

ORDER OF SHEETS		
Section No. 1	Title	
Section No. 2	Typical Sections and Details	
Section No. 3	Estimate of Quantities	
Section No. 3	Miscellaneous Quantities	
~~Section No. 4~~	~~Right of Way Plat~~	
Section No. 5	Plan and Profile	
Section No. 6	Standard Detail Drawings	
Section No. 7	Sign Plates	
~~Section No. 8~~	~~Structure Plans~~	
Section No. 9	Computer Earthwork Data	
Section No. 9	Cross Sections	

TOTAL SHEETS = 354

Section No. 2 Sheet 13 replaced with 13a&13b



DESIGN DESIGNATION

A.D.T. 2006	=	12,000
A.D.T. 2026	=	17,500
D.H.V.	=	945
D.	=	58 - 42%
T.	=	5.4
DESIGN SPEED	=	50 MPH
ESALS	=	6.8%

CONVENTIONAL SYMBOLS

PLAN	
CORPORATE LIMITS	
PROPERTY LINE	
LOT LINE	
LIMITED HIGHWAY EASEMENT	
EXISTING RIGHT OF WAY	
PROPOSED OR NEW R/W LINE	
SLOPE INTERCEPT	
REFERENCE LINE	
EXISTING CULVERT	
PROPOSED CULVERT (Box or Pipe)	
COMBUSTIBLE FLUIDS	
MARSH AREA	
WOODED OR SHRUB AREA	
EROSION MAT	

PROFILE

GRADE LINE	
ORIGINAL GROUND	
MARSH OR ROCK PROFILE (To be noted as such)	
SPECIAL DITCH	
GRADE ELEVATION	
CULVERT (Profile View)	
UTILITIES	
ELECTRIC	
FIBER OPTIC	
GAS	
SANITARY SEWER	
STORM SEWER	
TELEPHONE	
WATER	
UTILITY PEDESTAL	
POWER POLE	
TELEPHONE POLE	

STA 0+75
X=56906.5594
Y=561571.1738

BEGIN PROJECT

STA 1+00.00
X=56924.843
Y=561588.224



END PROJECT

STA 158+00

NOTE: SEVERAL
ELEVATION ERRORS IN
PLAN CROSS SECTIONS.
HAVE SURVEY PERFORMED
PRIOR TO USING ANY DATA
FROM CROSS SECTIONS

COORDINATES ON THIS PLAN ARE REFERENCED TO
THE WISCONSIN COUNTY COORDINATE SYSTEM
(WCCS), BROWN COUNTY NAD 83 (1991).

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
PLAN OF PROPOSED IMPROVEMENT
STH 54 - PACKERLAND DRIVE
AIRPORT ENTRANCE & STH 54 INT
STH 172
BROWN COUNTY

STATE PROJECT NUMBER
9280-04-72

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
9280-04-72	WISC 2011131	1

AS-BUILT PLAN

SUPERVISOR: Steve Noel
PROJECT LEADER: Bryan Learst
CONTRACTOR: RC Excavating, Inc.
WORK COMPLETED: 09/30/2011

Subcontractor List

Bodart Electric Service, INC.
Century Fence Company
Choice Construction Companies, INC.
Double D Landscape, LLC
Martell Construction, INC.
Mid-State Concrete Cutting CO.
Northeast Asphalt, INC.
Warning Lites of Appleton, INC.
Wisconsin Land Surveying, INC
MCM Excavation and Landscaping
Snowden, INC.
MCC, INC.
Vinton Construction Company

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	
Designer	E. J. HOEFFERLE
Project Manager	D. J. SEGERSTROM
District Examiner	
District Supervisor	S. C. NOEL
C.O. Examiner	

APPROVED FOR DISTRICT OFFICE

DATE: 11/1/10

LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,60,61,62,63

UTILITIES

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MILLER TW@CO.BROWN.WI.US

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APPLETON, WI 54915
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OSHKOSH, WI 54901
(920) 236-5901
DTPETERSEN@WISCONSINPUBLICSERVICE.COM

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2850 S. ASHLAND AVENUE
GREEN BAY, WI 54307
(920) 617-5092
CJSTREBEL@WISCONSINPUBLICSERVICE.COM

GENERAL NOTES

ALL ELEVATIONS ON THIS PROJECT ARE REFERENCED TO THE NATIONAL GEODETIC VERTICAL DATUM OF (NGVD 29).

DISTURBED AREAS WITHIN THE RIGHT-OF-WAY, EXCEPT THE AREAS WITHIN THE FINISHED SHOULDER POINTS, SHALL BE FERTILIZED, SEEDED AND MULCHED.

EXCAVATION BELOW SUBGRADE (EBS), IS NOT USED TO BALANCE YARDAGE AND IS NOT SHOWN ON THE CROSS SECTIONS BUT IS MEASURED AND PAID FOR AS COMMON EXCAVATION.

THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.

INLET AND DISCHARGE ELEVATIONS FOR DRAINAGE STRUCTURES SHOWN ON THE PLAN ARE APPROXIMATE AND SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

INLET GRATE ELEVATIONS REFERRED TO ON INLET NOTES ARE TO THE EDGE OF PAVEMENT (TO THE FLANGE OF THE CURB).

REINFORCED CONCRETE APRON ENDWALLS AND ADJOINING TWO SECTIONS OF CONCRETE PIPE SHALL BE TIED TOGETHER AS SHOWN ON THE STANDARD DETAIL DRAWINGS AND AS LOCATED IN THE MISCELLANEOUS QUANTITIES. JOINT TIES SHALL BE INCIDENTAL TO VARIOUS ITEMS.

PRIOR TO ORDERING DRAINAGE PIPES AND STRUCTURES, THE CONTRACTOR SHALL VERIFY RELATED DRAINAGE INFORMATION IN THE PLAN WITH THE ENGINEER.

THE EXACT LOCATIONS AND LIMITS OF FIELD, PRIVATE AND COMMERCIAL ENTRANCES SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

EROSION CONTROL MEASURES SHALL BE PLACED AS SHOWN ON THE EROSION CONTROL PLAN. THE EXACT LOCATIONS WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.

THE FACTOR USED FOR EXPANDING THE FILLS TO COMPUTE THE VOLUME OF MATERIAL IS SHOWN ON THE EARTHWORK TABLES.

THE LANDMARK REFERENCE MONUMENTS QUANTITY IS LISTED ASSUMING ALL MONUMENTS CAN NOT BE LOCATED. THE ACTUAL QUANTITY SHOULD BE DETERMINED BY THE ENGINEER IN THE FIELD.

TOPSOIL HAS BEEN COMPUTED BY DIRECT MEASUREMENTS ON THE CROSS SECTIONS PLUS FIVE FEET BEYOND THE TOE OF SLOPE.

IMMEDIATELY AFTER CONSTRUCTION OF ANY INLET, CONTRACTOR SHALL CONSTRUCT THE INLET PROTECTION TO MINIMIZE SEDIMENTATION IN THE INLET AND STORM SEWER.

CURB HEIGHTS AT THE ENDS OF CURB AND GUTTER SHALL BE TAPERED FROM 6 INCHES TO 0 INCHES IN 10 FEET, WHERE APPLICABLE.

SAWCUT LOCATIONS SHOWN ON THE PLAN ARE SUBJECTED TO ADJUSTMENT BY THE ENGINEER IN THE FIELD. THE LINE OF SUCH SAWCUTS SHALL BE NEATLY DELINEATED THRU THE ASPHALTIC AND/OR CONCRETE PAVEMENT WITHOUT ANY DAMAGE TO THE REMAINING PORTION OF THE EXISTING PAVEMENT.



Call 811 3 Work Days Before You Dig
or Toll Free (800) 242-8511
Hearing Impaired TDD (800) 542-2289
www.DiggersHotline.com

DNR AREA LIAISON

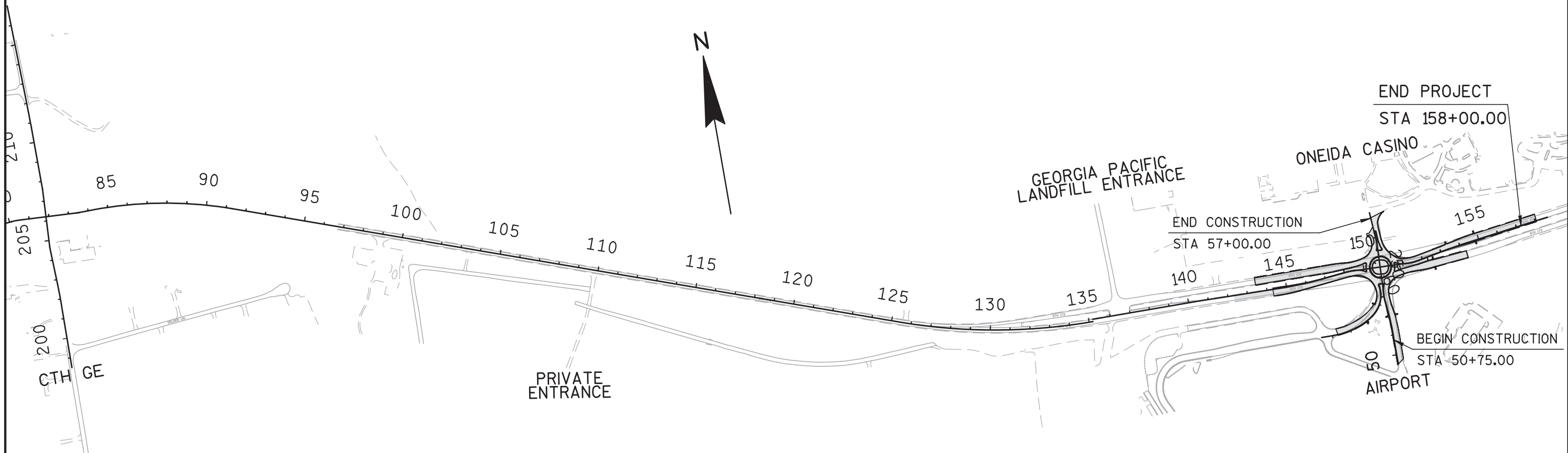
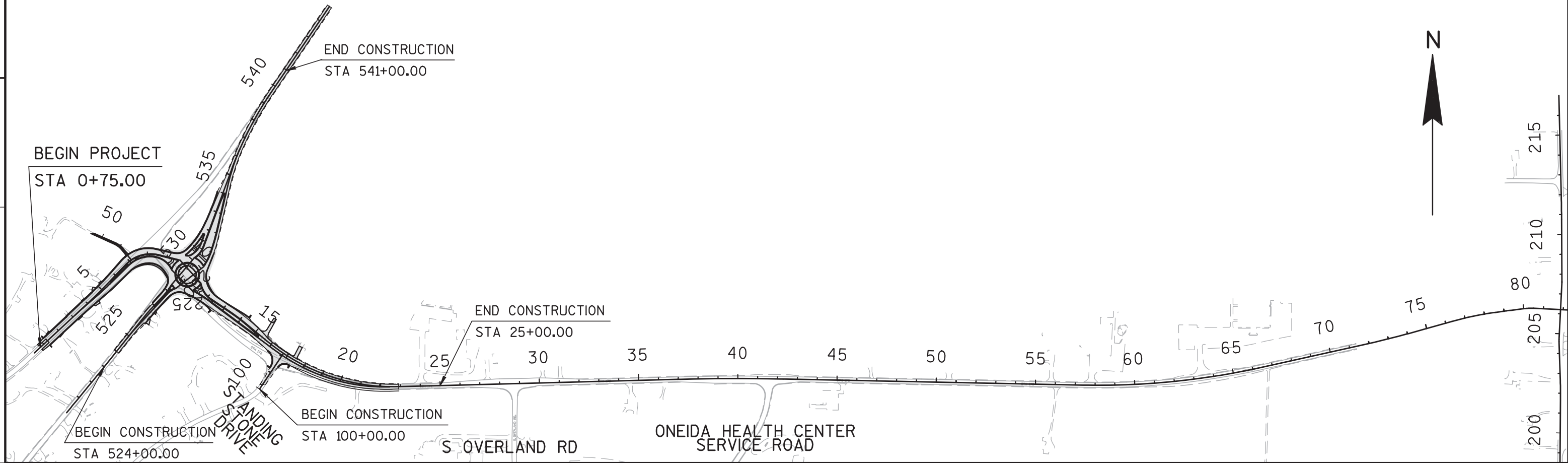
JAMES DOPERALSKI JR
DEPARTMENT OF NATURAL RESOURCES
NORTHEAST REGION
2984 SHAWANO AVE
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920-662-5119
JAMES.DOPERALSKI@WISCONSIN.GOV

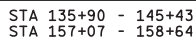
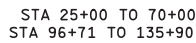
COUNTY SURVEYOR

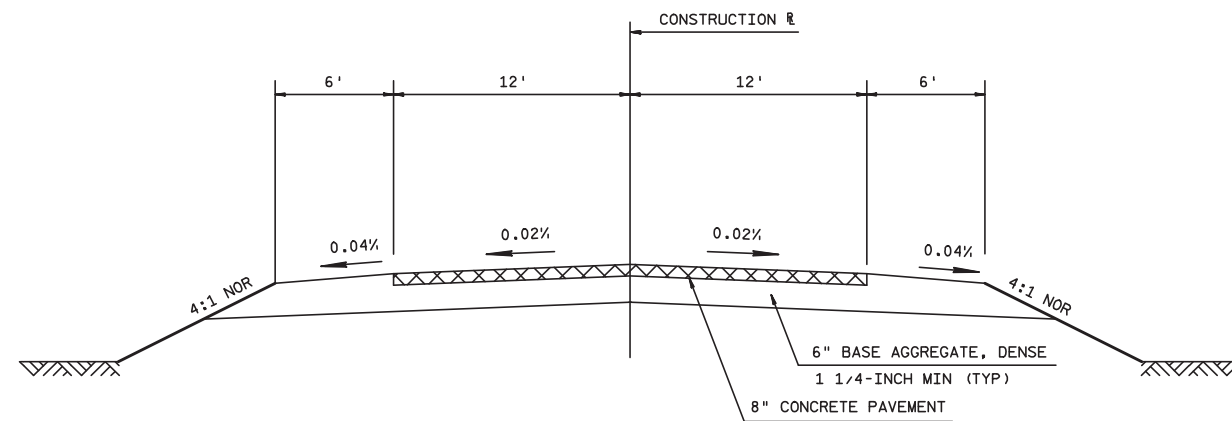
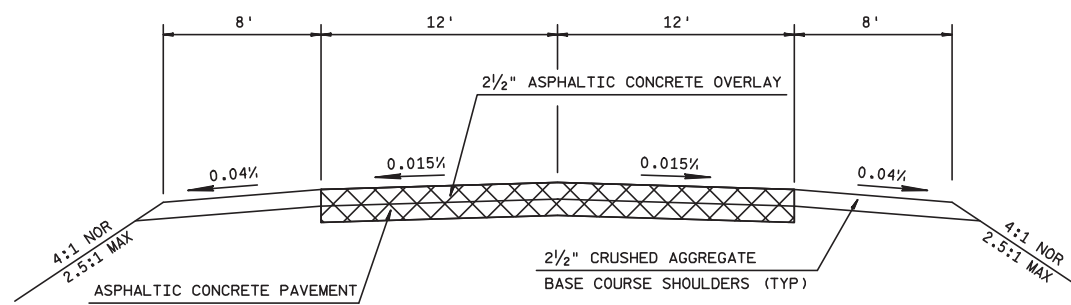
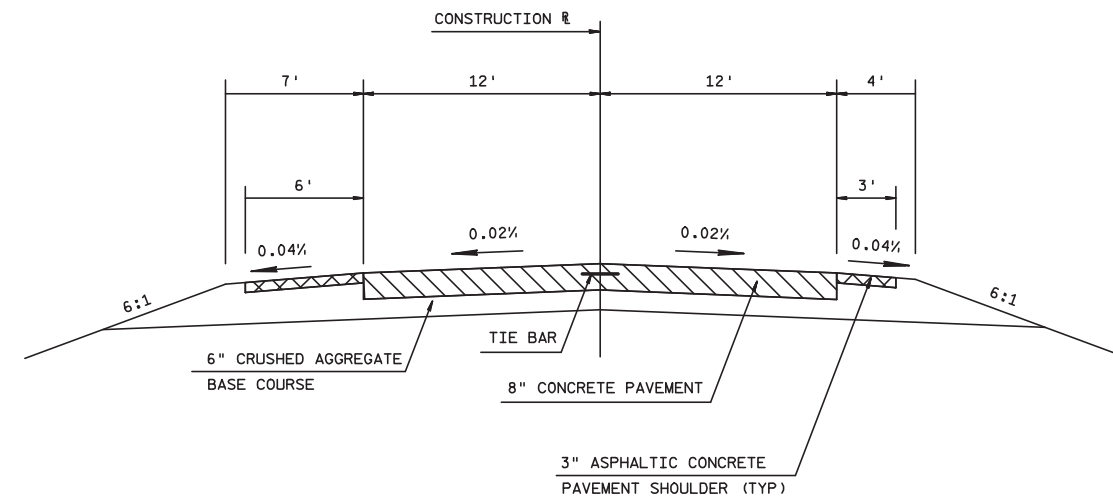
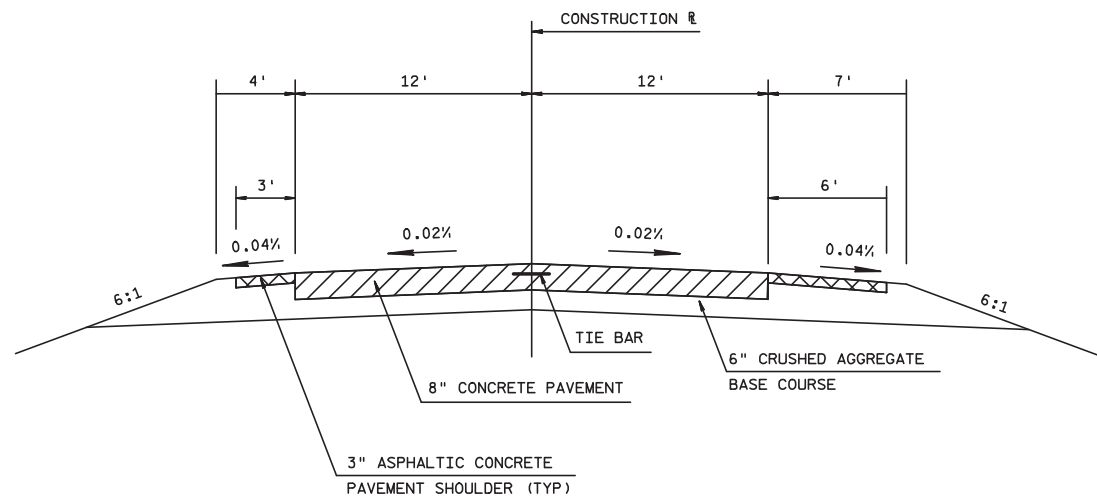
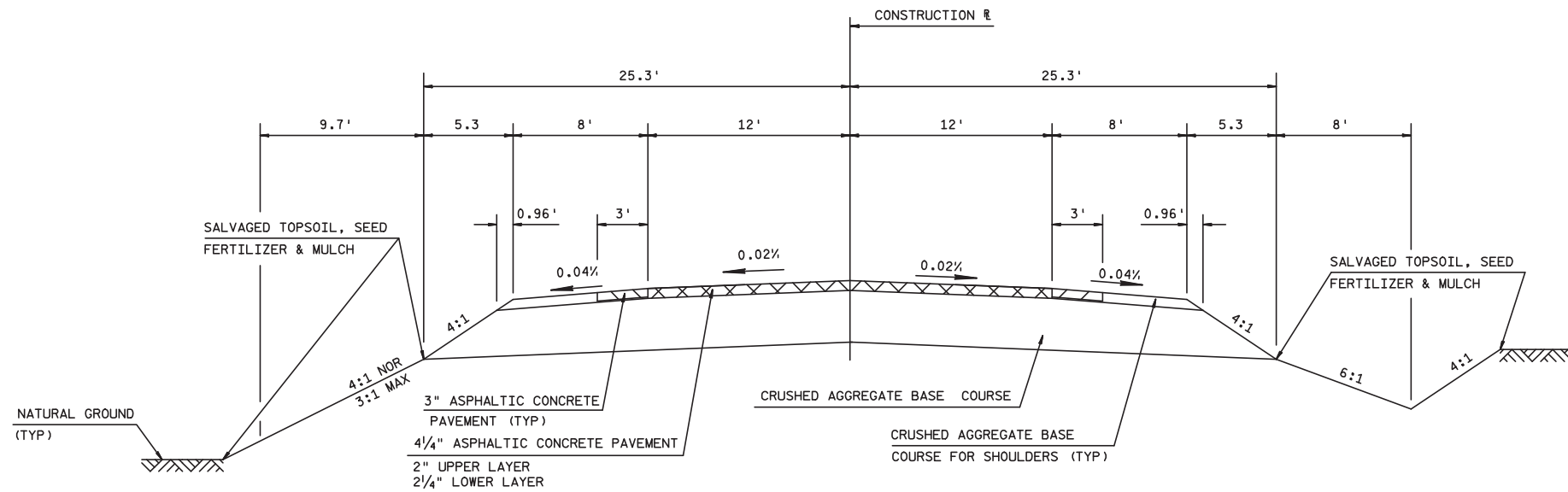
PAT FORD - BROWN COUNTY
305 EAST WALNUT STREET
GREEN BAY, WI 54301
920-448-4493
ford.pj@co.brown.wi.us

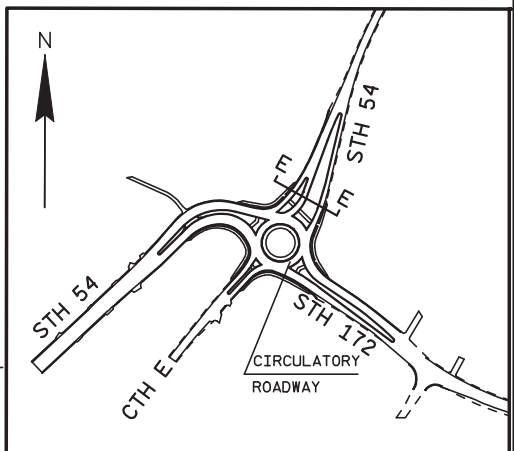
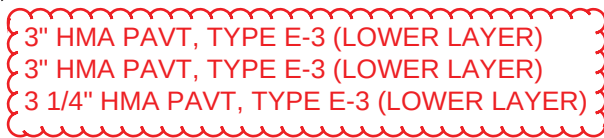
HIGHWAY COMMISSIONER

BRIAN LAMERS - BROWN CO HIGHWAY DEPARTMENT
2198 GLENDALE AVENUE
GREEN BAY, WI 54303
920-492-4925
smlth.wr@co.brown.wi.us

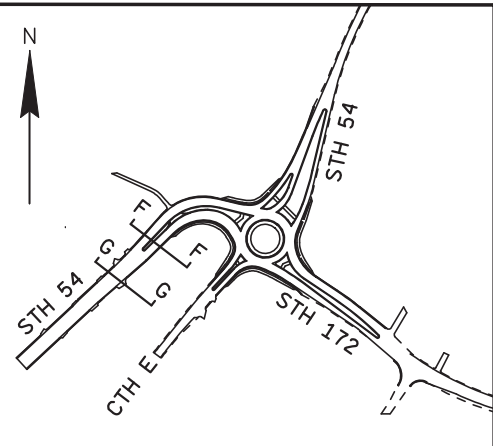
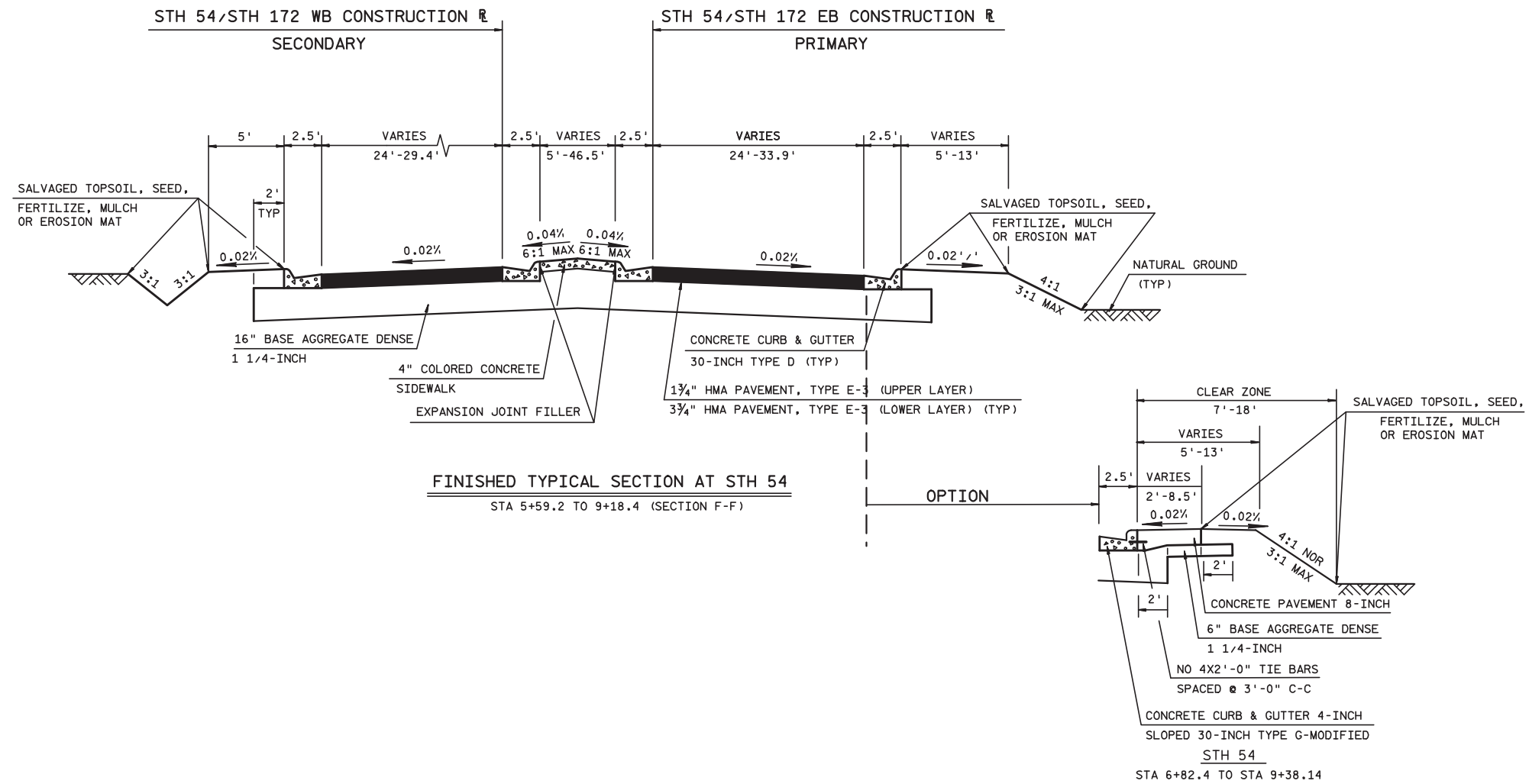




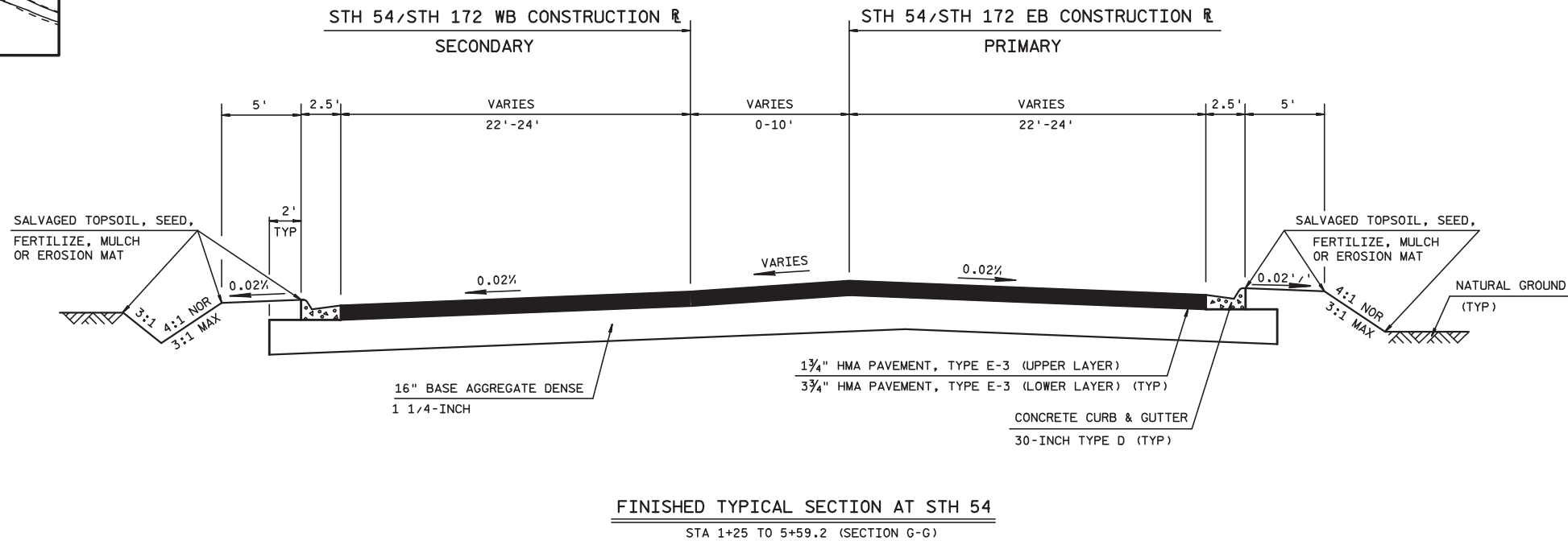


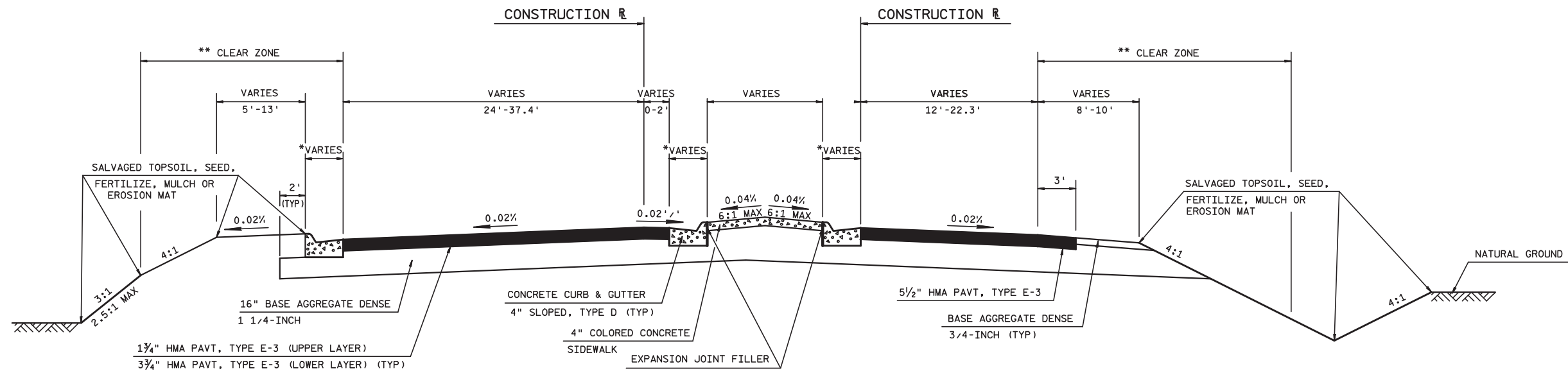


LOCATION MAP



LOCATION MAP



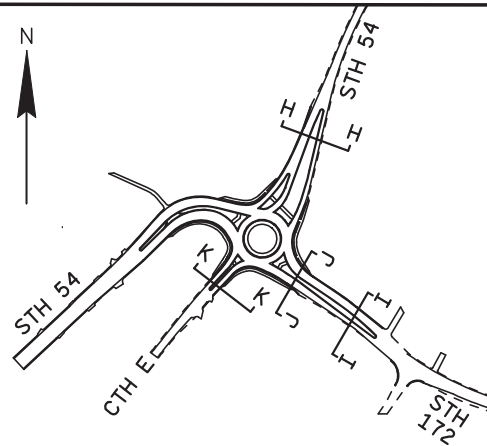
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STH 54 (SECTION H-H)
STA 531+80.1 TO 534+04

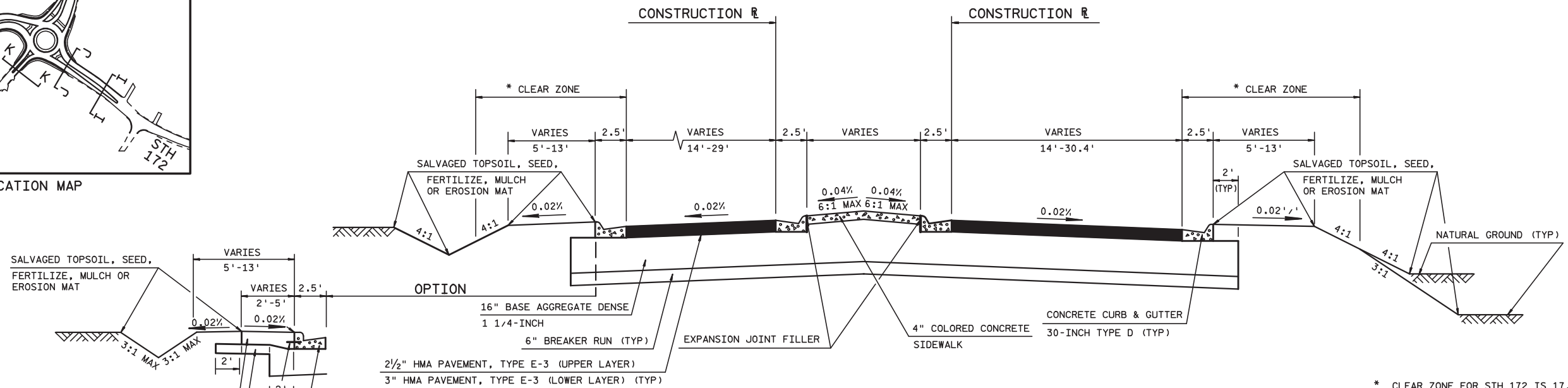
STH 172 (SECTION I-I)
STA 12+47.9 TO 15+24.9

* CURB & GUTTER, 30-INCH, TYPE D REQUIRED
AT STA 531+80.1 TO 533+10.4 FOR STH 54
AT STA 12+47.9 TO 14+25.8 FOR STH 172
CURB & GUTTER, 36-INCH, TYPE D REQUIRED
AT STA 533+10.4 TO 534+04 FOR STH 54
AT STA 14+25.8 TO 15+24.9 FOR STH 172

** CLEAR ZONE FOR STH 54 IS 18'
CLEAR ZONE FOR STH 172 IS 24'



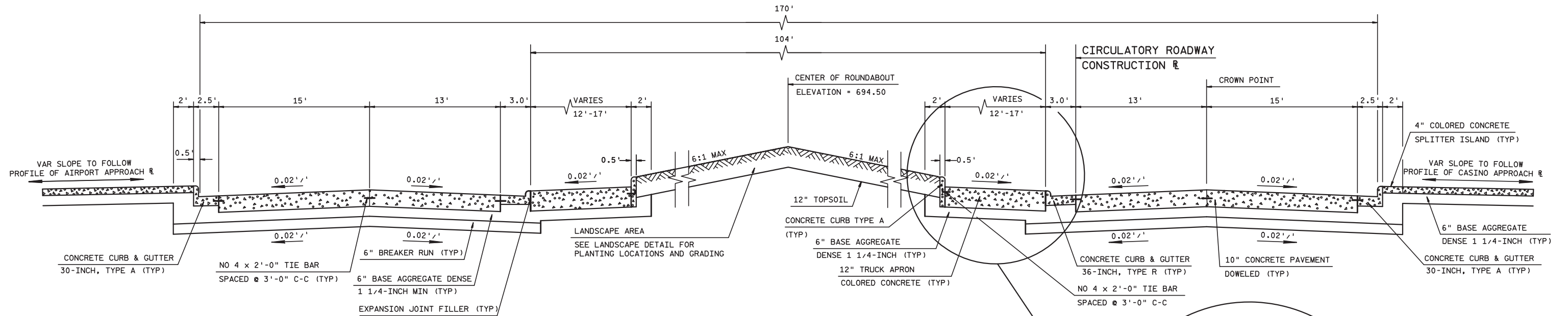
LOCATION MAP

**FINISHED TYPICAL SECTION FOR SPLITTER ISLANDS**

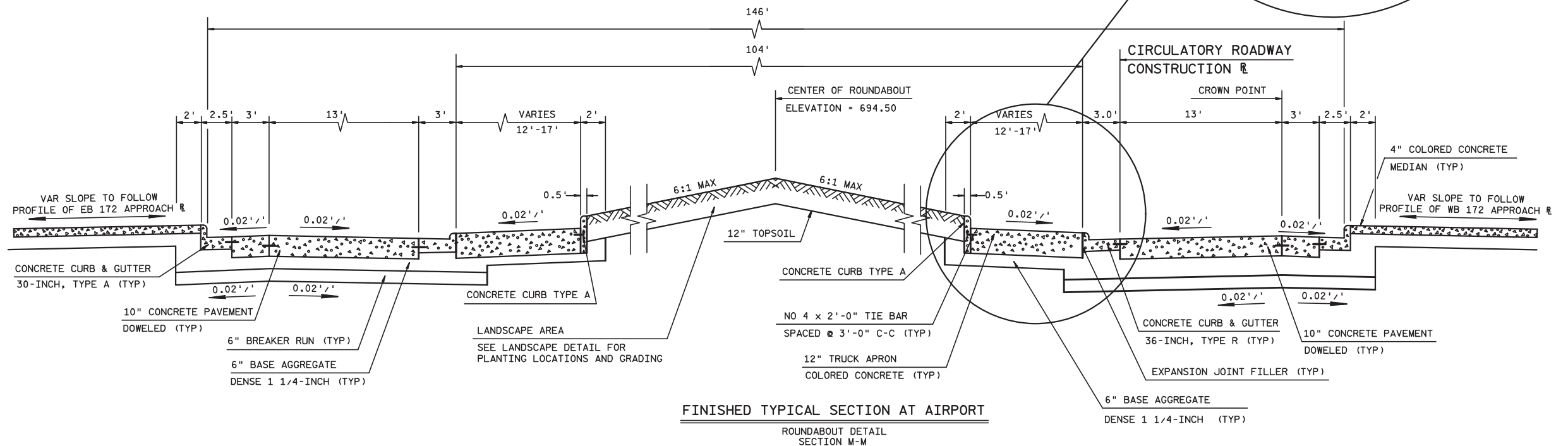
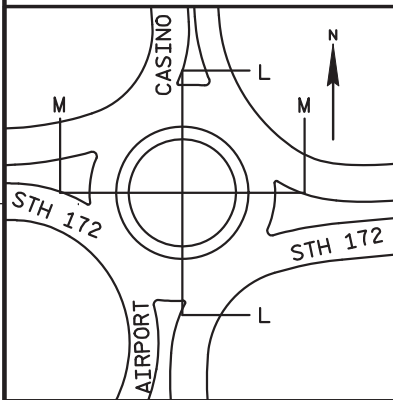
CTH E (SECTION K-K)
STA 526+94.5 TO 528+34

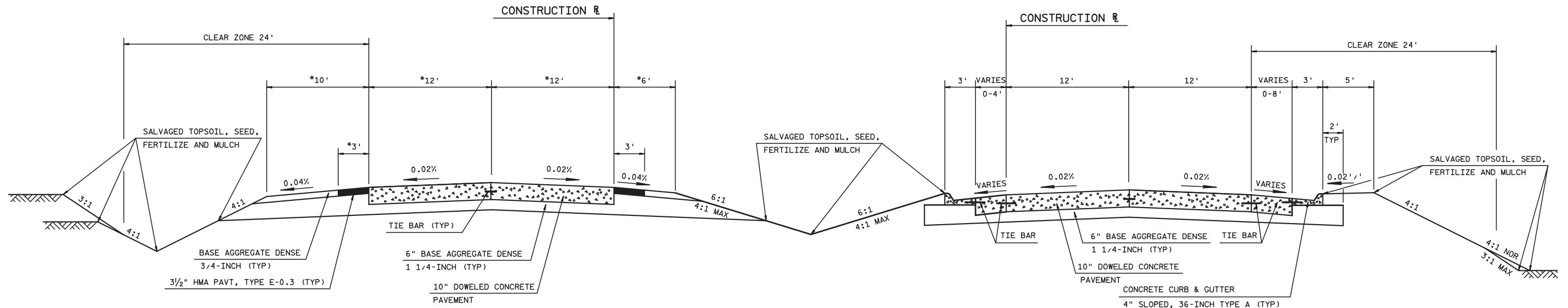
STH 172 (SECTION J-J)
STA 11+13 TO 12+47.9

* CLEAR ZONE FOR STH 172 IS 17.5'
CLEAR ZONE FOR CTH E IS 13'



LOCATION MAP

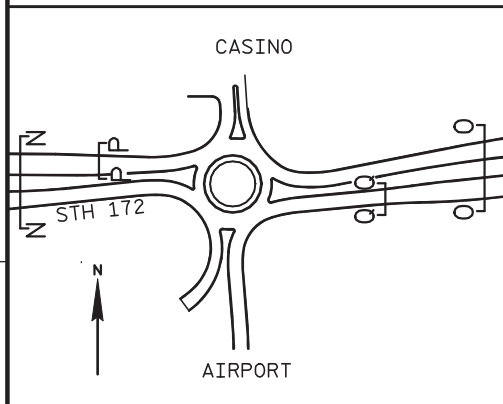




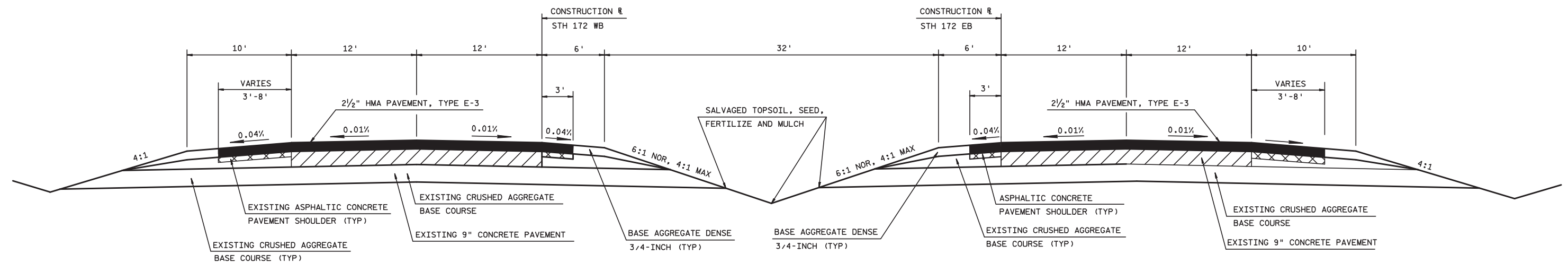
* STA 145+75 TO 146+75

FINISHED TYPICAL SECTION STH 172

STA 144+45 TO 146+75 - (SECTION N-N)
STA 152+50 TO 154+55 - (SECTION O-O)

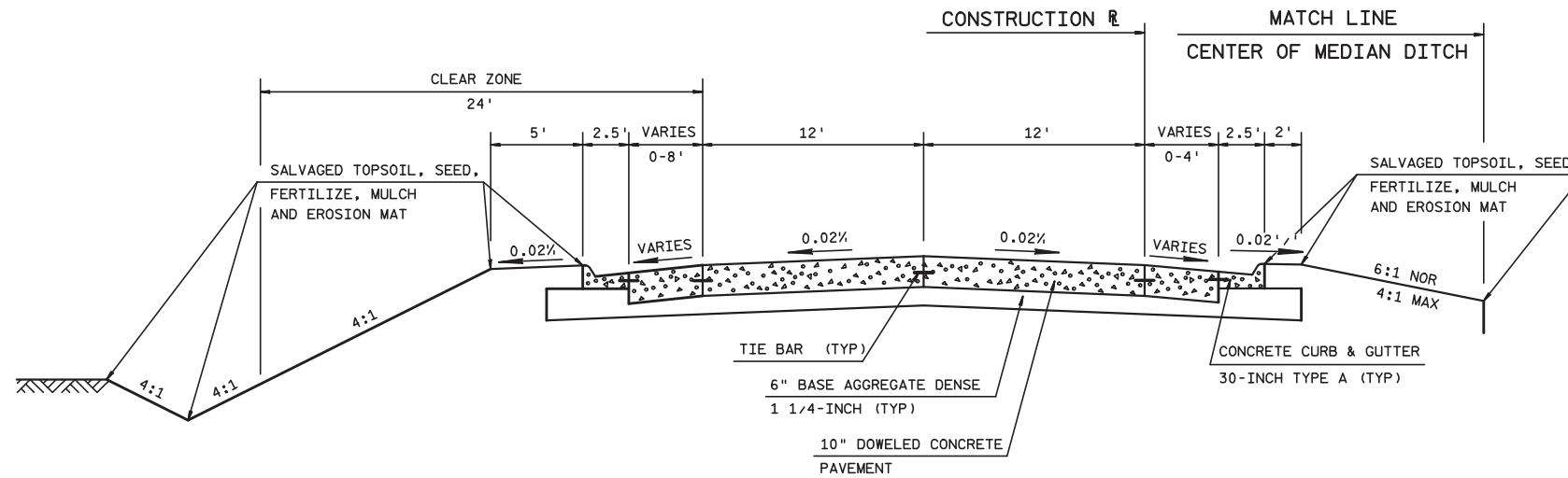


LOCATION MAP



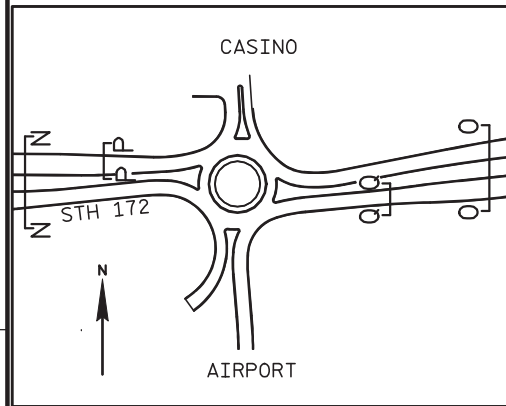
FINISHED TYPICAL SECTION FOR STH 172 (OVERLAY)

STA 135+48 - 145+75

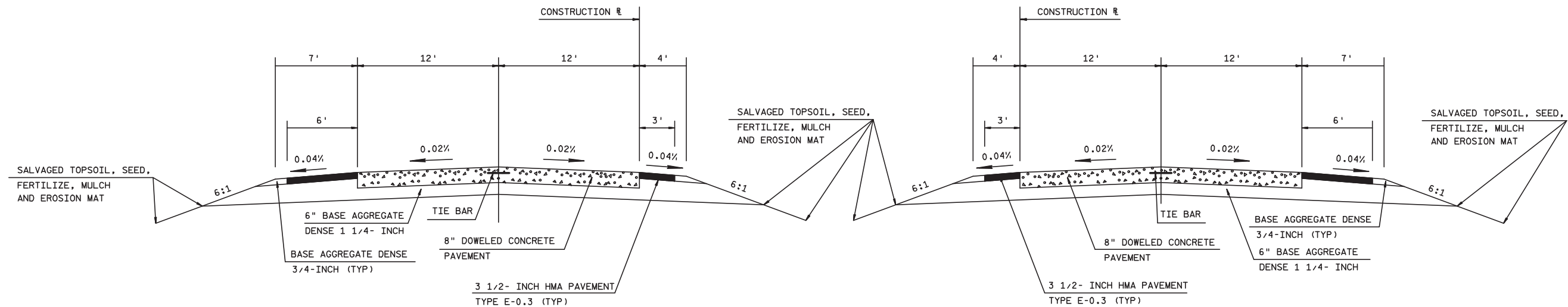


FINISHED TYPICAL SECTION STH 172

STA 146+95 TO 148+50 - WESTBOUND ROUNDABOUT EXIT (SECTION P-P)
STA 151+12 TO 152+44 - EASTBOUND ROUNDABOUT EXIT (SECTION Q-Q)



LOCATION MAP

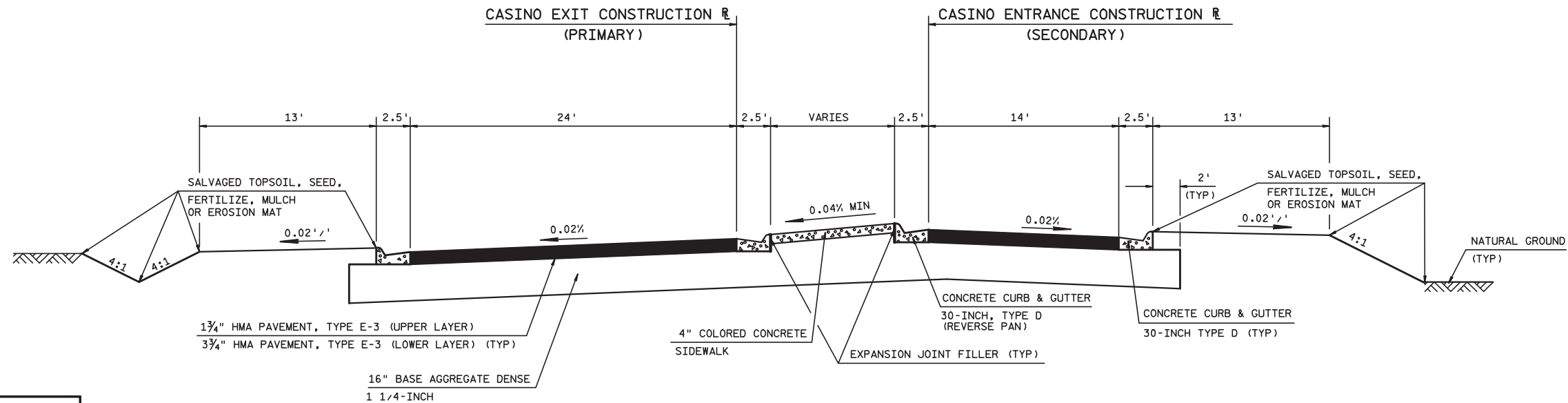


FINISHED TYPICAL SECTION FOR AIRPORT ENTRANCE

STA 62+00 TO 63+50

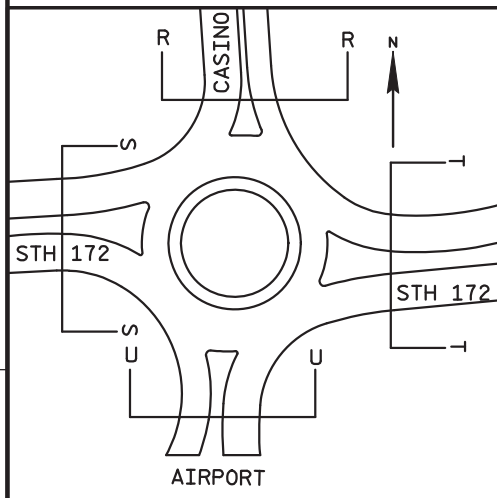
FINISHED TYPICAL SECTION FOR AIRPORT EXIT

STA 50+75 TO 52+79

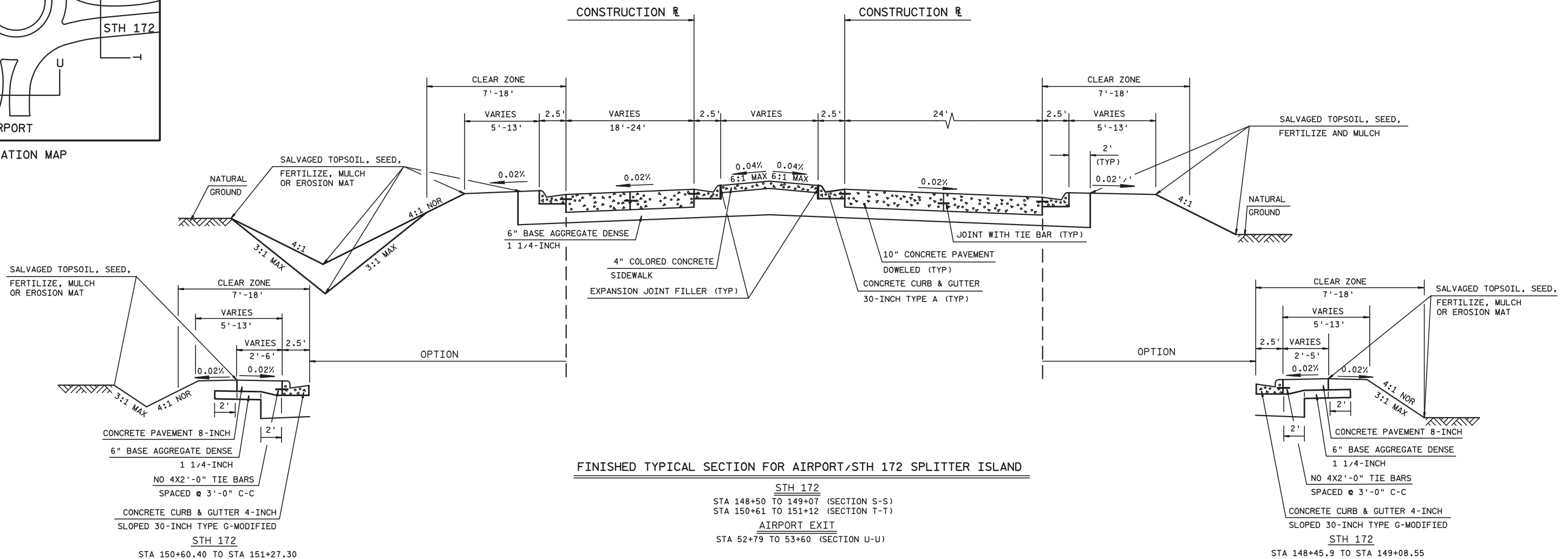


FINISHED TYPICAL SECTION FOR CASINO SPLITTER ISLAND

STA 55+37 TO 56+00 (SECTION R-R)



LOCATION MAP



FINISHED TYPICAL SECTION FOR AIRPORT/STH 172 SPLITTER ISLAND

STH 172

STA 148+50 TO 149+07 (SECTION S-S)

STA 150+61 TO 151+12 (SECTION T-T)

AIRPORT EXIT

STA 52+79 TO 53+60 (SECTION U-U)

SOIL PARAMETERS

UNIT WEIGHT	110 PCF
FRICTION ANGLE	30°
COHESION	500 PSF
ALLOWABLE	1000 PSF
BEARING CAPACITY	

PLAN DETAIL

ALL DIMENSIONS ARE SHOWN TO THE FACE OF WALL.
WIDTH DIMENSIONS ARE FROM FACE OF CURB TO
FACE OF CURB TO FACE OF WALL. STATIONING IS
ALONG FRONT FACE OF WALL.

POINTS ALONG FACE OF WALL

A	0+00.00 = STA 6+00.00, 37.02' LT
B	0+10.43 = STA 6+10.43, 37.39' LT
C	0+50.00 = STA 6+49.97, 38.87' LT
D	0+76.35 = STA 6+76.12, 39.87' LT
E	1+05.86 = STA 7+00.00, 40.87' LT

FACE OF WALL
MODULAR BLOCK MSE
CONSTRUCTION R (RETW1)

DRIVEWAY

SLOPE INTERCEPT

TLE

EXISTING R/W

PC 0+00.00
PT 0+10.43

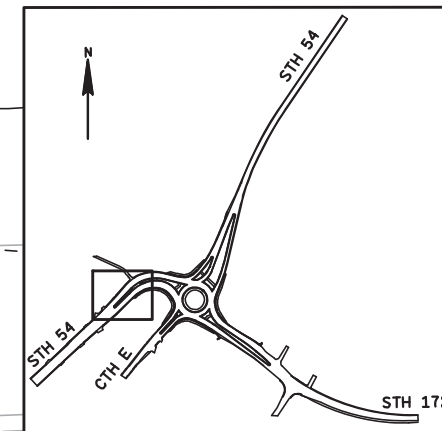
PC 0+76.35

PT 1+05.86

STH 54
CONSTRUCTION R (NPRL3)

STH 54 WB

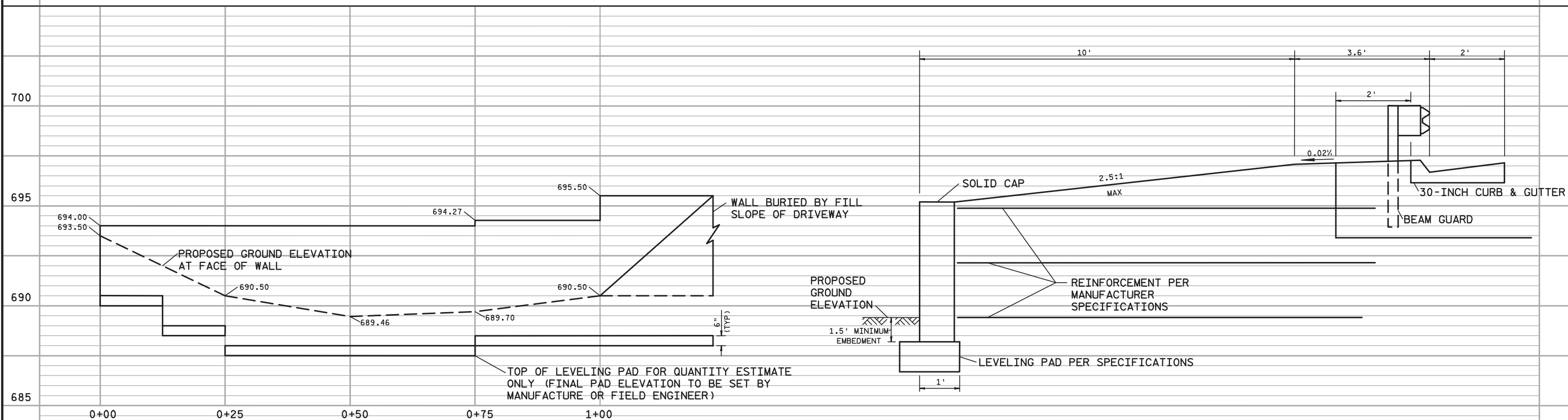
LOCATION MAP



ELEVATION

AT FRONT OF WALL

SIDE DETAIL



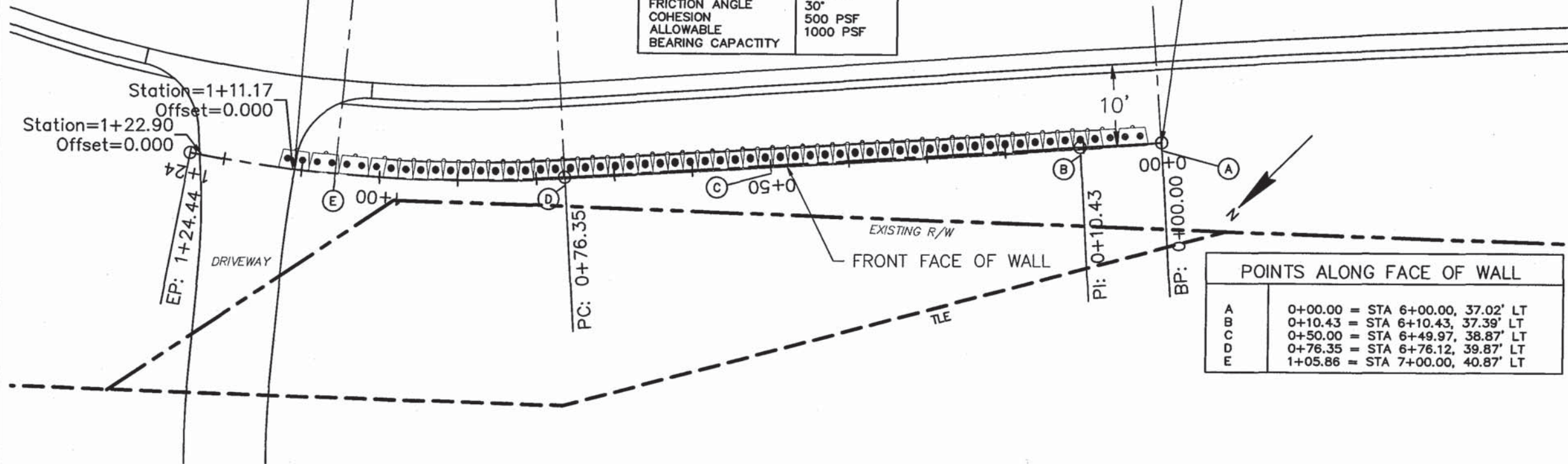


STH 54 WB

BEGIN WALL A - STA: 0+00

WALL SECTION AS NECESSARY TO
MATCH DRIVEWAY SLOPE ~ STA: 1+11

EXISTING SOIL PARAMETERS	
UNIT WEIGHT	110 PCF
FRICTION ANGLE	30°
COHESION	500 PSF
ALLOWABLE BEARING CAPACITY	1000 PSF



POINTS ALONG FACE OF WALL

A	0+00.00 = STA 6+00.00, 37.02' LT
B	0+10.43 = STA 6+10.43, 37.39' LT
C	0+50.00 = STA 6+49.97, 38.87' LT
D	0+76.35 = STA 6+76.12, 39.87' LT
E	1+05.86 = STA 7+00.00, 40.87' LT

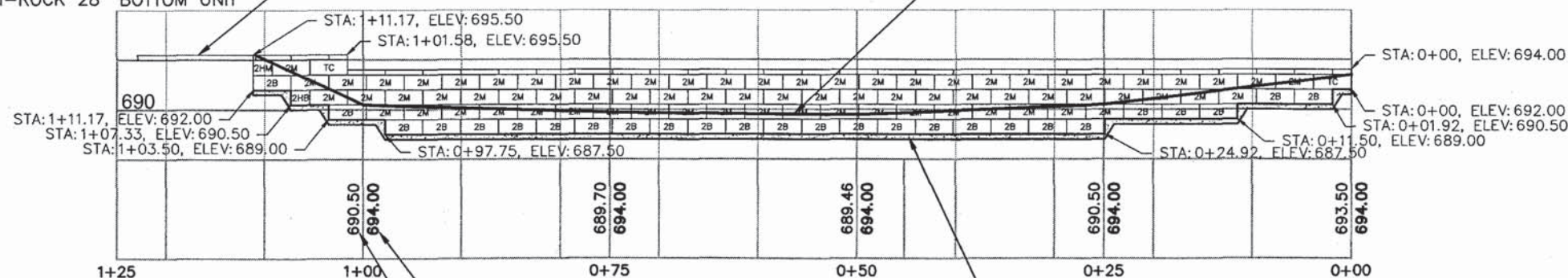
Approved
Lee Schuchardt
Bureau of Structures
8/22/2011

WALL A - PLAN VIEW

- REDI-ROCK CAP BLOCK SPLIT
- TC REDI-ROCK TOP CORNER
- 2M REDI-ROCK 28" MIDDLE UNIT
- 2B REDI-ROCK 28" BOTTOM UNIT

EXISTING DRIVEWAY

FINISHED GRADE AT BASE OF WALL



WALL A - ELEVATION VIEW

TOP OF WALL ELEVATION

FINISHED GRADE @ BOTTOM OF WALL

6" CONCRETE LEVELING PAD

No.	DATE	REVISION
1	08/16/11	BUREAU COMMENTS
FOREST CITY ENGINEERING, LLC 2327 BELL AVENUE ROCKFORD, ILLINOIS 61103 815.962.5911 815.962.5912 www.forestcityeng.com		
DATE: 07/25/2011		
STRUCTURE:		
STH 172 AASHTO GRAVITY SRW		
LEDGEVIEW PRECAST CONCRETE, INC.		
BROWN COUNTY, WI		
STH 54 & STH 172 & CTH F		
PLAN & PROFILE		

13 b



866-222-6400
261-237-9900
261-237-9921 fax
www.redi-rock.com
info@redi-rock.com
05481 South US-31
Charlevoix, Michigan 49720

The Essence of Natural Rock

SPECIFICATION FOR REDI-ROCK® 28" SERIES WALL SYSTEM

PART 1: GENERAL

- 1.1 Scope
Work includes furnishing and installing concrete retaining wall units to the lines and grades designated on the construction drawings and as specified herein.
- 1.2 Reference Standards
ASTM C94 Ready-Mixed Concrete
ASTM C1372 Segmental Retaining Wall Units
- 1.3 Delivery, Storage, and Handling
A. Contractor shall check the materials upon delivery to assure proper material has been received.
B. Contractor shall prevent excessive mud, wet cement and like materials from coming in contact with the SRW units.
C. Contractor shall protect the materials from damage. Damaged material shall not be incorporated in the project.

PART 2: MATERIALS

- 2.1 Wall Units
A. Wall units shall be Redi-Rock® as produced by a licensed manufacturer.
B. Wall units shall be made with Ready-Mixed concrete in accordance with ASTM C94, latest revision, and per the following chart:

Climate	Air Content	28 Day Compressive Strength, psi	Slump*
Negligible	1 1/2% - 4 1/2%	5000	5" ± 1 1/2"
Moderate	3% - 6%	5000	5" ± 1 1/2"
Severe	4 1/2% - 7 1/2%	5000	5" ± 1 1/2"

*Higher slumps are allowed if achieved by use of appropriate admixtures.
Notwithstanding anything stated above, all material used in the wall units must meet applicable ASTM and local requirements for exterior concrete.



- 2.2 Foundation Soil Preparation
A. Exterior block dimensions shall be uniform and consistent. Maximum dimensional deviations shall be 1% excluding the architectural surface. Maximum width (face to back) deviation including the architectural surface shall be 1.0 inch.
B. Exposed face shall be finished as specified. Other surfaces to be smooth form type. Dime-size bug holes on the block face may be patched and/or shako-on color stain can be used to blend into the remainder of the block face.

- 2.3 Leveling Pad and Free Draining Backfill
A. Leveling pad shall be crushed stone. See detail sheet defining leveling pad options for drain placement in the bottom of the foundation leveling pad.
B. Free Draining Backfill material shall be washed stone and shall be placed to a minimum of 1' width behind the back of the wall and shall extend vertically from the leveling pad to an elevation 4" below the top of wall.
C. Backfill material shall be approved by the geotechnical engineer. Site excavated soils may be used if approved unless otherwise specified in the drawings. Unsuitable soils with a PL > 6, organic soils and frost susceptible soils shall not be used within a 1 to 1 influence area.

SPECIFICATION FOR REDI-ROCK® 28" SERIES WALL SYSTEM

- D. Non-woven geotextile cloth shall be placed between the Free Draining Backfill and retained soil if required.
E. Where additional fill is needed, Contractor shall submit sample and specifications to the Engineer for approval.

- 2.4 Geogrid Connection (Type IAT)
A. Fiberglass rod used in the Type IAT Geo-Grid connection shall be 7/16" diameter. Only fiberglass rod obtained from an authorized Redi-Rock® dealer shall be used.

PART 3: CONSTRUCTION OF WALL SYSTEM

- 3.1 Excavation
A. Contractor shall excavate to the lines and grades shown on the construction drawings.

- 3.2 Foundation Soil Preparation
A. Native foundation soil shall be compacted to 95% of standard proctor or 90% of modified proctor prior to placement of the leveling pad material.
B. In-situ foundation soil shall be examined by the Engineer to ensure that the actual foundation soil strength meets or exceeds assumed design strength. Soil not meeting the required strength shall be removed and replaced with acceptable, compacted material.

3.3 Leveling Pad Placement

- A. Leveling pad shall be placed as shown on the construction drawings.
B. Leveling pad shall be placed on undisturbed native soils or suitable replacements fills.
C. Leveling pad shall be compacted to 95% of standard proctor or 90% of modified proctor to ensure a level, hard surface on which to place the first course blocks. Pad shall be constructed to the proper elevation to ensure the final elevation shown on the plans.
D. Leveling pad shall have a 6 inch minimum depth for walls under 8 feet in height and a 12 inch minimum depth for walls over 8 feet. Pad dimensions shall extend beyond the blocks in all directions to a distance at least equal to the depth of the pad or as designed by Engineer.
E. For steps and piers, a minimum of 1" - 1 1/2" of free draining sand shall be screeded smooth to not create a placement bed for the steps or piers.

- 3.4 Unit Installation
A. The first course of wall units shall be placed on the prepared leveling pad with the aesthetic surface facing out and the front edges tight together. All units shall be checked for level and alignment as they are placed.
B. Ensure that units are in full contact with leveling pad. Proper care shall be taken to develop straight lines and smooth curves on base course as per wall layout.
C. The backfill in front and back of entire base row shall be placed and compacted to firmly lock them in place. Check all units again for level and alignment. All excess material shall be swept from top of units.
D. Install next course of wall units on top of base row. Position blocks to be offset from seams of blocks below. Blocks shall be placed fully forward so knob and groove are engaged. Check each block for proper alignment and level. Backfill to 12 inch width behind block with Free Draining Backfill. Spread backfill in uniform lifts not exceeding 9 inches. Employ methods using lightweight compaction equipment that will not disrupt the stability or batter of the wall. Hand-operated plate compaction equipment shall be used around the block and within 3 feet of the wall to achieve consolidation. Compact backfill to 95% of standard proctor (ASTM D 698, AASHTO T-99) density within 2% of its optimum moisture content.
E. Install each subsequent course in like manner. Repeat procedure to the extent of wall height.
F. Allowable construction tolerance at the wall face is 2 degrees vertically and 1 inch in 10 feet horizontally.
G. All walls shall be installed in accordance with local building codes and requirements.

3.5 Geogrid Installation

- 3.6 Availability
Redi-Rock® International
05481 South US-31
Charlevoix, MI 49720
1-866-222-8400
www.redi-rock.com
info@redi-rock.com

REDI-ROCK 28" COBBLESTONE - TYPICAL SECTION - WALL A - STA: 0+50 (6+50 ROADWAY)

GENERAL NOTES

1. THE DEPARTMENT SHALL RETAIN A GEOTECHNICAL ENGINEER/CONSTRUCTION TESTING FIRM TO EVALUATE THE FOUNDATION SOILS PRIOR TO CONSTRUCTION. UNSUITABLE SOILS (IF ANY), AS DETERMINED BY THE DEPARTMENTS GEOTECHNICAL ENGINEER, SHALL BE REMOVED AND REPLACED WITH PROPERLY COMPACTED FILL SOIL AS DIRECTED BY THE OWNER'S GEOTECHNICAL ENGINEER. UNSUITABLE SOILS ARE DEFINED AS ANY SOIL THAT DOES NOT HAVE SUFFICIENT BEARING CAPACITY OR WILL CAUSE EXCESSIVE WALL SETTLEMENT.

2. THE DEPARTMENT HAS PROVIDED PRELIMINARY SOIL PARAMETERS FOR THIS SEGMENTAL RETAINING WALL DESIGN. IT IS THE RESPONSIBILITY OF THE GEOTECHNICAL TESTING REPRESENTATIVE TO VERIFY THE ASSUMED SOIL STRENGTH PARAMETERS ARE REPRESENTATIVE OF THE SOILS AVAILABLE FOR WALL CONSTRUCTION. IF THE SOIL STRENGTH PARAMETERS ARE FOUND TO BE INCONSISTENT WITH THOSE ASSUMED BY THE FOLLOWING DATA, THESE VALUES ARE NO LONGER VALID AND IT IS THE RESPONSIBILITY OF THE DEPARTMENTS REPRESENTATIVE TO REQUEST RECOMMENDATIONS OR ADDITIONAL DATA FOR THE GEOTECHNICAL ENGINEER SO THE RETAINING WALL SYSTEM CAN BE RE-DESIGNED EFFECTIVELY.

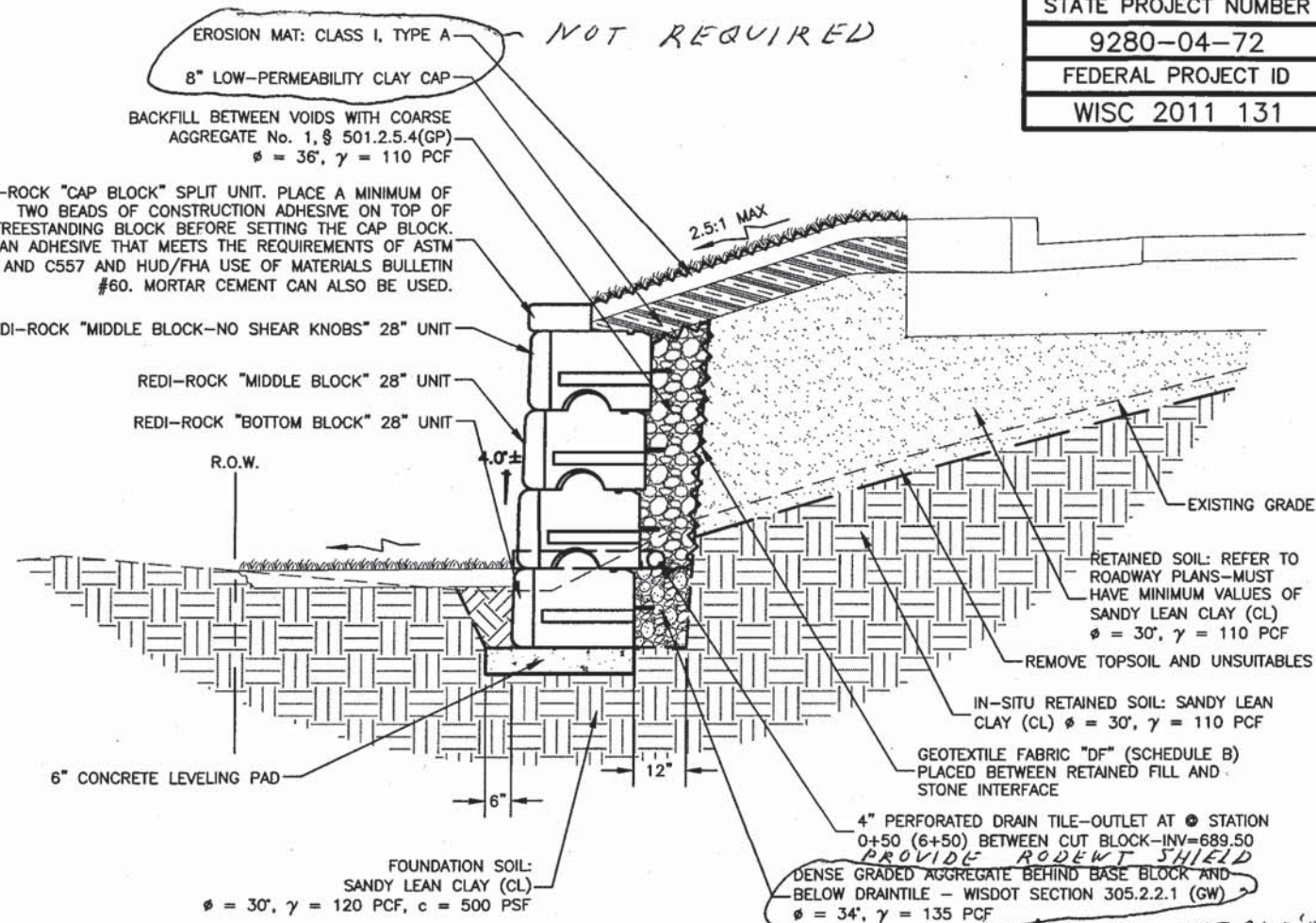
3. ASSUMED DESIGN SOIL PARAMETERS:

RETAINED SOIL, SANDY LEAN CLAY (CL), $\phi=30^\circ$, $\gamma=110$ PCF

DRAINAGE COLUMN AND INFILL MATERIAL, Coarse Aggregate No. 1, § 501.2.5.4(GP) $\phi=36^\circ$, $\gamma=110$ PCF

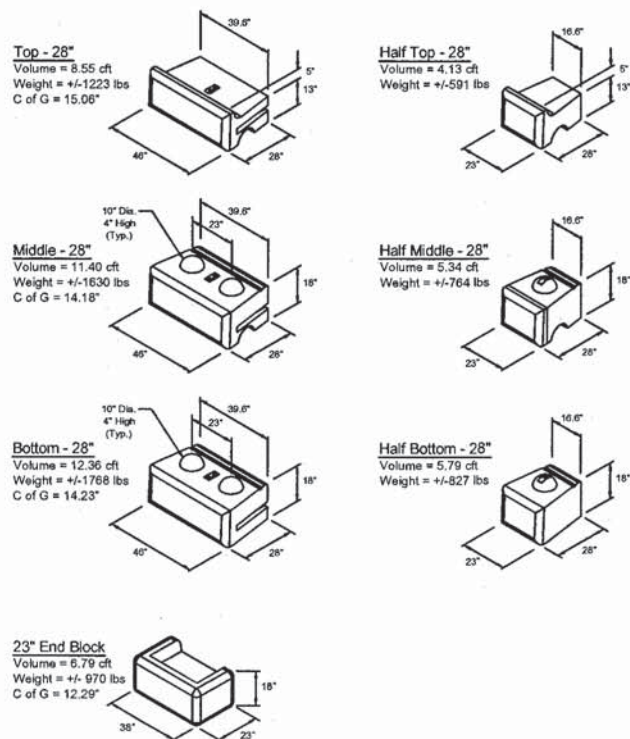
FOUNDATION SOIL, SANDY LEAN CLAY (CL), $\phi=30^\circ$, $\gamma=110$ PCF, $c=500$ PSF

4. ANY EXCAVATION, UNDERCUT, BELOW THE WALL SHOULD HAVE PROPER 1:1 LATERAL OVERSIZING. EXCAVATION OVERSIZING SHOULD BE MEASURED FROM THE FRONT OF THE GRAVEL LEVELING PAD AND THE BACK OF THE DRAINAGE COLUMN.



STATE PROJECT NUMBER
9280-04-72
FEDERAL PROJECT ID
WISC 2011 131

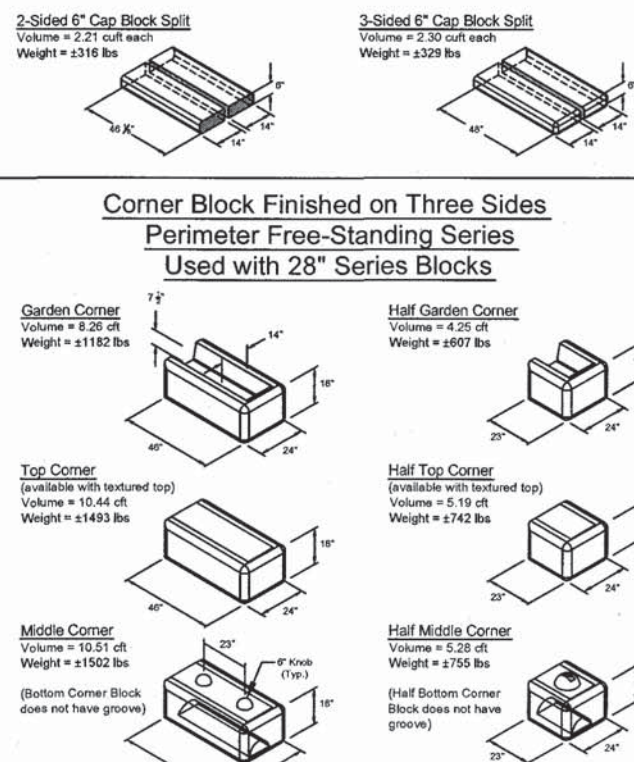
28" Series Blocks



NOTES:
Volume and Center of Gravity (C of G) calculations are based on the blocks as shown.
Center of Gravity is measured from the back of the block.
Half blocks include a fork lift slot on one side.
Actual weights and volumes will vary.
Weight shown is based on 143 pcf concrete.

DESIGNED BY	J. JOHNSON	DATE	01/03/07	PROJECT	Redi-Rock® International, LLC
CHECKED BY		DATE		SCALE	28" Series Block Details (Reg)
APPROVED BY		DATE		SCALE	100 SCALE
REVISION		DATE		DESCRIPTION	

Caps Used with 28" Series Blocks

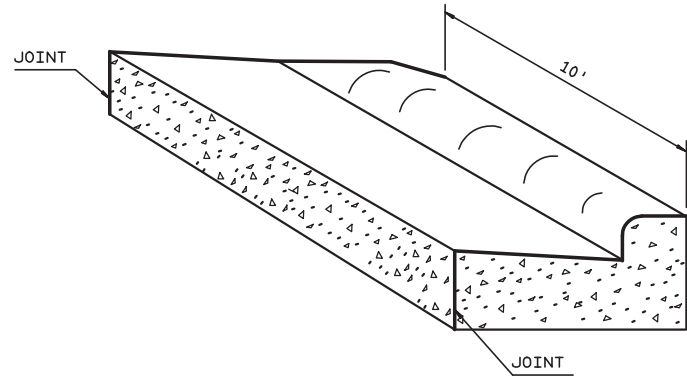


NOTES:
Cobblestone face is 24" wide and limestone face is approximately 23" wide.
Volume calculations are based on the blocks as shown.
Actual weights and volumes will vary.
Weight shown is based on 143 pcf concrete.

DESIGNED BY	J. JOHNSON	DATE	01/03/07	PROJECT	Redi-Rock® International, LLC
CHECKED BY		DATE		SCALE	28" Series Block Details (Reg)
APPROVED BY		DATE		SCALE	100 SCALE
REVISION		DATE		DESCRIPTION	

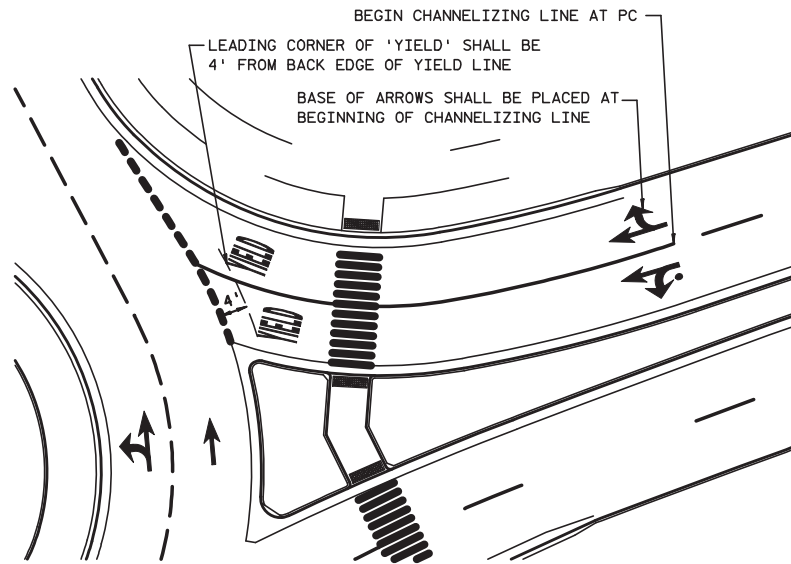


No.	DATE	REVISION
1	08/16/11	BUREAU COMMENTS
FOREST CITY ENGINEERING, LLC 2327 BELL AVENUE ROCKFORD, ILLINOIS 61103 815.962.5911 www.forestcityeng.com		
DATE: 07/25/2011		
STRUCTURE:		
STH 172 AASHTO GRAVITY SRW LEDGEVIEW PRECAST CONCRETE, INC. BROWN COUNTY, WI STH 54 & STH 172 & C		
DETAILS & TYPICAL SECT		

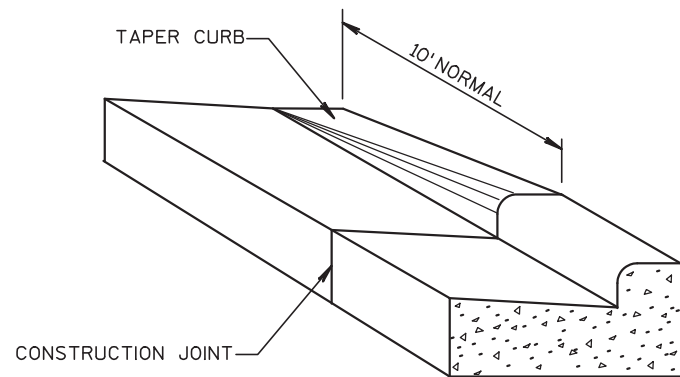


CONCRETE CURB & GUTTER TRANSITION DETAIL

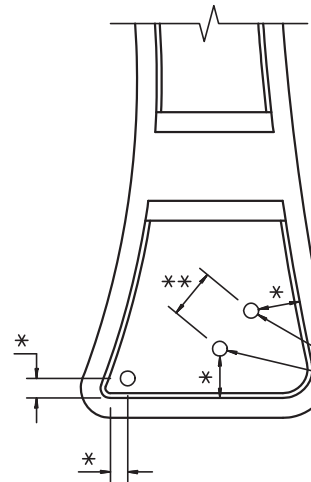
36-INCH CONCRETE CURB & GUTTER, 4-INCH SLOPED, TYPE D TO 30-INCH CONCRETE CURB & GUTTER, TYPE D (TO BE MEASURED AND PAID FOR AS 36-INCH CONCRETE CURB & GUTTER, 4-INCH SLOPED, TYPE D) OR 30-INCH CONCRETE CURB & GUTTER, TYPE D, TO 30-INCH CONCRETE CURB & GUTTER, 4-INCH SLOPED, TYPE G, MODIFIED (TO BE MEASURED AND PAID FOR AS 30-INCH CURB & GUTTER, 4-INCH SLOPED, TYPE G, MODIFIED).



PAVEMENT MARKING DETAIL FOR ROUNDABOUTS



DETAIL OF CURB & GUTTER TERMINI



* DISTANCE TO BE LAID OUT IN THE FIELD BASED ON SIGN SIZE. TWO FOOT MINIMUM CLEARANCE BETWEEN THE EDGE OF SIGN AND THE FACE OF CURB.
** SEE A4-4 SIGN PLATE FOR POST SPACING REQUIREMENTS.

12

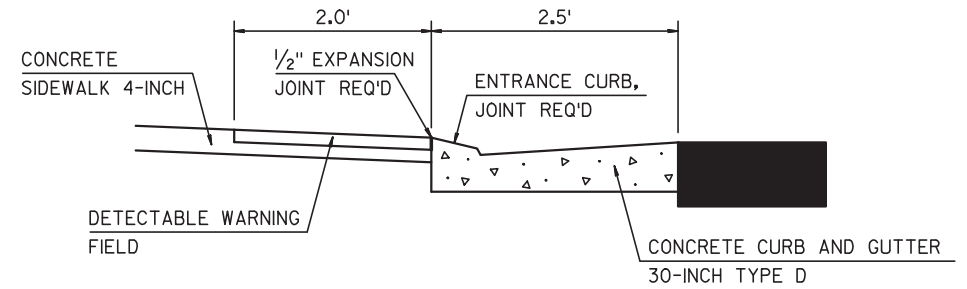
USE A 14-INCH MINIMUM INSIDE DIAMETER PVC PIPE BOX OUT IN CONCRETE FOR SIGN POST (TYP). THE NUMBER OF BOX OUTS REQUIRED VARIES BY WIDTH OF THE SIGN AND SHALL BE VERIFIED BEFORE PLACING THE CONCRETE IN THE ISLAND.

ISLAND SIGN LOCATION DETAIL (TYP)

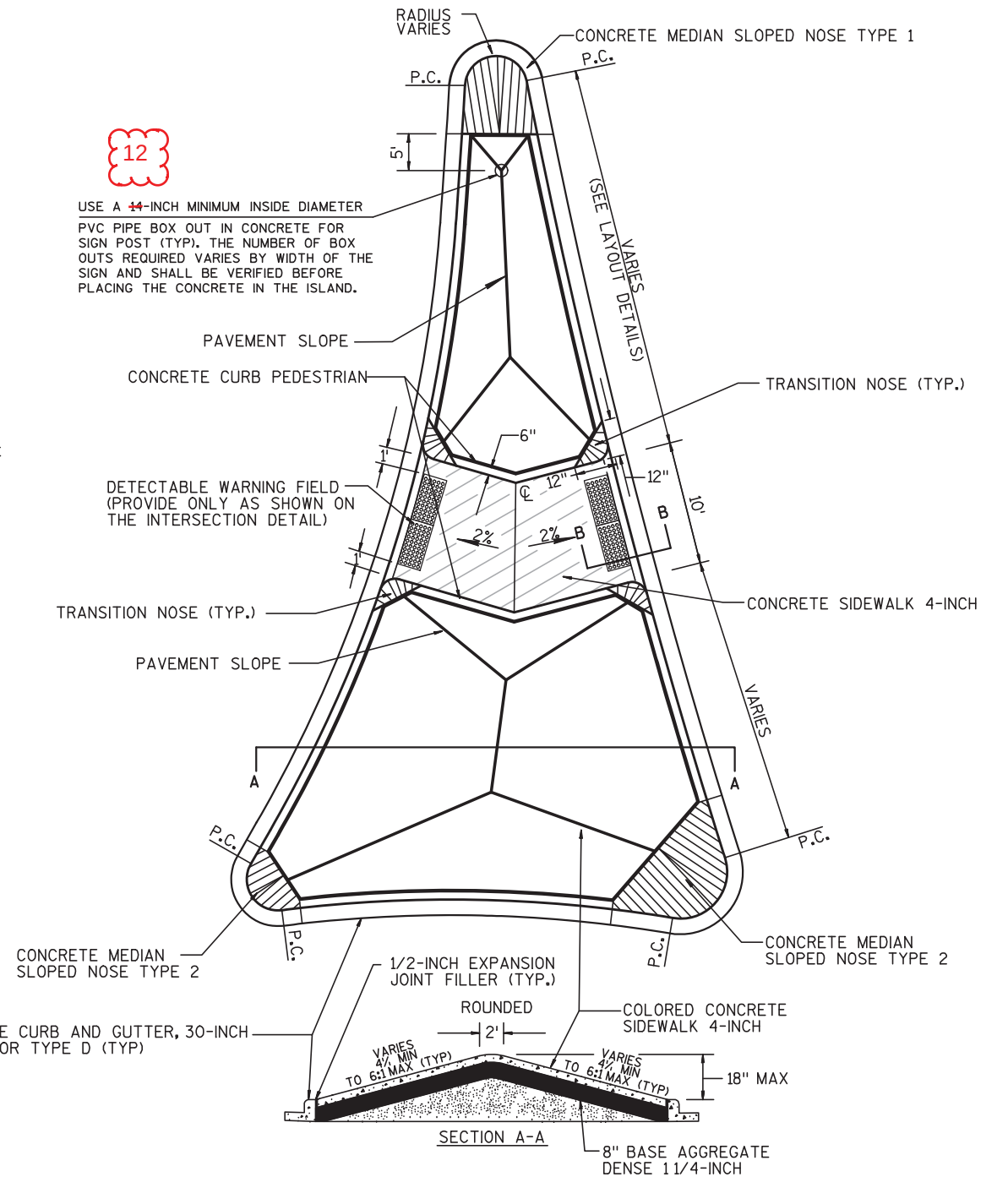
NOTIFY THE REGIONAL TRAFFIC UNIT AT 920-492-5653 A MINIMUM OF TWO WEEK PRIOR TO THE NEED FOR SIGN PLACEMENT TO ALLOW FOR STAKING OF ANY PERMANENT SIGNING REQUIRED ON THE PROJECT.

NOTES:

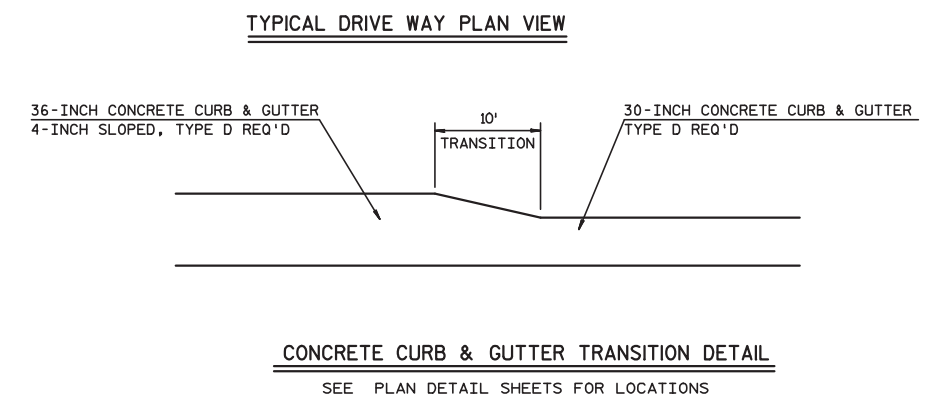
1. 1/2" EXPANSION JOINT FILLER IS INCIDENTAL TO COLORED CONCRETE SIDEWALK.
2. TROWEL ISLAND NOSE TO A SMOOTH FINISH.
3. TRUNCATED DOMES IN DETECTABLE WARNING FIELD ALIGNED IN A ROW AND PERPENDICULAR TO THE EDGE OF PAVEMENT.
4. JOINT SPACING TO BE DETERMINED IN FIELD.

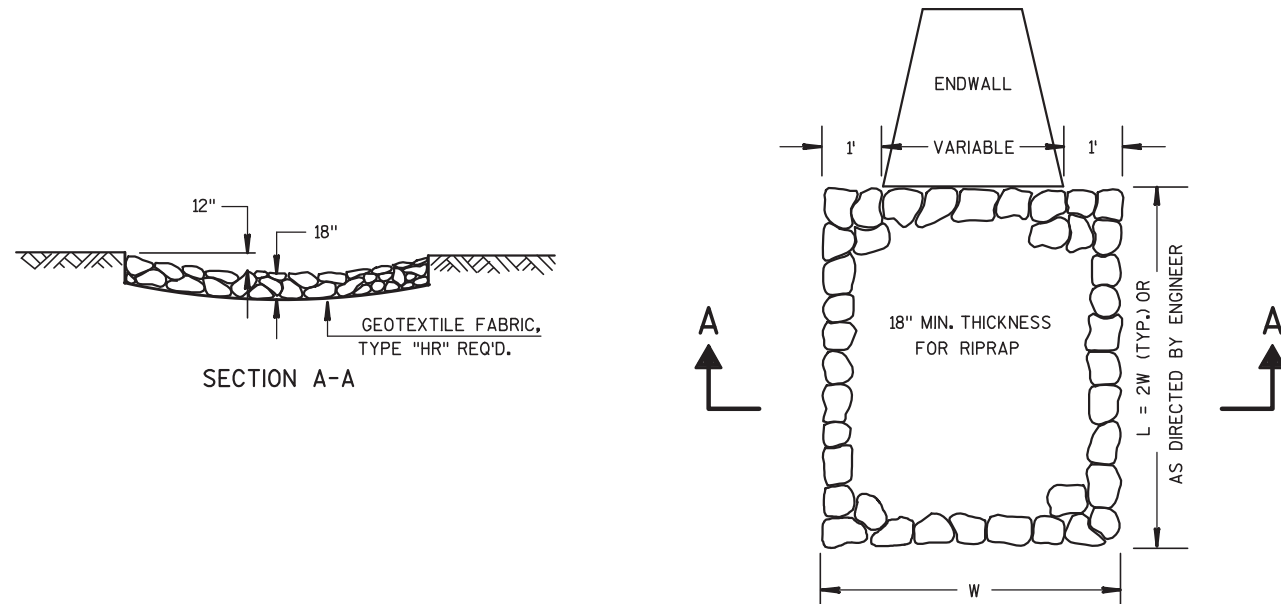


SECTION B-B

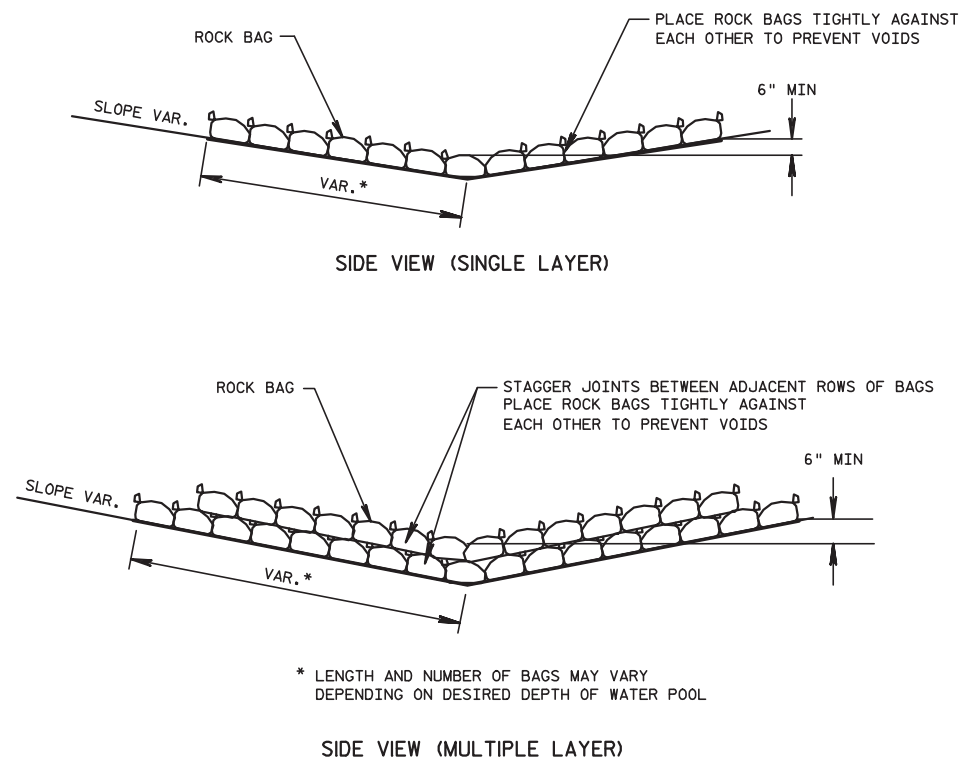


SPLITTER ISLAND DETAIL (TYP.)

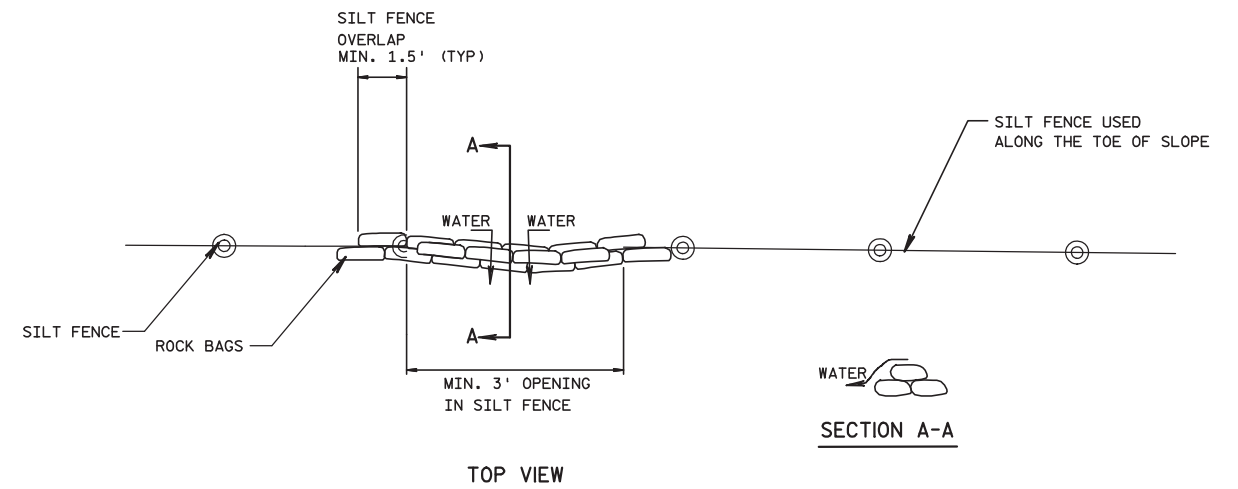




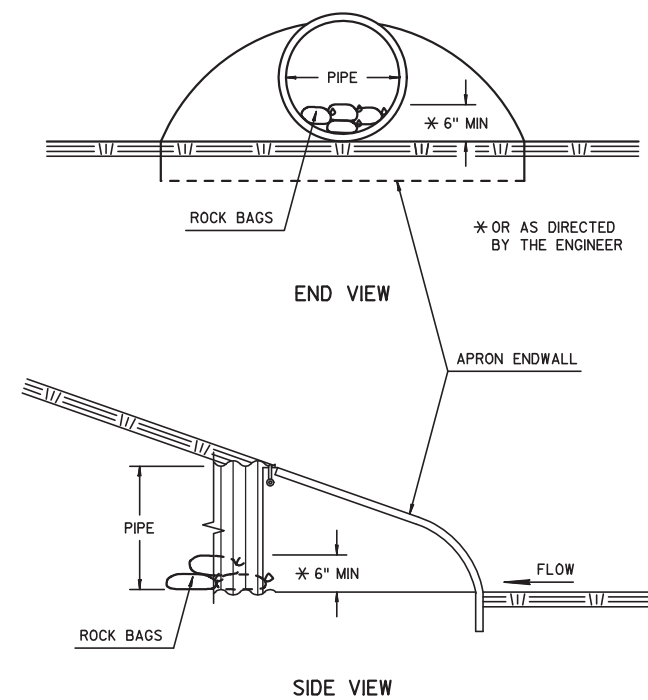
RIPRAP MEDIUM TREATMENT AT CULVERTS



DITCH CHECKS

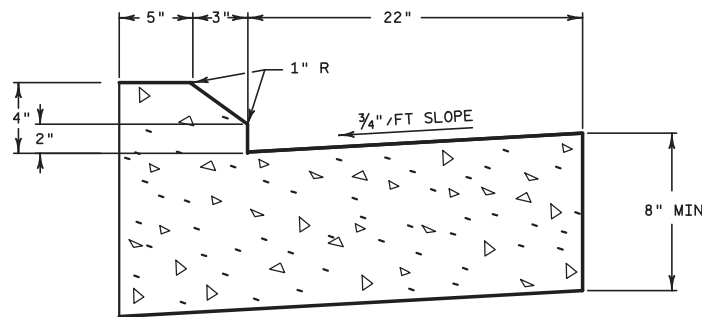


ROCK BAGS USED FOR SILT FENCE RELIEF DETAIL

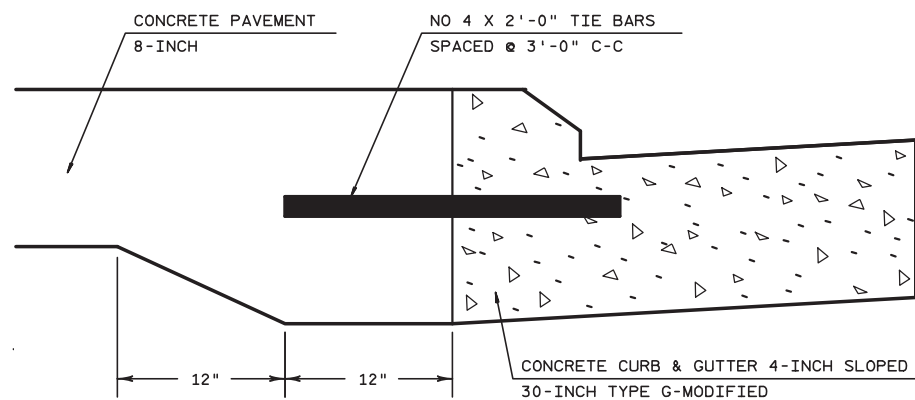


CULVERT PIPE ENDS

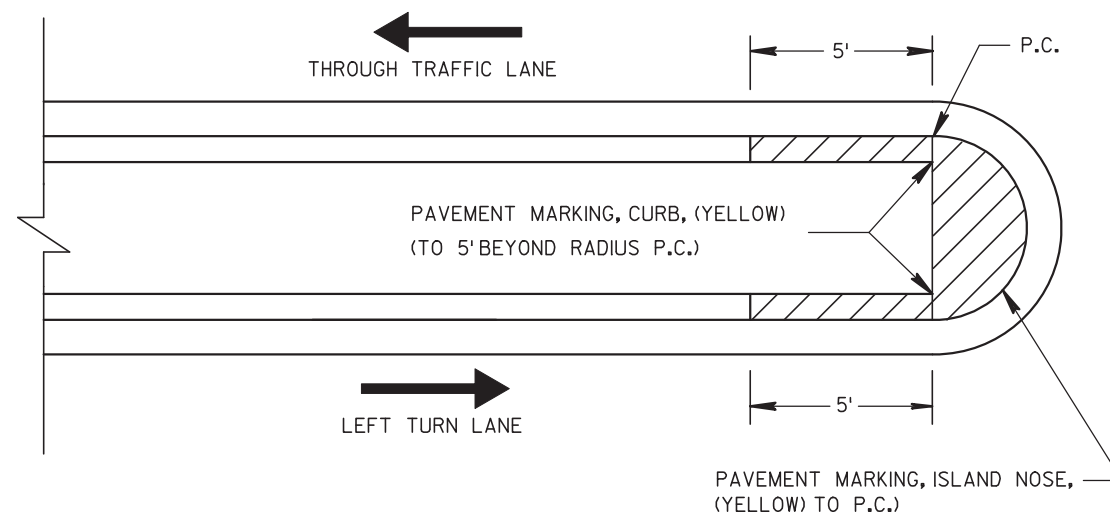
ROCK BAGS



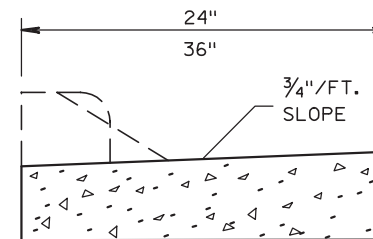
CONCRETE CURB & GUTTER 4-INCH SLOPED 30-INCH TYPE G-MODIFIED



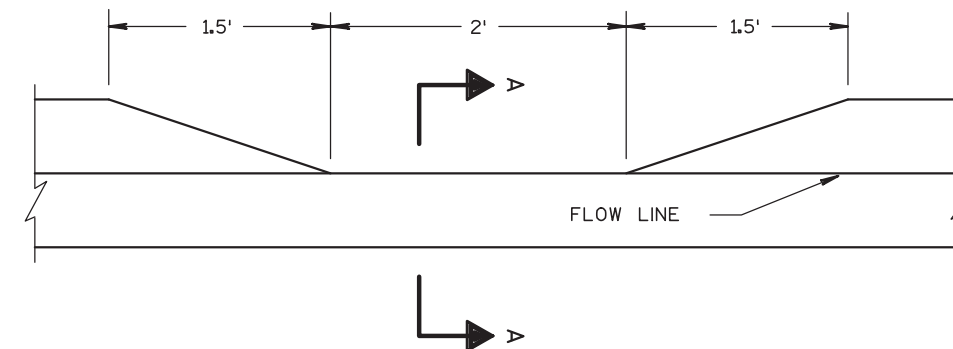
TRUCK OVERTRACKING DETAIL



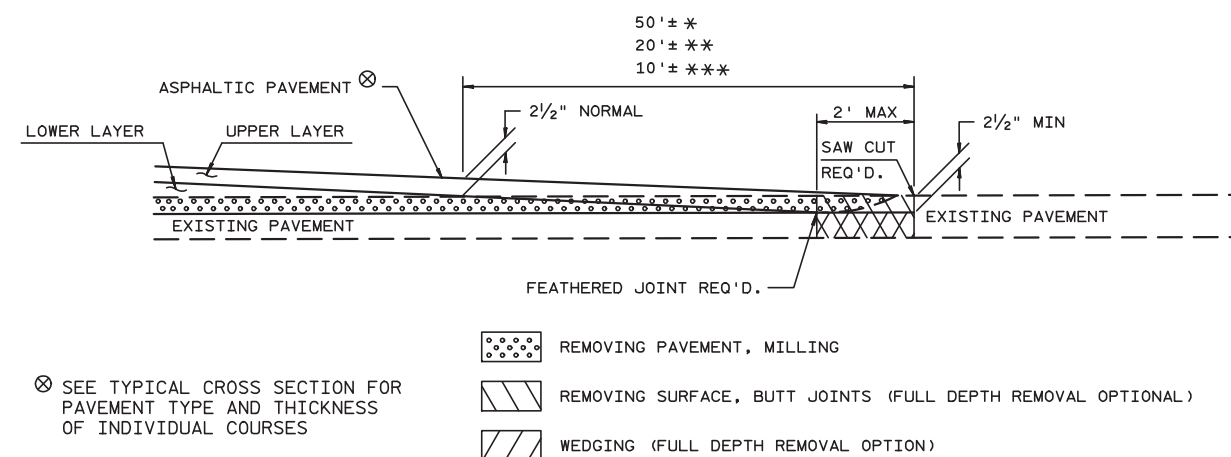
MEDIAN ISLAND WITH SLOPED NOSE



SECTION A-A

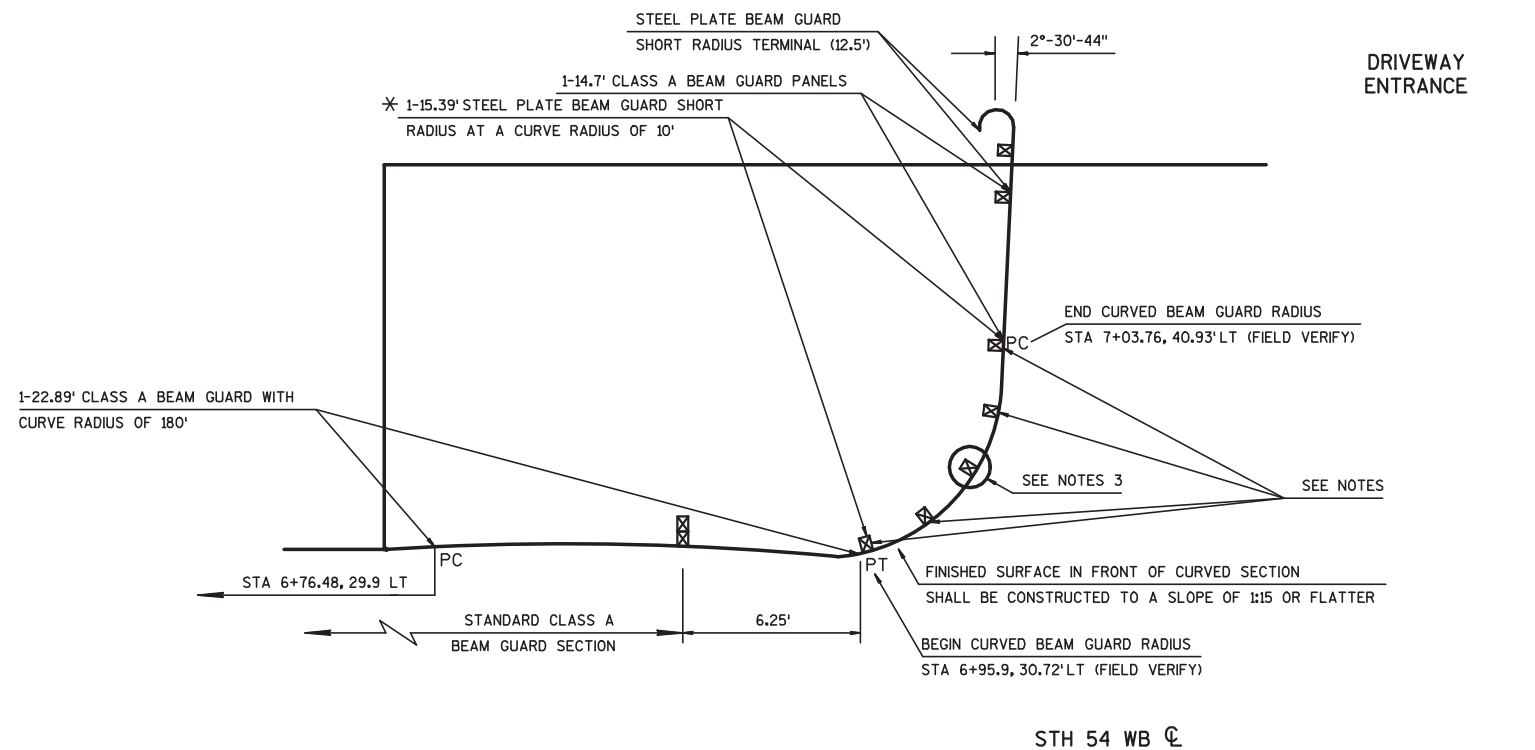


DETAIL OF CURB HEAD DEPRESSION FOR DRAINAGE AT CURB & GUTTER SECTION

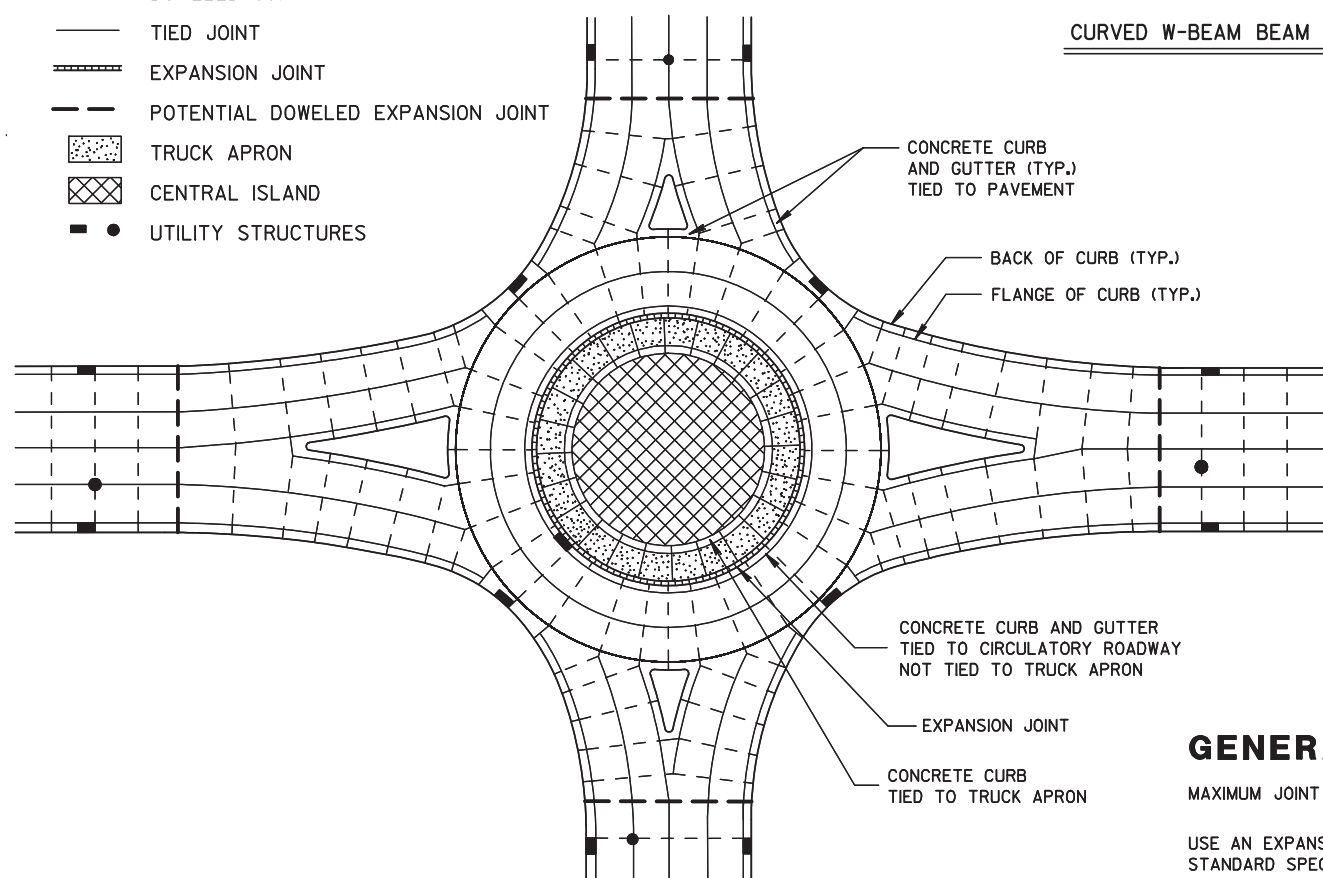


BUTT JOINT DETAIL FOR MILLED PAVEMENTS

* MAINLINE
** SIDEROADS
*** PRIVATE ENTRANCES

**LEGEND**

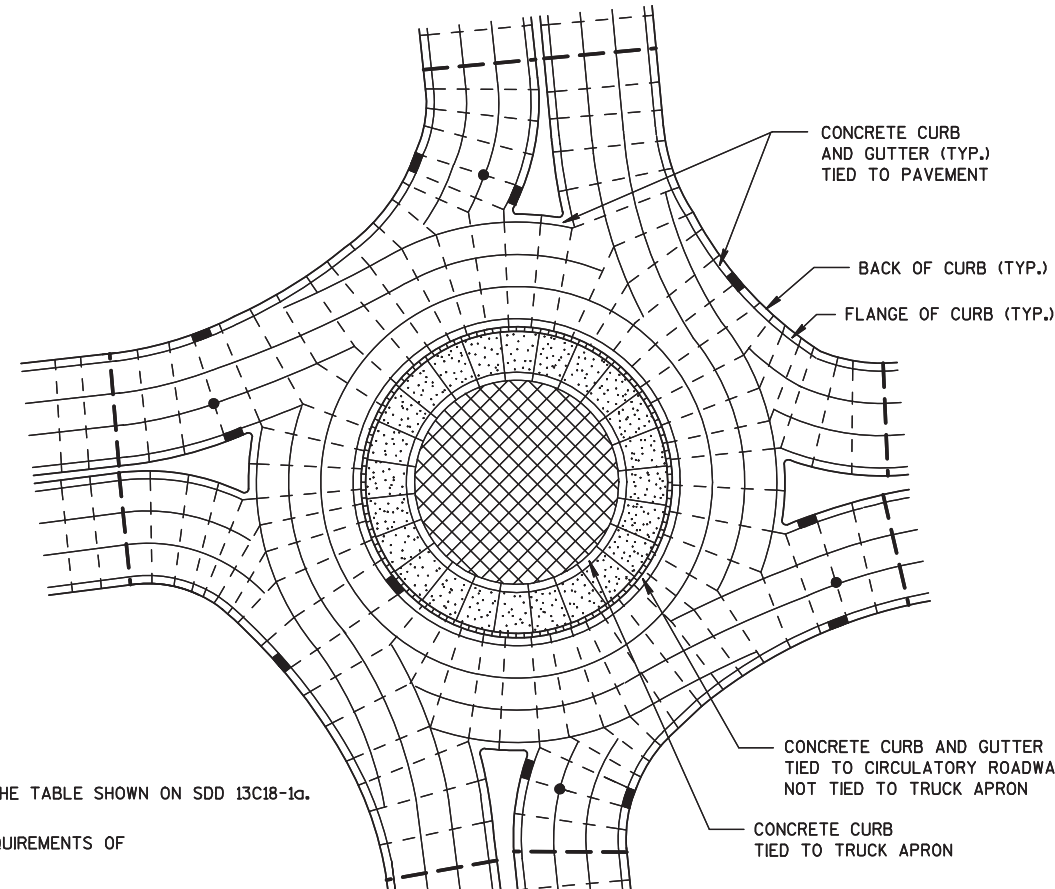
- DOWELED JOINT
- TIED JOINT
- EXPANSION JOINT
- POTENTIAL DOWELED EXPANSION JOINT
- TRUCK APRON
- CENTRAL ISLAND
- UTILITY STRUCTURES

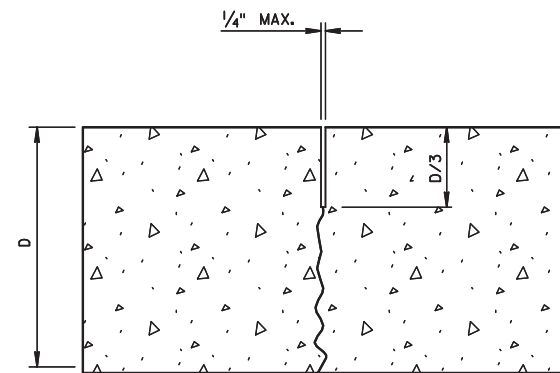
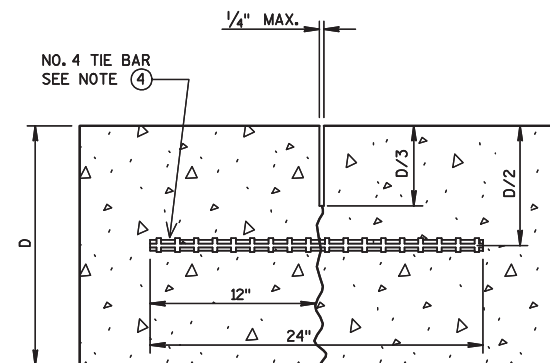
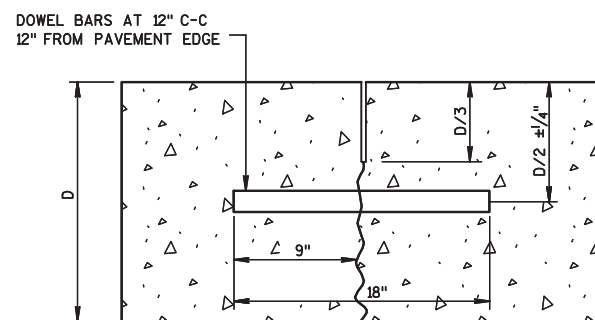
CURVED W-BEAM BEAM GUARD DETAIL**GENERAL NOTES**

MAXIMUM JOINT SPACING IS IN ACCORDANCE WITH THE TABLE SHOWN ON SDD 13C18-1a.

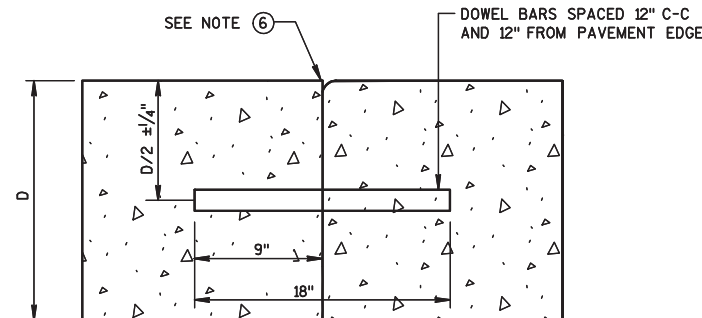
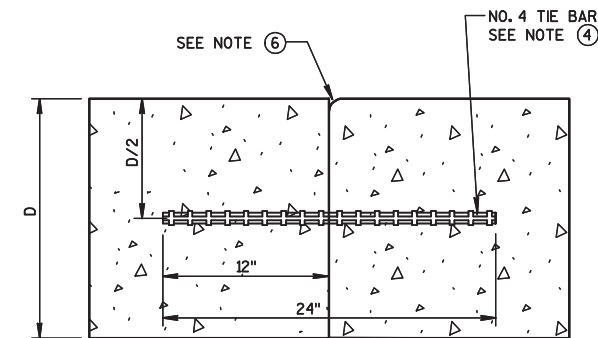
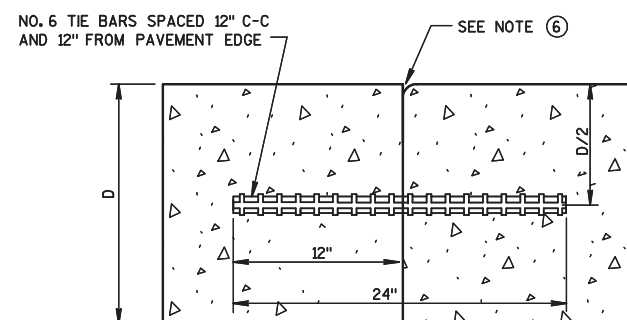
USE AN EXPANSION JOINT FILLER MEETING THE REQUIREMENTS OF
STANDARD SPECIFICATION 415.

DO NOT DOWEL OR TIE THE TRUCK APRON TRANSVERSE JOINTS.

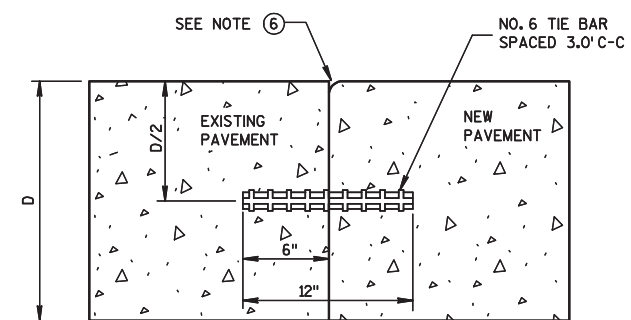
**ISOLATED CIRCLE JOINT LAYOUT FOR ROUNDABOUTS****PINWHEEL JOINT LAYOUT FOR ROUNDABOUTS**

**UNDOWELED-TRANSVERSE****TIED LONGITUDINAL****DOWELED-TRANSVERSE****CONTRACTION JOINTS**

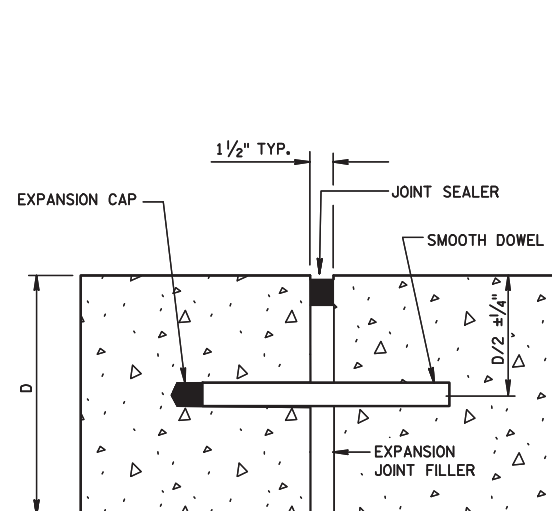
SEE NOTE ②

**DOWELED TRANSVERSE****TIED LONGITUDINAL****TIED TRANSVERSE**

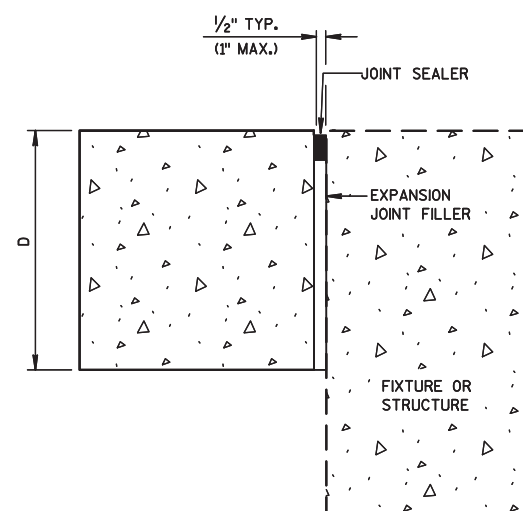
SEE NOTE ③

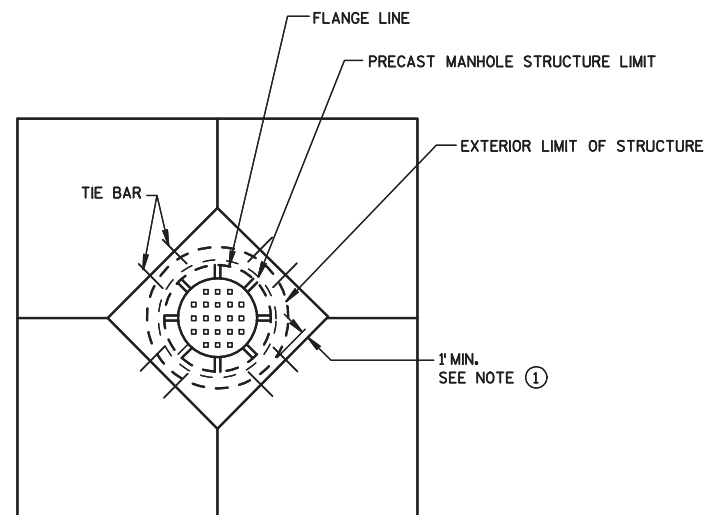
**TIED LONGITUDINAL TO EXISTING****CONSTRUCTION JOINTS**

SEE NOTE ⑤

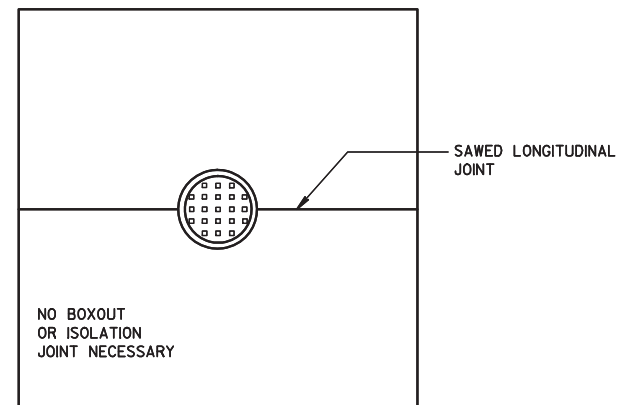
**DOWELED-TRANSVERSE**

SEE NOTE ①

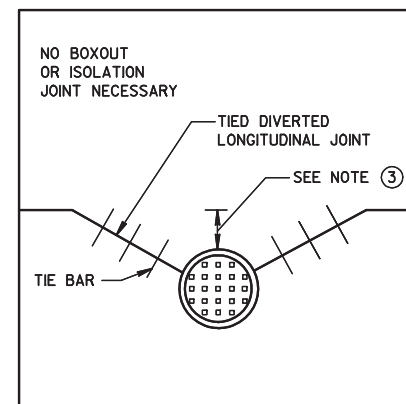
EXPANSION JOINTS**UNTIED-LONGITUDINAL**



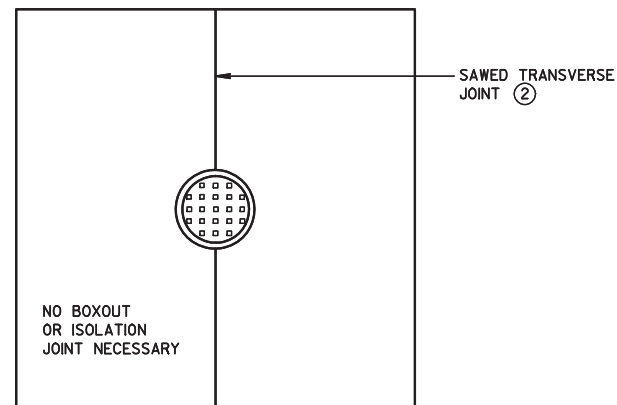
DIAGONAL MANHOLE BOXOUT FOR CONSTRUCTION JOINTS



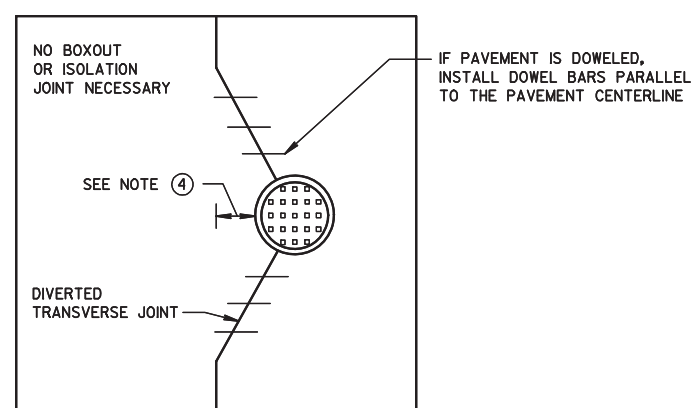
MANHOLE WITH LONGITUDINAL JOINT



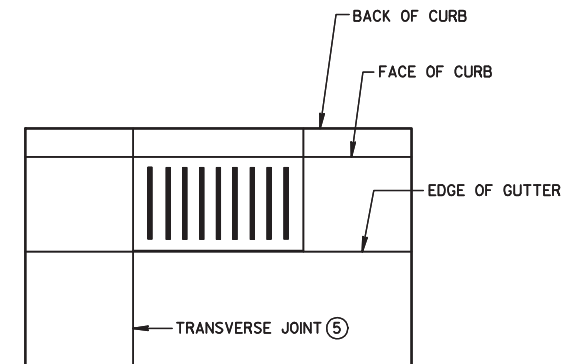
MANHOLE WITH DIVERTED LONGITUDINAL CONTRACTION JOINT



MANHOLE WITH TRANSVERSE JOINT



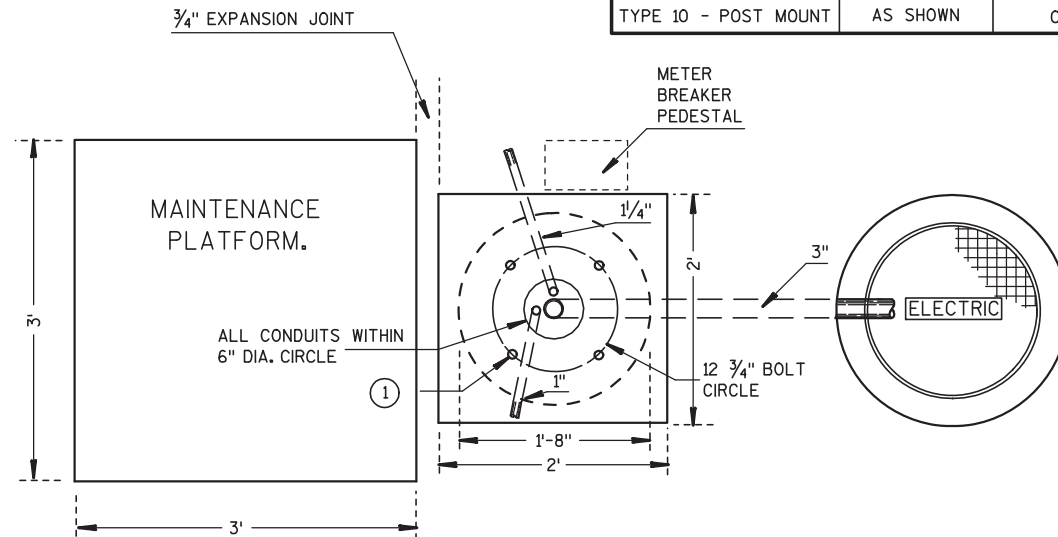
MANHOLE WITH DIVERTED TRANSVERSE CONTRACTION JOINT



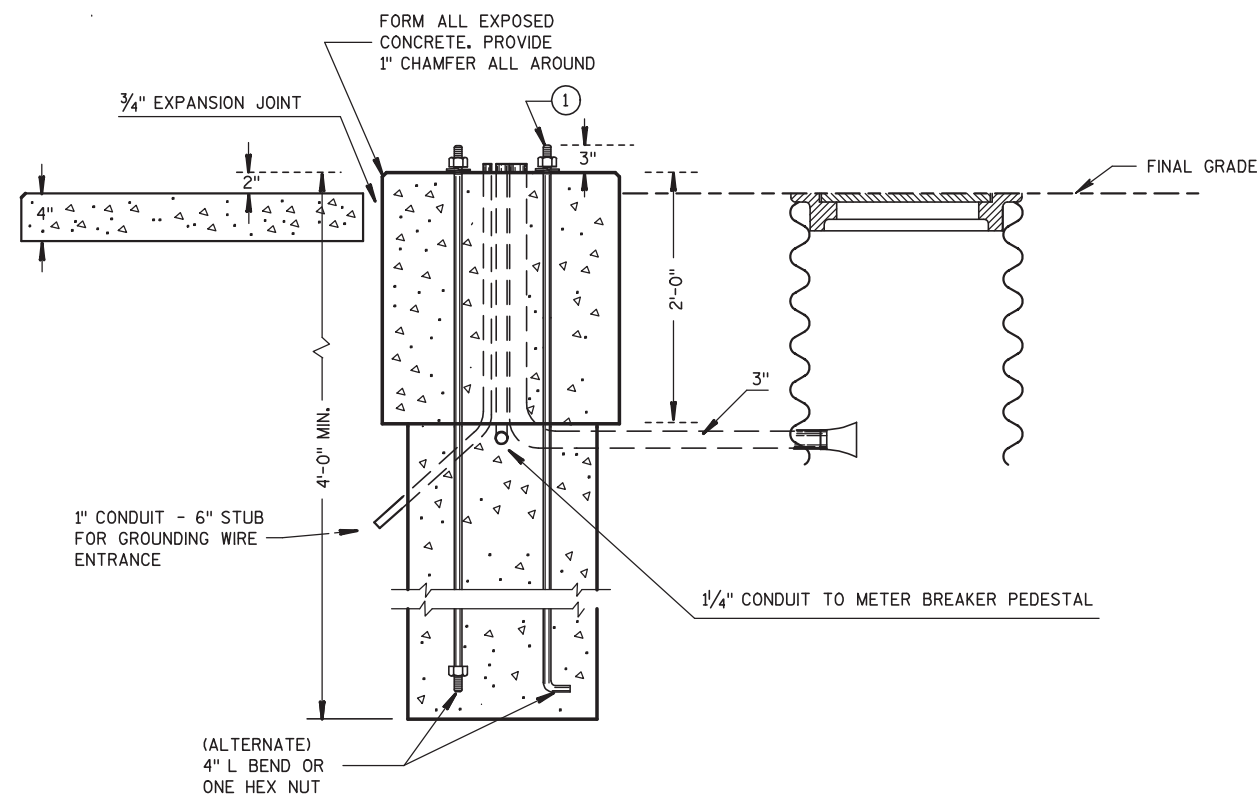
GENERAL NOTES

1. USE BOXOUTS WHEN UTILITY STRUCTURE IS IN THE PATH OF CONSTRUCTION JOINTS. PROVIDE A 1 FOOT MINIMUM CLEARANCE BETWEEN THE EXTERIOR LIMIT OF THE STRUCTURE TO THE DIAMOND BOXOUT.
2. ADJUST TRANSVERSE JOINT TO INTERSECT MANHOLE IF POSSIBLE.
3. IF DISTANCE BETWEEN THE LONGITUDINAL JOINT AND THE EDGE OF MANHOLE IS GREATER THAN 2 FEET, DO NOT DIVERT JOINT AND SAW LONGITUDINAL JOINT AS NORMAL. IF DISTANCE IS 2 FEET OR LESS, DIVERT LONGITUDINAL JOINT AT A 2:1 TAPER RATE TO THE CENTER OF THE MANHOLE.
4. IF DISTANCE FROM THE EDGE OF MANHOLE TO THE NEAREST TRANSVERSE JOINT IS GREATER THAN 4 FEET, REDIRECT JOINT TO INTERSECT MANHOLE. IF DISTANCE IS 4 FEET OR LESS, PLACE REBAR REINFORCEMENT AROUND MANHOLE.
5. ALIGN TRANSVERSE JOINT WITH ONE EDGE OF INLET WHEN PRACTICAL.

2

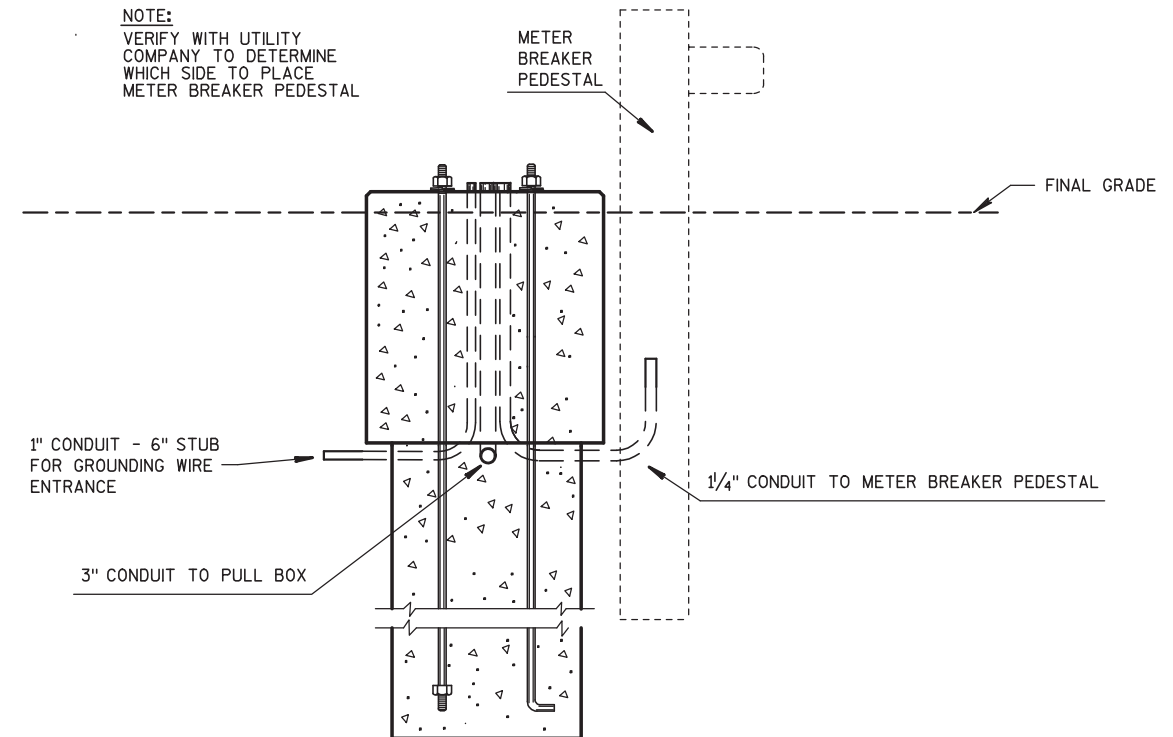


PLAN VIEW



PROFILE VIEW

NOTE:
VERIFY WITH UTILITY
COMPANY TO DETERMINE
WHICH SIDE TO PLACE
METER BREAKER PEDESTAL



FRONT VIEW

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

CONDUIT HEIGHT ABOVE THE CONCRETE BASE SHALL BE 1 INCH.

CONTROL CABINET BASE TOP SURFACES SHALL BE TROWEL FINISHED AND LEVEL.

WHEN A TYPE 10 CONTROL CABINET BASE IS USED TO POST MOUNT A CONTROL CABINET, A 36" SQUARE 4" THICK CONCRETE MAINTENANCE PLATFORM SHALL BE REQUIRED ON THE DOOR SIDE OF THE CABINET. THE TOP 1 INCH SHALL BE ABOVE FINISHED GRADE AND BE BROOM FINISHED AND LEVEL.

MAINTENANCE PLATFORMS ARE NOT REQUIRED WHEN THE SURROUNDING AREA IS PAVED.

ALL CONDUIT ENDS AT THE TOP OF THE CONCRETE BASE SHALL PLUGGED IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF THE CONCRETE BASE BEFORE INSTALLATION OF CABLE OR WIRE.

WHEN ANCHOR RODS USING THE ALTERNATE L BEND ARE FURNISHED FOR THE TYPE 10 BASE, THE 4" L BEND SHALL BE IN ADDITION TO THE SPECIFIED ANCHOR ROD BAR LENGTH.

THE "L" BEND SHALL NOT BE THREADED.

STRAIGHT ANCHOR RODS SHALL BE THREADED 12" IN LENGTH ON EACH END OF THE ROD.

FOUR (4) ANCHOR RODS, 1" DIA. X 3'-6"

ANCHOR RODS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 654.2.1 AND 641.2.2 OF THE STANDARD SPECIFICATIONS AND IN ACCORDANCE WITH A-449, OR ASTM. A-687 (GRADE 105).

NOTES:

WISCONSIN DOT NORTHEAST REGION ELECTRICAL UNIT SHALL APPROVE FINAL LOCATIONS FOR ALL CONCRETE BASES IN THE FIELD PRIOR TO CONSTRUCTION. CONTACT THEM 3 DAYS IN ADVANCE AT (920) 492-5654 OR 492-5710.

2" DRAIN DUCT TO DITCH REQUIRED FOR ALL PULL BOXES. THIS 2" DRAIN DUCT IS INCIDENTAL TO THE PULL BOX BID ITEM.

THE LOCATION OF EXISTING AND PROPOSED UTILITIES AS SHOWN ON THE PLANS ARE APPROXIMATE. IN ADDITION, THERE MAY BE OTHER UTILITIES WITHIN THE PROJECT AREA WHICH ARE NOT SHOWN. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL UTILITIES PRIOR TO CONSTRUCTION.

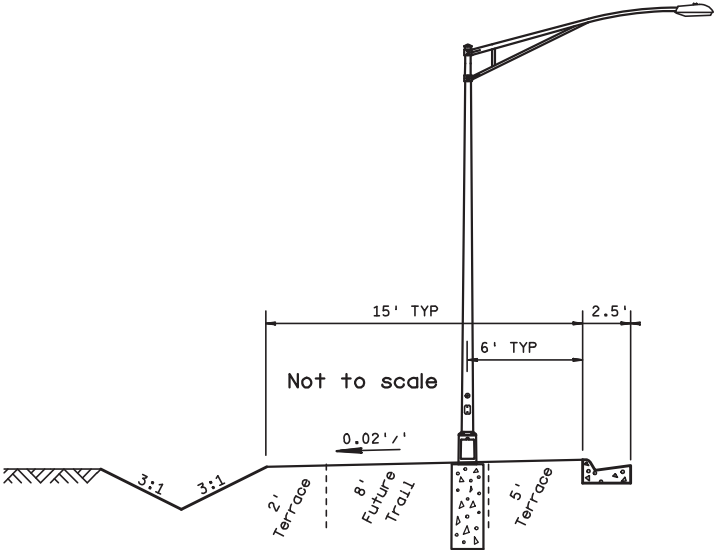
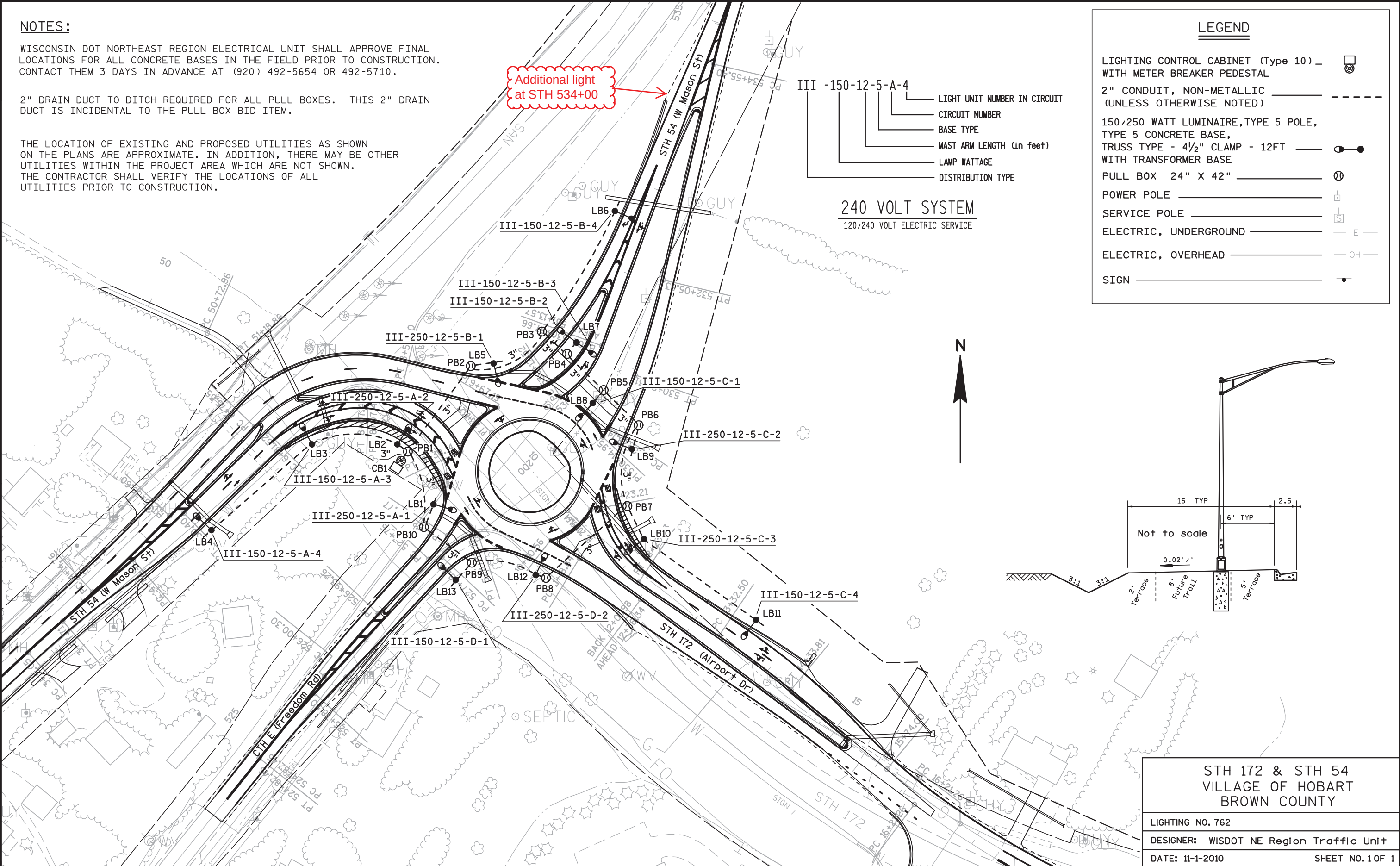
Additional light
at STH 534+00

- III -150-12-5-A-4
- LIGHT UNIT NUMBER IN CIRCUIT
- CIRCUIT NUMBER
- BASE TYPE
- MAST ARM LENGTH (in feet)
- LAMP WATTAGE
- DISTRIBUTION TYPE

240 VOLT SYSTEM
120/240 VOLT ELECTRIC SERVICE

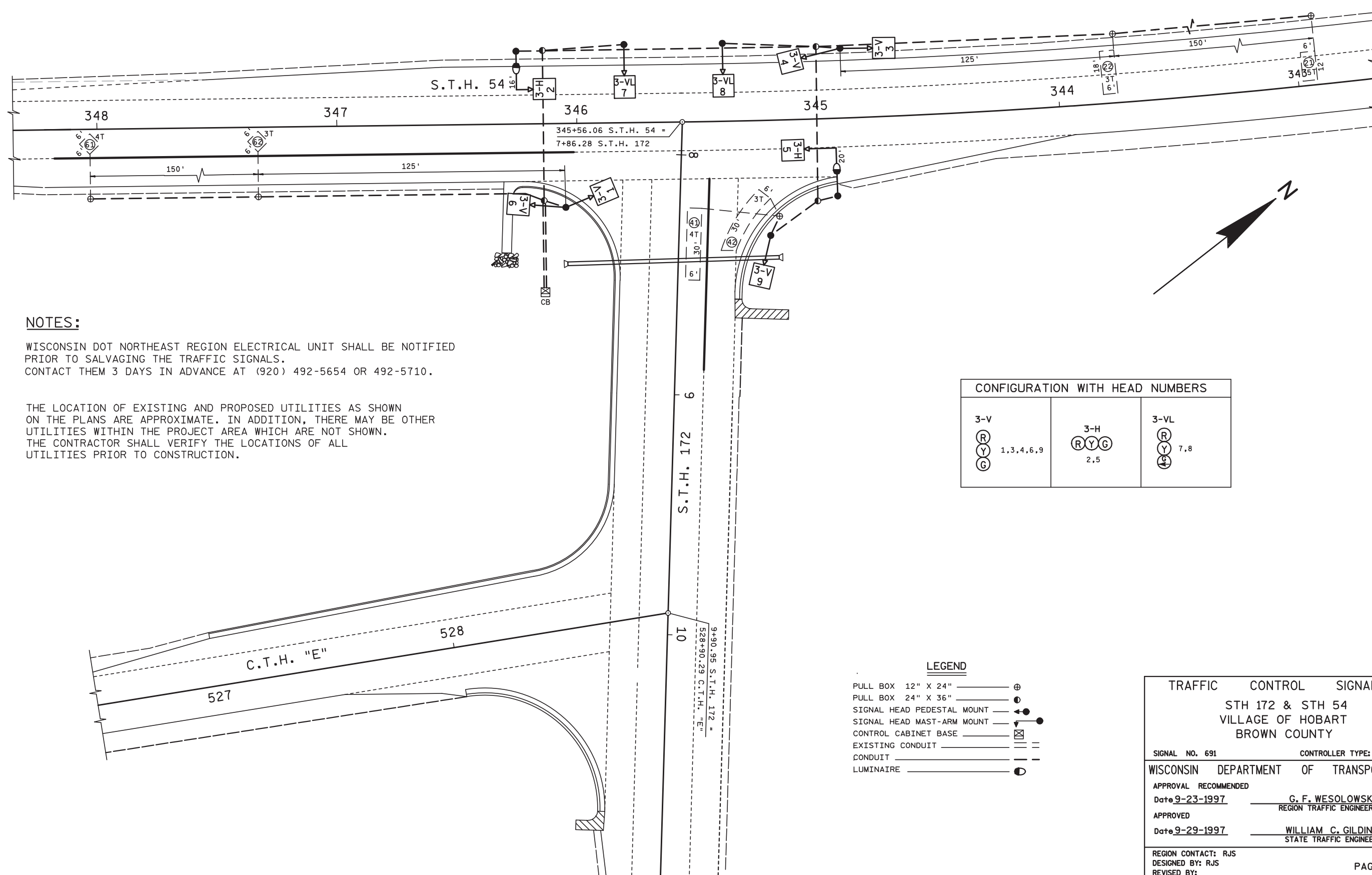
LEGEND

- LIGHTING CONTROL CABINET (Type 10) _ WITH METER BREAKER PEDESTAL
- 2" CONDUIT, NON-METALLIC (UNLESS OTHERWISE NOTED)
- 150/250 WATT LUMINAIRE, TYPE 5 POLE, TYPE 5 CONCRETE BASE, TRUSS TYPE - 4 1/2" CLAMP - 12FT WITH TRANSFORMER BASE
- PULL BOX 24" X 42"
- POWER POLE
- SERVICE POLE
- ELECTRIC, UNDERGROUND
- ELECTRIC, OVERHEAD
- SIGN



STH 172 & STH 54
VILLAGE OF HOBART
BROWN COUNTY

LIGHTING NO. 762
DESIGNER: WISDOT NE Region Traffic Unit
DATE: 11-1-2010 SHEET NO. 1 OF 1



2

NOTES:

WISCONSIN DOT NORTHEAST REGION ELECTRICAL UNIT SHALL BE NOTIFIED
PRIOR TO SALVAGING THE TRAFFIC SIGNALS.
CONTACT THEM 3 DAYS IN ADVANCE AT (920) 492-5654 OR 492-5710.

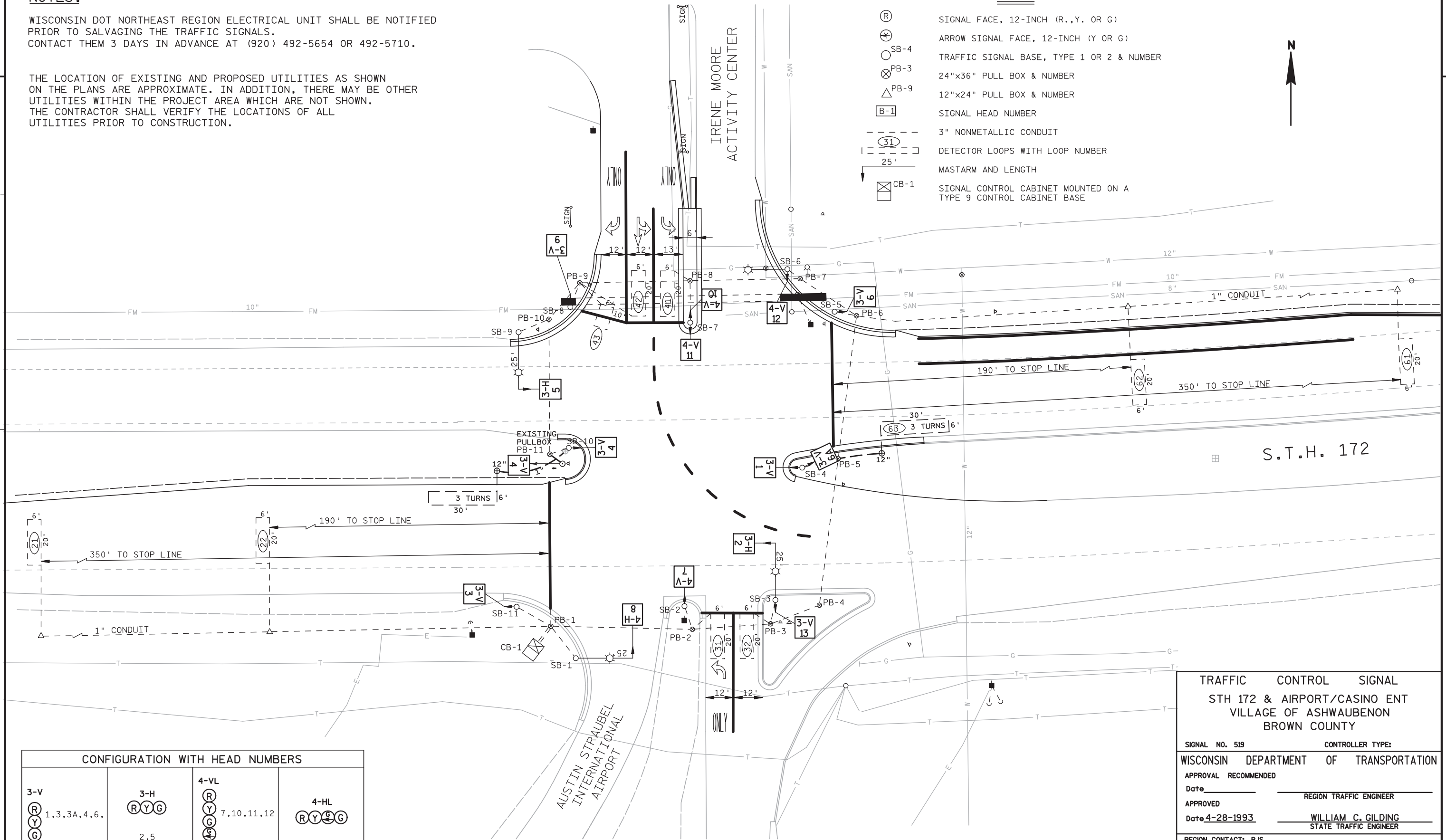
THE LOCATION OF EXISTING AND PROPOSED UTILITIES AS SHOWN
ON THE PLANS ARE APPROXIMATE. IN ADDITION, THERE MAY BE OTHER
UTILITIES WITHIN THE PROJECT AREA WHICH ARE NOT SHOWN.
THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL
UTILITIES PRIOR TO CONSTRUCTION.

LEGEND

	SIGNAL FACE, 12-INCH (R., Y. OR G)
	ARROW SIGNAL FACE, 12-INCH (Y OR G)
 SB-4	TRAFFIC SIGNAL BASE, TYPE 1 OR 2 & NUMBER
 PB-3	24"x36" PULL BOX & NUMBER
 PB-9	12"x24" PULL BOX & NUMBER
 B-1	SIGNAL HEAD NUMBER
	3" NONMETALLIC CONDUIT
	DETECTOR LOOPS WITH LOOP NUMBER
	MASTARM AND LENGTH
 CB-1	SIGNAL CONTROL CABINET MOUNTED ON A TYPE 9 CONTROL CABINET BASE



2



CONFIGURATION WITH HEAD NUMBERS			
3-V  1, 3, 3A, 4, 6,	3-H  2, 5	4-VL  7, 10, 11, 12	4-HL  8

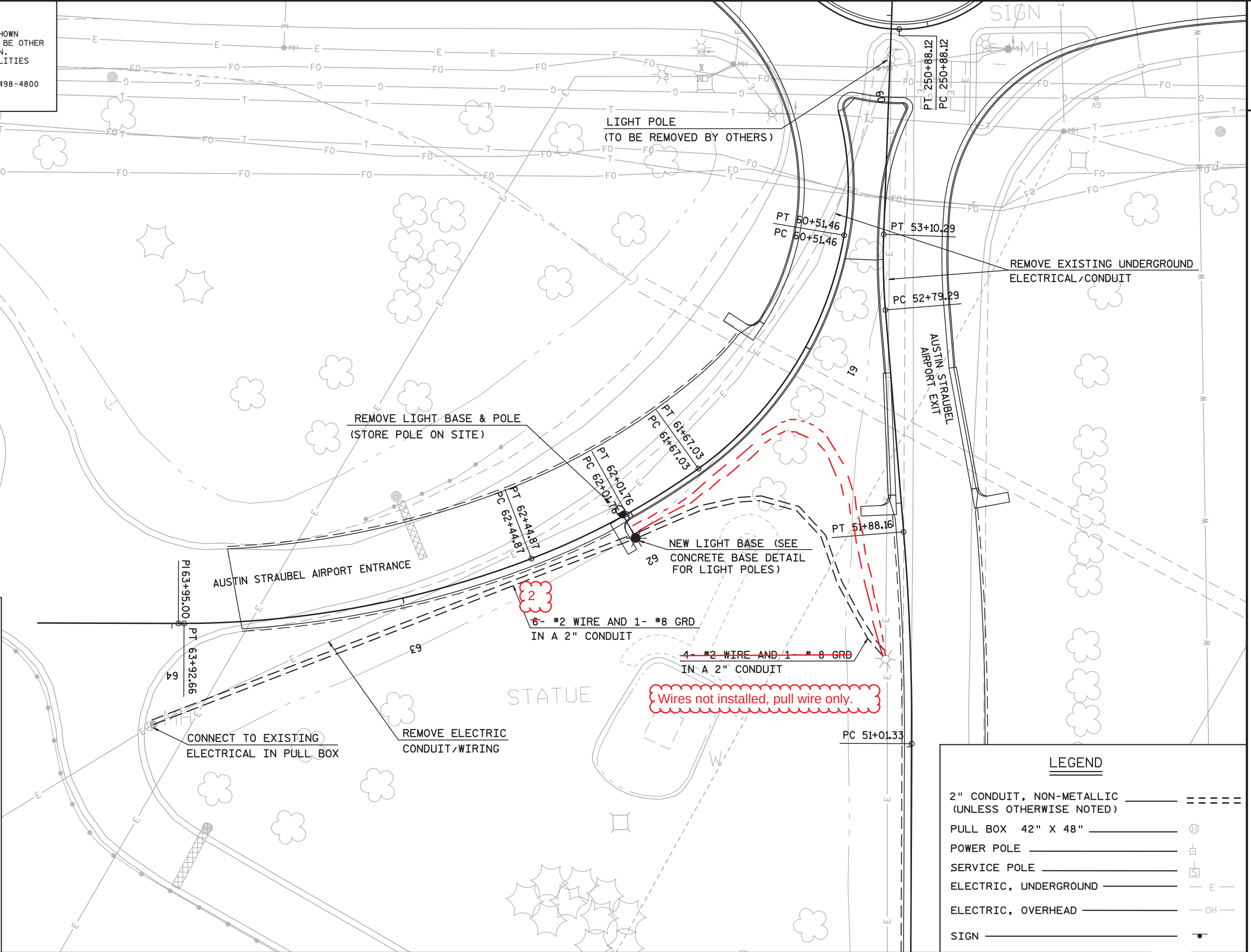
TRAFFIC		REGIONAL		SIGNAL	
STH 752 & AIRPORT/CASINO ENT VILLAGE OF ASHWAUBENON BROWN COUNTY					
SIGNAL NO. 519			CONTROLLER TYPE:		
WISCONSIN DEPARTMENT OF TRANSPORTATION					
APPROVAL RECOMMENDED					
Date _____		_____ REGION TRAFFIC ENGINEER			
APPROVED					
Date <u>4-28-1993</u>		_____ WILLIAM C. GILDING STATE TRAFFIC ENGINEER			
REGION CONTACT: RJS					
DESIGNED BY: RJS					
REVISED BY:					
PAGE 1 OF 1					

2

NOTES:

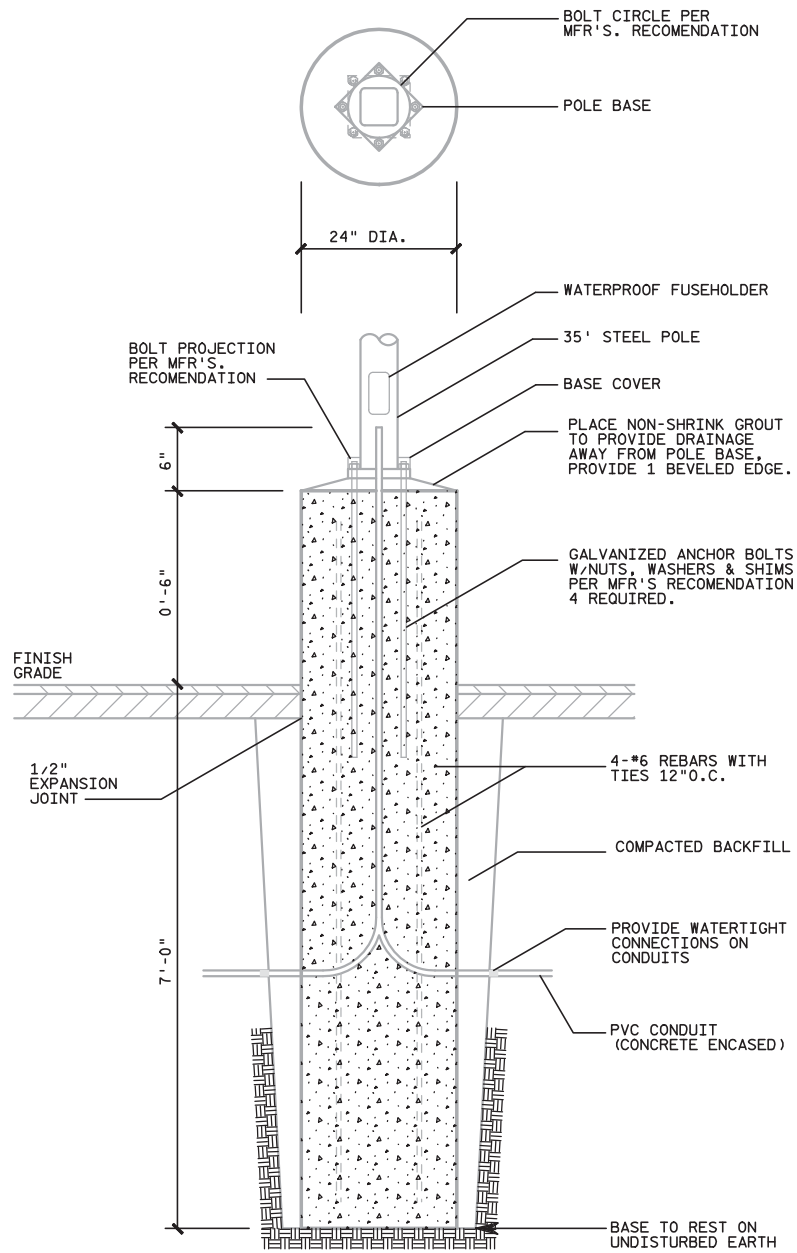
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CONTACT AUSTIN STRAUBEL AIRPORT (TOM MILLER) AT 920-498-4800 FOR POLE STORAGE LOCATION AND WIRING DETAILS.



LEGEND

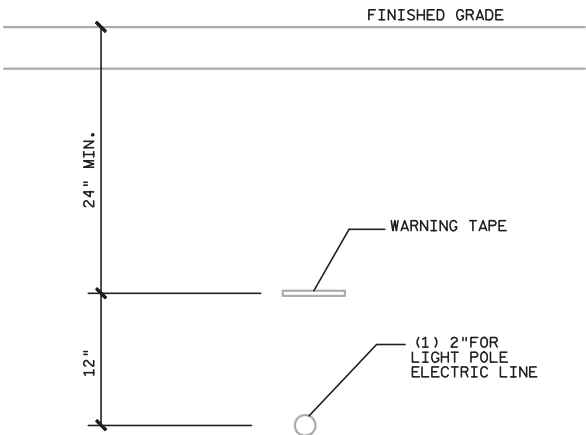
2" CONDUIT, NON-METALLIC (UNLESS OTHERWISE NOTED)	=====
PULL BOX 42" X 48"	⊗
POWER POLE	⊥
SERVICE POLE	⊥
ELECTRIC, UNDERGROUND	— E —
ELECTRIC, OVERHEAD	— OH —
SIGN	—



DETAIL TYPICAL FOR FIXTURE TYPES E AND C

CONCRETE BASE DETAIL FOR LIGHT POLES

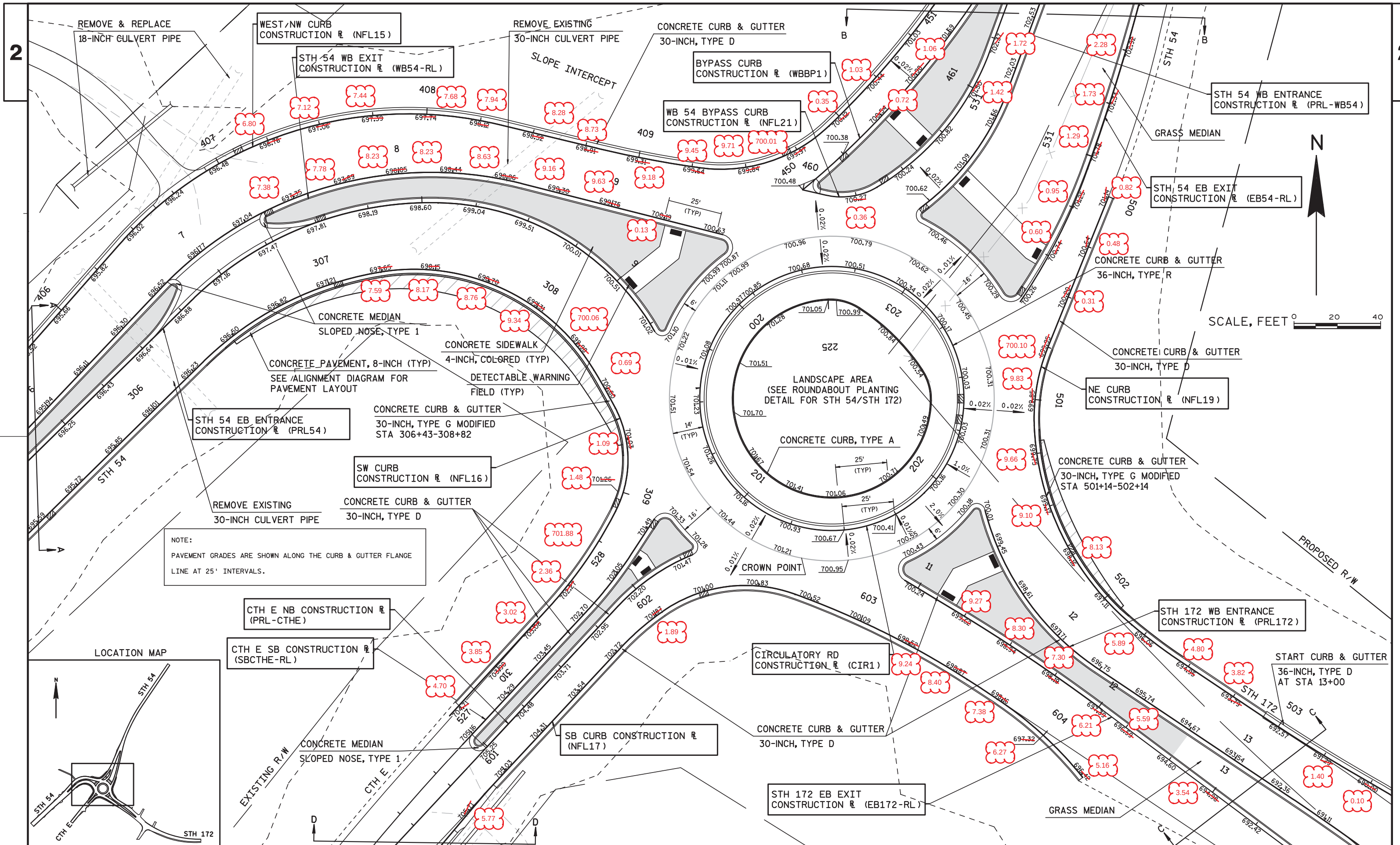
NO.	MANUFACTURER	CATALOG NO.	LAMPS	REMARKS
A	GARDCO LITHONIA MCGRAW-EDISON	EH1911-250HPS-WT-BRA-LF POLE - KA-IND-STSP35 KAS2-250S-R3-TB-SP12 POLE - STS-35-6G-DW19 CS7232-9-CA40 POLE - STS-350610-BY	1-LU250 EACH	(2) 250W, MULTI TAP RECTILINEAR CUT OF LUMINAIRE, TYPE III DISTRIBUTION, TEMPERED GLASS LENS, IN-LINE FUSING, AT POLE HANDHOLE, BRONZE FINISH, MOUNT ON 30" SQUARE TAPERED POLE, MOUNT POLE ON CONCRETE BASE PER CONSTRUCTION DETAIL.
B	GARDCO LITHONIA MCGRAW-EDISON	EH1911-250HPS-WT-BRA-LF POLE - KA-IND-STSP35 KAS2-250S-R3-TB-SP12 POLE - STS-35-6G-DW19 CS7232-9-CA40 POLE - STS-350610-BY	1-LU250 EACH	(1) 250W, MULTI TAP RECTILINEAR CUT OF LUMINAIRE, TYPE III DISTRIBUTION, TEMPERED GLASS LENS, IN-LINE FUSING, AT POLE HANDHOLE, BRONZE FINISH, MOUNT ON 30" SQUARE TAPERED POLE, MOUNT POLE ON CONCRETE BASE PER CONSTRUCTION DETAIL.

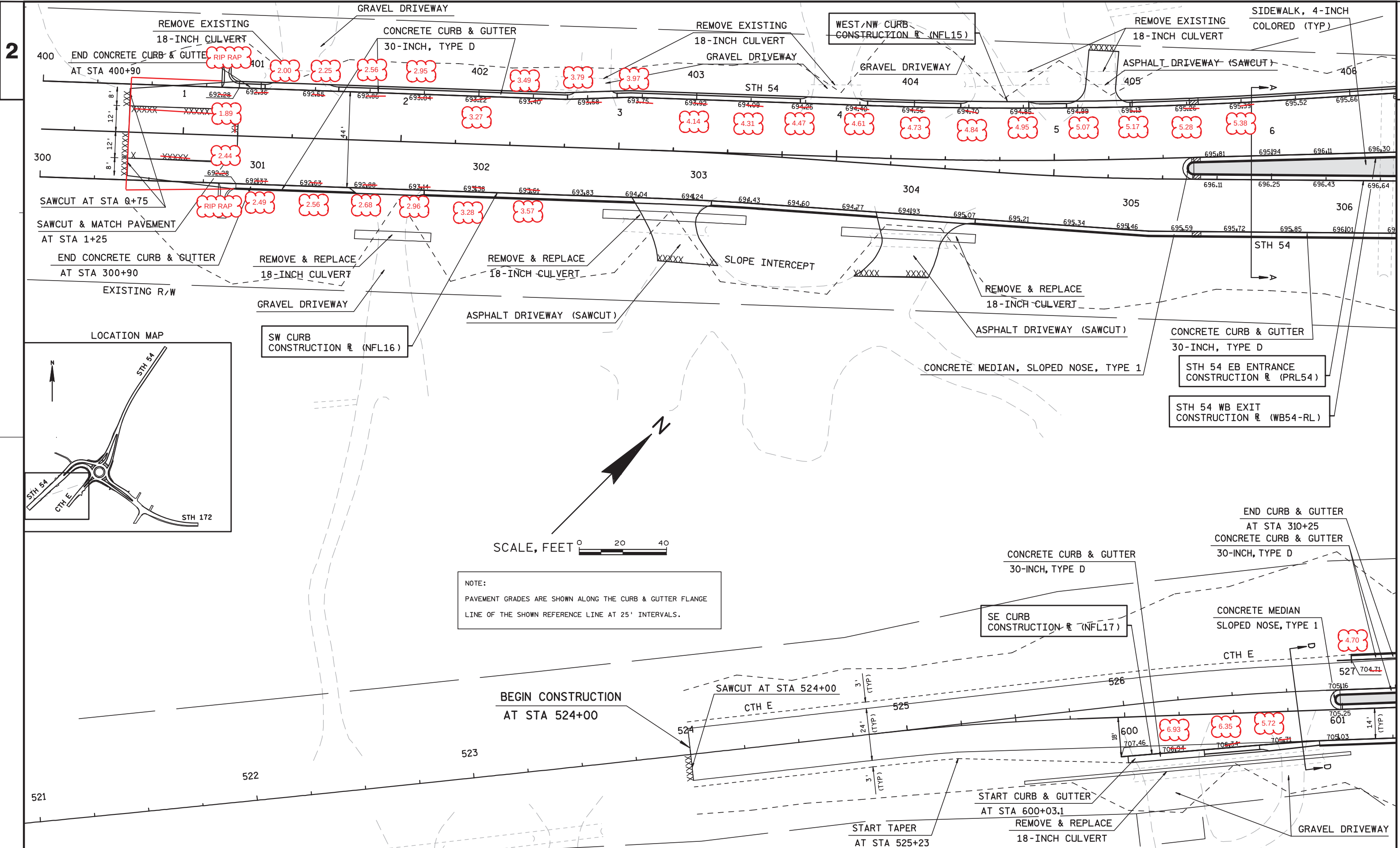


CONDUIT DETAIL

NOTES:

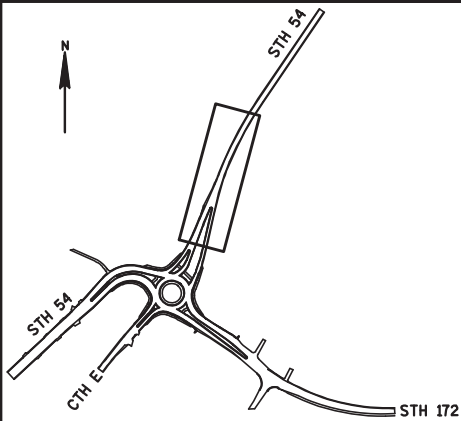
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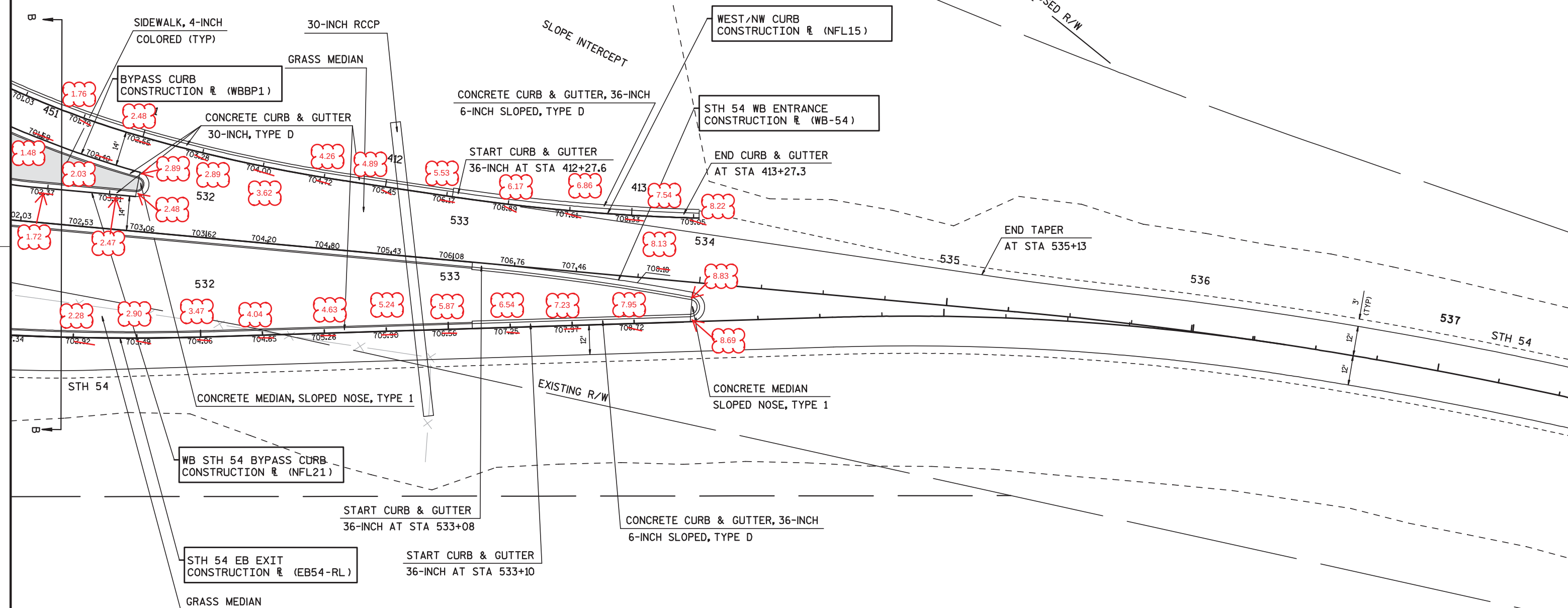


2

2

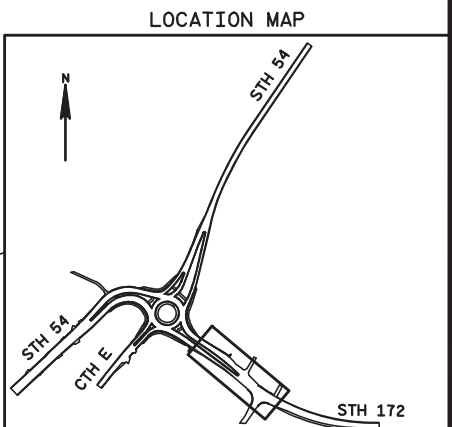


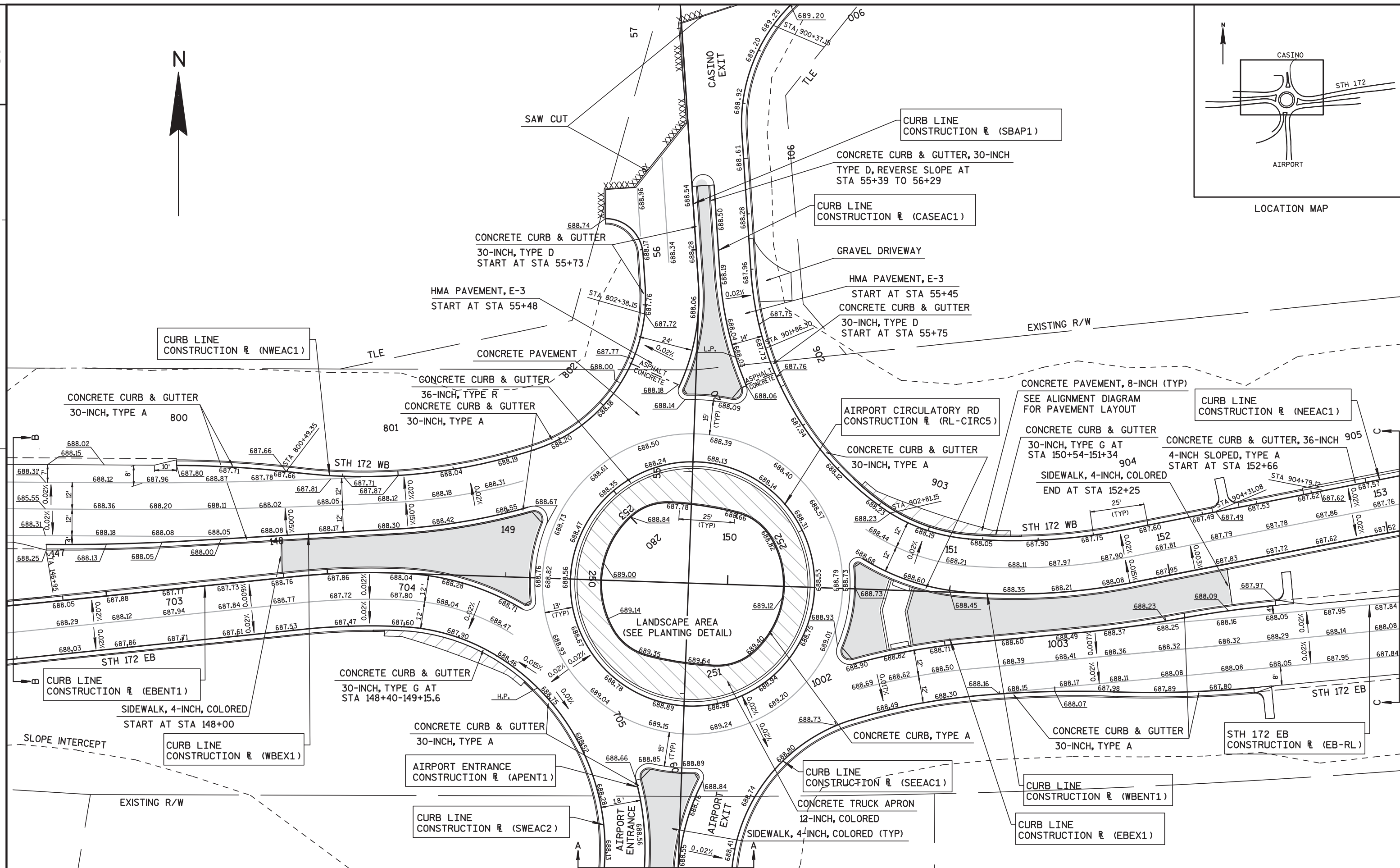
LOCATION MAP



NOTE:
PAVEMENT GRADES ARE SHOWN ALONG THE CURB & GUTTER FLANGE
LINE OF THE SHOWN REFERENCE LINE AT 25' INTERVALS.

2

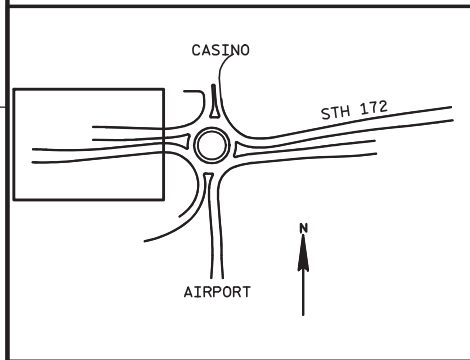




2



A schematic map showing a road network. A vertical road runs through the center. A horizontal road intersects it, with "STH 172" written above it. To the left of the intersection is a "CASINO" and to the right is an "AIRPORT". A north arrow points upwards in the top left corner.



LOCATION MAP

EXISTING R/W

CONCRETE CURB & GUTTER, 36-INCH
4-INCH SLOPED, TYPE A
START AT STA 144+44
END AT STA 145+87

CONSTRUCTION LIMITS
STA 144+30

CURB LINE
CONSTRUCTION R (EBENT1)

Surface Drain

CURB LINE
CONSTRUCTION R (SWEAC2)

Surface Drain

CONCRETE CURB & GUTTER, 36-INCH
4-INCH SLOPED, TYPE A
START AT STA 144+44
END AT STA 146+34

CONCRETE CURB & GUTTER, 36-INCH
4-INCH SLOPED, TYPE D
START AT STA 146+96

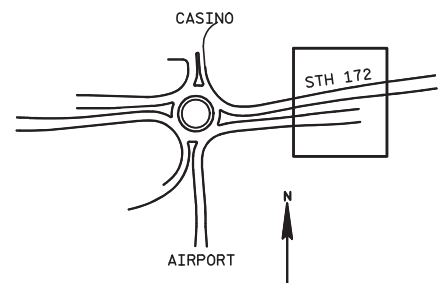
SAW CUT
STA 145+75

STH 172 WB

CONCRETE CURB & GUTTER
30-INCH, TYPE A

CURB LINE
CONSTRUCTION R (WBEX1)

SLOPE INTERCEPT



LOCATION MAP

EXISTING R/W

SLOPE INTERCEPT

CONCRETE CURB & GUTTER
36-INCH, TYPE A, SLOPED
START AT STA 152+66
END AT STA 154+80

CONCRETE CURB & GUTTER
36-INCH, TYPE A, SLOPED
START AT STA 153+13
END AT STA 154+80

CURB LINE
CONSTRUCTION R (NEEAC1)

STH 172 WB

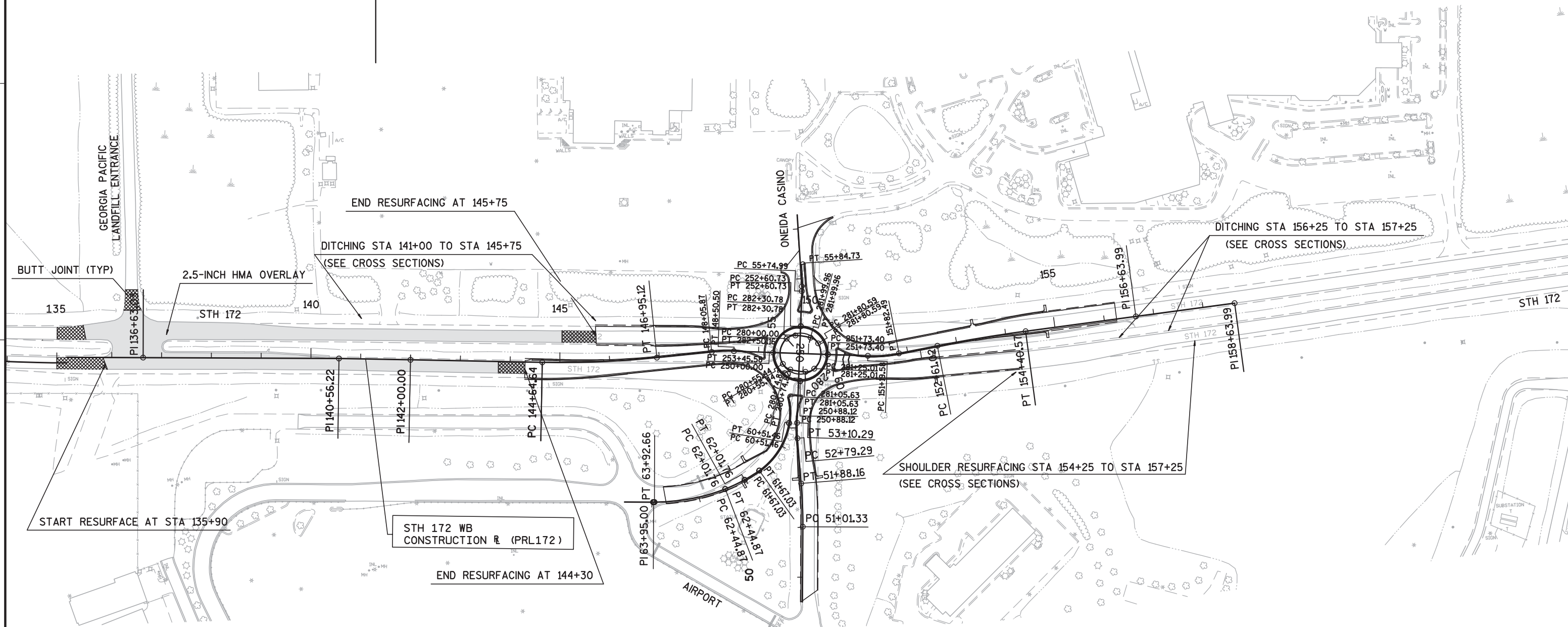
SAW CUT

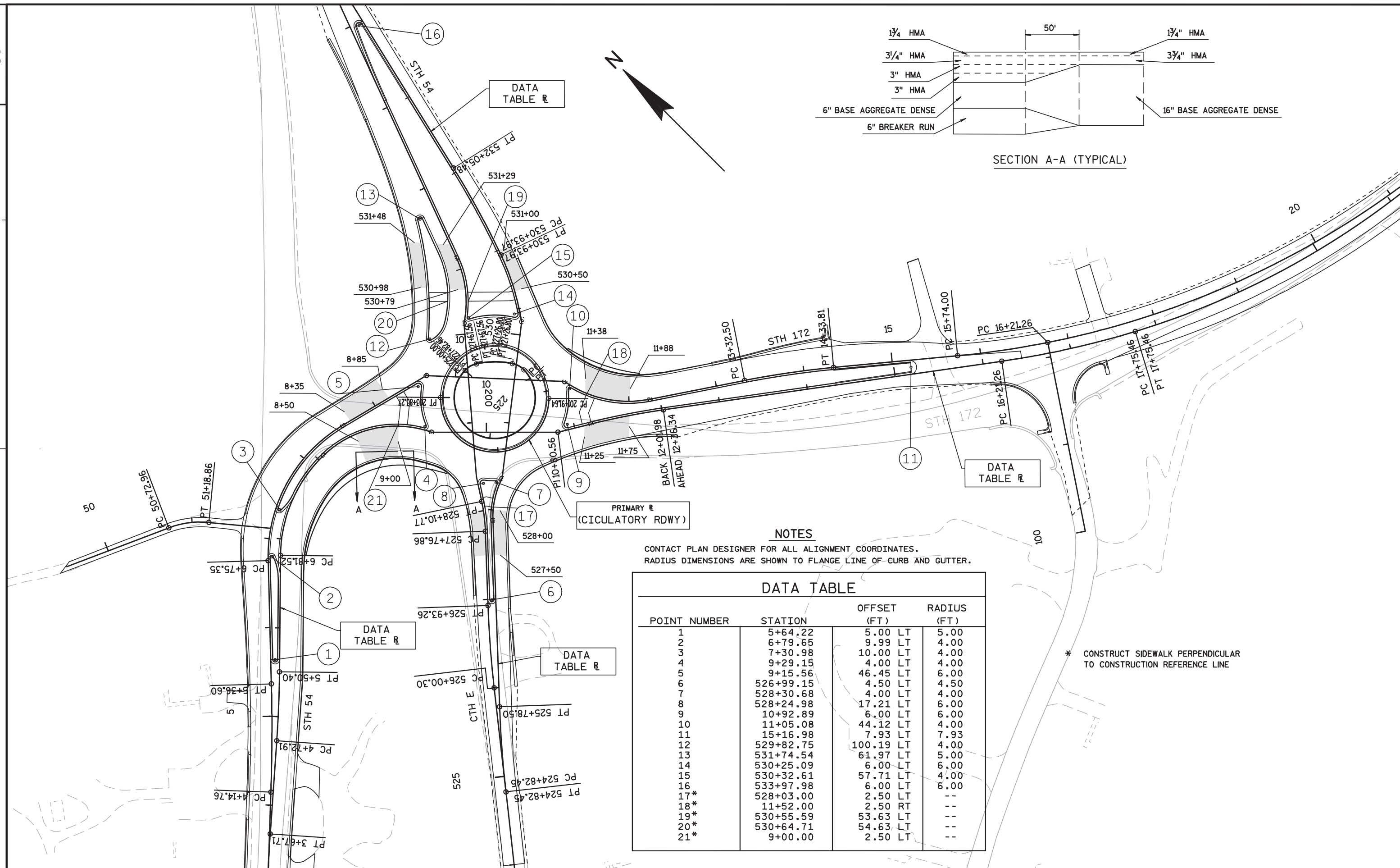
CONSTRUCT NORMAL SHOULDER

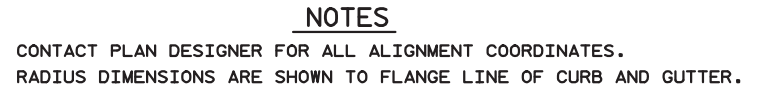
PAVED MERGE LANE (TO BE REMOVED)
STA 154+25 TO STA 157+25

CURB LINE
CONSTRUCTION R (WBENT1)



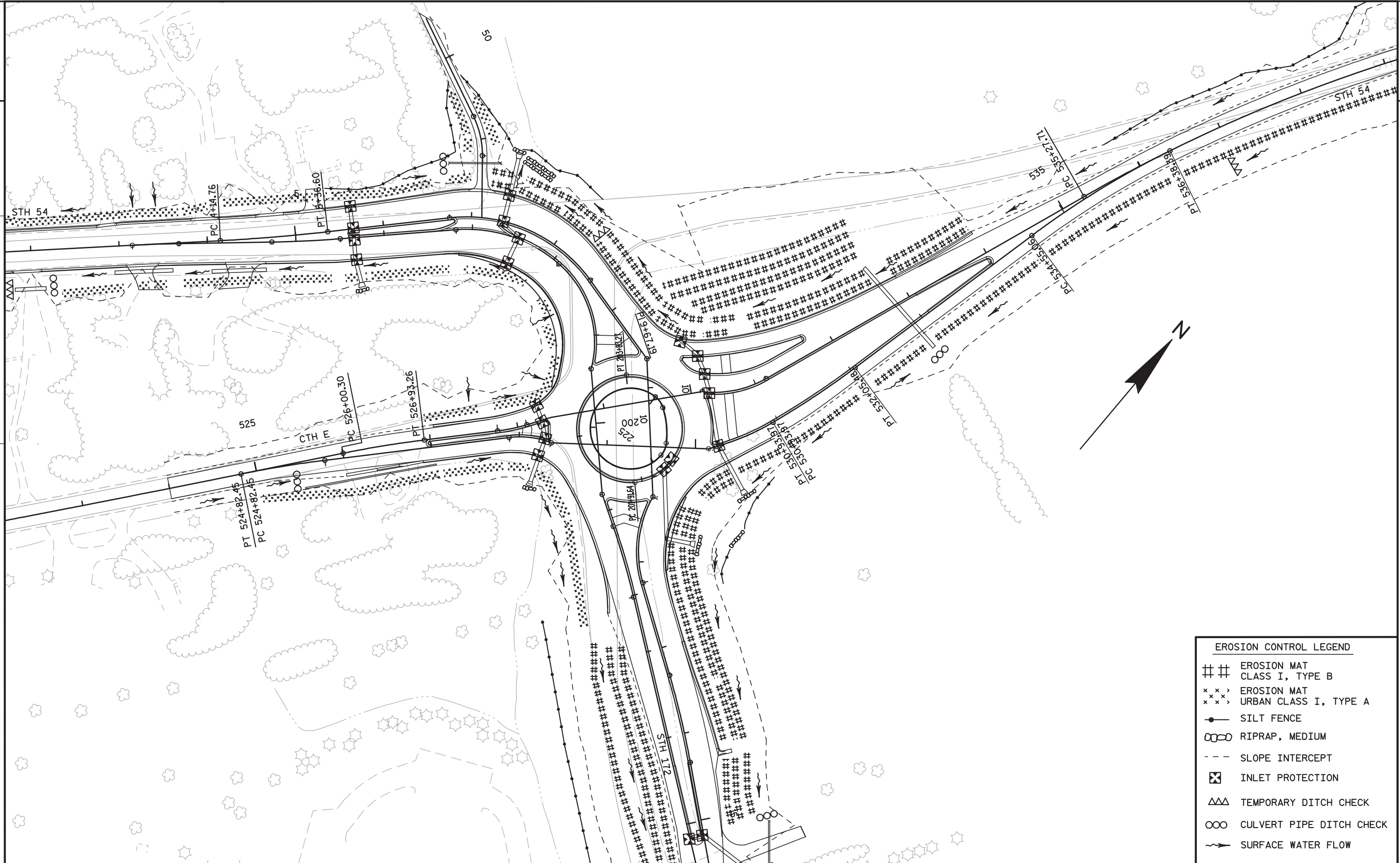






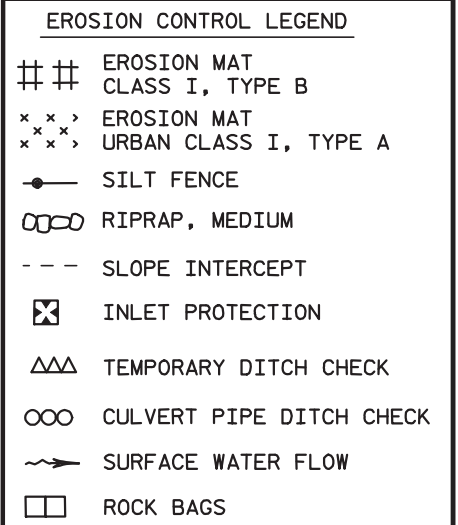
DATA TABLE			
POINT NUMBER	STATION	OFFSET (FT)	RADIUS (FT)
1	149+09.92	10.69 RT	4.00
2	149+11.94	26.30 LT	6.00
3	53+61.99	14.68 LT	6.00
4	53+62.55	6.01 RT	4.00
5	150+56.01	28.10 RT	6.00
6	150+58.46	10.22 LT	4.00
7	55+36.27	3.80 LT	4.00
8	55+37.10	17.76 RT	6.00
9	56+28.60	5.00 RT	5.00
10*	150+72.74	7.56 LT	-
11*	150+71.82	29.71 RT	-

* CONSTRUCT SIDEWALK PERPENDICULAR
TO CURB LINE REFERENCE LINE



EROSION CONTROL LEGEND	
##	EROSION MAT CLASS I, TYPE B
xxx	EROSION MAT URBAN CLASS I, TYPE A
—●—	SILT FENCE
○○	RIPRAP, MEDIUM
- - -	SLOPE INTERCEPT
⊗	INLET PROTECTION
△△	TEMPORARY DITCH CHECK
○○	CULVERT PIPE DITCH CHECK
~	SURFACE WATER FLOW

2

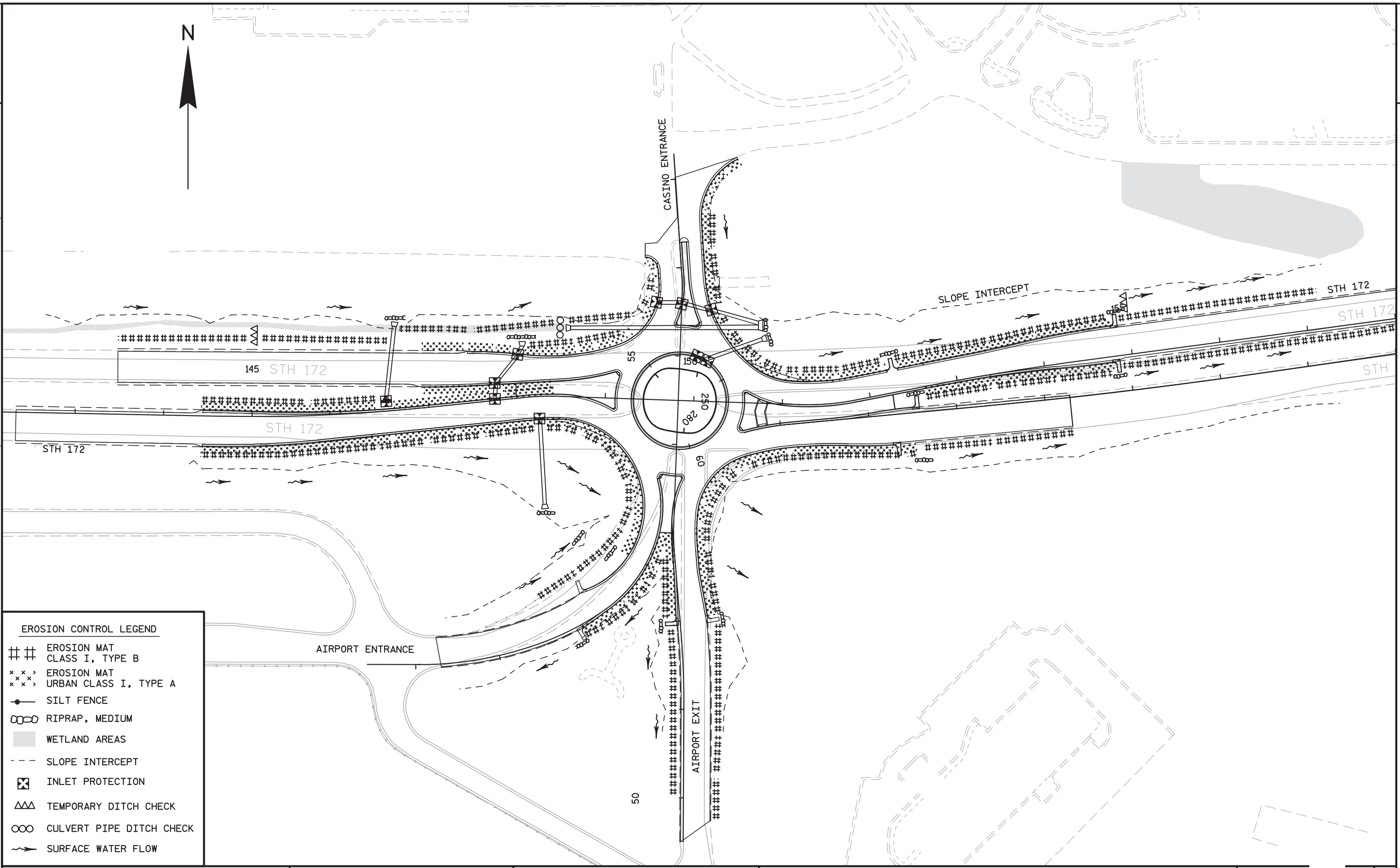


E

WISDOT/CADDS SHEET 42



LEVELS ON = 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63



EROSION CONTROL LEGEND

##

EROSION MAT
CLASS I, TYPE B

x x x

EROSION MAT
URBAN CLASS I, TYPE A

—●—

SILT FENCE

〰〰〰

RIPRAP, MEDIUM

■

WETLAND AREAS

- - -

SLOPE INTERCEPT

⊠

INLET PROTECTION

△△△

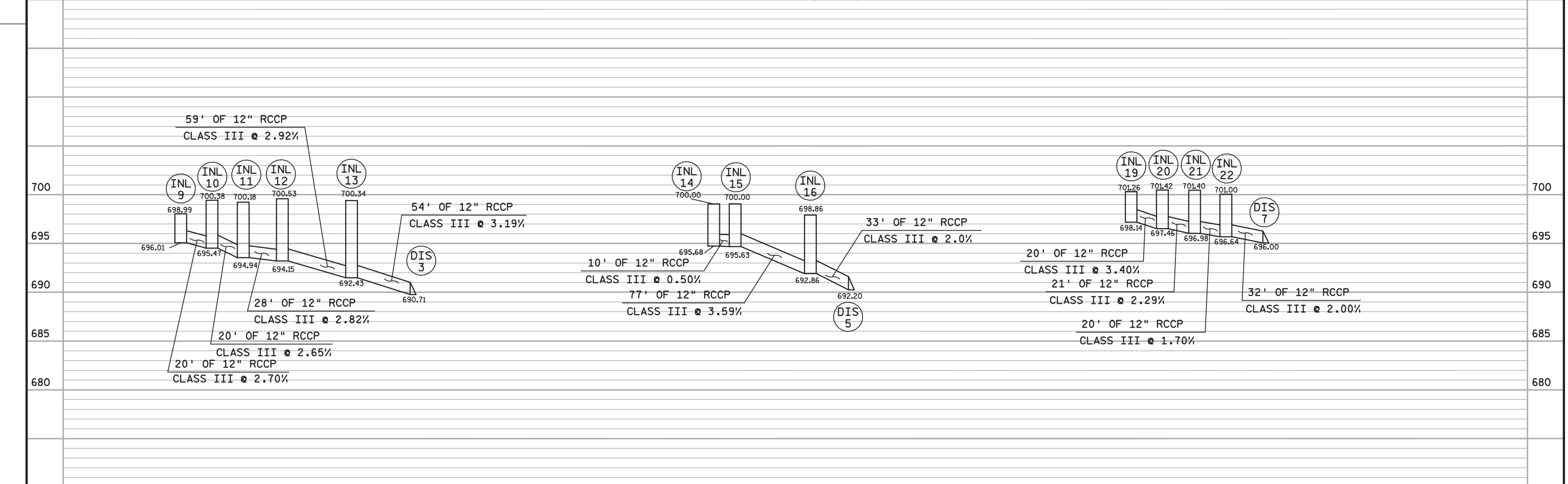
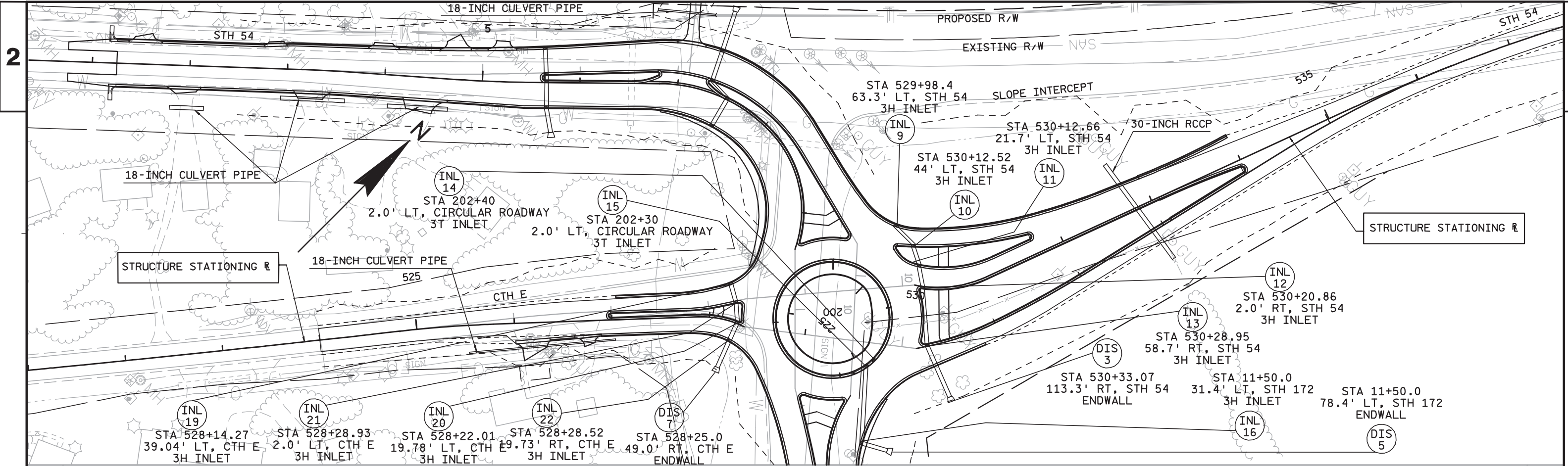
TEMPORARY DITCH CHECK

〇〇〇

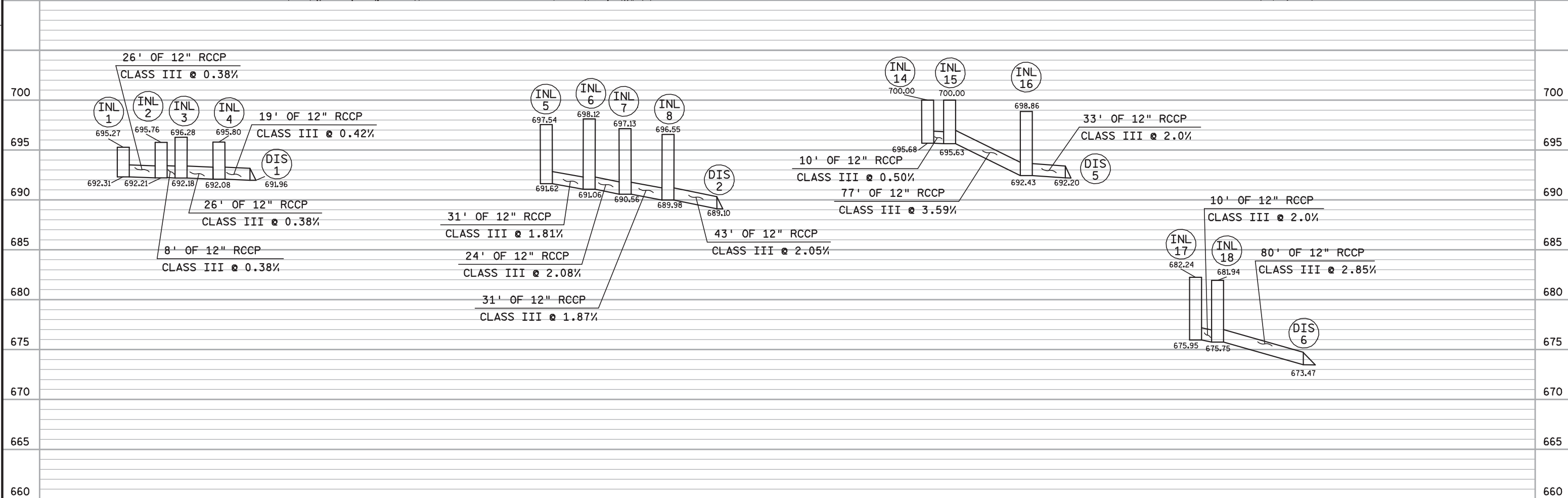
CULVERT PIPE DITCH CHECK

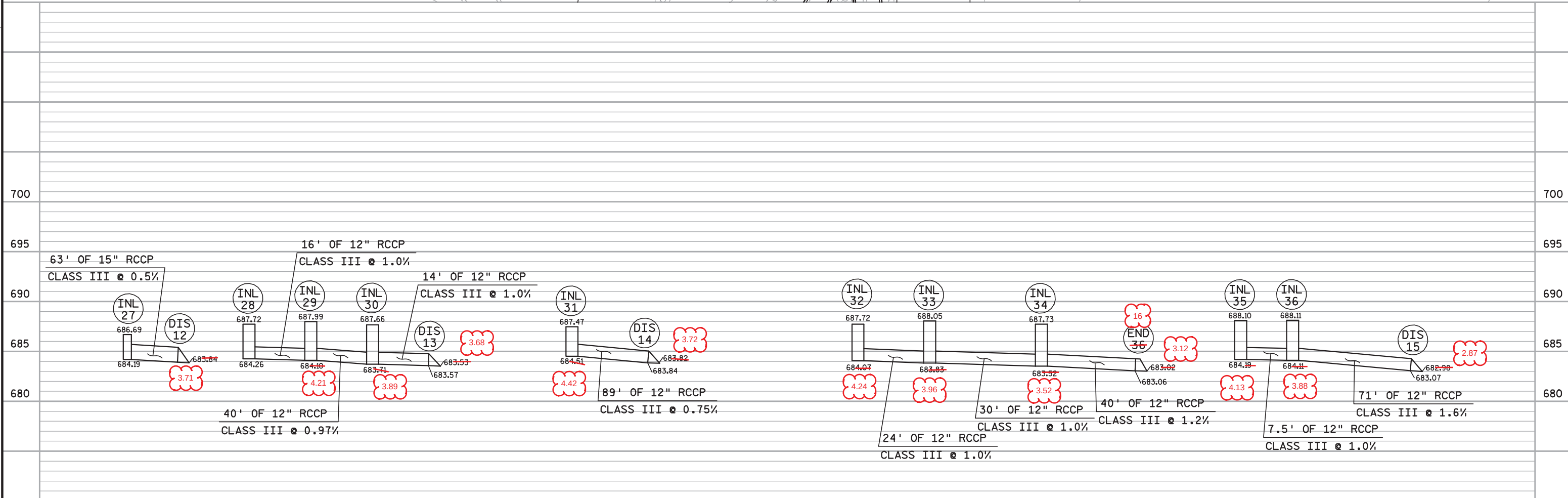
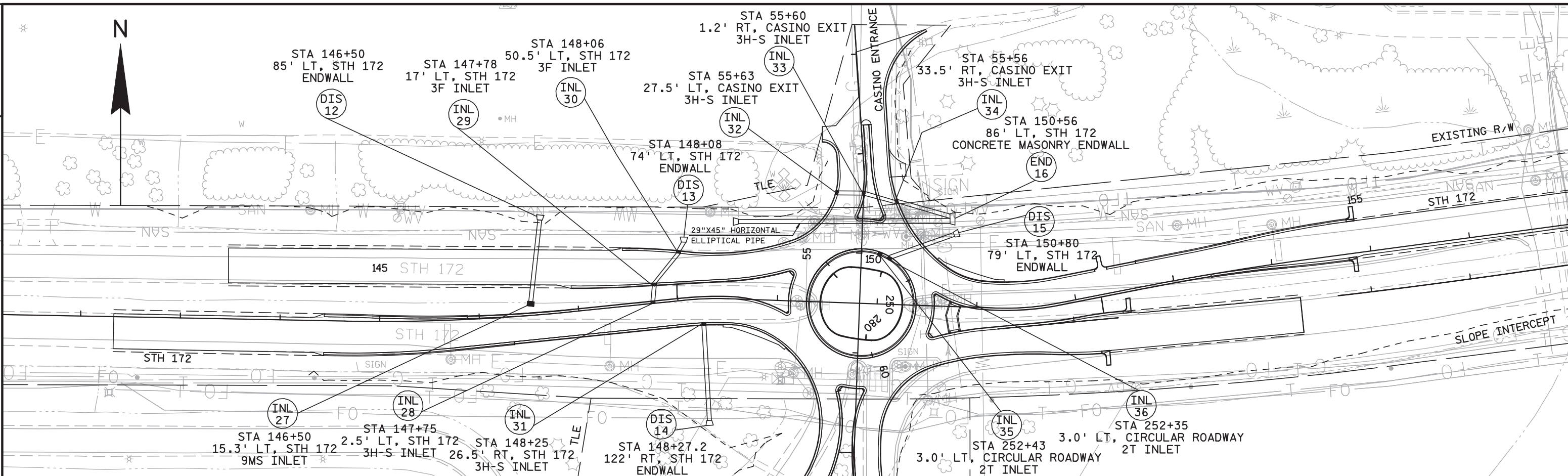
→

SURFACE WATER FLOW



2





1" FELT JOINT, TYP.
AS SHOWN

NOTE: ON INNER RING COLORED
CONCRETE SIDEWALK 5-INCH
MATCH JOINTS AS PLACED ON
THE TRUCK APRON

LITTLE BLUESTEM SHALL BE
PLANTED IN CLUMPS OF 5-7
PLANTS.

