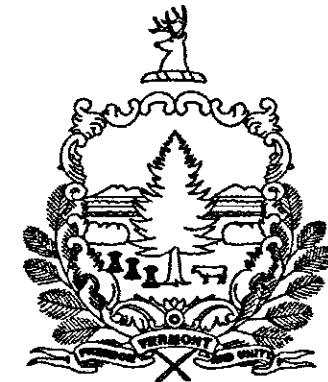


STATE OF VERMONT
AGENCY OF TRANSPORTATION



PROPOSED IMPROVEMENT
TOWNS OF WINDSOR & HARTLAND
COUNTY OF WINDSOR
INTERSTATE ROUTE 91 NB & SB

WINDSOR-HARTLAND AC IM 091-1(61) NORTHBOUND:
BEGINNING IN WINDSOR ON I-91 AT MM 57.438 AND EXTENDING NORTHERLY
A DISTANCE OF 46,025.76 FEET (8.717 MILES) TO MM 66.155

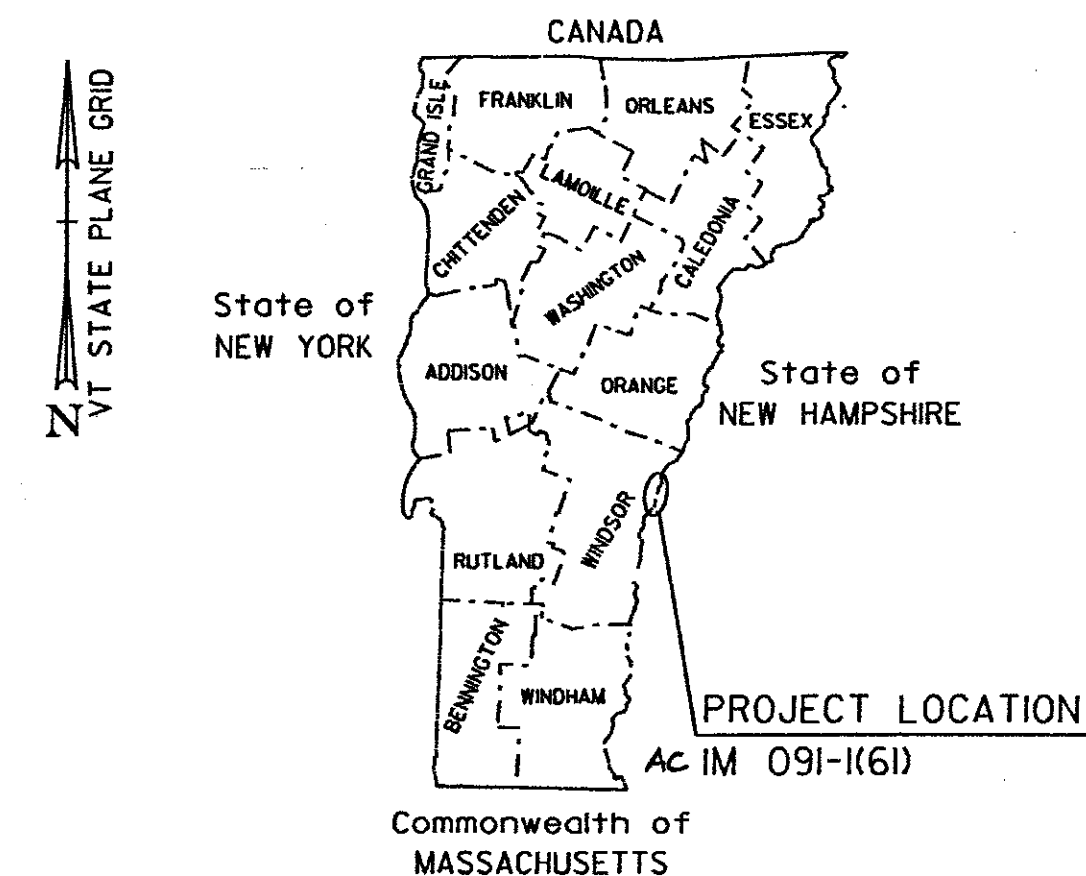
LENGTH OF ROADWAY = 46,025.76 FT = (8.717 MILES)
LENGTH OF PROJECT = 46,025.76 FT = (8.717 MILES)

WINDSOR-HARTLAND AC IM 091-1(61) SOUTHBOUND:
BEGINNING IN WINDSOR ON I-91 AT MM 57.401 AND EXTENDING NORTHERLY
A DISTANCE OF 46,236.96 FEET (8.757 MILES) TO MM 66.158

LENGTH OF ROADWAY = 46,236.96 FT = (8.757 MILES)
LENGTH OF PROJECT = 46,236.96 FT = (8.757 MILES)

WORK TO BE PERFORMED UNDER THIS PROJECT INCLUDES COLD PLANING,
RESURFACING WITH A LEVELING COURSE AND WEARING COURSE, EXTENDING
ACCELERATION / DECELERATION LANE, NEW PAVEMENT MARKINGS, NEW SIGNS, GUARDRAIL
IMPROVEMENTS, DRAINAGE IMPROVEMENTS AND INCIDENTAL ITEMS.

INDEX OF SHEETS
SEE SHEET 2



RECORD PLANS

CONTRACTOR: LANE CONSTRUCTION CORP. - MERIDAN, CT

RESIDENT ENGINEER: BUTCH COLBY

CONSTRUCTION BEGAN: APRIL 12, 2010

CONSTRUCTION COMPLETE: DECEMBER 9, 2010

RECORD PLANS BY: BUTCH COLBY & AMOS KEMPTON

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

BY: *[Signature]* RESIDENT ENGINEER

DATE: 4/27/11

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

BITUMINOUS CONCRETE SUPERPAVE MIXTURE DESIGN CRITERIA

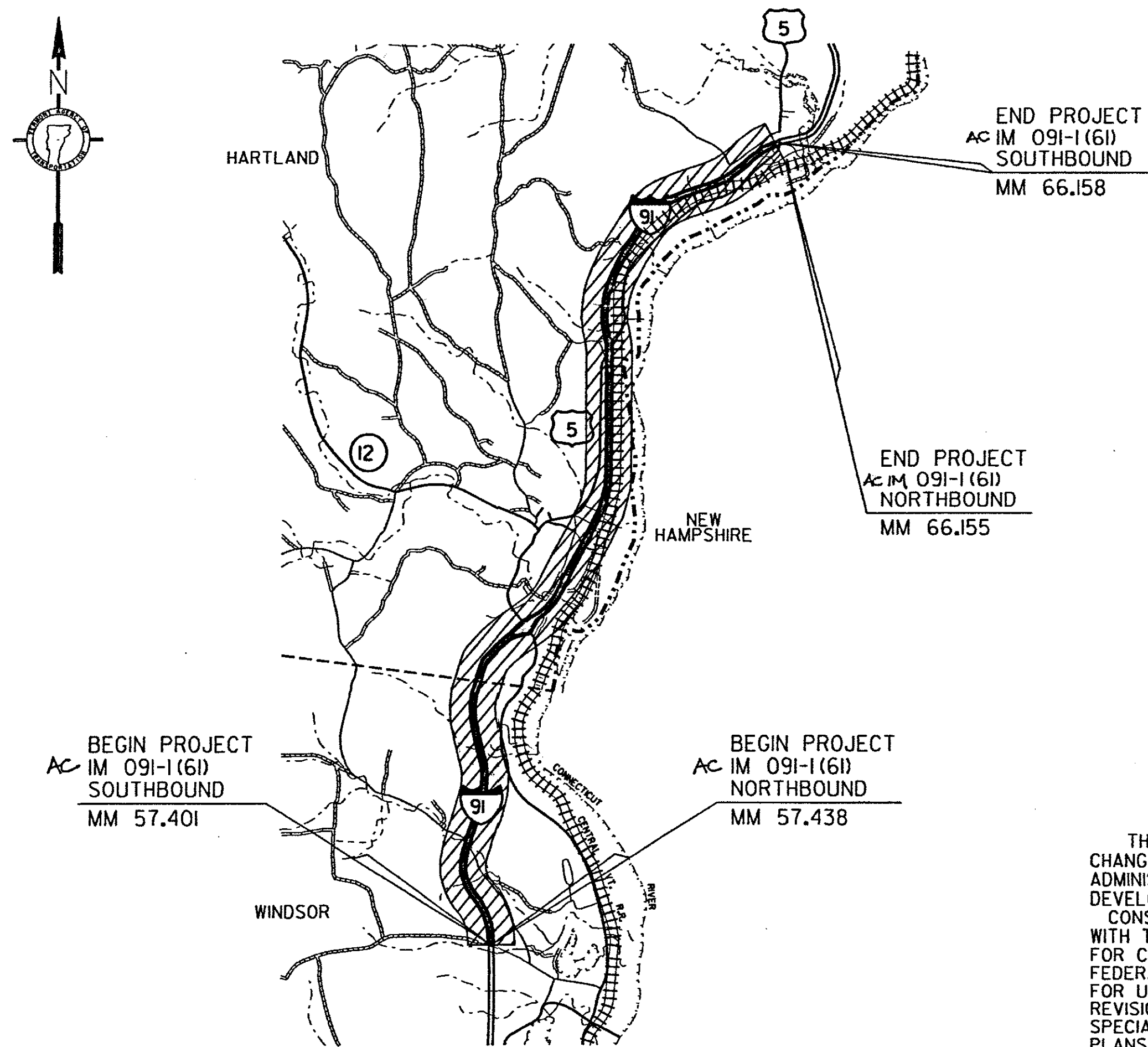
| | |
|----------------------------------|--------------------------------------------|
| DESIGN LANE/DESIGN LIFE ESAL | 8,886,000 |
| DESIGN NUMBER OF GYRATIONS | 80 |
| PERFORMANCE GRADE ASPHALT BINDER | SEE SECTION 490 GENERAL SPECIAL PROVISIONS |

TRAFFIC DATA

| LOCATION | ADT | | DHV | | ESALS | |
|----------------------|------|--------|------|------|-----------|------------|
| | 2009 | 2019 | 2009 | 2019 | 2009-2019 | 2009-2029 |
| NORTHBOUND SECTION 1 | 7400 | 8600 | 1200 | 1400 | 4,116,000 | 11,262,000 |
| NORTHBOUND SECTION 2 | 9700 | 11,300 | 1600 | 1800 | 5,403,000 | 14,803,000 |
| SOUTHBOUND SECTION 1 | 7400 | 8600 | 1600 | 1800 | 5,065,000 | 13,521,000 |
| SOUTHBOUND SECTION 2 | 9700 | 11,300 | 2000 | 2400 | 6,649,000 | 17,772,000 |

CONVENTIONAL SYMBOLS

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



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 ADMINISTRATION

APPROVED: *[Signature]* DATE: 8-14-09

DIRECTOR OF PROGRAM DEVELOPMENT

APPROVED: *[Signature]* DATE: 7-15-09

PROJECT MANAGER: TED DOMEY

PROJECT NAME: WINDSOR - HARTLAND
PROJECT NUMBER: AC IM 091-1(61)

SHEET 1 OF 56 SHEETS

INDEX OF SHEETS

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| 1 | TITLE SHEET |
| 2 | INDEX OF SHEETS |
| 3 | TYPICAL SECTION SHEET |
| 4 | PAVING DETAILS SHEET |
| 5 | ACCELERATION / DECELERATION LANE EXTENSION DETAILS |
| 6-8 | QUANTITY SHEETS |
| 9-12 | ITEM DETAIL SUMMARY SHEETS |
| 13 | DITCH CLEANING DETAIL SHEET |
| 14 | PROJECT LAYOUT SHEET |
| 15-18 | INTERCHANGE #9 DETAIL SHEETS |
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| 32-34 | TRAFFIC SIGN REMOVAL SHEETS |
| 35-37 | TRAFFIC SIGN DETAIL SHEETS |
| 38-40 | TRAFFIC SIGN CROSS SECTION SHEETS |
| 41-42 | GUARDRAIL APPROACH SECTION DETAIL SHEETS |
| 43-45 | ALUMINUM APPROACH RAILING SHEETS |
| 46 | BRIDGE 35N AND 35S DETAIL SHEET |
| 47 | BRIDGE 36N AND 36S DETAIL SHEET |
| 48 | BRIDGE 37N AND 37S DETAIL SHEET |
| 49 | BRIDGE 38N AND 38S DETAIL SHEET |
| 50 | BRIDGE 39N AND 39S DETAIL SHEET |
| 51 | SNOW BARRIER DETAIL SHEET |
| 52 | MILLED RUMBLE STRIP DETAIL SHEET |
| 53 | BRIDGE 34S DETAIL SHEET & THINNING AND TRIMMING DETAIL SHEET |
| 54 | PAVEMENT MARKINGS DETAIL SHEET |
| 55 | CULVERT LOCATION TABLES SHEET |
| 56 | TRAFFIC CONTROL PLAN SHEET |

VAOT STANDARDS

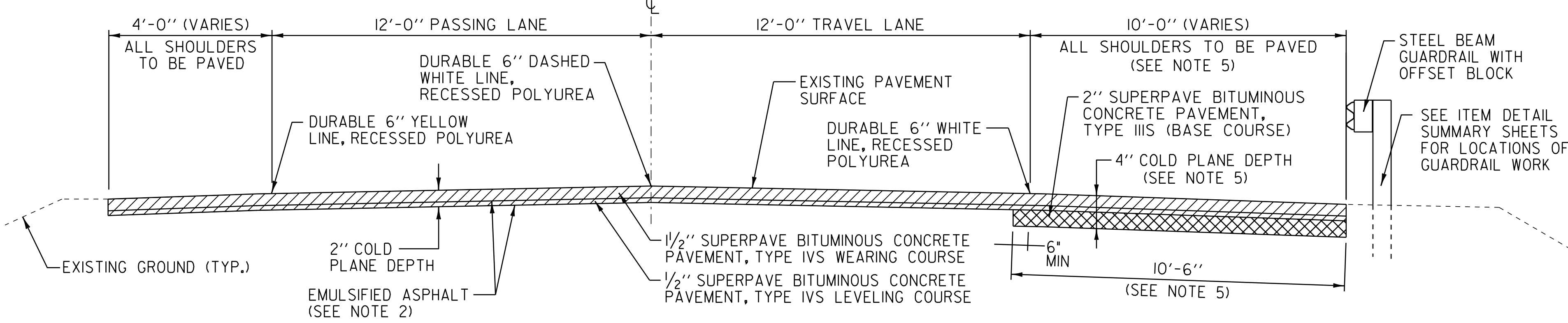
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| D-6 | 06-01-94 |
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| D-15 | 06-01-94 |
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| E-100A | 01-02-04 |
| E-101 | 05-30-03 |
| E-102 | 06-30-03 |
| E-102A | 05-01-04 |
| E-103 | 03-01-04 |
| E-105 | 05-01-04 |
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| E-107 | 06-30-03 |
| E-107A | 06-08-09 |
| E-108A | 06-08-09 |
| E-110 | 08-08-95 |
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| ESFM | 07-10-97 |
| G-1 | 01-03-00 |
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| G-6 | 02-11-08 |
| G-19 | 11-15-02 |

**INDEX
OF
SHEETS**

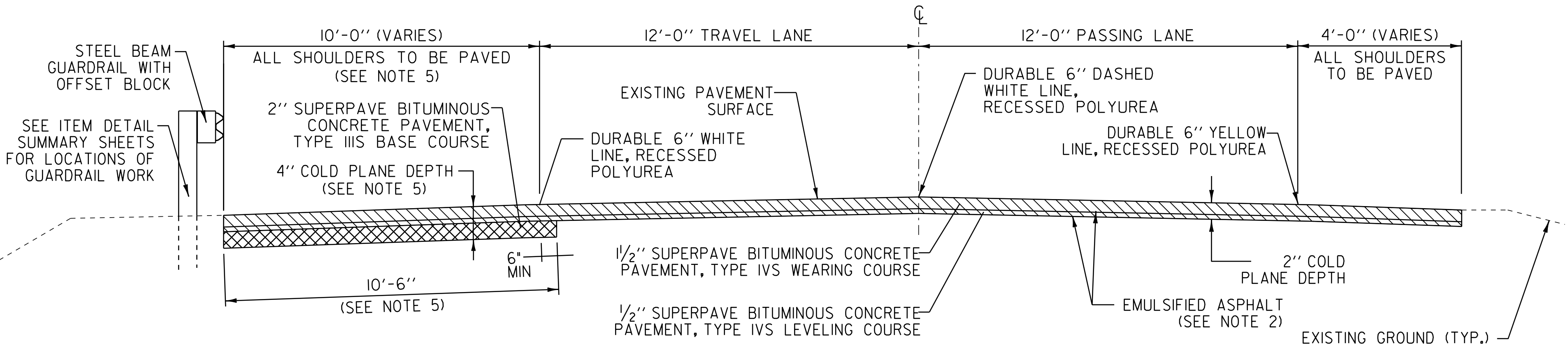
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PROJECT NUMBER: IM 091-(161)

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| DESIGNED BY: M.J.L. | CHECKED BY: R.A.B. |
| IPARM FILE: p07al42ind.i | SHEET 2 OF 56 |

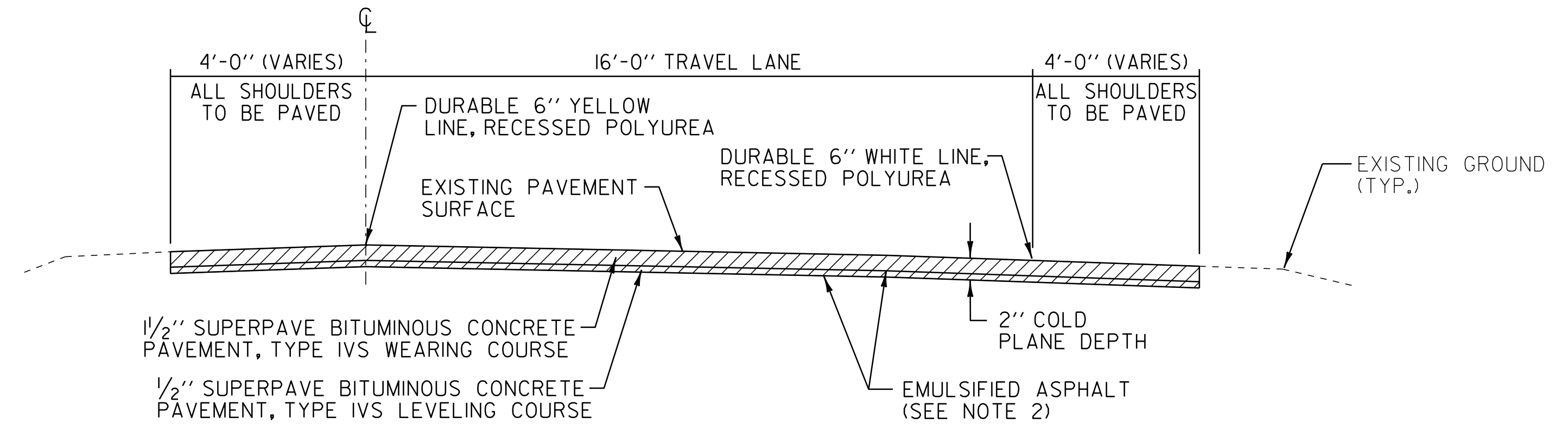
NOTES



NORTHBOUND MAINLINE TYPICAL SECTION



SOUTHBOUND MAINLINE TYPICAL SECTION



RAMP TYPICAL SECTION

**SEEDING FORMULA
RURAL AREAS**

| % WT. | LBS./A. | NAME | PUR % | GERM % |
|-------|---------|---------------------|-------|--------|
| 37.5 | 22.5 | CREeping RED FESCUE | 98 | 98 |
| 37.5 | 22.5 | TALL FESCUE | 95 | 95 |
| 5.0 | 3.0 | RED TOP | 95 | 95 |
| 15.0 | 9.0 | BIRDSFOOT TREFOIL | 98 | 98 |
| 5.0 | 3.0 | ANNUAL RYEGRASS | 95 | 95 |
| 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.

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

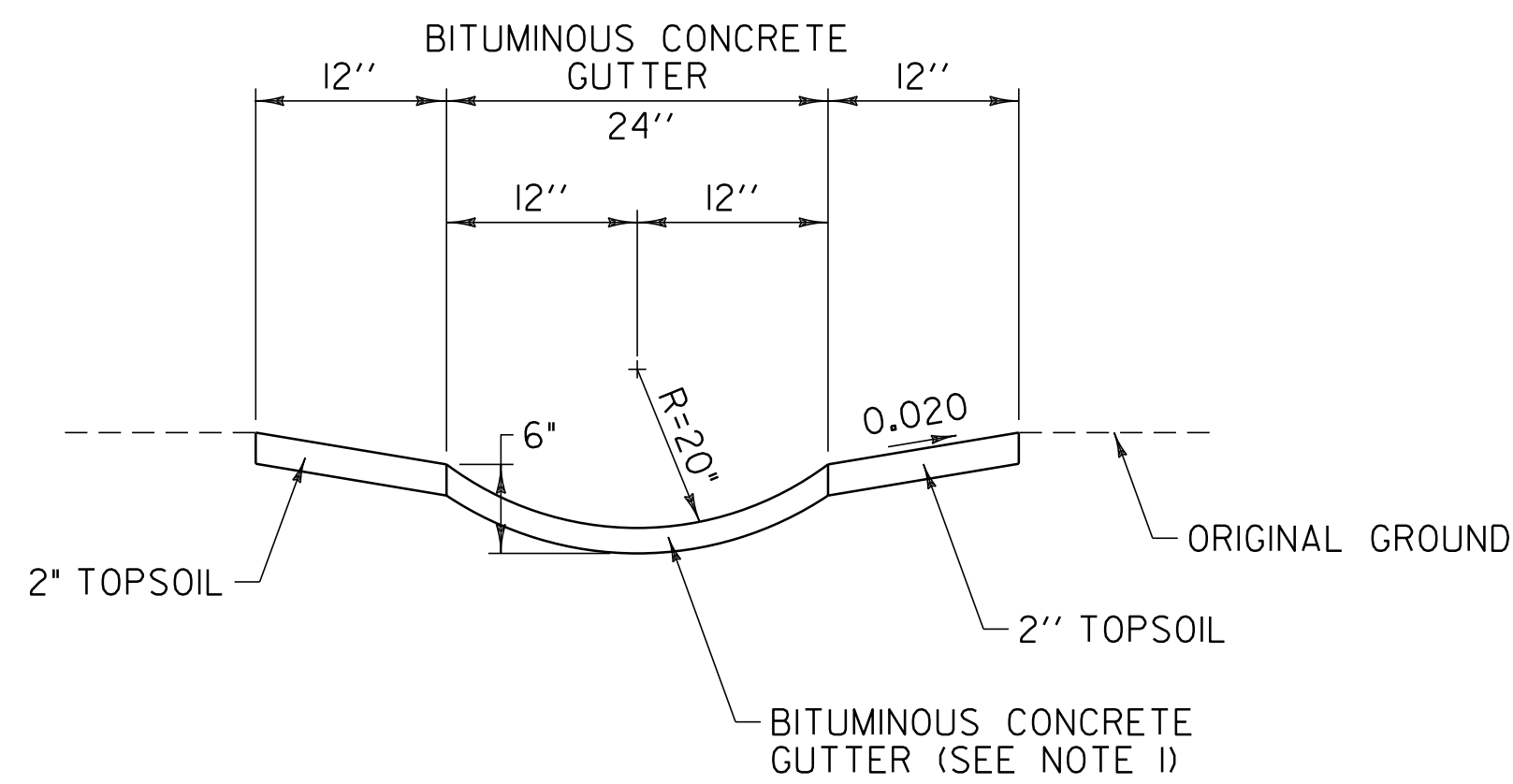
17. THE CONTRACTOR SHALL MAINTAIN COLD PLANE AND PAVING DEPTHS THAT DO NOT REDUCE THE CLEARANCE HEIGHTS OF THE ROADWAY OR SHOULDERS UNDER THE OVERPASS BRIDGES. THESE HEIGHTS SHALL BE RECORDED BY THE RESIDENT ENGINEER PRIOR TO THE START OF CONSTRUCTION AND SHALL BE REMEASURED AFTER PAVING OPERATIONS ARE COMPLETE. IF IT IS DETERMINED THAT A REDUCTION IN CLEAR HEIGHT HAS OCCURRED, THE CONTRACTOR SHALL RE-ESTABLISH THE ORIGINAL CLEAR HEIGHT AT NO ADDITIONAL EXPENSE TO THE STATE.

* PRECONSTRUCTION AND POST CONSTRUCTION HEIGHTS WERE RECORDED AND FILED IN PROJECT COMPUTATIONS BINDER IN SECTION 490.30

- THE WEARING COURSE SHALL BE TYPE IVS SUPERPAVE BITUMINOUS CONCRETE PAVEMENT. THE LEVELING COURSE SHALL BE TYPE IVS SUPERPAVE BITUMINOUS CONCRETE PAVEMENT. THE BASE COURSE FOR SHOULDER REPAIRS SHALL BE TYPE IIIS SUPERPAVE BITUMINOUS CONCRETE PAVEMENT. THE BASE COURSE FOR ACCELERATION / DECELERATION LANE EXTENSIONS SHALL BE TYPE IS SUPERPAVE BITUMINOUS CONCRETE PAVEMENT.
- 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.
- SUPERPAVE BITUMINOUS CONCRETE PAVEMENT TOLERANCE = +/- 1/4 INCH (TOTAL PAVEMENT THICKNESS EXCLUDING LEVELING).
- 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. 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 ITEM 30L40 SUBBASE, RAP. EXCAVATED MATERIAL SHALL BE SPREAD ON THE ADJACENT SLOPES OR REMOVED FROM THE PROJECT 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. IN AREAS OF RUTTING, THE COLD PLANE DEPTH SHOULD BE MEASURED FROM THE HIGH POINTS OF THE ROADWAY SECTION.
- THE CONTRACTOR SHALL REPAIR ALL SHOULDERS THAT ARE GREATER THAN 10' WIDE AS SHOWN ON THE TYPICAL SECTION AS DIRECTED BY THE RESIDENT ENGINEER. ALL SHOULDERS LESS THAN 10' IN WIDTH SHALL BE COLD PLANED AND PAVED THE SAME AS THE ADJACENT TRAVEL LANES. THE CONTRACTOR SHALL REBUILD THE EXISTING SHOULDERS IN THE VICINITY OF INTERCHANGE 9 AS SHOWN ON SHEET 5 FOR THE ACCELERATION/ DECELERATION LANE EXTENSION DETAILS. IF THE CONTRACTOR ELECTS TO COLD PLANE THE 10' SHOULDER PRIOR TO COLD PLANING THE ADJACENT TRAVEL LANE, THE 2" BASE COURSE SHALL BE PAVED THE SAME WORKDAY. IF THE CONTRACTOR CHOOSES TO COLD PLANE THE 4" ON THE 10' SHOULDER IN TWO PASSES, PAYMENT FOR COLD PLANING WILL ONLY BE MADE FOR THE FIRST PASS. FINAL GRADING OF THE EXPOSED SHOULDER SUBBASE MATERIAL SHALL BE COMPLETED AS DIRECTED BY THE RESIDENT ENGINEER. AN ESTIMATED QUANTITY OF ITEM 608.15 POWER GRADER RENTAL HAS BEEN INCLUDED TO COMPLETE THIS GRADE.
- ALL DI'S AND CB'S TO BE REHABILITATED AS SHOWN ON THE PLANS AND PAID FOR UNDER 604.412, 604.415, 604.418 REHAB. DI, CB OR MH CLASS I, II, III, SHALL BE RAISED OR REHABILITATED SUCH THAT THE NEW GRATE ELEVATION IS ~~LEVEL~~ WITH THE SURROUNDING TERRAIN. TYPE B GRATES SHALL BE USED FOR ALL REHABILITATED DI'S AND CB'S IN PAVEMENT ADJACENT TO BITUMINOUS CURBING. DRAINAGE STRUCTURES CALLING FOR REHAB HAVE BEEN EVENLY DISTRIBUTED BETWEEN ITEMS 604.412, 604.415, AND 604.418 FOR ESTIMATING PURPOSES. **3/4" BELOW**
- THE CONTRACTOR SHALL PAVE ALL U-TURNS LOCATED WITHIN THE PROJECT AREA AS DETAILED ON SHEET 4 OR AS DIRECTED BY THE RESIDENT ENGINEER.
- 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.J3 AGGREGATE SHOULDERS, RAP.
- 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.
- 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.
- ESTIMATED QUANTITIES OF EARTH BORROW AND AGGREGATE SHOULDERS HAVE BEEN INCLUDED FOR CONSTRUCTING AND RESHAPING THE AREAS AROUND 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 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.
- ALL DELINEATORS WITHIN THE PROJECT AREA ARE TO BE REPLACED AS DIRECTED BY THE RESIDENT ENGINEER AND PAID FOR UNDER ITEM 676.J0 DELINEATOR WITH STEEL POST.
- AN ESTIMATED QUANTITY OF ITEM 619.I7 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.
- AREAS ADJACENT TO THE SHOULDER WHERE NO GUARDRAIL EXISTS THAT HAVE BUILT UP EXCESS MATERIAL ARE TO BE GRADED IN ORDER TO ALLOW THE SHOULDER TO DRAIN AS DIRECTED BY THE RESIDENT ENGINEER AND SHALL BE PAID FOR UNDER ITEM 608.15 POWER GRADER RENTAL.
- ESTIMATED QUANTITIES OF ITEM 613.I0 STONE FILL, TYPE I; ITEM 649.3I 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.
- STEEL BEAM GUARDRAIL WITH STEEL POSTS SHALL BE USED ON THIS PROJECT. 3' OF BACKING IS REQUIRED BEHIND THE FACE OF GUARDRAIL WITH 6' POSTS. IF THIS CANNOT BE OBTAINED, THEN 8' POSTS SHALL BE USED.

NOT TO SCALE

| | | |
|------------------------------|----------------------------------|------------------------------|
| TYPICAL SECTION SHEET | PROJECT NAME: WINDSOR - HARTLAND | |
| | PROJECT NUMBER: IM 091-(161) | |
| | FILE NAME: p07al42.dgn | PLOT DATE: 16-AUG-2011 13:41 |
| | PROJECT LEADER: D.E.G. | DRAWN BY: C.A.K. |
| | DESIGNED BY: M.J.L. | CHECKED BY: R.A.B. |
| | IPARM FILE: p07al42+yp.i | SHEET 3 OF 56 |

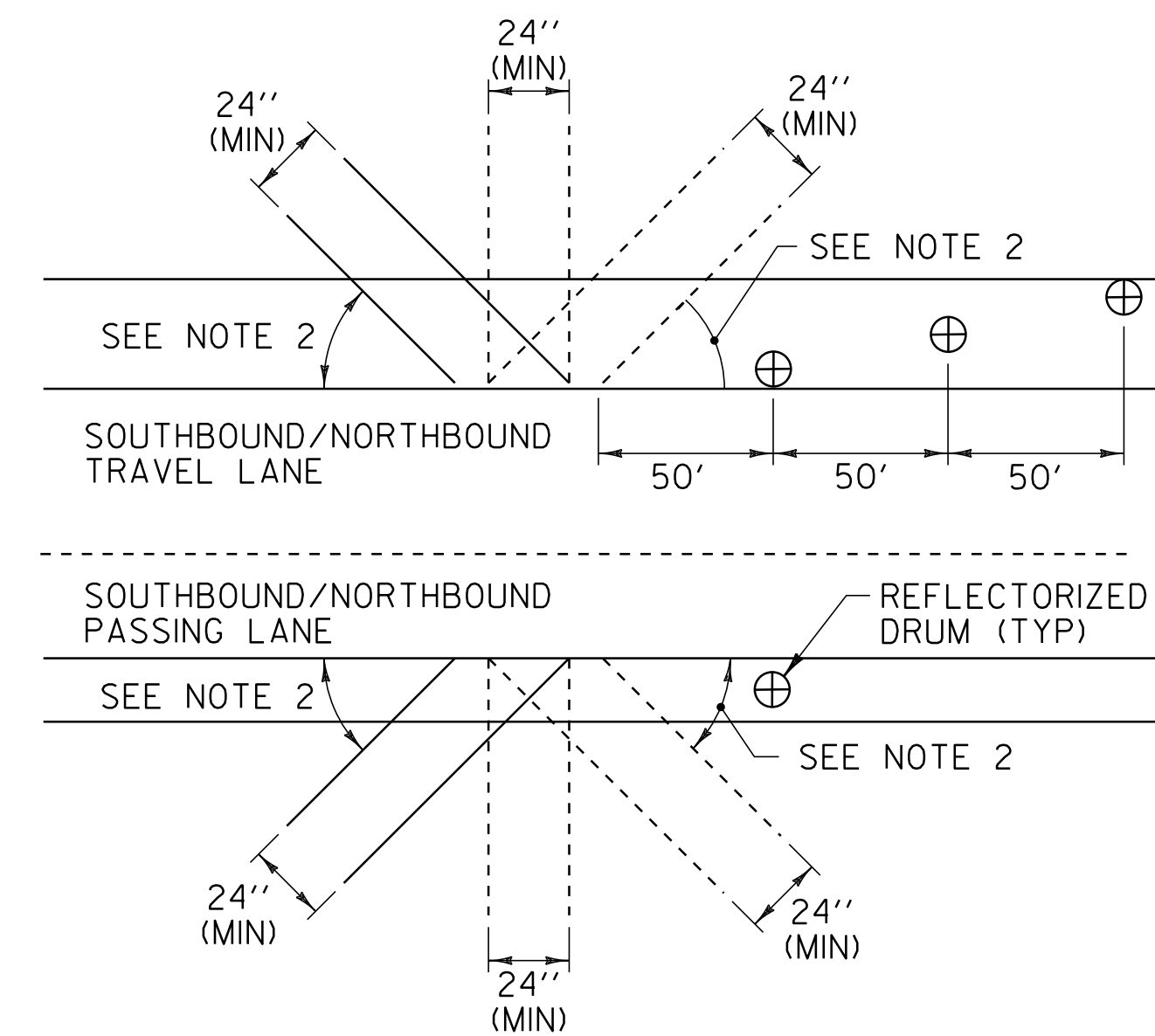


BITUMINOUS CONCRETE GUTTER DETAIL

SEE ITEM DETAIL SUMMARY SHEETS FOR LOCATIONS

NOTE:

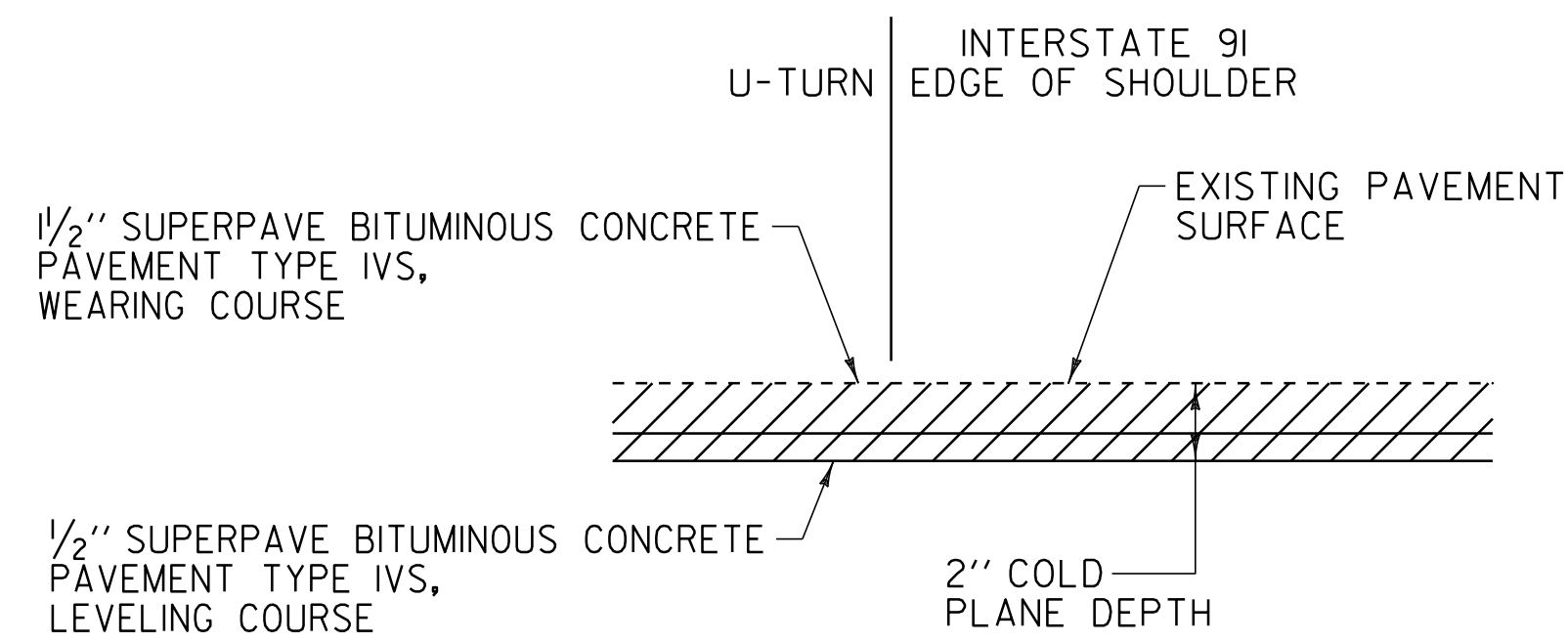
1. BITUMINOUS CONCRETE GUTTER TO BE CONSTRUCTED BY PLACING ONE 2" TYPE IVS SUPERPAVE BITUMINOUS CONCRETE PAVEMENT LIFT AS DIRECTED BY THE RESIDENT ENGINEER. PAYMENT UNDER ITEM 616.47 BITUMINOUS CONCRETE GUTTERS AND TRAFFIC ISLANDS.



BLEEDER DETAIL

NOTES:

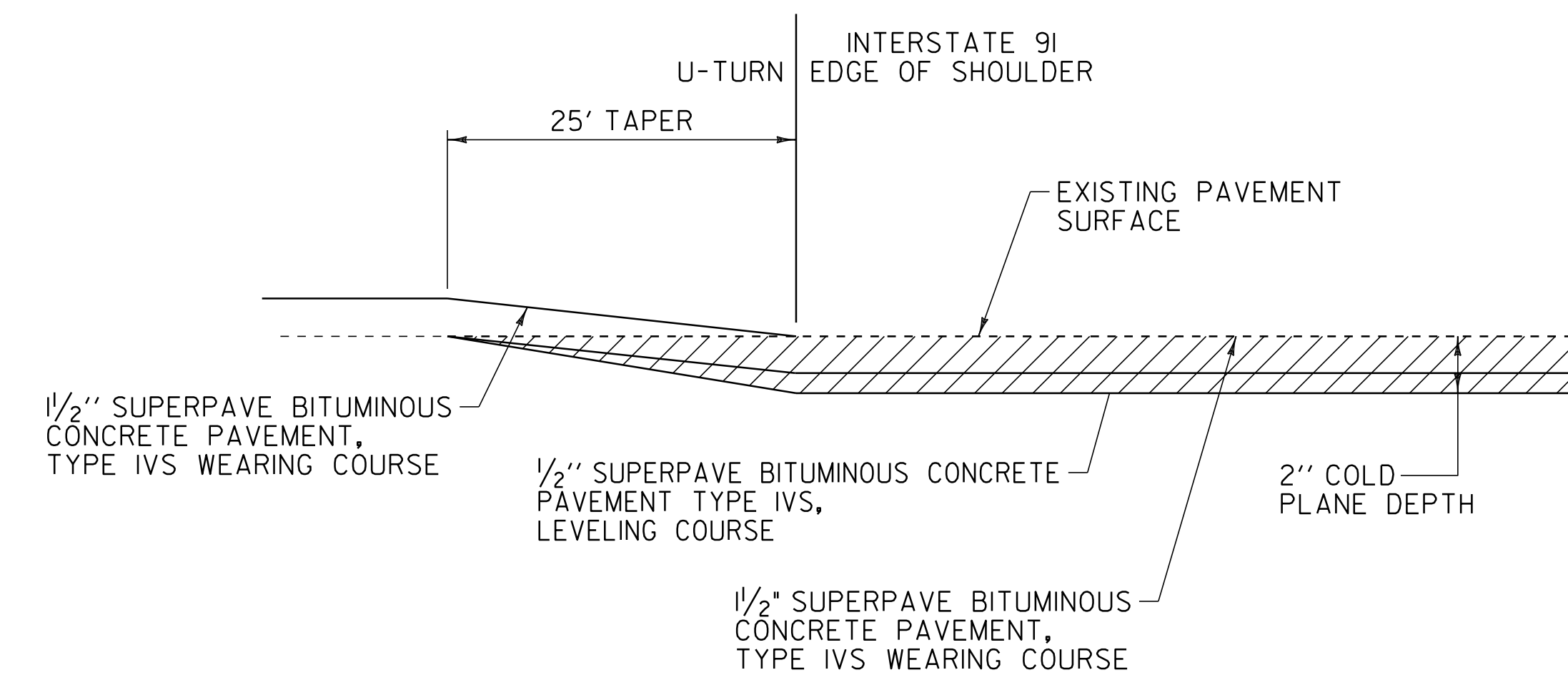
- BLEEDERS ARE TO BE CUT WHILE COLD PLANING AT LOCATIONS SPECIFIED BY THE RESIDENT ENGINEER.
- ANGLE BLEEDERS TO BEST ACCEPT WATER FLOW.
- CUT ALL BLEEDERS TO THE DEPTH OF COLD PLANING AND GRADE TO DRAIN. PAYMENT INCIDENTAL TO ITEM 210.10.
- BLEEDERS ARE TO BE FILLED DURING PAVING WITH ITEM 490.30 OR AS DIRECTED BY THE RESIDENT ENGINEER.
- REFLECTORIZED DRUMS MUST BE PLACED AS SHOWN TO WARN MOTORISTS OF THE GAP IN THE SHOULDER. PAYMENT SHALL BE INCIDENTAL TO ITEM 641.10 TRAFFIC CONTROL AS DIRECTED BY THE RESIDENT ENGINEER.
- BLEEDERS SHALL NOT BE REQUIRED IF THE COLD PLANED AREAS ARE PAVED BACK THE SAME DAY AS DIRECTED BY THE RESIDENT ENGINEER.



U-TURN PAVING DETAIL

U-TURN LENGTH LESS THAN 50 FEET

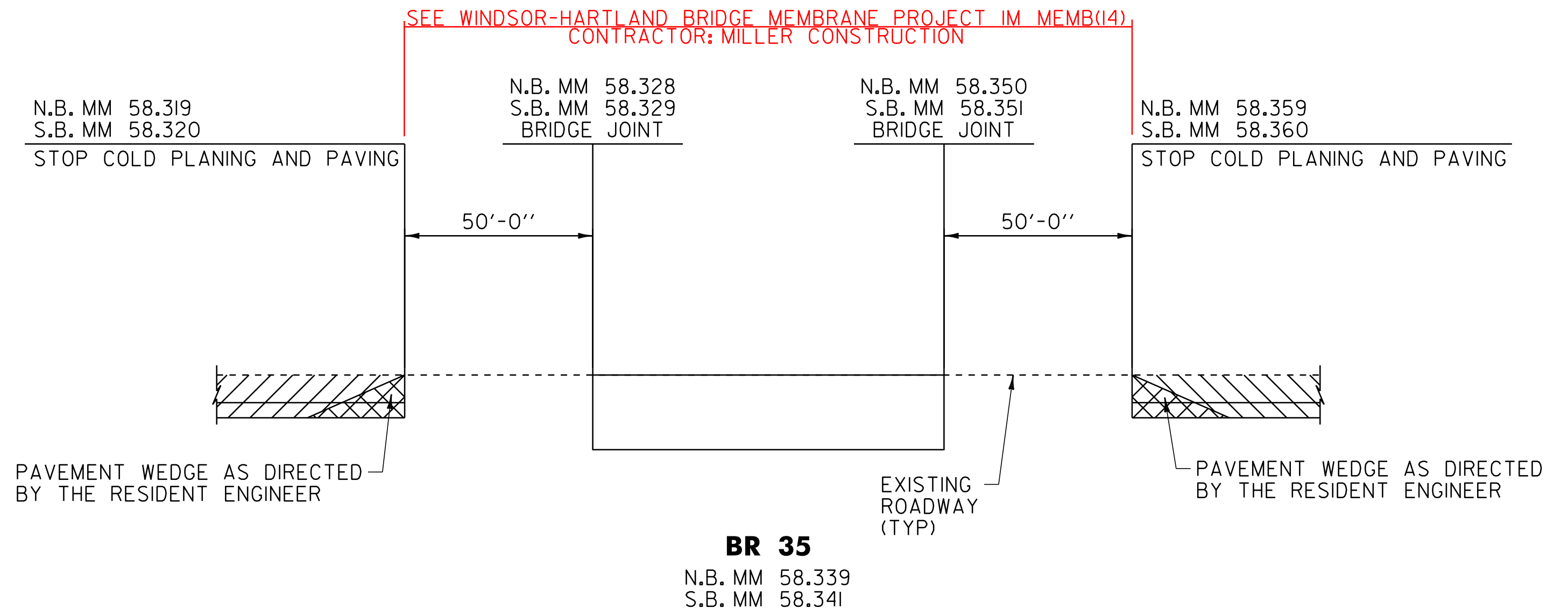
S.B. MM 57.591
S.B. MM 58.761
S.B. MM 60.720
S.B. MM 65.889



U-TURN PAVING TRANSITION DETAIL

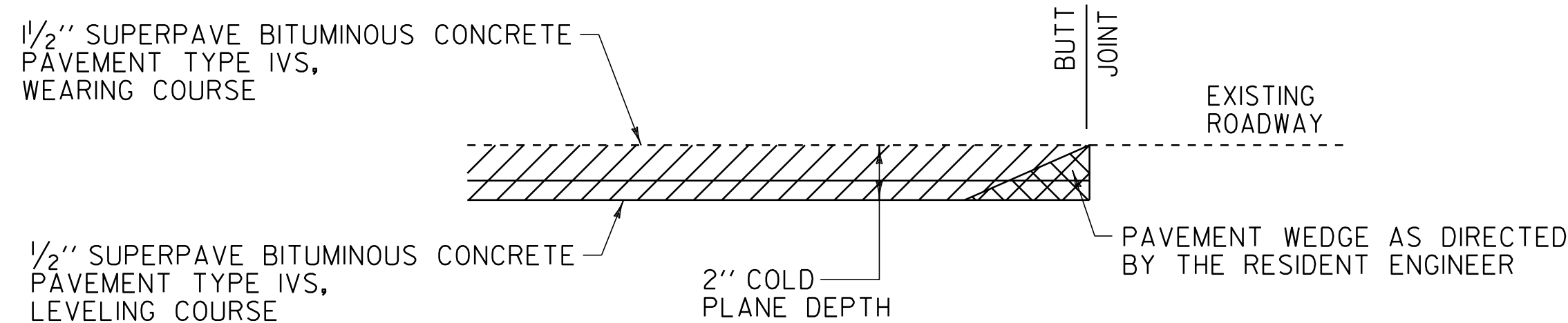
U-TURN LENGTH GREATER THAN 50 FEET

S.B. MM 60.091
S.B. MM 63.965
S.B. MM 64.007



BR 35

N.B. MM 58.339
S.B. MM 58.341



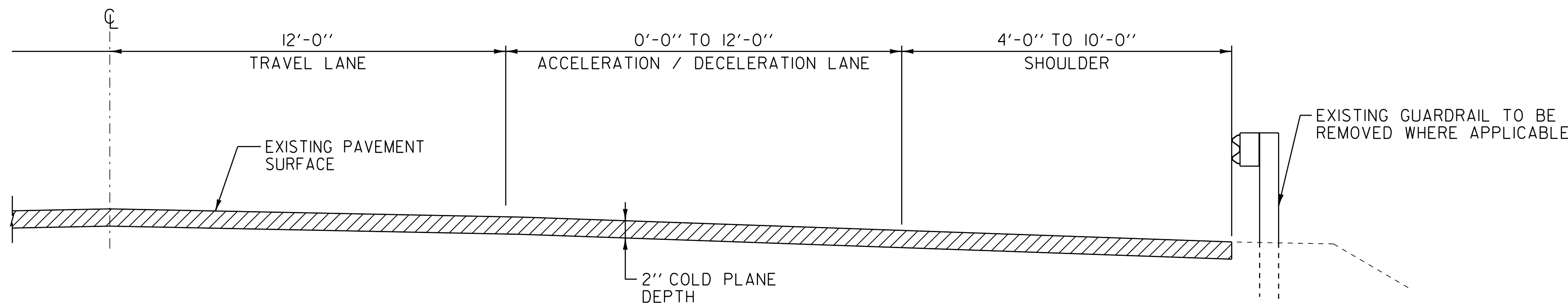
TYPICAL APPROACH AREA DETAIL

WINDSOR: N.B. MM 57.438 - BEGIN IM 091-(161) S.B. MM 57.401 - BEGIN IM 091-(161)
HARTLAND: N.B. MM 66.155 - END IM 091-(161) S.B. MM 66.158 - END IM 091-(161)
RAMP A STA. A0+25.00 - INTERCHANGE 9
RAMP B STA. B11+73.00 - INTERCHANGE 9
RAMP C STA. C0+23.00 - INTERCHANGE 9
RAMP D STA. D13+86.00 - INTERCHANGE 9

NOT TO SCALE

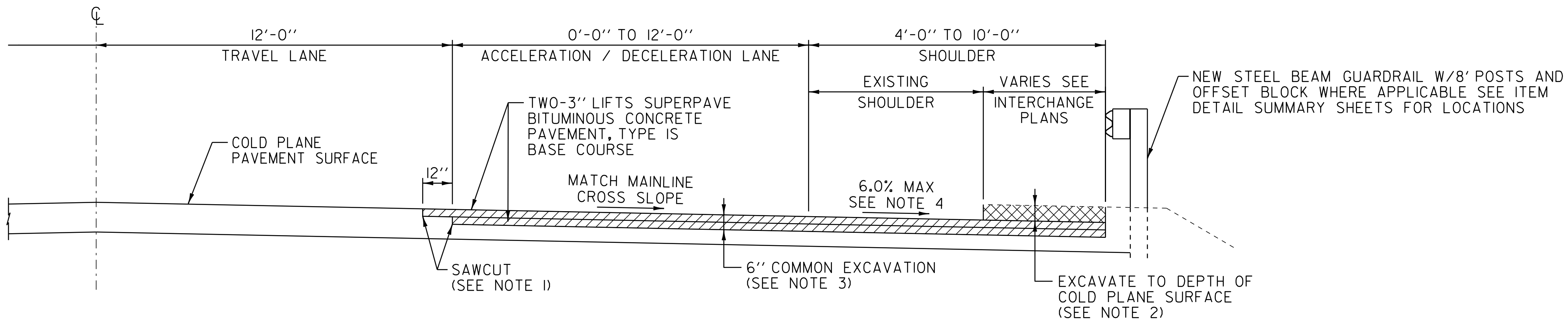
PAVING DETAILS SHEET

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| PROJECT NUMBER: IM 091-(161) | DRAWN BY: C.A.K. |
| FILE NAME: p07al42.dgn | CHECKED BY: R.A.B. |
| PROJECT LEADER: D.E.G. | SHEET 4 OF 56 |
| DESIGNED BY: M.J.L. | |
| IPARM FILE: p07al42pd.i | |



PAVEMENT WIDENING FOR INTERCHANGE RAMP - PHASE I

COLD PLANE EXISTING PAVEMENT SURFACE AS SHOWN ON THE PLANS AND REMOVE EXISTING GUARDRAIL. SEE SHEET 3 FOR COLD PLANING TYPICAL SECTION



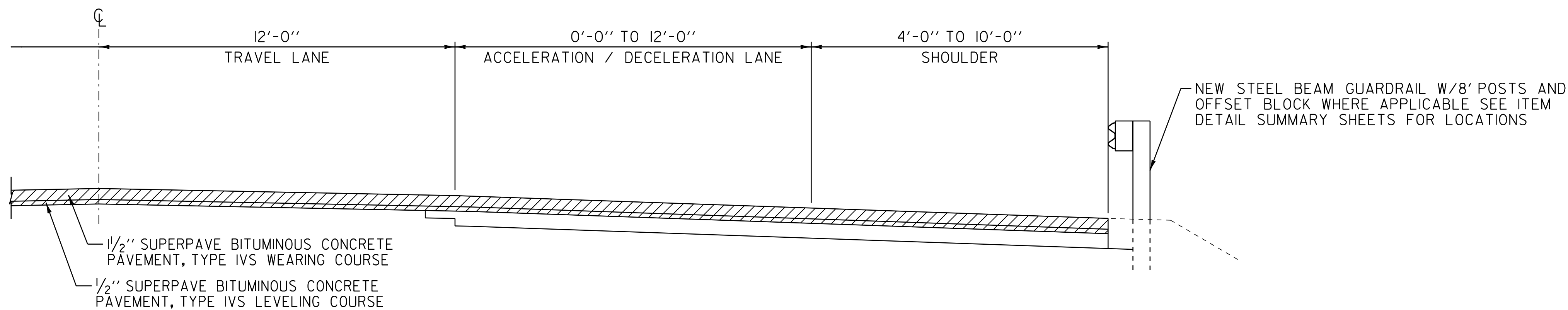
PAVEMENT WIDENING FOR INTERCHANGE RAMP - PHASE II

EXCAVATE EXISTING PAVED SHOULDER, ACCELERATION / DECELERATION LANE AND AREA BEHIND GUARDRAIL AS SHOWN ON THE PLANS, PAVE BASE COURSE AND INSTALL NEW GUARDRAIL

RAMP B STA B0+00.0 - STA B5+48.0 RT
 RAMP C STA C11+00.0 - STA C15+70.0 RT
 RAMP D STA D0+00.0 - STA D6+00.0 RT

NOTES

1. THE CONTRACTOR SHALL SAWCUT THE EXISTING PAVEMENT ALONG THE PAVEMENT WIDENING AREA TO THE DEPTHS SHOWN OR AS DIRECTED BY THE RESIDENT ENGINEER. THE COST OF SAWCUTTING SHALL BE INCIDENTAL TO ITEM 203.15 COMMON EXCAVATION.
2. THE CONTRACTOR SHALL EXCAVATE THE AREA BEHIND THE EXISTING GUARDRAIL TO THE DEPTHS SHOWN TO MATCH THE TOP OF THE ADJACENT COLD PLANE SURFACE AS DIRECTED BY THE RESIDENT ENGINEER.
3. THE CONTRACTOR SHALL NOT LEAVE THE UNPROTECTED 6" DROP OFF EXPOSED TO VEHICULAR TRAFFIC. THE CONTRACTOR SHALL ONLY EXCAVATE WHAT CAN BE PAVED WITH THE TWO 3" LIFTS OF TYPE IS BASE OR AS DIRECTED BY THE RESIDENT ENGINEER.
4. THE CONTRACTOR SHALL RECONSTRUCT THE SHOULDER ADJACENT TO THE ACCELERATION / DECELERATION LANES IN SUCH A MANNER THAT THE CROSS SLOPE DOES NOT EXCEED 6.0%. IN AREAS WHERE THE SHOULDER IS LOCATED ON THE INSIDE OF A CURVE AND THE MAINLINE IS SUPERELEVATED GREATER THAN 6.0% THE SHOULDER SHALL MATCH THE SLOPE OF THE MAINLINE AS DIRECTED BY THE RESIDENT ENGINEER.



