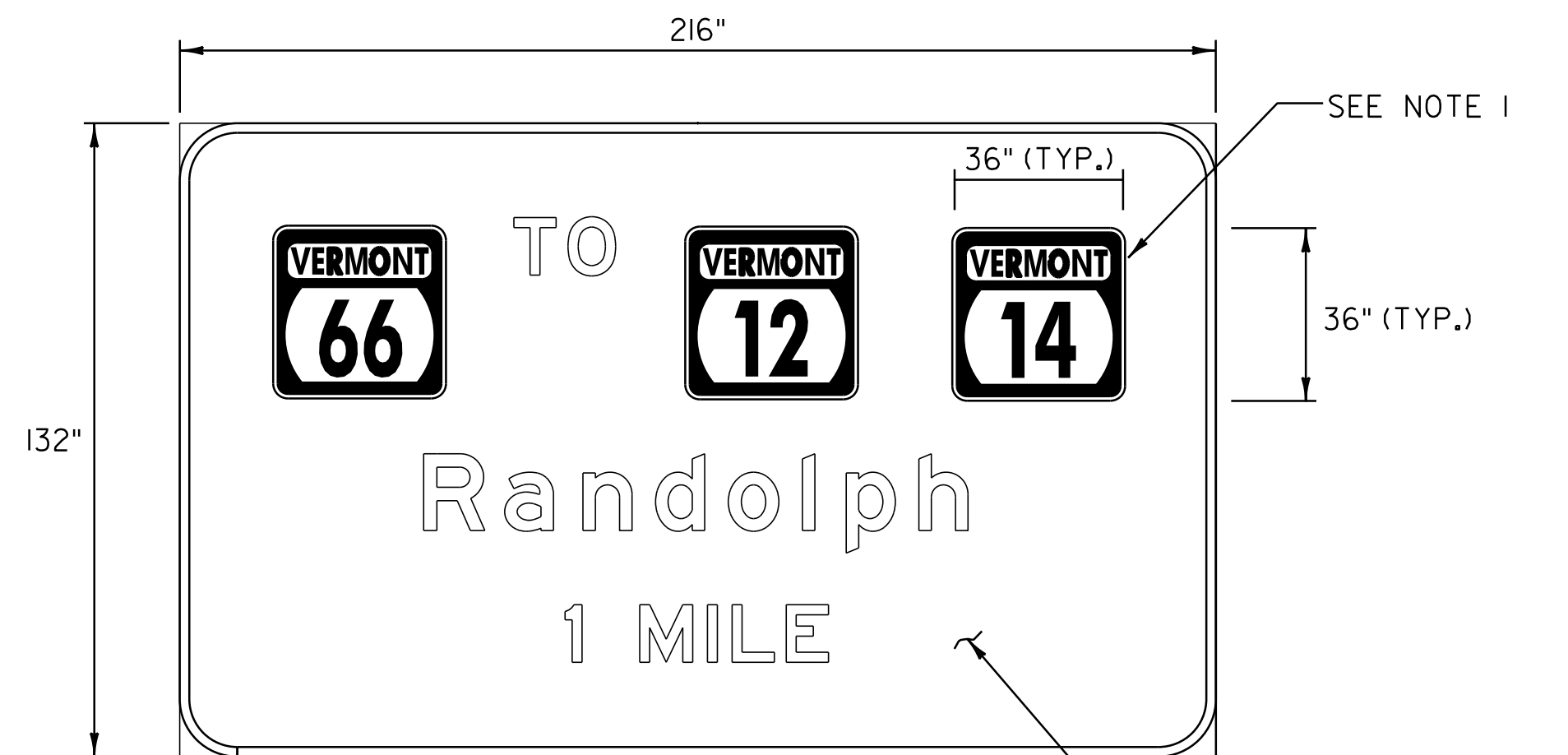
SIGN - INTERSTATE 89  
NORTHBOUND:  
MM 30.488, RT



COLOR: WHITE BORDER & BACKGROUND (REFLECTORIZED)  
GREEN LEGEND & TEXT (REFLECTORIZED)

MATERIAL: 0.060" FLAT SHEET ALUMINUM

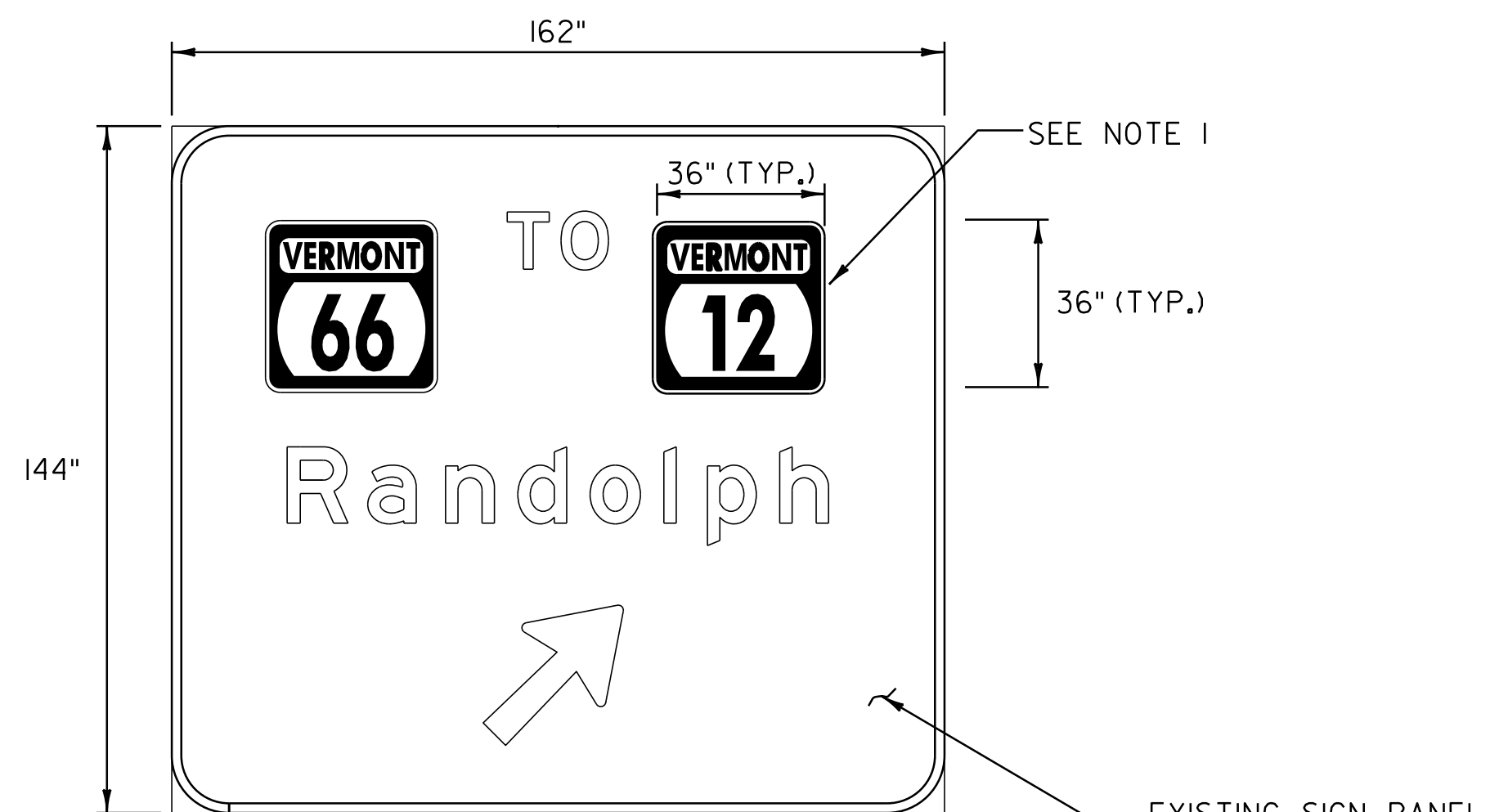
SIGN - INTERSTATE 89  
NORTHBOUND:  
MM 30.297, RT



COLOR: WHITE BORDER & BACKGROUND (REFLECTORIZED)  
GREEN LEGEND & TEXT (REFLECTORIZED)

MATERIAL: 0.060" FLAT SHEET ALUMINUM

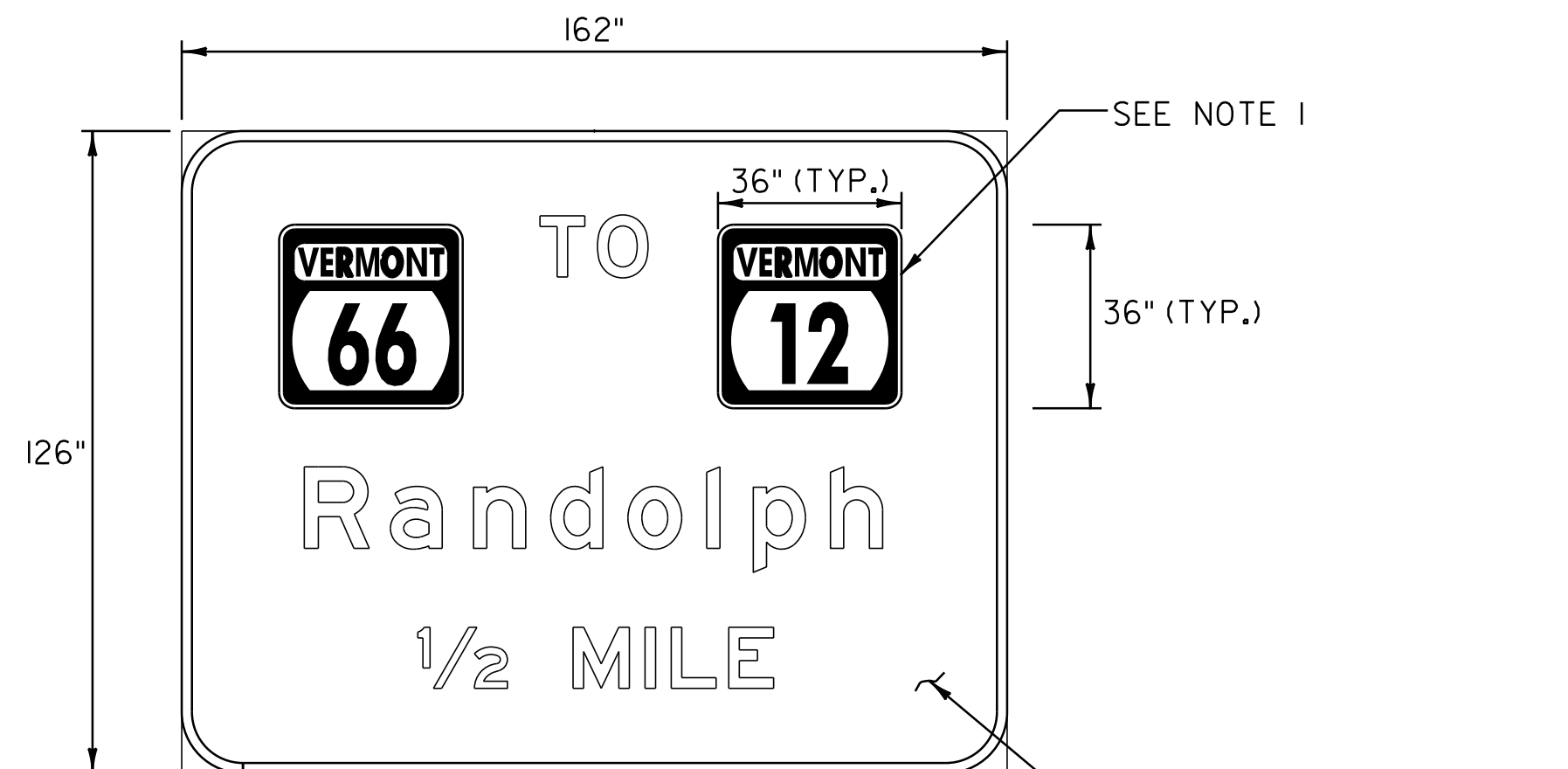
SIGN - INTERSTATE 89  
NORTHBOUND:  
MM 29.900, RT



COLOR: WHITE BORDER & BACKGROUND (REFLECTORIZED)  
GREEN LEGEND & TEXT (REFLECTORIZED)

MATERIAL: 0.060" FLAT SHEET ALUMINUM

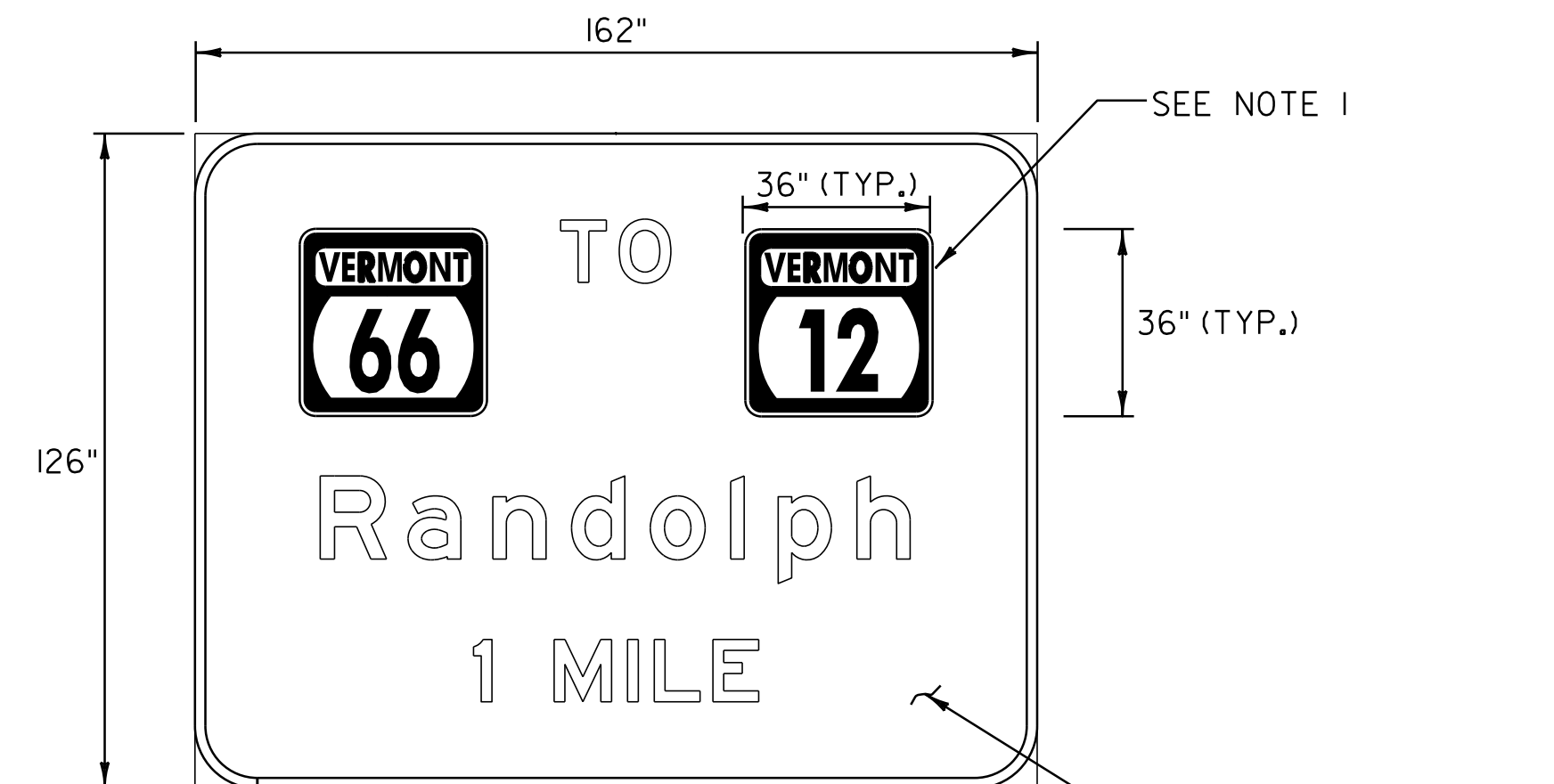
SIGN - INTERSTATE 89  
SOUTHBOUND:  
MM 31.200, LT



COLOR: WHITE BORDER & BACKGROUND (REFLECTORIZED)  
GREEN LEGEND & TEXT (REFLECTORIZED)

MATERIAL: 0.060" FLAT SHEET ALUMINUM

SIGN - INTERSTATE 89  
SOUTHBOUND:  
MM 31.450, LT



COLOR: WHITE BORDER & BACKGROUND (REFLECTORIZED)  
GREEN LEGEND & TEXT (REFLECTORIZED)

MATERIAL: 0.060" FLAT SHEET ALUMINUM

SIGN - INTERSTATE 89  
SOUTHBOUND:  
MM 31.950, LT

NOTES:

- REMOVE THE EXISTING STATE ROUTE MARKER PLAQUE AND REPLACE WITH NEW STATE ROUTE MARKER PLAQUE AS DIRECTED BY THE RESIDENT ENGINEER. THE CONTRACTOR SHALL FABRICATE THE NEW STATE ROUTE MARKER OVERLAY PANELS OUT OF 0.060" THICK FLAT SHEET ALUMINUM. ALL NEW STATE ROUTE MARKER OVERLAY PANELS SHALL HAVE A CONTRASTING WHITE BORDER AS SHOWN ON VAOT STANDARD E-136B STATE ROUTE MARKER FOR GUIDE SIGN USE.
- THE CONTRACTOR SHALL FIELD VERIFY THE DIMENSIONS OF THE EXISTING OVERHEAD SIGN PANEL PRIOR TO THE FABRICATION OF OVERLAY PANEL.

FILE NAME = \$FILES\$  
DATE/TIME = \$DATE\$  
USER = \$USER\$

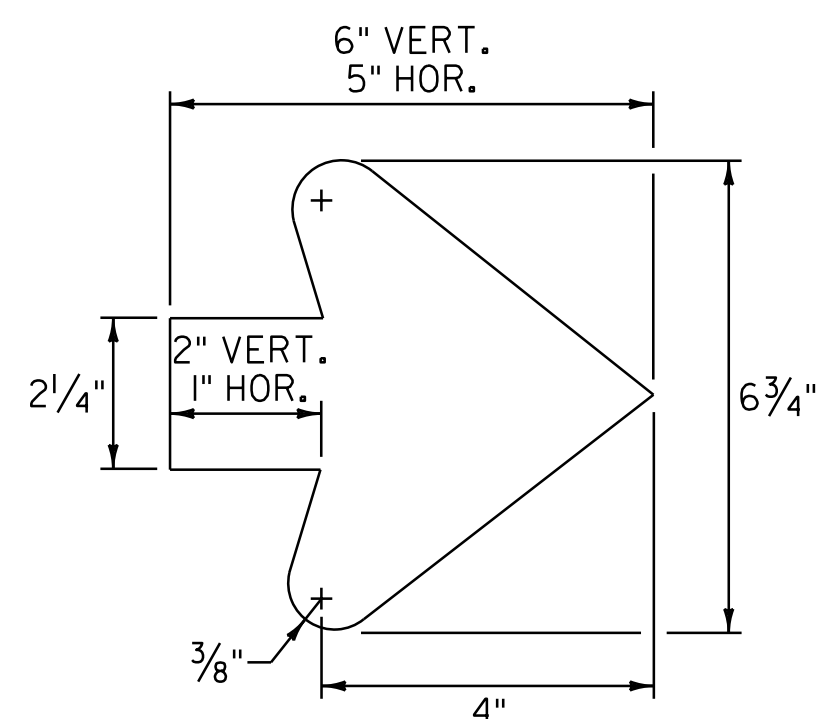
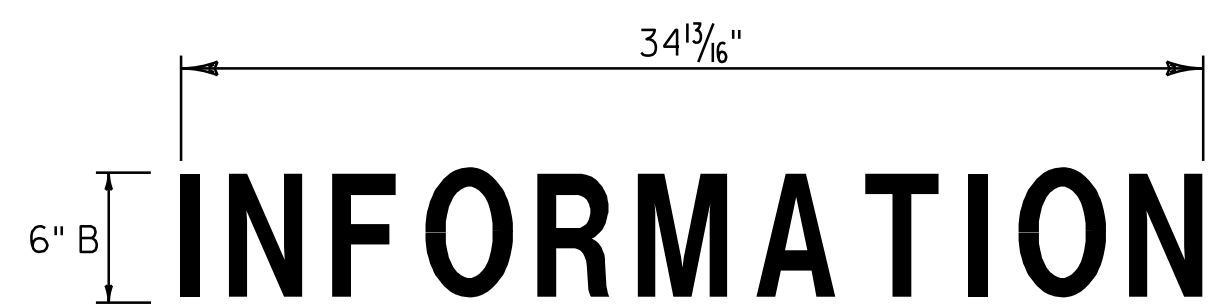
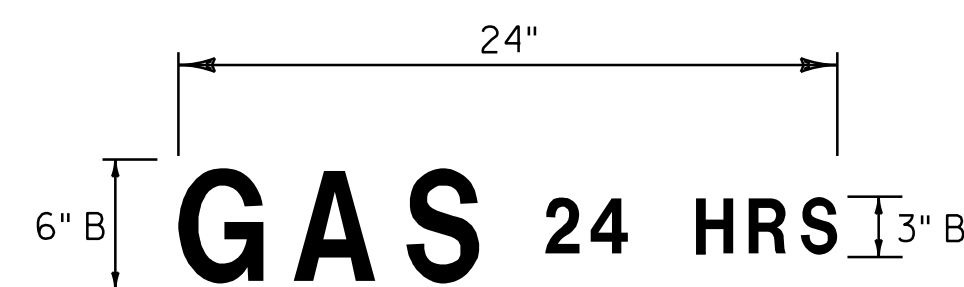
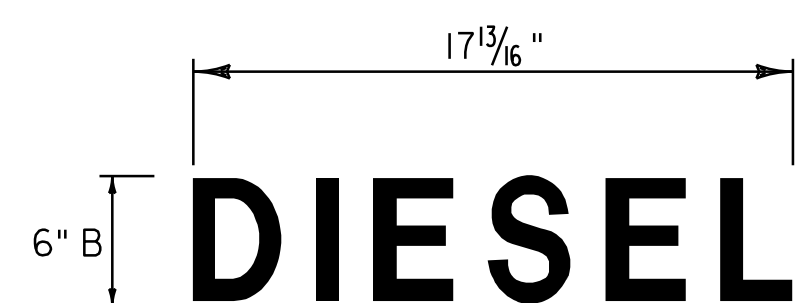
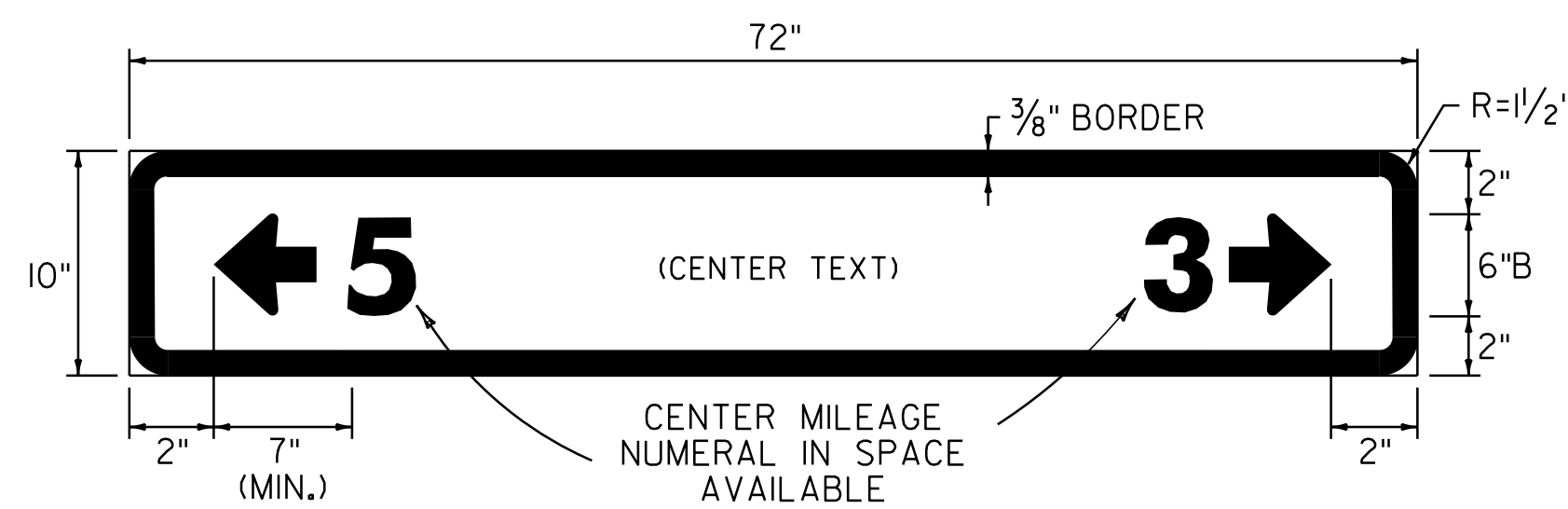
NOT TO SCALE

TRAFFIC SIGN  
DETAIL  
SHEET #4

PROJECT NAME: BETHEL - RANDOLPH &  
RANDOLPH - BROOKFIELD  
PROJECT NUMBER: IM 089-1(52) & IM 089-1(22)

FILE NAME: p99a200.dgn  
PROJECT LEADER: D.E.G.  
DESIGNED BY: D.W.E.  
IPARM FILE: p06A048c+sd4.1

PLOT DATE: \$DATE\$  
DRAWN BY: C.A.K.  
CHECKED BY: D.W.E.  
SHEET 10 OF 61



**ARROW DIMENSIONS**

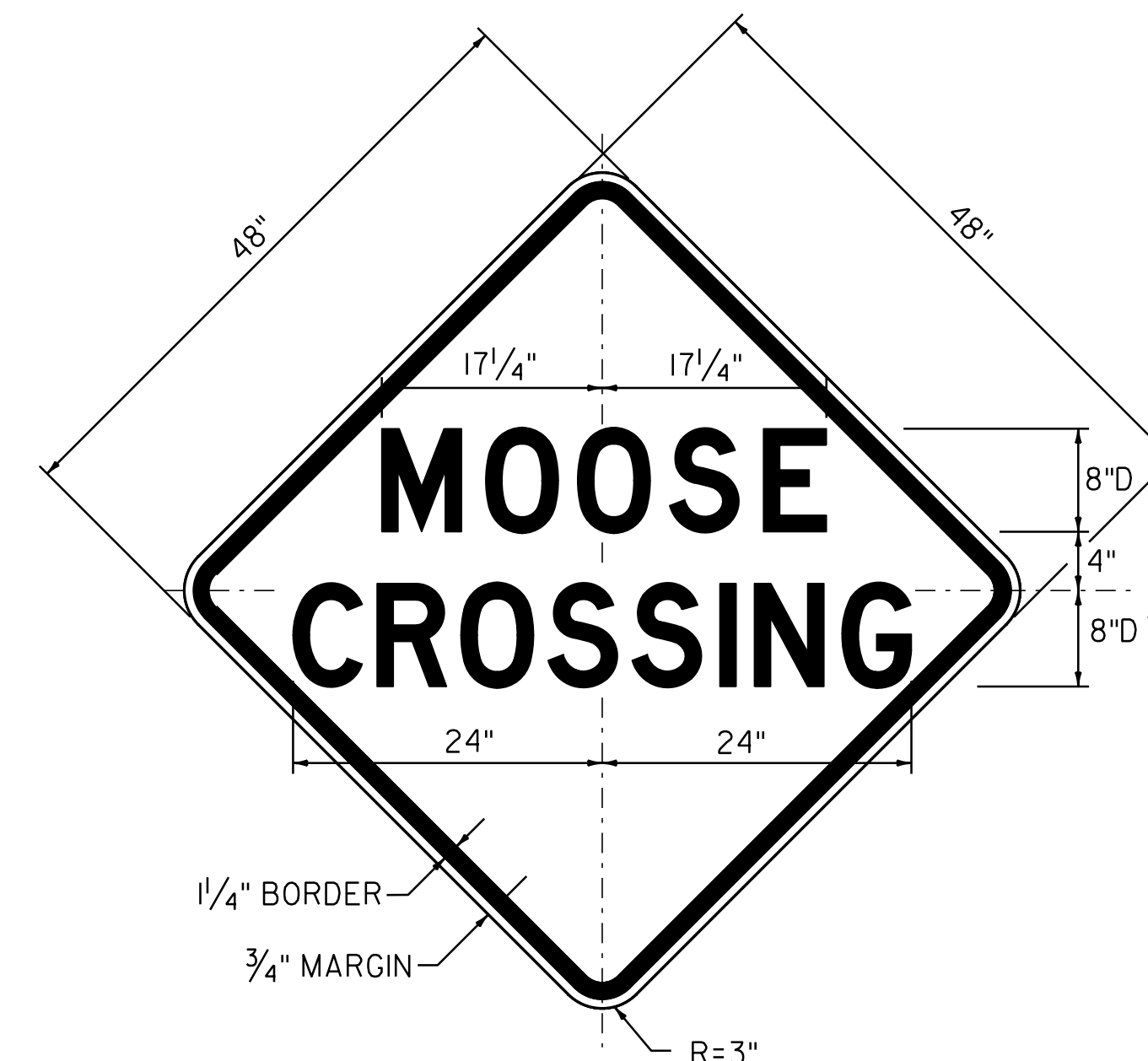
COLOR: WHITE BORDER, TEXT & SYMBOL (REFLECTORIZED)  
BLUE BACKGROUND (REFLECTORIZED)

MATERIAL: PER VAOT E-133

SIGN - INTERSTATE 89

NORTHBOUND:  
RAMP B: B18+53.0, RT

SOUTHBOUND:  
RAMP C: C14+00.0, RT



COLOR: BLACK BORDER & TEXT (REFLECTORIZED)  
YELLOW BACKGROUND (REFLECTORIZED)

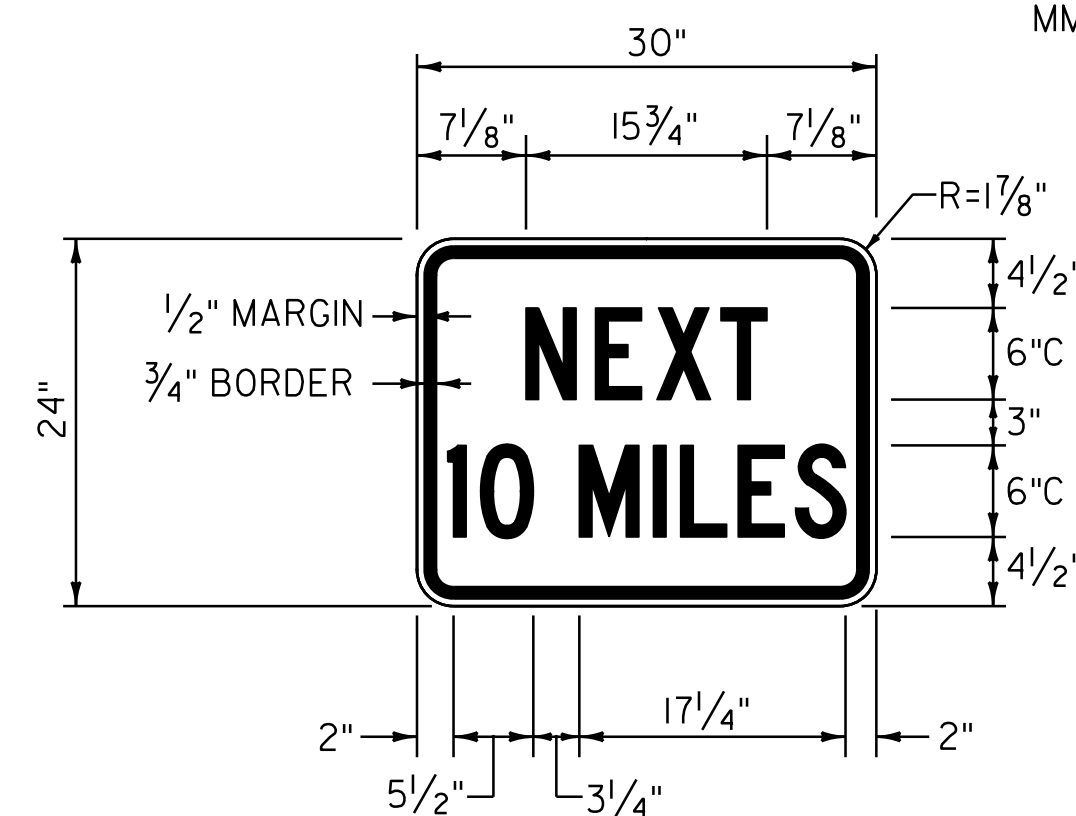
MATERIAL: PER VAOT STANDARD E-153

\* 75% REDUCED SPACING

SIGN - INTERSTATE 89

NORTHBOUND:  
MM 31.870, RT  
MM 36.600, RT

SOUTHBOUND:  
MM 35.500, LT  
MM 41.600, LT



COLOR: BLACK BORDER & TEXT (REFLECTORIZED)  
YELLOW BACKGROUND (REFLECTORIZED)

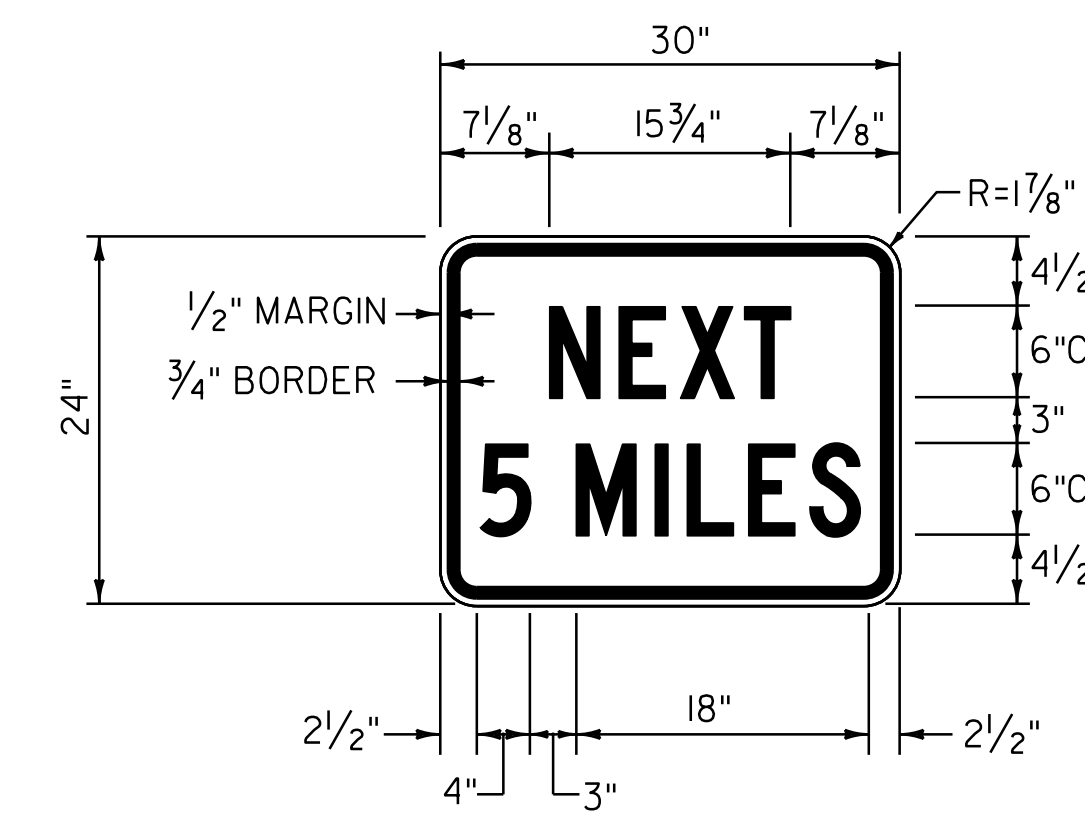
MATERIAL: PER VAOT STANDARD E-152

\* 75% REDUCED SPACING

SIGN - INTERSTATE 89

NORTHBOUND:  
MM 31.870, RT

SOUTHBOUND:  
MM 41.600, LT



COLOR: BLACK BORDER & TEXT (REFLECTORIZED)  
YELLOW BACKGROUND (REFLECTORIZED)

MATERIAL: PER VAOT STANDARD E-152

SIGN - INTERSTATE 89

NORTHBOUND:  
MM 36.600, RT

SOUTHBOUND:  
MM 35.500, LT

NOT TO SCALE

**TRAFFIC SIGN  
DETAIL  
SHEET #5**

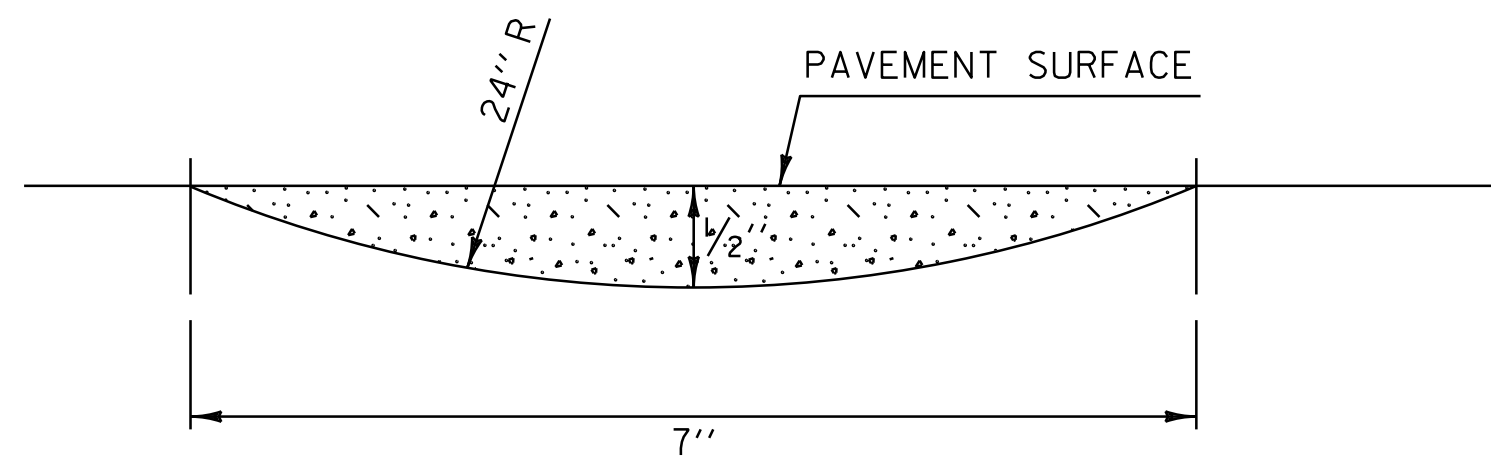
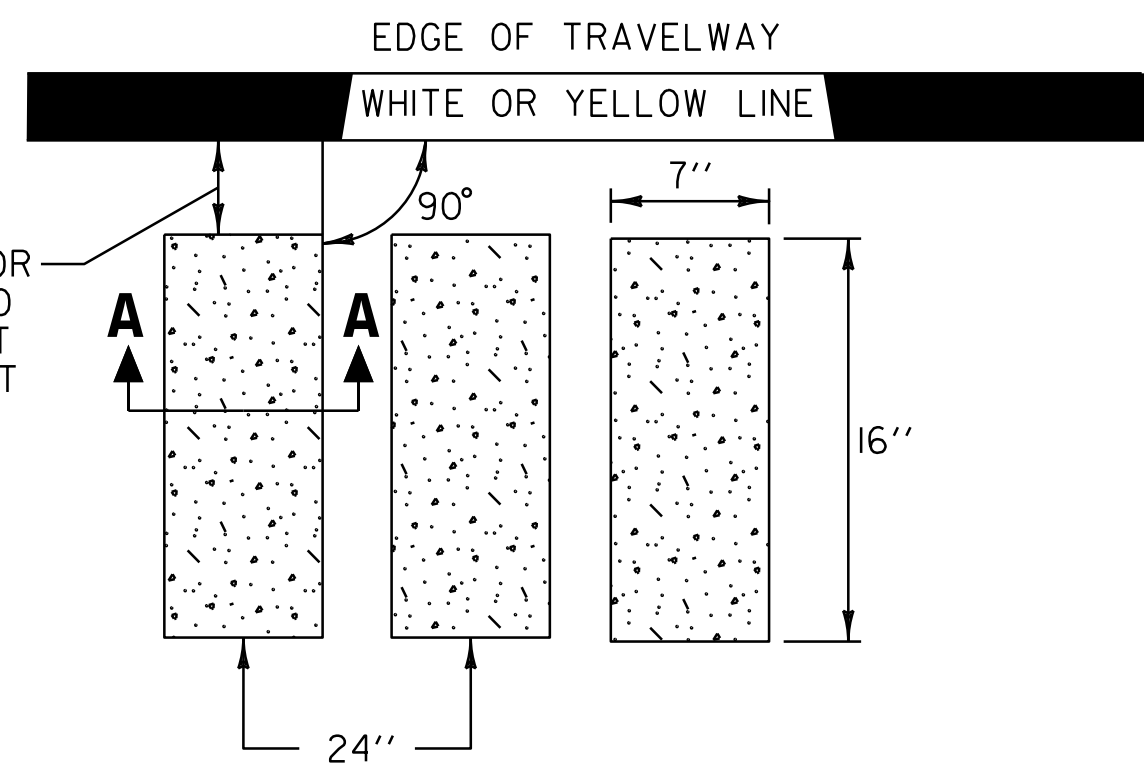
PROJECT NAME: BETHEL - RANDOLPH &  
RANDOLPH - BROOKFIELD  
PROJECT NUMBER: IM 089-1(52) & IM 089-1(22)

FILE NAME: p99a200.dgn  
PROJECT LEADER:  
DESIGNED BY: D.W.E.  
IPARM FILE: p06A048c+sd5.1

PLOT DATE: \$DATE\$  
DRAWN BY: C.A.K.  
CHECKED BY: D.W.E.  
SHEET II OF 61

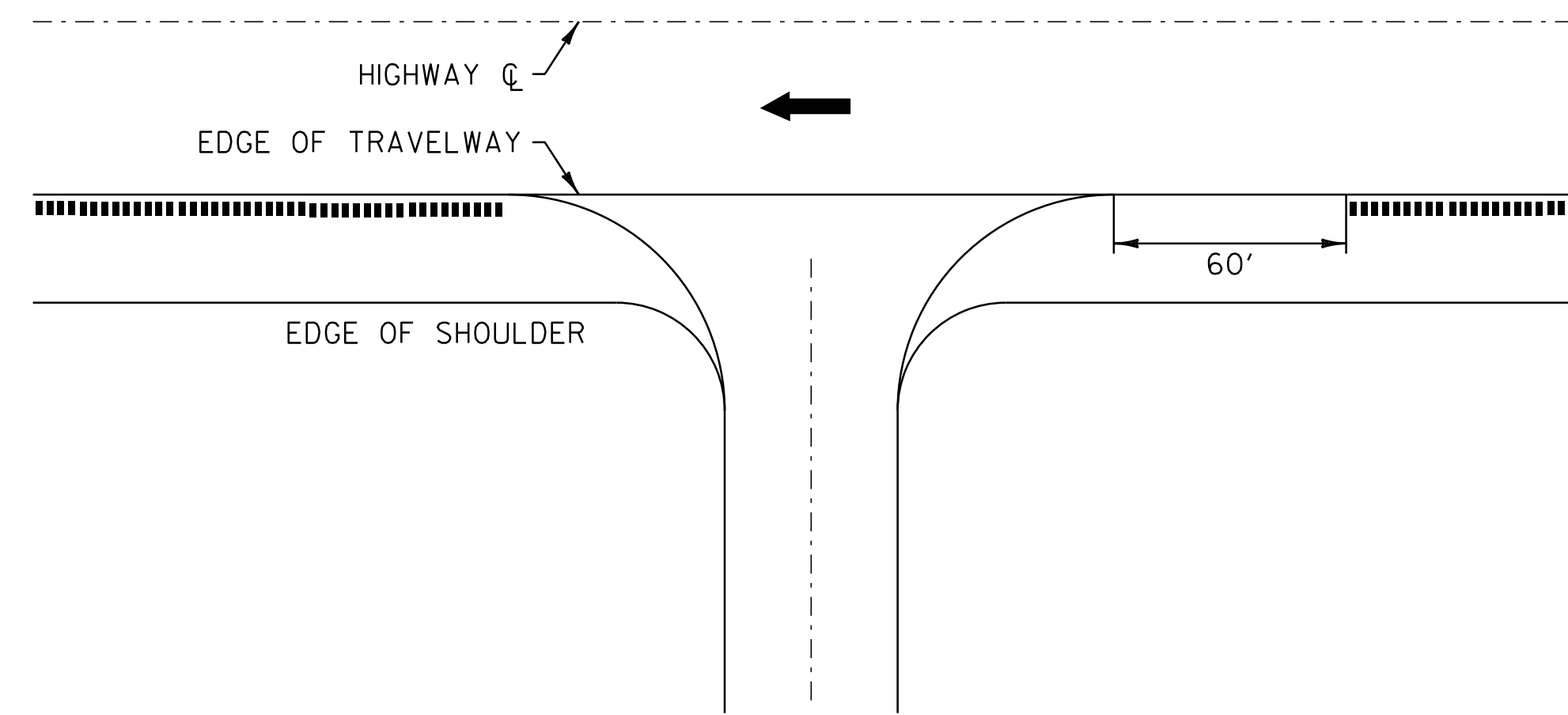
NOTE:  
TEXT LAYOUT DIMENSIONS ARE BASED ON THE "LETTER & NUMERAL WIDTHS & SPACE" TABLES FOUND IN THE "STANDARD HIGHWAY SIGNS" BOOKLET. MINOR VARIATIONS IN TEXT DIMENSIONS ARE ACCEPTABLE BASED ON INDIVIDUAL MANUFACTURER'S LETTER FABRICATION. SIGNIFICANT CHANGES THAT AFFECT SIGN APPEARANCE SHALL BE BROUGHT TO THE ATTENTION OF THE VAOT'S TRAFFIC OPERATIONS SECTION BEFORE FABRICATION.