LEGEND

+HP HIGH POINT OF ROUNDABOUT

☼ LITTLE BLUESTEM

* SEDUM VARIETY

GRS PLANT SYMBOL

90 QUANTITY

PLANT SCHEDULE

NUM SYM SCIENTIFIC NAME - COMMON NAME

GRS	PLANTS - OUTSIDE TURTLE SHELL
90	SCHIZACHYRIUM SCOPARIUM - LITTLE BLUESTEM

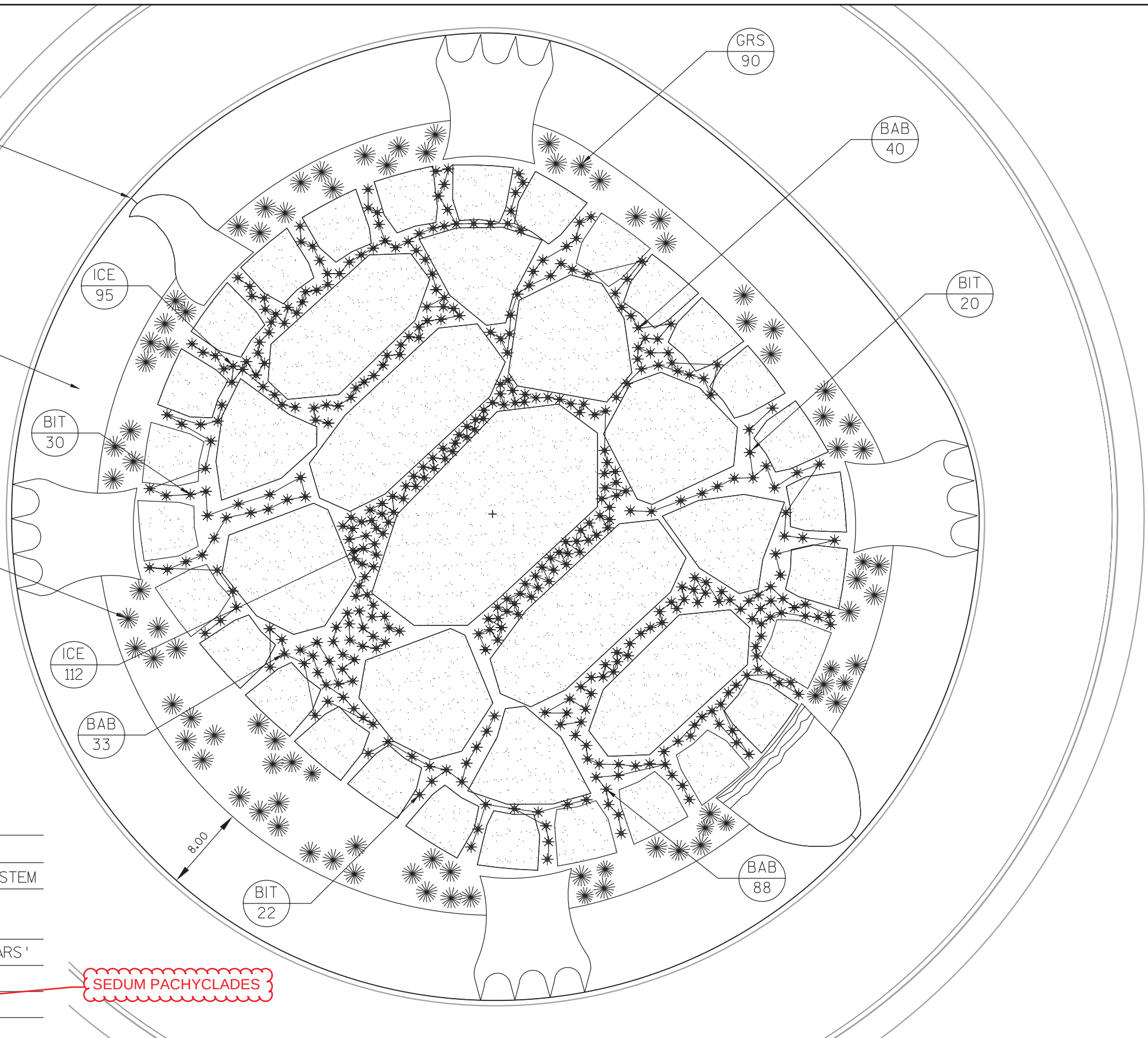
SED	PLANT MIX - ON TURTLE SHELL
440	

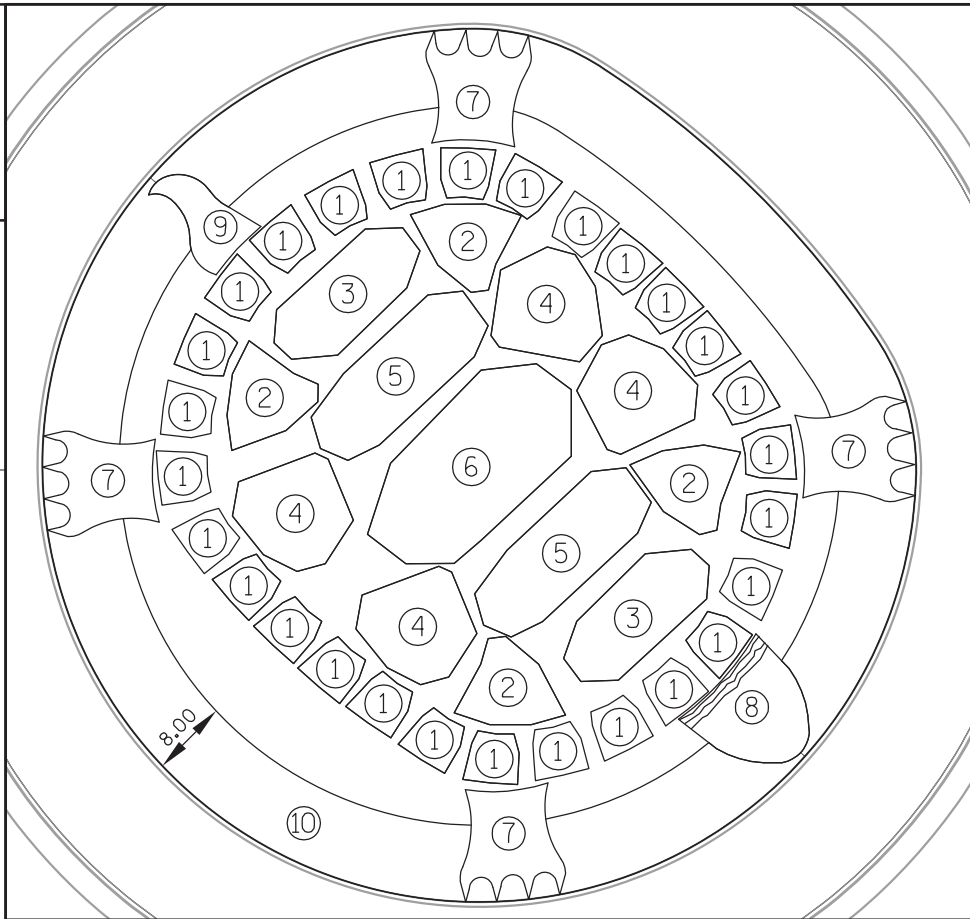
161	BAB	SEDUM ALBUM CHLOROTICUM 'BABY TEARS'

207	ICE	SEDUM ALBUM 'GREEN ICE'

72	BIT	~~SEDUM BITHYNICUM~~

SEDUM PACHYCLADES

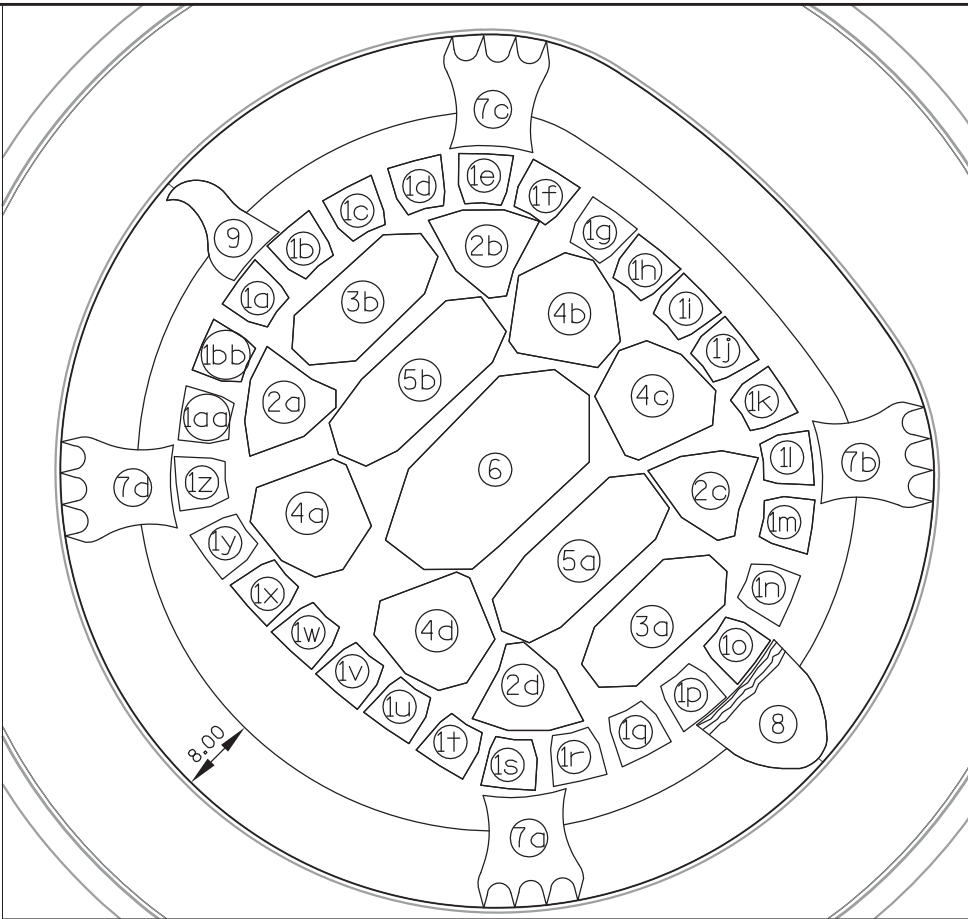




SHELL TYPES - PLAN

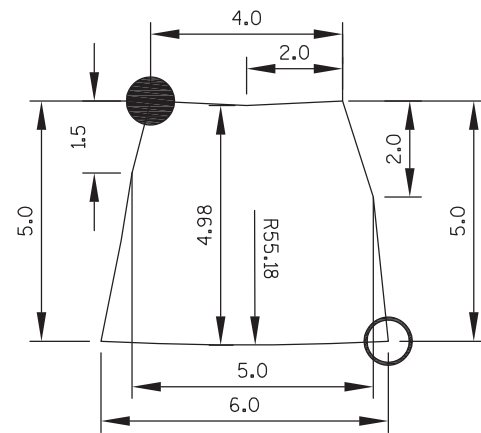


STH 172 SHELL DATA CHART				
NUM	PAVEMENT THICKNESS	QUANTITY	SQUARE FEET	FEDERAL COLOR
1	4-INCH	28	26 SF EA	FS#30227
2	4-INCH	4	65.5 SF EA	FS#30227
3	4-INCH	2	121 SF EA	FS#30227
4	4-INCH	4	104.5 SF EA	FS#30227
5	4-INCH	2	157 SF EA	FS#30227
6	4-INCH	1	276 SF EA	FS#30227
7	5-INCH	4	85 SF EA	FS#34094
8	5-INCH	1	107 SF EA	FS#34094
9	5-INCH	1	51 SF EA	FS#34094
10	5-INCH	1	1754 SF EA	FS#33617

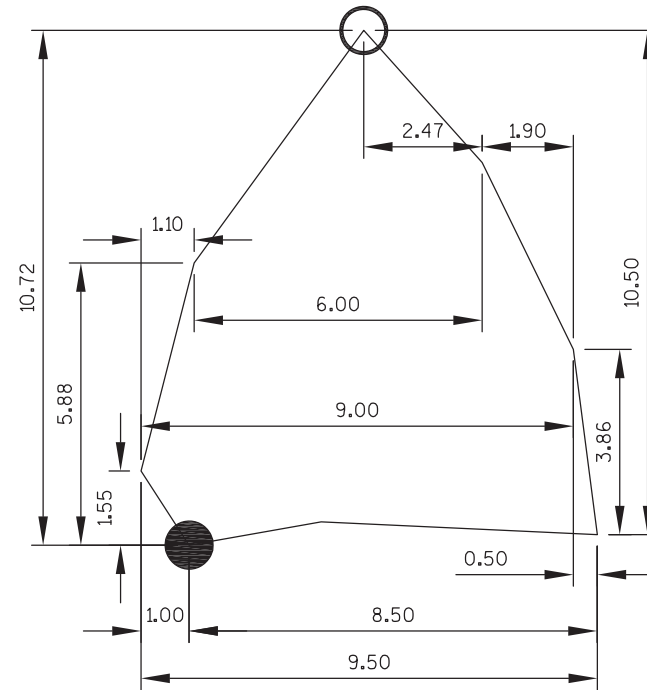


SHELL LOCATIONS - PLAN

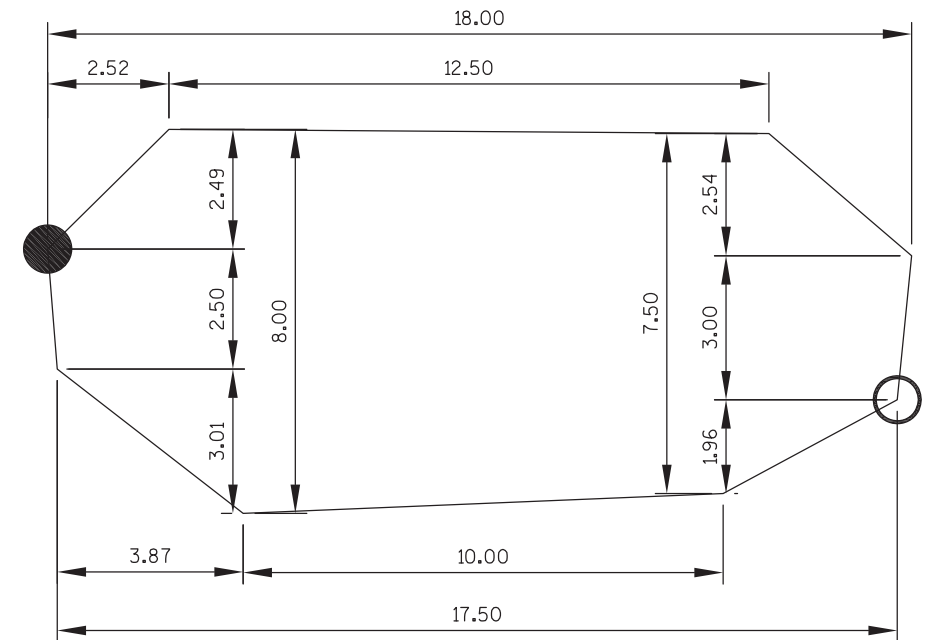
KEYED SHELL	NORTHING A	EASTING A	NORTHING B	EASTING B	KEYED SHELL	NORTHING A	EASTING A	NORTHING B	EASTING B	KEYED SHELL	NORTHING A	EASTING A	NORTHING B	EASTING B
1a	561955.78	57618.32	561956.39	57625.25	1r	561906.78	57658.37	561910.82	57652.71	4a	561927.28	57627.96	561939.61	57629.83
1b	561961.78	57622.99	561960.82	57629.87	1s	561905.10	57650.91	561910.71	57646.79	4b	561960.29	57656.93	561950.65	57649.02
1c	561966.48	57628.76	561964.04	57635.27	1t	561906.25	57643.33	561913.11	57642.18	4c	561951.94	57662.49	561939.50	57661.66
1d	561969.85	57635.53	561966.01	57641.33	1u	561909.98	57637.73	561916.88	57636.90	4d	561915.50	57640.84	561927.83	57642.71
1e	561971.44	57642.94	561966.04	57647.32	1v	561913.55	57632.38	561920.50	57632.23	5a	561924.98	57646.44	561934.49	57664.86
1f	561970.82	57650.69	561963.98	57651.93	1w	561917.71	57627.60	561924.66	57627.76	5b	561943.37	57629.44	561952.89	57647.87
1g	561966.91	57656.90	561959.99	57657.59	1x	561922.20	57622.94	561929.11	57623.73	6	561931.28	57635.15	561946.23	57656.53
1h	561963.04	57661.66	561956.09	57661.89	1y	561927.06	57618.31	561933.86	57619.79	7a	561892.88	57645.54	561893.64	57655.33
1i	561958.97	57666.35	561952.04	57665.79	1z	561934.19	57613.90	561939.33	57618.59	7b	561935.21	57692.33	561944.98	57691.41
1j	561954.46	57670.67	561947.62	57669.42	1aa	561941.59	57613.72	561945.41	57619.53	7c	561983.12	57652.06	561983.62	57642.26
1k	561949.25	57675.16	561942.56	57673.28	1bb	561948.91	57615.17	561951.12	57621.77	7d	561941.41	57601.54	561931.60	57601.95
1l	561942.57	57679.36	561937.43	57674.68	2a	561939.91	57621.18	561946.81	57630.15	8	561911.91	57667.68	561920.79	57675.75
1m	561935.34	57680.04	561931.53	57674.22	2b	561964.45	57639.76	561956.59	57647.90	9	561963.22	57624.20	561958.20	57619.53
1n	561927.45	57678.53	561925.19	57671.95	2c	561938.40	57662.63	561931.58	57671.67	NOTE SEE SHELL DETAIL SHEETS FOR NORTHING/EASTING LOCATIONS				
1o	561920.69	57675.39	561920.12	57668.46	2d	561912.34	57655.91	561920.31	57647.87					
1p	561914.79	57670.81	561915.94	57663.95	3a	561918.23	57655.72	561927.90	57670.87					
1q	561910.16	57665.04	561912.67	57658.56	3b	561960.69	57640.76	561951.10	57625.56					



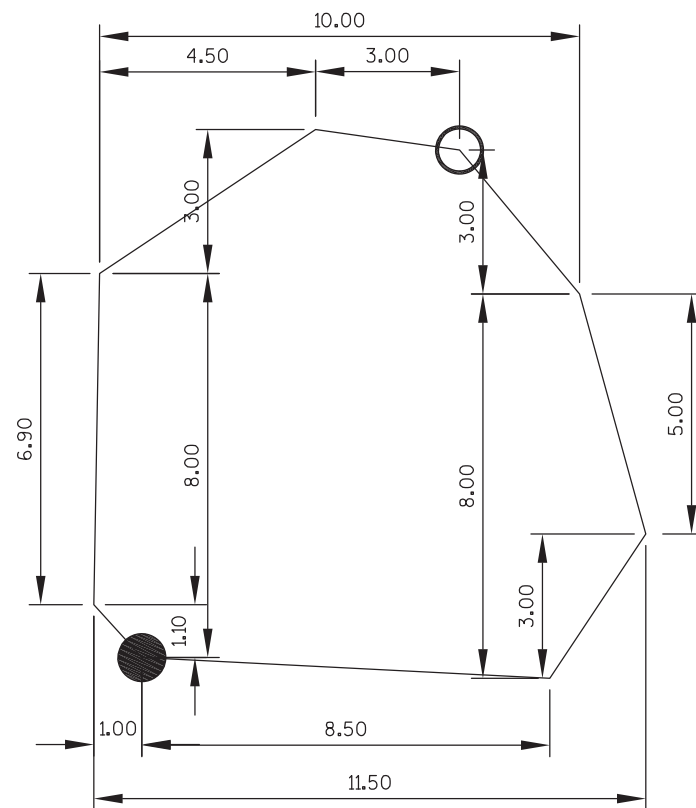
KEY #1 SHELL DETAIL - PLAN



KEY #2 SHELL DETAIL - PLAN



KEY #3 SHELL DETAIL - PLAN



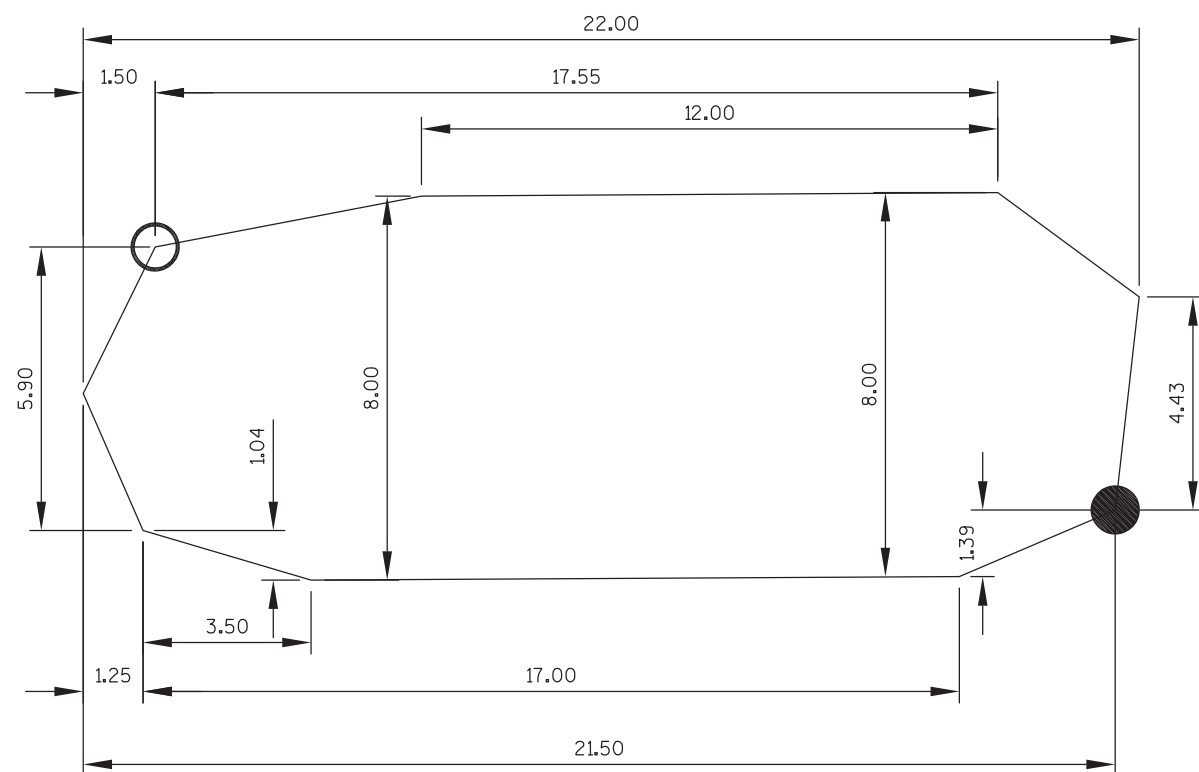
KEY #4 SHELL DETAIL - PLAN

GENERAL CONCRETE NOTES:
- SURFACE EDGE OF THE
CONCRETE TO BE FINISHED
WITH ROUNDED EDGES.

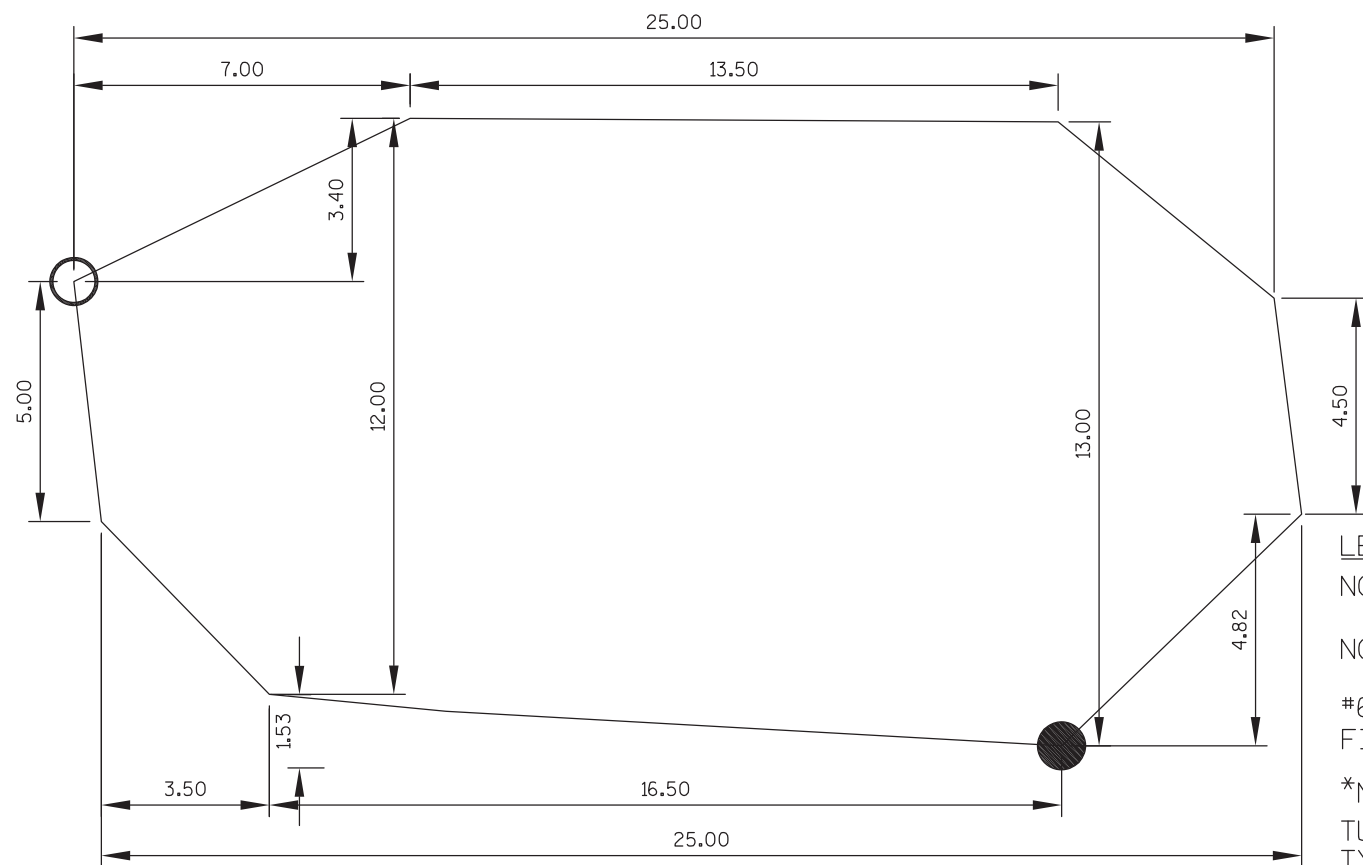
LEGEND

NORTHING/EASTING A

NORTHING/EASTING B



KEY #5 SHELL DETAIL - PLAN



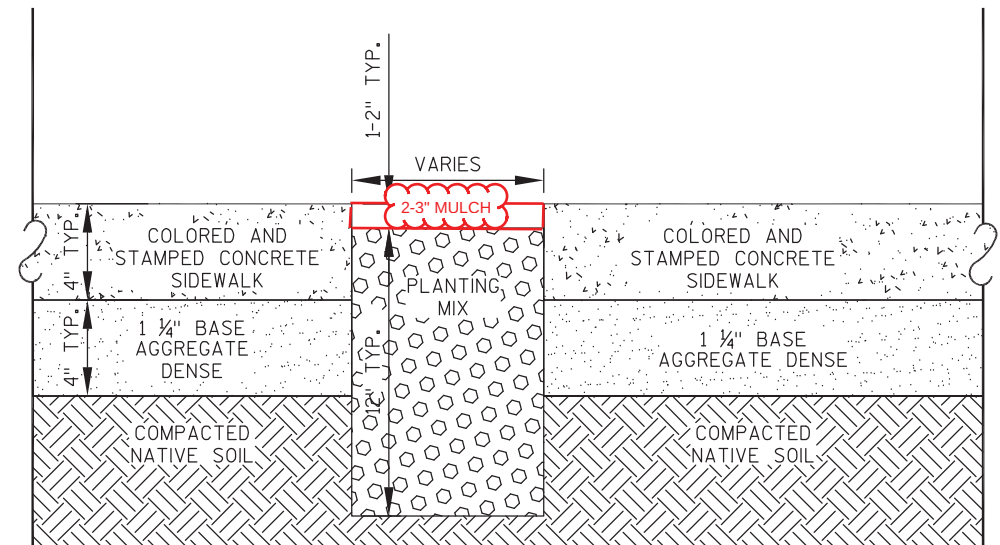
KEY #6 SHELL DETAIL - PLAN

LEGEND

NORTHING/EASTING A ○

NORTHING/EASTING B ●

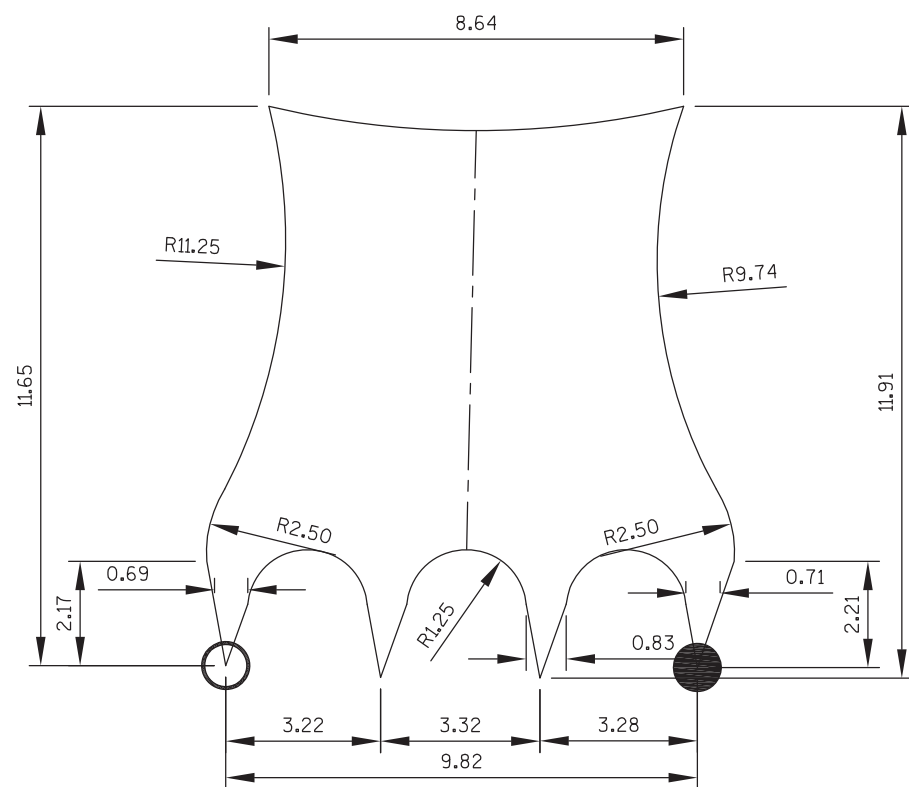
#6 SHELL NOTE: FIELD FIT SHELL TO FIT APEX OF ROUNDABOUT CONTOURS

*NOTE: THE THREE NECK FOLDS OF TURTLE HEAD TO BE SCORED $\frac{1}{2}$ " $\times$ 2" TYP. IN AN IRREGULAR PATTERN AS SHOWN.

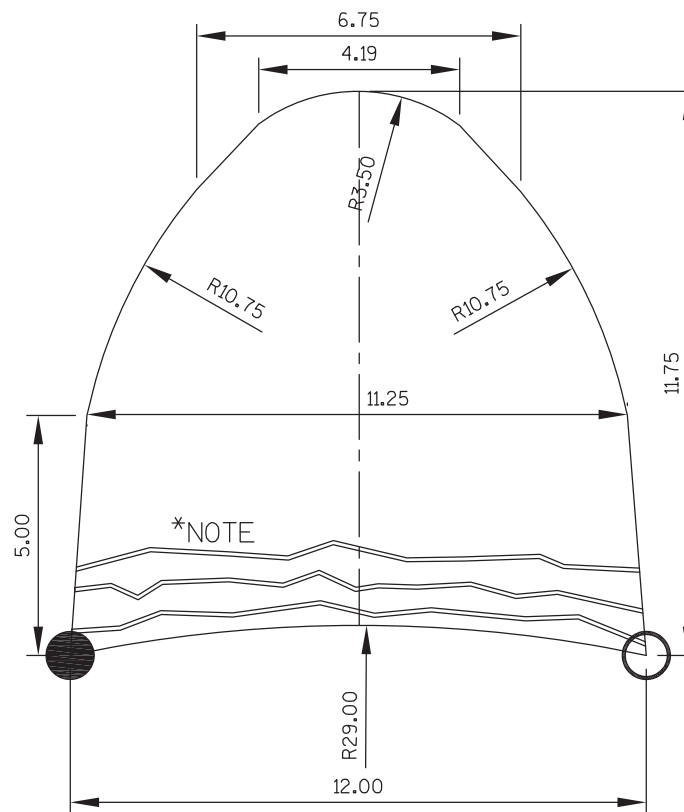
TYPICAL SHELL RIDGE DETAIL - PROFILE

GENERAL CONCRETE NOTES:

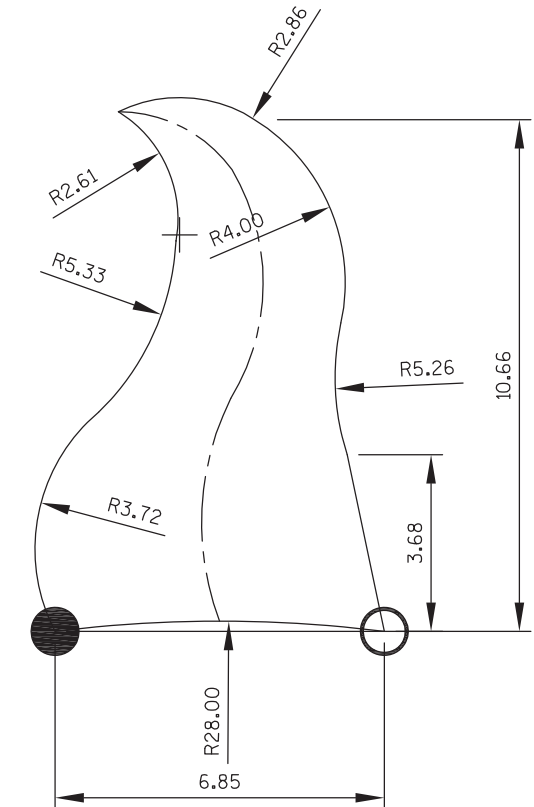
- SURFACE EDGE OF THE CONCRETE TO BE FINISHED WITH ROUNDED EDGES.
- CONCRETE THICKNESS INCREASES 1"-2" FROM THE EDGE OF CONCRETE TO THE CENTERLINE SHOWN ON SHELL DETAILS 7, 8, 9.
- IF POINTS OF TOES ON FEET DO NOT REACH EDGE OF APRON, PROVIDE SMALL JOINT TO CONNECT.



KEY #7 FOOT DETAIL - PLAN



KEY #8 HEAD DETAIL - PLAN



KEY #9 HEAD DETAIL - PLAN

ON INNER RING COLORED
CONCRETE SIDEWALK 5-INCH
MATCH JOINTS AS PLACED ON
THE TRUCK APRON

1" FELT JOINT, TYP.
AS SHOWN

LITTLE BLUESTEM SHALL BE
PLANTED IN CLUMPS OF 5-7
PLANTS.

LEGEND

+HP HIGH POINT OF ROUNDABOUT

☼ LITTLE BLUESTEM

* SEDUM VARIETY

GRS PLANT SYMBOL
80 QUANTITY

PLANT SCHEDULE

NUM SYM SCIENTIFIC NAME - COMMON NAME

GRS PLANTS - OUTSIDE TURTLE SHELL

80 SCHIZACHYRIUM SCOPARIUM - LITTLE BLUESTEM

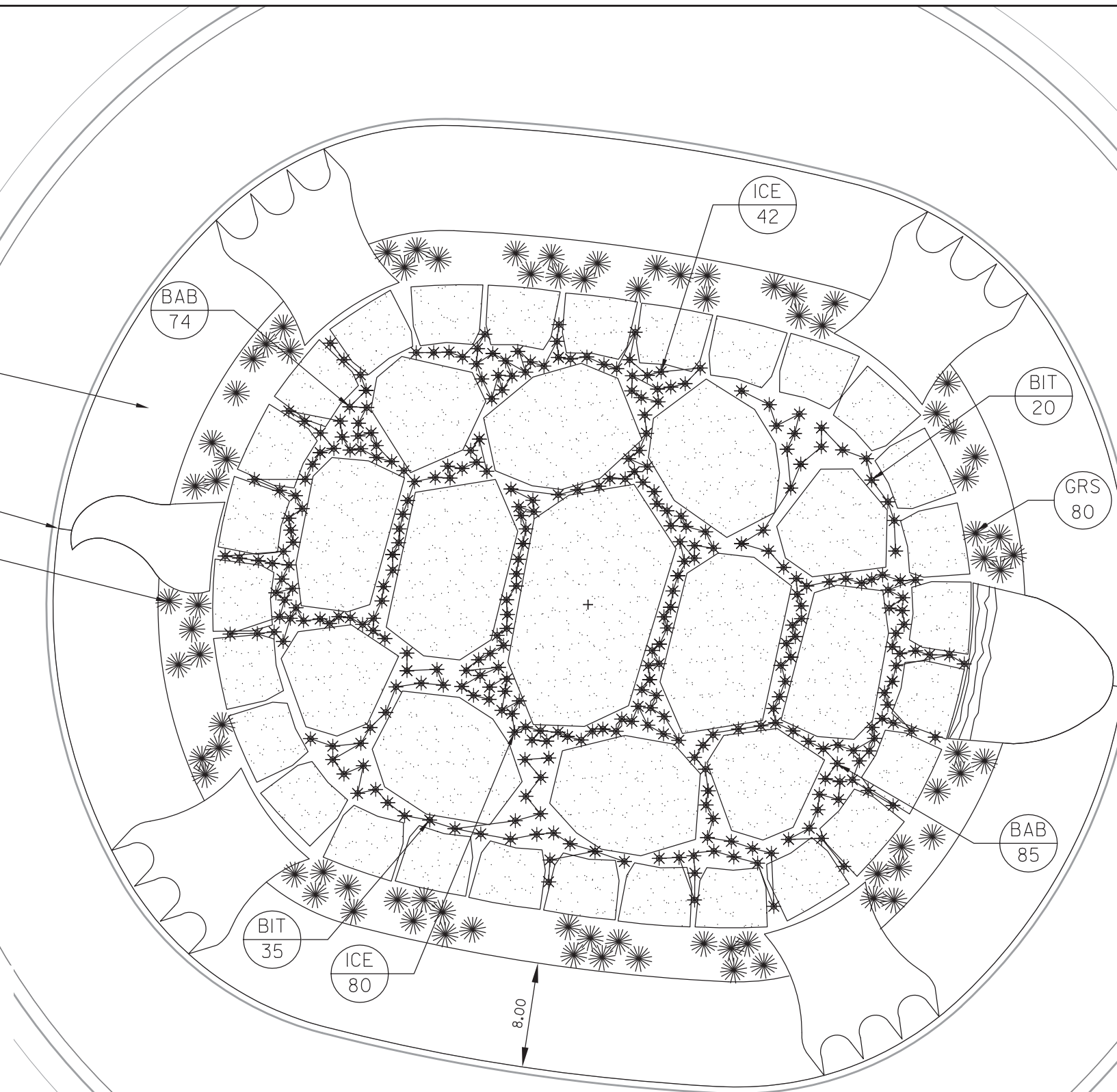
SED PLANT MIX - ON TURTLE SHELL

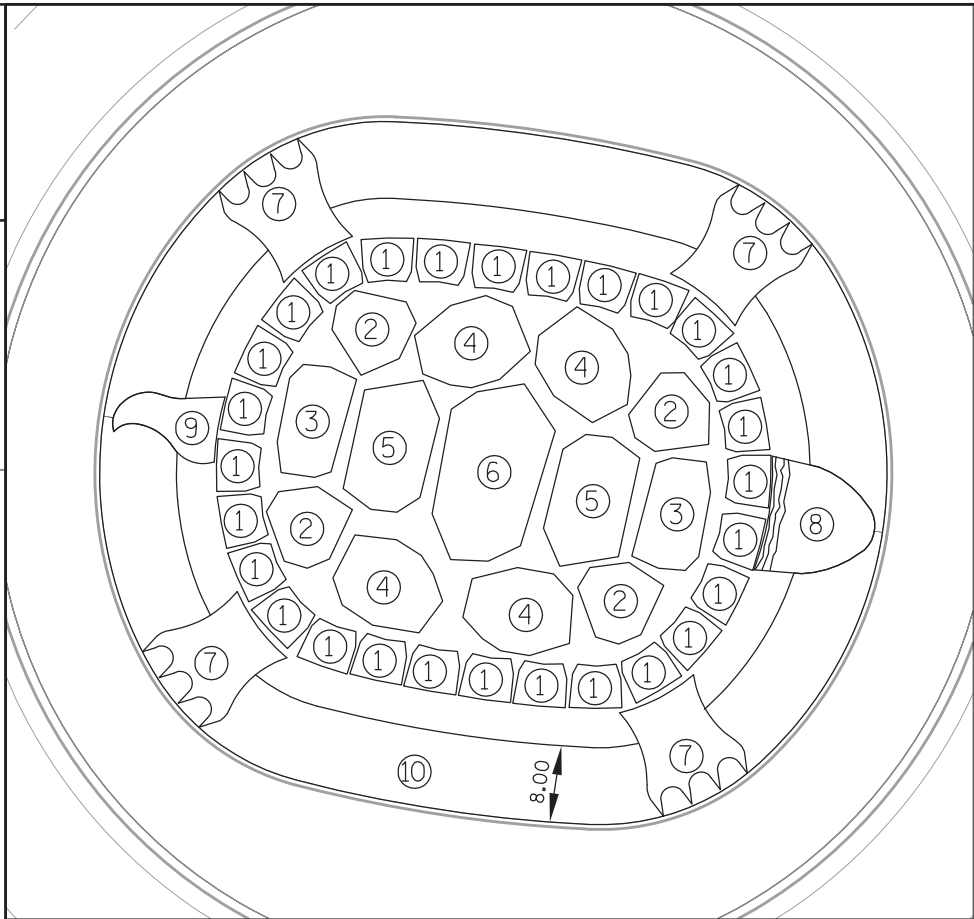
159 BAB SEDUM ALBUM CHLOROTICUM 'BABY TEARS'

122 ICE SEDUM ALBUM 'GREEN ICE'

55 BIT ~~SEDUM BITHYNICUM~~

SEDUM PACHYCLADES



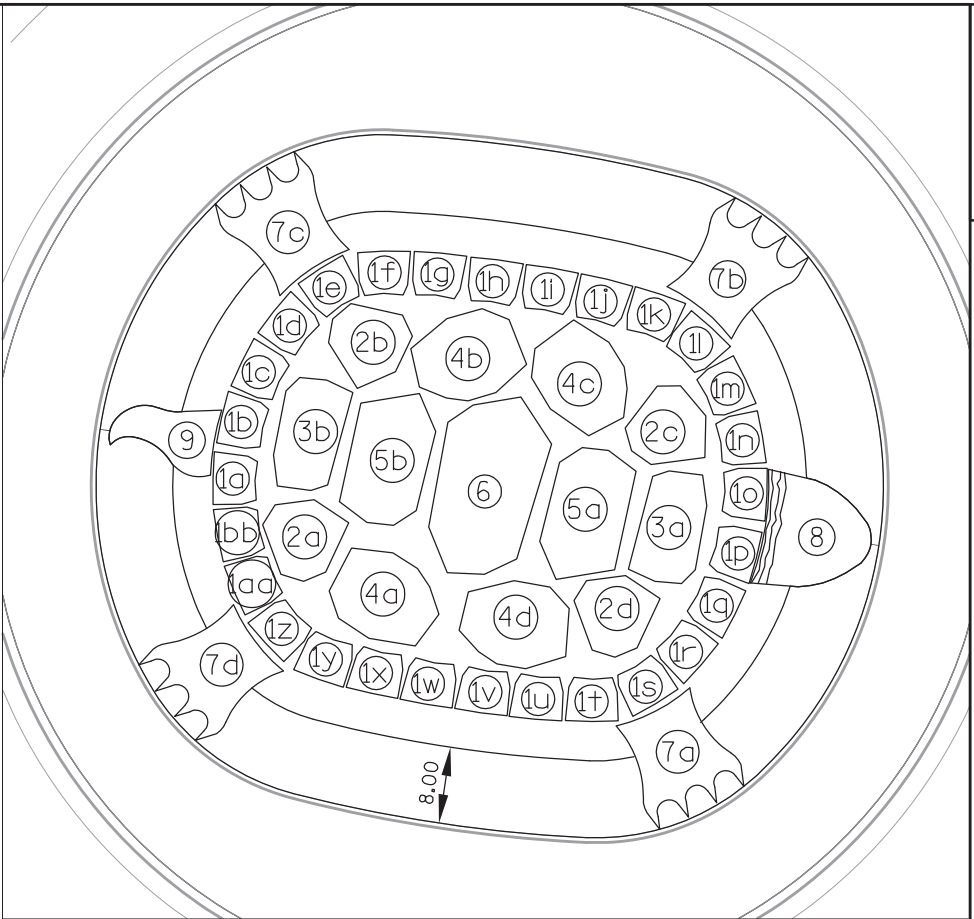


SHELL TYPES - PLAN



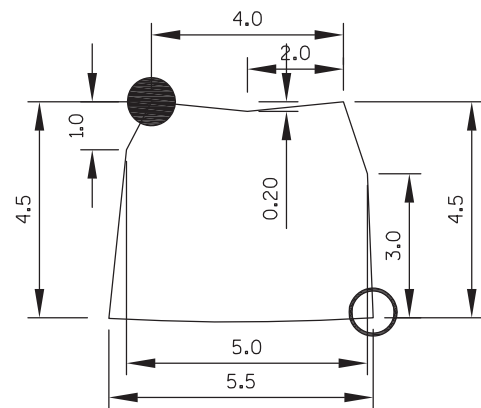
AIRPORT SHELL DATA CHART

NUM	PAVEMENT THICKNESS	QUANTITY	SQUARE FEET	FEDERAL COLOR
1	4-INCH	28	23 SF EA	FS#30227
2	4-INCH	4	52 SF EA	FS#30227
3	4-INCH	2	71 SF EA	FS#30227
4	4-INCH	4	82 SF EA	FS#30227
5	4-INCH	2	100 SF EA	FS#30227
6	4-INCH	1	170 SF EA	FS#30227
7	5-INCH	4	85 SF EA	FS#34094
8	5-INCH	1	107 SF EA	FS#34094
9	5-INCH	1	51 SF EA	FS#34094
10	5-INCH	1	1502 SF EA	FS#33617

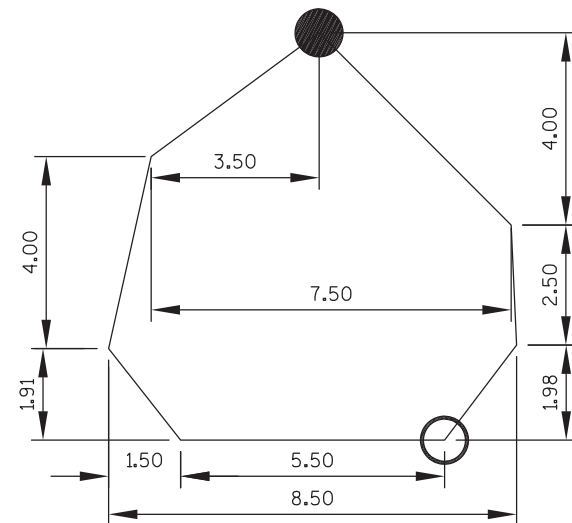


SHELL LOCATIONS - PLAN

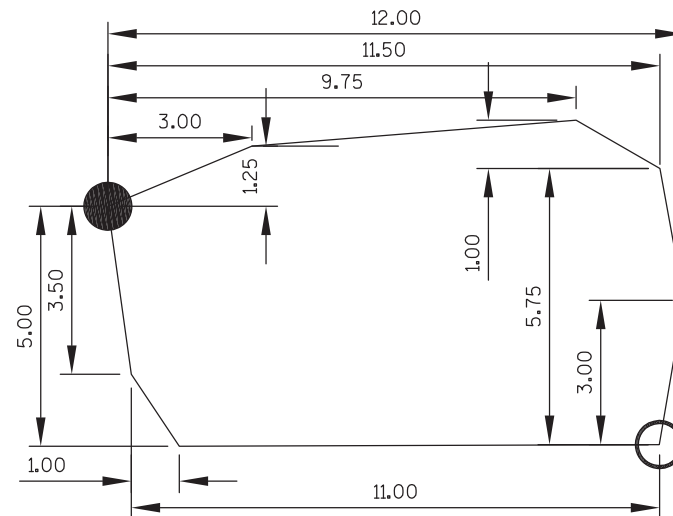
KEYED SHELL	NORTHING A	EASTING A	NORTHING B	EASTING B	KEYED SHELL	NORTHING A	EASTING A	NORTHING B	EASTING B	KEYED SHELL	NORTHING A	EASTING A	NORTHING B	EASTING B
1a	560343.29	71113.74	560347.78	71118.37	1r	560328.79	71166.37	560328.26	71159.94	4a	560328.55	71134.81	560338.75	71128.16
1b	560349.73	71114.12	560353.20	71119.55	1s	560324.05	71162.16	560325.55	71155.89	4b	560359.54	71134.35	560357.89	71146.41
1c	560355.65	71115.59	560357.80	71121.67	1t	560320.78	71155.93	560325.29	71151.33	4c	560350.45	71152.86	560362.52	71151.29
1d	560361.20	71118.41	560362.00	71124.81	1u	560320.77	71150.05	560325.65	71145.84	4d	560334.20	71140.34	560327.45	71150.47
1e	560366.29	71122.62	560365.00	71128.94	1v	560321.31	71144.35	560326.41	71140.40	5a	560336.49	71155.57	560347.71	71149.81
1f	560369.53	71128.80	560365.14	71133.52	1w	560322.10	71138.63	560327.33	71134.85	5b	560353.87	71129.14	560342.65	71134.90
1g	560369.66	71134.69	560364.74	71138.86	1x	560323.11	71132.98	560328.50	71129.43	6	560354.49	71145.79	560336.19	71138.13
1h	560369.06	71140.59	560364.01	71144.60	1y	560324.26	71127.31	560330.05	71124.48	7a	560309.47	71160.27	560313.94	71169.01
1i	560368.29	71146.36	560363.08	71150.16	1z	560326.93	71121.11	560333.37	71121.27	7b	560369.05	71175.76	560375.26	71168.15
1j	560367.33	71152.11	560361.85	71155.50	1aa	560331.79	71117.08	560337.81	71119.40	7c	560380.04	71122.17	560374.62	71113.98
1k	560365.99	71157.74	560360.25	71160.66	1bb	560337.34	71114.80	560342.71	71118.37	7d	560326.61	71106.02	560318.72	71111.88
1l	560363.49	71163.56	560357.05	71163.90	2a	560336.03	71120.80	560341.39	71127.88	8	560335.12	71169.69	560346.97	71171.59
1m	560358.78	71167.93	560352.67	71165.85	2b	560364.23	71128.10	560355.38	71128.77	9	560353.13	71114.63	560346.37	71113.47
1n	560353.07	71170.41	560347.75	71166.77	2c	560351.28	71156.65	560348.18	71164.97	NOTE SEE SHELL DETAIL SHEETS FOR NORTHING/EASTING LOCATIONS				
1o	560347.05	71171.46	560342.64	71166.75	2d	560328.13	71153.22	560333.49	71160.30					
1p	560340.40	71170.93	560337.06	71165.41	3a	560336.55	71156.98	560346.37	71164.73					
1q	560334.30	71169.21	560332.18	71163.12	3b	560354.97	71128.32	560345.24	71120.45					



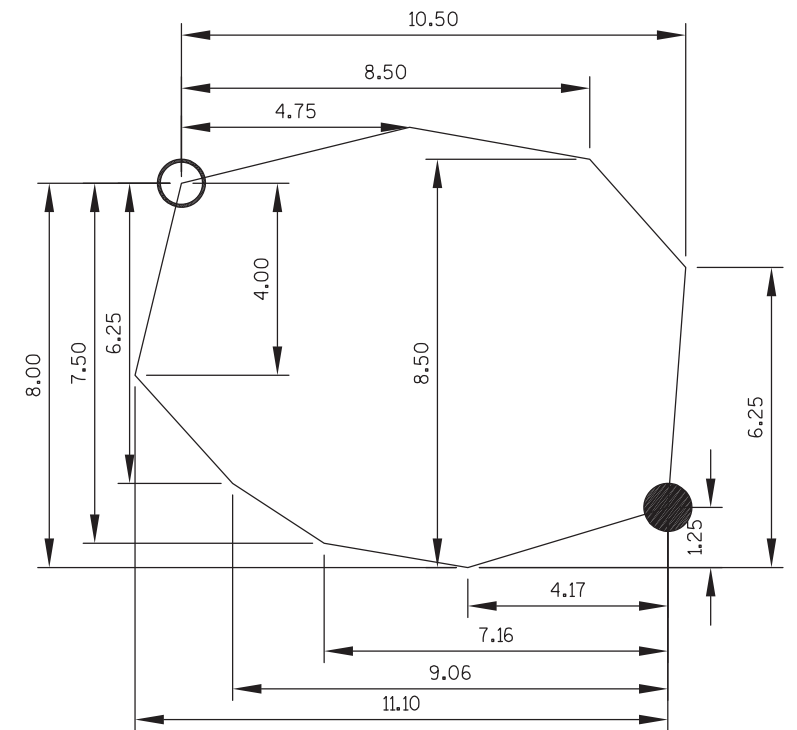
KEY #1 SHELL DETAIL - PLAN



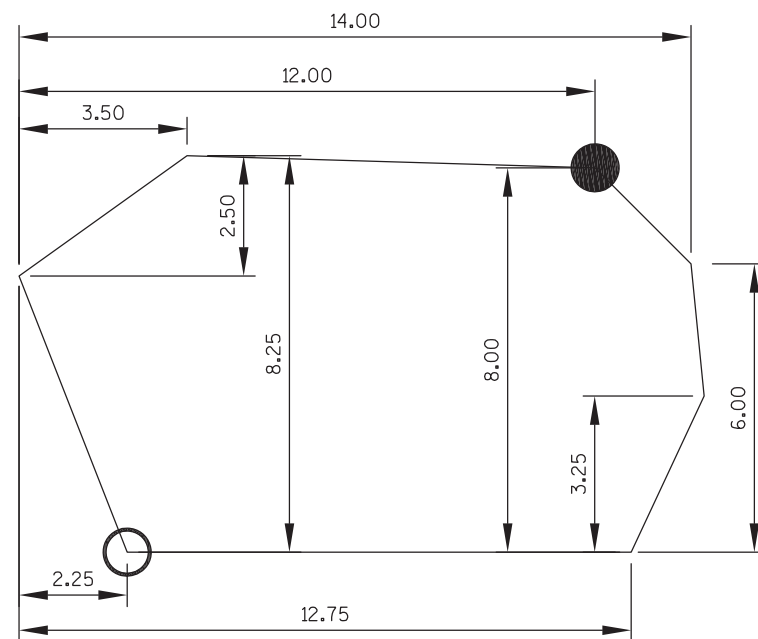
KEY #2 SHELL DETAIL - PLAN



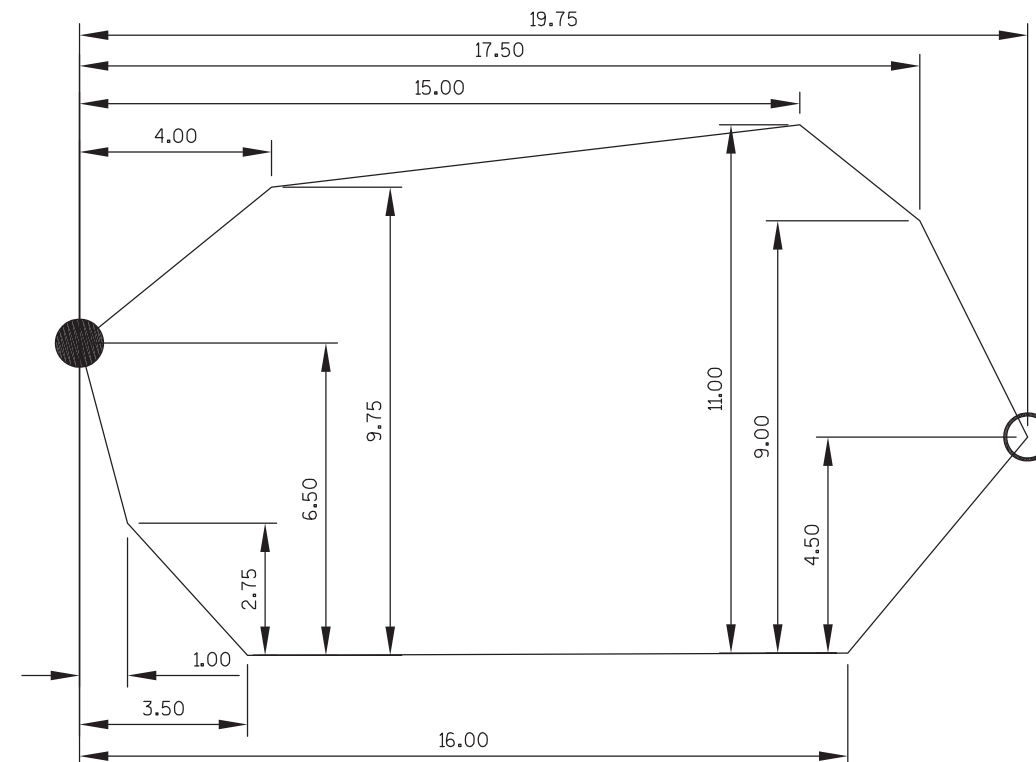
KEY #3 SHELL DETAIL - PLAN



KEY #4 SHELL DETAIL - PLAN



KEY #5 SHELL DETAIL - PLAN



KEY #6 SHELL DETAIL - PLAN

#6 SHELL NOTE: FIELD FIT SHELL TO FIT APEX OF ROUNDABOUT CONTOURS

LEGEND

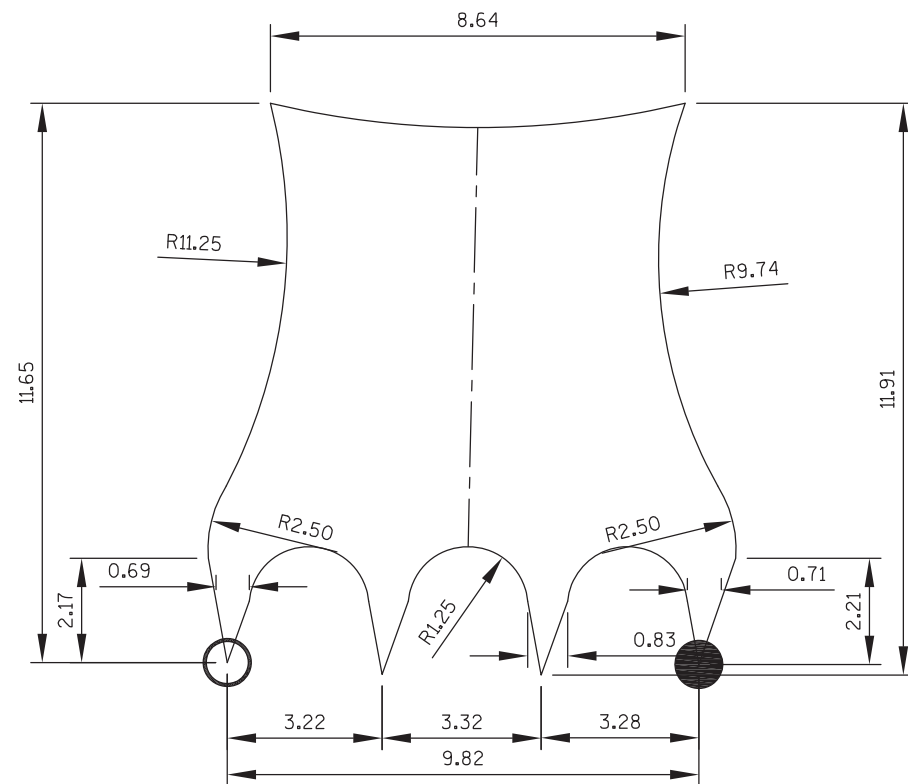
NORTHING/EASTING A ○

NORTHING/EASTING B ●

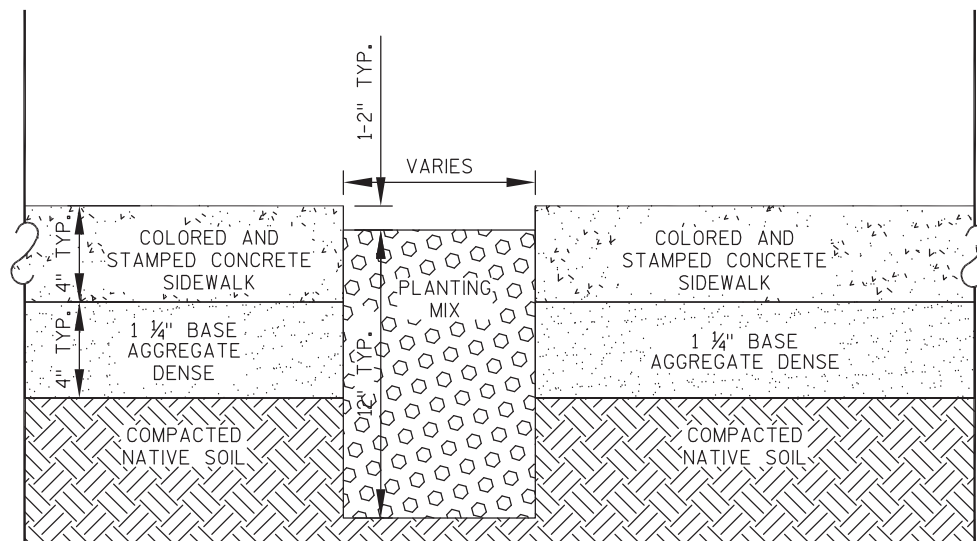
GENERAL CONCRETE NOTES:

- SURFACE EDGE OF THE
CONCRETE TO BE FINISHED
WITH ROUNDED EDGES.

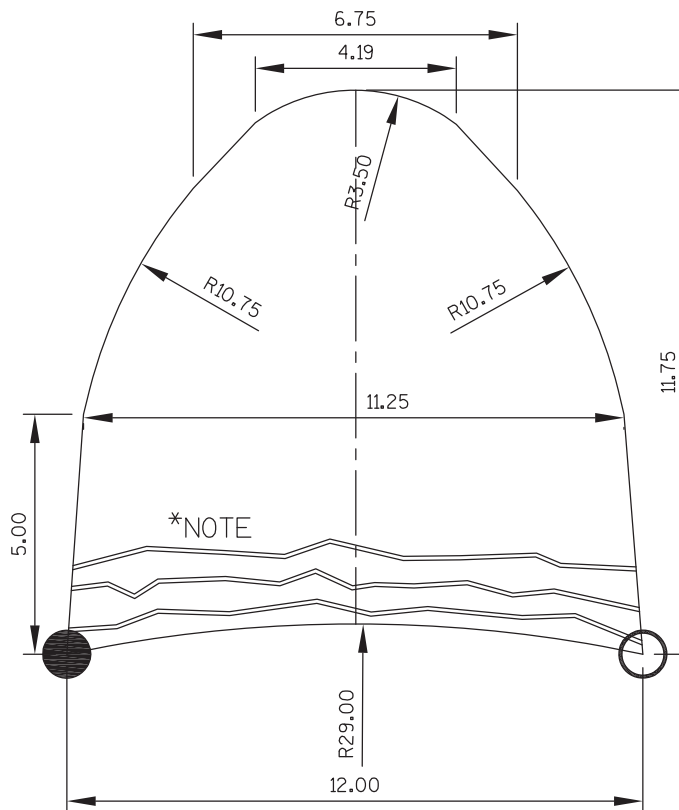
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KEY #7 FOOT DETAIL - PLAN



TYPICAL SHELL - PROFILE



KEY #8 HEAD DETAIL - PLAN

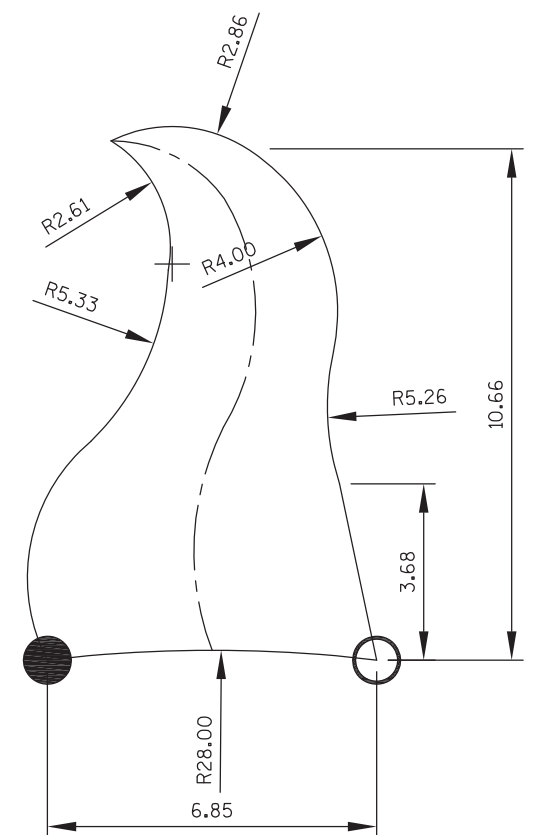
*NOTE: THE THREE NECK FOLDS OF TURTLE HEAD TO BE SCORED $\frac{1}{2}$ " $\times$ 2" TYP. IN AN IRREGULAR PATTERN AS SHOWN.

GENERAL CONCRETE NOTES:

- SURFACE EDGE OF THE CONCRETE TO BE FINISHED WITH ROUNDED EDGES.

- CONCRETE THICKNESS INCREASES 1"-2" FROM THE EDGE OF CONCRETE TO THE CENTERLINE SHOWN ON SHELL DETAILS 7, 8, 9.

- IF POINTS OF TOES ON FEET DO NOT REACH EDGE OF APRON, PROVIDE SMALL JOINT TO CONNECT.



KEY #9 TAIL DETAIL - PLAN

LEGEND

NORTHING/EASTING A ○

NORTHING/EASTING B ●

2

ROUNABOUT PLANT DATA CHART																
SYM	COMMON NAME	SCIENTIFIC NAME	TYPE	MATURE HEIGHT	SIZE PLANTED	COND	ROOT ZONE DIA	BALL/POT		ROOT DIA	PLANT DEPTH	GUY/BRACE	FERT UNITS REQ'D	RODENT PROTECT	MULCH RING DIA	PLANT BED
								DEPTH	SPREAD							
GRS	LITTLE BLUESTEM	SCHIZACHYRIUM SCOPARIUM	N/A	18"	1 GAL	CONT	12"	N/A	N/A	12"	8"	N/A	0	N/A	N/A	N/A
BAB	SEDUM ALBUM 'BABY TEARS'	SEDUM ALBUM CHLOROTICUM 'BABY TEARS'	N/A	5"	6-INCH POT	CONT	12"	N/A	N/A	8"	6"	N/A	0	N/A	N/A	N/A
ICE	SEDUM ALBUM 'GREEN ICE'	SEDUM ALBUM 'GREEN ICE'	N/A	2"	6-INCH POT	CONT	12"	N/A	N/A	8"	6"	N/A	0	N/A	N/A	N/A
BIT	~~SEDUM BITHYNICUM~~	~~SEDUM BITHYNICUM~~	N/A	1"	6-INCH POT	CONT	12"	N/A	N/A	8"	6"	N/A	0	N/A	N/A	N/A

SEDUM PACHYCLADES

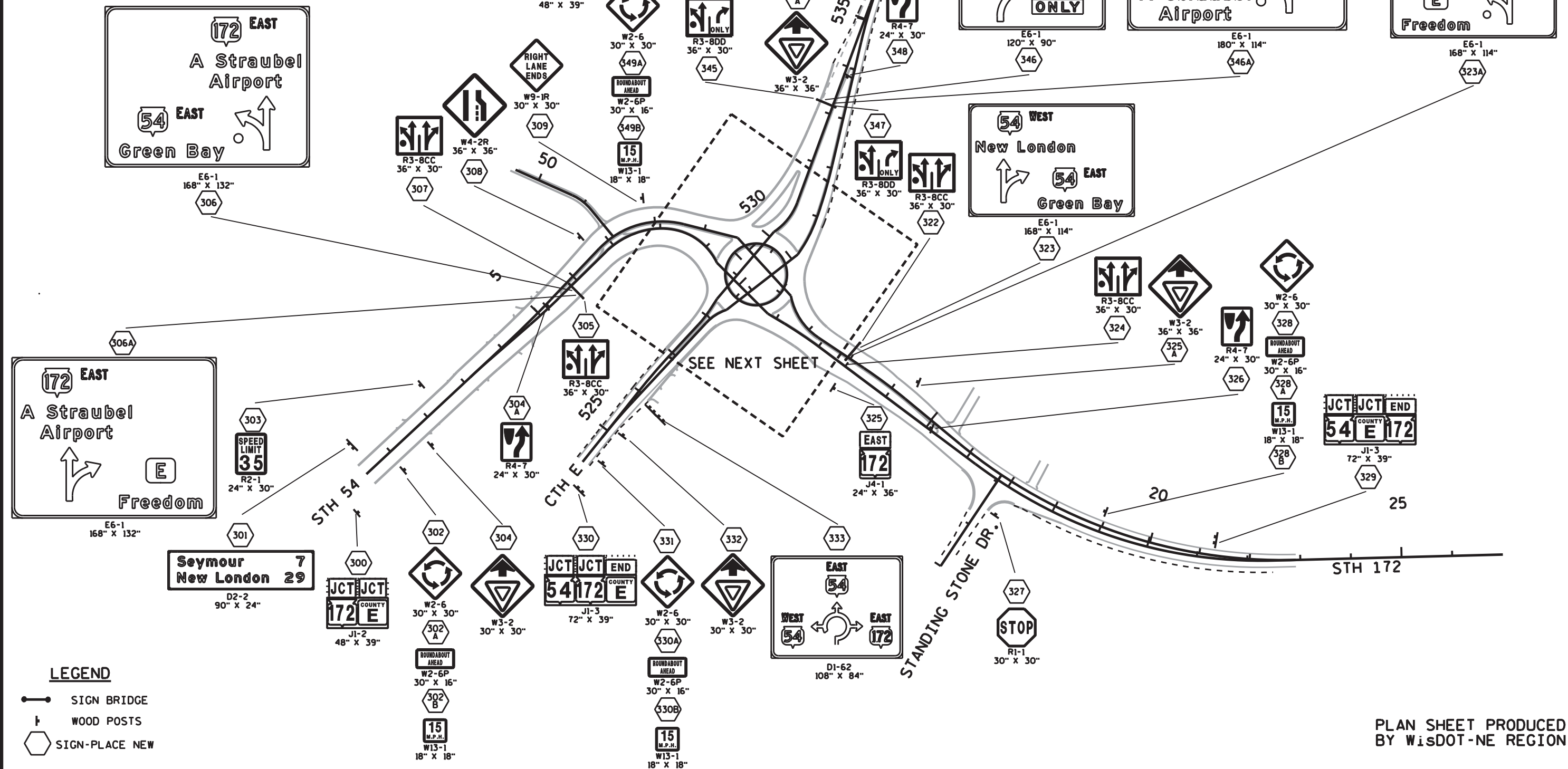
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THE CONTRACTOR SHALL NOTIFY THE REGIONAL TRAFFIC UNIT, 920-492-5653, A MINIMUM OF TWO WEEKS PRIOR TO THE NEED FOR SIGN PLACEMENT TO ALLOW FOR STAKING OF ANY PERMANENT SIGNING REQUIRED ON THE PROJECT.

TYPE II SIGNS REMOVED UNDER THE CONTRACT SHALL BE DELIVERED TO THE REGIONAL TRAFFIC UNIT. SIGNS SHALL BE CAREFULLY REMOVED FROM THE SUPPORTS, SORTED BY BASE MATERIAL AND PALLETIZED BY MATERIAL TYPE. THE REGIONAL TRAFFIC UNIT 920-492-5653, SHALL BE NOTIFIED THREE WORKING DAYS PRIOR TO DELIVERY OF SIGNS.

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WOOD POSTS SIZES, FOR TYPE II SIGNING, ARE ESTIMATED LENGTHS AND THE ACTUAL LENGTH WILL BE DETERMINED IN THE FIELD.



SIGNING NOTES

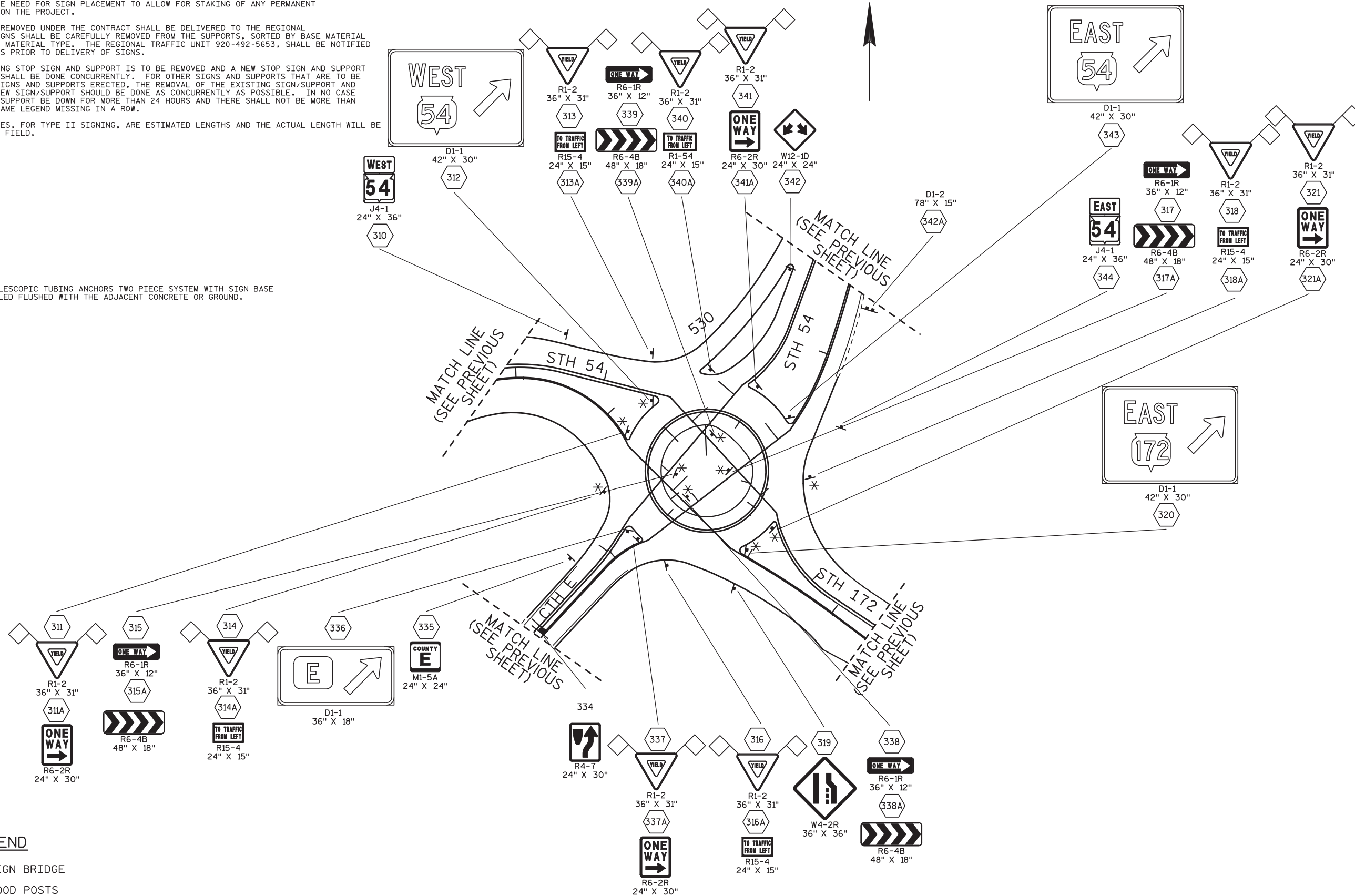
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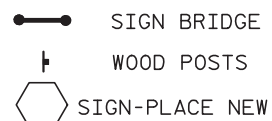
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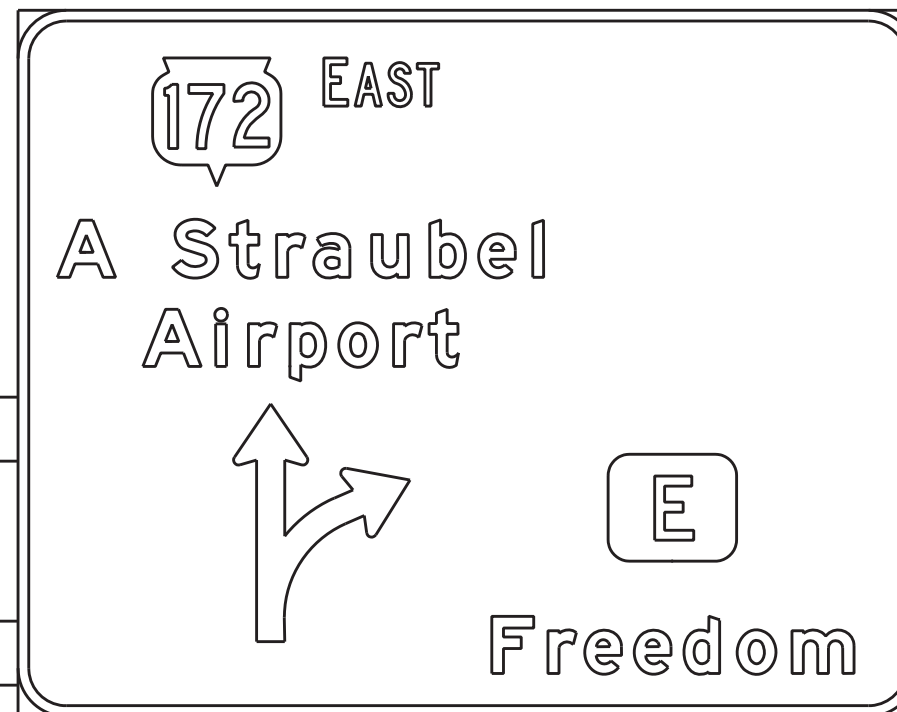
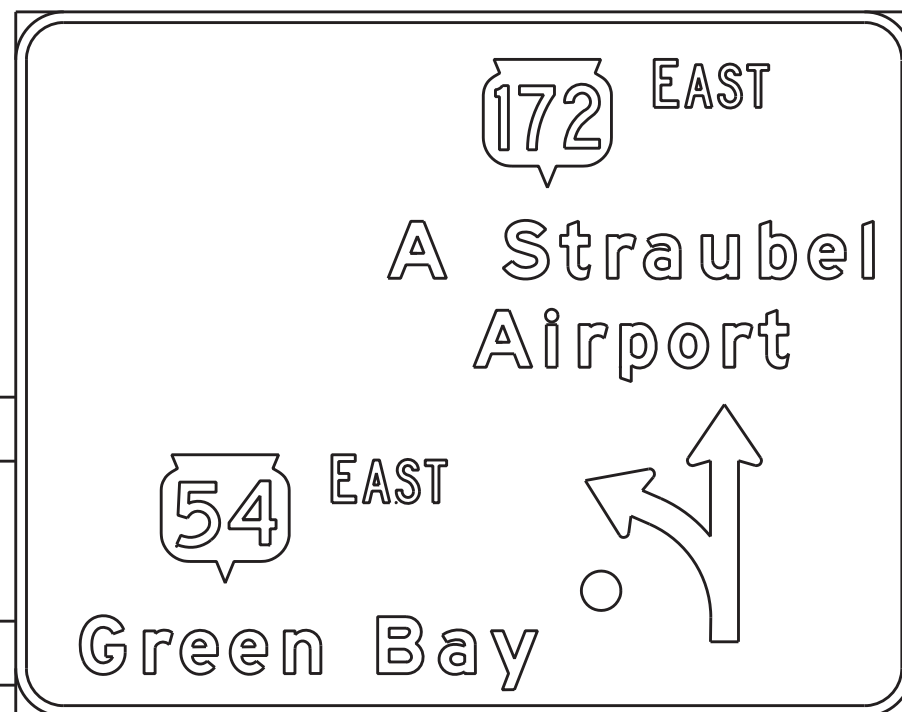
* USE TELESCOPIC TUBING ANCHORS TWO PIECE SYSTEM WITH SIGN BASE INSTALLED FLUSHED WITH THE ADJACENT CONCRETE OR GROUND.



WOOD POSTS SIZES, FOR TYPE II SIGNING, ARE ESTIMATED LENGTHS AND THE ACTUAL LENGTH WILL BE DETERMINED IN THE FIELD.



E

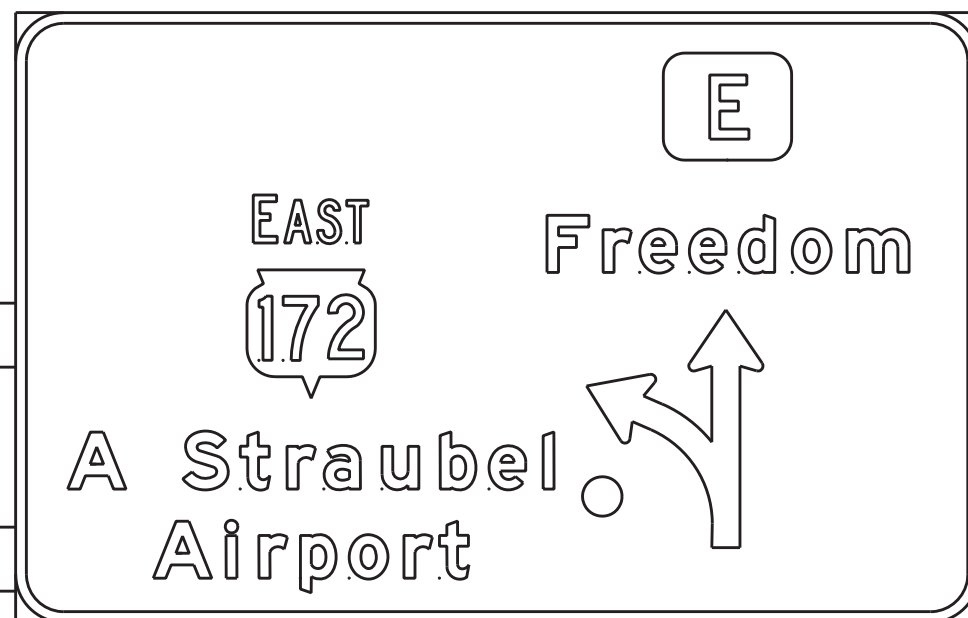


18'-3"

ROADWAY

PLAN SHEET PRODUCED
BY WISDOT-NE REGION

NOTE:
MINIMUM VERTICAL CLEARANCE FROM HIGH POINT OF ROAD 18'-3"

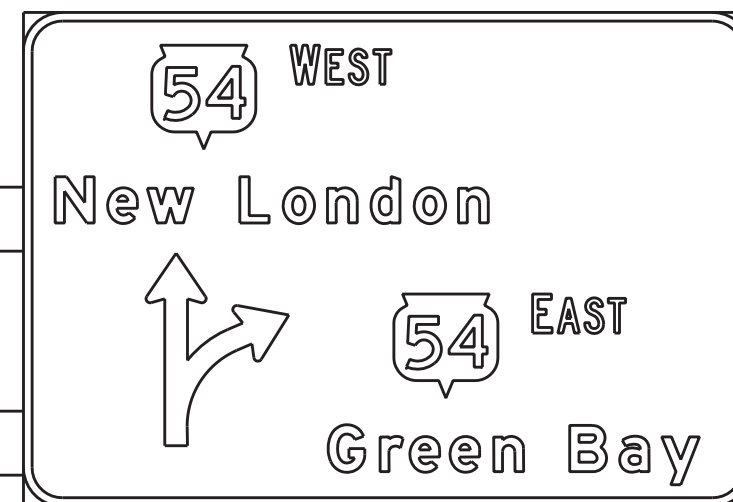
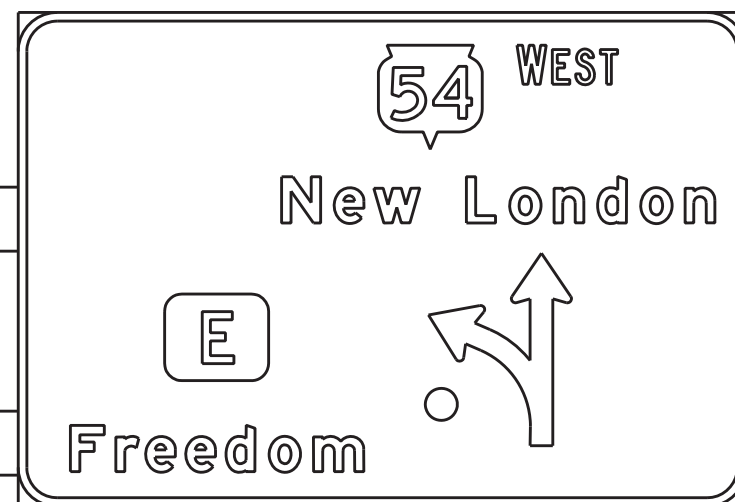


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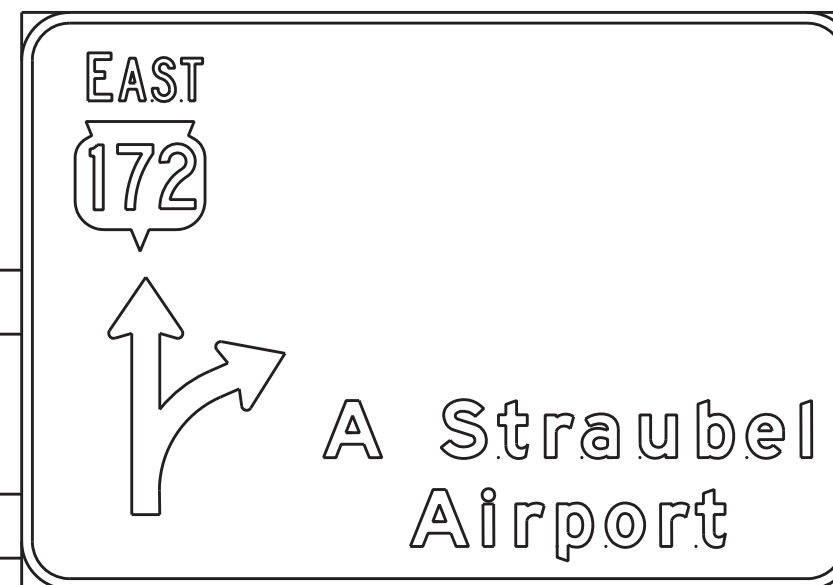
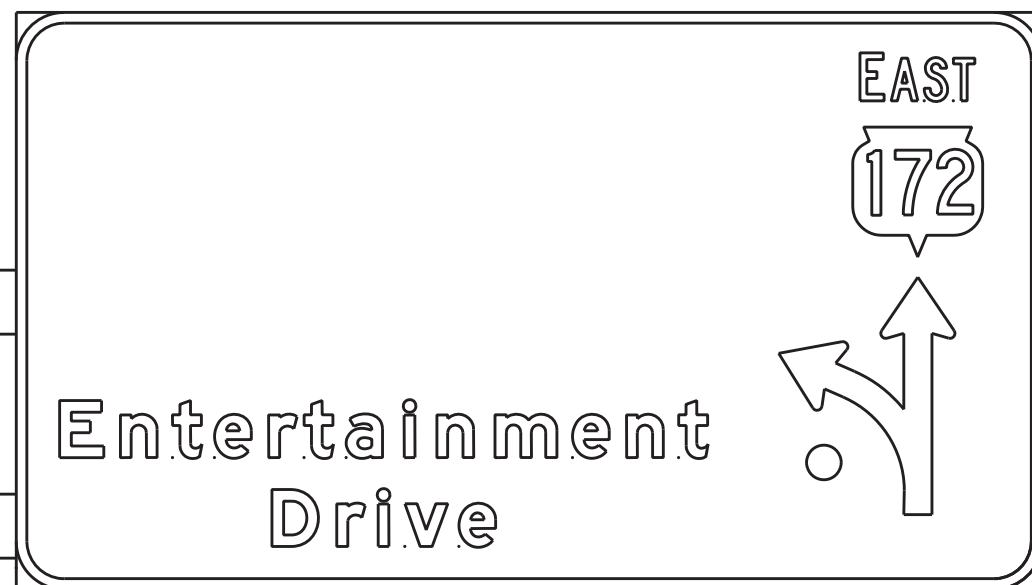


18'-3"

ROADWAY

PLAN SHEET PRODUCED
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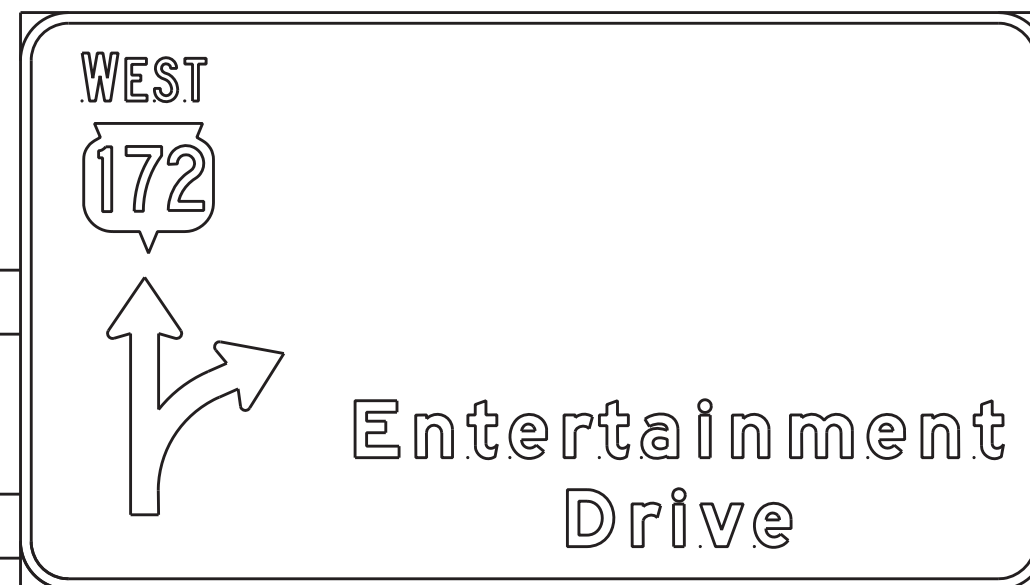
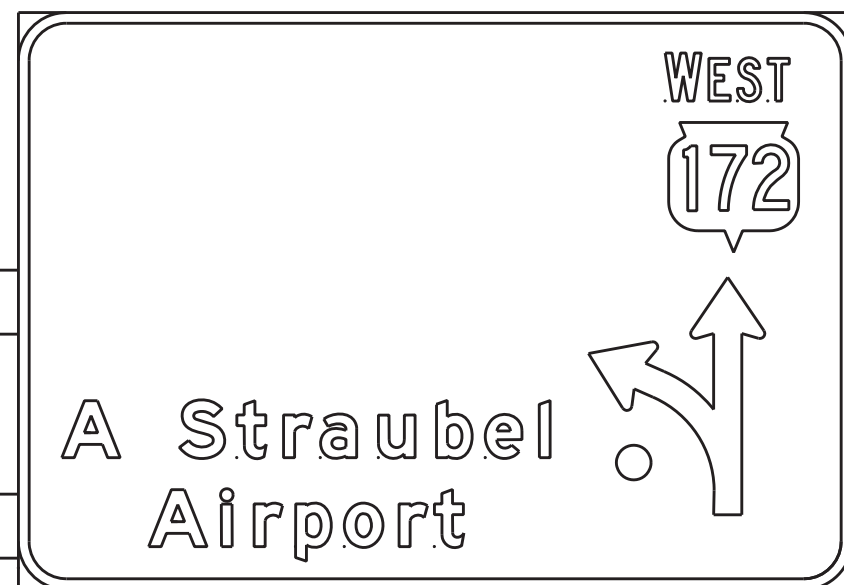


18'-3"

ROADWAY

PLAN SHEET PRODUCED
BY WisDOT-NE REGION

NOTE:
MINIMUM VERTICAL CLEARANCE FROM HIGH POINT OF ROAD 18'-3"



18'-3"

ROADWAY

PLAN SHEET PRODUCED
BY WISDOT-NE REGION

NOTE:

MINIMUM VERTICAL CLEARANCE FROM HIGH POINT OF ROAD 18'-3"

RENTAL CAR RETURN
HOTEL
EAST G.A.



TERMINAL
PARKING
CELL PHONE LOT



TERMINAL DELIVERIES
WEST G.A.



18'-3"

ROADWAY

PLAN SHEET PRODUCED
BY WISDOT-NE REGION

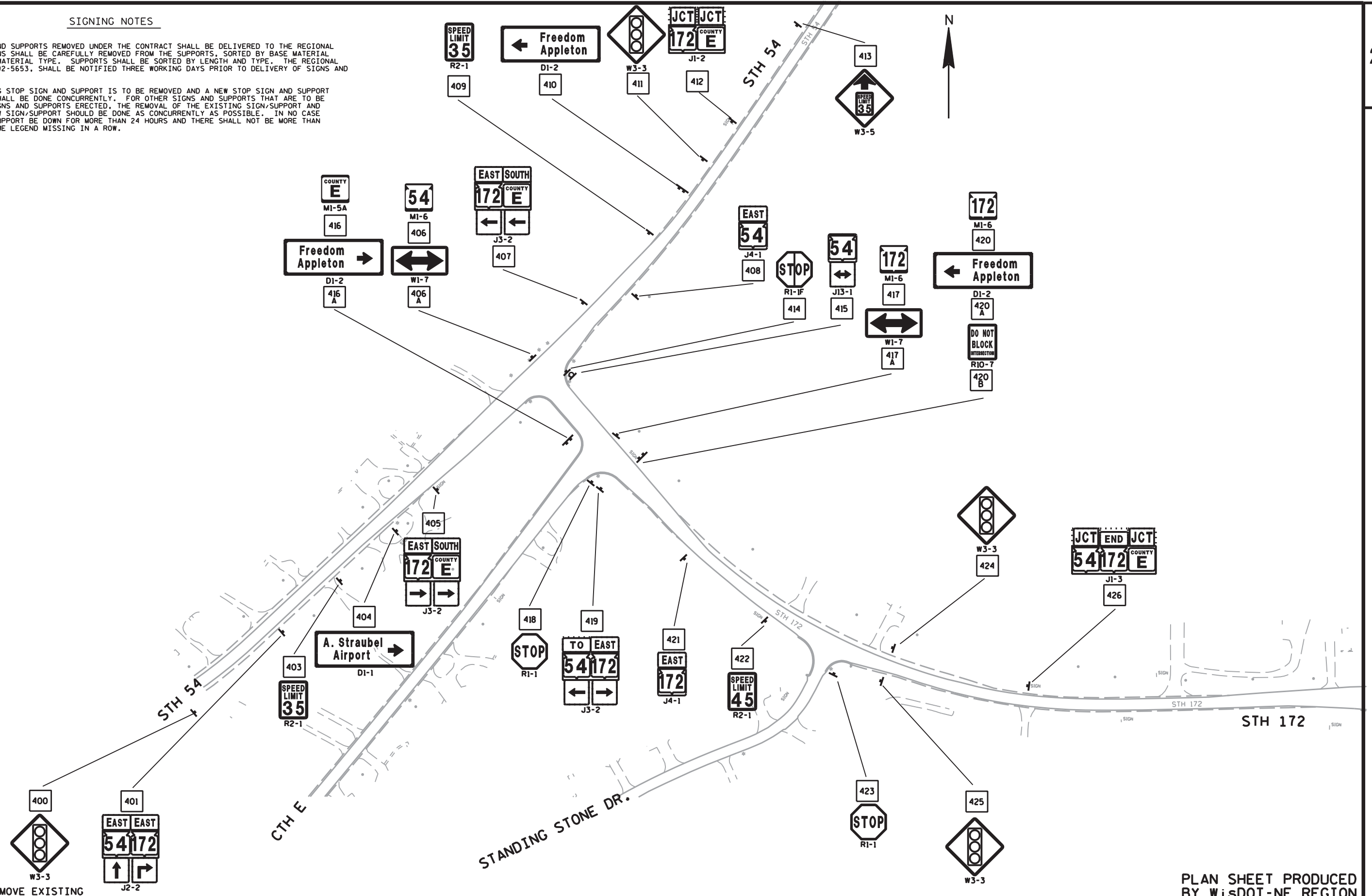
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MINIMUM VERTICAL CLEARANCE FROM HIGH POINT OF ROAD 18'-3"

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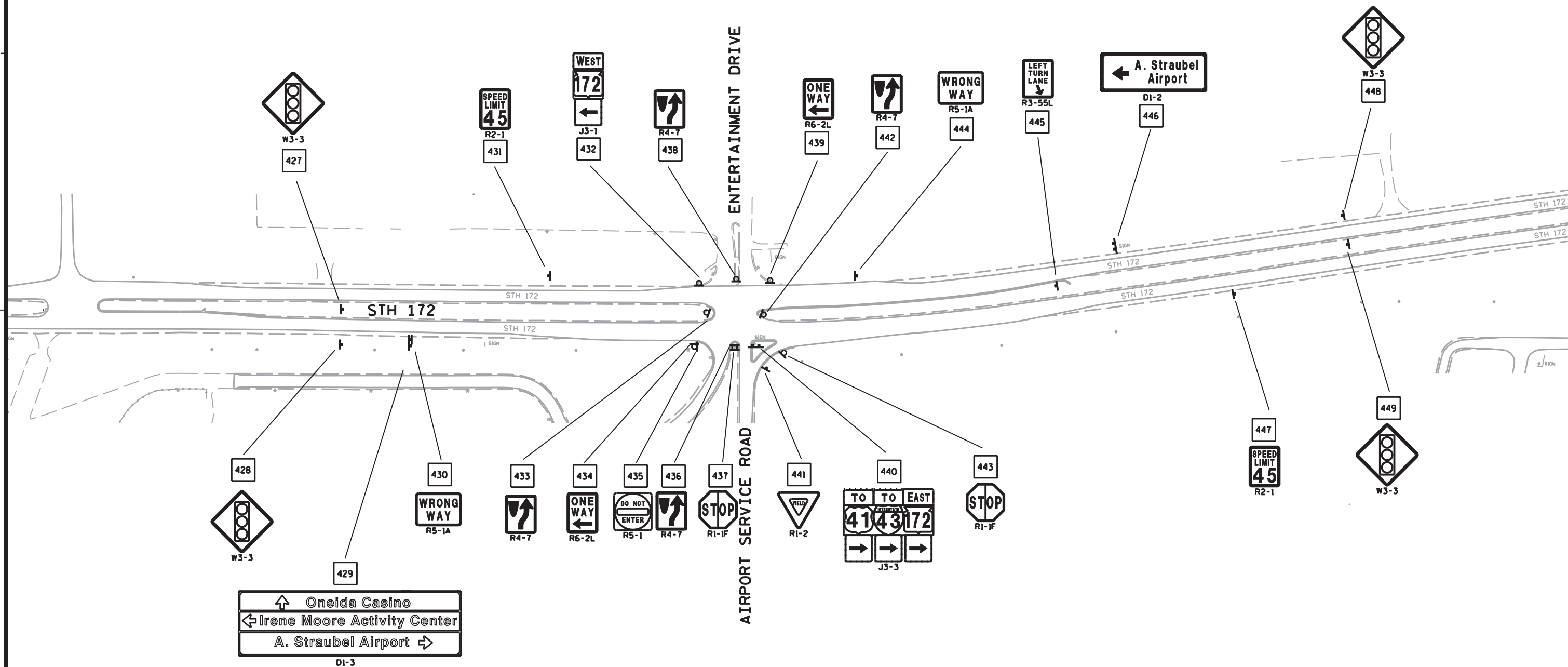
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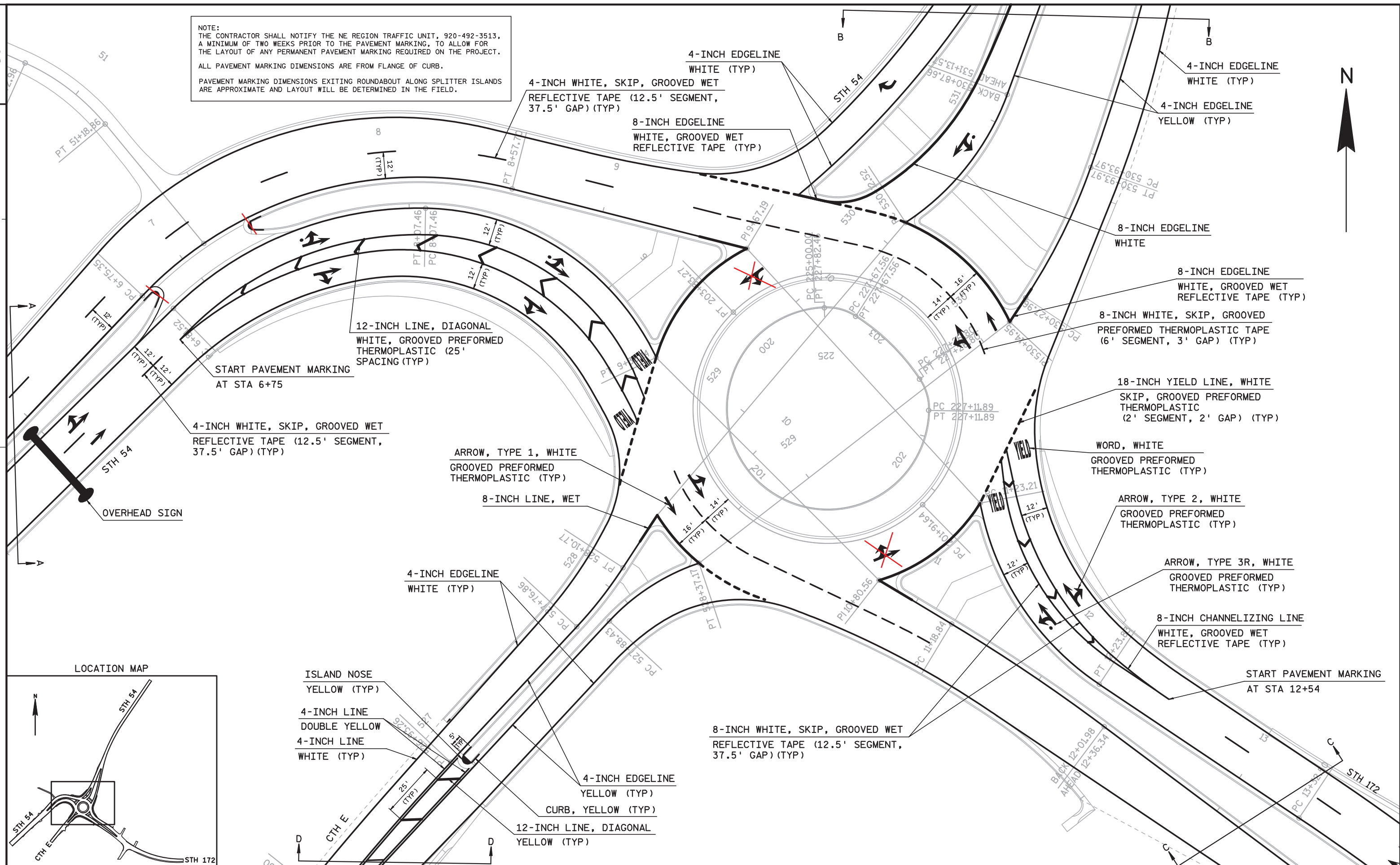
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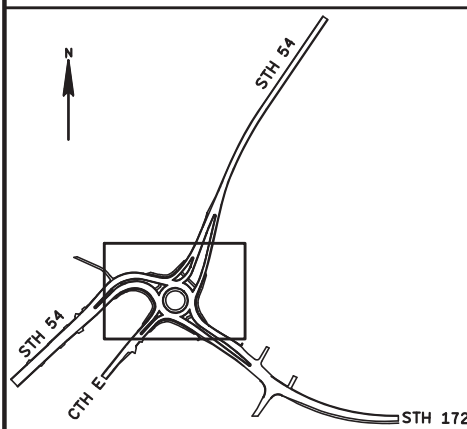


PLAN SHEET PRODUCED
BY WISDOT-NE REGION

NOTE:
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ALL PAVEMENT MARKING DIMENSIONS ARE FROM FLANGE OF CURB.
PAVEMENT MARKING DIMENSIONS EXITING ROUNDABOUT ALONG SPLITTER ISLANDS
ARE APPROXIMATE AND LAYOUT WILL BE DETERMINED IN THE FIELD.



LOCATION MAP



PROJECT NO: 9280-04-72

HWY: STH 172

COUNTY: BROWN

EPOXY PAVEMENT MARKING - STH 54 & STH 172 & CTH E

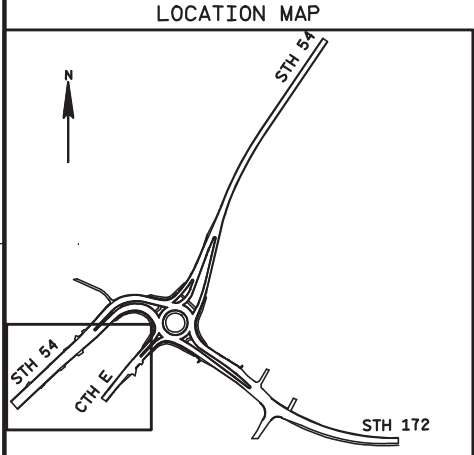
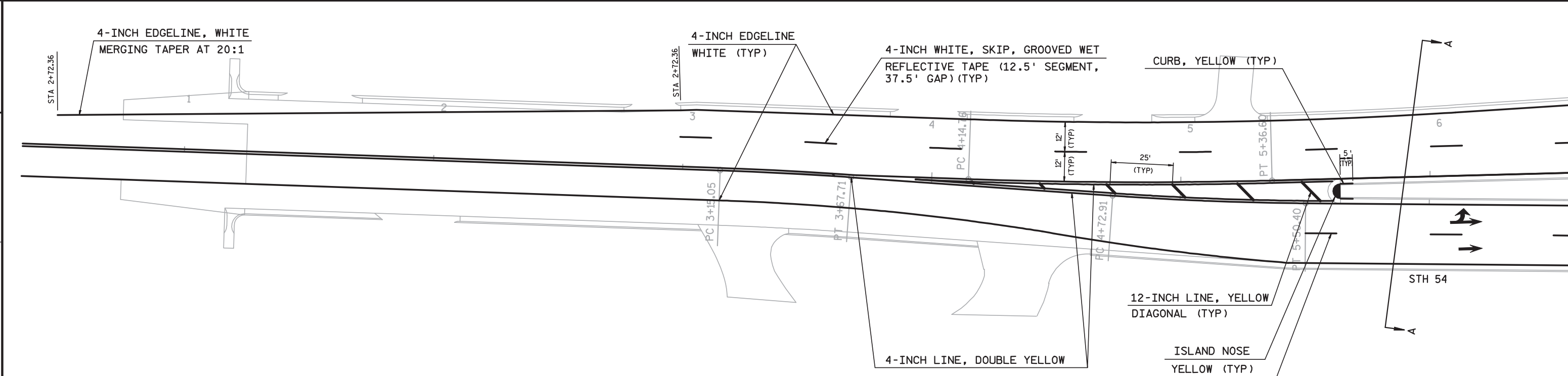
SHEET

64

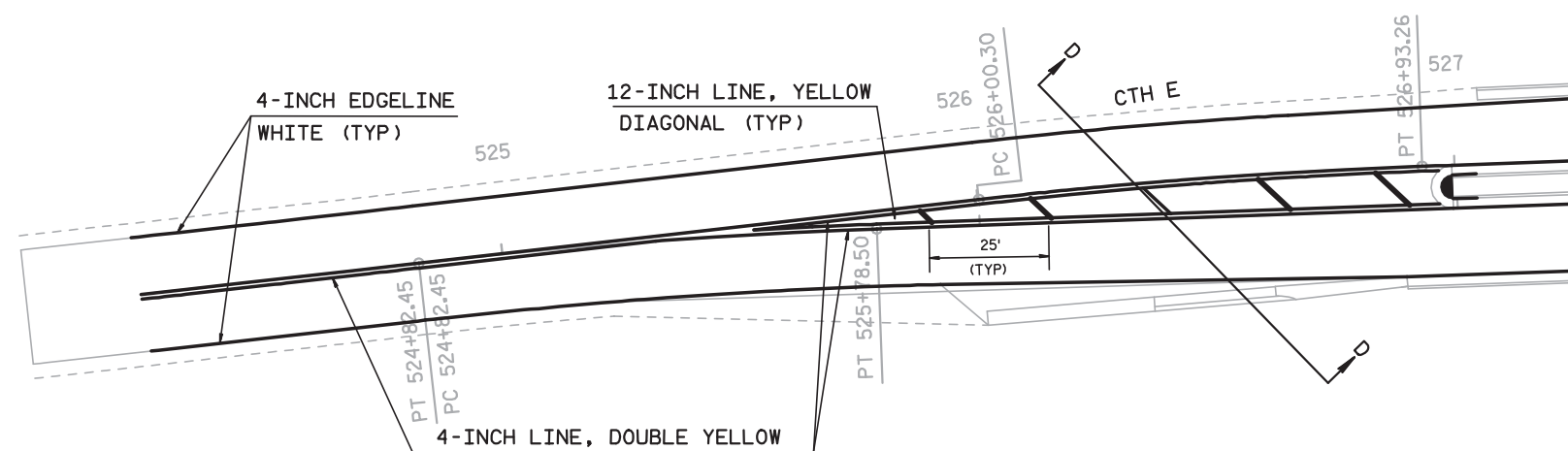
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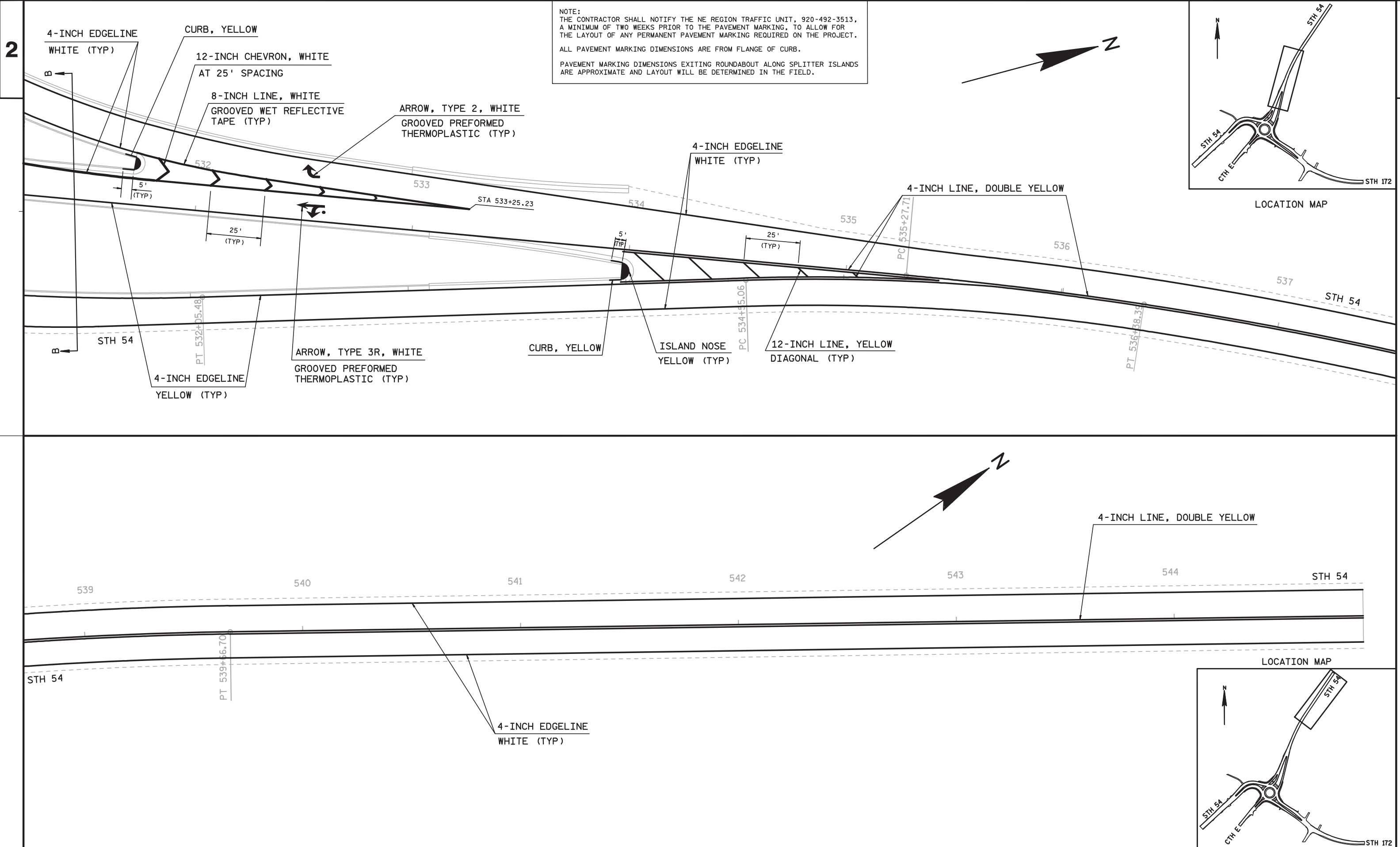
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2

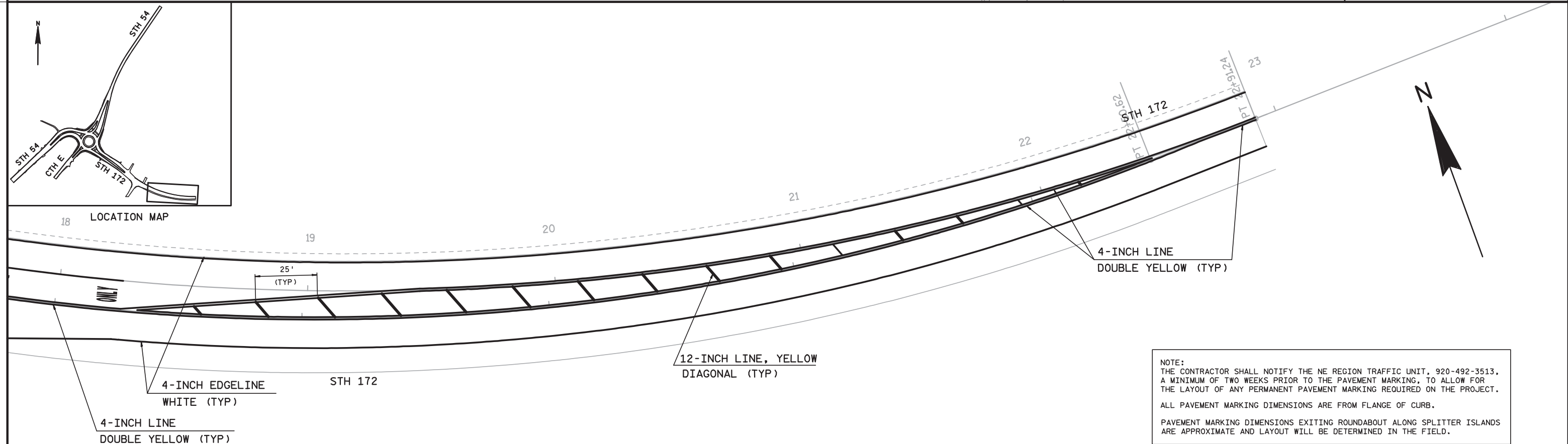
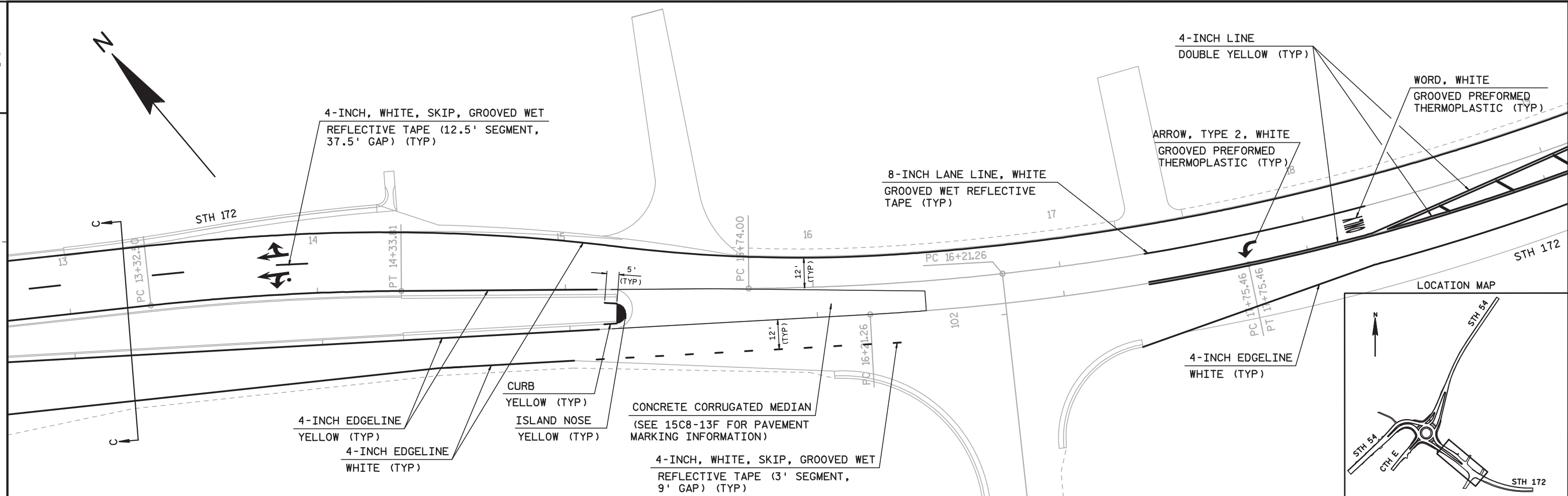


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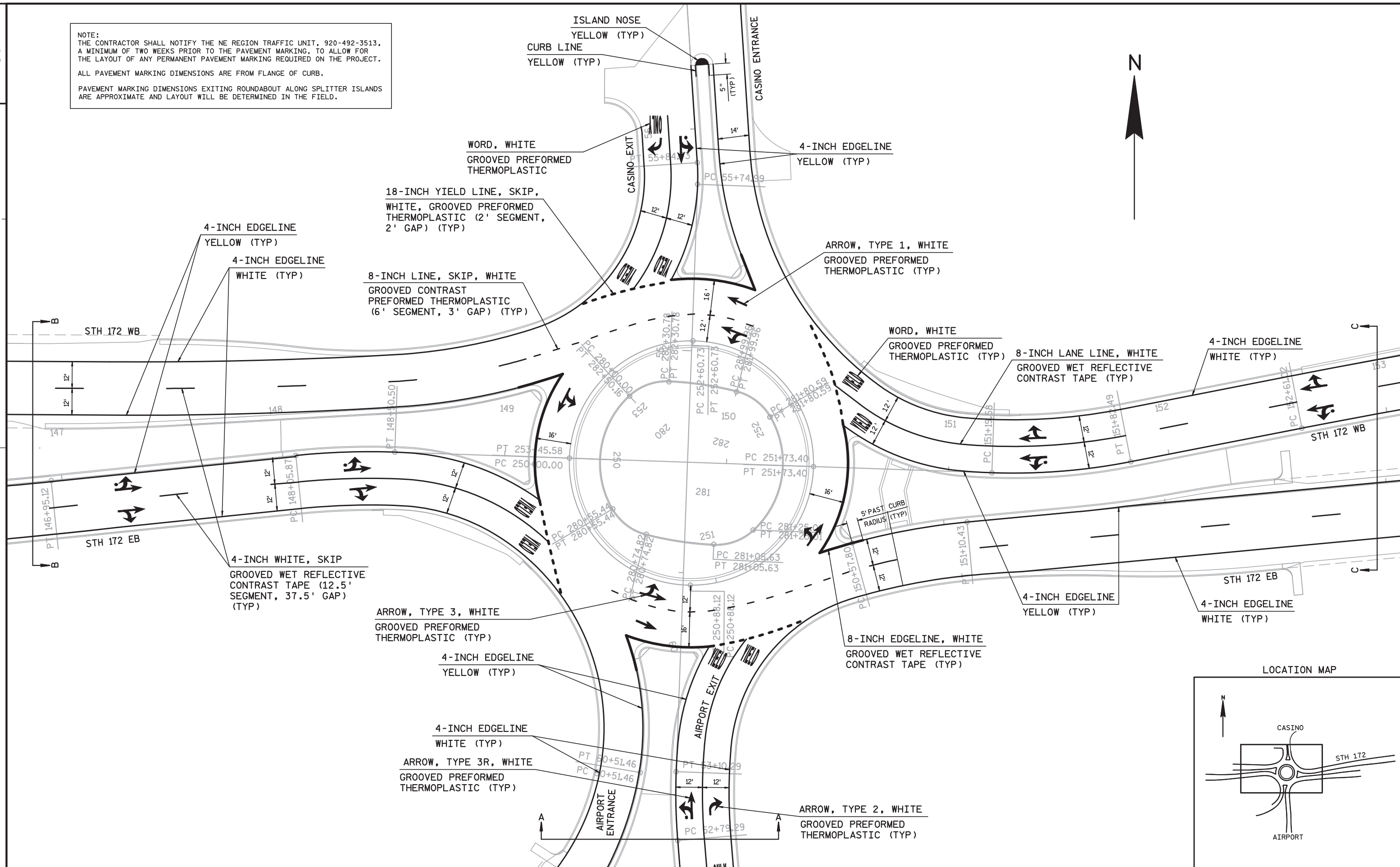


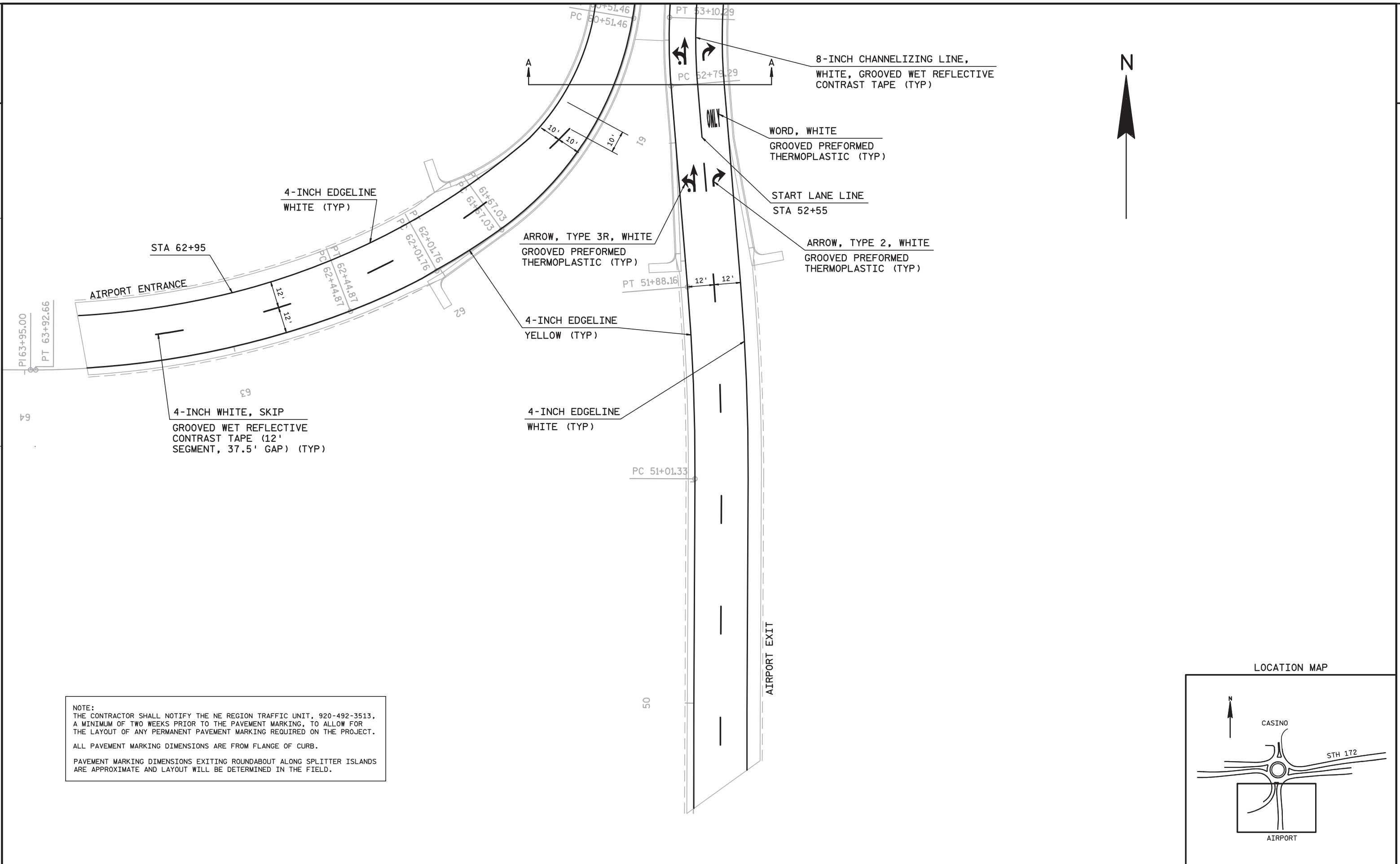


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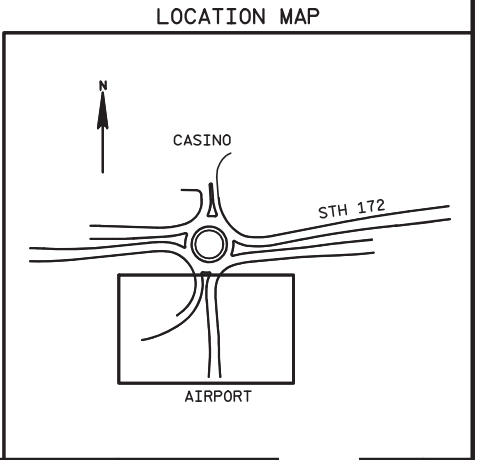


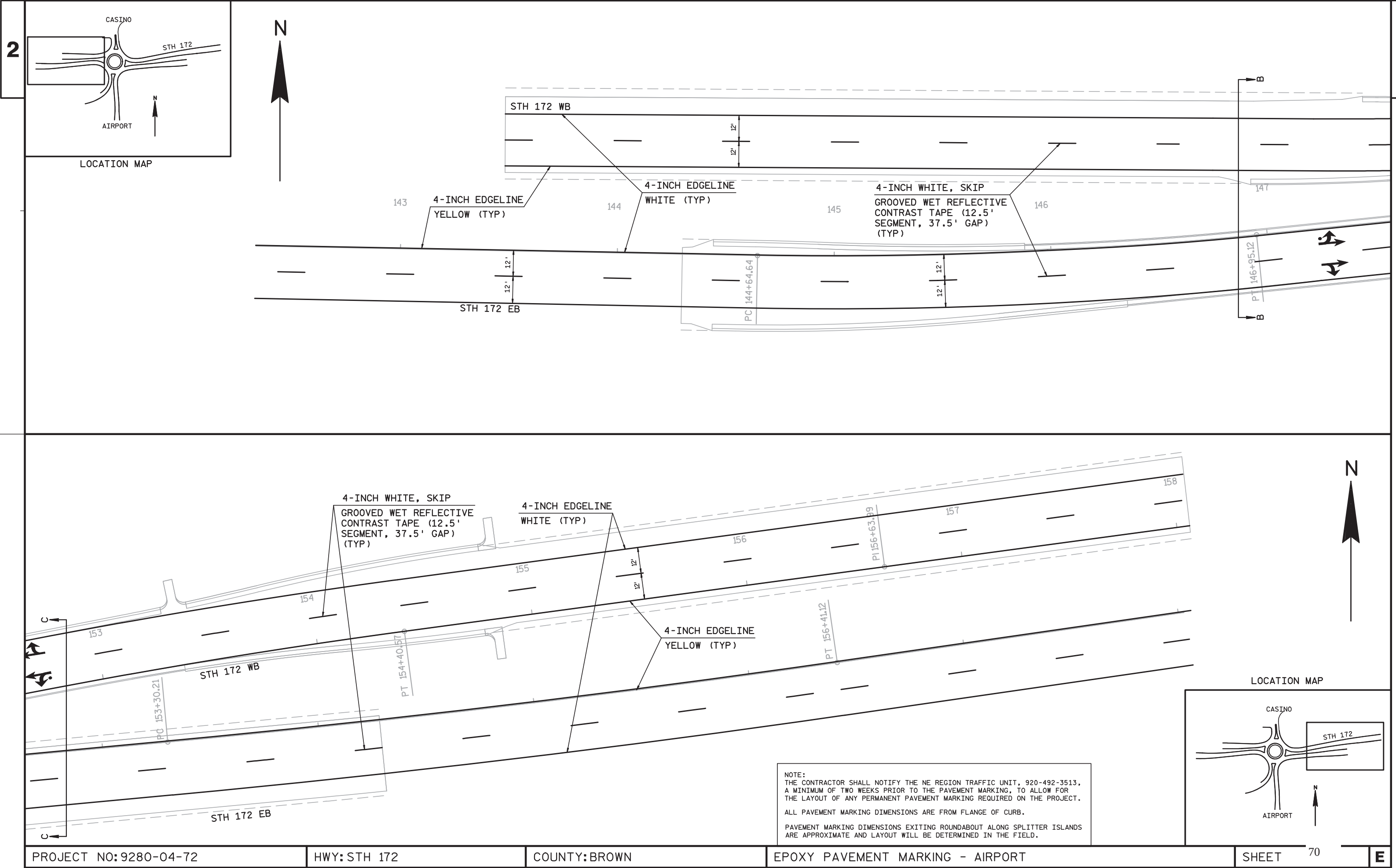
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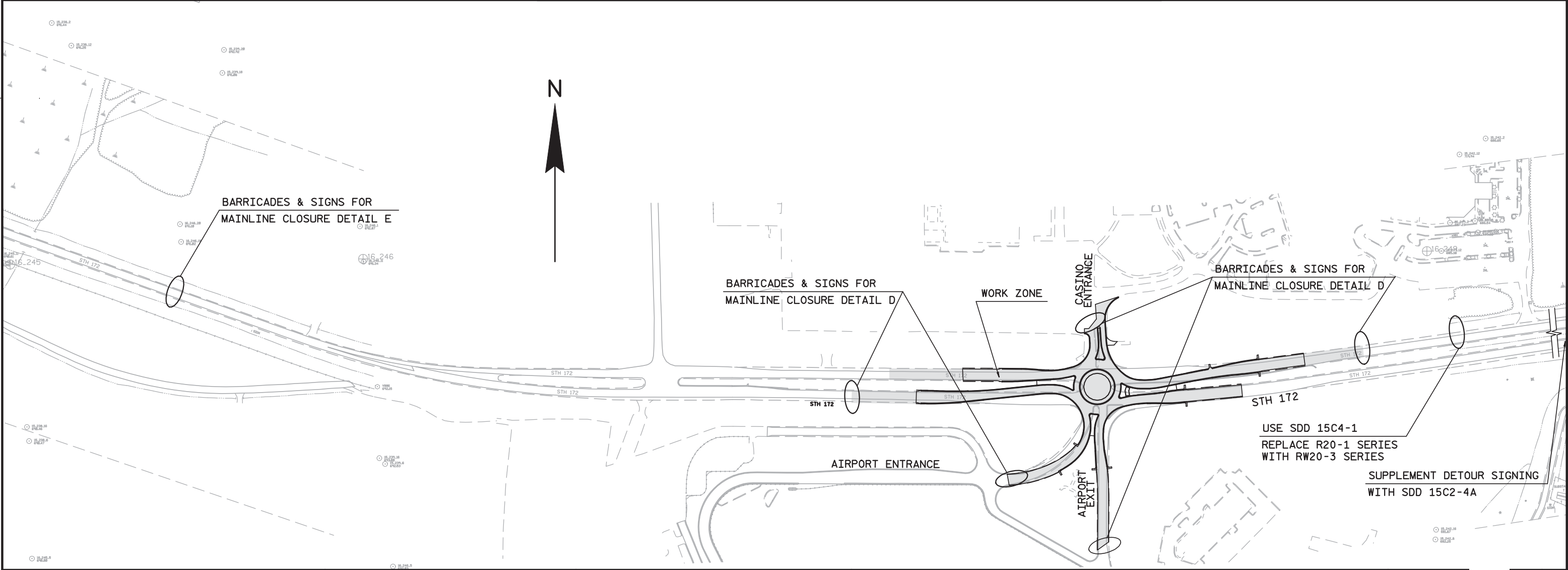
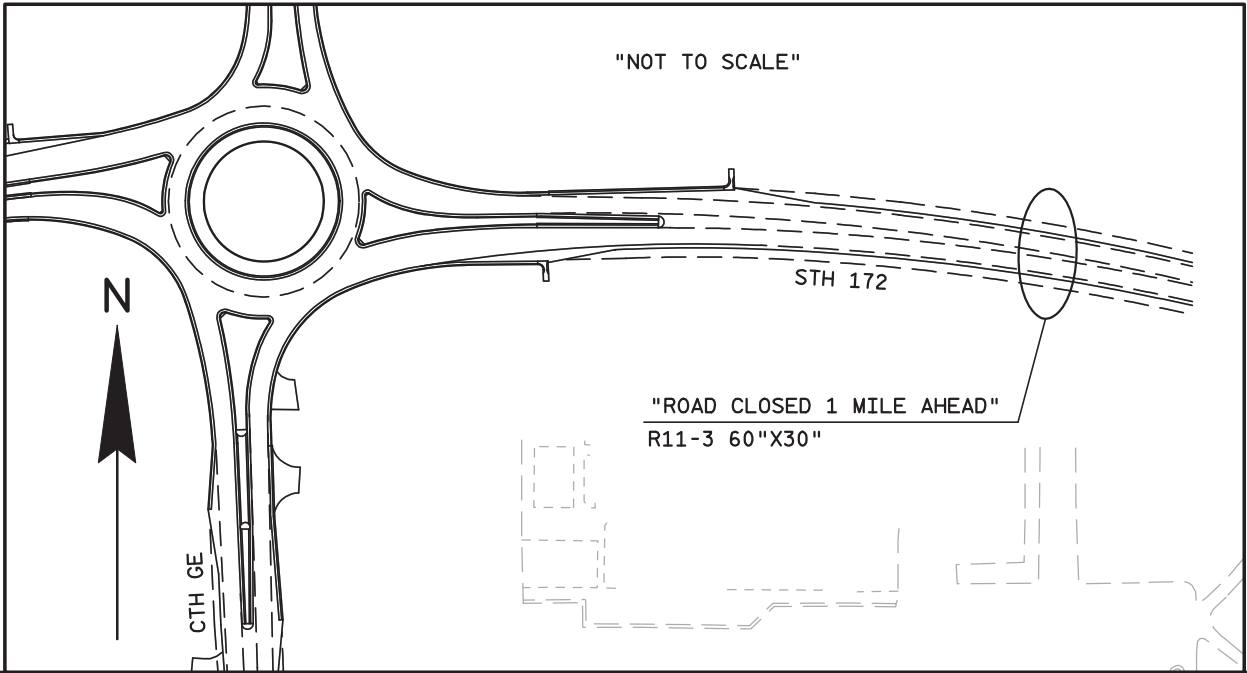


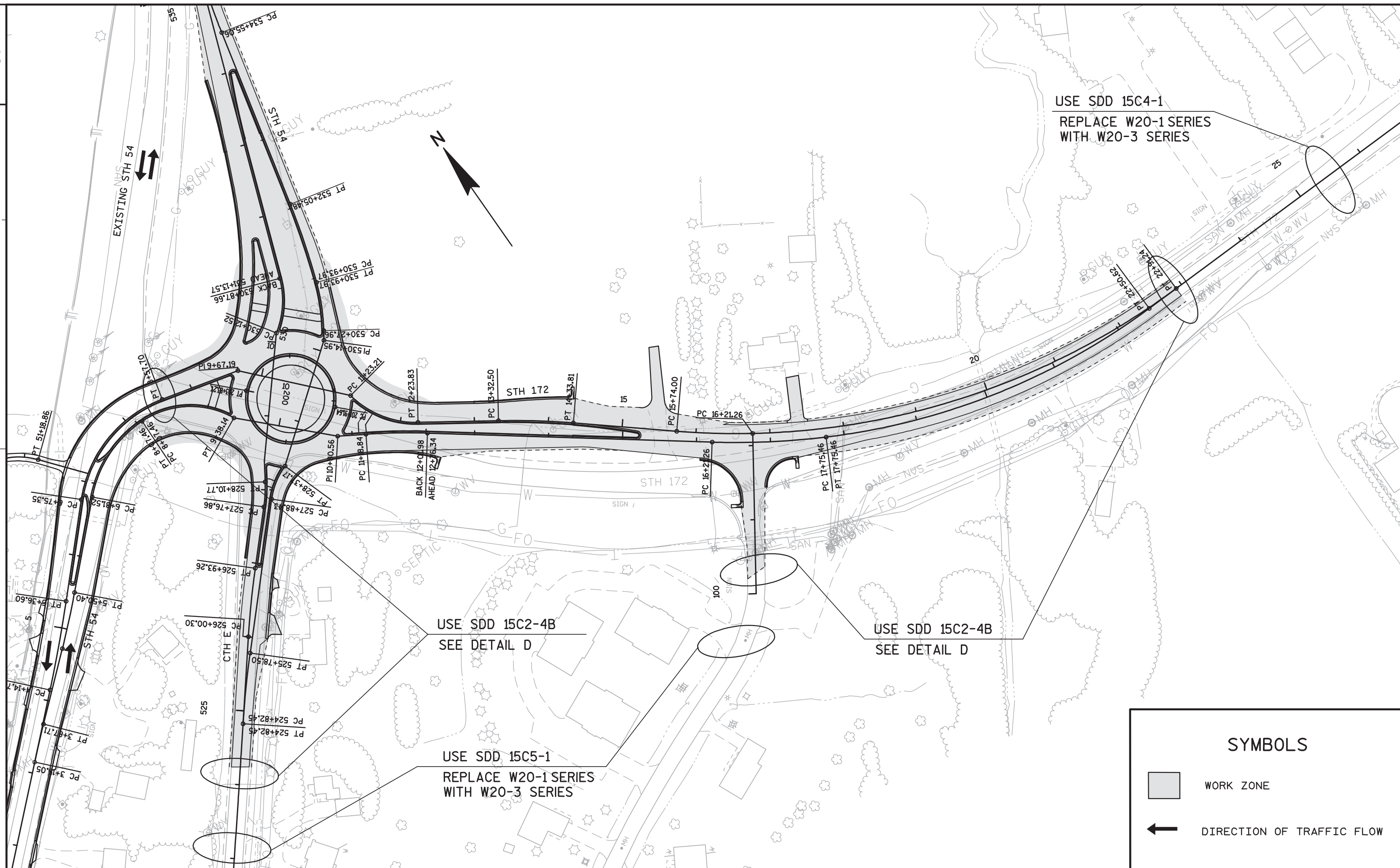


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A MINIMUM OF TWO WEEKS PRIOR TO THE PAVEMENT MARKING, TO ALLOW FOR
THE LAYOUT OF ANY PERMANENT PAVEMENT MARKING REQUIRED ON THE PROJECT.
ALL PAVEMENT MARKING DIMENSIONS ARE FROM FLANGE OF CURB.
PAVEMENT MARKING DIMENSIONS EXITING ROUNDABOUT ALONG SPLITTER ISLANDS
ARE APPROXIMATE AND LAYOUT WILL BE DETERMINED IN THE FIELD.









2

USE SDD 15C2-4B
SEE DETAIL D

USE SDD 15C4-1
REPLACE W20-1 SERIES
WITH W20-3 SERIES

STH 54

CTH E

STH 54

USE SDD 15C2-4B
SEE DETAIL D

CLOSE RIGHT LANE WITH DRUMS & BARRICADES

STH

STH 172

USE SDD 15C4-1
REPLACE W20-1 SERIES
WITH W20-3 SERIES

STH 54

SYMBOLS



WORK ZONE



DIRECTION OF TRAFFIC FLOW



BARRICADE, TYPE 3



DRUM

PROJECT NO: 9280-04-72

HWY: STH 172

COUNTY: BROWN

TRAFFIC CONTROL DETAIL- STH 172 & STH 54 & CTH E- STAGE 2, PHASE 2

SHEET

73

E

FILE NAME : F:\D3_928004\025005_+c.dgn

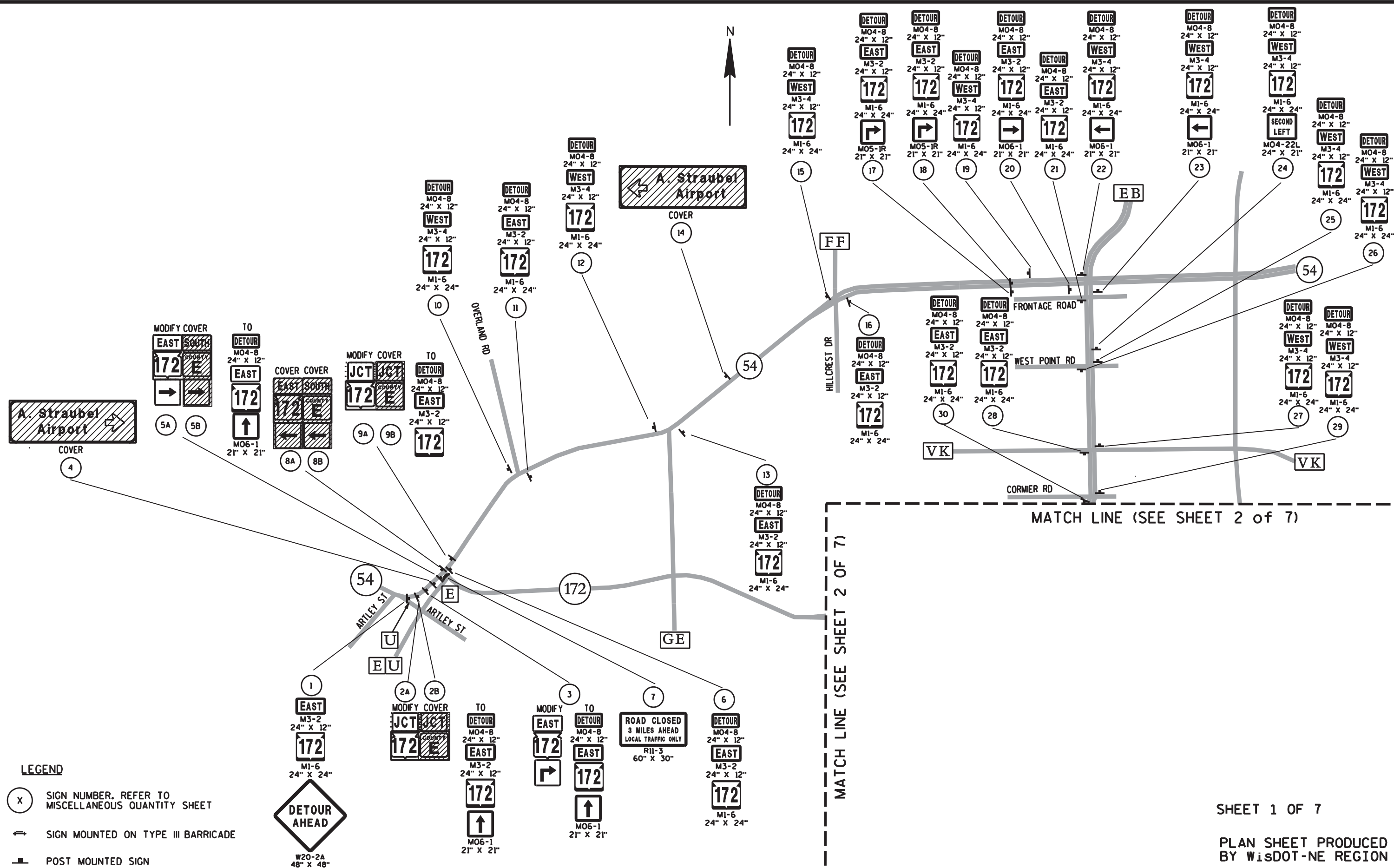
PLOT DATE : 25-OCT-2010 16:45

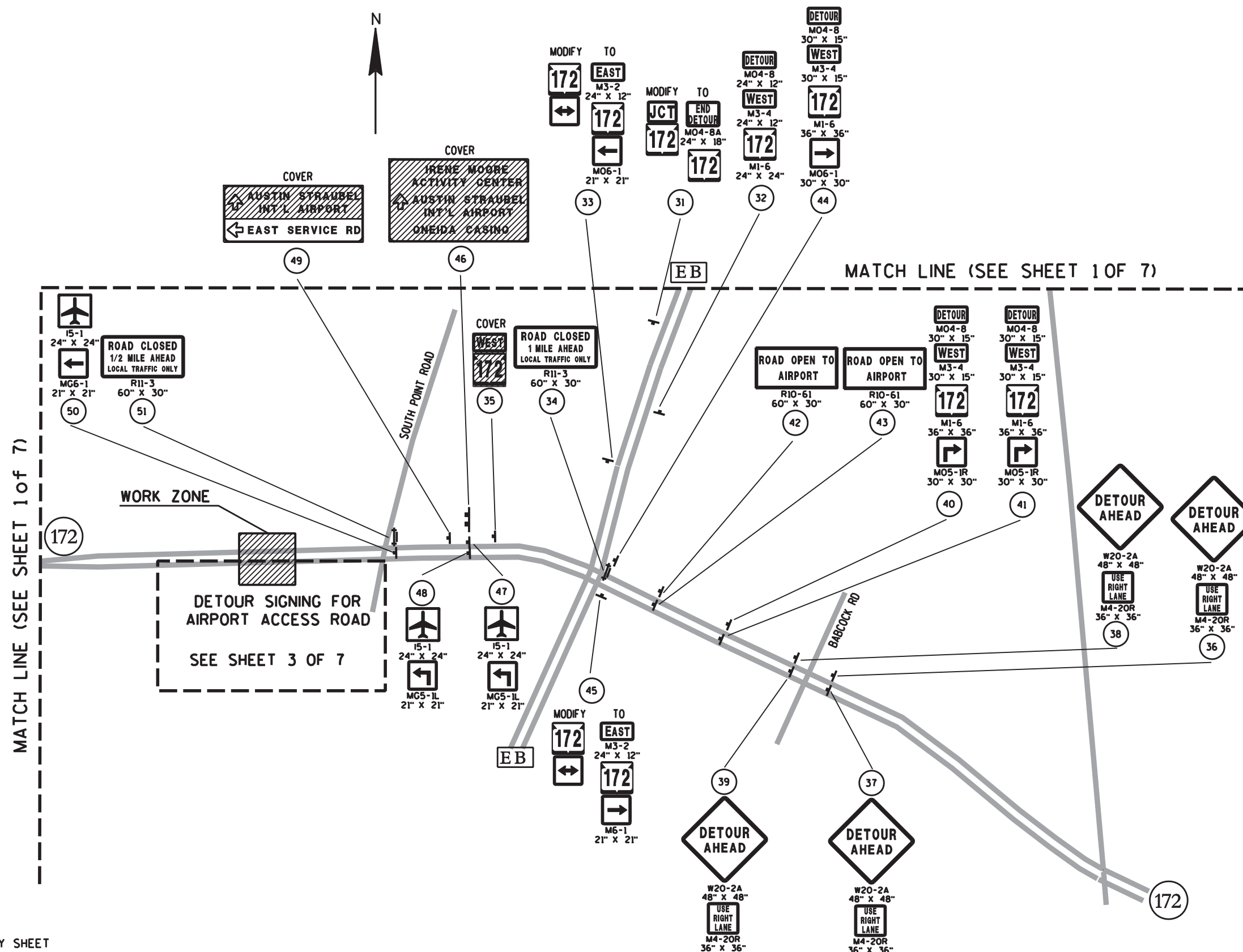
PLOT BY : ditjbs

PLOT NAME : 021105 TC I.

PLOT SCALE : 116.823529:1.000000

WISDOT/CADDS SHEET 42





LEGEND

- (X) SIGN NUMBER. REFER TO MISCELLANEOUS QUANTITY SHEET
- SIGN MOUNTED ON TYPE III BARRICADE
- POST MOUNTED SIGN

SHEET 2 OF 7

PLAN SHEET PRODUCED
BY WISDOT-NE REGION

PROJECT NO: 9280-04-72

HWY: STH 172

COUNTY: BROWN

DETOUR SIGNING DETAIL-STAGE 1

SHEET

75

E

FILE NAME : \$\$....designfile....\$\$

PLOT DATE : \$\$...plottingdate...\$\$

PLOT BY : \$\$...plotuser...\$\$

PLOT NAME :

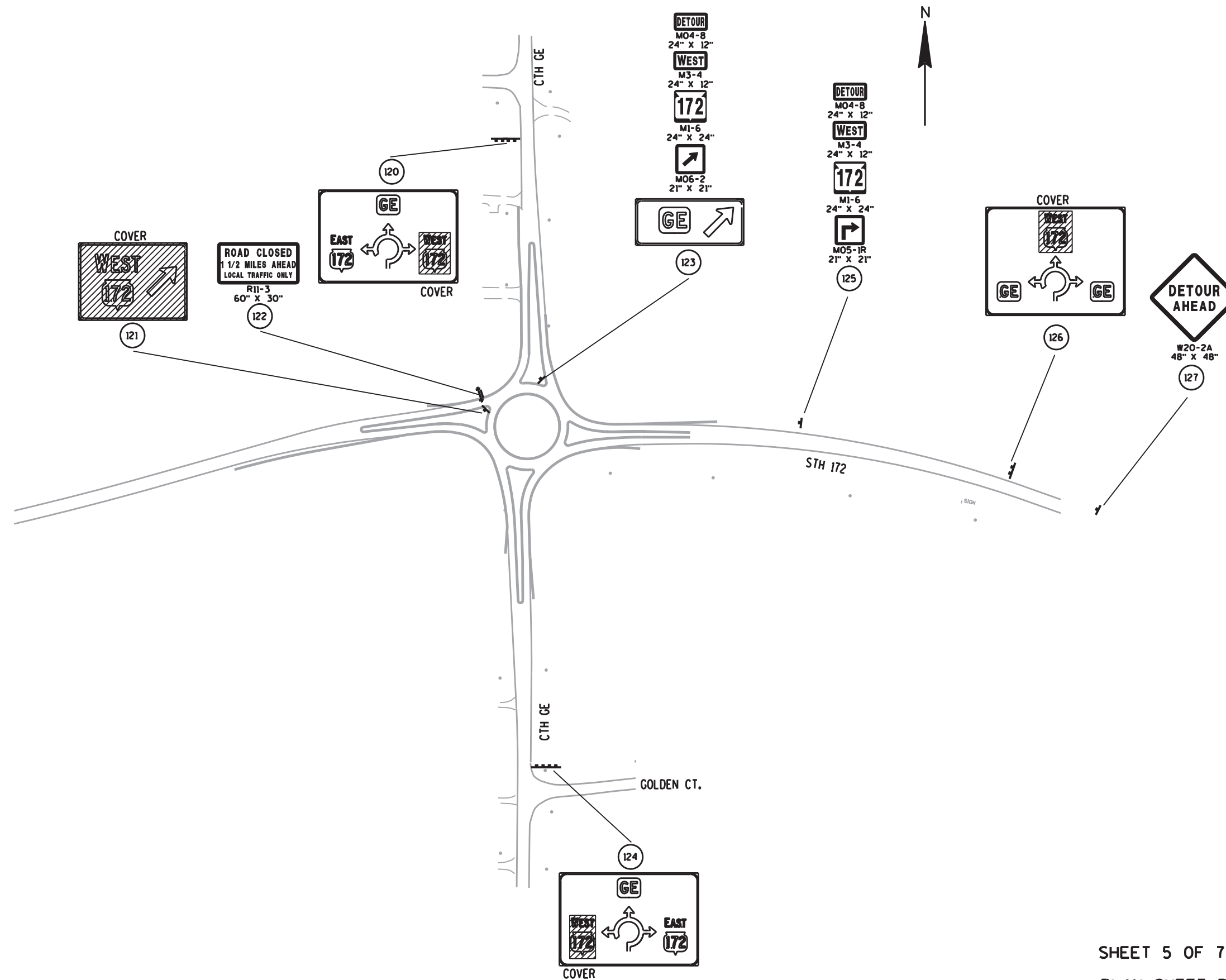
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WISDOT/CADD\$ SHEET 42





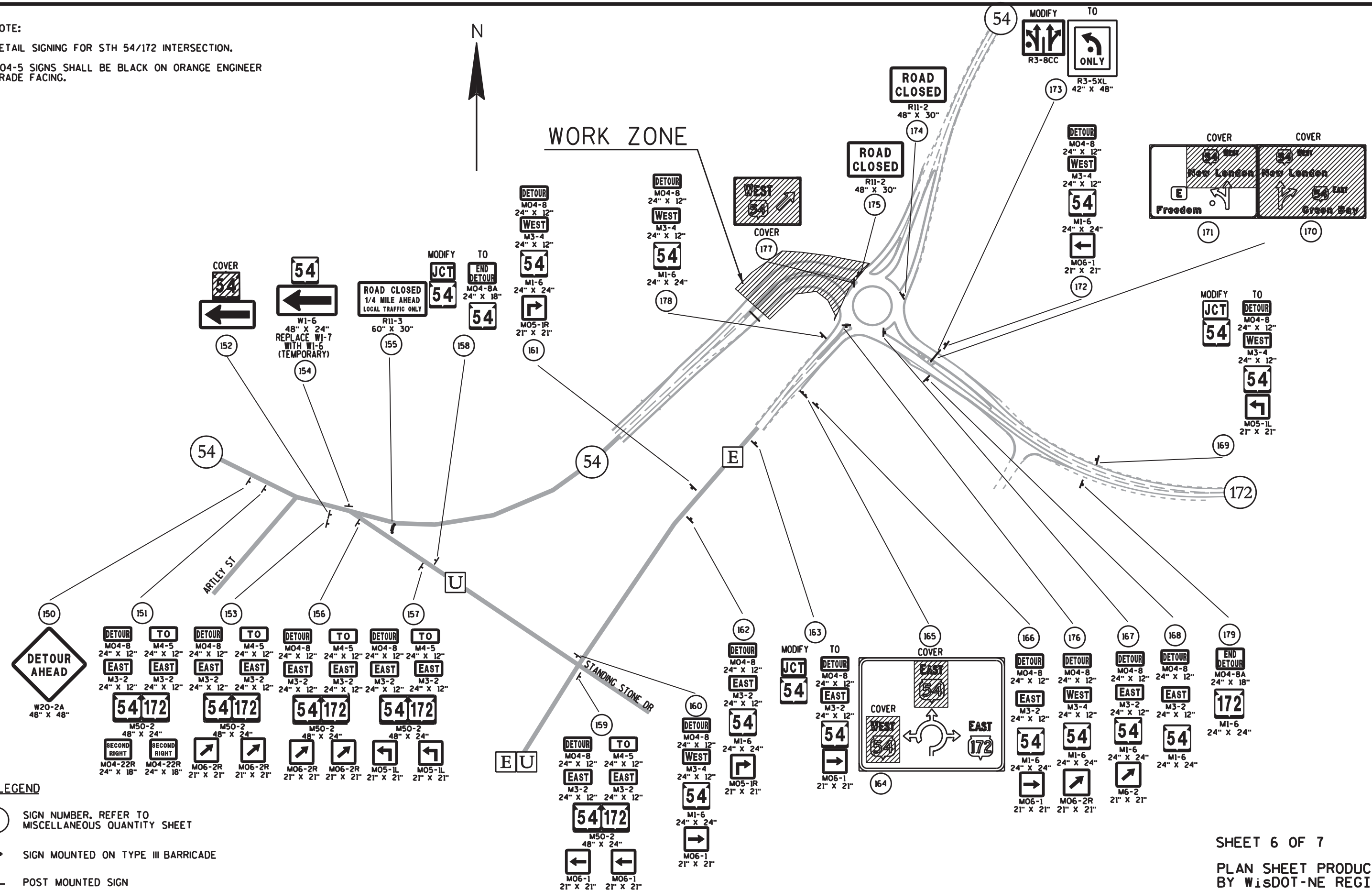
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SHEET 5 OF 7

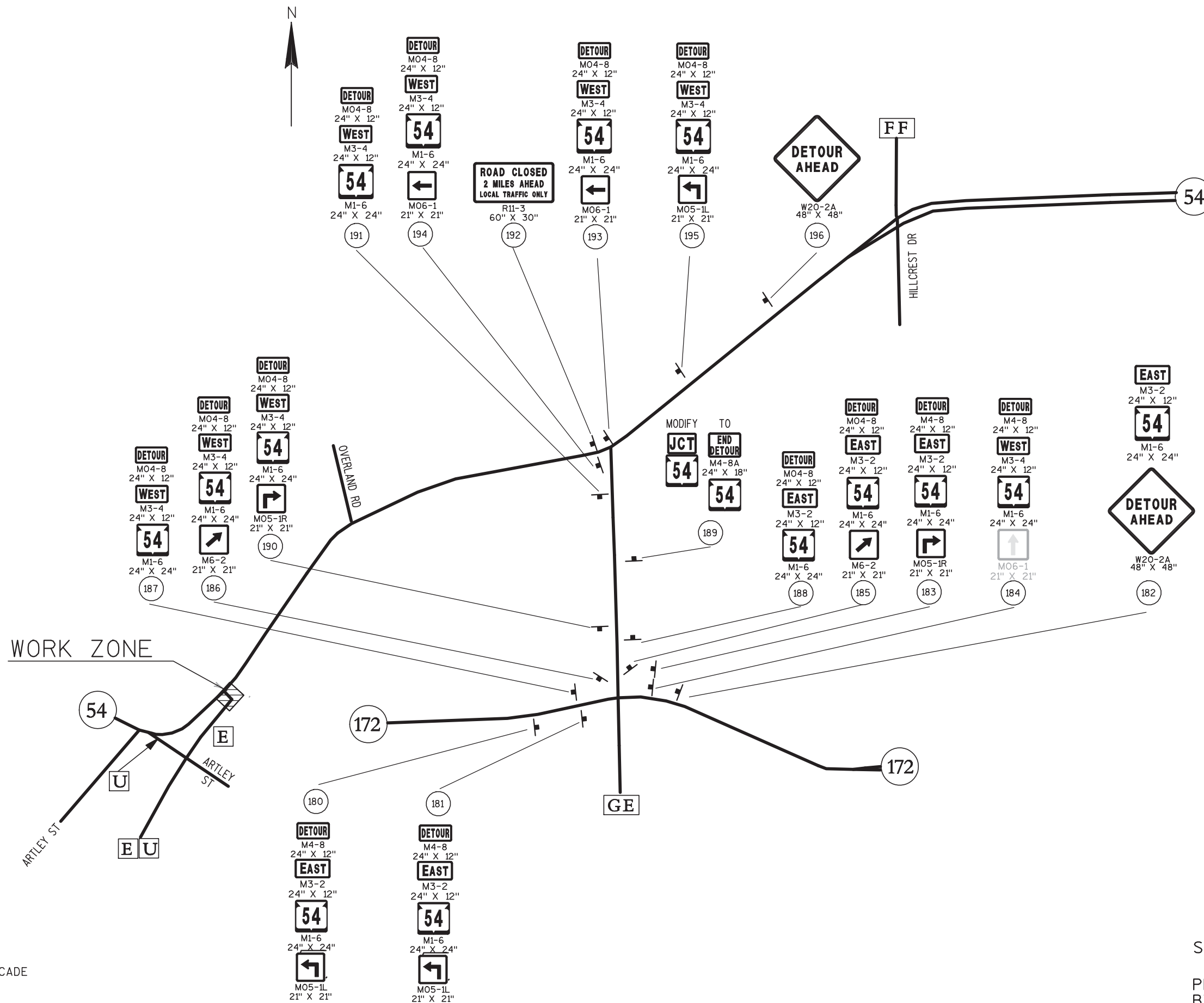
PLAN SHEET PRODUCED
BY WISDOT-NE REGION

NOTE:
DETAIL SIGNING FOR STH 54/172 INTERSECTION.
MO4-5 SIGNS SHALL BE BLACK ON ORANGE ENGINEER GRADE FACING.



- LEGEND
- X SIGN NUMBER. REFER TO MISCELLANEOUS QUANTITY SHEET
 - ≡ SIGN MOUNTED ON TYPE III BARRICADE
 - POST MOUNTED SIGN

SHEET 6 OF 7
PLAN SHEET PRODUCED
BY WisDOT-NE REGION



PI DATA TABLE (DDWY1)			
STATION	COORDINATES		
	X	Y	
49+50.00	57,171.894	562,144.770	
51+88.84	57,364.812	562,012.882	

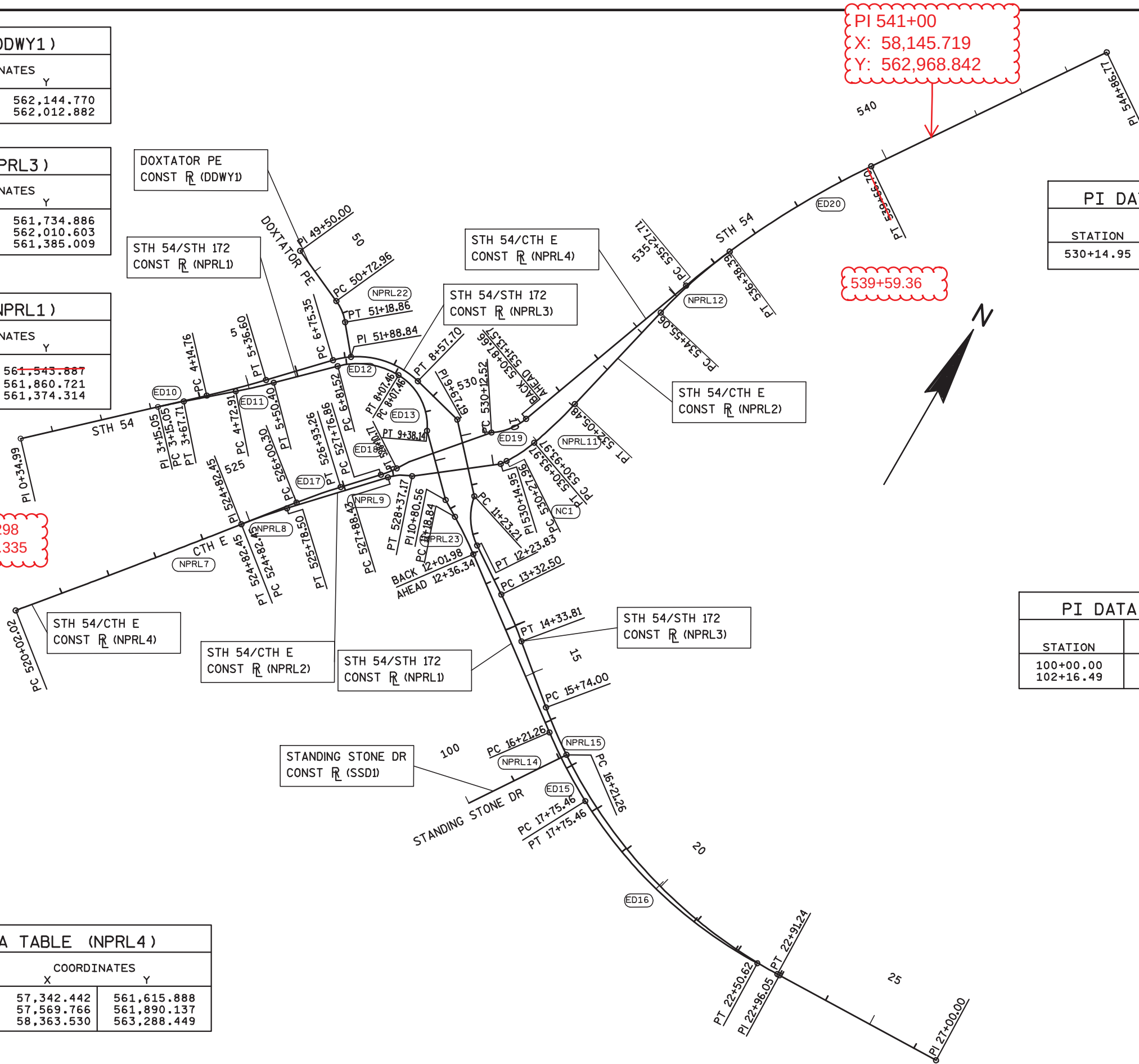
PI DATA TABLE (NPRL3)			
STATION	COORDINATES		
	X	Y	
3+15.05	57,082.118	561,734.886	
9+67.19	57,610.305	562,010.603	
27+00.00	59,121.212	561,385.009	

PI DATA TABLE (NPRL1)			
STATION	COORDINATES		
	X	Y	
0+34.99	56,877.298	561,543.887	
10+80.56	57,670.029	561,860.721	
22+96.05	58,712.591	561,374.314	

PI DATA TABLE (NPRL2)			
STATION	COORDINATES		
	X	Y	
530+14.95	57,729.090	561,977.502	

PI DATA TABLE (SSD1)			
STATION	COORDINATES		
	X	Y	
100+00.00	58,011.206	561,362.086	
102+16.49	58,131.369	561,542.161	

PI DATA TABLE (NPRL4)			
STATION	COORDINATES		
	X	Y	
524+82.45	57,342.442	561,615.888	
528+39.10	57,569.766	561,890.137	
544+86.77	58,363.530	563,288.449	



LEGEND

CURVE NUMBER

SHEET 81

E

STH 54 EB TO STH 172 EB REFERENCE LINE (NPRL1)

ED10 CURVE NOTES		ED11 CURVE NOTES		ED12 CURVE NOTES		ED13 CURVE NOTES		NPRL23 CURVE NOTES		ED15 CURVE NOTES		ED16 CURVE NOTES	
PI	= 3+41.38	PI	= 5+11.66	PI	= 7+48.05	PI	= 8+80.41	PI	= 11+60.44	PI	= 16+98.51	PI	= 20+18.47
X	= 57,101.377	X	= 57,229.919	X	= 57,398.581	X	= 57,538.032	X	= 57,738.461	X	= 58,141.728	X	= 58,424.254
Y	= 561,752.845	Y	= 561,864.540	Y	= 562,030.196	Y	= 562,027.316	Y	= 561,819.513	Y	= 561,517.576	Y	= 561,366.768
∠	= 182°-00'-42"	∠	= 176°-31'-14"	∠	= 225°-40'-05"	∠	= 243°-27'-10"	∠	= 185°-46'-02"	∠	= 171°-17'-10"	∠	= 150°-25'-29"
Δ	= 2°-00'-42"	Δ	= -3°-29'-46"	Δ	= 45°-40'-05"	Δ	= 63°-27'-10"	Δ	= 5°-46'-02"	Δ	= -8°-43'-50"	Δ	= -29°-35'-31"
D	= 3°-49'-11"	D	= 4°-30'-41"	D	= 36°-15'-47"	D	= 48°-33'-21"	D	= 6°-56'-12"	D	= 5°-39'-42"	D	= 6°-13'-40"
T	= 26.33'	T	= 38.76'	T	= 66.53'	T	= 72.95'	T	= 41.61'	T	= 77.25'	T	= 243.00'
L	= 52.66'	L	= 77.50'	L	= 125.94'	L	= 130.68'	L	= 83.14'	L	= 154.20'	L	= 475.16'
R	= 1500.00'	R	= 1270.00'	R	= 158.00'	R	= 118.00'	R	= 826.00'	R	= 1012.00'	R	= 920.00'

STH 172 WB TO STH 54 WB APPROACH/EXIT PRIMARY REFERENCE LINE (NPRL3)

DOXTATOR DRIVEWAY (DDWY1)

54WB1 CURVE NOTES		54WB2 CURVE NOTES		172RL3 CURVE NOTES		172RL4 CURVE NOTES		172RL5 CURVE NOTES		NPRL22 CURVE NOTES	
PI	= 4+75.70	PI	= 7+76.14.	PI	= 11+76.38	PI	= 13+83.20	PI	= 19+48.82	PI	= 50+96.32
X	= 57,199.609	X	= 57,406.482	X	= 57,725.367	X	= 57,901.978	X	= 58,337.891	X	= 57,305.392
Y	= 561,844.449	Y	= 562,062.379	Y	= 561,843.313	Y	= 561,725.070	Y	= 561,364.508	Y	= 562,084.874
∠	= 176°-31'-34"	∠	= 240°-44'-40"	∠	= 134°-15'-38"	∠	= 185°-47'-35"	∠	= 138°-55'-19"	∠	= 206°-18'-02"
Δ	= -3°-29'-26"	Δ	= 60°-44'-40"	Δ	= -45°-45'-22"	Δ	= 5°-47'-35"	Δ	= -41°-05'-41"	Δ	= 26°-18'-02"
D	= 2°-51'-53"	D	= 33°-18'-41"	D	= 45°-28'-22"	D	= 5°-43'-05"	D	= 5°-43'-47"	D	= 57°-17'-45"
T	= 60.94'	T	= 100.80'	T	= 53.17'	T	= 50.70'	T	= 374.83'	T	= 23.36'
L	= 121.85'	L	= 182.35'	L	= 100.62'	L	= 101.31'	L	= 717.24'	L	= 45.90'
R	= 2000.00'	R	= 172.00'	R	= 126.00'	R	= 1002.00'	R	= 1000.00'	R	= 100.00'

CTH E NB TO STH 54 EB REFERENCE LINE (NPRL2)

NPRL7 CURVE NOTES		NPRL8 CURVE NOTES		NPRL9 CURVE NOTES		NC1 CURVE NOTES		NPRL11 CURVE NOTES		NPRL12 CURVE NOTES	
PI	= 522+42.24	PI	= 525+30.50	PI	= 528+13.31	PI	= 530+61.13	PI	= 531+49.78	PI	= 535+46.98
X	= 57,192.877	X	= 57,372.359	X	= 57,565.075	X	= 57,754.579	X	= 57,784.414	X	= 57,875.238
Y	= 561,427.907	Y	= 561,653.488	Y	= 561,860.546	Y	= 562,016.005	Y	= 562,099.834	Y	= 562,486.624
∠	= 178°-48'-56"	∠	= 184°-26'-18"	∠	= 208°-29'-34"	∠	= 166°-26'-49"	∠	= 173°-38'-24"	∠	= 190°-30'-15"
Δ	= -1°-12'-04"	Δ	= 4°-26'-18"	Δ	= 28°-29'-34"	Δ	= -13°-54'-11"	Δ	= -6°-22'-36"	Δ	= 10°-30'-15"
D	= 0°-14'-60"	D	= 4°-37'-14"	D	= 58°-27'-54"	D	= 21°-03'-53"	D	= 5°-43'-05"	D	= 5°-43'-47"
T	= 240.22'	T	= 48.05'	T	= 24.88'	T	= 33.16'	T	= 55.82'	T	= 91.92'
L	= 480.43'	L	= 96.05'	L	= 48.74'	L	= 66.00'	L	= 111.52'	L	= 183.33'
R	= 22919.08'	R	= 1240.00'	R	= 98.00'	R	= 272.00'	R	= 1002.00'	R	= 1000.00'

STH 54 WB TO CTH E SB REFERENCE LINE (NPRL4)

STANDING STONE ROADWAY (SSD1)

ED17 CURVE NOTES		ED18 CURVE NOTES		ED19 CURVE NOTES		ED20 CURVE NOTES		NPRL14 CURVE NOTES		NPRL15 CURVE NOTES	
PI	= 526+46.80	PI	= 527+93.85	PI	= 530+51.41	PI	= 537+48.30	PI	= 100+00.00	PI	= 102+16.49
X	= 57,444.771	X	= 57,544.987	X	= 57,714.512	X	= 57,947.310	X	= 58,011.206	X	= 58,131.369
Y	= 561,744.449	Y	= 561,852.173	Y	= 562,043.683	Y	= 562,675.803	Y	= 561,362.086	Y	= 561,542.161
∠	= 184°-26'-18"	∠	= 170°-12'-14"	∠	= 143°-32'-01"	∠	= 193°-58'-25"				
Δ	= 4°-26'-18"	Δ	= -9°-48'-46"	Δ	= -36°-28'-59"	Δ	= 13°-58'-25"				
D	= 4°-46'-29"	D	= 28°-56'-14"	D	= 48°-33'-21"	D	= 3°-10'-59"				
T	= 46.50'	T	= 17.00'	T	= 38.89'	T	= 220.59'				
L	= 92.95'	L	= 33.91'	L	= 75.14'	L	= 438.99'				
R	= 1200.00'	R	= 198.00'	R	= 118.00'	R	= 1800.00'				

PI DATA TABLE (54WBEX1)			
STATION	COORDINATES		Y
	X		
5+64.00	57,260.428	561,908.518	
9+53.08	57,596.622	562,014.079	

PI DATA TABLE (54EB1)			
STATION	COORDINATES		Y
	X		
5+64.00	57,267.558	561,901.508	

PI DATA TABLE (NFL21)			
STATION	COORDINATES		Y
	X		
450+00.00	57,633.524	562,034.768	
461+60.55	57,734.382	562,138.148	

PI DATA TABLE (54EBEX1)			
STATION	COORDINATES		Y
	X		
530+24.92	57,734.595	561,985.810	
533+97.64	57,841.099	562,341.236	

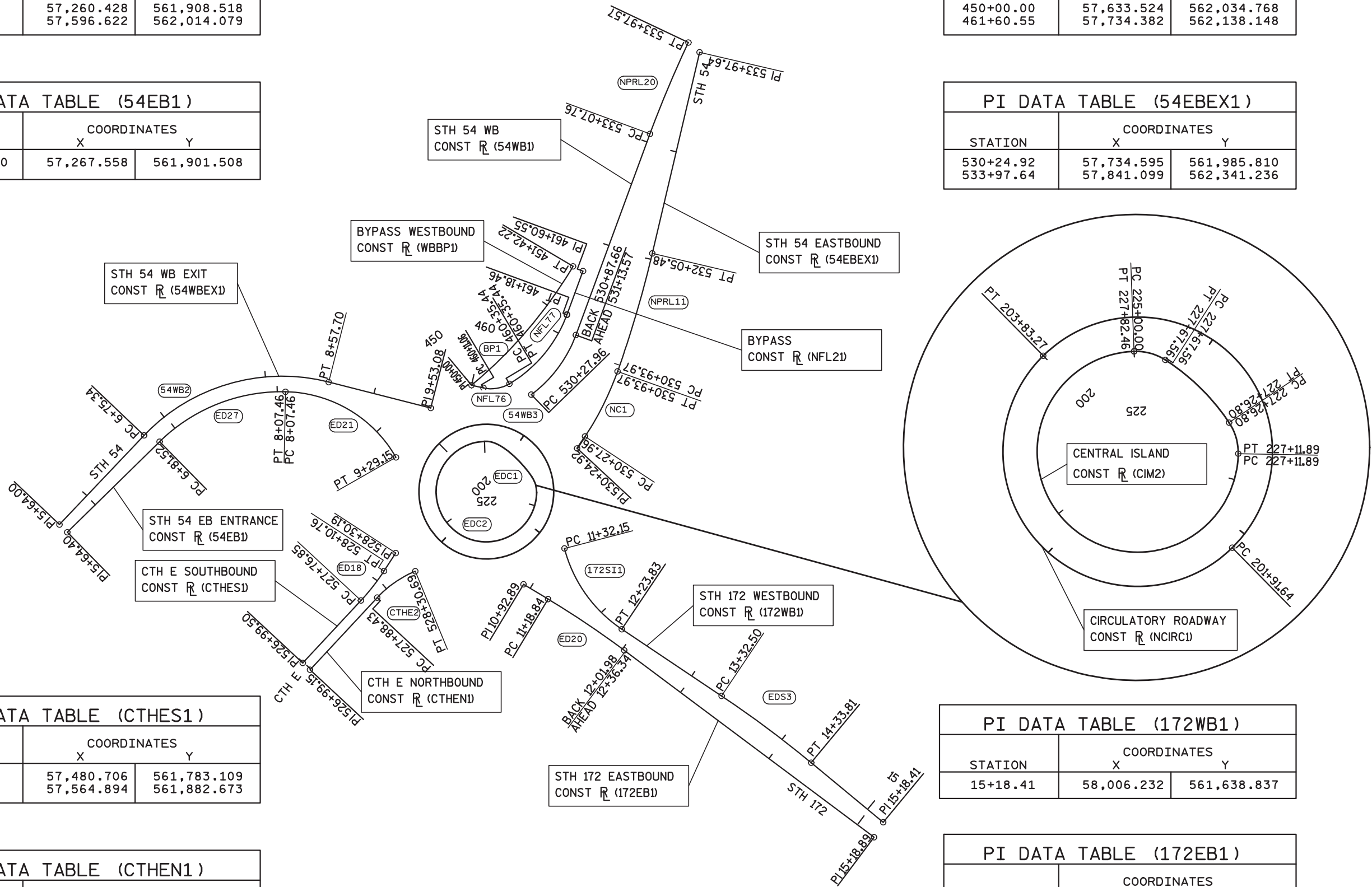
PI DATA TABLE (CTHES1)			
STATION	COORDINATES		Y
	X		
526+99.50	57,480.706	561,783.109	
528+30.19	57,564.894	561,882.673	

PI DATA TABLE (CTHEN1)			
STATION	COORDINATES		Y
	X		
526+99.15	57,487.294	561,776.977	

PI DATA TABLE (172WB1)			
STATION	COORDINATES		Y
	X		
15+18.41	58,006.232	561,638.837	

PI DATA TABLE (172EB1)			
STATION	COORDINATES		Y
	X		
10+92.89	57,680.590	561,854.362	
15+18.89	57,997.942	561,625.233	

LEGEND	
	CURVE NUMBER



STH 54 CIRCULATORY ROADWAY (NCIRC1)

EDC1 CURVE NOTES		EDC2 CURVE NOTES	
PI	= 200+00	PI	= 201+91.64
X	= 57,604.157	X	= 57,689.719
Y	= 561,981.843	Y	= 561,894.877
∠	= 0°-00'-00"	∠	= 359°-59'-59"
Δ	= -180°-00'-00"	Δ	= 180°-00'-01"
D	= 93°-55'-39"	D	= 93°-55'-39"
T	=	T	=
L	= 191.64'	L	= 191.64'
R	= 61.00'	R	= 61.00'

SPLITTER ISLAND EXIT FOR STH 172 EB (172EB1)

ED20 CURVE NOTES	
PI	= 11+60.44
X	= 57,738.461
Y	= 561,819.512
∠	= 185°-46'-03"
Δ	= 5°-46'-03"
D	= 6°-56'-12"
T	= 41.61'
L	= 83.15'
R	= 826.000'

SPLITTER ISLAND ENTRY FOR STH 172 WB (172WB1)

172SI1 CURVE NOTES		EDS3 CURVE NOTES	
PI	= 11+80.12	PI	= 13+83.20
X	= 57,729.683	X	= 57,901.978
Y	= 561,840.423	Y	= 561,725.070
∠	= 138°-19'-42"	∠	= 185°-47'-35"
Δ	= -41°-41'-18"	Δ	= 5°-47'-35"
D	= 45°-28'-22"	D	= 5°-43'-03"
T	= 47.97'	T	= 50.70'
L	= 91.68'	L	= 101.31'
R	= 126.00'	R	= 1002.00'

BYPASS LANE RT FLANGE OF STH 54 WB LEG (NFL21)

NFL76 CURVE NOTES		NFL77 CURVE NOTES	
PI	= 460+23.88	PI	= 460+78.63
X	= 57,656.801	X	= 57,704.911
Y	= 562,029.451	Y	= 562,058.124
∠	= 136°-21'-19"	∠	= 141°-01'-45"
Δ	= -43°-39'-41"	Δ	= -38°-59'-15"
D	= 179°-02'-58"	D	= 46°-57'-50"
T	= 12.82'	T	= 43.19'
L	= 24.39'	L	= 83.02'
R	= 32.00'	R	= 122.00'

STH 54 WB BYPASS LEFT FLANGE (WBBP1)

BP1 CURVE NOTES	
PI	= 450+71.81
X	= 57,688.749
Y	= 562,080.668
∠	= 160°-25'-44"
Δ	= -19°-35'-16"
D	= 13°-46'-23"
T	= 71.81'
L	= 142.22'
R	= 416.00'

SPLITTER ISLAND FOR 54 EB ENTRANCE (54EB1)

ED27 CURVE NOTES		ED21 CURVE NOTES	
PI	= 7+48.05	PI	= 8+74.34
X	= 57,398.581	X	= 57,531.960
Y	= 562,030.196	Y	= 562,027.441
∠	= 225°-40'-05"	∠	= 239°-05'-17"
Δ	= 45°-40'-05"	Δ	= 59°-05'-17"
D	= 36°-15'-47"	D	= 48°-33'-21"
T	= 66.53'	T	= 66.88'
L	= 125.94'	L	= 121.69'
R	= 158.00'	R	= 118.00'

SPLITTER ISLAND FOR STH 54 WB EXIT (54WBEX1)

54WB2 CURVE NOTES	
PI	= 7+76.14
X	= 57,406.482
Y	= 562,062.379
∠	= 240°-44'-40"
Δ	= 60°-44'-40"
D	= 33°-18'-41"
T	= 100.80'
L	= 182.35'
R	= 172.00'

SPLITTER ISLAND FOR STH 54 EB EXIT (54EBEX1)

NC1 CURVE NOTES		NPRL11 CURVE NOTES	
PI	= 530+61.13	PI	= 531+49.78
X	= 57,754.579	X	= 57,784.414
Y	= 562,016.005	Y	= 562,099.834
∠	= 166°-06'-49"	∠	= 173°-38'-24"
Δ	= -13°-54'-11"	Δ	= -6°-22'-36"
D	= 21°-03'-53"	D	= 5°-43'-05"
T	= 33.16'	T	= 55.82'
L	= 66.00'	L	= 111.52'
R	= 272.00'	R	= 1002.00'

SPLITTER ISLAND FOR STH 54 WB ENTRANCE (54WB1)

54WB3 CURVE NOTES		NPRL20 CURVE NOTES	
PI	= 530+54.49	PI	= 533+52.69
X	= 57,715.810	X	= 57,810.593
Y	= 562,047.209	Y	= 562,304.569
∠	= 146°-51'-20"	∠	= 185°-08'-08"
Δ	= -33°-09'-40"	Δ	= 5°-08'-08"
D	= 48°-33'-21"	D	= 5°-43'-05"
T	= 35.13'	T	= 44.94'
L	= 68.30'	L	= 89.81'
R	= 118.00'	R	= 1002.00'

SPLITTER ISLAND FOR CTH E NB (CTHEN1)

CTHE2 CURVE NOTES	
PI	= 528+09.89
X	= 57,562.744
Y	= 561,858.042
∠	= 204°-42'-14"
Δ	= 24°-42'-14"
D	= 58°-27'-54"
T	= 21.46'
L	= 42.25'
R	= 98.00'

SPLITTER ISLAND FOR CTH E SB (CTHES1)

ED18 CURVE NOTES	
PI	= 527+93.85
X	= 57,544.987
Y	= 561,852.173
∠	= 170°-12'-14"
Δ	= -9°-48'-46"
D	= 28°-56'-14"
T	= 17.00'
L	= 33.91'
R	= 198.00'

REVISED CENTRAL ISLAND ALIGNMENT (BACK OF CURB) AT 54/172 (CIM2)

CIM9 CURVE NOTES		CIM10 CURVE NOTES		CIM11 CURVE NOTES		CIM12 CURVE NOTES	
PI	= 225+48.09	PI	= 227+19.58	PI	= 227+47.47	PI	= 227+75.25
X	= 57,693.350	X	= 57,692.577	X	= 57,676.819	X	= 57,652.973
Y	= 561,985.574	Y	= 561,945.178	Y	= 561,968.757	Y	= 561,984.109
∠	= -87°-11'-28"	∠	= 145°-08'-54"	∠	= 156°-31'-43"	∠	= 145°-08'-53"
Δ	= -266°-49'-32"	Δ	= -34°-51'-06"	Δ	= -23°-28'-17"	Δ	= -34°-51'-07"
D	= 125°-55'-29"	D	= 233°-51'-37"	D	= 57°-35'-01"	D	= 233°-51'-37"
T	= 48.09'	T	= 7.69'	T	= 20.67'	T	= 7.69'
L	= 211.89'	L	= 14.90'	L	= 40.76'	L	= 14.90'
R	= 45.50'	R	= 24.50'	R	= 99.50'	R	= 24.50'

DATA TABLE

POINT NUMBER	STATION	OFFSET (FT)
5	306+48.54	4.00 RT
6	306+75.00	5.50 RT
7	307+00.00	6.80 RT
8	307+50.00	9.60 RT
9	308+00.00	10.40 RT
10	308+50.00	8.10 RT
11	308+77.38	4.00 RT

PI DATA TABLE (NFL15)

STATION	COORDINATES	
	X	Y
400+00.00	~~56,862.294~~	~~561,559.977~~
402+39.81	57,037.683	561,723.531
402+69.88	57,058.260	561,745.453

X: 56,861.875
Y: 561,560.424

PI DATA TABLE (NFL16)

STATION	COORDINATES	
	X	Y
300+00.00	~~56,892.302~~	~~561,527.797~~
305+09.43	57,269.658	561,869.926
310+31.45	57,470.394	561,791.759

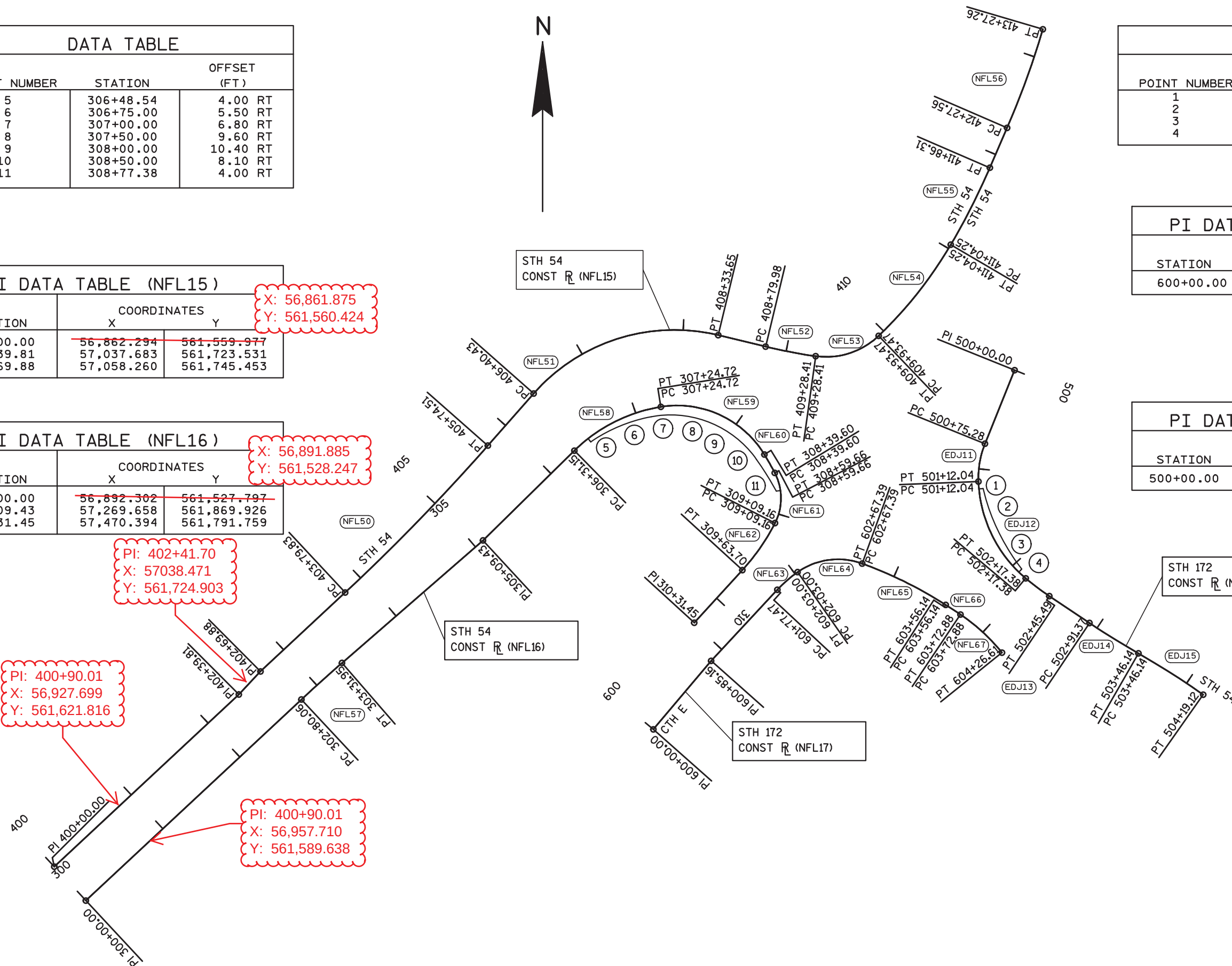
X: 56,891.885
Y: 561,528.247

PI: 402+41.70
X: 57038.471
Y: 561,724.903

PI: 400+90.01
X: 56,927.699
Y: 561,621.816

PI: 400+90.01
X: 56,957.710
Y: 561,589.638

N



DATA TABLE

POINT NUMBER	STATION	OFFSET (FT)
1	501+19.16	4.00 LT
2	501+50.00	6.74 LT
3	501+75.00	6.80 LT
4	502+08.46	4.00 LT

PI DATA TABLE (NFL17)

STATION	COORDINATES	
	X	Y
600+00.00	57,431.521	561,690.430

PI DATA TABLE (NFL19)

STATION	COORDINATES	
	X	Y
500+00.00	57,774.756	562,031.654

LEGEND

○ CURVE NUMBER

NW QUADRANT OF CTH E/STH 54/STH 172 ROUNDABOUT (NFL15)

NFL50
CURVE NOTES
PI = 404+77.25
X = 57,209.917
Y = 561,886.877
Z = 174°-22'-19"
Δ = -5°-38'-41"
D = 2°-53'-59"
T = 97.42'
L = 194.68'
R = 1976.00'

NFL51
CURVE NOTES
PI = 407+47.80
X = 57,388.779
Y = 562,090.078
Z = 242°-11'-49"
Δ = 62°-11'-49"
D = 32°-11'-19"
T = 107.37'
L = 193.23'
R = 178.00'

NFL52
CURVE NOTES
PI = 409+04.21
X = 57,561.755
Y = 562,048.384
Z = 174°-29'-19"
Δ = -5°-31'-41"
D = 11°-24'-49"
T = 24.24'
L = 48.43'
R = 502.00'

NFL53
CURVE NOTES
PI = 409+63.35
X = 57,620.350
Y = 562,040.124
Z = 128°-14'-48"
Δ = -51°-46'-12"
D = 79°-34'-39"
T = 34.94'
L = 65.06'
R = 72.00'

NFL54
CURVE NOTES
PI = 410+49.21
X = 57,685.859
Y = 562,102.828
Z = 164°-13'-38"
Δ = -15°-47'-22"
D = 14°-15'-10"
T = 55.75'
L = 110.78'
R = 402.00'

NFL55
CURVE NOTES
PI = 411+45.33
X = 57,734.951
Y = 562,186.289
Z = 172°-56'-46"
Δ = -7°-04'-14"
D = 8°-36'-57"
T = 41.08'
L = 82.06'
R = 665.00'

NFL56
CURVE NOTES
PI = 412+77.47
X = 57,787.456
Y = 562,307.658
Z = 173°-06'-34"
Δ = -6°-54'-26"
D = 6°-55'-41"
T = 49.91'
L = 99.70'
R = 827.00'

SW QUADRANT OF CTH E/STH 54/STH 172 ROUNDABOUT (NFL16)

NFL57
CURVE NOTES
PI = 303+06.00
X = 57,116.098
Y = 561,736.492
Z = 182°-00'-42"
Δ = 2°-00'-42"
D = 3°-52'-36"
T = 25.95'
L = 51.89'
R = 1478.00'

NFL58
CURVE NOTES
PI = 306+79.47
X = 57,390.967
Y = 561,989.078
Z = 215°-16'-17"
Δ = 35°-16'-17"
D = 37°-41'-41"
T = 48.32'
L = 93.57'
R = 152.00'

NFL59
CURVE NOTES
PI = 307+89.97
X = 57,503.077
Y = 562,007.263
Z = 247°-51'-33"
Δ = 67°-51'-33"
D = 59°-04'-04"
T = 65.25'
L = 114.88'
R = 97.00'

NFL60
CURVE NOTES
PI = 308+49.63
X = 57,542.249
Y = 561,942.973
Z = 183°-48'-16"
Δ = 3°-48'-16"
D = 18°-58'-20"
T = 10.03'
L = 20.05'
R = 302.00'

NFL61
CURVE NOTES
PI = 308+86.46
X = 57,559.288
Y = 561,910.312
Z = 234°-32'-50"
Δ = 54°-32'-50"
D = 110°-11'-03"
T = 26.81'
L = 49.51'
R = 52.00'

NFL62
CURVE NOTES
PI = 309+36.60
X = 57,534.663
Y = 561,861.976
Z = 195°-28'-13"
Δ = 15°-28'-13"
D = 28°-21'-51"
T = 27.44'
L = 54.54'
R = 202.00'

NE QUADRANT OF CTH E/STH 54/STH 172 ROUNDABOUT (NFL19)

EDJ11
CURVE NOTES
PI = 500+93.93
X = 57,739.678
Y = 561,944.514
Z = 155°-48'-27"
Δ = -24°-12'-33"
D = 65°-51'-26"
T = 18.66'
L = 36.76'
R = 87.00'

EDJ12
CURVE NOTES
PI = 501+67.95
X = 57,742.647
Y = 561,870.001
Z = 132°-29'-32"
Δ = -47°-31'-28"
D = 45°-06'-53"
T = 55.91'
L = 105.34'
R = 127.00'

EDJ13
CURVE NOTES
PI = 502+31.45
X = 57,796.105
Y = 561,824.836
Z = 173°-36'-31"
Δ = -6°-23'-29"
D = 22°-44'-11"
T = 14.07'
L = 28.11'
R = 252.00'

SE QUADRANT OF CTH E/STH 54/STH 172 ROUNDABOUT (NFL17)

NFL63
CURVE NOTES
PI = 601+90.28
X = 57,558.063
Y = 561,832.464
Z = 191°-59'-32"
Δ = 11°-59'-32"
D = 46°-57'-50"
T = 12.81'
L = 25.54'
R = 122.00'

NFL64
CURVE NOTES
PI = 602+37.93
X = 57,597.136
Y = 561,859.886
Z = 235°-03'-31"
Δ = 55°-03'-31"
D = 85°-30'-58"
T = 34.92'
L = 64.38'
R = 67.00'

NFL65
CURVE NOTES
PI = 603+11.94
X = 57,671.824
Y = 561,832.708
Z = 192°-38'-59"
Δ = 12°-38'-59"
D = 14°-15'-10"
T = 44.56'
L = 88.75'
R = 402.00'

NFL66
CURVE NOTES
PI = 603+64.51
X = 57,716.390
Y = 561,804.156
Z = 181°-11'-46"
Δ = 1°-11'-46"
D = 7°-08'-39"
T = 8.37'
L = 16.74'
R = 802.00'

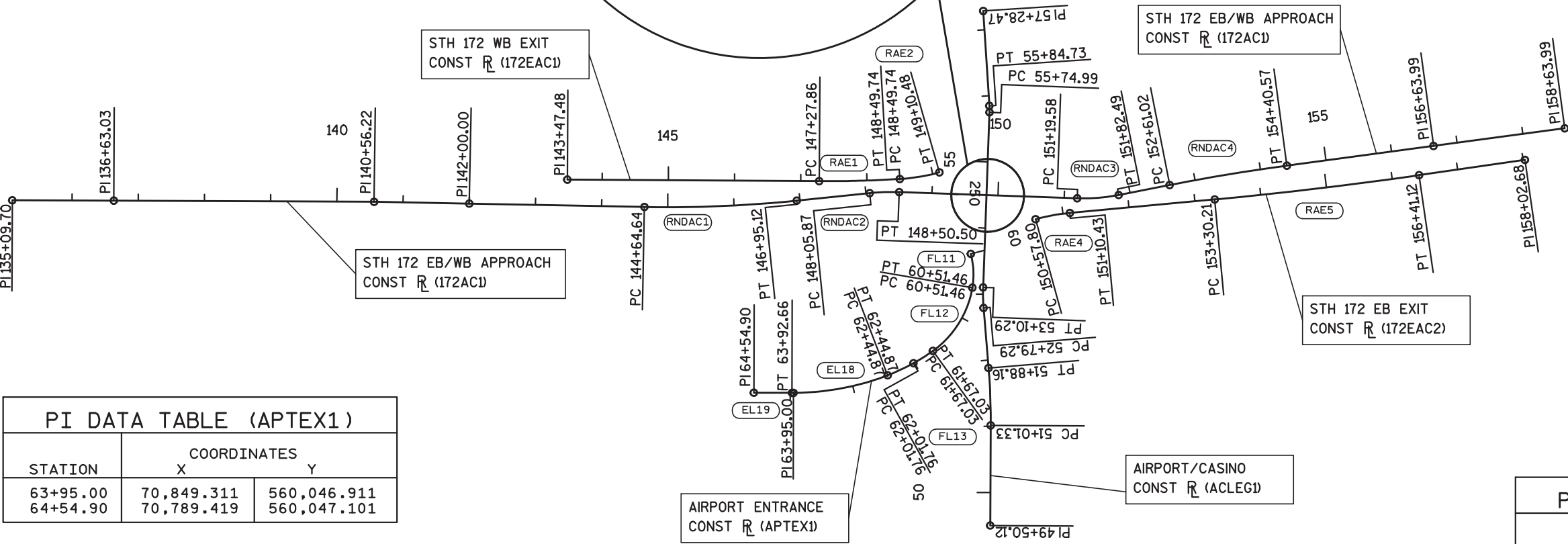
NFL67
CURVE NOTES
PI = 603+99.95
X = 57,745.826
Y = 561,784.419
Z = 197°-23'-29"
Δ = 17°-23'-29"
D = 32°-22'-14"
T = 27.07'
L = 53.73'
R = 177.00'

EDJ14
CURVE XOTES
PI = 503+18.77
X = 57,868.690
Y = 561,776.239
Z = 176°-06'-13"
Δ = -3°-54'-47"
D = 7°-08'-39"
T = 27.40'
L = 54.77'
R = 802.00'

EDJ15
CURVE NOTES
PI = 503+82.66
X = 57,924.098
Y = 561,744.391
Z = 185°-14'-22"
Δ = 5°-14'-22"
D = 7°-10'-48"
T = 36.51'
L = 72.98'
R = 798.00'

PI DATA TABLE (172AC1)		
STATION	COORDINATES	
	X	Y
135+09.70	69,669.203	560,337.773
136+63.03	69,822.533	560,337.290
140+56.22	70,215.720	560,335.502
142+00.00	70,359.474	560,332.802
156+63.99	71,816.058	560,419.915
158+63.99	72,014.275	560,446.561

PI DATA TABLE (ACLEG1)		
STATION	COORDINATES	
	X	Y
49+50.12	71,147.178	559,846.470
57+28.47	71,135.853	560,623.909



PI DATA TABLE (APTEX1)		
STATION	COORDINATES	
	X	Y
63+95.00	70,849.311	560,046.911
64+54.90	70,789.419	560,047.101

PI DATA TABLE (172EAC2)		
STATION	COORDINATES	
	X	Y
158+02.68	71,954.137	560,398.823

LEGEND

CURVE NUMBER

PROJECT NO: 9280-04-72

HWY: STH 172

COUNTY: BROWN

ALIGNMENT DIAGRAM (PRIMARY REFERENCE LINES- STH 172/AIRPORT)

SHEET 87

E

WB/EB STH 172 APPROACHES TO AIRPORT ROUNDABOUT- EDGE OF TRAVEL LANE (172AC1)

RNDAC1 CURVE NOTES		RNDAC2 CURVE NOTES		RNDAC3 CURVE NOTES		RNDAC4 CURVE NOTES	
PI	= 145+80.02	PI	= 148+28.22	PI	= 151+51.17	PI	= 153+50.82
X	= 70,739.424	X	= 70,986.610	X	= 71,309.435	X	= 71,505.628
Y	= 560,325.511	Y	= 560,350.906	Y	= 560,339.755	Y	= 560,378.186
∠	= 0°-00'-00"	∠	= 187°-50'-39"	∠	= 166°-57'-19"	∠	= 183°-25'-37"
Δ	= -6°-57'-55"	Δ	= 7°-50'-39"	Δ	= -13°-03'-41"	Δ	= 3°-25'-37"
D	= 3°-01'-19"	D	= 17°-34'-31"	D	= 20°-45'-34"	D	= 1°-54'-31"
T	= 115.39'	T	= 22.35'	T	= 31.60'	T	= 89.80'
L	= 230.49'	L	= 44.63'	L	= 62.92'	L	= 179.55'
R	= 1896.00'	R	= 326.00'	R	= 276.00'	R	= 3002.00'

STH 172 WB EXIT- EDGE OF TRAVEL LANE (172EAC1)

RAE1 CURVE NOTES		RAE2 CURVE NOTES	
PI	= 147+88.82	PI	= 148+80.23
X	= 70,949.005	X	= 71,040.302
Y	= 530,366.370	Y	= 560,371.736
∠	= 176°-15'-15"	∠	= 167°-24'-29"
Δ	= -3°-45'-45	Δ	= -12°-36'-31"
D	= 3°-05'-13"	D	= 20°-45'-34"
T	= 60.96'	T	= 60.96'
L	= 121.88'	L	= 121.88'
R	= 1856.00'	R	= 1856.00'

STH 172 EB EXIT- EDGE OF TRAVEL LANE (172EAC2)

RAE4 CURVE NOTES		RAE5 CURVE NOTES	
PI	= 150+84.18	PI	= 154+85.703
X	= 71,240.437	X	= 71,640.349
Y	= 560,316.171	Y	= 562,353.540
∠	= 190°-01'-05"	∠	= 177°-08'-36"
Δ	= 10°-01'-05"	Δ	= -2°-52'-24"
D	= 19°-02'-07"	D	= 0°-55'-27"
T	= 26.38'	T	= 155.49'
L	= 52.63'	L	= 310.91'
R	= 301.00'	R	= 6200.00'

AIRPORT AND CASINO EXIT TO ROUNDABOUT (ACLEG1)

EDH4 CURVE NOTES		EDH5 CURVE NOTES		EDH6 CURVE NOTES	
PI	= 51+44.77	PI	= 52+94.81	PI	= 55+79.86
X	= 71,147.387	X	= 71,135.114	X	= 71,145.506
Y	= 560,041.118	Y	= 560,190.707	Y	= 560,475.610
∠	= 175°-03'-17"	∠	= 186°-46'-45"	∠	= 174°-12'-11"
Δ	= -4°-57'-43"	Δ	= 6°-46'-45"	Δ	= -5°-48'-49"
D	= 5°-43'-05"	D	= 21°-52'-07"	D	= 59°-40'-59"
T	= 43.44'	T	= 15.52'	T	= 4.87'
L	= 86.83'	L	= 31.00'	L	= 9.74'
R	= 1002.00'	R	= 262.00'	R	= 96.00'

AIRPORT ENTRANCE AT FLANGE LINE (APTEX1)

FL11 CURVE NOTES		FL12 CURVE NOTES		FL13 CURVE NOTES		EL18 CURVE NOTES		EL19 CURVE NOTES	
PI	= 60+26.13	PI	= 61+12.37	PI	= 61+84.41	PI	= 62+23.35	PI	= 63+19.62
X	= 71,123.851	X	= 71,109.335	X	= 71,045.718	X	= 71,011.664	X	= 70,921.717
Y	= 560,231.619	Y	= 560,145.794	Y	= 560,100.150	Y	= 560,081.186	Y	= 560,046.681
∠	= 204°-34'-10"	∠	= 224°-44'-29"	∠	= 186°-32'-46"	∠	= 188°-07'-32"	∠	= 201°-10'-09"
Δ	= 24°-34'-10"	Δ	= 44°-44'-29"	Δ	= 6°-32'-46"	Δ	= 8°-07'-32"	Δ	= 21°-10'-09"
D	= 47°-44'-47"	D	= 38°-42'-48"	D	= 18°-50'-50"	D	= 18°-50'-50"	D	= 14°-19'-26"
T	= 26.13'	T	= 60.91'	T	= 17.39'	T	= 21.59'	T	= 74.75'
L	= 51.46'	L	= 115.57'	L	= 34.73'	L	= 43.11'	L	= 147.79'
R	= 120.00'	R	= 148.00'	R	= 304.00'	R	= 304.00'	R	= 400.00'

CIRCULATORY ROADWAY AT FLANGE LINE (CIRC5)

ARL1 CURVE NOTES		ARL2 CURVE NOTES		ARL3 CURVE NOTES		ARL4 CURVE NOTES	
PI	= 250+56.76	PI	= 251+42.01	PI	= 252+29.34	PI	= 253+14.20
X	= 71,085.325	X	= 71,195.969	X	= 71,199.153	X	= 71,089.740
Y	= 560,290.713	Y	= 560,289.745	Y	= 560,399.540	Y	= 560,400.851
∠	= 88°-12'-20"	∠	= 91°-09'-37"	∠	= 89°-01'-31"	∠	= 91°-36'-32"
Δ	= -91°-47'-40"	Δ	= -88°-50'-23"	Δ	= -90°-58'-29"	Δ	= -88°-23'-28"
D	= 104°-10'-27"	D	= 104°-10'-27"	D	= 104°-10'-27"	D	= 104°-10'-27"
T	= 56.75'	T	= 53.90'	T	= 55.94'	T	= 53.48'
L	= 88.12'	L	= 85.28'	L	= 87.34'	L	= 84.85'
R	= 55.00'	R	= 55.00'	R	= 55.00'	R	= 55.00'

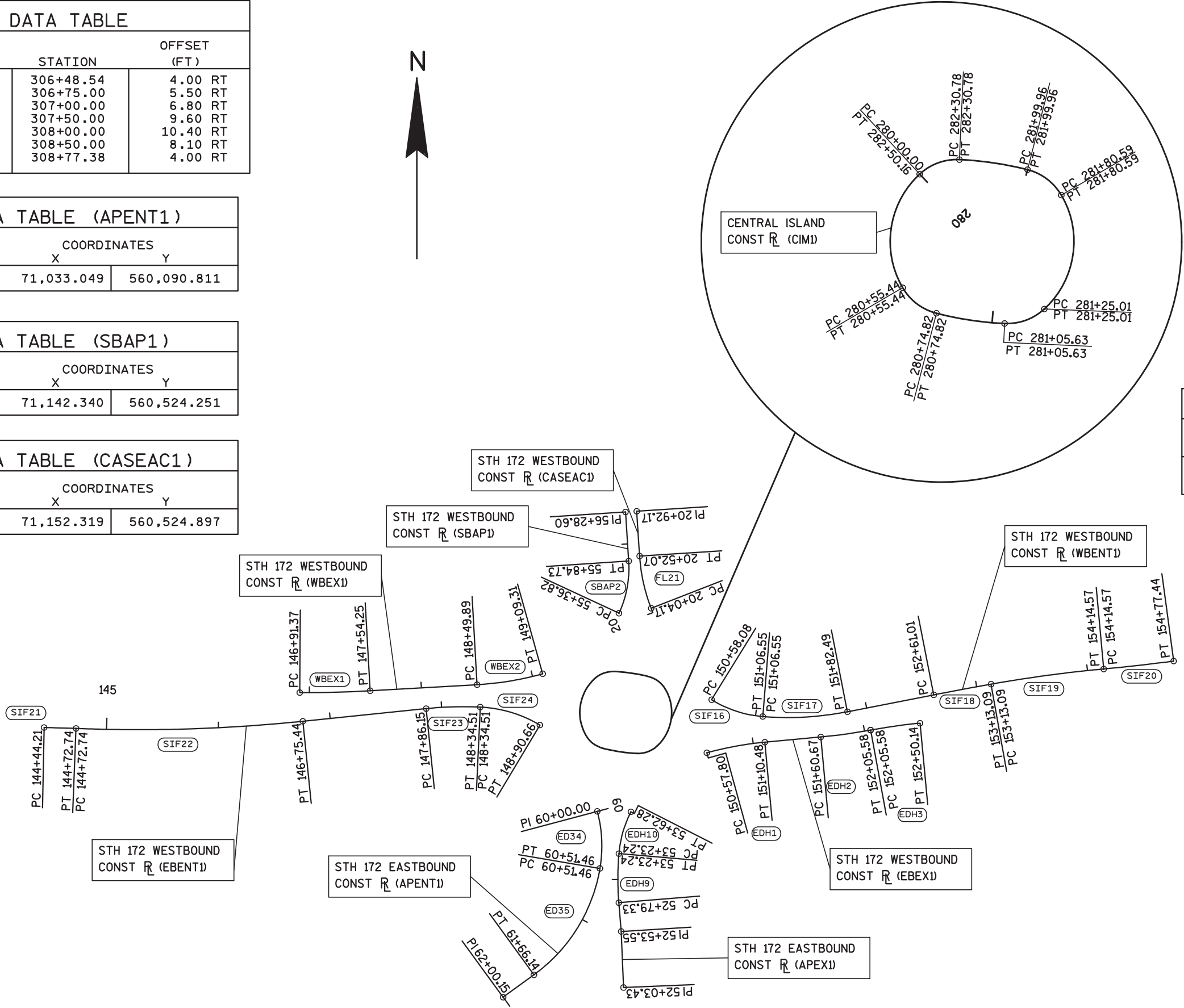
DATA TABLE		
POINT NUMBER	STATION	OFFSET (FT)
5	306+48.54	4.00 RT
6	306+75.00	5.50 RT
7	307+00.00	6.80 RT
8	307+50.00	9.60 RT
9	308+00.00	10.40 RT
10	308+50.00	8.10 RT
11	308+77.38	4.00 RT

PI DATA TABLE (APENT1)		
STATION	COORDINATES	
	X	Y
62+00.15	71,033.049	560,090.811

PI DATA TABLE (SBAP1)		
STATION	COORDINATES	
	X	Y
56+28.60	71,142.340	560,524.251

PI DATA TABLE (CASEAC1)		
STATION	COORDINATES	
	X	Y
20+92.17	71,152.319	560,524.897

PI DATA TABLE (APEX1)		
STATION	COORDINATES	
	X	Y
52+03.43	71,140.591	560,099.472
52+53.55	71,138.491	560,149.548



FLANGE LINE FOR THE AIRPORT ENTRANCE (APENT1)

ED34 CURVE NOTES		ED35 CURVE NOTES	
PI	= 60+26.13	PI	= 61+11.85
X	= 71,123.851	X	= 71,109.422
Y	= 560,231.619	Y	= 560,146.307
∠	= 204°-34'-10"	∠	= 224°-23'-48"
Δ	= 24°-34'-10"	Δ	= 44°-23'-48"
D	= 47°-44'-47"	D	= 38°-42'-48"
T	= 26.13'	T	= 60.39'
L	= 51.46'	L	= 114.68'
R	= 120.00'	R	= 148.00'

SPLITTER ISLAND FOR AIRPORT EXIT (APEX1)

EDH9 CURVE NOTES		EDH10 CURVE NOTES	
PI	= 53+01.34	PI	= 53+43.01
X	= 71,134.584	X	= 71,138.161
Y	= 560,197.176	Y	= 560,238.798
∠	= 189°-36'-12"	∠	= 202°-08'-49"
Δ	= 9°-36'-12"	Δ	= 22°-08'-49"
D	= 21°-52'-07"	D	= 56°-43'-43"
T	= 22.01'	T	= 19.77'
L	= 43.91'	L	= 39.04'
R	= 262.00'	R	= 101.00'

FLANGE LINE OF CASINO ENTRANCE- SPLITTER ISLAND SIDE (CASEAC1)

FL17 CURVE NOTES	
PI	= 20+28.21
X	= 71,156.492
Y	= 560,460.794
∠	= 197°-35'-32"
Δ	= 17°-35'-32"
D	= 36°-43'-41"
T	= 24.14'
L	= 47.90'
R	= 156.00'

EB ENTRANCE SPLITTER ISLAND OF STH 172 (EBENT1)

SIF21 CURVE NOTES		SIF22 CURVE NOTES		SIF23 CURVE NOTES		SIF24 CURVE NOTES	
PI	= 144+58.48	PI	= 145+74.26	PI	= 148+10.37	PI	= 148+63.17
X	= 70,637.562	X	= 70,753.258	X	= 70,988.471	X	= 71,041.296
Y	= 560,331.466	Y	= 560,326.932	Y	= 560,351.097	Y	= 560,348.668
∠	= 181°-08'-42"	∠	= 171°-54'-24"	∠	= 188°-29'-54"	∠	= 208°-13'-25"
Δ	= 1°-08'-42"	Δ	= -8°-06'-36"	Δ	= 8°-29'-54"	Δ	= 28°-13'-25"
D	= 4°-00'-44"	D	= 4°-00'-04"	D	= 17°-34'-31"	D	= 50°-15'-34"
T	= 14.27'	T	= 101.52'	T	= 24.22'	T	= 28.66'
L	= 28.54'	L	= 202.70'	L	= 48.35'	L	= 56.16'
R	= 1428.00'	R	= 1432.00'	R	= 326.00'	R	= 114.00'

STH 172 EB EXISTING SPLITTER ISLAND (EBEX1)

EDH1 CURVE NOTES		EDH2 CURVE NOTES		EDH3 CURVE NOTES	
PI	= 150+84.21	PI	= 151+83.14	PI	= 152+27.88
X	= 71,240.412	X	= 71,339.051	X	= 71,383.072
Y	= 560,316.168	Y	= 560,325.386	Y	= 560,333.517
∠	= 190°-01'-38"	∠	= 174°-53'-25"	∠	= 185°-07'-35"
Δ	= 10°-01'-38"	Δ	= -5°-07'-35"	Δ	= 5°-07'-35"
D	= 19°-02'-07"	D	= 11°-24'-49"	D	= 11°-30'-19"
T	= 26.41'	T	= 22.47'	T	= 22.29'
L	= 52.68'	L	= 44.92'	L	= 44.56'
R	= 301.00'	R	= 502.00'	R	= 498.00'

SB APPROACH RADIUS AT SPLITTER ISLAND FLANGE LINE AT CASINO ENTRANCE (SBAP1)

SBAP2 CURVE NOTES	
PI	= 55+61.29
X	= 71,146.779
Y	= 560,456.060
∠	= 151°-25'-17"
Δ	= -28°-35'-43"
D	= 59°-40'-59"
T	= 24.47'
L	= 47.91'
R	= 96.00'

WB 172 ENTRANCE SPLITTER ISLAND (WBENT1)

SIF16 CURVE NOTES		SIF17 CURVE NOTES		SIF18 CURVE NOTES		SIF19 CURVE NOTES		SIF20 CURVE NOTES	
PI	= 150+82.77	PI	= 151+44.76	PI	= 152+87.05	PI	= 153+63.86	PI	= 154+46.01
X	= 71,240.250	X	= 71,302.942	X	= 71,443.054	X	= 71,518.679	X	= 71,600.909
Y	= 560,343.617	Y	= 560,338.483	Y	= 560,365.929	Y	= 560,379.384	Y	= 560,386.909
∠	= 153°-03'-23"	∠	= 164°-15'-07"	∠	= 180°-59'-38"	∠	= 184°-46'-00"	∠	= 177°-36'-43"
Δ	= -26°-57'-37"	Δ	= -15°-45'-53"	Δ	= 0°-59'-38"	Δ	= 4°-46'-00"	Δ	= -2°-24'-17"
D	= 55°-37'-37"	D	= 20°-45'-34"	D	= 1°-54'-31"	D	= 4°-50'-15"	D	= 3°-49'-29"
T	= 24.69'	T	= 38.21'	T	= 26.04'	T	= 50.77'	T	= 31.44'
L	= 48.47'	L	= 75.94'	L	= 52.08'	L	= 101.49'	L	= 62.87'
R	= 103.00'	R	= 276.00'	R	= 3002.00'	R	= 1202.00'	R	= 1498.00'

WB STH 172 SPLITTER ISLAND EXIT (WBEX1)

WBEX1 CURVE NOTES		WBEX2 CURVE NOTES	
PI	= 147+22.82	PI	= 148+79.71
X	= 70,882.977	X	= 71,039.638
Y	= 560,362.771	Y	= 560,371.698
∠	= 176°-24'-25"	∠	= 167°-40'-53"
Δ	= -3°-36'-35"	Δ	= -12°-20'-07"
D	= 5°-44'-28	D	= 20°-45'-34
T	= 31.45'	T	= 29.83'
L	= 62.88'	L	= 59.42'
R	= 998.00'	R	= 276.00'

MODIFIED CENTRAL ISLAND ALIGNMENT FOR BACK OF CURB (CIM1)

CIM1 CURVE NOTES		CIM2 CURVE NOTES		CIM3 CURVE NOTES		CIM4 CURVE NOTES		CIM5 CURVE NOTES		CIM6 CURVE NOTES		CIM7 CURVE NOTES		CIM8 CURVE NOTES	
PI	= 280+32.89	PI	= 280+65.67	PI	= 280+90.28	PI	= 281+15.86	PI	= 281+58.02	PI	= 281+90.82	PI	= 282+15.43	PI	= 282+41.01
X	= 71,090.567	X	= 71,112.286	X	= 71,137.162	X	= 71,162.823	X	= 71,194.615	X	= 71,172.770	X	= 71,147.883	X	= 71,122.220
Y	= 560,352.977	Y	= 560,315.729	Y	= 560,309.320	Y	= 560,308.137	Y	= 560,337.441	Y	= 560,374.753	Y	= 560,381.119	Y	= 560,382.256
∠	= 102°-31'-18"	∠	= 134°-41'-42"	∠	= 168°-11'-20"	∠	= 134°-41'-42"	∠	= 102°-19'-13"	∠	= 134°-41'-42"	∠	= 168°-11'-20"	∠	= 134°-41'-42"
Δ	= -77°-28'-42"	Δ	= -45°-18'-18"	Δ	= -11°-48'-40"	Δ	= -45°-18'-18"	Δ	= -77°-40'-47"	Δ	= -45°-18'-18"	Δ	= -11°-48'-40"	Δ	= -45°-18'-18"
D	= 139°-44'-45"	D	= 233°-51'-37"	D	= 38°-19'-30"	D	= 233°-51'-37"	D	= 139°-44'-45"	D	= 233°-51'-37"	D	= 38°-19'-30"	D	= 233°-51'-37"
T	= 32.89'	T	= 10.23'	T	= 15.46'	T	= 10.23'	T	= 33.01'	T	= 10.23'	T	= 15.46'	T	= 10.23'
L	= 55.44'	L	= 19.73'	L	= 30.82'	L	= 19.37'	L	= 55.59'	L	= 19.37'	L	= 30.82'	L	= 19.37'
R	= 41.00'	R	= 24.50'	R	= 149.50'	R	= 24.50'	R	= 41.00'	R	= 24.50'	R	= 149.50'	R	= 24.50'

DATA TABLE		
POINT NUMBER	STATION	OFFSET (FT)
6	902+63.17	4.50 RT
7	902+70.25	4.50 RT
8	903+00.00	8.50 RT
9	903+29.06	4.50 RT
10	903+37.50	4.50 RT



LEGEND	
	CURVE NUMBER
SHEET	91 E

NE QUADRANT FOR CURB FLANGE (NEEAC1)

RAC17 CURVE NOTES		RAC18 CURVE NOTES		RAC19 CURVE NOTES		RAC20 CURVE NOTES		RAC21 CURVE NOTES		RAC22 CURVE NOTES	
PI	= 900+50.49	PI	= 902+18.50	PI	= 902+98.24	PI	= 903+53.42	PI	= 905+50.81	PI	= 906+34.96
X	= 71,161.572	X	= 71,173.272	X	= 71,245.616	X	= 71,301.589	X	= 71,495.737	X	= 71,577.545
Y	= 560,598.277	Y	= 560,418.547	Y	= 560,367.258	Y	= 560,362.674	Y	= 560,400.704	Y	= 560,420.429
∠	= 112°-07'-06"	∠	= 129°-14'-35"	∠	= 149°-52'-34"	∠	= 185°-46'-03"	∠	= 177°-32'-38"	∠	= 185°-56'-06"
Δ	= -67°-53'-54"	Δ	= -50°-46'-25"	Δ	= -30°-08'-26"	Δ	= -15°-45'-53"	Δ	= -2°-28'-22"	Δ	= 5°-56'-06"
D	= 76°-23'-40"	D	= 40°-20'-57"	D	= 72°-31'-35"	D	= 22°-44'-11"	D	= 3°-48'-53"	D	= 5°-44'-28"
T	= 50.49'	T	= 67.39"	T	= 21.27'	T	= 34.89'	T	= 32.42'	T	= 51.74'
L	= 88.88'	L	= 125.84'	L	= 41.56'	L	= 69.34'	L	= 64.82'	L	= 103.38'
R	= 75.00'	R	= 142.00'	R	= 79.00'	R	= 252.00'	R	= 1502.00'	R	= 998.00'

NW QUADRANT FOR CURB FLANGE (NWEAC1)

ED6 CURVE NOTES		ED7 CURVE NOTES		ED8 CURVE NOTES		ED9 CURVE NOTES	
PI	= 800+27.46	PI	= 801+09.64	PI	= 802+18.85	PI	= 802+88.87
X	= 70,937.661	X	= 71,019.346	X	= 71,124.885	X	= 71,119.240
Y	= 560,398.439	Y	= 560,388.901	Y	= 560,422.928	Y	= 560,509.653
∠	= 186°-18'-42"	∠	= 155°-29'-13"	∠	= 104°-35'-16"	∠	= 94°-02'-14"
Δ	= 6°-18'-42"	Δ	= -24°-31'-47"	Δ	= -75°-51'-17"	Δ	= -85°-58'-46"
D	= 11°-30'-19"	D	= 22°-44'-11"	D	= 79°-34'-39"	D	= 337°-02'-02"
T	= 27.46'	T	= 54.78'	T	= 56.11'	T	= 15.85'
L	= 54.86'	L	= 107.89'	L	= 95.22'	L	= 25.51'
R	= 498.00'	R	= 252.00'	R	= 72.00'	R	= 17.00'

SE QUADRANT CURB & GUTTER FLANGE LINE (SEEAC1)

EDH14 CURVE NOTES		ED2 CURVE NOTES		ED3 CURVE NOTES		ED4 CURVE NOTES		ED5 CURVE NOTES	
PI	= 1000+96.22	PI	= 1001+68.39	PI	= 1002+35.62	PI	= 1002+94.91	PI	= 1003+58.20
X	= 71,158.668	X	= 71,164.858	X	= 71,241.401	X	= 71,300.612	X	= 71,363.949
Y	= 560,197.129	Y	= 560,269.131	Y	= 560,292.156	Y	= 560,297.689	Y	= 560,295.573
∠	= 189°-36'-12"	∠	= 228°-20'-42"	∠	= 168°-36'-48"	∠	= 187°-15'-08"	∠	= 172°-45'-52"
Δ	= 9°-36'-12"	Δ	= 68°-20'-42"	Δ	= -11°-24'-12"	Δ	= 7°-15'-08"	Δ	= -7°-15'-08"
D	= 24°-04'-26"	D	= 74°-24'-36"	D	= 20°-41'-04"	D	= 11°-24'-49"	D	= 11°-30'-19"
T	= 19.99'	T	= 52.28'	T	= 27.66'	T	= 31.81'	T	= 31.56'
L	= 39.89'	L	= 91.85'	L	= 55.13'	L	= 63.54'	L	= 63.04'
R	= 238.00'	R	= 77.00'	R	= 277.00'	R	= 502.00'	R	= 498.00'

SW QUADRANT OF STH 172/AIRPORT ROUNDABOUT CURB & GUTTER (SWEAC2)

ED22 CURVE NOTES		ED23 CURVE NOTES		ED24 CURVE NOTES		ED25 CURVE NOTES		ED26 CURVE NOTES		ED27 CURVE NOTES	
PI	= 700+60.74	PI	= 703+76.59	PI	= 704+22.05	PI	= 705+15.51	PI	= 705+87.10	PI	= 706+40.31
X	= 70,674.798	X	= 70,989.150	X	= 71,034.645	X	= 71,115.223	X	= 71,097.546	X	= 71,070.036
Y	= 560,294.745	Y	= 560,327.040	Y	= 560,324.949	Y	= 560,275.708	Y	= 560,187.708	Y	= 560,141.751
∠	= 173°-03'-05"	∠	= 188°-29'-55"	∠	= 208°-47'-45"	∠	= 249°-55'-46"	∠	= 189°-32'-48"	∠	= 219°-04'-30"
Δ	= -6°-57'-55"	Δ	= 8°-29'-55"	Δ	= 28°-47'-45"	Δ	= 69°-55'-46"	Δ	= 19°-32'-48"	Δ	= 39°-04'-30"
D	= 5°-44'-28"	D	= 18°-58'-20"	D	= 72°-31'-35"	D	= 56°-10'-20"	D	= 53°-32'-51"	D	= 57°-52'-28"
T	= 60.74'	T	= 22.44"	T	= 23.11'	T	= 71.32'	T	= 18.43'	T	= 35.13'
L	= 121.32'	L	= 44.80'	L	= 45.23'	L	= 124.49'	L	= 36.50'	L	= 67.52'
R	= 998.00'	R	= 302.00'	R	= 90.00'	R	= 102.00'	R	= 107.00'	R	= 99.00'

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DATE 20DEC10		E S T I M A T E O F Q U A N T I T I E S			
LINE				9280-04-72	
NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	QUANTITY
0010	201.0105	CLEARING **P**	STA	22.000	22.000
0020	201.0205	GRUBBING **P**	STA	22.000	22.000
0030	203.0100	REMOVING SMALL PIPE CULVERTS	EACH	17.000	17.000
0040	204.0100	REMOVING PAVEMENT	SY	8,323.000	8,323.000
0050	204.0105	REMOVING PAVEMENT BUTT JOINTS **P**	SY	266.000	266.000
0060	204.0115	REMOVING ASPHALTIC SURFACE BUTT JOINTS **P**	SY	1,064.000	1,064.000
0070	204.0150	REMOVING CURB & GUTTER **P**	LF	2,067.000	2,067.000
0080	204.0155	REMOVING CONCRETE SIDEWALK **P**	SY	96.000	96.000
0090	204.0165	REMOVING GUARDRAIL **P**	LF	76.000	76.000
0100	204.0190	REMOVING SURFACE DRAINS	EACH	2.000	2.000
0110	204.0195	REMOVING CONCRETE BASES	EACH	21.000	21.000
0120	204.0205	REMOVING UTILITY POLES	EACH	1.000	1.000
0130	204.0220	REMOVING INLETS	EACH	2.000	2.000
0140	205.0100	EXCAVATION COMMON **P**	CY	31,601.000	31,601.000
0150	211.0100	PREPARE FOUNDATION FOR ASPHALTIC PAVING (PROJECT) 01. 9280-04-72	LS	1.000	1.000
0160	213.0100	FINISHING ROADWAY (PROJECT) 01. 9280-04-72	EACH	1.000	1.000
0170	305.0110	BASE AGGREGATE DENSE 3/4-INCH	TON	4,246.000	4,246.000
0180	305.0120	BASE AGGREGATE DENSE 1 1/4-INCH	TON	28,761.000	28,761.000
0190	305.0500	SHAPING SHOULDERS	STA	55.000	55.000
0200	311.0110	BREAKER RUN	TON	1,365.000	1,365.000
0210	415.0080	CONCRETE PAVEMENT 8-INCH	SY	1,467.000	1,467.000
0220	415.0100	CONCRETE PAVEMENT 10-INCH	SY	5,972.000	5,972.000
0230	415.2000.S	INCENTIVE STRENGTH CONCRETE PAVEMENT	DOL	1,792.000	1,792.000
0240	416.1010	CONCRETE SURFACE DRAINS	CY	9.000	9.000
0250	455.0105	ASPHALTIC MATERIAL PG58-28	TON	422.000	422.000
0260	455.0605	TACK COAT	GAL	1,415.000	1,415.000
0270	460.1100	HMA PAVEMENT TYPE E-0.3	TON	592.000	592.000
0280	460.1103	HMA PAVEMENT TYPE E-3	TON	4,704.000	4,704.000
0290	460.2000	INCENTIVE DENSITY HMA PAVEMENT	DOL	4,892.000	4,892.000
0300	460.4100.S	REHEATING HMA LONGITUDINAL JOINTS	STA	18.000	18.000
0310	460.4200.S	HMA PAVEMENT INTERSECTION	TON	2,340.000	2,340.000
0320	465.0120	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES	TON	21.000	21.000
0330	465.0315	ASPHALTIC FLUMES	SY	79.000	79.000
0340	504.0900	CONCRETE MASONRY ENDWALLS	CY	1.000	1.000
0350	521.0118	CULVERT PIPE CORRUGATED STEEL 18-INCH	LF	269.000	269.000
0360	521.1018	APRON ENDWALLS FOR CULVERT PIPE STEEL 18-INCH	EACH	12.000	12.000
0370	522.0130	CULVERT PIPE REINFORCED CONCRETE CLASS III 30-INCH	LF	116.000	116.000
0380	522.1012	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 12-INCH	EACH	8.000	8.000
0390	522.1015	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 15-INCH	EACH	1.000	1.000
0400	522.1030	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 30-INCH	EACH	2.000	2.000
0410	523.0129	CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CLASS HE-III 29X45-INCH	LF	192.000	192.000
0420	523.0529	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL 29X45-INCH	EACH	1.000	1.000
0430	527.0345	PIPE ARCH STRUCTURAL PLATE 14-FT SPAN	LF	20.000	20.000

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DATE 20DEC10		E S T I M A T E O F Q U A N T I T I E S			
LINE				9280-04-72	
NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	QUANTITY
0440	532.0300.S	WALL MODULAR BLOCK MECHANICALLY STABILIZED EARTH	SF	608.000	608.000
0450	601.0105	CONCRETE CURB TYPE A **P**	LF	576.000	576.000
0460	601.0409	CONCRETE CURB & GUTTER 30-INCH TYPE A **P**	LF	4,046.000	4,046.000
0470	601.0411	CONCRETE CURB & GUTTER 30-INCH TYPE D **P**	LF	5,280.000	5,280.000
0480	601.0551	CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE A **P**	LF	777.000	777.000
0490	601.0553	CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE D **P**	LF	468.000	468.000
0500	601.0580	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE R **P**	LF	333.000	333.000
0510	601.0582	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE T **P**	LF	368.000	368.000
0520	601.0600	CONCRETE CURB PEDESTRIAN **P**	LF	363.000	363.000
0530	602.0405	CONCRETE SIDEWALK 4-INCH	SF	1,809.000	1,809.000
0540	602.0515	CURB RAMP DETECTABLE WARNING FIELD	SF	192.000	192.000
0550	606.0200	NATURAL PATINA RIPRAP MEDIUM	CY	34.000	34.000
0560	608.0312	STORM SEWER PIPE REINFORCED CONCRETE CLASS III 12-INCH **P**	LF	1,024.000	1,024.000
0570	608.0315	STORM SEWER PIPE REINFORCED CONCRETE CLASS III 15-INCH **P**	LF	63.000	63.000
0580	611.0302	INLETS TYPE 2	EACH	2.000	2.000
0590	611.0303	INLETS TYPE 3	EACH	28.000	28.000
0600	611.0307	INLETS TYPE 9	EACH	1.000	1.000
0610	611.0615	INLET COVERS TYPE F	EACH	2.000	2.000
0620	611.0624	INLET COVERS TYPE H	EACH	17.000	17.000
0630	611.0627	INLET COVERS TYPE HM	EACH	2.000	2.000
0640	611.0639	INLET COVERS TYPE H-S	EACH	5.000	5.000
0650	611.0642	INLET COVERS TYPE MS	EACH	1.000	1.000
0660	611.0652	INLET COVERS TYPE T	EACH	4.000	4.000
0670	614.0115	ANCHORAGES FOR STEEL PLATE BEAM GUARD TYPE 2	EACH	1.000	1.000
0680	614.0305	STEEL PLATE BEAM GUARD CLASS A	LF	79.000	79.000
0690	614.0345	STEEL PLATE BEAM GUARD SHORT RADIUS	LF	35.000	35.000
0700	614.0390	STEEL PLATE BEAM GUARD SHORT RADIUS TERMINAL	EACH	1.000	1.000
0710	618.0100	MAINTENANCE AND REPAIR OF HAUL ROADS (PROJECT) 01. 9280-04-72	EACH	1.000	1.000
0720	619.1000	MOBILIZATION	EACH	1.000	1.000
0730	620.0100	CONCRETE CORRUGATED MEDIAN	SF	1,088.000	1,088.000
0740	620.0300	CONCRETE MEDIAN SLOPED NOSE	SF	1,025.000	1,025.000
0750	621.0100	LANDMARK REFERENCE MONUMENTS	EACH	36.000	36.000
0760	623.0200	DUST CONTROL SURFACE TREATMENT	SY	44,000.000	44,000.000
0770	624.0100	WATER	MGAL	458.000	458.000
0780	625.0100	TOPSOIL	SY	1,985.000	1,985.000
0790	625.0500	SALVAGED TOPSOIL	SY	39,836.000	39,836.000
0800	627.0200	MULCHING	SY	30,231.000	30,231.000
0810	628.1504	SILT FENCE	LF	5,406.000	5,406.000
0820	628.1520	SILT FENCE MAINTENANCE	LF	1,352.000	1,352.000
0830	628.1905	MOBILIZATIONS EROSION CONTROL	EACH	2.000	2.000
0840	628.1910	MOBILIZATIONS EMERGENCY EROSION CONTROL	EACH	2.000	2.000
0850	628.2004	EROSION MAT CLASS I TYPE B	SY	21,546.000	21,546.000

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DATE 20DEC10		E S T I M A T E O F Q U A N T I T I E S			
LINE				9280-04-72	
NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	QUANTITY
0860	628.2006	EROSION MAT URBAN CLASS I TYPE A	SY	8,170.000	8,170.000
0870	628.7005	INLET PROTECTION TYPE A	EACH	31.000	31.000
0880	628.7015	INLET PROTECTION TYPE C	EACH	31.000	31.000
0890	628.7504	TEMPORARY DITCH CHECKS	LF	135.000	135.000
0900	628.7555	CULVERT PIPE CHECKS	EACH	30.000	30.000
0910	628.7570	ROCK BAGS	EACH	77.000	77.000
0920	629.0210	FERTILIZER TYPE B	CWT	29.100	29.100
0930	630.0120	SEEDING MIXTURE NO. 20	LB	456.000	456.000
0940	630.0130	SEEDING MIXTURE NO. 30	LB	457.000	457.000
0950	630.0200	SEEDING TEMPORARY	LB	1,076.000	1,076.000
0960	632.9101	LANDSCAPE PLANTING SURVEILLANCE AND CARE CYCLES	EACH	9.000	9.000
0970	633.5200	MARKERS CULVERT END	EACH	14.000	14.000
0980	634.0612	POSTS WOOD 4X6-INCH X 12-FT	EACH	1.000	1.000
0990	634.0614	POSTS WOOD 4X6-INCH X 14-FT	EACH	45.000	45.000
1000	634.0616	POSTS WOOD 4X6-INCH X 16-FT	EACH	13.000	13.000
1010	634.0618	POSTS WOOD 4X6-INCH X 18-FT	EACH	8.000	8.000
1020	634.0814	POSTS TUBULAR STEEL 2X2-INCH X 14-FT	EACH	15.000	15.000
1030	634.0816	POSTS TUBULAR STEEL 2X2-INCH X 16-FT	EACH	4.000	4.000
1040	637.0101	SIGNS TYPE I	SF	1,518.500	1,518.500
1050	637.0202	SIGNS REFLECTIVE TYPE II	SF	777.480	777.480
1060	638.2602	REMOVING SIGNS TYPE II	EACH	86.000	86.000
1070	638.3000	REMOVING SMALL SIGN SUPPORTS	EACH	43.000	43.000
1080	641.8100	OVERHEAD SIGN SUPPORT (STRUCTURE) 01. S-05-0115	LS	1.000	1.000
1090	641.8100	OVERHEAD SIGN SUPPORT (STRUCTURE) 02. S-05-0116	LS	1.000	1.000
1100	641.8100	OVERHEAD SIGN SUPPORT (STRUCTURE) 03. S-05-0117	LS	1.000	1.000
1110	641.8100	OVERHEAD SIGN SUPPORT (STRUCTURE) 04. S-05-0118	LS	1.000	1.000
1120	641.8100	OVERHEAD SIGN SUPPORT (STRUCTURE) 05. S-05-0119	LS	1.000	1.000
1130	641.8100	OVERHEAD SIGN SUPPORT (STRUCTURE) 06. S-05-0120	LS	1.000	1.000
1140	642.5001	FIELD OFFICE TYPE B	EACH	1.000	1.000
1150	643.0100	TRAFFIC CONTROL (PROJECT) 01. 9280-04-72	EACH	1.000	1.000
1160	643.0300	TRAFFIC CONTROL DRUMS	DAY	1,140.000	1,140.000
1170	643.0420	TRAFFIC CONTROL BARRICADES TYPE III	DAY	1,983.000	1,983.000
1180	643.0705	TRAFFIC CONTROL WARNING LIGHTS TYPE A	DAY	2,078.000	2,078.000
1190	643.0900	TRAFFIC CONTROL SIGNS	DAY	492.000	492.000
1200	643.0905.S	TRAFFIC CONTROL COVERING SIGNS	EACH	29.000	29.000
1210	643.1050.S	TRAFFIC CONTROL SIGNS PORTABLE CHANGEABLE MESSAGE	DAY	28.000	28.000
1220	643.2000	TRAFFIC CONTROL DETOUR (PROJECT) 01. 9280-04-72	EACH	1.000	1.000
1230	643.3000	TRAFFIC CONTROL DETOUR SIGNS	DAY	10,618.000	10,618.000
1240	645.0120	GEOTEXTILE FABRIC TYPE HR	SY	638.000	638.000
1250	646.0106	PAVEMENT MARKING EPOXY 4-INCH **P**	LF	21,648.000	21,648.000
1260	646.0126	PAVEMENT MARKING EPOXY 8-INCH **P**	LF	94.000	94.000
1270	646.0841.S	PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH	LF	1,112.000	1,112.000
1280	646.0843.S	PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 8-INCH	LF	723.000	723.000
1290	646.0881.S	PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE 4-INCH	LF	75.000	75.000

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DATE 20DEC10		E S T I M A T E O F Q U A N T I T I E S			
LINE					9280-04-72
NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	QUANTITY
1300	646.0883.S	PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE 8-INCH	LF	1,504.000	1,504.000
1310	647.0456	PAVEMENT MARKING CURB EPOXY	LF	70.000	70.000
1320	647.0606	PAVEMENT MARKING ISLAND NOSE EPOXY	EACH	26.000	26.000
1330	647.0726	PAVEMENT MARKING DIAGONAL EPOXY 12-INCH	LF	592.000	592.000
1340	647.0856	PAVEMENT MARKING CONCRETE CORRUGATED MEDIAN EPOXY	SF	528.000	528.000
1350	650.4000	CONSTRUCTION STAKING STORM SEWER SYSTEM	EACH	42.000	42.000
1360	650.4500	CONSTRUCTION STAKING SUBGRADE **P**	LF	6,949.000	6,949.000
1370	650.5000	CONSTRUCTION STAKING BASE **P**	LF	4,964.000	4,964.000
1380	650.5500	CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER **P**	LF	7,400.000	7,400.000
1390	650.6000	CONSTRUCTION STAKING PIPE CULVERTS	EACH	9.000	9.000
1400	650.7000	CONSTRUCTION STAKING CONCRETE PAVEMENT	LF	2,800.000	2,800.000
1410	650.8000	CONSTRUCTION STAKING RESURFACING REFERENCE	LF	1,805.000	1,805.000
1420	650.8500	CONSTRUCTION STAKING ELECTRICAL INSTALLATIONS (PROJECT) 01. 9280-04-72	LS	1.000	1.000
1430	650.9910	CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (PROJECT) 01. 9280-04-72	LS	1.000	1.000
1440	650.9920	CONSTRUCTION STAKING SLOPE STAKES **P**	LF	8,186.000	8,186.000
1450	652.0225	CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH **P**	LF	1,950.000	1,950.000
1460	652.0235	CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH **P**	LF	1,410.000	1,410.000
1470	653.0140	PULL BOXES STEEL 24X42-INCH	EACH	18.000	18.000
1480	653.0905	REMOVING PULL BOXES	EACH	25.000	25.000
1490	654.0105	CONCRETE BASES TYPE 5	EACH	23.000	23.000
1500	654.0220	CONCRETE CONTROL CABINET BASES TYPE 10	EACH	2.000	2.000
1510	655.0610	ELECTRICAL WIRE LIGHTING 12 AWG **P**	LF	3,635.000	3,635.000
1520	655.0615	ELECTRICAL WIRE LIGHTING 10 AWG **P**	LF	14,920.000	14,920.000
1530	655.0620	ELECTRICAL WIRE LIGHTING 8 AWG **P**	LF	770.000	770.000
1540	655.0635	ELECTRICAL WIRE LIGHTING 2 AWG **P**	LF	2,100.000	2,100.000
1550	656.0200	ELECTRICAL SERVICE METER BREAKER PEDESTAL (LOCATION) 01. STH 172/STH 54	LS	1.000	1.000
1560	656.0200	ELECTRICAL SERVICE METER BREAKER PEDESTAL (LOCATION) 02. STH 172/AIRPORT CASINO ENT.	LS	1.000	1.000
1570	657.0255	TRANSFORMER BASES STANDARD 11 1/2-INCH BOLT CIRCLE	EACH	23.000	23.000
1580	657.0322	POLES TYPE 5-ALUMINUM	EACH	23.000	23.000
1590	657.0710	LUMINAIRE ARMS TRUSS TYPE 4 1/2-INCH CLAMP 12-FT	EACH	24.000	24.000
1600	659.0115	LUMINAIRES UTILITY HPS 150 WATTS	EACH	8.000	8.000
1610	659.0125	LUMINAIRES UTILITY HPS 250 WATTS	EACH	16.000	16.000
1620	690.0150	SAWING ASPHALT	LF	279.000	279.000
1630	690.0250	SAWING CONCRETE	LF	96.000	96.000
1640	ASP.1T0A	ON-THE-JOB TRAINING APPRENTICE AT \$5.00/HR	HRS	2,000.000	2,000.000
1650	ASP.1T0G	ON-THE-JOB TRAINING GRADUATE AT \$5.00/HR	HRS	1,320.000	1,320.000
1660	SPV.0035	SPECIAL 01. PLANTING MIXTURE	CY	120.000	120.000
1670	SPV.0060	SPECIAL 01. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 1	EACH	4.000	4.000
1680	SPV.0060	SPECIAL 02. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 2	EACH	6.000	6.000

3

DATE 20DEC10		E S T I M A T E O F Q U A N T I T I E S			
LINE					9280-04-72
NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	QUANTITY
1690	SPV.0060	SPECIAL 03. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 3	EACH	8.000	8.000
1700	SPV.0060	SPECIAL 04. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 3R	EACH	15.000	15.000
1710	SPV.0060	SPECIAL 05. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC WORDS	EACH	14.000	14.000
1720	SPV.0060	SPECIAL 06. CONCRETE BASE AIRPORT LIGHTING	EACH	1.000	1.000
1730	SPV.0060	SPECIAL 07. SALVAGE AND REINSTALLATION OF AIRPORT LIGHT POLE	EACH	1.000	1.000
1740	SPV.0060	SPECIAL 08. PERENNIAL PLANTS SEDUM BABY TEARS 6-INCH POT	EACH	320.000	320.000
1750	SPV.0060	SPECIAL 09. PERRENIAL PLANTS SEDUM GREEN ICE 6-INCH POT	EACH	329.000	329.000
1760	SPV.0060	SPECIAL 10. PERRENIAL PLANTS SEDUM BITHYNICUM 6-INCH POT	EACH	127.000	127.000
1770	SPV.0060	SPECIAL 11. PERRENIAL PLANTS LITTLE BLUESTEM GRASS 1 GAL	EACH	170.000	170.000
1780	SPV.0085	SPECIAL 01. SPECIAL LOW-MAINTENANCE SEED MIX	LB	10.000	10.000
1790	SPV.0090	SPECIAL 01. CONCRETE CURB & GUTTER 30-INCH SLOPED TYPE G MODIFIED	LF	500.000	500.000
1800	SPV.0090	SPECIAL 02. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC YIELD LINE	LF	314.000	314.000
1810	SPV.0090	SPECIAL 03. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC 8-INCH	LF	119.000	119.000
1820	SPV.0090	SPECIAL 04. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC 12-INCH	LF	93.000	93.000
1830	SPV.0090	SPECIAL 05. PAVEMENT MARKING GROOVED CONTRAST PREFORMED THERMOPLASTIC 8-INCH	LF	54.000	54.000
1840	SPV.0090	SPECIAL 06. REMOVING ELECTRICAL WIRING	LF	665.000	665.000
1850	SPV.0105	SPECIAL 01. SALVAGE TRAFFIC SIGNALS SPECIAL STH 172 & STH 54	LS	1.000	1.000
1860	SPV.0105	SPECIAL 02. SALVAGE TRAFFIC SIGNALS SPECIAL STH 172 & AIRPORT	LS	1.000	1.000
1870	SPV.0105	SPECIAL 03. CONSTRUCTION STAKING CENTRAL ISLAND LANDSCAPING STH 54	LS	1.000	1.000
1880	SPV.0105	SPECIAL 04. CONSTRUCTION STAKING CENTRAL ISLAND LANDSCAPING AIRPORT ENTRANCE	LS	1.000	1.000
1890	SPV.0105	SPECIAL 05. CONSTRUCTION STAKING WALL MODULAR BLOCK LANDSCAPE	LS	1.000	1.000
1900	SPV.0165	SPECIAL 01. COLORED CONCRETE SIDEWALK 4-INCH	SF	17,630.000	17,630.000
1910	SPV.0165	SPECIAL 02. COLORED CONCRETE SIDEWALK 5-INCH	SF	4,250.000	4,250.000
1920	SPV.0165	SPECIAL 03. COLORED AND STAMPED CONCRETE SIDEWALK 4-INCH	SF	3,930.000	3,930.000
1930	SPV.0180	SPECIAL 01. TRUCK APRON COLORED CONCRETE 12-INCH	SY	833.000	833.000

3

CLEARING AND GRUBBING

CATEGORY	STATION	TO	STATION	LOCATION	201.0105 CLEARING STA	201.0205 GRUBBING STA
0010	49+00	-	51+00	DRIVEWAY AT STA 7+00 STH 54 LT - WEST LEG	2	2
0010	4+00	-	7+00	STH 54 LT - WEST LEG	3	3
0010	3+00	-	7+00	STH 54 RT - WEST LEG	4	4
0010	525+00	-	527+00	CTH E LT - SOUTH LEG	2	2
0010	530+00	-	531+00	STH 54 RT - NORTH LEG	1	1
0010	538+00	-	540+00	STH 54 LT - NORTH LEG	2	2
0010	11+00	-	12+00	STH 172 LT - EAST LEG	1	1
0010	15+00	-	19+00	STH 172 LT - EAST LEG	4	4
0010	146+00	-	149+00	STH 172 RT - AIRPORT ENTRANCE	3	3
TOTAL					22	22

REMOVING SMALL PIPE CULVERTS

CATEGORY	STATION	LOCATION	203.0100 EACH	DISCRIPTION
0010	1+50	STH 54 RT	1	18-INCH CMP
0010	2+00	STH 54 RT	1	18-INCH CMP
0010	2+75	STH 54 LT	1	18-INCH CMP
0010	3+25	STH 54 RT	1	18-INCH CMP
0010	4+00	STH 54 LT	1	18-INCH CMP
0010	4+36	STH 54 RT	1	18-INCH CMP
0010	4+71	STH 54 LT	1	18-INCH CMP
0010	5+20	STH 54 LT	1	18-INCH CMP
0010	6+53	STH 54	1	30-INCH RCCP
0010	7+15	STH 54 LT	1	30-INCH CMP
0010	8+22	STH 54	1	30-INCH RCCP
0010	526+50	CTH E RT	1	18-INCH CMP
0010	15+50	STH 172 LT	1	18-INCH CMP
0010	17+50	STH 172 LT	1	18-INCH CMP
0010	148+57	STH 172 LT	1	15-INCH RCCP
0010	150+00	STH 172 LT	1	36-INCH RCCP
0010	152+15	STH 172 RT	1	15-INCH RCCP
TOTAL			17	

REMOVING PAVEMENT BUTT JOINTS

CATEGORY	STATION	LOCATION	204.0105 SY
0010	144+30	STH 172 EB LANE	133
0010	145+75	STH 172 WB LANE	133
TOTAL			266

REMOVING PAVEMENT

CATEGORY	STATION	TO	STATION	LOCATION	204.0100 SY
0010	60+00	-	63+70	AIRPORT ENTRANCE	1036
0010	49+50	-	54+10	AIRPORT EXIT	1599
0010	144+29	-	154+25	EASTBOUND LANES	2886
0010	145+75	-	156+26	WESTBOUND LANES	2802
TOTAL					8323

REMOVING ASPHALTIC SURFACE BUTT JOINTS

CATEGORY	STATION	TO	STATION	LOCATION	204.0115 SY	REMARKS
0010	25+00			STH 172	250	PROJECT LIMITS
0010	134+90	-	135+90	STH 172 WB	330	
0010	134+90	-	135+90	STH 172 EB	361	
0010	136+25	-	136+75	LANDFILL ENTRANCE	123	
TOTAL					1064	

REMOVING CURB & GUTTER

CATEGORY	STATION	LOCATION	204.0150 LF
0010		NE QUAD STH 172 / STH 54	67
0010		SW QUAD STH 172 / CTH E	338
0010		SE QUAD STH 172 / CTH E	73
0010		SE QUAD STH 172 / STANDING STONE DR	63
0010		SW QUAD STH 172 / STANDING STONE DR	95
0010	150+25	CASINO ENTRANCE	90
0010	149+25	CASINO ENTRANCE	62
0010	149+83	CASINO SPLITTER ISLAND	252
0010	150+25	AIRPORT EXIT RIGHT TURN ISLAND	145
0010	150+50	AIRPORT EXIT RIGHT TURN LANE	129
0010	149+25	AIRPORT ENTRANCE RIGHT TURN LANE	73
0010	149+80	AIRPORT SPLITTER ISLAND	22
0010	150+25 - 156+25	STH 172 MEDIAN	621
0010	149+35	STH 172 MEDIAN	37
TOTAL			2067

REMOVING CONCRETE SIDEWALK

CATEGORY	STATION	TO	STATION	LOCATION	204.0155 SY
0010	150+10	-	56+29	CASINO SPLITTER ISLAND	96
TOTAL					96

REMOVING GUARDRAIL

CATEGORY	STATION	TO	STATION	LOCATION	204.0165 LF
0010	62+26	-	63+09	AIRPORT ENTRANCE	76
TOTAL					76

REMOVING SURFACE DRAINS

CATEGORY	STATION	LOCATION	204.0190 EACH
0010	17+19	STH 172 RT	1
0010	100+77	STANDING STONE DR.	1
TOTAL			2

REMOVING INLETS

CATEGORY	STATION	LOCATION	204.0220 EACH
0010	148+57	STH 172 MEDIAN	1
0010	152+15	STH 172 MEDIAN	1
TOTAL			2

CATEGORY 0010

EARTHWORK SUMMARY

From/To Station	Location	Common Excavation (1)	Available Material (3)	Unexpanded Fill	Expanded Fill (4)	Mass Ordinate +/- (5)	Waste
		Cut (2)			Factor 1.15		
1+00.00 - 9+25.00	STH 54 WEST LEG @ STH 172	4,970	4,970	981	1,128	3,842	3,842
530+00.00 - 545+75.00	STH 54 NORTH LEG @ STH 172	11,723	11,723	1,677	1,929	9,794	9,794
200+00.00 - 203+75.00	CIR RDWY @ STH 54 & STH 172 & CTH E	758	758	2,524	2,903	-2,145	-2,145
11+25.00 - 23+25.00	STH 172 EAST LEG @ STH 54	3,466	3,466	4,910	5,647	-2,181	-2,181
522+00.00 - 528+25.00	CTH E SOUTH LEG @ STH 172	1,542	1,542	246	283	1,259	1,259
100+00.00 - 101+80.49	STANDING STONE DRIVE	483	483	270	310	173	173
49+50.00 - 51+52.00	DOXTATOR DRIVEWAY	23	23	154	177	-154	-154
		22,965	22,965	10,762	12,377	10,588	10,588
9280-04-72 SUBTOTAL		22,965	22,965	10,762	12,377	10,588	10,588
		Subtotal Common Exc	22,965				

- 1) Common Excavation is the sum of the Cut and EBS Excavation columns. Item number 205.0100
- 2) Salvaged/Unsuable Pavement Material is included in Cut.
- 3) Available Material = Cut - Salvaged/Unusuable Pavement Material
- 4) Expanded Fill. Factor = 1.25
- Depending on selections:

Expanded Fill = (Unexpanded Fill - Rock* Rock Factor - Reduced Marsh - Reduced EBS) * Fill Factor

Expanded Fill = (Unexpanded Fill - Rock* Rock Factor - Reduced EBS) * Fill Factor

Expanded Fill = (Unexpanded Fill - Rock* Rock Factor - Reduced Marsh) * Fill Factor

Expanded Fill = (Unexpanded Fill - Rock* Rock Factor) * Fill Factor
- 5) The Mass Ordinate + or - Qty calculated for the Division. Plus quantity indicates an excess of material within the Division. Minus indicates a shortage of material within the Division.