PAVEMENT WIDENING FOR INTERCHANGE RAMP - PHASE III

PAVE LEVELING & WEARING COURSE AS SHOWN ON THE PLANS

RAMP B STA B0+00.0 - STA B5+48.0 RT
 RAMP C STA C11+00.0 - STA C15+70.0 RT
 RAMP D STA D0+00.0 - STA D6+00.0 RT

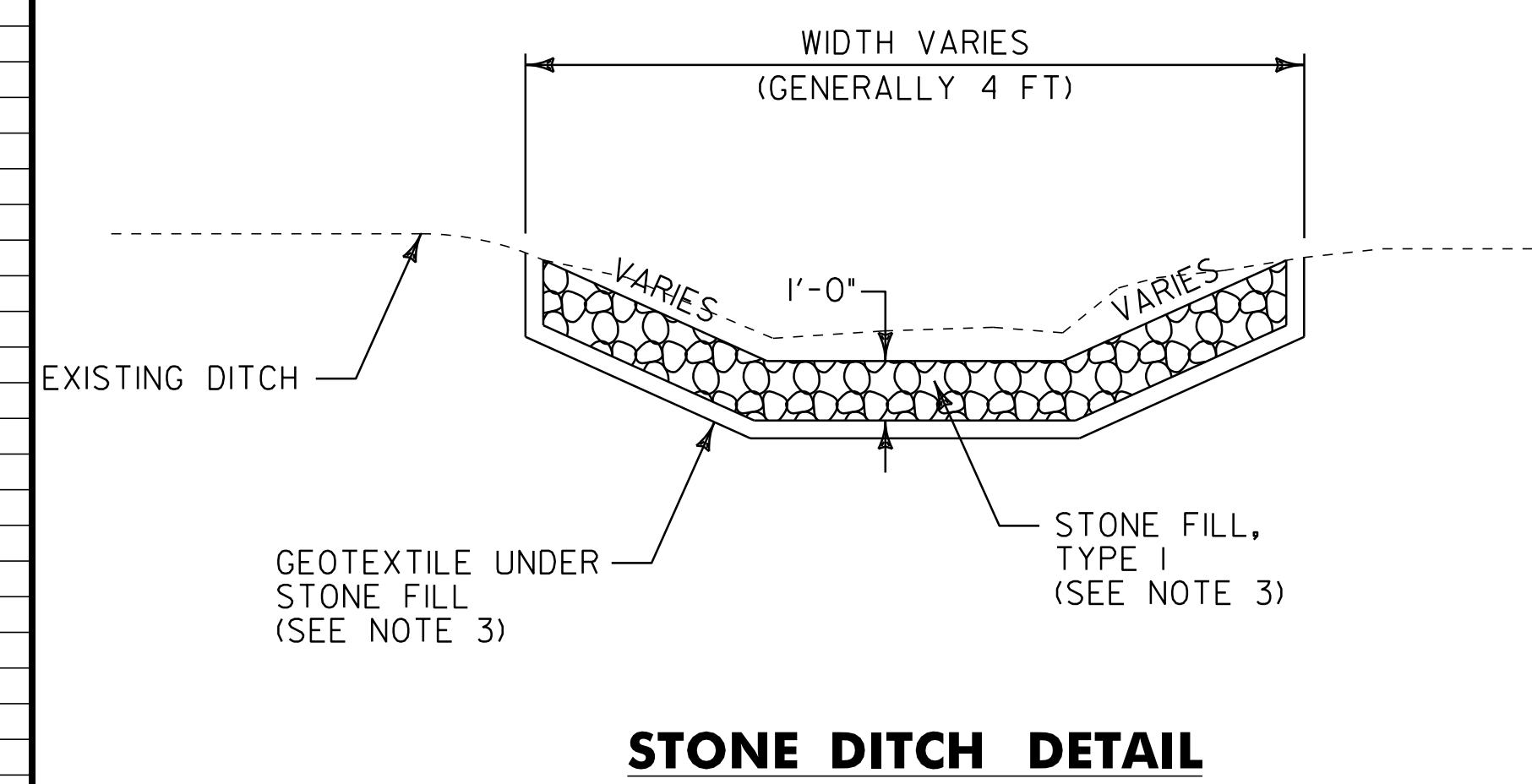
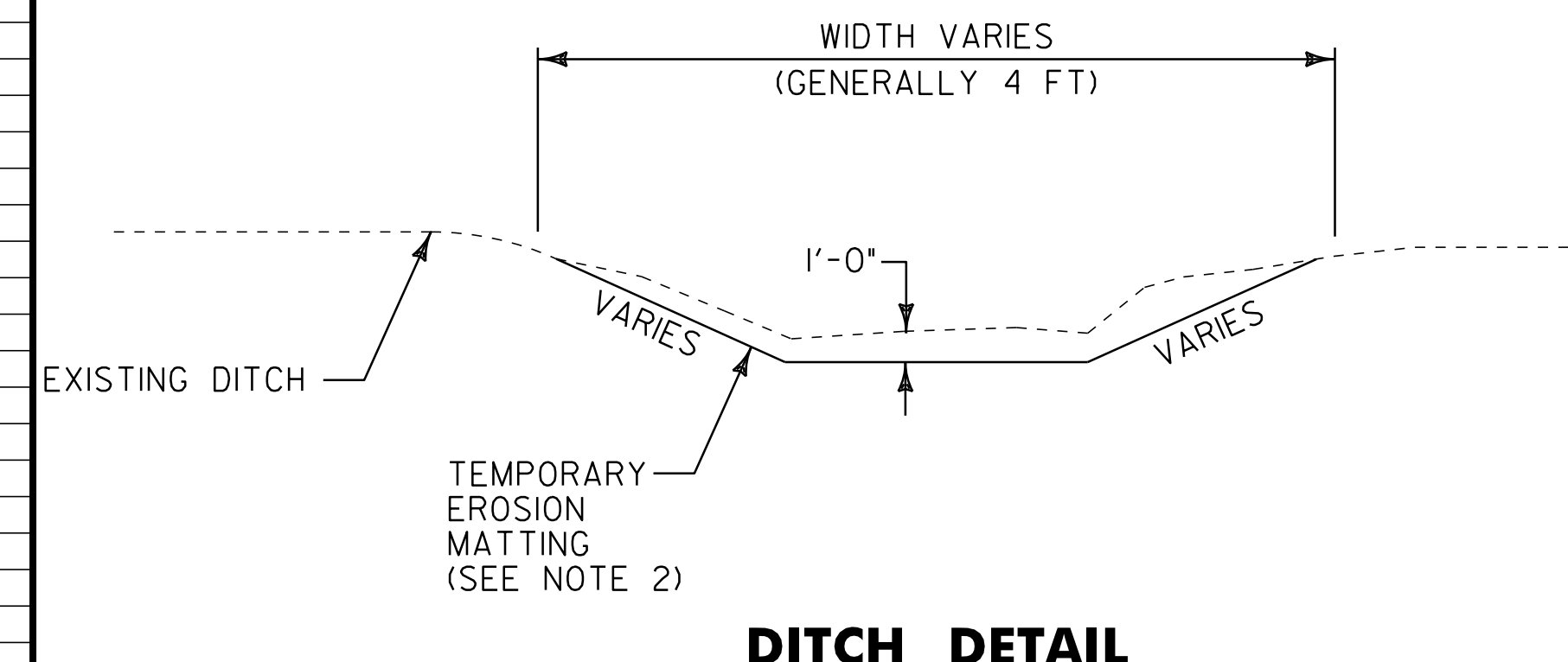
NOT TO SCALE

| | | |
|-----------------------------------------------------------|---------------------------------------------------------------------------|---------------------------------------------------------|
| ACCELERATION / DECELERATION LANE EXTENSION DETAILS | PROJECT NAME: WINDSOR - HARTLAND | |
| | PROJECT NUMBER: IM 091-(161) | |
| | FILE NAME: p07al42.dgn | PLOT DATE: 16-AUG-2011 13:41 |
| | PROJECT LEADER: D.E.G. DESIGNED BY: M.J.L. IPARM FILE: p07al42pd2.i | DRAWN BY: C.A.K. CHECKED BY: R.A.B. SHEET 5 OF 56 |

ITEM DETAIL SUMMARY SHEET #2

| LOCATION | | | GUARDRAIL (GALVANIZED) | | | | | | | | | | | | | | | | DRAINAGE | | | | | MISCELLANEOUS | | | REMARKS | | | |
|--------------------------------------|-------------|-------|--------------------------------------------------|--------------------|------------------|-------------------|--------------------|------------------|------------------------------|-------------|----------------------|------------------------------|--------------------------|---------------------|-------------------|-------------------|---------------------|---------------------|------------------|-------------|---------|---------|-------------------------|------------------------------|----------------------------|----|---------|-------------------------|----|----|
| | | | 203.30 | 203.40 | 402.12 | 402.13 | 620.75 | 621.20 | 621.205 | 621.50 | 621.60 | 621.70 | 621.71 | 621.74 | 621.76 | 621.77 | 621.79 | 621.80 | 653.20 | 604.412 | 604.415 | 604.418 | 616.305 | 616.47 | 676.10 | | | 676.12 | | |
| BEGIN STATION | END STATION | POS. | EARTH BORROW | SHLDR. BERM REMOV. | AGG. SHLDRS. | AGG. SHLDRS., RAP | SNOW BARRIER GALV. | S.B. G.R., GALV. | S.B.G.R. GALV. W/ 8 FT POSTS | MTS. FLARED | ANCHOR FOR S.B. G.R. | G.R. APPR. SECT. TYPE I | G.R. APPR. SECT. TYPE II | ALUM. APPR. RAILING | REPLACE G.R. POST | REPLACE G.R. BEAM | ADJ. HEIGHT OF G.R. | REMOV. & DISP. G.R. | TEMP. EROS. MAT. | REHAB. DI'S | CB'S | OR MH'S | BIT. CONC. CURB, TYPE A | BIT. CONC. GUT. & TRAF. ISL. | DELINEATOR WITH STEEL POST | | | REMOV. OF EXIST. DELIN. | | |
| | | | CY | LF | TON | TON | LF | LF | EA | EA | EA | EA | EA | EA | EA | EA | EA | EA | EA | EA | EA | EA | EA | EA | EA | EA | | EA | EA | EA |
| NORTHBOUND: | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 62.312 | 62.317 | RT | | | | | | 39.5 | | | I | | | | | | | | | | | | | | | | | | | |
| 62.937 | 62.946 | RT | -25 | | -5 | | | 12.5 | | | I | | | | | | | | | | | | | | | | | | | |
| 63.023 | 63.028 | RT | | | | | | 39.5 | | | | | | | | | | | | | | | | | | | | | | |
| 63.305 | 63.341 | RT | -25 | | -5 | | | 187.5 150.0 | | | I | | | | | | | | | | | | | | | | | | | |
| 63.287 | 63.394 | LT | -25 | | -5 | | | 527.0 525.0 | | | I | I | | | | | | | | | | | | | | | | | | |
| 63.570 | 63.579 | LT | -25 | | -5 | | | 12.5 | | | I | | | | | | | | | | | | | | | | | | | |
| 63.614 | 63.619 | RT | BURIED | END | | | | 39.5 | | | | +2 | | | | | | | | | | | | | | | | | | |
| 63.680 | 63.685 | LT | | | | | | 39.5 | | | | I | | | | | | | | | | | | | | | | | | |
| 63.798 | 63.807 | RT | -25 | | -5 | | | 12.5 | | | I | I | | | | | | | | | | | | | | | | | | |
| 63.820 | 63.825 | RT | | | | | | 39.5 | | | | I | | | | | | | | | | | | | | | | | | |
| 64.064 | 64.073 | LT | -25 | | -5 | | | 28 12.5 | | | I | | | | | | | | | | | | | | | | | | | |
| 64.115 | 64.120 | LT | | | | | | 39.5 | | | | I | | | | | | | | | | | | | | | | | | |
| 64.156 | 64.161 | RT | BURIED | END | | | | 39.5 | | | | +2 | | | | | | | | | | | | | | | | | | |
| 64.212 | 64.221 | RT | -25 | | -5 | | | 175 12.5 | | | I | | | | | | | | | | | | | | | | | | | |
| 64.254 | 64.259 | RT | REPLACE ENTIRE GUARDRAIL DUE TO EXCESSIVE DAMAGE | | | | | | 39.5 | | | | | | | | | | | | | | | | | | | | | |
| 64.340 64.648 64.720 64.863 | 64.653 | RT | BURIED | END | | | | 39.5 | | | | +2 | | | | | | | | | | | | | | | | | | |
| 64.863 | 64.868 | RT | BURIED | END | | | | 39.5 | | | | +2 | | | | | | | | | | | | | | | | | | |
| 65.182 | 65.191 | RT | -25 | | -5 | | | 12.5 | | | I | | | | | | | | | | | | | | | | | | | |
| 65.784 | 65.789 | RT | | | | | | 39.5 | | | | I | | | | | | | | | | | | | | | | | | |
| 66.013 | 66.158 | RT | -25 | | -5 | | | 700.0 | | | I | I | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | 27.25 | | | | | | | | | | | | | | | | |
| 66.068 | 66.161 | LT | -25 | | -5 | | | 425.0 | | | I | I | | | | | | | | | | | | | | | | | | |
| SOUTHBOUND: | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 57.401 | 66.158 | LT/RT | | | 11,256 10,110 | 75.77 | 2,427.49 700 | | | | | | | | | | | | | | | | | | | | | | | |
| 57.401 | 57.489 | LT | -25 | | -5 | | | 288 375 | | | I | | | | | | | | | | | | | | | | | | | |
| 57.833 | 57.842 | LT | -25 | | -5 | | | 12.5 | | | I | | | | | | | | | | | | | | | | | | | |
| 58.273 | 58.280 | LT | | | | | | 264.5 39.5 | | | | I | | | | | | | | | | | | | | | | | | |
| 58.312 | 58.327 | RT | | | | | | 66.5 64.5 | | | | I | | | | | | | | | | | | | | | | | | |
| 58.353 | 58.441 | RT | -25 | | -5 | | | 375.0 | | | I | | | | | | | | | | | | | | | | | | | |
| 58.426 | 58.435 | LT | -25 | | -5 | | | 87.5 | | | I | | | | | | | | | | | | | | | | | | | |
| SHEET SUBTOTAL: | | | 0 350 | 11,256 10,110 | 75.77 70 | 2,429.49 700 | - | 3,621 3263.5 | - | 14 | 20 13 | 2 | 1 | 54.50 | 11 80 | 320 625 | 587 1000 | 2,442.5 2304.5 | 1,154.7 350 | 16 22 | 1 22 | 0 22 | 1,718 100.0 | - | 461 539 | - | - | 500 | | |
| ITEM DETAIL SUMMARY SHEET #2 | | | PROJECT NAME: WINDSOR - HARTLAND | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | PROJECT NUMBER: IM 091-1(61) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| FILE NAME: p07al42.dgn | | | | | | | | | | | | PLOT DATE: 16-AUG-2011 13:41 | | | | | | | | | | | | | | | | | | |
| PROJECT LEADER: D.E.G. | | | | | | | | | | | | DRAWN BY: C.A.K. | | | | | | | | | | | | | | | | | | |
| DESIGNED BY: M.J.L. | | | | | | | | | | | | CHECKED BY: R.A.B. | | | | | | | | | | | | | | | | | | |
| IPARM FILE: p07al42ids2.i | | | | | | | | | | | | SHEET 10 OF 56 | | | | | | | | | | | | | | | | | | |

| LOCATION | | | | FEET OF DITCHING | | | | MISCELLANEOUS ITEMS | | | | REMARKS | LOCATION | | | | FEET OF DITCHING | | | | MISCELLANEOUS ITEMS | | | | REMARKS |
|---------------------------|-------------|-------------|-------|------------------|-------|--------|-----|------------------------------------|----------------------------------------|-----------------------|-----------------------------------|--------------------------------------|----------|-------------|-------------|------|------------------|-------|--------|-----|------------------------------------|----------------------------------------|----------------------|-----------------------------------|---------|
| SITE | MILE MARKER | MILE MARKER | POS. | PERCENT GRADE | | | | 613.10 STONE FILL, TYPE I CY | 649.31 GEOT. UNDER STONE FILL SY | 651.15 SEED LB | 653.20 TEMP. EROS. MATT. SY | | SITE | MILE MARKER | MILE MARKER | POS. | PERCENT GRADE | | | | 613.10 STONE FILL, TYPE I CY | 649.31 GEOT. UNDER STONE FILL SY | 651.15 SEED LB | 653.20 TEMP. EROS. MATT. SY | |
| | | | | 0-1 | 1-2.5 | 2.5-10 | >10 | | | | | | | | | | 0-1 | 1-2.5 | 2.5-10 | >10 | | | | | |
| INTERSTATE 91 NORTHBOUND: | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 57.438 | 66.155 | LT/RT | 1000 | 200 | | | 30 | 140 | 2.37 9 | 191.2 667 | AS DIRECTED BY THE RESIDENT ENGINEER | | | | | | | | | | | | | |
| SOUTHBOUND: | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 57.401 | 66.158 | LT/RT | 1000 | 200 | | | 2.5 30 | 140 | 11.08 9 | 894.9 667 | AS DIRECTED BY THE RESIDENT ENGINEER | | | | | | | | | | | | | |
| ROUNDINGS | | | | - | - | | | - | 20.0 | 2.0 | 16.0 | | | | | | | | | | | | | | |
| TOTALS | | | | 2000 | 400 | | | 60 | 300.0 | 20 | 1,086.1 | | | | | | | | | | | | | | |



- NOTES:
1. PIPE INLET AND OUTLET AREAS AND DITCH CLEANING THROUGHOUT THE PROJECT SHALL BE PERFORMED AT LOCATIONS IDENTIFIED ON THIS SHEET AND AS DIRECTED BY THE RESIDENT ENGINEER. PAYMENT WILL BE UNDER THE APPLICABLE EQUIPMENT RENTAL ITEM(S).
 2. ESTIMATED QUANTITIES OF TEMPORARY EROSION MATTING AND SEED HAVE BEEN INCLUDED AS NEEDED OR AS DIRECTED BY THE RESIDENT ENGINEER.
 3. ESTIMATED QUANTITIES OF STONE FILL TYPE I AND GEOTEXTILE UNDER STONE FILL HAVE BEEN INCLUDED AS NEEDED. STONE FILL TYPE I SHALL BE USED IN ALL DITCHES WITH A GRADE BETWEEN 2.5 AND 10 PERCENT OR AS DIRECTED BY THE RESIDENT ENGINEER.

NOT TO SCALE

DITCH CLEANING DETAIL SHEET

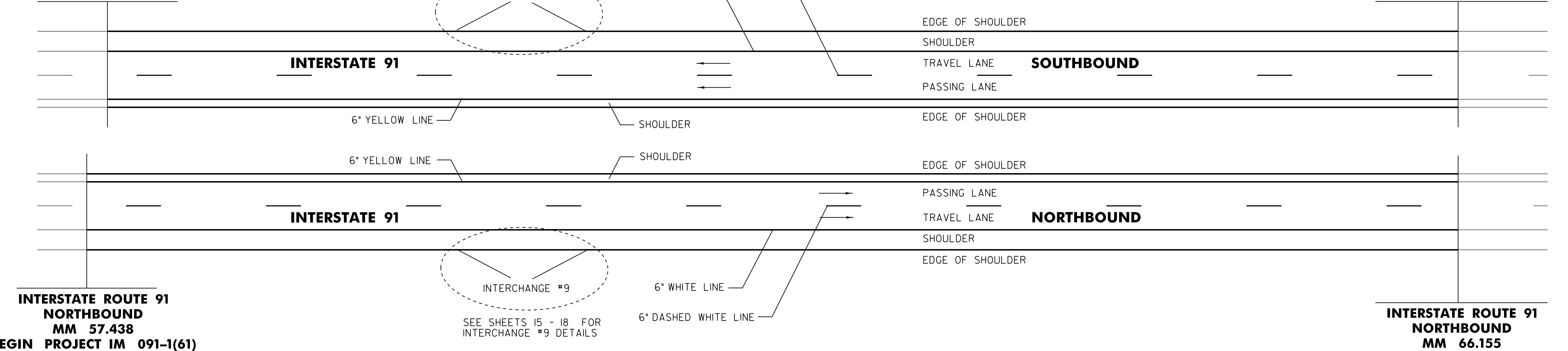
PROJECT NAME: WINDSOR - HARTLAND
PROJECT NUMBER: IM 091-(61)
FILE NAME: p07a142.dgn
PROJECT LEADER: D.E.G.
DESIGNED BY: M.J.L.
IPARM FILE: p07a142dcd.i

PLOT DATE: 16-AUG-2011 13:41
DRAWN BY: C.A.K.
CHECKED BY: R.A.B.
SHEET 13 OF 56

**INTERSTATE ROUTE 91
SOUTHBOUND
MM 57.401
BEGIN PROJECT IM 091-1(61)**

SEE SHEET 15 - 18 FOR
INTERCHANGE #9 DETAILS

**INTERSTATE ROUTE 91
SOUTHBOUND
MM 66.158
END PROJECT IM 091-1(61)**



**INTERSTATE ROUTE 91
NORTHBOUND
MM 57.438
BEGIN PROJECT IM 091-1(61)**

**INTERSTATE ROUTE 91
NORTHBOUND
MM 66.155
END PROJECT IM 091-1(61)**

604.412, 604.415, OR 604.418 REHAB. DROP INLETS, CATCH BASINS OR MANHOLES (SEE NOTE 2)

| | | | |
|--------------|--------------|--------------|--------------|
| NORTHBOUND: | NORTHBOUND: | SOUTHBOUND: | SOUTHBOUND: |
| MM 57.484 LT | MM 60.774 RT | MM 57.574 RT | MM 63.402 LT |
| MM 57.750 RT | MM 60.894 LT | MM 57.732 RT | MM 63.464 RT |
| MM 57.750 LT | MM 60.967 LT | MM 57.803 RT | MM 63.484 LT |
| MM 57.851 LT | MM 61.534 LT | MM 57.977 RT | MM 63.643 RT |
| MM 57.905 LT | MM 61.534 RT | MM 57.977 LT | MM 64.180 RT |
| MM 58.001 LT | MM 61.609 LT | MM 58.037 RT | MM 64.180 LT |
| MM 58.060 LT | MM 61.609 RT | MM 58.106 RT | MM 64.255 RT |
| MM 58.132 LT | MM 61.657 RT | MM 58.382 RT | MM 64.255 LT |
| MM 58.198 LT | MM 61.705 RT | MM 58.528 RT | MM 64.316 RT |
| MM 58.296 RT | MM 61.866 LT | MM 58.660 RT | MM 64.400 RT |
| MM 58.318 RT | MM 61.913 LT | MM 58.766 RT | MM 64.456 RT |
| MM 58.359 RT | MM 61.961 LT | MM 58.939 RT | MM 64.524 RT |
| MM 58.542 LT | MM 62.317 LT | MM 59.027 LT | MM 64.601 RT |
| MM 58.949 LT | MM 63.305 RT | MM 59.191 RT | MM 64.665 RT |
| MM 59.043 LT | MM 63.306 LT | MM 59.283 LT | MM 64.665 LT |
| MM 59.134 LT | MM 63.344 RT | MM 59.378 LT | MM 64.820 RT |
| MM 59.310 LT | MM 63.361 LT | MM 59.929 RT | MM 64.894 RT |
| MM 59.403 LT | MM 63.369 LT | MM 60.079 RT | MM 65.026 RT |
| MM 59.518 LT | MM 63.492 LT | MM 60.224 RT | MM 65.026 LT |
| MM 59.595 LT | MM 63.806 RT | MM 60.479 RT | MM 65.090 RT |
| MM 59.660 RT | MM 64.154 RT | MM 60.710 RT | MM 65.166 RT |
| MM 59.678 LT | MM 64.243 LT | MM 60.811 RT | MM 65.192 LT |
| MM 59.751 LT | MM 64.432 RT | MM 60.811 LT | MM 65.223 RT |
| MM 59.937 LT | MM 64.518 RT | MM 60.858 LT | MM 65.280 RT |
| MM 60.081 RT | MM 64.809 RT | MM 60.905 RT | MM 65.336 LT |
| MM 60.161 LT | MM 64.856 RT | MM 60.905 LT | MM 65.336 RT |
| MM 60.198 RT | MM 64.949 RT | MM 60.968 RT | MM 65.414 RT |
| MM 60.293 RT | MM 65.202 RT | MM 62.087 RT | MM 65.414 LT |
| MM 60.367 LT | MM 65.295 RT | MM 62.296 RT | MM 65.469 LT |
| MM 60.426 LT | MM 65.352 RT | MM 63.275 LT | MM 65.538 LT |
| MM 60.474 RT | MM 65.808 LT | MM 63.280 RT | MM 65.634 LT |
| MM 60.540 LT | MM 65.835 LT | MM 63.343 RT | MM 65.690 RT |
| MM 60.542 RT | MM 65.957 RT | MM 63.401 RT | MM 65.764 RT |

213.10 MILLED RUMBLE STRIPS
NORTHBOUND:
MM 57.438 - MM 66.155 LT (44,165 LF)
MM 57.438 - MM 66.155 RT (44,980 LF)

SOUTHBOUND:
MM 57.401 - MM 66.158 LT (44,426 LF)
MM 57.401 - MM 66.158 RT (45,211 LF)

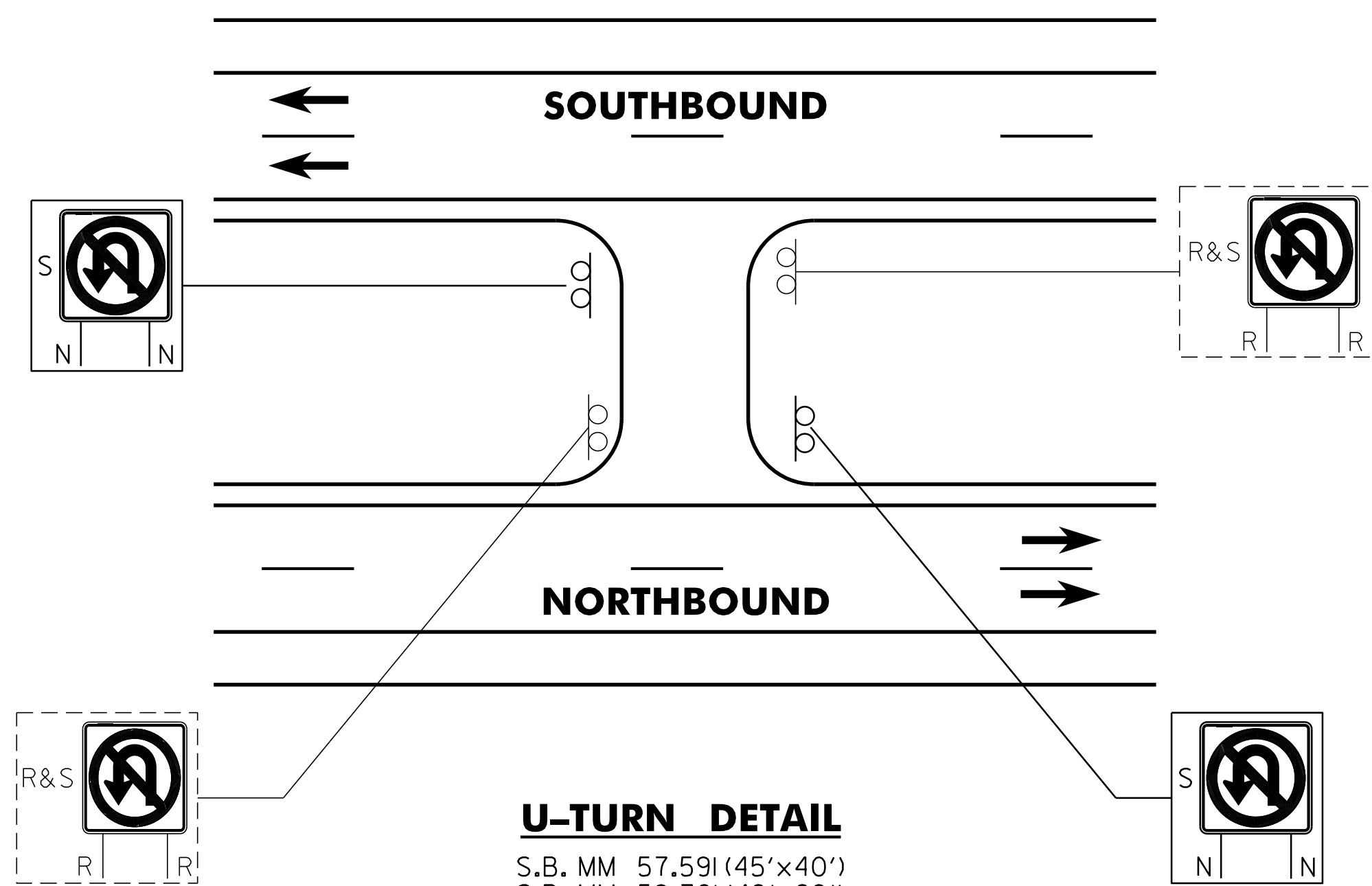
616.305 BITUMINOUS CONCRETE CURB, TYPE A
SEE ITEM DETAIL SUMMARY SHEETS
616.47 BITUMINOUS CONCRETE GUTTERS AND TRAFFIC ISLANDS
SEE ITEM DETAIL SUMMARY SHEETS
620.75 SNOW BARRIER, GALVANIZED
SEE ITEM DETAIL SUMMARY SHEETS
621.20 STEEL BEAM GUARDRAIL, GALVANIZED
SEE ITEM DETAIL SUMMARY SHEETS

621.205 STEEL BEAM GUARDRAIL, GALVANIZED W/8 FEET POSTS
SEE ITEM DETAIL SUMMARY SHEETS
621.50 MANUFACTURED TERMINAL SECTION, FLARED
SEE ITEM DETAIL SUMMARY SHEETS
621.60 ANCHOR FOR STEEL BEAM RAIL
SEE ITEM DETAIL SUMMARY SHEETS
621.70 GUARDRAIL APPROACH SECTION, GALVANIZED TYPE I
SEE ITEM DETAIL SUMMARY SHEETS
621.71 GUARDRAIL APPROACH SECTION, GALVANIZED TYPE II
SEE ITEM DETAIL SUMMARY SHEETS
621.74 ALUMINUM APPROACH RAILING
SEE ITEM DETAIL SUMMARY SHEETS
621.76 REPLACE GUARDRAIL POST ASSEMBLY
SEE ITEM DETAIL SUMMARY SHEETS
621.77 REPLACE GUARDRAIL BEAM UNIT
SEE ITEM DETAIL SUMMARY SHEETS
621.79 ADJUST HEIGHT OF GUARDRAIL
SEE ITEM DETAIL SUMMARY SHEETS
621.80 REMOVAL AND DISPOSAL OF GUARDRAIL
SEE ITEM DETAIL SUMMARY SHEETS
646.426 DURABLE 6 INCH WHITE LINE, RECESSED POLYUREA
NORTHBOUND:
MM 57.438 - MM 66.155 CL (DASHED)
MM 57.438 - MM 60.142 RT (SOLID)
MM 60.292 - MM 60.557 RT (SOLID)
MM 60.716 - MM 66.155 RT (SOLID)
SOUTHBOUND:
MM 57.401 - MM 66.158 CL (DASHED)
MM 57.401 - MM 60.020 LT (SOLID)
MM 60.285 - MM 60.609 LT (SOLID)
MM 60.743 - MM 66.158 LT (SOLID)

NOTES:

- THE CONTRACTOR SHALL INSTALL MILLED RUMBLE STRIPS WITHIN THE PROJECT LIMITS AS SHOWN ON SHEET 52 OR AS DIRECTED BY THE RESIDENT ENGINEER.
- THE CONTRACTOR SHALL REHAB. THE EXISTING DROP INLETS, CATCH BASINS OR MANHOLES TO A DEPTH AS DIRECTED BY THE RESIDENT ENGINEER. ALL REHAB. WORK WILL BE PAID FOR UNDER THE APPLICABLE REHAB. ITEM AS DIRECTED BY THE RESIDENT ENGINEER.

646.436 DURABLE 6 INCH YELLOW LINE, RECESSED POLYUREA
NORTHBOUND:
MM 57.438 - MM 66.155 LT (SOLID)
SOUTHBOUND:
MM 57.401 - MM 66.158 RT (SOLID)
646.622 TEMPORARY 6 INCH WHITE LINE, PAINT
NORTHBOUND:
MM 57.438 - MM 66.155 CL (DASHED)
MM 57.438 - MM 60.142 RT (SOLID)
MM 60.292 - MM 60.557 RT (SOLID)
MM 60.716 - MM 66.155 RT (SOLID)
SOUTHBOUND:
MM 57.401 - MM 66.158 CL (DASHED)
MM 57.401 - MM 60.020 LT (SOLID)
MM 60.285 - MM 60.609 LT (SOLID)
MM 60.743 - MM 66.158 LT (SOLID)
646.632 TEMPORARY 6 INCH YELLOW LINE, PAINT
NORTHBOUND:
MM 57.438 - MM 66.155 LT (SOLID)
SOUTHBOUND:
MM 57.401 - MM 66.158 RT (SOLID)
675.50 REMOVING SIGNS
SEE TRAFFIC SIGN REMOVAL SHEETS FOR SIGN REMOVALS ALONG I-91
676.10 DELINEATOR WITH STEEL POST
SEE ITEM DETAIL SUMMARY SHEETS AND REFER TO STANDARDS E-197, E-198 AND E-199 FOR PLACEMENT GUIDELINES
676.12 REMOVAL OF EXISTING DELINEATOR
SEE ITEM DETAIL SUMMARY SHEETS



U-TURN DETAIL

- S.B. MM 57.591 (45'x40')
- S.B. MM 58.761 (42'x29')
- S.B. MM 60.091 (75'x27')
- S.B. MM 60.720 (44'x31')
- S.B. MM 63.965 (187'x28')
- S.B. MM 64.007 (183'x29')
- S.B. MM 65.889 (43'x40')

NOT TO SCALE

| | | |
|-----------------------------|----------------------------------|------------------------------|
| PROJECT LAYOUT SHEET | PROJECT NAME: WINDSOR - HARTLAND | |
| | PROJECT NUMBER: IM 091-1(61) | |
| | FILE NAME: p07al42.dgn | PLOT DATE: 16-AUG-2011 13:41 |
| | PROJECT LEADER: D.E.G. | DRAWN BY: C.A.K. |
| DESIGNED BY: M.J.L. | CHECKED BY: R.A.B. | |
| IPARM FILE: p07al42il.i | SHEET 14 OF 56 | |

SIGN LEGEND

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

646.426 DURABLE 6 INCH WHITE LINE, RECESSED POLYUREA
 RAMP A:
 STA A0+25.0 - STA A0+90.3 EDGE LINE LT/RT
 STA A0+25.0 - STA A23+00.0 EDGE LINE RT
 STA A17+50.0 - STA A18+75.0 DASHED LANE LINE CL

646.81 PAINTED CURB
 RAMP A:
 STA A0+25.0 - STA A0+81.0 LT (60 LF)
 STA A0+25.0 - STA A0+81.0 RT (100 LF)

646.622 TEMPORARY 6 INCH WHITE LINE, PAINT
 RAMP A:
 STA A0+25.0 - STA A0+90.3 EDGE LINE LT/RT
 STA A0+25.0 - STA A23+00.0 EDGE LINE RT
 STA A17+50.0 - STA A18+75.0 DASHED LANE LINE CL

646.436 DURABLE 6 INCH YELLOW LINE, RECESSED POLYUREA
 RAMP A:
 STA A0+25.0 - STA A0+90.0 EDGE LINE RT
 STA A0+39.0 - STA A14+17.0 EDGE LINE CL

646.632 TEMPORARY 6 INCH YELLOW LINE, PAINT
 RAMP A:
 STA A0+25.0 - STA A0+90.0 EDGE LINE RT
 STA A0+39.0 - STA A14+17.0 EDGE LINE CL

646.466 DURABLE 12 INCH WHITE LINE, RECESSED POLYUREA
 RAMP A:
 STA A14+17.0 - STA A17+50.0 SOLID GORE LINES CL

646.662 TEMPORARY 12 INCH WHITE LINE, PAINT
 RAMP A:
 STA A14+17.0 - STA A17+50.0 SOLID GORE LINES CL

646.492 DURABLE LETTER OR SYMBOL, THERMOPLASTIC
 RAMP A:
 STA A0+62.0 RT YIELD LINE (5 EA)

646.692 TEMPORARY LETTER OR SYMBOL, PAINT
 RAMP A:
 STA A0+62.0 RT YIELD LINE (5 EA)

S.B. MM 60.061
 RAMP A STA A23+00.00
 END RAMP A

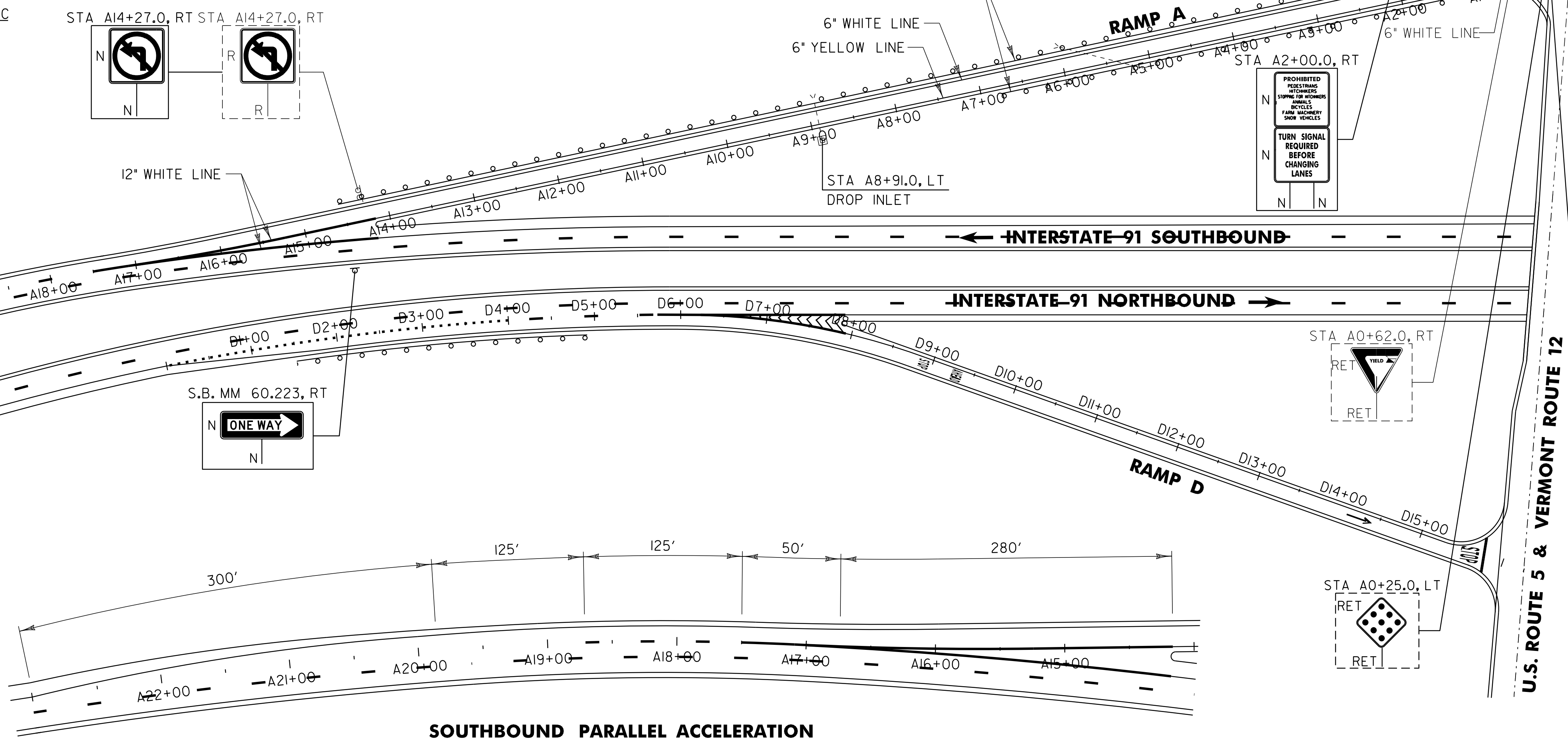
S.B. MM 60.223, RT

604.412, 604.415 OR 604.418 REHAB DROP INLETS, CATCH BASINS OR MANHOLES (SEE NOTE 2)

RAMP A:
 STA A0+52.0 RT
 STA A1+78.0 RT
 STA A8+91.0 LT

621.76 REPLACE GUARDRAIL POST
 RAMP A:
 STA A0+25.0 - STA A14+56.00 LT&RT (5 EA)

676.10 DELINEATOR WITH STEEL POST
 SEE ITEM DETAIL SUMMARY SHEETS



SOUTHBOUND PARALLEL ACCELERATION LANE DETAIL

NOTES:

- SEE SHEET 18 FOR RAMP D DETAILS.
- THE CONTRACTOR SHALL REHAB. THE EXISTING DROP INLETS, CATCH BASINS OR MANHOLES TO A DEPTH AS DIRECTED BY THE RESIDENT ENGINEER. ALL REHAB. WORK WILL BE PAID FOR UNDER THE APPLICABLE REHAB. ITEM AS DIRECTED BY THE RESIDENT ENGINEER.

SIGN LEGEND

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

NOT TO SCALE

| | | |
|-------------------------------------------|----------------------------------------------------------------------------|------------------------------|
| INTERCHANGE #9 RAMP A DETAIL SHEET | PROJECT NAME: WINDSOR - HARTLAND | PLOT DATE: 16-AUG-2011 13:41 |
| | PROJECT NUMBER: IM 091-(161) | DRAWN BY: C.A.K. |
| | FILE NAME: p07al42.dgn | CHECKED BY: R.A.B. |
| | PROJECT LEADER: D.E.G. DESIGNED BY: M.J.L. IPARM FILE: p07al42int1.i | SHEET 15 OF 56 |

646.426 DURABLE 6 INCH WHITE LINE, RECESSED POLYUREA

RAMP B:
STA B0+00.0 - STA B13+71.0 EDGE LINE RT
STA B0+00.0 - STA B3+40.0 DOTTED LANE LINE CL
STA B3+40.0 - STA B5+00.0 DASHED LANE LINE CL

646.622 TEMPORARY 6 INCH WHITE LINE, PAINT

RAMP B:
STA B0+00.0 - STA B13+71.0 EDGE LINE RT
STA B0+00.0 - STA B3+40.0 DOTTED LANE LINE CL
STA B3+40.0 - STA B5+00.0 DASHED LANE LINE CL

646.436 DURABLE 6 INCH YELLOW LINE, RECESSED POLYUREA

RAMP B:
STA B7+00.0 - STA B13+71.0 EDGE LINE CL

646.632 TEMPORARY 6 INCH YELLOW LINE, PAINT

RAMP B:
STA B7+00.0 - STA B13+71.0 EDGE LINE CL

646.466 DURABLE 12 INCH WHITE LINE, RECESSED POLYUREA

RAMP B:
STA B5+00.0 - STA B7+00.0 SOLID GORE LINES CL & LT
STA B5+00.0 - STA B7+00.0 GORE HATCHING LT

646.662 TEMPORARY 12 INCH WHITE LINE, PAINT

RAMP B:
STA B5+00.0 - STA B7+00.0 SOLID GORE LINES CL & LT

646.482 DURABLE 24 INCH STOP BAR, THERMOPLASTIC

RAMP B:
STA B13+58.0 LT/RT

646.682 TEMPORARY 24 INCH STOP BAR, PAINT

RAMP B:
STA B13+58.0 LT/RT

646.492 DURABLE LETTER OR SYMBOL, THERMOPLASTIC

RAMP B:
STA B7+67.6 RT "S,T,O,P" (4 EA)
STA B8+08.0 RT "A,H,E,A,D" (5 EA)
STA B12+47.0 RT WRONG WAY ARROW (1EA)
STA B13+49.0 RT "S,T,O,P" (4 EA)

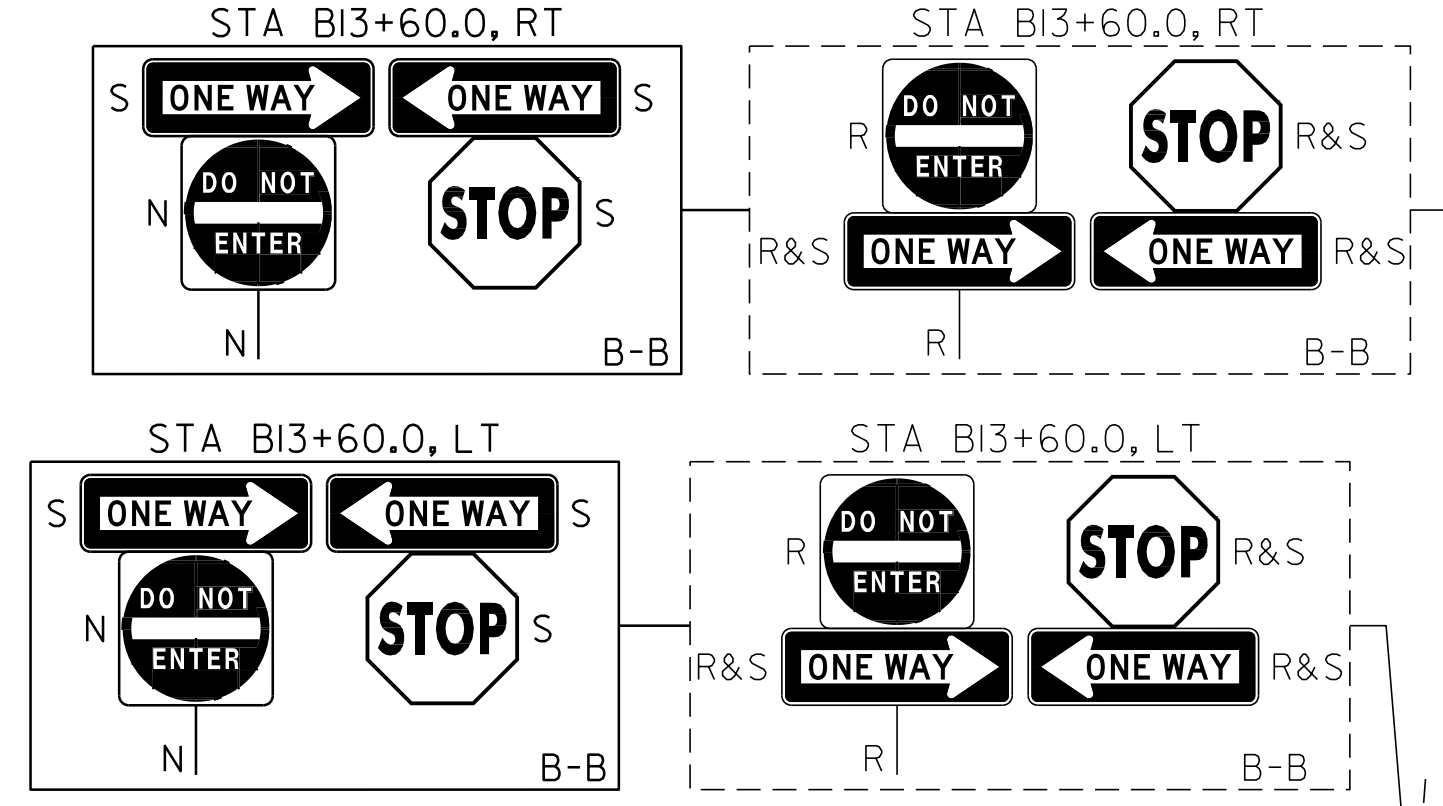
646.692 TEMPORARY LETTER OR SYMBOL, PAINT

RAMP B:
STA B7+67.6 RT "S,T,O,P" (8 EA)
STA B8+08.0 RT "A,H,E,A,D" (10 EA)
STA B12+47.0 RT WRONG WAY ARROW (2 EA)
STA B13+49.0 RT "S,T,O,P" (8 EA)

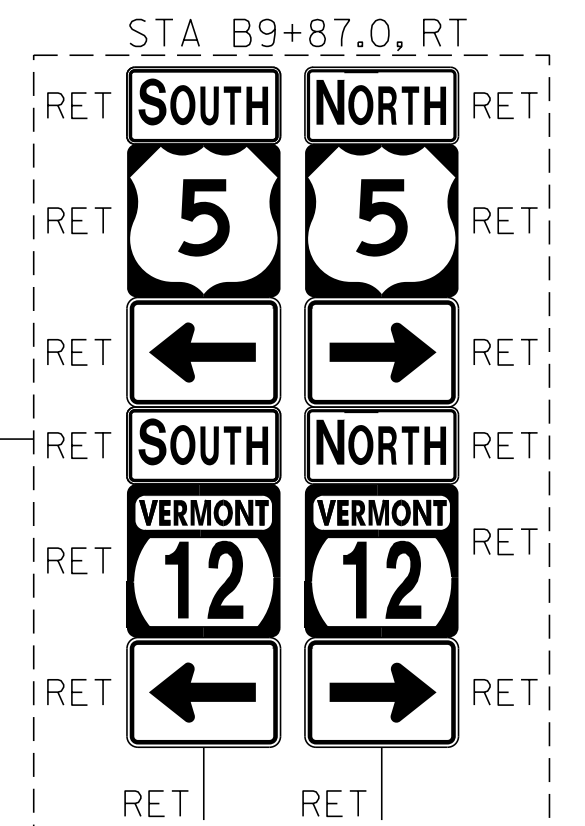
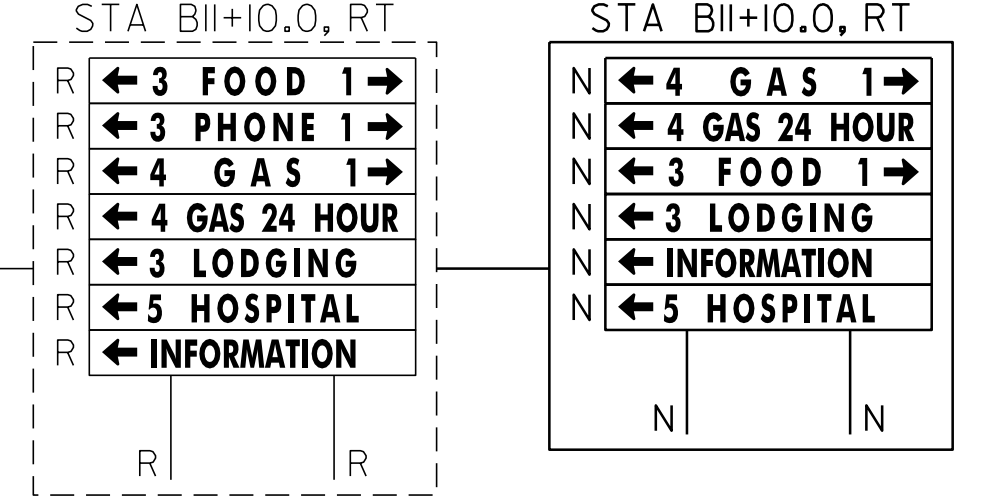
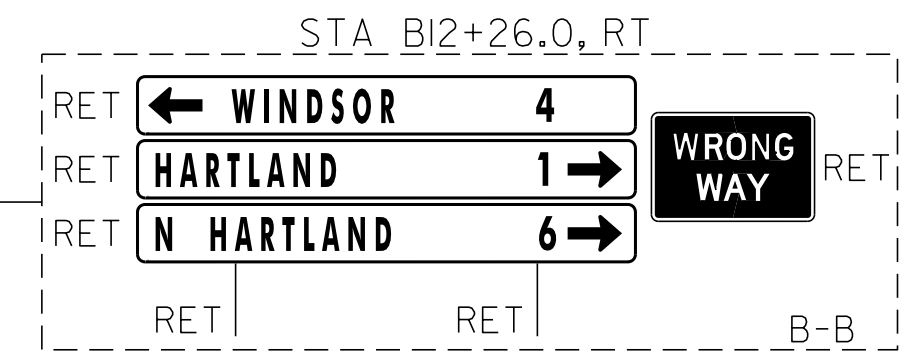
616.47 BITUMINOUS CONCRETE GUTTERS AND TRAFFIC ISLANDS

RAMP B:
STA B11+11.0 - STA B11+63.0 LT (1.4 TONS)

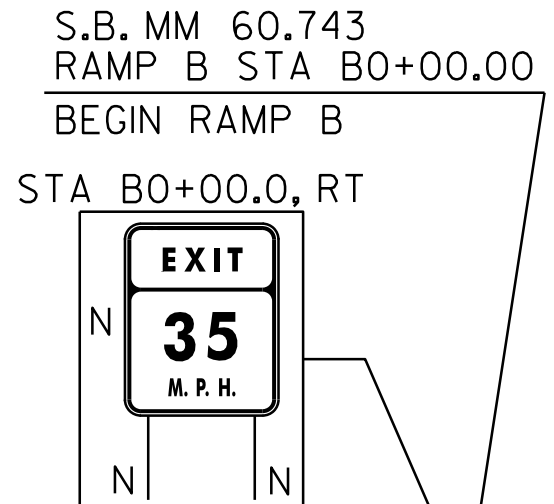
676.10 DELINEATOR WITH STEEL POST
SEE ITEM DETAIL SUMMARY SHEETS



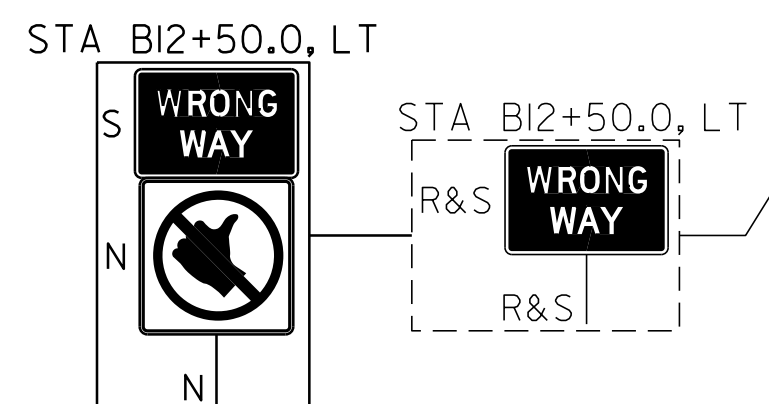
621.20 STEEL BEAM GUARDRAIL, GALVANIZED
RAMP B:
STA B0+37.5 - STA B9+00.0 RT
621.50 MANUFACTURED TERMINAL SECTION, FLARED
RAMP B:
STA B0+00.0 - STA B0+37.5 RT
621.60 ANCHOR FOR STEEL BEAM RAIL
RAMP B:
STA B9+00.0 RT



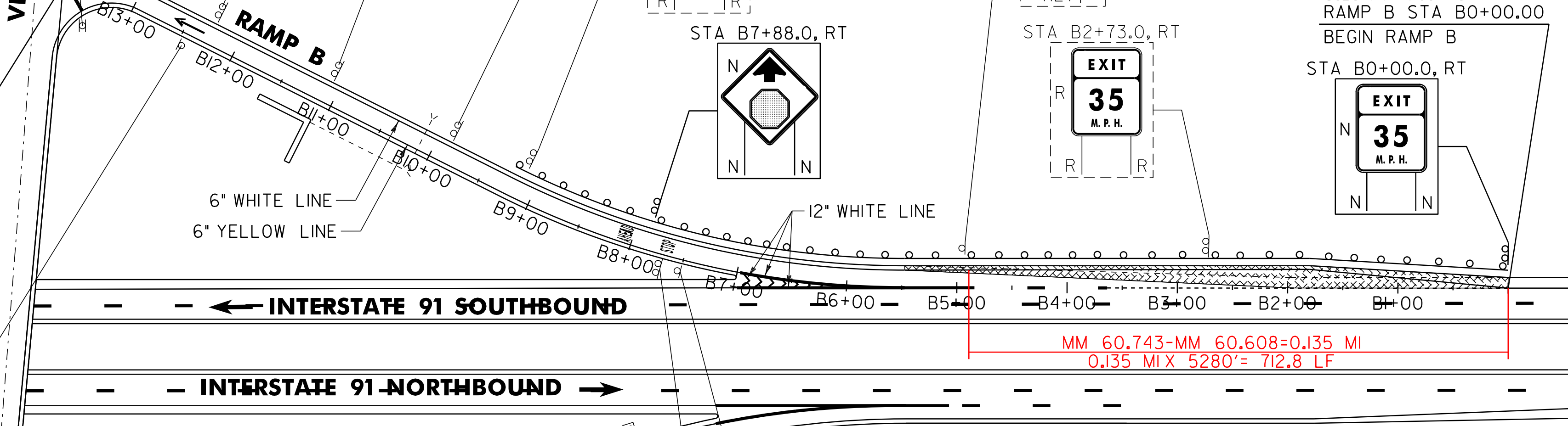
STA B4+94.0, RT B7+12.8, RT
SEE CALCULATION BELOW



STA B13+71.00-B16+01.00
END RAMP B
LIMIT OF COLD PLANING
AND PAVING

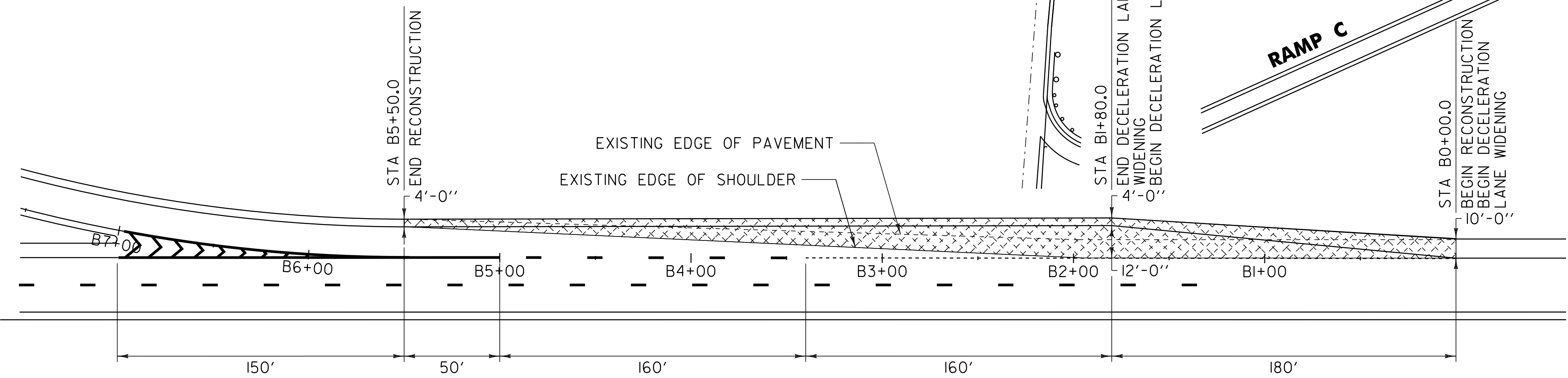


U.S. ROUTE 5 &
VERMONT ROUTE 12



MM 60.743-MM 60.608=0.135 MI
0.135 MI X 5280' = 712.8 LF

NOTE: THE DECELERATION LANE EXTENSION @ RAMP B WAS ESTABLISHED USING MAIN-LINE MILE-MARKER PLAN FEATURES AS FOLLOWS:
SHEET #47 - BR NO 36S APPROACH PIER MM 60.445 LT
SHEET #4 - U-TURN PAVING DETAIL SB MM 60.720
BUST OF 230 LF +/- IN RAMP B STATIONING



**INTERSTATE 91 SOUTHBOUND
SOUTHBOUND PARALLEL DECELERATION
LANE DETAIL**

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

NOT TO SCALE

**INTERCHANGE
#9
RAMP B
DETAIL
SHEET**

| | |
|----------------------------------|------------------------------|
| PROJECT NAME: WINDSOR - HARTLAND | PLOT DATE: 16-AUG-2011 13:41 |
| PROJECT NUMBER: IM 091-(161) | DRAWN BY: C.A.K. |
| FILE NAME: p07al42.dgn | CHECKED BY: R.A.B. |
| PROJECT LEADER: D.E.G. | SHEET 16 OF 56 |
| DESIGNED BY: M.J.L. | |
| IPARM FILE: p07al42int2.i | |

646.426 DURABLE 6 INCH WHITE LINE, RECESSED POLYUREA
RAMP C:
STA C0+23.0 - STA C15+70.0 EDGE LINE RT
STA C0+23.0 - STA C0+43.0 EDGE LINE LT/RT
STA C0+43.0 - STA C0+85.0 EDGE LINE LT/RT
STA C9+40.0 - STA C11+00.0 DASHED LANE LINE CL

646.622 TEMPORARY 6 INCH WHITE LINE, PAINT
RAMP C:
STA C0+23.0 - STA C15+70.0 EDGE LINE RT
STA C0+23.0 - STA C0+43.0 EDGE LINE LT/RT
STA C0+43.0 - STA C0+85.0 EDGE LINE LT/RT
STA C9+40.0 - STA C11+00.0 DASHED LANE LINE CL

646.436 DURABLE 6 INCH YELLOW LINE, RECESSED POLYUREA
RAMP C:
STA C0+23.0 - STA C0+85.0 EDGE LINE RT
STA C0+60.0 - STA C7+30.0 EDGE LINE LT

646.632 TEMPORARY 6 INCH YELLOW LINE, PAINT
RAMP C:
STA C0+23.0 - STA C0+85.0 EDGE LINE RT
STA C0+60.0 - STA C7+30.0 EDGE LINE LT

646.466 DURABLE 12 INCH WHITE LINE, RECESSED POLYUREA
RAMP C:
STA C7+30.0 - STA C9+40.0 SOLID GORE LINES CL & LT

646.662 TEMPORARY 12 INCH WHITE LINE, PAINT
RAMP C:
STA C7+30.0 - STA C9+40.0 SOLID GORE LINES CL & LT

646.492 DURABLE LETTER OR SYMBOL, THERMOPLASTIC
RAMP C:
STA C0+73.0 LT YIELD LINE (6 EA)

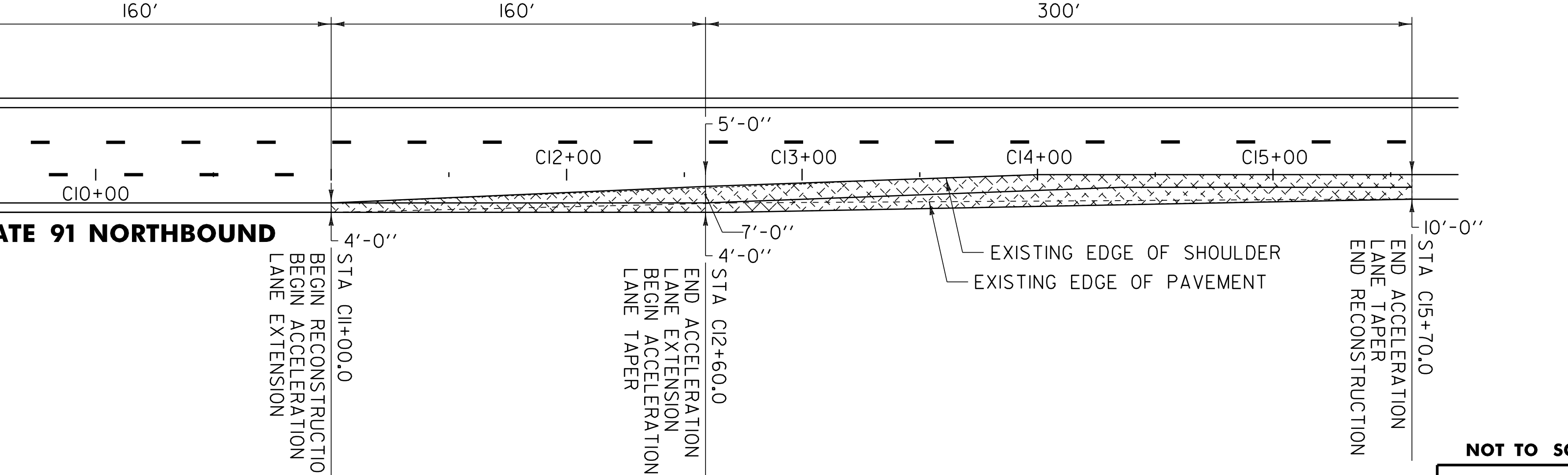
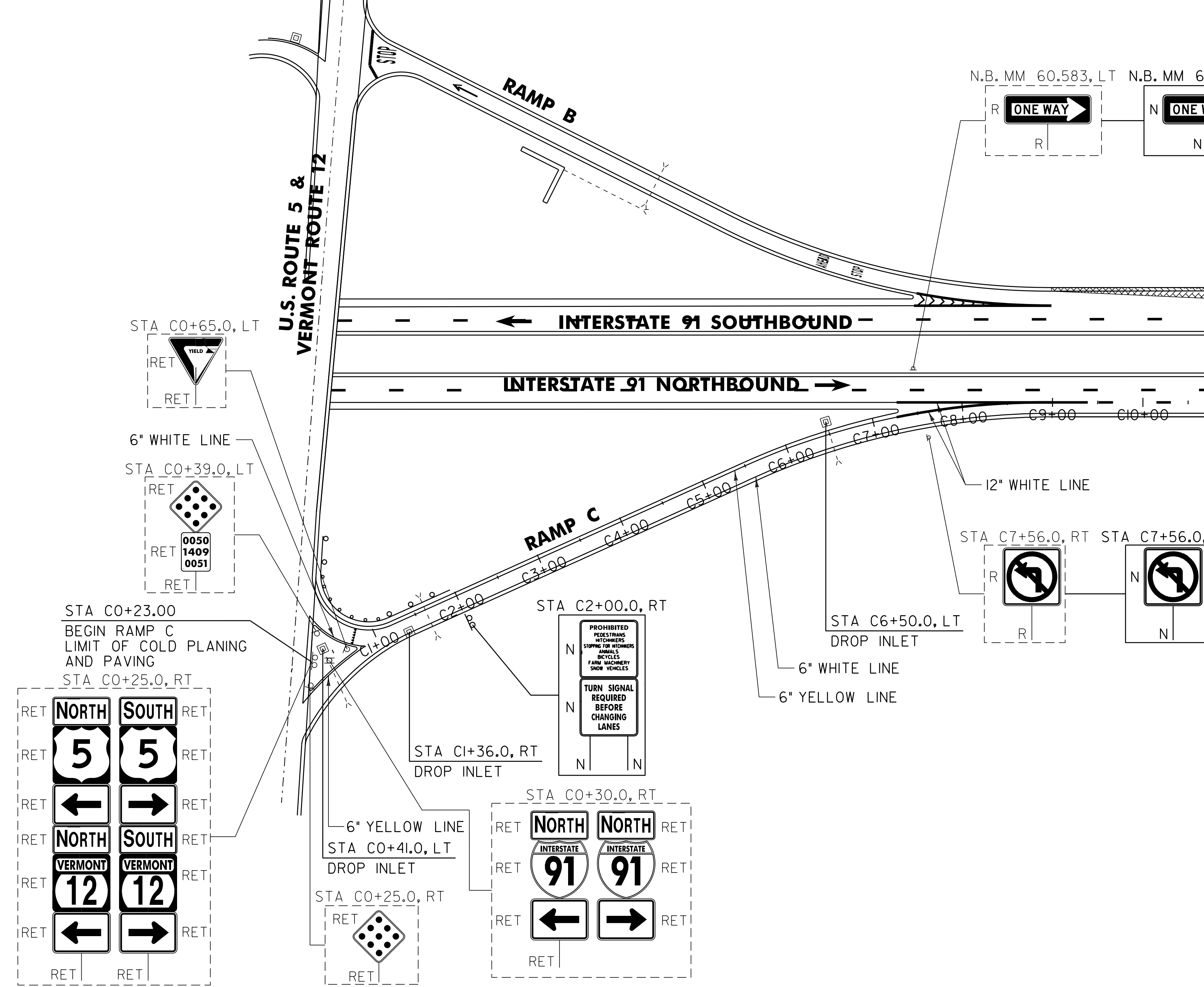
646.692 TEMPORARY LETTER OR SYMBOL, PAINT
RAMP C:
STA C0+73.0 LT YIELD LINE (6 EA)

646.81 PAINTED CURB
RAMP C:
STA C0+23.0 - STA C0+76.0 LT/RT (55 LF)
STA C0+23.0 - STA C0+76.0 RT (80 LF)

621.20 STEEL BEAM GUARDRAIL, GALVANIZED
RAMP C:
STA C11+00 - ML 60.810 RT
MATCH INTO EXISTING GUARDRAIL AT MM 60.810 RT

621.50 MANUFACTURED TERMINAL SECTION, FLARED
RAMP C:
STA C11+00 - STA C11+37.5 RT

621.80 REMOVAL AND DISPOSAL OF GUARDRAIL
NB MM 60.770 - MM 60.810 RT
REMOVE EXISTING BURIED END SO NEW STEEL BEAM GUARDRAIL CAN MATCH INTO EXISTING STEEL BEAM GUARDRAIL.