30" FOR ALL SHOULDERS 6' OR WIDER, 6" FOR ALL SHOULDERS LESS THAN 6' WIDE WITH NO GUARDRAIL, MILLED RUMBLE STRIPS WILL NOT BE REQUIRED IN GUARDRAIL AREAS ADJACENT TO THE 4' SHOULDER.

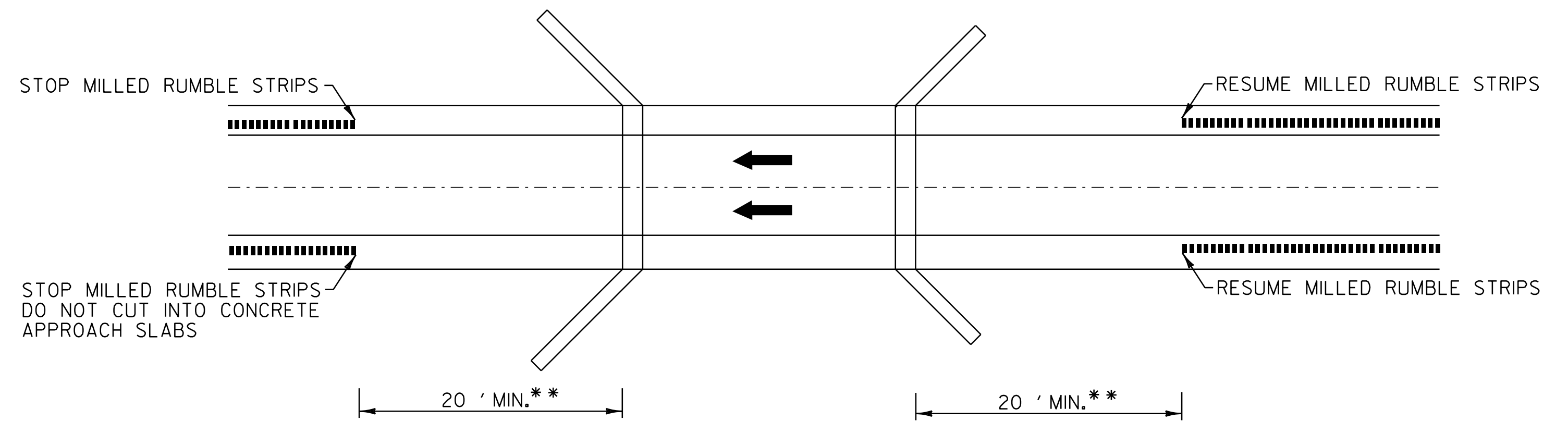


SECTION A-A

TYPICAL RUMBLE STRIP MILLING DETAIL

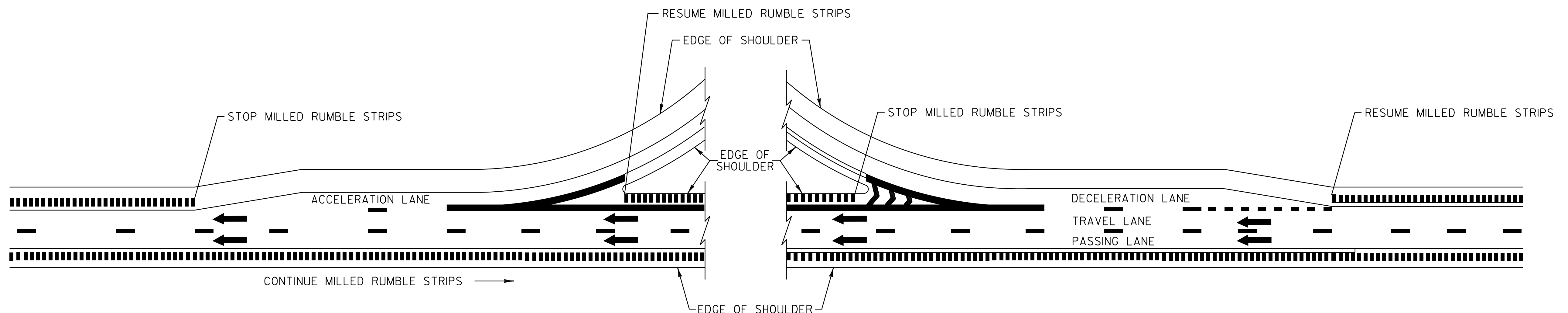


U-TURN DETAIL



BRIDGE DETAIL

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



TYPICAL MILLED RUMBLE STRIPS AT PARALLEL DECELERATION AND ACCELERATION LANES

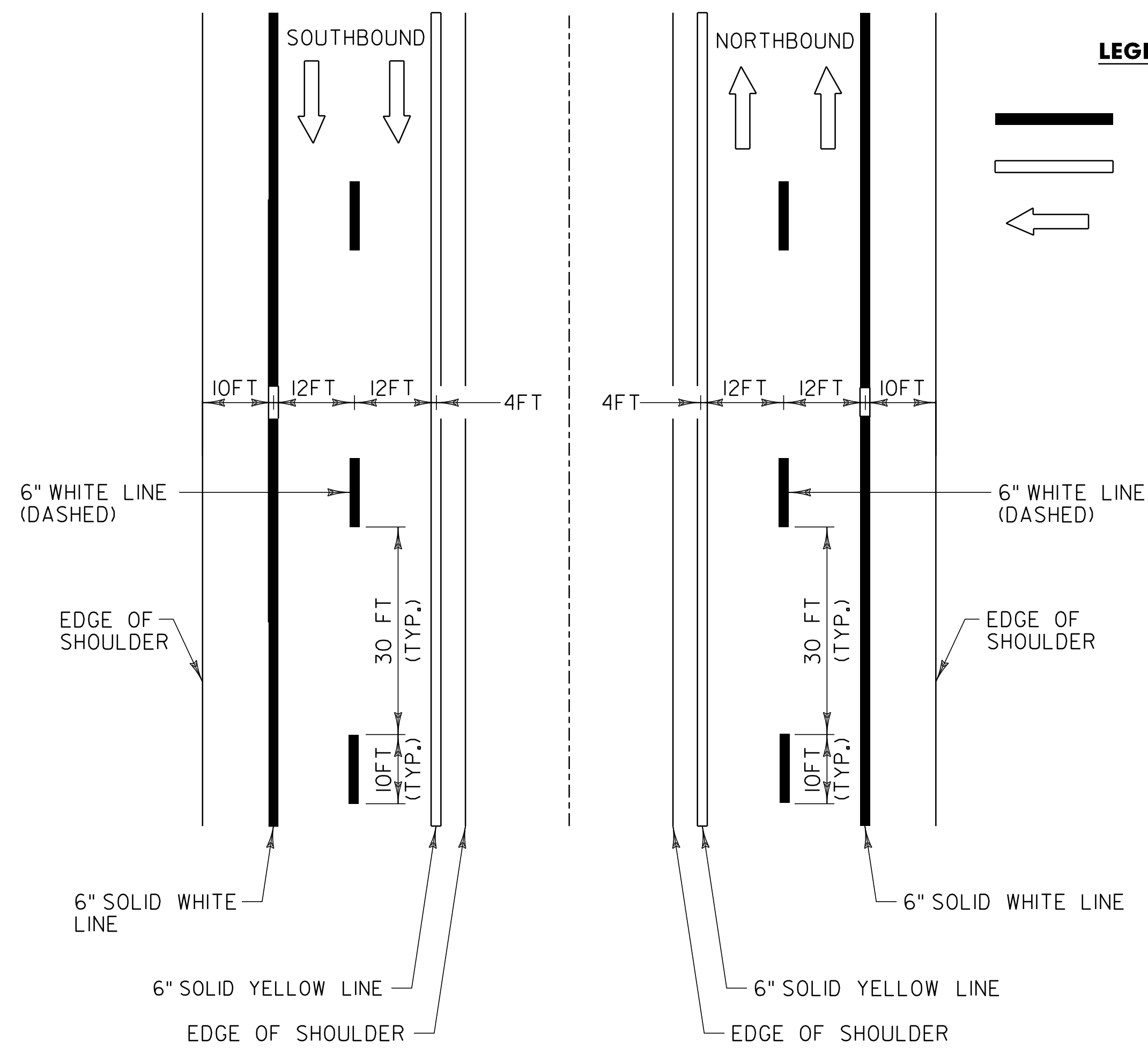
LEGEND

- ← DIRECTION OF TRAFFIC FLOW
- ..... MILLED RUMBLE STRIPS

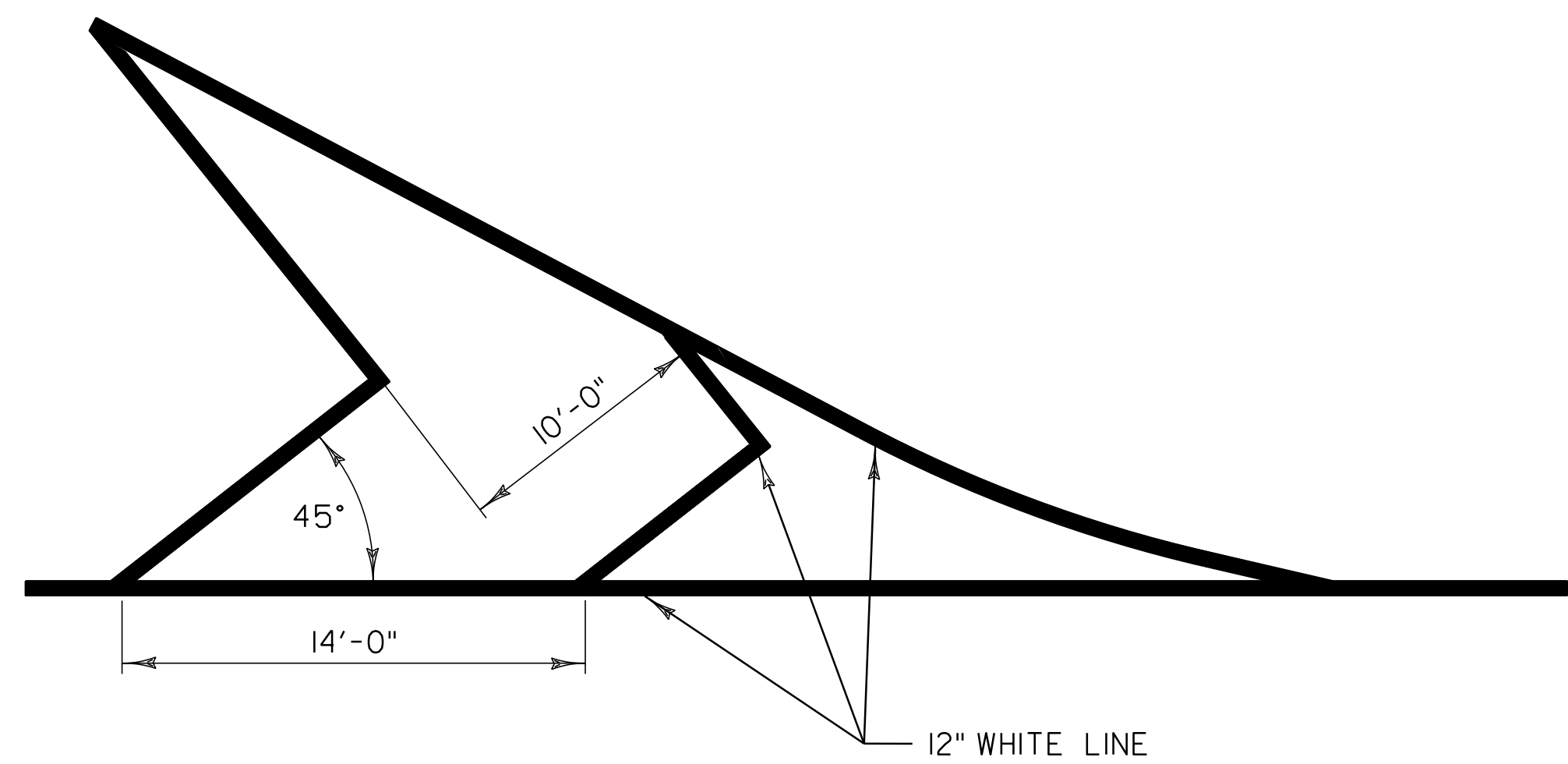
NOT TO SCALE

MILLED RUMBLE STRIP DETAIL SHEET

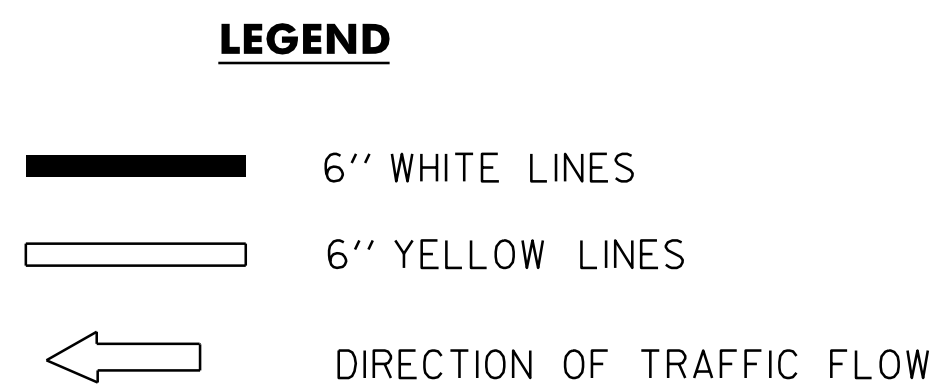
PROJECT NAME: BETHEL - RANDOLPH & RANDOLPH - BROOKFIELD  
 PROJECT NUMBER: IM 089-1(52) & IM 089-1(22)  
 FILE NAME: p06a048.dgn  
 PROJECT LEADER: D.E.G.  
 DESIGNED BY: D.W.E.  
 IPARM FILE: p06A048crsd.i  
 PLOT DATE: \$DATE\$  
 DRAWN BY: C.A.K.  
 CHECKED BY: D.W.E.  
 SHEET 12 OF 61



**TYPICAL MAINLINE MARKING PLAN**



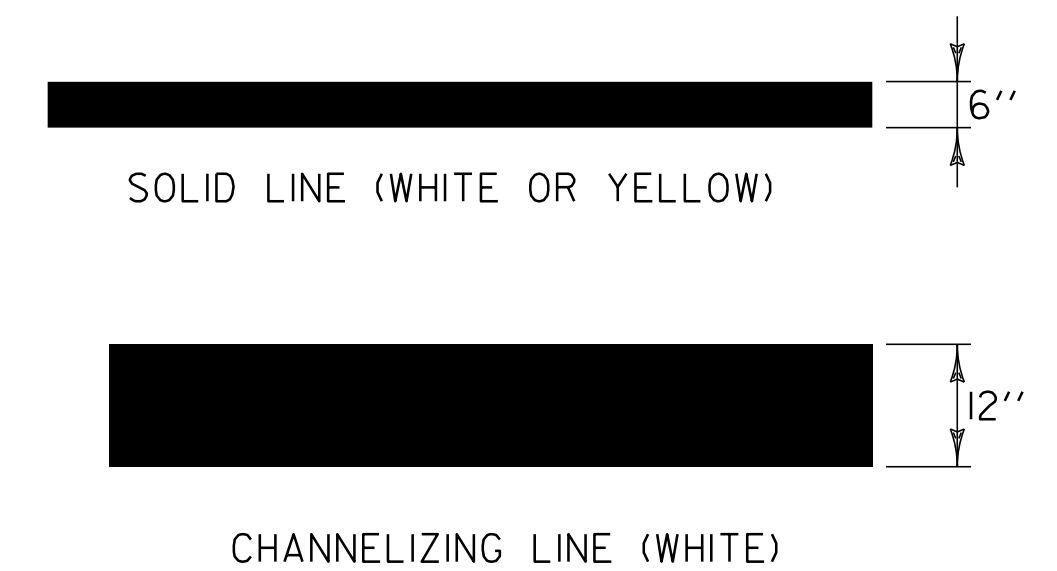
**GORE MARKING DETAIL**



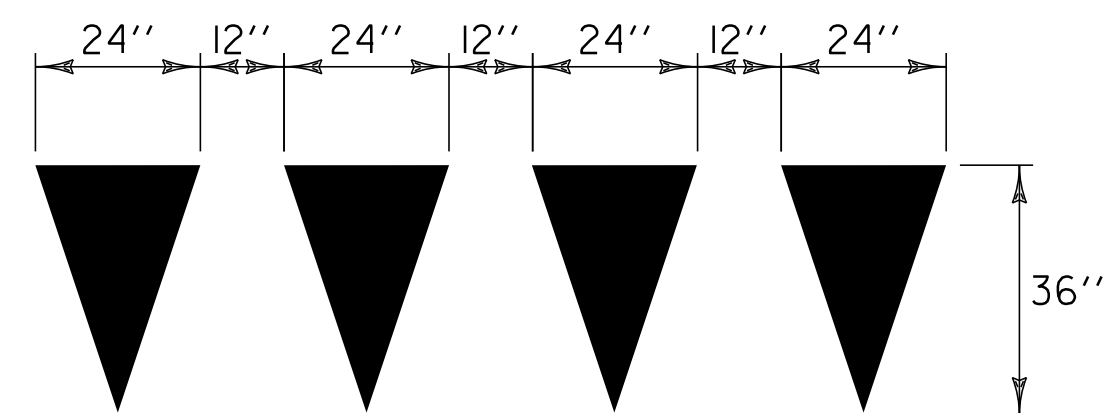
**LEGEND**



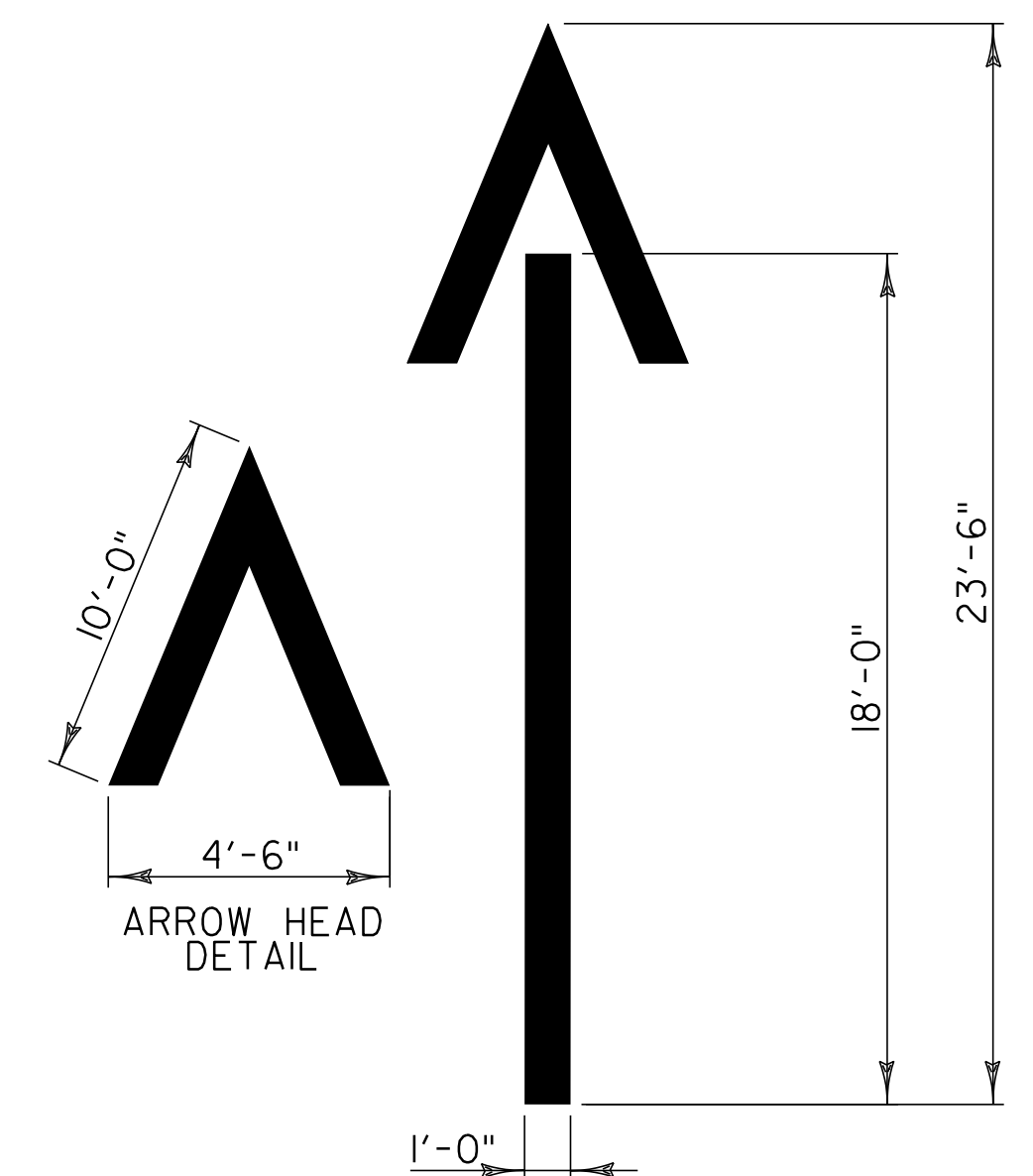
\* TO BE INSTALLED ONLY AT THE DIRECTION OF THE RESIDENT ENGINEER



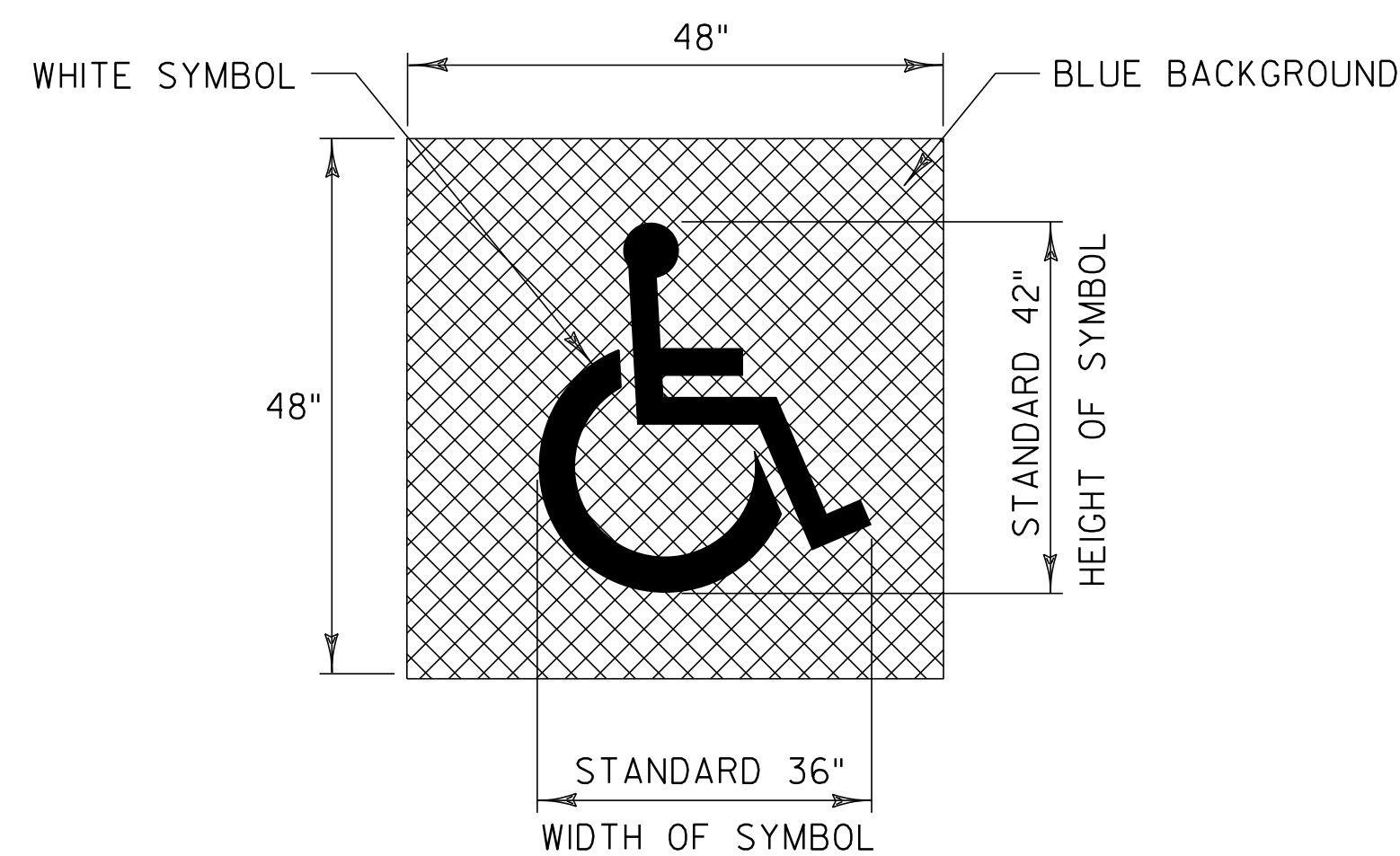
**PAVEMENT MARKING LINE DETAILS**



**YIELD LINE DETAILS**  
TO BE PAID AS ONE LETTER OR SYMBOL PER TRIANGLE.



**WRONG WAY ARROW**



**HANDICAPPED PAVEMENT MARKING DETAIL**

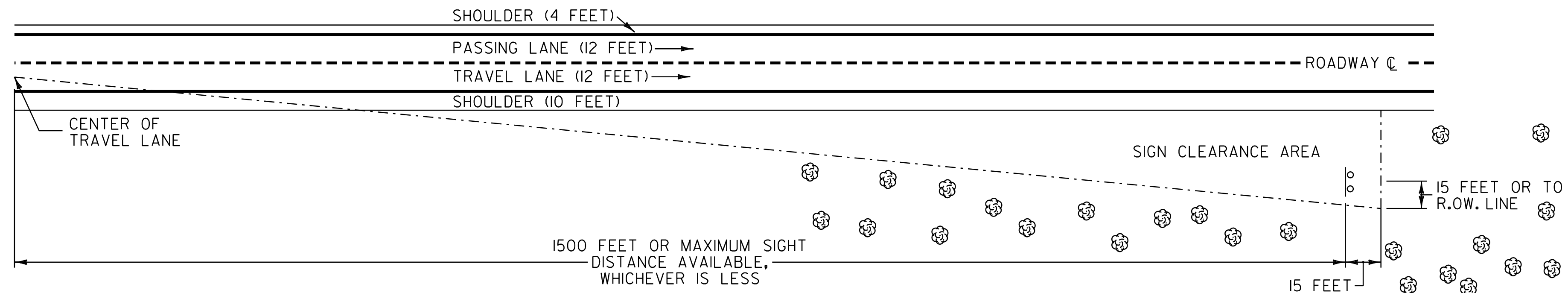
TO BE PAID AS TWO SYMBOLS

NOT TO SCALE

**PAVEMENT MARKINGS DETAIL SHEET**

PROJECT NAME:	BETHEL - RANDOLPH & RANDOLPH - BROOKFIELD	PLOT DATE:	\$DATE\$
PROJECT NUMBER:	IM 089-1(52) & IM 089-1(22)	DRAWN BY:	C.A.K.
FILE NAME:	p99a200.dgn	CHECKED BY:	D.W.E.
PROJECT LEADER:		SHEET	13 OF 61
DESIGNED BY:	D.W.E.		
IPARM FILE:	p06A048csds.i		

**THINNING AND TRIMMING FOR SIGNS DETAIL**



THE CONTRACTOR SHALL REMOVE ALL WOODY STEMMED GROWTH INCLUDING BRUSH, SAPLINGS AND TREE LIMBS GROWING WITHIN OR PROJECTING INTO THE CLEARANCE AREA DOWN TO GROUND LEVEL OR AT LEAST 10 FEET BELOW THE BOTTOM OF THE SIGN, WHICHEVER IS LESS. PAYMENT WILL BE FOR THINNING AND TRIMMING OF SIGNS, ITEM 201.31, AND PAID FOR PER EACH SIGN. NO CHEMICALS (POISONS OR DEFOLIANTS) WILL BE ALLOWED.

SIGN LOCATION:

BROOKFIELD:

NORTHBOUND:  
MM 33.420 33.78 RT

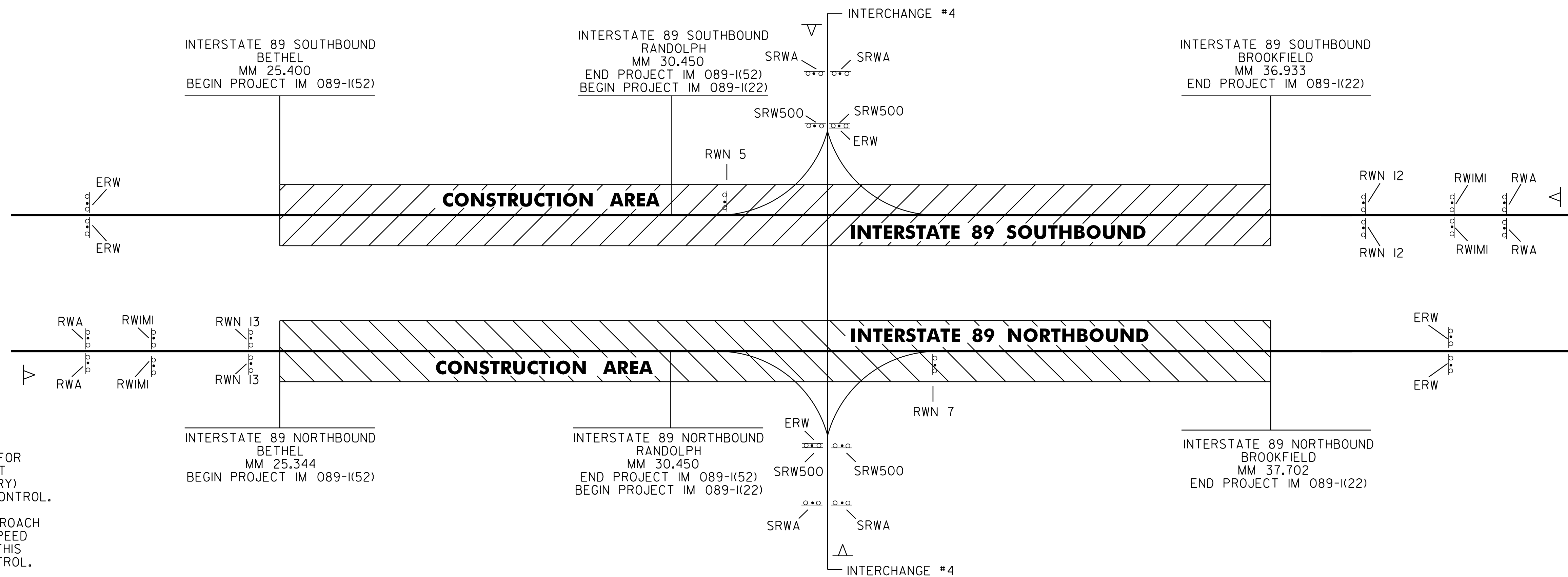
SOUTHBOUND:  
MM 37.19 LT

NOT TO SCALE

**THINNING &  
TRIMMING  
DETAIL  
SHEET**

PROJECT NAME:	BETHEL - RANDOLPH & RANDOLPH - BROOKFIELD
PROJECT NUMBER:	IM 089-1(52) & IM 089-1(22)
FILE NAME:	p99a200.dgn
PROJECT LEADER:	D.E.G.
DESIGNED BY:	D.W.E.
IPARM FILE:	p06A048c++d.i
PLOT DATE:	\$DATE\$
DRAWN BY:	C.A.K.
CHECKED BY:	D.W.E.
SHEET	14 OF 61

FILE NAME = \$FILES\$  
DATE/TIME = \$DATE\$  
USER = \$NTUSER\$



**CONSTRUCTION APPROACH SIGNING**

**NOTES:**

1. THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN FOR APPROVAL PRIOR TO THE START OF CONSTRUCTION. THE COST OF PREPARING THIS PLAN (AND MAKING CHANGES IF NECESSARY) SHALL BE CONSIDERED INCIDENTAL TO ITEM 641.10 TRAFFIC CONTROL.
2. THE CONTRACTOR SHALL INCLUDE A CONSTRUCTION SIGN APPROACH PACKAGE FOR EXPECTED LANE CLOSURES AND WORK ZONE SPEED REDUCTIONS IN COMPLIANCE WITH STD. E-103. PAYMENT FOR THIS PACKAGE SHALL BE INCIDENTAL TO ITEM 641.10 TRAFFIC CONTROL.
3. DURING CONSTRUCTION IT WILL BE NECESSARY FOR THE CONTRACTOR TO MAINTAIN ONE-LANE TRAFFIC FOR EXTENDED PERIODS OF TIME. IN NO CASE SHALL THE PAVED WIDTH FOR THIS ONE-LANE TRAFFIC, INCLUDING SHOULDER, BE REDUCED TO LESS THAN 15 FEET. THIS PAVED WIDTH SHALL REMAIN FREE OF OBSTRUCTIONS AND OBSTACLES AT ALL TIMES.
4. THE CONTRACTOR SHALL POSITION A PORTABLE CHANGEABLE MESSAGE SIGN PRIOR TO I-89 INTERCHANGES #3, #4 AND #5, WARNING NORTHBOUND AND SOUTHBOUND MOTORISTS OF THE COLD PLANNED SURFACE AND REDUCED ROADWAY WIDTHS AHEAD. THE MESSAGE TO BE DISPLAYED SHALL BE SUBMITTED TO THE RESIDENT ENGINEER IN ADVANCED FOR APPROVAL. THE COST OF PROVIDING THIS MESSAGE SIGN SHALL BE PAID UNDER ITEM 641.15 PORTABLE CHANGEABLE MESSAGE SIGN. ALL OTHER CONSTRUCTION SIGNING SHALL BE PAID FOR UNDER ITEM 641.10. THE CONTRACTOR SHALL ALSO INSTALL AND MAINTAIN THE APPROPRIATE CONSTRUCTION SIGNING WHICH WARNS THE TRAVELING PUBLIC OF THE ROUGH ROADWAY SURFACE.
5. CONSTRUCTION ZONE SIGN LAYOUT SHALL BE IN ACCORDANCE WITH SECTION 6 OF THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
6. CONSTRUCTION SIGNS SHALL BE IN NEW OR LIKE NEW CONDITION PER VAOT STANDARDS.
7. DIAMOND SHAPED SIGNS SHALL BE 4' X 4' WITH BLACK LEGEND ON FLUORESCENT ORANGE BACKGROUND.
8. REFLECTIVE SHEETING SHALL BE TYPE VII OR BETTER.
9. CONSTRUCTION ZONE SIGNS SHALL BE INSTALLED ON TWO POSTS EACH OR AS AN NCHRP 350 COMPLIANT SIGN/STAND SYSTEM.
10. INSTALLATION OF CONSTRUCTION ZONE SIGNING SHALL NOT BLOCK EXISTING SIGN ASSEMBLIES. A MINIMUM OF 200 FEET SHALL BE MAINTAINED BETWEEN ANY EXISTING SIGN AND THE CONSTRUCTION SIGNS.
11. ADDITIONAL CONSTRUCTION SIGNING MAY BE REQUIRED ON THE RAMPS AT INTERCHANGE #4 AS DIRECTED BY THE RESIDENT ENGINEER.
12. AT INTERCHANGE #4, THE CONTRACTOR SHALL CONDUCT ALL RAMP COLD PLANING, PAVING AND GUARDRAIL OPERATIONS BETWEEN THE HOURS OF 6:00PM AND 11:00AM. BETWEEN THE HOURS OF 11:00AM AND 6:00PM, NO CONSTRUCTION OPERATIONS THAT INTERFERE WITH VEHICULAR TRAFFIC MOVEMENT WILL BE ALLOWED, UNLESS OTHERWISE DIRECTED BY THE RESIDENT ENGINEER.