CATEGORY 0010

EARTHWORK SUMMARY

From/To Station	Location	Common Excavation (1)	Available Material (3)	Unexpanded Fill	Expanded Fill (4)	Mass Ordinate +/- (5)	Waste
		Cut (2)			Factor 1.15		
50+00.00 - 53+60.00	AIRPORT EXIT TO STH 172 SOUTH LEG	551	551	67	77	474	474
55+38.00 - 57+25.00	CASINO ENTRANCE NORTH LEG AT STH 172	550	550	62	71	479	479
60+00.00 - 63+71.00	AIRPORT ENT. FROM STH 172 SOUTH LEG	1,147	1,147	57	65	1,082	1,082
142+50.00 - 149+07.00	172 WEST LEG AT AIRPORT/CASINO ENT.	2,659	2,659	404	465	2,194	2,194
150+60.50 - 158+50.00	172 EAST LEG AT AIRPORT/CASINO ENT.	3,280	3,280	395	455	2,825	2,825
250+00.00 - 253+25.00	CIR ROADWAY AT AIRPORT/CASINO ENT.	449	449	160	184	265	265
		8,636	8,636	1,145	1,317	7,319	7,319
9280-04-72 SUBTOTAL		8,636	8,636	1,145	1,317	7,319	7,319
		Subtotal Common Exc	8,636				
9280-04-72 PROJECT TOTAL		Total Common Exc	31,601				

- 1) Common Excavation is the sum of the Cut and EBS Excavation columns. Item number 205.0100
- 2) Salvaged/Unsuable Pavement Material is included in Cut.
- 3) Available Material = Cut - Salvaged/Unusuable Pavement Material
- 4) Expanded Fill. Factor = 1.25
- Depending on selections:

Expanded Fill = (Unexpanded Fill - Rock* Rock Factor - Reduced Marsh - Reduced EBS) * Fill Factor

Expanded Fill = (Unexpanded Fill - Rock* Rock Factor - Reduced EBS) * Fill Factor

Expanded Fill = (Unexpanded Fill - Rock* Rock Factor - Reduced Marsh) * Fill Factor

Expanded Fill = (Unexpanded Fill - Rock* Rock Factor) * Fill Factor
- 5) The Mass Ordinate + or - Qty calculated for the Division. Plus quantity indicates an excess of material within the Division. Minus indicates a shortage of material within the Division.

PREPARE FOUNDATION FOR ASPHALTIC PAVING (PROJECT)

CATEGORY	LOCATION	211.0100 LS
0010	PROJECT	1
TOTAL		1

FINISHING ROADWAY (PROJECT)

CATEGORY	LOCATION	213.0100 EACH
0010	PROJECT	1
TOTAL		1

BASE AGGREGATE SUMMARY

CATEGORY	STATION	TO	STATION	LOCATION	305.0110 BASE AGGREGATE DENSE 3/4 INCH TON	305.0120 BASE AGGREGATE DENSE 1-1/4 INCH TON	311.0110 BREAKER RUN TON	624.0100 WATER MGAL	REMARKS
0010	11+25	-	23+00	STH 172 - EAST LEG		4176		58	
0010	306+43	-	308+87	STH 54 - WEST LEG		44			SW QUADRANT
0010	530+13	-	541+00	STH 54 - NORTH LEG		5384		75	
0010	524+00	-	528+25	CTH E - SOUTH LEG		1400		20	
0010	1+25	-	9+25	STH 54 - WEST LEG		7456		104	
0010	501+14	-	502+14	STH 172 - EAST LEG		12			NE QUADRANT
0010	200+00	-	203+83	STH 172 / STH 54 CIRCULATORY ROADWAY		1560	1365	22	
0010	530+83	-	539+67	STH 54 RT	891			12	SHOULDER
0010	534+00	-	539+67	STH 54 LT	572			8	SHOULDER
0010	524+82	-	525+98	CTH E RT	118			2	SHOULDER
0010	524+82	-	526+99	CTH E LT	220			3	SHOULDER
0010	12+48	-	22+91	STH 172 RT	1053			15	SHOULDER
0010	15+24	-	22+91	STH 172 LT	773			11	SHOULDER
0010	100+20	-	101+44	STANDING STONE DR RT	125			2	SHOULDER
0010	100+20	-	101+25	STANDING STONE DR LT	105			1	SHOULDER
0010	136+00	-	144+45	STH 172 RT	98			1	SHOULDER
0010	136+00	-	147+00	STH 172 LT	127			2	SHOULDER
0010	152+50	-	158+00	STH 172 RT	64			1	SHOULDER
0010	154+75	-	158+00	STH 172 LT	38			1	SHOULDER
0010	61+00	-	63+67	AIRPORT ENTRANCE	52			1	SHOULDER
0010	51+56	-	52+03	AIRPORT EXIT	11			1	SHOULDER
0010	142+25	-	149+00	STH 172		1579		22	
0010	148+40	-	149+15.6	STH 172 / WEST LEG AT AIRPORT		10			SW QUADRANT
0010	150+75	-	158+00	STH 172		1934		27	
0010	150+54	-	151+34	STH 172 / EAST LEG AT AIRPORT		12			NE QUADRANT
0010	50+75	-	53+75	AIRPORT EXIT		1436		20	
0010	60+00	-	63+50	AIRPORT ENTRANCE		1147		16	
0010	55+25	-	57+25	CASINO ENTRANCE/EXIT		1535		21	
0010	149+00	-	150+75	STH 172/AIRPORT ROUNDABOUT		876		12	
TOTAL					4246	28561	1365	458	

SHAPING SHOULDERS

CATEGORY	STATION	TO	STATION	LOCATION	305.0500 STA
0010	524+82	-	525+98	CTH E RT	1
0010	524+82	-	527+00	CTH E LT	2
0010	12+54	-	16+07	STH 172 RT	4
0010	100+20	-	101+25	STANDING STONE DR LT	1
0010	100+20	-	101+44	STANDING STONE DR RT	1
0010	15+24	-	22+91	STH 172 LT	8
0010	17+28	-	22+91	STH 172 RT	6
0010	136+00	-	144+45	STH 172 RT	8
0010	136+00	-	147+00	STH 172 LT	11
0010	152+50	-	158+00	STH 172 RT	6
0010	154+75	-	158+00	STH 172 LT	3
0010	61+00	-	63+67	AIRPORT ENTRANCE	3
0010	51+56	-	52+03	AIRPORT EXIT	1
TOTAL					55

CONCRETE PAVEMENT 8-INCH

CATEGORY	STATION	TO	STATION	LOCATION	415.0080 SY	REMARKS
0010	306+43	-	308+87	STH 54 W LEG	133	SW QUADRANT
0010	501+14	-	502+14	STH 172 E LEG	33	NE QUADRANT
0010	148+40	-	149+15.6	STH 172 W LEG	31	SW QUADRANT AT AIRPORT
0010	150+54	-	151+34	STH 172 E LEG	35	NE QUADRANT AT AIRPORT
0010	50+75	-	52+93	AIRPORT EXIT	583	NB LANES
0010	60+87	-	63+50	AIRPORT ENTRANCE	652	SB LANES
TOTAL					1467	

CONCRETE PAVEMENT 10-INCH & INCENTIVE STRENGTH CONCRETE PAVEMENT

CATEGORY	STATION	TO	STATION	LOCATION	415.0100 CONCRETE PAVEMENT 10-INCH SY	415.2000.S INCENTIVE STRENGTH CONCRETE PAVEMENT DOL	REMARKS
0010	144+30	-	149+25	STH 172	1325	398	EB LANES
0010	145+75	-	149+25	STH 172	928	278	WB LANES
0010	149+25	-	150+50	STH 172	1121	336	ROUNDAABOUT
0010	150+50	-	154+25	STH 172	1046	314	EB LANES
0010	150+50	-	156+25.71	STH 172	1552	466	WB LANES
TOTAL					5972	1792	

CONCRETE SURFACE DRAINS

CATEGORY	STATION	LOCATION	416.1010 CY
0010	152+46	STH 172 RT	1
0010	152+51	STH 172 RT	1
0010	153+37	STH 172 LT	2
0010	154+81	STH 172 RT	1
0010	154+83	STH 172 LT	1
0010	52+00	AIRPORT EXIT LT	1
0010	52+00	AIRPORT EXIT RT	1
0010	62+06	AIRPORT ENT LT	1
TOTAL			9

HMA SUMMARY

CATEGORY	STATION	TO	STATION	LOCATION	455.0105 ASPHALTIC MATERIAL PG58-28 TON	455.0605 TACK COAT GAL	460.1100 HMA PAVEMENT TYPE E-0.3 TON	460.1103 HMA PAVEMENT TYPE E-3 TON	460.2000 INCENTIVE DENSITY HMA PAVEMENT DOL	460.4200.S HMA PAVEMENT INTERSECTION TON	REMARKS
0010	200+00	-	203+83	STH 172 / STH 54 CIRCULATORY ROADWAY	37	95			427	666	LOWER LAYER
0010	200+00	-	203+83	STH 172 / STH 54 CIRCULATORY ROADWAY	34	95			402	628	LOWER LAYER
0010	200+00	-	203+83	STH 172 / STH 54 CIRCULATORY ROADWAY	37	95			435	680	LOWER LAYER
0010	200+00	-	203+83	STH 172 / STH 54 CIRCULATORY ROADWAY	20	95			234	366	UPPER LAYER
0010	11+75	-	25+00	STH 172 - EAST LEG	50	106		914	585		LOWER LAYER
0010	11+75	-	25+00	STH 172 - EAST LEG	22	106		407	261		UPPER LAYER
0010	531+00	-	541+00	STH 54 - NORTH LEG	35	73		632	405		LOWER LAYER
0010	531+00	-	541+00	STH 54 - NORTH LEG	16	73		281	180		UPPER LAYER
0010	524+00	-	527+50	CTH E - SOUTH LEG	10	21		180	115		LOWER LAYER
0010	524+00	-	527+50	CTH E - SOUTH LEG	4	21		80	51		UPPER LAYER
0010	1+25	-	8+50	STH 54 - WEST LEG	38	80		690	442		LOWER LAYER
0010	1+25	-	8+50	STH 54 - WEST LEG	17	80		307	197		UPPER LAYER
0010	136+00	-	144+30	STH 172 RT	7	68		132	85		LEVELING LAYER
0010	136+00	-	144+30	STH 172 RT	14	68		260	167		UPPER LAYER
0010	136+00	-	145+75	STH 172 LT	9	80		157	101		LEVELING LAYER
0010	136+00	-	145+75	STH 172 LT	17	80		309	198		UPPER LAYER
0010	55+25	-	57+25	CASINO ENTRANCE	11	36		195	125		LOWER LAYER
0010	55+25	-	57+25	CASINO ENTRANCE	9	36		160	103		UPPER LAYER
0010	60+00	-	63+75	AIRPORT ENTRANCE	13	46	222		142		RT & LT SHOULDER
0010	49+50	-	53+65	AIRPORT EXIT	10	36	179		115		RT & LT SHOULDER
0010	144+30	-	144+54	STH 172 RT	1	1	6		4		EB 172 SHOULDER
0010	145+75	-	146+95	STH 172 LT	2	4	27		17		WB 172 SHOULDER
0010	151+50	-	157+25	STH 172 RT	7	15	122		78		EB 172 SHOULDER
0010	154+80	-	156+25	STH 172 LT	2	5	36		23		WB 172 SHOULDER
TOTAL					422	1415	592	4704	4892	2340	

REHEATING HMA PAVEMENT LONGITUDINAL JOINTS

CATEGORY	STATION	TO	STATION	LOCATION	460.4100.S STA	REMARKS
0010	136+00	-	144+30	STH 172 RT	8	UPPER LAYER
0010	136+00	-	145+75	STH 172 LT	10	UPPER LAYER
TOTAL					18	

CONCRETE MASONRY ENDWALLS

CATEGORY	STATION	LOCATION	504.0900 CY
0010	150+56	STH 172 86' LT	1
TOTAL			1

ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES

CATEGORY	STATION	LOCATION	465.0120 TON
0010	3+25	STH 54 RT	3
0010	4+00	STH 54 LT	2
0010	4+36	STH 54 RT	4
0010	4+77	STH 54 LT	3
0010	5+22	STH 54 LT	2
0010	526+16	CTH E RT	3
0010	526+76	CTH E RT	2
0010	17+40	STH 172 LT	2
TOTAL			21

CULVERT PIPE CORRUGATED STEEL 18-INCH

CATEGORY	STATION	LOCATION	THICKNESS		521.0118 LF
			STEEL INCHES	ALUM. INCHES	
0010	3+25	STH 54 RT	0.064	0.060	38
0010	4+00	STH 54 LT	0.064	0.060	24
0010	4+36	STH 54 RT	0.064	0.060	34
0010	4+71	STH 54 LT	0.064	0.060	37
0010	5+20	STH 54 LT	0.064	0.060	20
0010	7+15	STH 54 LT	0.064	0.060	78
0010	15+47	STH 172 LT	0.064	0.060	38
TOTAL					269

ASPHALTIC FLUMES

CATEGORY	STATION	LOCATION	465.0315 SY
0010	1+25	STH 54 RT	20
0010	1+25	STH 54 LT	20
0010	12+46	STH 172 RT	20
0010	14+25	STH 172 LT	19
TOTAL			79

APRON ENDWALLS FOR CULVERT PIPE STEEL 18-INCH

CATEGORY	STATION	LOCATION	521.1018 EACH
0010	3+25	STH 54 RT	2
0010	4+00	STH 54 LT	2
0010	4+36	STH 54 RT	2
0010	4+71	STH 54 LT	2
0010	5+20	STH 54 LT	2
0010	7+15	STH 54 LT	2
TOTAL			12

CULVERT PIPE REINFORCED CONCRETE CLASS III 30-INCH

CATEGORY	STATION	LOCATION	522.0130 LF	REMARKS
0010	532+83	STH 54	116	
TOTAL			116	

APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 30-INCH

CATEGORY	STATION	LOCATION	522.1030 EACH	REMARKS
0010	532+83	STH 54	2	
TOTAL			2	

CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CLASS HE-III 29X45-INCH

CATEGORY	STATION	LOCATION	523.0129 LF	REMARKS
0010	149+75	CASINO ENTRANCE	192	
TOTAL			192	

APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL 29X45-INCH

CATEGORY	STATION	LOCATION	523.0529 EACH	REMARKS
0010	149+75	CASINO ENTRANCE	1	
TOTAL			1	

PIPE ARCH STRUCTURAL PLATE 14-FT SPAN

CATEGORY	STATION	LOCATION	527.0345 LF
0010	20+00	STH 172 LT	20
TOTAL			20

WALL MODULAR BLOCK MECHANICALLY STABILIZED EARTH

CATEGORY	STATION	TO	STATION	LOCATION	532.0300.S SF
0010	6+00	-	7+00	STH 54	608
TOTAL					608

CONCRETE CURB TYPE A

CATEGORY	STATION	TO	STATION	LOCATION	601.0105 LF
0010	200+00	-	203+68	STH 172 / STH 54 ROUNDABOUT TRUCK APRON	286
0010	149+43	-	150+25	AIRPORT ROUNDABOUT TRUCK APRON	290
TOTAL					576

CONCRETE CURB & GUTTER 30-INCH TYPE A

CATEGORY	LOCATION	601.0409 LF
0010	CASINO SPLITTER ISLAND	201
0010	AIRPORT SPLITTER ISLAND	382
0010	STH 172 W SPLITTER ISLAND	722
0010	STH 172 E SPLITTER ISLAND	650
0010	STH 172/AIRPORT ENT. NE QUAD	681
0010	STH 172/AIRPORT ENT. NW QUAD	395
0010	STH 172/AIRPORT ENT. SW QUAD	615
0010	STH 172/AIRPORT ENT. SE QUAD	400
TOTAL		4046

CONCRETE CURB & GUTTER 30-INCH TYPE D

CATEGORY	STATION	TO	STATION	LOCATION	601.0411 LF	REMARKS
0010	5+62	-	6+82	STH 54, WEST LEG	248	SPLITTER ISLAND
0010	7+30	-	9+38	STH 54, WEST LEG	483	SPLITTER ISLAND
0010	526+97	-	528+35	CTH E, SOUTH LEG	297	SPLITTER ISLAND
0010	11+18	-	14+34	STH 172, EAST LEG	661	SPLITTER ISLAND
0010	530+20	-	533+08	STH 54, NORTH LEG	612	SPLITTER ISLAND
0010	529+96	-	531+73	STH 54, NORTH LEG	298	BYPASS ISLAND
0010	3+15	-	9+41	STH 54 RT, WEST LEG	573	
0010	3+15	-	9+60	STH 54 LT, SOUTH LEG	678	
0010	526+98	-	528+43	CTH E LT, SOUTH LEG	172	
0010	524+82	-	12+46	STH 172 / CTH E, SE QUAD	423	
0010	529+88	-	533+97	STH 54 LT, NORTH LEG	274	
0010	530+80	-	14+25	STH 172 / STH 54, NE QUAD	415	
0010				STANDING STONE DR., SE QUAD	58	
0010				STANDING STONE DR., SW QUAD	88	
TOTAL					5280	

CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE A

CATEGORY	STATION	TO	STATION	LOCATION	601.0551 LF	REMARKS
0010	144+54	-	146+34	STH 172 AT AIRPORT	304	SPLITTER ISLAND LT & RT
0010	152+66	-	154+80	STH 172 AT AIRPORT	381	SPLITTER ISLAND LT & RT
0010	52+04	-	52+50	AIRPORT EXIT	92	AIRPORT EXIT LT & RT
TOTAL					777	

CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE D

CATEGORY	STATION	TO	STATION	LOCATION	601.0553 LF	REMARKS
0010	6+70	-	7+49	STH 54	118	SPLITTER ISLAND CROSSOVER
0010	14+34	-	15+16	STH 172	180	SPLITTER ISLAND
0010	533+08	-	533+94	STH 54	170	SPLITTER ISLAND
TOTAL					468	

CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE R

CATEGORY	STATION	TO	STATION	LOCATION	601.0580 LF
0010	149+31	-	150+37	AIRPORT ROUNDABOUT TRUCK APRON	333
TOTAL					333

CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE T

CATEGORY	STATION	TO	STATION	LOCATION	601.0582 LF
0010	200+00	-	203+68	STH 172 / STH 54 TRUCK APRON	368
TOTAL					368

CONCRETE CURB PEDESTRIAN

CATEGORY	STATION	LOCATION	601.0600 LF
0010	9+00	STH 54 W. LEG	74
0010	528+03	CTH E S. LEG	20
0010	11+52	STH 172 E. LEG	64
0010	530+37	STH 54 N. LEG	104
0010	530+66	STH 54 N. LEG BYPASS	43
0010	150+73	STH 172 E. LEG	58
TOTAL			363

CONCRETE SIDEWALK 4-INCH

CATEGORY	STATION	LOCATION	602.0405 SF
0010	9+00	STH 54 W. LEG	367
0010	528+03	CTH E S. LEG	99
0010	11+52	STH 172 E. LEG	316
0010	530+37	STH 54 N. LEG	521
0010	530+66	STH 54 N. LEG BYPASS	210
0010	150+73	STH 172 E. LEG	296
TOTAL			1809

CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA

CATEGORY	STATION	LOCATION	602.0515 SF
0010	9+05	STH 54 EB ENTRANCE	16
0010	9+30.5	STH 54 WB EXIT	16
0010	11+14	STH 172 EB EXIT	16
0010	11+57	STH 172 WB ENTRANCE	16
0010	528+08	CTH E NB ENTRANCE	16
0010	528+09	CTH E SB EXIT	16
0010	530+43	STH 54 WB ENTRANCE	16
0010	530+47	STH 54 EB EXIT	16
0010	530+43	STH 54 WB BYPASS ISLAND	32
0010	150+75	STH 172 WB ENTRANCE	32
TOTAL			192

RIPRAP MEDIUM

CATEGORY	STATION	LOCATION	606.0200 CY
0010		DIS 1	1
0010	7+32	DIS 2	1
0010	530+33	DIS 3	1
0010		DIS 5	1
0010		DIS 6	1
0010		DIS 7	1
0010	12+46	STH 172 RT	2
0010	14+25	STH 172 LT	2
0010		DIS 12	1
0010		DIS 13	1
0010		DIS 14	1
0010		DIS 15	1
0010		END 16	2
0010	61+00	AIRPORT ENT. RT	2
0010	62+10	AIRPORT ENT. RT	2
0010	52+00	AIRPORT EXIT LT	2
0010	52+00	AIRPORT EXIT RT	2
0010	152+50	STH 172 RT	2
0010	152+50	STH 172 RT	2
0010	153+00	STH 172 LT	2
0010	154+85	STH 172 RT	2
0010	154+85	STH 172 LT	2
TOTAL			34

CONCRETE CURB & GUTTER 30-INCH SLOPED TYPE G MODIFIED

CATEGORY	STATION	TO	STATION	LOCATION	SPV.0090.01 LF
0010	501+14	-	502+14	STH 172 WB AT CTH E	100
0010	306+43	-	308+82	STH 54 EB AT CTH E	239
0010	148+40	-	149+15.6	STH 172 EB AT AIRPORT	78
0010	150+54	-	151+34	STH 172 WB AT AIRPORT	83
TOTAL					500

STORM SEWER PIPE REINFORCED CONCRETE CLASS III 12-INCH &
STORM SEWER PIPE REINFORCED CONCRETE CLASS III 15-INCH

CATEGORY	PIPE NO.	FROM STRUCTURE	TO STRUCTURE	INLET ELEVATION	OUTLET ELEVATION	608.0312 12-INCH LF	608.0315 15-INCH LF	SLOPE %	REMARKS
0010	P-1	INL 1	INL 2	692.31	692.21	26		0.38	STH 54/STH 172 ROUNDABOUT
0010	P-2	INL 2	INL 3	692.21	692.18	8		0.38	STH 54/STH 172 ROUNDABOUT
0010	P-3	INL 3	INL 4	692.18	692.08	26		0.38	STH 54/STH 172 ROUNDABOUT
0010	P-4	INL 4	DIS 1	692.08	692.00	19		0.42	STH 54/STH 172 ROUNDABOUT
0010	P-5	INL 5	INL 6	691.62	691.06	31		1.81	STH 54/STH 172 ROUNDABOUT
0010	P-6	INL 6	INL 7	691.06	690.56	24		2.08	STH 54/STH 172 ROUNDABOUT
0010	P-7	INL 7	INL 8	690.56	689.98	31		1.87	STH 54/STH 172 ROUNDABOUT
0010	P-8	INL 8	DIS 2	689.98	689.10	43		2.05	STH 54/STH 172 ROUNDABOUT
0010	P-9	INL 9	INL 10	696.01	695.47	20		2.70	STH 54/STH 172 ROUNDABOUT
0010	P-10	INL 10	INL 11	695.47	694.94	20		2.65	STH 54/STH 172 ROUNDABOUT
0010	P-11	INL 11	INL 12	694.94	694.15	28		2.82	STH 54/STH 172 ROUNDABOUT
0010	P-12	INL 12	INL 13	694.15	692.43	59		2.92	STH 54/STH 172 ROUNDABOUT
0010	P-13	INL 13	DIS 3	692.43	690.71	54		3.19	STH 54/STH 172 ROUNDABOUT
0010	P-14	INL 14	INL 15	695.68	695.63	10		0.50	STH 54/STH 172 ROUNDABOUT
0010	P-15	INL 15	INL 16	695.63	692.86	77		3.59	STH 54/STH 172 ROUNDABOUT
0010	P-16	INL 16	DIS 5	692.86	692.20	33		2.00	STH 54/STH 172 ROUNDABOUT
0010	P-17	INL 17	INL 18	675.95	675.75	10		2.00	STH 54/STH 172 ROUNDABOUT
0010	P-18	INL 18	DIS 6	675.75	673.47	80		2.85	STH 54/STH 172 ROUNDABOUT
0010	P-19	INL 19	INL 20	698.14	697.46	20		3.40	STH 54/STH 172 ROUNDABOUT
0010	P-20	INL 20	INL 21	697.46	696.98	21		2.29	STH 54/STH 172 ROUNDABOUT
0010	P-21	INL 21	INL 22	696.98	696.64	20		1.70	STH 54/STH 172 ROUNDABOUT
0010	P-22	INL 22	DIS 7	696.64	696.00	32		2.00	STH 54/STH 172 ROUNDABOUT
0010	P-28	INL 27	DIS 12	684.19	683.84		63	0.56	STH 172/AIRPORT ROUNDABOUT
0010	P-29	INL 28	INL 29	684.26	684.10	16		1.00	STH 172/AIRPORT ROUNDABOUT
0010	P-30	INL 29	INL 30	684.10	683.71	40		0.97	STH 172/AIRPORT ROUNDABOUT
0010	P-31	INL 30	DIS 13	683.71	683.53	14		1.29	STH 172/AIRPORT ROUNDABOUT
0010	P-32	INL 31	DIS 14	684.51	683.82	89		0.78	STH 172/AIRPORT ROUNDABOUT
0010	P-33	INL 32	INL 33	684.07	683.83	24		1.00	STH 172/AIRPORT ROUNDABOUT
0010	P-34	INL 33	INL 34	683.83	683.52	30		1.03	STH 172/AIRPORT ROUNDABOUT
0010	P-35	INL 34	END 16	683.52	683.02	40		1.25	STH 172/AIRPORT ROUNDABOUT
0010	P-36	INL 35	INL 36	684.19	684.11	8		1.00	STH 172/AIRPORT ROUNDABOUT
0010	P-37	INL 36	DIS 15	684.11	682.98	71		1.59	STH 172/AIRPORT ROUNDABOUT
				TOTAL		1024	63		

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STORM SEWER SUMMARY

CATEGORY 0010

STURCTURE NO.	STATION	LOCATION	OFFSET	INLETS			REINFORCED CONCRETE APRON ENDWALLS		COVERS						RIM ELEV	FLOWLINE OF STRUCTURE	STRUCTURE DEPTH FT
				611.0302 TYPE 2 EACH	611.0303 TYPE 3 EACH	611.0307 TYPE 9 EACH	522.1012 12-INCH EACH	522.1015 15-INCH EACH	611.0642 TYPE MS EACH	611.0615 TYPE F EACH	611.0624 TYPE H EACH	611.0627 TYPE HM EACH	611.0639 TYPE H-S EACH	611.0652 TYPE T EACH			
INL 1	5+64.05	STH 54	36.3' LT		1						1				695.27	692.31	1.96
INL 2	5+65.79	STH 54	8.0' LT		1						1				695.76	692.21	2.55
INL 3	5+65.90	STH 54	2.0' LT		1						1				696.28	692.18	3.10
INL 4	5+65.78	STH 54	24.0' RT		1						1				695.80	692.08	2.72
DIS 1	5+66.00	STH 54	42.0' RT				1								-	692.00	-
INL5	7+51.69	STH 54	31.3' RT		1						1				697.54	691.62	4.92
INL 6	7+52.90	STH 54	2.0' LT		1						1				698.12	691.06	6.06
INL 7	7+32.38	STH 54	12.0' LT		1						1				697.13	690.56	5.57
INL 8	7+32.38	STH 54	45.4' LT		1						1				696.55	689.98	5.57
DIS 2	7+32.00	STH 54	87.0' LT				1								-	689.1	-
INL 9	529+98.42	STH 54	63.3' LT		1						1				698.99	696.01	1.98
INL 10	530+12.52	STH 54	44.0' LT		1						1				700.38	695.47	3.91
INL 11	530+08.19	STH 54	21.7' LT		1						1				700.18	694.94	4.24
INL 12	530+20.86	STH 54	2.0' RT		1						1				700.53	694.15	5.38
INL 13	530+28.95	STH 54	58.7' RT		1		1				1				700.34	692.43	6.91
DIS 3	530+33.07	STH 54	113.3' RT												-	690.71	-
INL 14	202+40.00	STH 54 / STH 172 ROUNDABOUT	2.0' LT		1									1	700.00	695.68	3.57
INL 15	202+30.00	STH 54 / STH 172 ROUNDABOUT	2.0' LT		1									1	700.00	695.63	3.37
INL 16	11+50.00	STH 172	31.4' LT												698.86	692.86	5.00
DIS 5	11+50.00	STH 172	78.4' LT												-	692.20	-
INL 17	15+15.83	STH 172	14.0' RT		1							1			682.24	675.95	5.29
INL 18	15+16	STH 172	2.0' RT		1							1			681.94	675.75	5.19
DIS 6	15+83.80	STH 172	44.3' LT				1								-	673.47	-
INL 19	528+14.27	CTH E	39.0' LT		1						1				701.26	698.14	2.12
INL 20	528+22.01	CTH E	19.8' LT		1						1				701.42	697.46	2.96
INL 21	528+28.93	CTH E	2.0' LT		1						1				701.40	696.98	3.42
INL 22	528+25.52	CTH E	19.7' RT		1						1				701.00	696.64	3.36
DIS 7	528+25.00	CTH E	49.0' RT				1								-	696.00	-
INL 27	146+50	STH 172	15.3' LT			1			1						686.69	684.19	2.50
DIS 12	146+50	STH 172	85' LT					1							-	683.84	-
INL 28	147+75	STH 172	2.5' LT		1								1		687.72	684.26	2.46
INL 29	147+78	STH 172	17' LT		1					1					687.99	684.10	2.89
INL 30	148+06	STH 172	50.5' LT		1					1					687.66	683.71	2.95
DIS 13	148+08	STH 172	74' LT												-	683.53	-
INL 31	148+25	STH 172	26.5' RT		1								1		687.47	684.51	1.96
DIS 14	148+27.2	STH 172	122' RT				1								-	683.82	-
INL 32	55+63	CASINO ENT.	27.5' LT		1								1		687.58	684.07	2.51
INL 33	55+60	CASINO ENT.	1.2' RT		1								1		688.05	683.83	3.22
INL 34	55+56	CASINO ENT.	33.5' RT		1								1		687.73	683.52	3.21
INL 35	252+43	AIRPORT ROUNDABOUT	3' LT	1										1	688.10	683.77	3.41
INL 36	252+35	AIRPORT ROUNDABOUT	3' LT	1										1	688.10	683.59	3.59
DIS 15	150+80	STH 172	79' LT				1								-	682.98	-
END 16	150+56	STH 172	86' LT				1								-		-

TOTAL22818111217254

RIM ELEVATION = FINISHED EDGE OF PAVEMENT AT TYPE 3 INLETS AND MANHOLES WITH TYPE F, H-S AND T CASTINGS
STRUCTURE DEPTH = RIM ELEVATION MINUS FLOWLINE OF STRUCTURE MINUS 11" FOR STRUCTURES WITH TYPE T CASTINGS
STRUCTURE DEPTH = RIM ELEVATION MINUS FLOWLINE OF STRUCTURE MINUS 12" FOR STRUCTURES WITH TYPE H-S CASTINGS
STRUCTURE DEPTH = RIM ELEVATION MINUS FLOWLINE OF STRUCTURE MINUS 15" FOR STRUCTURES WITH TYPE C & J CASTINGS
OFFSET IS TO CENTER FACE OF CURB FOR TYPE 3 INLETS, TYPE 1 INLETS AND MANHOLES WITH TYPE H AND Z CASTINGS
OFFSET IS TO CENTER OF STRUCTURE FOR MANHOLES AND TYPE 1 INLETS WITH TYPE J AND TYPE C CASTINGS

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ANCHORAGES FOR STEEL PLATE BEAM GUARD TYPE 2

CATEGORY	STATION	LOCATION	614.0115 EACH
0010	6+12	STH 54 LT	1
TOTAL			1

STEEL PLATE BEAM GUARD CLASS A

CATEGORY	STATION	TO	STATION	LOCATION	614.0305 LF
0010	6+12	-	6+91	STH 54	79
TOTAL					79

STEEL PLATE BEAM GUARD SHORT RADIUS

CATEGORY	STATION	TO	STATION	LOCATION	614.0345 LF
0010	6+91	-	7+00	STH 54 / DOXTATOR DRIVEWAY	35
TOTAL					35

STEEL PLATE BEAM GUARD SHORT RADIUS TERMINAL

CATEGORY	STATION	TO	STATION	LOCATION	614.0390 EACH
0010	51+19	-	51+32	DOXTATOR DRIVEWAY	1
TOTAL					1

MAINTENANCE AND REPAIR OF HAUL ROADS (PROJECT 9280-04-72)

CATEGORY	LOCATION	618.0100 EACH
0010	PROJECT	1
TOTAL		1

MOBILIZATION

CATEGORY	LOCATION	619.1000 EACH
0010	PROJECT	1
TOTAL		1

CONCRETE CORRUGATED MEDIAN

CATEGORY	STATION	TO	STATION	LOCATION	620.0100 SF
0010	15+25	-	16+44	STH 172 EAST LEG	1088
TOTAL					1088

CONCRETE MEDIAN SLOPED NOSE

CATEGORY	STATION	LOCATION	620.0300 SF	REMARKS
0010	5+62	STH 54 - WEST LEG	59	SPLITTER ISLAND
0010	6+79	STH 54 - WEST LEG	52	SPLITTER ISLAND
0010	7+32	STH 54 - WEST LEG	17	SPLITTER ISLAND
0010	9+17	STH 54 - WEST LEG	62	SPLITTER ISLAND
0010	9+29	STH 54 - WEST LEG	34	SPLITTER ISLAND
0010	527+00	CTH E - SOUTH LEG	54	SPLITTER ISLAND
0010	528+27	CTH E - SOUTH LEG	40	SPLITTER ISLAND
0010	528+32	CTH E - SOUTH LEG	26	SPLITTER ISLAND
0010	530+11	STH 54 - NORTH LEG	27	SPLITTER ISLAND
0010	530+24	STH 54 - NORTH LEG	44	SPLITTER ISLAND
0010	534+00	STH 54 - NORTH LEG	69	SPLITTER ISLAND
0010	529+85	STH 54 - NORTH LEG	32	BYPASS ISLAND
0010	531+76	STH 54 - NORTH LEG	60	BYPASS ISLAND
0010	11+26	STH 172 - EAST LEG	34	SPLITTER ISLAND
0010	11+41	STH 172 - EAST LEG	54	SPLITTER ISLAND
0010	15+20	STH 172 - EAST LEG	69	SPLITTER ISLAND
0010	56+32	CASINO ENTRANCE	64	SPLITTER ISLAND
0010	55+32	CASINO ENTRANCE	22	SPLITTER ISLAND
0010	55+32	CASINO ENTRANCE	28	SPLITTER ISLAND
0010	149+10	STH 172	33	SPLITTER ISLAND
0010	149+15	STH 172	26	SPLITTER ISLAND
0010	53+63	AIRPORT ENTRANCE	33	SPLITTER ISLAND
0010	53+65	AIRPORT ENTRANCE	26	SPLITTER ISLAND
0010	150+53	STH 172	33	SPLITTER ISLAND
0010	150+58	STH 172	27	SPLITTER ISLAND
TOTAL			1025	

LANDMARK REFERENCE MONUMENTS

CATEGORY	STATION	LOCATION	SECTION	TOWN	RANGE	621.0100 EACH
0010	532+50	STH 54	3	T 23 N	R 19 E	4
0010	545+00	STH 54	3	T 23 N	R 19 E	4
0010	545+00	STH 54	3	T 23 N	R 19 E	4
0010	10+00	STH 172	3	T 23 N	R 19 E	4
0010	19+15	STH 172	3	T 23 N	R 19 E	4
0010	19+15	STH 172	3	T 23 N	R 19 E	4
0010	136+50	STH 172	1	T 23 N	R 19 E	4
0010	149+80	STH 172	6	T 23 N	R 20 E	4
0010	163+00	STH 172	6	T 23 N	R 20 E	4
TOTAL						36

DUST CONTROL SURFACE TREATMENT

CATEGORY	STATION	TO	STATION	LOCATION	623.0200 SY
0010	1+00	-	158+00	PROJECT	44000
TOTAL					44000

LANDSCAPING SUMMARY

CATEGORY	STATION	TO	STATION	LOCATION	625.0500 SALVAGED TOPSOIL SY	629.0210 FERTILIZER TYPE B CWT	630.0200 SEEDING TEMPORARY LB	630.0120 SEEDING MIXTURE NO. 20 LB	630.0130 SEEDING MIXTURE NO. 30 LB	627.0200 MULCHING SY	REMARKS
0010	3+15	-	9+00	STH 54 LT	1682	1.06	45	17	19	1682	WEST LEG
0010	3+15	-	9+00	STH 54 RT	1461	0.92	39	16	16	1461	WEST LEG
0010	524+82	-	528+40	CTH E LT	1208	0.76	33	15	12	249	SOUTH LEG
0010	524+82	-	528+40	CTH E RT	822	0.52	22	7	10	822	SOUTH LEG
0010	11+00	-	23+91	STH 172 LT	6262	3.94	169	117	34	3377	EAST LEG
0010	11+00	-	23+91	STH 172 RT	6207	3.91	168	105	36	3434	EAST LEG
0010	530+00	-	539+67	STH 54 LT	5062	3.19	137	94	29	2897	NORTH LEG
0010	530+00	-	539+67	STH 54 RT	4765	3.00	129	85	30	2307	NORTH LEG
0010	143+50	-	115+00	STH 172 TO CASINO EXIT LT	2233	1.41	60		45	2233	
0010	144+50	-	147+50	STH 172 MEDIAN	605	0.38	16		17	605	
0010	144+50	-	63+50	STH 172 TO AIRPORT ENT RT	3088	1.95	84		63	3088	
0010	50+75	-	53+00	AIRPORT ENT/EXIT MEDIAN	488	0.31	13		18	488	
0010	49+75	-	154+25	AIRPORT EXIT TO STH 172 RT	1777	1.12	48		38	1777	
0010	55+75	-	157+25	CASINO ENT TO STH 172 LT	3381	2.13	91		71	3381	
0010	152+50	-	158+00	STH 172 MEDIAN	795	0.50	22		19	795	
TOTAL					39836	25.10	1076	456	457	28596	

SILT FENCE SUMMARY

CATEGORY	STATION	TO	STATION	LOCATION	628.1504 SILT FENCE LF	628.152 SILT FENCE MAINTENANCE LF
0010	6+00	-	8+00	STH 54 LT	200	50
0010	5+00	-	8+25	STH 54 RT	325	81
0010	530+00	-	532+25	STH 54 RT	225	56
0010	530+00	-	533+00	STH 54 RT	300	75
0010	537+50	-	540+00	STH 54 LT	250	63
0010	524+50	-	528+00	CTH E LT	350	88
0010	524+50	-	526+00	CTH E RT	150	38
0010	11+25	-	23+00	STH 172 LT	1175	294
0010	11+50	-	16+25	STH 172 RT	475	119
0010	17+25	-	23+00	STH 172 RT	575	144
0010	100+00	-	101+50	STANDING STONE DR.	150	38
0010	100+00	-	101+50	STANDING STONE DR.	150	38
0010				UNDISTRIBUTED	1081	270
TOTAL					5406	1352

MOBILIZATIONS EROSION CONTROL AND MOBILIZATIONS EMERGENCY EROSION CONTROL

CATEGORY	STATION	TO	STATION	LOCATION	628.1905 MOBILIZATIONS EROSION CONTROL EACH	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL EACH
0010	1+00	-	158+00	PROJECT	2	2
TOTAL					2	2

EROSION MAT CLASS I TYPE B

CATEGORY	STATION	TO	STATION	LOCATION	628.2004 SY
0010	3+15	-	9+70	STH 54 RT	576
0010	3+15	-	9+67	STH 54 LT	634
0010	525+50	-	528+00	CTH E LT	228
0010	525+86	-	528+48	CTH E RT	239
0010	10+67	-	20+55	STH 172 RT	822
0010	11+22	-	22+00	STH 172 LT	875
0010	530+15	-	539+67	STH 54 RT	816
0010	529+83	-	539+67	STH 54 LT	680
0010	143+50	-	115+00	STH 172 TO CASINO EXIT LT	2233
0010	144+50	-	147+50	STH 172 MEDIAN	605
0010	144+50	-	63+50	STH 172 TO AIRPORT ENT RT	3088
0010	50+75	-	53+00	AIRPORT ENT/EXIT MEDIAN	488
0010	49+75	-	154+25	AIRPORT EXIT TO STH 172 RT	1777
0010	55+75	-	157+25	CASINO ENT TO STH 172 LT	3381
0010	152+50	-	158+00	STH 172 MEDIAN	795
0010		-		UNDISTRIBUTED	4309
TOTAL					21546

EROSION MAT URBAN CLASS I TYPE A

CATEGORY	STATION	TO	STATION	LOCATION	628.2006 SY
0010	3+15	-	4+85	STH 54 LT	123
0010	3+40	-	4+23	STH 54 RT	140
0010	4+07	-	4+60	STH 54 LT	91
0010	4+79	-	5+13	STH 54 LT	52
0010	4+51	-	10+70	STH 54 RT	748
0010	5+29	-	7+00	STH 54 LT	300
0010	7+14	-	9+67	STH 54 LT	508
0010	526+34	-	526+69	CTH E RT	60
0010	526+83	-	528+48	CTH E RT	264
0010	527+00	-	528+42	CTH E LT	218
0010	10+46	-	12+45	STH 172 RT	276
0010	11+22	-	15+24	STH 172 LT	656
0010	529+82	-	533+97	STH 54 LT	609
0010	529+91	-	530+83	STH 54 RT	155
0010	144+50	-	148+00	STH 172 MEDIAN	345
0010	144+50	-	61+00	STH 172 TO AIRPORT ENT RT	476
0010	147+00	-	56+15	STH 172 TO CASINO EXIT LT	274
0010	52+00	-	53+00	AIRPORT ENT./EXIT MEDIAN	190
0010	57+00	-	154+85	CASINO ENT. TO STH 172 LT	533
0010	52+00	-	152+50	AIRPORT EXIT TO STH 172 RT	344
0010	152+50	-	154+80	STH 172 MEDIAN	174
0010		-		UNDISTRIBUTED	1634
TOTAL					8170

INLET PROTECTION SUMMARY

CATEGORY	LOCATION	628.7005 TYPE A EACH	628.7015 TYPE C EACH
0010	I-1	1	1
0010	I-2	1	1
0010	I-3	1	1
0010	I-4	1	1
0010	I-5	1	1
0010	I-6	1	1
0010	I-7	1	1
0010	I-8	1	1
0010	I-9	1	1
0010	I-10	1	1
0010	I-11	1	1
0010	I-12	1	1
0010	I-13	1	1
0010	I-14	1	1
0010	I-15	1	1
0010	I-16	1	1
0010	I-17	1	1
0010	I-18	1	1
0010	I-19	1	1
0010	I-20	1	1
0010	I-21	1	1
0010	I-27	1	1
0010	I-28	1	1
0010	I-29	1	1
0010	I-30	1	1
0010	I-31	1	1
0010	I-32	1	1
0010	I-33	1	1
0010	I-34	1	1
0010	I-35	1	1
0010	I-36	1	1
TOTAL		31	31

TEMPORARY DITCH CHECKS

CATEGORY	STATION	LOCATION	628.7504 LF
0010	1+80	STH 54	18
0010	8+30	STH 54	18
0010	537+00	STH 54	18
0010	16+20	STH 172	18
0010	145+00	STH 172	18
0010	155+00	STH 172	18
0010		UNDISTRIBUTED	27
TOTAL			135

ROCK BAGS

CATEGORY	STATION	LOCATION	628.7570 EACH
0010	16+40	STH 172	20
0010	20+30	STH 172	17
0010	145+00	STH 172	20
0010	155+00	STH 172	20
TOTAL			77

CULVERT PIPE CHECKS

CATEGORY	STATION	LOCATION	628.7555 EACH
0010	1+80	STH 54	3
0010	2+25	STH 54	3
0010	6+70	STH 54	3
0010	533+00	STH 54	3
0010	525+40	CTH E	3
0010	15+10	STH 172	3
0010	16+10	STH 172	3
0010	16+20	STH 172	3
0010	16+30	STH 172	3
0010	148+50	STH 172	3
TOTAL			30

MARKERS CULVERT END

CATEGORY	STATION	LOCATION	633.5200 EACH
0010	5+66	STH 54 42' RT	1
0010	7+32	STH 54 87' LT	1
0010	528+25	CTH E 49' RT	1
0010	202+30	CIRCULAR ROADWAY 64.4' RT	1
0010	530+33.07	STH 54 113.3' RT	1
0010	532+83	STH 54 54' LT	1
0010	532+83	STH 54 65' RT	1
0010	11+50	STH 172 78.4' LT	1
0010	15+83.8	STH 172 44.3' LT	1
0010	20+00	STH 172 55' LT	1
0010	146+50	STH 172 85' LT	1
0010	148+08	STH 172 74' LT	1
0010	148+27.2	STH 172 122' RT	1
0010	150+80	STH 172 79' LT	1
TOTAL			14

ERECTION OF TYPE II SIGNS AND SUPPORTS

CATEGORY 0010

SIGN NO.	LOCATION	SIGN CODE	W X H	637.0202 SIGNS REFLECTIVE TYPE II S.F.	634.0612 POSTS WOOD 4x6x12 EACH	634.0614 POSTS WOOD 4x6x14 EACH	634.0616 POSTS WOOD 4x6x16 EACH	634.0618 POSTS WOOD 4x6x18 EACH	634.0814 POSTS TUBULAR STEEL 2x2x14 EACH	634.0816 POSTS TUBULAR STEEL 2x2x16 EACH	REMARKS
300	STH 54, W. OF STH 172	J1-2	48" X 39"	13.00		1					STH 172, CTH E, SEE PLAN SHEET
301	"	D2-2	90" X 24"	15.00		1	1				SEE SIGN DETAIL
302A	"	W2-6P	30" X 16"	3.33							MOUNT BELOW SIGN #300
302B	"	W13-1	18" X 18"	2.25							15 MPH, MOUNT BELOW SIGN #300A
303	"	R2-1	24" X 30"	5.00		1					35 MPH
304	"	W3-2	30" X 30"	6.25		1					
304A	"	R4-7	24" X 30"	5.00		1					
305	STH 54, IN SPLITTER ISLAND	R3-8CC	36" X 30"	7.50							MOUNT ON SIGN BRIDGE LEG
306	SEE TYPE 1 SIGNS										
306A	"										
307	STH 54, IN SPLITTER ISLAND	R3-8CC	36" X 30"	7.50							MOUNT ON SIGN BRIDGE LEG
308	STH 54 AT ROUNDABOUT	W4-2R	36" X 36"	9.00		1					
309	"	W9-1R	30" X 30"	6.25							
310	"	J4-1	24" X 36"	6.00		1					STH 54, SEE PLAN SHEET
311	STH 54 IN SPLITTER ISLAND	R1-2	36" X 31"	3.88						1	
311A	"	R6-2R	24" X 30"	5.00							MOUNT BELOW SIGN #311
312	"	D1-1	42" X 30"	8.75					1		SEE SIGN DETAIL
313	STH 54, W. OF STH 172	R1-2	36" X 31"	3.88		1					
313A	"	R15-4	24" X 15"	2.50							MOUNT BELOW SIGN #313
314	"	R1-2	36" X 31"	3.88					1		
314A	"	R15-4	24" X 15"	2.50							MOUNT BELOW SIGN #314
315	IN ROUNDABOUT CIRCLE	R6-1R	36" X 12"	3.00					1		
315A	"	R6-4B	48" X 18"	6.00							MOUNT BELOW SIGN #315
316	CTH E, W. OF STH 172	R1-2	36" X 31"	3.88		1					
316A	"	R15-4	24" X 15"	2.50							MOUNT BELOW SIGN #316
317	IN ROUNDABOUT CIRCLE	R6-1R	36" X 12"	3.00					1		
317A	"	R6-4B	48" X 18"	6.00							MOUNT BELOW SIGN #317
318	STH 54, N. OF STH 172	R1-2	36" X 31"	3.88					1		
318A	"	R15-4	24" X 15"	2.50							MOUNT BELOW SIGN #318
319	W. OF STH 172	W4-2R	36" X 36"	9.00		1					
320	STH 172, IN SPLITTER ISLAND	D1-62	24" X 24"	4.00		2					SEE SIGN DETAIL
321	"	R1-2	36" X 31"	3.88						1	
321A	"	R6-2R	24" X 30"	5.00							MOUNT BELOW SIGN #321
322	"	R3-8CC	36" X 30"	7.50							MOUNT ON SIGN BRIDGE LEG
323	SEE TYPE 1 SIGNS										
323A	"										
324	STH 172, IN SPLITTER ISLAND	R3-8CC	36" X 30"	7.50							MOUNT ON SIGN BRIDGE LEG
325	"	J4-1	24" X 36"	6.00		1					STH 172, SEE PLAN SHEET
325A	"	W3-2	36" X 36"	9.00		1					
326	"	R4-7	24" X 30"	5.00		1					
327	STANDING STONE DR.	R1-1	30" X 30"	5.18		1					
328	E. OF STANDING STONE DR	J1-3	72" X 39"	19.50		1	1				STH 54, CTH E, STH 172, SEE PLAN SHEET
328	"	W2-6	30" X 30"	6.25			1				
328A	"	W2-6P	30" x 16"	3.33							MOUNT BELOW SIGN #329
328B	"	W13-1	18" X 18"	2.25							15 MPH, MOUNT BELOW SIGN #329A
329	E. OF STANDING STONE DR	J1-3	72" X 39"	19.50		1	1				STH 54, CTH E, STH 172, SEE PLAN SHEET

CONTINUED

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ERECTION OF TYPE II SIGNS AND SUPPORTS CONTINUED

CATEGORY 0010

SIGN NO.	LOCATION	SIGN CODE	W X H	637.0202 SIGNS REFLECTIVE TYPE II S.F.	634.0612 POSTS WOOD 4x6x12 EACH	634.0614 POSTS WOOD 4x6x14 EACH	634.0616 POSTS WOOD 4x6x16 EACH	634.0618 POSTS WOOD 4x6x18 EACH	634.0814 POSTS TUBULAR STEEL 2x2x14 EACH	634.0816 POSTS TUBULAR STEEL 2x2x16 EACH	REMARKS
330	CTH E, W. OF STH 172	J1-3	72" X 39"	19.50		1	1				STH 54, STH 172, CTH E, SEE PLAN SHEET
331	"	W2-6	30" X 30"	6.25			1				
331A	"	W2-6P	30" X 16"	3.33							MOUNT BELOW SIGN #330
331B	"	W13-1	18" X 18"	2.25							15 MPH, MOUNT BELOW SIGN #330A
332	"	W3-2	30" X 30"	6.25		1					
333	"	D1-62	108" X 84"	63.00				4			SEE SIGN DETAIL
334	CTH E, IN SPLITTER ISLAND	R4-7	24" X 30"	5.00		1					
335	CTH E, W. OF STH 172	M1-5A	24" X 24"	4.00		1					CTH E
336	CTH E, IN SPLITTER ISLAND	D1-62	36" X 18"	4.50		1					SEE SIGN DETAIL
337	"	R1-2	36" X 31"	3.88			1				
337A	"	R6-2R	24" X 30"	5.00							MOUNT BELOW SIGN #337
338	IN ROUNDABOUT CIRCLE	R6-1R	36" X 12"	3.00					1		
338A	"	R6-4B	48" X 18"	6.00							MOUNT BELOW SIGN 338
339	"	R6-1R	36" X 12"	3.00					1		
339A	"	R6-4B	48" X 18"	6.00							MOUNT BELOW SIGN #339
340	STH 54 IN ISLAND	R1-2	36" X 31"	3.88		1					
340A	"	R1-54	24" X 15"	2.50							MOUNT BELOW SIGN #340
341	STH 54 IN SPLITTER ISLAND	R1-2	36" X 31"	3.88			1				
341A	"	R6-2R	24" X 30"	5.00							MOUNT BELOW SIGN #341
342	STH 54 IN ISLAND	W12-1D	24" X 24"	4.00	1						
343	STH 54 IN SPLITTER ISLAND	D1-1	42" X 30"	8.75		1					SEE SIGN DETAIL
344	STH 54, E. OF STH 172	J4-1	24" X 36"	6.00		1					STH 54, SEE PLAN SHEET
345	STH 54, IN SPLITTER ISLAND	R3-8DD	36" X 30"	7.50							MOUNT ON SIGN BRIDGE LEG
346	SEE TYPE 1 SIGNS										
346A	"										
347	STH 54, IN SPLITTER ISLAND	R3-8DD	36" X 30"	7.50							MOUNT ON SIGN BRIDGE LEG
348	"	R4-7	24" X 30"	5.00		1					
348A	STH 54, N. OF STH 172	W3-2	36" X 36"	9.00		1					
349	"	W2-6	30" X 30"	6.25			1				
349A	"	W2-6P	30" X 16"	3.33							MOUNT BELOW SIGN #350
349B	"	W13-1	18" X 18"	2.25							15 MPH, MOUNT BELOW SIGN #350A
350	"	J1-2	48" X 39"	13.00		1					STH 172, CTH E, SEE PLAN SHEET
351	"	R2-1	24" X 30"	5.00		1					55 MPH
352	"	R2-1	24" X 30"	5.00		1					35 MPH
353	VACANT										
354	W. OF AIRPORT SERVICE RD	W2-6	30" X 30"	6.25			1				
354A	"	W2-6P	30" X 16"	3.33							MOUNT BELOW SIGN #354
354B	"	W13-1	18" X 18"	2.25							15 MPH, MOUNT BELOW SIGN #354A
355	"	R2-1	24" X 30"	5.00		1					45 MPH
356	"	W3-2	36" X 36"	9.00		1					
357	SEE TYPE 1 SIGNS										
357A	"										

CONTINUED

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ERECTION OF TYPE II SIGNS AND SUPPORTS CONTINUED											
CATEGORY 0010											
SIGN NO.	LOCATION	SIGN CODE	W X H	637.0202 SIGNS REFLECTIVE TYPE II S.F.	634.0612 POSTS WOOD 4x6x12 EACH	634.0614 POSTS WOOD 4x6x14 EACH	634.0616 POSTS WOOD 4x6x16 EACH	634.0618 POSTS WOOD 4x6x18 EACH	634.0814 POSTS TUBULAR STEEL 2x2x14 EACH	634.0816 POSTS TUBULAR STEEL 2x2x16 EACH	REMARKS
358	STH 172, IN SPLITTER ISLAND	D1-1	42" X 30"	8.75					1		SEE SIGN DETAIL
359	"	R1-2	36" X 31"	3.88						1	
359A	"	R6-2R	24" X 30"	5.00							MOUNT BELOW SIGN #359
360	W. OF AIRPORT SERVICE RD.	R1-2	36" X 31"	3.88					1		
360A	"	R1-54	24" X 15"	2.50							MOUNT BELOW SIGN #360
361	IN ROUNDABOUT CIRCLE	R6-1R	36" X 12"	3.00					1		
361A	"	W1-8A	48" X 18"	6.00							MOUNT BELOW SIGN #361
362	AIRPORT SERVICE RD	W2-6	30" X 30"	6.25			1				
362A	"	W2-6P	30" X 16"	3.33							MOUNT BELOW SIGN #362
362B	"	W13-1	18" X 18"	2.25							15 MPH, MOUNT BELOW SIGN #362A
363	"	D1-62	108" X 72"	54.00				4			SEE SIGN DETAIL
364	"	W3-2	36" X 36"	9.00		1					
365	AIRPORT SERVICE RD. SPLITTER ISLAND	D1-1	66" X 24"	11.00		2					SEE SIGN DETAIL
366	"	R1-2	36" X 31"	3.88			1				
366A	"	R6-2R	24" X 30"	5.00							MOUNT BELOW SIGN #366
367	"	R1-2	36" X 31"	3.88		1					
367A	"	R1-54	24" X 15"	2.50							MOUNT BELOW SIGN #367
368	IN ROUNDABOUT CIRCLE	R6-1R	36" X 12"	3.00					1		
368A	"	W1-8A	48" X 18"	6.00							MOUNT BELOW SIGN #368
369	"	R6-1R	36" X 12"	3.00					1		
369A	"	W1-8A	48" X 18"	6.00							MOUNT BELOW SIGN #369
370	ENTERTAINMENT DR.	R1-2	36" X 31"	3.88		1					
370A	"	R1-54	24" X 15"	2.50							MOUNT BELOW SIGN #370
371	ENTERTAINMENT DR. SPLITTER ISLAND	R1-2	36" X 31"	3.88		1					
371A	"	R6-2R	24" X 30"	5.00							MOUNT BELOW SIGN #371
372	"	D1-1	84" X 24"	14.00		2					SEE SIGN DETAIL
373	ENTERTAINMENT DR.	R3-8	36" X 30"	7.50		1					
374	ENTERTAINMENT DR. SPLITTER ISLAND	R4-7	24" X 30"	5.00		1					
375	IN ROUNDABOUT CIRCLE	R6-1R	36" X 12"	3.00					1		
375A	"	W1-8A	48" X 18"	6.00							MOUNT BELOW SIGN #375
376	STH 172, E. OF ENTERTAINMENT DR.	R1-2	36" X 31"	3.88					1		
376A	"	R1-54	24" X 15"	2.50							MOUNT BELOW SIGN #376
377	STH 172 SPLITTER ISLAND	R1-2	36" X 31"	3.88						1	
377A	"	R6-2R	24" X 30"	5.00							MOUNT BELOW SIGN #377
378	"	D1-1	42" X 30"	8.75					1		SEE SIGN DETAIL
379	SEE TYPE 1 SIGNS										
379A	"										
380	STH 172, E. OF ENTERTAINMENT DR.	W3-2	36" X 36"	9.00		1					
381	"	W2-6	30" X 30"	6.25			1				
381A	"	W2-6P	30" X 16"	3.33							MOUNT BELOW SIGN #381
381B	"	W13-1	18" X 18"	2.25							15 MPH, MOUONT BELOW SIGN #381A
382	"	R2-1	24" X 30"	5.00		1					45 MPH
TOTAL				777.48	1	45	13	8	15	4	

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ERECTION OF TYPE I SIGNS

CATEGORY	SIGN NO.	LOCATION	SIGN CODE	637.0101 SIGNS TYPE I				REMARKS
				W	X	H	S.F.	
0010	306	STH 54, W. OF ROUNDABOUT	E6-1	168"	X	132"	154.00	MOUNT ON SIGN BRIDGE, SEE SIGN DETAIL
0010	306A	"	E6-1	168"	X	132"	154.00	"
0010	323	STH 172, E. OF ROUNDABOUT	E6-1	168"	X	114"	133.00	"
0010	323A	"	E6-1	168"	X	114"	133.00	"
0010	346	STH 54, N. OF ROUNDABOUT	E6-1	120"	X	90"	75.00	"
0010	346A	"	E6-1	180"	X	114"	142.50	"
0010	357	STH 172, W. OF ROUNDABOUT	E11-1	192"	X	108"	144.00	"
0010	357A	"	E11-1	156"	X	108"	117.00	"
0010	379	STH 172, E. OF ROUNDABOUT	E11-1	156"	X	108"	117.00	"
0010	379A	"	E11-1	192"	X	108"	144.00	"
0010	383	AIRPORT ENTRANCE	SP	144"	X	66"	66.00	"
0010	384	"	SP	108"	X	90"	67.50	"
0010	385	"	SP	132"	X	78"	71.50	"
TOTAL				1518.50				

REMOVAL OF TYPE II SIGNS AND SUPPORTS

CATEGORY	SIGN NO.	LOCATION	SIGN CODE	638.2602 REMOVING SIGNS TYPE II	638.3000 REMOVING SMALL SIGN SUPPORTS	REMARKS
				EACH	EACH	
0010	400	STH 54, W. OF STH 172	W3-3	1	1	
0010	401	"	J2-2	5	1	
0010	402	VACANT				
0010	403	STH 54, W. OF STH 172	R2-1	1	1	
0010	404	"	D1-1	1	1	
0010	405	"	J3-2	5	1	
0010	406	STH 54 AT STH 172	M1-6	1	1	
0010	406A	"	W1-7	1		
0010	407	STH 54, E. OF STH 172	J3-2	5	1	
0010	408	"	J4-1	2	1	
0010	409	"	R2-1	1	1	
0010	410	"	D1-2	1	2	
0010	411	"	W3-3	1	1	
0010	412	"	J1-2	3	1	
0010	413	"	W3-5	1	1	
0010	414	STH 172 AT STH 54	R1-1F	1	1	
0010	415	"	J13-1	2		REMOVE FROM TRAFFIC SIGNAL

CONTINUED

REMOVAL OF TYPE II SIGNS AND SUPPORTS CONTINUED

CATEGORY	SIGN NO.	LOCATION	SIGN CODE	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	REMARKS
0010	416	W. OF CTH E	M1-5A	1	2	
0010	416A	"	D1-2	1		
0010	417	CTH E	M1-6	1	1	
0010	417A	"	W1-7	1		
0010	418	"	R1-1	1	1	
0010	419	"	J3-2	5	1	
0010	420	"	M1-6	1	2	
0010	420A	"	D1-2	1		
0010	420B	"	R10-7	1		
0010	421	E. OF CTH E	J4-1	2	1	
0010	422	W. OF STANDING STONE DR.	R2-1	1	1	
0010	423	STANDING STONE DR.	R1-1	1	1	
0010	424	E. OF STANDING STONE DR.	W3-3	1	1	
0010	425	"	W3-3	1	1	
0010	426	"	J1-3	4	1	
0010	427	W. OF AIRPORT SERVICE ROAD	W3-3	1	1	
0010	428	"	W3-3	1	1	
0010	429	"	D1-3	1	2	
0010	430	"	R5-1A	1		
0010	431	"	R2-1	1	1	
0010	432	CASINO ENTRANCE	J3-1	3		REMOVE FROM TRAFFIC SIGNAL
0010	433	MEDIAN AT AIRPORT SERVICE RD.	R4-7	1		"
0010	434	AIRPORT SERVICE RD.	R6-2L	1		"
0010	435	AIRPORT SERVICE RD.	R5-1	1		REMOVE FROM TRAFFIC SIGNAL
0010	436		R4-7	1		"
0010	437		R1-1F	1		"
0010	438	CASINO ENTRANCE	R4-7	1		"
0010	439	"	R6-2L	1		"
0010	440	AIRPORT SERVICE RD.	J3-3	7	2	
0010	441	"	R1-2	1	1	
0010	442	MEDIAN AT AIRPORT SERVICE RD.	R4-7	1		REMOVE FROM TRAFFIC SIGNAL
0010	443	AIRPORT SERVICE RD.	R1-1F	1		"
0010	444	W. OF AIRPORT SERVICE ROAD	R5-1A	1	1	
0010	445	"	R3-55L	1	1	
0010	446	"	D1-2	1	2	
0010	447	"	R2-1	1	1	
0010	448	"	W3-3	1	1	
0010	449	"	W3-3	1	1	
TOTAL				86	43	

OVERHEAD SIGN SUPPORT (STRUCTURE)

CATEGORY	STATION	LOCATION	641.8100 LS
0010	5+80	STH 54	1
0010	533+20	STH 54	1
0010	13+00	STH 172	1
0010	146+20	STH 172	1
0010	153+40	STH 172	1
0010	62+00	AIRPORT ENTRANCE	1
TOTAL			6

FIELD OFFICE TYPE B (PROJECT)

CATEGORY	STATION	TO	STATION	LOCATION	642.5001 EACH
0010	1+00	-	158+00	PROJECT	1
TOTAL					1

TRAFFIC CONTROL (PROJECT)

CATEGORY	STATION	TO	STATION	LOCATION	643.0100 EACH
0010	1+00	-	158+00	PROJECT	1
TOTAL					1

TRAFFIC CONTROL DETOUR (PROJECT)

CATEGORY	LOCATION	643.2000 EACH	REMARKS
0010	PROJECT	1	
TOTAL		1	

TRAFFIC CONTROL SUMMARY

CATEGORY	STATION	LOCATION	APPROX. SERVICE PERIOD DAYS	643.0300 DRUMS		* 643.0420 BARRICADES TYPE III		643.0705 WARNING LIGHTS TYPE A		643.0900 SIGNS		643.1050.S SIGNS PORTABLE CHANGEABLE MESSAGE		REMARKS
				NO. IN SERVICE	DAYS	NO. IN SERVICE	DAYS	NO. IN SERVICE	DAYS	NO. IN SERVICE	DAYS	NO. IN SERVICE	DAYS	
0010	161+50	STH 172	35							1	35			STAGE 1
0010	158+60	STH 172	35			5	175	6	210	1	35			STAGE 1
0010	142+00	STH 172	35			5	175	6	210	1	35			STAGE 1
0010	122+00	STH 172	35			2	70	4	140	1	35			STAGE 1
0010	49+50	STH 172 - AIRPORT	35			5	175	6	210	1	35			STAGE 1
0010	56+00	STH 172 - CASINO	35			5	175	6	210	1	35			STAGE 1
0010	63+90	STH 172 - AIRPORT	35			5	175	6	210	1	35			STAGE 1
0010	25+50	STH 172	25							1	25			STAGE 2, PHASE 1
0010	23+00	STH 172	25			5	125	6	150	1	25			STAGE 2, PHASE 1
0010	90+80	STANDING STONE DR.	25			5	125	6	150	1	25			STAGE 2, PHASE 1
0010	100+80	STANDING STONE DR.	25							1	25			STAGE 2, PHASE 1
0010	524+20	CTH E	25			5	125	6	150	1	25			STAGE 2, PHASE 1
0010	523+00	CTH E	25							1	25			STAGE 2, PHASE 1
0010	9+50	STH 54 WB EXIT	25			5	125	6	150	1	25			STAGE 2, PHASE 1
0010	540+30	STH 54	12							1	12			STAGE 2, PHASE 2
0010	539+50	STH 54	12			5	60	6	72	1	12			STAGE 2, PHASE 2
0010	530+30	STH 54 WB ENTRANCE	12			5	60	6	72	1	12			STAGE 2, PHASE 2
0010	9+38	STH 54	12			5	60	6	72	1	12			STAGE 2, PHASE 2
0010	9+58	STH 54 WB BYPASS	12			5	60							
0010	0+25	STH 54	12			5	60	6	72	1	12			STAGE 2, PHASE 2
0010	2+40	STH 54	12							1	12			STAGE 2, PHASE 2
0010	15+25	STH 172 APPROACH AT ROUNDABOUT	12	35	420									STAGE 2, PHASE 2
0010		STH 172 & CTH GE	7									1	7	STAGE 1
0010		STH 172 & CTH EB	7									1	7	STAGE 1
0010		STH 54 & CTH GE	7									1	7	STAGE 2
0010		STH 54 & CTH C	7									1	7	STAGE 2
0010		STH 172 - AIRPORT	35	10	350									UNDISTRIBUTED
0010		STH 54 - STH 172	37	10	370									UNDISTRIBUTED
TOTAL					1140		1745		2078		492		28	

* ADDITIONAL QUANTITIES ARE SHOWN ELSEWHERE

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TRAFFIC CONTROL DETOUR SIGNS AND COVERING SIGNS									
CATEGORY 0010									
SIGN NO.	LOCATION	SIGN CODE	SIZE W X H	NUMBER IN SERVICE	APPROX. SERVICE PERIOD 35 DAYS	643.3000 DETOUR SIGNS DAYS	* 643.0420 BARRICADES TYPE III DAYS	643.0905.S COVERING SIGNS EACH	REMARKS
	STAGE 1 (round-a-bout @ airport entrance)								
1	100' E OF CTH U INTERSECTION ON STH 54	M3-2	24"x12"	1	35	35			
	"	M1-6	24"x24"	1	35	35			172
	"	W20-2-A	48"x48"	1	35	35			
2A	MODIFY J1-2 (JCT 172; JCT E)	M0 4-8	24"x12"	1	35	35			
	"	M3-2	24"x12"	1	35	35			
	"	M1-6	EXISTING						
	"	M0 6-1	21"x21"	1	35	35			AHEAD
2B	J1-2 (JCT 172; JCT E)							1	JCT E
3	MODIFY J2-2 (E-54- AH; E- 172-AH RT)	M0 4-8	24"x12"	1	35	35			
	"	M3-2	EXISTING						
	"	M1-6	EXISTING						
	"	M0 6-1	21"x21"	1	35	35			AHEAD
4	D1-1 (A. STRAUBEL AIRPORT-RT)							1	A. STRAUBEL AIRPORT
5A	MODIFY J3-2 (E-172-RT; S-E-RT)	M0 4-8	24"x12"	1	35	35			
	"	M3-2	EXISTING						
	"	M1-6	EXISTING						
	"	M0 6-1	21"x21"	1	35	35			AHEAD
5B	J3-2 (E-172-RT; S-E-RT)							1	SOUTH-CTH E-RIGHT ARROW
6	RT OF J4-1 (E-54)	M0 4-8	24"x12"	1	35	35			
	"	M3-2	24"x12"	1	35	35			
	"	M1-6	24"x24"	1	35	35			172
7	SW QUAD OF STH 54 & STH 172 INTERSECTION	R-11-3	60"x30"	1	35	35	35		3 MILES
8A	J3-2 (E-172-LT; S-E-LT)							1	EAST 172 -LT
8B	J3-2 (E-172-LT; S-E-LT)							1	SOUTH-CTH E-LEFT ARROW
9A	MODIFY J1-2 (JCT 172; JCT E)	M0 4-8-A	24"x18"	1	35	35			
	"	M3-4	24"x12"	1	35	35			
	"	M1-6	EXISTING						172
9B	J1-2 (JCT 172; JCT E)							1	JCT E
10	150' W OF OVERLAND RD INTERSECTION ON STH 54	M0 4-8	24"x12"	1	35	35			
	"	M3-4	24"x12"	1	35	35			
	"	M1-6	24"x24"	1	35	35			172
11	150' E OF OVERLAND RD INTERSECTION ON STH 54	M0 4-8	24"x12"	1	35	35			
	"	M3-2	24"x12"	1	35	35			
	"	M1-6	24"x24"	1	35	35			172
12	150' W OF CTH GE INTERSECTION ON STH 54	M0 4-8	24"x12"	1	35	35			
	"	M3-4	24"x12"	1	35	35			
	"	M1-6	24"x24"	1	35	35			172
13A	150' E OF CTH GE INTERSECTION ON STH 54	M0 4-8	24"x12"	1	35	35			
	"	M3-2	24"x12"	1	35	35			
	"	M1-6	24"x24"	1	35	35			172
13B	SE QUAD OF STH 172 & CTH GE RAB	R-11-3	60"x30"	1	35	35	35		3 MILES
14	D1-1 (AUSTIN STRAUBEL AIRPORT)							1	LT - A. STRAUBEL AIRPORT

* ADDITIONAL QUANTITIES ARE SHOWN ELSEWHERE CONTINUED

CATEGORY 0010

TRAFFIC CONTROL DETOUR SIGNS AND COVERING SIGNS CONTINUED

SIGN NO.	LOCATION	SIGN CODE	SIZE W X H	NUMBER IN SERVICE	APPROX. SERVICE PERIOD 35 DAYS	643.3000	*	643.0905.S	REMARKS
						DETOUR SIGNS	643.0420 BARRICADES TYPE III	COVERING SIGNS	
						DAYS	DAYS	EACH	
15	200' W OF CTH FF INTERSECTION ON STH 54	MO 4-8	24"X12"	1	35	35			
	"	M3-4	24"X12"	1	35	35			
	"	M 1-6	24"X24"	1	35	35			172
16	200' E OF CTH FF INTERSECTION ON STH 54	MO 4-8	24"X12"	1	35	35			
	"	M3-2	24"X12"	1	35	35			
	"	M 1-6	24"X24"	1	35	35			172
17	150' E OF SIGNAL AHEAD SIGN STH 54 @ CTH EB	MO 4-8	24"X12"	1	35	35			
	"	M 3-2	24"X12"	1	35	35			
	"	M 1-6	24"X24"	1	35	35			172
	"	MO 5-1R	21"X21"	1	35	35			
18	ACROSS FROM SIGN # 47 (IN MEDIAN)	MO 4-8	24"X12"	1	35	35			
	"	M 3-2	24"X12"	1	35	35			
	"	M 1-6	24"X24"	1	35	35			172
	"	MO 5-1R	21"X21"	1	35	35			
19	RT OF J4-1 (W-54) SIGN	MO 4-8	24"X12"	1	35	35			
	"	M 3-4	24"X12"	1	35	35			
	"	M 1-6	24"X24"	1	35	35			172
20	ON BACK WRONG WAY SIGN	MO 4-8	24"X12"	1	35	35			
	"	M 3-2	24"X12"	1	35	35			
	"	M 1-6	24"X24"	1	35	35			172
	"	MO 6-1	21"X21"	1	35	35			RIGHT
21	100' S OF STH 54 INTERSECTION ON CTH EB	MO 4-8	24"X12"	1	35	35			
	"	M 3-2	24"X12"	1	35	35			
	"	M 1-6	24"X24"	1	35	35			172
22	ON BACK J13-2 (54-DBL ARROW; EB-AHEAD) SIGN	MO 4-8	24"X12"	1	35	35			
	"	M 3-4	24"X12"	1	35	35			
	"	M 1-6	24"X24"	1	35	35			172
	"	MO 6-1	21"X21"	1	35	35			LEFT
23	ON BACK J13-2 (54-DBL ARROW; EB-AHEAD) SIGN	MO 4-8	24"X12"	1	35	35			
	"	M 3-4	24"X12"	1	35	35			
	"	M 1-6	24"X24"	1	35	35			172
	"	MO 6-1	21"X21"	1	35	35			LEFT
24	200' S OF SIGNAL AHEAD SIGN	MO 4-8	24"X12"	1	35	35			
	"	M 3-4	24"X12"	1	35	35			
	"	M 1-6	24"X24"	1	35	35			172
	"	MO 4-22-L	24"X18"	1	35	35			
25	100' N OF WEST POINT RD INTERSECTION ON CTH EB	MO 4-8	24"X12"	1	35	35			
	"	M 3-4	24"X12"	1	35	35			
	"	M 1-6	24"X24"	1	35	35			172
26	100' S OF WEST POINT RD INTERSECTION ON CTH EB	MO 4-8	24"X12"	1	35	35			
	"	M 3-2	24"X12"	1	35	35			
	"	M 1-6	24"X24"	1	35	35			172

* ADDITIONAL QUANTITIES ARE SHOWN ELSEWHERE

CONTINUED

TRAFFIC CONTROL DETOUR SIGNS AND COVERING SIGNS CONTINUED									
CATEGORY 0010									
SIGN NO.	LOCATION	SIGN CODE	SIZE W X H	NUMBER IN SERVICE	APPROX. SERVICE PERIOD 35 DAYS	643.3000 DETOUR SIGNS DAYS	* 643.0420 BARRICADES TYPE III DAYS	643.0905.S COVERING SIGNS EACH	REMARKS
27	100' N OF CTH VK INTERSECTION ON CTH EB	MO 4-8	24"X12"	1	35	35			
	"	M 3-4	24"X12"	1	35	35			
	"	M 1-6	24"X24"	1	35	35			172
28	100' S OF CTH VK INTERSECTION ON CTH EB	MO 4-8	24"X12"	1	35	35			
	"	M 3-2	24"X12"	1	35	35			
	"	M 1-6	24"X24"	1	35	35			172
29	100' N OF CORMIER RD INTERSECTION ON CTH EB	MO 4-8	24"X12"	1	35	35			
	"	M 3-4	24"X12"	1	35	35			
	"	M 1-6	24"X24"	1	35	35			172
30	100' S OF CORMIER RD INTERSECTION ON CTH EB	MO 4-8	24"X12"	1	35	35			
	"	M 3-2	24"X12"	1	35	35			
	"	M 1-6	24"X24"	1	35	35			172
31	MODIFY J1-1 (JCT 172) SIGN	MO 4-8-A	24"X18"	1	35	35			
	"	M1-6	EXISTING						172
32	200' N OF STH 172 INTERSECTION ON CTH EB	MO 4-8	24"X12"	1	35	35			
	"	M3-4	24"X12"	1	35	35			
		M1-6	24"X24"	1	35	35			172
33	MODIFY J13-1 (172-DBL ARROW)	M3-2	24"X12"	1	35	35			
	"	M1-6	EXISTING						
	"	MO 6-1	21"X21"	1	35	35			LEFT
34	NE QUAD OF STH 172 & CTH EB INTERSECTION	R 11-3	60"X30"	1	35	35	35		1 MILE
35	J13-1 (WEST 172) SIGN							1	WEST 172
36	300' E OF SIGNAL AHEAD SIGN	W 20-2A	48"X48"	1	35	35			
	"	M4-20-R	36"x36"	1	35	35			
37	ACROSS FROM SIGN # 36 (MEDIAN SIDE)	W 20-2A	48"X48"	1	35	35			
	"	M4-20-R	36"x36"	1	35	35			
38	250' W OF BABCOCK RD	W 20-2A	48"X48"	1	35	35			
	"	M4-20-R	36"x36"	1	35	35			
39	ACROSS FROM SIGN # 38 (MEDIAN SIDE)	W 20-2A	48"X48"	1	35	35			
	"	M4-20-R	36"x36"	1	35	35			
40	200' W OF J1-1 (JCT EB)	MO 4-8	30"X15"	1	35	35			
	"	M 3-4	30"X15"	1	35	35			
	"	M 1-6	36"X36"	1	35	35			172
	"	MO 5-1R	30"X30"	1	35	35			
41	ACROSS FROM SIGN # 40 (MEDIAN SIDE)	MO 4-8	30"X15"	1	35	35			
	"	M 3-4	30"X15"	1	35	35			
	"	M 1-6	36"X36"	1	35	35			172
	"	MO 5-1R	30"X30"	1	35	35			
42	ABOVE PACKERLAND DR SIGN	R 10-61	60"X30"	1	35	35			"AIRPORT"
43	ACROSS FROM SIGN # 42 (MEDIAN SIDE)	R 10-61	60"X30"	1	35	35			"AIRPORT"

* ADDITIONAL QUANTITIES ARE SHOWN ELSEWHERE CONTINUED

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TRAFFIC CONTROL DETOUR SIGNS AND COVERING SIGNS CONTINUED									
CATEGORY 0010									
SIGN NO.	LOCATION	SIGN CODE	SIZE W X H	NUMBER IN SERVICE	APPROX. SERVICE PERIOD 35 DAYS	643.3000 DETOUR SIGNS DAYS	* 643.0420 BARRICADES TYPE III DAYS	643.0905.S COVERING SIGNS EACH	REMARKS
44	RT OF J13-1 (EB-DBL ARROW)SIGN	MO 4-8	30"X15"	1	35	35			
	"	M 3-4	30"X15"	1	35	35			
	"	M 1-6	36"X36"	1	35	35			172
	"	MO 6-1	30"X30"	1	35	35			RIGHT
45A	MODIFY J13-1 (172-DBL ARROW) SIGN	M 3-2	24"X12"	1	35	35			
	"	M1-6	EXISTING						
	"	M 6-1	21"X21"	1	35	35			RIGHT
45B	RT OF SIGN # 45B	MO 4-8	24"X12"	1	35	35			
	"	M 3-4	24"X12"	1	35	35			
	"	M 1-6	24"X24"	1	35	35			172
	"	MO 6-1	21"X21"	1	35	35			RIGHT
45C	100' W OF TRAFFIC SIGNAL (RIGHT MEDIAN ISLAND)	MO 4-8	24"X12"	1	35	35			
	"	M 3-4	24"X12"	1	35	35			
	"	M 1-6	24"X24"	1	35	35			172
	"	MO 6-1	21"X21"	1	35	35			LEFT
45D	200' W OF D1-1 (PACKERLAND DR - LT NORTH -SOUTH RT)	MO 4-8	24"X12"	1	35	35			
	"	M 3-4	24"X12"	1	35	35			
	"	M 3-2	24"X12"	1	35	35			
	"	M 50-2	48"X24"	1	35	35			172-172
	"	MO 6-1	21"X21"	1	35	35			LEFT
	"	MO 6-1	21"X21"	1	35	35			AHEAD
45E	ACROSS FROM SIGN # 45D (MEDIAN SIDE)	MO 4-8	24"X12"	1	35	35			
	"	M 3-4	24"X12"	1	35	35			
	"	M 3-2	24"X12"	1	35	35			
	"	M 50-2	48"X24"	1	35	35			172-172
	"	MO 6-1	21"X21"	1	35	35			LEFT
	"	MO 6-1	21"X21"	1	35	35			AHEAD
45F	500' W OF SIGN # 45D	MO 4-8	24"X12"	1	35	35			
	"	M 3-4	24"X12"	1	35	35			
	"	M 3-2	24"X12"	1	35	35			
	"	M 50-2	48"X24"	1	35	35			172-172
	"	MO 6-1	21"X21"	1	35	35			LEFT
	"	MO 6-1	21"X21"	1	35	35			AHEAD
45G	ACROSS FROM SIGN # 45F (MEDIAN SIDE)	MO 4-8	24"X12"	1	35	35			
	"	M 3-4	24"X12"	1	35	35			
	"	M 3-2	24"X12"	1	35	35			
	"	M 50-2	48"X24"	1	35	35			172-172
	"	MO 5-1-L	21"X21"	1	35	35			
	"	MO 6-1	21"X21"	1	35	35			AHEAD

* ADDITIONAL QUANTITIES ARE SHOWN ELSEWHERE

CONTINUED

TRAFFIC CONTROL DETOUR SIGNS AND COVERING SIGNS CONTINUED									
CATEGORY 0010									
SIGN NO.	LOCATION	SIGN CODE	SIZE W X H	NUMBER IN SERVICE	APPROX. SERVICE PERIOD 35 DAYS	643.3000 DETOUR SIGNS DAYS	* 643.0420 BARRICADES TYPE III DAYS	643.0905.S COVERING SIGNS EACH	REMARKS
46	D1-3 (AH-IRENE MOORE ACTIVITY CENTER, A STRAUBEL AIRPORT, ONEIDA CASINO)							1	"AH-IRENE MOORE ACTIVITY CENTER, A STRAUBEL AIRPORT, ONEIDA CASINO"
47	LT OF SIGN # 46	I 5-1	24"X24"	1	35	35			
	"	MG 5-1-L	21"X21"	1	35	35			
48	ACROSS FROM SIGN # 47 (MEDIAN SIDE)	I 5-1	24"X24"	1	35	35			
	"	MG 5-1-L	21"X21"	1	35	35			
49	D1-2 (AH- A STRAUBEL AIRPORT, LT-EAST SERVICE RD)							1	"AH- A STRAUBEL AIRPORT"
50	LT OF SIGNAL, (MEDIAN SIDE)	I 5-1	24"X24"	1	35	35			
	"	MG 6-1	21"X21"	1	35	35			
51	NE QUAD OF STH 172 & SOUTH POINT RD INTERSECTION	R 11-3	60"X30"	1	35	35	35		"1/2 MILE"
52	RT OF STOP SIGN	I5-1	24"X24"	1	35	35			
	"	MG 6-1	21"X21"	1	35	35			RIGHT
53	SW QUAD OF SERVICE RD & DRIVEWAY INTERSECTION	I5-1	24"X24"	1	35	35			
	"	MG 6-1	21"X21"	1	35	35			RIGHT
54	50' W OF INTERSECTION	MO 4-5	24"X12"	1	35	35			
	"	M1-6	24"X24"	1	35	35			172
	"	MO 6-1	21"X21"	1	35	35			LEFT
55	50' W OF INTERSECTION	I5-1	24"X24"	1	35	35			
	"	MG 6-1	21"X21"	1	35	35			AHEAD
56	ON BACK OF SIGN # 103	MO 4-5	24"X12"	1	35	35			
	"	M1-6	24"X24"	1	35	35			172
	"	MO 5-1-R	21"X21"	1	35	35			
57	50' W OF INTERSECTION	I5-1	24"X24"	1	35	35			
	"	MG 6-1	21"X21"	1	35	35			AHEAD
58	50' E OF INTERSECTION	MO 4-5	24"X12"	1	35	35			
	"	M1-6	24"X24"	1	35	35			172
	"	MO 6-1	21"X21"	1	35	35			AHEAD
59	RT OF NO PARKING SIGN	I5-1	24"X24"	1	35	35			
	"	MG 5-1-R	21"X21"	1	35	35			
60	RT OF STOP SIGN	I5-1	24"X24"	1	35	35			
	"	MG 6-1	21"X21"	1	35	35			RIGHT
61	150' E OF INTERSECTION	MO 4-5	24"X12"	1	35	35			
	"	M1-6	24"X24"	1	35	35			172
	"	MO 6-1	21"X21"	1	35	35			AHEAD

* ADDITIONAL QUANTITIES ARE SHOWN ELSEWHERE CONTINUED

TRAFFIC CONTROL DETOUR SIGNS AND COVERING SIGNS CONTINUED									
CATEGORY 0010									
SIGN NO.	LOCATION	SIGN CODE	SIZE W X H	NUMBER IN SERVICE	APPROX. SERVICE PERIOD 35 DAYS	643.3000 DETOUR SIGNS DAYS	* 643.0420 BARRICADES TYPE III DAYS	643.0905.S COVERING SIGNS EACH	REMARKS
62	50' N OF INTERSECTION	MO 4-5	24"X12"	1	35	35			
	"	M1-6	24"X24"	1	35	35			172
	"	MO 6-1	21"X21"	1	35	35			LEFT
63	100' N OF INTERSECTION	MO 4-5	24"X12"	1	35	35			
	"	M1-6	24"X24"	1	35	35			172
	"	MO 5-1-L	21"X21"	1	35	35			
64	RT OF STOP SIGN	I5-1	24"X24"	1	35	35			
	"	MG 6-1	21"X21"	1	35	35			LEFT
65	50' W OF INTERSECTION	MO 4-5	24"X12"	1	35	35			
	"	M1-6	24"X24"	1	35	35			172
	"	MO 6-1	21"X21"	1	35	35			RIGHT
66	RT OF STOP SIGN	I5-1	24"X24"	1	35	35			
	"	MG 6-1	21"X21"	1	35	35			AHEAD
67	COVER AIRPORT EXIT SIGN (UNDER STOP SIGN)							1	
68	TYPE I WB- BLUE (AIRPORT EXIT RT ARROW; TO 172-41-43)							1	
69	RT OF STOP SIGN	I5-1	24"X24"	1	35	35			
	"	MG 6-1	21"X21"	1	35	35			LEFT
70	150' S OF INTERSECTION	MO 4-5	24"X12"	1	35	35			
	"	M1-6	24"X24"	1	35	35			172
	"	MO 5-1-R	21"X21"	1	35	35			
71	50' W OF INTERSECTION	MO 4-5	24"X12"	1	35	35			
	"	M1-6	24"X24"	1	35	35			172
	"	MO 6-1	21"X21"	1	35	35			RIGHT
72	SW QUAD OF SERVICE ROAD INTERSECTION	MO 4-5	24"X12"	1	35	35			
	"	M1-6	24"X24"	1	35	35			172
	"	MO 6-1	21"X21"	1	35	35			LEFT
73	100 S OF STH 172 INTERSECTION	M1-6	24"X24"	1	35	35			172
	"	M4-5	24"X12"	2	35	70			
	"	M1-4	24"X24"	1	35	35			41
	"	M1-1-A	30"x24"	1	35	35			43
	"	MO 6-1	21"X21"	3	35	105			RT-RT-RT
74	TYPE I EB- BLUE (AIRPORT EXIT LT ARROW; AH -TITLETOWN JET CENTRE, JET AIR CORP, AIR CARGO, RENTAL CAR RETURN)							1	AIRPORT EXIT LEFT ARROW
	STAGE 1 SUBTOTAL			209		7,315	140	13	
	STAGE 2A - STH 54 & STH 172 ROUND-A-BOUT EAST 2/3				25				
	SIGN SEQUENCE NUMBER CHANGE								
100	100' E OF CTH U INTERSECTION ON STH 54	M3-2	24"X12"	1	25	25			
	"	M1-6	24"X24"	1	25	25			172
	"	W20-2-A	48"x48"	1	25	25			

* ADDITIONAL QUANTITIES ARE SHOWN ELSEWHERE CONTINUED

TRAFFIC CONTROL DETOUR SIGNS AND COVERING SIGNS CONTINUED									
CATEGORY 0010									
SIGN NO.	LOCATION	SIGN CODE	SIZE W X H	NUMBER IN SERVICE	APPROX. SERVICE PERIOD 25 DAYS	643.3000 DETOUR SIGNS DAYS	* 643.0420 BARRICADES TYPE III DAYS	643.0905.S COVERING SIGNS EACH	REMARKS
101A	MODIFY J1-2 (JCT 172; JCT E)	MO 4-8	24"X12"	1	25	25			
	"	M3-2	24"X12"	1	25	25			
	"	M1-6	EXISTING						
	"	MO 6-1	21"x21"	1	25	25			AHEAD
101B	J1-2 (JCT 172; JCT E)							1	JCT E
102	MODIFY J2-2 (E-54- AH; E- 172-AH RT)	MO 4-8	24"X12"	1	25	25			
	"	M3-2	EXISTING						
	"	M1-6	EXISTING						
	"	MO 6-1	21"x21"	1	25	25			AHEAD
103	D1-1 (A. STRAUBEL AIRPORT-RT)							1	A. STRAUBEL AIRPORT
104	MODIFY J3-2 (E-172-RT; S-E-RT)	MO 4-8	24"X12"	1	25	25			
	"	M3-2	EXISTING						
	"	M1-6	EXISTING						
	"	MO 6-1	21"x21"	1	25	25			AHEAD
104B	J3-2 (E-172-RT; S-E-RT)							1	SOUTH-CTH E- RIGHT ARROW
105	RT OF J4-1 (E-54)	MO 4-8	24"X12"	1	25	25			
	"	M3-2	24"X12"	1	25	25			
	"	M1-6	24"X24"	1	25	25			172
106	SW QUAD OF STH 54 & STH 172 INTERSECTION	R-11-2	48"x30"	1	25	25	25		
107A	J3-2 (E-172-LT; S-E-LT)							1	EAST 172 -LT
107B	J3-2 (E-172-LT; S-E-LT)							1	SOUTH-CTH E- LEFT ARROW
108A	MODIFY J1-2 (JCT 172; JCT E)	MO 4-8-A	24"x18"	1	25	25			
	"	M3-2	24"X12"	1	25	25			
	"	M1-6	EXISTING						
108B	J1-2 (JCT 172; JCT E)							1	JCT E
109	150' W OF OVERLAND RD INTERSECTION ON STH 54	MO 4-8	24"X12"	1	25	25			
	"	M3-4	24"X12"	1	25	25			
	"	M1-6	24"X24"	1	25	25			172
110	150' E OF OVERLAND RD INTERSECTION ON STH 54	MO 4-8	24"X12"	1	25	25			
	"	M3-2	24"X12"	1	25	25			
	"	M1-6	24"X24"	1	25	25			172
111	LT OF J1-1 (JCT GE)	MO 4-8	24"X12"	1	25	25			
	"	M3-2	24"X12"	1	25	25			
	"	M1-6	24"X24"	1	25	25			172
	"	MO 5-1-R	21"x21"	1	25	25			
112	LT OF J13-1 (GE-RT ARROW)	MO 4-8	24"X12"	1	25	25			
	"	M3-2	24"X12"	1	25	25			
	"	M1-6	24"X24"	1	25	25			172
	"	MO 6-1	21"x21"	1	25	25			RIGHT
113	500' E OF J1-1 (JCT GE) SIGN	M3-2	24"X12"	1	25	25			
	"	M1-6	24"X24"	1	25	25			172
	"	W 20-2A	48"X48"	1	25	25			

* ADDITIONAL QUANTITIES ARE SHOWN ELSEWHERE CONTINUED

CATEGORY 0010

TRAFFIC CONTROL DETOUR SIGNS AND COVERING SIGNS CONTINUED

SIGN NO.	LOCATION	SIGN CODE	SIZE W X H	NUMBER IN SERVICE	APPROX. SERVICE PERIOD 25 DAYS	643.3000 DETOUR SIGNS DAYS	* 643.0420 BARRICADES TYPE III DAYS	643.0905.S COVERING SIGNS EACH	REMARKS
114	200' W OF J1-1 (JCT GE) SIGN	MO 4-8	24"X12"	1	25	25			
	"	M 3-2	24"X12"	1	25	25			
	"	M1-6	24"x24"	1	25	25			172
	"	MO 5-1-L	21"X21"	1	25	25			
115	RT OF J13-1 (GE-LT ARROW)	MO 4-8	24"X12"	1	25	25			
	"	M 3-2	24"X12"	1	25	25			
	"	M1-6	24"X24"	1	25	25			172
	"	MO 6-1	21"X21"	1	25	25			LEFT
116	250' S OF STH 54 INTERSECTION ON CTH GE	MO 4-8	24"X12"	1	25	25			
	"	M 3-2	24"X12"	1	25	25			
	"	M 1-6	48"X24"	1	25	25			172
117	RT OF STOP SIGN	MO 4-8	24"X12"	1	25	25			
	"	M 3-4	24"X12"	1	25	25			
	"	M 1-6	24"X24"	1	25	25			172
	"	MO 6-1	21"X21"	1	25	25			LEFT
118	RT OF J1-3 (END GE)	MO 4-8	24"X12"	1	25	25			
	"	M 3-4	24"X12"	1	25	25			
	"	M 1-6	24"X24"	1	25	25			172
	"	MO 5-1-L	21"X21"	1	25	25			
119	MODIFY J1-1 (JCT 172) SIGN	MO 4-8-A	24"X18"	1	25	25			
	"	M1-6	EXISTING						
120	D1-62 (SB ROUND-A-BOUT DIAGRAMATIC) ON CTH GE							1	WEST 172
121	D1-1 @ SPLITTER ISLAND STH 172 WEST LEG							1	WEST 172 TILT RT
122	@ SPLITTER ISLAND STH 172 WEST LEG	R11-3	60"X30"	1	25	25	25		"1 1/2 MILES"
123	ABOVE D1-1 (GE-TILT RT) ON SPLITTER ISLAND	MO 4-8	24"X12"	1	25	25			
	"	M3-4	24"X12"	1	25	25			
	"	M1-6	24"X24"	1	25	25			172
	"	MO 6-2	21"X21"	1	25	25			RIGHT
124	D1-62 (NB ROUND-A-BOUT DIAGRAMATIC) ON CTH GE							1	WEST 172
125	250' W OF WB ROUND-A-BOUT DIAGRAMATIC ON STH 172	MO 4-8	24"X12"	1	25	25			
	"	M3-4	24"X12"	1	25	25			
	"	M1-6	24"X24"	1	25	25			172
	"	MO 5-1-R	21"X21"	1	25	25			
126	D1-62 (WB ROUND-A-BOUT DIAGRAMATIC) ON STH 172							1	WEST 172
127	500' E OF J1-1 (JCT GE) SIGN	W 20-2A	48"X48"	1	25	25			
	STAGE 2A SUBTOTAL			63		1,575	50	10	
STAGE 2B - STH 54 & STH 172 ROUND-A-BOUT WEST 1/3 & TIE INS					12				
	SIGN SEQUENCE NUMBER CHANGE								
150	500' E OF STH 54 & CTH U (WEST LEG) INTERSECTION SIGN	W 20-2A	48"X48"	1	12	12			

* ADDITIONAL QUANTITIES ARE SHOWN ELSEWHERE

CONTINUED

CATEGORY 0010

TRAFFIC CONTROL DETOUR SIGNS AND COVERING SIGNS CONTINUED

SIGN NO.	LOCATION	SIGN CODE	SIZE W X H	NUMBER IN SERVICE	APPROX. SERVICE PERIOD 12 DAYS	643.3000 DETOUR SIGNS DAYS	* 643.0420 BARRICADES TYPE III DAYS	643.0905.S COVERING SIGNS EACH	REMARKS
151	150' E OF DUCK CREEK BRIDGE	MO 4-8	24"X12"	1	12	12			
	"	M 4-5	24"X12"	1	12	12			
	"	M 3-2	24"X12"	2	12	24			
	"	M 50-2	48"X24"	1	12	12			54/172
	"	MO 4-22-R	24"X18"	2	12	24			SECOND RIGHT
152	M1-6 (54) ABOVE NIGHT ARROW-EB							1	54
153	RT OF SIGN # 3	MO 4-8	24"X12"	1	12	12			
		M4-5	24"X12"	1	12	12			
	"	M 3-2	24"X12"	2	12	24			
	"	M50-2	48"x24"	1	12	12			54/172
	"	MO 6-2R	21"X21"	2	12	24			RIGHT
154	M1-6 (54) ABOVE NIGHT ARROW	W1-6	48"X24"	1	12	12			TEMP REPLACE NIGHT ARROW
155	SE QUAD OF STH 54 & CTH U (EAST LEG) INTERSECTION	R 11-3	60"X30"	1	12	12	12		1/4 MILE
156	RT OF J13-1 (U-TILT RT)	MO 4-8	24"X12"	1	12	12			
	"	M 4-5	24"X12"	1	12	12			
	"	M 3-2	24"X12"	2	12	24			
	"	M 50-2	24"X24"	1	12	12			172
	"	MO 6-2R	21"X21"	2	12	24			
157	100' S OF STOP AHEAD SIGN ON CTH U	MO 4-8	24"X12"	1	12	12			
	"	M 4-5	24"X12"	1	12	12			
	"	M 3-2	24"X12"	2	12	24			
	"	M 50-2	48"X24"	1	12	12			54/172
	"	MO 5-1-L	21"X21"	2	12	24			
158	MODIFY J1-1 (JCT 54)	MO 4-8-A	24"X18"	1	12	12			
	"	M1-6	EXISTING						54
159	SE QUAD OF CTH E & CTH U INTERSECTION	MO 4-8	24"X12"	1	12	12			
	"	M 4-5	24"X12"	1	12	12			
	"	M 3-2	24"X12"	2	12	24			
	"	M 50-2	48"X24"	1	12	12			54/172
	"	MO 6-1	21"X21"	2	12	24			LEFT
160	RT OF J13-2 (E-AH; U-RT & AH ARROW) SIGN	MO 4-8	24"X12"	1	12	12			
	"	M 3-4	24"X12"	1	12	12			
	"	M 1-6	24"X24"	1	12	12			54
	"	MO 6-1	21"X21"	1	12	12			RIGHT
161	500' E OF CTH E & CTH U INTERSECTION	MO 4-8	24"X12"	1	12	12			
	"	M 3-4	24"X12"	1	12	12			
	"	M 1-6	24"X24"	1	12	12			"54"
	"	MO 5-1R	21"X21"	1	12	12			
162	RT OF J1-2 (JCT 172; END E) SIGN	MO 4-8	24"X12"	1	12	12			
	"	M 3-2	24"X12"	1	12	12			
	"	M 1-6	24"X24"	1	12	12			"54"
	"	MO 5-1R	21"X21"	1	12	12			

* ADDITIONAL QUANTITIES ARE SHOWN ELSEWHERE

CONTINUED

TRAFFIC CONTROL DETOUR SIGNS AND COVERING SIGNS CONTINUED									
CATEGORY 0010									
SIGN NO.	LOCATION	SIGN CODE	SIZE W X H	NUMBER IN SERVICE	APPROX. SERVICE PERIOD 12 DAYS	643.3000 DETOUR SIGNS DAYS	* 643.0420 BARRICADES TYPE III DAYS	643.0905.S COVERING SIGNS EACH	REMARKS
163	MODIFY J1-3 (JCT 54; JCT 172; END E) SIGN	MO 4-8	24"X12"	1	12	12			
	"	M 3-2	24"X12"	1	12	12			
	"	M1-6	EXISTING						54
	"	MO 6-1	21"X21"	1	12	12			RIGHT
164	D1-62 (EB ROUND-A-BOUT DIAGRAMATIC) ON CTH E							1	WEST 54
165	D1-62 (EB ROUND-A-BOUT DIAGRAMATIC) ON CTH E							1	EAST 54
166	RT OF ROUND-A-BOUT DIAGRAMATIC	MO 4-8	24"X12"	1	12	12			
	"	M 3-2	24"X12"	1	12	12			
	"	M1-6	24"X24"	1	12	12			54
	"	MO 6-1	21"X21"	1	12	12			RIGHT
167	ABOVE J3-1 (E-172-TILT RT) ON SPLITTER ISLAND	MO 4-8	24"X12"	1	12	12			
	"	M3-2	24"X12"	1	12	12			
	"	M1-6	24"X24"	1	12	12			54
	"	MO 6-2	21"X21"	2	12	24			RIGHT
168	RT OF J4-1 (E-172)	MO 4-8	24"X12"	1	12	12			
	"	M3-2	24"X12"	1	12	12			
	"	M1-6	24"X24"	1	12	12			54
169	MODIFY J1-3 (JCT 54; JCT E; END 172) SIGN	MO 4-8	24"X12"	1	12	12			
	"	M 3-4	24"X12"	1	12	12			
	"	M 1-6	EXISTING						54
	"	MO5-1-L	21"X21"	1	12	12			
170	TYPE 1 (E-FREEDOM-LT; AH W-54-NEW LONDON; E-54-GREEN BAY)							1	W-54-NEW LONDON; E-54-GREEN BAY
171	TYPE 1 (E-FREEDOM-LT; AH W-54-NEW LONDON; E-54-GREEN BAY)							1	W-54-NEW LONDON (LEFT SIDE)
172	LT SIDE OF RT LEG-SIGN BRIDGE (AH W-54-NEW LONDON)	MO 4-8	24"X12"	1	12	12			
	"	M 3-4	24"X12"	1	12	12			
	"	M 1-6	24"X24"	1	12	12			54
	"	MO6-1	21"X21"	1	12	12			LEFT
173	MODIFY R3-8-CC (LT & THRU; THRU & RT) SIGN BRIDGE RT LEG	R3-5-XL	42"x48"	1	12	12			
174	ACROSS 54 EAST EXIT LANES @ SPLITTER ISLAND	R11-2	48"x30"	1	12	12			
	ACROSS 54 EAST EXIT LANES @ SPLITTER ISLAND			3	12		36		
175	ACROSS 54 WEST EXIT LANES @ SPLITTER ISLAND	R11-2	48"x30"	1	12	12			
	ACROSS 54 WEST EXIT LANES @ SPLITTER ISLAND			6	12	72			
176	ABOVE J3-1 (S-E-TILT RT) ON SPLITTER ISLAND	MO 4-8	24"X12"	1	12	12			
	"	M 3-4	24"X12"	1	12	12			
	"	M 1-6	24"X24"	1	12	12			54
	"	MO 6-2R	21"X21"	1	12	12			LEFT
177	J3-1 (W-54-TILT RT) ON SPLITTER ISLAND							1	W-54-TILT RT
178	150' W OF ROUND-A-BOUT 54/172 LANES ON CTH E	MO 4-8	24"X12"	1	12	12			
	"	M 3-4	24"X12"	1	12	12			
	"	M 1-6	24"X24"	1	12	12			54

* ADDITIONAL QUANTITIES ARE SHOWN ELSEWHERE

CONTINUED

TRAFFIC CONTROL DETOUR SIGNS AND COVERING SIGNS CONTINUED									
CATEGORY 0010									
SIGN NO.	LOCATION	SIGN CODE	SIZE W X H	NUMBER IN SERVICE	APPROX. SERVICE PERIOD 12 DAYS	643.3000 DETOUR SIGNS DAYS	* 643.0420 BARRICADES TYPE III DAYS	643.0905.S COVERING SIGNS EACH	REMARKS
	SIGN # 179 SEQUENCE NUMBER SKIPPED								
180	LT OF D1-62 (EB ROUND-A-BOUT DIAGRAMATIC) ON STH 172	M0 4-8	24"X12"	1	12	12			
	"	M 3-2	24"X12"	1	12	12			
	"	M 1-6	28"X24"	1	12	12			54
	"	M05-1-L	21"X21"	1	12	12			
181	250' E OF SIGN # 180	M0 4-8	24"X12"	1	12	12			
	"	M 3-2	24"X12"	1	12	12			
	"	M 1-6	24"X24"	1	12	12			54
	"	M05-1-L	21"X21"	1	12	12			
182	500' E OF STH 172 WB DIAGRAMATIC SIGN	M 3-2	24"X12"	1	12	12			
	"	M 1-6	24"X24"	1	12	12			54
	"	W 20-2A	48"X48"	1	12	12			
183	RT OF D1-62 (WB ROUND-A-BOUT DIAGRAMATIC) ON STH 172	M0 4-8	24"X12"	1	12	12			
	"	M 3-2	24"X12"	1	12	12			
	"	M 1-6	48"X24"	1	12	12			54
	"	M05-1-R	21"X21"	1	12	12			
184	ABOVE D1-62 (WB ROUND-A-BOUT DIAGRAMATIC) STH 172 LEG	M0 4-8	24"X12"	1	12	12			
	"	M 3-4	24"X12"	1	12	12			
	"	M 1-6	24"X24"	1	12	12			54
	"	M0 6-1	21"X21"	1	12	12			AHEAD
185	ABOVE D1-1 (GE-TILT RT) ON NB CTH GE SPLITTER ISLAND	M0 4-8	24"X12"	1	12	12			
	"	M3-2	24"X12"	1	12	12			
	"	M 1-6	24"X24"	1	12	12			54
	"	M6-2	21"X21"	1	12	12			RIGHT
186	ABOVE D1-1 (W-172-TILT RT) ON SPLITTER ISLAND	M0 4-8	24"X12"	1	12	12			
	"	M3-4	24"X12"	1	12	12			
	"	M1-6	24"X24"	1	12	12			"54"
	"	M6-2	21"X21"	1	12	12			RIGHT
187	250' W OF SIGN # 186	M0 4-8	24"X12"	1	12	12			
	"	M 3-4	24"X12"	1	12	12			
	"	M 1-6	24"X24"	1	12	12			"54"
188	250' N OF STH 172 INTERSECTION ON CTH GE	M0 4-8	24"X12"	1	12	12			
	"	M3-2	24"X12"	1	12	12			
	"	M 1-6	24"X24"	1	12	12			54
189	MODIFY J1-1 (JCT 54) SIGN	M0 4-8-A	24"X18"	1	12	12			
	"	M1-6	EXISTING						
190	RT OF D1-62 (SB ROUND-A-BOUT DIAGRAMATIC) WEST 172 LEG	M0 4-8	24"X12"	1	12	12			
	"	M 3-4	24"X12"	1	12	12			
	"	M1-6	24"X24"	1	12	12			54/172
	"	M0 5-1-R	21"X21"	1	12	12			

* ADDITIONAL QUANTITIES ARE SHOWN ELSEWHERE

CONTINUED

TRAFFIC CONTROL DETOUR SIGNS AND COVERING SIGNS CONTINUED

CATEGORY 0010

SIGN NO.	LOCATION	SIGN CODE	SIZE W X H	NUMBER IN SERVICE	APPROX. SERVICE PERIOD 12 DAYS	643.3000 DETOUR SIGNS DAYS	* 643.0420 BARRICADES TYPE III DAYS	643.0905.S COVERING SIGNS EACH	REMARKS
191	250' S OF STH 54 INTERSECTION ON CTH GE	MO 4-8	24"X12"	1	12	12			
	"	M 3-4	24"X12"	1	12	12			
	"	M 1-6	24"X24"	1	12	12			54
192	NW QUAD OF CTH GE INTERSECTION ON STH 54	R11-3	60"X30"	1	12	12			"2 MILES"
193	RT OF J13-1 (GE-LT ARROW)	MO 4-8	24"X12"	1	12	12			
	"	M 3-4	24"X12"	1	12	12			
	"	M1-6	24"X24"	1	12	12			54
	"	MO 6-1	21"X21"	1	12	12			LEFT
194	SW QUAD OF STH 54 & CTH GE INTERSECTION	MO 4-8	24"X12"	1	12	12			
	"	M 3-4	24"X12"	1	12	12			
	"	M1-6	24"X24"	1	12	12			54
	"	MO 6-1	21"X21"	1	12	12			LEFT
195	200' W OF J1-1 (JCT GE) SIGN	MO 4-8	24"X12"	1	12	12			
	"	M 3-4	24"X12"	1	12	12			
	"	M1-6	24"X24"	1	12	12			54/172
	"	MO 5-1-L	21"X21"	1	12	12			
196	700' E OF SIGN # 195	W 20-2A	48"X48"	1	12	12			
	STAGE 2B SUBTOTAL			147		1,728	48	6	
	STAGE 1 SUBTOTAL			209		7315	140	13	
	STAGE 2A SUBTOTAL			63		1,575	50	10	
	STAGE 2B SUBTOTAL			147		1,728	48	6	
PROJECT TOTAL				419		10,618	238	29	

* ADDITIONAL QUANTITIES ARE SHOWN ELSEWHERE

GEOTEXTILE FABRIC TYPE HR

CATEGORY	STATION	LOCATION	645.0120 SY
0010		DIS 1	18
0010		DIS 2	18
0010		DIS 3	18
0010		DIS 4	18
0010		DIS 5	18
0010		DIS 6	18
0010		DIS 7	18
0010	12+46	STH 172 RT	36
0010	14+25	STH 172 LT	36
0010		DIS 12	22
0010		DIS 13	18
0010		DIS 14	18
0010		DIS 15	18
0010		END 16	41
0010	61+00	AIRPORT ENT. RT	36
0010	62+10	AIRPORT ENT. RT	36
0010	52+00	AIRPORT EXIT LT	36
0010	52+00	AIRPORT EXIT RT	36
0010	152+50	STH 172 RT	36
0010	152+50	STH 172 RT	36
0010	153+00	STH 172 LT	36
0010	154+85	STH 172 RT	36
0010	154+85	STH 172 LT	36
TOTAL			638

PAVEMENT MARKING EPOXY 4-INCH

CATEGORY	STATION	TO	STATION	LOCATION	646.0106 LF	REMARKS
0010	3+15	-	9+40	STH 54 RT	575	WHITE EDGE LINE
0010	3+15	-	9+00	STH 54 LT	677	WHITE EDGE LINE
0010	5+64	-	9+40	STH 54 SPLITTER ISLAND	761	YELLOW EDGE LINE
0010	3+15	-	5+64	STH 54	498	YELLOW CENTER LINE
0010	524+82	-	528+45	CTH E LT	395	WHITE EDGE LINE
0010	524+82	-	528+57	CTH E RT	381	WHITE EDGE LINE
0010	527+00	-	528+37	CTH E SPLITTER ISLAND	263	YELLOW EDGE LINE
0010	524+82	-	527+00	CTH E	434	YELLOW CENTER LINE
0010	10+61	-	16+05	STH 172 RT	517	WHITE EDGE LINE
0010	17+28	-	22+96	STH 172 RT	576	WHITE EDGE LINE
0010	10+76	-	22+96	STH 172 LT	1176	WHITE EDGE LINE
0010	10+95	-	16+27	STH 172 SPLITTER ISLAND	1007	YELLOW EDGE LINE
0010	17+33	-	22+96	STH 172	1030	YELLOW CENTER LINE
0010	530+00	-	539+67	STH 54 RT	983	WHITE EDGE LINE
0010	529+66	-	539+67	STH 54 LT	943	WHITE EDGE LINE
0010	530+15	-	534+00	STH 54 SPLITTER ISLAND	725	YELLOW EDGE LINE
0010	534+00	-	539+67	STH 54	1141	YELLOW CENTER LINE
0010	529+75	-	531+20	STH 54 RT TURN ISLAND	109	WHITE EDGE LINE
0010	529+75	-	531+75	STH 54 RT TURN ISLAND	142	YELLOW EDGE LINE
0010	136+00	-	142+33	STH 172 RT	633	EDGE LINE
0010	136+00	-	143+47	STH 172 LT	747	EDGE LINE
0010	126+80	-	137+38	STH 172	1300	CHANNELIZATION
0010	136+00	-	142+33	STH 172 EB LANES	160	CENTER LINE
0010	136+00	-	142+33	STH 172 EB LANES	633	LT EDGE LINE
0010	136+00	-	143+47	STH 172 WB LANES	215	CENTER LINE
0010	136+00	-	143+47	STH 172 WB LANES	747	RT EDGE LINE
0010	142+33	-	146+65	STH 172	432	EDGE LINE
0010	142+33	-	146+80	STH 172 RT	447	EDGE LINE
0010	143+47	-	148+44	STH 172 LT	496	EDGE LINE
0010	143+47	-	148+54	STH 172 LT	506	EDGE LINE
0010	151+31	-	158+06	STH 172 RT	525	EDGE LINE
0010	151+65	-	158+06	STH 172 RT	523	EDGE LINE
0010	153+20	-	158+06	STH 172 LT	486	EDGE LINE
0010	153+45	-	158+06	STH 172 LT	461	EDGE LINE
0010	49+52	-	52+55	AIRPORT EXIT	303	EDGE LINE
0010	49+61	-	52+55	AIRPORT EXIT	294	EDGE LINE
0010	61+00	-	63+75	AIRPORT ENTRANCE	275	EDGE LINE
0010	61+10	-	63+75	AIRPORT ENTRANCE	132	EDGE LINE
TOTAL					21648	

PAVEMENT MARKING EPOXY 8-INCH

CATEGORY	STATION	TO	STATION	LOCATION	646.0126 LF	REMARKS
0010	17+33	-	18+27	STH 172	94	WHITE
TOTAL					94	

PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH

CATEGORY	STATION	TO	STATION	LOCATION	646.0841.S LF	REMARKS
0010	142+33	-	148+05	STH 172 RT	150	CENTERLINE
0010	143+47	-	149+10	STH 172 LT	175	CENTERLINE
0010	149+12	-	150+10	STH 172	72	LANE LINE
0010	149+50	-	150+58	STH 172	72	LANE LINE
0010	150+61	-	158+06	STH 172 RT	162	CENTERLINE
0010	152+00	-	158+06	STH 172 LT	188	CENTERLINE
0010	52+55	-	53+71	AIRPORT EXIT	118	LANE LINE
0010	62+00	-	63+75	AIRPORT ENTRANCE	175	CENTERLINE
TOTAL					1112	

PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 8-INCH

CATEGORY	STATION	TO	STATION	LOCATION	646.0843.S LF	REMARKS
0010	148+33	-	149+22	STH 172 RT	85	LANE LINE
0010	150+48	-	151+82	STH 172 LT	138	LANE LINE
0010	49+70	-	52+55	AIRPORT EXIT	144	CENTERLINE
				STH 172 @ AIRPORT	83	SPLITTER ISLAND @ CIRCULATORY ROADWAY
				STH 172 @ AIRPORT	85	SPLITTER ISLAND @ CIRCULATORY ROADWAY
				AIRPORT ENTRANCE @ 172	57	SPLITTER ISLAND @ CIRCULATORY ROADWAY
0010				CASINO ENTRANCE @ 172	58	SPLITTER ISLAND @ CIRCULATORY ROADWAY
0010	55+27	-	56+00	CASINO EXIT	73	LANE LINE
TOTAL					723	

PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE 4-INCH

CATEGORY	STATION	TO	STATION	LOCATION	646.0881.S LF	REMARKS
0010	5+50	-	6+75	STH 54	37.5	LANE LINE SKIP
0010	12+60	-	13+95	STH 172	37.5	LANE LINE SKIP
TOTAL					75.0	

PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE 8-INCH

CATEGORY	STATION	TO	STATION	LOCATION	646.0883.S LF	REMARKS
0010	5+50	-	6+65	STH 54	37.5	WHITE CENTERLINE
0010	6+65	-	9+52	STH 54	521.0	WHITE LANE LINES
0010	12+52	-	14+00	STH 54	37.5	WHITE CENTERLINE
0010	11+01	-	12+52	STH 172	267.0	WHITE LANE LINES
0010	531+20	-	533+30	STH 54	362.0	RT TURN GORE
0010				STH 54 - WEST LEG	81.0	SPLITTER ISLAND @ CIRCULATORY ROADWAY
0010				CTH E - SOUTH LEG	44.0	SPLITTER ISLAND @ CIRCULATORY ROADWAY
0010				STH 172 - EAST LEG	74.0	SPLITTER ISLAND @ CIRCULATORY ROADWAY
0010				STH 54 - NORTH LEG	80.0	SPLITTER ISLAND @ CIRCULATORY ROADWAY
TOTAL					1504.0	

PAVEMENT MARKING CURB EPOXY

CATEGORY	STATION	LOCATION	647.0456 LF	REMARKS
0010	5+67	STH 54 - WEST LEG	10	STH 54/STH 172
0010	527+02	CTH E - SOUTH LEG	10	STH 54/STH 172
0010	533+95	STH 54 - NORTH LEG	10	STH 54/STH 172
0010	6+76	STH 54 - WEST LEG	10	STH 54/STH 172
0010	7+38	STH 54 - WEST LEG	10	STH 54/STH 172
0010	15+17	STH 172 - EAST LEG	10	STH 54/STH 172
0010	56+25	CASINO ENTRANCE	10	STH 172/AIRPORT
TOTAL			70	

PAVEMENT MARKING DIAGONAL EPOXY 12-INCH

CATEGORY	STATION	TO	STATION	LOCATION	647.0726 LF
0010	15+25	-	22+32	STH 172	409
0010	525+68	-	526+96	CTH E	56
0010	4+32	-	5+60	STH 54	59
0010	534+00	-	535+25	STH 54	68
TOTAL					592

PAVEMENT MARKING ISLAND NOSE EPOXY

CATEGORY	LOCATION	647.0606 EACH	REMARKS
0010	STH 54 - WEST LEG	5	STH 54/STH 172
0010	CTH E - SOUTH LEG	3	STH 54/STH 172
0010	STH 54 - NORTH LEG	5	STH 54/STH 172
0010	STH 172 - EAST LEG	4	STH 54/STH 172
0010	STH 172 - WEST LEG	2	STH 172/AIRPORT
0010	AIRPORT ENTRANCE	2	STH 172/AIRPORT
0010	CASINO ENTRANCE	3	STH 172/AIRPORT
0010	STH 172 - EAST LEG	2	STH 172/AIRPORT
TOTAL		26	

PAVEMENT MARKING CONCRETE CORRUGATED MEDIAN EPOXY

CATEGORY	LOCATION	647.0856 SF	REMARKS
0010	STH 172 EAST LEG	528	STH 54 / STH 172
TOTAL		528	

CONSTRUCTION STAKING STORM SEWER SYSTEM

CATEGORY	LOCATION	650.4000 EACH
0010	STH 172/AIRPORT ROUNDABOUT	13
0010	STH 172/STH 54 ROUNDABOUT	29
TOTAL		42

CONSTRUCTION STAKING SUBGRADE

CATEGORY	STATION	TO	STATION	LOCATION	650.4500 LF
0010	3+15	-	9+38	STH 54 - WEST LEG	1047
0010	524+82	-	528+37	CTH E	500
0010	529+72	-	539+67	STH 54 - NORTH LEG	1462
0010	11+25	-	22+91	STH 172	1594
0010	100+20	-	101+81	STANDING STONE DR.	161
0010	144+30	-	156+25	STH 172	1195
0010	55+25	-	57+25	CASINO ENT	200
0010	60+00	-	63+75	AIRPORT ENT	375
0010	49+50	-	53+65	AIRPORT EXIT	415
TOTAL					6949

CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER

CATEGORY	LOCATION	650.5500 LF
0010	STH 172 / STH 54 ROUNDABOUT	6405
0010	STH 172 / AIRPORT ROUNDABOUT	419
0010	STH 172 / 54 / E CENTRAL ISLAND	286
0010	STH 172 / AIRPORT CENTRAL ISLAND	290
TOTAL		7400

CONSTRUCTION STAKING BASE

CATEGORY	STATION	TO	STATION	LOCATION	650.5000 LF
0010	3+15	-	9+38	STH 54 - WEST LEG	1047
0010	524+82	-	528+37	CTH E	500
0010	529+72	-	539+67	STH 54 - NORTH LEG	1462
0010	11+25	-	22+91	STH 172	1594
0010	100+20	-	101+81	STANDING STONE DR.	161
0010	55+25	-	57+25	CASINO ENT	200
TOTAL					4964

CONSTRUCTION STAKING PIPE CULVERTS

CATEGORY	STATION	LOCATION	650.6000 EACH	REMARKS
0010	532+79	STH 54 NORTH LEG	1	30" RCCP
0010	55+30	CASINO ENT	1	29"x45" REINFORCED CONCRETE
0010	VARIOUS	STH 54 / 172 ROUNDABOUT	7	PE/FE CULVERTS
TOTAL			9	

CONSTRUCTION STAKING CONCRETE PAVEMENT

CATEGORY	STATION	TO	STATION	LOCATION	650.7000 LF	REMARKS
0010	144+30	-	149+25	STH 172	495	EB LANES
0010	145+75	-	149+25	STH 172	350	WB LANES
0010	250+00	-	253+45	STH 172	345	ROUNDAABOUT
0010	150+50	-	154+25	STH 172	375	EB LANES
0010	150+50	-	156+25	STH 172	575	WB LANES
0010	60+00	-	63+75	AIRPORT ENTRANCE	375	TO THE AIRPORT
0010	50+75	-	53+60	AIRPORT EXIT	285	FROM THE AIRPORT
TOTAL					2800	

CONSTRUCTION STAKING RESURFACING REFERENCE

CATEGORY	STATION	TO	STATION	LOCATION	650.8000 LF
0010	136+00	-	144+30	STH 172	830
0010	136+00	-	145+75	STH 172	975
TOTAL					1805

CONSTRUCTION STAKING ELECTRICAL INSTALLATIONS (PROJECT)

CATEGORY	STATION	TO	STATION	LOCATION	650.8500 LS
0010	1+00	-	158+00	PROJECT	1
TOTAL					1

CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (PROJECT)

CATEGORY	STATION	TO	STATION	LOCATION	650.9910 LS
0010	1+00	-	158+00	PROJECT	1
TOTAL					1

CONSTRUCTION STAKING SLOPE STAKES

CATEGORY	STATION	TO	STATION	LOCATION	650.9920 LF
0010	3+15	-	9+38	STH 54 - WEST LEG	1047
0010	524+82	-	528+37	CTH E	500
0010	529+72	-	539+67	STH 54 - NORTH LEG	1462
0010	11+25	-	22+91	STH 172	1594
0010	100+20	-	101+81	STANDING STONE DR.	161
0010	144+25	-	149+25	STH 172 EB	500
0010	142+50	-	149+25	STH 172 WB	675
0010	60+50	-	63+50	AIRPORT ENT LT	300
0010	60+50	-	63+50	AIRPORT ENT RT	300
0010	50+75	-	52+50	AIRPORT EXIT LT	172
0010	50+75	-	53+50	AIRPORT EXIT RT	275
0010	55+25	-	56+00	CASINO EXIT	75
0010	55+25	-	57+00	CASINO ENT	175
0010	150+50	-	154+25	STH 172 LT	375
0010	150+50	-	156+25	STH 172 RT	575
TOTAL					8186

CONSTRUCTION STAKING WALL MODULAR BLOCK LANDSCAPE

CATEGORY	STATION	TO	STATION	LOCATION	SPV.0105.05 LS
0010	6+00	-	7+00	STH 54	1
TOTAL					1

SAWING ASPHALT

CATEGORY	STATION	LOCATION	690.0150 LF	REMARKS
0010	3+15	STH 54	46	PROJECT LIMITS
0010	3+26	STH 54 RT	22	DRIVEWAY
0010	4+00	STH 54 LT	17	DRIVEWAY
0010	4+37	STH 54 RT	27	DRIVEWAY
0010	4+69	STH 54 LT	16	DRIVEWAY
0010	524+82	CTH E	25	PROJECT LIMITS
0010	526+21	CTH E RT	25	DRIVEWAY
0010	526+76	CTH E RT	11	DRIVEWAY
0010	100+20	STANDING STONE DR.	24	PROJECT LIMITS
0010	17+39	STH 172 LT	18	DRIVEWAY
0010	22+96	STH 172	24	PROJECT LIMITS
0010	539+67	STH 54	24	PROJECT LIMITS
TOTAL			279	

SAWING CONCRETE

CATEGORY	STATION	LOCATION	690.0250 LF
0010	144+29	STH 172 EB	24
0010	145+75	STH 172 WB	24
0010	154+29	STH 172 EB	24
0010	157+00	STH 172 WB	24
TOTAL			96

PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 1

CATEGORY	LOCATION	SPV.0060.01 EACH	REMARKS
0010	STH 172/STH 54	2	CIRCULATORY ROADWAY
0010	STH 172/AIRPORT ENTRANCE	2	CIRCULATORY ROADWAY
TOTAL		4	

PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 2

CATEGORY	STATION	LOCATION	SPV.0060.02 EACH	REMARKS
0010		STH 54 - NORTH LEG	2	BYPASS LANE
0010	52+05	AIRPORT EXIT	1	
0010	52+93	AIRPORT EXIT	1	
0010	55+42	AIRPORT EXIT	1	
0010	55+93	AIRPORT EXIT	1	
TOTAL			6	

PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC WORDS

CATEGORY	STATION	LOCATION	SPV.0060.05 EACH
0010		STH 172/STH 54	7
0010	149+03	STH 172 RT	1
0010	149+13	STH 172 RT	1
0010	150+52	STH 172 LT	1
0010	150+59	STH 172 LT	1
0010	52+63	AIRPORT EXIT	1
0010	53+61	AIRPORT EXIT	2
TOTAL			14

PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 3

CATEGORY	LOCATION	SPV.0060.03 EACH	REMARKS
0010	STH 172/STH 54	4	CIRCULATORY ROADWAY
0010	STH 172/AIRPORT ENTRANCE	4	CIRCULATORY ROADWAY
TOTAL		8	

PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 3R

CATEGORY	STATION	LOCATION	SPV.0060.04 EACH	REMARKS
0010		STH 54 - WEST LEG	2	RT TURN/THRU LANE
0010		STH 172 - EAST LEG	2	RT TURN/THRU LANE
0010	147+28	STH 172 RT	2	
0010	148+34	STH 172 RT	2	
0010	150+39	STH 172 LT	2	
0010	152+70	STH 172 LT	2	
0010	52+05	AIRPORT EXIT	1	
0010	52+93	AIRPORT EXIT	1	
0010	55+93	CASINO EXIT	1	
TOTAL			15	

PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC YIELD LINE

CATEGORY	STATION	LOCATION	SPV.0090.02 LF	REMARKS
0010		STH 54 - WEST LEG	52	
0010		CTH E - SOUTH LEG	30	
0010		STH 172 - EAST LEG	54	
0010		STH 54 - NORTH LEG	34	THROUGH LANE
0010		STH 54 - NORTH LEG	39	BYPASS LANE
0010	149+22	STH 172 YIELD LINE	27	2' SKIP, 2' GAP
0010	150+47	STH 172 YIELD LINE	27	2' SKIP, 2' GAP
0010	53+70	AIRPORT EXIT YIELD LINE	27	2' SKIP, 2' GAP
0010	55+28	CASINO EXIT YIELD LINE	24	2' SKIP, 2' GAP
TOTAL			314	

PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC 8-INCH

CATEGORY	STATION	TO	STATION	LOCATION	SPV.0090.03 LF	REMARKS
0010	9+18	-	10+52	STH 54/STH 172	67	CIRCULATORY ROADWAY
0010	9+80	-	10+81	STH 54/STH 172	52	CIRCULATORY ROADWAY
TOTAL					119	

PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC 12-INCH

CATEGORY	STATION	TO	STATION	LOCATION	SPV.0090.04 LF
0010	11+25	-	12+10	STH 172	26
0010	7+00	-	9+34	STH 54	67
TOTAL					93

PAVEMENT MARKING GROOVED CONTRAST PREFORMED THERMOPLASTIC 8-INCH

CATEGORY	LOCATION	SPV.0090.05 LF	REMARKS
0010	STH 172 WB EXIT AT THE AIRPORT	27	CENTERLINE OF CIRCULATORY ROADWAY
0010	STH 172 EB EXIT AT THE AIRPORT	27	CENTERLINE OF CIRCULATORY ROADWAY
TOTAL		54	

COLORED CONCRETE SIDEWALK 4-INCH

CATEGORY	STATION	TO	STATION	LOCATION	SPV.0165.01 SF	REMARKS
0010	5+62	-	6+82	STH 54 - WEST LEG	898	SPLITTER ISLAND
0010	7+30	-	9+38	STH 54 - WEST LEG	3585	SPLITTER ISLAND
0010	526+97	-	528+35	CTH E - SOUTH LEG	981	SPLITTER ISLAND
0010	11+18	-	15+24	STH 172 - EAST LEG	2054	SPLITTER ISLAND
0010	530+20	-	534+02	STH 54 - NORTH LEG	1458	SPLITTER ISLAND
0010	529+96	-	531+73	STH 54 - NORTH LEG	2269	BYPASS ISLAND
0010	53+00	-	53+65	AIRPORT SPLITTER ISLAND	727	
0010	55+35	-	56+28	CASINO SPLITTER ISLAND	669	
0010	148+00	-	149+10	STH 172 SPLITTER ISLAND	1848	
0010	150+56	-	152+25	STH 172 SPLITTER ISLAND	3141	
TOTAL					17630	

TRUCK APRON COLORED CONCRETE 12-INCH

CATEGORY	LOCATION	SPV.0180.01 SY
0010	STH 172 / STH 54 TRUCK APRON	468
0010	AIRPORT ROUNDABOUT TRUCK APRON	365
TOTAL		833

COLORED CONCRETE SUMMARY

		*305.0120 BASE AGGREGATE DENSE 1 1/4-INCH	SPV.0165.03 COLORED AND STAMPED CONCRETE SIDEWALK 4-INCH	SPV.0165.02 COLORED CONCRETE SIDEWALK 5-INCH
CATEGORY	LOCATION	TON	S.F.	S.F.
0020	CENTRAL ISLAND - STH 172 / STH 54	110	2,240	2,250
0020	CENTRAL ISLAND - STH 172 / AIRPORT	90	1,690	2,000
TOTAL		200	3,930	4,250

* ADDITIONAL QUANTITIES ARE SHOWN ELSEWHERE

TOPSOIL, SEED, MULCHING, AND FERTILIZER

		SPV.0085.01 SPECIAL LOW-MAINTENANCE SEED MIX	625.0100 TOPSOIL	*627.0200 MULCHING	*629.0210 FERTILIZER TYPE B
CATEGORY	LOCATION	LB	SY	SY	CWT
0020	CENTRAL ISLAND - STH 172 / STH 54		220		1
0020	CENTRAL ISLAND - STH 172 / AIRPORT		130		1
0020	530+60 - 533+98	7	1165	1165	1
0020	12+50 - 15+19	3	470	470	1
TOTAL		10	1985	1635	4

* ADDITIONAL QUANTITIES ARE SHOWN ELSEWHERE

PLANTING SUMMARY

		SPV.0035.01	SPV.0060.08 PERENNIAL PLANTS SEDUM BABY TEARS	SPV.0060.09 PERENNIAL PLANTS SEDUM GREEN ICE	SPV.0060.10 PERENNIAL PLANTS SEDUM BITHYNICUM	SPV.0060.11 PERENNIAL PLANTS LITTLE BLUESTEM
CATEGORY	LOCATION	PLANTING MIXTURE CY	6-INCH POT EACH	6-INCH POT EACH	6-INCH POT EACH	GRASS 1 GAL EACH
0020	CENTRAL ISLAND - STH 172 / STH 54	75	161	207	72	90
0020	CENTRAL ISLAND - STH 172 / AIRPORT	45	159	122	55	80
TOTAL		120	320	329	127	170

CONSTRUCTION STAKING CENTRAL ISLAND LANDSCAPING

		SPV.0105.03 CONSTRUCTION STAKING CENTRAL ISLAND LANDSCAPING STH 54	SPV.0105.04 CONSTRUCTION STAKING CENTRAL ISLAND LANDSCAPING AIRPORT ENTRANCE
CATEGORY	LOCATION	LS	LS
0020	CENTRAL ISLAND - STH 172 / STH 54	1	
0020	CENTRAL ISLAND - STH 172 / AIRPORT		1
TOTAL		1	1

REMOVING CONCRETE BASES

CATEGORY	LOCATION	* 204.0195 EACH
0010	STH 172/STH 54	8
TOTAL		8

* ADDITIONAL QUANTITIES ARE SHOWN ELSEWHERE

CONDUIT RIGID NONMETALLIC SCHEDULE 40 SUMMARY

CATEGORY	LOCATION	FROM	TO	* 652.0225 2-Inch LF	* 652.0235 3-Inch LF
0010	STH 172/STH 54	CB1	PB1		20
0010	STH 172/STH 54	PB1	LB2	10	
0010	STH 172/STH 54	LB2	LB3	100	
0010	STH 172/STH 54	LB3	LB4	150	
0010	STH 172/STH 54	PB1	PB2		120
0010	STH 172/STH 54	PB2	LB5	30	
0010	STH 172/STH 54	PB2	PB3		100
0010	STH 172/STH 54	PB3	LB6	160	
0010	STH 172/STH 54	PB3	PB4		40
0010	STH 172/STH 54	PB4	LB7	20	
0010	STH 172/STH 54	PB4	PB5		60
0010	STH 172/STH 54	PB5	LB8	20	
0010	STH 172/STH 54	PB5	PB6		60
0010	STH 172/STH 54	PB6	LB9	30	
0010	STH 172/STH 54	PB6	PB7		100
0010	STH 172/STH 54	PB7	LB10	40	
0010	STH 172/STH 54	LB10	LB11	160	
0010	STH 172/STH 54	PB7	PB8		120
0010	STH 172/STH 54	PB8	LB12	10	
0010	STH 172/STH 54	LB12	PB9	80	
0010	STH 172/STH 54	PB9	LB13	30	
0010	STH 172/STH 54	PB9	PB10		70
0010	STH 172/STH 54	PB10	LB1	30	
0010	STH 172/STH 54	PB10	PB1		90
TOTAL				870	780

* ADDITIONAL QUANTITIES ARE SHOWN ELSEWHERE

PULL BOXES STEEL 24X42-INCH

CATEGORY	LOCATION	* 653.0140 24x42-Inch EACH
0010	STH 172/STH 54	10
TOTAL		10

* ADDITIONAL QUANTITIES ARE SHOWN ELSEWHERE

REMOVING PULL BOXES

CATEGORY	LOCATION	* 653.0905 EACH
0010	STH 172/STH 54	9
TOTAL		9

* ADDITIONAL QUANTITIES ARE SHOWN ELSEWHERE

CONCRETE BASES SUMMARY

CATEGORY	LOCATION	* 654.0105 Type 5 EACH	* 654.0220 Control Cabinet Type 10 NER EACH
0010	STH 172/STH 54	13	1
TOTAL		13	1

* ADDITIONAL QUANTITIES ARE SHOWN ELSEWHERE

ELECTRICAL WIRE LIGHTING SUMMARY

CATEGORY	LOCATION	(240 VOLT SYSTEM)		TO	10AWG		12AWG	
		Circuit	FROM		* 655.0615 Ungrounded Conductor (Black/Red) LF	* 655.0615 Equipment Grounding Conductor (Green) LF	* 655.0610 Ungrounded Conductor (Black/Red) LF	* 655.0610 Equipment Grounding Conductor (Green) LF
0010	STH 172/STH 54	A	CB1	LB1	360	180		
0010	STH 172/STH 54		LB1	Luminaire			100	50
0010	STH 172/STH 54		CB1	PB1		40		
0010	STH 172/STH 54		LB1	PB10		50		
0010	STH 172/STH 54		CB1	LB2	120	60		
0010	STH 172/STH 54		LB2	Luminaire			100	50
0010	STH 172/STH 54		LB2	LB3	240	120		
0010	STH 172/STH 54		LB3	Luminaire			100	50
0010	STH 172/STH 54		LB3	LB4	340	170		
0010	STH 172/STH 54		LB4	Luminaire			100	50
0010	STH 172/STH 54							
0010	STH 172/STH 54	B	CB1	LB5	420	210		
0010	STH 172/STH 54		LB5	Luminaire			100	50
0010	STH 172/STH 54		LB5	PB2		50		
0010	STH 172/STH 54		LB5	LB7	480	240		
0010	STH 172/STH 54		LB7	Luminaires			200	100
0010	STH 172/STH 54		LB7	PB4		40		
0010	STH 172/STH 54		LB7	PB3		90		
0010	STH 172/STH 54		LB7	LB6	520	260		
0010	STH 172/STH 54		LB6	Luminaire			100	50
0010	STH 172/STH 54							
0010	STH 172/STH 54	C	CB1	LB8	840	420		
0010	STH 172/STH 54		LB8	Luminaire			100	50
0010	STH 172/STH 54		LB8	PB5		40		
0010	STH 172/STH 54		LB8	LB9	300	150		
0010	STH 172/STH 54		LB9	Luminaire			100	50
0010	STH 172/STH 54		LB9	PB6		50		
0010	STH 172/STH 54		LB9	LB10	420	210		
0010	STH 172/STH 54		LB10	Luminaire			100	50
0010	STH 172/STH 54		LB10	PB7		60		
0010	STH 172/STH 54		LB10	LB11	360	180		
0010	STH 172/STH 54		LB11	Luminaire			100	50
0010	STH 172/STH 54							
0010	STH 172/STH 54	D	CB1	LB13	520	260		
0010	STH 172/STH 54		LB13	Luminaire			100	50
0010	STH 172/STH 54		LB13	PB9		50		
0010	STH 172/STH 54		LB13	LB12	280	140		
0010	STH 172/STH 54		LB12	Luminaire			100	50
0010	STH 172/STH 54		LB12	PB8		30		
SUBTOTAL					5,200	3,100	1,400	700
TOTAL					8,300		2,100	

* ADDITIONAL QUANTITIES ARE SHOWN ELSEWHERE

LIGHTING SUMMARY

		* 656.0200 Electrical Service Meter Breaker Pedestal (STH 172/STH 54)	* 657.0255 Transformer Bases Standard 11 1/2-Inch Bolt Circle	* 657.0322 Poles Type 5 (Aluminum)	* 657.0710 Luminaire Arms Truss Type 4 1/2-Inch Clamp 12-FT	659.0115 Luminaires Utility HPS 150 Watts	* 659.0125 Luminaires Utility HPS 250 Watts
CATEGORY	LOCATION	LS	EACH	EACH	EACH	EACH	EACH
0010	STH 172/STH 54	1	13	13	14	8	6
	TOTAL	1	13	13	14	8	6

* ADDITIONAL QUANTITIES ARE SHOWN ELSEWHERE

REMOVING CONCRETE BASES

CATEGORY	LOCATION	* 204.0195 EACH
0010	STH 172/Airport-Casino Ent	12
TOTAL		12

* ADDITIONAL QUANTITIES ARE SHOWN ELSEWHERE

CONDUIT RIGID NONMETALLIC SCHEDULE 40 SUMMARY

CATEGORY	LOCATION	FROM	TO	* 652.0225 2-Inch LF	* 652.0235 3-Inch LF
0010	STH 172/AIRPORT-CASINO ENT.	CB1	PB7		40
0010	STH 172/AIRPORT-CASINO ENT.	PB7	LB9	30	
0010	STH 172/AIRPORT-CASINO ENT.	PB7	PB8		90
0010	STH 172/AIRPORT-CASINO ENT.	PB8	LB10	20	
0010	STH 172/AIRPORT-CASINO ENT.	PB8	PB1		110
0010	STH 172/AIRPORT-CASINO ENT.	PB1	LB1	10	
0010	STH 172/AIRPORT-CASINO ENT.	LB1	LB2	200	
0010	STH 172/AIRPORT-CASINO ENT.	PB1	PB2		100
0010	STH 172/AIRPORT-CASINO ENT.	PB2	LB3	50	
0010	STH 172/AIRPORT-CASINO ENT.	LB3	PB3	50	
0010	STH 172/AIRPORT-CASINO ENT.	PB3	LB4	30	
0010	STH 172/AIRPORT-CASINO ENT.	PB3	PB4		90
0010	STH 172/AIRPORT-CASINO ENT.	PB4	LB5	10	
0010	STH 172/AIRPORT-CASINO ENT.	LB5	PB5	90	
0010	STH 172/AIRPORT-CASINO ENT.	PB5	LB6	10	
0010	STH 172/AIRPORT-CASINO ENT.	LB6	LB7	200	
0010	STH 172/AIRPORT-CASINO ENT.	PB5	PB6		100
0010	STH 172/AIRPORT-CASINO ENT.	PB6	LB8	30	
0010	STH 172/AIRPORT-CASINO ENT.	PB6	PB7		100
TOTAL				730	630

* ADDITIONAL QUANTITIES ARE SHOWN ELSEWHERE

PULL BOXES STEEL 24X42-INCH

CATEGORY	LOCATION	* 653.0140 24x42-Inch EACH
0010	STH 172/Airport-Casino Ent	8
TOTAL		8

* ADDITIONAL QUANTITIES ARE SHOWN ELSEWHERE

REMOVING PULL BOXES

CATEGORY	LOCATION	* 653.0905 EACH
0010	STH 172/Airport-Casino Ent	16
TOTAL		16

* ADDITIONAL QUANTITIES ARE SHOWN ELSEWHERE

CONCRETE BASES SUMMARY

CATEGORY	LOCATION	* 654.0105 Type 5 EACH	* 654.0220 Control Cabinet Type 10 NER EACH
0010	STH 172/Airport-Casino Ent	10	1
TOTAL		10	1

* ADDITIONAL QUANTITIES ARE SHOWN ELSEWHERE

ELECTRICAL WIRE LIGHTING SUMMARY

CATEGORY	LOCATION	(240 VOLT SYSTEM)		TO	10AWG		12AWG	
					*	*	*	*
					655.0615 Ungrounded Conductor (Black/Red) LF	655.0615 Equipment Grounding Conductor (Green) LF	655.0610 Ungrounded Conductor (Black/Red) LF	655.0610 Equipment Grounding Conductor (Green) LF
0010	STH 172/AIRPORT-CASINO ENT.	A	CB1	LB9	200	100		
0010	STH 172/AIRPORT-CASINO ENT.		LB9	Luminaire			100	50
0010	STH 172/AIRPORT-CASINO ENT.		LB9	PB7		50		
0010	STH 172/AIRPORT-CASINO ENT.		LB9	LB8	400	200		
0010	STH 172/AIRPORT-CASINO ENT.		LB8	Luminaire			100	50
0010	STH 172/AIRPORT-CASINO ENT.		LB8	PB6		50		
0010	STH 172/AIRPORT-CASINO ENT.							
0010	STH 172/AIRPORT-CASINO ENT.	B	CB1	LB10	380	190		
0010	STH 172/AIRPORT-CASINO ENT.		LB10	Luminaire			100	50
0010	STH 172/AIRPORT-CASINO ENT.		LB10	PB8		40		
0010	STH 172/AIRPORT-CASINO ENT.		LB10	LB1	360	180		
0010	STH 172/AIRPORT-CASINO ENT.		LB1	Luminaire			100	50
0010	STH 172/AIRPORT-CASINO ENT.		LB1	PB1		30		
0010	STH 172/AIRPORT-CASINO ENT.		LB1	LB2	440	220		
0010	STH 172/AIRPORT-CASINO ENT.		LB2	Luminaire			100	50
0010	STH 172/AIRPORT-CASINO ENT.							
0010	STH 172/AIRPORT-CASINO ENT.	C	CB1	LB3	900	450		
0010	STH 172/AIRPORT-CASINO ENT.		LB3	Luminaire			100	50
0010	STH 172/AIRPORT-CASINO ENT.		LB3	PB2		70		
0010	STH 172/AIRPORT-CASINO ENT.		LB3	LB4	200	100		
0010	STH 172/AIRPORT-CASINO ENT.		LB4	Luminaire			100	50
0010	STH 172/AIRPORT-CASINO ENT.		LB4	PB3		50		
0010	STH 172/AIRPORT-CASINO ENT.							
0010	STH 172/AIRPORT-CASINO ENT.	D	CB1	LB6	600	300		
0010	STH 172/AIRPORT-CASINO ENT.		LB6	Luminaire			100	50
0010	STH 172/AIRPORT-CASINO ENT.		LB6	PB5		30		
0010	STH 172/AIRPORT-CASINO ENT.		LB6	LB7	440	220		
0010	STH 172/AIRPORT-CASINO ENT.		LB7	Luminaire			100	50
0010	STH 172/AIRPORT-CASINO ENT.		LB6	LB5	260	130		
0010	STH 172/AIRPORT-CASINO ENT.		LB5	Luminaire			100	50
0010	STH 172/AIRPORT-CASINO ENT.		LB5	PB4		30		
SUBTOTAL					4,180	2,440	1,000	500
TOTAL					6,620		1,500	

* ADDITIONAL QUANTITIES ARE SHOWN ELSEWHERE

LIGHTING SUMMARY

		* 656.0200 Electrical Service Meter Breaker Pedestal (STH 172/Airport-Casino Ent)	* 657.0255 Transformer Bases Standard 11 1/2-Inch Bolt Circle	* 657.0322 Poles Type 5 (Aluminum)	* 657.0710 Luminaire Arms Truss Type 4 1/2-Inch Clamp 12-FT	* 659.0125 Luminaires Utility HPS 250 Watts
CATEGORY	LOCATION	LS	EACH	EACH	EACH	EACH
0010	STH 172/AIRPORT-CASINO ENT.	1	10	10	10	10
	TOTAL	1	10	10	10	10

* ADDITIONAL QUANTITIES ARE SHOWN ELSEWHERE

SALVAGE TRAFFIC SIGNALS SPECIAL

CATEGORY	LOCATION	SPV.0105.01 LS	SPV.0105.02 LS
0010	STH 172/STH 54	1	
0010	STH 172/Airport-Casino Ent		1
	TOTAL	1	1

REMOVING CONCRETE BASES

CATEGORY	STATION	LOCATION	* 204.0195 EACH
0010	62+00	AIRPORT LIGHTING	1
TOTAL			1

* ADDITIONAL QUANTITIES ARE SHOWN ELSEWHERE

CONDUIT RIGID NONMETALLIC SCHEDULE 40 SUMMARY

CATEGORY	STATION	TO	STATION	LOCATION	* 652.0225 2-Inch LF
0010	51+37	-	62+00	AIRPORT LIGHTING	140
0010	62+00	-	64+15	AIRPORT LIGHTING	210
					350

* ADDITIONAL QUANTITIES ARE SHOWN ELSEWHERE

SALVAGE AND REINSTALLATION OF AIRPORT LIGHT POLE

CATEGORY	STATION	LOCATION	SPV.0060.07 EACH
0010	62+00	AIRPORT LIGHTING	1
TOTAL			1

REMOVING UTILITY POLES

CATEGORY	STATION	LOCATION	204.0205 EACH
0010	62+00	AIRPORT LIGHTING	1
TOTAL			1

ELECTRICAL WIRE LIGHTING 12 AWG

CATEGORY	STATION	LOCATION	* 655.0610 LF
0010	62+00	AIRPORT LIGHTING	35
			35

* ADDITIONAL QUANTITIES ARE SHOWN ELSEWHERE

ELECTRICAL WIRE LIGHTING 8 AWG

CATEGORY	STATION	TO	STATION	LOCATION	655.0620 LF
0010	62+00	-	64+15	AIRPORT LIGHTING	770
TOTAL					770

CONCRETE BASE AIRPORT LIGHTING

CATEGORY	STATION	LOCATION	SPV.0060.06 EACH
0010	62+00	AIRPORT LIGHTING	1
TOTAL			1

ELECTRICAL WIRE LIGHTING 2 AWG

CATEGORY	STATION	TO	STATION	LOCATION	655.0635 LF
0010	51+37	-	62+00	AIRPORT LIGHTING	2100
TOTAL					2100

REMOVING ELECTRICAL WIRING

CATEGORY	STATION	TO	STATION	LOCATION	SPV.0090.06 LF
0010	51+37	-	53+82	AIRPORT LIGHTING	245
0010	53+82	-	62+00	AIRPORT LIGHTING	215
0010	62+00	-	64+15	AIRPORT LIGHTING	205
TOTAL					665

TRANSPORTATION PROJECT PLAT NO: 9280-04-23-4.01 AMENDMENT NUMBER 1

AMENDS PARCELS 18, 19, AND ADDS UTILITY PARCEL 103 OF TRANSPORTATION PROJECT PLAT 9280-04-23-4.01 RECORDED AS DOCUMENT #2473171, AND FILED IN VOL. 1 OF TRANSPORTATION PROJECT PLATS, PG. 122 PART OF LOTS 1 AND 2, CERTIFIED SURVEY MAP NUMBER 4858, LOCATED IN AND INCLUDING UNPLATTED LANDS WITHIN INDIAN CLAIMS 151; AND PART OF LOTS 1 AND 2, CERTIFIED SURVEY MAP NUMBER 7906, WITHIN INDIAN CLAIMS 155; INCLUDING UNPLATTED LANDS WITHIN INDIAN CLAIMS 152, 156, 157 AND 169; ALL LOCATED IN THE VILLAGE OF HOBART, BROWN COUNTY, WISCONSIN.

RELOCATION ORDER STH 172 BROWN COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3) AND 84.09, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

CONVENTIONAL ABBREVIATIONS AND SYMBOLS

ACCESS POINT	AP	ACCESS RIGHT	AR	CHORD BEARING	CH B	CHORD DISTANCE	CH D	DEED	D	DOCUMENT	DOC	EAST BOUND	EB	GAS VALVE	GV	INLET	IL	LENGTH OF CURVE	L	MANHOLE	MH	MONUMENT	MON	NORTH BOUND	NB	PAGE	PERM	PERMANENT LIMITED EASEMENT	PLE	PRIVATE DRIVEWAY	PD	PROPERTY LINE	PL	RADIUS	R	REFERENCE LINE	RL	RIGHT OF WAY	R/W	SECTION LINE	S	FOUND IRON PIPE	IP	STATION	STA	TEMPORARY LIMITED EASEMENT	TLE	TIE POINT	TP	VOLUME	VOL	ADJOINING LANDS WITH SAME OWNER	ADJ	PARALLEL TO LINE	PAR	BUILDING TO BE RAZED	B	FEE ACQUISITION	FA
ACCESS POINT	AP	ACCESS RIGHT	AR	CHORD BEARING	CH B	CHORD DISTANCE	CH D	DEED	D	DOCUMENT	DOC	EAST BOUND	EB	GAS VALVE	GV	INLET	IL	LENGTH OF CURVE	L	MANHOLE	MH	MONUMENT	MON	NORTH BOUND	NB	PAGE	PERM	PERMANENT LIMITED EASEMENT	PLE	PRIVATE DRIVEWAY	PD	PROPERTY LINE	PL	RADIUS	R	REFERENCE LINE	RL	RIGHT OF WAY	R/W	SECTION LINE	S	FOUND IRON PIPE	IP	STATION	STA	TEMPORARY LIMITED EASEMENT	TLE	TIE POINT	TP	VOLUME	VOL	ADJOINING LANDS WITH SAME OWNER	ADJ	PARALLEL TO LINE	PAR	BUILDING TO BE RAZED	B	FEE ACQUISITION	FA
ACCESS POINT	AP	ACCESS RIGHT	AR	CHORD BEARING	CH B	CHORD DISTANCE	CH D	DEED	D	DOCUMENT	DOC	EAST BOUND	EB	GAS VALVE	GV	INLET	IL	LENGTH OF CURVE	L	MANHOLE	MH	MONUMENT	MON	NORTH BOUND	NB	PAGE	PERM	PERMANENT LIMITED EASEMENT	PLE	PRIVATE DRIVEWAY	PD	PROPERTY LINE	PL	RADIUS	R	REFERENCE LINE	RL	RIGHT OF WAY	R/W	SECTION LINE	S	FOUND IRON PIPE	IP	STATION	STA	TEMPORARY LIMITED EASEMENT	TLE	TIE POINT	TP	VOLUME	VOL	ADJOINING LANDS WITH SAME OWNER	ADJ	PARALLEL TO LINE	PAR	BUILDING TO BE RAZED	B	FEE ACQUISITION	FA

RESERVE FOR CLAUSES AND NOTE INFORMATION

RIGHT OF WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS AND ARE REFERENCED TO THE US PUBLIC LAND SURVEY OR OTHER SURVEYS OF PUBLIC RECORD.

RIGHT OF WAY MONUMENTS ARE TYPE 2 AND WILL BE PLACED PRIOR TO OR AT THE TIME OF LAND TITLE TRANSFER.

AREAS SHOWN IN THE TOTAL ACRES COLUMN OF THE SCHEDULE OF LANDS & INTEREST TABLE MAY BE APPROXIMATE AND ARE DERIVED FROM TAX ROLLS OR OTHER AVAILABLE SOURCES AND MAY NOT INCLUDE LANDS OF THE OWNER WHICH ARE NOT CONTIGUOUS TO THE AREA TO BE ACQUIRED.

COORDINATES AS SHOWN ARE NOT INTENDED TO BE USED FOR RETRACEMENT PURPOSES AND MUST BE VERIFIED WITH THE COUNTY SURVEY DEPARTMENT.

COORDINATES AND BEARINGS SHOWN ON THIS PLAT ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM, BROWN COUNTY, (ENGLISH), NAD OF 1983 (1999) ADJUSTMENT, ALL PLAT DISTANCES ARE GROUND LENGTH.

PROPERTY LINES SHOWN ON THIS PLAT ARE DRAWN FROM DATA DERIVED FROM MAPS AND DOCUMENTS OF PUBLIC RECORD AND/OR EXISTING OCCUPATIONAL LINES. THIS PLAT MAY NOT BE A TRUE REPRESENTATION OF EXISTING PROPERTY LINES AND SHOULD NOT BE USED AS A SUBSTITUTE FOR AN ACCURATE FIELD SURVEY.

EXISTING RIGHT OF WAY WAS ACQUIRED FROM PROJECT(S): THE BROWN COUNTY SURVEY DEPARTMENT & PROJECT 121-03-21

EXISTING ACCESS CONTROL WAS ACQUIRED UNDER PROJECT(S): 121-03-21 & 9210-04-29

RIGHT OF WAY REFERENCE LINE MAY NOT BE THE SAME AS THE CONSTRUCTION REFERENCE LINE.

A TEMPORARY LIMITED EASEMENT (TLE) IS A RIGHT FOR CONSTRUCTION PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON AND THE RIGHT OF INGRESS AND EGRESS AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM NECESSARY OR DESIRABLE TO PREVENT EROSION OF THE SOIL. ALL TLEs ON THIS PLAT EXPIRE AT THE COMPLETION OF THE CONSTRUCTION PROJECT FOR WHICH THIS INSTRUMENT IS GIVEN.

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND INTERESTS TO THE DEPARTMENT OF TRANSPORTATION.

* THE ACRE FIGURE SHOWN IS FOR APPRAISAL INFORMATION ONLY AND IS NOT INTENDED TO INDICATE THE ACTUAL PARCEL SIZE.

A PERPETUAL HIGHWAY EASEMENT (PHE), AN EASEMENT FOR HIGHWAY PURPOSES, AS LONG AS SO USED, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM DESIRABLE.

* SEE RECORDED DOCUMENT FOR PERPETUAL EASEMENT PROVISIONS.

SEE DOT TPP PROJECT NUMBER 9280-04-21 FOR CONTINUED R/W INFORMATION.

I HEREBY CERTIFY THAT THIS PLAT MEETS ALL REQUIREMENTS OF SECTION 84.095, WISCONSIN STATUTES. THIS PLAT WAS PREPARED BY OR UNDER THE DIRECTION OF

JON L. HERBEL
PRINTED NAME
SIGNATURE
DATE

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION

NORMAN PAWELCZYK
PRINTED NAME
SIGNATURE
DATE

COURSE TABLE	STH 172 REFERENCE LINE	BEARING	DISTANCE
CL26	CL7	S 40°37'42" E	585.97'
CL7	CL6	S 40°37'42" E	359.61'
CL6	CL16	SEE CURVE: CUR34	
CL16	CL4	N 88°30'22" E	1425.03'

CURVE TABLE	CURVE	CH DISTANCE	CH BEARING	RADIUS	ARC LENGTH	P1 COORDINATES
CUR34	1093.59'	S 86°03'40" E	1273.24'	1130.35'	Y=561358.12	X=58091.52
CUR30	1620.06'	N 63°57'03" W	1373.24'	1045.10'	Y=561317.92	X=58014.07
CUR17	370.20'	N 79°04'37" W	1183.24'	371.73'	Y=561470.42	X=58436.57
CUR18	235.01'	N 64°48'30" W	1372.39'	235.29'	Y=561561.25	X=58144.71
CUR19	379.39'	N 49°43'40" W	1299.51'	380.75'	Y=561721.66	X=57879.86
CUR21	650.35'	N 40°49'01" E	2814.79'	651.81'	Y=562333.68	X=57653.93
CUR23	442.85'	N 42°25'03" E	2784.79'	443.32'	Y=562300.65	X=57570.97

PHE	POINT TO POINT	BEARING	DISTANCE
IC11	PL319	N 58°53'23" W	277.78'
PL319	RW709	S 32°39'04" W	5.06'
RW709	PLE38	S 47°03'11" W	22.83'
PLE38	PLE37	N 43°02'33" W	24.74'
PLE37	RW710	N 46°57'27" E	120.00'
RW710	PL319	S 32°39'04" W	95.22'

POINT	STATION	OFFSET	COORDINATES	
TLE "A"				
PLE37	7+12.95	167.11' R	562037.172	X 57288.73
PLE38	7+37.67	166.07' R	562019.090	X 57305.61
TLE79	7+41.07	250.01' R	561961.854	X 57244.12
TLE "B"				
TLE77	5+01.09	1080.55' L	563010.380	X 58097.69
TLE78	5+10.28	1096.92' L	563014.067	X 58116.09
TLE76	5+44.36	876.74' L	562844.830	X 57971.18
TLE75	5+73.87	862.56' L	562813.197	X 57979.63
TLE "C"				
TLE82	10+88.95	246.11' R	561700.368	X 57473.60
RW705	10+94.59	275.57' R	561676.900	X 57454.92
TLE83	11+03.68	243.29' R	561691.023	X 57485.34
TLE81	11+09.32	272.75' R	561667.556	X 57466.65

POINT TLE "D"	STATION	OFFSET	COORDINATES
TLE86	5+38.64	165.38' R Y	562170.587 X 57176.540
TLE85	5+49.92	199.58' R Y	562139.760 X 57157.936
TLE89	6+33.61	134.05' R Y	562118.319 X 57262.157
TLE90	6+82.87	155.71' R Y	562067.424 X 57277.800
TLE87	6+85.07	90.16' R Y	562108.440 X 57328.980
TLE88	7+09.98	96.66' R Y	562085.301 X 57340.266
PLE37	7+12.95	167.11' R Y	562037.172 X 57288.730

EXISTING R/W POINTS			
POINT	STATION	OFFSET	COORDINATES
RW200	5+93.74	789.34' L	Y 562750.440 X 57937.000
RW201	6+39.94	619.07' L	Y 562604.500 X 57837.860
RW12	6+52.43	436.32' L	Y 562476.030 X 57707.291
RW13	6+60.65	538.01' L	Y 562536.008 X 57789.825
RW701	8+60.10	97.23' R	Y 561970.996 X 57437.586
RW14	9+15.09	376.60' L	Y 562237.789 X 57833.001
RW15	9+44.83	302.67' L	Y 562167.083 X 57796.258
RW702	9+57.15	65.21' R	Y 561918.194 X 57525.080
RW703	9+72.29	197.14' R	Y 561820.792 X 57434.803
RW717	10+22.65	73.72' L	Y 561958.939 X 57673.169
RW706	10+75.14	173.98' R	Y 561757.815 X 57519.359
RW705	10+94.59	275.57' R	Y 561676.901 X 57454.917
RW707	11+05.19	123.62' R	Y 561767.798 X 57577.143
RW227	11+07.67	399.47' R	Y 561586.300 X 57369.400
RW718	11+45.58	73.72' L	Y 561865.642 X 57753.215
RW708	11+79.35	100.01' R	Y 561725.191 X 57645.445
RW719	15+49.99	73.72' L	Y 561620.397 X 58042.683
RW721	17+99.98	89.99' L	Y 561534.283 X 58260.380
RW720	17+99.98	75.19' L	Y 561520.368 X 58255.337
RW724	21+48.34	100.01' R	Y 561277.238 X 58561.883
RW722	21+99.98	89.99' L	Y 561464.133 X 58623.872
RW723	22+75.92	61.86' L	Y 561435.749 X 58695.165

POINT TO POINT	BEARING	DISTANCE
IC11	IC12	N 36°12'37" E 431.22'
IC12	DB155	N 26°06'08" E 238.78'
DB155	PLE34	S 63°53'52" E 21.90'
PLE34	PLE33	S 14°56'21" W 546.72'
PLE33	PLE32	S 51°13'02" E 313.86'
PLE32	PLE31	N 88°51'31" E 37.65'
PLE31	PLE30	S 33°07'15" E 150.18'
PLE30	PLE29	S 66°00'07" E 179.64'
PLE29	PLE28	S 72°45'31" E 162.54'
PLE28	IC13	S 57°49'45" W 174.71'
IC13	IC11	N 56°33'30" W 927.98'

PARCEL NUMBER	OWNER	INTEREST REQUIRED	FEE ACRES	T.L.E. ACRES	P.H.E. ACRES
18	THE USA IN TRUST FOR ROSEMARY DANFORTH, AN ONEIDA INDIAN	PHE & TLE	-	0.03	0.03
19	MAREN JANE DANFORTH	PHE	-	0.17	0.01
20	ONEIDA TRIBE OF INDIANS	TLE	-	0.10	-
21	ONEIDA TRIBE OF INDIANS	PHE	-	-	0.14
22	USA IN TRUST FOR THE ONEIDA TRIBE OF INDIANS OF WIS.	PHE	-	-	1.57
23	USA IN TRUST FOR THE ONEIDA TRIBE OF INDIANS OF WIS.	PHE	-	-	0.24
24	USA IN TRUST FOR THE ONEIDA TRIBE OF INDIANS OF WIS.	PHE	-	-	0.01
25	FELIX & CECILIA MARTINEZ	TLE	-	0.01	-
101	MPS - ELECTRIC	RELEASE OF RIGHTS	-	-	-
102	NORTHEAST TELEPHONE CO.	RELEASE OF RIGHTS	-	-	-
103	ONEIDA TRIBE OF INDIANS	RELEASE OF RIGHTS	-	-	-

POINT	STATION	OFFSET	COORDINATE
CL26	2+00.00	0.00' L	Y 562535.288 X 57081.550
RW710	7+07.90	47.22' R	Y 562119.077 X 57376.432
PLE37	7+12.95	167.11' R	Y 562037.172 X 57288.730
PL319	7+35.29	138.41' R	Y 562038.904 X 57325.059
RW709	7+36.75	143.26' R	Y 562034.644 X 57322.329
PLE38	7+37.67	166.07' R	Y 562019.090 X 57305.618
CL7	7+85.97	0.00' R	Y 562090.567 X 57463.105
DB155	8+06.57	587.88' L	Y 562457.735 X 57922.685
PLE34	8+26.68	596.53' L	Y 562448.100 X 57942.350
IC12	9+00.90	368.53' L	Y 562243.311 X 57817.630
IC11	9+99.08	51.37' R	Y 561895.379 X 57562.887
PLE33	11+35.82	145.60' L	Y 561919.860 X 57801.410
CL6	11+45.58	0.00' R	Y 561817.642 X 57697.265
PLE32	14+92.26	162.35' L	Y 561723.270 X 58046.070
PLE31	15+28.33	183.46' L	Y 561724.020 X 58083.710
PLE30	16+78.31	112.58' L	Y 561598.240 X 58165.770
PLE29	18+74.50	103.11' L	Y 561525.180 X 58329.880
IC13	19+20.70	30.99' R	Y 561383.979 X 58337.236
PLE28	20+49.95	89.99' L	Y 561477.002 X 58485.120
CL16	22+75.92	0.00' L	Y 561373.910 X 58696.780
IC10	23+31.44	540.90' L	Y 561916.067 X 58738.025
CL4	37+01.11	0.00' R	Y 561411.061 X 60121.330

RESERVE FOR REGISTER OF DEEDS PROJECT NUMBER 9280-04-23 - 4.01 AMENDMENT NUMBER 1

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN BROWN COUNTY, WISCONSIN AT 2:51PM ON August 2, 2010 AS DOCUMENT # 2482179 AND

FILED IN Vol. 1 Transportation Plats, Pg 135

Recording information via email from Debbie Gore, Chief Deputy, SIGNATURE OF REGISTER OF DEEDS

TRANSPORTATION PROJECT PLAT NO: 9280-04-23-4.01

PART OF LOTS 1 AND 2, CERTIFIED SURVEY MAP NUMBER 4858, LOCATED IN AND INCLUDING UNPLATTED LANDS WITHIN INDIAN CLAIMS 151; AND PART OF LOTS 1 AND 2, CERTIFIED SURVEY MAP NUMBER 7906, WITHIN INDIAN CLAIMS 155; INCLUDING UNPLATTED LANDS WITHIN INDIAN CLAIMS 152, 156, 157 AND 169; ALL LOCATED IN THE VILLAGE OF HOBART, BROWN COUNTY, WISCONSIN.

RELOCATION ORDER STH 172 BROWN COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3) AND 84.09, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

CONVENTIONAL ABBREVIATIONS AND SYMBOLS

ACCESS POINT	AP	SECTION CORNER	SC	COMPENSABLE	NON-COMPENSABLE
ACCESS RIGHTS	AR	(MATERIAL AS NOTED)			
ACRES	AC	SET R/W MONUMENT W/CAP			
CHORD BEARING	CH BRG	(1/4" OUTSIDE DIA. X 8"			
CHORD DISTANCE	CH DIS	IRON PIPE 1-1 1/2 LBS./FT.)			
DEED	DO	SET P.K. NAIL			
DOCUMENT	DOC	PROPOSED R/W			
EAST BOUND	EB	BOUNDARY POINT			
GAS VALVE	GV				
INLET	IL				
LENGTH OF CURVE	L				
MANHOLE	MH	CORPORATE LIMITS			
MONUMENT	MON	EXISTING R/W			
NORTH BOUND	NB	SECTION LINE			
FACE	FC	QUARTER LINE			
PERMANENT	PERM	SIXTEENTH LINE			
PERMANENT LIMITED EASEMENT	PERM	PROPOSED OR NEW R/W LINE			
GAS VALVE	GV	PROPOSED EASEMENT LINE			
PROPERTY LINE	PL	PARCEL NUMBER			
RADIUS	R				
REFERENCE LINE	RL	UTILITY PARCEL NUMBER			
RIGHT OF WAY	R/W				
SECTION	SEC				
SECTION LINE	SL				
FOUND IRON PIPE	IP				
STATION	STA				
TEMPORARY LIMITED EASEMENT	TLE				
TIE POINT	TP				
VOLUME	VOL				
ADJOINING LANDS					
WITH SAME OWNER					
PARALLEL TO LINE					
BUILDING TO BE RAZED					
FEE ACQUISITION					

RESERVE FOR CLAUSES AND NOTE INFORMATION

RIGHT OF WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS AND ARE REFERENCED TO THE US PUBLIC LAND SURVEY OR OTHER SURVEYS OF PUBLIC RECORD.

RIGHT OF WAY MONUMENTS ARE TYPE 2 AND WILL BE PLACED PRIOR TO OR AT THE TIME OF LAND TITLE TRANSFER.

AREAS SHOWN IN THE TOTAL ACRES COLUMN OF THE SCHEDULE OF LANDS & INTEREST TABLE MAY BE APPROXIMATE AND ARE DERIVED FROM TAX ROLLS, OR OTHER AVAILABLE SOURCES AND MAY NOT INCLUDE LANDS OF THE OWNER WHICH ARE NOT CONTIGUOUS TO THE AREA TO BE ACQUIRED.

COORDINATES AS SHOWN ARE NOT INTENDED TO BE USED FOR RETRACEMENT PURPOSES AND MUST BE VERIFIED WITH THE COUNTY SURVEY DEPARTMENT.

COORDINATES AND BEARINGS SHOWN ON THIS PLAT ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM, BROWN COUNTY, (ENGLISH), NAD OF 1983 (1999) ADJUSTMENT, ALL PLAT DISTANCES ARE GROUND LENGTH.

PROPERTY LINES SHOWN ON THIS PLAT ARE DRAWN FROM DATA DERIVED FROM MAPS AND DOCUMENTS OF PUBLIC RECORD AND/OR EXISTING OCCUPATIONAL LINES. THIS PLAT MAY NOT BE A TRUE REPRESENTATION OF EXISTING PROPERTY LINES AND SHOULD NOT BE USED AS A SUBSTITUTE FOR AN ACCURATE FIELD SURVEY.

EXISTING RIGHT OF WAY WAS ACQUIRED FROM PROJECT(S): THE BROWN COUNTY SURVEY DEPARTMENT & PROJECT 121-03-21

EXISTING ACCESS CONTROL WAS ACQUIRED UNDER PROJECT(S): 121-03-21 & 9210-04-29

RIGHT OF WAY REFERENCE LINE MAY NOT BE THE SAME AS THE CONSTRUCTION REFERENCE LINE.

A TEMPORARY LIMITED EASEMENT (TLE) IS A RIGHT FOR CONSTRUCTION PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON AND THE RIGHT OF INGRESS AND EGRESS AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM NECESSARY OR DESIRABLE TO PREVENT EROSION OF THE SOIL. ALL TLEs ON THIS PLAT EXPIRE AT THE COMPLETION OF THE CONSTRUCTION PROJECT FOR WHICH THIS INSTRUMENT IS GIVEN.

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND INTERESTS TO THE DEPARTMENT OF TRANSPORTATION.

* THE ACRE FIGURE SHOWN IS FOR APPRAISAL INFORMATION ONLY AND IS NOT INTENDED TO INDICATE THE ACTUAL PARCEL SIZE.

A PERPETUAL HIGHWAY EASEMENT (PHE), AN EASEMENT FOR HIGHWAY PURPOSES, AS LONG AS SO USED, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM DESIRABLE.

* SEE RECORDED DOCUMENT FOR PERPETUAL EASEMENT PROVISIONS.

SEE DOT TPP PROJECT NUMBER 9280-04-21 FOR CONTINUED R/W INFORMATION.

I HEREBY CERTIFY THAT THIS PLAT MEETS ALL REQUIREMENTS OF SECTION 84.095, WISCONSIN STATUTES. THIS PLAT WAS PREPARED BY OR UNDER THE DIRECTION OF

JON L. HERBEL
PRINTED NAME
SIGNATURE
DATE

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION

NORMAN PAWELCZYK
PRINTED NAME
SIGNATURE
DATE

COURSE TABLE	STH 172 REFERENCE LINE	BEARING	DISTANCE
CL26	CL7	S 40°37'42" E	585.97'
CL7	CL6	S 40°37'42" E	359.61'
CL6	CL16	SEE CURVE: CUR34	
CL16	CL4	N 88°30'22" E	1425.03'

CURVE TABLE	CURVE	CH DISTANCE	CH BEARING	RADIUS	ARC LENGTH	P1 COORDINATES
CUR34	1093.59'	S 66°03'40" E	1273.24'	1130.35'	Y=561358.12	X=58091.52
CUR20	1020.06'	N 63°57'03" W	1373.24'	1045.10'	Y=561317.92	X=58014.07
CUR17	370.20'	N 79°04'37" W	1183.24'	371.73'	Y=561470.42	X=58436.57
CUR18	235.01'	N 64°48'30" W	1372.39'	235.29'	Y=561561.25	X=58144.71
CUR19	379.39'	N 49°43'40" W	1299.51'	380.75'	Y=561721.66	X=57879.86
CUR21	650.35'	N 40°49'01" E	2814.79'	651.81'	Y=562333.68	X=57653.93
CUR23	442.85'	N 42°25'03" E	2784.79'	443.32'	Y=562300.65	X=57570.97

POINT TO POINT	BEARING	DISTANCE
IC11	N 36°12'37" E	431.22'
PL319	S 32°39'04" W	5.06'
RW709	S 47°03'11" W	22.83'
PLE38	N 43°02'33" W	24.74'
PLE37	N 46°57'27" E	120.00'
RW710	S 32°39'04" W	95.22'

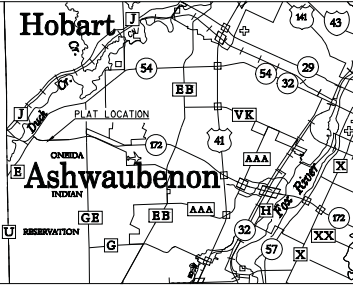
IC 169

VILLAGE

IC 155

IC 151

INDIAN CLAIMS 151, 152, 155, 156, 157 & 169



LOCATION SKETCH (NOT TO SCALE)

SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL NUMBER	OWNER	INTEREST REQUIRED	FEE ACRES	T.L.E. ACRES	P.H.E. ACRES
18	THE USA IN TRUST FOR ANNA JOHN, AN ONEIDA INDIAN	TLE	-	0.02	-
19	ROSEMARY DANFORTH	PHE	-	-	0.03
20	ONEIDA TRIBE OF INDIANS	TLE	-	0.10	-
21	ONEIDA TRIBE OF INDIANS	PHE	-	-	0.14
22	USA IN TRUST FOR THE ONEIDA TRIBE OF INDIANS OF WIS.	PHE	-	-	1.57
23	TRIBE OF INDIANS OF WIS.	PHE	-	-	0.24
24	USA IN TRUST FOR THE ONEIDA TRIBE OF INDIANS OF WIS.	PHE	-	-	0.01
25	FELIX & CECILIA MARTINEZ	TLE	-	0.01	-
101	WPS - ELECTRIC	RELEASE OF RIGHTS	-	-	-
102	NORTHEAST TELEPHONE CO.	RELEASE OF RIGHTS	-	-	-

IC 156

POINT	STATION	OFFSET	COORDINATE
CL26	2+00.00	0.00'L	Y 562535.288 X 57081.550
RW710	7+07.90	47.22'R	Y 562119.077 X 57376.432
PLE37	7+12.95	167.11'R	Y 562037.172 X 57288.730
PL319	7+35.29	138.41'R	Y 562038.904 X 57325.059
RW709	7+36.75	143.26'R	Y 562034.644 X 57322.329
PLE38	7+37.67	166.07'R	Y 562019.090 X 57305.618
CL7	7+85.97	0.00'R	Y 562090.567 X 57463.105
DB155	8+06.57	587.88'L	Y 562457.735 X 57922.685
PLE34	8+26.68	596.53'L	Y 562448.100 X 57942.350
IC12	9+00.90	368.53'L	Y 562243.311 X 57817.630
IC11	9+99.08	51.37'R	Y 561895.379 X 57562.887
PLE33	11+35.82	145.60'L	Y 561919.860 X 57801.410
CL6	11+45.58	0.00'R	Y 561817.642 X 57697.265
PLE32	14+92.26	162.35'L	Y 561723.270 X 58046.070
PLE31	15+28.33	183.46'L	Y 561724.020 X 58083.710
PLE30	16+78.31	112.58'L	Y 561598.240 X 58165.770
PLE29	18+74.50	103.11'L	Y 561525.180 X 58329.880
IC13	19+20.70	30.99'R	Y 561383.979 X 58337.236
PLE28	20+49.95	89.99'L	Y 561477.002 X 58485.120
CL16	22+75.92	0.00'L	Y 561373.910 X 58696.780
IC10	23+31.44	540.90'L	Y 561916.067 X 58738.025
CL4	37+01.11	0.00'R	Y 561411.061 X 60121.330

POINT TO POINT	BEARING	DISTANCE
IC11	N 36°12'37" E	431.22'
IC12	N 26°06'08" E	238.78'
DB155	S 63°53'52" E	21.90'
PLE34	S 14°56'21" W	546.72'
PLE33	S 51°13'02" E	313.86'
PLE32	N 88°51'31" E	37.65'
PLE31	S 33°07'15" E	150.18'
PLE30	S 66°00'07" E	179.64'
PLE29	S 72°45'31" E	162.54'
PLE28	S 57°49'45" W	174.71'
IC13	N 56°33'30" W	927.98'

HOBART

RESERVE FOR REGISTER OF DEEDS
PROJECT NUMBER 9280-04-23 - 4.01
AMENDMENT NUMBER

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN BROWN COUNTY, WISCONSIN

AT 3:07 PM ON June 1st 2010

AS DOCUMENT # 2473171

AND FILED IN THE REGISTER OF DEEDS

SIGNATURE OF REGISTER OF DEEDS

TRANSPORTATION PROJECT PLAT NO: 9280-04-21-4.05

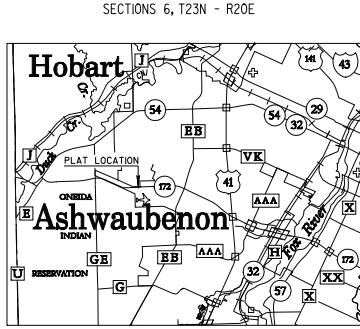
PART OF LOT 3, 5, 6, 14, AND 16, ALL LOCATED IN SECTION 6, TOWNSHIP 23 NORTH, RANGE 20 EAST, VILLAGE OF ASHWAUBENON, BROWN COUNTY, WISCONSIN.

RELOCATION ORDER STH 172 BROWN COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3) AND 84.09, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.



POINT	STATION	OFFSET	COORDINATES
TLE "G"			
TLE7	146+72.34	271.43' R	Y 560080.960 X 70843.130
TLE47	147+00.09	101.95' R	Y 560250.360 X 70871.360
TLE8	147+05.96	365.00' R	Y 559987.300 X 70876.490
TLE9	149+44.42	468.19' R	Y 559883.440 X 71114.660
TLE43	150+70.73	468.77' R	Y 559883.785 X 71252.333
TLE65	150+77.51	101.89' R	Y 560250.731 X 71251.412
TLE "H"			
TLE11	148+12.10	90.04' L	Y 560442.041 X 70983.900
TLE12	149+16.46	112.14' L	Y 560463.850 X 71088.320
TLE13	149+60.81	273.39' L	Y 560624.970 X 71133.130
TLE15	150+14.48	213.56' L	Y 560565.190 X 71184.470
TLE16	150+21.95	119.63' L	Y 560471.320 X 71192.400
TLE17	150+41.64	96.73' L	Y 560448.650 X 71211.820
TLE14	150+66.05	272.21' L	Y 560624.500 X 71232.070

COURSE TABLE			
STH 172 REFERENCE LINE			
POINT TO POINT	BEARING	DISTANCE	
CL13	CL14	S 89°50'22" E	1477.84'
CL14	CL15	SEE CURVE TABLE (CUR39)	

RESERVE FOR CLAUSES AND NOTE INFORMATION

RIGHT OF WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS AND ARE REFERENCED TO THE US PUBLIC LAND SURVEY OR OTHER SURVEYS OF PUBLIC RECORD.

RIGHT OF WAY MONUMENTS ARE TYPE 2 AND WILL BE PLACED PRIOR TO OR AT THE TIME OF LAND TITLE TRANSFER.

AREAS SHOWN IN THE TOTAL ACRES COLUMN OF THE SCHEDULE OF LANDS & INTEREST TABLE MAY BE APPROXIMATE AND ARE DERIVED FROM TAX ROLLS OR OTHER AVAILABLE SOURCES AND MAY NOT INCLUDE LANDS OF THE OWNER WHICH ARE NOT CONTIGUOUS TO THE AREA TO BE ACQUIRED.

COORDINATES AS SHOWN ARE NOT INTENDED TO BE USED FOR RETRACEMENT PURPOSES AND MUST BE VERIFIED WITH THE COUNTY SURVEY DEPARTMENT.

COORDINATES AND BEARINGS SHOWN ON THIS PLAT ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM, BROWN COUNTY, (ENGLISH), NAD OF 1983 (1993) ADJUSTMENT. ALL PLAT DISTANCES ARE GROUND LENGTH.

PROPERTY LINES SHOWN ON THIS PLAT ARE DRAWN FROM DATA DERIVED FROM MAPS AND DOCUMENTS OF PUBLIC RECORD AND/OR EXISTING OCCUPATIONAL LINES. THIS PLAT MAY NOT BE A TRUE REPRESENTATION OF EXISTING PROPERTY LINES AND SHOULD NOT BE USED AS A SUBSTITUTE FOR AN ACCURATE FIELD SURVEY.

EXISTING RIGHT OF WAY WAS ACQUIRED FROM PROJECT(S): THE BROWN COUNTY SURVEY DEPARTMENT

EXISTING ACCESS CONTROL WAS ACQUIRED UNDER PROJECT(S): E 1456 (5D), 61-GG-4179

RIGHT OF WAY REFERENCE LINE MAY NOT BE THE SAME AS THE CONSTRUCTION REFERENCE LINE.

A TEMPORARY LIMITED EASEMENT (TLE) IS A RIGHT FOR CONSTRUCTION PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON AND THE RIGHT OF INGRESS AND EGRESS AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM NECESSARY OR DESIRABLE TO PREVENT EROSION OF THE SOIL. THIS EASEMENT IS TO TERMINATE ON 1/1/2020 OR THE DATE THE CONSTRUCTION OF THIS PROJECT IS COMPLETED, WHICHEVER OCCURS FIRST.

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND INTERESTS TO THE DEPARTMENT OF TRANSPORTATION.

* THE ACRE FIGURE SHOWN IS FOR APPRAISAL INFORMATION ONLY AND IS NOT INTENDED TO INDICATE THE ACTUAL PARCEL SIZE.

I HEREBY CERTIFY THAT THIS PLAT MEETS ALL REQUIREMENTS OF SECTION 84.095, WISCONSIN STATUTES. THIS PLAT IS APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION DISTRICT OFFICE.

