SEL APRIL 2014

PROJECT ID:

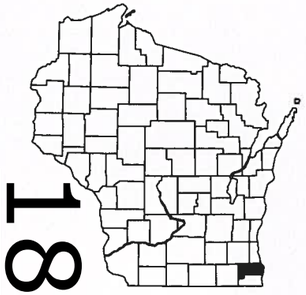
WITH:

COUNTY: RACINE COUNTY

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 = 178



18

N

DESIGN DESIGNATION

A.A.D.T. (2014)	=	17,200
A.A.D.T. (2034)	=	18,800
D.H.V. (2034)	=	2,200
D.D.	=	59/41
T.	=	3.2%
DESIGN SPEED	=	35 MPH
ESALS	=	1,627,900

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 (CAUTION)
- MARSH AREA
- WOODED OR SHRUB AREA

PROFILE

- GRADE LINE
- ORIGINAL GROUND
- MARSH OR ROCK PROFILE (To be noted as such) (ROCK)
- SPECIAL DITCH (LABEL)
- GRADE ELEVATION (95.36)
- CULVERT (Profile View)

UTILITIES

- ELECTRIC (E)
- FIBER OPTIC (FO)
- GAS (G)
- SANITARY SEWER (SAN)
- STORM SEWER (SS)
- TELEPHONE (T)
- WATER (W)
- UTILITY PEDESTAL
- POWER POLE
- TELEPHONE POLE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

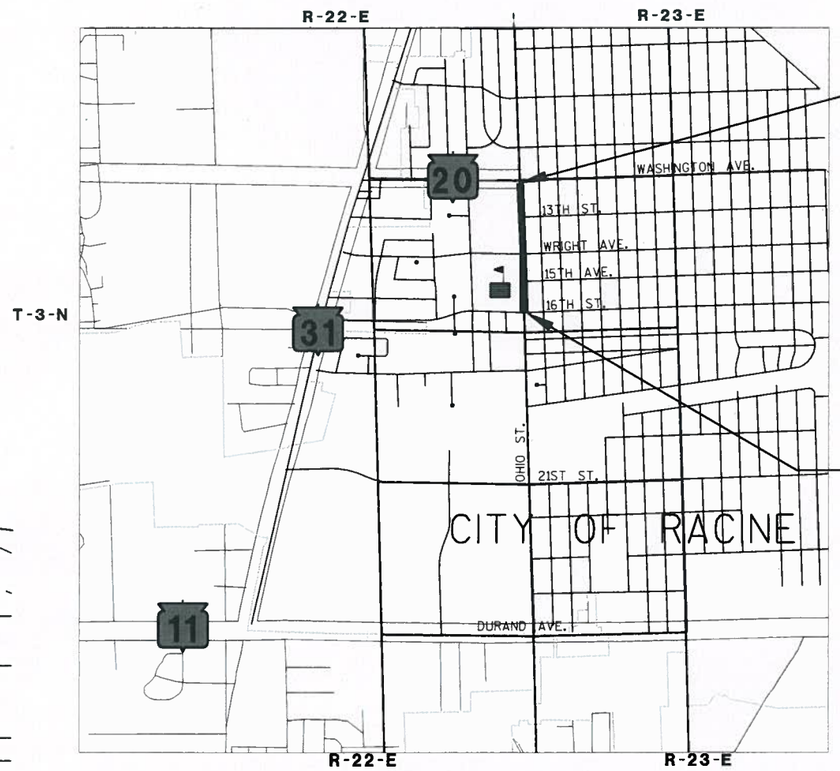
OHIO STREET

16TH STREET TO WASHINGTON AVENUE (STH 20)

LOCAL STREET
RACINE COUNTY

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
2704-00-73	WISC 2014108	1

STATE PROJECT NUMBER: 2704-00-73



END PROJECT
STA. 65+50.00

BEGIN PROJECT
STA. 41+00.00
Y = 180541.74
X = 625715.29

LAYOUT SCALE 0 ¼ MI.

TOTAL NET LENGTH OF CENTERLINE = 0.380 MI.

ACCEPTED FOR CITY of RACINE

11-21-13 (Date) (Signature & Title of Official)

ORIGINAL PLANS PREPARED BY

WISCONSIN — BRIAN D. CATER 38996 KENOSHA, WI — PROFESSIONAL ENGINEER

11/21/13 (Date) (Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	CLARK DIETZ INC.
Designer	CLARK DIETZ INC.
Project Manager	BRIAN CATER, P.E.
Management Consultant	DAAR ENGINEERING, INC.

APPROVED FOR THE DEPARTMENT

DATE: 11/22/2013

Management Consultant Signature

E

FILE NAME : P:\R0140060_RACINE - OHIO STREET DESIGN\C3D\SHEETSPLAN\27040003_010101TL.DWG PLOT DATE : 9/9/2008 8:17 AM PLOT BY : KEVIN K. RISCH PLOT NAME : ----------

UTILITIES

STORM SEWER AND SANITARY SEWER
CITY HALL
730 WASHINGTON AVE.
RACINE, WI 53403
ATTN:JOHN ROONEY
PH. 262-636-9460
EMAIL:john.rooney@cityofracine.org

WATER
CITY HALL ANNEX
800 CENTER STREET
RACINE, WI 53403
ATTN:KEITH HAAS
PH. 262-636-9430
EMAIL:KEITH.HAAS@cityofracine.org

ELECTRIC

WE ENERGIES
333 W. EVERETT ST.-A279
MILWAUKEE, WI. 53203
ATTN: LATROY BRUMFIELD
PH: (414) 221-5617
EMAIL: latroy.bromfield@we-energies.com

PAVING COORDINATOR
WE ENERGIES
500 S. 116TH STREET - WAOC
WEST ALLIS, WI 53214
EMAIL:
we-utility-relocations@we-energies.com

GAS

WE ENERGIES
333 W. EVERETT ST.-A279
MILWAUKEE, WI. 53203
ATTN: LATROY BRUMFIELD
PH: (414) 221-5617
EMAIL: latroy.bromfield@we-energies.com

PAVING COORDINATOR
WE ENERGIES
500 S. 116TH STREET - WAOC
WEST ALLIS, WI 53214
EMAIL:
we-utility-relocations@we-energies.com

PHONE/CABLE

TIME WARNER CABLE
1320 N MARTIN LUTHER KING JR. DR.
MILWAUKEE, WI 53212
ATTN: STEVE CRAMER
PH. 414-277-4240
EMAIL: steve.cramer@twcable.com
ATTN: JACK RUSSERT
PH. 414-277-4245
EMAIL: JOHN.RUSSERT@TWCABLE.COM

AT&T (WISCONSIN)
316 W. WASHINGTON AVE
RACINE, WI 53703
ATTN: KARIN EWOLDT
PH. 608-338-5560
EMAIL: ke3543@att.com

CONTACTS

DESIGN CONSULTANT:
CLARK DIETZ, INC.
5017 GREEN BAY ROAD
SUITE 126
KENOSHA, WI 53144
ATTN: BRIAN D. CATER, P.E.
PH. 262-657-1550
FAX: 262-657-1594
EMAIL: brian.cater@clarkdietz.com

CITY OF RACINE
CITY HALL
730 WASHINGTON AVE.
RACINE, WI 53402
ATTN: JOHN ROONEY
PH. 262-636-9460
EMAIL: john.rooney@cityofracine.org

RACINE POLICE DEPARTMENT
730 CENTER ST.
RACINE, WI 53403
PH. 262-886-2300

CITY OF RACINE TRAFFIC SIGNALS
CITY HALL
730 WASHINGTON AVE.
RACINE, WI 53402
ATTN: ARA MOLITOR
PH. 262-636-9487
EMAIL: ara.molitor@cityofracine.org

WDNR LIAISON
STATE OF WISCONSIN
DEPT. OF NATURAL RESOURSES
2300 N. DR. MARTIN LUTHER KING JR. DR.
MILWAUKEE, WI 53212
ATTN: KRISTINA BETZOLD
PH. 414-263-8517
EMAIL: kristina.betzold@wisconsin.gov

SEWRPC
CHIEF TRANSPORTATION ENGINEER
S.E. WI. REGIONAL PLANNING COMMISSION
W239 N1812 ROCKWOOD DRIVE
P.O. BOX 1607
WAUKESHA, WI. 53187-1607
ATTN: CHRISTOPHER T. HIEBERT
PH. 262-547-6722 EXT. 227
EMAIL: CHIEBERT@SEWRPC.ORG

ACOE
ARMY CORPS OF ENGINEERS
ST. PAUL DISTRICT
WAUKESHA FIELD OFFICE
1617 E. RACINE AVE.
ROOM 101
WAUKESHA, WI 53186
ATTN: DALE PFEIFFLE
PH. 262-547-0868

LIST OF STANDARD ABBREVIATIONS

ABUT	Abutment
AC	Acre
AGG	Aggregate
AH	Ahead
ASPH	Asphaltic
AVG	Average
ADT	Average Daily Traffic
BK	Back
BM	Bench Mark
BR	Bridge
CE	COMMERCIAL ENTRANCE
CL or C/L	Center Line
CC	Center to Center
CTH	County Trunk Highway
CY or CU YD	Cubic Yard
C & G	Curb and Gutter
DIA	Diameter
E	East
EB	Eastbound
ELEC	Electric (al)
EL or ELEV	Elevation
EBS	Excavation Below Subgrade
FE	Field Entrance
FG	Finished Grade
FL or F/L	Flow Line
HYD	Hydrant
INL	Inlet
ID	Inside Diameter
IND	Inch-Diameter
INV	Invert
IP	Iron Pipe or Pin
JT	Joint
LHF	Left-Hand Forward
LIN FT or LF	Linear Foot
MH	Manhole
MB	Message Board
MLB	Mailbox
ML or M/L	Match Line
NC	Normal Crown
NB	Northbound
OD	Outside Diameter
PGL	Profile Grade Line
PLE	Permanent Limited Easement
PT	Point
PC	Point of Curvature
PI	Point of Intersection
PRC	Point of Reverse Curvature
PT	Point of Tangency
POC	Point On Curve
POT	Point on Tangent
PVC	Polyvinyl Chloride
PCC	Portland Cement Concrete
PE	Private Entrance
R	Radius
RL or R/L	Reference Line
RCCP	Reinforced Concrete Culvert Pipe
REQD	Required
RW	Retaining Wall
RT	Right
RHF	Right-Hand Forward
R/W	Right-of-Way
RDWY	Roadway
SALV	Salvaged
SEC	Section
SHLDR	Shoulder
SW	Sidewalk
SB	Southbound
SQ	Square
SF or SQ FT	Square Feet
SY or SQ YD	Square Yard
STD	Standard
SDD	Standard Detail Drawings
STH	State Trunk Highways
STA	Station
SG	Subgrade
T	Tangent
TEL	Telephone
TEMP	Temporary
TLE	Temporary Limited Easement
TC	Top Of Curb
TYP	Typical
UG	Underground Cable
VAR	Variable
VERT	Vertical
VC	Vertical Curve
WM	Water Main
WV	Water Valve
WB	Westbound

GENERAL NOTES

1. 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. CONTRACTOR IS TO CONTACT DIGGERS HOTLINE AND ANY OTHER MUNICIPAL UTILITIES THAT ARE NOT PART OF DIGGERS HOTLINE TO HAVE THEM LOCATE UTILITIES. IT IS THE CONTRACTORS RESPONSIBILITY TO LOCATE UTILITIES IN THE FIELD.
2. ELEVATIONS ON THIS PLAN ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).
3. COORDINATES AND BEARINGS ARE ORIENTED TO THE WISCONSIN COUNTY COORDINATE SYSTEM RACINE COUNTY (ENGLISH) NAD 83, 91 ADJUSTMENT, ALL PLAN DISTANCES ARE GROUND LENGTH.
4. BENCH MARKS ARE REFERENCED TO NAVD 88 ON THE SW ¼ CORNER OF SECTION 18 T3N, R22/23E. LOCATED NORTH OF VICTORY AVENUE IN THE CITY OF RACINE, RACINE COUNTY, WISCONSIN. HAVING A KNOWN ELEVATION OF 697.915 (1929 ADJ.).
5. THE EXACT LOCATION AND WIDTH OF PRIVATE, COMMERCIAL AND FIELD ENTRANCES TO BE DETERMINED BY THE ENGINEER IN THE FIELD.
6. PAVEMENT ELEVATIONS SHOWN AT THE FLOW LINE FOR CONCRETE CURB AND GUTTER TYPE A ARE AT THE EDGE OF PAVEMENT. PAVEMENT ELEVATIONS FOR CONCRETE CURB AND GUTTER INTEGRAL TYPE D AND J SHOWN AT FACE OF CURB & GUTTER.
7. CURB & GUTTER JOINT SPACING SHALL MATCH THE ABUTTING PAVEMENT JOINTS (WHERE APPLICABLE) UNLESS OTHERWISE DESIGNATED BY THE ENGINEER.
8. EXPANSION JOINTS SHALL BE CONSTRUCTED AT ALL RADII POINTS IN THE CURB & GUTTER.
9. THE COST OF CONNECTING CULVERT PIPE OR STORM SEWER TO EXISTING DRAINAGE STRUCTURES SHALL BE INCIDENTAL TO THE COST OF INSTALLING THE CULVERT OR STORM SEWER.
10. STORM SEWER INVERT ELEVATIONS, LENGTHS AND LOCATIONS AS SHOWN ON THE PLANS AND CROSS SECTIONS MAY BE ADJUSTED TO FIT FIELD CONDITIONS.
11. EXISTING ROADWAY OR DRIVEWAYS REMOVALS SHALL BE NEATLY DELINEATED WITH A SAWCUT THROUGH THE EXISTING PAVEMENT SUCH THAT REMOVAL OF THE PAVEMENT WILL BE ACCOMPLISHED WITHOUT DAMAGE TO THE REMAINING PORTIONS. ANY DAMAGE TO THE REMAINING PORTIONS WILL BE REPAIRED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE.
12. NO TREES OR SHRUBS ARE TO BE REMOVED UNLESS SUCH TREES OR SHRUBS HAVE FIRST BEEN INDICATED FOR REMOVAL BY THE ENGINEER IN THE FIELD.
13. MISCELLANEOUS REMOVAL ITEMS REQUIRING RESTORATION OF CONCRETE DRIVEWAYS, SIDEWALKS, OR SIDE STREETS SHALL BE REMOVED TO AN EXISTING JOINT OR SAWED AS DETERMINED BY THE ENGINEER IN THE FIELD, OR AS SHOWN ON THE PLANS.
14. TRAFFIC CONTROL LOCATIONS AS SHOWN ON THE PLAN ARE SUGGESTED LOCATIONS. EXACT LOCATIONS TO BE DETERMINED BY THE ENGINEER IN THE FIELD.
15. EROSION CONTROL DEVICES SHALL BE INSTALLED PRIOR TO CONSTRUCTION OPERATIONS. EROSION CONTROL ITEMS ON THE PLAN ARE AT SUGGESTED LOCATIONS. THE EXACT LOCATIONS AND DIMENSIONS WILL BE DETERMINED BY THE ENGINEER IN THE FIELD. ALL EROSION CONTROL DEVICES SHALL BE MAINTAINED UNTIL SUCH TIME AS THE ENGINEER IN THE FIELD DEEMS THE DEVICES NO LONGER NECESSARY.
16. ALL DISTURBED AREAS SHOWN WITHIN THE RIGHT-OF-WAY, SHALL RECEIVE TOPSOIL FERTILIZER TYPE B AND LAWN SOD AS DIRECTED BY THE ENGINEER IN THE FIELD. NO DISTURBED LAND IS TO BE LEFT UNSEEDED OR UNSODDED FOR MORE THAN 3 DAYS FOLLOWING THE DISTURBING ACTIVITY. TEMPORARY SEED MAY BE USED UNTIL SUCH TIME SOD IS READY TO BE PLACED.
17. SILT FENCE SHALL BE PLACED AS SHOWN ON THE EROSION CONTROL PLAN AND MISCELLANEOUS QUANTITY SHEET OR AS DIRECTED BY THE ENGINEER IN THE FIELD. SILT FENCE SHALL BE PLACED PRIOR TO CONSTRUCTION.
18. FILL EXPANSION OF EARTHWORK IS ESTIMATED AT 25% .
19. ALL TOPSOIL TO BE PLACED AT A DEPTH OF 6".
20. ALL INTERSECTION RADII IS MEASURED TO THE FLANGE OF CURB AND GUTTER.

SOIL BORING LOG

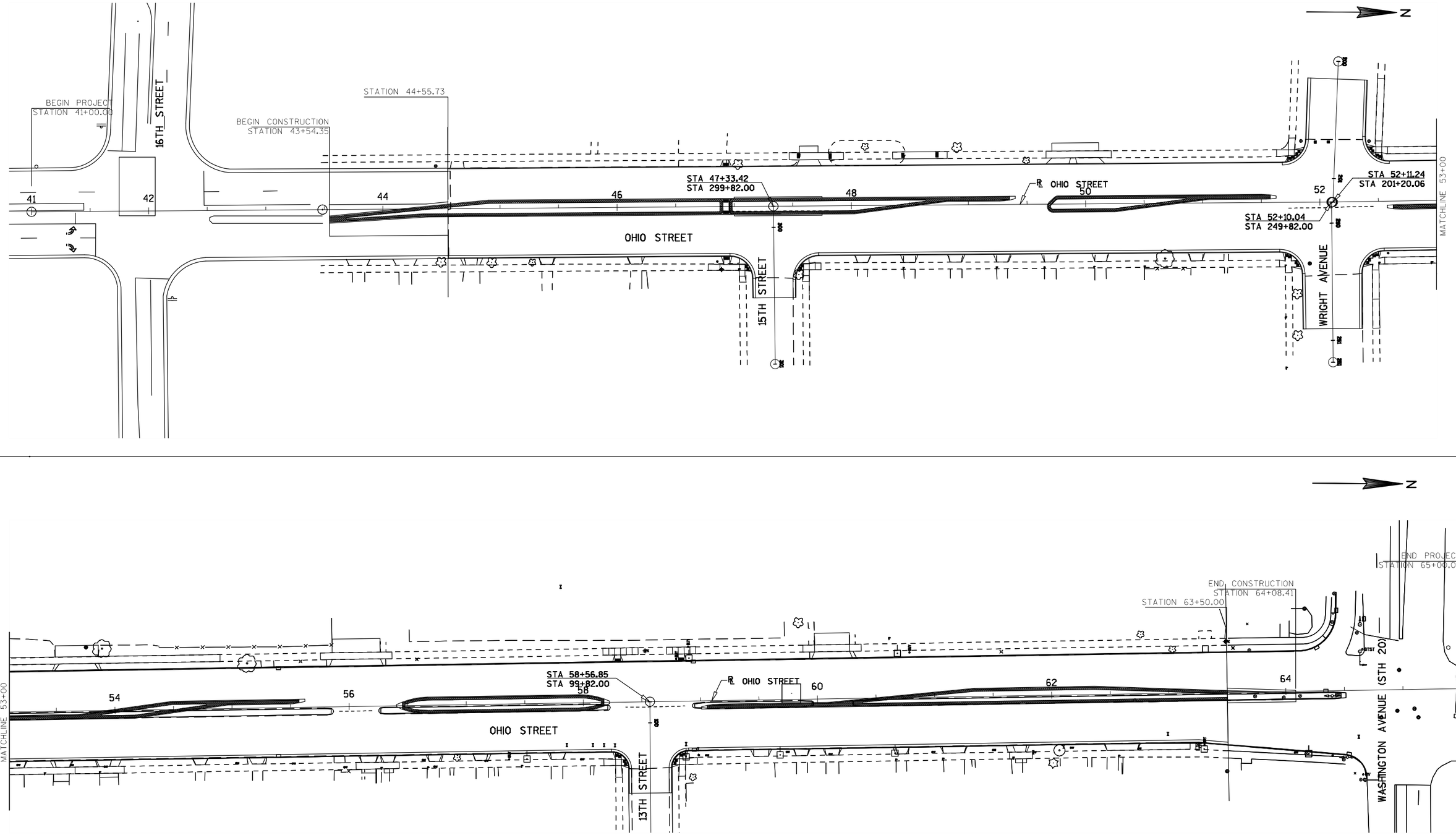
BORE NO.	STATION	OFFSET	ASPHALT SURFACE DEPTH (IN.)	CONCRETE PAVEMENT (NON-REINFORCED) DEPTH (IN.)	CRUSHED STONE DEPTH (IN.)
SB-1	45+88	13.6' RT	4.0	9.0	3.0
SB-2	48+36	3.7' LT	4.0	9.0	N.O.
SB-3	50+35	14.5' RT	4.0	10.0	N.O.
SB-4	51+31	29.1' LT	4.0	9.0	N.O.
SB-5	52+94	27.0' RT	4.0	8.0	N.O.
SB-6	54+65	28.5' LT	4.0	8.0	5.0
SB-7	57+96	13.7' RT	3.5	9.5	N.O.
SB-8	60+95	28.0' LT	4.0	8.0	N.O.
N.O. – NONE OBSERVED					

ORDER OF SECTION 2 SHEETS

GENERAL NOTES
PROJECT OVERVIEW
TYPICAL SECTIONS
CONSTRUCTION DETAILS
REMOVAL PLAN
PAVEMENT LAYOUT DETAIL
JOINTING DETAIL
EROSION CONTROL DETAIL
LANDSCAPING DETAIL
DRAINAGE/UTILITY PLAN DETAIL
PAVEMENT MARKING DETAIL
SIGNING DETAIL
TEMPORARY LIGHTING PLAN DETAIL
LIGHTING, SIGNAL, AND FIBER OPTIC PLAN DETAIL
CONSTRUCTION STAGING
DETOUR
ALIGNMENT AND TIES

DIGGERS HOTLINE

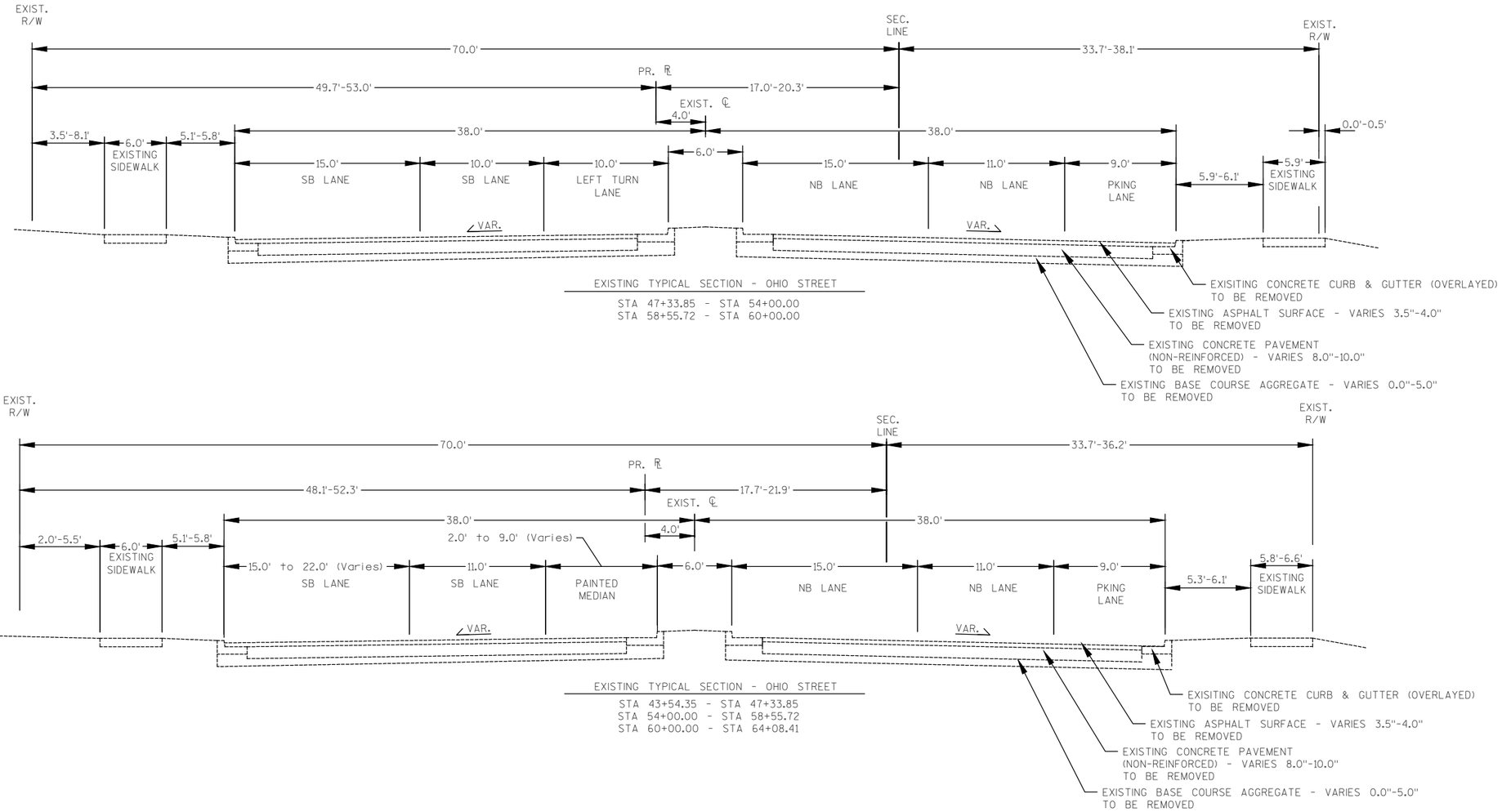
Call 811 3 Work Days Before You Dig
or Toll Free (800) 242-8511
Hearing Impaired TDD (800) 542-2289



2

PROJECT NO: 2704-00-73	HWY: OHIO STREET	COUNTY: RACINE	PLAN: PROJECT OVERVIEW	SHEET 3	E

FILE NAME : P:\R0140060_RACINE - OHIO STREET DESIGN\C3D\SHEETSPLAN\27040003_020101P0.DWG PLOT DATE : 11/26/2013 7:33 AM PLOT BY : KEVIN K. RISCH PLOT NAME : ---------- PLOT SCALE : 1" = 80'_XREF
WISDOT/CADDS SHEET 42



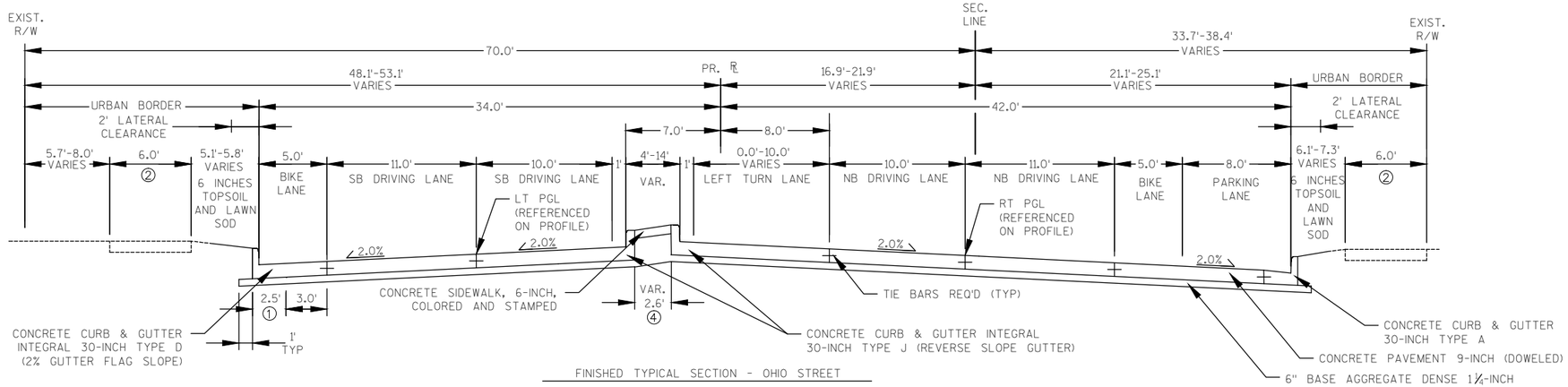
EXISTING TYPICAL SECTION - OHIO STREET

STA 47+33.85 - STA 54+00.00
STA 58+55.72 - STA 60+00.00

EXISTING TYPICAL SECTION - OHIO STREET

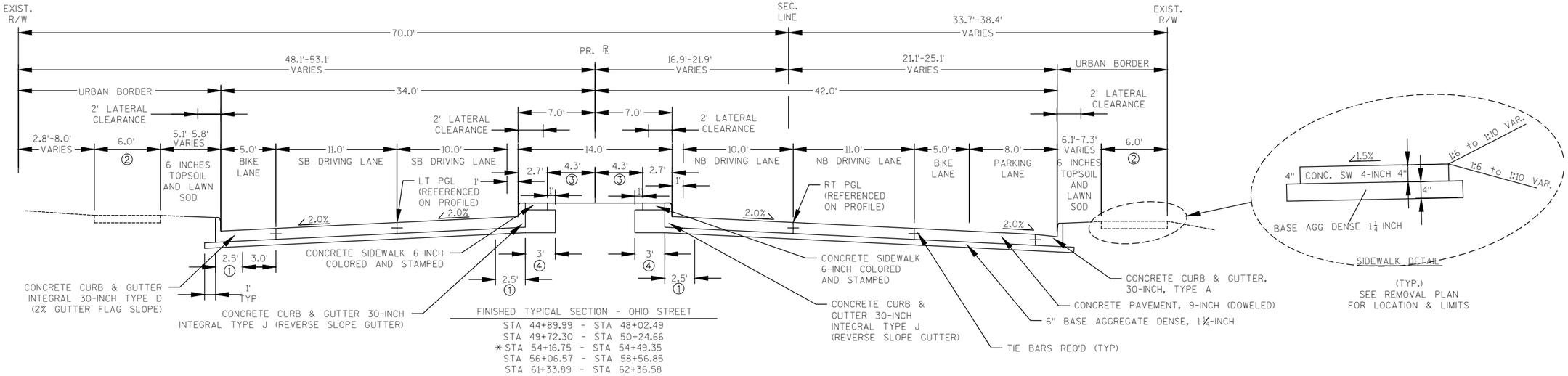
STA 43+54.35 - STA 47+33.85
STA 54+00.00 - STA 58+55.72
STA 60+00.00 - STA 64+08.41

PROJECT NO: 2704-00-73	HWY: OHIO STREET	COUNTY: RACINE	PLAN: EXISTING TYPICAL SECTIONS - OHIO STREET	SHEET 4	E



FINISHED TYPICAL SECTION - OHIO STREET

STA 48+02.49 - STA 49+72.30
STA 50+24.66 - STA 52+10.59
* STA 54+16.75 - STA 56+06.57



FINISHED TYPICAL SECTION - OHIO STREET

STA 44+89.99 - STA 48+02.49
STA 49+72.30 - STA 50+24.66
* STA 54+16.75 - STA 54+49.35
STA 56+06.57 - STA 58+56.85
STA 61+33.89 - STA 62+36.58

NOTES:

* OVERLAP IN STATIONING EXISTS DUE TO BACK-TO-BACK LEFT TURN LANES.

** VARYING WIDTH AT START AND END OF PROJECT DUE TO MATCHING INTO EXISTING PAVEMENT SECTION.

① PAY LIMITS OF CONCRETE CURB AND GUTTER INTEGRAL 30-INCH (TYP. ALL TYPES)

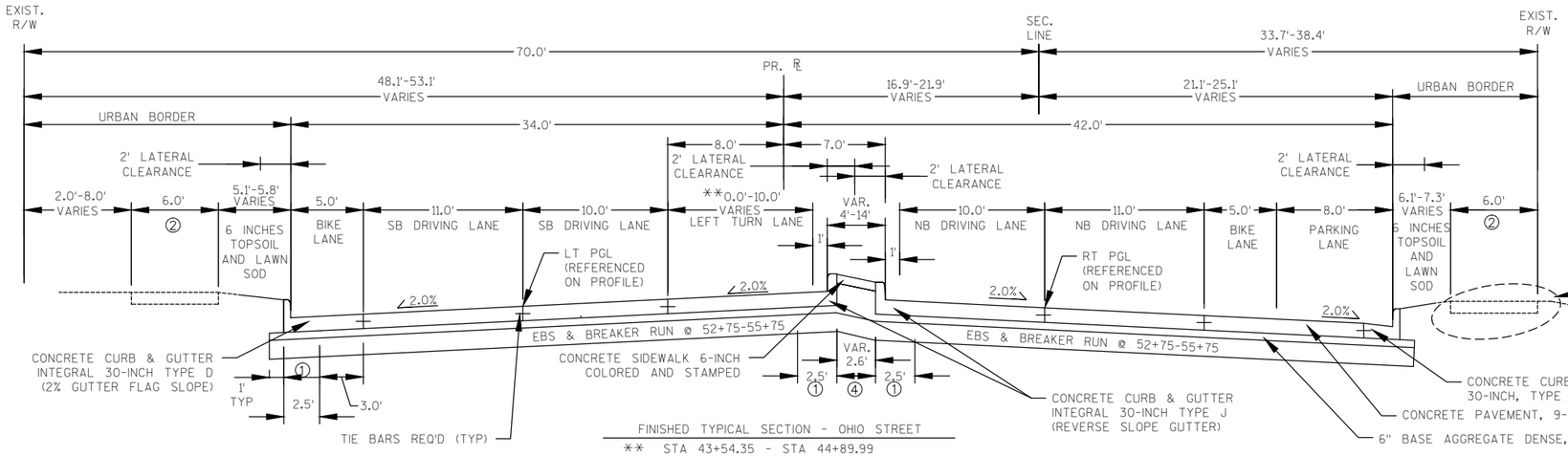
② EXISTING SIDEWALK TO REMAIN UNLESS OTHERWISE NOTED. (SEE SIDEWALK DETAIL)

③ 6" TOPSOIL AND SHREDDED BARK MULCH RED

④ LIMITS OF 15" BASE AGGREGATE DENSE 1½-INCH.

PROJECT NO: 2704-00-73	HWY: OHIO STREET	COUNTY: RACINE	PLAN: FINISHED TYPICAL SECTIONS - OHIO STREET	SHEET 5	E

2



FINISHED TYPICAL SECTION - OHIO STREET

** STA 43+54.35 - STA 44+89.99
* STA 52+10.59 - STA 54+49.35
STA 58+56.85 - STA 61+33.89
** STA 62+36.58 - STA 64+08.41

SIDEWALK DETAIL
(TYP.)
SEE REMOVAL PLAN FOR LOCATION & LIMITS

NOTES:

* OVERLAP IN STATIONING EXISTS DUE TO BACK-TO-BACK LEFT TURN LANES.

** VARYING WIDTH AT START AND END OF PROJECT DUE TO MATCHING INTO EXISTING PAVEMENT SECTION.

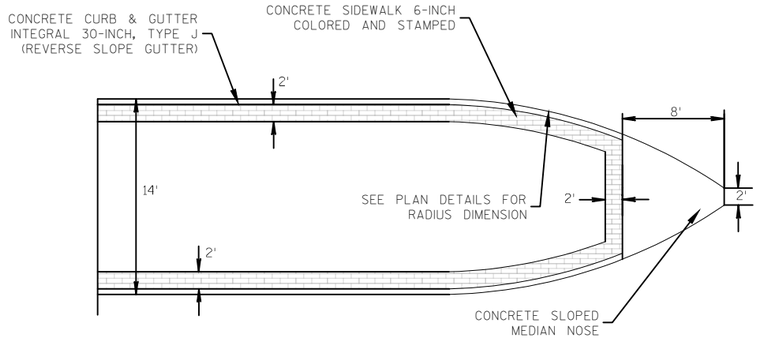
① PAY LIMITS OF CONCRETE CURB AND GUTTER INTEGRAL 30-INCH (TYP. ALL TYPES)

② EXISTING SIDEWALK TO REMAIN UNLESS OTHERWISE NOTED. (SEE SIDEWALK DETAIL)

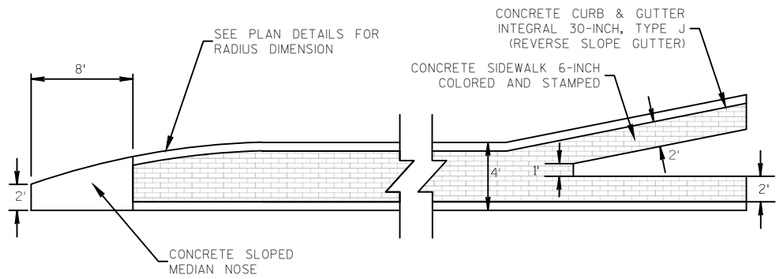
③ 6" TOPSOIL AND SHREDDED BARK MULCH RED

④ LIMITS OF 15" BASE AGGREGATE DENSE 1¼-INCH.

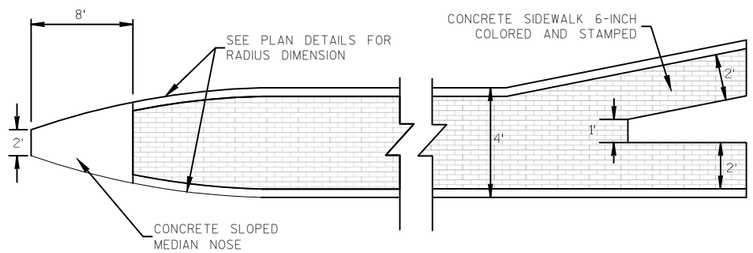
PROJECT NO: 2704-00-73	HWY: OHIO STREET	COUNTY: RACINE	PLAN: FINISHED TYPICAL SECTIONS - OHIO STREET	SHEET 6	E



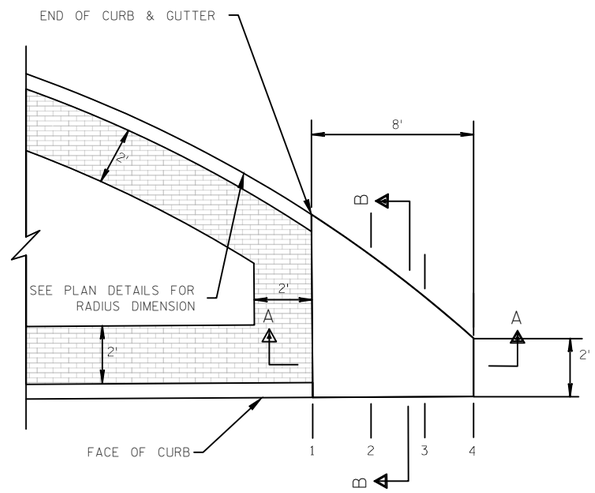
TYPE 1 – MEDIAN NOSE WITHOUT LEFT TURN LANE

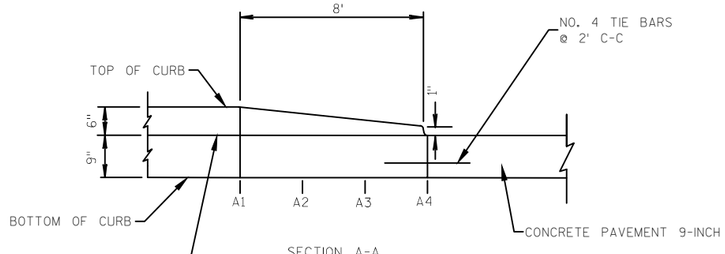


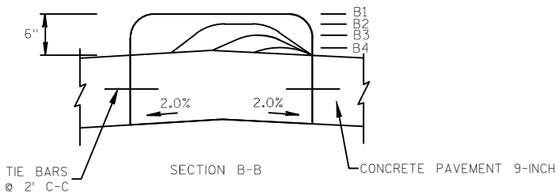
TYPE 2 – MEDIAN NOSE WITH LEFT TURN LANE
(AT "T" INTERSECTION)



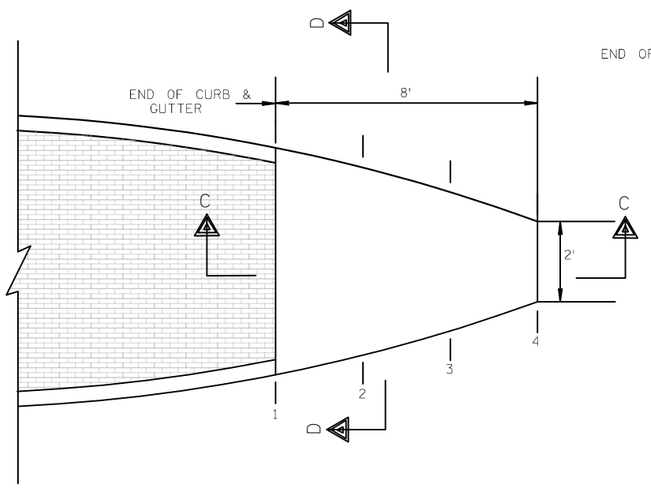
TYPE 3 – MEDIAN NOSE WITH LEFT TURN LANE
(AT 4–WAY INTERSECTION)

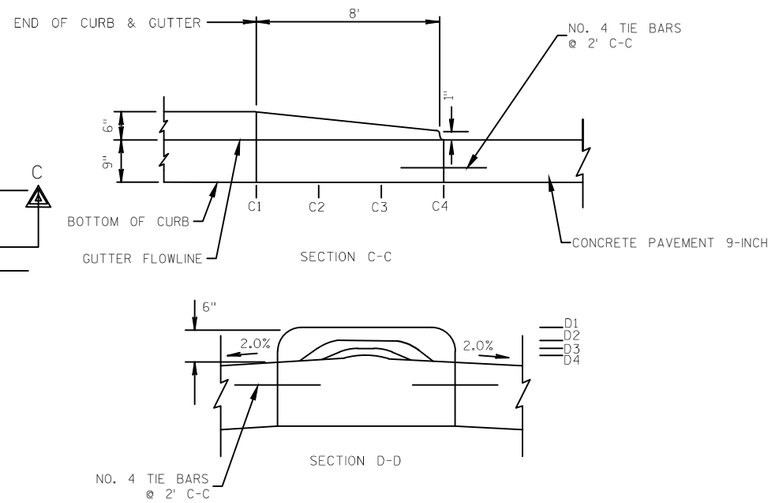






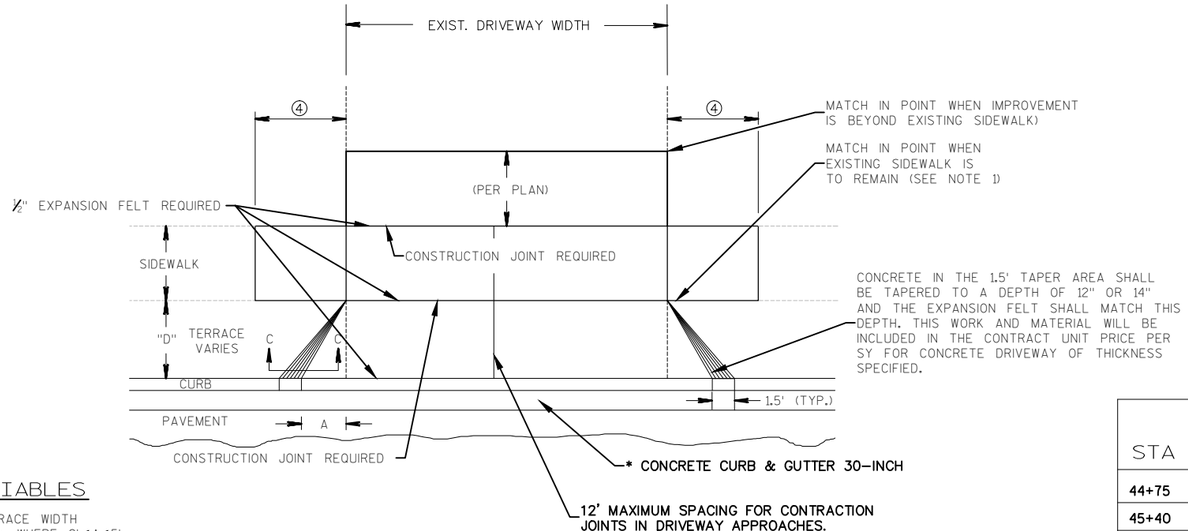
CONCRETE MEDIAN NOSE DETAIL
TYPE 2





CONCRETE MEDIAN NOSE DETAIL
TYPE 1 & 3

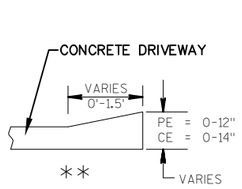
DRIVEWAY ENTRANCE DETAIL WITH SIDEWALK AND CURB & GUTTER



VARIABLES

D=TERRACE WIDTH
A=1/2D, WHERE 2'≤A≤5'

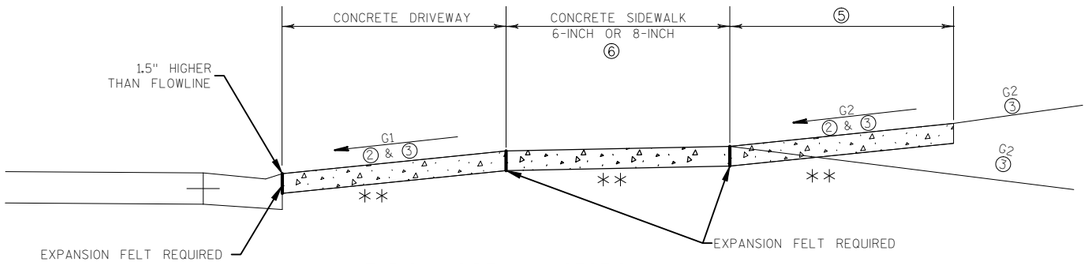
PLAN VIEW



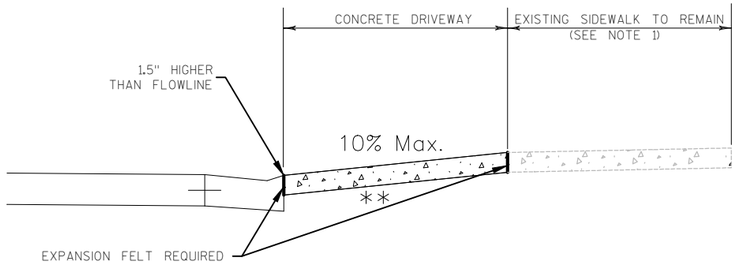
SECTION C-C



ELEVATION VIEW AT FACE OF CURB



TYPICAL SIDEWALK SECTION
(MATCH BEYOND SIDEWALK)



TYPICAL SIDEWALK SECTION
(MATCH AT SIDEWALK)

N

STA	DRIVEWAY SIDE	DRIVEWAY TYPE
44+75	RIGHT	PRIVATE
45+40	RIGHT	PRIVATE
46+16	RIGHT	PRIVATE
48+09	RIGHT	PRIVATE
47+64	LEFT	COMMERCIAL
48+49	RIGHT	PRIVATE
48+89	RIGHT	PRIVATE
49+28	RIGHT	PRIVATE
49+70	RIGHT	PRIVATE
49+80	LEFT	COMMERCIAL
50+02	LEFT	COMMERCIAL
50+12	RIGHT	PRIVATE
50+94	RIGHT	PRIVATE
53+13	RIGHT	PRIVATE
53+53	RIGHT	PRIVATE
53+68	LEFT	COMMERCIAL
53+94	RIGHT	PRIVATE
55+21	RIGHT	PRIVATE
55+72	RIGHT	PRIVATE
56+07	LEFT	COMMERCIAL
56+16	RIGHT	PRIVATE
56+30	RIGHT	PRIVATE
56+70	RIGHT	PRIVATE
57+13	RIGHT	PRIVATE
57+77	RIGHT	PRIVATE
59+50	RIGHT	PRIVATE
59+86	RIGHT	PRIVATE
60+12	RIGHT	PRIVATE
60+13	LEFT	COMMERCIAL
60+71	RIGHT	PRIVATE
61+16	RIGHT	PRIVATE
61+73	RIGHT	PRIVATE
62+51	RIGHT	COMMERCIAL
62+65	RIGHT	COMMERCIAL

NOTES:

① PROPOSED DRIVEWAY APPROACH SHALL MATCH THE EXISTING ROADWAY SIDE EDGE OF SIDEWALK ELEVATION EXCEPT WHERE INDICATED OTHERWISE ON PLAN DETAIL

② SEE CROSS SECTION SHEETS FOR PROPOSED DRIVEWAY APRON SLOPES

③ ALGEBRAIC DIFFERENCE BETWEEN G1 AND G2 NOT TO EXCEED 14%.

④ LIMITS OF CONCRETE SIDEWALK 4-INCH WHERE IDENTIFIED ON PLANS.

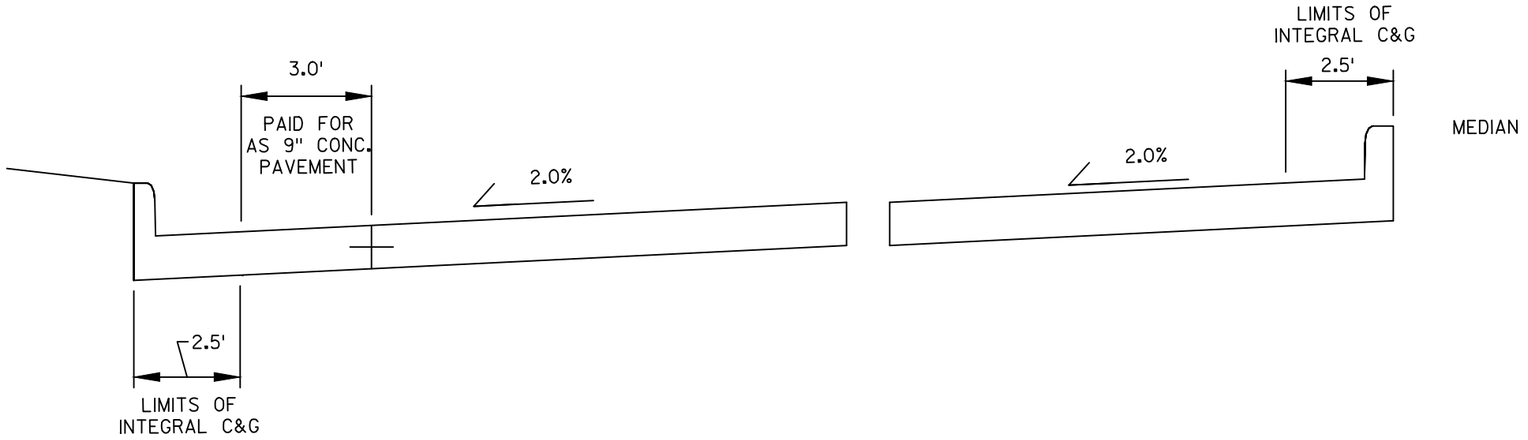
⑤ MATCH EXISTING DRIVEWAY MATERIAL PER TABLE BELOW.

⑥ PAID FOR AS CONCRETE DRIVEWAY OF DEPTH SPECIFIED.

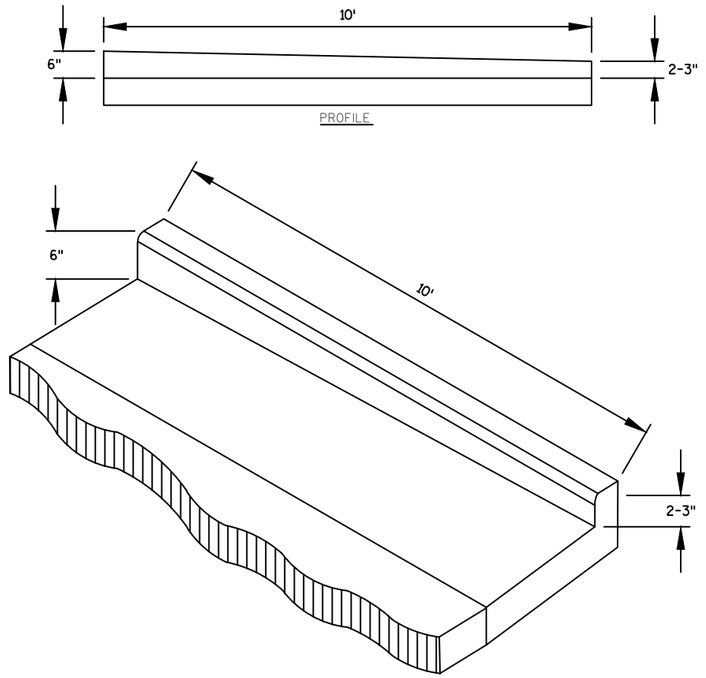
* RT DRIVEWAYS- CONCRETE CURB & GUTTER 30-INCH, TYPE A
LT DRIVEWAYS- CONCRETE CURB & GUTTER INTEGRAL 30-INCH, TYPE D

** 6" - 1 1/4-INCH BASE AGGREGATE DENSE REQUIRED UNDER CONCRETE DRIVEWAY

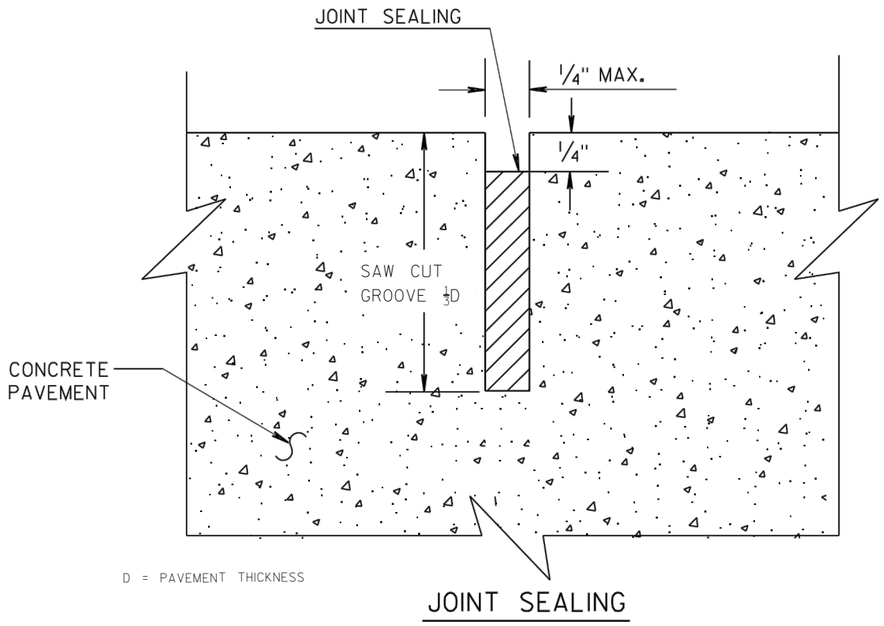
SURFACE TYPE	DRIVEWAY TYPE	CONCRETE DRIVEWAY BID ITEM
CONCRETE	PRIVATE	CONCRETE DRIVEWAY 6-INCH
	COMMERCIAL	CONCRETE DRIVEWAY 8-INCH
ASPHALT	PRIVATE	3" ASPHALT SURFACE DRIVEWAY AND FIELD ENTRANCES, OVER 8" 1-1/4" BASE COURSE
	COMMERCIAL	4.5" ASPHALT SURFACE DRIVEWAY AND FIELD ENTRANCES, OVER 12" 1-1/4" BASE COURSE
GRAVEL	PRIVATE	3" CABC 1 1/4"



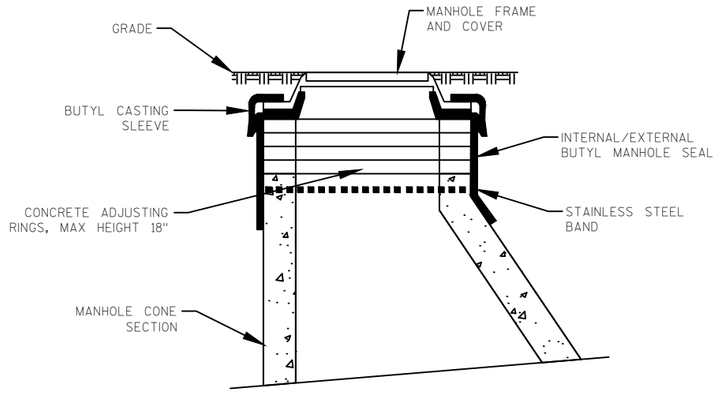
INTEGRAL CURB & GUTTER LIMITS



CURB AND GUTTER TRANSITION BEGINNING AND ENDING OF PROJECT LIMITS



JOINT SEALING

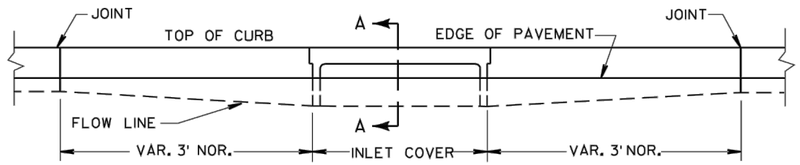


SANITARY MANHOLE INTERNAL/EXTERNALSEAL

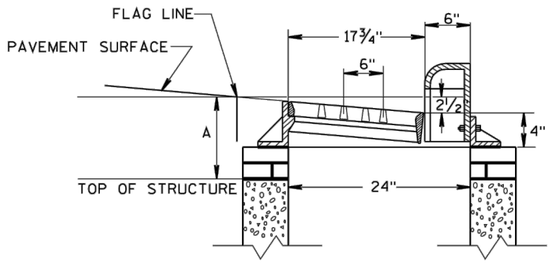
NOTES:

1) MANHOLE SEAL SHALL BE INSTALLED ACCORDING TO MANUFACTURER SPECIFICATIONS.

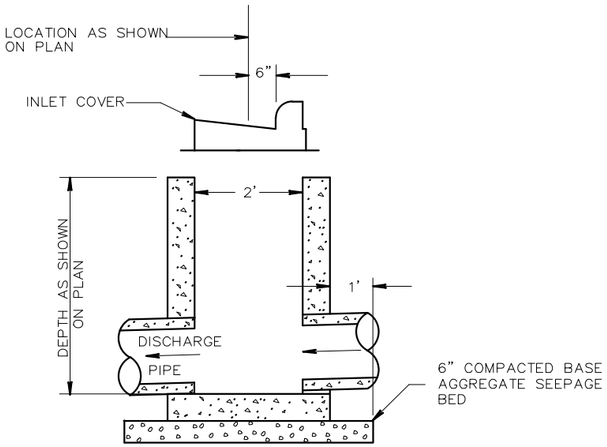
PROJECT NO:2704-00-70	HWY: OHIO STREET	COUNTY:RACINE	PLAN: CONSTRUCTION DETAIL - MISCELLANEOUS DETAILS	SHEET 9	E



ELEVATION

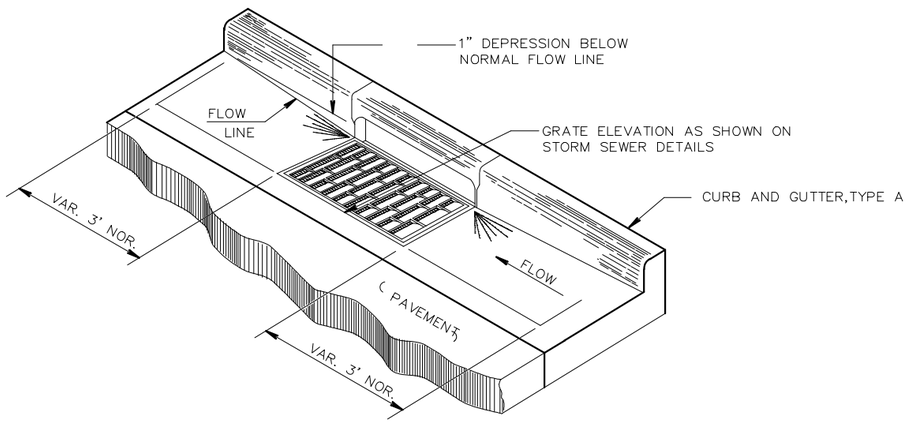


STRUCTURE TYPE	"A"
INLET COVER TYPE "H"	11.5"
MANHOLE COVER	14"



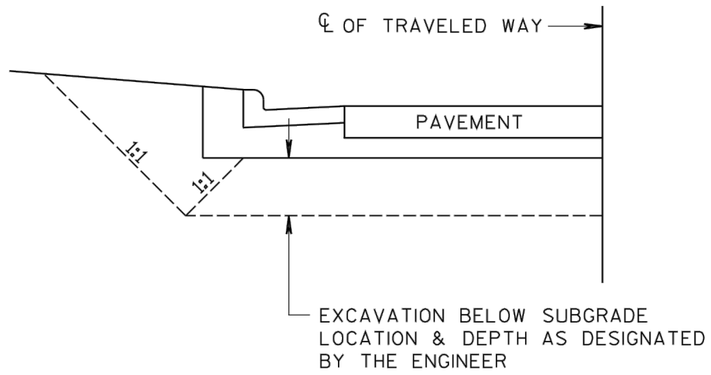
NOTE: DETAILS NOT SHOWN SHALL CONFORM TO STANDARD DETAIL DRAWING FOR INLETS 2 X 3

INLET 2 X 3 – FT



DETAIL OF CURB AND GUTTER AT INLETS

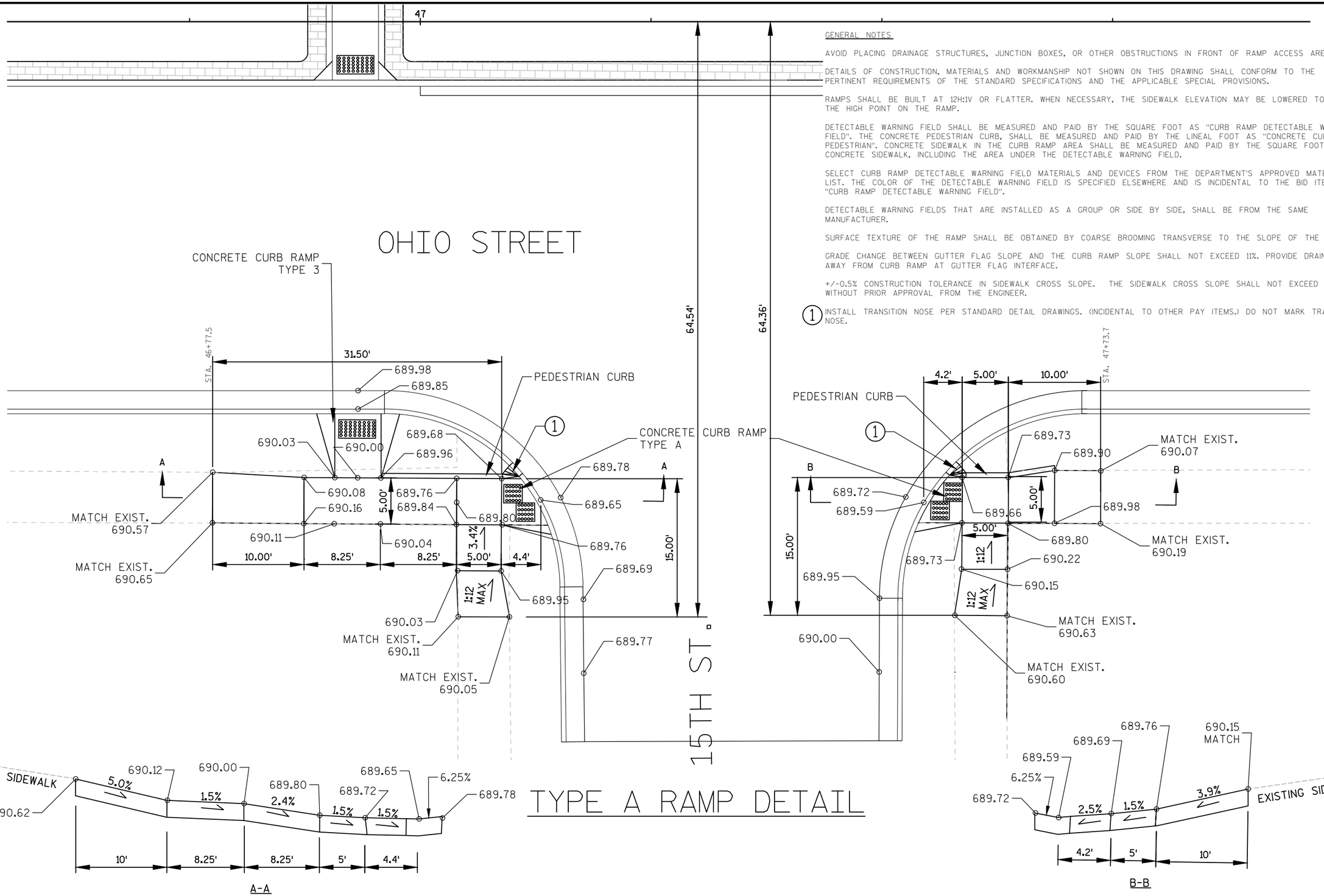
(INLET 2 X 3 – FT WITH TYPE H COVER SHOWN)



DETAIL FOR EXCAVATION BELOW SUBGRADE

PROJECT NO: 2704-00-70	HWY: OHIO STREET	COUNTY: RACINE	PLAN: CONSTRUCTION DETAIL - MISCELLANEOUS DETAILS	SHEET	E

FILE NAME : P:\R0140060_RACINE - OHIO STREET DESIGN\C3D\SHEETSPLAN\27040003_021001_CD.DWG PLOT DATE : 2/6/2014 10:41 AM PLOT BY : KEVIN K. RISCH PLOT NAME : PLOT SCALE : *********
WISDOT/CADDS SHEET 42



TYPE A RAMP DETAIL

GENERAL NOTES

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

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.

DETECTABLE WARNING FIELD SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS "CURB RAMP DETECTABLE WARNING FIELD". THE CONCRETE PEDESTRIAN CURB, 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".

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

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

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.

+/-0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(1) INSTALL TRANSITION NOSE PER STANDARD DETAIL DRAWINGS. (INCIDENTAL TO OTHER PAY ITEMS.) DO NOT MARK TRANSITION NOSE.

PROJECT NO: 2704-00-70	HWY: OHIO STREET	COUNTY: RACINE	PLAN: CONSTRUCTION DETAIL - RAMPS AT 15TH STREET	SHEET 11	E

LEGEND

PAVEMENT REMOVAL

SIDEWALK REMOVAL (NOTE: REMOVE TO NEAREST JOINT)

RLP — REMOVE LIGHT POLE (SEE LIGHTING DETAILS FOR ADDITIONAL INFORMATION)

REMOVING CURB AND GUTTER

SAWCUT

TREE PROTECTION

TREE REMOVAL

NOTES:

1. PAVEMENT REMOVAL SHALL CONSIST OF REMOVING THE ENTIRE EXISTING PAVEMENT STRUCTURE (ASPHALT SURFACE & CONCRETE). IF CONTRACTOR CHOOSES TO MILL OFF ASPHALT SURFACE, THIS WORK WILL BE INCIDENTAL TO REMOVING PAVEMENT BID ITEM.
2. ALL LIGHT POLES MARKED FOR REMOVAL SHALL BE DISASSEMBLED AND DELIVERED TO THE CITY OF RACINE. THE EXISTING LUMINARIES WILL BE REINSTALLED AS PART OF THIS PROJECT. (SEE SPECIAL PROVISIONS)

BEGIN CONSTRUCTION STA 43+54.35

STA 44+55.73

4.22 LT

4.09 LT

19.43 RT

22.69 RT

+52.88

+93.42

+47.28

+54.70 55.00 LT

+55.55 51.14 LT

+51.96 53.71 LT

+71.91 51.21 LT

+84.12 55.00 LT

+85.23 53.54 LT

+38.24 57.65 LT

+81.23 57.81 LT

+82.14

+93.68

+35.52

STARBUCK MIDDLE SCHOOL
1516 OHIO ST.

R OHIO STREET

44 45 46 47 48

RLP

MATCH LINE STA 49+00.00

+77.48

+73.71

STA 300+46.48

+46.42

STA 300+60.00

STA 200+13.18

15TH ST.

300

ALLAN ROBERTS
1516 OHIO ST.

PHAN HUU NAM
1517 OHIO ST.

RAYMOND STEGER
1515 OHIO ST.

JAMES CORMAN
4621 15TH ST.

EMILY DAUS
1439 OHIO ST.

RENEE MACHADO
1435 OHIO ST.

DIEP EST
1431 OHIO

SHOPKO SPE REAL ESTATE
4804 WASHINGTON AVE.

STA 200+15.00

REMOVE PULL BOXES

STA 200+66.82

+63.43

+66.60

+22.24

* PLATES ARE PART OF A SIGNAL LOOP SYSTEM WHICH HAS NEVER BEEN USED. REMOVAL INCIDENTAL WITH PAVEMENT REMOVAL.

REMOVE PULL BOXES

+90.51

MATCH LINE STA 49+00.00

MATCH LINE STA 55+00.00

R OHIO STREET

50 51 52 53 54

RLP

201

250

WRIGHT AVE.

+59.94 59.96 RT

+02.07 56.95 RT

+07.08

+46.36 59.96 RT

+86.05 56.95 RT

+65.24

STA 250+41.92

STA 250+90.07

STA 250+90.07

DAVID AND VALERIE DUFFECK
1427 OHIO ST.

WANDA BERRYMAN PRICE
1423 OHIO ST.

LISA CHAVEZ
1417 OHIO ST.

JOHN SOLBERG
1415 OHIO ST.

SALVADOR AND MARIA TORRES
1401 OHIO ST.

DANIEL AND DEBORAH TUTTLE
1355 OHIO ST.

KENNETH AND MARION WEISS
1351 OHIO ST.

DOROTHY TWESME
1347 OHIO ST.

THOMAS AND MEGAN JENSEN
1341 OHIO ST.

ALPHONSE AND MARCIA POST
1333 OHIO ST.

SCALE, FEET 0 20 40

PROJECT NO: 2704-00-73	HWY: OHIO STREET	COUNTY: RACINE	PLAN: REMOVAL PLAN	SHEET 12	E

LEGEND

PAVEMENT REMOVAL

SIDEWALK REMOVAL (NOTE: REMOVE TO NEAREST JOINT)

RLP — REMOVE LIGHT POLE (SEE LIGHTING DETAILS FOR ADDITIONAL INFORMATION)

REMOVING CURB AND GUTTER

SAWCUT

TREE PROTECTION

TREE REMOVAL

NOTES:

1. PAVEMENT REMOVAL SHALL CONSIST OF REMOVING THE ENTIRE EXISTING PAVEMENT STRUCTURE (ASPHALT SURFACE & CONCRETE). IF CONTRACTOR CHOOSES TO MILL OFF ASPHALT SURFACE, THIS WORK WILL BE INCIDENTAL TO REMOVING PAVEMENT BID ITEM.
2. ALL LIGHT POLES MARKED FOR REMOVAL SHALL BE DISASSEMBLED AND DELIVERED TO THE CITY OF RACINE. THE EXISTING LUMINARIES WILL BE REINSTALLED AS PART OF THIS PROJECT. (SEE SPECIAL PROVISIONS)

N

MATCH LINE STA 55+00.00

MATCH LINE STA 61+00.00

℄ OHIO STREET

+76.27 +37.28

+17.45 +47.44 +71.72 +96.71

+88.20 +37.97

+05.09 +41.97

+16.68

STA 100+46.26

STA 100+60.09

13TH ST.

+98.37

STA 100+45.76

SHOPKO SPE REAL ESTATE
4804 WASHINGTON AVE.

JOSE HERNANDEZ
1329 OHIO ST.

MANFRED REITZENSTEIN
1323 OHIO ST.

STANLEY AND KATHY ANNIS
1317 OHIO ST.

JAMES AND CATHERINE SCHULDT
1313 OHIO ST.

CONNIE DIAZ
1309 OHIO ST.

FLOYD LUCAS
1301 OHIO ST.

BRENDA STOCKTON
4624 13TH ST.

RICHARD AND NANCY LENZKE
1247 OHIO ST.

TONYA KING
1243 OHIO ST.

EDWINA ELDRIDGE
1237 OHIO ST.

US BANK
4701 WASHINGTON AVE.

STA 63+50.00

END CONSTRUCTION
STA 64+08.41

3.58 LT

0.79 LT

9.00 RT 9.00 RT

WASHINGTON AVE (STH 20)

+63.19

+82.71

+17.50

SAWCUT AND MATCH EXISTING FIRST JOINT SOUTH OF CABINET FOUNDATION

MICHAEL HOPPUS
1233 OHIO ST.

PENELOPE SCHATZMAN
1227 OHIO ST.

CYLINTIA KNIBBS
1223 OHIO ST.

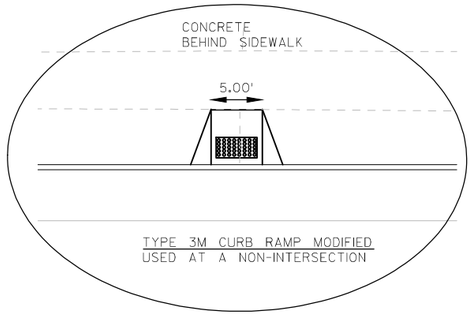
WILLIAM AND CHERYL SPENCER
4625 WASHINGTON AVE.

SCALE, FEET 0 20 40

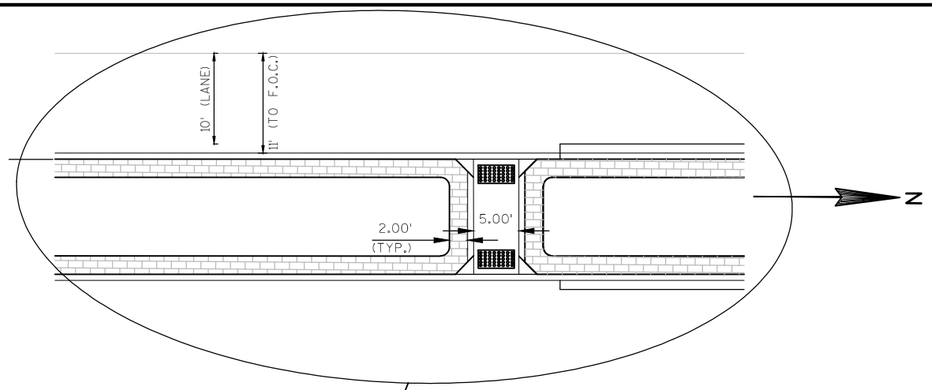
PROJECT NO: 2704-00-73	HWY: OHIO STREET	COUNTY: RACINE	PLAN: REMOVAL PLAN	SHEET 13	E

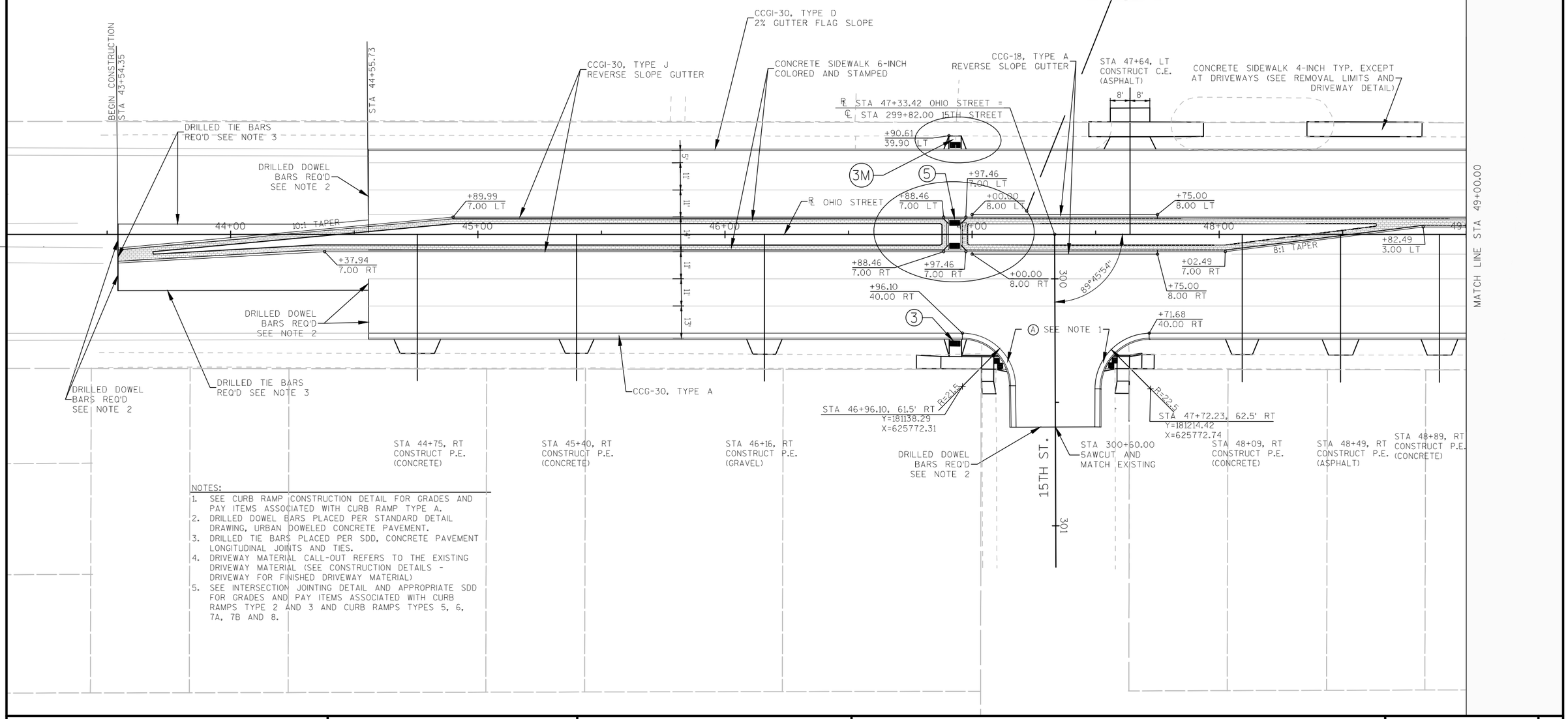
LEGEND - PAVING DETAIL

(A)	CONCRETE CURB RAMP TYPE A (SEE CONSTRUCTION DETAILS)
(2)	CONCRETE CURB RAMP TYPE 2
(3M)	CONCRETE CURB RAMP TYPE 3 (MODIFIED)
(3)	CONCRETE CURB RAMP TYPE 3
(5)	CONCRETE CURB RAMP TYPE 5 MEDIAN ISLAND
(7B)	CONCRETE CURB RAMP TYPE 7B
CMSN	CONCRETE MEDIAN SLOPED NOSE (SEE CONSTRUCTION DETAIL - MEDIAN NOSE)
CCG-18	CONCRETE CURB AND GUTTER 18-INCH TYPE A
CCGI-30	CONCRETE CURB AND GUTTER INTEGRAL 30-INCH
CCG-30	CONCRETE CURB AND GUTTER 30-INCH
▬	CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA



TYPE 3M CURB RAMP MODIFIED
USED AT A NON-INTERSECTION





NOTES:

1. SEE CURB RAMP CONSTRUCTION DETAIL FOR GRADES AND PAY ITEMS ASSOCIATED WITH CURB RAMP TYPE A.
2. DRILLED DOWEL BARS PLACED PER STANDARD DETAIL DRAWING, URBAN DOWELED CONCRETE PAVEMENT.
3. DRILLED TIE BARS PLACED PER SDD, CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES.
4. DRIVEWAY MATERIAL CALL-OUT REFERS TO THE EXISTING DRIVEWAY MATERIAL (SEE CONSTRUCTION DETAILS - DRIVEWAY FOR FINISHED DRIVEWAY MATERIAL)
5. SEE INTERSECTION JOINTING DETAIL AND APPROPRIATE SDD FOR GRADES AND PAY ITEMS ASSOCIATED WITH CURB RAMPS TYPE 2 AND 3 AND CURB RAMPS TYPES 5, 6, 7A, 7B AND 8.

PROJECT NO: 2704-00-73	HWY: OHIO STREET	COUNTY: RACINE	PLAN: PAVEMENT LAYOUT DETAIL	SHEET	E

FILE NAME : P:\R0140060_RACINE - OHIO STREET DESIGN\C3D\SHEETSPLAN\270400003_021201_PD.DWG
PLOT DATE : 2/3/2014 2:53 PM
PLOT BY : KEVIN K. RISCH
PLOT NAME :
PLOT SCALE : 1:40_XREF
WISDOT/CADDS SHEET 42

LEGEND - PAVING DETAIL

(A)	CONCRETE CURB RAMP TYPE A (SEE CONSTRUCTION DETAILS)
(2)	CONCRETE CURB RAMP TYPE 2
(3M)	CONCRETE CURB RAMP TYPE 3 (MODIFIED)
(3)	CONCRETE CURB RAMP TYPE 3
(5)	CONCRETE CURB RAMP TYPE 5 MEDIAN ISLAND
(7B)	CONCRETE CURB RAMP TYPE 7B
CMSN	CONCRETE MEDIAN SLOPED NOSE (SEE CONSTRUCTION DETAIL - MEDIAN NOSE)
CCG-18	CONCRETE CURB AND GUTTER 18-INCH TYPE A
CCGI-30	CONCRETE CURB AND GUTTER INTEGRAL 30-INCH
CCG-30	CONCRETE CURB AND GUTTER 30-INCH
	CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA

R5.00 R5.00 8.66' 2.00'

N

MATCH LINE STA 49+00.00

STA 200+15.00 · SAWCUT AND MATCH EXISTING

DRILLED DOWEL BARS REQ'D SEE NOTE 2

CCG-30, TYPE A

℄ STA 52+11.24 OHIO STREET
℄ STA 201+20.06 WRIGHT AVENUE (WEST)

CCG-30, TYPE A

STA 49+80, LT CONSTRUCT C.E. (ASPHALT)

STA 50+02, LT CONSTRUCT C.E. (ASPHALT)

STA 51+68.22, 54.5' LT Y=181609.52 X=625652.77

STA 52+59.91, 54.5' LT Y=181700.73 X=625651.66

STA 53+68, LT CONSTRUCT C.E. (ASPHALT)

STA 49+26.72, 48.0' LT Y=181368.07 X=625661.08

CONCRETE SIDEWALK 4-INCH (SEE REMOVAL LIMITS)

STA 51+54.03, 63.0' LT Y=181595.27 X=625644.37

CCGI-30, TYPE D 2% GUTTER FLAG SLOPE

STA 52+74.19, 53.0' LT Y=181715.03 X=625652.93

CONCRETE SIDEWALK 4-INCH TYP. EXCEPT AT DRIVEWAYS (SEE REMOVAL LIMITS AND DRIVEWAY DETAIL)

CONCRETE SIDEWALK 6-INCH COLORED AND STAMPED

R=45.0' R=22.5' R=60.0' R=22.5' R=60.0'

2% CROSS SLOPE GUTTER FLAG

+39.98 7.00 LT +73.02 5.49 LT +26.72 3.00 LT +76.59 7.00 LT +68.22 32.00 LT +50.15 7.00 LT +62.69 5.68 LT +59.91 32.00 LT

CCGI-30, TYPE J REVERSE SLOPE GUTTER

50' STORAGE 50+00 51+00 52+00 179°30'11" 92°35'48" 90°21'27" 201 202 250 53+00 100' STORAGE 54+00 8:1 TAPER 8:1 TAPER

℄ OHIO STREET

+57.63 3.57 RT +65.88 3.00 RT +69.35 3.00 RT +49.35 7.00 LT +96.75 2.95 LT

+69.01 1.82 LT +72.30 7.00 RT +24.66 7.00 RT +04.66 3.00 LT +54.03 3.00 LT CMSN TYPE 3 +70.48 7.00 RT +16.75 7.00 RT

CMSN TYPE 2

+65.46 40.00 RT

+54.27 40.00 RT

R=60.0' R=21.5' R=60.0' R=21.5'

CCG-30, TYPE A

STA 51+50.15, 53.0' RT Y=181592.26 X=625760.40

STA 51+65.46, 61.5' RT Y=181607.64 X=625768.78

STA 52+09.98 OHIO STREET = STA 240+82.00 WRIGHT AVENUE (EAST)

STA 52+69.59, 63.0' RT Y=181712.31 X=625768.98

STA 52+54.27, 61.5' RT Y=181696.97 X=625767.73

CONCRETE SIDEWALK 4-INCH TYP. EXCEPT AT DRIVEWAYS (SEE REMOVAL LIMITS AND DRIVEWAY DETAIL)

STA 49+28, RT CONSTRUCT P.E. (CONCRETE)

STA 49+70, RT CONSTRUCT P.E. (CONCRETE)

STA 50+12, RT CONSTRUCT P.E. (CONCRETE)

STA 50+94, RT CONSTRUCT P.E. (CONCRETE)

STA 53+53, RT CONSTRUCT P.E. (CONCRETE)

STA 53+94, RT CONSTRUCT P.E. (CONCRETE)

STA 55+72, RT CONSTRUCT P.E. (CONCRETE)

STA 53+13, RT CONSTRUCT P.E. (CONCRETE)

STA 200+90.07 SAWCUT AND MATCH EXISTING

DRILLED DOWEL BARS REQ'D SEE NOTE 2

WRIGHT AVE.

MATCH LINE STA 55+00.00

NOTES:

1. SEE CURB RAMP CONSTRUCTION DETAIL FOR GRADES AND PAY ITEMS ASSOCIATED WITH CURB RAMP TYPE A.
2. DRILLED DOWEL BARS PLACED PER STANDARD DETAIL DRAWING, URBAN DOWELED CONCRETE PAVEMENT.
3. DRILLED TIE BARS PLACED PER SDD, CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES.
4. DRIVEWAY MATERIAL CALL-OUT REFERS TO THE EXISTING DRIVEWAY MATERIAL (SEE CONSTRUCTION DETAILS - DRIVEWAY FOR FINISHED DRIVEWAY MATERIAL)
5. SEE INTERSECTION JOINTING DETAIL AND APPROPRIATE SDD FOR GRADES AND PAY ITEMS ASSOCIATED WITH CURB RAMPS TYPE 2 AND 3 AND CURB RAMPS TYPES 5, 6, 7A, 7B AND 8.

PROJECT NO: 2704-00-73	HWY: OHIO STREET	COUNTY: RACINE	PLAN: PAVEMENT LAYOUT DETAIL	SHEET 15 E

LEGEND - PAVING DETAIL

(A)	CONCRETE CURB RAMP TYPE A (SEE CONSTRUCTION DETAILS)
(2)	CONCRETE CURB RAMP TYPE 2
(3M)	CONCRETE CURB RAMP TYPE 3 (MODIFIED)
(3)	CONCRETE CURB RAMP TYPE 3
(5)	CONCRETE CURB RAMP TYPE 5 MEDIAN ISLAND
(7B)	CONCRETE CURB RAMP TYPE 7B
CMSN	CONCRETE MEDIAN SLOPED NOSE (SEE CONSTRUCTION DETAIL - MEDIAN NOSE)
CCG-18	CONCRETE CURB AND GUTTER 18-INCH TYPE A
CCGI-30	CONCRETE CURB AND GUTTER INTEGRAL 30-INCH
CCG-30	CONCRETE CURB AND GUTTER 30-INCH
DET	CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA

N

MATCH LINE STA 55+00.00

STA 55+46.75, 62.9' LT
Y=181987.39
X=625638.57

STA 56+07, LT
CONSTRUCT P.E.
(ASPHALT)

STA 56+66.72, 53.0' LT
Y=182107.51
X=625646.57

R=60.0'

CMSN TYPE 2

+62.31
7.00 LT

+46.75
2.95 LT

50' STORAGE

56+00

+40.59
1.00 LT

+66.75
7.00 LT

CMSN TYPE 1

+66.75
7.00 RT

57+00

CCGI-30, TYPE J
REVERSE SLOPE GUTTER

℄ OHIO STREET

CCGI-30, TYPE D
2% GUTTER FLAG SLOPE

CONCRETE SIDEWALK 6-INCH
COLORED AND STAMPED

+96.34
7.00 LT

+96.34
7.00 RT

+22.49
1.00 RT

58+00

CMSN TYPE 1

CONCRETE SIDEWALK 4-INCH TYP. EXCEPT
AT DRIVEWAYS (SEE REMOVAL LIMITS AND
DRIVEWAY DETAIL)

℄ STA 58+56.85 OHIO STREET=
℄ STA 99+82.00 13TH STREET

7B

7B

CMSN TYPE 2

59+00

+16.25
3.00 RT

+00.89
7.00 RT

90°32'38"

100

+23.30
40.00 RT

+89.31
40.00 RT

R=60.0'

2

2

100' STORAGE

60+00

+08.89
3.00 RT

12.5:1 TAPER

STA 60+13, LT
CONSTRUCT C.E.
(ASPHALT)

MATCH LINE STA 61+00.00

CCG-30, TYPE A

CONCRETE SIDEWALK 4-INCH
(SEE REMOVAL LIMITS)

CONCRETE SIDEWALK 6-INCH
(SEE REMOVAL LIMITS)

STA 56+66.75, 53.0' RT
Y=182109.25
X=625752.56

STA 57+96.34, 53.0' RT
Y=182238.83
X=625750.46

STA 58+23.30, 57.0' RT
Y=182265.85
X=625754.02

DRILLED DOWEL
BARS REQ'D
SEE NOTE 2

13TH ST.

101

STA 59+16.25, 63.0' RT
Y=182358.89
X=625758.52

STA 58+89.31, 57.0' RT
Y=182331.85
X=625752.96

STA 100+60.09
SAWCUT AND
MATCH EXISTING

STA 55+21, RT
CONSTRUCT P.E.
(CONCRETE)

STA 56+16, RT
CONSTRUCT P.E.
(GRAVEL)

STA 56+30, RT
CONSTRUCT P.E.
(GRAVEL)

STA 56+70, RT
CONSTRUCT P.E.
(CONCRETE)

STA 57+13, RT
CONSTRUCT P.E.
(CONCRETE)

STA 57+77, RT
CONSTRUCT P.E.
(CONCRETE)

STA 59+50, RT
CONSTRUCT P.E.
(CONCRETE)

STA 59+86, RT
CONSTRUCT P.E.
(CONCRETE)

STA 60+12, RT
CONSTRUCT P.E.
(CONCRETE)

STA 60+71, RT
CONSTRUCT P.E.
(CONCRETE)

NOTES:

1. SEE CURB RAMP CONSTRUCTION DETAIL FOR GRADES AND PAY ITEMS ASSOCIATED WITH CURB RAMP TYPE A.
2. DRILLED DOWEL BARS PLACED PER STANDARD DETAIL DRAWING, URBAN DOWELED CONCRETE PAVEMENT.
3. DRILLED TIE BARS PLACED PER SDD, CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES.
4. DRIVEWAY MATERIAL CALL-OUT REFERS TO THE EXISTING DRIVEWAY MATERIAL (SEE CONSTRUCTION DETAILS - DRIVEWAY FOR FINISHED DRIVEWAY MATERIAL)
5. SEE INTERSECTION JOINTING DETAIL AND APPROPRIATE SDD FOR GRADES AND PAY ITEMS ASSOCIATED WITH CURB RAMPS TYPE 2 AND 3 AND CURB RAMPS TYPES 5, 6, 7A, 7B AND 8.

PROJECT NO: 2704-00-73	HWY: OHIO STREET	COUNTY: RACINE	PLAN: PAVEMENT LAYOUT DETAIL	SHEET	E

FILE NAME : P:\R0140060_RACINE - OHIO STREET DESIGN\C3D\SHEETSPLAN\270400003_021201_PD.DWG PLOT DATE : 2/3/2014 2:53 PM PLOT BY : KEVIN K. RISCH PLOT NAME : PLOT SCALE : 1:40_XREF
WISDOT/CADDS SHEET 42

LEGEND - PAVING DETAIL

(A)	CONCRETE CURB RAMP TYPE A (SEE CONSTRUCTION DETAILS)
(2)	CONCRETE CURB RAMP TYPE 2
(3M)	CONCRETE CURB RAMP TYPE 3 (MODIFIED)
(3)	CONCRETE CURB RAMP TYPE 3
(5)	CONCRETE CURB RAMP TYPE 5 MEDIAN ISLAND
(7B)	CONCRETE CURB RAMP TYPE 7B
CMSN	CONCRETE MEDIAN SLOPED NOSE (SEE CONSTRUCTION DETAIL - MEDIAN NOSE)
CCG-18	CONCRETE CURB AND GUTTER 18-INCH TYPE A
CCGI-30	CONCRETE CURB AND GUTTER INTEGRAL 30-INCH
CCG-30	CONCRETE CURB AND GUTTER 30-INCH
▮▮▮	CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA

N

MATCH LINE STA 61+00.00

CCGI-30, TYPE D
2% GUTTER FLAG SLOPE

CCGI-30, TYPE J
REVERSE SLOPE GUTTER

CONCRETE SIDEWALK 6-INCH
COLORED AND STAMPED

CONCRETE SIDEWALK 4-INCH
(SEE REMOVAL LIMITS)

STA 63+50.00

END CONSTRUCTION
STA 64+08.41

END PROJECT
STA 65+50

CTST

+33.89
7.00 LT

℄ OHIO STREET

+36.58
7.00 LT

+50.00
3.58 LT

2% REVERSE
SLOPE GUTTER

+08.41
0.79 LT

MATCH EX. GUTTER
SLOPE AND ELEVATION

61+00

62+00

63+00

64+00

65+00

65+50

+50.00
9.00 RT

+08.41
9.00 RT

CCG-30, TYPE J

DRILLED TIE BARS REQ'D
SEE NOTE 3

MATCH EXISTING
BOC ELEVATION

DRILLED DOWEL
BARS REQ'D
SEE NOTE 2

+17.50

STA 62+65, RT
CONSTRUCT C.E.
(ASPHALT)

CONCRETE SIDEWALK 4-INCH TYP. EXCEPT
AT DRIVEWAYS (SEE REMOVAL LIMITS AND
DRIVEWAY DETAIL)

STA 61+16, RT
CONSTRUCT P.E.
(CONCRETE)

STA 61+73, RT
CONSTRUCT P.E.
(GRAVEL)

STA 62+51, RT
CONSTRUCT C.E.
(ASPHALT)

WASHINGTON AVE (STH 20)

NOTES:

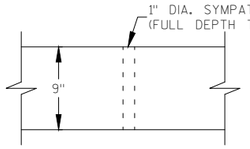
1. SEE CURB RAMP CONSTRUCTION DETAIL FOR GRADES AND PAY ITEMS ASSOCIATED WITH CURB RAMP TYPE A.
2. DRILLED DOWEL BARS PLACED PER STANDARD DETAIL DRAWING, URBAN DOWELED CONCRETE PAVEMENT.
3. DRILLED TIE BARS PLACED PER SDD, CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES.
4. DRIVEWAY MATERIAL CALL-OUT REFERS TO THE EXISTING DRIVEWAY MATERIAL (SEE CONSTRUCTION DETAILS - DRIVEWAY FOR FINISHED DRIVEWAY MATERIAL)
5. SEE INTERSECTION JOINTING DETAIL AND APPROPRIATE SDD FOR GRADES AND PAY ITEMS ASSOCIATED WITH CURB RAMPS TYPE 2 AND 3 AND CURB RAMPS TYPES 5, 6, 7A, 7B AND 8.

PROJECT NO: 2704-00-73	HWY: OHIO STREET	COUNTY: RACINE	PLAN: PAVEMENT LAYOUT DETAIL	SHEET	E

FILE NAME : P:\R0140060_RACINE - OHIO STREET DESIGN\C3D\SHEETSPLAN\270400003_021201_PD.DWG PLOT DATE : 2/3/2014 2:53 PM PLOT BY : KEVIN K. RISCH PLOT NAME : PLOT SCALE : 1:40_XREF
WISDOT/CADDS SHEET 42

2

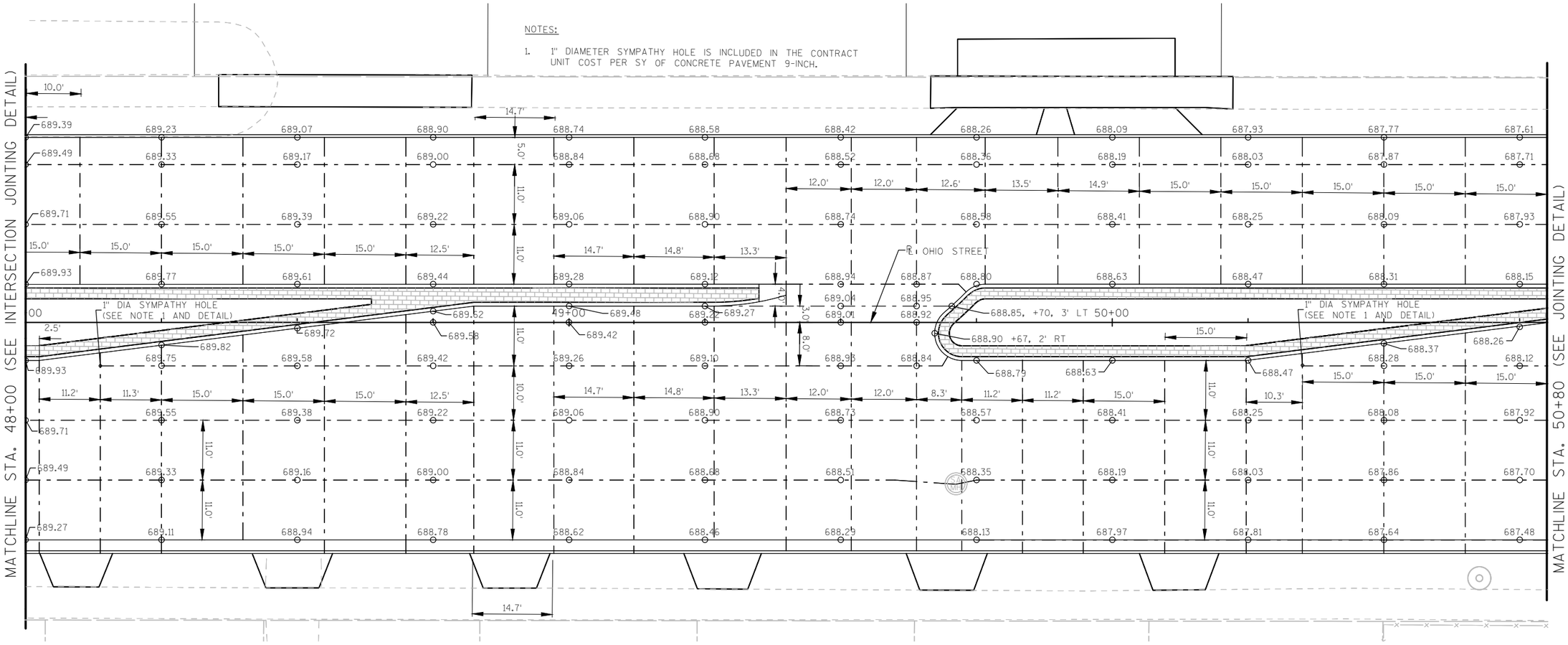
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SYMPATHY HOLE DETAIL

NOTES:

1. 1" DIAMETER SYMPATHY HOLE IS INCLUDED IN THE CONTRACT UNIT COST PER SY OF CONCRETE PAVEMENT 9-INCH.

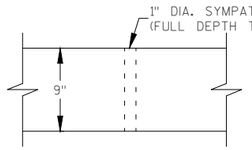


PROJECT NO: 2704-00-73	HWY: OHIO STREET	COUNTY: RACINE	PLAN: JOINTING DETAIL	SHEET	E

FILE NAME : P:\R0140060_RACINE - OHIO STREET DESIGN\C3D\SHEETSPLAN\270400003_021301_JD.DWG PLOT DATE : 11/26/2013 7:35 AM PLOT BY : KEVIN K. RISCH PLOT NAME : PLOT SCALE : 1" = 20'_XREF
WISDOT/CADDS SHEET 42

2

N



SYMPATHY HOLE DETAIL

NOTES:

1. 1" DIAMETER SYMPATHY HOLE IS INCLUDED IN THE CONTRACT UNIT COST PER SY OF CONCRETE PAVEMENT 9-INCH.

EX. EOP

1" DIA SYMPATHY HOLE

STA. 44+55.73

EX. LONGITUDINAL JOINTS

MATCH EXISTING JOINT LOCATIONS
STA 43+54.35 TO STA 44+53.73

EX. LONGITUDINAL JOINTS

MATCH EX CROSS SLOPE

+37.02
4.13 LT

1" DIA SYMPATHY HOLE
(SEE NOTE 1 AND DETAIL)

R OHIO STREET

44+00 45+00 46+00

MATCHLINE STA. 46+80 (SEE INTERSECTION JOINTING DETAIL)

MATCH EXISTING JOINT LOCATIONS
STA 43+54.35 TO STA 44+53.73

MATCH EX CROSS SLOPE

EX. LONGITUDINAL JOINTS

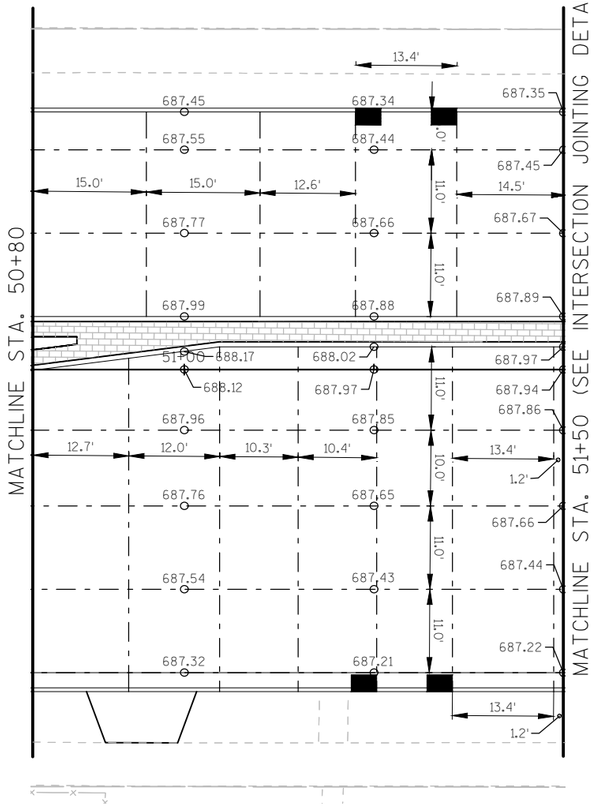
MATCH EX CROSS SLOPE

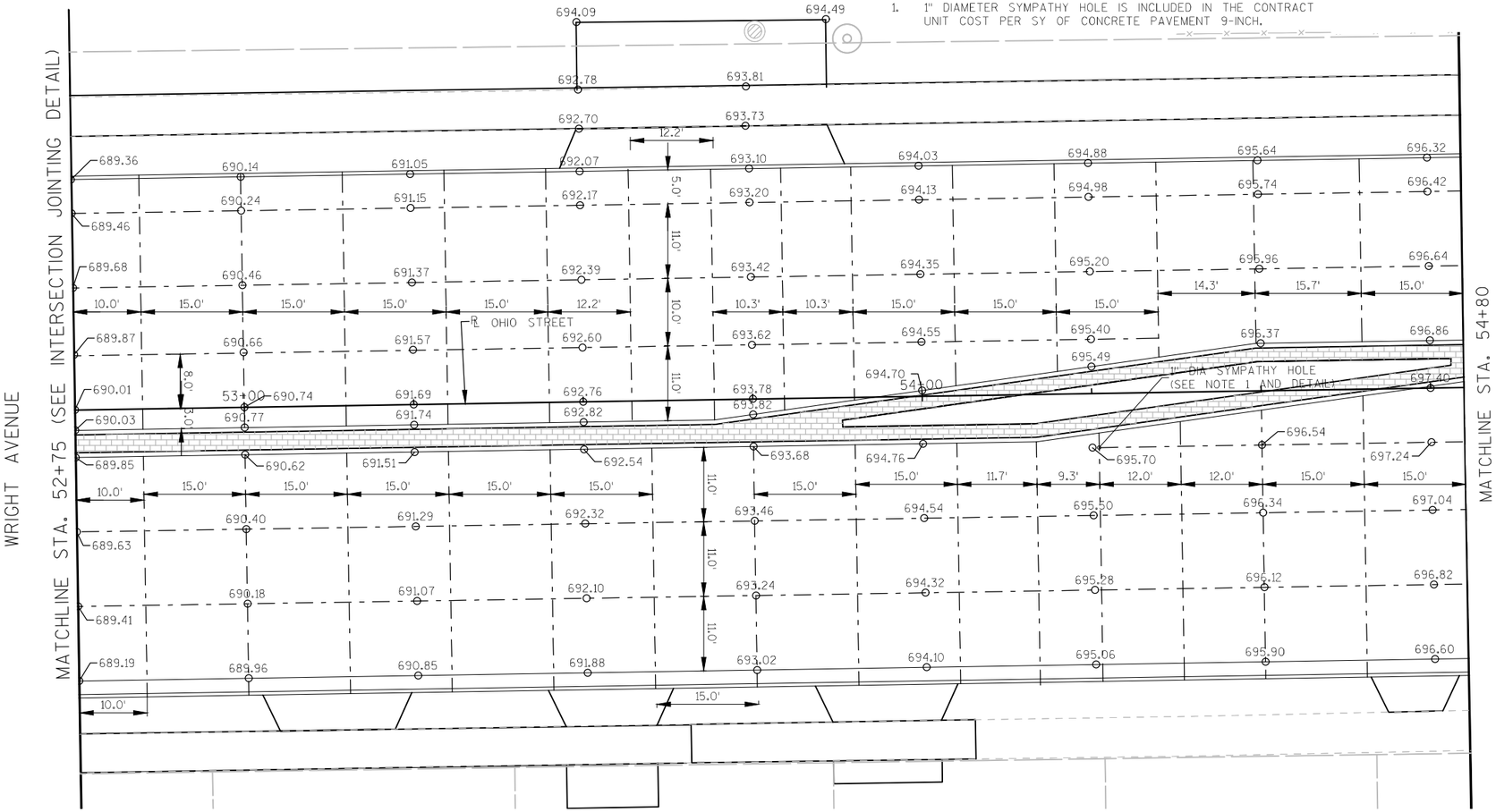
6' SW

690.57
MATCH

690.65
MATCH

PROJECT NO: 2704-00-73	HWY: OHIO STREET	COUNTY: RACINE	PLAN: JOINTING DETAIL	SHEET 19	E





1" DIA. SYMPATHY HOLE
(FULL DEPTH TYP.)

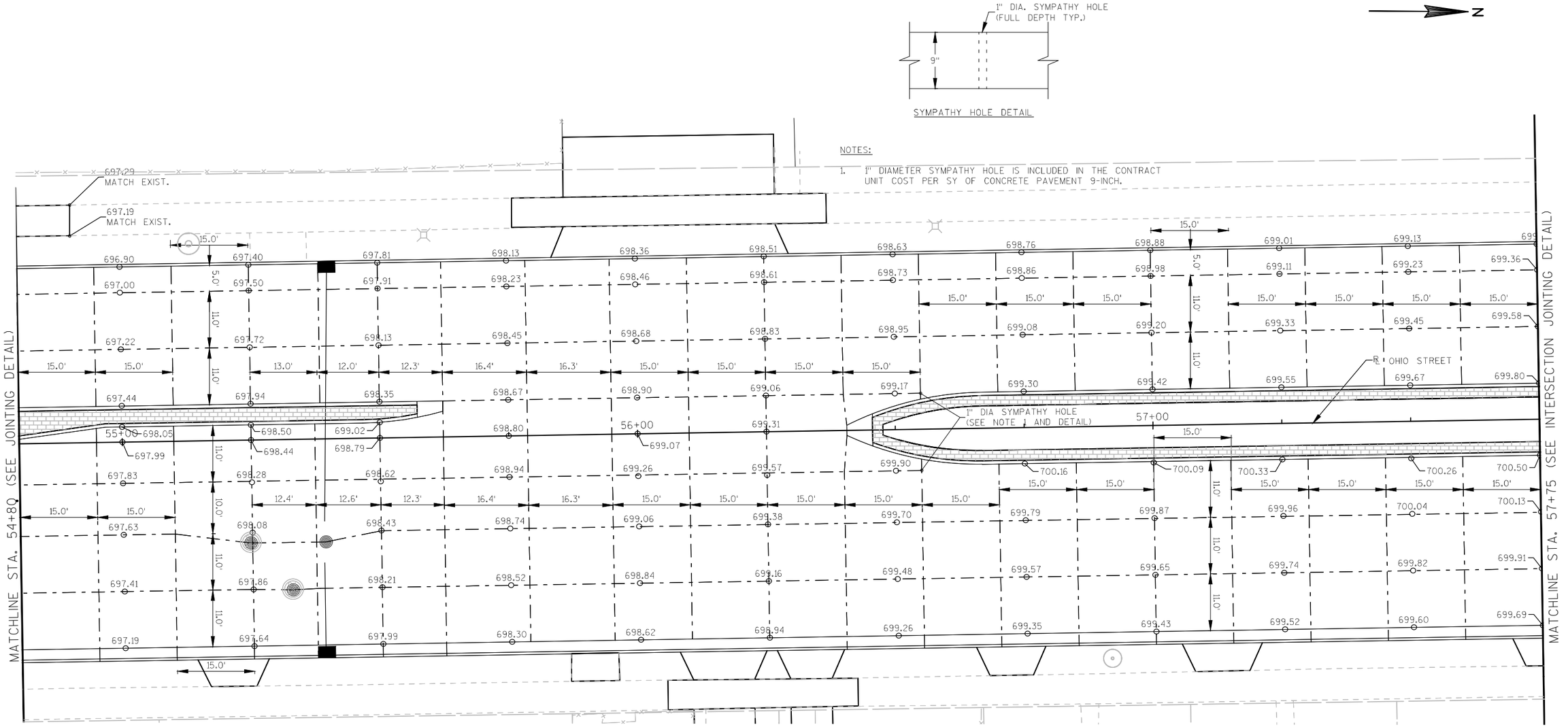
9"

SYMPATHY HOLE DETAIL

NOTES:

1. 1" DIAMETER SYMPATHY HOLE IS INCLUDED IN THE CONTRACT UNIT COST PER SY OF CONCRETE PAVEMENT 9-INCH.