LEGEND
[Hatched Box] AREA TO BE RECONSTRUCTED

NOTES:
1. SEE SHEET 16 FOR RAMP B DETAILS.
2. THE CONTRACTOR SHALL REHAB. THE EXISTING DROP INLETS, CATCH BASINS OR MANHOLES TO A DEPTH AS DIRECTED BY THE RESIDENT ENGINEER. ALL REHAB. WORK WILL BE PAID FOR UNDER THE APPLICABLE REHAB. ITEM AS DIRECTED BY THE RESIDENT ENGINEER.
3. SEE SHEET 5 FOR ACCELERATION LANE EXTENSION DETAILS.

604.412, 604.415 OR 604.418 REHAB DROP INLETS, CATCH BASINS, OR MANHOLES (SEE NOTE 2)
RAMP C:
STA C0+41.0 LT
STA C1+36.0 RT
STA C6+50.0 LT

676.10 DELINEATOR WITH STEEL POST
SEE ITEM DETAIL SUMMARY SHEETS

NORTHBOUND PARALLEL ACCELERATION LANE DETAIL

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

INTERCHANGE #9 RAMP C DETAIL SHEET

PROJECT NAME: WINDSOR - HARTLAND
PROJECT NUMBER: IM 091-(161)
FILE NAME: p07al42.dgn
PROJECT LEADER: D.E.G.
DESIGNED BY: M.J.L.
IPARM FILE: p07al42in+3.i
PLOT DATE: 16-AUG-2011 13:41
DRAWN BY: C.A.K.
CHECKED BY: R.A.B.
SHEET 17 OF 56

646.426 DURABLE 6 INCH WHITE LINE, RECESSED POLYUREA
 RAMP D:
 STA D0+00.0 - STA D3+75.0 DOTTED LANE LINE CL
 STA D0+00.0 - STA D15+96.0 EDGE LINE RT
 STA D3+75.0 - STA D5+70.0 DASHED LANE LINE CL
 646.622 TEMPORARY 6 INCH WHITE LINE, PAINT
 RAMP D:
 STA D0+00.0 - STA D3+75.0 DOTTED LANE LINE CL
 STA D0+00.0 - STA D15+96.0 EDGE LINE RT
 STA D3+75.0 - STA D5+70.0 DASHED LANE LINE CL

646.682 TEMPORARY 24 INCH STOP BAR, PAINT
 RAMP D:
 STA D15+72.0 LT/RT
 646.492 DURABLE LETTER OR SYMBOL, THERMOPLASTIC
 RAMP D:
 STA D8+89.6 RT "S,T,O,P" (4 EA)
 STA D9+30.2 RT "A,H,E,A,D" (5 EA)
 STA D14+23.0 RT WRONG WAY ARROW (1EA)
 STA D15+63.0 RT "S,T,O,P" (4 EA)

675.50 REMOVING SIGNS
 AS SHOWN - 19
 675.60 ERECTING SALVAGED SIGNS
 AS SHOWN - 6
 676.10 DELINEATOR WITH STEEL POST
 SEE ITEM DETAIL SUMMARY SHEETS

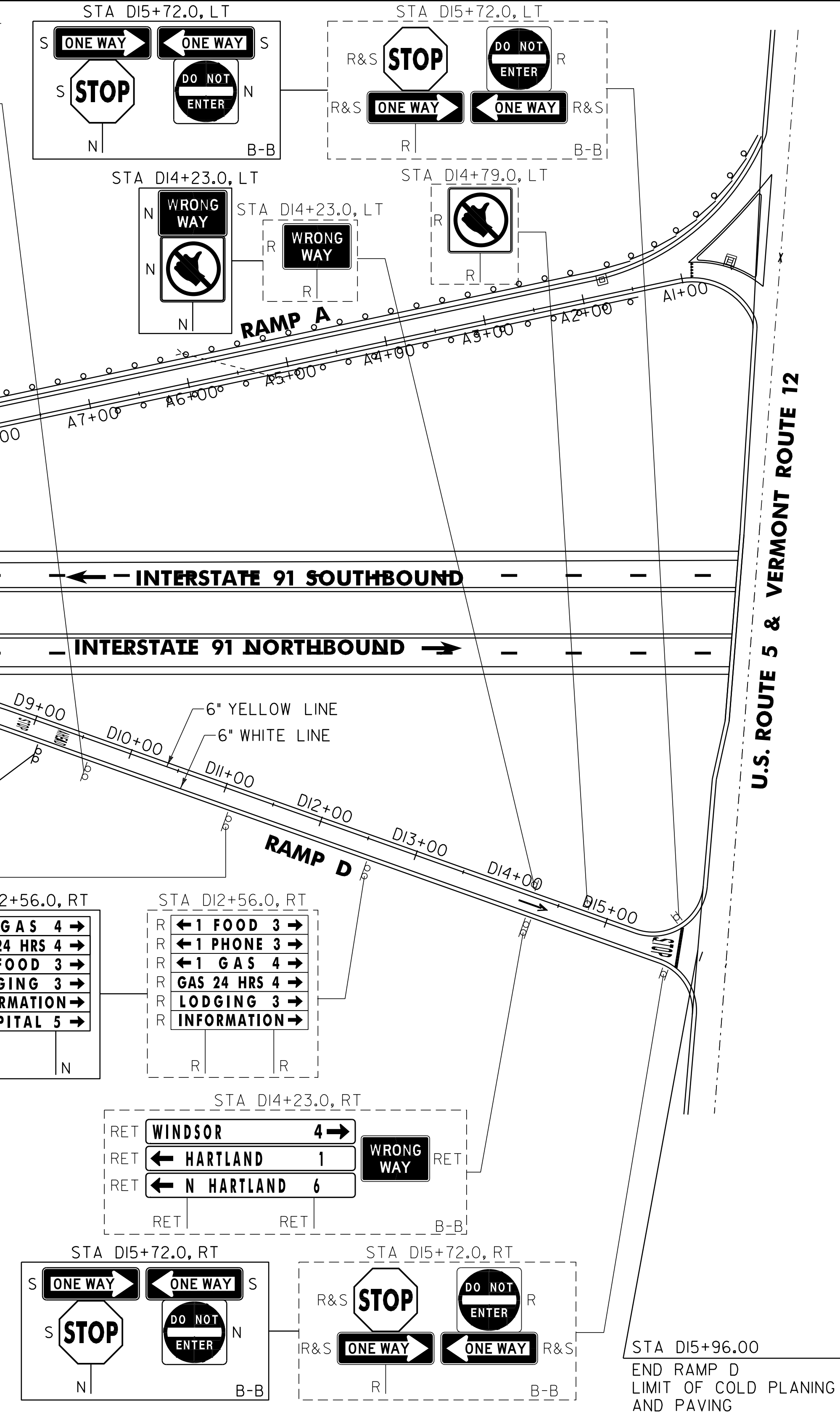
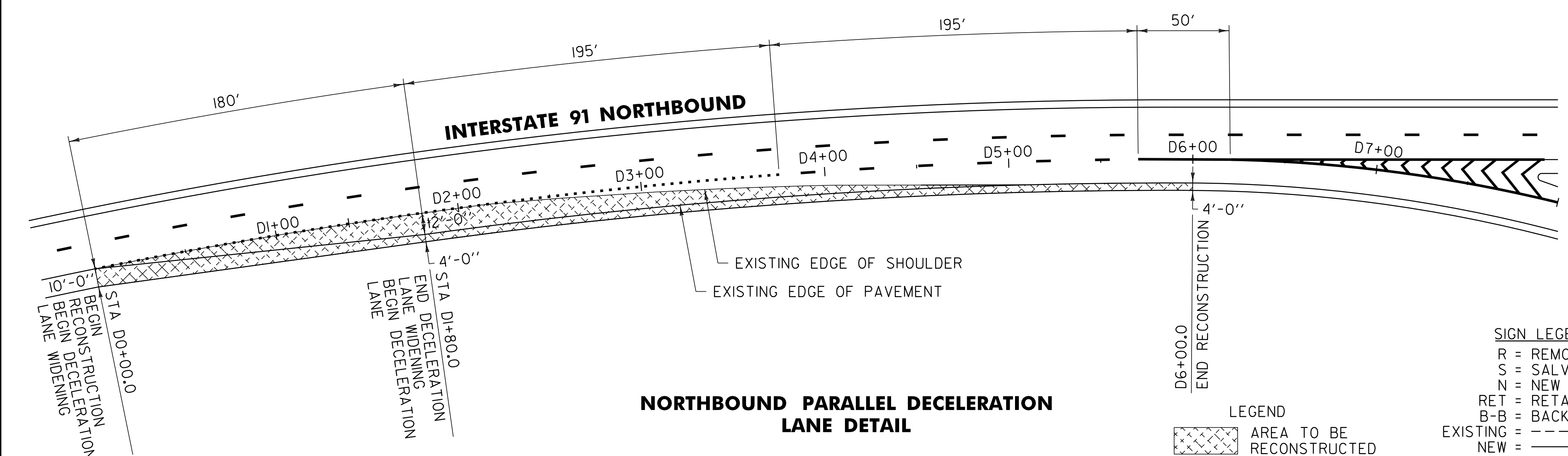
646.436 DURABLE 6 INCH YELLOW LINE, RECESSED POLYUREA
 RAMP D:
 STA D7+90.0 - STA D15+96.0 EDGE LINE LT
 646.632 TEMPORARY 6 INCH YELLOW LINE, PAINT
 RAMP D:
 STA D7+90.0 - STA D15+96.0 EDGE LINE LT

646.692 TEMPORARY LETTER OR SYMBOL, PAINT
 RAMP D:
 STA D8+89.6 RT "S,T,O,P" (8 EA)
 STA D9+30.2 RT "A,H,E,A,D" (10 EA)
 STA D14+23.0 RT WRONG WAY ARROW (2 EA)
 STA D15+63.0 RT "S,T,O,P" (8 EA)

646.466 DURABLE 12 INCH WHITE LINE, RECESSED POLYUREA
 RAMP D:
 STA D5+70.0 - STA D7+90.0 SOLID GORE LINES LT & CL
 STA D5+70.0 - STA D7+90.0 GORE HATCHING LT
 646.662 TEMPORARY 12 INCH WHITE LINE, PAINT
 RAMP D:
 STA D5+70.0 - STA D7+90.0 SOLID GORE LINES LT & CL

646.482 DURABLE 24 INCH STOP BAR, THERMOPLASTIC
 RAMP D:
 STA D15+72.0 LT/RT

621.205 STEEL BEAM GUARDRAIL, GALVANIZED W/8 FEET POSTS
 N.B. MM 60.149 - N.B. MM 60.233 RT (450.0 LF)
 621.50 MANUFACTURED TERMINAL SECTION, FLARED
 N.B. MM 60.142 - N.B. MM 60.149 RT
 621.60 ANCHOR FOR STEEL BEAM RAIL
 N.B. MM 60.232 RT
 621.80 REMOVAL AND DISPOSAL OF GUARDRAIL
 N.B. MM 60.174 - N.B. MM 60.233 RT (312.0 LF)



NOTES:
 1. SEE SHEET 15 FOR RAMP A DETAILS.
 2. SEE SHEET 5 FOR DECELERATION LANE EXTENSION DETAILS.

SIGN LEGEND
 R = REMOVE
 S = SALVAGE
 N = NEW
 RET = RETAIN
 B-B = BACK TO BACK
 EXISTING BY: - - - - -
 NEW BY: _____

NOT TO SCALE
INTERCHANGE #9 RAMP D DETAIL SHEET

PROJECT NAME: WINDSOR - HARTLAND
 PROJECT NUMBER: IM 091-(161)
 FILE NAME: p07al42.dgn
 PROJECT LEADER: D.E.G.
 DESIGNED BY: M.J.L.
 IPARM FILE: p07al42int4.i
 PLOT DATE: 16-AUG-2011 13:41
 DRAWN BY: C.A.K.
 CHECKED BY: R.A.B.
 SHEET 18 OF 56

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 Ø (in) | | | TUBULAR STEEL Ø (in) | | | | W-SHAPE STEEL | | | FRONT SIGN | REAR SIGN | DETAIL ON DWG. NUMBER | STD. SHEET NUMBER | | | | | | | | | | | | |
| | | | | | | | | | | | | 1.12 | 2.0 | 3.0 | 1.75 | 2.0 | 2.5 | 3.0 | 4.0 | 4.0 MOD | FOUNDATION | 3.0 | 3.5 | 4.0 | 5.0 | | FTG. SIZE | | | | | WEIGHT | POST SIZE | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | lb/ft | | | | | | | lb/ft | lb/ft | 24" | 30" | | | | | | |
| NORTHBOUND: 59.859, RT | | 1 | 36 | 30 | 7.50 | | | | | | 2 | | | | X | | X | | | | | | | | | | | | SIGN ID CODE R3-4 | 36 | | | | | | | | | | | | | |
| 59.910, RT | | 1 | 144 | 144 | | 144.00 | | | | | 2 | | | | | | | | | | | 2 | 875.8 | W8x18 | | | | | SIGN ID CODE D9-18 CALCULATED BOLT TENSION IS 23.7 KIPS. | 36 | | | | | | | | | | | | | |
| 60.000, RT | | 1 | 12 | 36 | 3.00 | | | | | | 1 | | | | X | | X | | | | | | | | | | | | SIGN ID CODE D10-2 | | E-139 | | | | | | | | | | | | |
| 60.090, RT | | 1 | 96 | 30 | 20.00 | | | | | | 2 | | | | | | | | | | | 2 | 779.6 | W8x18 | | | | | SIGN ID CODE EI-5 | | E-131 | | | | | | | | | | | | |
| 60.094, LT | | 1 | +38 156 | 108 | | 103.50 | | | | | | | | | | | | | | | | | | | | | | | SEE REVISED SHEETS *35/56 AND *38/56 SIGN ID CODE EI-1 CALCULATED BOLT TENSION IS 19.2 KIPS. SEE TIS REVISION-NEW *20/56 REMOVE *34/56 | 35 | | | | | | | | | | | | | |
| | | 1 | 96 | 48 | | 32.00 | | | | | | | | | | | | | | | | | | | | | | | SIGN ID CODE E2-1A | | E-131 | | | | | | | | | | | | |
| 60.485, RT | | 1 | 48 | 48 | 16.00 | | | | | | 2 | | | | | | | | | | | 2 | 96.2 | | | | | | SIGN ID CODE W4-1 | | E-150 | | | | | | | | | | | | |
| 60.583, LT | | 1 | 36 | 12 | 3.00 | | | | | | 1 | | | | X | | X | | | | | | | | | | | | SIGN ID CODE R6-1R | | E-142 | | | | | | | | | | | | |
| FINAL POST LENGTHS ARE TO BE DETERMINED IN THE FIELD. POST SIZES ARE COMPUTED BASED ON INFORMATION FURNISHED ON THE STANDARD SHEETS AND THE VTRANS "SIGN POST DESIGN GUIDELINE." | | | | | | | | | | | | LF | LF | LF | LF | LF | LF | LF | EA. | LB | LB | LB | LB | LB | LB | LB | EA. | EA. | LB | | | | | | | | | | | | | | |
| | | | | | | | | | | | | 84 | | | 96.2 | | | EA. | | | LB | | | EA. | | | LB | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | EA. | EA. | EA. | EA. | EA. | EA. | EA. | EA. | EA. | EA. | EA. | EA. | EA. | EA. | EA. | EA. | EA. | EA. | EA. | EA. | EA. | EA. | EA. | EA. | EA. | EA. | EA. | EA. | EA. | EA. | EA. | EA. |
| | | | | | | | | | | | | 49.50 | 279.50 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |










TRAFFIC SIGN SUMMARY SHEET #2

PROJECT NAME: WINDSOR - HARTLAND
PROJECT NUMBER: IM 091-(161)

FILE NAME: p07al42.dgn
PROJECT LEADER: D.E.G.
DESIGNED BY: M.J.L.
IPARM FILE: p07al42+ss02.i

PLOT DATE: 16-AUG-2011 13:42
DRAWN BY: C.A.K.
CHECKED BY: R.A.B.
SHEET 20 OF 56

TRAFFIC SIGN SUMMARY SHEET 4

| MILEMARKER, STATION, OR SIGN NUMBER | SIGN LEGEND | SIGN DIMENSIONS | | | NEW & SALVAGED SIGNS | | | | EXIST POST SALVAGED RETAINED | NO. OF POSTS | NEW SIGN POSTS | | | | | | | | | | | | | | | | REMARKS | SIGN DETAIL | | | | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-----------------|------------|-------------|----------------------|-----|-----------|----------|------------------------------------|--------------|-----------------|-------|-------|-------------------|-----|-------|-----------------------|-----|---------|--------------------|-----|-----|-----|---------------|-----------|---------|---------|-------------|-----------------------|---------------------|-------------------|-----------|-----|
| | | E A | WIDTH (in) | HEIGHT (in) | "A" | "B" | SALV SIGN | SALV TIS | | | FLANGED CHANNEL | | | SQUARE STEEL (in) | | | TUBULAR ALUMINUM (in) | | | TUBULAR STEEL (in) | | | | W-SHAPE STEEL | | FRAMING | | REQUIRE | 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 | |
| | | | | | | | | | | | | | | | | | | | | | | | | | 1.2 | | | | | | | | 2.0 |
| NORTHBOUND: 61.390, RT |  | 1 | 36 | 48 | 12.00 | | | | | 2 | | | | | | | | | | | | | | | | | | | | SIGN ID CODE VR-132 | | E-126 | |
| 62.000, RT |  | 1 | 12 | 36 | 3.00 | | | | | 1 | | | | X | | X | | | | | | | | | | | | | | SIGN ID CODE D10-2 | | E-139 | |
| 63.000, RT |  | 1 | 12 | 36 | 3.00 | | | | | 1 | | | | X | | X | | | | | | | | | | | | | | SIGN ID CODE D10-2 | | E-139 | |
| 63.979, LT |  | | | | | | | | | 2 | | | | X | | X | | | | | | | | | | | | | | SIGN ID CODE R3-4 | - | - | |
| 64.000, RT |  | 1 | 12 | 36 | 3.00 | | | | | 1 | | | | X | | X | | | | | | | | | | | | | | SIGN ID CODE D10-2 | | E-139 | |
| 64.015, LT |  | | | | | | | | | 2 | | | | X | | X | | | | | | | | | | | | | | SIGN ID CODE R3-4 | - | - | |
| 65.000, RT |  | 1 | 12 | 36 | 3.00 | | | | | 1 | | | | X | | X | | | | | | | | | | | | | | SIGN ID CODE D10-2 | | E-139 | |
| 65.295, RT |  | 1 | 48 | 48 | 16.00 | | | | | 2 | | | | | | X | X | | | | | | | | | | | | | | 37 | | |
| 65.890, LT |  | | | | | | | | | 2 | | | | X | | X | | | | | | | | | | | | | | | SIGN ID CODE R3-4 | - | - |
| <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 VTRANS "SIGN POST DESIGN GUIDELINE."</p> | | | | | | | | | | | LF | LF | LF | LF | LF | LF | LF | EA. | LB | LB | LB | | LB | LB | LB | LB | | | | | | | |
| TOTALS | | | | | SF | SF | EA. | SF | | | LF | LF | | | EA. | LB | EA. | EA. | LB | | | | | | | | | | | | | | |
| | | | | | 40.00 | | 3 | | | | 168 | | | | 2 | 228.0 | | | | | | | | | | | | | | | | | |

TRAFFIC SIGN SUMMARY SHEET #4

PROJECT NAME: WINDSOR - HARTLAND
 PROJECT NUMBER: IM 091-(161)
 FILE NAME: p07al42.dgn
 PROJECT LEADER: D.E.G.
 DESIGNED BY: M.J.L.
 IPARM FILE: p07al42+ss04.i
 PLOT DATE: 16-AUG-2011 13:42
 DRAWN BY: C.A.K.
 CHECKED BY: R.A.B.
 SHEET 22 OF 56

TRAFFIC SIGN SUMMARY SHEET 5

| MILEMARKER, STATION, OR SIGN NUMBER | SIGN LEGEND | SIGN DIMENSIONS | | | NEW & SALVAGED SIGNS | | | | EXIST POST RETAIN | NO. OF POSTS | NEW SIGN POSTS | | | | | | | | | | | | | | REMARKS | SIGN DETAIL | | | | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-----------------|------------|-------------|----------------------|-----|-----------|----------|-------------------|--------------|-----------------|-----|-----|-------------------|-----|-----|-----------------------|-------|---------|--------------------|-------|-----|-----|---------------|---------|-----------------------|----------------------------------------------|-----------|-------|--------|-----------|
| | | EA | WIDTH (in) | HEIGHT (in) | "A" | "B" | SALV SIGN | SALV TIS | | | FLANGED CHANNEL | | | SQUARE STEEL (in) | | | TUBULAR ALUMINUM (in) | | | TUBULAR STEEL (in) | | | | W-SHAPE STEEL | | DETAIL ON DWG. NUMBER | STD. SHEET NUMBER | | | | |
| | | | | | | | | | | | 1.2 | 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 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | lb/ft | | | |
| NORTHBOUND: 65.969, RT | | 1 | 48 | 48 | 16.00 | | | | | 2 | | | | | | | | | | | | | | | | | SIGN ID CODE W8-13 | | E-150 | | |
| 66.000 RT | | 1 | 12 | 36 | 3.00 | | | | | 1 | | | X | | X | | | | | | | | | | | | SIGN ID CODE D10-2 | | E-139 | | |
| SOUTHBOUND: 57.393, RT | | 1 | 12 | 36 | 3.00 | | | | | 1 | | | X | | X | | | | | | | | | | | | SIGN ID CODE OM-3L NOT INSTALLED PER R.E. | | E-120 | | |
| 57.395, LT | | 1 | 12 | 36 | 3.00 | | | | | 1 | | | X | | X | | | | | | | | | | | | SIGN ID CODE OM-3L NOT INSTALLED PER R.E. | | E-120 | | |
| | | 1 | 6 | 8 | 0.33 | | | | | | | | | | | | | | | | | | | | | | SIGN ID CODE VD-701 | | E-134 | | |
| 57.527, LT | | 1 | 48 | 48 | 16.00 | | | | | 2 | | | | | | | | | | | | | | | | | SIGN ID CODE W8-13 | | E-150 | | |
| 57.585, RT | | | | | | | | 1 | | 2 | | | X | | X | | | | | | | | | | | | SIGN ID CODE R3-4 | - | - | | |
| 58.000, LT | | 1 | 12 | 36 | 3.00 | | | | | 1 | | | X | | X | | | | | | | | | | | | SIGN ID CODE D10-2 | | E-139 | | |
| 58.356, LT | | 1 | 6 | 8 | 0.33 | | | | | 1 | | | X | | X | | | | | | | | | | | | SIGN ID CODE VD-701 | | E-134 | | |
| 58.485, LT | | 1 | 48 | 48 | 16.00 | | | | | 2 | | | | | | | | | | | | | | | | | SIGN ID CODE W8-13 | | E-150 | | |
| 58.757, RT | | | | | | | | 1 | | 2 | | | X | | X | | | | | | | | | | | | SIGN ID CODE R3-4 | - | - | | |
| <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 VTRANS "SIGN POST DESIGN GUIDELINE."</p> | | | | | | | | | | | LF | LF | LF | LF | LF | EA. | LB | LB | LB | LB | 633.9 | | | | | | | | | | |
| TOTALS | | | | | SF | SF | EA. | SF | | | LF | LF | LF | EA. | LB | EA. | EA. | LB | | | | | | | | | | | | | |
| | | | | | 60.66 | | 2 | | | | 126 | | | 6 | | | | 633.9 | | | | | | | | | | | | | |

TRAFFIC SIGN SUMMARY SHEET #5

PROJECT NAME: WINDSOR - HARTLAND
 PROJECT NUMBER: IM 091-(161)

FILE NAME: p07a142.dgn
 PROJECT LEADER: D.E.G.
 DESIGNED BY: M.J.L.
 IPARM FILE: p07a2+ss05.i

PLOT DATE: 16-AUG-2011 13:42
 DRAWN BY: C.A.K.
 CHECKED BY: R.A.B.
 SHEET 23 OF 56

TRAFFIC SIGN SUMMARY SHEET 6

| MILEMARKER, STATION, OR SIGN NUMBER | SIGN LEGEND | SIGN DIMENSIONS | | | NEW & SALVAGED SIGNS | | | | EXIST POST RE SALVAGE RE TAIN | 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 | | | FR I G M E R E D | 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" | | |
| SOUTHBOUND: 59.000, LT | | 1 | 12 | 36 | 3.00 | | | | | 1 | | | | X | | X | | | | | | | | | | | SIGN ID CODE D10-2 | | E-139 | | | | | | |
| 59.450, LT | | 1 | 36 | 48 | 12.00 | | | | | 2 | | | | | | | | | | | 2 | 228.0 | | | | | | SIGN ID CODE VR-132 | | E-126 | | | | | |
| 59.693, LT | | 1 | 48 | 60 | 20.00 | | | | | 2 | | | | | | | | | | | 2 | 297.9 | | | | | | SIGN ID CODE R2-1 | | E-142 | | | | | |
| | | 1 | 48 | 48 | 16.00 | | | | | | | | | | | | | | | | | | | | | | | SIGN ID CODE R2-4 | | E-142 | | | | | |
| 59.700, LT | | 1 | 90 108 | 36 | | 22.50 | | | | 2 | | | | | | | | | | | 2 | 177.9 | | | | | | SIGN ID CODE D2-2 SEE REVISED SHEETS #36/56 AND #39/56 | 36 | | | | | | |
| 59.795, LT | | 1 | 48 | 48 | 16.00 | | | | | 2 | | | | | | | | | | | 2 | 300.5 | | | | | | SIGN ID CODE VM-397 | 36 | | | | | | |
| | | 1 | 24 | 18 | 3.00 | | | | | | | | | | | | | | | | | | | | | | | SIGN ID CODE VP-396 | | E-153B | | | | | |
| 59.857, LT | | 1 | 36 | 30 | 7.50 | | | | | 2 | | | | X | | X | | | | | | | | | | | | SIGN ID CODE R3-4 | 36 | | | | | | |
| 59.881, LT | | 1 | 30 | 15 | 3.13 | | | | | 2 | | | | | | | | | | | 2 | 250.8 | | | | | | SIGN ID CODE M3-3 | | E-135 | | | | | |
| | | 1 | 36 | 36 | 9.00 | | | | | | | | | | | | | | | | | | | | | | | SIGN ID CODE MI-1 | | E-135 | | | | | |
| | | 1 | 36 | 36 | 9.00 | | | | | | | | | | | | | | | | | | | | | | | SIGN ID CODE MI-10 | | E-135 | | | | | |
| FINAL POST LENGTHS ARE TO BE DETERMINED IN THE FIELD. POST SIZES ARE COMPUTED BASED ON INFORMATION FURNISHED ON THE STANDARD SHEETS AND THE VTRANS "SIGN POST DESIGN GUIDELINE." | | | | | | | | | | | LF | LF | LF | LF | LF | LF | EA. | LB | LB | LB | | | LB | LB | LB | LB | | | | | | | | | |
| | | | | | | | | | | | LF | | | LF | | | | LB | | | EA. | | LB | | | EA. | EA. | LB | | | | | | | |
| | | | | | | | | | | | LF | | | LF | | | | LB | | | EA. | | LB | | | EA. | EA. | LB | | | | | | | |
| | | | | | | | | | | | LF | | | LF | | | | LB | | | EA. | | LB | | | EA. | EA. | LB | | | | | | | |
| | | | | | | | | | | | LF | | | LF | | | | LB | | | EA. | | LB | | | EA. | EA. | LB | | | | | | | |
| | | | | | | | | | | | LF | | | LF | | | | LB | | | EA. | | LB | | | EA. | EA. | LB | | | | | | | |
| | | | | | | | | | | | LF | | | LF | | | | LB | | | EA. | | LB | | | EA. | EA. | LB | | | | | | | |
| | | | | | | | | | | | LF | | | LF | | | | LB | | | EA. | | LB | | | EA. | EA. | LB | | | | | | | |
| | | | | | | | | | | | LF | | | LF | | | | LB | | | EA. | | LB | | | EA. | EA. | LB | | | | | | | |
| | | | | | | | | | | | LF | | | LF | | | | LB | | | EA. | | LB | | | EA. | EA. | LB | | | | | | | |
| | | | | | | | | | | | LF | | | LF | | | | LB | | | EA. | | LB | | | EA. | EA. | LB | | | | | | | |
| | | | | | | | | | | | LF | | | LF | | | | LB | | | EA. | | LB | | | EA. | EA. | LB | | | | | | | |
| | | | | | | | | | | | LF | | | LF | | | | LB | | | EA. | | LB | | | EA. | EA. | LB | | | | | | | |
| | | | | | | | | | | | LF | | | LF | | | | LB | | | EA. | | LB | | | EA. | EA. | LB | | | | | | | |
| | | | | | | | | | | | LF | | | LF | | | | LB | | | EA. | | LB | | | EA. | EA. | LB | | | | | | | |
| | | | | | | | | | | | LF | | | LF | | | | LB | | | EA. | | LB | | | EA. | EA. | LB | | | | | | | |
| | | | | | | | | | | | LF | | | LF | | | | LB | | | EA. | | LB | | | EA. | EA. | LB | | | | | | | |
| | | | | | | | | | | | LF | | | LF | | | | LB | | | EA. | | LB | | | EA. | EA. | LB | | | | | | | |
| | | | | | | | | | | | LF | | | LF | | | | LB | | | EA. | | LB | | | EA. | EA. | LB | | | | | | | |
| | | | | | | | | | | | LF | | | LF | | | | LB | | | EA. | | LB | | | EA. | EA. | LB | | | | | | | |
| | | | | | | | | | | | LF | | | LF | | | | LB | | | EA. | | LB | | | EA. | EA. | LB | | | | | | | |
| | | | | | | | | | | | LF | | | LF | | | | LB | | | EA. | | LB | | | EA. | EA. | LB | | | | | | | |
| | | | | | | | | | | | LF | | | LF | | | | LB | | | EA. | | LB | | | EA. | EA. | LB | | | | | | | |
| | | | | | | | | | | | LF | | | LF | | | | LB | | | EA. | | LB | | | EA. | EA. | LB | | | | | | | |
| | | | | | | | | | | | LF | | | LF | | | | LB | | | EA. | | LB | | | EA. | EA. | LB | | | | | | | |
| | | | | | | | | | | | LF | | | LF | | | | LB | | | EA. | | LB | | | EA. | EA. | LB | | | | | | | |
| | | | | | | | | | | | LF | | | LF | | | | LB | | | EA. | | LB | | | EA. | EA. | LB | | | | | | | |
| | | | | | | | | | | | LF | | | LF | | | | LB | | | EA. | | LB | | | EA. | EA. | LB | | | | | | | |
| | | | | | | | | | | | LF | | | LF | | | | LB | | | EA. | | LB | | | EA. | EA. | LB | | | | | | | |
| | | | | | | | | | | | LF | | | LF | | | | LB | | | EA. | | LB | | | EA. | EA. | LB | | | | | | | |
| | | | | | | | | | | | LF | | | LF | | | | LB | | | EA. | | LB | | | EA. | EA. | LB | | | | | | | |
| | | | | | | | | | | | LF | | | LF | | | | LB | | | EA. | | LB | | | EA. | EA. | LB | | | | | | | |
| | | | | | | | | | | | LF | | | LF | | | | LB | | | EA. | | LB | | | EA. | EA. | LB | | | | | | | |
| | | | | | | | | | | | LF | | | LF | | | | LB | | | EA. | | LB | | | EA. | EA. | LB | | | | | | | |
| | | | | | | | | | | | LF | | | LF | | | | LB | | | EA. | | LB | | | EA. | EA. | LB | | | | | | | |
| | | | | | | | | | | | LF | | | LF | | | | LB | | | EA. | | LB | | | EA. | EA. | LB | | | | | | | |
| | | | | | | | | | | | LF | | | LF | | | | LB | | | EA. | | LB | | | EA. | EA. | LB | | | | | | | |
| | | | | | | | | | | | LF | | | LF | | | | LB | | | EA. | | LB | | | EA. | EA. | LB | | | | | | | |
| | | | | | | | | | | | LF | | | LF | | | | LB | | | EA. | | LB | | | EA. | EA. | LB | | | | | | | |
| | | | | | | | | | | | LF | | | LF | | | | LB | | | EA. | | LB | | | EA. | EA. | LB | | | | | | | |
| | | | | | | | | | | | LF | | | LF | | | | LB | | | EA. | | LB | | | EA. | EA. | LB | | | | | | | |
| | | | | | | | | | | | LF | | | LF | | | | LB | | | EA. | | LB | | | EA. | EA. | LB | | | | | | | |
| | | | | | | | | | | | LF | | | LF | | | | LB | | | EA. | | LB | | | EA. | EA. | LB | | | | | | | |
| | | | | | | | | | | | LF | | | LF | | | | LB | | | EA. | | LB | | | EA. | EA. | LB | | | | | | | |
| | | | | | | | | | | | LF | | | LF | | | | LB | | | EA. | | LB | | | EA. | EA. | LB | | | | | | | |
| | | | | | | | | | | | LF | | | LF | | | | LB | | | EA. | | LB | | | EA. | EA. | LB | | | | | | | |
| | | | | | | | | | | | LF | | | LF | | | | LB | | | EA. | | LB | | | EA. | EA. | LB | | | | | | | |
| | | | | | | | | | | | LF | | | LF | | | | LB | | | EA. | | LB | | | EA. | EA. | LB | | | | | | | |
| | | | | | | | | | | | LF | | | LF | | | | LB | | | EA. | | LB | | | EA. | EA. | LB | | | | | | | |
| | | | | | | | | | | | LF | | | LF | | | | LB | | | EA. | | LB | | | EA. | EA. | LB | | | | | | | |
| | | | | | | | | | | | LF | | | LF | | | | LB | | | EA. | | LB | | | EA. | EA. | LB | | | | | | | |
| | | | | | | | | | | | LF | | | LF | | | | LB | | | EA. | | LB | | | EA. | EA. | LB | | | | | | | |
| | | | | | | | | | | | LF | | | LF | | | | LB | | | EA. | | LB | | | EA. | EA. | LB | | | | | | | |
| | | | | | | | | | | | LF | | | LF | | | | LB | | | EA. | | LB | | | EA. | EA. | LB | | | | | | | |
| | | | | | | | | | | | LF | | | LF | | | | LB | | | EA. | | LB | | | EA. | EA. | LB | | | | | | | |
| | | | | | | | | | | | LF | | | LF | | | | LB | | | EA. | | LB | | | EA. | EA. | LB | | | | | | | |
| | | | | | | | | | | | LF | | | LF | | | | LB | | | EA. | | LB | | | EA. | EA. | LB | | | | | | | |
| | | | | | | | | | | | LF | | | LF | | | | LB | | | EA. | | LB | | | EA. | EA. | LB | | | | | | | |
| | | | | | | | | | | | LF | | | LF | | | | LB | | | EA. | | LB | | | EA. | EA. | LB | | | | | | | |
| | | | | | | | | | | | LF | | | LF | | | | LB | | | EA. | | LB | | | EA. | EA. | LB | | | | | | | |
| | | | | | | | | | | | LF | | | LF | | | | LB | | | EA. | | LB | | | EA. | EA. | LB | | | | | | | |
| | | | | | | | | | | | LF | | | LF | | | | LB | | | EA. | | LB | | | EA. | EA. | LB | | | | | | | |
| | | | | | | | | | | | LF | | | LF | | | | LB | | | EA. | | LB | | | EA. | EA. | LB | | | | | | | |
| | | | | | | | | | | | LF | | | LF | | | | LB | | | EA. | | LB | | | EA. | EA. | LB | | | | | | | |
| | | | | | | | | | | | LF | | | LF | | | | LB | | | EA. | | LB | | | EA. | EA. | LB | | | | | | | |
| | | | | | | | | | | | LF | | | LF | | | | LB | | | EA. | | LB | | | EA. | EA. | LB | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

TRAFFIC SIGN SUMMARY SHEET 10

| MILEMARKER, STATION, OR SIGN NUMBER | SIGN LEGEND | SIGN DIMENSIONS | | | NEW & SALVAGED SIGNS | | | | EXIST POST | NO. OF POSTS | NEW SIGN POSTS | | | | | | | | | | | | | | REMARKS | SIGN DETAIL | | |
|-------------------------------------|-------------|-----------------|------------|-------------|----------------------|-----|-----------|----------|------------|--------------|-----------------|-----|-----|-------------------|-----|-----|-----------------------|-----|-----|--------------------|-----|-----|-----|---------------|---------|-----------------------|-------------------|-----------|
| | | EA | WIDTH (in) | HEIGHT (in) | "A" | "B" | SALV SIGN | SALV TIS | | | FLANGED CHANNEL | | | SQUARE STEEL (in) | | | TUBULAR ALUMINUM (in) | | | TUBULAR STEEL (in) | | | | W-SHAPE STEEL | | DETAIL ON DWG. NUMBER | STD. SHEET NUMBER | |
| | | | | | | | | | | | 1.2 | 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 | | | | FTG. SIZE |




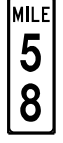








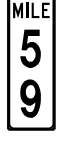












| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------|--|---|----|----|-------|--|--|--|--|---|--|--|--|---|--|---|--|---|-------|--|--|--|--|--|--|--|---------------------|--|-------|
| RAMP A: A0+25.0, RT | | 1 | 18 | 18 | 2.25 | | | | | 1 | | | | X | | X | | | | | | | | | | | SIGN ID CODE OMI-1 | | E-150 |
| A2+00.0, RT | | 1 | 36 | 36 | 9.00 | | | | | 2 | | | | | | | | 2 | 228.0 | | | | | | | | SIGN ID CODE VR-046 | | E-142 |
| | | 1 | 36 | 36 | 9.00 | | | | | | | | | | | | | | | | | | | | | | SIGN ID CODE VR-002 | | E-142 |
| A14+27.0, RT | | 1 | 30 | 30 | 6.25 | | | | | 1 | | | | X | | X | | | | | | | | | | | SIGN ID CODE R3-2 | | E-143 |
| RAMP B: B0+00.0, RT | | 1 | 48 | 60 | 20.00 | | | | | 2 | | | | | | | | 2 | 228.0 | | | | | | | | SIGN ID CODE W13-2 | | E-150 |
| B7+51.0, LT | | 1 | 18 | 18 | 2.25 | | | | | 1 | | | | X | | X | | | | | | | | | | | SIGN ID CODE OMI-1 | | E-150 |
| B7+70.0, LT | | 1 | 72 | 60 | | | | | | 2 | | | | | | | | 2 | 182.4 | | | | | | | | SIGN ID CODE E5-1A | | E-131 |
| B7+88.0, RT | | 1 | 36 | 36 | 9.00 | | | | | 2 | | | | X | | X | | | | | | | | | | | SIGN ID CODE W3-1A | | 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 VTRANS "SIGN POST DESIGN GUIDELINE."

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------|-------|-------|-----|----|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| TOTALS | SF | SF | EA. | SF | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 57.75 | 30.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

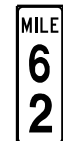



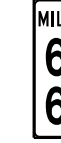




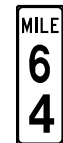












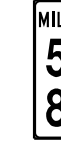



| | |
|---------------------------------------|----------------------------------|
| TRAFFIC SIGN SUMMARY SHEET #10 | PROJECT NAME: WINDSOR - HARTLAND |
| | PROJECT NUMBER: IM 091-(161) |
| | FILE NAME: p07al42.dgn |
| | PLOT DATE: 16-AUG-2011 13:42 |
| DESIGNED BY: M.J.L. | DRAWN BY: C.A.K. |
| CHECKED BY: R.A.B. | CHECKED BY: R.A.B. |
| IPARM FILE: p07al42+ssi0.i | SHEET 28 OF 56 |

TRAFFIC SIGN REMOVAL SHEET 1

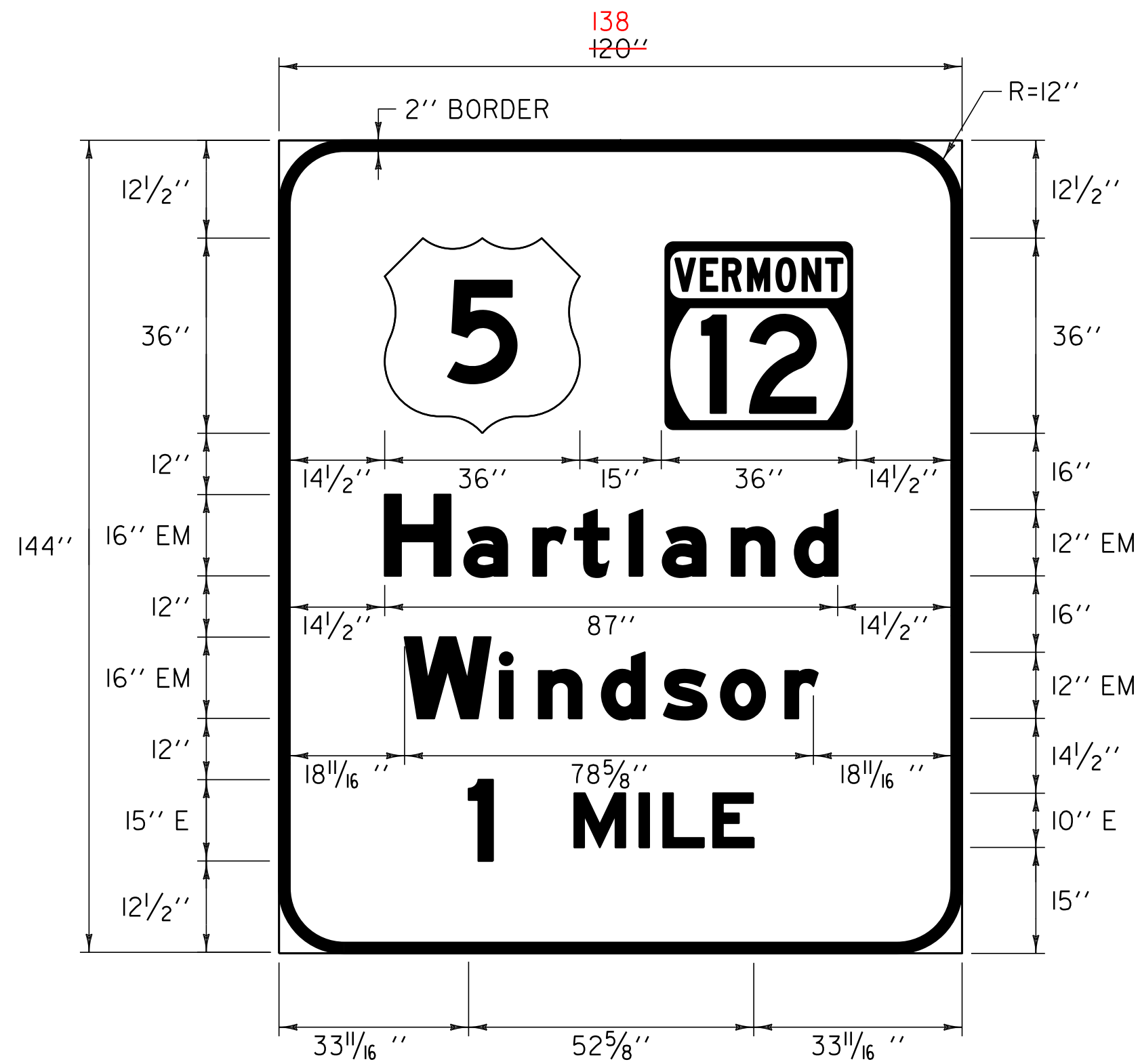
| MILEMARKER, STATION, OR SIGN NUMBER | SIGN LEGEND | ITEM 675.50 | REMARKS | MILEMARKER, STATION, OR SIGN NUMBER | SIGN LEGEND | ITEM 675.50 | REMARKS | MILEMARKER, STATION, OR SIGN NUMBER | SIGN LEGEND | ITEM 675.50 | REMARKS |
|-------------------------------------|-------------------------------------------------------------------------------------|-----------------------------|-------------------------------------|-------------------------------------|---------------------------------------------------------------------------------------|------------------------------|------------------------------------|-------------------------------------|---------------------------------------------------------------------------------------|------------------------------|------------------------------------|
| NORTHBOUND: 57.605, LT |  | I | SIGN ID CODE R3-4 | NORTHBOUND: 59.859, RT |  | I | SIGN ID CODE R3-4 | NORTHBOUND: 60.809, RT |  | I | SIGN ID CODE M3-1 |
| 58.000, RT |  | I | SIGN ID CODE DIO-2 | 60.000, RT |  | I | SIGN ID CODE DIO-2 | |  | I | SIGN ID CODE MI-1 |
| 58.321, RT |  | I | SIGN ID CODE VD-701 | 60.009, RT |  | I | SIGN ID CODE EI-5 | 60.874, RT |  | I | SIGN ID CODE DIO-2 |
| 58.760, LT |  | I | SIGN ID CODE R3-4 | |  | I | SIGN ID CODE EI-1 (TYPE B REMOVAL) | |  | I | SIGN ID CODE VP-396 |
| 59.000, RT |  | I | SIGN ID CODE DIO-2 | |  | 5 | | 60.981, RT |  | I | SIGN ID CODE R2-1 |
| 59.270, RT |  | I | SIGN ID CODE EI-5 | 60.086, LT |  | I | SIGN ID CODE R3-4 | |  | I | SIGN ID CODE R2-4 |
| |  | I | SIGN ID CODE EI-1 (TYPE B REMOVAL) | 60.531, RT |  | I | SIGN ID CODE W4-1 | 61.000, RT |  | I | SIGN ID CODE DIO-2 |
| |  | I | SIGN ID CODE E2-1A (TYPE B REMOVAL) | 60.564, LT |  | I | SIGN ID CODE R6-1R | 61.099, RT |  | I | SIGN ID CODE D2-2 (TYPE B REMOVAL) |
| | | | | 60.724, LT |  | I | SIGN ID CODE R3-4 | | | | |
| COLUMN 1 TOTAL | | EA. 6 TYPE A 2 TYPE B | | COLUMN 2 TOTAL | | EA. 12 TYPE A 1 TYPE B | | SHEET 1 TOTAL | | EA. 26 TYPE A 4 TYPE B | |

| | |
|--------------------------------------|----------------------------------|
| TRAFFIC SIGN REMOVAL SHEET #1 | PROJECT NAME: WINDSOR - HARTLAND |
| | PROJECT NUMBER: IM 091-(161) |
| | FILE NAME: p07a142.dgn |
| | PLOT DATE: 16-AUG-2011 13:42 |
| PROJECT LEADER: D.E.G. | DRAWN BY: C.A.K. |
| DESIGNED BY: M.J.L. | CHECKED BY: R.A.B. |
| IPARM FILE: p07a142+srLi | SHEET 32 OF 56 |

TRAFFIC SIGN REMOVAL SHEET 2

| MILEMARKER, STATION, OR SIGN NUMBER | SIGN LEGEND | ITEM 675.50 | REMARKS | MILEMARKER, STATION, OR SIGN NUMBER | SIGN LEGEND | ITEM 675.50 | REMARKS | MILEMARKER, STATION, OR SIGN NUMBER | SIGN LEGEND | ITEM 675.50 | REMARKS |
|-------------------------------------|-------------------------------------------------------------------------------------|-----------------|--------------------|-------------------------------------|---------------------------------------------------------------------------------------|-----------------|---------------------|-------------------------------------|---------------------------------------------------------------------------------------|----------------------------|------------------------------------|
| NORTHBOUND: 62.000, RT |  | I | SIGN ID CODE D10-2 | NORTHBOUND: 65.969, RT |  | I | SIGN ID CODE W8-13 | SOUTHBOUND: 58.485, LT |  | I | SIGN ID CODE W8-13 |
| 63.000, RT |  | I | SIGN ID CODE D10-2 | 66.000 RT |  | I | SIGN ID CODE D10-2 | 58.764, RT |  | I | SIGN ID CODE R3-4 |
| 63.970, LT |  | I | SIGN ID CODE R3-4 | SOUTHBOUND: 57.393, RT |  | I | SIGN ID CODE OM-3L | 59.000, LT |  | I | SIGN ID CODE D10-2 |
| 64.000, RT |  | I | SIGN ID CODE D10-2 | 57.395, LT |  | I | SIGN ID CODE OM-3L | 59.465, LT |  | I | SIGN ID CODE D2-2 (TYPE B REMOVAL) |
| 64.004, LT |  | I | SIGN ID CODE R3-4 | |  | I | SIGN ID CODE VD-70I | 59.693, LT |  | I | SIGN ID CODE R2-1 |
| 65.000, RT |  | I | SIGN ID CODE D10-2 | 57.527, LT |  | I | SIGN ID CODE W8-13 | |  | I | SIGN ID CODE R2-4 |
| 65.295, RT |  | I | | 57.594, RT |  | I | SIGN ID CODE R3-4 | 59.795, LT |  | I | SIGN ID CODE VM-397 |
| 65.879, LT |  | I | SIGN ID CODE R3-4 | 58.000, LT |  | I | SIGN ID CODE D10-2 | |  | I | SIGN ID CODE VP-396 |
| | | | | 58.356, LT |  | I | SIGN ID CODE VD-70I | 59.857, LT |  | I | SIGN ID CODE R3-4 |
| COLUMN 1 TOTAL | | EA. 8 TYPE A | | COLUMN 2 TOTAL | | EA. 9 TYPE A | | SHEET 2 TOTAL | | EA. 25TYPE A 1TYPE B | |
| | | | | | | | | | | | |

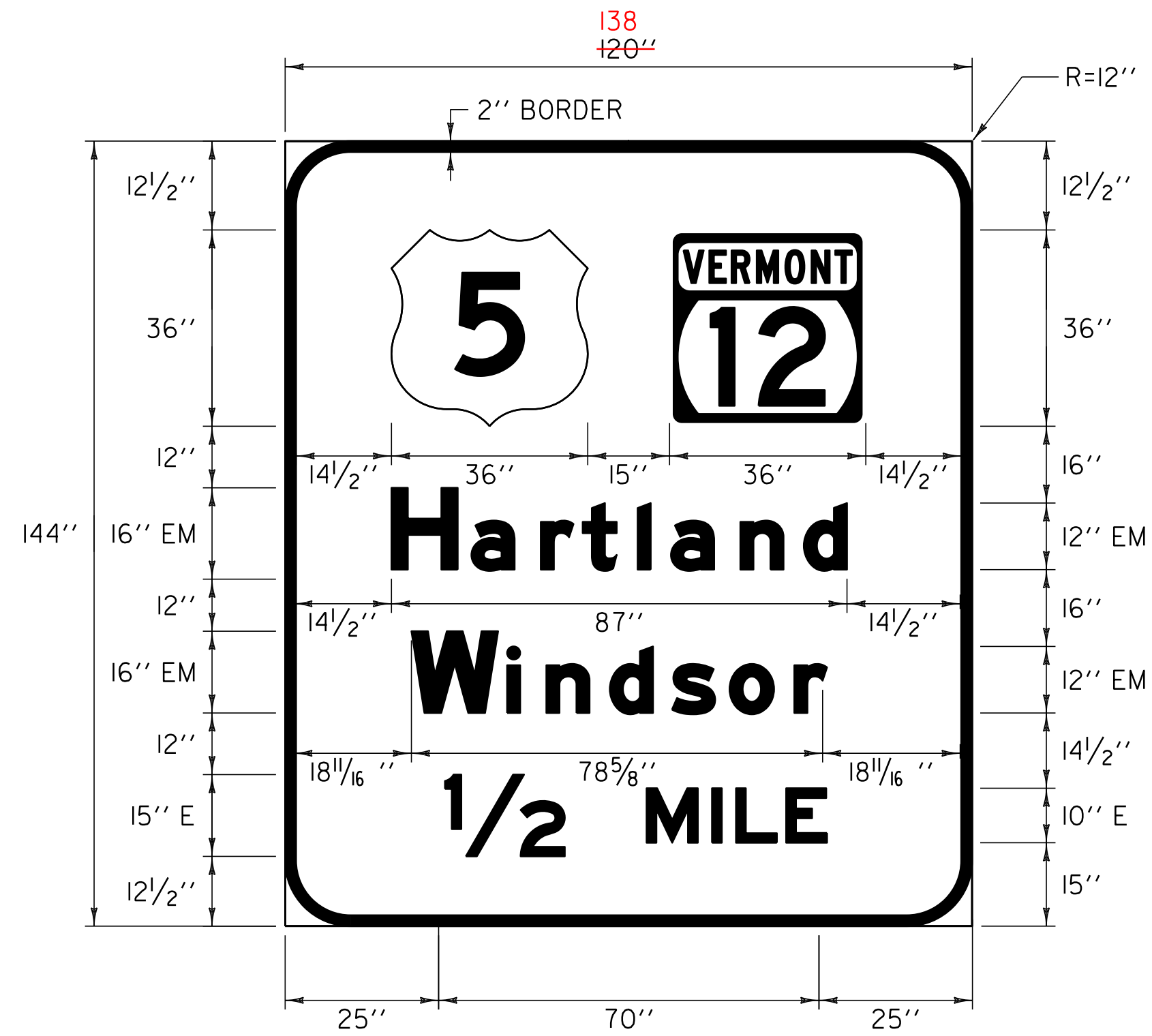
| | |
|--------------------------------------|----------------------------------|
| TRAFFIC SIGN REMOVAL SHEET #2 | PROJECT NAME: WINDSOR - HARTLAND |
| | PROJECT NUMBER: IM 09I-(16I) |
| | FILE NAME: p07a142.dgn |
| | PLOT DATE: 16-AUG-2011 13:42 |
| PROJECT LEADER: D.E.G. | DRAWN BY: C.A.K. |
| DESIGNED BY: M.J.L. | CHECKED BY: R.A.B. |
| IPARM FILE: p07a142+sr2.i | SHEET 33 OF 56 |



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

MATERIAL: PER VAOT STANDARD E-131
SIGN - INTERSTATE 91

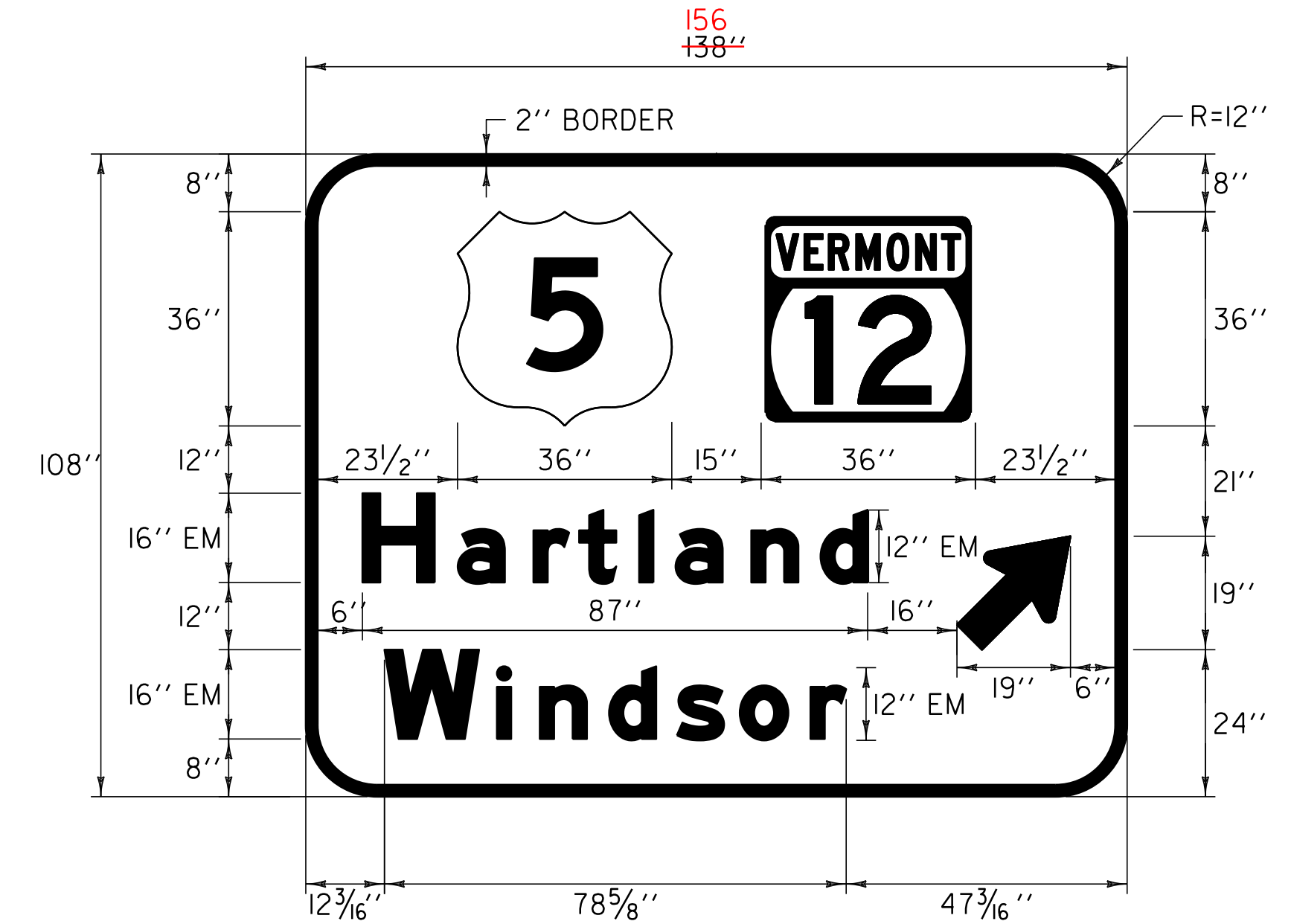
NORTHBOUND: SEE SHEET #19/56
MM 59.250 RT SEE SHEET #26/56
SOUTHBOUND: SEE SHEET #38/56
MM 61.650 LT SEE SHEET #40/56



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

MATERIAL: PER VAOT STANDARD E-131
SIGN - INTERSTATE 91

NORTHBOUND: SEE SHEET #19/56
MM 59.750 RT SEE SHEET #26/56
SOUTHBOUND: SEE SHEET #38/56
MM 61.050 LT SEE SHEET #40/56



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

MATERIAL: PER VAOT STANDARD E-131
SIGN - INTERSTATE 91

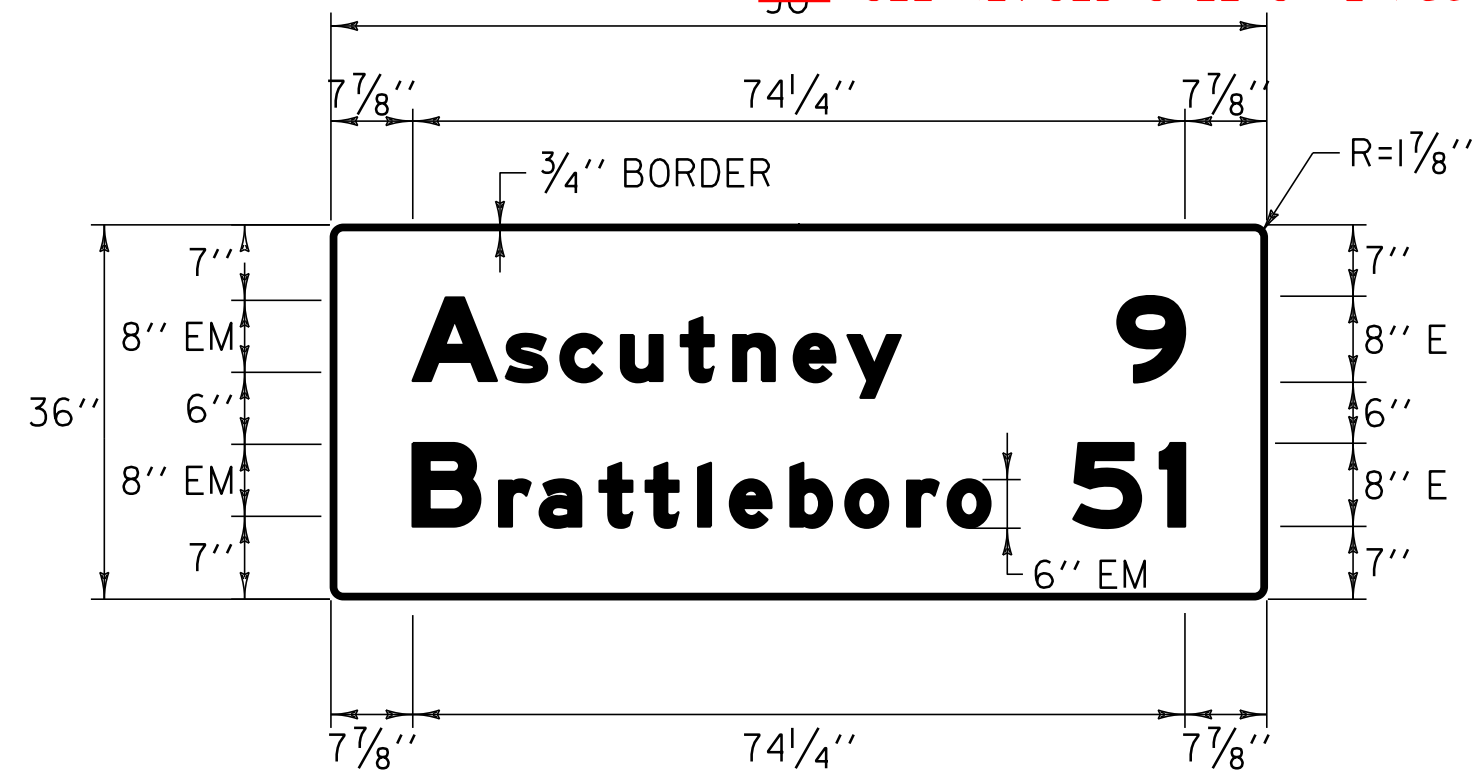
NORTHBOUND: SEE SHEET #20/56
MM 60.090 RT SEE SHEET #25/56
SOUTHBOUND: SEE SHEET #38/56
MM 60.710 LT SEE SHEET #39/56

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 VTRANS' TRAFFIC DESIGN UNIT BEFORE FABRICATION. INTERSTATE GUIDE SIGNS SHALL BE FABRICATED USING A MINIMUM ASTM TYPE IX SHEETING FOR LETTERS, BORDERS AND SYMBOLS AND THE BACKGROUND MATERIAL SHALL BE A MINIMUM ASTM TYPE III RETROREFLECTIVE SHEETING.