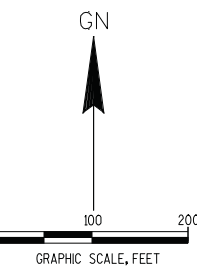
DATE: 2/2/2009
NAME: NORMAN PAWELCZYK
TITLE: REAL ESTATE SUPERVISOR

THIS PLAT WAS PREPARED BY OR UNDER THE DIRECTION OF:
DATE: 2/2/2009
NAME: JON L. HERBEL

COMPENSABLE	NON-COMPENSABLE
POWER POLE	TELEPHONE POLE
TELEPHONE POLE	SIGN
SIGN	TELEPHONE PEDESTAL
TELEPHONE PEDESTAL	

CONVENTIONAL ABBREVIATIONS AND SYMBOLS	
ACCESS POINT	AP
ACCESS RIGHTS	AR
ACRES	AC
CHORD BEARING	CH BRG
CHORD DISTANCE	CH DIS
DEED	(D)
DOCUMENT	DOC
EAST BOUND	EB
GAS VALVE	GV
INLET	IL
LENGTH OF CURVE	L
MANHOLE	MH
MONUMENT	MON
NORTH BOUND	NB
PAGE	PG
PERMANENT	PERM
PERMANENT LIMITED EASEMENT	PLE
PRIVATE DRIVEWAY	PD
PROPERTY LINE	PL
RADIUS	RAD
REFERENCE LINE	REF
REMAINING	REM
RIGHT OF WAY	R/W
SECTION	SEC
SECTION LINE	SL
FOUND IRON PIPE	IP
STATION	STA
TEMPORARY LIMITED EASEMENT	TLE
TIE POINT	TP
VOLUME	VOL
ADJOINING LANDS WITH SAME OWNER	ADJ
PARALLEL TO LINE	PAR
BUILDING TO BE RAZED	BRZ
FEE ACQUISITION	FAC

PROPERTY LINE	UTILITY PARCEL NUMBER
LOT, TIE AND OTHER MINOR	
DASHED LINES	
ACCESS CONTROL (By Previous Acquisition or Covenant)	
NO ACCESS (By Acquisition)	
NO ACCESS (By Statutory Authority)	
LIMITED EASEMENT (Temporary or Permanent)	
BURIED FIBER OPTICS CABLE	
BURIED TELEPHONE CABLE	
BURIED GAS LINE	
BURIED ELECTRIC LINE	

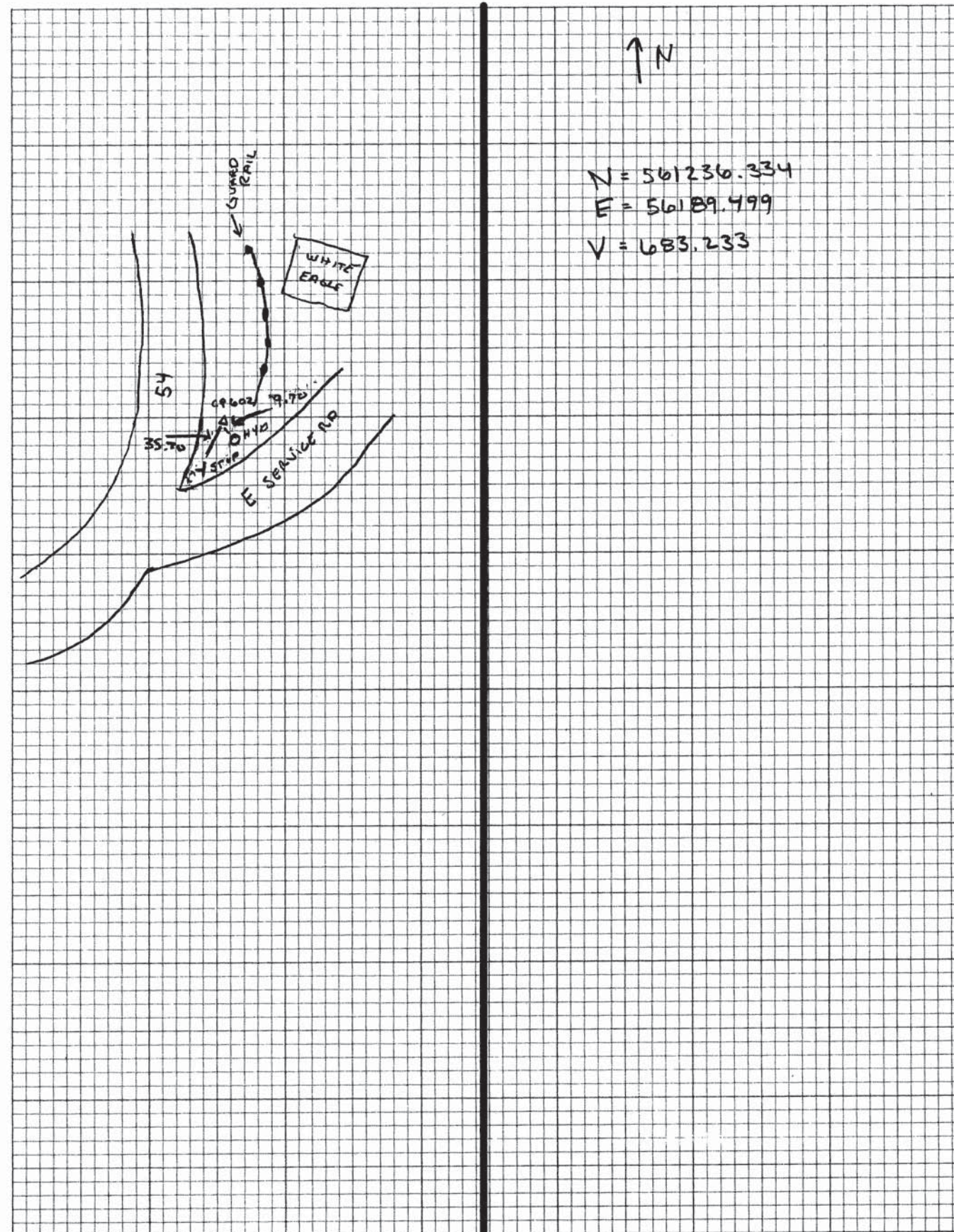


SCHEDULE OF LANDS & INTERESTS REQUIRED							
PARCEL NUMBER	OWNER	INTEREST REQUIRED	R/W ACRES REQUIRED			T.L.E. ACRES	P.L.E. ACRES
			NEW	EXISTING	TOTAL		
12	BROWN COUNTY	TLE	-	-	-	2.74	-
17	USA IN TRUST FOR THE OJIBWA TRIBE OF INDIANS OF WIS.	TLE	-	-	-	0.21	-
			-	-	-	-	-
			-	-	-	-	-
			-	-	-	-	-
			-	-	-	-	-
101	WPS - ELECTRIC	RELEASE OF RIGHTS	-	-	-	-	-
103	WPS - GAS	RELEASE OF RIGHTS	-	-	-	-	-
104	VILLAGE OF ASHWAUBENON	RELEASE OF RIGHTS	-	-	-	-	-
105	ATAT WISCONSIN	RELEASE OF RIGHTS	-	-	-	-	-
			-	-	-	-	-

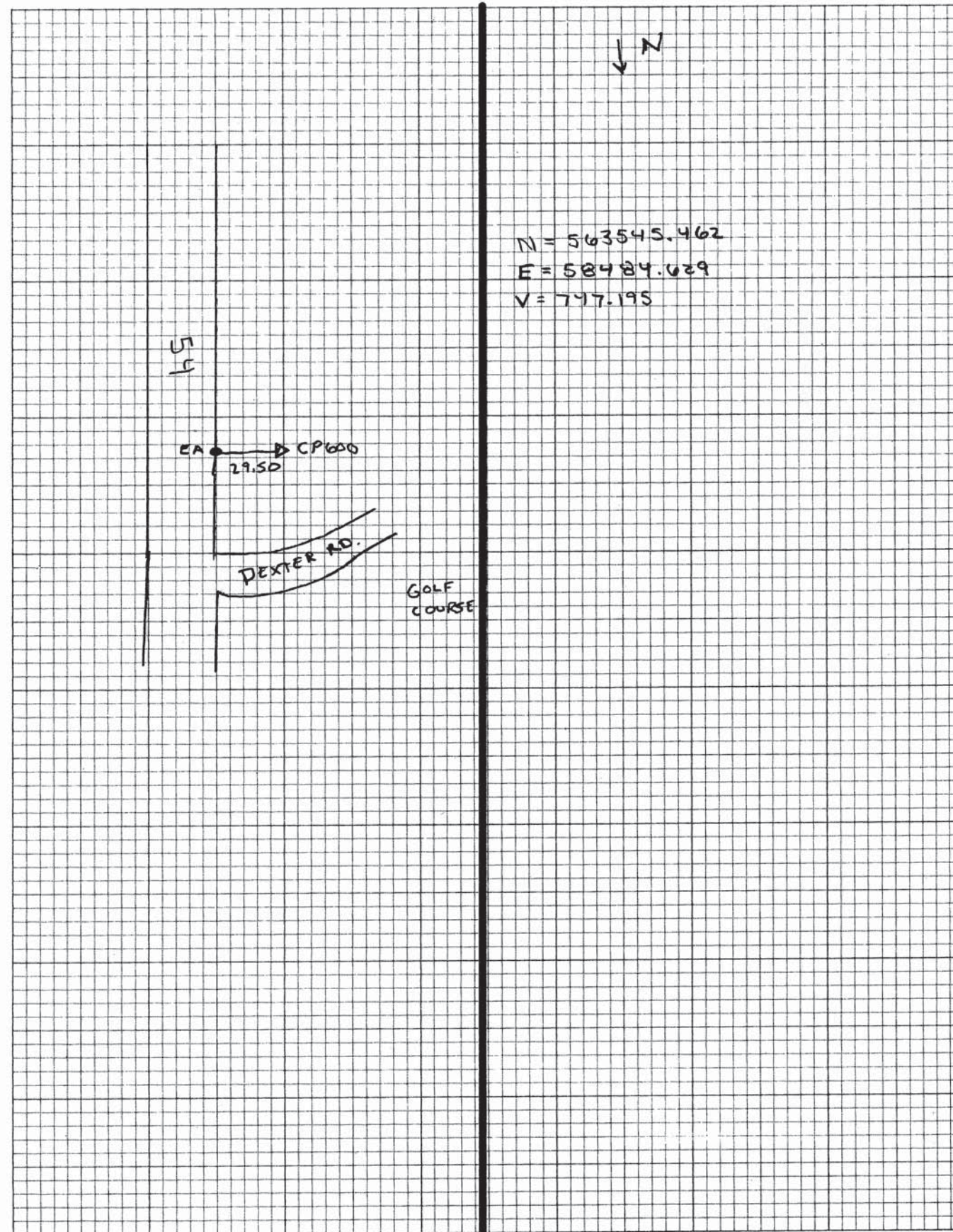
RESERVE FOR REGISTER OF DEEDS
PROJECT NUMBER 9280-04-21 - 4.05
AMENDMENT NUMBER

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN BROWN COUNTY, WISCONSIN
AT 12:36 PM ON Feb. 20th 2009
AS DOCUMENT # 2405015
AND FILED IN Vol. 1 of Transportation Plats
Signature of Register of Deeds

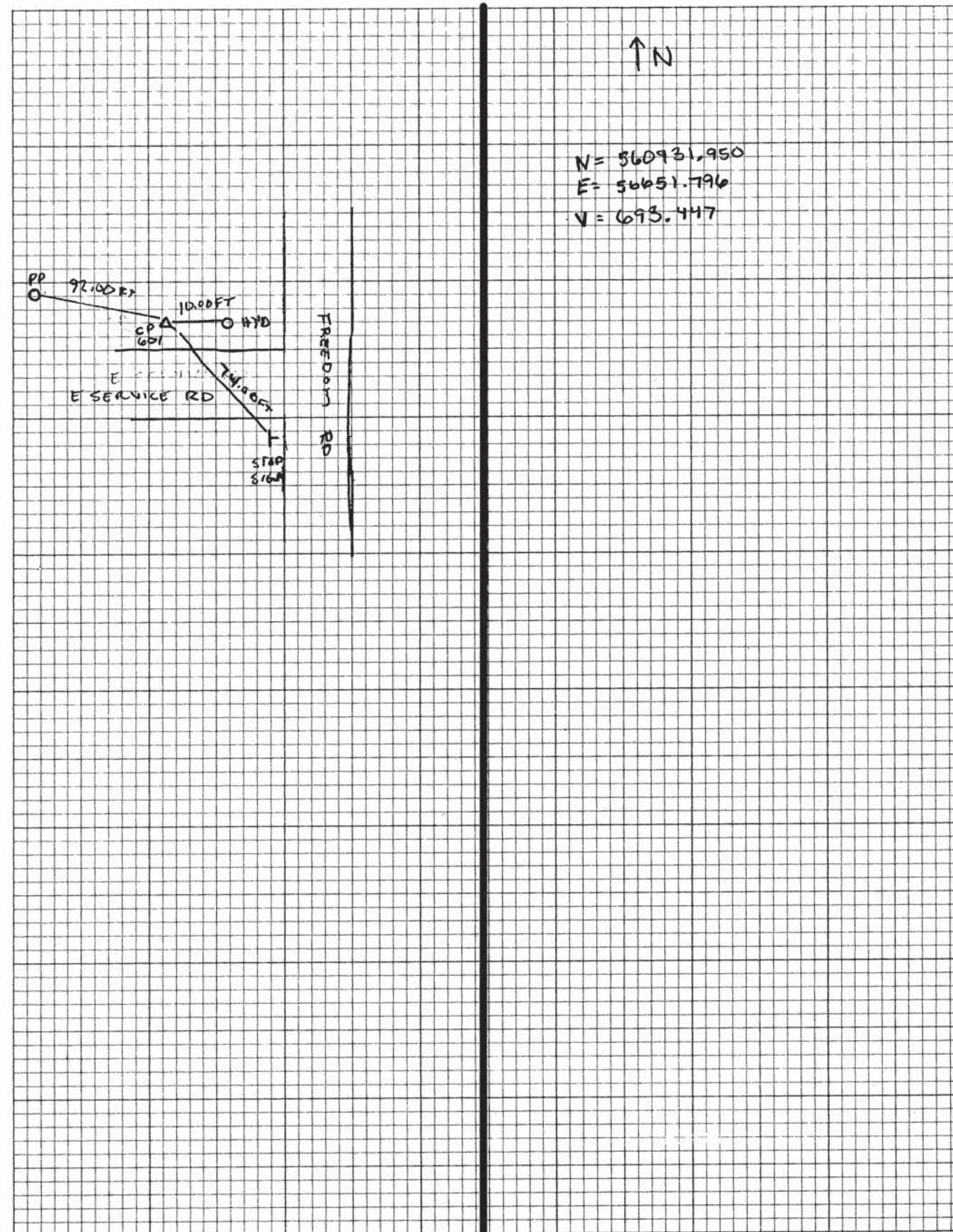
CP 602



CP 600

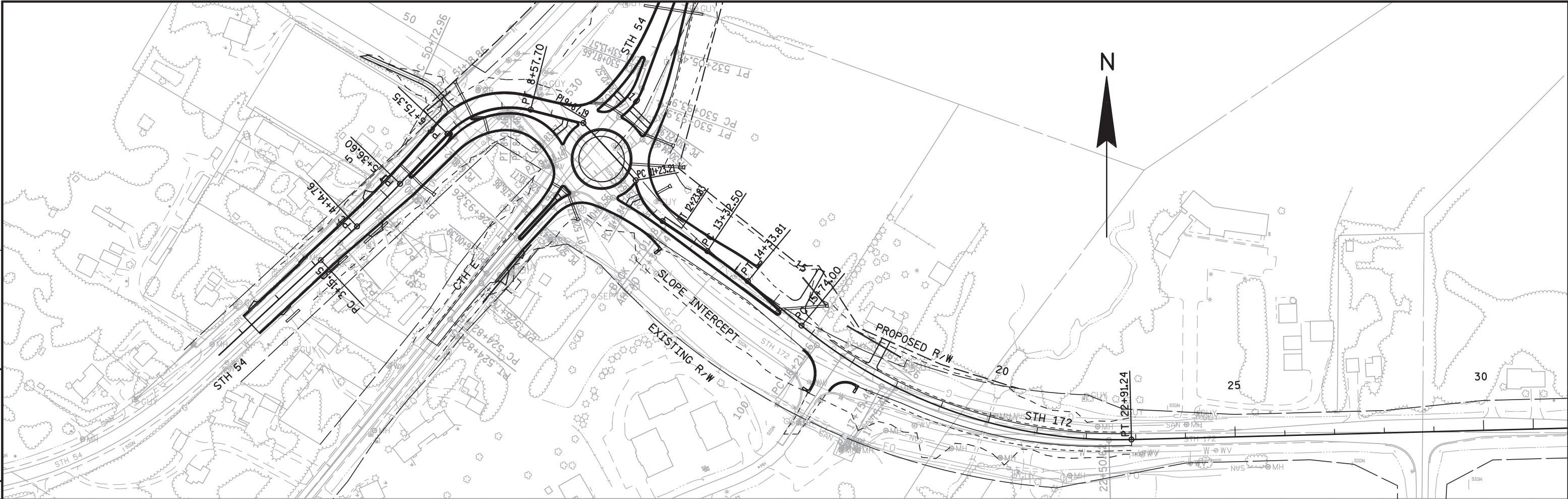


CP 601

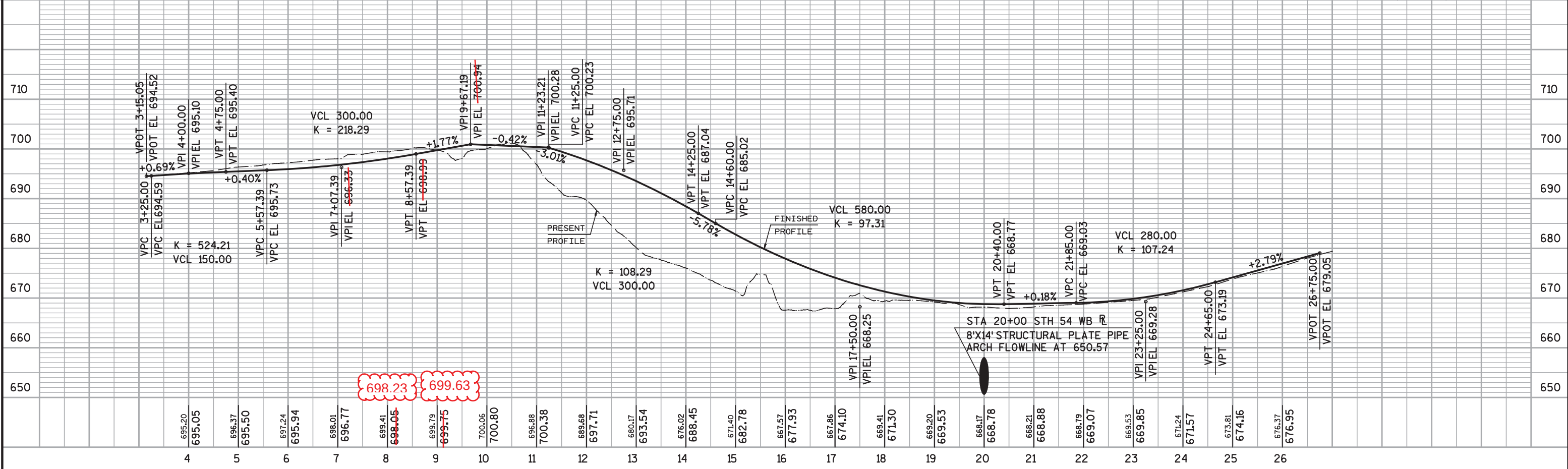


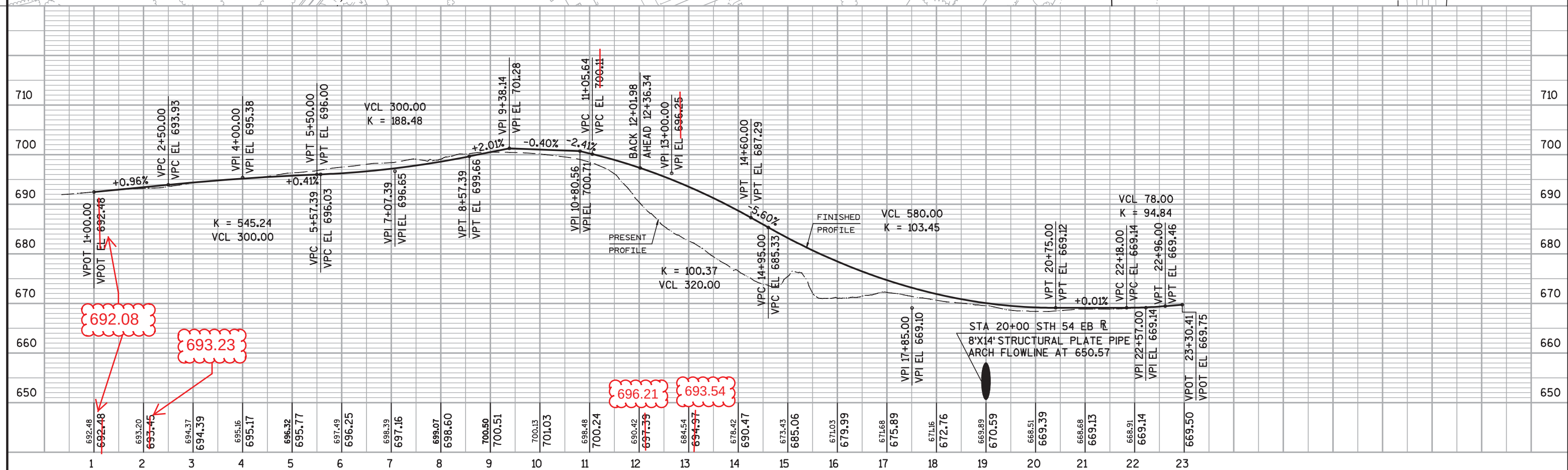
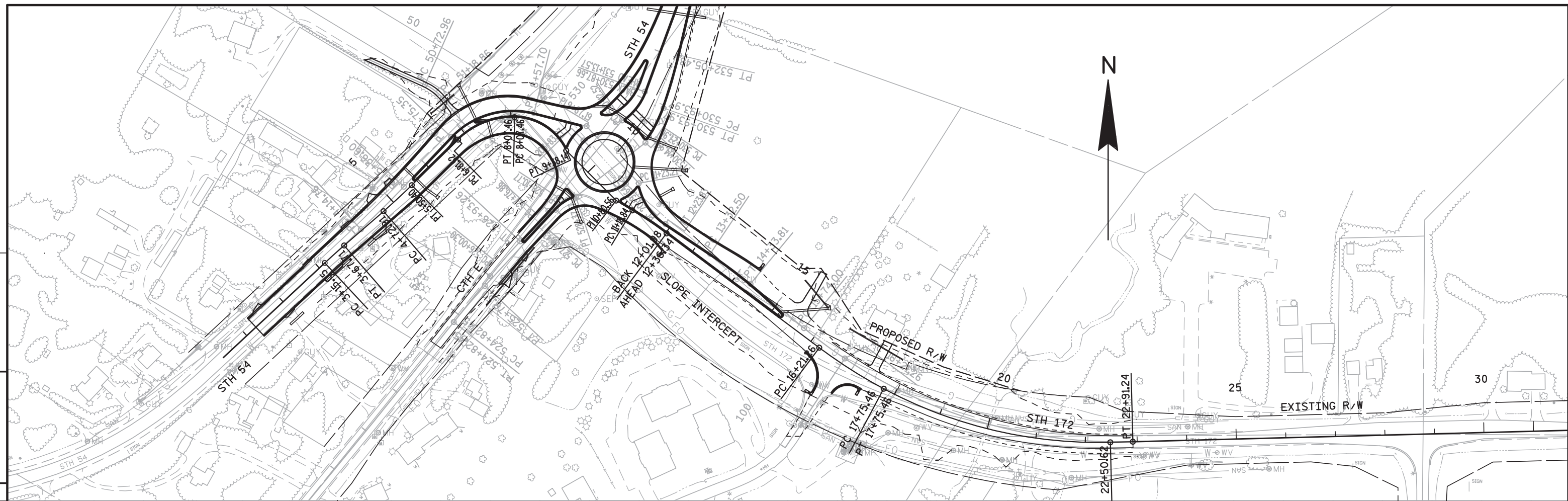
BM 651	RR SPIKE in POOL # 2319-3E6	100ft east of Freedom rd.
	and S side of 172	
BM 652	RR SPIKE in POOL # 2319-3E32	100ft east of Freedom rd.
	and N side of 172	
BM 650	RR SPIKE in Light Pole	300 ft South of 172 and 54
	intersection	

5

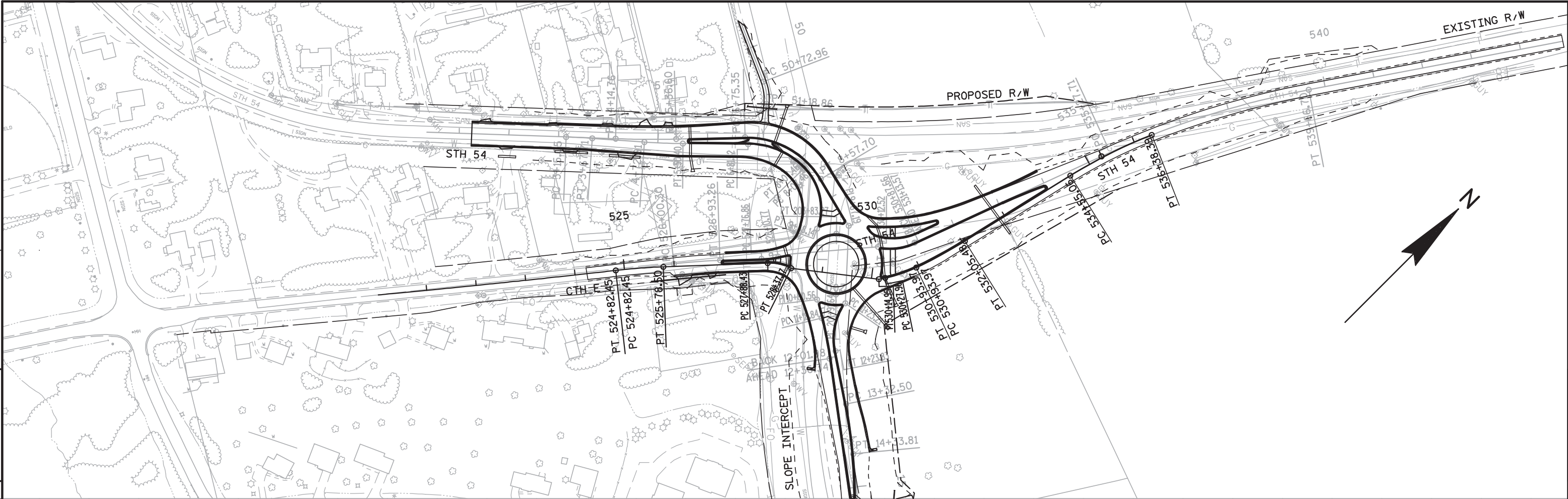


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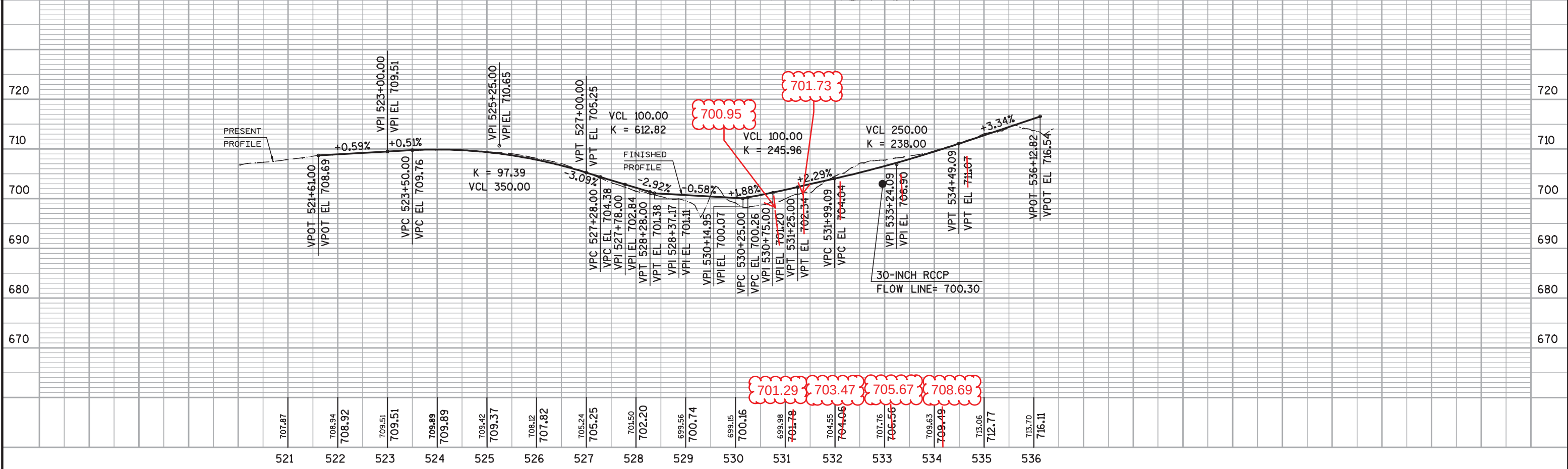


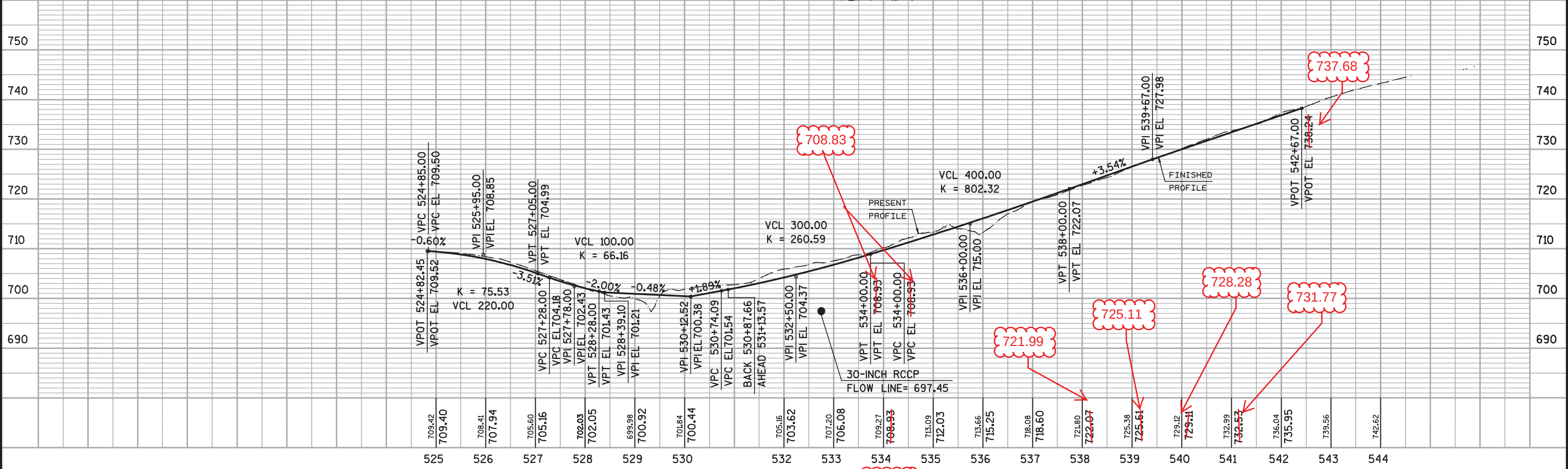
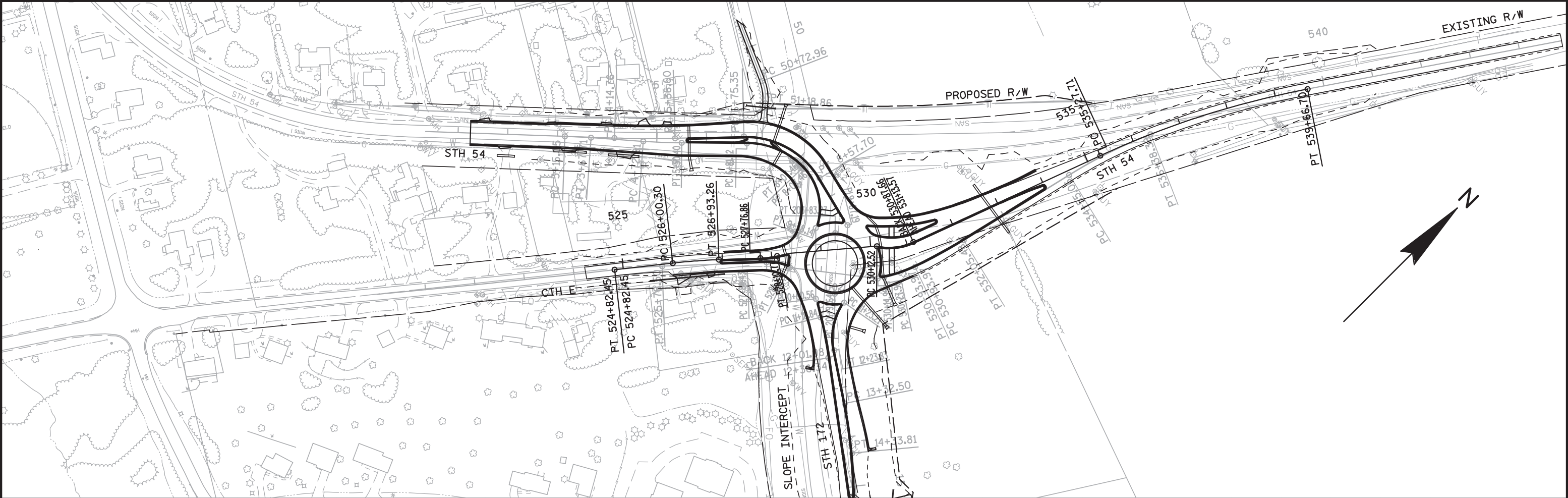


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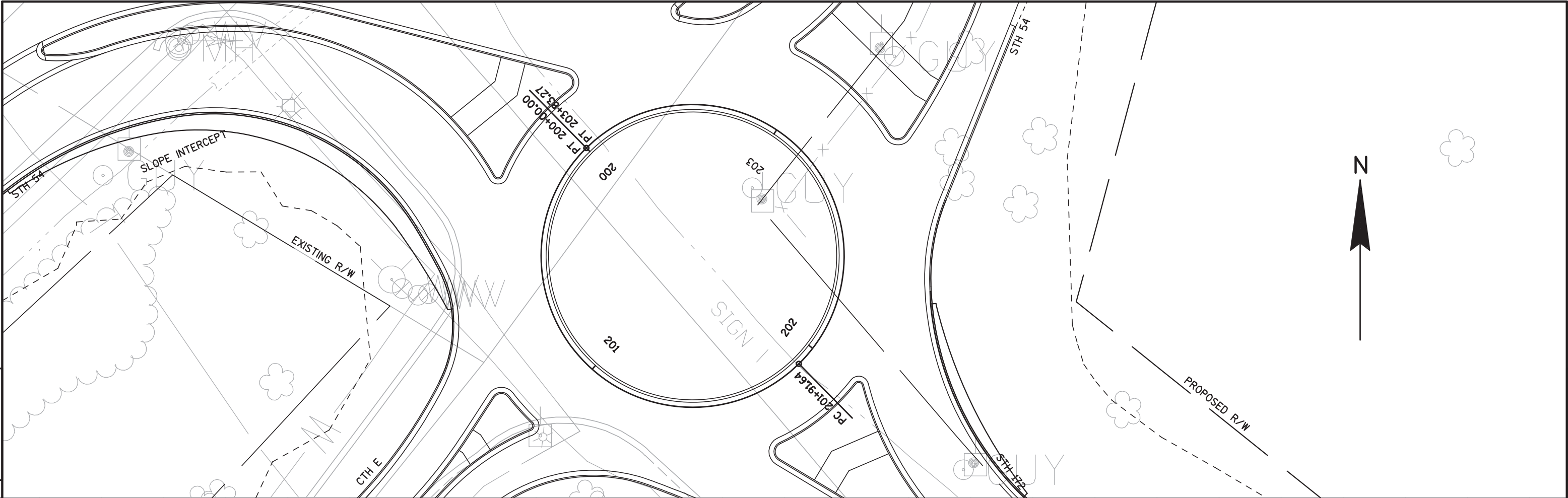


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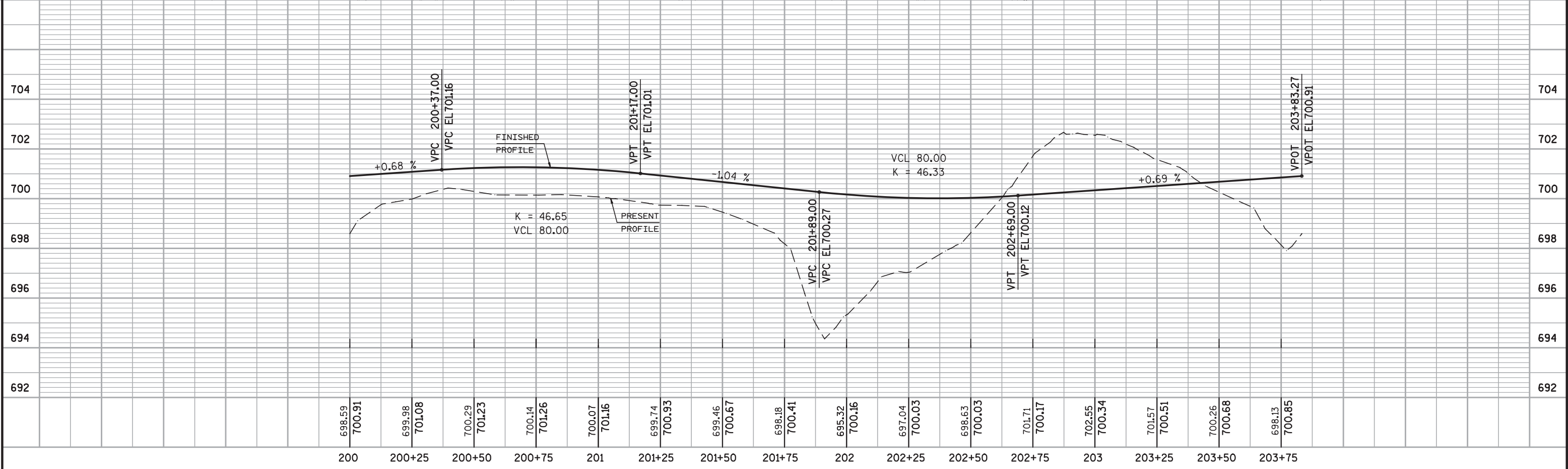


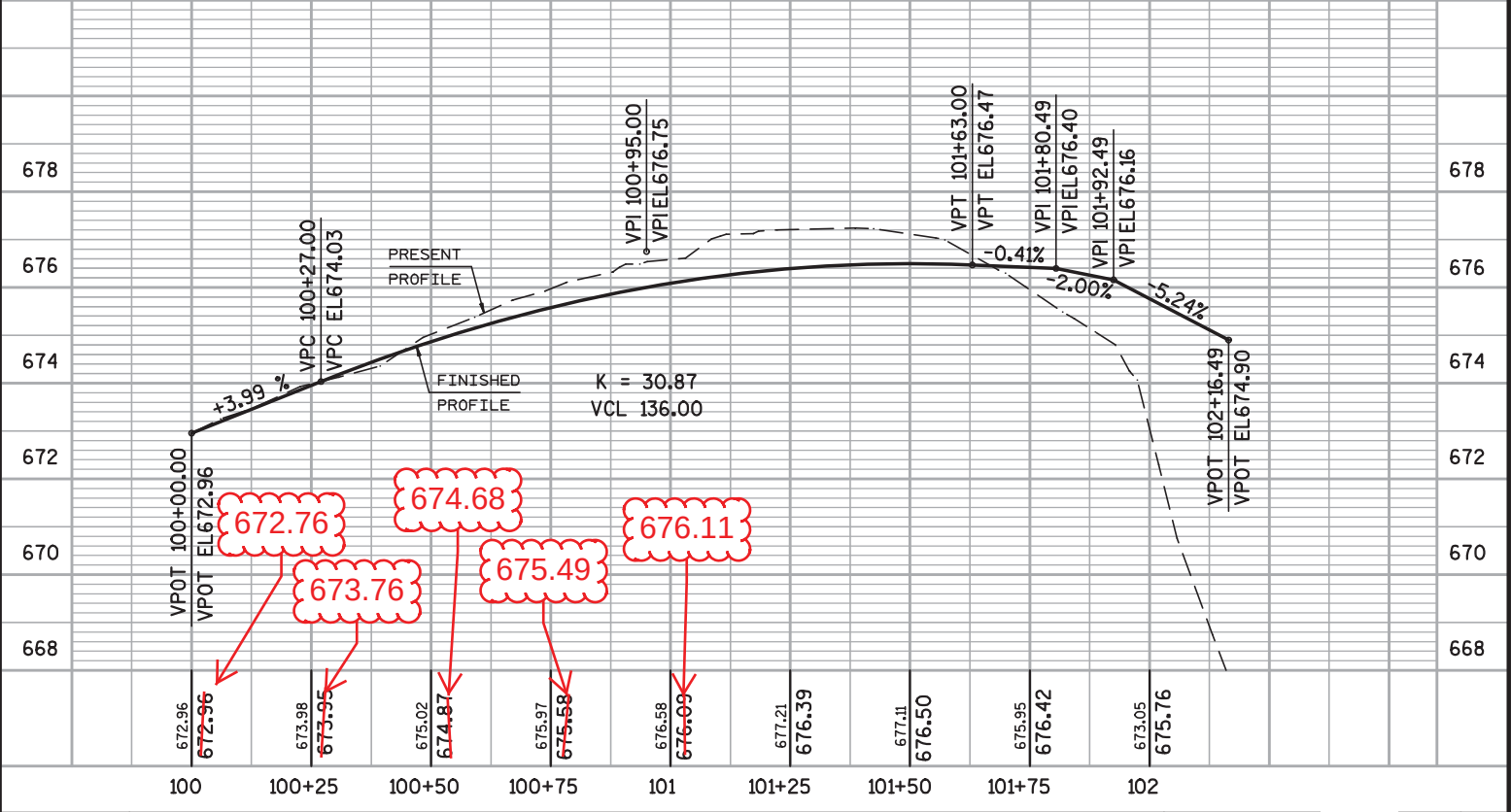
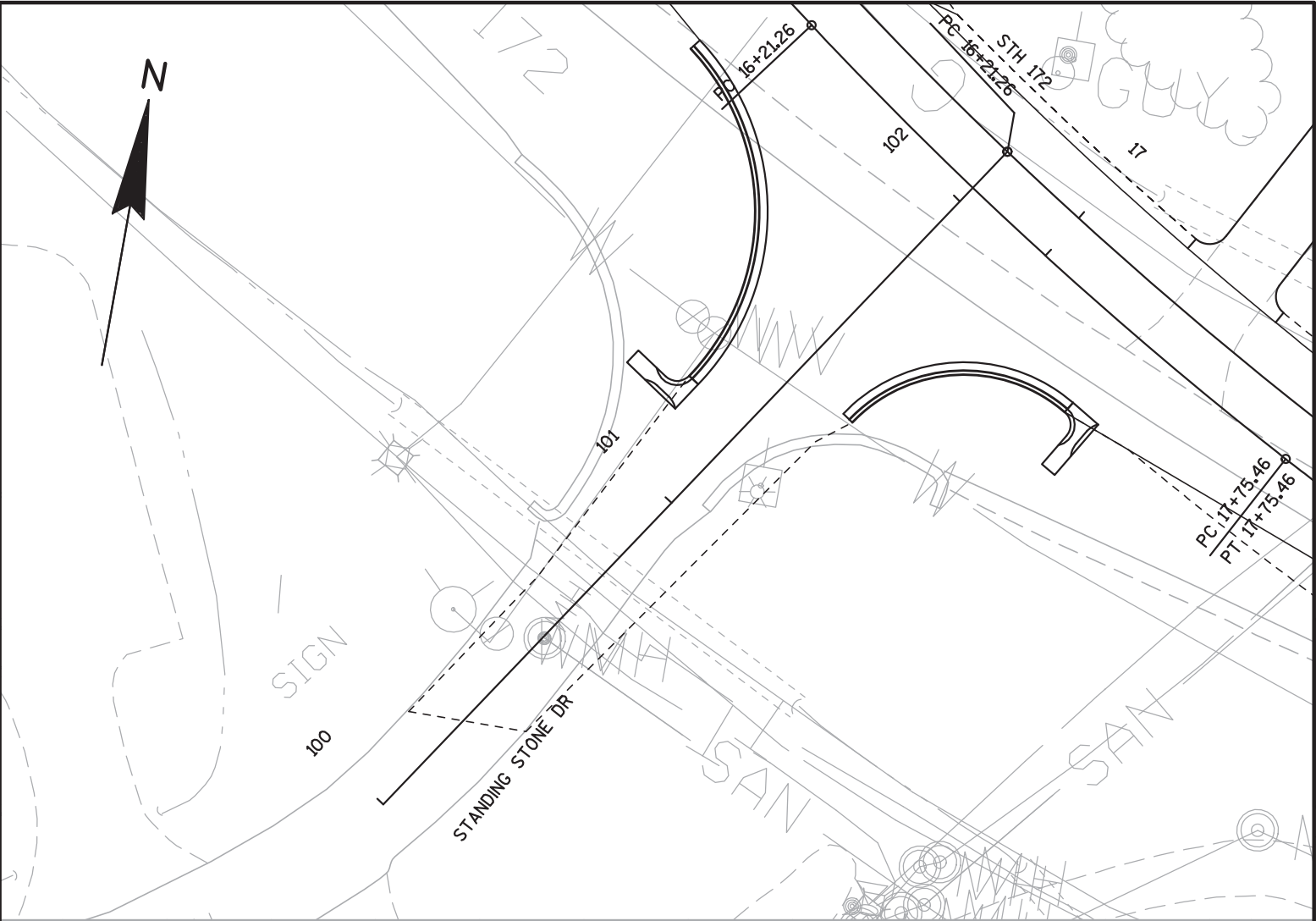
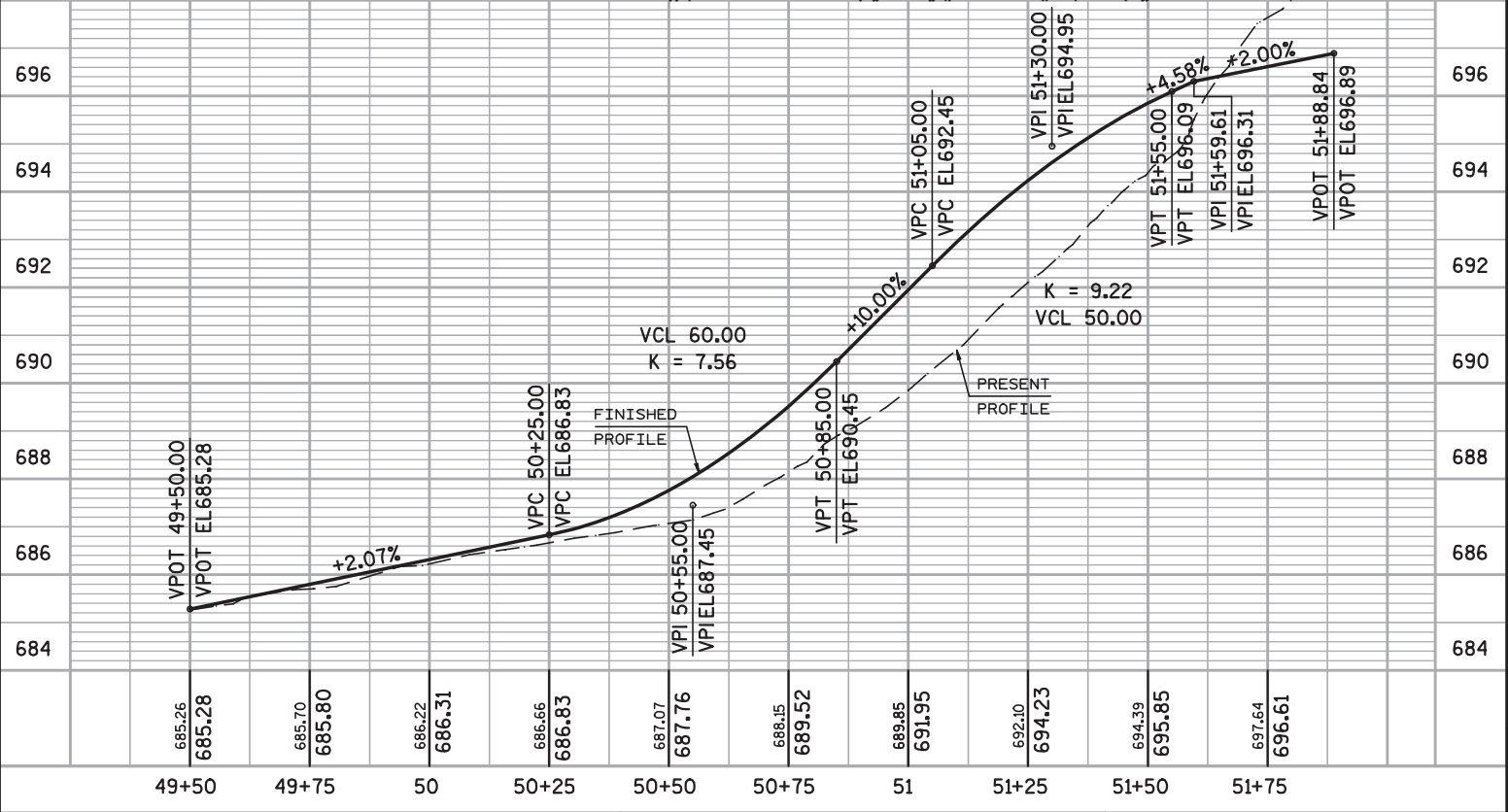
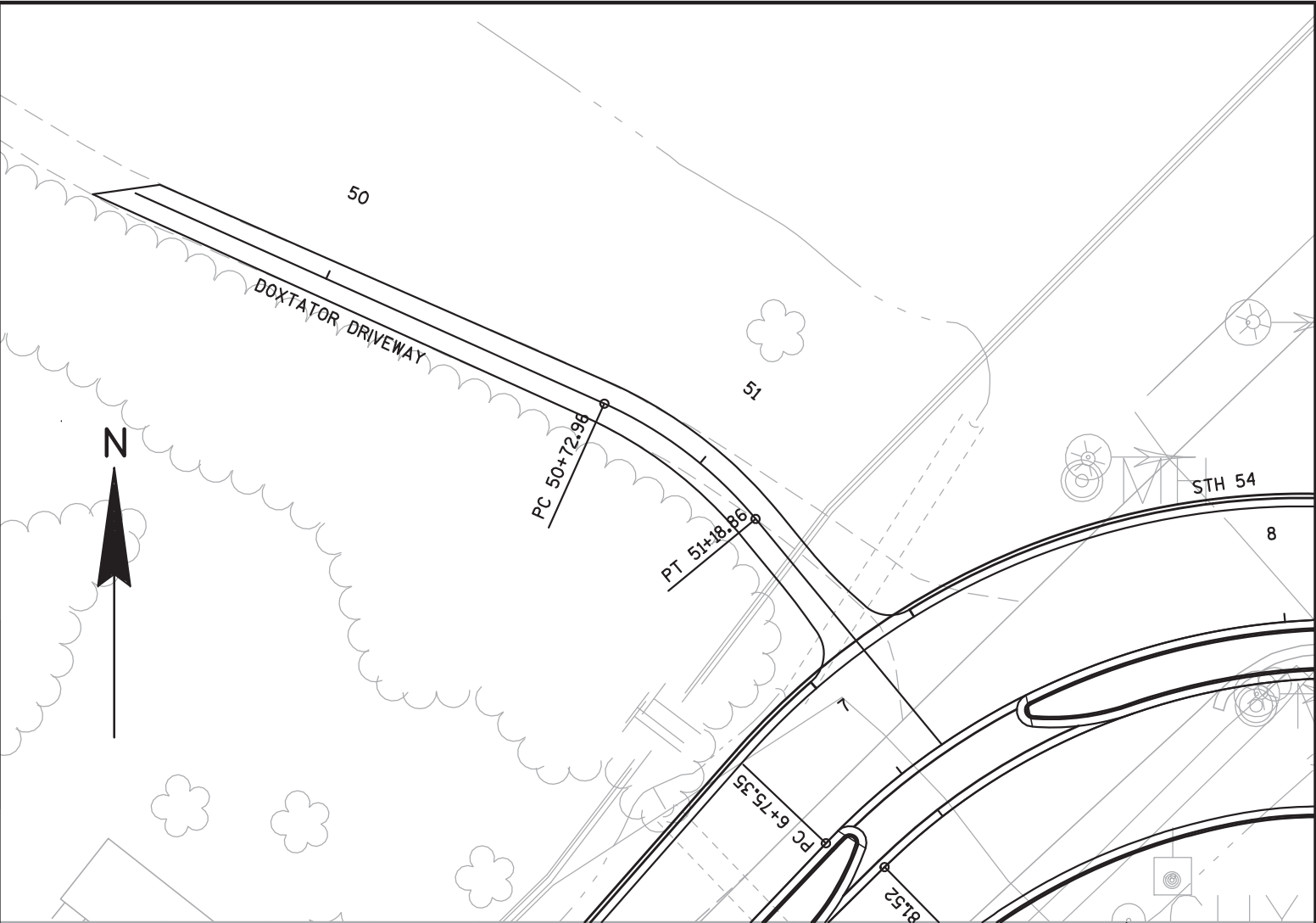


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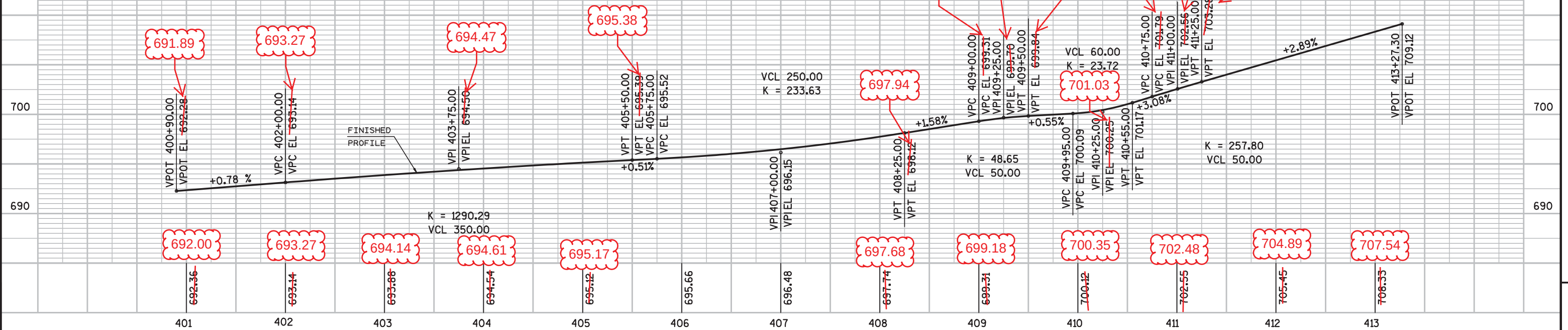


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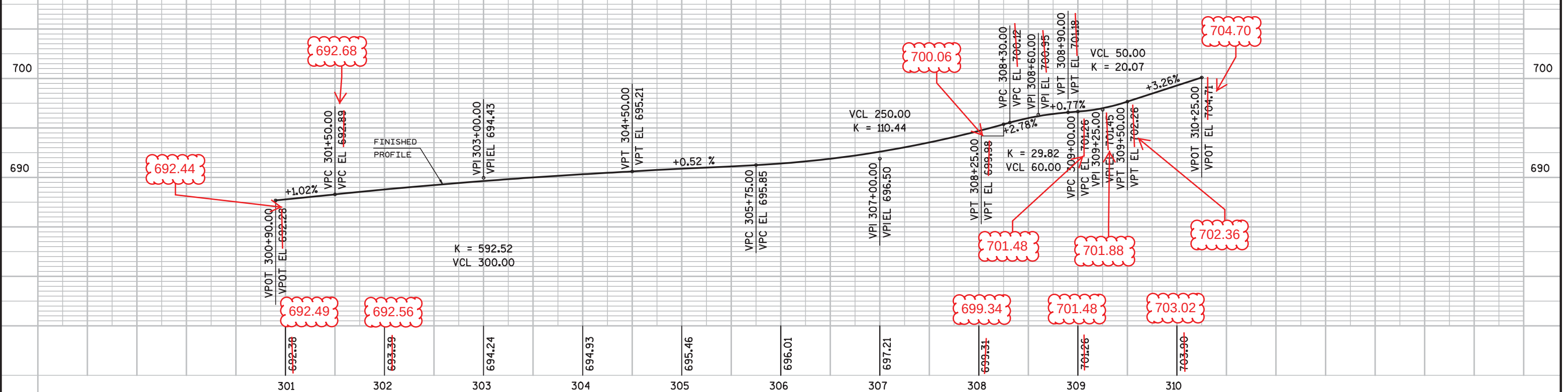


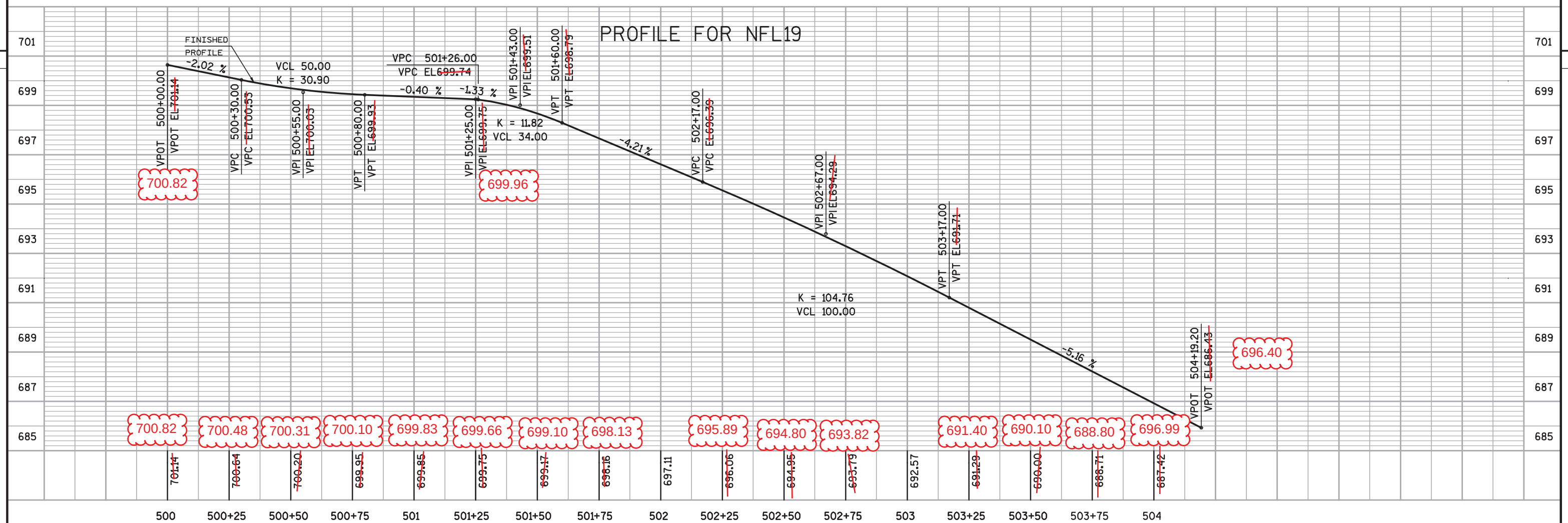
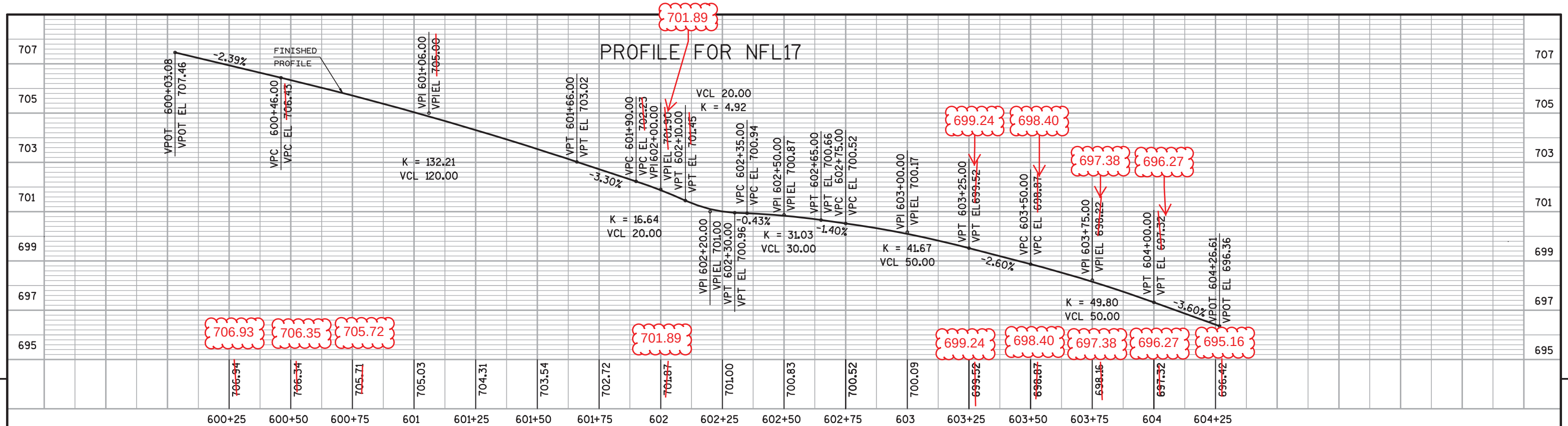


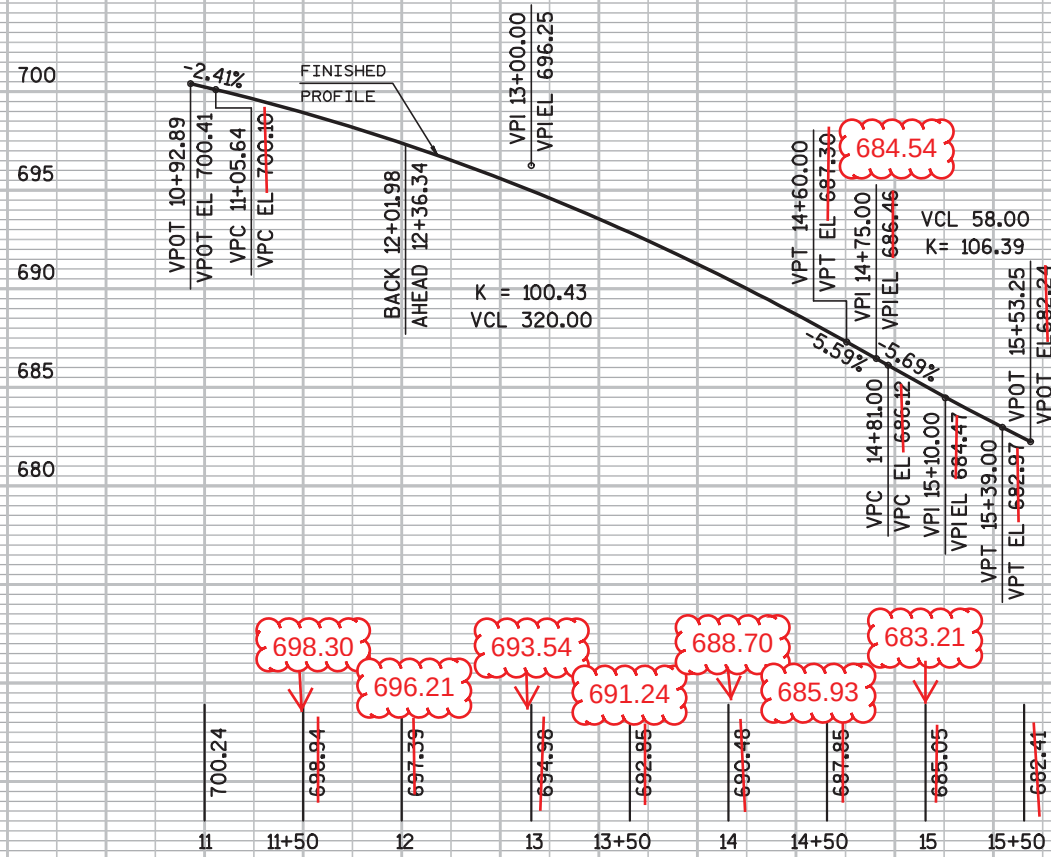
PROFILE FOR NFL15



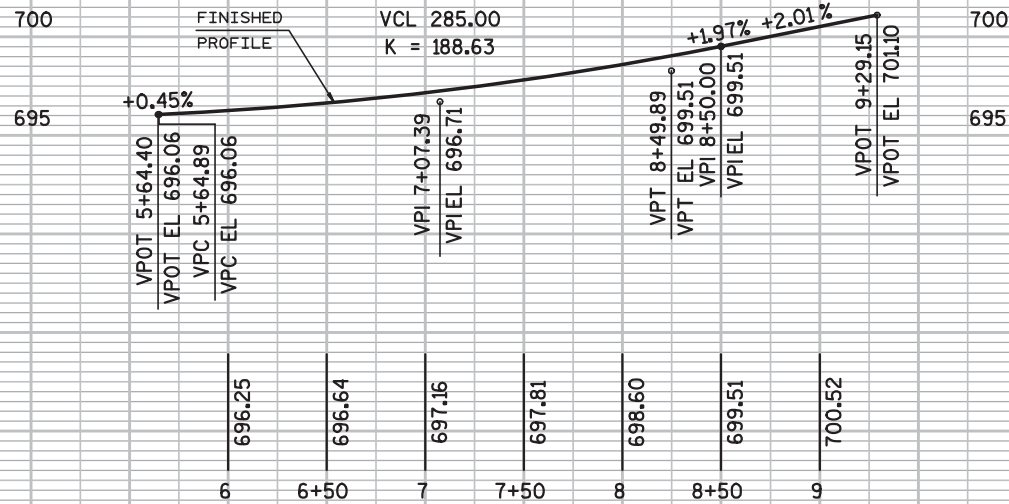
PROFILE FOR NFL16



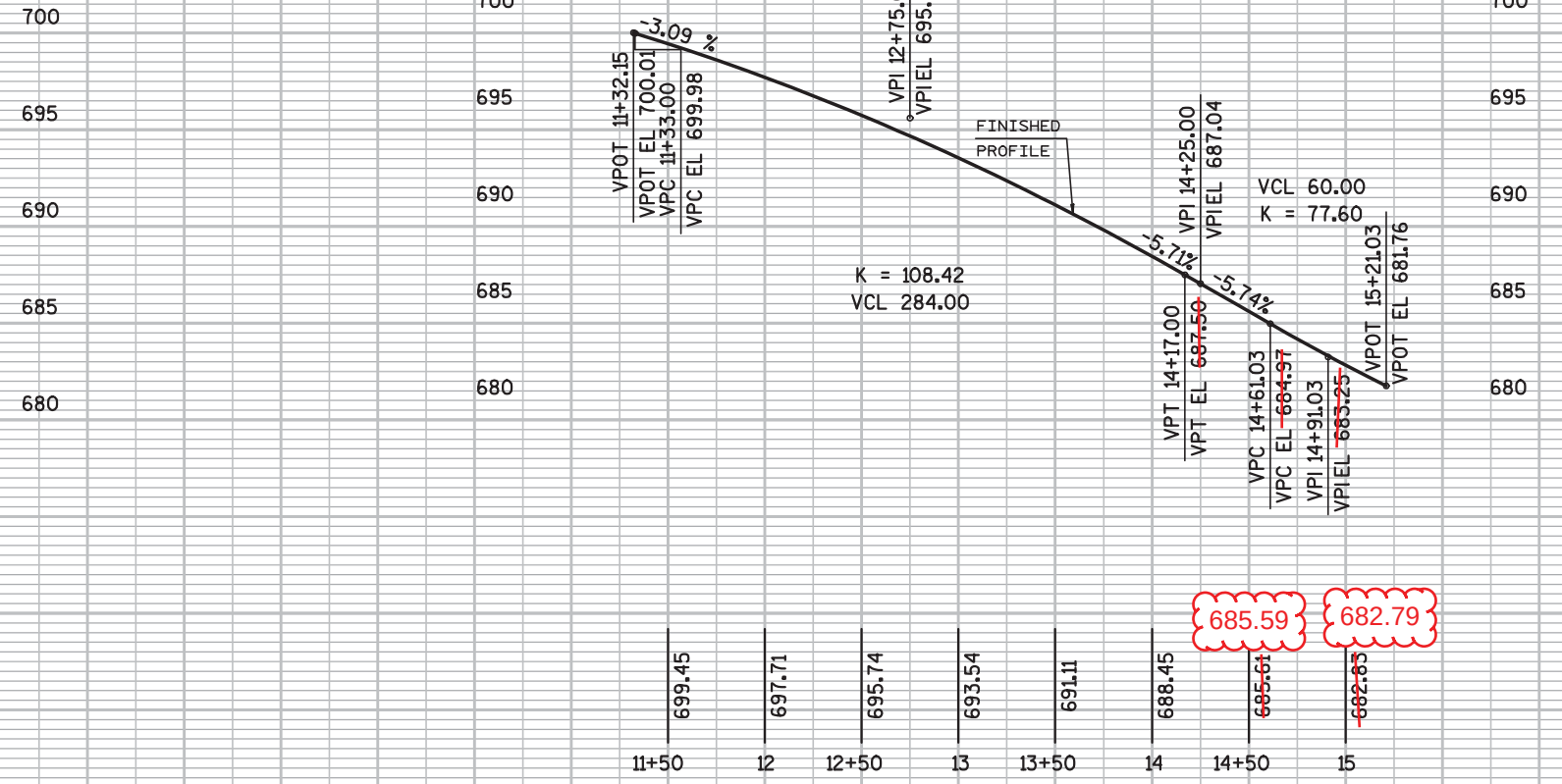




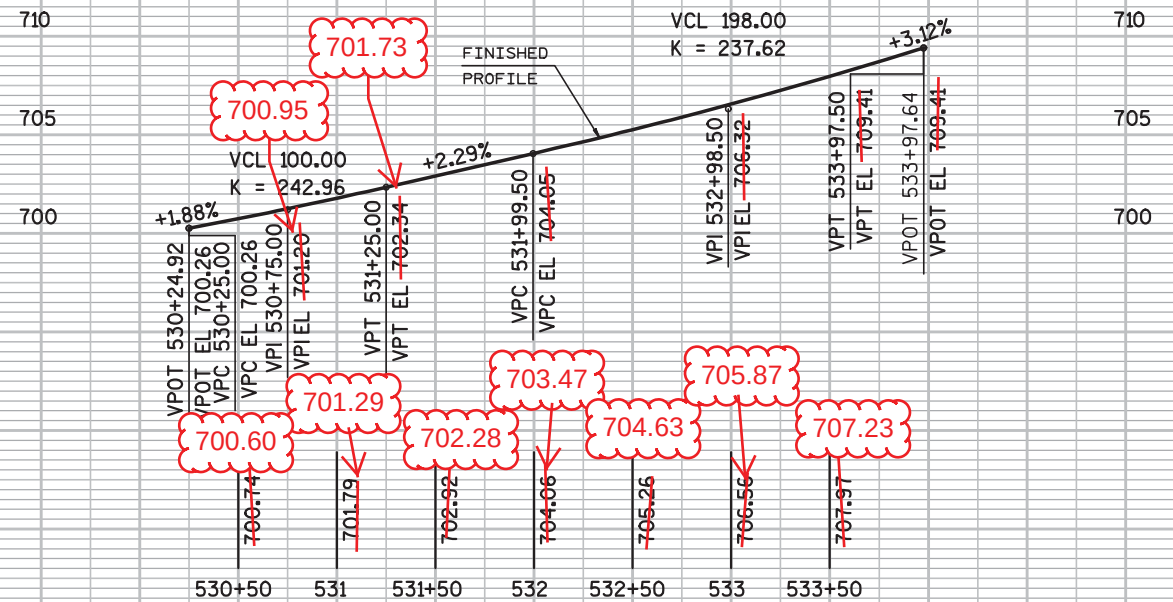
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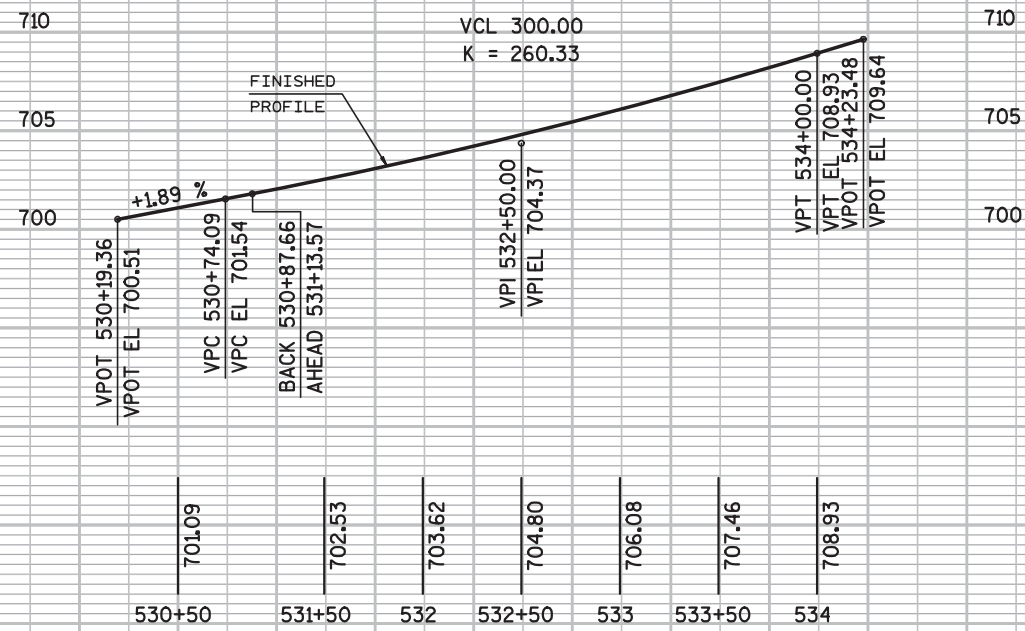
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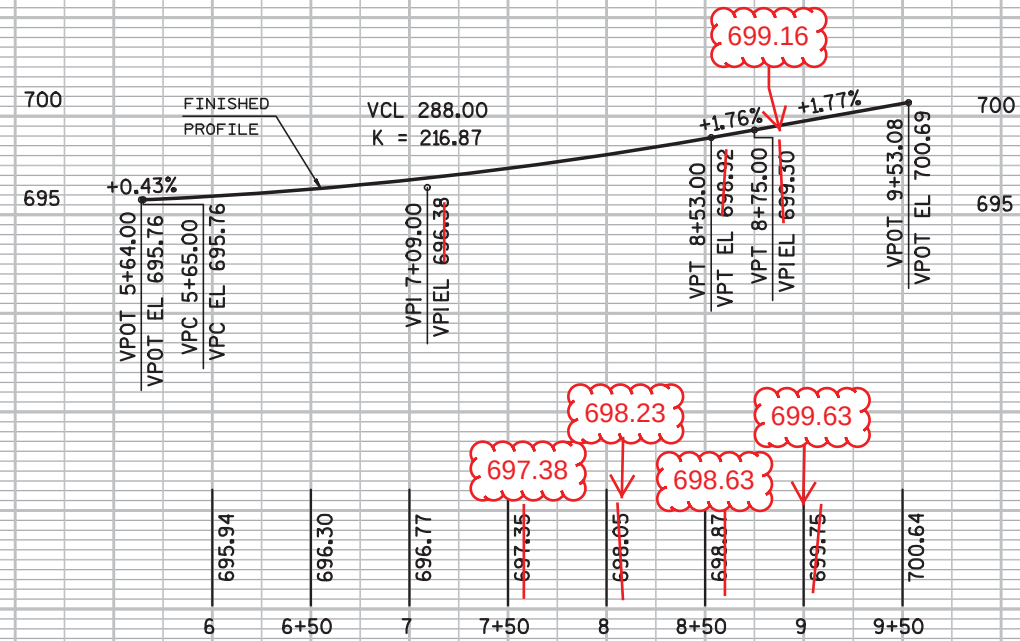
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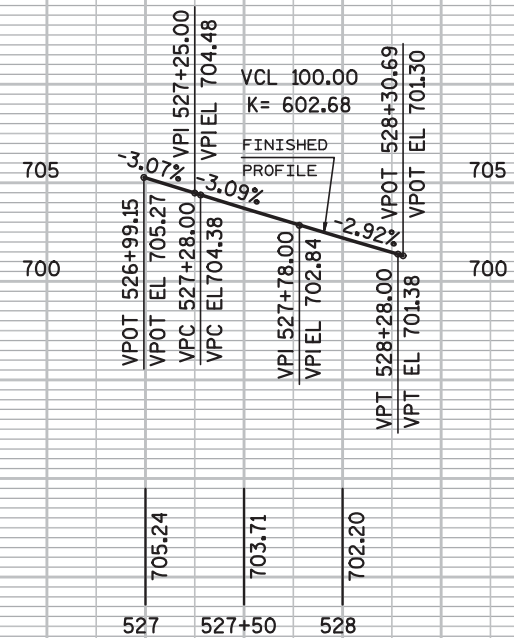
PROFILE FOR P54EBEX1



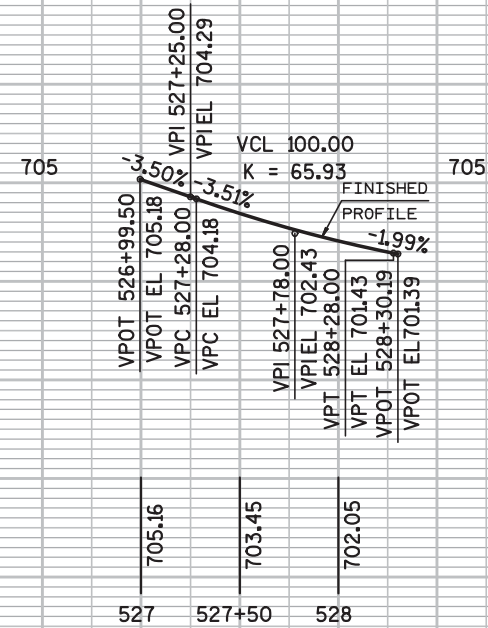
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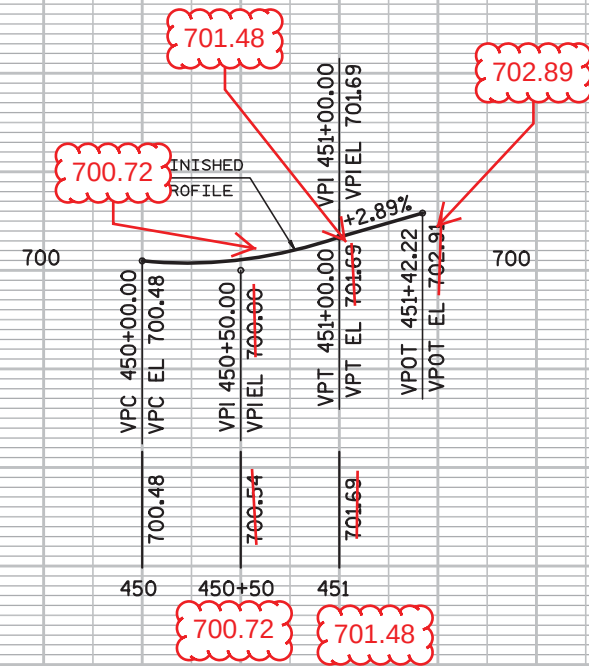
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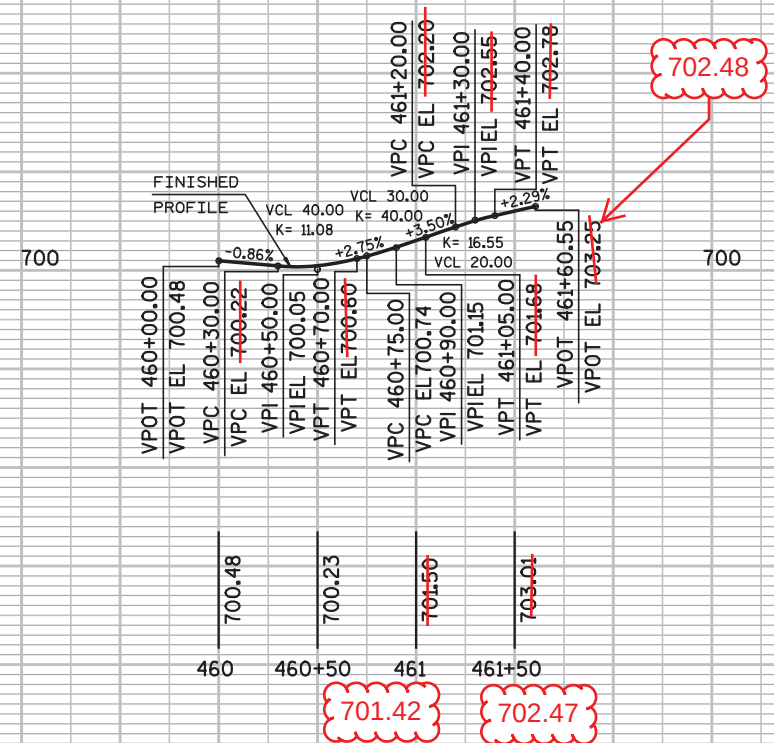
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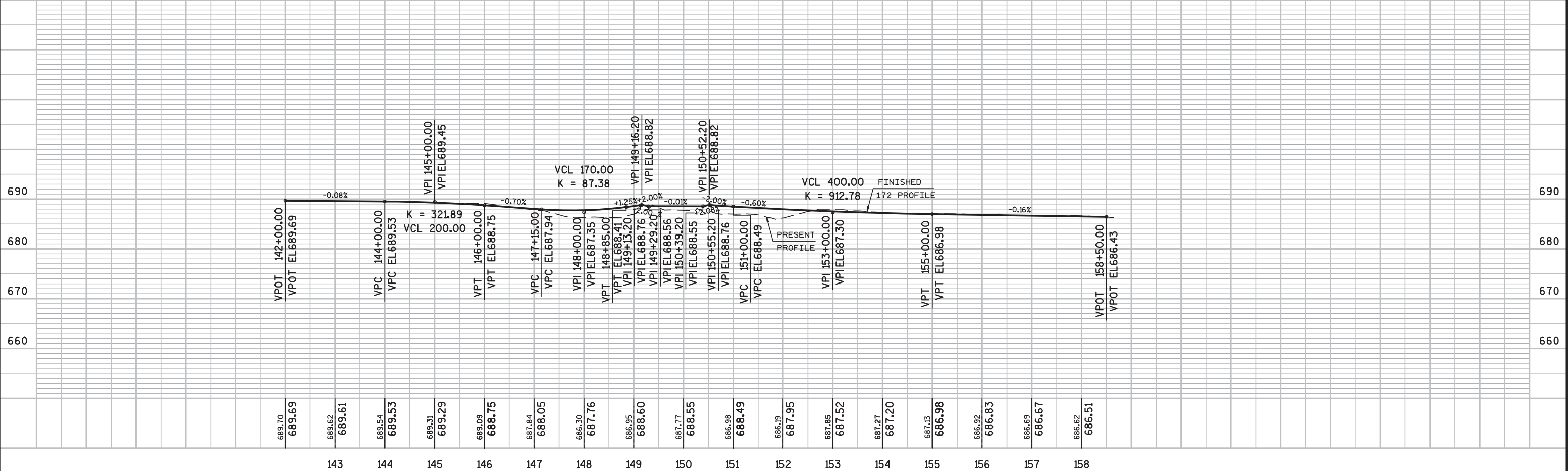
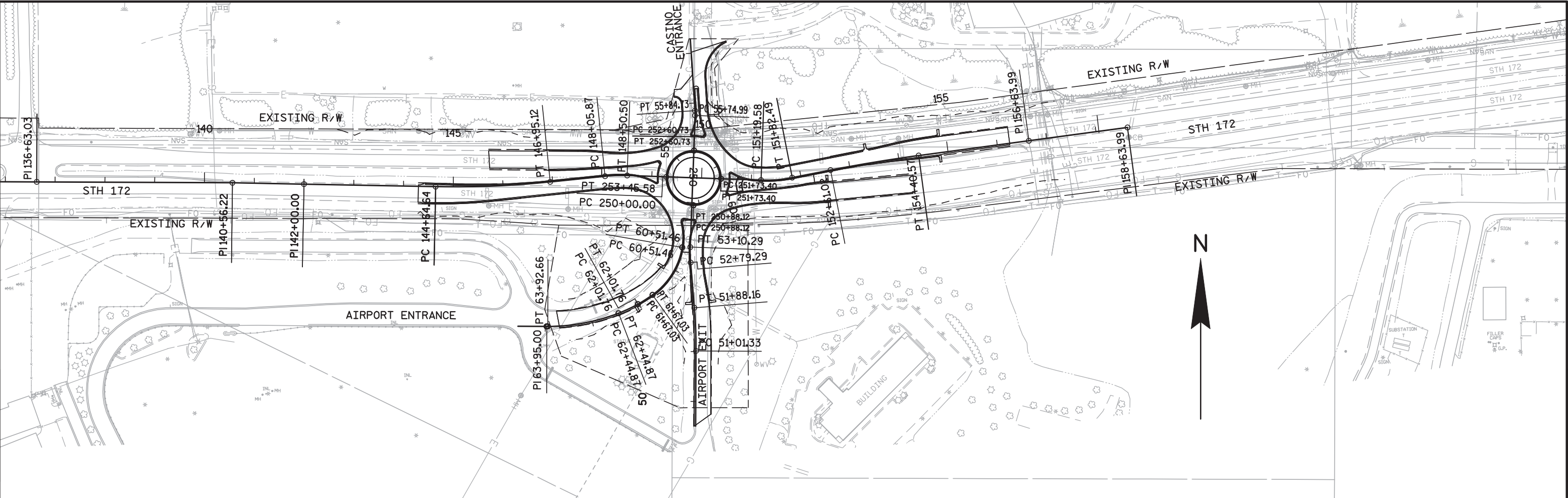
PROFILE FOR PCTHES1

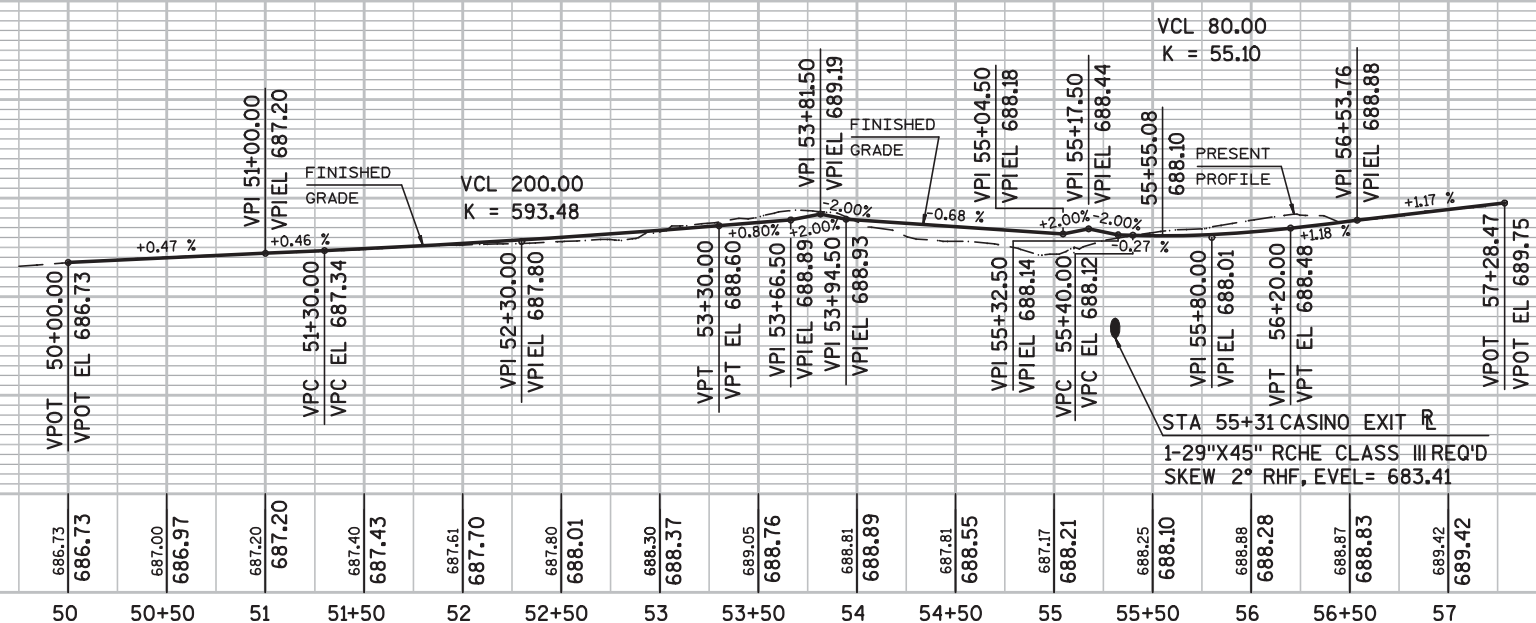
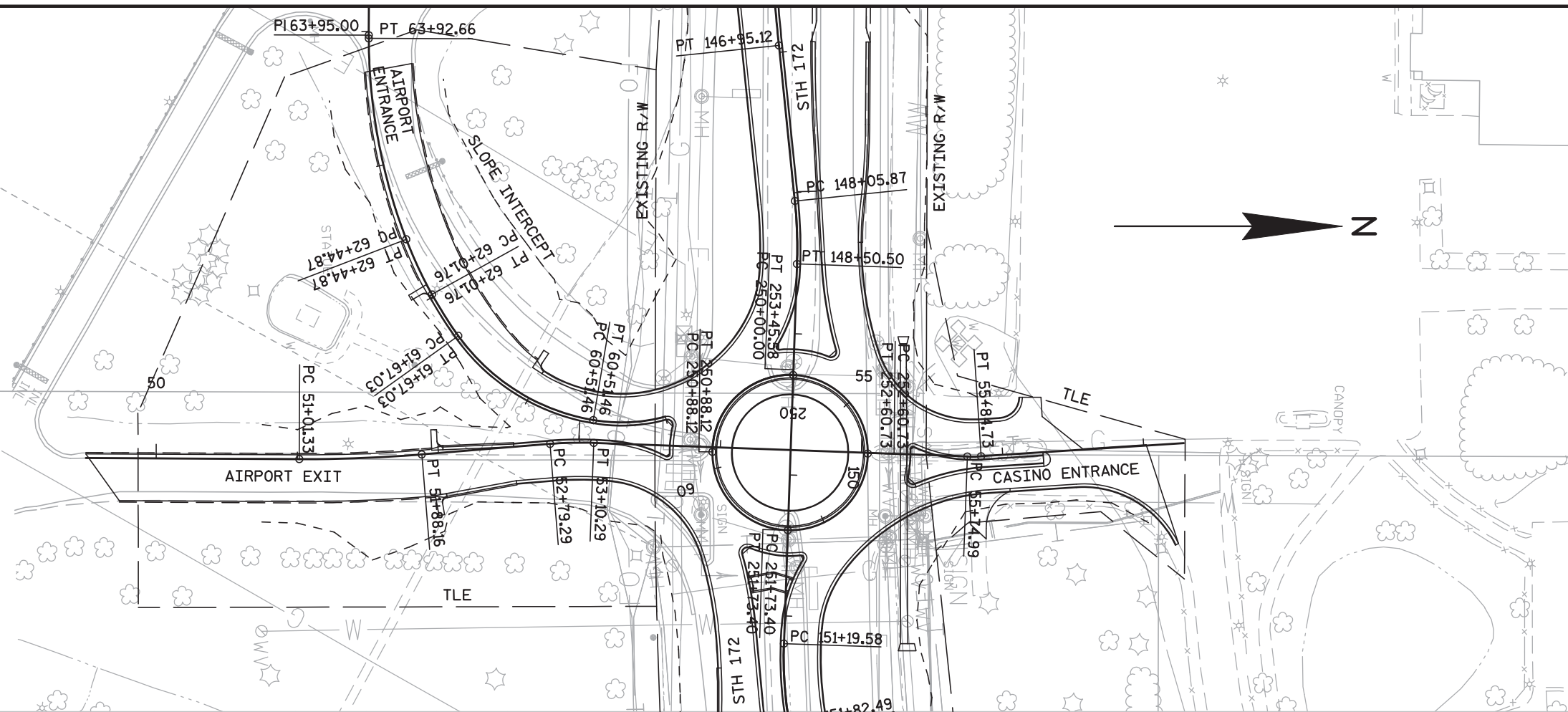


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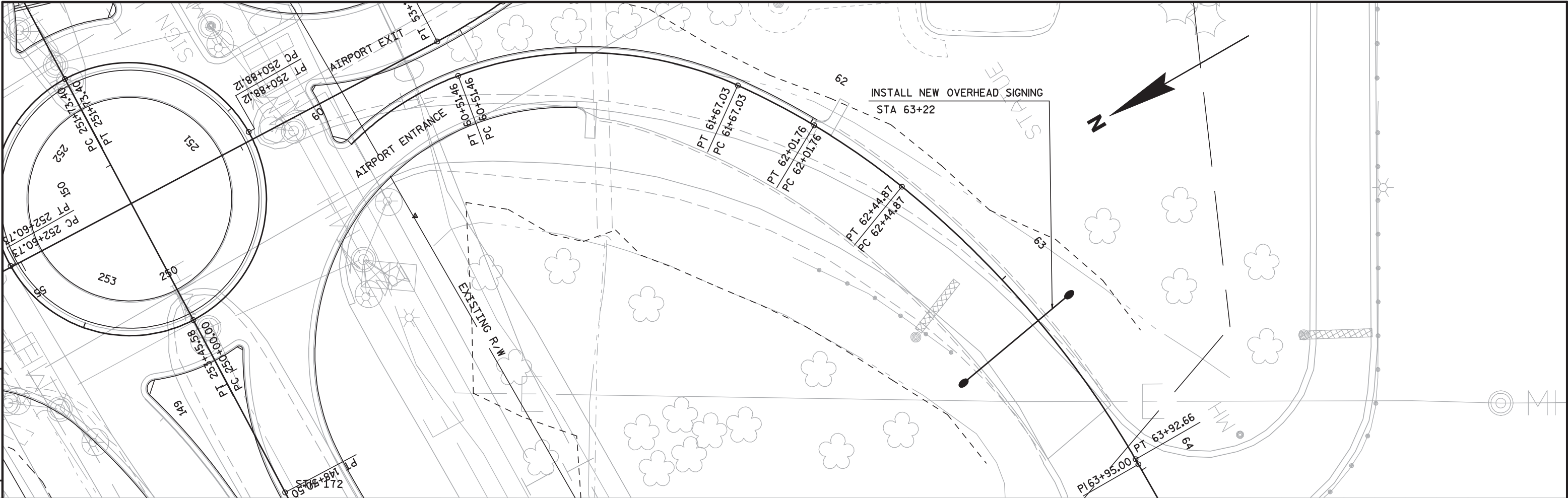


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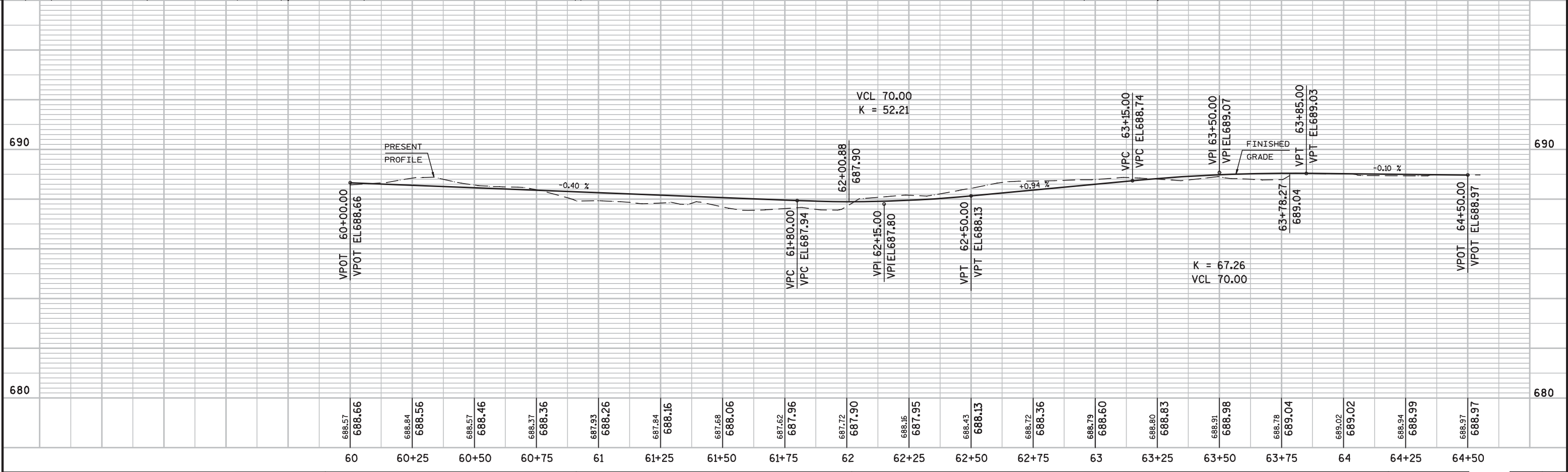




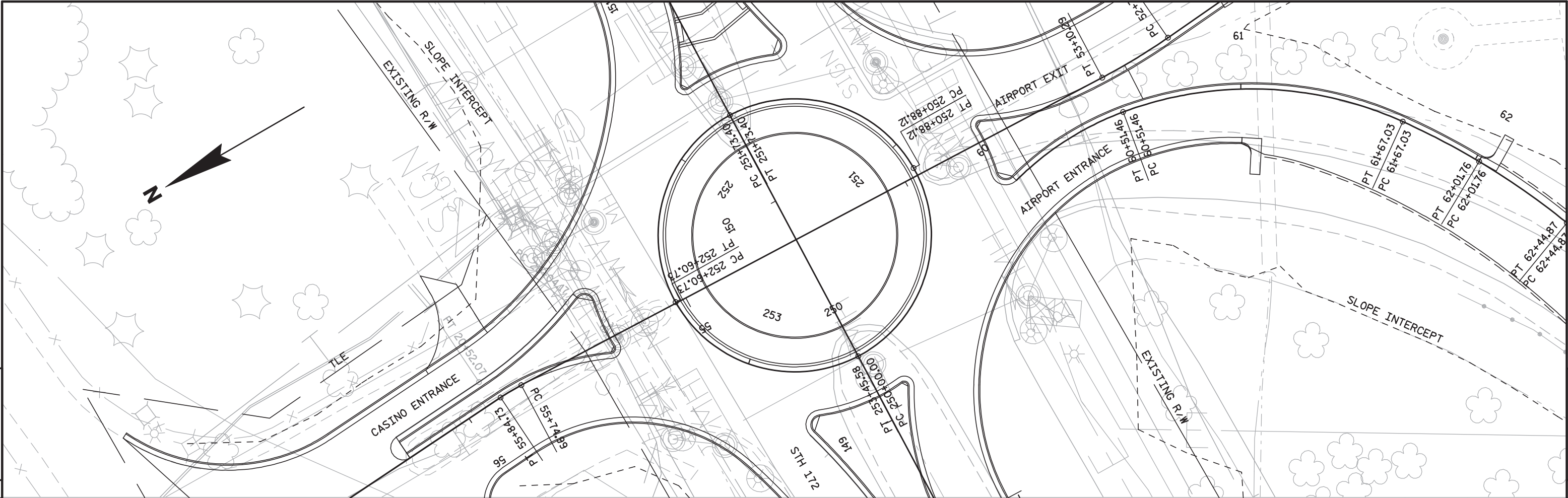
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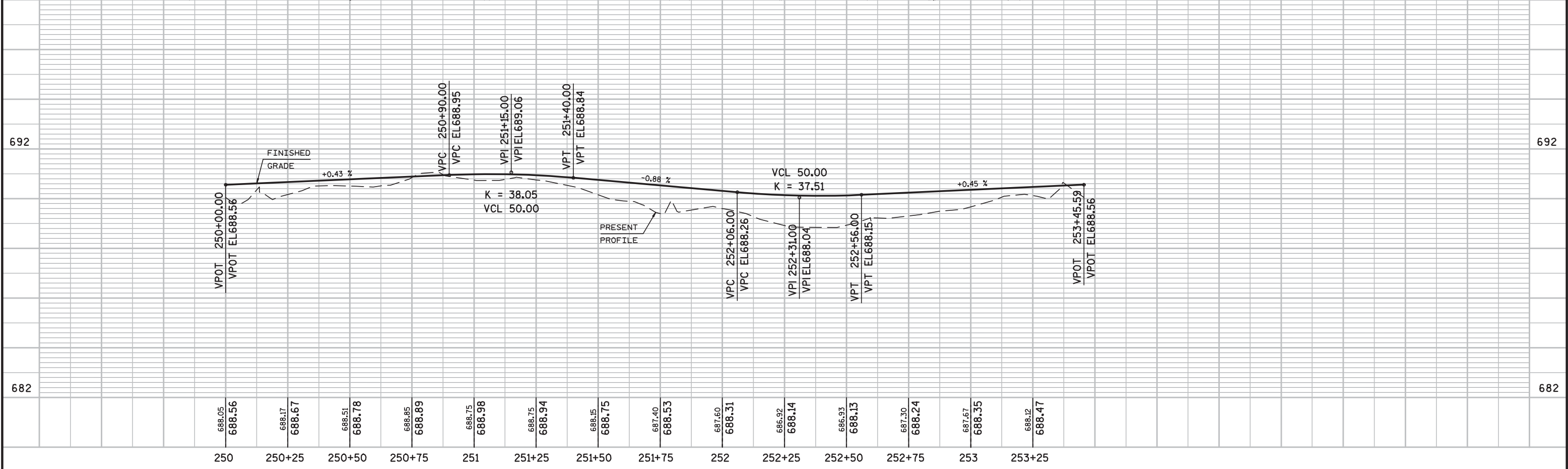
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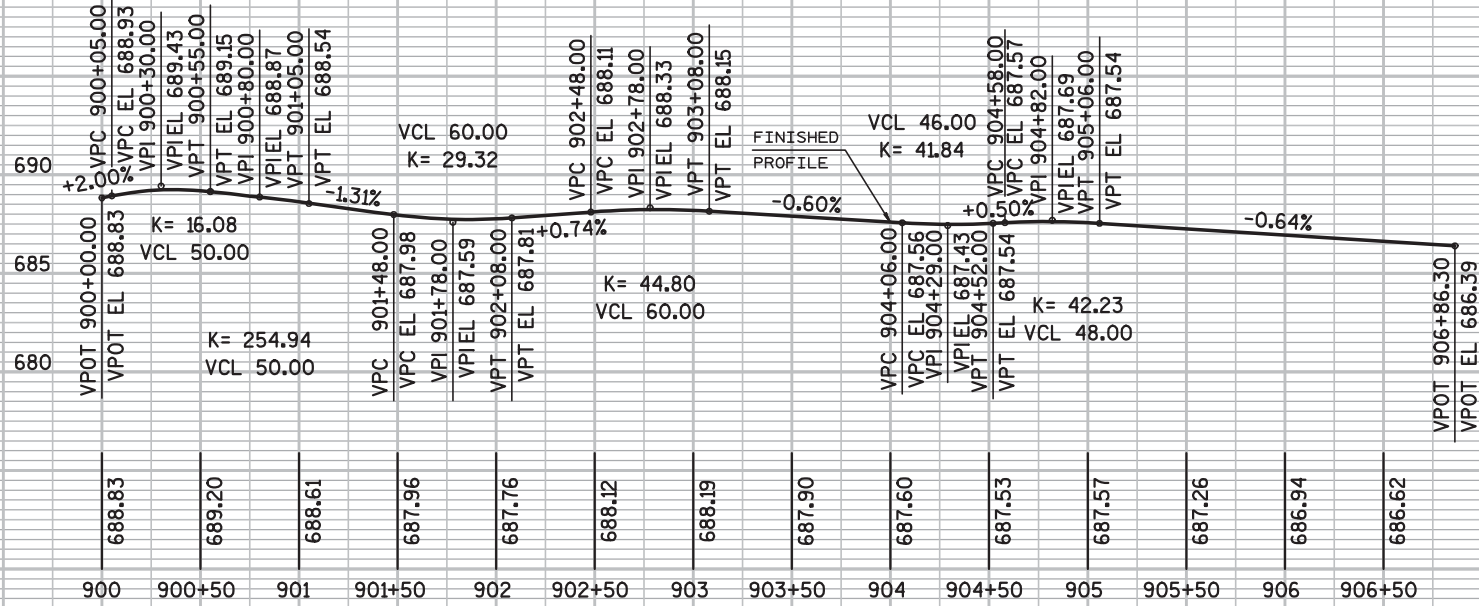


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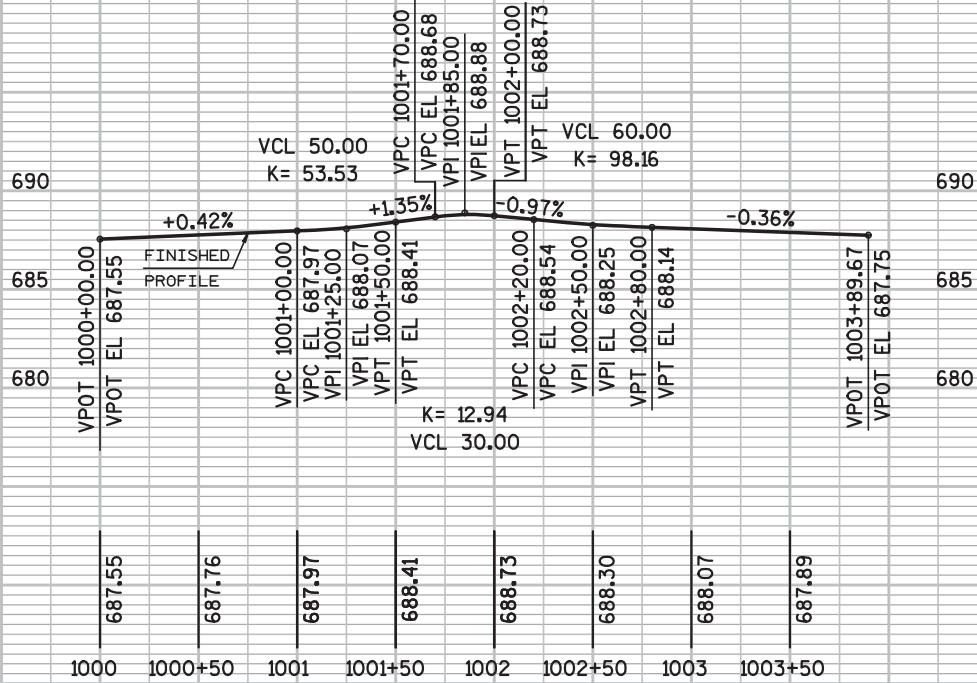


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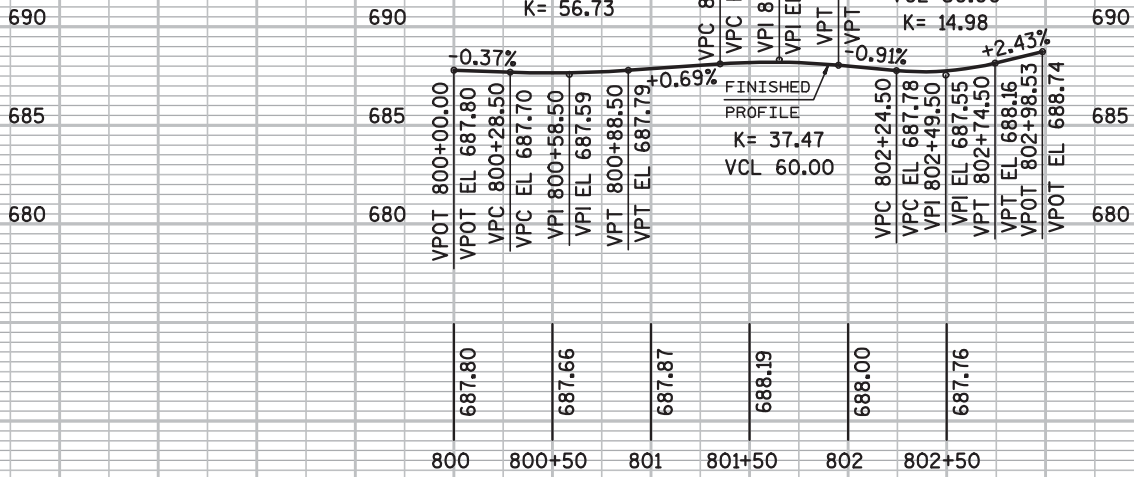




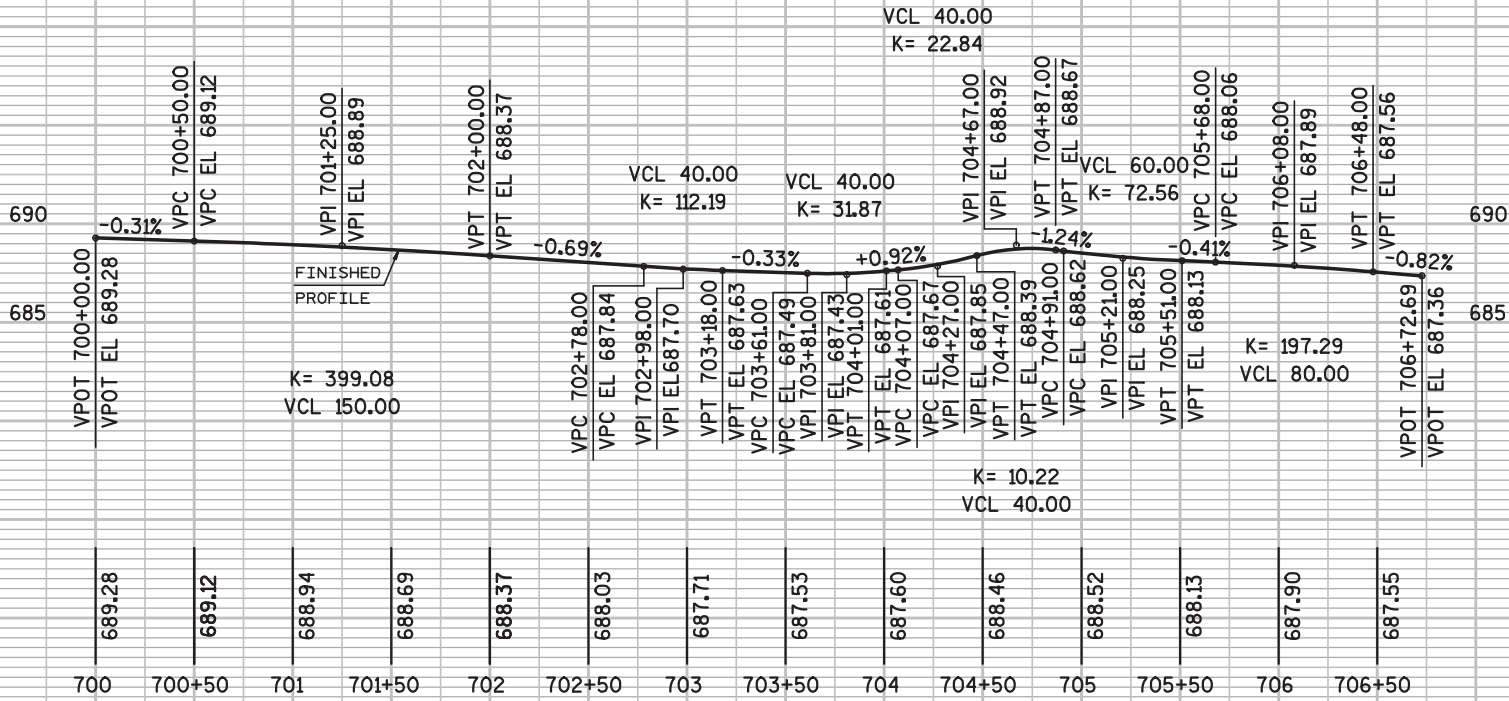
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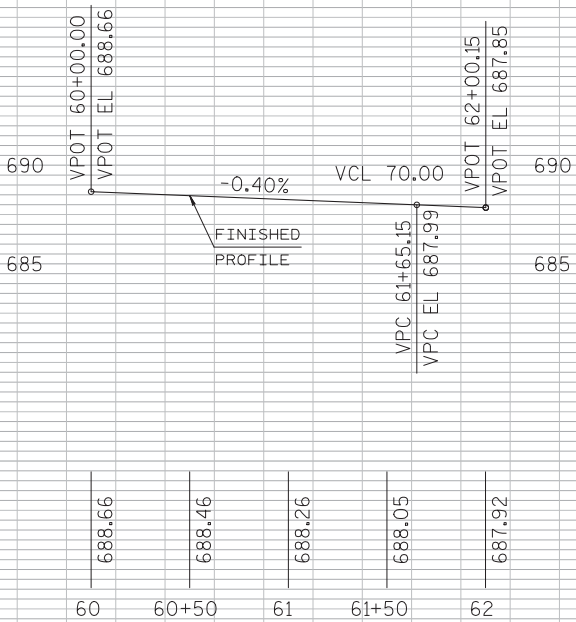
PROFILE FOR SEEAC1



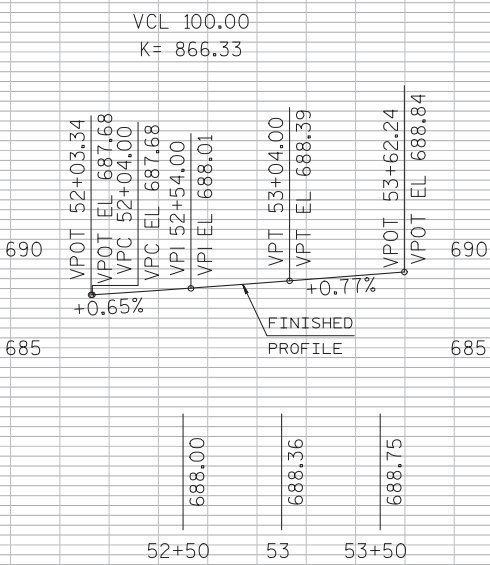
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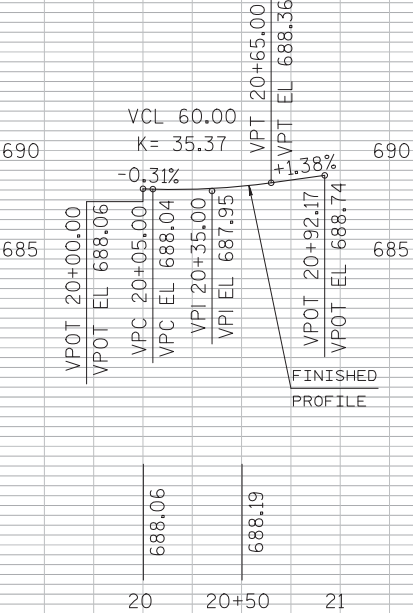
PROFILE FOR SWEAC2



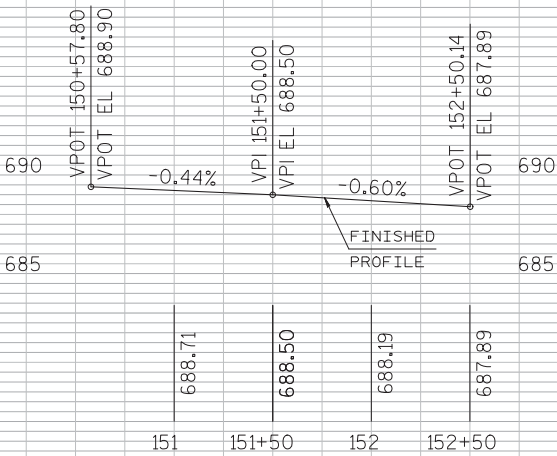
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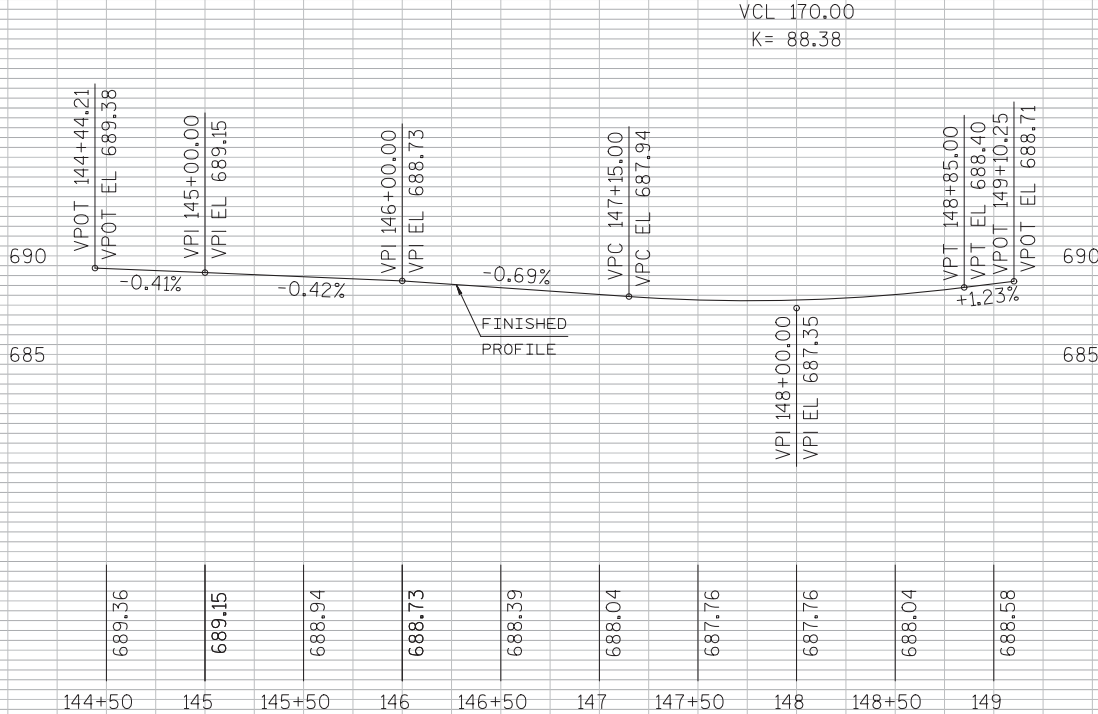
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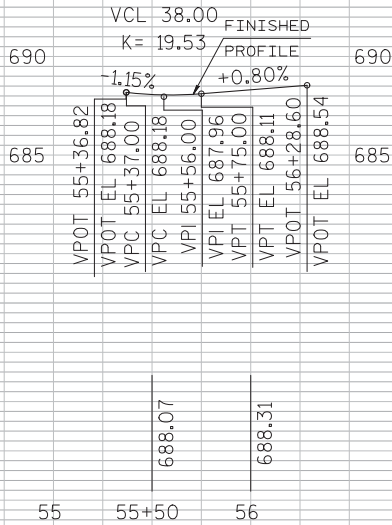
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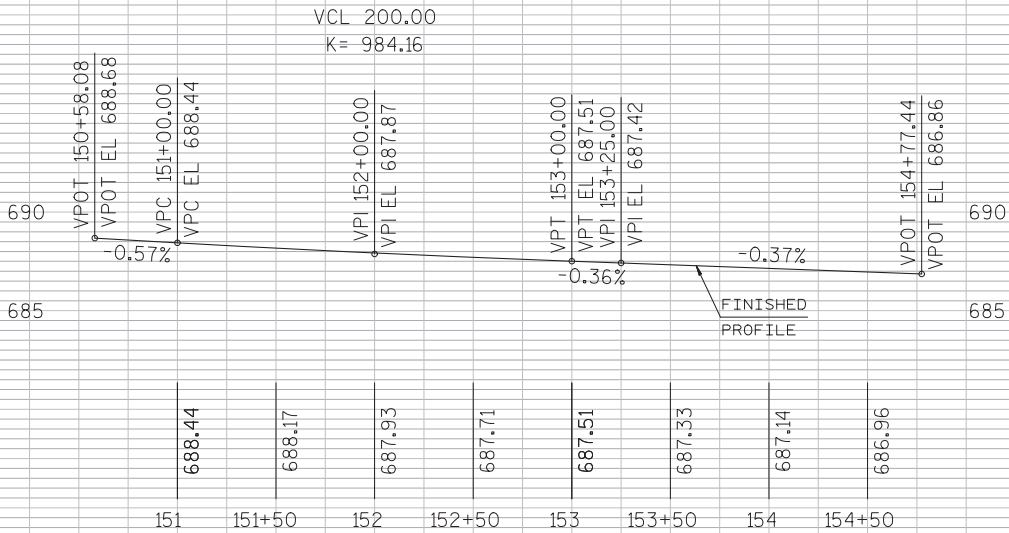
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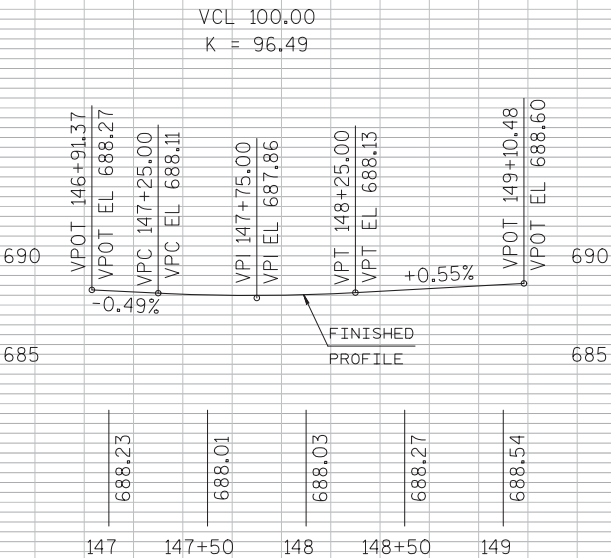
PROFILE FOR EBENT1



PROFILE FOR SBAP1



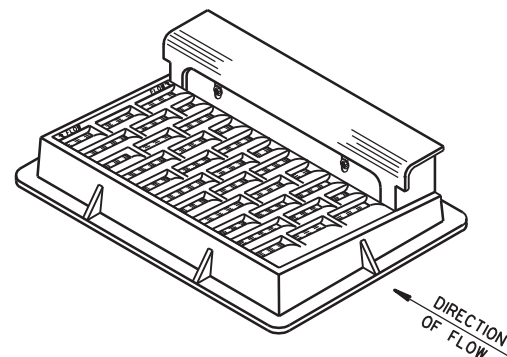
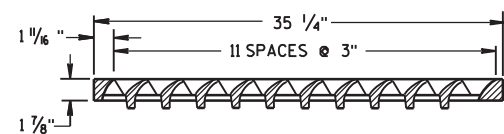
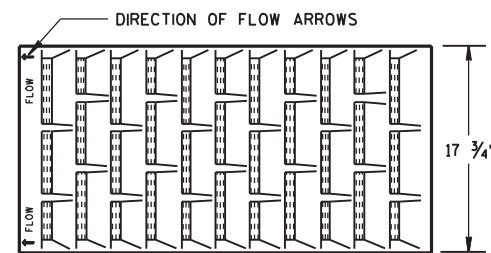
PROFILE FOR WBENT1



PROFILE FOR WBEX1

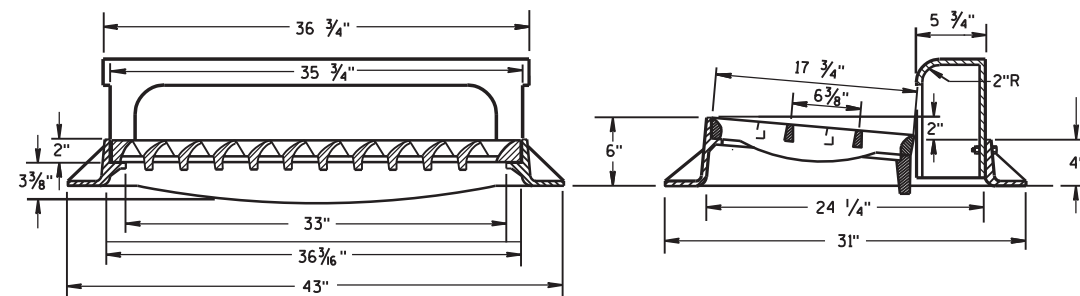
Standard Detail Drawing List

08A5-16A	INLET COVERS TYPE A, H, A-S, & H-S
08A5-16B	INLET COVERS TYPE B, B-A, C, MS, MS-A, & WM
08A5-17C	INLET COVERS TYPE F, HM, HM-S, S, T, V, HM-GJ, & HM-GJ-S
08C1-5	INLETS TYPE 1, 2, 3 & 4
08C5-2	INLETS TYPE 8, 9, 10, AND 11
08D1-17	CONCRETE CURB, CONCRETE CURB AND GUTTER AND TIES
08D4-5	CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES
08D5-14A	CURB RAMPS TYPES 1 AND 1-A
08D5-14B	CURB RAMPS TYPES 2 AND 3
08D5-14C	CURB RAMPS TYPE 4A
08D5-14D	CURB RAMPS TYPE 4B
08D5-14E	CURB RAMPS TYPES 5, 6, 7A, 7B & 8
08E8-3	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E9-6	SILT FENCE
08E10-2	INLET PROTECTION TYPE A, B, C AND D
08F1-11	APRON ENDWALLS FOR CULVERT PIPE
08F2-1	APRON ENDWALLS FOR PIPE ARCH AND ELLIPTICAL PIPE
08F4-6	JOINT TIES FOR CONCRETE PIPE
08F10-1	CONCRETE MASONRY ENDWALLS FOR CULVERT PIPE AND PIPE ARCH
09A1-12A	AT-GRADE SIDE ROAD INTERSECTION, TYPES "B1", "B2", "C" AND D AND TEE INTERSECTION BYPASS LANE
09B2-7	CONDUIT
09B4-9	PULL BOX
09C2-6	CONCRETE BASES, TYPES 1, 2 & 5
09C3-3	TRANSFORMER/PEDESTAL BASES
09C5-7	CONCRETE CONTROL CABINET BASES
09D1-4	CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)
09E1-10B	POLE MOUNTINGS FOR TRAFFIC SIGNALS AND LIGHTING UNITS, TYPE 3 (HEAVY DUTY)
09E1-10C	POLE MOUNTINGS FOR TRAFFIC SIGNALS AND LIGHTING UNITS, TYPE 4
09E1-10D	POLE MOUNTINGS FOR LIGHTING UNITS, TYPE 5 (30 FEET)
09E1-10G	HARDWARE DETAILS FOR POLE MOUNTINGS
09E3-3	NON-FREEWAY LIGHTING UNIT POLE WIRING
09E6-4	TRAFFIC SIGNAL STANDARD POLY BRACKET MOUNTINGS (TYPICAL) 13 FT. OR 15 FT.
11B1-5	CONCRETE CORRUGATED MEDIAN
11B2-2	CONCRETE MEDIAN NOSE
13C1-14	CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES
13C11-10A	RURAL DOWELED CONCRETE PAVEMENT
13C11-10B	RURAL DOWELED CONCRETE PAVEMENT
14B15-6A	STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATION & ELEMENTS
14B15-6B	STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATION & ELEMENTS
14B15-6C	STEEL PLATE BEAM GUARD, CLASS "A", INSTALLATION & ELEMENTS
14B15-6D	STEEL PLATE BEAM GUARD, CLASS "A", MOW STRIP DETAIL
14B16-4A	ANCHORAGE FOR STEEL PLATE BEAM GUARD TYPE 2
14B16-4B	ANCHORAGE FOR STEEL PLATE BEAM GUARD TYPE 2
14B27-1A	STEEL PLATE BEAM GUARD SHORT RADIUS TERMINAL
14B27-1B	STEEL PLATE BEAM GUARD SHORT RADIUS TERMINAL
14B27-1C	STEEL PLATE BEAM GUARD SHORT RADIUS TERMINAL
15A3-1	MARKER POSTS, FLEXIBLE, FOR CULVERT END
15C2-4A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C2-4B	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C2-4C	DETOUR SIGNING FOR MAINLINE CLOSURES
15C3-1	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15C4-1	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C5-1	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS
15C7-11B	PAVEMENT MARKING WORDS
15C7-11E	ROUNDBABOUT ARROWS
15C8-13A	PAVEMENT MARKING (MAINLINE)
15C8-13B	PAVEMENT MARKING (INTERSECTIONS)
15C8-13E	PAVEMENT MARKING (LEFT TURN LANE)
15C8-13F	PAVEMENT MARKING (ISLANDS, STOP LINE & CROSS WALK)
15C18-3	MEDIAN ISLAND MARKING
16A1-6	LANDMARK REFERENCE MONUMENTS AND COVERS



NOTE:
GRATE IS REVERSIBLE.

NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

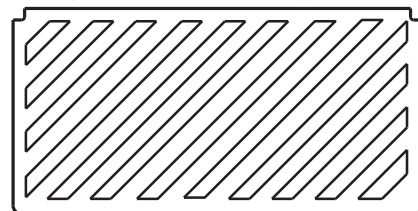


TYPE "H"

(APPROXIMATE WEIGHT 422 LBS.)

FRAME..... 175 LBS.
GRATE..... 138 LBS.
CURB BOX..... 109 LBS.

1 1/8" DIAGONAL BARS WITH 1 5/8" OPENINGS



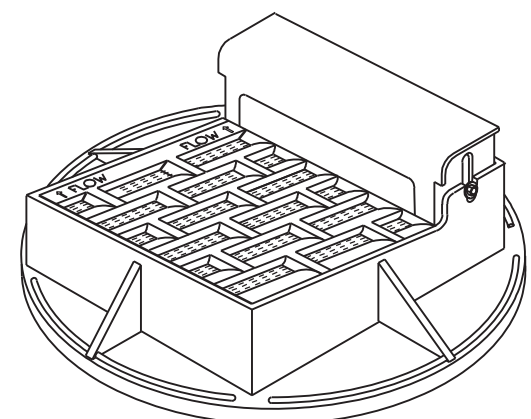
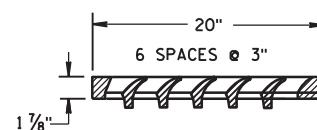
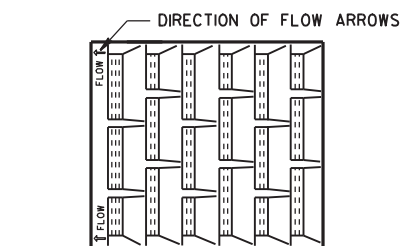
**SPECIAL GRATE FOR
TYPE "H" COVER**

(MEASURES 35 1/4" X 17 3/4" X 2")

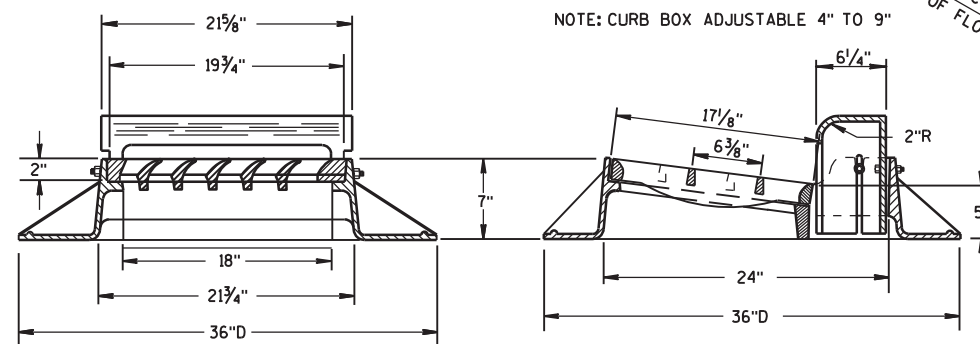
(APPROXIMATE WEIGHT 172 LBS.)

GRATE..... 172 LBS.

(NOTED AS TYPE H-S ON DRAINAGE TABLE)



NOTE: CURB BOX ADJUSTABLE 4" TO 9"



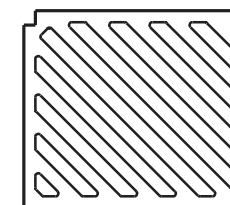
TYPE "A"

(APPROXIMATE WEIGHT 325 LBS.)

FRAME..... 157 LBS.
GRATE..... 84 LBS.
CURB BOX..... 84 LBS.

NOTE:
GRATE IS REVERSIBLE.

1" DIAGONAL BARS
WITH 1 1/2" OPENINGS



**SPECIAL GRATE FOR
TYPE "A" COVER**

(MEASURES 19 3/4" X 17" X 1 7/8")

GRATE..... 84 LBS.

(NOTED AS TYPE A-S ON DRAINAGE TABLE)

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.

THE ACTUAL WEIGHT OF COVERS MAY VARY WITHIN 5 PERCENT, PLUS OR MINUS, OF THE APPROXIMATE WEIGHT.

**INLET COVERS
TYPE A, H, A-S, & H-S**

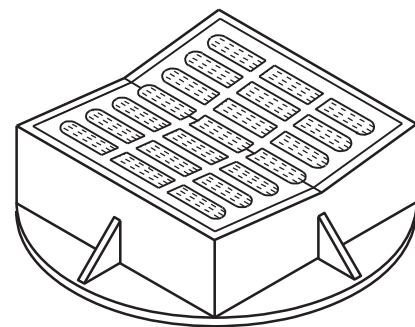
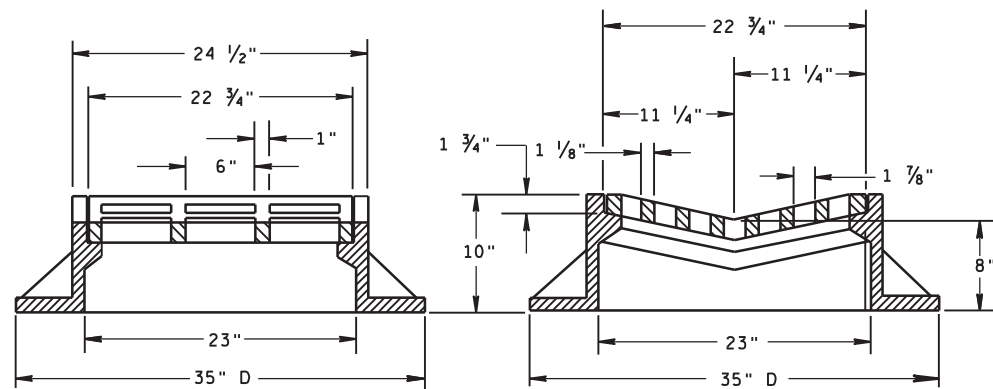
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

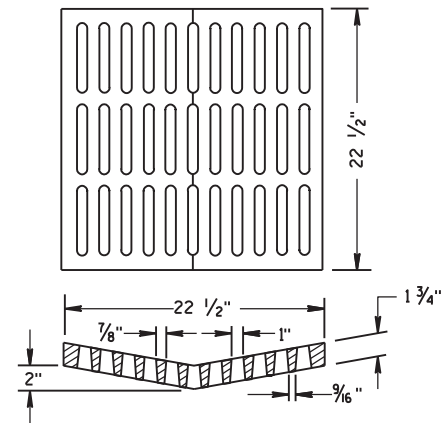
10/4/99
DATE

FHWA

[Signature]
CHIEF ROADWAY DEVELOPMENT ENGINEER

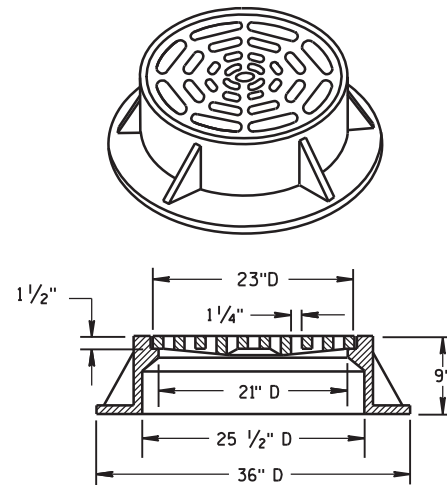


TYPE "B"
(APPROXIMATE WEIGHT 395 LBS.)
FRAME..... 285 LBS.
GRATE..... 110 LBS.

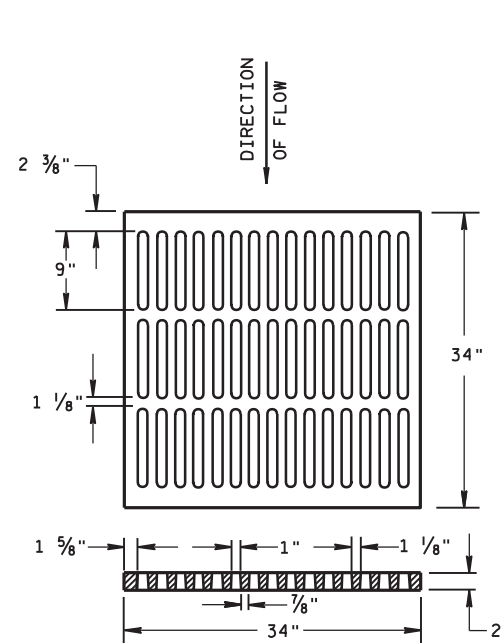


**ALTERNATIVE GRATE FOR
TYPE "B" COVER**

(APPROXIMATE GRATE WEIGHT 125 LBS.)
GRATE..... 125 LBS.
USE WHERE PEDESTRIAN OR BICYCLE TRAFFIC IS POSSIBLE.
NOTED AS TYPE B-A ON THE DRAINAGE TABLE

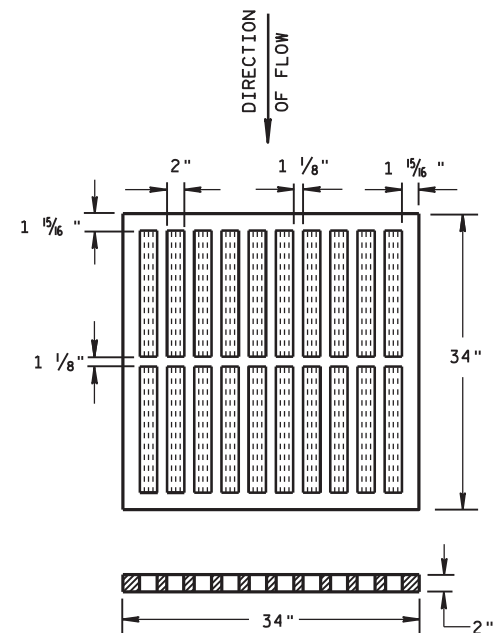


TYPE "C"
(APPROXIMATE WEIGHT 340 LBS.)
FRAME..... 235 LBS.
GRATE..... 105 LBS.

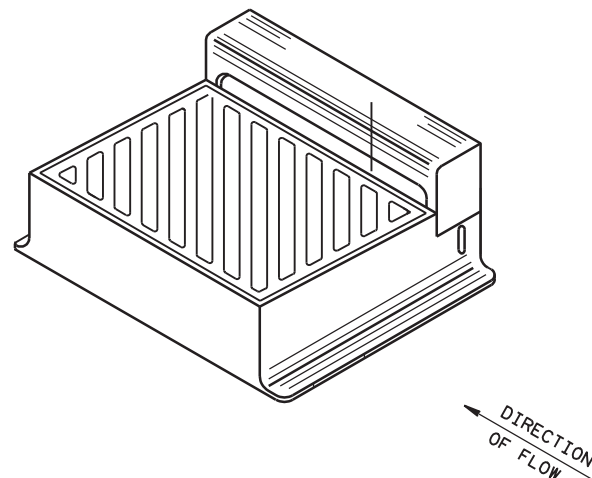


ALTERNATIVE TYPE "MS"
(APPROXIMATE GRATE WEIGHT 365 LBS.)
GRATE..... 365 LBS.

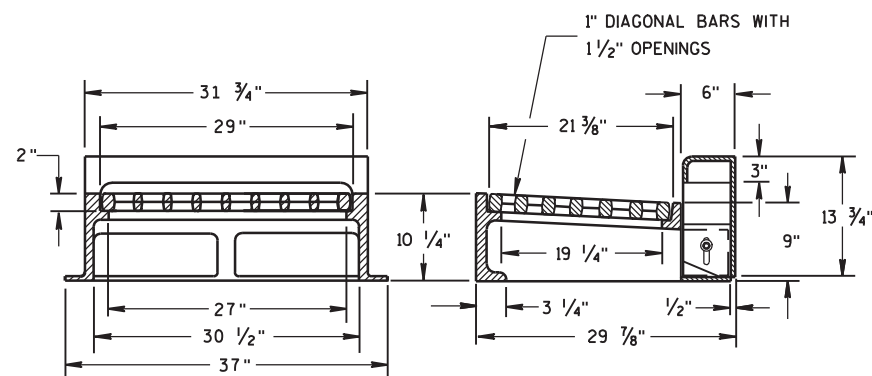
USE WHERE PEDESTRIAN OR BICYCLE TRAFFIC IS PERMITTED
NOTED AS TYPE MS-A ON THE DRAINAGE TABLE



TYPE "MS"
(APPROXIMATE GRATE WEIGHT 270 LBS.)
GRATE..... 270 LBS.
USE ON FREEWAYS AND EXPRESSWAYS
NOTED AS TYPE MS ON DRAINAGE TABLE



DIAGONAL SLOTS, SHALL BE ORIENTED
TO THE DIRECTION OF FLOW AS ILLUSTRATED.
GRATES ARE MANUFACTURED TO BE REVERSIBLE.



NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

TYPE "WM"
(APPROXIMATE WEIGHT 670 LBS.)
FRAME..... 360 LBS.
GRATE..... 160 LBS.
CURB BOX..... 150 LBS.

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.

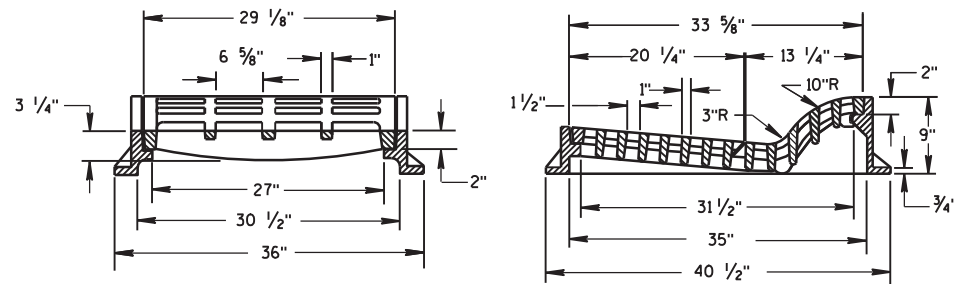
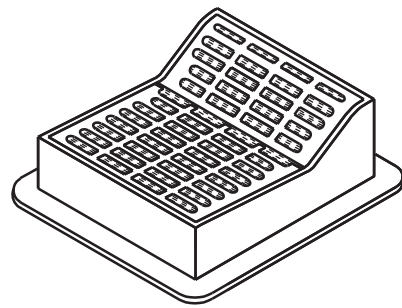
THE ACTUAL WEIGHT OF COVERS MAY VARY WITHIN 5 PERCENT, PLUS OR MINUS, OF THE APPROXIMATE WEIGHT.

**INLET COVERS
TYPE B, B-A, C, MS, MS-A, & WM**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/4/99
DATE
FHWA

Paul J. Rasmussen
CHIEF ROADWAY DEVELOPMENT ENGINEER



TYPE "F"

(APPROXIMATE WEIGHT 645 LBS.)

FRAME.....300 LBS.
GRATE.....165 LBS.
GRATE.....180 LBS.

USE WITH TYPES A & D CONCRETE CURB & GUTTER, 36 INCH.

ALTERNATIVE CURB BOX FOR TYPE "HM" COVER

(APPROXIMATE WEIGHT 79 LBS.)

CURB BOX.....79 LBS.

USE WITH TYPES G & J CONCRETE CURB & GUTTER, 30 INCH
NOTED AS TYPE HM-GJ ON DRAINAGE TABLE

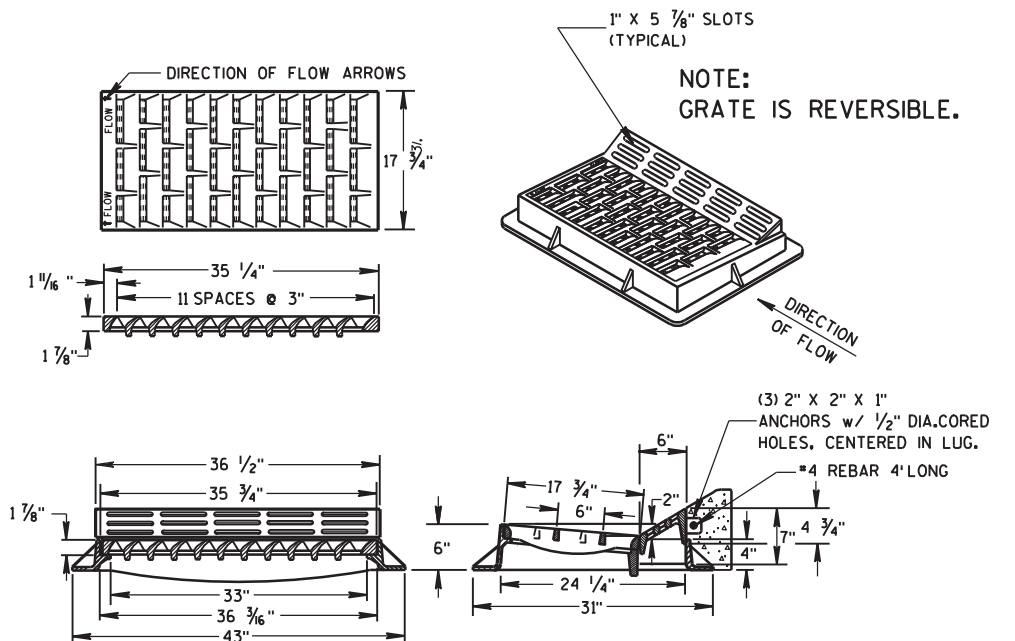
NOTE:
SPECIAL GRATE FOR THE
TYPE "H" COVER MAY ALSO BE
USED FOR THE TYPE "HM-GJ" COVER
NOTED AS TYPE HM-GJ-S ON DRAINAGE TABLE

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

THE ACTUAL WEIGHT OF COVERS MAY VARY WITHIN 5 PERCENT, PLUS OR MINUS, OF THE APPROXIMATE WEIGHT.



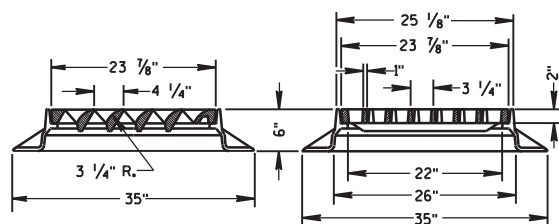
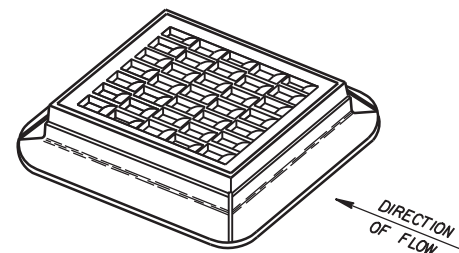
TYPE "HM"

(APPROXIMATE WEIGHT 375 LBS.)

FRAME.....175 LBS.
GRATE.....138 LBS.
CURB BOX.....62 LBS.

USE WITH TYPES A & D CONCRETE CURB & GUTTER, 36 INCH.

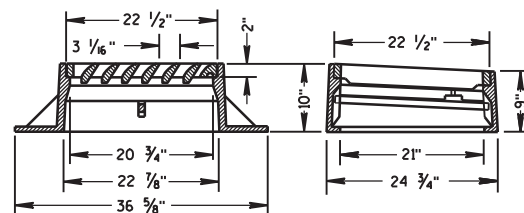
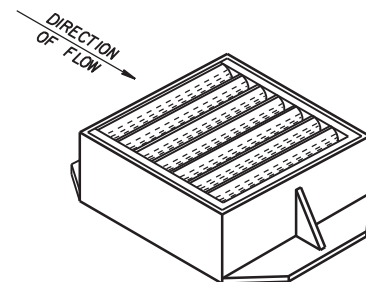
NOTE:
SPECIAL GRATE FOR THE
TYPE "H" COVER MAY ALSO BE
USED FOR THE TYPE "HM" COVER
NOTED AS TYPE HM-S ON DRAINAGE TABLE



TYPE "S"

(APPROXIMATE WEIGHT 334 LBS.)

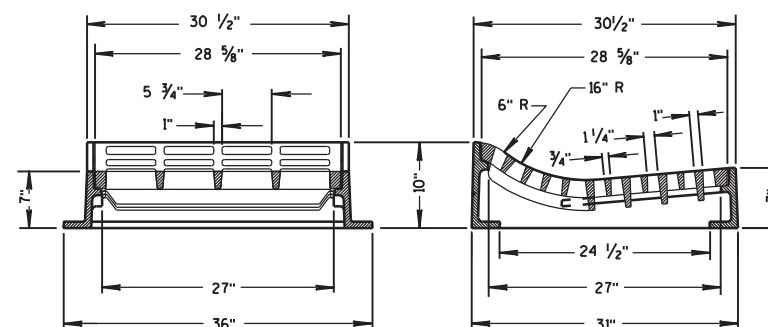
FRAME.....165 LBS.
GRATE.....169 LBS.



TYPE "V"

(APPROXIMATE WEIGHT 405 LBS.)

FRAME.....270 LBS.
GRATE.....130 LBS.
SAFETY BAR.....5 LBS.

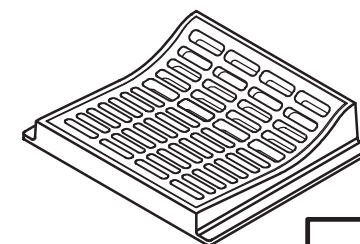


TYPE "T"

(APPROXIMATE WEIGHT 530 LBS.)

FRAME.....270 LBS.
GRATE.....260 LBS.

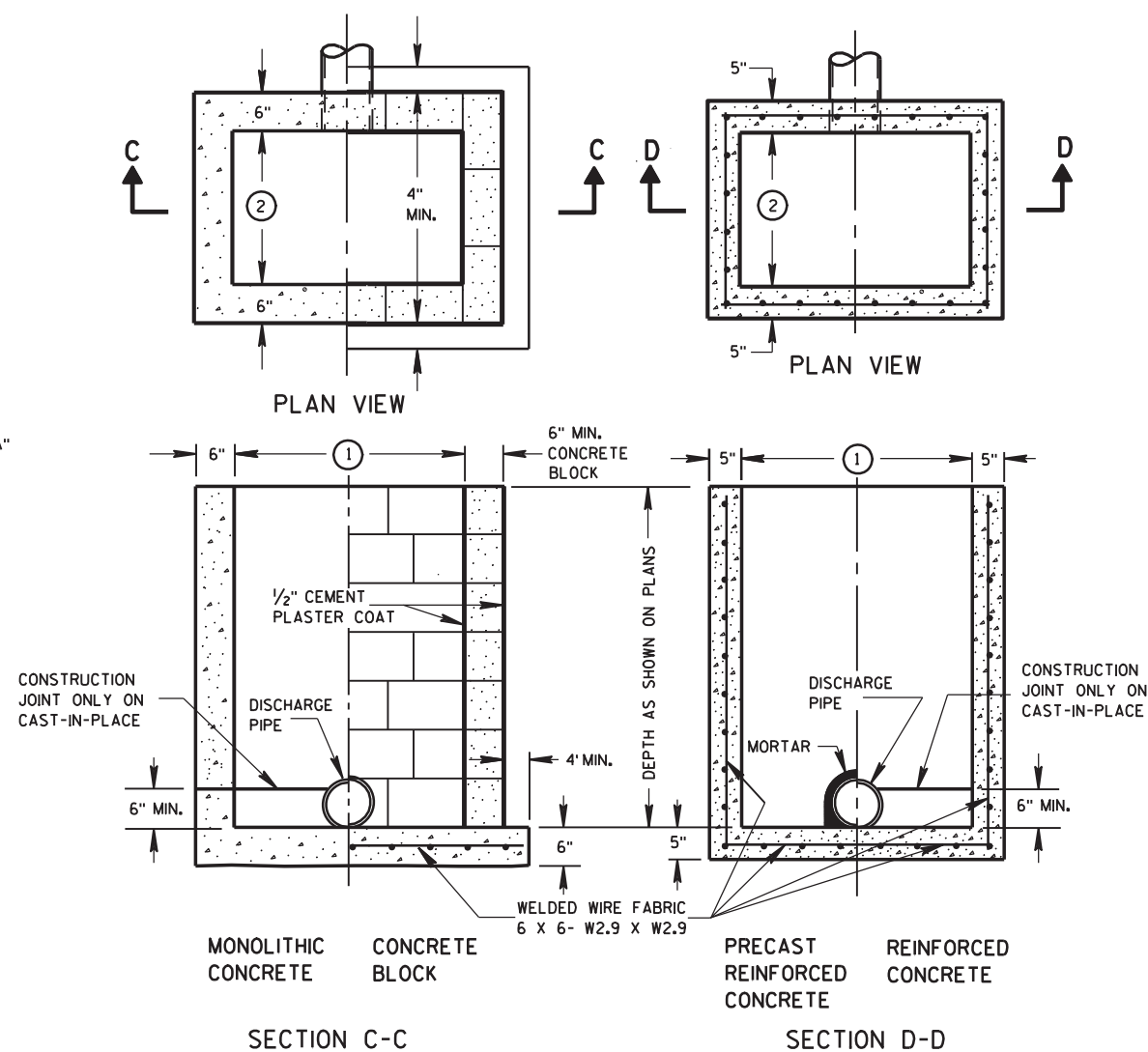
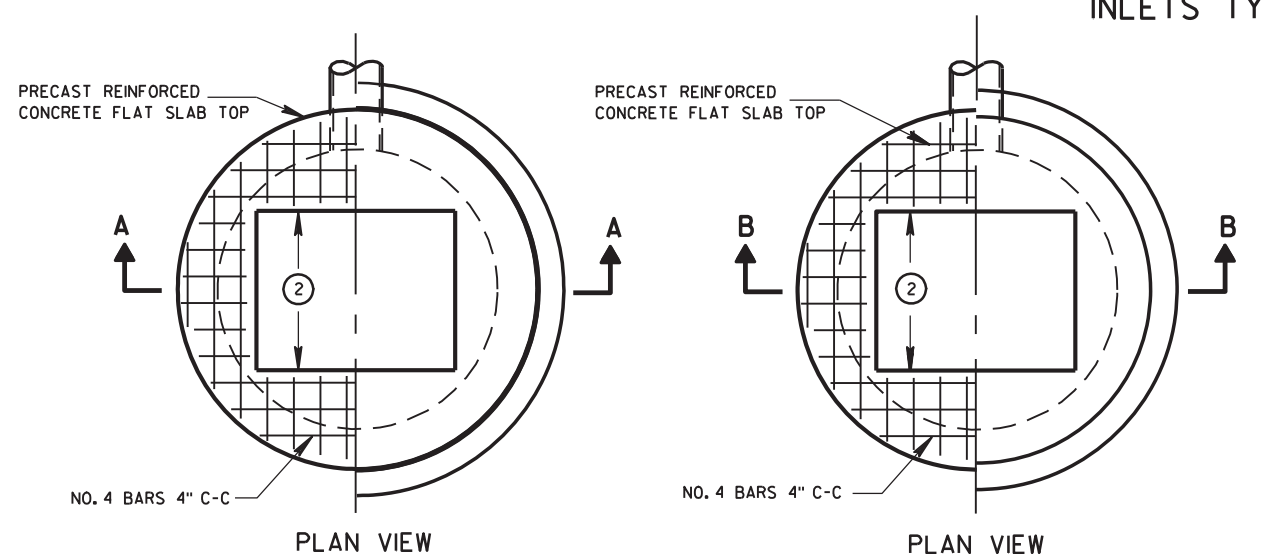
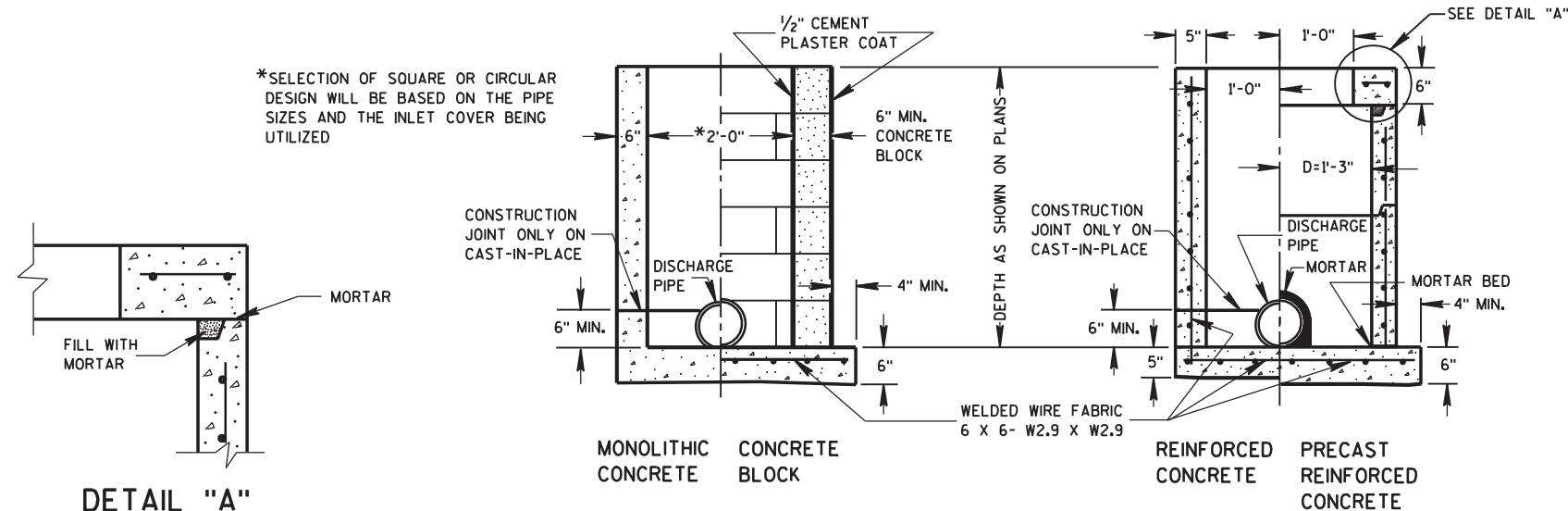
USE WITH TYPES R & T CONCRETE CURB & GUTTER, 30 INCH.



INLET COVERS
TYPE F, HM, HM-S, S, T, V,
HM-GJ, & HM-GJ-S

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
12/17/07 /S/ Jerry H. Zogg
DATE ROADWAY STANDARDS DEVELOPMENT
ENGINEER
FHWA

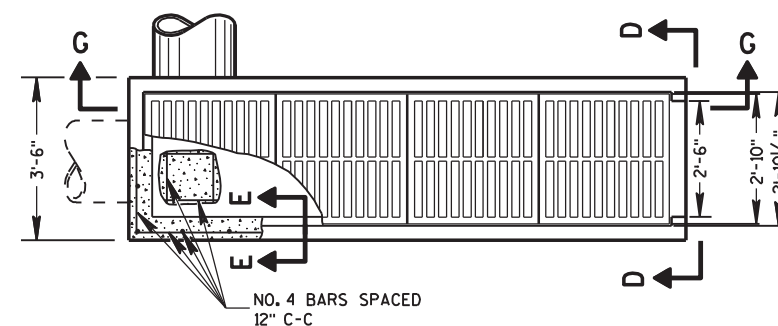
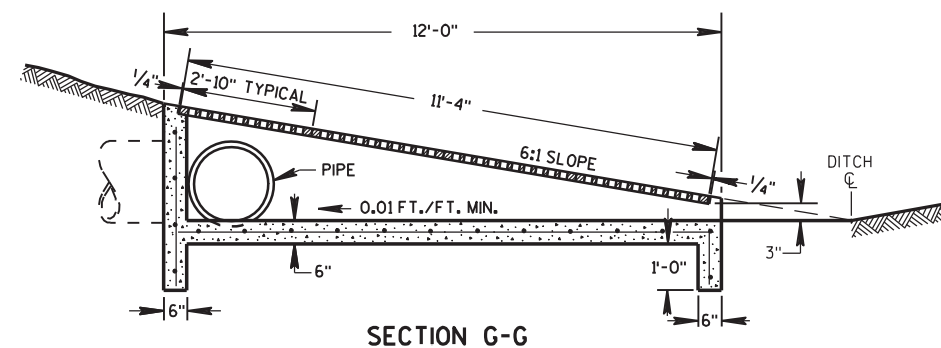


INLETS TYPE 2, 3 & 4

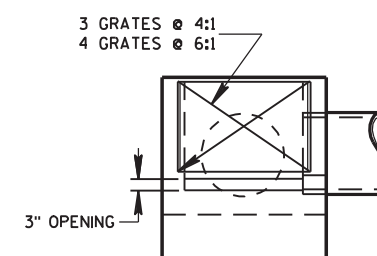
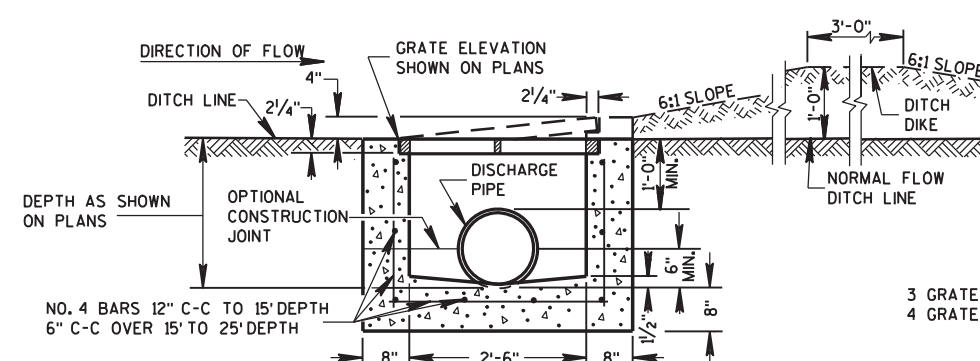
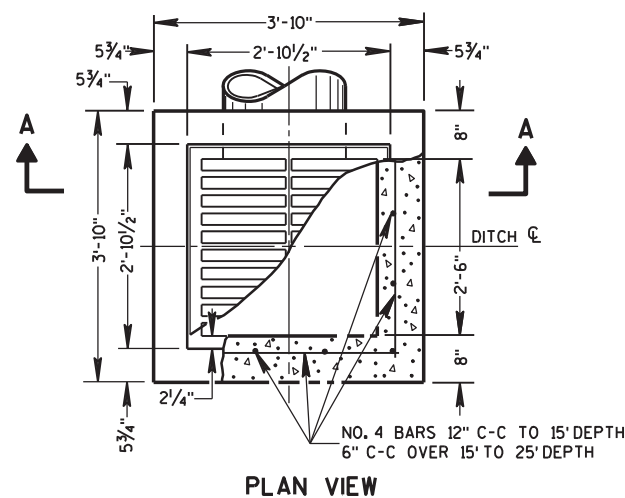
INLETS TYPE 1, 2, 3 & 4

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATIONAPPROVED
8/26/94
DATE
FHWA

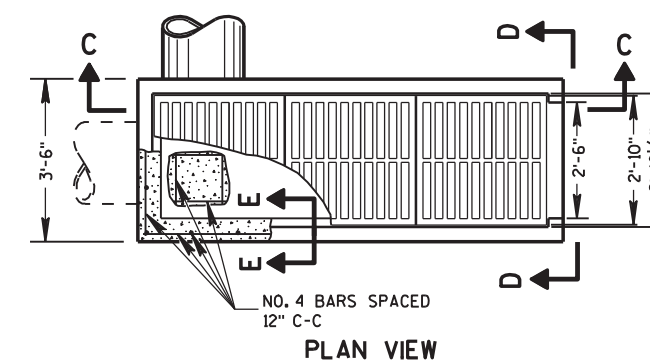
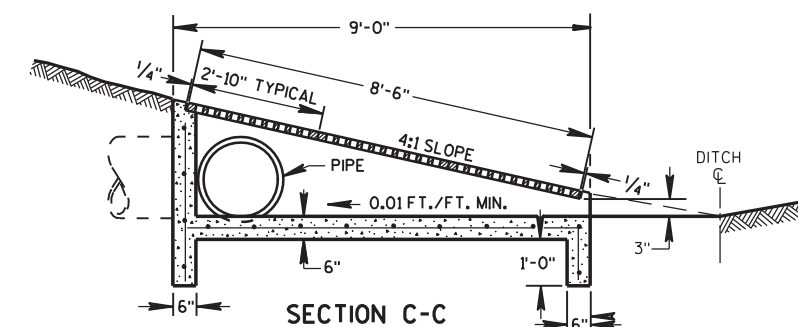
CHIEF ROADWAY DEVELOPMENT ENGINEER



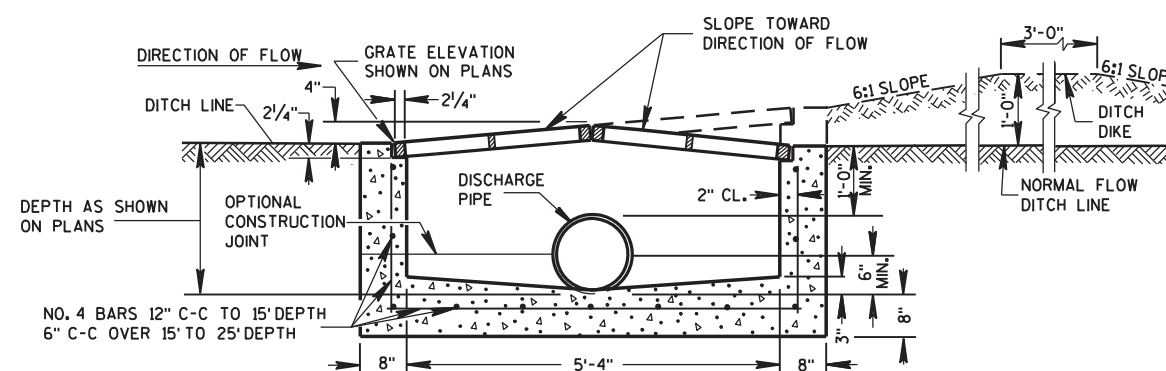
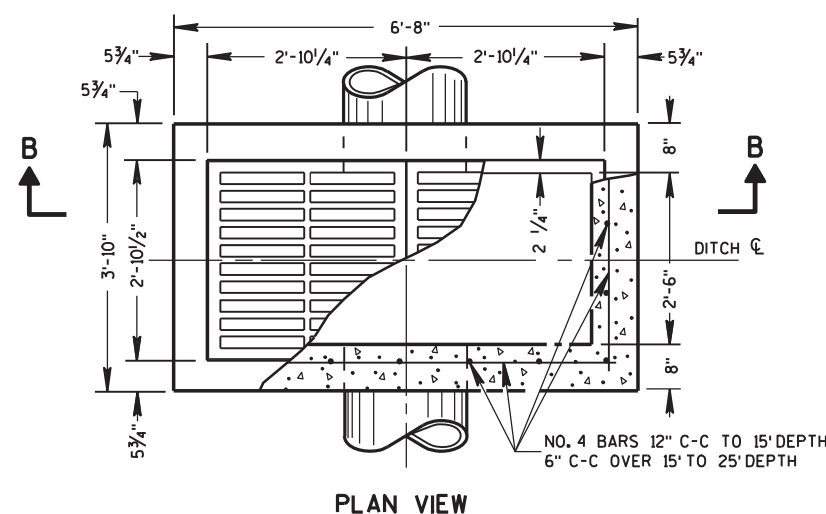
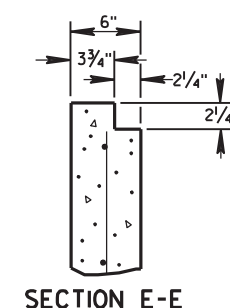
REINFORCED CONCRETE INLET TYPE 11



REINFORCED CONCRETE INLET TYPE 8



REINFORCED CONCRETE INLET TYPE 10



REINFORCED CONCRETE INLET TYPE 9

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR INLETS WHICH MAY INCLUDE PRECAST REINFORCED CONCRETE INLETS, SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

PRECAST REINFORCED CONCRETE INLET UNITS, IF USED, SHALL CONFORM TO THE REQUIREMENTS OF THE CATCH BASINS, MANHOLES AND INLETS SECTION OF THE STANDARD SPECIFICATIONS. UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST INLET UNITS REQUIRED FOR THE PROJECT UNTIL A CORRECTED LIST OF SIZES IS FURNISHED BY THE ENGINEER.

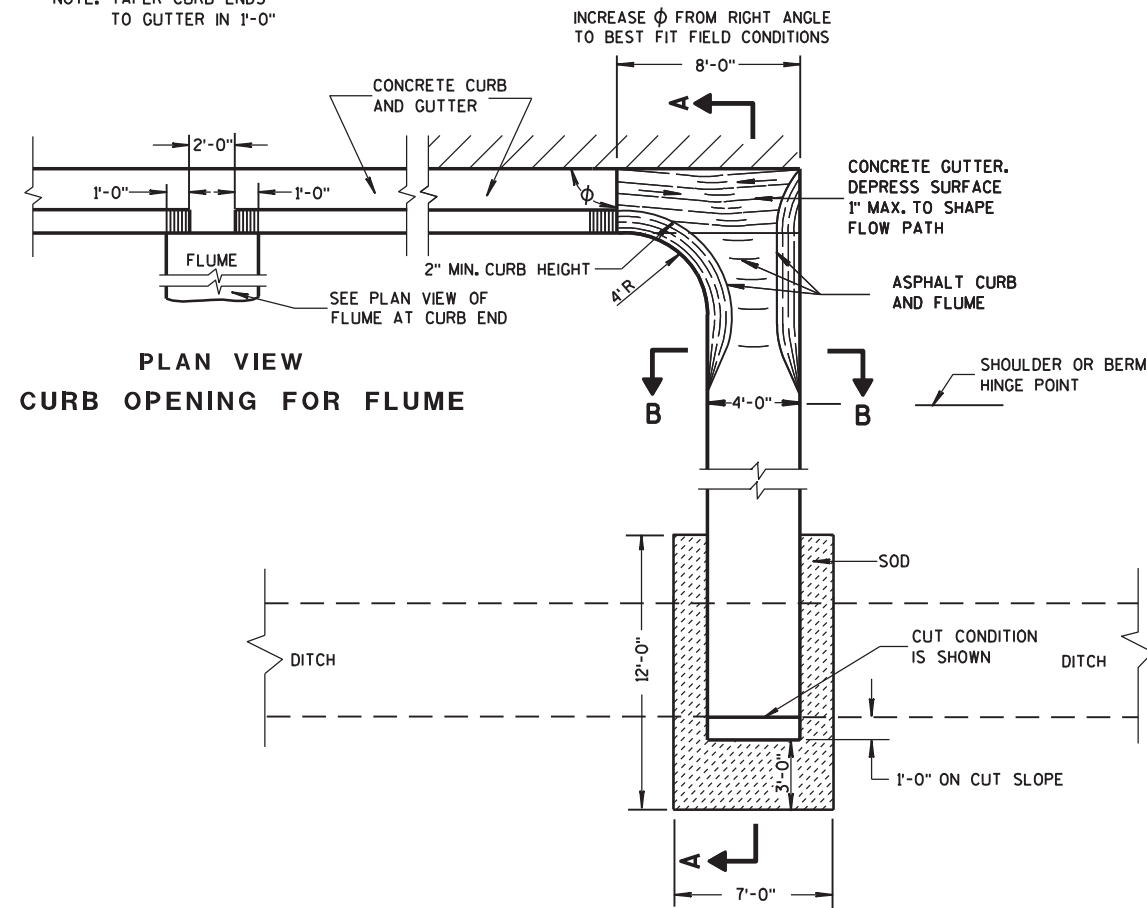
ALL INLETS ARE DESIGNATED ON THE PLANS AS "INLETS, 8-MS", ETC. THIS DESIGNATION IS INTERPRETTED TO MEAN THAT THE NUMBER, OR FIRST DIGIT DESIGNATES THE MASONRY PORTION OF THE STRUCTURE AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER OR IRON CASTING TO BE USED THEREWITH TO COMPRISE THE COMPLETE UNIT.

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

6

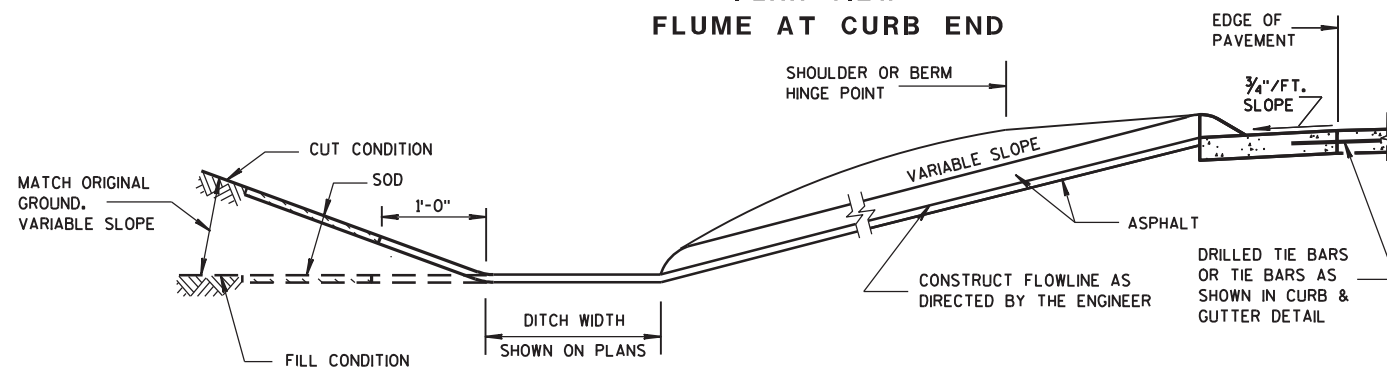
ASPHALTIC FLUME

NOTE: TAPER CURB ENDS
TO GUTTER IN 1'-0"

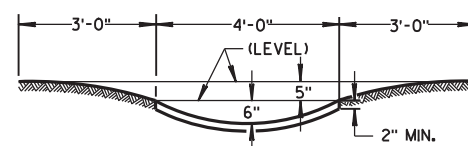


PLAN VIEW
CURB OPENING FOR FLUME

PLAN VIEW
FLUME AT CURB END



SECTION A-A



SECTION B-B

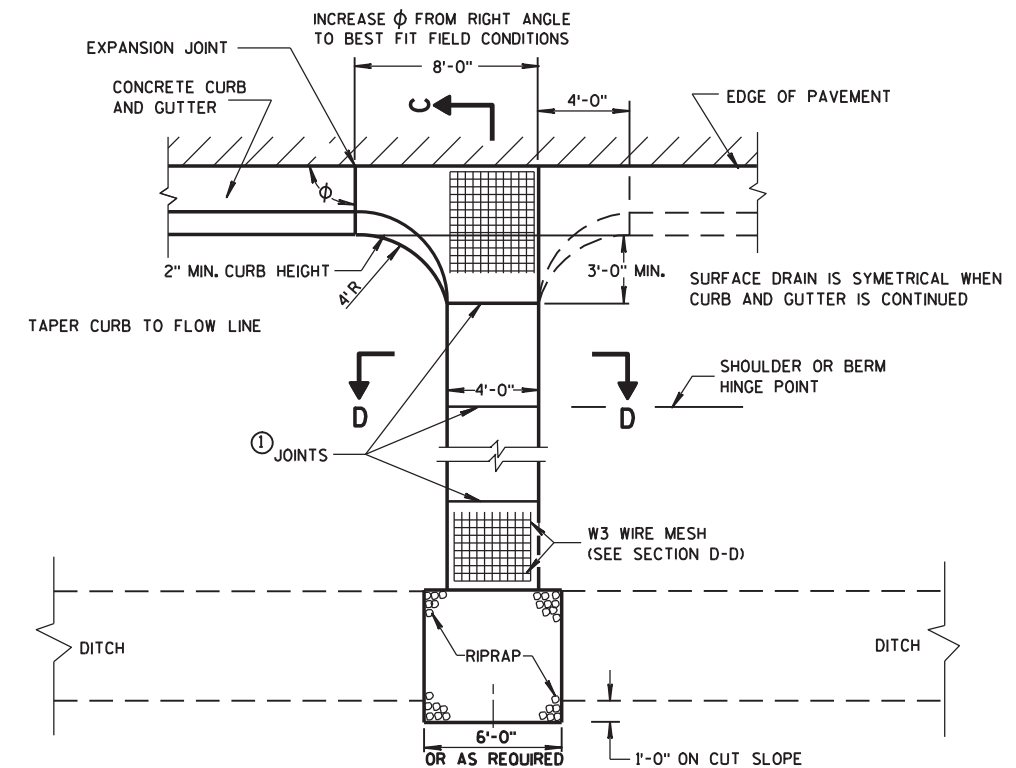
GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

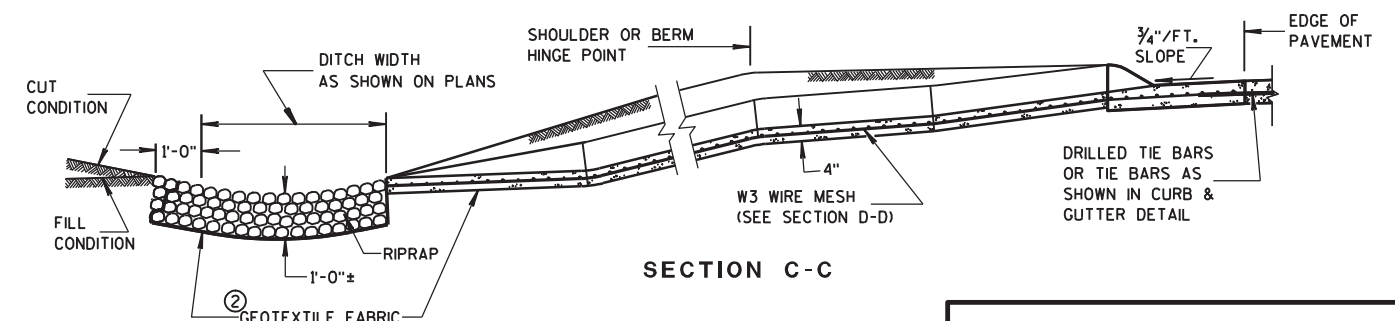
WELDED STEEL WIRE FABRIC SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATION M55.

- JOINTS SHALL BE $\frac{1}{8}$ TO $\frac{1}{4}$ INCH WIDE BY $\frac{1}{2}$ INCHES DEEP AND SPACED AT UNIFORM INTERVALS OF APPROXIMATELY 4 FEET.
- GEOTEXTILE FABRIC TYPE "R" SHALL UNDERLAY THE FULL LENGTH AND WIDTH OF THE CONCRETE SURFACE DRAIN AND RIPRAP.
- CONCRETE SURFACE DRAIN WITHOUT CURB AND GUTTER MAY BE USED ON BACKSLOPES WHEN SPECIFIED

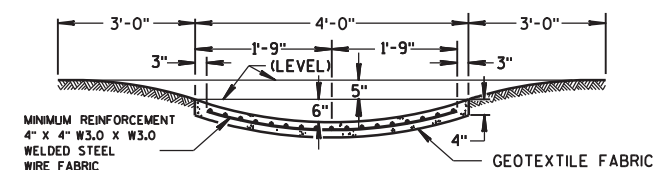
③ CONCRETE SURFACE DRAIN



PLAN VIEW



SECTION C-C



SECTION D-D

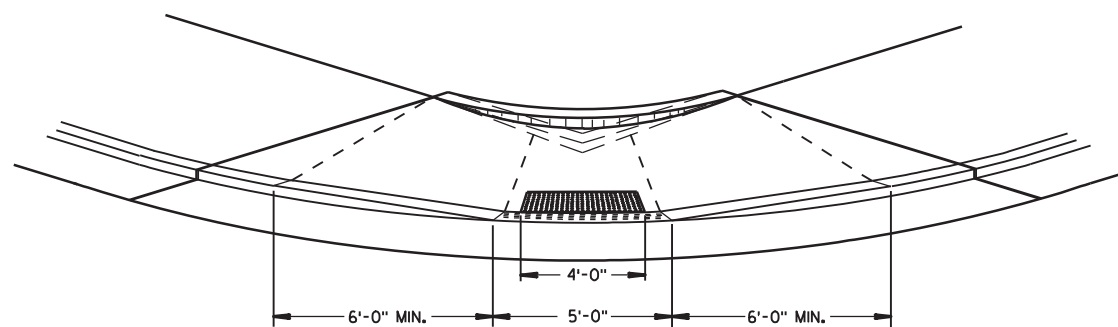
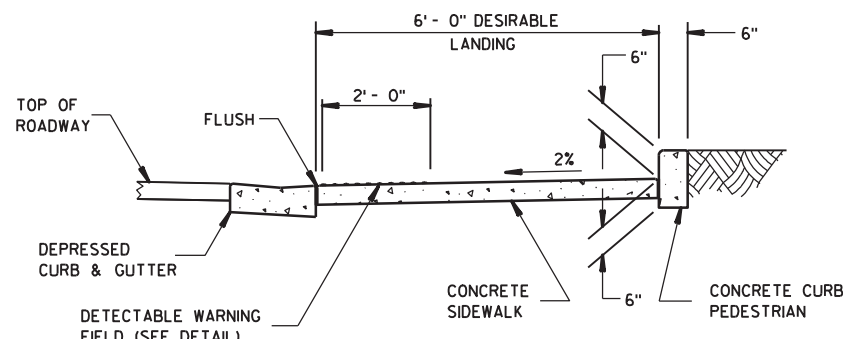
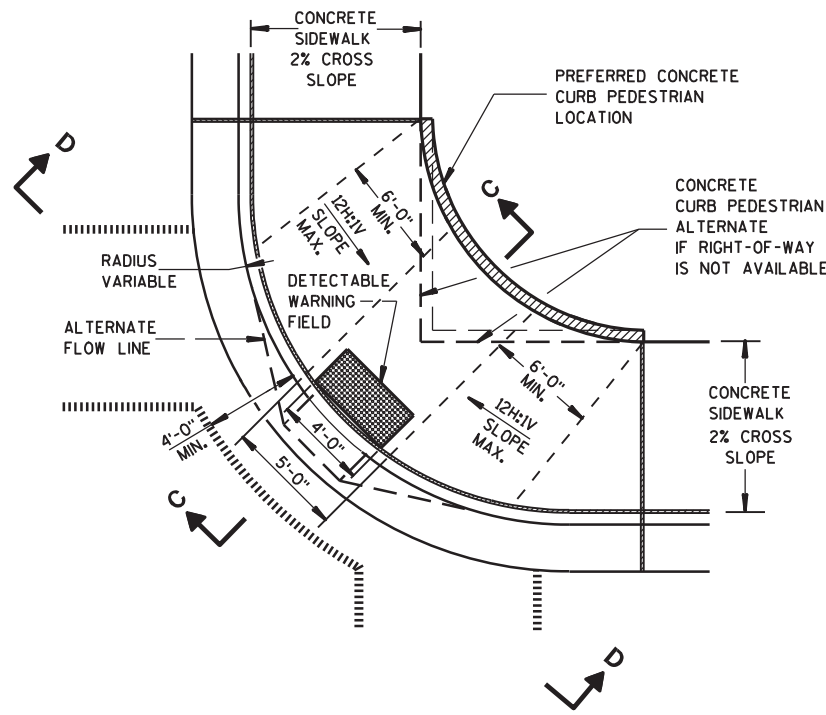
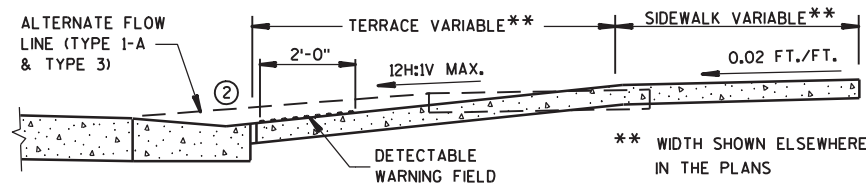
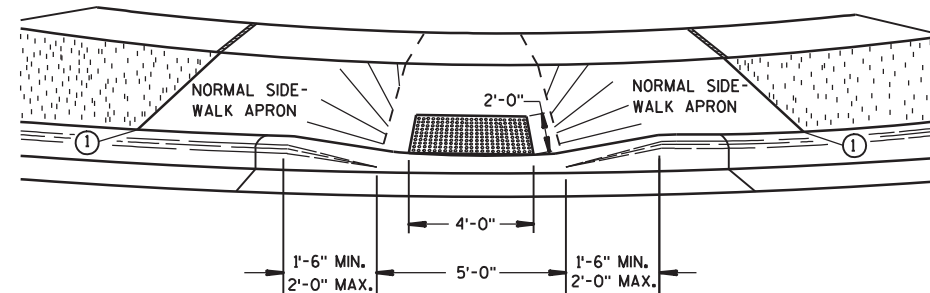
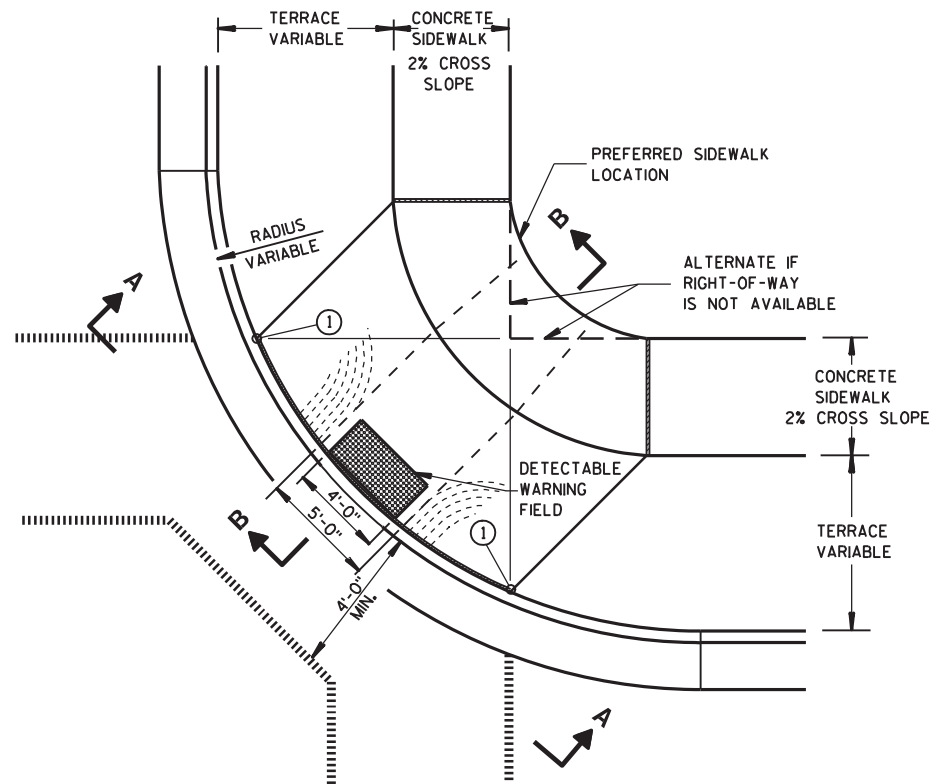
CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
9-4-08 /S/ Jerry H. Zogg
DATE ROADWAY STANDARDS DEVELOPMENT
ENGINEER
FHWA

S.D.D. 8 D 4-5

S.D.D. 8 D 4-5



GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

RAMPS SHALL BE BUILT AT 12H:1V OR FLATTER. WHEN NECESSARY, THE SIDEWALK ELEVATION MAY BE LOWERED TO MEET THE HIGH POINT ON THE RAMP.

TYPE 1 RAMPS SHALL HAVE A NORMAL SIDEWALK APRON AND CURB ON BOTH SIDES OF RAMP.

DETECTABLE WARNING FIELD SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS "CURB RAMP DETECTABLE WARNING FIELD". THE CONCRETE PEDESTRIAN CURB, IF NEEDED, SHALL BE MEASURED AND PAID BY THE LINEAL FOOT AS "CONCRETE CURB PEDESTRIAN". CONCRETE SIDEWALK IN THE CURB RAMP AREA SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS CONCRETE SIDEWALK, INCLUDING THE AREA UNDER THE DETECTABLE WARNING FIELD.

SELECT CURB RAMP DETECTABLE WARNING FIELD MATERIALS AND DEVICES FROM THE DEPARTMENT'S APPROVED MATERIALS LIST. THE COLOR OF THE DETECTABLE WARNING FIELD IS SPECIFIED ELSEWHERE AND IS INCIDENTAL TO THE BID ITEM OF "CURB RAMP DETECTABLE WARNING FIELD".

SURFACE TEXTURE OF THE RAMP SHALL BE OBTAINED BY COARSE BROOMING TRANSVERSE TO THE SLOPE OF THE RAMP.

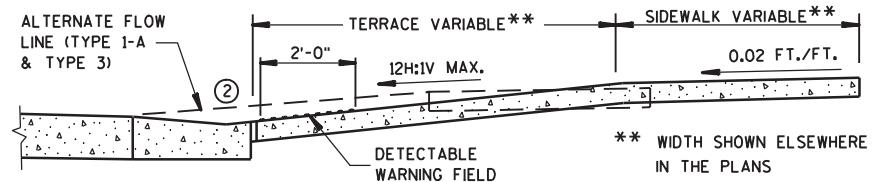
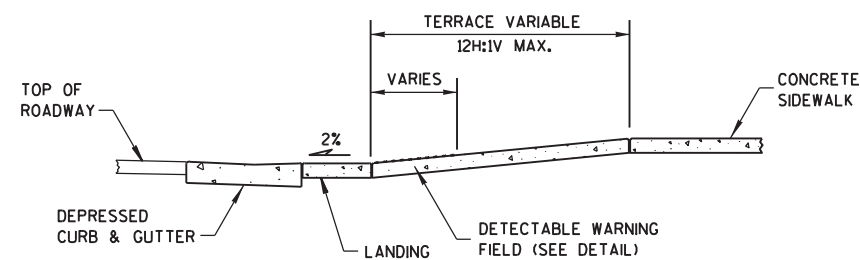
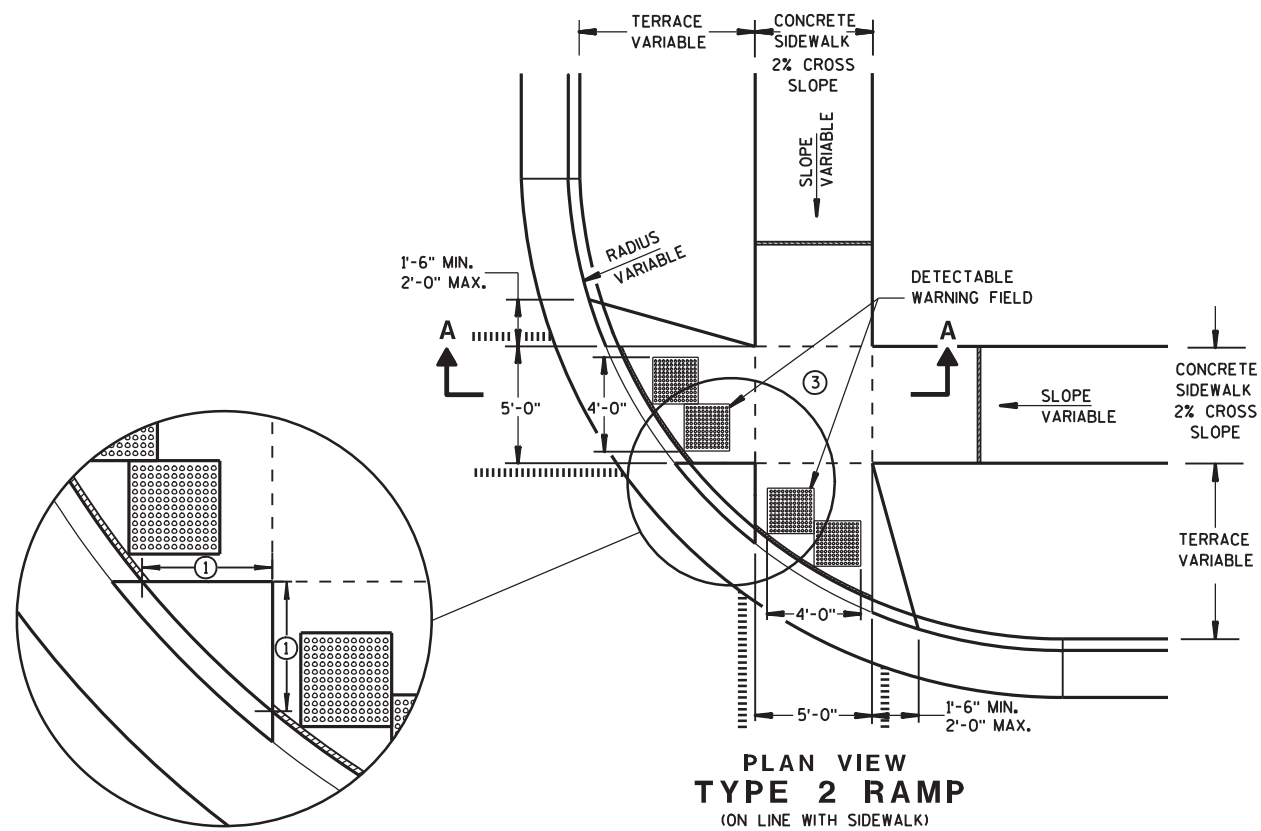
- ① THIS POINT IS AN EXTENSION OF OUTSIDE EDGE OF APPROACHING SIDEWALK WHERE IT MEETS THE BACK OF CONCRETE CURB.
- ② GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. PROVIDE DRAINAGE AWAY FROM CURB RAMP AT GUTTER FLAG INTERFACE.

LEGEND

- 1/2" EXPANSION JOINT-SIDEWALK
- - - CONTRACTION JOINT FIELD LOCATED
- ||||| PAVEMENT MARKING CROSSWALK (WHITE)
- - - ALTERNATIVE LAYOUT

CURB RAMPS
TYPES I AND I-A

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



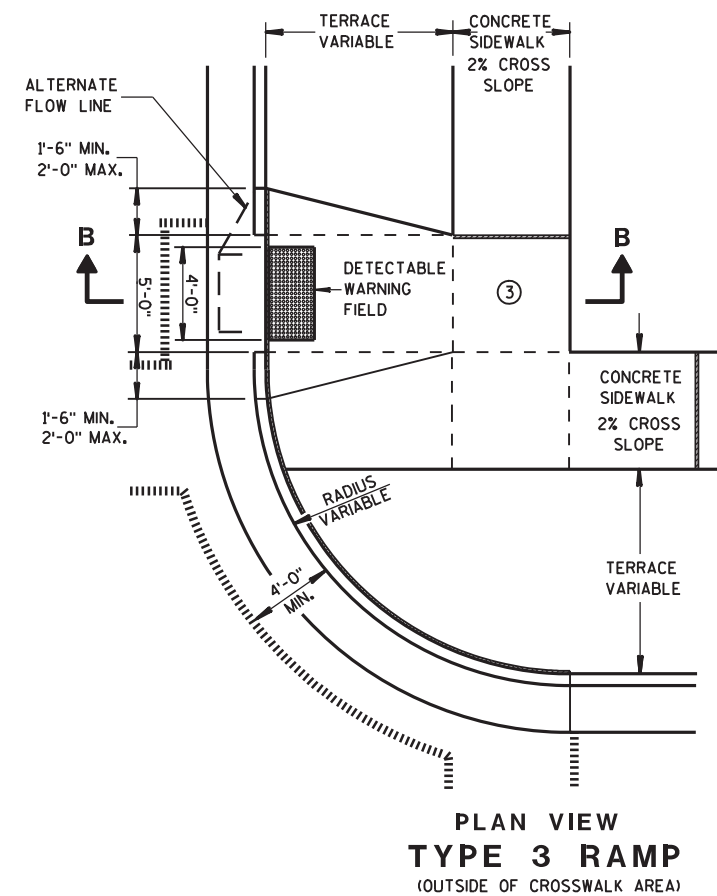
GENERAL NOTES

USE THE TYPE 3 RAMP ONLY WHEN A TYPE 1 OR TYPE 2 CANNOT BE ACHIEVED BECAUSE OF FIELD CONDITIONS.

- ① WHEN THIS DISTANCE IS LESS THAN 6'-0" IT MAY BE DIFFICULT TO ACHIEVE A 12H:1V SLOPE, OR FLATTER, ON THE RAMP. REDUCE CURB HEIGHT IN TRIANGLE AREA TO ACHIEVE 12H:1V SLOPE, OR FLATTER, ON RAMP. 2" MINIMUM CURB HEIGHT.
- ② GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. PROVIDE DRAINAGE AWAY FROM CURB RAMP AT GUTTER FLAG INTERFACE.
- ③ PROVIDE LANDING AT TOP OF RAMP WITH NO MORE THAN 2% SLOPE IN ANY DIRECTION.

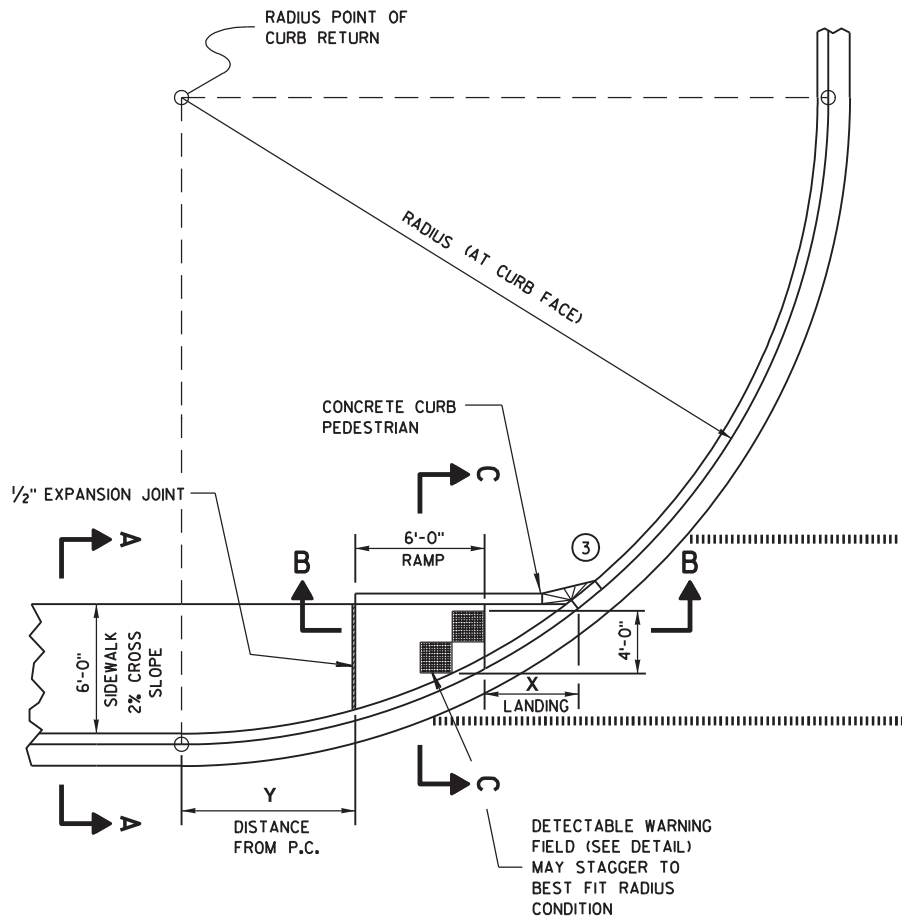
LEGEND

- 1/2" EXPANSION JOINT-SIDEWALK
- - - CONTRACTION JOINT FIELD LOCATED
- ||||| PAVEMENT MARKING CROSSWALK (WHITE)
- - - ALTERNATIVE LAYOUT

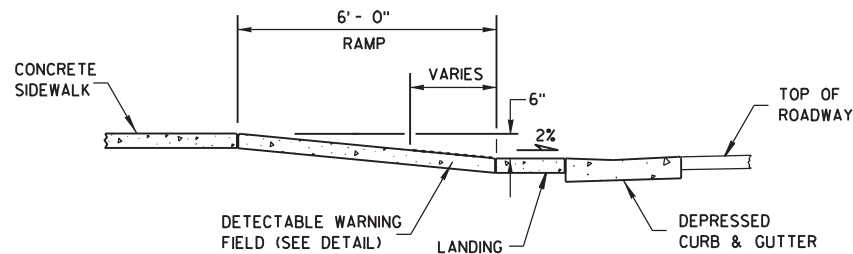


**CURB RAMPS
TYPES 2 AND 3**

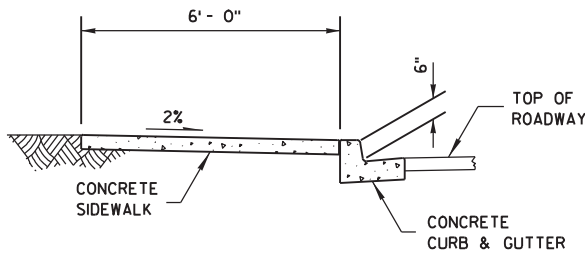
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



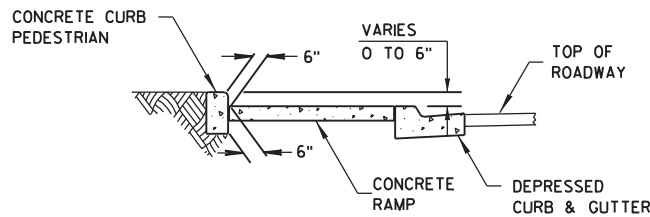
CURB RAMP TYPE 4A
PLAN VIEW



SECTION B-B



SECTION A-A



SECTION C-C

RADIUS (AT CURB FACE)	X	Y
20 FEET	6'-1 $\frac{3}{4}$ "	2'-7 $\frac{1}{4}$ "
30 FEET	7'-11 $\frac{3}{4}$ "	4'-8 $\frac{1}{4}$ "
40 FEET	9'-5 $\frac{1}{4}$ "	6'-5"
50 FEET	10'-8 $\frac{3}{4}$ "	7'-11 $\frac{1}{4}$ "
60 FEET	11'-10 $\frac{1}{4}$ "	9'-3 $\frac{1}{2}$ "

INTERMEDIATE RADII CAN BE INTERPOLATED

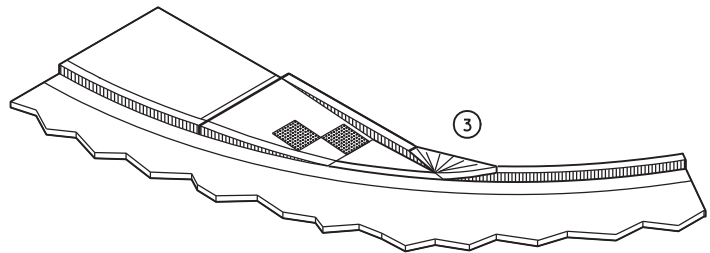
GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

RAMP SLOPES SHALL NOT BE STEEPER THAN 12:1.

SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

- ③ INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS.)
DO NOT MARK TRANSITION NOSE.



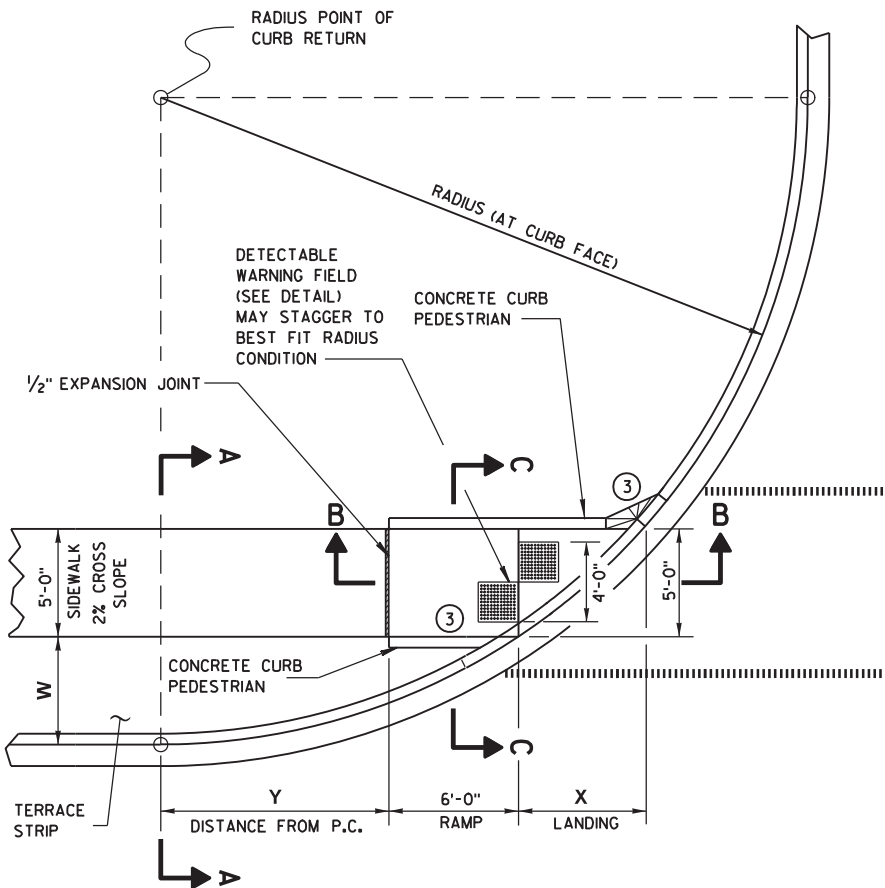
ISOMETRIC VIEW

LEGEND

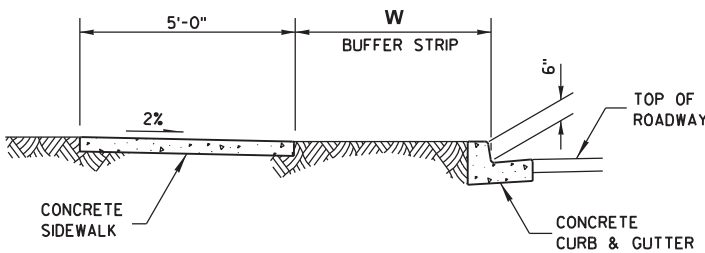
- 1/2" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS
TYPE 4A

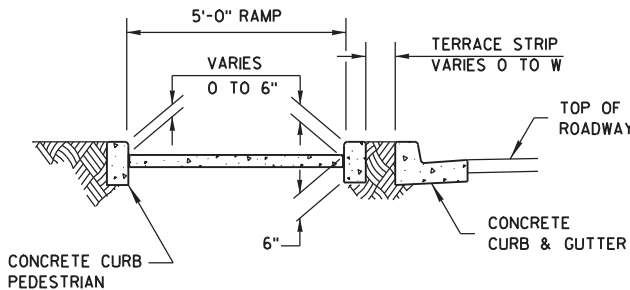
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



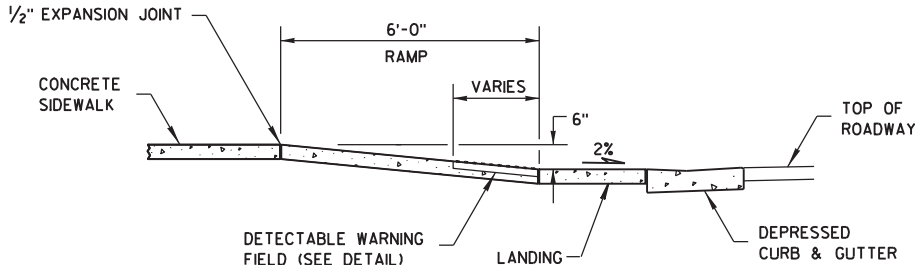
CURB RAMP TYPE 4B
PLAN VIEW



SECTION A-A



SECTION C-C



SECTION B-B

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

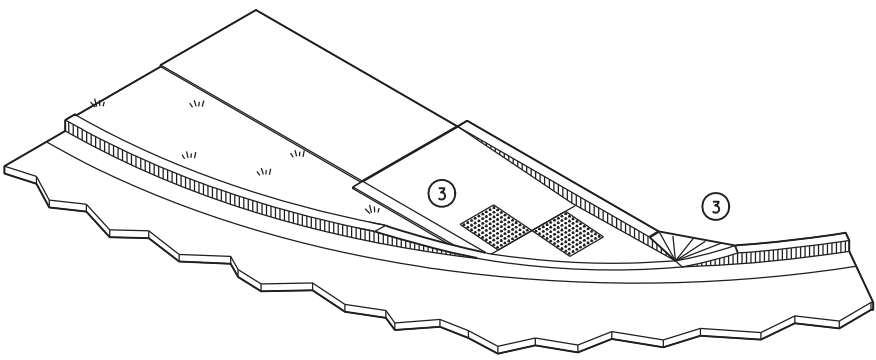
RAMP SLOPES SHALL NOT BE STEEPER THAN 12:1.

SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

- ③ INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS.)
DO NOT MARK TRANSITION NOSE.

RADIUS (AT CURB FACE)	W = 3' - 0"		W = 4' - 0"		W = 5' - 0"		W = 6' - 0"		W = 7' - 0"	
	X	Y	X	Y	X	Y	X	Y	X	Y
20 FEET	5'-5 1/2"	4'-6 1/2"	4'-8 1/2"	6'-0"	4'-1"	7'-2 3/4"	3'-7"	8'-3 1/2"	3'-1 1/2"	9'-2 1/2"
30 FEET	7'-3 3/4"	7'-1"	6'-5 1/2"	8'-11 1/2"	5'-9 1/4"	10'-7"	5'-2 1/2"	12'-0"	4'-8 3/4"	13'-3 1/4"
40 FEET	8'-9 1/2"	9'-2 1/2"	7'-10"	11'-5 1/4"	7'-1"	13'-4 1/2"	6'-5 3/4"	15'-3/4"	5'-11 1/2"	16'-7 1/4"
50 FEET	10'-3/4"	11'-3/4"	9'-1/4"	13'-7 1/4"	8'-2 1/2"	15'-9 1/2"	7'-6 1/2"	17'-9"	6'-11 3/4"	19'-6 1/4"
60 FEET	11'-2 1/2"	12'-8 3/4"	10'-3/4"	15'-6 1/2"	9'-2 1/4"	17'-11 3/4"	8'-5 3/4"	20'-1 3/4"	7'-10 1/2"	22'-1 1/2"
70 FEET	12'-2 3/4"	14'-3 1/4"	11'-1/4"	17'-4"	10'-1"	19'-11 3/4"	9'-3 3/4"	22'-4 1/4"	8'-8 1/4"	24'-6 1/4"
80 FEET	13'-2"	15'-8 1/2"	11'-10 1/2"	18'-11 3/4"	10'-10 3/4"	21'-10"	10'-1"	24'-4 3/4"	9'-5"	26'-8 3/4"
90 FEET	14'-1/2"	17'-1/2"	12'-8 1/4"	20'-6 1/2"	11'-7 3/4"	23'-7"	10'-9 3/4"	26'-3 3/4"	10'-1 1/4"	28'-9 1/2"
100 FEET	14'-10 1/2"	18'-3 3/4"	13'-5 1/2"	22'-0"	12'-4 1/4"	25'-2 3/4"	11'-5 3/4"	28'-1 1/2"	10'-9"	30'-9"

INTERMEDIATE RADII CAN BE INTERPOLATED



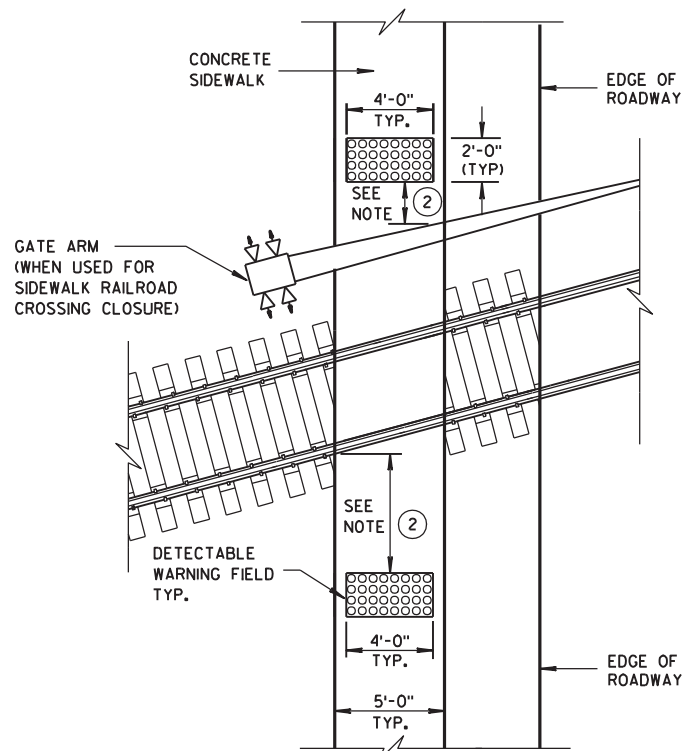
ISOMETRIC VIEW

LEGEND

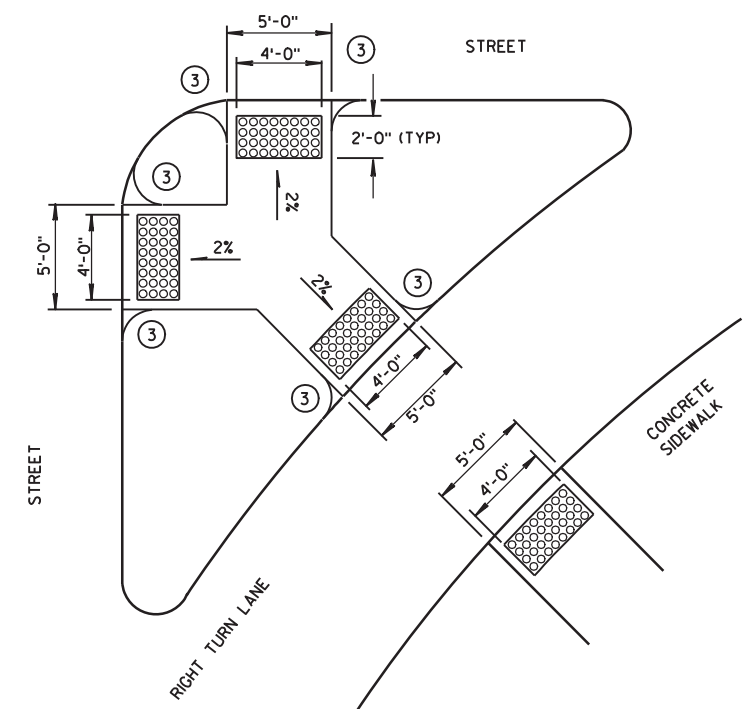
- 1/2" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMP
TYPE 4B

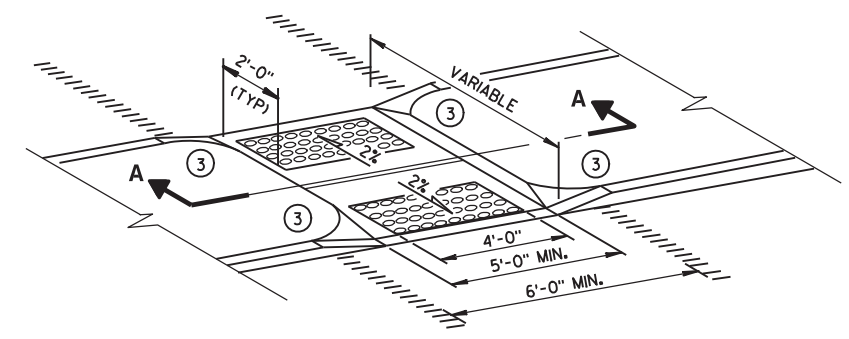
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



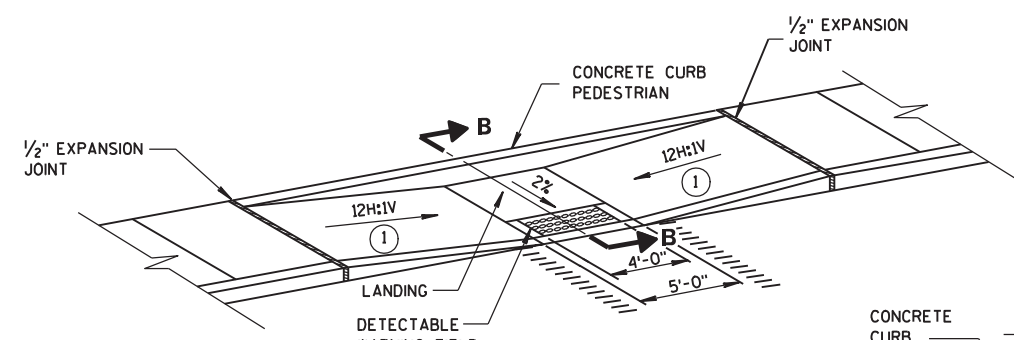
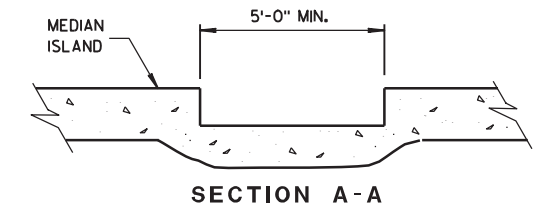
TYPE 8
DETECTABLE WARNINGS
AT RAILROAD CROSSING



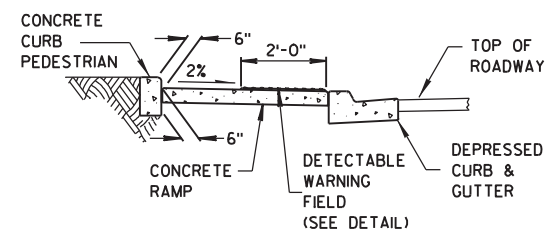
TYPE 6
DETECTABLE WARNING AT ISLANDS



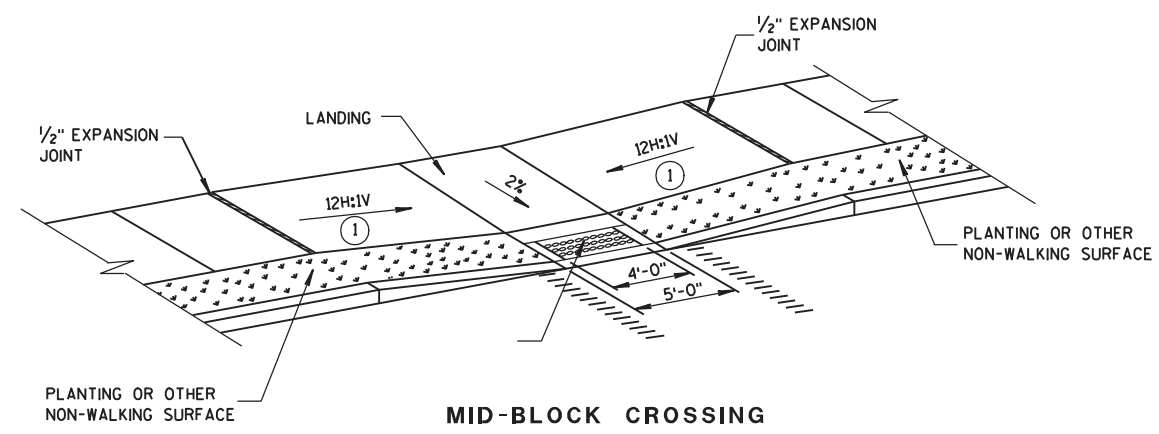
MEDIAN ISLAND
NON-ELEVATED CROSSING
TYPE 5



MID-BLOCK CROSSING
TYPE 7A



SECTION B-B



MID-BLOCK CROSSING
TYPE 7B

NOTE: THESE PARALLEL AND PARALLEL/PERPENDICULAR CURB RAMPS
MAY BE USED AT INTERSECTIONS AND MID BLOCK LOCATIONS.

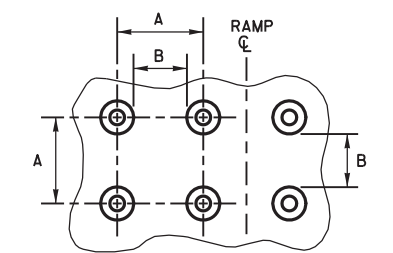
GENERAL NOTES

SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

- ① SLOPE SIDEWALK TOWARD LANDING AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.
- ② THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO A RAILROAD CROSSING SHALL BE 1.5 FEET ± 0.1' FROM THE FACE OF THE GATE ARM IF THE GATE ARM EXTENDS ACROSS THE SIDEWALK. WHERE THERE IS NO PEDESTRIAN GATE, THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO THE RAILROAD CROSSING SHALL BE 15 FEET FROM THE NEAREST RAIL.
- ③ INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS.) DO NOT MARK TRANSITION NOSE.

LEGEND

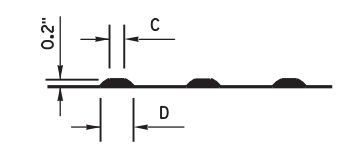
- 1/2" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)



PLAN VIEW

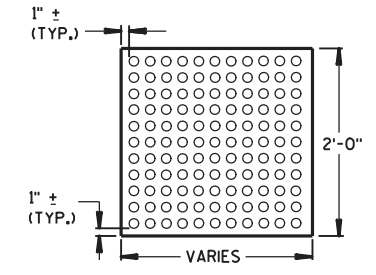
	MIN.	MAX.
A	1.6"	2.4"
B	0.65"	1.5"
C	*	*
D	0.9"	1.4"

* THE C DIMENSION IS 50% TO 65% OF THE D DIMENSION.



ELEVATION VIEW

TRUNCATED DOMES
DETECTABLE WARNING
PATTERN DETAIL

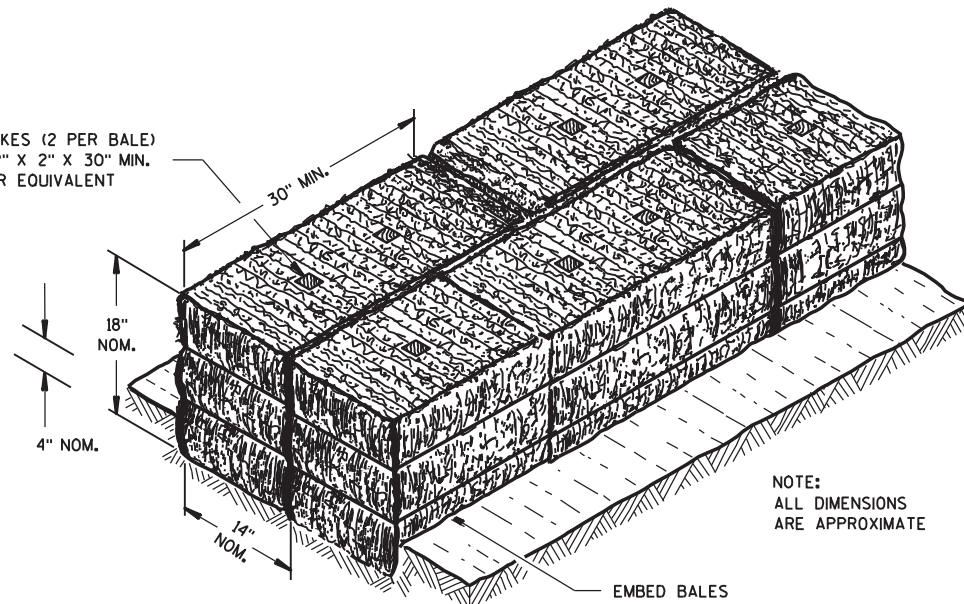


PLAN VIEW

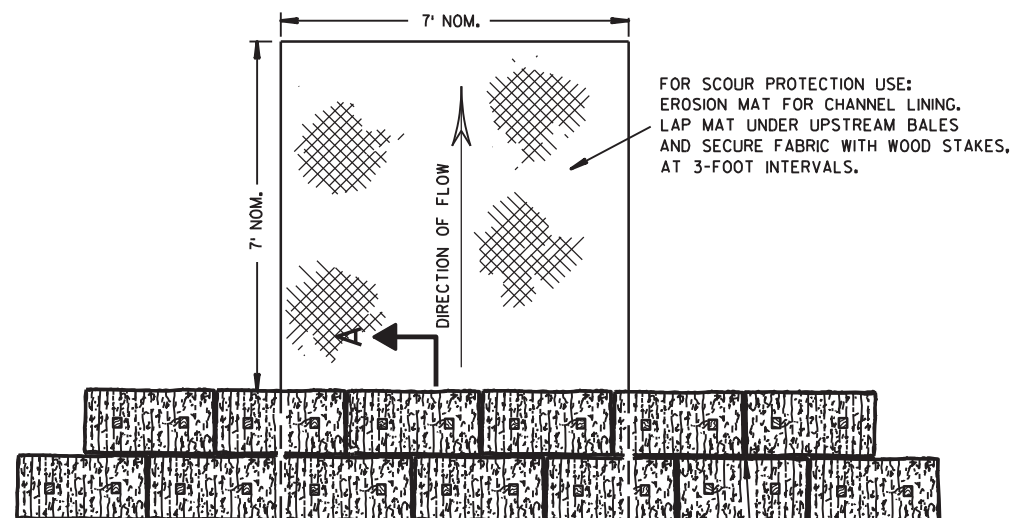
DETECTABLE WARNING
FIELD (TYPICAL)

CURB RAMPS TYPES 5, 6, 7A, 7B & 8	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	
2-9-10 DATE FHWA	/S/ Jerry H. Zogg ROADWAY STANDARDS DEVELOPMENT ENGINEER

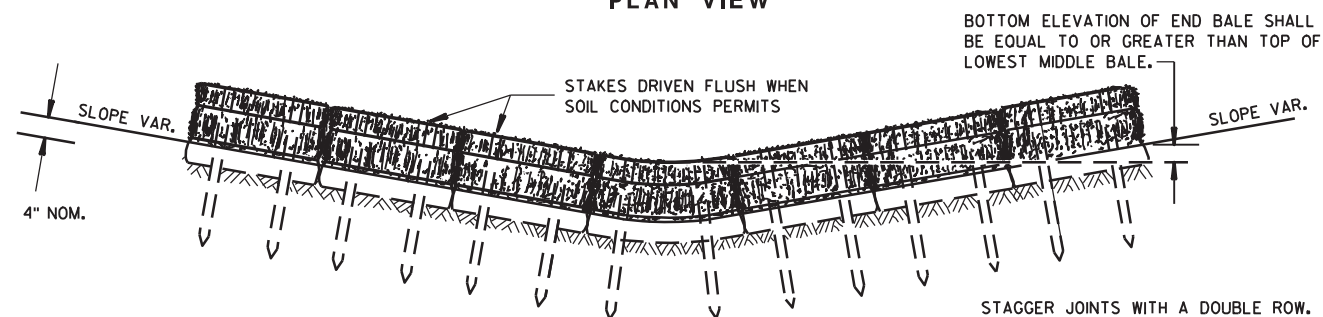
WOOD STAKES (2 PER BALE)
NOMINAL 2" X 2" X 30" MIN.
LENGTH OR EQUIVALENT



SECTION A-A



PLAN VIEW



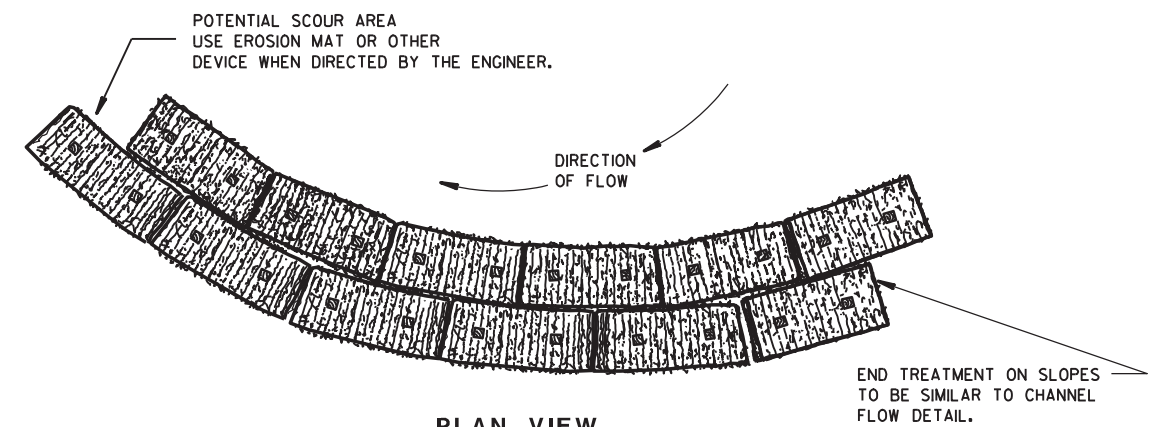
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES ①

GENERAL NOTES

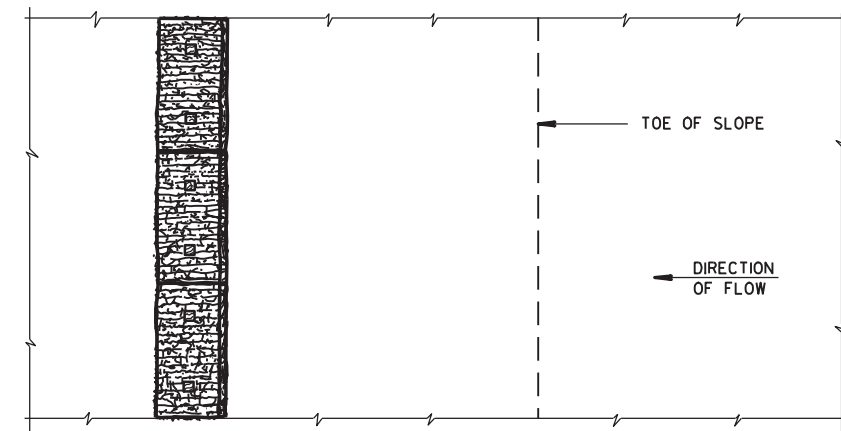
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

- ① TEMPORARY DITCH CHECKS EITHER EROSION BALES OR MANUFACTURED SHALL BE PAID FOR UNDER THE BID ITEM OF TEMPORARY DITCH CHECK. THE DEPARTMENT WILL NOT PAY FOR TEMPORARY DITCH CHECKS CONSTRUCTED OF A SINGLE ROW OF EROSION BALES.