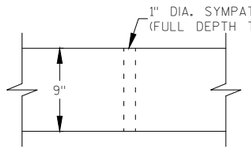
PROJECT NO: 2704-00-73	HWY: OHIO STREET	COUNTY: RACINE	PLAN: JOINTING DETAIL	SHEET 20	E



PROJECT NO: 2704-00-73	HWY: OHIO STREET	COUNTY: RACINE	PLAN: JOINTING DETAIL	SHEET 21	E

2

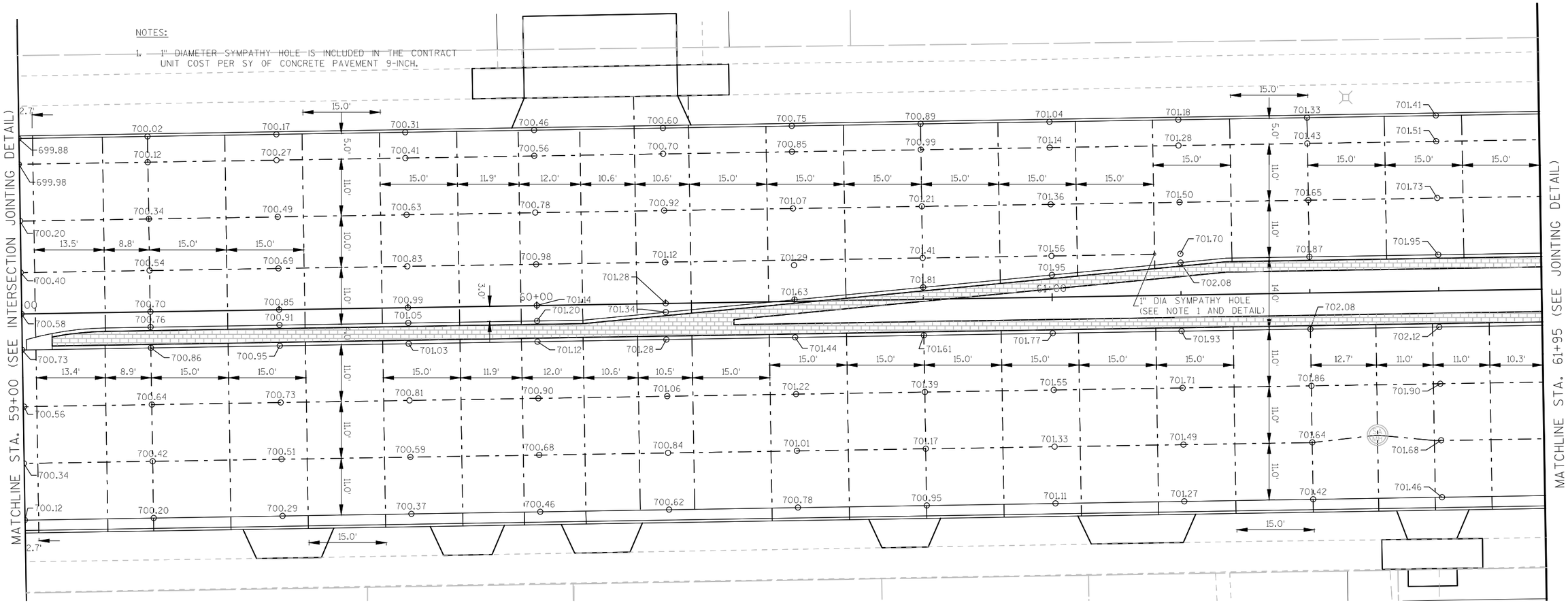
N



SYMPATHY HOLE DETAIL

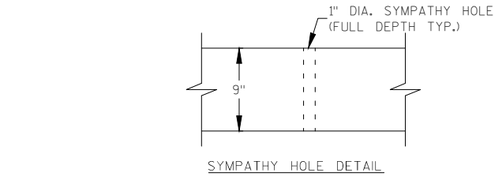
NOTES:

1. 1" DIAMETER SYMPATHY HOLE IS INCLUDED IN THE CONTRACT UNIT COST PER SY OF CONCRETE PAVEMENT 9-INCH.



PROJECT NO: 2704-00-73	HWY: OHIO STREET	COUNTY: RACINE	PLAN: JOINTING DETAIL	SHEET 22	E

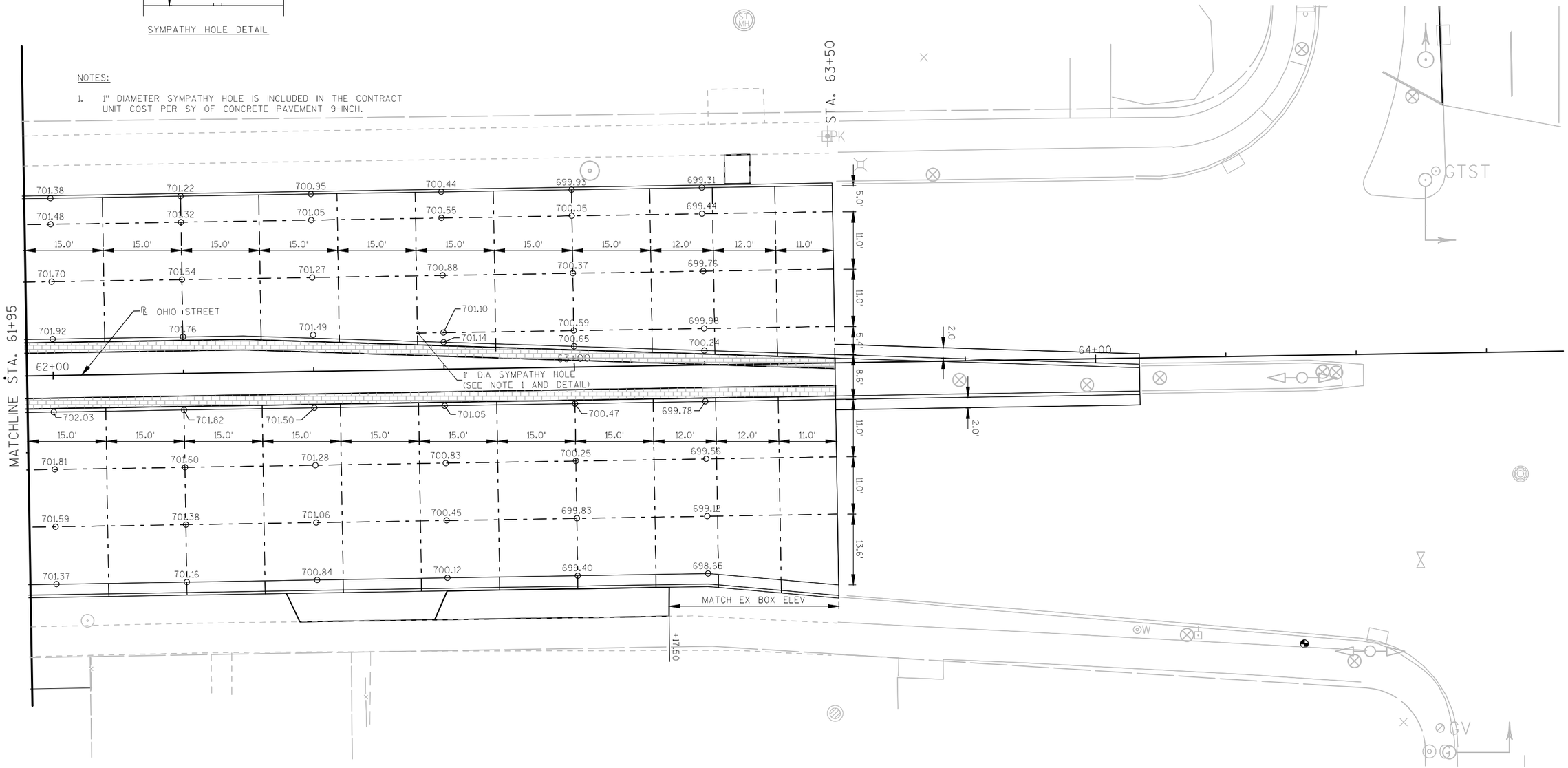
2



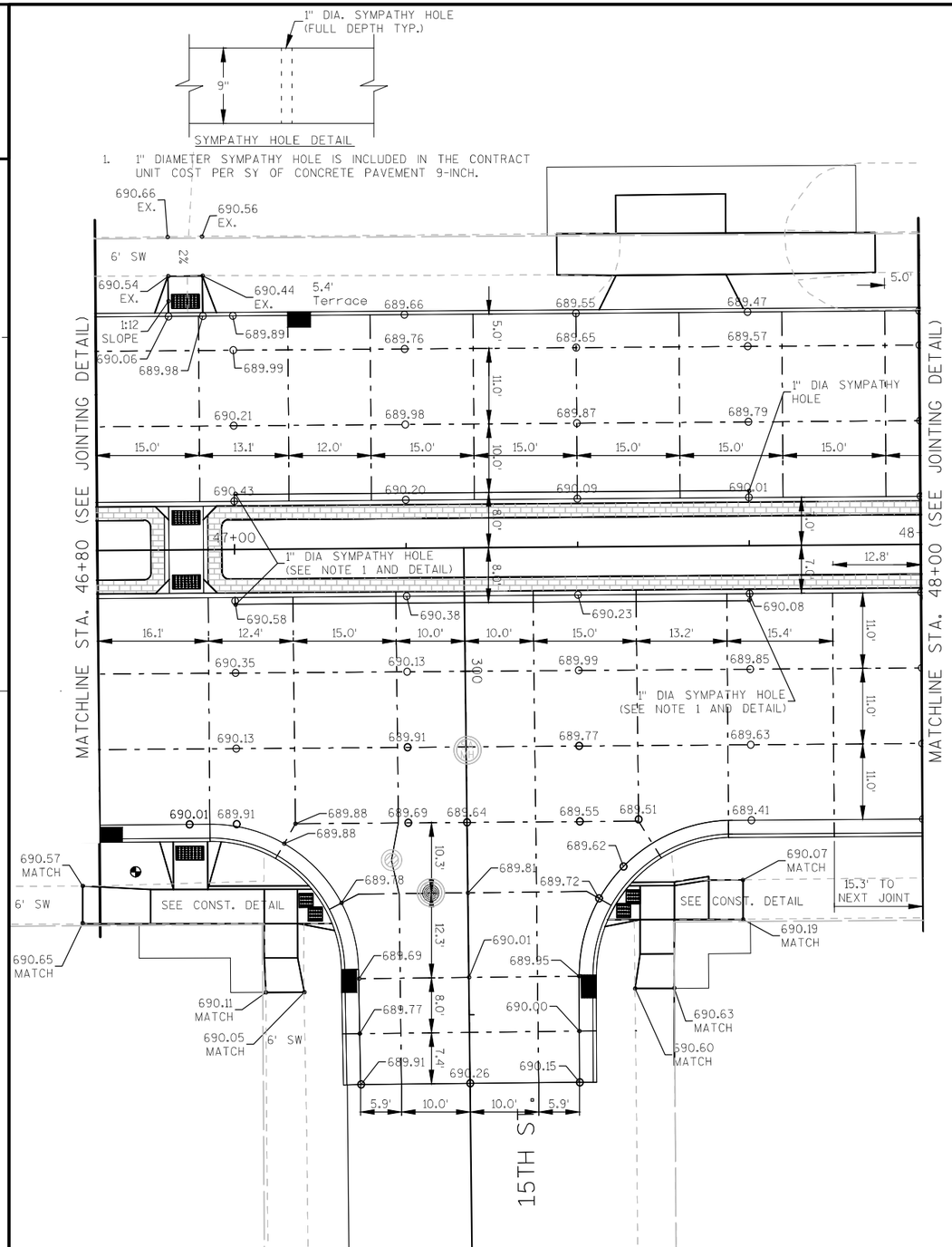
SYMPATHY HOLE DETAIL

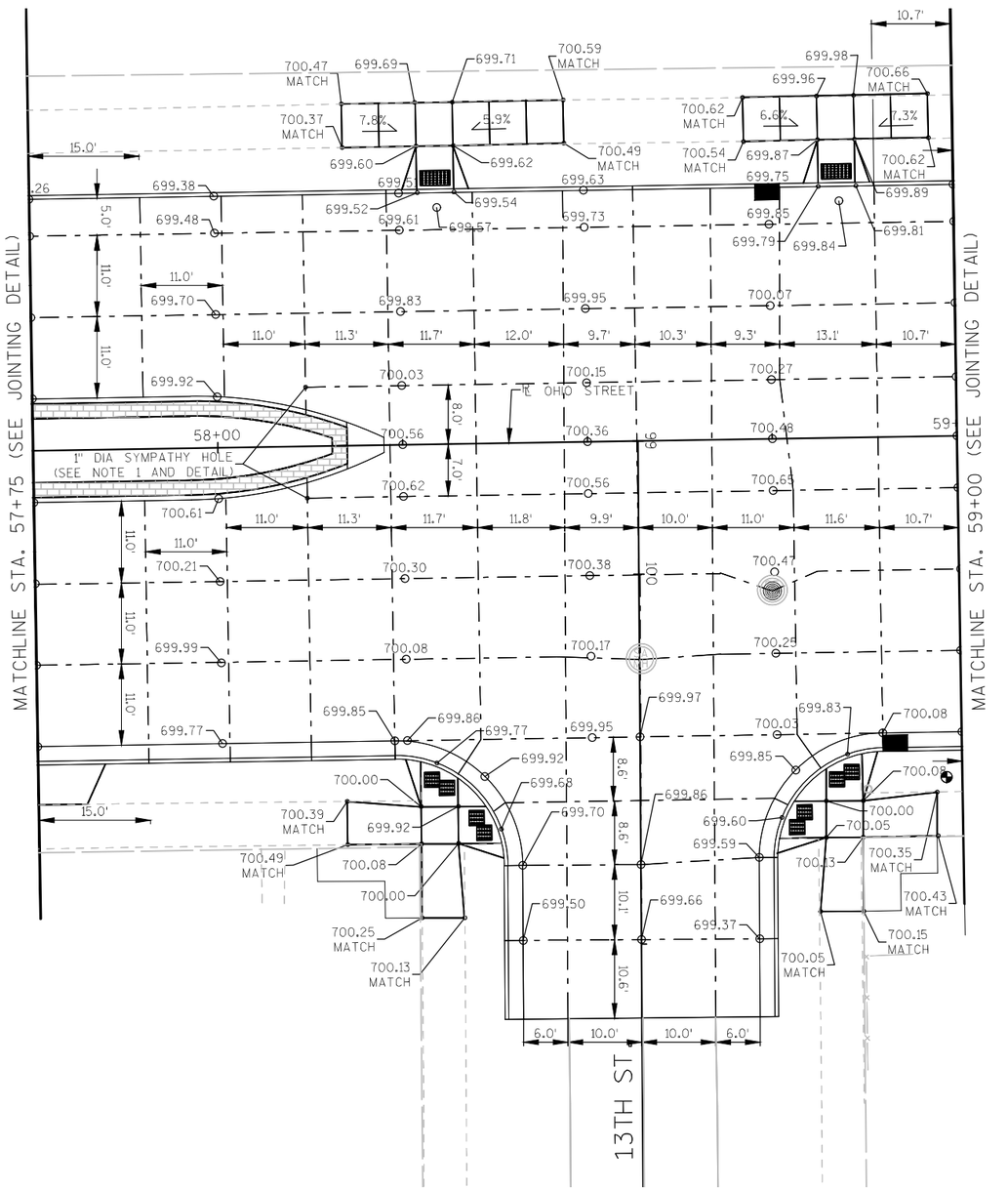
NOTES:

1. 1" DIAMETER SYMPATHY HOLE IS INCLUDED IN THE CONTRACT UNIT COST PER SY OF CONCRETE PAVEMENT 9-INCH.



PROJECT NO: 2704-00-73	HWY: OHIO STREET	COUNTY: RACINE	PLAN: JOINTING DETAIL	SHEET 23	E

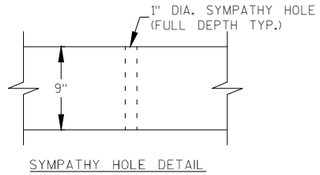




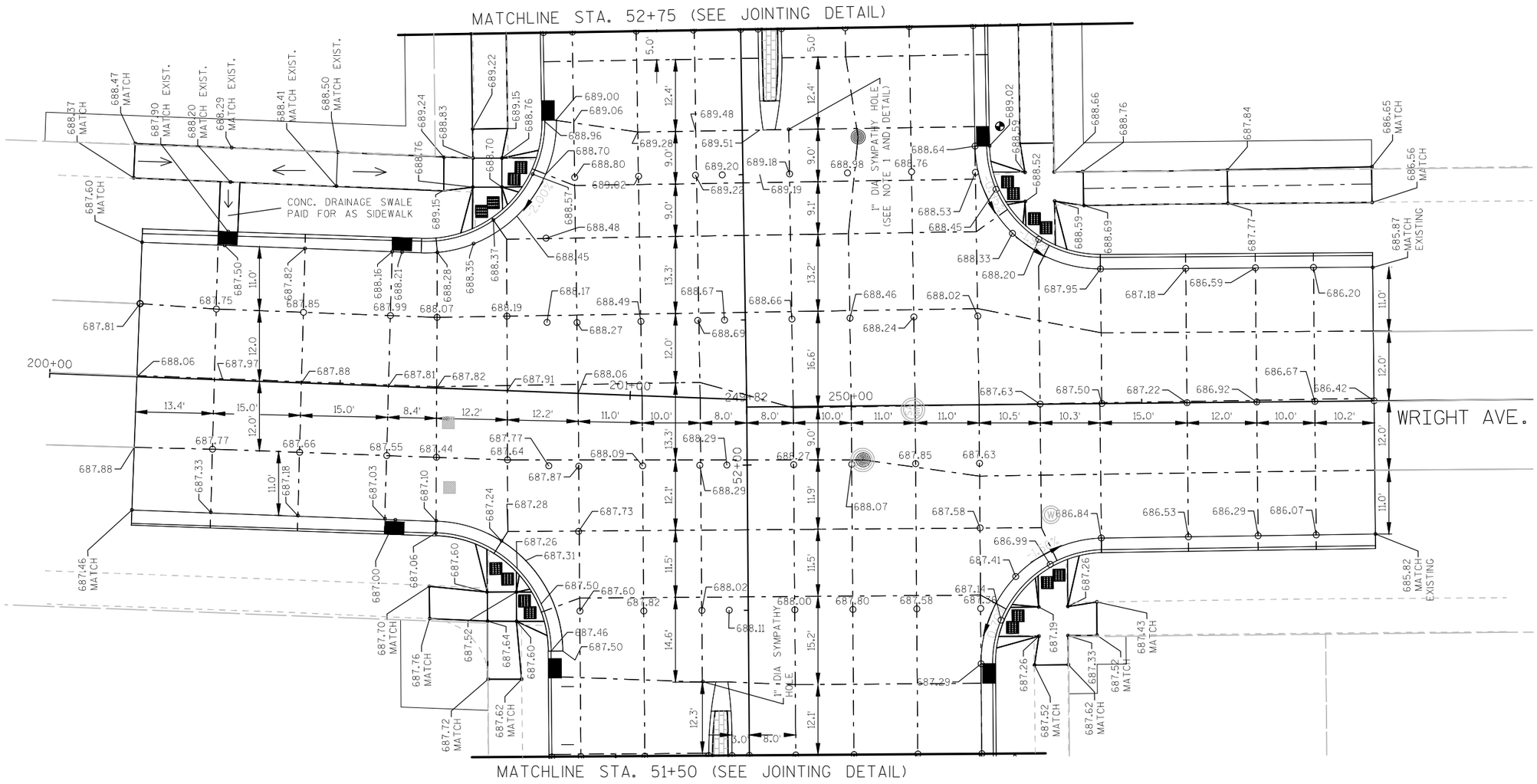
PROJECT NO: 2704-00-73	HWY: OHIO STREET	COUNTY: RACINE	PLAN: INTERSECTION JOINTING DETAIL	SHEET 24	E

NOTES:

1. 1" DIAMETER SYMPATHY HOLE IS INCLUDED IN THE CONTRACT UNIT COST PER SY OF CONCRETE PAVEMENT 9-INCH.



SYMPATHY HOLE DETAIL



PROJECT NO: 2704-00-73	HWY: OHIO STREET	COUNTY: RACINE	PLAN: INTERSECTION JOINTING DETAIL	SHEET	E

FILE NAME : P:\R0140060_RACINE - OHIO STREET DESIGN\C3D\SHEETSPLAN\270400003_021301_JD.DWG PLOT DATE : 11/30/2013 11:51 AM PLOT BY : KEVIN K. RISCH PLOT NAME : PLOT SCALE : ********** WISDOT/CADDS SHEET 42

2

PLACE 3 TYPE C INLET PROTECTION ON THE WEST LEG OF 16TH STREET

BEGIN CONSTRUCTION STA 43+54.35

STA 44+55.73

SILT FENCE 229 LF

SLOPE INTERCEPT +77.88 -46.39

EXISTING R/W

TYPE C EXISTING INLET

TYPE A AND C NEW INLET

PROP. TLE

+85.71 -45.76

N

℄ OHIO STREET

44 45 46 47 48 49

300

TYPE A AND C NEW INLET

TYPE B MANHOLE

TYPE C EXISTING INLET

LEGEND - EROSION CONTROL

MEDIAN PRAIRIE PLANTINGS (SEE LANDSCAPING DETAIL)

TEMPORARY SEEDING

INLET PROTECTION
TYPE A PRIOR TO PLACEMENT OF CURB BOX
TYPE B WITH STRUCTURES WITHOUT CURB BOX
TYPE C OR D AFTER PLACEMENT OF CURB BOX

SURFACE WATER FLOW (RUNOFF COEFFICIENT = 0.68 BEFORE & AFTER)

SLOPE INTERCEPT

SILT FENCE

SLOPE INTERCEPT

EXISTING R/W

PROP. TLE

TYPE C EXISTING INLET

TYPE A AND D NEW INLET

15TH ST.

PROP. TLE

TYPE A AND D NEW INLET

TYPE A AND D NEW INLET

TYPE A AND D NEW INLET

TYPE D EXISTING INLET

TYPE A AND D NEW INLET

R/W EASEMENT

PROP. TLE

EXISTING R/W

SLOPE INTERCEPT

SILT FENCE 86 LF

PROP. TLE +71.55 -45.68

+11.55 -45.83

SILT FENCE 168 LF

SLOPE INTERCEPT

TYPE A AND D NEW INLET

TYPE A AND D NEW INLET +73.80 -59.88

+58.10 -44.94

TYPE A AND D NEW INLET

TYPE D EXISTING INLET

TYPE A AND D NEW INLET

TYPE D EXISTING INLET

201

TYPE D EXISTING INLET

TYPE A AND C NEW INLET

TYPE B NEW MANHOLE

℄ OHIO STREET

50 51 52 53 54

249

250

TYPE B MANHOLE

TYPE A AND D NEW INLET

TYPE A AND D NEW INLET

TYPE A AND D NEW INLET

TYPE D EXISTING INLET

TYPE A AND D NEW INLET

SLOPE INTERCEPT

EXISTING R/W

TYPE D EXISTING INLET

TYPE D EXISTING INLET

PROP. TLE

WRIGHT AVE.

PROP. TLE

SLOPE INTERCEPT

PROP. TLE

PROJECT NO: 2704-00-73	HWY: OHIO STREET	COUNTY: RACINE	PLAN: EROSION CONTROL DETAIL	SHEET 26	E

FILE NAME : P:\R0140060_RACINE - OHIO STREET DESIGN\C3D\SHEETSPLAN\270400003_022001_EC.DWG PLOT DATE : 12/2/2013 7:21 AM PLOT BY : KEVIN K. RISCH PLOT NAME : PLOT SCALE : 1" = 40'_XREF

LEGEND - EROSION CONTROL

MEDIAN PRAIRIE PLANTINGS (SEE LANDSCAPING DETAIL)

TEMPORARY SEEDING

INLET PROTECTION
TYPE A PRIOR TO PLACEMENT OF CURB BOX
TYPE B WITH STRUCTURES WITHOUT CURB BOX
TYPE C OR D AFTER PLACEMENT OF CURB BOX

SURFACE WATER FLOW (RUNOFF COEFFICIENT = 0.68 BEFORE & AFTER)

SLOPE INTERCEPT

SILT FENCE

PROP. TLE

TYPE C EXISTING INLET

TYPE A AND C NEW INLET

EXISTING R/W

SLOPE INTERCEPT

TYPE A AND C NEW INLET

TYPE C EXISTING INLET

R/W EASEMENT

PROP. TLE

℄ OHIO STREET

56

57

58

59

60

TYPE B EXISTING MANHOLE

TYPE B NEW MANHOLE

TYPE B MANHOLE

TYPE A AND C NEW INLET

TYPE A AND C EXISTING AND NEW INLET

EXISTING R/W

SLOPE INTERCEPT

PROP. TLE

66

100

13TH ST.

TYPE C EXISTING INLET

PROP. TLE

TYPE B MANHOLE

R/W EASEMENT

SLOPE INTERCEPT

EXISTING R/W

STA 63+50.00

TYPE C EXISTING INLET

END CONSTRUCTION STA 64+08.41

61

62

63

64

65

66

℄ OHIO STREET

WASHINGTON AVE (STH 20)

END PROJECT STA 65+50.00

PROP. TLE

SLOPE INTERCEPT

EXISTING R/W

PROJECT NO: 2704-00-73	HWY: OHIO STREET	COUNTY: RACINE	PLAN: EROSION CONTROL DETAIL	SHEET 27	E

FILE NAME : P:\R0140060_RACINE - OHIO STREET DESIGN\C3D\SHEETSPLAN\270400003_022001_EC.DWG PLOT DATE : 11/26/2013 7:37 AM PLOT BY : KEVIN K. RISCH PLOT NAME : PLOT SCALE : 1" = 40'_XREF

BEGIN CONSTRUCTION
STA 43+54.35

STA 44+55.73

SLOPE INTERCEPT

℄ OHIO STREET

30 EA - GLS
3' C-C

6 EA
RR
4 C-C

2'
42'
12'

MATCH LINE STA 49+00.00

SLOPE INTERCEPT

15TH ST.

SLOPE INTERCEPT

MATCH LINE STA 49+00.00

℄ OHIO STREET

WRIGHT AVE.

SLOPE INTERCEPT

MATCH LINE STA 55+00.00

LEGEND - LANDSCAPING PLAN DETAILS

- LITTLE BLUE STEM
- 6" TOPSOIL AND SOD
- GLS - SUMAC, GRO-LOW
- PCF - PURPLE CONEFLOWER
- DL - DAYLILY, YELLOW
- AJ - AUTUMN JOY
- RR - RUGOSA ROSE, PURPLE PAVEMENT
- * 6" TOPSOIL AND SHREDDED BARK MULCH

PROJECT NO: 2704-00-73	HWY: OHIO STREET	COUNTY: RACINE	PLAN: LANDSCAPING DETAIL	SHEET 28 E

LEGEND - LANDSCAPING PLAN DETAILS

LITTLE BLUE STEM

6" TOPSOIL AND SOD

GLS - SUMAC, GRO-LOW

PCF - PURPLE CONEFLOWER

DL - DAYLILY, YELLOW

AJ - AUTUMN JOY

RR - RUGOSA ROSE, PURPLE PAVEMENT

* 6" TOPSOIL AND SHREDDED BARK MULCH

N

MATCH LINE STA 55+00.00

MATCH LINE STA 61+00.00

SLOPE INTERCEPT

℄ OHIO STREET

13TH ST.

SLOPE INTERCEPT

STA 63+50.00

END CONSTRUCTION
STA 64+08.41

END PROJECT
65+50.00

WASHINGTON AVE (STH 20)

SLOPE INTERCEPT

PROJECT NO: 2704-00-73	HWY: OHIO STREET	COUNTY: RACINE	PLAN: LANDSCAPING DETAIL	SHEET 29 E

NOTES:

1. INLET RIM ELEVATIONS ARE GIVEN AT FACE OF CURB. INLET STA AND OFFSETS GIVEN AT FACE OF CURB.
2. PIPE INVERT AND LENGTH ARE MEASRURED FROM CENTER OF STRUCTURE.
3. MANHOLE RIM ELEVATIONS, STA, AND OFFSETS ARE GIVEN TO CENTER OF STRUCTURE.

BEGIN CONSTRUCTION STA 43+54.35

WE ENERGIES GAS TO BE ABANDONED AND RELOCATED

℄ OHIO STREET

RECONST. SANITARY MH w/ INTERNAL/EXTERNAL SEAL(SEE DETAIL)

CITY OF RACINE LIGHTING

CITY OF RACINE SANITARY SEWER

WE ENERGIES GAS

RACINE WATER UTILITY

RACINE WATER UTILITY

EX-CB1

EX-A2

CAUTION

REMOVING INLET

INL-1

85 LF, REMOVING STORM SEWER (12")

EXISTING R/W

PR-1

ADJ. SANITARY STRUCTURE w/ INTERNAL/EXTERNAL SEAL(SEE DETAIL)

RECONSTRUCTING MANHOLES

34 LF, REMOVING STORM SEWER (12")

INL-2

REMOVING INLET

PR-2

RECONSTRUCT MANHOLES

INL-3

CAUTION

12 LF, REMOVING STORM SEWER (12")

WE ENERGIES GAS

MH-A

PR-3

INL-3

15TH STREET

RECONSTRUCTING MANHOLES

42 LF, REMOVING STORM SEWER (12")

PR-4

INL-4

REMOVING INLET

EXISTING R/W

REMOVING INLET

MH-A RIM=689.73

INL-3 RIM=689.66

INL-4 RIM=689.82

PR-4-12" SSPRC @ 1.00% UP INVERT=686.43 DWN INVERT=686.08

PR-3-15" SSPRC @ 3.00% UP INVERT=686.12 DWN INVERT=685.61

INL-2 RIM=690.05

MH-A RIM=689.73

PR-2-15" SSPRC @ 1.00% UP INVERT=684.37 DWN INVERT=683.90

PR-1-12" SSPRC @ 1.00% UP INVERT=686.57 DWN INVERT=685.72

INL-1 RIM=689.80

MH-A RIM=689.73

APPROX. TOP OF 16-INCH GAS TO BE ABANDONED

APPROX. TOP OF WATER

RECONSTRUCT MANHOLE A BEGINNING AT ELEV=682.75 (60-INCH DIA.) (CONTRACTOR SHALL VERIFY DIA. PRIOR TO ORDERING MANHOLE)

RECONSTRUCT MANHOLE PROVIDE CONE SECTION

MH-A RIM=689.73

FINISHED RT PGL

FINISHED LT PGL

ADJ. SANITARY STRUCTURE

APPROX. TOP OF EXISTING SANITARY SEWER

APPROX. TOP OF WATERMAIN

APPROX. TOP OF 4-INCH AND 16-INCH GAS

APPROX TOP OF 24-INCH & 12-INCH WATERMAIN

SANP8

SANP7

SANP6

ExSanStr_259 EX. RIM=694.22

RECONSTRUCT MANHOLE PROVIDE CONE SECTION

ExSanStr_317 EX. RIM=690.49

LT PGL ELEV (TYP.)

RT PGL ELEV (TYP.)

698.46

696.51 696.40

694.57 694.30

692.71 692.49

691.30 691.18

690.38 690.37

689.92 690.01

689.58 689.71

689.24 689.38

688.89 689.06

PROJECT NO: 2704-00-73	HWY: OHIO STREET	COUNTY: RACINE	DRAINAGE/UTILITY PLAN DETAIL	SHEET 30	E

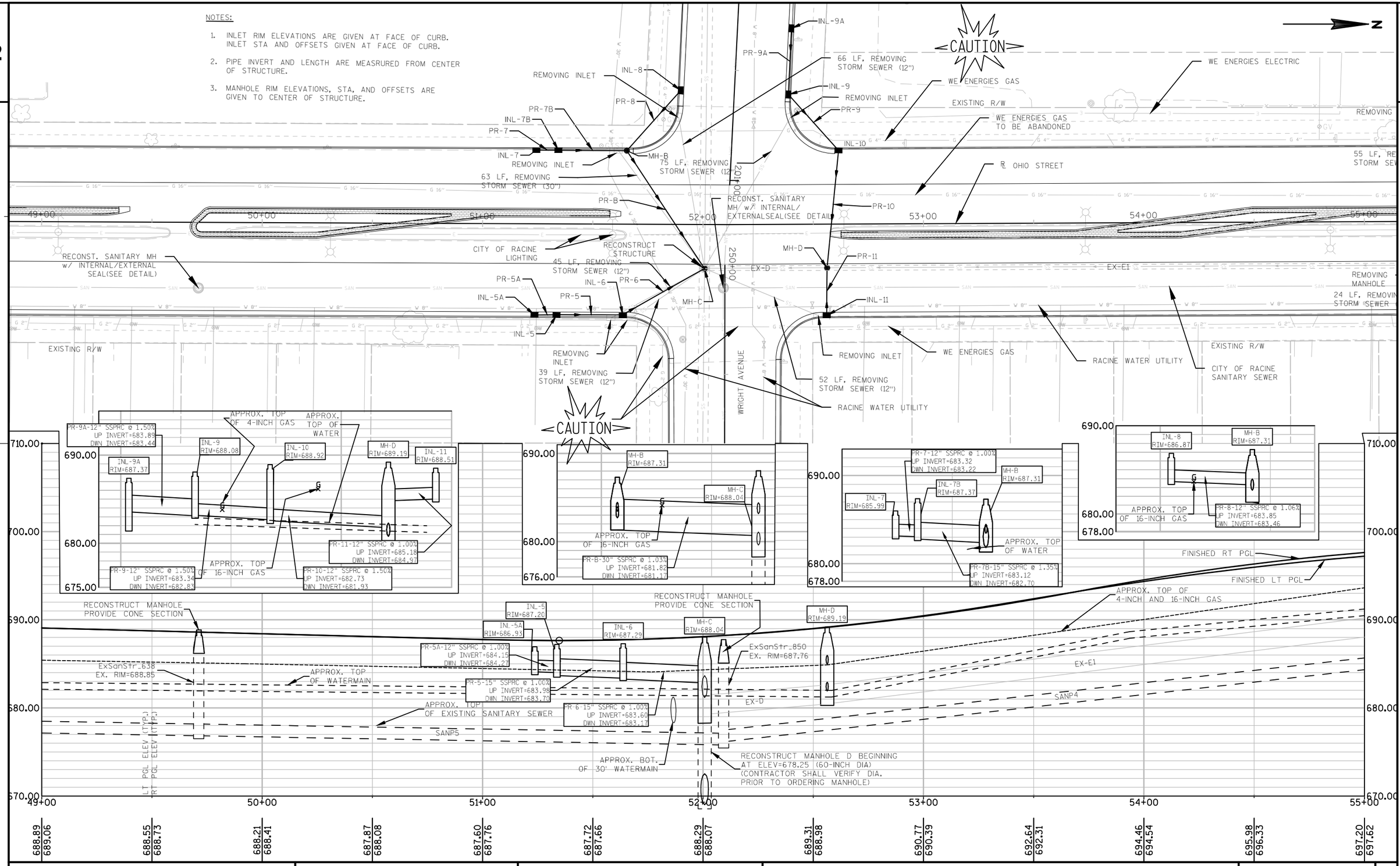
FILE NAME : P:\R0140060_RACINE - OHIO STREET DESIGN\C3D\SHEETSPLAN\270400003_022501_SS.DWG PLOT DATE : 11/26/2013 7:38 AM PLOT BY : KEVIN K. RISCH PLOT NAME : PLOT SCALE : 1:40_XREF

WISDOT/CADDS SHEET 42

NOTES:

1. INLET RIM ELEVATIONS ARE GIVEN AT FACE OF CURB. INLET STA AND OFFSETS GIVEN AT FACE OF CURB.
2. PIPE INVERT AND LENGTH ARE MEASRURED FROM CENTER OF STRUCTURE.
3. MANHOLE RIM ELEVATIONS, STA, AND OFFSETS ARE GIVEN TO CENTER OF STRUCTURE.

N



PROJECT NO: 2704-00-73	HWY: OHIO STREET	COUNTY: RACINE	DRAINAGE/UTILITY PLAN DETAIL	SHEET	E

FILE NAME : P:\R0140060_RACINE - OHIO STREET DESIGN\C3D\SHEETSPLAN\270400003_022501_SS.DWG PLOT DATE : 11/26/2013 7:38 AM PLOT BY : KEVIN K. RISCH PLOT NAME : PLOT SCALE : 1:40_XREF

WISDOT/CADDS SHEET 42

NOTES:

1. INLET RIM ELEVATIONS ARE GIVEN AT FACE OF CURB. INLET STA AND OFFSETS GIVEN AT FACE OF CURB.
2. PIPE INVERT AND LENGTH ARE MEASRURED FROM CENTER OF STRUCTURE.
3. MANHOLE RIM ELEVATIONS, STA, AND OFFSETS ARE GIVEN TO CENTER OF STRUCTURE.

N

CAUTION

CAUTION

EXISTING R/W

WE ENERGIES GAS TO BE ABANDONED AND RELOCATE

WE ENERGIES GAS

WE ENERGIES ELECTRIC/ TIME WARNER CABLE OVERHEAD

15 LF, REMOVING STORM SEWER (12")

REMOVING INLET

WE ENERGIES GAS VALVE TO BE REMOVED BY OTHERS

CONCRETE COLLAR TO PLUG HOLE

WE ENERGIES ELECTRIC/ TIME WARNER CABLE OVERHEAD

REMOVING INLET

55 LF, REMOVING STORM SEWER (30")

INL-12

PR-12

INL-14

PR-14

℄ OHIO STREET

55+00 56+00 57+00 58+00 59+00 60+00 61+00

RECONSTRUCT STRUCTURE

MH-F

26 LF, REMOVING STORM SEWER (12")

CONCRETE PIPE COLLAR

PR-E

MH-E

REMOVING MANHOLE

24 LF, REMOVING STORM SEWER (30")

CITY OF RACINE LIGHTING

ADJ. SANITARY STRUCTURE w/ INTERNAL/EXTERNAL SEAL(SEE DETAIL)

100+00

PR-15

INL-15

EX-D2

PR-13

INL-13

RE-CONSTRUCT SANITARY CONE ON MH w/INTERNAL/EXTERNAL SEAL(SEE DETAIL)

REMOVING INLET

RACINE WATER UTILITY

CITY OF RACINE SANITARY SEWER

EXISTING R/W

WE ENERGIES GAS

13TH STREET

REMOVING INLET

RACINE WATER UTILITY

700.00

INL-12 RIM=697.65

MH-E RIM=698.25

INL-13 RIM=697.72

APPROX. TOP OF 4-INCH GAS

APPROX. TOP OF 16-INCH GAS

APPROX. TOP OF WM

PR-12-12" SSPRC @ 1.00% UP INVERT=694.00 DWN INVERT=693.47

PR-13-12" SSPRC @ 1.00% UP INVERT=694.60 DWN INVERT=694.39

700.00

INL-14 RIM=699.75

MH-F RIM=700.42

APPROX. TOP OF 16-INCH GAS

PR-14-12" SSPRC @ 1.00% UP INVERT=696.50 DWN INVERT=695.96

690.00

681.00

RECONSTRUCT MANHOLE BEGINNING AT ELEV=694.50 (48-INCH DIA) (CONTRACTOR SHALL VERIFY DIA. PRIOR TO ORDERING MANHOLE)

MH-F RIM=700.42

INL-15 RIM=700.40

FINISHED RT PGL

FINISHED LT PGL

ExSanStr_1117 EX. RIM=698.19

RECONSTRUCT MANHOLE PROVIDE CONE SECTION

MH-E RIM=698.25

APPROX. TOP OF 4-INCH AND 16-INCH GAS

APPROX. TOP OF WATERMAIN

PR-E-18 INCH CONCRETE PIPE @ 3.11% UP INVERT=689.59 DWN INVERT=MATCH EXISTING

PR-15-12" SSPRC @ 1.00% UP INVERT=696.75 DWN INVERT=696.49

ExSanStr_1449 EX. RIM=700.57

EX-E1

APPROX. TOP OF EXISTING SANITARY SEWER

SANP3

SANP2

REMOVING MANHOLES & REPLACE WITH A CONCRETE PIPE COLLAR

LT PGL ELEV (TYP.)

RT PGL ELEV (TYP.)

710.00 700.00 690.00 680.00 675.00

55+00 56+00 57+00 58+00 59+00 60+00 61+00

697.20	698.11	698.72	699.03	699.29	699.54	699.79	700.04	700.29	700.54	700.79	701.04	701.29
697.62	698.42	699.06	699.70	699.87	700.04	700.21	700.39	700.56	700.73	700.90	701.22	701.55

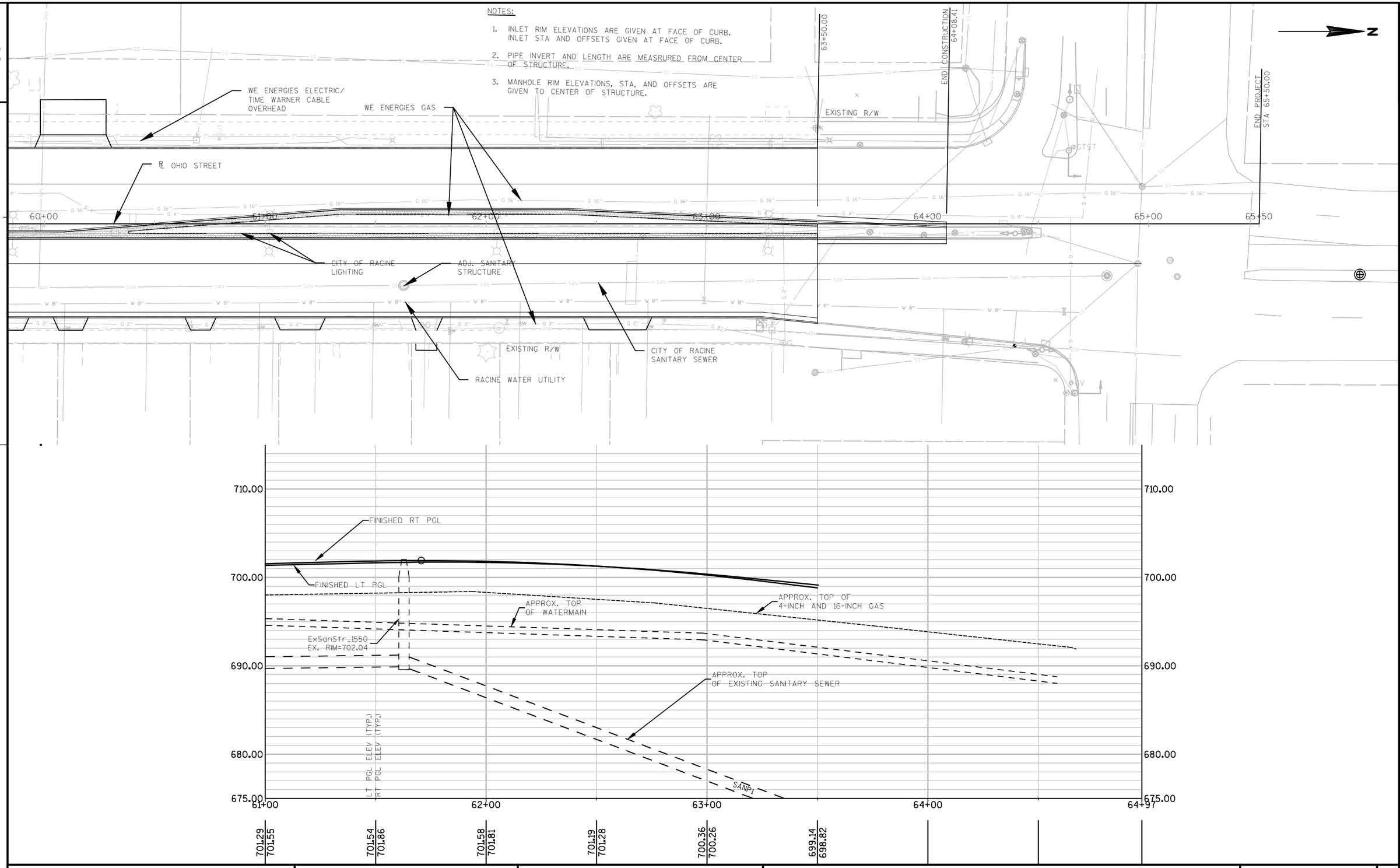
PROJECT NO: 2704-00-73	HWY: OHIO STREET	COUNTY: RACINE	DRAINAGE/UTILITY PLAN DETAIL	SHEET E

FILE NAME : P:\R0140060_RACINE - OHIO STREET DESIGN\C3D\SHEETSPLAN\270400003_022501_SS.DWG PLOT DATE : 11/26/2013 7:39 AM PLOT BY : KEVIN K. RISCH PLOT NAME : PLOT SCALE : 1:40_XREF

WISDOT/CADDS SHEET 42

NOTES:

1. INLET RIM ELEVATIONS ARE GIVEN AT FACE OF CURB. INLET STA AND OFFSETS GIVEN AT FACE OF CURB.
2. PIPE INVERT AND LENGTH ARE MEASRURED FROM CENTER OF STRUCTURE.
3. MANHOLE RIM ELEVATIONS, STA, AND OFFSETS ARE GIVEN TO CENTER OF STRUCTURE.



PROJECT NO: 2704-00-73	HWY: OHIO STREET	COUNTY: RACINE	DRAINAGE/UTILITY PLAN DETAIL	SHEET	E

LEGEND - PAVEMENT MARKING

- A PAVEMENT MARKING EPOXY 4-INCH (37.5'-12.5', SKIP-DASH WHITE)
- B PAVEMENT MARKING EPOXY 4-INCH (SOLID WHITE)
- C PAVEMENT MARKING EPOXY 4-INCH (SOLID YELLOW)
- D PAVEMENT MARKING EPOXY 8-INCH (9'-3" SKIP DASH WHITE)
- E PAVEMENT MARKING EPOXY 8-INCH (SOLID WHITE)
- F PAVEMENT MARKING EPOXY 12-INCH (SOLID WHITE)
- G PAVEMENT MARKING EPOXY 18-INCH (SOLID WHITE)
- H PAVEMENT MARKING CURB EPOXY (SOLID YELLOW)
- I PAVEMENT MARKING ISLAND NOSE EPOXY (SOLID YELLOW)
- J PAVEMENT MARKING ARROWS EPOXY TYPE 2 OR TYPE 3
- K PAVEMENT MARKING SYMBOLS BIKE LANE EPOXY
- L PAVEMENT MARKING ARROWS BIKE LANE EPOXY
- M PAVEMENT MARKING WORDS EPOXY ONLY

BEGIN CONSTRUCTION STA 43+54.35

STA 44+55.73

44+00 45+00 46+00 47+00 48+00 49+

℄ OHIO STREET

+90.00

+80.00

20' TO ARROW

+52.49

59' RT.

15TH ST.

MATCH LINE STA 49+00.00

SEE WRIGHT STREET WEST DETAIL FOR CONTINUATION

50.5' LT

50+00 51+00 52+00 53+00 54+00 55+

+40.49

+04.72

+85.00

+69.35

WRIGHT AVE.

SEE WRIGHT STREET EAST DETAIL FOR CONTINUATION

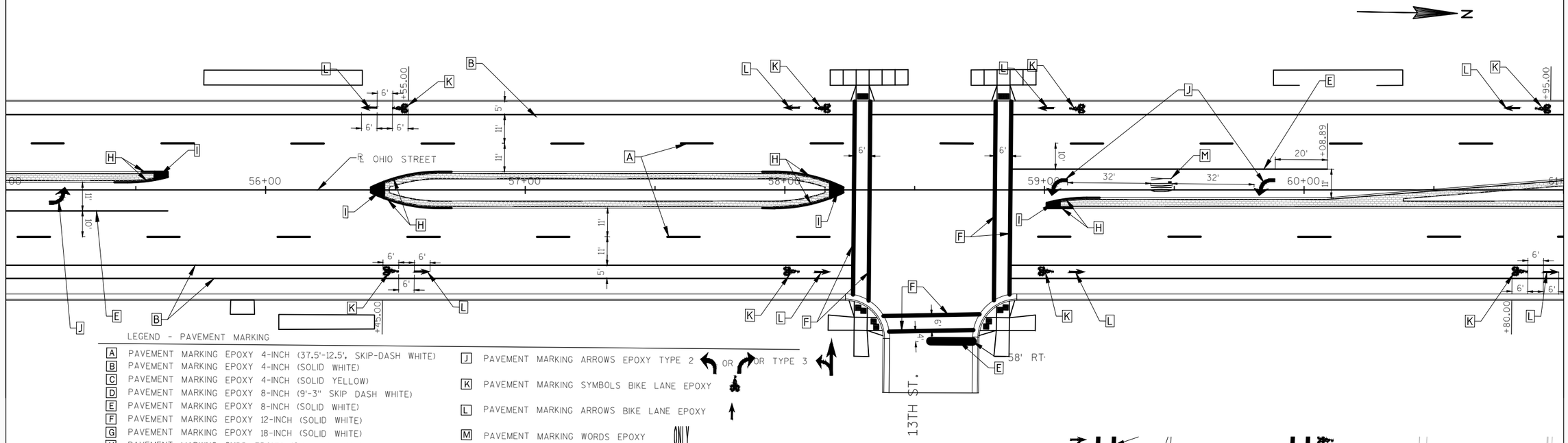
MATCH LINE STA 55+00.00

+40.00

PROJECT NO: 2704-00-73	HWY: OHIO STREET	COUNTY: RACINE	PLAN: PAVEMENT MARKING DETAIL	SHEET 34 E

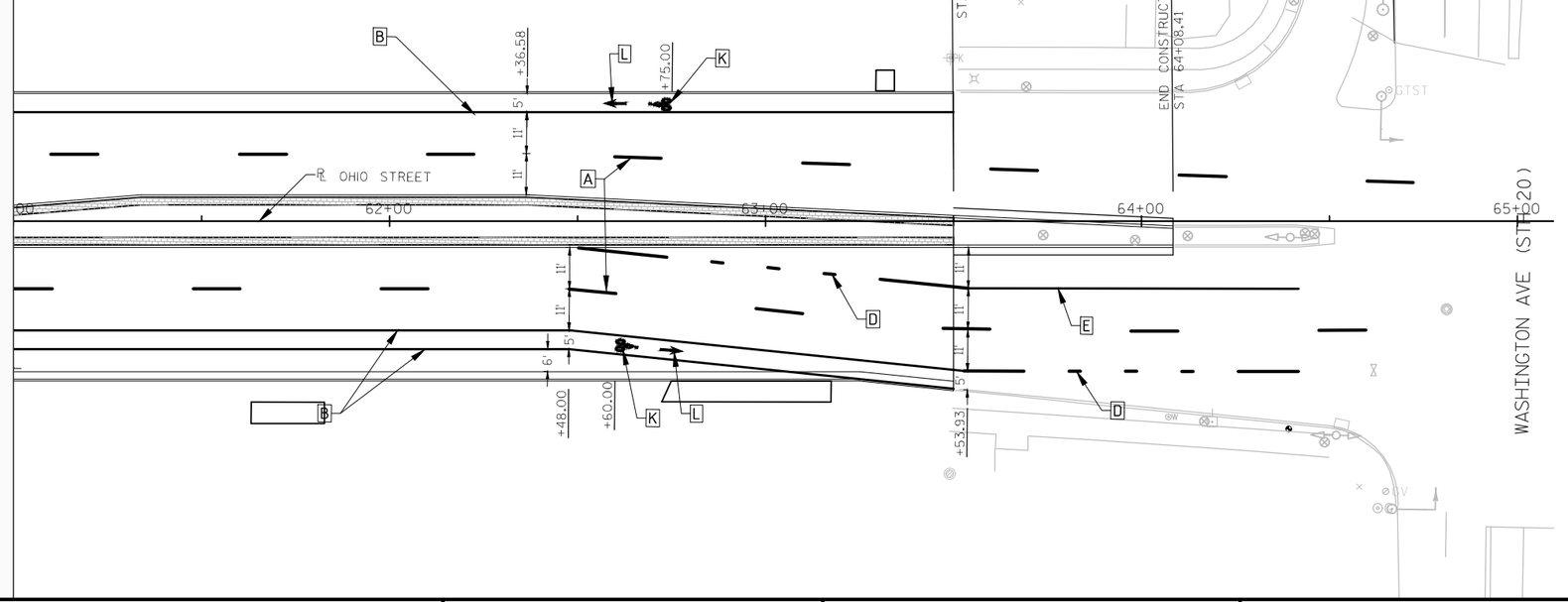
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2



LEGEND - PAVEMENT MARKING

- A PAVEMENT MARKING EPOXY 4-INCH (37.5'-12.5', SKIP-DASH WHITE)
- B PAVEMENT MARKING EPOXY 4-INCH (SOLID WHITE)
- C PAVEMENT MARKING EPOXY 4-INCH (SOLID YELLOW)
- D PAVEMENT MARKING EPOXY 8-INCH (9'-3" SKIP DASH WHITE)
- E PAVEMENT MARKING EPOXY 8-INCH (SOLID WHITE)
- F PAVEMENT MARKING EPOXY 12-INCH (SOLID WHITE)
- G PAVEMENT MARKING EPOXY 18-INCH (SOLID WHITE)
- H PAVEMENT MARKING CURB EPOXY (SOLID YELLOW)
- I PAVEMENT MARKING ISLAND NOSE EPOXY (SOLID YELLOW)
- J PAVEMENT MARKING ARROWS EPOXY TYPE 2 OR TYPE 3
- K PAVEMENT MARKING SYMBOLS BIKE LANE EPOXY
- L PAVEMENT MARKING ARROWS BIKE LANE EPOXY
- M PAVEMENT MARKING WORDS EPOXY ONLY



WRIGHT AVE EAST DETAIL

WRIGHT AVE WEST DETAIL

PROJECT NO: 2704-00-73	HWY: OHIO STREET	COUNTY: RACINE	PLAN: PAVEMENT MARKING DETAIL	SHEET 35	E

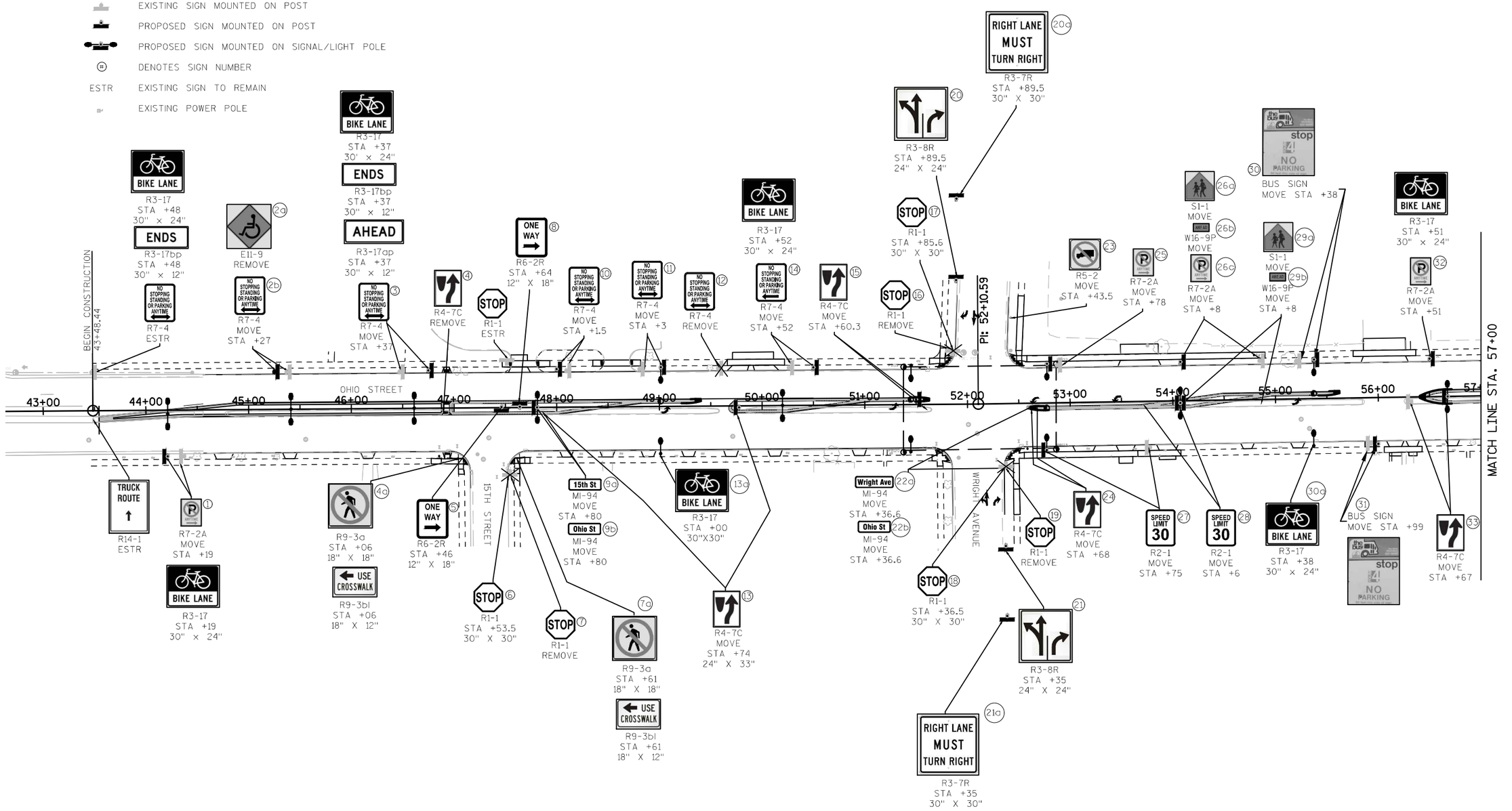
2

N

SIGNING LEGEND

- EXISTING SIGN POST TO BE REMOVED
- EXISTING SIGN MOUNTED ON POST
- PROPOSED SIGN MOUNTED ON POST
- PROPOSED SIGN MOUNTED ON SIGNAL/LIGHT POLE
- (#) DENOTES SIGN NUMBER
- ESTR EXISTING SIGN TO REMAIN
- EXISTING POWER POLE

NOTE: ALL SIGNS LABELED TO BE MOVED WILL HAVE A NEW POST INSTALLED AND THE EXISTING POST SHALL BE REMOVED. (SEE QUANTITIES TABLE FOR LOCATIONS)



PROJECT NO: 2704-00-70	HWY: OHIO STREET	COUNTY: RACINE	SIGNING DETAIL	SHEET	E

FILE NAME : P:\R0140060_RACINE - OHIO STREET DESIGN\C3D\DESIGN\27040003_SIGN PLAN.DWG PLOT DATE : 11/26/2013 7:39 AM PLOT BY : KEVIN K. RISCH PLOT NAME : PLOT SCALE : 1" = 100'_XREF
WISDOT/CADDS SHEET 42

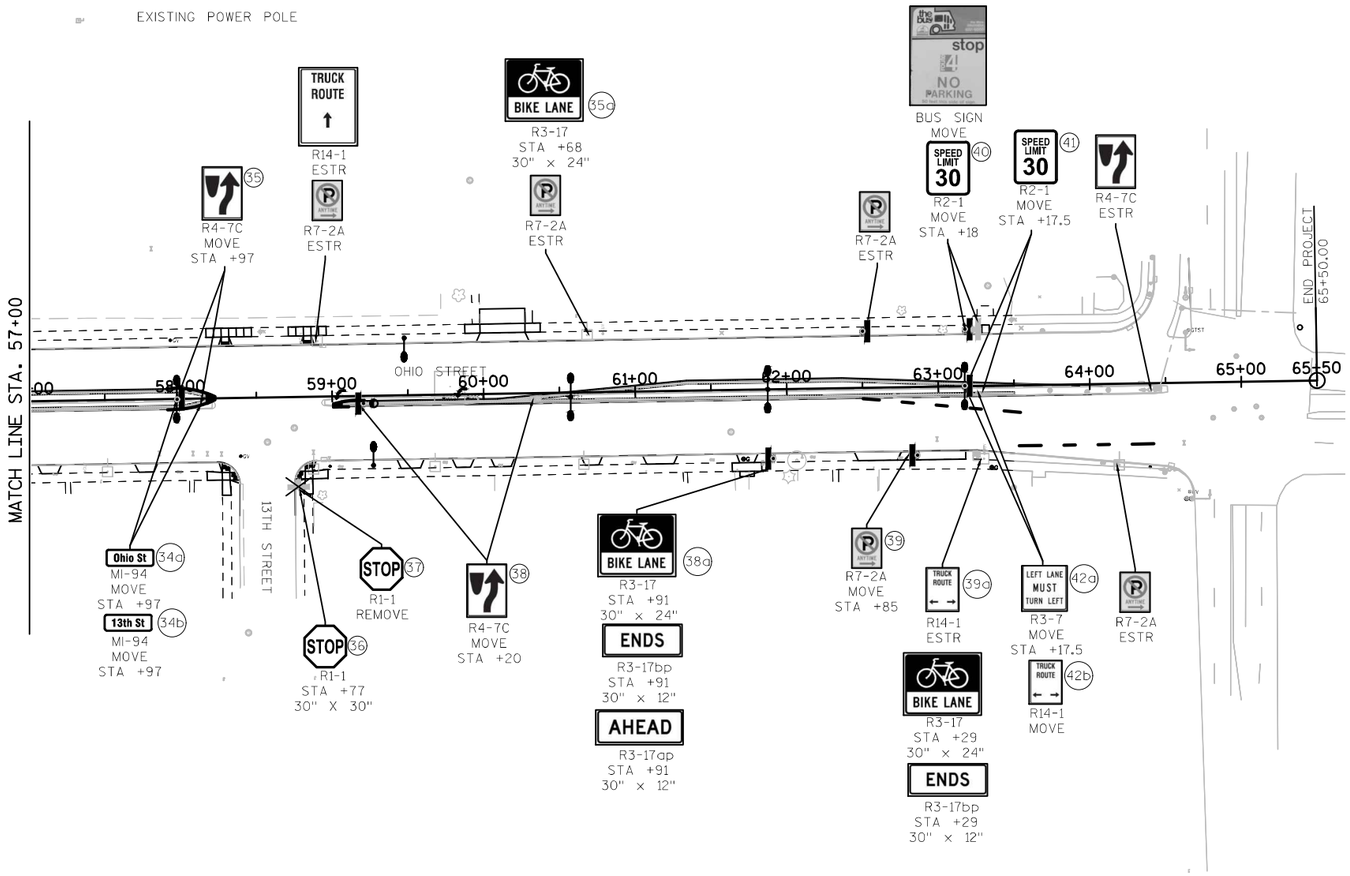
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N

SIGNING LEGEND

- EXISTING SIGN POST TO BE REMOVED
- EXISTING SIGN MOUNTED ON POST
- PROPOSED SIGN MOUNTED ON POST
- PROPOSED SIGN MOUNTED ON SIGNAL/LIGHT POLE
- (#) DENOTES SIGN NUMBER
- ESTR EXISTING SIGN TO REMAIN
- EXISTING POWER POLE

NOTE: ALL SIGNS LABELED TO BE MOVED WILL HAVE A NEW POST INSTALLED AND THE EXISTING POST SHALL BE REMOVED. (SEE QUANTITIES TABLE FOR LOCATIONS)



PROJECT NO: 2704-00-70	HWY: OHIO STREET	COUNTY: RACINE	SIGNING DETAIL	SHEET	E

FILE NAME : P:\R0140060_RACINE - OHIO STREET DESIGN\C3D\DESIGN\27040003_SIGN PLAN.DWG PLOT DATE : 11/26/2013 7:39 AM PLOT BY : KEVIN K. RISCH PLOT NAME : PLOT SCALE : 1" = 100'_XREF

2

TEMPORARY LIGHTING GENERAL NOTES

1. CONTACT CITY FOR ACCESS TO EXISTING CONTROLLER/CIRCUITS USED FOR TEMPORARY LIGHTING.
2. THE INTENT IS TO TRANSFER EXISTING LED LIGHT FIXTURE HEADS OVER TO NEW LIGHTING INFRASTRUCTURE FOR THEIR REUSE.
3. EXISTING LIGHT POLES AND CIRCUITING TO REMAIN INTACT FOR USE AS TEMPORARY LIGHTING UNTIL NEW LIGHTING SYSTEM IS INSTALLED AND OPERATIONAL.
4. AT COMPLETION OF THE NEW LIGHTING INSTALLATION, REMOVE ALL POLES, ARMS, POLE BASES, CONDUIT, AND WIRE ASSOCIATED WITH THE FIXTURES SHOWN.
5. REMOVED POLES, ARMS, AND ANY REMAINING HEADS SHALL BE SECURELY STORED ON SITE UNTIL PROJECT COMPLETION, AT WHICH TIME THE ELECTRICAL CONTRACTOR WILL DELIVER THEM TO THE OWNER AT 1415 HAMPDEN PLACE, RACINE, WI. COORDINATE DELIVERY WITH JOHN DIRKINITIS (262) 770-9588. INCLUDE ALL STORAGE AND DELIVERY COSTS IN SPV.0105.01.

GENERAL: REFERENCE THE SPECIAL PROVISIONS AND COMPLETE PLAN SET FOR FURTHER INFORMATION.

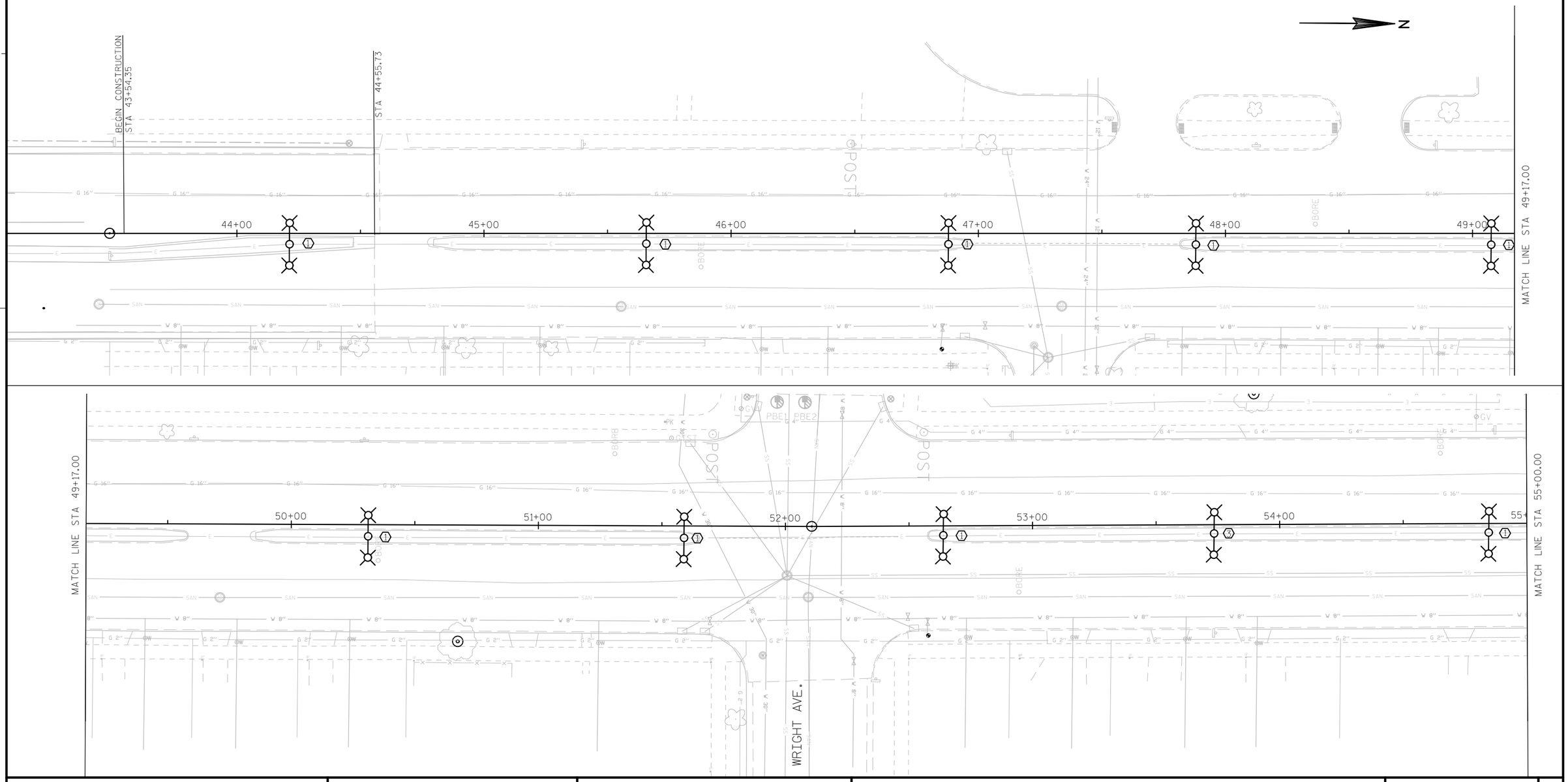
(1) TEMPORARY LIGHTING KEYED NOTES

1. EXISTING LIGHT POLE TO REMAIN FOR USE AS TEMPORARY LIGHTING UNTIL NEW LIGHTING SYSTEM IS INSTALLED AND OPERATIONAL.
2. EXISTING LIGHTING CONTROLLER (PRESENTLY SERVING THE EXISTING LIGHT POLES SHOWN AND ADDITIONAL FIXTURES NORTH OF THE PROJECT LIMITS). CONTROLLER WILL REMAIN TO SERVE THE FIXTURES NORTH OF THE PROJECT LIMITS AT PROJECT COMPLETION.
3. EXISTING LIGHT POLE, ARMS, AND POLE BASE SHALL BE REMOVED DURING STAGE 1 CONSTRUCTION TO MAINTAIN ACCESS TO SHOPKO DRIVEWAY DURING STAGE 2. PROVIDE CONDUIT AND WIRE AS REQUIRED TO MAINTAIN THE EXISTING LIGHTING CIRCUIT AFTER POLE REMOVAL.

TEMPORARY LIGHTING SYMBOLS

EXISTING LIGHT POLE ASSEMBLY

EXISTING LIGHTING CONTROLLER



PROJECT NO: 2704-00-73	HWY: OHIO STREET	COUNTY: RACINE	PLAN: TEMPORARY LIGHTING PLAN DETAIL	SHEET 38 E

FILE NAME : P:\R0140060_RACINE - OHIO STREET DESIGN\C3D\SHEETSPLAN\270400003_023501_LT.DWG PLOT DATE : 11/26/2013 7:40 AM PLOT BY : KEVIN K. RISCH PLOT NAME : PLOT SCALE : 1" = 40'_XREF

TEMPORARY LIGHTING GENERAL NOTES

1. CONTACT CITY FOR ACCESS TO EXISTING CONTROLLER/CIRCUITS USED FOR TEMPORARY LIGHTING.
2. THE INTENT IS TO TRANSFER EXISTING LED LIGHT FIXTURE HEADS OVER TO NEW LIGHTING INFRASTRUCTURE FOR THEIR REUSE.
3. EXISTING LIGHT POLES AND CIRCUITING TO REMAIN INTACT FOR USE AS TEMPORARY LIGHTING UNTIL NEW LIGHTING SYSTEM IS INSTALLED AND OPERATIONAL.
4. AT COMPLETION OF THE NEW LIGHTING INSTALLATION, REMOVE ALL POLES, ARMS, POLE BASES, CONDUIT, AND WIRE ASSOCIATED WITH THE FIXTURES SHOWN.
5. REMOVED POLES, ARMS, AND ANY REMAINING HEADS SHALL BE SECURELY STORED ON SITE UNTIL PROJECT COMPLETION, AT WHICH TIME THE ELECTRICAL CONTRACTOR WILL DELIVER THEM TO THE OWNER AT 1415 HAMPDEN PLACE, RACINE, WI. COORDINATE DELIVERY WITH JOHN DIRKINITIS (262) 770-9588. INCLUDE ALL STORAGE AND DELIVERY COSTS IN SPV.0105.01.

GENERAL: REFERENCE THE SPECIAL PROVISIONS AND COMPLETE PLAN SET FOR FURTHER INFORMATION.

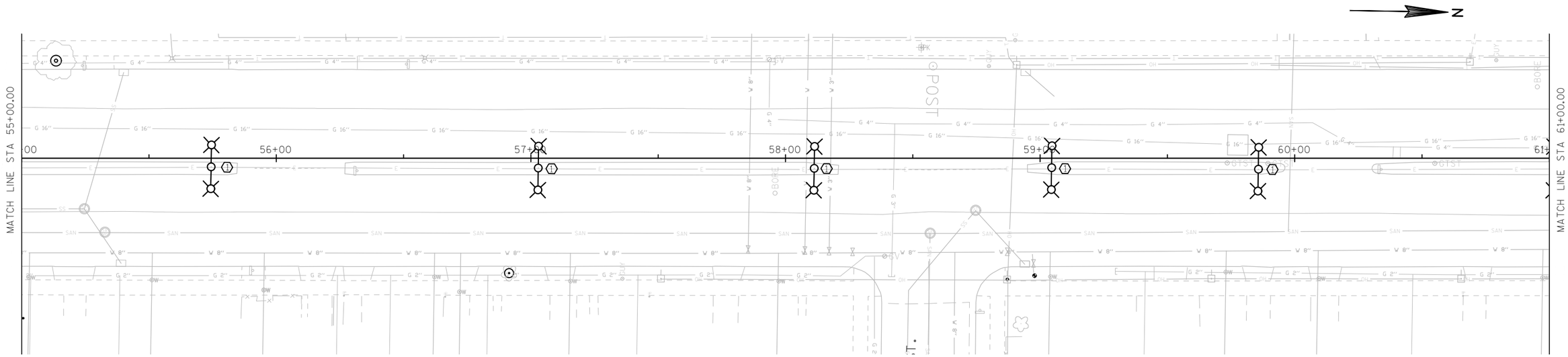
(1) TEMPORARY LIGHTING KEYED NOTES

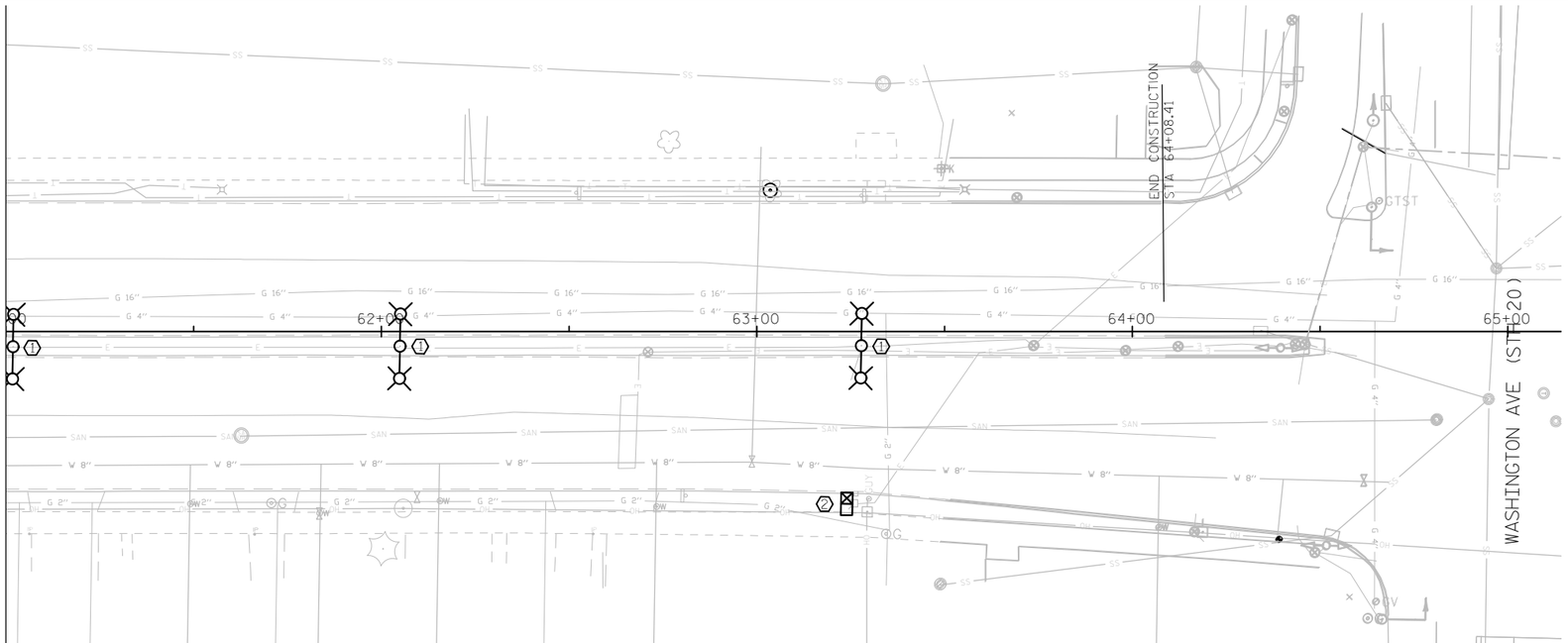
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TEMPORARY LIGHTING SYMBOLS

EXISTING LIGHT POLE ASSEMBLY

EXISTING LIGHTING CONTROLLER





PROJECT NO: 2704-00-73	HWY: OHIO STREET	COUNTY: RACINE	PLAN: TEMPORARY LIGHTING PLAN DETAIL	SHEET 39	E

(E) FIBER OPTIC CABLING KEYED NOTES

1. REMOVE EXISTING PULL BOX PB113. PROTECT EXISTING CABELING AND INSTALL NEW CABLE VAULT CV-40 AT THE SAME LOCATION OF THE OLD PB-113.
2. PULL NEW FIBER OPTIC CABLE FROM NEW CV-40 THROUGH EXISTING RACEWAY TO EXISTING PULL BOX PB115. INCLUDE 50' COIL AT CV-40. CONTINUE FIBER OPTIC CABLING FROM EXISTING PULL BOX PB115 TO EXISTING PULL BOX PBS-F61 USING NEW CONDUIT AND PULL BOXES AS SHOWN ON THE PLANS. USING EXISTING SPLICE ENCLOSURE, SPLICE NEW FIBER OPTIC CABLE WITH EXISTING 96 STRAND FIBER OPTIC CABLE AT CV-40.
3. APPROXIMATE LOCATION OF EXISTING PULL BOX PBS-F61. FIBER OPTIC CABLE TO CONTINUE FROM PBS-F61 TO CABLE VAULT CV-18 LOCATED AT THE NORTHWEST CORNER OF THE INTERSECTION OF OHIO ST. AND WASHINGTON AVE. PULL FIBER OPTIC CABLE THROUGH EXISTING RACEWAY BETWEEN PBS-F61 AND CV-18 (APPROXIMATELY 210 LINEAR FEET). INCLUDE ADDITIONAL 50' COIL AT CV-18. PROVIDE NEW SPLICE ENCLOSURE PER SPECIAL PROVISIONS AND SPLICE NEW FIBER OPTIC CABLE WITH EXISTING 96 STRAND FIBER OPTIC CABLE AT CV-18.
4. PROPOSED NEW PULL BOX LOCATION.
5. PROVIDE PULL BOXES PB119, PB120, PB122, PB123 AND RIGID NONMETALLIC CONDUIT AS SHOWN FOR FUTURE TRAFFIC SIGNAL INTERCONNECT BETWEEN INTERSECTIONS.
6. ELECTRICAL CONTRACTOR TO REMOVE EXISTING UNUSED SIGNAL PULL BOXES.

(E) NEW LIGHTING KEYED NOTES

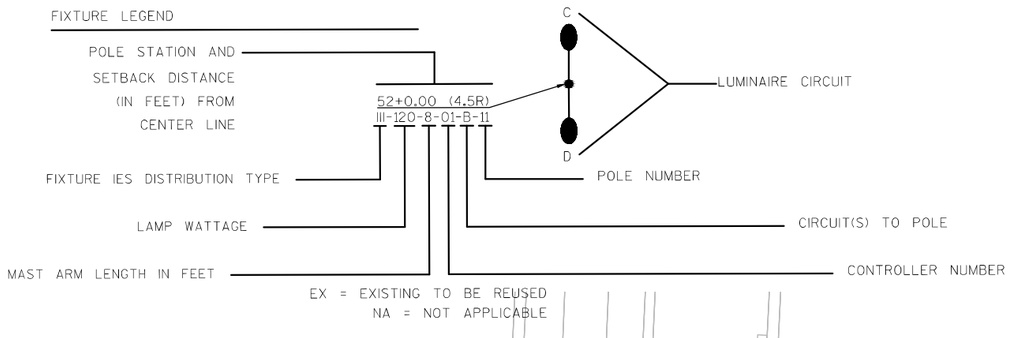
1. EXISTING LIGHT POLE IS FED WITH CIRCUITS C AND D FROM EXISTING CONTROLLER 31 LOCATED AT THE INTERSECTION OF BYRD AVENUE AND OHIO STREET TO THE SOUTH OF THIS PROJECT. INSTALL NEW POLE BASE TO SHIFT THIS POLE LOCATION TO THE CENTER OF THE NEW MEDIAN. EXTEND EXISTING CONDUIT AND CIRCUITRY WITH NEW CONDUIT AND WIRE FROM PREVIOUS POLE TO THE SOUTH OF THE NEW POLE BASE. TAKE DOWN AND REINSTALL COMPLETE POLE LIGHT FIXTURE ASSEMBLY AT THE NEW POLE BASE LOCATION. EXISTING CIRCUITS C AND D ARE TO BE EXTENDED USING NEW RACEWAY AND CONDUCTORS TO POWER THE NEW LIGHT POLES AS SHOWN.

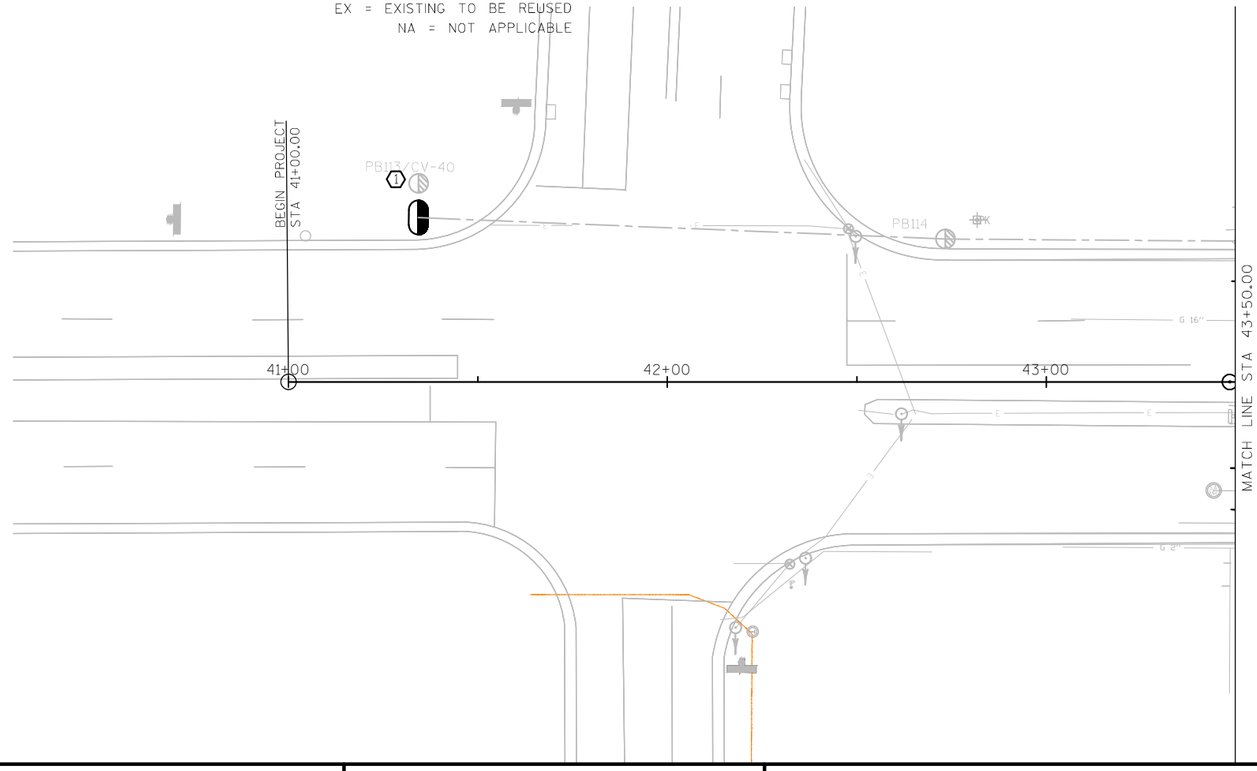
FIBER OPTIC CABLING GENERAL NOTES

1. NEW FIBER OPTIC CABLING IS TO EXTEND FROM NEW CABLE VAULT CV-40 ON THE SOUTH END OF THE PROJECT TO CABLE VAULT CV-18 ON THE NORTH END OF THE PROJECT. SEE KEYED NOTES FOR DETAILS ON LOCATION AND WORK SCOPE. RUN FROM CV-18 TO CV-40 SHALL BE A CONTINUOUS RUN WITH NO SPLICING.
2. REFERENCE PLAN NOTES AND SPECIAL PROVISIONS FOR FURTHER INFORMATION.

NEW LIGHTING GENERAL NOTES

1. CONTACT CITY FOR ACCESS TO EXISTING CONTROLLER/CIRCUITS TO BE EXTENDED TO THE NEW FIXTURES.
2. CAREFULLY EXCAVATE AROUND EXISTING POLE BASES AND CONDUITS TO INSTALL NEW CONDUITS, POLE BASES, AND TRANSFORMER BASES. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ANY ACCIDENTAL INTERRUPTION AS A RESULT OF CONSTRUCTION. ELECTRICAL CONTRACTOR SHALL INFORM THE CITY OF ANY SUCH INCIDENT AND REPAIR AND RECONNECT THE INTERRUPTION AT NO ADDITIONAL COST TO THE CITY.
3. INSTALL NEW WIRING IN THE TRANSFORMER BASES INCLUDING FUSE HOLDERS SHOWN ON THE DETAIL TO EXTEND CIRCUITRY TO EACH NEW BASE.
4. ELECTRICAL CONTRACTOR SHALL TRANSFER EXISTING LED HEADS FROM EXISTING LIGHT POLES TO NEW LIGHT POLES IN A SEQUENCE THAT WILL KEEP THE FULL PROJECT CORRIDOR COMPLETELY LIT EACH NIGHT.
5. REFERENCE PLAN NOTES AND SPECIAL PROVISIONS FOR FURTHER INFORMATION.





NEW LIGHTING SYMBOLS

- EXISTING LIGHT POLE ASSEMBLY
- PROPOSED LIGHT POLE ASSEMBLY
- CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH UNLESS NOTED OTHERWISE.
- PROPOSED LIGHTING PULL BOXES STEEL 24 X 36-INCH
- PROPOSED FIBER OPTIC CABLE PULL BOXES STEEL 24 X 36-INCH
- EXISTING LIGHTING CONTROLLER
- CONDUCTOR SYMBOL (5 / 4) TOP NUMBER = No. OF CONDUCTORS BOTTOM NUMBER = CONDUCTOR SIZE FOR COPPER CONDUCTORS IN AWG
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- PROPOSED FIBER OPTIC CABLE COMMUNICATION VAULT TYPE 1

PROJECT NO: 2704-00-73	HWY: OHIO STREET	COUNTY: RACINE	PLAN: LIGHTING, SIGNAL, AND FIBER OPTIC PLAN DETAIL	SHEET 40	E

FIBER OPTIC CABLING KEYED NOTES

1. REMOVE EXISTING PULL BOX PB113. PROTECT EXISTING CABELING AND INSTALL NEW CABLE VAULT CV-40 AT THE SAME LOCATION OF THE OLD PB-113.
2. PULL NEW FIBER OPTIC CABLE FROM NEW CV-40 THROUGH EXISTING RACEWAY TO EXISTING PULL BOX PB115. INCLUDE 50' COIL AT CV-40. CONTINUE FIBER OPTIC CABLING FROM EXISTING PULL BOX PB115 TO EXISTING PULL BOX PBS-F61 USING NEW CONDUIT AND PULL BOXES AS SHOWN ON THE PLANS. USING EXISTING SPLICE ENCLOSURE, SPLICE NEW FIBER OPTIC CABLE WITH EXISTING 96 STRAND FIBER OPTIC CABLE AT CV-40.
3. APPROXIMATE LOCATION OF EXISTING PULL BOX PBS-F61. FIBER OPTIC CABLE TO CONTINUE FROM PBS-F61 TO CABLE VAULT CV-18 LOCATED AT THE NORTHWEST CORNER OF THE INTERSECTION OF OHIO ST. AND WASHINGTON AVE. PULL FIBER OPTIC CABLE THROUGH EXISTING RACEWAY BETWEEN PBS-F61 AND CV-18 (APPROXIMATELY 210 LINEAR FEET). INCLUDE ADDITIONAL 50' COIL AT CV-18. PROVIDE NEW SPLICE ENCLOSURE PER SPECIAL PROVISIONS AND SPLICE NEW FIBER OPTIC CABLE WITH EXISTING 96 STRAND FIBER OPTIC CABLE AT CV-18.
4. PROPOSED NEW PULL BOX LOCATION.
5. PROVIDE PULL BOXES PB119, PB120, PB122, PB123 AND RIGID NONMETALLIC CONDUIT AS SHOWN FOR FUTURE TRAFFIC SIGNAL INTERCONNECT BETWEEN INTERSECTIONS.
6. ELECTRICAL CONTRACTOR TO REMOVE EXISTING UNUSED SIGNAL PULL BOXES.

NEW LIGHTING KEYED NOTES

1. EXISTING LIGHT POLE IS FED WITH CIRCUITS C AND D FROM EXISTING CONTROLLER 31 LOCATED AT THE INTERSECTION OF BYRD AVENUE AND OHIO STREET TO THE SOUTH OF THIS PROJECT. INSTALL NEW POLE BASE TO SHIFT THIS POLE LOCATION TO THE CENTER OF THE NEW MEDIAN. EXTEND EXISTING CONDUIT AND CIRCUITRY WITH NEW CONDUIT AND WIRE FROM PREVIOUS POLE TO THE SOUTH OF THE NEW POLE BASE. TAKE DOWN AND REINSTALL COMPLETE POLE LIGHT FIXTURE ASSEMBLY AT THE NEW POLE BASE LOCATION. EXISTING CIRCUITS C AND D ARE TO BE EXTENDED USING NEW RACEWAY AND CONDUCTORS TO POWER THE NEW LIGHT POLES AS SHOWN.

FIBER OPTIC CABLING GENERAL NOTES

1. NEW FIBER OPTIC CABLING IS TO EXTEND FROM NEW CABLE VAULT CV-40 ON THE SOUTH END OF THE PROJECT TO CABLE VAULT CV-18 ON THE NORTH END OF THE PROJECT. SEE KEYED NOTES FOR DETAILS ON LOCATION AND WORK SCOPE. RUN FROM CV-18 TO CV-40 SHALL BE A CONTINUOUS RUN WITH NO SPLICING.
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NEW LIGHTING GENERAL NOTES

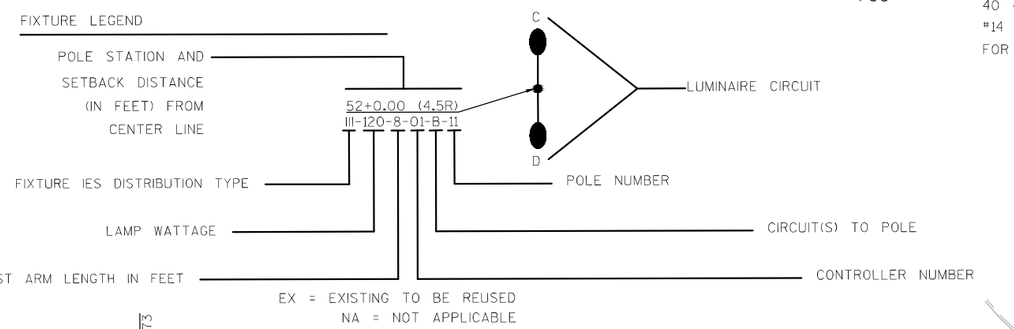
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3. INSTALL NEW WIRING IN THE TRANSFORMER BASES INCLUDING FUSE HOLDERS SHOWN ON THE DETAIL TO EXTEND CIRCUITRY TO EACH NEW BASE.
4. ELECTRICAL CONTRACTOR SHALL TRANSFER EXISTING LED HEADS FROM EXISTING LIGHT POLES TO NEW LIGHT POLES IN A SEQUENCE THAT WILL KEEP THE FULL PROJECT CORRIDOR COMPLETELY LIT EACH NIGHT.
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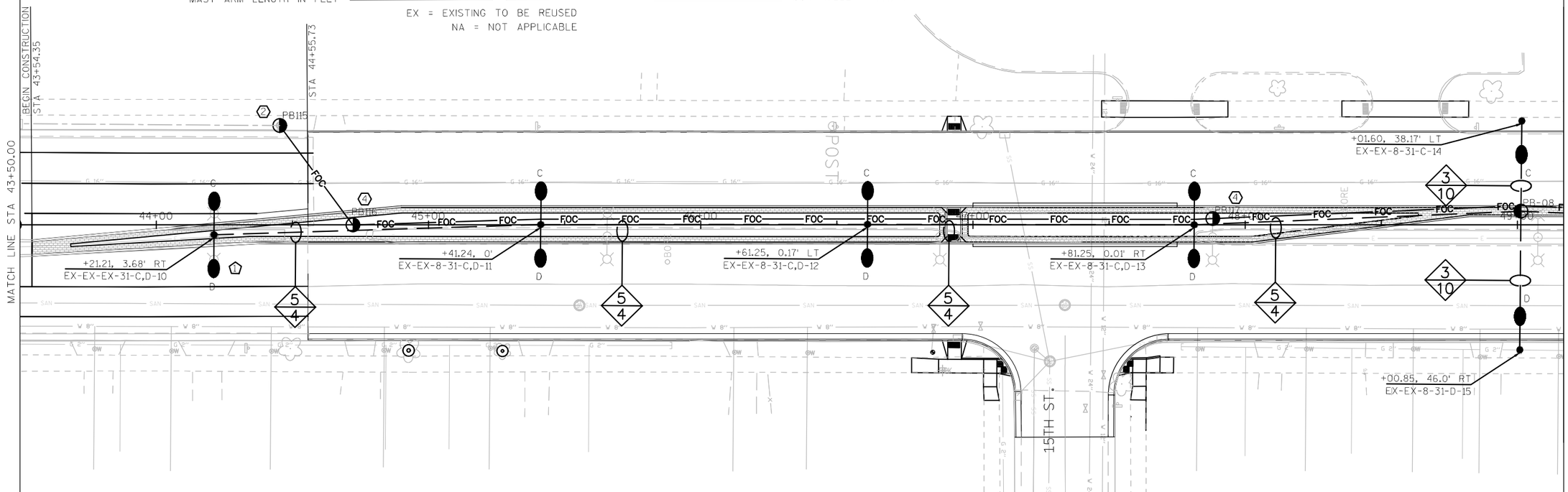
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—— FOC —— CONDUIT RIGID NONMETALLIC SCHEDULE 40 4-INCH WITH FIBER OPTIC CABLE AND #14 TRACER WIRE. SEE SPECIAL PROVISIONS FOR DETAIL.

NEW LIGHTING SYMBOLS

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PROJECT NO: 2704-00-73	HWY: OHIO STREET	COUNTY: RACINE	PLAN: LIGHTING, SIGNAL, AND FIBER OPTIC PLAN DETAIL	SHEET 41	E

FIBER OPTIC CABLING KEYED NOTES

1. REMOVE EXISTING PULL BOX PB113. PROTECT EXISTING CABELING AND INSTALL NEW CABLE VAULT CV-40 AT THE SAME LOCATION OF THE OLD PB-113.
2. PULL NEW FIBER OPTIC CABLE FROM NEW CV-40 THROUGH EXISTING RACEWAY TO EXISTING PULL BOX PB115. INCLUDE 50' COIL AT CV-40. CONTINUE FIBER OPTIC CABLING FROM EXISTING PULL BOX PB115 TO EXISTING PULL BOX PBS-F61 USING NEW CONDUIT AND PULL BOXES AS SHOWN ON THE PLANS. USING EXISTING SPLICE ENCLOSURE, SPLICE NEW FIBER OPTIC CABLE WITH EXISTING 96 STRAND FIBER OPTIC CABLE AT CV-40.
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4. PROPOSED NEW PULL BOX LOCATION.
5. PROVIDE PULL BOXES PB119, PB120, PB122, PB123 AND RIGID NONMETALLIC CONDUIT AS SHOWN FOR FUTURE TRAFFIC SIGNAL INTERCONNECT BETWEEN INTERSECTIONS.
6. ELECTRICAL CONTRACTOR TO REMOVE EXISTING UNUSED SIGNAL PULL BOXES.

NEW LIGHTING KEYED NOTES

1. EXISTING LIGHT POLE IS FED WITH CIRCUITS C AND D FROM EXISTING CONTROLLER 31 LOCATED AT THE INTERSECTION OF BYRD AVENUE AND OHIO STREET TO THE SOUTH OF THIS PROJECT. INSTALL NEW POLE BASE TO SHIFT THIS POLE LOCATION TO THE CENTER OF THE NEW MEDIAN. EXTEND EXISTING CONDUIT AND CIRCUITRY WITH NEW CONDUIT AND WIRE FROM PREVIOUS POLE TO THE SOUTH OF THE NEW POLE BASE. TAKE DOWN AND REINSTALL COMPLETE POLE LIGHT FIXTURE ASSEMBLY AT THE NEW POLE BASE LOCATION. EXISTING CIRCUITS C AND D ARE TO BE EXTENDED USING NEW RACEWAY AND CONDUCTORS TO POWER THE NEW LIGHT POLES AS SHOWN.

FIBER OPTIC CABLING GENERAL NOTES

1. NEW FIBER OPTIC CABLING IS TO EXTEND FROM NEW CABLE VAULT CV-40 ON THE SOUTH END OF THE PROJECT TO CABLE VAULT CV-18 ON THE NORTH END OF THE PROJECT. SEE KEYED NOTES FOR DETAILS ON LOCATION AND WORK SCOPE. RUN FROM CV-18 TO CV-40 SHALL BE A CONTINUOUS RUN WITH NO SPLICING.
2. REFERENCE PLAN NOTES AND SPECIAL PROVISIONS FOR FURTHER INFORMATION.

NEW LIGHTING GENERAL NOTES

1. CONTACT CITY FOR ACCESS TO EXISTING CONTROLLER/CIRCUITS TO BE EXTENDED TO THE NEW FIXTURES.
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3. INSTALL NEW WIRING IN THE TRANSFORMER BASES INCLUDING FUSE HOLDERS SHOWN ON THE DETAIL TO EXTEND CIRCUITRY TO EACH NEW BASE.
4. ELECTRICAL CONTRACTOR SHALL TRANSFER EXISTING LED HEADS FROM EXISTING LIGHT POLES TO NEW LIGHT POLES IN A SEQUENCE THAT WILL KEEP THE FULL PROJECT CORRIDOR COMPLETELY LIT EACH NIGHT.
5. REFERENCE PLAN NOTES AND SPECIAL PROVISIONS FOR FURTHER INFORMATION.

5/4 — CONDUCTOR SYMBOL
TOP NUMBER = No. OF CONDUCTORS
BOTTOM NUMBER = CONDUCTOR SIZE
FOR COPPER CONDUCTORS IN AWG

FOC — CONDUIT RIGID NONMETALLIC SCHEDULE 40 4-INCH WITH FIBER OPTIC CABLE AND #14 TRACER WIRE. SEE SPECIAL PROVISIONS FOR DETAIL.

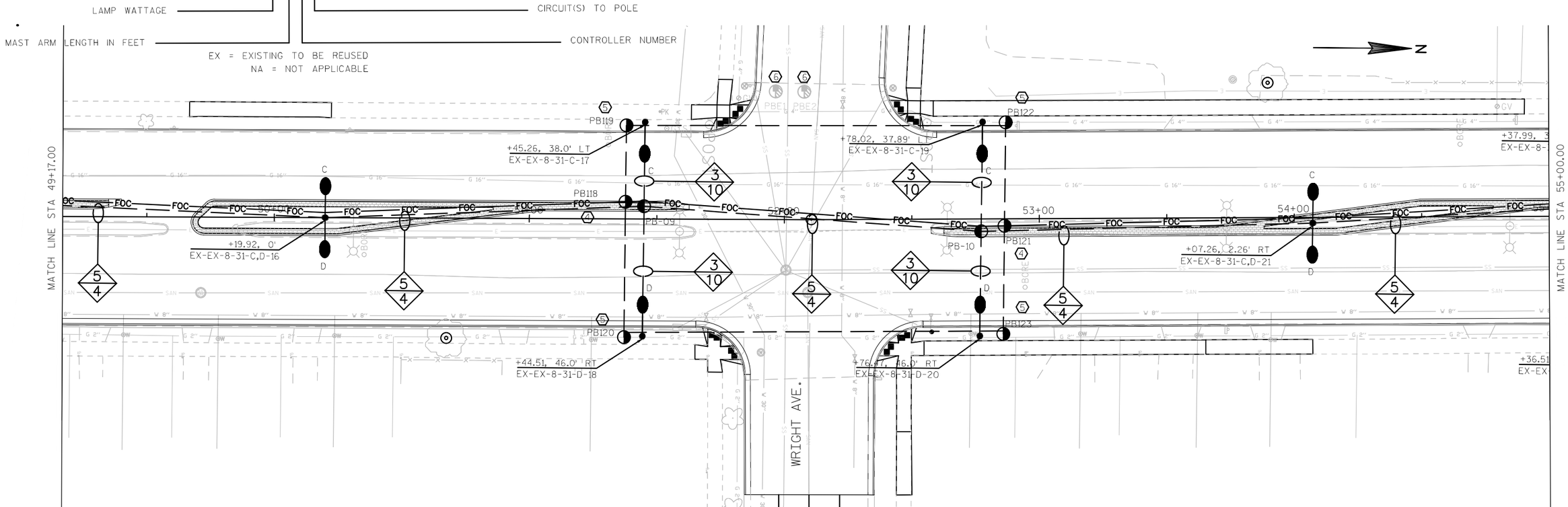
NEW LIGHTING SYMBOLS

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- EXISTING LIGHTING CONTROLLER
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- EXISTING FIBER OPTIC CABLE PULL BOXES STEEL 24 X 36-INCH
- PROPOSED FIBER OPTIC CABLE COMMUNICATION VAULT TYPE 1

FIXTURE LEGEND

POLE STATION AND SETBACK DISTANCE (IN FEET) FROM CENTER LINE — 52+0.00 (4.5R)
FIXTURE IES DISTRIBUTION TYPE — III
LAMP WATTAGE — 120
MAST ARM LENGTH IN FEET — 8
CIRCUIT(S) TO POLE — 01
POLE NUMBER — B-11
CONTROLLER NUMBER — 11
C, D — LUMINAIRE CIRCUIT

EX = EXISTING TO BE REUSED
NA = NOT APPLICABLE



PROJECT NO: 2704-00-73	HWY: OHIO STREET	COUNTY: RACINE	PLAN: LIGHTING, SIGNAL, AND FIBER OPTIC PLAN DETAIL	SHEET 42	E

(11) FIBER OPTIC CABLING KEYED NOTES

1. REMOVE EXISTING PULL BOX PB113. PROTECT EXISTING CABELING AND INSTALL NEW CABLE VAULT CV-40 AT THE SAME LOCATION OF THE OLD PB-113.
2. PULL NEW FIBER OPTIC CABLE FROM NEW CV-40 THROUGH EXISTING RACEWAY TO EXISTING PULL BOX PB115. INCLUDE 50' COIL AT CV-40. CONTINUE FIBER OPTIC CABLING FROM EXISTING PULL BOX PB115 TO EXISTING PULL BOX PBS-F61 USING NEW CONDUIT AND PULL BOXES AS SHOWN ON THE PLANS. USING EXISTING SPLICE ENCLOSURE, SPLICE NEW FIBER OPTIC CABLE WITH EXISTING 96 STRAND FIBER OPTIC CABLE AT CV-40.
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4. PROPOSED NEW PULL BOX LOCATION.
5. PROVIDE PULL BOXES PB119, PB120, PB122, PB123 AND RIGID NONMETALLIC CONDUIT AS SHOWN FOR FUTURE TRAFFIC SIGNAL INTERCONNECT BETWEEN INTERSECTIONS.
6. ELECTRICAL CONTRACTOR TO REMOVE EXISTING UNUSED SIGNAL PULL BOXES.

(10) NEW LIGHTING KEYED NOTES

1. EXISTING LIGHT POLE IS FED WITH CIRCUITS C AND D FROM EXISTING CONTROLLER 31 LOCATED AT THE INTERSECTION OF BYRD AVENUE AND OHIO STREET TO THE SOUTH OF THIS PROJECT. INSTALL NEW POLE BASE TO SHIFT THIS POLE LOCATION TO THE CENTER OF THE NEW MEDIAN. EXTEND EXISTING CONDUIT AND CIRCUITRY WITH NEW CONDUIT AND WIRE FROM PREVIOUS POLE TO THE SOUTH OF THE NEW POLE BASE. TAKE DOWN AND REINSTALL COMPLETE POLE LIGHT FIXTURE ASSEMBLY AT THE NEW POLE BASE LOCATION. EXISTING CIRCUITS C AND D ARE TO BE EXTENDED USING NEW RACEWAY AND CONDUCTORS TO POWER THE NEW LIGHT POLES AS SHOWN.

FIBER OPTIC CABLING GENERAL NOTES

1. NEW FIBER OPTIC CABLING IS TO EXTEND FROM NEW CABLE VAULT CV-40 ON THE SOUTH END OF THE PROJECT TO CABLE VAULT CV-18 ON THE NORTH END OF THE PROJECT. SEE KEYED NOTES FOR DETAILS ON LOCATION AND WORK SCOPE. RUN FROM CV-18 TO CV-40 SHALL BE A CONTINUOUS RUN WITH NO SPLICING.
2. REFERENCE PLAN NOTES AND SPECIAL PROVISIONS FOR FURTHER INFORMATION.

NEW LIGHTING GENERAL NOTES

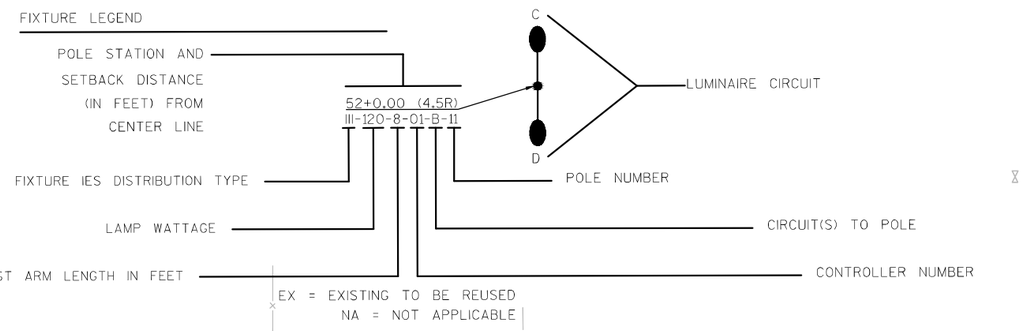
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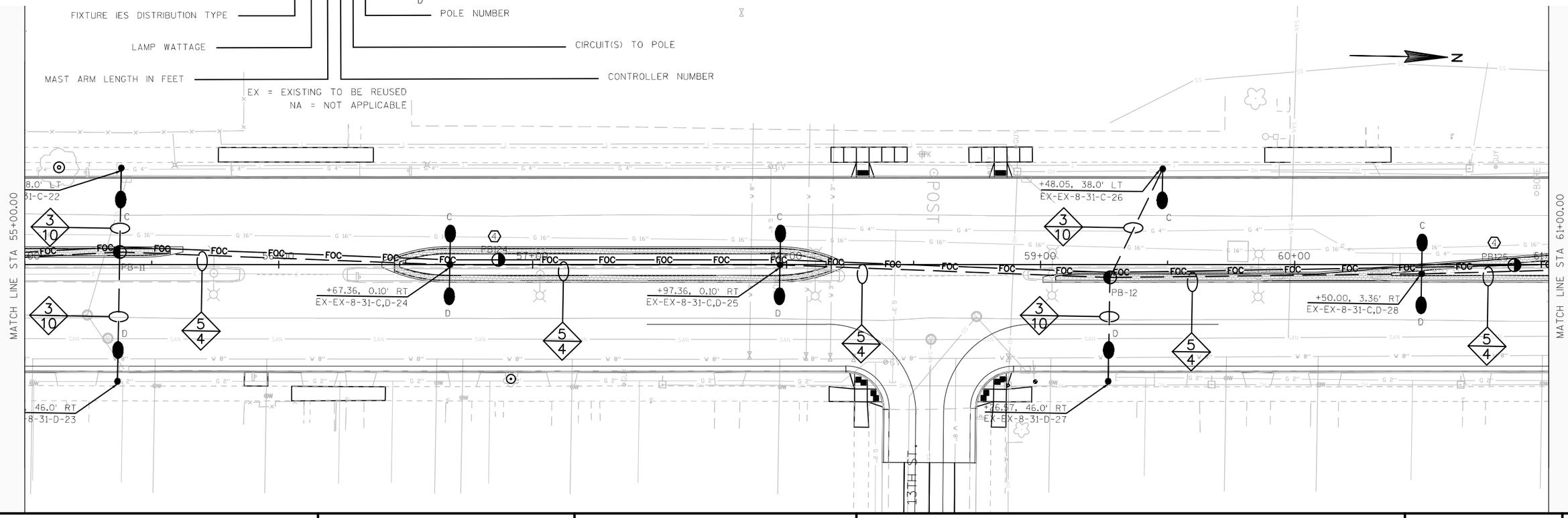
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—FOC— CONDUIT RIGID NONMETALLIC SCHEDULE 40 4-INCH WITH FIBER OPTIC CABLE AND #14 TRACER WIRE. SEE SPECIAL PROVISIONS FOR DETAIL.