HIGHWAY NAME	RWA	SRWA	ERW	SRW500	RWIMI	RWN 5	RWN 7	RWN 11	RWN 12	OTHER
INTERSTATE 89 NORTHBOUND - BEGIN PROJECT	2				2				2	1-PORT. MESSAGE SIGN
INTERSTATE 89 NORTHBOUND - END PROJECT			2							
INTERSTATE 89 SOUTHBOUND - BEGIN PROJECT			2							
INTERSTATE 89 SOUTHBOUND - END PROJECT	2				2			2		1-PORT. MESSAGE SIGN
INTERCHANGE #3										1-PORT. MESSAGE SIGN
INTERCHANGE #4		4	2	4		1	1			2-PORT. MESSAGE SIGN
INTERCHANGE #5										1-PORT. MESSAGE SIGN
TOTALS	4	4	6	4	4	1	1	2	2	6-PORT. MESSAGE SIGN

**SIGN LEGEND**

RWA	= ROAD WORK AHEAD
RWIMI	= ROAD WORK 1 MILE
SRWA	= SIDEROAD WORK AHEAD
SRW500	= SIDEROAD WORK 500 FT
ERW	= END ROAD WORK
RWN 5	= ROAD WORK NEXT 5 MILES
RWN 7	= ROAD WORK NEXT 7 MILES
RWN 12	= ROAD WORK NEXT 12 MILES
RWN 13	= ROAD WORK NEXT 13 MILES

◁ = PORTABLE CHANGEABLE MESSAGE SIGN

FILE NAME = \$FILES\$  
 DATE/TIME = \$DATE\$  
 USER = \$USER\$

**NOT TO SCALE**

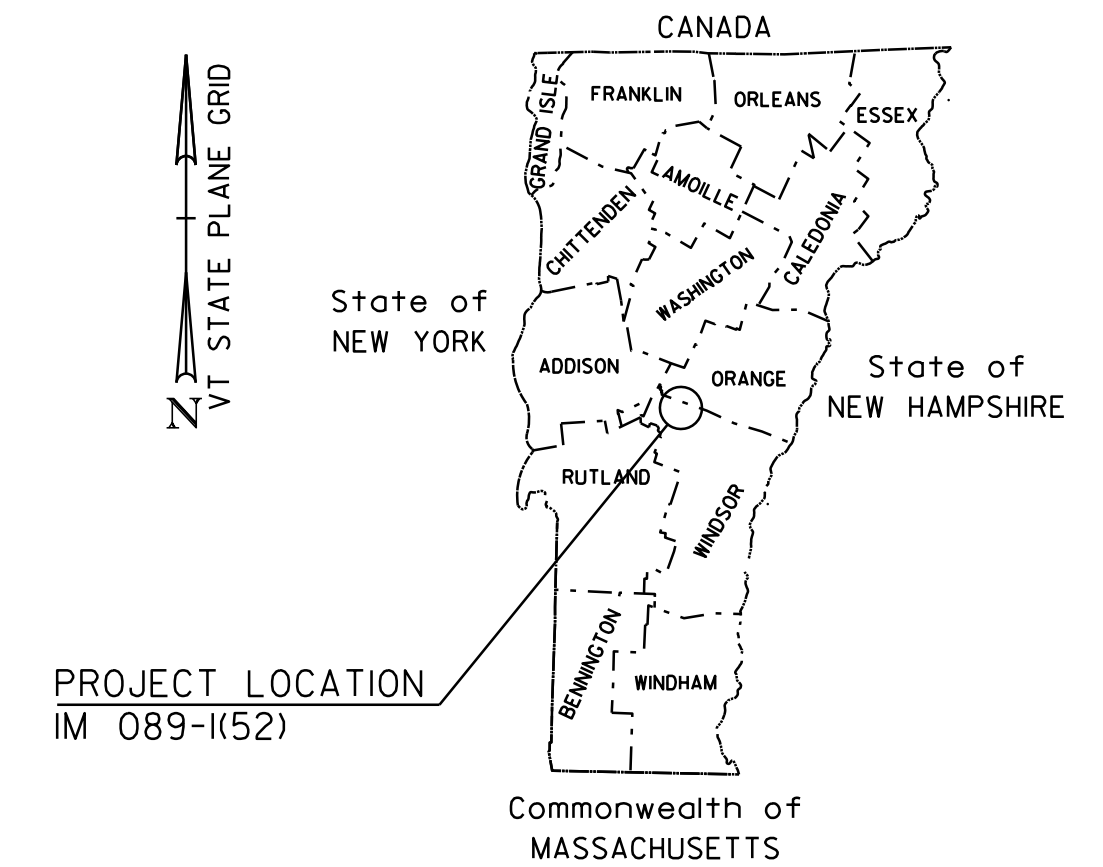
<b>CONSTRUCTION APPROACH SIGNING DETAILS SHEET</b>	PROJECT NAME: BETHEL - RANDOLPH & RANDOLPH - BROOKFIELD
	PROJECT NUMBER: IM 089-1(52) & IM 089-1(22)
	FILE NAME: p99a200.dgn PROJECT LEADER: D.E.G. DESIGNED BY: D.W.E. IPARM FILE: p06A048ccas.i
	PLOT DATE: \$DATE\$ DRAWN BY: C.A.K. CHECKED BY: D.W.E. SHEET 15 OF 61

STATE OF VERMONT  
 AGENCY OF TRANSPORTATION



PROPOSED IMPROVEMENT  
 TOWNS OF BETHEL & RANDOLPH  
 COUNTIES OF WINDSOR & ORANGE  
 INTERSTATE ROUTE 89 (NB) & (SB)

INDEX OF SHEETS  
 SEE SHEET 2



NORTHBOUND:  
 BEGINNING IN THE TOWN OF BETHEL ON INTERSTATE 89 AT MILE MARKER 25.344 EXTENDING NORTHERLY  
 FOR A DISTANCE OF 5.106 MILES TO A POINT IN THE TOWN OF RANDOLPH AT MILE MARKER 30.450

SOUTHBOUND:  
 BEGINNING IN THE TOWN OF BETHEL ON INTERSTATE 89 AT MILE MARKER 25.400 AND EXTENDING NORTHERLY  
 FOR A DISTANCE OF 5.050 MILES TO A POINT IN THE TOWN OF RANDOLPH AT MILE MARKER 30.450

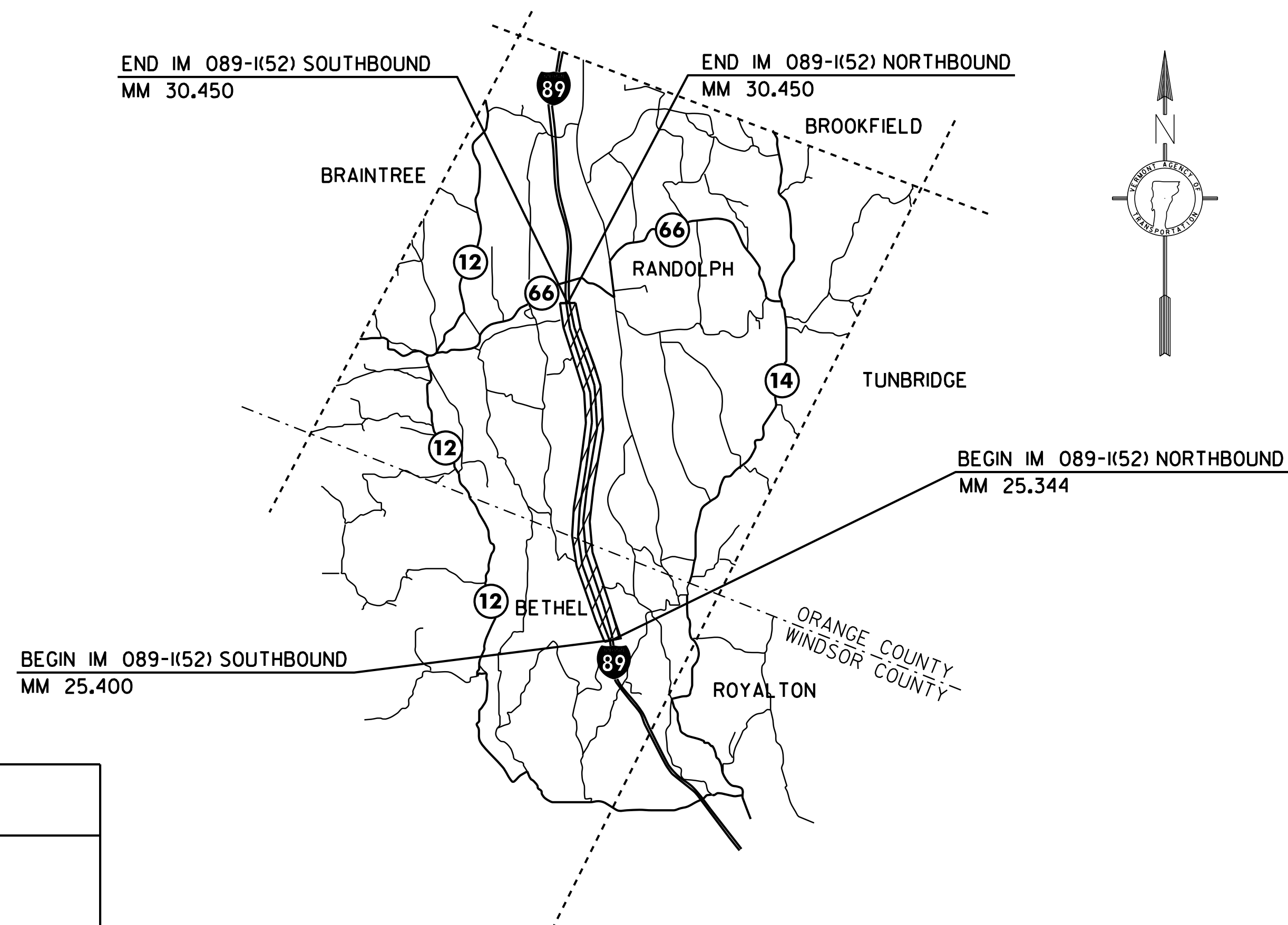
NORTHBOUND:  
 LENGTH OF ROADWAY 5.106 MILES

SOUTHBOUND:  
 LENGTH OF ROADWAY 5.050 MILES

LENGTH OF PROJECT 10.156 MILES

BITUMINOUS CONCRETE PAVEMENT SUPERPAVE MIXTURE DESIGN CRITERIA	
DESIGN LANE/DESIGN LIFE ESALS	23,804,000
DESIGN NUMBER OF GYRATIONS	100
PERFORMANCE GRADED ASPHALT BINDER	64-28

WORK TO BE PERFORMED UNDER THIS PROJECT INCLUDES COLD PLANING AND RESURFACING OF THE EXISTING HIGHWAY WITH A SHIM/LEVELING COURSE AND WEARING COURSE, NEW PAVEMENT MARKINGS, DRAINAGE IMPROVEMENTS, GUARDRAIL IMPROVEMENTS, NEW SIGNS AND INCIDENTAL ITEMS.



TRAFFIC DATA

LOCATION	ADT			DHV			ESALS	
	2007	2017	2027	2007	2017	2027	2007-2017	2007-2027
I-89 NORTHBOUND	7500	9100	10,700	970	1175	1380	8,649,000	23,804,000
I-89 SOUTHBOUND	7500	9100	10,700	970	1175	1380	7,490,000	20,405,000

CONVENTIONAL SYMBOLS

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

SURVEYED BY : NA  
 SURVEYED DATE : NA

DATUM  
 VERTICAL NA  
 HORIZONTAL NA

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

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

PROJECT MANAGER : WOOLAVER  
 PROJECT NAME : BETHEL - RANDOLPH  
 PROJECT NUMBER : IM 089 - I (52)  
 SHEET 16 OF 61 SHEETS

FILE NAME : \$FILES  
 DATE/TIME : \$DATE\$  
 USER : \$NTUSER\$





# ITEM DETAIL SUMMARY SHEET 1

LOCATION			GUARDRAIL (GALVANIZED)									DRAINAGE		MISCELLANEOUS			REMARKS	
BEGIN MM	END MM	POS.	203.30	203.40	402.13	616.35	621.20	621.50	621.60	621.76	621.77	621.80	604.412	616.47	676.10			
			EARTH BORROW CY	SHOULDER BERM REMOVAL LF	AGG. SHOULDERS, RAP TON	TREATED TIMBER CURB LF	STEEL BEAM GUARDRAIL GALVANIZED LF	MANUF. TERM. SECT. FLARED EA	ANCHOR FOR STEEL BEAM RAIL EA	REPLACE GUARDRAIL POST EA	REPLACE GUARDRAIL BEAM EA	REMOVAL & DISPOSAL GUARDRAIL LF	REHAB. DI, CB, MH CLASS I EA	BIT. CONC. GUTTERS & TRAFFIC ISLANDS TON	DELINEATOR WITH STEEL POST TYPE I TYPE II TYPE III EA EA EA			
NORTHBOUND:																		
25.344	30.450	LT/RT		6000	700					50	150					206		
25.630	<del>25.639</del>	RT	10		5		12.5	I			9	50.0				I	INSTALL NEW MANUFACTURED TERMINAL SECTION, FLARED FROM MM 25.630 TO MM 25.637. 7/02/07	
25.774		RT			I													
25.878		RT												I			REPAVE EXISTING PAVED GUTTER.	
26.52	26.72																	
26.516	<del>26.526</del>	RT	10		5		12.5	I		I	17	50.0				I	INSTALL NEW MANUFACTURED TERMINAL SECTION, FLARED FROM MM 26.516 TO MM 26.523. 7/02/07	
26.683		RT												I			REPAVE EXISTING PAVED GUTTER.	
26.888	26.897	RT	10		5		12.5	I			14	50.0				I	INSTALL NEW MANUFACTURED TERMINAL SECTION, FLARED FROM MM 26.888 TO MM 26.895. 7/02/07	
26.916	26.926	LT	10		5		12.5	I			0	50.0				I	INSTALL NEW MANUFACTURED TERMINAL SECTION, FLARED FROM MM 26.916 TO MM 26.923.	
27.370	27.379	LT	10		5		12.5	I			9	50.0				I	INSTALL NEW MANUFACTURED TERMINAL SECTION, FLARED FROM MM 27.370 TO MM 27.377.	
27.393	27.403	RT	10		5		12.5	I		I	37	50.0				I	INSTALL NEW MANUFACTURED TERMINAL SECTION, FLARED FROM MM 27.393 TO MM 27.400. 7/02/07 2 BLOCKS = 1POST	
27.462		RT			I													
27.471		LT			I													
27.519		LT			I													
27.519		RT			I													
27.566		LT			I													
27.566		RT			I													
28.135	28.299	RT	25		19	498	827.0 2	I	X 0		69	50.0 855.0				I	INSTALL NEW MANUFACTURED TERMINAL SECTION, FLARED FROM MM 28.135 TO MM 28.142. INSTALL NEW TREATED TIMBER CURB FROM MM 28.158 TO MM 28.252. INSTALL NEW TRAILING END TERMINAL WITH ANCHOR FROM MM 28.296 TO MM 28.299. SEE VAOT STD. GI-D.	
28.205		RT			I													
28.252		RT			I													
28.366	28.562	RT	25		5		1002.0 2	I	X 0	I	69	50.0 1030.0				I	INSTALL NEW MANUFACTURED TERMINAL SECTION, FLARED FROM MM 28.366 TO MM 28.373. 7/12/07 INSTALL NEW TRAILING END TERMINAL WITH ANCHOR FROM MM 28.480 TO 28.562. SEE VAOT STD. GI-D.	
28.408	28.418	LT	10		5		12.5	I			9	50.0				I	INSTALL NEW MANUFACTURED TERMINAL SECTION, FLARED FROM MM 28.408 TO MM 28.415.	
28.480		LT			I													
28.530		LT			I													
28.531		LT												I			INSTALL NEW PAVED GUTTER AS DIRECTED BY THE RESIDENT ENGINEER.	
28.670	28.680	RT	10		5		12.5	I			67	50.0				I	INSTALL NEW MANUFACTURED TERMINAL SECTION, FLARED FROM MM 28.670 TO MM 28.677.	
28.932	28.941	LT	10		5		12.5	I		3	24	50.0				I	INSTALL NEW MANUFACTURED TERMINAL SECTION, FLARED FROM MM 28.932 TO MM 28.939.	
29.009		LT			I													
29.085		LT			I													
29.162		LT			I													
SHEET SUBTOTAL			140	6000	783	498	1941.5 4	11	2 0	50 6	324 150	537.5 2335.0	14	3	217	-	-	

FILE NAME = \$FILES\$  
DATE/TIME = \$DATE\$  
USER = \$NTUSER\$

<b>ITEM DETAIL SUMMARY SHEET #1</b>	PROJECT NAME: BETHEL - RANDOLPH
	PROJECT NUMBER: IM 089-1(52)
	FILE NAME: p06a048.dgn PROJECT LEADER: D.E.G. DESIGNED BY: D.W.E. IPARM FILE: p06a048idl1
	PLOT DATE: \$DATE\$ DRAWN BY: C.A.K. CHECKED BY: D.W.E. SHEET 19 OF 61

# ITEM DETAIL SUMMARY SHEET 2

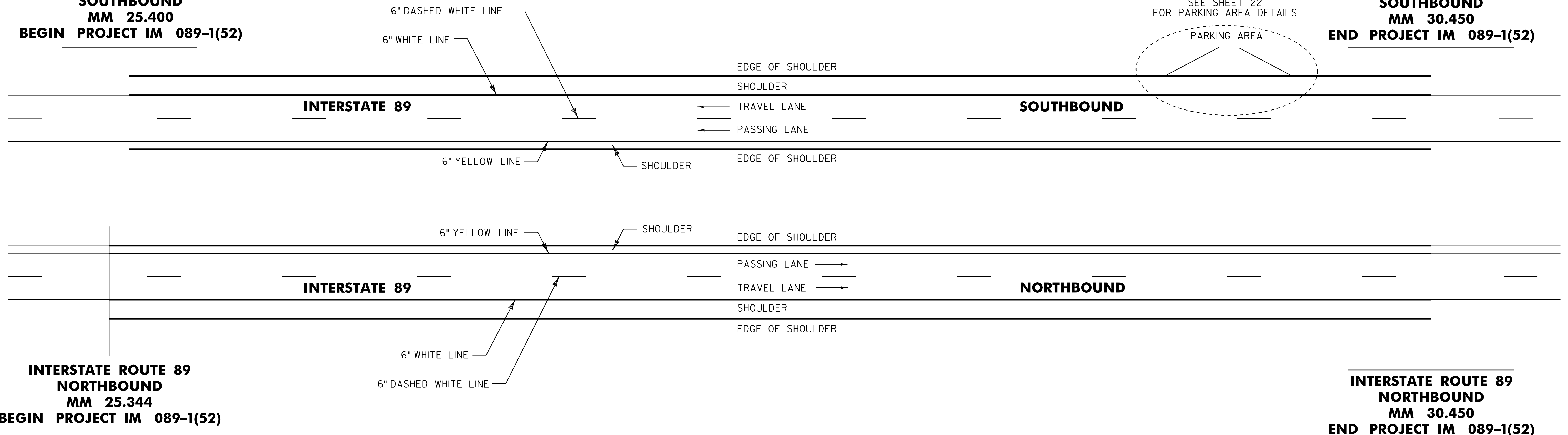
LOCATION			GUARDRAIL (GALVANIZED)									DRAINAGE		MISCELLANEOUS			REMARKS				
BEGIN MM	END MM	POS.	203.30	203.40	402.13	616.35	621.20	621.50	621.60	621.76	621.77	621.80	604.412	616.47	676.10						
			EARTH BORROW CY	SHOULDER BERM REMOVAL LF	AGG. SHOULDERS, RAP TON	TREATED TIMBER CURB LF	STEEL BEAM GUARDRAIL GALVANIZED LF	MANUF. TERM. SECT. FLARED EA	ANCHOR FOR STEEL BEAM RAIL EA	REPLACE GUARDRAIL POST EA	REPLACE GUARDRAIL BEAM EA	REMOVAL & DISPOSAL GUARDRAIL LF	REHAB. DI, CB, MH CLASS I EA	BIT, CONC. GUTTERS & TRAFFIC ISLANDS TON	DELINATOR WITH STEEL POST TYPE I	TYPE II		TYPE III			
SOUTHBOUND:																					
25.400	30.450	LT/RT		6000	650					50	150					197	23				
25.90																					
25.876		RT			I																
25.94																					
25.922		RT			I																
25.85	26.05																				
26.015	26.024	RT	10		5	12.5	I			2		50.0			I		INSTALL NEW MANUFACTURED TERMINAL SECTION, FLARED FROM MM 26.017 TO MM 26.024. 7/5/07				
26.25	26.33																				
26.304	26.314	RT	10		5	12.5	I			0	2	50.0			I		INSTALL NEW MANUFACTURED TERMINAL SECTION, FLARED FROM MM 26.307 TO MM 26.314. 7/5/07 IBLK				
26.60	26.81																				
26.793	26.803	RT	10		5	12.5	I			2	11	50.0			I		INSTALL NEW MANUFACTURED TERMINAL SECTION, FLARED FROM MM 26.796 TO MM 26.803. 7/5/07				
26.665		RT			I																
26.73																					
26.711		RT			I																
27.146	27.155	RT	10		5	12.5	I				9	50.0			I		INSTALL NEW MANUFACTURED TERMINAL SECTION, FLARED FROM MM 27.148 TO MM 27.155. 7/5/07				
27.00																					
27.041		RT			I																
27.03	27.14																				
27.132	27.141	LT	10		5	12.5	I				19	50.0			I		INSTALL NEW MANUFACTURED TERMINAL SECTION, FLARED FROM MM 27.134 TO MM 27.141. 6/28/07				
27.745	27.77																				
27.732	27.741	RT	10		5	12.5	I				5	50.0			I		INSTALL NEW MANUFACTURED TERMINAL SECTION, FLARED FROM MM 27.734 TO MM 27.741. 7/5/07				
27.440		RT			I																
27.44	27.77																				
27.682	27.691	LT	10		5	12.5	I				21	50.0			I		INSTALL NEW MANUFACTURED TERMINAL SECTION, FLARED FROM MM 27.684 TO MM 27.691. 6/28/07				
27.498		LT			I																
27.498		RT			I																
27.554		LT			I																
27.554		RT			I																
27.610		LT			I																
27.610		RT			I																
28.48																					
28.625	28.635	RT	10		5	12.5	I				3	50.0			I		INSTALL NEW MANUFACTURED TERMINAL SECTION, FLARED FROM MM 28.628 TO MM 28.635. 7/5/07				
29.305	29.315	RT	10		5	12.5	I				8	50.0			I		INSTALL NEW MANUFACTURED TERMINAL SECTION, FLARED FROM MM 29.307 TO MM 29.315. 6/27/07				
29.20																					
29.325	29.335	LT	10		5	12.5	50	I		9	8	50.0			I		INSTALL NEW MANUFACTURED TERMINAL SECTION, FLARED FROM MM 29.328 TO MM 29.335.				
29.211		LT			I																
30.39	30.23																				
30.391	30.401	LT	10		5	12.5	I				7	50.0			I		INSTALL NEW MANUFACTURED TERMINAL SECTION, FLARED FROM MM 30.394 TO MM 30.401.				
NB 26.57		RT						I									ACCIDENT REPLACEMENT. 10/03/07				
NB 27.39		RT						I									ACCIDENT REPLACEMENT. 8/02/07				
SHEET SUBTOTAL			110	6000	718	-	137.5	50	# 13	-	50	11	150	95	600	13	-	208	23	-	
SHEET 19 SUBTOTAL			140	6000	783	498	1941.5	4	#	2	50	6	150	324	537.5	14	3	217	-	-	
ROUNDING			-	-	24	2	21	-	-	-	-	-	-	-	15	-	-	-	-	-	
TOTAL			250	12,000	1525	500	2100	54	22	24	2	100	17	419	300	1137.5	27	3	425	23	-

FILE NAME = \$FILES\$  
DATE/TIME = \$DATE\$  
USER = \$NTUSER\$

<b>ITEM DETAIL SUMMARY SHEET #2</b>	PROJECT NAME: BETHEL - RANDOLPH	
	PROJECT NUMBER: IM 089-1(52)	
	FILE NAME: p06a048.dgn	PLOT DATE: \$DATE\$
	DESIGNED BY: D.W.E.	CHECKED BY: D.W.E.
	IPARM FILE: p06a048id2.i	SHEET 20 OF 61

**INTERSTATE ROUTE 89  
SOUTHBOUND  
MM 25.400  
BEGIN PROJECT IM 089-1(52)**

**INTERSTATE ROUTE 89  
SOUTHBOUND  
MM 30.450  
END PROJECT IM 089-1(52)**



**604.412 REHAB. DROP INLETS, CATCH BASINS OR MANHOLES, CLASS I**

NORTHBOUND:	SOUTHBOUND:
MM 25.774 RT	MM 25.876 RT
MM 27.462 RT	MM 25.922 RT
MM 27.471 LT	MM 26.665 RT
MM 27.519 LT	MM 26.711 RT
MM 27.519 RT	MM 27.041 RT
MM 27.566 LT	MM 27.440 RT
MM 27.566 RT	MM 27.498 LT
MM 28.205 RT	MM 27.498 RT
MM 28.252 RT	MM 27.554 LT
MM 28.480 LT	MM 27.554 RT
MM 28.530 LT	MM 27.610 LT
MM 29.009 LT	MM 27.610 RT
MM 29.085 LT	MM 29.211 LT
MM 29.162 LT	

**213.10 MILLED RUMBLE STRIPS**

NORTHBOUND:
MM 25.344 - MM 30.450 LT
MM 25.344 - MM 30.450 RT

SOUTHBOUND:
MM 25.400 - MM 30.450 LT
MM 25.400 - MM 30.450 RT

**616.35 TREATED TIMBER CURB**

SEE ITEM DETAIL SUMMARY SHEET

**621.20 STEEL BEAM GUARDRAIL, GALVANIZED**

SEE ITEM DETAIL SUMMARY SHEET

**621.50 MANUFACTURED TERMINAL SECTION, FLARED**

SEE ITEM DETAIL SUMMARY SHEET

**621.60 ANCHOR FOR STEEL BEAM RAIL**

SEE ITEM DETAIL SUMMARY SHEET

**621.76 REPLACE GUARDRAIL POST ASSEMBLY**

SEE ITEM DETAIL SUMMARY SHEET

**621.77 REPLACE GUARDRAIL BEAM UNIT**

SEE ITEM DETAIL SUMMARY SHEET

**621.80 REMOVAL AND DISPOSAL OF GUARDRAIL**

SEE ITEM DETAIL SUMMARY SHEET

**646.426 DURABLE 6 INCH WHITE LINE, RECESSED**

NORTHBOUND:
MM 25.344 - 30.450 RT (SOLID)
MM 25.344 - 30.450 CL (DASHED)

SOUTHBOUND:
MM 25.400 - MM 29.319 LT (SOLID)
MM 25.400 - MM 30.450 CL (DASHED)
MM 29.839 - MM 30.450 LT (SOLID)

**646.436 DURABLE 6 INCH YELLOW LINE, RECESSED**

NORTHBOUND:
MM 25.344 - MM 30.450 LT (SOLID)

SOUTHBOUND:
MM 25.400 - MM 30.450 RT (SOLID)

**646.622 TEMPORARY 6 INCH WHITE LINE, PAINT**

NORTHBOUND:
MM 25.344 - MM 30.450 RT (SOLID)
MM 25.344 - MM 30.450 CL (DASHED)

SOUTHBOUND:
MM 25.400 - MM 29.319 LT (SOLID)
MM 25.400 - MM 30.450 CL (DASHED)
MM 29.839 - MM 30.450 LT (SOLID)

**646.632 TEMPORARY 6 INCH YELLOW LINE, PAINT**

NORTHBOUND:
MM 25.344 - MM 30.450 LT (SOLID)

SOUTHBOUND:
STA. 25.400 - MM 30.450 RT (SOLID)

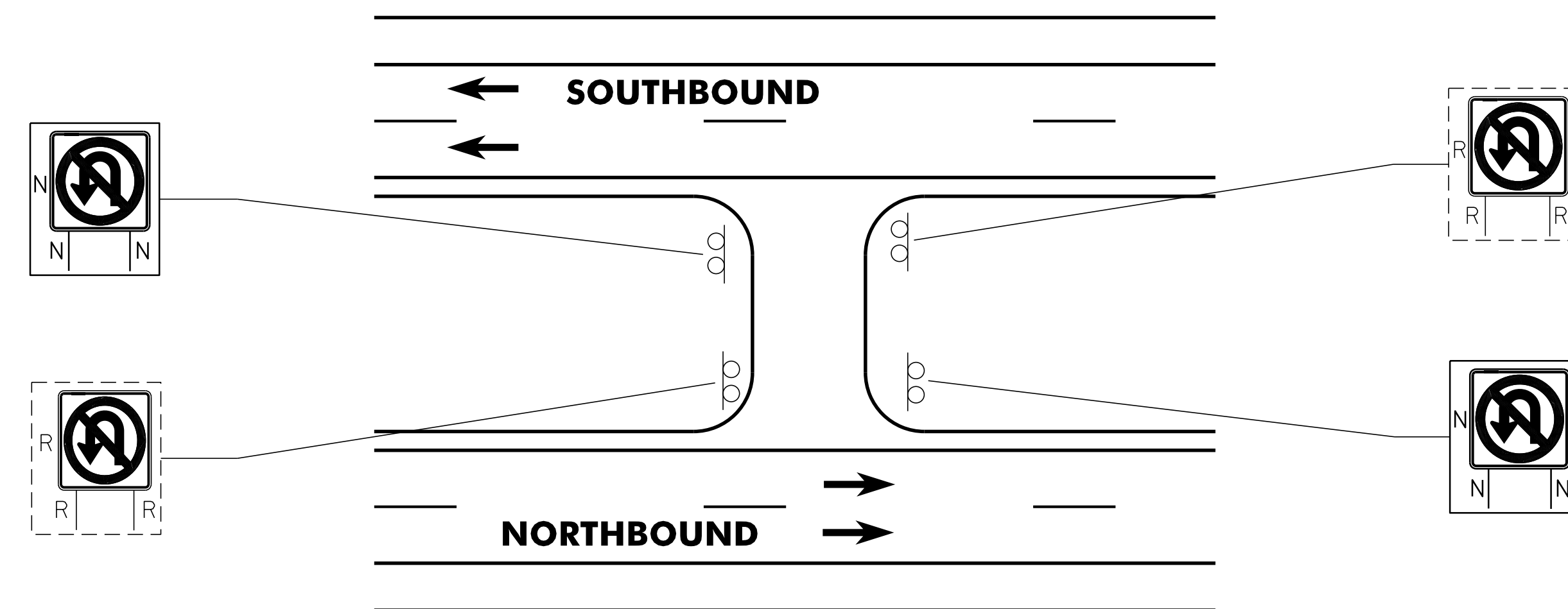
**675.50 REMOVING SIGNS**

NORTHBOUND - 13 EA

SOUTHBOUND - 17 EA

**676.10 DELINEATOR WITH STEEL POST**

SEE ITEM DETAIL SUMMARY SHEET AND REFER TO STANDARDS E-197, E-198 AND E-199 FOR PLACEMENT GUIDELINES



**U-TURN DETAIL**

N.B. MM 26.840 (22' x 410')  
N.B. MM 27.740 (30' x 221')  
N.B. MM 30.320 (34' x 64')

**NOTE:**

1. THE CONTRACTOR SHALL INSTALL MILLED RUMBLE STRIPS WITHIN THE PROJECT LIMITS AS SHOWN ON SHEET I2 OR AS DIRECTED BY THE RESIDENT ENGINEER.

**NOT TO SCALE**

**PROJECT LAYOUT SHEET**

**SIGN LEGEND**

R	= REMOVE
S	= SALVAGE
N	= NEW
RET	= RETAIN
B-B	= BACK TO BACK
EXISTING	= - - - - -
NEW	= _____

PROJECT NAME: BETHEL - RANDOLPH  
PROJECT NUMBER: IM 089-1(52)

FILE NAME: p06a048.dgn	PLOT DATE: \$DATE\$
PROJECT LEADER: D.E.G.	DRAWN BY: C.A.K.
DESIGNED BY: D.W.E.	CHECKED BY: D.W.E.
IPARM FILE: p06A048plst.l	SHEET 21 OF 61

646.426 DURABLE 6 INCH WHITE LINE, RECESSED

SOUTHBOUND:  
STA. P1+00.0 - STA. P28+35.0 RT (SOLID)  
STA. P1+00.0 - STA. P4+25.0 LT (DOTTED)  
STA. P4+25.0 - STA. P5+76.0 LT (DASHED)  
STA. P7+90.0 - STA. P14+30.0 LT (SOLID)  
STA. P17+66.0 - STA. P21+65.0 LT (DASHED)

646.622 TEMPORARY 6 INCH WHITE LINE, PAINT

SOUTHBOUND:  
STA. P1+00.0 - STA. P28+35.0 RT (SOLID)  
STA. P1+00.0 - STA. P4+25.0 LT (DOTTED)  
STA. P4+25.0 - STA. P5+76.0 LT (DASHED)  
STA. P7+90.0 - STA. P14+30.0 LT (SOLID)  
STA. P17+66.0 - STA. P21+65.0 LT (DASHED)

646.436 DURABLE 6 INCH YELLOW LINE, RECESSED

SOUTHBOUND:  
STA. P7+90.0 - STA. P14+30.0 LT (SOLID)

646.632 TEMPORARY 6 INCH YELLOW LINE, PAINT

SOUTHBOUND:  
STA. P7+90.0 - STA. P14+30.0 LT (SOLID)

646.466 DURABLE 12 INCH WHITE LINE, RECESSED

SOUTHBOUND:  
STA. P5+76.0 - STA. P7+90.0 LT (SOLID GORE LINES)  
STA. P5+76.0 - STA. P7+90.0 LT (HATCHED GORE)  
STA. P14+30.0 - STA. P17+66.0 LT (SOLID GORE LINES)

646.662 TEMPORARY 12 INCH WHITE LINE, PAINT

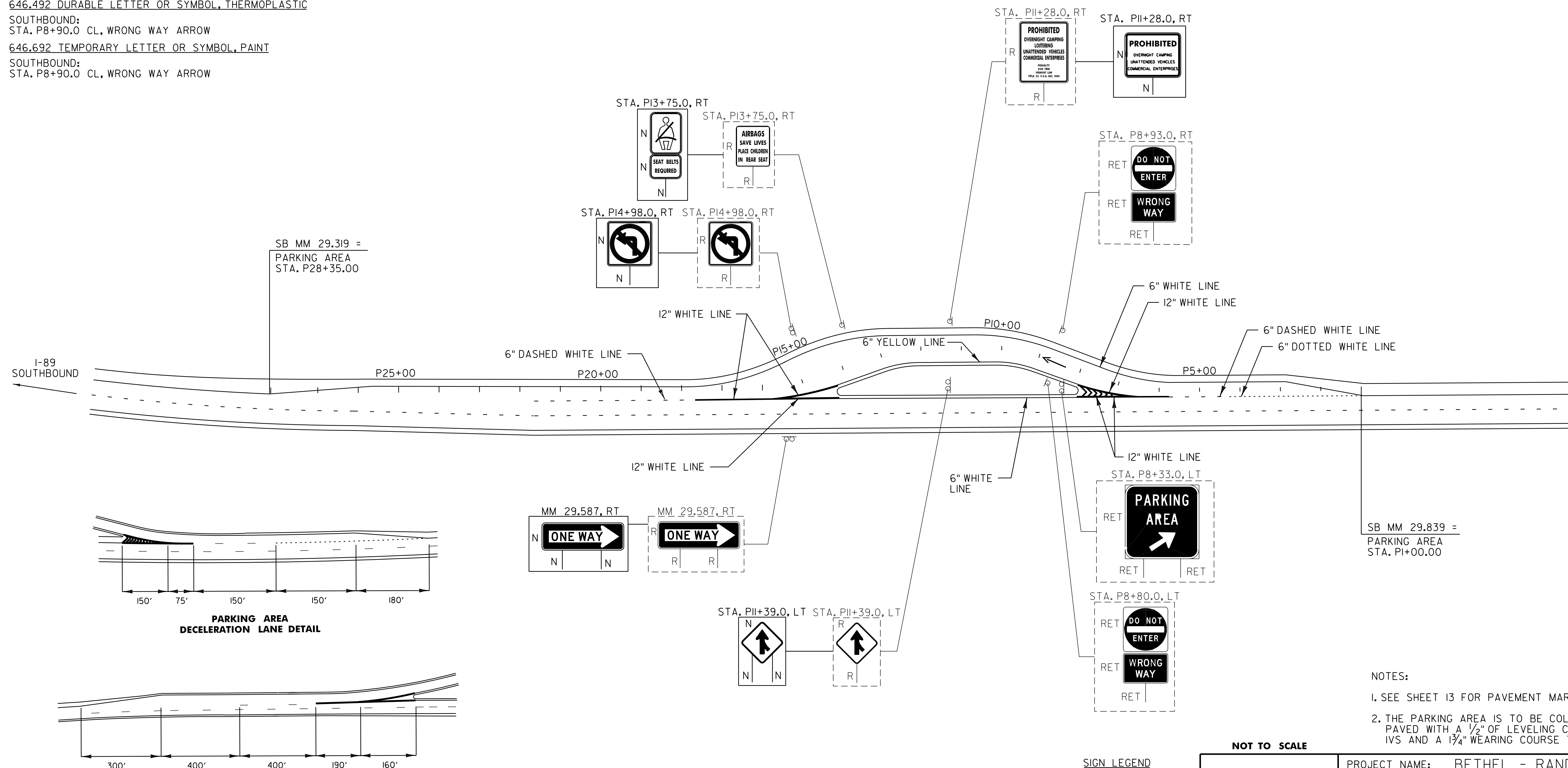
SOUTHBOUND:  
STA. P5+76.0 - STA. P7+90.0 LT (SOLID GORE LINES)  
STA. P14+30.0 - STA. P17+66.0 LT (SOLID GORE LINES)

646.492 DURABLE LETTER OR SYMBOL, THERMOPLASTIC

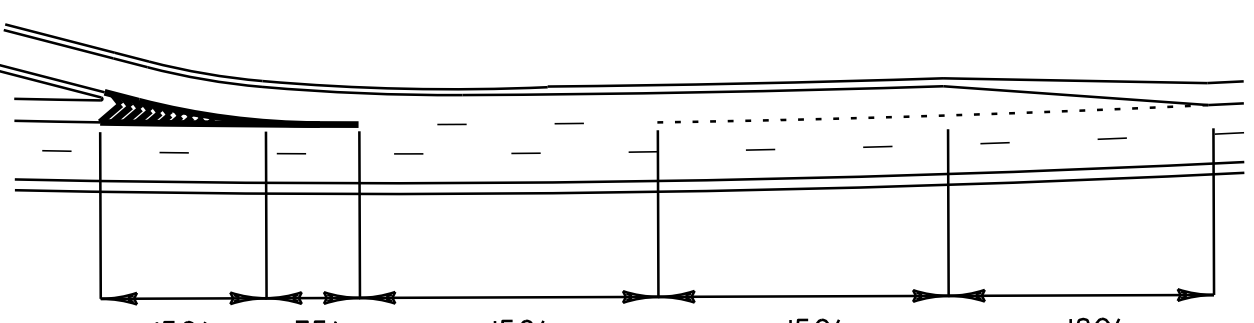
SOUTHBOUND:  
STA. P8+90.0 CL, WRONG WAY ARROW

646.692 TEMPORARY LETTER OR SYMBOL, PAINT

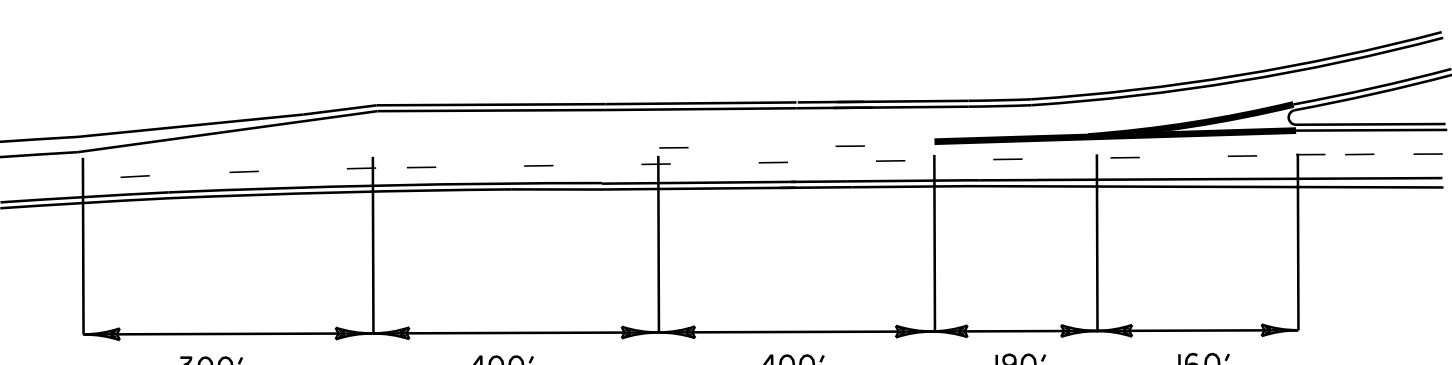
SOUTHBOUND:  
STA. P8+90.0 CL, WRONG WAY ARROW



SB MM 29.319 =  
PARKING AREA  
STA. P28+35.00



PARKING AREA  
DECELERATION LANE DETAIL



PARKING AREA  
ACCELERATION LANE DETAIL

NOTES:  
1. SEE SHEET 13 FOR PAVEMENT MARKING DETAILS  
2. THE PARKING AREA IS TO BE COLD PLANED 2 1/4", PAVED WITH A 1/2" OF LEVELING COURSE TYPE IVS AND A 1 3/4" WEARING COURSE TYPE IIIS.