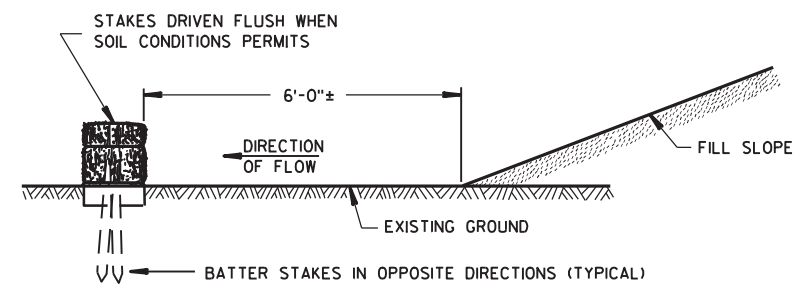


PLAN VIEW

WHEN ALTERING THE DIRECTION OF FLOW



PLAN VIEW



FRONT ELEVATION

WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

EROSION BALES FOR SHEET FLOW

TYPICAL INSTALLATIONS OF
EROSION BALES / TEMPORARY
DITCH CHECKS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/04/02
DATE

CHIEF ROADWAY DEVELOPMENT ENGINEER

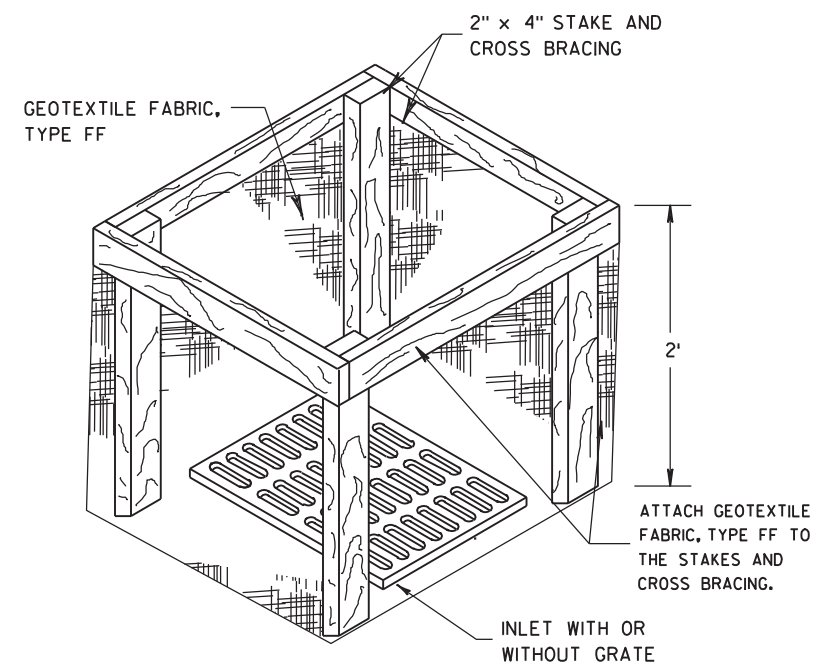
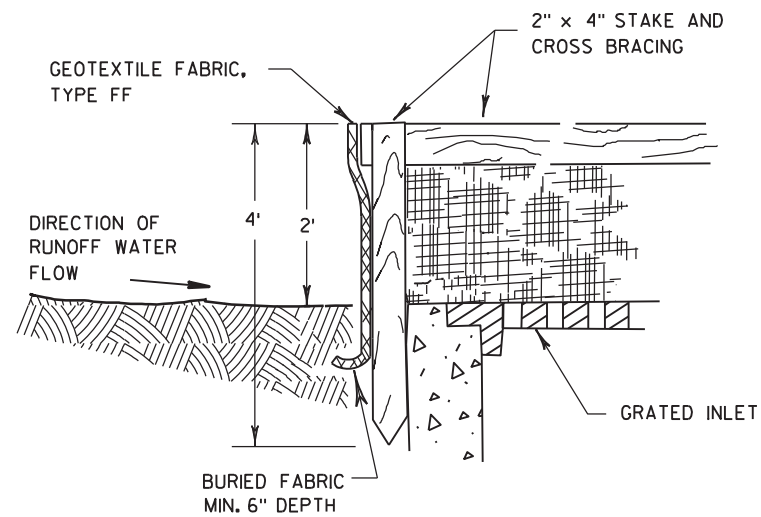
FHWA



TRENCH DETAIL



8.7.D.8 E 9-6



INLET PROTECTION, TYPE A

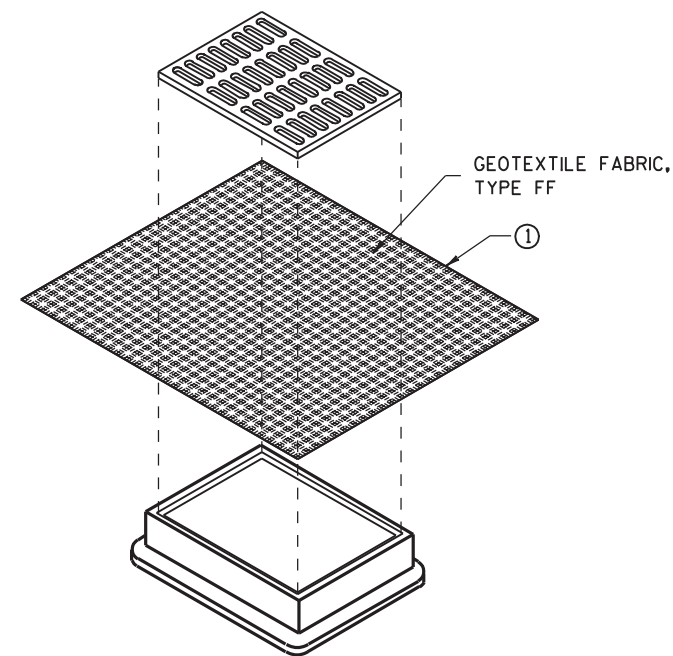
GENERAL NOTES

INLET PROTECTION DEVICES SHALL BE MAINTAINED OR REPLACED AT THE DIRECTION OF THE ENGINEER.

MANUFACTURED ALTERNATIVES APPROVED AND LISTED ON THE DEPARTMENT'S EROSION CONTROL PRODUCT ACCEPTABILITY LIST MAY BE SUBSTITUTED.

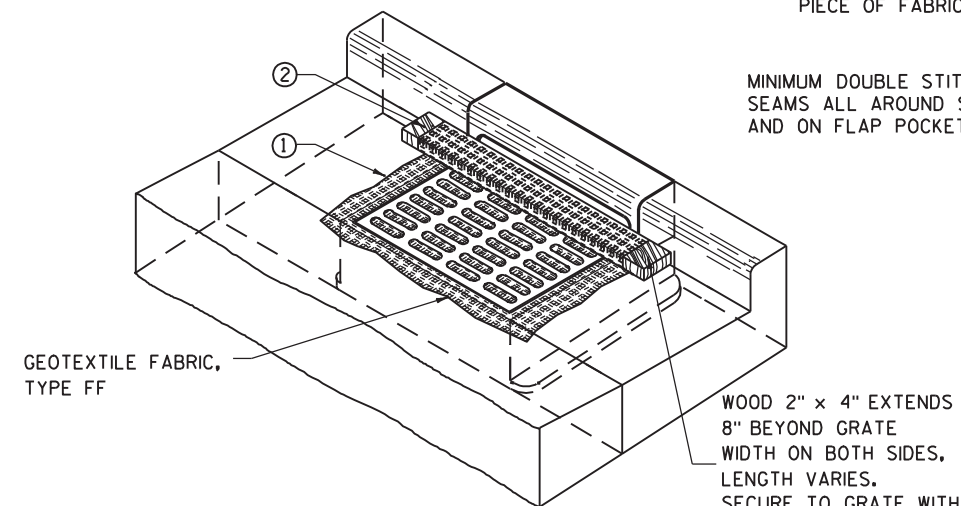
WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.

- ① FINISHED SIZE, INCLUDING FLAP POCKETS WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10" AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.
- ② FOR INLET PROTECTION, TYPE C (WITH CURB BOX), AN ADDITIONAL 18" OF FABRIC IS WRAPPED AROUND THE WOOD AND SECURED WITH STAPLES. THE WOOD SHALL NOT BLOCK THE ENTIRE HEIGHT OF THE CURB BOX OPENING.
- ③ FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2X4.



**INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)**

(CAN BE INSTALLED IN ANY INLET WITHOUT A CURB BOX)



INLET PROTECTION, TYPE C (WITH CURB BOX)

INSTALLATION NOTES

TYPE B & C

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

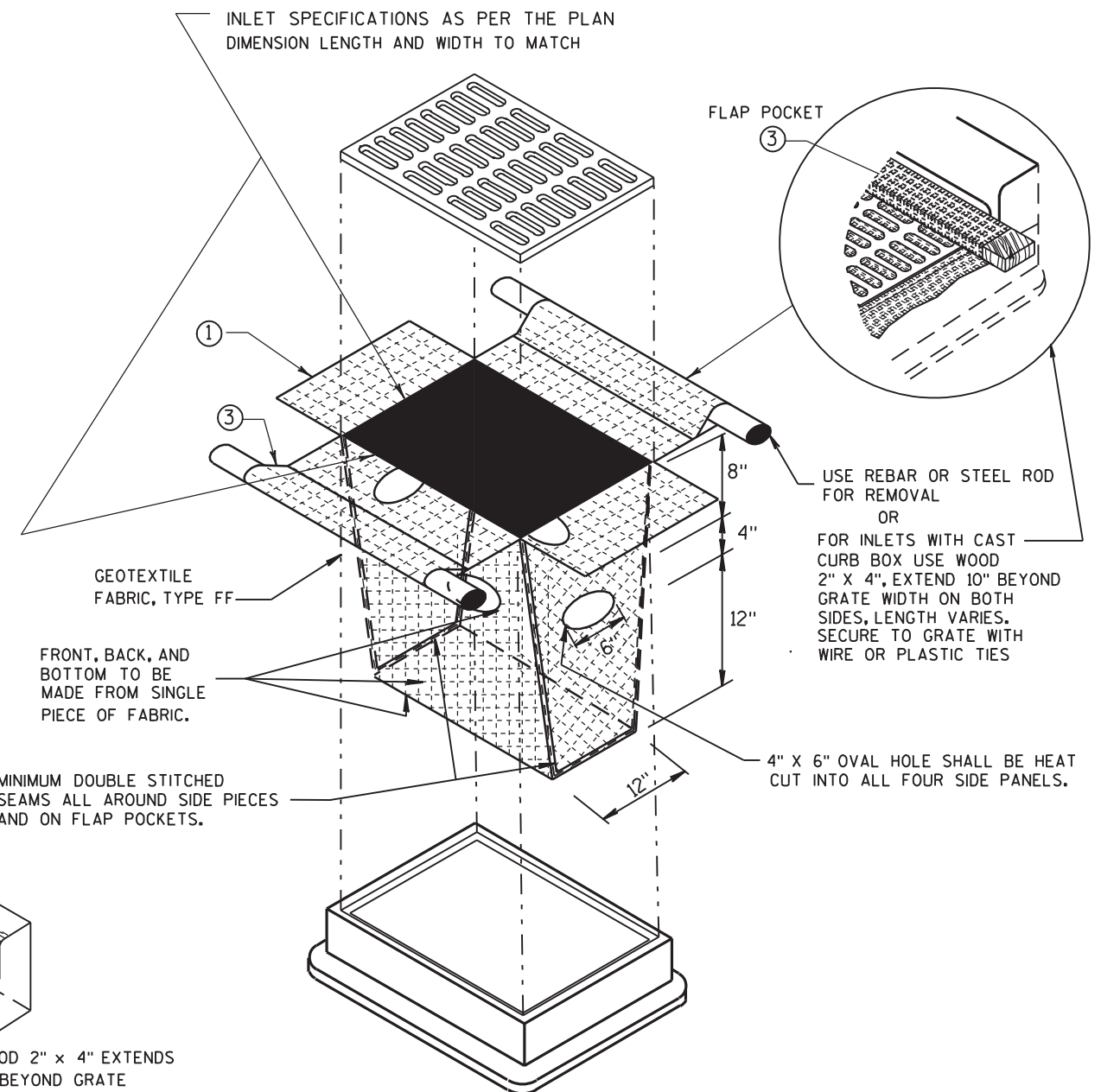
THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

TYPE D

DO NOT INSTALL INLET PROTECTION TYPE D IN INLETS SHALLOWER THAN 30", MEASURED FROM THE BOTTOM OF THE INLET TO THE TOP OF THE GRATE.

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE BOTTOM OF THE BAG.



INLET PROTECTION, TYPE D

(CAN BE INSTALLED IN ANY INLET TYPE WITH OR WITHOUT A CURB BOX AS PER NOTE ②)

**INLET PROTECTION
TYPE A, B, C, AND D**

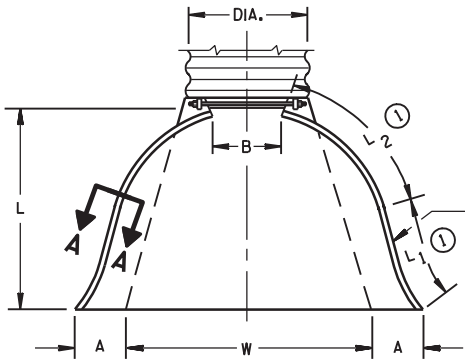
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/16/02
DATE
FHWA

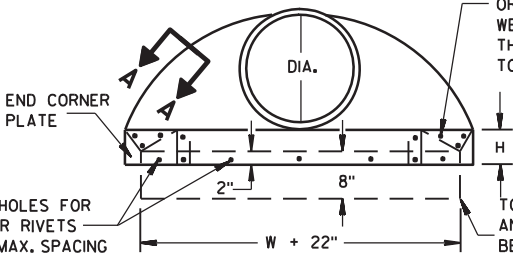
CHIEF ROADWAY DEVELOPMENT ENGINEER

METAL APRON ENDWALLS											
PIPE DIA. (IN.)	MIN. THICK. (Inches)		DIMENSIONS (Inches)							APPROX. SLOPE	BODY
	STEEL	ALUM.	A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ⓪	L2 ⓪	W (±2")		
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4	36	2 1/2 to 1	1 Pc.
21	.064	.060	9	12	6	36	18	29 5/8	42	2 1/2 to 1	1 Pc.
24	.064	.075	10	13	6	41	18	37 1/4	48	2 1/2 to 1	1 Pc.
30	.079	.075	12	16	8	51	18	52 1/4	60	2 1/2 to 1	1 Pc.
36	.079	.105	14	19	9	60	24	59 3/4	72	2 1/2 to 1	2 Pc.
42	.109	.105	16	22	11	69	24	75 5/8	84	2 1/2 to 1	2 Pc.
48	.109	.105	18	27	12	78	24	81	90	2 1/4 to 1	3 Pc.
54	.109	.105	18	30	12	84	30	85 1/2	102	2 1/4 to 1	3 Pc.
60	.109x	.105x	18	33	12	87	—	—	114	2 to 1	3 Pc.
66	.109x	.105x	18	36	12	87	—	—	120	2 to 1	3 Pc.
72	.109x	.105x	18	39	12	87	—	—	126	2 to 1	3 Pc.
78	.109x	.105x	18	42	12	87	—	—	132	1 1/2 to 1	3 Pc.
84	.109x	.105x	18	45	12	87	—	—	138	1 1/2 to 1	3 Pc.
90	.109x	.105x	18	37	12	87	—	—	144	1 1/2 to 1	3 Pc.
96	.109x	.105x	18	35	12	87	—	—	150	1 1/2 to 1	3 Pc.

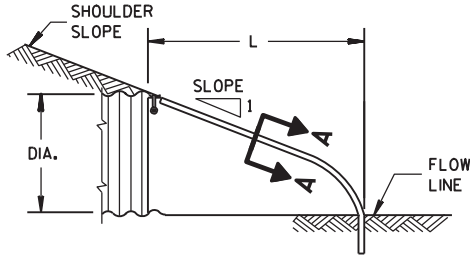
* EXCEPT CENTER PANEL
SEE GENERAL NOTES



PLAN VIEW



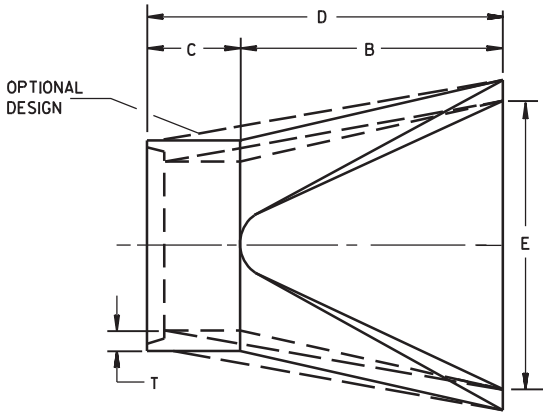
END VIEW



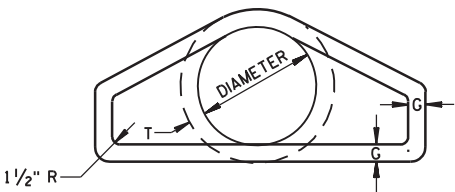
SIDE ELEVATION
METAL ENDWALLS

REINFORCED CONCRETE APRON ENDWALLS									
PIPE DIA. (IN.)	DIMENSIONS (Inches)							APPROX. SLOPE	
	T	A	B	C	D	E	G		
12	2	4	24	48 1/8	72 7/8	24	2	3 to 1	
15	2 1/4	6	27	46	73	30	2 1/4	3 to 1	
18	2 1/2	9	27	46	73	36	2 1/2	3 to 1	
21	2 3/4	9	36	37 1/2	73 1/2	42	2 3/4	3 to 1	
24	3	9 1/2	43 1/2	30	73 1/2	48	3	3 to 1	
27	3 1/4	10 1/2	49 1/2	24	73 1/2	54	3 1/4	3 to 1	
30	3 1/2	12	54	19 3/4	73 1/2	60	3 1/2	3 to 1	
36	4	15	63	34 3/4	97 1/4	72	4	3 to 1	
42	4 1/2	21	63	35	98	78	4 1/2	3 to 1	
48	5	24	72	26	98	84	5	3 to 1	
54	5 1/2	27	65	33 1/4	98 1/4	90	5 1/2	2 3/5 to 1	
60	6	30-35	60	39	99	96	5	2 to 1	
66	6 1/2	24-30	72-78	21-27	99	102	5 1/2	2 to 1	
72	7	24-36	78	21	99	108	6	2 to 1	
78	7 1/2	24-36	78	21	99	114	6 1/2	2 to 1	
84	8	36	90 1/2	21	111 1/2	120	6 1/2	1 1/2 to 1	
90	8 1/2	41	87 1/2	24	111 1/2	132	6 1/2	1 1/2 to 1	

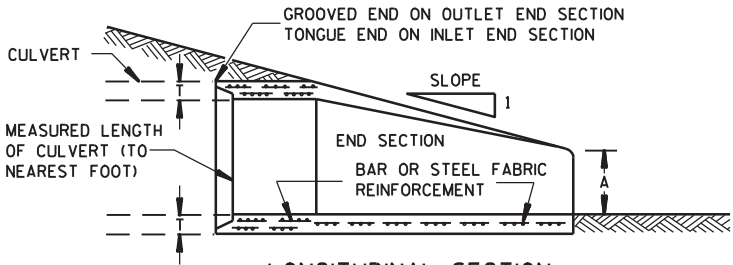
* MINIMUM
** MAXIMUM



PLAN

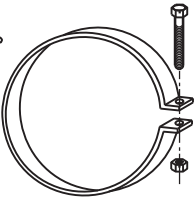


END VIEW

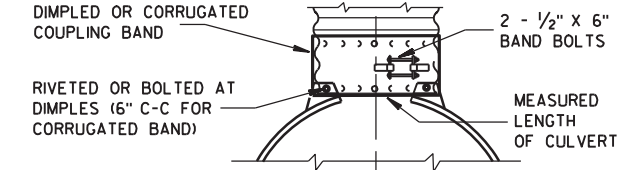
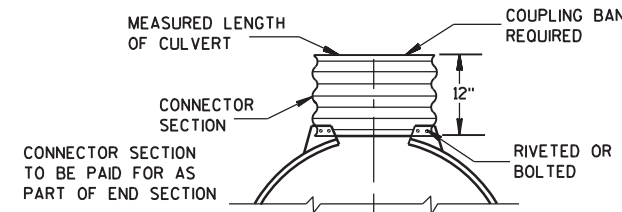
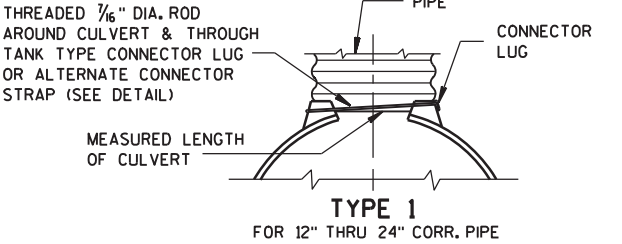


LONGITUDINAL SECTION
CONCRETE ENDWALLS

1" WIDE, 12 GA. (0.109" THICK) GALVANIZED STRAP WITH STANDARD 6" X 1/2" BAND BOLT AND NUT



ALTERNATE FOR TYPE 1 CONNECTION
END SECTION CONNECTOR STRAP



ALTERNATE FOR:
ALL SIZES CORRUGATED CIRCULAR PIPE

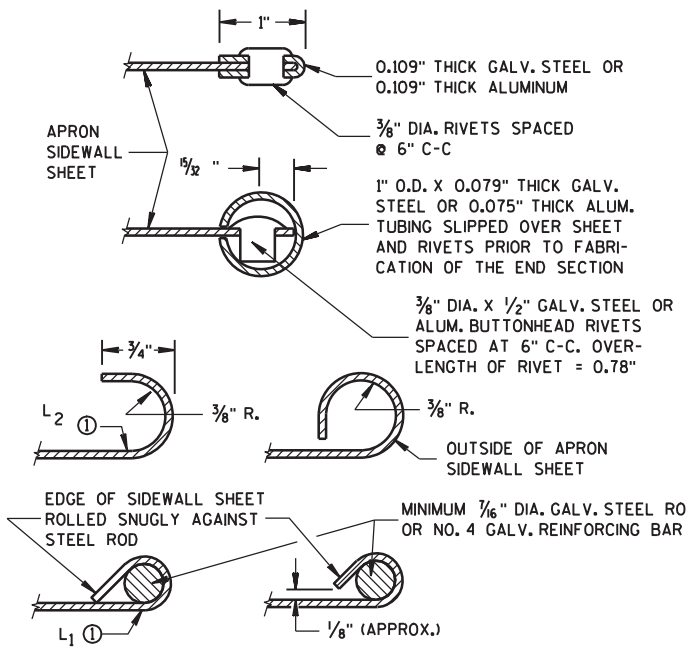
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL, AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

FOR CIRCUMFERENTIALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2, 3 OR 5 AS APPLICABLE.

FOR HELICALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2 OR 5.

FOR HELICALLY CORRUGATED PIPES WITH TWO CIRCUMFERENTIAL CORRUGATIONS AT EACH END USE ENDWALL CONNECTION DETAILS 1, 2 OR 3.

CONNECTION DETAILS



SECTION A-A

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

CONCRETE CULVERT ENDWALLS MAY NOT BE USED WITH GALVANIZED STEEL OR ALUMINUM CULVERT PIPE OR VISE VERSA. GALVANIZED STEEL OR ALUMINUM ENDWALLS SHALL NORMALLY BE INSTALLED ON CULVERT PIPE OF THE SAME METAL.

ALL THREE PIECE STEEL APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.105" SIDES AND 0.134" CENTER PANELS. THE WIDTH OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT OF THE PIPE PERIMETER.

LAP SEAMS SHALL BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS FOR STEEL UNITS AND ALUMINUM RIVETS AND BOLTS FOR ALUMINUM UNITS. FOR THE 60" THROUGH 96" DIAMETER APRON ENDWALL SIZES, THE REINFORCED EDGES AND CENTER PANEL SEAMS SHALL BE FURTHER REINFORCED WITH GALVANIZED STEEL OR ALUMINUM STIFFENER ANGLES. THE ANGLES SHALL BE ATTACHED BY GALVANIZED NUTS AND BOLTS FOR STEEL UNITS AND ALUMINUM NUTS AND BOLTS FOR ALUMINUM UNITS.

WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

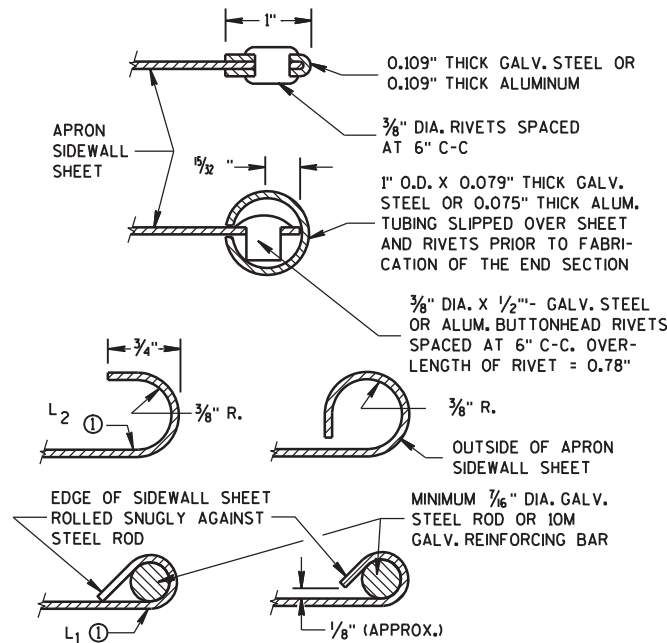
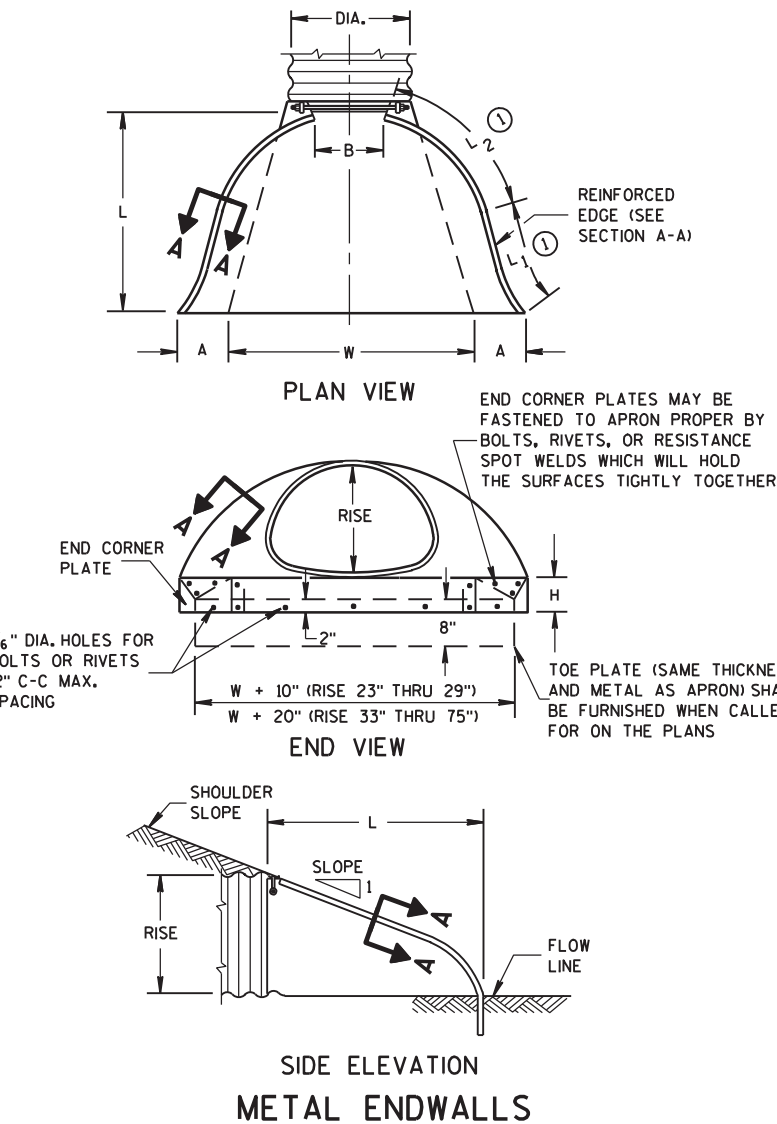
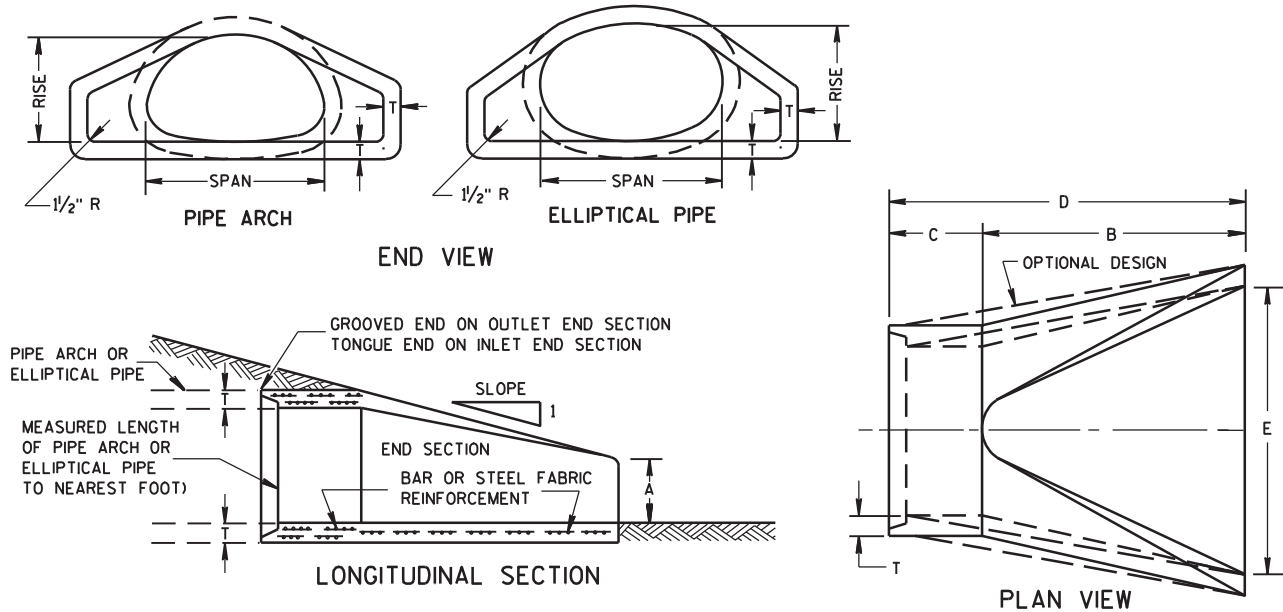
① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR
CULVERT PIPE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/30/94
DATE
FHWA

CHIEF ROADWAY DEVELOPMENT ENGINEER

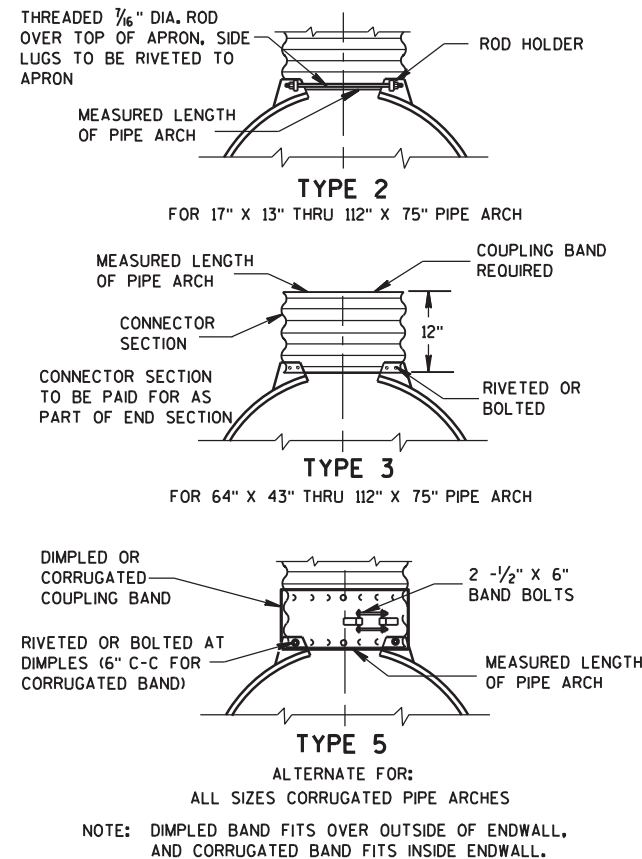


SECTION A-A

2- 2/3" x 1/2" CORRUGATIONS													
EQUIV. DIA. (Inches)	(Inches)		MIN. THICK. (Inches)		DIMENSIONS (Inches)							APPROX. SLOPE	BODY
	SPAN	RISE	STEEL	ALUM.	A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")		
15	17	13	.064	.060	7	9	6	19	14	16	30	2 1/2 to 1	1 Pc.
18	21	15	.064	.060	7	10	6	23	14	19 3/8	36	2 1/2 to 1	1 Pc.
21	24	18	.064	.060	8	12	6	28	18	21 1/4	42	2 1/2 to 1	1 Pc.
24	28	20	.064	.060	9	14	6	32	18	27 1/2	48	2 1/2 to 1	1 Pc.
30	35	24	.079	.075	10	16	6	39	18	37 5/8	60	2 1/2 to 1	1 Pc.
36	42	29	.079	.075	12	18	8	46	24	45 3/8	75	2 1/2 to 1	1 Pc.
42	49	33	.109	.105	13	21	9	53	24	54 3/4	85	2 1/2 to 1	2 Pc.
48	57	38	.109	.105	18	26	12	63	24	68	90	2 1/2 to 1	3 Pc.
54	64	43	.109	.105	18	30	12	70	24	72 3/4	102	2 1/4 to 1	3 Pc.
60	71	47	.109*	.105*	18	33	12	77	30	82 1/4	114	2 1/4 to 1	3 Pc.
66	77	52	.109*	.105*	18	36	12	77	—	—	126	2 to 1	3 Pc.
72	83	57	.109*	.105*	18	39	12	77	—	—	138	2 to 1	3 Pc.

3" X 1" CORRUGATIONS													
EQUIV. DIA. (Inches)	(Inches)		MIN. THICK. (Inches)		DIMENSIONS (Inches)							APPROX. SLOPE	BODY
	SPAN	RISE	STEEL	ALUM.	A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")		
48	53	41	.109	.105	18	26	12	63	24	72 3/4	90	2 1/2 to 1	2 Pc.
54	60	46	.109	.105	18	30	12	70	30	82 1/4	102	2 to 1	2 Pc.
60	66	51	.109*	.105*	18	33	12	77	—	—	114	1 1/2 to 1	3 Pc.
66	73	55	.109*	.105*	18	36	12	77	—	—	126	1 1/2 to 1	3 Pc.
72	81	59	.109*	.105*	18	39	12	77	—	—	138	2 to 1	3 Pc.
78	87	63	.109*	.105*	22	38	12	77	—	—	148	1 1/2 to 1	3 Pc.
84	95	67	.109*	.105*	22	34	12	77	—	—	162	1 1/2 to 1	3 Pc.
90	103	71	.109*	.105*	22	38	12	77	—	—	174	1 1/2 to 1	3 Pc.
96	112	75	.109*	.105*	24	40	12	77	—	—	174	1 1/2 to 1	3 Pc.

NOTE: ALL SPLICES TO BE LAP RIVETED OR BOLTED. * EXCEPT CENTER PANEL SEE GENERAL NOTES



CONNECTION DETAILS

REINFORCED CONCRETE PIPE ARCH									
EQUIV. DIA. (Inches)	DIMENSIONS (Inches)							APPROX. SLOPE	
	** SPAN	** RISE	T	A	B	C	D		E
24	29	18	3	8½	39	33	72	48	3 to 1
30	36	22	3½	9½	50	46	96	60	3 to 1
36	44	27	4	11⅞	60	36	96	72	3 to 1
42	51	31	4½	15⅞	60	36	96	78	3 to 1
48	58	36	5	21	60	36	96	84	3 to 1
54	65	40	5½	25½	60	36	96	90	3 to 1
60	73	45	6	31	60	36	96	96	3 to 1
72	88	54	7	31	60	39	99	120	2 to 1
84	102	62	8	28½	83	19	102	144	2 to 1

REINFORCED CONCRETE ELLIPTICAL PIPE									
EQUIV. DIA. (Inches)	DIMENSIONS (Inches)							APPROX. SLOPE	
	** SPAN	** RISE	T	A	B	C	D		E
24	30	19	3¼	8½	39	33	72	48	3 to 1
30	38	24	3¾	9½	54	18	72	60	3 to 1
36	45	29	4½	11⅞	60	24	84	72	2½to 1
42	53	34	5	15¾	60	36	96	78	2½to 1
48	60	38	5½	21	60	36	96	84	2½to 1
54	68	43	6	25½	60	36	96	90	2½to 1
60	76	48	6½	30	60	36	96	96	2½to 1

**NOMINAL SIZE

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

CONCRETE APRON ENDWALLS MAY NOT BE USED WITH GALVANIZED STEEL OR ALUMINUM CULVERT PIPE OR VISE VERSA. GALVANIZED STEEL OR ALUMINUM APRON ENDWALLS SHALL NORMALLY BE INSTALLED ON CULVERT PIPE OF THE SAME METAL.

ALL THREE PIECE STEEL APRON ENDWALLS FOR 66" X 51" PIPE ARCH AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 66" X 51" PIPE ARCH AND LARGER SHALL HAVE 0.105" SIDES AND 0.134" CENTER PANELS. THE WIDTH OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT OF THE PIPE ARCH PERIMETER.

LAP SEAMS SHALL BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS FOR STEEL UNITS AND ALUMINUM RIVETS AND BOLTS FOR ALUMINUM UNITS. FOR THE 77" X 52" THROUGH 112" X 75" APRON ENDWALL SIZES, THE REINFORCED EDGES AND CENTER PANEL SEAMS SHALL BE FURTHER REINFORCED WITH GALVANIZED STEEL OR ALUMINUM STIFFENER ANGLES. THE ANGLES SHALL BE ATTACHED BY GALVANIZED NUTS AND BOLTS FOR STEEL UNITS AND ALUMINUM NUTS AND BOLTS FOR ALUMINUM UNITS.

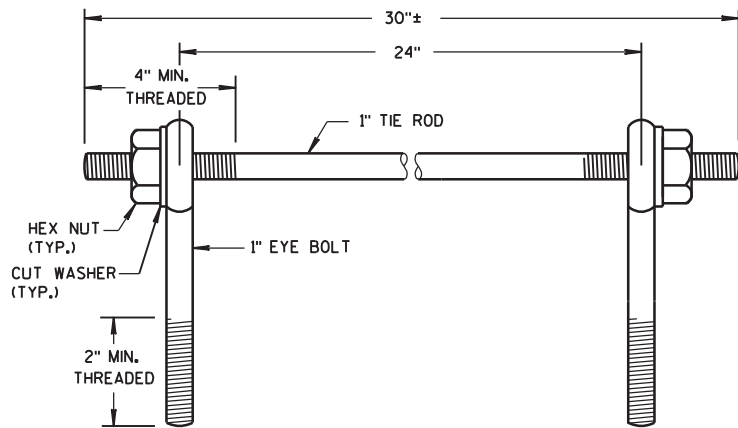
WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

① FOR PIPE ARCH SIZES UP TO 73" X 55" A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

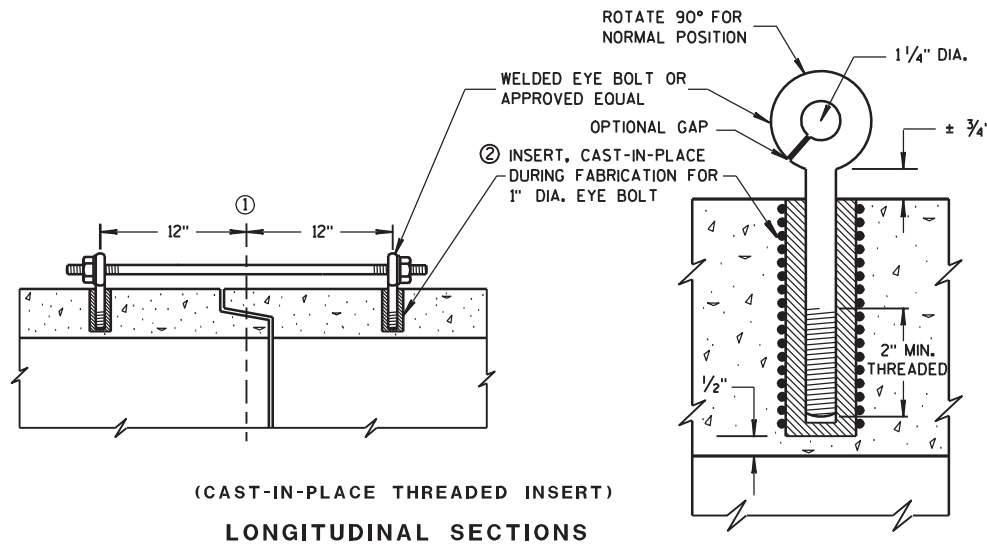
APRON ENDWALLS FOR PIPE ARCH AND ELLIPTICAL PIPE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/30/94
DATE
FHW
CHIEF ROADWAY DEVELOPMENT ENGINEER



EYE BOLTS AND TIE ROD



(CAST-IN-PLACE THREADED INSERT)
LONGITUDINAL SECTIONS

GENERAL NOTES

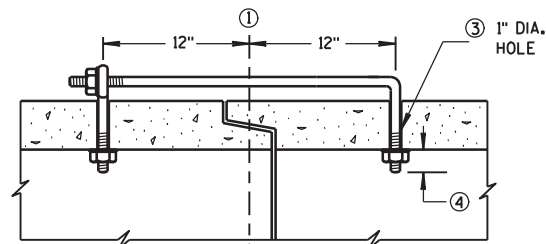
DETAILS OF CONSTRUCTION, MATERIALS, AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

CONCRETE CULVERT PIPE SHALL BE TIED TOGETHER IN THE MANNER ILLUSTRATED BY THIS DETAIL AT LOCATIONS DESIGNATED ON THE PLAN. THE CONTRACTOR MAY USE EITHER ALTERNATE 1, 2 OR 3 FOR DRAINAGE STRUCTURES. ONLY ALTERNATE 1 AND 3 MAY BE USED FOR CATTLE PASSES. UNLESS OTHERWISE STATED IN THE CONTRACT THE MATERIALS, FABRICATION AND WORK NECESSARY TO TIE CULVERT PIPE AS INDICED ON THE PLANS AND BY THIS DETAIL WILL BE CONSIDERED INCIDENTAL TO CULVERT PIPE, REINFORCED CONCRETE CULVERT PIPE, OR REINFORCED CONCRETE PIPE CATTLE PASS.

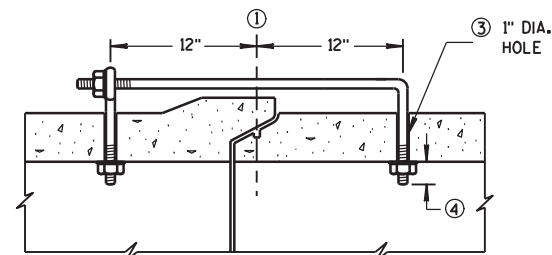
DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR JOINT TIES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

- ① C. OF TONGUE AND GROOVE OR BELL AND SPIGOT JOINTS.
- ② THE INSIDE OF THE THREADED INSERTS SHALL BE CLEAN TO ALLOW THE INSERTION OF THREADED EYE BOLTS.
- ③ HOLES SHALL BE CAST-IN-PLACE OR DRILLED 12 INCHES FROM C. OF TONGUE AND GROOVE.
- ④ BOLT PROJECTION INSIDE OF PIPE SHALL NOT EXCEED 2 INCHES.
- ⑤ OPENING TO BE ROD DIAMETER PLUS 1 INCH.
- ⑥ LENGTH ADEQUATE TO EXTEND TO WITHIN 1/2 INCH OF THE INNER SURFACE OF THE PIPE.

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 1)



(TONGUE & GROOVE PIPE)



(MODIFIED BELL PIPE)
LONGITUDINAL SECTION

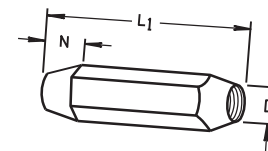
EYE BOLT DIMENSION TABLE

PIPE SIZE	L = LENGTH	
	TONGUE & GROOVE PIPE	MODIFIED BELL PIPE
18" TO 24"	4 1/2"	6 1/4"
30"	5"	7"
36"	5 1/2"	7"
42"	6"	
48"	6 1/2"	
60"	7 1/2"	
66"	8"	

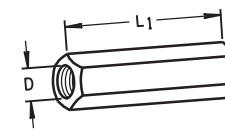
ADJUSTABLE TIE ROD TABLE

PIPE DIAMETER	TIE ROD DIAMETER	D	L ₁	N
12-60	5/8	5/8	5	1/2
66-84	3/4	3/4	5	1/2
90-108	1	1	7	1 1/8

DIMENSIONS SHOWN ARE IN INCHES



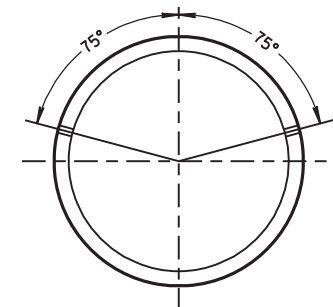
TAPERED



PLAIN

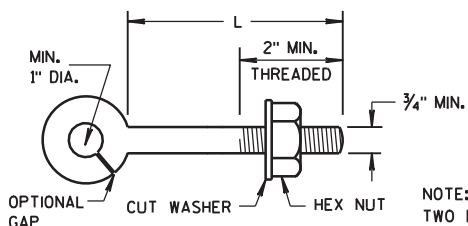
RIGHT AND LEFT THREADS

SLEEVE NUTS



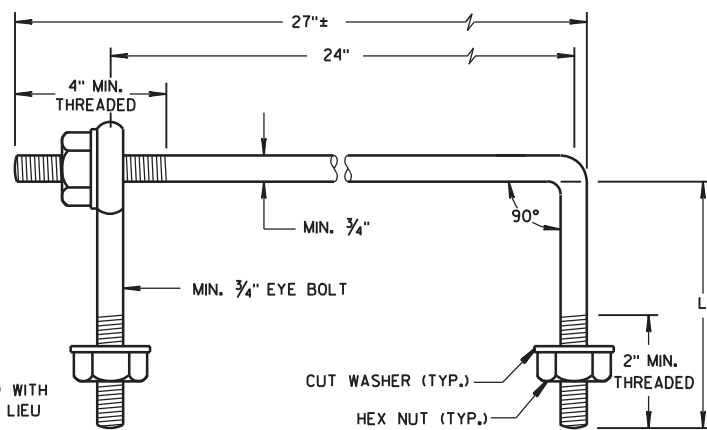
PLACEMENT OF (2) CAST-IN-PLACE INSERTS OR HOLES DURING FABRICATION FOR PIPE SECTIONS REQUIRING TIE RODS

TRANSVERSE SECTION



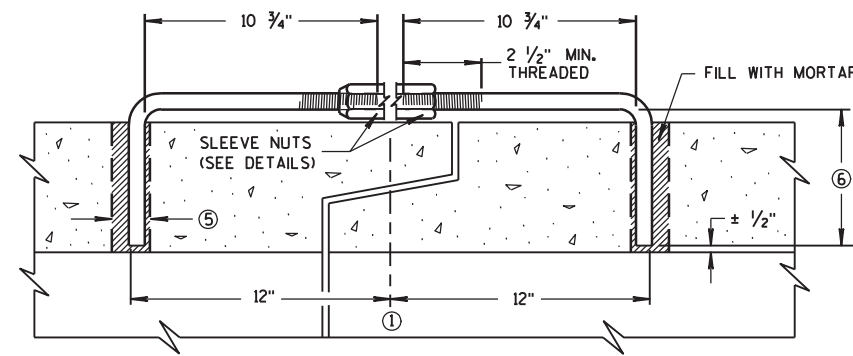
EYE BOLT

NOTE:
TWO EYE BOLTS MAY BE USED WITH A 30" LONG THREADED ROD IN LIEU OF THE 90° BENT TIE ROD.



EYE BOLT AND TIE ROD

(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)
EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 2)



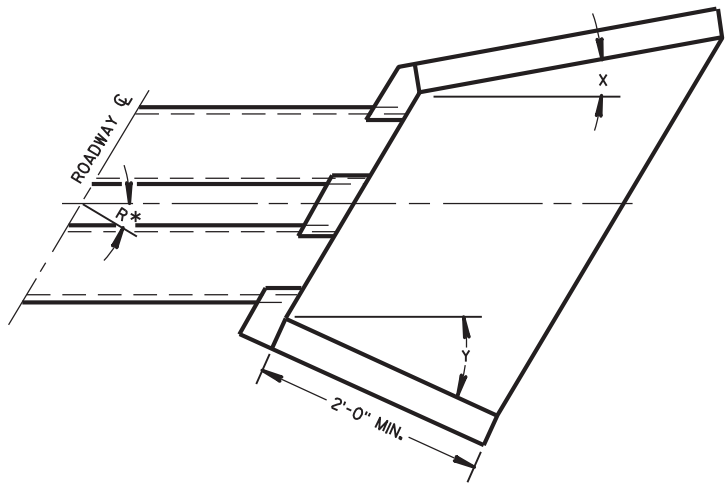
LONGITUDINAL SECTION

(JOINT TIES FOR 12" TO 108" DIA. CONCRETE PIPE)
ADJUSTABLE TIE ROD (ALTERNATE NO. 3)

JOINT TIES FOR CONCRETE PIPE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
12/17/07 /S/ Jerry H. Zogg
DATE ROADWAY STANDARDS DEVELOPMENT
ENGINEER
FHWA



WINGWALL ANGLE DETAILS

INLET			OUTLET		
R*	X	Y	R*	X	Y
0 - 7°	30°	30°	0 - 15°	15°	15°
8 - 22°	25°	"	16 - 45°	10°	"
23 - 37°	20°	"	46 - 75°	5°	"
38 - 52°	15°	"	OVER 75°	0°	"
53 - 67°	10°	"			
68 - 82°	5°	"			
OVER 82°	0°	"			

*R = NUMBER OF DEGREES RIGHT OR LEFT HAND FORWARD

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

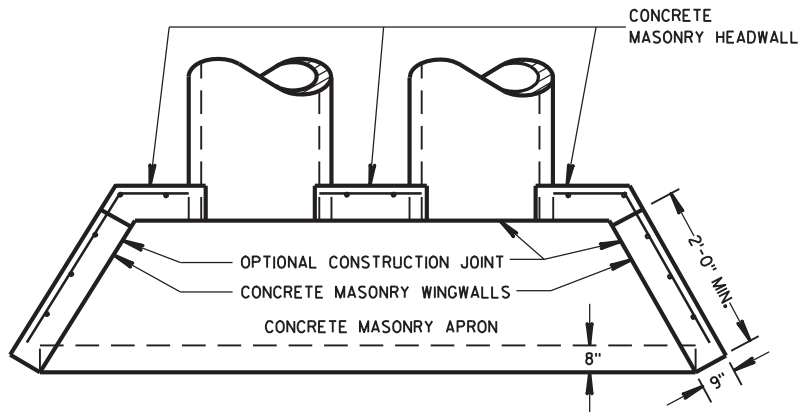
FILL SLOPES FLATTER THAN 2 1/2:1 SHALL BE WARPED TO MEET THE TOP OF THE WINGWALLS.

ALL STEEL REINFORCEMENT AND WELDED STEEL WIRE FABRIC SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE NOTED.

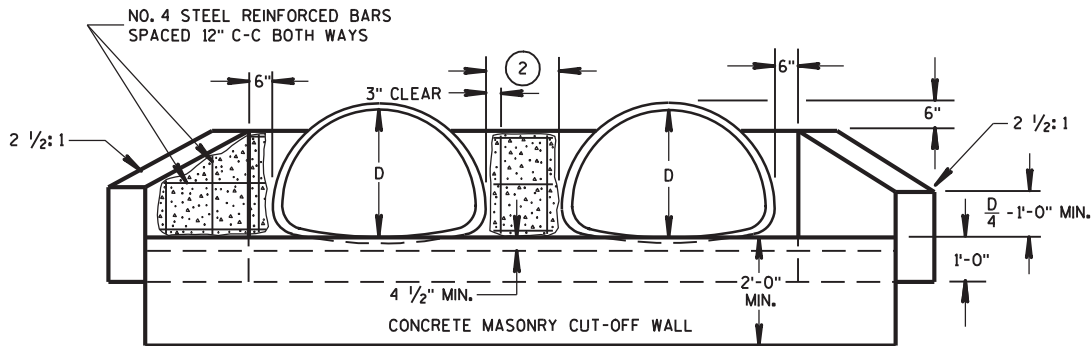
1 MINIMUM REINFORCEMENT SHALL BE 6" X 6" - W4.0 X W4.0 OR NO. 3 BARS SPACED 12" C-C IN BOTH DIRECTIONS.

2 THE SPACE BETWEEN PIPES SHALL BE AS FOLLOWS:

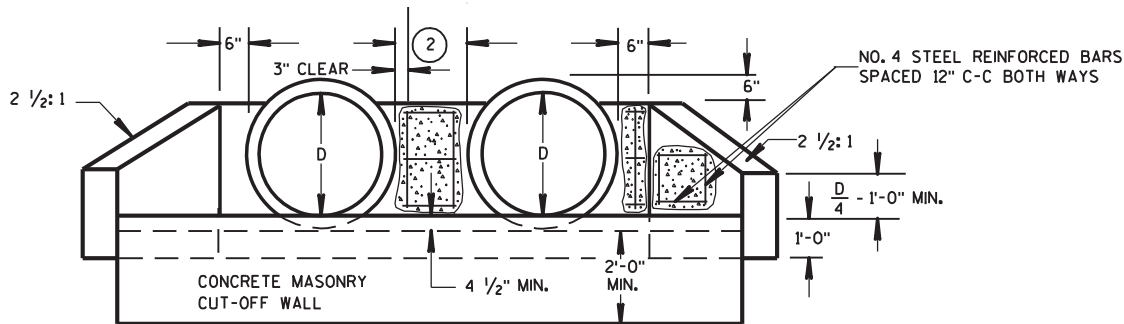
DIAMETER OR SPAN	SPACE
UP TO AND INCLUDING 48"	2'-0"
OVER 48" TO 72"	1/2 DIA. OR SPAN
OVER 72"	3'-0"



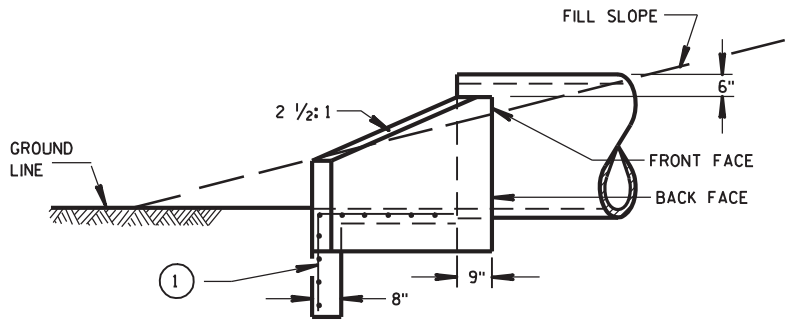
PLAN VIEW
CULVERT PIPE AND PIPE ARCH



END ELEVATION
PIPE ARCH



END ELEVATION
CULVERT PIPE



SIDE ELEVATION
CULVERT PIPE AND PIPE ARCH

S.D.D. 8 F 10-1

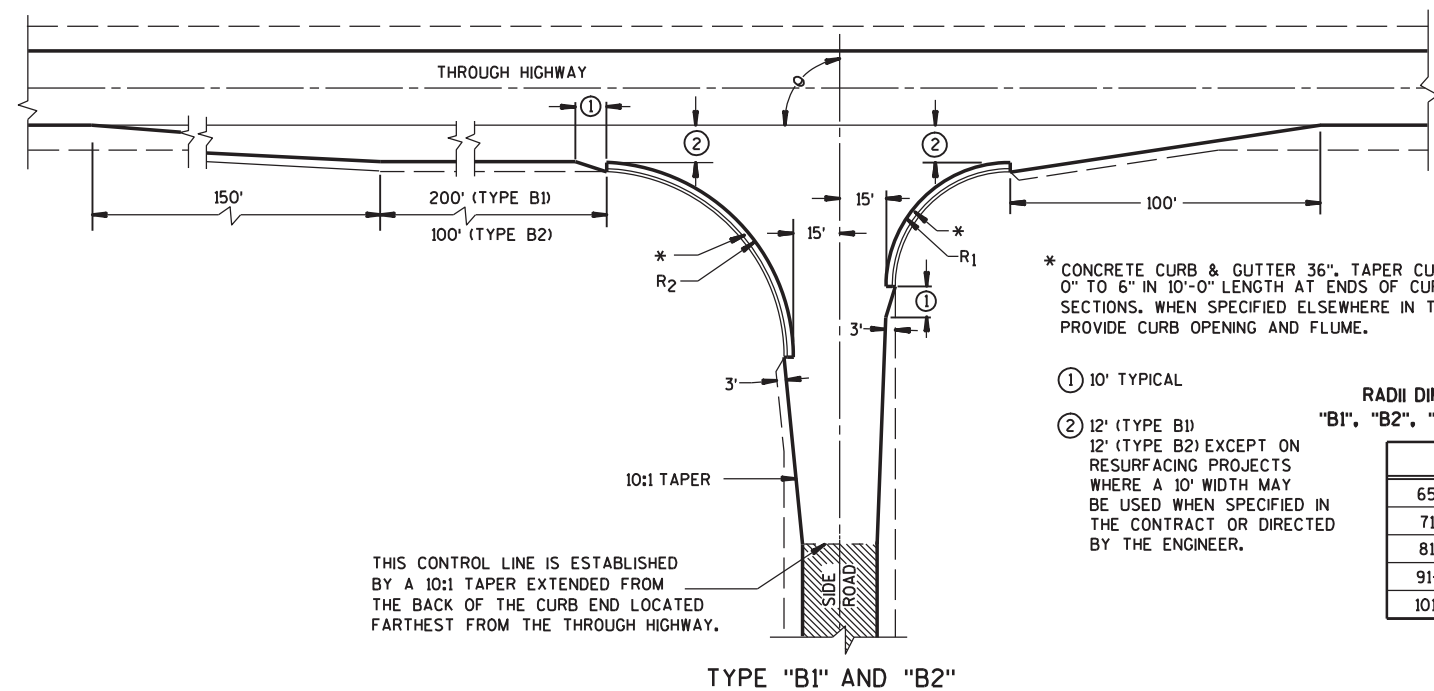
CONCRETE MASONRY ENDWALLS FOR
CULVERT PIPE AND PIPE ARCH

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
9/14/98
DATE
FHWAA

CHIEF ROADWAY DEVELOPMENT ENGINEER

S.D.D. 8 F 10-1



GENERAL NOTES

DESIGNS MAY BE USED INTERCHANGEABLY IN COMBINATION OR SEPARATELY FOR ANY ONE COMPLETE INTERSECTION DEPENDING UPON INTERSECTION ANGLE AND SURFACING OF EACH APPROACH ROADWAY.

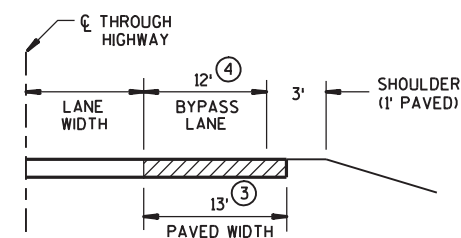
SIDE ROAD SURFACING NOTE

WHEN THE SIDE ROAD IS NOT PRESENTLY PAVED, PAVEMENT SHALL BE PLACED TO THE LIMITS SHOWN UNLESS OTHERWISE PROVIDED IN THE CONTRACT. WHERE THE CONSTRUCTION LIMITS ARE BEYOND THE PAVING LIMITS, CRUSHED AGGREGATE SURFACING SHALL BE PLACED BETWEEN THE PAVING LIMITS AND CONSTRUCTION LIMITS.

WHEN THE SIDE ROAD IS PRESENTLY PAVED, NEW PAVEMENT SHALL BE PLACED TO THE LIMITS OF DESIGN AS SHOWN AND BEYOND, IF NECESSARY, TO MEET EXISTING PAVEMENT.

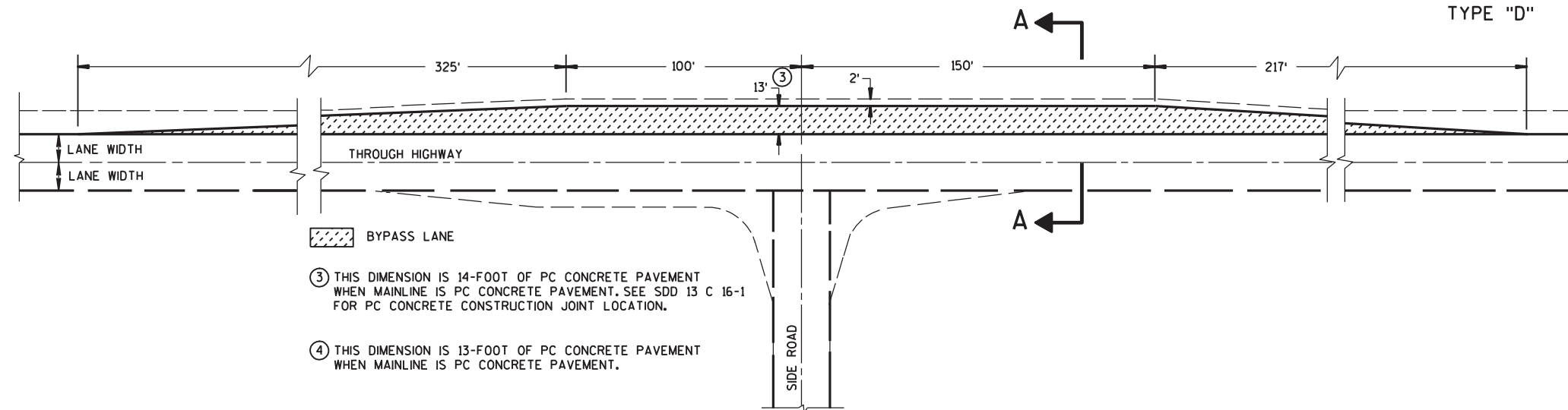
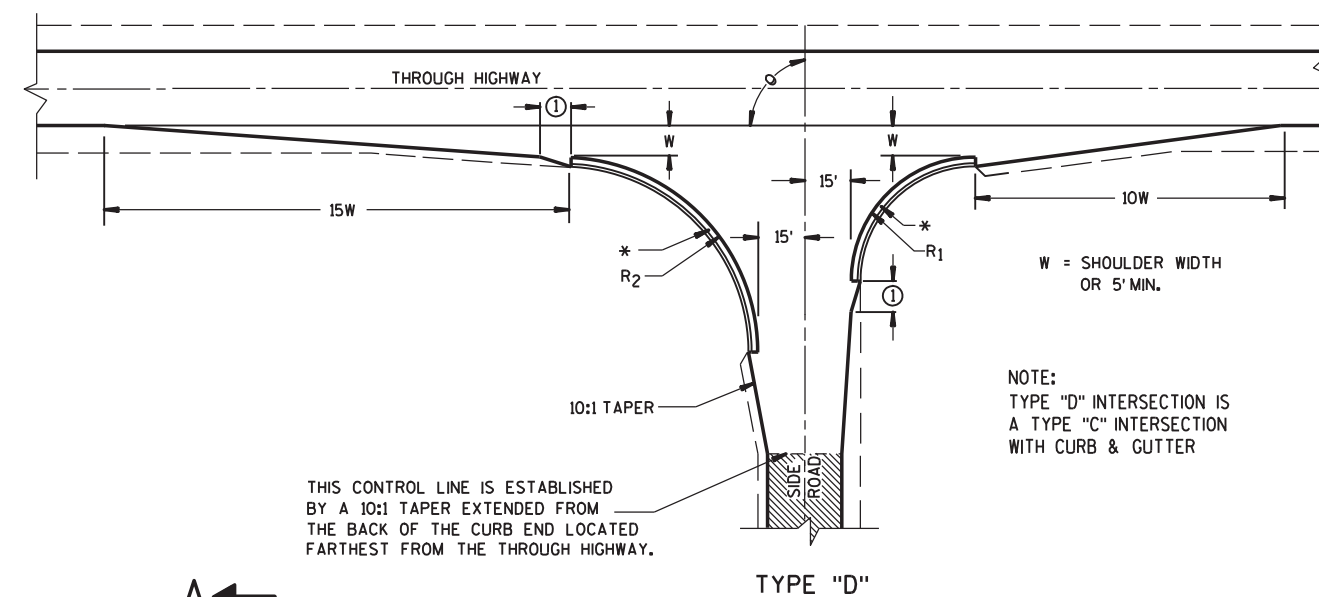
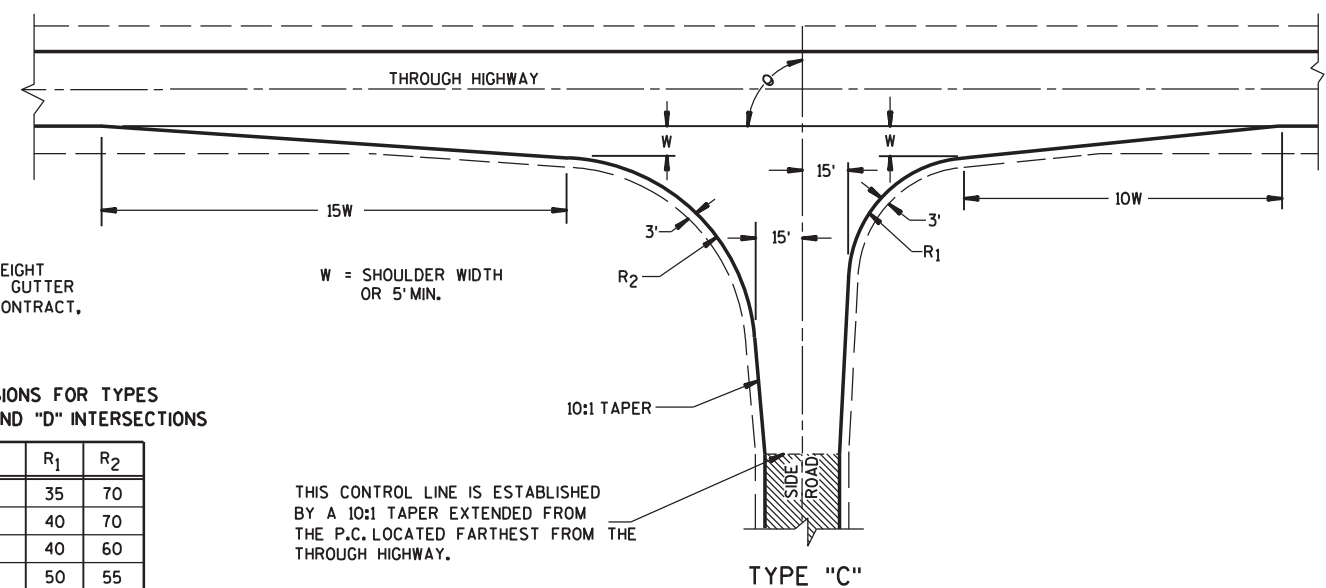
WHEN THE SIDE ROAD IS THE CONSTRUCTION PROJECT, THE INTERSECTION SURFACING SHALL BE THE SAME AS FOR THE PROJECT.

EXISTING SURFACE



SECTION A-A

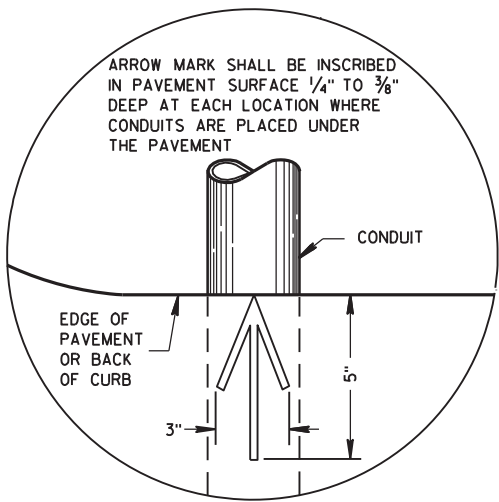
(SHOWING BYPASS LANE AND SHOULDER)



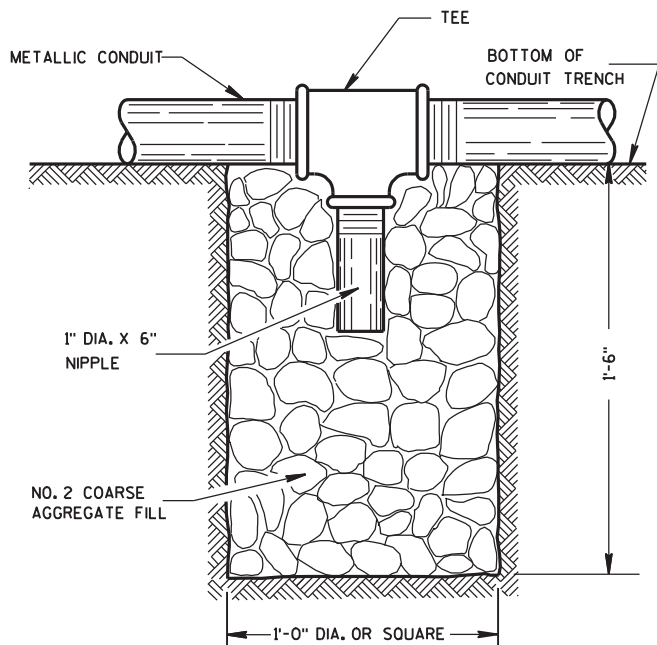
TEE INTERSECTION BYPASS LANE DETAIL

AT-GRADE SIDE ROAD
INTERSECTION, TYPES "B1", "B2", "C"
AND "D" AND TEE INTERSECTION
BYPASS LANE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

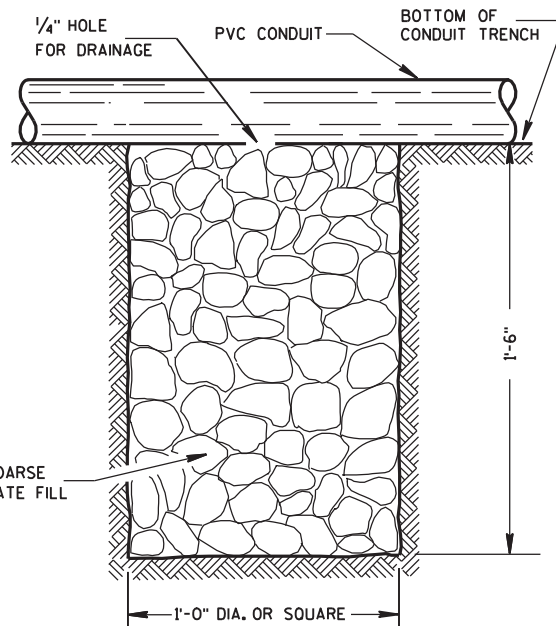


PLAN VIEW
ARROW MARK



NOTE: INSTALL AT LOCATIONS WHERE METALLIC CONDUITS CANNOT BE PITCHED TO DRAIN INTO A PULL BOX.

DRAIN SUMP FOR METALLIC CONDUIT



NOTE: INSTALL AT LOCATIONS WHERE PVC CONDUITS CANNOT BE PITCHED TO DRAIN INTO A PULL BOX.

DRAIN SUMP FOR PVC CONDUIT

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

METALLIC (STANDARD SPECIFICATION 652.2.2) OR NONMETALLIC (STANDARD SPECIFICATION 652.2.3) CONDUIT SHALL BE FURNISHED AND PLACED AS SHOWN.

DEPTH OF CONDUIT INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES MINIMUM AND 36 INCHES MAXIMUM.

DEPTH OF CONDUIT INSTALLED THAT IS NOT BELOW THE TRAVELED WAY SHALL BE 18 INCHES MINIMUM AND 36 INCHES MAXIMUM.

ANY EXCEPTION TO THE MAXIMUM DEPTH SHALL BE ONLY WITH THE WRITTEN APPROVAL OF THE ENGINEER.

THE TRENCH SHALL NOT BE BACKFILLED PRIOR TO INSPECTION OF THE CONDUIT.

ALL METALLIC CONDUIT RACEWAY ENDS SHALL BE REAMED AND THREADED.

ALL METALLIC CONDUIT IN WHICH WIRE OR CABLE IS TO BE INSTALLED SHALL BE BUSHED WITH APPROVED THREADED BUSHINGS BEFORE INSTALLATION OF THE WIRE OR CABLE.

ALL METALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT TO BE INSTALLED SHALL BE CAPPED WITH THREADED PROTECTIVE CAPS, AS APPROVED BY THE ENGINEER.

ALL NONMETALLIC CONDUIT SHALL BE CAPPED OR PLUGGED IMMEDIATELY AFTER INSTALLATION AND SHALL REMAIN CAPPED OR PLUGGED UNTIL WIRE/CABLES ARE INSTALLED.

NONMETALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

BENDING OF PVC ELECTRICAL CONDUIT SHALL BE ACCOMPLISHED BY USING A BLANKET OR EMERSION TYPE TANK DESIGNED FOR THE PURPOSE OF BENDING PVC ELECTRICAL CONDUIT.

ALL CUT ENDS SHALL BE TRIMMED INSIDE AND OUTSIDE TO REMOVE ALL ROUGH EDGES ON NONMETALLIC CONDUIT. (SEE NEC 347.5)

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY U.L. LISTED ADAPTER FITTINGS SHALL BE USED.

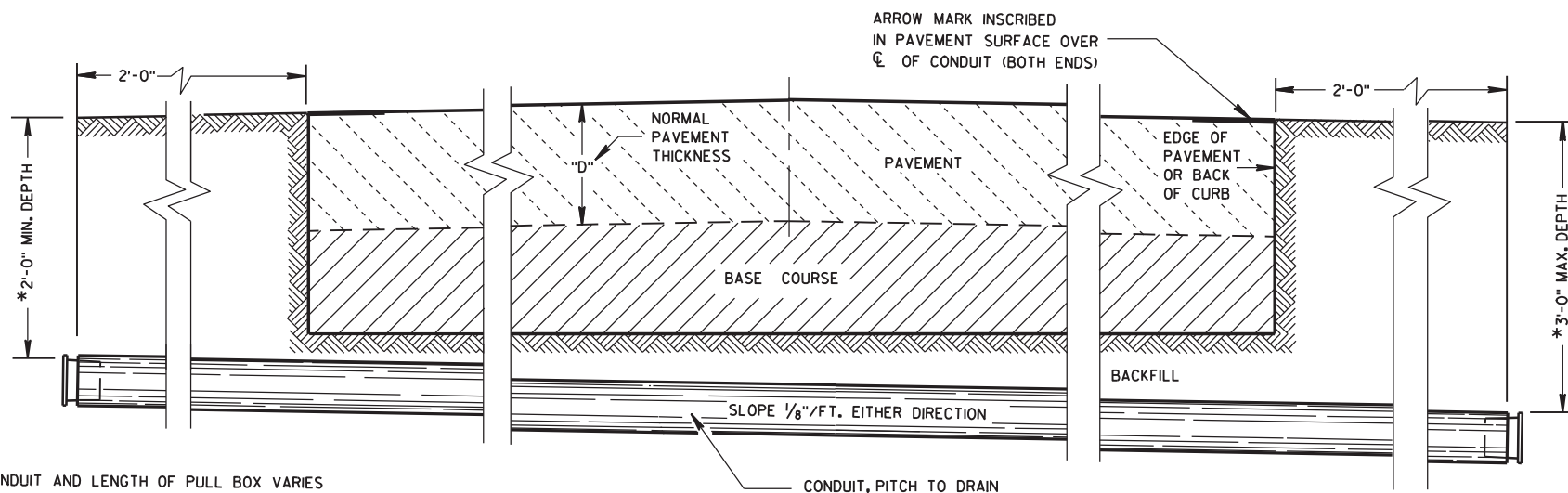
PRIOR TO CONDUIT ACCEPTANCE, CONDUIT CAPS OR PLUGS SHALL BE REMOVED, AND THE CAPS, PLUGS AND CONDUIT ENDS SHALL BE THOROUGHLY CLEANED AND THEN THE CAPS OR PLUGS REINSTALLED TO ENSURE THAT THE CAPS OR PLUGS CAN BE EASILY REMOVED IN THE FUTURE.

ALL CONDUIT BEING FURNISHED AND INSTALLED SHALL HAVE THE U.L. LABEL FIRMLY ATTACHED.

CONDUIT RUNS SHALL BE THE SAME SIZE OF CONDUIT FROM ONE END TO THE OTHER (FROM PULL BOX TO PULL BOX-OR-JUNCTION BOX TO JUNCTION BOX-OR-BASE TO BASE, ETC.).

POLY ROPE OR A PULL WIRE SHALL BE INSTALLED AS STATED IN THE STANDARD SPECIFICATION, ITEM 652.3.1.1.

ALL CONDUIT RUNS SHALL BE STRAIGHT (WITHOUT BENDS) FROM PULL BOX TO PULL BOX, PULL BOX TO BASE AND BASE TO BASE AS SHOWN ON THE PLANS.



*DEPTH OF CONDUIT AND LENGTH OF PULL BOX VARIES WITH HEIGHT OF CURB USED. ALSO SEE PULL BOX S.D.D. 9B4

SIDE ELEVATION
DETAIL FOR CONDUIT UNDER PAVED HIGHWAYS

CONDUIT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/23/03
DATE
FHWA

Bala Arund
STATE ELECTRICAL ENGINEER FOR
HIGHWAYS

TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

DIMENSION IN INCHES		CORRUGATED STEEL PIPE								
PIPE DIAMETER (INSIDE)	A	12	12	12	18	18	18	24	24	24
PIPE LENGTH **	B	24	30	36	24	30	36	36	42	48
WALL THICKNESS	C	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064
COVER	D	10 1/4	10 1/4	10 1/4	16 1/4	16 1/4	16 1/4	22 1/4	22 1/4	22 1/4
FRAME	E	14 1/2	14 1/2	14 1/2	20 1/2	20 1/2	20 1/2	26 1/2	26 1/2	26 1/2
FRAME	F	8 1/2	8 1/2	8 1/2	14 1/2	14 1/2	14 1/2	20 1/2	20 1/2	20 1/2
FRAME	G	11 1/2	11 1/2	11 1/2	17 1/2	17 1/2	17 1/2	23 1/2	23 1/2	23 1/2
WEIGHT IN POUNDS *										
FRAME AND COVER		60	60	60	110	110	110	155	155	155

* THE ACTUAL WEIGHT OF THE MANHOLE FRAME AND COVER MAY VARY WITHIN 5 PERCENT PLUS OR MINUS OF THE WEIGHTS SHOWN.

** NORMALLY USED LENGTHS. THE PROJECT ENGINEER SHALL DETERMINE IF PIPE LENGTHS, OTHER THAN THOSE SPECIFIED, SHALL BE USED, TO A MAXIMUM OF 48" (CONTINUOUS LENGTH, NON-SPLICED). THE ADDITIONAL LENGTH SHALL BE INCIDENTAL TO THE PULL BOX BID PRICE.

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

ALL FRAMES AND COVERS SHALL BE HEAVY DUTY TYPE, SUITABLE FOR VEHICULAR TRAFFIC LOADS.

PULL BOXES LOCATED IN THE ROADWAYS SHALL HAVE LOCKING COVERS.

ENTRANCE HOLES INTO PULL BOXES SHALL BE CUT WITH A CIRCULAR HOLE SAW OR HYDRAULIC CONDUIT PUNCH. HOLE SIZE SHALL BE THE OUTSIDE DIAMETER OF THE CONDUIT THAT IS TO FIT IN THE OPENING PLUS NO MORE THAN 1/4".

THE CONTRACTOR SHALL NOT INSTALL WIRE IN ANY PULL BOX UNTIL ITS INSTALLATION HAS BEEN INSPECTED AND ACCEPTED BY THE ENGINEER.

GROUNDING LUGS (MECHANICAL CONNECTORS) SHALL BE U.L. LISTED AND APPROVED FOR USE WITH COPPER WIRE. THE MECHANICAL CONNECTION (INSIDE AND OUTSIDE) TO THE PULL BOX, SHALL BE TOTALLY AND PERMANENTLY SEALED WITH A SILICONE OR RUBBERIZED CAULKING COMPOUND AS APPROVED BY THE ENGINEER.

GROUNDING LUGS ARE NOT REQUIRED IN PULL BOXES WHEN VOLTAGES OF LESS THAN 50 VOLTS AC ARE THE ONLY VOLTAGES ENCOUNTERED IN THE BOXES.

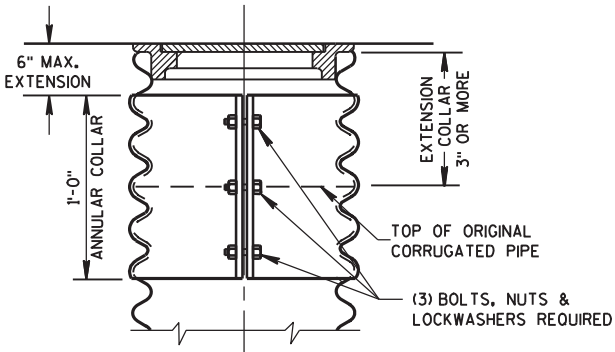
ALL METALLIC CONDUIT IN WHICH WIRE AND/OR CABLE IS TO BE INSTALLED, SHALL BE BUSHED BEFORE INSTALLATION OF THE WIRE AND/OR CABLE.

S.D.D. 9B2, "CONDUIT", APPLIES TO THIS DRAWING.

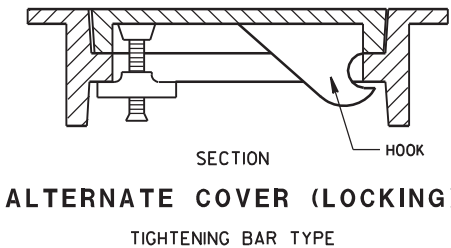
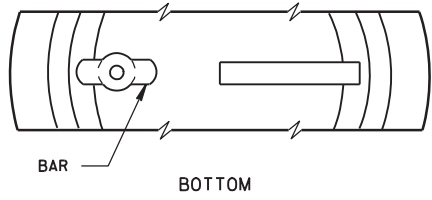
WHEN PULL BOXES ARE INSTALLED FOR FUTURE USE, DO NOT INSTALL THE EQUIPMENT GROUNDING LUG. THE EQUIPMENT GROUNDING LUG, THE EQUIPMENT GROUNDING ELECTRODE AND THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE REQUIRED AND INSTALLED UNDER A FUTURE WIRING CONTRACT.

IF PULL BOX EQUIPMENT GROUNDING IS REQUIRED USING AN EQUIPMENT GROUNDING ELECTRODE IN EACH PULL BOX, THE EQUIPMENT GROUNDING ELECTRODE SHALL BE 5/8" X 8'-0", COPPERCLAD AND BE EXOTHERMICALLY WELDED TO A #4 AWG, COPPER, STRANDED WIRE (BARE OR GREEN INSULATED). THE #4 AWG WIRE SHALL BE 4 FEET IN LENGTH, NEATLY COILED, TAPED AND AVAILABLE FOR USE WHEN REQUIRED.

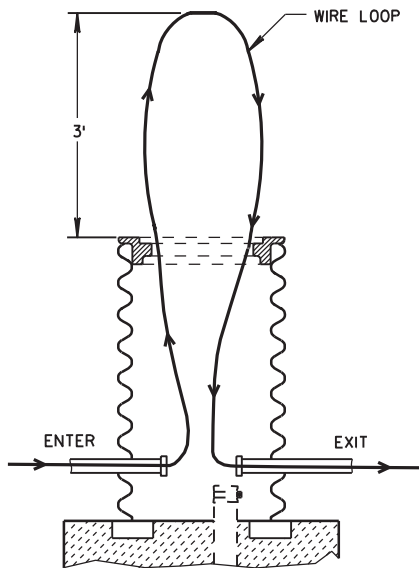
WHEN A PULL BOX IS INSTALLED IN CRUSHED AGGREGATE SHOULDERS, PLACE IT 2-3 INCHES BELOW GRADE AND COVER IT WITH 2-3 INCHES OF CRUSHED AGGREGATE



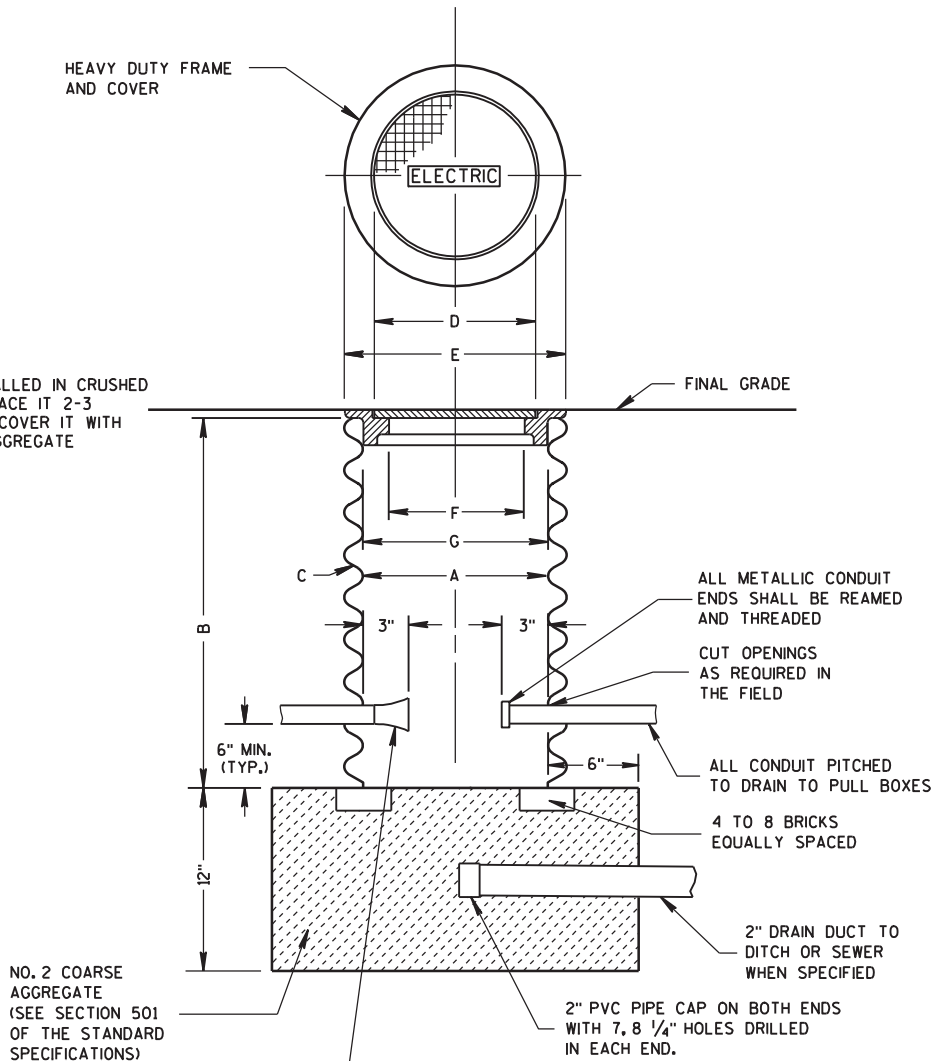
CORRUGATED PIPE EXTENDER



ALTERNATE COVER (LOCKING)

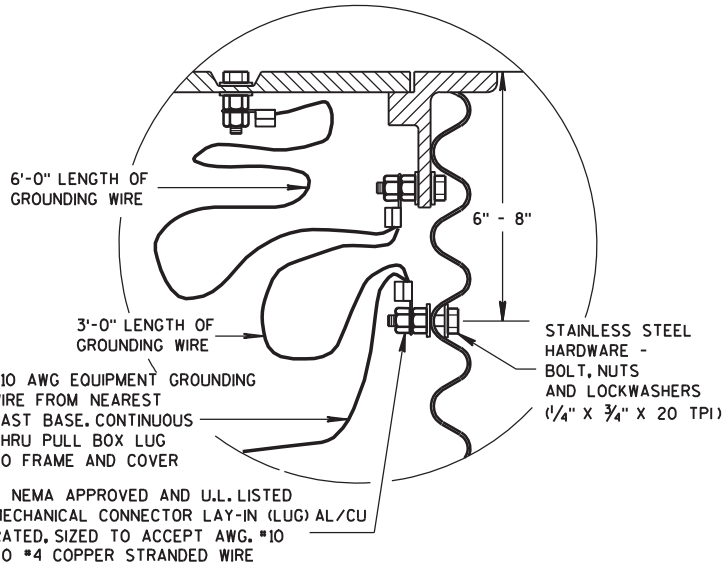


MEASUREMENT DETAIL FOR WIRE/CABLE IN THE PULL BOX



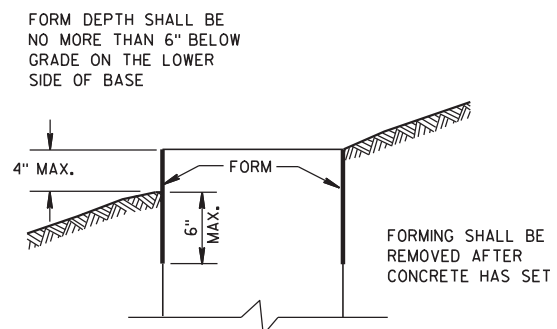
INSTALL END BELLS (U.L. LISTED FOR ELECTRICAL USE) ON ALL NONMETALLIC CONDUIT BEFORE INSTALLATION OF WIRE AND/OR CABLE.

PULL BOX



EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES

PULL BOX	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 9/27/06 DATE FHWA	/S/ Balu Ananthanarayanan STATE ELECTRICAL ENGINEER FOR HIGHWAYS



FORMING DETAIL

QUANTITY REQUIREMENTS	CONCRETE BASE TYPE		
	1	2	5
APPROX. CUBIC YARDS OF CONCRETE	0.40	0.57	0.40
LBS. OF HOOP BAR STEEL	NONE	23	16
LBS. OF VERTICAL BAR STEEL	NONE	60	18

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

BASES SHALL BE EXCAVATED BY USE OF A CIRCULAR AUGER.

TOP SURFACES OF CONCRETE BASES SHALL BE TROWEL FINISHED SMOOTH AND LEVEL.

CONDUIT SIZES AND LOCATIONS SHALL BE AS SHOWN ON THE PLANS.

THE FINAL OR TERMINATING CONCRETE BASE IN A CONDUIT RUN SHALL HAVE A 6" EXIT STUB INSTALLED FOR FUTURE CABLING USE. THE EXIT STUB SHALL BE SIZED AS USED THROUGHOUT THE CONDUIT RUN AS SHOWN AT THE ENTRANCE OF THE BASE.

MINIMUM BENDING RADIUS OF CONDUIT IS EQUAL TO 6 X THE DIAMETER.

CONDUIT HEIGHT ABOVE CONCRETE BASES SHALL BE 1 INCH. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

GENERAL NOTES (CONTINUED)

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF CONCRETE BASES BEFORE INSTALLATION OF CABLE OR WIRE.

ENDS OF CONDUIT INSTALLED BELOW GRADE FOR FUTURE USE SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC.

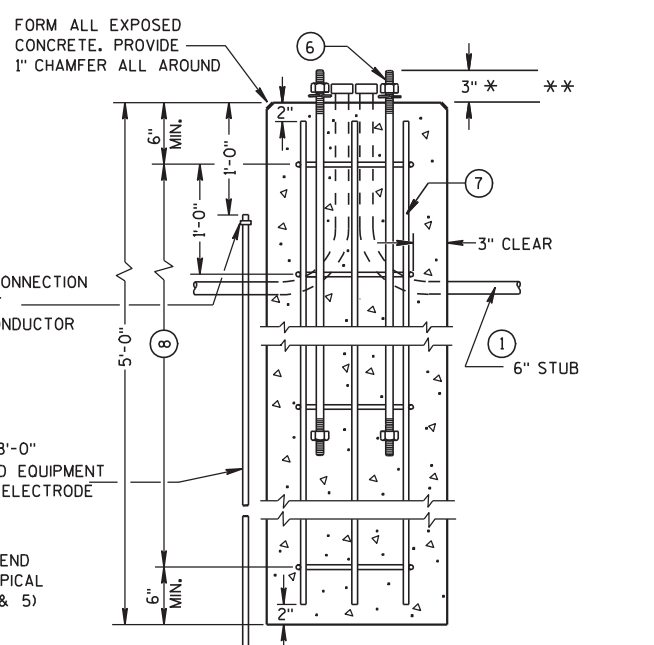
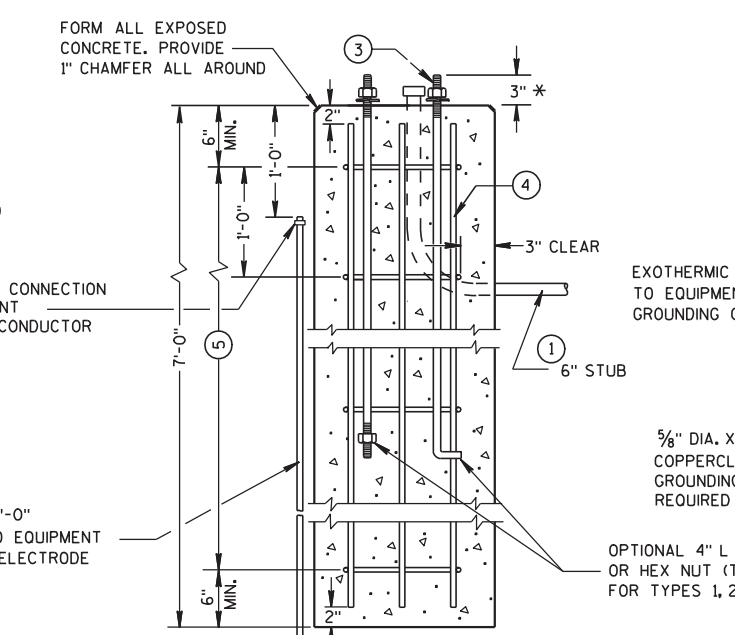
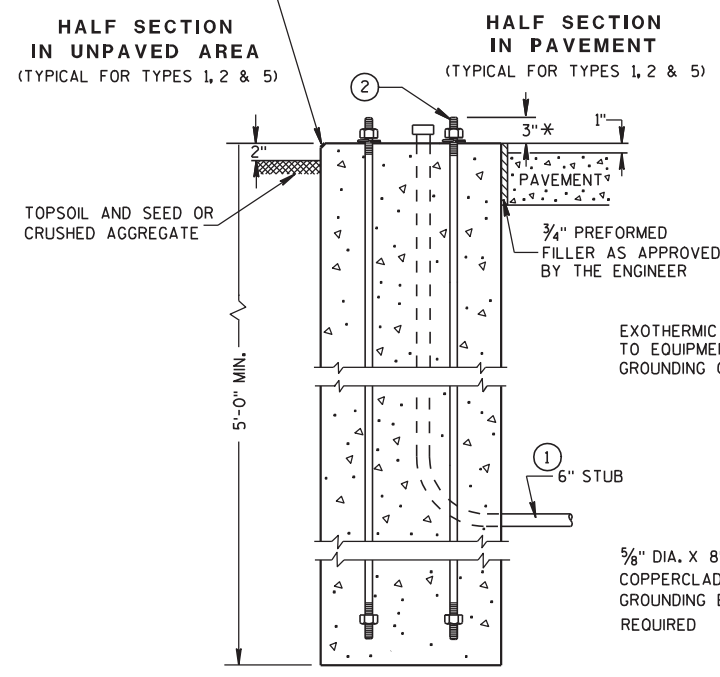
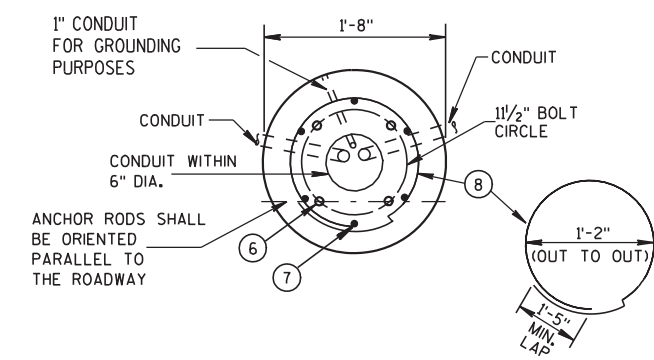
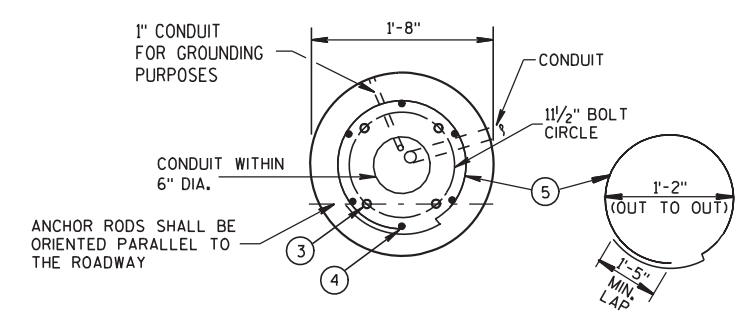
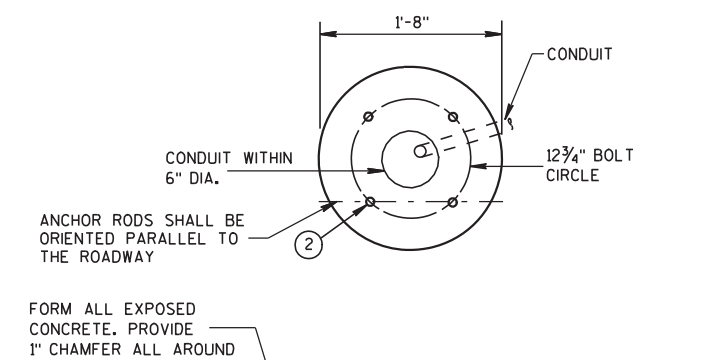
WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

IF A BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE DIRT OR FILL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING AROUND THE BASE. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BARE CONCRETE BASE IN LAYERS OF 1FOOT OR LESS.

A NO. 4 AWG, STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD) FOR TYPE 2 AND TYPE 5 BASES.

THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE FURNISHED AND INSTALLED TO ENTER THE BASE OF THE TYPE 2 AND TYPE 5 BASES THROUGH A 1INCH CONDUIT INSTALLED FOR GROUNDING PURPOSES, LEAVING A 4 FOOT COIL OF WIRE ABOVE THE CONCRETE BASE. THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE NEATLY COILED AND THE COILS TIED TOGETHER.

ANCHOR RODS SHALL BE THREADED 12" IN LENGTH ON EACH END OF THE ROD. ANCHOR RODS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 654.2.1 AND 641.2.2 OF THE STANDARD SPECIFICATIONS, ASTM A-449, OR ASTM A-687 (GRADE 105).



CONCRETE BASES

* ANY ANCHOR ROD PROJECTION SHORTER THAN 2 3/4" OR LONGER THAN 3 1/4" SHALL REQUIRE THE BASE TO BE REMOVED AND REPLACED AT THE CONTRACTORS EXPENSE.

** FOR NONBREAKAWAY INSTALLATIONS, 4 1/2" ± ANCHOR ROD PROJECTION WITH THE USE OF LEVELING NUTS. RODENT SCREEN REQUIRED.

- 1 THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18 INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36 INCHES EXCEPT WITH WRITTEN APPROVAL BY THE ENGINEER.
- 2 (4) 1" DIA. X 3'-6" ANCHOR RODS.
- 3 (4) 1" DIA. X 5'-0" ANCHOR RODS.
- 4 (6) NO. 6 X 6'-8" BAR STEEL REINFORCEMENT.
- 5 (7) NO. 4 X 5'-1" BAR STEEL REINFORCEMENT @ 1'-0" C-C.
- 6 (4) 1" DIA. X 3'-6" ANCHOR RODS.
- 7 (6) NO. 4 X 4'-8" BAR STEEL REINFORCEMENT.
- 8 (5) NO. 4 X 5'-1" BAR STEEL REINFORCEMENT @ 1'-0" C-C.

CONCRETE BASES,
TYPES 1, 2 & 5

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
3/3/10 /S/ Joanna L. Bush
DATE STATE ELECTRICAL ENGINEER FOR
HIGHWAYS

FHWA

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

FOUR (4) BOLTS SHALL BE FURNISHED WITH EACH TRANSFORMER BASE. BOLTS SHALL BE 1" DIAMETER, 4" IN LENGTH, WITH WASHERS, LOCK WASHERS AND NUTS. BOLTS, NUTS AND WASHERS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 641.2.2 OF THE STANDARD SPECIFICATIONS, ASTM A-325, (92,000 YIELD) HEAVY HEX NUT AND BE GALVANIZED IN ACCORDANCE WITH ASTM A-153, CLASS C.

LEVELING SHIMS, IF NEEDED, SHALL BE DESIGNED FOR THE PURPOSE AND USED UNDER CAST BASES WHEN PLUMBING POLES OR STANDARDS DURING INSTALLATION. THE USE OF WASHERS IN LIEU OF PROPER LEVELING SHIMS IS NOT ACCEPTABLE.

SHIM LENGTH SHALL BE LONG ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.

DOUBLE NUTTING IS NOT ACCEPTABLE FOR LEVELING OR MOUNTING PURPOSES.

A NEMA APPROVED AND U.L. LISTED MECHANICAL CONNECTOR (LUG) AL/CU RATED AND SIZED TO ACCEPT #10 AWG STRANDED WIRE, SHALL BE FURNISHED AND INSTALLED IN THE PEDESTAL AND TRANSFORMER BASES.

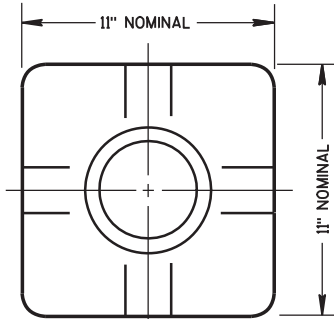
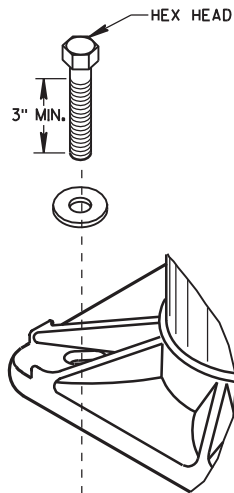
THE MECHANICAL CONNECTOR SHALL BE INSTALLED USING A 1/4" - 20 (TPI) STAINLESS STEEL HEX HEAD BOLT OF SUFFICIENT LENGTH TO FIRMLY ATTACH THE LUG TO THE BASE.

SHOULD THE MANNER OF ATTACHMENT OF THE LUG REQUIRE WASHERS, HEX NUTS, LOCK WASHER - THEY SHALL BE STAINLESS STEEL AS IS THE BOLT. THE MANNER OF ATTACHMENT SHALL NOT BLOCK ACCESSIBILITY TO WIRE PLACEMENT IN THE CONNECTOR.

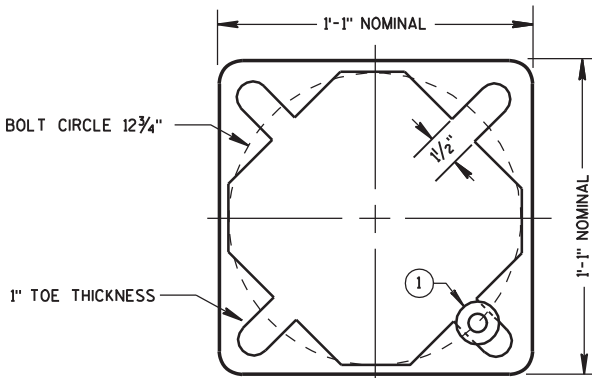
PEDESTAL BASE COLLAR THREADING SHALL BE TAPERED AND IN ACCORDANCE WITH NATIONAL PIPE THREADING DIMENSIONS.

BASE COLLAR THREADING SHALL EXTEND INTO THE BASE COLLAR WITH SUFFICIENT DEPTH TO ACCEPT THE INSTALLATION OF TRAFFIC SIGNAL STANDARDS TO A DEPTH OF 1/2", THEN TIGHTENING TO A POINT OF BEING IMMOVABLE.

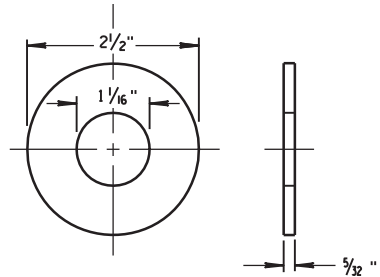
THE ACCESS DOOR SHALL BE OF THE SAME MATERIAL AS THE BASE.



TOP VIEW
(PEDESTAL BASE)

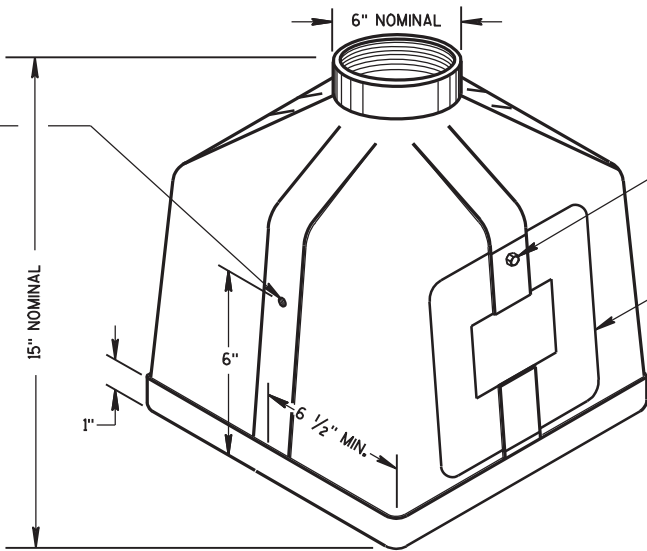
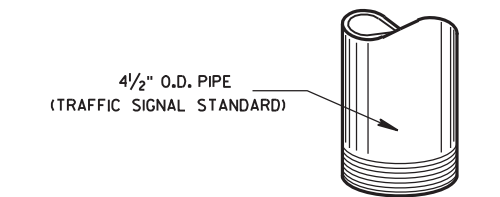


BOTTOM VIEW
(PEDESTAL BASE)

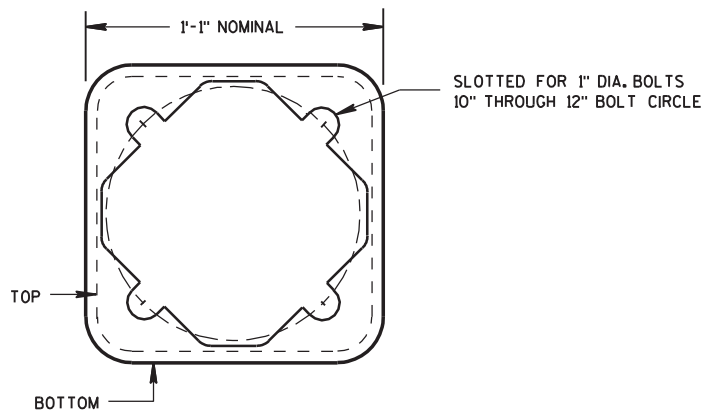


ZINC COATED STEEL WASHER
TO BE PROVIDED BY THE CONTRACTOR

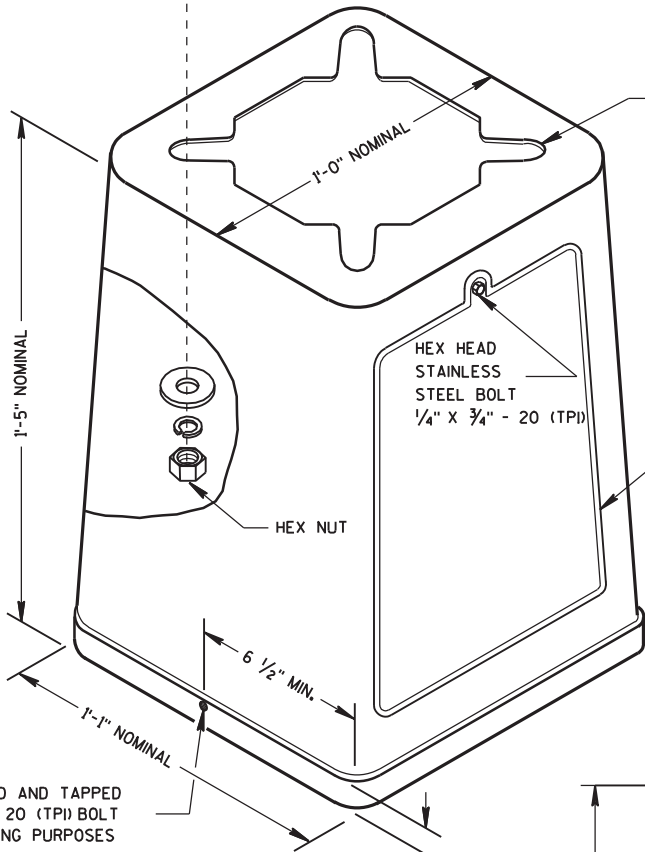
PEDESTAL
BASE WASHER ①



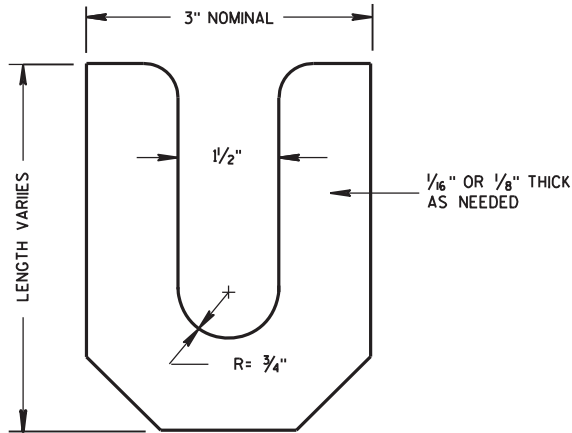
ISOMETRIC VIEW
PEDESTAL BASE



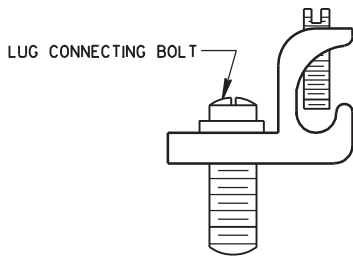
BOTTOM VIEW
(TRANSFORMER BASE)



ISOMETRIC VIEW



LEVELING SHIM



TYPICAL MECHANICAL
CONNECTOR LUG
TO BE FURNISHED WITH EACH BASE

TRANSFORMER BASE
INTENDED FOR USE WITH TYPE 2, 3, 4, 5 & 6 POLES

TRANSFORMER/PEDESTAL BASES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/27/09
DATE
/S/ Joanna L. Bush
STATE ELECTRICAL ENGINEER FOR
HIGHWAYS

CONTROL CABINET BASE TYPE	DIMENSIONS				C.Y. CONCRETE (APPROX.)
	H	I	J	K	
TYPE 6 - 30" CABINET	34"	60"	10"	17"	.64
TYPE 7 - 38" CABINET	42"	60"	10"	21"	.93
TYPE 8 - 38" CABINET	42"	72"	12"	21"	1.29
TYPE 9 - VARIABLE	54"	72"	14"	27"	1.56
TYPE 10 - POST MOUNT	AS SHOWN				.65 *

* INCLUDES MAINTENANCE PLATFORM.

TYPICAL 3'-0" X 3'-0" X 4" THICK
MAINTENANCE PLATFORM.
LOCATION TO BE DETERMINED
IN THE FIELD. COST TO BE
INCLUDED UNDER CONCRETE
CONTROL CABINET TYPE 10.

EXIT LOCATION OF 1/4" CONDUIT
FROM CABINET BASE DEPENDENT
UPON LOCATION OF ELECTRIC
SERVICE.

THE 3" CONDUIT SHALL BE
INSTALLED FROM THE CABINET BASE
TO THE FIRST (NEAREST) PULL BOX
LOCATED AS SHOWN ON THE PLAN

ALL CONDUITS WITHIN
6" DIA. CIRCLE

12 3/4" BOLT
CIRCLE

6
HALF SECTION
IN UNPAVED AREA

TOPSOIL AND SEED
OR CRUSHED AGGREGATE

1" CONDUIT - 6" STUB
FOR GROUNDING WIRE
ENTRANCE

1/4" SERVICE ENTRANCE
WITH 6" STUB

FORM ALL EXPOSED
CONCRETE. PROVIDE
1" CHAMFER ALL AROUND

HALF SECTION
IN PAVED AREA

3/4" PREFORMED FILLER AS
APPROVED BY THE ENGINEER

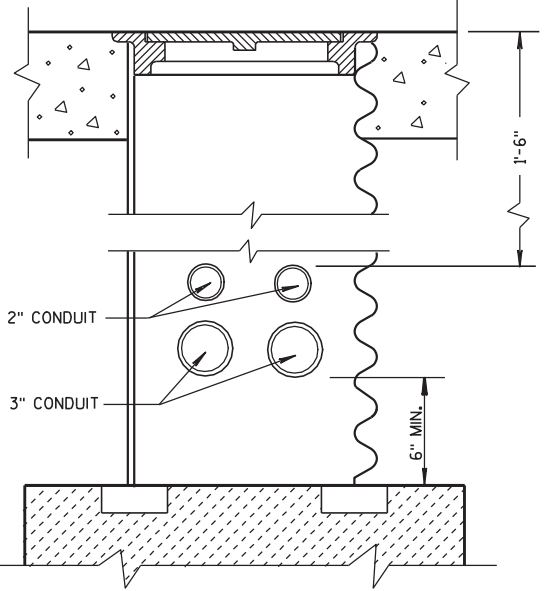
THE 3" CONDUIT SHALL BE
SPACED 2" MIN. APART TO
ALLOW FOR PLACEMENT OF
CAPS, BUSHINGS OR COUPLINGS

(ALTERNATE)
4" L BEND OR
ONE HEX NUT

TYPE 10

* ANY ANCHOR ROD PROJECTION SHORTER THAN 2 3/4" OR LONGER THAN 3 1/4" SHALL REQUIRE
THE BASE TO BE REMOVED AND REPLACED AT THE CONTRACTORS EXPENSE.

CONCRETE CONTROL CABINET BASES



CONDUIT LOCATIONS IN 24" X 36" PULL BOX
(LEADING TO CONTROLLER CABINET BASE TYPE 6, 7, 8 AND 9)

FORM ALL EXPOSED
CONCRETE. PROVIDE
1" CHAMFER ALL AROUND

ALL CONDUIT SHALL
BE INSTALLED WITHIN
7" X 14" RECTANGLE

LOCATE CONCRETE MAINTENANCE
PLATFORM ON DOOR SIDE OF
CABINET (SEE NOTES)

GROUND
LINE

6" STUB

4 - 6" STUBS SPACED 2" MIN.
APART TO ALLOW FOR PLACEMENT
OF CAPS, BUSHING OR COUPLINGS

* EXIT LOCATION OF 1/4" CONDUIT
FROM CABINET BASE DEPENDENT
UPON LOCATION OF ELECTRIC
SERVICE AND OR COMMUNICATION
CABLE.

TYPE 6, 7, 8 AND 9
(ISOMETRIC VIEW)

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING
SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

INSTALL FOUR 1/2 INCH MINIMUM DIAMETER X 4 INCH MINIMUM LENGTH APPROVED CONCRETE
MASONRY ANCHORS TO ANCHOR THE CABINET TO TYPE 6, 7, 8, AND 9 BASES. THE ANCHOR
STUDS SHALL BE LOCATED AS DIRECTED BY THE ENGINEER TO PROPERLY ANCHOR THE
CONTROL CABINET TO THE BASE.

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER
FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

CONDUIT HEIGHT ABOVE THE CONCRETE BASE SHALL BE 1 INCH.

DEPTH OF CONDUIT INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES MINIMUM
AND 36 INCHES MAXIMUM.

DEPTH OF CONDUIT INSTALLED THAT IS NOT BELOW THE TRAVELED WAY SHALL BE 18 INCHES
MINIMUM AND 36 INCHES MAXIMUM.

ANY EXCEPTION TO THE MAXIMUM DEPTH SHALL BE ONLY WITH THE WRITTEN APPROVAL
OF THE ENGINEER.

CONTROL CABINET BASE TOP SURFACES SHALL BE TROWEL FINISHED SMOOTH AND LEVEL.

WHEN A TYPE 10 CONTROL CABINET BASE IS USED TO POST MOUNT A CONTROL CABINET, A
36" SQUARE 4" THICK CONCRETE MAINTENANCE PLATFORM SHALL BE REQUIRED ON THE DOOR
SIDE OF THE CABINET. THE TOP 1 INCH SHALL BE ABOVE FINISHED GRADE AND BE BROOM
FINISHED AND LEVEL.

MAINTENANCE PLATFORMS ARE NOT REQUIRED WHEN THE SURROUNDING AREA IS PAVED.

MINIMUM BENDING RADIUS OF CONDUIT = 6 X THE DIAMETER.

ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR
PLUGGED IF NONMETALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS
POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN
CAPPED OR PLUGGED.

ALL FOUR (TWO INCH AND THREE INCH) CONDUIT SHALL BE INSTALLED FROM THE CABINET
BASE TO THE FIRST (NEAREST) PULL BOX LOCATED AS SHOWN ON THE PLANS.

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF THE
CONCRETE BASE BEFORE INSTALLATION OF CABLE OR WIRE.

CONCRETE FORM DEPTH BELOW FINISHED GRADE SHALL BE 6" MAXIMUM. CONCRETE FORMS
SHALL BE REMOVED AFTER CONCRETE HAS SET.

WHEN ANCHOR RODS USING THE ALTERNATE L BEND ARE FURNISHED FOR THE TYPE 10
BASE, THE 4" L BEND SHALL BE IN ADDITION TO THE SPECIFIED ANCHOR ROD BAR LENGTH.

THE "L" BEND SHALL NOT BE THREADED.

STRAIGHT ANCHOR RODS SHALL BE THREADED 12" IN LENGTH ON EACH END OF THE ROD.

ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM
VERTICAL.

WHEN THIS DRAWING IS USED FOR STREET LIGHTING CABINET BASES, CONDUIT MAY BE
DIFFERENT AS SHOWN ON THE PLAN OR AS DIRECTED BY THE ENGINEER.

① FOUR (4) ANCHOR RODS, 1" DIA. X 3'-6"
ANCHOR RODS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 654.2.1 AND
641.2.2 OF THE STANDARD SPECIFICATIONS.

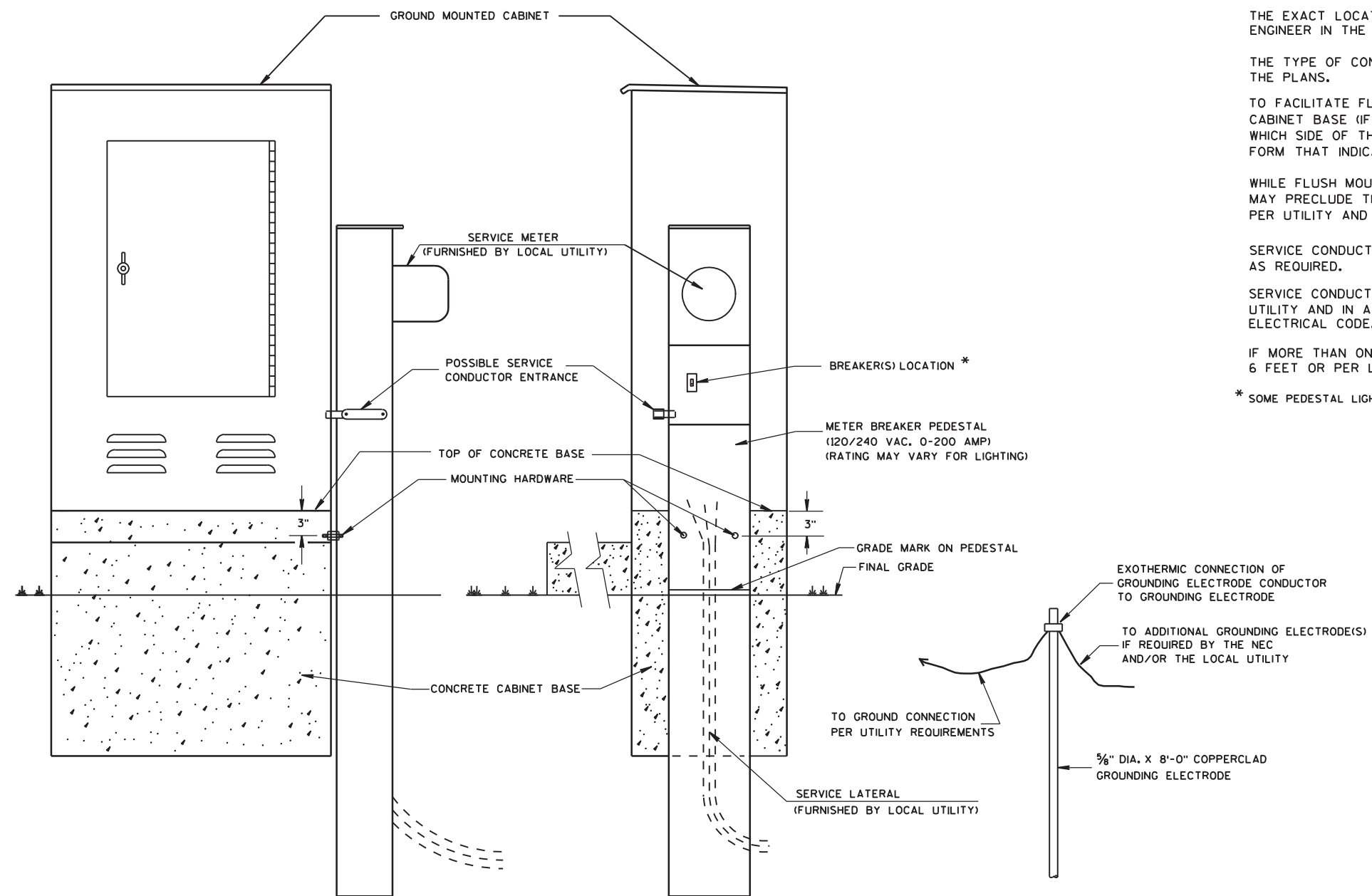
CONCRETE CONTROL CABINET
BASES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
3/3/10
DATE
/S/ Joanna L. Bush
STATE ELECTRICAL ENGINEER FOR
HIGHWAYS
FHWA

6

S.D.D. 9 D 1-4



TYPICAL CABINET SERVICE INSTALLATION

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

THE EXACT LOCATION OF THE METER BREAKER PEDESTAL SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

THE TYPE OF CONCRETE CABINET BASE TO BE INSTALLED SHALL BE AS CALLED FOR IN THE PLANS.

TO FACILITATE FLUSH MOUNTING OF THE METER BREAKER PEDESTAL AGAINST THE SIDE OF THE CABINET BASE (IF FLUSH MOUNTING POSSIBLE. CONFER WITH THE LOCAL UTILITY TO DETERMINE WHICH SIDE OF THE CONCRETE BASE THE ELECTRICAL SERVICE LATERAL WILL APPROACH. THEN FORM THAT INDICATED SIDE FOR FULL SIDE DEPTH.

WHILE FLUSH MOUNTING IS THE MOST DESIRABLE MOUNTING CONFIGURATION UTILITY REQUIREMENTS MAY PRECLUDE THIS OPTION. CONTRACTOR MUST PROVIDE UTILITY APPROVED PEDESTAL AND INSTALL PER UTILITY AND MANUFACTURERS REQUIREMENTS.

SERVICE CONDUCTOR ENTRANCES SHALL BE RIGID METALLIC CONDUIT, NIPPLES AND/OR CONDULETS AS REQUIRED.

SERVICE CONDUCTOR ENTRANCES SHALL BE SIZED AND LOCATED AS REQUIRED BY THE LOCAL UTILITY AND IN ACCORDANCE WITH APPROPRIATE ARTICLES OF THE LATEST ACCEPTED NATIONAL ELECTRICAL CODE.

IF MORE THAN ONE GROUNDING ELECTRODE IS REQUIRED, THE DISTANCE APART SHALL BE 6 FEET OR PER LOCAL UTILITY REGULATIONS.

* SOME PEDESTAL LIGHTING PLANS SHOW MAIN LUGS ONLY.

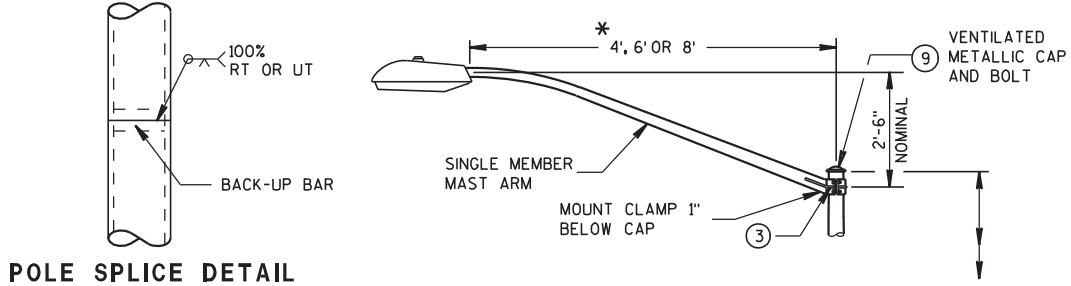
6

S.D.D. 9 D 1-4

CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 10/27/09 DATE	/S/ Joanna L. Bush STATE ELECTRICAL ENGINEER FOR HIGHWAYS
FHWA	

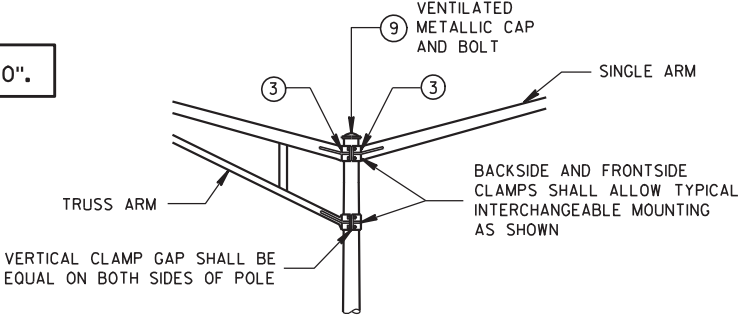
FOR MANUFACTURERS USE ONLY

WELD TO BE 100% R.T. OR U.T. TESTED AS PER THE REQUIREMENTS OF AWS D 1.5-88. RECORDS OF COMPLIANCE OF SUCH TESTING SHALL BE FURNISHED TO THE OFFICE OF DESIGN/BRIDGE FOR VERIFICATION AND APPROVAL.



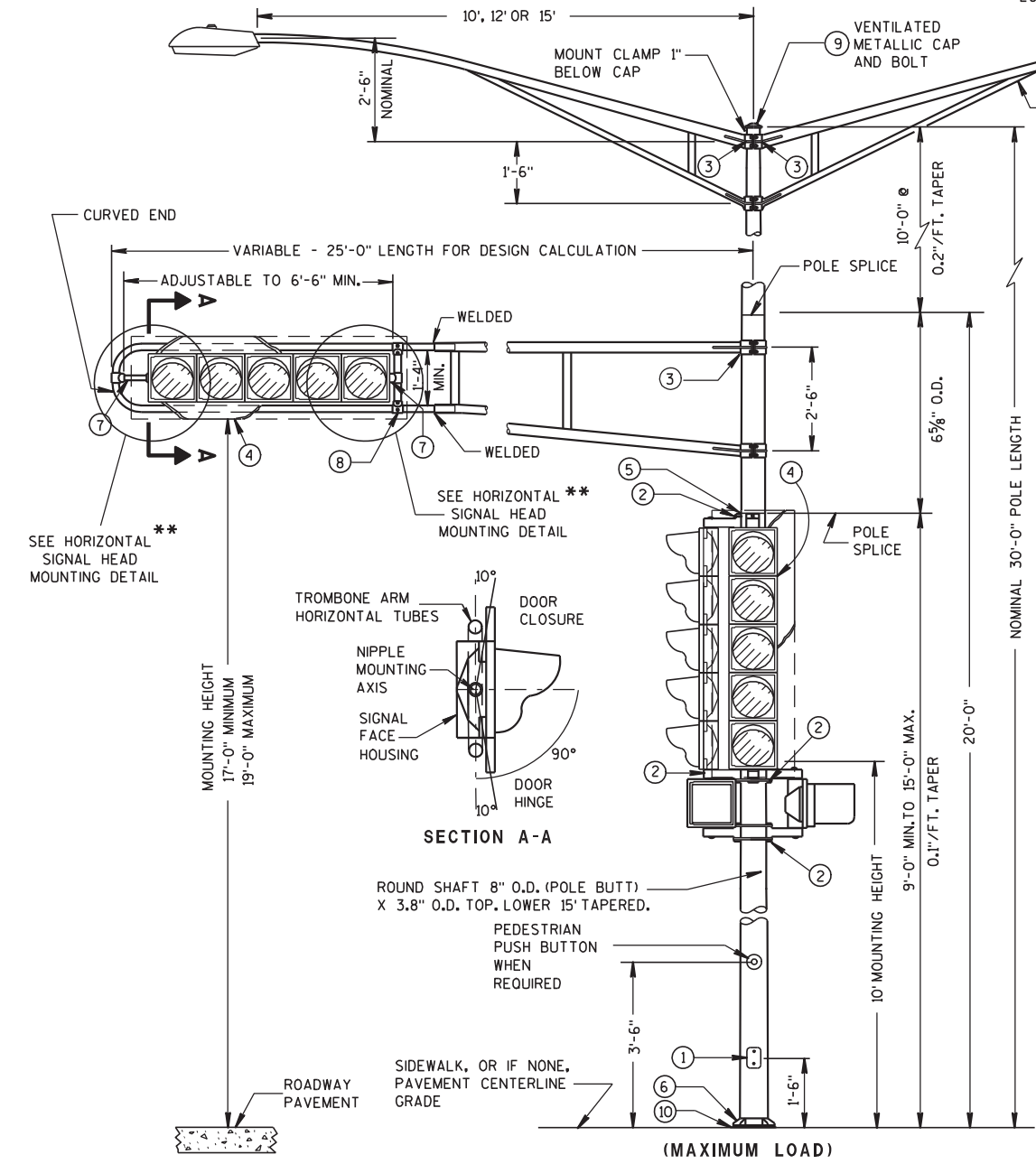
POLE SPLICE DETAIL

*RISE FOR 4' ARM SHALL BE 2'-0".

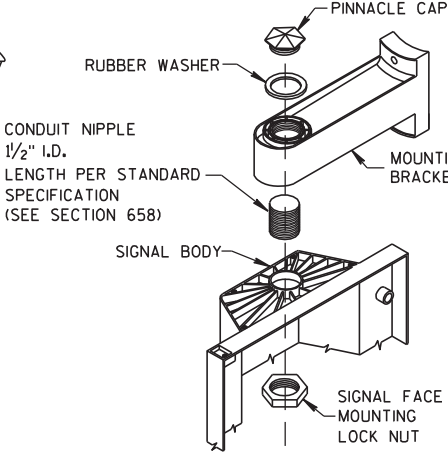


INTERCHANGEABLE MOUNTING DETAIL

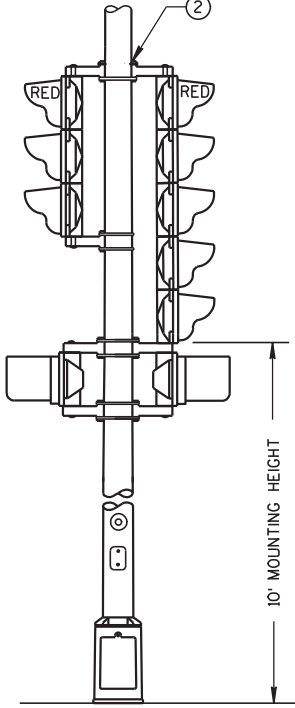
LUMINAIRE
WT. - 50 LBS.
EFFECTIVE PROJECTED
AREA FOR WIND
LOADING = 1.5 SQ. FT.



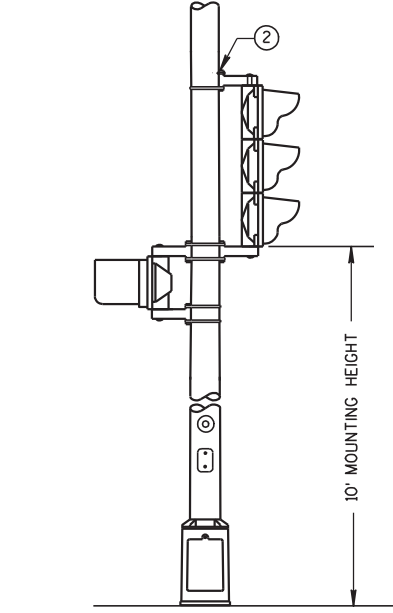
TYPE 3 POLE MOUNTING CONFIGURATION



SIGNAL FACE MOUNTING DETAIL
(BANDED)



TYPICAL MOUNTING OF BACK TO BACK
3 AND 5 SECTION SIGNAL FACES



TYPICAL MOUNTING OF 3 SECTION
SIGNAL FACE

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

ALL TYPE 3 POLE MOUNTINGS SHALL BE DESIGNED TO INCLUDE TWIN 15' ARMS WITH LUMINAIRES.

POLES SHALL BE GALVANIZED STEEL.

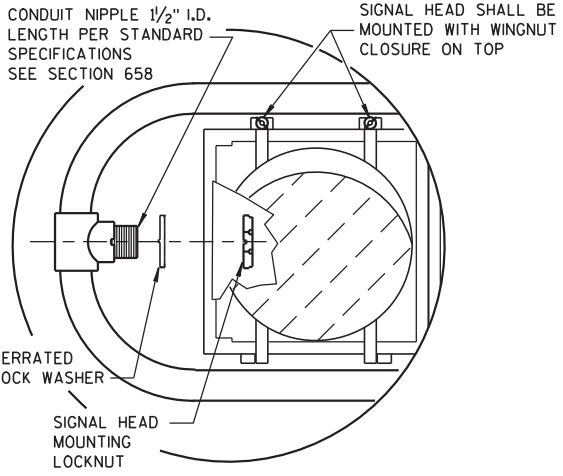
SECTION 657, POLES, OF THE STANDARD SPECIFICATIONS SHALL APPLY TO THIS DRAWING.

A PULL WIRE/ROPE IN ACCORDANCE WITH STANDARD SPECIFICATION 652, SHALL BE INSTALLED IN EACH TROMBONE ARM RACEWAY DURING THE MANUFACTURING PROCESS.

THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 2 3/8 INCHES IN OUTSIDE DIAMETER. THE STRAIGHT PORTION OF THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 12 INCHES IN LENGTH.

WHEN TRANSFORMER BASES ARE USED, WIRE CONNECTIONS SHALL BE MADE IN THE TRANSFORMER BASE.

1. 4" X 6" REINFORCED HANDHOLE & COVER ASSEMBLY WITH 2 (TWO) 1/4" X 3/4" - 20 TPI HEX HEAD STAINLESS STEEL BOLTS.
2. SIGNAL FACE MOUNTING BRACKETS, MOUNT WITH CAP SCREWS AND BANDING. (SEE STANDARD SPECIFICATIONS - SEC. 658)
3. GROMMETS, 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1 3/8" HOLE IN POLE SHAFT FOR WIRING.
4. SECURELY MOUNT DULL BLACK POLYCARBONATE BACKPLATES, PROJECTING 5" BEYOND ALL SIDES OF THE SIGNAL FACE HOUSING, PER MANUFACTURER'S RECOMMENDATIONS.
5. POLE MOUNTED SIGNAL FACES SHALL REQUIRE 1 OR MORE MOUNTING SPACERS UNDER THE TOP MOUNTING BRACKET(S) AS REQUIRED, TO PLUMB THE SIGNAL FACE.
6. TYPE 3 POLE CONFIGURATIONS SHALL BE MOUNTED DIRECTLY TO THEIR CONCRETE BASES.
7. MOUNTING BRACKET NIPPLES FOR THE SIGNAL FACE(S) SHALL BE 2 INCHES IN LENGTH AND 1/2 INCHES IN DIAMETER. (SEE STANDARD SPECIFICATION - SECTION 658)
8. VERTICAL STRUT (ADJUSTABLE), ONE (1) SET SCREW (1/4" X 3/4" - 20 TPI, STAINLESS STEEL, HEX HEAD) INTO EACH ARM MEMBER IF STRUT IS THE SLIDING TYPE.
9. FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS, FASTEN CAPS WITH ONE (1) 1/4" X 3/4" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.
10. SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND POLE.

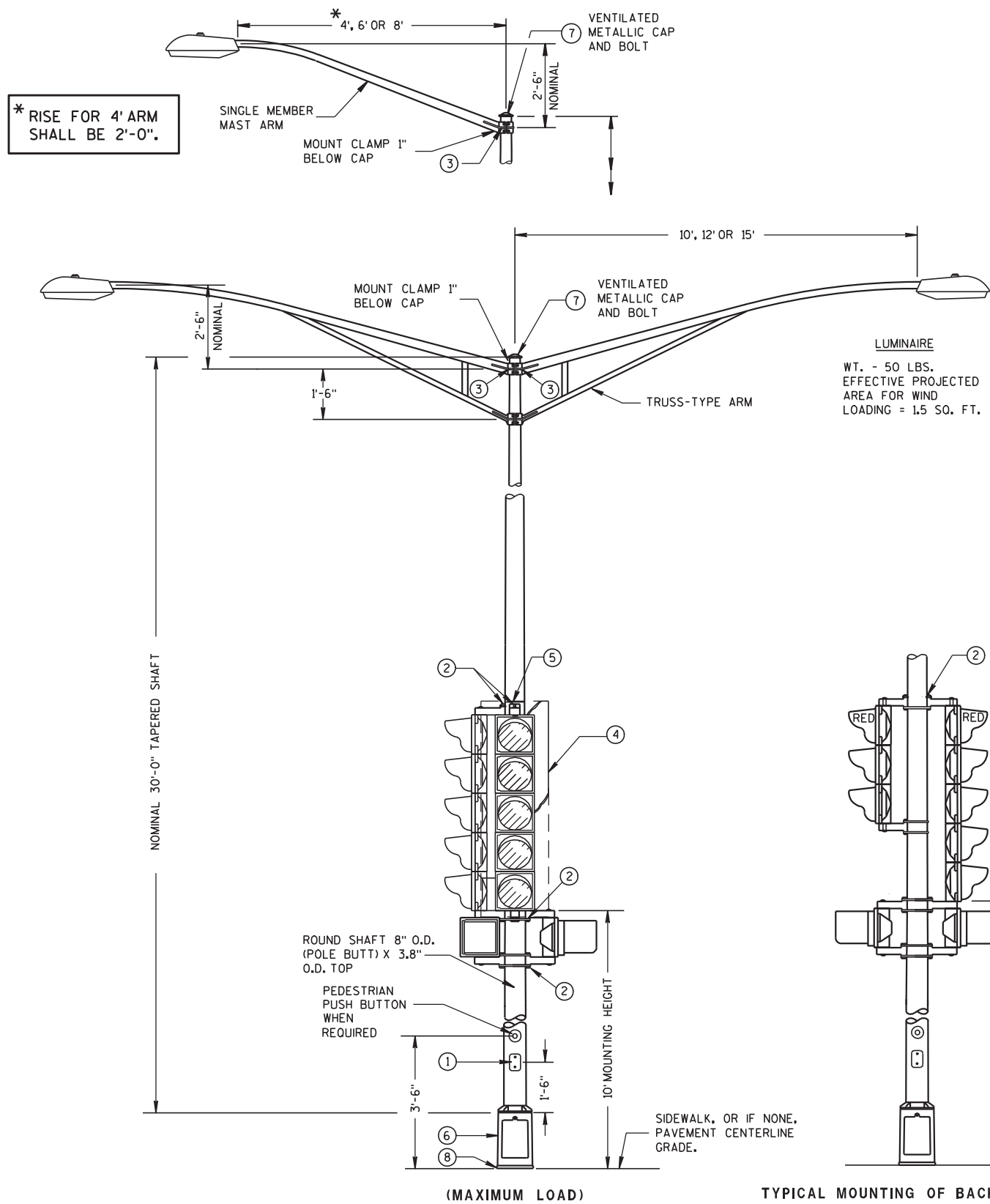


HORIZONTAL SIGNAL HEAD MOUNTING DETAIL **

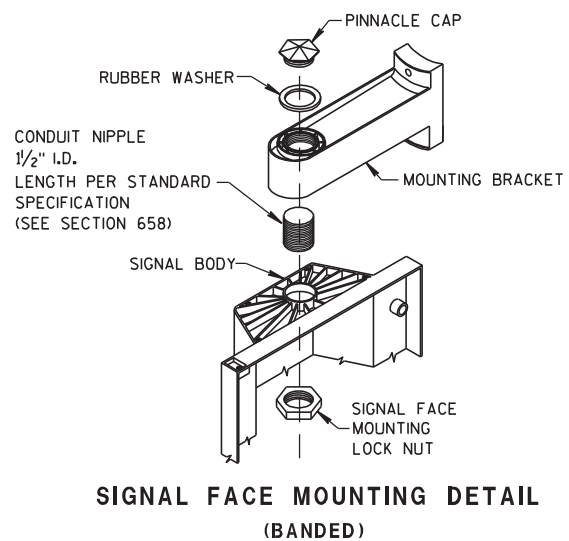
** SIGNAL HEAD ATTACHMENT ALSO APPLYS TO MOUNTING AT CROSS BAR

POLE MOUNTINGS FOR
TRAFFIC SIGNALS AND
LIGHTING UNITS, TYPE 3
(HEAVY DUTY)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



TYPE 4 POLE MOUNTING CONFIGURATION



GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

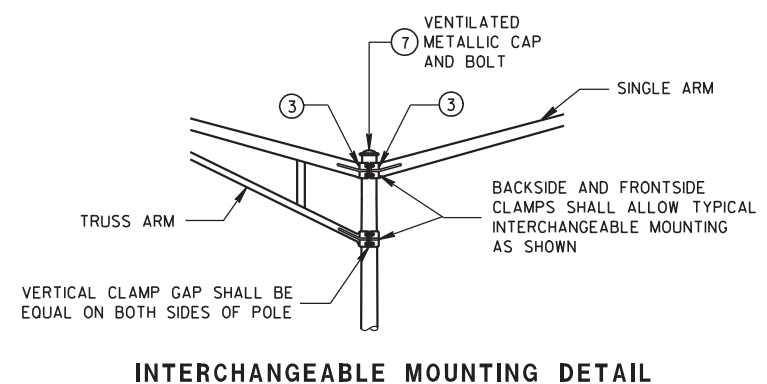
ALL TYPE 4 POLE MOUNTINGS SHALL BE DESIGNED TO INCLUDE TWIN 15' ARMS WITH LUMINAIRES.

POLES SHALL BE GALVANIZED STEEL WITH A MINIMUM WALL THICKNESS OF U.S. STANDARD 11 GAGE (.1196").

SECTION 657, POLES, OF THE STANDARD SPECIFICATIONS SHALL APPLY TO THIS DRAWING.

THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 2 3/8 INCHES IN OUTSIDE DIAMETER. THE STRAIGHT PORTION OF THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 12 INCHES IN LENGTH. WHEN TRANSFORMER BASES ARE USED, CONNECTIONS SHALL BE MADE IN THE TRANSFORMER BASE.

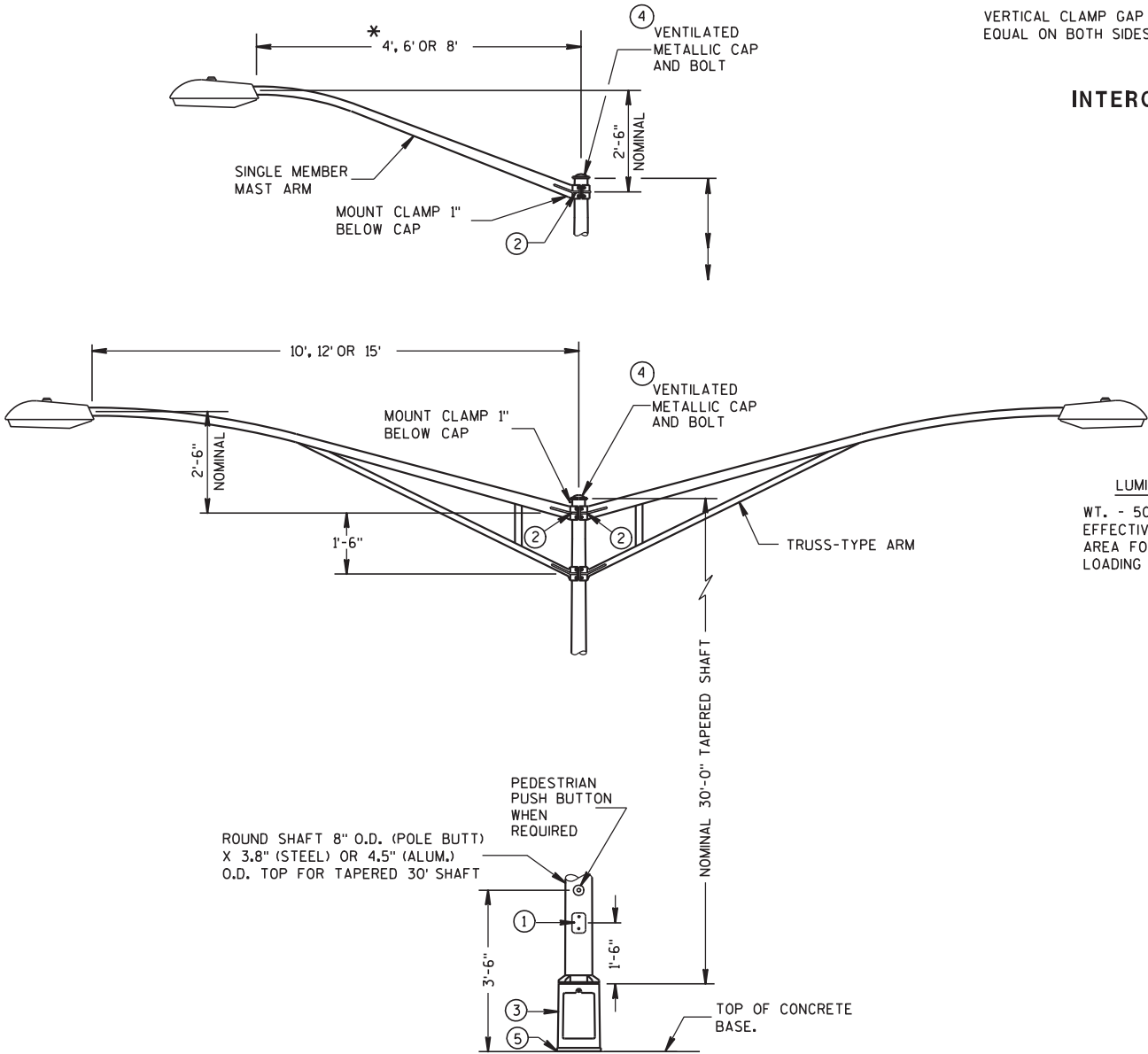
- ① 4" X 6" REINFORCED HANDHOLE & COVER ASSEMBLY WITH 2 (TWO) 1/4" X 3/4" - 20 TPI HEX HEAD STAINLESS STEEL BOLTS.
- ② SIGNAL FACE MOUNTING BRACKETS, MOUNT WITH CAP SCREWS AND BANDING. (SEE STANDARD SPECIFICATIONS - SEC. 658).
- ③ GROMMETS, 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1 3/8" HOLE IN POLE SHAFT FOR WIRING.
- ④ SECURELY MOUNT DULL BLACK POLYCARBONATE BACKPLATES, PROJECTING 5" BEYOND ALL SIDES OF THE SIGNAL FACE HOUSING, PER MANUFACTURER'S RECOMMENDATIONS.
- ⑤ POLE MOUNTED SIGNAL FACES SHALL REQUIRE 1 OR MORE MOUNTING SPACERS UNDER THE TOP MOUNTING BRACKET(S) AS REQUIRED, TO PLUMB THE SIGNAL FACE.
- ⑥ CAST ALUMINUM TRANSFORMER BASE, WHEN REQUIRED.
- ⑦ FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) 1/4" X 3/4" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.
- ⑧ SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND THE TRANSFORMER BASE.



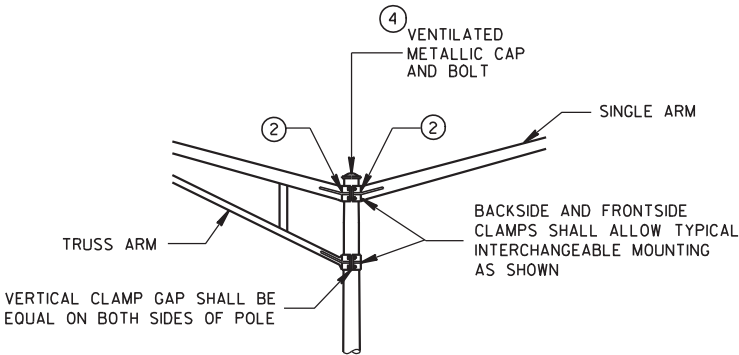
**POLE MOUNTINGS FOR
TRAFFIC SIGNALS AND
LIGHTING UNITS, TYPE 4**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

* RISE FOR 4' ARM SHALL BE 2'-0".



TYPE 5 POLE MOUNTING CONFIGURATION
(MAXIMUM LOAD)
LIGHTING ONLY



INTERCHANGEABLE MOUNTING DETAIL

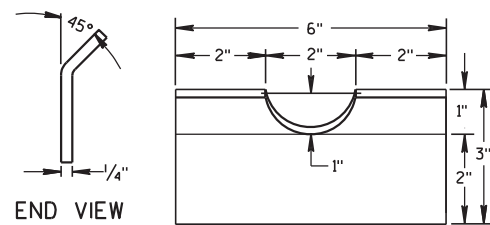
LUMINAIRE
WT. - 50 LBS.
EFFECTIVE PROJECTED
AREA FOR WIND
LOADING = 1.5 SQ. FT.

GENERAL NOTES

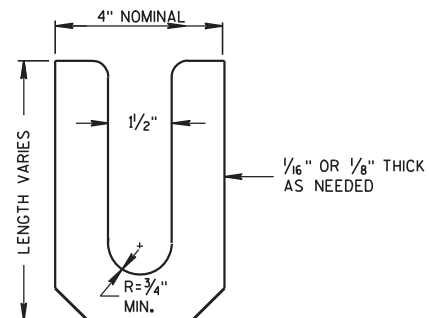
- DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.
- ALL TYPE 5 POLE MOUNTINGS SHALL BE DESIGNED TO INCLUDE TWIN 15' ARMS WITH LUMINAIRES.
- POLES SHALL BE GALVANIZED STEEL OR ALUMINUM, AS CALLED FOR IN THE CONTRACT.
- TYPE 5 ALUMINUM POLES SHALL BE CONSTRUCTED OF 6063-T6 ALUMINUM ALLOY. SLEEVING INSIDE THE POLE IS NOT ACCEPTABLE.
- THE TYPE 5 ALUMINUM POLES SHALL HAVE A MINIMUM WALL THICKNESS OF 0.188".
- TYPE 5 STEEL POLES SHALL HAVE A MINIMUM WALL THICKNESS OF U.S. STANDARD 11 GAGE (.1196").
- THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 2 3/8" INCHES IN OUTSIDE DIAMETER. THE STRAIGHT PORTION OF THE SLIPFITTER END OF THE LUMINAIRE ARM SHALL BE A NOMINAL 12 INCHES IN LENGTH.
- WHEN TRANSFORMER BASES ARE USED, WIRE CONECTIONS SHALL BE MADE IN THE TRANSFORMER BASE.
- ① 4" x 6" REINFORCED HANDHOLE & COVER ASSEMBLY WITH 2 (TWO) 1/4" x 3/4" - 20 TPI HEX HEAD STAINLESS STEEL BOLTS.
 - ② GROMMETS, 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1 3/8" HOLE IN POLE SHAFT FOR WIRING.
 - ③ CAST ALUMINUM TRANSFORMER BASE, WHEN REQUIRED.
 - ④ FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) 1/4" x 3/4" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.
 - ⑤ SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND THE TRANSFORMER BASE.

POLE MOUNTINGS FOR
LIGHTING UNITS, TYPE 5
(30 FEET)

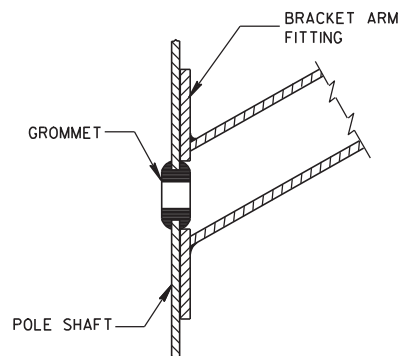
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



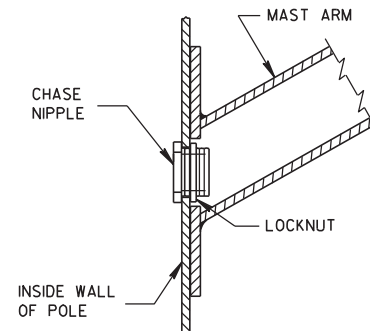
FRONT VIEW
RECTANGULAR CLAMP SHIM
(4 TO A SET)



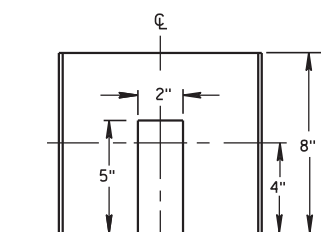
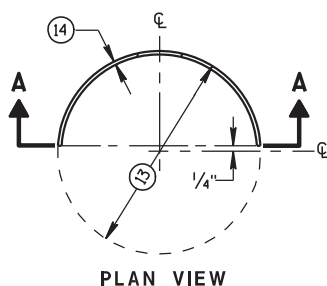
LEVELING SHIM
SHALL BE ALUMINUM



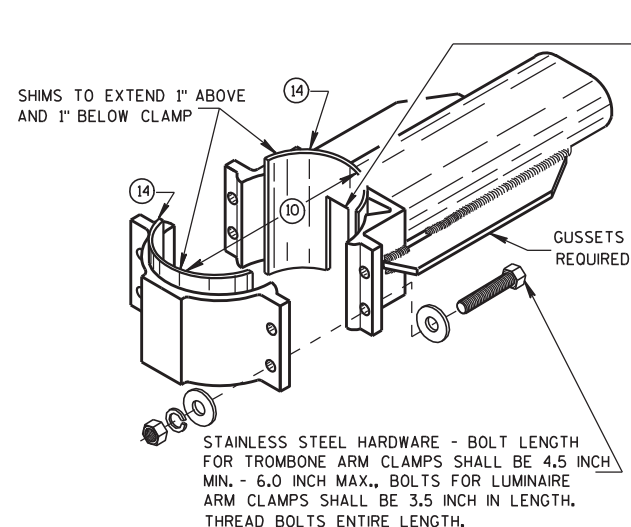
TYPICAL APPLICATION OF
GROMMET IN POLE SHAFT



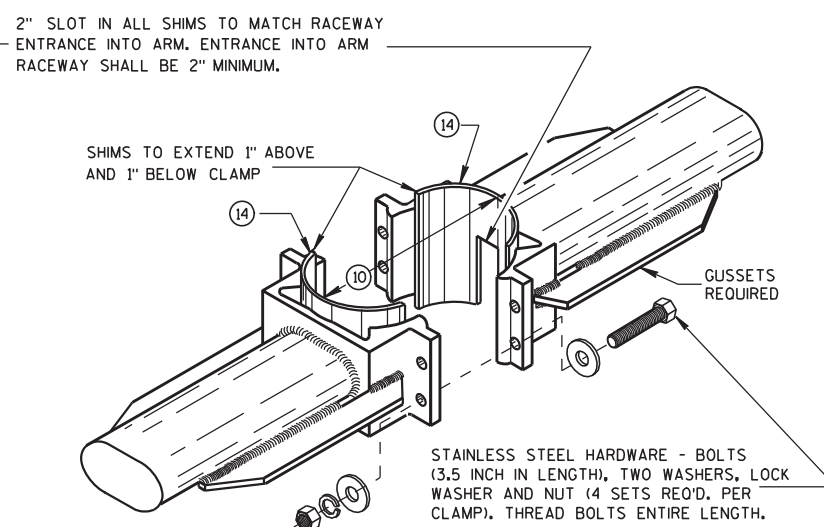
TYPICAL APPLICATION OF
CHASE NIPPLE IN POLE SHAFT



SECTION A-A
CIRCULAR CLAMP SHIM
(2 TO A SET)



TYPICAL TROMBONE MAST ARM AND SINGLE
LUMINAIRE MAST ARM MOUNTING CLAMP



TYPICAL LUMINAIRE MAST ARM
(DOUBLE) MOUNTING BRACKETS

GENERAL NOTES

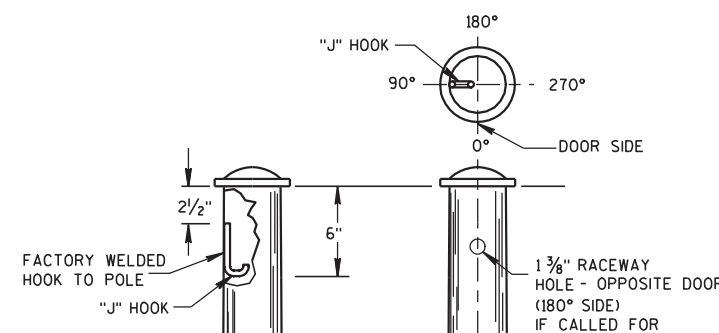
CLAMP BOLT-NUT TIGHTENING TORQUE SHALL BE INDICATED BY INDENT STAMPING (1/2 INCH NUMERALS AND LETTERS) OR WEATHERPROOF PRINTING ON THE INSIDE OF THE CLAMP THAT IS WELDED TO THE ARM MEMBER.

- (10) 4.5" I.D. FOR LUMINAIRE MAST ARM CLAMP.
6.625" I.D. FOR TROMBONE MAST ARM CLAMP.
- (11) INDIVIDUAL BASE PLATE ANCHOR ROD COVERS. (4 REQUIRED)
- (12) BASE PLATE SLOTTED TO ACCEPT 11" THROUGH 12" BOLT
CIRCLE USING 1" DIAMETER ANCHOR RODS.
- (13) OUTSIDE SHIM DIAMETER - (4.5" O.D. FOR LUMINAIRE MAST ARM)
(6.625" O.D. FOR TROMBONE MAST ARM)
- (14) VARIABLE SHIM THICKNESS - (0.10", 0.25", 0.35", 0.53" OR 0.70")
SHIM THICKNESS FOR TROMBONE MAST ARMS MAY BE TYPICALLY 0.25", 0.35",
0.53" OR 0.70".
SHIM THICKNESS FOR LUMINAIRE MAST ARMS MAY BE TYPICALLY 0.10",
0.25" OR 0.35".
SHIM MATERIAL SHALL BE ALUMINUM ALLOY.
SHIM THICKNESS SHALL BE IMPRESSED INTO EACH SHIM. NUMERALS
SHALL BE 1/4" HIGH AND LEGIBLE.

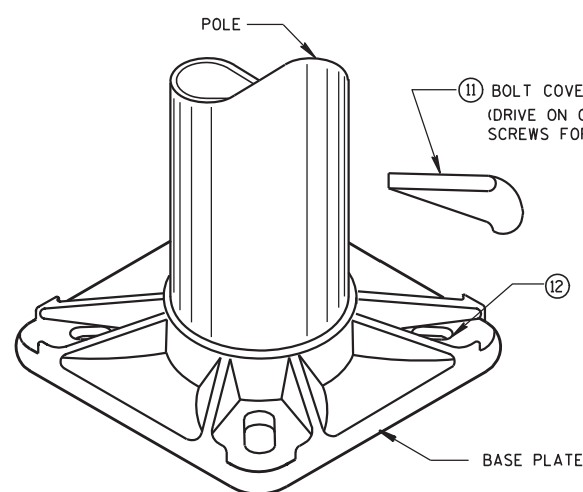
THE CONTRACTOR SHALL SUBMIT TWO COPIES OF ALL SHIM SHOP DRAWINGS
TO THE ENGINEER FOR APPROVAL.

- (15) LEVELING SHIMS, DESIGNED FOR THE PURPOSE, SHALL BE USED WHEN PLUMBING
POLES. THE USE OF WASHERS IN LIEU OF PROPER LEVELING SHIMS IS NOT
ACCEPTABLE. LEVELING SHIMS SHALL BE USED ONLY BETWEEN THE TOP OF THE
CONCRETE BASE AND A METALLIC BASE PLATE.

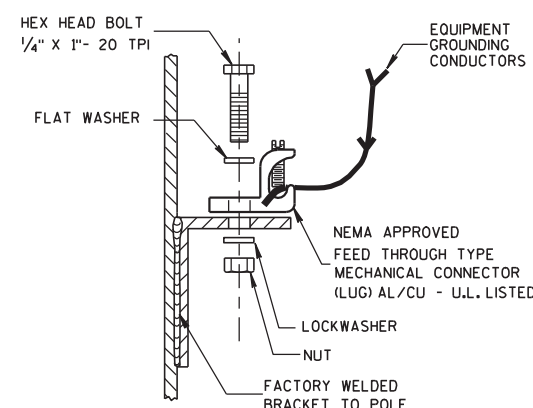
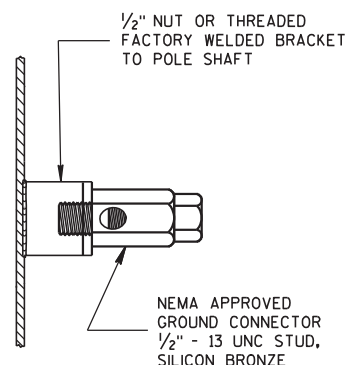
SHIMS SHALL BE LONG ENOUGH AND WIDE ENOUGH TO COMPLETELY COVER THE
AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.



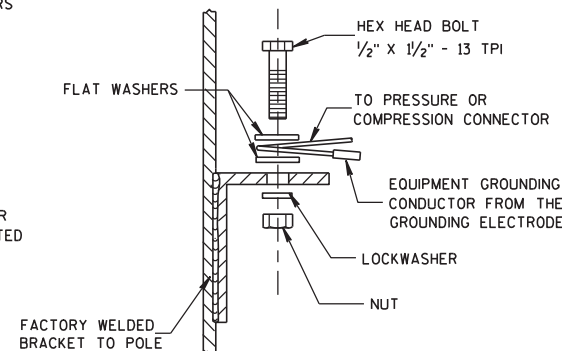
TYPICAL "J" HOOK LOCATION



BASE PLATE



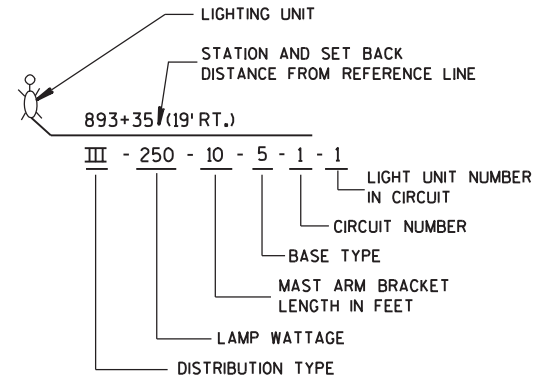
TYPICAL GROUNDING CONNECTIONS
NUT, BOLT AND WASHERS SHALL
BE STAINLESS STEEL



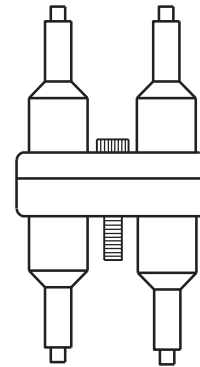
HARDWARE DETAILS FOR POLE MOUNTINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
5/11/10 /S/ John Corbin
DATE STATE ELECTRICAL ENGINEER FOR
FHWA HIGHWAYS



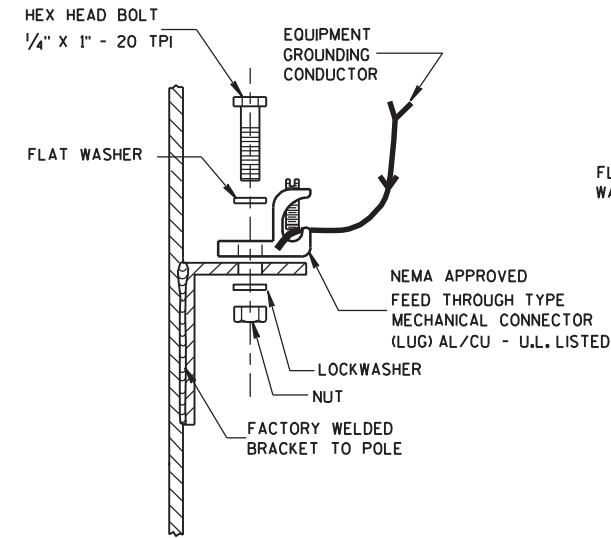
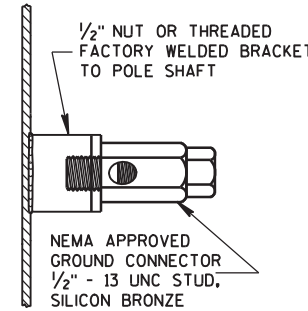
LIGHTING UNIT CODE
(TYPICAL)



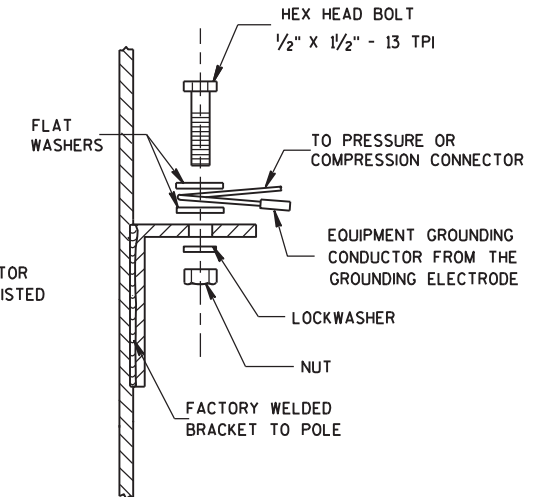
DETAIL "A"
DOUBLE POLE



DETAIL "B"
SINGLE POLE



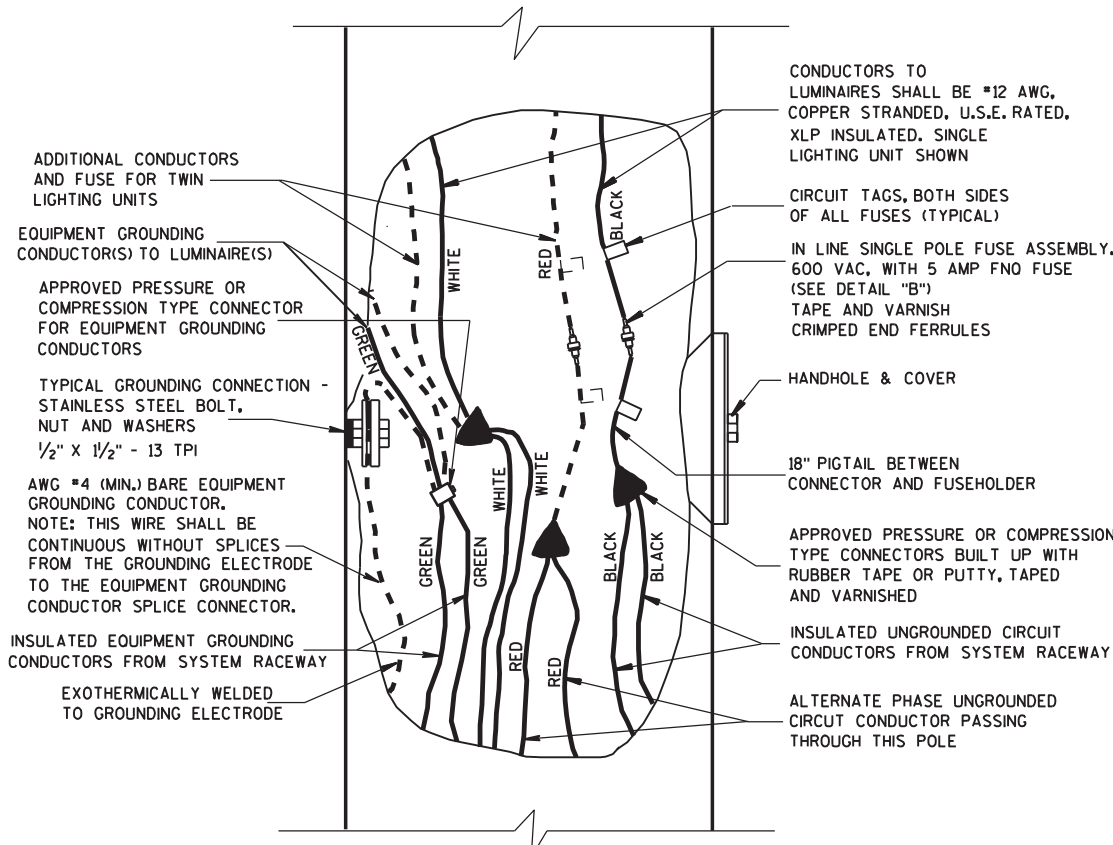
TYPICAL GROUNDING CONNECTIONS
NUT, BOLT, WASHERS AND LOCKWASHERS SHALL BE STAINLESS STEEL



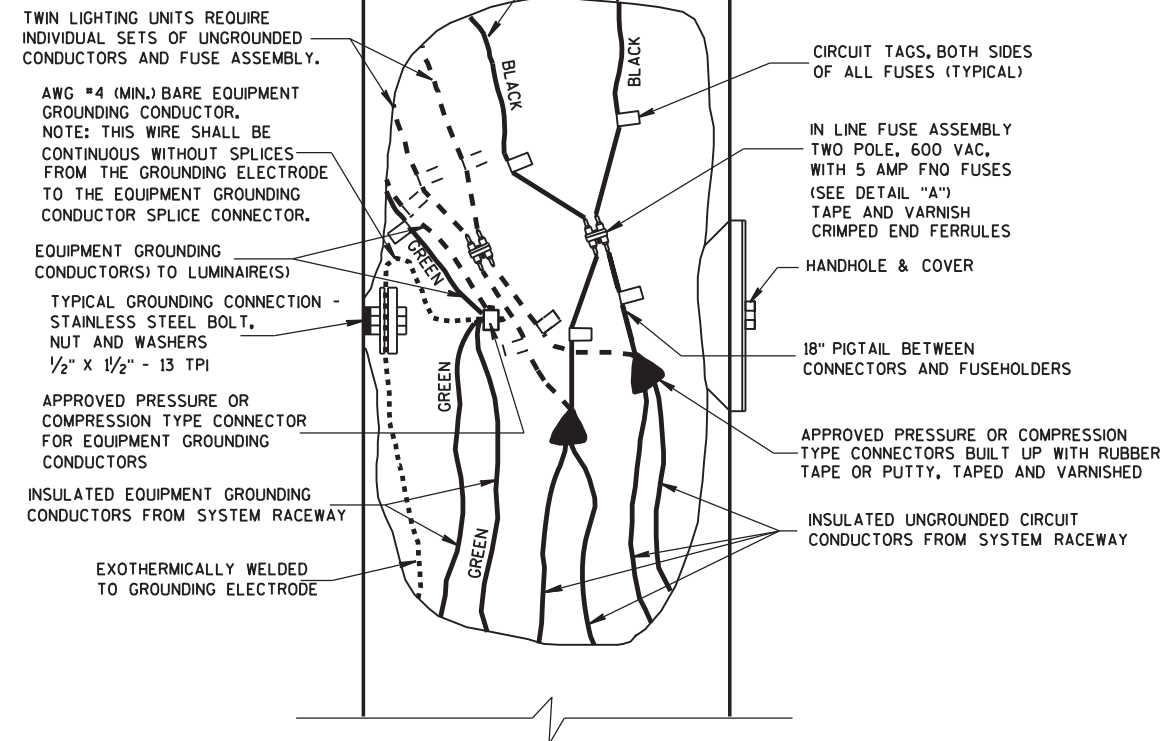
UNGROUND CONDUCTORS TO LUMINAIRES SHALL BE #12 AWG, COPPER STRANDED, U.S.E. RATED, XLP INSULATED, SINGLE LIGHTING UNIT SHOWN

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.
THE EQUIPMENT GROUNDING CONNECTOR SHALL BE TAPED WITH 3 WRAPS (MINIMUM) OF APPROVED RUBBER TAPE AND THEN 3 WRAPS (MINIMUM) OF APPROVED VINYL TAPE TO COVER SHARP WIRE ENDS AFTER THE CONNECTION IS COMPLETED.



3 WIRE - 120, 240 OR 480 VAC (UNGROUND CONDUCTOR)
WITH GROUNDED CONDUCTOR AND
WITH EQUIPMENT GROUNDING CONDUCTOR



2 WIRE - 240 OR 480 VAC (UNGROUND CONDUCTORS)
WITH EQUIPMENT GROUNDING CONDUCTOR

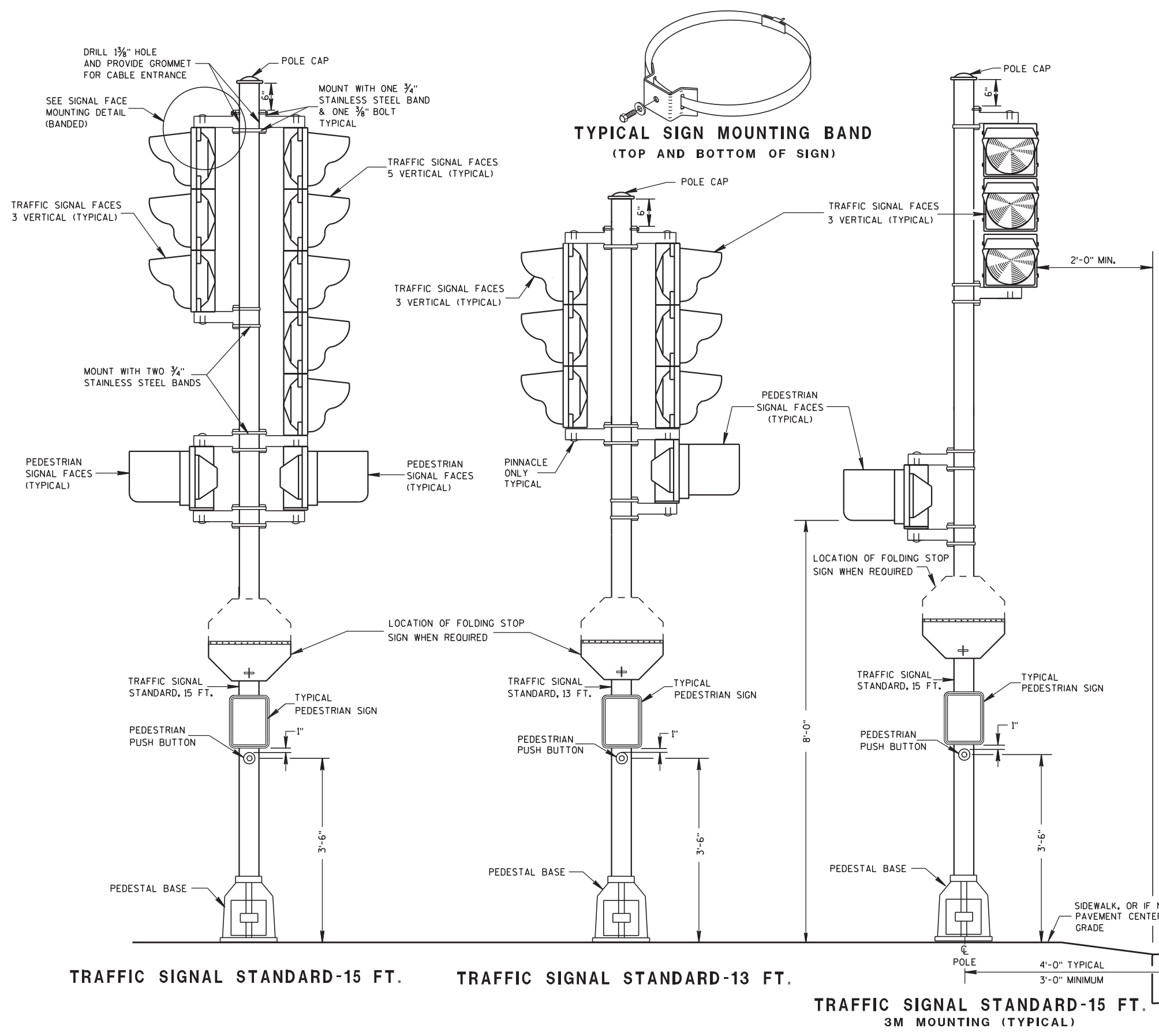
NON-FREEWAY LIGHTING UNIT
POLE WIRING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/14/08 /S/ Joanna L. Bush
DATE STATE ELECTRICAL ENGINEER FOR
FHWA HIGHWAYS

6

S.D.D. 9 E 6-4



TYPICAL SIGN MOUNTING BAND
(TOP AND BOTTOM OF SIGN)

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

SEE THE SIGNAL PLAN FOR REQUIRED SIGNAL FACE SIZES.

ALL PEDESTAL BASES SHALL BE MOUNTED ON CONCRETE BASE - TYPE 1.

FOR APPROVED MOUNTING HARDWARE, SEE THE CONTRACT SPECIAL PROVISIONS.

POLYCARBONATE MOUNTING BRACKETS SHALL BE USED.

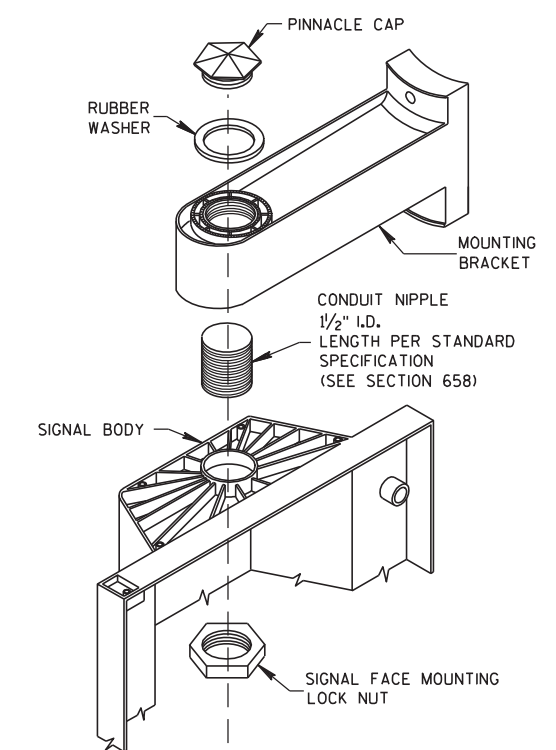
LENGTH AND LOCATION OF TRAFFIC SIGNAL STANDARDS SHALL BE AS SHOWN ON THE PLANS.

OPTICALLY PROGRAMMED SIGNAL FACES SHALL BE MASKED IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS, AND UNDER THE DIRECTIONS OF THE DISTRICT TRAFFIC ENGINEER.

FOLDING STOP SIGNS SHALL BE IN ACCORDANCE WITH THE MUTCD AND/OR THE LATEST WISCONSIN SUPPLEMENT. THE SIGNS SHALL BE SIZED AND LOCATED AS CALLED FOR IN THE PLANS.

PEDESTRIAN SIGNS SHALL BE AS DESIGNATED IN THE PLANS.

FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) $\frac{1}{4}$ " X $\frac{3}{4}$ " - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.

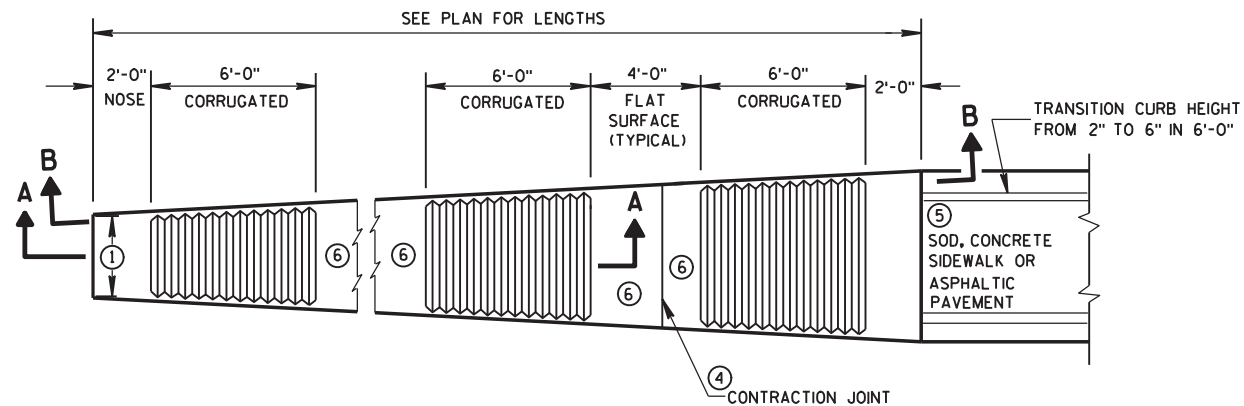


SIGNAL FACE MOUNTING DETAIL
(BANDED)

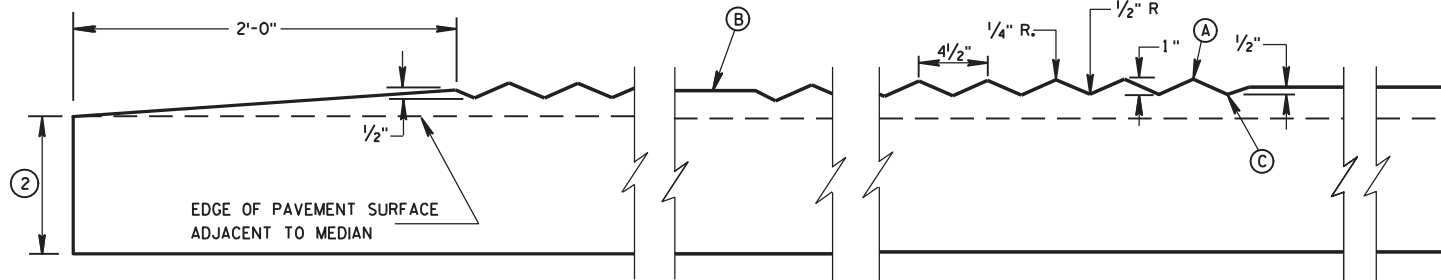
TRAFFIC SIGNAL STANDARD POLY BRACKET MOUNTINGS (TYPICAL) 13 FT. OR 15 FT.	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 5/11/10 DATE	/S/ John Corbin STATE ELECTRICAL ENGINEER FOR HIGHWAYS
FHWA	

6

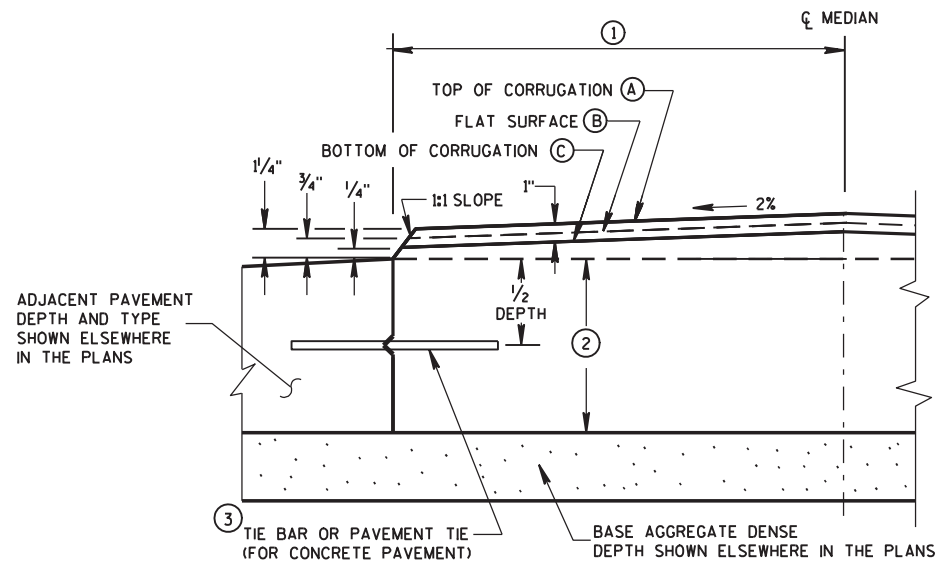
S.D.D. 9 E 6-4



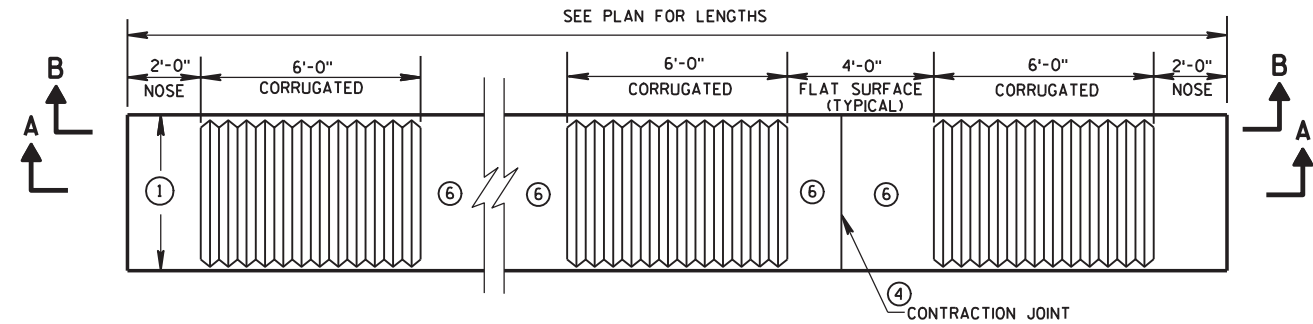
PLAN VIEW
VARIABLE WIDTH CONCRETE CORRUGATED MEDIAN



SECTION A-A
LONGITUDINAL SECTION



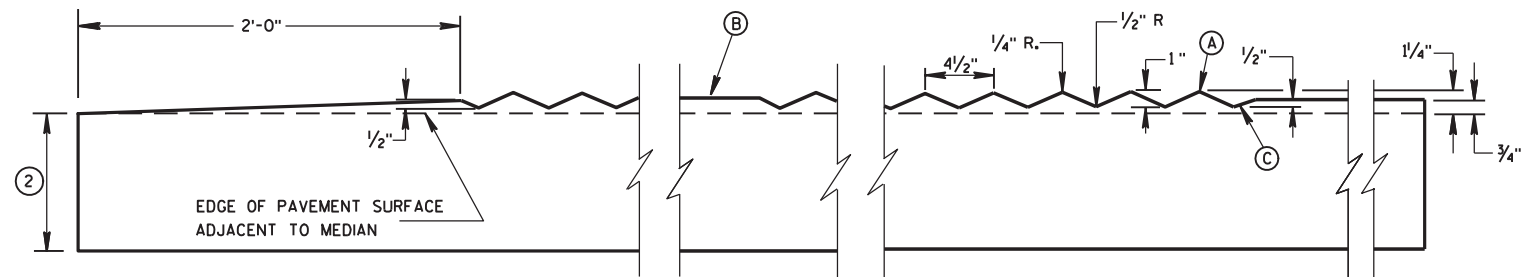
HALF CROSS SECTION
CONCRETE CORRUGATED MEDIAN AND ADJACENT PAVEMENT



PLAN VIEW
UNIFORM WIDTH CONCRETE CORRUGATED MEDIAN

GENERAL NOTES

- ① SEE PLANS FOR CONSTANT OR VARIABLE WIDTH.
- ② THE DEPTH OF THE CONCRETE CORRUGATED MEDIAN SHALL BE 9-INCHES UNLESS SHOWN OTHERWISE IN THE PLAN. ADJACENT PAVEMENT STRUCTURE DETAILS ARE SHOWN IN THE PLAN. TYPICAL OPTIONS ARE:
 - (1) NEW OR EXISTING CONCRETE PAVEMENT.
 - (2) ASPHALTIC CONCRETE OVER NEW OR EXISTING CONCRETE BASE COURSE, OR PAVEMENT.
 - (3) ASPHALTIC PAVEMENT OVER BASE AGGREGATE DENSE.
- ③ TIE BARS OR PAVEMENT TIES REQUIRED IN NEW CONCRETE PAVEMENT OR CONCRETE BASE COURSE. TIE BARS SHALL BE NO. 4 X 2'-0" SPACED AT 2'-0" C-C. INSTALL TIE BARS TO MAINTAIN A MINIMUM OF 3-INCHES OF COVER BETWEEN THE TIE BAR AND THE CONCRETE SURFACE (BOTTOM AND TOP). PAVEMENT TIES REQUIRED IN EXISTING CONCRETE PAVEMENT OR CONCRETE BASE COURSE, PAVEMENT TIES SHALL BE NO. 6 X 1'-0" SPACED AT 3'-0" C-C INSTALLED ON A HORIZONTAL SKEW OF 6:1. THE DIRECTION OF SKEW SHALL ALTERNATE AFTER EVERY ONE OR TWO BARS.
- ④ CONCRETE CORRUGATED MEDIAN CONTRACTION JOINTS SHALL BE CONSTRUCTED TO MATCH THE JOINTS IN ADJACENT CONCRETE PAVEMENT, WHERE ADJACENT PAVEMENT IS ASPHALT WITH BASE AGGREGATE DENSE. TRANSVERSE CONTRACTION JOINTS SHALL BE PROVIDED AT 20 FOOT INTERVALS.
- ⑤ SURFACE TYPE AND DETAILS ARE DEFINED ELSEWHERE IN THE PLAN.
- ⑥ YELLOW MARKING ON FLAT SURFACE WHEN MEDIAN SEPARATES OPPOSING TRAFFIC.

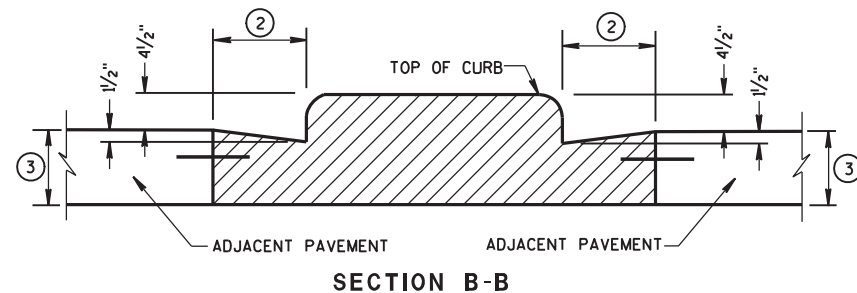
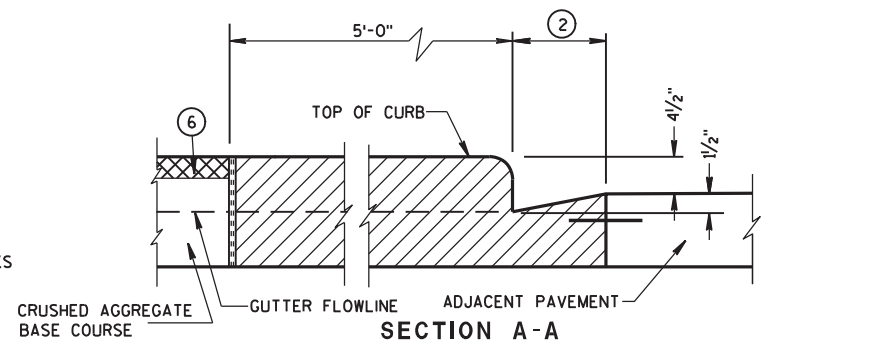
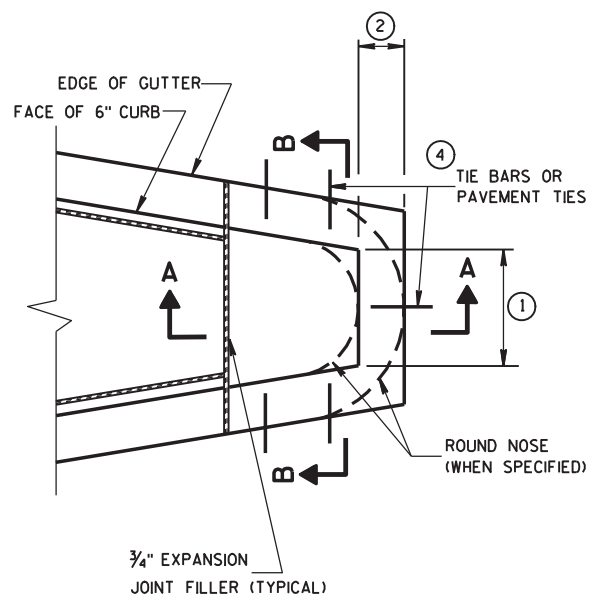
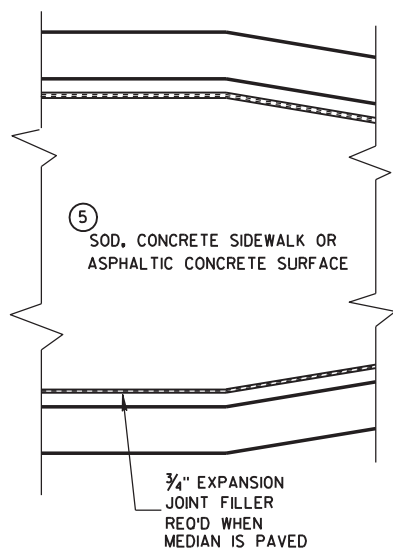


SECTION B-B
LONGITUDINAL SECTION

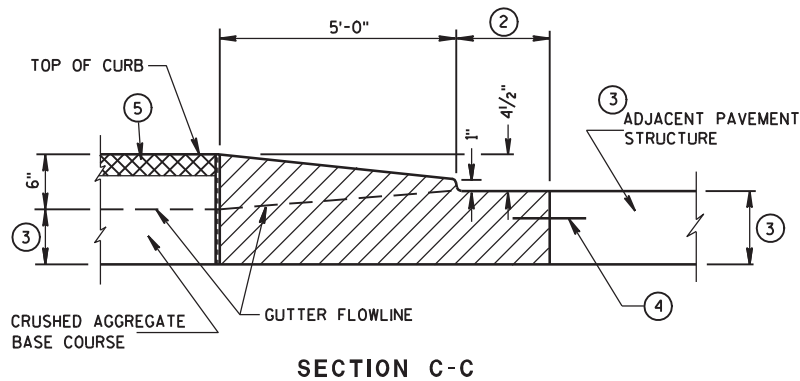
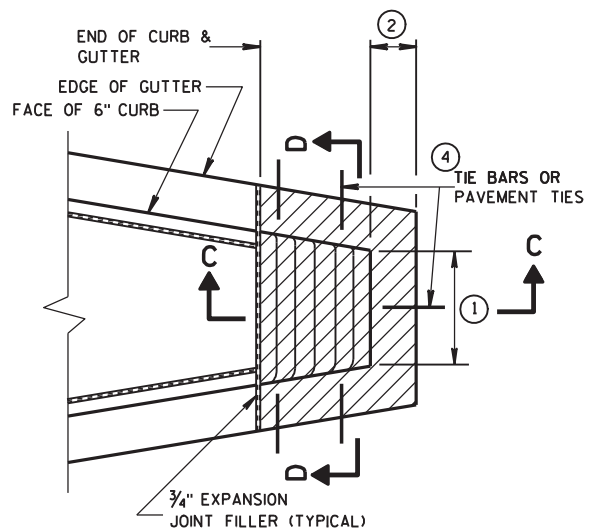
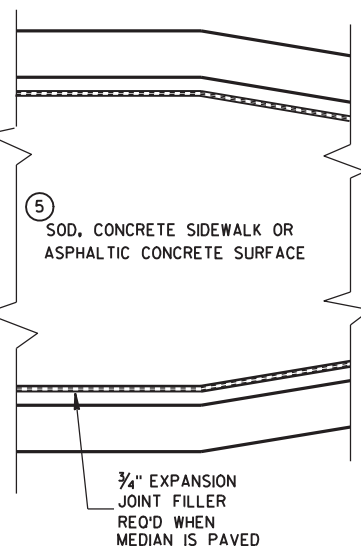
CONCRETE CORRUGATED MEDIAN

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

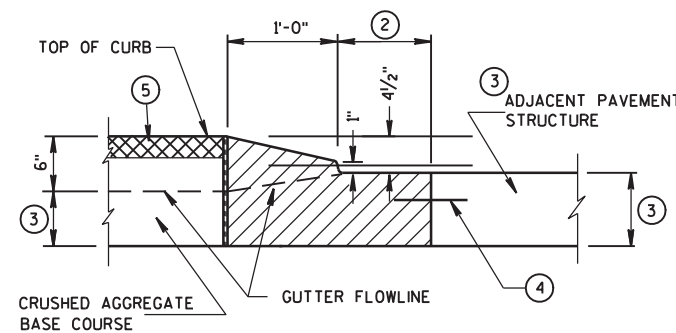
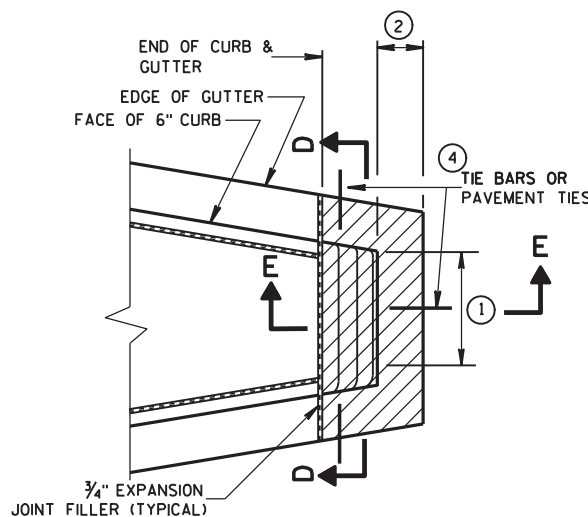
APPROVED
12/17/07
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT
ENGINEER
FHWA



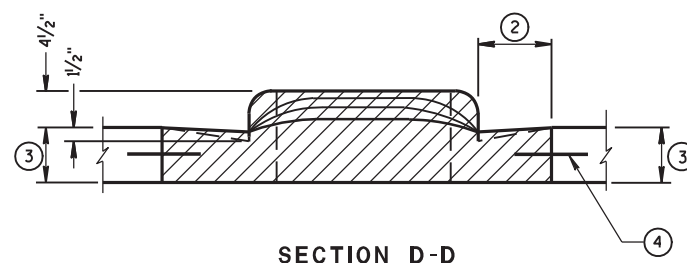
CONCRETE MEDIAN BLUNT NOSE DETAIL



CONCRETE MEDIAN SLOPED NOSE TYPE 1



CONCRETE MEDIAN SLOPED NOSE TYPE 2



GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

- ① SEE PLAN FOR MEDIAN NOSE WIDTH AND RADIUS (FOR ROUND NOSE ALTERNATE).
- ② WIDTH OF GUTTER TO MATCH EXISTING ADJACENT GUTTER OR AS SPECIFIED ELSEWHERE IN THE PLAN.
- ③ DEPTH EQUAL TO ADJACENT PAVEMENT. ADJACENT PAVEMENT STRUCTURE DETAILS ARE SHOWN ON THE PLAN. TYPICAL OPTIONS ARE:
 - (1) NEW OR EXISTING CONCRETE PAVEMENT.
 - (2) ASPHALTIC CONCRETE PAVEMENT OVER NEW OR EXISTING CONCRETE BASE COURSE.
 - (3) ASPHALTIC CONCRETE PAVEMENT OVER CRUSHED AGGREGATE BASE COURSE.

- ④ TIE BARS OR PAVEMENT TIES REQUIRED IN NEW CONCRETE PAVEMENT OR CONCRETE BASE COURSE. TIE BARS SHALL BE NO. 4 X 2'-0" SPACED AT 2'-0" C-C.
- PAVEMENT TIES REQUIRED IN EXISTING CONCRETE BASE COURSE. PAVEMENT TIES SHALL BE NO. 6 X 1'-0" SPACED AT 3'-0" C-C INSTALLED ON A HORIZONTAL SKEW OF 6:1. THE DIRECTION OF SKEW SHALL ALTERNATE AFTER EVERY ONE OR TWO BARS.

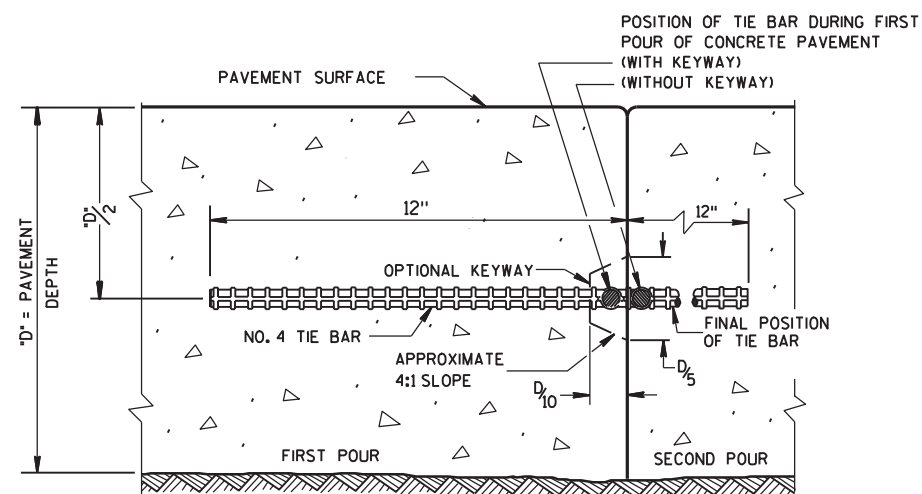
- ⑤ SURFACE TYPE AND DETAILS ARE SHOWN ELSEWHERE IN THE PLAN.

CONCRETE MEDIAN NOSE

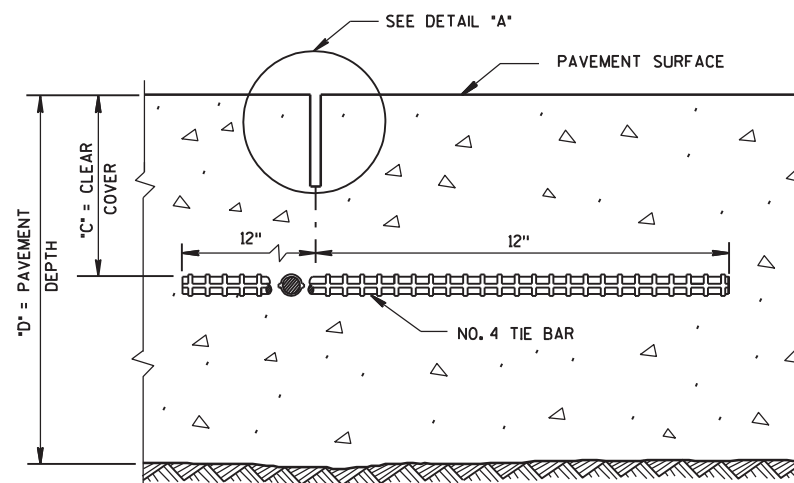
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6/8/06
DATE
FHWA

/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT
ENGINEER



CONSTRUCTION JOINT

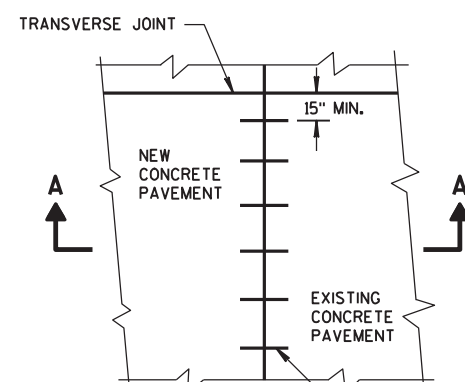


SAWED JOINT

GENERAL NOTES

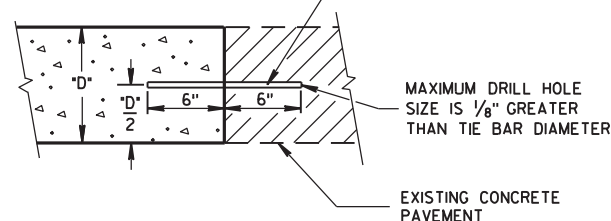
DO NOT SEAL OR FILL LONGITUDINAL JOINTS.

- ① ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

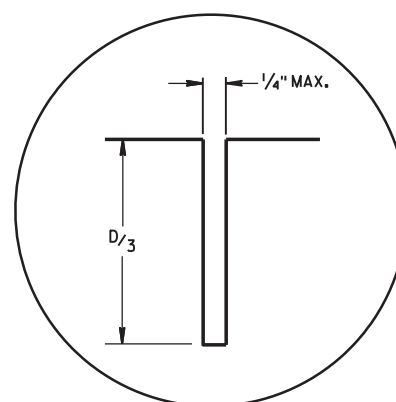


PLAN VIEW

NO. 6 TIE BARS SPACED 2'-6" C-C, INSTALLED PERPENDICULAR TO THE LONGITUDINAL JOINT. ①

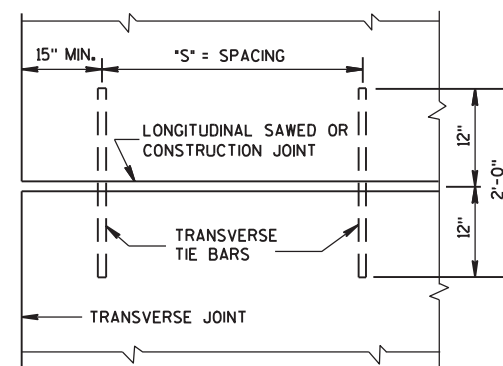


SECTION A-A
LONGITUDINAL CONSTRUCTION JOINT
TIE BARS ANCHORED
INTO EXISTING PAVEMENT



DETAIL "A"

PAVEMENT DEPTH "D"	CLEAR COVER "C"	MAXIMUM TIE BAR SPACING "S"	
		PAVEMENT WIDTH 24' OR 26'	≥ 30'
6, 6 1/2"	3" ± 1/2"	48"	42"
7, 7 1/2"	3 1/4" ± 1"	45"	36"
8, 8 1/2"	3 3/4" ± 1"	39"	30"
9, 9 1/2"	4 1/4" ± 1"	33"	27"
10, 10 1/2"	4 3/4" ± 1"	30"	24"
11, 11 1/2"	5 1/4" ± 1"	27"	21"
12"	5 3/4" ± 1"	24"	21"



PLAN VIEW
SHOWING LOCATION OF TIE BARS

CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES

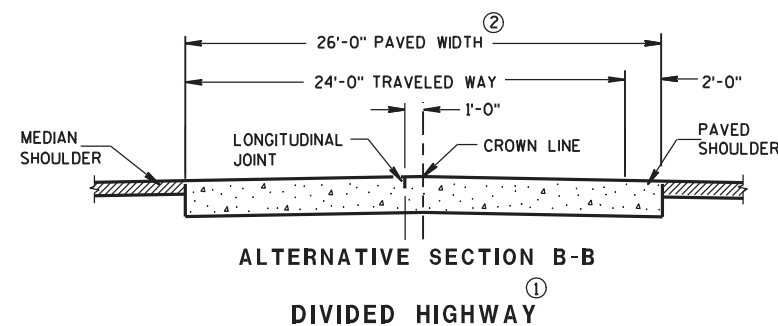
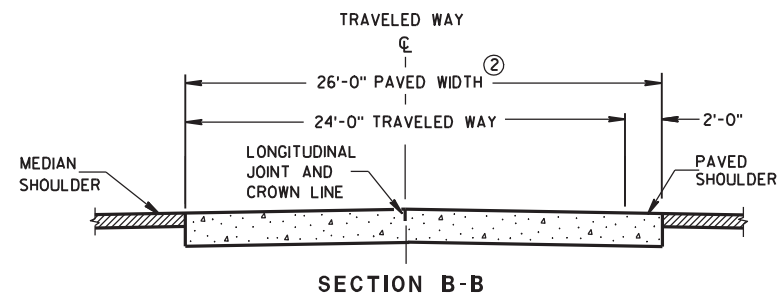
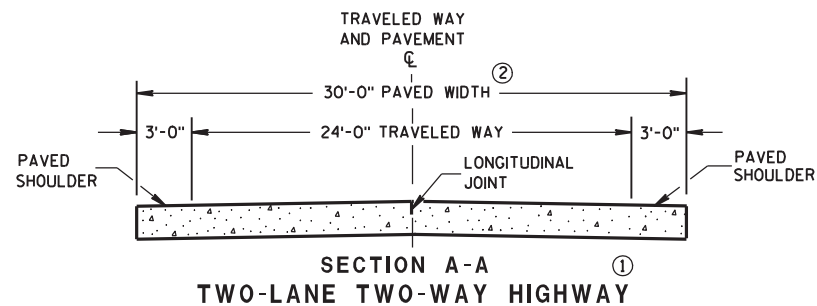
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

12/11/2009
DATE

FHWA

/S/ Deb Bischoff
PAVEMENT POLICY & DESIGN ENGINEER



GENERAL NOTES

CONTRACTION JOINTS

CONSTRUCT CONTRACTION JOINTS NORMAL TO THE CENTERLINE. SHOW THE LOCATION OF CONTRACTION JOINTS THROUGH INTERSECTIONS ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

DO NOT SEAL OR FILL CONTRACTION JOINTS.

INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

FOR PAVEMENT SLABS OF VARYING WIDTHS, CENTER THE DOWEL ASSEMBLY ACROSS THE LANES. LOCATE THE INNER AND OUTER MOST DOWEL BARS SO THAT THE CENTER OF THE BARS ARE A MINIMUM OF 6 INCHES AND A MAXIMUM OF 12 INCHES FROM THE LONGITUDINAL JOINT AND THE EDGE OF PAVEMENT.

CONSTRUCTION JOINTS

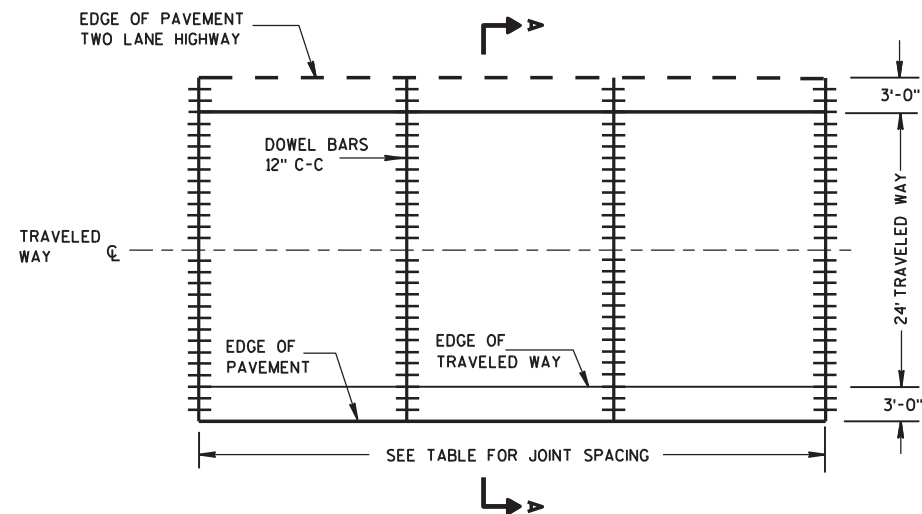
LOCATE CONSTRUCTION JOINTS A MINIMUM OF 4 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO CONTRACTION JOINTS.

THE CONTRACTOR MAY INSERT TIE BARS THROUGH THE HEADER BOARD AFTER THE CONCRETE HAS BEEN PLACED.

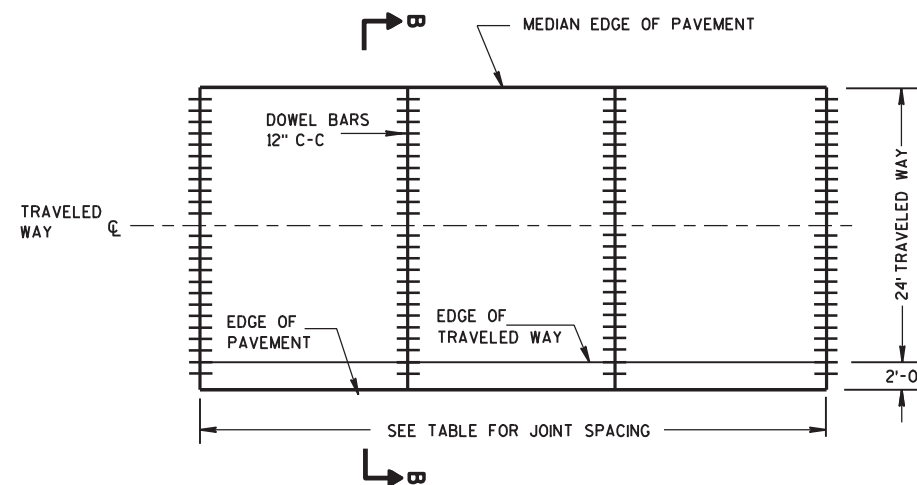
- ① REFER TO TYPICAL CROSS SECTIONS FOR ADDITIONAL DETAILS.
- ② MEASURE THE ENTIRE PAVED WIDTH INCLUDING THE PORTION(S) LABELED PAVED SHOULDER AS CONCRETE PAVEMENT.

PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	DOWEL BAR DIAMETER	CONTRACTION JOINT SPACING
5 1/2", 6", 6 1/2"	NONE	12'
7", 7 1/2"	1"	14'
8", 8 1/2"	1 1/4"	15'
9", 9 1/2"	1 1/4"	15'
10" & ABOVE	1 1/2"	15'



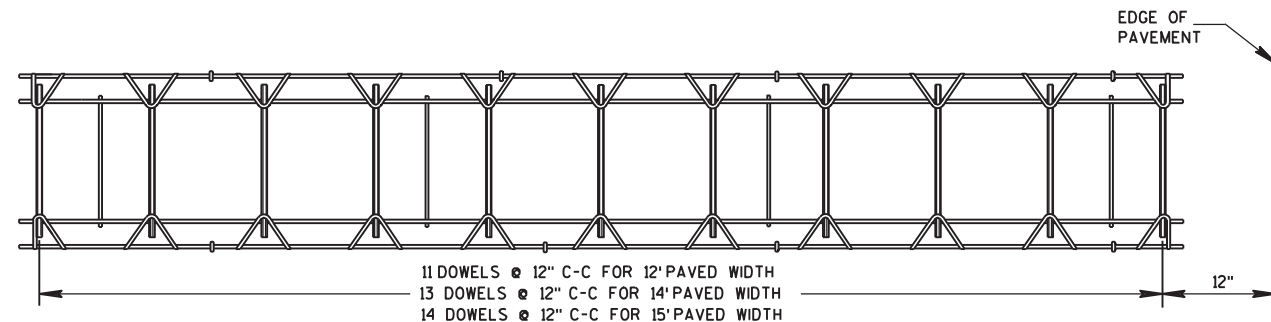
CONTRACTION JOINT LAYOUT FOR TWO-LANE TWO-WAY HIGHWAY



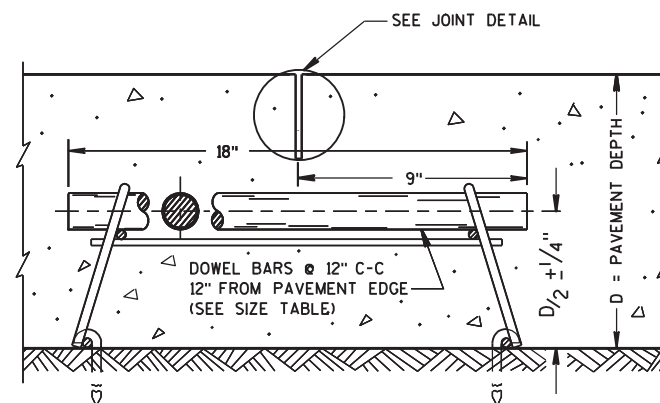
CONTRACTION JOINT LAYOUT FOR DIVIDED HIGHWAY

RURAL DOWELED
CONCRETE PAVEMENT

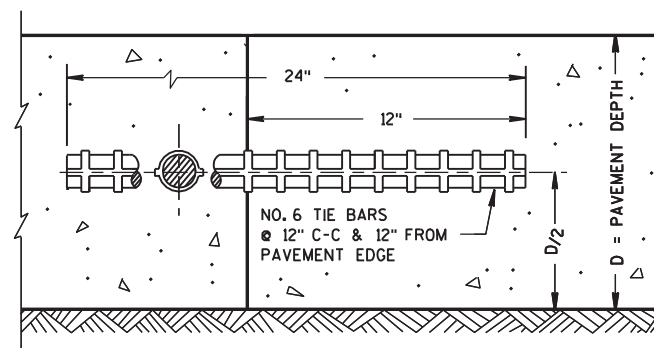
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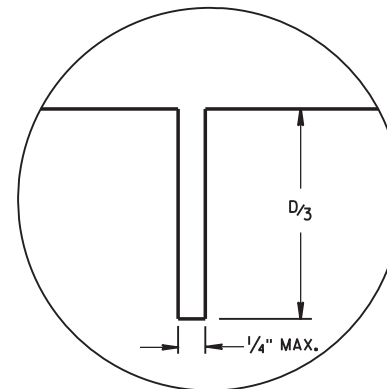
PLAN VIEW

SIDE VIEW
(NORMAL TO CENTERLINE)CONTRACTION JOINT DOWEL ASSEMBLY^①

DOWELED CONTRACTION JOINT



CONSTRUCTION JOINT



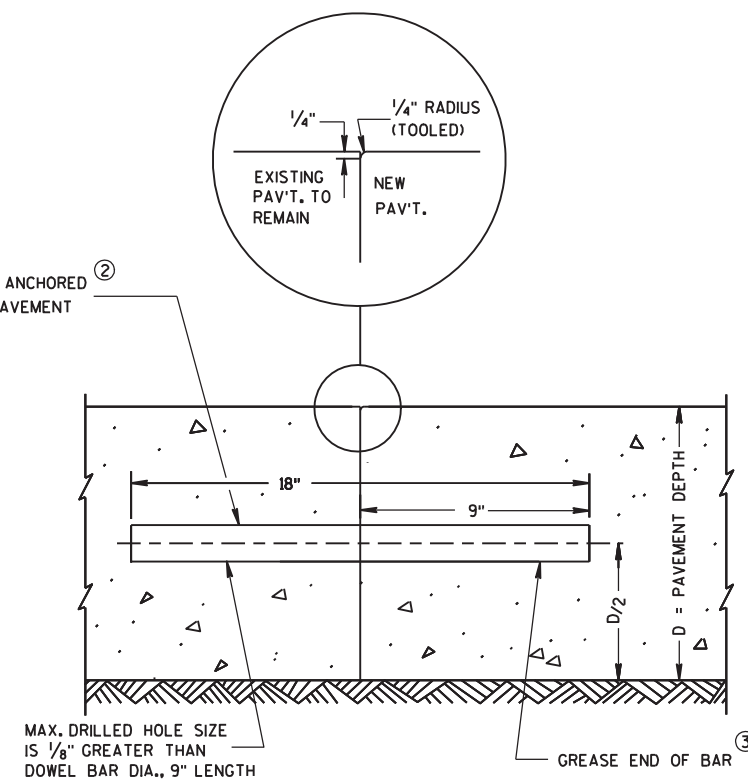
JOINT DETAIL

GENERAL NOTES

- ① THE ENGINEER MAY APPROVE THE USE OF ALTERNATIVE DESIGNS OF THE DOWEL ASSEMBLY. THE CONTRACTOR MAY USE MECHANICAL DOWEL BAR INSERTERS INSTEAD OF DOWEL ASSEMBLIES.
- ② ANCHOR DOWEL BARS INTO DRILLED HOLES WITH AN EPOXY.
- ③ APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT BONDING.
- ④ SPACE DOWEL BARS INSTALLED BY DRILLING 1'-3" ON CENTER. CENTER THE GROUPING OF DOWEL BARS INSIDE THE SLAB BASED ON ALL THE FOLLOWING SITUATIONS:

BETWEEN THE EDGES OF PAVEMENTS WITHOUT LONGITUDINAL JOINTS OR BETWEEN THE EDGE OF PAVEMENT AND NEAREST LONGITUDINAL JOINT OR BETWEEN TWO ADJACENT LONGITUDINAL JOINTS.
- ⑤ SECURE BASKETS WITH ANCHORS TO HOLD DOWEL BARS IN THE CORRECT POSITION AND ALIGNMENT. TYPE, LOCATION, NUMBER AND LENGTH OF ANCHORS ARE DEPENDENT UPON FIELD CONDITIONS.