NOT TO SCALE

| | | |
|-------------------------------------------------|----------------------------------|------------------------------|
| TRAFFIC SIGN DETAIL SHEET #1 | PROJECT NAME: WINDSOR - HARTLAND | |
| | PROJECT NUMBER: IM 091-(161) | |
| | FILE NAME: p07al42.dgn | PLOT DATE: 16-AUG-2011 13:43 |
| | PROJECT LEADER: D.E.G. | DRAWN BY: C.A.K. |
| DESIGNED BY: M.J.L. | CHECKED BY: R.A.B. | |
| IPARM FILE: p07al42+sdl.i | SHEET 35 OF 56 | |

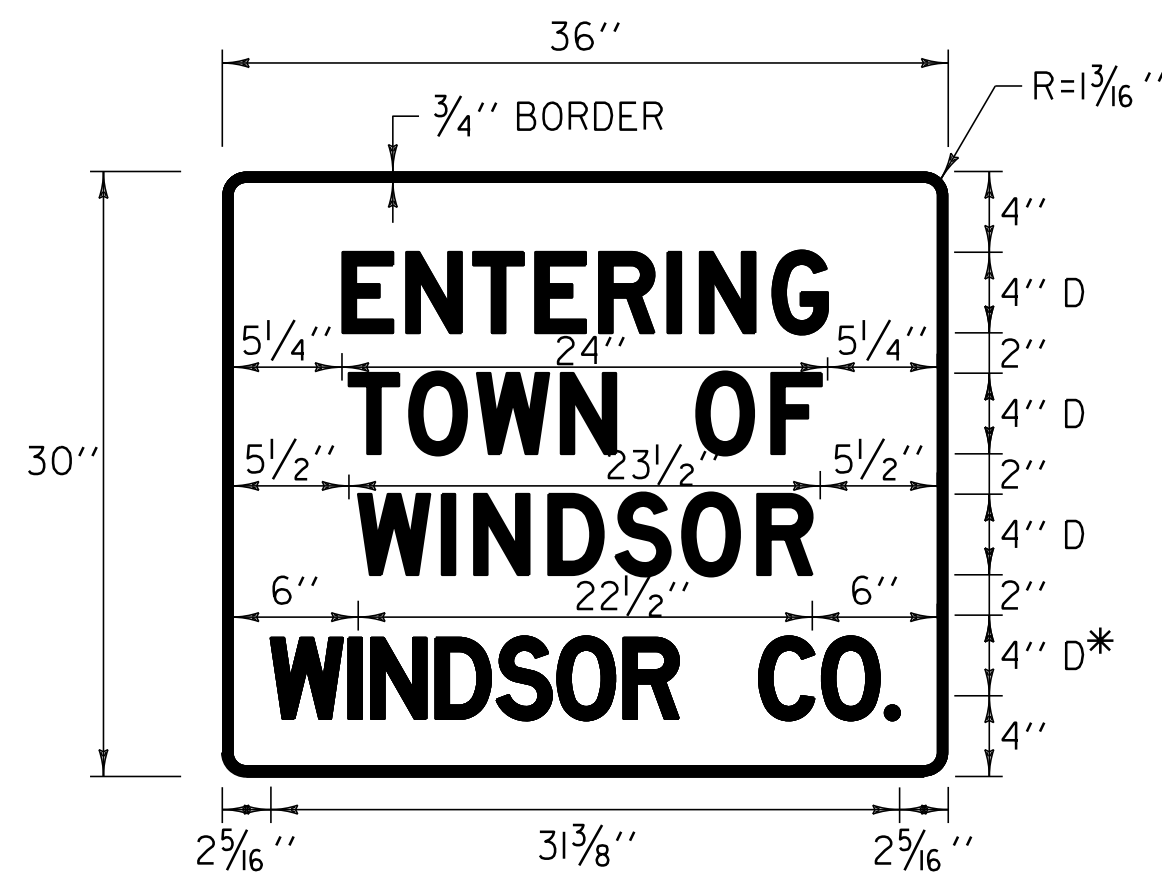
108
90" SEE REVISED SHEETS #24/56 AND #39/56



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

MATERIAL: PER VAOT STANDARD E-131
SIGN - INTERSTATE 91

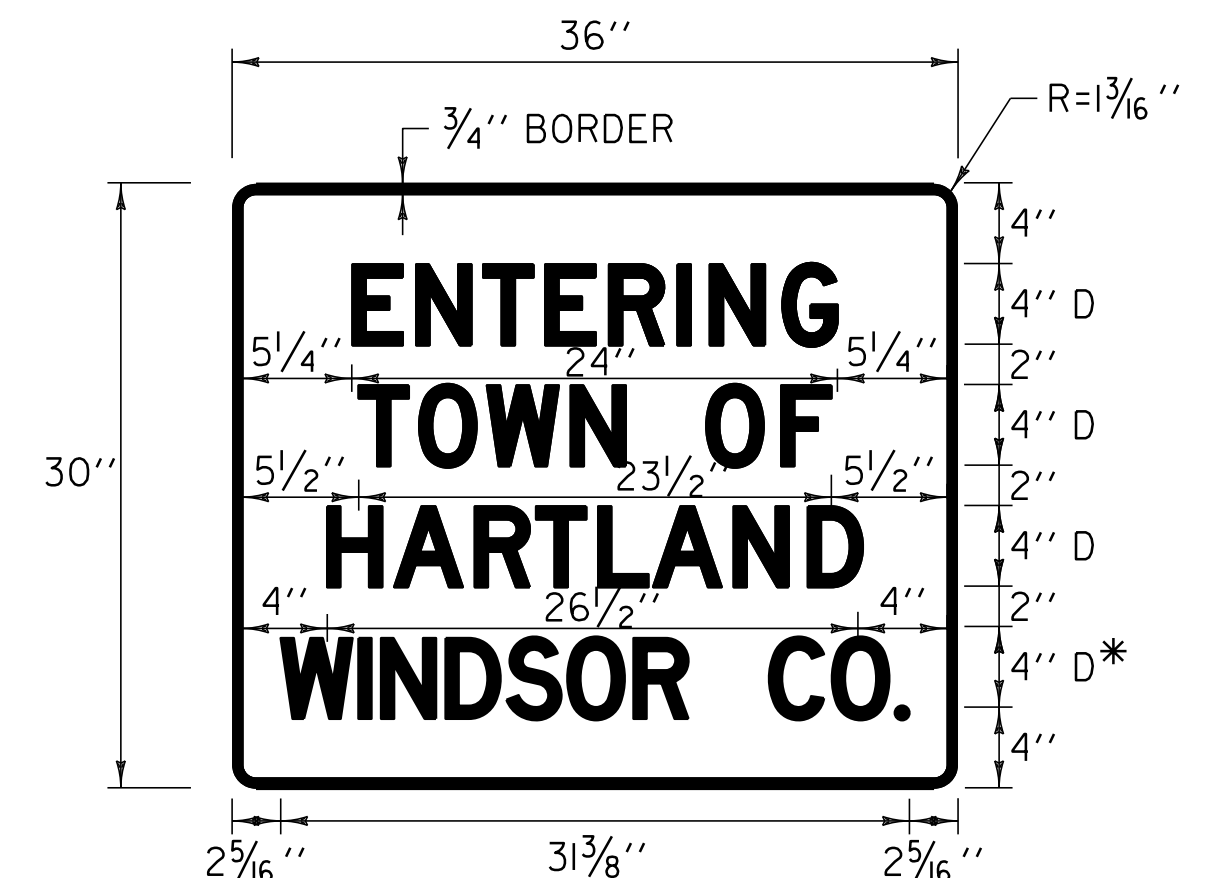
SOUTHBOUND:
MM 59.700 LT



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

MATERIAL: PER VAOT STANDARD E-128B
* 50% REDUCTION IN SPACING
SIGN - INTERSTATE 91

SOUTHBOUND:
MM 59.857 LT



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

MATERIAL: PER VAOT STANDARD E-128A
* 50% REDUCTION IN SPACING
SIGN - INTERSTATE 91

NORTHBOUND:
MM 59.859 RT

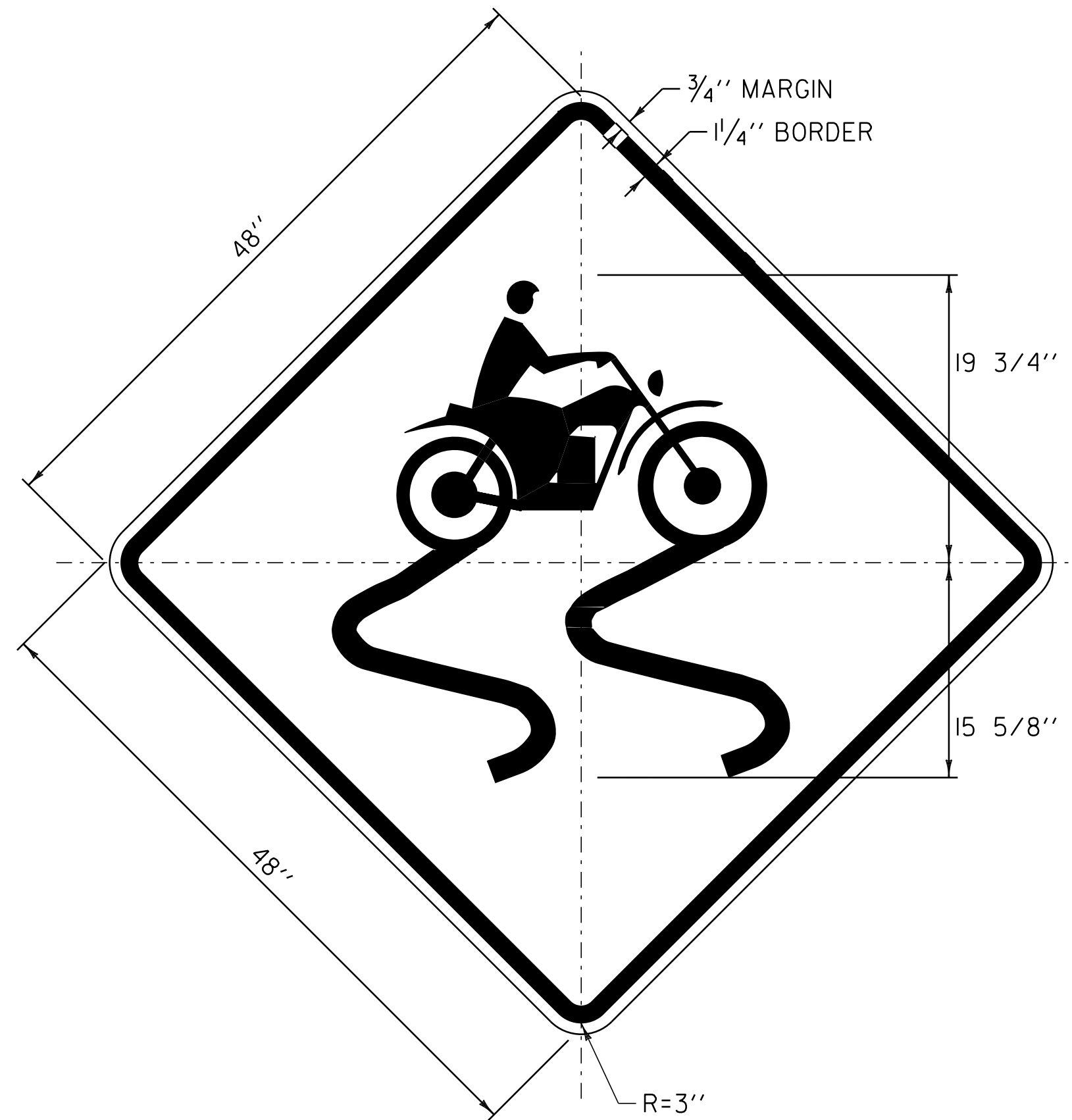
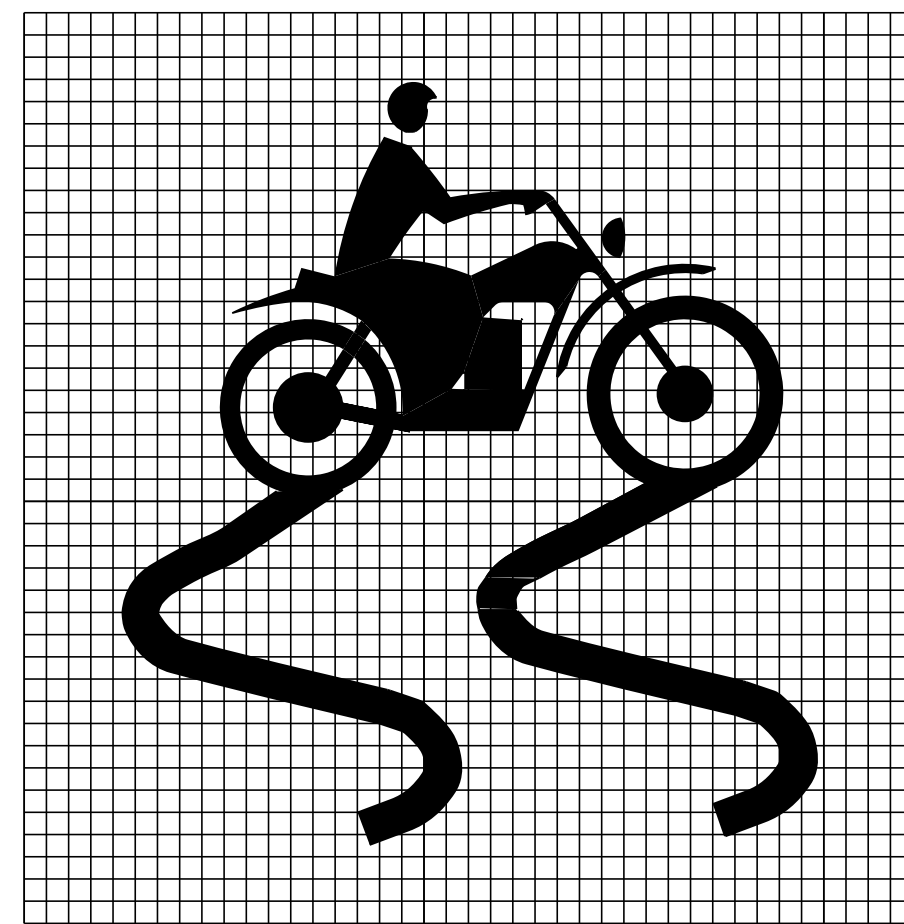
144
126" SEE REVISED SHEET #21/56



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

MATERIAL: PER VAOT STANDARD E-131
SIGN - INTERSTATE 91

NORTHBOUND:
MM 61.140 RT

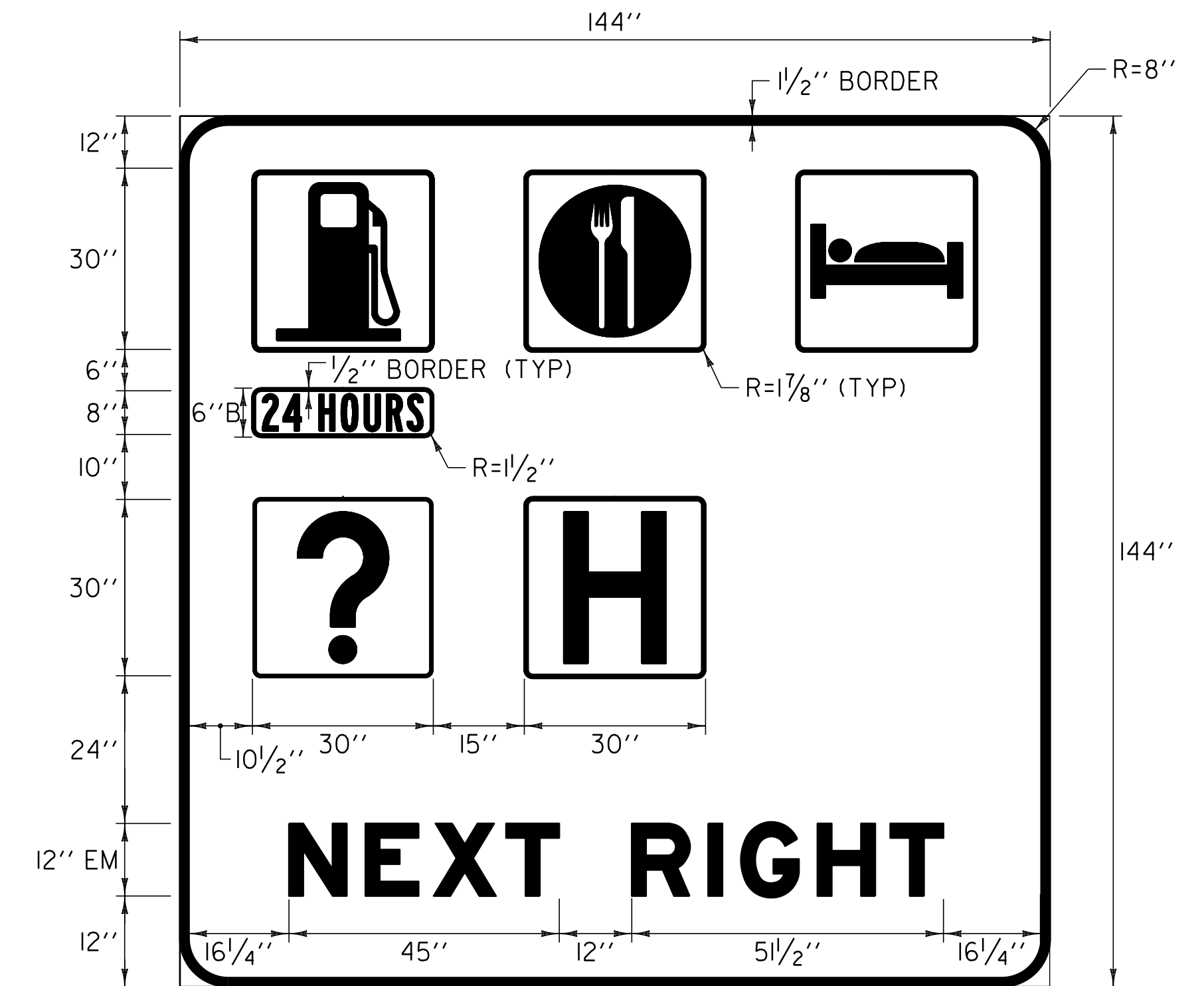


COLOR: BLACK BORDER & TEXT
YELLOW BACKGROUND (REFLECTORIZED)

MATERIAL: PER VAOT STANDARD E-153B
SIGN - INTERSTATE 91

NORTHBOUND:
MM 60.874, RT

SOUTHBOUND:
MM 59.795, LT



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

MATERIAL: PER VAOT STANDARD E-130
SIGN - INTERSTATE 91

NORTHBOUND:
MM 59.910 RT

SOUTHBOUND:
MM 60.900 LT

NOT TO SCALE

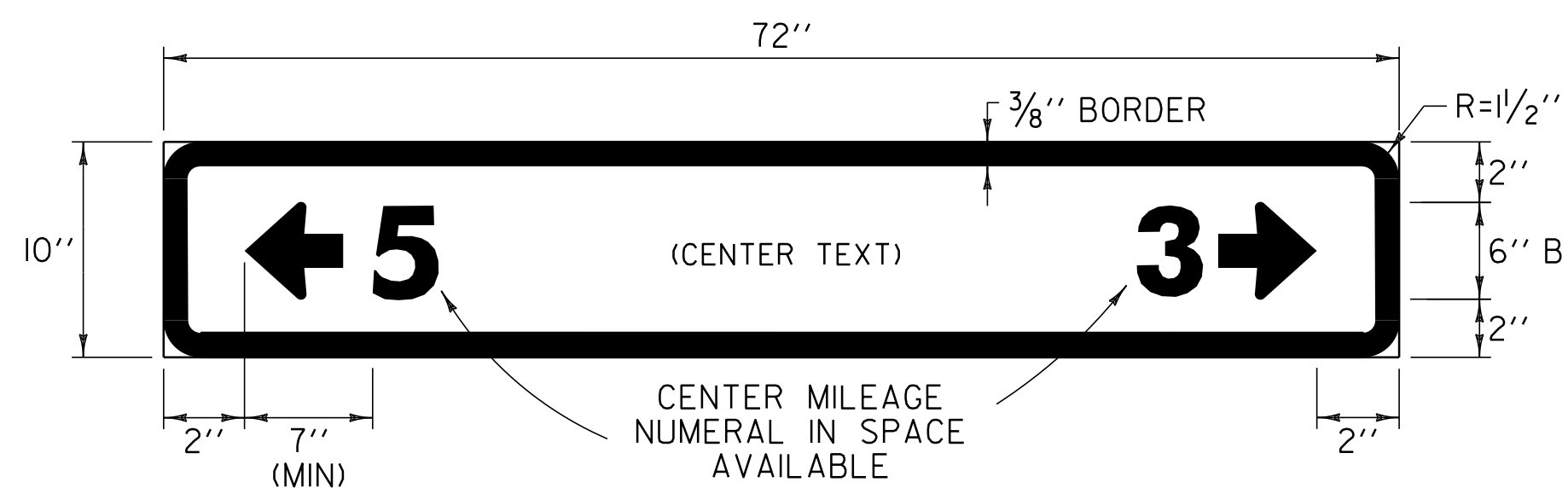
TRAFFIC
SIGN
DETAIL
SHEET #2

PROJECT NAME: WINDSOR - HARTLAND
PROJECT NUMBER: IM 091-(161)

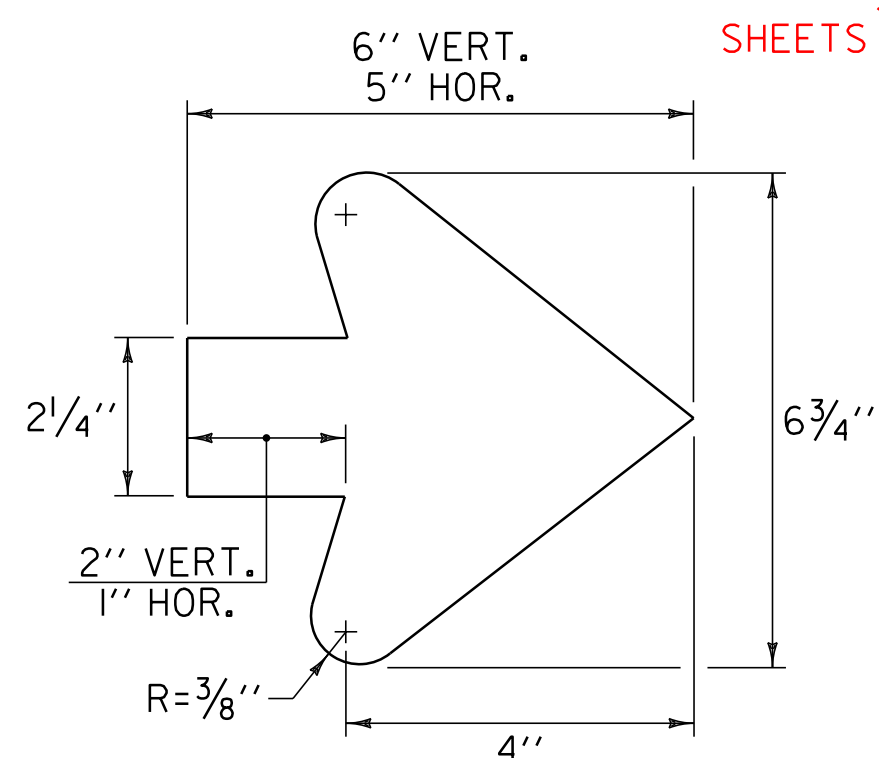
FILE NAME: p07al42.dgn
PROJECT LEADER: D.E.G.
DESIGNED BY: M.J.L.
IPARM FILE: p07al42+sd2.i

PLOT DATE: 16-AUG-2011 13:43
DRAWN BY: C.A.K.
CHECKED BY: R.A.B.
SHEET 36 OF 56

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 VTRANS' TRAFFIC DESIGN UNIT BEFORE FABRICATION. INTERSTATE GUIDE SIGNS SHALL BE FABRICATED USING A MINIMUM ASTM TYPE IX SHEETING FOR LETTERS, BORDERS AND SYMBOLS AND THE BACKGROUND MATERIAL SHALL BE A MINIMUM ASTM TYPE III RETROREFLECTIVE SHEETING. ALL OTHER PERMANENT SIGNS SHALL BE FABRICATED USING MINIMUM ASTM TYPE III RETROREFLECTIVE SHEETING.



SEE REVISIONS SHEETS #29/56 AND #30/56

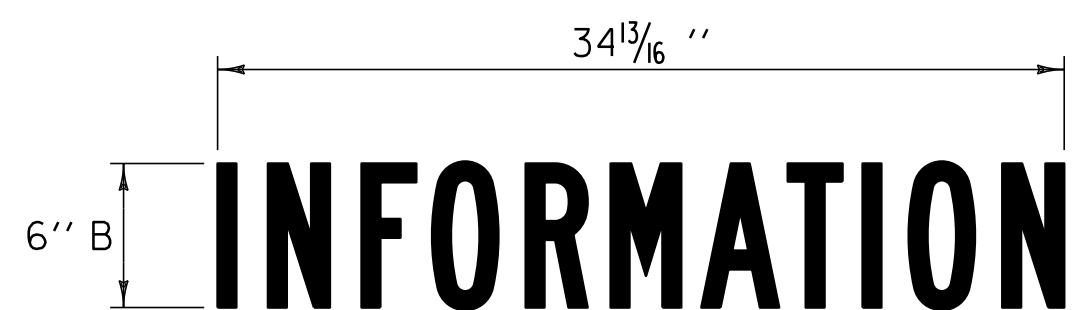
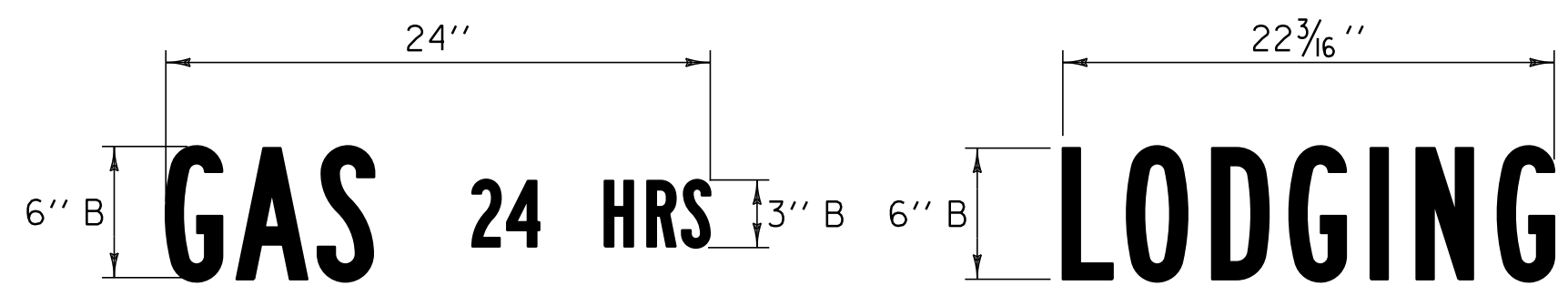
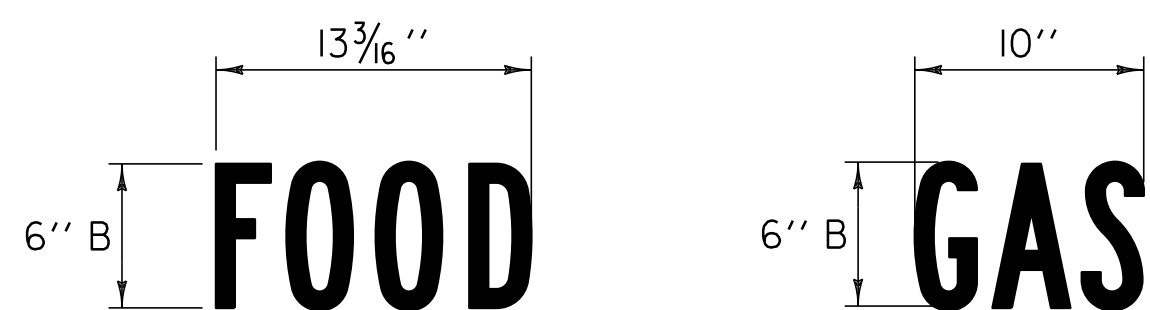


ARROW DIMENSIONS

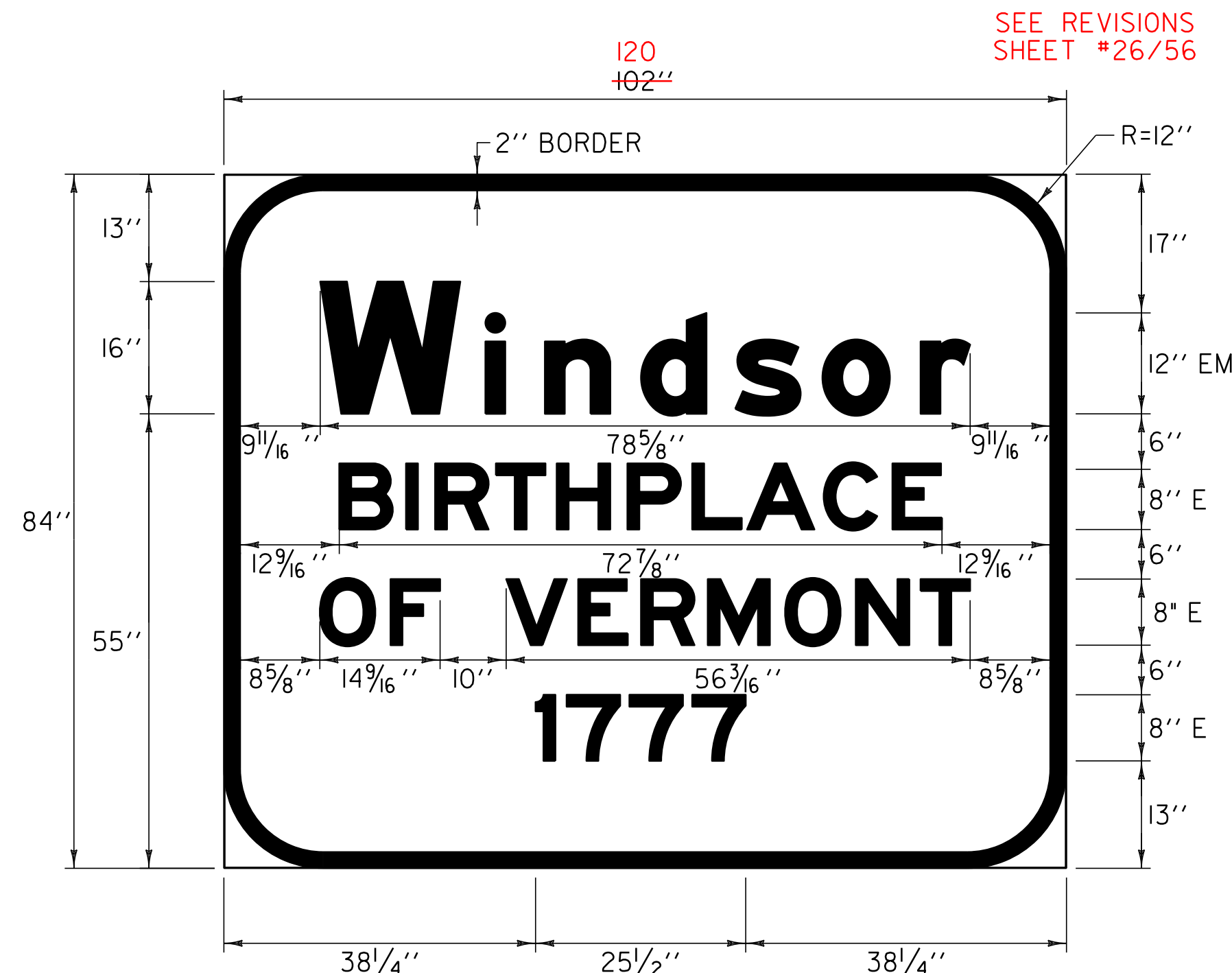
COLOR: WHITE BORDER, TEXT & SYMBOL (REFLECTORIZED)
BLUE BACKGROUND (REFLECTORIZED)

MATERIAL: PER VAOT STANDARD E-133
SIGN - INTERSTATE 91

RAMP B BII+10.0 RT
RAMP D DI2+56.0 RT



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 VTRANS' TRAFFIC DESIGN UNIT BEFORE FABRICATION. INTERSTATE GUIDE SIGNS SHALL BE FABRICATED USING A MINIMUM ASTM TYPE IX SHEETING FOR LETTERS, BORDERS AND SYMBOLS AND THE BACKGROUND MATERIAL SHALL BE A MINIMUM ASTM TYPE III RETROREFLECTIVE SHEETING. ALL OTHER PERMANENT SIGNS SHALL BE FABRICATED USING MINIMUM ASTM TYPE III RETROREFLECTIVE SHEETING.



SEE REVISIONS SHEET #26/56

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

MATERIAL: PER VAOT STANDARD E-131
SIGN - INTERSTATE 91

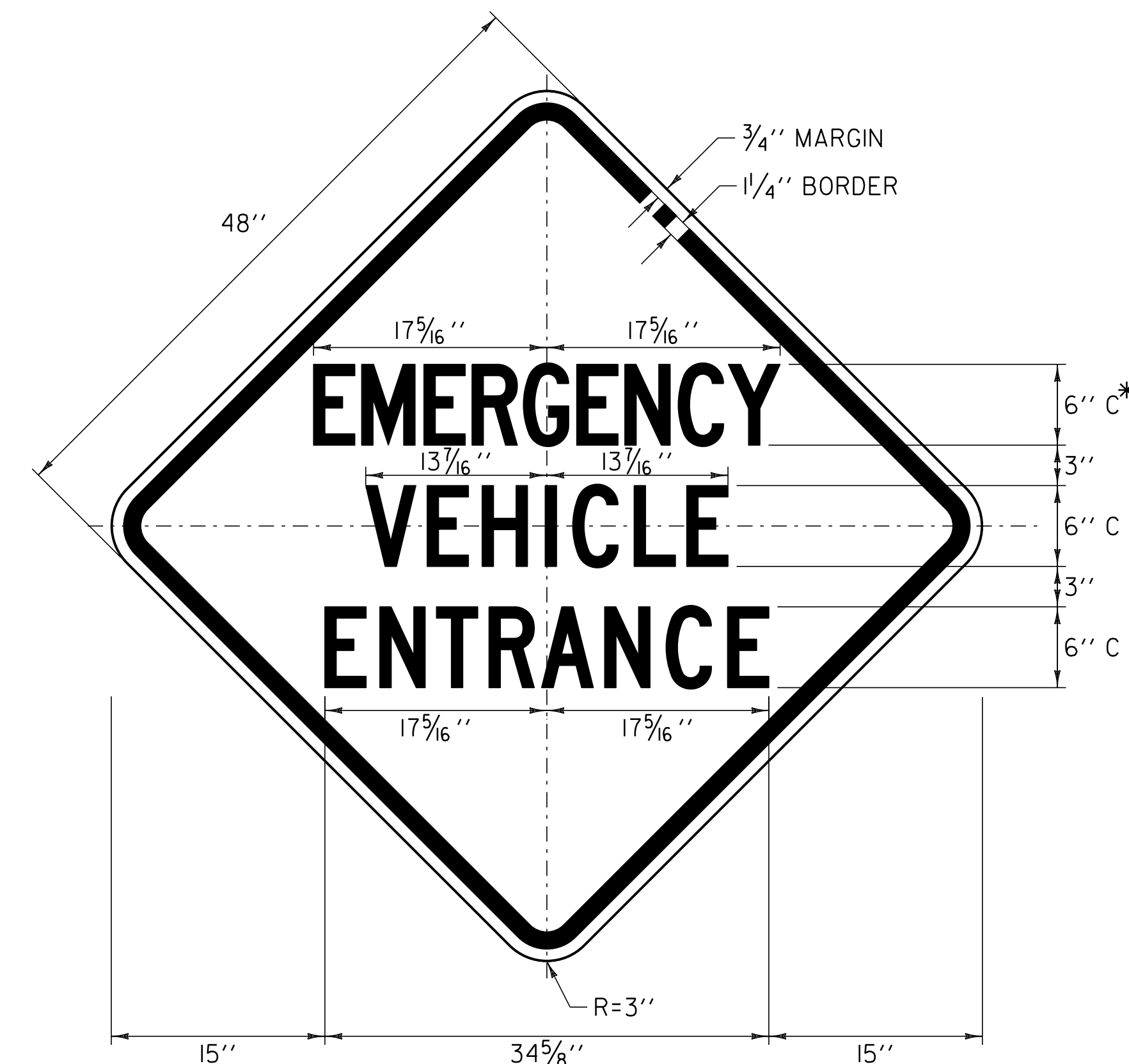
SOUTHBOUND: MM 61.270 LT
SEE REVISIONS SHEETS #26/56 AND #40/56



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

MATERIAL: PER VAOT STANDARD E-132
SIGN - INTERSTATE 91

NORTHBOUND: MM 65.295 RT

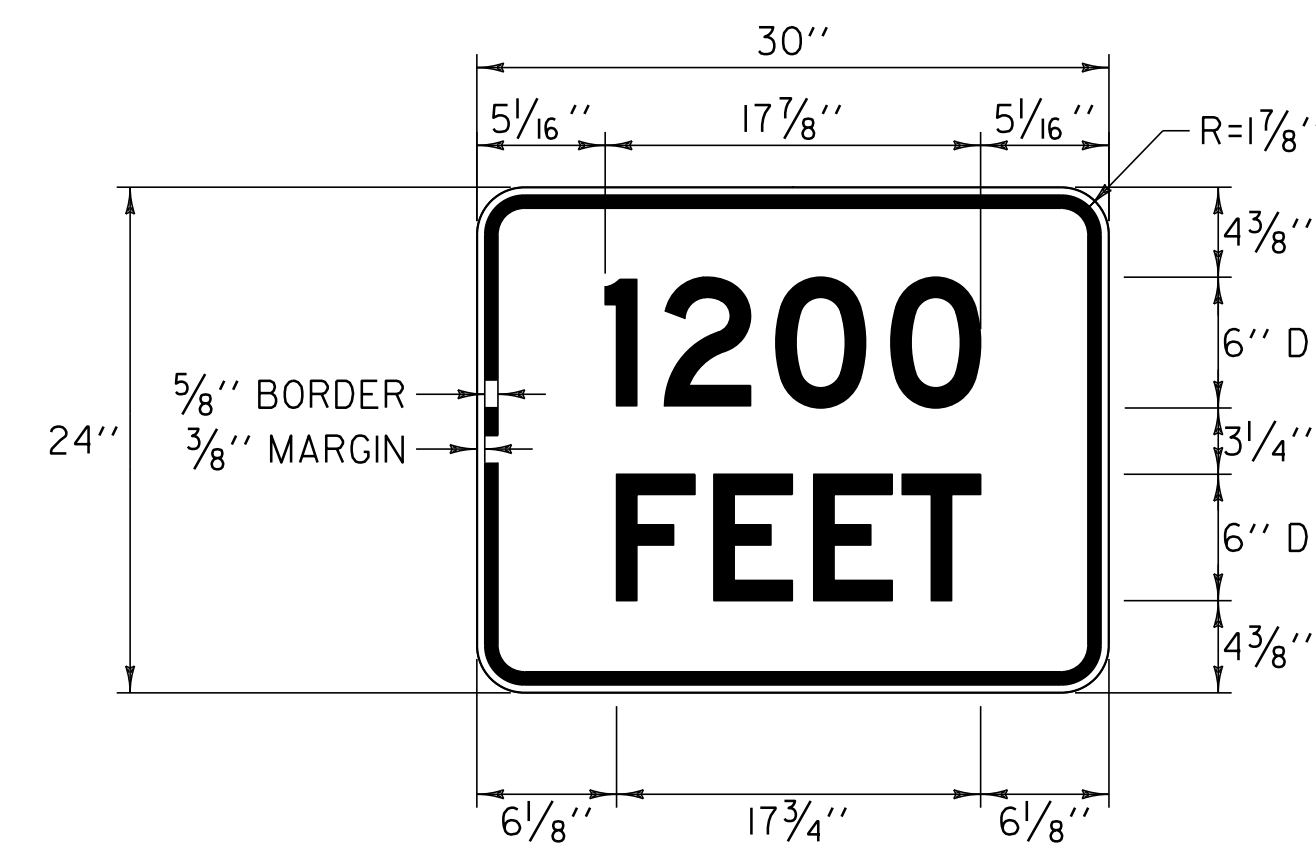


COLOR: BLACK BORDER & TEXT
YELLOW BACKGROUND (REFLECTORIZED)

MATERIAL: PER VAOT STANDARD E-153
SIGN - INTERSTATE 91

SOUTHBOUND: MM 66.114 LT

* LETTERING USED WITH 50% REDUCED SPACING



COLOR: BLACK BORDER & TEXT
YELLOW BACKGROUND (REFLECTORIZED)

MATERIAL: PER VAOT STANDARD E-153
SIGN - INTERSTATE 91

SOUTHBOUND: MM 66.114 LT

NOT TO SCALE

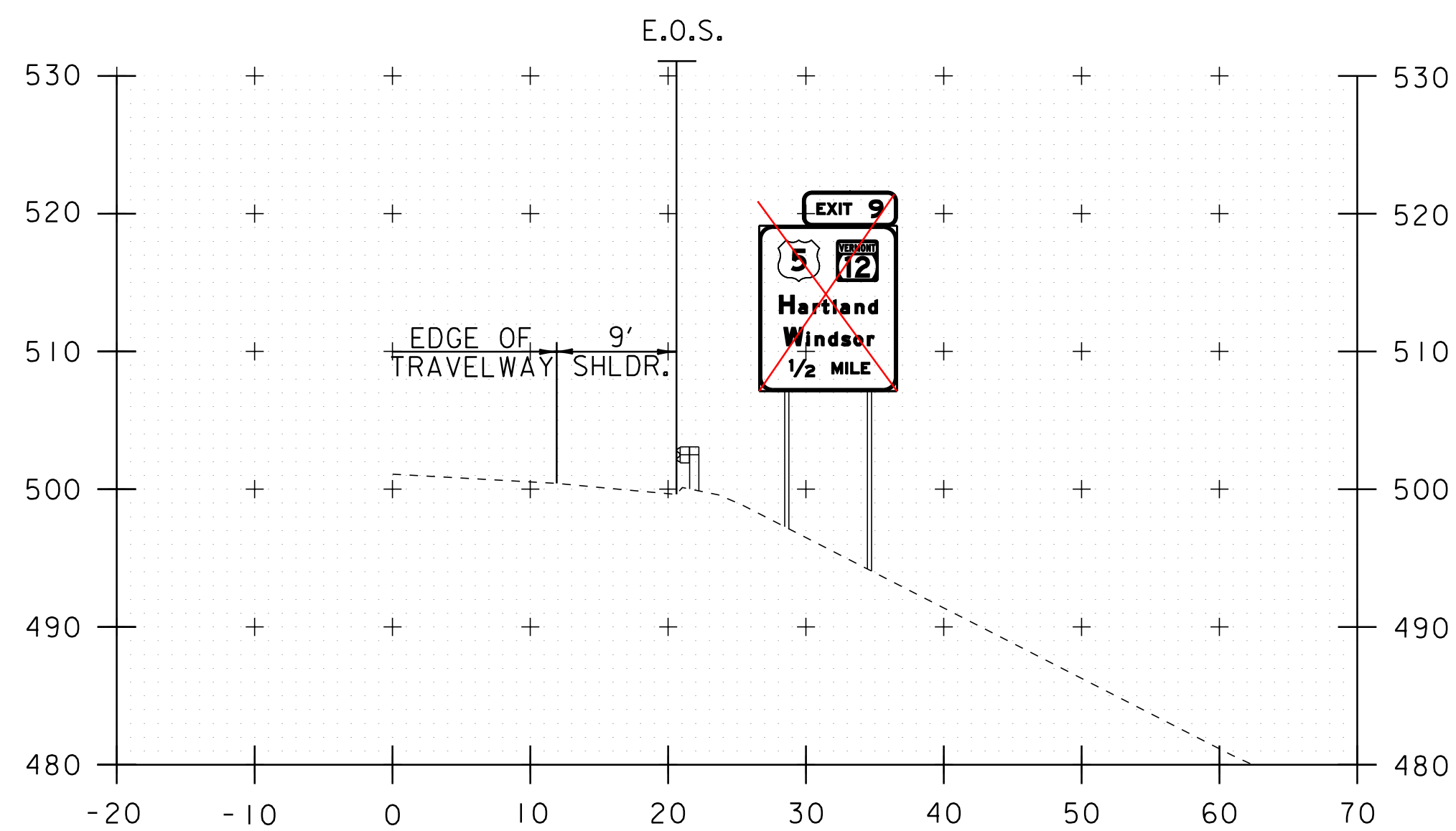
TRAFFIC SIGN DETAIL SHEET #3

PROJECT NAME: WINDSOR - HARTLAND
PROJECT NUMBER: IM 091-(161)

FILE NAME: p07al42.dgn
PROJECT LEADER: D.E.G.
DESIGNED BY: M.J.L.
IPARM FILE: p07al42+sd3.i

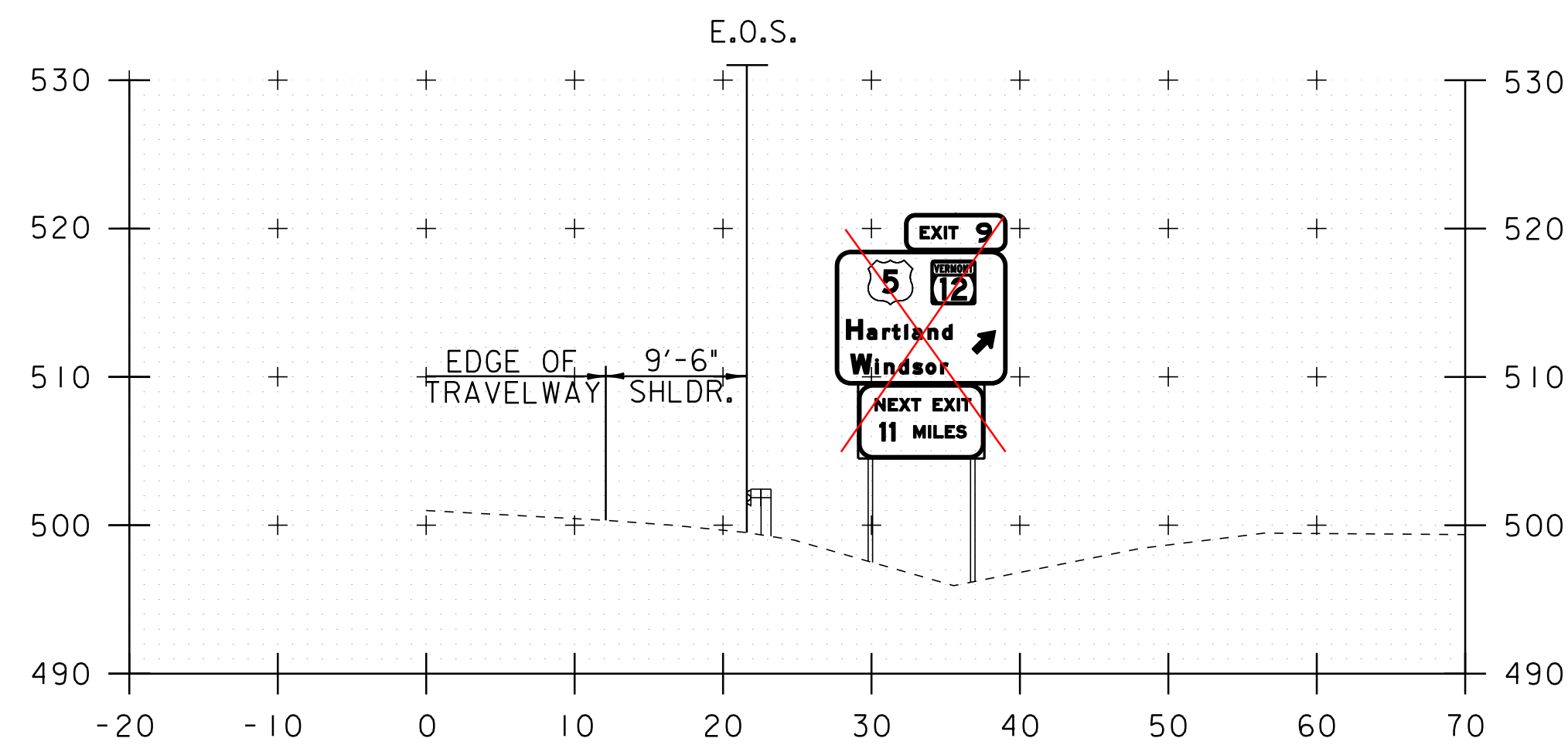
PLOT DATE: 16-AUG-2011 13:43
DRAWN BY: C.A.K.
CHECKED BY: R.A.B.
SHEET 37 OF 56

USE NEW SIGN FACE LAYOUTS (AS NOTED)



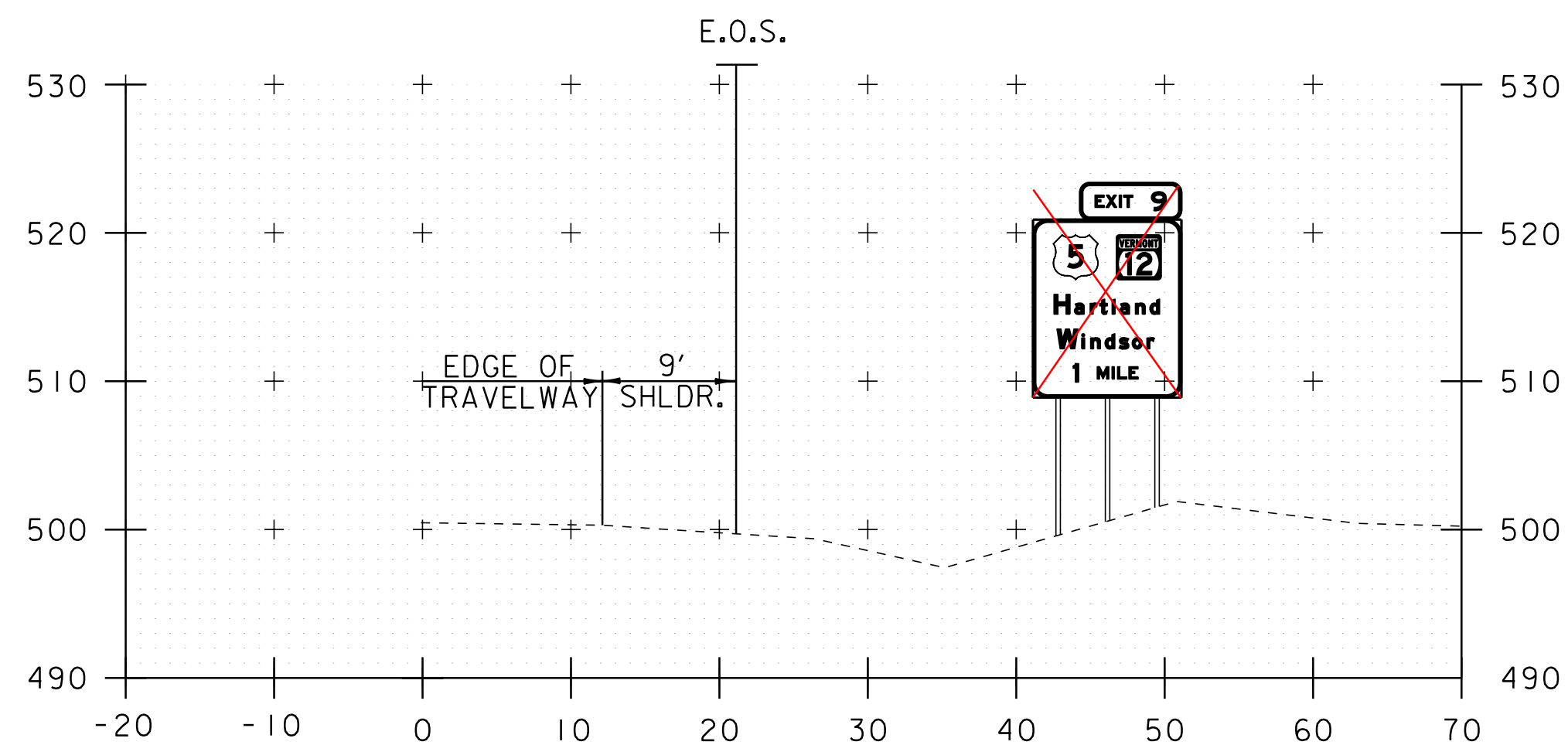
NORTHBOUND
MM 59.750 RT
LEFT POST = 21.9' 22.1'
RIGHT POST = 27.5' 25.6'
W 8x21W-SHAPE STEEL

REVISED BOLT TENSION = 29.8 KIP
SEE SHEET #35/56



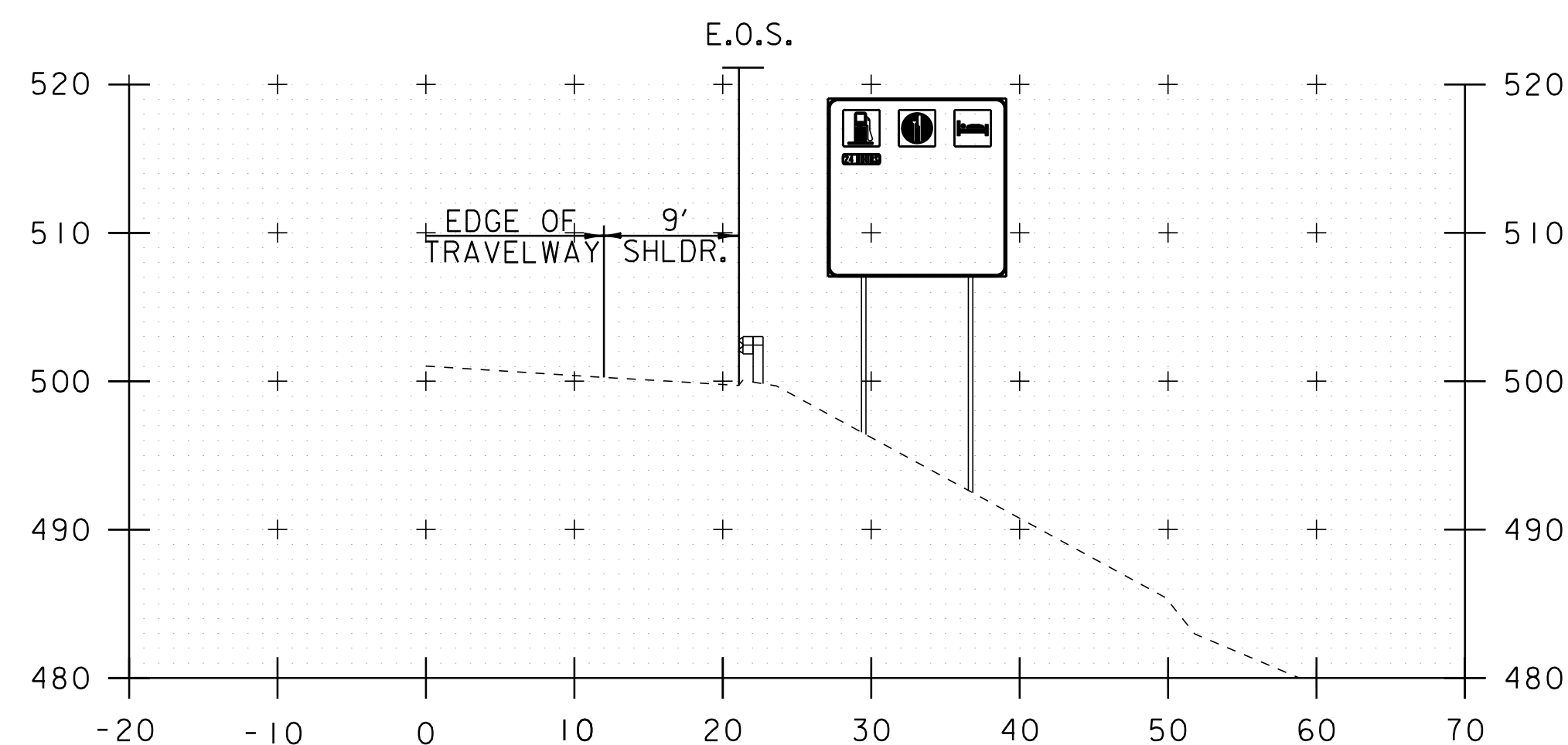
NORTHBOUND
MM 60.090 RT
LEFT POST = 20.0' 21.0'
RIGHT POST = 23.8' 22.1'
W 8x18 W-SHAPE STEEL