SIGN LEGEND  
R = REMOVE  
S = SALVAGE  
N = NEW  
RET = RETAIN  
B-B = BACK TO BACK  
EXISTING = - - - - -  
NEW = \_\_\_\_\_








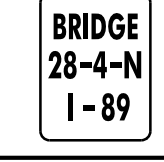
NOT TO SCALE

**PARKING AREA  
DETAIL SHEET**

PROJECT NAME: BETHEL - RANDOLPH	PLOT DATE: \$DATE\$
PROJECT NUMBER: IM 089-1(52)	DRAWN BY: C.A.K.
FILE NAME: p06a048.dgn	CHECKED BY: D.W.E.
DESIGNED BY: D.W.E.	SHEET 22 OF 61
IPARM FILE: p06a048pads.i	

FILE NAME = \$FILES\$  
DATE/TIME = \$DATE\$  
USER = \$NTUSER\$

# TRAFFIC SIGN SUMMARY SHEET 1

MILEMARKER, STATION, OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS		NEW & SALVAGED SIGNS				EXIST POST RETAIN	SALVAGE	NO. OF POSTS	NEW SIGN POSTS																REMARKS	SIGN DETAIL							
		EA	WIDTH (in)	HEIGHT (in)	"A"	"B"	SALV SIGN				SALV TIS	FLANGED CHANNEL			SQUARE STEEL (in)			TUBULAR ALUMINUM Ø (in)			TUBULAR STEEL Ø (in)				W-SHAPE STEEL			DETAIL ON DWG. NUMBER	STD. SHEET NUMBER						
												lb/ft	1.2	2.0	3.0	1.75	2.0	2.5	ANCHOR	S L E P T	3.0	4.0	4.0 MOD	FOUND-ATION	3.0	3.5				4.0	5.0	FTG. SIZE		WEIGHT	POST SIZE
																																24"	30"		
NORTHBOUND: 26.000, RT	 9/28/07	1	12	36	3.00					1			X		X		X													SIGN ID CODE DIO-2	E-139				
26.677, RT	 9/28/07	1	36	30	7.50					2			X																SIGN TO BE MOUNTED ON TWO FLANGED CHANNEL SIGN POSTS SIGN ID CODE R3-4	7					
26.843, LT	 9/29/07	1	36	36	9.00					2			I-14 X I-14																SIGN TO BE MOUNTED ON TWO FLANGED CHANNEL SIGN POSTS SIGN ID CODE R3-4	E-143					
27.000, RT	 9/28/07	1	12	36	3.00					1			X		X		X												SIGN ID CODE DIO-2	E-139					
27.008, RT	 9/28/07	1	6	8	0.33					1			X		X		X												SIGN ID CODE VD-701	E-134					
27.743, LT	 10/01/07	1	36	36	9.00					2			I-14 X I-14																SIGN TO BE MOUNTED ON TWO FLANGED CHANNEL SIGN POSTS SIGN ID CODE R3-4	E-143					
28.000, RT	 10/12/07	1	12	36	3.00					1			X		X		X												SIGN ID CODE DIO-2	E-139					
28.238, RT	 10/10/07	1	6	8	0.33					1			X		X		X												SIGN ID CODE VD-701	E-134					
											FT	FT	FT	FT	FT	FT	EA	LB	LB	LB	LB	LB	EA	EA	LB										
												28.0 17.0	42.0 (84.0)	29.0 (71.0)	70.0																				
											FT	46.0 (84.0) (71.0)		FT	70.0			EA	LB				EA	EA	LB										
												70.0			70.0																				
											<b>TOTALS</b>	SF	SF	EA	SF																				
												35.16																							

FILE NAME = \$FILES\$  
DATE/TIME USER = \$DATE\$ \$TIME\$ \$USER\$ \$NTUSER\$

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

PROJECT NAME: BETHEL - RANDOLPH  
PROJECT NUMBER: IM 089-1(52)  
FILE NAME: p06a048.dgn  
PROJECT LEADER: D.E.G.  
DESIGNED BY: D.W.E.  
IPARM FILE: p06a048+ts01.i  
PLOT DATE: \$DATE\$  
DRAWN BY: K.A.R.  
CHECKED BY: D.E.G.  
SHEET 23 OF 61

# TRAFFIC SIGN SUMMARY SHEET 2







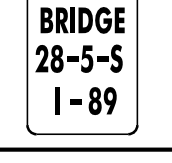

MILEMARKER, STATION, OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS		NEW & SALVAGED SIGNS				EXIST POST RETAIN	SALVAGE	NO. OF POSTS	NEW SIGN POSTS																REMARKS	SIGN DETAIL																	
		EA	WIDTH (in)	HEIGHT (in)	"A"	"B"	SALV SIGN				SALV TIS	FLANGED CHANNEL			SQUARE STEEL (in)			TUBULAR ALUMINUM 0 (in)			TUBULAR STEEL 0 (in)				W-SHAPE STEEL			DETAIL ON DWG. NUMBER	STD. SHEET NUMBER																
												lb/ft	1.2	2.0	3.0	1.75	2.0	2.5	ANCHOR	SLEEVE	3.0	4.0	4.0 MOD	FOUND-ATION	3.0	3.5				4.0	5.0	FTG. SIZE		WEIGHT	POST SIZE										
																																24"	30"												
NORTHBOUND: 28.508, RT <i>10/10/07</i>		1	6	8	0.33					1		X		X		X															SIGN ID CODE VD-701	E-134													
28.976, RT <i>10/10/07</i>		1	6	8	0.33					1		X		X		X														SIGN ID CODE VD-701	E-134														
29.000, RT <i>10/12/07</i>		1	12	36	3.00					1			X		X		X													SIGN ID CODE DIO-2	E-139														
29.900, RT <i>10/24/07</i>		1 1 1	36 36 36	36 36 36	9.00 9.00 9.00																									SIGN ID CODE MI-5 SIGN ID CODE MI-5 SIGN ID CODE MI-5	SEE SHEET 10 FOR OVERLAY SIGN PANEL INSTALLATION DETAILS	E-136B E-136B E-136B													
30.000, RT <i>10/12/07</i>		1	12	36	3.00					1			X		X		X													SIGN ID CODE DIO-2	E-139														
30.297, RT <i>10/24/07</i>		1 1 1	36 36 36	36 36 36	9.00 9.00 9.00																									SIGN ID CODE MI-5 SIGN ID CODE MI-5 SIGN ID CODE MI-5	SEE SHEET 10 FOR OVERLAY SIGN PANEL INSTALLATION DETAILS	E-136B E-136B E-136B													
30.323, LT <i>10/01/07</i>		1	36	36	9.00					2		X																		SIGN TO BE MOUNTED ON TWO FLANGED CHANNEL SIGN POSTS	SIGN ID CODE R3-4	E-143													
30.449, RT <i>9/27/07</i>		1	144	144		144.00				2																							2	<i>1-22.42</i> <i>404.1</i> <i>908.25</i> <i>1-20.83</i>	<i>W8x18</i> <i>W8x21</i>	8									
30.488, RT <i>10/24/07</i>		1 1 1	36 36 36	36 36 36	9.00 9.00 9.00																									SIGN ID CODE MI-5 SIGN ID CODE MI-5 SIGN ID CODE MI-5	SEE SHEET 10 FOR OVERLAY SIGN PANEL INSTALLATION DETAILS	E-136B E-136B E-136B													
											FT	FT	FT	FT	FT	FT	EA	LB	LB	LB	LB	LB	EA	EA	LB																				
												<i>28.0</i>	<i>28.0</i>	<i>18.0</i>	<i>56.0</i>																														
												<i>56.0</i>	<i>34.0</i>	<i>(28.0)</i>	<i>(29.0)</i>																														
											<b>TOTALS</b>	SF	SF	EA.	SF																														
												96.66	144.00																																

FILE NAME = \$FILES\$  
DATE/TIME = \$DATE\$ \$TIME\$  
USER = \$USER\$

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

PROJECT NAME: BETHEL - RANDOLPH  
PROJECT NUMBER: IM 089-1(52)  
FILE NAME: p06a048.dgn  
PROJECT LEADER: D.E.G.  
DESIGNED BY: D.W.E.  
IPARM FILE: p06a048+s02.i  
PLOT DATE: \$DATE\$  
DRAWN BY: K.A.R.  
CHECKED BY: D.E.G.  
SHEET 24 OF 61

# TRAFFIC SIGN SUMMARY SHEET 3

MILEMARKER, STATION, OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS		NEW & SALVAGED SIGNS				EXIST POST	NO. OF POSTS	NEW SIGN POSTS																REMARKS	SIGN DETAIL															
		EA	WIDTH (in)	HEIGHT (in)	"A"	"B"	SALV SIGN			SALV TIS	FLANGED CHANNEL			SQUARE STEEL (in)			TUBULAR ALUMINUM (in)			TUBULAR STEEL (in)				W-SHAPE STEEL			DETAIL ON DWG. NUMBER	STD. SHEET NUMBER														
											lb/ft			1.75	2.0	2.5	3.0	4.0	4.0 MOD	FOUND-A-TION	3.0	3.5	4.0	5.0	FTG. SIZE				WEIGHT	POST SIZE												
											1.12	2.0	3.0	1.88	2.16	3.35	1.3	1.7	1.7		7.6	9.0	10.8	14.6							24"	30"										
SOUTHBOUND: 26.000, LT		1	12	36	3.00				1		7/20/07 10/05/07 X 8LF+4LF		X			X										SIGN ID CODE D10-2		E-139														
26.705, LT		1	36	30	7.50				2		7/20/07 X 14LF																	7														
26.837, RT		1	36	36	9.00 LEFT EXISTING				2		X															SIGN TO BE MOUNTED ON TWO FLANGED CHANNEL SIGN POSTS SIGN ID CODE R3-4		E-143														
27.000, LT		1	12	36	3.00				1		7/20/07 X 12LF		X			X										SIGN ID CODE D10-2		E-139														
27.735, RT		1	36	36	9.00 LEFT EXISTING				2		X															SIGN TO BE MOUNTED ON TWO FLANGED CHANNEL SIGN POSTS SIGN ID CODE R3-4		E-143														
28.000, LT		1	12	36	3.00				1		7/20/07 X 12LF		X			X										SIGN ID CODE D10-2		E-139														
28.579, LT		1	6	8	0.33				1		7/20/07 X 10LF		X			X										SIGN ID CODE VD-701		E-134														
29.000, LT		1	12	36	3.00				1		7/20/07 X 12LF		X			X										SIGN ID CODE D10-2		E-139														
										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.	EA.	EA.	EA.	EA.			
											0	28.0	42.0	58.0	70.0																											
											70.0	56.0	70.0																													
											70.0	56.0	70.0																													
											70.0	56.0	70.0																													

FILE NAME = \$FILES  
DATE/TIME = \$DATE\$  
USER = \$NTUSER\$

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

**TOTALS**

SF 19.83  
37.83

EA. SF

FT 70.0 56.0  
(84.0) (14.0)

FT 70.0

EA.

LB

EA.

LB

EA.

EA.

EA.

EA.

EA.

EA.

PROJECT NAME: BETHEL - RANDOLPH  
PROJECT NUMBER: IM 089-1(52)

FILE NAME: p06a048.dgn  
PROJECT LEADER: D.E.G.  
DESIGNED BY: D.W.E.  
IPARM FILE: p06a048+s03.1

PLOT DATE: \$DATE\$  
DRAWN BY: K.A.R.  
CHECKED BY: D.E.G.  
SHEET 25 OF 61





STATE OF VERMONT  
AGENCY OF TRANSPORTATION



PROPOSED IMPROVEMENT  
TOWNS OF RANDOLPH & BROOKFIELD  
COUNTY OF ORANGE  
INTERSTATE ROUTE 89 (NB) & (SB)

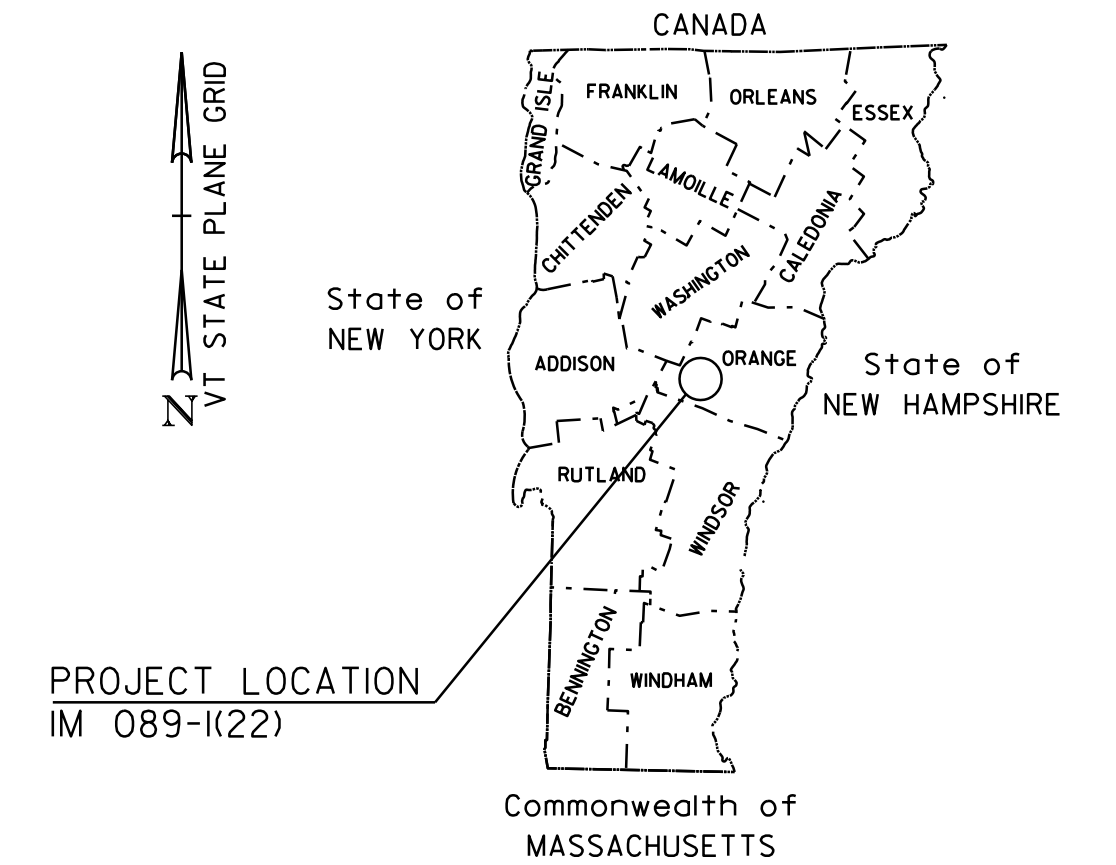
NORTHBOUND:  
BEGINNING IN THE TOWN OF RANDOLPH ON INTERSTATE 89 AT MILE MARKER 30.450 AND EXTENDING NORTHERLY  
FOR A DISTANCE OF 7.252 MILES TO A POINT IN THE TOWN OF BROOKFIELD AT MILE MARKER 37.702

SOUTHBOUND:  
BEGINNING IN THE TOWN OF RANDOLPH ON INTERSTATE 89 AT MILE MARKER 30.450 AND EXTENDING NORTHERLY  
FOR A DISTANCE OF 6.483 MILES TO A POINT IN THE TOWN OF BROOKFIELD AT MILE MARKER 36.933

NORTHBOUND:  
LENGTH OF ROADWAY 7.252 MILES

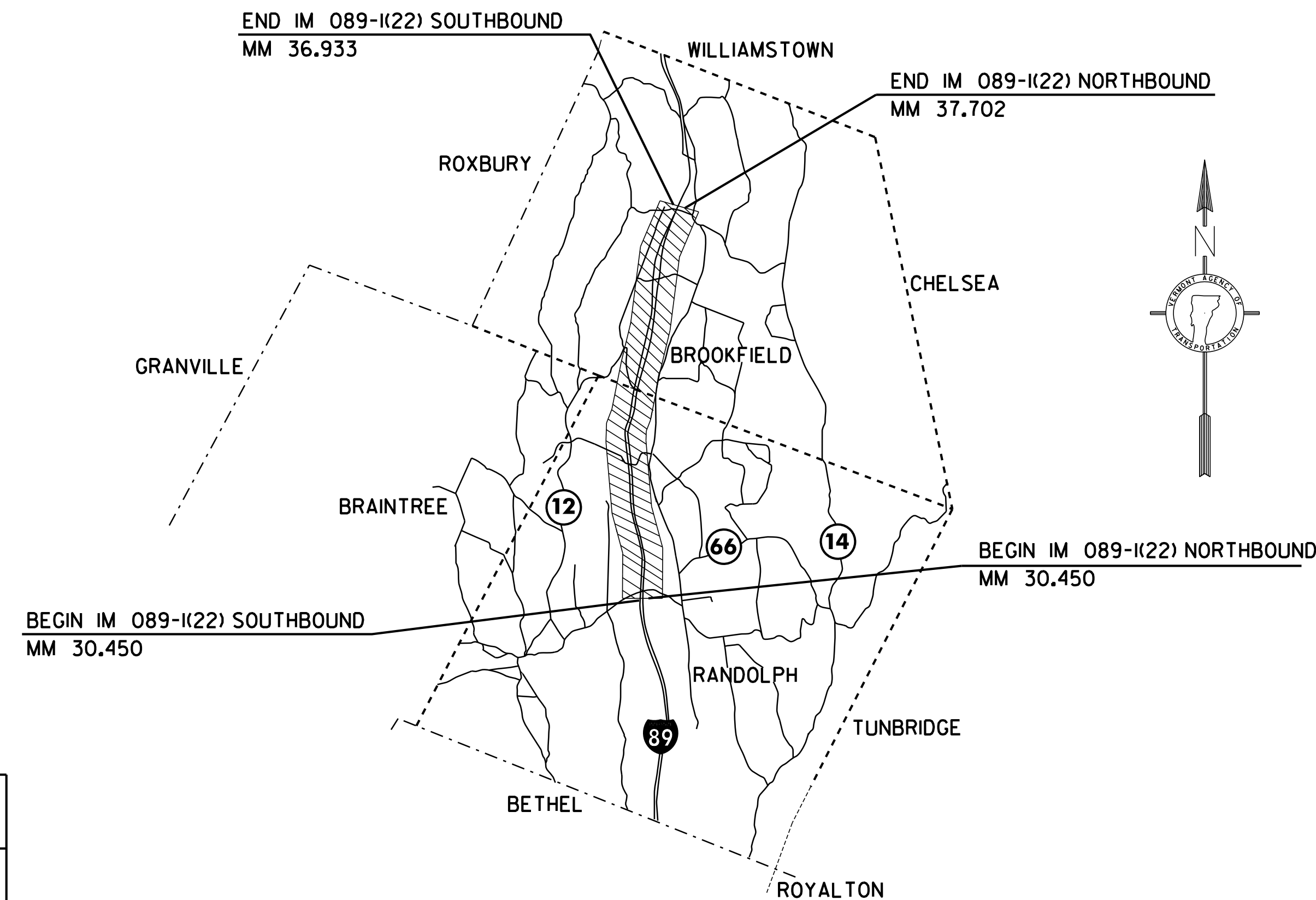
SOUTHBOUND:  
LENGTH OF ROADWAY 6.483 MILES

LENGTH OF PROJECT 13.735 MILES



BITUMINOUS CONCRETE PAVEMENT SUPERPAVE MIXTURE DESIGN CRITERIA	
DESIGN LANE/DESIGN LIFE ESALS	23,536,000
DESIGN NUMBER OF GYRATIONS	100
PERFORMANCE GRADED ASPHALT BINDER	64-28

WORK TO BE PERFORMED UNDER THIS PROJECT INCLUDES COLD PLANING AND RESURFACING OF THE EXISTING HIGHWAY WITH A SHIM/LEVELING COURSE AND WEARING COURSE, NEW PAVEMENT MARKINGS, DRAINAGE IMPROVEMENTS, GUARDRAIL IMPROVEMENTS, NEW SIGNS AND INCIDENTAL ITEMS.



LOCATION	ADT		DHV		ESALS	ESALS
	2007	2017	2007	2017	2007-2017	2007-2027
I-89 NORTHBOUND PROJECT BEGIN TO EXIT 4	7400	9000	950	1200	8,540,000	23,536,000
I-89 NORTHBOUND EXIT 4 TO PROJECT END	7600	9200	1000	1200	6,898,000	19,043,000
I-89 SOUTHBOUND PROJECT BEGIN TO EXIT 4	7400	9000	950	1200	7,402,000	20,186,000
I-89 SOUTHBOUND EXIT 4 TO PROJECT END	7600	9200	1000	1200	6,679,000	18,610,000

CONVENTIONAL SYMBOLS

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

SURVEYED BY : NA  
SURVEYED DATE : NA

DATUM  
VERTICAL NA  
HORIZONTAL NA

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

PROJECT MANAGER : WOOLAVER  
PROJECT NAME : RANDOLPH - BROOKFIELD  
PROJECT NUMBER : 1M 089-1 (22)  
SHEET 28 OF 61 SHEETS

FILE NAME : #FILES  
DATE/TIME : #DATE#  
USER : #NTUSER#





# ITEM DETAIL SUMMARY SHEET 1

LOCATION			GUARDRAIL (GALVANIZED)									DRAINAGE		MISCELLANEOUS			REMARKS
BEGIN MM	END MM	POS.	203.30	203.40	402.13	621.20	621.50	621.60	621.76	621.77	621.80	604.412	616.47	676.10			
			EARTH BORROW	SHOULDER BERM REMOVAL	AGG. SHOULDERS, RAP	STEEL BEAM GUARDRAIL GALVANIZED	MANUF. TERM. SECT. FLARED	ANCHOR FOR STEEL BEAM RAIL	REPLACE GUARDRAIL POST	REPLACE GUARDRAIL BEAM	REMOVAL DISPOSAL GUARDRAIL	REHAB. DI, CB, MH CLASS I	BIT. CONC. GUTTERS & TRAFFIC ISLANDS	DELINEATOR WITH STEEL POST	TYPE I	TYPE II	TYPE III
NORTHBOUND:			CY	LF	TON	LF	EA	EA	EA	EA	LF	EA	TON	EA	EA	EA	
30.450	37.702	LT/RT		7400	900									273			
30.803	30.912	LT	55		5	539.5	I	I			106.25 140.0			I			INSTALL NEW MANUFACTURED TERMINAL SECTION, FLARED FROM MM 30.803 TO MM 30.810. INSTALL NEW TRAILING END TERMINAL WITH ANCHOR FROM MM 30.910 TO MM 30.912. SEE SHEET 39 FOR BULLNOSE REMOVAL DETAIL. 7/17/07
31.043	31.052	RT	10		5	12.5	2	I	I	1	12	50.0		I			INSTALL NEW MANUFACTURED TERMINAL SECTION, FLARED FROM MM 31.043 TO MM 31.050. BUFFER
31.523	31.533	RT	10		5	12.5	2	I	I	2	26	50.0		I			INSTALL NEW MANUFACTURED TERMINAL SECTION, FLARED FROM MM 31.523 TO MM 31.530. BUFFER
33.353	33.362	LT	10		5	12.5		I		8	45	50.0		I			INSTALL NEW MANUFACTURED TERMINAL SECTION, FLARED FROM MM 33.353 TO MM 33.360.
33.362	33.372	RT	10		5	12.5		I			39	50.0		I			INSTALL NEW MANUFACTURED TERMINAL SECTION, FLARED FROM MM 33.362 TO MM 33.369.
33.445		RT											I				REPAVE EXISTING GUTTER
33.471		LT			I								I				
33.471		RT			I								I				
33.548		LT			I								I				
33.548		RT			I								I				
33.605		LT			I								I				
33.605		RT			I								I				
33.662		LT			I								I				
33.662		RT			I								I				
33.976	34.043	RT	25		5	314.5		X	X								INSTALL NEW MANUFACTURED TERMINAL SECTION, FLARED FROM MM 33.976 TO MM 33.983. THIS RUN NOT NECESSARY INSTALL NEW TRAILING END TERMINAL WITH ANCHOR FROM MM 33.976 TO MM 34.043. SEE VAOT STANDARD G-ID.
34.30	34.68																
34.623	34.633	LT	10		5	12.5		I			5	50.0		I			INSTALL NEW MANUFACTURED TERMINAL SECTION, FLARED FROM MM 34.623 TO MM 34.630.
34.649	34.659	RT	10		5	12.5	2	I		5(10BLOCKS)	15	50.0		I			INSTALL NEW MANUFACTURED TERMINAL SECTION, FLARED FROM MM 34.649 TO MM 34.657. BUFFER
34.733	34.743	RT	10		5	12.5		I		3(5BLOCKS)	31	50.0		I			INSTALL NEW MANUFACTURED TERMINAL SECTION, FLARED FROM MM 34.733 TO MM 34.740.
34.796		RT			I								I				
35.622	35.632	RT	10		5	12.5		I			9	19	50.0	I			INSTALL NEW MANUFACTURED TERMINAL SECTION, FLARED FROM MM 35.622 TO MM 35.629.
35.671	35.680	LT	10		5	12.5		I			1	9	50.0	I			INSTALL NEW MANUFACTURED TERMINAL SECTION, FLARED FROM MM 35.671 TO MM 35.678.
35.720		RT			I								I				
35.775		LT			I								I				
35.775		RT			I								I				
35.882	35.891	LT	10		5	12.5		I			3	46	50.0	I			7/25/07 INSTALL NEW MANUFACTURED TERMINAL SECTION, FLARED FROM MM 35.882 TO MM 35.889. 1BLK
35.923	35.932	RT	10		5	12.5		I				9	50.0	I			INSTALL NEW MANUFACTURED TERMINAL SECTION, FLARED FROM MM 35.923 TO MM 35.930.
36.430	36.440	RT	10		5	12.5		I			2	3	50.0	I			INSTALL NEW MANUFACTURED TERMINAL SECTION, FLARED FROM MM 36.430 TO MM 36.438.
36.556		LT			I								I				
36.559		RT			I								I				
36.589		RT			I								I				
36.823	36.832	RT	10		5	12.5		I			3	9	50.0	I			INSTALL NEW MANUFACTURED TERMINAL SECTION, FLARED FROM MM 36.823 TO MM 36.830.
37.144	37.153	RT	10		5	12.5		I				7	50.0	I			INSTALL NEW MANUFACTURED TERMINAL SECTION, FLARED FROM MM 37.144 TO MM 37.151.
37.463	37.472	RT	10		5	12.5		I				17	50.0	I			INSTALL NEW MANUFACTURED TERMINAL SECTION, FLARED FROM MM 37.463 TO MM 37.470.
37.584		RT			I								I				
37.638		RT			I								I				
SHEET SUBTOTAL			230	7400	1002	545.5	17	8	3	37	303	893.75	17	I	289	-	-

FILE NAME = \$FILES\$  
DATE/TIME = \$DATE\$  
USER = \$NTUSER\$

<b>ITEM DETAIL SUMMARY SHEET #1</b>	PROJECT NAME: RANDOLPH - BROOKFIELD
	PROJECT NUMBER: IM 089-1(22)
FILE NAME: p99a200.dgn	PLOT DATE: \$DATE\$
PROJECT LEADER: D.E.G.	DRAWN BY: C.A.K.
DESIGNED BY: D.W.E.	CHECKED BY: D.W.E.
IPARM FILE: p06A0481dsl	SHEET 31 OF 61

# ITEM DETAIL SUMMARY SHEET 2

LOCATION			GUARDRAIL (GALVANIZED)								DRAINAGE		MISCELLANEOUS			REMARKS	
BEGIN MM	END MM	POS.	203.30 EARTH BORROW CY	203.40 SHOULDER BERM REMOVAL LF	402.13 AGG. SHOULDERS, RAP TON	621.20 STEEL BEAM GUARDRAIL GALVANIZED LF	621.50 MANUF. TERM. SECT. FLARED EA	621.60 ANCHOR FOR STEEL BEAM RAIL EA	621.76 REPLACE GUARDRAIL POST EA	621.77 REPLACE GUARDRAIL BEAM EA	621.80 REMOVAL & DISPOSAL GUARDRAIL LF	604.412 REHAB. DI, CB, MH CLASS I EA	616.47 BIT. CONC. GUTTERS & TRAFFIC ISLANDS TON	676.10 DELINEATOR WITH STEEL POST TYPE I TYPE II TYPE III EA EA EA			
NORTHBOUND:																	
37.754	37.933	LT	106		10	502.0	1	1			100.0			2		INSTALL NEW MANUFACTURED TERMINAL SECTION, FLARED FROM MM 37.754 TO MM 37.761 AND MM 37.926 TO MM 37.933. INSTALL NEW TRAILING END TERMINAL FROM MM 37.831 TO MM 37.833 AND MM 37.855 TO MM 37.858. SEE SHEET 39 FOR BULLNOSE REMOVAL DETAIL.	
37.83	37.93	LT/SB				502.0	1	1			125						
SOUTHBOUND:																	
30.450	37.933	LT/RT		6000	925				30	100							
30.87	31.00										50.0						
30.872	31.003	LT	25		5	652.0	1	X		29	684.0			1		INSTALL NEW TRAILING END TERMINAL FROM MM 30.872 TO MM 30.875. 6/26/07 INSTALL NEW MANUFACTURED TERMINAL SECTION, FLARED FROM MM 30.995 TO MM 31.003.	
30.879	30.989	RT	55		5	539.5	1	1			106.25 140.0			1		INSTALL NEW TRAILING END TERMINAL END TERMINAL FROM MM 30.879 TO MM 30.882. 6/27/07 INSTALL NEW MANUFACTURED TERMINAL SECTION, FLARED FROM MM 30.981 TO MM 30.989. SEE SHEET 39 FOR BULLNOSE REMOVAL DETAIL.	
31.444		LT			1											7/06/07	
31.504		LT			1											7/06/07	
31.65	31.45																
31.629	31.639	LT	10		5	12.5	2	1		27	50.0			1		INSTALL NEW MANUFACTURED TERMINAL SECTION, FLARED FROM MM 31.632 TO MM 31.639. 6/26/07 BUFFER	
32.317		RT			1											7/05/07	
32.45	32.25	RT									75.0						
32.447	32.453	LT	10		5	12.5	25	1		11	50.0			1		INSTALL NEW MANUFACTURED TERMINAL SECTION, FLARED FROM MM 32.449 TO MM 32.453. 6/21/07	
33.25	33.13										37.5						
33.252	33.262	LT	10		5	12.5	1			12	50.0			1		INSTALL NEW MANUFACTURED TERMINAL SECTION, FLARED FROM MM 33.255 TO MM 33.262. 6/25/07	
33.25	33.15																
33.281	33.290	RT	10		5	12.5	1			3	50.0			1		INSTALL NEW MANUFACTURED TERMINAL SECTION, FLARED FROM MM 33.283 TO MM 33.290. 6/21/07	
33.69		RT			1											7/05/07	
33.734		RT			1											7/05/07	
33.85	33.68										37.5						
33.828	33.838	RT	10		5	12.5	1			7	50.0			1		INSTALL NEW MANUFACTURED TERMINAL SECTION, FLARED FROM MM 33.830 TO MM 33.838. 6/21/07	
33.92	33.25																
33.905	33.915	LT	10		5	12.5	1		4	43	50.0			1		INSTALL NEW MANUFACTURED TERMINAL SECTION, FLARED FROM MM 33.908 TO MM 33.915. 6/25/07 8 BLKS	
34.25	34.09																
34.229	34.238	LT	10		5	12.5	2	1		27	50.0			1		INSTALL NEW MANUFACTURED TERMINAL SECTION, FLARED FROM MM 34.231 TO MM 34.238. 6/22/07 BUFFER	
34.69	34.65																
34.702	34.712	RT	10		5	12.5	1		2	4	50.0			1		INSTALL NEW MANUFACTURED TERMINAL SECTION, FLARED FROM MM 34.705 TO MM 34.712. 6/21/07	
34.75	34.64																
34.738	34.748	LT	10		5	12.5	2	1	2	16	50.0			1		INSTALL NEW MANUFACTURED TERMINAL SECTION, FLARED FROM MM 34.740 TO MM 34.748. 6/22/07 IPOST FOR BK PLT'S	
35.31	35.12																
35.311	35.321	LT	10		5	12.5	1			5	50.0			1		INSTALL NEW MANUFACTURED TERMINAL SECTION, FLARED FROM MM 35.314 TO MM 35.321. 6/22/07	
35.54	35.38																
35.555	35.564	LT	10		5	12.5	1			7	50.0			1		INSTALL NEW MANUFACTURED TERMINAL SECTION, FLARED FROM MM 35.557 TO MM 35.564. 6/20/07 6/22/07	
35.92	35.81																
35.860	35.870	LT	10		5	12.5	1			3	50.0			1		INSTALL NEW MANUFACTURED TERMINAL SECTION, FLARED FROM MM 35.863 TO MM 35.870. 6/20/07 6/22/07	
36.09	35.99																
36.072	36.081	LT	10		5	12.5	1			3	50.0			1		INSTALL NEW MANUFACTURED TERMINAL SECTION, FLARED FROM MM 36.074 TO MM 36.081. 6/20/07	
36.282		LT			1											7/05/07	
36.323		LT														REPAVE EXISTING PAVED GUTTER	
36.385		LT														REPAVE EXISTING PAVED GUTTER	
36.55	36.50																
36.539	36.549	RT	10		5	12.5	1			9	50.0			1		INSTALL NEW MANUFACTURED TERMINAL SECTION, FLARED FROM MM 36.542 TO MM 36.549. 6/21/07	
36.55	36.24																
36.543	36.552	LT	10		5	12.5	1			7	50.0			1		INSTALL NEW MANUFACTURED TERMINAL SECTION, FLARED FROM MM 36.545 TO MM 36.552. 6/20/07	
36.90	36.75																
36.923	36.927	LT	10		5	12.5	1			7	50.0			1		INSTALL NEW MANUFACTURED TERMINAL SECTION, FLARED FROM MM 36.920 TO MM 36.927. 6/20/07	
SHEET SUBTOTAL			346	6000	1030	1574.5 2395.5	20	X 3	30 8	220 100	1181.25 1824.0	6 8	2	20	-		

FILE NAME = \$FILES\$  
DATE/TIME = \$DATE\$  
USER = \$NTUSER\$

<b>ITEM DETAIL SUMMARY SHEET #2</b>	PROJECT NAME: RANDOLPH - BROOKFIELD
	PROJECT NUMBER: IM 089-1(22)
	FILE NAME: p99a200.dgn
PROJECT LEADER: D.E.G.	PLOT DATE: \$DATE\$
DESIGNED BY: D.W.E.	DRAWN BY: C.A.K.
IPARM FILE: p06A048ids2.i	CHECKED BY: D.W.E.
	SHEET 32 OF 61

# ITEM DETAIL SUMMARY SHEET 3

LOCATION			GUARDRAIL (GALVANIZED)								DRAINAGE		MISCELLANEOUS			REMARKS	
BEGIN MM	END MM	POS.	203.30	203.40	402.13	621.20	621.50	621.60	621.76	621.77	621.80	604.412	616.47	676.10			
			EARTH BORROW CY	SHOULDER BERM REMOVAL LF	AGG. SHOULDERS, RAP TON	STEEL BEAM GUARDRAIL GALVANIZED LF	MANUF. TERM. SECT. FLARED EA	ANCHOR FOR STEEL BEAM RAIL EA	REPLACE GUARDRAIL POST EA	REPLACE GUARDRAIL BEAM EA	REMOVAL & DISPOSAL GUARDRAIL LF	REHAB. DI, CB, MH CLASS I EA	BIT, CONC. GUTTERS & TRAFFIC ISLANDS TON	DELINEATOR WITH STEEL POST TYPE I TYPE II TYPE III EA EA EA			
NORTHBOUND: REST AREA														5	19		
SOUTHBOUND: REST AREA														3	20		
Y 6+00	Y 12+18	RT				814.5	1	1	1	1	800.0					NEW STEEL BEAM IN REST AREA TO REPLACE 3-CABLE. 7/09/07	
RAMP 4A: AI+00.00 A21+02.00														8	13		
RAMP 4B: BI+00.00 A21+32.00														4	8	5	
RAMP 4C: CI+00.00 C16+86.00														9	7		
SB 31.45 LT C5+60.00 C5+97.50 RT			10		5		1			38	50.0			1		INSTALL NEW MANUFACTURED TERMINAL SECTION, FLARED FROM STA. C5+60.00 TO STA. C5+97.50. 6/26/07	
C9+94.00 C10+31.50 LT			10		5		1			1	37.5			1		INSTALL NEW MANUFACTURED TERMINAL SECTION, FLARED FROM STA. C9+94.00 TO STA. C10+31.50.	
RAMP 4D: DI+00.00 D26+84.00														14	13		
DI+00.00 DI+50.00 LT DI+00.00 DI+37.50 RT			10		5		1		2	7	37.5			1		INSTALL NEW MANUFACTURED TERMINAL SECTION, FLARED FROM STA. DI+00.00 TO STA. DI+37.50.	
D7+64.00 D8+01.50 RT			10		5		1			1	50.0			1		INSTALL NEW MANUFACTURED TERMINAL SECTION, FLARED FROM STA. D7+64.00 TO STA. D8+01.50.	
SHEET SUBTOTAL			40	-	20	814.5	-4 5	-1	-4	-56	987.5	-	-	47	80	5	
SHEET 31 SUBTOTAL			230	7400	1002	545.5	17	2 3	50 37	1503 03	893.75	17	1	289	-	-	
SHEET 32 SUBTOTAL			346	6000	1030	1574.5	20	4 3	30 8	10022 0	1181.25	5	2	20	-	-	
ROUNDING			34	-	23	63.0	-	-	-	-	-86	-	-	-	-	-	
TOTAL			650	13,400	2075	2934.5	41 42	6 7	80 49	579 250	3062.5	22	3	356	80	5	

FILE NAME = \$FILES\$  
DATE/TIME = \$DATE\$  
USER = \$NTUSER\$

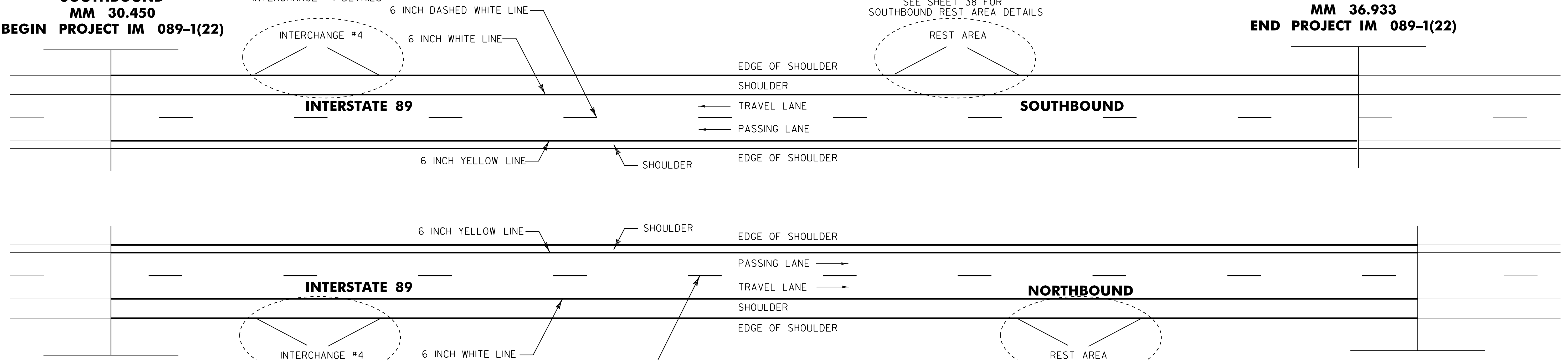
<b>ITEM DETAIL SUMMARY SHEET #3</b>	PROJECT NAME: RANDOLPH - BROOKFIELD
	PROJECT NUMBER: IM 089-1(22)
	FILE NAME: p99a200.dgn PROJECT LEADER: D.E.G. DESIGNED BY: D.W.E. IPARM FILE: p06A048ids3.i
	PLOT DATE: \$DATE\$ DRAWN BY: C.A.K. CHECKED BY: D.W.E. SHEET 33 OF 61

**INTERSTATE ROUTE 89  
SOUTHBOUND  
MM 30.450  
BEGIN PROJECT IM 089-1(22)**

SEE SHEET 35 & 36 FOR  
INTERCHANGE #4 DETAILS

SEE SHEET 38 FOR  
SOUTHBOUND REST AREA DETAILS

**INTERSTATE ROUTE 89  
SOUTHBOUND  
MM 36.933  
END PROJECT IM 089-1(22)**



**INTERSTATE ROUTE 89  
NORTHBOUND  
MM 30.450  
BEGIN PROJECT IM 089-1(22)**

SEE SHEETS 35 & 36 FOR  
INTERCHANGE #4 DETAILS

SEE SHEET 37 FOR  
NORTHBOUND REST AREA DETAIL

**INTERSTATE ROUTE 89  
NORTHBOUND  
MM 37.702  
END PROJECT IM 089-1(22)**

604.412 REHAB. DROP INLET, CATCH BASIN OR MANHOLE, CLASS I

NORTHBOUND:  
MM 33.471 LT  
MM 33.471 RT  
MM 33.548 LT  
MM 33.548 RT  
MM 33.605 LT  
MM 33.605 RT  
MM 33.662 LT  
MM 33.662 RT  
MM 37.496 RT  
MM 35.720 RT  
MM 35.775 LT  
MM 35.775 RT  
MM 35.556 LT  
MM 36.559 RT  
MM 36.589 RT  
MM 37.583 RT  
MM 37.638 RT