18" DOWEL BARS ANCHORED
INTO EXISTING PAVEMENT^②

TRANSVERSE CONTRACTION JOINTS ABUTTING
EXISTING PAVEMENT

④ DOWEL BAR DETAIL

RURAL DOWELED
CONCRETE PAVEMENT

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12/11/09
DATE

FHWA

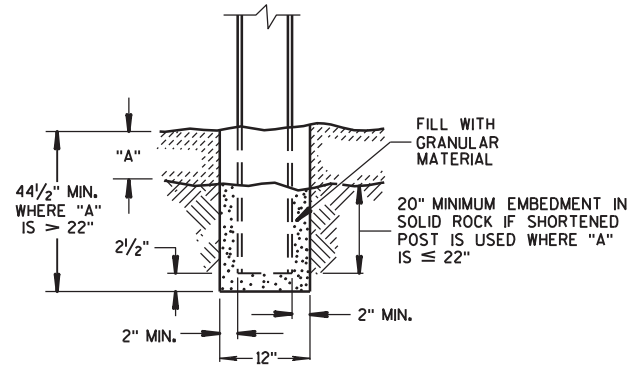
/S/ Deb Bischoff
PAVEMENT POLICY & DESIGN ENGINEER

GENERAL NOTES

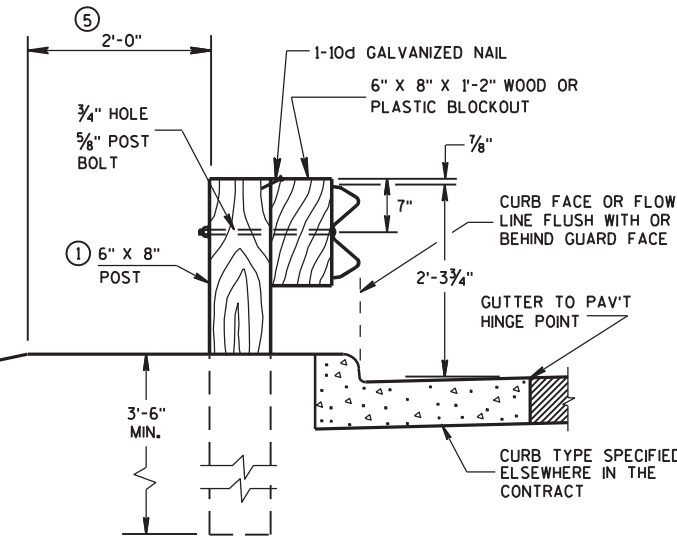
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, AND THE APPLICABLE SPECIAL PROVISIONS.

- ① W6 X 9 OR W6 X 8.5 STEEL POSTS AND NOTCHED PLASTIC BLOCKOUTS ARE ACCEPTABLE ALTERNATIVES FOR 6" X 8" WOOD POSTS WITH WOOD OR PLASTIC BLOCKOUTS. USE APPROVED NOTCHED PLASTIC BLOCKOUTS WITH STEEL POSTS. APPROVED PLASTIC BLOCKOUT DESIGNS MAY VARY FROM THIS TYPICAL DETAIL WHEN USED IN CONJUNCTION WITH STEEL POSTS. DO NOT MIX STEEL POSTS AND WOOD POSTS IN A SINGLE INSTALLATION.
- ② USE STRUCTURAL STEEL POSTS CONFORMING TO ASTM A 36. GALVANIZED POSTS ACCORDING TO AASHTO M 111. EITHER SET THE POSTS IN DRILLED HOLES OR DRIVE TO GRADE. REMOVE MUSHROOMING CAUSED BY DRIVING AND REPAIR DAMAGED SPELTER COATING ON GALVANIZED POSTS.
- ③ INSTALL STEEL POSTS WITH HOLES ON APPROACHING TRAFFIC SIDE.
- ④ USE EITHER WOOD OR APPROVED PLASTIC BLOCKOUTS ON WOOD POSTS.
- ⑤ IF THE DISTANCE FROM BACK OF POST TO SHOULDER HINGE POINT IS LESS THAN 2 FEET INSTALL LONGER POST AT HALF POST SPACING, W BEAM (LHW).
- ⑥ IF ROCK IS ENCOUNTERED DURING EXCAVATION, THE ENGINEER MAY APPROVE USING A 12 INCH DIAMETER POST HOLE EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE APPROXIMATELY 2 1/2 INCHES DEEP. CUT THE POSTS TO LENGTH AND PLACE IN THE HOLE. BACKFILL WITH MATERIAL EXCAVATED FROM THE HOLE AND COMPACT ADEQUATELY.

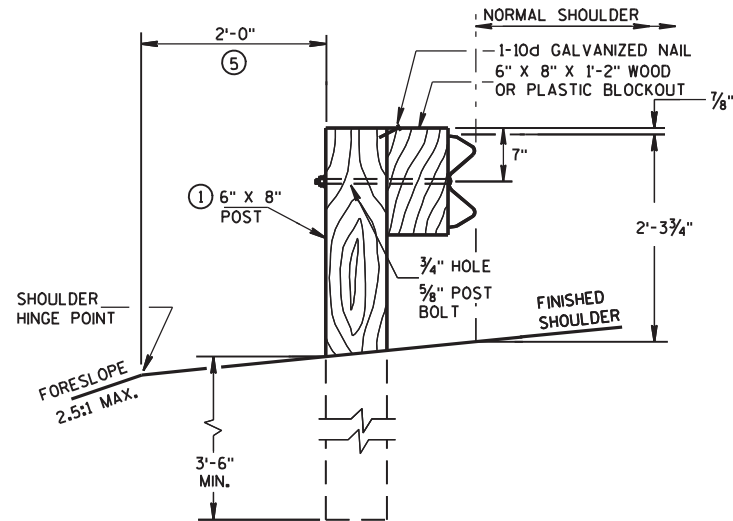
INSTALL BEAM GUARD SECTIONS AND ALL NECESSARY HARDWARE ACCORDING TO THE APPLICABLE PLAN AND CURRENT STANDARD AND SUPPLEMENTAL SPECIFICATIONS. ALL DIMENSIONS ARE SUBJECT TO MANUFACTURER'S TOLERANCES EXCEPT WHERE ALLOWABLE TOLERANCES ARE SHOWN.



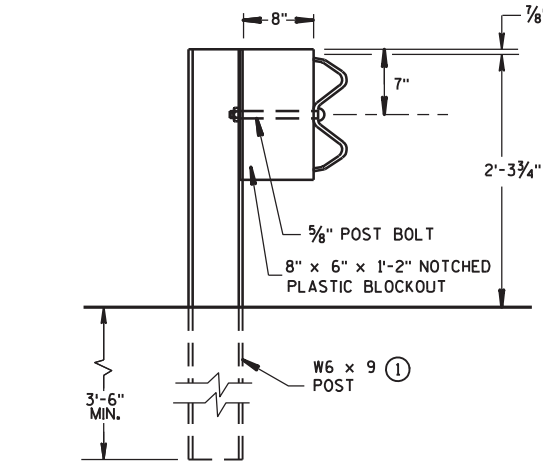
END VIEW
SETTING STEEL OR WOOD POST IN ROCK ⑥



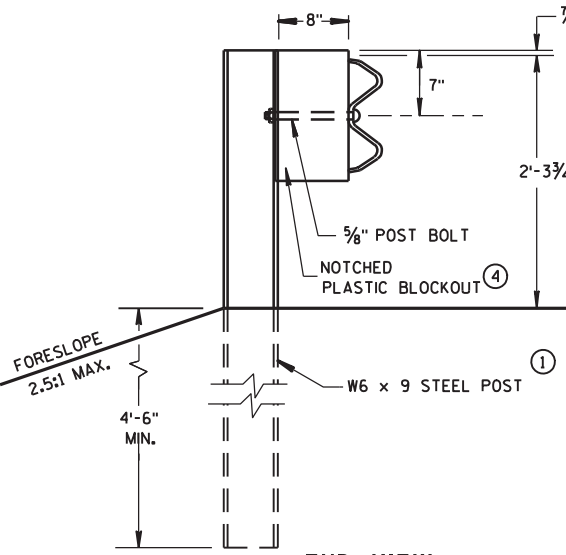
END VIEW
LOCATED ALONG A CURBED ROADWAY



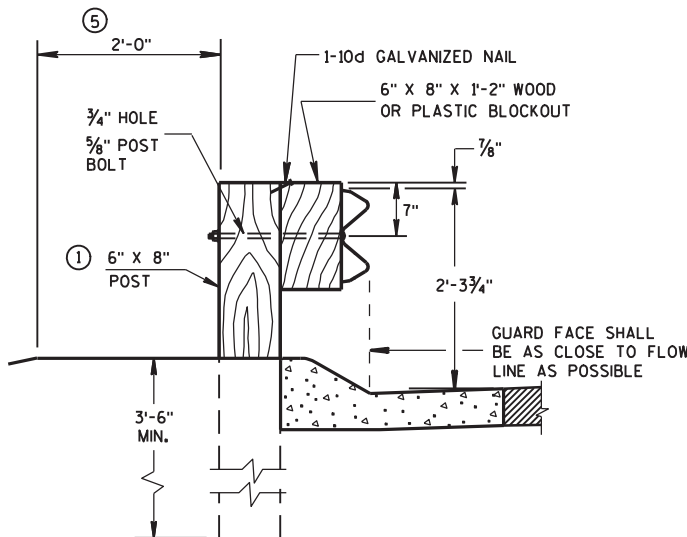
END VIEW
LOCATED ALONG A ROADWAY SHOULDER
STANDARD INSTALLATION



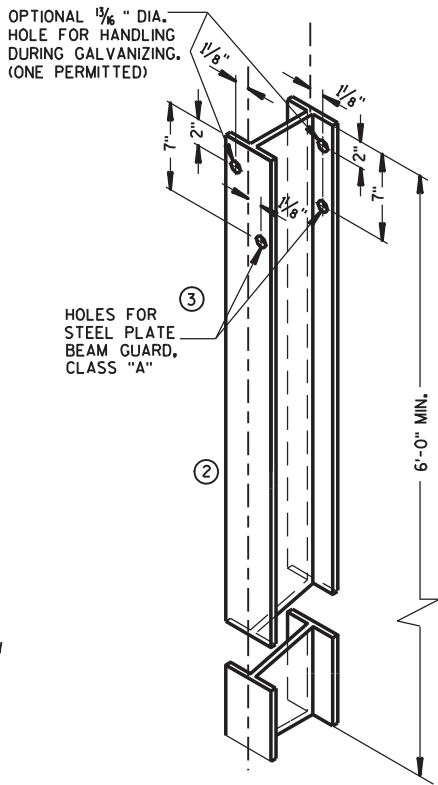
END VIEW
STEEL POST & NOTCHED
PLASTIC BLOCKOUT ALTERNATIVE
STANDARD INSTALLATION



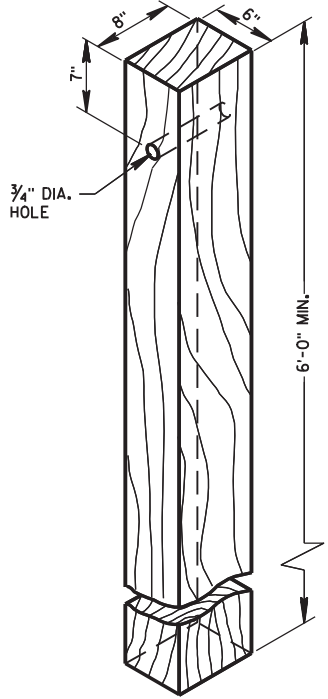
END VIEW
LONGER POST AT HALF
POST SPACING W BEAM
(LHW)



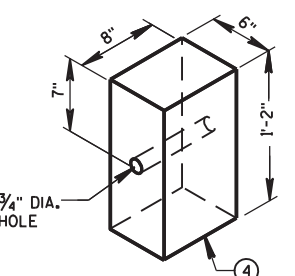
END VIEW
LOCATED ALONG A
MOUNTABLE CURBED ROADWAY



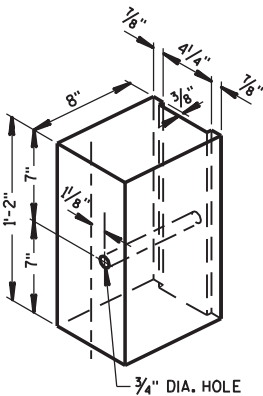
STEEL POST &
HOLE PUNCHING DETAIL
(W6 X 9) ①
ALL HOLES 1 1/8" DIAMETER EXCEPT AS NOTED



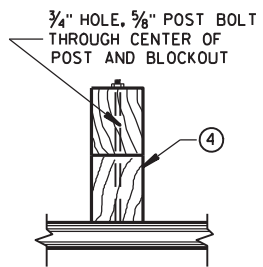
WOOD POST
(6" X 8") NOMINAL



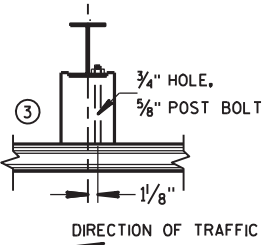
WOOD OR PLASTIC
BLOCKOUT FOR
WOOD POSTS



TYPICAL NOTCHED
PLASTIC BLOCKOUT ①
FOR STEEL POSTS



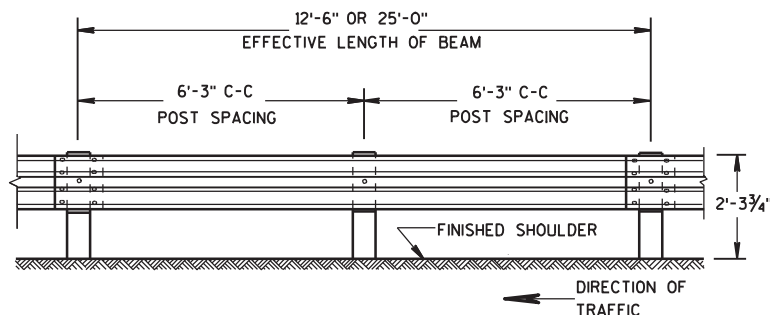
PLAN VIEW
WOOD POST,
BLOCKOUT & BEAM



PLAN VIEW
STEEL POST, NOTCHED
PLASTIC BLOCKOUT & BEAM

STEEL PLATE BEAM GUARD,
CLASS "A"
INSTALLATION & ELEMENTS

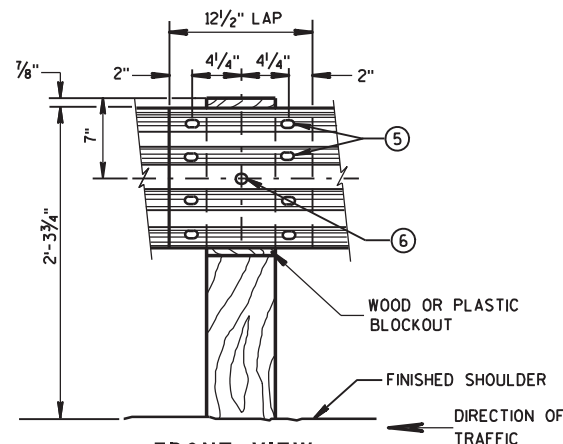
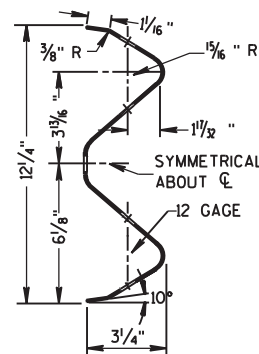
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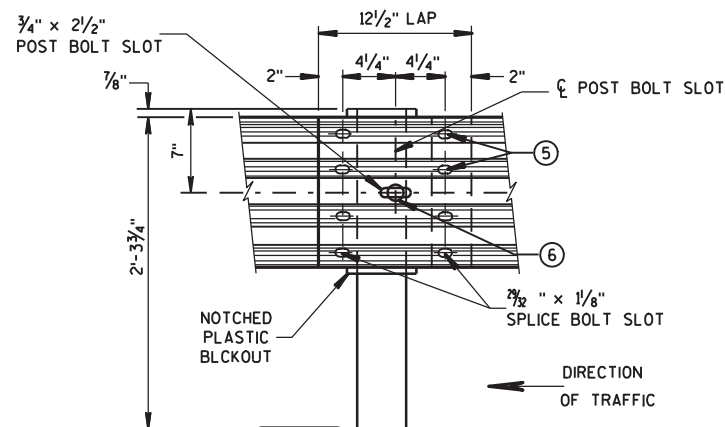
FRONT VIEW

POST SPACING STANDARD INSTALLATION

SECTION THRU W BEAM



FRONT VIEW
BEAM SPLICE AT WOOD POST
AND POST MOUNTING DETAIL

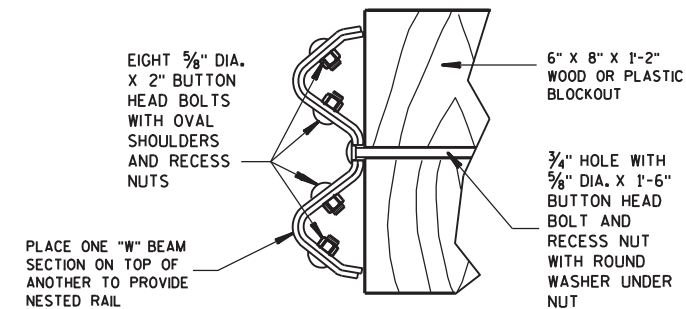


FRONT VIEW
BEAM SPLICE AT STEEL POST

TYPICAL SPLICING DETAILS
OF STEEL PLATE BEAM GUARD

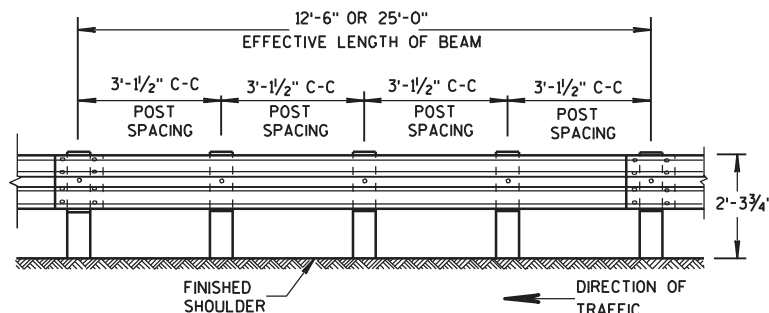
GENERAL NOTES

- ① PROVIDE TYPE "H" SILVER REFLECTIVE SHEETING ON ALL REFLECTORS EXCEPT THOSE LOCATED ALONG THE LEFT EDGE OF ONE-WAY ROADWAYS, WHICH SHALL BE PROVIDED WITH TYPE "H" YELLOW REFLECTIVE SHEETING.
- ② DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.
- ③ REVERSE EVERY OTHER REFLECTOR FOR 2-WAY VISIBILITY. THE CONTRACTOR MAY FURNISH TWO-SIDED REFLECTORS IN LIEU OF ONE-SIDED REFLECTORS.
- ④ PROVIDE AN ANGLE OF BEND OF $90^\circ \pm 1^\circ$ FOR TWO-SIDED REFLECTORS.
- ⑤ 8 - $\frac{5}{8}$ " ϕ X 2" BUTTON HEAD BOLTS WITH OVAL SHOULDERS & RECESS NUTS.
- ⑥ $\frac{5}{8}$ " ϕ X 1'-6" BUTTON HEAD BOLT AND AND RECESS NUT WITH ROUND WASHER UNDER NUT.



NESTED W BEAM (NW)

USE ALL OTHER STANDARD BEAM GUARD DETAILS FOR
CONSTRUCTING NESTED W BEAM (NW)

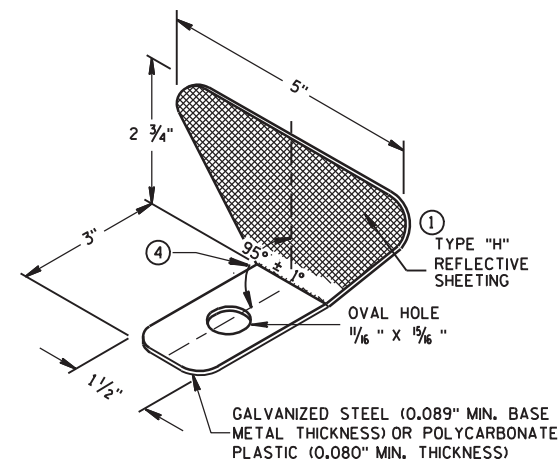
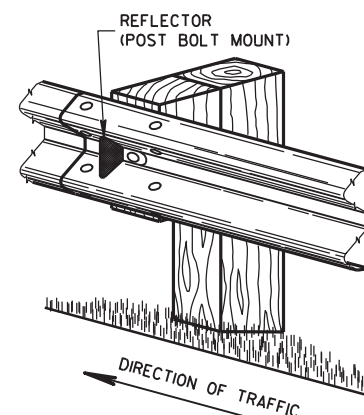


FRONT VIEW

POST SPACING FOR LONGER POST
AT HALF POST SPACING W BEAM (LHW)

REFLECTOR SPACING^②

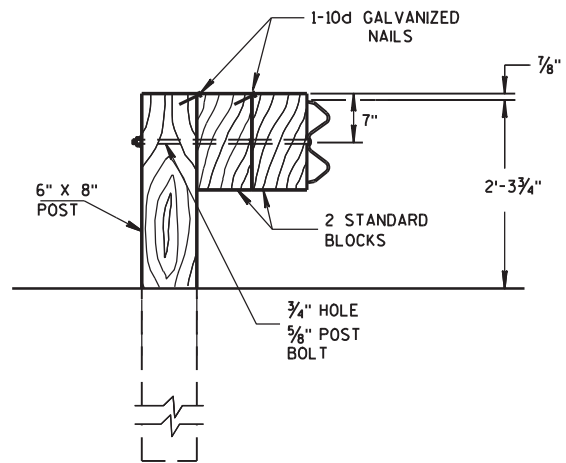
	BEAM GUARD LENGTH	REFLECTOR SPACING	NO. SURFACES REFLECTORIZED	MIN. NO. REFLECTORS
ONE WAY TRAFFIC	< 200'	50' C-C	1	3
	> 200'	100' C-C	1	
TWO WAY TRAFFIC	< 200'	25' C-C	1 ③	6
	> 200'	50' C-C	1	
TWO WAY TRAFFIC	< 200'	50' C-C	2 ④	3
	> 200'	100' C-C	2	



ONE SIDED REFLECTOR DETAIL AND TYPICAL INSTALLATION^①

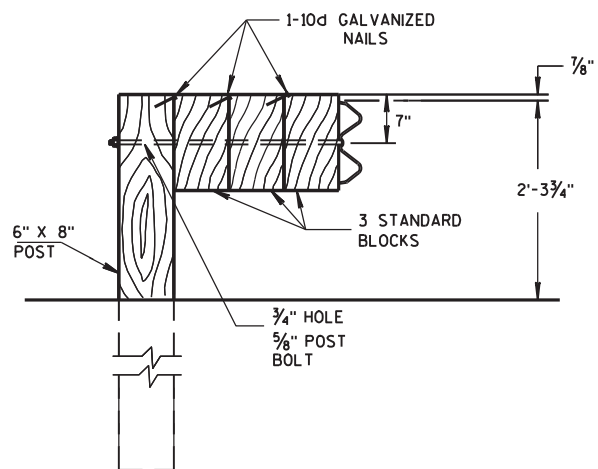
STEEL PLATE BEAM GUARD,
CLASS "A",
INSTALLATION & ELEMENTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



DETAIL FOR DOUBLE BLOCKS

THE NUMBER OF DOUBLE BLOCK POSTS
WITHIN A BARRIER RUN IS UNLIMITED

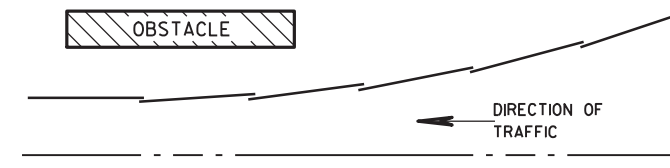


DETAIL FOR TRIPLE BLOCKS

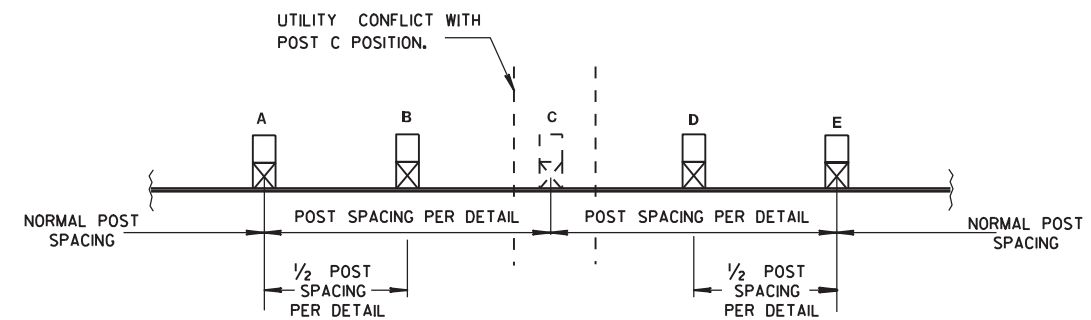
TRIPLE BLOCK DETAIL IS LIMITED TO ONE
LOCATION WITHIN A BEAM GUARD RUN.

NOTES: USE DOUBLE OR TRIPLE BLOCKS WHEN UNDERGROUND OBSTACLES
PREVENT THE POST FROM BEING INSTALLED.

DO NOT USE EXTRA BLOCKOUTS IF IT CAUSES THE POST TO BE DRIVEN BEYOND
SHOULDER HINGE POINT OR CAUSES A FIXED OBJECT TO BE WITHIN THE DEFLECTION
DISTANCE OF THE BARRIER.



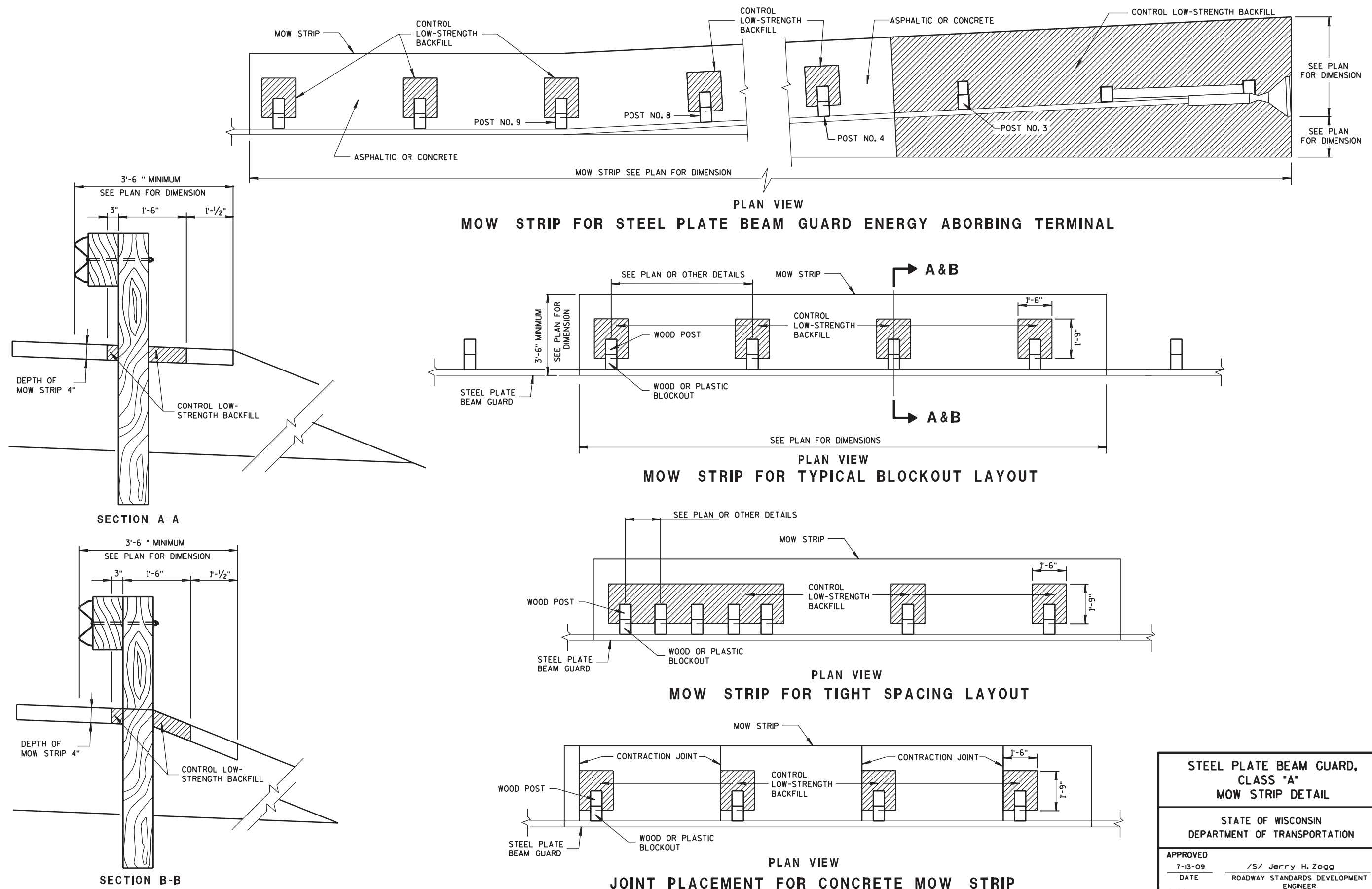
PLAN VIEW BEAM LAPPING DETAIL



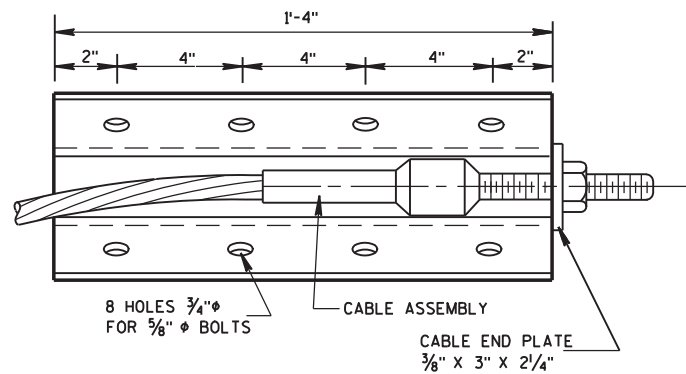
POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION

STEEL PLATE BEAM GUARD,
CLASS "A",
INSTALLATION & ELEMENTS

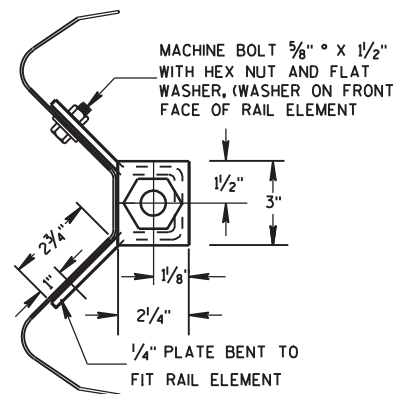
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



STEEL PLATE BEAM GUARD, CLASS "A" MOW STRIP DETAIL	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 7-13-09 DATE FHWA	/S/ Jerry H. Zogg ROADWAY STANDARDS DEVELOPMENT ENGINEER

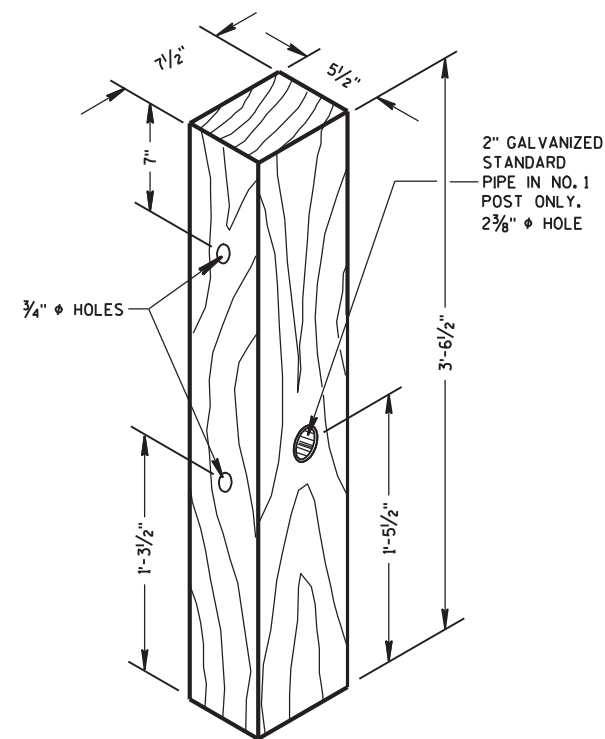


FRONT VIEW

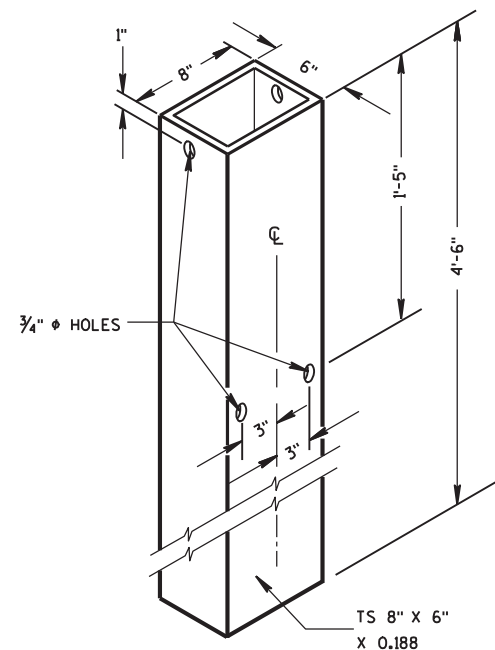


END VIEW

ANCHOR PLATE DETAIL

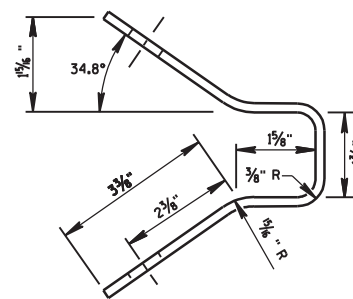


WOOD BREAKAWAY POST

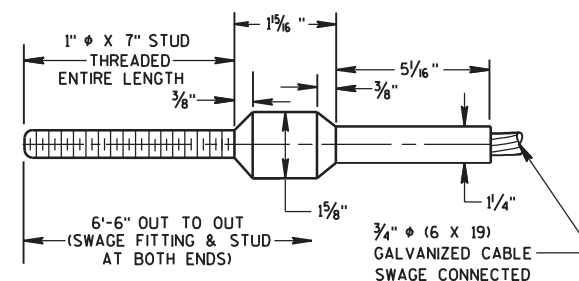


STEEL TUBE

STEEL TUBE SHALL CONFORM TO REQUIREMENTS OF ASTM A500

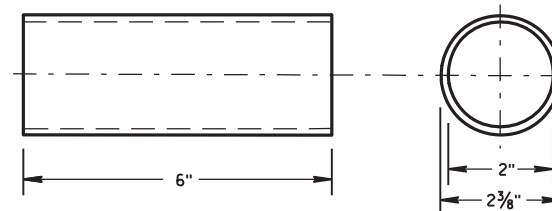


END VIEW OF BRACKET



CABLE ASSEMBLY

CABLE, SWAGE FITTING, STUD AND NUT SHALL DEVELOP A MINIMUM BREAKING STRENGTH OF 40,000 LB (TIGHTEN UNTIL TAUT)



BREAKAWAY TERMINAL POST SLEEVE

GALVANIZED STANDARD STRENGTH STEEL PIPE, ASTM 53 GRADE "B"

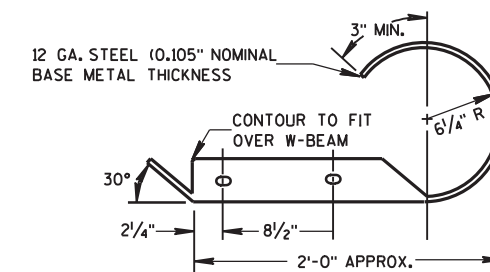
GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

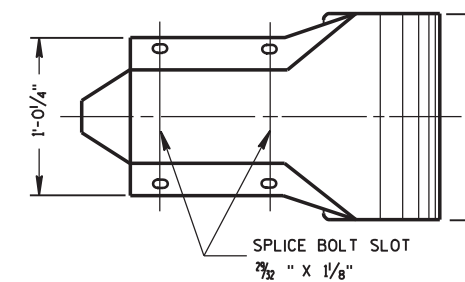
STRUCTURAL TUBING SHALL CONFORM TO THE REQUIREMENTS OF ASTM A-500 GRADE B OR ASTM A-501.

POST NO.1 SHALL BE WOOD BREAKAWAY POST INSERTED AND BOLTED INTO STEEL TUBE.

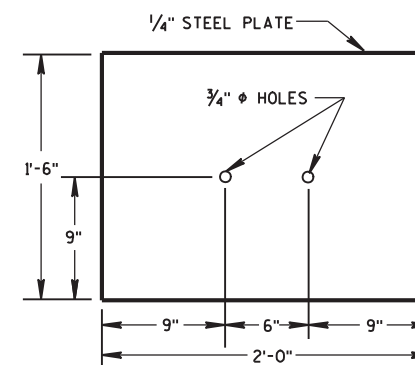
TYPE 2 ANCHORAGE SHALL CONSIST OF A STEEL TUBE, SOIL PLATE WOOD BREAKAWAY POST, BEARING PLATE, ANCHOR PLATE, CABLE ASSEMBLY AND ALL ASSOCIATED HARDWARE, ALL STEEL PARTS SHALL BE GALVANIZED.



PLAN VIEW

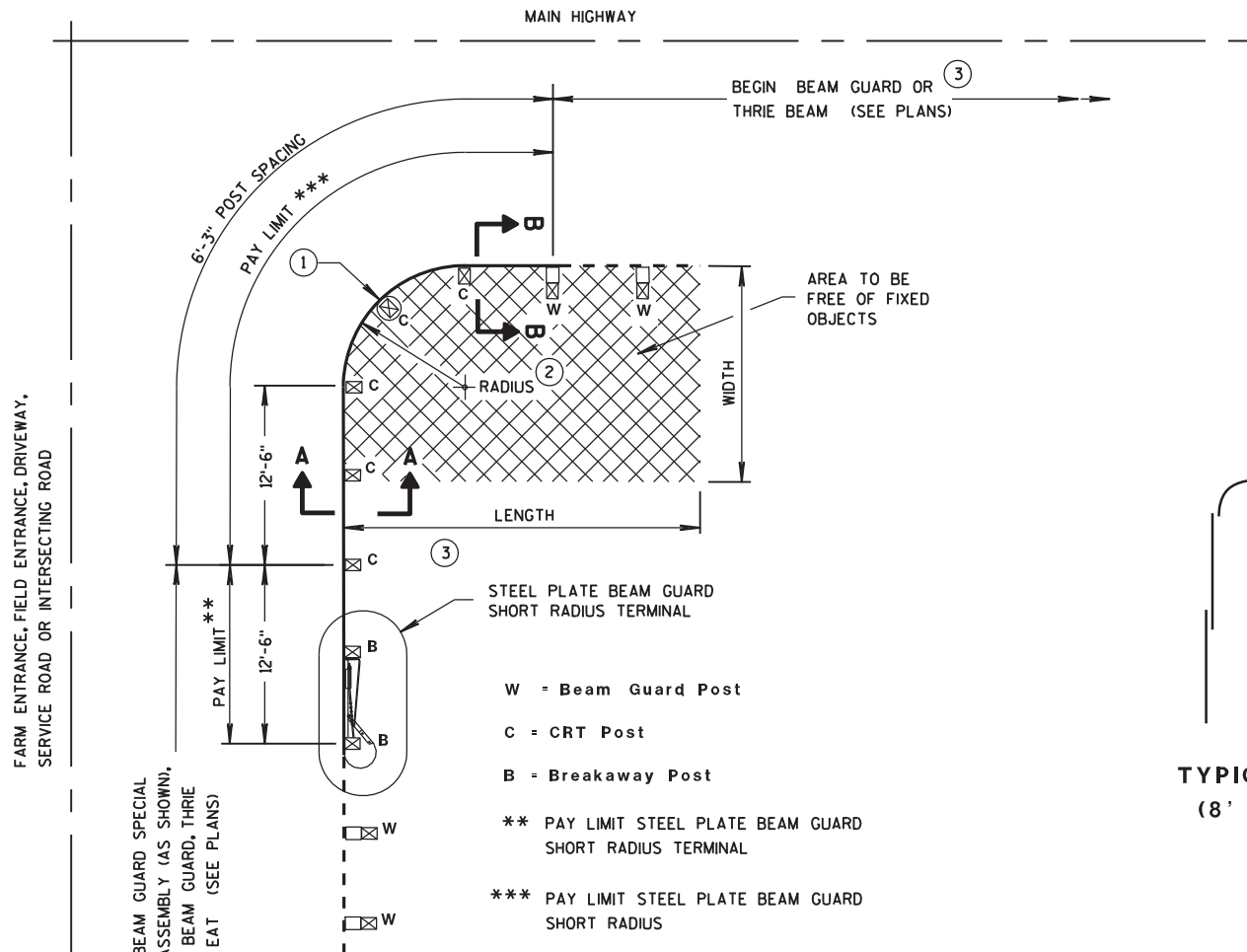


FRONT VIEW
W BEAM END SECTION ROUNDED

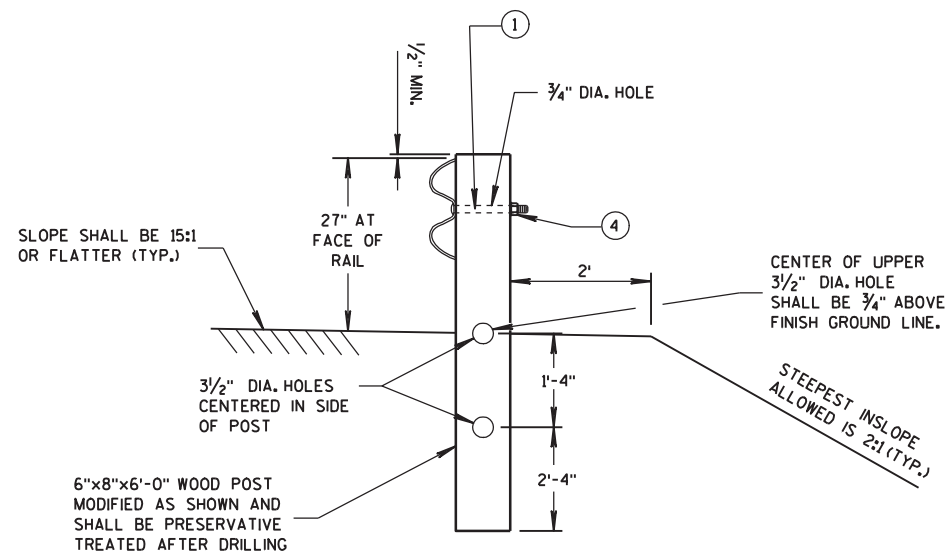


SOIL PLATE

ANCHORAGE FOR STEEL PLATE BEAM GUARD TYPE 2	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 8/21/07 DATE	/S/ Jerry H. Zogg ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA	



TYPICAL LAYOUT
(8' RADIUS SHOWN)



SECTION A-A
(CRT POST)

TYPICAL LAP SPLICES
(8' RADIUS SHOWN)

STEEL PLATE BEAM GUARD SHORT RADIUS TERMINAL

GENERAL NOTES

ALL ANGLES, CHANNELS, AND PLATES SHALL CONFORM TO THE REQUIREMENTS OF ASTM A36 AND THE STRUCTURAL TUBING SHALL CONFORM TO ASTM A 500. WELDING SHALL MEET THE CURRENT REQUIREMENTS OF THE AMERICAN WELDING SOCIETY STRUCTURAL WELDING CODE ANSI/AWS D1.1. ALL STRUCTURAL STEEL SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A 123. PUNCHING, DRILLING, CUTTING, OR WELDING WILL NOT BE PERMITTED AFTER GALVANIZING. FURNISH AND INSTALL HARDWARE PER STANDARD SPECIFICATION 614.2, UNLESS NOTED OTHERWISE.

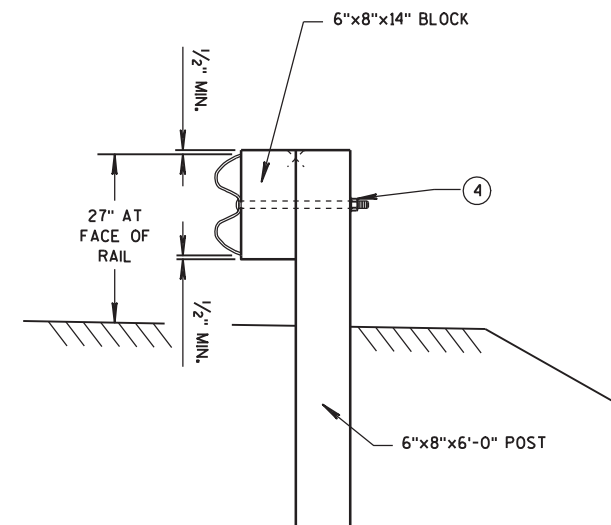
SHOP BEND CURVED RAIL SECTIONS.

SEE STANDARD DETAIL DRAWING 14 B 15 FOR OTHER DETAIL.

- ① ON THE 8 FOOT RADIUS INSTALLATION, DO NOT INSTALL BUTTON HEAD BOLT AT CENTER CRT POST.
- ② RADIUS FROM 8' - 36'. SEE PLAN.
- ③ HEIGHT TRANSITION MAY BE REQUIRED. SEE PLAN OR PROJECT ENGINEER.
- ④ 5/8" ϕ x 1'-6" BUTTON HEAD BOLT AND RECESS NUT WITH ROUND WASHER UNDER NUT.

RADIUS	NUMBER OF CRT POSTS	* NUMBER AND LENGTH OF CURVED RAILS	REQUIRED AREA FREE OF FIXED OBJECTS (LENGTH x WIDTH)
8'	5	1 at 12.5'	25' x 15'
16'	7	1 at 25'	30' x 15'
24'	9	1 at 25' and 1 at 12.5'	40' x 20'
32'	11	2 at 25'	50' x 20'

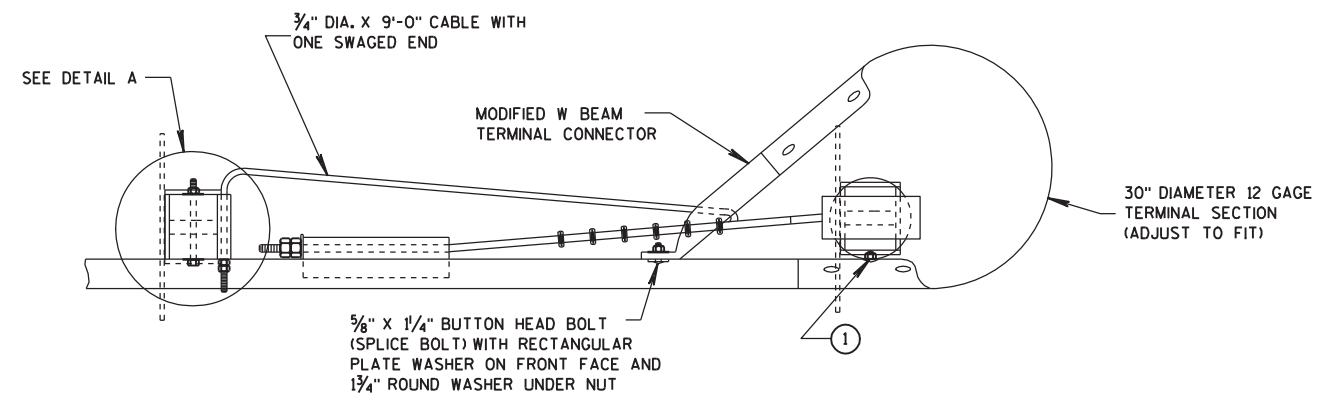
* THE NUMBER OF RAILS IS BASED ON A 90° INTERSECTION. SEE PLAN FOR NON 90° INSTALLATIONS.



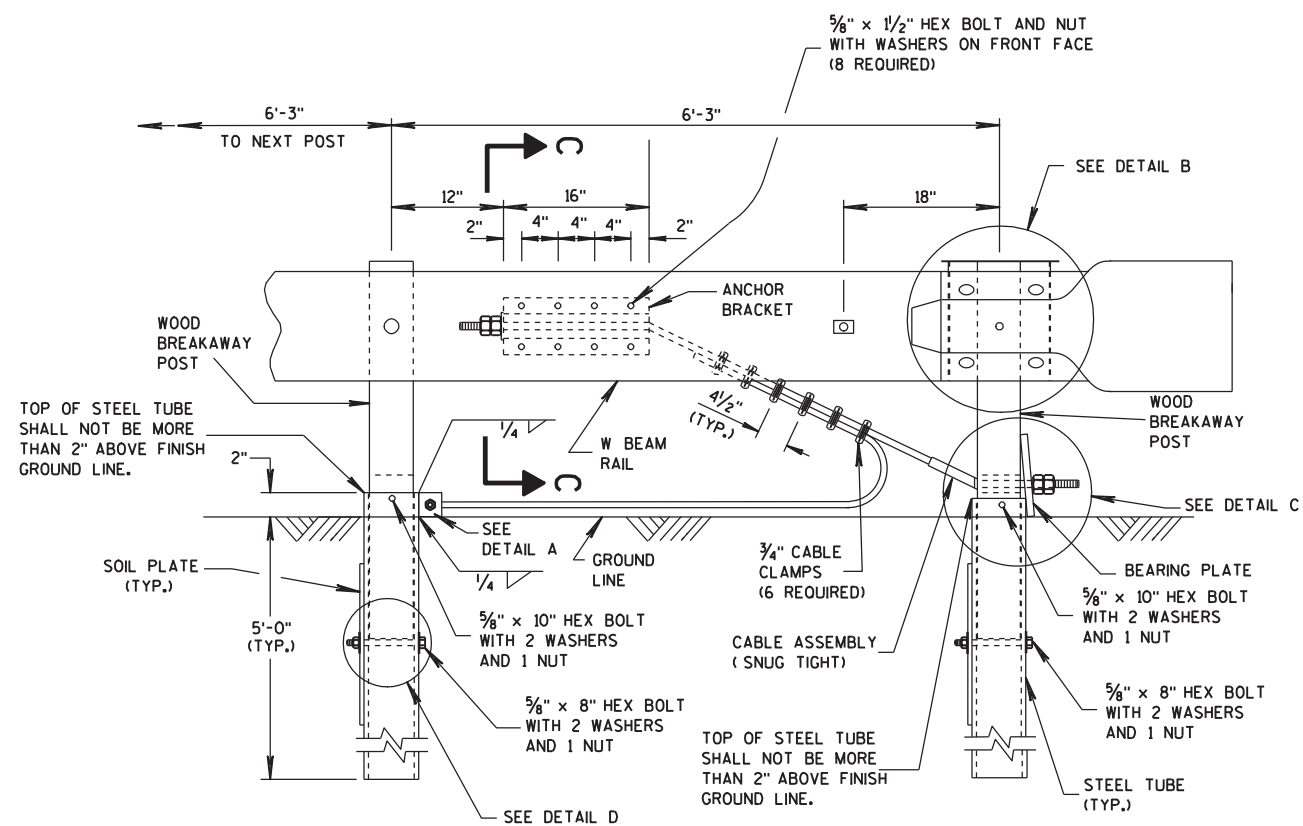
SECTION B-B
(BEAM GUARD POST)

STEEL PLATE BEAM GUARD
SHORT RADIUS TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



PLAN VIEW



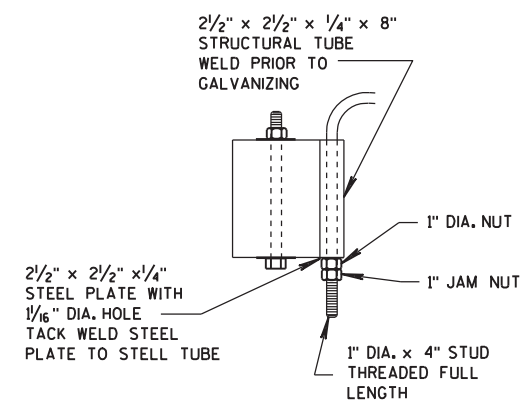
ELEVATION VIEW

STEEL PLATE BEAM GUARD SHORT RADIUS TERMINAL

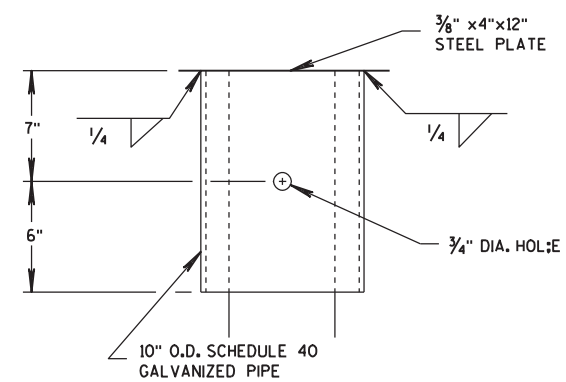
GENERAL NOTES

- 1 ATTACH W BEAM RAIL TO THE STEEL PIPE WITH A 5/8" X 2" BUTTON HEAD BOLT WITH NO WASHER. CONNECTION TO THE POST IS NOT REQUIRED.

INSTALL GALVANIZED 3/4" (6X19) PREFORMED WIRE OR INDEPENDENT WIRE ROPE CORE CONFORMING TO AASHTO M 30. MANUFACTURE WIRE ROPE OUT OF IMPROVED FLOW STEEL WITH A MINIMUM BREAKING STRENGTH OF 42,800 PSI.



DETAIL A

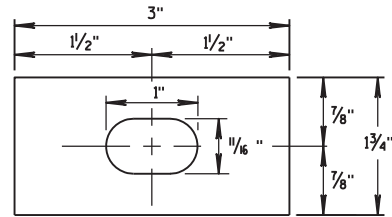


DETAIL B

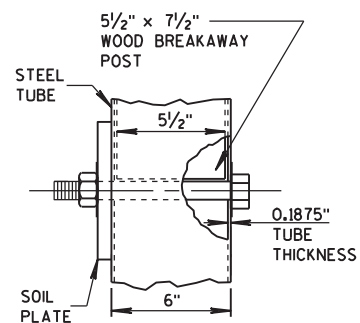
(BEAM GUARD AND TERMINAL SECTION NOT SHOWN)

STEEL PLATE BEAM GUARD
SHORT RADIUS TRMINAL

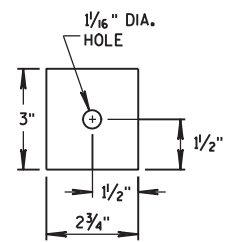
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



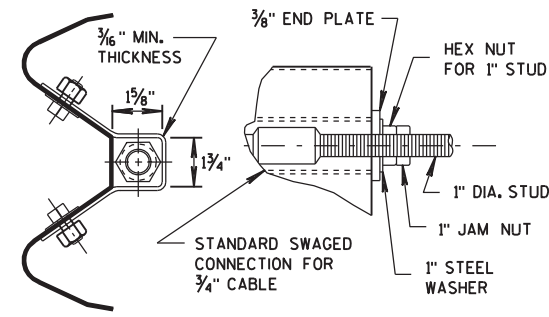
RECTANGULAR
PLATE WASHER



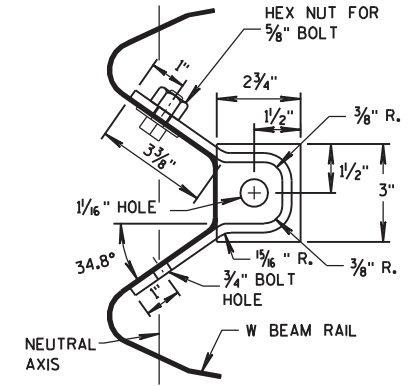
DETAIL D



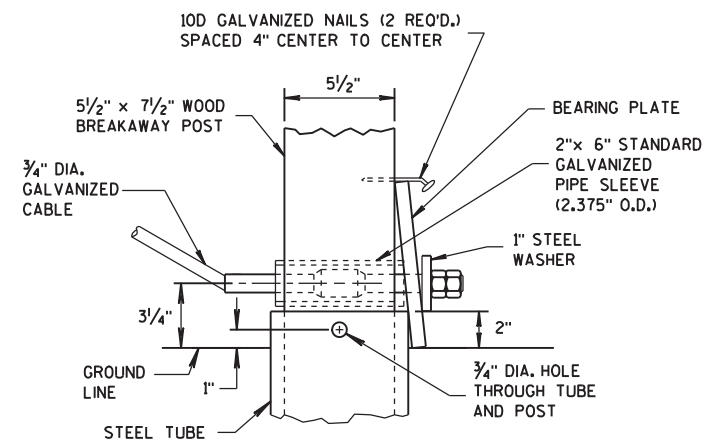
END PLATE



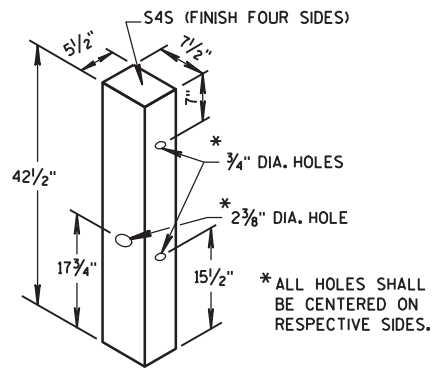
SECTION C-C
(END PLATE REMOVED)



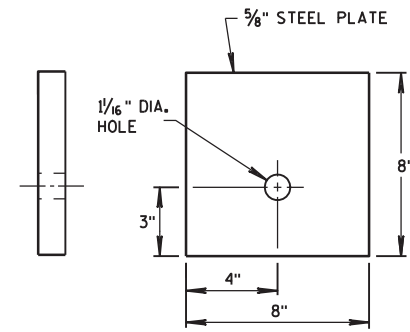
ANCHOR BRACKET



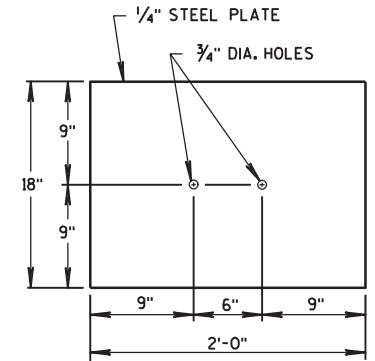
DETAIL C



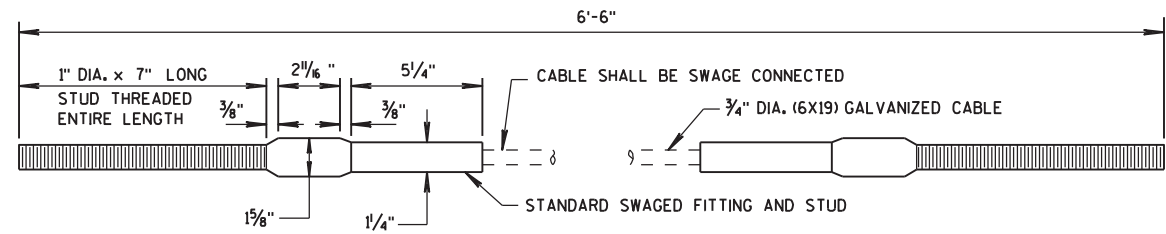
WOOD BREAKAWAY POST



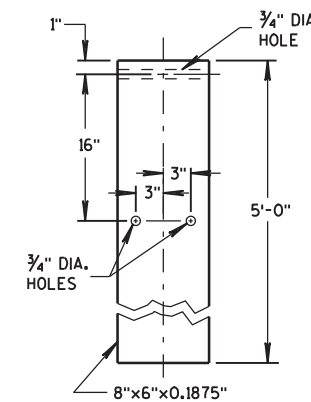
BEARING PLATE



SOIL PLATE



CABLE ASSEMBLY

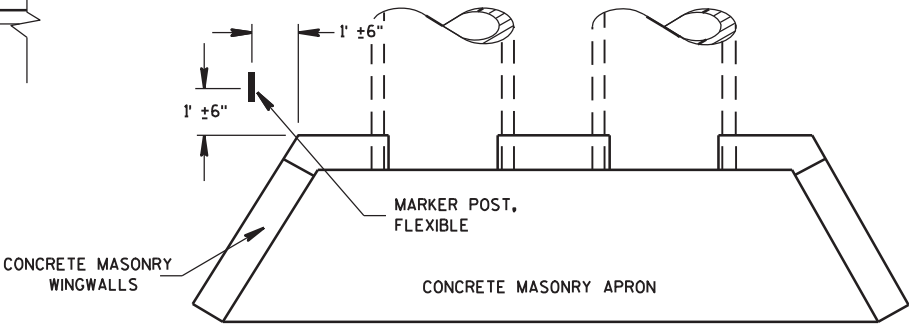


STEEL TUBE

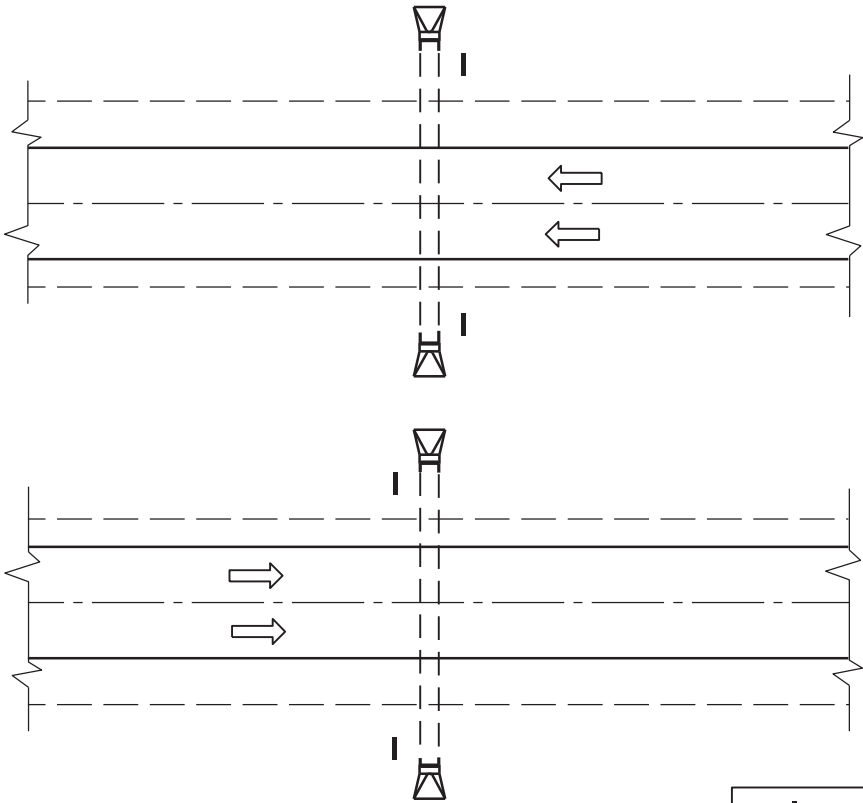
STEEL PLATE BEAM GUARD SHORT RADIUS TERMINAL	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 12/18/08 DATE	/S/ Jerry H. Zogg ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA	

GENERAL NOTES

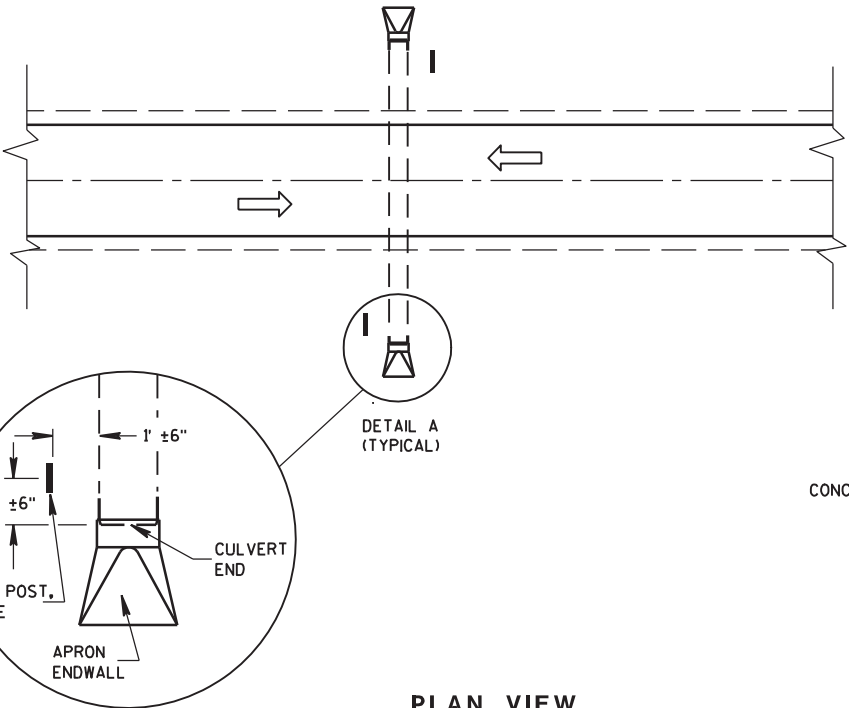
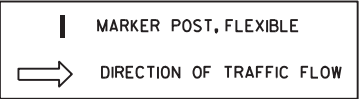
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.



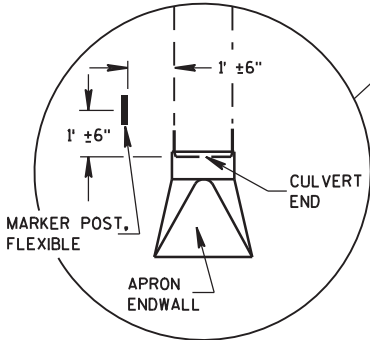
PLAN VIEW
CONCRETE MASONRY ENDWALLS FOR
CULVERT PIPE AND PIPE ARCH



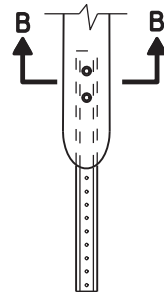
PLAN VIEW
DIVIDED HIGHWAY



PLAN VIEW
UNDIVIDED HIGHWAY



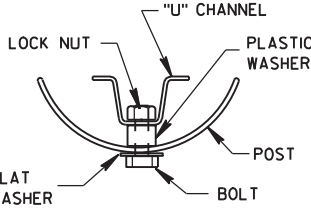
DETAIL A
(TYPICAL)



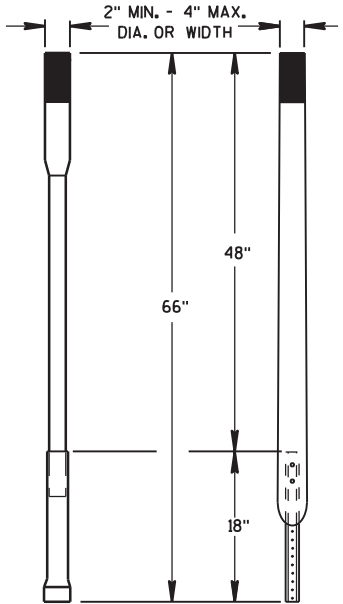
FRONT VIEW
CURVED MARKER



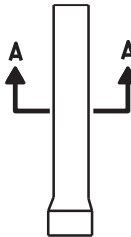
SIDE VIEW
CURVED MARKER



SECTION B-B



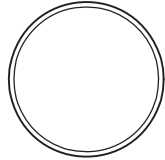
ALTERNATE 1 ALTERNATE 2
FLEXIBLE MARKER POST



FRONT VIEW
ROUND MARKER

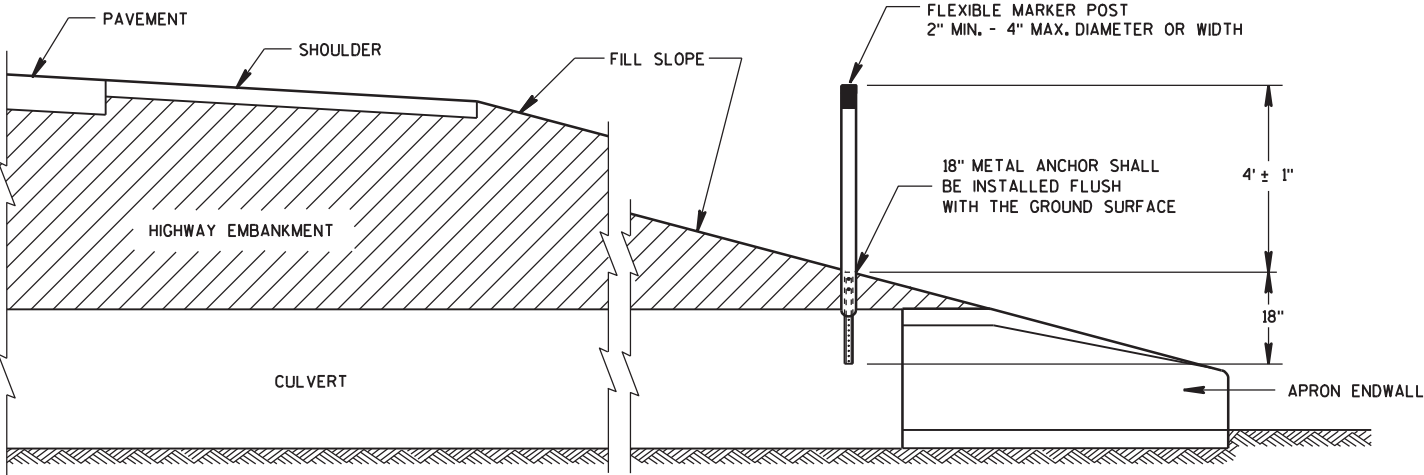


SIDE VIEW
ROUND MARKER



SECTION A-A

FLEXIBLE MARKER POST ANCHORS

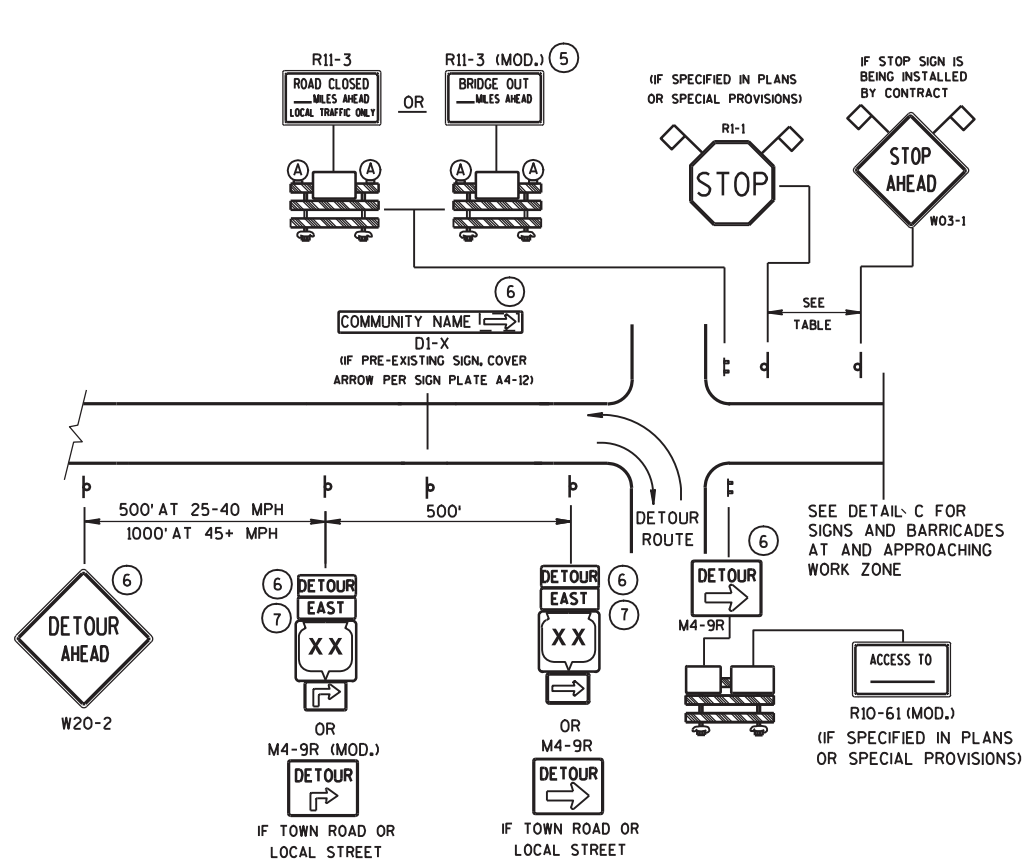


CROSS SECTION
FLEXIBLE MARKER POST

MARKER POST, FLEXIBLE, FOR CULVERT END	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 10/1/98 DATE	 CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA	

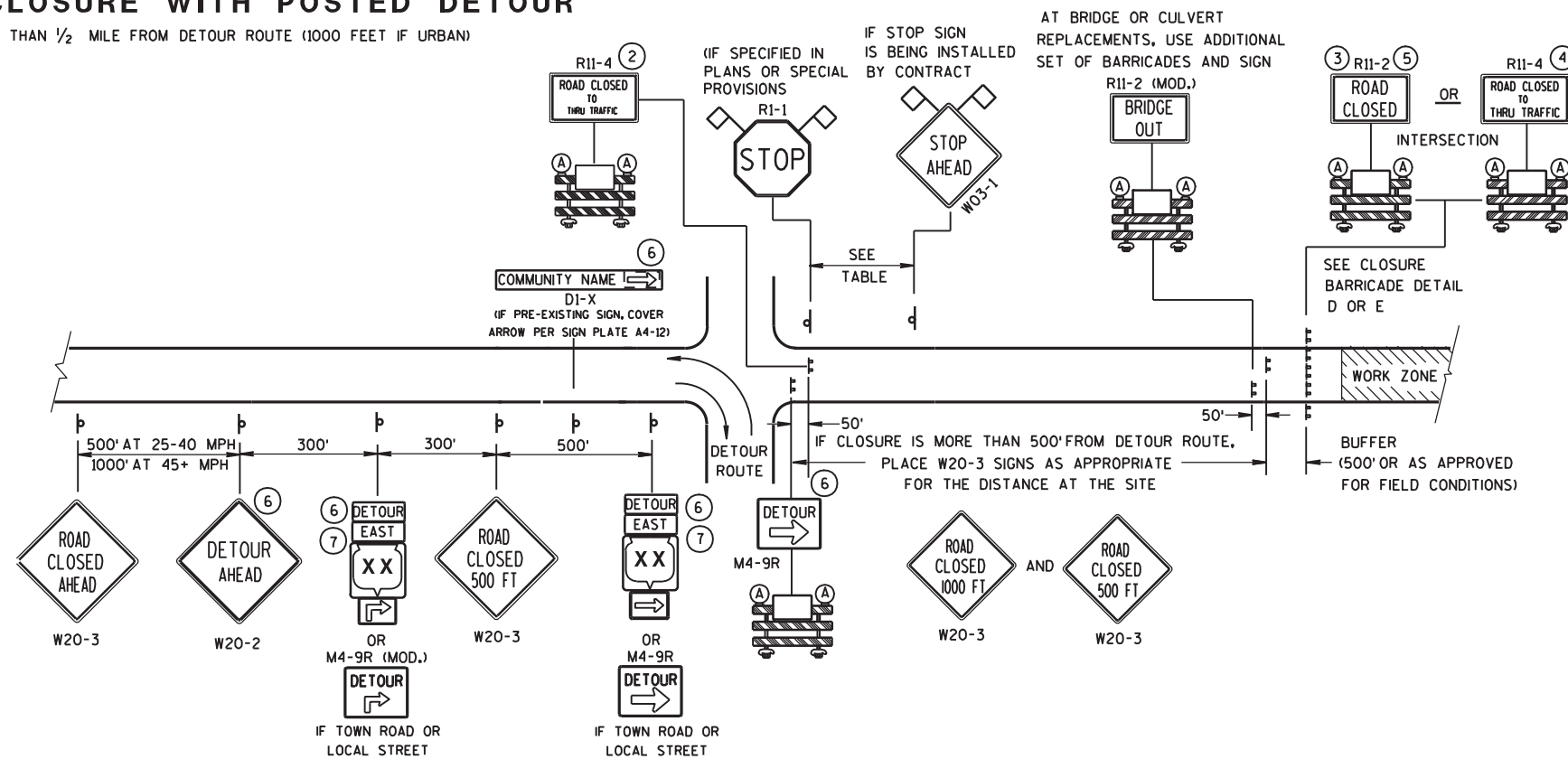
S.D.D. 15 A 3-1

S.D.D. 15 A 3-1



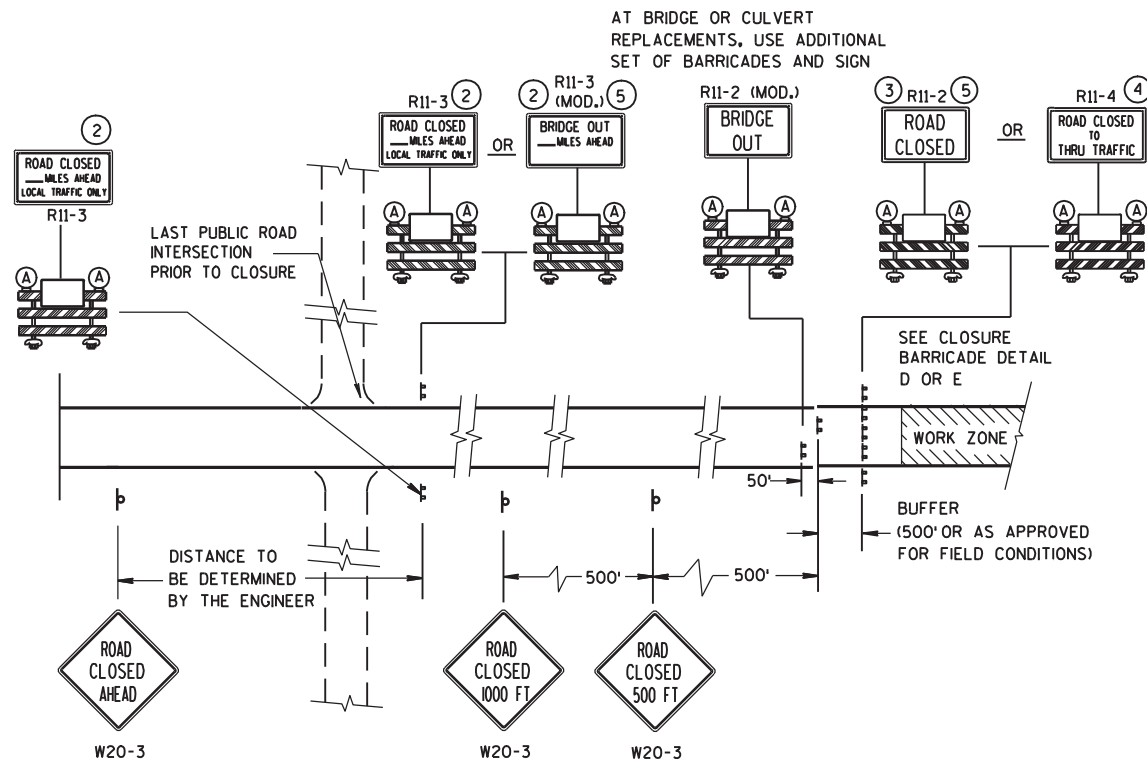
DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE GREATER THAN 1/2 MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE LESS THAN 1/2 MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL C
MAINLINE CLOSURE, NO POSTED DETOUR

SPEED LIMIT (MPH)	"STOP AHEAD" ADVANCE WARNING DISTANCE (FT)
25	200
30	200
35	350
40	350
45	500
50	550
55	750

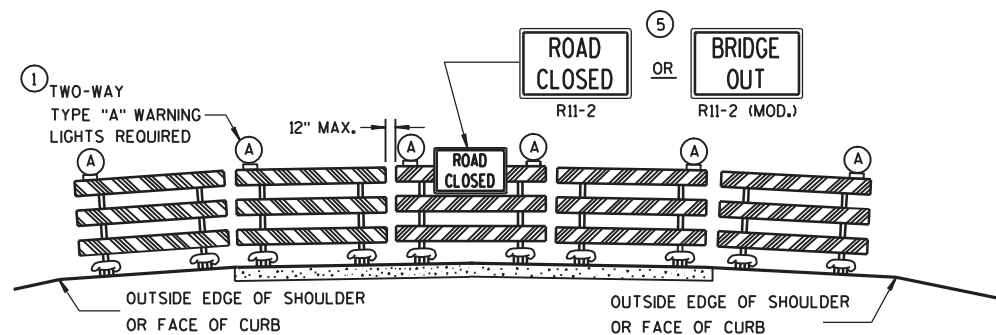
SEE SDD 15C2-4b
FOR GENERAL NOTES
AND FOOTNOTES ① THROUGH ⑦

LEGEND

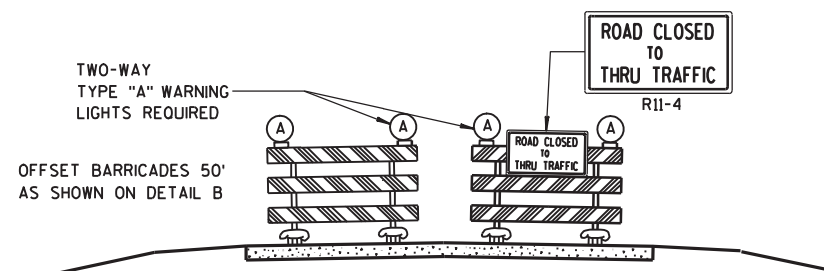
- POST MOUNTED SIGN
- TYPE III BARRICADES
- TYPE "A" LOW INTENSITY FLASHING WARNING LIGHT (FOR NIGHT USE)
- WORK ZONE
- DETOUR EAST M4-8 M3-X
- MI-4 OR COUNTY MI-5A OR MI-6
- MI-5-1 OR MI-6-1
- FLAGS, 16" X 16" MIN., (ORANGE)

BARRICADES AND SIGNS
FOR
MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



DETAIL D
ROAD CLOSURE BARRICADE DETAIL
APPROACH VIEW



DETAIL E
LANE CLOSURE BARRICADE DETAIL
APPROACH VIEW

SEE SDD 15C2-4a FOR LEGEND

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND BARRICADES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION OR, FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL D FOR FULL ROAD CLOSURES.

TYPE "A" LOW-INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

THE R11-2, R11-3, M4-9, R11-4 AND R10-61 SIGNS PLACED ON BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE OR BOTTOM RAILS.

THE REFLECTIVE SHEETING USED ON R11-2, R11-3, R11-4, R10-61 AND R1-1 SIGNS SHALL COMPLY WITH SUBSECTION 637.2.2.2 OF THE STANDARD SPECIFICATIONS.

"WO AND "MO" SIGNS ARE THE SAME AS "W" AND "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:

R11-2 SHALL BE 48" X 30".

R11-3, R11-4 AND R10-61 SHALL BE 60" X 30".

M4-9 SHALL BE 30" X 24".

M3-X AND M4-8 SHALL BE 24" X 12". (30" X 15" IF NEEDED TO MATCH EXISTING SIGNS.)

M1-4, M1-5A, AND M1-6 SHALL BE 24" X 24". (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS.)

M05-1 AND M06-1 SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS.)

D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.

R1-1 SHALL BE 36" X 36".

- 1 TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND A MINIMUM OF ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN (APPROX. 8-FOOT LIGHT SPACING).
- 2 THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT INTERSECTION.
- 3 FOR ROAD CLOSURE WITHOUT LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL D.
- 4 FOR ROAD CLOSURE WITH LOCAL ACCESS TO PROJECT, SEE LANE CLOSURE BARRICADE DETAIL E.
- 5 FOR BRIDGE OR CULVERT REPLACEMENTS, SUBSTITUTE "BRIDGE OUT" INSTEAD OF "ROAD CLOSED" ON R11-2 AND R11-3 SIGNS.
- 6 INSTALL DETOUR AND COMMUNITY GUIDE SIGNS AND ARROWS ONLY IF SPECIFIED IN THE CONTRACT. IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. MODIFY EXISTING SIGNS WHERE POSSIBLE. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. IF DETOUR SIGNS ARE BEING INSTALLED BY OTHERS, PLACE THE CONTRACTED TRAFFIC CONTROL SIGNS TO ALLOW FOR PLACEMENT OF ALL WARNING, DETOUR AND GUIDE SIGNS AS SHOWN.
- 7 "EAST" CARDINAL DIRECTION MARKERS AND RIGHT TURN ARROWS ARE SHOWN. USE OTHER CARDINAL DIRECTIONS AND ARROWS AS APPROPRIATE.

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

9/16/03

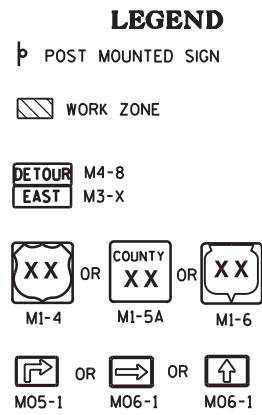
DATE

FHWA

Thomas N. Nottm for
CHIEF SIGNS AND MARKING ENGINEER



S.D.D. 13 C 2-4C



MATCH POINT



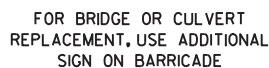
6

DETAIL 1

DETAIL 3



(PUBLIC CROSS-TRAFFIC MAINTAINED.



DETAIL 4

(CONTRACTOR, LOCAL BUSINESS AND
RESIDENT ACCESS TO PROJECT)

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND BARRICADES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

IF A "STOP" SIGN MUST BE REMOVED FOR A WORK OPERATION, A TEMPORARY "STOP" SIGN SHALL BE PLACED PRIOR TO THE SIGN REMOVAL, OR A FLAGGER SHALL BE PROVIDED UNTIL THE SIGN IS RE-ESTABLISHED.

BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION OR, FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL D FOR FULL ROAD CLOSURES.

TYPE "A" LOW-INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

THE R11-2, R11-3 AND R11-4 SIGNS PLACED ON BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE OR BOTTOM RAILS.

THE REFLECTIVE SHEETING USED ON R11-2, R11-3 AND R11-4 SIGNS SHALL COMPLY WITH SUBSECTION 637.2.2.2 OF THE STANDARD SPECIFICATIONS.

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:

R11-2 SHALL BE 48" X 30"

R11-4 AND R11-3 SHALL BE 60" X 30".

*OMIT THE "ROAD CLOSED 500 FT." SIGN IF THE LAST INTERSECTION IS 500 FT. OR LESS FROM THE WORK ZONE.

**500' MAX. OR AT LAST INTERSECTION
WHICHEVER IS CLOSER.

LEGEND

POST MOUNTED WARNING SIGN

TYPE III BARRICADES

(A) TYPE "A" LOW INTENSITY FLASHING
WARNING LIGHT (FOR NIGHT USE)

 WORK AREA

BARRICADES AND SIGNS FOR SIDEROAD CLOSURES	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 9-16-03 DATE	<i>Thomas N. Nottolm Jr.</i> CHIEF SIGNS AND MARKING ENGINEER

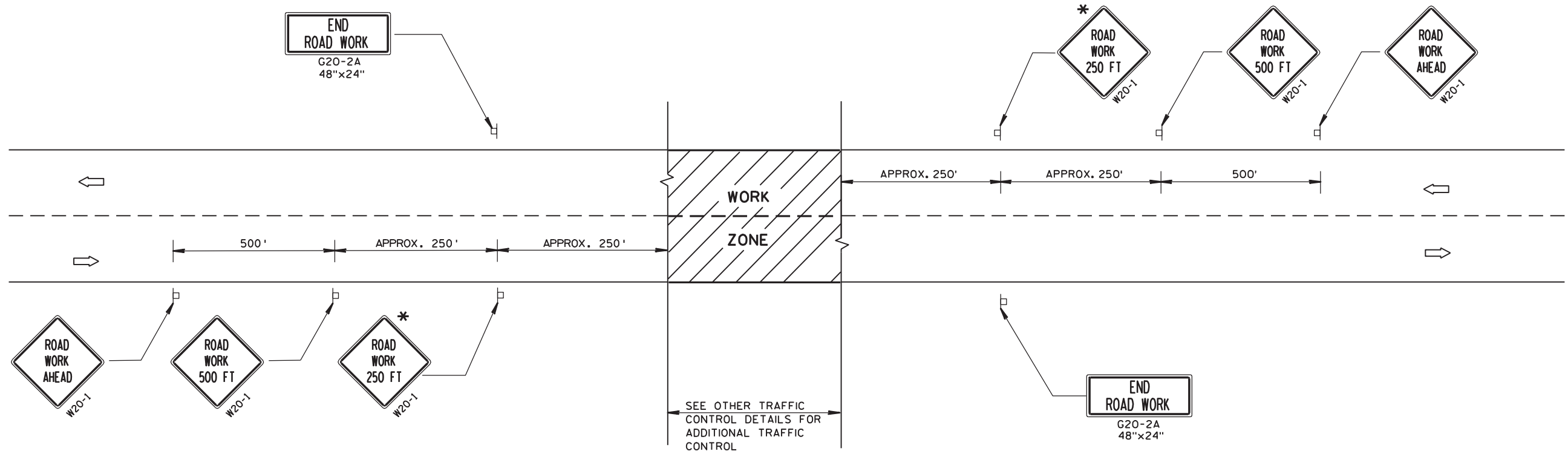


LEGEND

- # SIDEROAD

A diamond-shaped warning sign with a black border and the text "ROAD WORK AHEAD" in bold, black, sans-serif capital letters. The sign is tilted slightly to the right. Below the sign, the text "W20-1" is written in a black, sans-serif font.

S.D.D. 15 C 4-1



TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

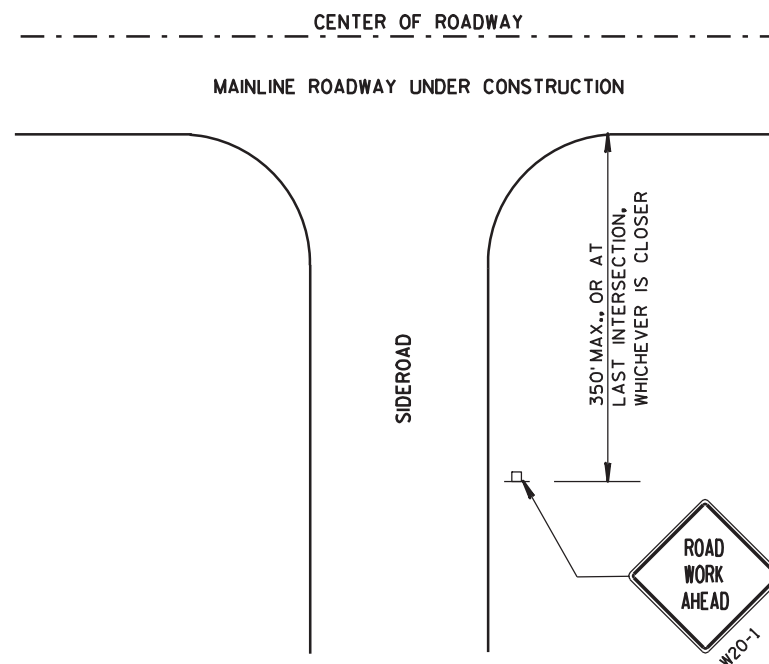
THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS, 36"x36" SIGNS MAY BE USED INSTEAD OF 48"x48" SIGNS, IF APPROVED BY DISTRICT TRAFFIC UNIT.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

IF A "STOP" SIGN MUST BE REMOVED FOR A WORK OPERATION, A TEMPORARY "STOP" SIGN SHALL BE PLACED PRIOR TO THE SIGN REMOVAL, OR A FLAGGER SHALL BE PROVIDED UNTIL THE SIGN IS RE-ESTABLISHED.

* THE THIRD W20-1 SIGN IS REQUIRED ONLY IF THERE IS AN INTERSECTION BETWEEN THE "ROAD WORK 500 FT" SIGN AND THE WORK ZONE. ADJUST THE PLACEMENT OF THIS SIGN BASED ON INTERSECTION LOCATION AND OTHER FIELD CONDITIONS.



LEGEND

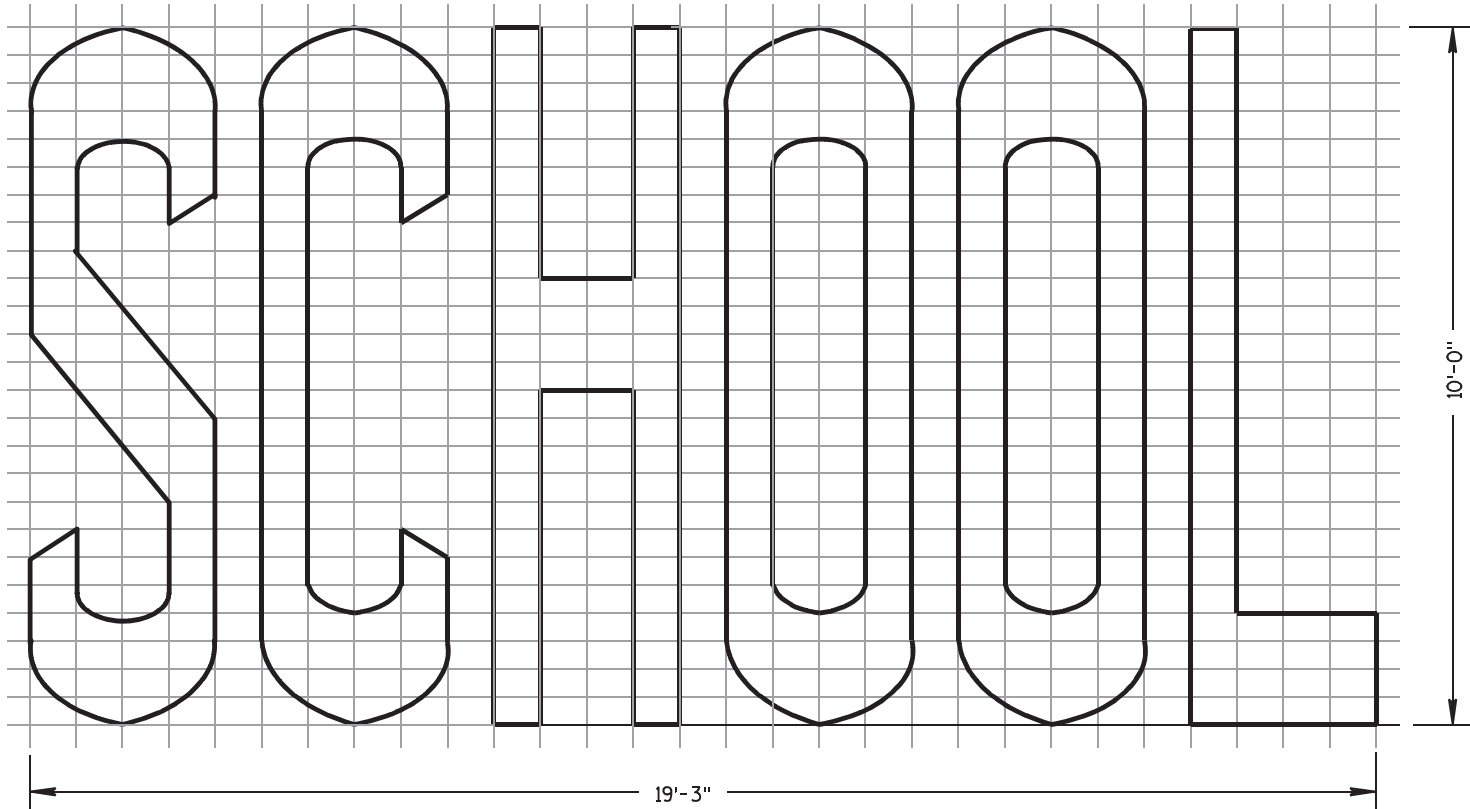
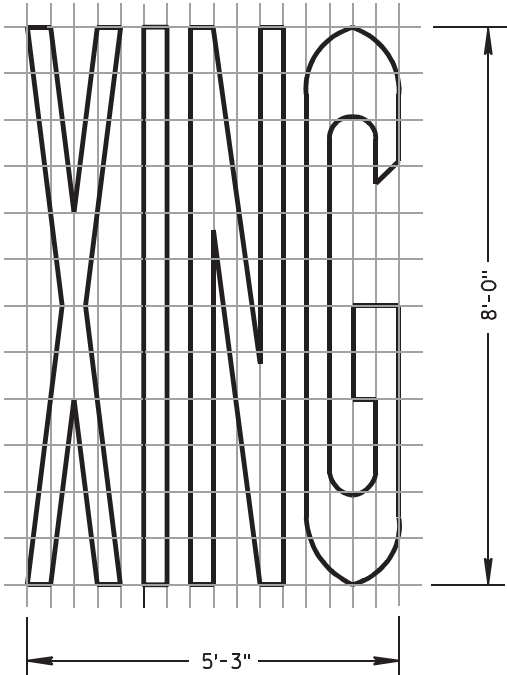
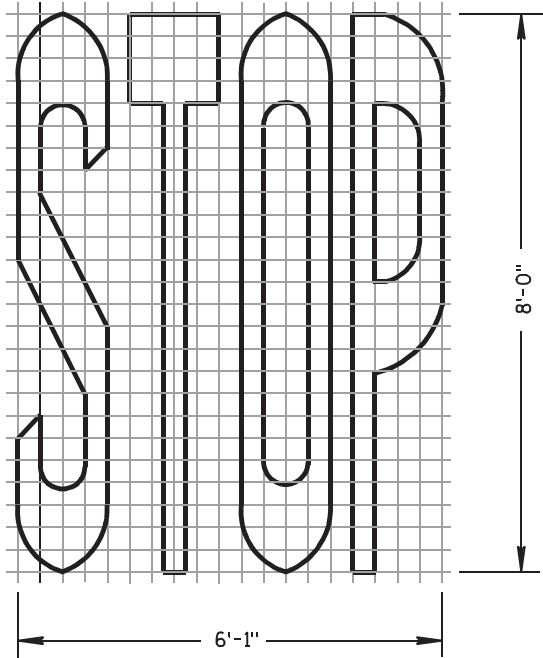
- POST MOUNTED SIGN
- ➡ DIRECTION OF TRAFFIC FLOW

TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 5/23/00 DATE	<i>Christa J. Spang</i> CHIEF SIGNS AND MARKING ENGINEER
FHWA	

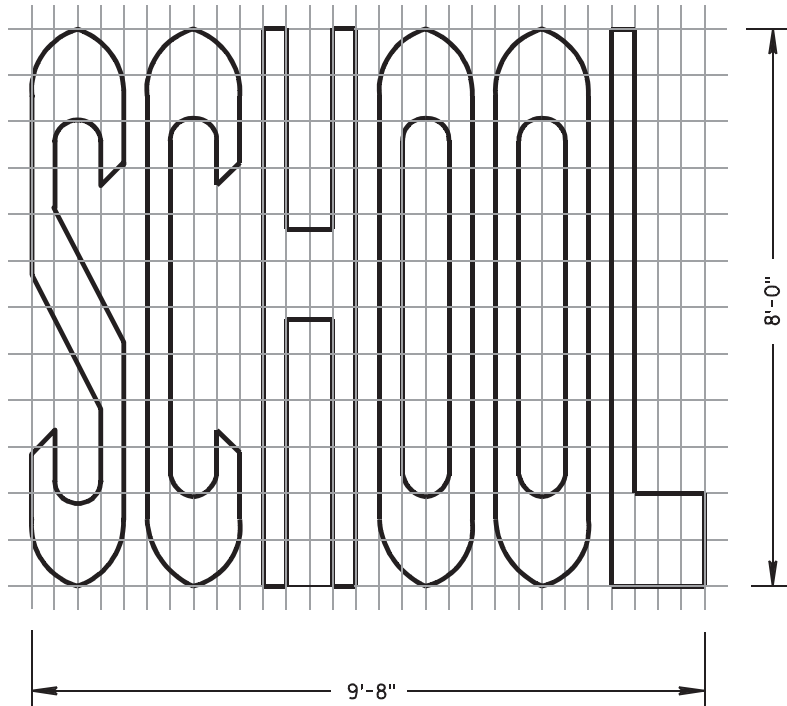
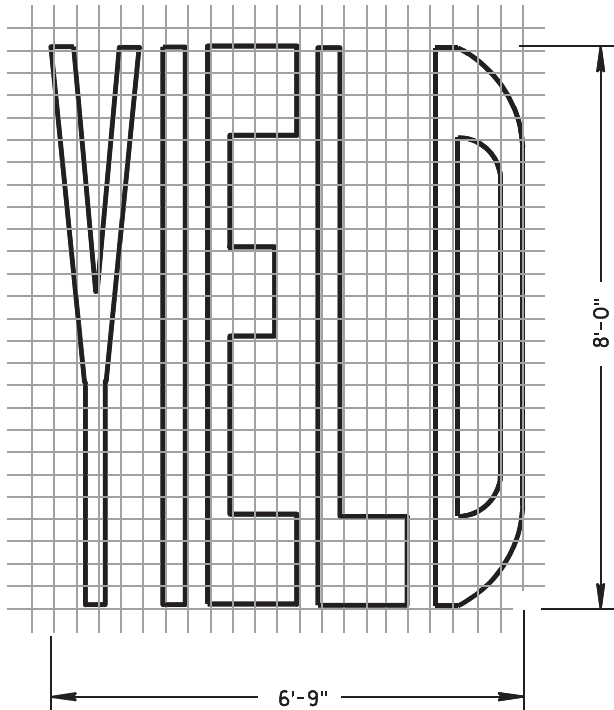
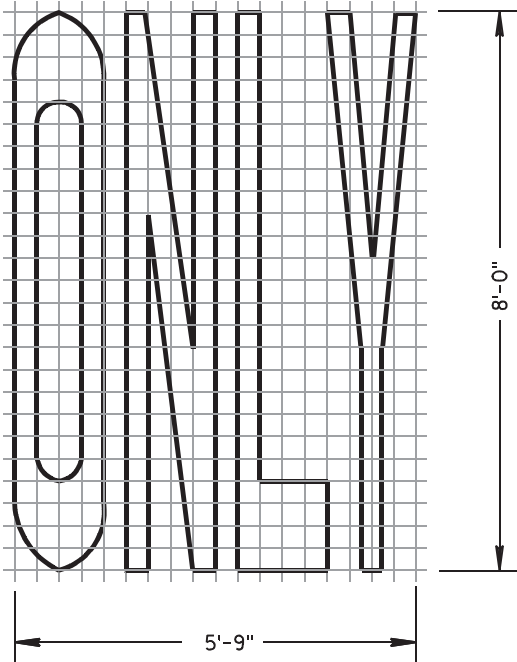
GENERAL NOTES

DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

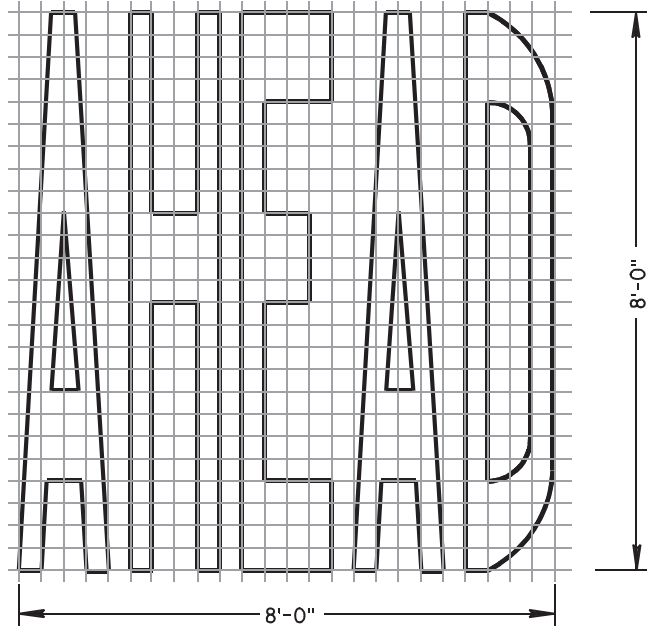
ALL LETTERS, ARROWS AND SYMBOLS SHALL BE IN CONFORMANCE WITH REQUIREMENTS INCLUDED IN "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKING" BOOK BY THE FEDERAL HIGHWAY ADMINISTRATION. ALL LETTERS, ARROWS AND SYMBOLS SHALL BE WHITE AND REFLECTORIZED. SMALL DIFFERENCES IN DIMENSIONS WITHIN THE TOLERANCES OF THAT BOOK ARE ACCEPTABLE.



TWO-LANE



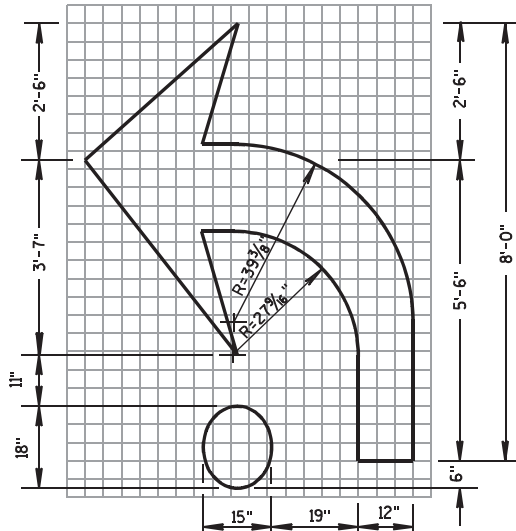
SINGLE-LANE



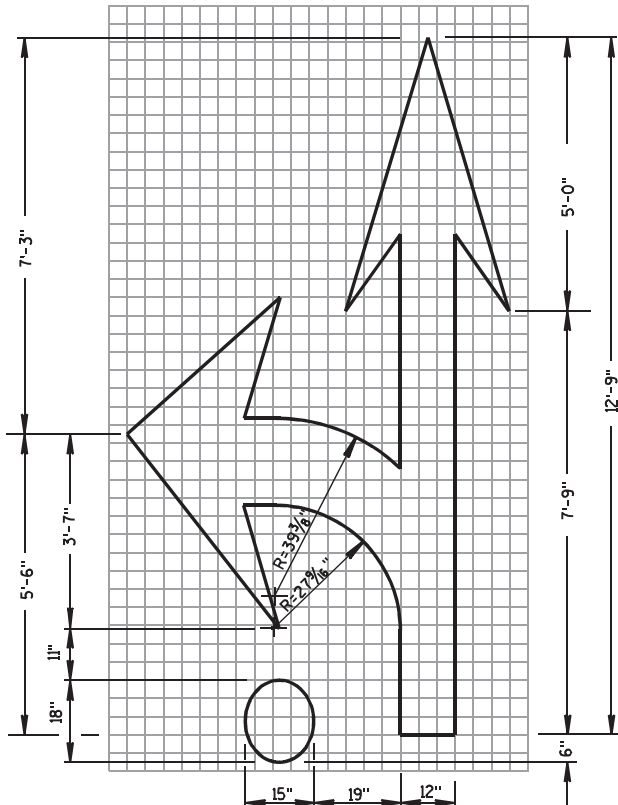
PAVEMENT MARKING WORDS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

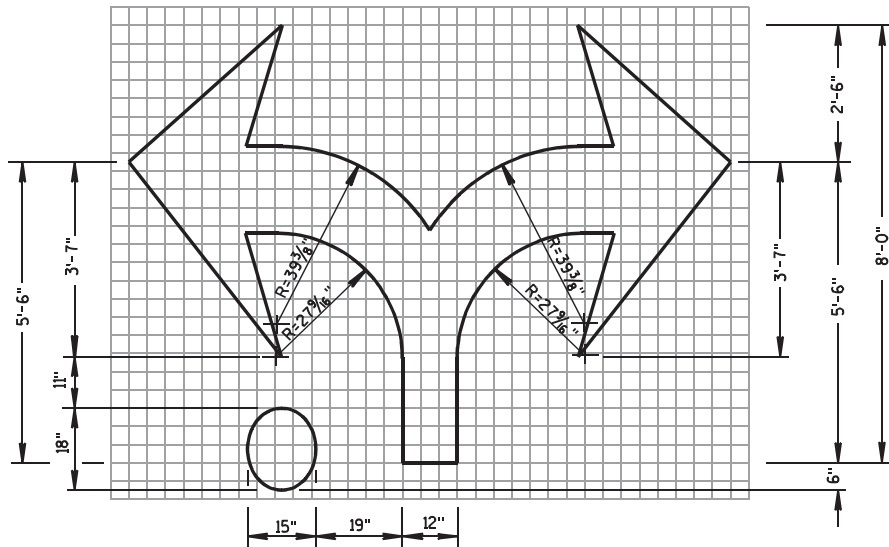
APPROVED
5-13-10 /S/ Thomas N. Notbohm
DATE STATE TRAFFIC ENGINEER OF DESIGN
FHWA



TYPE 2R



TYPE 3R

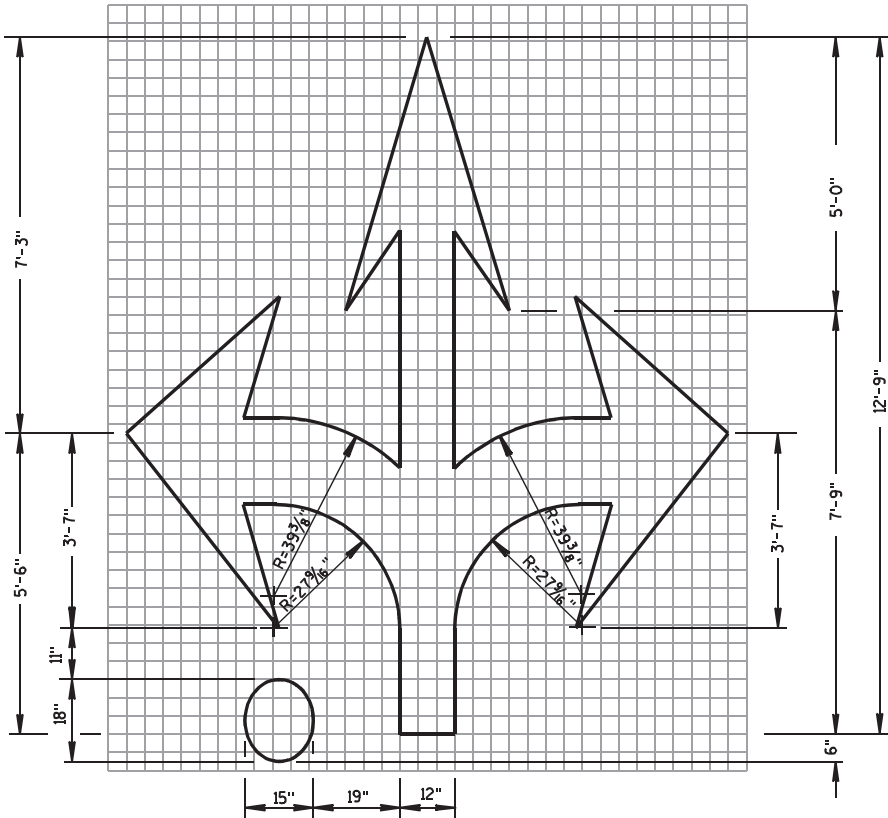


TYPE 7R

GENERAL NOTES

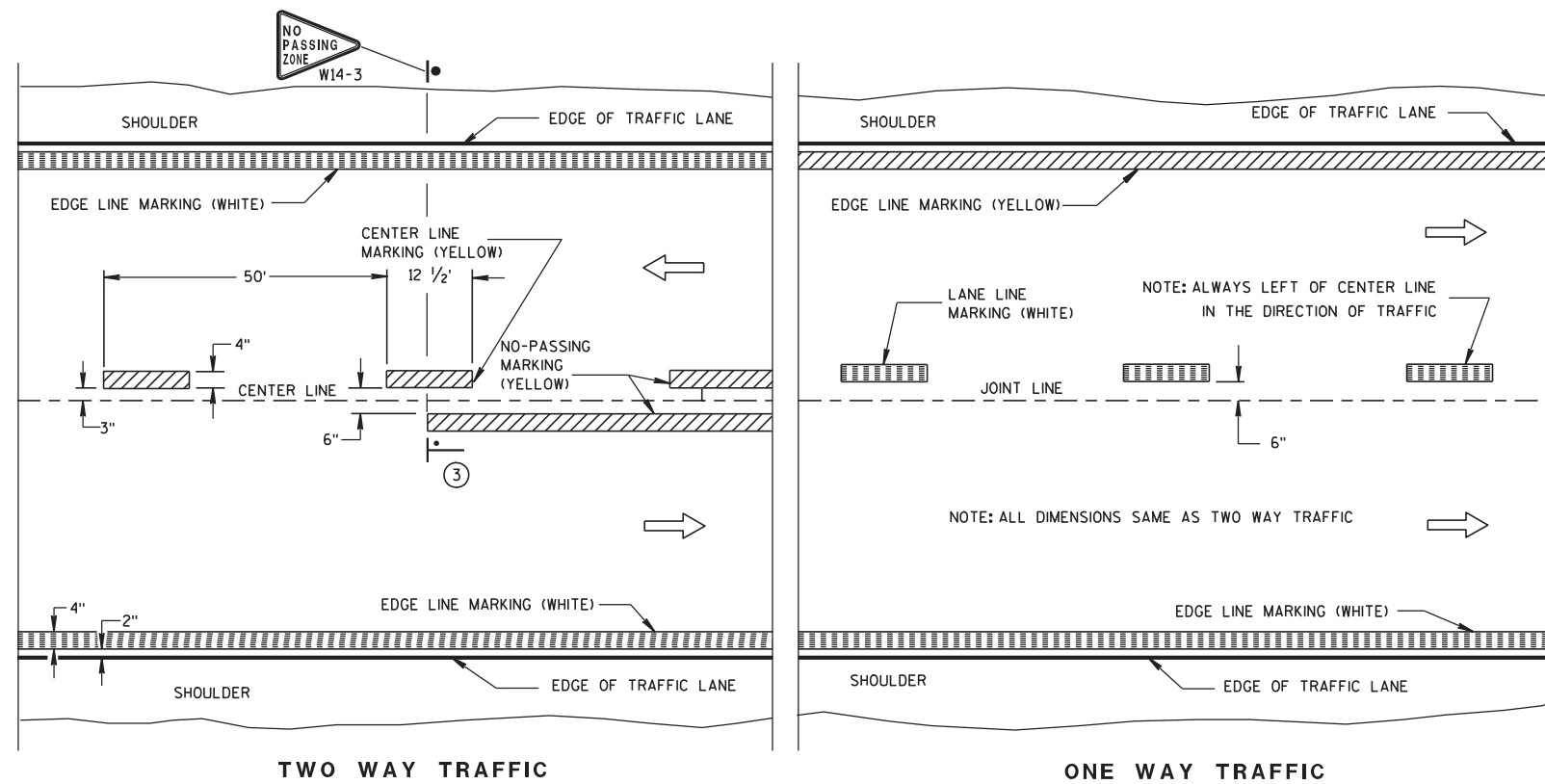
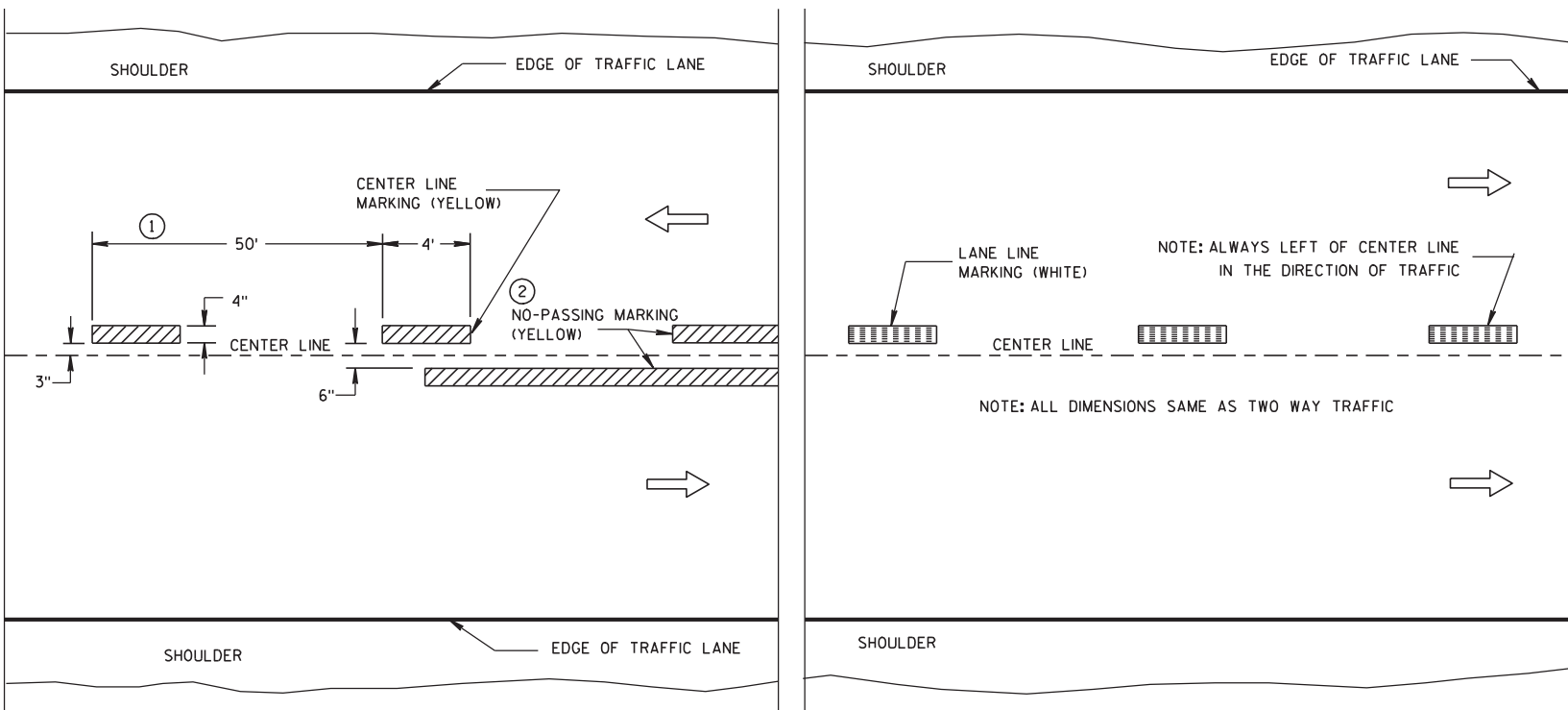
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

ALL LETTERS, ARROWS AND SYMBOLS SHALL BE IN CONFORMANCE WITH REQUIREMENTS INCLUDED IN "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKING" BOOK BY THE FEDERAL HIGHWAY ADMINISTRATION. ALL LETTERS, ARROWS AND SYMBOLS SHALL BE WHITE AND REFLECTORIZED. SMALL DIFFERENCES IN DIMENSIONS WITHIN THE TOLERANCES OF THAT BOOK ARE ACCEPTABLE.



TYPE 6R

ROUNDABOUT ARROWS	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 5/13/10 DATE	/S/ Thomas N. Notbohm STATE TRAFFIC ENGINEER OF DESIGN
FHWA	

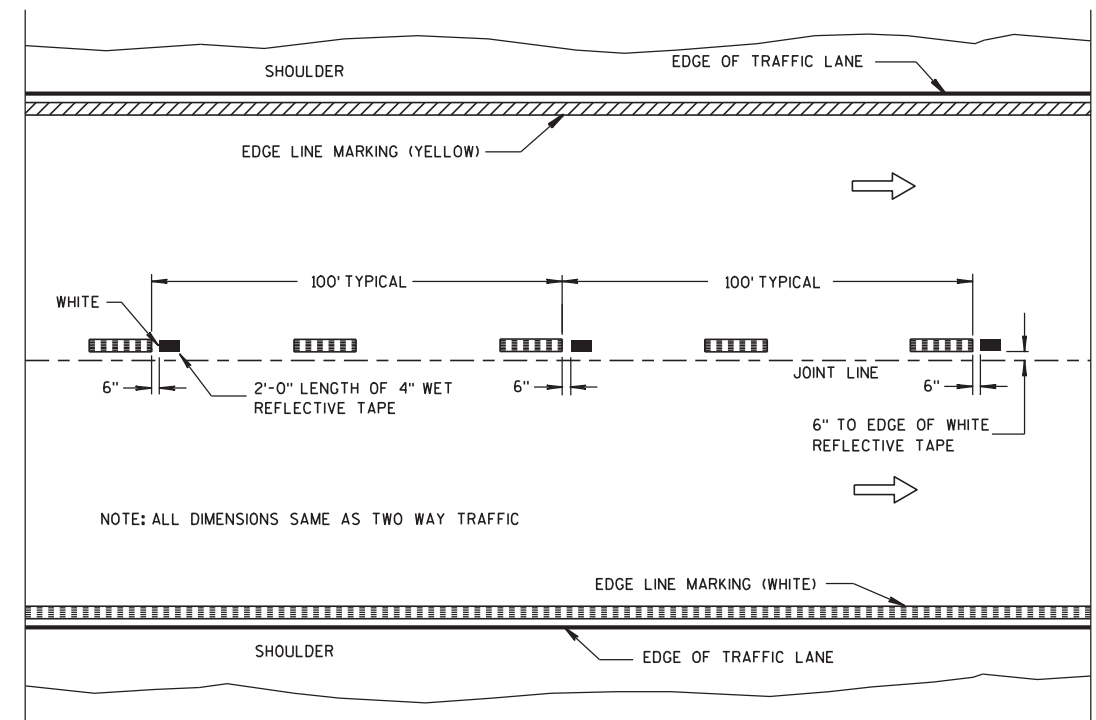
**PERMANENT PAVEMENT MARKING****TEMPORARY (INTERMEDIATE) PAVEMENT MARKING**
(SHOWS CYCLE FOR TEMPORARY CENTER LINE OR TEMPORARY LANE LINE MARKING)**GENERAL NOTES**

DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.

- ① HALF CYCLE LENGTHS (25'±) WITH 2' MINIMUM STRIPE LENGTHS SHALL BE PROVIDED ON ROADWAYS (INCLUDING TEMPORARY TRAVELED WAYS) WITH REVERSE CURVATURE, CURVATURE OF OVER 5 DEGREES OR WHEN DIRECTED BY THE ENGINEER TO MARK UNUSUAL ALIGNMENT OF THE TRAVELED WAY.
- ② NO PASSING ZONE TEMPORARY PAVEMENT MARKING IS REQUIRED TO BE PLACED, WHERE APPROPRIATE, ALONG WITH CENTERLINE TEMPORARY PAVEMENT MARKING WHEN A SAME DAY PERMANENT PAVEMENT MARKING ITEM IS INCLUDED IN THE CONTRACT.
- ③ NO PASSING ZONE MARKINGS ARE PLACED ACCORDING TO "T" MARKINGS. IF EXISTING NO PASSING ZONE W14-3 SIGNS ARE BEYOND 50 FEET IN EITHER DIRECTION, THE SIGNS SHALL BE MOVED TO THE "T" MARKINGS.

NOTE

ARROW SYMBOL (→) SHOWS DIRECTION OF TRAVEL

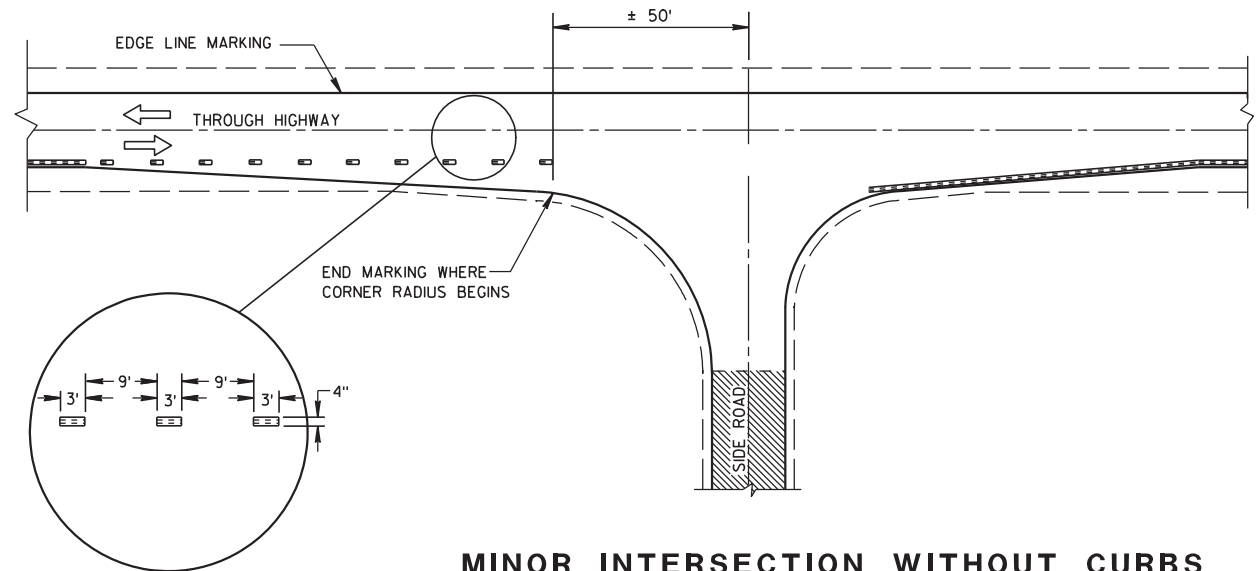
**LEGEND**

- "T" MARKING
- POST MOUNTED SIGN

PAVEMENT MARKING
(MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

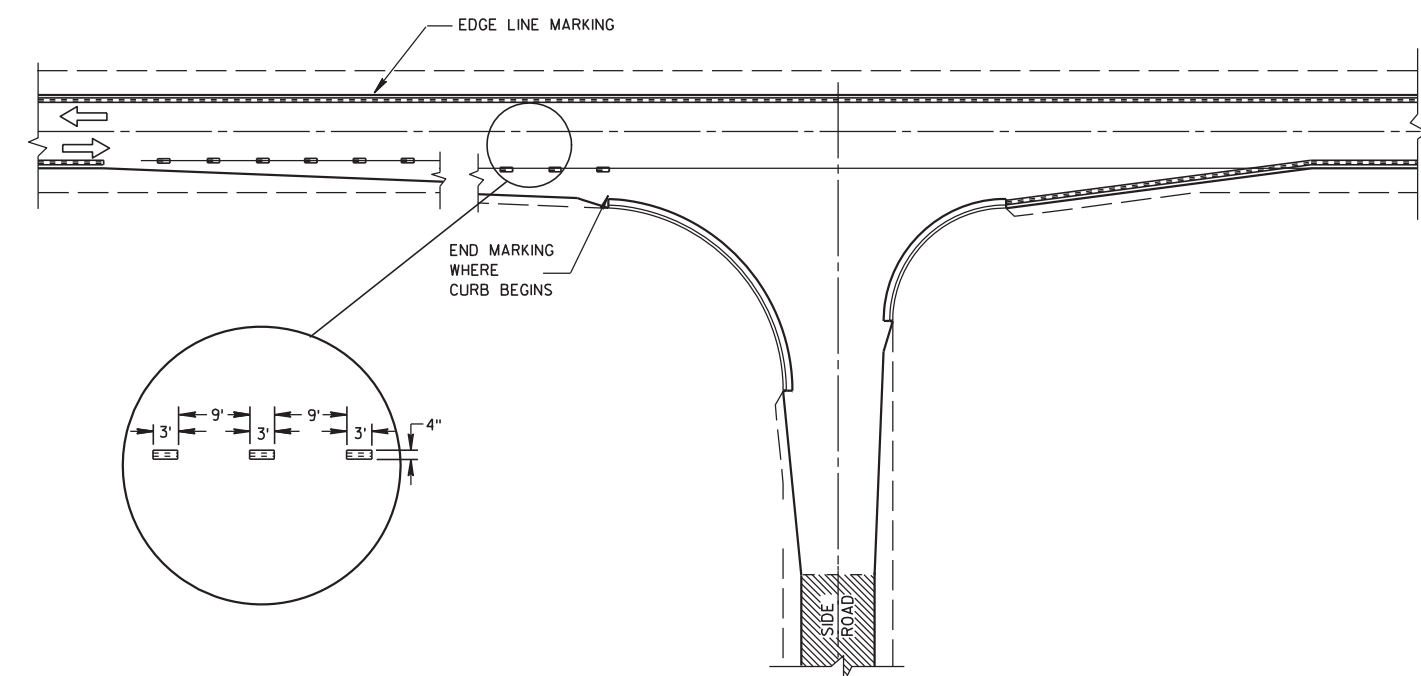
APPROVED
5-13-10 /S/ Thomas N. Notbohm
DATE STATE TRAFFIC ENGINEER OF DESIGN
FHWA



MINOR INTERSECTION WITHOUT CURBS

⑦

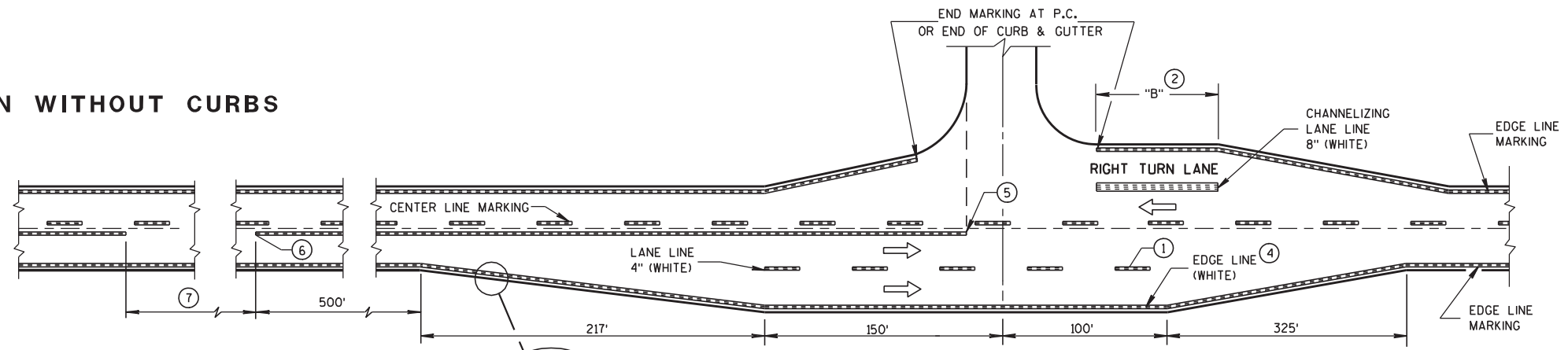
POSTED SPEED (MPH)	MINIMUM DISTANCE BETWEEN ZONES (FEET)
25 - 30	528
35 - 40	528
45 - 50	686
55	792



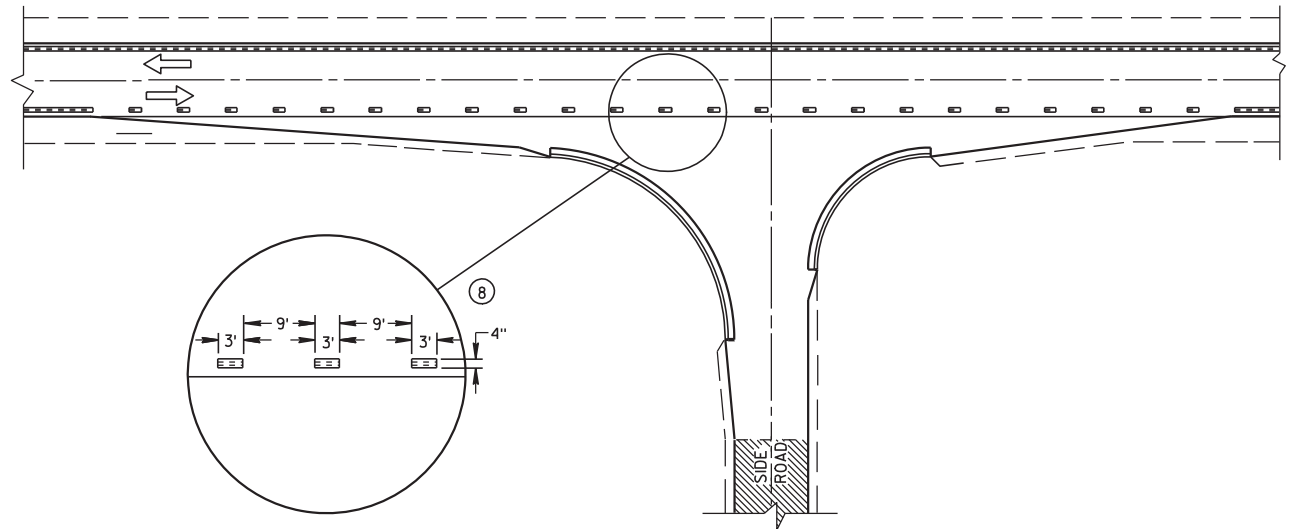
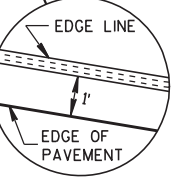
MINOR INTERSECTION WITH CURBS
(TYPICAL MARKING)

GENERAL NOTES

- EDGE LINES SHALL BE OMITTED THROUGH INTERSECTIONS. EDGE LINES SHALL BE CONTINUED THROUGH DRIVEWAYS.
- ① WHEN DISTANCE "A" IS LESS THAN 250 FEET, OMIT LANE LINE.
 - ② WHEN DISTANCE "B" IS LESS THAN 100 FEET, OMIT CHANNELIZING LANE LINE.
 - ③ ALTERNATIVE MARKING SHALL BE PROVIDED WHEN SPECIFIED IN THE CONTRACT. TYPICAL SITUATIONS WHERE THIS MARKING MAY BE REQUIRED ARE WHERE THE INTERSECTION IS ON A SHARP HORIZONTAL CURVE OR CREST VERTICAL CURVE IN AN UNLIGHTED AREA SUCH THAT THE EDGE LINE MAY BE MISLEADING TO THE MOTORIST OR DISAPPEAR FROM SIGHT.
 - ④ THE EDGE LINE IN THE TAPER AREAS OF THE BYPASS LANE AND THE BYPASS LANE SHALL BE LOCATED 1-FOOT FROM EDGE OF PAVEMENT TO THE OUTSIDE EDGE OF EDGE LINE.
 - ⑤ BARRIER LINE ENDS AT SIDE ROAD PAVEMENT/SURFACE EDGE EXTENSION.
 - ⑥ BARRIER LINE STARTS 500 FEET PRIOR TO THE BYPASS TAPER.
 - ⑦ IF THE DISTANCE BETWEEN 2 SUCCESSIVE NO-PASSING ZONES IS LESS THAN THE MINIMUM DISTANCE BETWEEN ZONES, CONNECT THE 2 ZONES.
 - ⑧ 3' LINE 9' GAP, EXCEPT RETRACE THE EXISTING LINE - GAP PATTERN WHERE EXISTING MARKINGS ARE IN PLACE.
- ARROW SYMBOL (➡) SHOWS DIRECTION OF TRAVEL

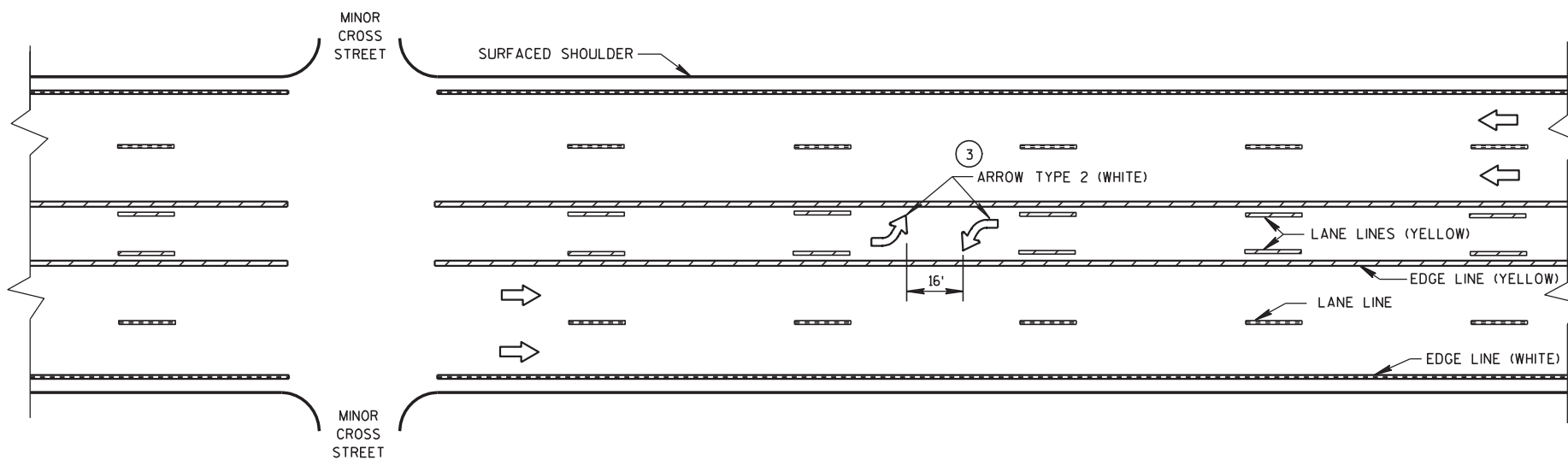


MAJOR INTERSECTIONS
(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANES)



MINOR INTERSECTION WITH CURBS
③ (FOR SPECIAL CONDITIONS AS SPECIFIED)

PAVEMENT MARKING (INTERSECTIONS)
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

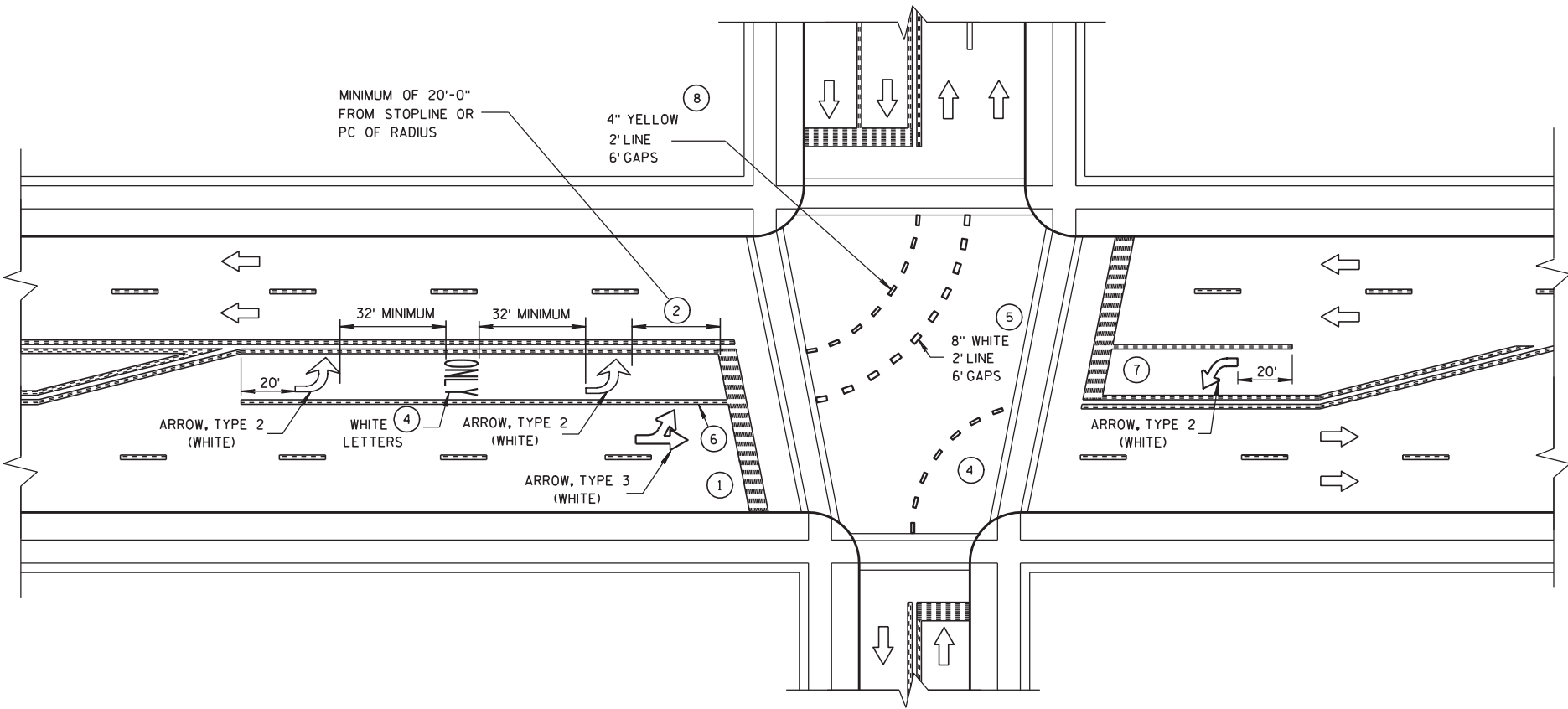


TWO WAY LEFT TURN LANE

GENERAL NOTES

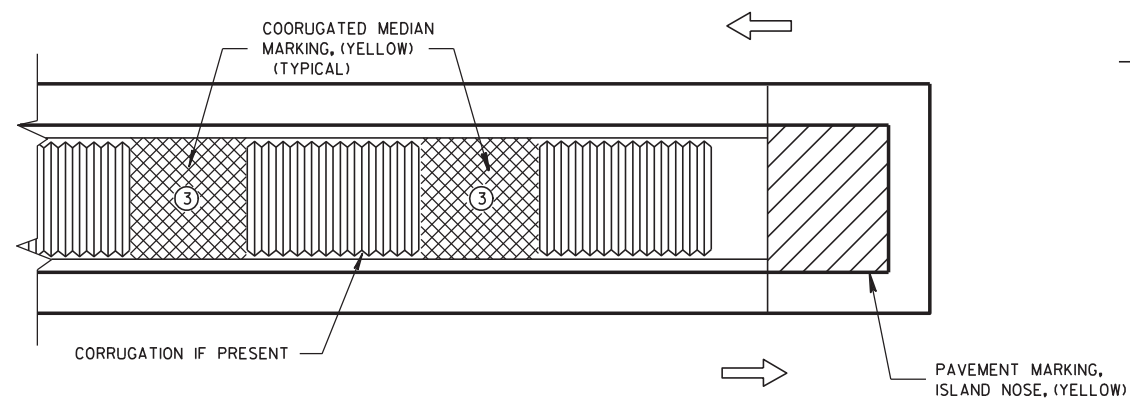
- ① STOP BAR IS REQUIRED ONLY WHEN SPECIFIED IN THE CONTRACT.
- ② DISTANCE MAY BE ADJUSTED TO ACCOMODATE SHORT LEFT TURN LANES. AS APPROVED BY THE ENGINEER.
- ③ A SET OF ARROWS IS REQUIRED EVERY 400' OR NEAR INTERSECTIONS OR DRIVEWAYS WITH TURNING TRAFFIC.
- ④ ADD EXTRA ARROW AND ONLY PER 160' OR WHEN ON A CURVE.
- ⑤ 8" WHITE WITH 2' LINE 6' GAPS FOR DUAL TURN LANE.
- ⑥ 8" WHITE
- ⑦ ADD SECOND ARROW WHEN TURN BAY IS GREATER THAN OR EQUAL TO 108'.
- ⑧ REQUIRED ONLY WHEN SPECIFIED IN THE CONTRACT.

NOTE:
ARROW SYMBOL (➡)
SHOWS DIRECTION OF TRAVEL

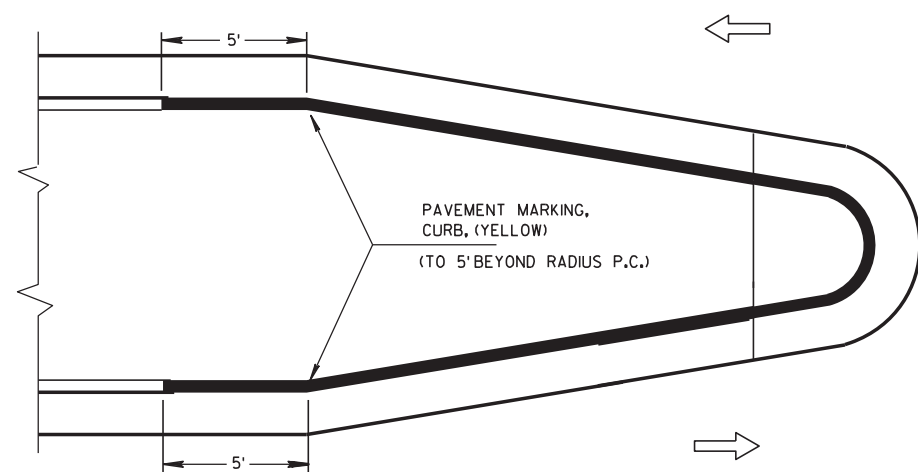


PAVEMENT MARKING
(LEFT TURN LANE)

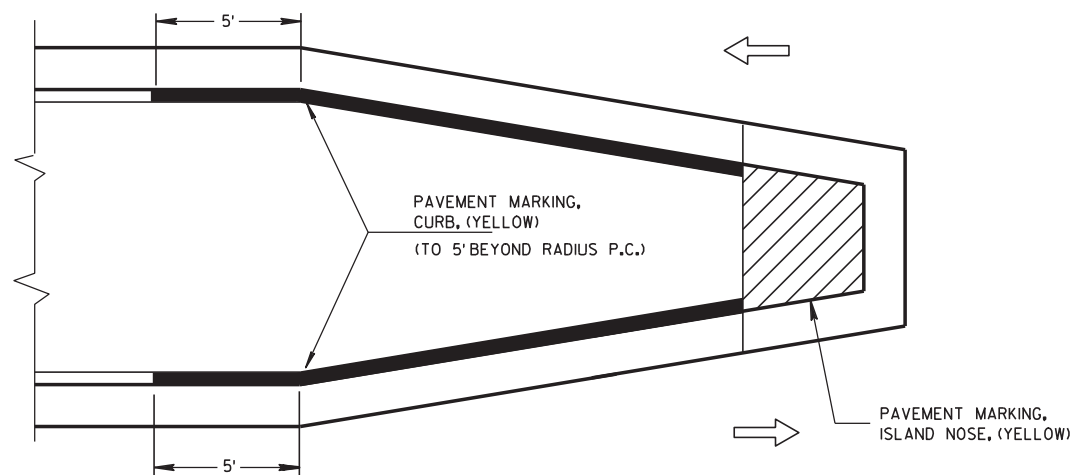
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



MEDIAN ISLAND WITH SQUARE BLUNT NOSE

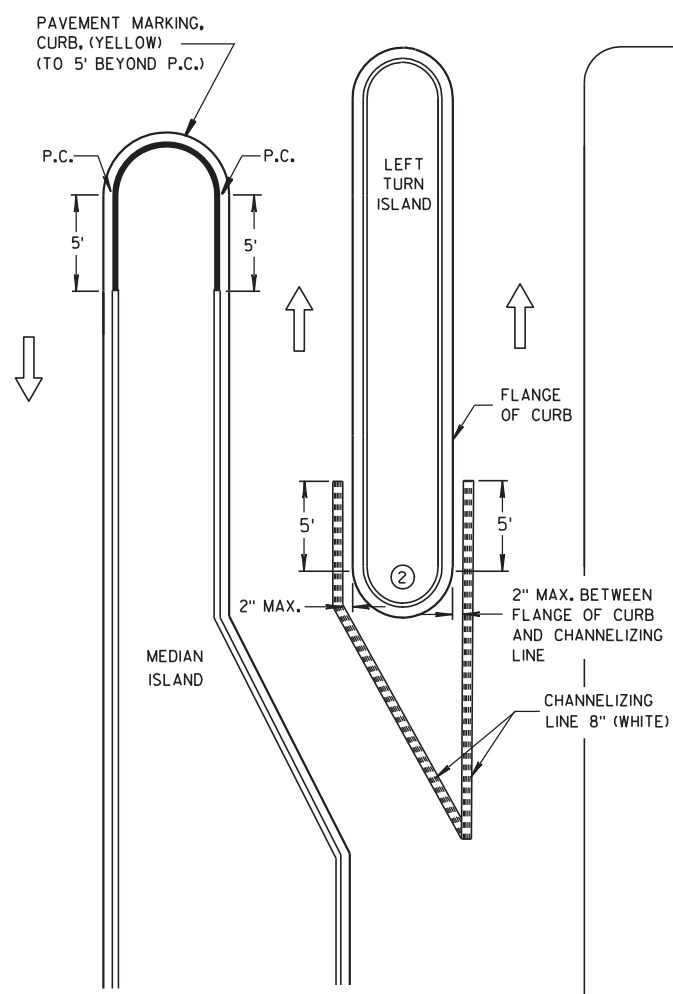


MEDIAN ISLAND WITH ROUND BLUNT NOSE



MEDIAN ISLAND WITH SLOPED NOSE

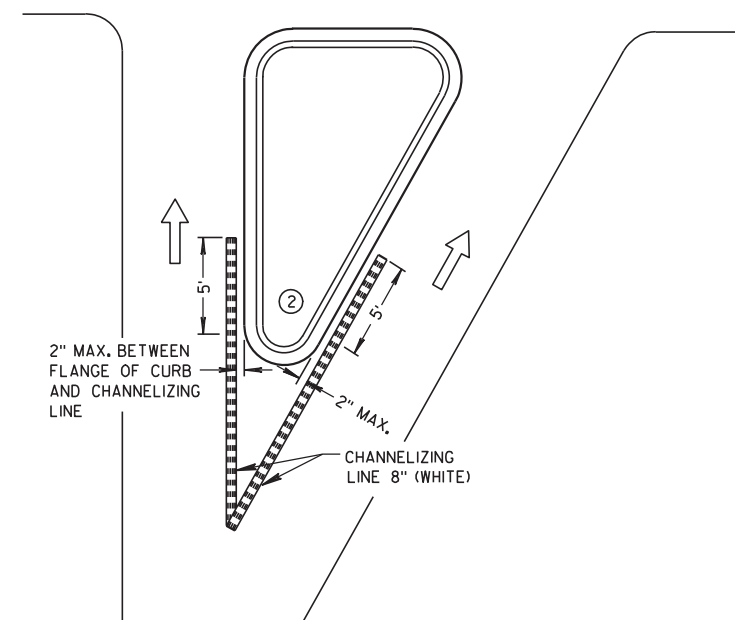
TYPICAL PLACEMENT OF PAVEMENT MARKING ON MEDIAN ISLANDS



LEFT TURN & MEDIAN ISLAND

GENERAL NOTES

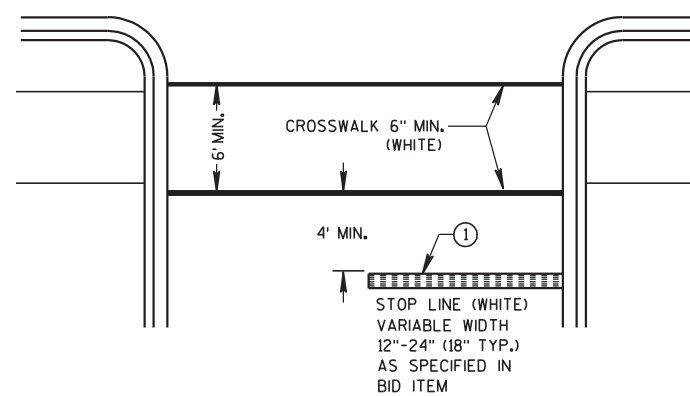
- ① STOP LINE IS REQUIRED ONLY WHEN SPECIFIED IN THE CONTRACT.
- ② DO NOT MARK CURB NOSES THAT SEPARATE LANES OF TRAFFIC TRAVELING IN THE SAME DIRECTION.
- ③ WHEN CONCRETE CORRUGATED MEDIAN IS CONSTRUCTED TO SEPARATE TRAFFIC OPERATING IN THE OPPOSING DIRECTION YELLOW PAVEMENT MARKING SHALL BE APPLIED TO THE FLAT PORTION OF THE CONCRETE CORRUGATED MEDIAN. THE ITEM OF PAVEMENT MARKING, CONCRETE CORRUGATED MEDIAN, WILL BE MEASURED IN PLACE AND ACCEPTED IN ACCORDANCE WITH THE CONTRACT AND PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE FOOT.



RIGHT TURN ISLAND

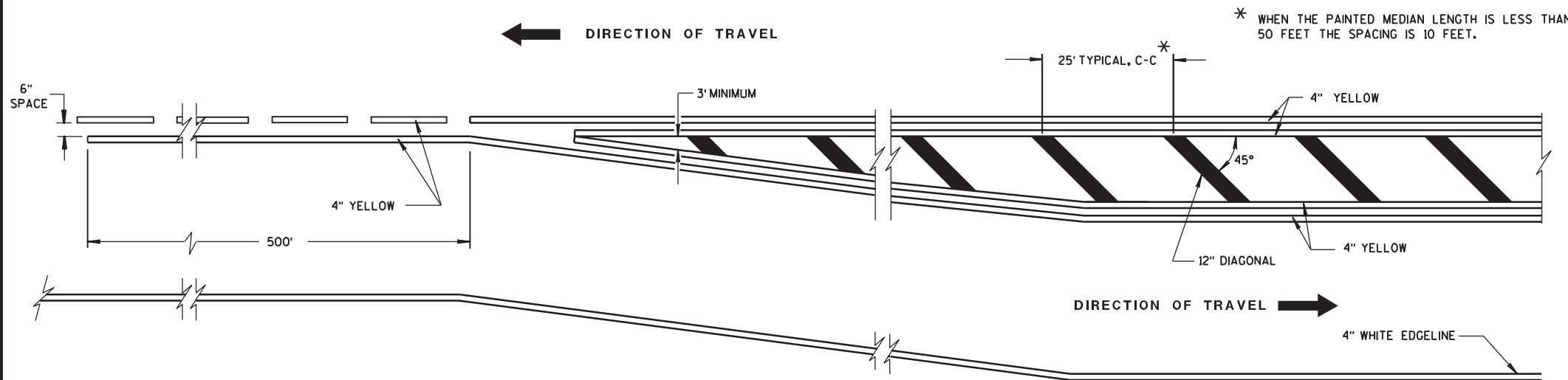
LEGEND

- ISLAND NOSE MARKING
- CURB MAKING
- CORRUGATED MEDIAN MARKING
- DIRECTION OF TRAVEL



STOP LINE AND CROSSWALK

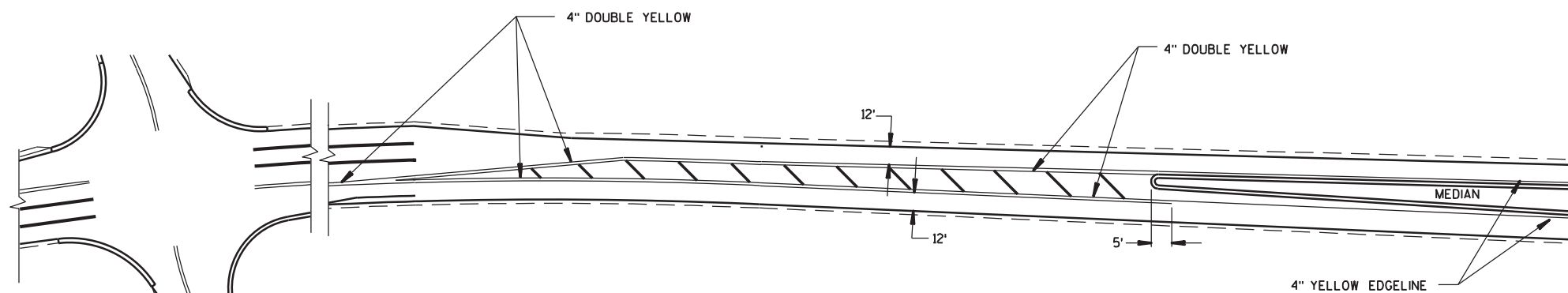
PAVEMENT MARKING
(ISLANDS, STOP LINE &
CROSS WALK)STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



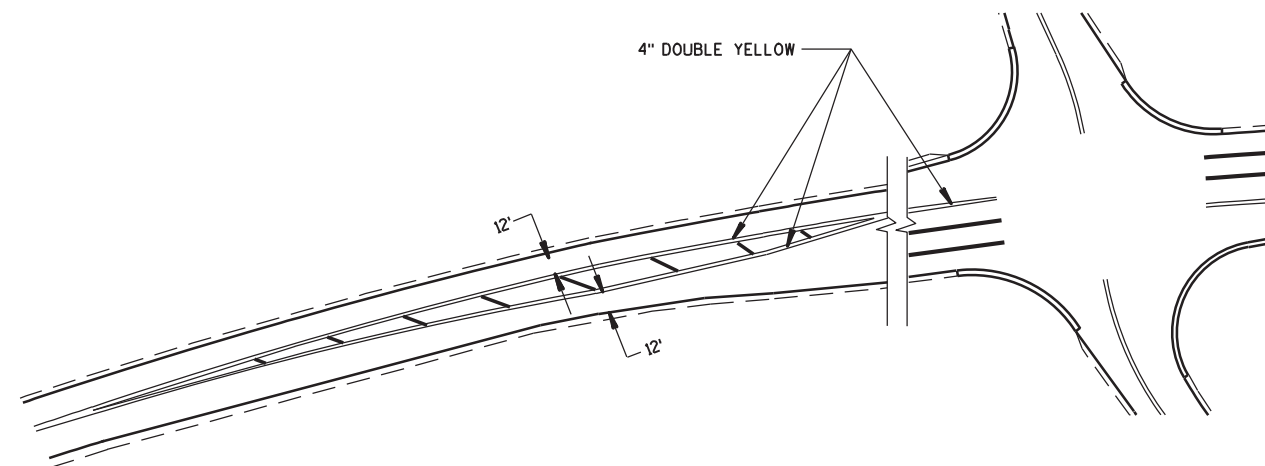
MEDIAN ISLAND DETAIL

GENERAL NOTE

DIAGONALS ARE OPTIONAL WHEN PAINTED ISLAND IS LESS THAN 6 FEET AT WIDEST POINT.

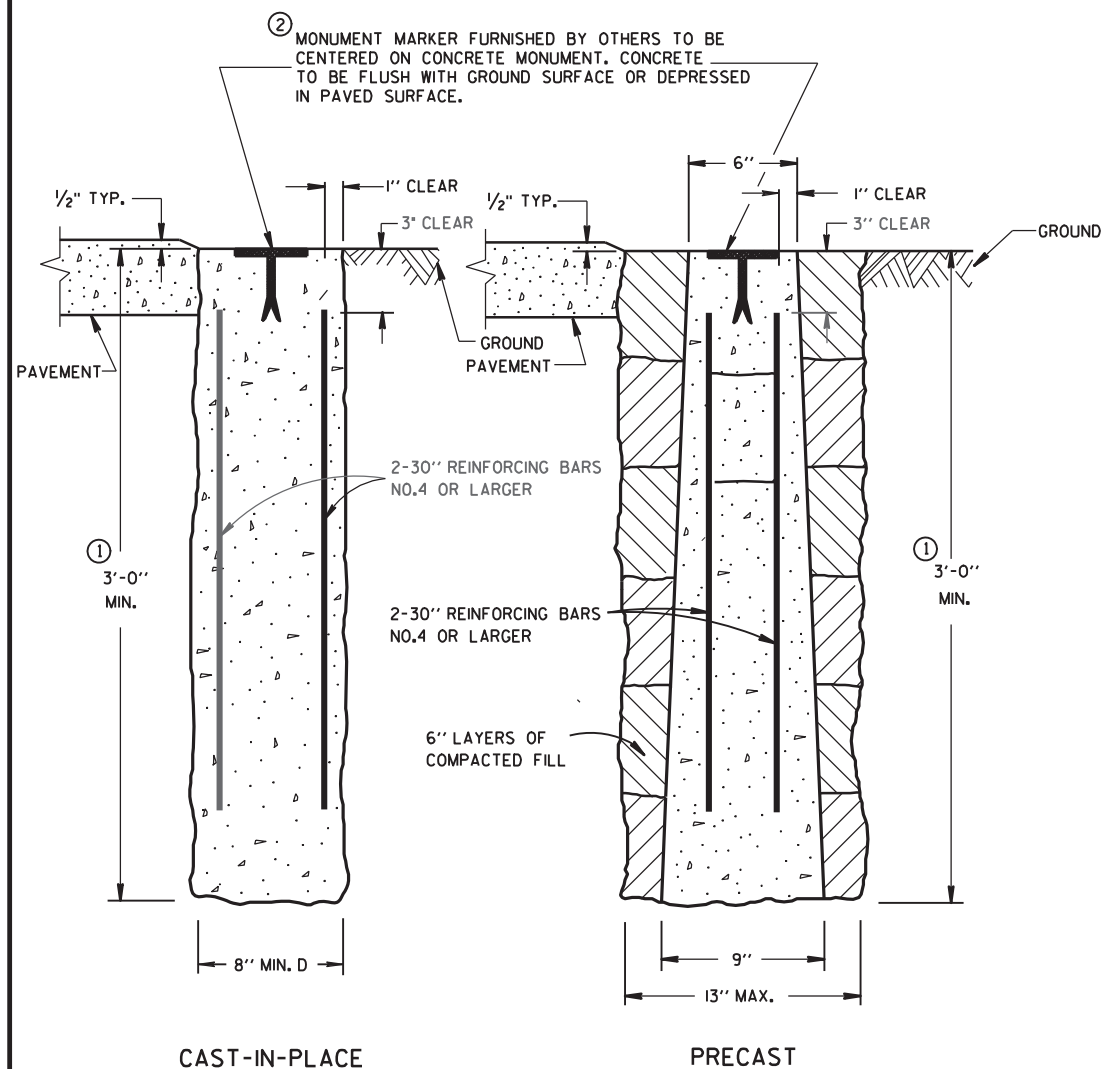


APPROACH MARKINGS FOR OTHER MEDIAN TYPES

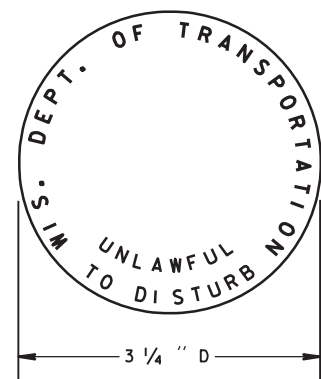
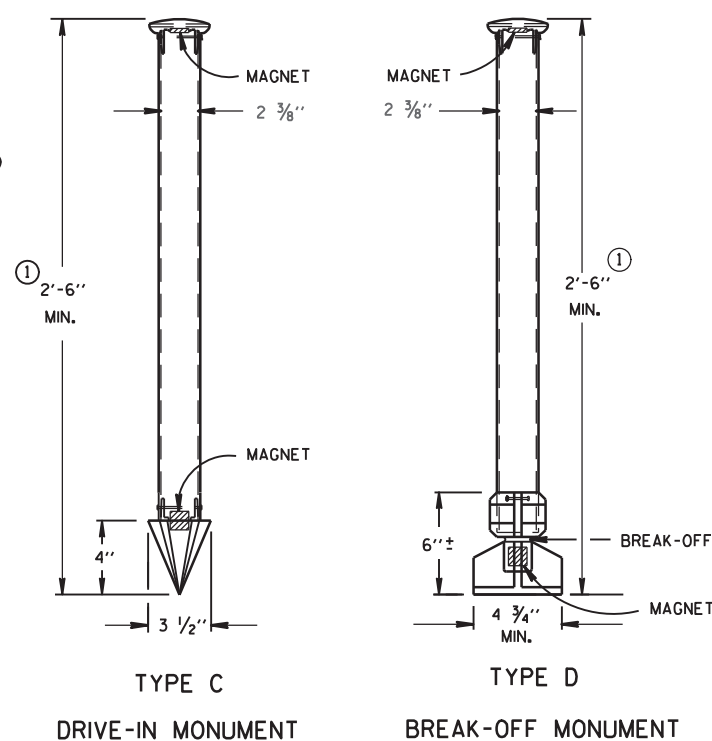
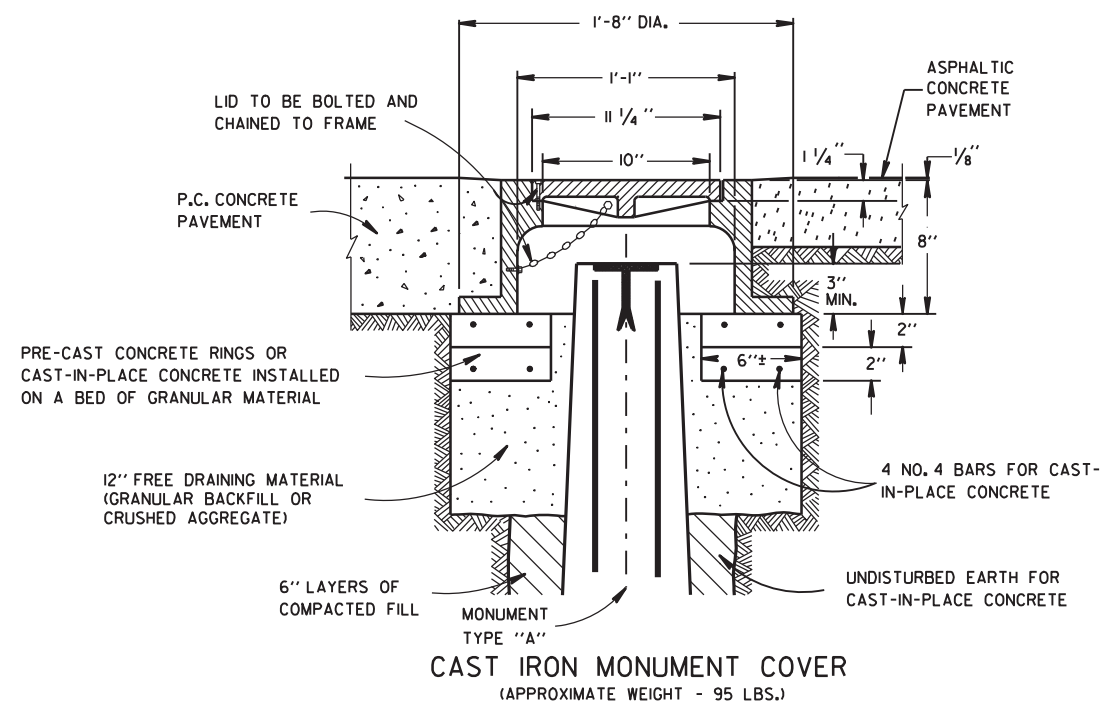


NON APPROACH MARKINGS

MEDIAN ISLAND MARKING	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 2-5-09 DATE	/S/ Thomas N. Notbohm STATE TRAFFIC ENGINEER OF DESIGN
FHWA	



CAST-IN-PLACE

CONCRETE MONUMENTS
TYPE A② WIS DOT MONUMENT MARKER LOGO
FOR TYPES "A", "C" & "D"TYPE C
DRIVE-IN MONUMENTTYPE D
BREAK-OFF MONUMENTALUMINUM MONUMENTS
(INCLUDES MARKER)

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

DETAILED DRAWINGS OF PROPOSED ALTERNATE DESIGNS FOR METAL MONUMENTS OR MONUMENT COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

INSTALLED METAL MONUMENTS MUST BE EASILY DETECTED WITH A DIP NEEDLE. INSERT PERMANENT MAGNETS SHALL BE ATTACHED NEAR THE TOP AND BOTTOM OF THOSE MONUMENTS CONSTRUCTED OF A METAL ALLOY WHICH IS NOT ATTRACTIVE TO A DIP NEEDLE.

THE CAST IRON MONUMENT COVER SHALL BE A "NON-ROCKING" TYPE. ADJUSTMENT OF THE COVER TO GRADE MAY BE ACCOMPLISHED BY THE USE OF MORTAR AND BRICK, OR BY EITHER PRECAST OR CAST-IN-PLACE REINFORCED CONCRETE GRADE RINGS.

MONUMENTS SHALL BE LOCATED AND PLACED AT THE DIRECTION OF THE ENGINEER.

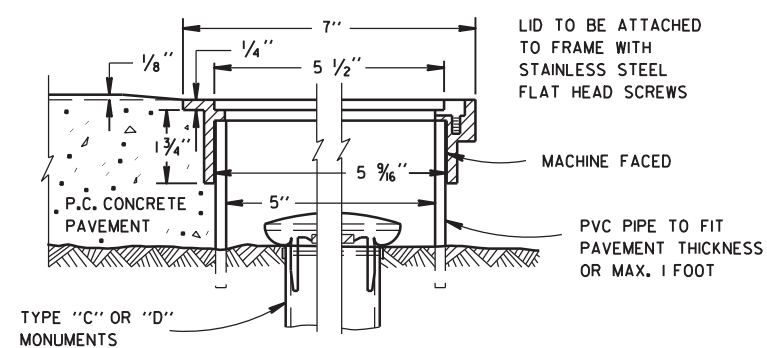
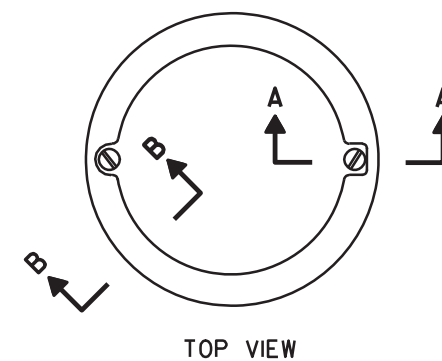
ALUMINUM MONUMENTS AND MONUMENT COVERS SHALL BE MADE FROM AN ALUMINUM AND MAGNESIUM ALLOY AS DETERMINED BY THE MANUFACTURER.

THE MONUMENT COVERS DETAILED ON THIS DRAWING ARE NOT EQUAL ALTERNATES. MONUMENT COVERS SHALL BE CAST IRON UNLESS ALUMINUM IS SPECIFIED ELSEWHERE IN THE CONTRACT.

MONUMENT SHALL BE CAST-IN-PLACE CONCRETE UNLESS PRECAST CONCRETE OR ALUMINUM MONUMENTS ARE SPECIFIED IN THE CONTRACT OR PERMITTED BY THE ENGINEER.

① MINIMUM LENGTH SHALL BE 4'-0" FOR MONUMENTS INSTALLED IN PAVED AREAS.

② AN OFFICIAL COUNTY MONUMENT MARKER SUPPLIED BY A COUNTY MAY BE REQUIRED FOR SOME SECTION CORNERS AND WITNESS MONUMENTS INSTEAD OF THIS WIS DOT MARKER.

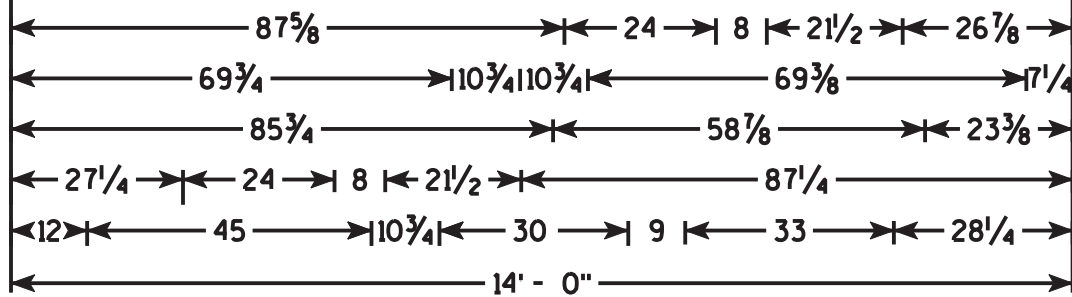
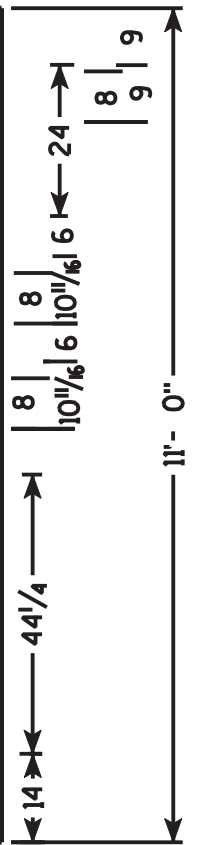
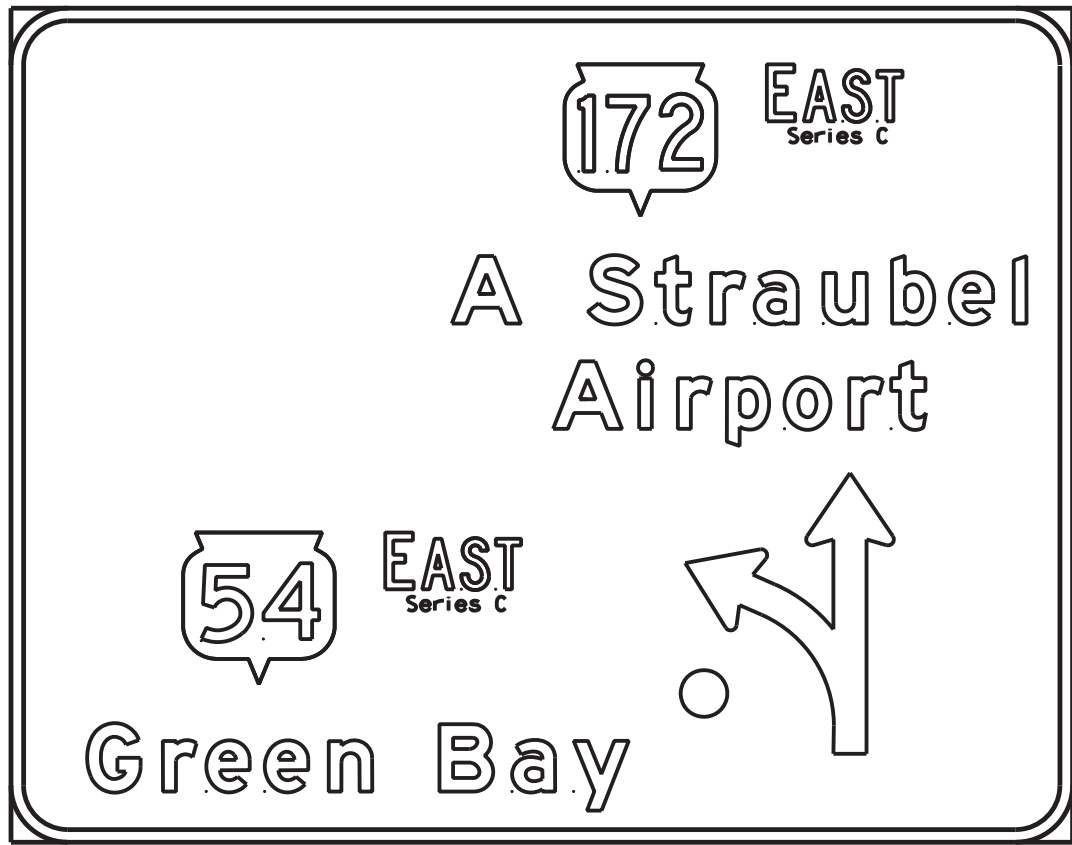
SECTION B-B SECTION A-A
ALUMINUM MONUMENT COVER

(APPROXIMATE WEIGHT 2 LBS.)
(FOR CONCRETE PAVEMENT ONLY)

LANDMARK REFERENCE
MONUMENTS AND COVERS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
9/22/99
DATE
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

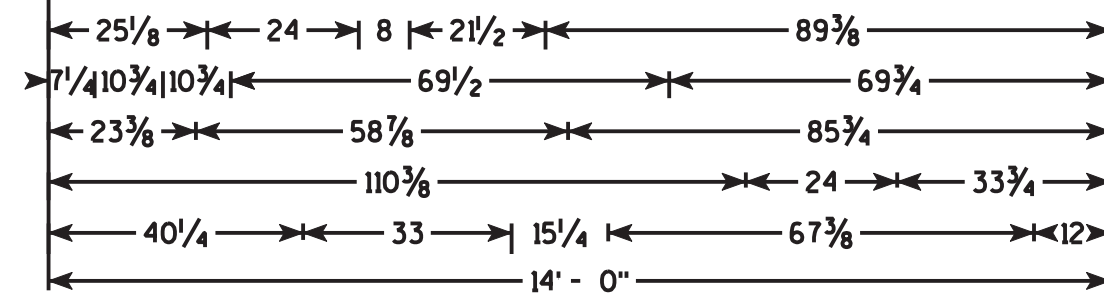
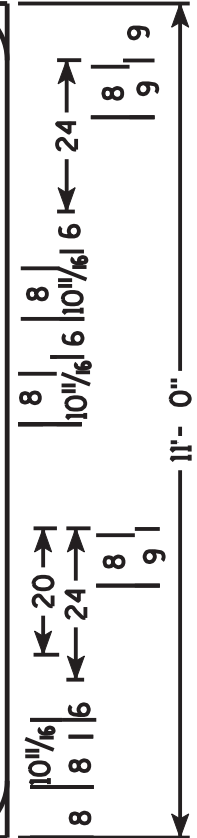
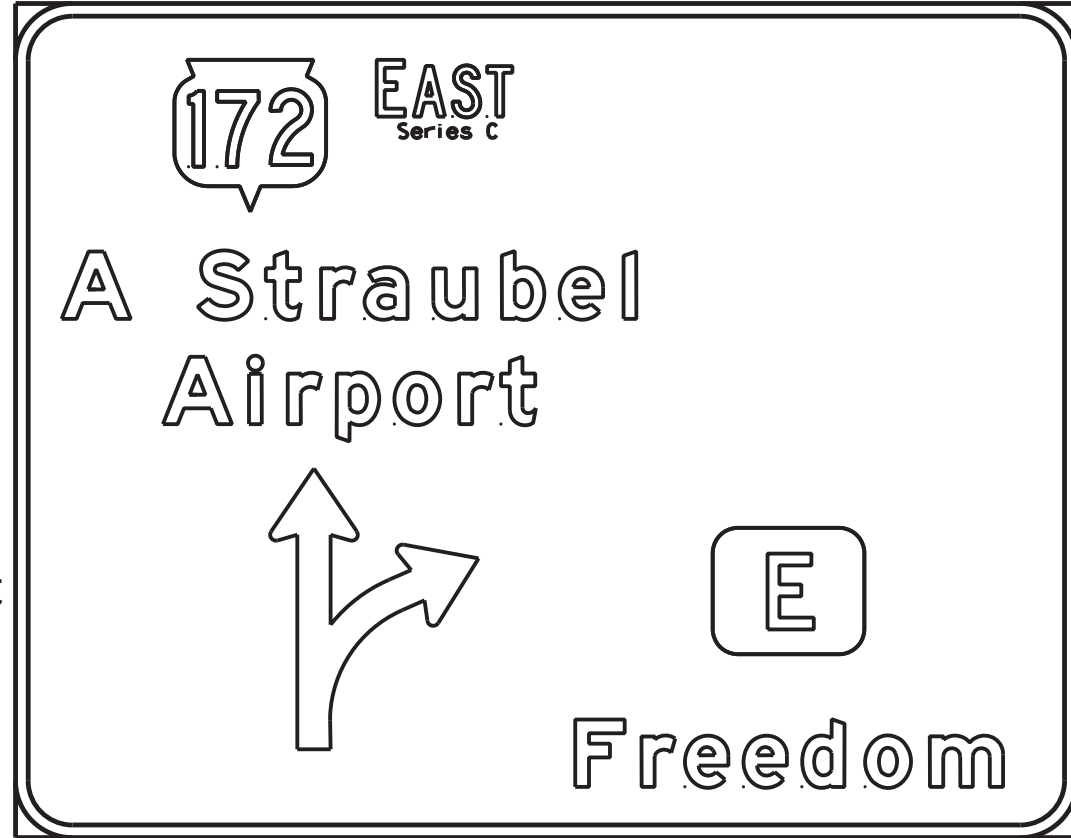


2" Border
12" Radius

306

NOTES

1. All Signs are Type I - Type SH Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Green except as noted
Message - White except as noted
3. Message Series - E Modified except as noted



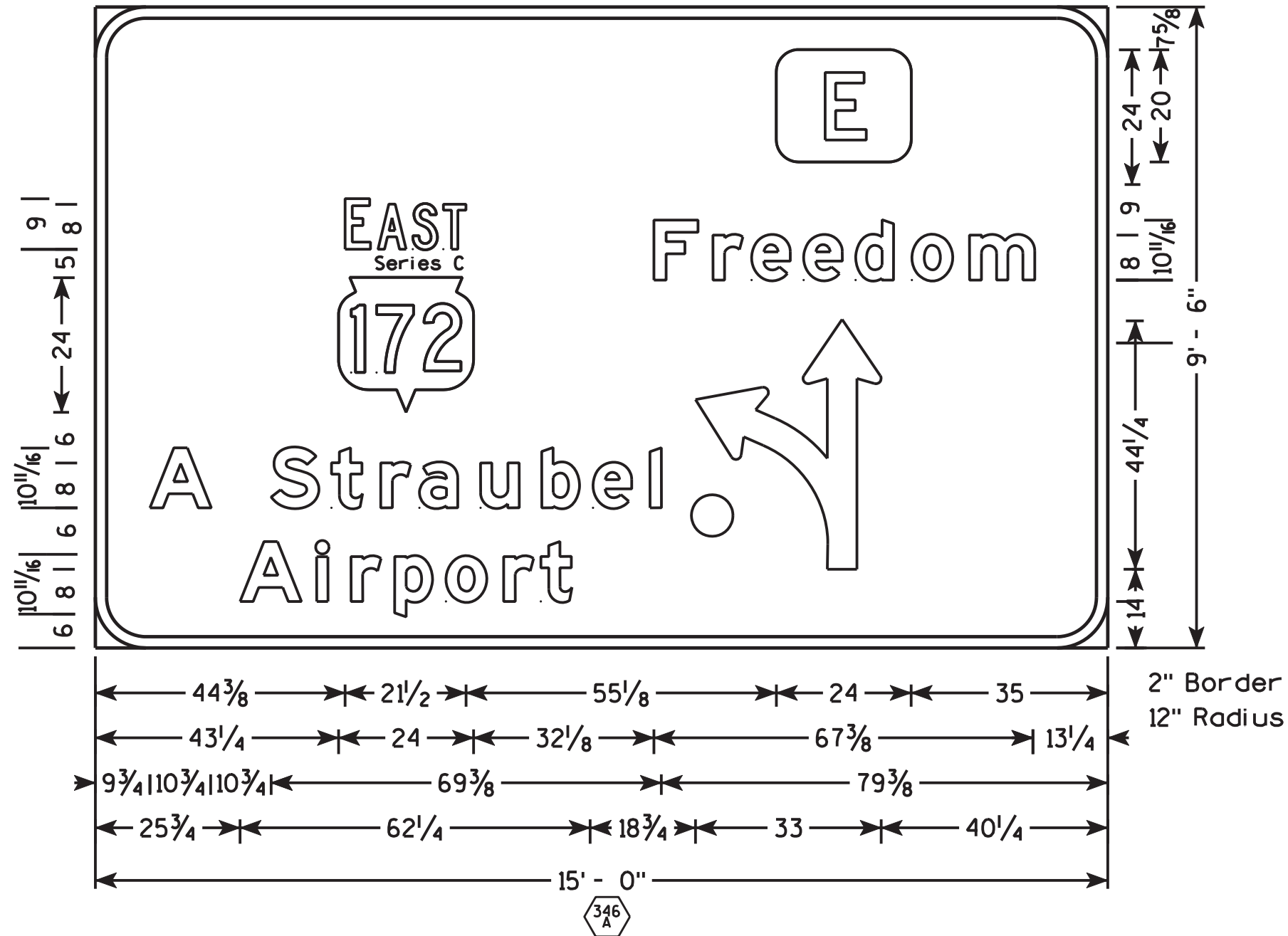
2" Border
12" Radius

306
A

PLAN SHEET PRODUCED
BY WISDOT-NE REGION

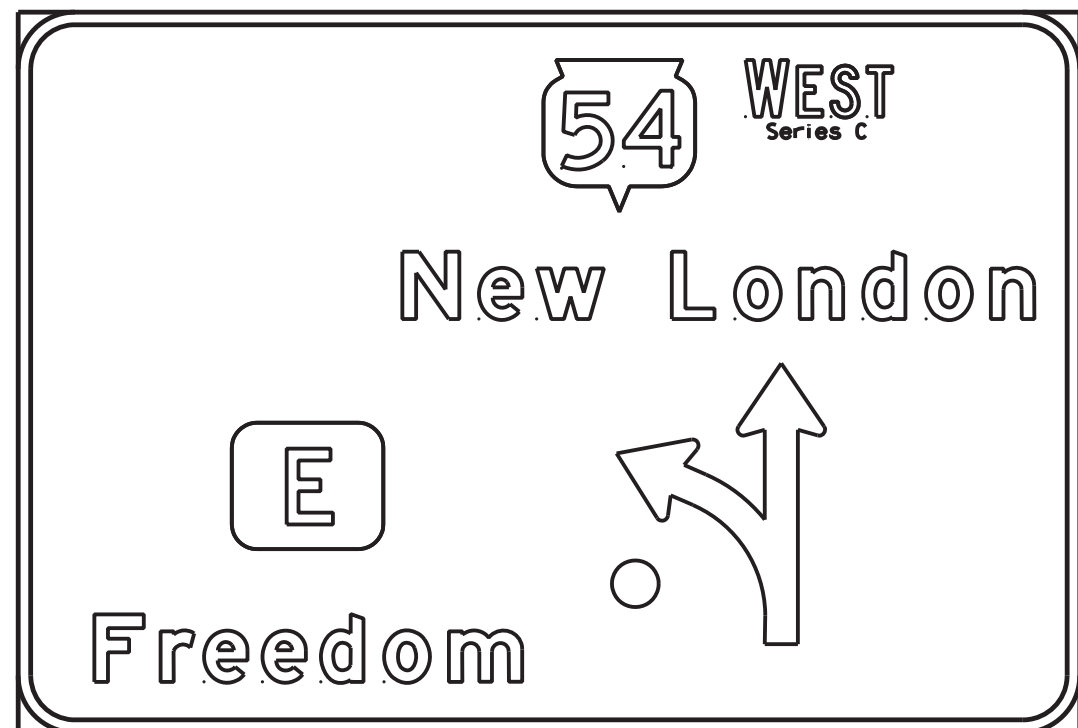
NOTES

1. All Signs are Type I - Type SH Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Green except as noted
Message - White except as noted
3. Message Series - E Modified except as noted



323
A

10 1/16
8 1 9
20
24

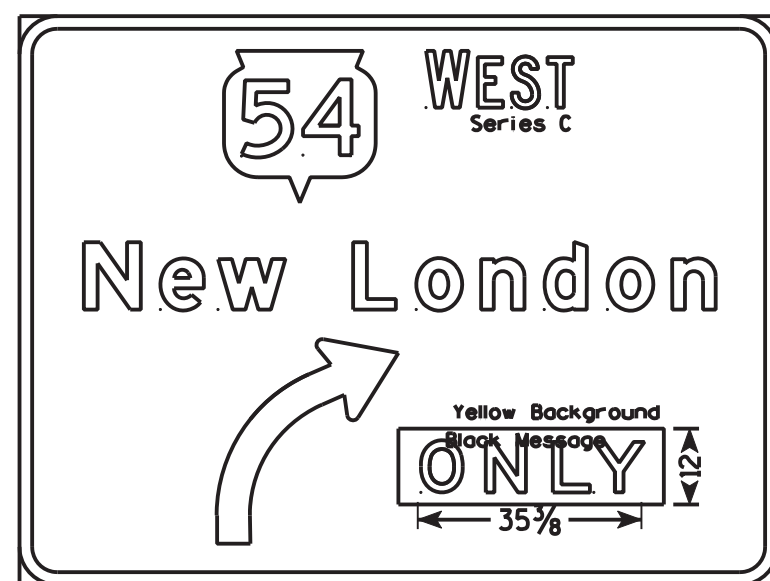


8 1 9
10 1/16
24
20
7 5/8
8 1 9
44 1/4
9' - 6"

83 1/8 24 8 23 1/4 29 5/8
60 7/8 31 7/8 110 3/4 57 1/4 7 1/4
33 3/4 24 110 1/4
12 67 1/2 15 1/4 33 40 1/4
14' - 0"

2" Border
12" Radius

346



8 1 9
10 1/16
24
15
32 1/4
8
6 1/2
14 5/8
5 1/2
7' - 6"

64 3/8 23 1/4 32 3/8
32 3/8 24 23 1/4 32 3/8
10 1/8 31 7/8 110 3/4 57 1/4 10
31 1/4 28 3/4 42 18
10' - 0"

2" Border
9" Radius

NOTES

1. All Signs are Type I - Type SH Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Green except as noted
Message - White except as noted
3. Message Series - E Modified except as noted



8 1 9
10 1/16
24
20
7 5/8
8 1 9
44 1/4
9' - 6"

29 5/8 24 8 23 1/4 83 1/8
7 1/4 31 7/8 110 3/4 57 1/4 60 7/8
85 1/2 24 8 21 1/2 29
28 1/4 33 9 45 110 3/4 30 12
14' - 0"

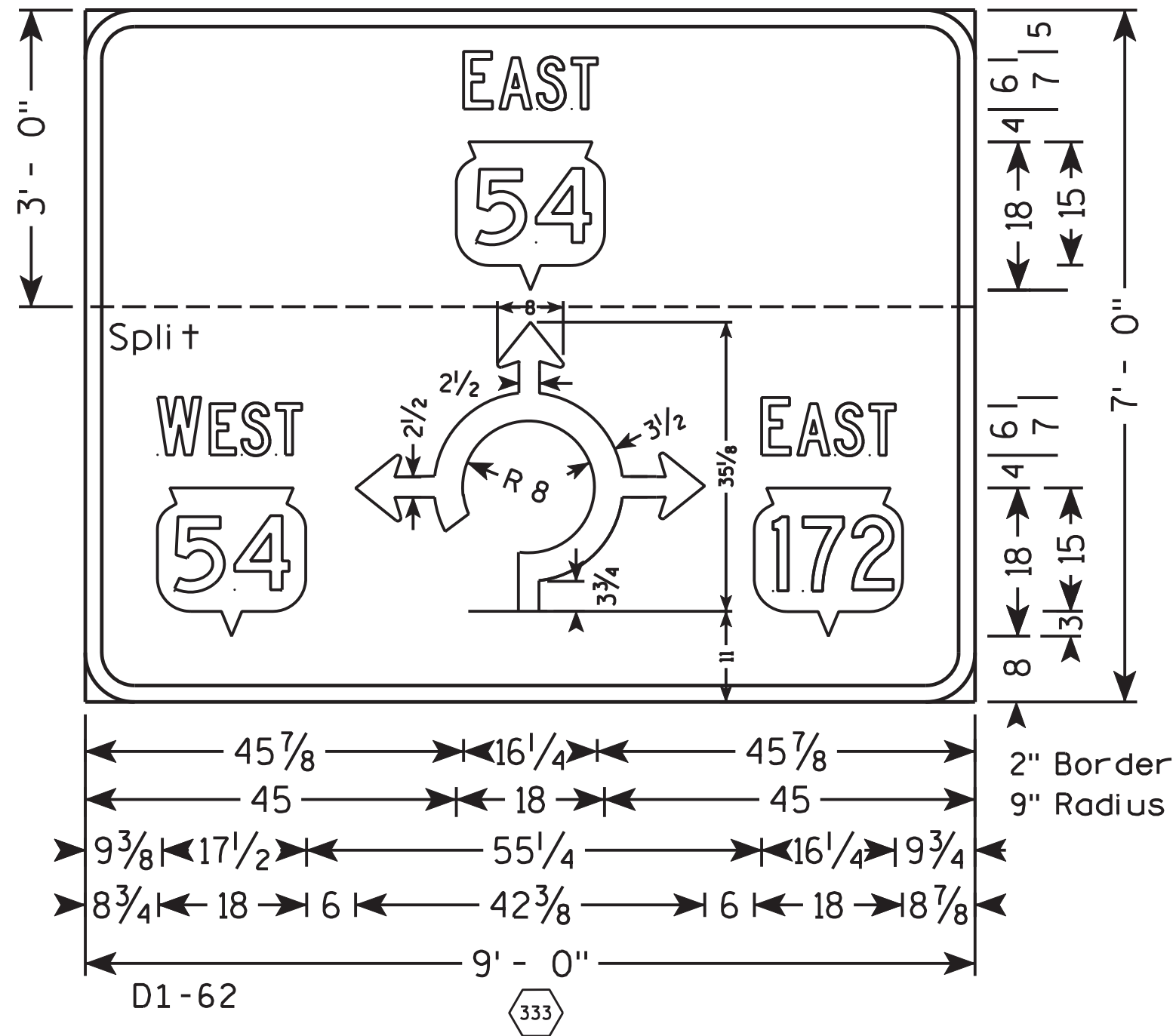
2" Border
12" Radius

323

PLAN SHEET PRODUCED
BY WISDOT-NE REGION

NOTES

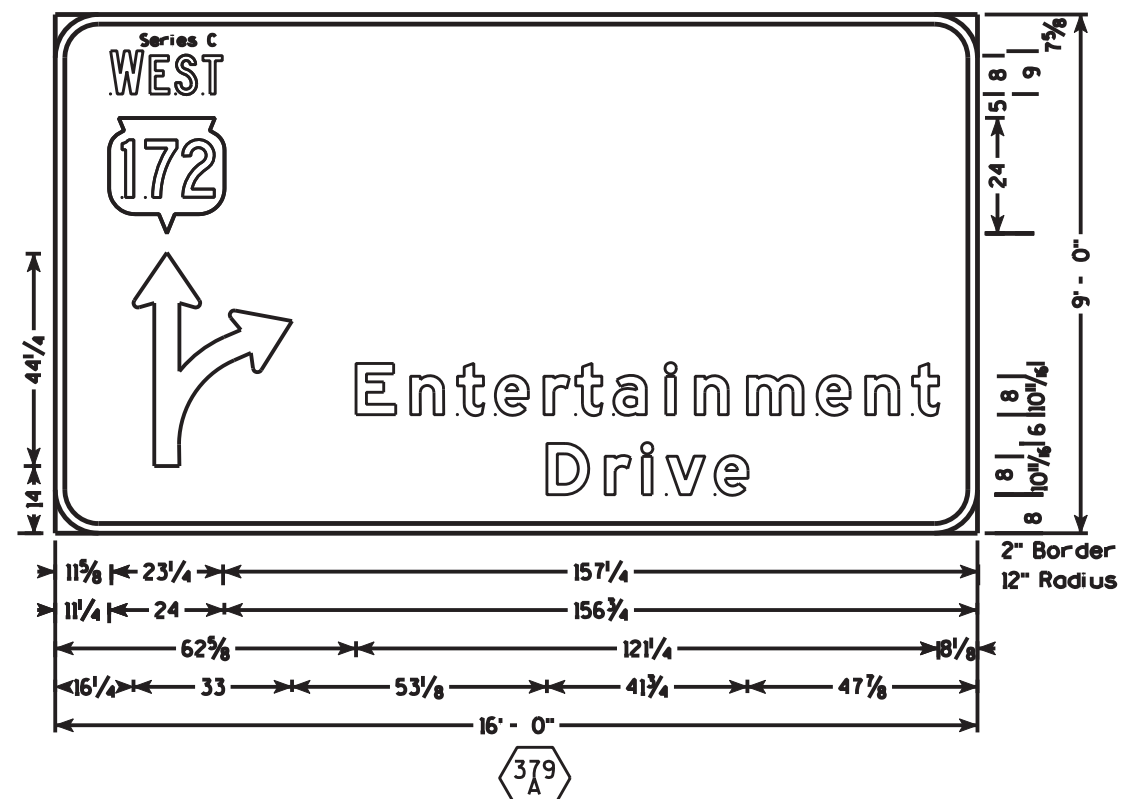
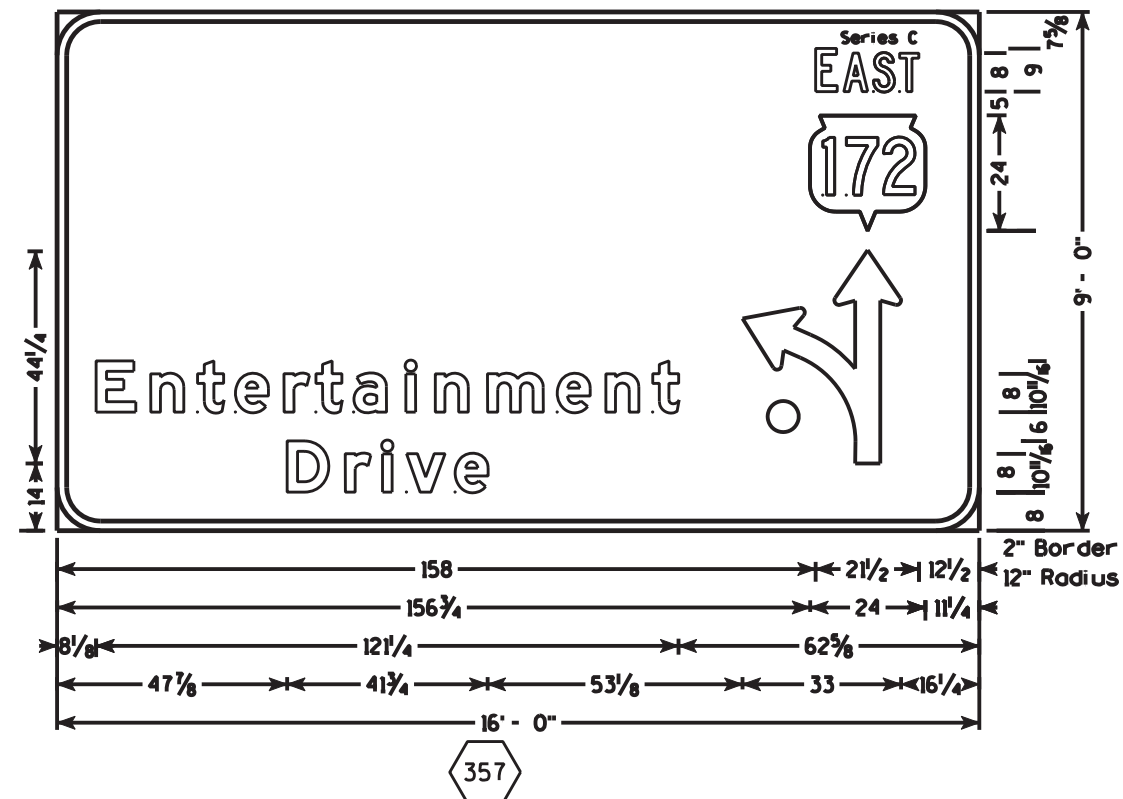
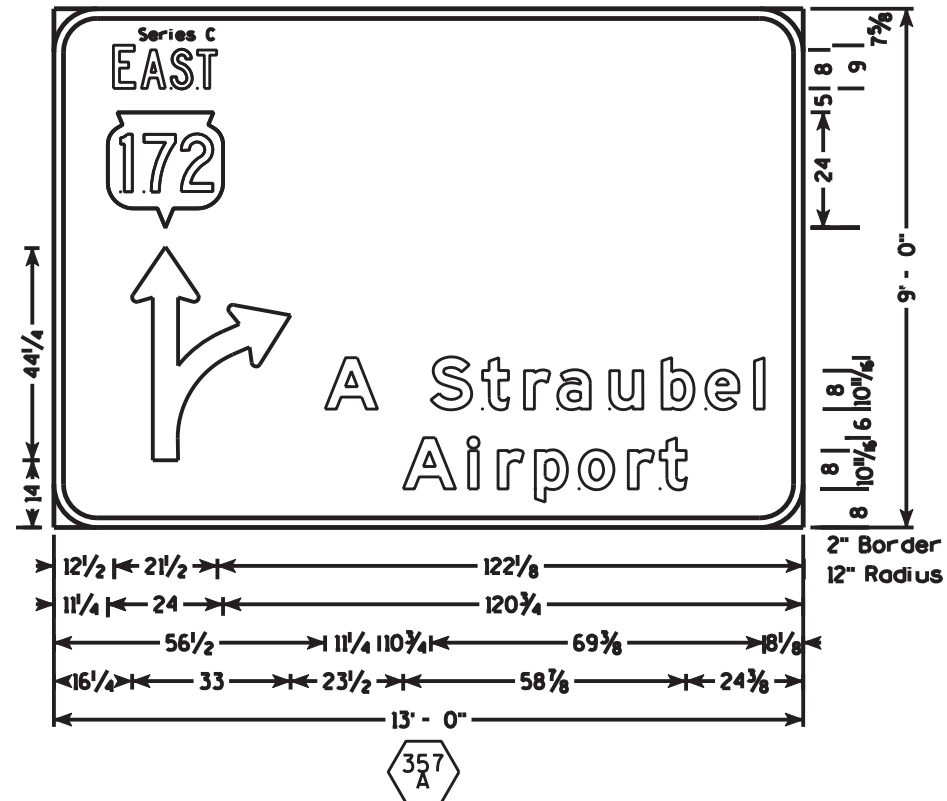
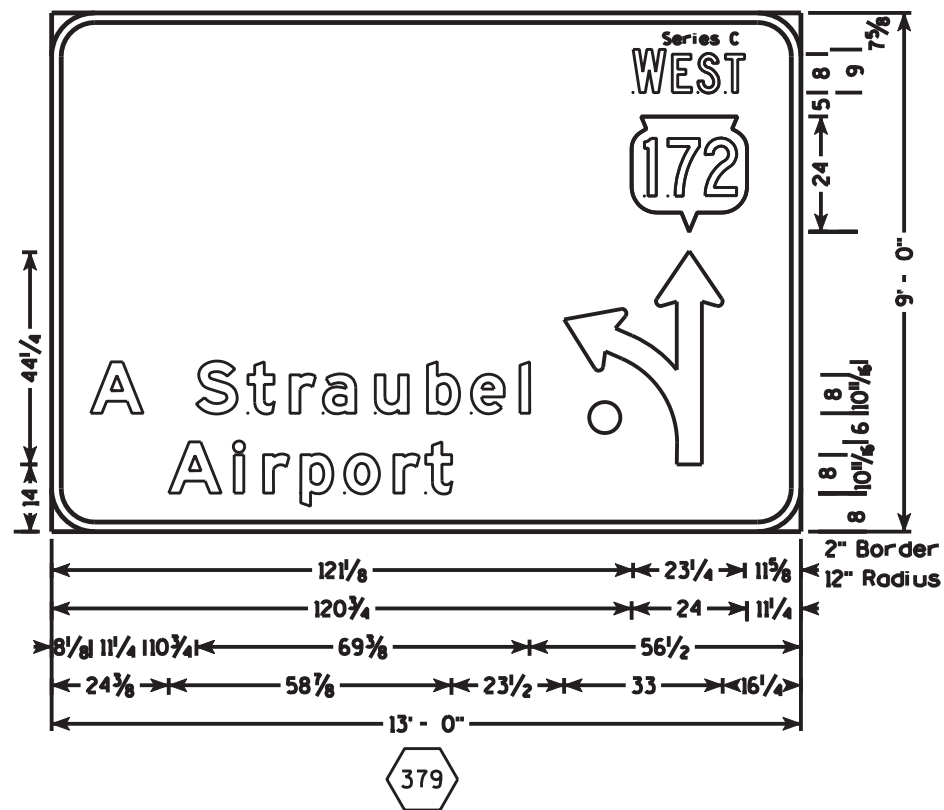
1. All Signs Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Green
Message - White
3. Message Series - C



PLAN SHEET PRODUCED
BY WISDOT-NE REGION

NOTES

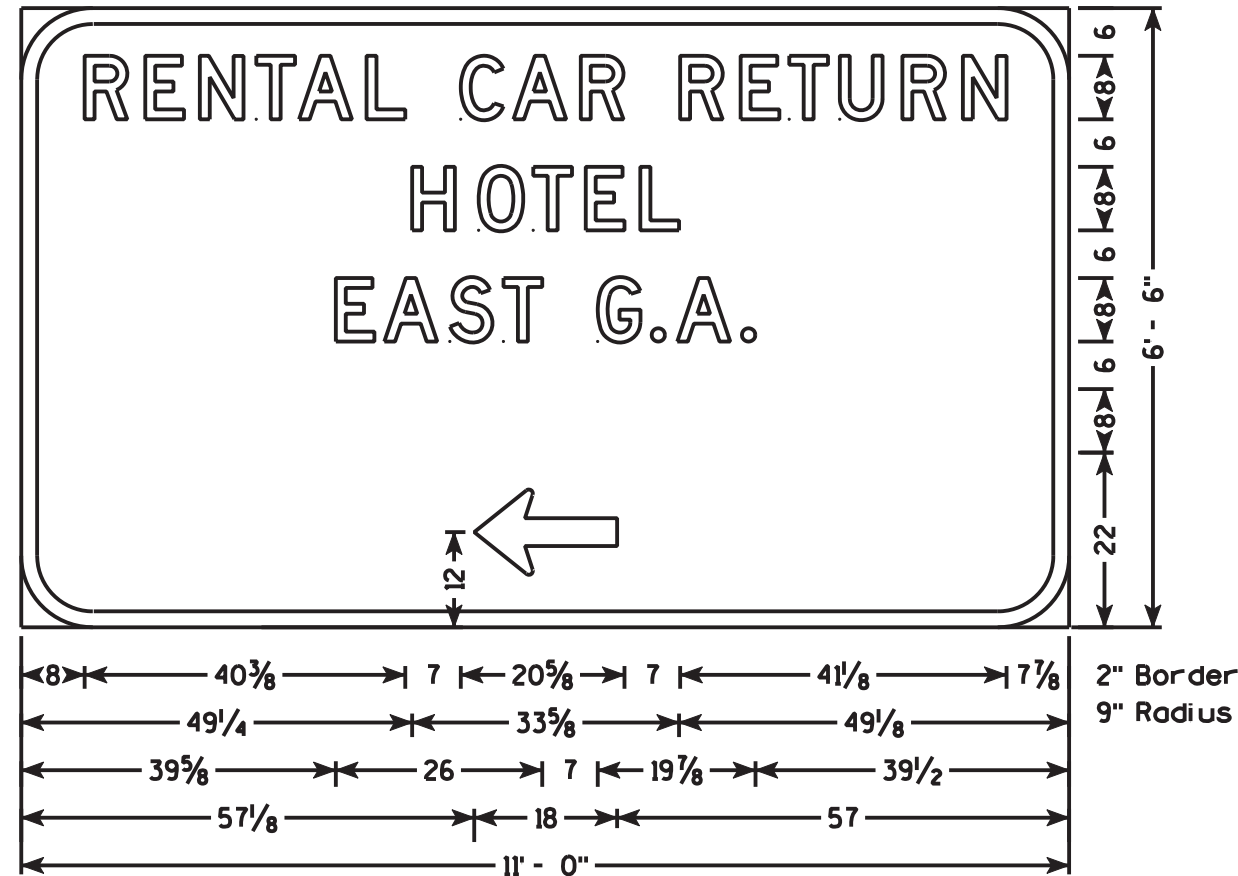
1. All Signs are Type I - Type SH Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Green
Message - White
3. Message Series - E Modified except as noted



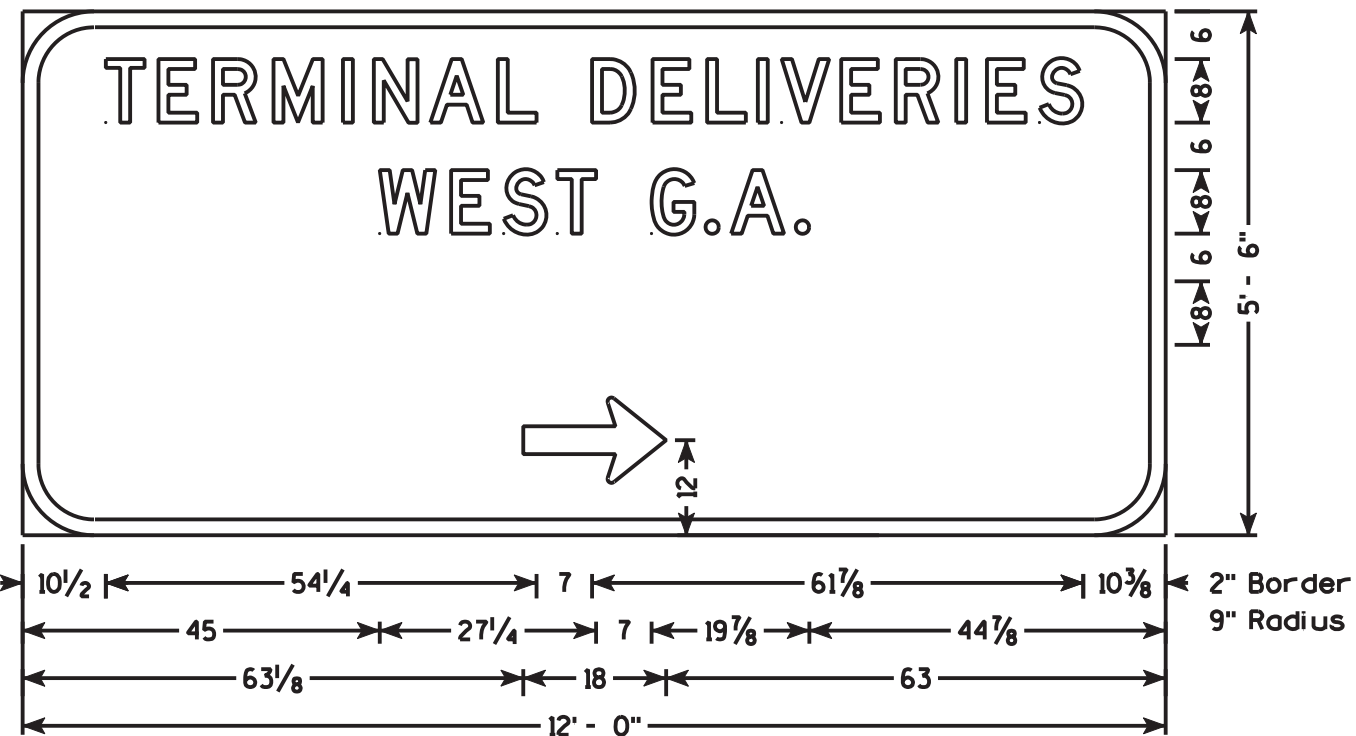
PLAN SHEET PRODUCED
BY WisDOT-NE REGION

NOTES

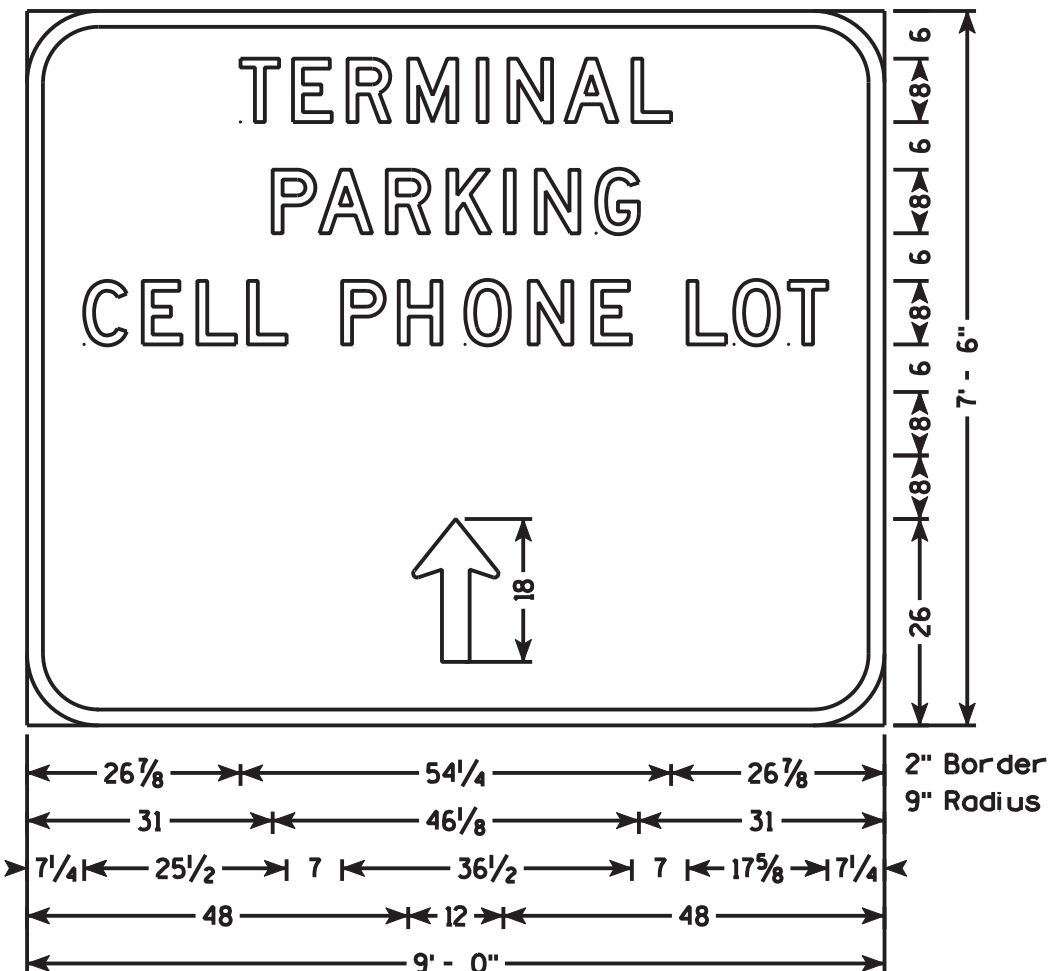
1. All Signs are Type I - Type SH Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Blue
Message - White
3. Message Series - D



385



383

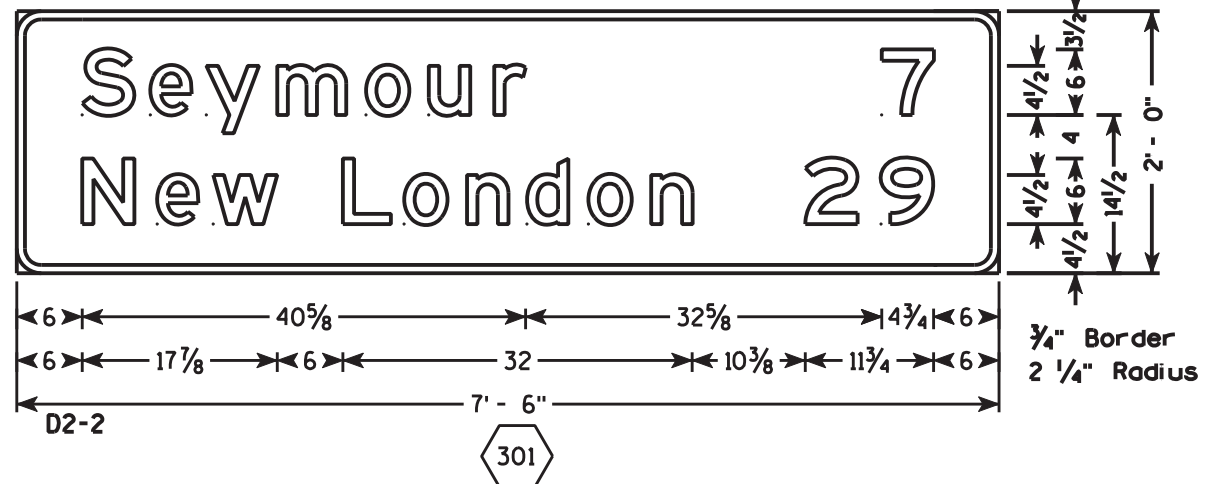
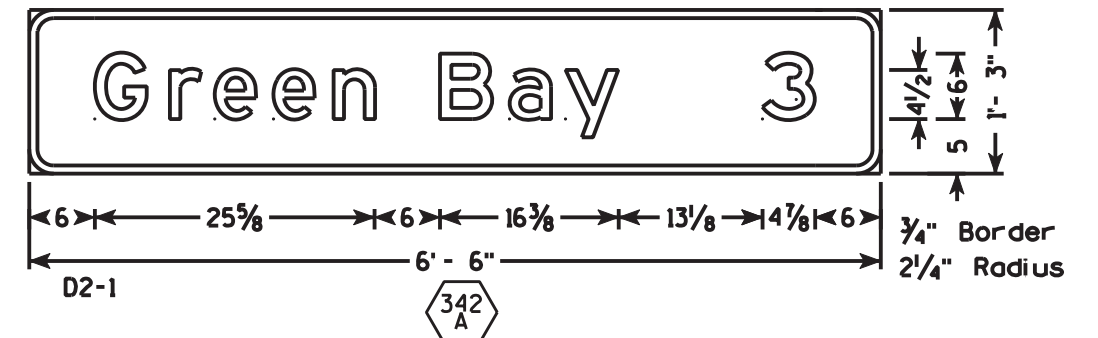
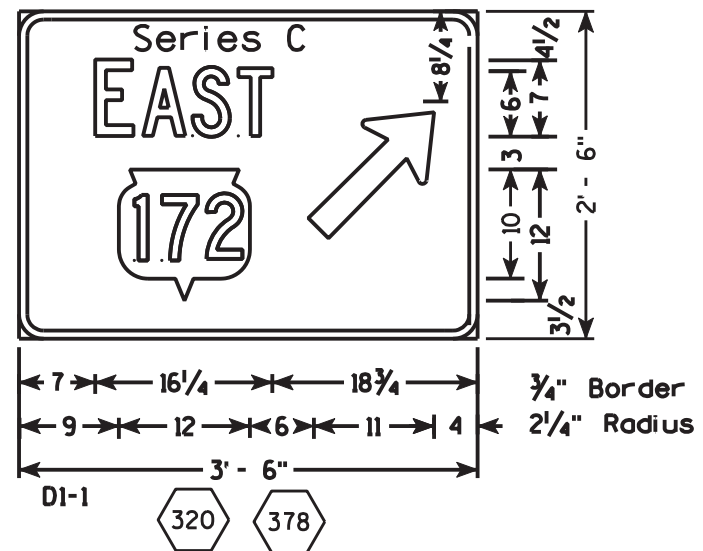
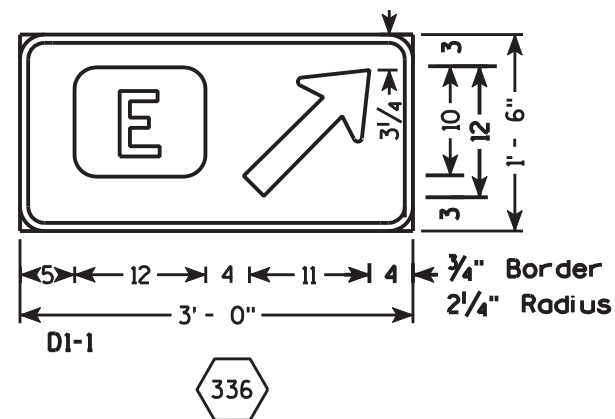
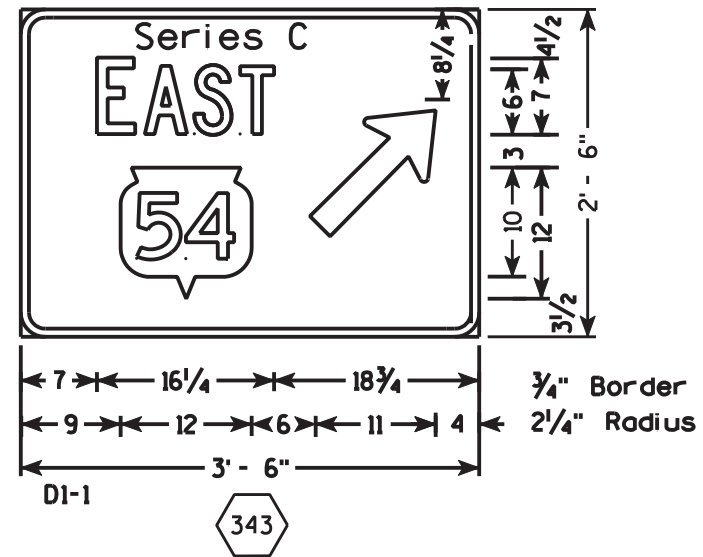
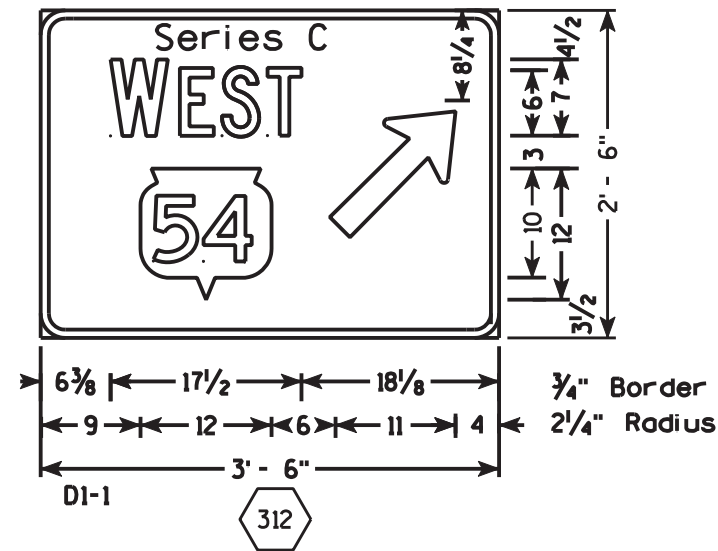


384

PLAN SHEET PRODUCED
BY WISDOT-NE REGION

NOTES

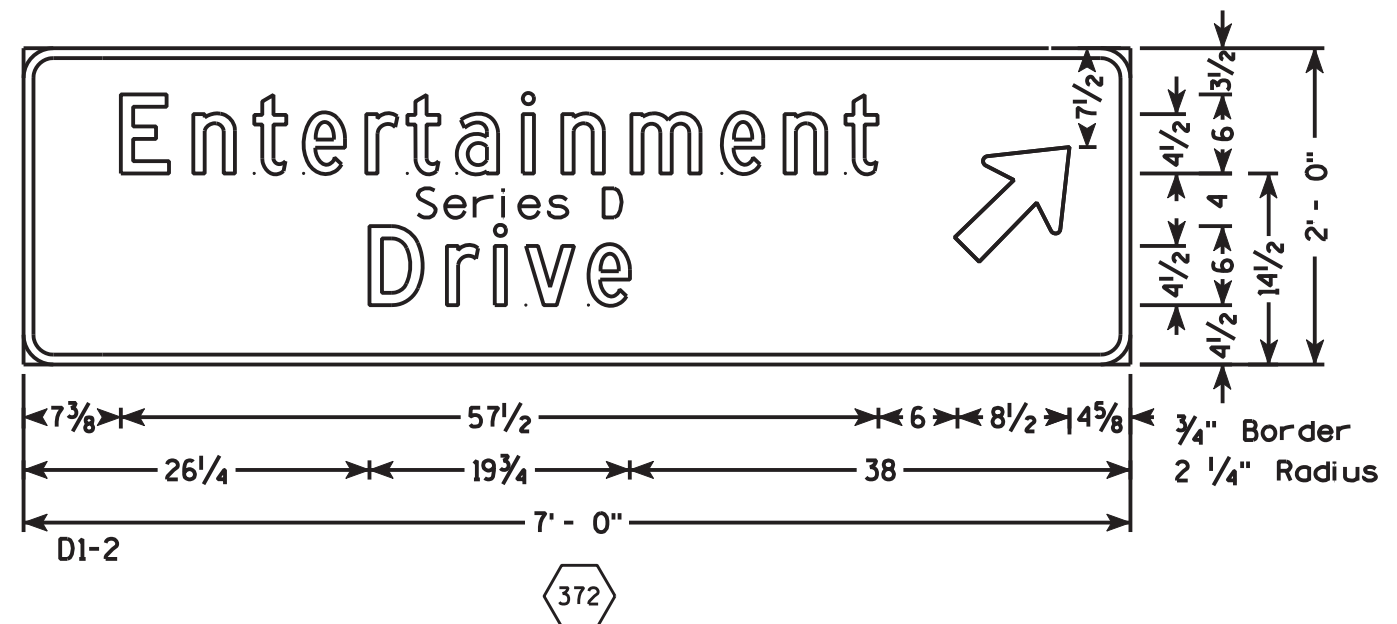
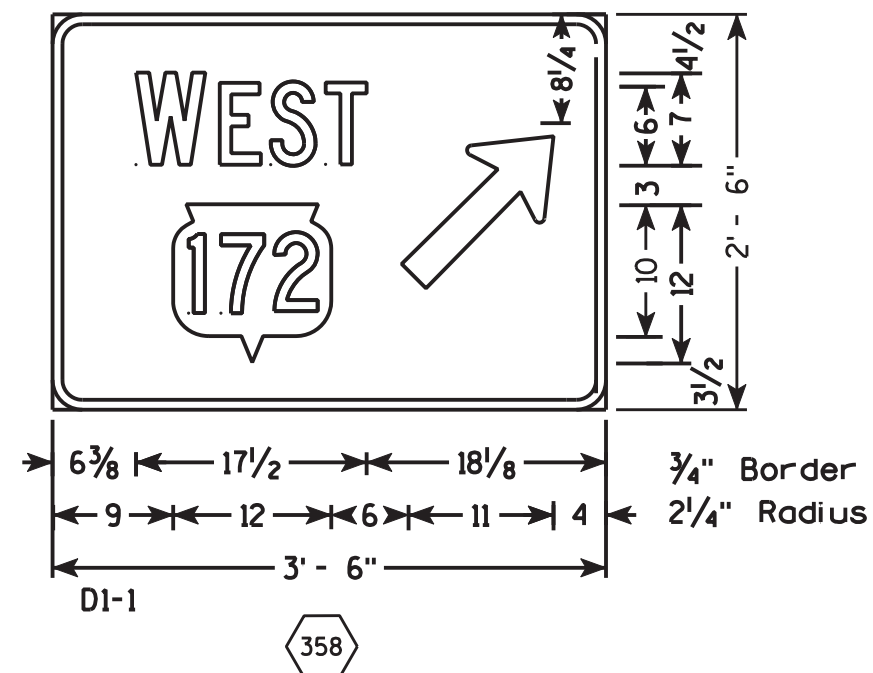
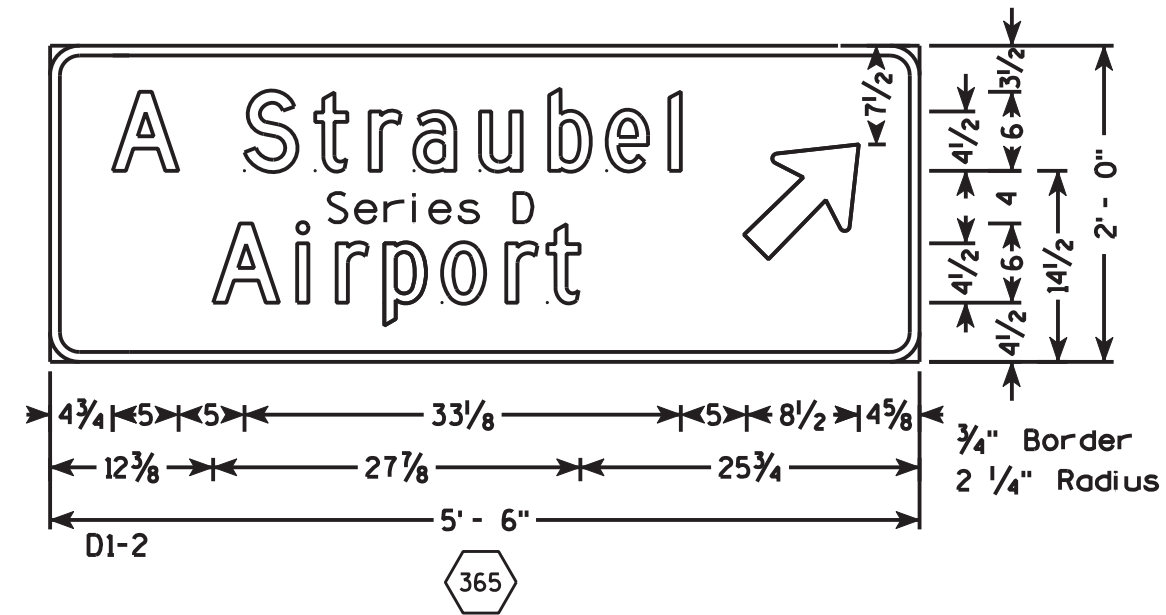
1. All Signs Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Green
Message - White
3. Message Series - E except as noted



PLAN SHEET PRODUCED
BY WisDOT-NE REGION

NOTES

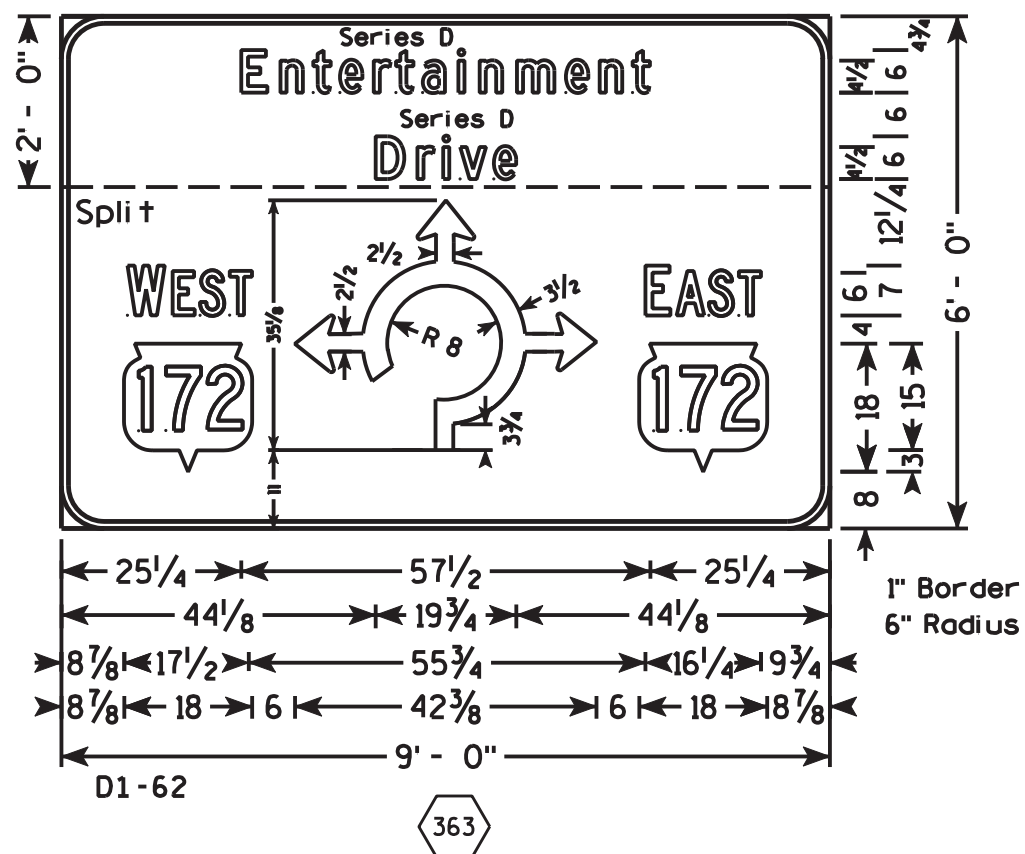
1. All Signs Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Green
Message - White
3. Message Series - C except as noted
4. Colors for shields and cardinals shall be according to the applicable route marker specifications.