REVISED BOLT TENSION = 19.9 KIP
SEE SHEET #35/56



NORTHBOUND
MM 59.250 RT
LEFT POST = 21.3' 21.2'
CENTER POST = 22.8' 20.1'
RIGHT POST = 21.9' 19.0'
5" DIAMETER TUBULAR STEEL

SEE SHEET #35/56



NORTHBOUND
MM 59.910 RT
LEFT POST = 22.6'
RIGHT POST = 26.5'
W 8x18 W-SHAPE STEEL

NOT TO SCALE

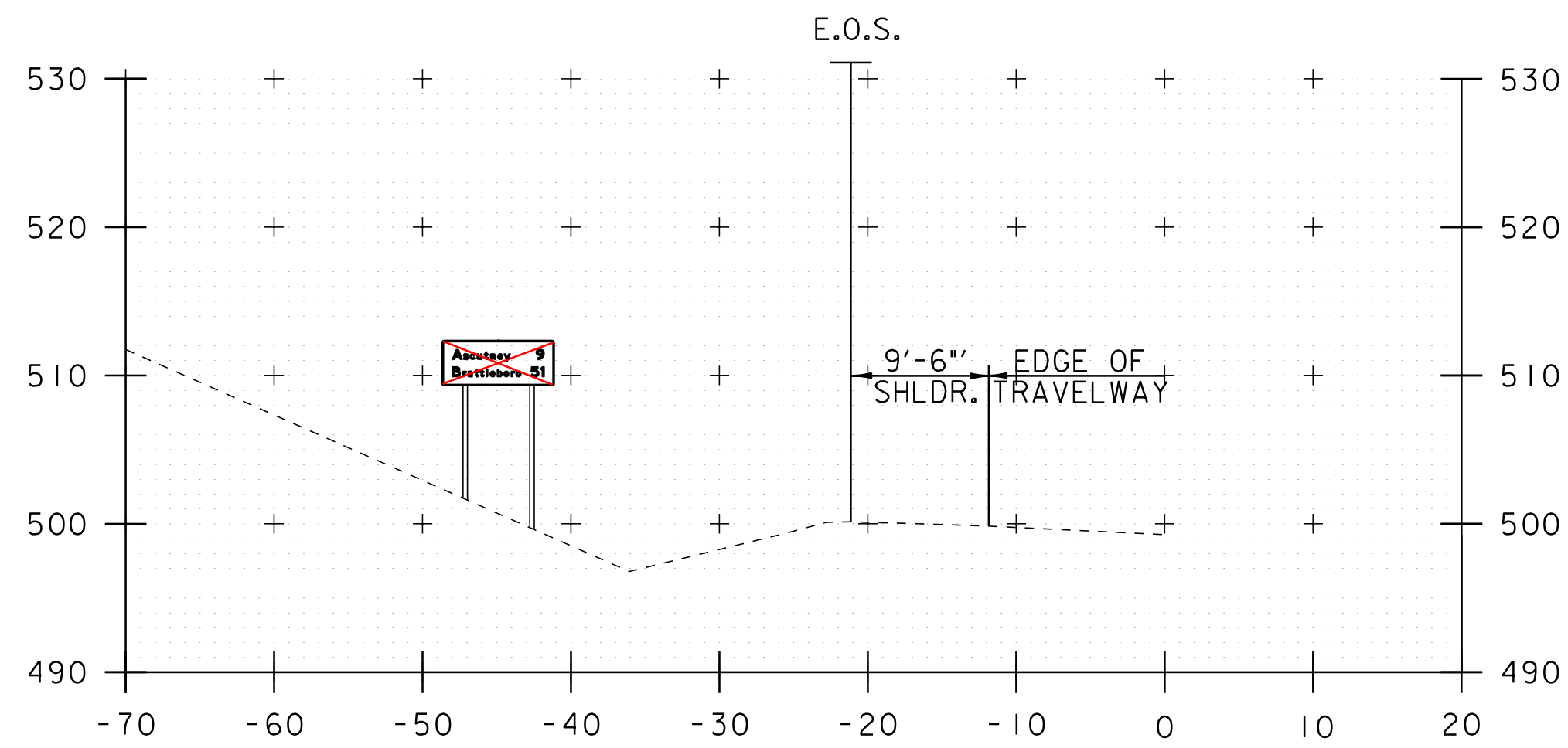
**TRAFFIC
SIGN
CROSS
SECTION
SHEET #1**

PROJECT NAME: WINDSOR - HARTLAND
PROJECT NUMBER: IM 09I-(6I)

FILE NAME: p07al42.dgn
PROJECT LEADER: D.E.G.
DESIGNED BY: M.J.L.
IPARM FILE: p07al42xscl.i

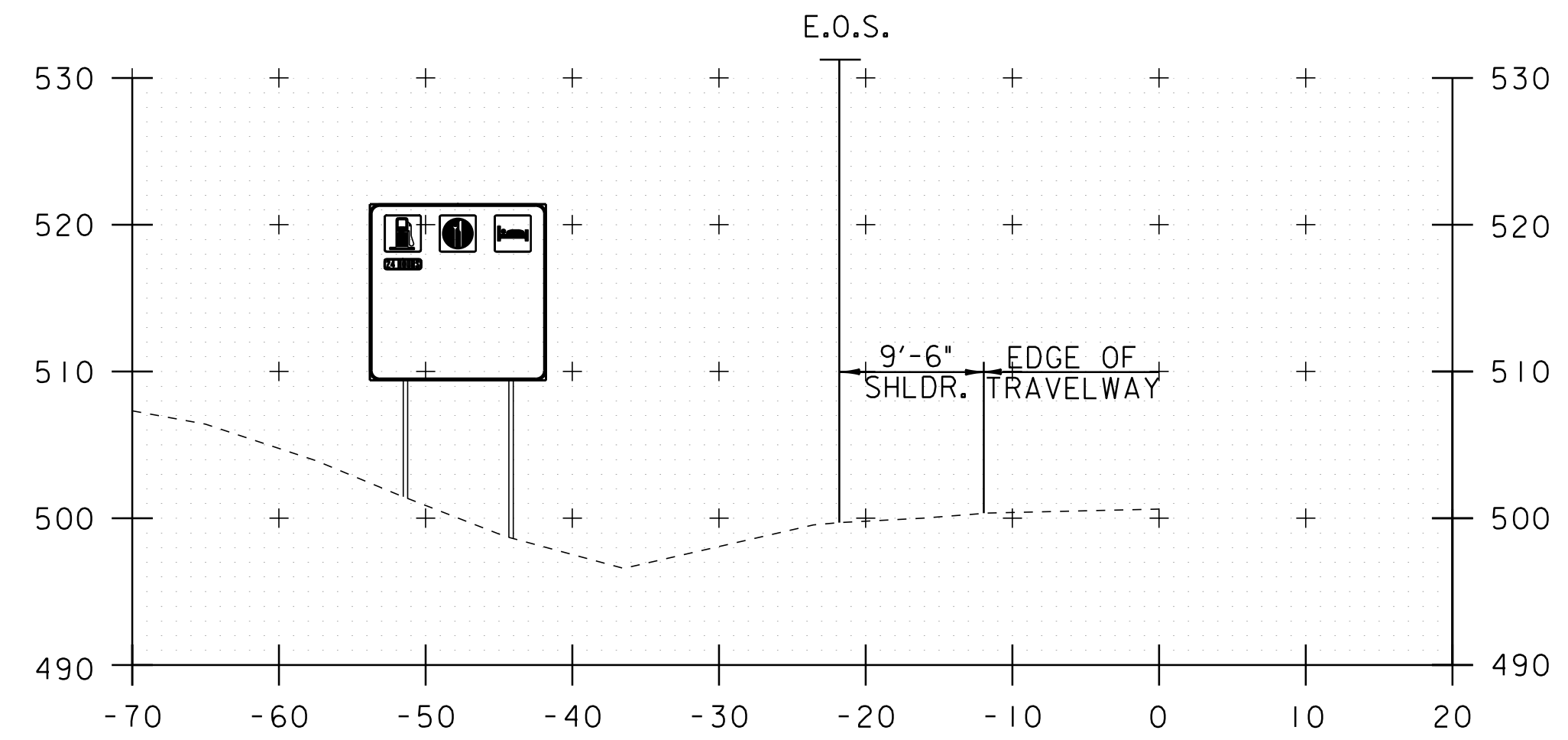
PLOT DATE: 16-AUG-2011 13:43
DRAWN BY: C.A.K.
CHECKED BY: R.A.B.
SHEET 38 OF 56

USE REVISED SIGN FACE LAYOUTS (AS NOTED)

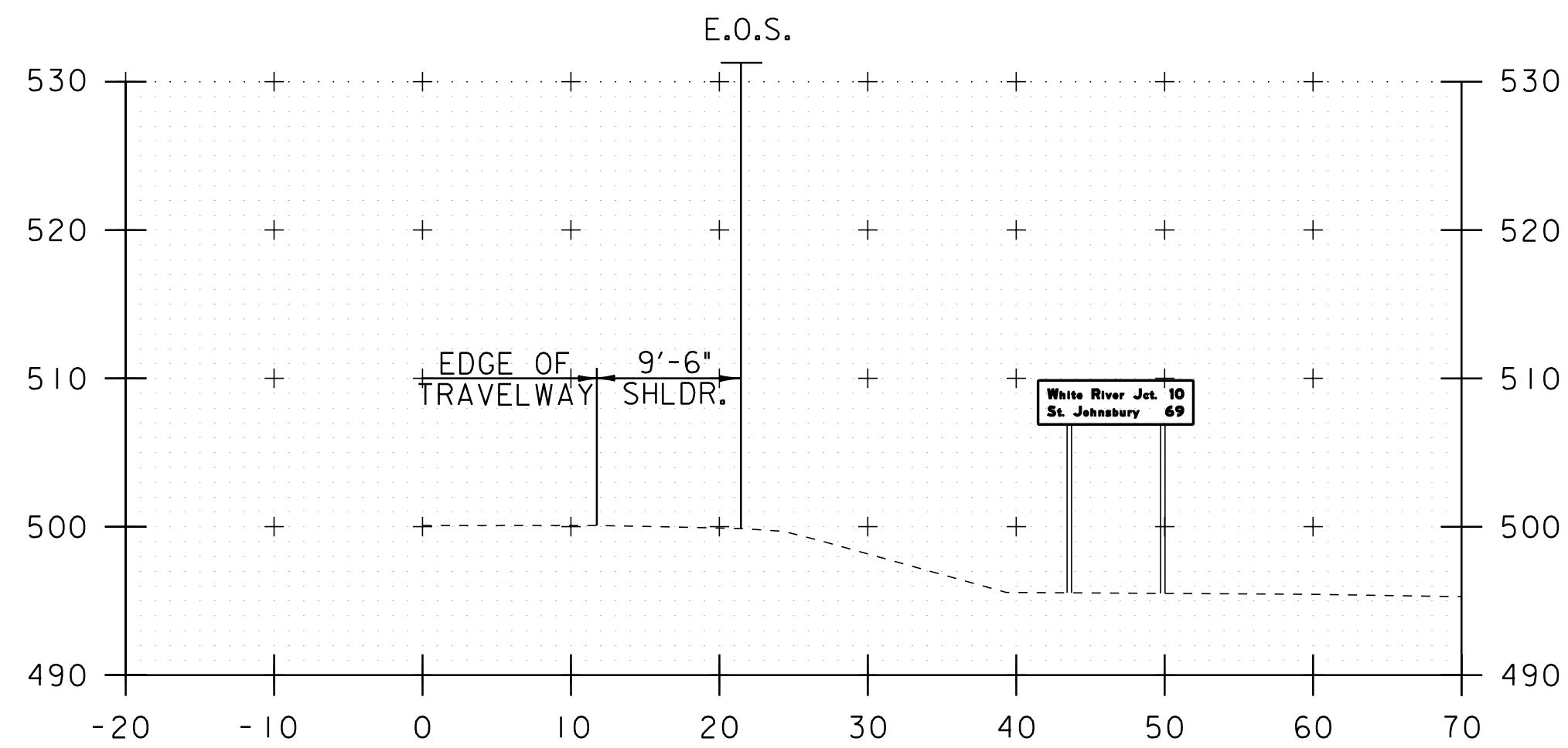


*SOUTHBOUND
MM 59.700 LT
LEFT POST = 10.7' 10.8'
RIGHT POST = 12.7' 13.2'
3" DIAMETER TUBULAR STEEL

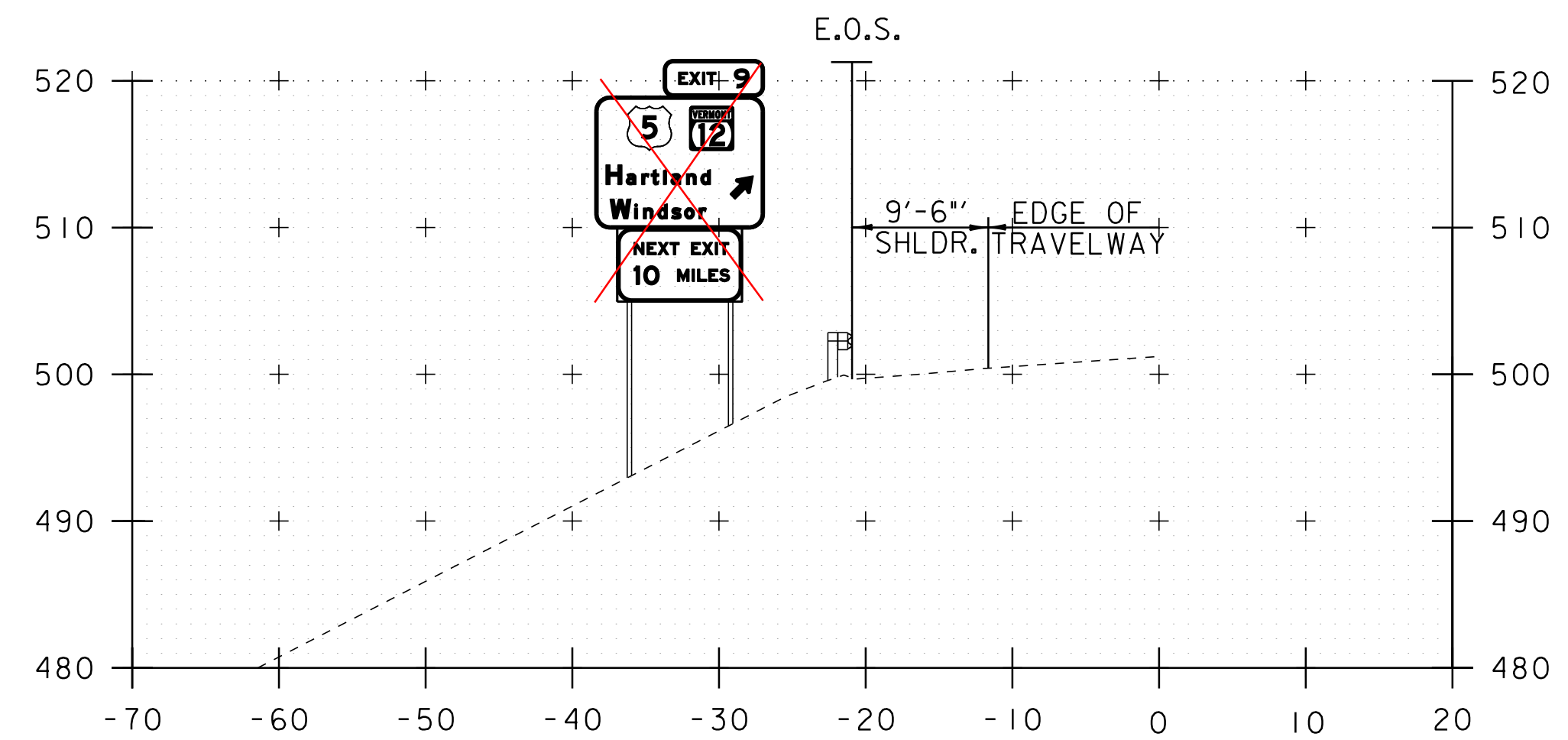
SEE SHEET #36/56



*SOUTHBOUND
MM 60.900 LT
LEFT POST = 20.0'
RIGHT POST = 22.7'
W 8x18 W-SHAPE STEEL



NORTHBOUND
MM 61.140 RT
LEFT POST = 14.3'
RIGHT POST = 14.4'
3" DIAMETER TUBULAR STEEL



*SOUTHBOUND
MM 60.710 LT
LEFT POST = 25.2' 26.5'
RIGHT POST = 21.5' 22.5'
~~W 8x18 W-SHAPE STEEL~~
W 8x21 W-SHAPE STEEL

CALCULATED REVISED BOLT TENSION = 19.8 KIP
USE MINIMUM TENSION = 28.4 KIP

SEE SHEET #35/56

* 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 SIDE OF INTERSTATE 91.

NOT TO SCALE

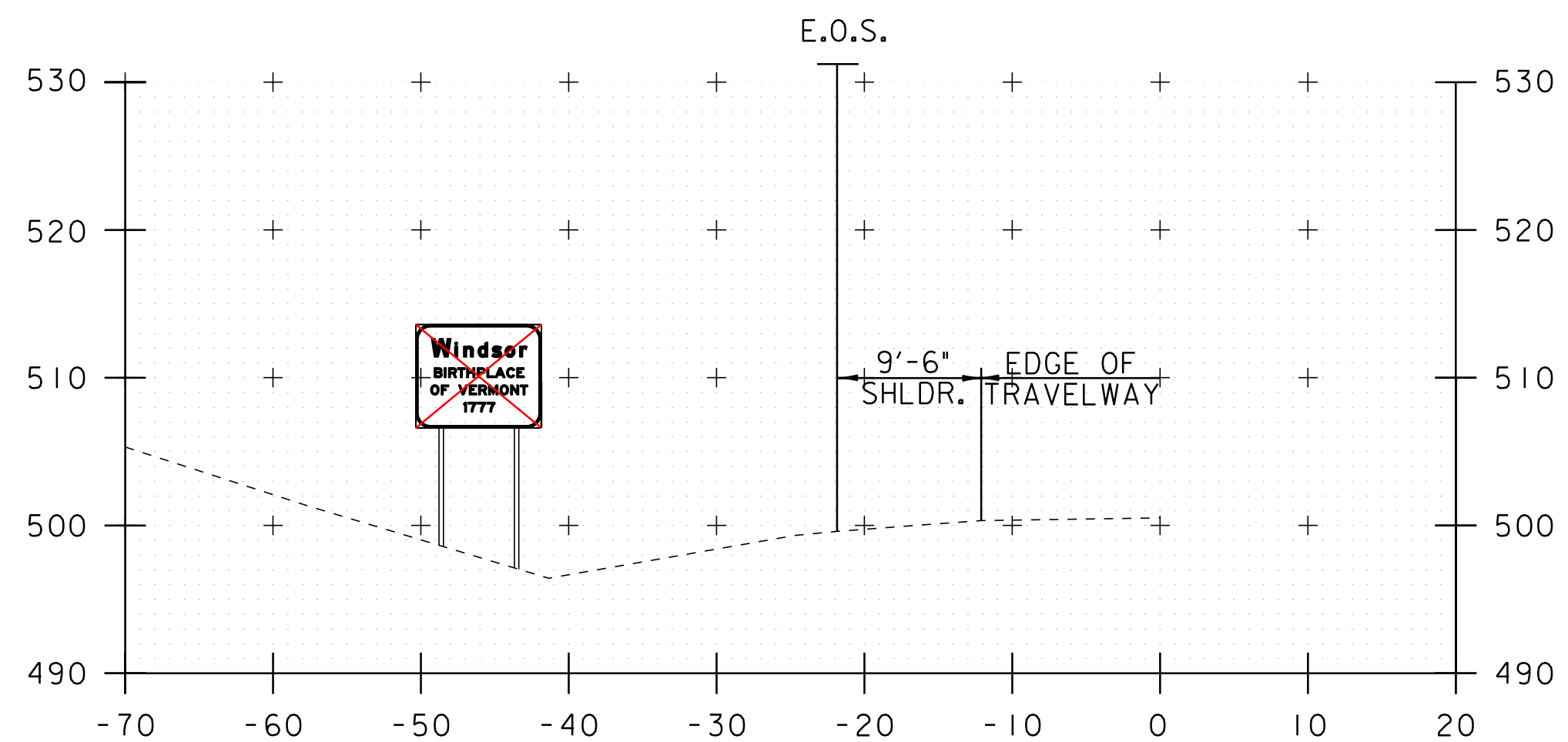
**TRAFFIC
SIGN
CROSS
SECTION
SHEET #2**

PROJECT NAME: WINDSOR - HARTLAND
PROJECT NUMBER: IM 091-(6)

FILE NAME: p07al42.dgn
PROJECT LEADER: D.E.G.
DESIGNED BY: M.J.L.
IPARM FILE: p07al42xsc2.i

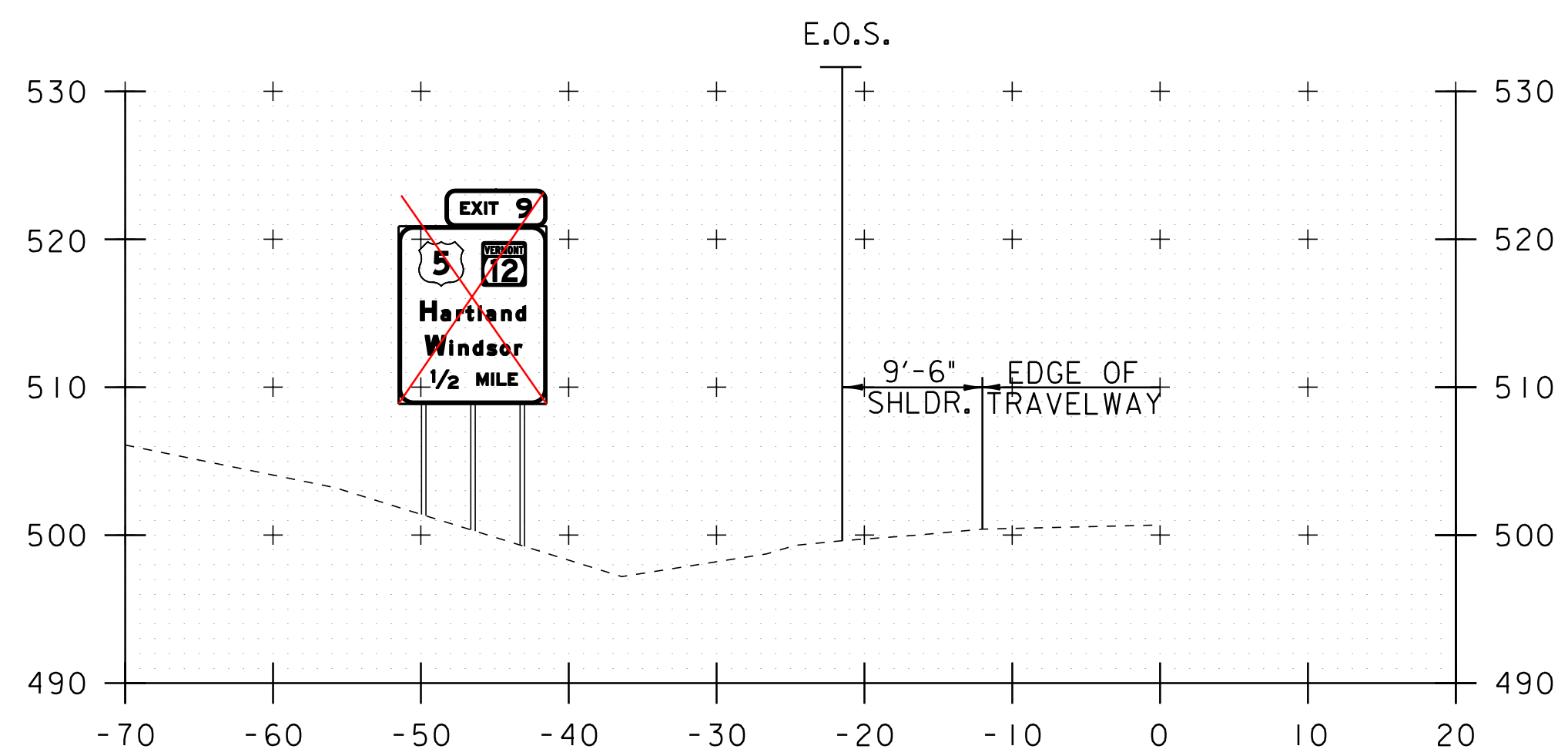
PLOT DATE: 16-AUG-2011 13:43
DRAWN BY: C.A.K.
CHECKED BY: R.A.B.
SHEET 39 OF 56

USE REVISED SIGN FACE LAYOUTS (AS NOTED)



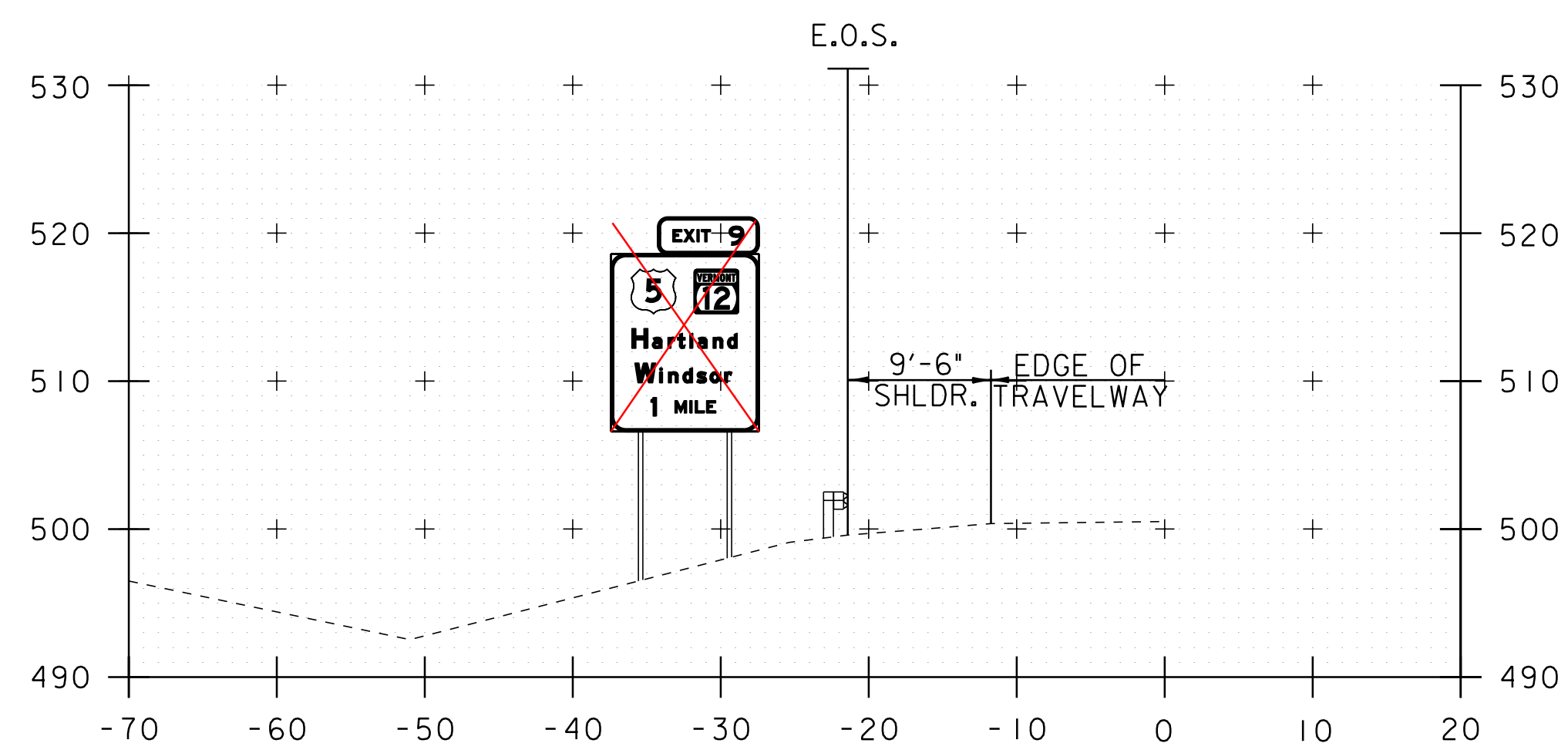
*SOUTHBOUND
MM 61.270 LT
LEFT POST = 15.0' 14.6'
RIGHT POST = 46.5' 16.4'
3.5" DIAMETER TUBULAR STEEL

SEE SHEET #37/56



*SOUTHBOUND
MM 61.050 LT
LEFT POST = 19.5' 19.7'
CENTER POST = 23.4' 20.8'
RIGHT POST = 24.4' 21.9'
5" DIAMETER TUBULAR STEEL

SEE SHEET #35/56



*SOUTHBOUND
MM 61.650 LT
LEFT POST = 22.4' 22.4'
RIGHT POST = 23.0' 20.6'
W 8x21 W-SHAPE STEEL

REVISED BOLT TENSION = 29.0 KIP

SEE SHEET #35/56

* 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 SIDE OF INTERSTATE 91.

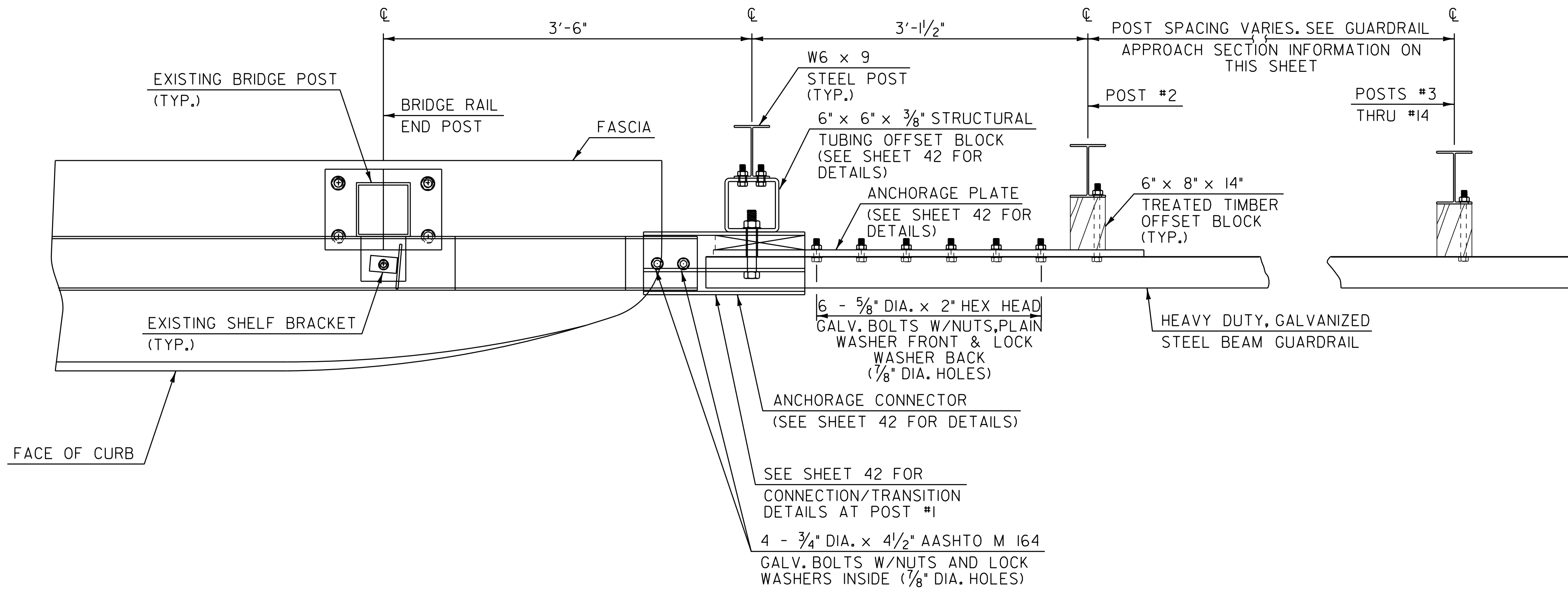
NOT TO SCALE

TRAFFIC SIGN CROSS SECTION SHEET #3

PROJECT NAME: WINDSOR - HARTLAND
PROJECT NUMBER: IM 091-(6)

FILE NAME: p07al42.dgn
PROJECT LEADER: D.E.G.
DESIGNED BY: M.J.L.
IPARM FILE: p07al42xsc3.i

PLOT DATE: 16-AUG-2011 13:43
DRAWN BY: C.A.K.
CHECKED BY: R.A.B.
SHEET 40 OF 56

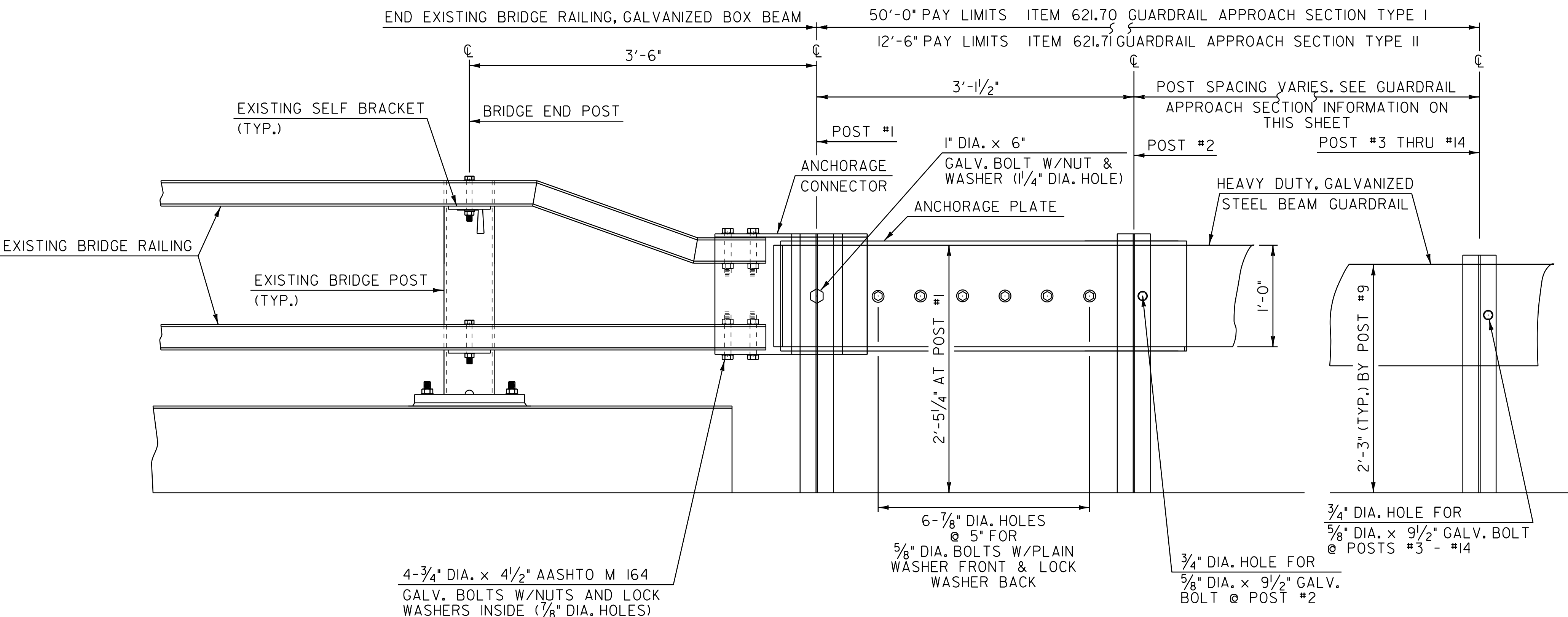


PLAN

**ITEM 621.70
GUARDRAIL
APPROACH SECTION,
TYPE I**

| POST NO. | SPACING |
|----------|-----------|
| 1 | 3'-1 1/2" |
| 2 | 3'-1 1/2" |
| 3 | 3'-1 1/2" |
| 4 | 3'-1 1/2" |
| 5 | 3'-1 1/2" |
| 6 | 3'-1 1/2" |
| 7 | 3'-1 1/2" |
| 8 | 3'-1 1/2" |
| 9 | 3'-1 1/2" |
| 10 | 4'-2" |
| 11 | 4'-2" |
| 12 | 4'-2" |
| 13 | 6'-3" |
| 14 | 6'-3" |

50'-0" PAY LENGTH GUARDRAIL APPROACH SECTION, TYPE I



ELEVATION

**ITEM 621.71
GUARDRAIL
APPROACH SECTION,
TYPE II**

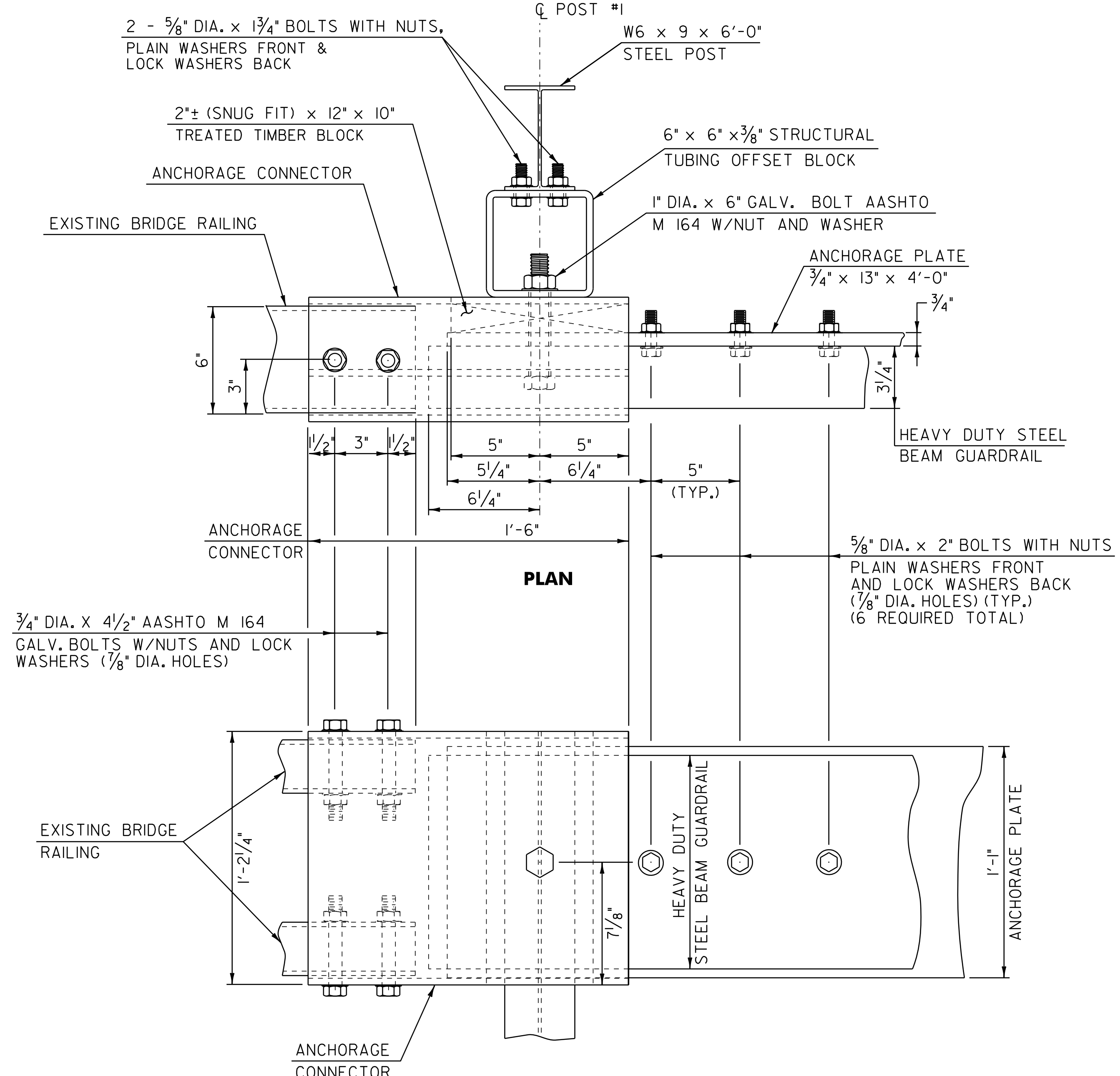
| POST NO. | SPACING |
|----------|-----------|
| 1 | 3'-1 1/2" |
| 2 | 4'-8 1/4" |
| 3 | 4'-8 1/4" |
| 4 | 4'-8 1/4" |

12'-6" PAY LENGTH GUARDRAIL APPROACH SECTION, TYPE II

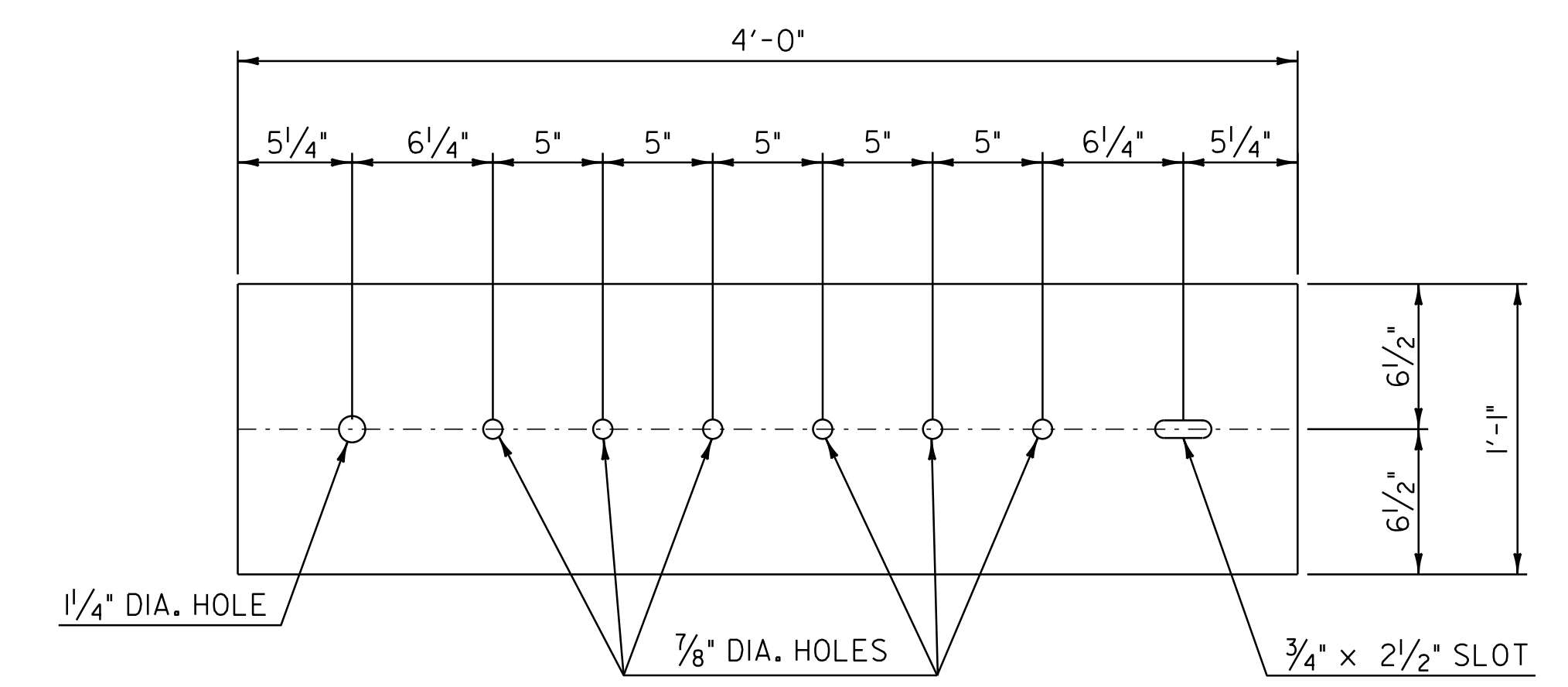
GUARDRAIL APPROACH SECTION DETAIL

NOT TO SCALE

| | | |
|---------------------------------------------------------------|----------------------------------|------------------------------|
| GUARDRAIL APPROACH SECTION DETAIL SHEET #1 | PROJECT NAME: WINDSOR - HARTLAND | |
| | PROJECT NUMBER: IM 091-(161) | |
| | FILE NAME: p07al42.dgn | PLOT DATE: 16-AUG-2011 13:43 |
| | PROJECT LEADER: D.E.G. | DRAWN BY: C.A.K. |
| | DESIGNED BY: M.J.L. | CHECKED BY: R.A.B. |
| | IPARM FILE: p07al42gdl.i | SHEET 41 OF 56 |

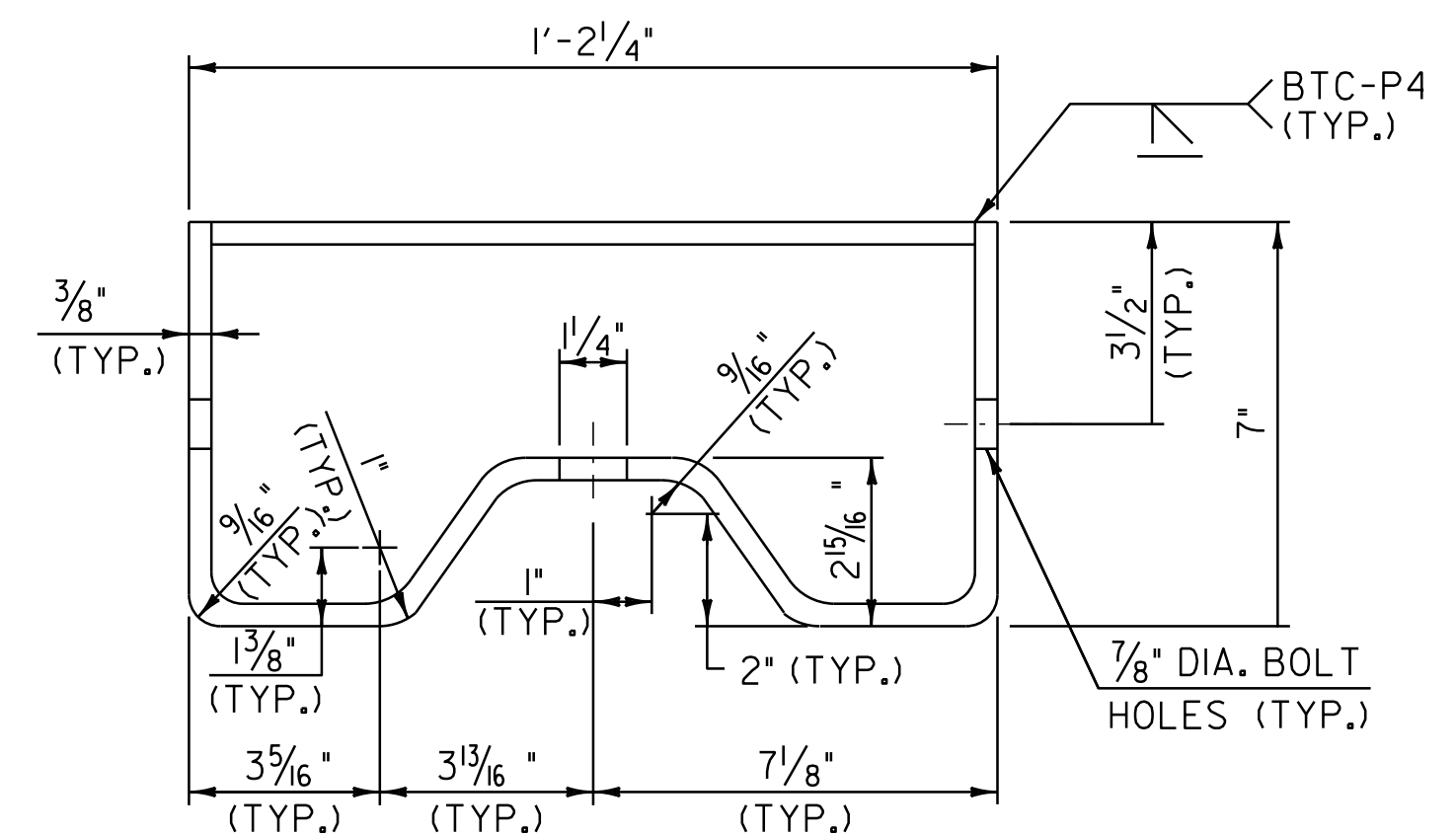


CONNECTION DETAILS AT POST #1

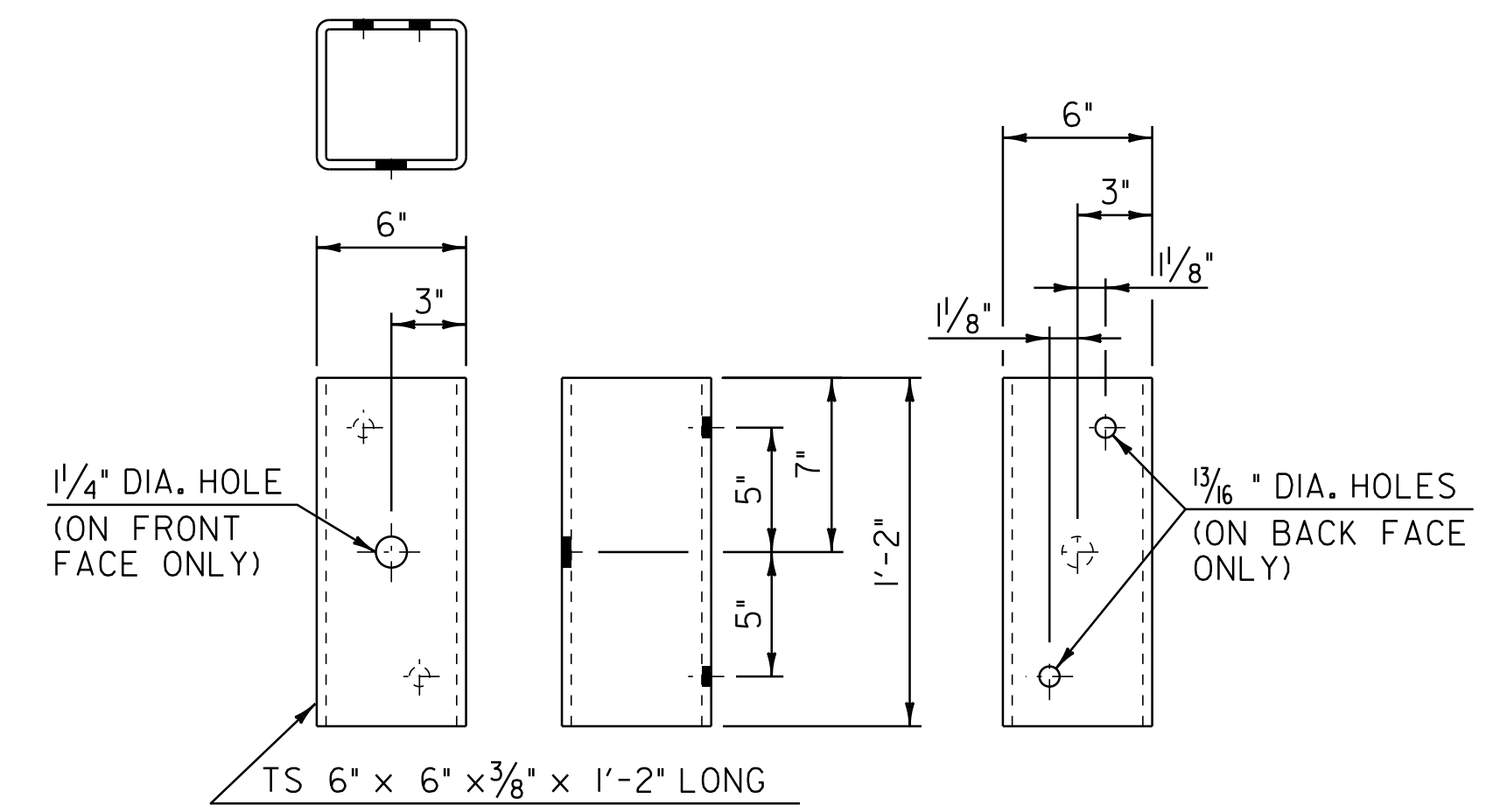


ANCHORAGE PLATE DETAIL

- NOTES**
1. REFER TO STANDARD G-1 FOR ADDITIONAL RAIL DETAILS.
 2. ALL POSTS FOR HEAVY DUTY STEEL BEAM GUARDRAIL SHALL BE STEEL IN ACCORDANCE WITH SECTION 728 "GUARDRAIL, GUIDE POSTS AND BARRIERS" UNLESS OTHERWISE SPECIFIED IN THE CONTRACT.
 3. APPROACH RAIL SPLICES SHALL LAP IN DIRECTION OF TRAFFIC FLOW.
 4. ANCHORAGE CONNECTOR AND ANCHORAGE PLATE SHALL BE AASHTO M 270, GRADE 250 GALVANIZED TO AASHTO M III AFTER FABRICATION.
 5. ALL BOLTS, NUTS AND WASHERS SHALL BE AASHTO M 164 GALVANIZED TO AASHTO M 232 AFTER FABRICATION.
 6. STRUCTURAL TUBING OFFSET BLOCK SHALL BE AASHTO M 183 GALVANIZED TO AASHTO M III AFTER FABRICATION.
 7. APPROACH RAILING SHALL BE HEAVY DUTY STEEL BEAM FOR 50'-0" FROM THE Q OF POST #1 FOR TYPE I AND 12'-6" FROM THE Q OF POST #1 FOR TYPE II.
 8. ALLOWABLE DIMENSIONAL TOLERANCE FOR BENT SECTIONS IS $\pm 1/16"$.
 9. THE UNIT PRICES BID FOR EITHER TYPE OF GUARDRAIL APPROACH SECTION SHALL INCLUDE ANCHORAGE CONNECTOR, ANCHORAGE PLATE, HEAVY DUTY STEEL BEAM GUARDRAIL, POSTS, OFFSET BLOCKS, BLOCKING, BOLTS, AND ALL NECESSARY HARDWARE.



ANCHORAGE CONNECTOR DETAIL
(SEE NOTE 8)



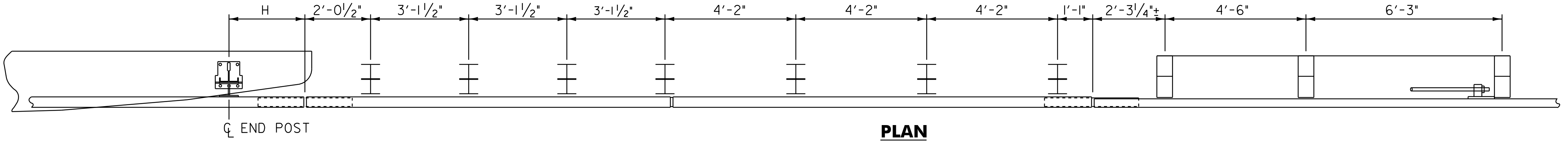
STRUCTURAL TUBING OFFSET BLOCK DETAILS
(OCCURS AT POST #1 WHEN USING APPROACH RAIL UTILIZING STEEL POSTS)

NOT TO SCALE

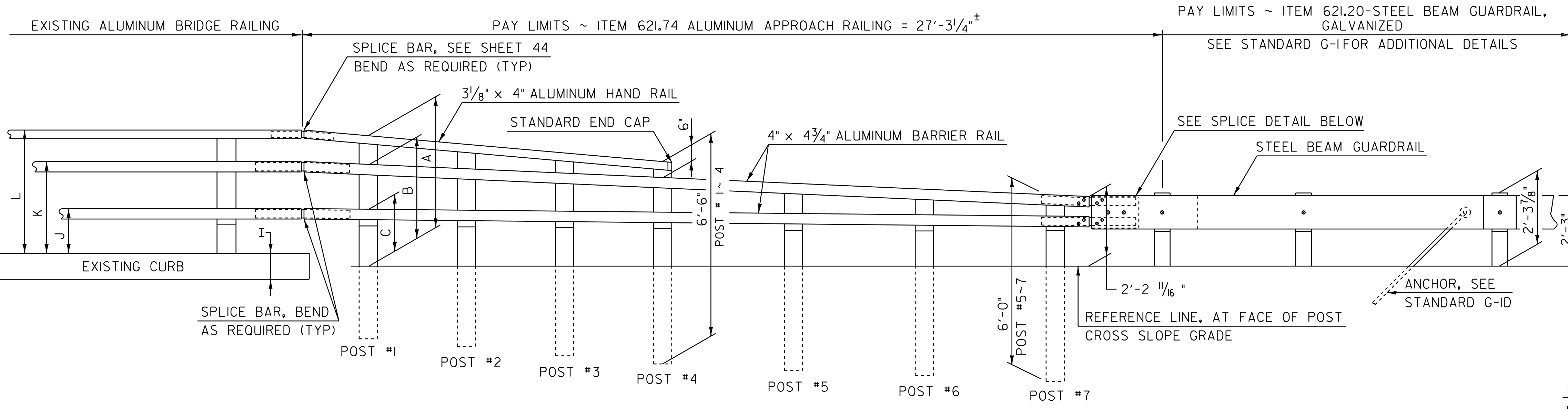
| | | |
|---------------------------------------------------|----------------------------------|------------------------------|
| GUARDRAIL APPROACH SECTION DETAIL SHEET #2 | PROJECT NAME: WINDSOR - HARTLAND | PLOT DATE: 16-AUG-2011 13:43 |
| | PROJECT NUMBER: IM 091-(161) | DRAWN BY: C.A.K. |
| | FILE NAME: p07al42.dgn | DESIGNED BY: M.J.L. |
| | IPARM FILE: p07al42qd2.i | CHECKED BY: R.A.B. |
| | | SHEET 42 OF 56 |

NOTES

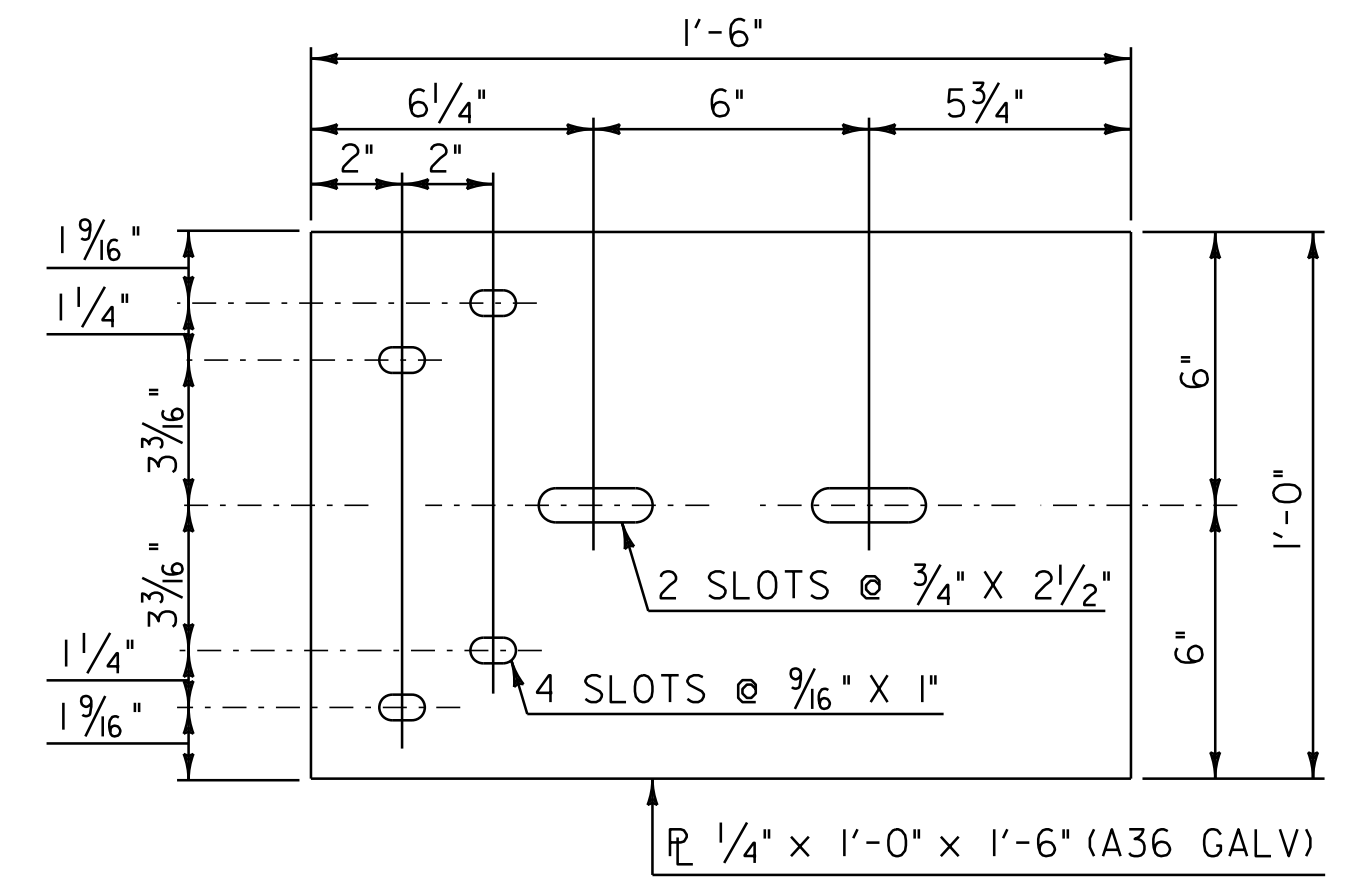
1. POST 1 THROUGH 7 SHALL BE EXTRUDED ALUMINUM.
2. ALL STRUCTURAL STEEL SHALL BE ASTM A36 AND GALVANIZED AFTER FABRICATION.
3. ALL ITEMS NOT OTHERWISE INDICATED SHALL MEET THE SPECIFICATION REQUIREMENTS OF THE STANDARD SHEETS ON WHICH THEY ARE DETAILED.
4. SEE STANDARD G-1 FOR STEEL BEAM GUARDRAIL DETAILS.
5. THE COST OF ALL MATERIALS AND LABOR FOR THE SPLICE BETWEEN THE ALUMINUM APPROACH RAILING AND THE STEEL BEAM GUARDRAIL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 621.74 ALUMINUM APPROACH RAILING.
6. DIMENSIONS SHOWN ARE FROM A REFERENCE LINE AT THE FACE OF POST FOR A NORMAL CROWNED SECTION. APPROPRIATE CORRECTIONS SHALL BE MADE FOR CROSS SLOPES OTHER THAN A NORMAL SECTION.
7. SEE SHEET 45 FOR ALUMINUM APPROACH RAILING DIMENSIONS TABLE.