SOUTHBOUND:  
MM 31.444 LT  
MM 31.504 LT  
MM 32.317 RT  
MM 33.734 RT  
MM 36.282 LT

646.426 DURABLE 6 INCH WHITE LINE, RECESSED  
NORTHBOUND:  
MM 30.450 - MM 37.702 CL (DASHED)  
MM 30.450 - MM 30.545 RT (SOLID)  
MM 30.687 - MM 31.170 RT (SOLID)  
MM 31.406 - MM 34.187 RT (SOLID)  
MM 34.312 - MM 34.571 RT (SOLID)  
MM 34.785 - MM 37.702 RT (SOLID)

SOUTHBOUND:  
MM 30.450 - MM 36.933 CL (DASHED)  
MM 30.450 - MM 30.502 LT (SOLID)  
MM 30.724 - MM 31.070 LT (SOLID)  
MM 31.184 - MM 33.246 LT (SOLID)  
MM 33.496 - MM 33.688 LT (SOLID)  
MM 33.817 - MM 36.933 LT (SOLID)

646.436 DURABLE 6 INCH YELLOW LINE, RECESSED  
NORTHBOUND:  
MM 30.450 - MM 37.702 LT (SOLID)

SOUTHBOUND:  
MM 30.450 - MM 36.933 RT (SOLID)  
646.622 TEMPORARY 6 INCH WHITE LINE, PAINT

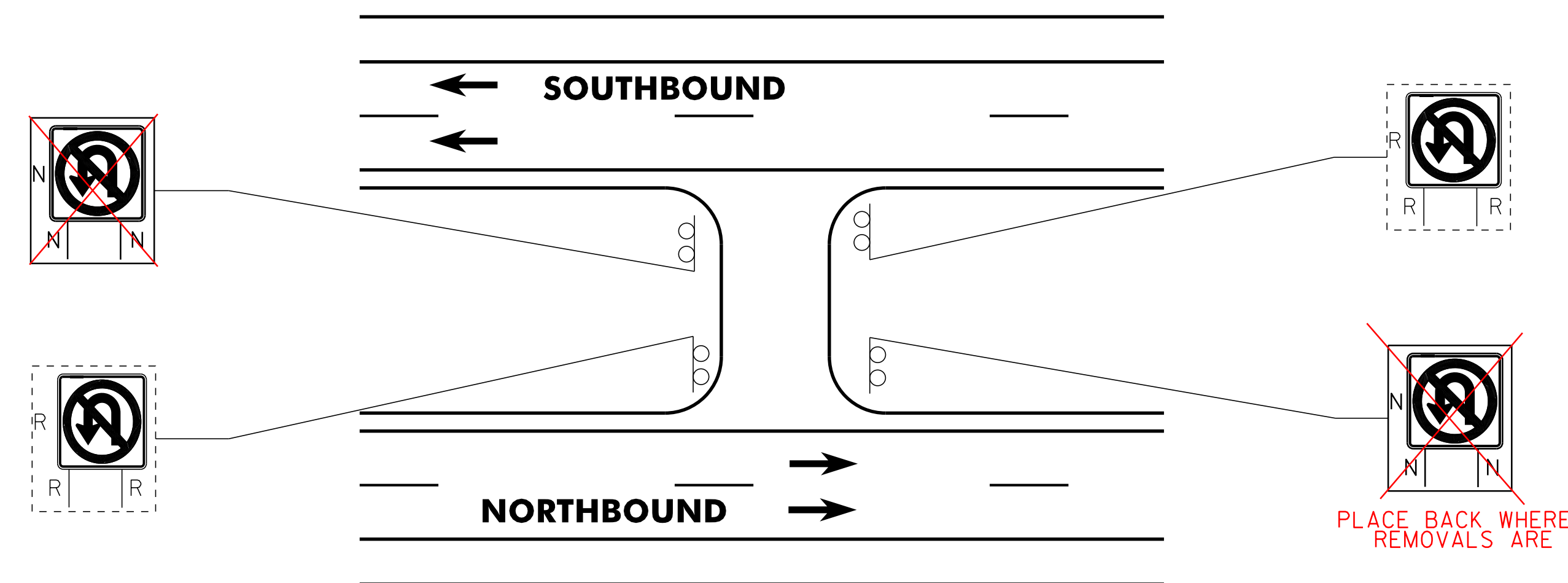
NORTHBOUND:  
MM 30.450 - MM 37.702 CL (DASHED)  
MM 30.450 - MM 30.545 RT (SOLID)  
MM 30.687 - MM 31.170 RT (SOLID)  
MM 31.406 - MM 34.187 RT (SOLID)  
MM 34.312 - MM 34.571 RT (SOLID)  
MM 34.785 - MM 37.702 RT (SOLID)

SOUTHBOUND:  
MM 30.450 - MM 36.933 CL (DASHED)  
MM 30.450 - MM 30.502 LT (SOLID)  
MM 30.724 - MM 31.070 LT (SOLID)  
MM 31.184 - MM 33.246 LT (SOLID)  
MM 33.496 - MM 33.688 LT (SOLID)  
MM 33.817 - MM 36.933 LT (SOLID)

646.632 TEMPORARY 6 INCH YELLOW LINE, PAINT  
NORTHBOUND:  
MM 30.450 - MM 37.702 LT (SOLID)

SOUTHBOUND:  
MM 30.450 - MM 36.933 RT (SOLID)  
675.50 REMOVING SIGNS  
NORTHBOUND - 34

SOUTHBOUND - 25  
676.10 DELINEATOR WITH STEEL POST  
REFER TO STANDARDS E-197, E-198  
AND E-199 FOR PLACEMENT GUIDELINES



**U-TURN DETAIL**

N.B. MM 31.500 (33'x44')  
N.B. MM 32.890 (22'x95')  
N.B. MM 35.010 (20'x355')  
N.B. MM 35.110 (20'x363')  
N.B. MM 37.600 (34'x64')

NOTE:

1. THE CONTRACTOR SHALL INSTALL MILLED RUMBLE STRIPS WITHIN THE PROJECT LIMITS AS SHOWN ON SHEET 12 OR AS DIRECTED BY THE RESIDENT ENGINEER.

NOT TO SCALE

**PROJECT  
LAYOUT  
SHEET**

**SIGN LEGEND**  
R = REMOVE  
S = SALVAGE  
N = NEW  
RET = RETAIN  
B-B = BACK TO BACK  
EXISTING = - - - - -  
NEW = \_\_\_\_\_

PROJECT NAME: RANDOLPH - BROOKFIELD  
PROJECT NUMBER: IM 089-1(22)

FILE NAME: p99a200.dgn  
PROJECT LEADER: D.E.G.  
DESIGNED BY: D.W.E.  
IPARM FILE: p06A048p01.i  
PLOT DATE: \$DATE\$  
DRAWN BY: C.A.K.  
CHECKED BY: D.W.E.  
SHEET 34 OF 61

FILE NAME = \$FILES\$  
DATE/TIME = \$DATE\$ \$TIME\$  
USER = \$NTUSER\$

646.426 DURABLE 6 INCH WHITE LINE, RECESSED  
 RAMP A:  
 STA. A1+00.0 - STA. A21+02.0 (EDGE LINE RT)  
 STA. A13+02.0 - STA. A15+52.0 (DASHED LANE LINE LT)  
 RAMP B:  
 STA. B1+00.0 - STA. B21+32.0 (EDGE LINE RT)  
 STA. B1+00.0 - STA. B4+80.0 (DOTTED LANE LINE LT)  
 STA. B4+80.0 - STA. B6+80.0 (DASHED LINE LT)  
 STA. B21+25.0 - STA. B21+32.0 (EDGE LINE LT)

646.622 TEMPORARY 6 INCH WHITE LINE, PAINT  
 RAMP A:  
 STA. A1+00.0 - STA. A21+02.0 (EDGE LINE RT)  
 STA. A13+02.0 - STA. A15+52.0 (DASHED LANE LINE LT)  
 RAMP B:  
 STA. B1+00.0 - STA. B21+32.0 (EDGE LINE RT)  
 STA. B1+00.0 - STA. B4+80.0 (DOTTED LANE LINE LT)  
 STA. B4+80.0 - STA. B6+80.0 (DASHED LINE LT)  
 STA. B21+25.0 - STA. B21+32.0 (EDGE LINE LT)

646.436 DURABLE 6 INCH YELLOW LINE, RECESSED  
 RAMP A:  
 STA. A9+27.0 - STA. A13+02.0 (EDGE LINE LT)  
 RAMP B:  
 STA. B8+50.0 - STA. B21+25.0 (EDGE LINE LT)

646.632 TEMPORARY 6 INCH YELLOW LINE, PAINT  
 RAMP A:  
 STA. A9+27.0 - STA. A13+02.0 (EDGE LINE LT)  
 RAMP B:  
 STA. B8+50.0 - STA. B21+25.0 (EDGE LINE LT)

646.466 DURABLE 12 INCH WHITE LINE, RECESSED  
 RAMP A:  
 STA. A9+27.0 - STA. A13+02.0 (SOLID GORE LINES LT)  
 RAMP B:  
 STA. B6+80.0 - STA. B8+50.0 (SOLID GORE LINES LT)  
 STA. B7+30.0 - STA. B8+50.0 (GORE HATCHING LT)

646.662 TEMPORARY 12 INCH WHITE LINE, PAINT  
 RAMP A:  
 STA. A9+27.0 - STA. A13+02.0 (SOLID GORE LINES LT)  
 RAMP B:  
 STA. B6+80.0 - STA. B8+50.0 (SOLID GORE LINES LT)

646.482 DURABLE 24 INCH STOP BAR, THERMOPLASTIC  
 RAMP B:  
 STA. B21+25.0 LT/RT  
 646.682 TEMPORARY 24 INCH STOP BAR, PAINT  
 RAMP B:  
 STA. B21+25.0 LT/RT

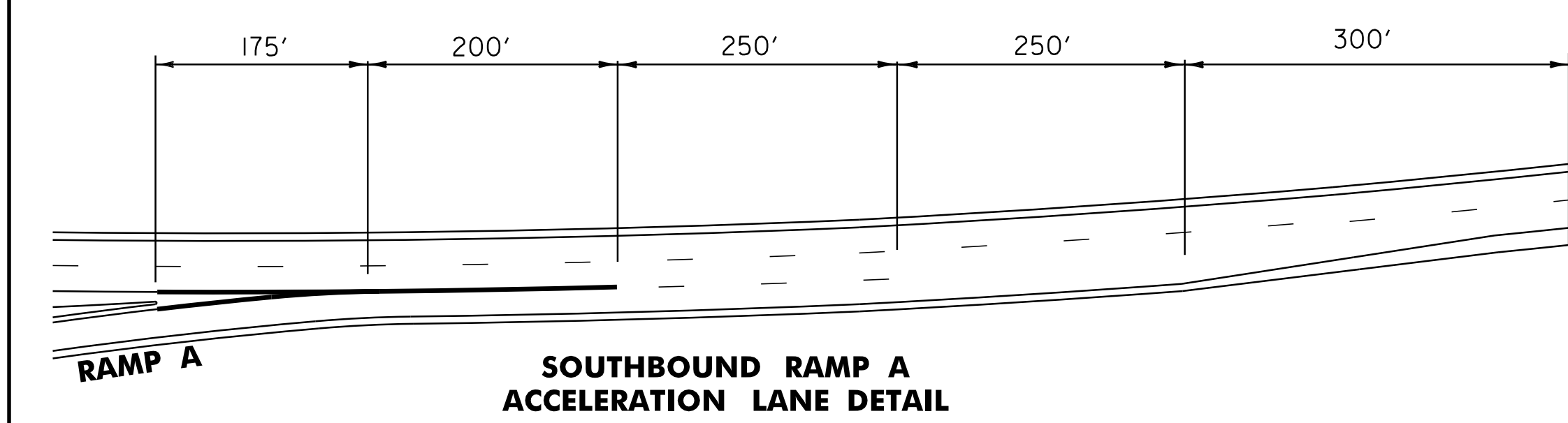
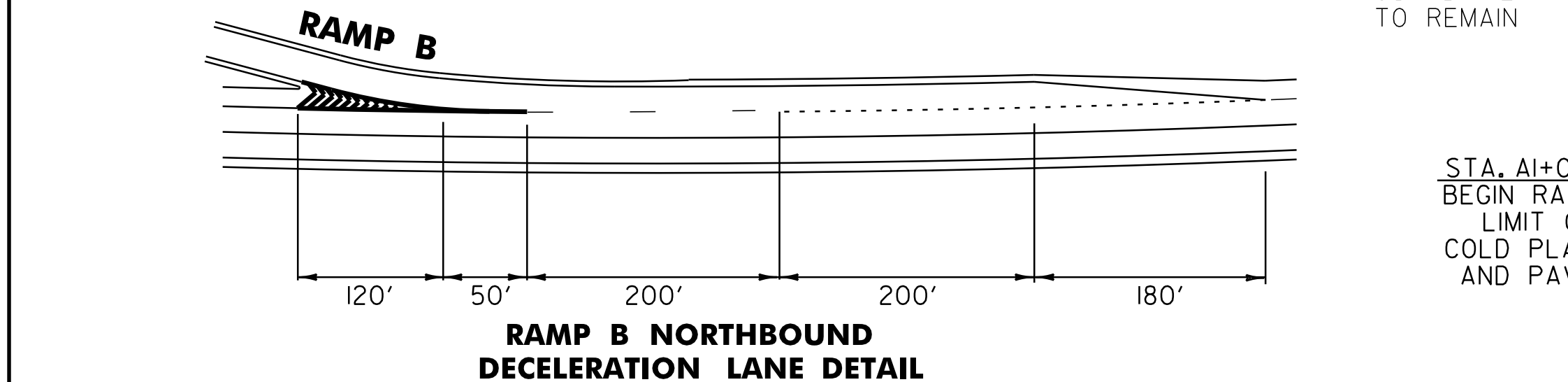
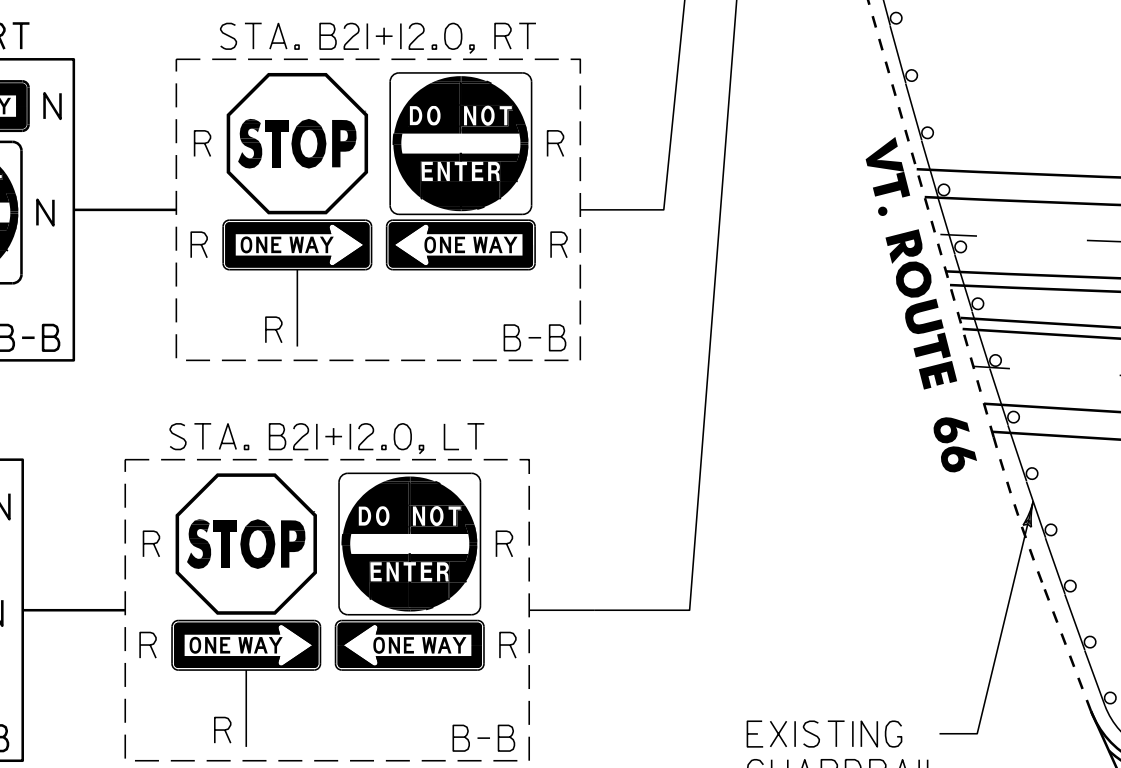
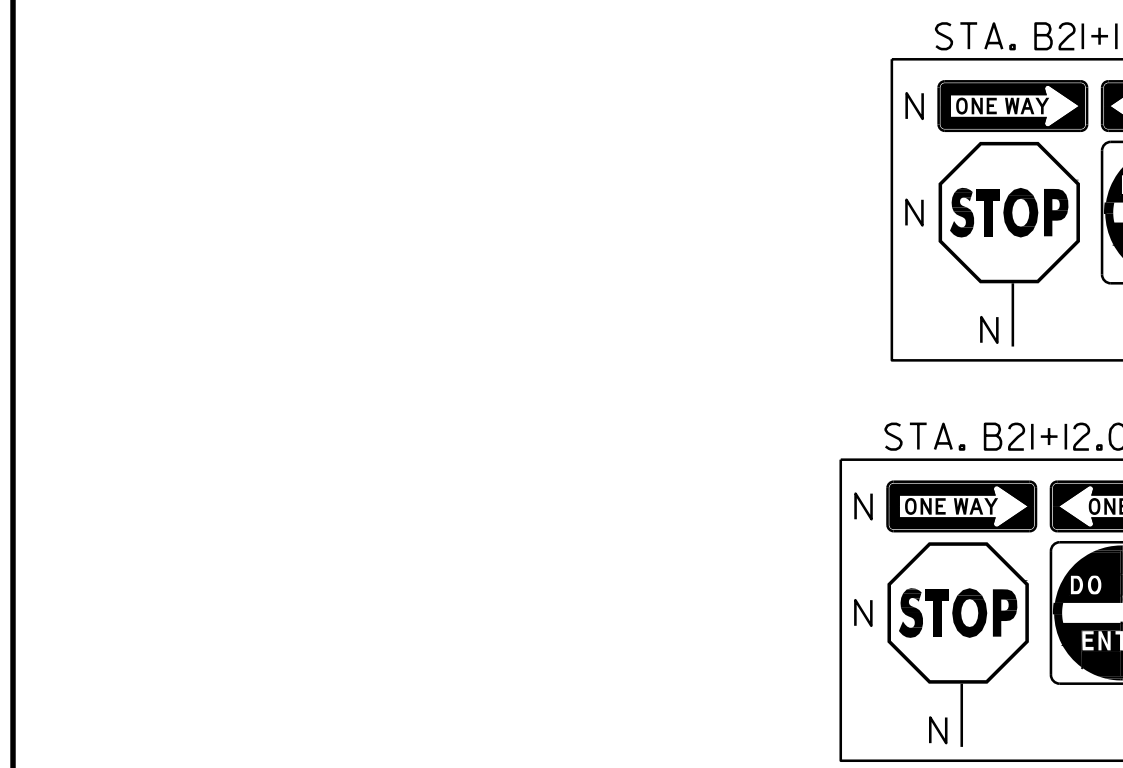
646.692 TEMPORARY LETTER OR SYMBOL, PAINT  
 RAMP B:  
 STA. B9+06.6 CL "STOP" (4 EA)  
 STA. B9+47.2 CL "AHEAD" (5 EA)  
 STA. B18+53.0 CL WRONG WAY ARROW (1EA)  
 STA. B21+20.0 CL "STOP" (4 EA)

646.492 DURABLE LETTER OR SYMBOL, THERMOPLASTIC  
 RAMP B:  
 STA. B9+06.6 CL "STOP" (4 EA)  
 STA. B9+47.2 CL "AHEAD" (5 EA)  
 STA. B18+53.0 CL WRONG WAY ARROW (1EA)  
 STA. B21+20.0 CL "STOP" (4 EA)

646.692 TEMPORARY LETTER OR SYMBOL, PAINT  
 RAMP B:  
 STA. B9+06.6 CL "STOP" (8 EA)  
 STA. B9+47.2 CL "AHEAD" (10 EA)  
 STA. B18+53.0 CL WRONG WAY ARROW (2 EA)  
 STA. B21+20.0 CL "STOP" (8 EA)

646.692 TEMPORARY LETTER OR SYMBOL, PAINT  
 RAMP B:  
 STA. B9+06.6 CL "STOP" (8 EA)  
 STA. B9+47.2 CL "AHEAD" (10 EA)  
 STA. B18+53.0 CL WRONG WAY ARROW (2 EA)  
 STA. B21+20.0 CL "STOP" (8 EA)

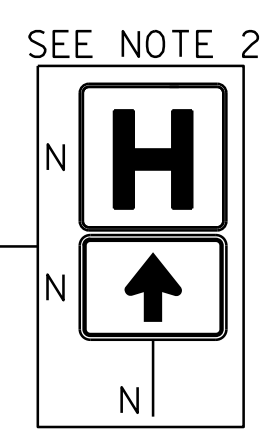
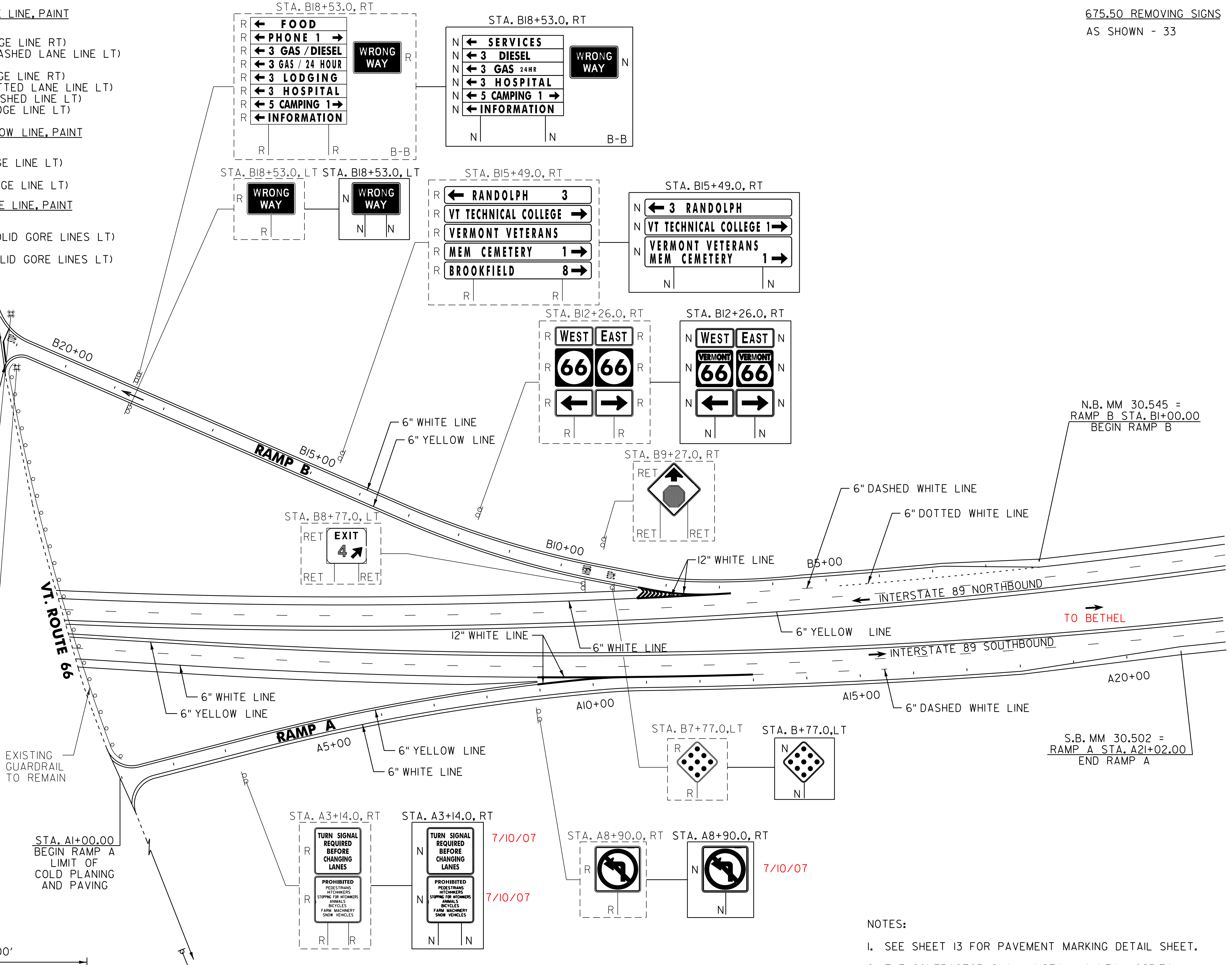
646.692 TEMPORARY LETTER OR SYMBOL, PAINT  
 RAMP B:  
 STA. B9+06.6 CL "STOP" (8 EA)  
 STA. B9+47.2 CL "AHEAD" (10 EA)  
 STA. B18+53.0 CL WRONG WAY ARROW (2 EA)  
 STA. B21+20.0 CL "STOP" (8 EA)



FILE NAME = \$FILES\$  
DATE/TIME = \$DATES\$  
USER = \$USERS\$

RAMP A

SOUTHBOUND RAMP A  
ACCELERATION LANE DETAIL



SIGN LEGEND  
 R = REMOVE  
 S = SALVAGE  
 N = NEW  
 RET = RETAIN  
 B-B = BACK TO BACK  
 EXISTING = \_\_\_\_\_  
 NEW = \_\_\_\_\_

NOT TO SCALE  
**INTERCHANGE #4**  
**DETAIL SHEET #1**

NOTES:  
 1. SEE SHEET 13 FOR PAVEMENT MARKING DETAIL SHEET.  
 2. THE CONTRACTOR SHALL INSTALL A NEW HOSPITAL CONFIRMATION GUIDE SIGN APPROXIMATELY 3 MILES FROM INTERCHANGE #4 AS DIRECTED BY THE RESIDENT ENGINEER.

PROJECT NAME: RANDOLPH - BROOKFIELD  
 PROJECT NUMBER: IM 089-1(22)  
 FILE NAME: p99a200.dgn  
 PROJECT LEADER: D.E.G.  
 DESIGNED BY: D.W.E.  
 IPARM FILE: p06A048int1.i  
 PLOT DATE: \$DATE\$  
 DRAWN BY: C.A.K.  
 CHECKED BY: D.W.E.  
 SHEET 35 OF 61

S.B. MM 30.502 =  
RAMP A STA. A21+02.00  
END RAMP A

N.B. MM 30.545 =  
RAMP B STA. B1+00.00  
BEGIN RAMP B

646.426 DURABLE 6 INCH WHITE LINE, RECESSED  
 RAMP C:  
 STA. C1+00.0 - STA. C16+86.0 (EDGE LINE RT)  
 STA. C1+00.0 - STA. C4+40.0 (DOTTED LANE LINE LT)  
 STA. C4+40.0 - STA. C6+00.0 (DASHED LANE LINE LT)  
 STA. C6+83.0 - STA. C16+86.0 (EDGE LINE LT)  
 RAMP D:  
 STA. D1+00.0 - STA. D26+84.0 (EDGE LINE RT)  
 STA. D17+84.0 - STA. D20+84.0 (DASHED LANE LINE LT)

646.436 DURABLE 6 INCH YELLOW LINE, RECESSED  
 RAMP C:  
 STA. C7+50.0 - STA. C16+83.0 (EDGE LINE LT)  
 RAMP D:  
 STA. D1+00.0 - STA. D14+34.0 (EDGE LINE LT)

646.466 DURABLE 12 INCH WHITE LINE, RECESSED  
 RAMP C:  
 STA. C6+00.0 - STA. C7+50.0 (SOLID GORE LINES LT)  
 STA. C6+50.0 - STA. C7+50.0 (GORE HATCHING LT)  
 RAMP D:  
 STA. D14+34.0 - STA. D17+84.0 (SOLID GORE LINES LT)

646.482 DURABLE 24 INCH STOP BAR, THERMOPLASTIC  
 RAMP C:  
 STA. C16+83.0 LT/RT

646.492 DURABLE LETTER OR SYMBOL, THERMOPLASTIC  
 RAMP C:  
 STA. C8+64.8 CL "STOP" (4 EA)  
 STA. C9+52.2 CL "AHEAD" (5 EA)  
 STA. C14+00.0 CL WRONG WAY ARROW (1 EA)  
 STA. C16+73.7 CL "STOP" (4 EA)

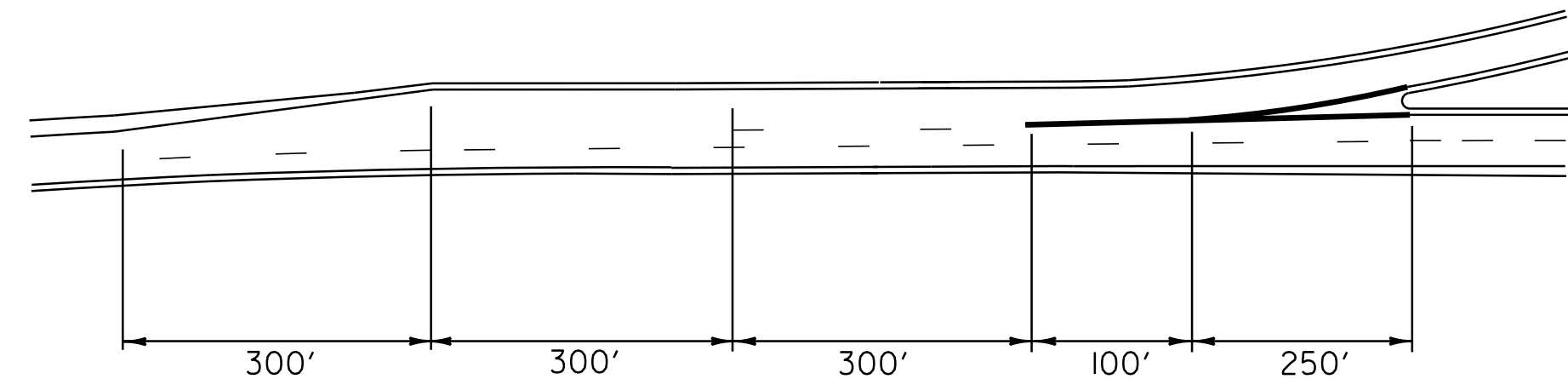
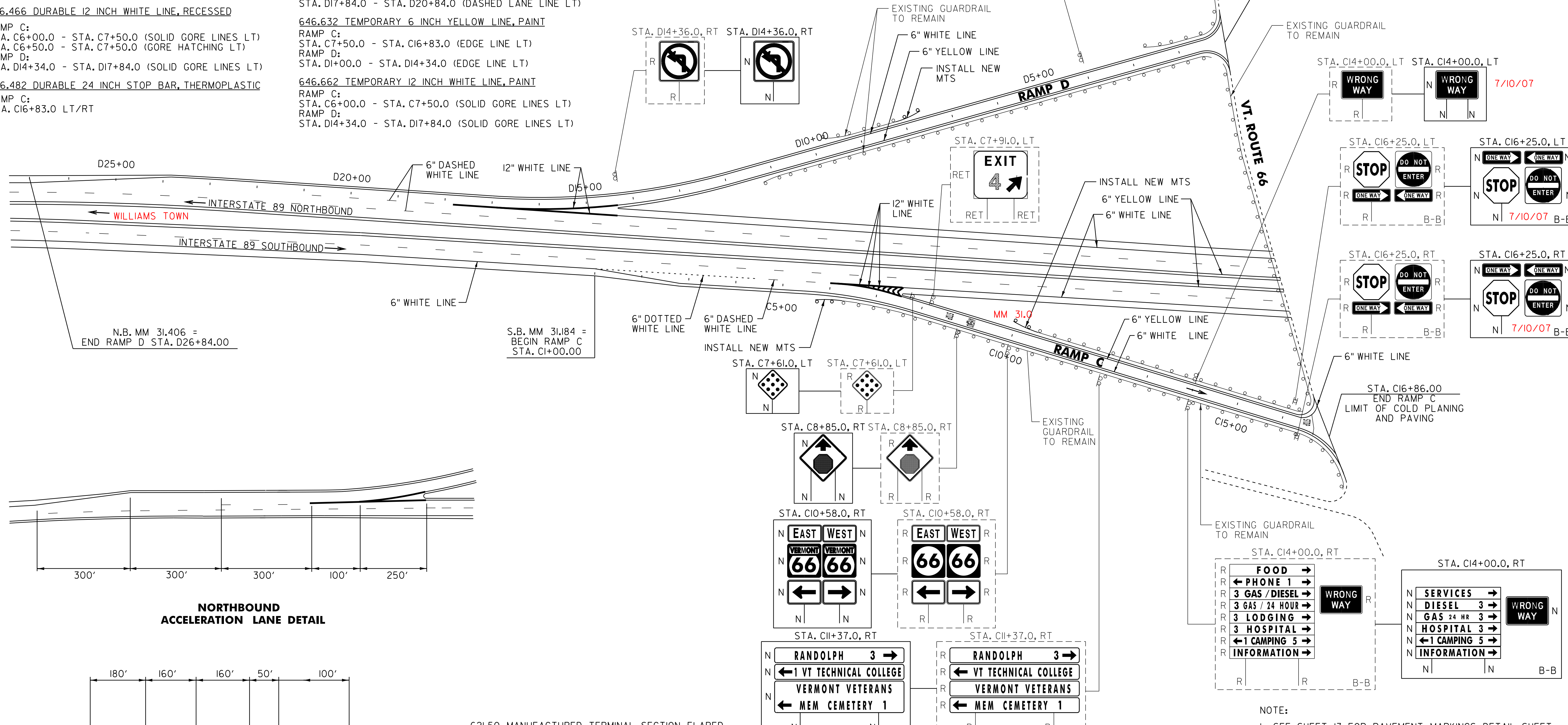
646.622 TEMPORARY 6 INCH WHITE LINE, PAINT  
 RAMP C:  
 STA. C1+00.0 - STA. C16+86.0 (EDGE LINE RT)  
 STA. C1+00.0 - STA. C4+40.0 (DOTTED LANE LINE LT)  
 STA. C4+40.0 - STA. C6+00.0 (DASHED LANE LINE LT)  
 STA. C6+83.0 - STA. C16+86.0 (EDGE LINE LT)  
 RAMP D:  
 STA. D1+00.0 - STA. D26+84.0 (EDGE LINE RT)  
 STA. D17+84.0 - STA. D20+84.0 (DASHED LANE LINE LT)

646.632 TEMPORARY 6 INCH YELLOW LINE, PAINT  
 RAMP C:  
 STA. C7+50.0 - STA. C16+83.0 (EDGE LINE LT)  
 RAMP D:  
 STA. D1+00.0 - STA. D14+34.0 (EDGE LINE LT)

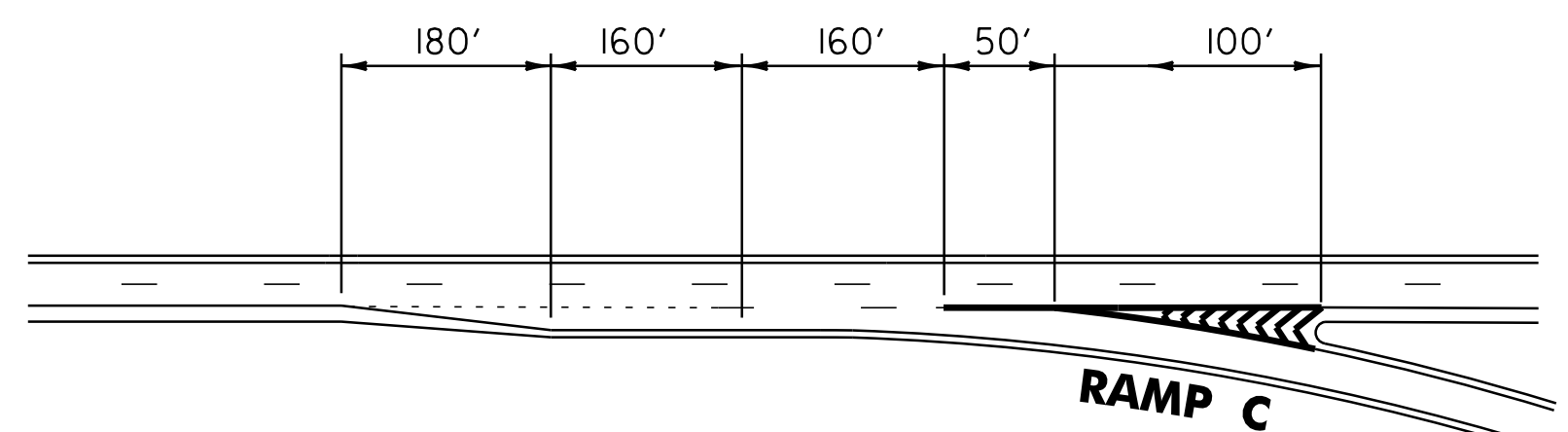
646.662 TEMPORARY 12 INCH WHITE LINE, PAINT  
 RAMP C:  
 STA. C6+00.0 - STA. C7+50.0 (SOLID GORE LINES LT)  
 RAMP D:  
 STA. D14+34.0 - STA. D17+84.0 (SOLID GORE LINES LT)

646.682 TEMPORARY 24 INCH STOP BAR, PAINT  
 RAMP C:  
 STA. C16+83.0 LT/RT  
 646.692 TEMPORARY LETTER OR SYMBOL, PAINT  
 RAMP C:  
 STA. C8+64.8 CL "STOP" (8 EA)  
 STA. C9+52.2 CL "AHEAD" (10 EA)  
 STA. C14+00.0 CL WRONG WAY ARROW (2 EA)  
 STA. C16+73.7 CL "STOP" (8 EA)

675.50 REMOVING SIGNS  
 AS SHOWN - 33



NORTHBOUND ACCELERATION LANE DETAIL



SOUTHBOUND DECELERATION LANE DETAIL

- 621.50 MANUFACTURED TERMINAL SECTION, FLARED  
SEE ITEM DETAIL SUMMARY SHEET
- 621.80 REMOVAL AND DISPOSAL OF GUARDRAIL  
SEE ITEM DETAIL SUMMARY SHEET
- 676.10 DELINEATOR WITH STEEL POST  
SEE ITEM DETAIL SUMMARY SHEET

SIGN LEGEND  
 R = REMOVE  
 S = SALVAGE  
 N = NEW  
 RET = RETAIN  
 B-B = BACK TO BACK  
 EXISTING = - - - - -  
 NEW = \_\_\_\_\_

NOTE:  
 I. SEE SHEET I3 FOR PAVEMENT MARKINGS DETAIL SHEET

NOT TO SCALE

**INTERCHANGE #4  
DETAIL SHEET #2**

PROJECT NAME: RANDOLPH - BROOKFIELD	PLOT DATE: \$DATE\$
PROJECT NUMBER: IM 089-1(22)	DRAWN BY: C.A.K.
FILE NAME: p99a200.dgn	CHECKED BY: D.W.E.
PROJECT LEADER: D.E.G.	SHEET 36 OF 61
DESIGNED BY: D.W.E.	
IPARM FILE: P06A200int.2i	

FILE NAME = \$FILES\$  
DATE/TIME = \$DATES\$  
USER = \$NTUSER\$

646.426 DURABLE 6 INCH WHITE LINE, RECESSED  
NORTHBOUND REST AREA:  
STA. X1+00.0 - STA. X34+78.0 (EDGE LINE RT)  
STA. X1+00.0 - STA. X5+10.0 (DOTTED LANE LINE LT)  
STA. X5+10.0 - STA. X6+20.0 (DASHED LANE LINE LT)  
STA. X9+15.0 - STA. X22+25.0 (EDGE LINE LT)  
STA. X25+18.0 - STA. X28+48.0 (DASHED LANE LINE LT)

646.632 TEMPORARY 6 INCH YELLOW LINE, PAINT  
NORTHBOUND REST AREA:  
STA. X7+60.0 - STA. X23+48.0 (EDGE LINE LT)  
STA. X9+25.0 - STA. X14+64.0 (EDGE LINE LT)  
STA. X17+67.0 - STA. X22+25.0 (EDGE LINE LT)

646.466 DURABLE 12 INCH WHITE LINE, RECESSED  
NORTHBOUND REST AREA:  
STA. X6+20.0 - STA. X7+60.0 (SOLID GORE LINES LT)  
STA. X6+70.0 - STA. X7+60.0 (GORE HATCHING LT)  
STA. X9+00.0 - STA. X9+25.0 (SOLID GORE LINES LT)  
STA. X22+25.0 - STA. X22+50.0 (SOLID GORE LINES LT)  
STA. X23+48.0 - STA. X25+18.0 (SOLID GORE LINE LT)