PLAN SHEET PRODUCED
BY WISDOT-NE REGION

NOTES

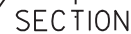
1. All Signs Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Green
Message - White
3. Message Series - C except as noted
4. Colors for shields and cardinals shall be according to the applicable route marker specifications.



PLAN SHEET PRODUCED
BY WISDOT-NE REGION



(SEE TABLE FOR DIMENSIONS)



SECTION B-B



BOLTING PROCEDURE - BASE CONNECTION

- NOTE:**
TIGHTEN THE HIGH STRENGTH BOLTS TO THE TORQUE SHOWN.
DO NOT OVERTIGHTEN.

⑦

⑦

④

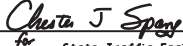
① ⑥ ①

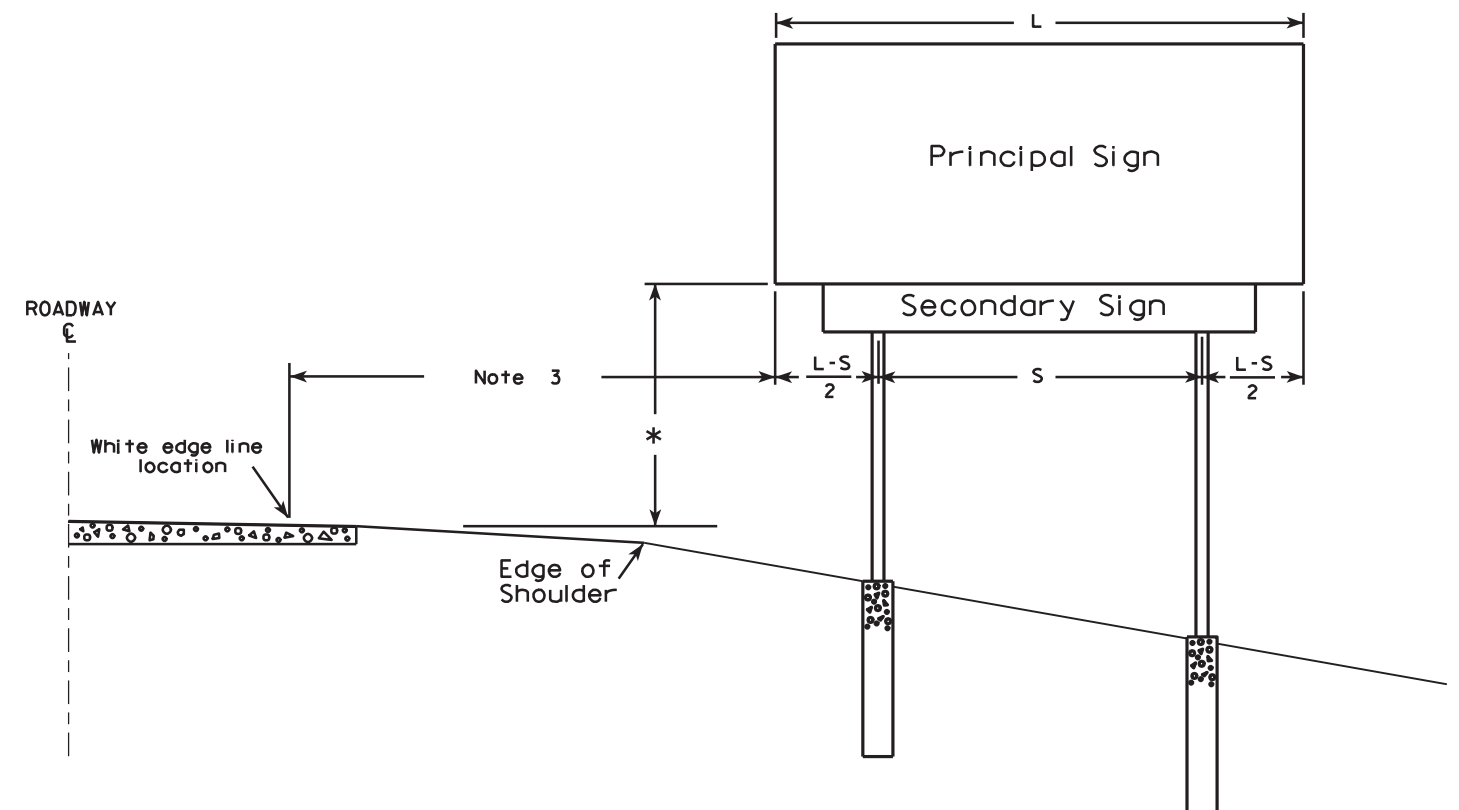
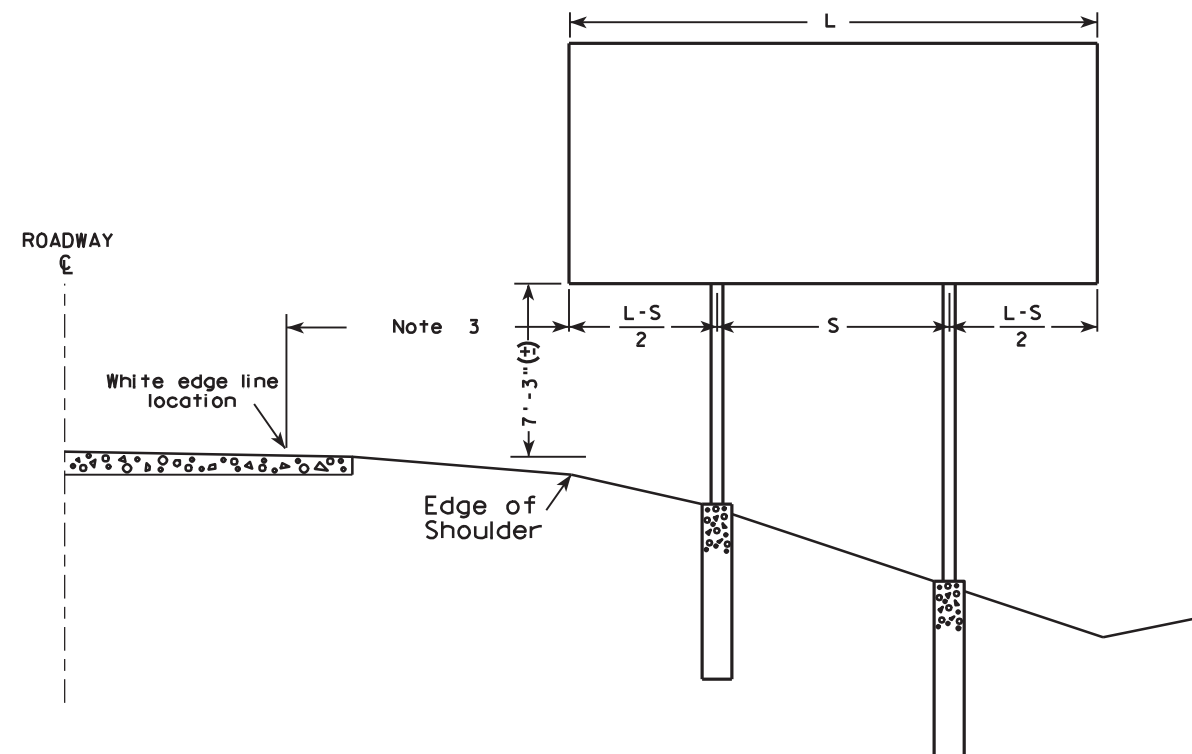
STRUCTURAL CARBON STEEL PAY WTS. (1POST) = K + (POST LENGTH X POST WT.)
" K " INCLUDES STUB, BASE PLATES, STIFFS., BOLTS, AND WASHERS.

<u>DESIGN DATA</u>	
WIND PRESSURE = 75 M.P.H.	
WIND COMPONENTS - NORMAL = 1.0 TRANSVERSE = 0.0	
ICE LOAD = 3 P.S.F.	
<u>GROUP LOADS</u>	<u>PERCENT OF ALLOWABLE STRESS</u>
1. DEAD	100
2. DEAD & WIND	140
3. DEAD, ICE & 1/2 WIND ^Δ	140 ^Δ 25 P.S.F. MIN.
ALLOWABLE SOIL PRESSURE = 1/2 T / SQ. FT.	
WIND LOAD WAS APPLIED TO THE AREA OF THE SIGN AND TO THE SUPPORTING MEMBERS.	
ICE LOAD WAS APPLIED TO ONE FACE OF THE SIGN AND AROUND THE SURFACE OF THE SUPPORTING MEMBERS.	

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.
DESIGN CONFORMS WITH A.A.S.H.T.O. SPECIFICATIONS 1985.
ALL POSTS, POST STUBS & ATTACHMENTS SHALL BE
A.S.T.M. A709 GRADE 50, EXCEPT WHERE CONTRACT
REQUIRES A.S.T.M. A709 GRADE 50 W.
IF A709 GRADE 50 MATERIAL IS USED, THE POST, BASE
PLATES, UPPER SIX INCHES OF STUB POST, FLANGE SPLICE
PLATE AND FUSE PLATE SHALL BE GALVANIZED
AFTER FABRICATION.
H.S. BOLTS, WASHERS & NUTS SHALL BE A325 GALVANIZED
WHEN POSTS, POST STUBS AND ATTACHMENTS ARE
A709 GRADE 50 AND GALVANIZED.
H. S. BOLTS, WASHERS & NUTS SHALL BE A325 TYPE 3
NOT GALVANIZED WHEN CONTRACT REQUIRES A709
GRADE 50 W POSTS, POSTS STUBS AND ATTACHMENTS.

WISCONSIN DEPT OF TRANSPORTATION			
APPROVED			
 State Traffic Engineer			
DATE 8/26/97		PLATE NO. A3-1.12	
⑧	10-30-96	NOT GALVANIZED/GALVANIZED	
⑦	10-30-92	QUANT., A588 EXCEPT., ADD SLOT VIEW	
⑥	8-24-87	BASE CONN. WELD	
⑤	10-13-81	BASE CONN. WELD & FUSE R WASHERS	
④	10-19-79	POST A & B, A572 GR. 50, & K	
③	11-28-78	"K"	③, 4-23-79 TYPE "E"
②	5-4-78	T ₁ · T ₂ & W ₁	
NO.	DATE	REVISION	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS			
TYPE A, B, C, D, & E			
CONST. SPEC.	1989	DRAWN BY	LOY PLANS CK'D.
FTG. & SIGN SUPPORT DETAILS GROUND MOUNT BREAK-AWAY SIGNS			SHEET



GENERAL NOTES

1. For a 2 post installation, S equals $3L/5$, but shall not be less than 9 ft.
2. For a 3 post installation, S equals $5L/7$, but shall not be less than 18 ft., and the space between any two posts shall not be less than 9 ft.
3. Unless noted in the plan, the sign offset distance shall be a minimum of 17'-6", desirable 30'-0".
4. The (±) tolerance shown on this sheet is 3 in.
5. The vertical sign height clearance detailed is measured from the bottom of the sign to the near edge of pavement.
6. Post lengths shown in the miscellaneous quantities are estimated lengths. The contractor shall verify post lengths at the time of final grading.
7. Refer to the Traffic Guidelines Manual for further guidance on minimum vertical clearance requirements.

* Clearance is 8'-3" (±) when the secondary sign is 3 ft. or less in height. For secondary signs larger than 3 ft., the clearance to the bottom of the secondary sign shall be 5'-3" (±).

TYPICAL INSTALLATION OF TYPE I SIGNS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Matthew R. Raub
for State Traffic Engineer

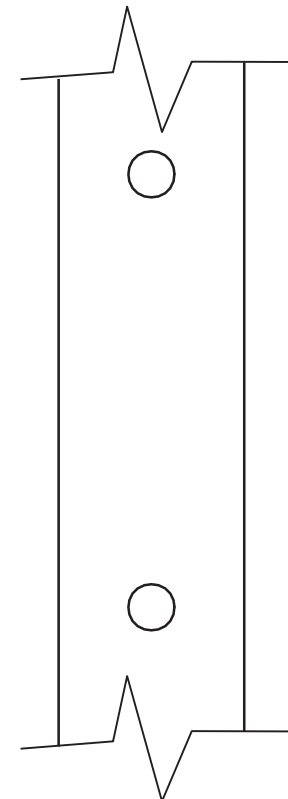
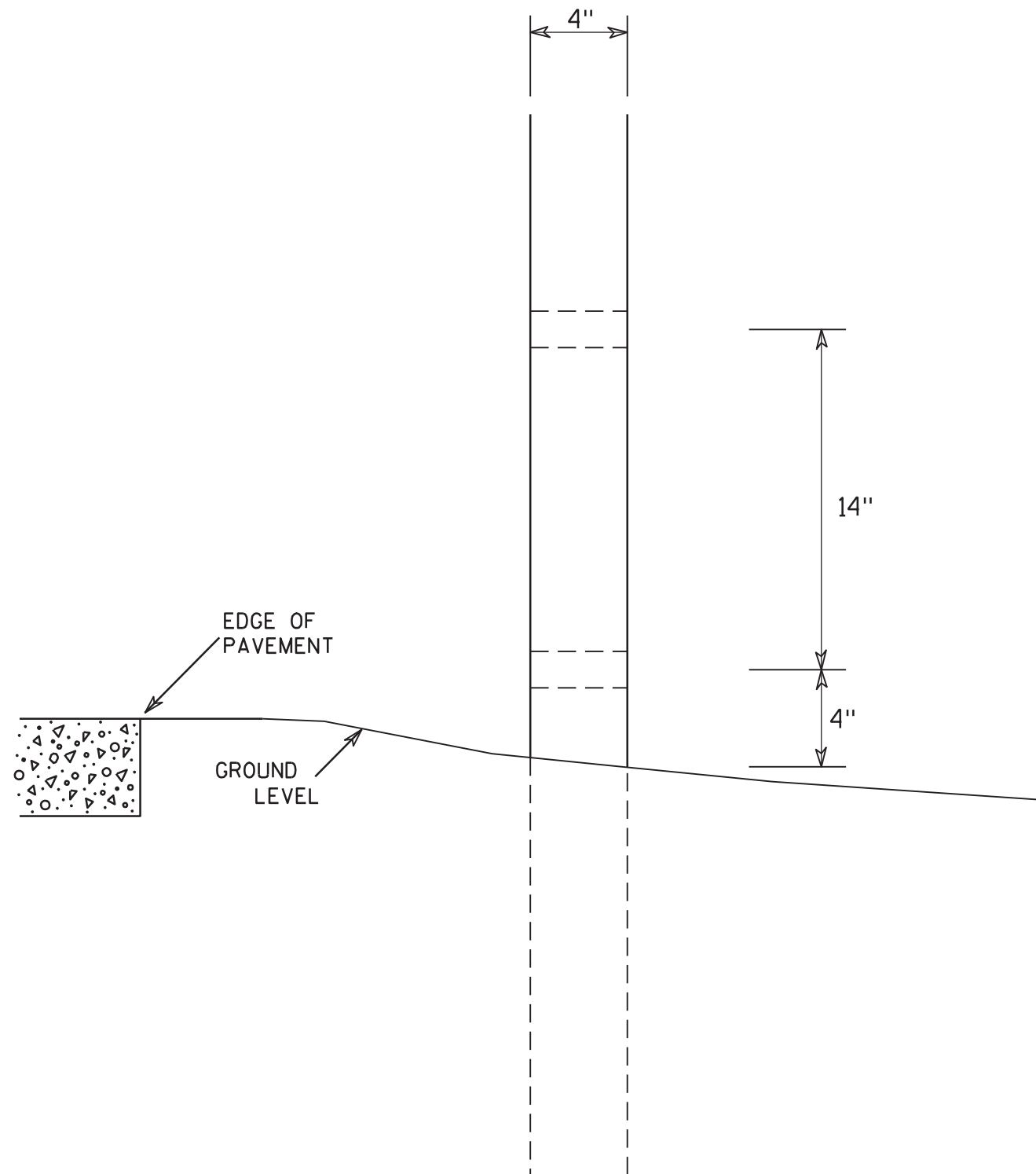
DATE 4/02/08

PLATE NO. A4-1.9

PROJECT NO:

SHEET NO: 242

E



SIDE VIEW

GENERAL NOTES

1. All 4 x 6 Wood Posts shall be modified by having two 1½" diameter holes drilled perpendicular to the roadway centerline.

4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Chester J. Spang
for State Traffic Engineer

DATE 3/27/97

PLATE NO. A4-11.2

PROJECT NO:

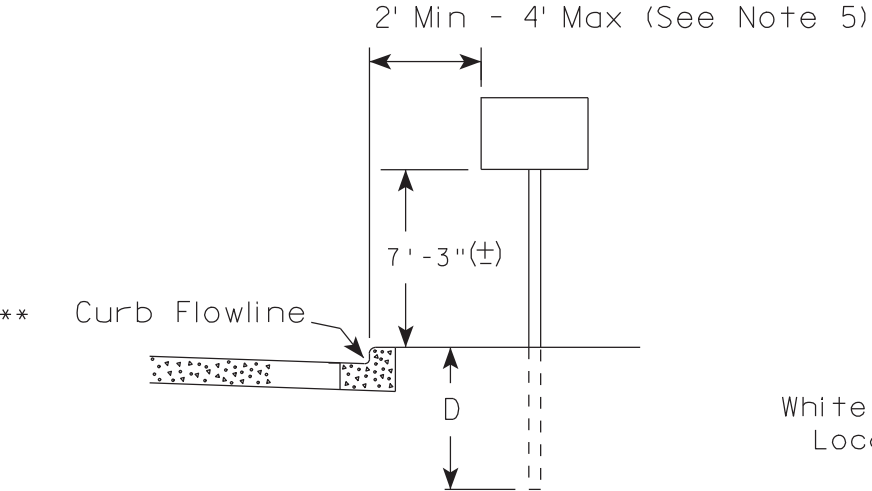
HWY:

COUNTY:

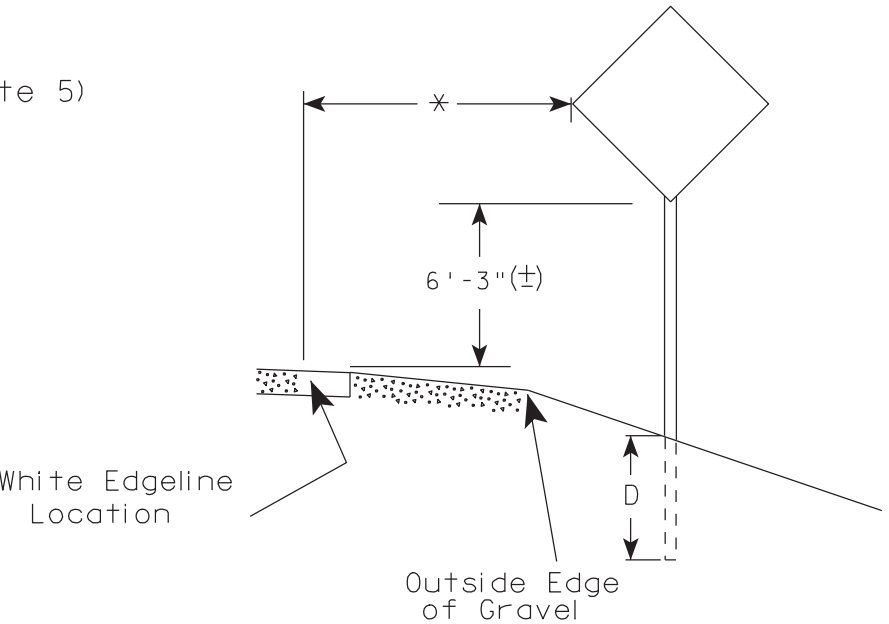
SHEET NO: 243

E

URBAN AREA

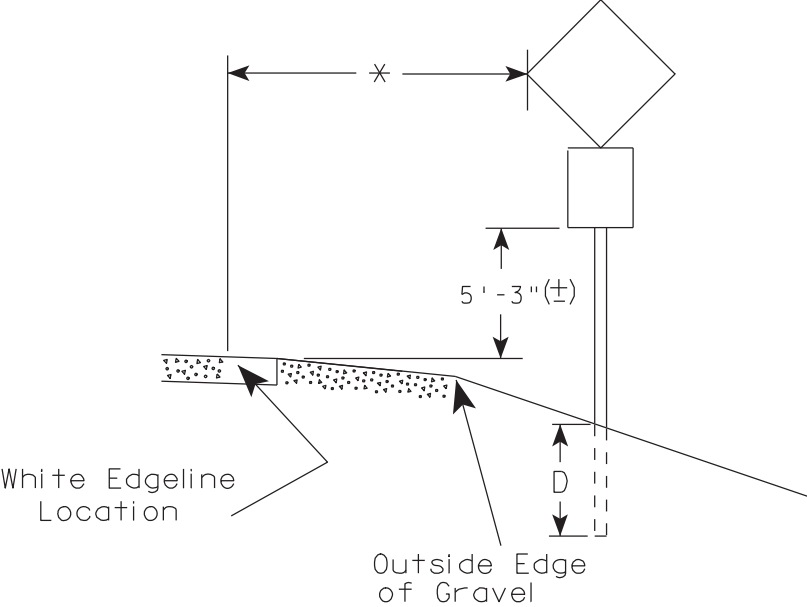
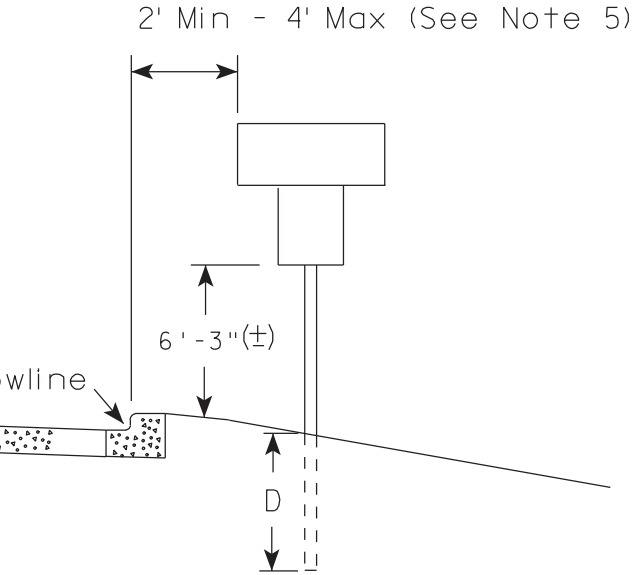


RURAL AREA (See Note 2)



GENERAL NOTES

1. Signs wider than 4 feet or larger than 20 sq. ft. shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on barrier wall, see A4-10 sign plate.
3. For expressways and freeways, mounting height is 7'-3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
4. Minimum mounting height for J assemblies (A4-5) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
5. Minimum mounting height for signs mounted on traffic signal poles is 5'-3" (±).
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. The (±) tolerance for mounting height is 3 inches.
8. Folding stop signs (R1-1F) shall be mounted at a height of 5'-3" (±) or as directed by the Engineer.
9. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (W1-8A), Clearance Markers (W5-52), Mile Markers (D10 series) & End of Road Markers (W5-56 & W5-56A) shall be mounted at a height of 4'-3" (±).



POST EMBEDMENT DEPTH

Area of Sign Installation (Sq. Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

✱✱ The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

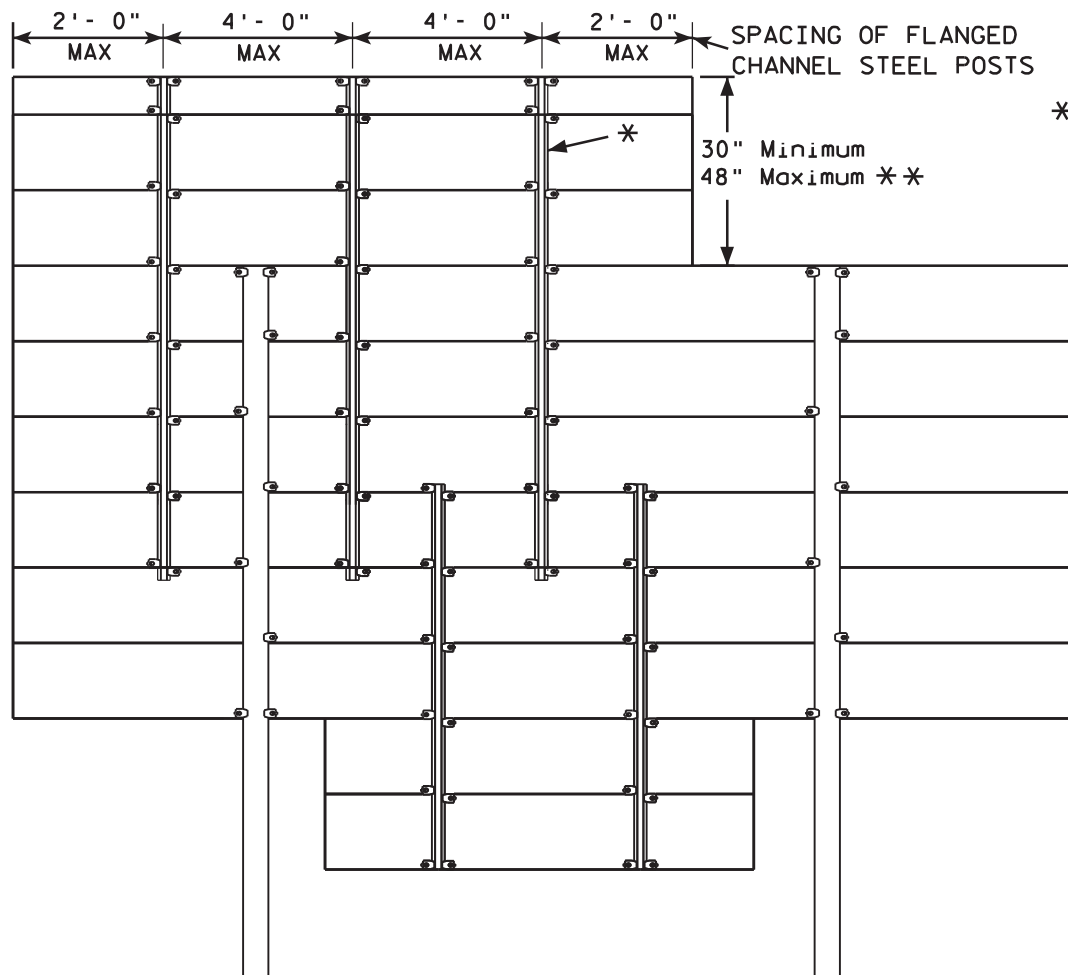
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

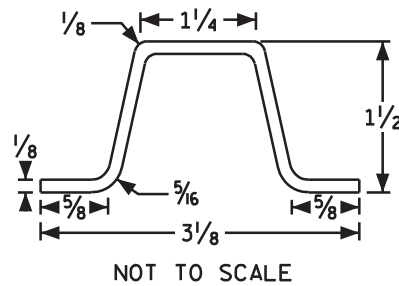
DATE 9/30/09 PLATE NO. A4-3.15

GROUND MOUNTED SIGN



* = 2.00 lb/ft FLANGED CHANNEL, MIN. YIELD STRENGTH = 60,000 PSI (GRADE 60) GALVANIZED
** = FOR 48" HEIGHT PANELS ON OVERHEAD STRUCTURES, ENTIRE SIGN SHALL BE CENTERED VERTICALLY ABOUT THE DEPTH OF THE TRUSS.

FLANGE CHANNEL DETAIL

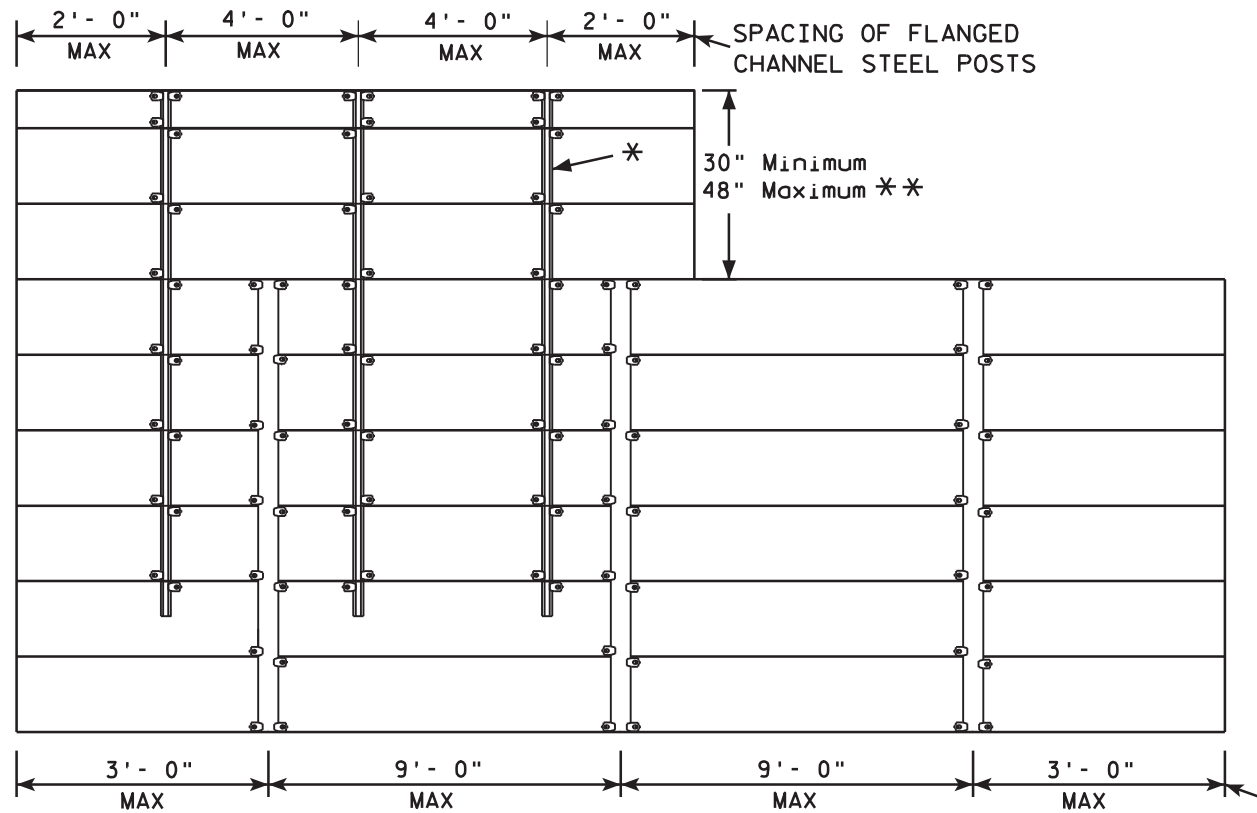


GENERAL NOTES

1. Flanged channel steel posts shall conform to size and material above, and shall be considered as incidental to other items in the contract.
2. Number of Flanged channel steel supports varies with length of panel and shall be spaced as shown:
PANEL LENGTH 8'-0" OR LESS = 2 CHANNELS
PANEL LENGTH 9'-0" - 12'-0" = 3 CHANNELS
PANEL LENGTH 13'-0" OR MORE = 4 CHANNELS
If the flanged channel steel posts can not be horizontally spaced as shown, they can be moved so as to securely hold the sign.

3. The EXIT NUMBER PANEL shall normally be positioned above the guide sign aligned with the right edge of the guide sign. If the guide sign indicates a left exit, the EXIT NUMBER PANEL shall be aligned with the left edge of the guide sign.
4. If the bolt holes in the top panel (EXIT NUMBER), or sub panel (NEXT EXIT) line up with holes in main sign panel, stitch bolts shall be used in addition to the channels.
5. Provide post clips for each sign as shown. (Please note the differences between a ground mounted versus Sign bridge mounted sign as far as number of clips required on the main supports or beams)

SIGN BRIDGE MOUNTED SIGN



SPACING OF ALUMINUM SIGN SUPPORTS
5" X 3.5" X 3.7 LBS./ft.

ATTACHMENT OF GUIDE SIGNS TO SUPPORTS

WISCONSIN DEPT OF TRANSPORTATION

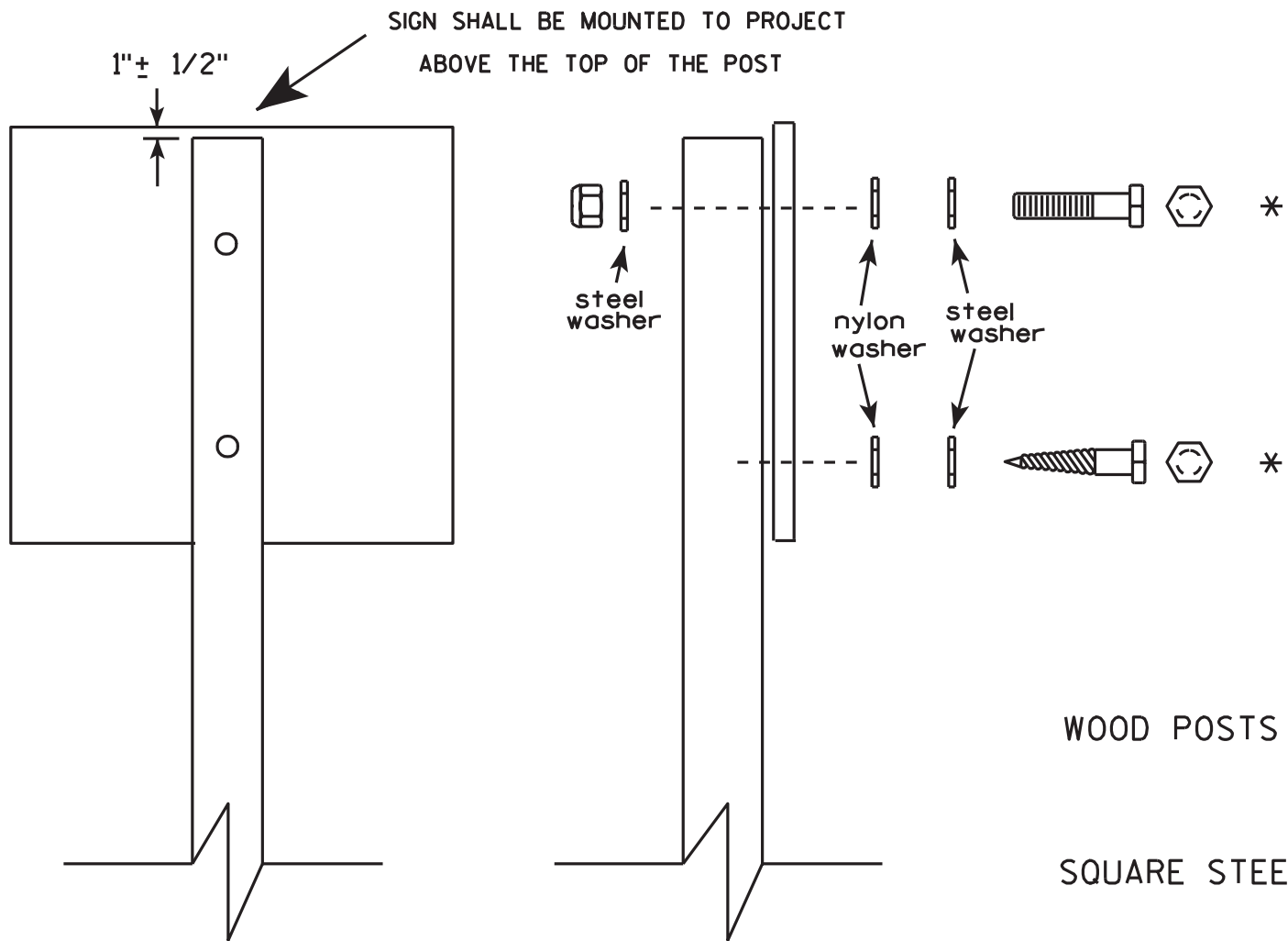
APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 6/7/10 PLATE NO. A4-6.11

PROJECT NO:

SHEET NO: 245

E

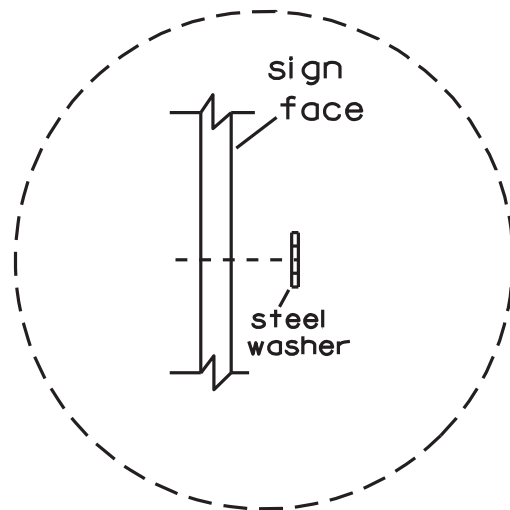


Nuts, bolts and lags used for mounting signs shall have hexagonal heads and shall be either :

- a. Hot dip galvanized in accordance with ASTM Designation: A 153, Class D, or SC 3
- b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

Threads on bolts and nuts shall be manufactured with sufficient allowance for the cadmium plate or galvanized coating to permit the nuts to run freely on the bolts.

- WOOD POSTS (4" x 4" or 4" x 6")
LAG SCREWS - 3/8" X 3"
MACHINE BOLTS - 5/16" X 6-1/2" or 7" Length w/ nuts
- SQUARE STEEL POSTS (2" x 2")
MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts
RIVETS - 9/32" (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL
O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH
- WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON for all Type H signs.



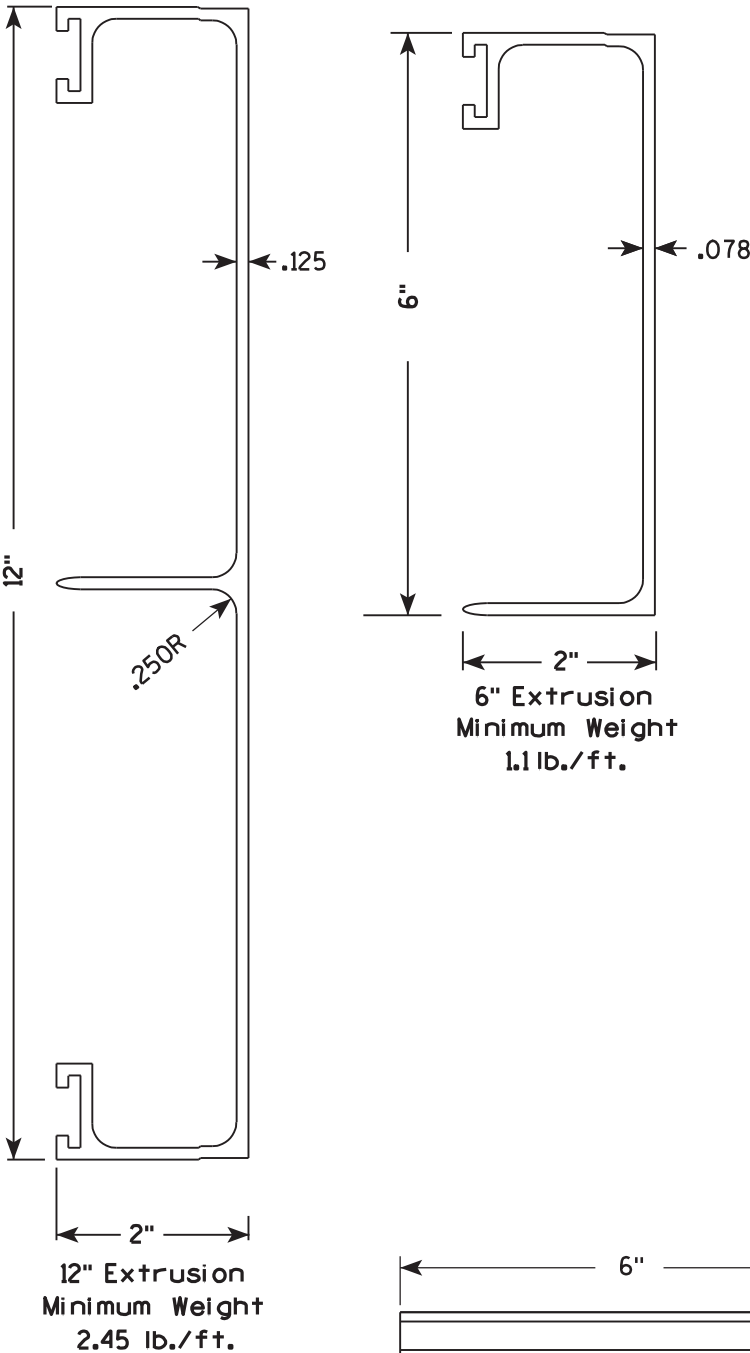
Washer Placement when Sign Has Other Than Type H or Type F Face

* Two different fastening systems are shown for illustration purposes. On any individual sign, either one or the other system shall be used. Actual number of fasteners per sign varies with the sign area, but normally there are two. For a single post installation, all signs greater than 9 sq. ft. require the use of 3 fasteners.

ATTACHMENT OF SIGNS TO POSTS	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R. Rauch</i> For State Traffic Engineer
DATE 3/23/10	PLATE NO. A4-8.7

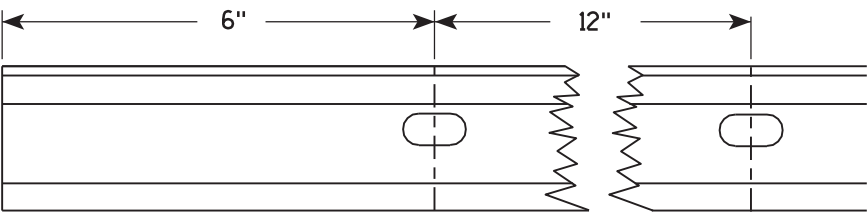
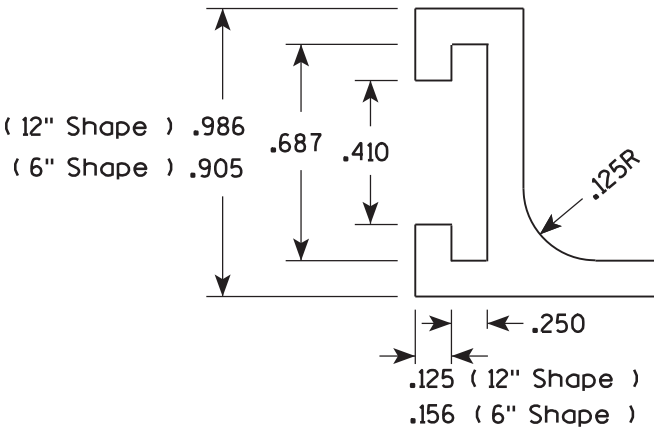
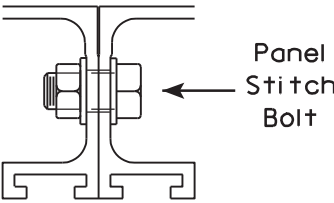
Extruded Shape

Hardware

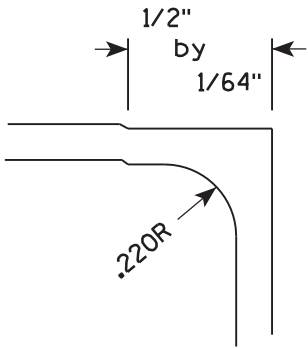


STITCH BOLT, WASHER & NUT

The hardware includes:
3/8 " - 16 X 3/4 " Economy Bolt 2024-T4 alloy
3/8 " - Stainless steel stop nut
3/8" X .064 Flat Washers, Alclad 2024-T4 alloy

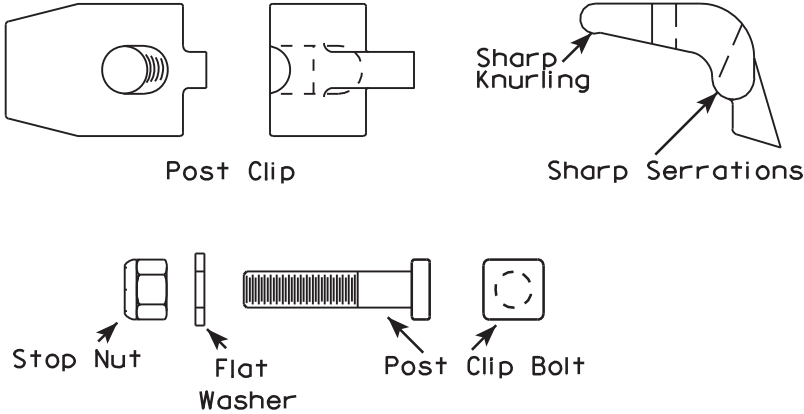


Punch 7/16" x 7/8" oval holes beginning 6" in from end of extrusion 12" CC on both edges of 6" and 12" panels.



POST CLIP, POST CLIP BOLT, WASHER & NUT

Post Clip shall be Alum. Alloy 356-T6
Post Clip Bolt shall be Stainless Steel.
Flat washer shall be 3/8" X .091, Stainless Steel.
Stop nut shall be stainless steel.



NOTES

1. The contractor may select any brand of extrusion that conforms to the illustrations or meets with the approval of the engineer, but all extrusions used on this contract shall be of the same brand.
2. Panel Stitch Bolts shall be used to assemble adjacent panels. Maximum stitch bolt spacing shall be 24" C-C, and a minimum of 4 bolts shall be used to connect any two extrusions.
3. Post Clips shall be used to attach the sign panel to the sign support.

ALUMINUM EXTRUSIONS FOR
TYPE I SIGNS

WISCONSIN DEPT OF TRANSPORTATION

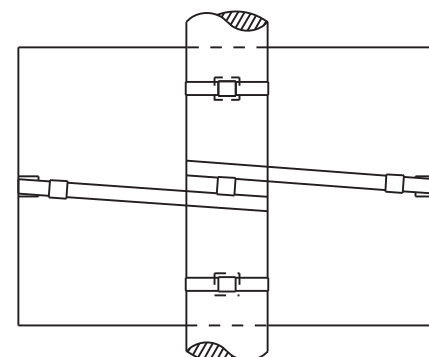
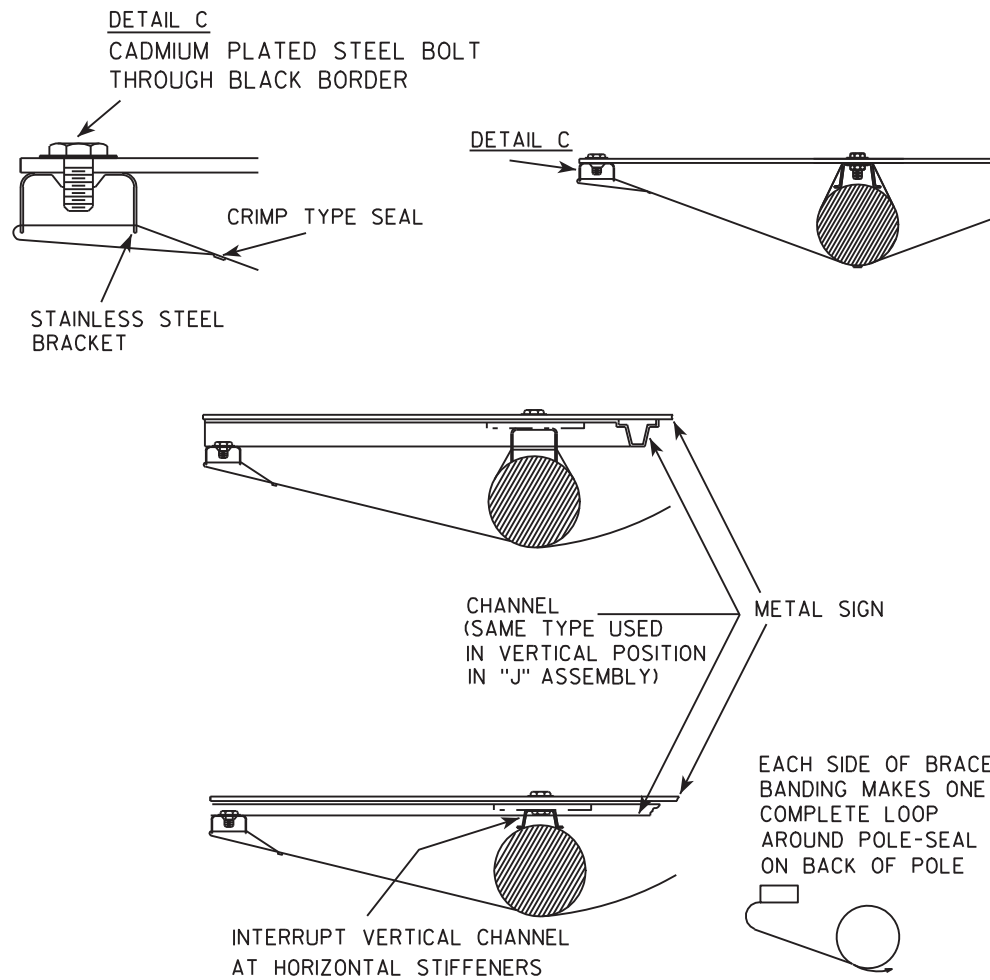
APPROVED *Chester J. Spang*
for State Traffic Engineer
DATE 11/18/99 PLATE NO. A5-2.9

PROJECT NO:

SHEET NO: 247

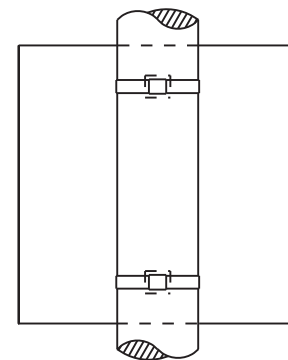
E

BRACE BANDING

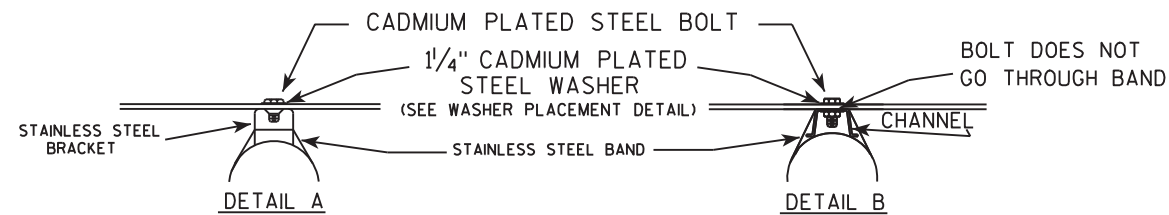
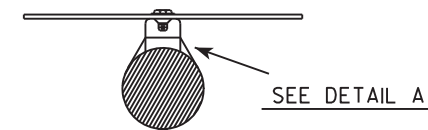


BRACE BANDING
BRACE BANDING SHALL BE TIGHTENED FIRMLY BUT NOT SO TIGHT AS TO APPRECIABLY CURVE FACE OF SIGN.

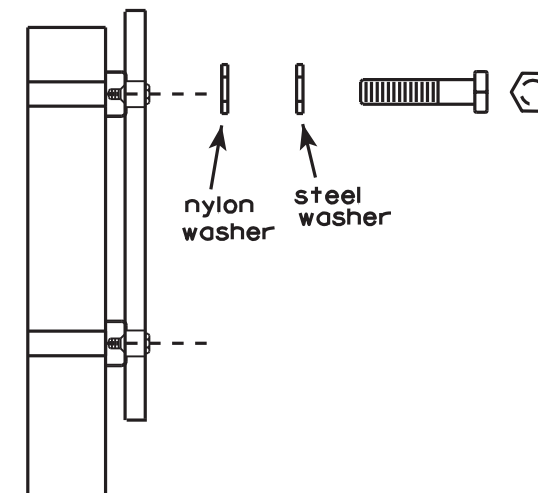
SINGLE SIGN



BRACKET BANDING

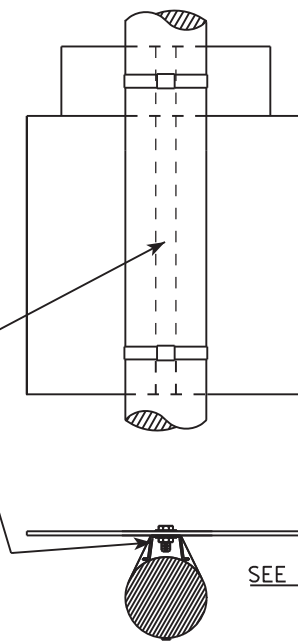


WASHER PLACEMENT



WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

"J" ASSEMBLY



SEE DETAIL B

GENERAL NOTES

1. Signs 4' or greater in width shall have one brace band installed at the center of the sign.
2. Signs 3' or greater in height shall have three bracket bands installed. Signs less than 3' in height shall have two bracket bands installed.
3. Banding and assembly bracket shall be stainless steel. All bands shall be 3/4" in width and 0.025" thickness.

STANDARD SIGN SIGN BANDING DETAILS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 11/08/05 PLATE NO. A5-9.2

PROJECT NO:

HWY:

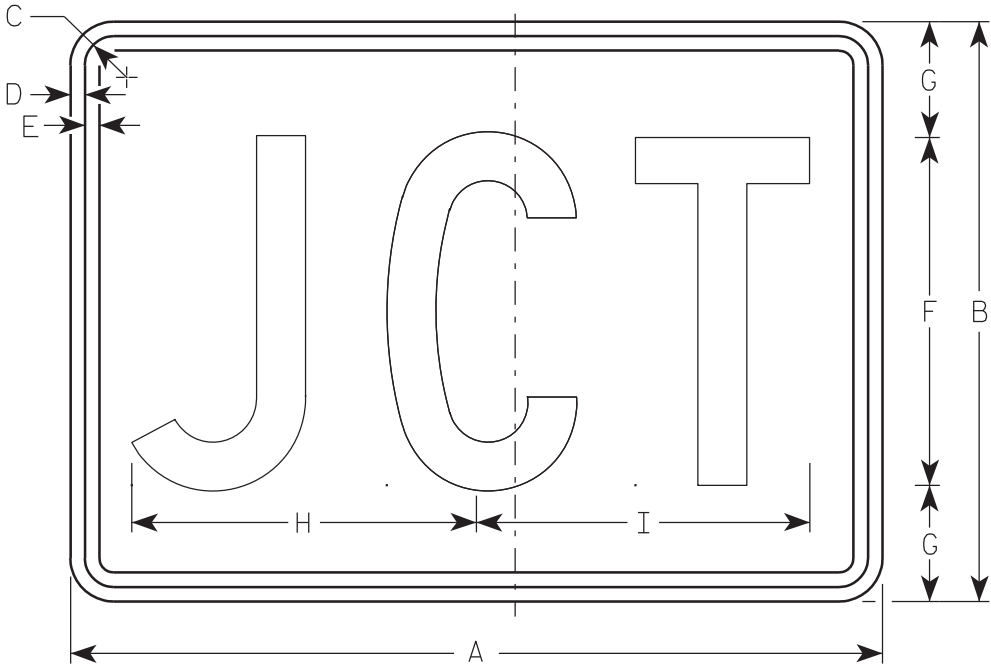
COUNTY:

SHEET NO: 248

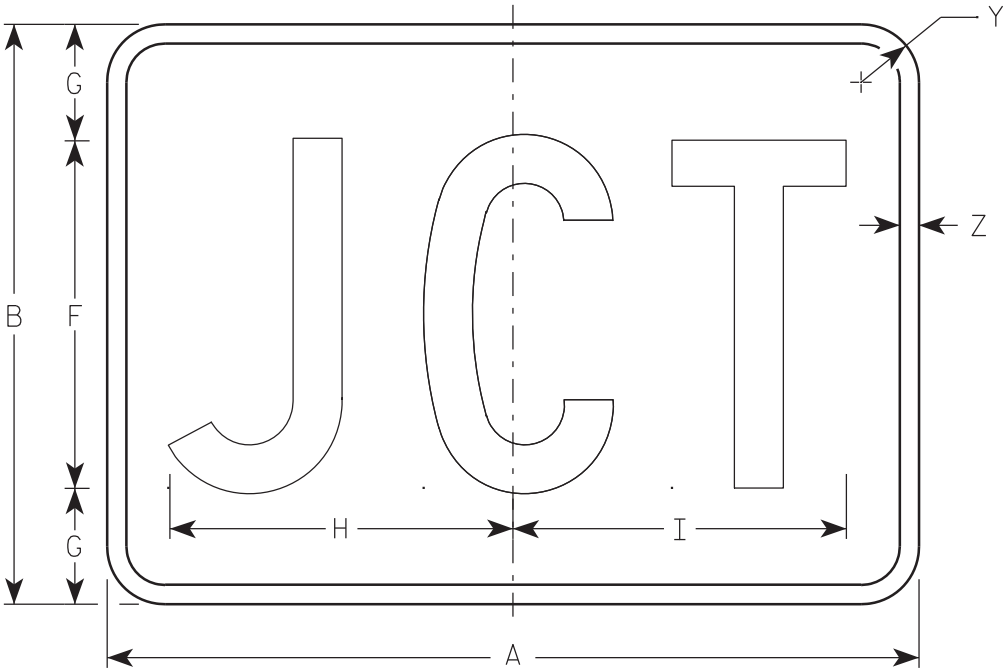
E

NOTES

1. Sign is Type II - See Note 5 - reference
WIS DOT Standard Specification for HIGHWAY
and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - See note 5
Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base
material is plywood but borders shall be rounded
as shown. When base material is metal, the
corners and borders shall be rounded.
5. M2-1 Background - White - Type H Reflective
(Detour or temporary Signs - Reflective)
Message - Black
MB2-1 Background - Blue
Message - White - Type H Reflective
(Detour or temporary Signs - Reflective)
MG2-1 Background - Green
Message - White - Type H Reflective
MK2-1 Background - Green
Message - White - Type H Reflective
MM2-1 Background - White - Type H Reflective
Message - Green
MN2-1 Background - Brown
Message - White - Type H Reflective
MR2-1 Background - Brown
Message - Yellow - Type H Reflective



M2-1
MK2-1
MM2-1
MR2-1



MB2-1
MG2-1
MN2-1

Metric equivalent
for this sign is:

SIZE	
1	
2	525 mm X 375 mm
3	750 mm X 525 mm
4	750 mm X 525 mm
5	750 mm X 525 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m ²
1																												
2	21	15	1 1/8	3/8	3/8	9	3	8 7/8	8 5/8																1 1/2	1/2	2.20	0.20
3	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40	0.20
4	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40	0.20
5	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40	0.20

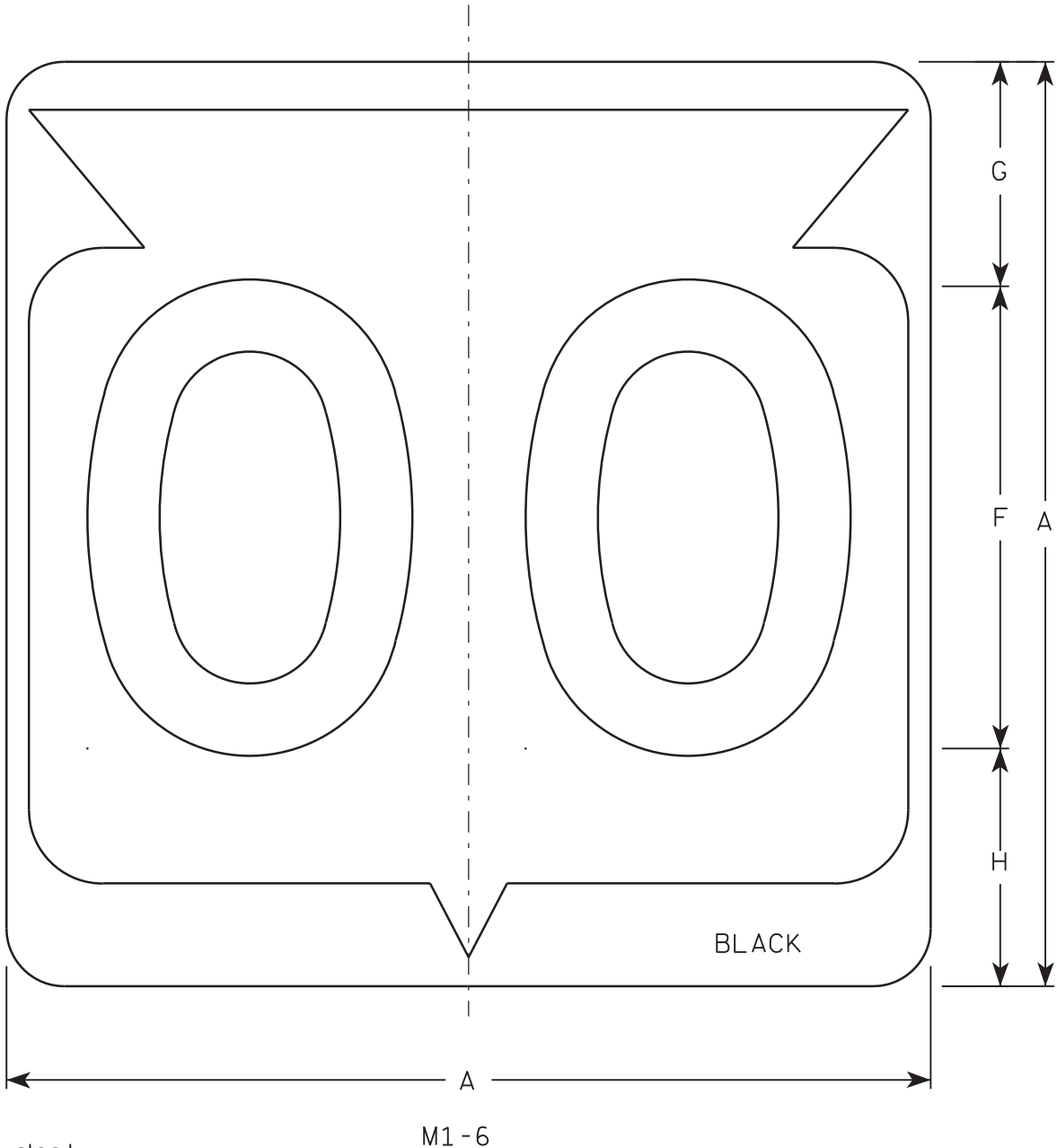
STANDARD SIGN
M2 - 1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED
Matthew R. Rauch
for State Traffic Engineer

DATE 3/16/10 PLATE NO. M2-1.10

7



Metric equivalent
for this sign is:

SIZE	
1	
2	600 mm X 600 mm
3	900 mm X 900 mm
4	900 mm X 900 mm
5	900 mm X 900 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m ²
1																												
2	24		1 1/2			12	5 1/2	6 1/2	10 1/4	2 1/2	8 7/8	11 1/2	1	1 7/8	11 1/4	21 7/8											4.0	.36
3	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0	.81
4	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0	.81
5	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0	.81

PROJECT NO:

HWY:

COUNTY:

SHEET NO: 250

E

FILE NAME : C:\Users\Projects\tr_std\plate\M16.DGN

PLOT DATE : 13-OCT-2005 14:55

PLOT BY : DITJPH

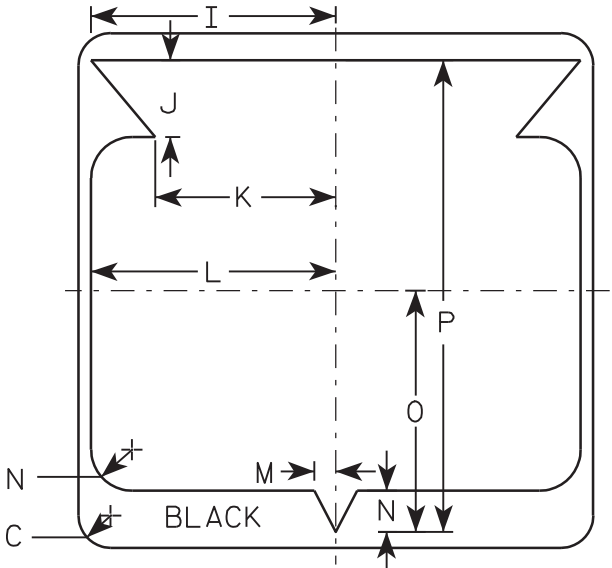
PLOT NAME :

PLOT SCALE : 6.715871:1.000000

WISDOT/CADDs SHEET 42

NOTES

1. Sign is Type II - See Note 6 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - White & Black - See Note 6
Message - Black
3. Message Series - See note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate Series numerals and adjust spacing as per plate A10-1.
6. Permanent Signs
Background - Type H Reflective
Detour or temporary Signs
Background - Reflective



STATE ROUTE MARKER
M1-6 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Chester J. Spang
for State Traffic Engineer

DATE 3/20/02

PLATE NO. M1-6.9

7

Metric equivalent
for this sign is:

SIZE	
1	
2	600 mm X 600 mm
3	900 mm X 900 mm
4	900 mm X 900 mm
5	900 mm X 900 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m ²
1																												
2	24		1 1/2			10	3	5 1/8	4 1/8	9 1/4	9 5/8	2	11 1/2	10 1/8	9 3/8												4.0	.36
3	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14												9.0	.81
4	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14												9.0	.81
5	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14												9.0	.81

PROJECT NO:

HWY:

COUNTY:

FILE NAME : C:\Users\Projects\tr_stdp\late\M15A.DGN

PLOT DATE : 13-OCT-2005 14:53

PLOT BY : DITJPH

PLOT NAME :

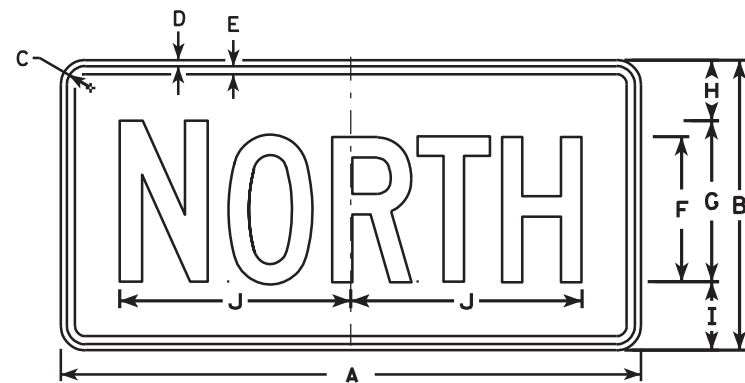
PLOT SCALE : 5.960833:1.000000

WISDOT/CADDs SHEET 42

NOTES

1. Sign is Type II - see Note 7 - reference
WIS DOT Standard Specification for HIGHWAY
and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - White & Black - See Note 7
Message - Black
3. Message Series - see Note 5
4. Corners may be square or rounded when base
material is plywood but borders shall be rounded
as shown. When base material is metal, the
corners and borders shall be rounded.
5. Message Series E for 1 letter.
Message Series D for 2 letters unless
message is too big then Series C.
Message Series C for 3 letters unless
message is too big then Series B.
6. Substitute appropriate letters & optically
adjust spacing to achieve proper balance.
7. Permanent Signs
Background - Type H Reflective
Detour or temporary Signs
Background - Reflective

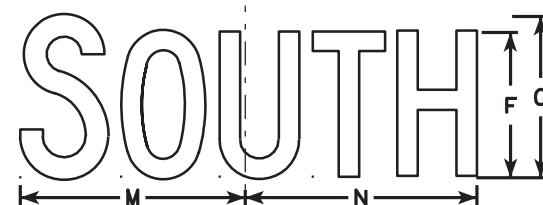
7



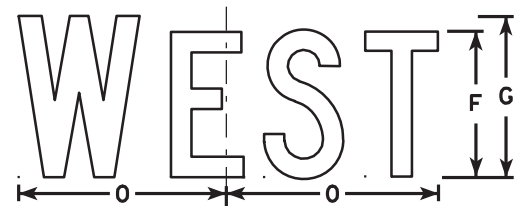
M3-1
MK3-1
M03-1



M3-2
MK3-2
M03-2



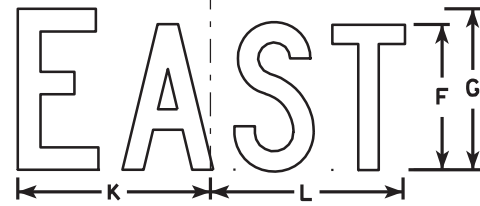
M3-3
MK3-3
M03-3



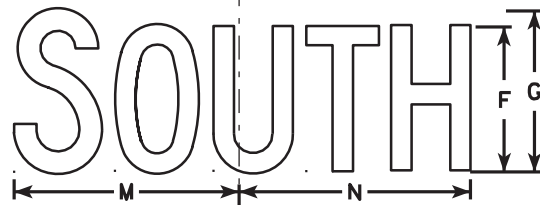
M3-4
MK3-4
M03-4



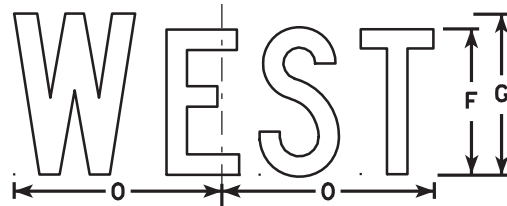
MB3-1
MG3-1
MM3-1
MN3-1



MB3-2
MG3-2
MM3-2
MN3-2



MB3-3
MG3-3
MM3-3
MN3-3



MB3-4
MG3-4
MM3-4
MN3-4

NOTES

1. All Signs Type II - See Note 5 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - See note 5
Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M3-1 thru M3-4 Background - White - Type H Reflective (Detour or temporary signs - Reflective)
Message - Black
MB3-1 thru MB3-4 Background - Blue
Message - White - Type H Reflective (Detour or temporary signs - Reflective)
MG3-1 thru MG3-4 Background - Green
Message - White - Type H Reflective
MK3-1 thru MK3-4 Background - Green
Message - White - Type H Reflective
MM3-1 thru MM3-4 Background - White - Type H Reflective
Message - Green
MN3-1 thru MN3-4 Background - Brown
Message - White - Type H Reflective
M03-1 thru M03-4 Background - Orange - Reflective
Message - Black
6. Note the first letter of each direction is larger than the remainder of the message.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	12	1 1/8	3/8	3/8	6	7	2 1/4	2 3/4	10 1/4	7 7/8	8 3/8	10 1/4	9 3/4	8 3/4			1 1/2									2.00
3	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5
4	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5
5	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5

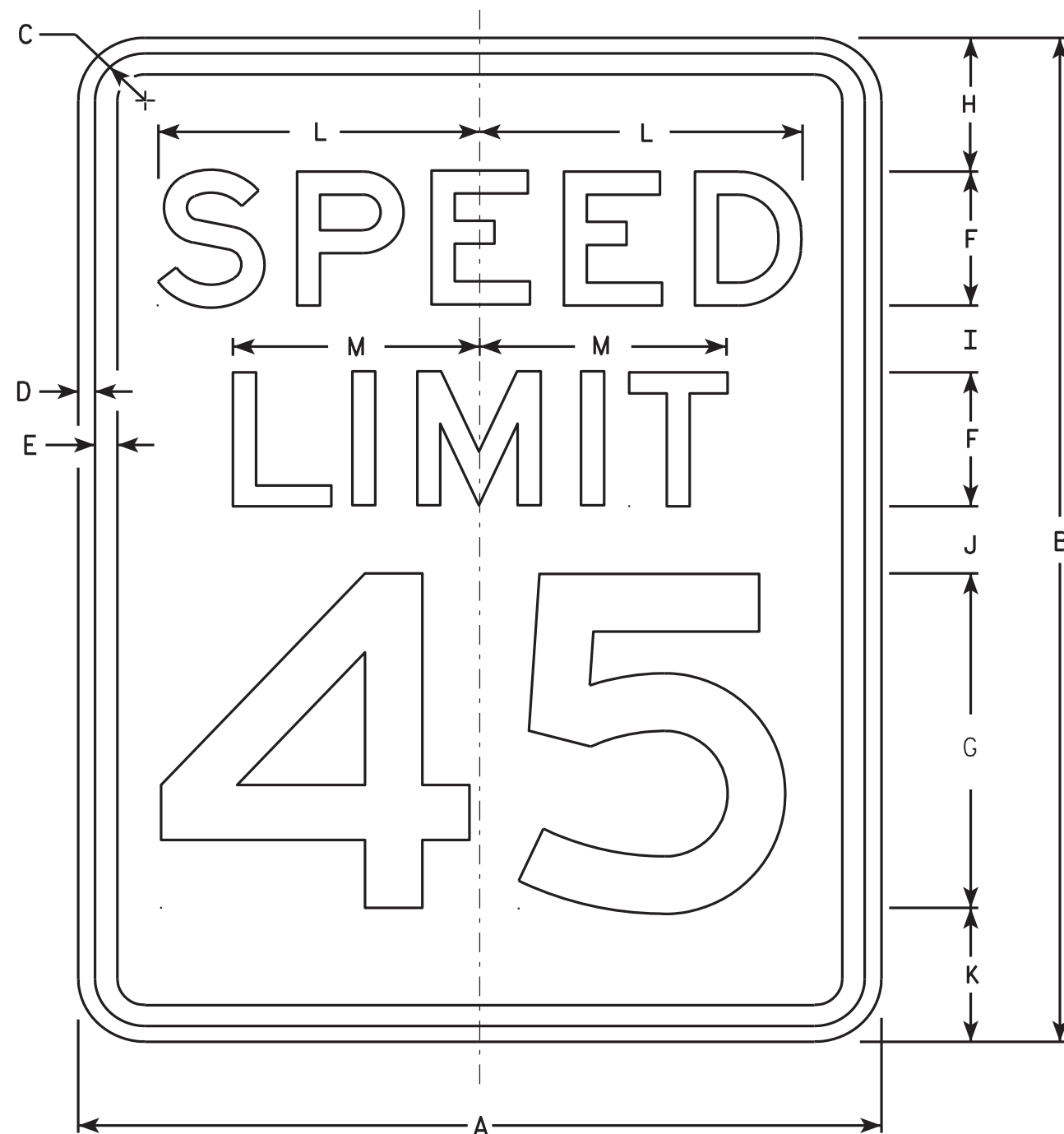
PROJECT NO: HWY: COUNTY: SHEET NO: 252 E

STANDARD SIGNS M3-1 thru M3-4 SERIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 11/10/10 PLATE NO. M3-1.12



R2-1

NOTES

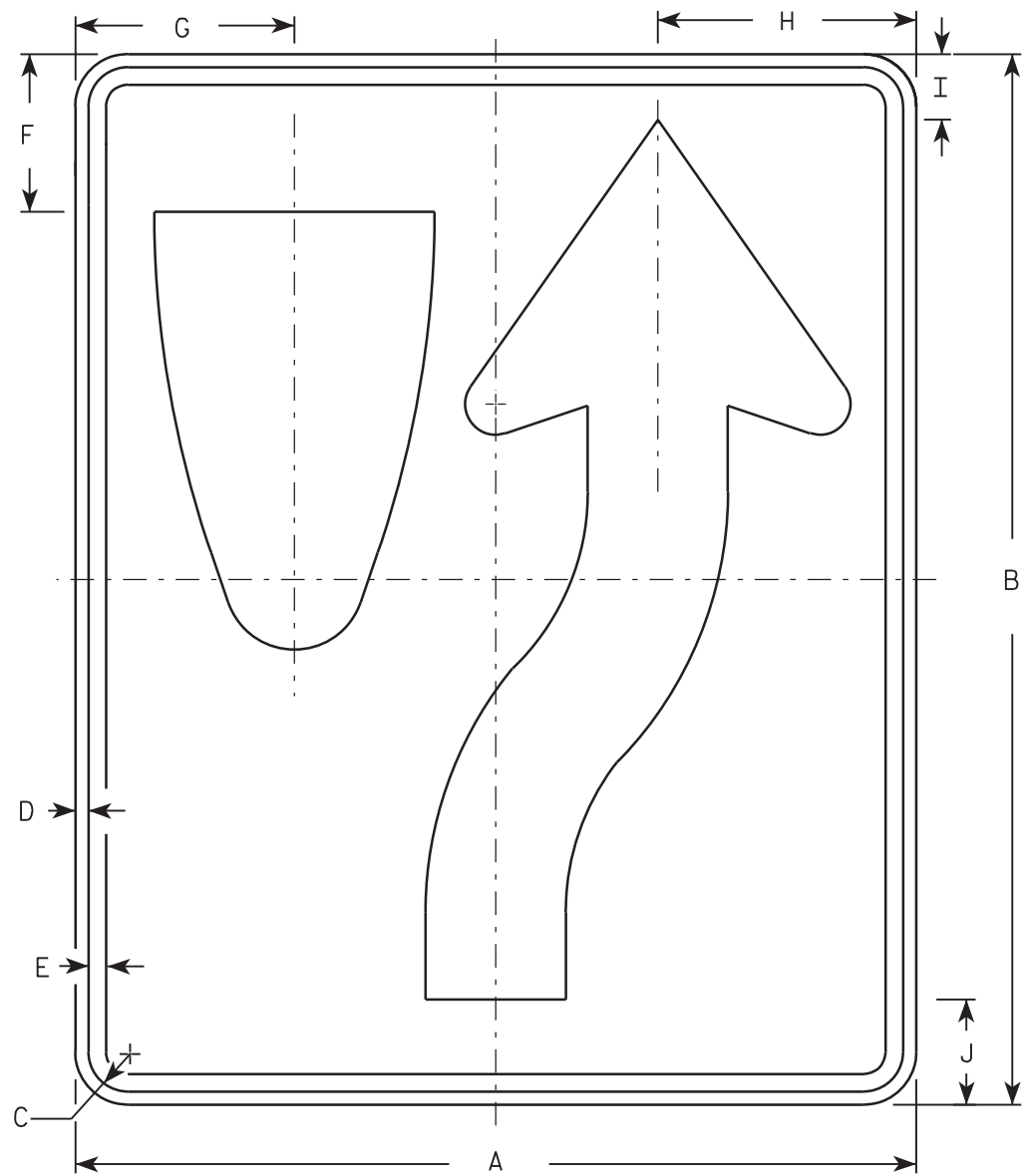
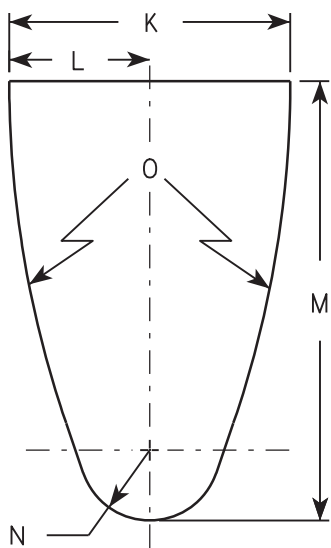
1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - White
Message - Black
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and optically adjust spacing to achieve proper balance.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18	24	1 1/8	3/8	1/2	3	8	3	2	2	3	7 1/4	5 1/2														3.0
2S	24	30	1 1/8	3/8	1/2	4	10	3	2 1/4	3 3/8	3 3/8	9 5/8	7 3/8														5.0
2M	30	36	1 3/8	1/2	5/8	5	12	5	2 1/2	2 1/2	4	12	9 1/4														7.5
3	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
4	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
5	48	60	2 1/4	3/4	1	8	20	6	4 1/2	6 3/4	6 3/4	19 1/4	14 5/8														20.0

STANDARD SIGN R2-1

WISCONSIN DEPT OF TRANSPORTATION
APPROVED *Matthew R. Rauch*
For State Traffic Engineer
DATE 5/26/10 PLATE NO. R2-1.13

PROJECT NO: HWY: COUNTY: SHEET NO: 253 E



R4-7

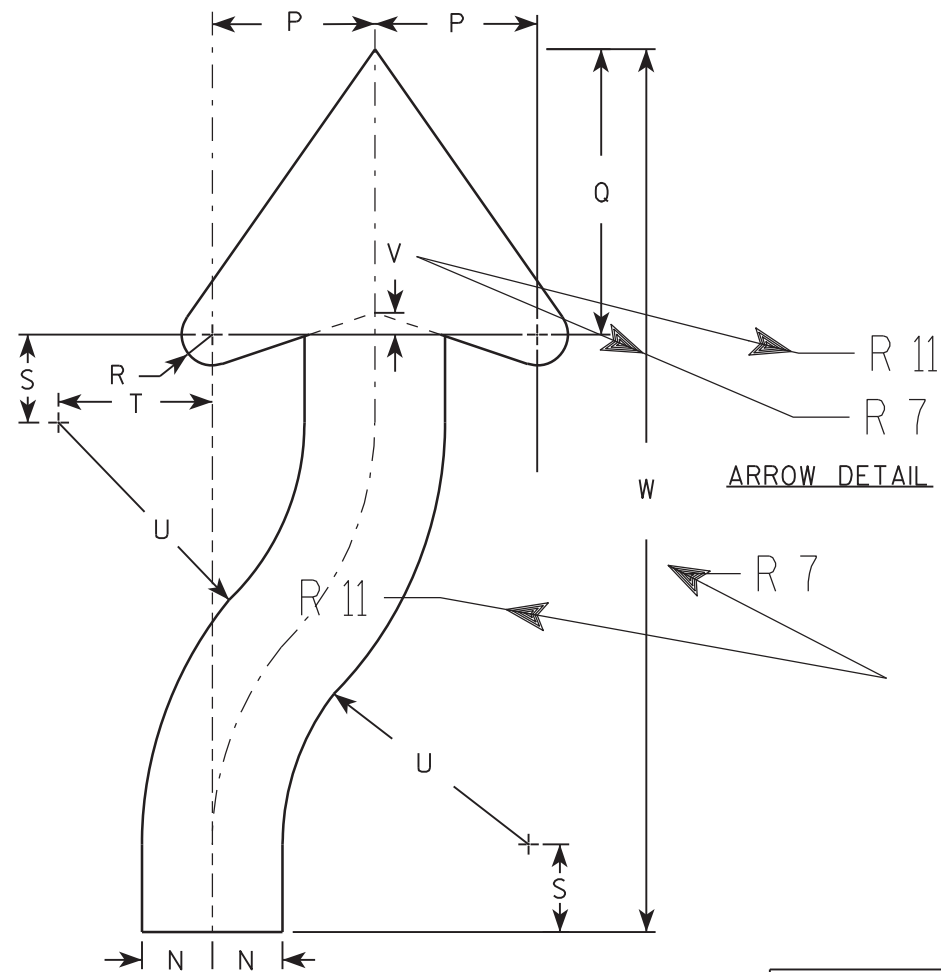
Metric equivalent
for this sign is:

SIZE	
1	450 mm X 600 mm
2	600 mm X 750 mm
3	900 mm X 1200 mm
4	900 mm X 1200 mm
5	900 mm X 1200 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	v	W	X	Y	Z	Area sq. ft.	Area m ²
1	18	24	1 1/8	3/8	1/2	3 3/8	4 3/4	5 1/2	1 3/8	2 1/4	6	3	9 3/8	1 1/2	22 1/2	3 1/2	6 1/8	5/8	1 7/8	3 1/4	6 3/4	1/2	20 3/8				3.0	.27
2	24	30	1 1/8	3/8	1/2	4 1/2	6 1/4	7 3/8	1 7/8	3	8	4	12 1/2	2	30	4 5/8	8 1/8	7/8	2 1/2	4 3/8	9	5/8	25 1/8				5.0	.45
3	36	48	1 3/4	1/2	5/8	6 3/4	9 3/8	11 1/8	2 7/8	4 1/2	12	6	18 3/4	3	45	6 7/8	12 1/4	1 1/4	3 3/4	6 5/8	13 1/2	1	40 3/4				12.0	1.08
4	36	48	1 3/4	1/2	5/8	6 3/4	9 3/8	11 1/8	2 7/8	4 1/2	12	6	18 3/4	3	45	6 7/8	12 1/4	1 1/4	3 3/4	6 5/8	13 1/2	1	40 3/4				12.0	1.08
5	48	60	2 1/4	3/4	1	9	12 1/2	14 3/4	3 3/4	6	16	8	25	4	60	9 1/4	16 1/4	1 5/8	5	8 3/4	18	1 1/4	50 1/4				20.0	1.08

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition. material is plywood but borders shall be rounded
2. Color:
Background - White
Message - Black
3. Corners may be square or rounded when base as shown. When base material is metal, the corners and borders shall be rounded.
4. R4-8 is the same as R4-7 except Legend is reversed.

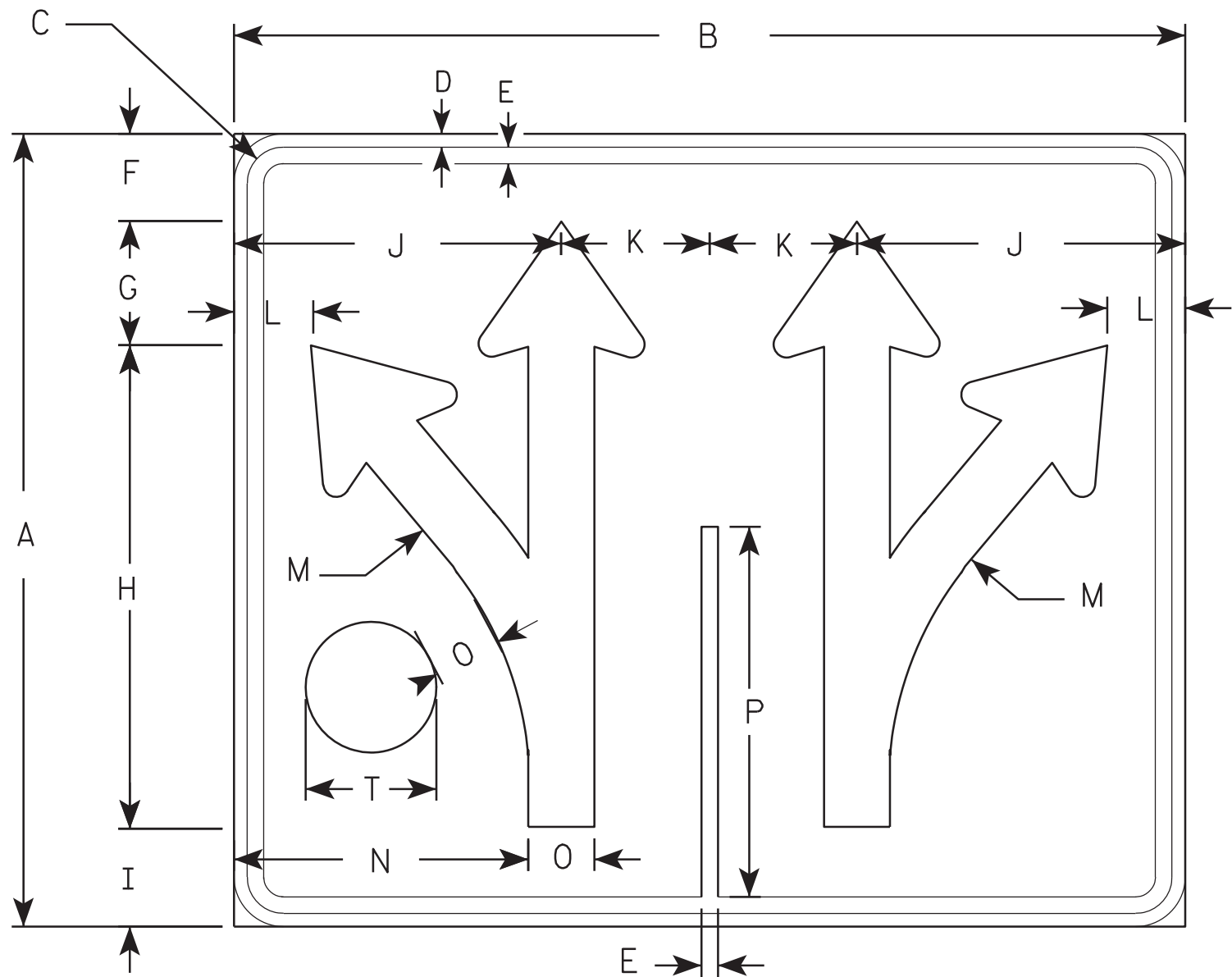


STANDARD SIGN
R4-7 & R4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED 
for State Traffic Engineer

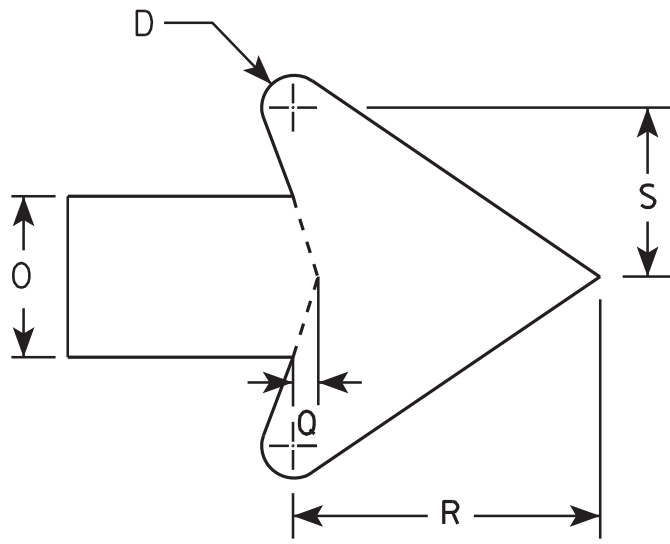
DATE 2/6/02 PLATE NO. R4-7.7



R3-8CC

NOTES

- 1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 2. Color:
Background - WHITE
Message - BLACK
- 3. Message Series - D
- 4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



ARROW DETAIL

Metric equivalent
for this sign is:

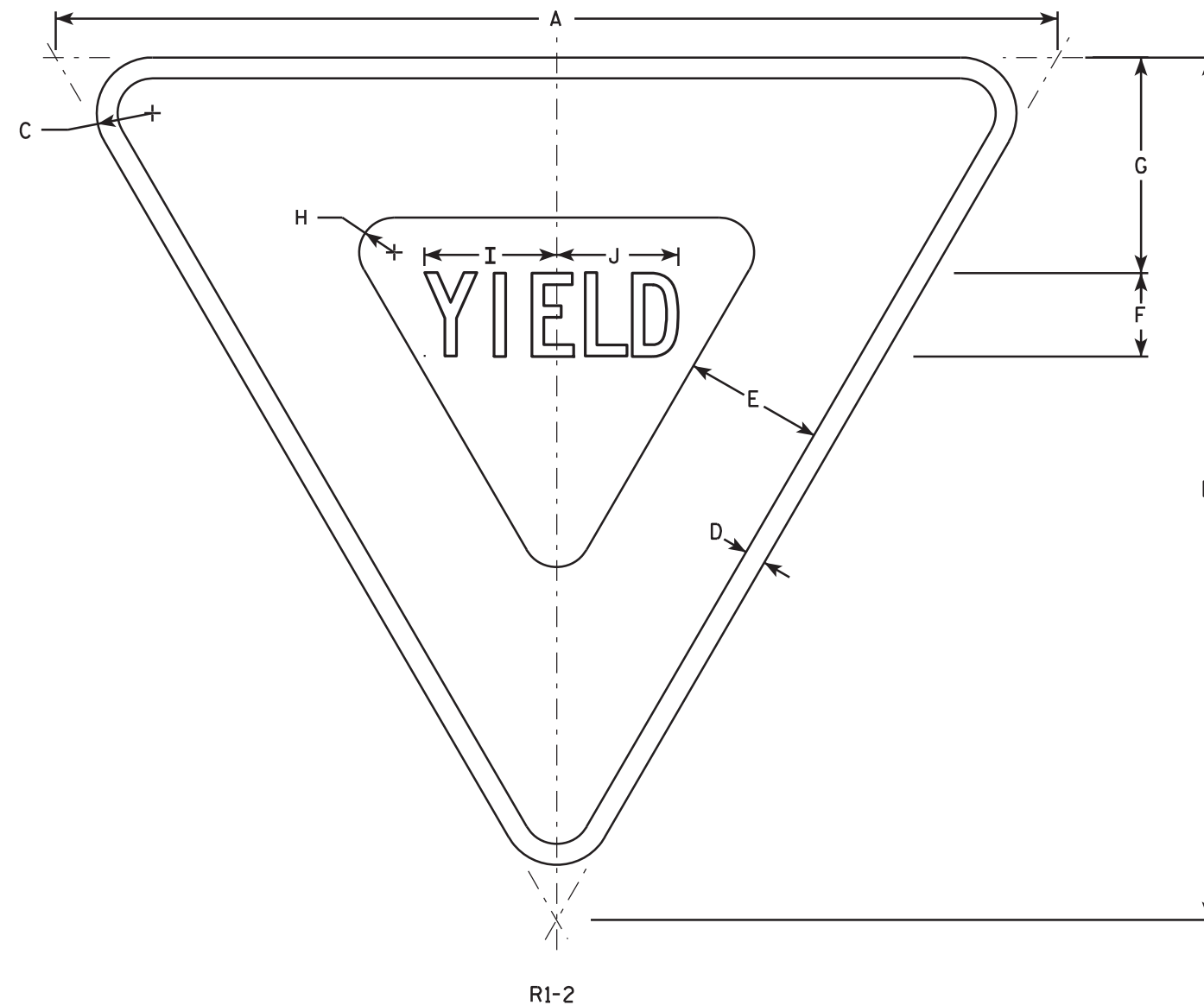
SIZE	
1	
2	750 mm X 900 mm
3	
4	1200 mm X 1350 mm
5	1200 mm X 1350 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m ²
1																												
2	30	36	1 3⁄8	1⁄2	5⁄8	3 1⁄4	4 3⁄4	18 1⁄4	3 3⁄4	12 3⁄8	5 5⁄8	3	13 1⁄4	11 1⁄8	2 1⁄2	14	3⁄8	4 3⁄4	2 5⁄8	5							7.5	0.68
3																												
4																												

STANDARD SIGN
R3-8CC

WISCONSIN DEPT OF TRANSPORTATION
APPROVED *Matthew R. Rauch*
for State Traffic Engineer
DATE 1/18/08 PLATE NO. R3-8CC.1

PROJECT NO:	HWY:	COUNTY:	SHEET NO: 255	E



NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - White
Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. The border strip and word message are reflectorized red.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30	26	1 1/2	5/8	4	2 1/2	6 3/8	7/8	4	3 5/8																	2.71
2S	36	31	2	3/4	5	3	7 3/4	1 1/4	4 3/4	4 3/8																	3.88
2M	48	42	3	1	6	4	9 3/4	2	6 1/4	5 7/8																	7.00
3	48	42	3	1	6	4	9 3/4	2	6 1/4	5 7/8																	7.00
4	48	42	3	1	6	4	9 3/4	2	6 1/4	5 7/8																	7.00
5	60	52	3	1 1/2	8	5	13	2 1/2	7 7/8	7 1/4																	10.83
6	24	21	1 1/2	3/8	3	2	4 3/4	7/8	3 1/4	3																	1.75
7	18	15 1/2	1	3/8	2 1/2	1 1/2	3 7/8	5/8	2 3/8	2 1/4																	0.97

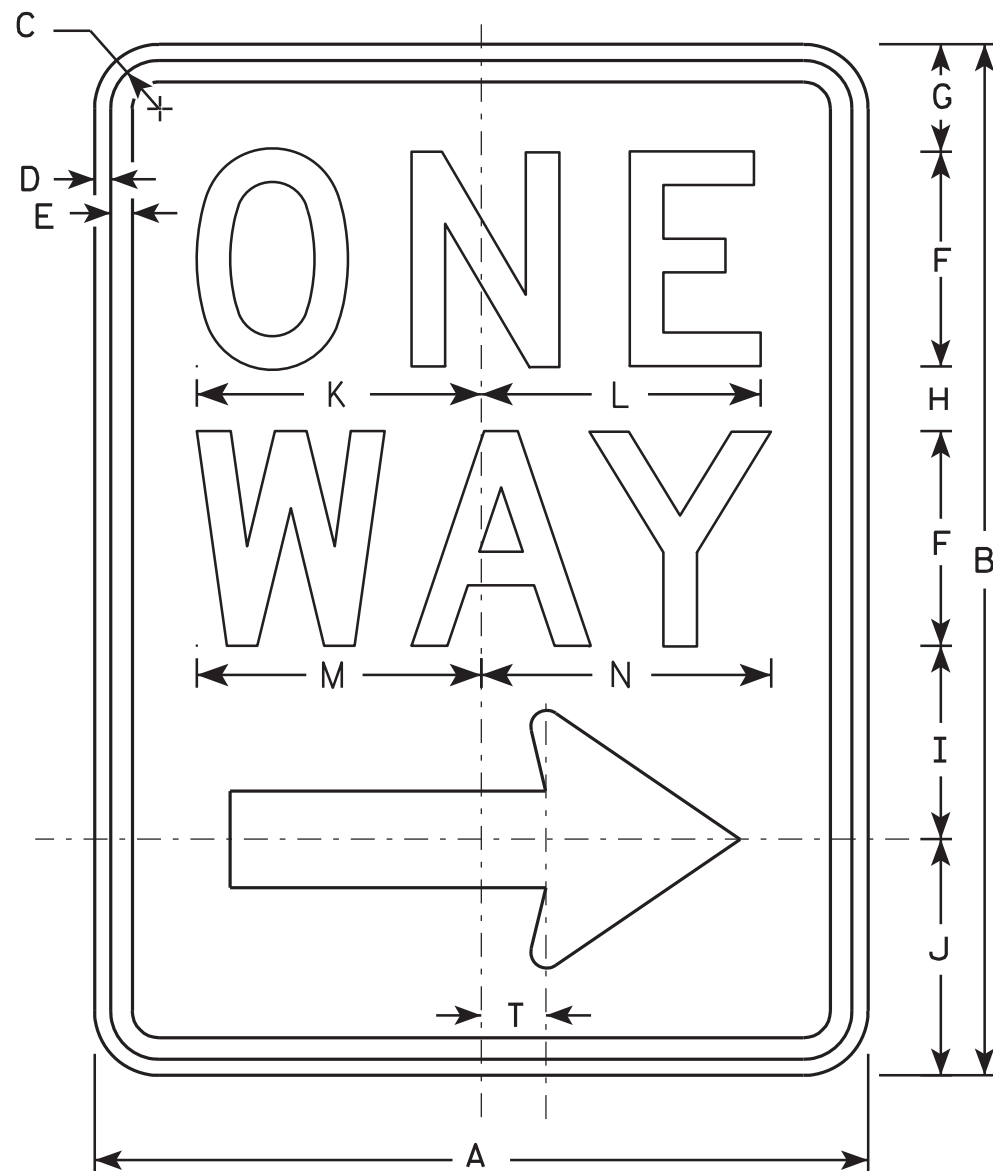
STANDARD SIGN
R1-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 11/02/10 PLATE NO. R1-2.11

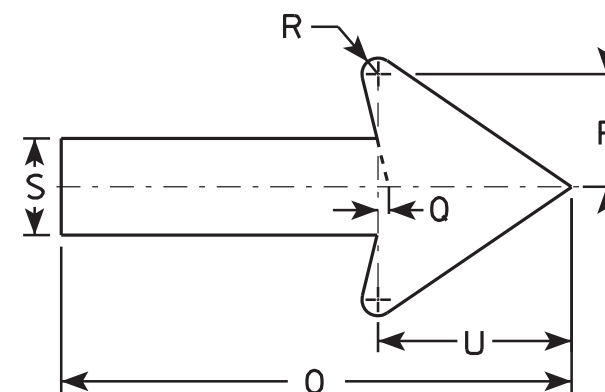
PROJECT NO: HWY: COUNTY: SHEET NO: 256 E



R6-2R

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - White
Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. R6-2L same as R6-2R except arrow points to the left.



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z
1	18	24	1 1/8	3/8	1/2	5	2 1/2	1 1/2	4 1/2	5 1/2	6 5/8	6 1/2	6 5/8	6 3/4	11 7/8	2 5/8	1/4	3/8	2 1/4	1 1/2	4 1/2					
2S	24	30	1 1/8	3/8	1/2	6	3	2 1/2	5 1/2	7	8 1/8	8 1/8	8 1/2	8 5/8	16	3 1/2	3/8	1/2	3	2	6					
2M	30	36	1 3/8	1/2	5/8	8	2 1/2	2 5/8	6 7/8	8	10 1/2	10 1/2	11 1/4	11 1/4	20	4 3/8	1/2	5/8	3 3/4	2 1/2	7 1/2					
3	36	48	1 7/8	1/2	5/8	10	5 1/4	3 1/4	9	10 1/2	12 3/4	12 3/4	13 1/4	13 1/2	24	5 5/8	1/2	3/4	4 3/4	3	9					
4	36	48	1 7/8	1/2	5/8	10	5 1/4	3 1/4	9	10 1/2	12 3/4	12 3/4	13 1/4	13 1/2	24	5 5/8	1/2	3/4	4 3/4	3	9					
5																										

PROJECT NO:	HWY:	COUNTY:	SHEET NO: 257	E

STANDARD SIGN

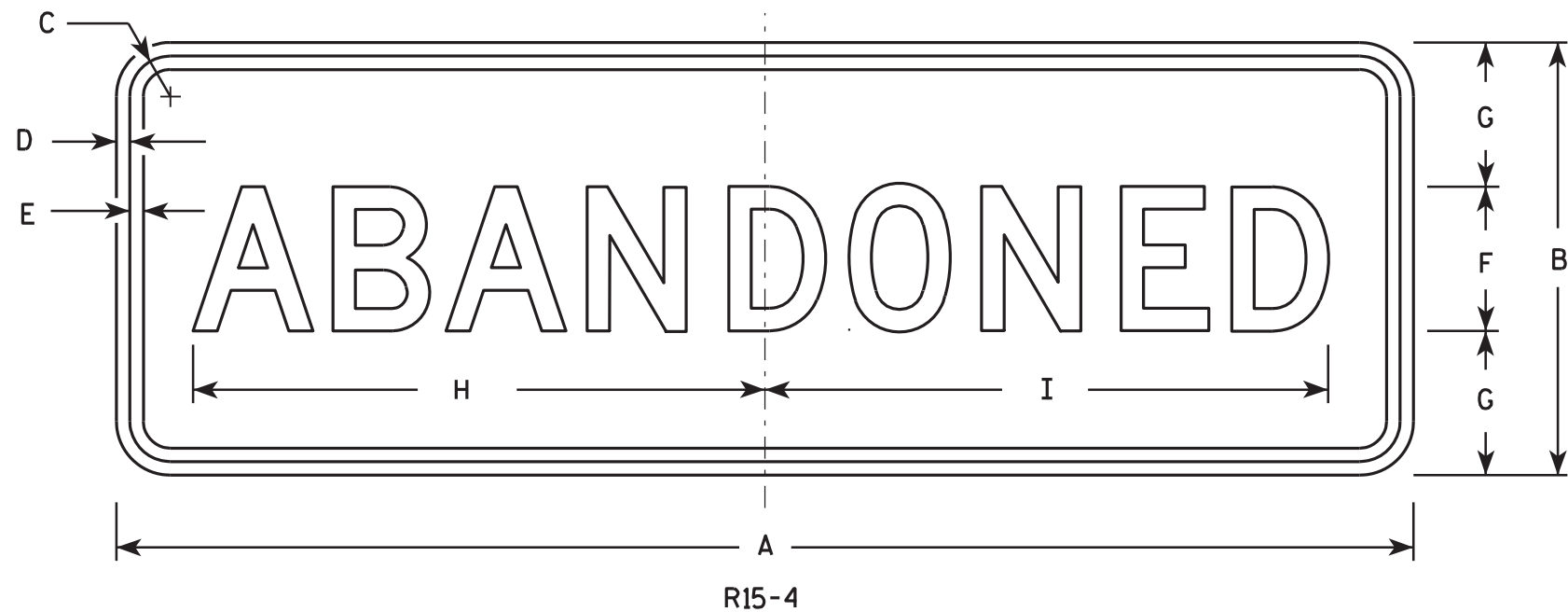
R6-2 R&L

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 11/2/10 PLATE NO. R6-2.8

7



NOTES

1. Sign is Type II - Type H Reflective -reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - White
Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

7

Metric equivalent
for this sign is:

SIZE	
1	
2	900 mm X 300 mm
3	
4	
5	

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m ²
1																												
2	36	12	1 1/8	3/8	3/8	4	4	15 7/8	15 5/8																	3.0	.27	
3																												
4																												
5																												

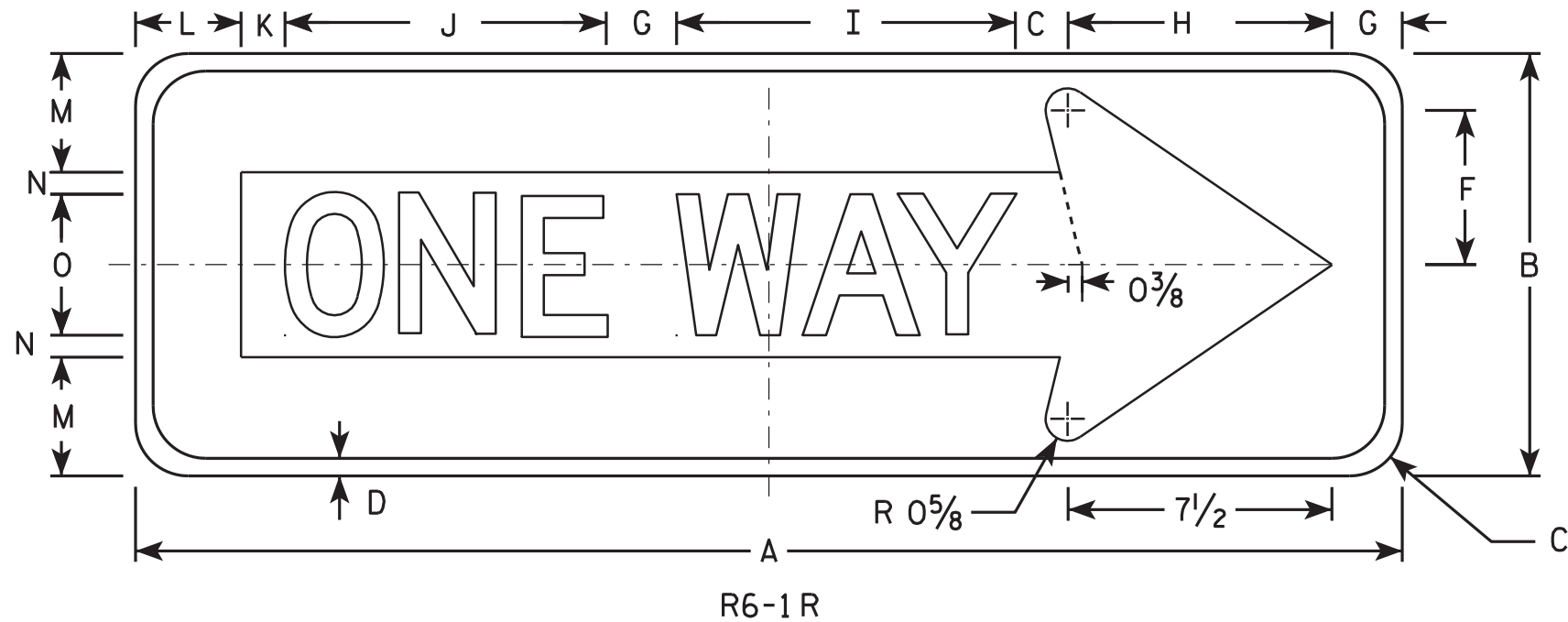
STANDARD SIGN
R15-4

WISCONSIN DEPT OF TRANSPORTATION

APPROVED 
for State Traffic Engineer

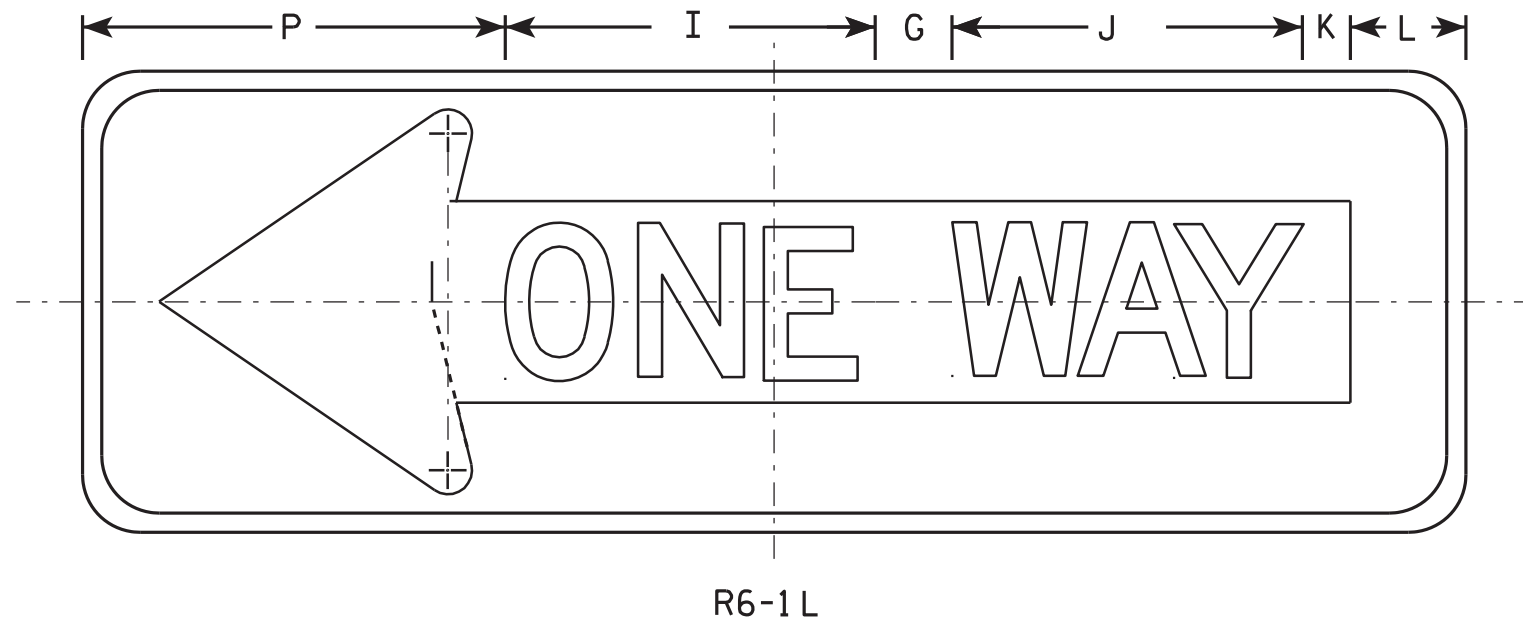
DATE 1/25/02 PLATE NO. R15-4.3

PROJECT NO:	HWY:	COUNTY:	SHEET NO: 258		E



NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - BLACK
Message - BLACK LEGEND & WHITE ARROW & BORDER
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



Metric equivalent
for this sign is:

SIZE	
1	
2	900 mm X 300 mm
3	
4	
5	

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area sq
1																												
2	36	12	1 1/2	1/2		4 3/8	2	7 1/2	9 5/8	9 1/8	1 1/4	3	3 3/8	5/8	4	11											3.0	0.27
3																												
4																												
5																												

STANDARD SIGN R6-1 L & R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 1/17/08 PLATE NO. R6-1.1

PROJECT NO:

SHEET NO: 259

E

7

Metric equivalent
for this sign is:

SIZE	
1	
2	1200 mm X 450 mm
3	
4	
5	

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m ²
1																												
2	48	18	2 1/4	3/4	7/8	7 1/8	5 3/4	6 3/8	9	36°																	6.0	0.54
3																												
4																												
5																												

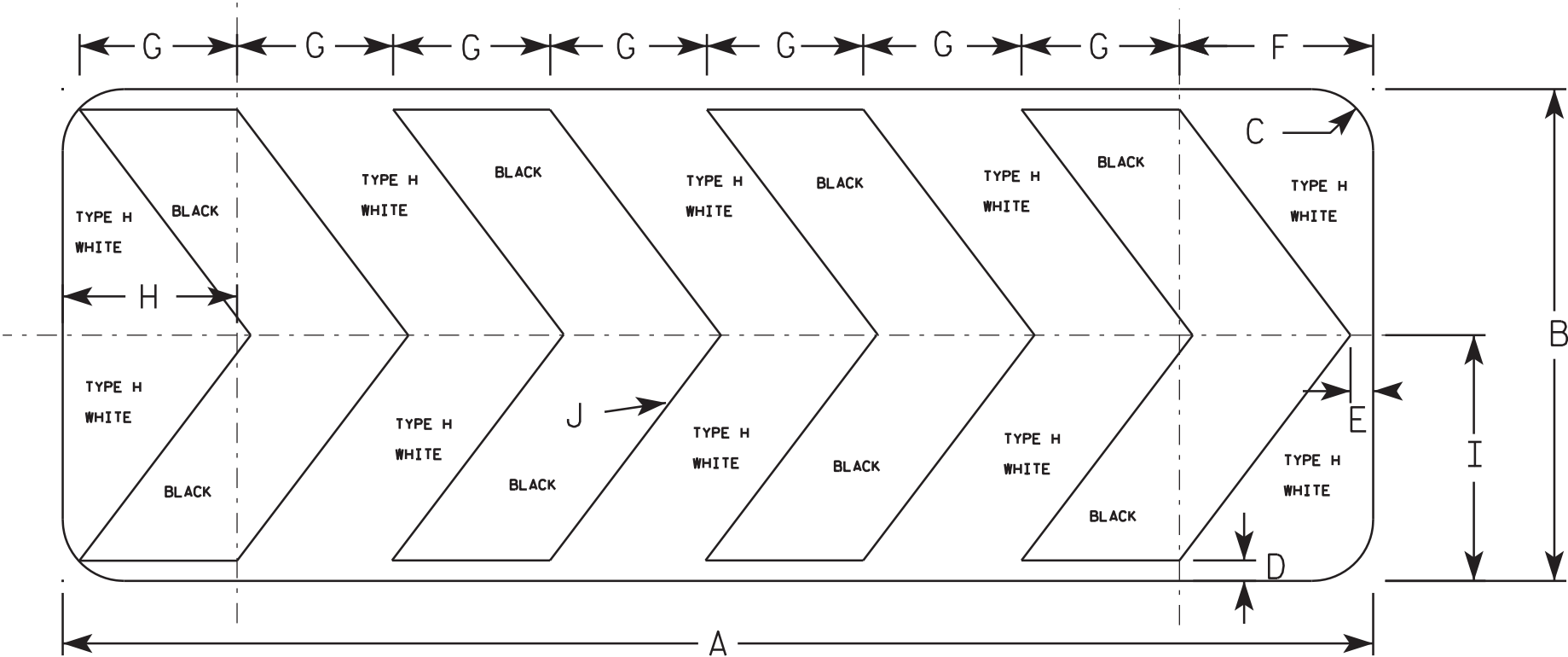
PROJECT NO:

SHEET NO: 260

E

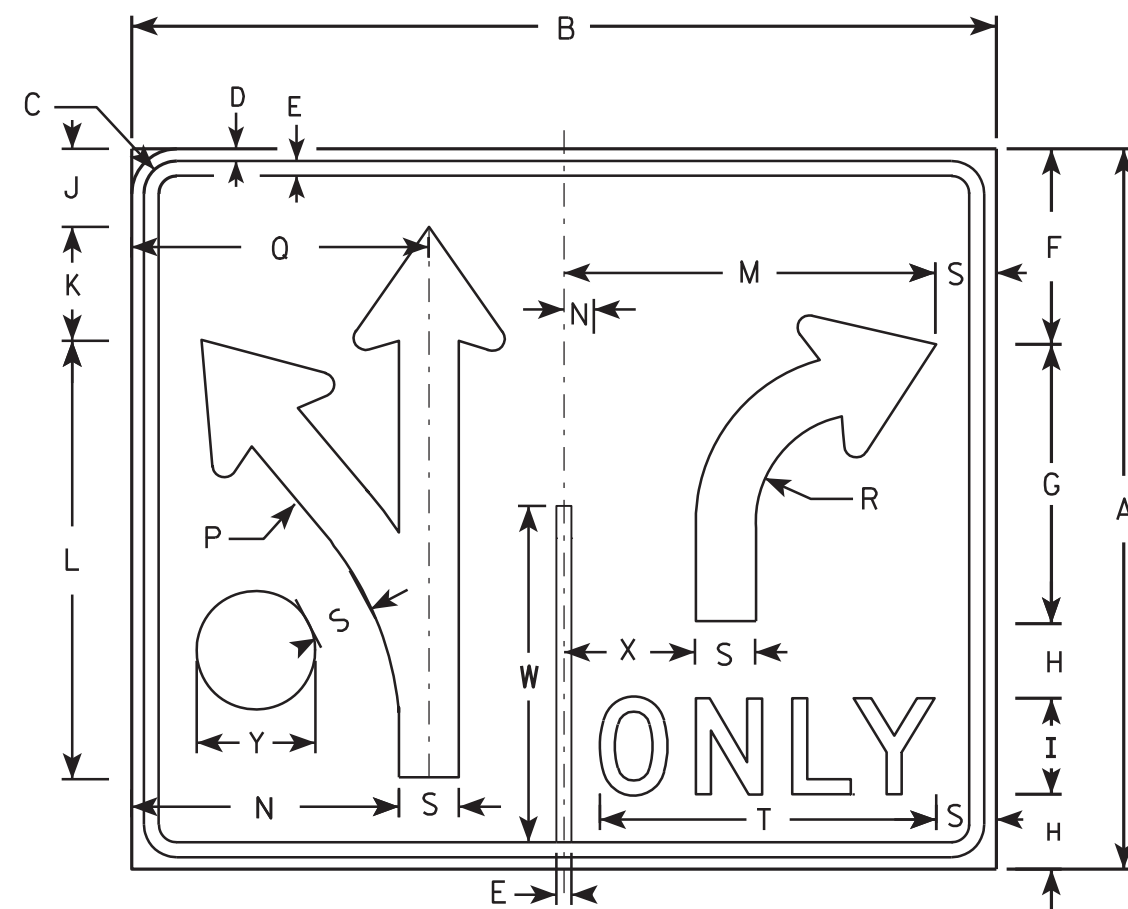
NOTES

1. Sign is Type II - Type H Reflective - reference
WIS DOT Standard Specification for HIGHWAY
and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - WHITE
Message - BLACK
3. Corners may be square or rounded when base
material is plywood but borders shall be rounded
as shown. When base material is metal, the
corners and borders shall be rounded.

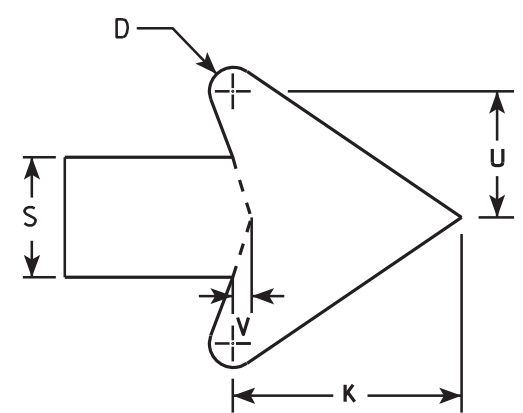


R6-4B

7



R3-8DD



ARROW DETAIL

Metric equivalent
for this sign is:

SIZE	
1	
2	750 mm X 900 mm
3	
4	1200 mm X 1350 mm
5	1200 mm X 1350 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
1																												
2	30	36	1 3⁄8	1⁄2	5⁄8	8 1⁄8	11 5⁄8	3 1⁄8	4	3 1⁄4	4 3⁄4	18 1⁄4	15 1⁄2	1 1⁄4		13 1⁄4	12 3⁄8	4 1⁄2	2 1⁄2	14	2 5⁄8	3⁄8	14	5 1⁄4	4 1⁄4		7.5	0.68
3																												

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - WHITE
Message - BLACK
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. R3-8B & R3-8C is the same but reversed.

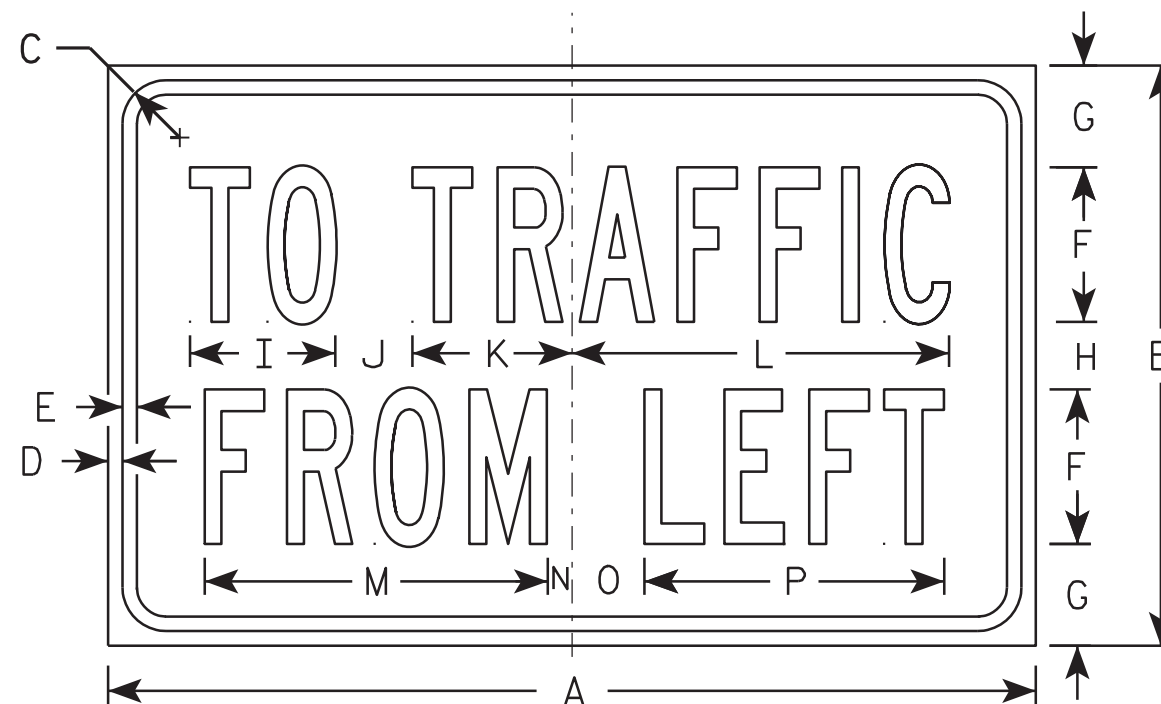
STANDARD SIGN
R3-8DD

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 1/18/08 PLATE NO. R3-8DD.1

PROJECT NO:	HWY:	COUNTY:	SHEET NO: 261	E



R1-54

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - White
Message - Black
3. Message Series - B

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	15	1 1/8	3/8	3/8	4	2 5/8	1 3/4	3 3/4	2	4 1/8	9 3/4	8 7/8	5/8	1 7/8	7 3/4											2.5
2M	24	15	1 1/8	3/8	3/8	4	2 5/8	1 3/4	3 3/4	2	4 1/8	9 3/4	8 7/8	5/8	1 7/8	7 3/4											2.5
3																											
4																											
5																											

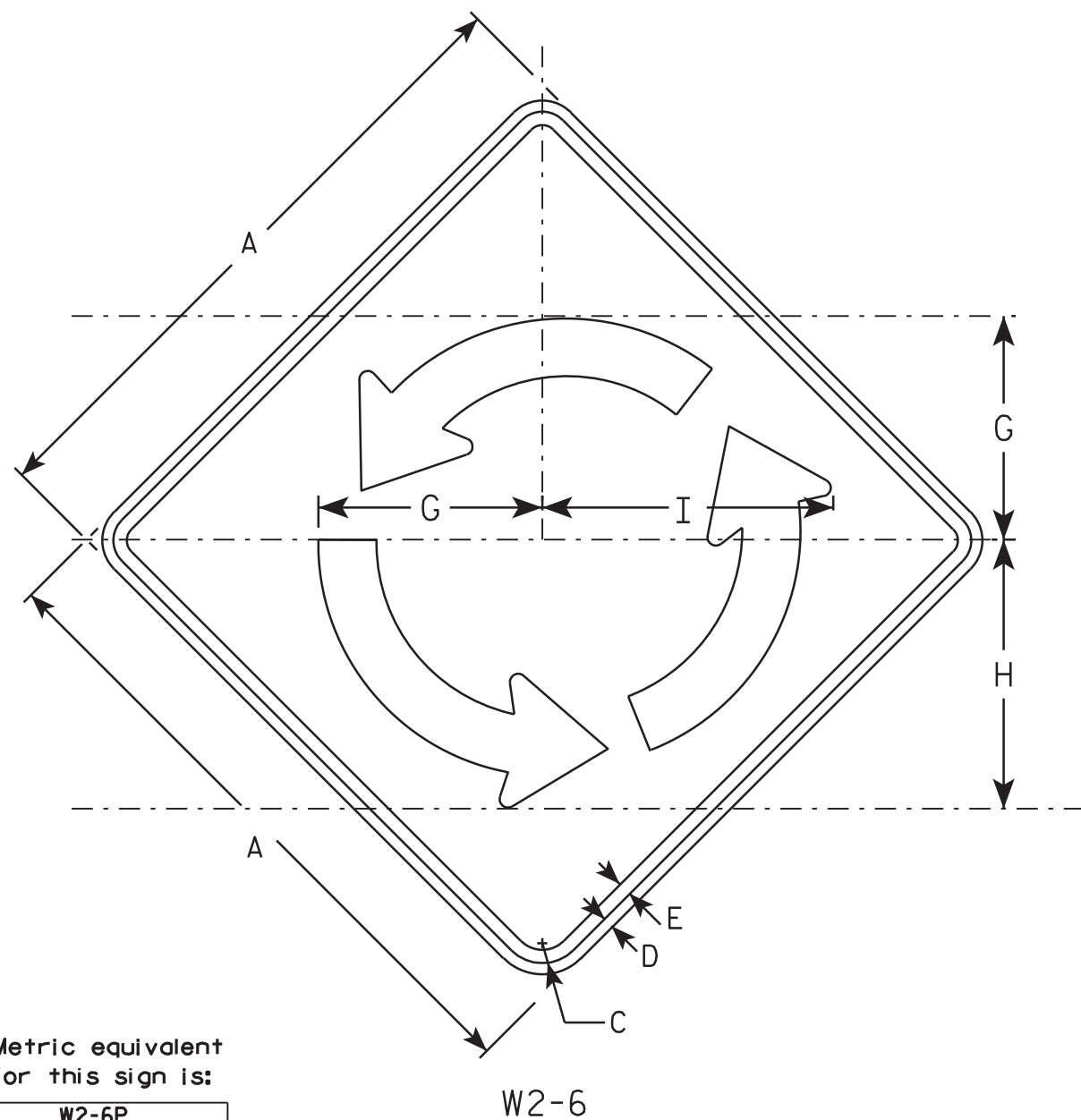
STANDARD SIGN
R1-54

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R. Rauch
for State Traffic Engineer

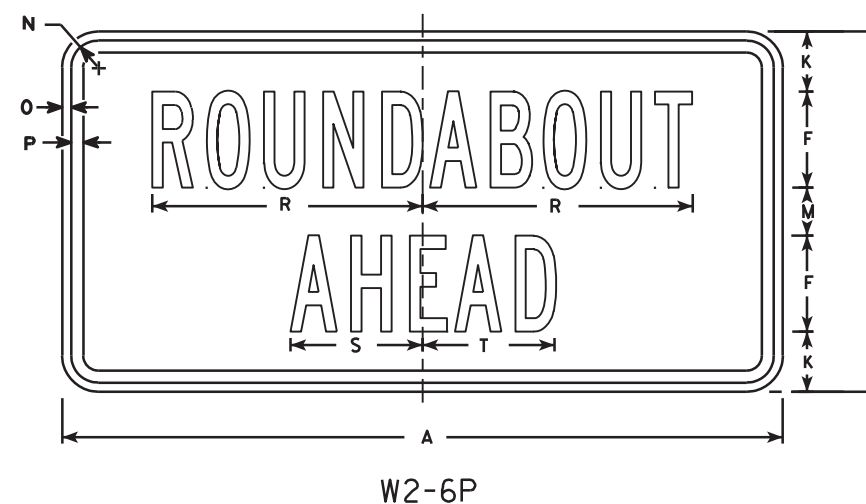
DATE 12/03/10 PLATE NO. R1-54.2

PROJECT NO:	HWY:	COUNTY:	SHEET NO: 262	E



NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - YELLOW
Message - BLACK
3. Message Series - B
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



Metric equivalent
for this sign is:

Metric equivalent
for this sign is:

SIZE	W2-6	SIZE	W2-6P
1		1	
2	750 mm X 750 mm	2	750 mm X 375 mm
3	900 mm X 900 mm	3	900 mm X 450 mm
4	1200 mm X 1200 mm	4	1200 mm X 600 mm
5		5	

																									W2-6		W2-6P	
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Area sq. ft.	Area m ²	Area sq. ft.	Area m ²
1																												
2	30		1 3⁄8	1⁄2	5⁄8	4	10 3⁄8	12 1⁄2	13 1⁄2	15	2 1⁄2		2	1 1⁄8	3⁄8	1⁄2		11 1⁄4	5 1⁄2	5 1⁄2					6.25	0.56	3.12	0.28
3	36		1 5⁄8	5⁄8	3⁄4	5	12 1⁄2	15	16 1⁄4	18	2 5⁄8		2 3⁄4	1 1⁄8	3⁄8	1⁄2		14	7	6 3⁄4					9.00	0.81	4.50	0.40
4	48		2 1⁄4	3⁄4	1	6	16 5⁄8	20	16 1⁄4	24	4 3⁄8		3 5⁄8	1 3⁄8	1⁄2	5⁄8		17	8 1⁄4	8 1⁄4					16.0	1.44	8.0	.72
5																												

STANDARD SIGN W2-6

WISCONSIN DEPT OF TRANSPORTATION

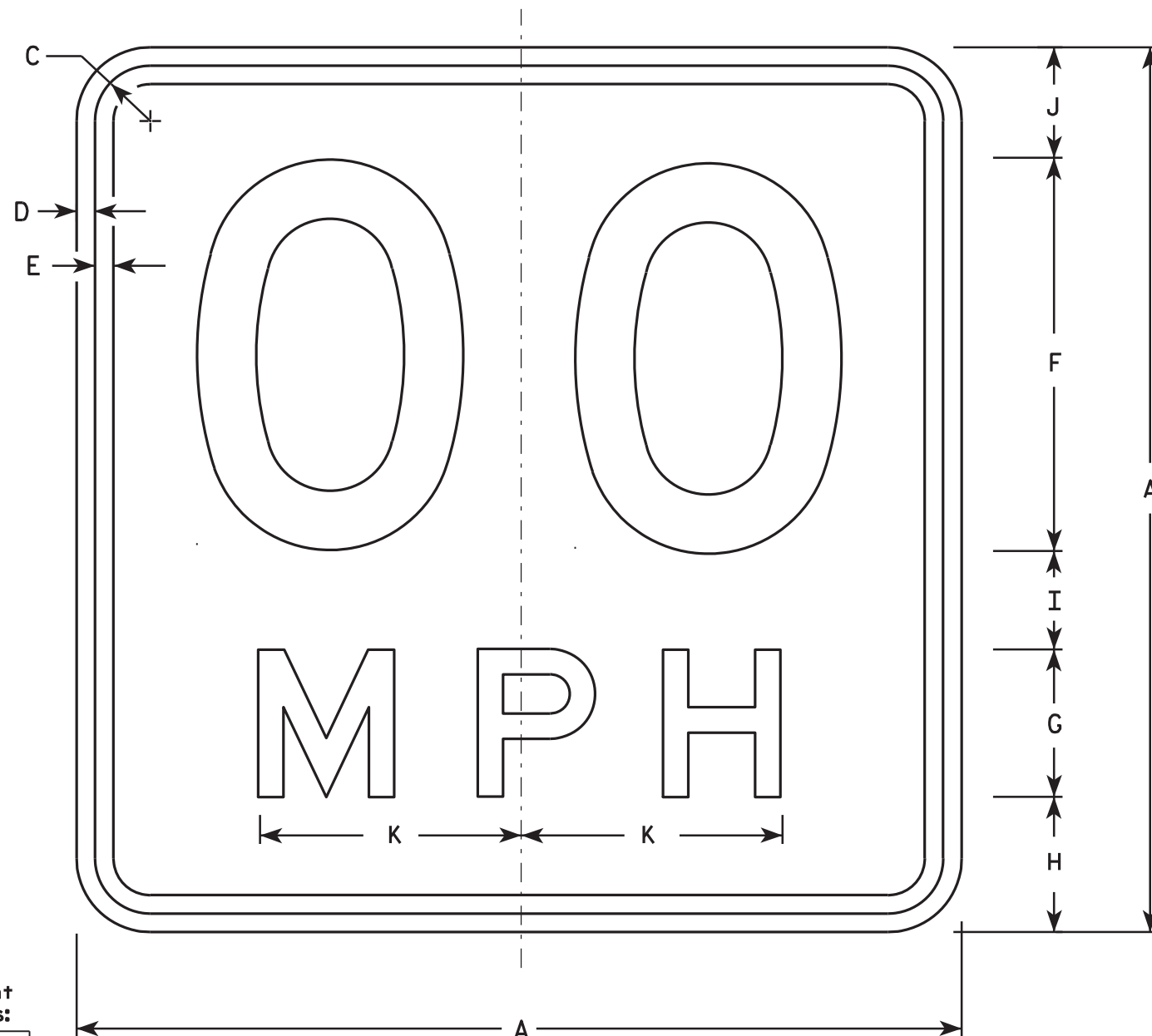
APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 3/12/07 PLATE NO. W2-6.3

PROJECT NO:

SHEET NO: 263

E



NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Yellow
Message - Black
3. Message Series - See Note 6
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and optically space about centerline to achieve proper balance.
6. Line 1 is Series D
Line 2 is Series E

Metric equivalent
for this sign is:

SIZE	
1	450 mm X 450 mm
2	450 mm X 450 mm
3	600 mm X 600 mm
4	900 mm X 900 mm
5	900 mm X 900 mm

W13-1

* For 30" x 30" Warning Signs, use 18" x 18" W13-1 signs.
For 36" x 36" Warning Signs, use 24" x 24" W13-1 signs.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area sq. m.
1	18		1 1/8	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25	0.20
2*	18		1 1/8	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25	0.20
2*	24		1 1/8	3/8	1/2	10	4	4	2 3/4	3 1/4	6 5/8																4.00	0.36
3	24		1 1/8	3/8	1/2	10	4	4	2 3/4	3 1/4	6 5/8																4.00	0.36
4	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00	0.81
5	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00	0.81

STANDARD SIGN W13-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 4/05/06 PLATE NO. W13-1.14

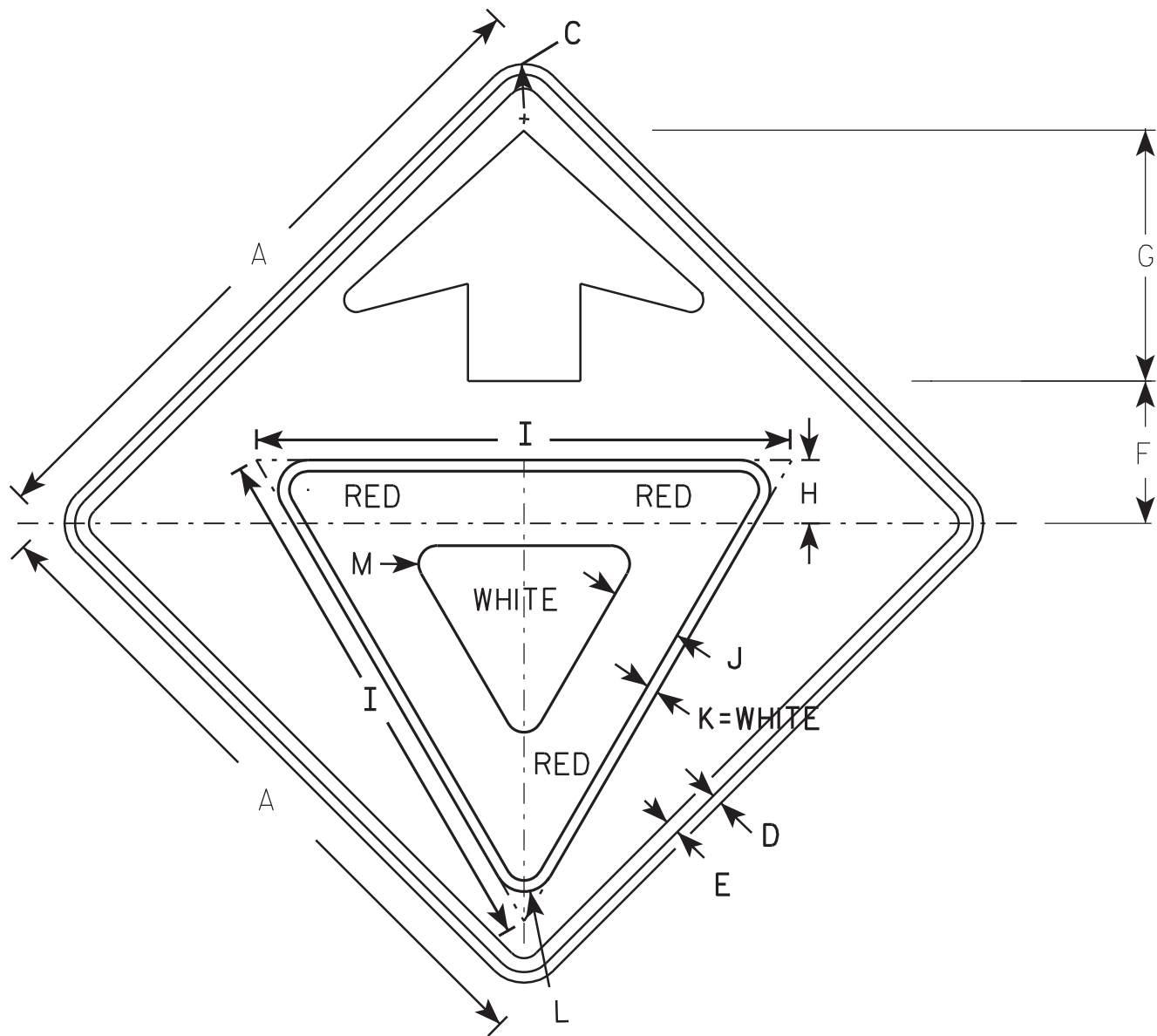
PROJECT NO:

HWY:

COUNTY:

SHEET NO: 264

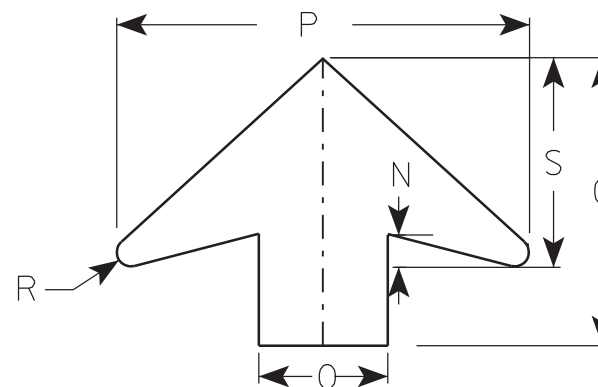
E



W3-2

NOTES

1. All Signs Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - YELLOW
Arrow & Border - BLACK
Yield Symbol - WHITE BORDER ON RED BACKGROUND



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8	6 1/4	11 1/4	3	25	3 3/8	1/2	1 3/8	7/8	1 1/4	5	16		1/2	8								6.25
2S	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 3/8	28	3 3/4	5/8	1 1/2	1	1 5/8	6	19 1/4		5/8	9 3/4								9.0
2M	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 3/8	28	3 3/4	5/8	1 1/2	1	1 5/8	6	19 1/4		5/8	9 3/4								9.0
3	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 3/8	28	3 3/4	5/8	1 1/2	1	1 5/8	6	19 1/4		5/8	9 3/4								9.0
4	48		2 1/4	3/4	1	10	17 7/8	4 1/2	38	5	3/4	2 1/8	1 3/8	2	8	25 5/8		7/8	13								16.0
5	48		2 1/4	3/4	1	10	17 7/8	4 1/2	38	5	3/4	2 1/8	1 3/8	2	8	25 5/8		7/8	13								16.0

PROJECT NO:																											SHEET NO: 265	E

STANDARD SIGN

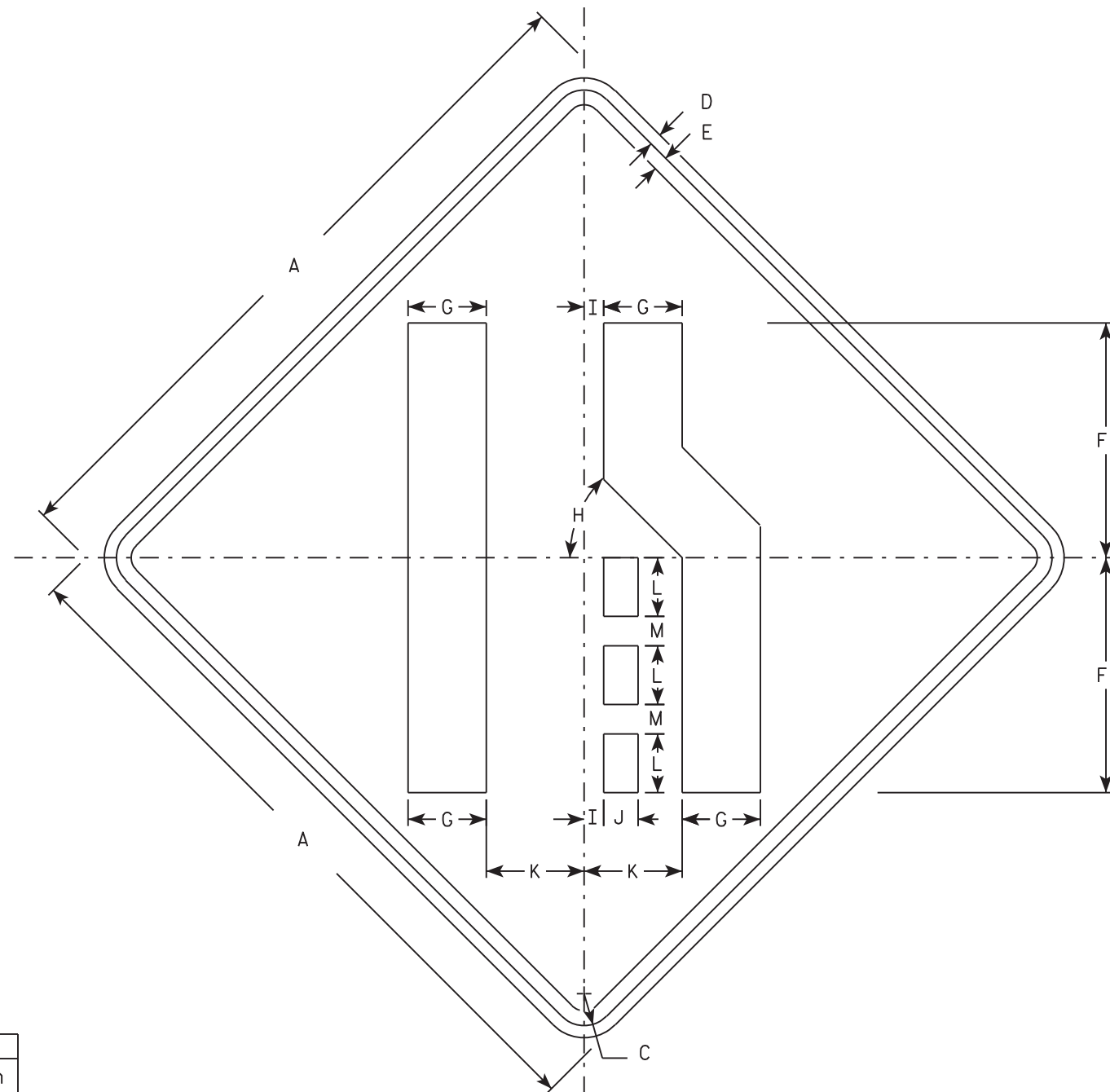
W3-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*

for State Traffic Engineer

DATE 6/7/10 PLATE NO. W3-2..9



W4-2R

Metric equivalent
for this sign is:

SIZE	
1	750 mm X 750 mm
2	900 mm X 900 mm
3	1200 mm X 1200 mm
4	1200 mm X 1200 mm
5	1200 mm X 1200 mm

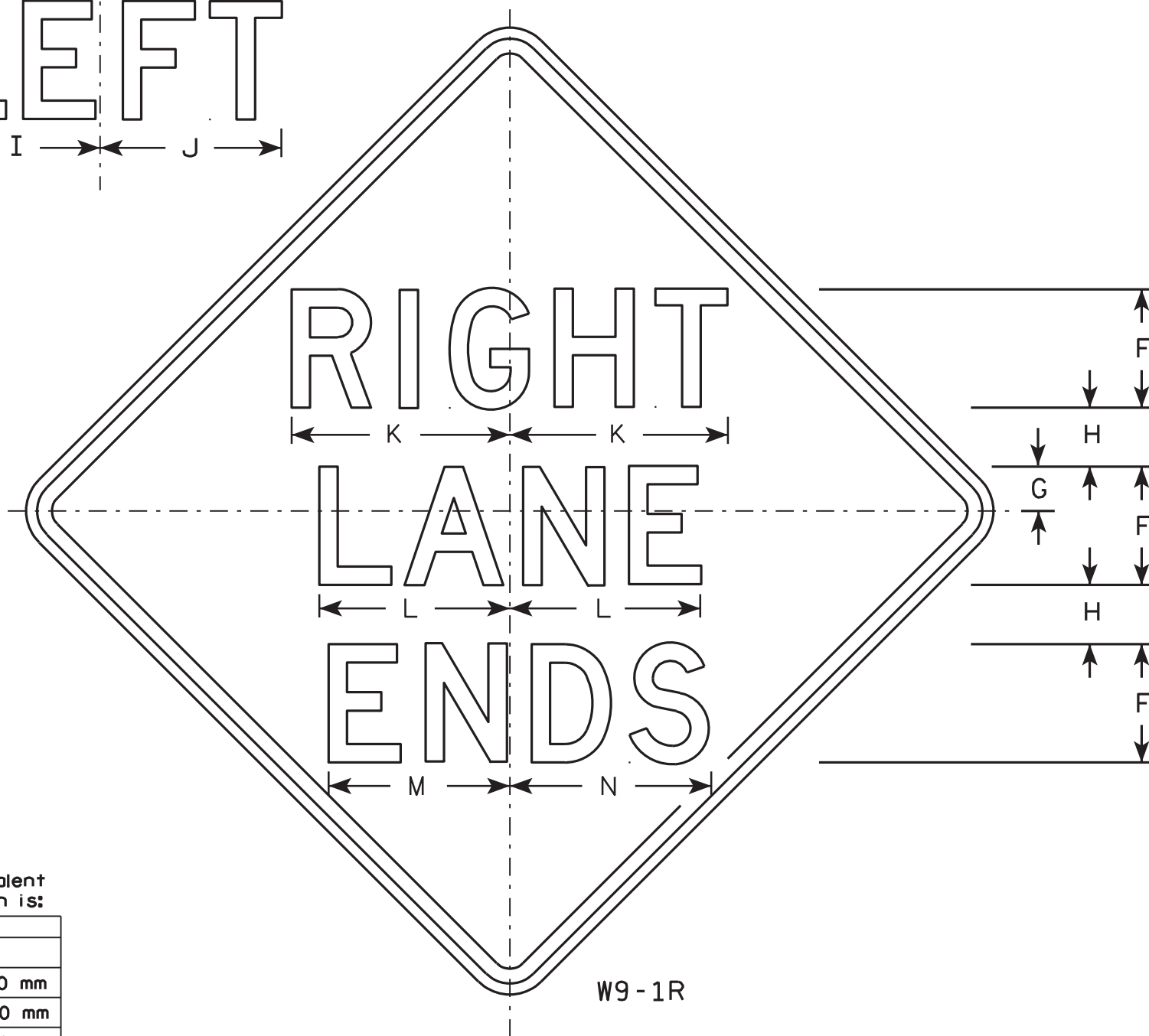
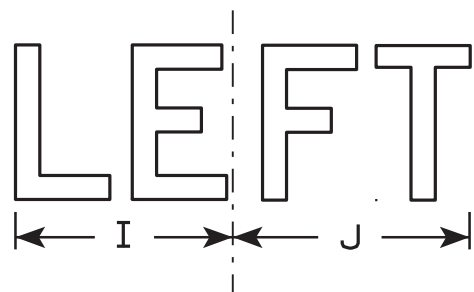
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
1	30		1 3⁄8	1⁄2	5⁄8	10	3 3⁄8	45°	7⁄8	1 1⁄2	4 1⁄4	2 1⁄2	1 1⁄4														6.25	0.56
2	36		1 5⁄8	5⁄8	3⁄4	12	4	45°	1	1 3⁄4	5	3	1 1⁄2														9.0	0.81
3	48		2 1⁄4	3⁄4	1	16	5 3⁄8	45°	1 1⁄4	2 3⁄8	6 3⁄4	4	2														16.0	1.44
4	48		2 1⁄4	3⁄4	1	16	5 3⁄8	45°	1 1⁄4	2 3⁄8	6 3⁄4	4	2														16.0	1.44
5	48		2 1⁄4	3⁄4	1	16	5 3⁄8	45°	1 1⁄4	2 3⁄8	6 3⁄4	4	2														16.0	1.44

NOTES

1. Sign is Type II - Type H Reflective - reference
WIS DOT Standard Specification for HIGHWAY
and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Yellow
Message - Black
3. Corners may be square or rounded when base
material is plywood but borders shall be rounded
as shown. When base material is metal, the
corners and borders shall be rounded.
4. W4-2L is the same as W4-2R except the message is
reversed along the vertical centerline.

STANDARD SIGN
W4-2

WISCONSIN DEPT OF TRANSPORTATION
APPROVED *Matthew R. Rauch*
for State Traffic Engineer
DATE 2/08/05 PLATE NO. W4-2.11



W9-1R

Metric equivalent
for this sign is:

SIZE	
1	
2	750 mm X 750 mm
3	900 mm X 900 mm
4	900 mm X 900 mm
5	1200 mm X 1200 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m ²
1																												
2	30		1 3⁄8	1⁄2	5⁄8	5	1 1⁄2	2 1⁄2	7 1⁄8	7 5⁄8	9 1⁄4	8 1⁄8	7 5⁄8	8 5⁄8													6.25	0.56
3	36		1 5⁄8	5⁄8	3⁄4	6	2	3	8 1⁄2	9 1⁄8	11	9 3⁄4	9	10 3⁄8													9.0	0.81
4	36		1 5⁄8	5⁄8	3⁄4	6	2	3	8 1⁄2	9 1⁄8	11	9 3⁄4	9	10 3⁄8													9.0	0.81
5	48		2 1⁄4	3⁄4	1	8	3	4	11 1⁄4	12 1⁄4	14 3⁄4	12 7⁄8	12 1⁄4	13 5⁄8													16.0	1.44

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Yellow
Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. W9-1L same as W9-1R except the word Left replaces Right.

STANDARD SIGN
W9-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED
Christa J. Spang
for State Traffic Engineer

DATE 01/16/02 PLATE NO. W9-1.6

STH 54 WEST LEG @ STH 172

STATION	Real Station	Distance	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)			Mass Ordinate
			Cut	Salvaged/ Unusable Pavement Material	Fill	Rock Exc	Cut	Salvaged/ Unusable Pavement Material	Fill	Rock Exc	Cut 1.25	Expanded Fill 1.15	Expanded Rock 1.10	
Note 1	Note 2	Note 3	Note 1	Note 4										
75.00	75	0	31	0	1									
1+00.00	100	25	90	0	3	0	56	0	2	0	70	2	0	53.89
1+25.00	125	25	207	0	32	0	138	0	16	0	242	21	0	172.75
1+50.00	150	25	175	0	9	0	177	0	19	0	463	43	0	327.78
1+75.00	175	25	166	0	18	0	158	0	13	0	660	57	0	471.22
2+00.00	200	25	78	0	12	0	113	0	14	0	801	73	0	568.10
2+25.00	225	25	142	0	20	0	101	0	15	0	928	89	0	652.89
2+50.00	250	25	112	0	20	0	117	0	18	0	1,075	111	0	749.10
2+75.00	275	25	123	0	15	0	109	0	17	0	1,211	130	0	839.13
3+00.00	300	25	119	0	17	0	112	0	15	0	1,352	147	0	934.15
3+25.00	325	25	92	0	8	0	98	0	12	0	1,474	161	0	1,018.34
3+50.00	350	25	122	0	25	0	99	0	15	0	1,597	178	0	1,099.60
3+75.00	375	25	128	0	29	0	116	0	25	0	1,742	206	0	1,186.96
4+00.00	400	25	134	0	20	0	122	0	23	0	1,894	232	0	1,282.59
4+25.00	425	25	110	0	25	0	113	0	21	0	2,035	256	0	1,371.85
4+50.00	450	25	119	0	20	0	106	0	21	0	2,168	280	0	1,453.82
4+75.00	475	25	118	0	25	0	109	0	21	0	2,304	304	0	1,539.29
5+00.00	500	25	153	0	54	0	125	0	36	0	2,461	346	0	1,623.11
5+25.00	525	25	168	0	20	0	149	0	34	0	2,647	385	0	1,732.68
5+50.00	550	25	161	0	57	0	152	0	36	0	2,838	426	0	1,844.16
5+75.00	575	25	160	0	62	0	149	0	55	0	3,023	489	0	1,929.76
6+00.00	600	25	162	0	67	0	149	0	60	0	3,210	558	0	2,010.30
6+25.00	625	25	167	0	19	0	153	0	40	0	3,400	603	0	2,117.03
6+50.00	650	25	170	0	31	0	156	0	23	0	3,596	630	0	2,246.56
6+75.00	675	25	120	0	23	0	134	0	25	0	3,763	659	0	2,351.88
7+00.00	700	25	176	0	112	0	137	0	63	0	3,934	731	0	2,417.01
7+25.00	725	25	220	0	56	0	183	0	78	0	4,164	820	0	2,510.93
7+50.00	750	25	199	0	67	0	194	0	57	0	4,406	886	0	2,639.59
7+75.00	775	25	219	0	73	0	194	0	65	0	4,649	960	0	2,759.01
8+00.00	800	25	225	0	28	0	206	0	47	0	4,906	1,013	0	2,911.00
8+25.00	825	25	315	0	0	0	250	0	13	0	5,218	1,028	0	3,146.09
8+50.00	850	25	300	0	0	0	285	0	0	0	5,574	1,028	0	3,430.79
8+75.00	875	25	204	0	33	0	233	0	16	0	5,866	1,046	0	3,646.28
9+00.00	900	25	155	0	58	0	166	0	42	0	6,073	1,095	0	3,763.65
9+25.00	925	25	85	0	4	0	111	0	29	0	6,212	1,128	0	3,841.79

TOTAL 4,970 0 981 0

- 1) Common Excavation is the sum of the Cut and EBS Excavation columns.
- 2) Salvaged/Unsuable Pavement Material is included in Cut.
- 3) Available Material = Cut - Salvaged/Unusuable Pavement Material
- 4) Mass Ordinate = [Cut - (Fill * Fill Factor)]

STH 54 NORTH LEG @ STH 172

STATION	Real Station	Distance	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)			Mass Ordinate
			Cut	Salvaged/ Unusable Pavement Material	Fill	Rock Exc	Cut	Salvaged/ Unusable Pavement Material	Fill	Rock Exc	Cut 1.25	Expanded Fill 1.15	Expanded Rock 1.10	
Note 1	Note 2	Note 3	Note 1	Note 4										
530+00.00	53,000		0	0	0	0	Note 1	Note 2	Note 3		Note 1			
530+13.00	53,013	13	450	0	26	0	108	0	6	0	135	7	0	101.30
530+25.00	53,025	12	510	0	25	0	213	0	11	0	402	20	0	301.76
530+50.00	53,050	25	435	0	233	0	437	0	119	0	949	157	0	601.87
530+75.00	53,075	25	399	0	126	0	386	0	166	0	1,431	348	0	796.66
531+25.00	53,125	50	382	0	98	0	723	0	207	0	2,335	587	0	1,280.96
531+50.00	53,150	25	398	0	71	0	361	0	78	0	2,786	676	0	1,552.14
531+75.00	53,175	25	457	0	27	0	396	0	45	0	3,281	729	0	1,895.77
532+00.00	53,200	25	526	0	455	0	455	0	224	0	3,850	986	0	2,094.12
532+25.00	53,225	25	570	0	7	0	507	0	214	0	4,484	1,232	0	2,355.27
532+50.00	53,250	25	669	0	2	0	573	0	4	0	5,201	1,237	0	2,923.95
532+75.00	53,275	25	686	0	1	0	627	0	1	0	5,985	1,238	0	3,549.82
533+00.00	53,300	25	714	0	1	0	648	0	1	0	6,796	1,239	0	4,197.28
533+25.00	53,325	25	525	0	4	0	574	0	2	0	7,513	1,242	0	4,768.71
533+50.00	53,350	25	405	0	12	0	430	0	7	0	8,051	1,250	0	5,190.86
533+75.00	53,375	25	383	0	12	0	365	0	11	0	8,507	1,263	0	5,542.83
534+00.00	53,400	25	265	0	0	0	300	0	6	0	8,882	1,269	0	5,836.56
534+25.00	53,425	25	276	0	0	0	251	0	0	0	9,195	1,269	0	6,087.16
534+50.00	53,450	25	279	0	3	0	257	0	1	0	9,517	1,271	0	6,342.50
534+75.00	53,475	25	274	0	7	0	256	0	4	0	9,836	1,276	0	6,593.20
535+00.00	53,500	25	257	0	8	0	245	0	7	0	10,143	1,284	0	6,830.58
535+25.00	53,525	25	254	0	13	0	237	0	10	0	10,439	1,295	0	7,055.50
535+50.00	53,550	25	257	0	16	0	237	0	14	0	10,735	1,311	0	7,276.56
535+75.00	53,575	25	236	0	10	0	228	0	12	0	11,020	1,325	0	7,490.59
536+00.00	53,600	25	201	0	8	0	202	0	8	0	11,272	1,335	0	7,682.99
536+25.00	53,625	25	195	0	8	0	183	0	7	0	11,501	1,343	0	7,857.79
536+50.00	53,650	25	184	0	7	0	176	0	7	0	11,721	1,351	0	8,025.45
536+75.00	53,675	25	172	0	8	0	165	0	7	0	11,927	1,359	0	8,182.62
537+00.00	53,700	25	183	0	7	0	165	0	7	0	12,133	1,367	0	8,339.26
537+25.00	53,725	25	170	0	7	0	163	0	6	0	12,337	1,374	0	8,495.38
537+50.00	53,750	25	170	0	6	0	157	0	6	0	12,534	1,381	0	8,645.82
537+75.00	53,775	25	172	0	4	0	158	0	4	0	12,731	1,386	0	8,798.79
538+00.00	53,800	25	153	0	3	0	150	0	3	0	12,919	1,390	0	8,945.50
538+25.00	53,825	25	139	0	1	0	135	0	2	0	13,088	1,392	0	9,078.34
538+50.00	53,850	25	137	0	1	0	128	0	1	0	13,247	1,393	0	9,205.03

CONTINUED

- 9
- 1) Common Excavation is the sum of the Cut and EBS Excavation columns.

2) Salvaged/Unsuable Pavement Material is included in Cut.

3) Available Material = Cut - Salvaged/Unusuable Pavement Material

4) Mass Ordinate = [Cut - (Fill * Fill Factor)]

STH 54 NORTH LEG @ STH 172 CONTINUED

STATION	Real Station	Distance	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)			Mass Ordinate
			Cut	Salvaged/ Unusable Pavement Material	Fill	Rock Exc	Cut	Salvaged/ Unusable Pavement Material	Fill	Rock Exc	Cut 1.25	Expanded Fill 1.15	Expanded Rock 1.10	
Note 1	Note 2	Note 3	Note 1	Note 4										
538+75.00	53,875	25	145	0	3	0	130	0	2	0	13,410	1,395	0	9,333.72
539+00.00	53,900	25	137	0	52	0	130	0	25	0	13,573	1,424	0	9,434.77
539+25.00	53,925	25	125	0	76	0	121	0	59	0	13,725	1,492	0	9,487.91
539+50.00	53,950	25	112	0	85	0	110	0	74	0	13,862	1,578	0	9,512.03
539+75.00	53,975	25	105	0	80	0	100	0	77	0	13,988	1,666	0	9,524.36
540+00.00	54,000	25	102	0	73	0	96	0	71	0	14,108	1,747	0	9,538.90
540+25.00	54,025	25	105	0	55	0	96	0	59	0	14,228	1,815	0	9,566.89
540+50.00	54,050	25	110	0	34	0	99	0	41	0	14,352	1,863	0	9,618.87
540+75.00	54,075	25	110	0	21	0	101	0	25	0	14,479	1,892	0	9,691.15
541+00.00	54,100	25	97	0	24	0	96	0	21	0	14,598	1,916	0	9,762.93
541+25.00	54,125	25	0	0	0	0	45	0	11	0	14,654	1,928	0	9,794.99
541+50.00	54,150	25	0	0	0	0	0	0	0	0	14,654	1,928	0	9,794.99
541+75.00	54,175	25	0	0	0	0	0	0	0	0	14,654	1,928	0	9,794.99
542+00.00	54,200	25	0	0	0	0	0	0	0	0	14,654	1,928	0	9,794.99
542+25.00	54,225	25	0	0	0	0	0	0	0	0	14,654	1,928	0	9,794.99
542+50.00	54,250	25	0	0	0	0	0	0	0	0	14,654	1,928	0	9,794.99
542+75.00	54,275	25	0	0	0	0	0	0	0	0	14,654	1,928	0	9,794.99
543+00.00	54,300	25	0	0	0	0	0	0	0	0	14,654	1,928	0	9,794.99
543+25.00	54,325	25	0	0	0	0	0	0	0	0	14,654	1,928	0	9,794.99
543+50.00	54,350	25	0	0	0	0	0	0	0	0	14,654	1,928	0	9,794.99
543+75.00	54,375	25	0	0	0	0	0	0	0	0	14,654	1,928	0	9,794.99
544+00.00	54,400	25	0	0	0	0	0	0	0	0	14,654	1,928	0	9,794.99
544+25.00	54,425	25	0	0	0	0	0	0	0	0	14,654	1,928	0	9,794.99
544+50.00	54,450	25	0	0	0	0	0	0	0	0	14,654	1,928	0	9,794.99
544+75.00	54,475	25	0	0	0	0	0	0	0	0	14,654	1,928	0	9,794.99
545+00.00	54,500	25	0	0	0	0	0	0	0	0	14,654	1,928	0	9,794.99
545+25.00	54,525	25	0	0	0	0	0	0	0	0	14,654	1,928	0	9,794.99
545+50.00	54,550	25	0	0	0	0	0	0	0	0	14,654	1,928	0	9,794.99
545+75.00	54,575	25	0	0	0	0	0	0	0	0	14,654	1,928	0	9,794.99

TOTAL 11,723 0 1,677 0

- 9
- 1) Common Excavation is the sum of the Cut and EBS Excavation columns.

2) Salvaged/Unsuable Pavement Material is included in Cut.

3) Available Material = Cut - Salvaged/Unusuable Pavement Material

4) Mass Ordinate = [Cut - (Fill * Fill Factor)]
- 9

CIRCULATORY ROADWAY @ STH 54 & STH 172 & CTH E

STATION	Real Station	Distance	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)			Mass Ordinate
			Cut	Salvaged/ Unusable Pavement Material	Fill	Rock Exc	Cut	Salvaged/ Unusable Pavement Material	Fill	Rock Exc	Cut 1.25	Expanded Fill 1.15	Expanded Rock 1.10	
Note 1	Note 2	Note 3	Note 1	Note 4										
200+00.00	20,000		0	0	8	0								
200+25.00	20,025	25	0	0	0	0	0	0	4	0	0	4	0	-4.41
200+50.00	20,050	25	24	0	3	0	11	0	2	0	14	6	0	4.92
200+75.00	20,075	25	2	0	0	0	12	0	2	0	29	8	0	15.16
201+00.00	20,100	25	6	0	0	0	4	0	0	0	34	8	0	18.80
201+25.00	20,125	25	0	0	95	0	3	0	44	0	37	59	0	-29.25
201+50.00	20,150	25	2	0	0	0	1	0	44	0	38	110	0	-79.26
201+75.00	20,175	25	0	0	15	0	1	0	7	0	39	118	0	-86.52
202+00.00	20,200	25	0	0	102	0	0	0	54	0	39	180	0	-148.63
202+25.00	20,225	25	2	0	440	0	1	0	251	0	40	468	0	-435.81
202+50.00	20,250	25	23	0	281	0	12	0	334	0	55	852	0	-807.65
202+75.00	20,275	25	82	0	0	0	49	0	130	0	117	1,002	0	-908.28
203+00.00	20,300	25	130	0	0	0	98	0	0	0	239	1,002	0	-810.05
203+25.00	20,325	25	133	0	0	0	122	0	0	0	392	1,002	0	-688.17
203+50.00	20,350	25	168	0	0	0	140	0	0	0	566	1,002	0	-548.56
203+75.00	20,375	25	0	0	23	0	78	0	10	0	664	1,014	0	-482.77
C. ISLAND			227	0	1,643	0	227	0	1,643	0	523	2,903	0	-2,372.22

TOTAL 758 0 2,524 0

- 1) Common Excavation is the sum of the Cut and EBS Excavation columns.
- 2) Salvaged/Unsuable Pavement Material is included in Cut.
- 3) Available Material = Cut - Salvaged/Unusuable Pavement Material
- 4) Mass Ordinate = [Cut - (Fill * Fill Factor)]

STH 172 EAST LEG @ STH 54

STATION	Real Station	Distance	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)			Mass Ordinate	
			Cut	Salvaged/ Unusable Pavement Material	Fill	Rock Exc	Cut	Salvaged/ Unusable Pavement Material	Fill	Rock Exc	Cut 1.25	Expanded Fill 1.15	Expanded Rock 1.10		
			Note 1				Note 2				Note 3			Note 4	
11+25.00	1,125		7	0	431	0									
11+50.00	1,150	25	64	0	60	0	33	0	227	0	41	261	0	-227.82	
11+75.00	1,175	25	36	0	16	0	47	0	35	0	100	302	0	-221.74	
12+00.00	1,200	25	40	0	18	0	35	0	16	0	144	320	0	-205.11	
12+25.00	1,225	25	50	0	2	0	41	0	9	0	196	331	0	-174.54	
12+50.00	1,250	25	132	0	0	0	84	0	1	0	301	332	0	-91.34	
12+75.00	1,275	25	111	0	0	0	113	0	0	0	442	332	0	21.16	
13+00.00	1,300	25	99	0	0	0	97	0	0	0	563	332	0	118.38	
13+25.00	1,325	25	100	0	0	0	92	0	0	0	678	332	0	210.51	
13+50.00	1,350	25	103	0	0	0	94	0	0	0	796	332	0	304.49	
13+75.00	1,375	25	110	0	0	0	99	0	0	0	919	332	0	403.10	
14+00.00	1,400	25	93	0	0	0	94	0	0	0	1,036	332	0	497.08	
14+25.00	1,425	25	110	0	0	0	94	0	0	0	1,154	332	0	591.07	
14+50.00	1,450	25	124	0	0	0	108	0	0	0	1,289	332	0	699.40	
14+75.00	1,475	25	115	0	0	0	111	0	0	0	1,428	332	0	810.05	
15+00.00	1,500	25	111	0	0	0	105	0	0	0	1,558	332	0	914.68	
15+25.00	1,525	25	86	0	0	0	91	0	0	0	1,672	332	0	1,005.88	
15+50.00	1,550	25	107	0	0	0	89	0	0	0	1,784	332	0	1,095.23	
15+75.00	1,575	25	115	0	410	0	103	0	190	0	1,913	550	0	979.90	
16+00.00	1,600	25	163	0	459	0	129	0	402	0	2,073	1,013	0	646.13	
16+25.00	1,625	25	89	0	382	0	117	0	389	0	2,219	1,460	0	315.04	
16+50.00	1,650	25	20	0	339	0	50	0	334	0	2,282	1,844	0	-18.36	
16+75.00	1,675	25	13	0	300	0	15	0	296	0	2,301	2,184	0	-343.43	
17+00.00	1,700	25	14	0	260	0	12	0	259	0	2,317	2,482	0	-629.10	
17+25.00	1,725	25	49	0	184	0	29	0	205	0	2,353	2,719	0	-836.20	

CONTINUED

- 1) Common Excavation is the sum of the Cut and EBS Excavation columns.
- 2) Salvaged/Unsuable Pavement Material is included in Cut.
- 3) Available Material = Cut - Salvaged/Unusuable Pavement Material
- 4) Mass Ordinate = [Cut - (Fill * Fill Factor)]

STH 172 EAST LEG @ STH 54 CONTINUED

STATION	Real Station	Distance	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)			Mass Ordinate
			Cut	Salvaged/ Unusable Pavement Material	Fill	Rock Exc	Cut	Salvaged/ Unusable Pavement Material	Fill	Rock Exc	Cut 1.25	Expanded Fill 1.15	Expanded Rock 1.10	
Note 1	Note 2	Note 3	Note 1	Note 4										
17+38.00	1,738	13	83	0	0	0	32	0	44	0	2,393	2,770	0	-855.36
17+50.00	1,750	12	95	0	107	0	40	0	24	0	2,442	2,797	0	-843.15
17+75.00	1,775	25	82	0	127	0	82	0	108	0	2,545	2,921	0	-885.79
18+00.00	1,800	25	107	0	196	0	88	0	150	0	2,654	3,093	0	-970.26
18+25.00	1,825	25	100	0	273	0	96	0	217	0	2,774	3,343	0	-1,124.13
18+50.00	1,850	25	92	0	244	0	89	0	239	0	2,885	3,618	0	-1,310.22
18+75.00	1,875	25	102	0	226	0	90	0	217	0	2,997	3,868	0	-1,470.48
19+00.00	1,900	25	93	0	233	0	90	0	213	0	3,110	4,113	0	-1,624.69
19+25.00	1,925	25	91	0	219	0	85	0	209	0	3,216	4,353	0	-1,780.28
19+50.00	1,950	25	78	0	214	0	78	0	201	0	3,314	4,584	0	-1,932.99
19+75.00	1,975	25	56	0	211	0	62	0	197	0	3,391	4,811	0	-2,097.74
20+00.00	2,000	25	44	0	232	0	46	0	205	0	3,449	5,047	0	-2,287.18
20+25.00	2,025	25	40	0	143	0	39	0	173	0	3,498	5,246	0	-2,447.82
20+50.00	2,050	25	56	0	83	0	44	0	105	0	3,553	5,367	0	-2,524.30
20+75.00	2,075	25	42	0	80	0	45	0	76	0	3,609	5,454	0	-2,566.26
21+00.00	2,100	25	52	0	80	0	43	0	74	0	3,664	5,539	0	-2,608.22
21+25.00	2,125	25	56	0	19	0	50	0	46	0	3,726	5,592	0	-2,611.28
21+50.00	2,150	25	60	0	15	0	54	0	16	0	3,793	5,610	0	-2,575.69
21+75.00	2,175	25	64	0	8	0	57	0	11	0	3,865	5,622	0	-2,530.29
22+00.00	2,200	25	72	0	4	0	63	0	5	0	3,944	5,629	0	-2,473.33
22+25.00	2,225	25	79	0	3	0	70	0	3	0	4,031	5,632	0	-2,407.23
22+50.00	2,250	25	79	0	2	0	73	0	2	0	4,122	5,635	0	-2,337.13
22+75.00	2,275	25	75	0	1	0	71	0	1	0	4,211	5,637	0	-2,267.54
23+00.00	2,300	25	68	0	9	0	66	0	5	0	4,294	5,642	0	-2,206.77
23+25.00	2,325	25	0	0	0	0	31	0	4	0	4,333	5,647	0	-2,180.04

TOTAL 3,466 0 4,910 0

- 1) Common Excavation is the sum of the Cut and EBS Excavation columns.
- 2) Salvaged/Unsuable Pavement Material is included in Cut.
- 3) Available Material = Cut - Salvaged/Unusuable Pavement Material
- 4) Mass Ordinate = [Cut - (Fill * Fill Factor)]

CTH E SOUTH LEG @ STH 172

STATION	Real Station	Distance	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)			Mass Ordinate
			Cut	Salvaged/ Unusable Pavement Material	Fill	Rock Exc	Cut	Salvaged/ Unusable Pavement Material	Fill	Rock Exc	Cut 1.25	Expanded Fill 1.15	Expanded Rock 1.10	
Note 1	Note 2	Note 3	Note 1	Note 4										
522+00.00	52,200		0.00	0	0.00	0								
522+25.00	52,225	25	0.00	0	0.00	0	0	0	0	0	0	0	0	0.00
522+50.00	52,250	25	0.00	0	0.00	0	0	0	0	0	0	0	0	0.00
522+75.00	52,275	25	0.00	0	0.00	0	0	0	0	0	0	0	0	0.00
523+00.00	52,300	25	0.00	0	0.00	0	0	0	0	0	0	0	0	0.00
523+25.00	52,325	25	0.00	0	0.00	0	0	0	0	0	0	0	0	0.00
523+50.00	52,350	25	0.00	0	0.00	0	0	0	0	0	0	0	0	0.00
523+75.00	52,375	25	0.00	0	0.00	0	0	0	0	0	0	0	0	0.00
524+00.00	52,400	25	79.89	0	0.00	0	37	0	0	0	46	0	0	36.99
524+25.00	52,425	25	81.33	0	0.77	0	75	0	0	0	140	0	0	111.22
524+50.00	52,450	25	82.00	0	0.18	0	76	0	0	0	234	1	0	186.33
524+75.00	52,475	25	83.29	0	0.32	0	77	0	0	0	330	1	0	262.58
525+00.00	52,500	25	85.79	0	0.00	0	78	0	0	0	428	1	0	340.69
525+25.00	52,525	25	90.34	0	0.00	0	82	0	0	0	529	1	0	422.23
525+50.00	52,550	25	95.47	0	0.00	0	86	0	0	0	637	1	0	508.25
525+75.00	52,575	25	103.46	0	0.00	0	92	0	0	0	752	1	0	600.35
526+00.00	52,600	25	126.67	0	9.54	0	107	0	4	0	885	6	0	701.81
526+25.00	52,625	25	134.80	0	0.00	0	121	0	4	0	1,037	12	0	817.79
526+50.00	52,650	25	127.22	0	0.02	0	121	0	0	0	1,188	12	0	939.08
526+75.00	52,675	25	137.73	0	0.00	0	123	0	0	0	1,342	12	0	1,061.73
527+00.00	52,700	25	76.49	0	41.77	0	99	0	19	0	1,466	34	0	1,138.67
527+25.00	52,725	25	101.72	0	20.83	0	83	0	29	0	1,569	67	0	1,187.85
527+50.00	52,750	25	89.27	0	30.88	0	88	0	24	0	1,679	95	0	1,248.74
527+75.00	52,775	25	70.93	0	45.66	0	74	0	35	0	1,772	135	0	1,282.15
528+00.00	52,800	25	65.70	0	72.20	0	63	0	55	0	1,851	198	0	1,282.66
528+25.00	52,825	25	67.53	0	86.87	0	62	0	74	0	1,928	283	0	1,259.65

TOTAL 1,542 0 246 0

- 1) Common Excavation is the sum of the Cut and EBS Excavation columns.
- 2) Salvaged/Unsuable Pavement Material is included in Cut.
- 3) Available Material = Cut - Salvaged/Unusuable Pavement Material
- 4) Mass Ordinate = [Cut - (Fill * Fill Factor)]

STANDING STONE DRIVE

STATION	Real Station	Distance	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)			Mass Ordinate
			Cut	Salvaged/ Unusable Pavement Material	Fill	Rock Exc	Cut	Salvaged/ Unusable Pavement Material	Fill	Rock Exc	Cut 1.25	Expanded Fill 1.15	Expanded Rock 1.10	
Note 1				Note 2		Note 3		Note 1		Note 4				
100+00.00	10,000		29	0	2	0								
100+25.00	10,025	25	33	0	1	0	29	0	1	0	36	2	0	27.07
100+50.00	10,050	25	36	0	20	0	32	0	9	0	76	12	0	48.08
100+75.00	10,075	25	44	0	103	0	37	0	57	0	122	78	0	19.65
101+00.00	10,100	25	110	0	134	0	71	0	110	0	211	204	0	-35.68
101+25.00	10,125	25	134	0	21	0	113	0	72	0	352	287	0	-5.45
101+50.00	10,150	25	128	0	0	0	121	0	10	0	503	298	0	104.34
101+75.00	10,175	25	36	0	17	0	76	0	8	0	597	308	0	170.43
101+80.49	10,180	5	13	0	4	0	5	0	2	0	604	310	0	172.90

DOXTATOR DRIVEWAY

STATION	Real Station	Distance	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)			Mass Ordinate
			Cut	Salvaged/ Unusable Pavement Material	Fill	Rock Exc	Cut	Salvaged/ Unusable Pavement Material	Fill	Rock Exc	Cut 1.25	Expanded Fill 1.15	Expanded Rock 1.10	
Note 1				Note 2				Note 3			Note 1		Note 4	
49+50.00	4,950		7	0	0	0	Note 1	Note 2	Note 3		Note 1			
49+75.00	4,975	25	6	0	1	0	6	0	0	0	7	0	0	5.27
50+00.00	5,000	25	6	0	0	0	6	0	0	0	14	1	0	10.29
50+25.00	5,025	25	5	0	1	0	5	0	0	0	21	1	0	15.28
50+50.00	5,050	25	1	0	4	0	3	0	2	0	24	4	0	15.89
50+75.00	5,075	25	0	0	21	0	0	0	11	0	25	16	0	3.27
51+00.00	5,100	25	0	0	59	0	0	0	37	0	25	59	0	-38.97
51+25.00	5,125	25	0	0	68	0	0	0	59	0	25	126	0	-106.40
51+35.00	5,135	10	0	0	55	0	0	0	23	0	25	153	0	-132.59
51+44.60	5,145	10	0	0	36	0	0	0	16	0	25	171	0	-151.20
51+50.00	5,150	5	28	0	20	0	3	0	6	0	29	178	0	-154.80

TOTAL 23 0 154 0

- 1) Common Excavation is the sum of the Cut and EBS Excavation columns.
- 2) Salvaged/Unsuable Pavement Material is included in Cut.
- 3) Available Material = Cut - Salvaged/Unusuable Pavement Material
- 4) Mass Ordinate = [Cut - (Fill * Fill Factor)]

CATEGORY 0010

EARTHWORK SUMMARY

From/To Station	Location	Common Excavation (1)	Available Material (3)	Unexpanded Fill	Expanded Fill (4)	Mass Ordinate +/- (5)	Waste
		Cut (2)			Factor 1.15		
1+00.00 - 9+25.00	STH 54 WEST LEG @ STH 172	4,970	4,970	981	1,128	3,842	3,842
530+00.00 - 545+75.00	STH 54 NORTH LEG @ STH 172	11,723	11,723	1,677	1,929	9,794	9,794
200+00.00 - 203+75.00	CIR RDWY @ STH 54 & STH 172 & CTH E	758	758	2,524	2,903	-2,145	-2,145
11+25.00 - 23+25.00	STH 172 EAST LEG @ STH 54	3,466	3,466	4,910	5,647	-2,181	-2,181
522+00.00 - 528+25.00	CTH E SOUTH LEG @ STH 172	1,542	1,542	246	283	1,259	1,259
100+00.00 - 101+80.49	STANDING STONE DRIVE	483	483	270	310	173	173
49+50.00 - 51+52.00	DOXTATOR DRIVEWAY	23	23	154	177	-154	-154
		22,965	22,965	10,762	12,377	10,588	10,588
9280-04-72 SUBTOTAL		22,965	22,965	10,762	12,377	10,588	10,588
		Subtotal Common Exc	22,965				

- 1) Common Excavation is the sum of the Cut and EBS Excavation columns. Item number 205.0100
- 2) Salvaged/Unsuable Pavement Material is included in Cut.
- 3) Available Material = Cut - Salvaged/Unusuable Pavement Material
- 4) Expanded Fill. Factor = 1.25
- Depending on selections:

Expanded Fill = (Unexpanded Fill - Rock* Rock Factor - Reduced Marsh - Reduced EBS) * Fill Factor

Expanded Fill = (Unexpanded Fill - Rock* Rock Factor - Reduced EBS) * Fill Factor

Expanded Fill = (Unexpanded Fill - Rock* Rock Factor - Reduced Marsh) * Fill Factor

Expanded Fill = (Unexpanded Fill - Rock* Rock Factor) * Fill Factor
- 5) The Mass Ordinate + or - Qty calculated for the Division. Plus quantity indicates an excess of material within the Division. Minus indicates a shortage of material within the Division.

AIRPORT EXIT TO STH 172 SOUTH LEG

STATION	Real Station	Distance	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)			Mass Ordinate
			Cut	Salvaged/ Unusable Pavement Material	Fill	Rock Exc	Cut	Salvaged/ Unusable Pavement Material	Fill	Rock Exc	Cut 1.25	Expanded Fill 1.15	Expanded Rock 1.10	
			Note 1		Note 2		Note 3		Note 1				Note 4	
50+00.00	5,000		0	0	0	0								
50+25.00	5,025	25	0	0	0	0	0	0	0	0	0	0	0	0.00
50+50.00	5,050	25	0	0	0	0	0	0	0	0	0	0	0	0.00
50+75.00	5,075	25	56	0	0	0	26	0	0	0	33	0	0	25.84
51+00.00	5,100	25	61	0	0	0	54	0	0	0	100	1	0	79.88
51+25.00	5,125	25	58	0	2	0	55	0	1	0	169	2	0	133.99
51+50.00	5,150	25	62	0	2	0	56	0	2	0	239	4	0	187.74
51+75.00	5,175	25	59	0	0	0	56	0	1	0	309	5	0	242.55
52+00.00	5,200	25	58	0	1	0	54	0	0	0	376	5	0	295.91
52+04.00	5,204	4	44	0	13	0	8	0	1	0	386	6	0	302.24
52+25.00	5,225	21	42	0	12	0	33	0	10	0	428	18	0	324.19
52+50.00	5,250	25	39	0	12	0	38	0	11	0	475	31	0	348.85
52+75.00	5,275	25	39	0	10	0	36	0	10	0	520	42	0	373.31
53+00.00	5,300	25	42	0	11	0	38	0	10	0	567	53	0	399.77
53+25.00	5,325	25	44	0	9	0	40	0	9	0	617	64	0	429.09
53+50.00	5,350	25	44	0	9	0	41	0	8	0	668	74	0	460.44
53+60.00	5,360	10	46	0	6	0	17		3	0	689	77	0	473.89

TOTAL 551 0 67 0

- 1) Common Excavation is the sum of the Cut and EBS Excavation columns.
- 2) Salvaged/Unsuable Pavement Material is included in Cut.
- 3) Available Material = Cut - Salvaged/Unusuable Pavement Material
- 4) Mass Ordinate = [Cut - (Fill * Fill Factor)]

CASINO ENTRANCE NORTH LEG AT STH 172

STATION	Real Station	Distance	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)			Mass Ordinate
			Cut	Salvaged/ Unusable Pavement Material	Fill	Rock Exc	Cut	Salvaged/ Unusable Pavement Material	Fill	Rock Exc	Cut 1.25	Expanded Fill 1.15	Expanded Rock 1.10	
			Note 1	Note 2	Note 3	Note 1			Note 4					
55+38.00	5,538		78	0	74	0								
55+50.00	5,550	12	95	0	33	0	38	0	24	0	48	27	0	10.89
55+75.00	5,575	25	101	0	12	0	91	0	21	0	161	52	0	77.31
56+00.00	5,600	25	105	0	4	0	95	0	7	0	280	60	0	164.17
56+25.00	5,625	25	98	0	3	0	94	0	3	0	398	63	0	254.75
56+28.00	5,628	3	96	0	3	0	11	0	0	0	411	64	0	265.19
56+50.00	5,650	22	51	0	2	0	60	0	2	0	486	66	0	323.15
56+75.00	5,675	25	60	0	1	0	51	0	1	0	550	68	0	372.78
57+00.00	5,700	25	89	0	2	0	69	0	2	0	636	70	0	439.50
57+25.00	5,725	25	0	0	0	0	41		1	0	688	71	0	479.28

TOTAL 550 0 62 0

- 1) Common Excavation is the sum of the Cut and EBS Excavation columns.
- 2) Salvaged/Unsuable Pavement Material is included in Cut.
- 3) Available Material = Cut - Salvaged/Unusuable Pavement Material
- 4) Mass Ordinate = [Cut - (Fill * Fill Factor)]

AIRPORT ENTRANCE FROM STH 172 SOUTH LEG

STATION	Real Station	Distance	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)			Mass Ordinate
			Cut	Salvaged/ Unusable Pavement Material	Fill	Rock Exc	Cut	Salvaged/ Unusable Pavement Material	Fill	Rock Exc	Cut 1.25	Expanded Fill 1.15	Expanded Rock 1.10	
Note 1	Note 2	Note 3	Note 1	Note 4										
60+00.00	6,000		31	0	18	0								
60+25.00	6,025	25	39	0	10	0	33	0	13	0	41	15	0	17.98
60+50.00	6,050	25	47	0	4	0	40	0	6	0	91	22	0	50.78
60+75.00	6,075	25	65	0	3	0	52	0	3	0	155	25	0	99.07
61+00.00	6,100	25	83	0	10	0	69	0	6	0	241	33	0	160.52
61+25.00	6,125	25	85	0	9	0	78	0	9	0	338	43	0	227.98
61+50.00	6,150	25	115	0	4	0	93	0	6	0	454	49	0	314.02
61+75.00	6,175	25	149	0	3	0	123	0	3	0	607	53	0	433.26
62+00.00	6,200	25	134	0	3	0	131	0	3	0	772	56	0	561.59
62+25.00	6,225	25	129	0	0	0	122	0	1	0	924	57	0	681.89
62+50.00	6,250	25	113	0	0	0	112	0	0	0	1,064	57	0	793.92
62+75.00	6,275	25	95	0	0	0	96	0	0	0	1,184	57	0	889.93
63+00.00	6,300	25	71	0	2	0	77	0	1	0	1,280	58	0	965.81
63+25.00	6,325	25	53	0	2	0	57	0	2	0	1,352	60	0	1,021.18
63+50.00	6,350	25	48	0	4	0	47	0	3	0	1,410	63	0	1,064.57
63+71.00	6,371	21	0	0	0	0	19		2	0	1,433	65	0	1,081.51

STH 172 WEST LEG AT AIRPORT/CASINO ENTRANCE

STATION	Real Station	Distance	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)			Mass Ordinate
			Cut	Salvaged/ Unusable	Fill	Rock Exc	Cut	Salvaged/ Unusable	Fill	Rock Exc	Cut	Expanded	Expanded	
				Pavement Material				Pavement Material			1.25	Fill	Rock	
							Note 1	Note 2	Note 3		Note 1	1.15	1.10	Note 4
142+50.00	14,250		0	0	0	0								
142+65.00	14,265	15	21	0	0	0	6	0	0	0	7	0	0	5.83
142+75.00	14,275	10	18	0	0	0	7	0	0	0	16	0	0	12.98
143+00.00	14,300	25	16	0	0	0	16	0	0	0	36	0	0	28.68
143+25.00	14,325	25	22	0	0	0	18	0	0	0	58	0	0	46.29
143+50.00	14,350	25	27	0	0	0	23	0	0	0	86	0	0	68.96
143+75.00	14,375	25	31	0	0	0	27	0	0	0	120	0	0	96.00
144+00.00	14,400	25	30	0	0	0	28	0	0	0	155	0	0	124.28
144+25.00	14,425	25	34	0	0	0	29	0	0	0	192	0	0	153.70
144+30.00	14,430	5	89	0	0	0	11	0	0	0	206	0	0	164.98
144+35.00	14,435	5	90	0	0	0	17	0	0	0	227	0	0	181.45
144+45.00	14,445	10	78	0	21	0	31	0	4	0	266	4	0	208.06
144+50.00	14,450	5	75	0	20	0	14	0	4	0	283	9	0	217.81
144+75.00	14,475	25	81	0	16	0	72	0	17	0	373	28	0	270.41
145+00.00	14,500	25	82	0	14	0	75	0	14	0	467	44	0	329.60
145+25.00	14,525	25	76	0	18	0	73	0	15	0	558	61	0	385.61
145+50.00	14,550	25	73	0	13	0	69	0	14	0	644	77	0	438.12
145+75.00	14,575	25	140	0	6	0	99	0	9	0	768	87	0	526.82
146+00.00	14,600	25	157	0	2	0	138	0	4	0	940	91	0	660.34
146+25.00	14,625	25	154	0	2	0	144	0	2	0	1,119	94	0	802.09
146+50.00	14,650	25	175	0	3	0	152	0	2	0	1,310	96	0	951.87
146+75.00	14,675	25	194	0	3	0	171	0	3	0	1,524	99	0	1,119.80
146+99.00	14,699	24	197	0	16	0	174	0	8	0	1,741	109	0	1,284.16
147+00.00	14,700	1	199	0	16	0	7	0	1	0	1,750	109	0	1,290.83
147+25.00	14,725	25	204	0	15	0	187	0	14	0	1,983	126	0	1,461.15
147+50.00	14,750	25	220	0	16	0	196	0	14	0	2,229	142	0	1,641.09
147+75.00	14,775	25	204	0	17	0	196	0	15	0	2,474	159	0	1,819.80
148+00.00	14,800	25	245	0	17	0	208	0	16	0	2,734	178	0	2,009.35
148+25.00	14,825	25	141	0	15	0	179	0	15	0	2,957	195	0	2,170.65
148+50.00	14,850	25	119	0	46	0	120	0	29	0	3,107	228	0	2,258.15
148+75.00	14,875	25	78	0	95	0	91	0	66	0	3,222	303	0	2,273.95
148+82.00	14,882	7	73	0	103	0	20	0	26	0	3,246	333	0	2,263.96
149+00.00	14,900	18	64	0	134	0	45	0	79	0	3,303	424	0	2,218.71
149+07.00	14,907	7	62	0	144	0	16		36	0	3,323	465	0	2,193.61

TOTAL 2,659 0 404 0

- 9
- 1) Common Excavation is the sum of the Cut and EBS Excavation columns.

2) Salvaged/Unsuable Pavement Material is included in Cut.

3) Available Material = Cut - Salvaged/Unusuable Pavement Material

4) Mass Ordinate = [Cut - (Fill * Fill Factor)]
- 9

STH 172 EAST LEG AT AIRPORT/CASINO ENTRANCE

STATION	Real Station	Distance	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)			Mass Ordinate
			Cut	Salvaged/ Unusable Pavement Material	Fill	Rock Exc	Cut	Salvaged/ Unusable Pavement Material	Fill	Rock Exc	Cut 1.25	Expanded Fill 1.15	Expanded Rock 1.10	
Note 1	Note 2	Note 3	Note 1	Note 4										
150+60.50	15,061		100	0	110	0								
150+75.00	15,075	15	94	0	81	0	52	0	51	0	65	59	0	-6.90
151+00.00	15,100	25	105	0	48	0	92	0	60	0	181	128	0	16.92
151+25.00	15,125	25	125	0	24	0	106	0	33	0	314	166	0	85.22
151+50.00	15,150	25	137	0	20	0	121	0	20	0	465	189	0	183.16
151+75.00	15,175	25	147	0	21	0	131	0	19	0	629	211	0	292.75
152+00.00	15,200	25	146	0	27	0	135	0	22	0	799	236	0	402.66
152+25.00	15,225	25	156	0	29	0	140	0	26	0	973	266	0	512.74
152+50.00	15,250	25	210	0	12	0	169	0	19	0	1,185	288	0	660.34
152+75.00	15,275	25	209	0	14	0	194	0	12	0	1,427	301	0	840.47
153+00.00	15,300	25	204	0	16	0	191	0	14	0	1,666	317	0	1,015.75
153+25.00	15,325	25	200	0	18	0	187	0	16	0	1,900	336	0	1,184.59
153+50.00	15,350	25	195	0	16	0	183	0	16	0	2,129	354	0	1,349.66
153+75.00	15,375	25	190	0	13	0	179	0	13	0	2,352	369	0	1,512.92
154+00.00	15,400	25	184	0	13	0	173	0	12	0	2,569	383	0	1,672.51
154+25.00	15,425	25	180	0	15	0	169	0	13	0	2,780	398	0	1,826.23
154+50.00	15,450	25	101	0	16	0	130	0	14	0	2,942	414	0	1,939.60
154+75.00	15,475	25	96	0	16	0	91	0	15	0	3,056	431	0	2,013.44
154+77.00	15,477	2	96	0	16	0	7	0	1	0	3,065	433	0	2,019.16
155+00.00	15,500	23	111	0	0	0	88	0	7	0	3,175	440	0	2,099.40
155+25.00	15,525	25	109	0	0	0	102	0	0	0	3,302	440	0	2,201.30
155+50.00	15,550	25	116	0	0	0	104	0	0	0	3,432	440	0	2,305.50
155+75.00	15,575	25	113	0	0	0	106	0	0	0	3,565	440	0	2,411.37
156+00.00	15,600	25	107	0	0	0	102	0	0	0	3,692	440	0	2,513.20
156+25.00	15,625	25	103	0	0	0	97	0	0	0	3,814	440	0	2,610.58
156+50.00	15,650	25	53	0	1	0	72	0	0	0	3,904	441	0	2,682.37
156+75.00	15,675	25	46	0	2	0	46	0	1	0	3,961	442	0	2,726.92
157+00.00	15,700	25	45	0	5	0	42	0	3	0	4,014	446	0	2,765.47
157+25.00	15,725	25	43	0	5	0	41	0	5	0	4,064	451	0	2,800.66
157+50.00	15,750	25	5	0	0	0	22	0	2	0	4,092	454	0	2,819.93
157+75.00	15,775	25	3	0	0	0	3	0	0	0	4,096	454	0	2,823.11
158+00.00	15,800	25	2	0	1	0	2	0	0	0	4,099	454	0	2,824.66
158+25.00	15,825	25	0	0	0	0	1	0	0	0	4,100	455	0	2,825.14
158+50.00	15,850	25	0	0	0	0	0		0	0	4,100	455	0	2,825.14

TOTAL 3,280 0 395 0

- 9
- 1) Common Excavation is the sum of the Cut and EBS Excavation columns.

2) Salvaged/Unsuable Pavement Material is included in Cut.

3) Available Material = Cut - Salvaged/Unusuable Pavement Material

4) Mass Ordinate = [Cut - (Fill * Fill Factor)]
- E

CIRCULATORY ROADWAY AT AIRPORT/CASINO ENTRANCE

STATION	Real Station	Distance	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)			Mass Ordinate
			Cut	Salvaged/ Unusable Pavement Material	Fill	Rock Exc	Cut	Salvaged/ Unusable Pavement Material	Fill	Rock Exc	Cut 1.25	Expanded Fill 1.15	Expanded Rock 1.10	
Note 1				Note 2				Note 3			Note 1		Note 4	
250+00.00	25,000		19	0	3	0								
250+25.00	25,025	25	43	0	3	0	29	0	3	0	36	3	0	25.06
250+50.00	25,050	25	58	0	11	0	46	0	7	0	94	11	0	63.80
250+75.00	25,075	25	57	0	0	0	53	0	5	0	160	17	0	110.66
251+00.00	25,100	25	59	0	0	0	53	0	0	0	226	17	0	163.99
251+25.00	25,125	25	77	0	7	0	63	0	3	0	305	21	0	222.82
251+50.00	25,150	25	34	0	4	0	51	0	5	0	369	27	0	268.22
251+75.00	25,175	25	12	0	4	0	21	0	4	0	395	31	0	285.41
252+00.00	25,200	25	30	0	15	0	19	0	9	0	420	41	0	294.73
252+25.00	25,225	25	9	0	47	0	18	0	29	0	442	74	0	280.03
252+50.00	25,250	25	21	0	6	0	14	0	25	0	460	102	0	265.95
252+75.00	25,275	25	35	0	3	0	26	0	5	0	492	107	0	286.74
253+00.00	25,300	25	22	0	70	0	26	0	34	0	525	146	0	273.98
253+25.00	25,325	25	40	0	1	0	29		33	0	561	184	0	265.26

TOTAL 449 0 160 0

- 1) Common Excavation is the sum of the Cut and EBS Excavation columns.
- 2) Salvaged/Unsuable Pavement Material is included in Cut.
- 3) Available Material = Cut - Salvaged/Unusuable Pavement Material
- 4) Mass Ordinate = [Cut - (Fill * Fill Factor)]

CATEGORY 0010

EARTHWORK SUMMARY

From/To Station	Location	Common Excavation (1)	Available Material (3)	Unexpanded Fill	Expanded Fill (4)	Mass Ordinate +/- (5)	Waste
		Cut (2)			Factor 1.15		
50+00.00 - 53+60.00	AIRPORT EXIT TO STH 172 SOUTH LEG	551	551	67	77	474	474
55+38.00 - 57+25.00	CASINO ENTRANCE NORTH LEG AT STH 172	550	550	62	71	479	479
60+00.00 - 63+71.00	AIRPORT ENT. FROM STH 172 SOUTH LEG	1,147	1,147	57	65	1,082	1,082
142+50.00 - 149+07.00	172 WEST LEG AT AIRPORT/CASINO ENT.	2,659	2,659	404	465	2,194	2,194
150+60.50 - 158+50.00	172 EAST LEG AT AIRPORT/CASINO ENT.	3,280	3,280	395	455	2,825	2,825
250+00.00 - 253+25.00	CIR ROADWAY AT AIRPORT/CASINO ENT.	449	449	160	184	265	265
		8,636	8,636	1,145	1,317	7,319	7,319
9280-04-72 SUBTOTAL		8,636	8,636	1,145	1,317	7,319	7,319
Subtotal Common Exc			8,636				
9280-04-72 PROJECT TOTAL		Total Common Exc	31,601				

- 1) Common Excavation is the sum of the Cut and EBS Excavation columns. Item number 205.0100
- 2) Salvaged/Unsuable Pavement Material is included in Cut.
- 3) Available Material = Cut - Salvaged/Unusuable Pavement Material
- 4) Expanded Fill. Factor = 1.25
- Depending on selections:

Expanded Fill = (Unexpanded Fill - Rock* Rock Factor - Reduced Marsh - Reduced EBS) * Fill Factor

Expanded Fill = (Unexpanded Fill - Rock* Rock Factor - Reduced EBS) * Fill Factor

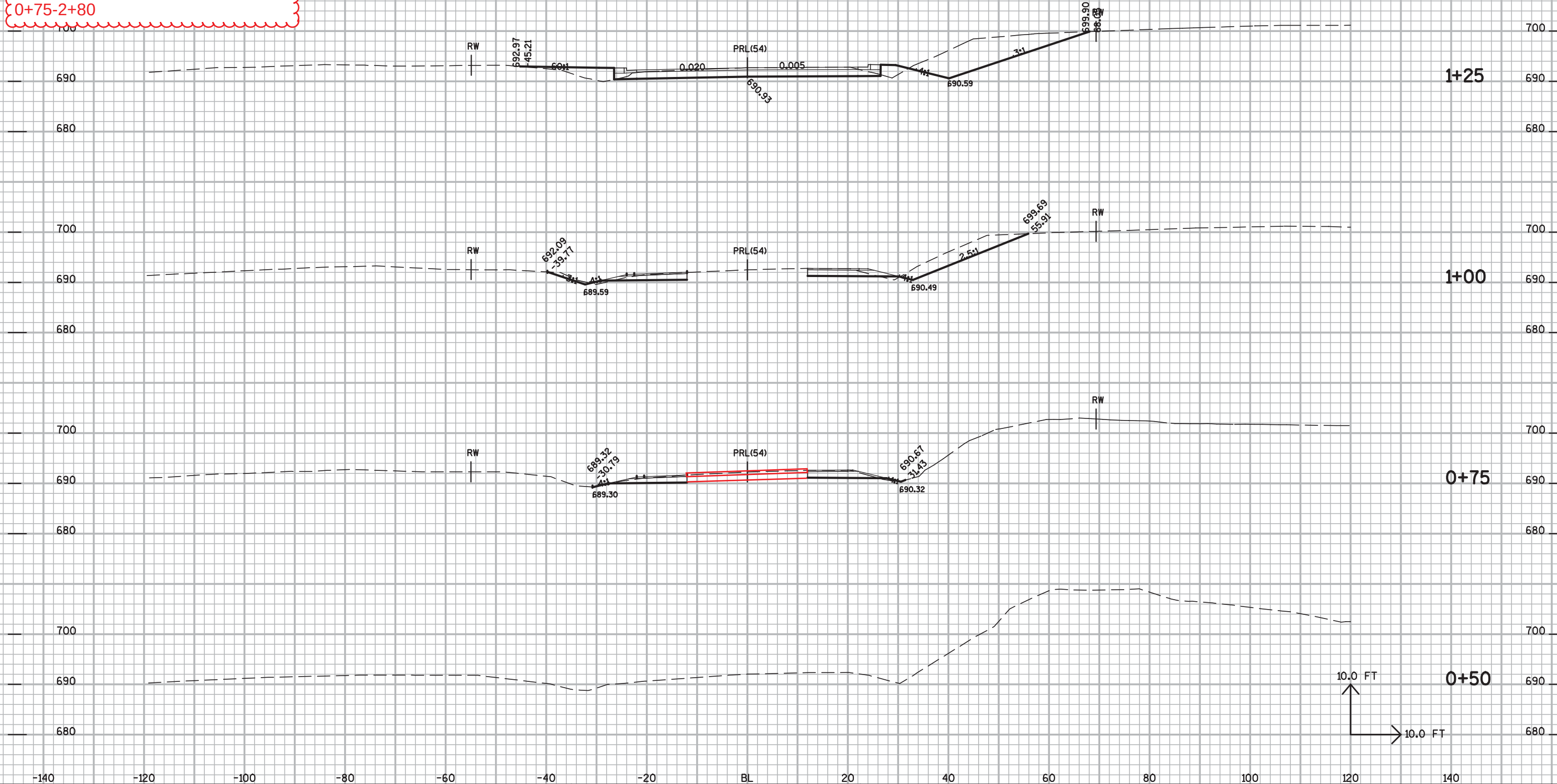
Expanded Fill = (Unexpanded Fill - Rock* Rock Factor - Reduced Marsh) * Fill Factor

Expanded Fill = (Unexpanded Fill - Rock* Rock Factor) * Fill Factor
- 5) The Mass Ordinate + or - Qty calculated for the Division. Plus quantity indicates an excess of material within the Division. Minus indicates a shortage of material within the Division.