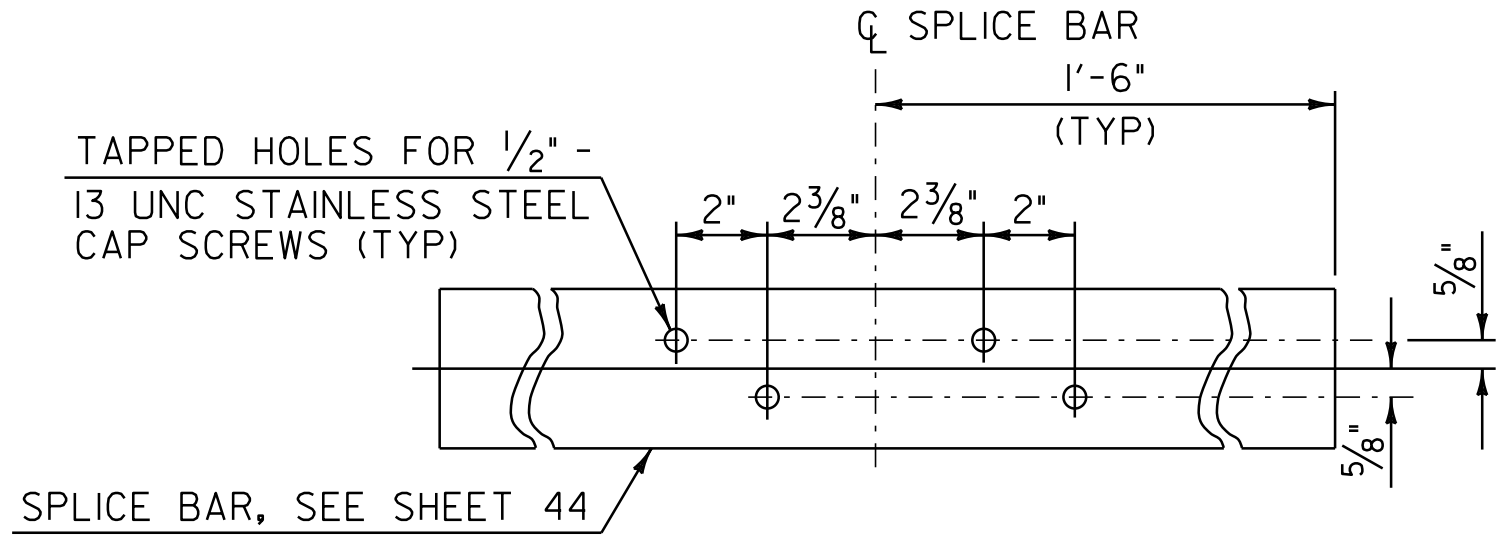
PLAN



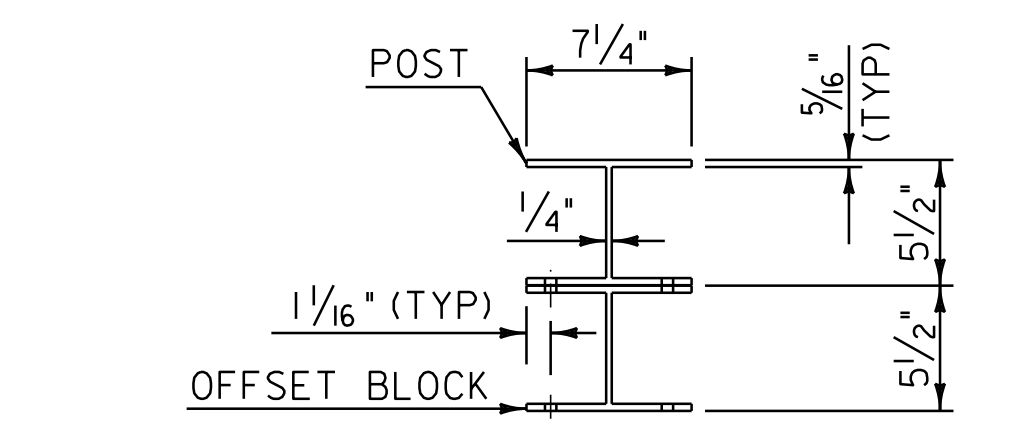
ELEVATION



BACK-UP PLATE DETAIL

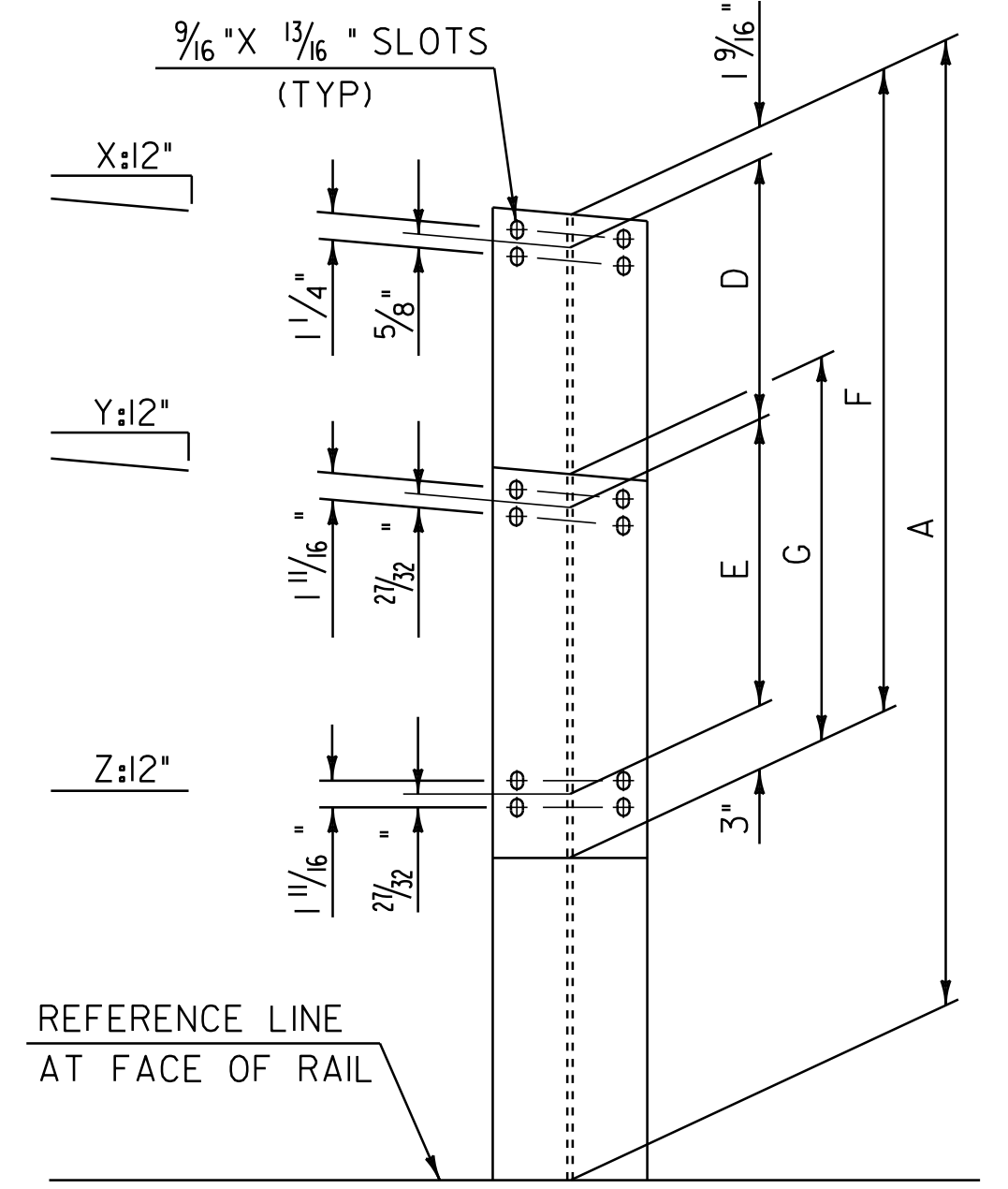


SPLICE BAR DETAIL (BACK SIDE VIEW)

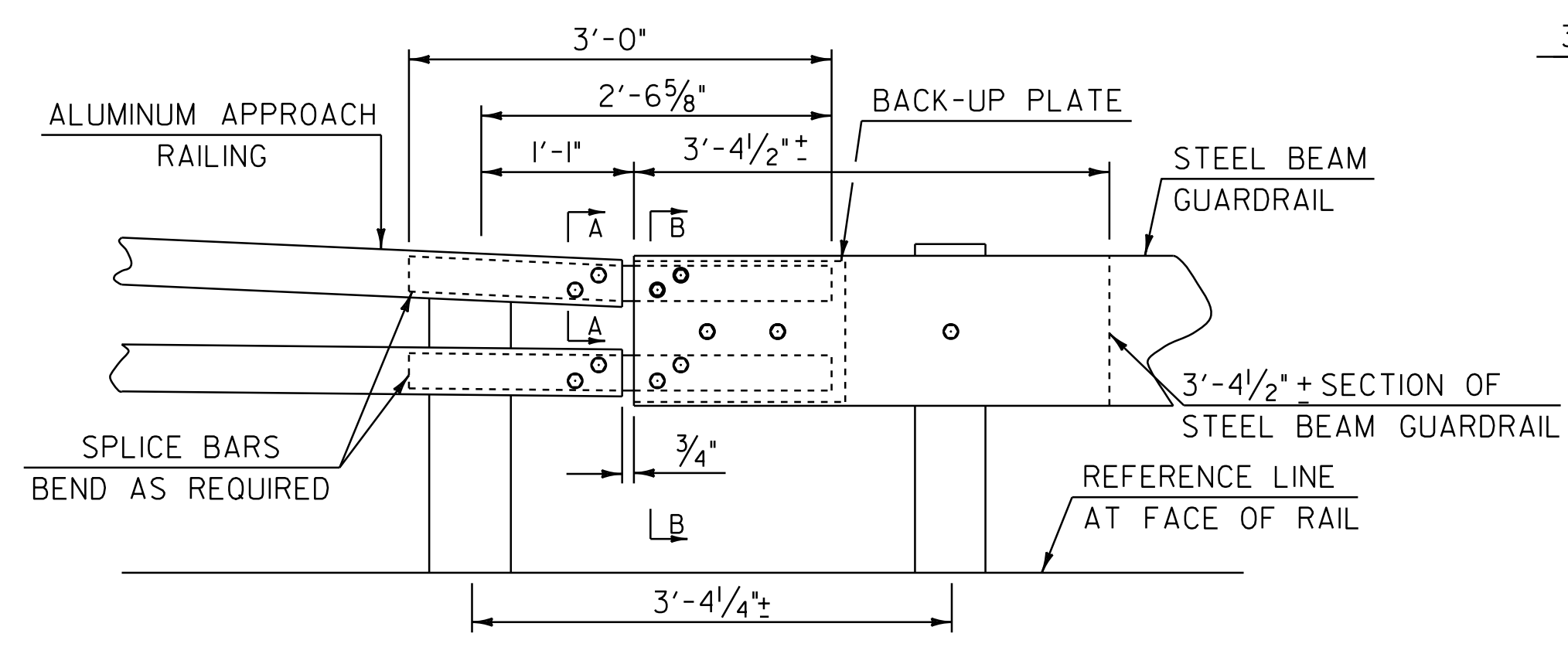


POST ELEVATION & SECTION
(SEE NOTE 7)

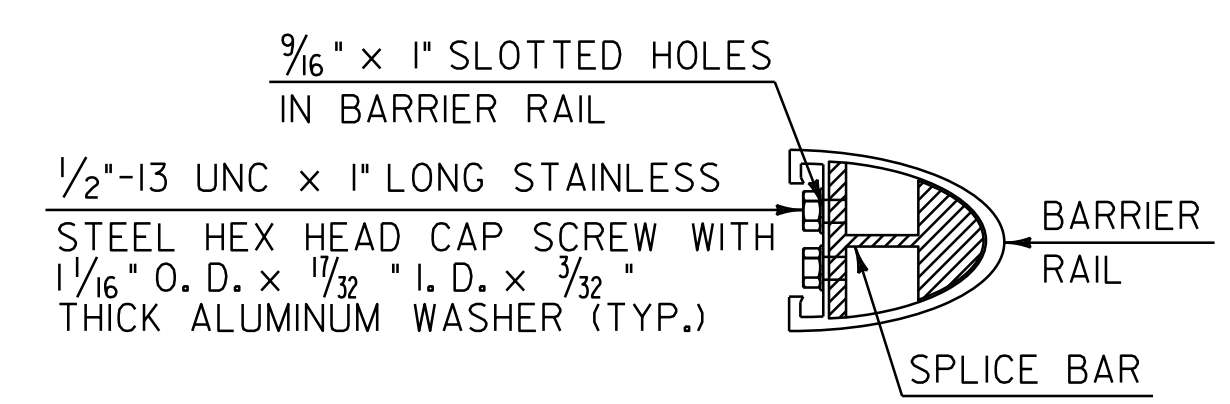
ATTACH OFFSET BLOCK TO POST WITH 1/2"-13 UNC x 1 1/4" LONG STAINLESS STEEL HEX HEAD BOLTS, NUTS AND WASHERS. 6 BOLTS PER POST, POST 1 THRU 4; 4 BOLTS PER POST, POST 5 THRU 7.



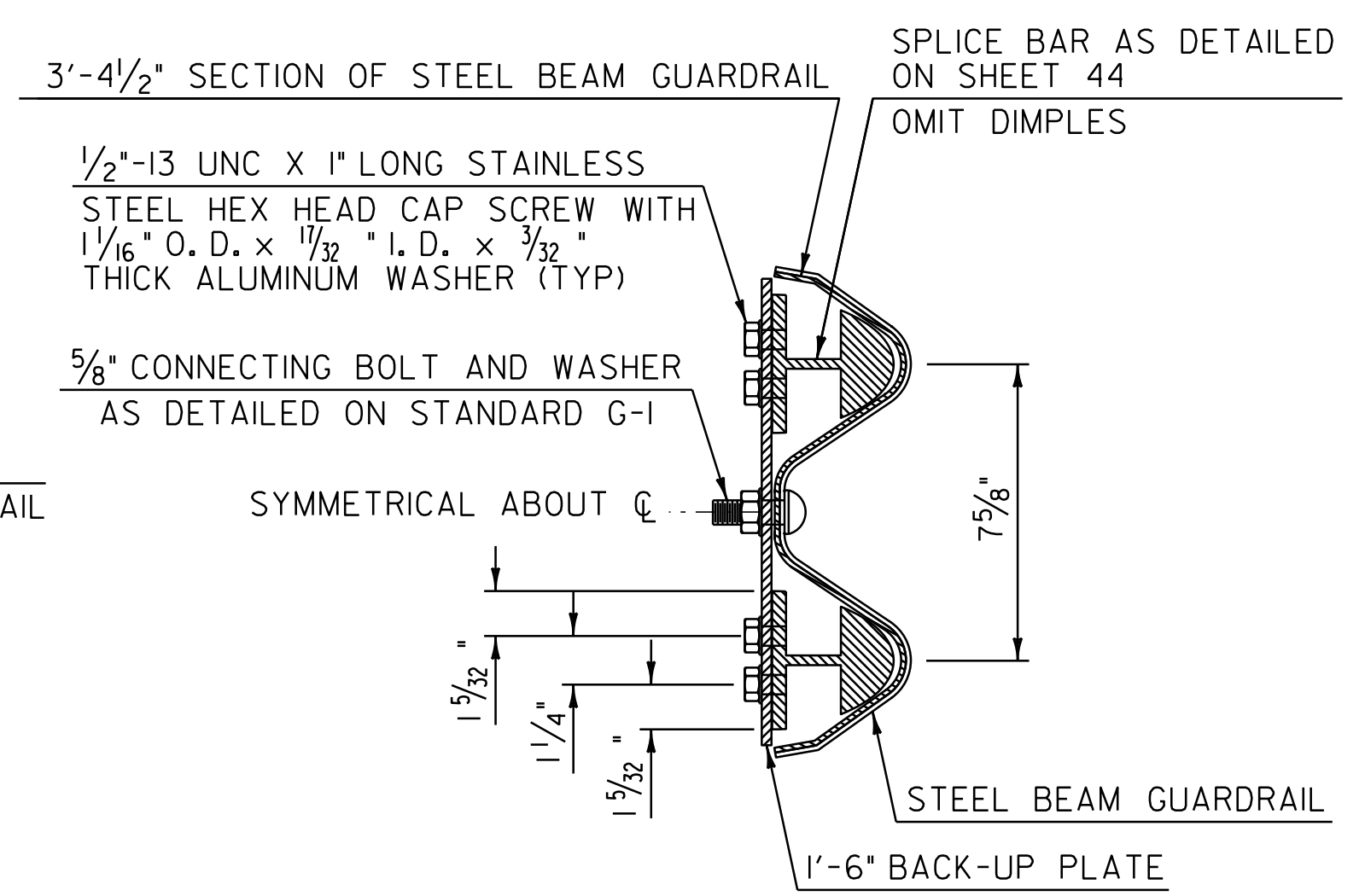
RAIL DETAIL
(SEE NOTE 7)



SPLICE DETAIL

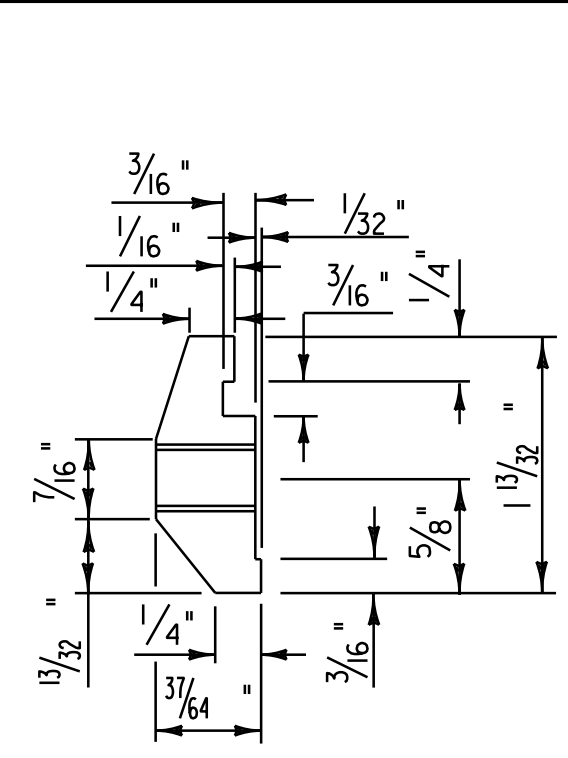


SECTION A - A

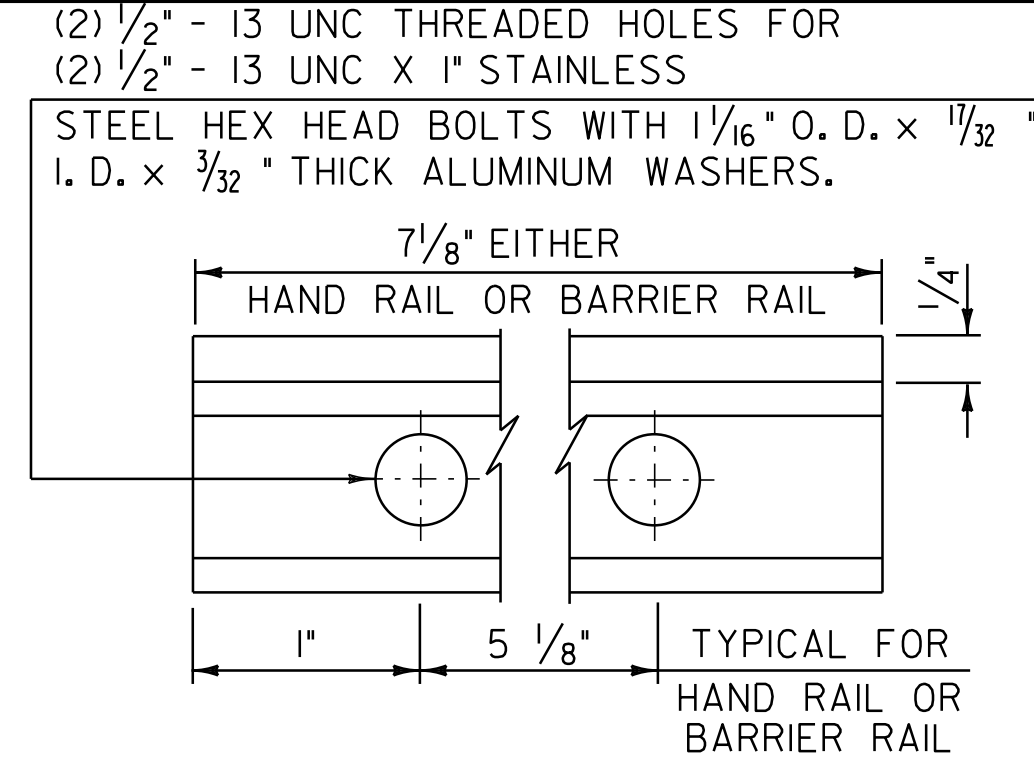


SECTION B - B

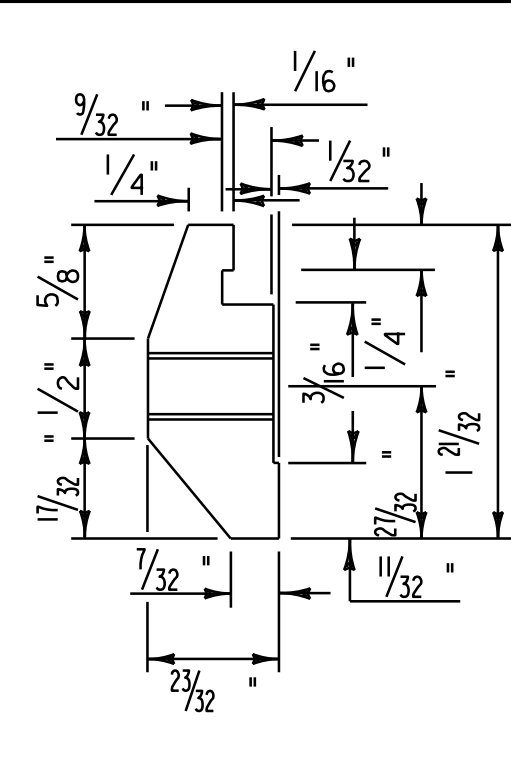
| | | |
|-------------------------------------------|----------------------------------|------------------------------|
| ALUMINUM APPROACH RAILING SHEET #1 | NOT TO SCALE | |
| | PROJECT NAME: WINDSOR - HARTLAND | PROJECT NUMBER: IM 091-(161) |
| | FILE NAME: p07al42.dgn | PLOT DATE: 16-AUG-2011 13:43 |
| | PROJECT LEADER: D.E.G. | DRAWN BY: C.A.K. |
| DESIGNED BY: M.J.L. | CHECKED BY: R.A.B. | |
| IPARM FILE: p07al42aar1.i | SHEET 43 OF 56 | |



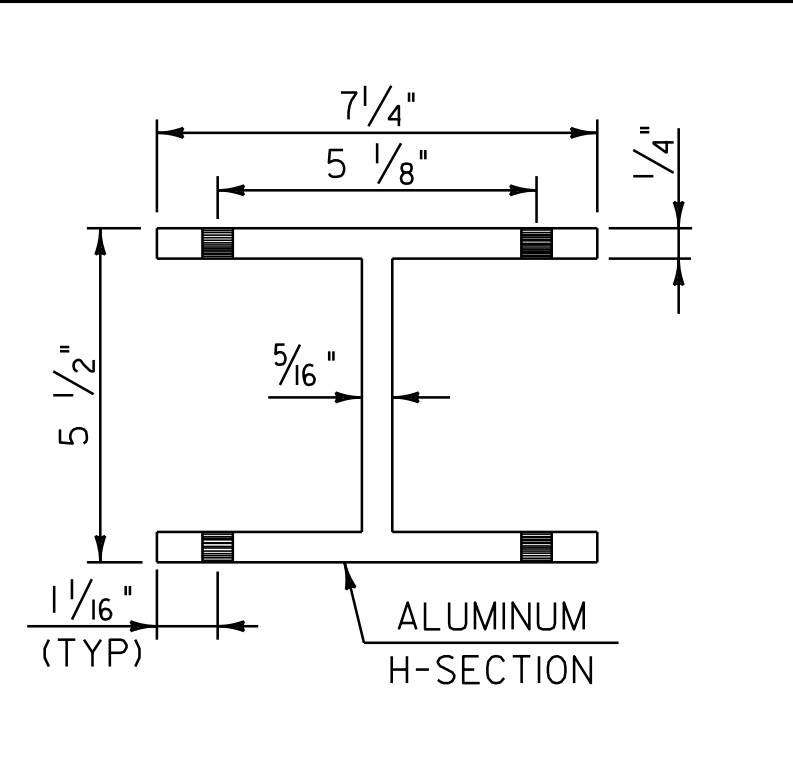
**POST CONNECTION
HAND RAIL SECTION**



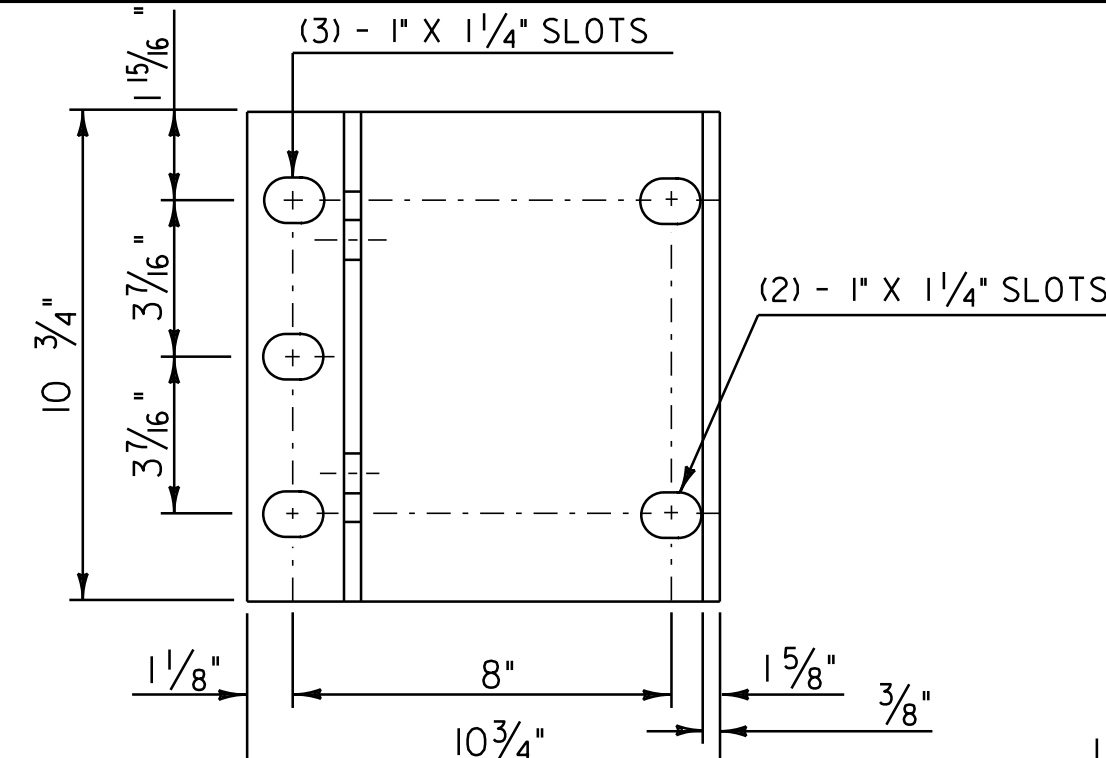
**POST CONNECTION
ELEVATION**



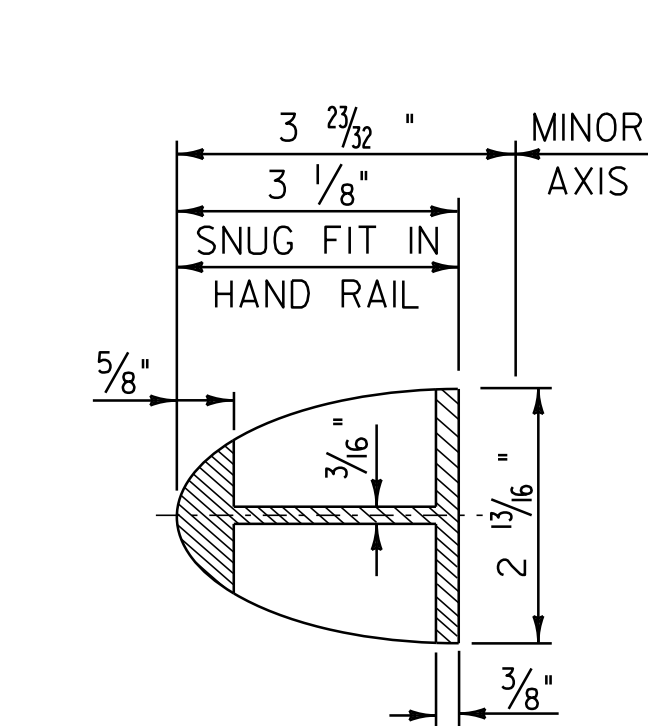
**POST CONNECTION
BARRIER RAIL SECTION**



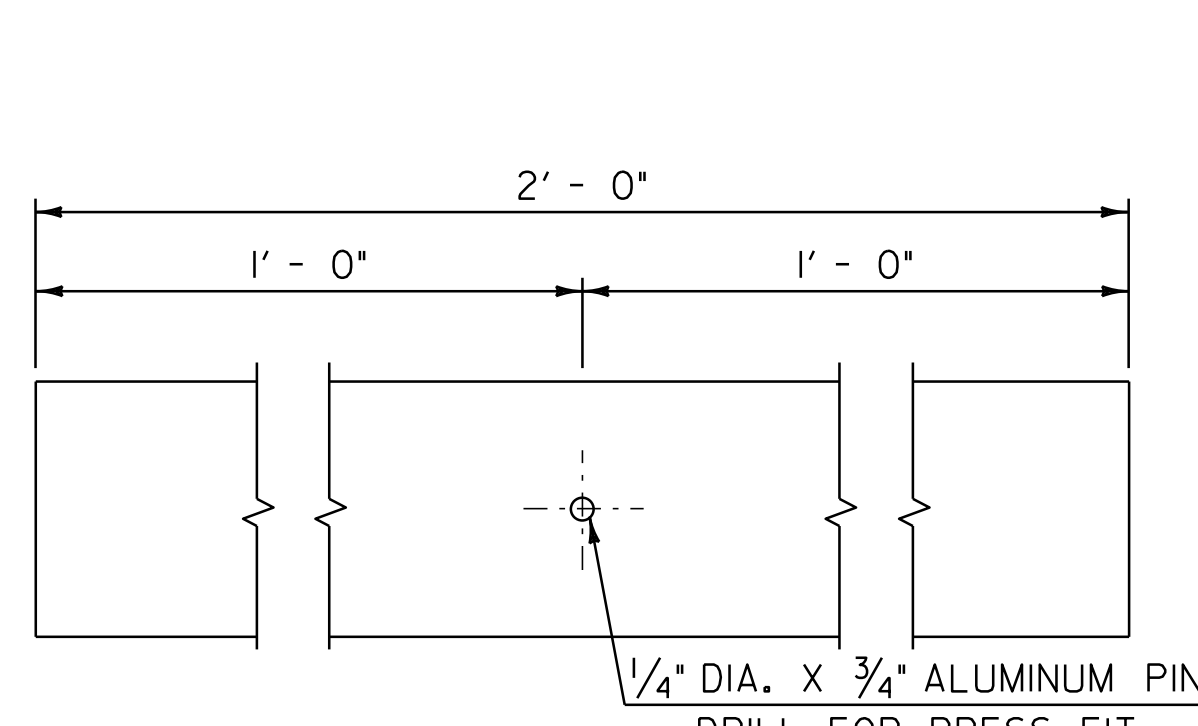
PLAN VIEW OF OFFSET BLOCK
(TO BE USED ON SUPERSTRUCTURE
ON CURB SIDE)



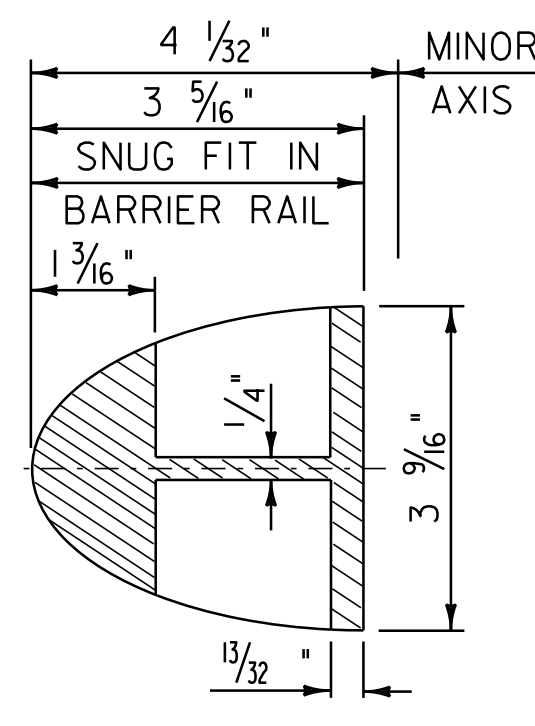
**POST BASE
PLAN**



**HAND RAIL
SPLICE SECTION**

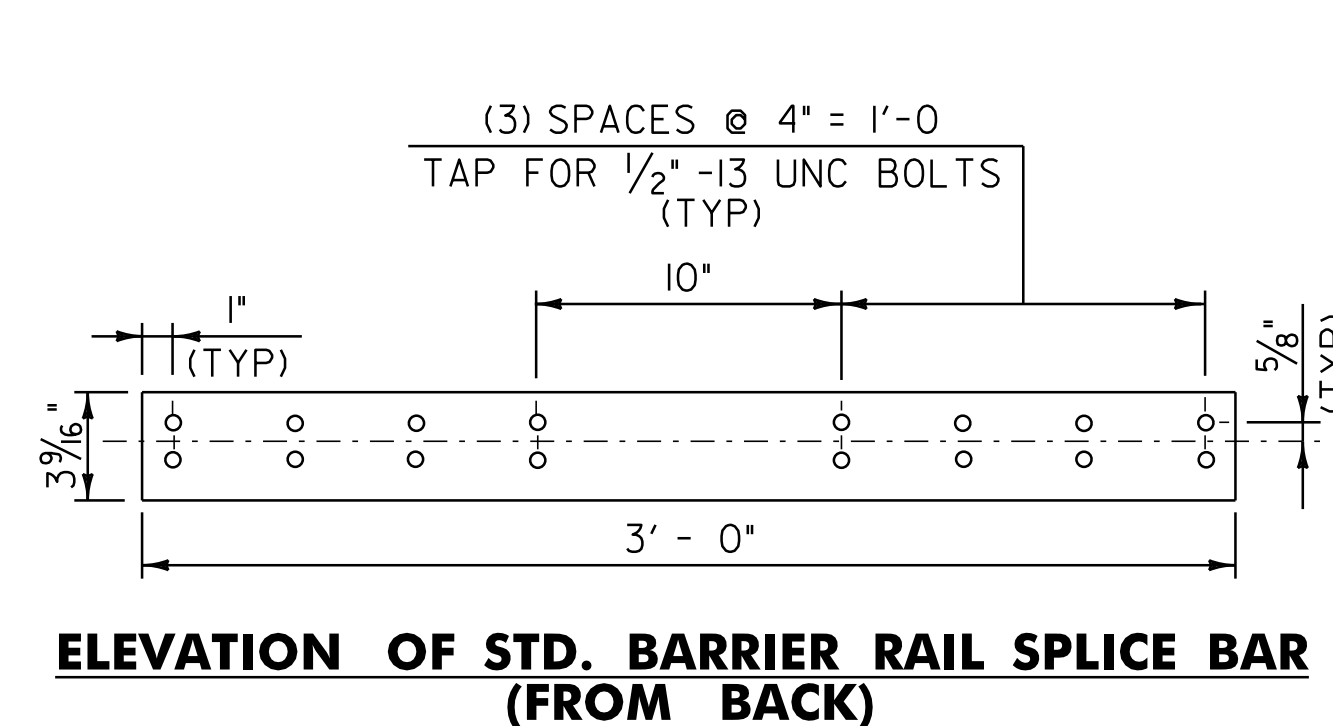


**ELEVATION OF
HAND RAIL SPLICE BAR**

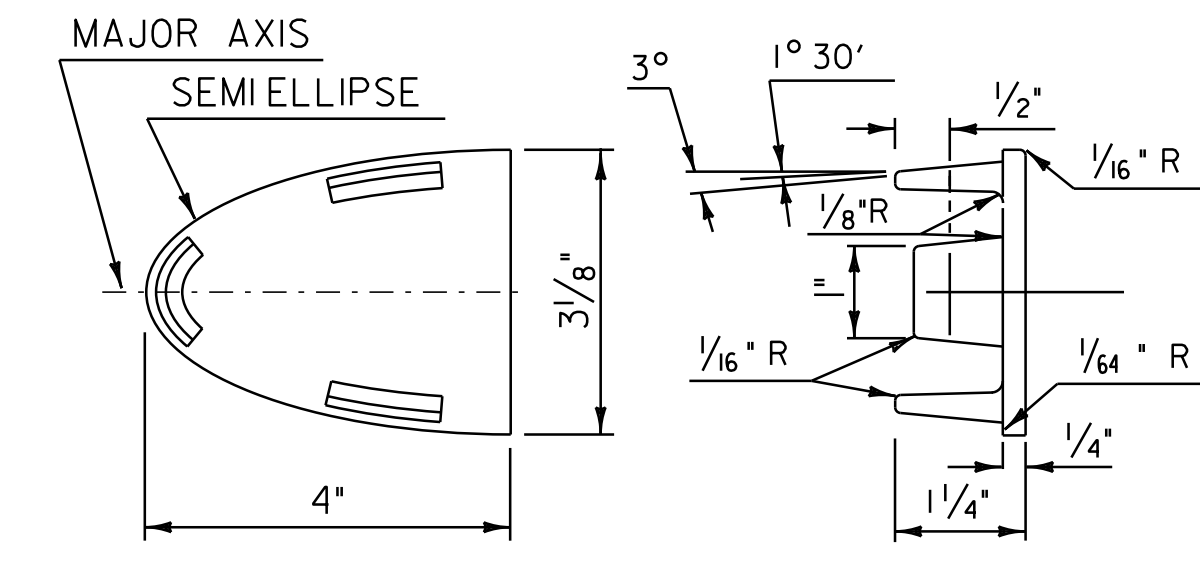


**BARRIER RAIL
SPLICE SECTION**

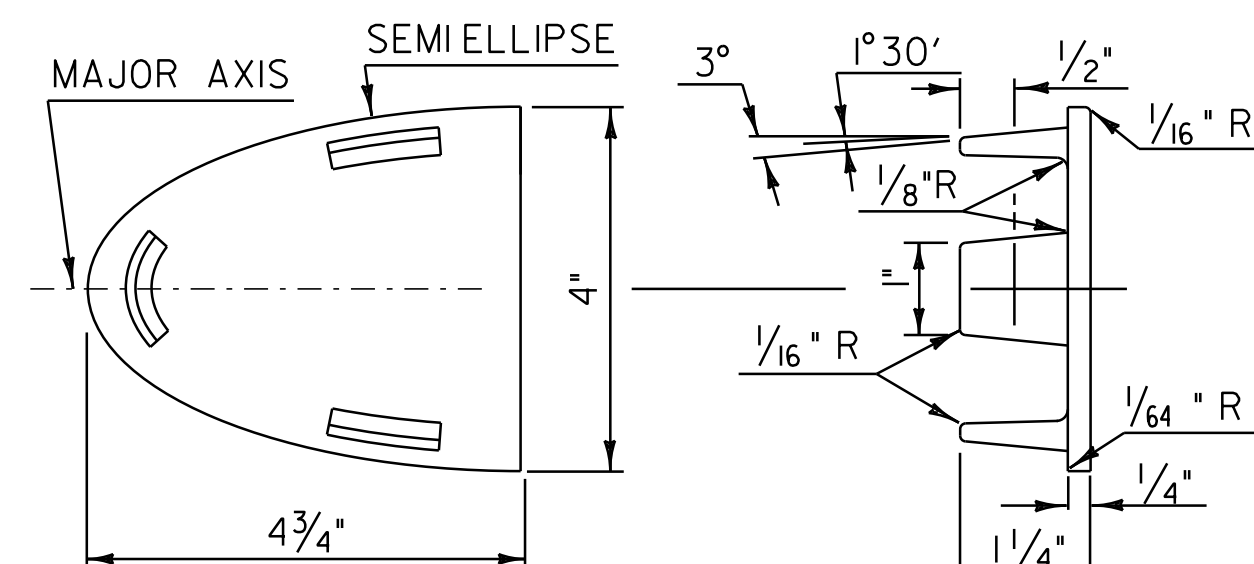
(SEE SHEET 43 FOR ELEVATION OF
BARRIER RAIL SPLICE BAR)



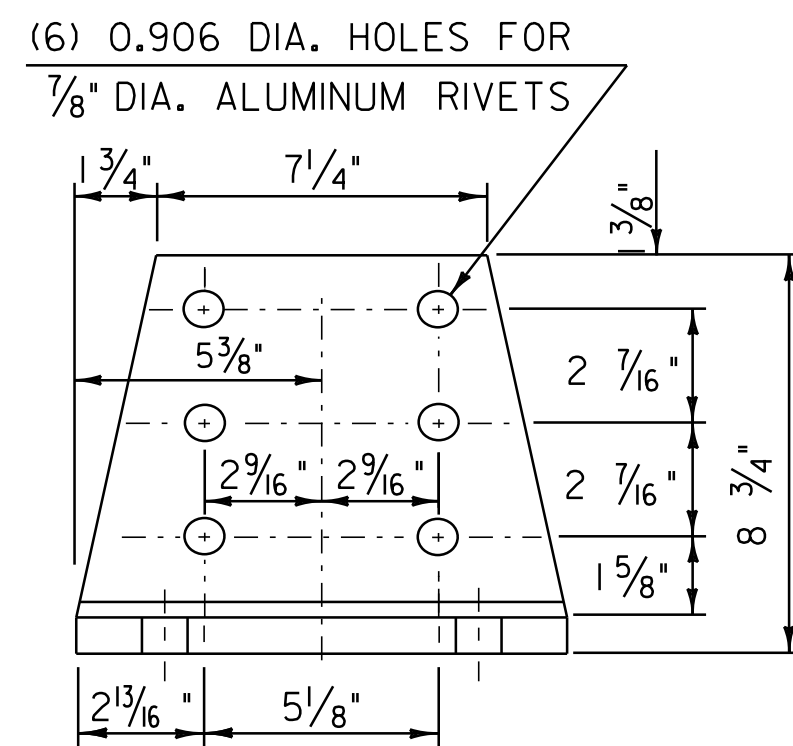
**ELEVATION OF STD. BARRIER RAIL SPLICE BAR
(FROM BACK)**



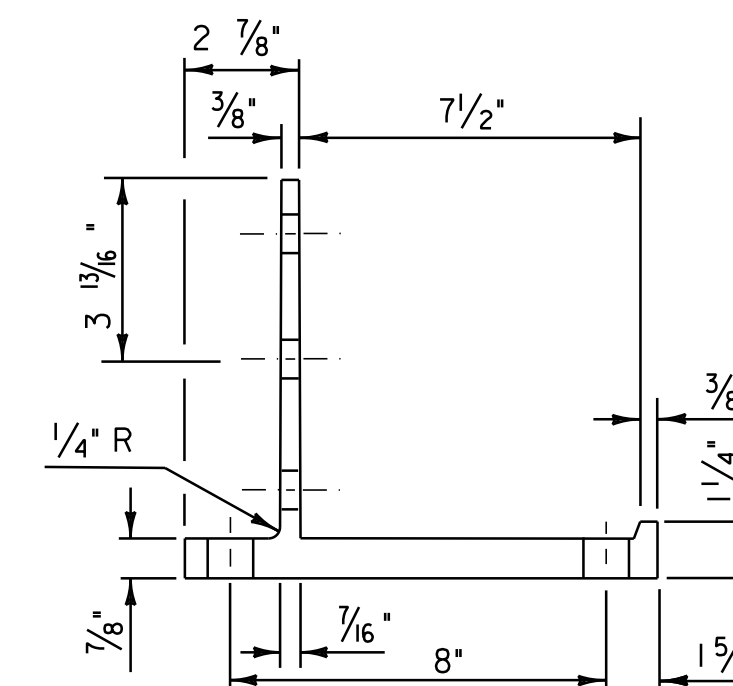
HAND RAIL END CAP



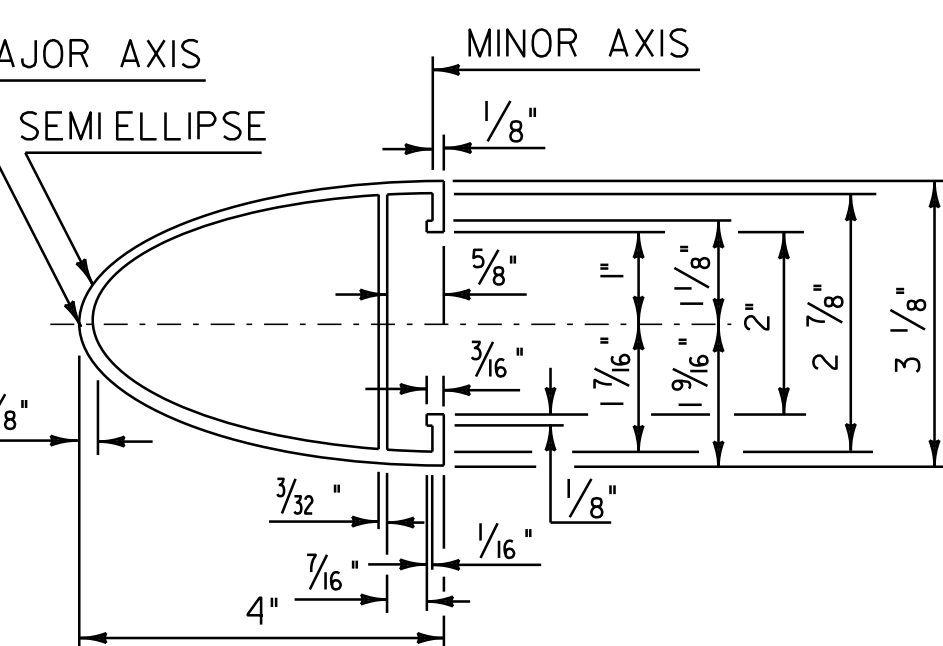
BARRIER RAIL END CAP



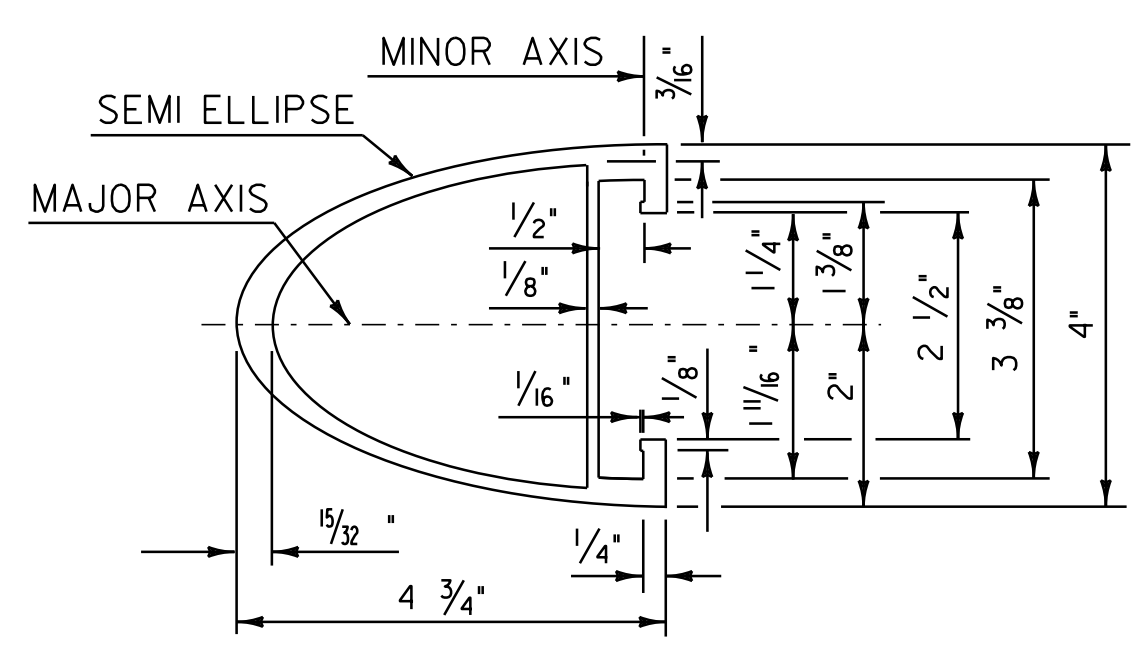
**POST BASE
FRONT ELEVATION**



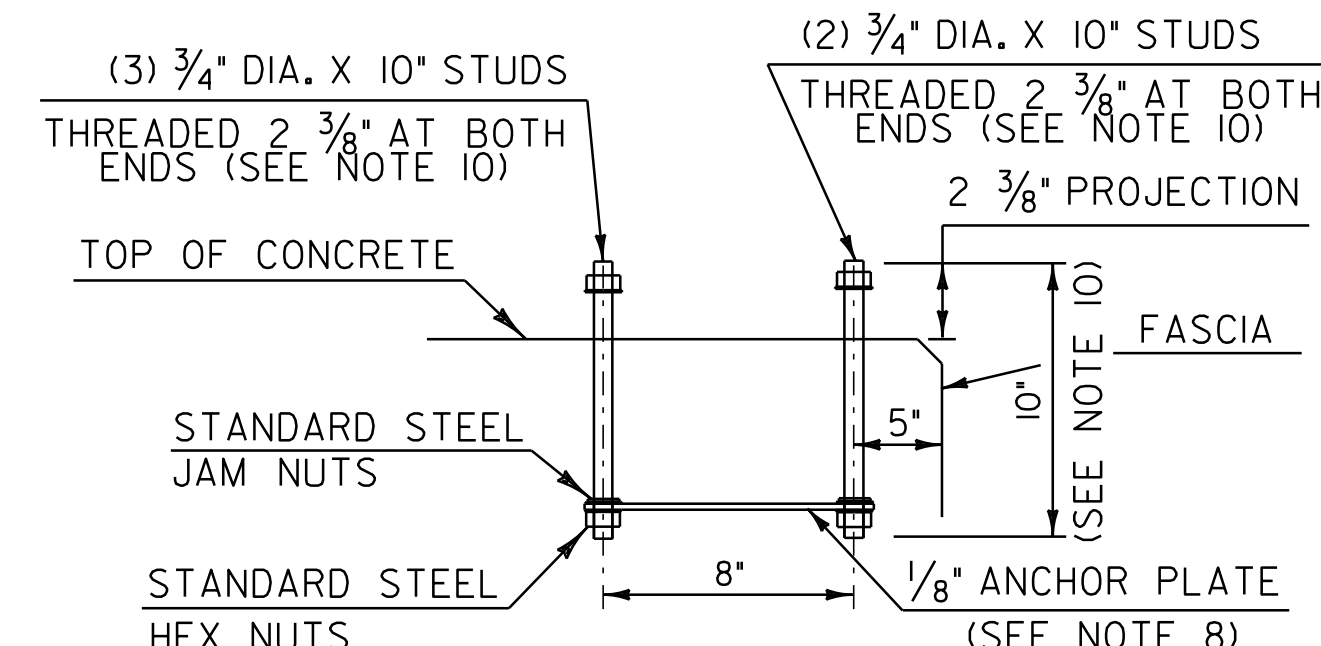
**POST BASE
SECTION**



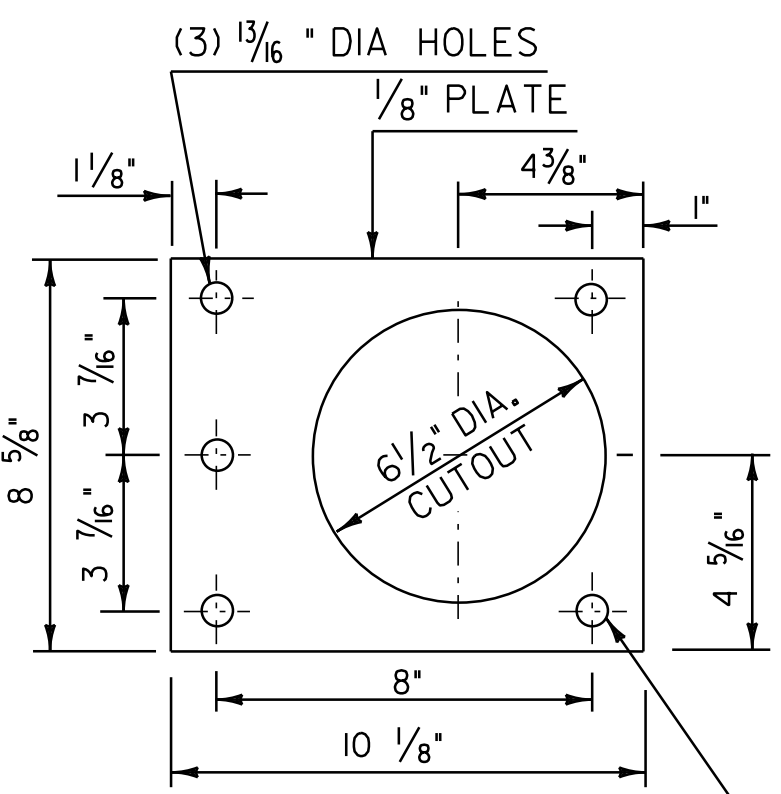
HAND RAIL SECTION



BARRIER RAIL SECTION



POST ANCHOR ASSEMBLY



ANCHOR PLATE

NOT TO SCALE

**ALUMINUM
APPROACH
RAILING
SHEET #2**

PROJECT NAME: WINDSOR - HARTLAND
PROJECT NUMBER: IM 091-(161)

FILE NAME: p07al42.dgn
PROJECT LEADER: D.E.G.
DESIGNED BY: M.J.L.
IPARM FILE: p07al42aar2.i

PLOT DATE: 16-AUG-2011 13:43
DRAWN BY: C.A.K.
CHECKED BY: R.A.B.
SHEET 44 OF 56

NOTES

- ANCHOR BOLTS, WASHERS AND HEAVY HEX NUTS MAY BE ANY OF THE FOLLOWING:
A. ASTM A449 GALVANIZED, OR
B. AASHTO M164 (ASTM A325) GALVANIZED
C. BOLTS AND WASHERS OF STAINLESS STEEL ASTM A276, TYPE 304 (MINIMUM ULTIMATE STRENGTH OF 100,000 PSI) WITH STAINLESS STEEL NUTS OF ASTM A194, GRADE 8NA.
- ALUMINUM POSTS, POST BASES, SPLICE BARS, CONNECTION BARS, RAILS AND BALUSTER FRAMES SHALL CONFORM TO ASTM B221 Fy = 35,000 PSI.
- ALUMINUM BALUSTER TUBES SHALL CONFORM TO ASTM B210 ALLOY 6061-T5 OR 6063-T5.
- ALUMINUM RAIL END CAPS SHALL CONFORM TO ASTM B26 ALLOY 356-T6.
- THE POST, RAIL, AND OFFSET BLOCK CONNECTION BOLTS SHALL BE EITHER ASTM A193 OR ASTM A320. EITHER ONE SHALL BE CLASS 1, B8 GRADE AISI 304 WITH AN ULTIMATE TENSILE STRENGTH OF 75,000 PSI. NUTS FOR EITHER OF THE ABOVE BOLTS SHALL BE ASTM A194, GRADE 8, STAINLESS STEEL WITH AN ULTIMATE TENSILE STRENGTH OF 75,000 PSI.
- SET SCREWS FOR ATTACHING BALUSTERS TO RAILING SHALL BE ASTM F880, TYPE 303 MATERIAL.
- RIVETS SHALL BE COLD DRIVEN HIGH BUTTON HEAD "CONE POINT", CONFORMING TO ASTM B316 ALLOY 6061-T6.
- THE ANCHOR PLATE FOR THE POST ANCHOR ASSEMBLY SHALL BE ASTM A36 STRUCTURAL STEEL.
- WELDING SHALL CONFORM TO THE REQUIREMENTS OF SUBSECTION 506.10 USING THE GMAW-INERT GAS PROCESS AND AWS ER 5356 ELECTRODE WIRE.
- UNLESS OTHERWISE SPECIFIED, ANCHOR BOLTS SHALL BE CAST INTO THE CONCRETE AS DETAILED.
- WHENEVER FEASIBLE BARRIER RAIL AND HAND RAIL SECTIONS, SHALL BE FULL LENGTH SECTIONS (40'+/-) AND WHEN POSSIBLE SHALL BE ATTACHED TO THREE POSTS. RAILS SHALL BE SPLICED AT EACH DECK JOINT AND INTERMITTENTLY AS REQUIRED. SPLICES SHALL OCCUR WITHIN THE SAME PANEL.
- ENDS OF RAILS SHALL BE CUT SQUARE AND GROUND FREE OF BURRS OR RAGGED EDGES. EXPOSED ENDS SHALL BE CAPPED.
- THE CONCRETE CONTACT SURFACE AT THE POST BASE SHALL BE BUSH HAMMERED AND/OR SHIMMED AS REQUIRED FOR PROPER POST ALIGNMENT. POST HEIGHT ADJUSTMENTS LESS THAN 1/4" SHALL BE WITH 1/16" AND 1/8" SHIMS. CORRECTIONS EXCEEDING 1/4" SHALL BE WITH MORTAR, TYPE IV CONFORMING WITH SECTION 541. FABRIC BEARING PADS AND ANY REQUIRED SHIMS OR EPOXY MORTAR ARE INCIDENTAL TO THE UNIT PRICE BID FOR THE RAILING.
- SHIMS AND 1/8" FABRIC BEARING PADS SHALL BE 10 3/4" SQUARE WITH SLOTTED HOLES SIZED AND LOCATED THE SAME AS THE POST BASE DETAIL. FABRIC BEARING PADS SHALL CONFORM TO SUBSECTION 731.01 OR 731.02. SHIM MATERIAL SHALL BE ASTM B 209 ALLOY 1100-O.
- EXTRUDED SECTIONS ARE DETAILED TO COMPLY WITH CURRENT AASHTO-ACC-ARTBA STANDARDS. MINOR VARIATIONS OF THE DETAILS SHOWN MAY BE CONSIDERED PROVIDING THEY DO NOT REDUCE THE STRENGTH CAPACITY OF THE RAIL SYSTEM.
- ALUMINUM WASHERS SHALL BE ASTM B209 ALLOY A14204-T4.