646.662 TEMPORARY 12 INCH WHITE LINE, PAINT  
NORTHBOUND REST AREA:  
STA. X6+20.0 - STA. X7+60.0 (SOLID GORE LINE LT)  
STA. X9+00.0 - STA. X9+25.0 (SOLID GORE LINES LT)  
STA. X22+25.0 - STA. X22+50.0 (SOLID GORE LINE LT)  
STA. X23+48.0 - STA. X25+18.0 (SOLID GORE LINES LT)

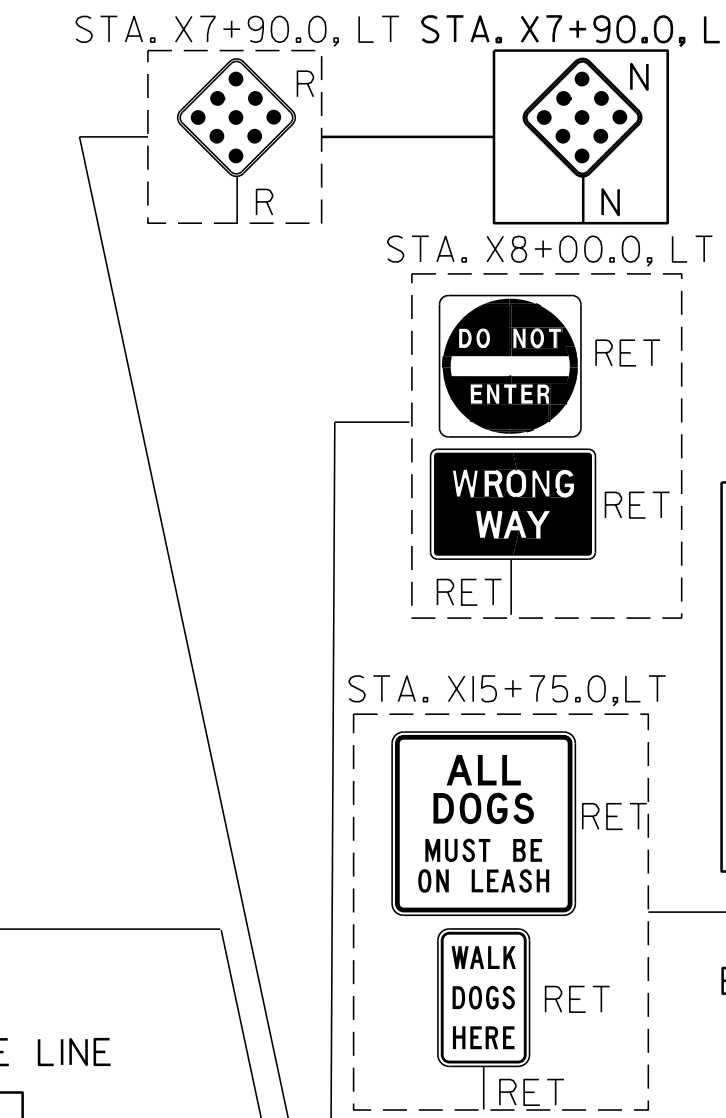
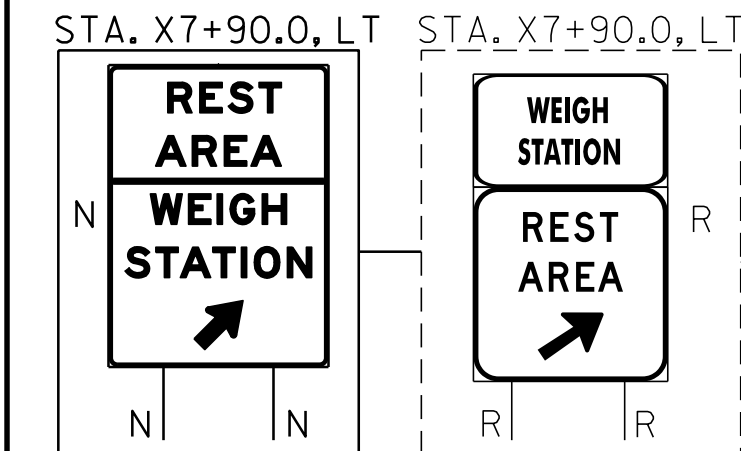
646.692 TEMPORARY LETTER OR SYMBOL, PAINT  
NORTHBOUND REST AREA:  
STA. X8+00.0 CL, WRONG WAY ARROW (2 EA)  
STA. X16+02.0 LT, HANDICAP SYMBOL (4 EA)  
STA. X16+27.0 LT, HANDICAP SYMBOL (4 EA)  
STA. X19+55.0 LT, WRONG WAY ARROW (2 EA)  
STA. X22+43.0 RT/LT, YIELD MARKINGS (10 EA)

675.50 REMOVING SIGNS  
AS SHOWN - 16

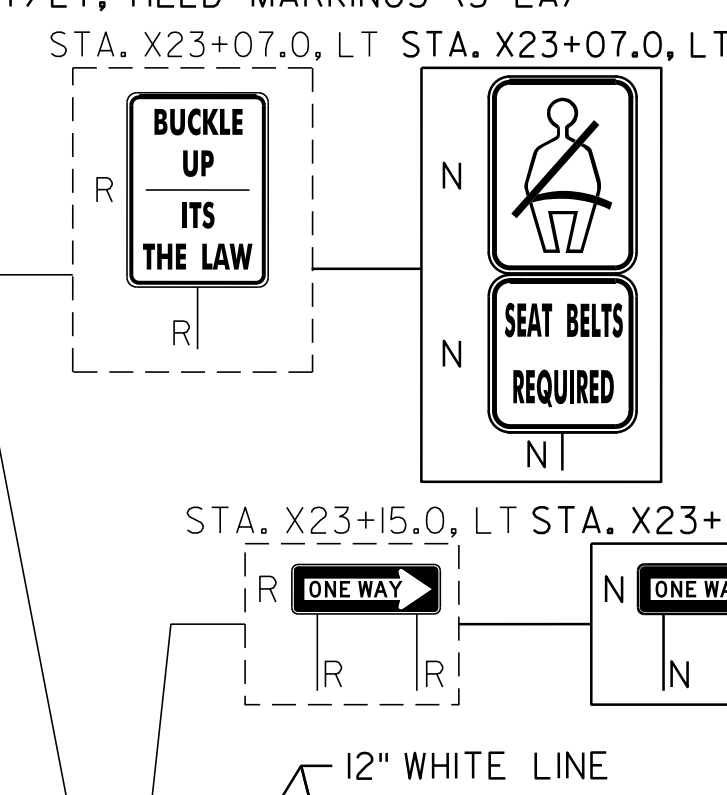
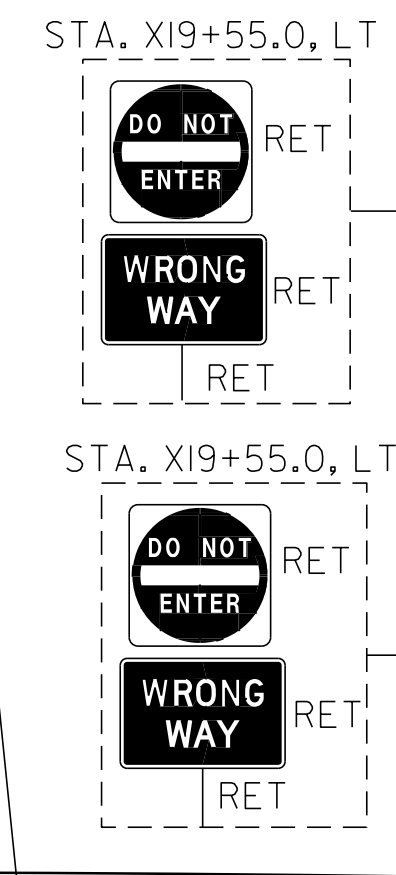
675.60 ERECTING SALVAGED SIGNS  
AS SHOWN - 2

646.622 TEMPORARY 6 INCH WHITE LINE, PAINT  
NORTHBOUND REST AREA:  
STA. X1+00.0 - STA. X34+78.0 (EDGE LINE RT)  
STA. X1+00.0 - STA. X5+10.0 (DOTTED LANE LINE LT)  
STA. X5+10.0 - STA. X6+20.0 (DASHED LANE LINE LT)  
STA. X9+15.0 - STA. X22+25.0 (EDGE LINE LT)  
STA. X25+18.0 - STA. X28+48.0 (DASHED LANE LINE LT)

646.436 DURABLE 6 INCH YELLOW LINE, RECESSED  
NORTHBOUND REST AREA:  
STA. X7+60.0 - STA. X23+48.0 (EDGE LINE LT)  
STA. X9+25.0 - STA. X14+64.0 (EDGE LINE LT)  
STA. X17+67.0 - STA. X22+25.0 (EDGE LINE LT)

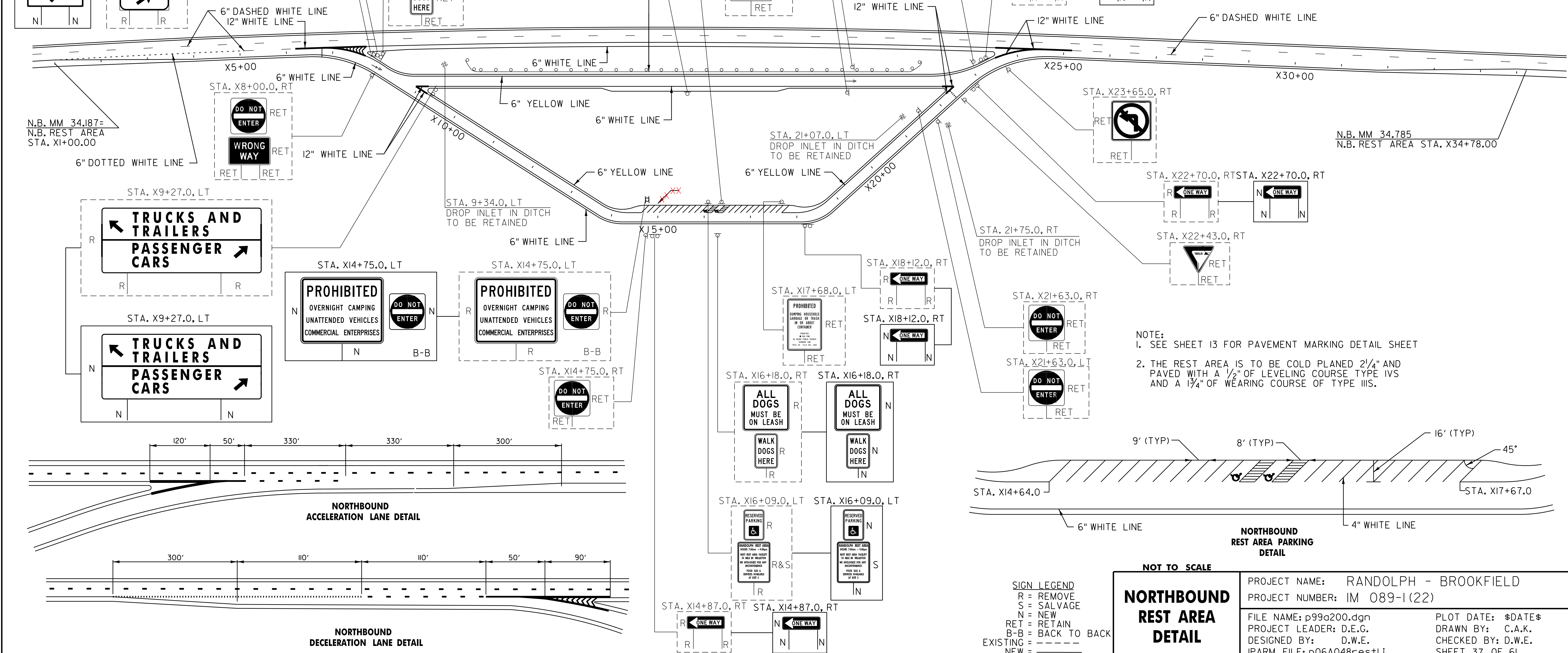


PLEASE NO OPEN CONTAINERS OF ALCOHOLIC BEVERAGES NO SOLICITATION OF ANY KIND  
IN CASE OF EMERGENCY CALL 911 VERMONT REST AREAS ARE REGULARLY PATROLLED BY THE STATE POLICE AND WILL HAVE SIGNS FOR VIOLATION OF THE LAW

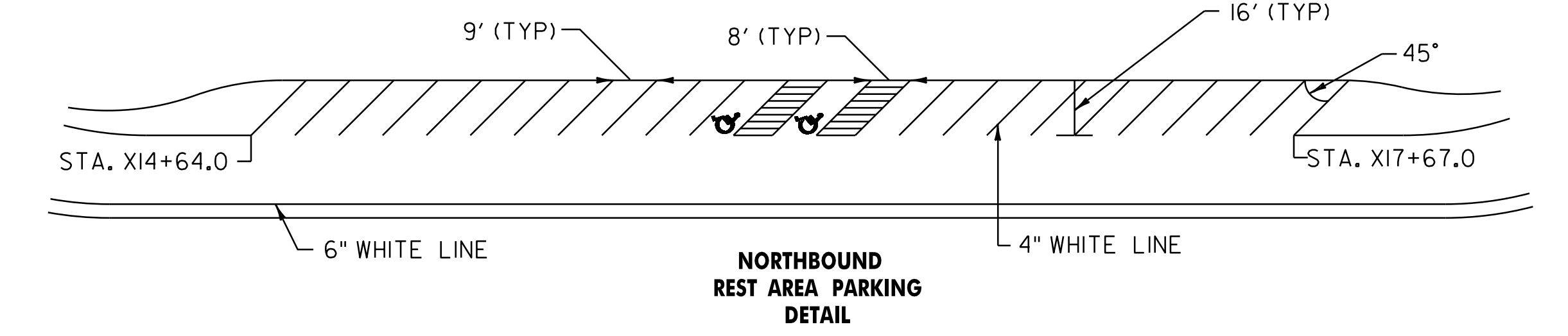
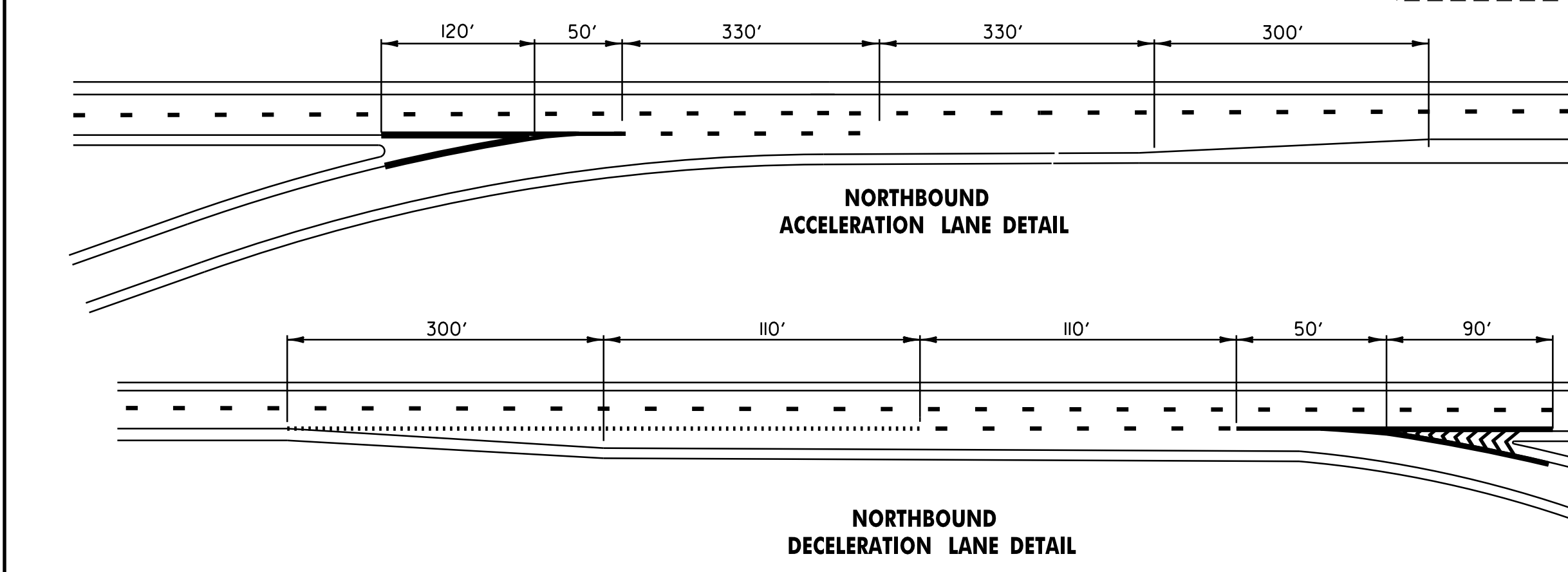


646.402 DURABLE 4 INCH WHITE LINE, THERMOPLASTIC  
NORTHBOUND REST AREA:  
STA. X14+64.0 - STA. X17+67.0 (PARKING SPACES LT)

646.602 TEMPORARY 4 INCH WHITE LINE, PAINT  
NORTHBOUND REST AREA:  
STA. X14+64.0 - STA. X17+67.0 (PARKING SPACES LT)



NOTE:  
1. SEE SHEET 13 FOR PAVEMENT MARKING DETAIL SHEET  
2. THE REST AREA IS TO BE COLD PLANED 2 1/4" AND PAVED WITH A 1/2" OF LEVELING COURSE TYPE IVS AND A 1 3/4" OF WEARING COURSE OF TYPE IIS.



**SIGN LEGEND**  
R = REMOVE  
S = SALVAGE  
N = NEW  
RET = RETAIN  
B-B = BACK TO BACK  
EXISTING = - - - - -  
NEW = \_\_\_\_\_

<b>NORTHBOUND REST AREA DETAIL</b>	NOT TO SCALE	
	PROJECT NAME: RANDOLPH - BROOKFIELD	PROJECT NUMBER: IM 089-1(22)
	FILE NAME: p99a200.dgn PROJECT LEADER: D.E.G. DESIGNED BY: D.W.E. IPARM FILE: p06A048rest1.i	PLOT DATE: \$DATE\$ DRAWN BY: C.A.K. CHECKED BY: D.W.E. SHEET 37 OF 61

FILE NAME = \$FILES\$  
DATE/TIME = \$DATE\$ \$TIME\$  
USER = \$USER\$

**646.426 DURABLE 6 INCH WHITE LINE, RECESSED**  
 SOUTHBOUND REST AREA:  
 STA. Y1+00.0 - STA. Y32+89.0 (EDGE LINE RT)  
 STA. Y1+00.0 - STA. Y4+55.0 (DOTTED LANE LINE LT)  
 STA. Y4+55.0 - STA. Y6+30.0 (DASHED LANE LINE LT)  
 STA. Y9+75.0 - STA. Y16+25.0 (EDGE LINE LT)  
 STA. Y9+90.0 - STA. Y11+49.0 (EDGE LINE RT)  
 STA. Y11+49.0 - STA. Y14+31.0 (PARKING SPACES RT)  
 STA. Y14+31.0 - STA. Y16+25.0 (EDGE LINE RT)  
 STA. Y22+89.0 - STA. Y26+39.0 (DASHED LANE LINE LT)

**646.436 DURABLE 6 INCH YELLOW LINE, RECESSED**  
 SOUTHBOUND REST AREA:  
 STA. Y7+80.0 - STA. Y9+75.0 (EDGE LINE LT)  
 STA. Y9+85.0 - STA. Y16+25.0 (EDGE LINE RT)  
 STA. Y16+25.0 - STA. Y19+69.0 (EDGE LINE LT)

**646.466 DURABLE 12 INCH WHITE LINE, RECESSED**  
 SOUTHBOUND REST AREA:  
 STA. Y6+30.0 - STA. Y7+80.0 (SOLID GORE LINES LT)  
 STA. Y6+80.0 - STA. Y7+80.0 (GORE HATCHING LT)  
 STA. Y9+60.0 - STA. Y9+85.0 (SOLID GORE LINES RT)  
 STA. Y16+25.0 - STA. Y16+50.0 (SOLID GORE LINES RT)  
 STA. Y19+69.0 - STA. Y22+89.0 (SOLID GORE LINES LT)

**646.622 TEMPORARY 6 INCH WHITE LINE, PAINT**  
 SOUTHBOUND REST AREA:  
 STA. Y1+00.0 - STA. Y32+89.0 (EDGE LINE RT)  
 STA. Y1+00.0 - STA. Y4+55.0 (DOTTED LANE LINE LT)  
 STA. Y4+55.0 - STA. Y6+30.0 (DASHED LANE LINE LT)  
 STA. Y9+75.0 - STA. Y16+25.0 (EDGE LINE LT)  
 STA. Y9+90.0 - STA. Y11+49.0 (EDGE LINE RT)  
 STA. Y11+49.0 - STA. Y14+31.0 (PARKING SPACES RT)  
 STA. Y14+31.0 - STA. Y16+25.0 (EDGE LINE RT)  
 STA. Y22+89.0 - STA. Y26+39.0 (DASHED LANE LINE LT)

**646.632 TEMPORARY 6 INCH YELLOW LINE, PAINT**  
 SOUTHBOUND REST AREA:  
 STA. Y7+80.0 - STA. Y9+75.0 (EDGE LINE LT)  
 STA. Y9+85.0 - STA. Y16+25.0 (EDGE LINE RT)  
 STA. Y16+25.0 - STA. Y19+69.0 (EDGE LINE LT)

**646.662 TEMPORARY 12 INCH WHITE LINE, PAINT**  
 SOUTHBOUND REST AREA:  
 STA. Y6+30.0 - STA. Y7+80.0 (SOLID GORE LINES LT)  
 STA. Y9+60.0 - STA. Y9+85.0 (SOLID GORE LINES RT)  
 STA. Y16+25.0 - STA. Y16+50.0 (SOLID GORE LINES RT)  
 STA. Y19+69.0 - STA. Y22+89.0 (SOLID GORE LINES LT)

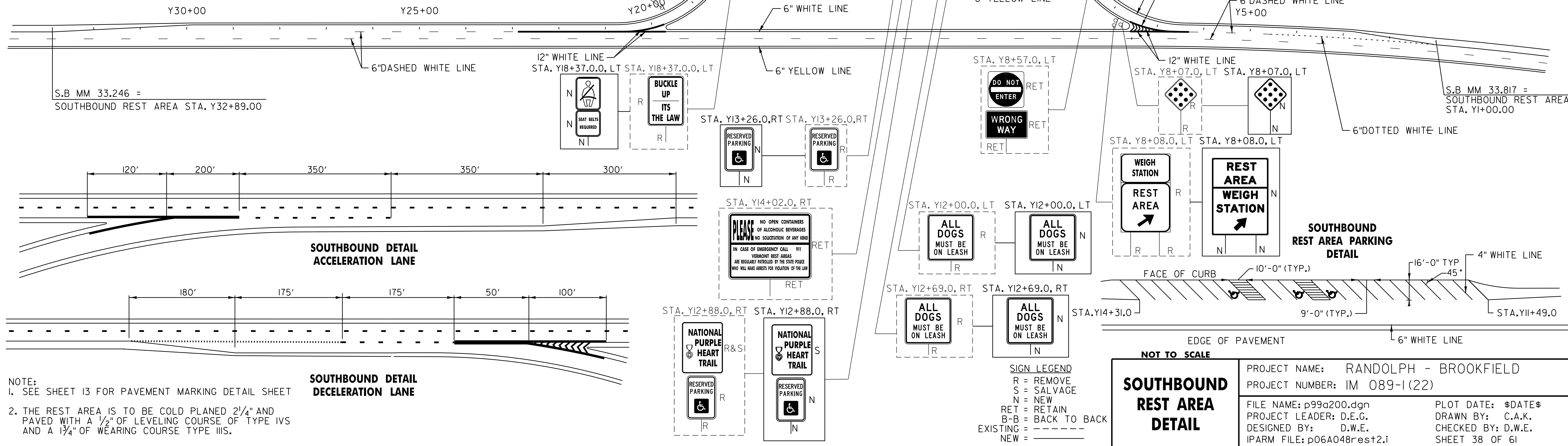
STA. Y14+43.0, RT STA. Y14+43.0, RT  
 STA. Y13+66.0, RT STA. Y13+66.0, RT  
 STA. Y13+82.0, RT  
 STA. Y14+64.0, RT STA. Y14+64.0, RT  
 STA. Y14+00.0, LT STA. Y14+00.0, LT  
 STA. Y12+18.0, RT  
 STA. Y13+66.0, RT STA. Y13+66.0, RT  
 STA. Y10+30.0, RT  
 STA. Y10+05.0, RT

**646.492 DURABLE LETTER OR SYMBOL, THERMOPLASTIC**  
 SOUTHBOUND REST AREA:  
 STA. Y8+57.0 CL WRONG WAY ARROW (1EA)  
 STA. Y12+84.0 RT HANDICAP SYMBOL (2 EA)  
 STA. Y13+23.0 RT HANDICAP SYMBOL (2 EA)  
 STA. Y13+74.0 RT HANDICAP SYMBOL (4 EA)  
 STA. Y15+91.0 CL WRONG WAY ARROW (1EA)  
 STA. Y16+37.0 RT/LT YIELD MARKINGS (5 EA)

**646.692 TEMPORARY LETTER OR SYMBOL, PAINT**  
 SOUTHBOUND REST AREA:  
 STA. Y8+57.0 CL WRONG WAY ARROW (2 EA)  
 STA. Y12+84.0 RT HANDICAP SYMBOL (4 EA)  
 STA. Y13+23.0 RT HANDICAP SYMBOL (4 EA)  
 STA. Y13+74.0 RT HANDICAP SYMBOL (4 EA)  
 STA. Y15+91.0 CL WRONG WAY ARROW (2 EA)  
 STA. Y16+37.0 RT/LT YIELD MARKINGS (10 EA)

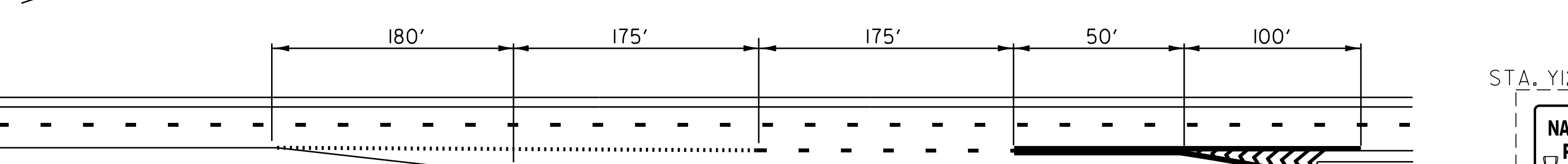
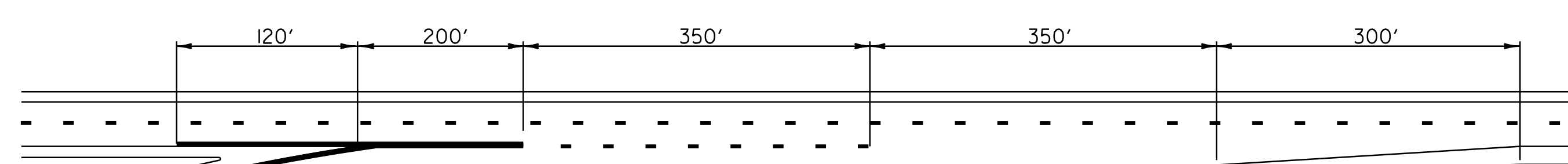
**646.402 DURABLE 4 INCH WHITE LINE, THERMOPLASTIC**  
 SOUTHBOUND REST AREA:  
 STA. Y11+49.0 - STA. Y14+31.0 (PARKING SPACES RT)

**646.602 TEMPORARY 4 INCH WHITE LINE, PAINT**  
 SOUTHBOUND REST AREA:  
 STA. Y11+49.0 - STA. Y14+31.0 (PARKING SPACES RT)



S.B MM 33.246 = SOUTHBOUND REST AREA STA. Y32+89.00

S.B MM 33.817 = SOUTHBOUND REST AREA STA. Y1+00.00



**NOTE:**  
 1. SEE SHEET I3 FOR PAVEMENT MARKING DETAIL SHEET  
 2. THE REST AREA IS TO BE COLD PLANED 2 1/4" AND PAVED WITH A 1/2" OF LEVELING COURSE OF TYPE IVS AND A 1 3/4" OF WEARING COURSE TYPE IIIS.

**SOUTHBOUND DETAIL ACCELERATION LANE**  
  
**SOUTHBOUND DETAIL DECELERATION LANE**

**SIGN LEGEND**  
 R = REMOVE  
 S = SALVAGE  
 N = NEW  
 RET = RETAIN  
 B-B = BACK TO BACK  
 EXISTING = - - - - -  
 NEW = \_\_\_\_\_

<b>SOUTHBOUND REST AREA DETAIL</b>	PROJECT NAME: RANDOLPH - BROOKFIELD	PLOT DATE: \$DATE\$
	PROJECT NUMBER: IM 089-1(22)	DRAWN BY: C.A.K.
	FILE NAME: p99a200.dgn	CHECKED BY: D.W.E.
	DESIGNED BY: D.W.E.	SHEET 38 OF 61
	IPARM FILE: p06A048rest2.1	

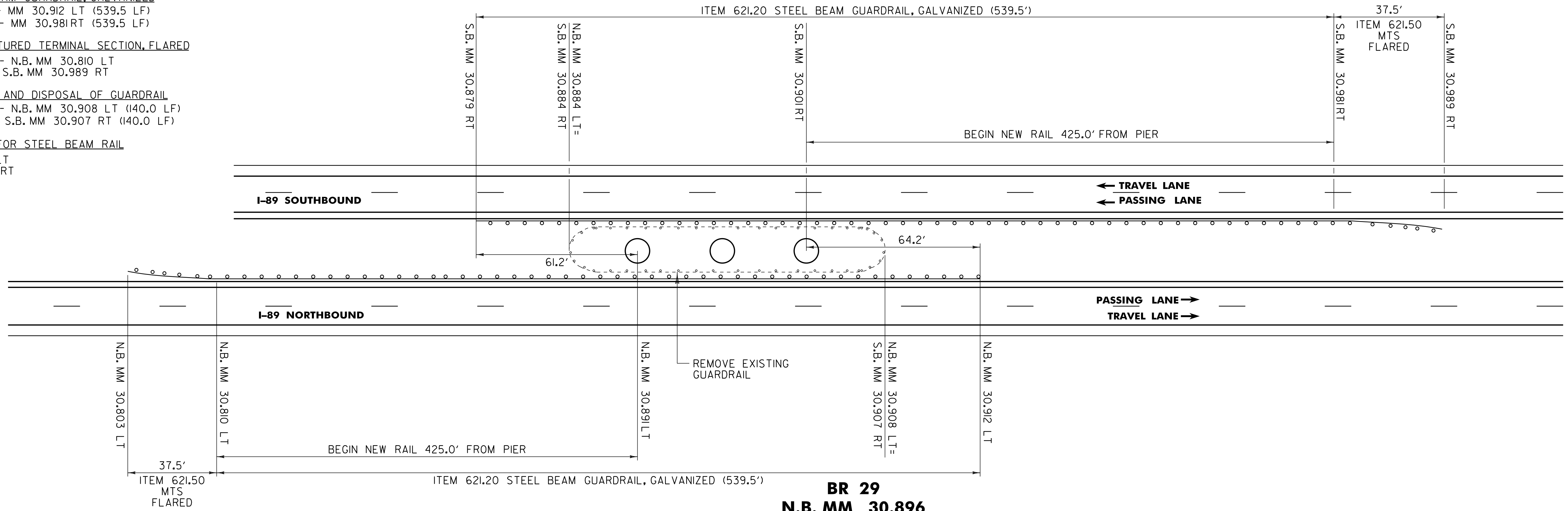
FILE NAME = \$FILES\$  
 DATE/TIME = \$DATES\$  
 USER = \$USERS\$

621.20 STEEL BEAM GUARDRAIL, GALVANIZED  
 N.B. MM 30.810 - MM 30.912 LT (539.5 LF)  
 S.B. MM 30.879 - MM 30.981 RT (539.5 LF)

621.50 MANUFACTURED TERMINAL SECTION, FLARED  
 N.B. MM 30.803 - N.B. MM 30.810 LT  
 S.B. MM 30.981 - S.B. MM 30.989 RT

621.80 REMOVAL AND DISPOSAL OF GUARDRAIL  
 N.B. MM 30.884 - N.B. MM 30.908 LT (140.0 LF)  
 S.B. MM 30.884 - S.B. MM 30.907 RT (140.0 LF)

621.60 ANCHOR FOR STEEL BEAM RAIL  
 N.B. MM 30.910 LT  
 S.B. MM 30.800 RT



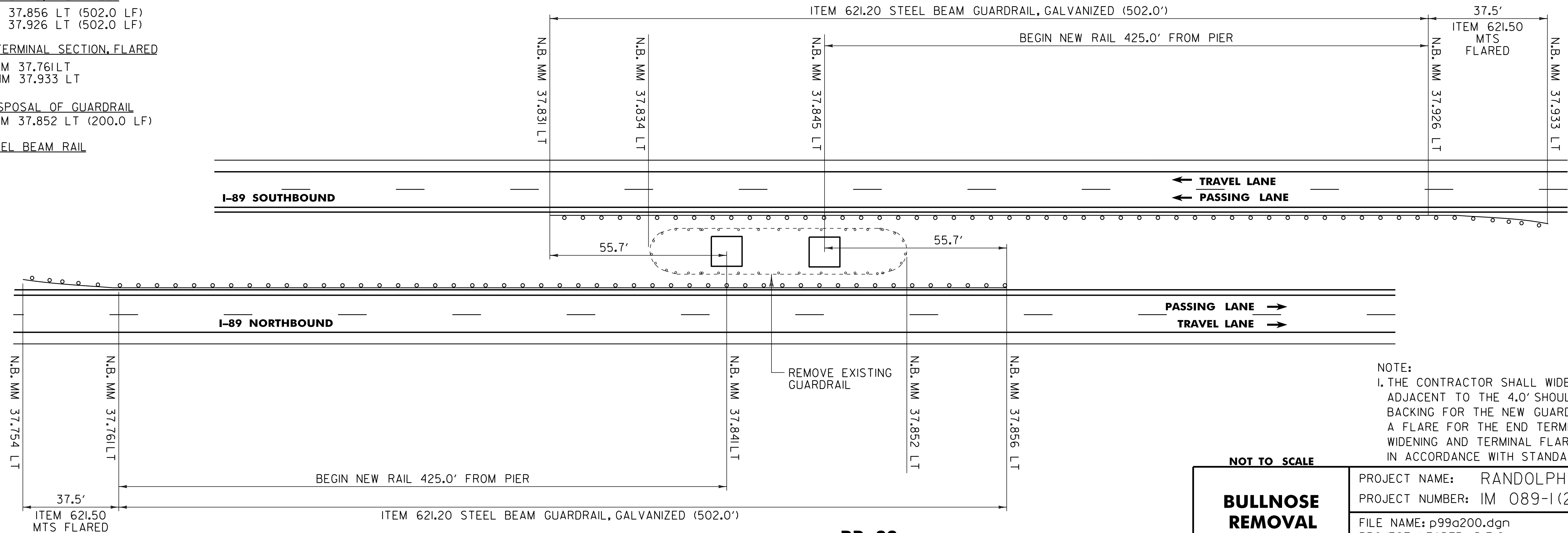
**BR 29**  
**N.B. MM 30.896**  
**S.B. MM 30.896**

621.20 STEEL BEAM GUARDRAIL, GALVANIZED  
 N.B. MM 37.761 - N.B. MM 37.856 LT (502.0 LF)  
 N.B. MM 37.831 - N.B. MM 37.926 LT (502.0 LF)

621.50 MANUFACTURED TERMINAL SECTION, FLARED  
 N.B. MM 37.754 - N.B. MM 37.761 LT  
 N.B. MM 37.926 - N.B. MM 37.933 LT

621.80 REMOVAL AND DISPOSAL OF GUARDRAIL  
 N.B. MM 37.834 - N.B. MM 37.852 LT (200.0 LF)

621.60 ANCHOR FOR STEEL BEAM RAIL  
 N.B. MM 37.831 LT  
 N.B. MM 37.855 LT



**BR 33**  
**N.B. MM 37.843**

NOTE:  
 1. THE CONTRACTOR SHALL WIDEN WITH EARTH BORROW ADJACENT TO THE 4.0' SHOULDER TO PROVIDE BACKING FOR THE NEW GUARDRAIL AND TO CONSTRUCT A FLARE FOR THE END TERMINAL. CONSTRUCTION OF THE WIDENING AND TERMINAL FLARE SHALL BE COMPLETED IN ACCORDANCE WITH STANDARD G-19.