NEW LIGHTING SYMBOLS

- EXISTING LIGHT POLE ASSEMBLY
- PROPOSED LIGHT POLE ASSEMBLY
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PROJECT NO: 2704-00-73	HWY: OHIO STREET	COUNTY: RACINE	PLAN: LIGHTING, SIGNAL, AND FIBER OPTIC PLAN DETAIL	SHEET 43 E

(E) FIBER OPTIC CABLING KEYED NOTES

1. REMOVE EXISTING PULL BOX PB113. PROTECT EXISTING CABELING AND INSTALL NEW CABLE VAULT CV-40 AT THE SAME LOCATION OF THE OLD PB-113.
2. PULL NEW FIBER OPTIC CABLE FROM NEW CV-40 THROUGH EXISTING RACEWAY TO EXISTING PULL BOX PB115. INCLUDE 50' COIL AT CV-40. CONTINUE FIBER OPTIC CABLING FROM EXISTING PULL BOX PB115 TO EXISTING PULL BOX PBS-F61 USING NEW CONDUIT AND PULL BOXES AS SHOWN ON THE PLANS. USING EXISTING SPLICE ENCLOSURE, SPLICE NEW FIBER OPTIC CABLE WITH EXISTING 96 STRAND FIBER OPTIC CABLE AT CV-40.
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5. PROVIDE PULL BOXES PB119, PB120, PB122, PB123 AND RIGID NONMETALLIC CONDUIT AS SHOWN FOR FUTURE TRAFFIC SIGNAL INTERCONNECT BETWEEN INTERSECTIONS.
6. ELECTRICAL CONTRACTOR TO REMOVE EXISTING UNUSED SIGNAL PULL BOXES.

LOOP DETECTOR NOTES

1. CONTRACTOR TO CUT WIRE, CONNECT NEW CONDUIT, AND INSTALL NEW LOOP DETECTOR LEAD-IN CABLE FROM PB126 TO EXISTING CONTROL CABINET IN NORTHWEST QUADRANT OF THE OHIO STREET AND WASHINGTON AVENUE INTERSECTION.
2. SEE ALSO SDD 9F15-3B.

(D) NEW LIGHTING KEYED NOTES

1. EXISTING LIGHT POLE IS FED WITH CIRCUITS C AND D FROM EXISTING CONTROLLER 31 LOCATED AT THE INTERSECTION OF BYRD AVENUE AND OHIO STREET TO THE SOUTH OF THIS PROJECT. INSTALL NEW POLE BASE TO SHIFT THIS POLE LOCATION TO THE CENTER OF THE NEW MEDIAN. EXTEND EXISTING CONDUIT AND CIRCUITRY WITH NEW CONDUIT AND WIRE FROM PREVIOUS POLE TO THE SOUTH OF THE NEW POLE BASE. TAKE DOWN AND REINSTALL COMPLETE POLE LIGHT FIXTURE ASSEMBLY AT THE NEW POLE BASE LOCATION. EXISTING CIRCUITS C AND D ARE TO BE EXTENDED USING NEW RACEWAY AND CONDUCTORS TO POWER THE NEW LIGHT POLES AS SHOWN.

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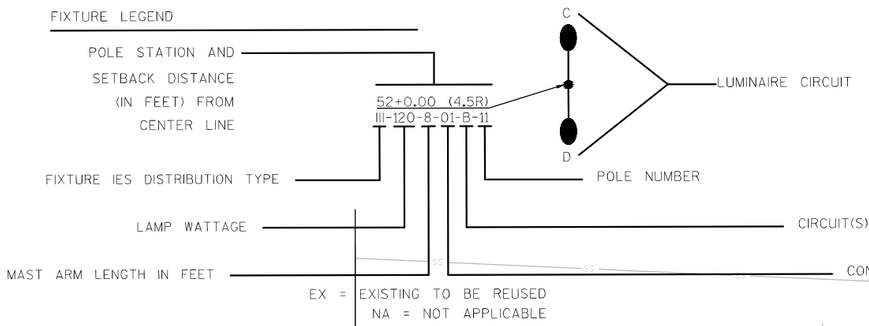
NEW LIGHTING GENERAL NOTES

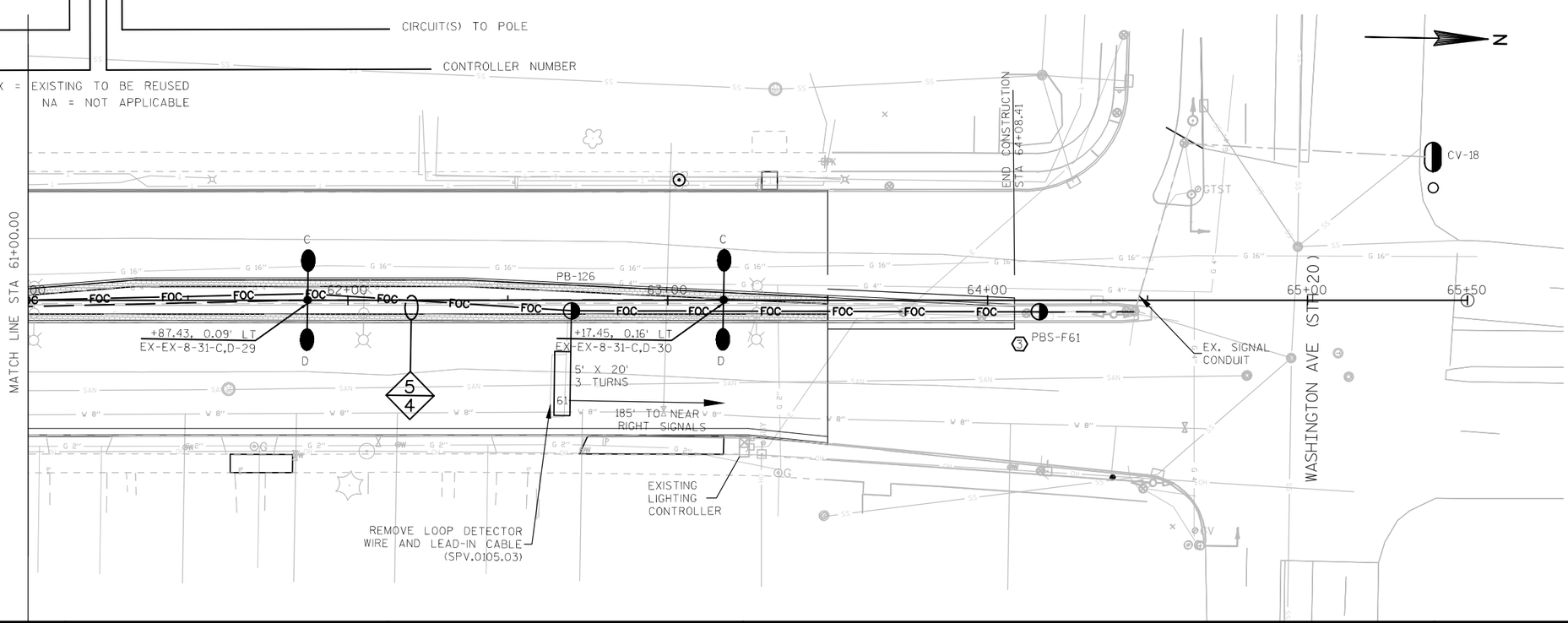
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- CONDUCTOR SYMBOL (5 / 4) TOP NUMBER = No. OF CONDUCTORS BOTTOM NUMBER = CONDUCTOR SIZE FOR COPPER CONDUCTORS IN AWG
- FOC — CONDUIT RIGID NONMETALLIC SCHEDULE 40 4-INCH WITH FIBER OPTIC CABLE AND #14 TRACER WIRE. SEE SPECIAL PROVISIONS FOR DETAIL.
- LOOP DETECTOR CONDUIT 1" NONMETALLIC
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT

- EXISTING CONDUIT RIGID NONMETALLIC SCHEDULE 40 4-INCH.
- EXISTING FIBER OPTIC CABLE PULL BOXES STEEL 24 X 36-INCH
- PROPOSED FIBER OPTIC CABLE PULL BOXES STEEL 24 X 36-INCH
- PROPOSED FIBER OPTIC CABLE COMMUNICATION VAULT TYPE 1





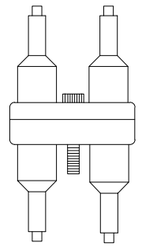
PROJECT NO: 2704-00-73	HWY: OHIO STREET	COUNTY: RACINE	PLAN: LIGHTING, SIGNAL, AND FIBER OPTIC PLAN DETAIL	SHEET 44	E

2

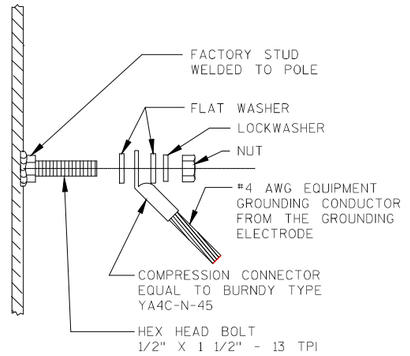
GENERAL NOTES

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

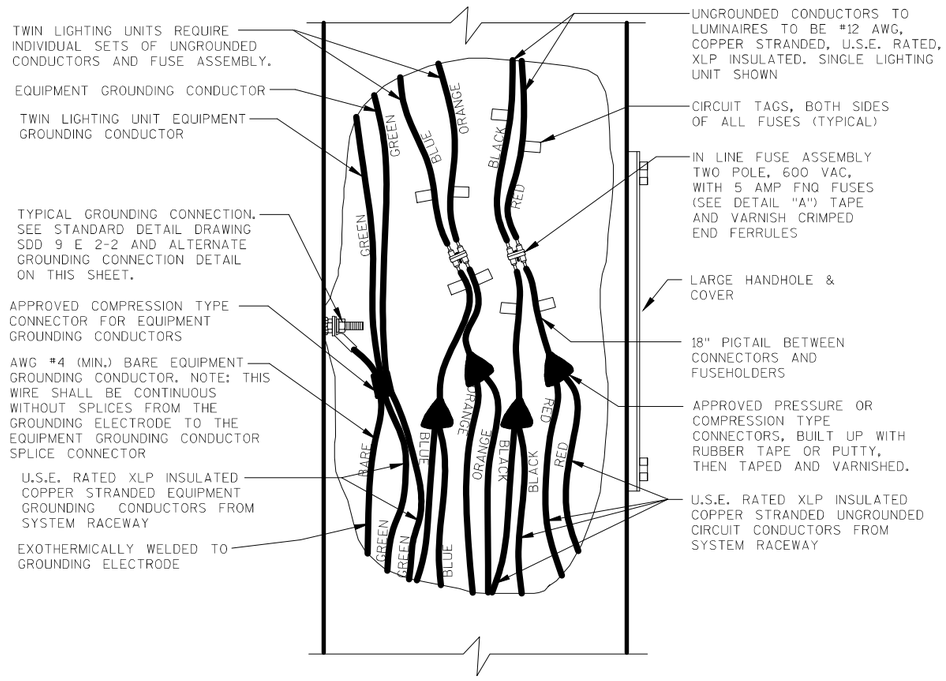
THE EQUIPMENT GROUND CONNECTOR SHALL BE TAPED WITH 3 WRAPS (MINIMUM) OF APPROVED RUBBER TAPE AND THEN 3 WRAPS (MINIMUM) OF APPROVED VINYL TAPE TO COVER SHARP WIRE ENDS AFTER THE CONNECTION IS COMPLETED.



DETAIL "A"
DOUBLE POLE



ALTERNATE GROUNDING CONNECTION
NUT, BOLT, AND WASHERS SHALL BE STAINLESS STEEL

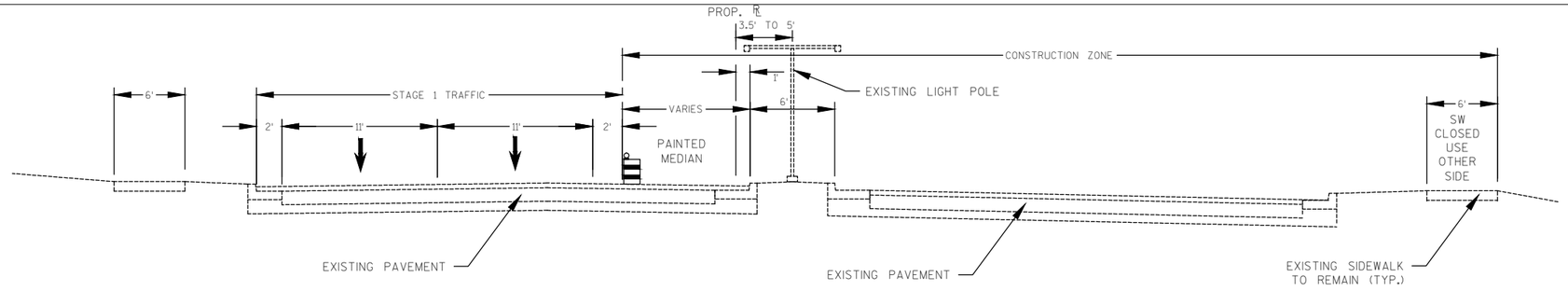


4 WIRE - 240 VAC (UNGROUNDED CONDUCTORS)
WITH EQUIPMENT GROUNDING CONDUCTOR

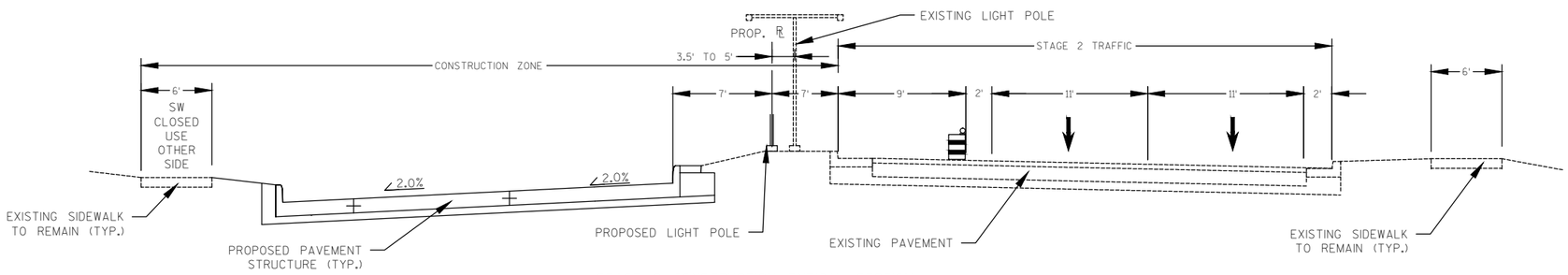
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GENERAL NOTES:

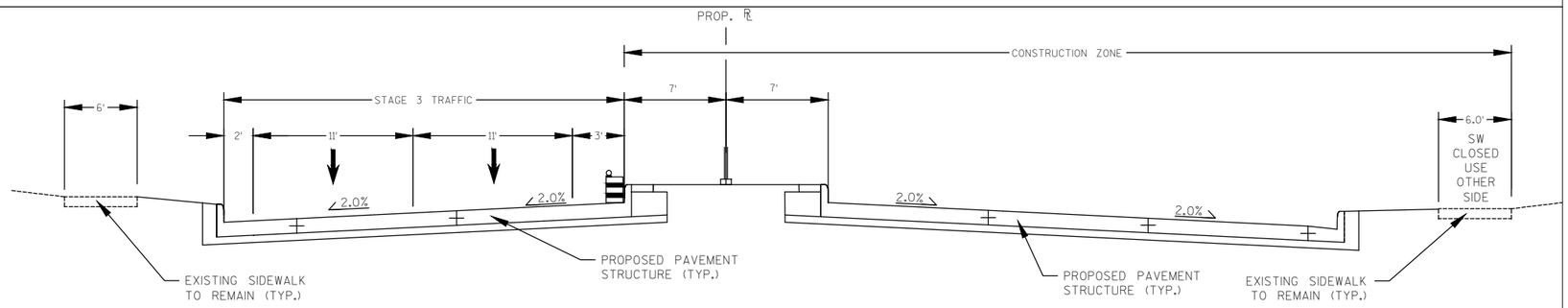
1. SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE AND MAINTAIN ACCESS TO ALL PROPERTY ABUTTING THE ROADWAY THROUGHOUT THE LIFE OF THE PROJECT,
2. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN ALL NECESSARY BARRICADES, SIGNS, LIGHTS, TEMPORARY MARKINGS, FLAGGERS, AND SUCH OTHER SAFETY DEVICES AS CALLED FOR ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
3. THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITION$ A$ DIRECTED BY THE ENGINEER.
4. THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200' CLEARANCE TO EXISTING SIGNS.
5. 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.
6. DURING HOURS OF DARKNESS, ALL BARRICADES USED TO SHIELD A HAZARD SHALL BE EQUIPPED WITH TYPE "A" (LOW INTENSITY FLASHING) LIGHTS AND DEVICES USED TO DELINEATE A PATH SHALL BE EQUIPPED WITH TYPE "C" (STEADY BURN) LIGHTS
7. WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.
8. DRAWINGS SHOW TRAFFIC CONTROL FOR A TYPICAL SITUATION. ADDITIONAL TRAFFIC CONTROL DEVICES MAY BE NECESSARY AND/OR LAYOUT DETAILS MODIFIED DEPENDING ON CONTRACTOR'S METHODS OR SEQUENCES OF OPERATION.
9. PAVEMENT MARKINGS NOT APPROPRIATE TO THE TRAVEL PATH SHALL BE REMOVED.
10. STATIONING SHOWN FOR PAVEMENT MARKING REMOVAL IS APPROXIMATE, ACTUAL LENGTHS ARE TO BE DETERMINED IN THE FIELD AND APPROVED BY THE ENGINEER.
11. ROAD MACHINERY, FLAGGERS AHEAD, ETC. SIGNS SHALL BE USED AS NEEDED AND SHALL BE REMOVED OR COVERED AT NIGHTS, ON WEEKENDS, OR WHEN THE ACTIVITY DOES NOT EXIST.
12. ALL LANE CLOSURE SIGNS SHALL BE COVERED AND DEVICES REMOVED BEYOND THE CURB AND GUTTER WHEN THE WORK IS NOT IN PROGRESS AND THE LANE IS RESTORED TO NORMAL OPERATING CONDITION.
13. ALL LANE CLOSURE SIGNS SHALL BE COVERED AND DEVICES REMOVED BEYOND THE CURB AND GUTTER WHEN THE WORK IS NOT IN PROGRESS AND THE LANE IS RESTORED.
14. FOR STORM SEWER PIPE INSTALLATION, THE CONTRACTOR SHALL UTILIZE THE STANDARD DETAIL DRAWING "TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)".
15. ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.
16. "WO" SIGNS ARE THE SAME AS 'W' SIGNS EXCEPT THE BACKGROUND IS ORANGE.
17. ALL TYPE III BARRICADES SHALL HAVE A WIDTH OF 8 FEET.
18. DRAWINGS ARE NOT TO SCALE.
19. ANY "STOP" SIGNS THAT ARE REMOVED FOR A CONSTRUCTION OPERATION SHALL BE IMMEDIATELY REESTABLISHED ONCE THAT OPERATION IS COMPLETED.
20. ADDITIONAL DRUMS OR TYPE III BARRICADES MAY BE REQUIRED ADJACENT TO DROP-OFFS, OPEN TRENCHES, OR PROTRUSIONS (INCLUDING MANHOLE COVERS AND WATER VALVES). COST TO BE INCLUDED IN THE OPERATION WHICH CREATES THE HAZARD.
21. DRUMS PLACED ADJACENT TO WORK AREAS SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.



STAGE 1 CONSTRUCTION TYPICAL SECTION



STAGE 2 CONSTRUCTION TYPICAL SECTION



STAGE 3 CONSTRUCTION TYPICAL SECTION

2

STAGE 1

1. TRAFFIC
   - 1.1. ONE WAY SOUTHBOUND TRAFFIC ON EXISTING SOUTHBOUND LANES .
   - 1.2. ACCESS TO OHIO STREET FROM 15TH STREET, WRIGHT AVENUE AND 13TH STREET WILL REMAIN OPEN, WITH ONLY SHORT TERM CLOSURES, ALLOWED DURING CONSTRUCTION.
   - 1.3. INSTALL TRAFFIC CONTROL FOR DETOUR
   - 1.4. ACCESS TO BUSINESSES SHALL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION.
2. CONSTRUCTION
   - 2.1. REMOVE ITEMS NECESSARY THAT CONFLICT WITH TEMPORARY PAVEMENT AND TRAFFIC CONTROL OF DOUBLE LANE CROSSOVER (STAGE 2) AT NORTH AND SOUTH ENDS OF THE PROJECT.
   - 2.2. CONSTRUCT TEMPORARY PAVEMENT STRUCTURE FOR DOUBLE LANE CROSSOVER AT NORTH AND SOUTH ENDS OF THE PROJECT
   - 2.3. CONSTRUCT PROPOSED STORM SEWER ON EAST SIDE OF OHIO STREET AT 15TH STREET, WRIGHT AVENUE, AND 13TH STREET.
   - 2.2. REMOVE EXISTING PAVEMENT MARKINGS ON NORTHBOUND LANES.
   - 2.3. INSTALL TEMPORARY PAVEMENT MARKINGS AND TRAFFIC CONTROL DEVICES NECESSARY FOR STAGE 2 ON THE EAST SIDE OF OHIO STREET.

STAGE 2

1. TRAFFIC
   - 1.1. ONE WAY SOUTHBOUND TRAFFIC ON EXISTING NORTHBOUND LANES
   - 1.2. ACCESS TO OHIO STREET FROM 15TH STREET, WRIGHT AVENUE AND 13TH STREET WILL REMAIN OPEN, WITH ONLY SHORT TERM CLOSURES ALLOWED DURING CONSTRUCTION.
   - 1.3. MAINTAIN TRAFFIC CONTROL FOR DETOUR.
   - 1.4. ACCESS TO BUSINESSES SHALL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION.
2. CONSTRUCTION
   - 2.1. REMOVE ALL ITEMS WITHIN CONSTRUCTION ZONE AREA AS INDICATED IN THE PLANS.
   - 2.2. CONSTRUCT NEW STORM SEWER INLETS AND PIPES TO THE LEFT OF THE PROPOSED REFERENCE LINE.
   - 2.3. CONSTRUCT NEW SOUTHBOUND LANES INCLUDING CURB & GUTTER, SIDEWALK AND CURB RAMPS TO THE LEFT OF THE PROPOSED REFERENCE LINE.
   - 2.4. INSTALL ALL EROSION CONTROL DEVICES AND PERTINENT FINISHING ITEMS THAT PERTAIN TO STAGE 2 CONSTRUCTION.
   - 2.4. INSTALL TEMPORARY PAVEMENT MARKINGS AND TRAFFIC CONTROL DEVICES NECESSARY FOR STAGE 3 CONSTRUCTION.
   - 2.5. INSTALL ALL LIGHT POLES IN THE MEDIAN AND ON THE LEFT SIDE OF ROADWAY. REMOVE THE LUMINAIRES FROM THE EXISTING LIGHT FIXTURES AND PLACE ON THE NEW POLES. THIS SHALL BE COMPLETED SO THAT THERE WILL BE LIGHT COVERAGE AT ALL TIMES FOR THE TRAVELING MOTORISTS.

STAGE 3

1. TRAFFIC
   - 1.1. ONE WAY SOUTHBOUND TRAFFIC TRAVEL ON NEWLY CONSTRUCTED SOUTHBOUND LANES.
   - 1.2. ACCESS TO OHIO STREET FROM 15TH STREET, WRIGHT AVENUE AND 13TH STREET WILL REMAIN OPEN, WITH ONLY SHORT TERM CLOSURES ALLOWED DURING CONSTRUCTION.
   - 1.3. MAINTAIN TRAFFIC CONTROL FOR DETOUR.
   - 1.4. ACCESS TO BUSINESSES SHALL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION.
2. CONSTRUCTION
   - 2.1. REMOVE ALL ITEMS WITHIN CONSTRUCTION ZONE AREA AS INDICATED IN THE PLANS.
   - 2.2. CONSTRUCT NEW NORTHBOUND LANES INCLUDING CURB & GUTTER, SIDEWALK AND CURB RAMPS TO THE RIGHT OF THE PROPOSED REFERENCE LINE.
   - 2.3. INSTALL ALL EROSION CONTROL DEVICES AND PERTINENT FINISHING ITEMS THAT PERTAIN TO STAGE 3 CONSTRUCTION.
   - 2.4. REMOVE ALL TEMPORARY SIGNS, BARRIERS, AND MARKINGS
   - 2.5. INSTALL PERMANENT SIGNS AND PAVEMENT MARKINGS.
   - 2.6. REMOVE ALL EXISTING LIGHT POLES FROM THE PROJECT. INSTALL ANY REMAINING LIGHT POLES ON THE EAST SIDE OF ROADWAY.
   - 2.7. CONSTRUCT STAMPED AND COLORED CONCRETE SIDEWALK IN MEDIAN.
   - 2.8. FINISH MEDIAN LANDSCAPING.

PROJECT NO: 2704-00-73	HWY: OHIO STREET	COUNTY: RACINE	CONSTRUCTION STAGING - SECTION & NOTES	SHEET 46	E

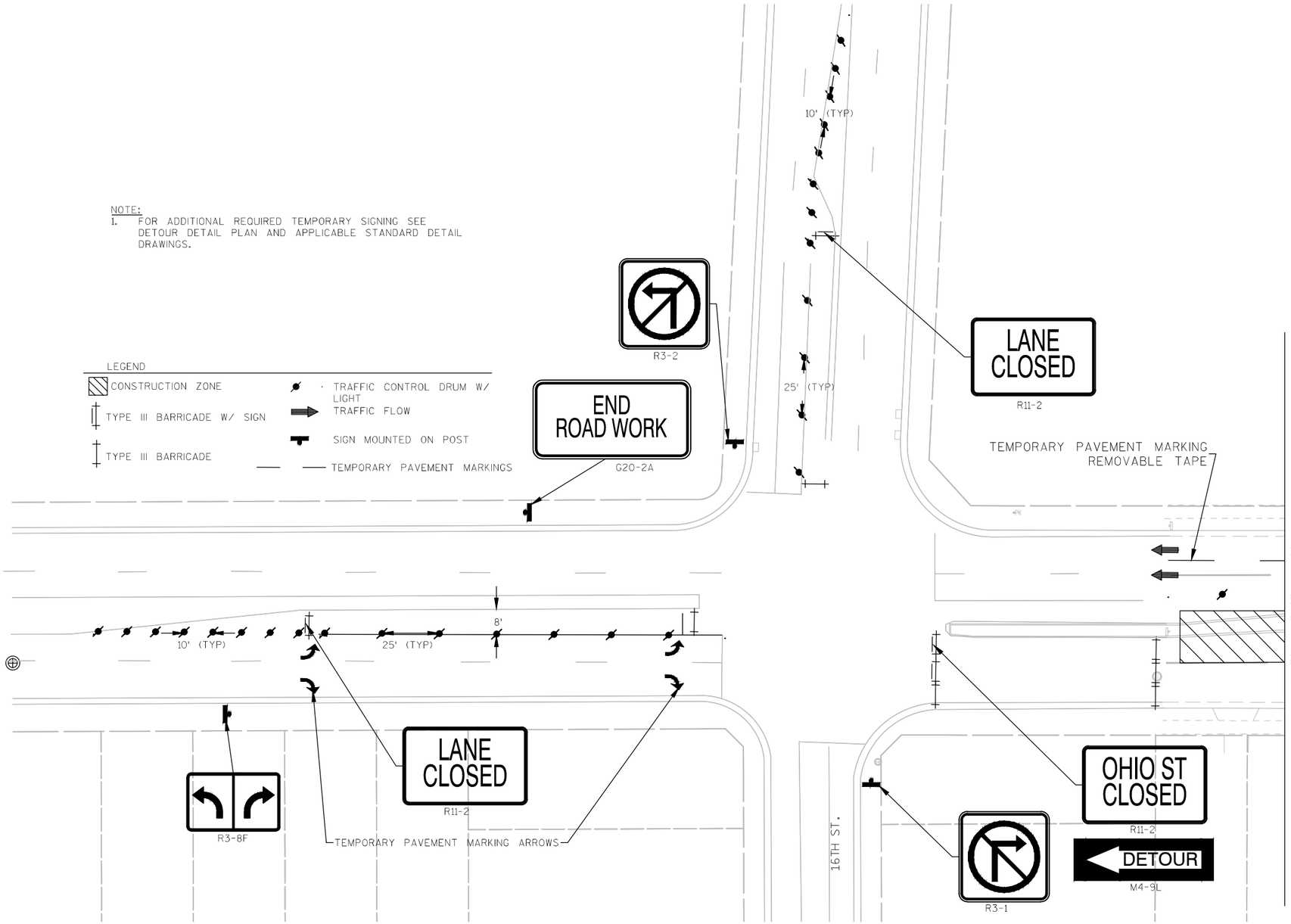
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N

NOTE:
1. FOR ADDITIONAL REQUIRED TEMPORARY SIGNING SEE DETOUR DETAIL PLAN AND APPLICABLE STANDARD DETAIL DRAWINGS.

LEGEND

- CONSTRUCTION ZONE
- TYPE III BARRICADE W/ SIGN
- TYPE III BARRICADE
- TRAFFIC CONTROL DRUM W/ LIGHT
- TRAFFIC FLOW
- SIGN MOUNTED ON POST
- TEMPORARY PAVEMENT MARKINGS



SCALE, FEET 0 25 50

PROJECT NO: 2704-00-73	HWY: OHIO STREET	COUNTY: RACINE	CONSTRUCTION STAGING - STAGE 1	SHEET 47	E

FILE NAME : P:\R0140060_RACINE - OHIO STREET DESIGN\C3D\SHEETSPLAN\27040003_026002_CS1.DWG PLOT DATE : 11/26/2013 7:41 AM PLOT BY : KEVIN K. RISCH PLOT NAME : PLOT SCALE : 1:50_XREF

WISDOT/CADDS SHEET 42

2

2

N

LEGEND

CONSTRUCTION ZONE

TYPE III BARRICADE W/ SIGN

TYPE III BARRICADE

TRAFFIC CONTROL DRUM W/ LIGHT

TRAFFIC FLOW

SIGN MOUNTED ON POST

TEMPORARY PAVEMENT MARKINGS

REMOVE EXISTING PAVEMENT MARKINGS (TYPICAL)

R3-2

TEMPORARY PAVEMENT MARKING REMOVABLE TAPE

MATCH LINE • STA 44+00

℄ OHIO STREET

44 45 46 47 48 50' (TYP) 49 50 51

MATCH LINE STA 51+50

CONTRACTOR MAY CLOSE ROADWAY FOR UP TO ONE WEEK. THIS WILL REQUIRE CONTRACTOR TO PROVIDE ADVANCED ROAD CLOSED AHEAD SIGNS. THIS WORK SHALL BE COORDINATED WITH OTHER INTERSECTIONS AND MUST NOT CLOSE 2 INTERSECTIONS AT THE SAME TIME

ROAD WORK AHEAD

W20-1

15TH ST.

R3-1

ROAD CLOSED AHEAD

W20-3
LAY DOWN OR COVER WHEN NOT IN USE

SCALE, FEET 0 25 50

PROJECT NO: 2704-00-73	HWY: OHIO STREET	COUNTY: RACINE	CONSTRUCTION STAGING - STAGE 1	SHEET 48	E

2

N

LEGEND

CONSTRUCTION ZONE

TYPE III BARRICADE W/ SIGN

TYPE III BARRICADE

TRAFFIC CONTROL DRUM W/ LIGHT

TRAFFIC FLOW

SIGN MOUNTED ON POST

TEMPORARY PAVEMENT MARKINGS

REMOVE EXISTING PAVEMENT MARKINGS (TYPICAL)

TEMPORARY PAVEMENT MARKING REMOVABLE TAPE

MATCH LINE STA 51+50

MATCH LINE STA 59+00

℄ OHIO STREET

50' (TYP)

52 53 54 55 56 57 58

WRIGHT AVE.

13TH ST.

R3-2

R3-1

R3-1

REMOVE LIGHT

REMOVE MEDIAN FROM STA 53+30 TO STA 54+10 AND REPLACE WITH TEMPORARY PAVEMENT TO MAINTAIN ACCESS TO DRIVEWAY DURING STAGE 2.

CONTRACTOR MAY CLOSE ROADWAY FOR UP TO ONE WEEK. THIS WILL REQUIRE CONTRACTOR TO PROVIDE ADVANCED ROAD CLOSED AHEAD SIGNS. THIS WORK SHALL BE COORDINATED WITH OTHER INTERSECTIONS AND MUST NOT CLOSE 2 INTERSECTIONS AT THE SAME TIME

CONTRACTOR MAY CLOSE ROADWAY FOR UP TO ONE WEEK. THIS WILL REQUIRE CONTRACTOR TO PROVIDE ADVANCED ROAD CLOSED AHEAD SIGNS. THIS WORK SHALL BE COORDINATED WITH OTHER INTERSECTIONS AND MUST NOT CLOSE 2 INTERSECTIONS AT THE SAME TIME

ROAD WORK AHEAD

W20-1

ROAD CLOSED AHEAD

W20-3
LAY DOWN OR COVER WHEN NOT IN USE

ROAD CLOSED AHEAD

W20-3
LAY DOWN OR COVER WHEN NOT IN USE

ROAD WORK AHEAD

W20-1

SCALE, FEET 0 25 50

PROJECT NO: 2704-00-73	HWY: OHIO STREET	COUNTY: RACINE	CONSTRUCTION STAGING - STAGE 1	SHEET 49	E

2

LEGEND

CONSTRUCTION ZONE

TYPE III BARRICADE W/ SIGN

TYPE III BARRICADE

TRAFFIC CONTROL DRUM W/ LIGHT

TRAFFIC FLOW

SIGN MOUNTED ON POST

TEMPORARY PAVEMENT MARKINGS

TEMPORARY PAVEMENT MARKING REMOVABLE TAPE

REMOVE EXISTING PAVEMENT MARKINGS (TYPICAL)

END CONSTRUCTION STA 64+08.41

MATCH LINE STA 59+00

℄ OHIO STREET

50' (TYP)

25' (TYP)

WASHINGTON AVE (STH 20)

ROAD WORK AHEAD

W20-1

N

SCALE, FEET 0 25 50

PROJECT NO: 2704-00-73	HWY: OHIO STREET	COUNTY: RACINE	CONSTRUCTION STAGING - STAGE 1	SHEET 50	E

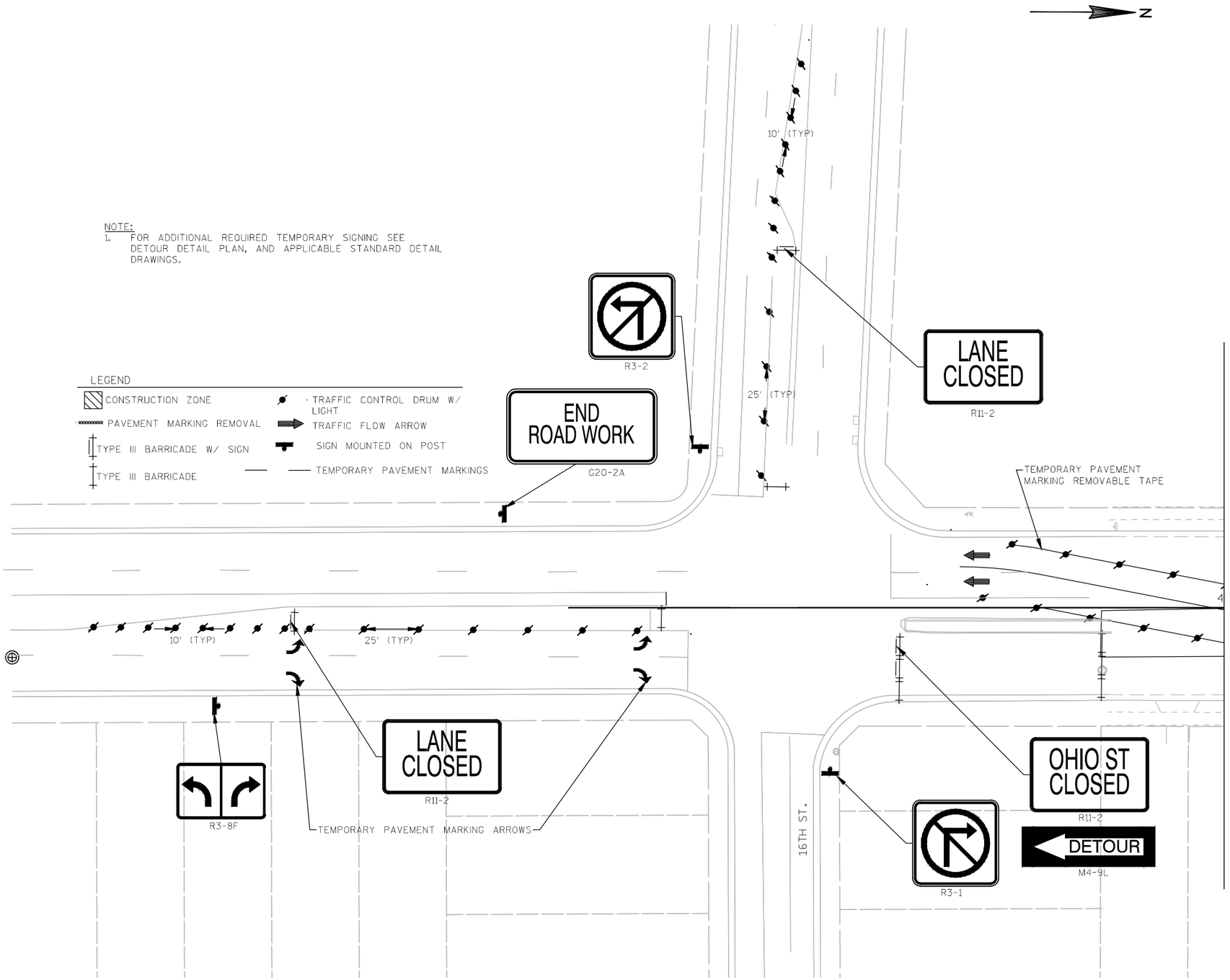
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NOTE:
1. FOR ADDITIONAL REQUIRED TEMPORARY SIGNING SEE DETOUR DETAIL PLAN, AND APPLICABLE STANDARD DETAIL DRAWINGS.

LEGEND

- CONSTRUCTION ZONE
- PAVEMENT MARKING REMOVAL
- TYPE III BARRICADE W/ SIGN
- TYPE III BARRICADE
- TRAFFIC CONTROL DRUM W/ LIGHT
- TRAFFIC FLOW ARROW
- SIGN MOUNTED ON POST
- TEMPORARY PAVEMENT MARKINGS



SCALE, FEET 0 25 50

PROJECT NO: 2704-00-73	HWY: OHIO STREET	COUNTY: RACINE	CONSTRUCTION STAGING - STAGE 2	SHEET 51	E

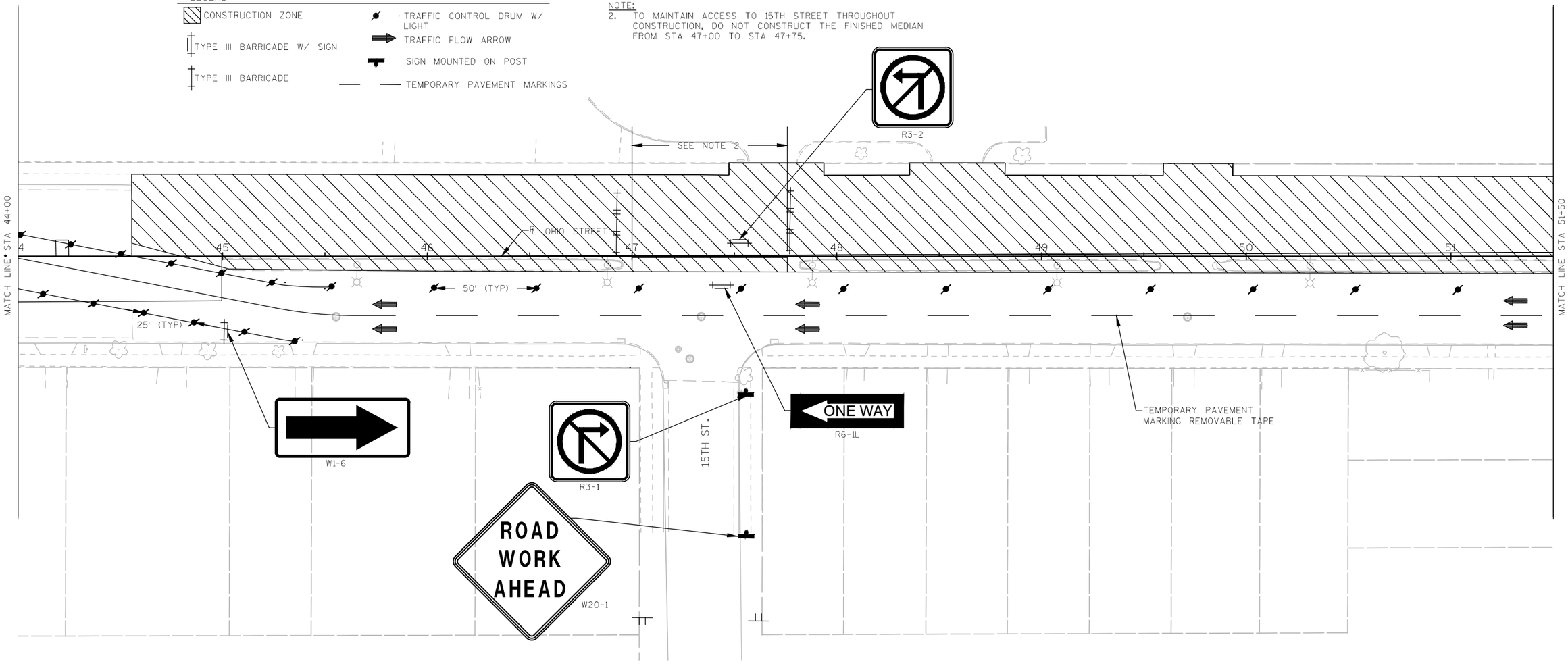
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LEGEND

- CONSTRUCTION ZONE
- TYPE III BARRICADE W/ SIGN
- TYPE III BARRICADE
- TRAFFIC CONTROL DRUM W/ LIGHT
- TRAFFIC FLOW ARROW
- SIGN MOUNTED ON POST
- TEMPORARY PAVEMENT MARKINGS

NOTE:
2. TO MAINTAIN ACCESS TO 15TH STREET THROUGHOUT CONSTRUCTION, DO NOT CONSTRUCT THE FINISHED MEDIAN FROM STA 47+00 TO STA 47+75.



SCALE, FEET 0 25 50

PROJECT NO: 2704-00-73	HWY: OHIO STREET	COUNTY: RACINE	CONSTRUCTION STAGING - STAGE 2	SHEET 52	E

2

N

ROAD WORK AHEAD
W20-1

R3-2

LEGEND

- CONSTRUCTION ZONE
- TYPE III BARRICADE W/ SIGN
- TYPE III BARRICADE
- TRAFFIC CONTROL DRUM W/ LIGHT
- TRAFFIC FLOW ARROW
- SIGN MOUNTED ON POST
- TEMPORARY PAVEMENT MARKINGS

NOTE:
3. TO MAINTAIN ACCESS TO DRIVEWAY THROUGHOUT CONSTRUCTION, DO NOT CONSTRUCT FINISHED MEDIAN FROM STA 53+30 TO STA 54+05. THIS SECTION OF MEDIAN WILL BE CONSTRUCTED IN STAGE 3.

R3-2

MATCH LINE STA 51+50

℄ OHIO STREET

52 53 54 55 56 57 58

℄ OHIO STREET

MATCH LINE STA 59+00

50' (TYP)

SEE NOTE 3

WRIGHT AVE.

ONE WAY
R6-1L

R3-2

TEMPORARY PAVEMENT MARKING REMOVABLE TAPE

ONE WAY
R6-1L

13TH ST.

R3-1

R3-1

ROAD WORK AHEAD
W20-1

ROAD WORK AHEAD
W20-1

SCALE, FEET 0 25 50

PROJECT NO: 2704-00-73	HWY: OHIO STREET	COUNTY: RACINE	CONSTRUCTION STAGING - STAGE 2	SHEET 53	E

FILE NAME : P:\R0140060_RACINE - OHIO STREET DESIGN\C3D\SHEETSPLAN\27040003_026003_CS2.DWG PLOT DATE : 11/26/2013 7:41 AM PLOT BY : KEVIN K. RISCH PLOT NAME : PLOT SCALE : ==========

WISDOT/CADDS SHEET 42

2

N

LEGEND

CONSTRUCTION ZONE

TYPE III BARRICADE W/ SIGN

TYPE III BARRICADE

TRAFFIC CONTROL DRUM W/ LIGHT

TRAFFIC FLOW ARROW

SIGN MOUNTED ON POST

TEMPORARY PAVEMENT MARKINGS

ROAD CLOSED

R11-2

W1-6

ROAD WORK AHEAD

W20-1

MATCH LINE STA 59+00

STA 63+50.00

RE OHIO STREET

WASHINGTON AVE (STH 20)

50' (TYP)

25' (TYP)

TEMPORARY PAVEMENT MARKING REMOVABLE TAPE

SCALE, FEET 0 25 50

PROJECT NO: 2704-00-73	HWY: OHIO STREET	COUNTY: RACINE	CONSTRUCTION STAGING - STAGE 2	SHEET 54	E

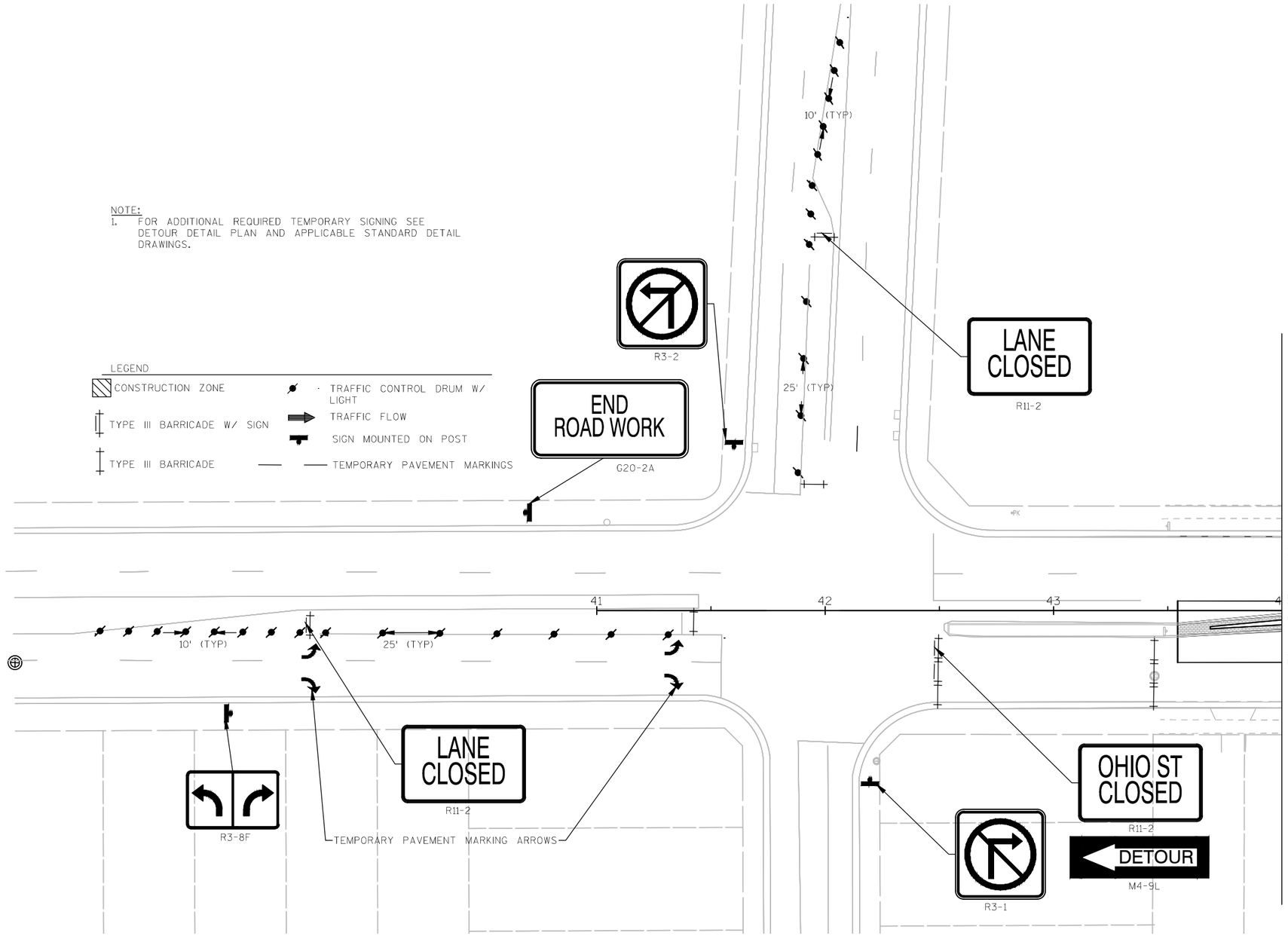
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NOTE:
1. FOR ADDITIONAL REQUIRED TEMPORARY SIGNING SEE DETOUR DETAIL PLAN AND APPLICABLE STANDARD DETAIL DRAWINGS.

LEGEND

- CONSTRUCTION ZONE
- TYPE III BARRICADE W/ SIGN
- TYPE III BARRICADE
- TRAFFIC CONTROL DRUM W/ LIGHT
- TRAFFIC FLOW
- SIGN MOUNTED ON POST
- TEMPORARY PAVEMENT MARKINGS



SCALE, FEET 0 25 50

PROJECT NO: 2704-00-73	HWY: OHIO STREET	COUNTY: RACINE	CONSTRUCTION STAGING - STAGE 3	SHEET 55	E

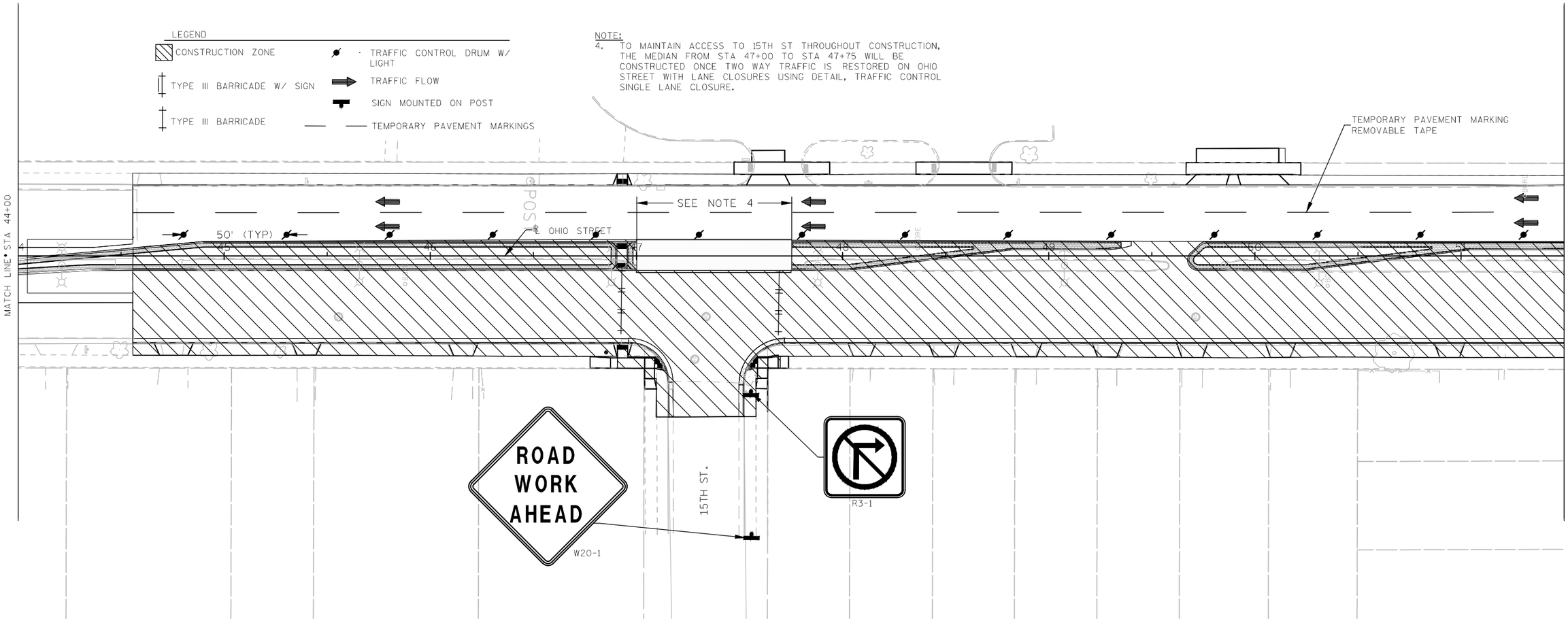
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LEGEND

- CONSTRUCTION ZONE
- TYPE III BARRICADE W/ SIGN
- TYPE III BARRICADE
- TRAFFIC CONTROL DRUM W/ LIGHT
- TRAFFIC FLOW
- SIGN MOUNTED ON POST
- TEMPORARY PAVEMENT MARKINGS

NOTE:
4. TO MAINTAIN ACCESS TO 15TH ST THROUGHOUT CONSTRUCTION, THE MEDIAN FROM STA 47+00 TO STA 47+75 WILL BE CONSTRUCTED ONCE TWO WAY TRAFFIC IS RESTORED ON OHIO STREET WITH LANE CLOSURES USING DETAIL, TRAFFIC CONTROL SINGLE LANE CLOSURE.



SCALE, FEET 0 25 50

PROJECT NO: 2704-00-73	HWY: OHIO STREET	COUNTY: RACINE	CONSTRUCTION STAGING - STAGE 3	SHEET 56	E

2

N

LEGEND

CONSTRUCTION ZONE

TYPE III BARRICADE W/ SIGN

TYPE III BARRICADE

TRAFFIC CONTROL DRUM W/ LIGHT

TRAFFIC FLOW

SIGN MOUNTED ON POST

TEMPORARY PAVEMENT MARKINGS

TEMPORARY PAVEMENT MARKING REMOVABLE TAPE

R3-2

POST

POST

POST

POST

MATCH LINE STA 51+50

MATCH LINE STA 59+00

℄ OHIO STREET

50' (TYP)

℄ OHIO STREET

52

53

54

55

56

57

R3-1

R3-1

WRIGHT AVE.

13TH ST.

ROAD WORK AHEAD

W20-1

ROAD WORK AHEAD

W20-1

SCALE, FEET 0 25 50

PROJECT NO: 2704-00-73	HWY: OHIO STREET	COUNTY: RACINE	CONSTRUCTION STAGING - STAGE 3	SHEET 57	E

FILE NAME : P:\R0140060_RACINE - OHIO STREET DESIGN\C3D\SHEETSPLAN\27040003_026004_CS3.DWG PLOT DATE : 11/26/2013 7:42 AM PLOT BY : KEVIN K. RISCH PLOT NAME : PLOT SCALE : ==========

2

LEGEND

CONSTRUCTION ZONE

TYPE III BARRICADE W/ SIGN

TYPE III BARRICADE

TRAFFIC CONTROL DRUM W/ LIGHT

TRAFFIC FLOW

SIGN MOUNTED ON POST

TEMPORARY PAVEMENT MARKINGS

NOTE:

5.1. DUE TO THE LOCATION OF THE CROSS OVER IN STAGE 2, THE DASHED AREA COULD NOT BE CONSTRUCTED. CONSTRUCT THIS AREA USING LANE CLOSURE PER SDD TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY.

SEE NOTE 5

TEMPORARY PAVEMENT MARKING REMOVABLE TAPE

MATCH LINE STA 59+00

℄ OHIO STREET

50' (TYP)

60

61

62

63

64

65

WASHINGTON AVE (STH 20)

ROAD WORK AHEAD

W20-1

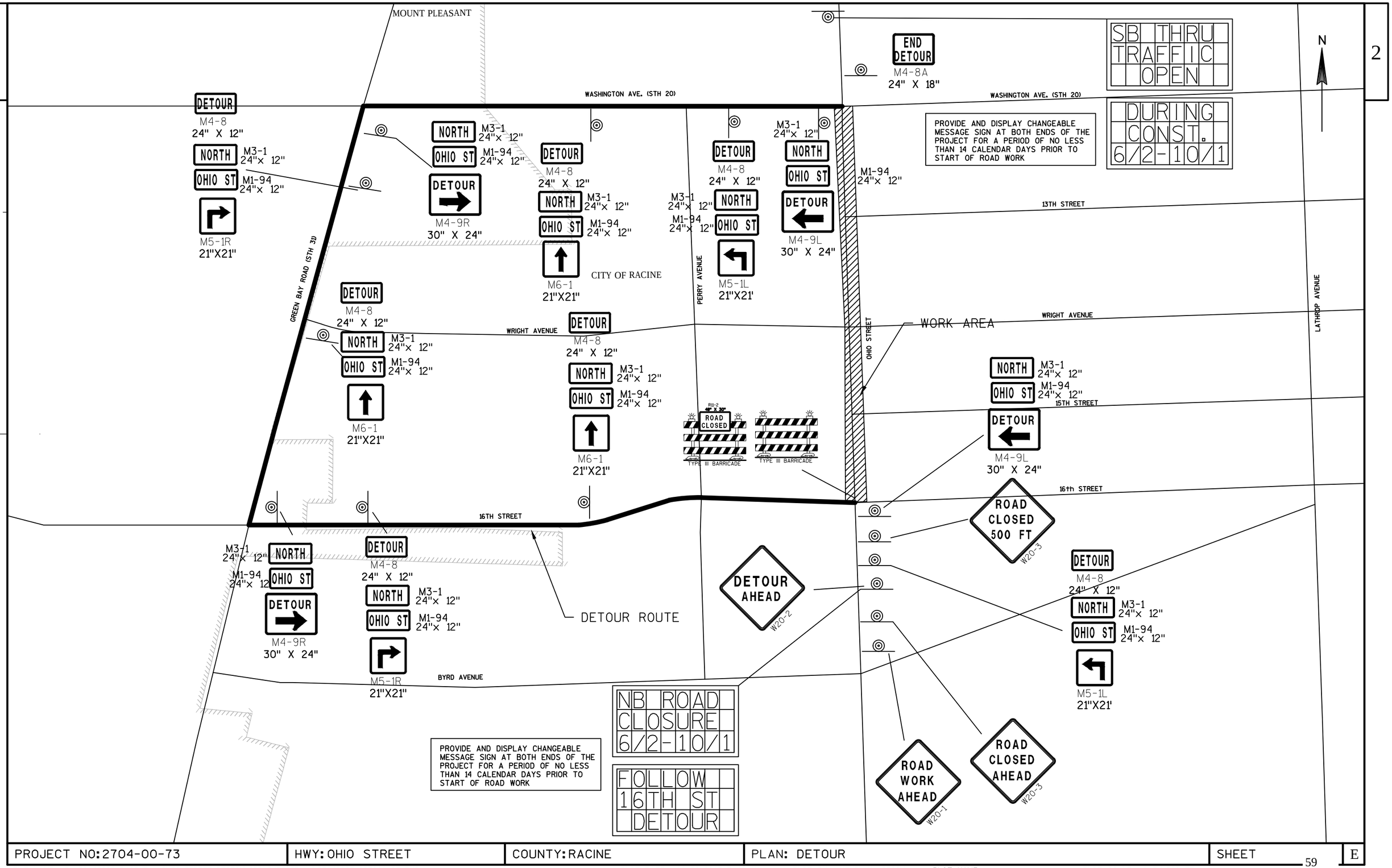
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SCALE, FEET 0 25 50

PROJECT NO: 2704-00-73	HWY: OHIO STREET	COUNTY: RACINE	CONSTRUCTION STAGING - STAGE 3	SHEET 58	E

FILE NAME : P:\R0140060_RACINE - OHIO STREET DESIGN\C3D\SHEETSPLAN\27040003_026004_CS3.DWG PLOT DATE : 11/26/2013 7:42 AM PLOT BY : KEVIN K. RISCH PLOT NAME : PLOT SCALE : 1" = 50'_XREF

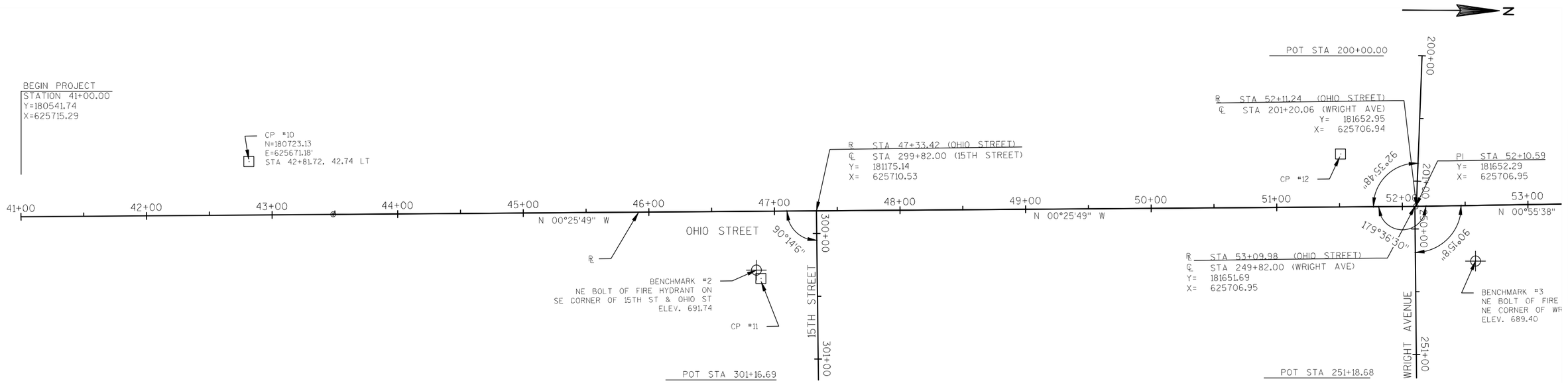
WISDOT/CADDS SHEET 42



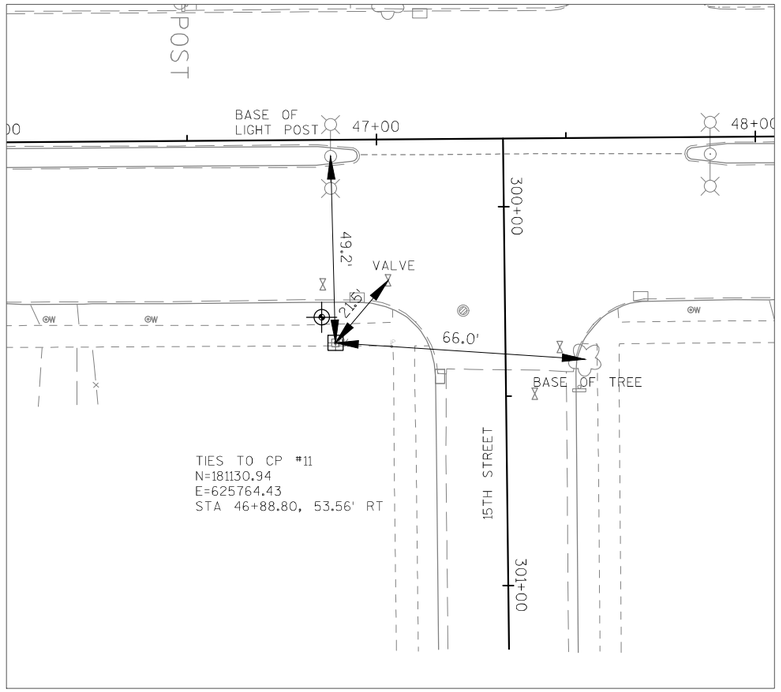
PROJECT NO: 2704-00-73	HWY: OHIO STREET	COUNTY: RACINE	PLAN: DETOUR	SHEET	E

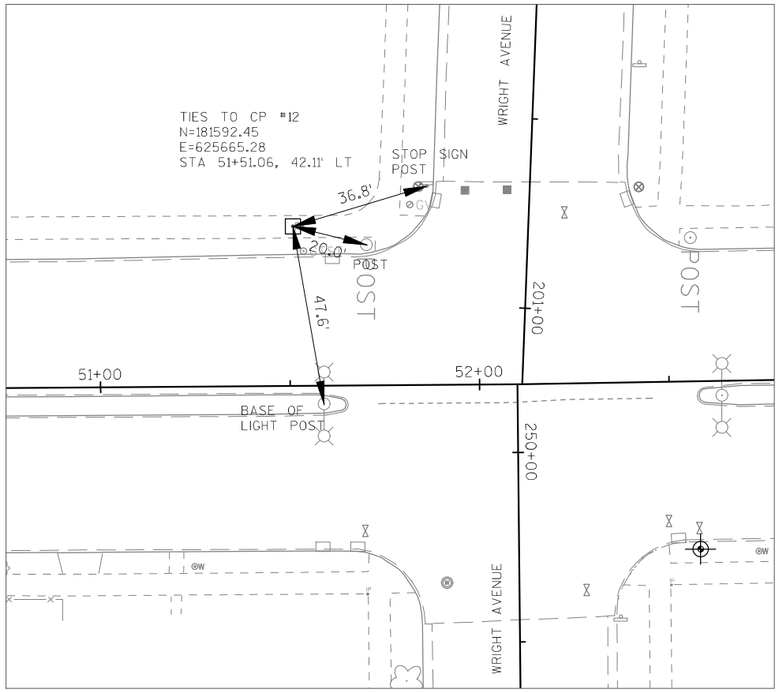
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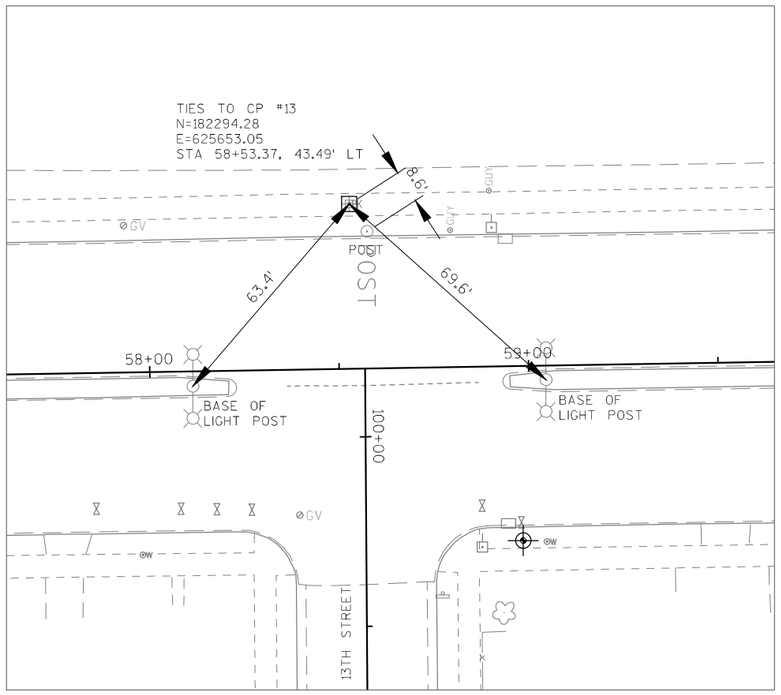
WISDOT/CADDS SHEET 42

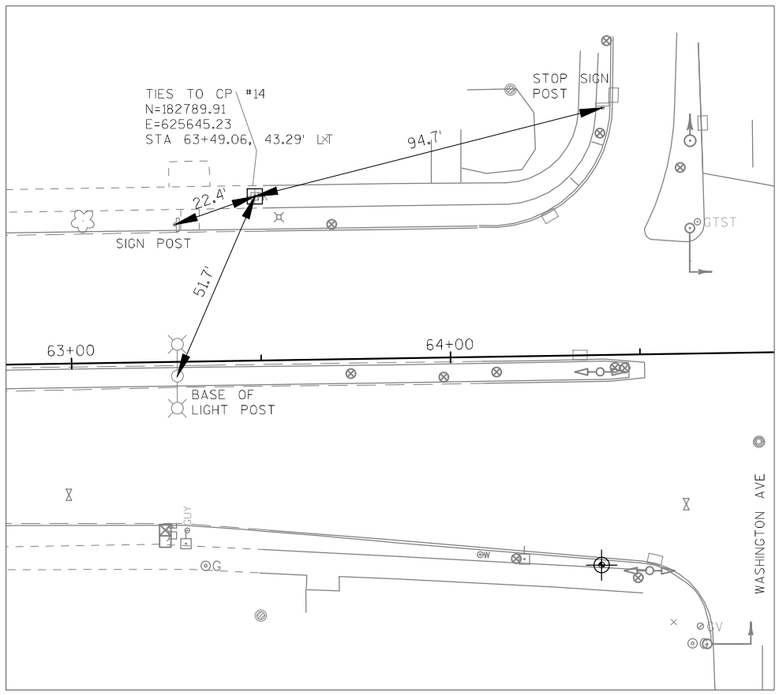


PROJECT NO: 2704-00-73	HWY: OHIO STREET	COUNTY: RACINE	PLAN: ALIGNMENT & TIES	SHEET 60	E









PROJECT NO: 2704-00-73	HWY: OHIO STREET	COUNTY: RACINE	PLAN: ALIGNMENT & TIES DETAIL	SHEET 61	E

FILE NAME : P:\R0140060_RACINE - OHIO STREET DESIGN\C3D\SHEETSPLAN\27040003_020101AT.DWG PLOT DATE : 11/26/2013 7:42 AM PLOT BY : KEVIN K. RISCH PLOT NAME : ---------- PLOT SCALE : 1:40_XREF

DATE 12FEB14 — E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	2704-00-73 QUANTITY
0010	201.0120	CLEARING	ID	45.000	45.000
0020	201.0220	GRUBBING	ID	45.000	45.000
0030	204.0100	REMOVING PAVEMENT	SY	16,600.000	16,600.000
0040	204.0155	REMOVING CONCRETE SIDEWALK	SY	610.000	610.000
0050	204.0210	REMOVING MANHOLES	EACH	3.000	3.000
0060	204.0220	REMOVING INLETS	EACH	14.000	14.000
0070	204.0245	REMOVING STORM SEWER (SIZE) 01. 12-INCH	LF	460.000	460.000
0080	204.0245	REMOVING STORM SEWER (SIZE) 02. 30-INCH	LF	190.000	190.000
0090	205.0100	EXCAVATION COMMON	CY	9,500.000	9,500.000
0100	213.0100	FINISHING ROADWAY (PROJECT) 01. 2704-00-73	EACH	1.000	1.000
0110	305.0120	BASE AGGREGATE DENSE 1 1/4-INCH	TON	5,900.000	5,900.000
0120	311.0110	BREAKER RUN	TON	2,950.000	2,950.000
0130	415.0090	CONCRETE PAVEMENT 9-INCH	SY	13,900.000	13,900.000
0140	415.0210	CONCRETE PAVEMENT GAPS	EACH	7.000	7.000
0150	415.1090	CONCRETE PAVEMENT HES 9-INCH	SY	150.000	150.000
0160	416.0160	CONCRETE DRIVEWAY 6-INCH	SY	260.000	260.000
0170	416.0180	CONCRETE DRIVEWAY 8-INCH	SY	310.000	310.000
0180	416.0260	CONCRETE DRIVEWAY HES 6-INCH	SY	50.000	50.000
0190	416.0280	CONCRETE DRIVEWAY HES 8-INCH	SY	50.000	50.000
0200	416.0610	DRILLED TIE BARS	EACH	130.000	130.000
0210	416.0620	DRILLED DOWEL BARS	EACH	288.000	288.000
0220	465.0120	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES	TON	40.000	40.000
0230	465.0125	ASPHALTIC SURFACE TEMPORARY	TON	90.000	90.000
0240	520.8000	CONCRETE COLLARS FOR PIPE	EACH	2.000	2.000
0250	601.0405	CONCRETE CURB & GUTTER 18-INCH TYPE A	LF	155.000	155.000
0260	601.0409	CONCRETE CURB & GUTTER 30-INCH TYPE A	LF	2,010.000	2,010.000
0270	601.0452	CONCRETE CURB & GUTTER INTEGRAL 30-INCH TYPE D	LF	1,970.000	1,970.000
0280	601.0454	CONCRETE CURB & GUTTER INTEGRAL 30-INCH TYPE J	LF	3,490.000	3,490.000
0290	601.0600	CONCRETE CURB PEDESTRIAN	LF	30.000	30.000
0300	602.0405	CONCRETE SIDEWALK 4-INCH	SF	5,050.000	5,050.000
0310	602.0515	CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA	SF	140.000	140.000
0320	608.0312	STORM SEWER PIPE REINFORCED CONCRETE CLASS III 12-INCH	LF	443.000	443.000
0330	608.0315	STORM SEWER PIPE REINFORCED CONCRETE CLASS III 15-INCH	LF	167.000	167.000
0340	608.0318	STORM SEWER PIPE REINFORCED CONCRETE CLASS III 18-INCH	LF	15.000	15.000
0350	608.0330	STORM SEWER PIPE REINFORCED CONCRETE CLASS III 30-INCH	LF	94.000	94.000
0360	611.0420	RECONSTRUCTING MANHOLES	EACH	8.000	8.000
0370	611.0530	MANHOLE COVERS TYPE J	EACH	6.000	6.000
0380	611.0624	INLET COVERS TYPE H	EACH	19.000	19.000
0390	611.2004	MANHOLES 4-FT DIAMETER	EACH	2.000	2.000
0400	611.2005	MANHOLES 5-FT DIAMETER	EACH	1.000	1.000
0410	611.3230	INLETS 2X3-FT	EACH	18.000	18.000
0420	611.8110	ADJUSTING MANHOLE COVERS	EACH	3.000	3.000
0430	612.0902.S	INSULATION BOARD POLYSTYRENE (INCH) 01. 3-INCH	SY	50.000	50.000
0440	619.1000	MOBILIZATION	EACH	1.000	1.000
0450	620.0300	CONCRETE MEDIAN SLOPED NOSE	SF	140.000	140.000

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DATE 12FEB14 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	2704-00-73 QUANTITY
0460	623.0200	DUST CONTROL SURFACE TREATMENT	SY	27,800.000	27,800.000
0470	624.0100	WATER	MGAL	50.000	50.000
0480	625.0100	TOPSOIL	SY	2,950.000	2,950.000
0490	628.1504	SILT FENCE	LF	485.000	485.000
0500	628.1520	SILT FENCE MAINTENANCE	LF	485.000	485.000
0510	628.1905	MOBILIZATIONS EROSION CONTROL	EACH	2.000	2.000
0520	628.1910	MOBILIZATIONS EMERGENCY EROSION CONTROL	EACH	4.000	4.000
0530	628.7005	INLET PROTECTION TYPE A	EACH	22.000	22.000
0540	628.7010	INLET PROTECTION TYPE B	EACH	11.000	11.000
0550	628.7015	INLET PROTECTION TYPE C	EACH	19.000	19.000
0560	628.7020	INLET PROTECTION TYPE D	EACH	22.000	22.000
0570	629.0210	FERTILIZER TYPE B	CWT	2.000	2.000
0580	630.0200	SEEDING TEMPORARY	LB	85.000	85.000
0590	631.0300	SOD WATER	MGAL	120.000	120.000
0600	631.1000	SOD LAWN	SY	2,050.000	2,050.000
0610	632.9101	LANDSCAPE PLANTING SURVEILLANCE AND CARE CYCLES	EACH	24.000	24.000
0620	634.0814	POSTS TUBULAR STEEL 2X2-INCH X 14-FT	EACH	36.000	36.000
0630	637.2210	SIGNS TYPE II REFLECTIVE H	SF	118.000	118.000
0640	638.2102	MOVING SIGNS TYPE II	EACH	30.000	30.000
0650	638.2602	REMOVING SIGNS TYPE II	EACH	7.000	7.000
0660	638.3000	REMOVING SMALL SIGN SUPPORTS	EACH	26.000	26.000
0670	642.5201	FIELD OFFICE TYPE C	EACH	1.000	1.000
0680	643.0100	TRAFFIC CONTROL (PROJECT) 01. 2704-00-73	EACH	1.000	1.000
0690	643.0300	TRAFFIC CONTROL DRUMS	DAY	8,758.000	8,758.000
0700	643.0420	TRAFFIC CONTROL BARRICADES TYPE III	DAY	4,581.000	4,581.000
0710	643.0705	TRAFFIC CONTROL WARNING LIGHTS TYPE A	DAY	8,758.000	8,758.000
0720	643.0900	TRAFFIC CONTROL SIGNS	DAY	2,135.000	2,135.000
0730	643.1050	TRAFFIC CONTROL SIGNS PCMS	DAY	14.000	14.000
0740	643.2000	TRAFFIC CONTROL DETOUR (PROJECT) 01. 2704-00-73	EACH	1.000	1.000
0750	643.3000	TRAFFIC CONTROL DETOUR SIGNS	DAY	2,392.000	2,392.000
0760	646.0106	PAVEMENT MARKING EPOXY 4-INCH	LF	6,510.000	6,510.000
0770	646.0126	PAVEMENT MARKING EPOXY 8-INCH	LF	530.000	530.000
0780	646.0600	REMOVING PAVEMENT MARKINGS	LF	4,200.000	4,200.000
0790	647.0166	PAVEMENT MARKING ARROWS EPOXY TYPE 2	EACH	9.000	9.000
0800	647.0176	PAVEMENT MARKING ARROWS EPOXY TYPE 3	EACH	2.000	2.000
0810	647.0206	PAVEMENT MARKING ARROWS BIKE LANE EPOXY	EACH	23.000	23.000
0820	647.0306	PAVEMENT MARKING SYMBOLS BIKE LANE EPOXY	EACH	23.000	23.000
0830	647.0356	PAVEMENT MARKING WORDS EPOXY	EACH	2.000	2.000
0840	647.0456	PAVEMENT MARKING CURB EPOXY	LF	200.000	200.000
0850	647.0566	PAVEMENT MARKING STOP LINE EPOXY 18-INCH	LF	90.000	90.000
0860	647.0606	PAVEMENT MARKING ISLAND NOSE EPOXY	EACH	6.000	6.000
0870	647.0776	PAVEMENT MARKING CROSSWALK EPOXY 12-INCH	LF	500.000	500.000
0880	649.0400	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH	LF	4,200.000	4,200.000
0890	649.1800	TEMPORARY PAVEMENT MARKING ARROWS REMOVABLE TAPE	EACH	2.000	2.000
0900	650.4000	CONSTRUCTION STAKING STORM SEWER	EACH	21.000	21.000
0910	650.4500	CONSTRUCTION STAKING SUBGRADE	LF	4,100.000	4,100.000
0920	650.5500	CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER	LF	7,470.000	7,470.000
0930	650.7000	CONSTRUCTION STAKING CONCRETE PAVEMENT	LF	4,100.000	4,100.000
0940	650.8500	CONSTRUCTION STAKING ELECTRICAL INSTALLATIONS (PROJECT) 01. 2704-00-73	LS	1.000	1.000

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DATE 12FEB14 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	2704-00-73 QUANTITY
0950	650.9910	CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (PROJECT) 01. 2704-00-73	LS	1.000	1.000
0960	650.9920	CONSTRUCTION STAKING SLOPE STAKES	LF	3,800.000	3,800.000
0970	652.0225	CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH	LF	2,370.000	2,370.000
0980	652.0240	CONDUIT RIGID NONMETALLIC SCHEDULE 40 4-INCH	LF	2,770.000	2,770.000
0990	652.0800	CONDUIT LOOP DETECTOR	LF	63.000	63.000
1000	653.0105	PULL BOXES STEEL 12X24-INCH	EACH	2.000	2.000
1010	653.0135	PULL BOXES STEEL 24X36-INCH	EACH	16.000	16.000
1020	653.0905	REMOVING PULL BOXES	EACH	5.000	5.000
1030	654.0105	CONCRETE BASES TYPE 5	EACH	21.000	21.000
1040	655.0505	ELECTRICAL WIRE TRAFFIC SIGNALS 14 AWG	LF	2,920.000	2,920.000
1050	655.0610	ELECTRICAL WIRE LIGHTING 12 AWG	LF	3,600.000	3,600.000
1060	655.0615	ELECTRICAL WIRE LIGHTING 10 AWG	LF	1,460.000	1,460.000
1070	655.0630	ELECTRICAL WIRE LIGHTING 4 AWG	LF	9,980.000	9,980.000
1080	655.0700	LOOP DETECTOR LEAD IN CABLE	LF	440.000	440.000
1090	655.0800	LOOP DETECTOR WIRE	LF	220.000	220.000
1100	657.0255	TRANSFORMER BASES BREAKAWAY 11 1/2-INCH BOLT CIRCLE	EACH	21.000	21.000
1110	657.0322	POLES TYPE 5-ALUMINUM	EACH	20.000	20.000
1120	657.0615	LUMINAIRE ARMS SINGLE MEMBER 4 1/2-INCH CLAMP 8-FT	EACH	30.000	30.000
1130	673.0105	COMMUNICATION VAULT TYPE 1	EACH	1.000	1.000
1140	690.0250	SAWING CONCRETE	LF	3,010.000	3,010.000
1150	ASP.1T0A	ON-THE-JOB TRAINING APPRENTICE AT $5. 00/HR	HRS	600.000	600.000
1160	ASP.1T0G	ON-THE-JOB TRAINING GRADUATE AT $5.00/HR	HRS	700.000	700.000
1170	SPV.0060	SPECIAL 01.PERRENIALS (SPECIES, ROOT, SIZE) AUTUMN JOY, CG, 1 GALLON	EACH	122.000	122.000
1180	SPV.0060	SPECIAL 02.PERRENIALS (SPECIES, ROOT, SIZE) DAYLILY YELLOW, CG, 1 GALLON	EACH	56.000	56.000
1190	SPV.0060	SPECIAL 03.PERRENIALS (SPECIES, ROOT, SIZE) PURPLE CONEFLOWER, CG, 1 GALLON	EACH	63.000	63.000
1200	SPV.0060	SPECIAL 04.PERRENIALS (SPECIES, ROOT, SIZE) RUGOSA ROSE, PURPLE, CG, 3 GALLON	EACH	64.000	64.000
1210	SPV.0060	SPECIAL 05.PERRENIALS (SPECIES, ROOT, SIZE) SUMAC, GROW-LOW, CG, 5 GALLON	EACH	64.000	64.000
1220	SPV.0060	SPECIAL 06.GRASSES (SPECIES, ROOT, SIZE) LITTLE BLUESTEM, PLUG, 2-INCH	EACH	4,724.000	4,724.000
1230	SPV.0060	SPECIAL 07. TREE PROTECTION	EACH	9.000	9.000
1240	SPV.0060	SPECIAL 08. REMOVAL EXISTING LIGHT POLE ASSEMBLY	EACH	18.000	18.000
1250	SPV.0060	SPECIAL 09. LUMINAIRES SALVAGED LED	EACH	30.000	30.000
1260	SPV.0060	SPECIAL 10. FIBER SPLICE, MAIN LINE, 96CT.SM	EACH	192.000	192.000
1270	SPV.0060	SPECIAL 11. CONSTRUCTION STAKING CURB RAMPS	EACH	18.000	18.000
1280	SPV.0060	SPECIAL 12. SANITARY MANHOLE INTERNAL/EXTERNAL SEAL	EACH	7.000	7.000
1290	SPV.0090	SPECIAL 01. DIELECTRIC FIBER OPTIC CABLE, 96CT-SM, FURNISH AND INSTALL	LF	2,560.000	2,560.000
1300	SPV.0105	SPECIAL 01. JOINT SEALING	LS	1.000	1.000
1310	SPV.0105	SPECIAL 02. LIGHTING SYSTEM INFRASTRUCTURE REMOVAL (EXISTING SYSTEM)	LS	1.000	1.000

DATE 12FEB14 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	2704-00-73 QUANTITY
1320	SPV.0105	SPECIAL 03. REMOVE LOOP DETECTOR WIRE AND LEAD-IN CABLE, OHIO STREET @ STH 20	LS	1.000	1.000
1330	SPV.0165	SPECIAL 01. CONCRETE SIDEWALK 6-INCH COLORED AND STAMPED	SF	6,300.000	6,300.000
1340	SPV.0180	SPECIAL 01. SHREDDED BARK MULCH RED	SY	860.000	860.000

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ALL PAY ITEMS ARE GROUP CODE 010 UNLESS OTHERWISE NOTED

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TREE REMOVAL

STATION	LOCATION	201.0120 CLEARING ID	201.0220 GRUBBING ID
47+04	OHIO ST 37' LT	20	20
47+55	OHIO ST 46' RT	25	25
	PROJECT TOTAL	45	45

REMOVING CONCRETE SIDEWALK

STATION - STATION	LOCATION	204.0155 STAGE 1 SY	STAGE 2 SY	STAGE 3 SY
44+55.7 - 47+33.0	OHIO ST, LT	--	--	--
44+55.7 - 47+33.0	OHIO ST, RT	--	--	30
47+33.0 - 52+10.0	OHIO ST, LT	--	25	--
47+33.0 - 52+10.0	OHIO ST, RT	--	--	45
52+10.0 - 58+56.0	OHIO ST, LT	--	250	--
52+10.0 - 58+56.0	OHIO ST, RT	--	--	190
58+56.0 - 63+50.0	OHIO ST, LT	--	35	--
58+56.0 - 63+50.0	OHIO ST, RT	--	--	35
	SUBTOTALS	0	310	300
	PROJECT TOTAL		610	

REMOVING STRUCTURES

STATION	LOCATION	STAGE	204.0220 REMOVING INLETS EACH	204.0210 REMOVING MANHOLES EACH	COMMENTS
46+95	OHIO ST, 41' RT	1	1		
47+12	OHIO ST, 32' LT	2	1		
47+16	OHIO ST, 62' RT	1	1		
47+28	OHIO ST, 50' RT	1		1	REMOVE 7 FEET OF EXISTING STRUCTURE
47+69	OHIO ST, 41' RT	1	1		
51+58	OHIO ST, 41' RT	1	1		
51+61	OHIO ST, 32' LT	2	1		
51+68	OHIO ST, 41' RT	1	1		
51+89	OHIO ST, 48' LT	2	1		
52+01	OHIO ST, 20' RT	1		1	REMOVE 10 FEET OF EXISTING STRUCTURE
52+39	OHIO ST, 48' LT	2	1		
52+52	OHIO ST, 41' RT	1	1		
55+40	OHIO ST, 41' RT	1	1		
55+40	OHIO ST, 32' LT	2	1		
58+75	OHIO ST, 21' RT	1		1	REMOVE 6 FEET OF EXISTING STRUCTURE
58+94	OHIO ST, 41' RT	1	1		
58+94	OHIO ST, 32' LT	2	1		
		TOTAL	14	3	

REMOVING PAVEMENT

STATION - STATION	LOCATION	204.0100 SY STAGE 2	STAGE 3
44+55.7 - 47+33.0	OHIO ST, LT	1150	--
44+55.7 - 47+33.0	OHIO ST, RT	–	1300
47+33.0 - 52+10.0	OHIO ST, LT	2100	--
47+33.0 - 52+10.0	OHIO ST, RT	–	2100
52+10.0 - 58+56.0	OHIO ST, LT	2750	--
52+10.0 - 58+56.0	OHIO ST, RT	–	2750
58+56.0 - 63+50.0	OHIO ST, LT	1950	--
58+56.0 - 63+50.0	OHIO ST, RT	–	2050
53+68	OHIO ST, LT (C.E.)	25	--
56+07	OHIO ST, LT (C.E.)	35	--
60+13	OHIO ST, LT (C.E.)	25	--
44+75	OHIO ST, RT (P.E.)	–	7
45+40	OHIO ST, RT (P.E.)	–	7
46+16	OHIO ST, RT (P.E.)	–	8
48+09	OHIO ST, RT (P.E.)	–	7
48+49	OHIO ST, RT (P.E.)	–	7
48+89	OHIO ST, RT (P.E.)	–	7
49+28	OHIO ST, RT (P.E.)	–	8
49+70	OHIO ST, RT (P.E.)	–	7
50+12	OHIO ST, RT (P.E.)	–	7
50+94	OHIO ST, RT (P.E.)	–	7
53+13	OHIO ST, RT (P.E.)	–	10
53+53	OHIO ST, RT (P.E.)	–	9
53+94	OHIO ST, RT (P.E.)	–	8
54+72	OHIO ST, RT (P.E.)	–	6
55+21	OHIO ST, RT (P.E.)	–	10
56+16	OHIO ST, RT (P.E.)	–	9
56+30	OHIO ST, RT (P.E.)	–	9
56+70	OHIO ST, RT (P.E.)	–	8
57+13	OHIO ST, RT (P.E.)	–	7
57+77	OHIO ST, RT (P.E.)	–	8
59+50	OHIO ST, RT (P.E.)	–	9
59+86	OHIO ST, RT (P.E.)	–	7
60+12	OHIO ST, RT (P.E.)	–	8
60+71	OHIO ST, RT (P.E.)	–	7
61+16	OHIO ST, RT (P.E.)	–	12
61+69	OHIO ST, RT (P.E.)	–	10
62+51	OHIO ST, RT (C.E.)	–	9
62+65	OHIO ST, RT (C.E.)	–	9
	SUBTOTALS	8100	8500
	PROJECT TOTAL	16600	

ALL PAY ITEMS ARE GROUP CODE 010 UNLESS OTHERWISE NOTED

REMOVING STORM SEWER

STATION - STATION	LOCATION	204.0245 12-INCH (LF) STAGE 1	204.0245 12-INCH (LF) STAGE 2	204.0245 12-INCH (LF) STAGE 3	204.0245 30-INCH (LF) STAGE 1	204.0245 30-INCH (LF) STAGE 2	204.0245 30-INCH (LF) STAGE 3
44+55.7 - 47+49.7	OHIO ST, LT	--	43	--	--	--	--
44+55.7 - 47+33.0	OHIO ST, MED LT	--	--	--	--	--	--
44+55.7 - 47+33.0	OHIO ST, MED RT	--	--	--	--	--	--
44+55.7 - 47+33.0	OHIO ST, RT	89	--	--	--	--	--
47+49.7 - 52+10.0	OHIO ST, LT	--	66	--	--	43	--
47+33.0 - 52+10.0	OHIO ST, MED LT	--	--	--	--	--	--
47+33.0 - 52+10.0	OHIO ST, MED RT	--	--	--	--	--	--
47+33.0 - 52+10.0	OHIO ST, RT	126	--	--	20	--	--
52+10.0 - 58+56.0	OHIO ST, LT	--	75	--	--	55	--
52+10.0 - 58+56.0	OHIO ST, MED LT	--	--	--	--	--	--
52+10.0 - 58+56.0	OHIO ST, MED RT	--	--	--	--	--	--
52+10.0 - 58+56.0	OHIO ST, RT	52	--	--	24	--	--
58+56.0 - 63+50.0	OHIO ST, LT	--	--	--	--	15	--
58+56.0 - 64+08.4	OHIO ST, MED LT	--	--	--	--	--	--
58+56.0 - 64+08.4	OHIO ST, MED RT	--	--	--	--	--	--
58+56.0 - 63+50.0	OHIO ST, RT	--	--	--	26	--	--
	SUBTOTALS	270	190	0	70	120	0
	PROJECT TOTAL		460			190	

EARTHWORK SUMMARY

STATION -STATION	LOCATION	STAGE	EXISTING TOPSOIL CY	(1) 205.0100** EXCAVATION COMMON (CY)	EXCESS TOPSOIL (CY)	(EX. PAVT) UNUSABLE MATERIAL (CY)	EXCAVATION BELOW SUBGRADE (CY)	(2) USABLE MATERIAL AVAILABLE (CY)	FILL VOLUME (CY)	(3) EXP FILL VOLUME (CY)	(4) WASTE MATERIAL (CY)
44+55.7 - 63+50.1	OHIO ST, MED.	1	0	100	0	30	0	70	0	0	70
44+55.7 - 63+50.0	OHIO ST, LT	2	338	4250	338	2835	415	662	15	19	1058
44+55.7 - 63+50.0	OHIO ST, RT	3	332	5150	332	2938	533	1347	19	23	1857
UNDISTRIBUTED							250				250
		TOTALS	670	9500	670	5802	1198	2079	34	43	3235

*NOTES: (1) CUT INCLUDES EBS (CUT VOLUME ONLY)
(2) USABLE MATERIAL AVAILABLE = EXCAVATION COMMON - EXCESS TOPSOIL - UNUSABLE MATERIAL - EBS
NOTE: THIS IS A WATE PROJECT. THEREFORE ALL USABLE MATERIAL WILL BE HAULED OFF JOB.
(3) FILL EXPANSION FACTOR = 1.25
(4) WASTE MATERIAL = USABLE MATERIAL - EXP FILL VOLUME + EBS {(+) INDICATES WASTE (-) INDICATES BORROW}

** TOTAL QUANTITY INCLUDES 100 C Y NOT INCLUDED IN THE END AREA VOLUME TABLE

FINISHING ROADWAY

STATION - STATION	LOCATION	213.0100 FINISHING ROADWAY (PROJECT) 2704-00-73 EACH
44+55.7 - 63+50.0	OHIO STREET	1
	PROJECT TOTAL	1

ALL PAY ITEMS ARE GROUP CODE 010 UNLESS OTHERWISE NOTED

3

BASE AGGREGATE DENSE 1 1/4-INCH

STATION - STATION	LOCATION	305.0120 TON STAGE 2	305.0120 TON STAGE 3
44+55.7 - 47+49.7	OHIO ST, LT	340	--
44+55.7 - 47+33.0	OHIO ST, MED LT	--	--
44+55.7 - 47+33.0	OHIO ST, MED RT	--	--
44+55.7 - 47+33.0	OHIO ST, RT	--	450
47+49.7 - 52+10.0	OHIO ST, LT	690	--
47+33.0 - 52+10.0	OHIO ST, MED LT	--	--
47+33.0 - 52+10.0	OHIO ST, MED RT	--	--
47+33.0 - 52+10.0	OHIO ST, RT	--	860
52+10.0 - 58+56.0	OHIO ST, LT	910	--
52+10.0 - 58+56.0	OHIO ST, MED LT	--	--
52+10.0 - 58+56.0	OHIO ST, MED RT	--	--
52+10.0 - 58+56.0	OHIO ST, RT	--	1150
58+56.0 - 63+50.0	OHIO ST, LT	640	--
58+56.0 - 64+08.4	OHIO ST, MED LT	--	--
58+56.0 - 64+08.4	OHIO ST, MED RT	--	--
58+56.0 - 63+50.0	OHIO ST, RT	--	800
	SUBTOTALS	2600	3300
	PROJECT TOTAL	5900	

CONCRETE PAVEMENT

STATION - STATION	LOCATION	415.0090 CONCRETE PAVEMENT 9-INCH (SY) STAGE 1	STAGE 2	STAGE 3	415.1090 CONCRETE PAVT HES 9-INCH (SY)
44+55.7 - 47+33.0	OHIO ST, LT	50	700	50	
44+55.7 - 47+33.0	OHIO ST, RT	--	1050	150	
47+33.0 - 52+10.0	OHIO ST, LT	--	1500	--	
47+33.0 - 52+10.0	OHIO ST, RT	--	--	2200	
52+10.0 - 58+56.0	OHIO ST, LT	--	2200	--	
52+10.0 - 58+56.0	OHIO ST, RT	--	--	2800	
58+56.0 - 63+50.0	OHIO ST, LT	--	1500	--	
58+56.0 - 63+50.0	OHIO ST, RT	--	--	1850	
	CONCRETE GAP AREAS		-150		150
	SUBTOTALS	50	6800	7050	150
	PROJECT TOTALS		13900		150

3

CONCRETE PAVEMENT GAPS

LOCATION	415.0210 CONCRETE PAVEMENT GAPS EACH STAGE 2	EACH STAGE 3
SCHOOL ENTRANCE	1	--
15TH STREET	--	1
WRIGHT AVENUE LT	1	--
WRIGHT AVENUE RT	--	1
SHOPKO 54+00 LT	1	--
SHOPKO 56+00 LT	1	
13TH STREET RT	--	1
SUBTOTALS	4	3
PROJECT TOTAL	7	

CONCRETE DRIVEWAY

STATION - STATION	LOCATION	416.0160 6-INCH SY STAGE 2	SY STAGE 3	416.0180 8-INCH SY STAGE 2	SY STAGE 3	416.0260 CONCRETE DRIVEWAY HES 6-INCH SY	416.0280 CONCRETE DRIVEWAY HES 8-INCH SY
44+55.7 - 47+49.7	OHIO ST, LT	--	--	--	--	--	--
44+55.7 - 47+33.0	OHIO ST, RT	--	30	--	--	--	--
47+49.7 - 52+10.0	OHIO ST, LT	--	--	70	--	--	--
47+33.0 - 52+10.0	OHIO ST, RT	--	65	--	--	--	--
52+10.0 - 58+56.0	OHIO ST, LT	--	--	200	--	--	--
52+10.0 - 58+56.0	OHIO ST, RT	--	150	--	--	--	--
58+56.0 - 63+50.0	OHIO ST, LT	--	--	70	--	--	--
58+56.0 - 63+50.0	OHIO ST, RT	--	65	--	20	--	--
	UNDISTRIBUTED		-50	-50		50	50
	SUBTOTALS		260	290	20	50	50
	PROJECT TOTAL	260		310		50	50

BREAKER RUN

STATION - STATION	LOCATION	311.0110 TON STAGE 2	STAGE 3
51+00 - 54+50	OHIO ST, LT (EBS)	830	--
51+00 - 54+50	OHIO ST, RT (EBS)	--	1100
Undistributed		500	500
	SUBTOTALS	1350	1600
	PROJECT TOTAL	2950	

ALL PAY ITEMS ARE GROUP CODE 010 UNLESS OTHERWISE NOTED

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PAVEMENT STEEL

STATION - STATION	LOCATION	DRILLED TIE BARS 416.0610 EACH STAGE 2	DRILLED TIE BARS 416.0610 EACH STAGE 3	DRILLED DOWEL BARS 416.0620 EACH STAGE 2	DRILLED DOWEL BARS 416.0620 EACH STAGE 3
44+55.7 - 47+33.0	OHIO ST, LT	41		35	
44+55.7 - 47+33.0	OHIO ST, RT	--	41	--	44
47+33.0 - 52+10.0	OHIO ST, LT	--	--	24	--
47+33.0 - 52+10.0	OHIO ST, RT	--	--	--	40
52+10.0 - 58+56.0	OHIO ST, LT	--	--	24	--
52+10.0 - 58+56.0	OHIO ST, RT	--	--	--	41
58+56.0 - 63+50.0	OHIO ST, LT	24	--	29	--
58+56.0 - 63+50.0	OHIO ST, RT		24	--	51
	SUBTOTAL	65	65	112	176
	PROJECT TOTAL	130		288	

ASPHALTIC MATERIAL

STATION	LOCATION	465.0120 ASPHALTIC SURFACE DRIVEWAYS & FIELD ENTRANCES TON STAGE 1 & 2	465.0125 ASPHALTIC SURFACE TEMPORARY TON STAGE 1
44+55.7 - 47+33.0	OHIO ST, RT	5	20
47+33.0 - 52+10.0	OHIO ST, RT	5	30
52+10.0 - 58+56.0	OHIO ST, RT	20	10
58+56.0 - 63+50.0	OHIO ST, RT	10	30
	SUBTOTALS	40	90

CONCRETE COLLARS

STATION	LOCATION	520.8000 CONCRETE COLLARS FOR PIPE (EA) STAGE 1
55+25 20' RT.	OHIO ST RT	1
59+00 20' LT.	OHIO ST RT	1
	PROJECT TOTAL	2

CONCRETE CURB & GUTTER

STATION - STATION	LOCATION	601.0452 CONCRETE CURB & GUTTER INTEGRAL 30-INCH TYPE D (LF) STAGE 2	601.0409 CONCRETE CURB & GUTTER 30-INCH TYPE A (LF) STAGE 3	601.0454 CONCRETE CURB & GUTTER INTEGRAL 30-INCH TYPE J (LF) STAGE 2	601.0454 CONCRETE CURB & GUTTER INTEGRAL 30-INCH TYPE J (LF) STAGE 3	601.0405 CONCRETE CURB & GUTTER 18-INCH TYPE A (LF) STAGE 3	601.0600 CONCRETE CURB PEDESTRIAN (LF) STAGE 3
44+55.7 - 47+33.0	OHIO ST, LT	280	--	380	--	34	
44+55.7 - 47+33.0	OHIO ST, RT	--	290	--	380	34	15
47+33.0 - 52+10.0	OHIO ST, LT	520	--	390	--	42	
47+33.0 - 52+10.0	OHIO ST, RT	--	520	--	390	42	15
52+10.0 - 58+56.0	OHIO ST, LT	680	--	475	--		
52+10.0 - 58+56.0	OHIO ST, RT	--	690	--	475		
58+56.0 - 63+50.0	OHIO ST, LT	490	--	500	--		
58+56.0 - 63+50.0	OHIO ST, RT	--	510	--	500		
	SUBTOTALS	1970	2010	1745	1745	155	30
	PROJECT TOTALS	1970	2010	3490		155	30

ALL PAY ITEMS ARE GROUP CODE 010 UNLESS OTHERWISE NOTED

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CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA

STATION - STATION	LOCATION	602.0515 SF STAGE 1	602.0515 SF STAGE 1
44+55.7 - 47+33.0	OHIO ST, LT	16	--
44+55.7 - 47+33.0	OHIO ST, RT	--	24
47+33.0 - 52+10.0	OHIO ST, LT	16	--
47+33.0 - 52+10.0	OHIO ST, RT	--	24
52+10.0 - 58+56.0	OHIO ST, LT	24	--
52+10.0 - 58+56.0	OHIO ST, RT	--	32
58+56.0 - 63+50.0	OHIO ST, LT	8	--
58+56.0 - 63+50.0	OHIO ST, RT	--	16
	SUBTOTAL	60	80
	PROJECT TOTAL	140	

CONCRETE SIDEWALK

STATION - STATION	LOCATION	602.0405 4-INCH (SF) STAGE 1	602.0405 4-INCH (SF) STAGE 1
44+55.7 - 47+33.0	OHIO ST, LT	100	--
44+55.7 - 47+33.0	OHIO ST, RT	--	250
47+33.0 - 52+10.0	OHIO ST, LT	700	--
47+33.0 - 52+10.0	OHIO ST, RT	--	400
52+10.0 - 58+56.0	OHIO ST, LT	1900	--
52+10.0 - 58+56.0	OHIO ST, RT	--	1350
58+56.0 - 63+50.0	OHIO ST, LT	150	--
58+56.0 - 63+50.0	OHIO ST, RT	--	200
	SUBTOTALS	2850	2200
	PROJECT TOTALS	5050	

3

MOBILIZATION

STATION - STATION	LOCATION	619.1000 MOBILIZATION EACH
44+55 - 63+50	OHIO STREET	1
	PROJECT TOTAL	1

STORM SEWER PIPE REINFORCED CONCRETE CLASS III

PIPE NUMBER	FROM STRUCTURE	TO STRUCTURE	INLET ELEVATION	DISCHARGE ELEVATION	SLOPE (%)	608.0312 CLASS III 12-INCH (LF)	608.0315 CLASS III 15-INCH (LF)	608.0318 CLASS III 18-INCH (LF)	608.0330 CLASS III 30-INCH (LF)
PR-1	INL-1	MH-A	686.57	685.72	1.00%	86.00	--	--	--
PR-2	INL-2	MH-A	685.62	685.15	1.00%	--	47.00	--	--
PR-3	INL-3	MH-A	686.12	685.61	3.00%	--	17.00	--	--
PR-4	INL-4	INL-3	686.43	686.08	1.00%	35.00	--	--	--
PR-5	INL-5	INL-6	683.98	683.70	1.00%	--	30.00	--	--
PR-5A	INL-5	INL-5A	684.15	684.27	1.00%	10.00	--	--	--
PR-6	INL-6	MH-D	683.60	683.17	1.00%	--	43.00	--	--
PR-7	INL-7B	INL-7	683.32	683.22	1.00%	10.00	--	--	--
PR-7B	INL-7B	MH-C	683.12	682.70	1.35%	--	--	--	28.00
PR-8	INL-8	MH-C	683.85	683.46	1.00%	39.00	--	--	--
PR-9	INL-9	INL-10	683.34	682.83	1.50%	34.00	--	--	--
PR-9A	INL-9A	INL-9	683.89	683.44	1.50%	--	30.00	--	--
PR-10	INL-10	MH-E	682.73	681.93	1.50%	54.00	--	--	--
PR-11	INL-11	MH-E	685.18	684.97	1.00%	21.00	--	--	--
PR-12	INL-12	MH-F	694.00	693.47	1.00%	53.00	--	--	--
PR-13	INL-13	MH-F	694.60	694.39	1.00%	21.00	--	--	--
PR-14	INL-14	MH-G	696.50	695.96	1.00%	54.00	--	--	--
PR-15	INL-15	MH-G	696.75	696.49	1.00%	26.00	--	--	--
PR-B	MH-C	MH-D	681.82	681.17	1.00%	--	--	--	66.00
PR-E	MH-F	Pipe Collar	689.29	689.14	1.00%	--	--	15.00	--
					TOTALS	443.00	167.00	15.00	94.00

ALL PAY ITEMS ARE GROUP CODE 010 UNLESS OTHERWISE NOTED

STORM SEWER - INLETS

STRUCTURE NUMBER	NORTHING	EASTING	611.3230 INLETS 2x3-FT (EACH)	611.0420 * RECONSTRUCTING MANHOLES (EACH)	611.2004 MANHOLES 4-FT DIAMETER (EACH)	611.2005 MANHOLES 5-FT DIAMETER (EACH)	611.0530 MANHOLE COVERS TYPE J (EACH)	611.0624 INLET COVERS TYPE H (EACH)	RIM/GRATE ELEVATION (FT.)
INL-1	181151.14	625677.32	1					1	689.80
INL-2	181123.72	625752.33	1					1	690.00
INL-3	181158.40	625773.62	1					1	689.66
INL-4	181193.35	625774.41	1					1	689.82
INL-5	181575.72	625748.92	1					1	687.20
INL-5A	181565.72	625749.00	1					1	686.93
INL-6	181605.81	625748.69	1					1	687.29
INL-7	181565.73	625674.20	1					1	687.38
INL-7B	181575.73	625674.12	1					1	687.37
INL-8	181630.86	625646.29	1					1	686.87
INL-9	181679.76	625647.62	1					1	688.08
INL-9A	181680.79	625617.61	1					1	687.37
INL-10	181702.76	625672.73	1					1	688.92
INL-11	181698.32	625747.61	1					1	688.51
INL-12	181981.27	625668.24	1					1	697.65
INL-13	181981.42	625743.03	1					1	697.72
INL-14	182315.92	625662.81	1					1	699.75
INL-15	182333.28	625737.33	1					1	700.40
MH-A	181170.30	625760.83		1			1		689.79
MH-B	181606.73	625673.95				1		1	687.31
MH-C	181642.59	625727.00		1			1		688.04
MH-D	181698.19	625726.12			1		1		689.19
MH-E	181981.23	625721.62			1		1		698.25
MH-F	182316.63	625716.77		1			1		700.42
EX. MH	181164.61	625756.01		1			1		688.47
			18	4	2	1	6	19	

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

INSULATION BOARD

STATION	LOCATION	612.0902.S INSULATION BOARD POLYSTYRENE (INCH) 3-INCH SY
UNDISTRIBUTED	OHIO ST	50
	PROJECT TOTAL	50

WATER

STATION - STATION	LOCATION	624.0100 MGAL STAGE 1
44+55 - 63+50	OHIO STREET	25
--	UNDISTRIBUTED	25
	PROJECT TOTAL	50

ALL PAY ITEMS ARE GROUP CODE 010 UNLESS OTHERWISE NOTED

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CONCRETE MEDIAN SLOPED NOSE

STATION - STATION	LOCATION	620.0300 SF STAGE 2
44+55.7 - 47+33.0	OHIO ST, MEDIAN	
47+33.0 - 52+10.0	OHIO ST, MEDIAN	40
52+10.0 - 58+56.0	OHIO ST, MEDIAN	80
58+56.0 - 63+50.0	OHIO ST, MEDIAN	20
	PROJECT TOTAL	140

DUST CONTROL SURFACE TREATMENT

STATION - STATION	LOCATION	623.0200 SY
44+55 - 63+50	OHIO STREET	27800
--		
	PROJECT TOTAL	27800

NOTE; QUANTITY IS EQUIVILENT TO 2 APPLICATIONS OVER THE ENTIRE PROJECT AREA

SANITARY MANHOLES
(GROUP CODE 020)

STATION	LOCATION		611.0420* RECONSTRUCTING SANITARY SEWER MANHOLES (EACH)	611.8110 ADJUSTING MANHOLE COVERS EACH	SPV.0060.12 SANITARY MANHOLE INTERNAL/EXTERNAL SEAL (EACH)
45+55	OHIO ST	30' RT	1		1
47+33	OHIO ST	30' RT		1	1
49+71	OHIO ST	30' RT	1		1
52+09	OHIO ST	29' RT	1		1
55+32	OHIO ST	29' RT	1		1
58+56	OHIO ST	30' RT		1	1
61+62	OHIO ST	28' RT		1	1
		TOTALS	4	3	7

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

NOTE: THE CITY OF RACINE IS PROVIDING NEW SANITARY FRAMES AND LIDS AS WELL AS SANITARY SEALS. CONTRACTOR SHALL INCLUDE COST TO PICK UP CITY PROVIDED MATERIALS FOR THE ABOVE ITEMS THIS DOES NOT APPLY TO THE COVER PLATES. CONTRACTOR SHALL PROVIDE.