ALUMINUM APPROACH RAILING
RAIL DIMENSIONS FOR A CURB CONDITION

| POST No. | RAIL HEIGHT DIMENSIONS | | | OFFSET BLOCK DIMENSIONS | | | |
|----------|------------------------|----------|----------|-------------------------|----------|----------|----------|
| | A | B | C | D | E | F | G |
| 1 | 46 5/16 | 36 3/8 | 23 5/8 | 10 5/16 | 12 13/16 | 27 11/16 | 17 13/16 |
| 2 | 43 11/16 | 35 1/16 | 23 | 9 1/16 | 12 1/16 | 25 11/16 | 17 1/16 |
| 3 | 41 1/16 | 33 3/4 | 22 3/8 | 7 3/4 | 11 3/8 | 23 11/16 | 16 3/8 |
| 4 | 38 7/16 | 32 7/16 | 21 3/4 | 6 7/16 | 10 11/16 | 21 11/16 | 15 11/16 |
| 5 | - | 30 11/16 | 20 15/16 | - | 9 3/4 | - | 14 3/4 |
| 6 | - | 28 7/8 | 20 1/8 | - | 8 13/16 | - | 13 13/16 |
| 7 | - | 27 1/8 | 19 1/4 | - | 7 7/8 | - | 12 7/8 |

ALL REMAINING POSTS ARE TO HAVE THE SAME DIMENSIONS AS POST NO. 7

| | |
|-----|-----------|
| | CURB SIDE |
| "X" | 13/16 |
| "Y" | 3/8 |
| "Z" | 3/16 |

BRIDGE 39-S
MM 66.163 - MM 66.168 LT

| | |
|---|--------|
| H | 22 |
| I | 10 |
| J | 14 |
| K | 27 1/4 |
| L | 38 |

SEE SHEETS 43 & 44 FOR ALUMINUM APPROACH RAILING DETAILS

ALUMINUM APPROACH RAILING
RAIL DIMENSIONS FOR A CURB CONDITION

| POST No. | RAIL HEIGHT DIMENSIONS | | | OFFSET BLOCK DIMENSIONS | | | |
|----------|------------------------|----------|----------|-------------------------|----------|----------|----------|
| | A | B | C | D | E | F | G |
| 1 | 46 3/4 | 36 7/8 | 24 1/16 | 10 5/16 | 12 13/16 | 27 11/16 | 17 13/16 |
| 2 | 44 1/16 | 35 7/16 | 23 3/8 | 9 1/16 | 12 1/16 | 25 11/16 | 17 1/16 |
| 3 | 41 3/8 | 34 1/16 | 22 11/16 | 7 3/4 | 11 3/8 | 23 11/16 | 16 3/8 |
| 4 | 38 11/16 | 32 11/16 | 22 | 6 7/16 | 10 11/16 | 21 11/16 | 15 11/16 |
| 5 | - | 30 7/8 | 21 1/8 | - | 9 3/4 | - | 14 3/4 |
| 6 | - | 29 | 20 3/16 | - | 8 13/16 | - | 13 13/16 |
| 7 | - | 27 3/16 | 19 5/16 | - | 7 7/8 | - | 12 7/8 |

ALL REMAINING POSTS ARE TO HAVE THE SAME DIMENSIONS AS POST NO. 7

| | |
|-----|-----------|
| | CURB SIDE |
| "X" | 3/4 |
| "Y" | 3/8 |
| "Z" | 1/8 |

BRIDGE 39-S
MM 66.160 - MM 66.165 RT

| | |
|---|--------|
| H | 21 1/4 |
| I | 11 |
| J | 13 1/2 |
| K | 26 3/4 |
| L | 37 1/2 |

SEE SHEETS 43 & 44 FOR ALUMINUM APPROACH RAILING DETAILS

ALUMINUM APPROACH RAILING
RAIL DIMENSIONS FOR A CURB CONDITION

| POST No. | RAIL HEIGHT DIMENSIONS | | | OFFSET BLOCK DIMENSIONS | | | |
|----------|------------------------|---------|----------|-------------------------|---------|---------|---------|
| | A | B | C | D | E | F | G |
| 1 | 46 1/16 | 36 3/16 | 23 5/8 | 10 5/16 | 12 9/16 | 27 7/16 | 17 9/16 |
| 2 | 43 1/2 | 34 7/8 | 23 | 9 1/16 | 11 7/8 | 25 1/2 | 16 7/8 |
| 3 | 40 7/8 | 33 9/16 | 22 3/8 | 7 3/4 | 11 3/16 | 23 1/2 | 16 3/16 |
| 4 | 38 5/16 | 32 5/16 | 21 3/4 | 6 7/16 | 10 9/16 | 21 9/16 | 15 9/16 |
| 5 | - | 30 9/16 | 20 15/16 | - | 9 5/8 | - | 14 5/8 |
| 6 | - | 28 7/8 | 20 1/8 | - | 8 3/4 | - | 13 3/4 |
| 7 | - | 27 1/8 | 19 1/4 | - | 7 7/8 | - | 12 7/8 |

ALL REMAINING POSTS ARE TO HAVE THE SAME DIMENSIONS AS POST NO. 7

| | |
|-----|-----------|
| | CURB SIDE |
| "X" | 3/4 |
| "Y" | 5/16 |
| "Z" | 1/8 |

BRIDGE 39-N
MM 66.156 - MM 66.161 LT

| | |
|---|--------|
| H | 24 1/2 |
| I | 10 |
| J | 14 |
| K | 27 |
| L | 37 3/4 |

SEE SHEETS 43 & 44 FOR ALUMINUM APPROACH RAILING DETAILS

ALUMINUM APPROACH RAILING
RAIL DIMENSIONS FOR A CURB CONDITION

| POST No. | RAIL HEIGHT DIMENSIONS | | | OFFSET BLOCK DIMENSIONS | | | |
|----------|------------------------|----------|---------|-------------------------|----------|---------|----------|
| | A | B | C | D | E | F | G |
| 1 | 45 7/8 | 36 5/8 | 23 1/8 | 9 3/4 | 13 1/2 | 27 3/4 | 18 1/2 |
| 2 | 43 7/16 | 35 1/4 | 22 9/16 | 8 5/8 | 12 11/16 | 25 7/8 | 17 11/16 |
| 3 | 41 | 33 15/16 | 22 | 7 9/16 | 11 7/8 | 24 | 16 7/8 |
| 4 | 38 9/16 | 32 9/16 | 21 1/2 | 6 7/16 | 11 1/16 | 22 1/16 | 16 1/16 |
| 5 | - | 30 3/4 | 20 3/4 | - | 10 | - | 15 |
| 6 | - | 28 15/16 | 20 | - | 8 15/16 | - | 13 15/16 |
| 7 | - | 27 1/8 | 19 1/4 | - | 7 7/8 | - | 12 7/8 |

ALL REMAINING POSTS ARE TO HAVE THE SAME DIMENSIONS AS POST NO. 7

| | |
|-----|-----------|
| | CURB SIDE |
| "X" | 3/4 |
| "Y" | 5/16 |
| "Z" | 1/8 |

BRIDGE 39-N
MM 66.153 - MM 66.158 RT

| | |
|---|--------|
| H | 23 |
| I | 10 |
| J | 13 1/2 |
| K | 27 1/2 |
| L | 37 1/2 |

SEE SHEETS 43 & 44 FOR ALUMINUM APPROACH RAILING DETAILS

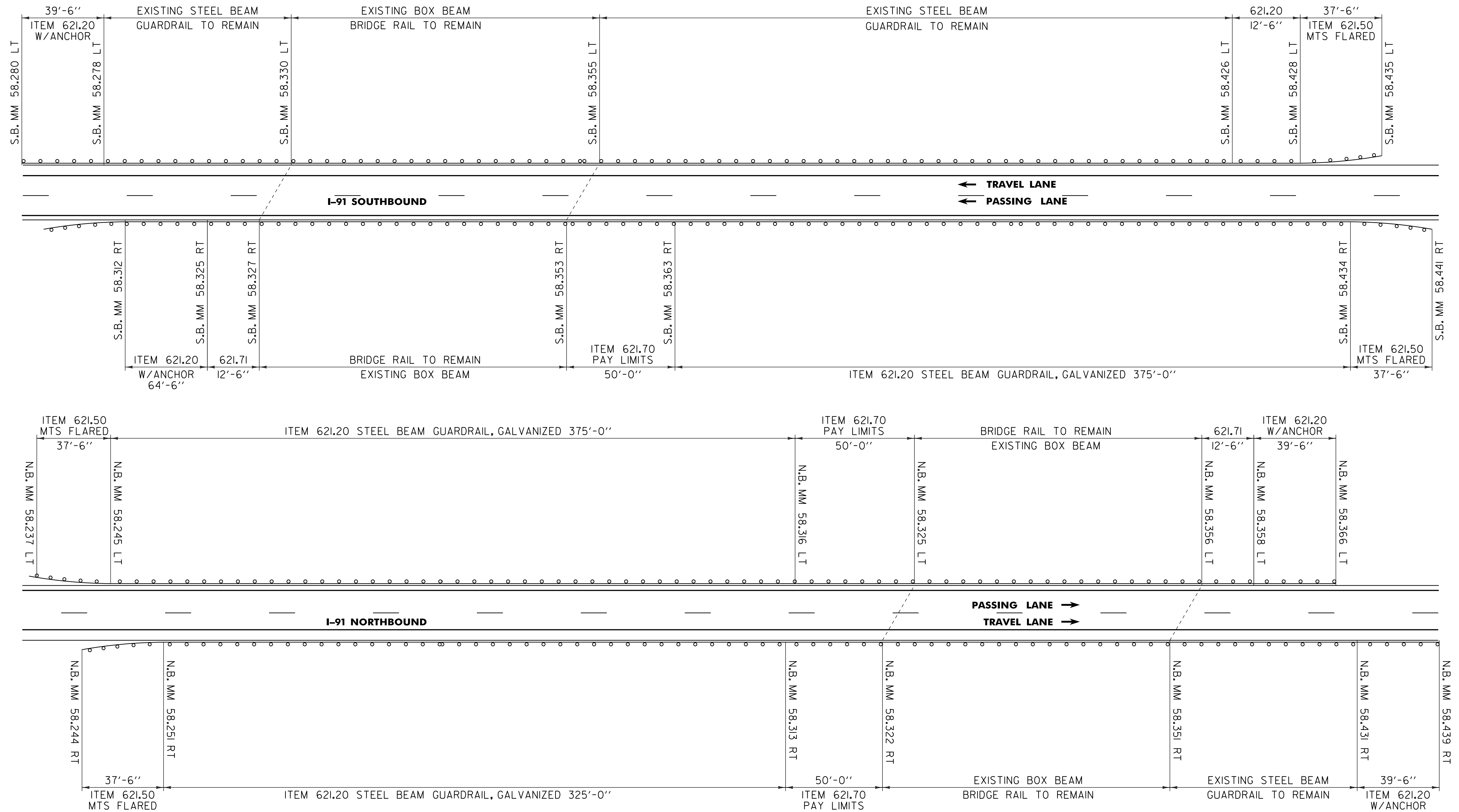
ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED

**ALUMINUM
APPROACH
RAILING
SHEET #3**

PROJECT NAME: WINDSOR - HARTLAND
PROJECT NUMBER: IM 091-(61)

FILE NAME: p07al42.dgn
PROJECT LEADER: D.E.G.
DESIGNED BY: M.J.L.
IPARM FILE: p07al42aar3.i

PLOT DATE: 16-AUG-2011 13:43
DRAWN BY: C.A.K.
CHECKED BY: R.A.B.
SHEET 45 OF 56



BR 35
N.B. MM 58.339
S.B. MM 58.341

616.305 BITUMINOUS CONCRETE CURB, TYPE A

N.B. MM 58.351 - N.B. MM 58.427 RT (400.0 LF)
 S.B. MM 58.318 - S.B. MM 58.327 RT (50.0 LF)

621.20 STEEL BEAM GUARDRAIL, GALVANIZED

N.B. MM 58.245 - N.B. MM 58.316 LT (375.0 LF)
 N.B. MM 58.251 - N.B. MM 58.313 RT (325.0 LF)
 N.B. MM 58.358 - N.B. MM 58.366 LT (39.5 LF)
 N.B. MM 58.431 - N.B. MM 58.439 RT (39.5 LF)
 S.B. MM 58.280 - S.B. MM 58.278 LT (39.5 LF)
 S.B. MM 58.312 - S.B. MM 58.325 LT (64.5 LF)
 S.B. MM 58.363 - S.B. MM 58.434 RT (375.0 LF)
 S.B. MM 58.426 - S.B. MM 58.428 LT (12.5 LF)

621.50 MANUFACTURED TERMINAL SECTION, FLARED

N.B. MM 58.237 - N.B. MM 58.245 LT
 N.B. MM 58.244 - N.B. MM 58.251 RT
 S.B. MM 58.428 - S.B. MM 58.435 LT
 S.B. MM 58.434 - S.B. MM 58.441 RT

621.60 ANCHOR FOR STEEL BEAM RAIL

N.B. MM 58.365 LT
 N.B. MM 58.438 RT
 S.B. MM 58.272 LT
 S.B. MM 58.313 RT

621.70 GUARDRAIL APPROACH SECTION, GALVANIZED TYPE I

N.B. MM 58.313 - N.B. MM 58.322 RT
 N.B. MM 58.316 - N.B. MM 58.325 LT
 S.B. MM 58.353 - S.B. MM 58.363 RT

621.71 GUARDRAIL APPROACH SECTION, GALVANIZED TYPE II

N.B. MM 58.356 - N.B. MM 58.358 LT
 S.B. MM 58.325 - S.B. MM 58.327 RT

621.80 REMOVAL AND DISPOSAL OF GUARDRAIL

N.B. MM 58.286 - N.B. MM 58.322 RT (190.0 LF)
 N.B. MM 58.292 - N.B. MM 58.325 LT (175.0 LF)
 N.B. MM 58.356 - N.B. MM 58.365 LT (49.0 LF)
 N.B. MM 58.431 - N.B. MM 58.439 RT (37.5 LF)
 S.B. MM 58.273 - S.B. MM 58.278 LT (37.5 LF)
 S.B. MM 58.312 - S.B. MM 58.327 RT (75.0 LF)
 S.B. MM 58.353 - S.B. MM 58.379 RT (140.0 LF)
 S.B. MM 58.411 - S.B. MM 58.435 LT (50.0 LF)

676.10 DELINEATOR WITH STEEL POST
 TYPE I:

N.B. MM 58.237 LT
 N.B. MM 58.244 RT
 S.B. MM 58.435 LT
 S.B. MM 58.441 RT

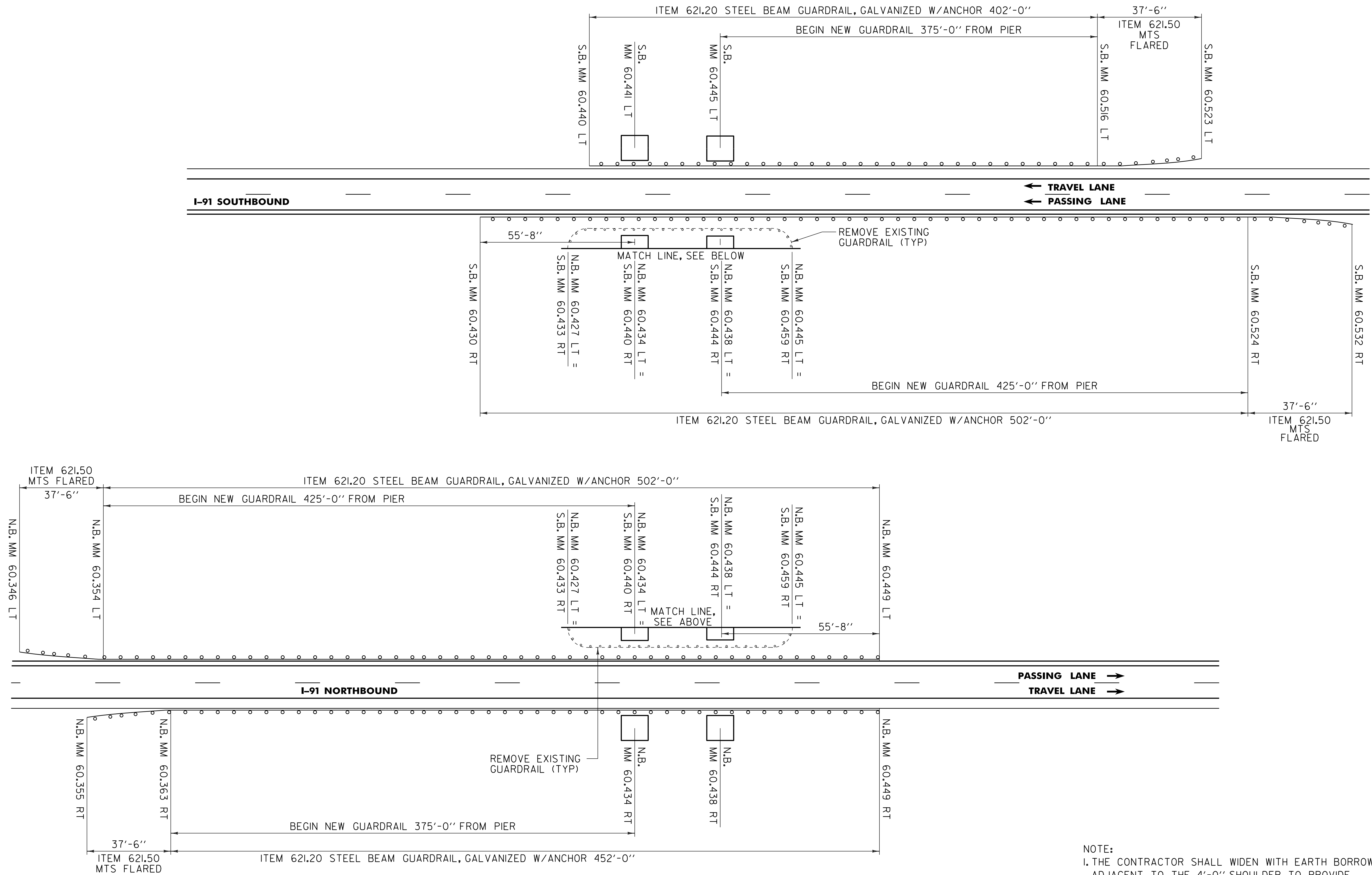
NOTE:

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

**BRIDGE 35N
 AND 35S
 DETAIL SHEET**

| | |
|----------------------------------|------------------------------|
| PROJECT NAME: WINDSOR - HARTLAND | PLOT DATE: 16-AUG-2011 13:43 |
| PROJECT NUMBER: IM 091-(161) | DRAWN BY: C.A.K. |
| FILE NAME: p07al42.dgn | CHECKED BY: R.A.B. |
| PROJECT LEADER: D.E.G. | SHEET 46 OF 56 |
| DESIGNED BY: M.J.L. | |
| IPARM FILE: p07al42bnr1.i | |



621.20 STEEL BEAM GUARDRAIL, GALVANIZED

N.B. MM 60.354 - N.B. MM 60.449 LT (502.0 LF)
 N.B. MM 60.363 - N.B. MM 60.449 RT (452.0 LF)
 S.B. MM 60.430 - S.B. MM 60.524 RT (502.0 LF)
 S.B. MM 60.440 - S.B. MM 60.516 LT (402.0 LF)

621.50 MANUFACTURED TERMINAL SECTION, FLARED

N.B. MM 60.346 - N.B. MM 60.354 LT
 N.B. MM 60.355 - N.B. MM 60.363 RT
 S.B. MM 60.516 - S.B. MM 60.523 LT
 S.B. MM 60.524 - S.B. MM 60.532 RT

621.80 REMOVAL AND DISPOSAL OF GUARDRAIL

N.B. MM 60.419 - N.B. MM 60.446 RT (148.0 LF)
 N.B. MM 60.427 - N.B. MM 60.445 LT (120.0 LF)
 S.B. MM 60.433 - S.B. MM 60.459 RT (120.0 LF)
 S.B. MM 60.440 - S.B. MM 60.460 LT (106.0 LF)

621.60 ANCHOR FOR STEEL BEAM RAIL

S.B. MM 60.431 RT
 S.B. MM 60.441 LT
 N.B. MM 60.448 LT
 N.B. MM 60.448 RT

676.10 DELINEATOR WITH STEEL POST
 TYPE I:

N.B. MM 60.346 LT
 N.B. MM 60.355 RT
 S.B. MM 60.523 LT
 S.B. MM 60.532 RT

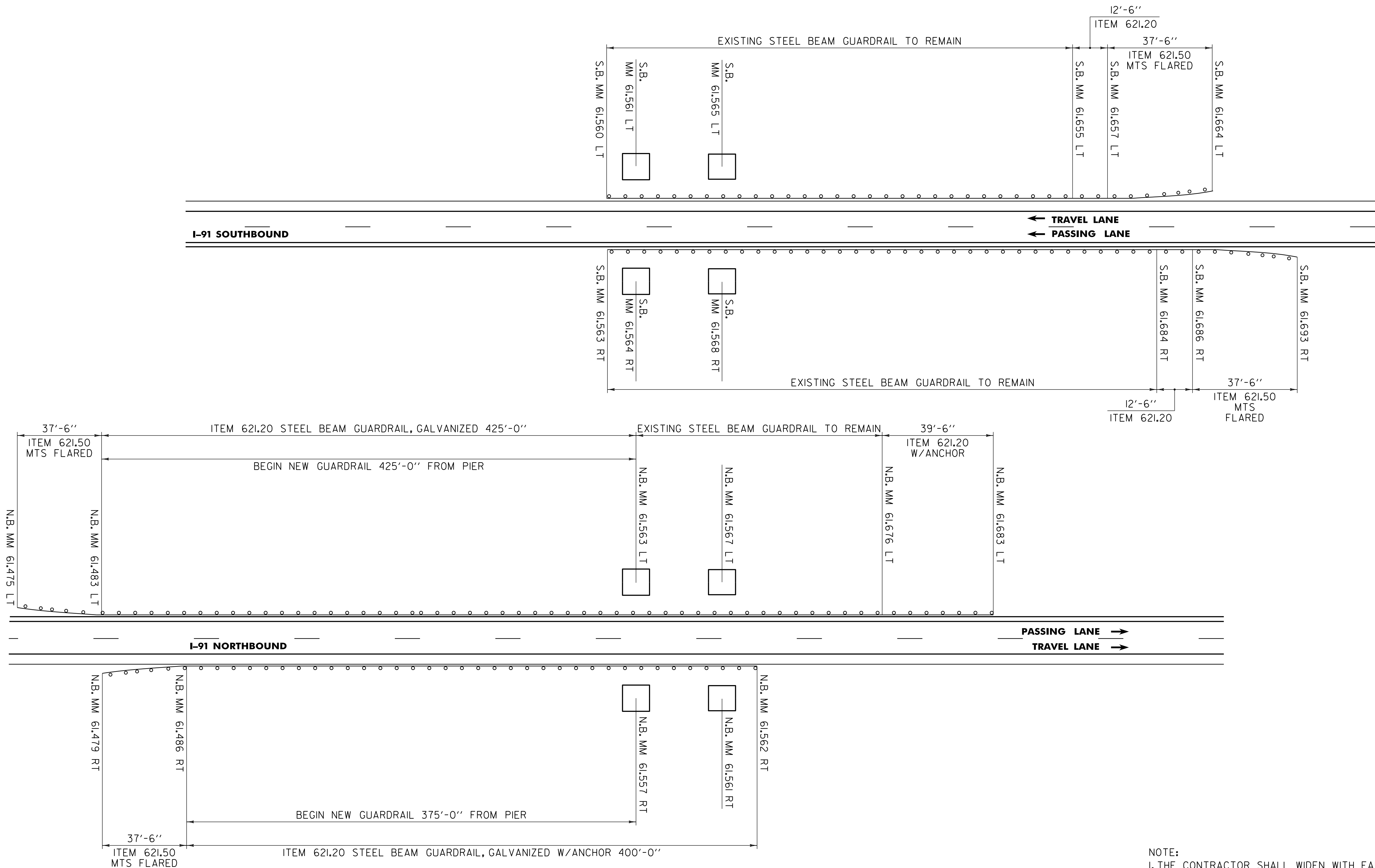
BR 36
N.B. MM 60.436
S.B. MM 60.442

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

BRIDGE 36N AND 36S
DETAIL SHEET

| | |
|----------------------------------|------------------------------|
| PROJECT NAME: WINDSOR - HARTLAND | PLOT DATE: 16-AUG-2011 13:43 |
| PROJECT NUMBER: IM 091-1(6) | DRAWN BY: C.A.K. |
| FILE NAME: p07al42.dgn | CHECKED BY: R.A.B. |
| PROJECT LEADER: D.E.G. | SHEET 47 OF 56 |
| DESIGNED BY: M.J.L. | |
| IPARM FILE: p07al42bnr2.i | |



621.20 STEEL BEAM GUARDRAIL, GALVANIZED

- N.B. MM 61.483 - N.B. MM 61.563 LT (425.0 LF)
- N.B. MM 61.486 - N.B. MM 61.562 RT (400.0 LF)
- N.B. MM 61.678 - N.B. MM 61.683 LT (39.5 LF)
- S.B. MM 61.655 - S.B. MM 61.657 LT (12.5 LF)
- S.B. MM 61.684 - S.B. MM 61.686 RT (12.5 LF)

621.80 REMOVAL AND DISPOSAL OF GUARDRAIL

- N.B. MM 61.542 - N.B. MM 61.561 RT (100.0 LF)
- N.B. MM 61.539 - N.B. MM 61.683 LT (130.0 LF)
- S.B. MM 61.655 - S.B. MM 61.664 LT (50.0 LF)
- S.B. MM 61.684 - S.B. MM 61.693 RT (50.0 LF)

621.50 MANUFACTURED TERMINAL SECTION, FLARED

- N.B. MM 61.475 - N.B. MM 61.483 LT
- N.B. MM 61.479 - N.B. MM 61.486 RT
- S.B. MM 61.657 - S.B. MM 61.664 LT
- S.B. MM 61.686 - S.B. MM 61.693 RT

621.60 ANCHOR FOR STEEL BEAM RAIL

- N.B. MM 61.682 LT
- N.B. MM 61.561 RT

676.10 DELINEATOR WITH STEEL POST

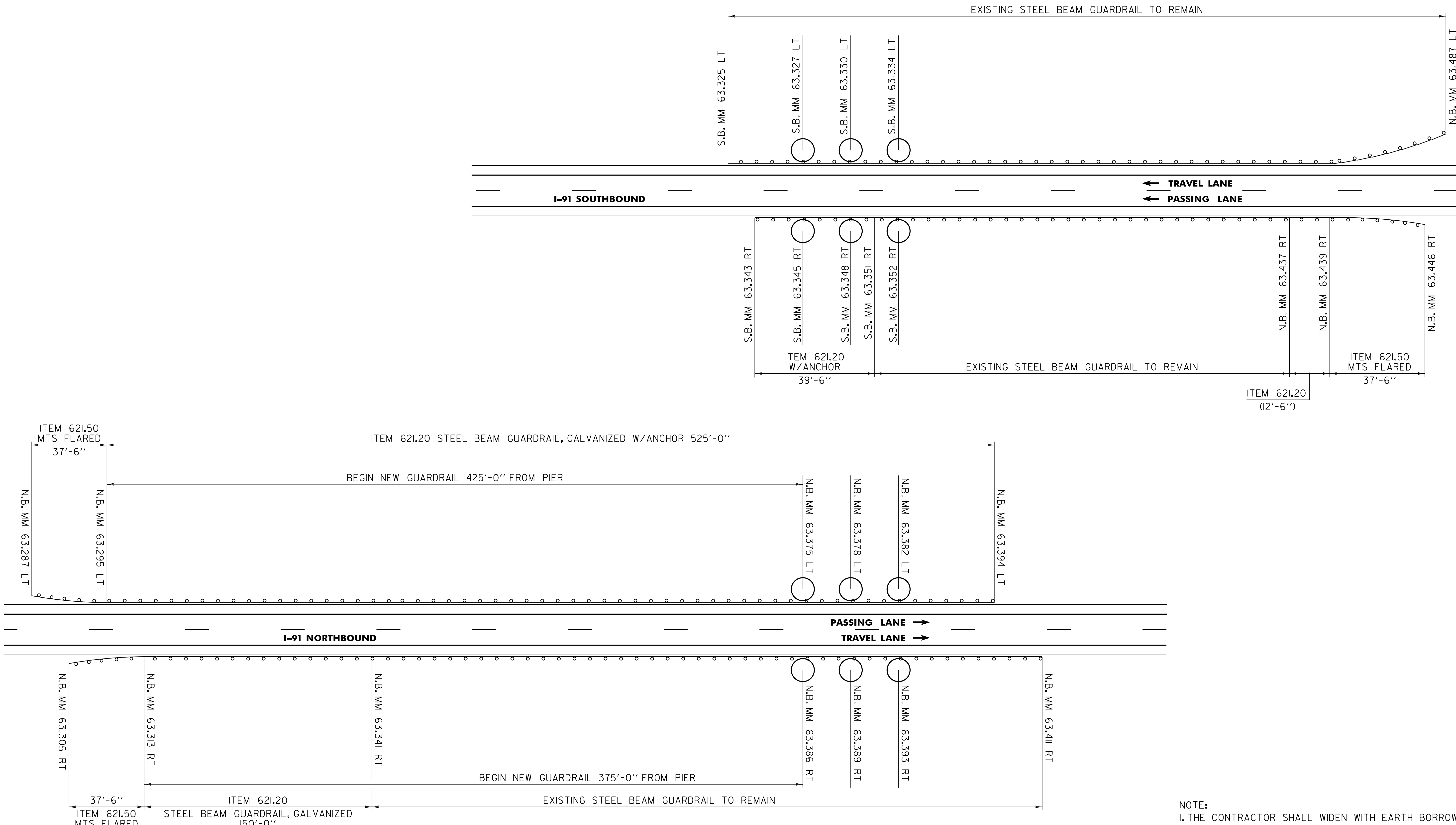
- TYPE 1:
- N.B. MM 61.475 LT
 - N.B. MM 61.479 RT
 - S.B. MM 61.664 LT
 - S.B. MM 61.693 RT

BR 37
N.B. MM 61.562
S.B. MM 61.565

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

| | | |
|--------------------------------------------|----------------------------------|------------------------------|
| BRIDGE 37N AND 37S DETAIL SHEET | PROJECT NAME: WINDSOR - HARTLAND | PLOT DATE: 16-AUG-2011 13:43 |
| | PROJECT NUMBER: IM 091-(161) | DRAWN BY: C.A.K. |
| | FILE NAME: p07al42.dgn | CHECKED BY: R.A.B. |
| | PROJECT LEADER: D.E.G. | SHEET 48 OF 56 |
| | DESIGNED BY: M.J.L. | |
| | IPARM FILE: p07al42bnr3.i | |



BR 38
N.B. MM 63.384
S.B. MM 63.340

621.20 STEEL BEAM GUARDRAIL, GALVANIZED

- N.B. MM 63.295 - N.B. MM 63.394 LT (525.0 LF)
- N.B. MM 63.313 - N.B. MM 63.341 RT (150.0 LF)
- S.B. MM 63.343 - S.B. MM 63.351 RT (39.5 LF)
- S.B. MM 63.437 - S.B. MM 63.439 RT (12.5 LF)

621.80 REMOVAL AND DISPOSAL OF GUARDRAIL

- N.B. MM 63.350 - N.B. MM 63.394 LT (190.0 LF)
- N.B. MM 63.332 - N.B. MM 63.341 RT (50.0 LF)
- S.B. MM 63.343 - S.B. MM 63.351 RT (37.5 LF)
- S.B. MM 63.437 - S.B. MM 63.446 RT (50.0 LF)

621.50 MANUFACTURED TERMINAL SECTION, FLARED

- N.B. MM 63.287 - N.B. MM 63.295 LT
- N.B. MM 63.305 - N.B. MM 63.313 RT
- S.B. MM 63.439 - S.B. MM 63.446 RT

621.60 ANCHOR FOR STEEL BEAM RAIL

- N.B. MM 63.393 LT
- S.B. MM 63.342 RT

676.10 DELINEATOR WITH STEEL POST

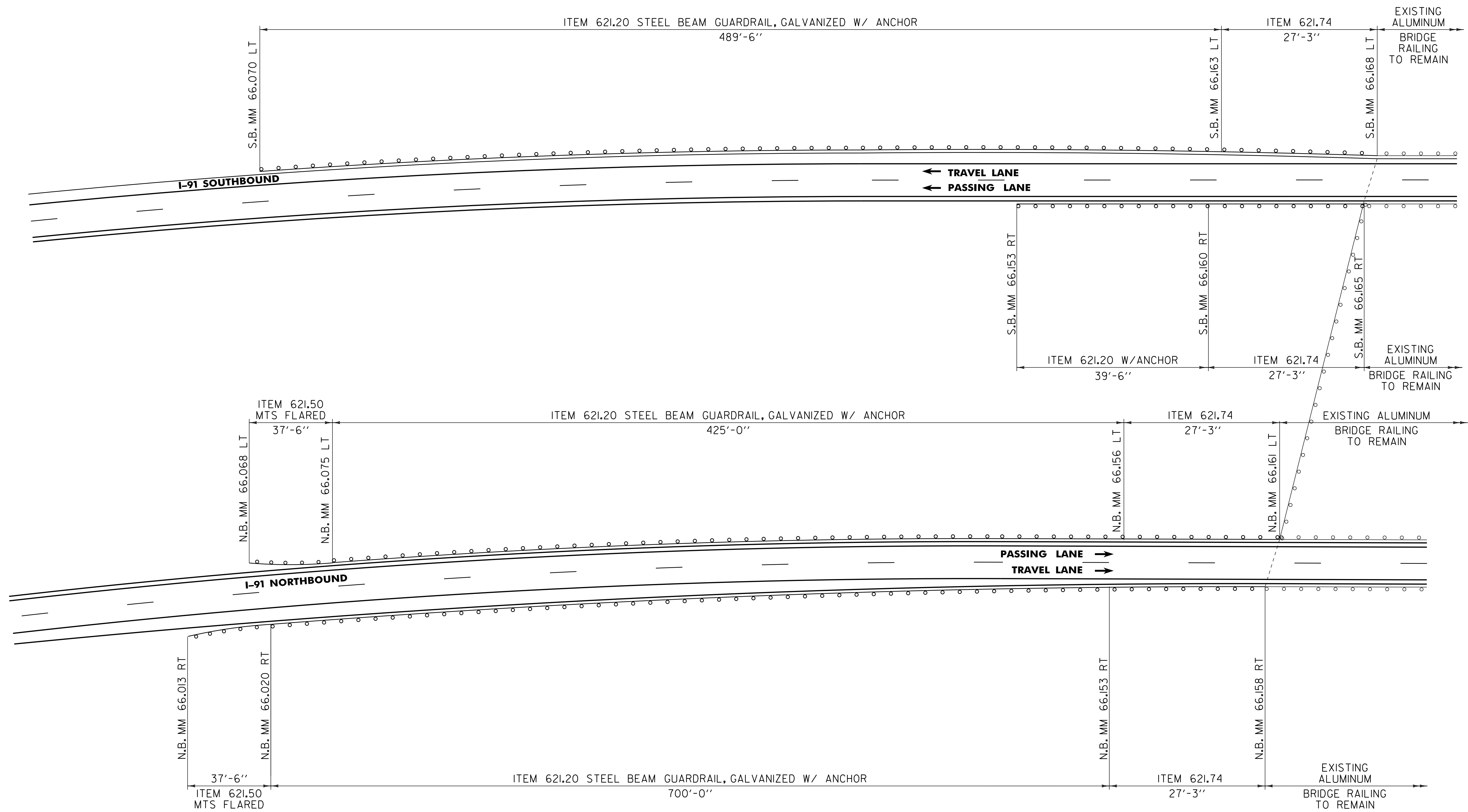
- TYPE I:
- N.B. MM 63.287 LT
- N.B. MM 63.305 RT
- S.B. MM 63.446 RT

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

**BRIDGE 38N AND 38S
 DETAIL SHEET**

| | |
|----------------------------------|------------------------------|
| PROJECT NAME: WINDSOR - HARTLAND | PLOT DATE: 16-AUG-2011 13:43 |
| PROJECT NUMBER: IM 091-(161) | DRAWN BY: C.A.K. |
| FILE NAME: p07al42.dgn | DESIGNED BY: M.J.L. |
| IPARM FILE: p07al42bnr4.i | CHECKED BY: R.A.B. |
| | SHEET 49 OF 56 |



BR 39
N.B. MM 66.165
S.B. MM 66.168

- 621.20 STEEL BEAM GUARDRAIL, GALVANIZED**
 N.B. MM 66.020 - N.B. MM 66.153 RT (700.0 LF)
 N.B. MM 66.075 - N.B. MM 66.156 LT (425.0 LF)
 S.B. MM 66.070 - S.B. MM 66.163 LT (489.5 LF)
 S.B. MM 66.153 - S.B. MM 66.160 RT (39.5 LF)

- 621.74 ALUMINUM APPROACH RAILING**
 N.B. MM 66.153 - N.B. MM 66.158 RT (27.25 LF)
 N.B. MM 66.156 - N.B. MM 66.161 LT (27.25 LF)
 S.B. MM 66.160 - S.B. MM 66.165 RT (27.25 LF)
 S.B. MM 66.163 - S.B. MM 66.168 LT (27.25 LF)

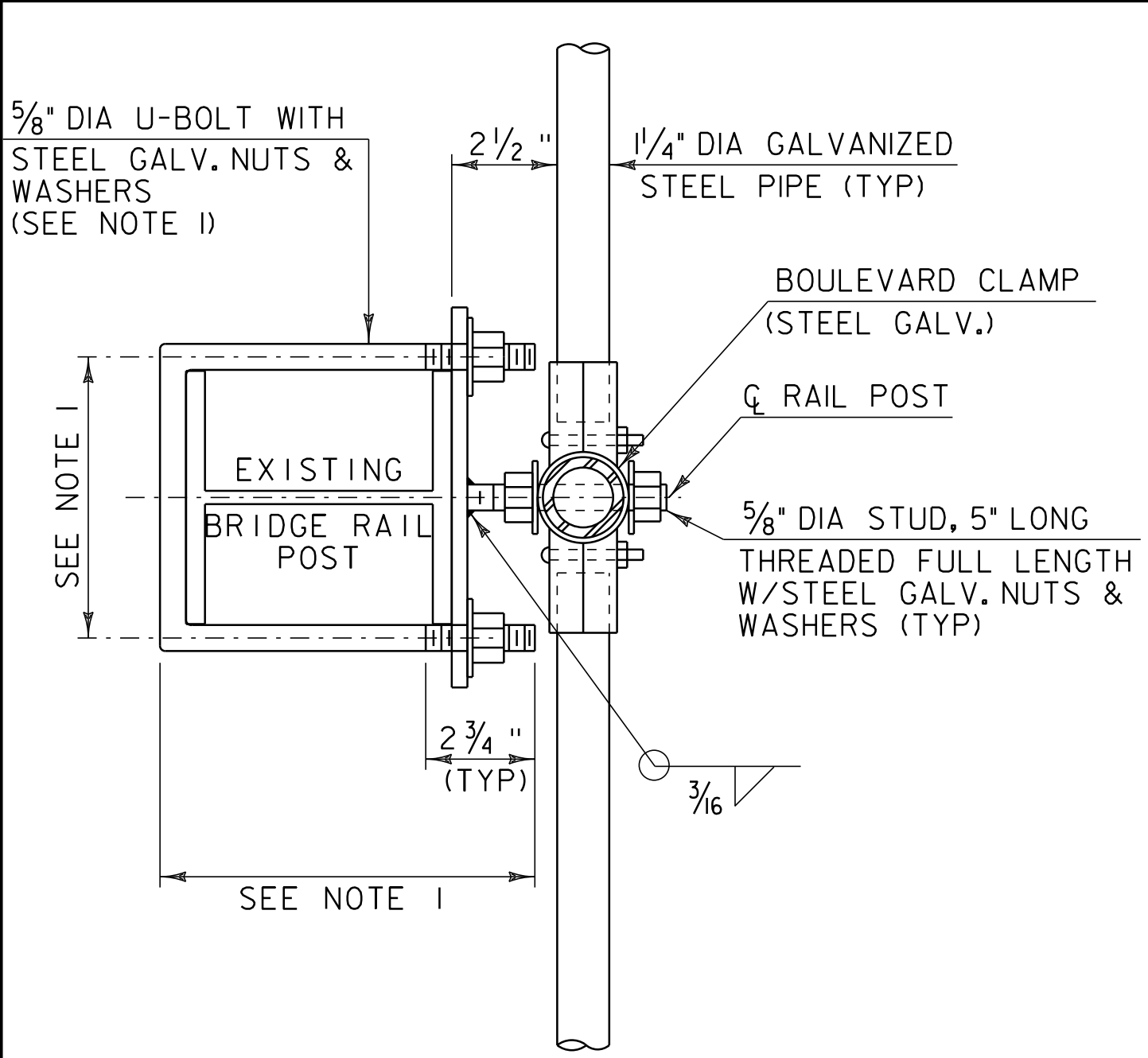
- 621.50 MANUFACTURED TERMINAL SECTION, FLARED**
 N.B. MM 66.013 - N.B. MM 66.020 RT
 N.B. MM 66.068 - N.B. MM 66.075 LT

- 621.80 REMOVAL AND DISPOSAL OF GUARDRAIL**
 N.B. MM 66.015 - N.B. MM 66.158 RT (757.0 LF)
 N.B. MM 66.146 - N.B. MM 66.161 LT (80.0 LF)
 S.B. MM 66.070 - S.B. MM 66.168 LT (517.0 LF)
 S.B. MM 66.148 - S.B. MM 66.165 RT (90.0 LF)

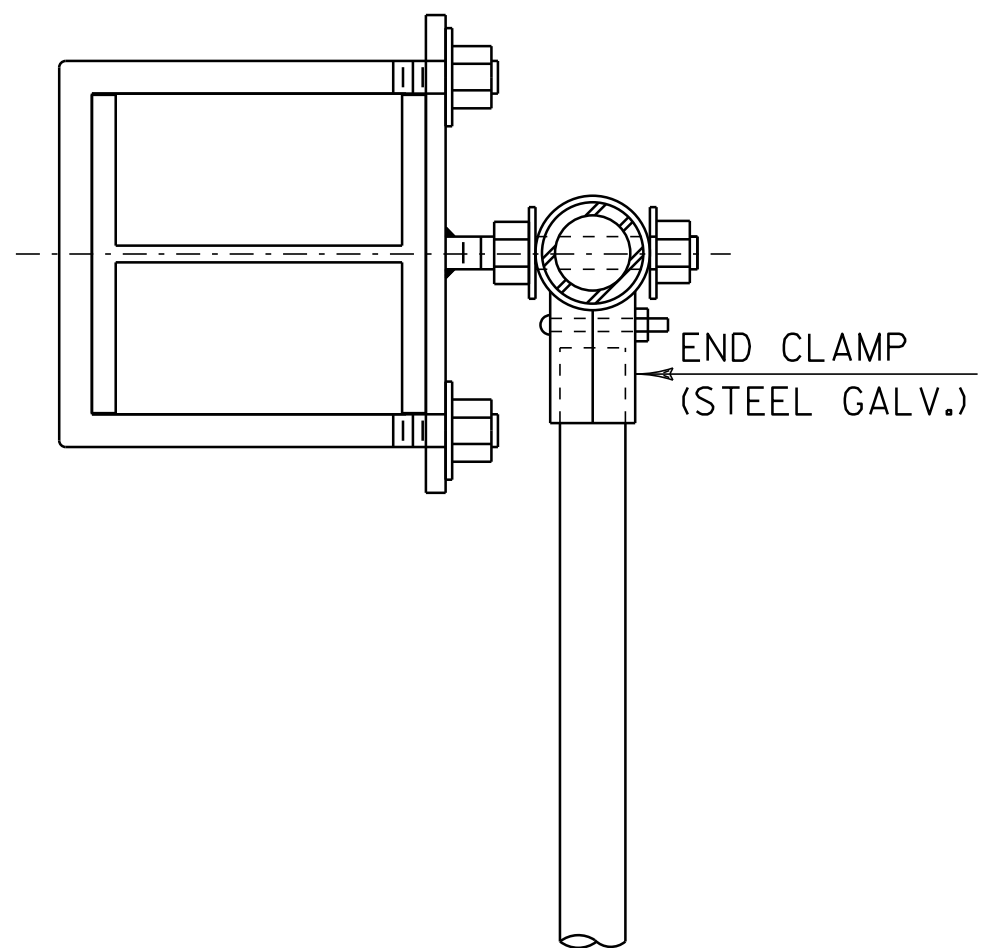
- 621.60 ANCHOR FOR STEEL BEAM RAILING**
 S.B. MM 66.071 LT
 S.B. MM 66.154 RT

- 676.10 DELINEATOR WITH STEEL POST**
 TYPE 1:
 N.B. MM 66.013 RT
 N.B. MM 66.068 LT

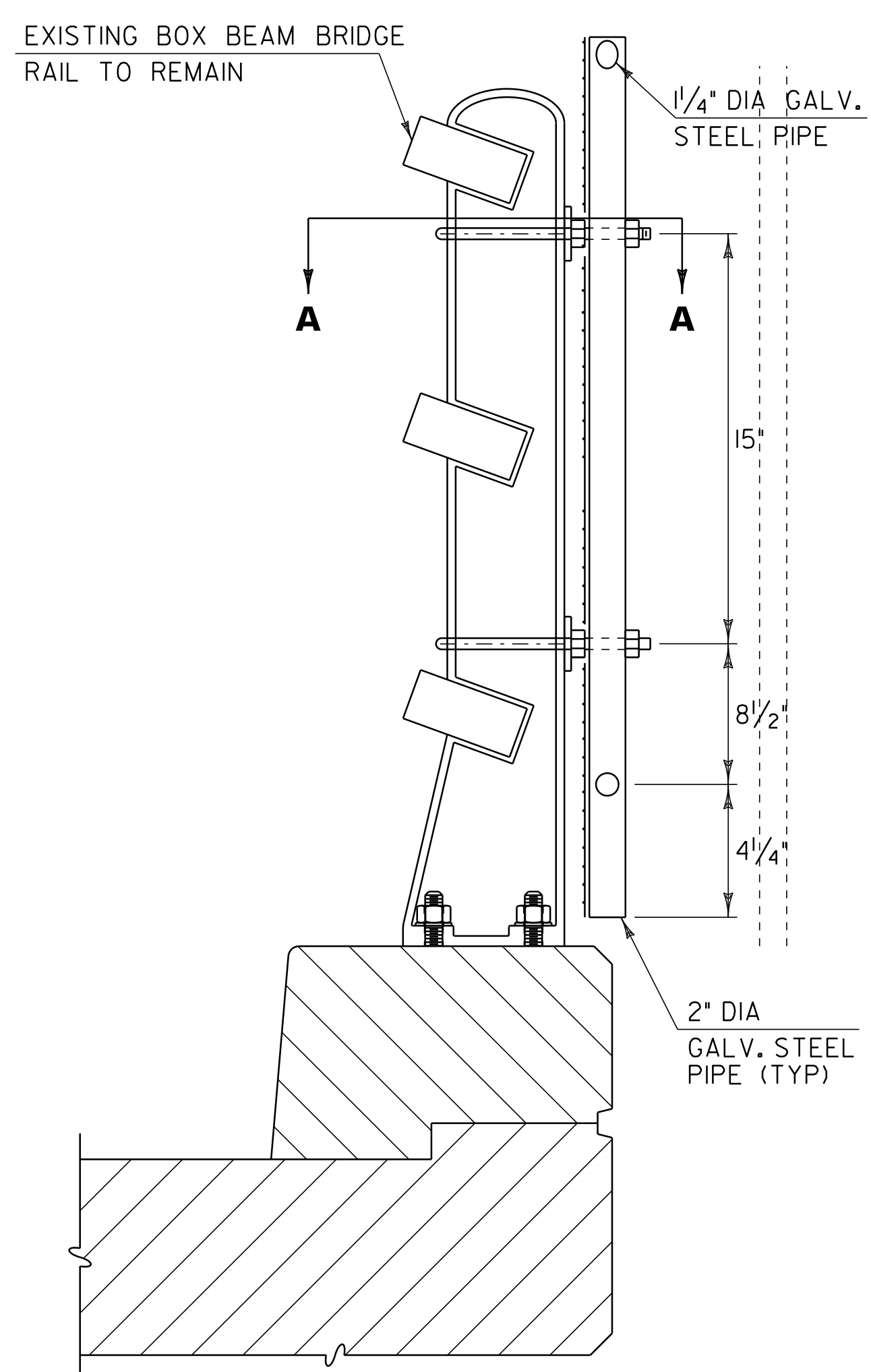
| | | |
|------------------------------------------------|----------------------------------|------------------------------|
| BRIDGE 39N AND 39S DETAIL SHEET | NOT TO SCALE | |
| | PROJECT NAME: WINDSOR - HARTLAND | PLOT DATE: 16-AUG-2011 13:44 |
| | PROJECT NUMBER: IM 091-(161) | DRAWN BY: C.A.K. |
| | FILE NAME: p07al42.dgn | CHECKED BY: R.A.B. |
| PROJECT LEADER: D.E.G. | SHEET 50 OF 56 | |
| DESIGNED BY: M.J.L. | | |
| IPARM FILE: p07al42bnr5.i | | |



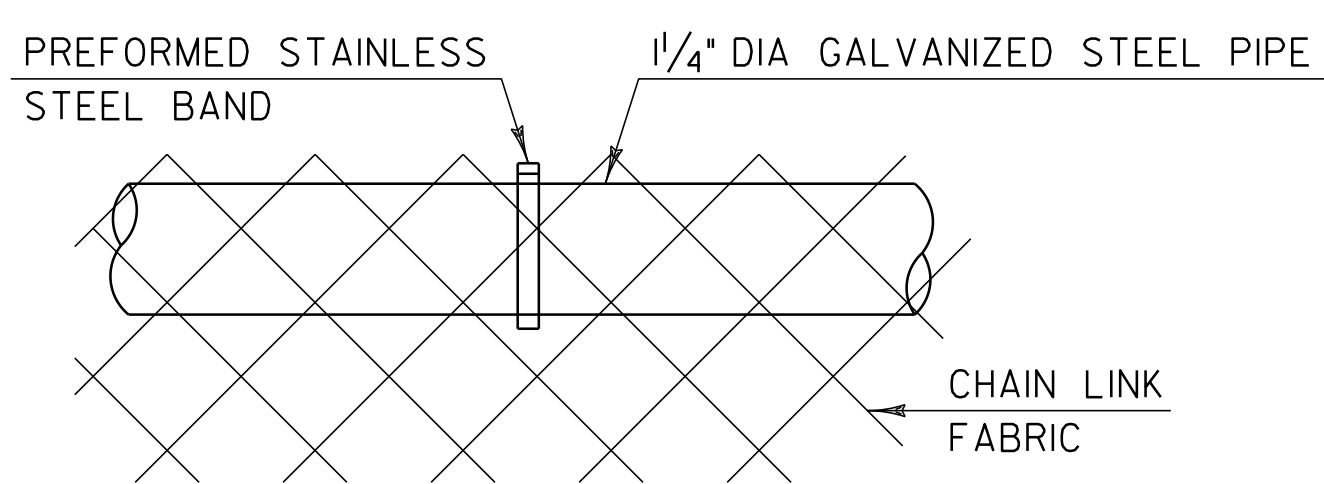
SECTION A-A



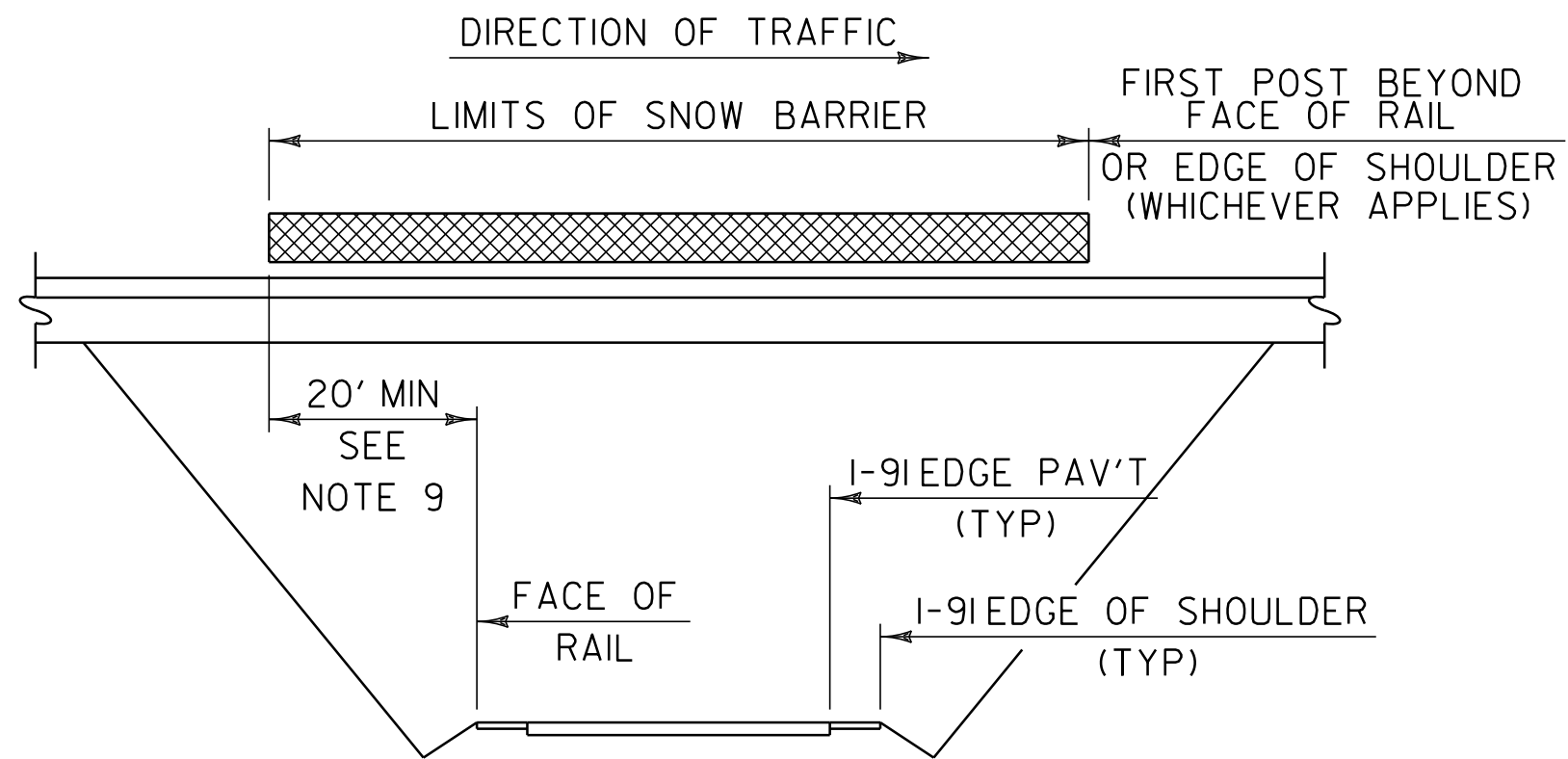
PLAN VIEW AT END POST



TYPICAL SECTION

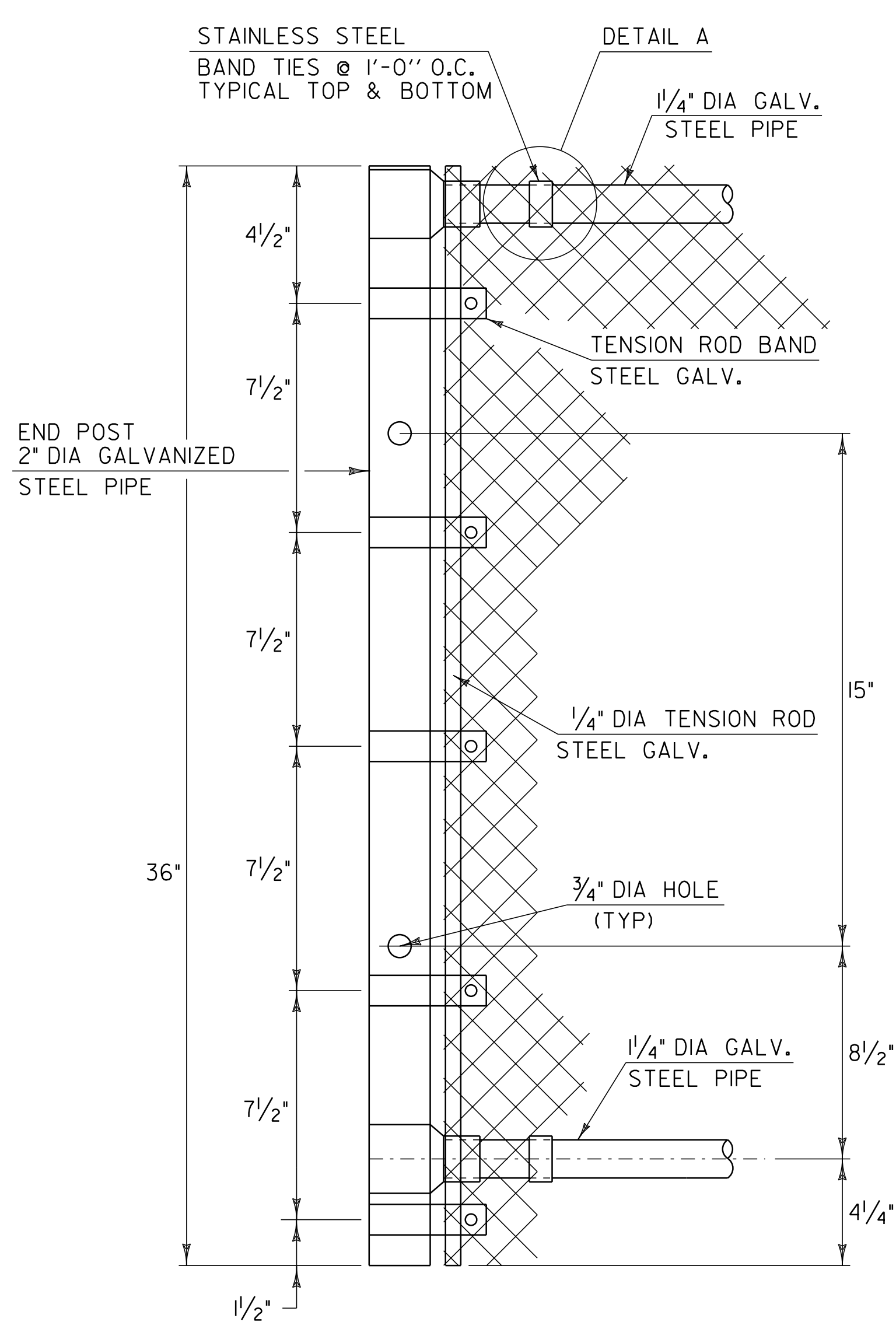


DETAIL A

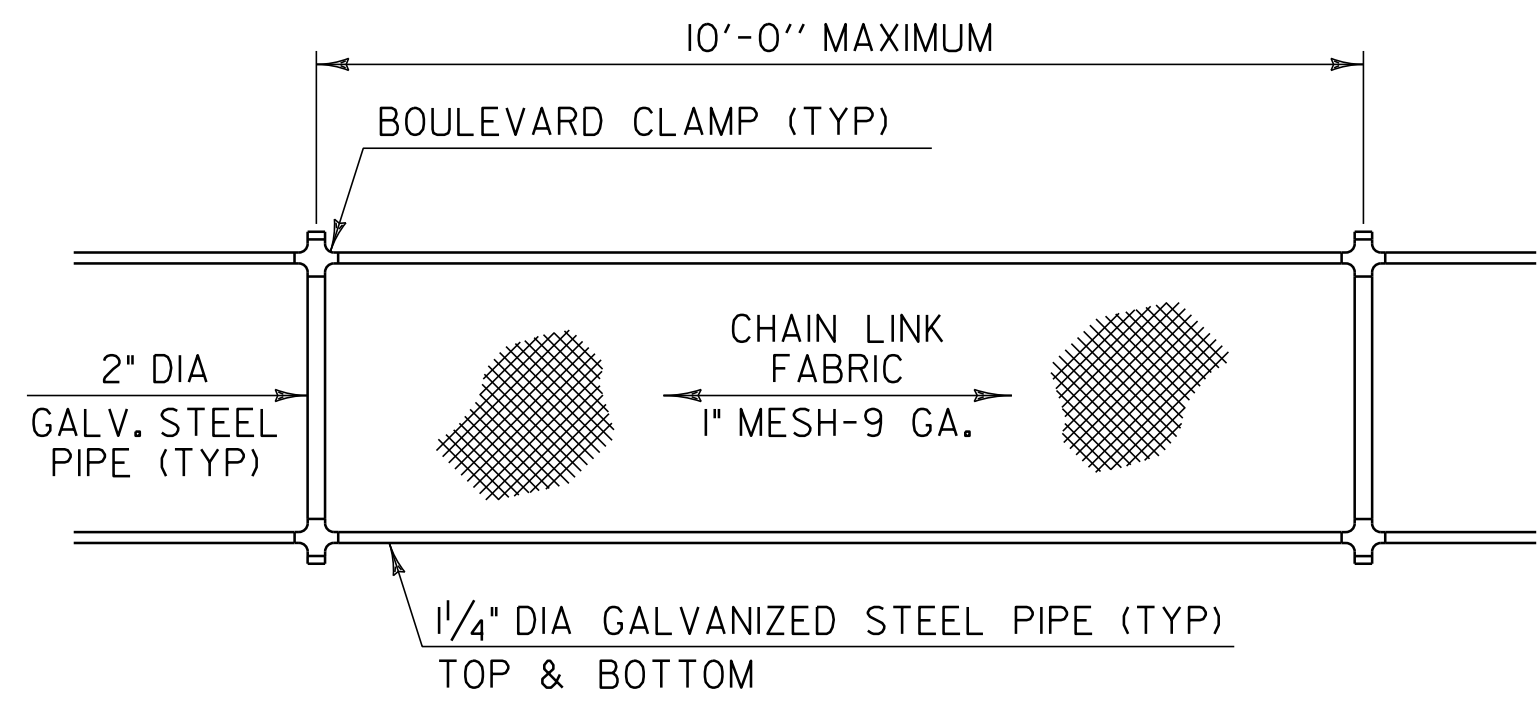


SCHEMATIC SNOW BARRIER LIMITS

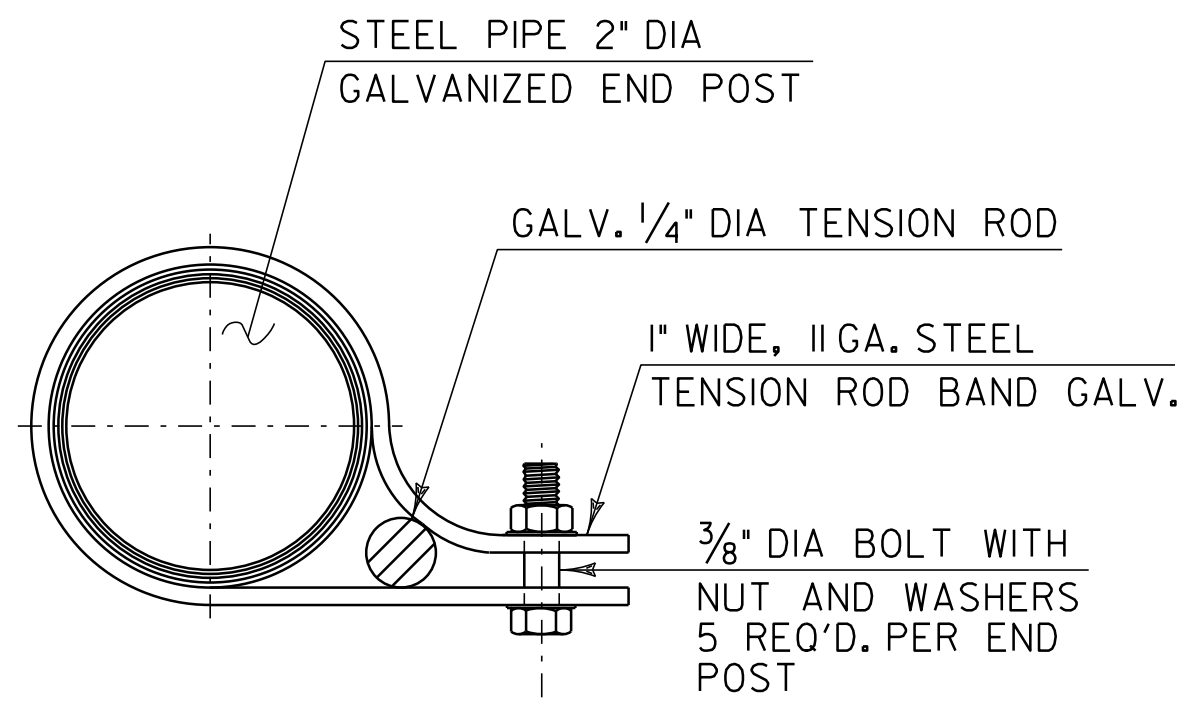
BR37 (TOWN HIGHWAY 41) NB MM 61.562
BR37 (TOWN HIGHWAY 41) SB MM 61.565



END POST DETAILS



ELEVATION SNOW BARRIER



TENSION ROD BAND

NOTES

1. THE CONTRACTOR SHALL FIELD VERIFY THE DIMENSIONS OF THE EXISTING BRIDGE POSTS PRIOR TO ORDERING ALL U-BOLTS AS DIRECTED BY THE RESIDENT ENGINEER. THREADS OF STUDS AND U-BOLTS TO BE 5/8-11UNC.
2. ALL CONNECTION PLATES TO BE GALVANIZED AFTER FABRICATION.
3. 1 1/4" PIPE LENGTH SHALL BE FIELD CUT TO FIT POST SPACING.
4. CHAIN LINK FABRIC TO BE KNUCKLED TOP AND BOTTOM.
5. ALL BOLTS, NUTS AND WASHERS SHALL CONFORM TO THE SPECIFICATIONS FOR ASTM A307.
6. ALL STEEL PLATES SHALL CONFORM TO THE SPECIFICATION FOR AASHTO M270 GRADE 36.
7. ALL GALVANIZING SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M-181 WITH HARDWARE AND FITTINGS CONFORMING TO THE REQUIREMENTS OF AASHTO M-III OR AASHTO M-232 WHICHEVER IS APPLICABLE. ALL BOLTS, NUTS AND WASHERS SHALL BE EITHER HOT-DIP GALVANIZED IN ACCORDANCE WITH THE ABOVE AASHTO REQUIREMENTS OR MECHANICALLY GALVANIZED USING A MECHANICALLY DEPOSITED PROCESS CONFORMING TO THE REQUIREMENTS OF AASHTO M-298, CLASS 110.
8. GALVANIZED CHAIN-LINK FABRIC SHALL BE TYPE 1 (ZINC) CLASS D AS SPECIFIED IN AASHTO M-181.
9. SNOW BARRIER SHALL BEGIN AT THE BRIDGE RAIL POST WHICH WILL PROVIDE A MINIMUM DISTANCE OF 20' (AS SHOWN) OR AS DIRECTED BY THE RESIDENT ENGINEER.
10. ALL REFERENCES TO THE DIAMETERS OF GALVANIZED STEEL PIPE SHALL REFER TO THE OUTSIDE DIAMETER (O.D.).