NOT TO SCALE

**BULLNOSE  
 REMOVAL  
 DETAIL**

PROJECT NAME: RANDOLPH - BROOKFIELD  
 PROJECT NUMBER: IM 089-1(22)










FILE NAME: p99a200.dgn  
 PROJECT LEADER: D.E.G.  
 DESIGNED BY: D.W.E.  
 IPARM FILE: p06A048gr1.i

PLOT DATE: \$DATE\$  
 DRAWN BY: C.A.K.  
 CHECKED BY: D.W.E.  
 SHEET 39 OF 61

FILE NAME = \$FILES\$  
 DATE/TIME = \$DATE\$ \$TIME\$  
 USER = \$USER\$



# TRAFFIC SIGN SUMMARY SHEET 2

MILEMARKER, STATION, OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS		NEW & SALVAGED SIGNS				EXIST POST NO. OF POSTS	NEW SIGN POSTS															REMARKS	SIGN DETAIL						
		E A	WIDTH (in)	HEIGHT (in)	"A"	"B"	SALV SIGN		SALV TIS	FLANGED CHANNEL			SQUARE STEEL (in)			TUBULAR ALUMINUM Ø (in)			TUBULAR STEEL Ø (in)				W-SHAPE STEEL			RE FRUIT NE E D	DETAIL ON DWG. NUMBER	STD. SHEET NUMBER			
										lb/ft	1.75	2.0	2.5	ANCHOR S L E F T	3.0	4.0	4.0 MOD	FOUND- ATION	3.0	3.5	4.0	5.0	FTG. SIZE		WEIGHT				POST SIZE		
																														1.2	2.0
OPTION ITEMS																															
NORTHBOUND: 31,500,RT	 9/06/07	I	30	15	3.13				2																				SIGN ID CODE M3-1	E-135	
	 9/06/07	I	36	36	9.00																								SIGN ID CODE MI-1	E-135	
	 9/06/07	I	36	36	9.00																								SIGN ID CODE MI-10	E-135	
31,511,RT	 10/11/07	I	6	8	0.33				1	1-9.0 X		X																	SIGN ID CODE VD-701	E-134	
31,568,RT	 9/06/2007	I	48	48	16.00				2																					7	
	 9/06/2007	I	48	60	20.00				2																					SIGN ID CODE R2-1	E-142
	 9/06/2007	I	48	48	16.00																									SIGN ID CODE VR-141	E-142
31,870,RT	 9/06/2007	I	48	48	16.00				2																					SIGN ID CODE VW-000	11 E-153
	 9/06/2007	I	30	24	5.00																									SIGN ID CODE W7-3a	11 E-152
<b>TOTALS</b>			SF	SF	EA.	SF				FT	FT	FT	EA	LB	LB	LB	EA.	LB	EA.	EA.	LB										
			97.46							14-0 9.0		14.0					8														

FILE NAME = \$FILES\$  
DATE/TIME = \$DATE\$ \$TIME\$  
USER = \$NTUSER\$

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

PROJECT NAME: RANDOLPH - BROOKFIELD  
PROJECT NUMBER: IM 089-1(22)

FILE NAME: p99a200.dgn  
PROJECT LEADER: D.E.G.  
DESIGNED BY: D.W.E.  
IPARM FILE: p06A048sss2.1

PLOT DATE: \$DATE\$  
DRAWN BY: K.A.R.  
CHECKED BY: D.E.G.  
SHEET 41 OF 61

# TRAFFIC SIGN SUMMARY SHEET 3

MILEMARKER, STATION, OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS E A WIDTH (in) HEIGHT (in)		NEW & SALVAGED SIGNS				EXIST POST		NEW SIGN POSTS														REMARKS	SIGN DETAIL					
				"A"	"B"	SALV SIGN	SALV TIS	RETAIN	SALVAGE	NO. OF POSTS	FLANGED CHANNEL			SQUARE STEEL (in)			TUBULAR ALUMINUM (in)			TUBULAR STEEL (in)					W-SHAPE STEEL			DETAIL ON DWG. NUMBER	STD. SHEET NUMBER	
											1.2	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
				lb/ft			lb/ft			lb/ft			lb/ft				24"	30"	FRUIT REEDED											
NORTHBOUND: 32.000,RT 10/11/07		1	12	36	3.00					1																				SIGN ID CODE DIO-2
32.895,LT 10/09/07		1	36	36	9.00					2																			SIGN SHALL BE MOUNTED ON TWO FLANGED CHANNEL SIGN POSTS SIGN ID CODE R3-4	E-143
33.000,RT 10/15/07		1	12	36	3.00					1																			SIGN ID CODE DIO-2	E-139
33.179,RT 10/15/07		1	6	8	0.33					1																			SIGN ID CODE VD-701	E-134
33.420,RT 9/26/07		1	156	72	78.00					2																				8
33.540,RT 9/26/07		1	96	96	64.00					2																				9
33.780,RT 9/26/07		1	114	42	33.25					2																				8
											FT 9.5 (14.0)	FT 21.5	FT 28.0 (28.0)	FT 14.0	FT 28.0	FT	EA	LB	LB	LB	LB 170.39 (85.9)	LB 392.47 (196.2)	LB 338.36 (169.1)	LB						
<b>TOTALS</b>				SF 15.33	SF 175.25	EA.	SF			FT 42.0 (28.0)	FT 31.0	FT 42.0	EA.	LB 6	LB 399.8 (199.9)	LB 901.22	EA.	EA.	LB											

FILE NAME = \$FILES\$  
DATE/TIME = \$DATE\$ \$TIME\$  
USER = \$USER\$

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

PROJECT NAME: RANDOLPH - BROOKFIELD  
PROJECT NUMBER: IM 089-1(22)  
FILE NAME: p99a200.dgn  
PROJECT LEADER: D.E.G.  
DESIGNED BY: D.W.E.  
IPARM FILE: p06A048sss3.i  
PLOT DATE: \$DATE\$  
DRAWN BY: K.A.R.  
CHECKED BY: D.E.G.  
SHEET 42 OF 61

# TRAFFIC SIGN SUMMARY SHEET 4

MILEMARKER, STATION, OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS		NEW & SALVAGED SIGNS				EXIST POST		NEW SIGN POSTS																			SIGN DETAIL						
		EA	WIDTH (in)	HEIGHT (in)	"A"	"B"	SALV SIGN	SALV TIS	RETA IN	SALV AGE	NO. OF POSTS	FLANGED CHANNEL			SQUARE STEEL (in)			TUBULAR ALUMINUM (in)			TUBULAR STEEL (in)				W-SHAPE STEEL			REFRUITED STRAIGHT	REMARKS	DETAIL ON DWG. NUMBER	STD. SHEET NUMBER				
												1.2	2.0	3.0	1.75	2.0	2.5	3.0	4.0	4.0	4.0 MOD	3.0	3.5	4.0	5.0	24"	30"					WEIGHT	POST SIZE		
NORTHBOUND: 34.000,RT		1	12	36	3.00					1			X		X		X																SIGN ID CODE DIO-2	E-139	
34.040,RT		1	174	72		87.00				2																							8		
34.255,RT		1	48	60	20.00					2			X																					SIGN SHALL BE MOUNTED ON TWO FLANGED CHANNEL SIGN POSTS SIGN ID CODE W13-3	E-150
34.30 LT		1	36	12	3.00					2			2-12	X																					
34.438,RT		1	48	48	16.00					2			1-16	X																				SIGN SHALL BE MOUNTED ON TWO FLANGED CHANNEL SIGN POSTS SIGN ID CODE W4-1	E-150
34.581,LT		1	36	12	3.00					2			2-12.5	X																				SIGN SHALL BE MOUNTED ON TWO FLANGED CHANNEL SIGN POSTS SIGN ID CODE R6-12	E-142
34.592,RT		1	36	30	7.50					2			1-14	X																				SIGN SHALL BE MOUNTED ON TWO FLANGED CHANNEL SIGN POSTS	7
35.000,RT		1	12	36	3.00					1			1-10.5	X		X		X																SIGN ID CODE DIO-2	E-139
35.013,LT		1	36	36	9.00					2			1-13	X																				SIGN SHALL BE MOUNTED ON TWO FLANGED CHANNEL SIGN POSTS SIGN ID CODE R3-4	E-143
<b>TOTALS</b>				SF	SF	EA.	SF						FT	FT	FT	EA		EA.	EA.	LB	EA.	EA.	LB												
				61.50	87.00								21.0	28.0	28.0			28.0			202.1														
				64.50									OPT 21.0	NON 28.0	(140.0)	(122.0)			2																






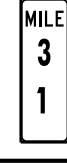

FILE NAME = \$FILES\$  
DATE/TIME = \$DATE\$ \$TIME\$  
USER = \$NTUSER\$

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

PROJECT NAME: RANDOLPH - BROOKFIELD  
PROJECT NUMBER: IM 089-1(22)  
FILE NAME: p99a200.dgn  
PROJECT LEADER: D.E.G.  
DESIGNED BY: D.W.E.  
IPARM FILE: p06A048sss4.i  
PLOT DATE: \$DATE\$  
DRAWN BY: K.A.R.  
CHECKED BY: D.E.G.  
SHEET 43 OF 61



# TRAFFIC SIGN SUMMARY SHEET 6

MILEMARKER, STATION, OR SIGN NUMBER	SIGN LEGEND  REMOVAL	SIGN DIMENSIONS		NEW & SALVAGED SIGNS				EXIST POST RETAIN SALVAGE	NO. OF POSTS	NEW SIGN POSTS																	REMARKS	SIGN DETAIL	
		EA	WIDTH (in)	HEIGHT (in)	"A"	"B"	SALV SIGN			SALV TIS	FLANGED CHANNEL			SQUARE STEEL (in)			TUBULAR ALUMINUM (in)			TUBULAR STEEL (in)				W-SHAPE STEEL		DETAIL ON DWG. NUMBER		STD. SHEET NUMBER	
											lb/ft	lb/ft	lb/ft	1.75	2.0	2.5	3.0	4.0	4.0 MOD	FOUND-ACTION	3.0	3.5	4.0	5.0	FTG. SIZE				WEIGHT
NORTHBOUND: 37.367,RT		1	6	8	0.33				1	X																SIGN ID CODE VD-701	E-134		
37.605,LT		1	36	36	9.00				2			I-15 X I-14														SIGN SHALL BE MOUNTED ON TWO FLANGED CHANNEL SIGN POSTS SIGN ID CODE R3-4	E-143		
SOUTHBOUND: 30.719,RT		1	36	12	3.00				2			I-12 X I-12														SIGN SHALL BE MOUNTED ON TWO FLANGED CHANNEL SIGN POSTS SIGN ID CODE R6-12	E-142		
30.844,LT		1	48	48	16.00				2			I-16 X I-15.5														SIGN SHALL BE MOUNTED ON TWO FLANGED CHANNEL SIGN POSTS SIGN ID CODE W4-1	E-150		
30.873,LT		1	6	8	0.33				1	X		7/18/07 I-8	X			X										SIGN ID CODE VD-701	E-134		
31.000,LT		1	12	36	3.00				1			I-10 X		X												SIGN ID CODE D10-2	E-139		
31.100,LT		1	6	8	0.33				1	X		8-0 7/18/07	X			X										SIGN ID CODE VD-701	E-134		
<p>FINAL POST LENGTHS ARE TO BE DETERMINED IN THE FIELD. POST SIZES ARE COMPUTED BASED ON INFORMATION FURNISHED ON THE STANDARD SHEETS AND THE TRAFFIC OPERATIONS SECTION "SIGN POST DESIGN GUIDELINE."</p>										FT	FT	FT	FT	FT	EA	LB	LB	LB	LB	LB	EA.	LB	EA.	EA.	LB				
										42.0 9.0	27.0 (84.5)	14.0 (84.0)	42.0	14.0															
<b>TOTALS</b>										SF	SF	EA.	SF			FT	FT	EA.	LB	EA.	EA.	LB							
										31.99						56.0 OPT NON (84.0) (84.5)	56.0												

FILE NAME = \$FILES\$  
DATE/TIME = \$DATE\$  
USER = \$NTUSER\$

PROJECT NAME: RANDOLPH - BROOKFIELD  
PROJECT NUMBER: IM 089-1(22)

FILE NAME: p99a200.dgn  
PROJECT LEADER: D.E.G.  
DESIGNED BY: D.W.E.  
IPARM FILE: p06A048sss6.i

PLOT DATE: \$DATE\$  
DRAWN BY: K.A.R.  
CHECKED BY: D.E.G.  
SHEET 45 OF 61

# TRAFFIC SIGN SUMMARY SHEET 7

MILEMARKER, STATION, OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS		NEW & SALVAGED SIGNS				EXIST POST RETAIN	NO. OF POSTS	NEW SIGN POSTS																REMARKS	SIGN DETAIL		
				"A"	"B"	SALV SIGN	SALV TIS			FLANGED CHANNEL			SQUARE STEEL (in)			TUBULAR ALUMINUM Ø (in)			TUBULAR STEEL Ø (in)				W-SHAPE STEEL		DETAIL ON DWG. NUMBER		STD. SHEET NUMBER		
		EA	WIDTH (in)							HEIGHT (in)	lb/ft	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					
						1.12	2.0			3.0	1.88	2.16	3.35	1.3	1.7	1.7	7.6	9.0	10.8	14.6	24"	30"							
SOUTHBOUND: 31.200,LT 10/24/07		7 +2	36	36	9.00																							SIGN ID CODE MI-5 SEE SHEET 10 FOR OVERLAY SIGN PANEL INSTALLATION DETAILS	E-136B
31.330 LT	SERVICE SIGN					144.00																						PAID UNDER BETHEL-RANDOLPH 14 089-1(52)	
31.433,LT 10/02/07			6	8	0.33				1	X	8-0 7/18/07	X																SIGN ID CODE VD-701	E-134
31.450,LT 10/24/07		2	36	36	9.00																							SIGN ID CODE MI-5 SEE SHEET 10 FOR OVERLAY SIGN PANEL INSTALLATION DETAILS	E-136B
31.498,RT 9/20/07			36	36	9.00				2		1-14.42 9/20/07 X 1-13.92																	SIGN SHALL BE MOUNTED ON TWO FLANGED CHANNEL SIGN POSTS SIGN ID CODE R3-4	E-143
31.513,LT 10/02/07			6	8	0.33				1	X	8-0 7/18/07	X																SIGN ID CODE VD-701	E-134
31.950,LT 10/24/07		2	36	36	9.00																							SIGN ID CODE MI-5 SEE SHEET 10 FOR OVERLAY SIGN PANEL INSTALLATION DETAILS	E-136B
32.000,LT 7/10/07			12	36	3.00				1		12-0 X	X																SIGN ID CODE D10-2	E-139
32.885,RT 9/20/07			36	36	9.00				2		1-14.50 X 1-14.67																	SIGN SHALL BE MOUNTED ON TWO FLANGED CHANNEL SIGN POSTS SIGN ID CODE R3-4	E-143
				TOTALS		SF	SF	EA.	SF		FT	FT	FT	EA	LB	LB	LB	EA.	LB	EA.	EA.	LB							
				75.66		144.00					28.0	28.0	14.0		28.0	14.0				2		1088.43							

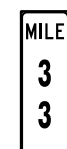


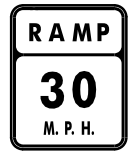

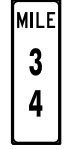


FILE NAME = \$FILES\$  
DATE/TIME = \$DATE\$ \$TIME\$  
USER = \$NTUSER\$

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

PROJECT NAME: RANDOLPH - BROOKFIELD  
PROJECT NUMBER: IM 089-1(22)  
FILE NAME: p99a200.dgn  
PROJECT LEADER: D.E.G.  
DESIGNED BY: D.W.E.  
IPARM FILE: p06A048sss7.i  
PLOT DATE: \$DATE\$  
DRAWN BY: K.A.R.  
CHECKED BY: D.E.G.  
SHEET 46 OF 61

TO (52) TOTALS SHEET 27 OF 61

# TRAFFIC SIGN SUMMARY SHEET 8

MILEMARKER, STATION, OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS		NEW & SALVAGED SIGNS				EXIST POST RETAIN SALVAGE	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 Ø (in)			TUBULAR STEEL Ø (in)				W-SHAPE STEEL			RE FRUIT STRAI GHTEN ED	DETAIL ON DWG. NUMBER	STD. SHEET NUMBER										
											lb/ft	lb/ft	lb/ft	1.75	2.0	2.5	3.0	4.0	4.0 MOD	FOUND- ATION	3.0	3.5	4.0	5.0	FTG. SIZE					WEIGHT	POST SIZE								
SOUTHBOUND: 33.000,LT	 7/10/07	1	12	36	3.00				1			11-0 X		X	X														SIGN ID CODE D10-2	E-139									
33.204,LT	 10/02/07	1	6	8	0.33				1	X		8-0 7/18/07	X		X													SIGN ID CODE VD-701	E-134										
33.481,RT	 9/20/07	1	36	12	3.00				2			1-12.0 9/20/07 X 1-12.0																SIGN SHALL BE MOUNTED ON TWO FLANGED CHANNEL SIGN POSTS SIGN ID CODE R6-12	E-142										
33.755,LT	 9/05/07	1	48	60	20.00				2			-X																SIGN SHALL BE MOUNTED ON TWO FLANGED CHANNEL SIGN POSTS SIGN ID CODE W13-3	E-150										
33.940,LT	 9/26/07	1	174	72		87.00			2																					8									
34.000,LT	 7/10/07	1	12	36	3.00				1			11-0 X	X	X														SIGN ID CODE D10-2	E-139										
34.190,LT	 9/26/07	1	114	42		33.25			2																					8									
34.440,LT	 9/25/07	1	96	96		64.00			2																					9									
										FT	FT	FT	FT	FT	EA	LB	LB	LB	LB	LB	EA.	EA.	LB																
										14.0	30.0 (24.0)	28.0 (56.0)	14.0	28.0							103.0 427.5	210.1 367.2	286.2	542.68															
										OPT NON	42.0 (56.0)	30.0 (24.0)	42.0		8 8				599.3 1337.38																				
FINAL POST LENGTHS ARE TO BE DETERMINED IN THE FIELD. POST SIZES ARE COMPUTED BASED ON INFORMATION FURNISHED ON THE STANDARD SHEETS AND THE TRAFFIC OPERATIONS SECTION "SIGN POST DESIGN GUIDELINE."										<b>TOTALS</b>	SF 29.33	SF 184.25	EA. EA.	SF EA.																									

FILE NAME = \$FILES\$  
DATE/TIME = \$DATE\$ \$TIME\$  
USER = \$NTUSER\$

PROJECT NAME: RANDOLPH - BROOKFIELD	
PROJECT NUMBER: IM 089-1(22)	
FILE NAME: p99a200.dgn	PLOT DATE: \$DATE\$
PROJECT LEADER: D.E.G.	DRAWN BY: K.A.R.
DESIGNED BY: D.W.E.	CHECKED BY: D.E.G.
IPARM FILE: p06A048sss8.i	SHEET 47 OF 61

# TRAFFIC SIGN SUMMARY SHEET 9

MILEMARKER, STATION, OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS		NEW & SALVAGED SIGNS				EXIST POST RETAIN SALVAGE		NEW SIGN POSTS															REMARKS	SIGN DETAIL									
		E A	WIDTH (in)	HEIGHT (in)	"A"	"B"	SALV SIGN	SALV TIS	NO. OF POSTS	FLANGED CHANNEL			SQUARE STEEL (in)			TUBULAR ALUMINUM Ø (in)			TUBULAR STEEL Ø (in)				W-SHAPE STEEL			RE FRUIT STRAI GHTEN ED	DETAIL ON DWG. NUMBER	STD. SHEET NUMBER							
										lb/ft			1.75	2.0	2.5	3.0	4.0	4.0 MOD	FOUND- ATION	3.0	3.5	4.0	5.0	FTG. SIZE					WEIGHT	POST SIZE					
										1.12	2.0	3.0	1.88	2.16	3.35	1.3	1.7	1.7		lb/ft				24"							30"				
SOUTHBOUND: 34.663,LT		1	36	30	7.50				1			12-0 X 7/18/07		X		X																7			
34.663,LT		1	6	8	0.33				1	X		8-0 7/18/07	X			X																SIGN ID CODE VD-701	E-134		
34.830,LT		1	156	72		78.00			2																							8			
35.000,LT		1	12	36	3.00				1			11-0 X	X		X																		SIGN ID CODE D10-2	E-139	
35.070,RT		1	36	36	<del>9.00</del>	KEEP EXISTING			2			*																					SIGN SHALL BE MOUNTED ON TWO FLANGED CHANNEL SIGN POSTS SIGN ID CODE R3-4	E-143	
35.105,RT		1	36	36	9.00	KEEP EXISTING			2			*																					SIGN SHALL BE MOUNTED ON TWO FLANGED CHANNEL SIGN POSTS SIGN ID CODE R3-4	E-143	
35.500,LT		1	48	48	16.00				2																									SIGN ID CODE VW-000	11
		1	30	24	5.00																													SIGN ID CODE W7-3a	11
35.814,LT		1	6	8	0.33				1	X		8-0 7/18/07	X			X																		SIGN ID CODE VD-701	E-134
				<b>TOTALS</b>		SF	SF	EA.	SF		FT	FT	FT	FT	FT	EA.	LB	LB	LB	EA.	EA.	LB													
						50.6 32.16	78.00				OPT	56.0	39.0 (56.0)		56.0		4						536.0 806.31												

FILE NAME = \$FILES\$  
DATE/TIME = \$DATE\$ \$TIME\$  
USER = \$USER\$

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

PROJECT NAME: RANDOLPH - BROOKFIELD  
PROJECT NUMBER: IM 089-1(22)  
FILE NAME: p99a200.dgn  
PROJECT LEADER: D.E.G.  
DESIGNED BY: D.W.E.  
IPARM FILE: p06A048sss9.1  
PLOT DATE: \$DATE\$  
DRAWN BY: K.A.R.  
CHECKED BY: D.E.G.  
SHEET 48 OF 61



# TRAFFIC SIGN SUMMARY SHEET 11

MILEMARKER, STATION, OR SIGN NUMBER	SIGN LEGEND  REMOVAL	SIGN DIMENSIONS		NEW & SALVAGED SIGNS				EXIST POST RETAINED	SALVAGED	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 Ø (in)			TUBULAR STEEL Ø (in)				W-SHAPE STEEL			FRUIT REEDED	DETAIL ON DWG. NUMBER	STD. SHEET NUMBER					
												lb/ft	1.2	2.0	3.0	1.75	2.0	2.5	ANCHOR	SLEEVE	3.0	4.0	4.0 MOD	FOUND-A-TION	3.0	3.5					4.0	5.0	FTG. SIZE	WEIGHT	POST SIZE
RAMP A: A3+14.0,RT  7/10/07		1	36	36	9.00					2			17-0 X 16-0															SIGN SHALL BE MOUNTED ON TWO FLANGED CHANNEL SIGN POSTS SIGN ID CODE VR-002		E-142					
		1	36	36	9.00																							SIGN ID CODE VR-046		E-142					
A8+90.0,RT  7/10/07		1	30	30	6.25					1		14-0 X	X		X													SIGN ID CODE R3-2		E-143					
		1	24	24	4.00					1		1-14 X	X		X													THE CONTRACTOR SHALL INSTALL A NEW HOSPITAL CONFIRMATION GUIDE SIGN APPROX. 3 MILES FROM INTERCHANGE #4 AS DIRECTED BY THE RESIDENT ENGINEER. SIGN ID CODE D9-2		E-132					
		1	21	15	2.19																							SIGN ID CODE M6-3		E-135					
RAMP B: B8+77.0,LT  10/11/07		1	18	18	2.25					1	X 1-9		X		X													SIGN ID CODE OMI-1		E-150					
B12+26.0,RT  9/04/07		1	30	15	3.13					2																		SIGN ID CODE M3-4		E-136B					
		1	30	15	3.13																							SIGN ID CODE M3-3		E-136B					
		1	36	36	9.00																							SIGN ID CODE MI-5		E-136B					
		1	36	36	9.00																							SIGN ID CODE MI-5		E-136B					
		1	21	15	2.19																							SIGN ID CODE M6-1		E-136B					
		1	21	15	2.19																							SIGN ID CODE M6-1		E-136B					
B15+49.0,RT  9/04/07		1	72	12	6.00					2																		SIGN ID CODE DI-1		E-123					
		1	72	12	6.00																								SIGN ID CODE DI-1		E-123				
		1	72	20	10.00																								SIGN ID CODE DI-2		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 TRAFFIC OPERATIONS SECTION "SIGN POST DESIGN GUIDELINE."											FT	FT	FT	FT	FT	FT	EA	LB	LB	LB	LB	LB	LB	LB	EA	EA	LB								
											14.0	9.0	(33.0)	28.0	(28.0)	14.0	28.0																		
											FT	FT	FT	FT	FT	EA	LB	LB	LB	LB	EA	EA	LB												
											OPT	42.0	37.0								EA		LB												
											NON	(28.0)	(33.0)								4		378.3	411.01											

FILE NAME = \$FILES\$  
DATE/TIME = \$DATE\$ \$TIME\$  
USER = \$NTUSER\$

PROJECT NAME: RANDOLPH - BROOKFIELD  
PROJECT NUMBER: IM 089-1(22)  
FILE NAME: p99a200.dgn  
PROJECT LEADER: D.E.G.  
DESIGNED BY: D.W.E.  
IPARM FILE: p06A048sss11.i  
PLOT DATE: \$DATE\$  
DRAWN BY: K.A.R.  
CHECKED BY: D.E.G.  
SHEET 50 OF 61

# TRAFFIC SIGN SUMMARY SHEET 12

MILEMARKER, STATION, OR SIGN NUMBER	SIGN LEGEND  REMOVAL	SIGN DIMENSIONS		NEW & SALVAGED SIGNS				EXIST POST RETAIN SALVAGE	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 Ø (in)			TUBULAR STEEL Ø (in)				W-SHAPE STEEL			DETAIL ON DWG. NUMBER	STD. SHEET NUMBER			
											lb/ft	lb/ft	lb/ft	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		
RAMP B: B18+53.0,LT 10/11/07		I	36	24	6.00				2																SIGN SHALL BE MOUNTED ON TWO FLANGED CHANNEL SIGN POSTS SIGN ID CODE R5-IA		E-143				
B18+53.0,RT 9/04/07	 	I	72	10	5.00				2																		II				
9/04/07	 	I	72	10	5.00																						II				
9/04/07	 	I	72	10	5.00																						II				
		I	36	24	6.00																							E-143			
B21+12.0,LT 10/11/07	 	I	36	12	3.00				I			X			X													E-142			
	 	I	30	30	6.25																							E-143			
B21+12.0,RT 10/11/07	 	I	36	12	3.00				I			X			X													E-142			
	 	I	30	30	6.25																							E-143			
RAMP C: C7+61.0,LT 7/06/07		I	18	18	2.25				I			10-0			X													E-150			
FINAL POST LENGTHS ARE TO BE DETERMINED IN THE FIELD. POST SIZES ARE COMPUTED BASED ON INFORMATION FURNISHED ON THE STANDARD SHEETS AND THE TRAFFIC OPERATIONS SECTION "SIGN POST DESIGN GUIDELINE."										FT	FT	FT	FT	FT	FT	EA	LB	LB	LB	LB	LB	EA.	EA.	EA.	EA.	EA.	EA.				
										10.0	26.0	28.0	14.0	28.0					99.0												
										14.0	(27.0)	(28.0)						203.91													
<b>TOTALS</b>										SF	SF	EA.	SF	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.				
										81.25																					
										FT	FT	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.				
											42.0	36.0																			
										(28.0)	(27.0)																				

PROJECT NAME: RANDOLPH - BROOKFIELD	PLOT DATE: \$DATE\$
PROJECT NUMBER: IM 089-1(22)	DRAWN BY: K.A.R.
FILE NAME: p99a200.dgn	CHECKED BY: D.E.G.
DESIGNED BY: D.W.E.	SHEET 51 OF 61
IPARM FILE: p06A048sssl2.1	

FILE NAME = \$FILES\$  
DATE/TIME = \$DATE\$ \$TIME\$  
USER = \$USER\$





# TRAFFIC SIGN SUMMARY SHEET 15

MILEMARKER, STATION, OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS		NEW & SALVAGED SIGNS				EXIST POST RETAIN	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 Ø (in)			TUBULAR STEEL Ø (in)					W-SHAPE STEEL			REQUIRE STRAIGHTENED	DETAIL ON DWG. NUMBER	STD. SHEET NUMBER		
												lb/ft	1.2	2.0	3.0	1.75	2.0	2.5	3.0	4.0	4.0 MOD	FOUND-ATION	3.0	3.5		4.0	5.0	FTG. SIZE				WEIGHT	POST SIZE
NORTHBOUND REST AREA: X9+27.0, LT				198	108		148.50		2																			8					
X14+75.0, LT	 			30	24	5.00			1			I-13 X		X		X													BACK-TO-BACK SIGN ID CODE VR-032 SIGN ID CODE R5-1	E-144 E-143			
X14+87.0, RT				36	12	3.00			2			9/24/07 I-12.0 X I-12.0																	SIGN SHALL BE MOUNTED ON TWO FLANGED CHANNEL SIGN POSTS SIGN ID CODE R6-IL	E-142			
X16+09.0, LT	 			12	18	1.50			1			USED EXISTING SQUARE STEEL POST (SIDEWALK)		X		X														7			
X16+18.0, RT	 			24	24	2.00			1			I-14 X		X		X														SIGN ID CODE VR-648 SIGN ID CODE VR-032	E-144 E-144		
X16+37.0, LT	 			12	18	1.50			1			I-14 X		X		X														SALVAGED SIGN TO BE MOUNTED ON NEW POST.	-	-	
X18+12.0, RT				36	12	3.00			2			I-12 X I-12																		SIGN SHALL BE MOUNTED ON TWO FLANGED CHANNEL SIGN POSTS SIGN ID CODE R6-IL	E-142		
				<b>TOTALS</b>		SF	SF	EA.	SF		FT	FT	FT	FT	EA.	LB	LB	LB	EA.	EA.	LB												
						23.75	148.50	21			OPT 56.0 NON (56.0)	41.0 (48.0)	56.0 (56.0)	56.0		2																	

FILE NAME = \$FILES\$  
DATE/TIME USER = \$DATE\$ \$TIME\$ \$USER\$

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

PROJECT NAME: RANDOLPH - BROOKFIELD  
PROJECT NUMBER: IM 089-1(22)  
FILE NAME: p99a200.dgn  
PROJECT LEADER: D.E.G.  
DESIGNED BY: D.W.E.  
IPARM FILE: p06A048sss15.l  
PLOT DATE: \$DATE\$  
DRAWN BY: K.A.R.  
CHECKED BY: D.E.G.  
SHEET 54 OF 61

# TRAFFIC SIGN SUMMARY SHEET 16

MILEMARKER, 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	RETAIN	SALVAGE	NO. OF POSTS	FLANGED CHANNEL			SQUARE STEEL (in)			TUBULAR ALUMINUM Ø (in)			TUBULAR STEEL Ø (in)					W-SHAPE STEEL			FRUIT REFRIG	DETAIL ON DWG. NUMBER	STD. SHEET NUMBER					
												lb/ft	1.2	2.0	3.0	1.75	2.0	2.5	ANCHOR	SPLICE	3.0	4.0	4.0 MOD	FOUND-ACTION		3.0	3.5	4.0				5.0	FTG. SIZE		WEIGHT	POST SIZE
																																	24"	30"		
NORTHBOUND REST AREA: X22+70.0, RT	9/28/07	1	36	12	3.00					2																				SIGN SHALL BE MOUNTED ON TWO FLANGED CHANNEL SIGN POSTS SIGN ID CODE R6-IL		E-142				
X23+07.0, LT	9/29/07	1	24	30	5.00					1			X		X																7					
		1	24	18	3.00																										7					
X23+15.0, LT	9/28/07	1	36	12	3.00					2																					SIGN SHALL BE MOUNTED ON TWO FLANGED CHANNEL SIGN POSTS SIGN ID CODE R6-IL		E-142			
SOUTHBOUND REST AREA: Y8+07.0, LT	7/06/07	1	18	18	2.25					1	X			X																	SIGN ID CODE OM-1-1		E-150			
Y8+08.0, LT	9/25/07	1	96	132		88.00				2																						8				
Y12+00.0, LT	7/06/07	1	24	24	2.00					1			X		X																	SIGN ID CODE VR-648		E-144		
Y12+69.0, LT	7/06/07	1	24	24	2.00					X				X		X																SIGN ID CODE VR-648		E-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 TRAFFIC OPERATIONS SECTION "SIGN POST DESIGN GUIDELINE."											FT	FT	FT	FT	FT	FT	EA	LB	LB	LB	LB	LB	LB	EA	EA	LB										
											14.0	27.0	42.0	14.0	42.0							403.16														
											11.0	(48.0)	(56.0)									198.2														
<b>TOTALS</b>											SF	SF	EA	SF	FT	FT	EA	LB	EA	EA	LB															
											20.25	88.00			56.0	56.0	20				403.16															
											24.25											198.2														
																						403.16														

FILE NAME = \$FILES  
DATE/TIME = \$DATE\$  
USER = \$NTUSER\$

PROJECT NAME: RANDOLPH - BROOKFIELD  
PROJECT NUMBER: IM 089-1(22)  
FILE NAME: p99a200.dgn  
PROJECT LEADER: D.E.G.  
DESIGNED BY: D.W.E.  
IPARM FILE: p06A048sss16.i  
PLOT DATE: \$DATE\$  
DRAWN BY: K.A.R.  
CHECKED BY: D.E.G.  
SHEET 55 OF 61



# TRAFFIC SIGN SUMMARY SHEET 18

MILEMARKER, STATION, OR SIGN NUMBER	SIGN LEGEND  REMOVAL	SIGN DIMENSIONS		NEW & SALVAGED SIGNS				EXIST POST RETAIN	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 Ø (in)			TUBULAR STEEL Ø (in)				W-SHAPE STEEL			DETAIL ON DWG. NUMBER	STD. SHEET NUMBER					
											lb/ft	1.2	2.0	3.0	1.75	2.0	2.5	ANCHOR	S L E P	3.0	4.0	4.0 MOD	FOUND-ATION	3.0	3.5				4.0	5.0	FTG. SIZE	WEIGHT	POST SIZE
SOUTHBOUND REST AREA: Y14+64.0,RT		I	36	12	3.00				2																		SIGN SHALL BE MOUNTED ON TWO FLANGED CHANNEL SIGN POSTS SIGN ID CODE R6-IL		E-142				
Y15+75.0,RT		I	30	30	6.25				1																		SIGN ID CODE R3-2 SIGN ID CODE R5-1 BACK-TO-BACK		E-143				
Y16+37.0,RT		I			3.19				1																		SIGN ID CODE R3-2		E-146				
Y17+06.0,RT		I	36	12	3.00				2																		SIGN SHALL BE MOUNTED ON TWO FLANGED CHANNEL SIGN POSTS SIGN ID CODE R6-IL		E-142				
Y18+37.0,LT		I	24	30	5.00				1																			7					
		I	24	18	3.00																							7					
Y20+15.0,RT		I	30	30	6.25				1																		SIGN ID CODE R3-2		E-143				
										FT	FT	FT	FT	FT	EA	LB	LB	LB	LB	LB	EA	EA	LB										
											57.0	56.0		56.0																			
											(50.0)	(56.0)		(56.0)																			
										FT	FT	FT	FT	EA	LB	LB	LB	LB	EA	EA	LB												
										OPT	56.0	57.0		56.0																			
										NON	(56.0)	(50.0)		(56.0)																			
										TOTALS	SF	SF	EA	SF																			
											35.94																						

FILE NAME = \$FILES\$  
DATE/TIME = \$DATE\$  
USER = \$USER\$

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

PROJECT NAME: RANDOLPH - BROOKFIELD  
PROJECT NUMBER: IM 089-1(22)  
FILE NAME: p99a200.dgn  
PROJECT LEADER: D.E.G.  
DESIGNED BY: D.W.E.  
IPARM FILE: p06A048sss18.i  
PLOT DATE: \$DATE\$  
DRAWN BY: K.A.R.  
CHECKED BY: D.E.G.  
SHEET 57 OF 61

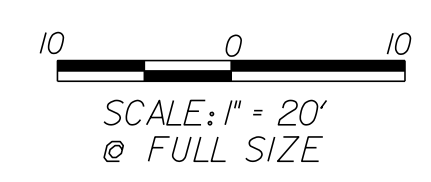
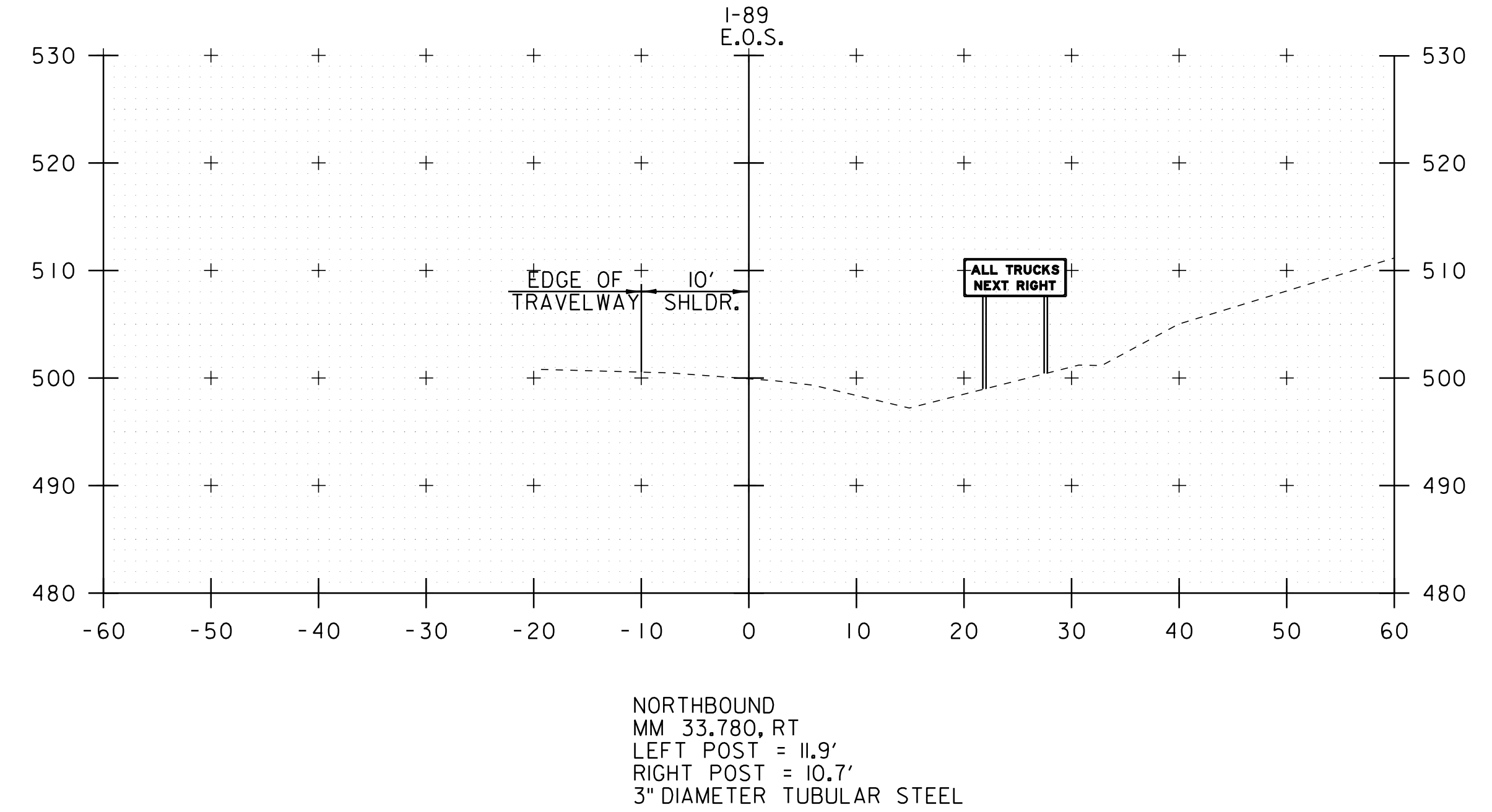
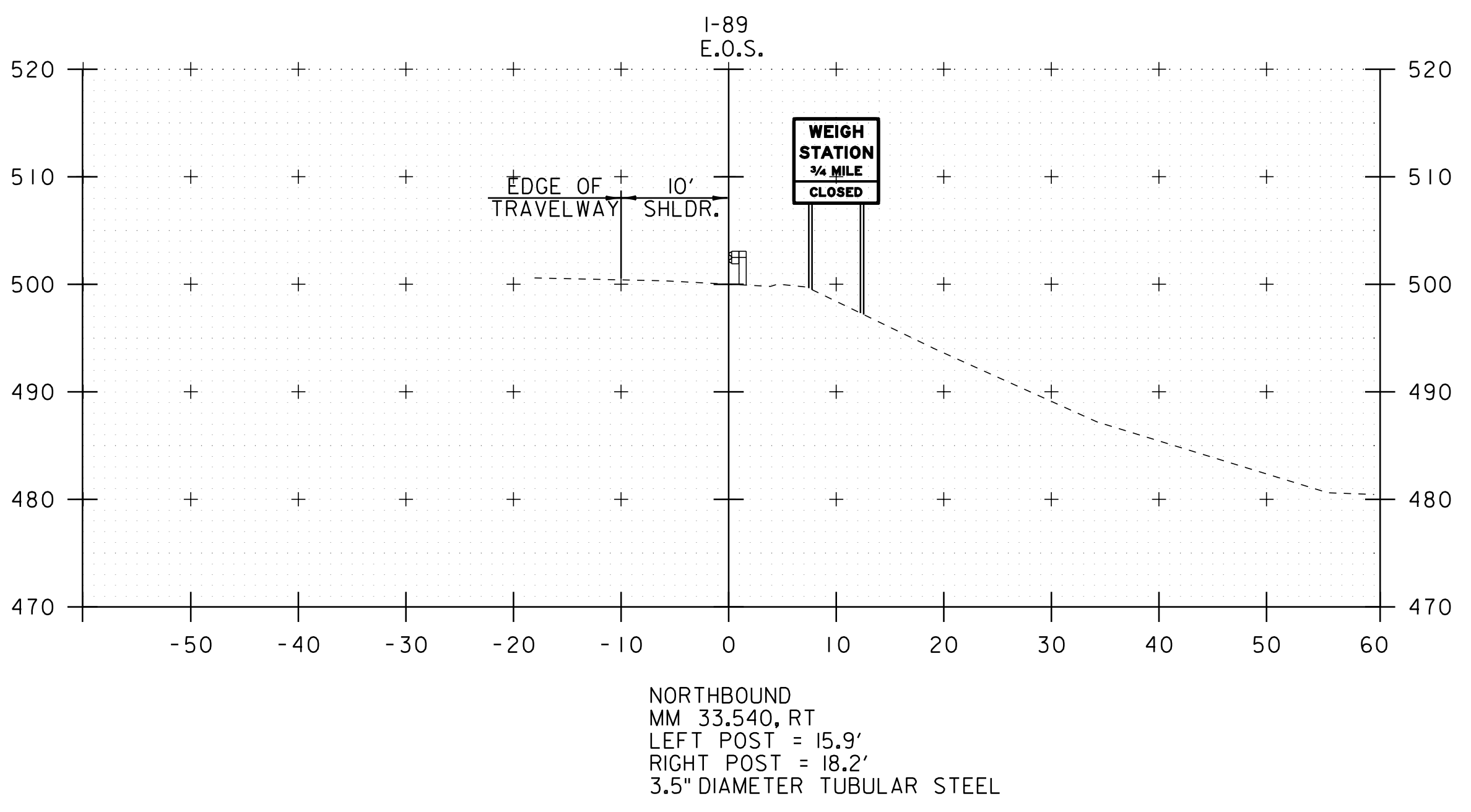
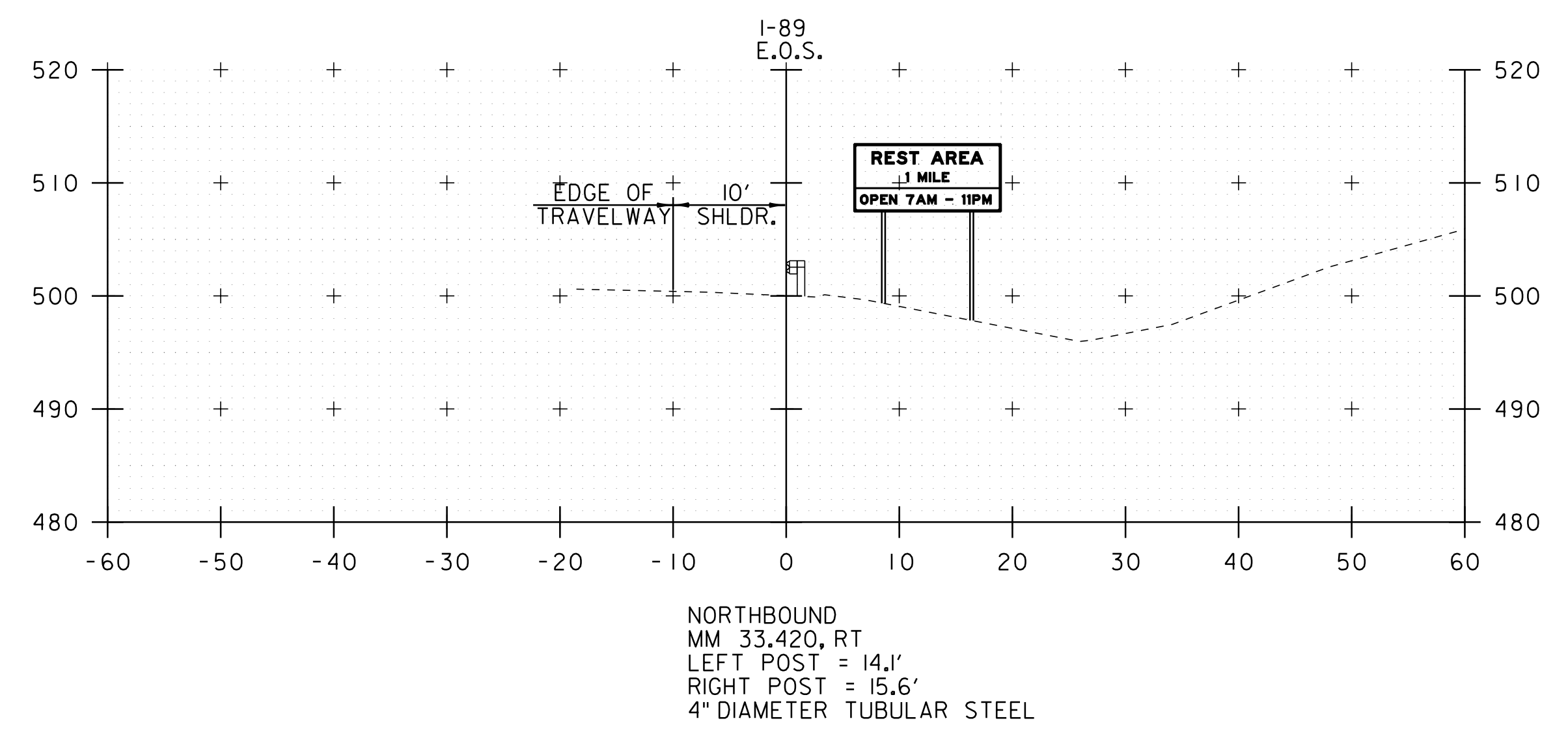
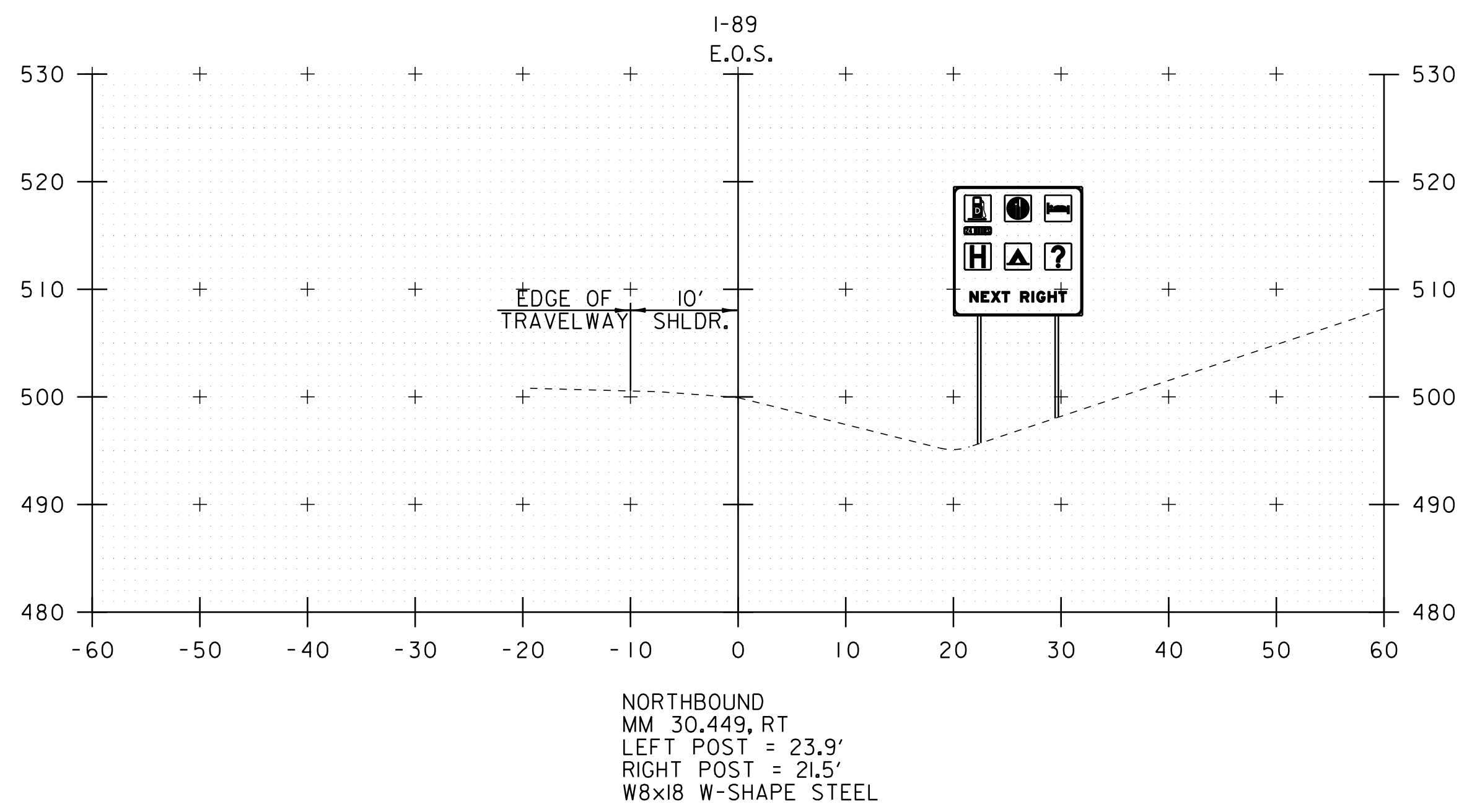
# TRAFFIC SIGN SUMMARY SHEET 19