EROSION CONTROL

STATION - STATION	LOCATION	628.1905 MOBILIZATIONS EROSION CONTROL (EACH)	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL (EACH)	628.1504 SILT FENCE (LF)	628.1520 SILT FENCE MAINTENANCE (LF)
44+55 - 63+50	OHIO ST	2	4	485	485
	TOTALS	2	4	485	485

ALL PAY ITEMS ARE GROUP CODE 010 UNLESS OTHERWISE NOTED

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FINISHING ITEMS

STATION - STATION	LOCATION	STAGE	625.0100 TOPSOIL (SY)	629.0210 FERTILIZER TYPE B (CWT)	631.1000 SOD LAWN (SY)	631.0300 SOD WATER (MGAL)	630.0200 SEEDING TEMPORARY (LB)
44+55.7 - 47+33.0	OHIO ST, LT	2	180	0.2	180	15	5
44+55.7 - 47+33.0	OHIO ST, RT	3	390	0.1	150	15	4
47+33.0 - 52+10.0	OHIO ST, LT	2	220	0.2	220	15	6
47+33.0 - 52+10.0	OHIO ST, RT	3	520	0.2	300	15	9
52+10.0 - 58+56.0	OHIO ST, LT	2	330	0.3	330	15	9
52+10.0 - 58+56.0	OHIO ST, RT	3	510	0.3	320	15	9
58+56.0 - 63+50.0	OHIO ST, LT	2	300	0.2	300	15	8
58+56.0 - 63+50.0	OHIO ST, RT	3	460	0.2	250	15	7
	UNDISTRIBUTED		--		--	--	25
	PROJECT TOTAL		2950	2.0	2050	120	85

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FIELD OFFICE

LOCATION	642.5201 FIELD OFFICE TYPE C EACH
OHIO STREET	1
PROJECT TOTAL	1

INLET PROTECTION

STATION - STATION	LOCATION	628.7005 TYPE A EACH		628.7010 TYPE B EACH		628.7015 TYPE C EACH		628.7020 TYPE D EACH	
		STAGE 2	STAGE 3	STAGE 2	STAGE 3	STAGE 2	STAGE 3	STAGE 2	STAGE 3
44+55.7 - 47+33.0	OHIO ST, LT	1	--	--	--	1	--	--	--
44+55.7 - 47+33.0	OHIO ST, RT	--	2	--	1	--	2	--	1
47+33.0 - 52+10.0	OHIO ST, LT	4						7	
47+33.0 - 52+10.0	OHIO ST, RT	--	4	--	1	--	1	--	6
52+10.0 - 58+56.0	OHIO ST, LT	3	--	--	--	3	--	2	--
52+10.0 - 58+56.0	OHIO ST, RT	--	2	--	4	--	1	--	2
58+56.0 - 63+50.0	OHIO ST, LT	1	--	--	--	4	--	--	--
58+56.0 - 63+50.0	OHIO ST, RT	--	1	--	1	--	3	--	--
	UNDISTRIBUTED	2	2	2	2	2	2	2	2
	SUBTOTAL	11	11	2	9	10	9	11	11
	PROJECT TOTAL	22		11		19		22	

ALL PAY ITEMS ARE GROUP CODE 010 UNLESS OTHERWISE *NOTED*

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PERMANENT SIGNING

SIGN NUMBER	EXISTING STATION	NEW LOCATION	LOCATION	TYPE	634.0814 POSTS TUBULAR STEEL 2X2-INCH X 14-FT (EACH)	637.2210 SIGNS TYPE II REFLECTIVE H (SF)	638.2102 MOVING SIGNS TYPE II (EACH)	638.2602 REMOVING SIGNS TYPE II (EACH)	638.3000 REMOVING SMALL SIGN SUPPORTS (EACH)	COMMENT
1	44+36	44+19	OHIO ST, RT	R7-2A, R3-17	1	5.00	1	--	1	
1a	43+48	43+48	OHIO ST. LT	R3-17, R3-17bp,	--	7.50	--	--	--	ADD SIGNS TO EXISTING ASSEMBLY
2a,2b	45+39	45+27	OHIO ST. LT	R7-4, E11-9	1	--	1	1	1	
3	46+49	46+37	OHIO ST. LT	R7-4, R3-17,R3-17bp, R3-17AP	1	10.00	1	--	1	
4	46+40	REMOVE	OHIO ST, MEDIAN	R4-7C	--	--	--	1	--	ON EXISTING LIGHT POLE
4a	NEW	47+06	OHIO ST, RT	R9-3a, R9-3bl	1	3.75	--	--	--	
5	NEW	47+46	OHIO ST, MEDIAN	R6-2R	1	1.50	--	--	--	
6, 7	47+53	47+53	OHIO ST, RT	R1-1, R1-1	1	5.50	--	1	1	REPLACE EXISTING STOP SIGN WITH NEW
7a	NEW	47+61	OHIO ST, RT	R9-3a, R9-3bl	1	3.75	--	--	--	
8	NEW	47+64	OHIO ST, MEDIAN	R6-2R	1	1.50	--	--	--	
9a, 9b	47+87	47+80	OHIO ST, MEDIAN	M1-94, M1-94	--	--	2	--	--	MOVE FROM EXISTING LP TO NEW LIGHT POLE
10	48+12	48+01	OHIO ST, LT	R7-4	1	--	1	--	1	
11	48+85	48+03	OHIO ST, LT	R7-4	1	--	1	--	1	
12	49+58	REMOVE	OHIO ST, LT	R7-4	--	--	--	1	1	
13	47+87	49+74	OHIO ST, MEDIAN	R4-7C	--	--	--	--	--	
13a	NEW	49+00	OHIO ST, RT	R3-17	1	5.00	--	--	--	
14	50+28	50+52	OHIO ST, LT	R7-4, R3-17	1	5.00	1	--	1	
15	51+60	51+60	OHIO ST, MEDIAN	R4-7C	1	--	1	--	1	
16, 17	51+85	51+85	OHIO ST, LT	R1-1, R1-1	1	5.50	--	1	1	REPLACE EXISTING STOP SIGN WITH NEW
18, 19	52+36	52+36	OHIO ST, RT	R1-1, R1-1	1	5.50	--	1	1	REPLACE EXISTING STOP SIGN WITH NEW
20	NEW	51+89	OHIO ST, LT	R3-8R	1	4.00	--	--	--	
20a	NEW	52+90	OHIO ST, LT	R3-7R	1	5.50	--	--	--	
21	NEW	52+35	OHIO ST, LT	R3-8R	1	4.00	--	--	--	
21a	NEW	52+35	OHIO ST, RT	R3-7R		5.50	--	--	--	
22a, 22b	52+62	47+80 RT.	OHIO ST, MEDIAN	M1-94, M1-94	--	--	2	--	--	MOVE FROM L.P. TO WB STOP SIGN POST ON WRIGHT AVE.
23	52+44	52+44	OHIO ST, LT	R5-2	1	--	1	--	1	
24	52+68	52+62	OHIO ST, MEDIAN	R4-7C	1	--	1	--	--	ON EXISTING LIGHT POLE
25	52+90	52+78	OHIO ST, LT	R7-2A	1	--	1	--	1	
26a, 26b, 26c	54+87	54+08	OHIO ST, LT	S1-1, W16-9P, R7-2A,	1	--	1	--	1	
27	53+76	52+75	OHIO ST, RT	R2-1	--	--	1	--	--	MOVE FROM EXISTING POST TO NEW LIGHT POLE
28	53+76	54+06	OHIO ST, MEDIAN	R2-1	--	--	1	--	--	MOVE FROM EXISTING LP TO NEW LIGHT POLE
29a, 29b	54+87	54+08	OHIO ST, MEDIAN	S1-1, W16-9P	1	--	1	--	1	MOVE FROM EXISTING POST TO NEW LIGHT POLE
30	55+24	52+38	OHIO ST, LT	Bus Stop Sign	1	--	1	--	1	
30a	NEW	55+38	OHIO ST, RT	R3-17	1	5.50	--	--	--	
31	55+91	55+99	OHIO ST, RT	Bus Stop Sign	1	--	1	--	1	
32	56+52	56+51	OHIO ST, LT	R7-2A, R3-17	1	5.50	1	--	1	
33	56+29	56+67	OHIO ST, RT	R4-7C	1	--	1	--	1	
34a, 34b	58+13	57+97	OHIO ST, RT	M1-94, M1-94	1	--	1	--	1	
35	58+13	57+97	OHIO ST, MEDIAN	R4-7C	1	--	1	--	1	
35a	NEW	60+68	OHIO ST, LT	R3-17, R3-17bp,	1	5.50	--	--	--	ADD SIGNS TO EXISTING ASSEMBLY
36, 37	58+77	58+77	OHIO ST, RT	R1-1, R1-1	1	5.50	--	1	1	REPLACE EXISTING STOP SIGN WITH NEW
38	60+20	59+20	OHIO ST, MEDIAN	R4-7C	1	--	1	--	1	
38A	NEW	61+91	OHIO ST, RT	R3-17,R3-17bp, R3-17AP	1	10.00	1	--	1	
39	62+85	62+85	OHIO ST, RT	R7-2A	1	--	1	--	1	
39a	NEW	63+29	OHIO ST, RT	R3-17, R3-17bp,	--	7.50	--	--	--	ADD SIGNS TO EXISTING ASSEMBLY
40	36+39		OHIO ST, LT	R2-1, Bus Stop Sign	1	--	1	--	1	
41	63+26	63+17	OHIO ST RT	R2-1	--	--	1	--	--	MOVE FROM EXISTING POST TO NEW LIGHT POLE
42a, 42b	63+26	63+17	OHIO ST, LT	R3-7, R14-1	--	--	1	--	--	MOVE FROM EXISTING POST TO NEW LIGHT POLE
				PROJECT TOTALS	36	118.00	30	7	26	

ALL PAY ITEMS ARE GROUP CODE 010 UNLESS OTHERWISE NOTED

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TRAFFIC CONTROL ITEMS

LOCATION	643.0100 TRAFFIC CONTROL (PROJECT) 2704-00-73 (EACH)	643.1050 TRAFFIC CONTROL SIGNS PCMS DAYS	643.0300 TRAFFIC CONTROL DRUMS (DAYS) STAGE 1	STAGE 2	STAGE 3	643.0420 TRAFFIC CONTROL BARRICADES TYPE III (DAYS) STAGE 1	STAGE 2	STAGE 3	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A (DAYS) STAGE 1	STAGE 2	STAGE 3	643.0900 TRAFFIC CONTROL SIGNS (DAYS) STAGE 1	STAGE 2	STAGE 3
OHIO STREET PROJECT	1	14												
OHIO ST. (S. OF 16TH STREET)			225	660	675	30	88	90	225	660	675	30	88	90
16TH ST. (W. OF OHIO ST.)			180	528	540	30	88	90	180	528	540	30	88	90
16th ST. (E. OF OHIO ST.)			--	--	--	--	--	--	--	--	--	15	44	45
NORTH LEG OHIO ST. (AT 16TH ST)			--	--	--	90	264	270	--	--	--	30	88	90
OHIO ST. (N. OF STH 20)			--	--	--	--	--	--	--	--	--	15	44	45
OHIO ST. (16TH ST TO 15TH ST.)			120	1100	270	45	176	135	120	1100	270	--	44	--
OHIO ST. (15TH ST. TO WRIGHT)			135	440	405	105	352	405	135	440	405	75	264	180
OHIO ST. (WRIGHT TO 13TH ST.)			195	572	585	90	836	405	195	572	585	30	220	90
OHIO ST. (13TH ST. TO STH 20)			225	1408	495	150	572	270	225	1408	495	45	220	135
SUBTOTALS	1	14	1080	4708	2970	540	2376	1665	1080	4708	2970	270	1100	765
		PROJECT TOTALS		8758			4581			8758			2135	

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TRAFFIC CONTROL

STATION - STATION	LOCATION	643.2000 TRAFFIC CONTROL DETOUR (PROJECT) 2704-00-73 EACH	643.3000 TRAFFIC CONTROL DETOUR SIGNS (23) DAYS (104)
44+55.7 - 63+50.0	OHIO ST, LT	1	2392
	PROJECT TOTALS	1	2392

PAVEMENT MARKING

STATION - STATION	LOCATION	646.0106 PAVEMENT MARKING EPOXY 4-INCH SKIP-DASH (37.5'-12.5') WHITE (L.F.)	SOLID WHITE (L.F.)	DOUBLE YELLOW (L.F.)	646.0126 PAVEMENT MARKING EPOXY 8-INCH SOLID WHITE (L.F.)	647.0166 PAVEMENT MARKING ARROWS EPOXY TYPE 2 (EACH)	647.0176 PAVEMENT MARKING ARROWS EPOXY TYPE 3 (EACH)	647.0356 PAVEMENT MARKING WORDS EPOXY (EACH)	647.0206 PAVEMENT MARKING ARROWS BIKE LANE EPOXY (EACH)	647.0306 PAVEMENT MARKING SYMBOLS BIKE LANE EPOXY (EACH)
44+55.7 - 47+33.0	OHIO ST, LT	70	340	60	--	--	--	--	1	1
44+55.7 - 47+33.0	OHIO ST, RT	95	530	60	--	--	--	--	2	2
47+33.0 - 52+10.0	OHIO ST, LT	120	480	--	--	--	--	--	3	3
47+33.0 - 52+10.0	OHIO ST, RT	120	800	--	125	3	1	--	3	3
52+10.0 - 58+56.0	OHIO ST, LT	165	650	--	120	2	1	1	4	4
52+10.0 - 58+56.0	OHIO ST, RT	165	1155	--	70	2	--	--	4	4
58+56.0 - 63+50.0	OHIO ST, LT	150	465	--	125	2	--	1	3	3
58+56.0 - 63+50.0	OHIO ST, RT	150	935	--	90	--	--	--	3	3
		1035	5355	120	530	9	2	2	23	23
	PROJECT TOTALS		6510		530	9	2	2	23	23

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PAVEMENT MARKING

STATION - STATION	LOCATION	647.0456 PAVEMENT MARKING CURB EPOXY (LF)	647.0606 PAVEMENT MARKING ISLAND NOSE EPOXY (EACH)	647.0776 PAVEMENT MARKING CROSSWALK EPOXY 12-INCH (LF)	647.0566 PAVEMENT MARKING STOP LINE EPOXY 18-INCH (LF)
44+55.7 - 47+33.0	OHIO ST, LT	--	--	55	--
44+55.7 - 47+33.0	OHIO ST, RT	--	--	100	--
47+33.0 - 52+10.0	OHIO ST, LT	40	2	60	25
47+33.0 - 52+10.0	OHIO ST, RT	--	--	90	20
52+10.0 - 58+56.0	OHIO ST, LT	70	3	60	--
52+10.0 - 58+56.0	OHIO ST, RT	70	--	95	25
58+56.0 - 63+50.0	OHIO ST, LT	--	--	--	--
58+56.0 - 63+50.0	OHIO ST, RT	20	1	40	20
	PROJECT TOTALS	200	6	500	90

REMOVING PAVEMENT MARKINGS

STATION - STATION	LOCATION	646.0600 REMOVING PAVEMENT MARKINGS (LF)	STAGE
44+55.7 - 63+50.0	OHIO ST, LT	2100	1
44+55.7 - 63+50.0	OHIO ST, RT	2100	2
	PROJECT TOTALS	4200	

NOTE: PAVEMENT MARKING REMOVAL LISTED ABOVE IS THE ENTIRE LENGTH OF BOTH SIDES OF OHIO STREET, PAYMENT SHALL BE MADE ON ONLY THE AMOUNT REMOVED AS DETERMINED BY THE ENGINEER.

TEMPORARY PAVEMENT MARKING REMOVABLE TAPE

STATION - STATION	LOCATION	649.0400 4-INCH (LF)	649.1800 ARROWS (EACH
44+55.7 - 63+50.0	OHIO ST, LT	2100	2
44+55.7 - 63+50.0	OHIO ST, RT	2100	
		4200	2

CONSTRUCTION STAKING

STATION - STATION	LOCATION	650.4500 SUBGRADE (LF)		650.5500 CURB GUTTER AND CURB & GUTTER (LF)		650.7000 CONCRETE PAVEMENT (LF)		650.8500 ELECTRICAL INSTALLATIONS (PROJECT) 2704-00-73 (LS)	650.9910 SUPPLEMENTAL CONTROL (PROJECT) 2704-00-73 (LS)	650.9920 SLOPE STAKES (LF)		SPV.0060.11 CURB RAMPS (EA)	
		STAGE 2	STAGE 3	STAGE 2	STAGE 3	STAGE 2	STAGE 3			STAGE 2	STAGE 3	STAGE 2	STAGE 3
44+55.7 - 47+33.0	OHIO ST, LT	380.0		660.0		380.0		1	1	280.0		1.0	
44+55.7 - 47+33.0	OHIO ST, RT		380.0		670.0		380.0				280.0		2.0
47+33.0 - 52+10.0	OHIO ST, LT	480.0		910.0		480.0				480.0		2.0	
47+33.0 - 52+10.0	OHIO ST, RT		480.0		910.0		480.0				480.0		4.0
52+10.0 - 58+56.0	OHIO ST, LT	645.0		1155.0		645.0				645.0		2.0	
52+10.0 - 58+56.0	OHIO ST, RT		645.0		1165.0		645.0				645.0		4.0
58+56.0 - 63+50.0	OHIO ST, LT	545.0		990.0		545.0				495.0		1.0	
58+56.0 - 63+50.0	OHIO ST, RT		545.0		1010.0		545.0				495.0		2.0
	SUBTOTALS	2050	2050	3715	3755	2050	2050	1	1	1900	1900	6	12
	PROJECT TOTALS	4100		7470		4100		1	1	3800		18	

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SAWING CONCRETE

STATION	LOCATION	690.0250 SAWING CONCRETE (LF) STAGE 1	STAGE 2	STAGE 3
44+55.7 - 47+33.0	OHIO ST, LT		50	
44+55.7 - 47+33.0	OHIO ST, RT	585		115
47+33.0 - 52+10.0	OHIO ST, LT		375	
47+33.0 - 52+10.0	OHIO ST, RT	335		225
52+10.0 - 58+56.0	OHIO ST, LT		275	
52+10.0 - 58+56.0	OHIO ST, RT	105		305
58+56.0 - 63+50.0	OHIO ST, LT		45	
58+56.0 - 63+50.0	OHIO ST, RT	315		275
	SUBTOTALS	1340	745	920
	PROJECT TOTALS	3010		

SHREDDED BARK MULCH RED

STATION - STATION	LOCATION	SPV.0180.01 SHREDDED BARK MULCH RED (SY)
44+55.7 - 47+33.0	OHIO ST, MEDIAN	240
47+33.0 - 52+10.0	OHIO ST, MEDIAN	220
52+10.0 - 58+56.0	OHIO ST, MEDIAN	190
58+56.0 - 63+50.0	OHIO ST, MEDIAN	210
	TOTAL	860

CONSTRUCTION STAKING STORM SEWER

STRUCTURE NUMBER	STATION	LOCATION			650.4000 EACH STAGE 2	STAGE 3
INL-1	47+09.7	OHIO ST,	33.4	LT	--	1
INL-2	46+81.7	OHIO ST,	41.4	RT	1	--
INL-3	47+16.2	OHIO ST,	63.0	RT	1	--
INL-4	47+51.1	OHIO ST,	64.0	RT	1	--
INL-5	51+33.7	OHIO ST,	41.4	RT	1	--
INL-5A	51+23.7	OHIO ST,	41.4	RT	1	--
INL-6	51+63.8	OHIO ST,	41.4	RT	1	--
INL-7	51+24.3	OHIO ST,	33.4	LT	--	1
INL-8	51+89.6	OHIO ST,	60.8	LT	--	1
INL-9	52+39.0	OHIO ST,	58.9	LT	--	1
INL-9A	52+40.5	OHIO ST,	88.9	LT	--	1
INL-10	52+61.6	OHIO ST,	33.4	LT	--	1
INL-11	52+56.0	OHIO ST,	41.4	RT	1	--
INL-12	55+40.1	OHIO ST,	33.4	LT	--	1
INL-13	55+39.1	OHIO ST,	41.4	RT	1	--
INL-14	58+74.8	OHIO ST,	33.4	LT	--	1
INL-15	58+91.0	OHIO ST,	41.4	RT	1	--
MH-A	47+28.2	OHIO ST,	50.3	RT	1	--
MH-B	51+34.3	OHIO ST,	33.4	LT	--	1
MH-C	51+62.1	OHIO ST,	33.3	LT	--	1
MH-D	52+00.7	OHIO ST,	20.0	RT	1	--
MH-E	52+56.2	OHIO ST,	19.9	RT	1	--
MH-F	55+39.2	OHIO ST,	20.0	RT	1	--
MH-G	58+74.7	OHIO ST,	20.6	RT	1	--
				SUBTOTAL	11	10
				PROJECT TOTAL	21	

TREE PROTECTION

STATION	LOCATION	SPV.0060.07 (EACH) STAGE 1
44+92	OHIO ST 46' RT	1
45+27	OHIO ST 46' RT	1
48+12	OHIO ST 50' LT	1
48+90	OHIO ST 49' LT	1
49+49	OHIO ST 37' LT	1
50+67	OHIO ST 47' RT	1
51+80	OHIO ST 78' RT	1
56+91	OHIO ST 45' RT	1
63+04	OHIO ST 37' LT	1
	PROJECT TOTAL	9

CONCRETE SIDEWALK 6-INCH COLORED AND STAMPED

STATION - STATION	LOCATION	SPV.0165.01 (SF)
44+55.7 - 47+33.0	OHIO ST, MEDIAN	1400
47+33.0 - 52+10.0	OHIO ST, MEDIAN	1600
52+10.0 - 58+56.0	OHIO ST, MEDIAN	1650
58+56.0 - 63+50.0	OHIO ST, MEDIAN	1650
	PROJECT TOTAL	6300

JOINT SEALING

LOCATION	SPV.0105.01 JOINT SEALING (LS)
OHIO STREET	1
PROJECT TOTAL	1

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PROJECT NO: NO: 2704-00-73	HWY: OHIO STRET	COUNTY: RACINE	MISCELLANEOUS QUANTITIES	SHEET: 77	E

FILE NAME : _____ PLOT DATE : 12-01-13 PLOT BY : KEVIN RISCH PLOT NAME : _____ PLOT SCALE : 1:1

ALL PAY ITEMS ARE GROUP CODE 010 UNLESS OTHERWISE NOTED

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LANDSCAPING

		PERENNIALS					GRASSES	
STATION - STATION	LOCATION	SPV.0060.01 AUTUMN JOY (EACH)	SPV.0060.02 DAYLILY, YELLOW (EACH)	SPV.0060.03 PURPLE CONEFLOWER (EACH)	SPV.0060.04 RUGOSA ROSE, PURPLE PAVEMENT (EACH)	SPV.0060.05 SUMAC, GRO-LOW (EACH)	SPV.0060.06 LITTLE BLUESTEM (EACH)	632.9101 LANDSCAPE PLANTING SURVEILLANCE AND CARE CYCLE (EACH)
44+55.7 - 47+33.0	OHIO ST, MEDIAN	31	14	16	16	16	1600	6
47+33.0 - 52+10.0	OHIO ST, MEDIAN	31	14	16	16	16	1600	6
52+10.0 - 58+56.0	OHIO ST, MEDIAN	30	14	16	16	16	324	6
58+56.0 - 63+50.0	OHIO ST, MEDIAN	30	14	15	16	16	1200	6
	TOTALS	122	56	63	64	64	4724	24

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LANDSCAPING

SYMBOL	COMMON NAME	SCIENTIFIC NAME	AVERAGE MATURE HEIGHT (FT)	SIZE PLANTED	ROOT ZONE MODE	PLANT HOLE DIAMETER (IN)	PLANT HOLE DEPTH (IN)	FERTILIZER UNITS REQ'D. (1) (EACH)
AJ	AUTUMN JOY	SEDUM SPECTABILE	2	#1	CG	12	8	1
DL	DAYLILY, YELLOW	HEMEROCALLIS HYBRID	1 - 3.5	#1	CG	12	8	1
PCF	PURPLE CONEFLOWER	ECHINACEA PURPUREA	3	#1	CG	12	8	1
RR	RUGOSA ROSE, PURPLE PAVEMENT	ROSA RUGOSA	2 - 3	#3	CG	16	12	2
GLS	SUMAC, GRO-LOW	RHUS AROMATICA	1.5 - 2	#5	CG	18	14	2
LBS	LITTLE BLUESTEM	SCHIZACHYRIUM SCOPARIUM	1 - 3	--	PLUG	2	4	--

CG: CONTAINER GROWN

(1) ONE FERTILIZER UNIT = 1 OZ. MICROPORE SLOW RELEASE POLYETHYLENE PACKET PER SECTION 632.2.4.2 OF STANDARD SPECIFICATIONS
USE FERTILIZER TYPE B APPLIED AT A RATE OF 7 LB PER 1000 SQUARE FEET FOR LITTLE BLUE STEM GRASS
LITTLE BLUE STEM IS TO BE PLANTED 6 IN. ON CENTER, APPROXIMATELY 4 PLUGS PER SQUARE FOOT
RUGOSA ROSE, PURPLE PAVEMENT SIZE SHALL BE GRADE #1 OR #1 1/2 BAREROOT IF CONTAINER GROWN STOCK IS NOT AVAILABLE

ALL PAY ITEMS ARE GROUP CODE 010 UNLESS OTHERWISE NOTED

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TRAFFIC DETECTOR LOOPS

STATION	LOCATION	SIZE (FT)x(FT)	NO. OF TURNS	652.0800 CONDUIT LOOP DETECTOR LF	655.0700 LOOP DETECTOR LEAD IN CABLE LF	655.0800 LOOP DETECTOR WIRE LF
62+70, RT.	OHIO ST RT.	5 x 20	3	63	440	220
	PROJECT TOTAL			63	440	220

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REMOVE LOOP DETECTOR WIRE AND LEAD-IN CABLE

STATION	LOCATION	SPV.0105.03 REMOVE LOOP DETECTOR WIRE & LEAD-IN CABLE OHIO ST @ STH 20 LS
62+70, RT.	62+70 TO CABINET	1
	PROJECT TOTAL	1

PULLBOXES

STATION	LOCATION	653.0105 PULL BOXES STEEL 12 x 24 - INCH EACH
62+70, RT.	OHIO ST MEDIAN	1
63+73, RT.	OHIO ST MEDIAN	1
	PROJECT TOTAL	2

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE
FINAL LOCATION TO BE DETERMINED BY THE ENGINEER IN THE FIELD

REMOVING PULLBOXES

STATION	LOCATION	653.0905* REMOVING PULL BOXES EACH
62+70, RT.	OHIO ST RT.	1
63+73, RT.	OHIO ST MEDIAN	1
	PROJECT TOTAL	2

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

CONDUIT

STATION	LOCATION	652.0225* CONDUIT RIGID NONMETALLIC SCHEDULE 4 2-INCH LF
64+46, 3' RT/	OHIO ST MEDIAN	30
	PROJECT TOTAL	30

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

ALL PAY ITEMS ARE GROUP CODE 010 UNLESS OTHERWISE NOTED

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LIGHTING SYSTEM INFRASTRUCTURE REMOVAL (EXISTING SYSTEM)			
ROUTE: OHIO STREET		SPV.0105.02	
LOCATION			LS
44+00 TO 63+50			1
TOTALS			**1**
NOTES			

FIBER SPLICE, MAIN LINE, 96CT.SM			
ROUTE: OHIO STREET		SPV.0060.10	
LOCATION			EA
41+35 LT			96
65+45 LT			96
TOTALS			**192**
NOTES			

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CONDUIT AND FIBER OPTIC CABLE SCHEDULE

ROUTE FROM	ROUTE TO	CONDUIT: RIGID NONMETALLIC SCHEDULE 40, 4-INCH 652.0240 — HORIZONTAL LENGTH (LF)	NO.	TOTAL (LF)	FIBER OPTIC CABLE: CABLE LENGTH SLACK & RISER ALLOWANCE	TOTAL LENGTH (LF)	DIELECTRIC FIBER OPTIC CABLE 96CT-SM, FURNISH AND INSTALL SPV.0090.01 — NO.	TOTAL (LF)	ELECTRICAL WIRE TRAFFIC SIGNALS 14 AWG 655.0505 — NO.	TOTAL (LF)	NOTES
CV-40	PB114	130	1	130	50	180	1	180	1	140	
PB114	PB115	180	1	180	30	210	1	210	1	190	
PB115	PB116	43	1	43	30	73	1	73	1	53	
PB116	PB117	316	1	316	30	346	1	346	1	326	
PB117	PB118	350	1	350		350			1	360	
PB118	PB119	30	1	30		30			1	40	
PB119	PB122	149	1	149		149			1	159	
PB122	PB121	41	1	41		41			1	51	
PB121	PB123	43	1	43		43			1	53	
PB123	PB120	149	1	149		149			1	159	
PB120	PB118	51	1	51	30	81	1	81	1	61	
PB118	PB121	150	1	150	30	180	1	180	1	160	
PB121	PB124	401	1	401	30	431	1	431	1	411	
PB124	PB125	401	1	401	30	431	1	431	1	411	
PB125	PBS-F61	330	1	330	30	360	1	360	1	340	
PBS-F61	CV-18	210			50	260	1	260			
TOTALS				**2,770**				**2,560**		**2,920**	

NOTES

ALL PAY ITEMS ARE GROUP CODE 010 UNLESS OTHERWISE NOTED

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ROUTE: OHIO STREET		REMOVAL EXISTING LIGHT POLE ASSEMBLY	
LOCATION		SPV.0060.08	EACH
44+20			1
45+60			1
46+85			1
47+85			1
49+05			1
50+30			1
51+60			1
52+65			1
53+75			1
54+85			1
55+75			1
57+05			1
58+10			1
59+05			1
59+85			1
61+00			1
62+05			1
63+40			1
TOTALS			**18**

NOTES

CONDUIT AND ELECTRICAL WIRE SCHEDULE

ROUTE		CONDUIT			ELECTRICAL WIRE LIGHTING						
		HORIZONTAL LENGTH	RIGID NONMETALLIC SCHEDULE 40 2-INCH 652.0225 *		WIRE LENGTH SLACK & RISER ALLOWANCE	TOTAL LENGTH (LF)	10 AWG 655.0615		4 AWG 655.0630		NOTES
FROM	TO	(LF)	NO.	TOTAL (LF)			NO.	TOTAL (LF)	NO.	TOTAL (LF)	
CIRCUIT 31 C,D											
POLE 10	POLE 11	120	1	120	6	126			5	630	1
POLE 11	POLE 12	120	1	120	6	126			5	630	1
POLE 12	POLE 13	120	1	120	6	126			5	630	1
POLE 13	PB-08	120	1	120	6	126			5	630	
PB-08	POLE 14	34	1	34	6	40	3	120			1
PB-08	POLE 15	51	1	51	6	57	3	171			1
PB-08	POLE 16	120	1	120	6	126			5	630	1
POLE 16	PB-09	126	1	126	6	132			5	660	
PB-09	POLE 17	34	1	34	6	40	3	120			1
PB-09	POLE 18	51	1	51	6	57	3	171			1
PB-09	PB-10	133	1	133	6	139			5	695	
PB-10	POLE 19	43	1	43	6	49	3	147			1
PB-10	POLE 20	42	1	42	6	48	3	144			1
PB-10	POLE 21	131	1	131	6	137			5	685	1
POLE 21	PB-11	131	1	131	6	137			5	685	
PB-11	POLE 22	34	1	34	6	40	3	120			1
PB-11	POLE 23	51	1	51	6	57	3	171			1
PB-11	POLE 24	131	1	131	6	137			5	685	1
POLE 24	POLE-25	130	1	130	6	136			5	680	1
POLE-25	PB-12	131	1	131	6	137			5	685	
PB-12	POLE 26	44	1	44	6	50	3	150			1
PB-12	POLE 27	41	1	41	6	47	3	141			1
PB-12	POLE 28	131	1	131	6	137			5	685	1
POLE 28	POLE 29	131	1	131	6	137			5	685	1
POLE 29	POLE 30	131	1	131	6	137			5	685	1
TOTALS				**2,340**				**1,460**		**9,980**	

NOTES
* ADDITIONAL QUANTITIES SHOWN ELSEWHERE
1. SEE LIGHTING BASES, POLES, LUMINAIRE ARMS, & LUMINAIRES SCHEDULE FOR 12 AWG IN POLE WIRE.

3

ALL PAY ITEMS ARE GROUP CODE 010 UNLESS OTHERWISE NOTED

3

LIGHTING PULL BOXES STEEL

NO.	LOCATION			SIZE 24X36-INCH 653.0135	NOTES
	ROAD	*STATION	OFFSET		
PB-08	OHIO ST.	49		1	
PB-09	OHIO ST.	51+45		1	
PB-10	OHIO ST.	52+78		1	
PB-11	OHIO ST.	55+38		1	
PB-12	OHIO ST.	59+28		1	
TOTALS				5	

NOTES

* THE FINAL LOCATION SHALL BE DETERMINED BY THE FIELD ENGINEER.

3

FIBER OPTIC PULL BOXES STEEL

NO.	LOCATION			SIZE 24X36-INCH 653.0135	REMOVING PULL BOXES 653.0905 *	COMMUNICATION VAULT TYPE 1 673.0105	NOTES
	ROAD	STATION	OFFSET				
PB113	OHIO ST.				1		
CV-40	OHIO ST.					1	
PB114	OHIO ST.			EXISTING			
PB115	OHIO ST.			1			
PB116	OHIO ST.			1			
PB117	OHIO ST.			1			
PB118	OHIO ST.			1			
PB119	OHIO ST.			1			
PB120	OHIO ST.			1			
PB121	OHIO ST.			1			
PB122	OHIO ST.			1			
PB123	OHIO ST.			1			
PB124	OHIO ST.			1			
PB125	OHIO ST.			1			
PBS-F61	OHIO ST.			EXISTING			
PBE1	WRIGHT				1		
PBE2	WRIGHT				1		
TOTALS				11	3	1	

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

ALL PAY ITEMS ARE GROUP CODE 010 UNLESS OTHERWISE NOTED

3

3

LIGHTING BASES, POLES, LUMINAIRE ARMS, & LUMINAIRES

POLE NO.	LOCATION ROAD	CONCRETE BASES TYPE 5 654.0105	TRANSFORMER BASES BREAKAWAY 11 1/2-INCH BOLT CIRCLE 657.0255	POLES TYPE 5 ALUMINUM 657.0322	LUMINAIRE ARMS SINGLE MEMBER 4 1/2-INCH CLAMP 8-FOOT 657.0615	LUMINAIRES SALVAGED LED SPV.0060.09	ELECTRICAL WIRE LIGHTING 12 AWG 655.0610	NOTES
10	OHIO ST.	1	1	EXISTING	EXISTING	EXISTING	EXISTING	
11	OHIO ST.	1	1	1	2	2	240	
12	OHIO ST.	1	1	1	2	2	240	
13	OHIO ST.	1	1	1	2	2	240	
14	OHIO ST.	1	1	1	1	1	120	
15	OHIO ST.	1	1	1	1	1	120	
16	OHIO ST.	1	1	1	2	2	240	
17	OHIO ST.	1	1	1	1	1	120	
18	OHIO ST.	1	1	1	1	1	120	
19	OHIO ST.	1	1	1	1	1	120	
20	OHIO ST.	1	1	1	1	1	120	
21	OHIO ST.	1	1	1	2	2	240	
22	OHIO ST.	1	1	1	1	1	120	
23	OHIO ST.	1	1	1	1	1	120	
24	OHIO ST.	1	1	1	2	2	240	
25	OHIO ST.	1	1	1	2	2	240	
26	OHIO ST.	1	1	1	1	1	120	
27	OHIO ST.	1	1	1	1	1	120	
28	OHIO ST.	1	1	1	2	2	240	
29	OHIO ST.	1	1	1	2	2	240	
30	OHIO ST.	1	1	1	2	2	240	
TOTALS		21	21	20	30	30	3,600	
NOTES								

STATE OF WISCONSIN

DEPARTMENT OF TRANSPORTATION

TRANSPORTATION PROJECT PLAT TITLE SHEET

PROJECT NO. 2704-00-03

SIXTEENTH STREET TO WASHINGTON AVENUE (STH 20)

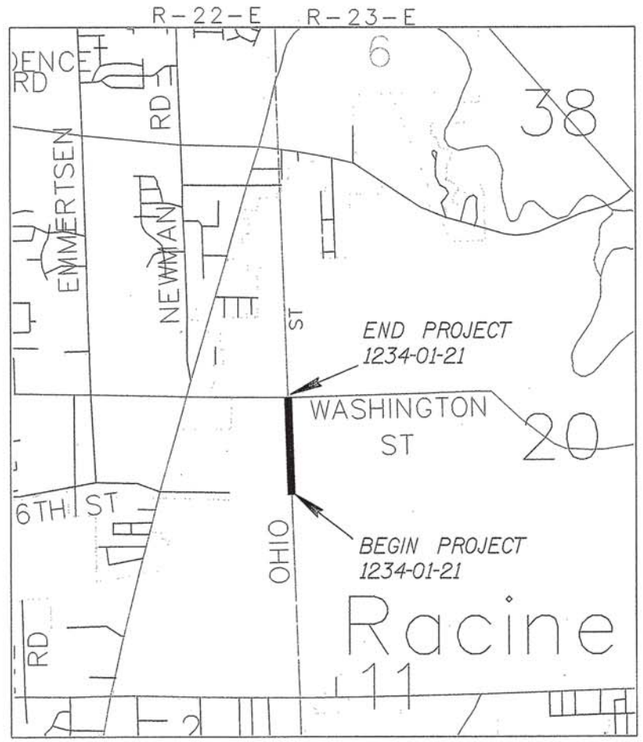
OHIO STREET
RACINE COUNTY

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 2704-00-03-4.00
SHEET 2 OF 2
AMENDMENT NO:...

4



T-3-N



N

0 4000
LAYOUT

NOTES:

COORDINATES AND BEARINGS SHOWN ON THIS PLAT ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM, RACINE COUNTY ZONE, NAD83 (97) ADJUSTMENT. THE COORDINATES SHOWN ARE GRID COORDINATES AND ARE TO BE USED AS GRID OR GROUND VALUES ON THIS PLAT.

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

RIGHT-OF-WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS REFERENCED TO THE U.S. PUBLIC LAND SURVEY SYSTEM OR OTHER "SURVEYS OF PUBLIC RECORD".

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, EXCLUDING RIGHT-OF-WAY LINES, AND SHOULD NOT BE USED AS A SUBSTITUTE FOR AN ACCURATE FIELD SURVEY.

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE: EXISTING HIGHWAY RIGHT-OF-WAY FOR OHIO STREET ESTABLISHED FROM PREVIOUS PROJECT2703-03-05 WILLIAM A. CRANE ADDITION #2, RACINE GARDENS, CRAB TREE GROVE AND DEEDS OF RECORD.

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. ALL TLES EXPIRE AT THE COMPLETION OF THE CONSTRUCTION PROJECT FOR WHICH THIS INSTRUMENT IS GIVEN.

A PERMANENT LIMITED EASEMENT (PLE) IS A RIGHT FOR CONSTRUCTION AND MAINTENANCE 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. BUT WITHOUT PREJUDICE TO THE OWNER'S RIGHT TO MAKE OR CONSTRUCT IMPROVEMENT ON SAID LANDS OR TO FLATTEN THE SLOPES, PROVIDING SAID ACTIVITIES WILL NOT IMPAIR OR OTHERWISE ADVERSELY AFFECT THE HIGHWAY FACILITIES.

A HIGHWAY EASEMENT (HE) IS 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 NECESSARY OR DESIRABLE.

DIMENSIONING FOR THE NEW RIGHT-OF-WAY IS MEASURED ALONG AND PERPENDICULAR TO NEW REFERENCE LINES.

CONVENTIONAL ABBREVIATIONS

ACCESS POINT/ DRIVEWAY CONNECTION	AP	RELEASE OF RIGHTS	ROR
ACCESS RIGHTS	AR	REMAINING	REM.
ACRES	AC.	RIGHT-OF-WAY	R/W
AND OTHERS	ET.AL.	SECTION	SEC.
CENTERLINE	C/L	STATION	STA.
CERTIFIED SURVEY MAP	CSM	TEMPORARY LIMITED EASEMENT	TLE
CORNER	COR.	VOLUME	V.
DOCUMENT	DOC.		
EASEMENT	EASE.		
HIGHWAY EASEMENT	H.E.		
LAND CONTRACT	LC		
MONUMENT	MON.		
PAGE	P.		
PERMANENT LIMITED EASEMENT	PLE		
PROPERTY LINE	PL		
RECORDED AS	(100')		
REFERENCE LINE	R/L		

CURVE DATA

LONG CHORD	LCH
LONG CHORD BEARING	LCB
RADIUS	R
DEGREE OF CURVE	D
CENTRAL ANGLE OR DELTA	DELTA
LENGTH OF CURVE	L
TANGENT	TAN

CONVENTIONAL SYMBOLS

FOUND IRON PIPE/PIN	⌀ (1" UNLESS NOTED)	PROPOSED R/W LINE	
R/W MONUMENT	● (SET)	EXISTING H.E. LINE	
R/W STANDARD	▲ (SET)	PROPERTY LINE	
SIGN	SIGN	LOT & TIE LINES	
SECTION CORNER MONUMENT		SLOPE INTERCEPTS	
SECTION CORNER SYMBOL		CORPORATE LIMITS	
FEE (HATCH VARIES)		NO ACCESS (BY PREVIOUS ACQUISITION/CONTROL)	
TEMPORARY LIMITED EASEMENT		ACCESS RESTRICTED (BY ACQUISITION)	
PERMANENT LIMITED EASEMENT		NO ACCESS (BY STATUTORY AUTHORITY)	
R/W BOUNDARY POINT	RWB20	SECTION LINE	
PARCEL NUMBER	102	QUARTER LINE	
UTILITY INTEREST	40	SIXTEENTH LINE	
SIGN NUMBER (OFF PREMISE)	21-1	EXISTING CENTERLINE	
BUILDING		PROPOSED REFERENCE LINE	
		PARALLEL OFFSET	

CONVENTIONAL UTILITY SYMBOLS

WATER	W
GAS	G
TELEPHONE	T
OVERHEAD TRANSMISSION LINES ELECTRIC	OH / E
CABLE TELEVISION	TV
FIBER OPTIC	FO
SANITARY SEWER	SAN
STORM SEWER	SS

	NON COMPENSABLE	COMPENSABLE
POWER POLE		
TELEPHONE POLE		
TELEPHONE PEDESTAL		
ELECTRIC TOWER		

WISCONSIN
8/21/13
ANTHONY J. GROMACKI
S-2090
JACKSON
WI
LAND SURVEYOR

FILE NAME : F:\PROJECTS\13-059-003 OHIO STREET PLAT\SURVEY\CAD\2013.08.06.OHIO_ST_TP_PLAT.DWG
APPRAISAL PLAT DATE : ----------

PLOT DATE : 8/21/2013 11:06 AM PLOT BY : GROMACKI, ANTHONY PLOT NAME : ----------PLOT SCALE : 1" = 400'_XREF

---------- ---------- 4.00

TRANSPORTATION PROJECT PLAT NO: 2704-00-03- 4.01

THAT PART OF WILLIAM A. CRANE ADDITION NO.2 IN THE SW 1/4 OF THE SW 1/4 OF SECTION 18, TOWNSHIP 3 NORTH, RANGE 23 EAST AND THE SE 1/4 OF THE SE 1/4 OF SECTION 13, TOWNSHIP 3 NORTH, RANGE 22 EAST, CITY OF RACINE, RACINE COUNTY, WISCONSIN

RELOCATION ORDER OHIO STREET- SIXTEENTH STREET TO WASHINGTON AVENUE (STH 20) RACINE COUNTY

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

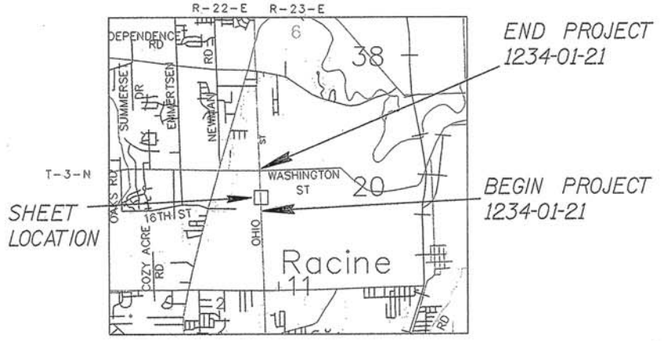
TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 62.22, WISCONSIN STATUTES, THE CITY OF RACINE HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE CITY FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE CITY OF RACINE, PURSUANT TO THE PROVISIONS OF SECTION 62.22, WISCONSIN STATUTES.

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 2704-00-03-4.01
SHEET 1 OF 2
AMENDMENT NO:...

SCHEDULE OF LAND AND INTEREST REQUIRED		OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTEREST TO THE DEPARTMENT OF TRANSPORTATION.					
PARCEL NUMBER	OWNER	INTEREST REQUIRED	R/W REQUIRED ACRES NEW	EXISTING	TOTAL	T.L.E. TEMP S.F.	P.L.E. PERM. S.F.
1	JAMES R. CORMAN	TLE				121	
2	EMILY DAUS	TLE				72	
3	SALVADOR R.AND MARIA E. TORRES	TLE				119	
4	RACINE UNIFIED SCHOOL DISTRICT NO. 1	TLE				2404	

HWY	BASIS OF EXISTING R/W	YEAR	WIDTH
OHIO STREET	R/W PROJECT 2703-03-05	2007	VARIES
OHIO STREET	AFFIDAVIT OF CORRECTION DOC.2195155	2008	VARIES
SIXTEENTH STREET (W)	CRAB TREE GROVE	1962	90'
SIXTEENTH STREET (E)	WILLIAM A. CRANE ADDITION #2	1927	60'
OHIO STREET	WILLIAM A. CRANE ADDITION #2	1927	30'
FIFTEENTH STREET	WILLIAM A. CRANE ADDITION #2	1927	60'
WRIGHT AV (E)	WILLIAM A. CRANE ADDITION #2	1927	40'
WRIGHT AV (W)	CITY OF RACINE PROJECT	1999	80'

POINT TABLE		
POINT #	NORTHING	EASTING
100	181127.13	625765.52
101	181127.17	625770.89
102	181142.17	625770.78
103	181142.22	625776.78
104	181145.84	625776.75
105	181145.77	625765.40
106	181205.77	625765.01
107	181205.82	625774.30
108	181210.21	625774.27
109	181210.18	625770.27
110	181216.17	625770.22
111	181216.13	625764.94
112	181599.12	625762.45
113	181599.17	625768.35
114	181605.17	625768.31
115	181605.21	625774.30
116	181612.26	625774.25
117	181612.14	625762.37
118	181186.31	625655.45
119	181186.38	625665.14
120	181233.38	625664.83
121	181233.31	625655.09
122	181272.27	625649.80
123	181272.38	625664.58
124	181326.38	625664.22
125	181326.27	625649.40
126	181403.27	625648.81
127	181403.38	625663.72
128	181461.38	625663.35
129	181461.27	625648.38
130	181597.25	625646.36
131	181597.37	625662.46
132	181614.49	625662.35
133	181615.11	625646.23





NOT LOCATED
Y=182,937.31
X=625708.67

CONC. MON./BRASS CAP
Y=180,287.26
X=625739.96

SIXTEENTH ST. (90')

BEGIN RELOCATION ORDER STA. 43+54.35
Y=180,796.08
X=625,713.38

N00°22'23"W R/W

100'

CITY OF RACINE

47+45.00 118 -55.00' 119 -45.31'
47+92.00 121 -55.00' 120 -45.26'
48+31.00 -60.00' 122 -45.22' 123
48+85.00 -60.00' 125 -45.17' 124
49+62.00 126 -60.00' 127 -45.09
50+20.00 129 -60.00' 128 -45.03'

SE SE PI 52+10.59
Y=181,652.30
X=625,706.95

WRIGHT AV. (80')

OHIO ST.

SLOPE INTERCEPTS (TYPICAL)

44 45 46 47 48 49 50 51 52

N00°25'49"W R/L

N00°40'36"W S/L

IP

N00°22'23"W R/W

LOT 15 LOT 16 LOT 17 LOT 18 LOT 19 LOT 20 LOT 21 LOT 22 LOT 23 LOT 24

BLK 5

WILLIAM A. CRANES

SIXTEENTH ST. (60')

FIFTEENTH ST. (60')

BLK 4

LOT 13 LOT 12 LOT 11 LOT 10 LOT 9 LOT 8 LOT 7 LOT 6

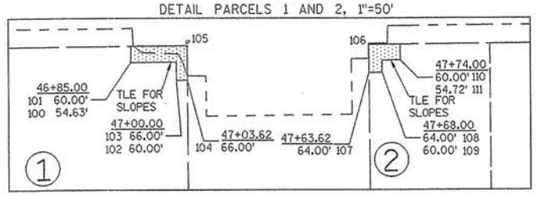
ADDITION NO. 2

SW SW

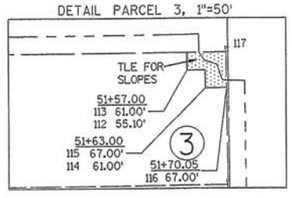
RACINE

WRIGHT AV. (80')

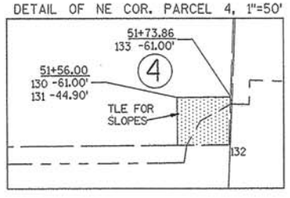
DETAIL PARCELS 1 AND 2, 1"=50'



DETAIL PARCEL 3, 1"=50'



DETAIL OF NE COR. PARCEL 4, 1"=50'



N

SCALE, FEET
0 50 100

PARCEL #	TAX KEY #
1	276-00-00-22-186-000
2	276-00-00-22-156-000
3	276-00-00-22-149-000
4	276-00-00-22-871-000

M SQUARED ENGINEERING
1162 N215 WASHINGTON AVE.
CEDARBURG WI. 53012

I ANTHONY J. GROMACKI, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE CITY OF RACINE, I HAVE SURVEYED, MONUMENTED AND MAPPED THE TRANSPORTATION PROJECT PLAT 2704-00-03 4.01 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN
8/21/13
ANTHONY J. GROMACKI
S-2090
JACKSON WI
LAND SURVEYOR

ANTHONY J. GROMACKI
S-2090 NUMBER

AUGUST 21, 2013
DATE

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE CITY OF RACINE, RACINE COUNTY, WISCONSIN

SIGNATURE

DATE

FILE NAME :F:\PROJECTS\13-059-003 OHIO STREET PLAT\SURVEY\CAD\2013.08.06.OHIO_ST_TP_PLAT.DWG
APPRAISAL PLAT DATE : ----------
PLOT DATE : 8/21/2013 11:05 AM PLOT BY : GROMACKI, ANTHONY PLOT NAME : ---------- PLOT SCALE : 100'_XREF

2704-00-03 4.01

TRANSPORTATION PROJECT PLAT NO: 2704-00-03- 4.02

THAT PART OF RACINE GARDENS IN THE NW 1/4 OF THE SW 1/4 OF SECTION 18, TOWNSHIP 3 NORTH, RANGE 23 EAST AND THE NE 1/4 OF THE SE 1/4 OF SECTION 13, TOWNSHIP 3 NORTH, RANGE 22 EAST, CITY OF RACINE, RACINE COUNTY, WISCONSIN

RELOCATION ORDER OHIO STREET- SIXTEENTH STREET TO WASHINGTON AVENUE (STH 20) RACINE COUNTY

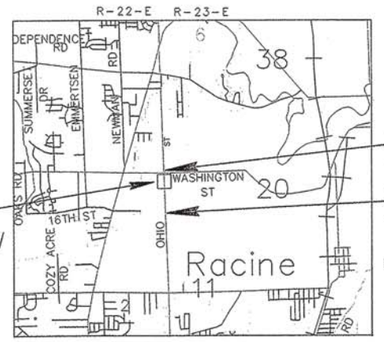
TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE CITY OF RACINE DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 62.22, WISCONSIN STATUTES, THE CITY OF RACINE HEREBY ORDERS THAT:
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RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 2704-00-03-4.02
AMENDMENT NO:---

SCHEDULE OF LAND AND INTEREST REQUIRED		OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTEREST TO THE DEPARTMENT OF TRANSPORTATION.					
PARCEL NUMBER	OWNER	INTEREST REQUIRED	R/W REQUIRED ACRES NEW	EXISTING	TOTAL	T.L.E. TEMP S.F.	P.L.E. PERM. S.F.
5	DANIEL J. AND DEBORAH J. TUTTLE	TLE				574	
6	KENNETH A. AND MARION J. WEISS	TLE				412	
7	RICHARD D. COLE	TLE				431	
8	THOMAS J. AND MEGAN L. JENSEN	TLE				246	
9	MANFRED A. REITZENSTEIN AND DONNA M. JOSIPOVICH	TLE				236	
10	PAMELA M. DESKINS	TLE				231	
11	FLOYD J. LUCAS	TLE				93	
12	BRENDA L. STOCKTON	TLE				80	
13	MICHAEL G. HOPPUS	TLE				61	
14	PENELOPE SCHATZMAN	TLE				240	
15	SHOPKO SPE REAL ESTATE	TLE				2367	

HWY	BASIS OF EXISTING R/W	YEAR	WIDTH
OHIO STREET (W)	DEEDS OF RECORD	NA	70'
OHIO STREET (E)	RACINE GARDENS	NA	80'
WRIGHT AV (E)	RACINE GARDENS	NA	40'
WRIGHT AV (W)	CITY OF RACINE PROJECT	1999	80'
THIRTEENTH STREET	RACINE GARDENS	NA	60'
S.T.H. 20 WASHINGTON AV (E)	RACINE GARDENS	NA	33'
S.T.H. 20 WASHINGTON AV (W)	DOC. 1069588	1980	VARIES



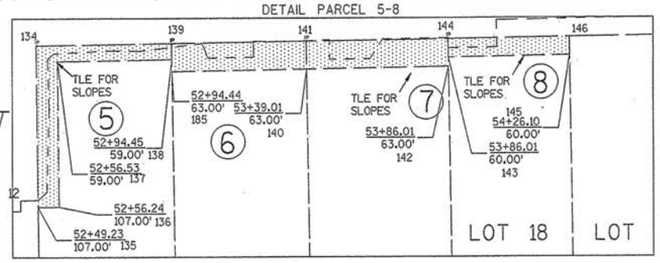
SHEET LOCATION

END PROJECT 1234-01-21

BEGIN PROJECT 1234-01-21

DETAIL PARCEL 11 AND 12

DETAIL PARCEL 5-8

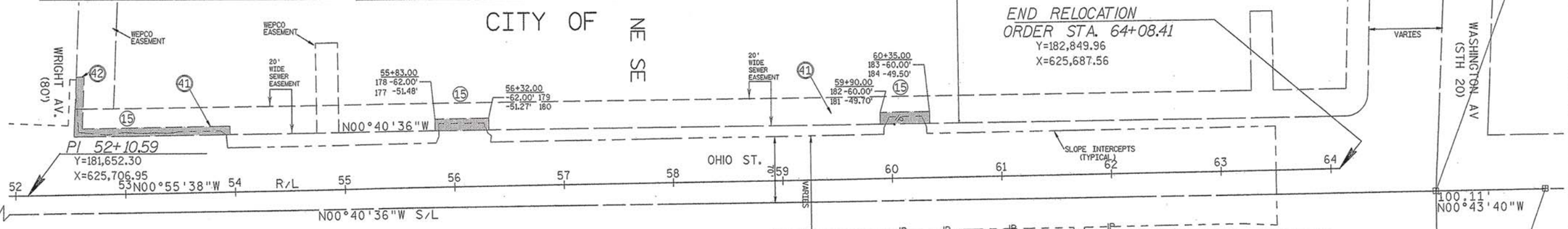


SCALE, FEET
0 50 100

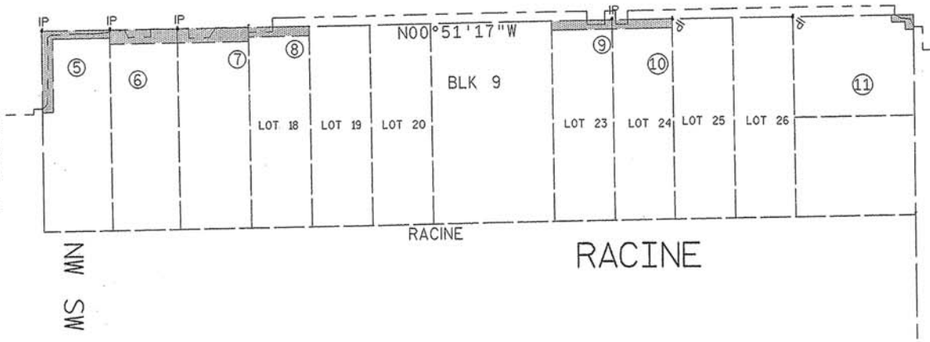
NOT LOCATED
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X=625708.67

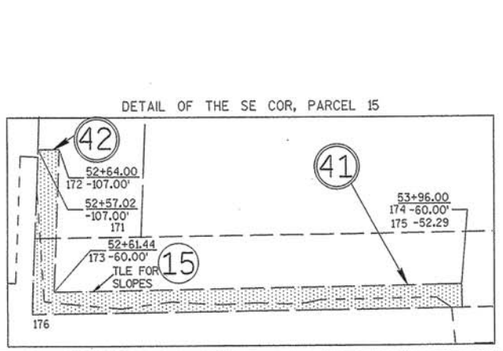
CONC. MON./BRASS CAP
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X=625739.96

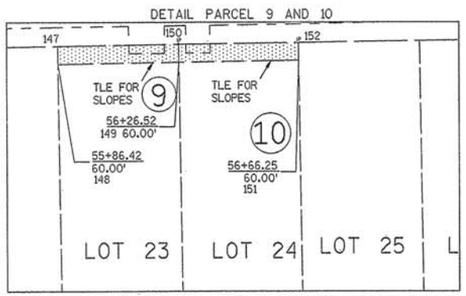
UTILITY SCHEDULE AND INTERESTS REQUIRED		
UTILITY NUMBER	UTILITY OWNERS	INTEREST REQUIRED
41	CITY OF RACINE	RELEASE OF RIGHTS
42	WISCONSIN ELECTRIC POWER COMPANY	RELEASE OF RIGHTS

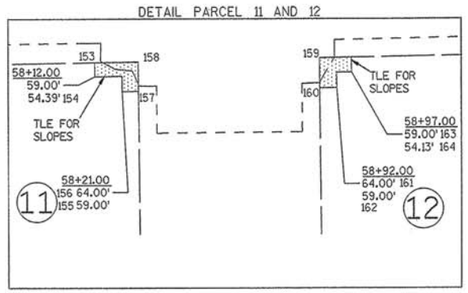


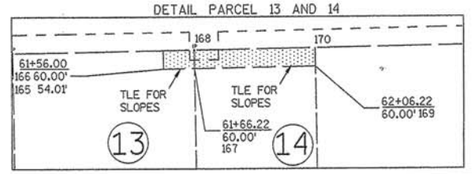
POINT TABLE		
POINT #	NORTHING	EASTING
134	181692.12	625759.99
135	181692.66	625813.30
136	181699.67	625813.19
137	181699.19	625765.20
138	181737.10	625764.59
139	181737.03	625759.32
140	181781.72	625767.86
141	181781.59	625758.65
142	181828.71	625767.10
143	181828.67	625764.10
144	181828.59	625757.95
145	181868.75	625763.45
146	181868.67	625757.35
147	182028.97	625754.96
148	182029.05	625760.86
149	182069.15	625760.21
150	182069.07	625754.36
151	182108.87	625759.57
152	182108.79	625753.77
153	182254.52	625751.60
154	182254.59	625756.21
155	182263.58	625756.06
156	182263.66	625761.06
157	182269.03	625760.97
158	182268.95	625751.38
159	182328.94	625750.14
160	182329.02	625760.00
161	182334.65	625759.91
162	182334.57	625754.92
163	182339.58	625754.84
164	182339.50	625749.96
165	182598.46	625745.65
166	182598.58	625751.64
167	182608.78	625751.47
168	182608.69	625745.48
169	182648.77	625750.83
170	182648.68	625744.81
171	181697.00	625899.21
172	181703.97	625899.10
173	181702.17	625646.13
174	181836.72	625643.95
175	181836.84	625651.65
176	181694.89	625653.33
177	182023.82	625649.45
178	182023.65	625698.93
179	182072.65	625638.14
180	182072.82	625648.87
181	182430.80	625644.64
182	182430.63	625634.34
183	182475.63	625633.61
184	182475.80	625644.11
185	181737.15	625768.58











M SQUARED ENGINEERING
1962 N215 WASHINGTON AVE.
CEDARBURG WI. 53012

I ANTHONY J. GROMACKI, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 236.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE CITY OF RACINE, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 2204-00-03 4.02 AND THAT SUCH PLAT CORRECTLY REPRESENTS THE EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

8/21/13
ANTHONY J. GROMACKI
S-2090
JACKSON
WI
LAND SURVEYOR

ANTHONY J. GROMACKI
REGISTRATION NUMBER S-2090

AUGUST 21, 2013
DATE

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE CITY OF RACINE, RACINE COUNTY, WISCONSIN

SIGNATURE

DATE

FILE NAME : F:\PROJECTS\13-059-003 OHIO STREET PLAT\SURVEY\CAD\2013.08.06.OHIO_ST_TP_PLAT.DWG
APPRAISAL PLAT DATE : ----------
PLOT DATE : 8/21/2013 11:16 AM PLOT BY : GROMACKI, ANTHONY PLOT NAME : ---------- PLOT SCALE : 1 = 100'_XREF

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
2	46+85.22	NE BOLT ON FH AT 15TH ST.	691.74

BEGIN CONSTRUCTION STA 43+54.35

STA 44+55.73

EXISTING R/W

OHIO STREET

LT PGL

RT PGL

℄ OHIO STREET

SB #1

SB #2

SLOPE INTERCEPT

EXISTING ACCESS TO BE REMOVED

STARBUCK MIDDLE SCHOOL
1516 OHIO ST.

CAUTION

℄ STA 47+33.42 OHIO STREET =
℄ STA 299+82.00 15TH STREET

MATCH LINE STA 49+00.00

ALLAN ROBERTS
1516 OHIO ST.

PHAN HUU NAM
1517 OHIO ST.

RAYMOND STEGER
1515 OHIO ST.

JAMES CORMAN
4621 15TH ST.

BM #2

TLE

SLOPE INTERCEPT

15TH ST.

EMILY DAUS
1439 OHIO ST.

RENEE MACHADO
1435 OHIO ST.

DIEP ESTE
1431 OHIO

EXISTING RT PGL

FINISHED RT PGL

FINISHED LT PGL

VCL = 180.00
K = 50

VPC STA 45+45.88
VPC EL 694.47

VPI STA 46+35.88
VPI EL 690.69

VPT STA 47+25.88
VPT EL 690.15

STA 48+00.00
EL 689.71

-4.31%
-4.21%
-0.60%
-0.65%

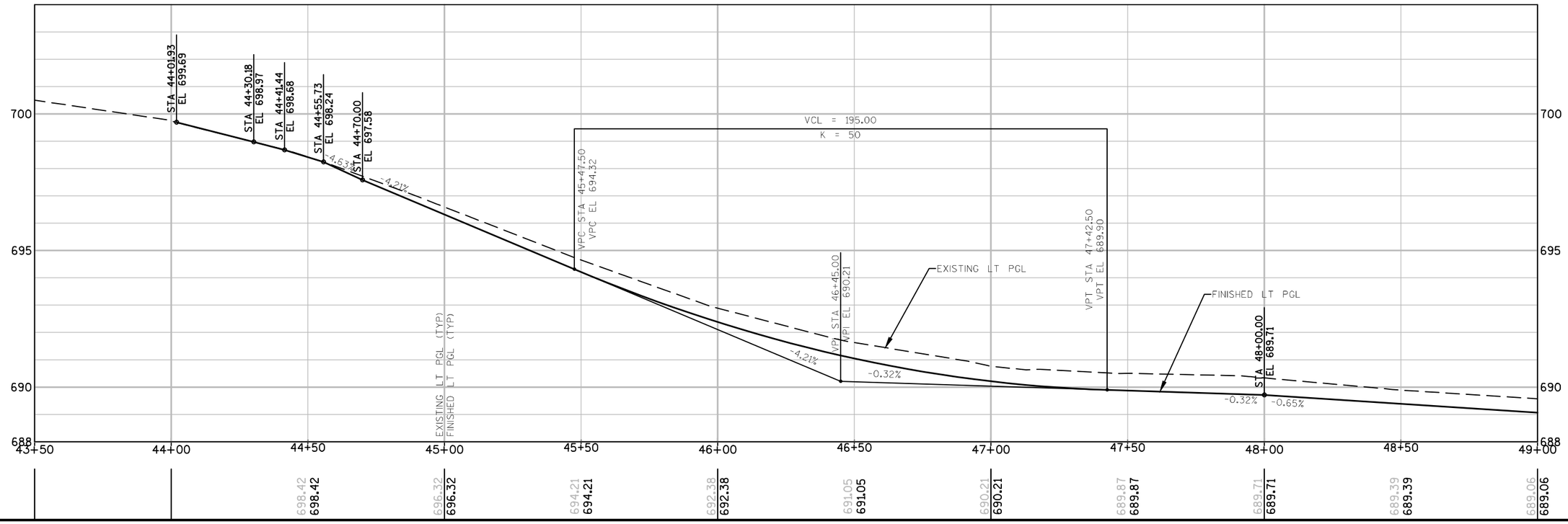
EXISTING RT PGL (TYP)
FINISHED RT PGL (TYP)

STA	EL	EXISTING RT PGL (TYP)	FINISHED RT PGL (TYP)
44+05.11	699.76	700.63	699.85
44+29.79	699.07	698.47	698.46
44+55.70	698.29	696.67	696.40
44+80.00	697.24	694.77	694.30
		692.99	692.49
		691.77	691.18
		691.01	690.37
		690.74	690.01
		690.47	689.71
		690.10	689.38
		689.77	689.06

PROJECT NO: 2704-00-73	HWY: OHIO STREET	COUNTY: RACINE	PLAN AND PROFILE: OHIO STREET	SHEET	E

FILE NAME : P:\R0140060_RACINE - OHIO STREET DESIGN\C3D\SHEETSPLAN\270400003_050101_PP.DWG PLOT DATE : 11/26/2013 7:43 AM PLOT BY : KEVIN K. RISCH PLOT NAME : PLOT SCALE : 1" = 40'_XREF

WISDOT/CADDS SHEET 44



5

5

PROJECT NO: 2704-00-73	HWY: OHIO STREET	COUNTY: RACINE	PLAN AND PROFILE: OHIO STREET	SHEET	E

FILE NAME : P:\R0140060_RACINE - OHIO STREET DESIGN\C3D\SHEETSPLAN\270400003_050201_DBPR.DWG PLOT DATE : 11/29/2013 1:52 PM PLOT BY : KEVIN K. RISCH PLOT NAME : PLOT SCALE : *********

WISDOT/CADDS SHEET 44

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
3	52+57.59	NE BOLT ON FH AT WRIGHT	689.41

PROPOSED NORTH ACCESS TO STARBUCK SCHOOL

EXISTING R/W

SLOPE INTERCEPT

LT PGL

SB #4

SB #3

RT PGL

MATCH LINE STA 49+00.00

MATCH LINE STA 55+00.00

℄ STA 52+11.24 OHIO STREET
℄ STA 201+20.06 WRIGHT AVENUE (WEST)

TLE

SLOPE INTERCEPT

CAUTION

SHOPKO SPE REAL ESTATE
4804 WASHINGTON AVE.

OHIO STREET

℄ OHIO STREET

SB #6

SB #5

BM #3

WRIGHT AVE.

EXISTING R/W

DAVID AND VALERIE DUFFECK
1427 OHIO ST.

WANDA BERRYMAN PRICE
1423 OHIO ST.

LISA CHAVEZ
1417 OHIO ST.

JOHN SOLBERG
1415 OHIO ST.

SALVADOR AND MARIA TORRES
1401 OHIO ST.

STA 52+09.98 OHIO STREET =
STA 24+82 WRIGHT AVENUE (EAST)

DANIEL AND DEBORAH TUTTLE
1355 OHIO ST.

KENNETH AND MARION WEISS
1351 OHIO ST.

DOROTHY TWESME
1347 OHIO ST.

THOMAS AND MEGAN JENSEN
1341 OHIO ST.

ALPHONSE AND MARCIA POST
1333 OHIO ST.

VCL = 265.00
K = 50

VPC STA 51+02.50
VPC EL 687.74

LOW POINT
51+34.75
687.64

EXISTING RT PGL

VPI STA 52+35.00
VPI EL 686.88

-0.65%

4.70%

VPT STA 53+67.50
VPT EL 693.10

VPC STA 53+70.00
VPC EL 693.22

FINISHED RT PGL

1.28%

4.70%

FINISHED LT PGL

VPI STA 54+55.00
VPI EL 697.210

VCL = 170.00
K = 49.73

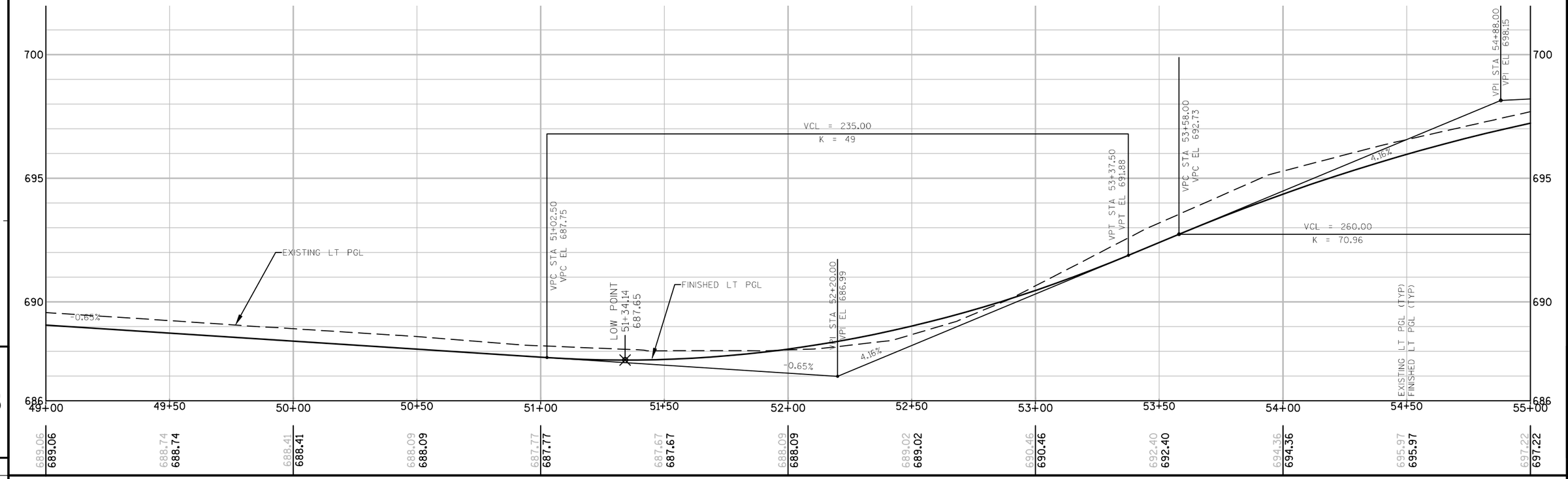
EXISTING RT PGL (TYP)
FINISHED RT PGL (TYP)

49+00	49+50	50+00	50+50	51+00	51+50	52+00	52+50	53+00	53+50	54+00	54+50	55+00
689.77 / 689.06	689.39 / 688.73	689.10 / 688.41	688.77 / 688.08	688.48 / 687.76	688.23 / 687.66	688.06 / 688.07	688.62 / 688.98	690.75 / 690.39	693.40 / 692.31	695.45 / 694.54	696.72 / 696.33	697.84 / 697.62

PROJECT NO: 2704-00-73	HWY: OHIO STREET	COUNTY: RACINE	PLAN AND PROFILE: OHIO STREET	SHEET	E

FILE NAME : P:\R0140060_RACINE - OHIO STREET DESIGN\C3D\SHEETSPLAN\270400003_050101_PP.DWG PLOT DATE : 11/26/2013 7:44 AM PLOT BY : KEVIN K. RISCH PLOT NAME : PLOT SCALE : 1" = 40'_XREF

WISDOT/CADDS SHEET 44



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PROJECT NO: 2704-00-73	HWY: OHIO STREET	COUNTY: RACINE	PLAN AND PROFILE: OHIO STREET	SHEET	E

FILE NAME : P:\R0140060_RACINE - OHIO STREET DESIGN\C3D\SHEETSPLAN\270400003_050201_DBPR.DWG PLOT DATE : 11/29/2013 1:52 PM PLOT BY : KEVIN K. RISCH PLOT NAME : PLOT SCALE : *********
WISDOT/CADDS SHEET 44

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
4	58+97.84	NE BOLT ON FH AT 13TH ST.	702.26

N

MATCH LINE STA 55+00.00

MATCH LINE STA 61+00.00

SLOPE INTERCEPT

EXISTING R/W

CAUTION

SHOPKO SPE REAL ESTATE
4804 WASHINGTON AVE.

℄ OHIO STREET

LT PGL

RT PGL

℄ STA 58+56.85 OHIO STREET=
℄ STA 99+82.00 13TH STREET

OHIO STREET

SB #8

SB #7

BM #4

56+00

57+00

58+00

59+00

60+00

100+00

13TH ST.

TLE

JOSE HERNANDEZ
1329 OHIO ST.

MANFRED REITZENSTEIN
1323 OHIO ST.

STANLEY AND
KATHY ANNIS
1317 OHIO ST.

JAMES AND
CATHERINE SCHULDT
1313 OHIO ST.

CONNIE DIAZ
1309 OHIO ST.

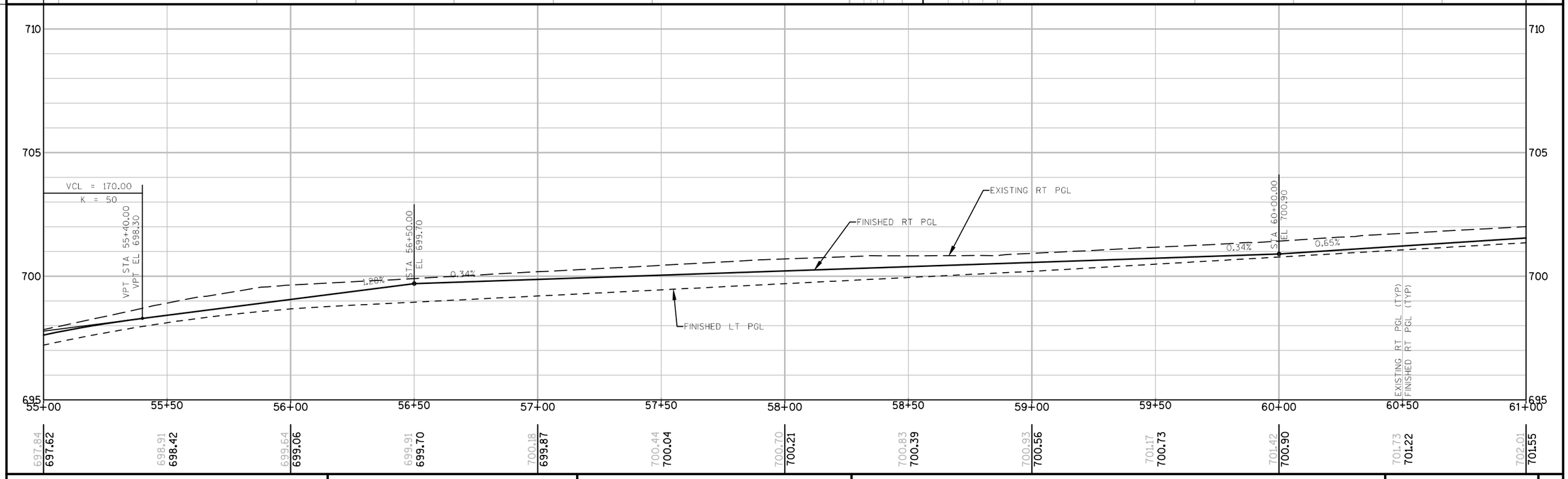
FLOYD LUCAS
1301 OHIO ST.

BRENDA STOCKTON
4624 13TH ST.

RICHARD AND
NANCY LENZKE
1247 OHIO ST.

TONYA KING
1243 OHIO ST.

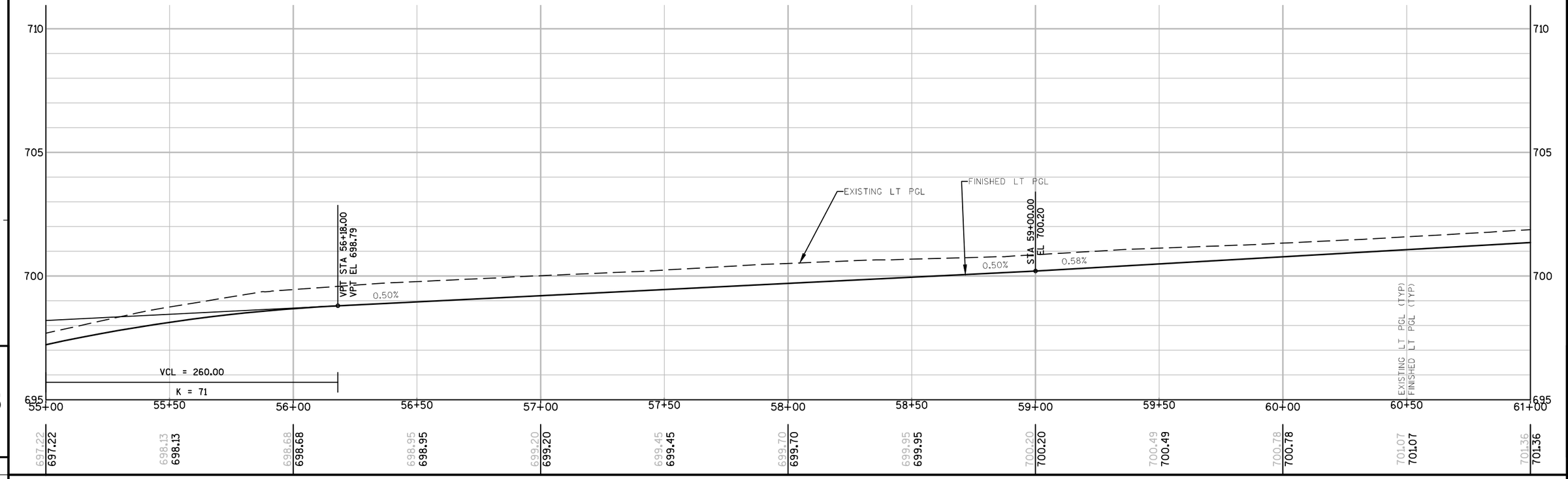
EDWINA ELDRIDGE
1237 OHIO ST.



PROJECT NO: 2704-00-73	HWY: OHIO STREET	COUNTY: RACINE	PLAN AND PROFILE: OHIO STREET	SHEET	E

FILE NAME : P:\R0140060_RACINE - OHIO STREET DESIGN\C3D\SHEETSPLAN\270400003_050101_PP.DWG PLOT DATE : 11/26/2013 7:44 AM PLOT BY : KEVIN K. RISCH PLOT NAME : PLOT SCALE : 1" = 40'_XREF

WISDOT/CADDS SHEET 44



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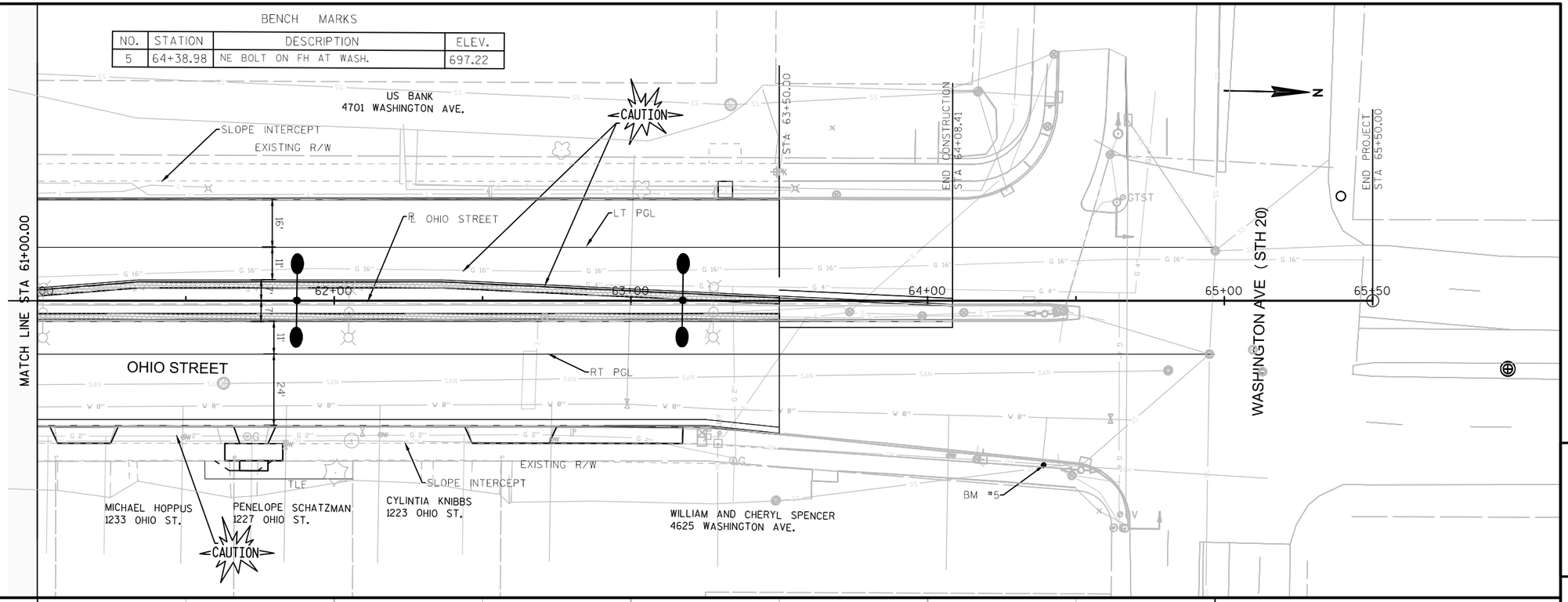
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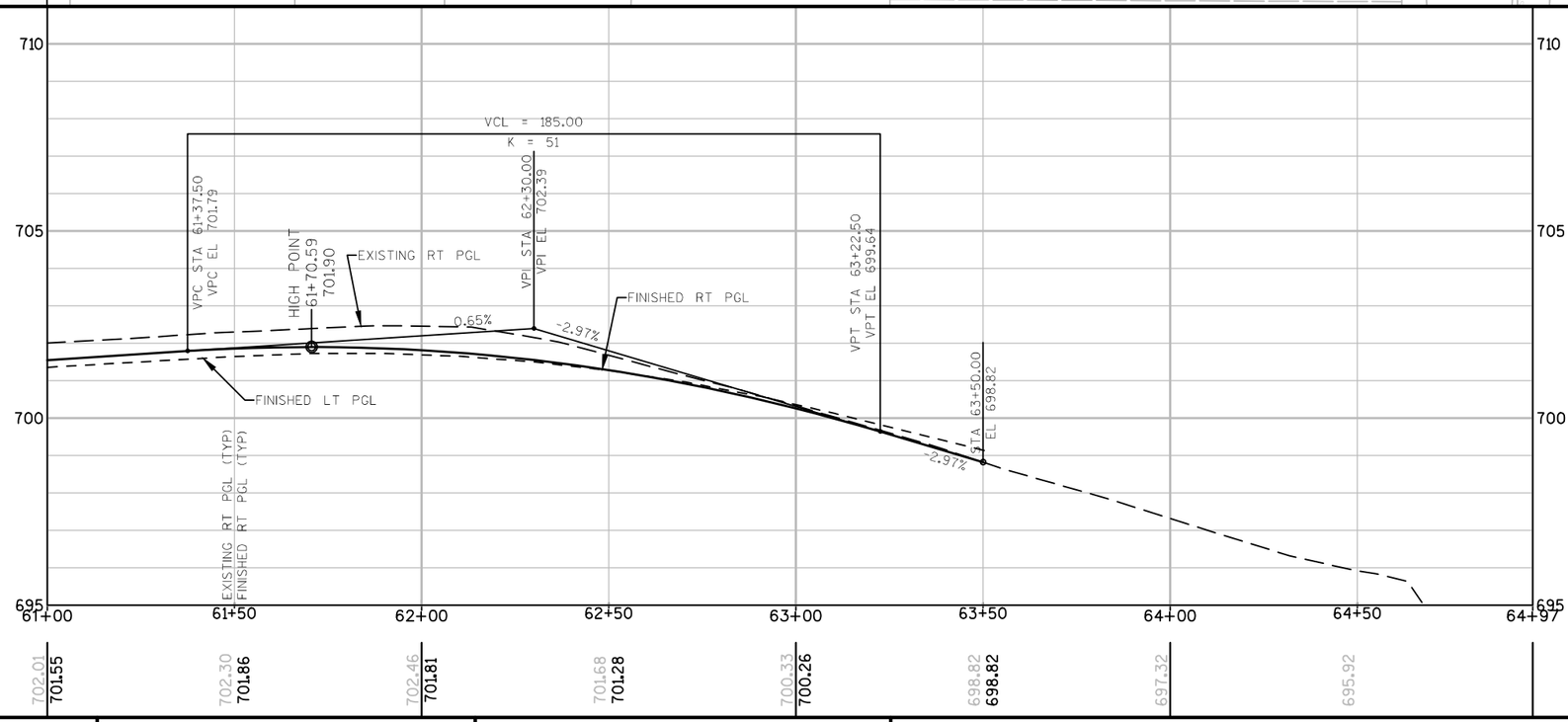
PROJECT NO: 2704-00-73	HWY: OHIO STREET	COUNTY: RACINE	PLAN AND PROFILE: OHIO STREET	SHEET	E

FILE NAME : P:\R0140060_RACINE - OHIO STREET DESIGN\C3D\SHEETSPLAN\270400003_050201_DBPR.DWG PLOT DATE : 11/29/2013 1:52 PM PLOT BY : KEVIN K. RISCH PLOT NAME : PLOT SCALE : *********

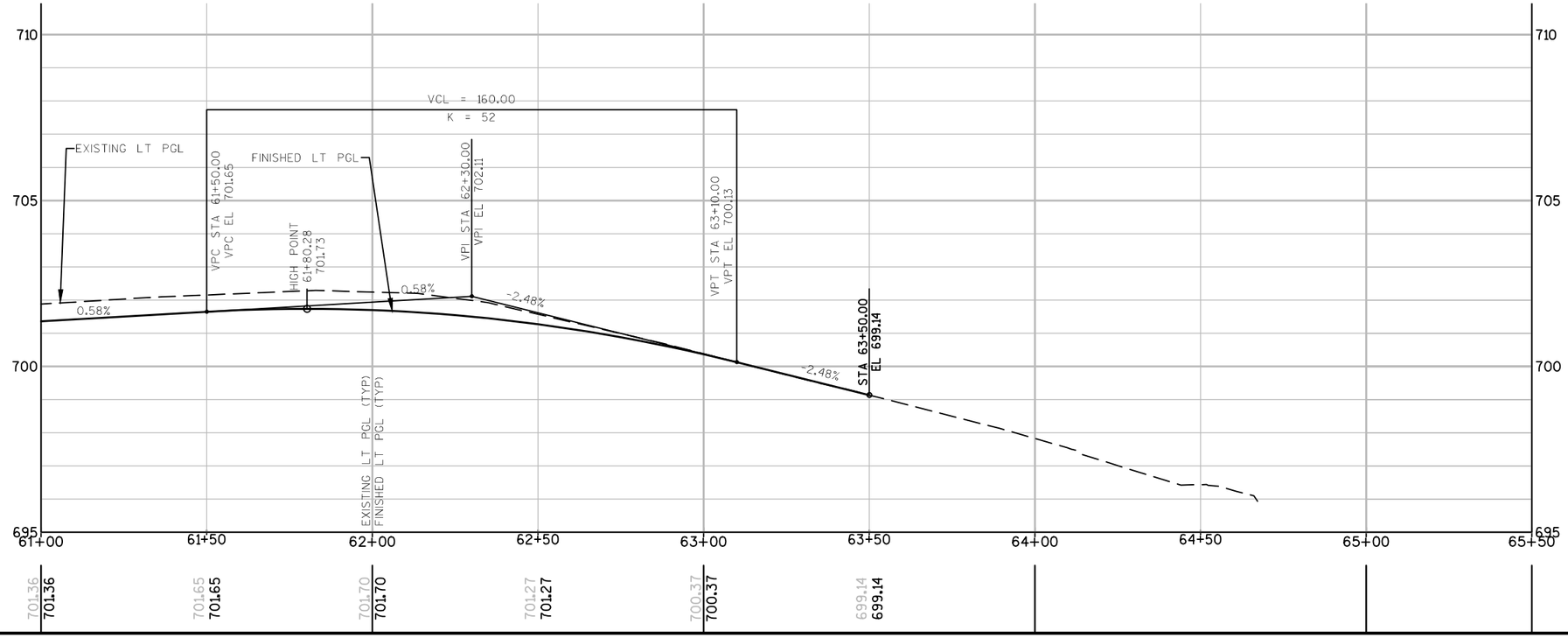
BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
5	64+38.98	NE BOLT ON FH AT WASH.	697.22





PROJECT NO: 2704-00-73	HWY: OHIO STREET	COUNTY: RACINE	PLAN AND PROFILE: OHIO STREET	SHEET	E



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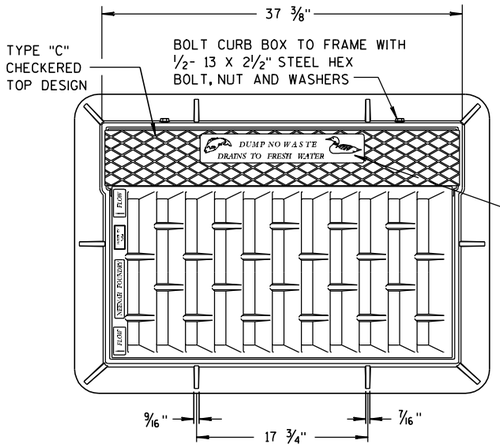
PROJECT NO: 2704-00-73	HWY: OHIO STREET	COUNTY: RACINE	PLAN AND PROFILE: OHIO STREET	SHEET	E

FILE NAME : P:\R0140060_RACINE - OHIO STREET DESIGN\C3D\SHEETSPLAN\270400003_050201_DBPR.DWG PLOT DATE : 11/29/2013 1:52 PM PLOT BY : KEVIN K. RISCH PLOT NAME : PLOT SCALE : *********
WISDOT/CADDS SHEET 44

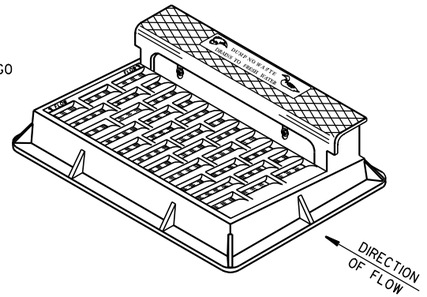
Standard Detail Drawing List

08A05-18A	INLET COVERS TYPE A, H, A-S, & H-S
08A05-18D	INLET COVER, TYPE BW, Z MANHOLE COVERS, TYPE K, J, J-S, L & M
08B09-01	MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER
08C07-01	INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT
08D01-17	CONCRETE CURB, CONCRETE CURB AND GUTTER AND TIES
08D05-15A	CURB RAMPS TYPES 1 AND 1-A
08D05-15B	CURB RAMPS TYPES 2 AND 3
08D05-15C	CURB RAMPS TYPES 4A AND 4A1
08D05-15D	CURB RAMPS TYPE 4B AND 4B1
08D05-15E	CURB RAMPS TYPES 5, 6, 7A, 7B & 8
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
08F04-07	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
09B02-07	CONDUIT
09B04-10	PULL BOX
09C02-06	CONCRETE BASES, TYPES 1, 2 & 5
09C03-03	TRANSFORMER/PEDESTAL BASES
09E01-12D	POLE MOUNTINGS FOR LIGHTING UNITS, TYPE 5 (30 FEET)
09E01-12G	HARDWARE DETAILS FOR POLE MOUNTINGS
09E03-04	NON-FREEWAY LIGHTING UNIT POLE WIRING
09F15-03B	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)
11B02-02	CONCRETE MEDIAN NOSE
13C01-16	CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES
13C13-08	URBAN DOWELED CONCRETE PAVEMENT
13C18-02A	CONCRETE PAVEMENT JOINTING
13C18-02B	CONCRETE PAVEMENT STEEL REINFORCEMENT
13C18-02C	CONCRETE PAVEMENT JOINT TIES
13C18-02D	CONCRETE PAVEMENT JOINTING AT UTILITY FIXTURES
14A02-01	TREE PLANTING DETAIL
15C02-05A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-05B	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-05C	DETOUR SIGNING FOR MAINLINE CLOSURES
15C03-02	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15C05-02	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS
15C07-12A	PAVEMENT MARKING SYMBOLS
15C07-12B	PAVEMENT MARKING WORDS
15C07-12C	PAVEMENT MARKING ARROWS
15C08-16A	PAVEMENT MARKING (MAINLINE)
15C08-16B	PAVEMENT MARKING (INTERSECTIONS)
15C08-16E	PAVEMENT MARKING (LEFT TURN LANE)
15C08-16F	PAVEMENT MARKING (ISLANDS)
15C12-04	TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)
15C19-02C	MOVING PAVEMENT MARKING OPERATION MULTI-LANE DIVIDED ROADWAY
15C29-03C	URBAN BICYCLE LANE MARKING
15C29-03D	URBAN BICYCLE LANE MARKING
15C29-03E	PAVEMENT MARKING FOR BIKE LANES
15C33-01	STOP LINE AND CROSSWALK PAVEMENT MARKING
15D20-02	TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY
15D21-02	TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE
15D30-01	TRAFFIC CONTROL, SIDEWALK CLOSURE

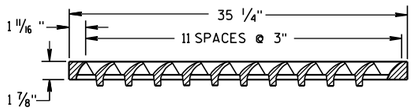
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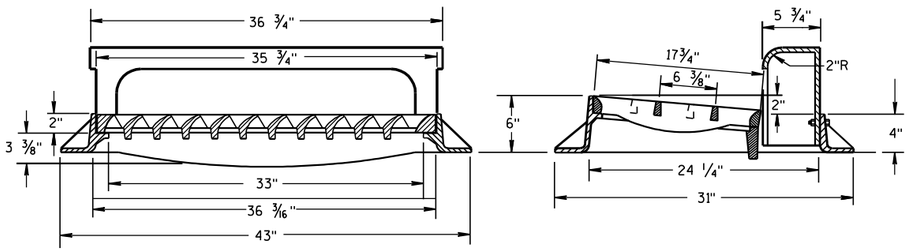


NOTE:
GRATE IS REVERSIBLE.



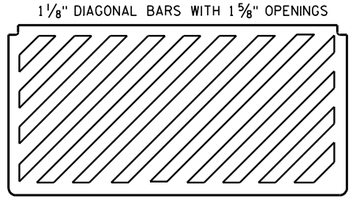
NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"





TYPE "H"

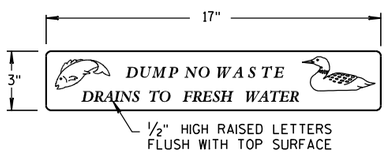
(APPROXIMATE WEIGHT 441 LBS.)
FRAME..... 181 LBS.
GRATE..... 146 LBS.
CURB BOX..... 114 LBS.



SPECIAL GRATE FOR TYPE "H" COVER

(MEASURES 35 1/4" X 17 3/4" X 2")
(APPROXIMATE WEIGHT 159 LBS.)
GRATE..... 159 LBS.

(NOTED AS TYPE H-S ON DRAINAGE TABLE)



LOGO DETAIL

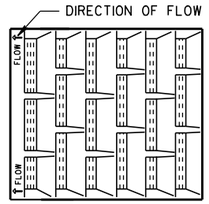
GENERAL NOTES

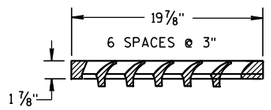
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

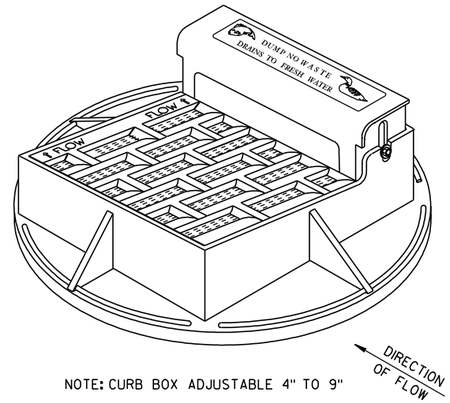
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

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

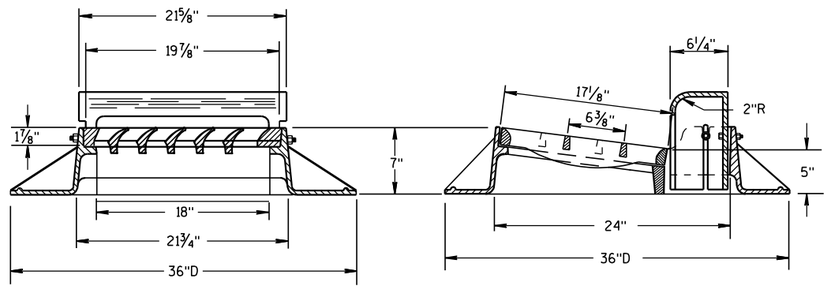
THE ACTUAL WEIGHT OF COVERS MAY VARY WITHIN 5 PERCENT, PLUS OR MINUS, OF THE APPROXIMATE WEIGHT.





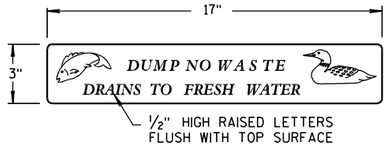


NOTE: CURB BOX ADJUSTABLE 4" TO 9"



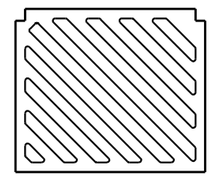
TYPE "A"

(APPROXIMATE WEIGHT 340 LBS.)
FRAME..... 185 LBS.
GRATE..... 71 LBS.
CURB BOX..... 84 LBS.



LOGO DETAIL

NOTE:
GRATE IS REVERSIBLE.



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)

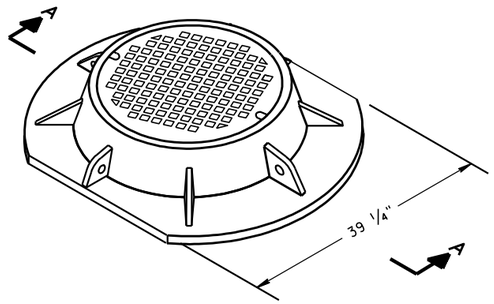
INLET COVERS TYPE A, H, A-S, & H-S

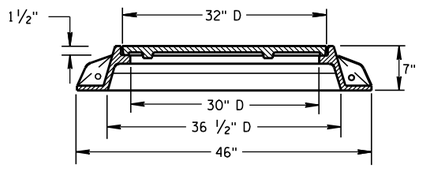
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/5/2012 DATE
/S/ Jerry H. [illegible] ROADWAY STANDARDS ENGINEER
FHWA

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S.D.D. 8 A 5-18a



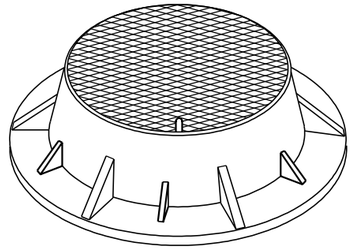


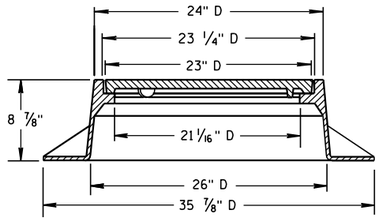
SECTION A-A

TYPE "K"

(APPROXIMATE WEIGHT 439 LBS.)

FRAME.....216 LBS.
LID.....223 LBS.

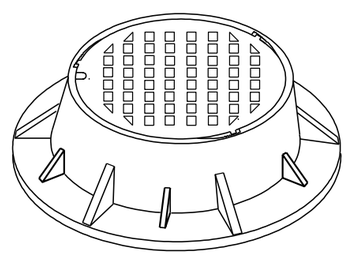


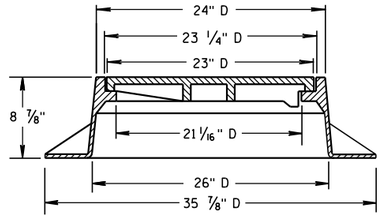


TYPE "J"

(APPROXIMATE WEIGHT 267 LBS.)

FRAME.....152 LBS.
LID.....115 LBS.





TYPE "J" SPECIAL

TYPE "B" NON-ROCKING SELF-SEAL LID

(APPROXIMATE WEIGHT 267 LBS.)

FRAME.....158 LBS.
LID.....109 LBS.

(NOTED AS TYPE J-S ON THE DRAINAGE TABLE)

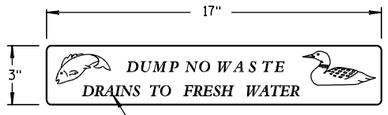
GENERAL NOTES

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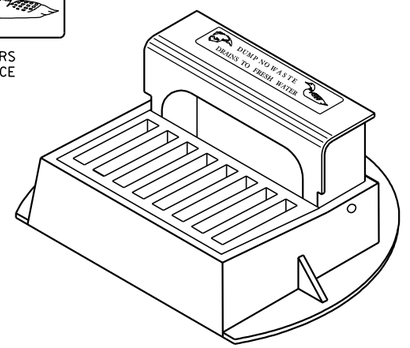
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR MANHOLE COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

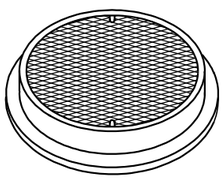
ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.

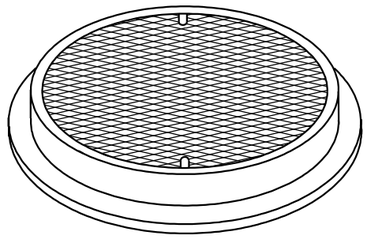
THE ACTUAL WEIGHT OF COVERS MAY VARY WITH 5 PERCENT, PLUS OR MINUS, OF THE APPROXIMATE WEIGHT.

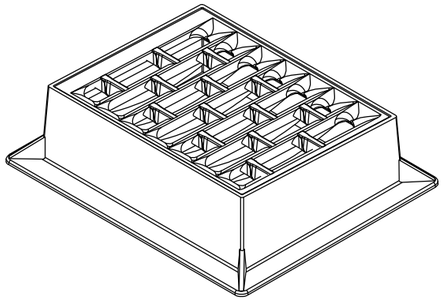


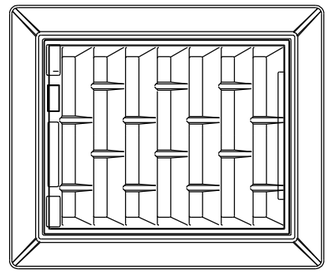
LOGO DETAIL

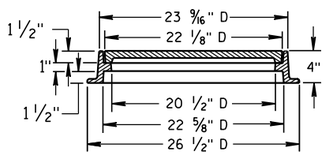








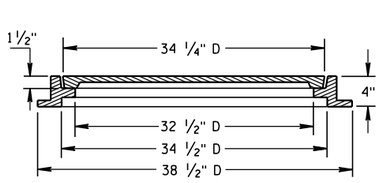




TYPE "L"

(APPROXIMATE WEIGHT 158 LBS.)

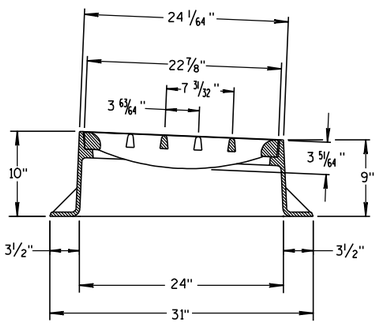
FRAME.....81 LBS.
LID.....77 LBS.

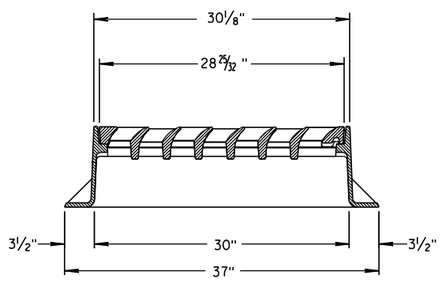


TYPE "M"

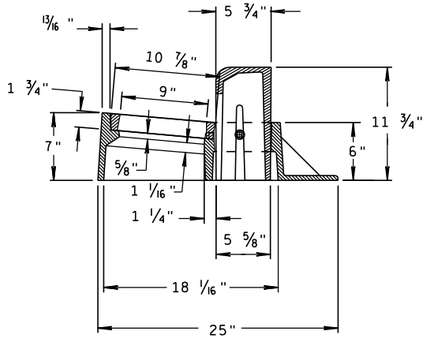
(APPROXIMATE WEIGHT 377 LBS.)

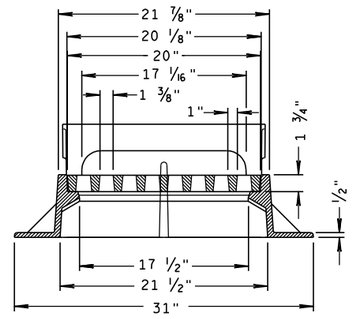
FRAME..... 125 LBS.
LID..... 252 LBS.





INLET COVER TYPE "BW"





INLET COVER TYPE "Z"

(APPROXIMATE WEIGHT 344 LBS.)

FRAME.....206 LBS.
GRATE..... 46 LBS.
CURB BOX..... 92 LBS.

INLET COVERS, TYPE BW, Z MANHOLE COVERS, TYPE K, J, J-S, L & M

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6/5/2012
DATE

/S/ Jerry H. Zaas
ROADWAY STANDARDS ENGINEER

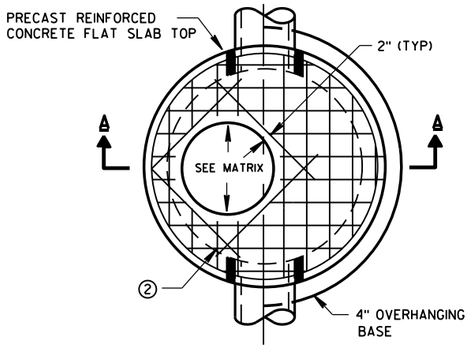
FHWA

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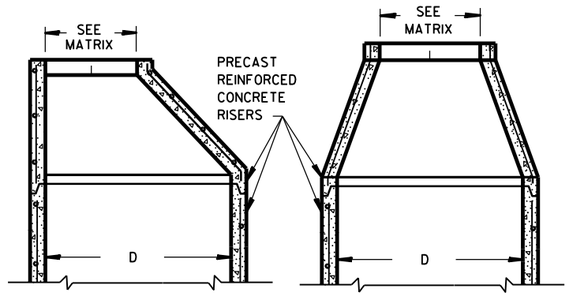
S.D.D. 8 A 5-18d

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S.D.D. 8 A 5-18d

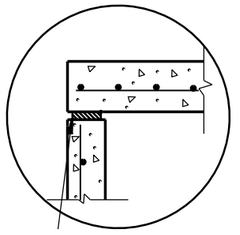


PLAN VIEW CIRCULAR OPENING

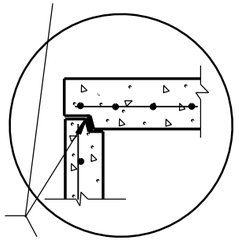


OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP

OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP

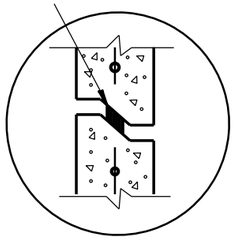


TOP WITH PLAIN END JOINT



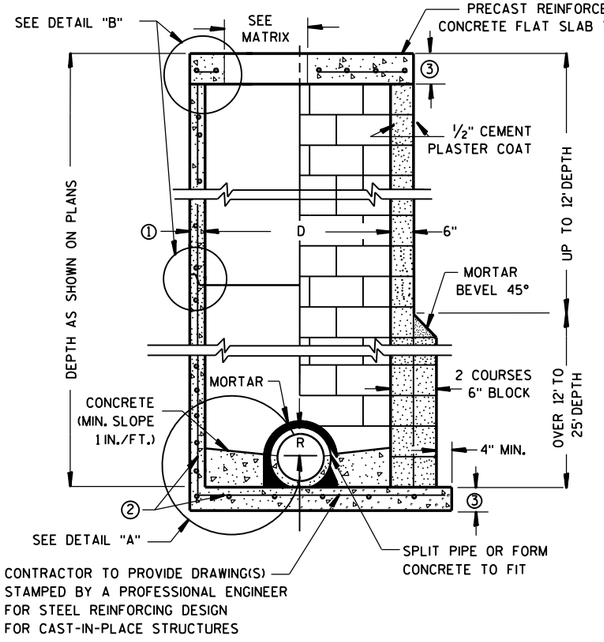
JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C990 (TYP)

TOP WITH TONGUE AND GROOVE JOINT



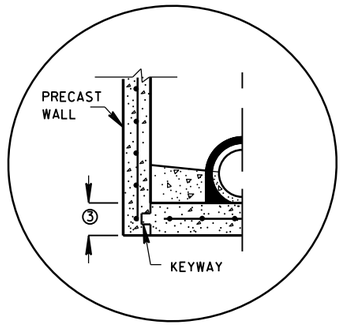
RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B"

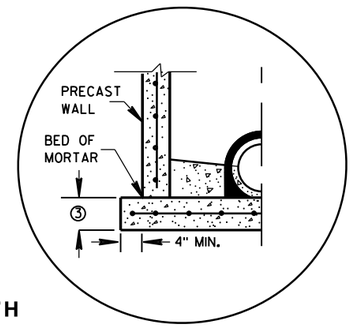


PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

CONCRETE BLOCK WITH CAST-IN-PLACE OR PRECAST REINFORCED CONCRETE BASE ②

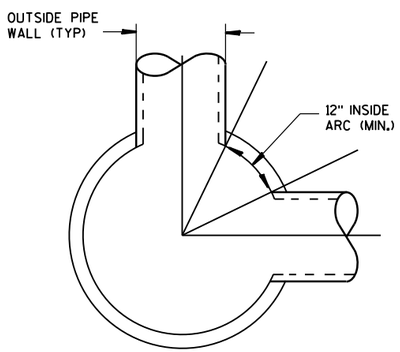


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"



DETAIL "C"

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.