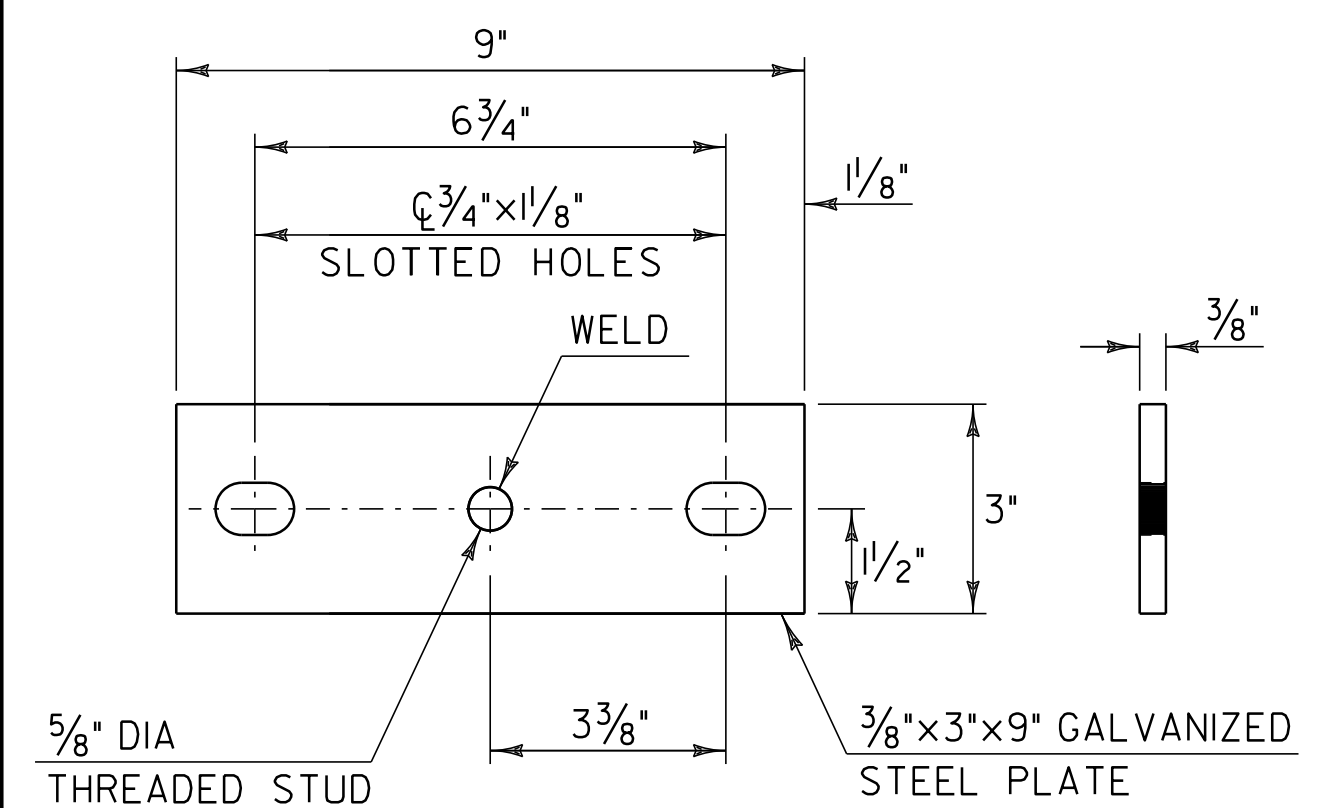
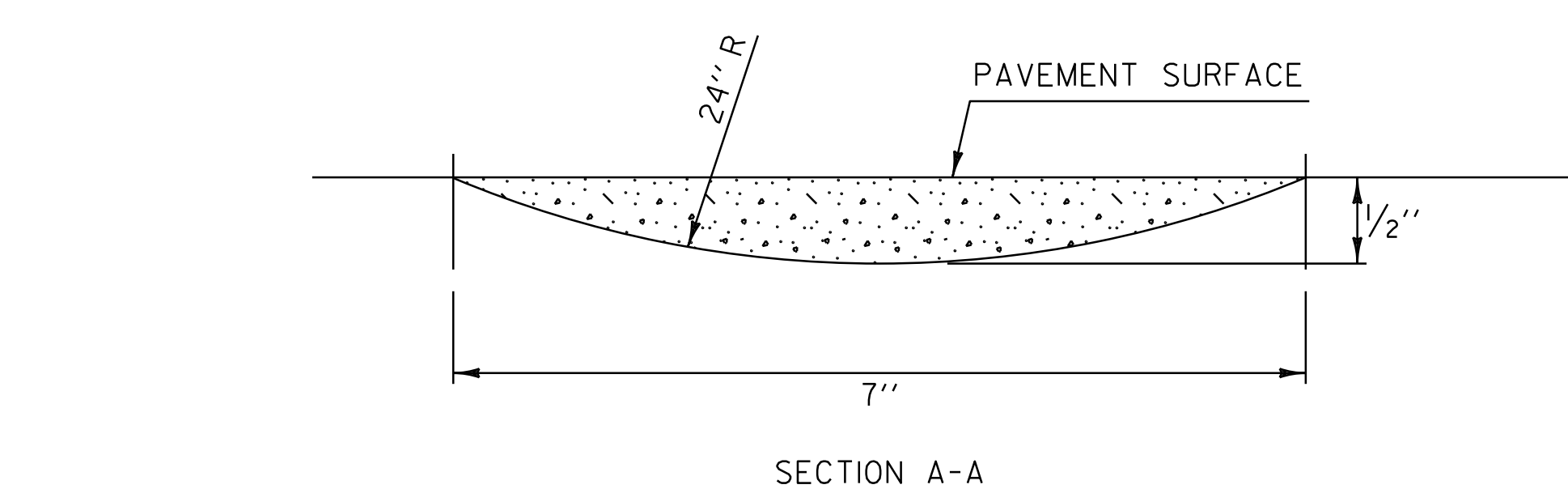
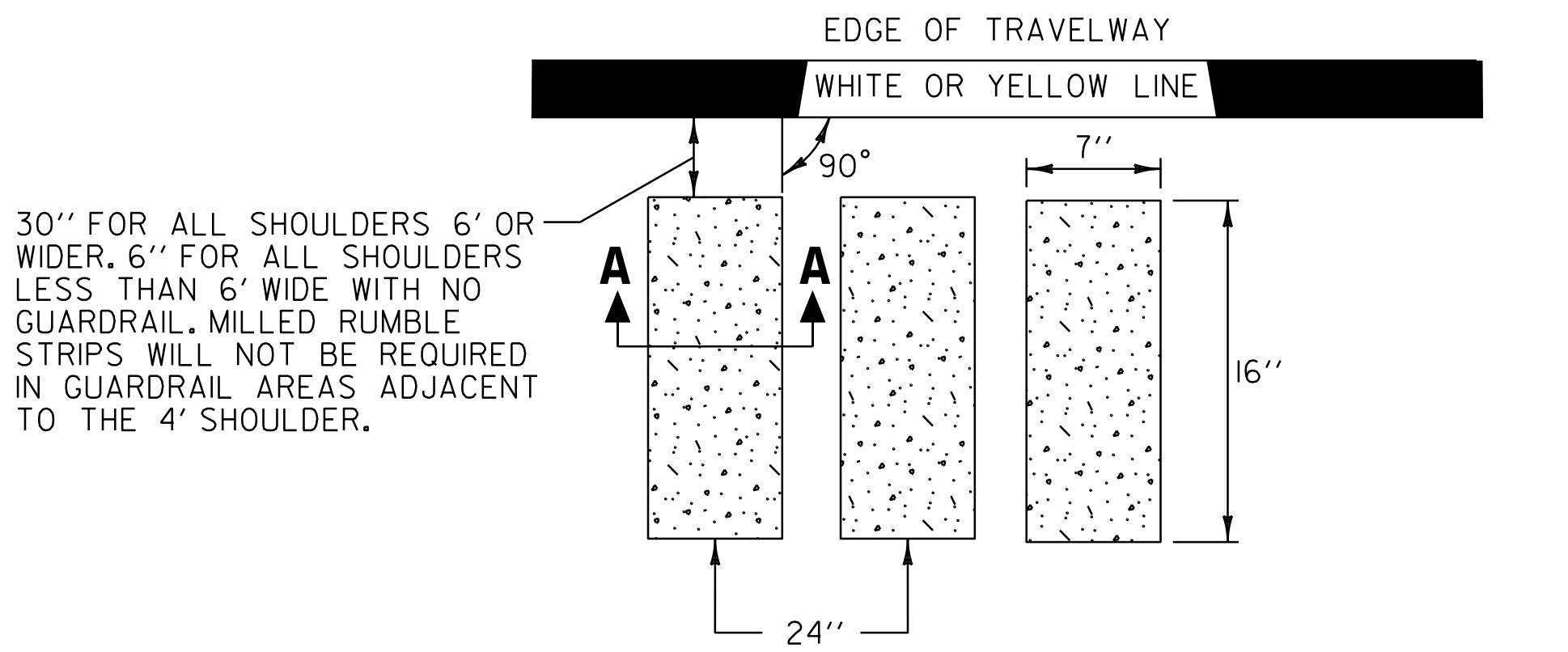


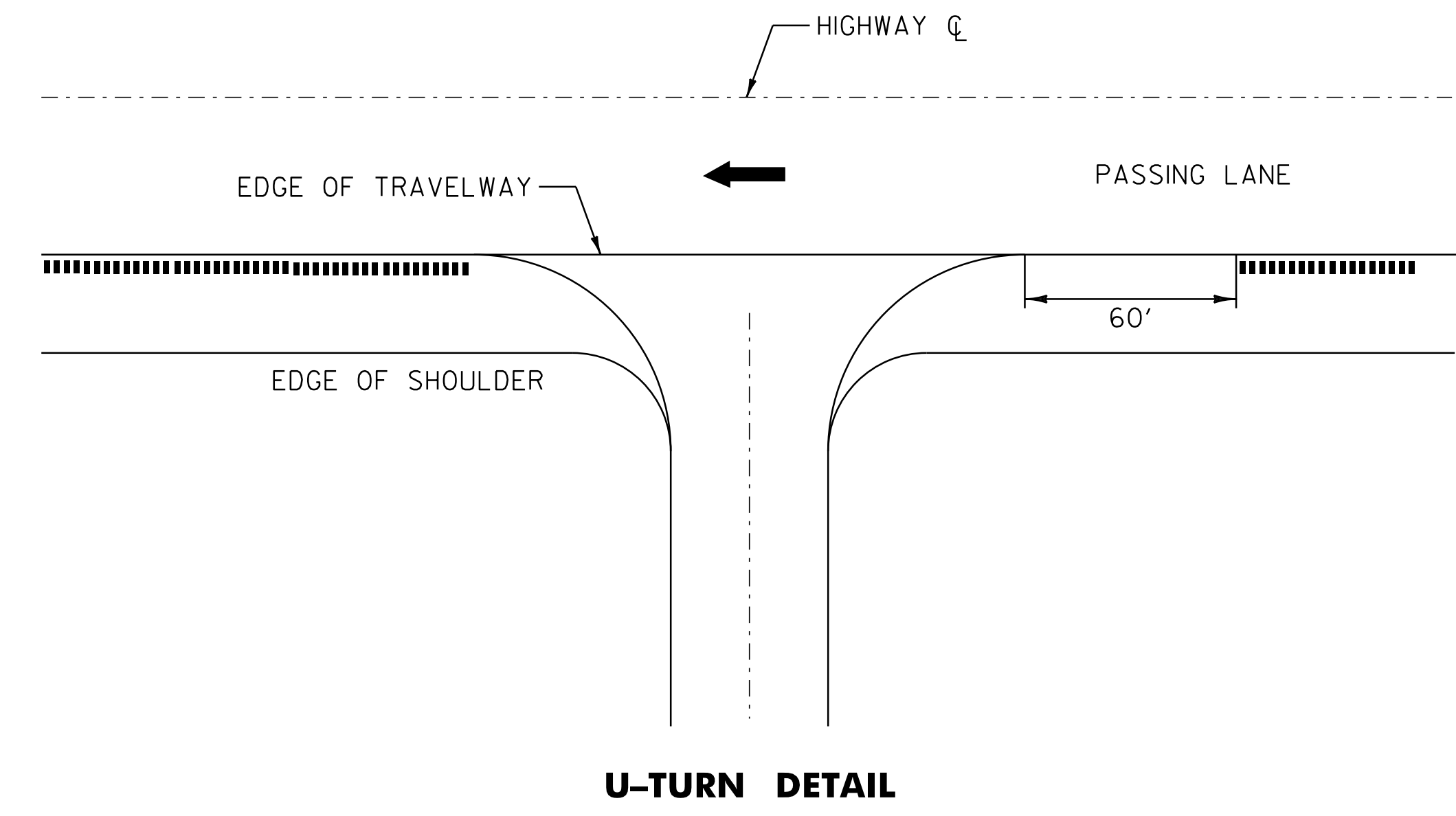
PLATE DETAILS

NOT TO SCALE

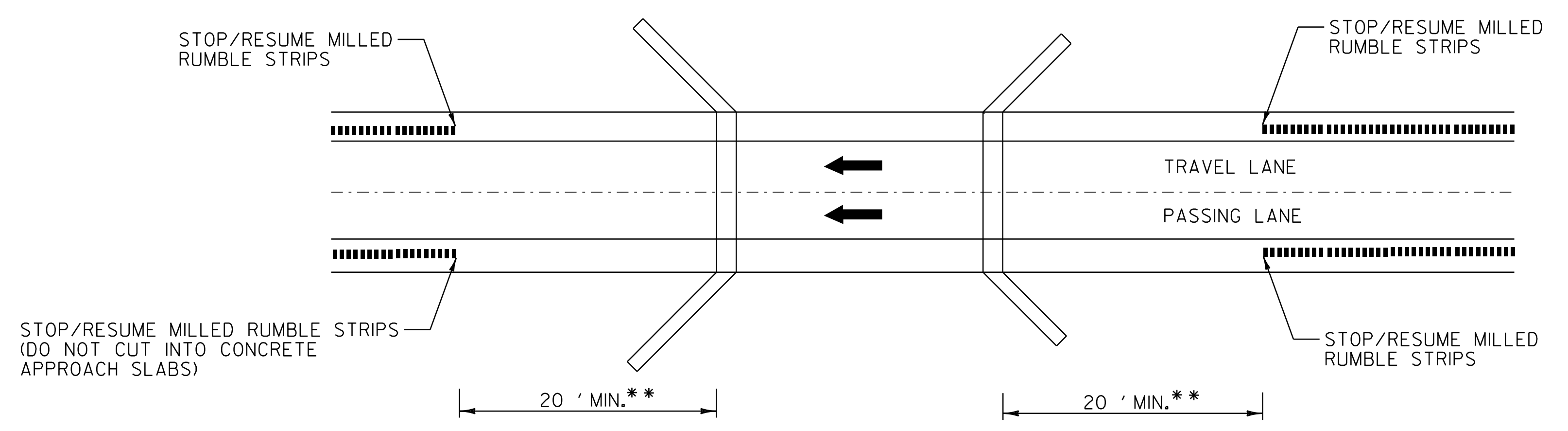
| | | |
|------------------------------------------|----------------------------------|------------------------------|
| SNOW BARRIER DETAIL SHEET | PROJECT NAME: WINDSOR - HARTLAND | |
| | PROJECT NUMBER: IM 091-(161) | |
| | FILE NAME: p07al42.dgn | PLOT DATE: 16-AUG-2011 13:44 |
| | PROJECT LEADER: D.E.G. | DRAWN BY: C.A.K. |
| DESIGNED BY: M.J.L. | CHECKED BY: R.A.B. | |
| IPARM FILE: p07al42sbd.i | SHEET 51 OF 56 | |



TYPICAL RUMBLE STRIP MILLING DETAIL

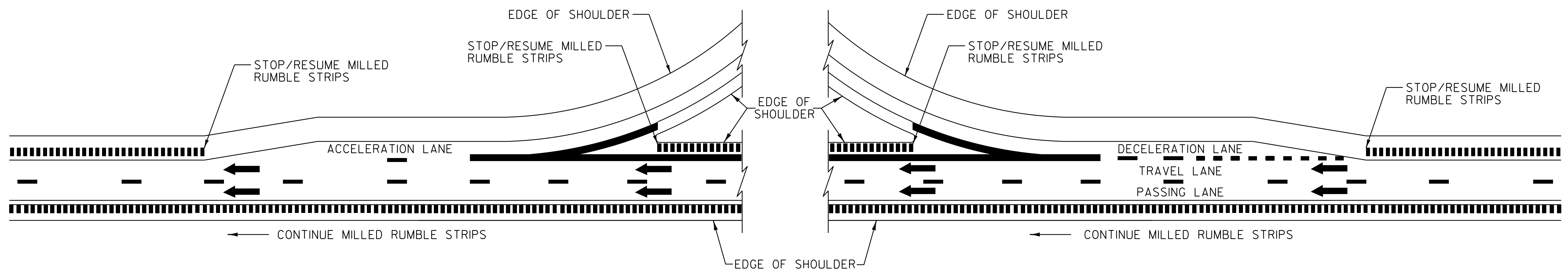


U-TURN DETAIL



BRIDGE DETAIL

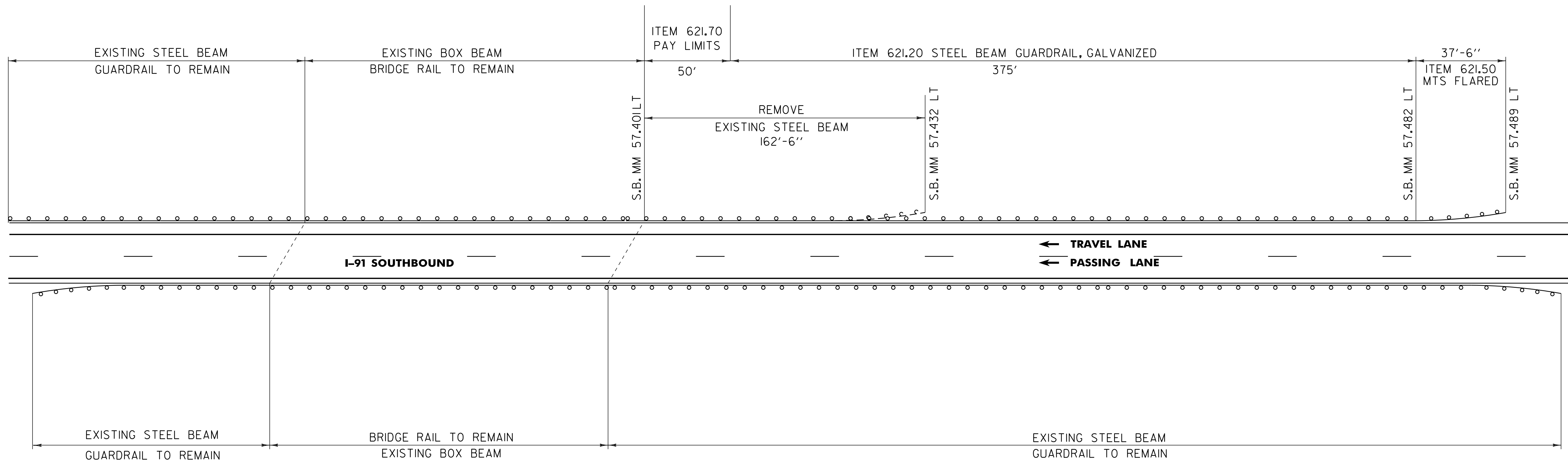
** BRIDGE RAIL WILL DETERMINE MINIMUM DISTANCE IN SOME CASES.



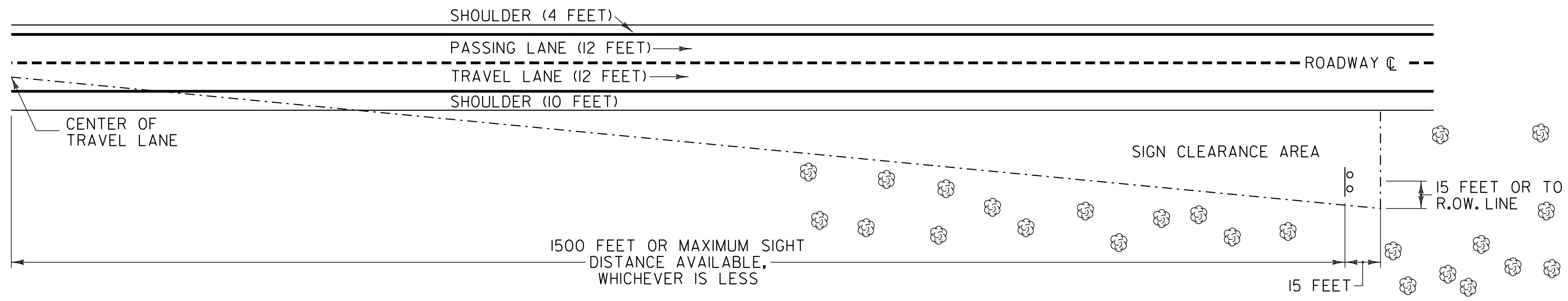
TYPICAL MILLED RUMBLE STRIPS AT PARALLEL DECELERATION AND ACCELERATION LANES

- LEGEND**
- ← DIRECTION OF TRAFFIC FLOW
 - MILLED RUMBLE STRIPS

| | | |
|-----------------------------------------|----------------------------------|------------------------------|
| MILLED RUMBLE STRIP DETAIL SHEET | NOT TO SCALE | |
| | PROJECT NAME: WINDSOR - HARTLAND | PROJECT NUMBER: IM 091-(6) |
| | FILE NAME: p07al42.dgn | PLOT DATE: 16-AUG-2011 13:44 |
| | PROJECT LEADER: D.E.G. | DRAWN BY: C.A.K. |
| DESIGNED BY: M.J.L. | CHECKED BY: R.A.B. | |
| IPARM FILE: p07al42mrs.i | | SHEET 52 OF 56 |



**BR 34S
MM 57.395**



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. THINNING AND TRIMMING FOR SIGNS SHALL BE PERFORMED IN ACCORDANCE WITH SUBSECTION 201.05 AND PAYMENT WILL BE MADE UNDER ITEM 201.31 THINNING AND TRIMMING FOR SIGNS, AND PAID FOR PER EACH SIGN.

SIGN LOCATIONS:

NORTHBOUND:
MM 59.750 RT

SOUTHBOUND:
MM 59.700 LT
MM 60.900 LT

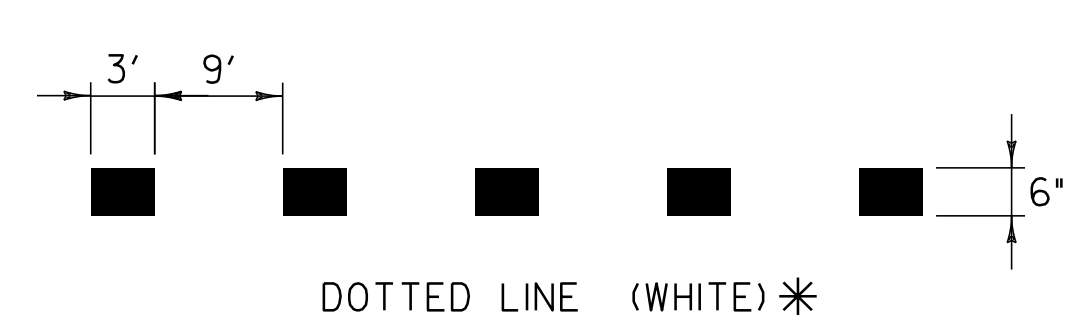
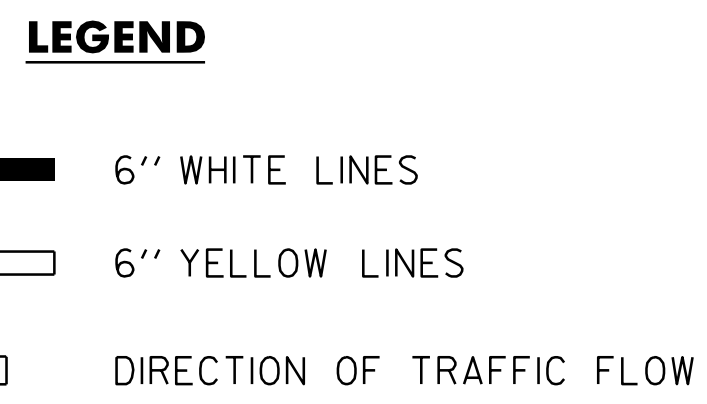
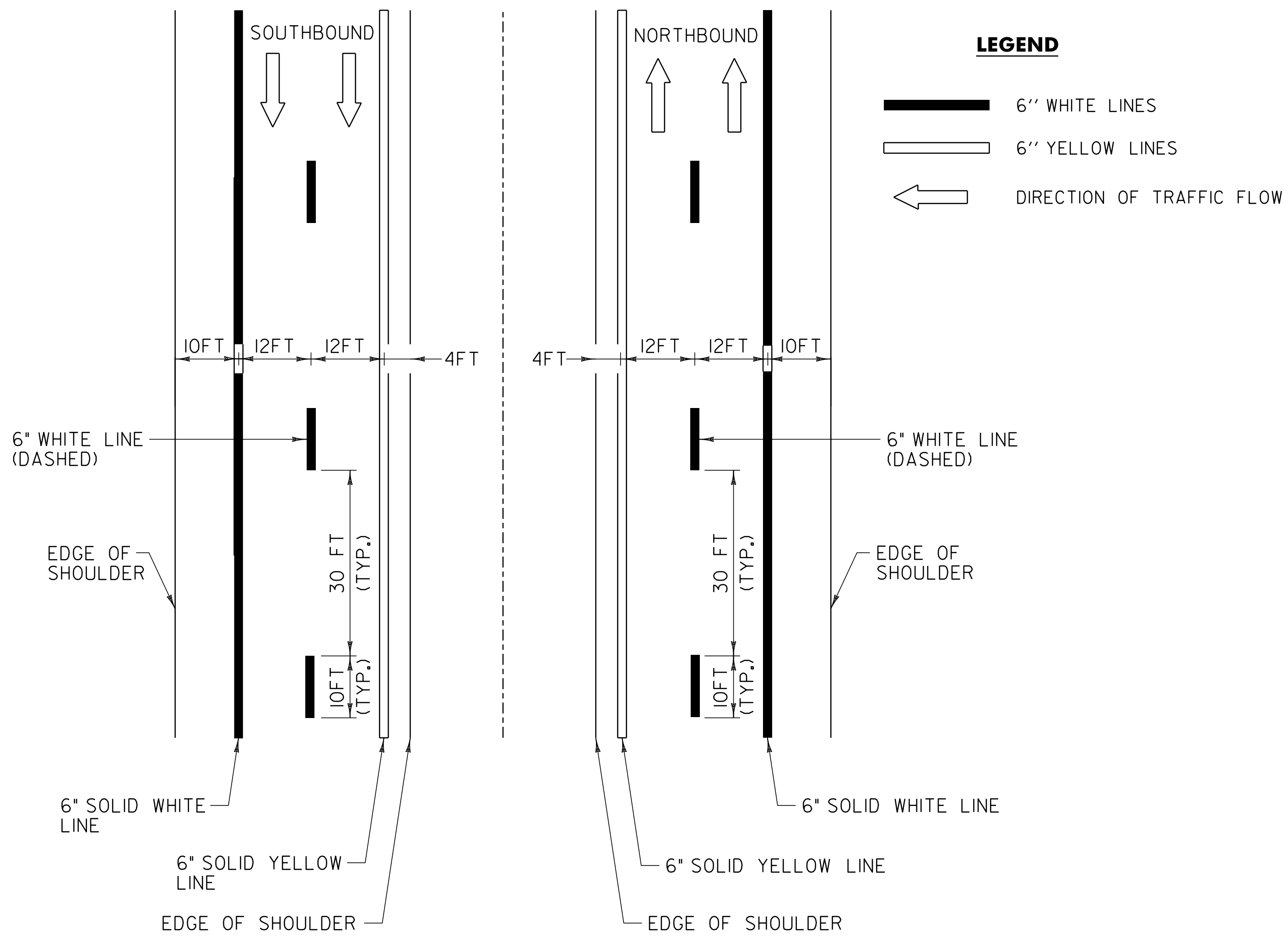
NOT TO SCALE

**BRIDGE 34S
DETAIL SHEET
&
THINNING
AND
TRIMMING
DETAIL
SHEET**

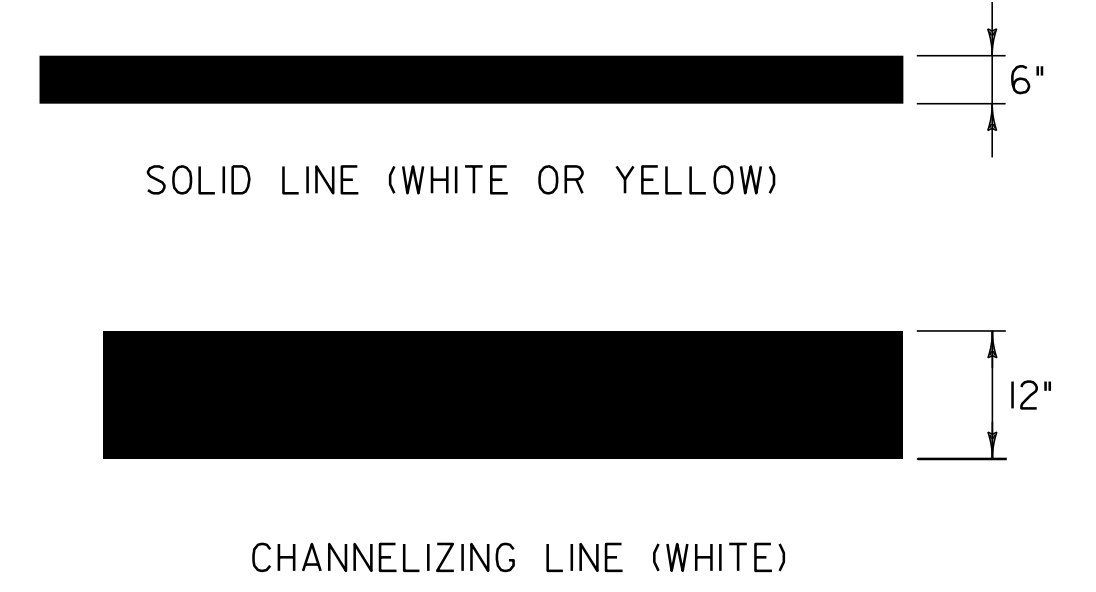
PROJECT NAME: WINDSOR - HARTLAND
PROJECT NUMBER: IM 09I-(6I)

FILE NAME: p07al42.dgn
PROJECT LEADER: D.E.G.
DESIGNED BY: M.J.L.
IPARM FILE: p07al42+td.i

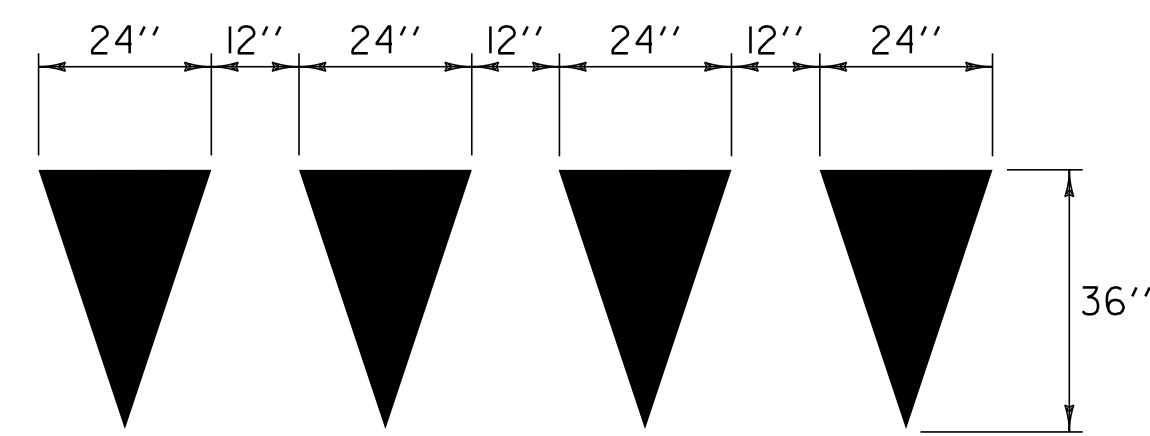
PLOT DATE: 16-AUG-2011 13:44
DRAWN BY: C.A.K.
CHECKED BY: R.A.B.
SHEET 53 OF 56



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

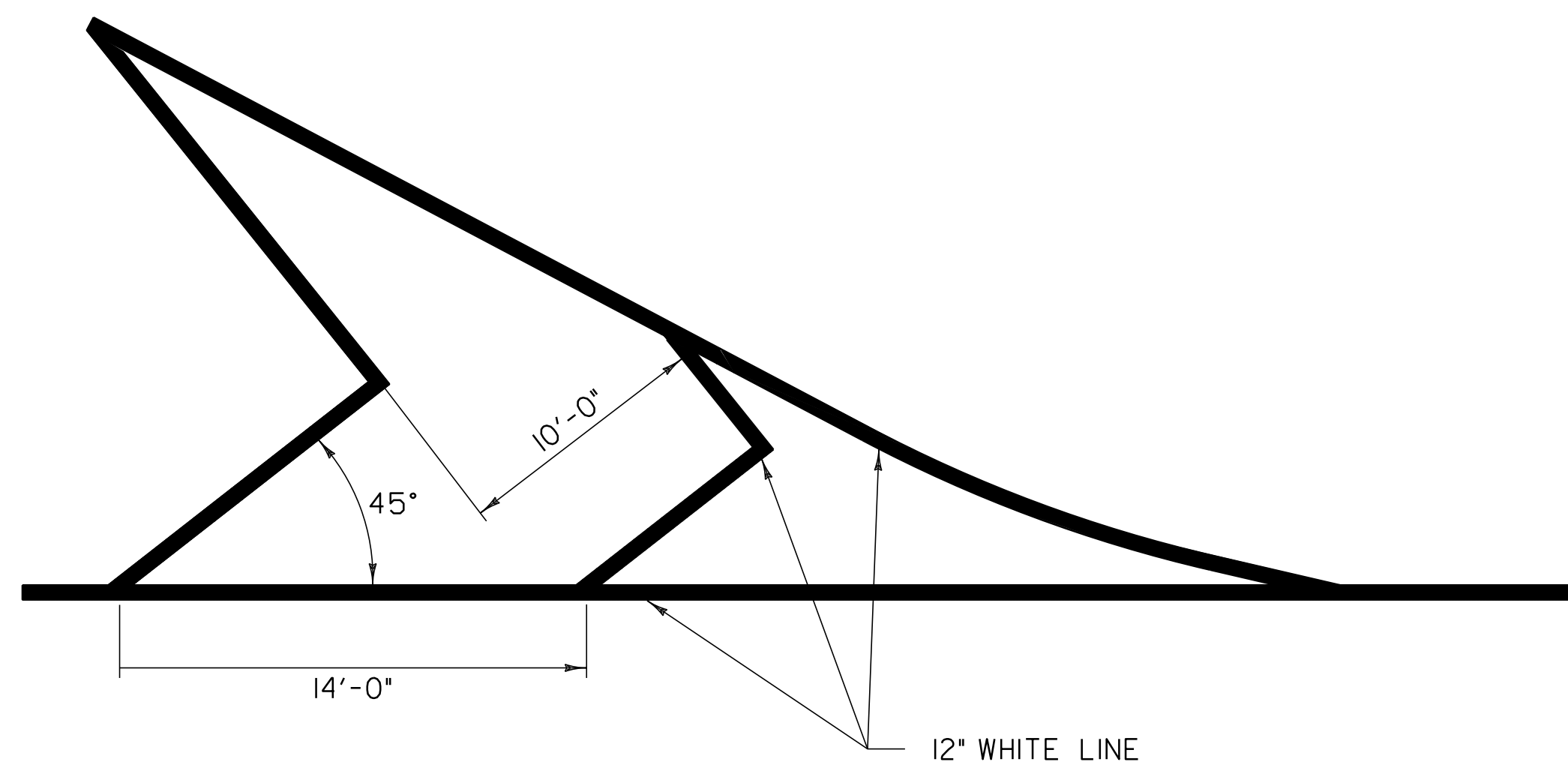
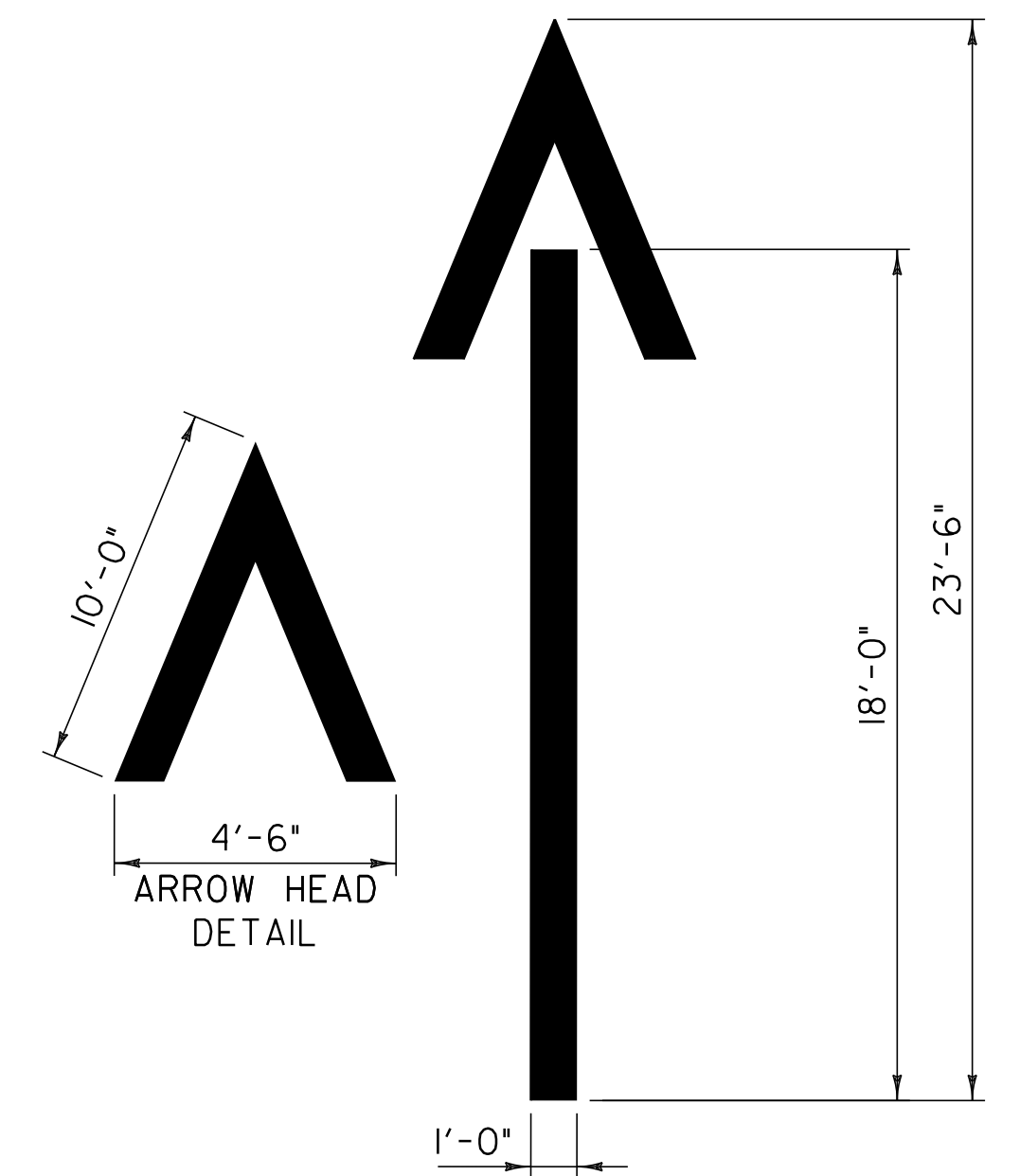


PAVEMENT MARKING LINE DETAILS



YIELD LINE DETAILS

NOTE:
 1. EACH TRIANGLE SHALL BE PAID AS ONE EACH ITEM 646.492 DURABLE LETTER OR SYMBOL OR 646.692 TEMPORARY LETTER OR SYMBOL.



GORE MARKING DETAIL

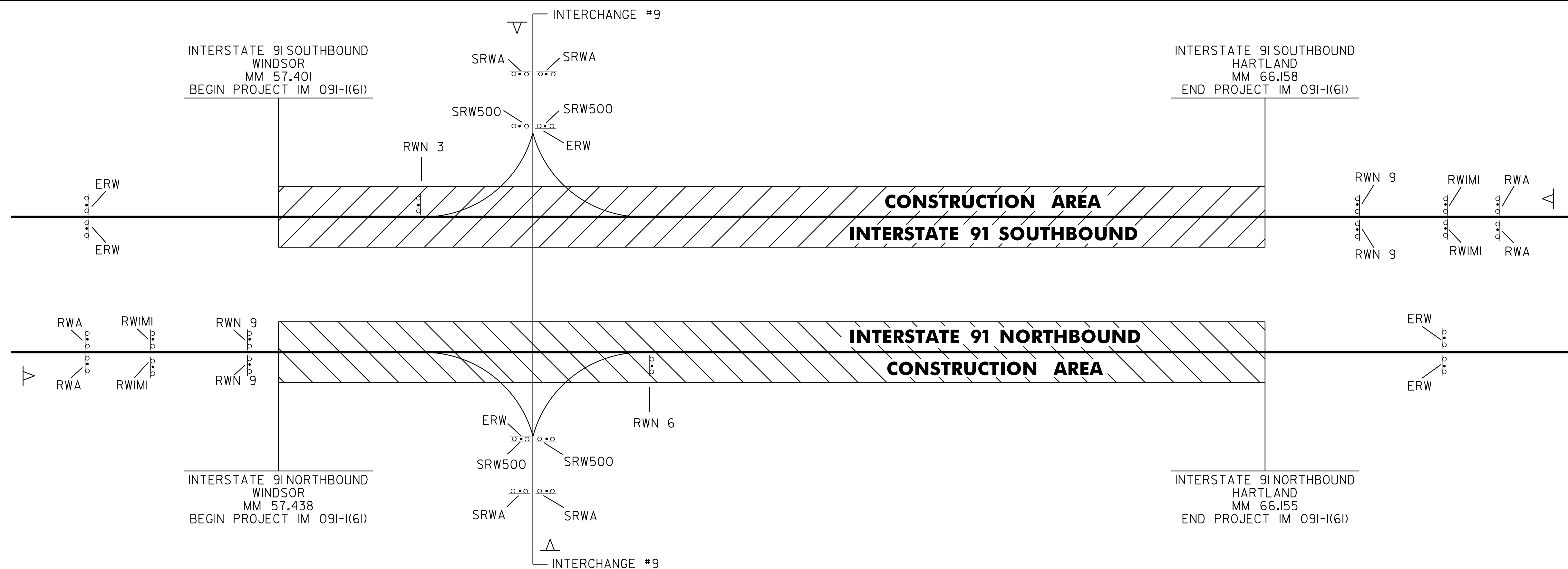
NOT TO SCALE

| | | | |
|-------------------------------------------|----------------------------------|------------------------|------------------------------|
| PAVEMENT MARKINGS DETAIL SHEET | PROJECT NAME: WINDSOR - HARTLAND | FILE NAME: p07al42.dgn | PLOT DATE: 16-AUG-2011 13:44 |
| | PROJECT NUMBER: IM 091-(161) | PROJECT LEADER: D.E.G. | DRAWN BY: C.A.K. |
| | DESIGNED BY: M.J.L. | CHECKED BY: R.A.B. | |
| | IPARM FILE: p07al42pmd.i | | SHEET 54 OF 56 |

| CULVERT LOCATIONS | | |
|-------------------|---------------|------|
| MM | SIZE (INCHES) | TYPE |
| NORTHBOUND: | | |
| 57.484 | 12 | CMP |
| 57.583 | 18 | CMP |
| 57.851 | 48 | CMP |
| 57.905 | 18 | RCP |
| 58.001 | 24 | RCP |
| 58.060 | 18 | RCP |
| 58.132 | 48 | CMP |
| 58.198 | 18 | CMP |
| 58.542 | 36 | RCP |
| 58.654 | 36 | RCP |
| 58.931 | 18 | RCP |
| 59.043 | 24 | RCP |
| 59.132 | 24 | CMP |
| 59.137 | 12 | CMP |
| 59.178 | 72 | CMP |
| 59.310 | 24 | RCP |
| 58.403 | 6 | CMP |
| 59.468 | 36 | CMP |
| 59.595 | - | - |
| 59.660 | 12 | CMP |
| 59.678 | 36 | RCP |
| 59.749 | 24 | CMP |
| 59.816 | 24 | CMP |
| 59.915 | 24 | CMP |
| 59.999 | 24 | RCP |
| 60.091 | 36 | CMP |
| 60.221 | - | - |
| 60.293 | - | - |
| 60.367 | 24 | RCP |
| 60.423 | 18 | RCP |
| 60.459 | 18 | RCP |
| 60.965 | 12 | CMP |
| 61.079 | 12 | CMP |
| 61.277 | 12 | CMP |
| 61.392 | 12 | CMP |
| 61.448 | 12 | CMP |
| 61.657 | 12 | RCP |
| 61.705 | 12 | CMP |
| 61.774 | 72 | CMP |
| 61.885 | 24 | CMP |
| 61.913 | - | - |
| 61.961 | - | - |
| 62.289 | 24 | CMP |
| 62.297 | 24 | CMP |
| 62.479 | 24 | RCP |
| 62.640 | 24 | RCP |
| 62.787 | 24 | RCP |
| 62.866 | 18 | CMP |
| 62.955 | - | - |
| 63.353 | 12 | CMP |
| 63.369 | 24 | CMP |
| 63.492 | 24 | RCP |
| 63.593 | 36 | CMP |
| 64.104 | 48 | CMP |
| 64.154 | 12 | CMP |
| 64.243 | 24 | CMP |
| 64.287 | 24 | CMP |
| 64.444 | 36 | CMP |
| 64.518 | 12 | CMP |
| 64.598 | 24 | CMP |
| 64.772 | 48 | CMP |
| 64.845 | 48 | CMP |
| 64.856 | 12 | CMP |
| 65.011 | 18 | RCP |
| 65.068 | 18 | CMP |
| 65.143 | 18 | CMP |
| 65.202 | 18 | CMP |
| 65.221 | 24 | CMP |
| 65.258 | 18 | RCP |
| 65.295 | - | - |
| 65.352 | 12 | CMP |
| 65.391 | 18 | CMP |
| 65.809 | 18 | CMP |
| 65.835 | 18 | RCP |

| CULVERT LOCATIONS | | |
|-------------------|---------------|------|
| MM | SIZE (INCHES) | TYPE |
| SOUTHBOUND: | | |
| 57.577 | - | - |
| 57.732 | 18 | RCP |
| 57.803 | 48 | CMP |
| 58.037 | 12 | RCP |
| 58.106 | 36 | CMP |
| 58.528 | 36 | CMP |
| 58.664 | 36 | CMP |
| 58.831 | 24 | CMP |
| 59.191 | 72 | CMP |
| 59.800 | 30 | CMP |
| 59.938 | 36 | CMP |
| 60.423 | 36 | RCP |
| 60.484 | 36 | RCP |
| 60.720 | 18 | RCP |
| 61.069 | 24 | CMP |
| 61.387 | 18 | CMP |
| 61.595 | 24 | RCP |
| 61.633 | 24 | RCP |
| 61.784 | - | - |
| 61.901 | 24 | CMP |
| 61.954 | 24 | RCP |
| 62.030 | 24 | RCP |
| 62.296 | - | - |
| 62.450 | 24 | RCP |
| 62.620 | 24 | RCP |
| 62.767 | 18 | RCP |
| 62.848 | 24 | RCP |
| 62.915 | 24 | CMP |
| 63.441 | 72 | - |
| 63.484 | 12 | CMP |
| 63.598 | 24 | - |
| 63.694 | 24 | CMP |
| 63.794 | 36 | RCP |
| 63.852 | 36 | CMP |
| 63.907 | 24 | CMP |
| 64.086 | 60 | CMP |
| 64.332 | 42 | CMP |
| 64.445 | 8 | CMP |
| 64.456 | 18 | CMP |
| 64.491 | 60 | CMP |
| 64.594 | 60 | CMP |
| 64.816 | 48 | CMP |
| 64.820 | 24 | CMP |
| 64.920 | 72 | CMP |
| 65.090 | 24 | CMP |
| 65.336 | 18 | CMP |
| 65.690 | 18 | CMP |
| 65.764 | 24 | CMP |
| | | |
| RAMP A: | | |
| A5+55.0 | - | - |
| A8+91.0 | - | - |
| | | |
| RAMP B: | | |
| B8+15.0 | 24 | CMP |
| | | |
| RAMP C: | | |
| C1+62.0 | 24 | CMP |
| C6+50.0 | 24 | CMP |
| | | |
| RAMP D: | | |
| D10+53.0 | 24 | CMP |

| | |
|--------------------------------------------------|----------------------------------|
| CULVERT LOCATION TABLES SHEET | PROJECT NAME: WINDSOR - HARTLAND |
| | PROJECT NUMBER: IM 091-(161) |
| | FILE NAME: p07al42.dgn |
| | PLOT DATE: 16-AUG-2011 13:44 |
| | PROJECT LEADER: D.E.G. |
| | DRAWN BY: C.A.K. |
| | DESIGNED BY: M.J.L. |
| | CHECKED BY: R.A.B. |
| | IPARM FILE: p07al42c11.i |
| | SHEET 55 OF 56 |



| HIGHWAY NAME | RWA | SRWA | ERW | SRW500 | RWIMI | RWN 3 | RWN 6 | RWN 9 | OTHER |
|------------------------------------------|-----|------|-----|--------|-------|-------|-------|-------|----------------------------------|
| INTERSTATE 91 NORTHBOUND - BEGIN PROJECT | 2 | | | | 2 | | | 2 | 1-PORT. CHANGEABLE MESSAGE SIGN |
| INTERSTATE 91 NORTHBOUND - END PROJECT | | | 2 | | | | | | |
| INTERSTATE 91 SOUTHBOUND - BEGIN PROJECT | | | 2 | | | | | | |
| INTERSTATE 91 SOUTHBOUND - END PROJECT | 2 | | | | 2 | | | 2 | 1-PORT. CHANGEABLE MESSAGE SIGN |
| INTERCHANGE #9 | | 4 | 2 | 4 | | 1 | 1 | | 2-PORT. CHANGEABLE MESSAGE SIGNS |
| TOTALS | 4 | 4 | 6 | 4 | 4 | 1 | 1 | 4 | 4-PORT. CHANGEABLE MESSAGE SIGNS |

| 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 3 | = ROAD WORK NEXT 3 MILES |
| RWN 6 | = ROAD WORK NEXT 6 MILES |
| RWN 9 | = ROAD WORK NEXT 9 MILES |
| ◁ | = PORTABLE CHANGEABLE MESSAGE SIGN |

CONSTRUCTION APPROACH SIGNING

NOTES:

- THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN FOR APPROVAL PRIOR TO THE START OF CONSTRUCTION. THE COST OF PREPARING THIS PLAN (AND MAKING CHANGES IF NECESSARY) WILL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 641.10 TRAFFIC CONTROL.
- THE CONTRACTOR SHALL INCLUDE A CONSTRUCTION SIGN APPROACH PACKAGE FOR EXPECTED LANE CLOSURES AND WORK ZONE SPEED REDUCTIONS IN COMPLIANCE WITH VAOT STD. E-103. PAYMENT FOR THIS PACKAGE WILL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 641.10 TRAFFIC CONTROL.
- 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.
- THE CONTRACTOR SHALL POSITION A PORTABLE CHANGEABLE MESSAGE SIGN PRIOR TO I-91 INTERCHANGE #9, 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 ADVANCE FOR APPROVAL. THE COST OF PROVIDING THIS MESSAGE SIGN SHALL BE PAID UNDER ITEM 641.15 PORTABLE CHANGEABLE MESSAGE SIGN. THE CONTRACTOR SHALL ALSO INSTALL AND MAINTAIN THE APPROPRIATE CONSTRUCTION SIGNING WHICH WARNS THE TRAVELING PUBLIC OF THE ROUGH ROADWAY SURFACE. PORTABLE CHANGEABLE MESSAGE SIGNS ARE TO BE USED AS DIRECTED BY THE RESIDENT ENGINEER.
- CONSTRUCTION ZONE SIGN LAYOUT SHALL BE IN ACCORDANCE WITH SECTION 6 OF THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
- SEE VAOT STD. E-100 FOR ADDITIONAL SIGN PLACEMENT DETAILS.
- CONSTRUCTION SIGNS SHALL BE IN NEW OR LIKE NEW CONDITION PER VAOT STANDARDS.
- DIAMOND SHAPED SIGNS SHALL BE 4' X 4' WITH BLACK LEGEND ON FLUORESCENT ORANGE BACKGROUND.
- RETROREFLECTIVE SIGN SHEETING SHALL BE MINIMUM TYPE VII FOR ALL SOLID SUBSTRATE SIGNS AND MINIMUM TYPE VI FOR ALL ROLL-UP SIGNS.
- ALL SIGN STANDS AND POST INSTALLATIONS SHALL BE NATIONAL COOPERATIVE HIGHWAY RESEARCH PROGRAM REPORT (NCHRP) 350 COMPLIANT.
- 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.
- PAYMENT FOR CONSTRUCTION SIGNING SHALL BE MADE UNDER ITEM 641.10 TRAFFIC CONTROL.
- ADDITIONAL CONSTRUCTION SIGNING MAY BE REQUIRED ON THE RAMPS AT INTERCHANGE #9 AS DIRECTED BY THE RESIDENT ENGINEER. PAYMENT FOR ANY ADDITIONAL CONSTRUCTION SIGNING SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 641.10.

NOT TO SCALE

| TRAFFIC CONTROL PLAN SHEET | PROJECT NAME: WINDSOR - HARTLAND | |
|----------------------------|----------------------------------|------------------------------|
| | PROJECT NUMBER: IM 091-I(6I) | |
| | FILE NAME: p07al42.dgn | PLOT DATE: 16-AUG-2011 13:44 |
| | PROJECT LEADER: D.E.G. | DRAWN BY: C.A.K. |
| DESIGNED BY: M.J.L. | CHECKED BY: R.A.B. | |
| IPARM FILE: p07al42+cpd.i | SHEET 56 OF 56 | |