2

2

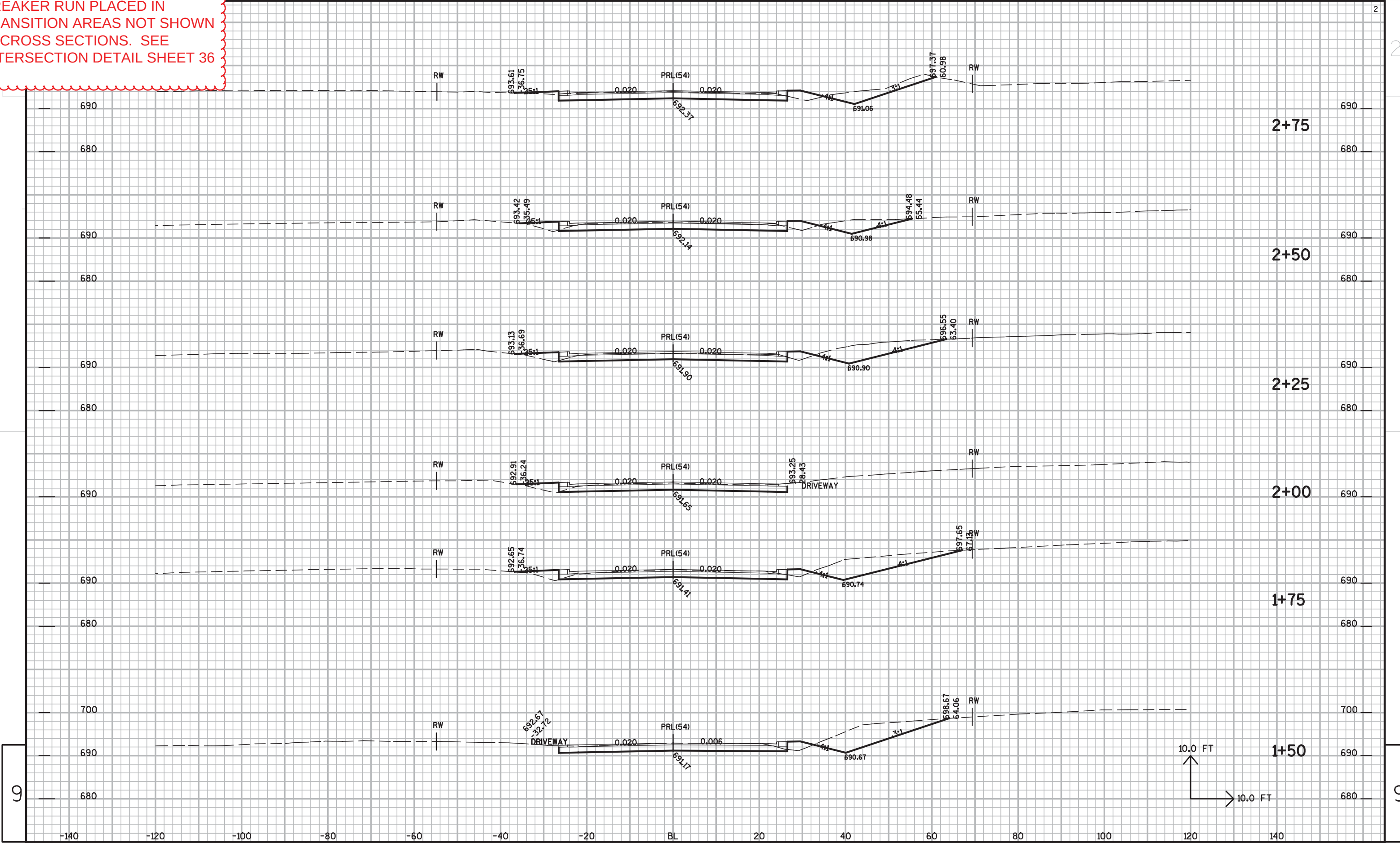
NOTE:
BREAKER RUN PLACED IN
TRANSITION AREAS NOT SHOWN
IN CROSS SECTIONS. SEE
INTERSECTION DETAIL SHEET 36
8" CONCRETE PAVEMENT IN
PLACE UNDER STONE STA
0+75-2+80



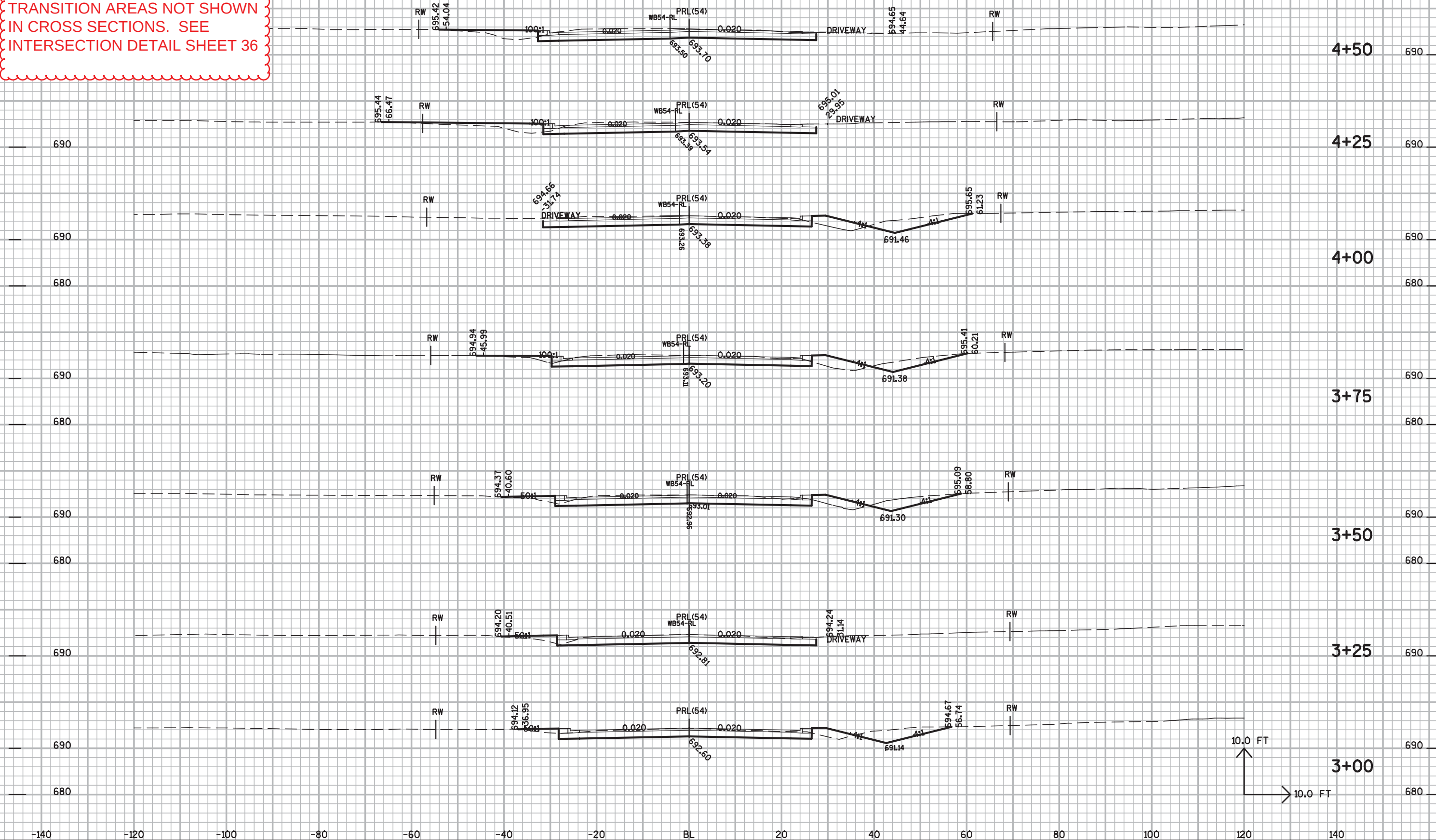
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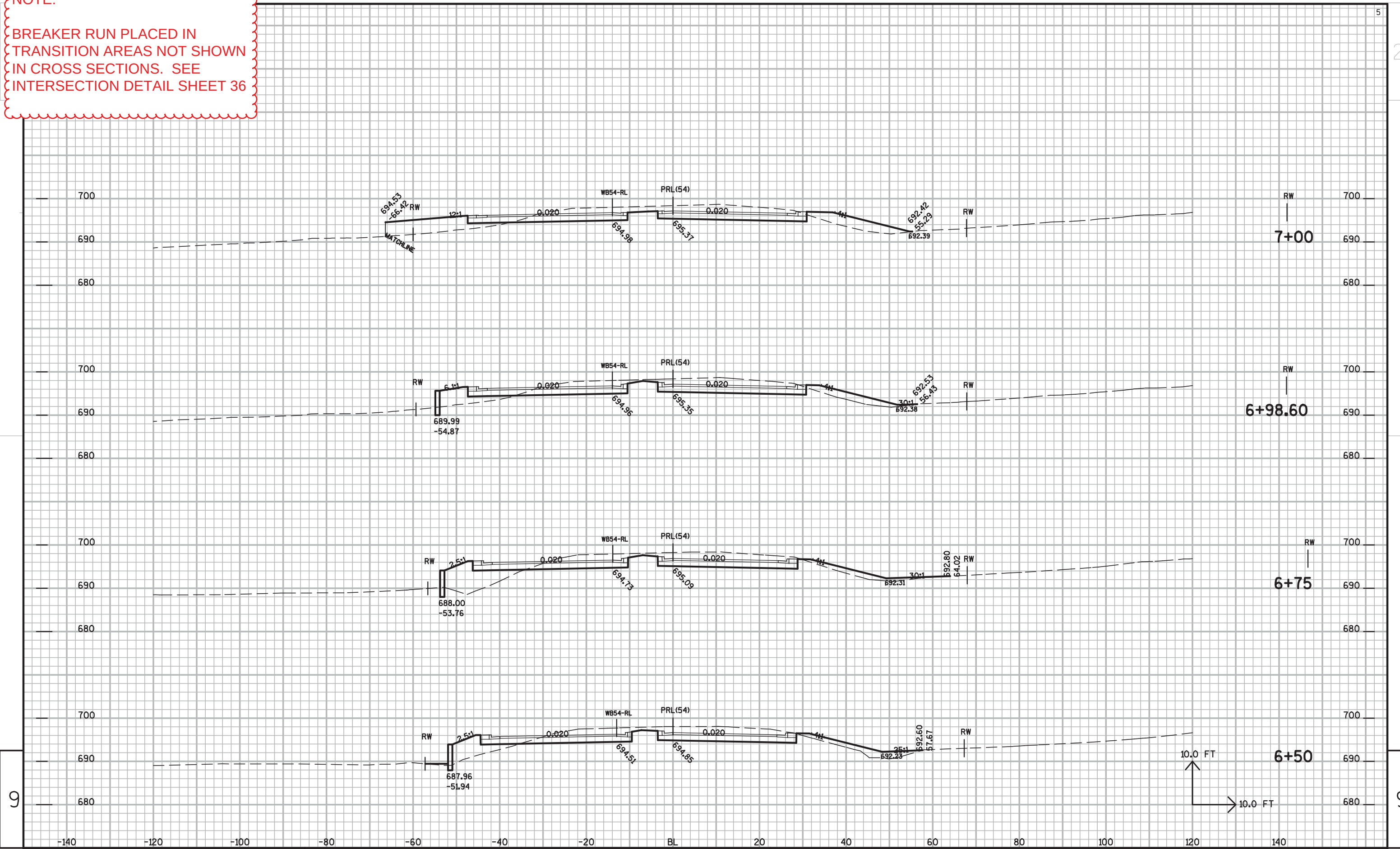
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INTERSECTION DETAIL SHEET 36



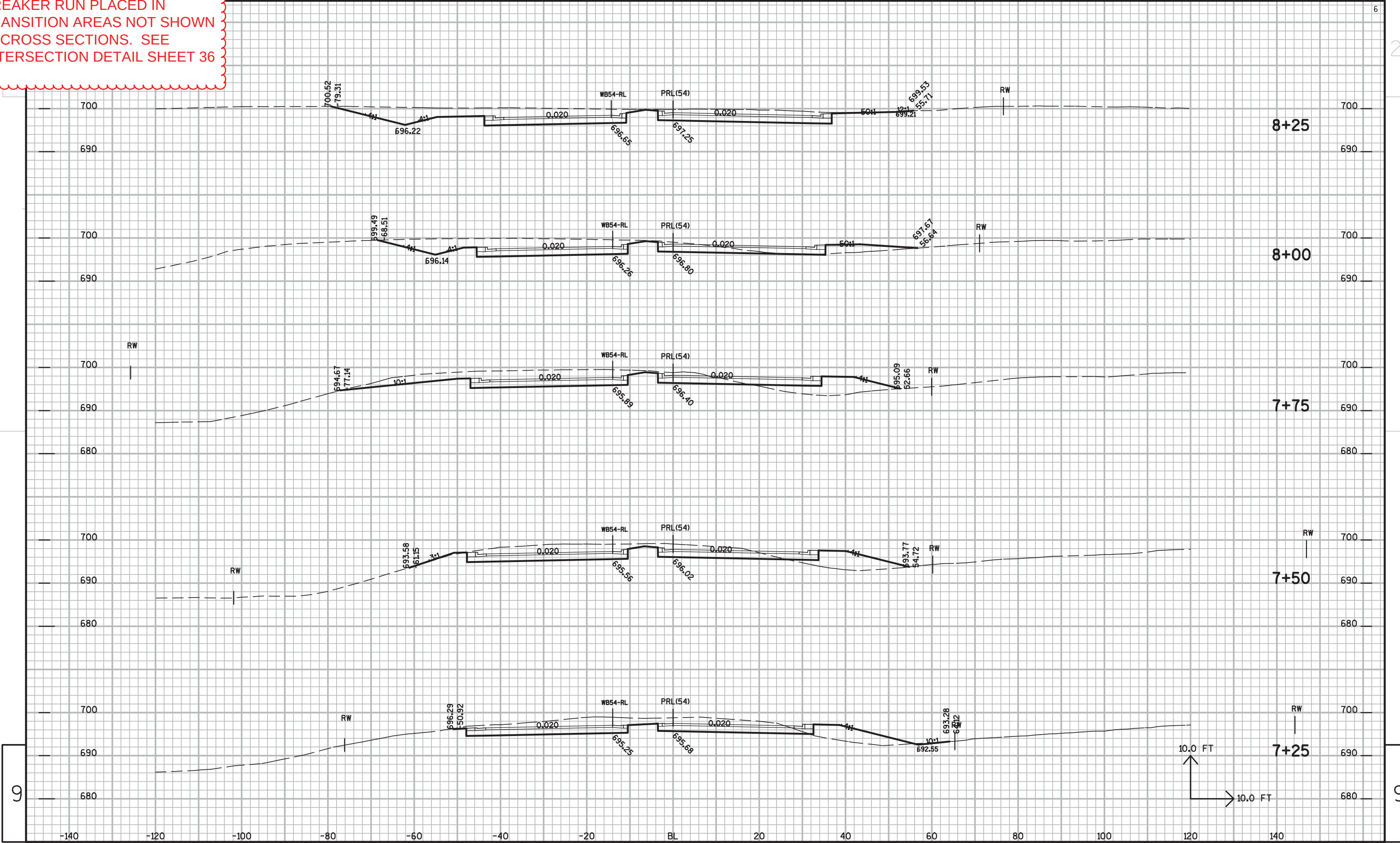
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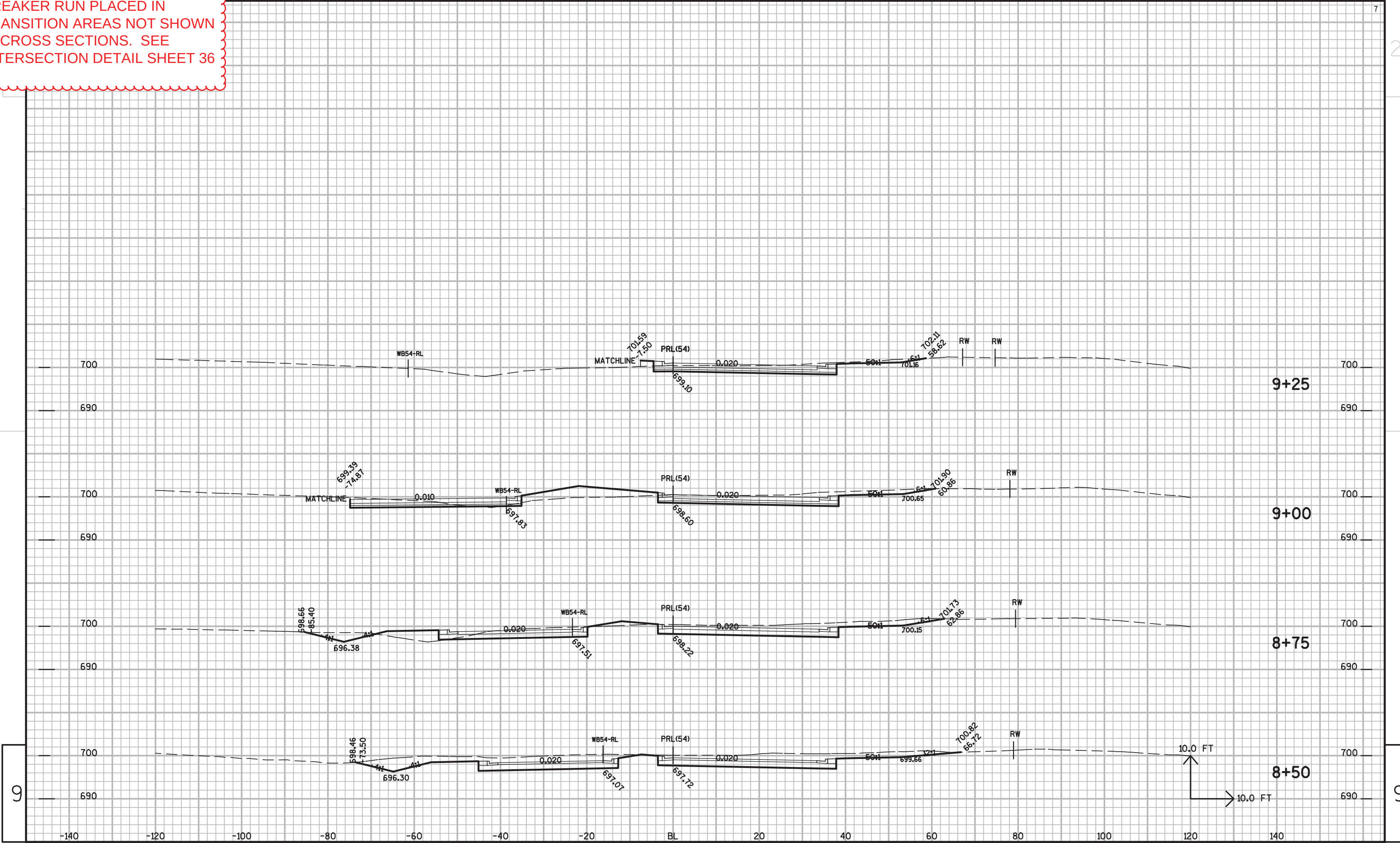
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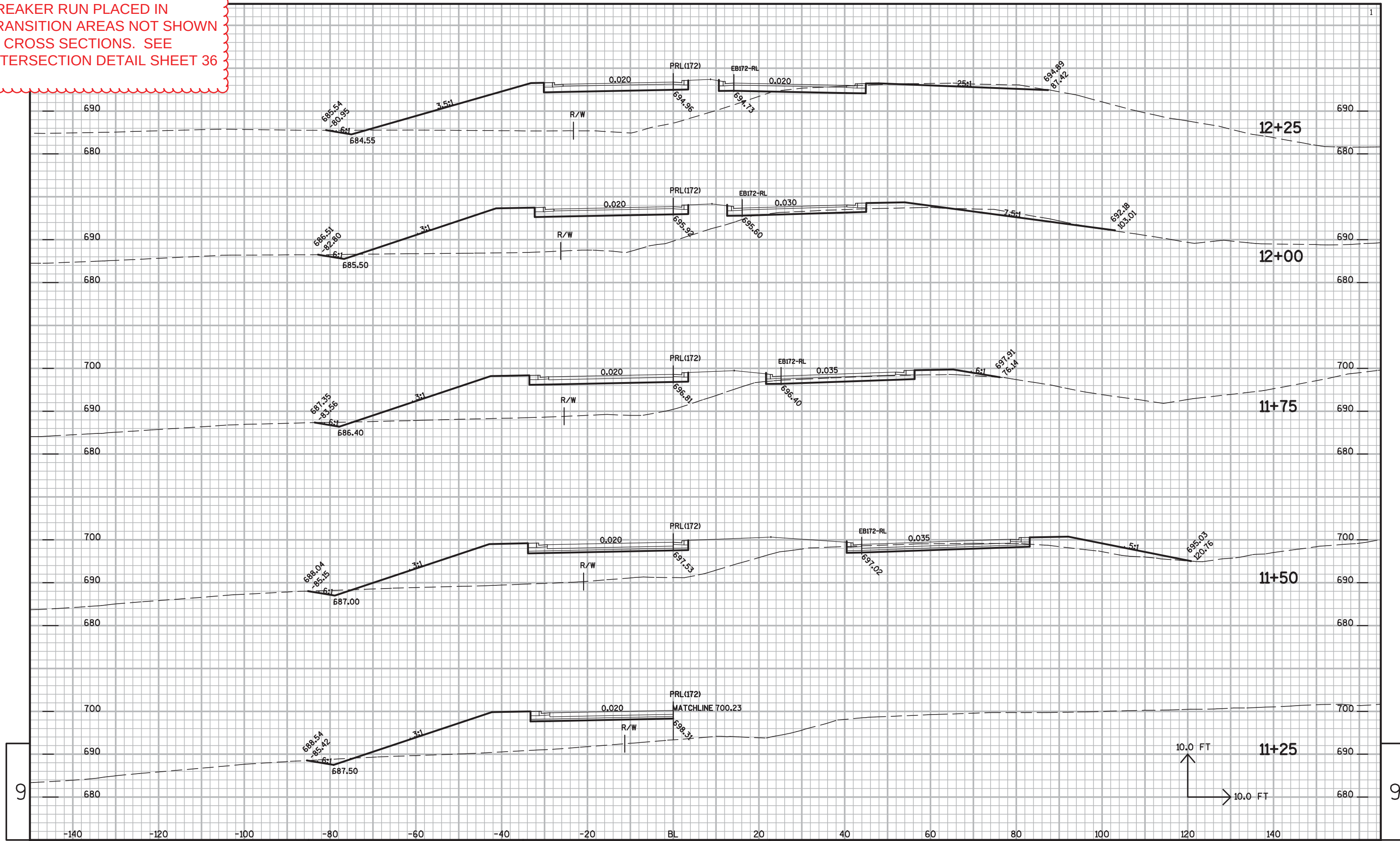
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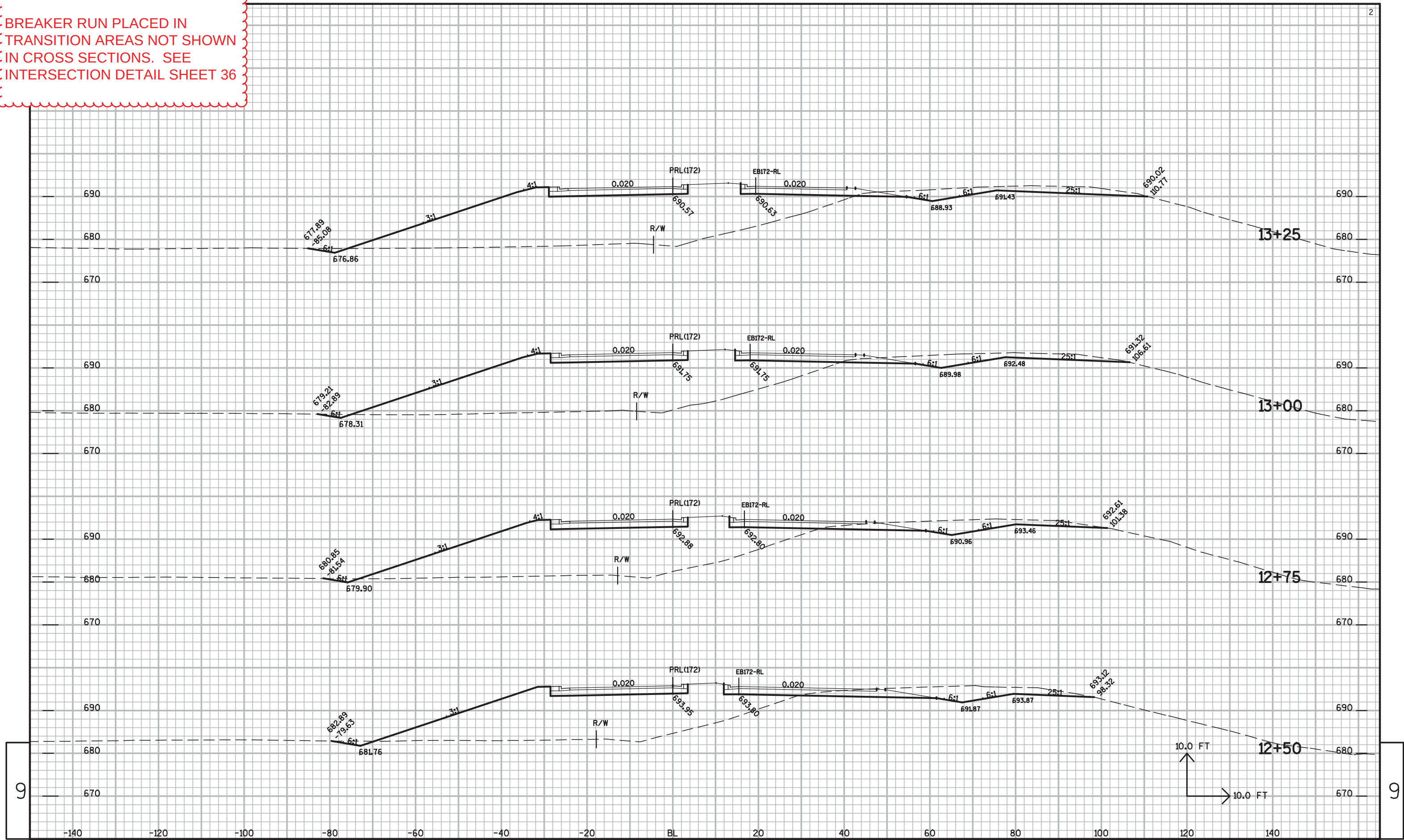
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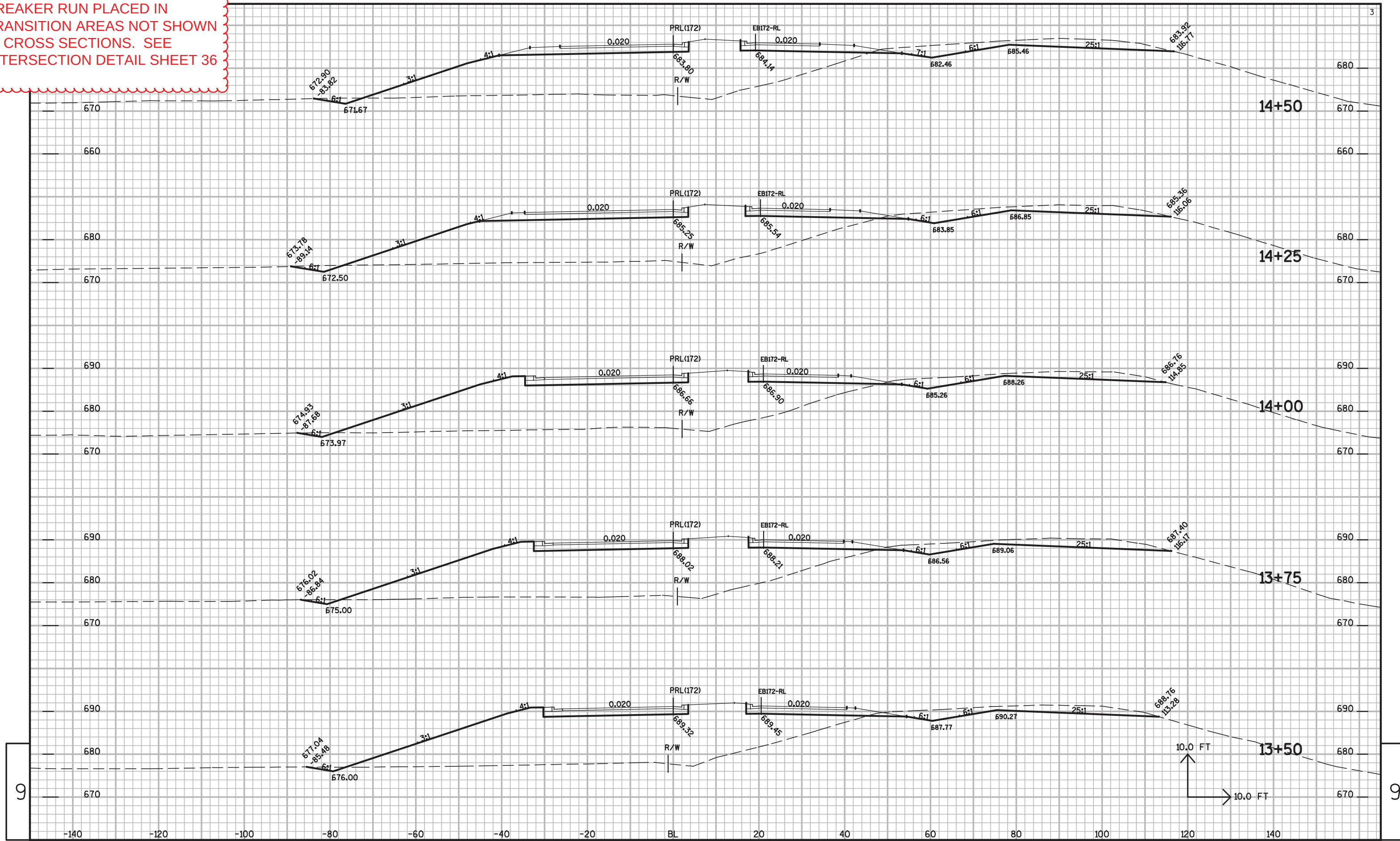
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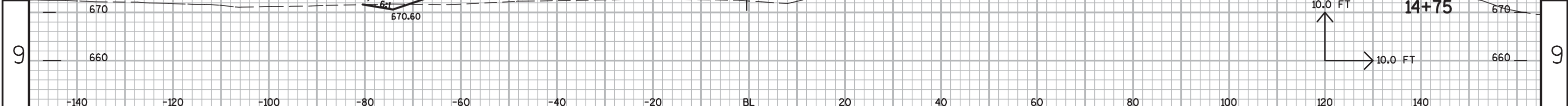


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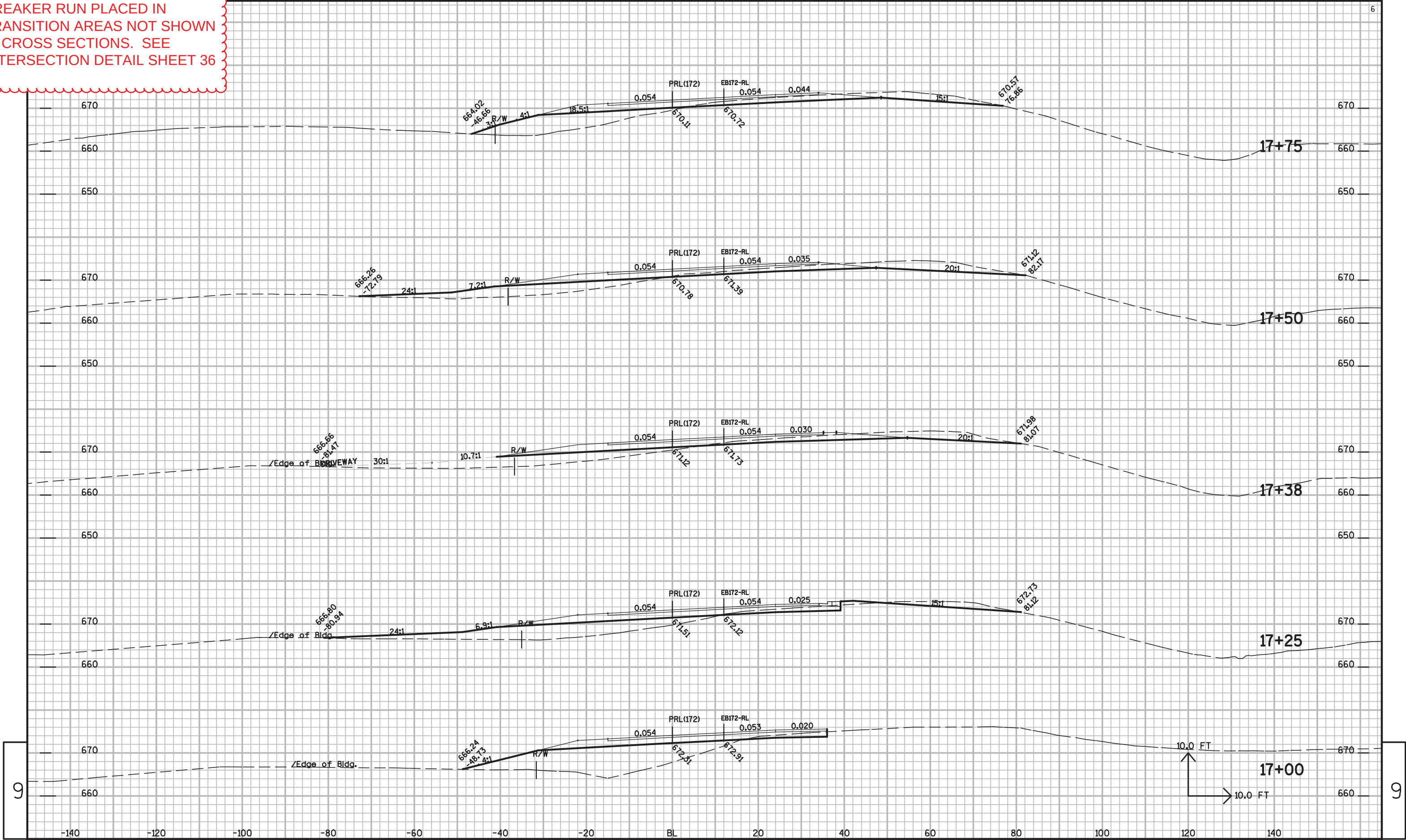


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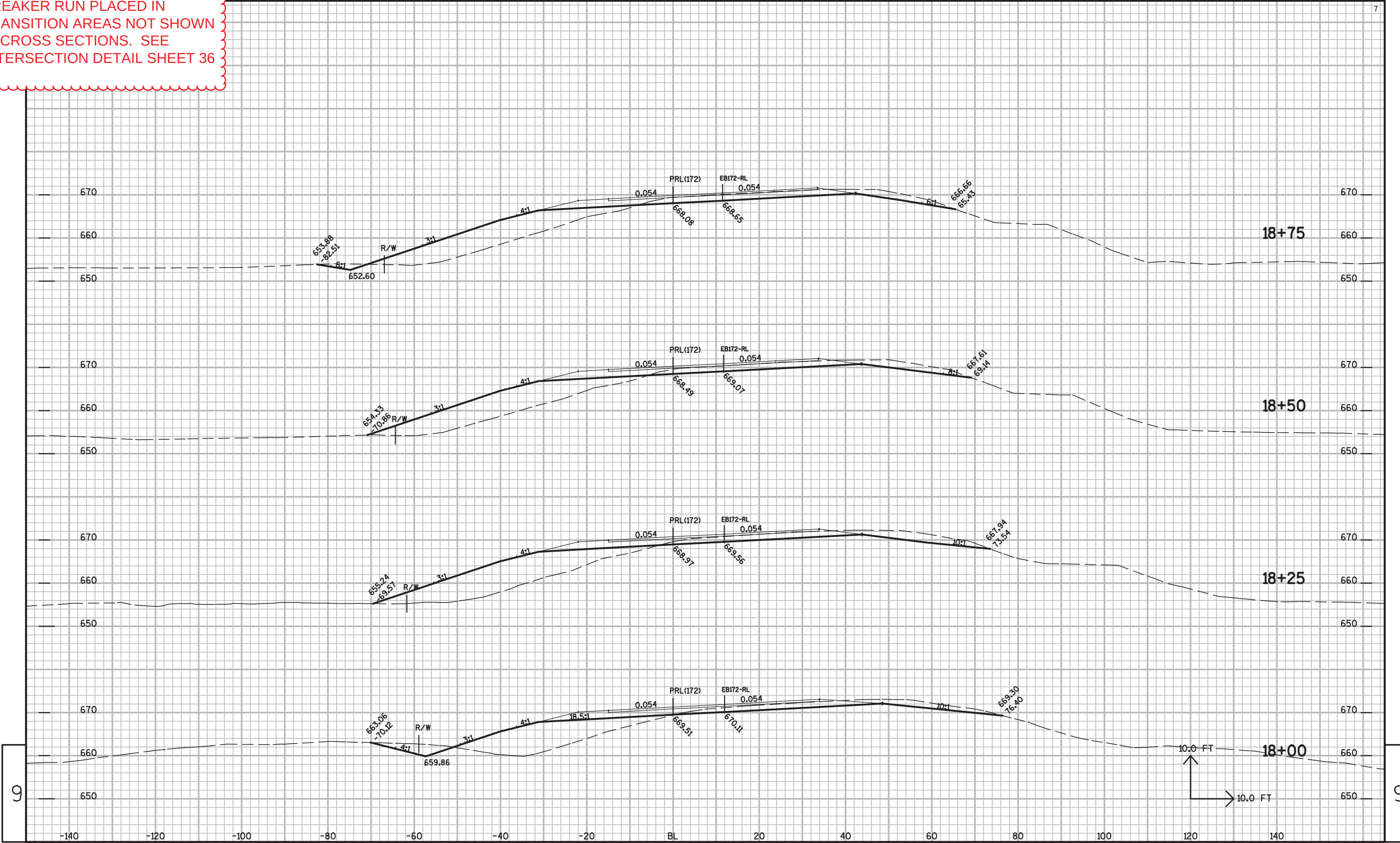
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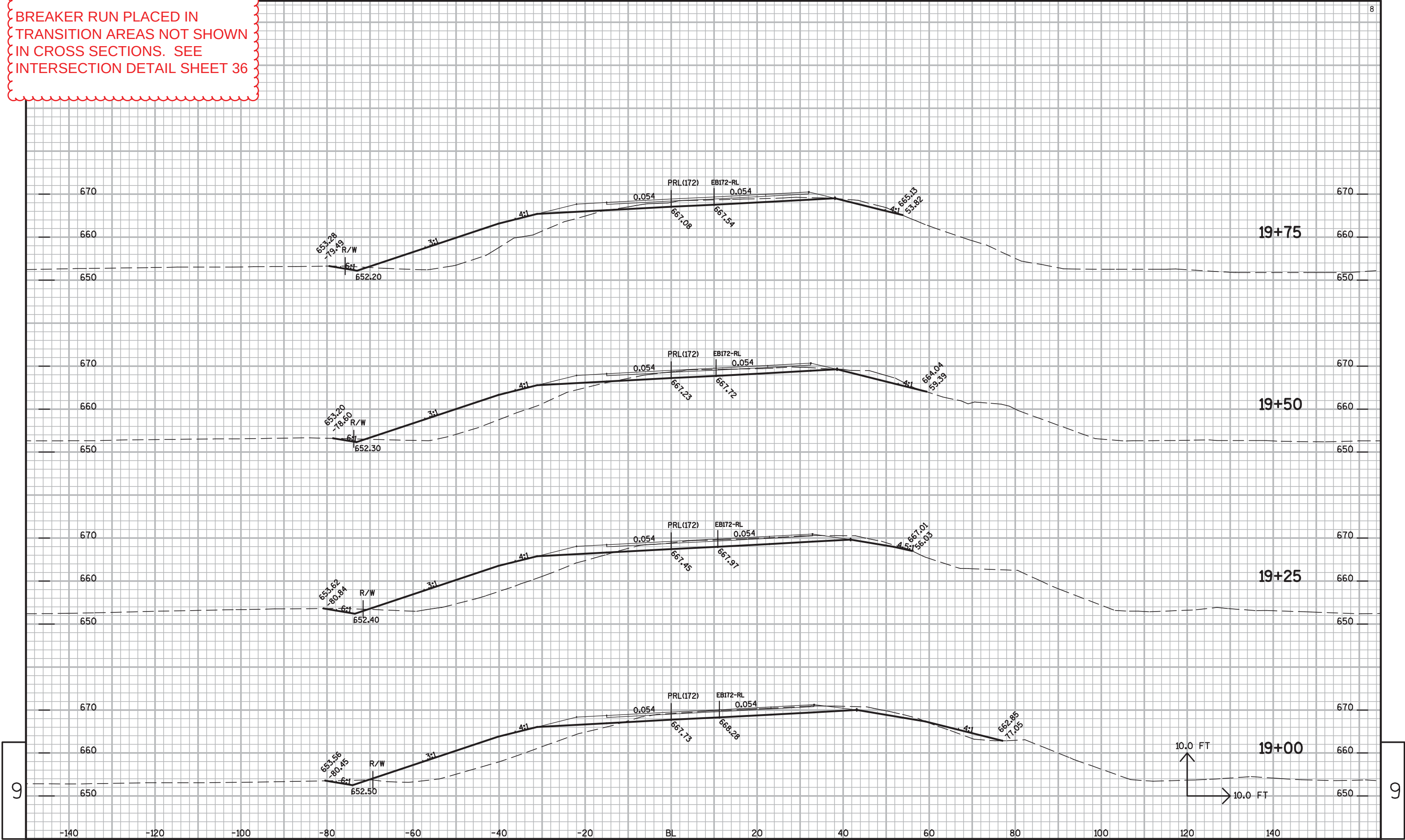
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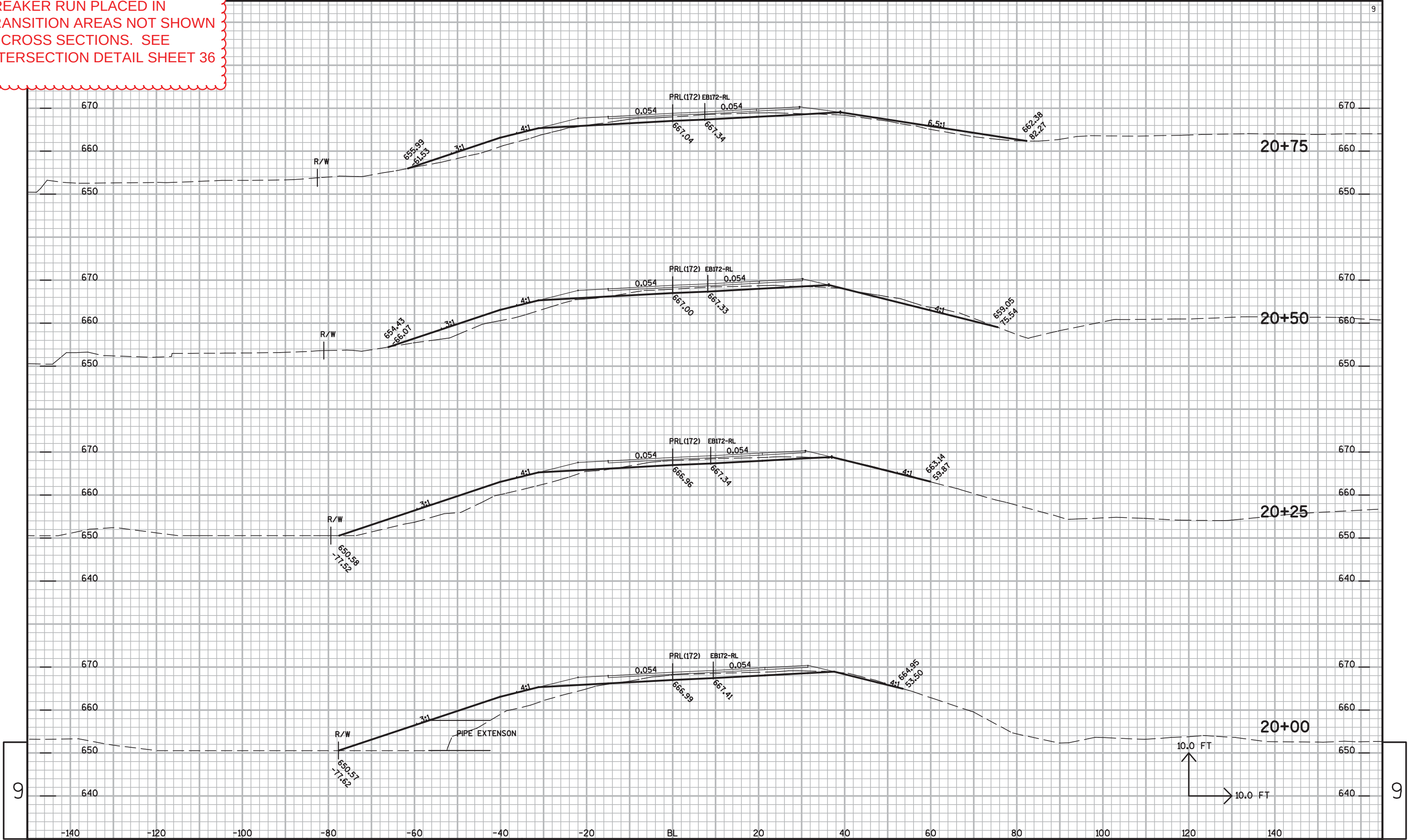
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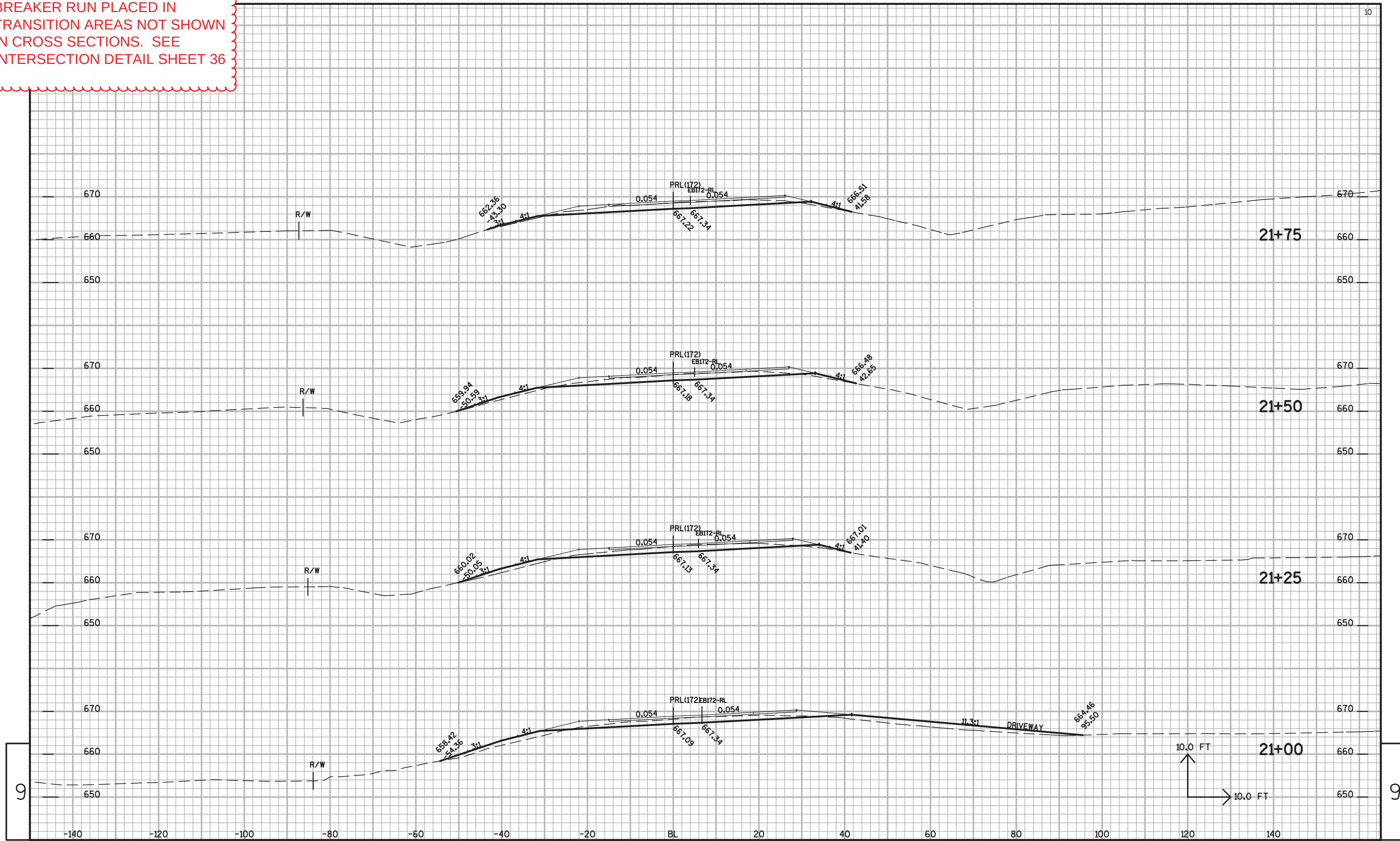
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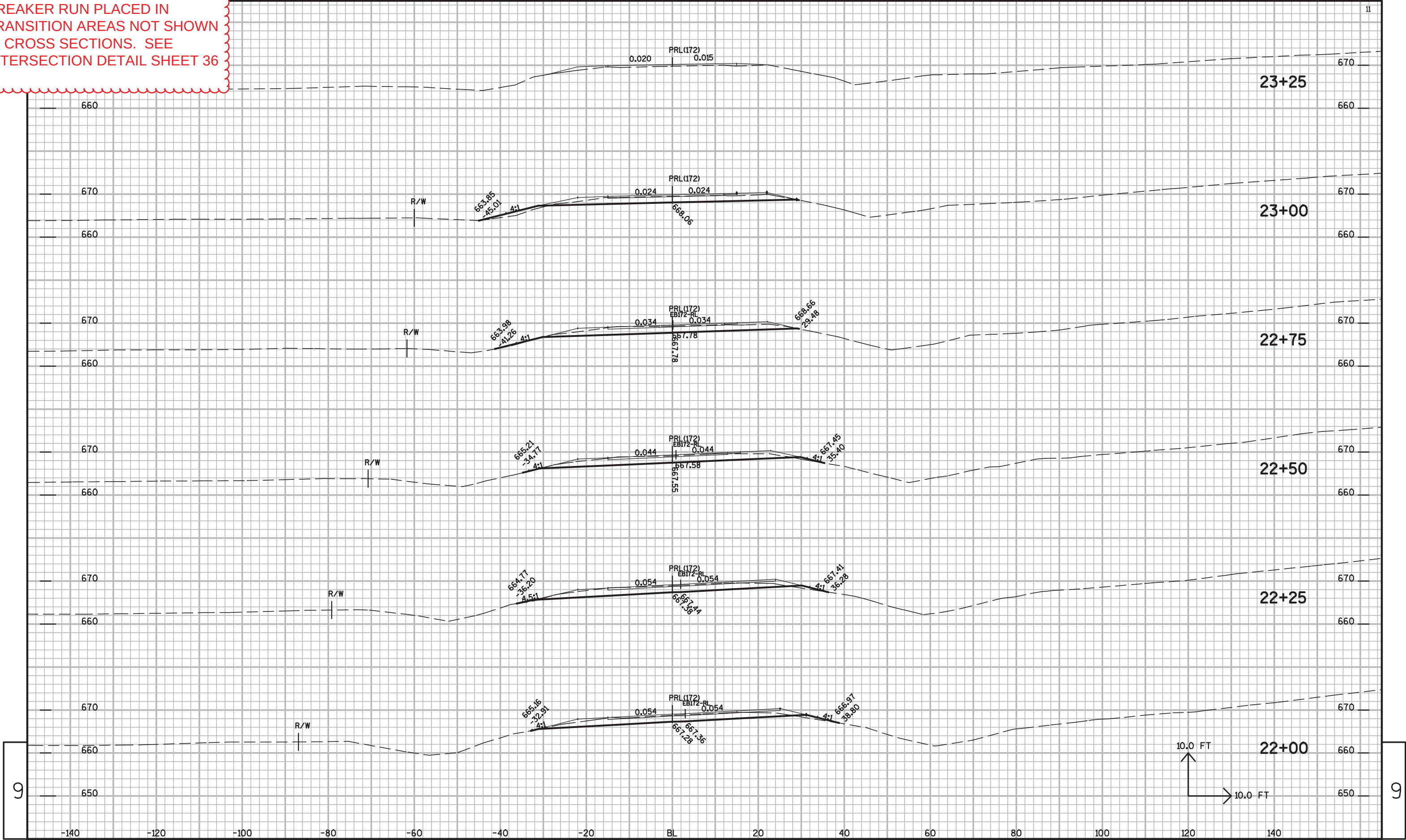
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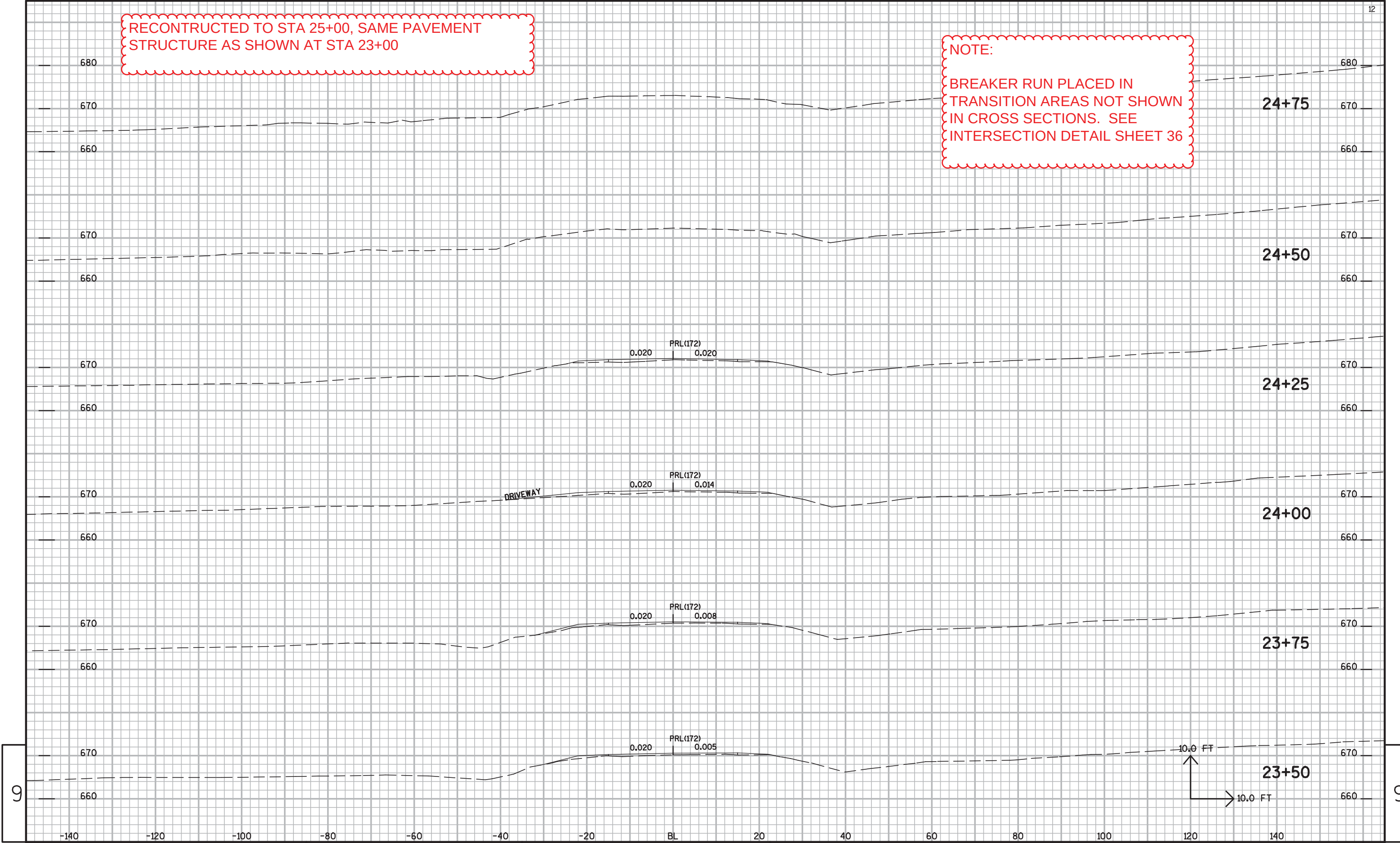


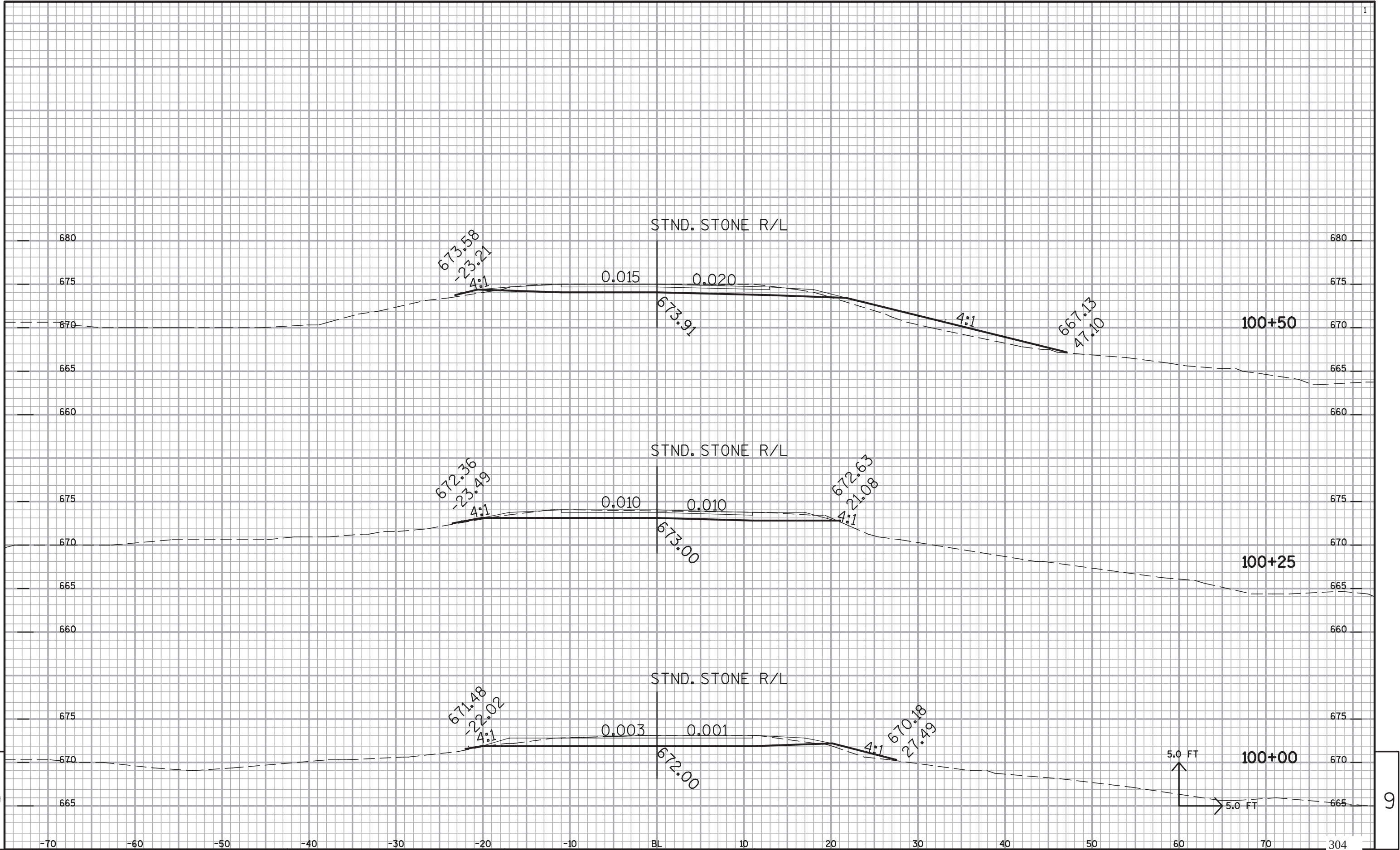
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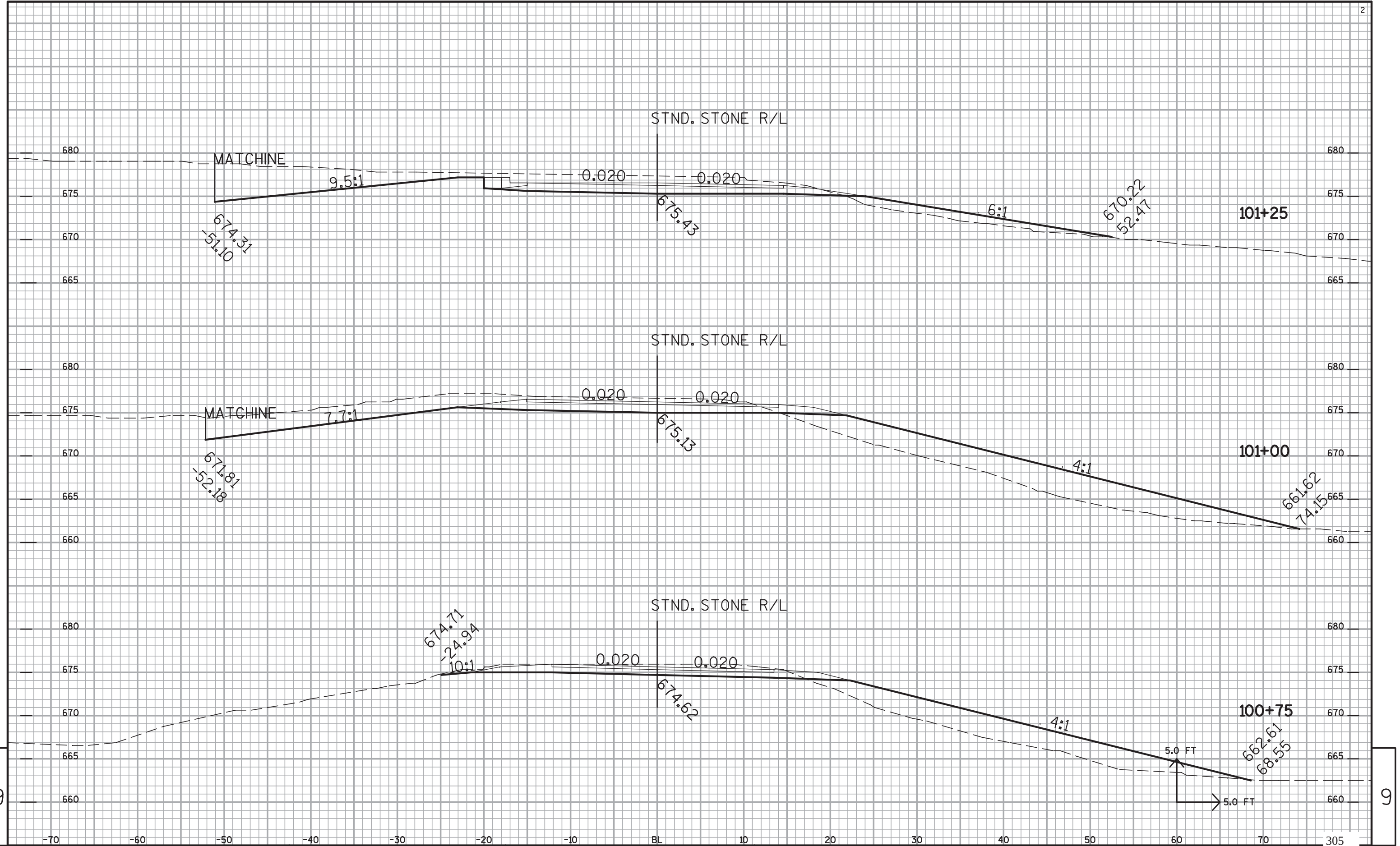


RECONSTRUCTED TO STA 25+00, SAME PAVEMENT
STRUCTURE AS SHOWN AT STA 23+00

NOTE:
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IN CROSS SECTIONS. SEE
INTERSECTION DETAIL SHEET 36

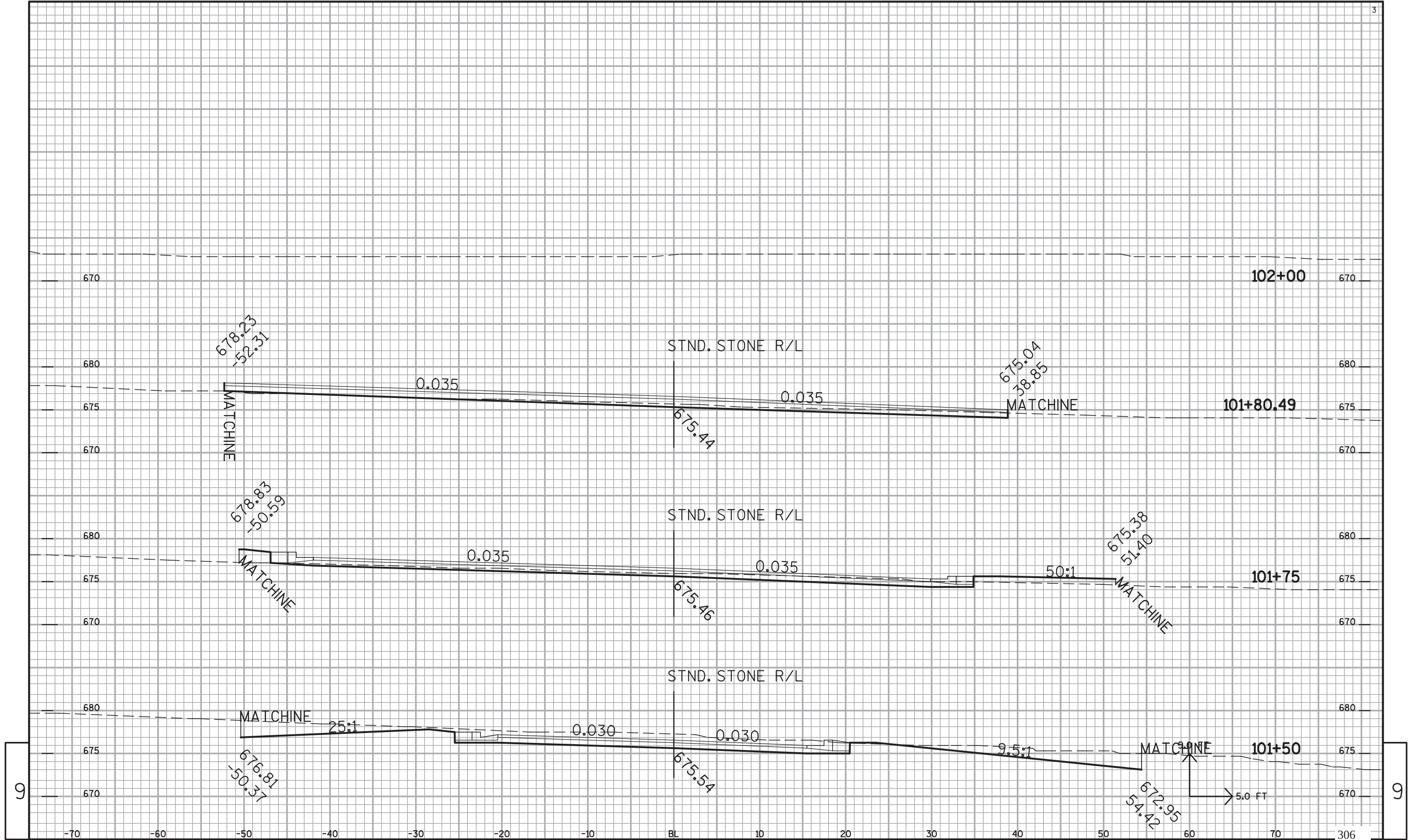






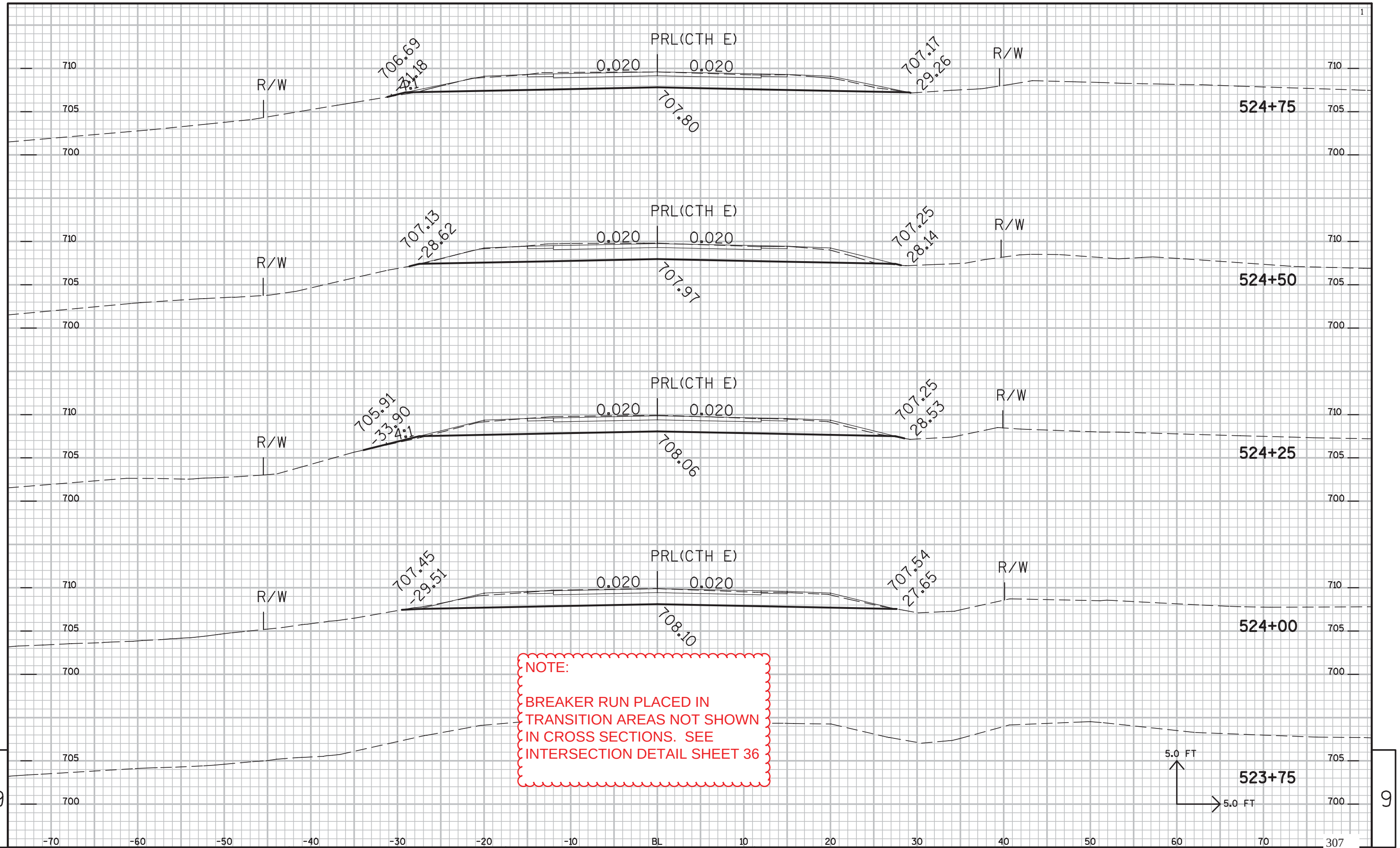
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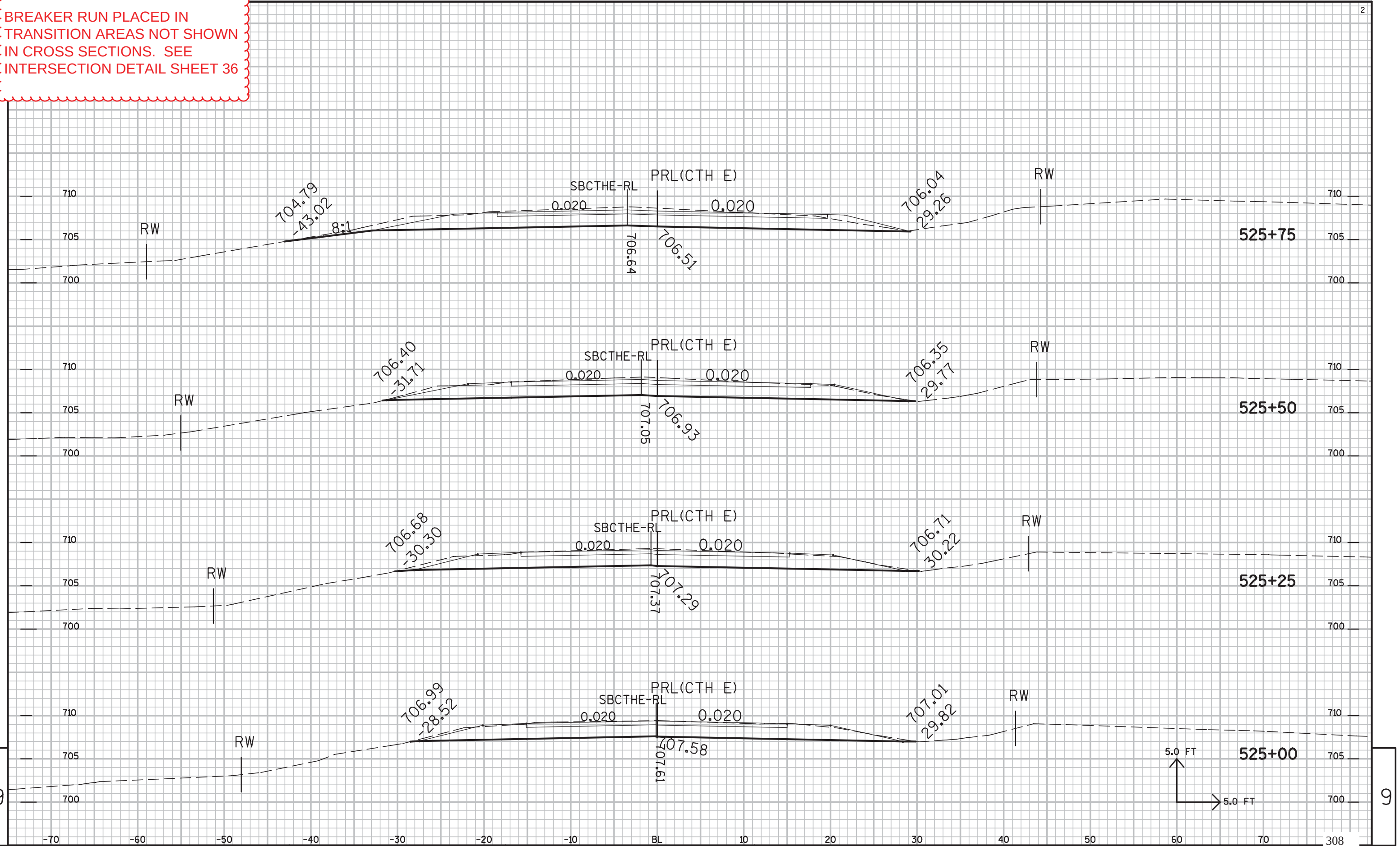
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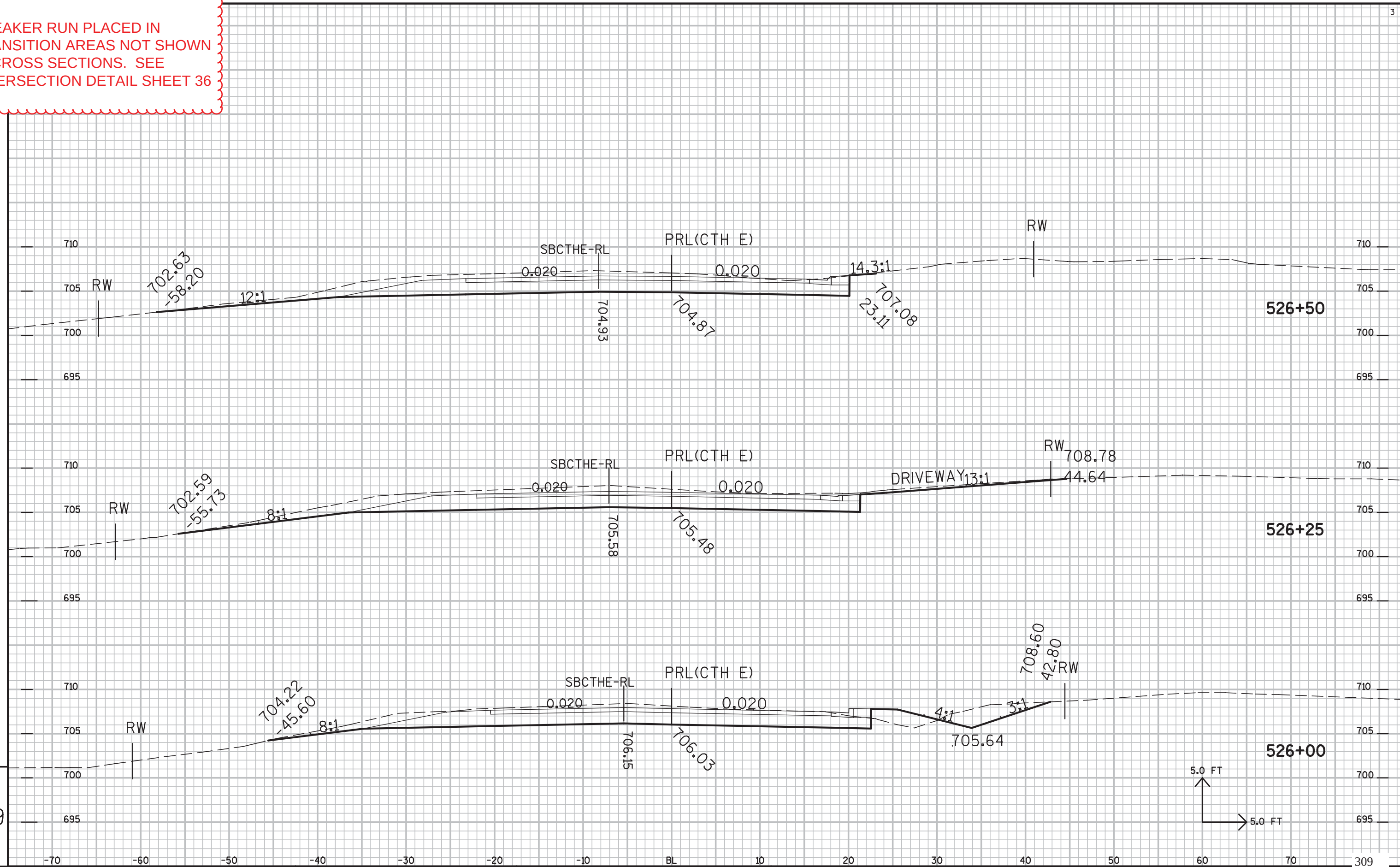


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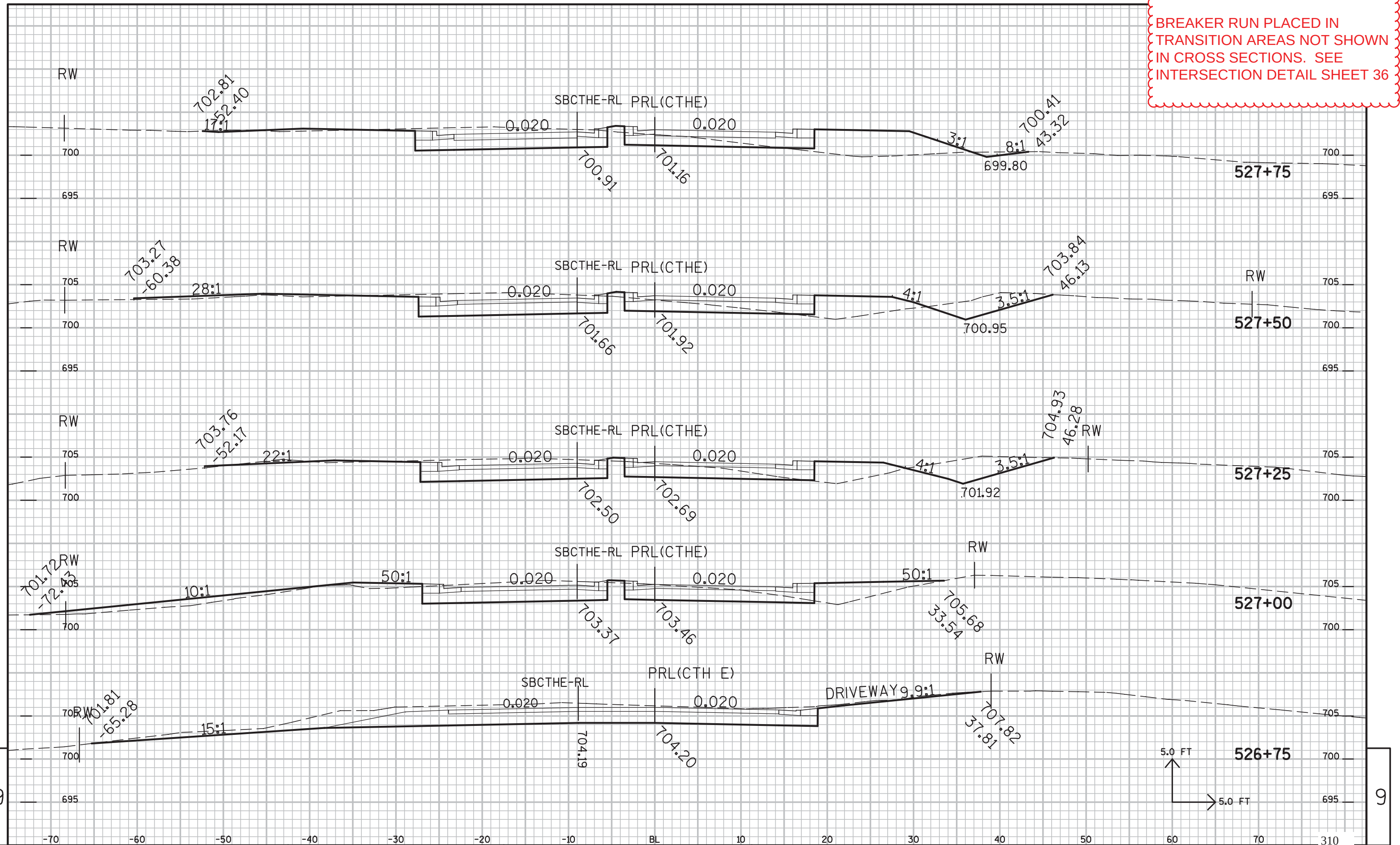
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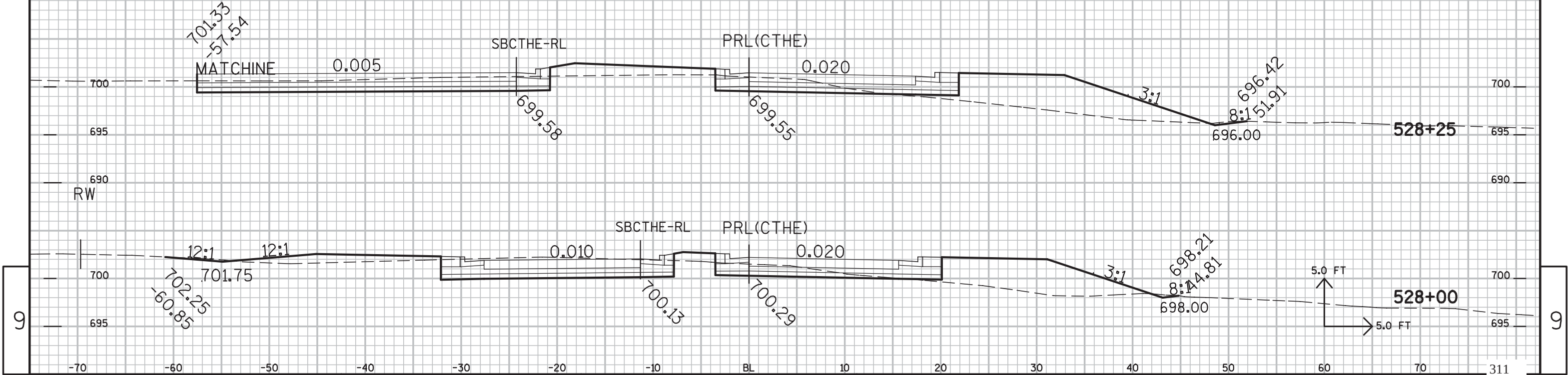
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NOTE:
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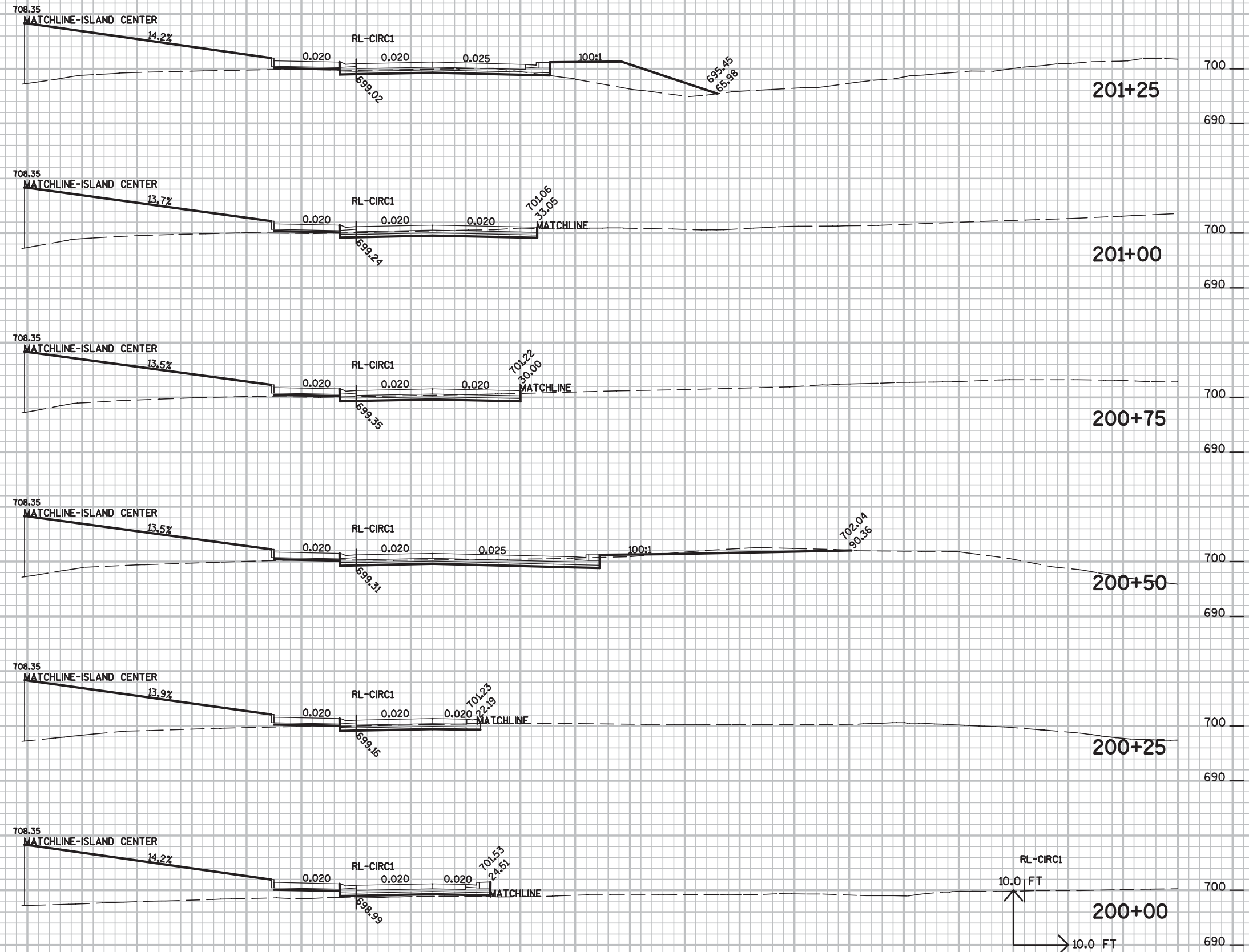


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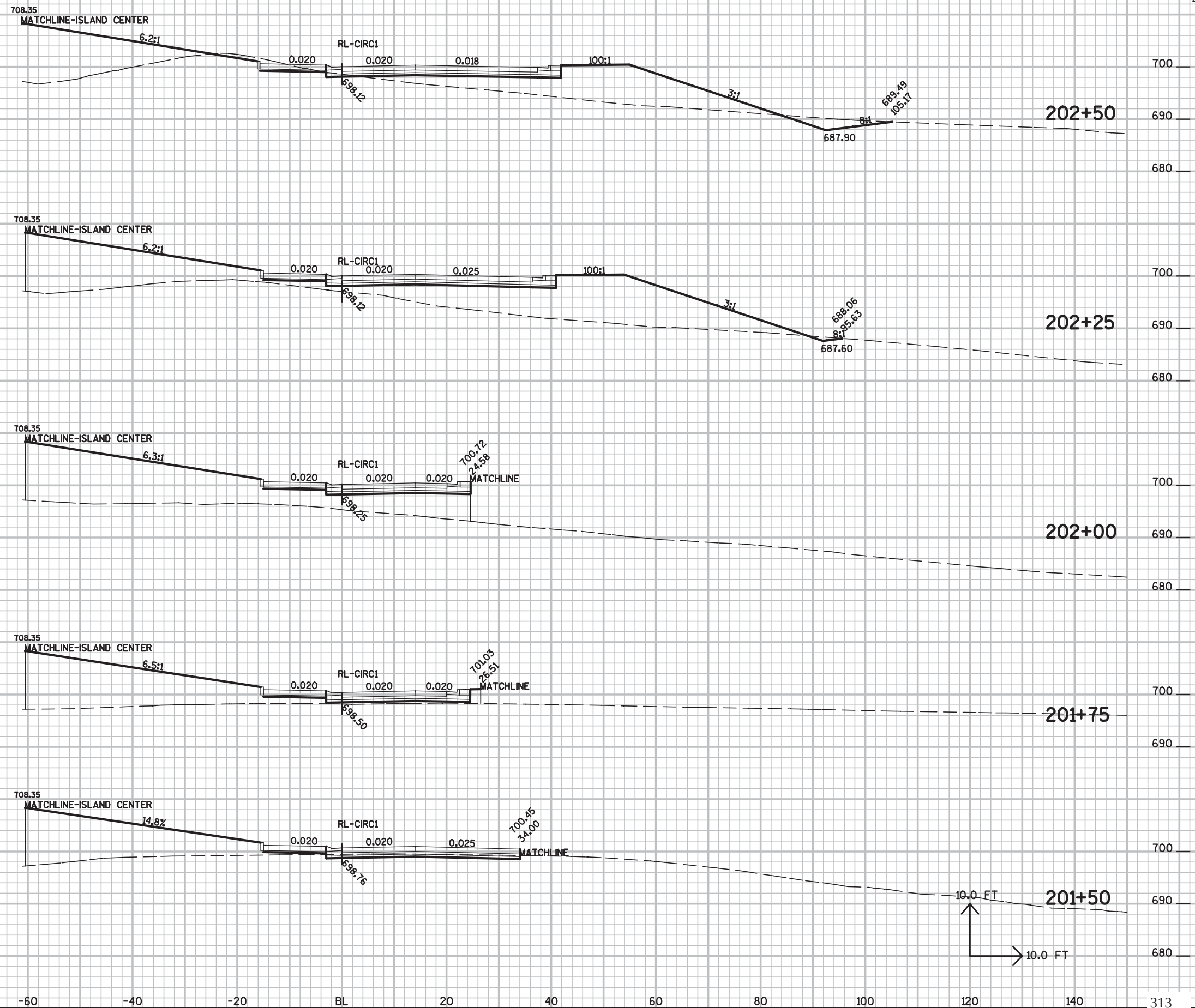


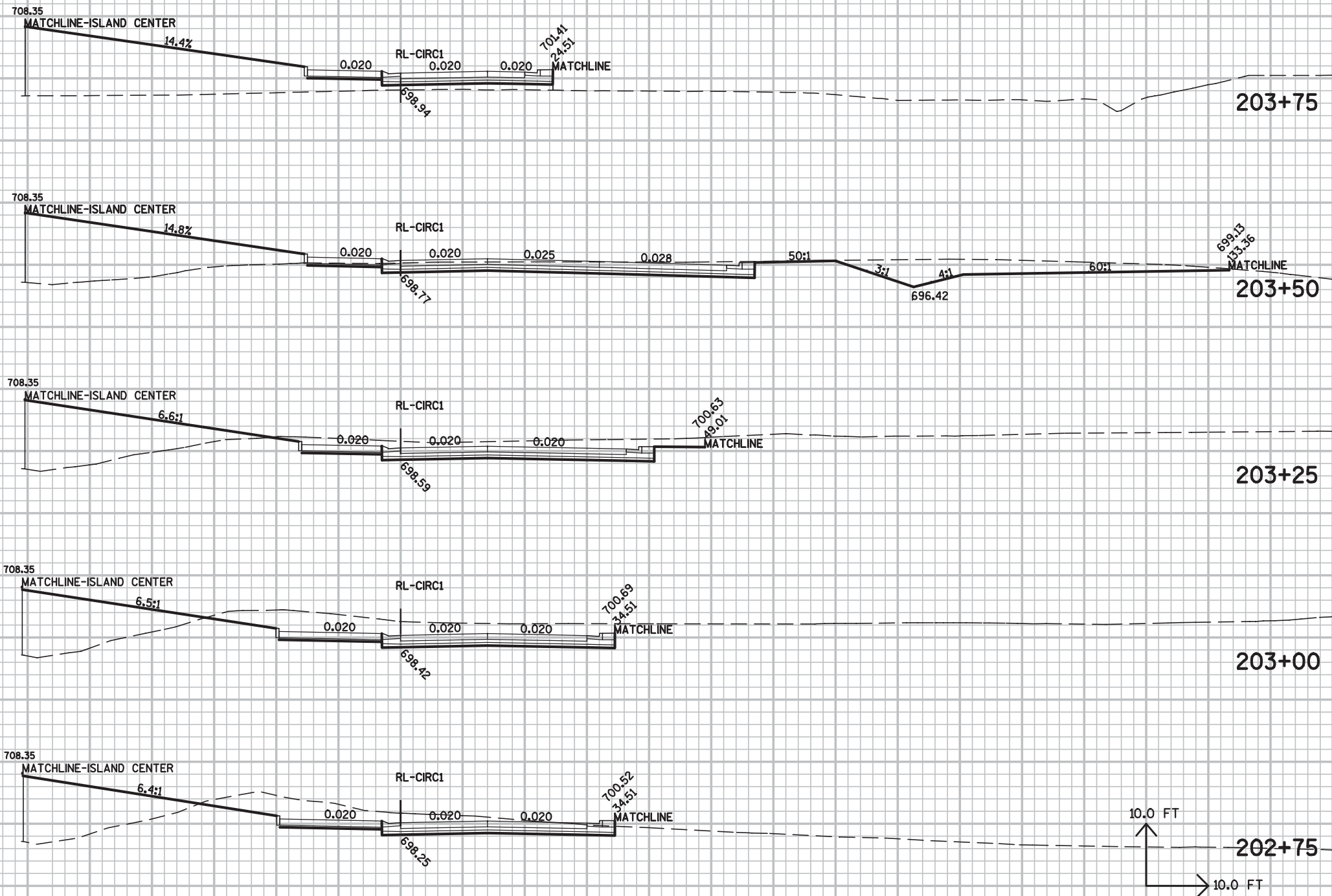
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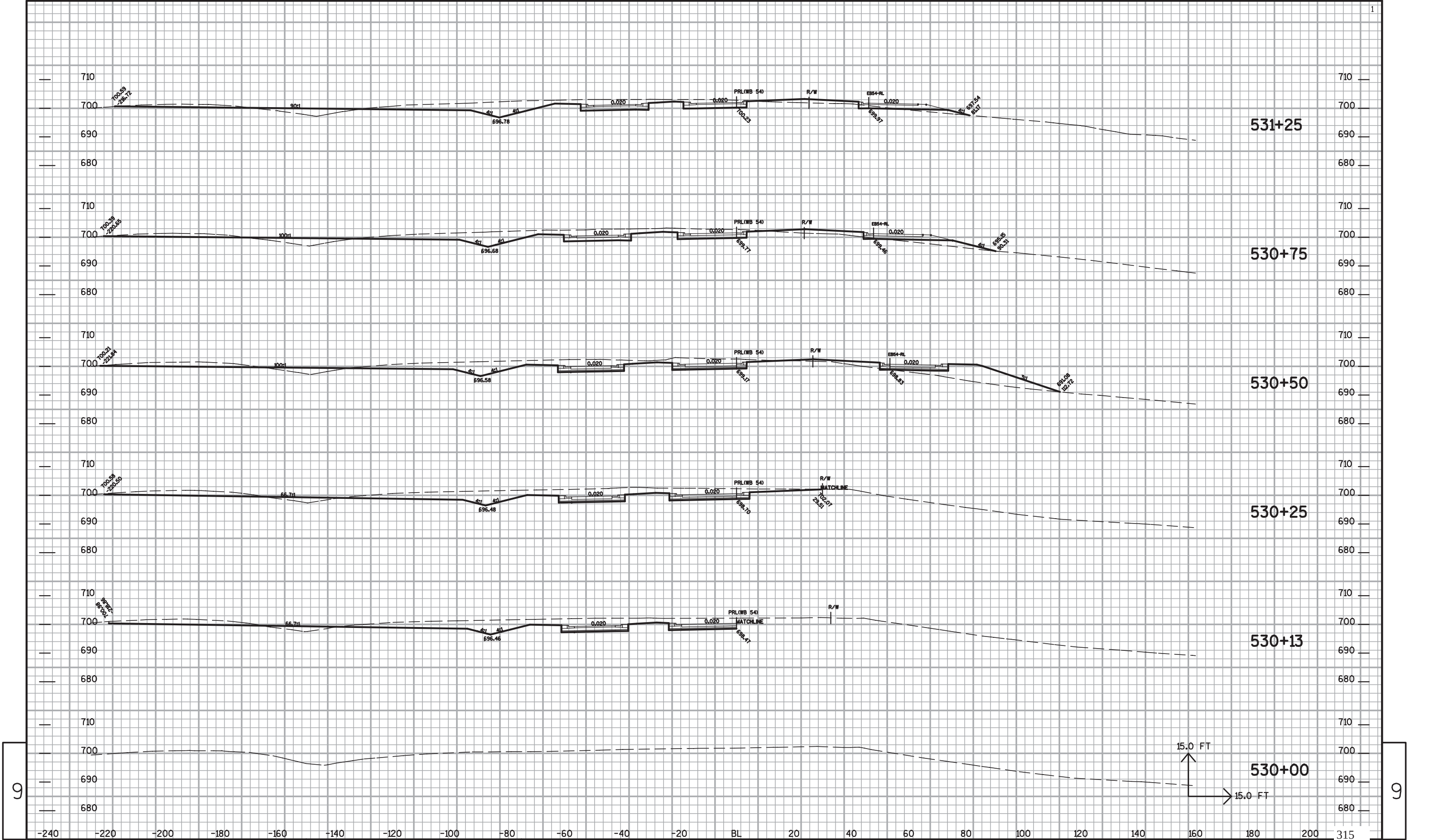
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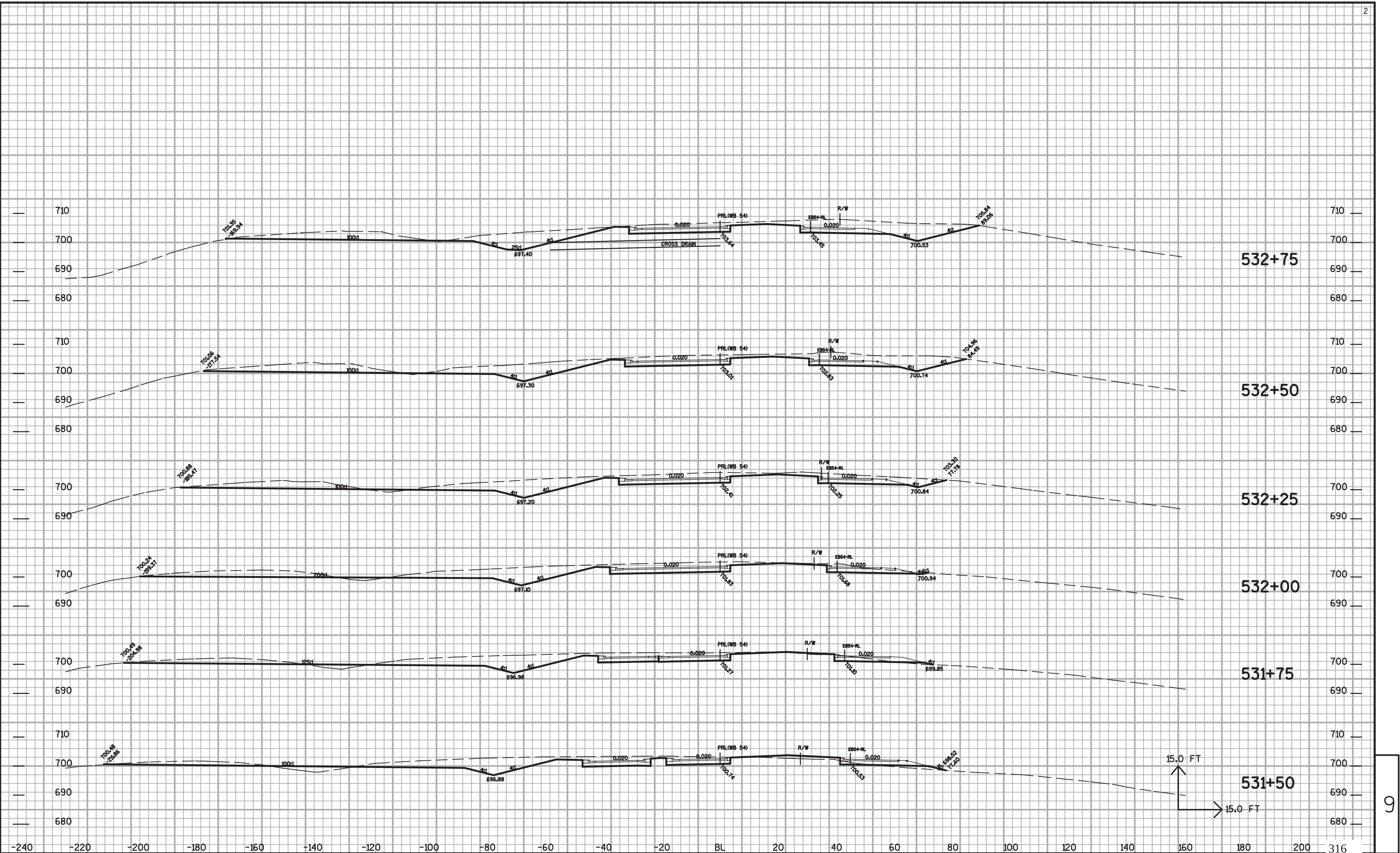


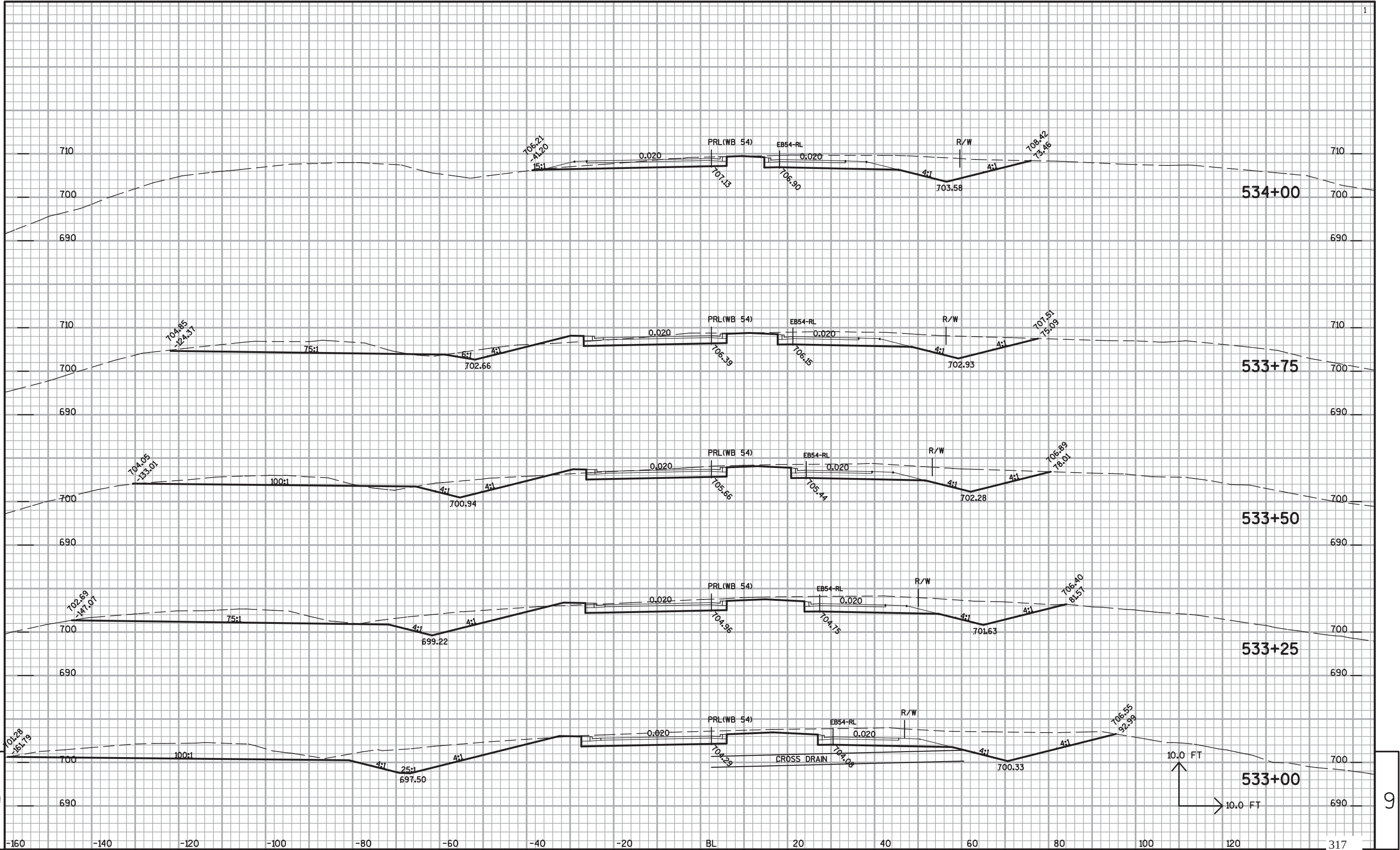
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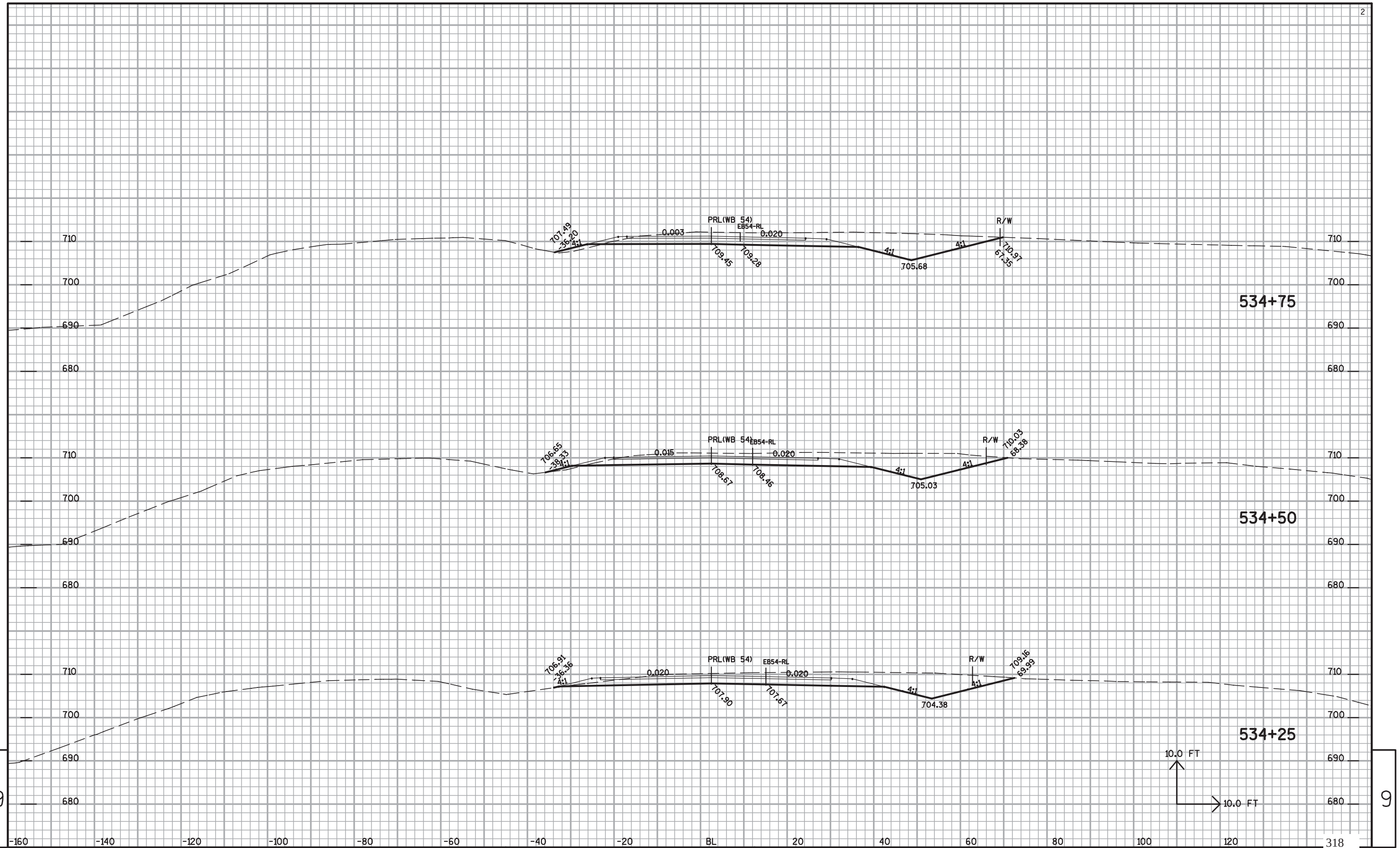


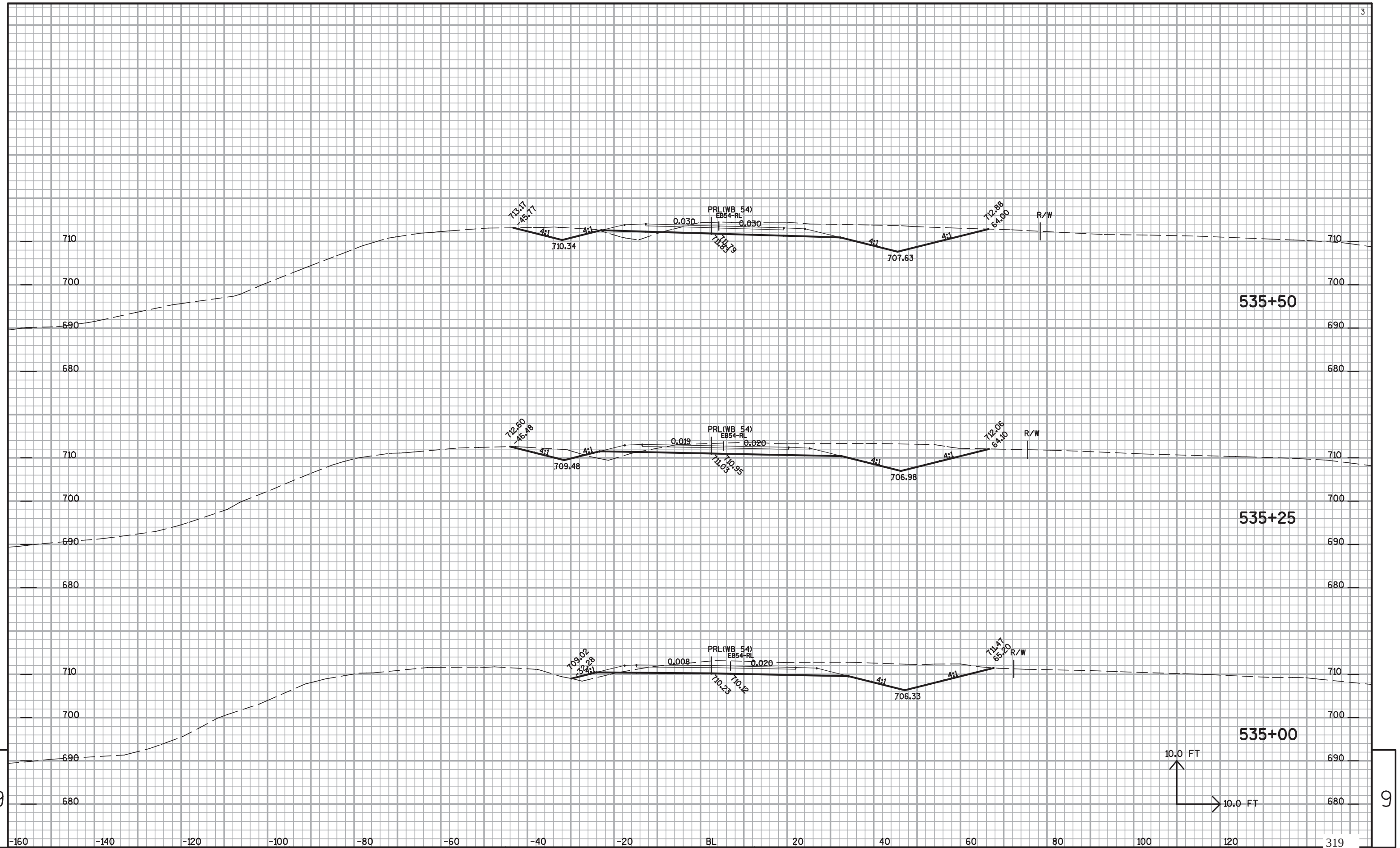


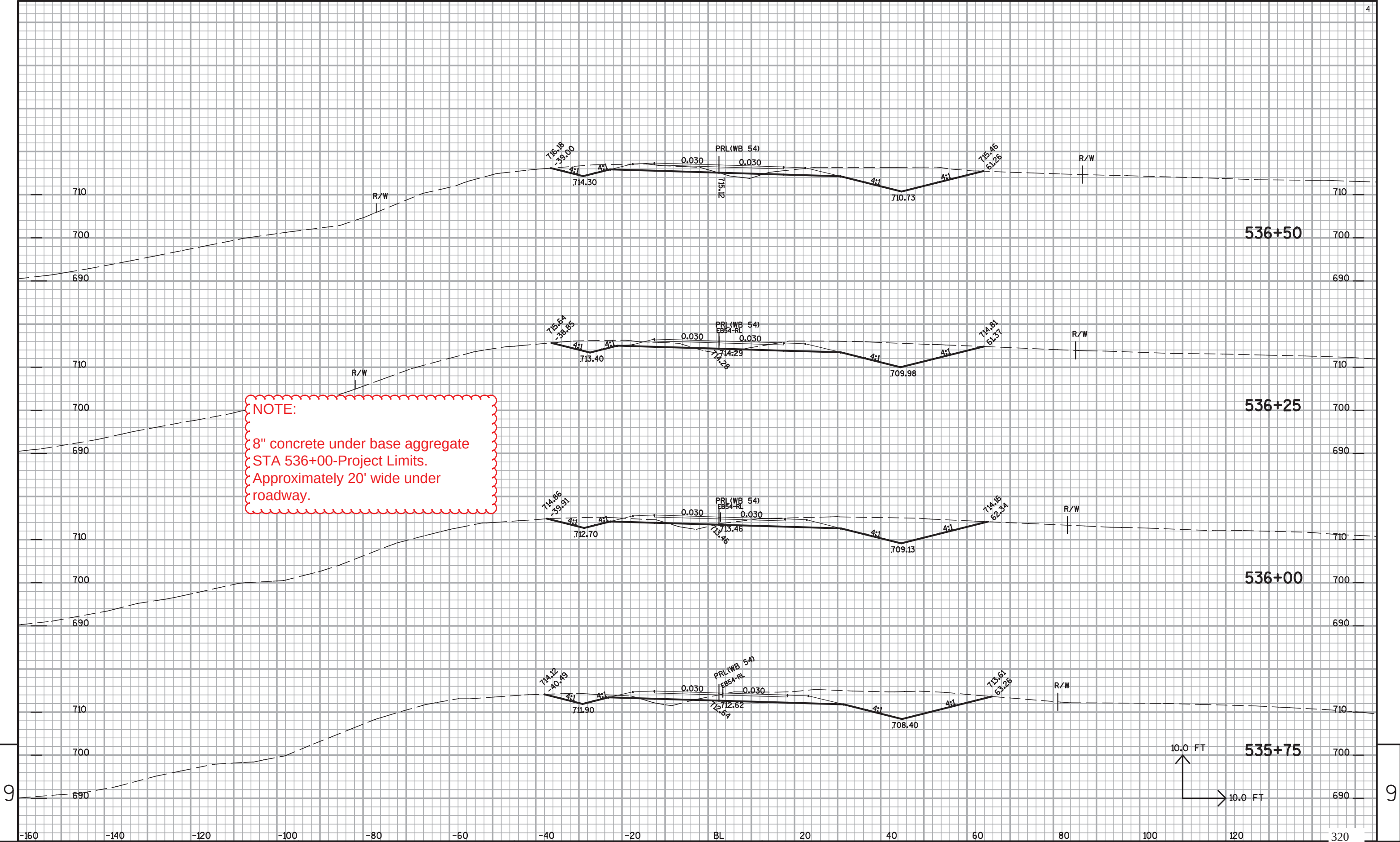








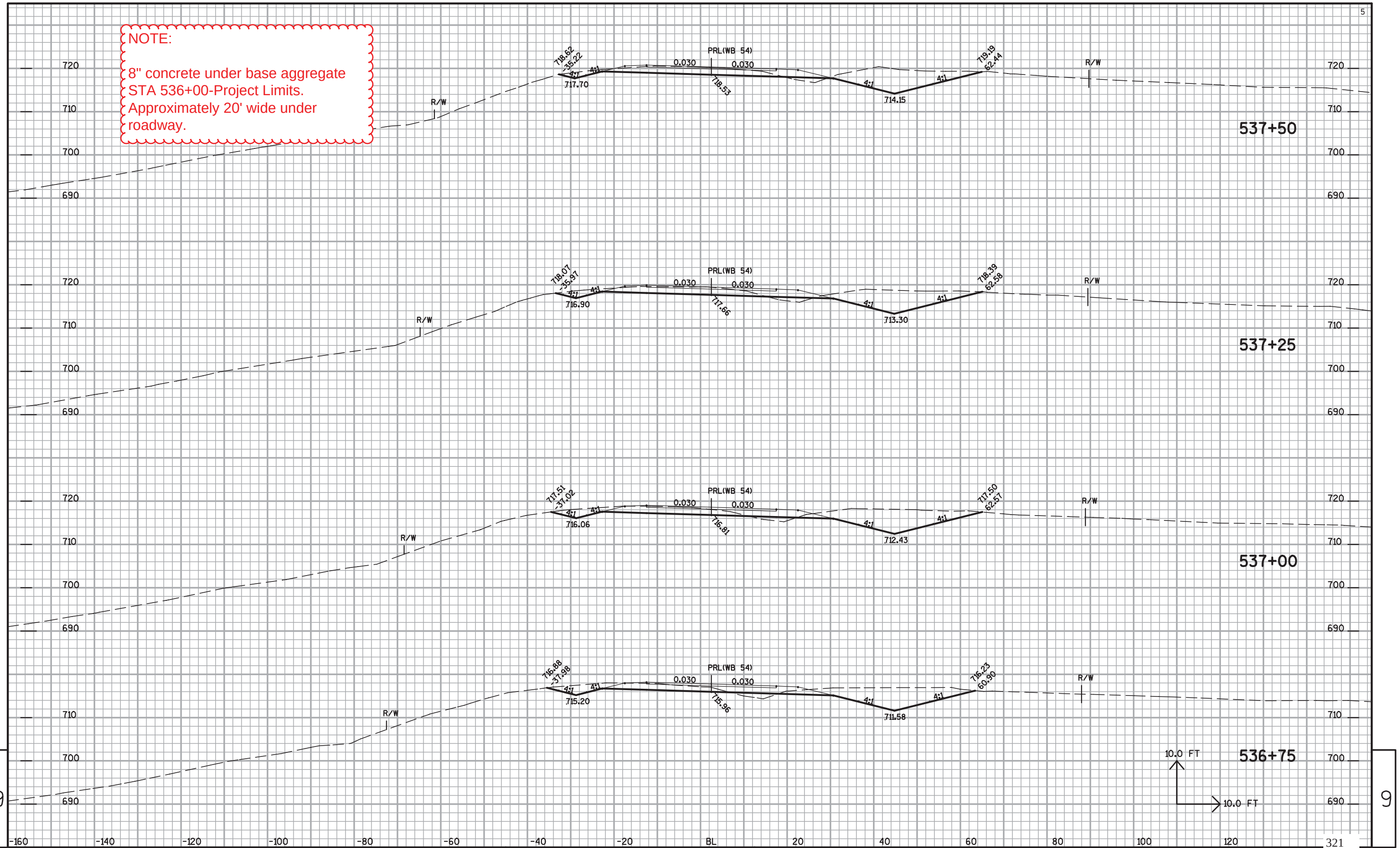




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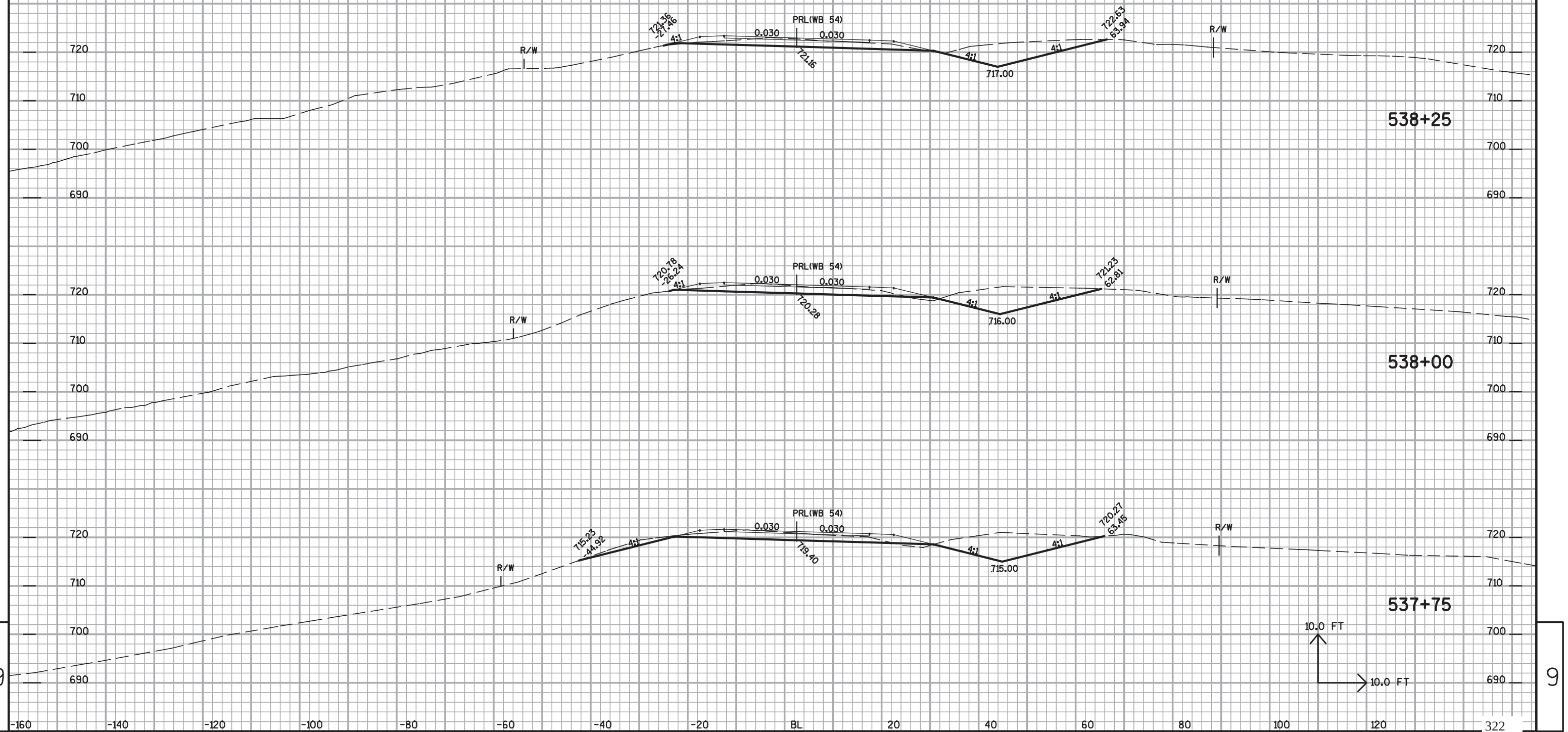
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NOTE:
8" concrete under base aggregate
STA 536+00-Project Limits.
Approximately 20' wide under
roadway.



NOTE:

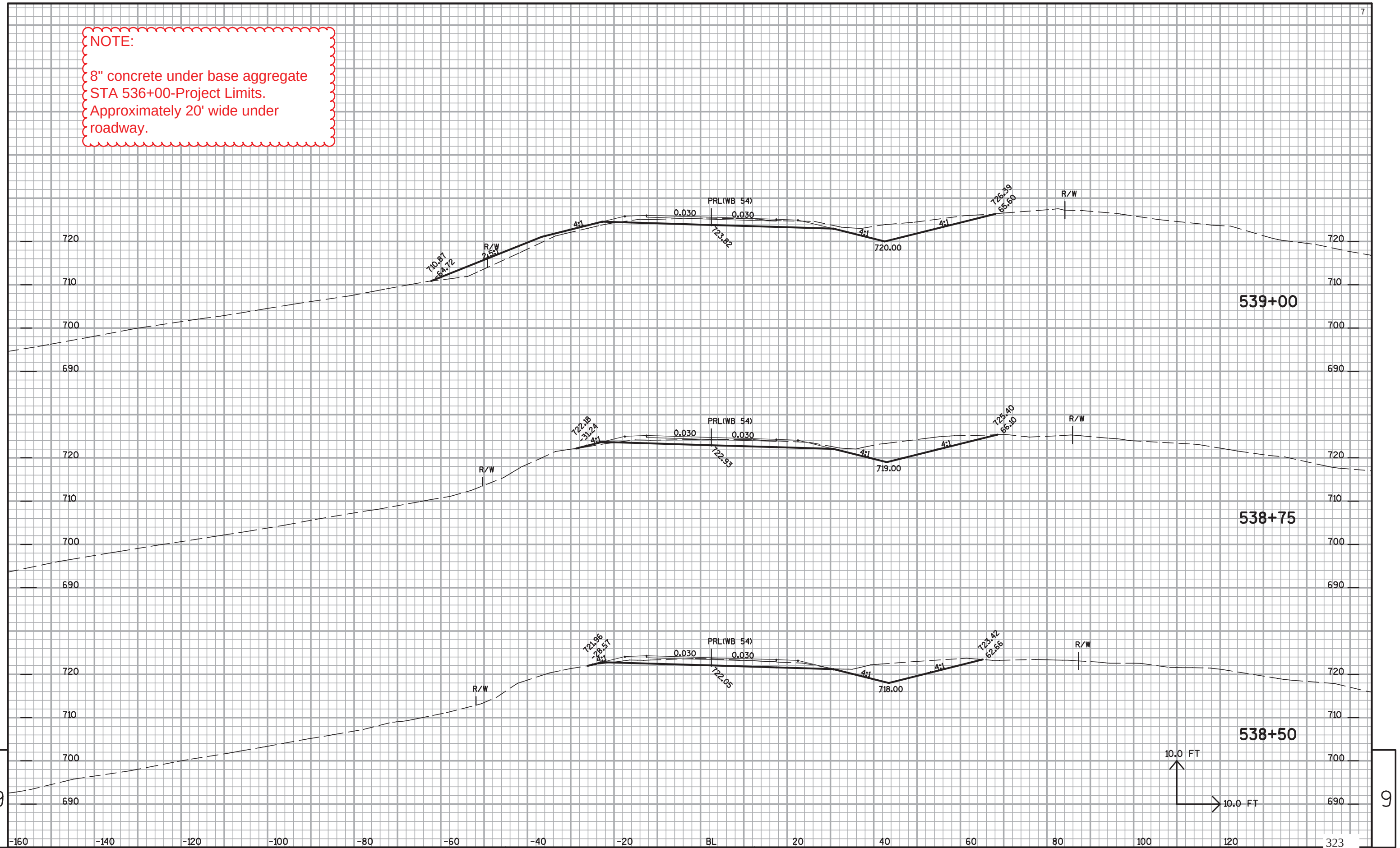
8" concrete under base aggregate
STA 536+00-Project Limits.
Approximately 20' wide under
roadway.



9

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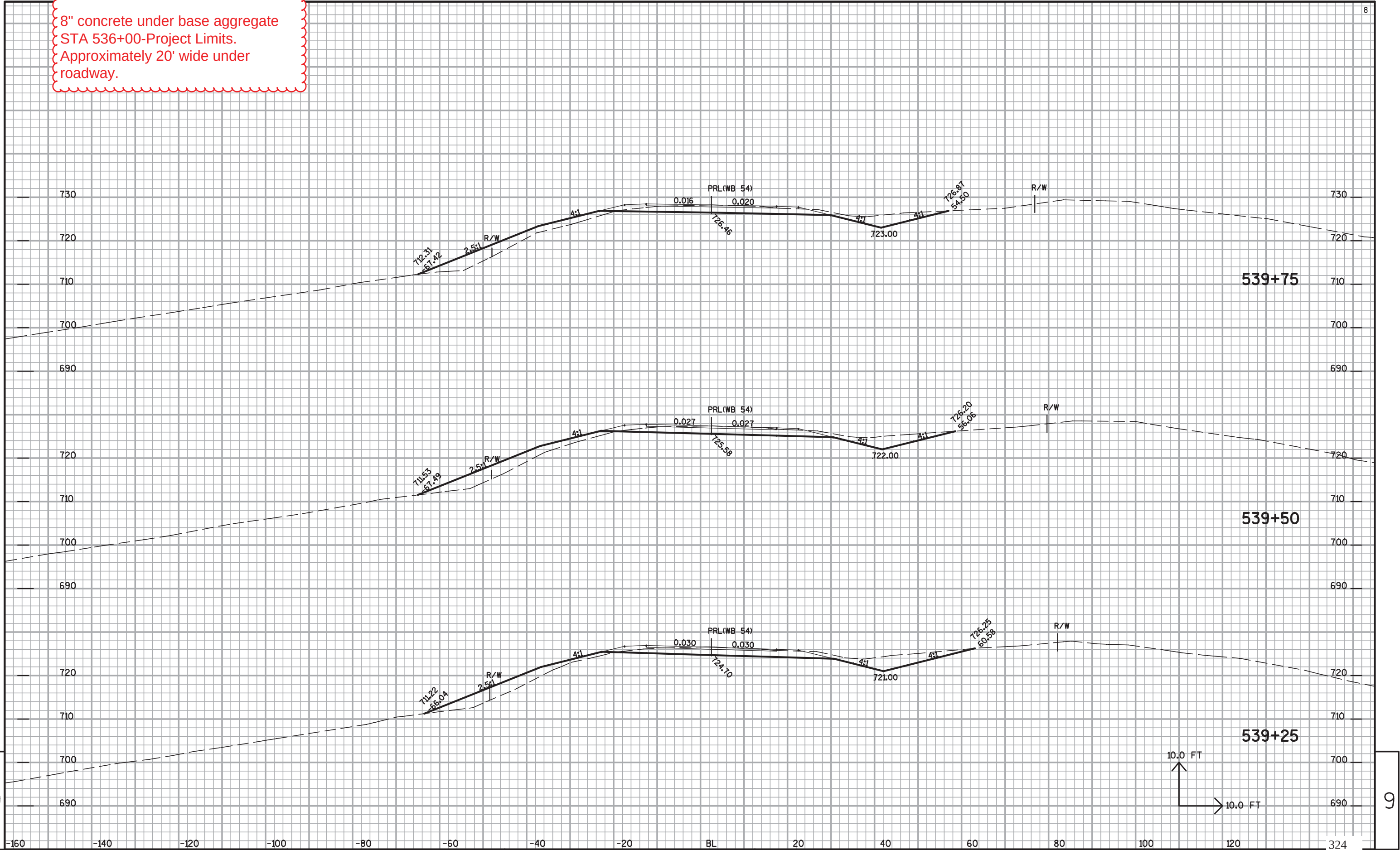
NOTE:
8" concrete under base aggregate
STA 536+00-Project Limits.
Approximately 20' wide under
roadway.



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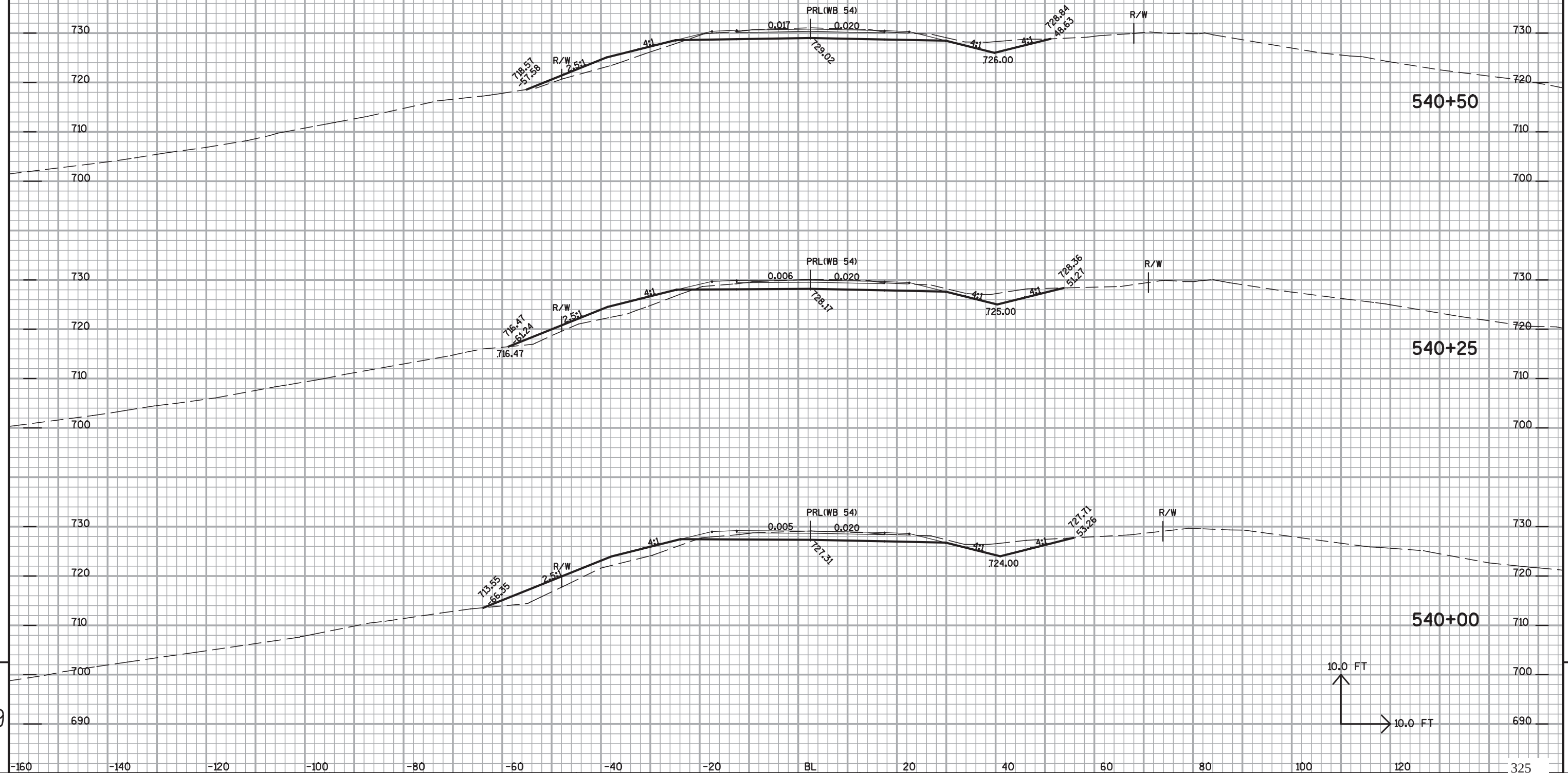
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NOTE:
8" concrete under base aggregate
STA 536+00-Project Limits.
Approximately 20' wide under
roadway.



NOTE:

8" concrete under base aggregate
STA 536+00-Project Limits.
Approximately 20' wide under
roadway.



PROJECT NO: 9280-04-72

HWY: STH 172

COUNTY: BROWN

CROSS SECTIONS APPROACH FOR WB STH 54

SHEET NO:

E

FILE NAME : w:\Design\Brown\9280-04-00\PS&E\9280-04-72\X-SECTIONS\X-SECT-54WB(2).DGN

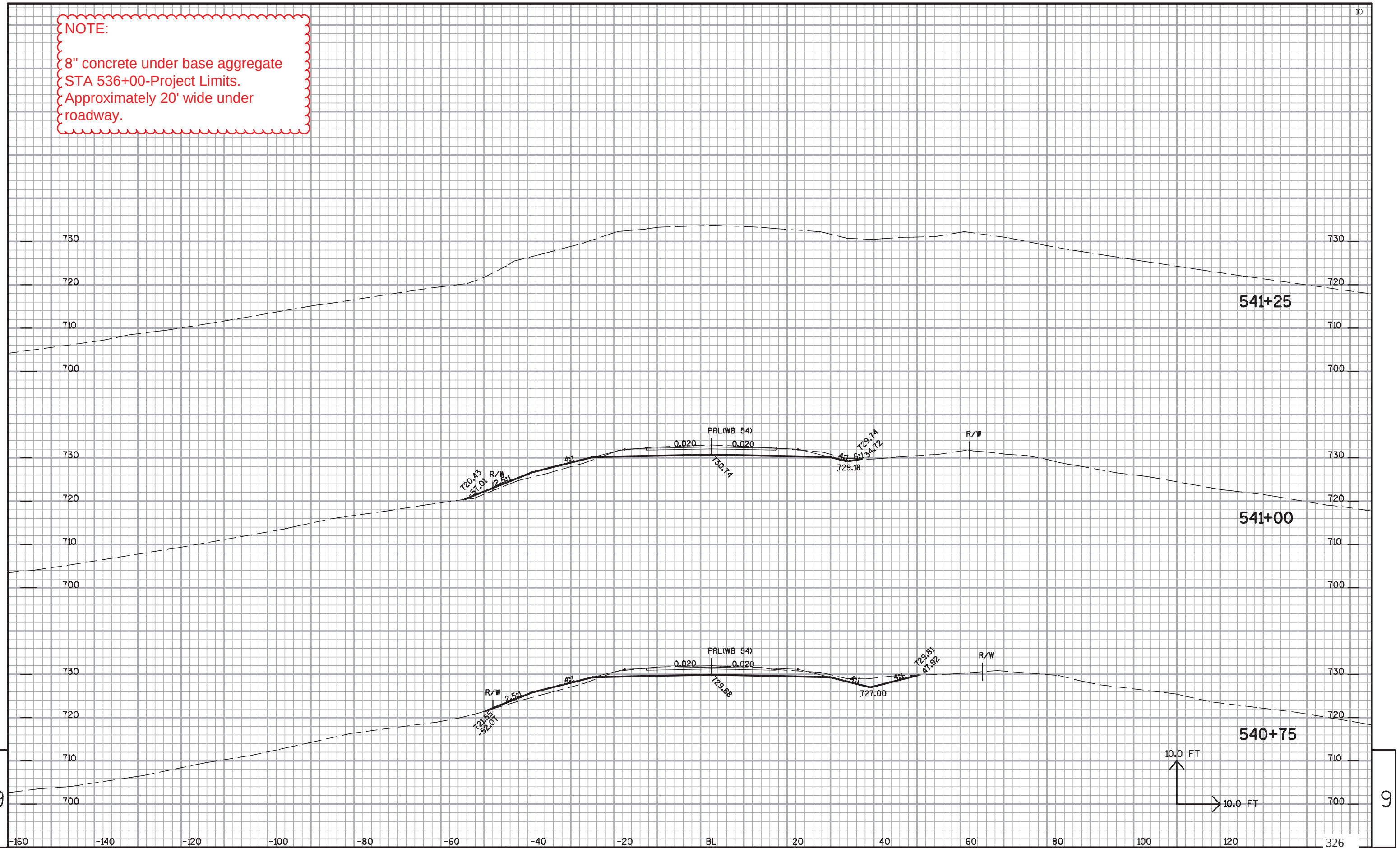
PLOT DATE : 29-APR-2010 16:40

PLOT BY : dotejh

PLOT NAME :

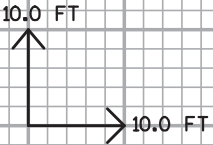
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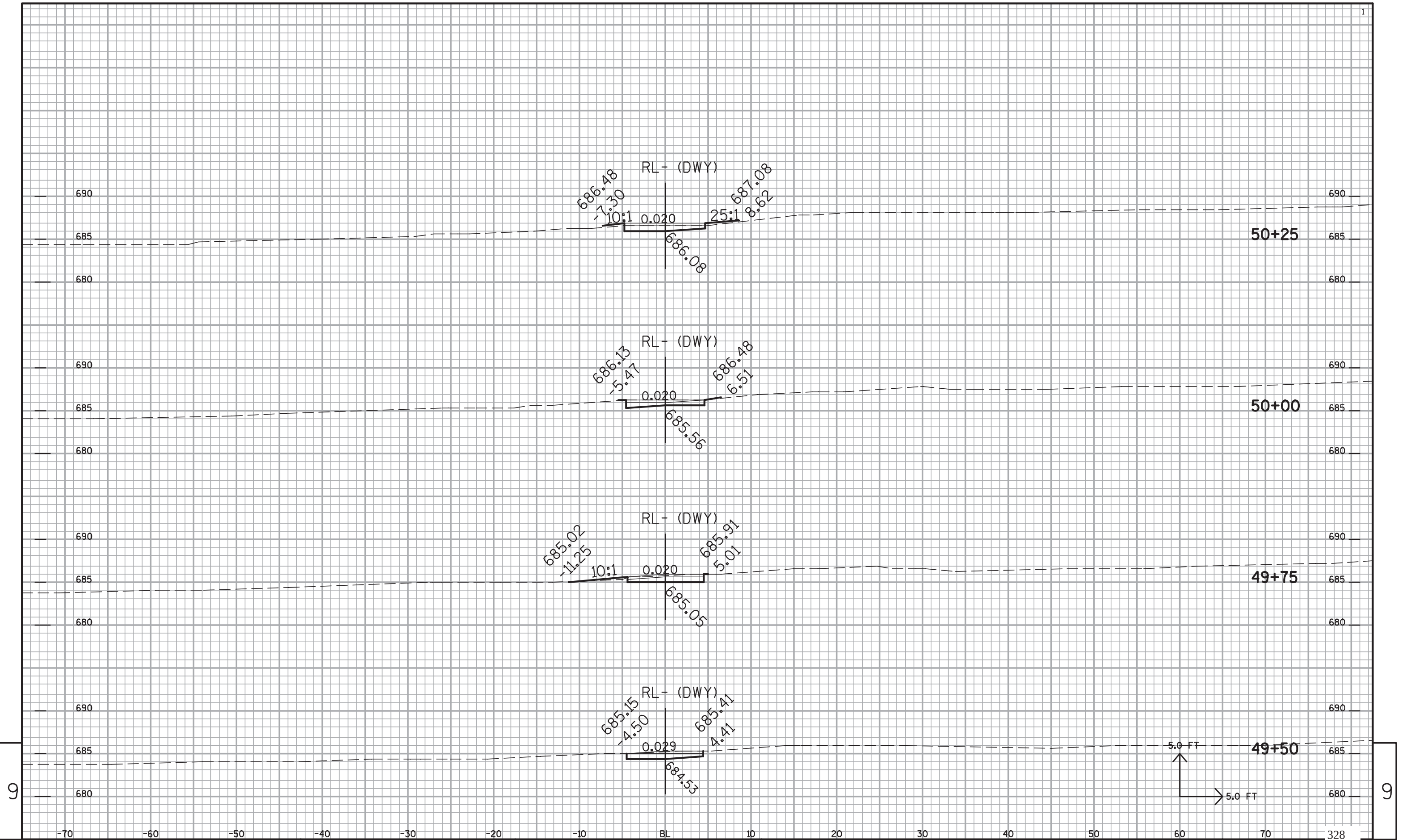
NOTE:
8" concrete under base aggregate
STA 536+00-Project Limits.
Approximately 20' wide under
roadway.



9

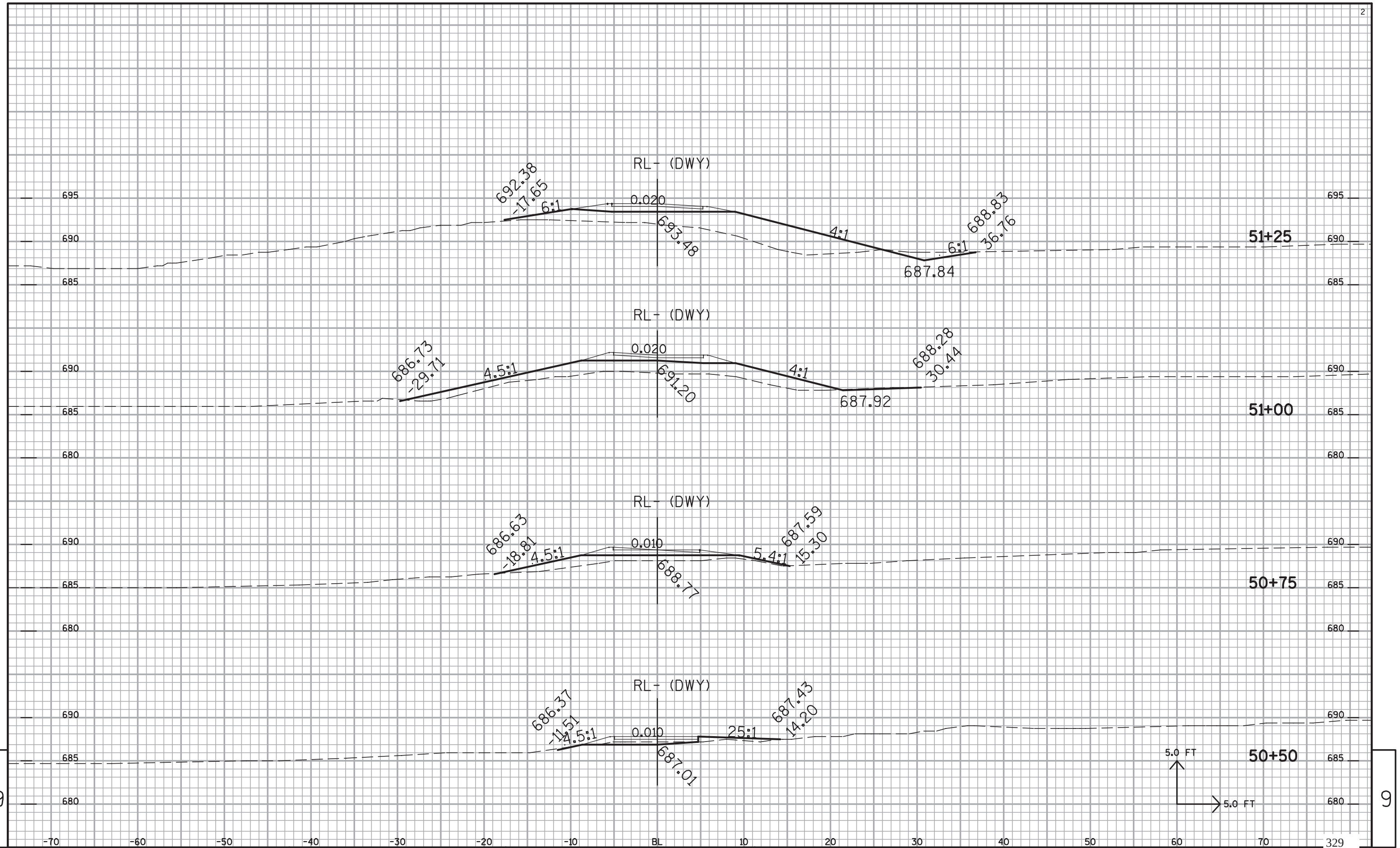
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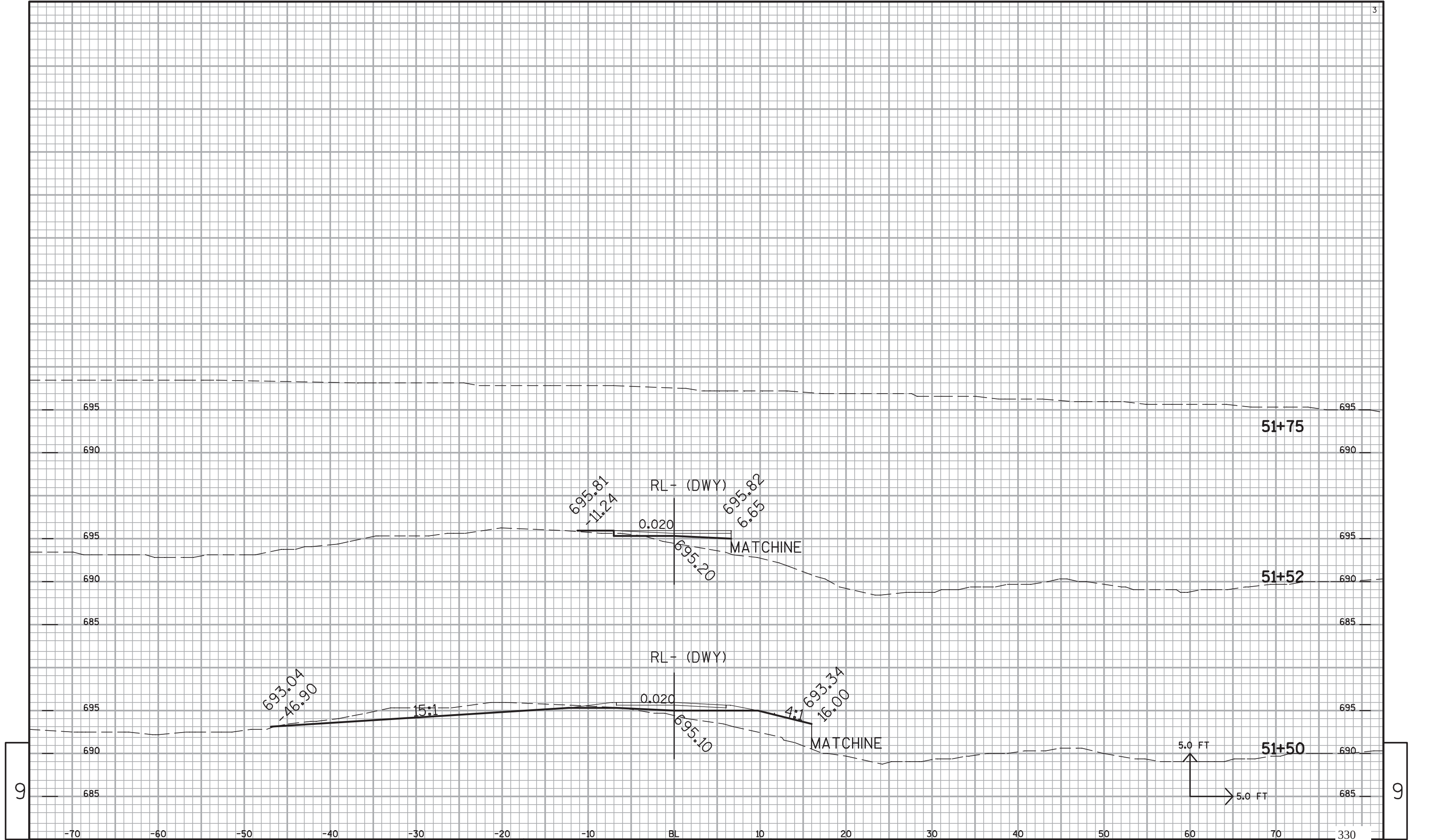
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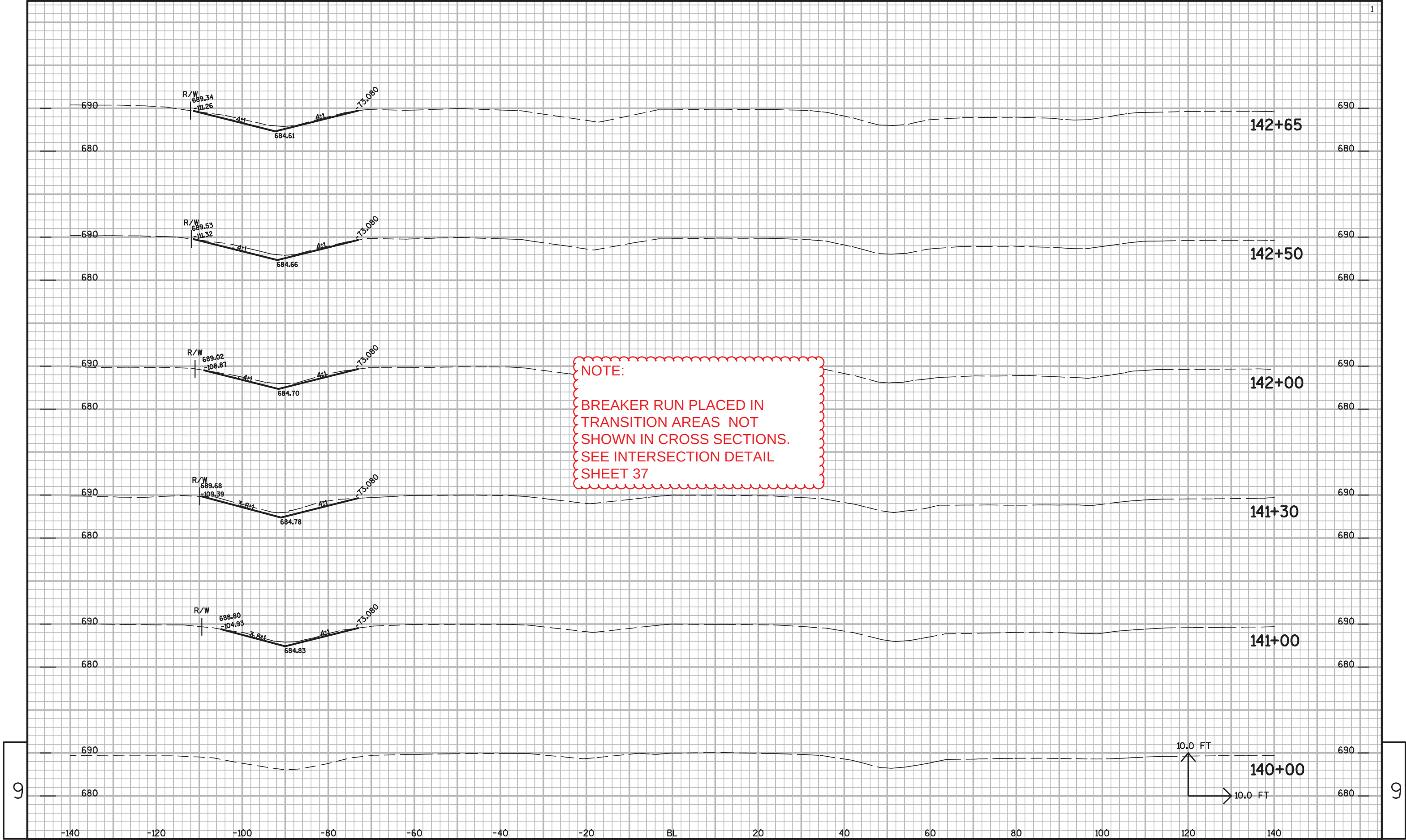
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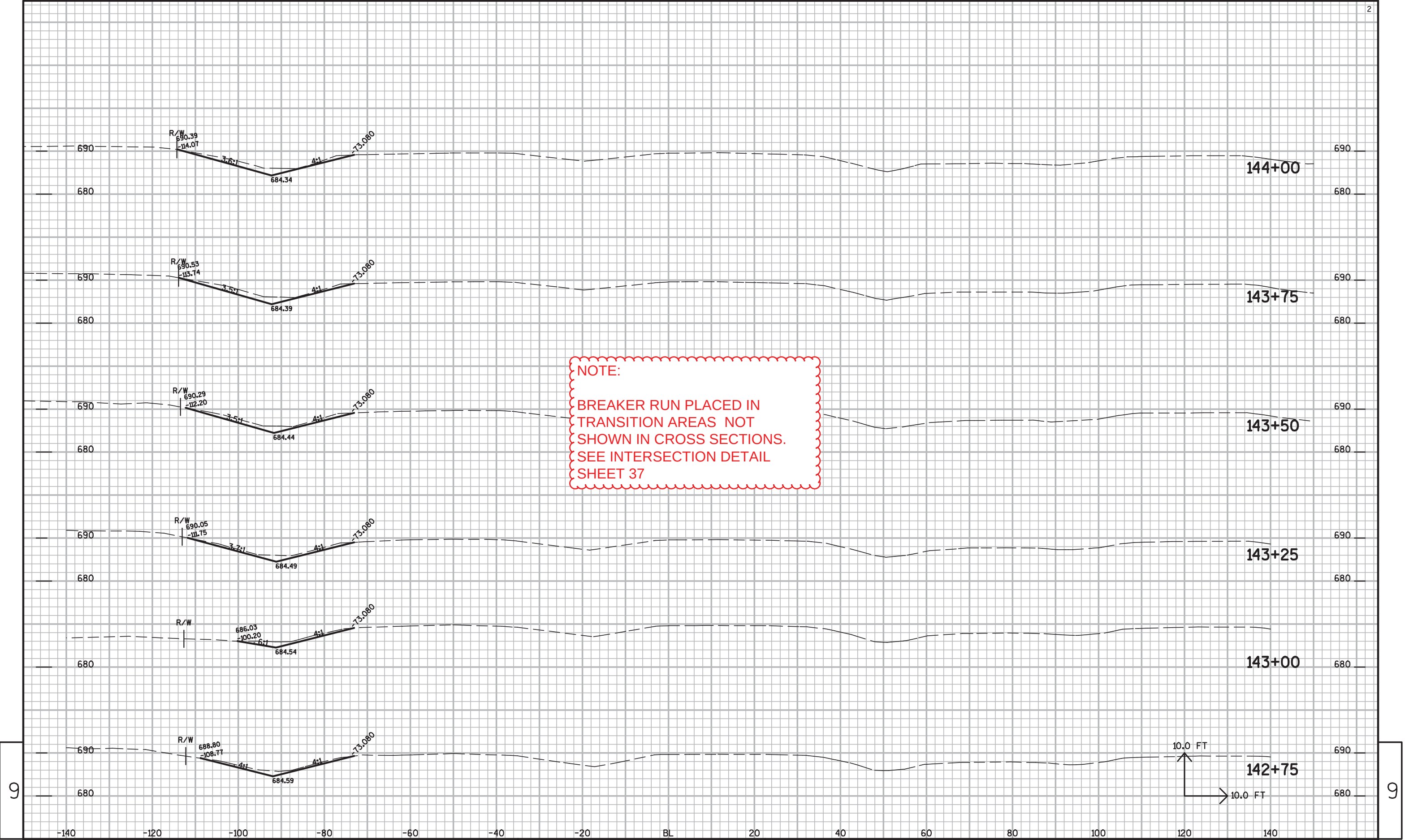
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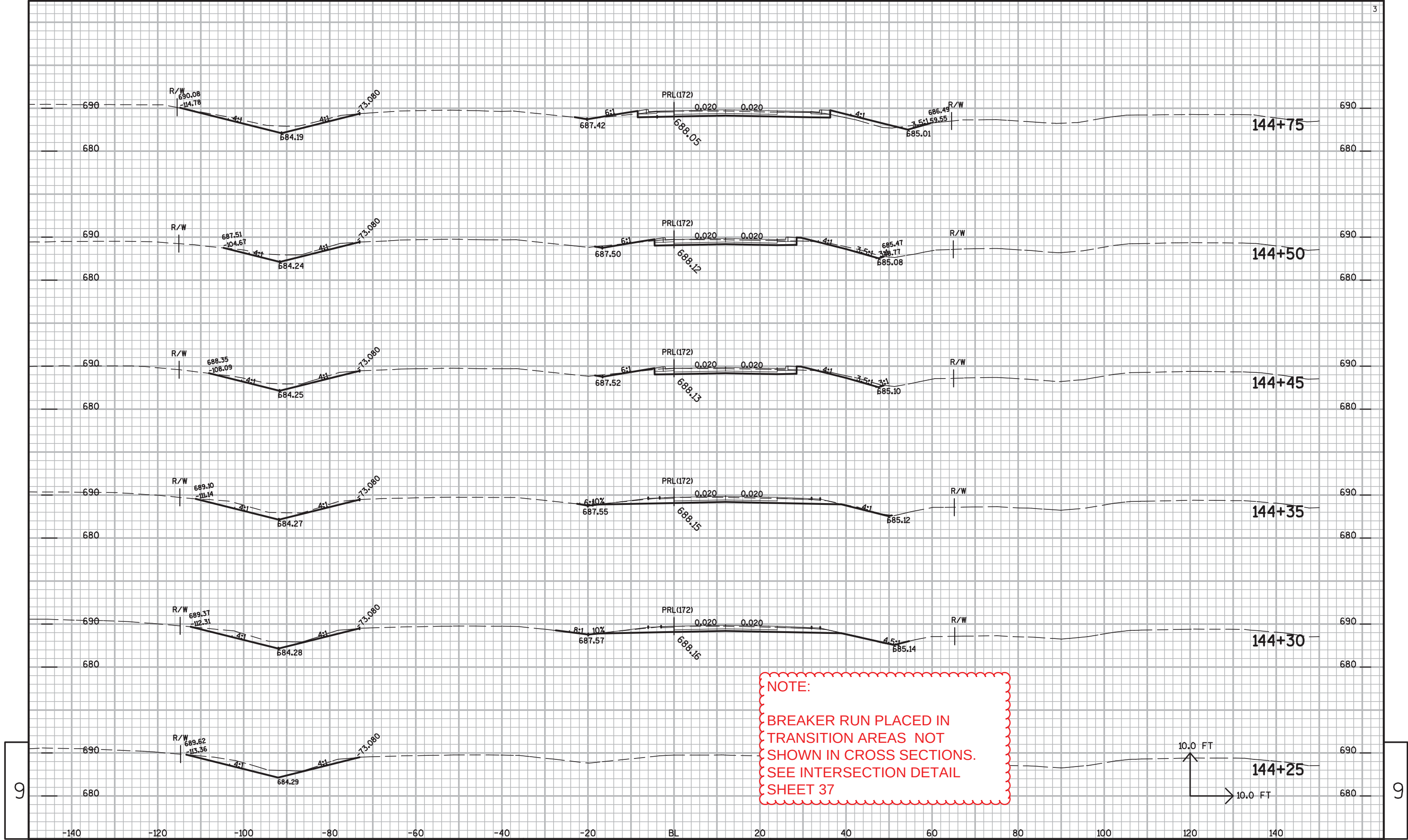


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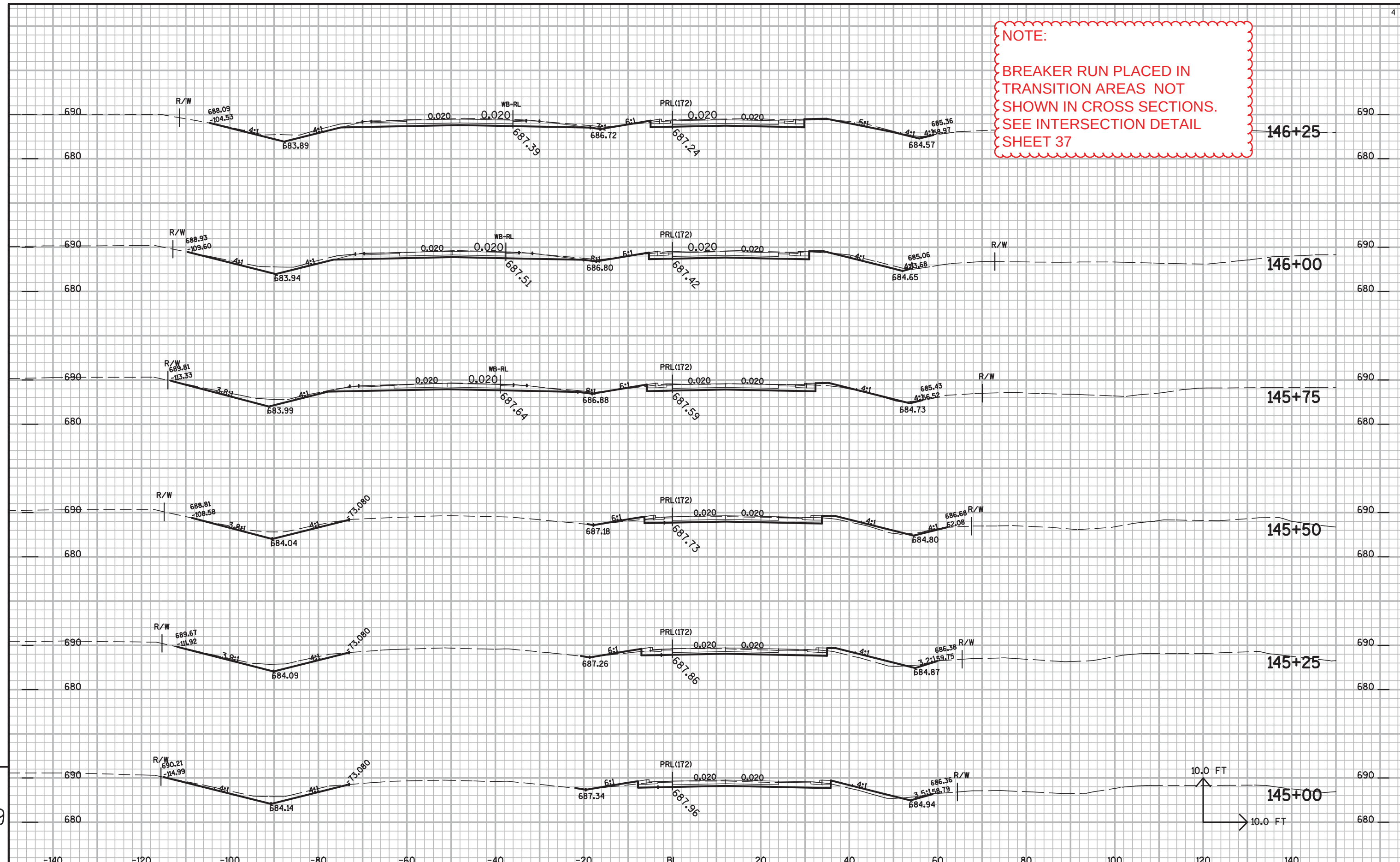
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NOTE:
BREAKER RUN PLACED IN
TRANSITION AREAS NOT
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SEE INTERSECTION DETAIL
SHEET 37



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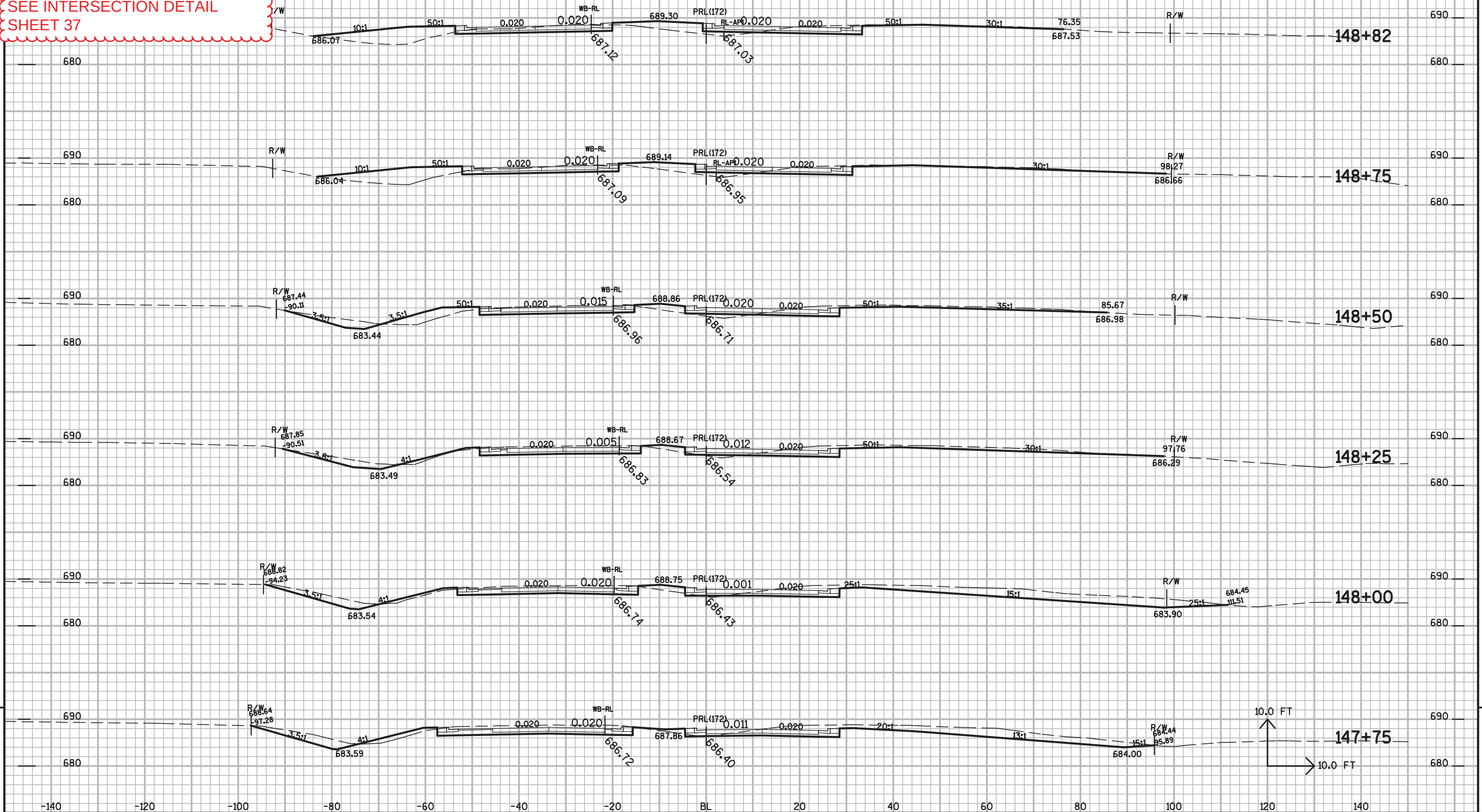
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SHEET 37



NOTE:

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SEE INTERSECTION DETAIL
SHEET 37



PROJECT NO: 9280-04-72

HWY: STH 172

COUNTY: BROWN

CROSS SECTIONS APPROACH/EXIT FOR STH 172 @ ARPT. RAB

SHEET NO: 336

E

FILE NAME : nt\pds\projects\Brown\9280-04-00\PS&E\9280-04-72\X-SECTIONS\SECTIONS @AIRPORT\XS-172@AC.DGN

PLOT DATE : 18-OCT-2010 11:30

PLOT BY : dotajh

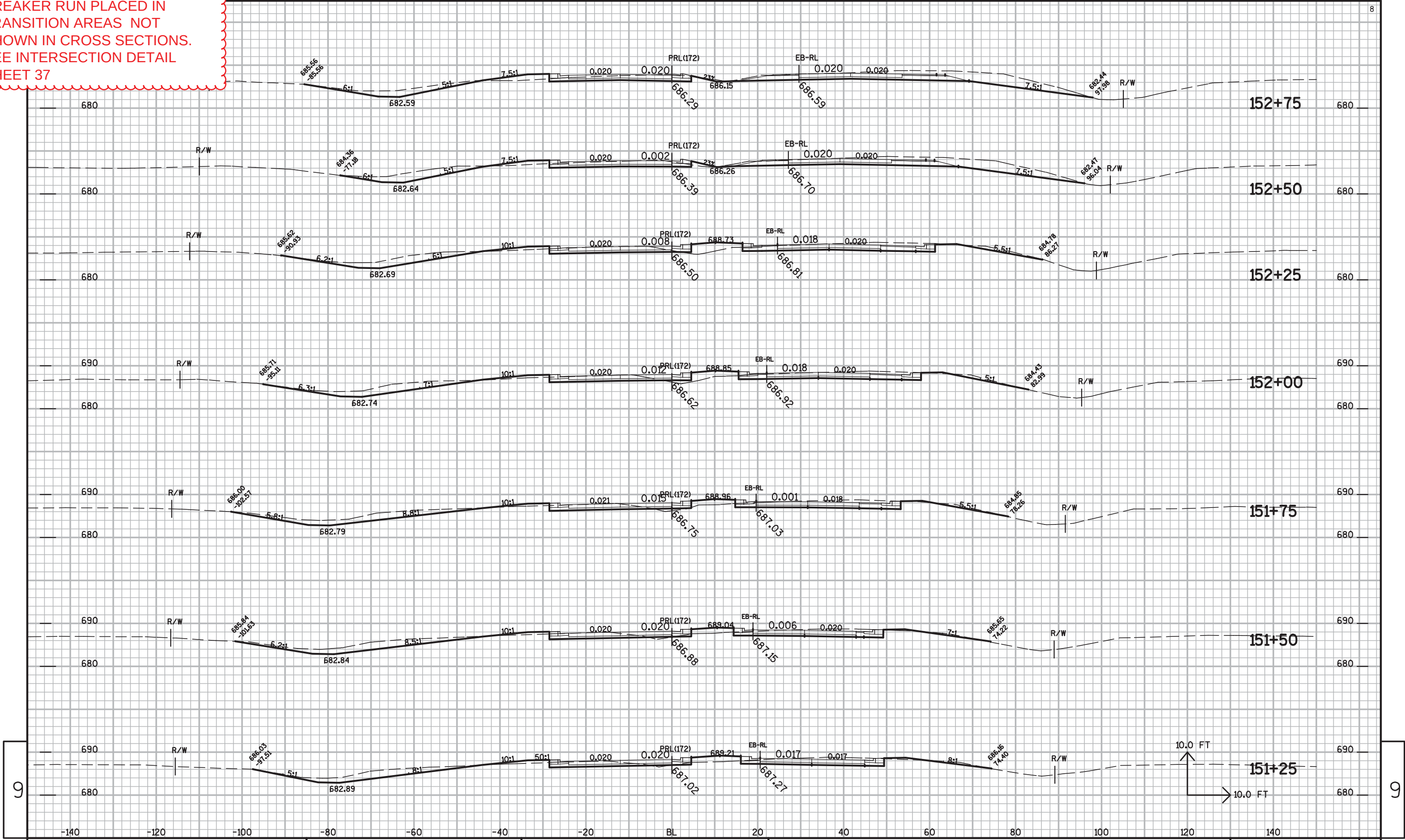
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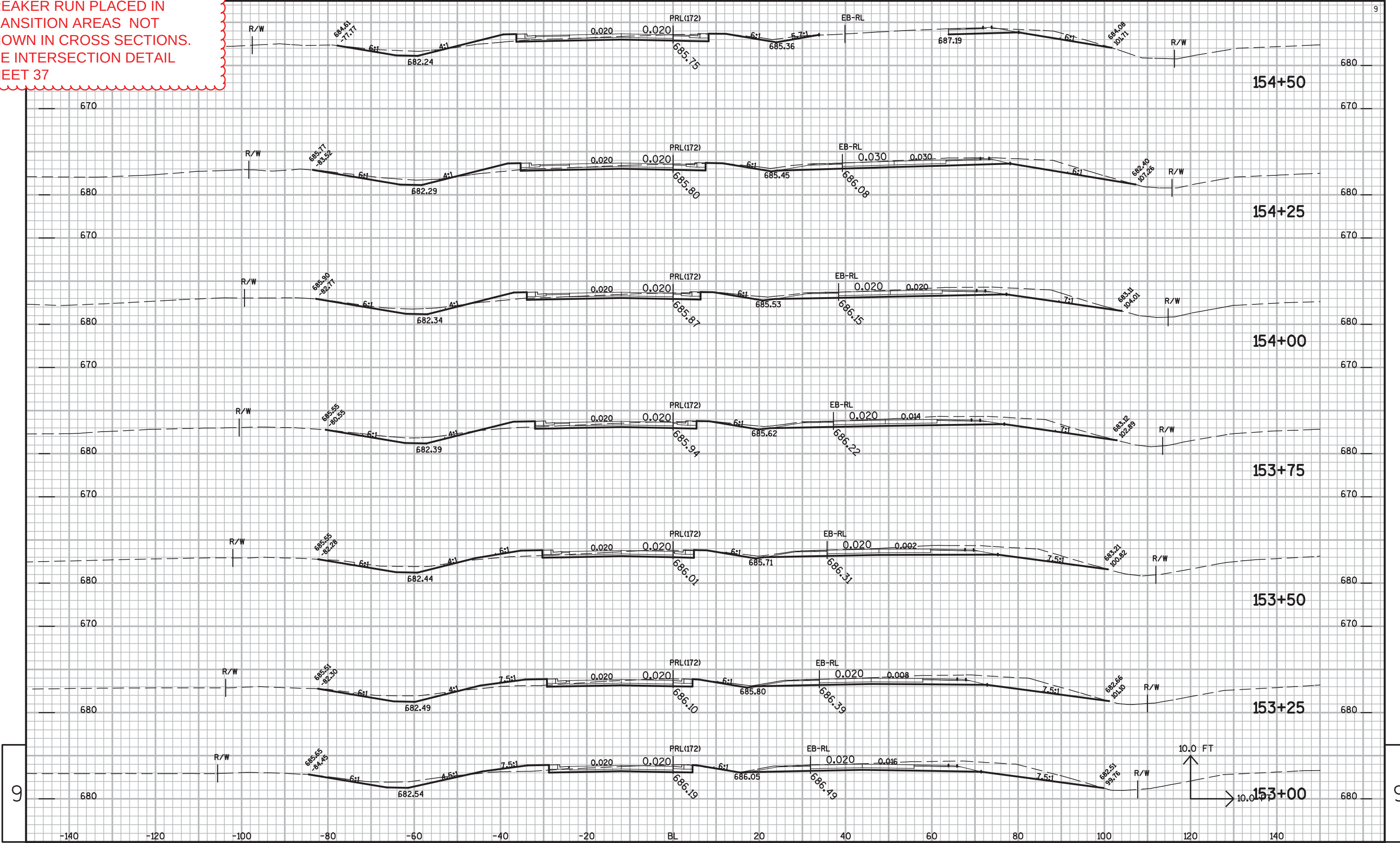
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SEE INTERSECTION DETAIL
SHEET 37



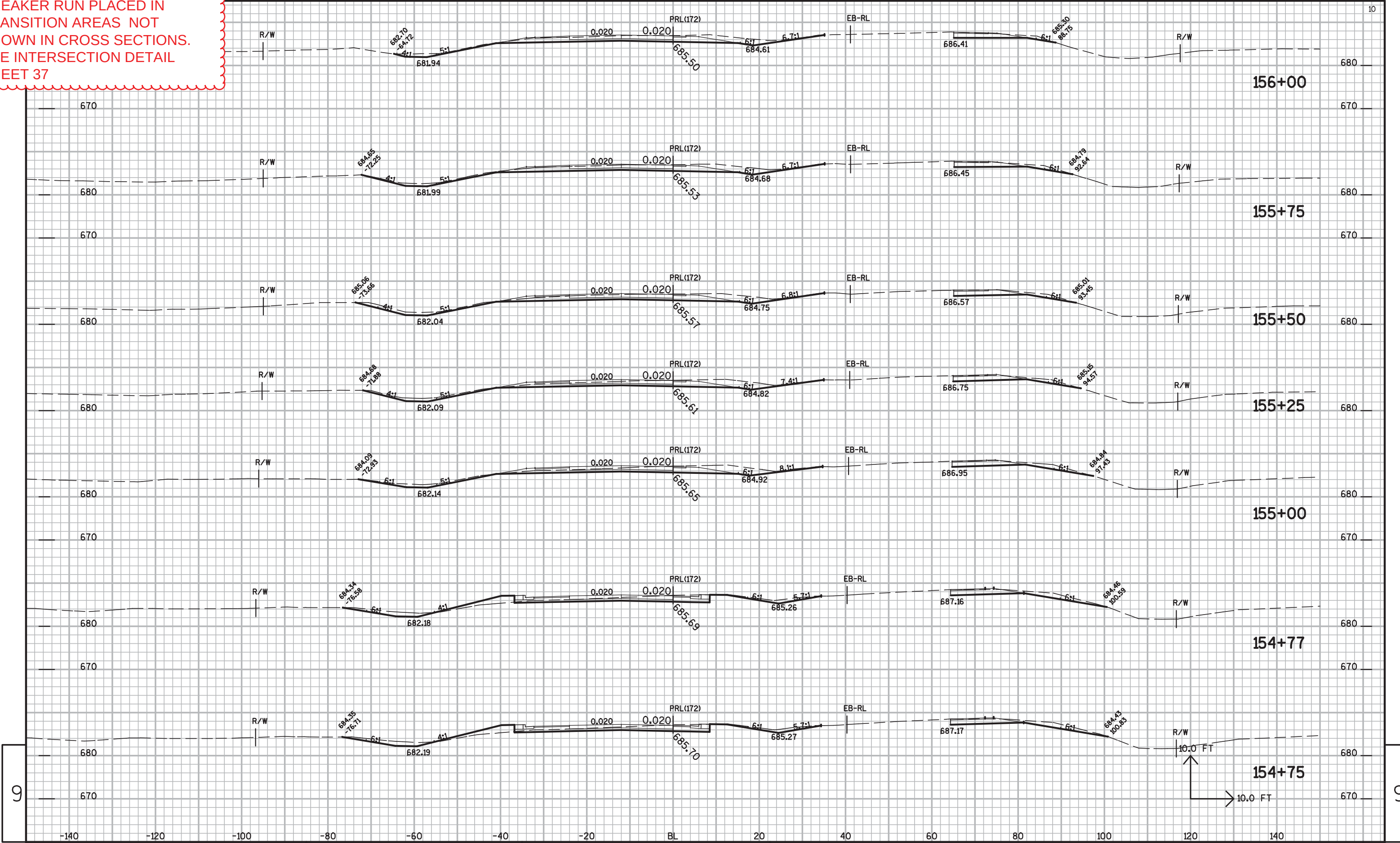
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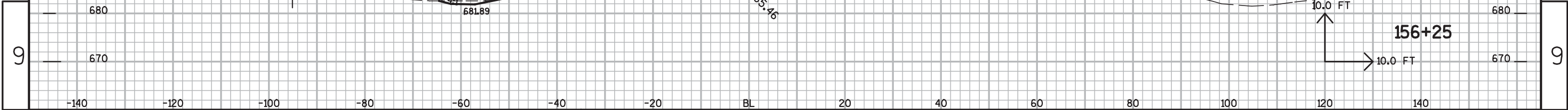
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SHEET 37



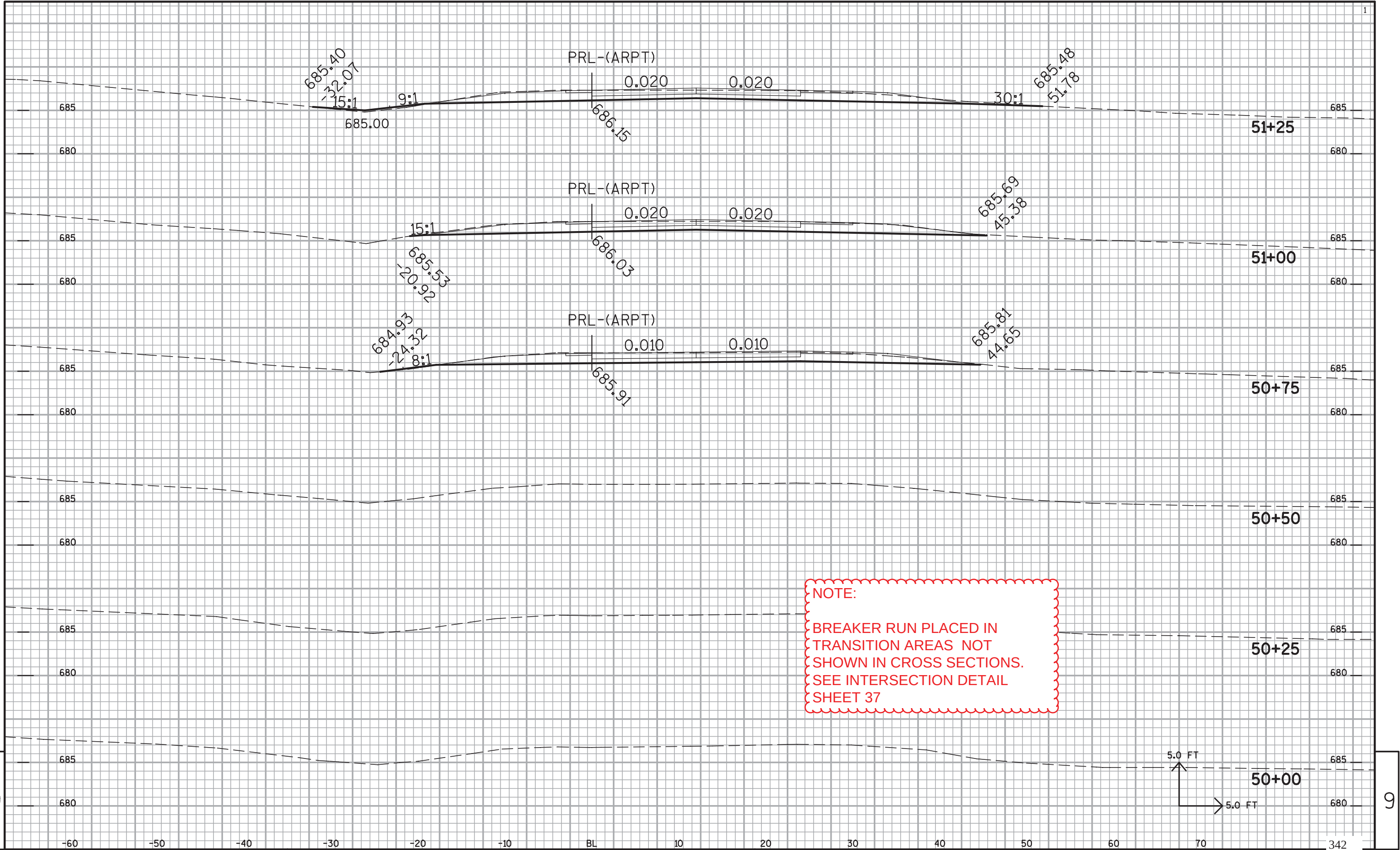
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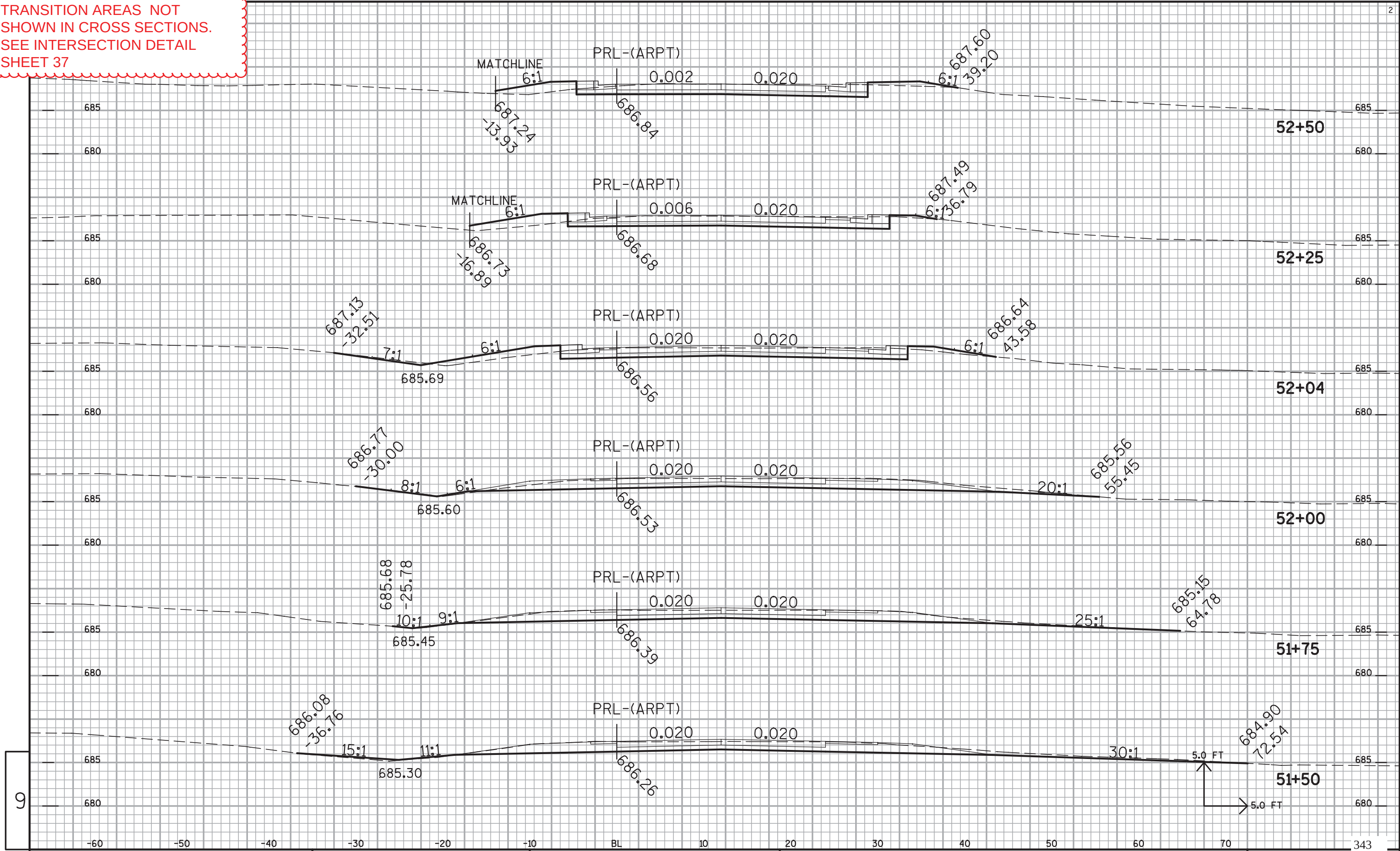
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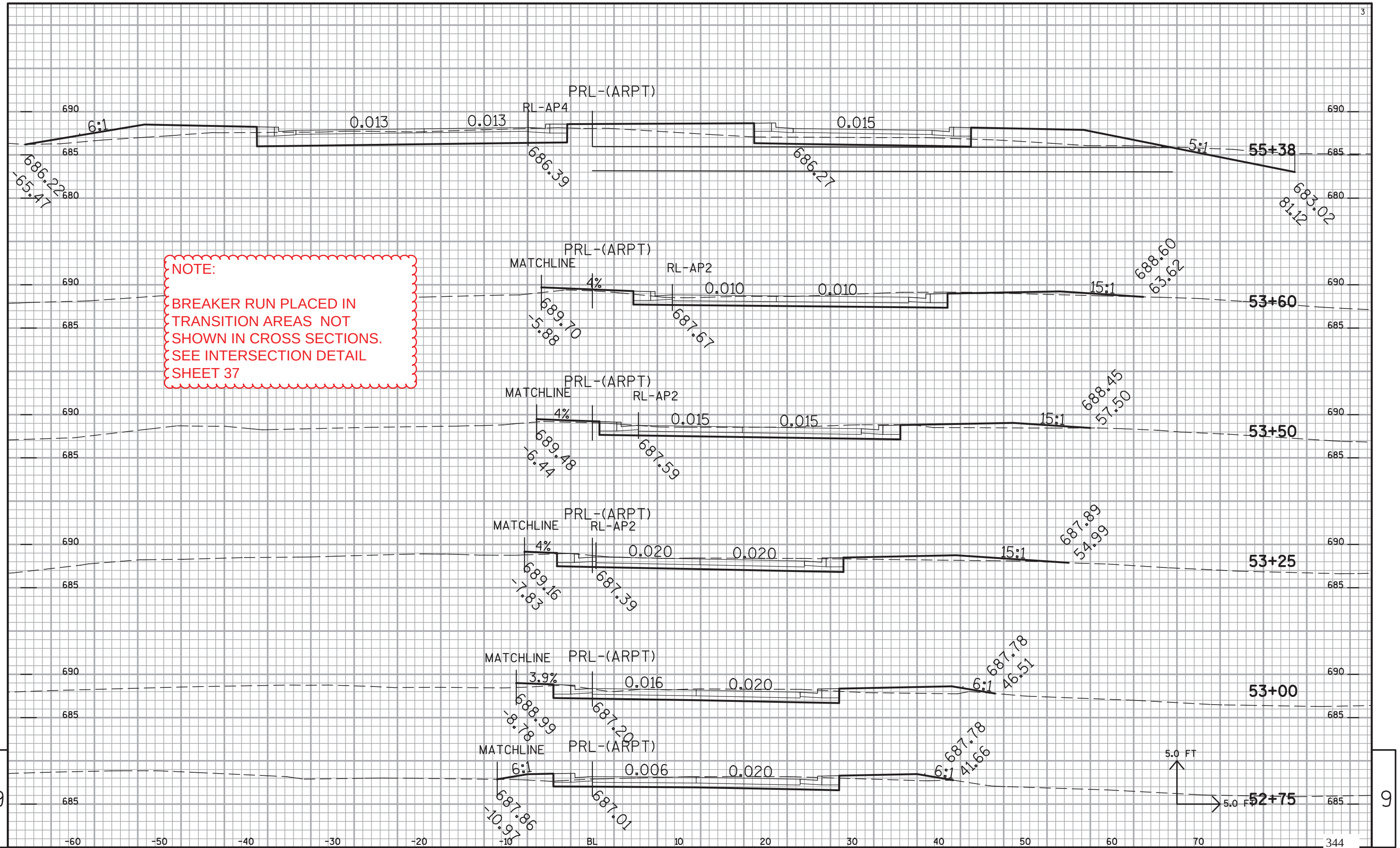
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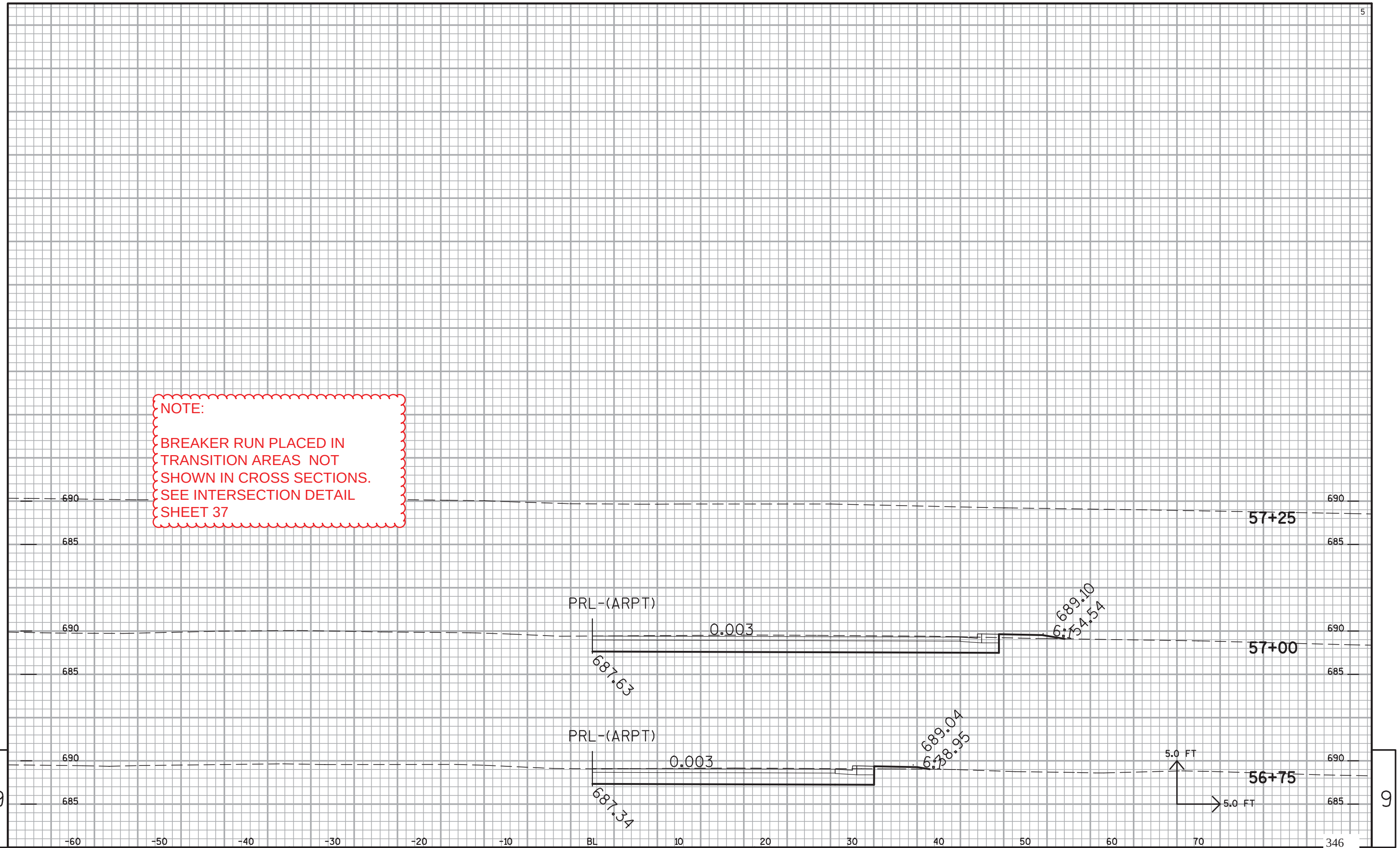
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SHEET 37



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SHEET 37

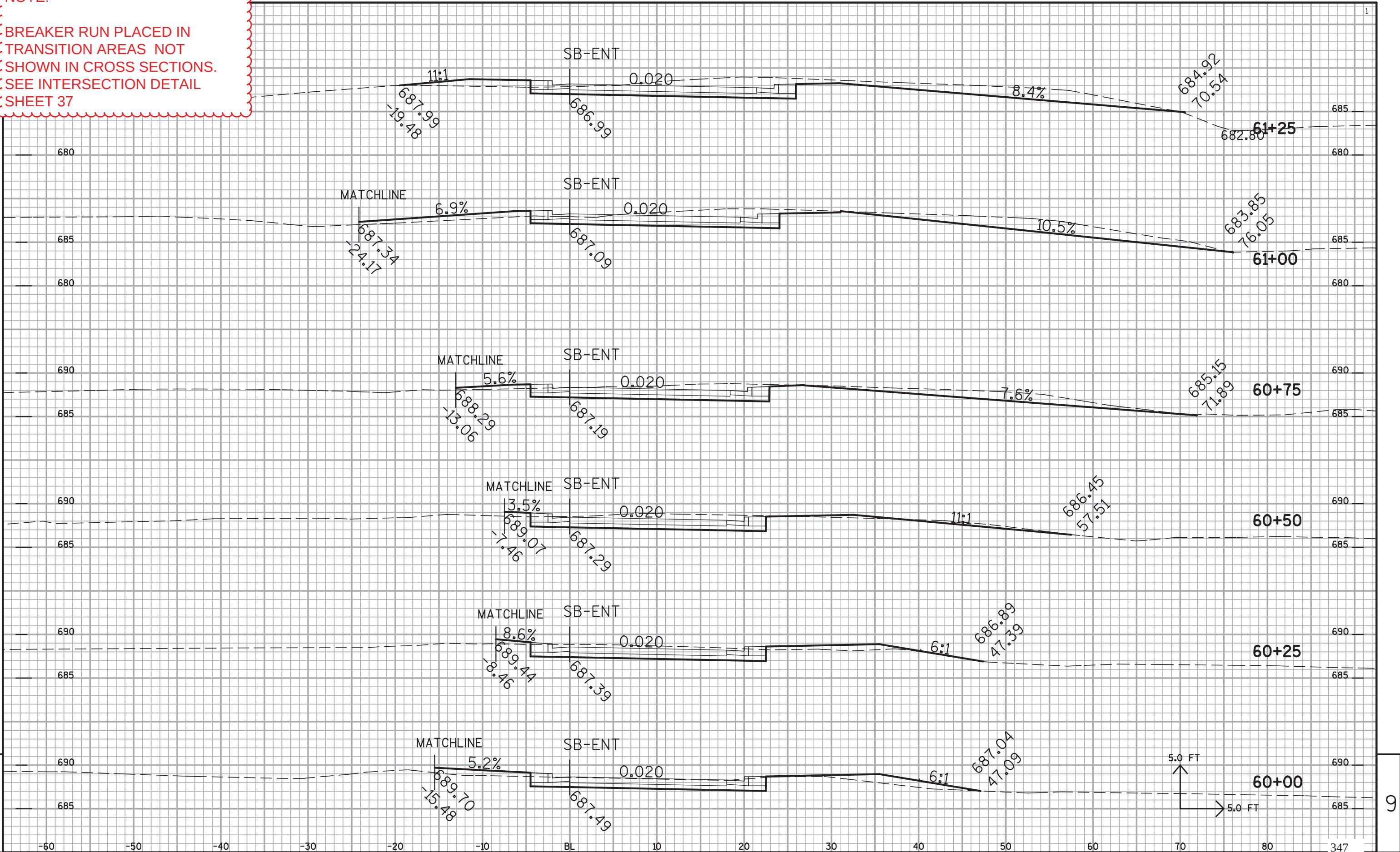


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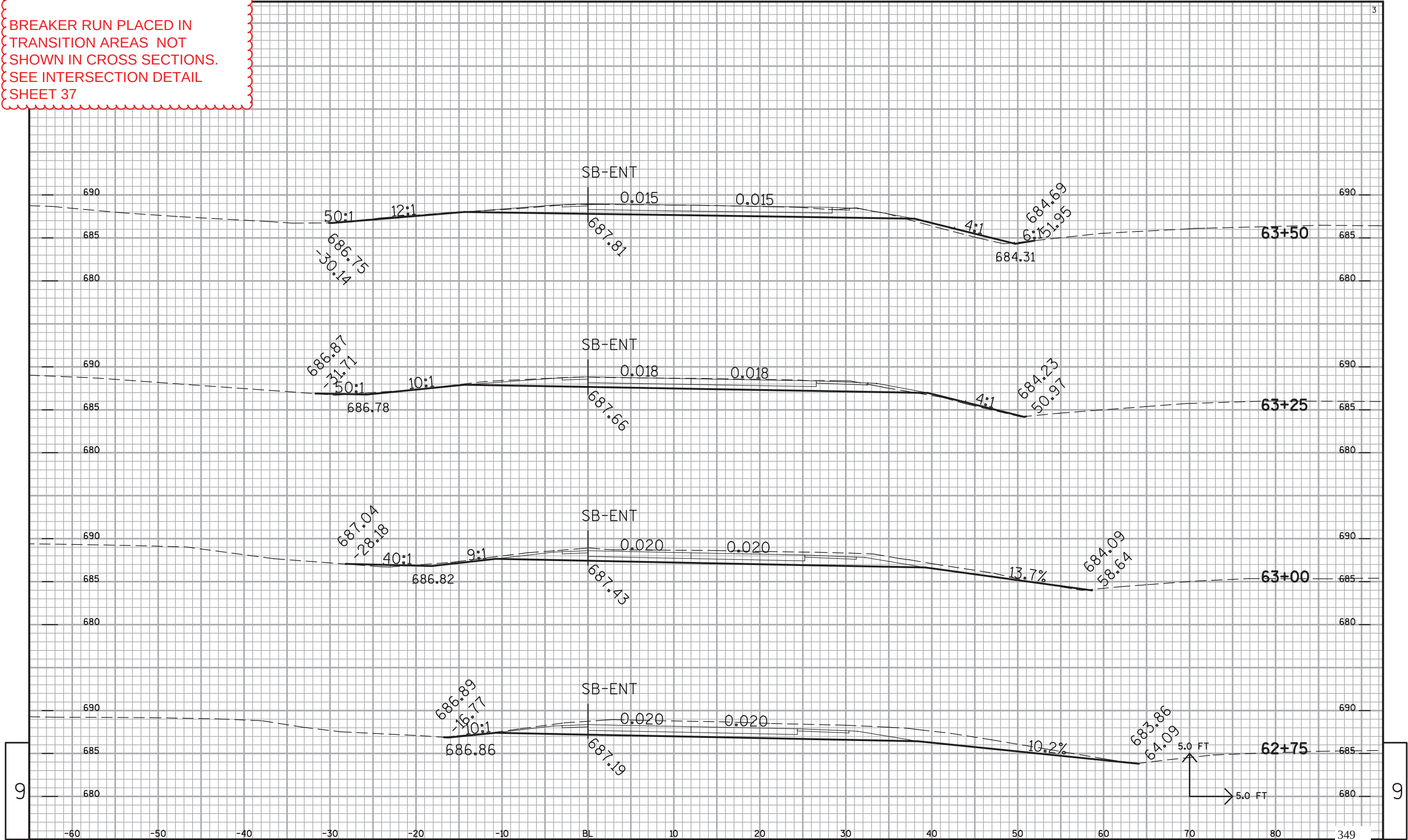
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SEE INTERSECTION DETAIL
SHEET 37

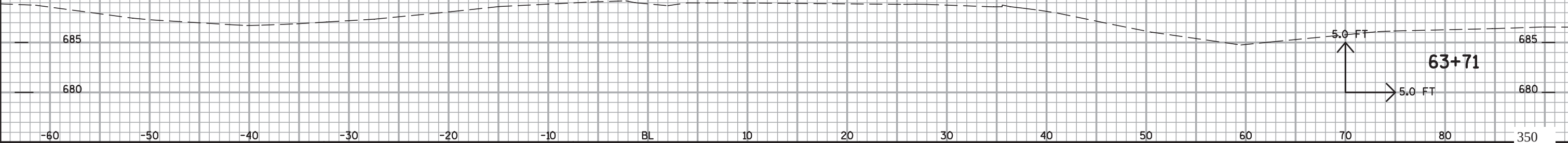


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SHEET 37



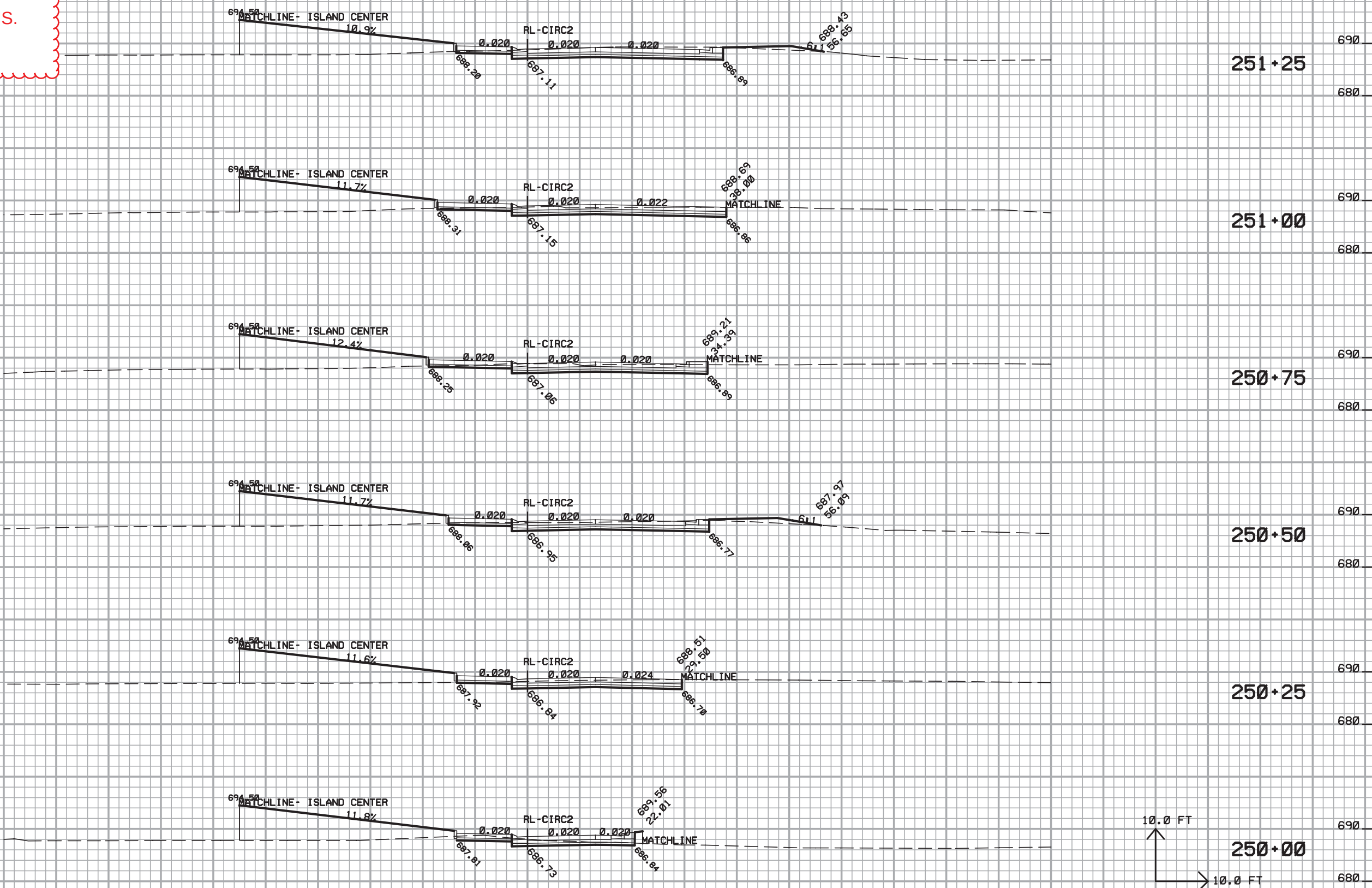
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SHEET 37

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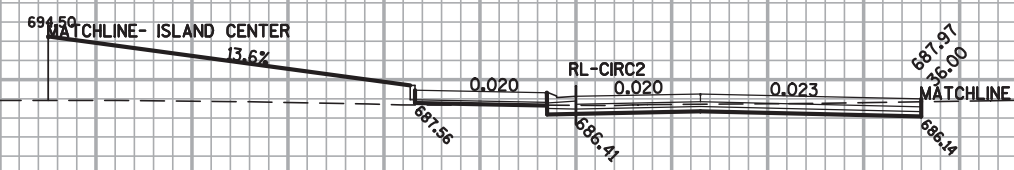


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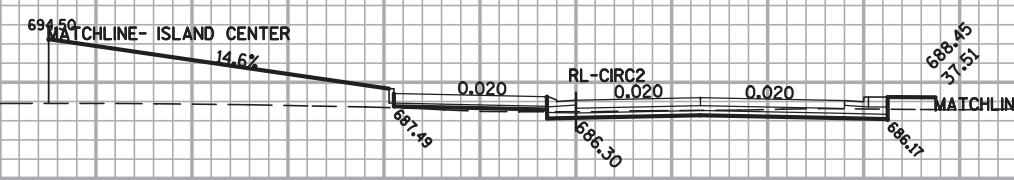
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SHEET 37



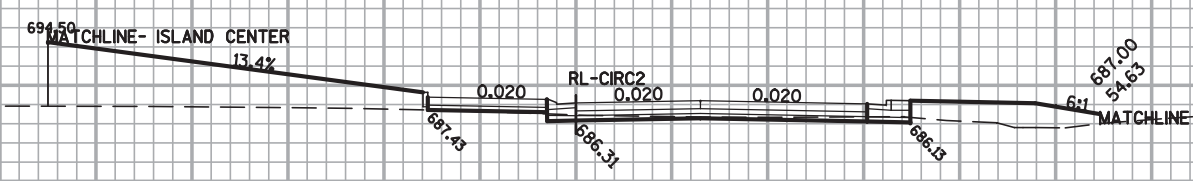
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TRANSITION AREAS NOT
SHOWN IN CROSS SECTIONS.
SEE INTERSECTION DETAIL
SHEET 37



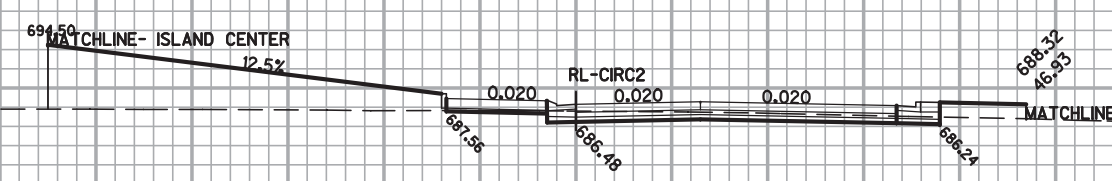
252+75



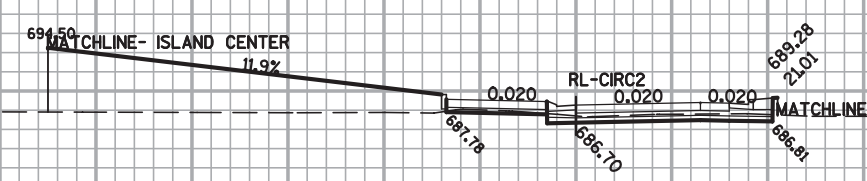
252+50



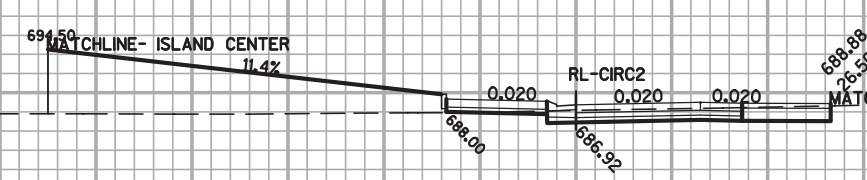
252+25



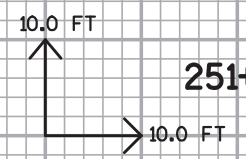
252+00



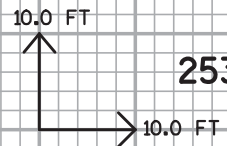
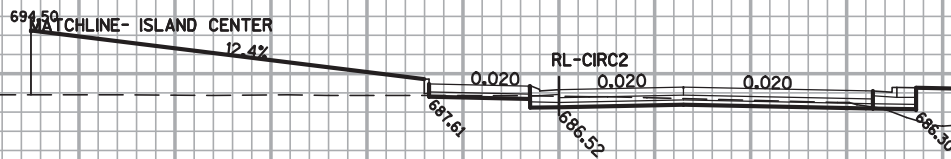
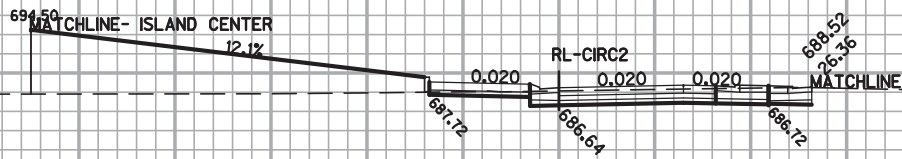
251+75



251+50



NOTE:
BREAKER RUN PLACED IN
TRANSITION AREAS NOT
SHOWN IN CROSS SECTIONS.
SEE INTERSECTION DETAIL
SHEET 37





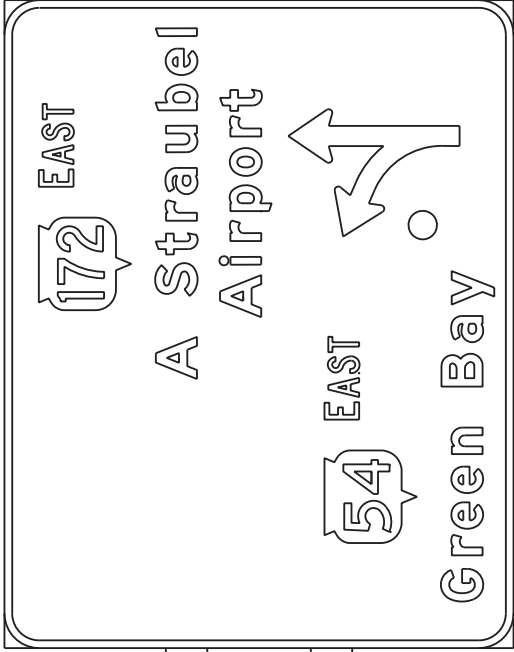
Wisconsin Department of Transportation

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<http://www.dot.wisconsin.gov>

Addendum #1
Revised Sheet 56
February 28, 2011

35.25'



14' X 11'

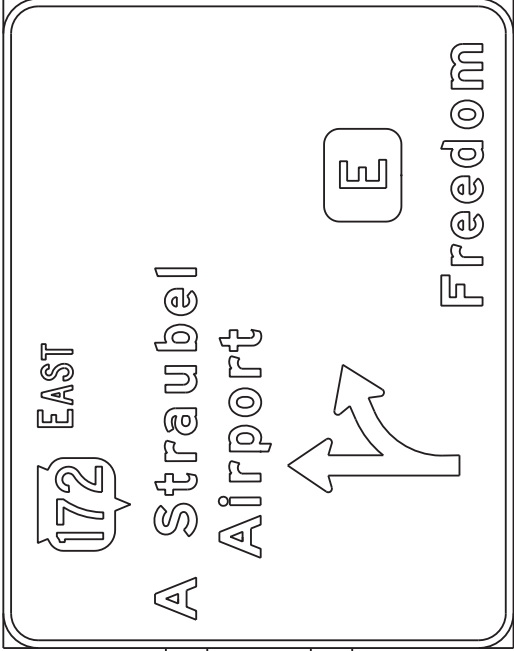
11.625'

12'

12'

14' X 11'

11.625'



36" X 30"

18.25' MINIMUM

2.0'

12'

12'

2.0'

3.625'



36" X 30"

PLAN SHEET PRODUCED
BY WISDOT-NE REGION

OVERHEAD SIGN SUPPORT DETAIL
STA. 5+80 STH 54 EB
(NOT TO SCALE)

NOTE:
MINIMUM VERTICAL CLEARANCE FROM HIGH POINT OF ROAD 18'-3"

PROJECT NO: 9280-04-72

HWY: STH 172

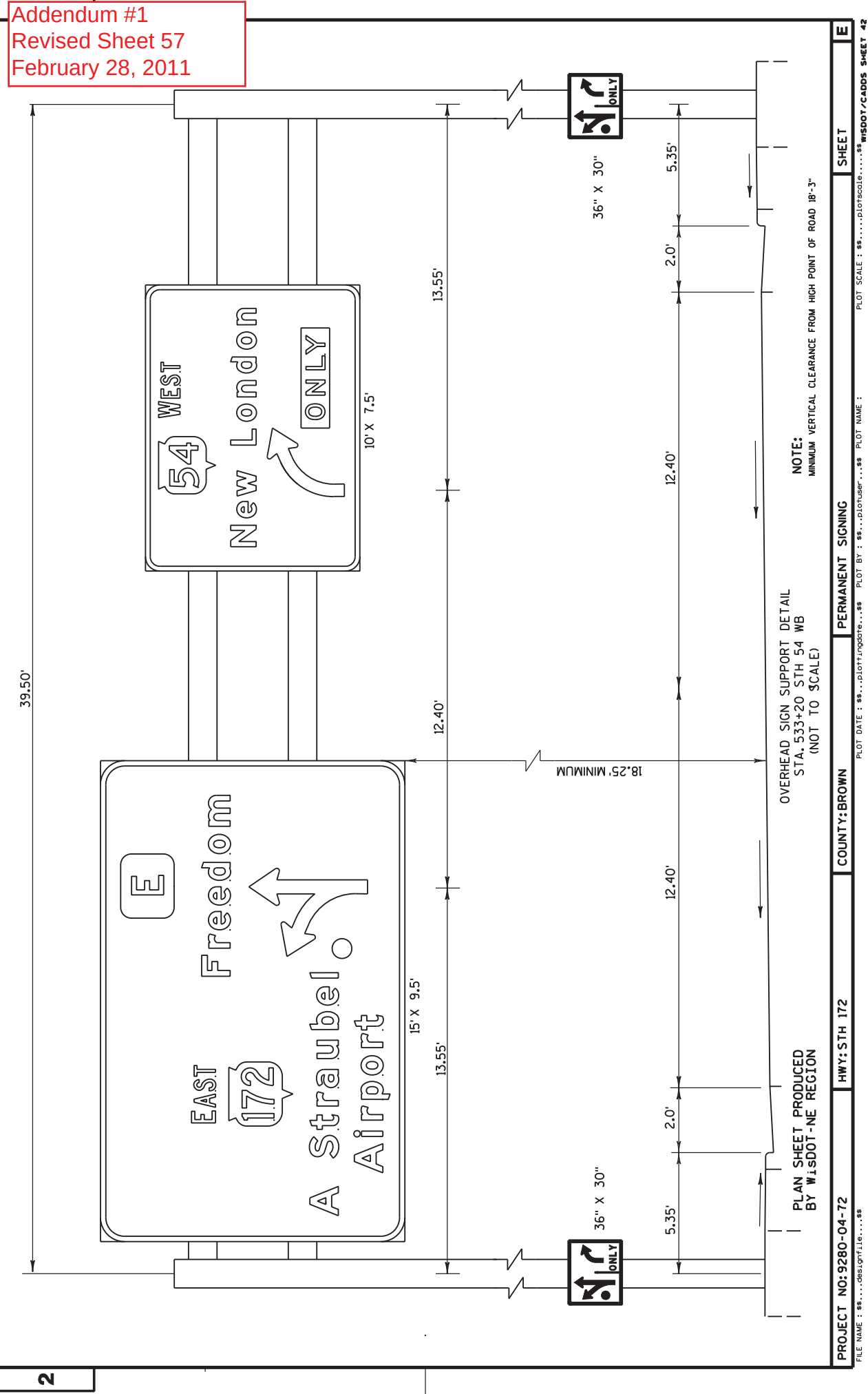
COUNTY: BROWN

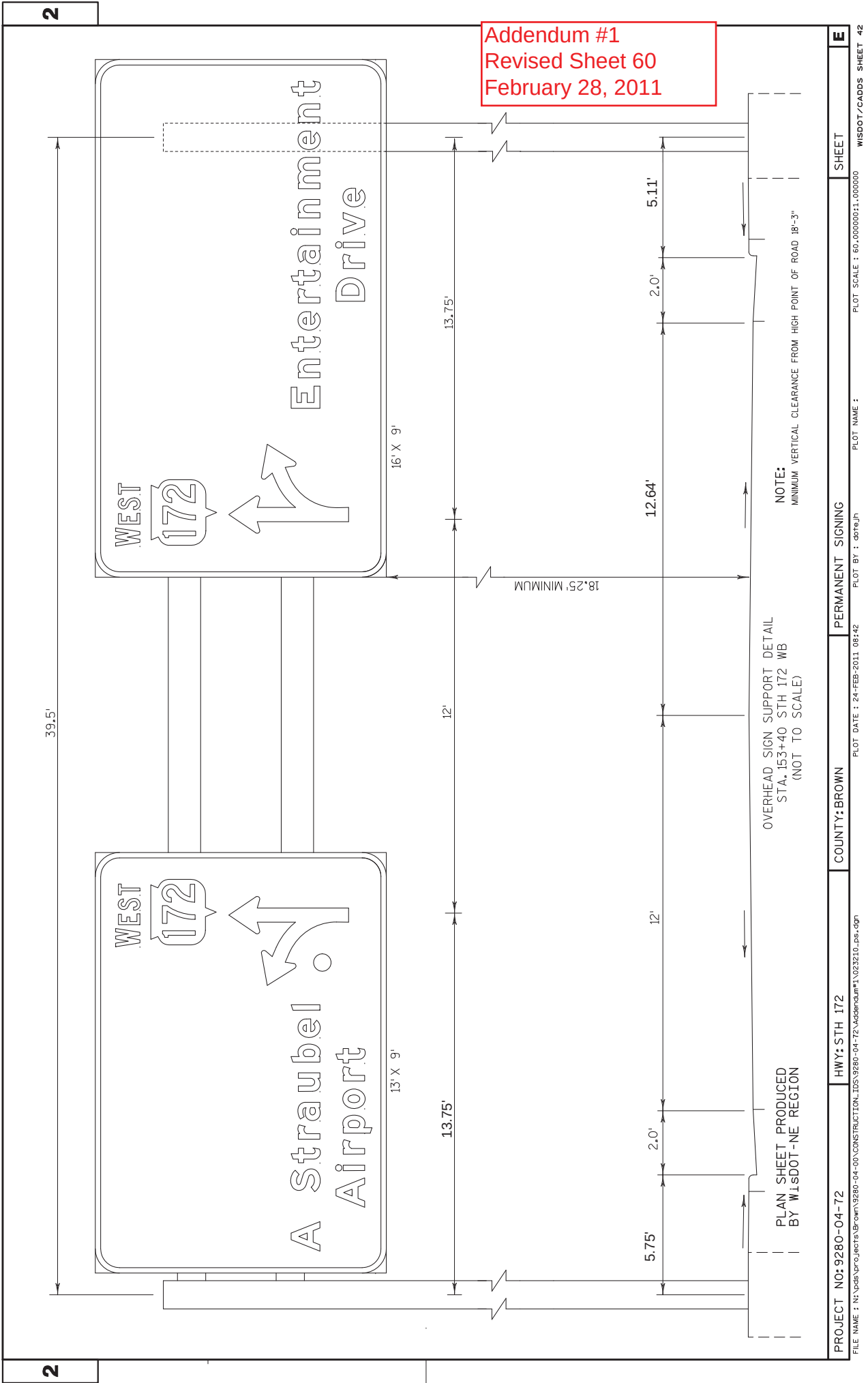
PERMANENT SIGNING

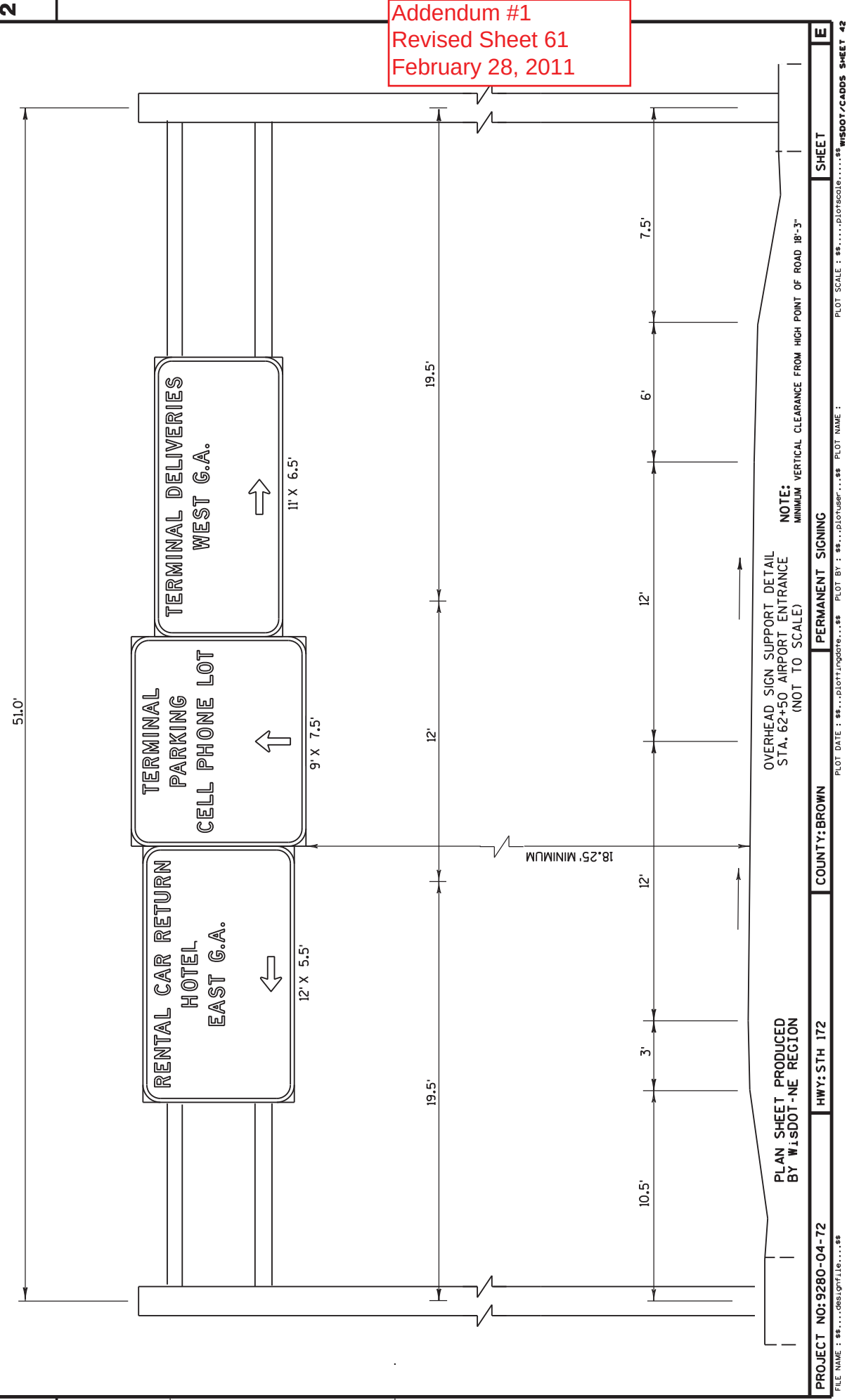
SHEET

E

FILE NAME : \$\$.\\...\\cbsign\\file...\$\$. PLOT DATE : \$\$.\\...\\plot\\rdate...\$\$. PLOT BY : \$\$.\\...\\plotuser...\$\$. PLOT NAME : \$\$.\\...\\plotscale...\$\$. WISDOT/CADDIS SHEET 42







Addendum #1
Revised Sheet 61
February 28, 2011