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST MANHOLE UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3X3-L", "CATCH BASINS 4-B", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATE THE SIZE OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF GRANULAR BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

PRECAST REINFORCED CONE TOPS (ECCENTRIC OR CONCENTRIC) OR PRECAST REINFORCED FLAT SLAB TOPS MAY BE USED ON CONCRETE BLOCK STRUCTURES. THE CONE TOPS SHALL BE INSTALLED ON A BED OF MORTAR.

ECCENTRIC CONE TOPS MAY BE USED ON ALL STRUCTURES, AND CONCENTRIC CONE TOPS SHALL BE USED ONLY ON STRUCTURES 5 FEET OR LESS IN DEPTH, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

STEPS MEETING AASHTO M199 AND THE FOLLOWING REQUIREMENTS SHALL BE INSTALLED IN ALL STRUCTURES OVER 5 FEET IN DEPTH: 16 INCH C-C MAXIMUM SPACING; PROJECT A MINIMUM CLEAR DISTANCE OF 4 INCHES FROM THE WALL AT THE POINT OF EMBEDMENT; MINIMUM LENGTH OF 10 INCHES; MINIMUM WALL EMBEDMENT OF 3 INCHES. FERROUS METAL STEPS NOT PAINTED OR TREATED TO RESIST CORROSION SHALL HAVE A MINIMUM CROSS SECTIONAL DIMENSION OF 1 INCH.

STEPS OF APPROVED POLYPROPYLENE PLASTIC COATED REINFORCEMENT BAR ARE ACCEPTABLE. REINFORCING BAR MUST BE A MINIMUM OF ½" AND MEET THE REQUIREMENTS OF ASTM A615.

CERTIFICATION SHALL BE PROVIDED THAT INSTALLED STEPS WHEN TESTED IN ACCORDANCE WITH SECTION 10 OF AASHTO T280 CAN WITHSTAND A VERTICAL LOAD OF 800 LBS. AND A HORIZONTAL LOAD OF 400 LBS.

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

CONCRETE BLOCK WILL NOT BE PERMITED FOR STRUCTURES GREATER THAN 4 FEET IN DIAMETER.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

ALL PRECAST MANHOLE UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M 199.

4" OVERHANGING BASES ARE REQUIRED FOR ALL CONCRETE BLOCK INSTALLATIONS. 4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

FOR ADDITIONAL CONFIGURATIONS, MAINTAIN A MINIMUM OF 12 INCHES AS MEASURED FROM THE INSIDE OF THE STRUCTURE WALL BETWEEN THE OUTSIDE PIPE WALLS OF ADJACENT PIPES. SEE DETAIL "C".

① MINIMUM WALL THICKNESS SHALL BE 4 INCHES FOR 3-FT, 5 INCHES FOR 4-FT, 6 INCHES FOR 5-FT, 7 INCHES FOR 6-FT, 8 INCHES FOR 7-FT AND 9 INCHES FOR 8-FT DIAMETER PRECAST MANHOLES.

② FOR PRECAST MANHOLES PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.

③ PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER OF 48" AND LESS SHALL HAVE A MINIMUM THICKNESS OF 6". PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER LARGER THAN 48" SHALL HAVE A MINIMUM THICKNESS OF 8".

MANHOLE COVER OPENING MATRIX

MANHOLE COVER TYPE	C	ALL J'S	K	L	M
OPENING SIZE (FT)					
2 DIA.	X	X		X	
3 DIA.			X		X

PIPE MATRIX

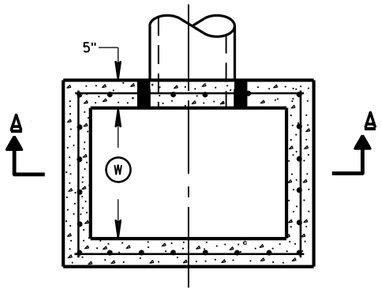
MANHOLE SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	180° SEPARATION (IN)	90° SEPARATION (IN)
3-FT	15	12
4-FT	24	18
5-FT	36	24
6-FT	42	36
7-FT	48	36
8-FT	60	42

MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER

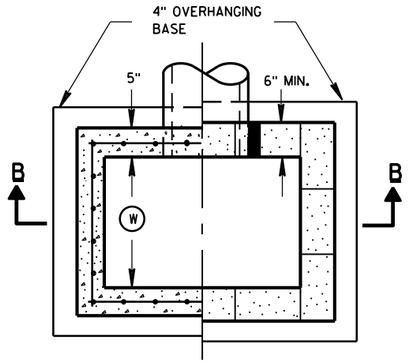
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/5/2012
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

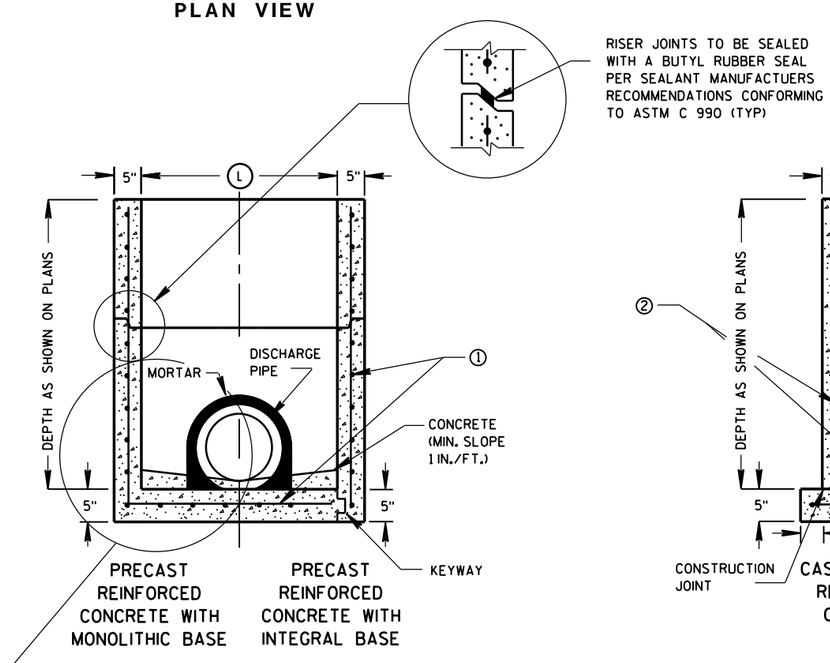
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S.D.D. 8 B 9-1



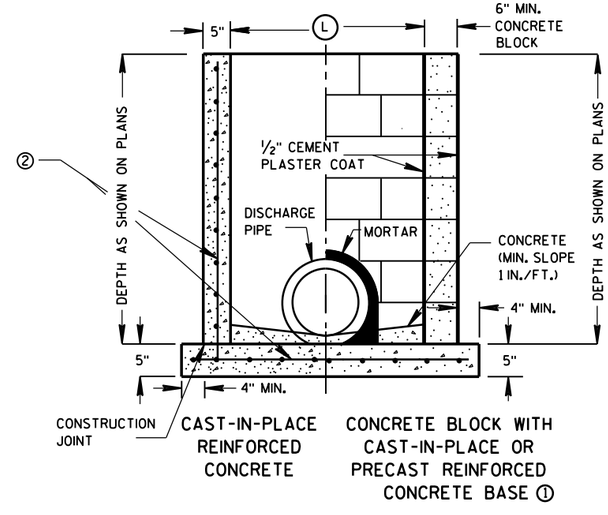
PLAN VIEW



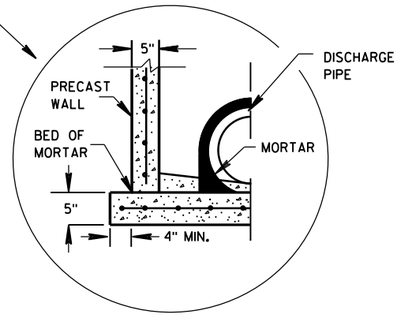
PLAN VIEW



SECTION A-A



SECTION B-B



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

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.

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST INLET UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF ASTM C 913.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3X3-L", "CATCH BASINS 4-B", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATES THE SIZE OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF GRANULAR BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

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

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

4" OVERHANGING BASES ARE REQUIRED FOR CAST-IN-PLACE REINFORCED CONCRETE AND CONCRETE BLOCK INSTALLATIONS.
4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED.
OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

MAXIMUM INSIDE PIPE DIAMETER DETERMINED BY 3 INCH CLEARANCE ON EACH SIDE OF THE OUTSIDE WALL OF THE PIPE. SEE DETAIL "A". ASSUMES PIPE ENTERS PERPENDICULAR TO THE STRUCTURE.

① FOR PRECAST INLETS PROVIDE REINFORCING STEEL IN ACCORDANCE TO ASTM C 913.

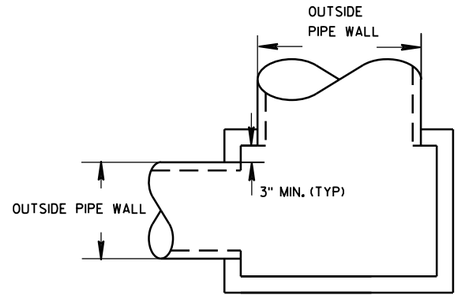
② CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

INLET COVER MATRIX

INLET SIZE		INLET COVER TYPE	ALL A'S	ALL B'S	BW	F	ALL H'S	S	T	V	WM
	WIDTH (W) (FT)	LENGTH (L) (FT)									
2X2-FT	2	2	X	X				X		X	
2X2.5-FT	2	2.5			X			X	X	X	X
2X3-FT	2	3					X				
2.5X3-FT	2.5	3				X					

PIPE MATRIX

INLET SIZE	MAXIMUM INSIDE PIPE DIAMETER	
	WIDTH (IN)	LENGTH (IN)
2X2-FT	12	12
2X2.5-FT	12	18
2X3-FT	12	24
2.5X3-FT	18	24



DETAIL "A"

INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT

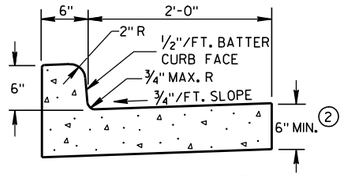
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/5/2012
DATE
FHWA

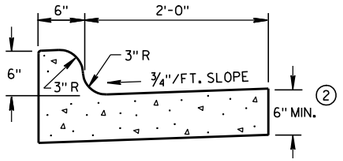
/S/ Jerry H. Zogg
ROADWAY STANDARDS DE
ENGINEER

6
S.D.D. 8 C 7-1

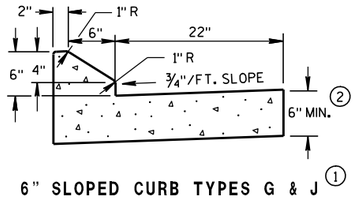
INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT



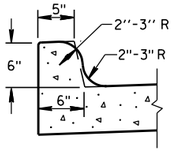
TYPES A & D (1)



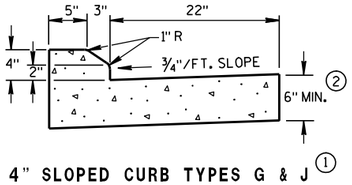
TYPES K & L (1)



6" SLOPED CURB TYPES G & J (1)

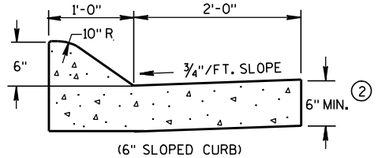


OPTIONAL CURB SHAPE FOR TYPES K & L (1)

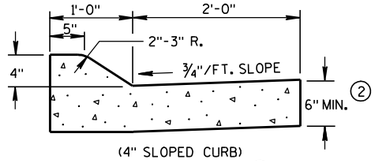


4" SLOPED CURB TYPES G & J (1)

CONCRETE CURB & GUTTER 30"

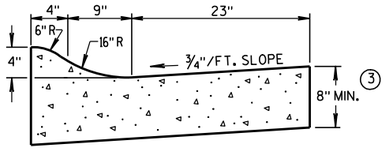


(6" SLOPED CURB)



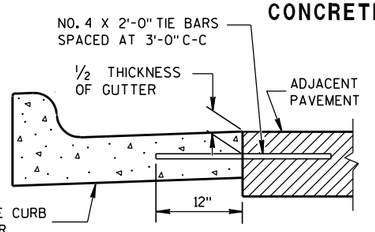
(4" SLOPED CURB)

TYPES A & D (1)

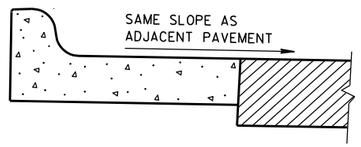


4" SLOPED CURB TYPES R & T (1) (4)

CONCRETE CURB & GUTTER 36"



TYPICAL TIE BAR LOCATION (1)



REVERSE SLOPE GUTTER (5)
(TYPICAL FOR ALL CURB & GUTTER TYPES)

GENERAL NOTES

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

PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

INTEGRAL CURB & GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB & GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE. A LONGITUDINAL CONSTRUCTION JOINT IS NOT REQUIRED WITH INTEGRAL CURB AND GUTTER.

WHERE THE TRANSVERSE JOINTS IN THE PAVEMENT ARE REQUIRED TO BE SEALED, THE JOINTS IN THE INTEGRAL CURB AND GUTTER SHALL BE SEALED TO THE FACE OF CURB WITH THE SAME TYPE OF SEALANT. THE COST OF FURNISHING AND INSTALLING THIS SEALANT SHALL BE INCIDENTAL TO THE ITEM CONCRETE CURB AND GUTTER.

UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2'-0" BEHIND THE BACK OF CURBS.

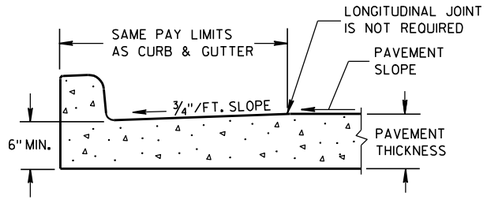
(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G, K AND R.

(2) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

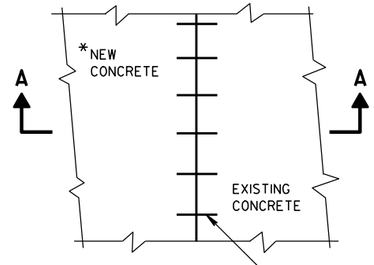
(3) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 8" MINIMUM GUTTER THICKNESS IS MAINTAINED.

(4) THE FACE OF CURB IS 6" FROM THE BACK OF CURB.

(5) WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.

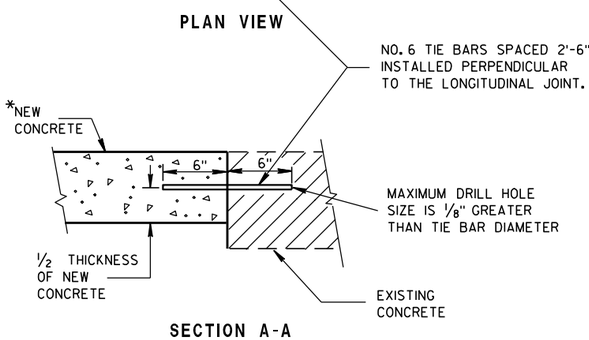


PARTIAL SECTION OF PAVEMENT WITH INTEGRAL CURB & GUTTER



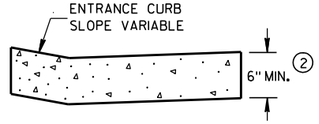
PLAN VIEW

*NEW CURB & GUTTER, SURFACE DRAINS, CONCRETE PAVEMENT OR OTHER NEW CONCRETE.

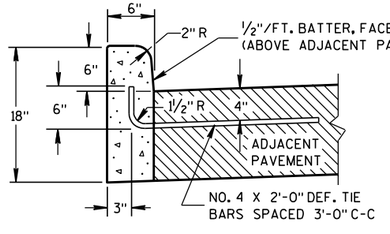


SECTION A-A

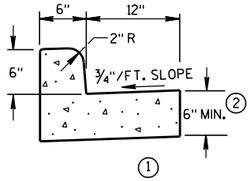
TIE BARS DRILLED INTO EXISTING PAVEMENT



DRIVEWAY ENTRANCE CURB
(WHEN DIRECTED BY THE ENGINEER)

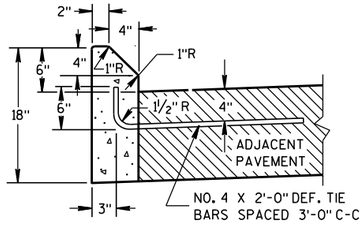


(1) TYPES A & D

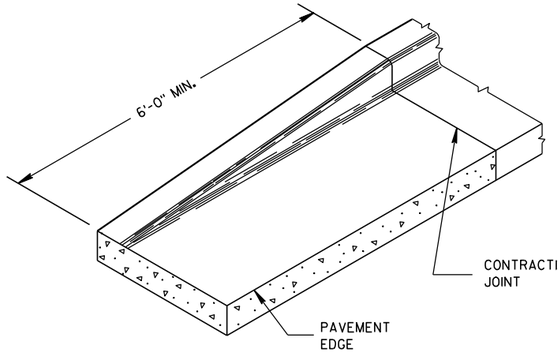


(1) TYPES A & D

CONCRETE CURB & GUTTER 18"



(1) TYPES G & J



END SECTION CURB & GUTTER

CONCRETE CURB

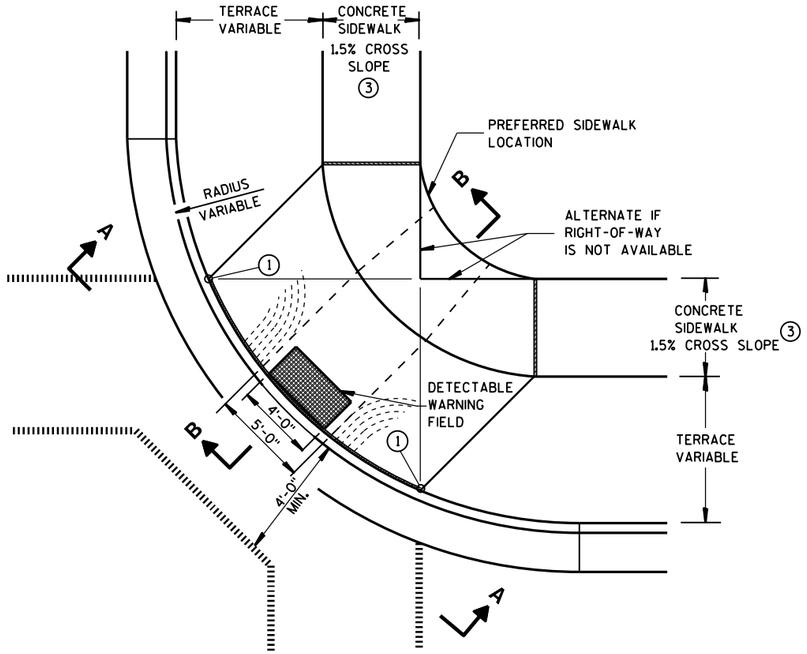
CONCRETE CURB, CONCRETE CURB & GUTTER AND TIES	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	
9/4/08 DATE	/S/ Jerry H. [illegible] ROADWAY STANDARDS ENGINEER
FHWA	100 ENT

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S.D.D. 8 D 1-17

6

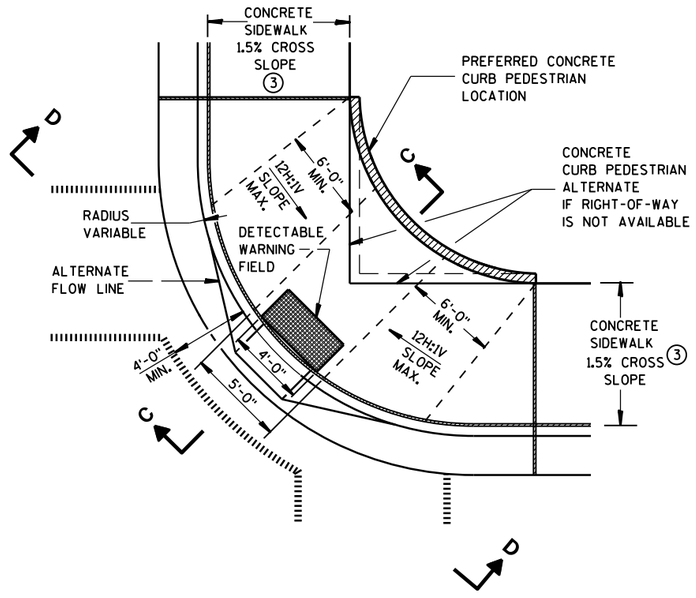
S.D.D. 8 D 1-17



PLAN VIEW

TYPE 1 RAMP

(CENTER OF CORNER RADIUS)



PLAN VIEW

TYPE 1-A RAMP

(NO TERRACE)

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".

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

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

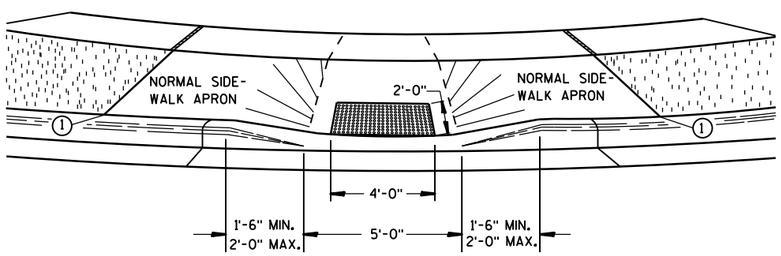
① THIS POINT IS AN EXTENSION OF OUTSIDE EDGE OF APPROACHING SIDEWALK WHERE IT MEETS THE BACK OF CONCRETE CURB.

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.

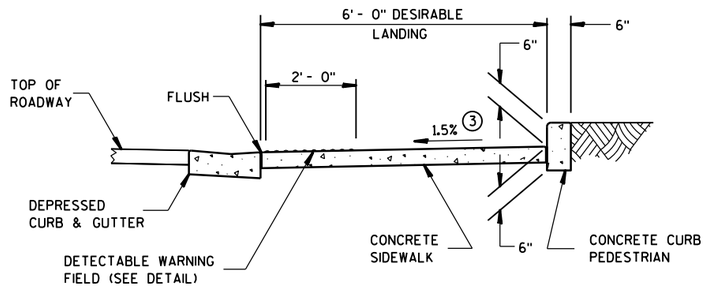
③ ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

LEGEND

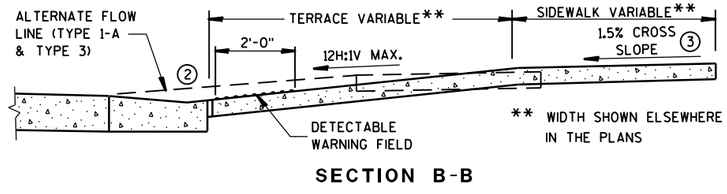
- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT



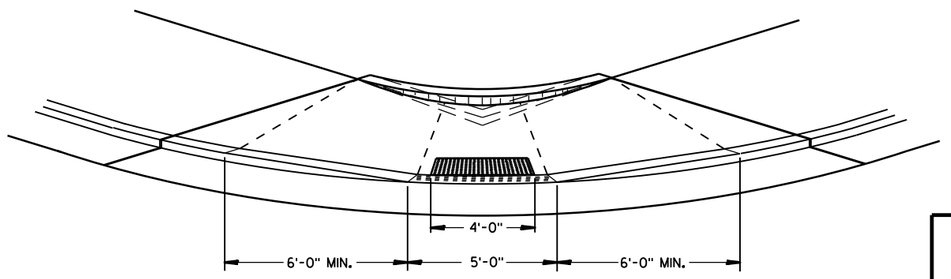
VIEW A-A



SECTION C-C



SECTION B-B



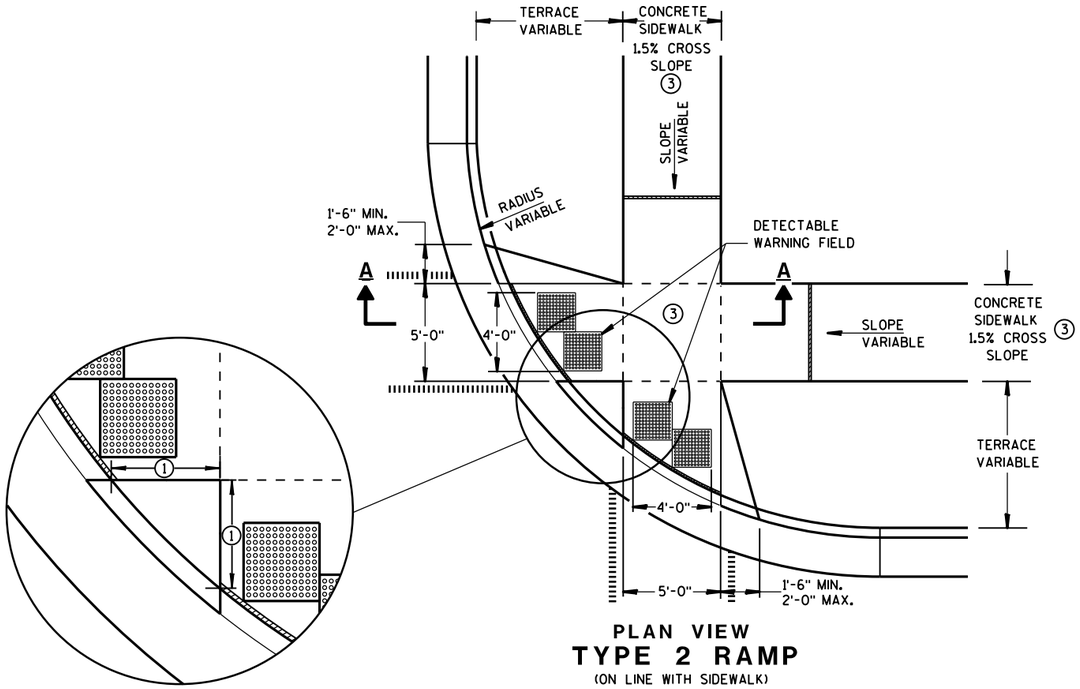
VIEW D-D

CURB RAMPS TYPES 1 AND 1-A

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

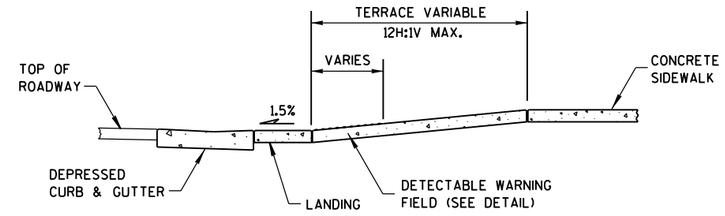
S.D.D. 8 D 5-15a



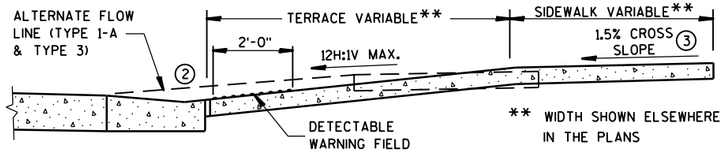
PLAN VIEW

TYPE 2 RAMP

(ON LINE WITH SIDEWALK)



SECTION A-A



SECTION B-B

GENERAL NOTES

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

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

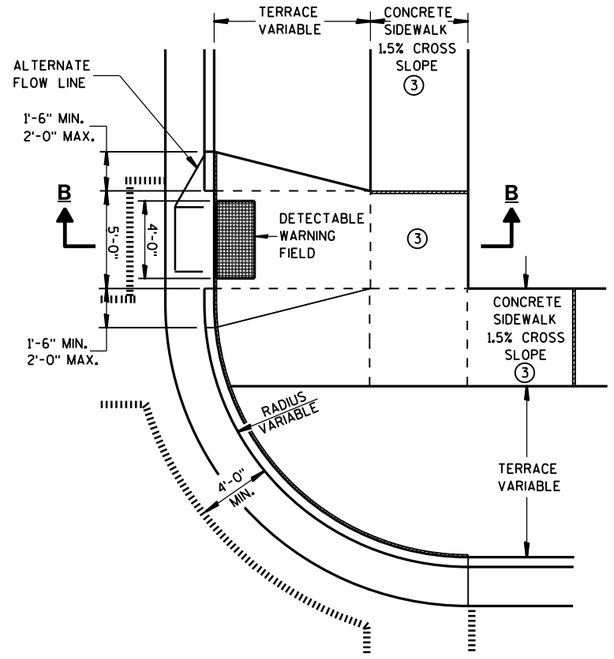
① WHEN THIS DISTANCE IS LESS THAN 6'-0" IT MAY BE DIFFICULT TO ACHIEVE A 12H:1V SLOPE, OR FLATTER, ON THE RAMP. REDUCE CURB HEIGHT IN TRIANGLE AREA TO ACHIEVE 12H:1V SLOPE, OR FLATTER, ON RAMP. 2" MINIMUM CURB HEIGHT.

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 ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

LEGEND

- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT



PLAN VIEW

TYPE 3 RAMP

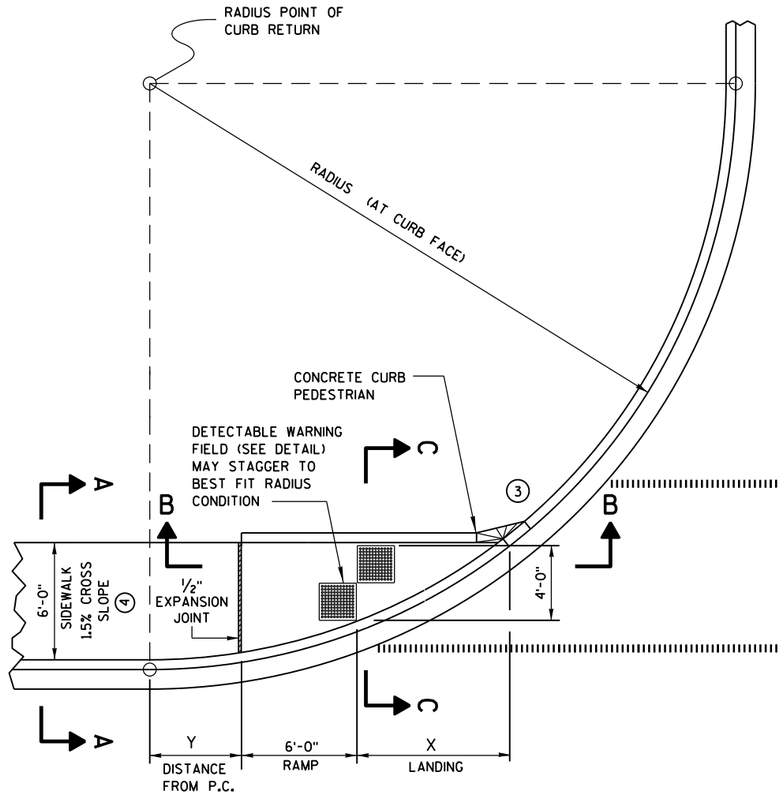
(OUTSIDE OF CROSSWALK AREA)

CURB RAMPS TYPES 2 AND 3

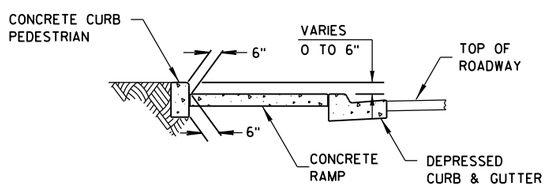
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

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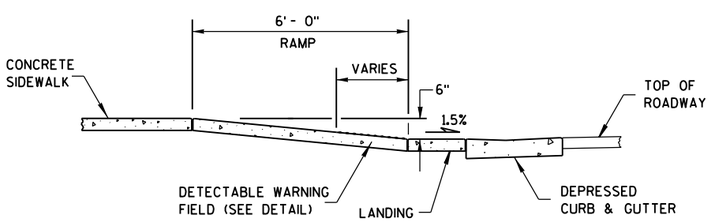
S.D.D. 8 D 5-15b



CURB RAMP TYPE 4A
PLAN VIEW



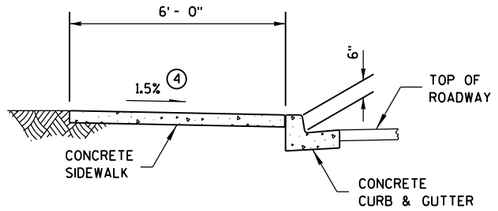
SECTION C-C FOR TYPE 4A



SECTION B-B FOR TYPE 4A

RADIUS (AT CURB FACE)	X	Y
20 FEET	6'-1¾"	2'-7¼"
30 FEET	7'-11¾"	4'-8¼"
40 FEET	9'-5¼"	6'-5"
50 FEET	10'-8¾"	7'-11¼"
60 FEET	11'-10¼"	9'-3½"

INTERMEDIATE RADII CAN BE INTERPOLATED



SECTION A-A FOR TYPE 4A

GENERAL NOTES

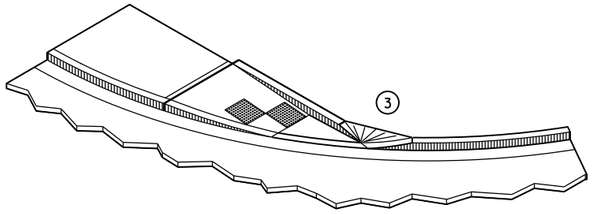
AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

RAMP SLOPES SHALL NOT BE STEEPER THAN 12:1.

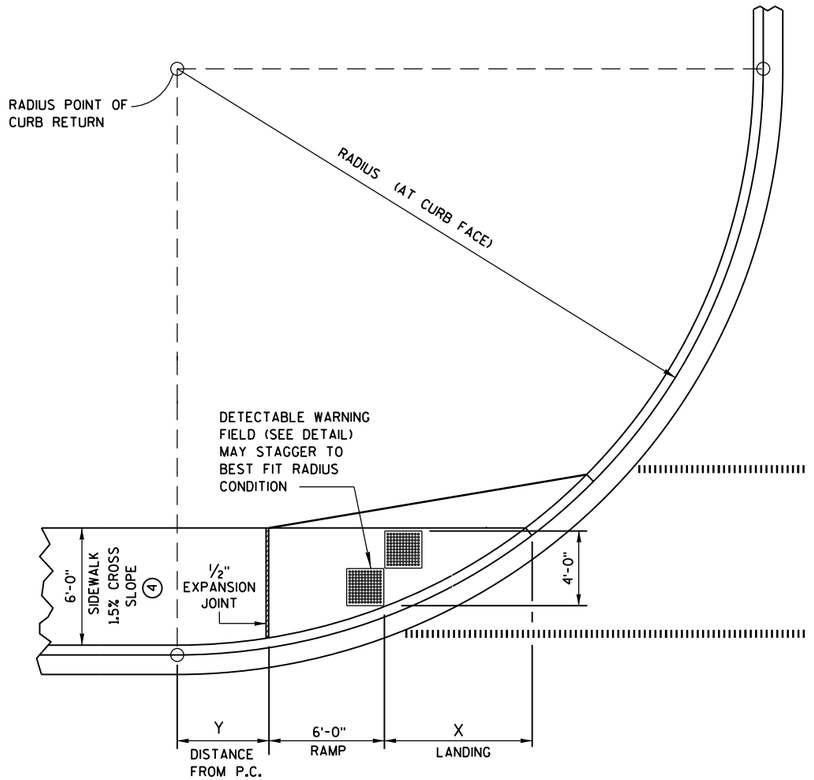
DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

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

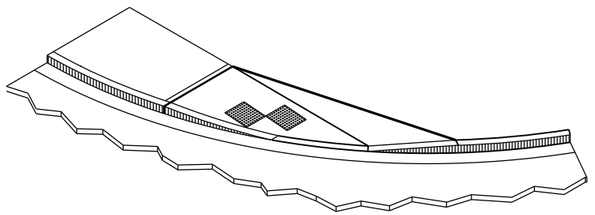
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.



ISOMETRIC VIEW FOR TYPE 4A



CURB RAMP TYPE 4A1
PLAN VIEW



ISOMETRIC VIEW FOR TYPE 4A1

LEGEND

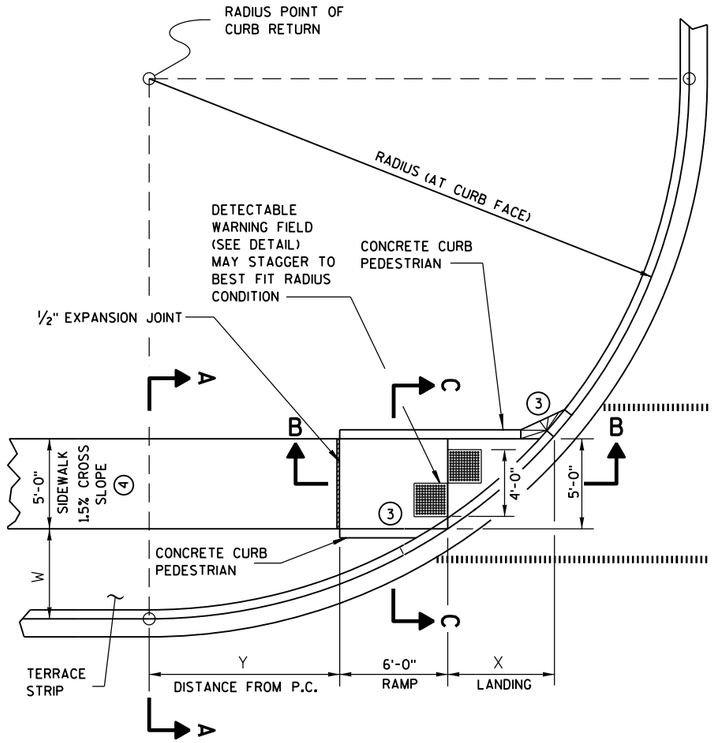
- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS TYPES 4A AND 4A1

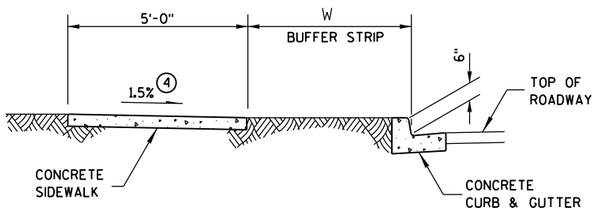
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

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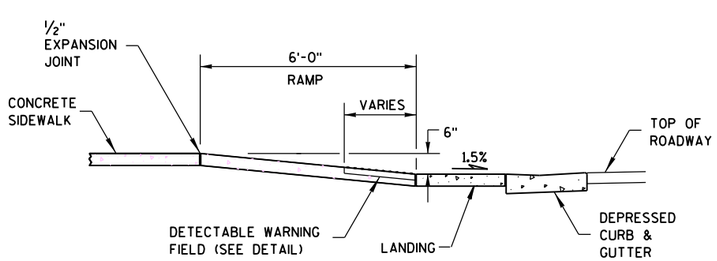
S.D.D. 8 D 5-15c



CURB RAMP TYPE 4B
PLAN VIEW



SECTION A-A FOR TYPE 4B



SECTION B-B FOR TYPE 4B

LEGEND

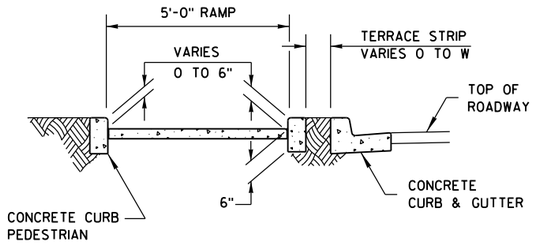
½" EXPANSION JOINT-SIDEWALK

CONTRACTION JOINT FIELD LOCATED

PAVEMENT MARKING CROSSWALK (WHITE)

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'-5½"	4'-6½"	4'-8½"	6'-0"	4'-1"	7'-2¾"	3'-7"	8'-3½"	3'-1½"	9'-2½"
30 FEET	7'-3¾"	7'-1"	6'-5½"	8'-11½"	5'-9¼"	10'-7"	5'-2½"	12'-0"	4'-8¾"	13'-3¼"
40 FEET	8'-9½"	9'-2½"	7'-10"	11'-5¼"	7'-1"	13'-4½"	6'-5¾"	15'-¾"	5'-11½"	16'-7¼"
50 FEET	10'-¾"	11'-¾"	9'-¼"	13'-7¼"	8'-2½"	15'-9½"	7'-6½"	17'-9"	6'-11¾"	19'-6¼"
60 FEET	11'-2½"	12'-8¾"	10'-¾"	15'-6½"	9'-2¼"	17'-11¾"	8'-5¾"	20'-1¾"	7'-10½"	22'-1½"

INTERMEDIATE RADII CAN BE INTERPOLATED



SECTION C-C FOR TYPE 4B

GENERAL NOTES

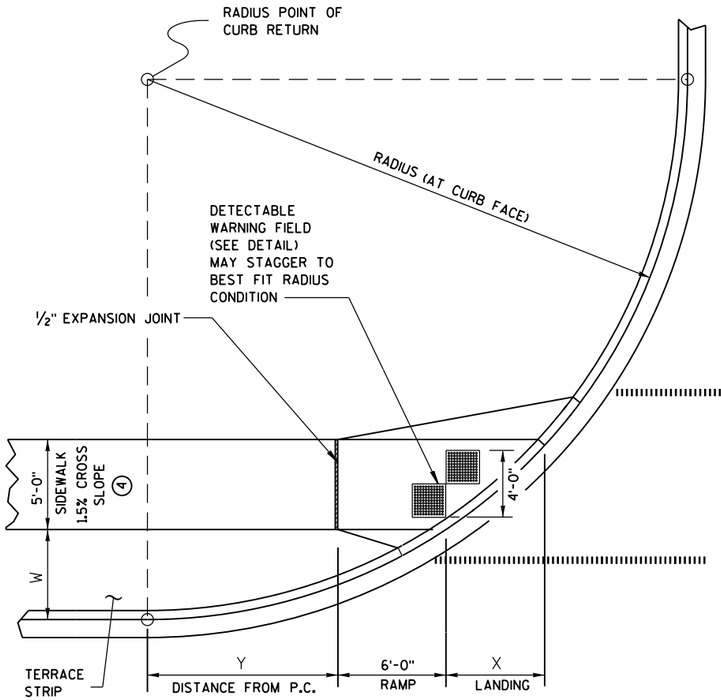
AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

RAMP SLOPES SHALL NOT BE STEEPER THAN 12:1.

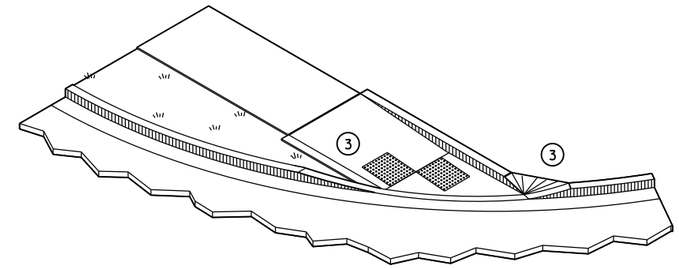
DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

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

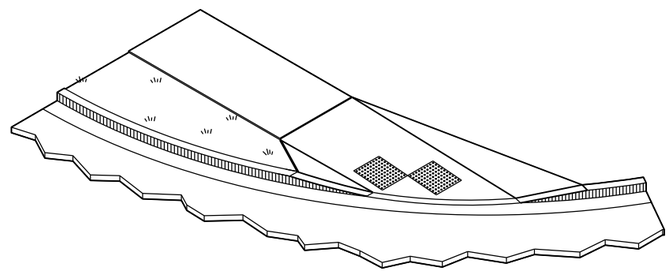
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.



CURB RAMP TYPE 4B1
PLAN VIEW



ISOMETRIC VIEW FOR TYPE 4B



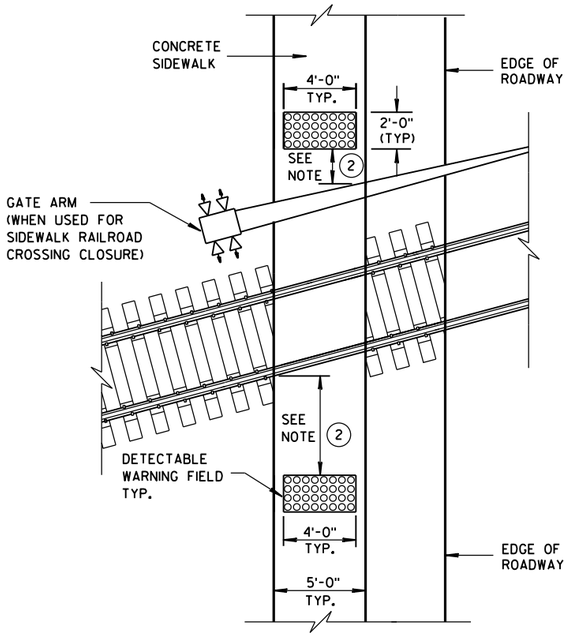
ISOMETRIC VIEW FOR TYPE 4B1

CURB RAMPS
TYPE 4B AND 4B1

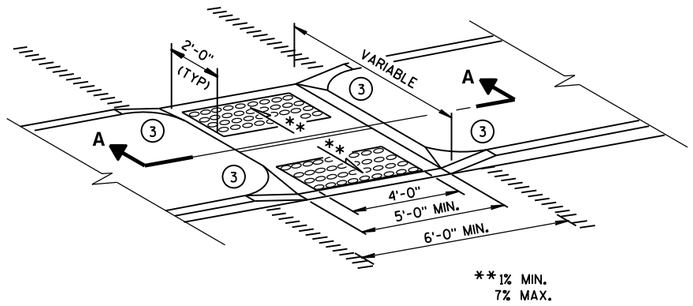
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

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S.D.D. 8 D 5-15d



TYPE 8
DETECTABLE WARNINGS AT RAILROAD CROSSING



MEDIAN ISLAND
NON-ELEVATED CROSSING
TYPE 5

GENERAL NOTES

SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

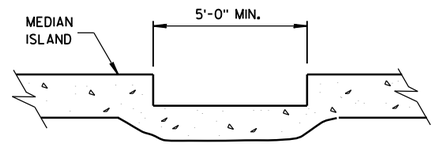
DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(1) SLOPE SIDEWALK TOWARD LANDING AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.

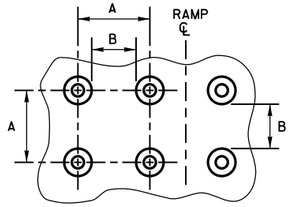
(2) THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO A RAILROAD CROSSING SHALL BE 1.5 FEET ± 0.1' FROM THE FACE OF THE GATE ARM IF THE GATE ARM EXTENDS ACROSS THE SIDEWALK. WHERE THERE IS NO PEDESTRIAN GATE, THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO THE RAILROAD CROSSING SHALL BE 15 FEET FROM THE NEAREST RAIL.

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

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.



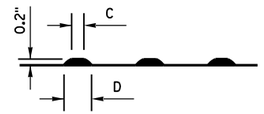
SECTION A-A



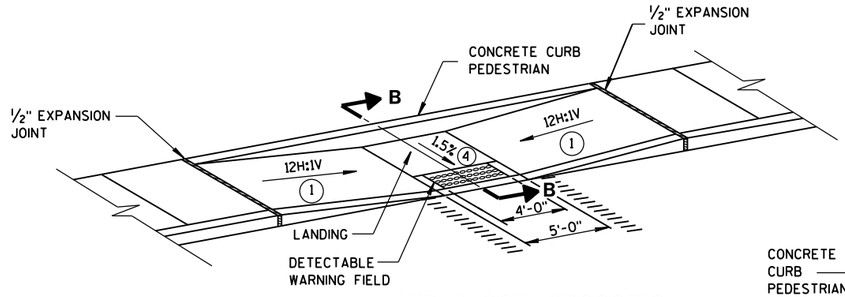
PLAN VIEW

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

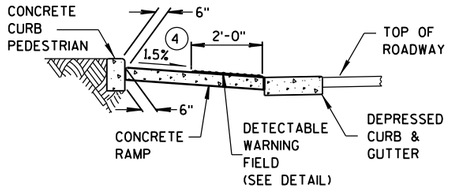
* THE C DIMENSION IS 50% TO 65% OF THE D DIMENSION.



ELEVATION VIEW

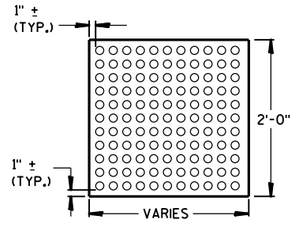


MID-BLOCK CROSSING
TYPE 7A



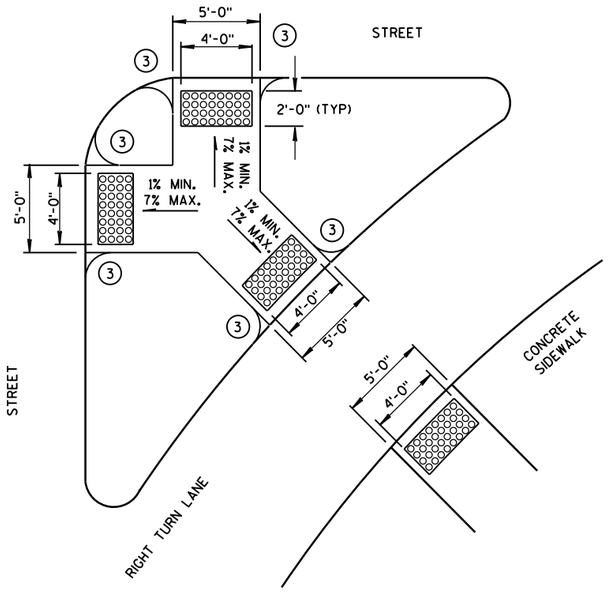
SECTION B-B

TRUNCATED DOMES
DETECTABLE WARNING PATTERN DETAIL

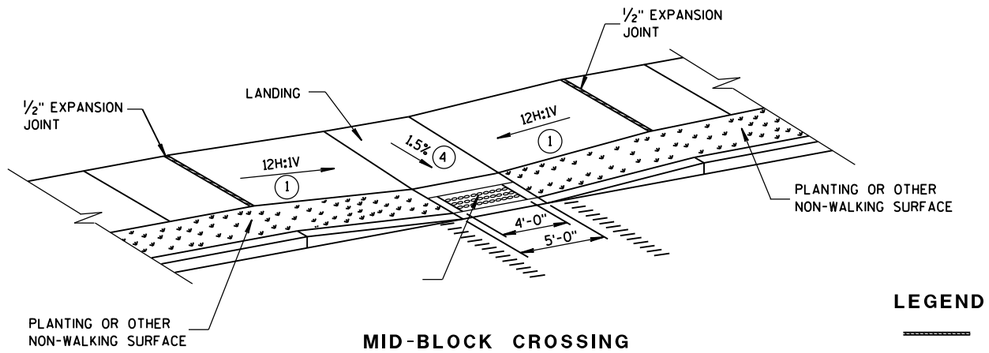


PLAN VIEW

DETECTABLE WARNING FIELD (TYPICAL)



TYPE 6
DETECTABLE WARNING AT ISLANDS



MID-BLOCK CROSSING
TYPE 7B

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

LEGEND

- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

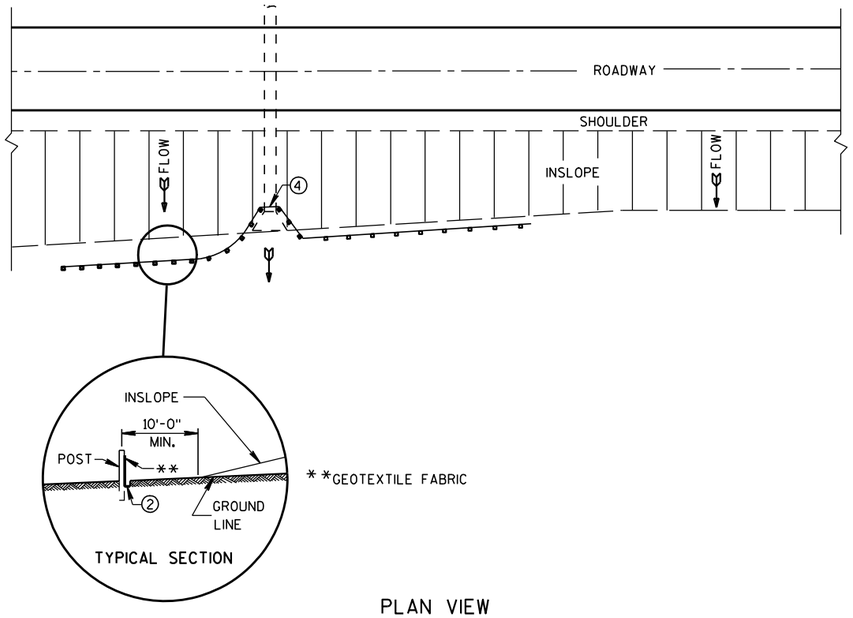
CURB RAMPS
TYPES 5, 6, 7A, 7B & 8

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
2-6-2013 DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS [illegible] ENGINEER
FHWA

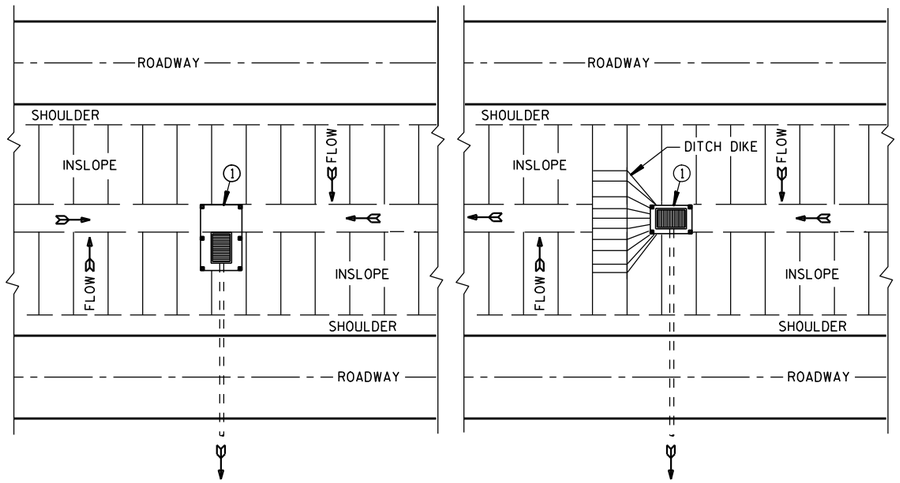
6

S.D.D. 8 D 5-15e



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

GENERAL NOTES

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

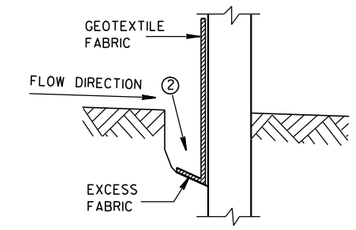
① HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.

② FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.

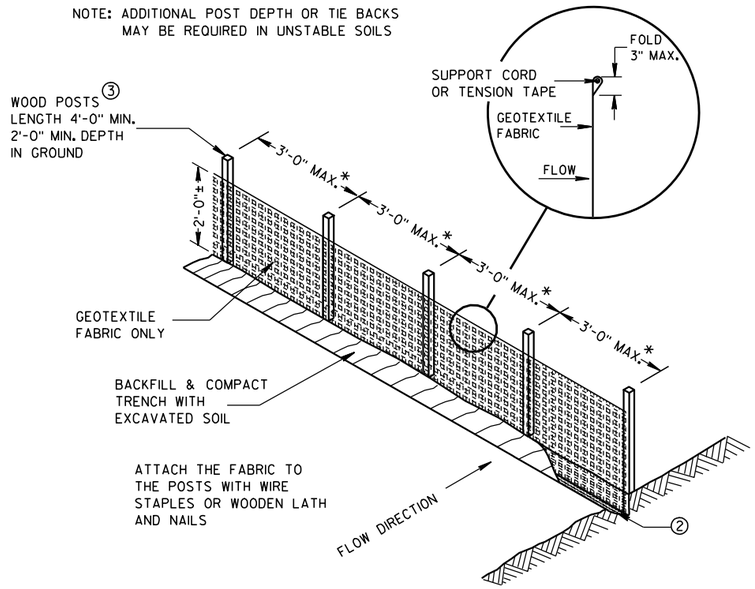
③ WOOD POSTS SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OF OAK OR HICKORY.

④ SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.

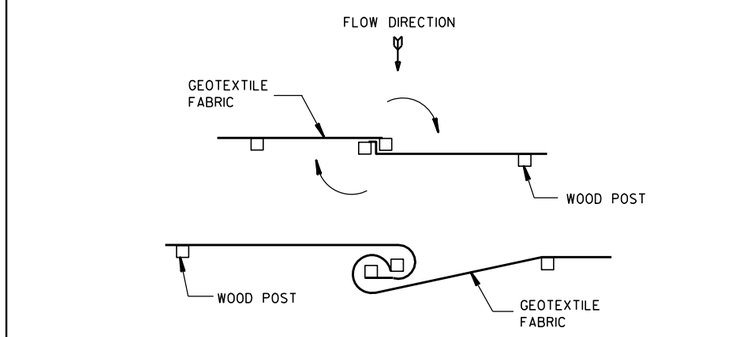
⑤ CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.



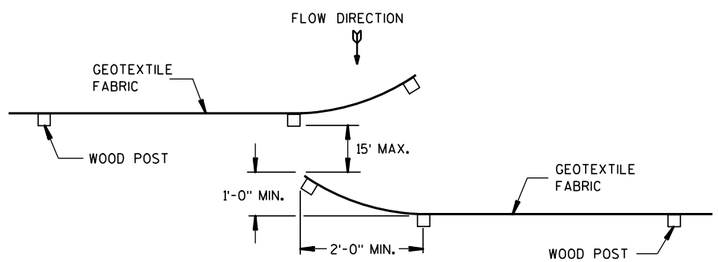
TRENCH DETAIL



SILT FENCE

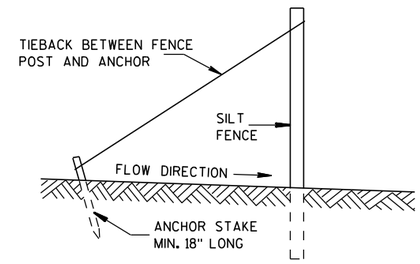


TWIST METHOD



HOOK METHOD

JOINING TWO LENGTHS OF SILT FENCE ⑤



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

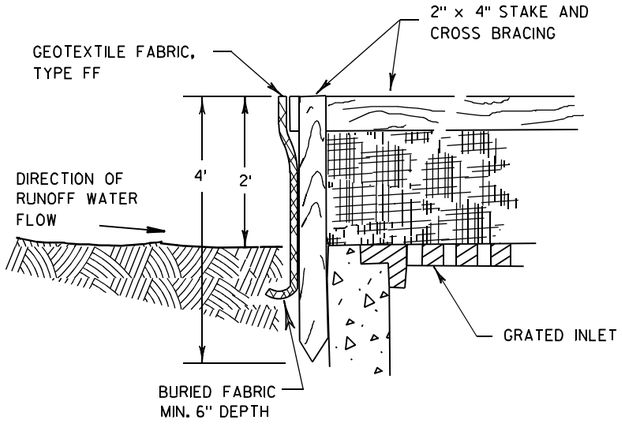
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

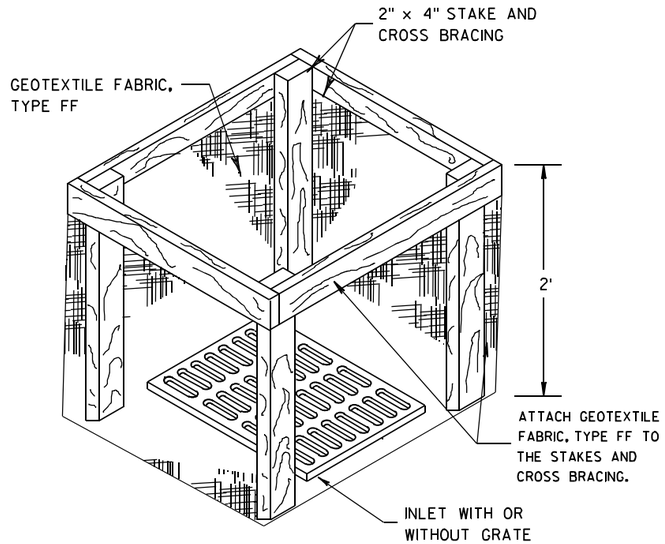
6

S.D.D. 8 E 9-6

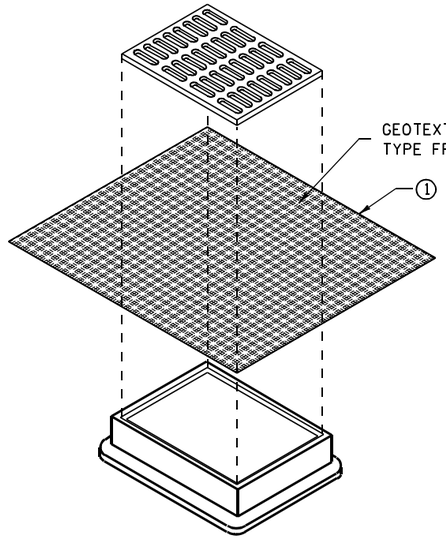
6

S.D.D. 8 E 9-6



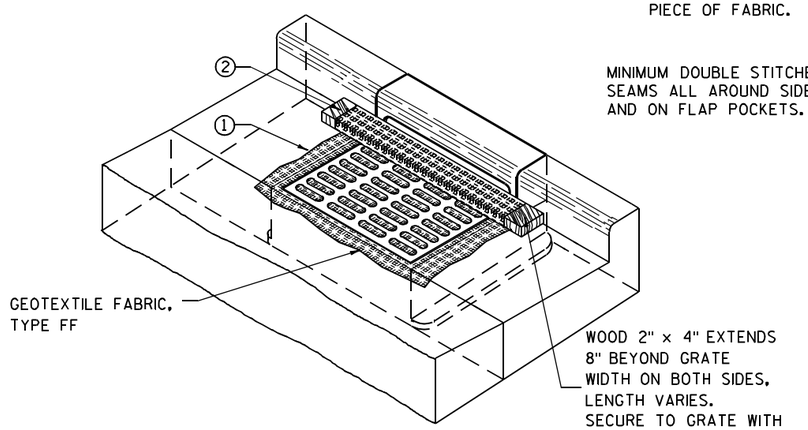


INLET PROTECTION, TYPE A

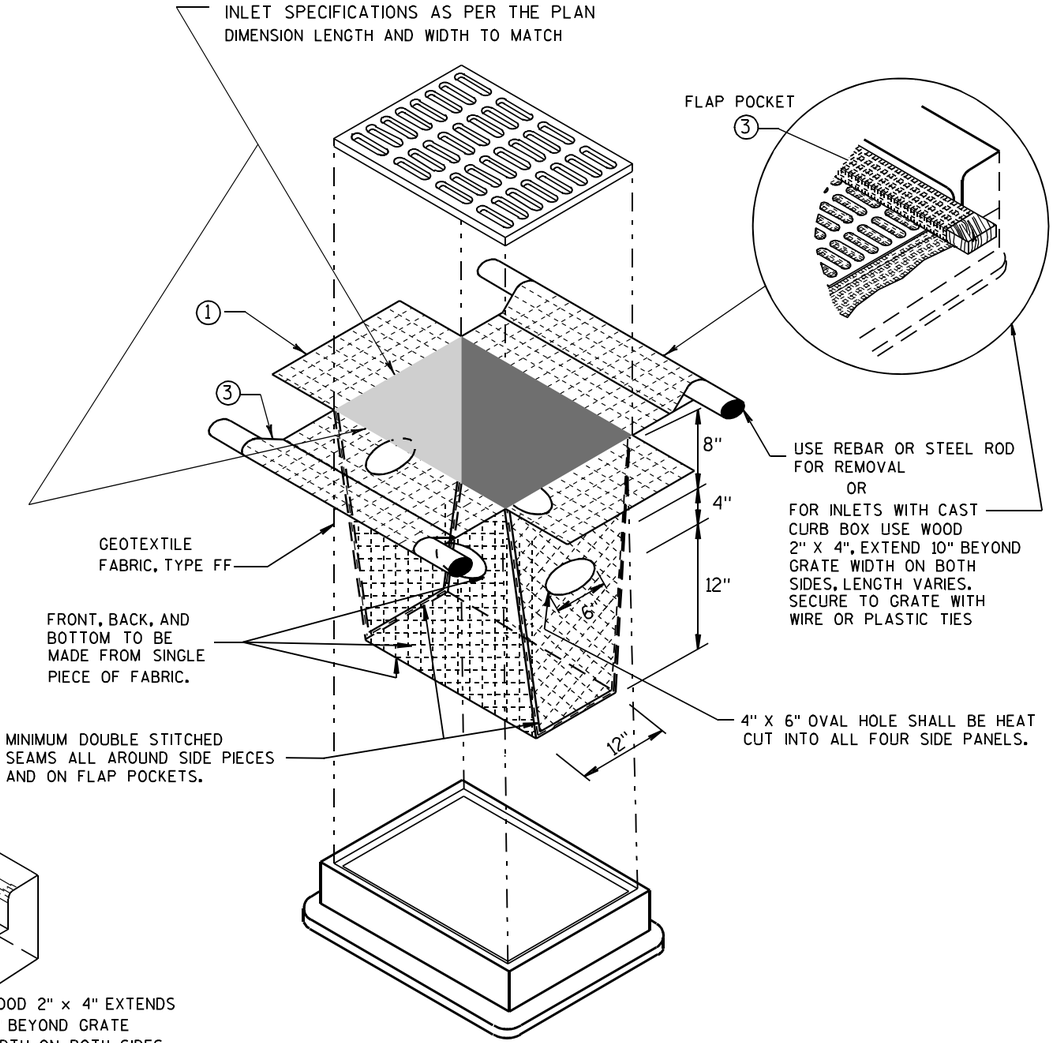


INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

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



INLET PROTECTION, TYPE C (WITH CURB BOX)



INLET PROTECTION, TYPE D

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

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.

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.

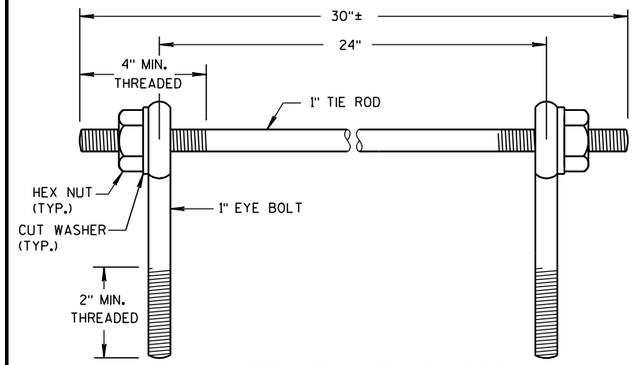
THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE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

INLET PROTECTION
TYPE A, B, C, AND D

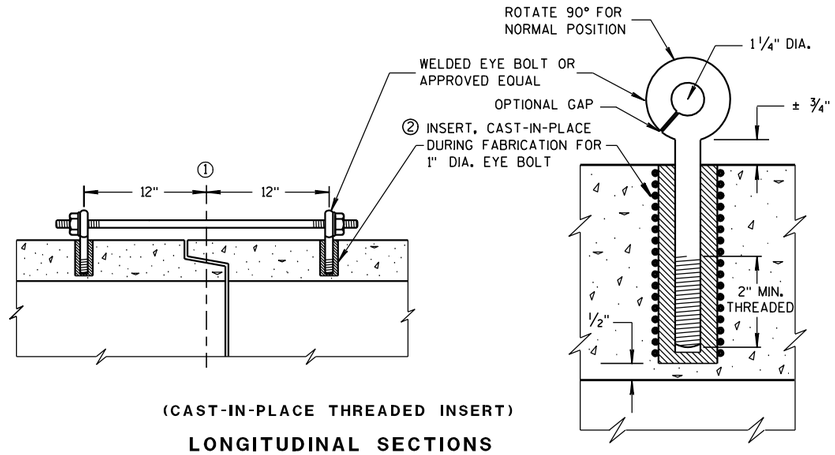
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/16/02
DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6
S.D.D. 8 E 10-2



EYE BOLTS AND TIE ROD



(CAST-IN-PLACE THREADED INSERT)

LONGITUDINAL SECTIONS

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 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 APPLICABLE SPECIAL PROVISIONS.

CONCRETE CULVERT AND STORM SEWER PIPE SHALL BE TIED TOGETHER IN THE MANNER ILLUSTRATED BY THIS DETAIL AT LOCATIONS DESIGNATED IN THE STANDARD SPECIFICATIONS AND 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 THE PIPE BY THIS DETAIL WILL BE CONSIDERED INCIDENTAL TO THE PIPE AND APRON ENDWALLS IF REQUIRED.

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

JOINT TIES TO BE HOT-DIP GALVANIZED PER ASTM A 153.

① ℄ OF TONGUE AND GROOVE OR BELL AND SPIGOT JOINTS.

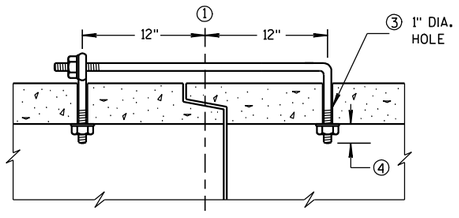
② THE INSIDE OF THE THREADED INSERTS SHALL BE CLEAN TO ALLOW THE INSERTION OF THREADED EYE BOLTS.

③ HOLES SHALL BE CAST-IN-PLACE OR DRILLED 12 INCHES FROM ℄ OF TONGUE AND GROOVE.

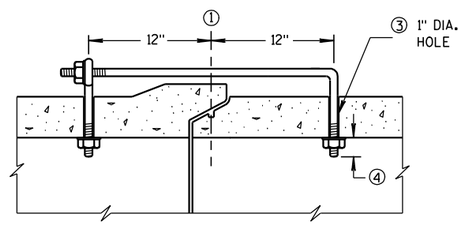
④ BOLT PROJECTION INSIDE OF PIPE SHALL NOT EXCEED 2 INCHES.

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.



(TONGUE & GROOVE PIPE)

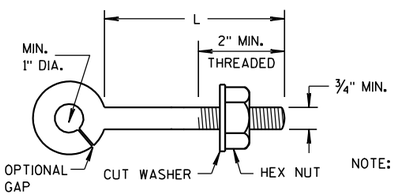


(MODIFIED BELL PIPE)

LONGITUDINAL SECTION

EYE BOLT DIMENSION TABLE

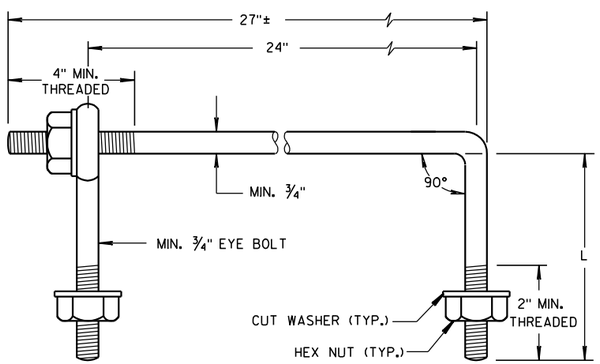
PIPE SIZE	L = LENGTH	
	TONGUE & GROOVE PIPE	MODIFIED BELL PIPE
18" TO 24"	4 1/2"	6 1/4"
30"	5"	7"
36"	5 1/2"	7"
42"	6"	
48"	6 1/2"	
60"	7 1/2"	
66"	8"	



NOTE:

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

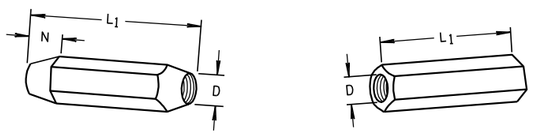
(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 2)

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 1/16

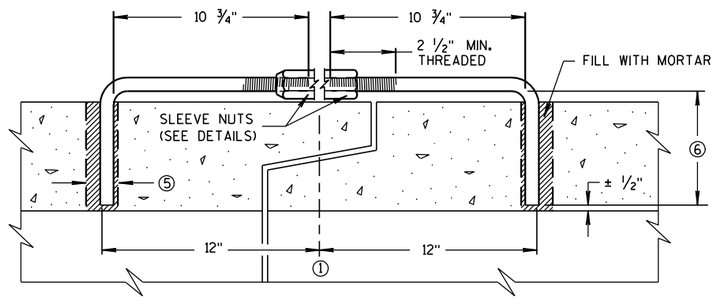
DIMENSIONS SHOWN ARE IN INCHES



TAPERED PLAIN

RIGHT AND LEFT THREADS

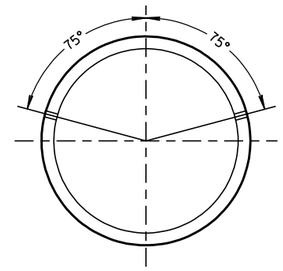
SLEEVE NUTS



LONGITUDINAL SECTION

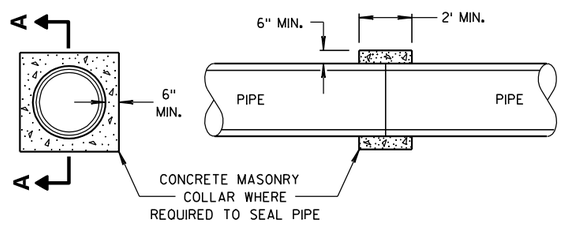
(JOINT TIES FOR 12" TO 108" DIA. CONCRETE PIPE)

ADJUSTABLE TIE ROD (ALTERNATE NO. 3)



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

TRANSVERSE SECTION



SECTION A-A

CONCRETE COLLAR DETAIL

JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/5/2012 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER

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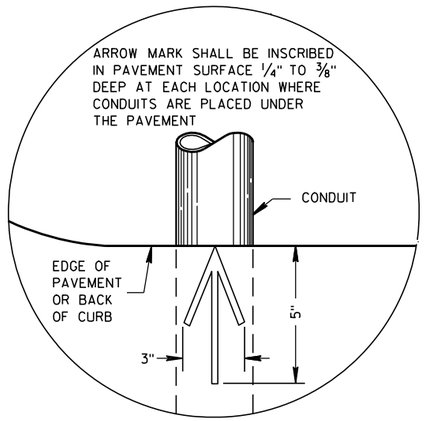
FHWA

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S.D.D. 8 F 4-7

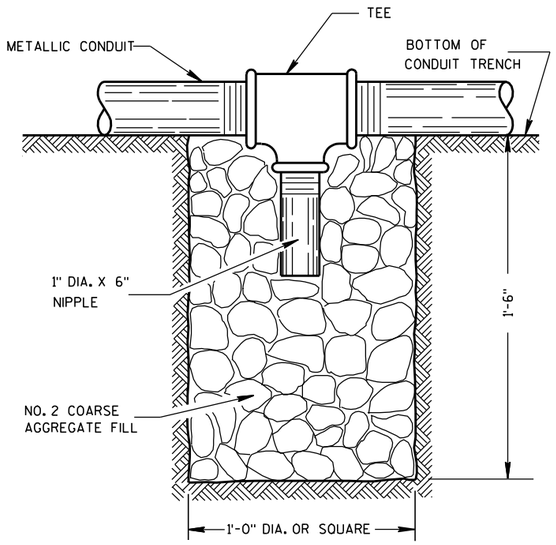
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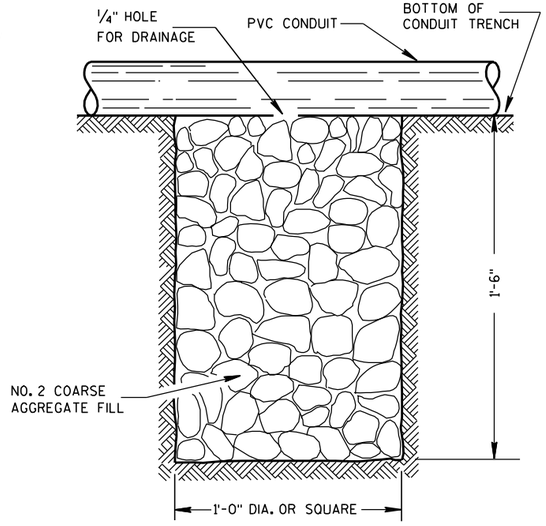
PLAN VIEW

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.

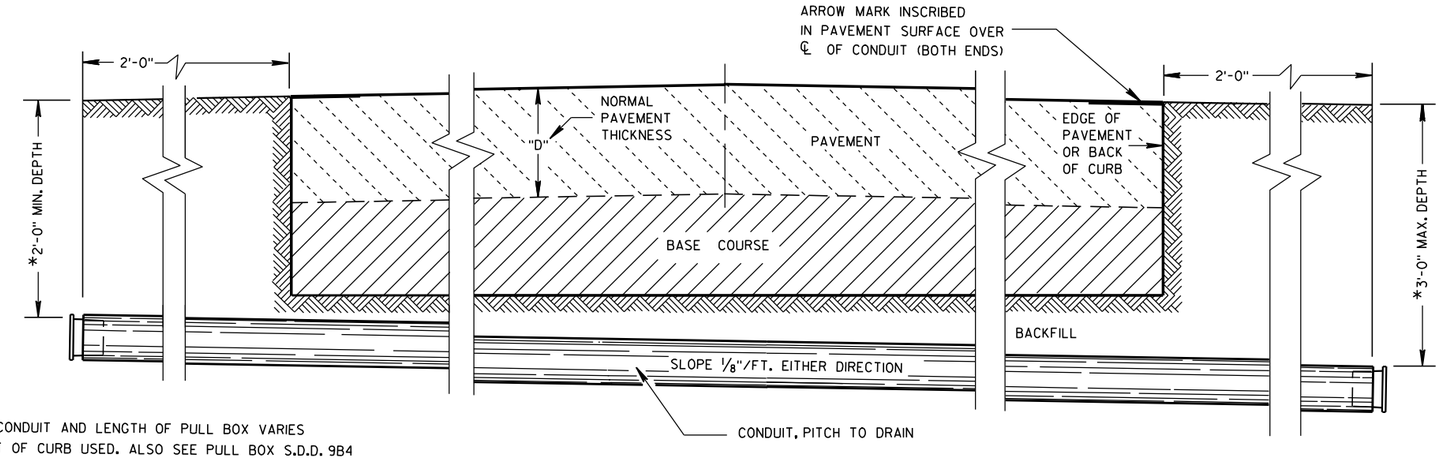
PRIOR TO CONDUIT ACCEPTANCE, CONDUIT CAPS OR PLUGS SHALL BE REMOVED, AND THE CAPS, PLUGS AND CONDUIT ENDS SHALL BE THOROUGHLY CLEANED AND THEN THE CAPS OR PLUGS REINSTALLED TO ENSURE THAT THE CAPS OR PLUGS CAN BE EASILY REMOVED IN THE FUTURE.

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

/S/ Balu Ananthanarayanan
STATE ELECTRICAL ENGI

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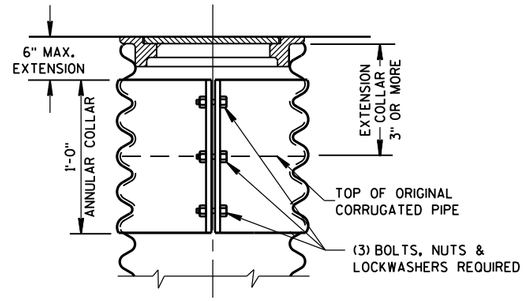
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TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

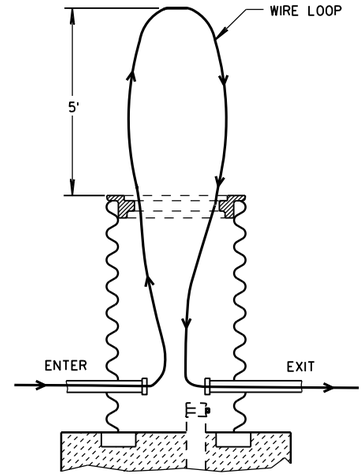
DIMENSION IN INCHES		CORRUGATED STEEL PIPE								
PIPE DIAMETER (INSIDE)	A	12	12	12	18	18	18	24	24	24
PIPE LENGTH **	B	24	30	36	24	30	36	36	42	48
WALL THICKNESS	C	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064
COVER	D	10 1/4	10 1/4	10 1/4	16 1/4	16 1/4	16 1/4	22 1/4	22 1/4	22 1/4
FRAME	E	14 1/2	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.

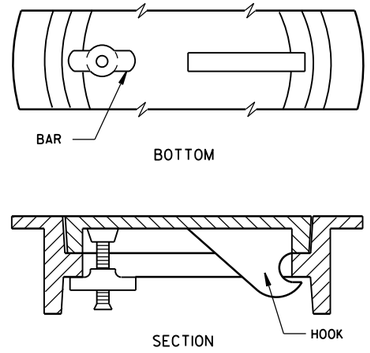
** NORMALLY USED LENGTHS. THE PROJECT ENGINEER SHALL DETERMINE IF PIPE LENGTHS, OTHER THAN THOSE SPECIFIED, SHALL BE USED, TO A MAXIMUM OF 48" (CONTINUOUS LENGTH, NON-SPLICED). THE ADDITIONAL LENGTH SHALL BE INCIDENTAL TO THE PULL BOX BID PRICE.



CORRUGATED PIPE EXTENDER

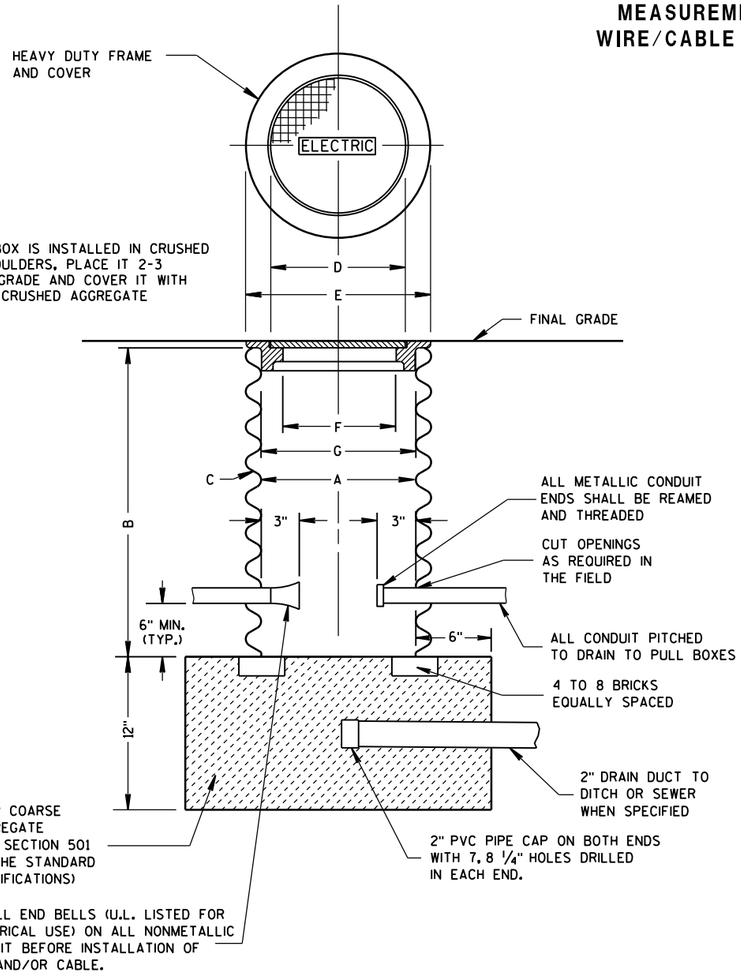


MEASUREMENT DETAIL FOR WIRE/CABLE IN THE PULL BOX



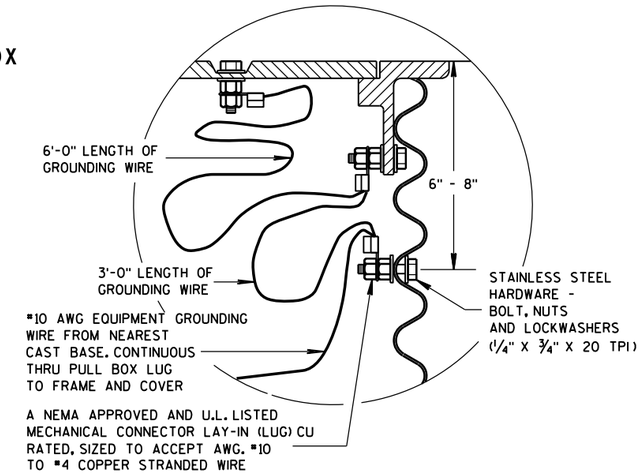
ALTERNATE COVER (LOCKING)

TIGHTENING BAR TYPE

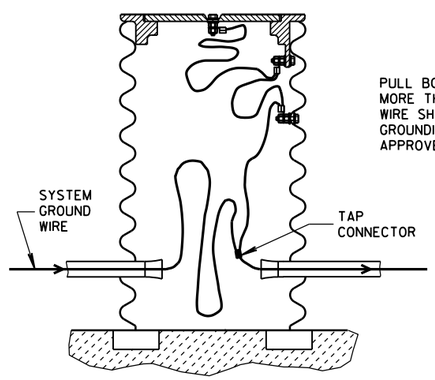


WHEN A PULL BOX IS INSTALLED IN CRUSHED AGGREGATE SHOULDERS, PLACE IT 2-3 INCHES BELOW GRADE AND COVER IT WITH 2-3 INCHES OF CRUSHED AGGREGATE

PULL BOX



EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES



PULL BOX TO NEAREST BASE DISTANCE MORE THAN 20 FEET. PULL BOX GROUND WIRE SHALL CONNECT AT SYSTEM GROUNDING WIRE. USE DEPARTMENT APPROVED TAP CONNECTOR.

EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES

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.

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.

PULL BOX

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

2-7-2013 — DATE

/S/ Ahmet Demirbilek — STATE ELECTRICAL

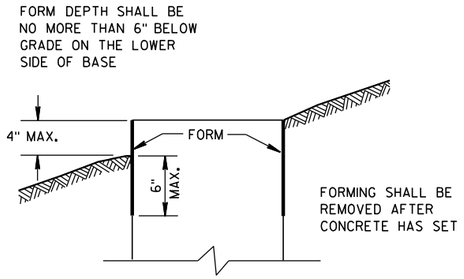
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S.D.D. 9 B 4-10



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 1 FOOT 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 1 INCH 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).

WASHERS AND LOCK WASHERS ARE REQUIRED ON ALL ANCHOR RODS.

WHEN ANCHOR RODS USING THE ALTERNATE "L" BEND ARE FURNISHED, THE 4" "L" BEND SHALL BE IN ADDITION TO THE SPECIFIED ANCHOR ROD BAR LENGTH. THE "L" BEND END SHALL NOT BE THREADED.

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

WELDING OF THE ANCHOR RODS TO THE CAGE IS UNACCEPTABLE. TIE WIRES SHALL BE USED.

BAR STEEL REINFORCEMENT SHALL BE COATED WITH POWDERED EPOXY RESIN IN ACCORDANCE WITH SECTION 505 OF THE STANDARD SPECIFICATIONS (LATEST EDITION).

(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.

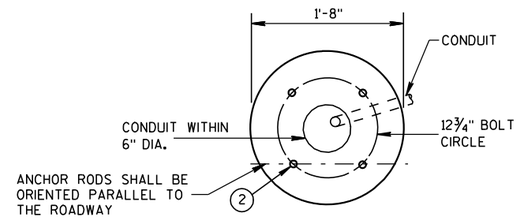
(4) (6) NO. 6 X 6'-8" BAR STEEL REINFORCEMENT.

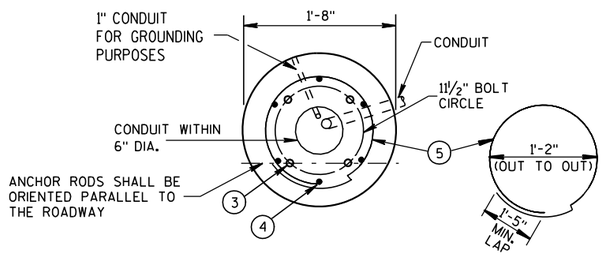
(5) (7) NO. 4 X 5'-1" BAR STEEL REINFORCEMENT @ 1'-0" C-C.

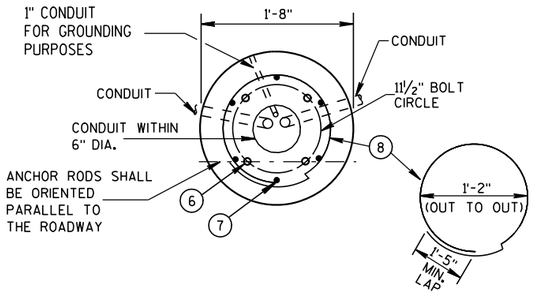
(6) (4) 1" DIA. X 3'-6" ANCHOR RODS.

(7) (6) NO.4 X 4'-8" BAR STEEL REINFORCEMENT.

(8) (5) NO. 4 X 5'-1" BAR STEEL REINFORCEMENT @ 1'-0" C-C.

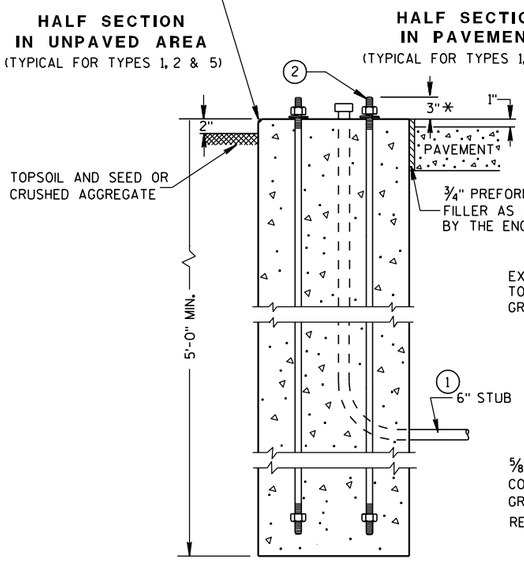






FORM ALL EXPOSED CONCRETE. PROVIDE 1" CHAMFER ALL AROUND

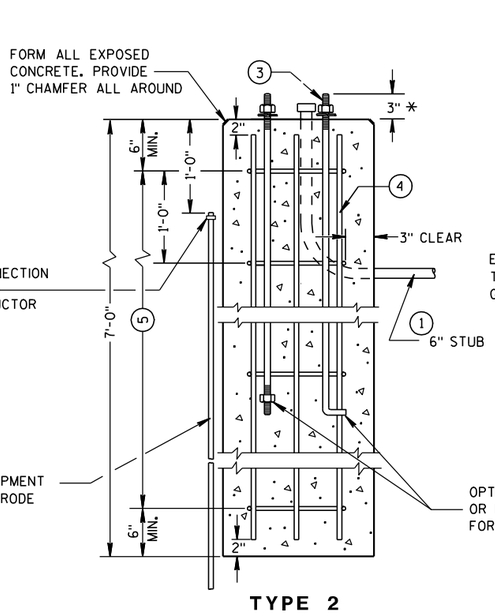
HALF SECTION IN UNPAVED AREA
(TYPICAL FOR TYPES 1, 2 & 5)



HALF SECTION IN PAVEMENT
(TYPICAL FOR TYPES 1, 2 & 5)

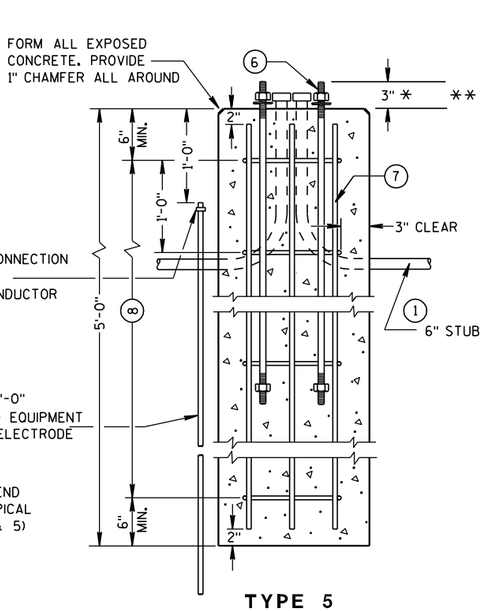
TYPE 1

FORM ALL EXPOSED CONCRETE. PROVIDE 1" CHAMFER ALL AROUND



TYPE 2

FORM ALL EXPOSED CONCRETE. PROVIDE 1" CHAMFER ALL AROUND



TYPE 5

CONCRETE BASES

* ANY ANCHOR ROD PROJECTION SHORTER THAN 2¾" OR LONGER THAN 3¼" SHALL REQUIRE THE BASE TO BE REMOVED AND REPLACED AT THE CONTRACTORS EXPENSE.

** FOR NONBREAKAWAY INSTALLATIONS, 4½" ± ANCHOR ROD PROJECTION WITH THE USE OF LEVELING NUTS. RODENT SCREEN REQUIRED.

CONCRETE BASES, TYPES 1, 2 & 5

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
3/3/10 — DATE
/S/ Joanna L. Rush — STATE ELECTRICAL ENGI
111
HWYS
FHWA

6
S.D.D. 9 C 2-6

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.

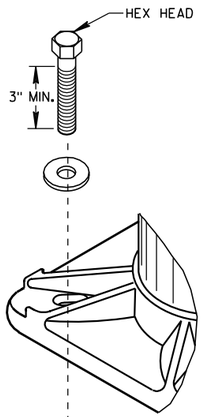
THE MECHANICAL CONNECTOR SHALL BE INSTALLED USING A 1/4" - 20 (TPI) STAINLESS STEEL HEX HEAD BOLT OF SUFFICIENT LENGTH TO FIRMLY ATTACH THE LUG TO THE BASE.

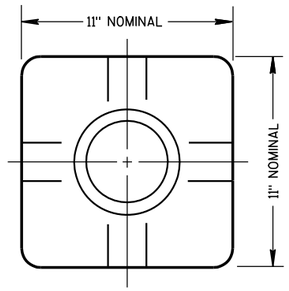
SHOULD THE MANNER OF ATTACHMENT OF THE LUG REQUIRE WASHERS, HEX NUTS, LOCK WASHER - THEY SHALL BE STAINLESS STEEL AS IS THE BOLT. THE MANNER OF ATTACHMENT SHALL NOT BLOCK ACCESSIBILITY TO WIRE PLACEMENT IN THE CONNECTOR.

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

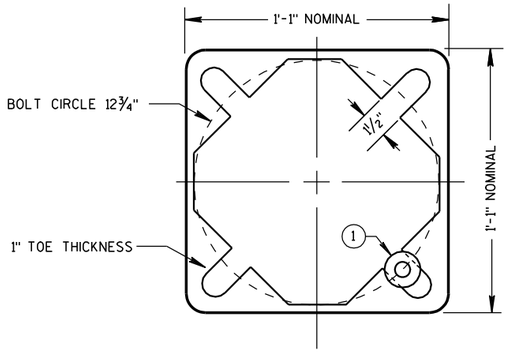
BASE COLLAR THREADING SHALL EXTEND INTO THE BASE COLLAR WITH SUFFICIENT DEPTH TO ACCEPT THE INSTALLATION OF TRAFFIC SIGNAL STANDARDS TO A DEPTH OF 1½", THEN TIGHTENING TO A POINT OF BEING IMMOVABLE.

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

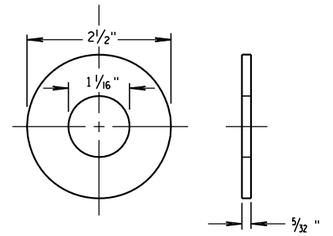




TOP VIEW
(PEDESTAL BASE)

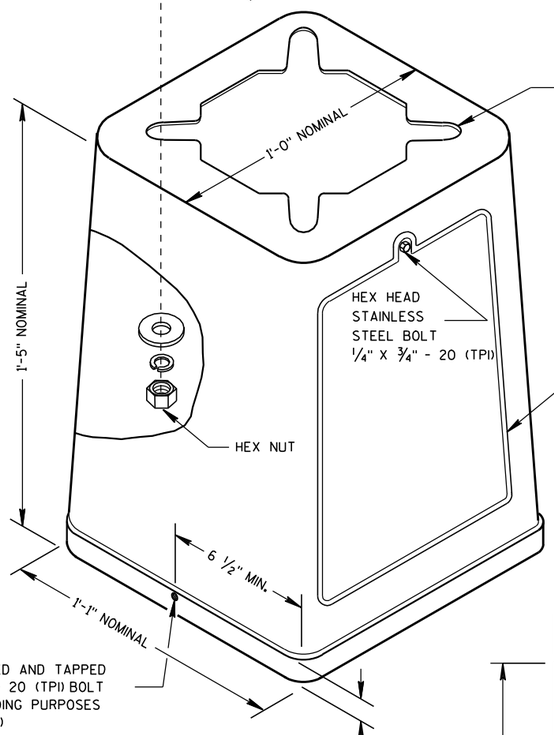


BOTTOM VIEW
(PEDESTAL BASE)

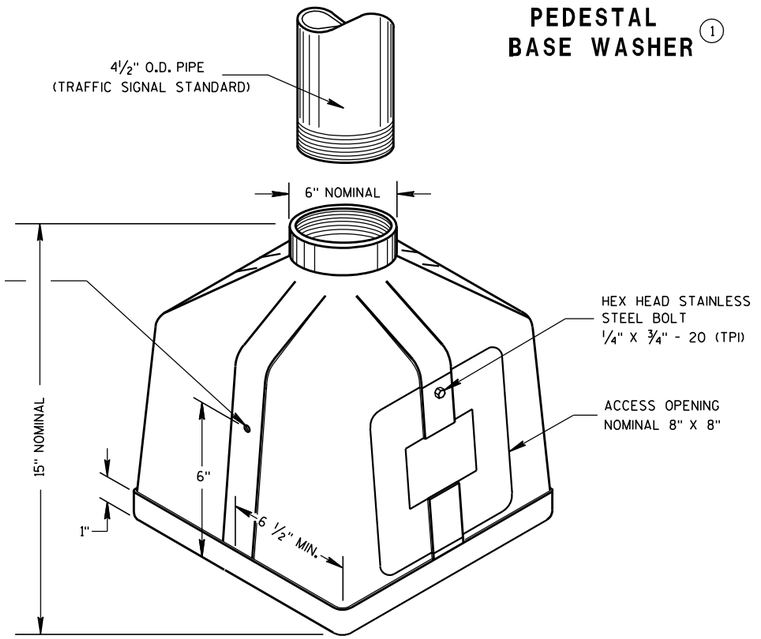


ZINC COATED STEEL WASHER
TO BE PROVIDED BY THE CONTRACTOR

PEDESTAL BASE WASHER (1)

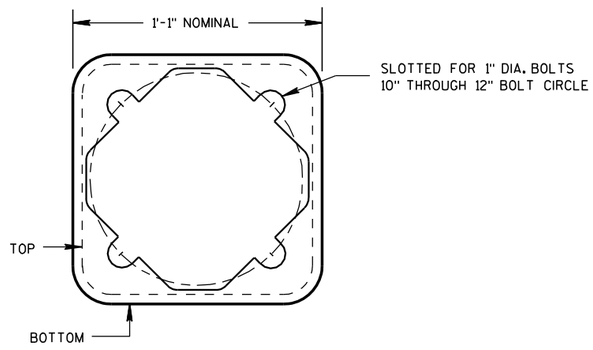


ISOMETRIC VIEW

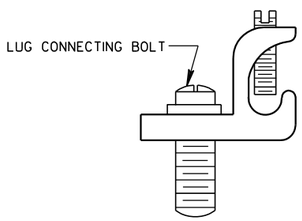


ISOMETRIC VIEW

PEDESTAL BASE



BOTTOM VIEW
(TRANSFORMER BASE)

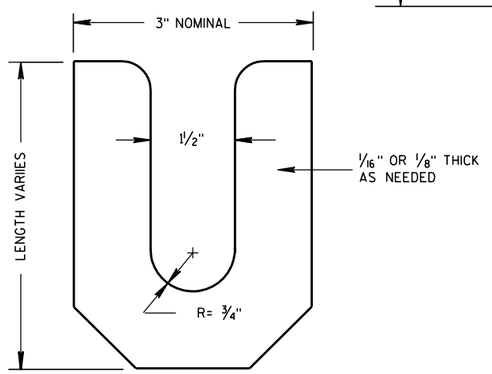


TYPICAL MECHANICAL CONNECTOR LUG

TO BE FURNISHED WITH EACH BASE

TRANSFORMER BASE

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



LEVELING SHIM

TRANSFORMER/PEDESTAL BASES	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 10/27/09 DATE	/S/ Joanna L. Rich STATE ELECTRICAL ENGI 112 HWYS
FHWA	

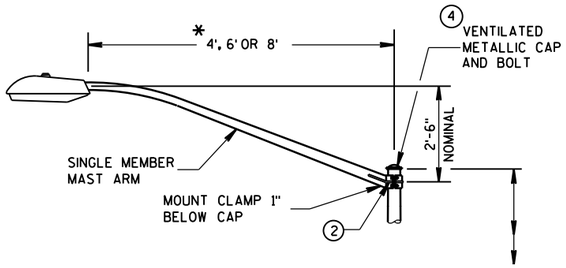
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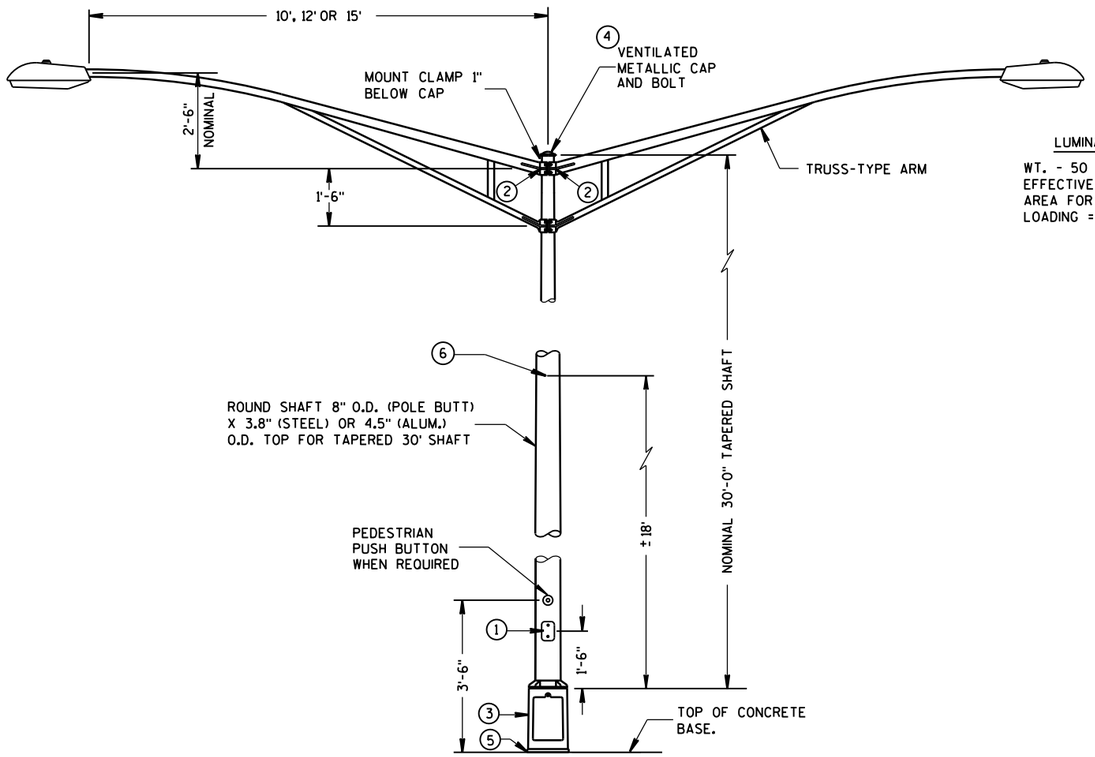
S.D.D. 9 C 3-3

6

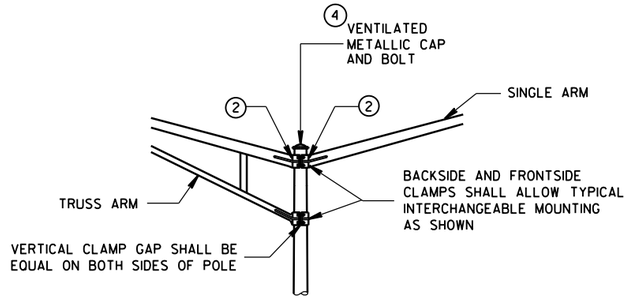
S.D.D. 9 C 3-3

*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 2⅜ 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 CONEECTIONS SHALL BE MADE IN THE TRANSFORMER BASE.

(1) 4" x 6" REINFORCED HANDHOLE & COVER ASSEMBLY WITH 2 (TWO) ¼" X ¾" - 20 TPI HEX HEAD STAINLESS STEEL BOLTS.

(2) GROMMETS, 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1⅜" 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) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.

(5) SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND THE TRANSFORMER BASE.

(6) INTERNAL DUMBBELL-TYPE VIBRATION DAMPER.

6

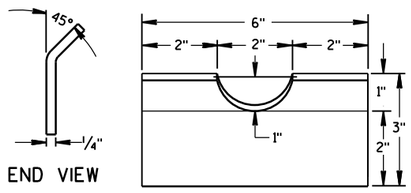
S.D.D. 9 E 1-12d

POLE MONTINGS FOR
LIGHTING UNITS, TYPE 5
(30 FEET)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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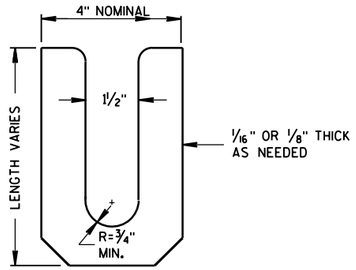
S.D.D. 9 E 1-12d



FRONT VIEW

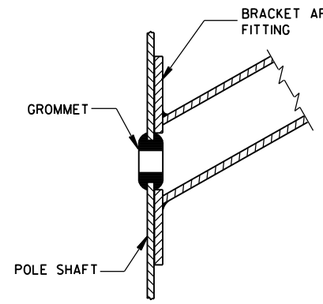
RECTANGULAR CLAMP SHIM

(4 TO A SET)

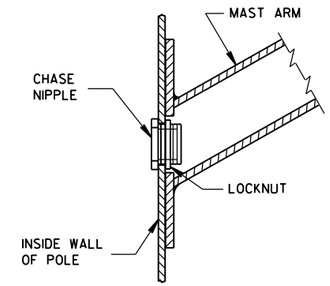


LEVELING SHIM (15)

SHALL BE ALUMINUM



TYPICAL APPLICATION OF GROMMET IN POLE SHAFT



TYPICAL APPLICATION OF CHASE NIPPLE IN POLE SHAFT

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".

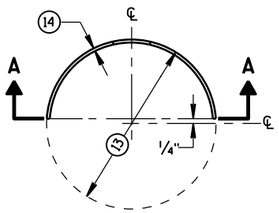
SHIM MATERIAL SHALL BE ALUMINUM ALLOY.

SHIM THICKNESS SHALL BE IMPRESSED INTO EACH SHIM. NUMERALS SHALL BE 1/4" HIGH AND LEGIBLE.

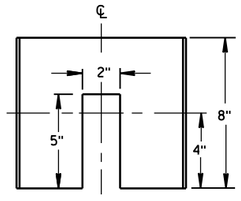
THE CONTRACTOR SHALL SUBMIT TWO COPIES OF ALL SHIM SHOP DRAWINGS TO THE ENGINEER FOR APPROVAL.

(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.