MILEMARKER, STATION, OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS		NEW & SALVAGED SIGNS				EXIST POST RETAIN	SALVAGE	NO. OF POSTS	NEW SIGN POSTS														REMARKS	SIGN DETAIL							
											FLANGED CHANNEL		SQUARE STEEL			TUBULAR ALUMINUM			TUBULAR STEEL				W-SHAPE STEEL				DETAIL ON DWG. NUMBER	STD. SHEET NUMBER					
		EA	WIDTH (in)	HEIGHT (in)	"A"	"B"	SALV SIGN				SALV TIS	1.12	2.0	3.0	1.75	2.0	2.5	ANCHOR	SLEEVE	3.0	4.0	4.0 MOD	FOUND-ATION	3.0		3.5			4.0	5.0	FTG. SIZE	WEIGHT	POST SIZE
																											lb/ft						
OPTION SIGN POSTS																																	
	TOTAL SHEET 40				31.99	-	-			26.0	42.0	11.0	14.0	42.0	14.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	TOTAL SHEET 41				97.46	-	-			9.0	14.0	-	-	14.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	TOTAL SHEET 42				15.33	175.25	-			9.5	14.0	21.5	28.0	14.0	28.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	TOTAL SHEET 43		64.50		61.50	87.00	-			36.0	-	21.0	28.0	-	28.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	TOTAL SHEET 44				37.32	-	-			9.0	56.0	21.0	28.0	56.0	28.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	TOTAL SHEET 45				31.99	-	-			9.0	42.0	27.0	14.0	42.0	14.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	TOTAL SHEET 46				75.66	144.00	-			28.0	28.0	14.0	28.0	14.0	14.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	TOTAL SHEET 47				29.33	184.25	-			14.0	30.0	28.0	14.0	28.0	28.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	TOTAL SHEET 48		32.16		50.16	78.00	-			28.0	39.0	28.0	28.0	28.0	28.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	TOTAL SHEET 49				36.99	-	-1			-	42.0	42.0	28.0	42.0	28.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	TOTAL SHEET 50				83.33	-	-			9.0	14.0	-	28.0	14.0	28.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	TOTAL SHEET 51				81.25	-	-			10.0	14.0	26.0	28.0	14.0	28.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	TOTAL SHEET 52				101.64	-	-1			9.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	TOTAL SHEET 53				63.50	88.00	-			9.0	14.0	40.0	42.0	14.0	42.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	TOTAL SHEET 54				23.75	148.50	-			9.0	-	41.0	56.0	-	56.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	TOTAL SHEET 55		24.25		20.25	88.00	-			11.0	14.0	27.0	42.0	14.0	42.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	TOTAL SHEET 56				12.50	-	-			-	-	-	84.0	-	84.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	TOTAL SHEET 57				35.94	-	-			-	-	57.0	56.0	-	56.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	SUBTOTAL				889.89	849	3				336	546	336	546																			
	ROUNDING				0.11	-	-				14	14	14	14																			
NON-OPTION SIGN POSTS																																	
	TOTAL SHEET 40				-	-	-				-	85.0	84.0	-	-	-	-	-	-	6	836.07	-	-	-	-	-	-	-	-	-	-		
	TOTAL SHEET 41				-	-	-				-	-	-	-	-	-	-	-	-	6	968.5	392.47	338.36	-	-	-	-	-	-	-	-		
	TOTAL SHEET 42				-	-	-				-	-	28.0	-	-	-	-	-	-	6	85.9	153.5	160.4	-	-	-	-	-	-	-	-		
	TOTAL SHEET 43				-	-	-				-	122.0	140.0	-	-	-	-	-	-	4	202.01	-	187.9	-	-	-	-	-	-	-	-		
	TOTAL SHEET 44				-	-	-				-	27.0	28.0	-	-	-	-	-	-	2	232.6	-	334.80	-	-	-	-	-	-	-	-		
	TOTAL SHEET 45				-	-	-				-	84.5	84.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	TOTAL SHEET 46				-	-	-				-	57.51	56.0	-	-	-	-	-	-	-	-	-	367.2	542.68	-	-	-	-	-	-	-		
	TOTAL SHEET 47				-	-	-				-	24.0	56.0	-	-	-	-	-	-	8	103.0	427.5	210.1	286.2	-	-	-	-	-	-	-		
	TOTAL SHEET 48				-	-	-				-	-	56.0	-	-	-	-	-	-	4	263.0	235.6	-	273.0	590.71	-	-	-	-	-	-		
	TOTAL SHEET 49				-	-	-				-	29.0	28.0	-	-	-	-	-	-	2	263.0	240.69	-	-	-	-	-	-	-	-	-		
	TOTAL SHEET 50				-	-	-				-	33.0	28.0	-	-	-	-	-	-	4	378.3	411.01	-	-	-	-	-	-	-	-	-		
	TOTAL SHEET 51				-	-	-				-	27.0	28.0	-	-	-	-	-	-	2	99.0	203.91	-	-	-	-	-	-	-	-	-		
	TOTAL SHEET 52				-	-	-				-	58.0	56.0	-	-	-	-	-	-	6	491.7	-	-	609.55	-	-	-	-	-	-	-		
	TOTAL SHEET 53				-	-	-				-	33.0	28.0	-	-	-	-	-	-	2	633.99	-	-	296.4	-	-	-	-	-	-	-		
	TOTAL SHEET 54				-	-	-				-	48.0	56.0	-	-	-	-	-	-	2	-	-	-	233.6	494.06	-	-	-	-	-	-		
	TOTAL SHEET 55				-	-	-				-	48.0	56.0	-	-	-	-	-	-	0	-	-	198.2	-	-	-	-	-	-	-	-		
	TOTAL SHEET 56				-	-	-				-	-	-	-	-	-	-	-	-	-	-	403.16	-	-	-	-	-	-	-	-	-		
	TOTAL SHEET 57				-	-	-				-	50.0	56.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	SUBTOTAL				-	-	-				-	868	-	-	-	-	-	-	-	48	2885.0	153.5	756.6	1089.2	2217.00	-	-	-	-	-	-		
	ROUNDING				-	-	-				-	7	-	-	-	-	-	-	-	-	-	15.0	1.5	13.4	10.8	-	-	-	-	-	-		
FINAL POST LENGTHS ARE TO BE DETERMINED IN THE FIELD. POST SIZES ARE COMPUTED BASED ON INFORMATION FURNISHED ON THE STANDARD SHEETS AND THE TRAFFIC OPERATIONS SECTION "SIGN POST DESIGN GUIDELINE."					FT 350 (28.5)	FT 464.5 (875)	FT 550 (875)				FT 350	FT 550	FT	EA	LB	LB	LB				LB 2900	LB 155	LB 770	LB 1100									
					<b>TOTALS</b>	SF 890	SF 849	EA 3				FT 593.0	FT 900	OPTION (754.0)		FT 900	OPTION			EA 48	LB 4925	LB 7640.94			EA	EA	LB						

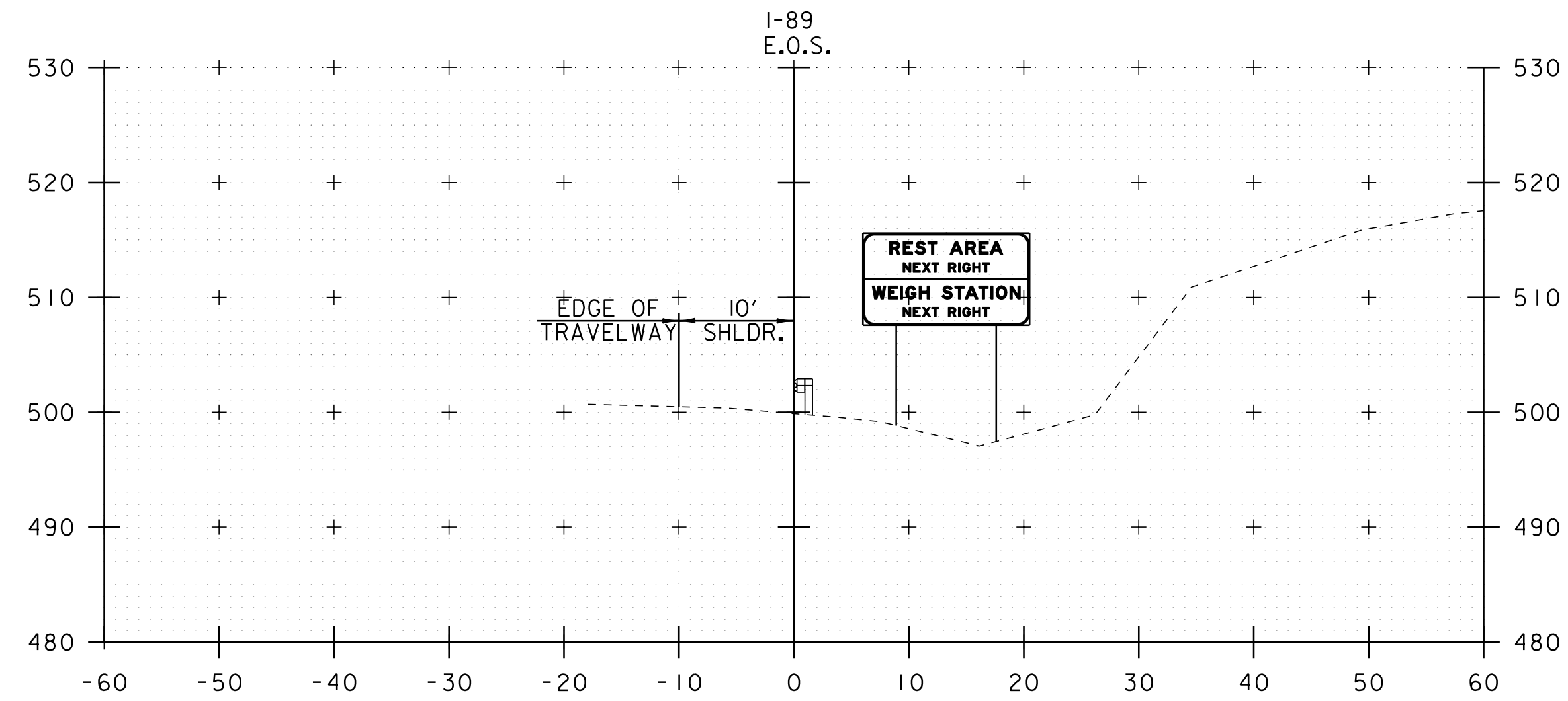
FILE NAME = \$FILES\$ DATE/TIME = \$DATE\$ USER = \$NTUSER\$

PROJECT NAME: RANDOLPH - BROOKFIELD	
PROJECT NUMBER: IM 089-1(22)	
FILE NAME: p99a200.dgn	PLOT DATE: \$DATE\$
PROJECT LEADER: D.E.G.	DRAWN BY: K.A.R.
DESIGNED BY: D.W.E.	CHECKED BY: D.E.G.
IPARM FILE: p06A048sss19.i	SHEET 58 OF 61

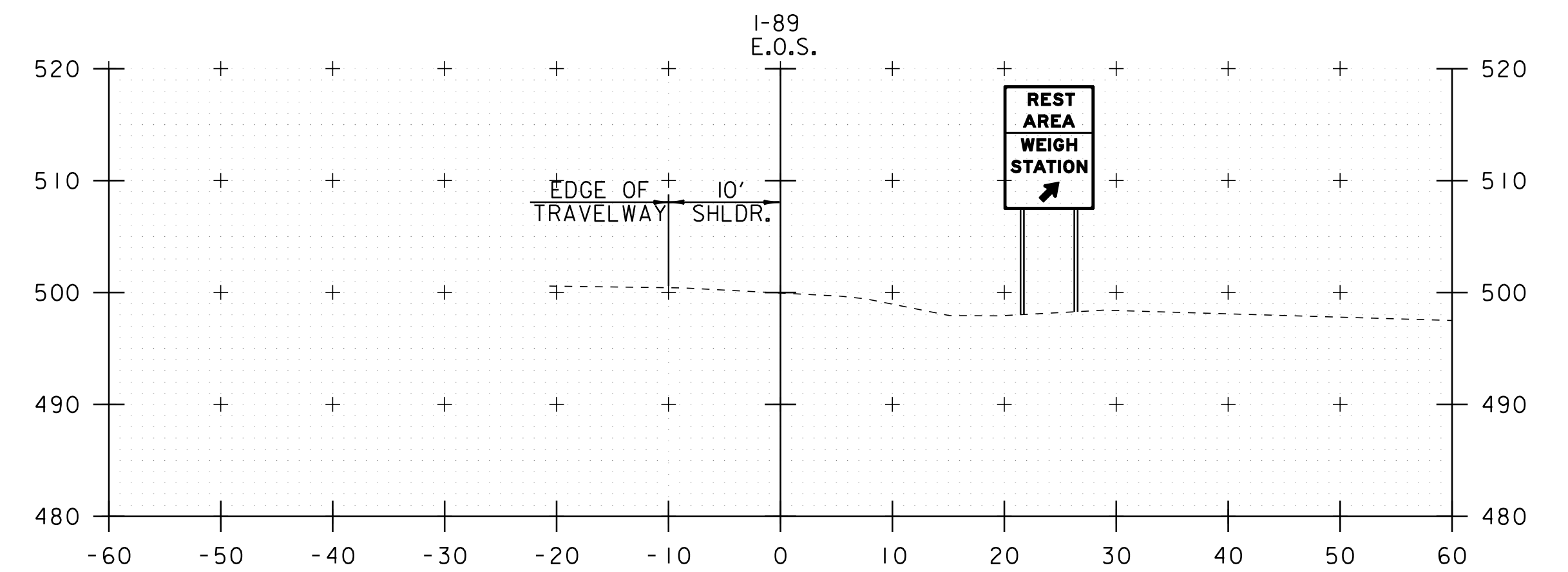
FILE NAME = \$FILES\$  
 DATE/TIME = \$DATE\$  
 USER = \$USER\$



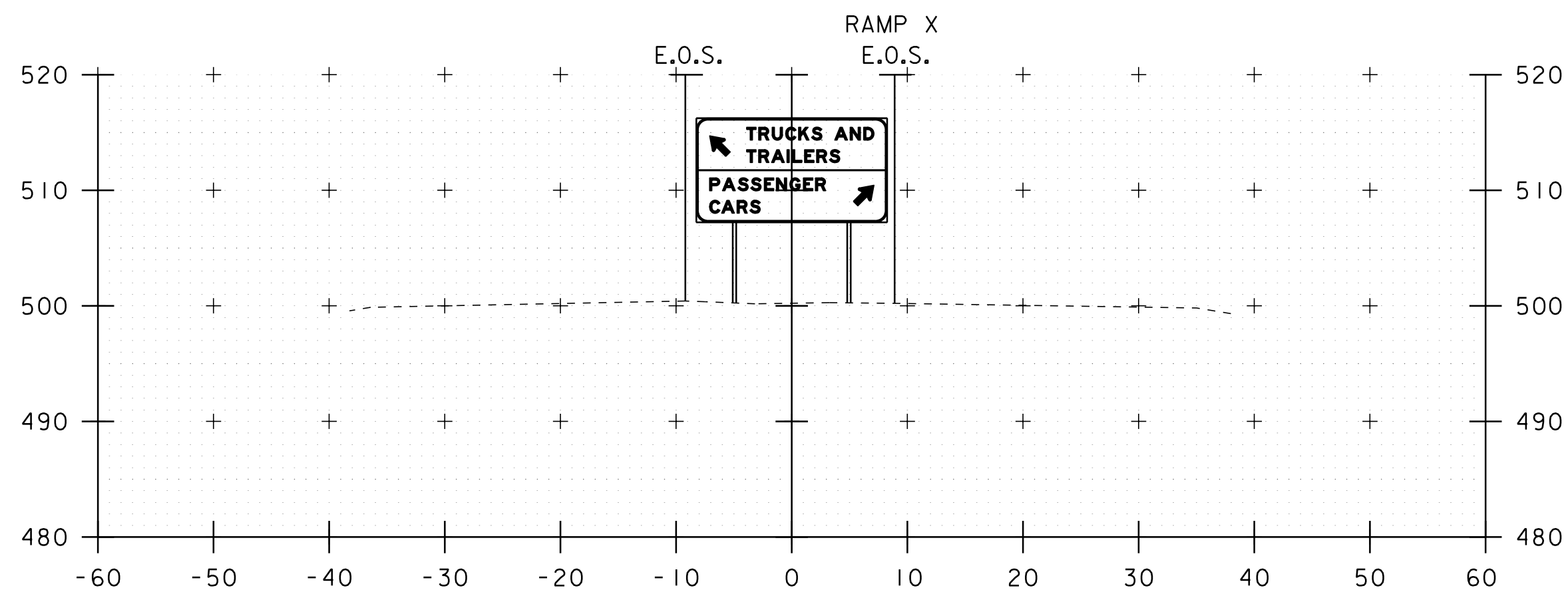
<b>TRAFFIC SIGN CROSS SECTION SHEET #1</b>	PROJECT NAME: RANDOLPH - BROOKFIELD	PLOT DATE: \$DATE\$
	PROJECT NUMBER: IM 089-1(22)	DRAWN BY: C.A.K.
FILE NAME: p99a200.dgn	DESIGNED BY: D.W.E.	CHECKED BY: D.W.E.
IPARM FILE: p06A048scxl.i		SHEET 59 OF 61



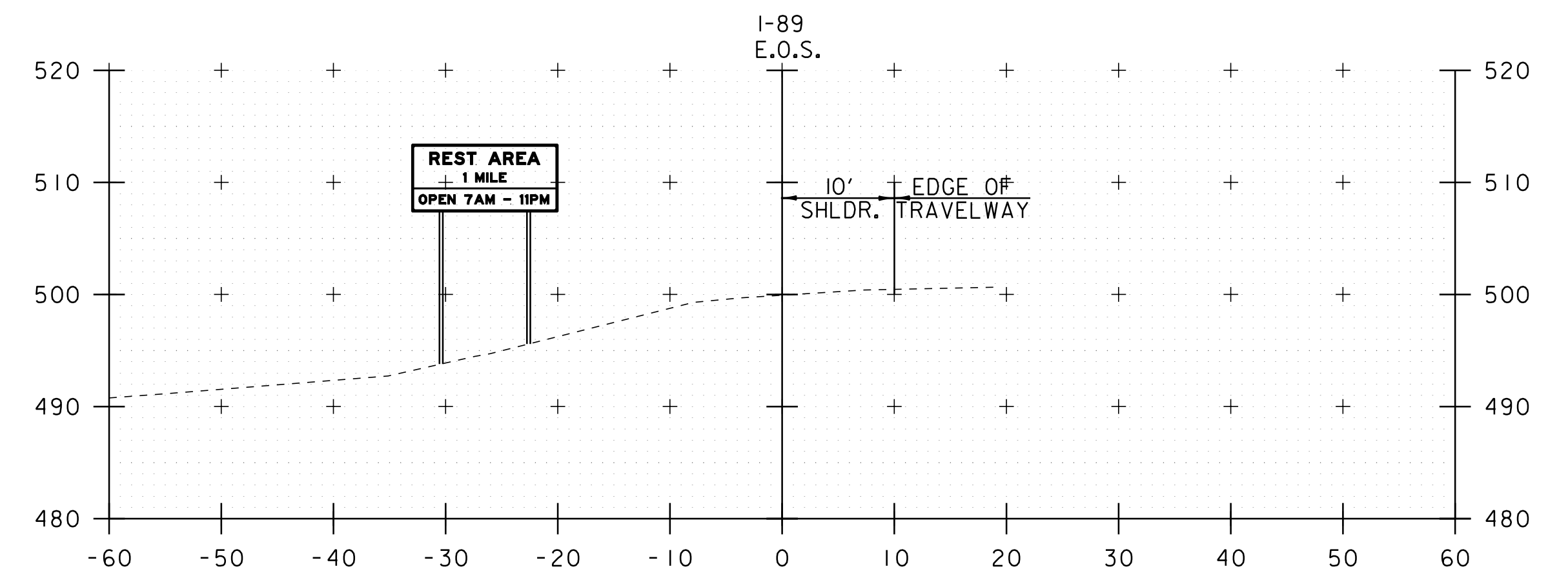
NORTHBOUND  
MM 30.040, RT  
LEFT POST = 16.7'  
RIGHT POST = 18.1'  
4" DIAMETER TUBULAR STEEL



NORTHBOUND REST AREA  
STA. X7+90.0, RT  
LEFT POST = 20.4'  
RIGHT POST = 20.2'  
5" DIAMETER TUBULAR STEEL

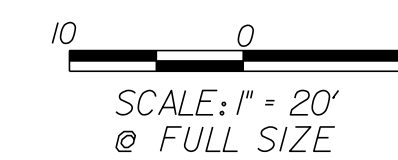


NORTHBOUND REST AREA  
STA. X9+27.0, LT  
LEFT POST = 16.0'  
RIGHT POST = 16.0'  
5" DIAMETER TUBULAR STEEL



SOUTHBOUND  
MM 34.830, LT \*  
LEFT POST = 19.6'  
RIGHT POST = 17.8'  
5" DIAMETER TUBULAR STEEL

\* THIS SIGN FACE HAS BEEN SHOWN ON THE CROSS SECTION AT THE PROPER STATION AND OFFSET. DUE TO THE ORIENTATION OF THE STATION LINE, THE TEXT AND SYMBOLS HAVE BEEN SHOWN ON THE BACK OF THE PROPOSED GUIDE SIGN FOR ALL SIGNS TO BE INSTALLED ON THE SOUTHBOUND BARREL.

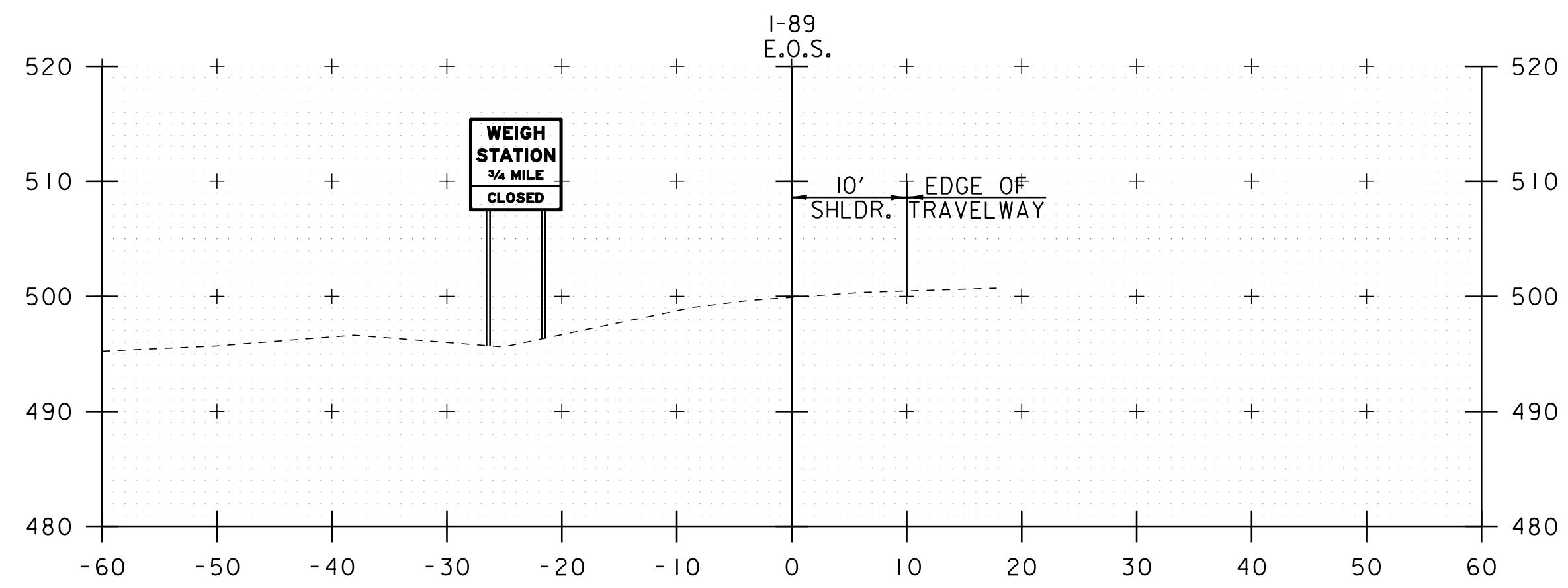


**TRAFFIC SIGN  
CROSS SECTION  
SHEET #2**

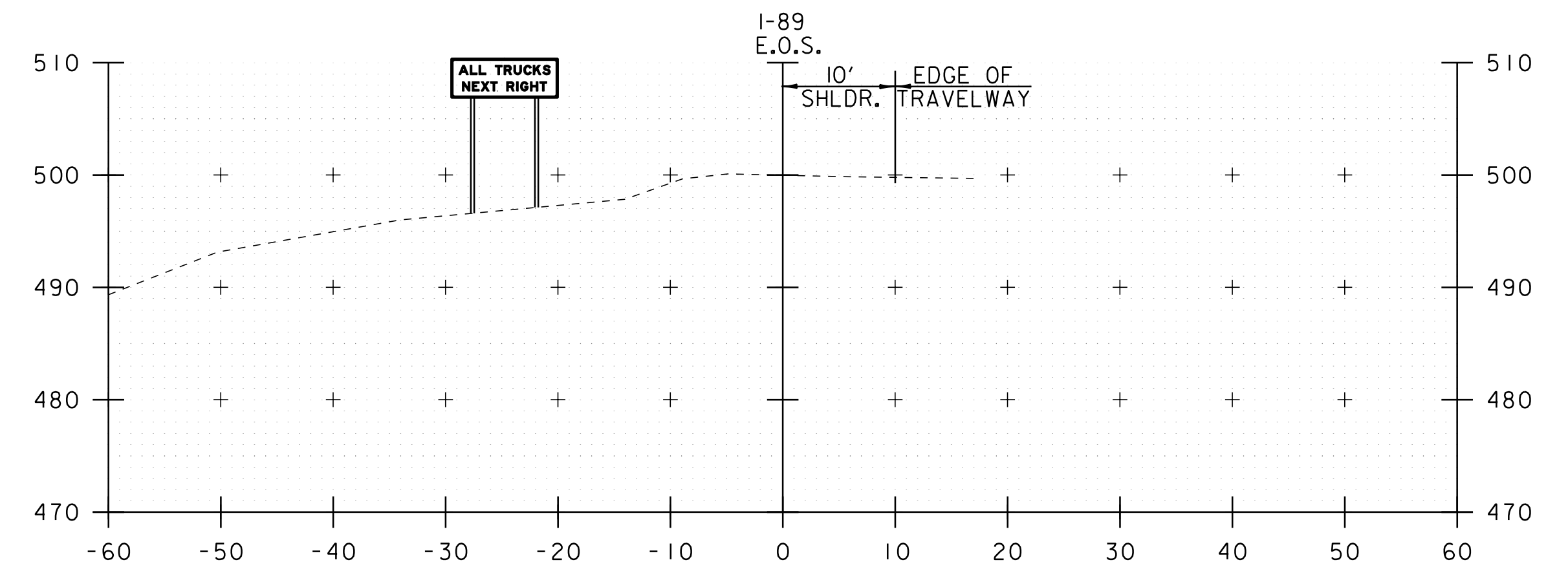
PROJECT NAME: RANDOLPH - BROOKFIELD  
PROJECT NUMBER: IM 089-1(22)

FILE NAME: p99a200.dgn  
PROJECT LEADER: D.E.G.  
DESIGNED BY: D.W.E.  
IPARM FILE: p06A048scx2.1

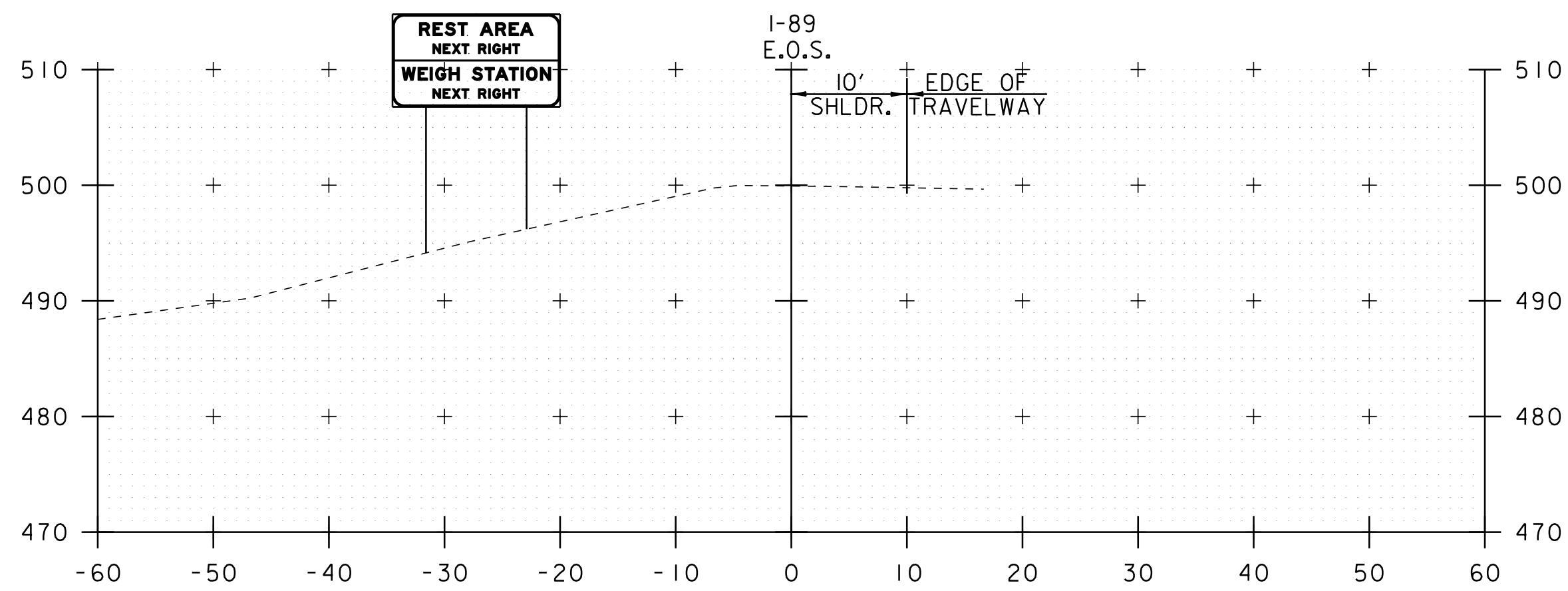
PLOT DATE: \$DATE\$  
DRAWN BY: C.A.K.  
CHECKED BY: D.W.E.  
SHEET 60 OF 61



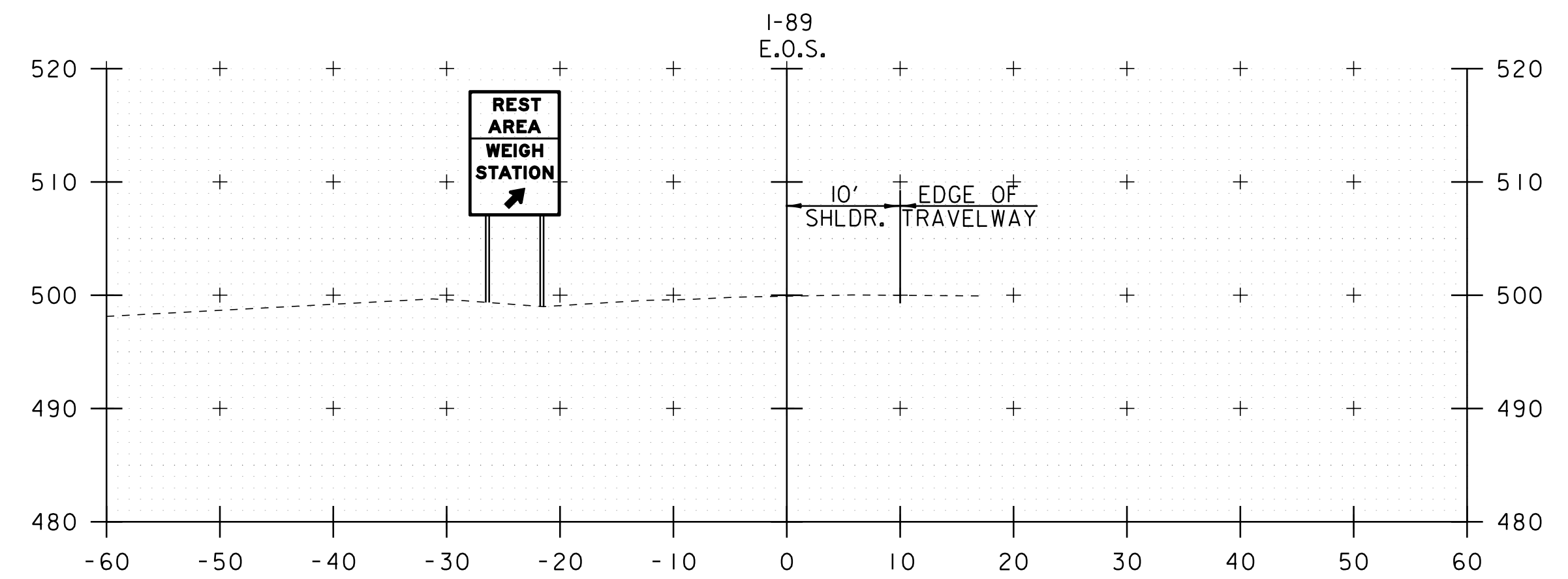
SOUTHBOUND  
 MM 34.440, LT \*  
 LEFT POST = 19.8'  
 RIGHT POST = 19.1'  
 4" DIAMETER TUBULAR STEEL



SOUTHBOUND  
 MM 34.190, LT \*  
 LEFT POST = 13.8'  
 RIGHT POST = 13.3'  
 3" DIAMETER TUBULAR STEEL

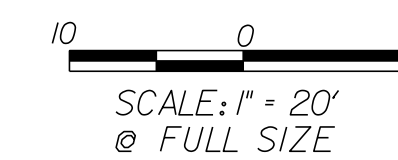


SOUTHBOUND  
 MM 33.940, LT \*  
 LEFT POST = 20.6'  
 RIGHT POST = 18.6'  
 5" DIAMETER TUBULAR STEEL



SOUTHBOUND  
 REST AREA  
 STA. Y8+08.0, LT \*  
 LEFT POST = 18.7'  
 RIGHT POST = 19.0'  
 4" DIAMETER TUBULAR STEEL

\* THIS SIGN FACE HAS BEEN SHOWN ON THE CROSS SECTION AT THE PROPER STATION AND OFFSET, DUE TO THE ORIENTATION OF THE STATION LINE, THE TEXT AND SYMBOLS HAVE BEEN SHOWN ON THE BACK OF THE PROPOSED GUIDE SIGN FOR ALL SIGNS TO BE INSTALLED ON THE SOUTHBOUND BARREL.



**TRAFFIC SIGN  
 CROSS SECTION  
 SHEET #3**

PROJECT NAME: RANDOLPH - BROOKFIELD  
 PROJECT NUMBER: IM 089-1(22)

FILE NAME: p99a200.dgn  
 PROJECT LEADER: D.E.G.  
 DESIGNED BY: D.W.E.  
 IPARM FILE: p06A048scx3.i

PLOT DATE: \$DATE\$  
 DRAWN BY: C.A.K.  
 CHECKED BY: D.W.E.  
 SHEET 61 OF 61