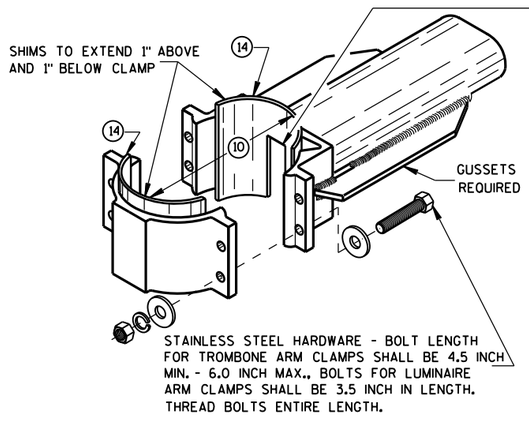
PLAN VIEW



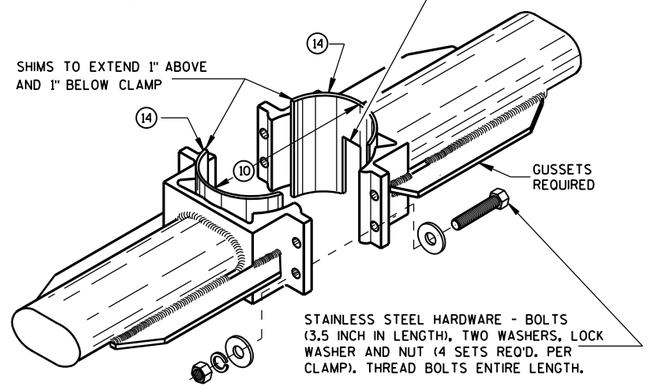
SECTION A-A

CIRCULAR CLAMP SHIM

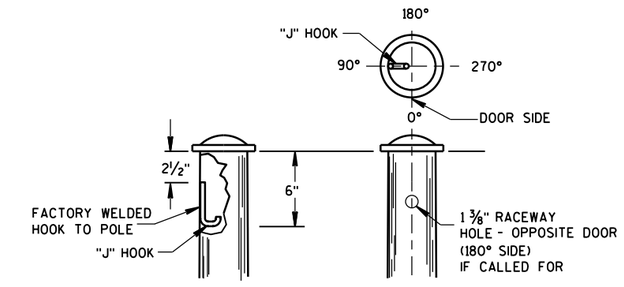
(2 TO A SET)



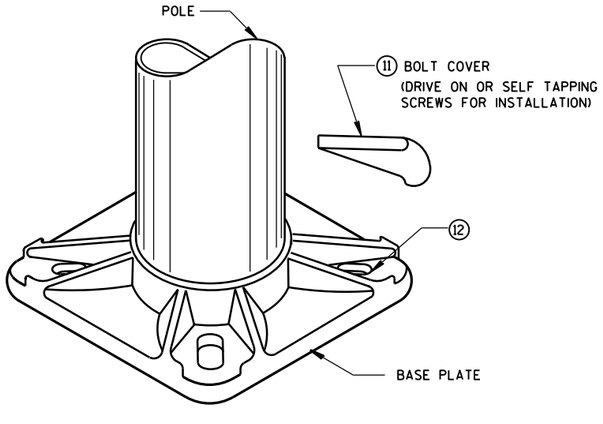
TYPICAL TROMBONE MAST ARM AND SINGLE LUMINAIRE MAST ARM MOUNTING CLAMP



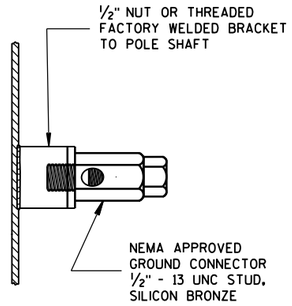
TYPICAL LUMINAIRE MAST ARM (DOUBLE) MOUNTING BRACKETS

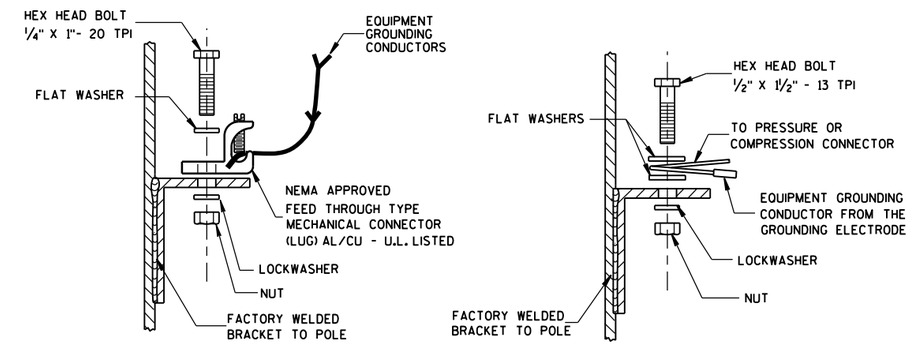


TYPICAL "J" HOOK LOCATION



BASE PLATE





TYPICAL GROUNDING CONNECTIONS

NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL

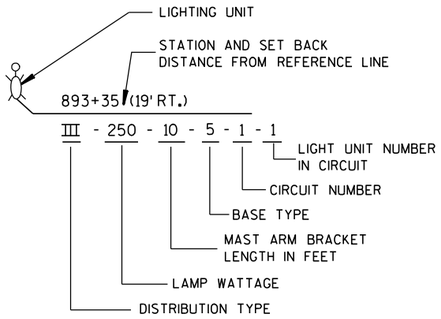
HARDWARE DETAILS FOR POLE MOUNTINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

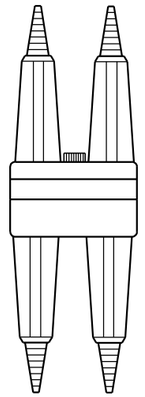
APPROVED
2/7/2013 DATE
/S/ Ahmet Demirbilek
STATE ELECTRICAL
FHWA

6

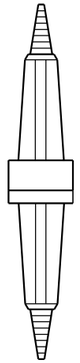
S.D.D. 9 E 1-12g



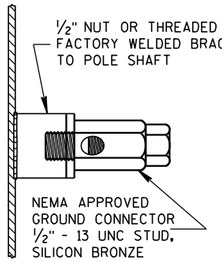
LIGHTING UNIT CODE
(TYPICAL)

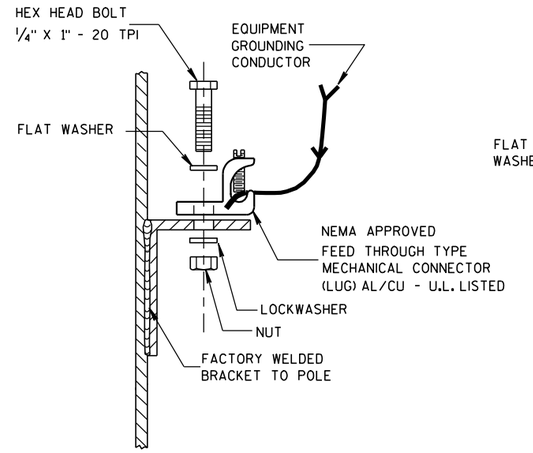


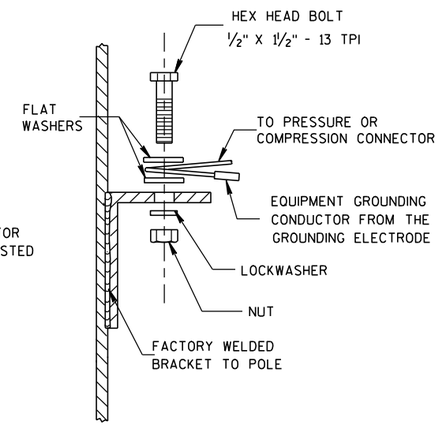
DETAIL "A"
BREAKAWY
DOUBLE POLE WITH
WATERPROOF
INSULATING BOOT



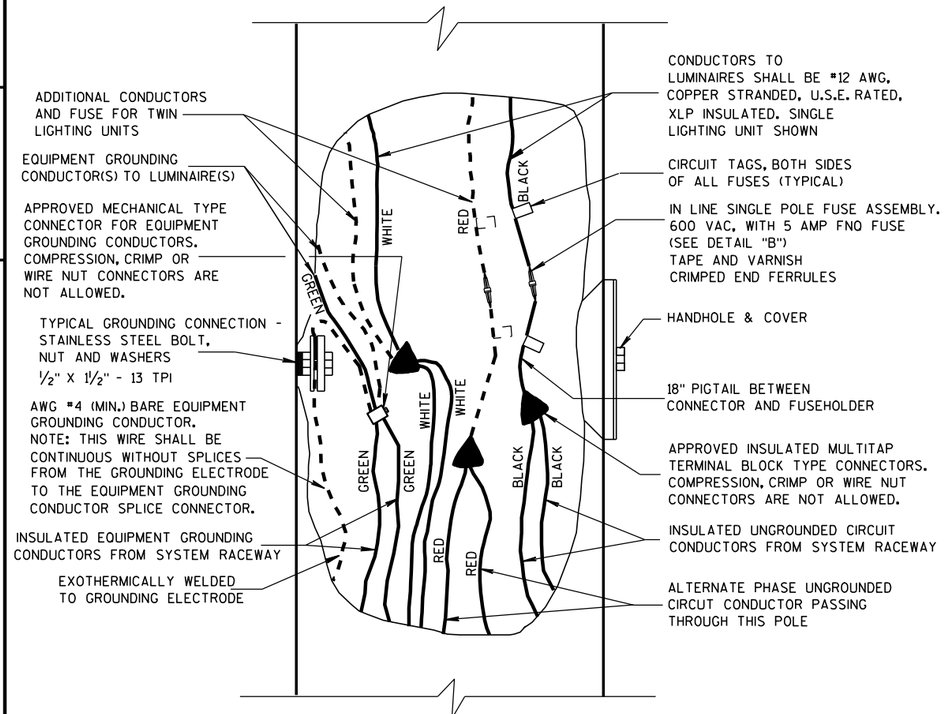
DETAIL "B"
BREAKAWY
SINGLE POLE WITH
WATERPROOF
INSULATING BOOT



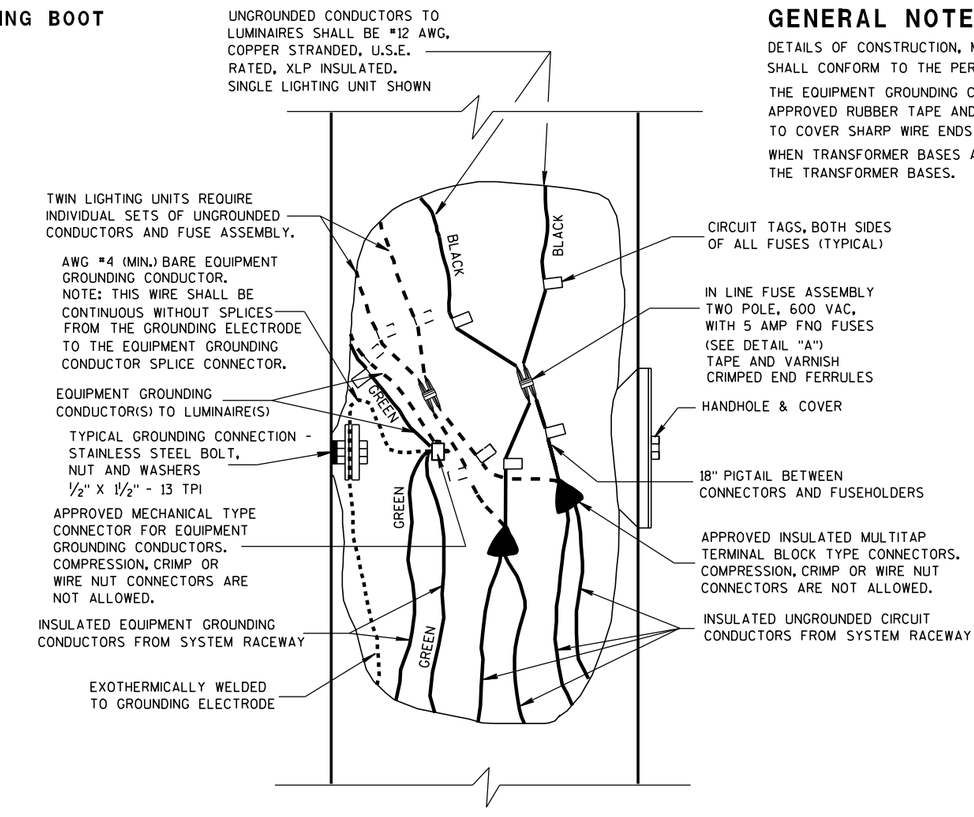




TYPICAL GROUNDING CONNECTIONS
NUT, BOLT, WASHERS AND LOCKWASHERS SHALL BE STAINLESS STEEL



3 WIRE - 120, 240 OR 480 VAC (UNGROUNDED CONDUCTOR) WITH GROUNDED CONDUCTOR AND WITH EQUIPMENT GROUNDING CONDUCTOR



2 WIRE - 240 OR 480 VAC (UNGROUNDED CONDUCTORS) WITH EQUIPMENT GROUNDING CONDUCTOR

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.

WHEN TRANSFORMER BASES ARE USED, ALL WIRING CONNECTIONS SHALL OCCUR WITHIN THE TRANSFORMER BASES.

NON-FREEWAY LIGHTING UNIT POLE WIRING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

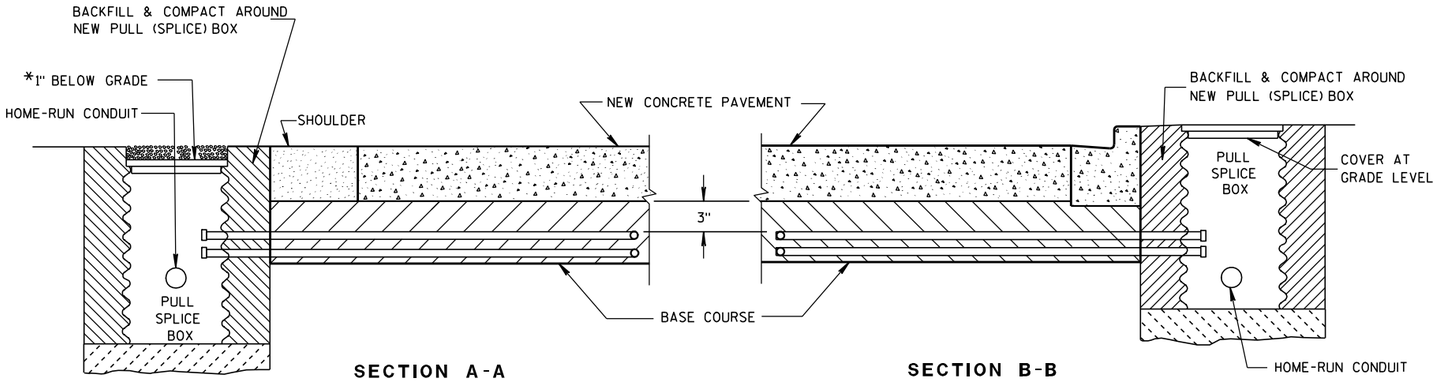
3/2/2011 — DATE

/S/ Thomas J. Gosnine — STATE ELECTRICAL ENGI

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SECTION A-A
NO CURB & GUTTER

SECTION B-B
CURB & GUTTER

*RECESS PULL (SPLICE) BOX SO THAT THE COVER IS 3" BELOW GRADE IN SHOULDER AREAS OF CRUSHED AGGREGATE. BACKFILL OVER COVER WITH THE CRUSHED AGGREGATE TO BRING THE AREA TO GRADE LEVEL.

LOOP DETECTOR INSTALLATION DETAIL

GENERAL NOTES

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

LOOP SIZE, CONFIGURATION LOCATION, NUMBER OF TURNS OF WIRE AND ASSOCIATED SIGNAL PHASE SHALL BE AS SHOWN ON THE PLANS.

PITCH LEAD OUT CONDUIT TO DRAIN TO ROADSIDE PULL (SPLICE) BOX.

SPLICES SHALL BE INSTALLED BY USING CAST IN PLACE SPLICE KITS SUCH AS 3M TYPE 82A1 OR APPROVED EQUAL. NON-INSULATED BUTT SPLICES TO FIT #12 AWG STRANDED WIRE SHALL BE USED. SPLICES SHALL BE SOLDERED AND INSULATED FROM EACH OTHER AS PER INSTRUCTIONS INCLUDED IN THE SPLICE KIT.

MEASURE GROUND RESISTANCE USING A MEGGER. REPLACE LOOP WIRE NOT ATTAINING A READING OF INFINITY TO GROUND.

AFTER SPLICING THE LOOP WIRE TO THE LOOP LEAD-IN CABLE, THE CONTRACTOR SHALL MEASURE INDUCTANCE, GROUND RESISTANCE AND WIRE RESISTANCE AT THE CABINET END OF THE LEAD-IN CABLE AND FURNISH A COPY OF THE READINGS TO THE PROJECT ENGINEER FOR EVALUATION.

LOOP DETECTOR LEADS SHALL BE IDENTIFIED WITH THEIR ASSOCIATED LOOP BY USE OF WATERPROOF TAGS AT BOTH ENDS OF THE CABLE. A LISTING OF THE CABLE IDENTIFICATION PER INDIVIDUAL LOOP LEAD-IN SHALL BE PLACED IN THE CABINET.

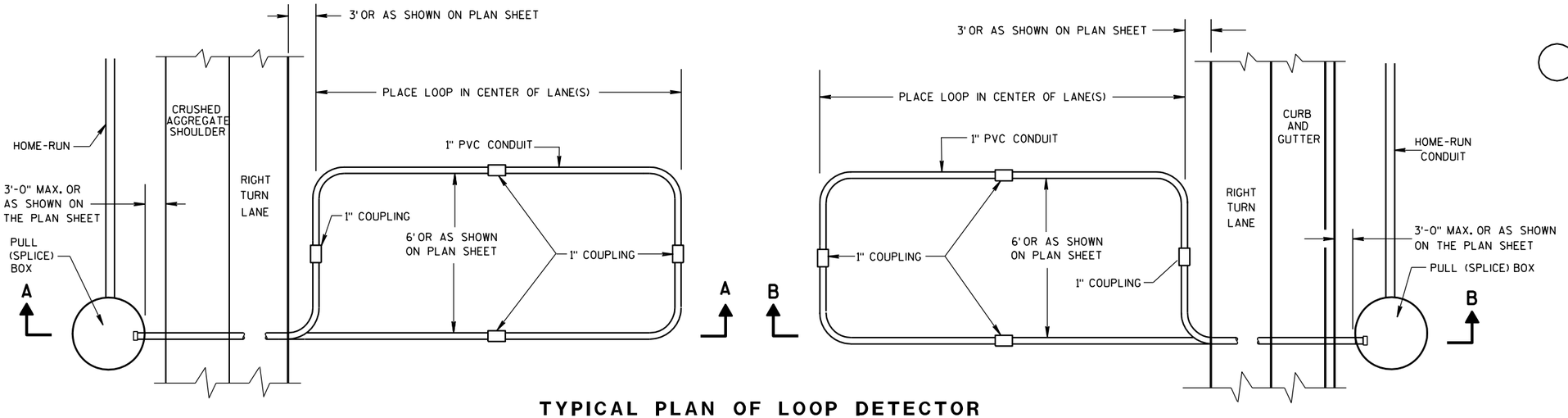
THE #12 AWG. LOOP WIRE IN THE PULL (SPLICE) BOX SHALL BE HAND TWISTED AT LEAST 3 TWISTS PER FOOT BEFORE BEING SPLICED TO THE LOOP LEAD-IN CABLE.

SPLICES OF LOOP WIRE TO LEAD-IN CABLE SHALL BE MADE ONLY IN PULL (SPLICE) BOXES AT THE SIDE OF THE ROAD.

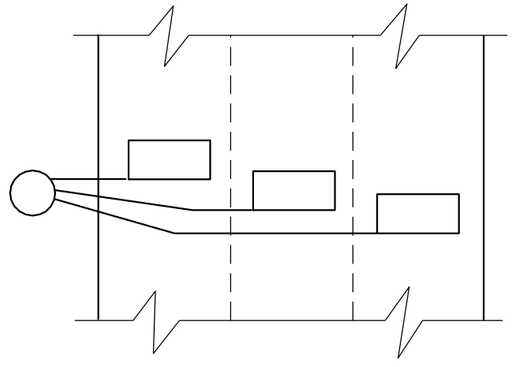
THE #12 AWG LOOP WIRE SHALL BE INSTALLED FROM THE ROADSIDE PULL (SPLICE) BOX, THROUGH THE LOOP CONDUIT, BACK TO THE ROADSIDE PULL (SPLICE) BOX, AND BE INSTALLED IN ONE, NON-SPLICED CONTINUOUS LENGTH.

PROTECTION OF THE CONDUITS IN THE BASE COURSE SHALL BE REQUIRED AFTER INSTALLATION AND BEFORE NEW PAVEMENT IS INSTALLED.

SHOULD INSTALLATION REPAIR BE REQUIRED, IT SHALL BE DONE UNDER THE DIRECTION OF THE PROJECT ENGINEER.



TYPICAL PLAN OF LOOP DETECTOR WITH 24" PULL (SPLICE) BOX



MULTI-LANE INSTALLATION

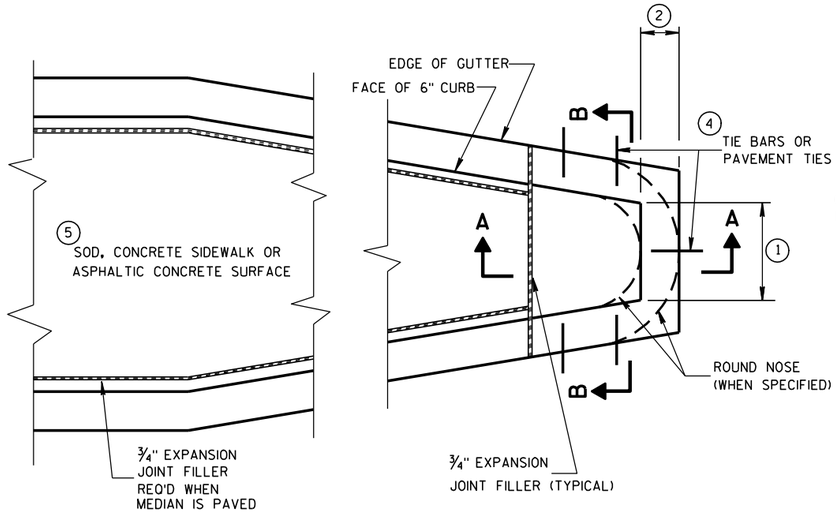
LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)

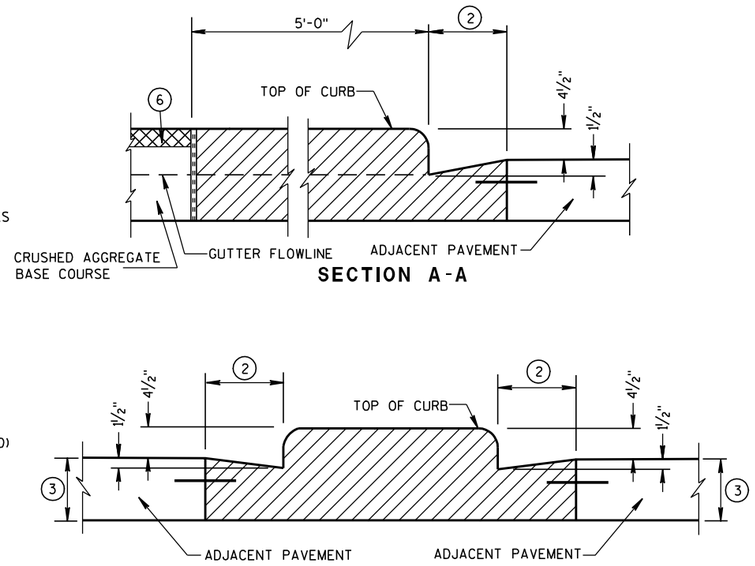
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/7/06 DATE
/S/ Balu Anantharaman
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CONCRETE MEDIAN BLUNT NOSE DETAIL

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.

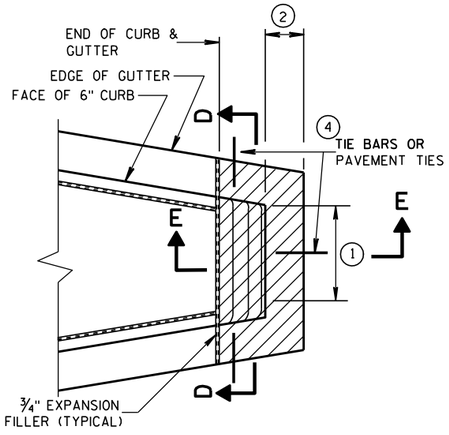
(2) ASPHALTIC CONCRETE PAVEMENT OVER NEW OR EXISTING CONCRETE BASE COURSE.

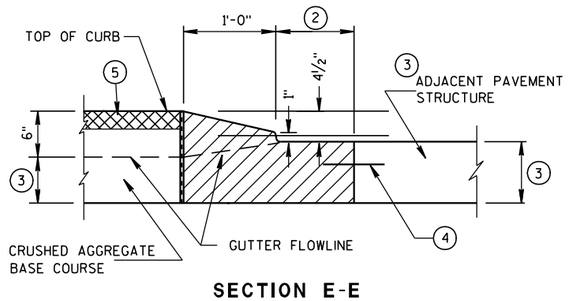
(3) ASPHALTIC CONCRETE PAVEMENT OVER CRUSHED AGGREGATE BASE COURSE.

(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.

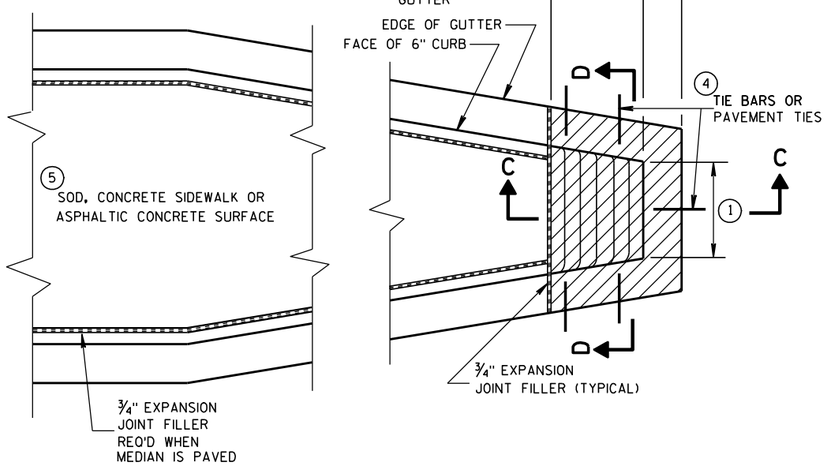
(5) SURFACE TYPE AND DETAILS ARE SHOWN ELSEWHERE IN THE PLAN.

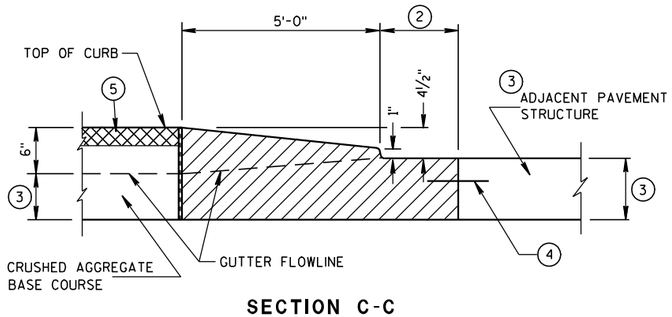




SECTION E-E

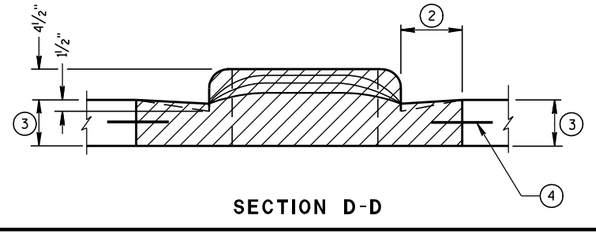
CONCRETE MEDIAN SLOPED NOSE TYPE 2





SECTION C-C

CONCRETE MEDIAN SLOPED NOSE TYPE 1



SECTION D-D

CONCRETE MEDIAN NOSE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6/8/2006
DATE

/S/ Jerry H. [illegible]
ROADWAY STANDARDS ENGINEER

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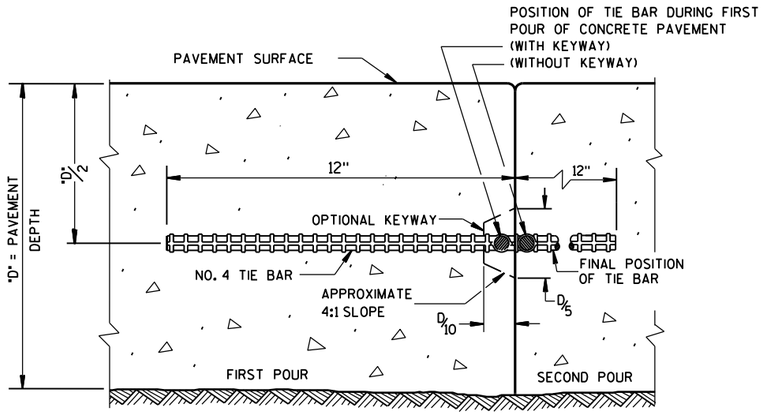
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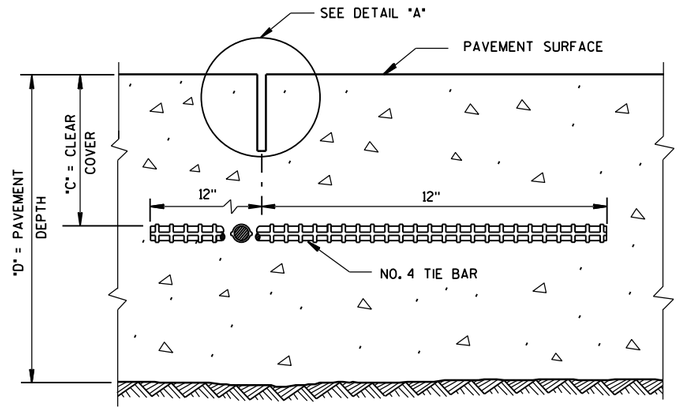
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S.D.D. 11 B 2-2



CONSTRUCTION JOINT



SAWED JOINT

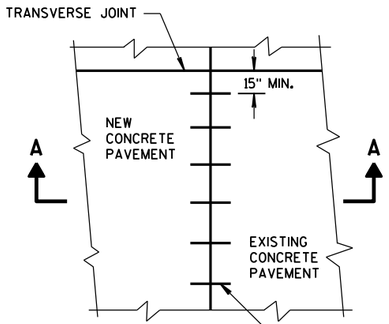
GENERAL NOTES

DO NOT SEAL OR FILL LONGITUDINAL JOINTS.

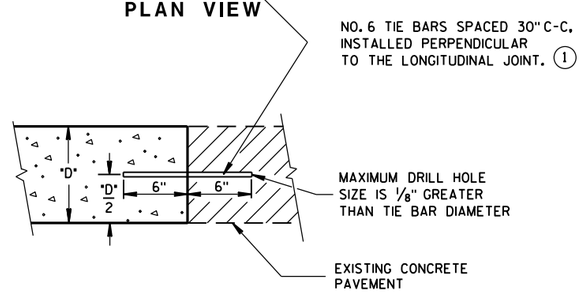
CREATE A LONGITUDINAL JOINT FOR PAVEMENT WIDTHS GREATER THAN 15 FEET.

CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

(1) ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

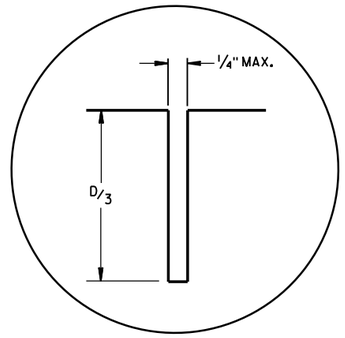


PLAN VIEW



SECTION A-A

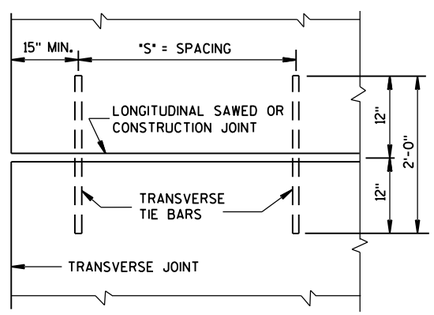
LONGITUDINAL CONSTRUCTION JOINT TIE BARS ANCHORED INTO EXISTING PAVEMENT



DETAIL "A"

TIE BAR TABLE

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

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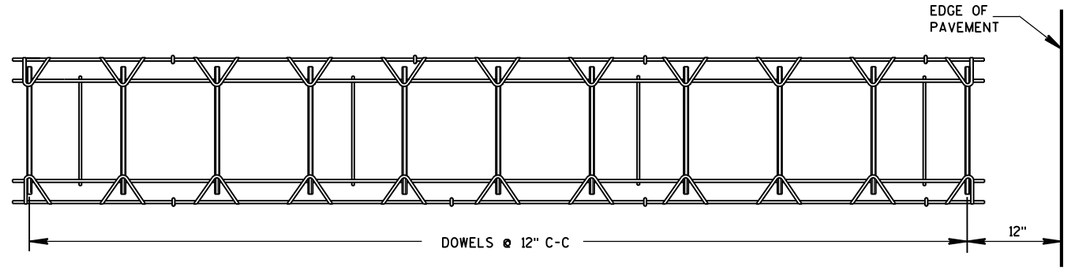
5-3-2013
DATE

/S/ Deb Bischoff
PAVEMENT POLICY & DE ...NEER

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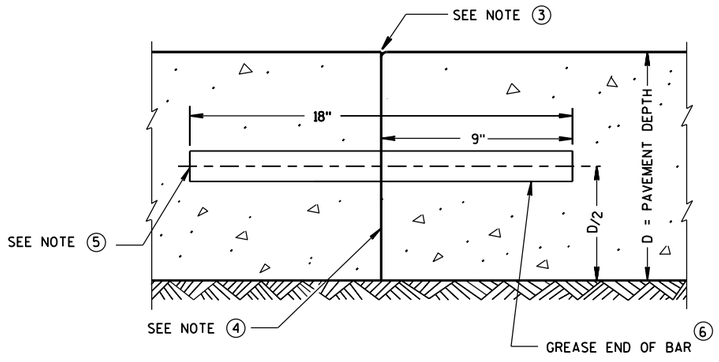


PLAN VIEW

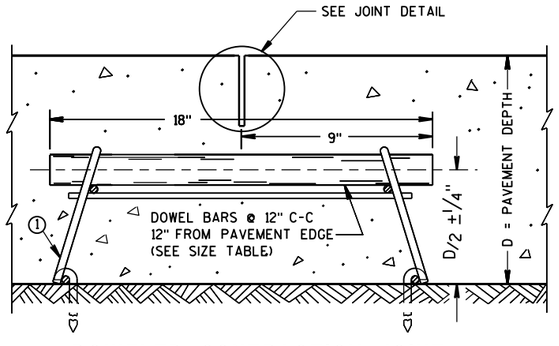


SIDE VIEW

CONTRACTION JOINT DOWEL ASSEMBLY ①



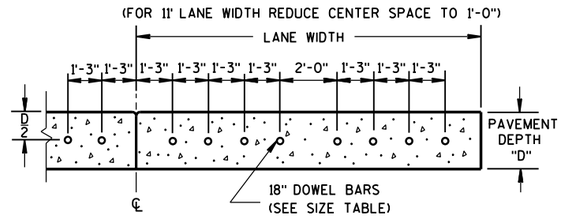
TRANSVERSE CONSTRUCTION JOINT



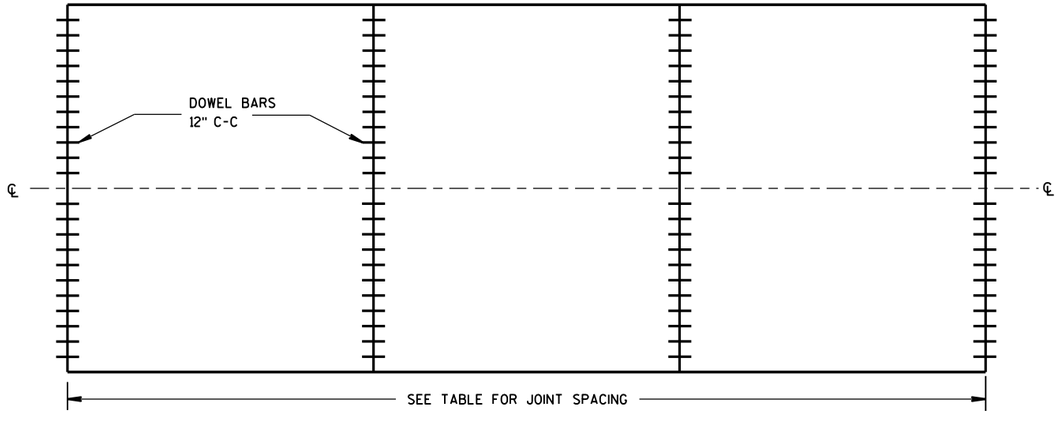
DOWELED CONTRACTION JOINT

PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	DOWEL BAR DIAMETER	CONTRACTION JOINT SPACING
5 ½", 6", 6 ½"	NONE	12'
7", 7 ½"	1"	14'
8", 8 ½"	1 ¼"	15'
9", 9 ½"	1 ¼"	15'
10" & ABOVE	1 ½"	15'



DRILLED DOWEL BAR CONSTRUCTION JOINT ⑦



CONTRACTION JOINT LOCATIONS

GENERAL NOTES

CONTRACTION JOINTS

CONSTRUCT TRANSVERSE 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, LOCATE THE OUTER MOST DOWEL BAR SO THAT THE CENTER OF THE BAR IS A MINIMUM OF 6 INCHES AND A MAXIMUM OF 18 INCHES FROM THE LONGITUDINAL JOINT AND THE FREE EDGE OF PAVEMENT.

CONSTRUCTION JOINTS

LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO CONTRACTION JOINTS.

① **OBTAIN THE ENGINEER'S APPROVAL FOR THE USE OF ALTERNATIVE DESIGNS OF THE DOWEL ASSEMBLY. USE MECHANICAL DOWEL BAR INSERTERS OR DOWEL ASSEMBLIES WHEN CONSTRUCTING CONTRACTION JOINTS.**

② 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.

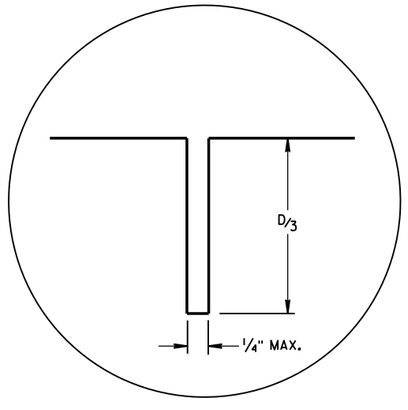
③ FORM OR SAW CONSTRUCTION JOINTS. PROVIDE A ¼-INCH RADIUS AT FORMED JOINTS.

④ PROVIDE A SMOOTH VERTICAL FACE FOR THE ENTIRE DEPTH OF THE PAVEMENT WHEN FORMING CONSTRUCTION JOINTS.

⑤ INSTALL DOWEL BARS AT CONSTRUCTION JOINTS BY FORMING OR DRILLING. INSTALL FORMED DOWEL BARS 12 INCHES C-C AND 12 INCHES FROM PAVEMENT EDGE. REMOVE EXCESS CONCRETE FROM THE FREE END OF THE DOWEL BAR IF DOWEL BARS ARE FORMED THROUGH A HEADER BOARD. INSTALL DRILLED DOWEL BARS ACCORDING TO *DRILLED DOWEL BAR CONSTRUCTION JOINT* DETAIL.

⑥ APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT BONDING.

⑦ ANCHOR DOWEL BARS INTO DRILLED HOLES WITH AN EPOXY. MAXIMUM DRILLED HOLE SIZE IS ⅛-INCH GREATER THAN DOWEL BAR DIAMETER, 9 INCHES IN LENGTH.



JOINT DETAIL

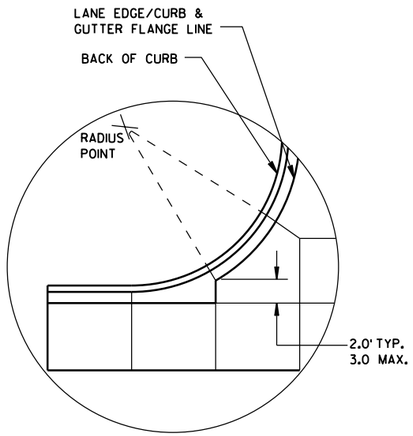
URBAN DOWELED CONCRETE PAVEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

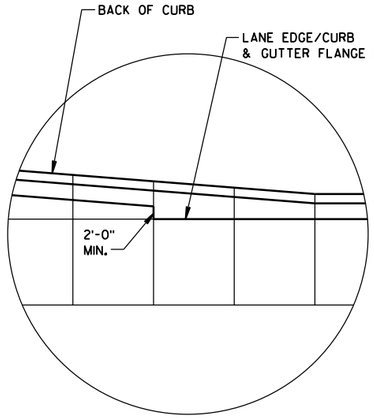
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5/3/2013 DATE
/S/ Deb Bischoff
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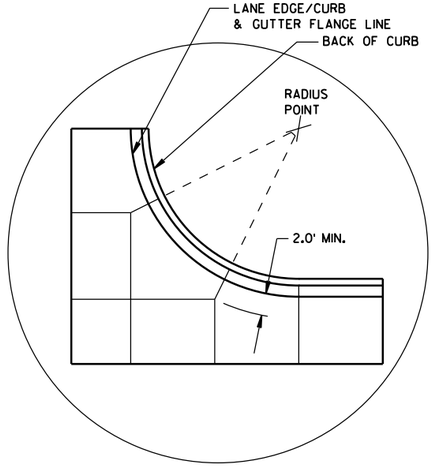
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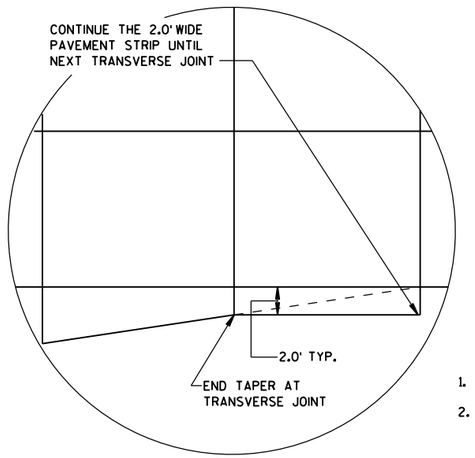
DETAIL "A"



DETAIL "B"



DETAIL "C"



DETAIL "D"

GENERAL NOTES

THE PRIMARY ROADWAY CONTROLS THE TRANSVERSE JOINT PATTERN.

ALIGN NEW JOINTS WITH EXISTING JOINTS OR CRACKS.

CONSTRUCT TRANSVERSE JOINTS PERPENDICULAR TO THE ROADWAY.

ADJUST TRANSVERSE JOINTS TO ALIGN WITH UTILITY FIXTURES (E.G. MANHOLES AND INLETS) IN THE PAVEMENT STRUCTURE WHEN POSSIBLE. WATER VALVES DO NOT REQUIRE JOINT ADJUSTMENT.

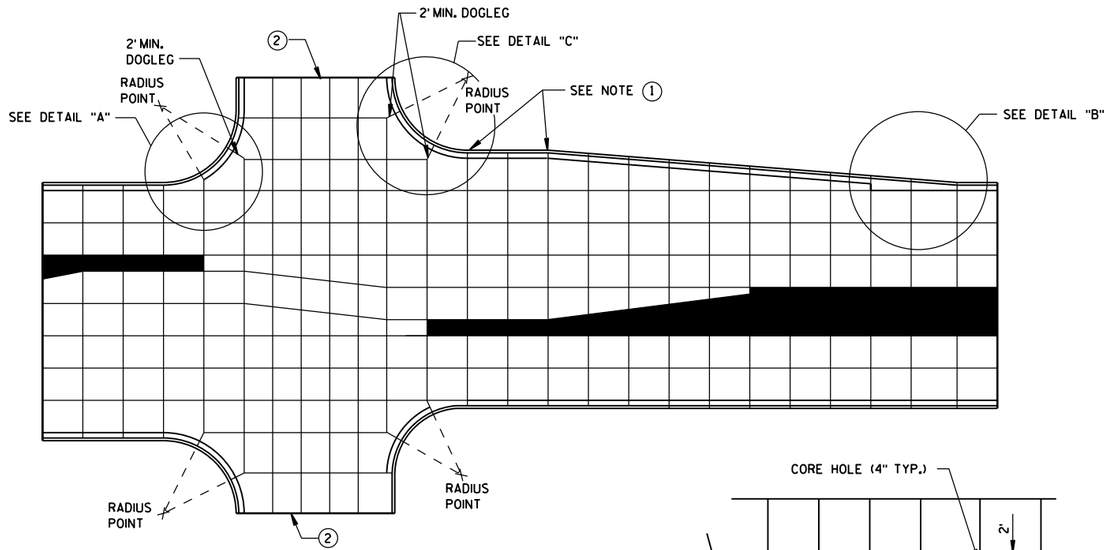
AVOID SLABS LESS THAN 2 FEET WIDE OR GREATER THAN 15 FEET WIDE.

SEE TABLE FOR TRANSVERSE JOINT SPACING. JOINT SPACING SPECIFIED IS MAXIMUM AND ACTUAL SPACING CAN BE ADJUSTED TO ACCOMMODATE INTERSECTIONS.

AVOID ANGLES LESS THAN 60° BY DOGLEGGING JOINTS THROUGH CURVE RADIUS POINTS. USE 90° ANGLES WHEN POSSIBLE.

CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

1. PROVIDE TRANSVERSE JOINTS AT ALL PAVEMENT WIDTH CHANGES.
2. CONSTRUCT DOWELED EXPANSION JOINT ON THE SIDE ROAD OF AN INTERSECTION IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH. ALIGN EXPANSION JOINT WITH EDGE OF RADIUS.
3. THE ENGINEER MAY APPROVE SLIGHT VARIATIONS FROM THESE JOINTING DETAILS.

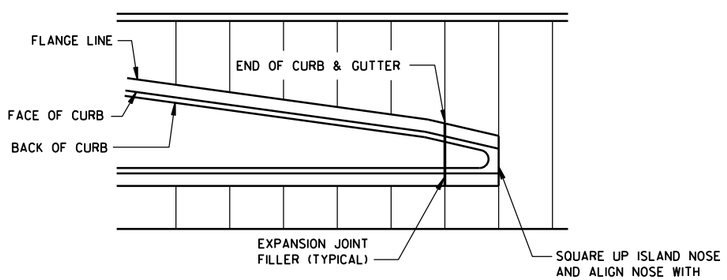


STANDARD INTERSECTION

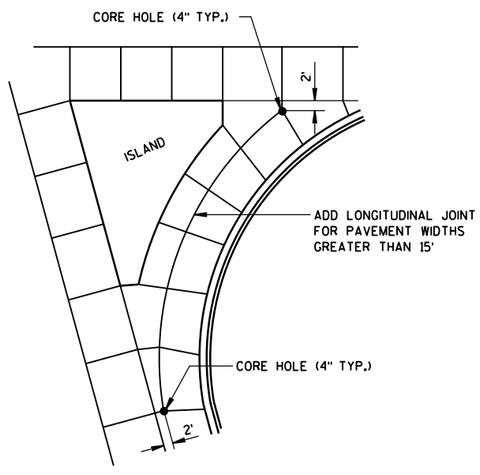
PAVEMENT DEPTH AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	CONTRACTION JOINT SPACING
6", 6½"	12'
7", 7½"	14'
8" & ABOVE	15'

SKEWED INTERSECTION



APPROACH TO MEDIAN



LARGE RIGHT TURN

CONCRETE PAVEMENT JOINTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

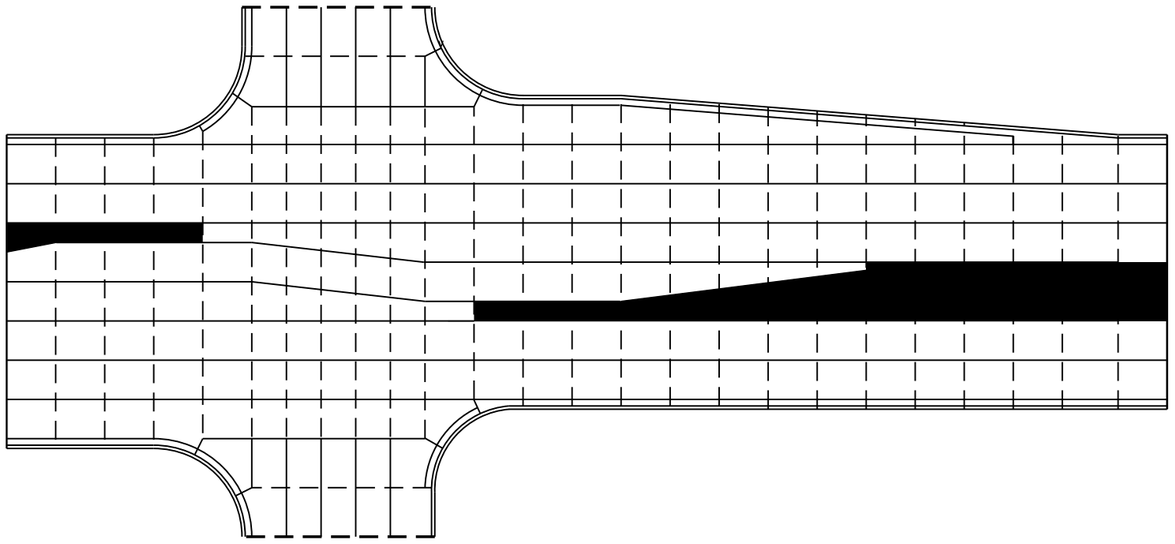
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LEGEND

POTENTIAL DOWELED EXPANSION JOINT

DOWELED JOINT

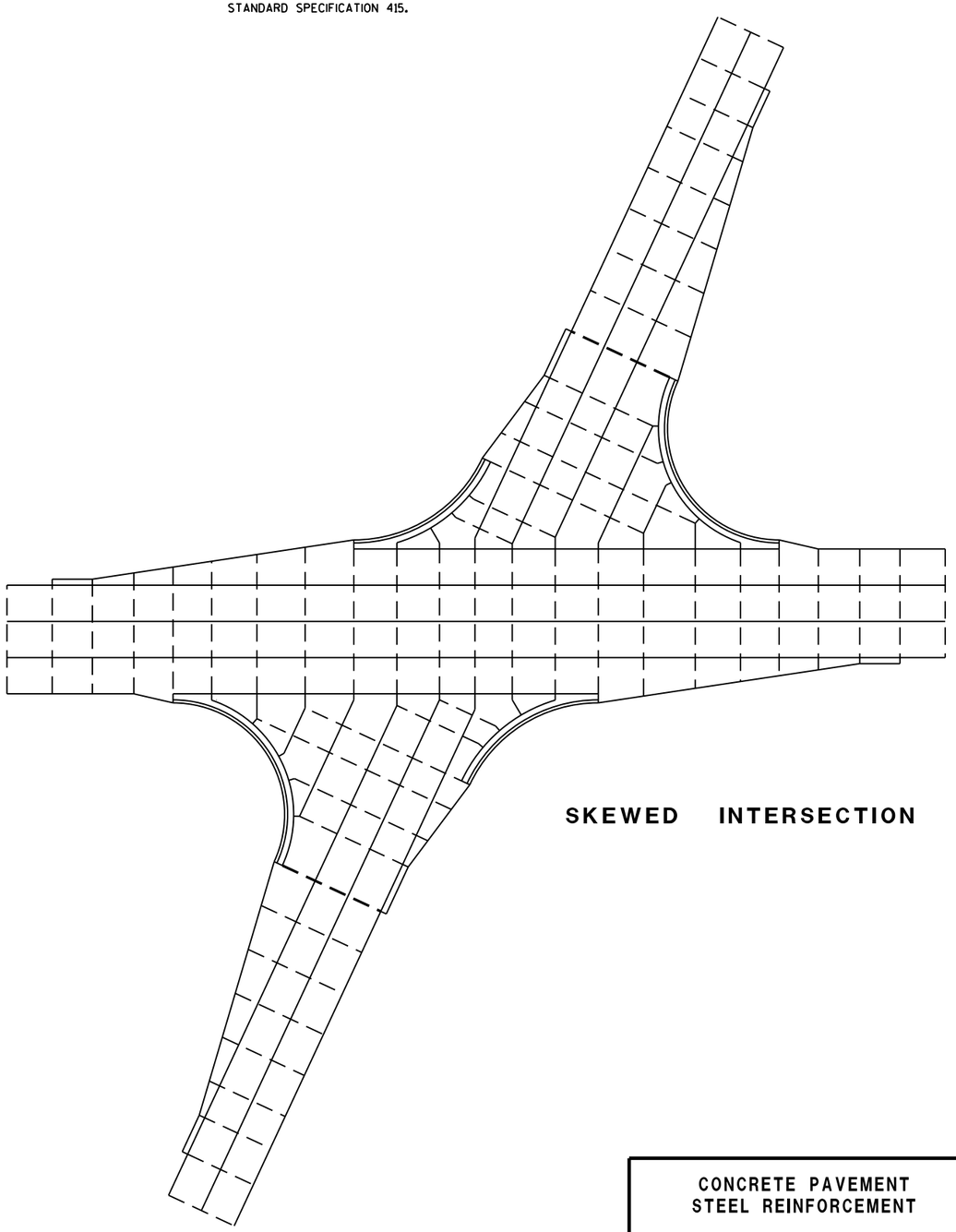
TIED JOINT



STANDARD INTERSECTION

GENERAL NOTES

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



SKEWED INTERSECTION

CONCRETE PAVEMENT
STEEL REINFORCEMENT

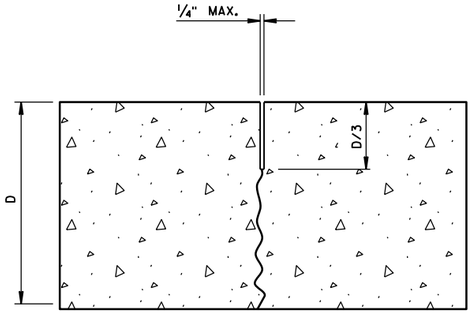
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

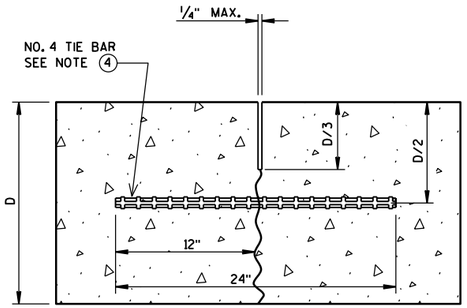
S.D.D. 13 C 18-2b

6

S.D.D. 13 C 18-2b



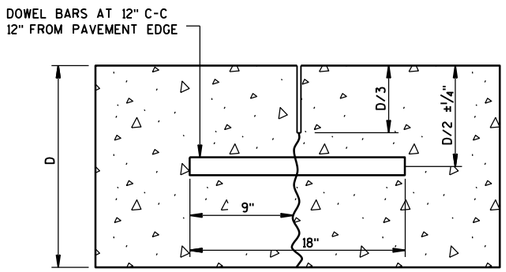
UNDOWELED-TRANSVERSE



TIED LONGITUDINAL

GENERAL NOTES

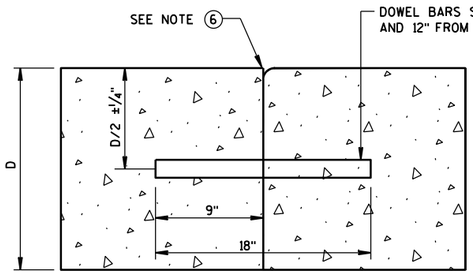
1. USE DOWELED EXPANSION JOINTS ON SIDE ROADS AT INTERSECTIONS (TO ISOLATE THE SIDE ROAD FROM THE THROUGH STREET) IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH.
2. SPACE CONTRACTION JOINTS IN ACCORDANCE WITH 13C4, 13C11 OR 13C13.
3. LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO CONTRACTION JOINTS.
4. SPACE TIE BARS AT LONGITUDINAL CONSTRUCTION OR CONTRACTION JOINTS IN ACCORDANCE WITH SDD 13C1.
5. CONSTRUCTION JOINTS CAN BE FORMED OR SAWED.
6. IF JOINT IS FORMED, PROVIDE A 1/4-INCH RADIUS.



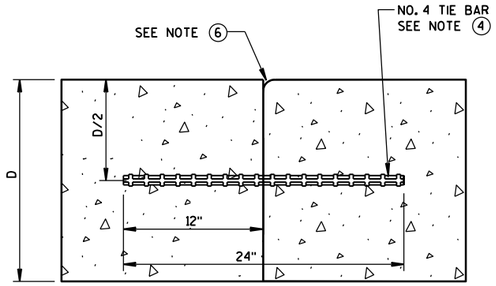
DOWELED-TRANSVERSE

CONTRACTION JOINTS

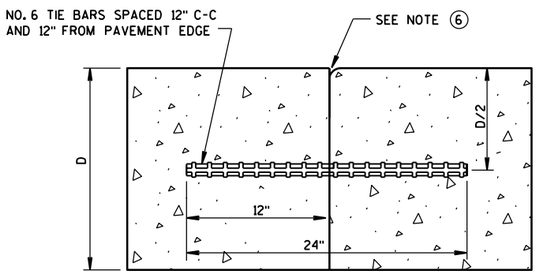
SEE NOTE (2)



DOWELED TRANSVERSE

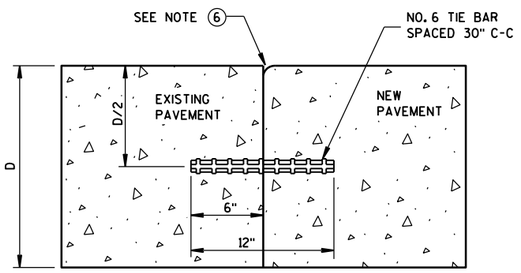


TIED LONGITUDINAL



TIED TRANSVERSE

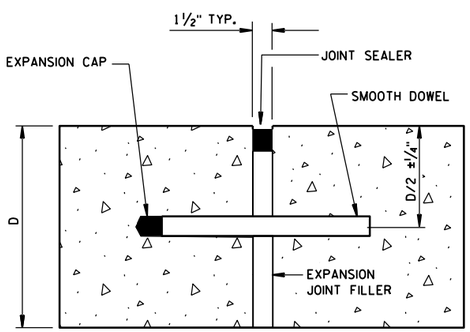
(FOR USE ON NON-DOWELED PAVEMENTS ONLY)



TIED LONGITUDINAL TO EXISTING

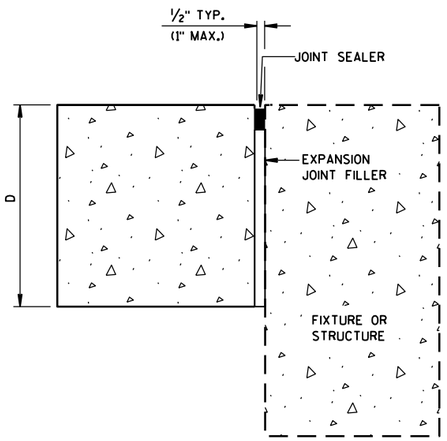
CONSTRUCTION JOINTS

SEE NOTE (5)



DOWELED-TRANSVERSE

SEE NOTE (1)



UNTIED-LONGITUDINAL

EXPANSION JOINTS

CONCRETE PAVEMENT
JOINT TYPES

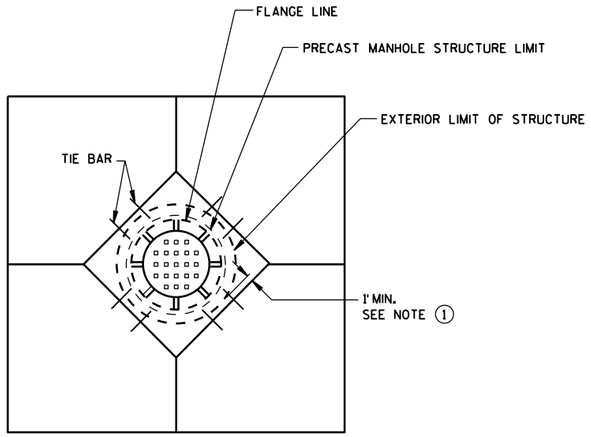
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

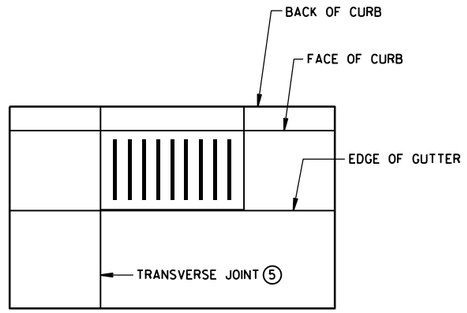
S.D.D. 13 C 18-2c

6

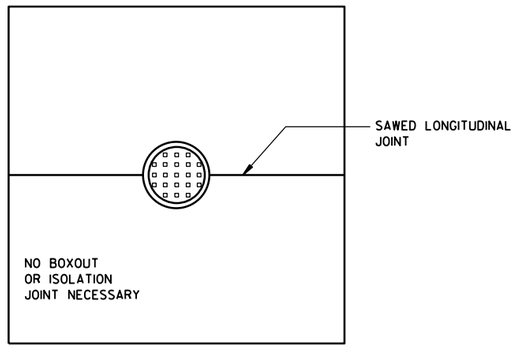
S.D.D. 13 C 18-2c



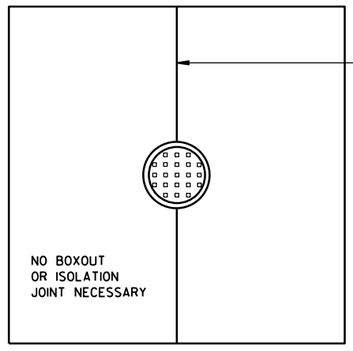
DIAGONAL MANHOLE BOXOUT FOR CONSTRUCTION JOINTS



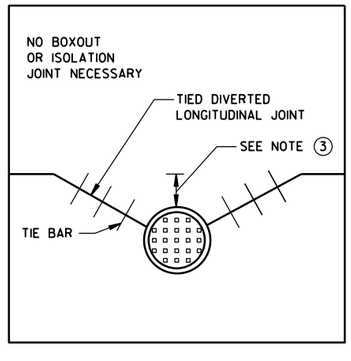
INLET WITH TRANSVERSE JOINT



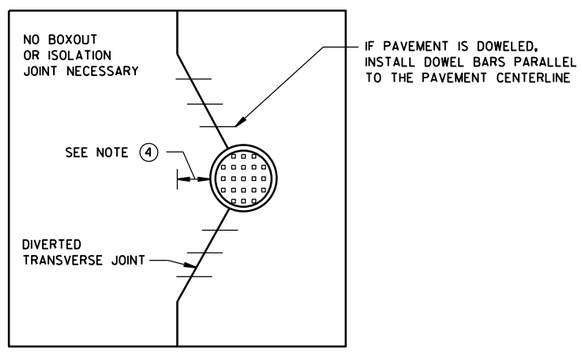
MANHOLE WITH LONGITUDINAL JOINT



MANHOLE WITH TRANSVERSE JOINT



MANHOLE WITH DIVERTED LONGITUDINAL CONTRACTION 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 2 FEET OR LESS, DIVERT THE LONGITUDIAL JOINT AT A 2:1 TAPER RATE TO THE CENTER OF THE MANHOLE. IF THE DISTANCE IS GREATER THAN 2 FEET, DO NOT DIVERT THE JOINT AND SAW AS NORMAL. PLACE REBAR REINFORCEMENT AROUND THE MANHOLE.

(4) IF DISTANCE FROM THE EDGE OF THE MANHOLE TO THE NEAREST TRANSVERSE JOINT IS 4 FEET OR LESS, REDIRECT JOINT TO INTERSECT THE CENTER OF THE MANHOLE. IF DISTANCE IS GREATER THAN 4 FEET, DO NOT DIVERT THE JOINT AND SAW AS NORMAL. PLACE REBAR REINFORCEMENT AROUND THE MANHOLE.

(5) ALIGN TRANSVERSE JOINT WITH ONE EDGE OF INLET WHEN PRACTICAL.

CONCRETE PAVEMENT JOINTING AT UTILITY FIXTURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

5-3-2013 — DATE

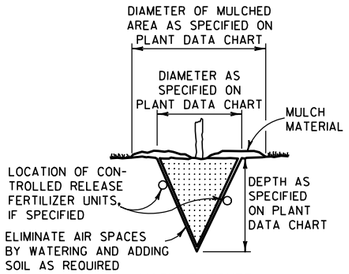
/S/ Deb Bischoff — PAVEMENT POLICY & DE

NEER

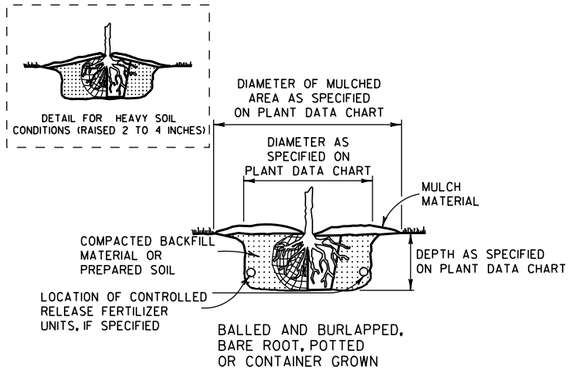
FHWA

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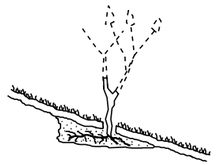
S.D.D. 13 C 18-2d



MACHINE MOVED

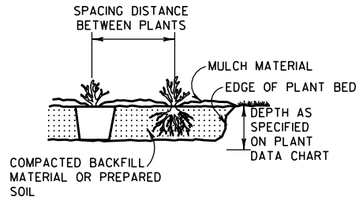


BALLED AND BURLAPPED, BARE ROOT, POTTED OR CONTAINER GROWN

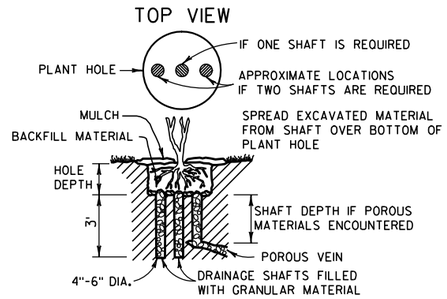


ACCOMMODATE ROOTS (SMOOTH AND STAGHORN SUMAC)

NOTE:
1) ENGINEER SHALL REQUIRE 3 SLITS IN POT TO SPEED DETERIORATION
2) METAL, PLASTIC OR OTHER NONDEGRADABLE POTS SHALL BE REMOVED PRIOR TO PLANTING



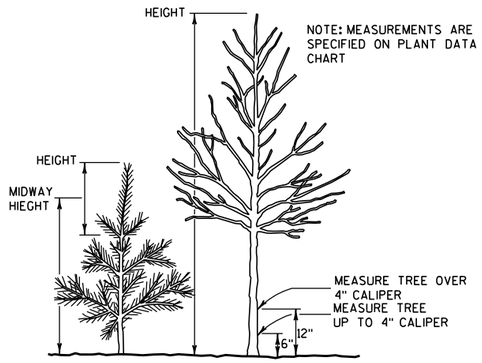
PREPARED BED (BARE ROOT AND POTTED)

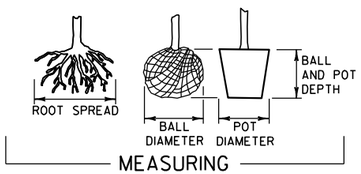


NOTE:
DRAINAGE SHAFT AS SPECIFIED ON PLANT DATA CHART

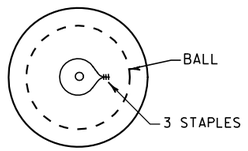
DRAINING

PLANTING

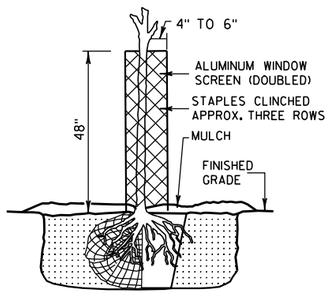




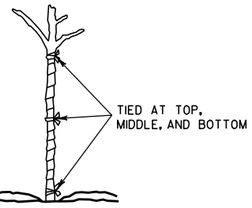
MEASURING



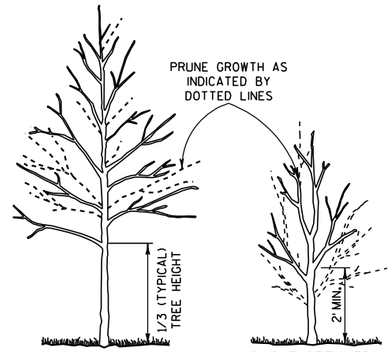
TOP VIEW



RODENT PROTECTION



WRAPPING

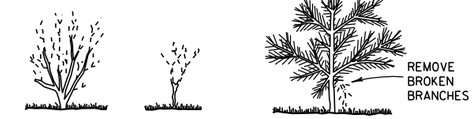


TALL DECIDUOUS TREES (ASH, MAPLE, LINDEN, OAK)

SINGLE STEMMED LOW DECIDUOUS TREES (CRABS AND OTHER SINGLE STEM TYPE)

MULTI-STEMMED LOW DECIDUOUS TREES OR LARGE SHRUBS (HAWTHORN, SERVICEBERRY)

NOTE: WHEN PRUNING, PRESERVE CHARACTER AND SHAPE OF TREE. AVOID LEAVING STUBS - REMOVE BRANCH OR TWIG BACK TO THE NEAREST CROTCH
1) PRUNE TO REMOVE DEAD AND BROKEN BRANCHES
2) PRUNE TO REMOVE BRANCHES THAT TOUCH OR ARE TOO CLOSE TO OTHER BRANCHES

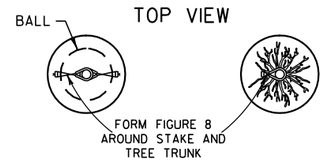


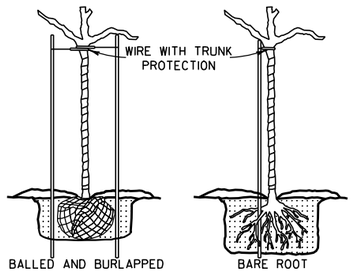
SHRUBS (GRAY DOGWOOD ARROWWOOD VIBURNUM)

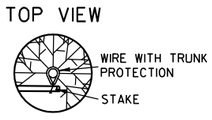
SUMAC

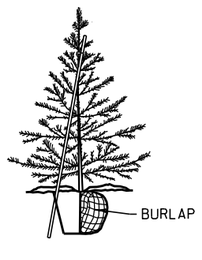
TREE TYPE EVERGREENS (PINE, SPRUCE, FIR) EVERGREENS USUALLY ARE NOT PRUNED

PRUNING



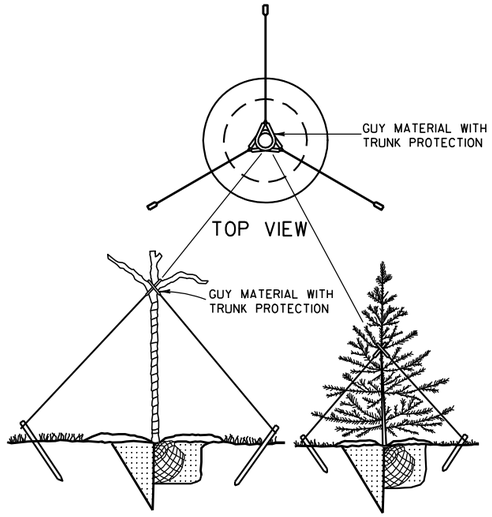




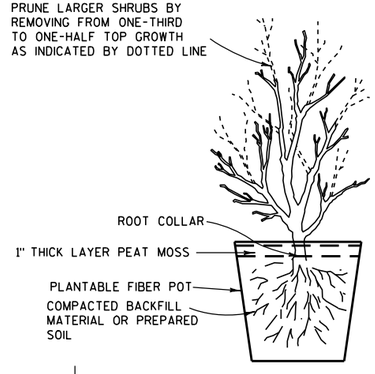


NOTE: BRACING STAKE
1) SHALL BE DRIVEN INTO THE GROUND AS CLOSE TO THE TREE AS POSSIBLE WITHOUT DAMAGING THE BRANCHES.
2) MAY BE DRIVEN AT SUCH AN ANGLE THAT IT DOES NOT PENETRATE THE BALL OR POT.
3) SHALL NOT PROTRUDE ABOVE THE TOP OF THE TREE; AND
4) SHALL HAVE A HOLE NEAR THE TOP TO HOLD THE WIRE IN PLACE.

BRACING



GUYING



POTTING

NOTES

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

BRACING, WRAPPING, GUYING, RODENT PROTECTION, FERTILIZER AND MULCH SHALL BE USED ONLY WHEN SPECIFIED ON THE PLANT DATA CHART (PART OF PLAN) OR SPECIAL PROVISIONS.

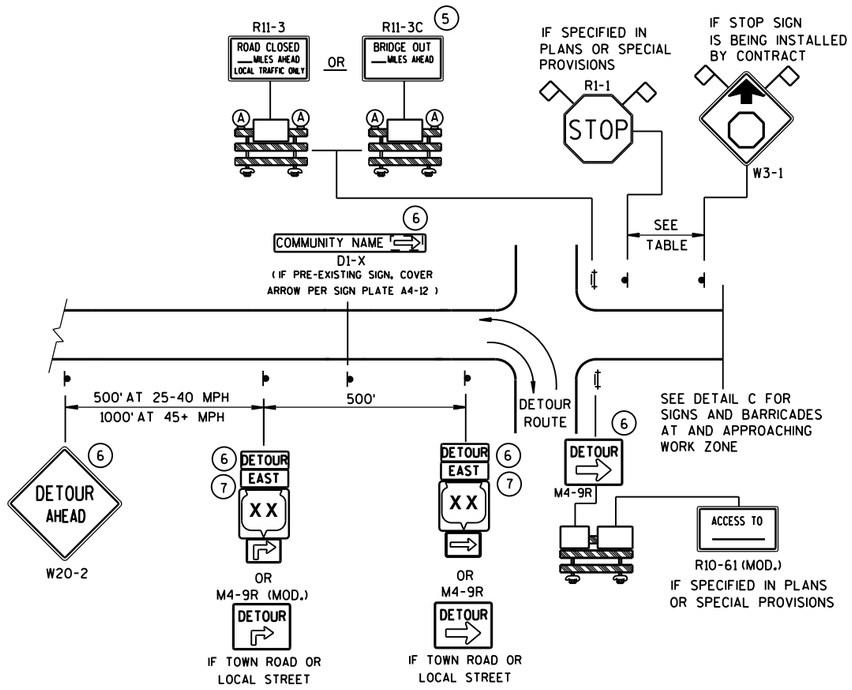
TREE PLANTING DETAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
4/11/94
DATE
/S/ Rory L. Rhinesmith
CHIEF METHODS DEVELOPMENT ENGINEER
FHWA

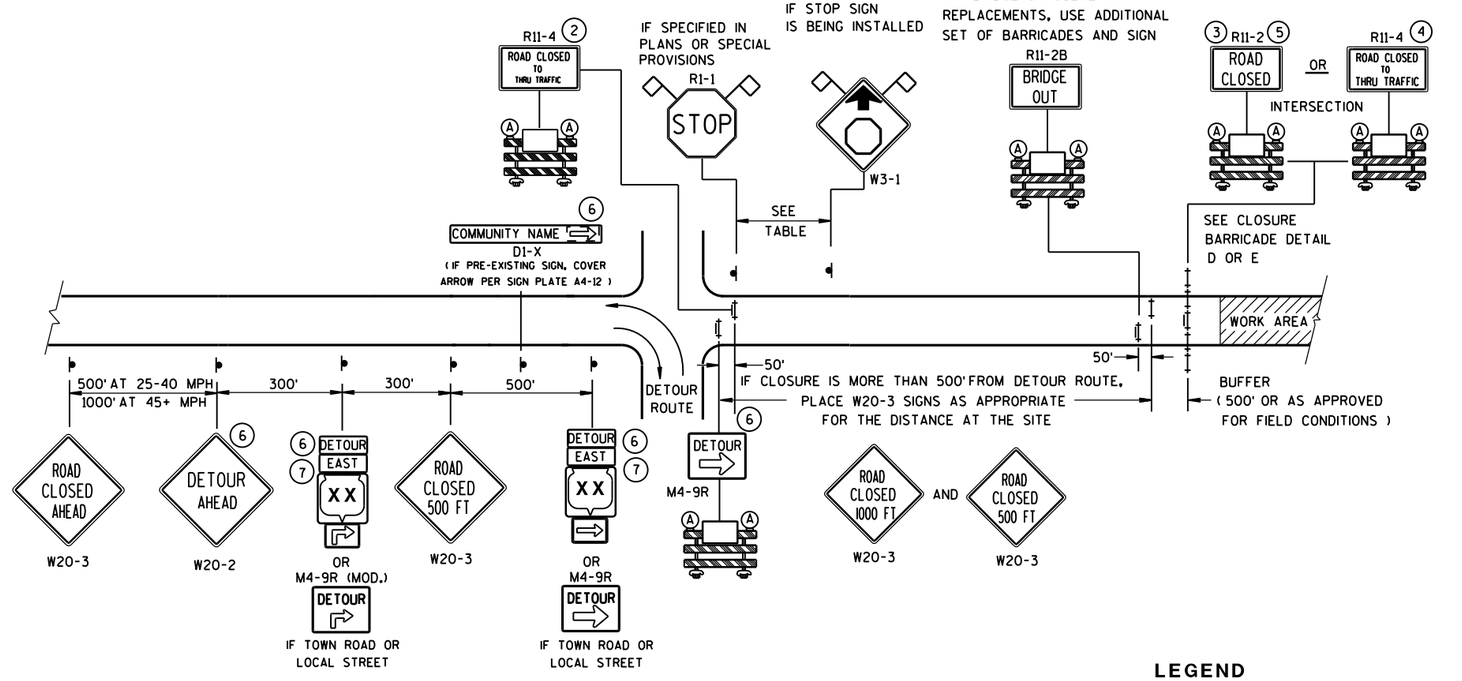
S.D.D. 14 A 2-1

S.D.D. 14 A 2-1



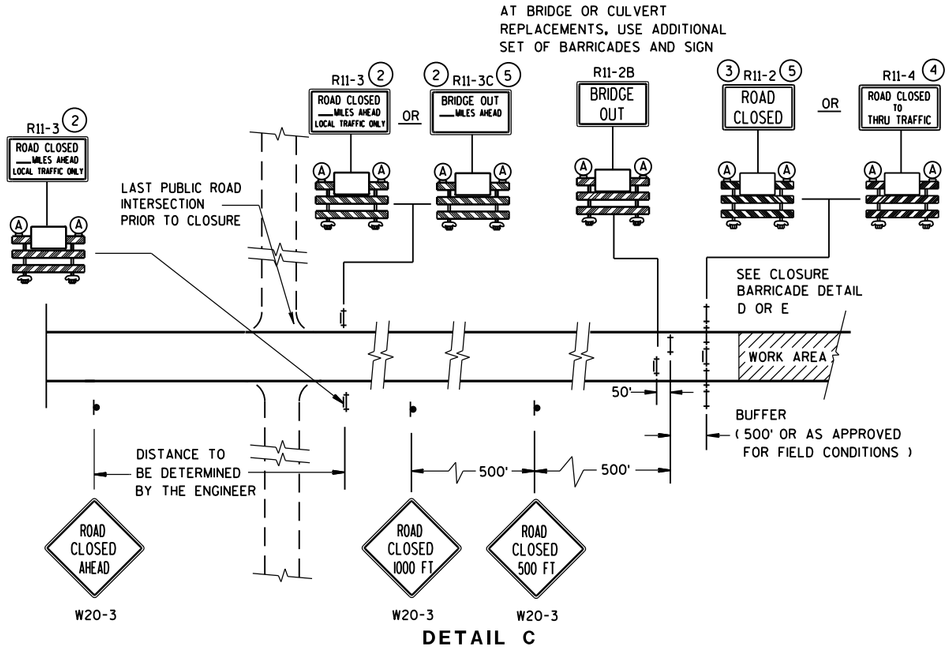
DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE GREATER THAN ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE LESS THAN ½ 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-SHEET "**b**" FOR GENERAL NOTES AND FOOTNOTES ① THROUGH ⑦

LEGEND

- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- (A) TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA
- DETOUR / EAST — M4-8 / M3-X
- XX — M1-4; COUNTY XX — M1-5A; XX — M1-6
- M05-1 OR M06-1
- FLAGS, 16" X 16" MIN., (ORANGE)

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

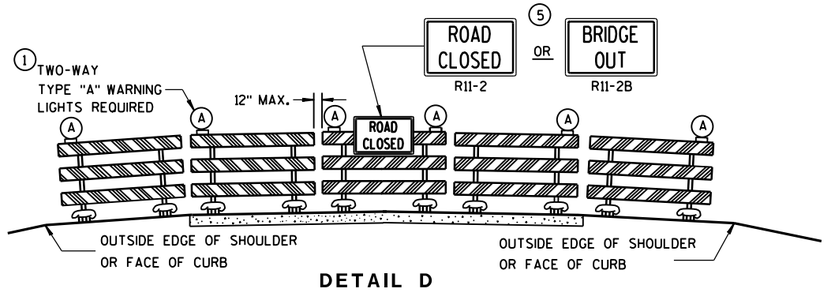
8/2013 DATE

/S/ Travis Feltes
STATE TRAFFIC ENGINEER

FHWA

6

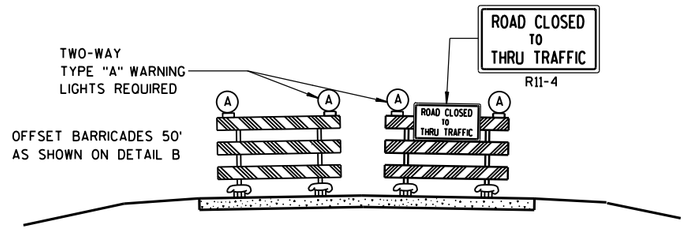
S.D.D. 15 C 2-5a



DETAIL D

ROAD CLOSURE BARRICADE DETAIL

APPROACH VIEW



DETAIL E

LANE CLOSURE BARRICADE DETAIL

APPROACH VIEW

SEE SDD 15C2-SHEET "**a**" 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.

"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 SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS.)
- 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

8/2013 — DATE

/S/ Travis Feltes — STATE TRAFFIC ENGINEER

FHWA

6

S.D.D. 15 C 2-5b

THIS DRAWING PROVIDES GENERAL GUIDANCE ON TYPICAL DETOUR SIGN LAYOUT AND SPACING. SEE PROJECT DETOUR SIGNING SHEETS FOR SPECIFIC DETAILS FOR EACH PROJECT.

GENERAL NOTES

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

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. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. MODIFY EXISTING SIGNS WHERE POSSIBLE.

THE SPACING BETWEEN TRAFFIC CONTROL AND DETOUR SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

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.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

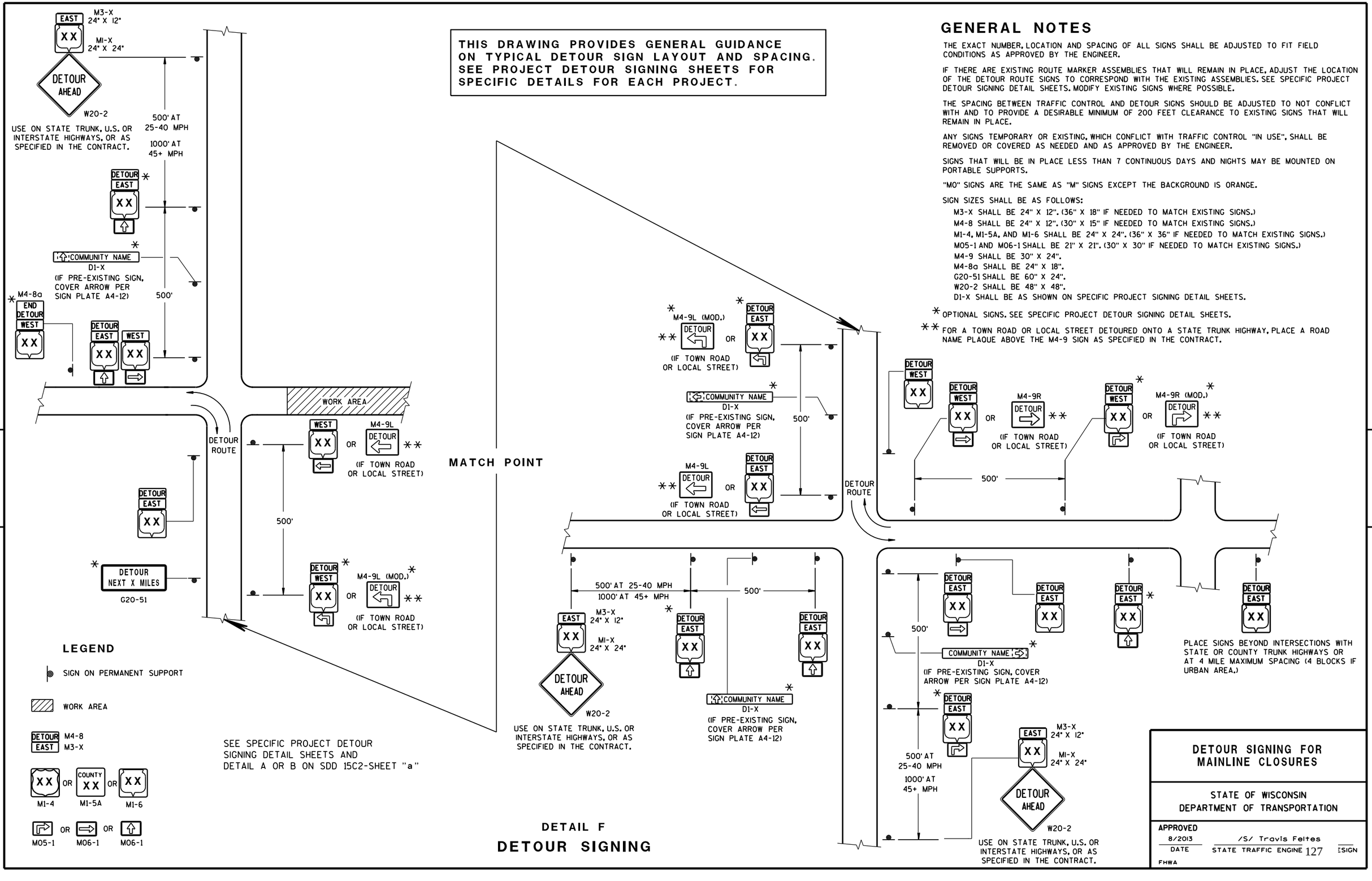
"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

SIGN SIZES SHALL BE AS FOLLOWS:

- M3-X SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS.)
- 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.)
- M4-9 SHALL BE 30" X 24".
- M4-8a SHALL BE 24" X 18".
- G20-51 SHALL BE 60" X 24".
- W20-2 SHALL BE 48" X 48".
- D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.

* OPTIONAL SIGNS. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS.

** FOR A TOWN ROAD OR LOCAL STREET DETOURED ONTO A STATE TRUNK HIGHWAY, PLACE A ROAD NAME PLAQUE ABOVE THE M4-9 SIGN AS SPECIFIED IN THE CONTRACT.



SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS AND DETAIL A OR B ON SDD 15C2-SHEET "a"

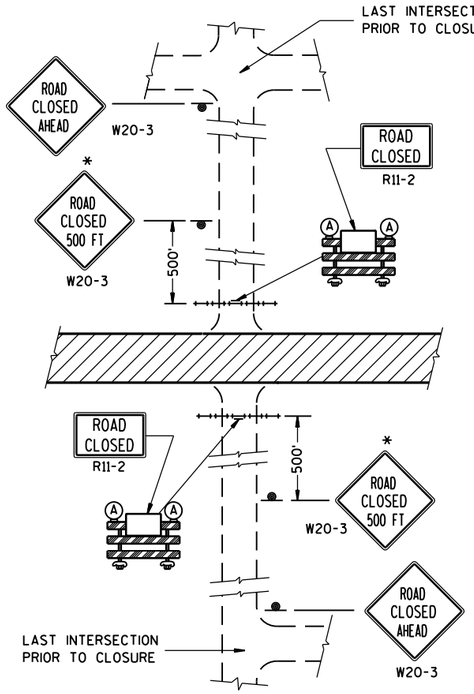
DETAIL F

DETOUR SIGNING

DETOUR SIGNING FOR MAINLINE CLOSURES	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	
8/2013 DATE	/S/ Travis Feltes STATE TRAFFIC ENGINE
FHWA	

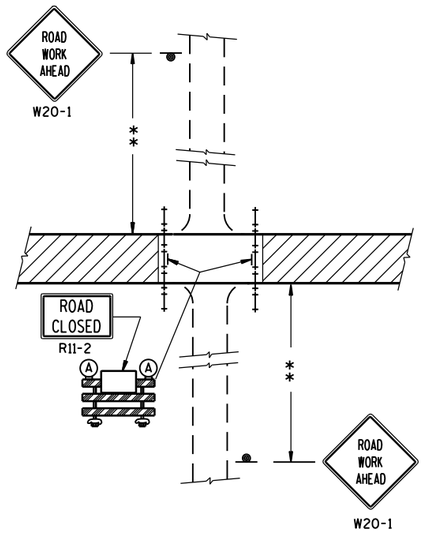
S.D.D. 15 C 2-5c

S.D.D. 15 C 2-5c



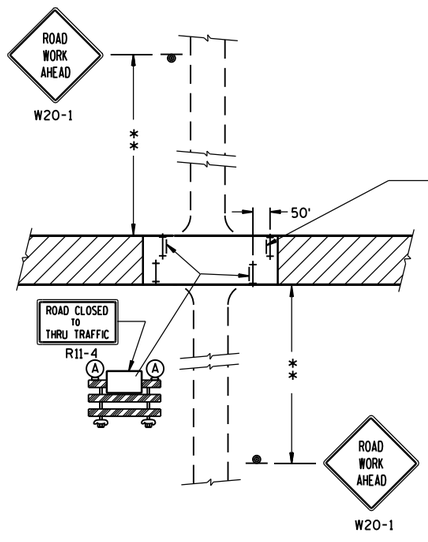
DETAIL 1

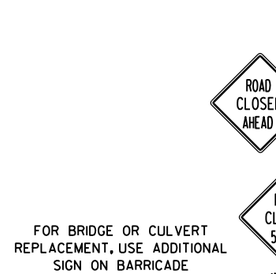
(NO ACCESS TO PROJECT)



DETAIL 2

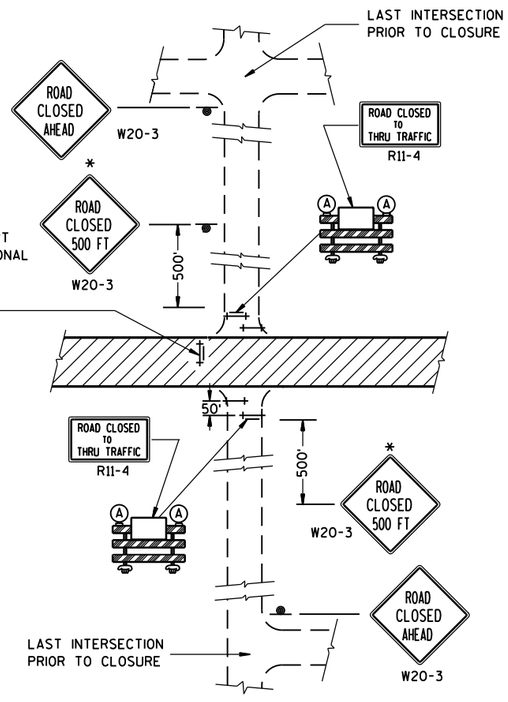
(PUBLIC CROSS-TRAFFIC MAINTAINED. NO ACCESS TO PROJECT).





DETAIL 3

(PUBLIC CROSS-TRAFFIC MAINTAINED. CONTRACTOR, LOCAL BUSINESS AND RESIDENT ACCESS).



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.

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

- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- (A) TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA

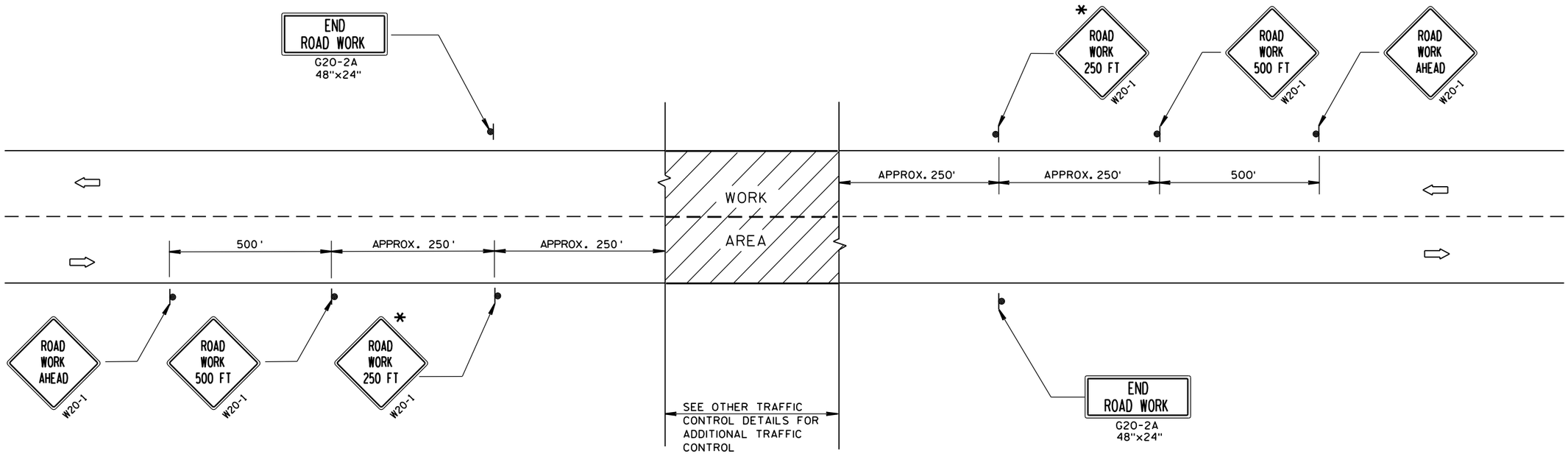
BARRICADES AND SIGNS FOR SIDEROAD CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

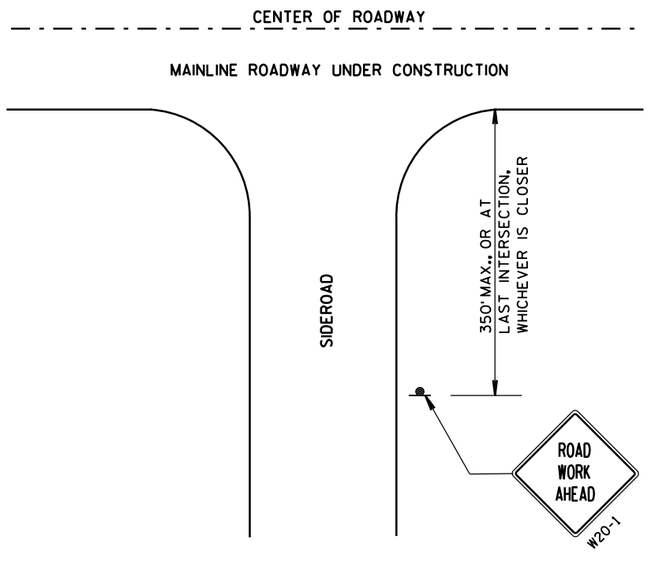
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8/2013 — DATE
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S.D.D. 15 C 3-2



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.

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

- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC
- WORK AREA

TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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SIGN

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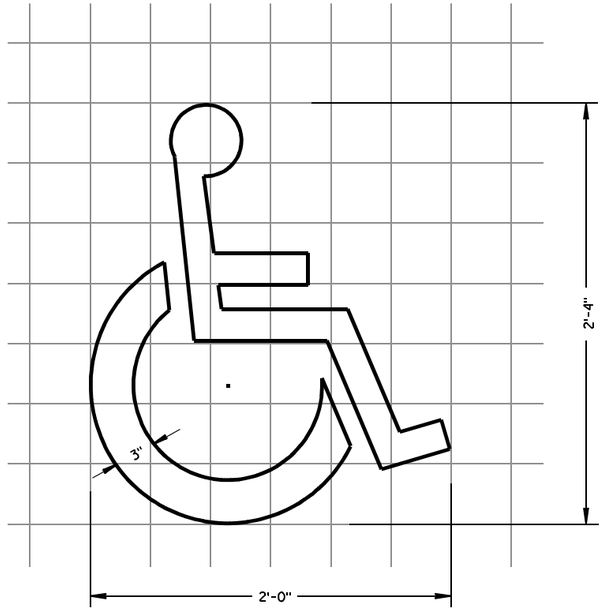
S.D.D. 15 C 5-2

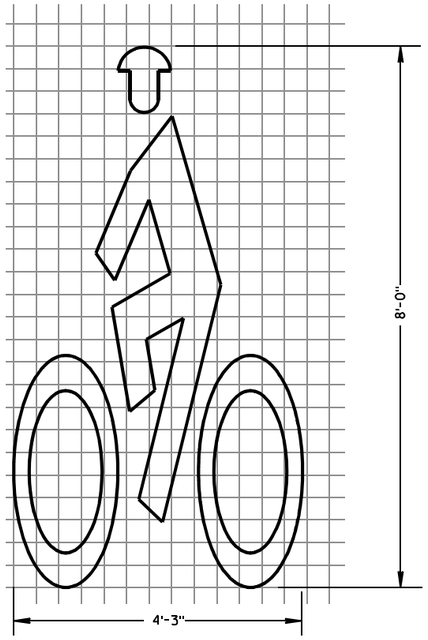
GENERAL NOTES

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.

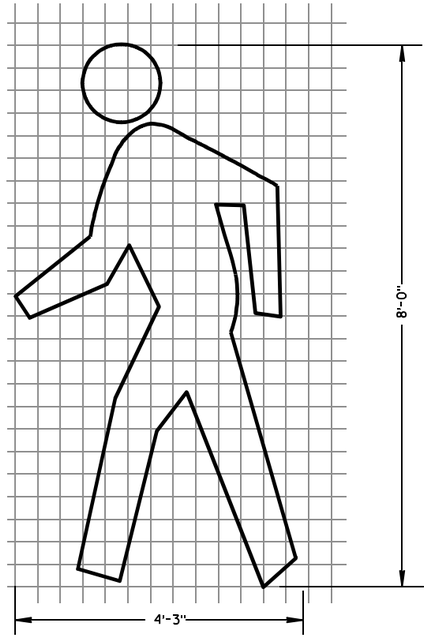
ALL LETTERS, ARROWS AND SYMBOLS SHALL BE IN CONFORMANCE WITH REQUIREMENTS INCLUDED IN "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKING" BOOK BY THE FEDERAL HIGHWAY ADMINISTRATION. ALL LETTERS, ARROWS AND SYMBOLS SHALL BE WHITE AND REFLECTORIZED. SMALL DIFFERENCES IN DIMENSIONS WITHIN THE TOLERANCES OF THAT BOOK ARE ACCEPTABLE.

A DETAILED DRAWING OF THE HANDICAPPED PARKING SYMBOL IS ILLUSTRATED IN THE "STANDARD HIGHWAY SIGNS MANUAL" BY THE FEDERAL HIGHWAY ADMINISTRATION.

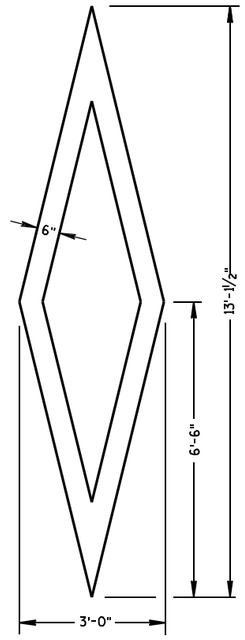




BIKE CROSSING SYMBOL



PEDESTRIAN SYMBOL



PREFERENTIAL LANE SYMBOL

PAVEMENT MARKING SYMBOLS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7/1/11 DATE

/S/ Thomas N Nathan STATE TRAFFIC ENGINEER

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S.D.D. 15 C 7-12a

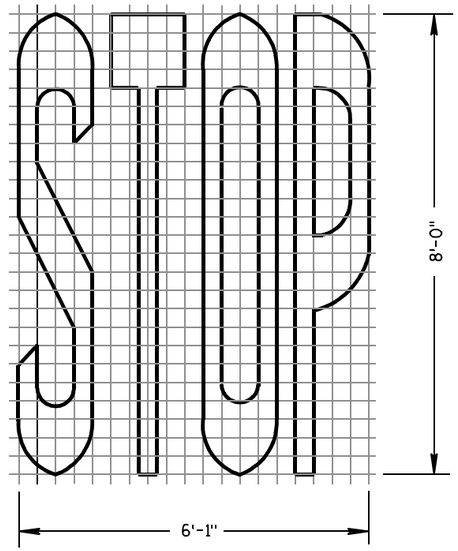
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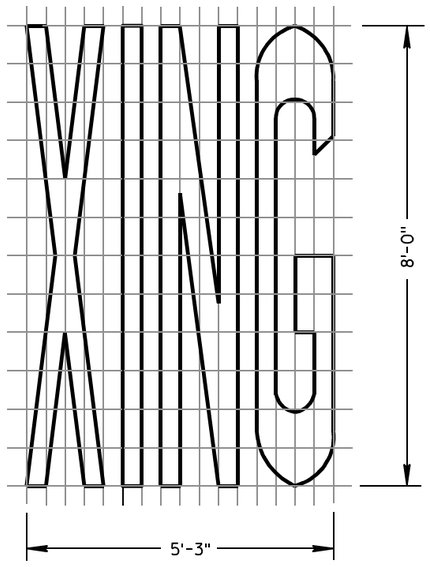
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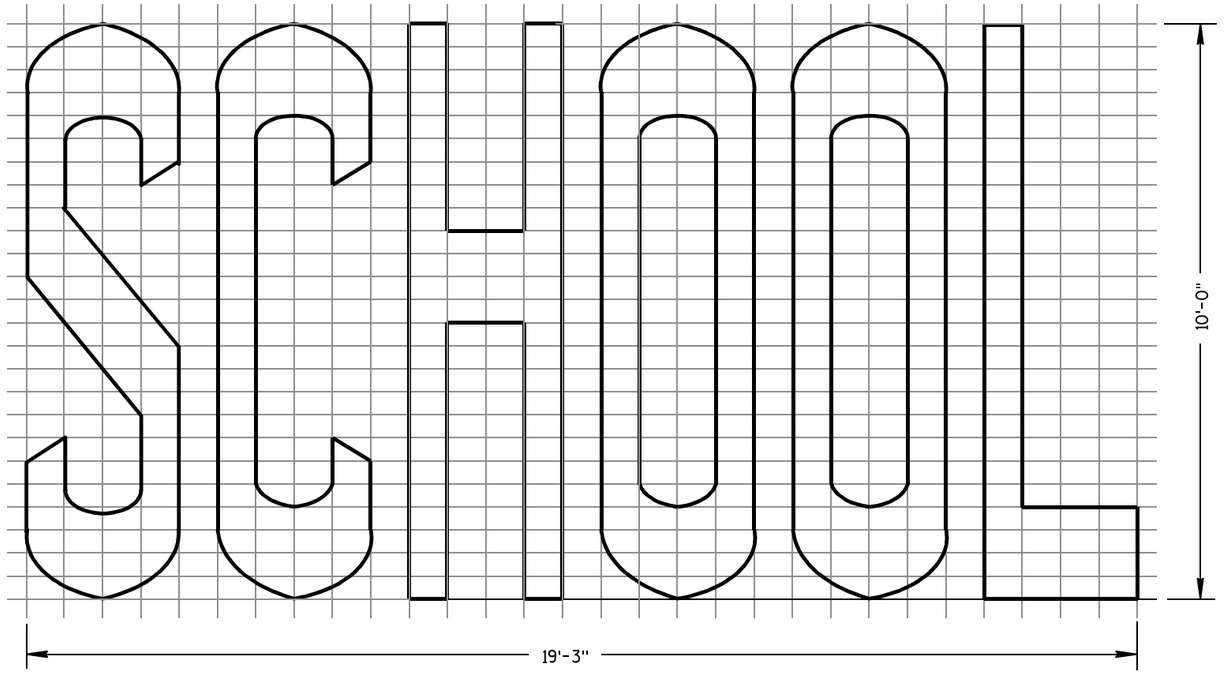
GENERAL NOTES

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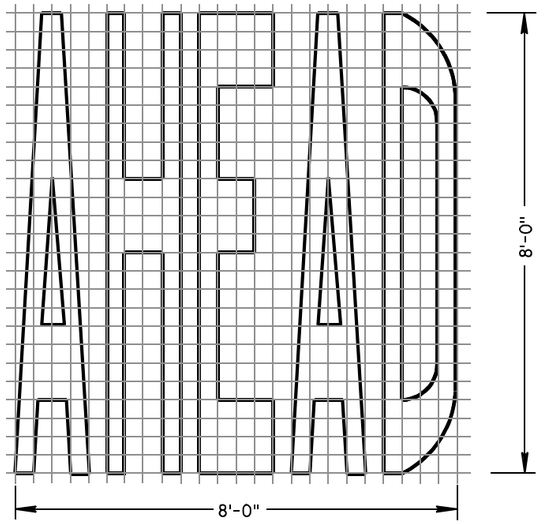
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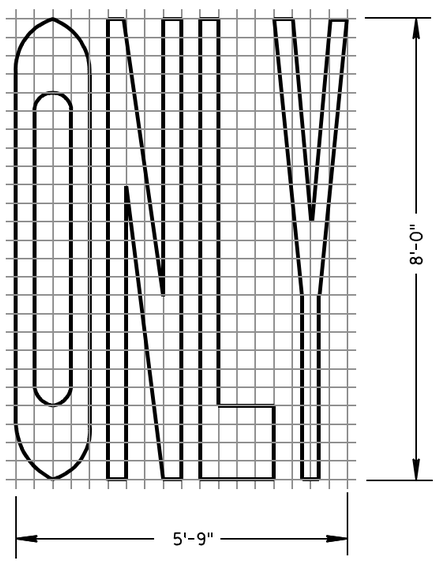


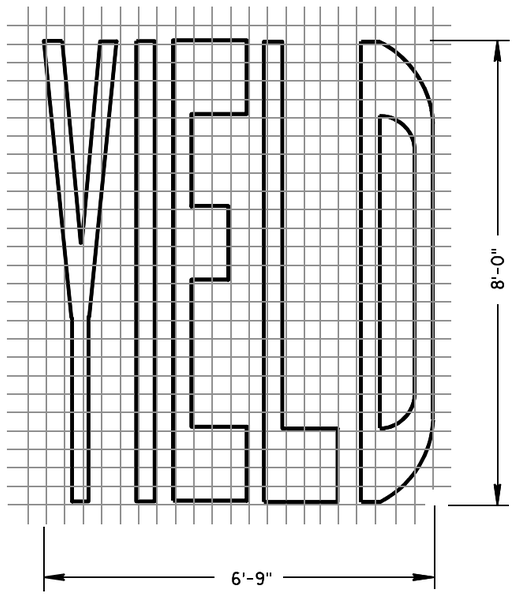


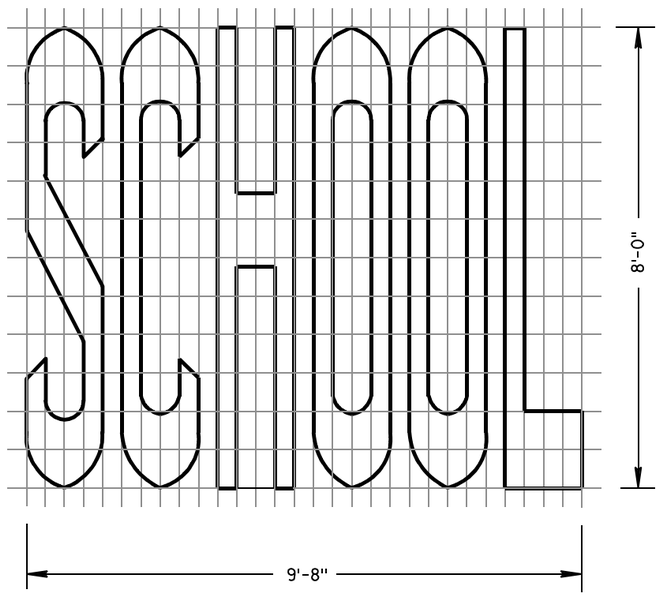


TWO-LANE









SINGLE-LANE

PAVEMENT MARKING WORDS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7-1-11 — DATE

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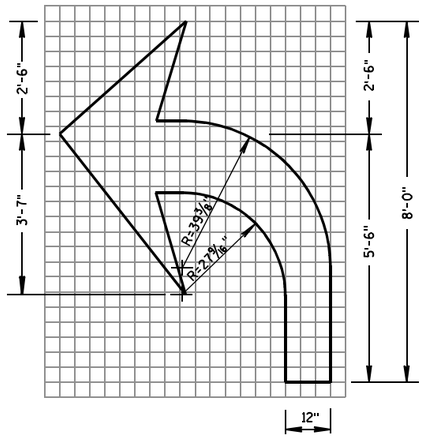
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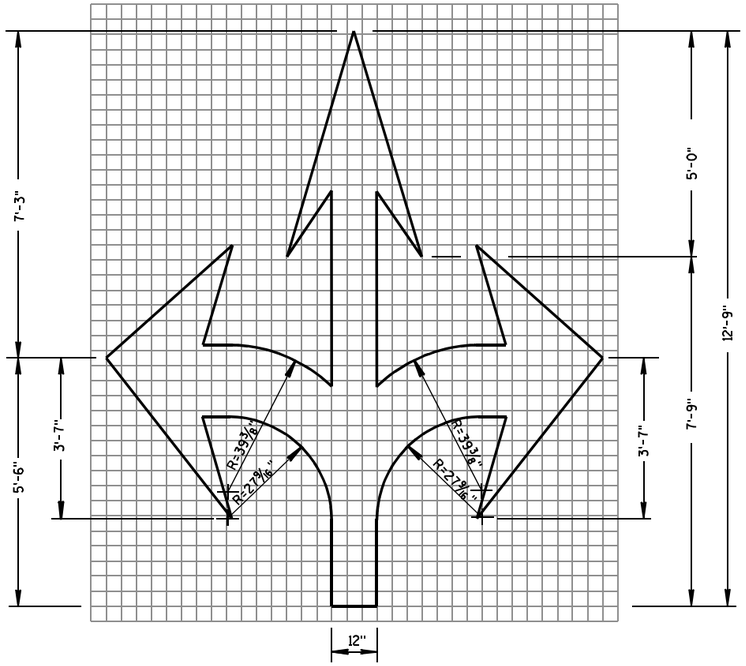
S.D.D. 15 C 7-12b

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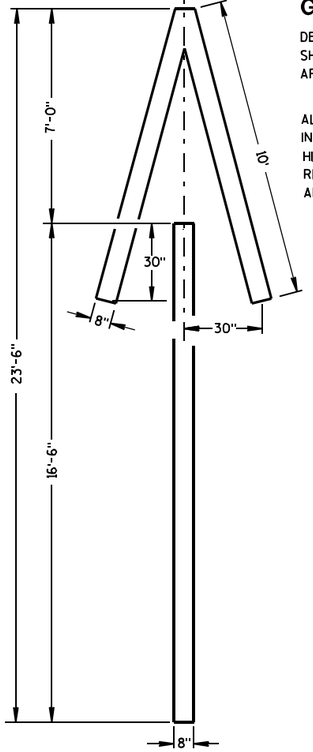
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TYPE 2



TYPE 6

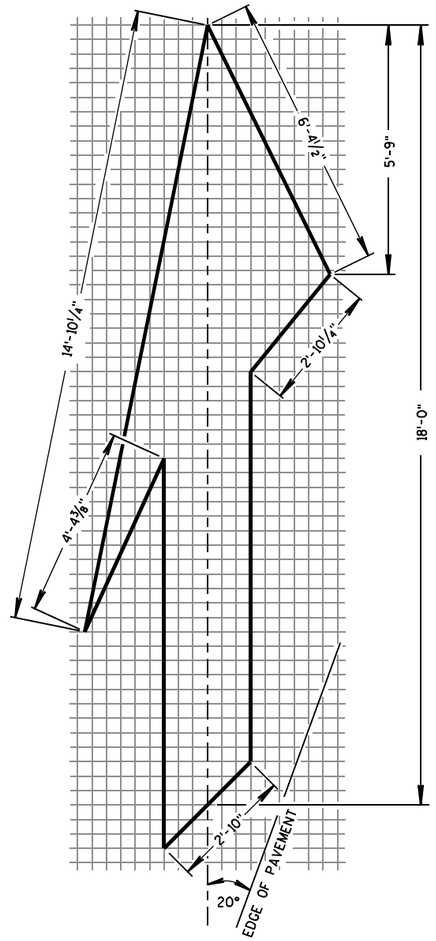


TYPE 4

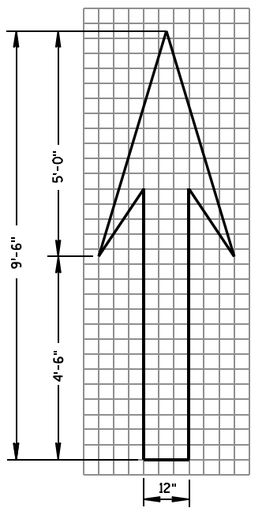
GENERAL NOTES

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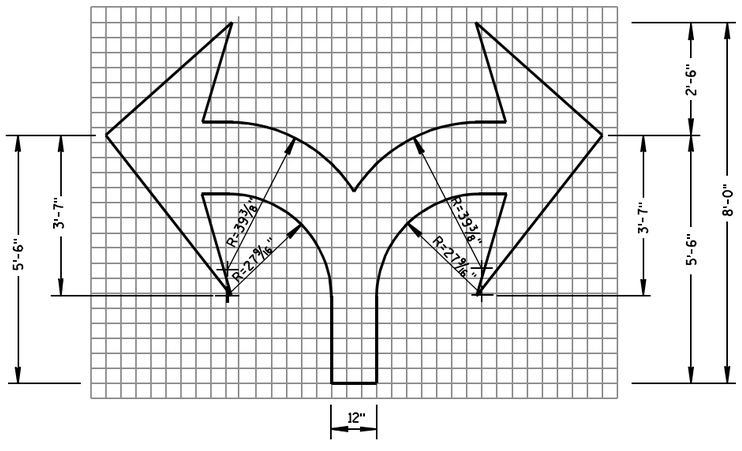
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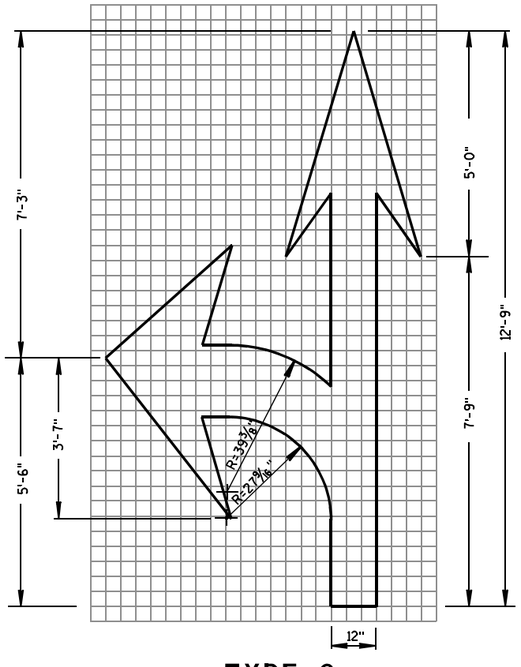
TYPE 5 LANE DROP ARROW



TYPE 1



TYPE 7



TYPE 3

PAVEMENT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7/1/11 — DATE

/S/ Thomas N. Nothdurft — STATE TRAFFIC ENGINEER

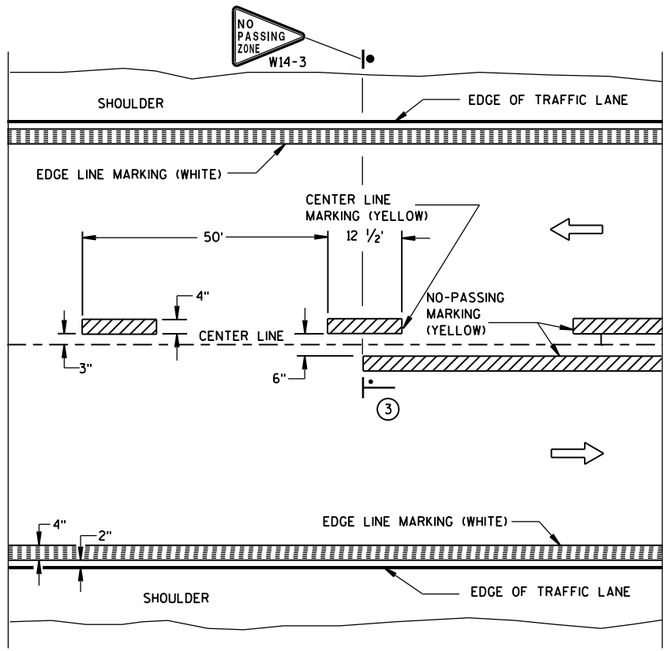
FHWA

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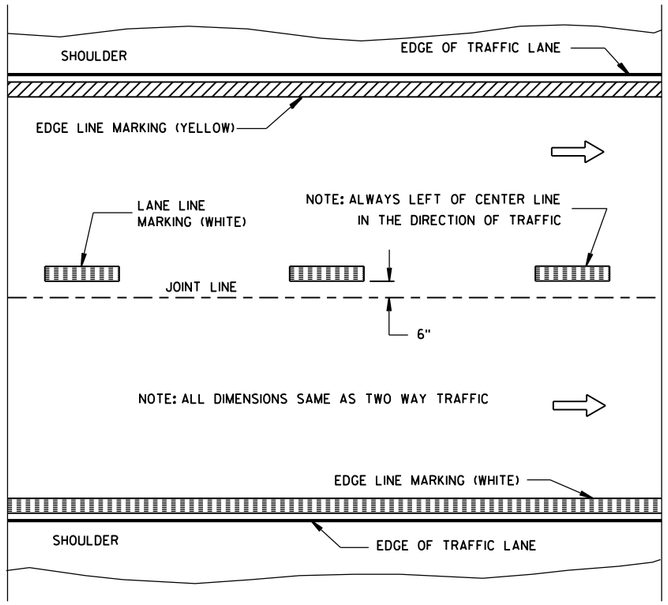
S.D.D. 15 C 7-12c

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S.D.D. 15 C 7-12c

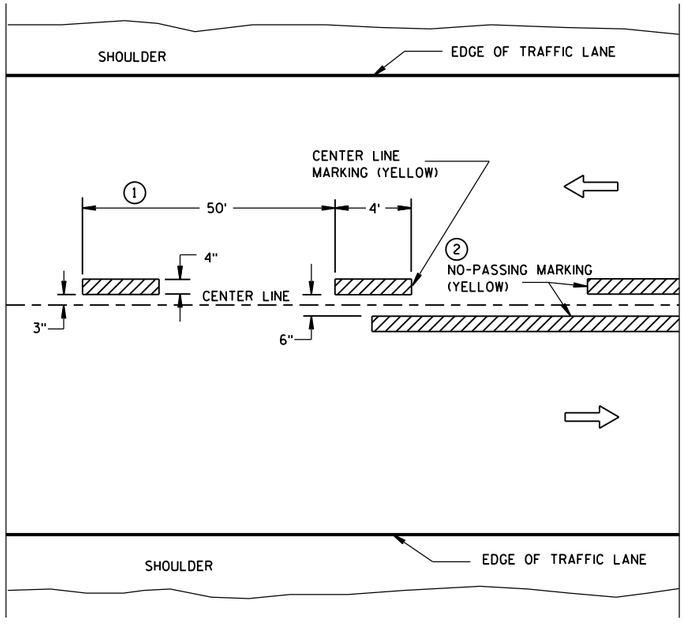


TWO WAY TRAFFIC

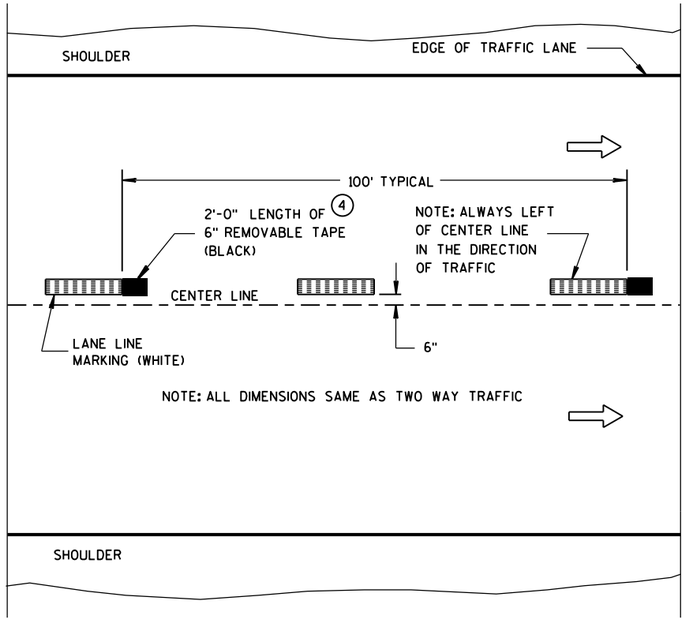


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY (INTERMEDIATE) PAVEMENT MARKING

(SHOWS CYCLE FOR TEMPORARY CENTER LINE OR TEMPORARY LANE LINE MARKING)

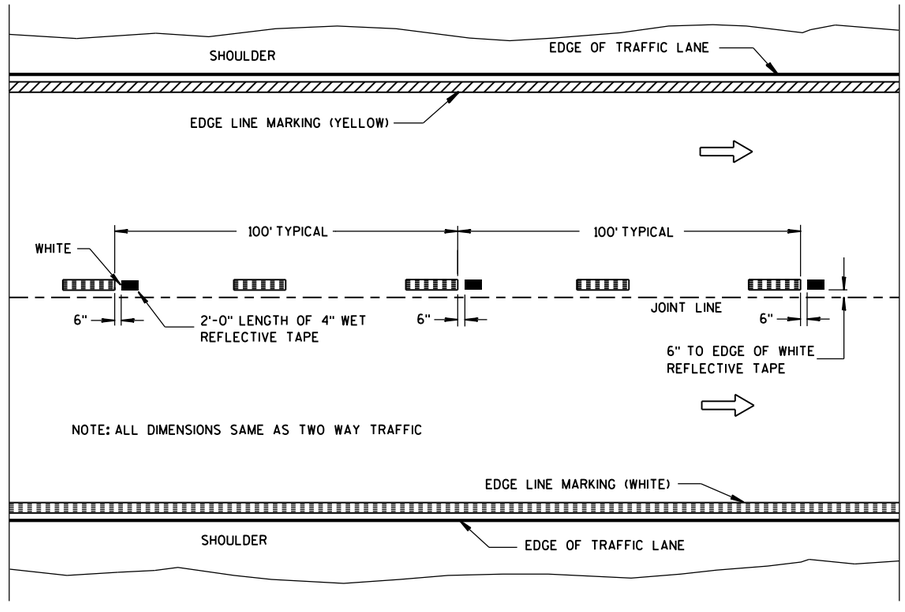
GENERAL NOTES

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.
4. CONCRETE ONLY.

NOTE

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL



WET REFLECTIVE TAPE SUPPLEMENT TO
SPRAYED OR NON WET REFLECTIVE TAPE LANE LINE

LEGEND

"T" MARKING

POST MOUNTED SIGN

PAVEMENT MARKING (MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

5-13-2013 — DATE

/S/ Travis Feltes — STATE TRAFFIC E

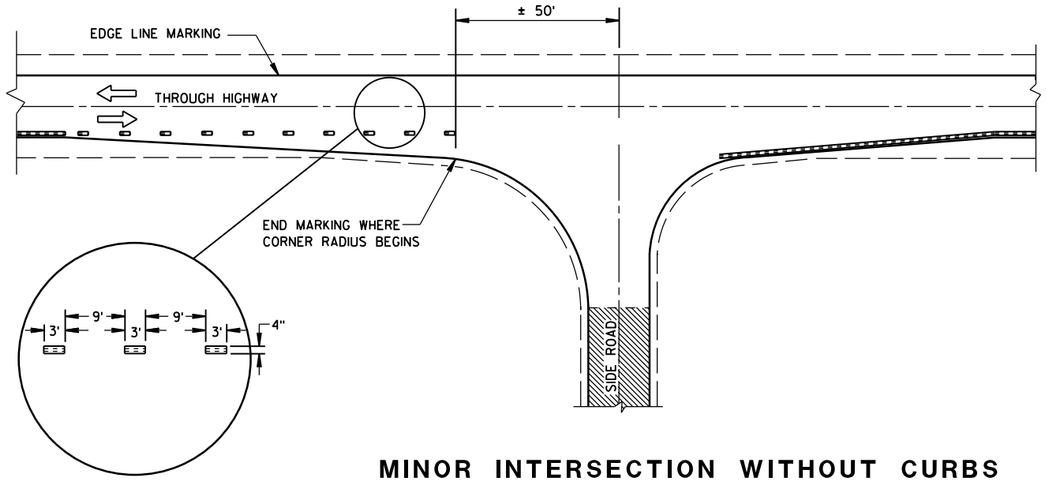
FHWA

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S.D.D. 15 C 8-16a

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S.D.D. 15 C 8-16a



MINOR INTERSECTION WITHOUT CURBS

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.

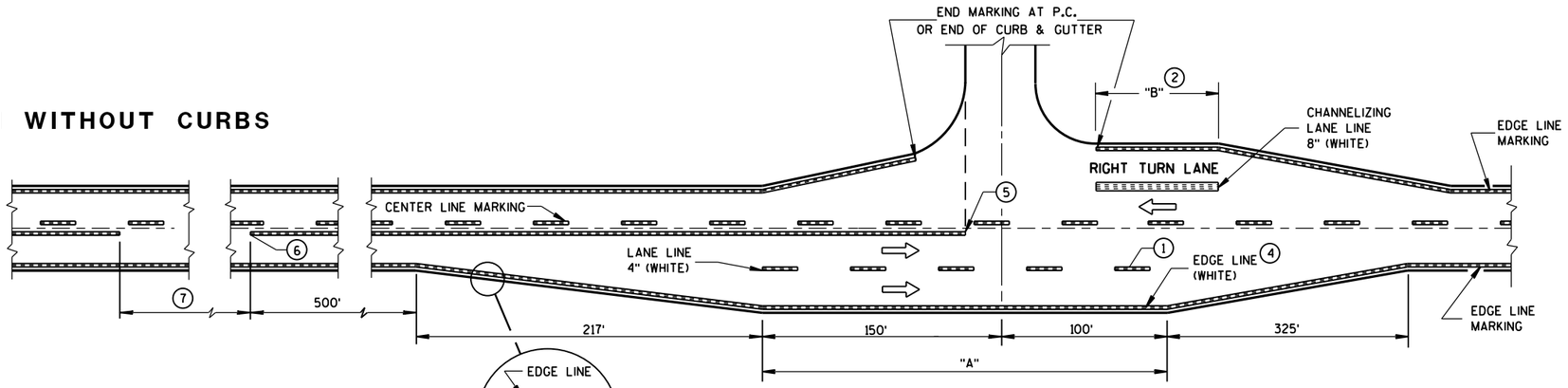
(7) IF THE DISTANCE BETWEEN 2 SUCCESSIVE NO-PASSING ZONES IS LESS THAN THE MINIMUM DISTANCE BETWEEN ZONES, CONNECT THE 2 ZONES.

(8) 3' LINE 9' GAP, EXCEPT RETRACE THE EXISTING LINE - GAP PATTERN WHERE EXISTING MARKINGS ARE IN PLACE.

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL

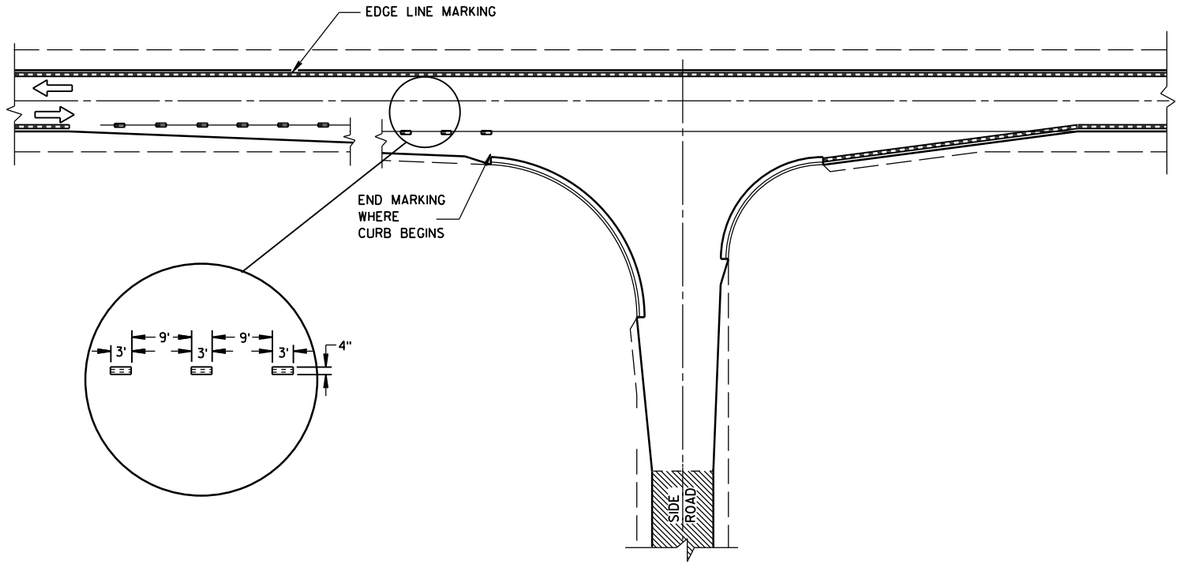
(7)

POSTED SPEED (MPH)	MINIMUM DISTANCE BETWEEN ZONES (FEET)
25 - 30	528
35 - 40	528
45 - 50	686
55	792



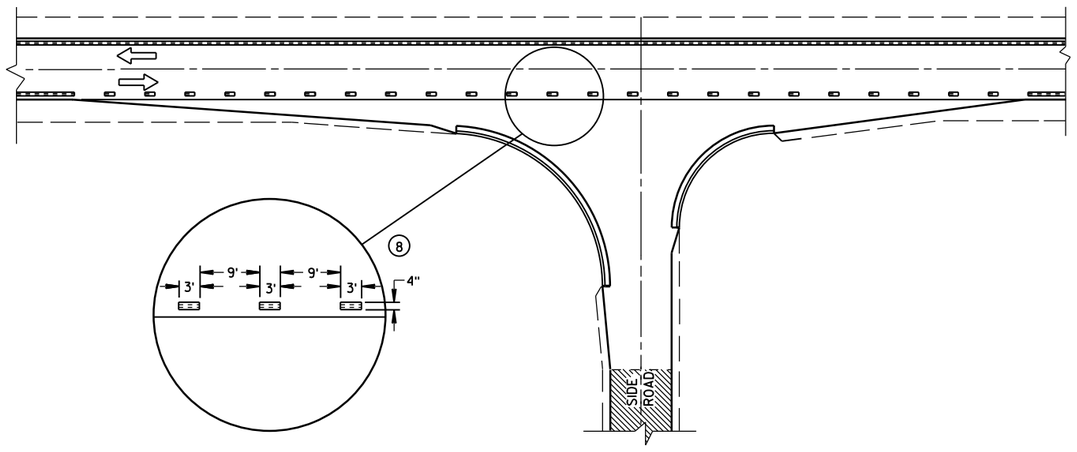
MAJOR INTERSECTIONS

(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANES)



MINOR INTERSECTION WITH CURBS

(TYPICAL MARKING)



MINOR INTERSECTION WITH CURBS

(3) (FOR SPECIAL CONDITIONS AS SPECIFIED)

PAVEMENT MARKING
(INTERSECTIONS)

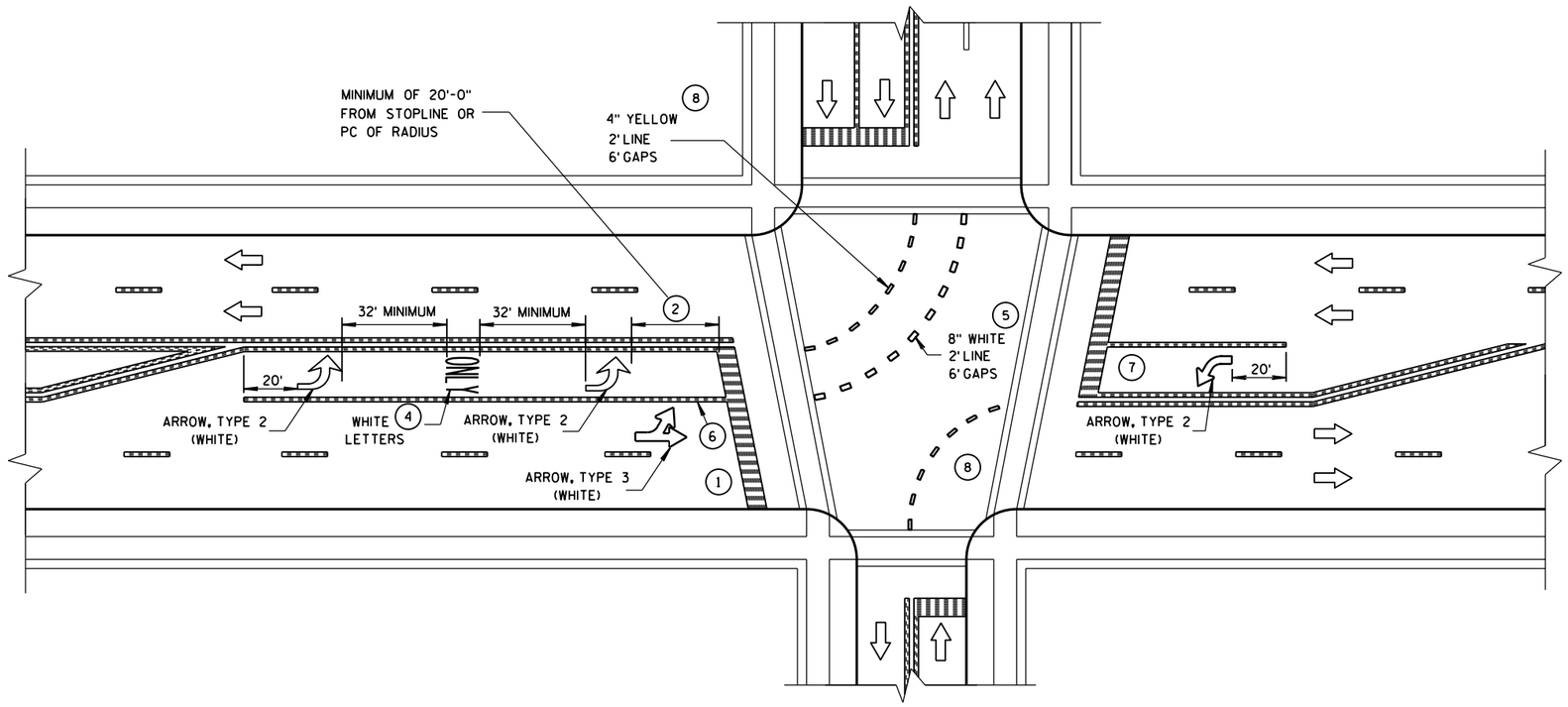
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR 134

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S.D.D. 15 C 8-16b

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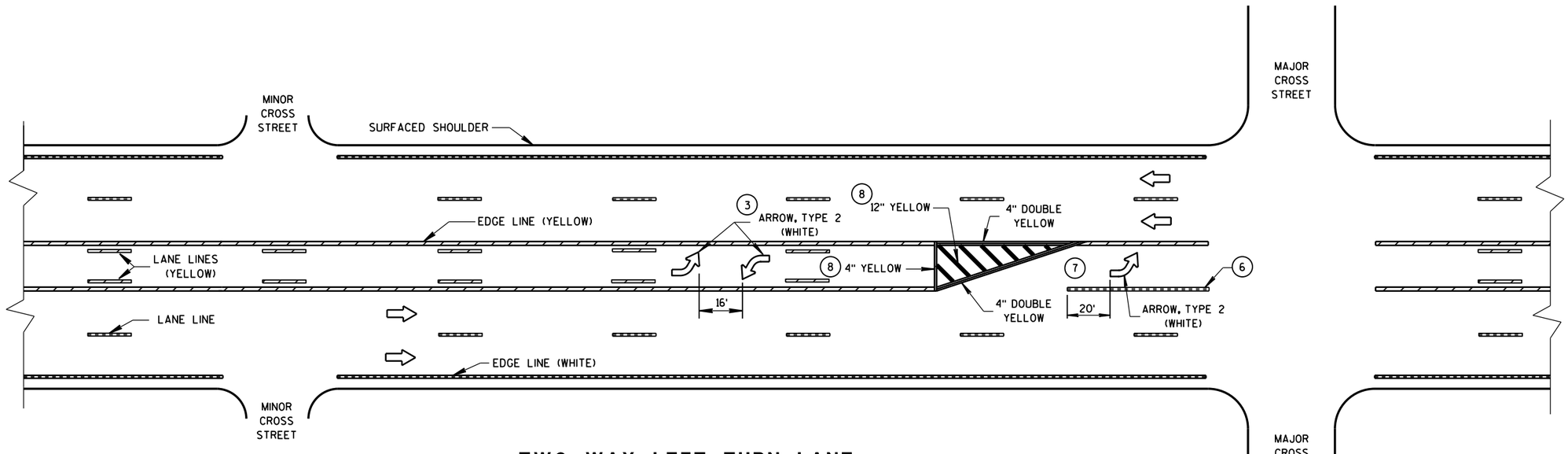
S.D.D. 15 C 8-16b



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 FEET OR NEAR INTERSECTIONS OR DRIVEWAYS WITH TURNING TRAFFIC.
4. ADD EXTRA SETS OF ONE ARROW AND ONE ONLY PER 160 FEET 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 FEET.
8. REQUIRED ONLY WHEN SPECIFIED IN THE CONTRACT.

NOTE:
ARROW SYMBOL (⇨)
SHOWS DIRECTION OF TRAVEL



TWO WAY LEFT TURN LANE

PAVEMENT MARKING (LEFT TURN LANE)

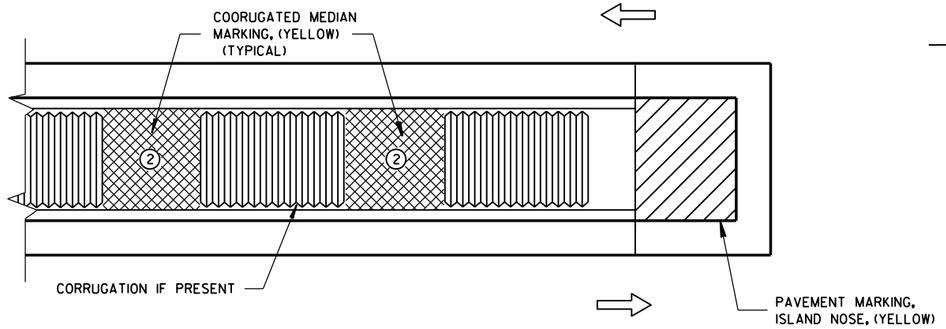
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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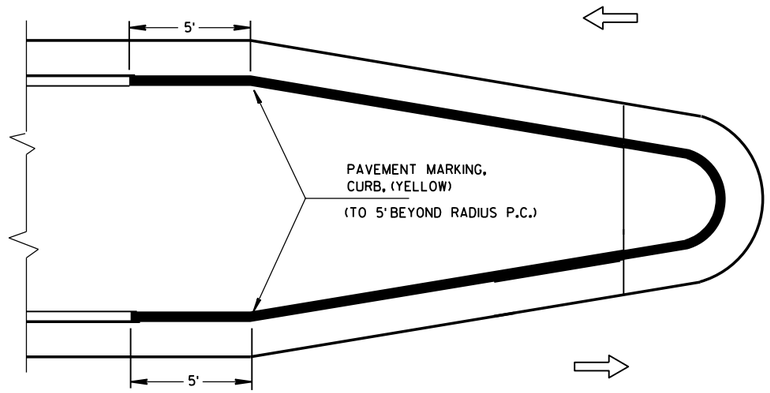
S.D.D. 15 C 8-16e

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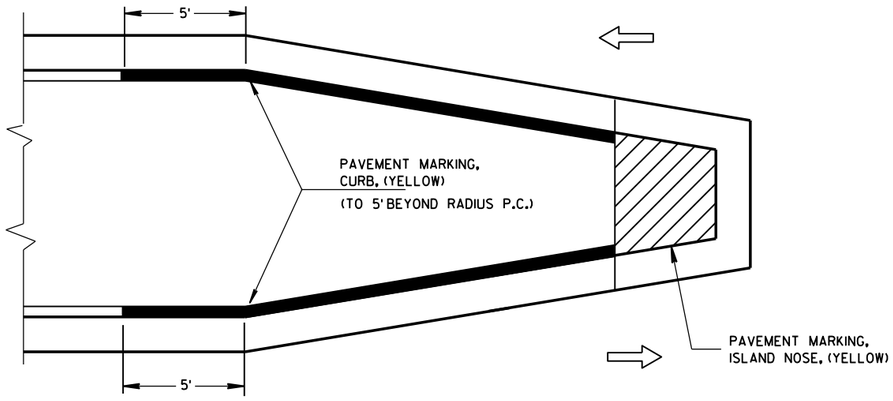
S.D.D. 15 C 8-16e



MEDIAN ISLAND WITH SQUARE BLUNT NOSE

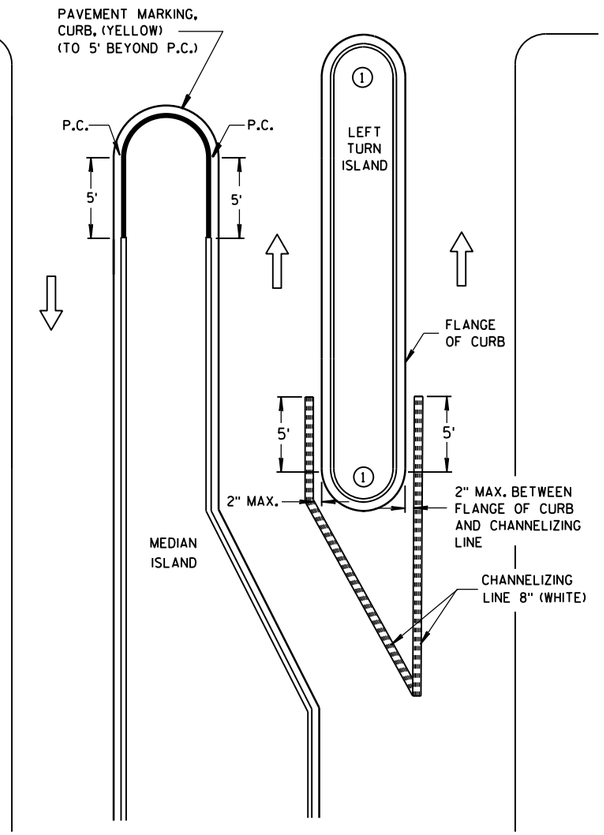


MEDIAN ISLAND WITH ROUND BLUNT NOSE



MEDIAN ISLAND WITH SLOPED NOSE

TYPICAL PLACEMENT OF PAVEMENT MARKING ON MEDIAN ISLANDS

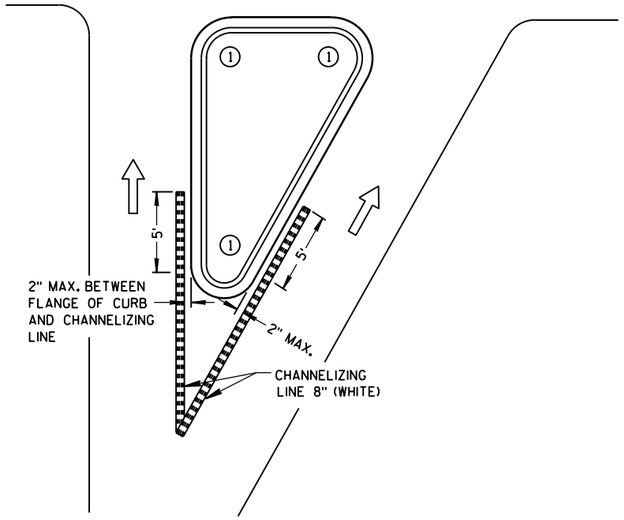


LEFT TURN & MEDIAN ISLAND

GENERAL NOTES

1. DO NOT MARK CURB NOSES THAT SEPARATE LANES OF TRAFFIC TRAVELING IN THE SAME DIRECTION.

2. 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 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 MARKING
- CORRUGATED MEDIAN MARKING
- DIRECTION OF TRAVEL

PAVEMENT MARKING
(ISLANDS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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S.D.D. 15 C 8-16f

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S.D.D. 15 C 8-16f

LEGEND

SIGN ON PORTABLE OR PERMANENT SUPPORT

DIRECTION OF TRAFFIC

WORK AREA

FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF

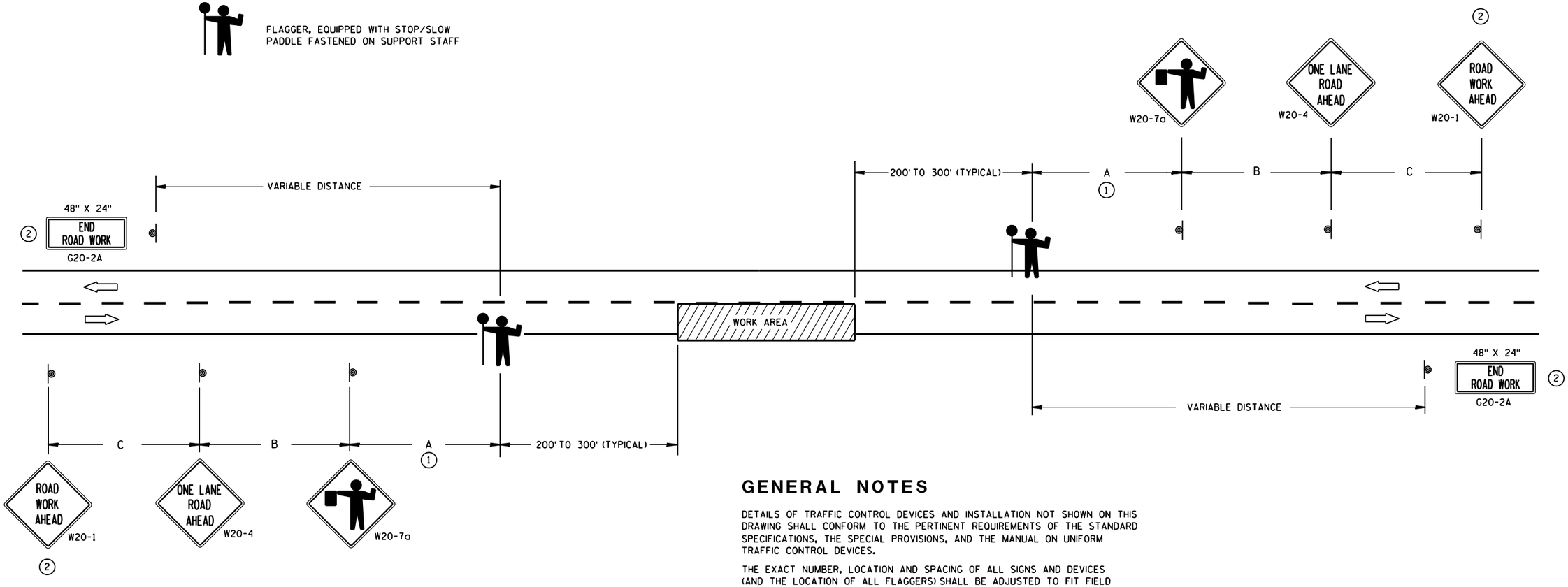
SIGN SPACING TABLE

SPEED LIMIT	SIGN SPACING A,B,C
25-35 MPH	200'
35-40 MPH	350'
45-55 MPH	500'



W3-4

USE OF THE "BE PREPARED TO STOP" SIGN IS OPTIONAL. WHEN USED, THIS SIGN SHALL BE LOCATED BETWEEN THE W20-7a AND W20-4 SIGNS. A 500' TYPICAL SPACING SHALL BE PROVIDED BETWEEN THE SIGNS.



(1) FOR A MOVING WORK OPERATION,
SIGNING FOR BOTH DIRECTIONS SHALL BE REESTABLISHED (AS SIMULTANEOUSLY AS PRACTICAL) AT APPROXIMATELY 3500 FOOT INTERVALS IN THE MOVING WORK OPERATION OR AS APPROVED BY THE ENGINEER.

(2) SIGN NOT REQUIRED IF FLAGGING OPERATION OCCURS WITHIN A SIGNED ROAD WORK ZONE AREA.

GENERAL NOTES

DETAILS OF TRAFFIC CONTROL DEVICES AND INSTALLATION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES (AND THE LOCATION OF ALL FLAGGERS) SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE FIRST ADVANCE WARNING SIGN SHOULD TYPICALLY BE LOCATED IN ADVANCE OF THE ANTICIPATED TRAFFIC BACKUP OR QUEUE.

WHEN A SIDE ROAD OR RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS APPROVED BY THE ENGINEER.

FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT, COVER OR REMOVE ALL TEMPORARY TRAFFIC CONTROL SIGNS.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

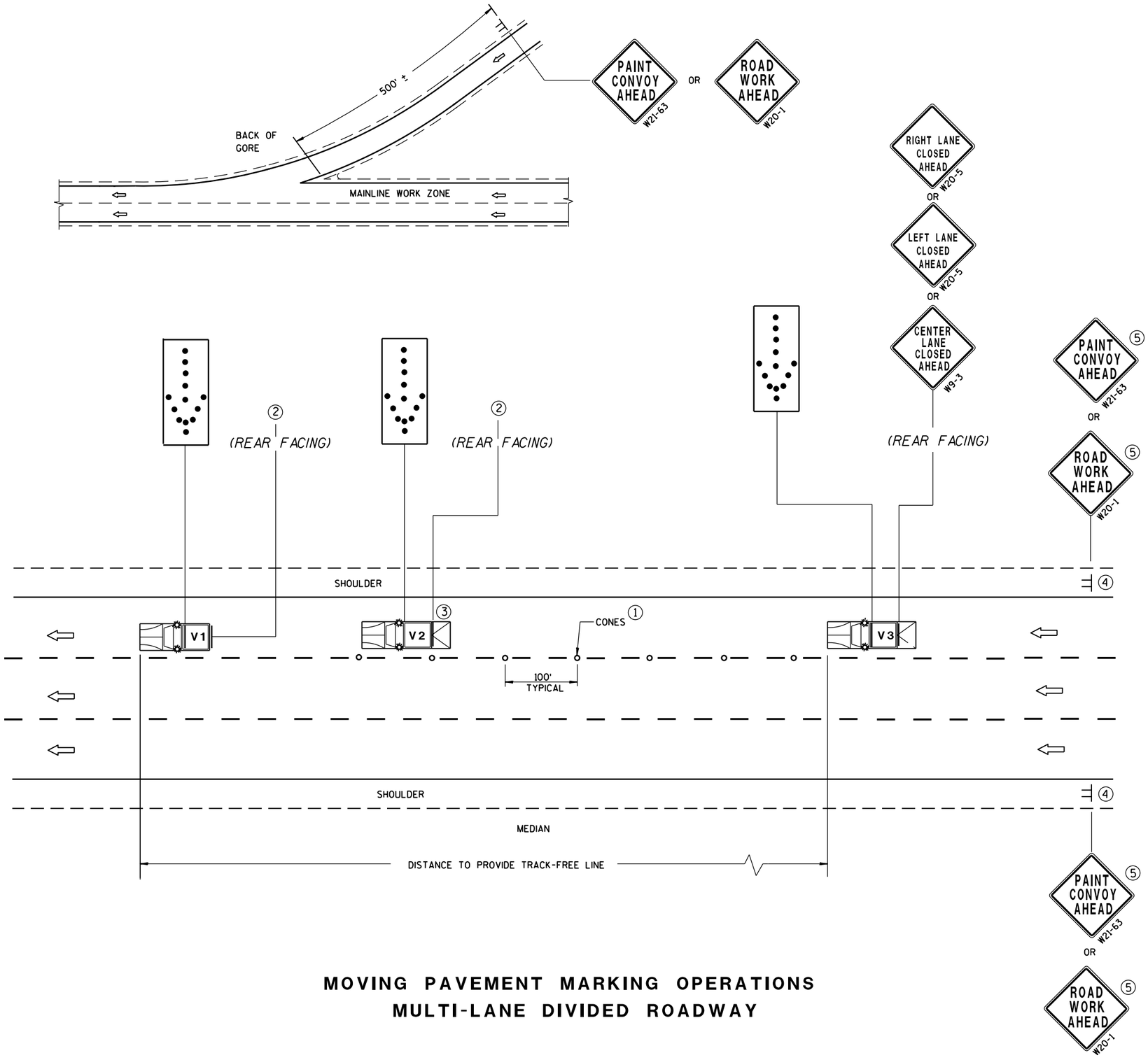
APPROVED
8/2013 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

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S.D.D. 15 C 12-4

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S.D.D. 15 C 12-4



MOVING PAVEMENT MARKING OPERATIONS
MULTI-LANE DIVIDED ROADWAY

GENERAL NOTES

ALL VEHICLES SHALL BE EQUIPPED WITH TWO 360 DEGREE HIGH INTENSITY YELLOW FLASHING LIGHTS OR STROBE LIGHTS AND OPERATED WITH HEADLIGHTS TURNED ON.

ALL VEHICLES SHALL BE EQUIPPED WITH REAR FACING TYPE B OR C FLASHING ARROW PANEL. SIGNS PLACED ON VEHICLES MUST NOT OBSCURE THE ARROW PANEL.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE SPECIFIED.

IF SPEED LIMIT IS 40 MPH OR LESS STATIONARY SIGNS MAY BE OMITTED IF CONES ARE USED.

ALTERNATE SIGN MESSAGES, SUCH AS "PAINT CREW AHEAD" OR "ROAD PAINTING AHEAD" MAY BE USED.

DISTANCE BETWEEN VEHICLES MAY VARY ACCORDING TO TERRAIN, SIGHT DISTANCE, PAINT DRYING TIME, AND OTHER FACTORS. WHENEVER ADEQUATE STOPPING SIGHT DISTANCE EXISTS TO THE REAR, SHADOW VEHICLES SHOULD MAINTAIN THE MINIMUM DISTANCE FROM THE WORK VEHICLE AND PROCEED AT THE SAME SPEED AS THE WORK VEHICLE. SHADOW VEHICLES SHOULD SLOW DOWN IN ADVANCE OF VERTICAL OR HORIZONTAL CURVES THAT RESTRICT SIGHT DISTANCE.

WHEN WORK ACTIVITY BLOCKS THE LEFT LANE, REVERSE TRAFFIC CONTROL.

WHEN A RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, PROVIDE ADDITIONAL TRAFFIC CONTROLS AS SPECIFIED IN THE CONTRACT OR AS APPROVED BY THE ENGINEER.

USE AN ATTENUATOR ON THE REARMOST VEHICLE THAT BLOCKS ALL OR PART OF THE TRAFFIC LANE.

FOR EDGELINE MARKING OR IF CONES ARE NOT USED, POSITION THE REARMOST SHADOW VEHICLE ON THE SHOULDER AS SHOWN IN THE MUTCD IF THE SHOULDER HAS ADEQUATE WIDTH. USE DOUBLE ARROWS WHEN CONVOY IS IN CENTER LANE ONLY.

WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR TURN THE STATIONARY WARNING SIGNS AWAY FROM TRAFFIC.

THIS DRAWING SHALL BE USED FOR EDGELINE OR LANELINE MARKING FOR MULTILANE DIVIDED ROADWAYS.

① CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER. CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.

② USE STANDARD SIGN W21-64 WITH APPROPRIATE ARROW.

WET PAINT W21-64 OR WET PAINT W21-64

③ OPTIONAL TRUCK-MOUNTED ATTENUATOR.

④ SIGNS SHALL BE REPEATED AFTER EVERY ON RAMP OR EVERY THREE MILES.

⑤ IF CONSTRUCTION WORK ZONE SIGNS ARE IN PLACE, W20-1 OR W21-63 ARE NOT REQUIRED.

LEGEND

V1	LEAD VEHICLE
V2	SHADOW VEHICLE
V3	TRAIL VEHICLE WITH TMA
TMA	TRUCK-MOUNTED ATTENUATOR
	SIGN ON TEMPORARY SUPPORT
	DIRECTION OF TRAFFIC
	CONES
	FLASHING ARROW PANEL (MERGE)

MOVING PAVEMENT MARKING OPERATION
MULTI-LANE DIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

5/3/2013 DATE

/S/ Travis Feltes STATE TRAFFIC EN

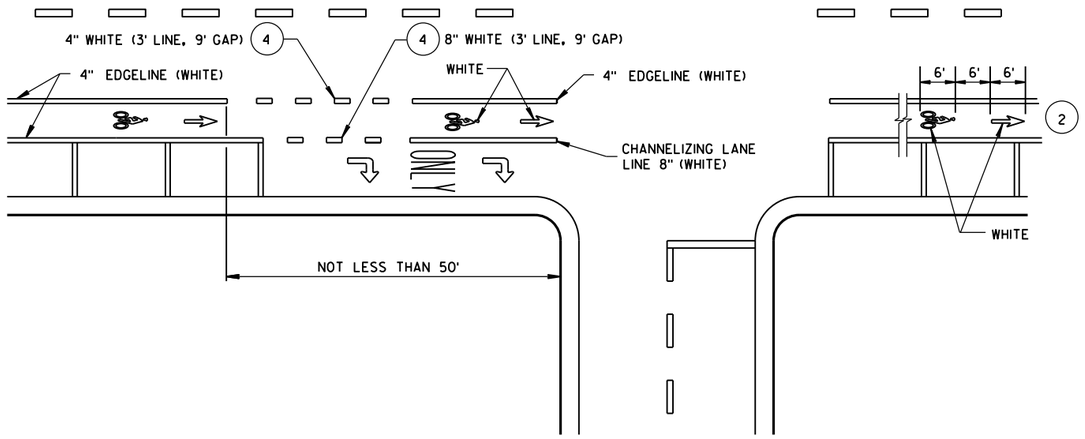
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S.D.D. 15 C 19-2c

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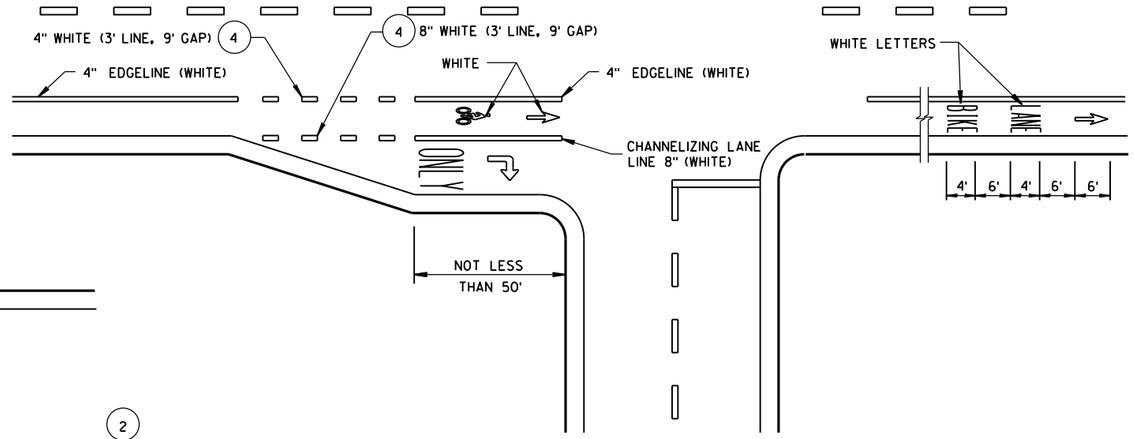
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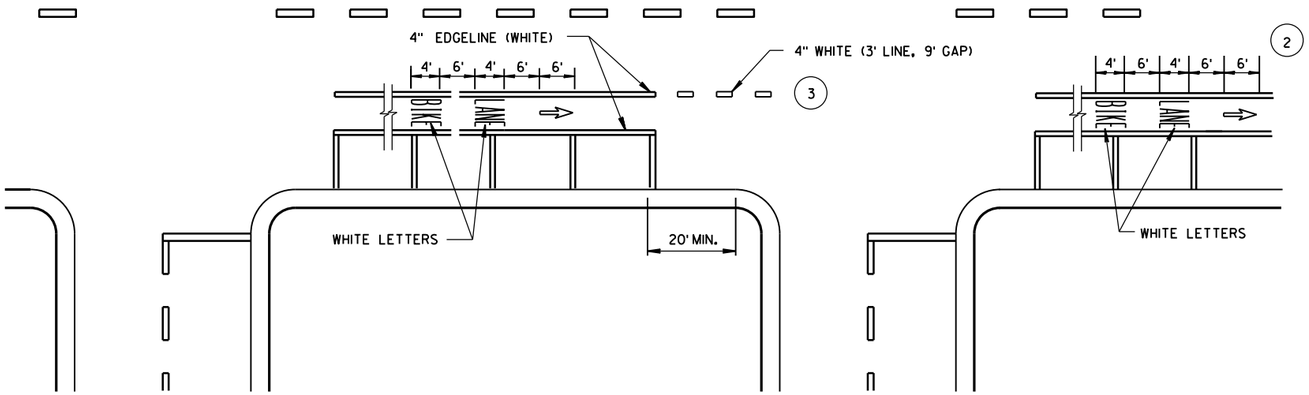
DESIGNATED BICYCLE LANE

GENERAL NOTES

1. DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.
2. THE SERIES OF PAVEMENT MARKING SYMBOLS SHALL BE REPEATED AFTER INTERSECTIONS AND SPACED A MAXIMUM OF 250'. NO PAVEMENT MARKING WILL TAKE PLACE IN THE CROSSWALK.
3. DOTTED LINES SHOULD BE USED 50' TO 200' IN ADVANCE OF AN INTERSECTION WHERE THERE IS NO RIGHT TURN ONLY LANE AND THERE IS HEAVY RIGHT TURN TRAFFIC OR THERE IS A NEAR-SIDE BUS STOP. AT OTHER INTERSECTIONS WHERE RIGHT TURN TRAFFIC IS LIGHT TO MODERATE, A SOLID LINE CAN BE USED UP TO THE INTERSECTION.
4. WHEN SPECIFIED IN THE CONTRACT.



DESIGNATED BICYCLE LANE
NO PARKING, RIGHT TURN LANE



DESIGNATED BICYCLE LANE
WITH PARKING, NO RIGHT TURN LANE

URBAN BICYCLE LANE MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
4/30/2013 DATE
/S/ Travis Feltes
STATE TRAFFIC E
FHWA

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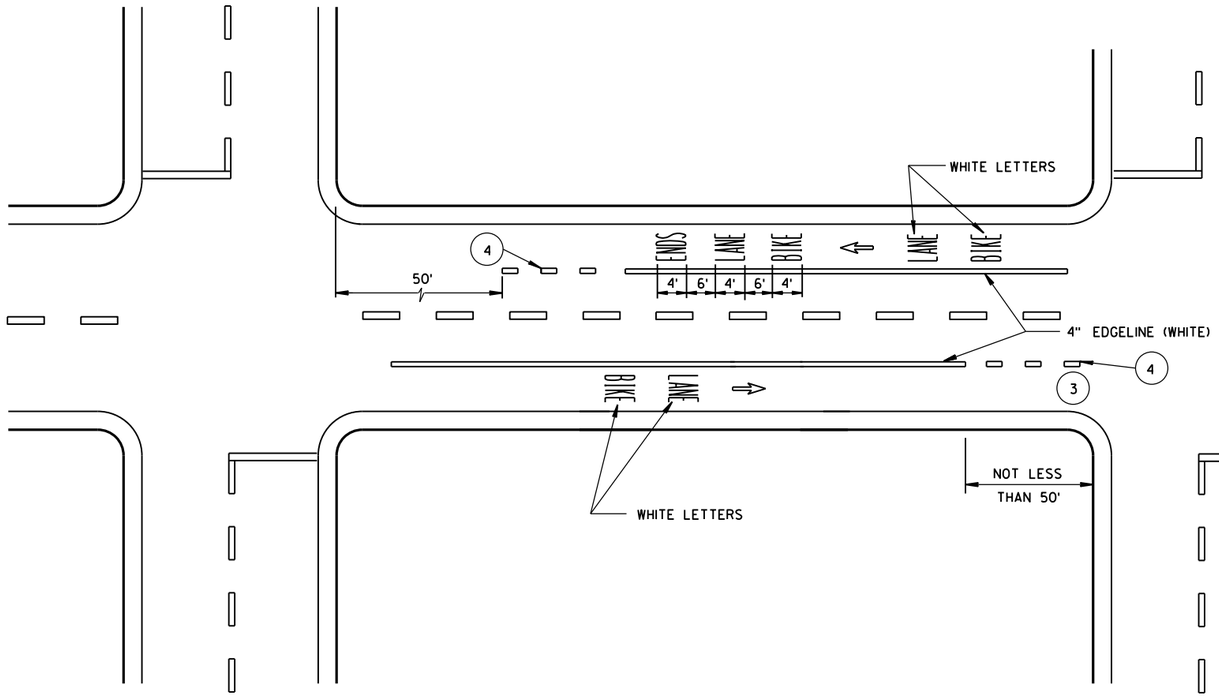
S.D.D. 15 C 29-3c

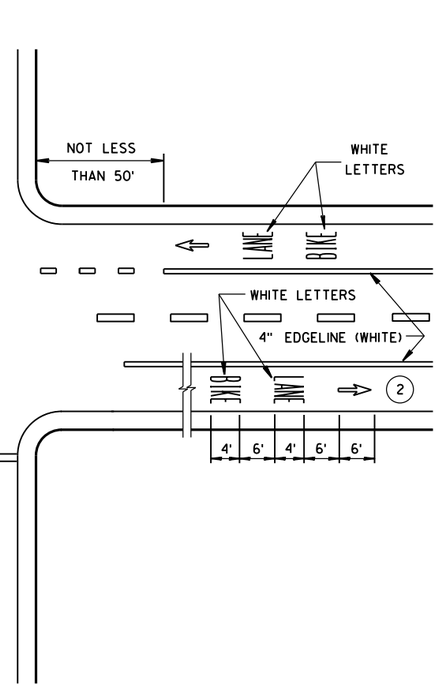
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S.D.D. 15 C 29-3c

GENERAL NOTES

1. DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.
2. THE SERIES OF PAVEMENT MARKING SYMBOLS SHALL BE REPEATED AFTER INTERSECTIONS AND SPACED A MAXIMUM OF 250'. NO PAVEMENT MARKING WILL TAKE PLACE IN THE CROSSWALK.
3. DOTTED LINES SHOULD BE USED 50' TO 200' IN ADVANCE OF AN INTERSECTION WHERE THERE IS NO RIGHT TURN ONLY LANE AND THERE IS HEAVY RIGHT TURN TRAFFIC OR THERE IS A NEAR-SIDE BUS STOP. AT OTHER INTERSECTIONS WHERE RIGHT TURN TRAFFIC IS LIGHT TO MODERATE, A SOLID LINE CAN BE USED UP TO THE INTERSECTION.
4. 3' LINE, 9' GAP - 4" WIDE, WHITE.





DESIGNATED BICYCLE LANE
NO PARKING

URBAN BICYCLE LANE MARKING	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	
4/30/2013 DATE	/S/ Travis Feltes STATE TRAFFIC EN
FHWA	

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S.D.D. 15 C 29-3d

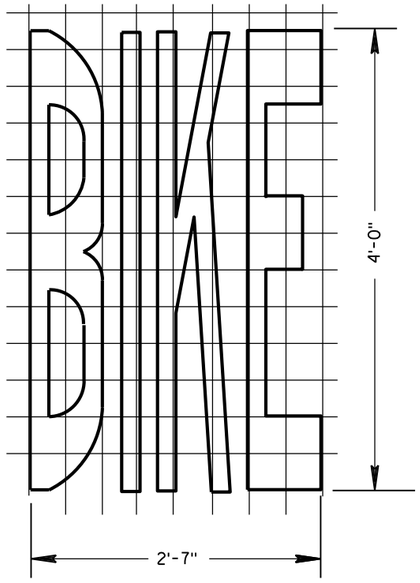
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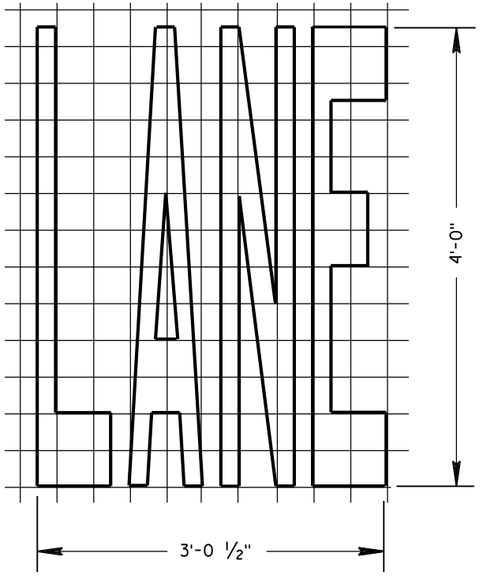
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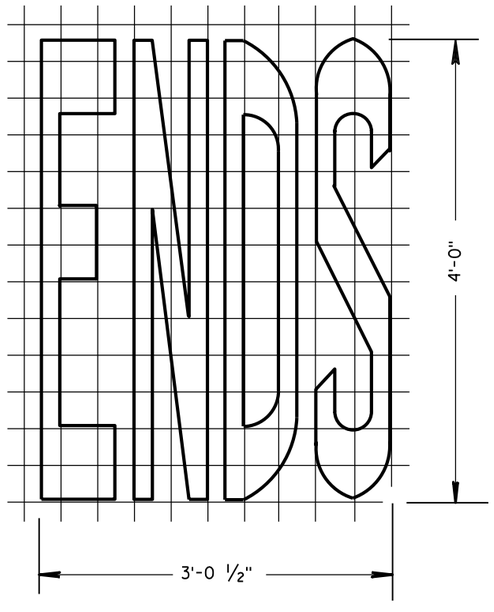
GENERAL NOTES

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.

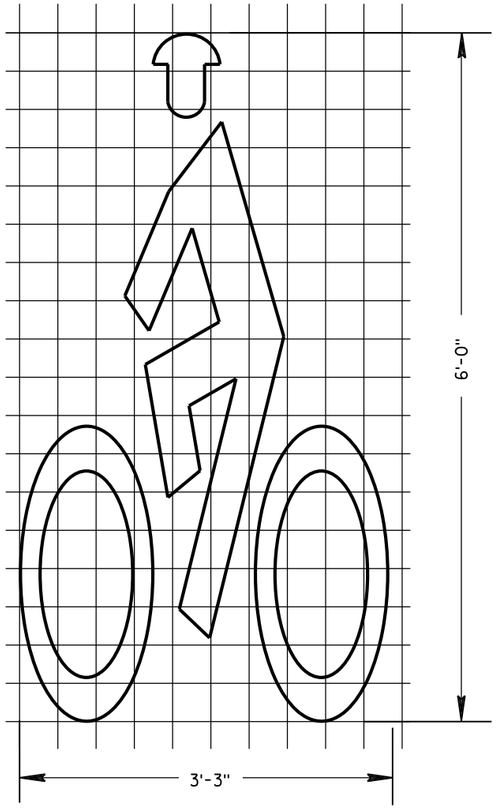
ALL LETTERS, ARROWS AND SYMBOLS SHALL BE IN CONFORMANCE WITH REQUIREMENTS INCLUDED IN "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKING" BOOK BY THE FEDERAL HIGHWAY ADMINISTRATION. ALL LETTERS, ARROWS AND SYMBOLS SHALL BE WHITE AND REFLECTORIZED. SMALL DIFFERENCES IN DIMENSIONS WITHIN THE TOLERANCES OF THAT BOOK ARE ACCEPTABLE.



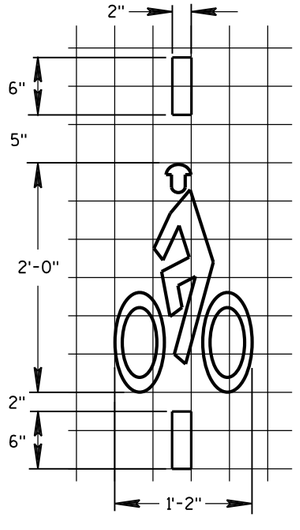




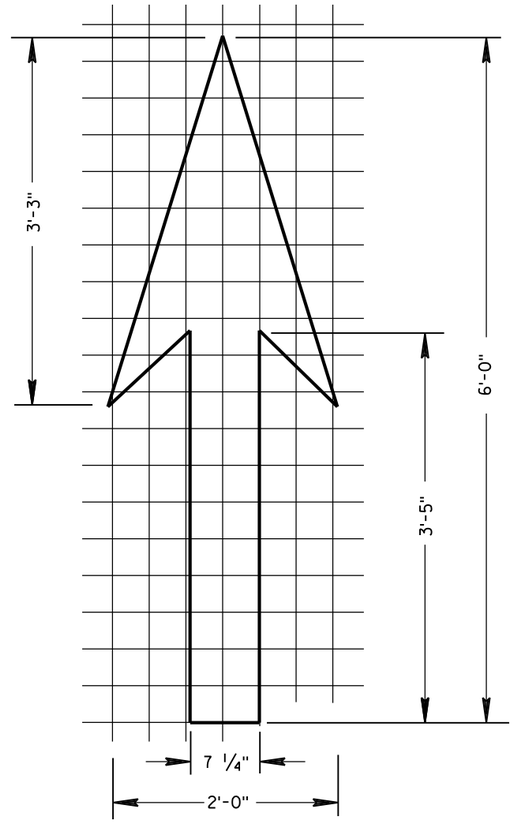
BIKE LANE WORDS



BIKE LANE SYMBOL



BICYCLE DETECTOR PAVEMENT MARKING



BIKE LANE ARROW

PAVEMENT MARKING FOR BIKE LANES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
4-30-2013
DATE

/S/ Travis Feltes
STATE TRAFFIC EN

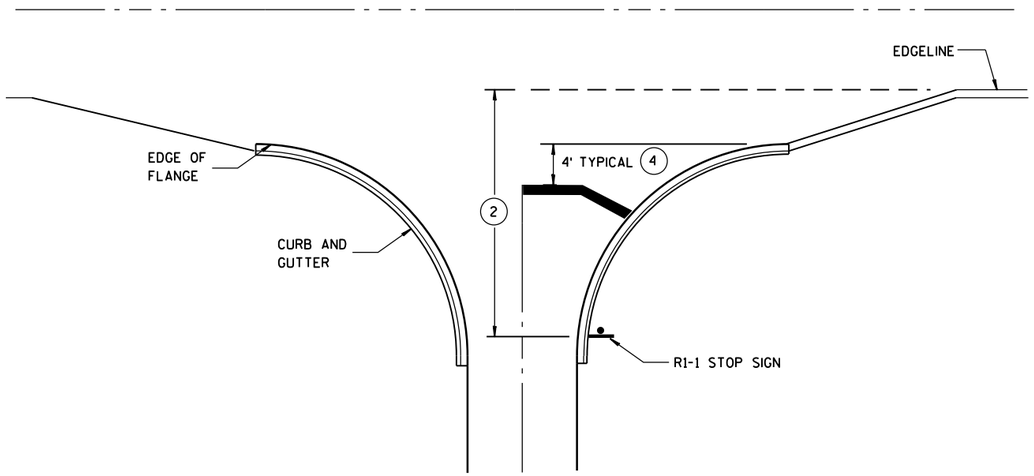
FHWA

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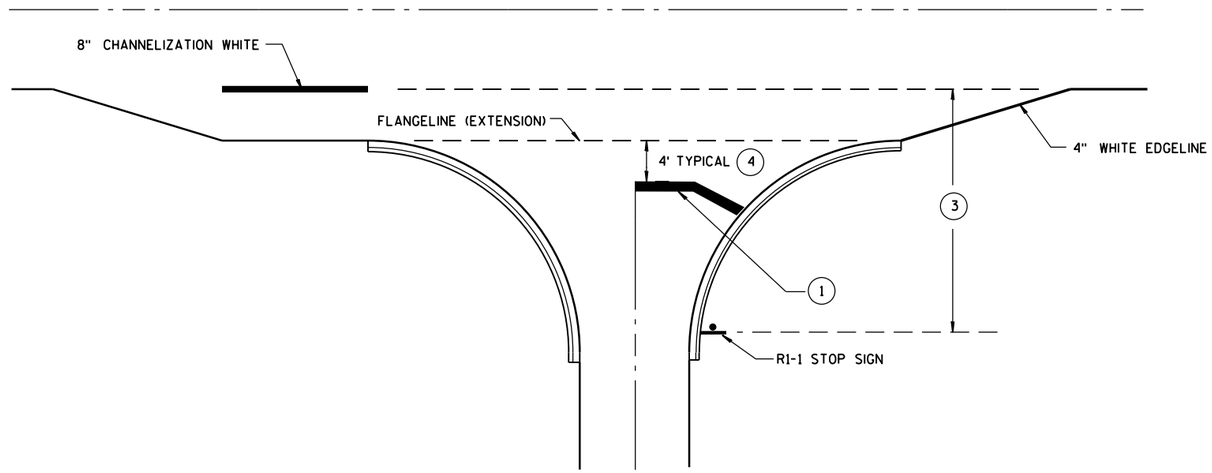
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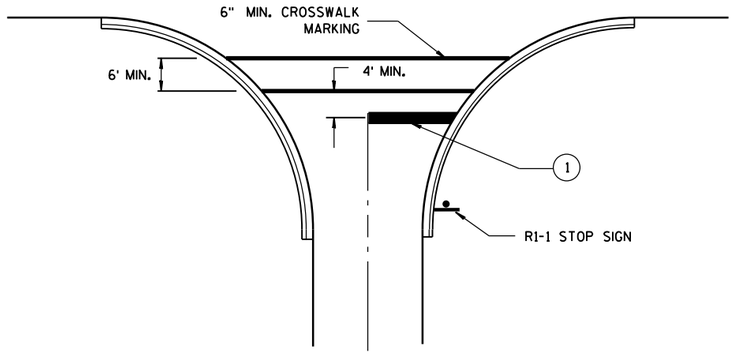
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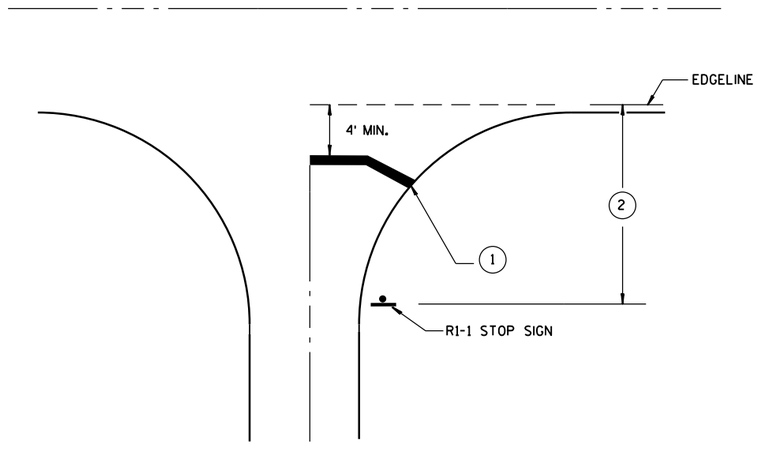
TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER



TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH RIGHT TURN LANE



TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH CROSSWALK MARKING



TYPICAL STOP LINE PAVEMENT MARKING WITHOUT CURB AND GUTTER

GENERAL NOTES

1. 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE PROJECT ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
2. IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGELINE THAN NO STOP LINE IS REQUIRED.
3. IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGELINE EXTENSION THAN NO STOP LINE IS REQUIRED.
4. MOVE CLOSER TO EDGE OF TRAVEL LANE AS NEEDED FOR VISIBILITY AND SIGHT LINES.

STOP LINE AND CROSSWALK PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

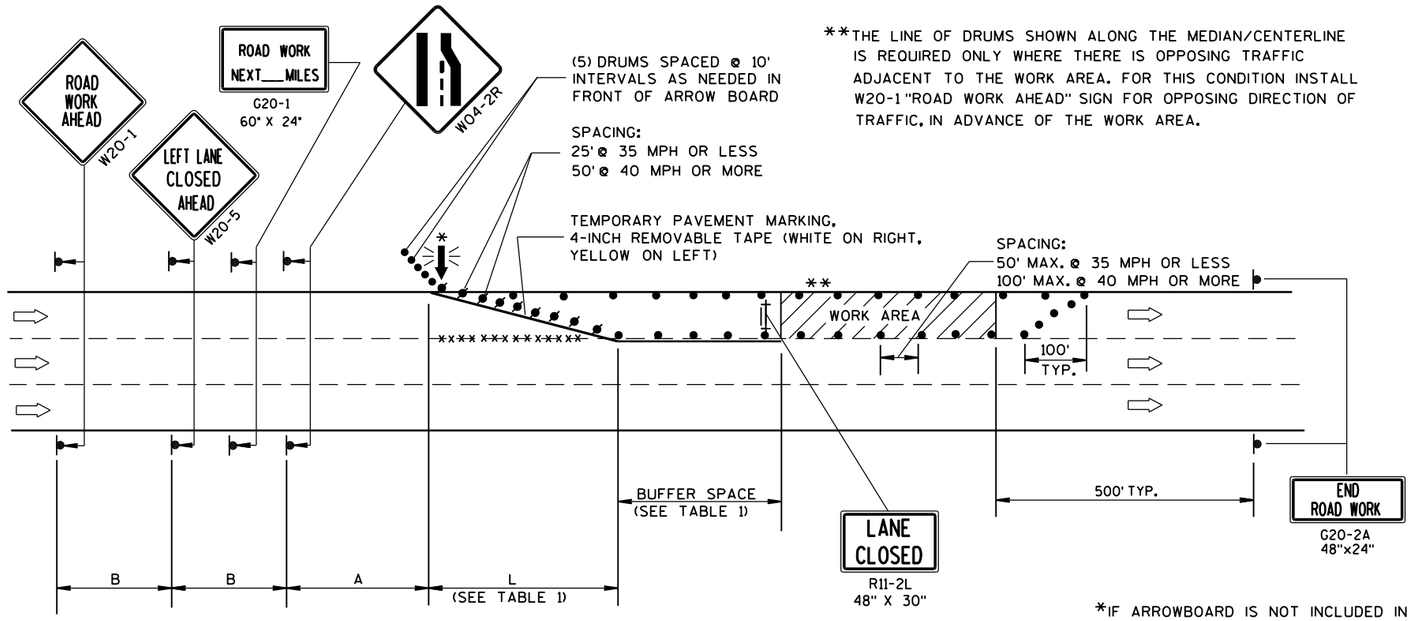
4/30/2013
DATE

/S/ Travis Feltes
STATE TRAFFIC E

FHWA

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S.D.D. 15 C 33-1
S.D.D. 15 C 33-1



**THE LINE OF DRUMS SHOWN ALONG THE MEDIAN/CENTERLINE IS REQUIRED ONLY WHERE THERE IS OPPOSING TRAFFIC ADJACENT TO THE WORK AREA. FOR THIS CONDITION INSTALL W20-1 "ROAD WORK AHEAD" SIGN FOR OPPOSING DIRECTION OF TRAFFIC, IN ADVANCE OF THE WORK AREA.

B=400' AT 25-30 MPH
700' AT 35-40 MPH
1000' AT 45-55 MPH

A=200' AT 25-30 MPH
350' AT 35-40 MPH
500' AT 45-55 MPH

(PLACE BARRICADE AND SIGN APPROX. EVERY 1000' ACROSS THE CLOSED LANE)

*IF ARROWBOARD IS NOT INCLUDED IN MISCELLANEOUS QUANTITIES, SUBSTITUTE A TYPE III BARRICADE WITH W01-6 SIGN IN THE LANE CLOSURE TAPER.

W01-6
48"x24"

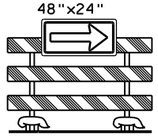


TABLE 1
TAPER AND BUFFER SPACE FOR 12' LANE WIDTH

S	L	BUFFER SPACE
25	125'	55'
30	180'	85'
35	245'	120'
40	320'	170'
45	540'	220'
50	600'	280'
55	660'	335'

FOR LANE WIDTH OTHER THAN 12':

L = WS AT 45 MPH OR GREATER

$L = \frac{WS^2}{60}$ AT 40 MPH OR LESS

L = TAPER LENGTH IN FEET

S = NON-CONSTRUCTION SPEED LIMIT (MPH)

W = WIDTH OF LANE CLOSURE

LEGEND

- TYPE III BARRICADE WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL DRUM
- FLASHING ARROW BOARD
- DIRECTION OF TRAFFIC
- REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)
- WORK AREA

GENERAL NOTES

THIS LANE CLOSURE DETAIL IS TYPICAL FOR CLOSING THE LEFT LANE. FOR A RIGHT LANE CLOSURE, REVERSE THE TRAFFIC CONTROL.

THIS DETAIL MAY BE USED FOR ROADWAYS WITH EITHER TWO OR THREE LANES IN EACH DIRECTION.

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS 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.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" SIGNS MAY BE USED IF APPROVED BY DISTRICT TRAFFIC UNIT.

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS.

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.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

ON UNDIVIDED ROADWAYS, OMIT THE SIGNS SHOWN ON LEFT SIDE OF ROAD.

W20-1, G20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE LANE CLOSURE IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT.

OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS.

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROWBOARDS SO THE APPROACHING DRIVER HAS A CLEAR VIEW OF THE ARROWBOARDS AND LANE CLOSURE DRUMS.

PLACE THE ARROWBOARD AS CLOSE AS POSSIBLE TO THE BEGINNING OF THE LANE CLOSURE TAPER, PREFERABLY ON THE SHOULDER OR TERRACE.

CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

BARRICADES IN A CLOSED LANE 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.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

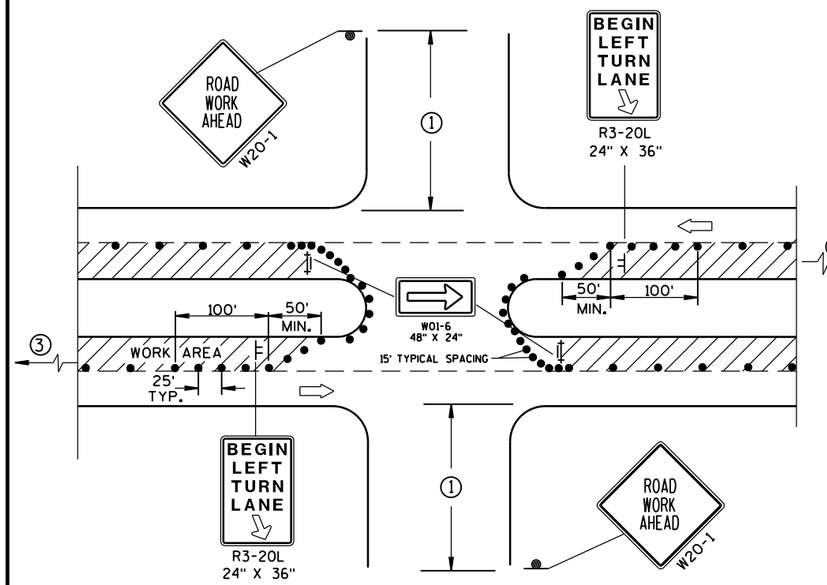
TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8/2013 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

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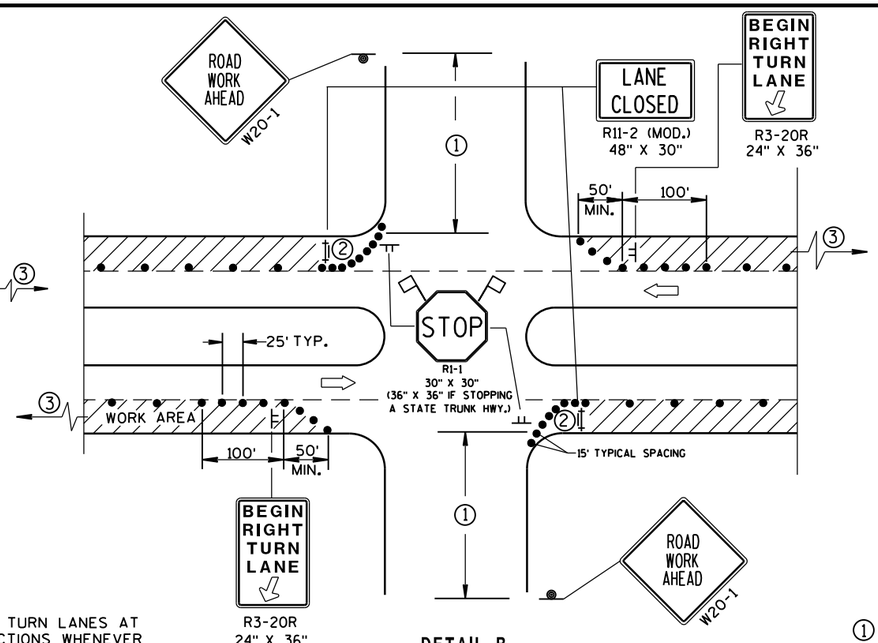
S.D.D. 15 D 20-2



DETAIL A

FOR LEFT LANE CLOSURE AT INTERSECTION OR MEDIAN OPENING

PROVIDE TURN LANES AT INTERSECTIONS WHENEVER STAGING OF WORK ALLOWS. TAPER AND TURN LANE LENGTHS BASED ON FIELD CONDITIONS AS APPROVED BY THE ENGINEER.



DETAIL B

FOR RIGHT LANE CLOSURE AT INTERSECTION

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN 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 IN URBAN AREAS, 36" X 36" SIGNS MAY BE USED IF APPROVED BY DISTRICT TRAFFIC UNIT.

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL OF STANDARD HIGHWAY SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS.

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.

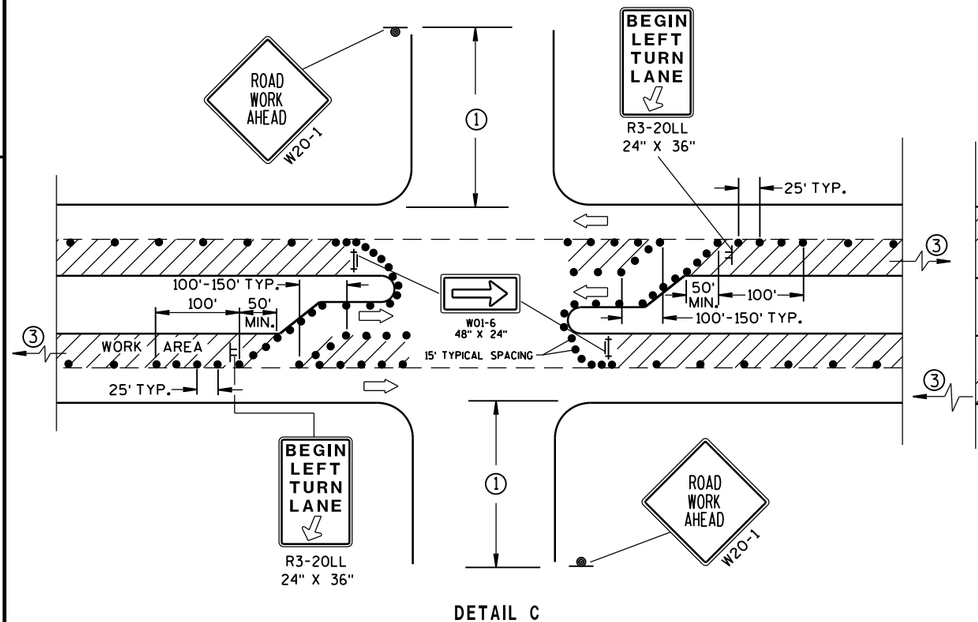
CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

BARRICADES IN A CLOSED LANE 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.

① 500' TYPICAL OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.
350' IF 35-40 MPH.
200' IF 25-30 MPH.

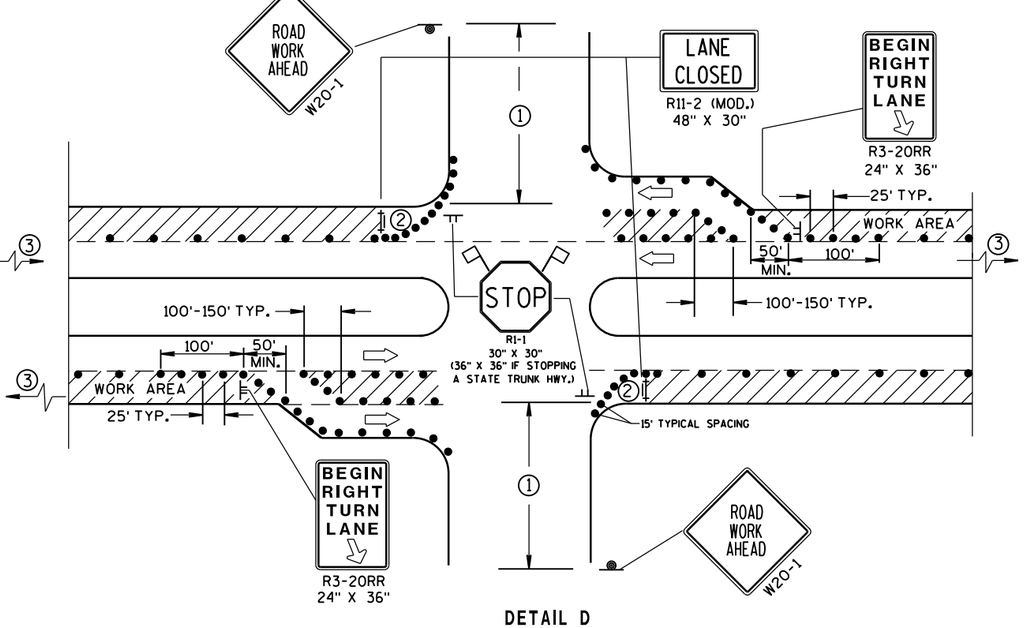
② ALSO USE BARRICADE AND 15-FOOT TYPICAL DRUM SPACING AT COMMERCIAL DRIVEWAYS.

③ SEE SEPARATE LANE CLOSURE DETAIL FOR ADDITIONAL TRAFFIC CONTROL.



DETAIL C

FOR LEFT LANE CLOSURE AT INTERSECTION OR MEDIAN OPENING (WITH LEFT TURN BAY OPEN)



DETAIL D

FOR RIGHT LANE CLOSURE AT INTERSECTION (WITH RIGHT TURN BAY OPEN)

LEGEND

- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT (5' MIN. MOUNTING HEIGHT)
- TYPE III BARRICADE WITH ATTACHED SIGN AND TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC
- FLAGS, 16" X 16" MIN., (ORANGE)
- WORK AREA

TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

8/2013 — DATE

/S/ Travis Feltes — STATE TRAFFIC ENGINEER

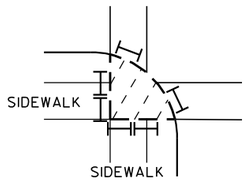
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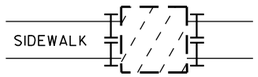
FHWA

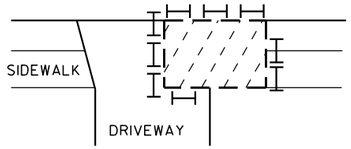
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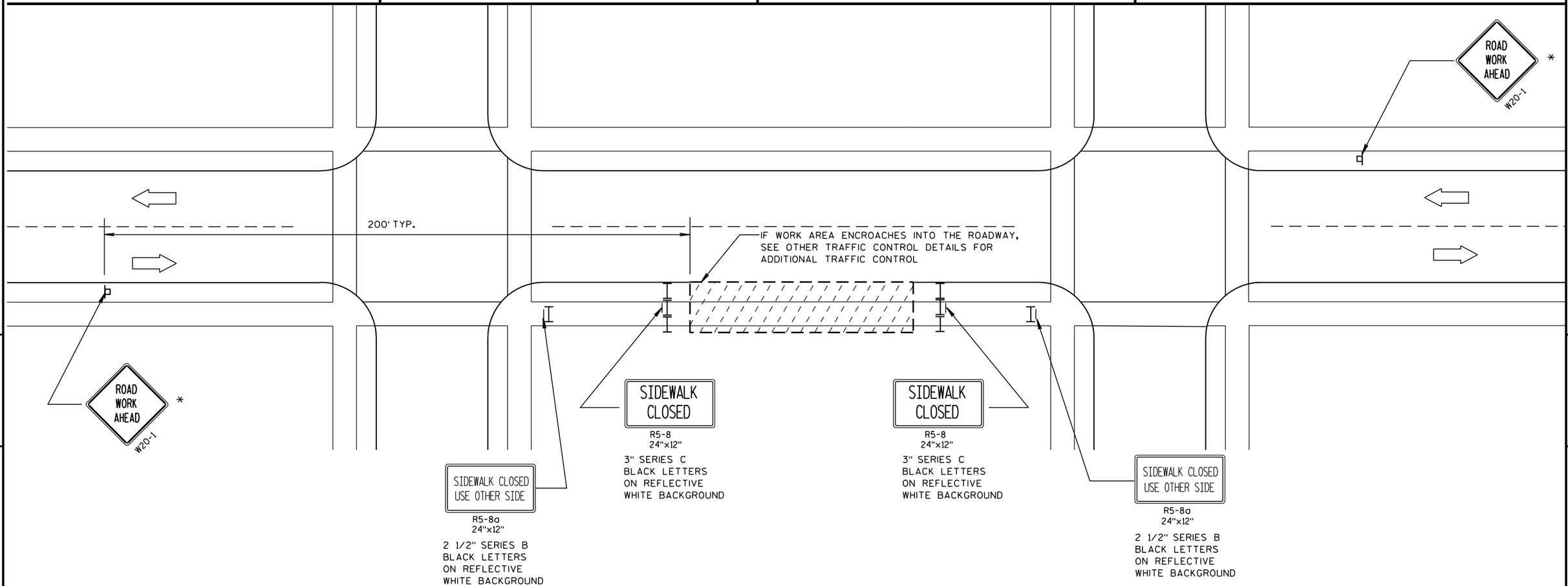
S.D.D. 15 D 21-2

WARNING OF LOCALIZED SIDEWALK WORK AREAS









LEGEND

- POST MOUNTED SIGN
- TYPE II BARRICADE WITH/WITHOUT SIGN (ALL WITH ONE WARNING LIGHT, TYPE A, LOW-INTENSITY FLASHING)
- WORK AREA
- DIRECTION OF TRAFFIC FLOW

GENERAL NOTES :

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.

THE EXACT LOCATION AND PLACEMENT OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

* "ROAD WORK AHEAD" SIGNS ARE NOT REQUIRED IF THE SIDEWALK CLOSURE OCCURS WITHIN A LARGER WORK ZONE WHERE ADVANCE WARNING SIGNS ARE ALREADY PRESENT, OR IF THE WORK AREA AND EQUIPMENT ARE MORE THAN 2 FEET BEHIND THE CURB.

WARNING SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

TRAFFIC CONTROL, SIDEWALK CLOSURE

TRAFFIC CONTROL, SIDEWALK CLOSURE

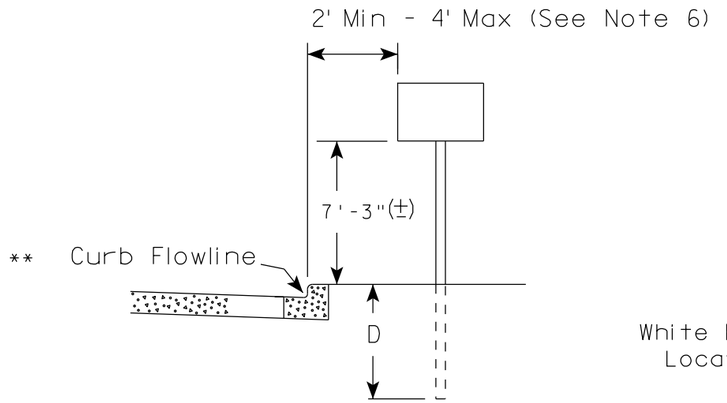
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
5/23/2000 DATE
/S/ Chester J. [illegible]
CHIEF SIGNS AND MARK[illegible]NEER
FHWA

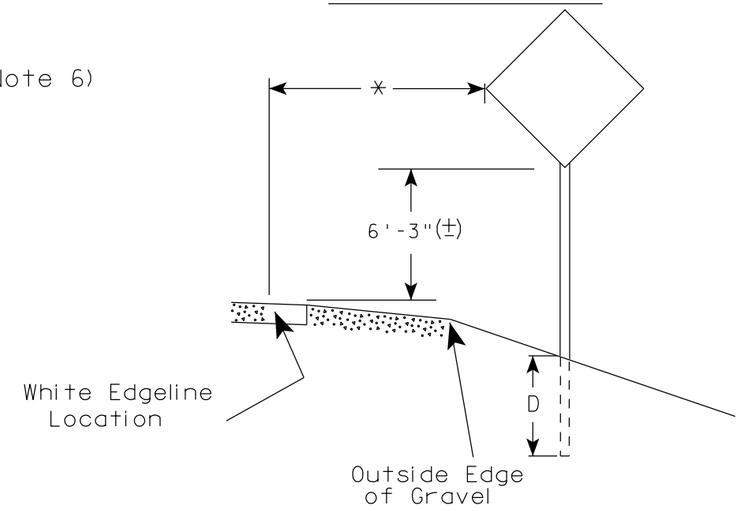
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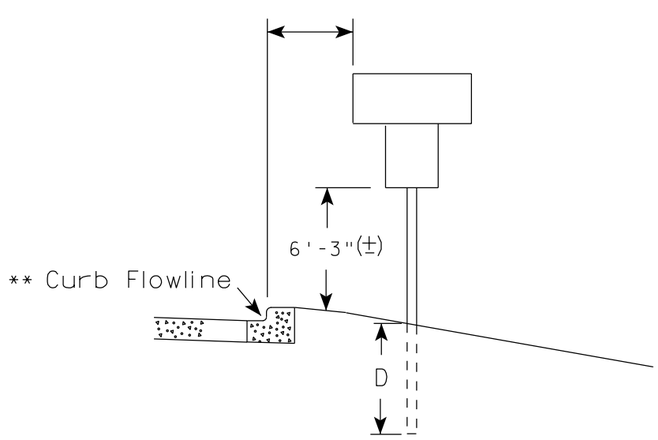
S.D.D. 15 D 30-1

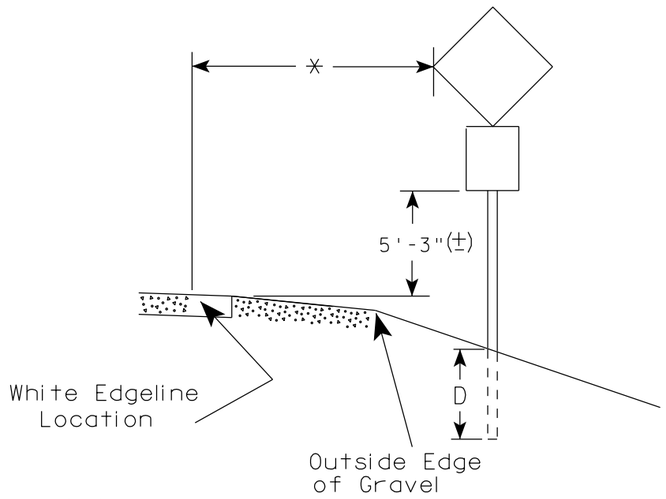
URBAN AREA



RURAL AREA (See Note 2)







** 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.

GENERAL NOTES

1. Signs wider than 4 feet, 20 sq.ft or larger, 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 (R6-4B), Enhanced Reference Markers, Clearance Markers (W5-52), Mile Markers (D10 series) & End of Rod 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'

TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

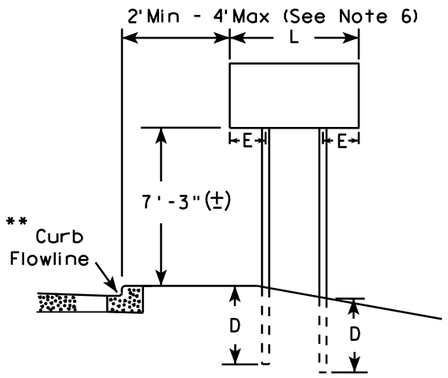
APPROVED Matthew R Rauch for State Traffic Engineer

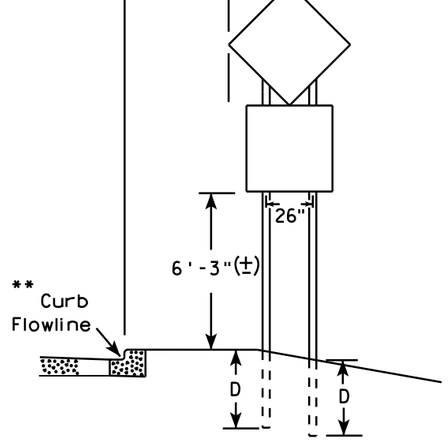
DATE 9/30/13 PLATE NO. A4-3.18

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A43.DGN PLOT DATE : 30-SEP-2013 13:25 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 99.237937:1.000000 WISDOT/CADDS SHEET 42

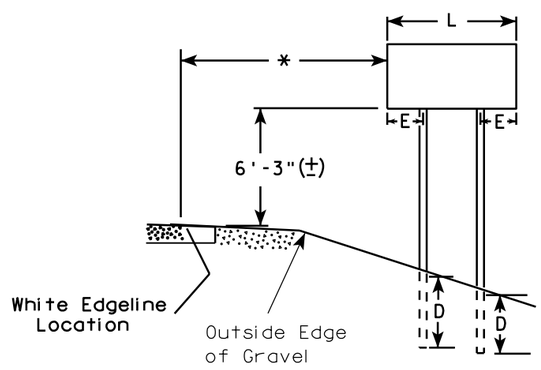
URBAN AREA

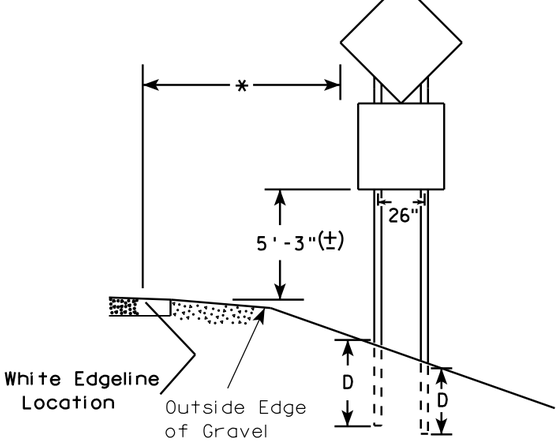




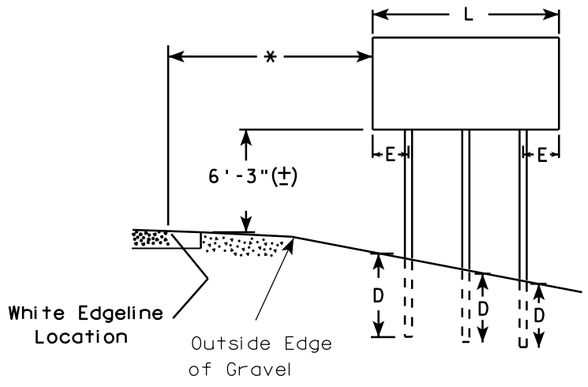
48" DIAMOND WARNING SIGN

RURAL AREA (See Note 3)





48" DIAMOND WARNING SIGN



GENERAL NOTES

1. For 3 or 4 post installations, individual post spacing shall be greater than 3'-6".
2. See tables below for required number of posts.
3. For expressways and freeways, mounting height is 7'-3" (±) or 6'-3" (±) depending upon existence of sub-sign.
4. The (±) tolerance for mounting height is 3 inches.
5. Minimum mounting height for J assemblies (A4-5) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. Folding stop signs (R1-1F) shall be mounted at a height of 5'-3" (±) or as directed by the engineer.
8. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), 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" (±).

* 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.

** 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.

*** See A4-3 sign plate for signs 4' or less in width or 20 S.F. or less in area.

SIGN SHAPE OTHER THAN DIAMOND (TWO POSTS REQUIRED)	
L	E
*** Greater than 48" Less than 60"	12"
60" to 120"	L/5

SIGN SHAPE OTHER THAN DIAMOND (THREE POSTS REQUIRED)	
L	E
Greater than 120" less than 168"	12"

SIGN SHAPE OTHER THAN DIAMOND (FOUR POSTS REQUIRED)	
L	E
168" and greater	12"

POST EMBEDMENT DEPTH

Area of Sign Installation (Sq. Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

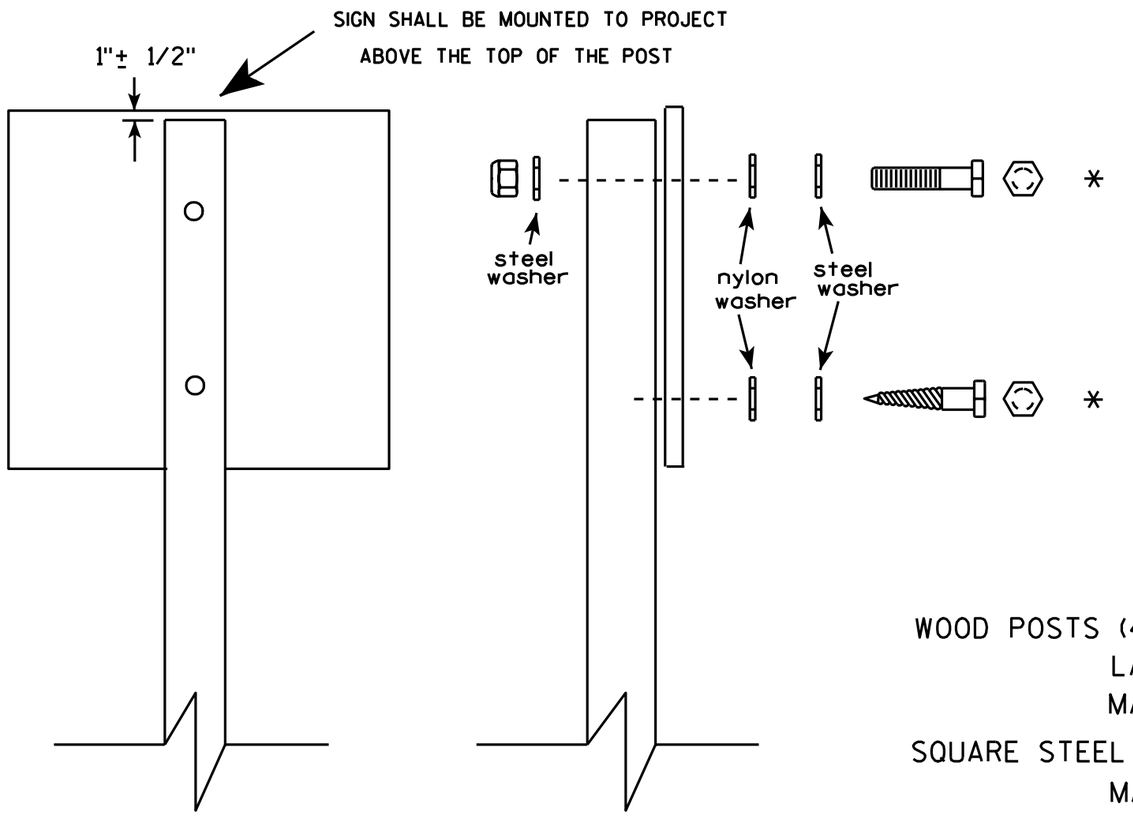
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/30/13 PLATE NO. A4-4 12

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A44.DGN PLOT DATE : 30-SEP-2013 13:27 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 107.021305:1.000000 WISDOT/CADDS SHEET 42



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

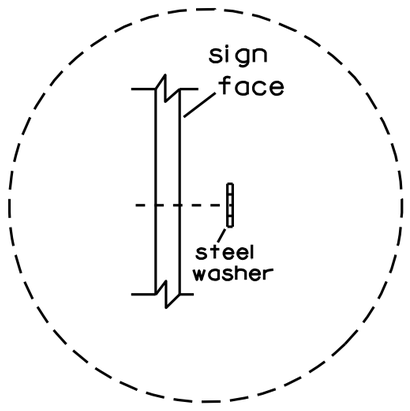
b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

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 Matthew R Rauch
for State Traffic Engineer

DATE 3/23/10 PLATE NO. A4-8.7

7

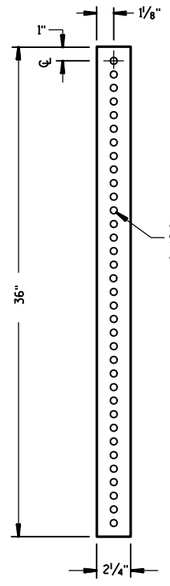
7

PROJECT NO:

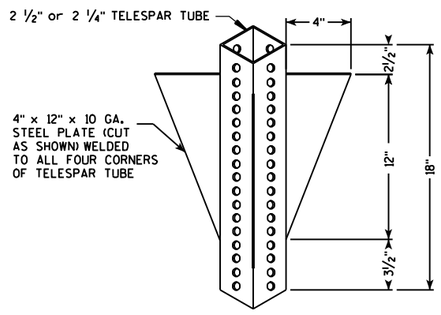
SHEET NO: 148 E

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

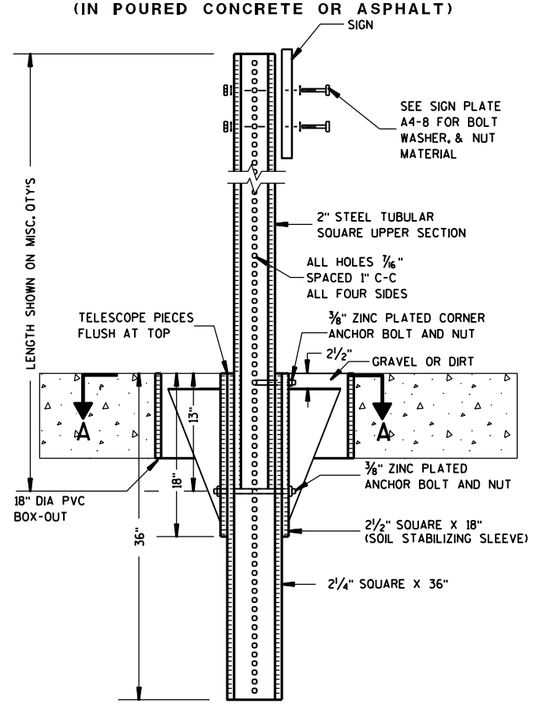
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



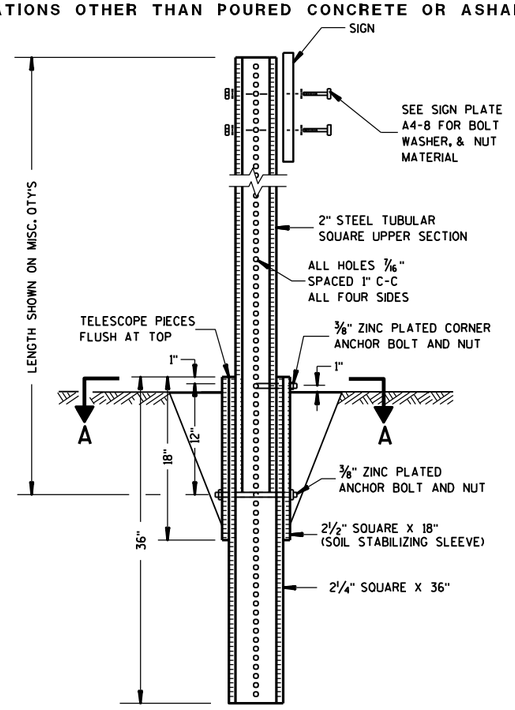
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

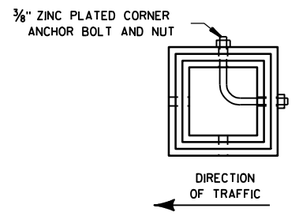


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



DETAIL OF TUBULAR STEEL SIGN POST
(IN LOCATIONS OTHER THAN POURED CONCRETE OR ASHALT)





SECTION A-A

Area of Sign Installation (Sq. Ft.)	Number of Required Posts
9 or less	1
Greater than 9 less than or equal to 18	2
Greater than 18 less than or equal to 27	3

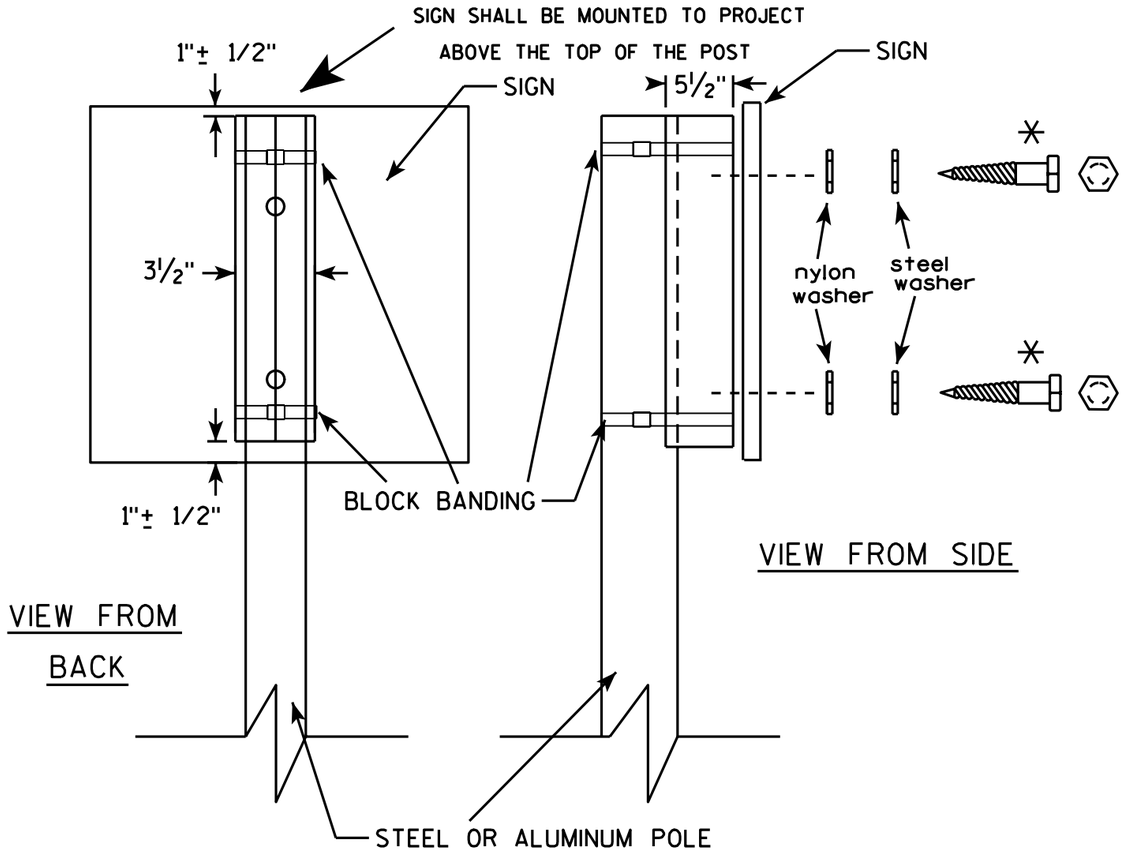
Signs wider than 3 feet or larger than 9 sq. ft shall be mounted on multiple posts (see above table).

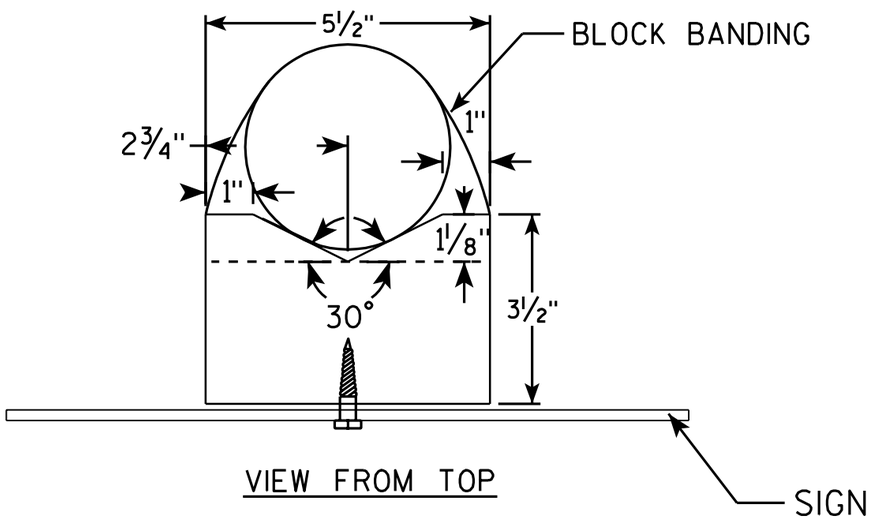
TUBULAR STEEL
SIGN POST
A4-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer
DATE 5/30/12 PLATE NO. A4-9.7

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 149	E





GENERAL NOTES

1. WOOD 4"X6" POST MATERIAL SHALL CONFORM TO 507.2.2 OF THE WisDOT STANDARD SPECIFICATIONS
2. BLOCK BANDING AND CLIPS SHALL BE STAINLESS STEEL, ¾" WIDTH AND 0.025" THICKNESS
3. SIGNS 3' OR GREATER IN HEIGHT SHALL UTILIZE 3 BLOCK BANDS. SIGNS UNDER 3' IN HEIGHT SHALL UTILIZE 2 BLOCK BANDS
4. ACTUAL NUMBER OF FASTENERS PER SIGN VARIES WITH THE SIGN AREA, BUT NORNALLY THERE ARE TWO. FOR SIGNS GREATER THAN 9 S.F. 3 FASTENERS SHALL BE USED.
5. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
   a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D, or
   b. Cadmium plated in accordance with ASTM Designation : B 766 TYPE 3, Class 12, or
   c. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.
6. ALL BOLTS SHALL HAVE HEXAGONAL HEADS.
7. STEEL WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X 1/16"
8. NYLON WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X .080 FOR TYPE H OR TYPE F FACE SIGN

✳ LAG BOLTS SHALL BE ⅜" X 2½"

BLOCK BANDING DETAIL (V-BLOCK OPTION)

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

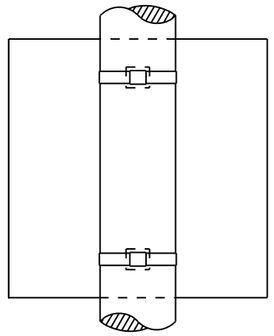
DATE 7/12/07 PLATE NO. A5-10.1

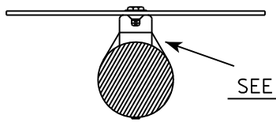
PROJECT NO:

SHEET NO: 150 E

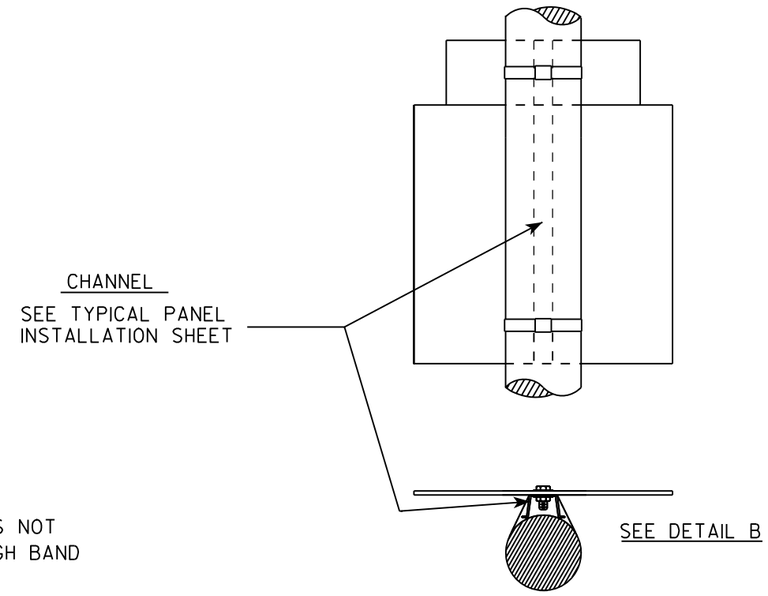
BANDING

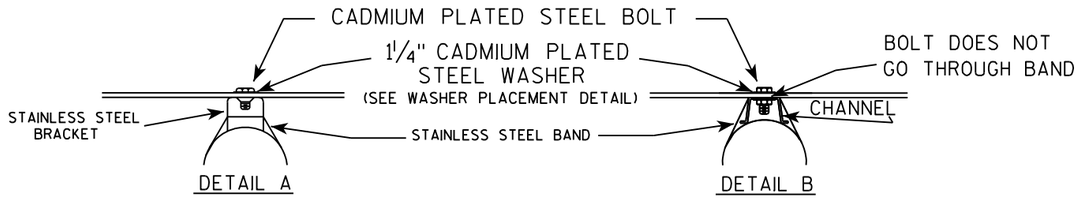
SINGLE SIGN



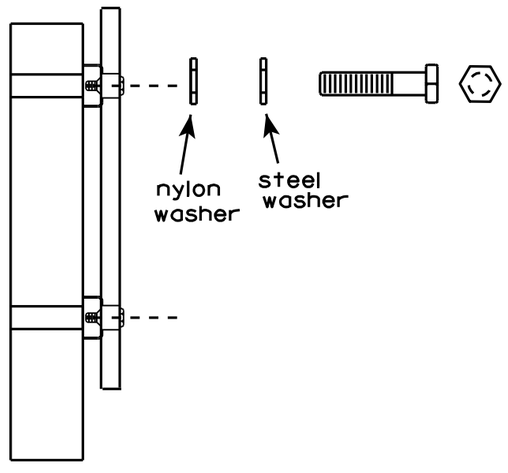


"J" ASSEMBLY





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

GENERAL NOTES

1. Any sign over 3 feet in width shall use the V-Block banding method. See A5-10 standard plate.
2. Signs 3 feet or greater in height shall have three bracket bands installed. Signs less than 3 feet in height shall have two bracket bands installed.
3. Banding and assembly bracket shall be stainless steel. All bands shall be ¾" in width and 0.025" thickness.

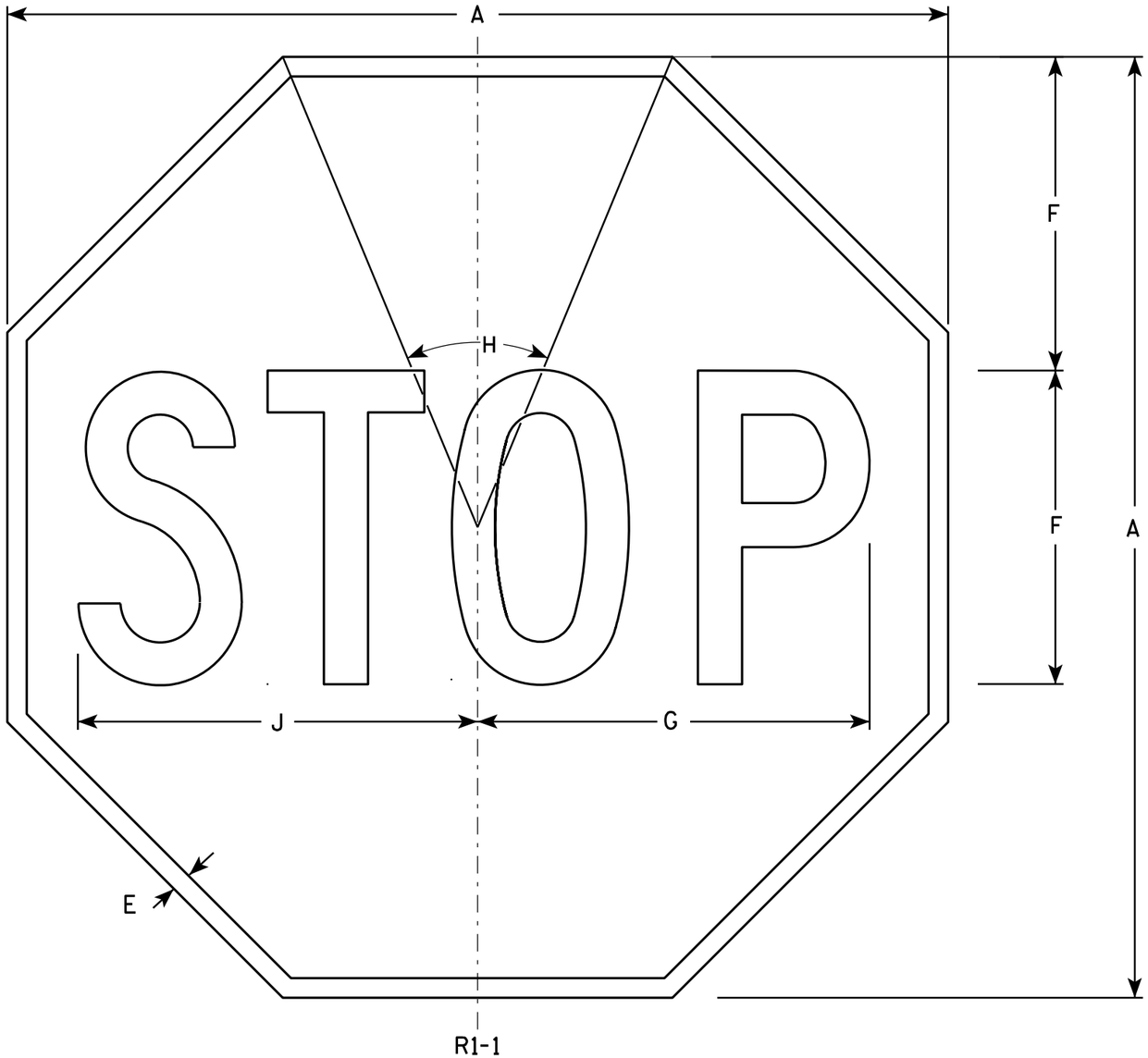
STANDARD SIGN
SIGN BANDING DETAILS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/16/13 PLATE NO. A5-9.3

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 151	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 - Red
   Message - White
3. Message Series - C

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	24				3/8	8	10	45°		10 1/4																	3.31
2S	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2M	36				3/4	12	15	45°		15 3/8																	7.46
3	36				3/4	12	15	45°		15 3/8																	7.46
4	48				1	16	20	45°		20 1/2																	13.25
5	48				1	16	20	45°		20 1/2																	13.25
6	18				3/8	6	7 3/4	45°		7 3/4																	1.86
7	12				1/4	4	5	45°		5 1/8																	0.78

STANDARD SIGN
R1-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/03/10 PLATE NO. R1-1.12

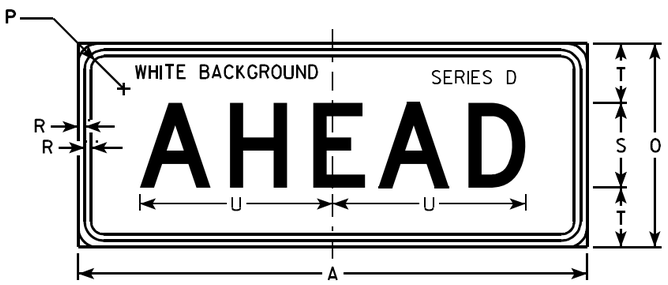
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 152	E



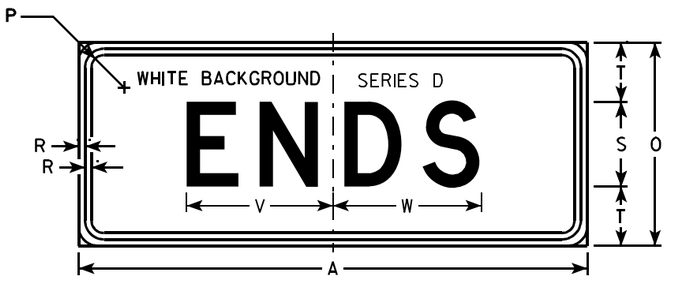
R3-17

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - AS SHOWN
   Message - BLACK
3. Message Series - C or as noted on the Signs.
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.



R3-17ap



R3-17bp

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	R3-17 Area sq. ft.	R3-17ap Area sq. ft.	R3-17bp Area sq. ft.
1																													
2S	30	24	1 1/8	3/8	1/2	2	4	4 1/8	7 7/8	6 3/8	9 1/2	2 5/8	7/8	13	12	1 1/8	3 3/8	3/8	5	3 1/2	11 3/8	8 5/8	8 3/4	2 3/8	15 5/8	8	5.0	2.5	2.5
2M	30	24	1 1/8	3/8	1/2	2	4	4 1/8	7 7/8	6 3/8	9 1/2	2 5/8	7/8	13	12	1 1/8	3 3/8	3/8	5	3 1/2	11 3/8	8 5/8	8 3/4	2 3/8	15 5/8	8	5.0	2.5	2.5
3																													
4																													
5																													

STANDARD SIGN
R3-17 & R3-17a&bp

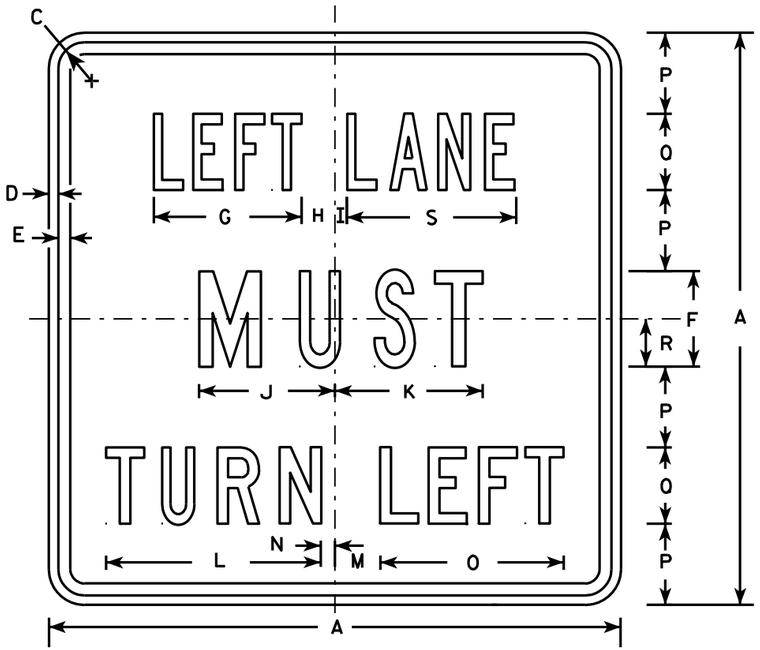
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

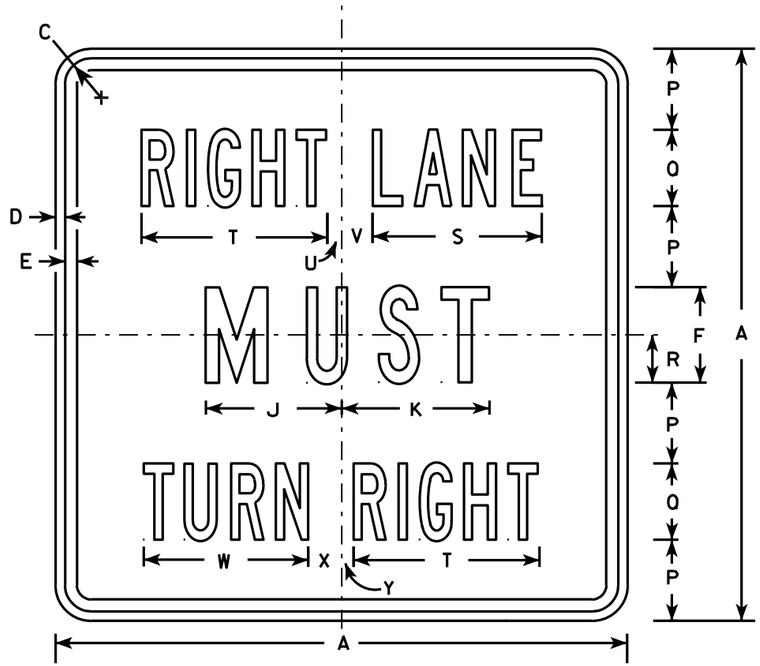
DATE 4/12/2011 PLATE NO. R3-17.2

PROJECT NO:

SHEET NO: 153 E



R3-7L



R3-7R

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 - Line 1 is Series B.
   Line 2 is Series C.
   Line 3 on plate R3-7R is Series B and Series C on plate R3-7L.
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.

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	5	7 3/4	1 3/4	5/8	7 1/8	7 3/4	11 1/4	2 3/8	3/4	9 5/8	4 1/4	4	2 1/2	8 7/8	9 3/4	3/4	1 5/8	8 5/8	1 5/8	5/8		6.25
2S	30		1 3/8	1/2	5/8	5	7 3/4	1 3/4	5/8	7 1/8	7 3/4	11 1/4	2 3/8	3/4	9 5/8	4 1/4	4	2 1/2	8 7/8	9 3/4	3/4	1 5/8	8 5/8	1 5/8	5/8		6.25
2M	30		1 3/8	1/2	5/8	5	7 3/4	1 3/4	5/8	7 1/8	7 3/4	11 1/4	2 3/8	3/4	9 5/8	4 1/4	4	2 1/2	8 7/8	9 3/4	3/4	1 5/8	8 5/8	1 5/8	5/8		6.25
3	36		1 5/8	5/8	3/4	6	9 5/8	2	1 1/8	8 3/4	9	13 1/2	3 7/8	1 1/2	12 1/2	5	5	3	10 5/8	12	7/8	2 1/4	10 5/8	2 1/8	1		9.00
4	48		2 1/4	3/4	1	8	13 1/2	2 3/8	1 1/2	11 1/2	11 7/8	17 3/4	3 5/8	2 1/2	16 3/8	6 1/2	7	4	14 3/8	16 7/8	5/8	3 1/4	15 1/8	2 3/4	1 1/8		16.00
5																											

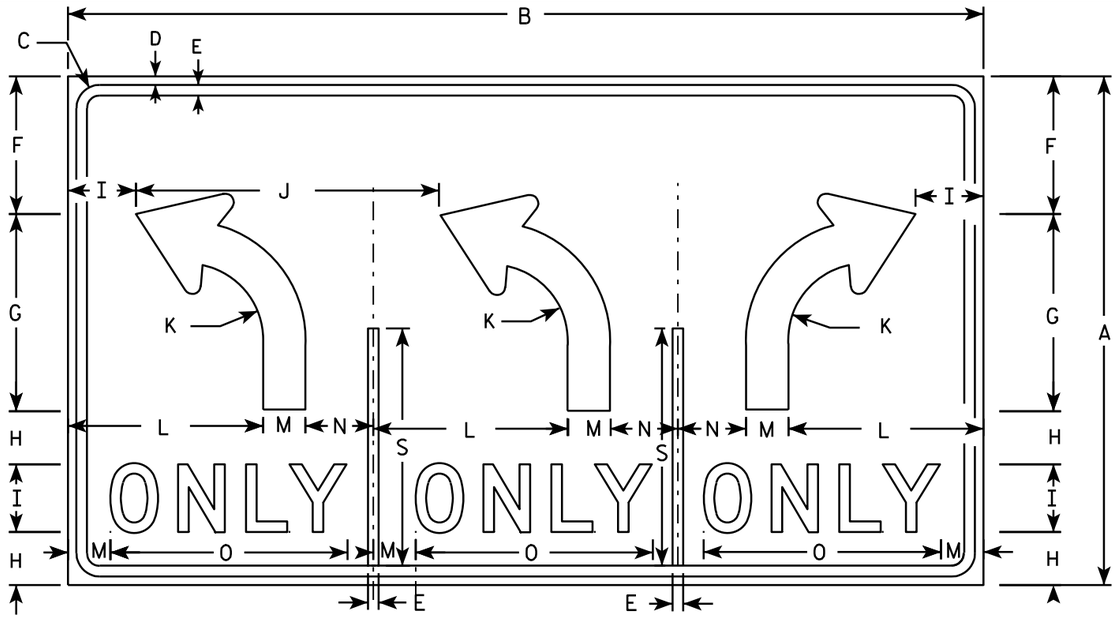
STANDARD SIGN
R3-7L & R3-7R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/2011 PLATE NO. R3-7.3

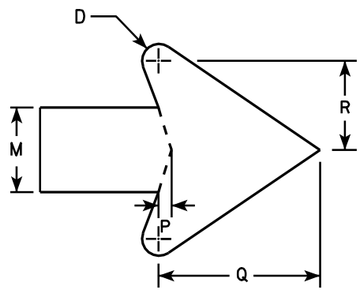
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 154	E



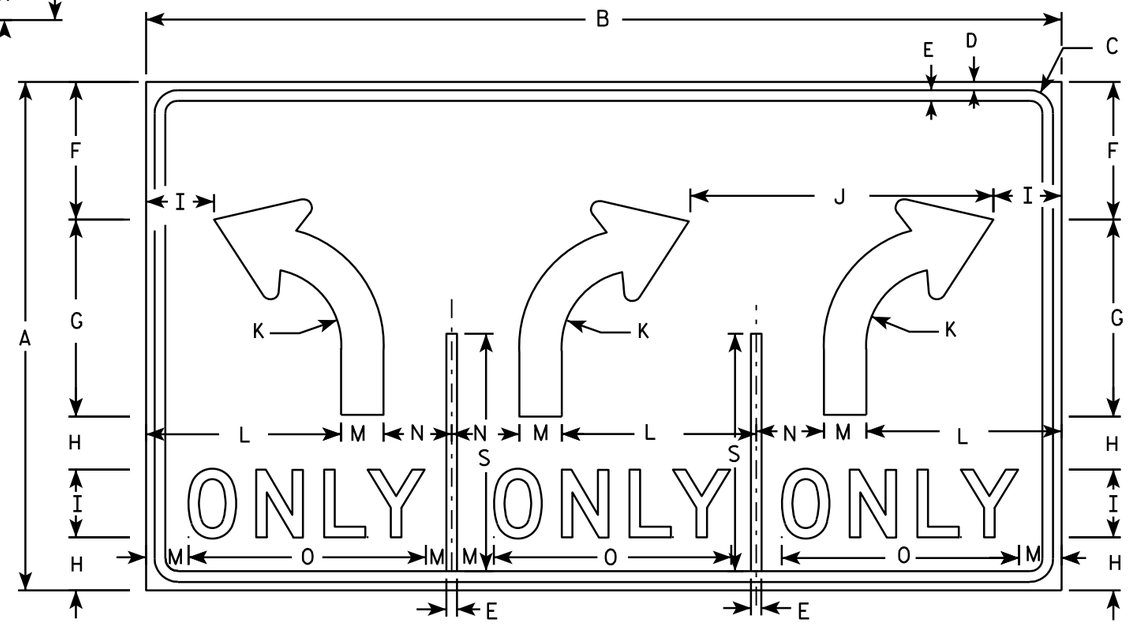
R3-8R

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



R3-8S

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																											
2S	30	54	1 3/8	1/2	5/8	8 1/8	11 5/8	3 1/8	4	17 7/8	4 1/2	11 1/2	2 1/2	4	14	3/8	4 3/4	2 5/8	14								11.25
2M	30	54	1 3/8	1/2	5/8	8 1/8	11 5/8	3 1/8	4	17 7/8	4 1/2	11 1/2	2 1/2	4	14	3/8	4 3/4	2 5/8	14								11.25
3																											
4	48	84	2 1/4	3/4	1	13 1/4	18 1/2	5 1/8	6		7 1/4	17 1/4	3 3/4	7	20 5/8	5/8	7 1/8	4	22 3/8								28.0
5	48	84	2 1/4	3/4	1	13 1/4	18 1/2	5 1/8	6		7 1/4	17 1/4	3 3/4	7	20 5/8	5/8	7 1/8	4	22 3/8								28.0

STANDARD SIGN
R3-8R & R3-8S

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

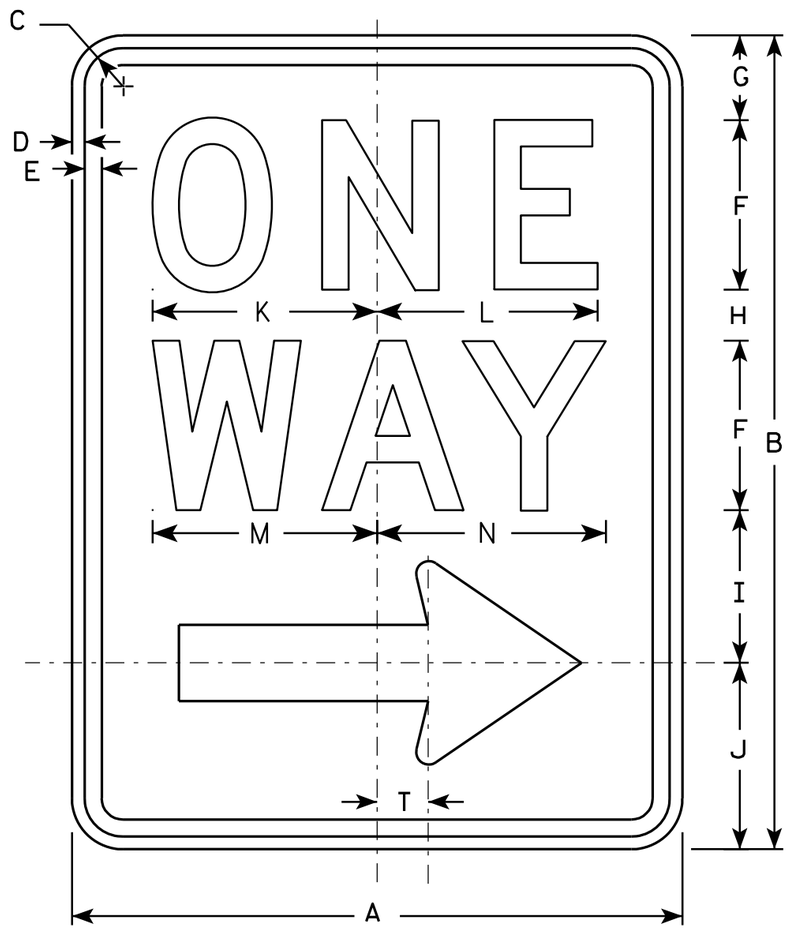
DATE 3/24/2011 PLATE NO. R3-8R.2

PROJECT NO:

SHEET NO: 155 E

7

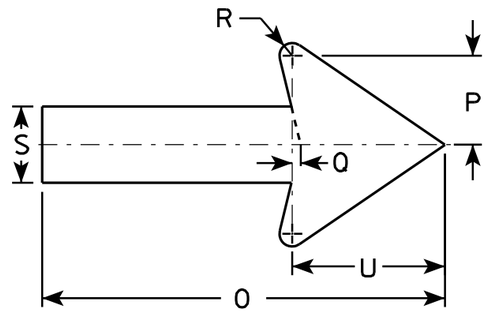
FILE NAME : C:\Users\PROJECTS\tr_stdplate\R38R.DGN PLOT DATE : 24-MAR-2011 09:49 PLOT BY : mscsja PLOT NAME :



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	Q	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																										

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 156	E

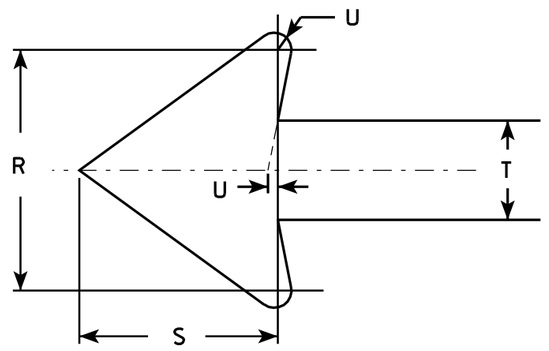


R7-2

*- See Note 5

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 - Red
3. Message Series - See Note 7
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 as required & adjust spacing to achieve proper balance.
6. R7-2D (double arrow)
   R7-2L (left arrow)
   R7-2R (right arrow)
7. Lines 1, 3 and 4 are series C, line 2 is series B.



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	12	18	1 1/8	3/8	3/8	3	1 7/8	1 1/2	7/8	7/8	2	2 1/2	2	2	4 7/8	4 7/8	3 7/8	1 3/4	1 1/2	3/4	1/8						1.5
2S	18	24	1 1/8	3/8	1/2	4	2 1/2	2 1/2	1 1/4	1	2	3 1/4	2 3/4	2 5/8	7 1/8	7	5 7/8	2 5/8	2 1/4	1 1/8	1/4						3.0
2M	24	30	1 1/8	3/8	1/2	5	3	3	2	1 1/4	2 1/2	4	3 1/4	3 3/8	9 1/4	9 1/4	7 3/4	3 1/2	3	1 1/2	1/4						5.0
3	24	30	1 1/8	3/8	1/2	5	3	3	2	1 1/4	2 1/2	4	3 1/4	3 3/8	9 1/4	9 1/4	7 3/4	3 1/2	3	1 1/2	1/4						5.0
4																											
5																											

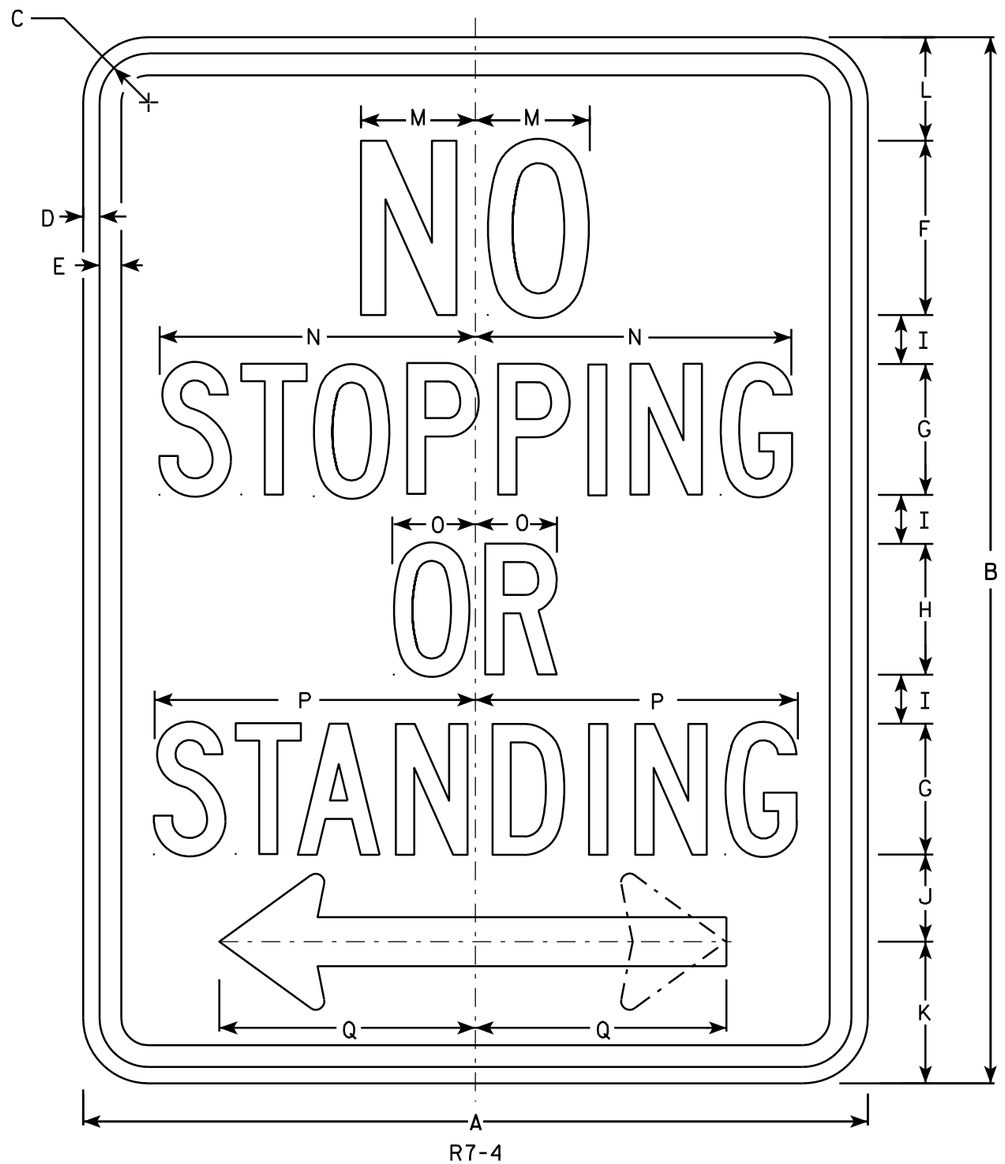
STANDARD SIGN
R7-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/31/2011 PLATE NO. R7-2.9

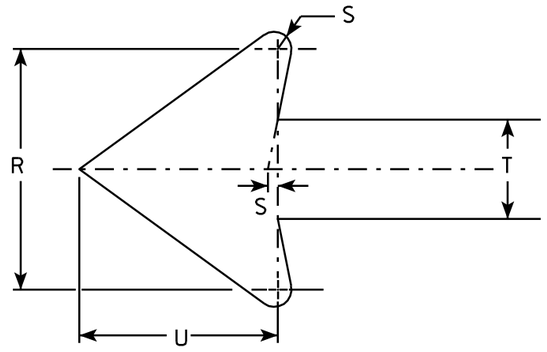
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 157	E



R7-4

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 - Red
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. R7-4L (left arrow)
   R7-4R (right arrow)
   R7-4D (double arrow)



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	12	18	1 1/8	3/8	3/8	3	2	2	1	1 1/2	2 1/2	2	2	4 7/8	1 1/4	4 7/8	3 7/8	1 3/4	1/8	3/4	1 1/2						1.5
2S	18	24	1 1/8	3/8	1/2	4	3	3	1 1/8	2	3 1/4	2 3/8	2 5/8	7 1/4	1 7/8	7 3/8	5 7/8	2 5/8	1/4	1 1/8	2 1/4						3.0
2M	24	30	1 1/8	3/8	1/2	5	4	3	1 1/2	3	4	2 1/2	3 3/8	10	2 1/2	10 1/4	7 3/4	3 1/2	1/4	1 1/2	3						5.0
3	24	30	1 1/8	3/8	1/2	5	4	3	1 1/2	3	4	2 1/2	3 3/8	10	2 1/2	10 1/4	7 3/4	3 1/2	1/4	1 1/2	3						5.0
4																											
5																											

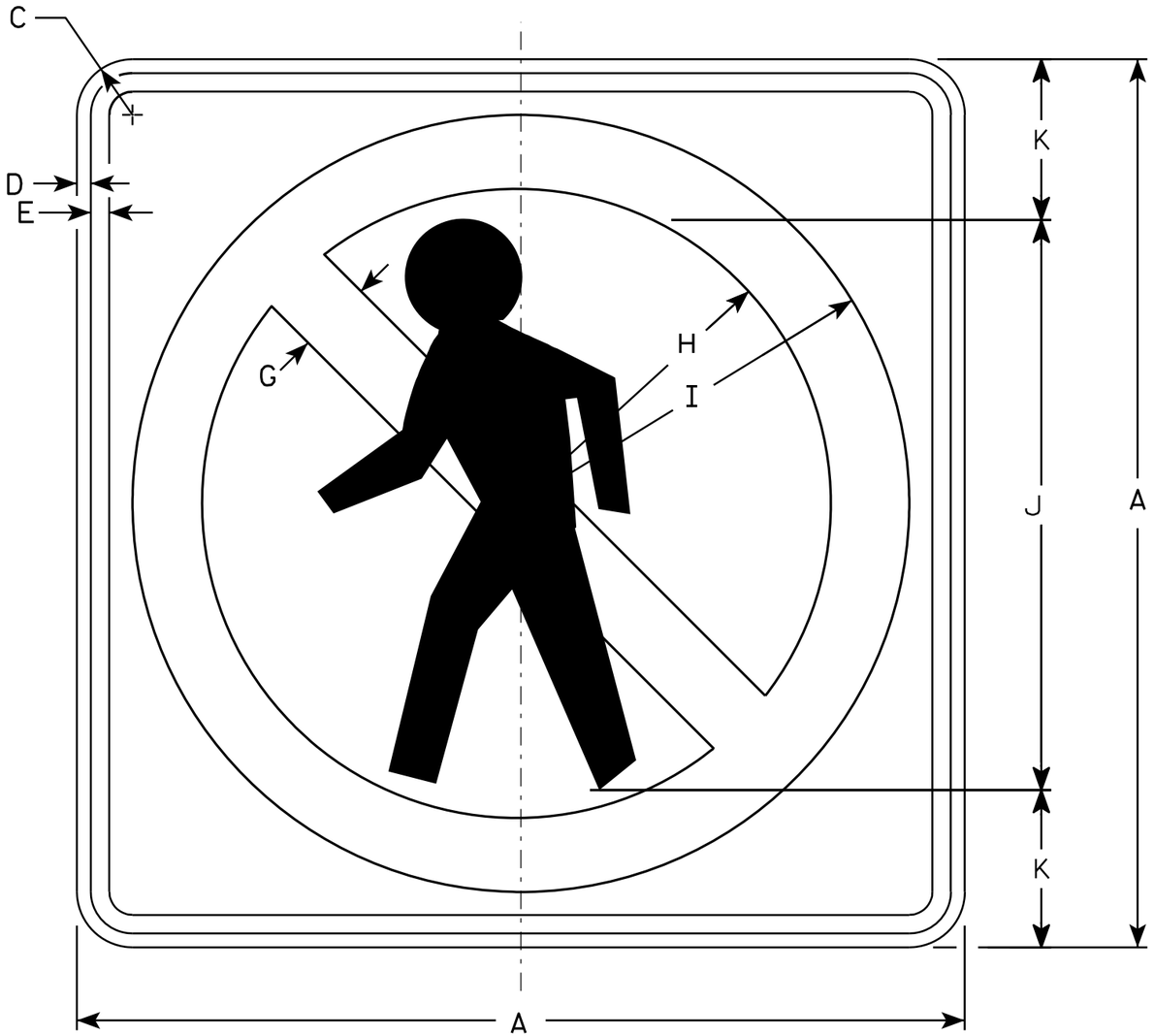
STANDARD SIGN
R7-4

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/31/2011 PLATE NO. R7-4.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 158	E



R9-3A

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 4
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. Border & Pedistrian are non-reflective black. Circle with diagonal bar is reflective 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																											
2S	18		1 1/8	3/8	3/8		1 1/2	6 1/4	7 7/8	12	3																2.25
2M	18		1 1/8	3/8	3/8		1 1/2	6 1/4	7 7/8	12	3																2.25
3																											
4	24		1 1/8	3/8	1/2		2	8 1/2	10 1/2	15	4																4.00
5																											

STANDARD SIGN
R9-3A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/4/10 PLATE NO. R9-3A.2

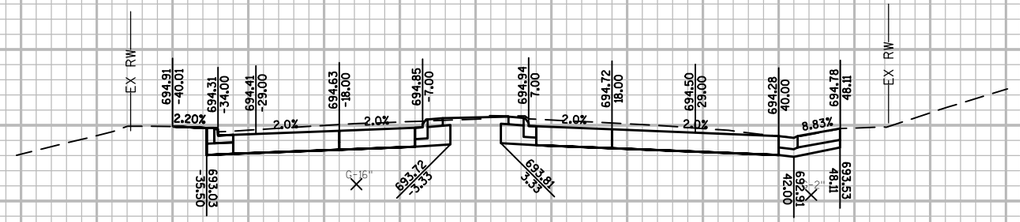
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 159	E

Total Volume Table							
Station	Cut Area	Fill Area	Cut Vol	Fill Vol	Cum Cut Vol	Cum Fill Vol	Net Vol
44+55.7	10.9 SY	0.0	0.0 CY	0.0 CY	0.0 CY	0.0 CY	0.0 CY
44+75.5	11.7 SY	0.0	74.5 CY	0.3 CY	74.5 CY	0.3 CY	74.2 CY
45+00.0	12.8 SY	0.1	100.2 CY	0.7 CY	174.7 CY	1.0 CY	173.7 CY
45+39.9	15.2 SY	0.0	186.3 CY	0.8 CY	361.0 CY	1.9 CY	359.1 CY
45+50.0	13.7 SY	0.0	48.4 CY	0.1 CY	409.4 CY	2.0 CY	407.5 CY
46+00.0	15.0 SY	0.1	239.3 CY	1.4 CY	648.8 CY	3.4 CY	645.3 CY
46+15.9	15.8 SY	0.0	81.9 CY	0.3 CY	730.6 CY	3.7 CY	726.9 CY
46+50.0	15.5 SY	0.0	177.7 CY	0.1 CY	908.3 CY	3.9 CY	904.4 CY
46+93.1	15.4 SY	0.1	222.2 CY	0.9 CY	1130.5 CY	4.8 CY	1125.7 CY
46+99.5	6.8 SY	0.1	7.2 CY	0.1 CY	1137.8 CY	4.9 CY	1132.9 CY
47+00.0	6.9 SY	0.1	1.1 CY	0.0 CY	1138.9 CY	4.9 CY	1134.0 CY
47+50.0	13.1 SY	0.0	167.0 CY	0.9 CY	1305.9 CY	5.8 CY	1300.1 CY
47+68.4	23.0 SY	0.1	62.8 CY	0.1 CY	1368.7 CY	5.9 CY	1362.8 CY
48+00.0	16.5 SY	0.0	169.2 CY	0.5 CY	1537.9 CY	6.5 CY	1531.5 CY
48+09.3	17.5 SY	0.0	52.8 CY	0.0 CY	1590.7 CY	6.5 CY	1584.2 CY
48+50.0	16.8 SY	0.0	232.5 CY	0.0 CY	1823.2 CY	6.5 CY	1816.7 CY
48+89.1	15.9 SY	0.0	213.0 CY	0.1 CY	2036.2 CY	6.6 CY	2029.6 CY
49+00.0	15.5 SY	0.0	57.0 CY	0.1 CY	2093.2 CY	6.7 CY	2086.4 CY
49+28.3	16.0 SY	0.0	148.3 CY	0.3 CY	2241.5 CY	7.0 CY	2234.5 CY
49+50.0	15.5 SY	0.0	113.8 CY	0.3 CY	2355.2 CY	7.3 CY	2347.9 CY
49+69.5	15.8 SY	0.0	101.7 CY	0.2 CY	2457.0 CY	7.5 CY	2449.5 CY
49+76.4	14.6 SY	0.0	34.7 CY	0.0 CY	2491.6 CY	7.5 CY	2484.1 CY
50+00.0	16.5 SY	0.0	122.2 CY	0.2 CY	2613.9 CY	7.7 CY	2606.2 CY
50+12.3	16.8 SY	0.0	68.5 CY	0.0 CY	2682.3 CY	7.7 CY	2674.6 CY
50+50.0	15.0 SY	0.0	200.3 CY	0.2 CY	2882.6 CY	7.9 CY	2874.6 CY
50+94.4	16.8 SY	0.0	235.5 CY	0.2 CY	3118.1 CY	8.2 CY	3109.9 CY
51+00.0	15.6 SY	0.0	30.4 CY	0.0 CY	3148.5 CY	8.2 CY	3140.3 CY
51+50.0	13.9 SY	0.1	245.6 CY	0.8 CY	3394.1 CY	9.0 CY	3385.1 CY
52+00.0	10.2 SY	0.0	84.7 CY	0.0 CY	3478.8 CY	9.0 CY	3469.8 CY
52+50.0	12.1 SY	1.3	86.4 CY	0.8 CY	3565.3 CY	9.8 CY	3555.5 CY
53+00.0	21.0 SY	0.1	274.2 CY	14.0 CY	3839.5 CY	23.7 CY	3815.8 CY
53+13.0	24.1 SY	0.0	97.9 CY	0.4 CY	3937.4 CY	24.1 CY	3913.3 CY
53+50.0	26.8 SY	0.0	313.3 CY	0.2 CY	4250.7 CY	24.3 CY	4226.4 CY
53+68.1	27.7 SY	0.0	164.6 CY	0.0 CY	4415.3 CY	24.3 CY	4390.9 CY

Total Volume Table							
Station	Cut Area	Fill Area	Cut Vol	Fill Vol	Cum Cut Vol	Cum Fill Vol	Net Vol
54+00.0	27.7 SY	0.0	294.6 CY	0.0 CY	4709.9 CY	24.3 CY	4685.6 CY
54+50.0	23.0 SY	0.0	422.4 CY	0.2 CY	5132.3 CY	24.5 CY	5107.8 CY
54+72.1	21.3 SY	0.0	162.9 CY	0.3 CY	5295.2 CY	24.8 CY	5270.4 CY
55+00.0	21.5 SY	0.1	199.2 CY	0.6 CY	5494.4 CY	25.4 CY	5469.0 CY
55+20.9	21.4 SY	0.0	149.6 CY	0.3 CY	5644.1 CY	25.7 CY	5618.4 CY
55+50.0	22.6 SY	0.0	213.4 CY	0.0 CY	5857.4 CY	25.7 CY	5831.7 CY
56+00.0	16.9 SY	0.0	329.9 CY	0.0 CY	6187.4 CY	25.7 CY	6161.7 CY
56+06.6	16.3 SY	0.0	36.4 CY	0.0 CY	6223.8 CY	25.7 CY	6198.0 CY
56+16.0	17.1 SY	0.0	52.6 CY	0.0 CY	6276.4 CY	25.7 CY	6250.7 CY
56+30.1	15.9 SY	0.0	77.5 CY	0.1 CY	6353.9 CY	25.8 CY	6328.1 CY
56+50.0	14.9 SY	0.1	102.5 CY	0.4 CY	6456.4 CY	26.2 CY	6430.2 CY
56+70.9	16.2 SY	0.0	108.7 CY	0.3 CY	6565.1 CY	26.4 CY	6538.7 CY
57+00.0	16.0 SY	0.0	156.2 CY	0.0 CY	6721.2 CY	26.4 CY	6694.8 CY
57+12.8	16.6 SY	0.0	69.5 CY	0.0 CY	6790.7 CY	26.5 CY	6764.3 CY
57+50.0	16.3 SY	0.0	203.8 CY	0.0 CY	6994.6 CY	26.5 CY	6968.1 CY
57+76.6	17.1 SY	0.0	147.9 CY	0.0 CY	7142.5 CY	26.5 CY	7116.0 CY
58+00.0	15.9 SY	0.0	128.7 CY	0.0 CY	7271.2 CY	26.5 CY	7244.7 CY
58+50.0	6.3 SY	0.0	52.4 CY	0.0 CY	7323.6 CY	26.5 CY	7297.2 CY
59+00.0	14.5 SY	0.1	57.2 CY	0.4 CY	7380.8 CY	26.9 CY	7354.0 CY
59+50.0	16.1 SY	0.0	250.0 CY	0.9 CY	7630.9 CY	27.8 CY	7603.1 CY
59+85.8	15.1 SY	0.0	186.4 CY	0.0 CY	7817.2 CY	27.8 CY	7789.4 CY
60+00.0	15.4 SY	0.0	71.9 CY	0.0 CY	7889.1 CY	27.8 CY	7861.3 CY
60+11.8	15.9 SY	0.0	61.8 CY	0.0 CY	7950.9 CY	27.8 CY	7923.1 CY
60+13.1	15.9 SY	0.0	6.7 CY	0.0 CY	7957.6 CY	27.8 CY	7929.8 CY
60+50.0	14.5 SY	0.0	186.6 CY	0.2 CY	8144.3 CY	28.0 CY	8116.2 CY
60+70.7	15.7 SY	0.0	104.1 CY	0.1 CY	8248.3 CY	28.1 CY	8220.2 CY
61+00.0	15.1 SY	0.0	150.2 CY	0.0 CY	8398.6 CY	28.2 CY	8370.4 CY
61+15.6	15.6 SY	0.0	79.7 CY	0.0 CY	8478.2 CY	28.2 CY	8450.1 CY
61+50.0	14.8 SY	0.0	175.0 CY	0.0 CY	8653.2 CY	28.2 CY	8625.0 CY
61+69.5	15.7 SY	0.0	99.1 CY	0.0 CY	8752.4 CY	28.2 CY	8724.2 CY
62+00.0	15.6 SY	0.0	159.3 CY	0.0 CY	8911.7 CY	28.2 CY	8883.5 CY
62+50.0	13.6 SY	0.1	243.4 CY	0.8 CY	9155.2 CY	29.0 CY	9126.2 CY
63+00.0	10.1 SY	0.4	197.7 CY	5.0 CY	9352.9 CY	34.0 CY	9318.9 CY
63+50.0	0.0 SY	0.0	84.2 CY	4.2 CY	9437.1 CY	38.3 CY	9398.8 CY

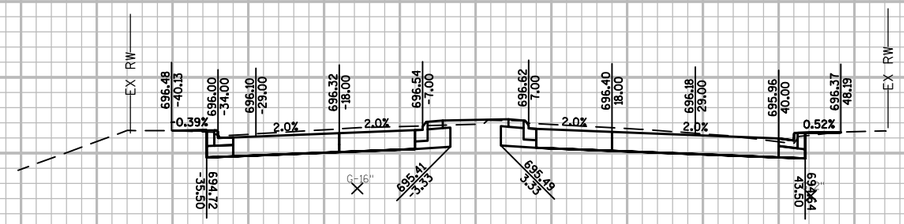
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WISDOT/CADDS SHEET 49



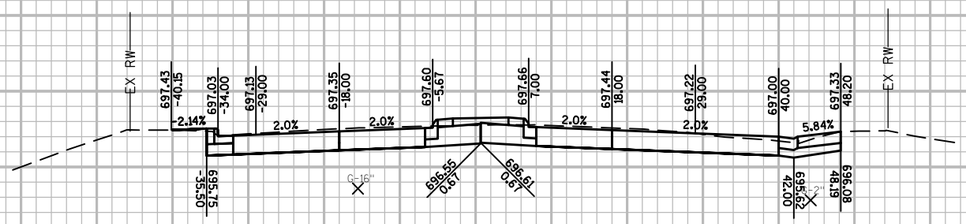
Earthwork at Station 45+40	
Cut Area	15 SY
Fill Area	0 SY
Total Volume	361 CY

700 45+40 690



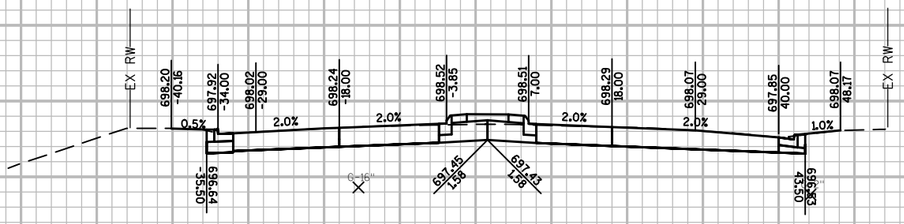
Earthwork at Station 45+00	
Cut Area	13 SY
Fill Area	0 SY
Total Volume	175 CY

700 45+00 690



Earthwork at Station 44+75	
Cut Area	12 SY
Fill Area	0 SY
Total Volume	74 CY

700 44+75 690



Earthwork at Station 44+56	
Cut Area	11 SY
Fill Area	0 SY
Total Volume	0 CY

700 44+56 690

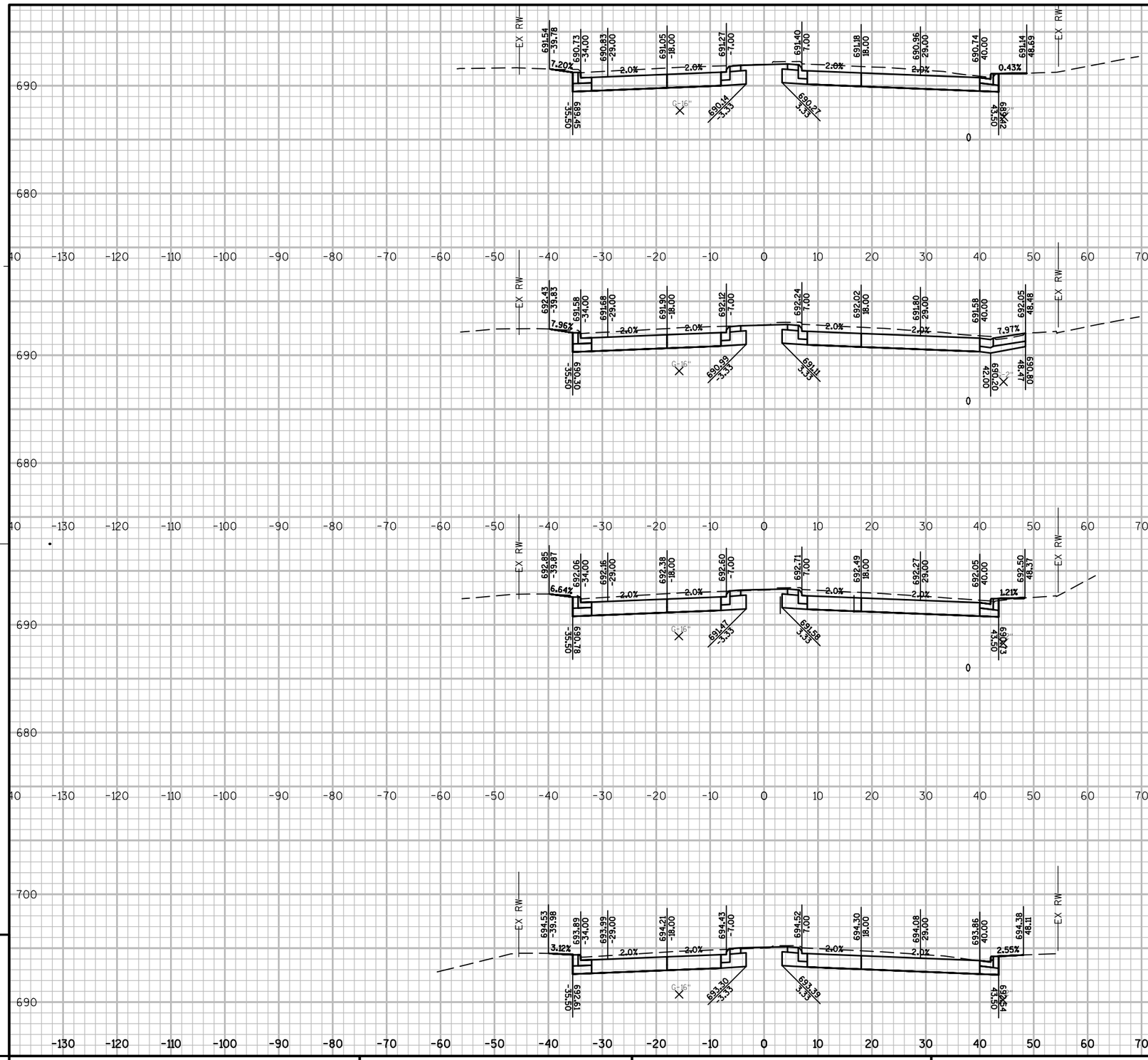
10 FT
20 FT

-130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140

9 9

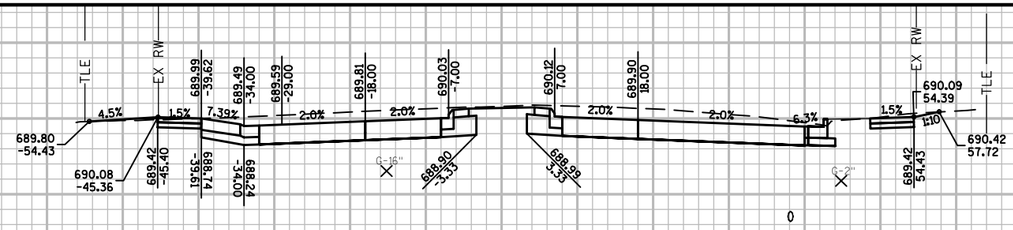
PROJECT NO: 2704-00-73	HWY: OHIO STREET	COUNTY: RACINE	CROSS SECTIONS: OHIO STREET MAINLINE	SHEET	E

FILE NAME : P:\R0140060_RACINE - OHIO STREET DESIGN\C3D\DESIGN\CORRIDORS\27040003_CORRIDOR_LT&RT- FILE EXPLODED.DWG PLOT DATE : 11/26/2013 7:36 AM PLOT BY : KEVIN K. RISCH PLOT NAME : PLOT SCALE : 1:20_XREF
WISDOT/CADDS SHEET 49

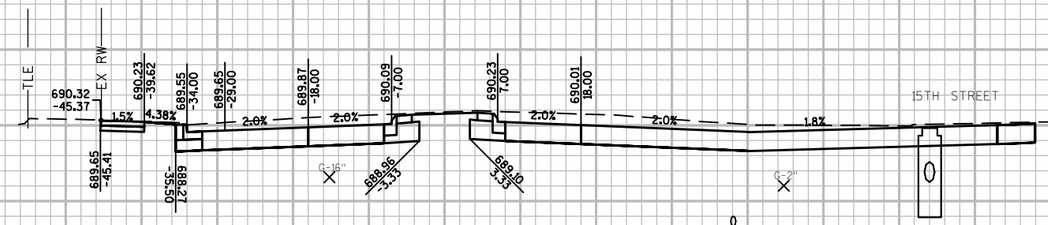


PROJECT NO: 2704-00-73	HWY: OHIO STREET	COUNTY: RACINE	CROSS SECTIONS: OHIO STREET MAINLINE	SHEET E

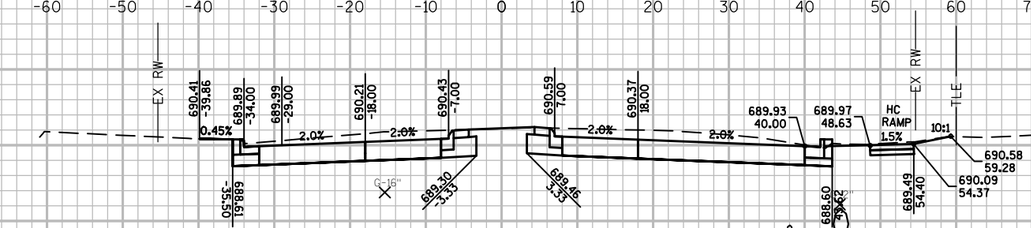
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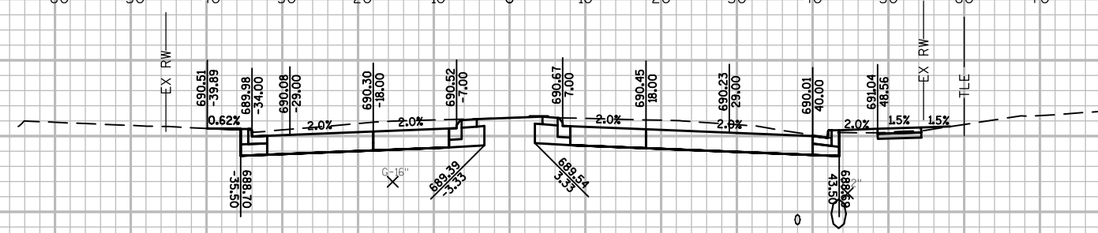
Earthwork at Station 47+68	
Cut Area	23 SY
Fill Area	0 SY
Total Volume	1369 CY



Earthwork at Station 47+50	
Cut Area	13 SY
Fill Area	0 SY
Total Volume	1306 CY



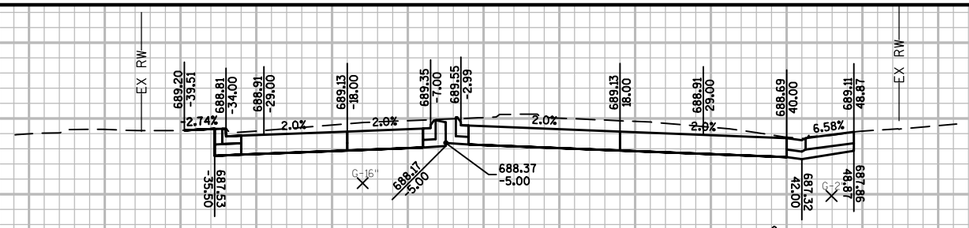
Earthwork at Station 47+00	
Cut Area	7 SY
Fill Area	0 SY
Total Volume	1139 CY



Earthwork at Station 46+93	
Cut Area	15 SY
Fill Area	0 SY
Total Volume	1131 CY

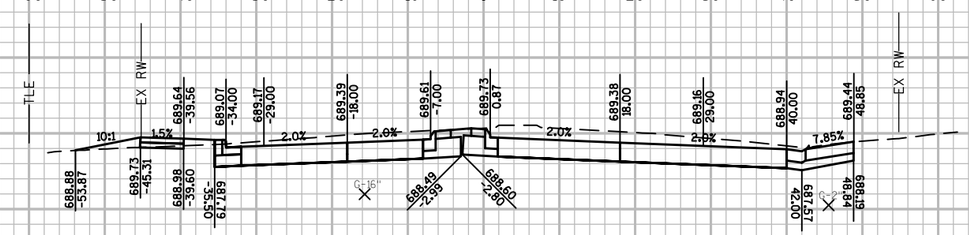
PROJECT NO: 2704-00-73	HWY: OHIO STREET	COUNTY: RACINE	CROSS SECTIONS: OHIO STREET MAINLINE	SHEET	E

FILE NAME : P:\R0140060_RACINE - OHIO STREET DESIGN\C3D\DESIGN\CORRIDORS\27040003_CORRIDOR_LT&RT- FILE EXPLODED.DWG PLOT DATE : 11/26/2013 7:36 AM PLOT BY : KEVIN K. RISCH PLOT NAME : PLOT SCALE : 1:20_XREF



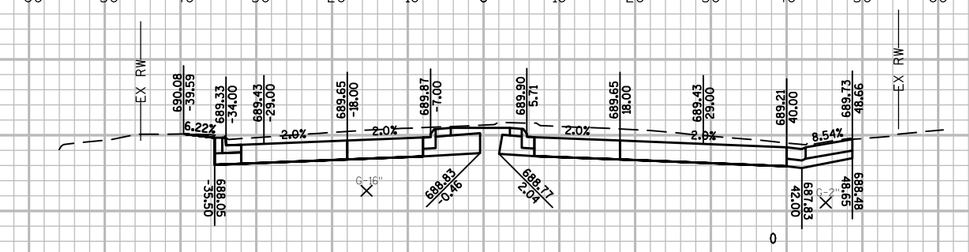
Earthwork at Station 48+89	
Cut Area	16 SY
Fill Area	0 SY
Total Volume	2036 CY

48+89



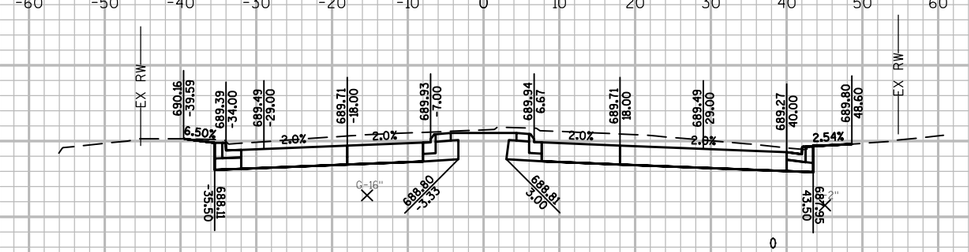
Earthwork at Station 48+50	
Cut Area	17 SY
Fill Area	0 SY
Total Volume	1823 CY

48+50



Earthwork at Station 48+09	
Cut Area	18 SY
Fill Area	0 SY
Total Volume	1591 CY

48+09



Earthwork at Station 48+00	
Cut Area	17 SY
Fill Area	0 SY
Total Volume	1538 CY

48+00

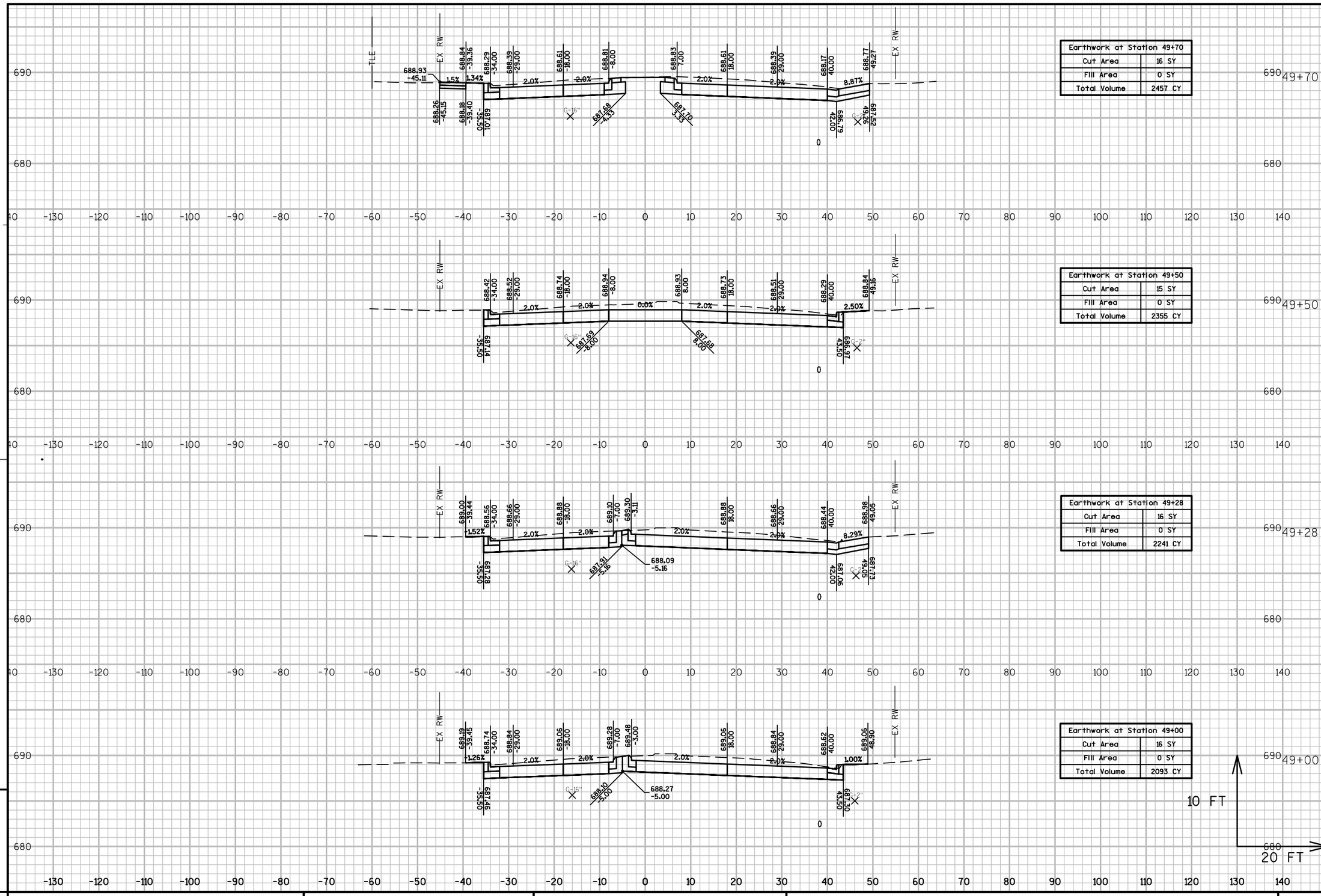
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20 FT

9

9

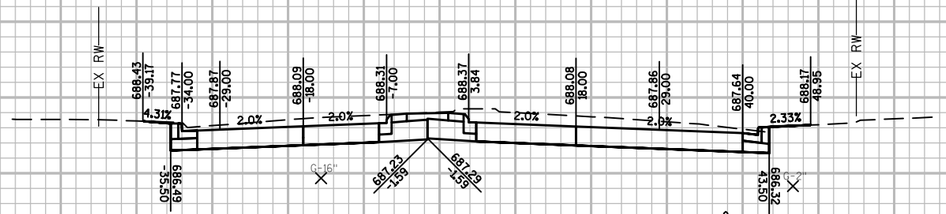
PROJECT NO: 2704-00-73	HWY: OHIO STREET	COUNTY: RACINE	CROSS SECTIONS: OHIO STREET MAINLINE	SHEET	E

FILE NAME : P:\R0140060_RACINE - OHIO STREET DESIGN\C3D\DESIGN\CORRIDORS\27040003_CORRIDOR_LT&RT- FILE EXPLODED.DWG PLOT DATE : 11/26/2013 7:37 AM PLOT BY : KEVIN K. RISCH PLOT NAME : PLOT SCALE : 1:20_XREF



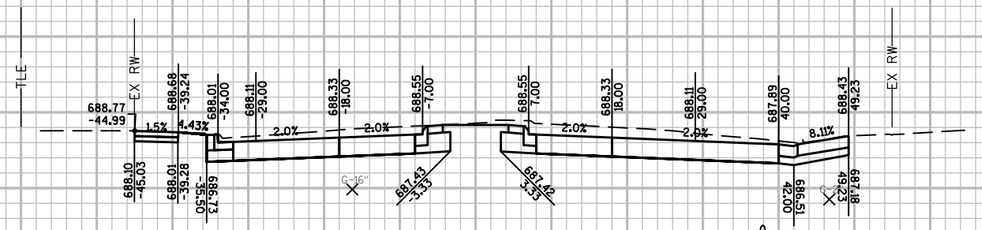
PROJECT NO: 2704-00-73	HWY: OHIO STREET	COUNTY: RACINE	CROSS SECTIONS: OHIO STREET MAINLINE	SHEET E

FILE NAME : P:\R0140060_RACINE - OHIO STREET DESIGN\C3D\DESIGN\CORRIDORS\27040003_CORRIDOR_LT&RT- FILE EXPLODED.DWG PLOT DATE : 11/26/2013 7:37 AM PLOT BY : KEVIN K. RISCH PLOT NAME : PLOT SCALE : 1:20_XREF
WISDOT/CADDS SHEET 49



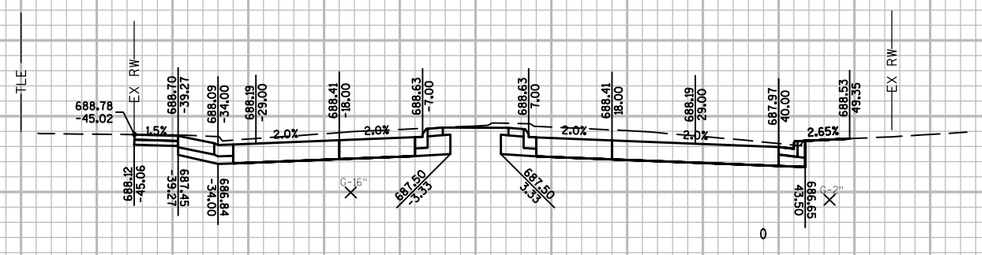
Earthwork at Station 50+50	
Cut Area	15 SY
Fill Area	0 SY
Total Volume	2883 CY

690 50+50 680



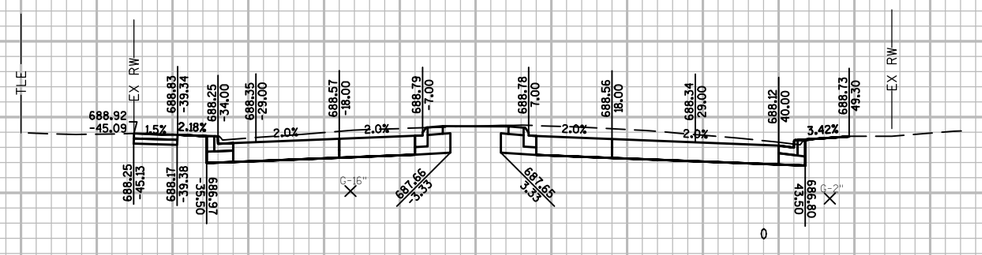
Earthwork at Station 50+12	
Cut Area	17 SY
Fill Area	0 SY
Total Volume	2682 CY

690 50+12 680



Earthwork at Station 50+00	
Cut Area	16 SY
Fill Area	0 SY
Total Volume	2614 CY

690 50+00 680



Earthwork at Station 49+76	
Cut Area	15 SY
Fill Area	0 SY
Total Volume	2492 CY

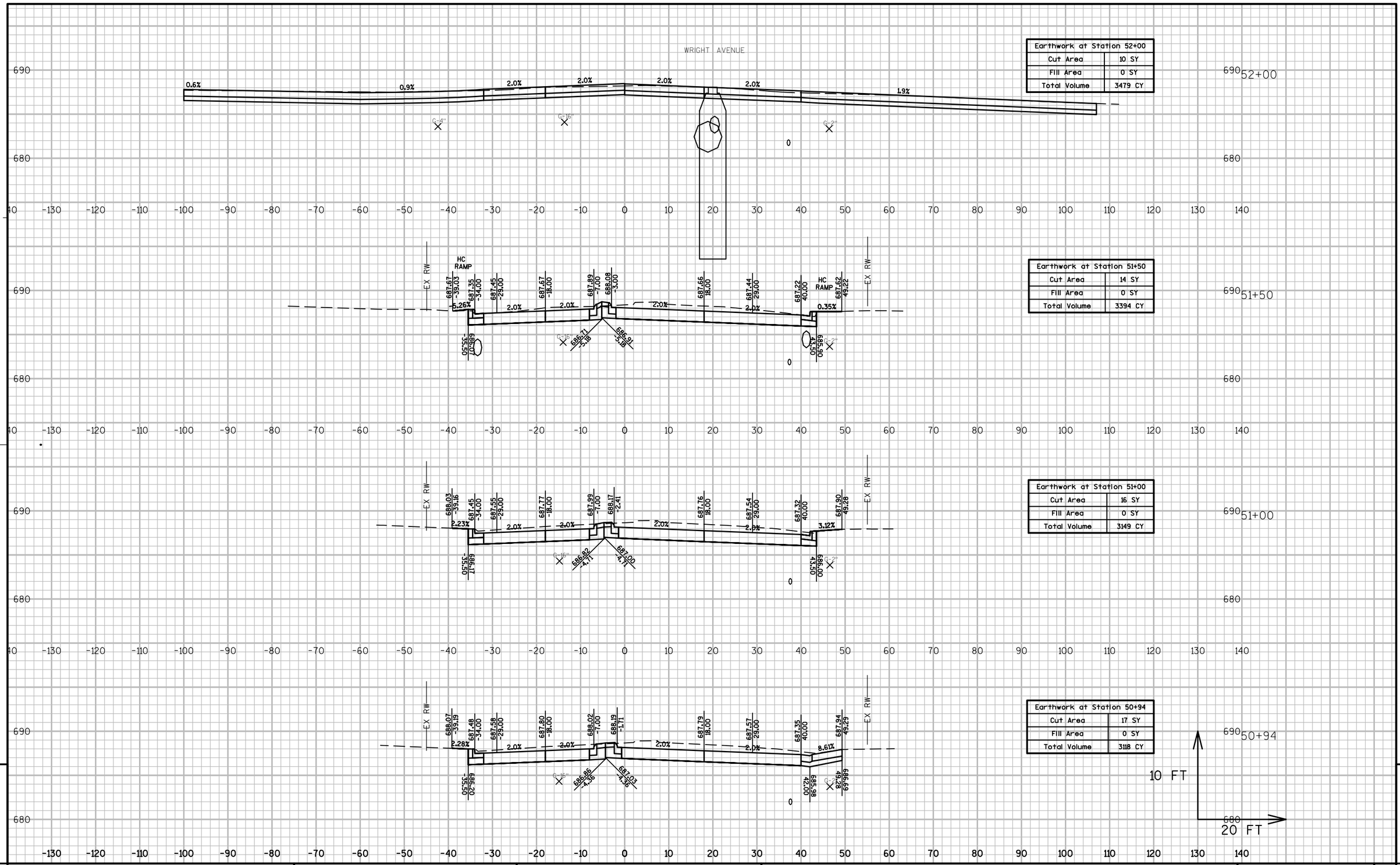
690 49+76 680

10 FT
20 FT

9 9

PROJECT NO: 2704-00-73	HWY: OHIO STREET	COUNTY: RACINE	CROSS SECTIONS: OHIO STREET MAINLINE	SHEET	E

FILE NAME : P:\R0140060_RACINE - OHIO STREET DESIGN\C3D\DESIGN\CORRIDORS\27040003_CORRIDOR_LT&RT- FILE EXPLODED.DWG PLOT DATE : 11/26/2013 7:37 AM PLOT BY : KEVIN K. RISCH PLOT NAME : PLOT SCALE : 1:20_XREF



Earthwork at Station 52+00	
Cut Area	10 SY
Fill Area	0 SY
Total Volume	3479 CY

Earthwork at Station 51+50	
Cut Area	14 SY
Fill Area	0 SY
Total Volume	3394 CY

Earthwork at Station 51+00	
Cut Area	16 SY
Fill Area	0 SY
Total Volume	3149 CY

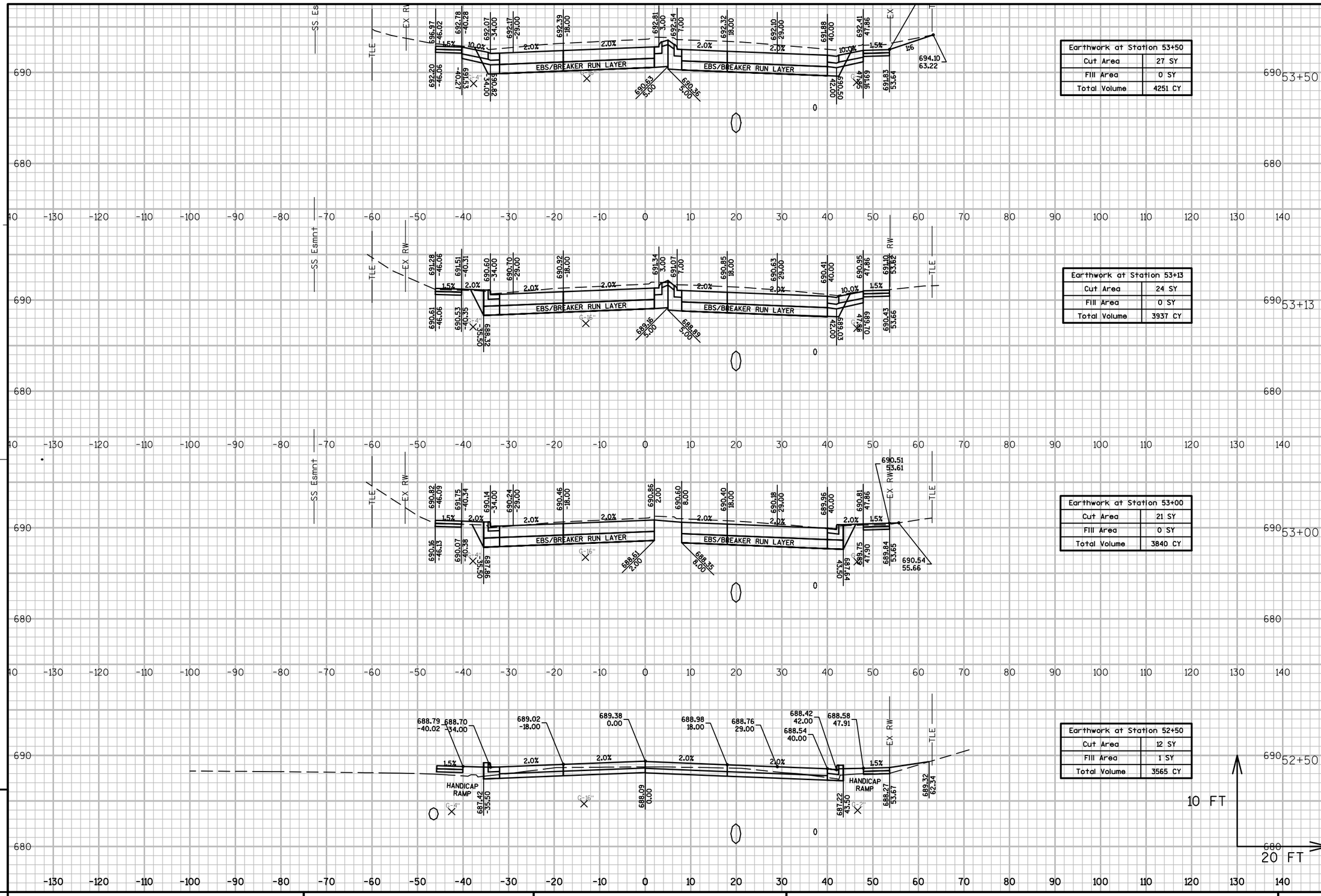
Earthwork at Station 50+94	
Cut Area	17 SY
Fill Area	0 SY
Total Volume	3118 CY

9

9

PROJECT NO: 2704-00-73	HWY: OHIO STREET	COUNTY: RACINE	CROSS SECTIONS: OHIO STREET MAINLINE	SHEET	E

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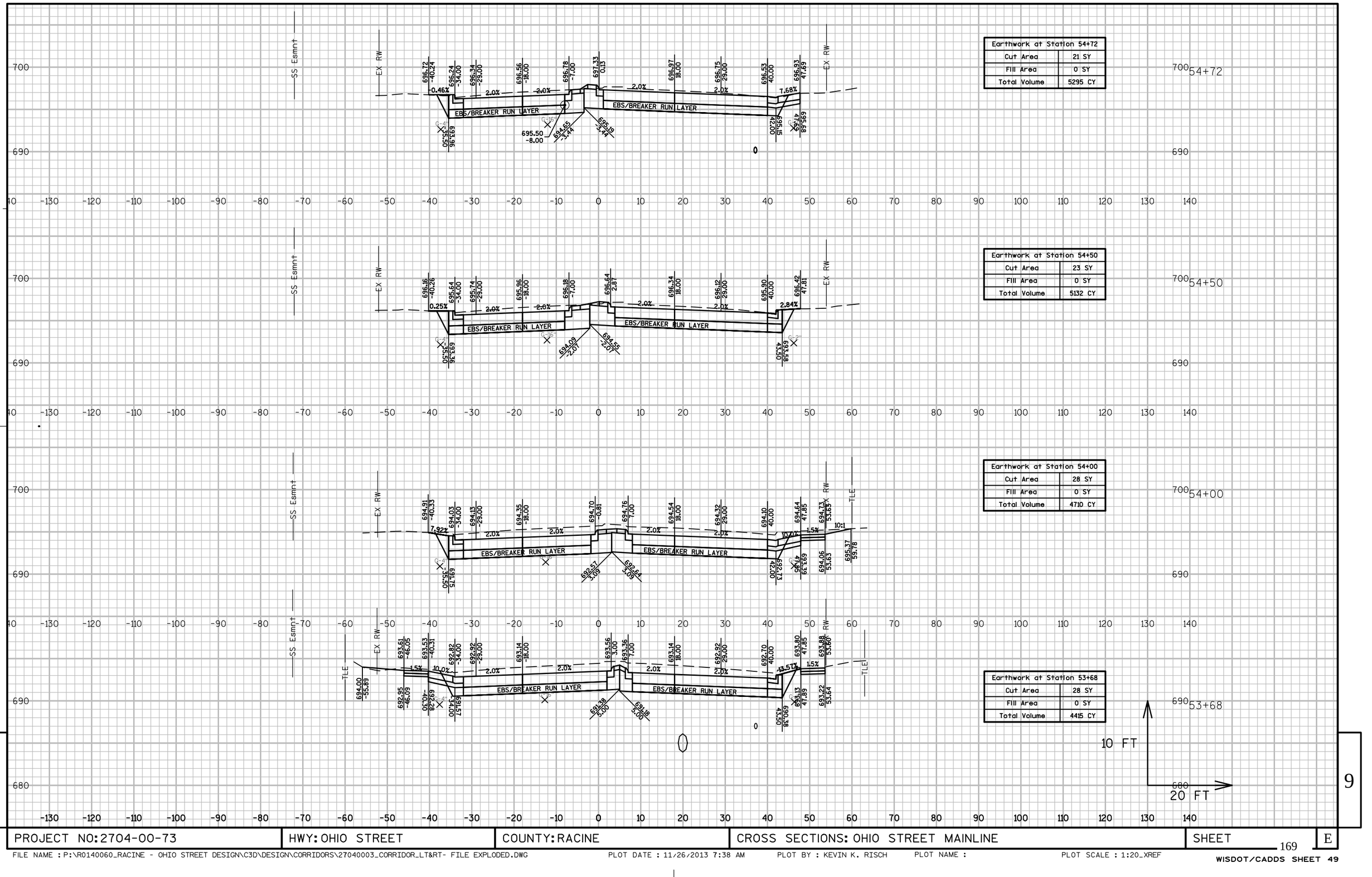
Earthwork at Station 53+50	
Cut Area	27 SY
Fill Area	0 SY
Total Volume	4251 CY

Earthwork at Station 53+13	
Cut Area	24 SY
Fill Area	0 SY
Total Volume	3937 CY

Earthwork at Station 53+00	
Cut Area	21 SY
Fill Area	0 SY
Total Volume	3840 CY

Earthwork at Station 52+50	
Cut Area	12 SY
Fill Area	1 SY
Total Volume	3565 CY

PROJECT NO: 2704-00-73	HWY: OHIO STREET	COUNTY: RACINE	CROSS SECTIONS: OHIO STREET MAINLINE	SHEET	E



Earthwork at Station 54+72	
Cut Area	21 SY
Fill Area	0 SY
Total Volume	5295 CY

54+72

Earthwork at Station 54+50	
Cut Area	23 SY
Fill Area	0 SY
Total Volume	5132 CY

54+50

Earthwork at Station 54+00	
Cut Area	28 SY
Fill Area	0 SY
Total Volume	4710 CY

54+00

Earthwork at Station 53+68	
Cut Area	28 SY
Fill Area	0 SY
Total Volume	4415 CY

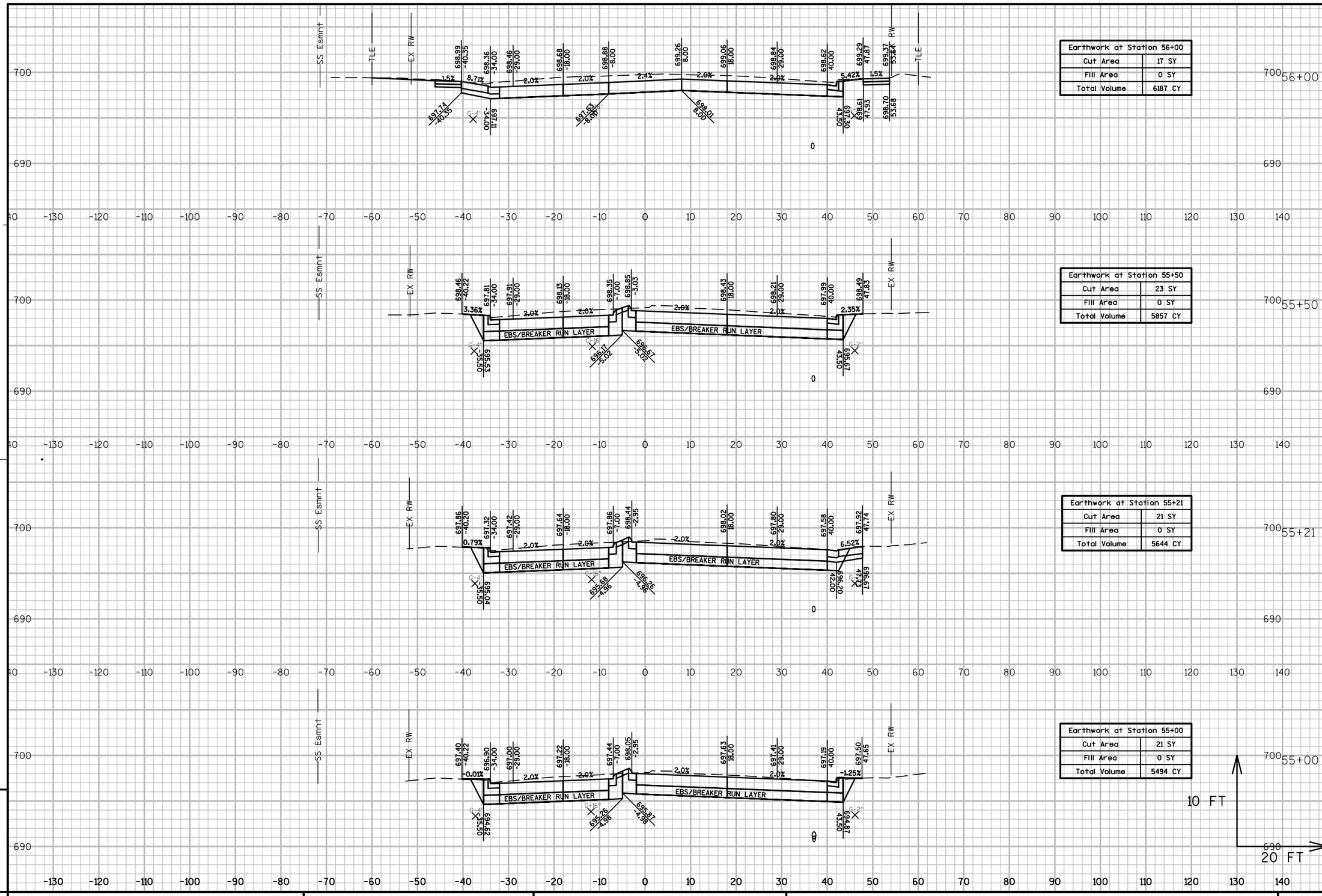
53+68

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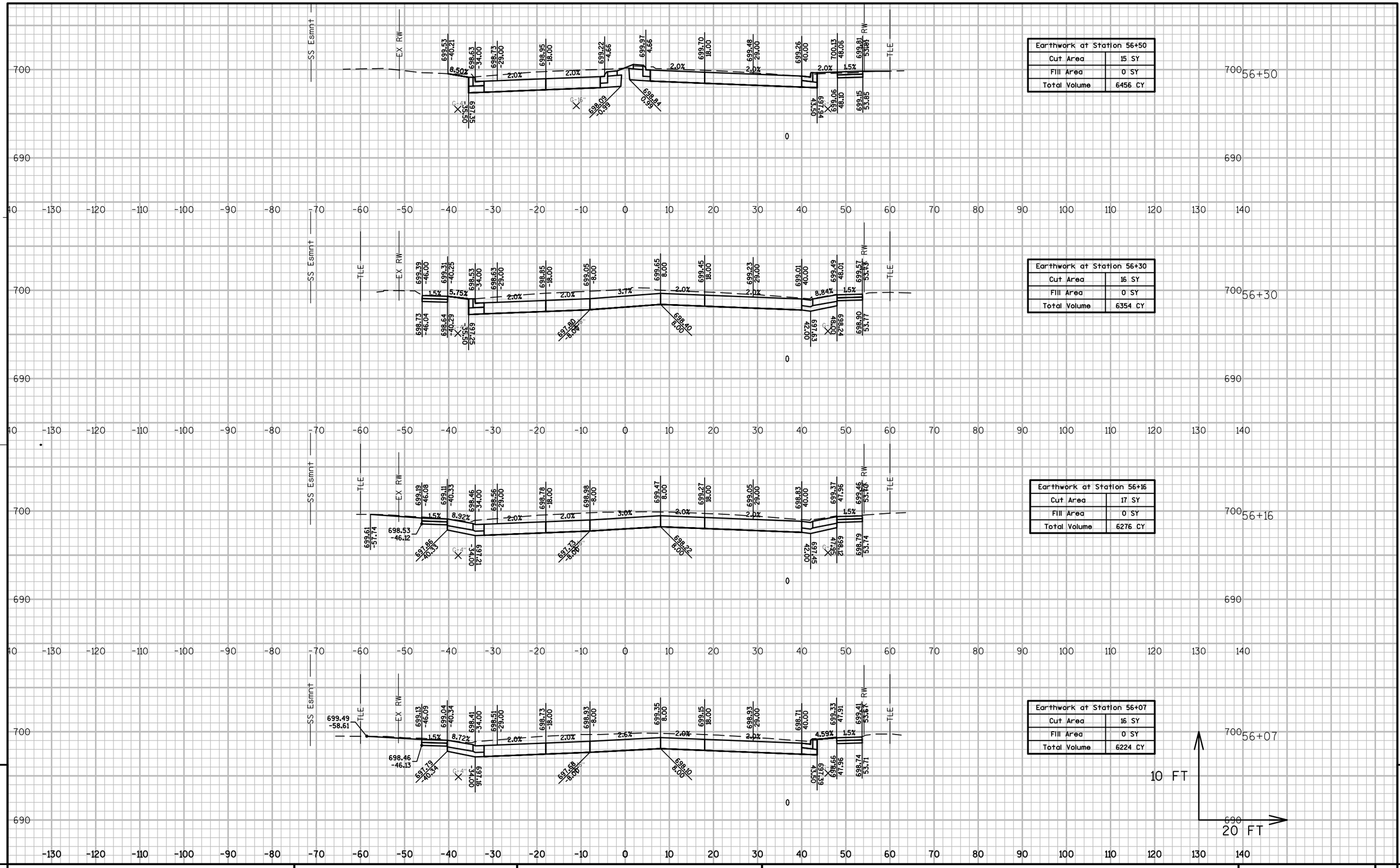
PROJECT NO: 2704-00-73	HWY: OHIO STREET	COUNTY: RACINE	CROSS SECTIONS: OHIO STREET MAINLINE	SHEET	E

FILE NAME : P:\R0140060_RACINE - OHIO STREET DESIGN\C3D\DESIGN\CORRIDORS\27040003_CORRIDOR_LT&RT- FILE EXPLODED.DWG PLOT DATE : 11/26/2013 7:38 AM PLOT BY : KEVIN K. RISCH PLOT NAME : PLOT SCALE : 1:20_XREF



PROJECT NO: 2704-00-73	HWY: OHIO STREET	COUNTY: RACINE	CROSS SECTIONS: OHIO STREET MAINLINE	SHEET	E

FILE NAME : P:\R0140060_RACINE - OHIO STREET DESIGN\C3D\DESIGN\CORRIDORS\27040003_CORRIDOR_LT&RT- FILE EXPLODED.DWG PLOT DATE : 11/26/2013 7:38 AM PLOT BY : KEVIN K. RISCH PLOT NAME : PLOT SCALE : 1:20_XREF
WISDOT/CADDS SHEET 49



Earthwork at Station 56+50	
Cut Area	15 SY
Fill Area	0 SY
Total Volume	6456 CY

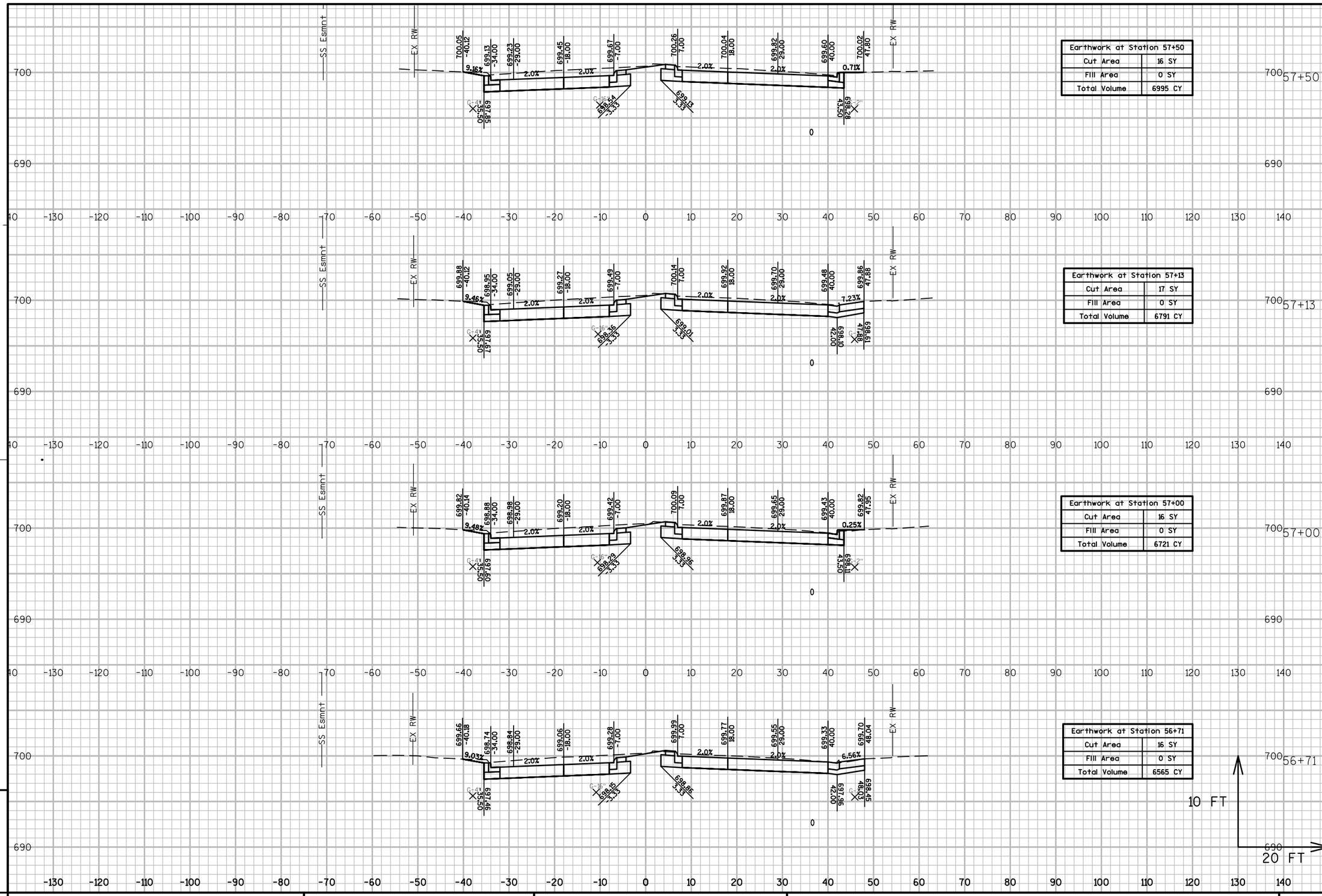
Earthwork at Station 56+30	
Cut Area	16 SY
Fill Area	0 SY
Total Volume	6354 CY

Earthwork at Station 56+16	
Cut Area	17 SY
Fill Area	0 SY
Total Volume	6276 CY

Earthwork at Station 56+07	
Cut Area	16 SY
Fill Area	0 SY
Total Volume	6224 CY

PROJECT NO: 2704-00-73	HWY: OHIO STREET	COUNTY: RACINE	CROSS SECTIONS: OHIO STREET MAINLINE	SHEET	E

FILE NAME : P:\R0140060_RACINE - OHIO STREET DESIGN\C3D\DESIGN\CORRIDORS\27040003_CORRIDOR_LT&RT- FILE EXPLODED.DWG PLOT DATE : 11/26/2013 7:38 AM PLOT BY : KEVIN K. RISCH PLOT NAME : PLOT SCALE : 1:20_XREF



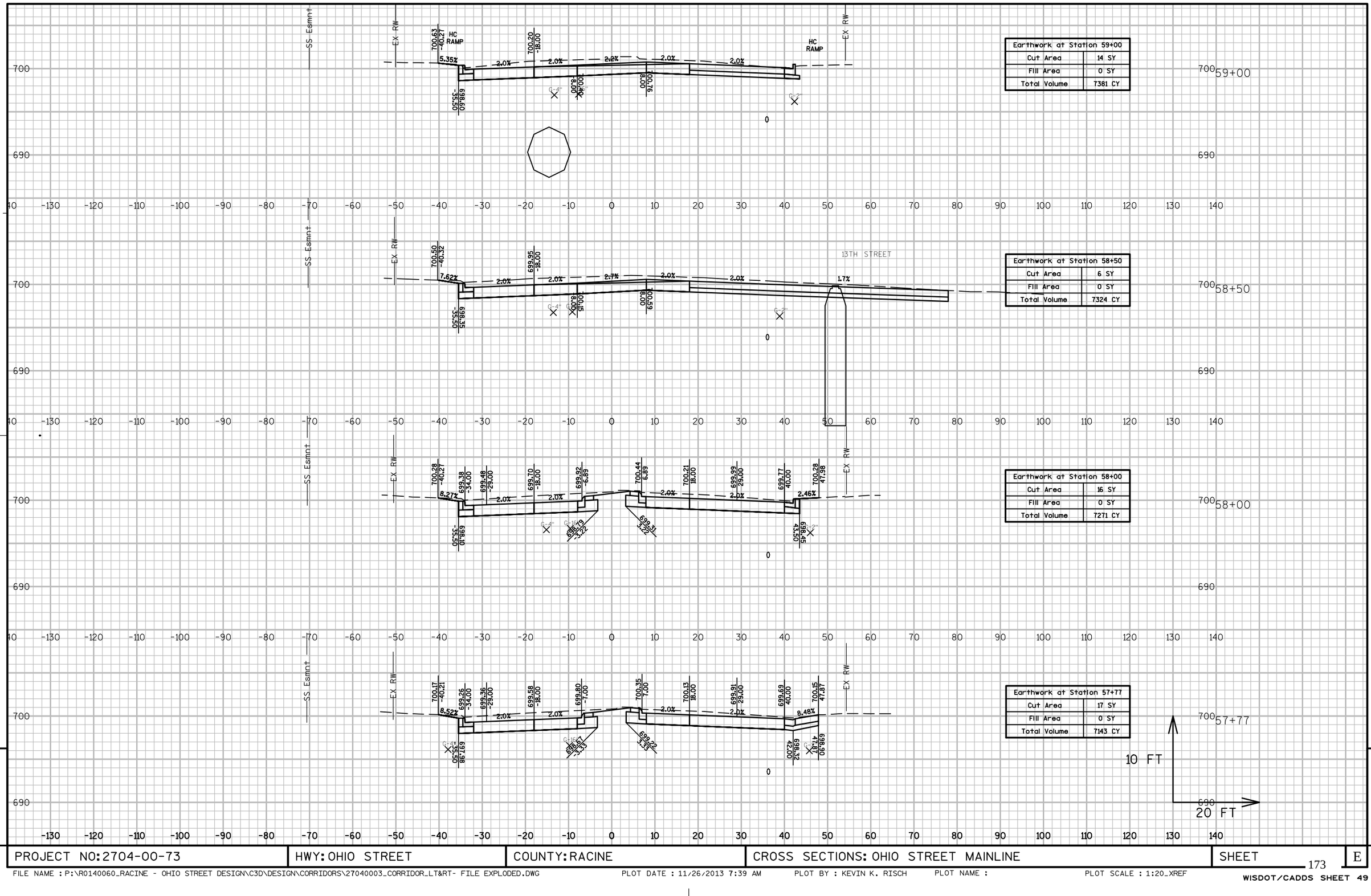
Earthwork at Station 57+50	
Cut Area	16 SY
Fill Area	0 SY
Total Volume	6995 CY

Earthwork at Station 57+13	
Cut Area	17 SY
Fill Area	0 SY
Total Volume	6791 CY

Earthwork at Station 57+00	
Cut Area	16 SY
Fill Area	0 SY
Total Volume	6721 CY

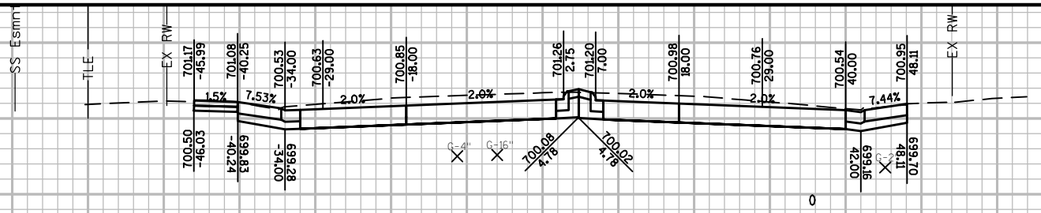
Earthwork at Station 56+71	
Cut Area	16 SY
Fill Area	0 SY
Total Volume	6565 CY

PROJECT NO: 2704-00-73	HWY: OHIO STREET	COUNTY: RACINE	CROSS SECTIONS: OHIO STREET MAINLINE	SHEET	E

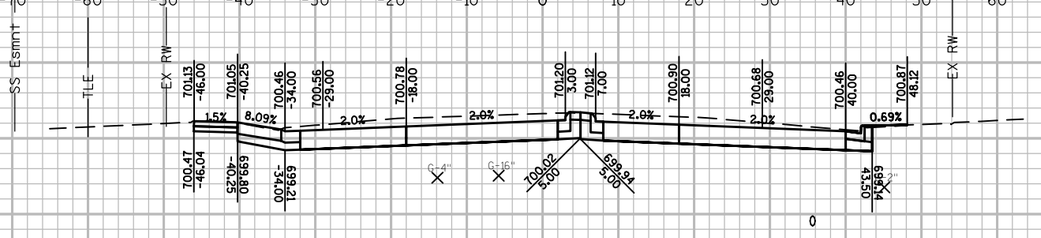


PROJECT NO: 2704-00-73	HWY: OHIO STREET	COUNTY: RACINE	CROSS SECTIONS: OHIO STREET MAINLINE	SHEET	E

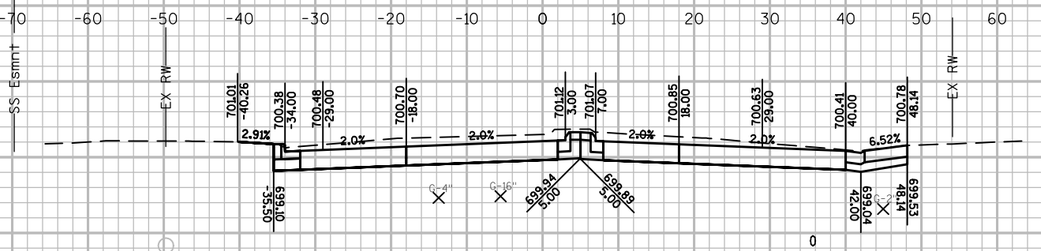
FILE NAME : P:\R0140060_RACINE - OHIO STREET DESIGN\C3D\DESIGN\CORRIDORS\27040003_CORRIDOR_LT&RT- FILE EXPLODED.DWG PLOT DATE : 11/26/2013 7:39 AM PLOT BY : KEVIN K. RISCH PLOT NAME : PLOT SCALE : 1:20_XREF



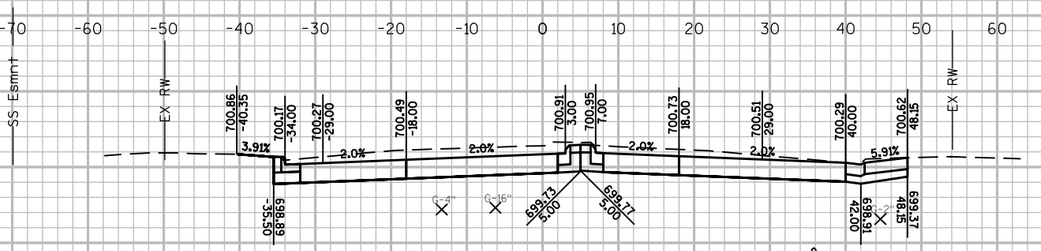
Earthwork at Station 60+12	
Cut Area	16 SY
Fill Area	0 SY
Total Volume	7951 CY



Earthwork at Station 60+00	
Cut Area	15 SY
Fill Area	0 SY
Total Volume	7889 CY



Earthwork at Station 59+86	
Cut Area	15 SY
Fill Area	0 SY
Total Volume	7817 CY



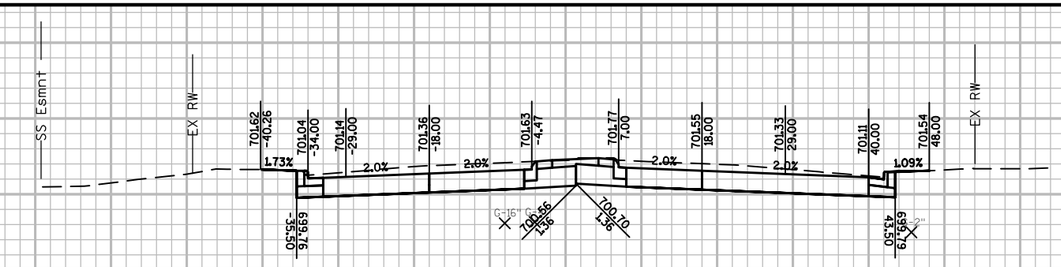
Earthwork at Station 59+50	
Cut Area	16 SY
Fill Area	0 SY
Total Volume	7631 CY

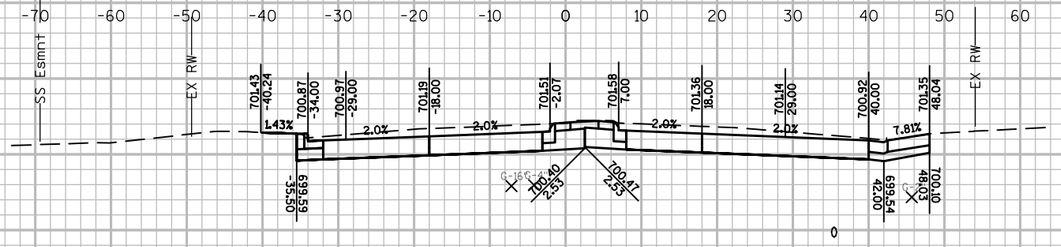
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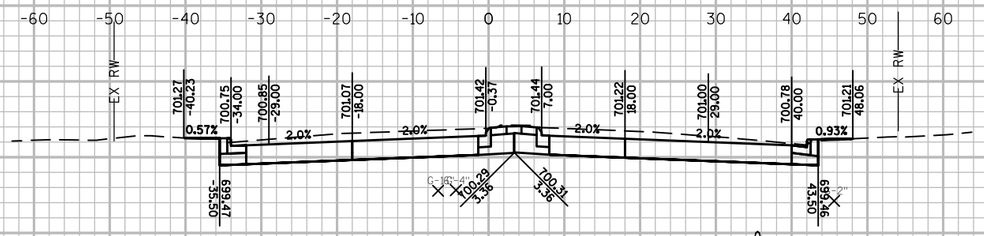
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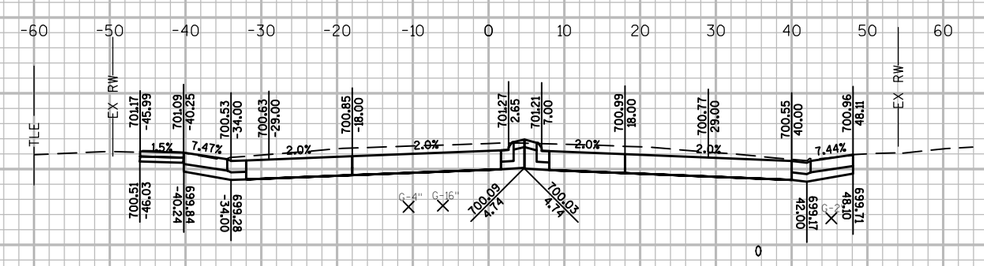
PROJECT NO: 2704-00-73	HWY: OHIO STREET	COUNTY: RACINE	CROSS SECTIONS: OHIO STREET MAINLINE	SHEET	E

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Earthwork at Station 61+00	
Cut Area	15 SY
Fill Area	0 SY
Total Volume	8399 CY

Earthwork at Station 60+71	
Cut Area	16 SY
Fill Area	0 SY
Total Volume	8248 CY

Earthwork at Station 60+50	
Cut Area	14 SY
Fill Area	0 SY
Total Volume	8144 CY

Earthwork at Station 60+13	
Cut Area	16 SY
Fill Area	0 SY
Total Volume	7958 CY

61+00

60+71

60+50

60+13

10 FT

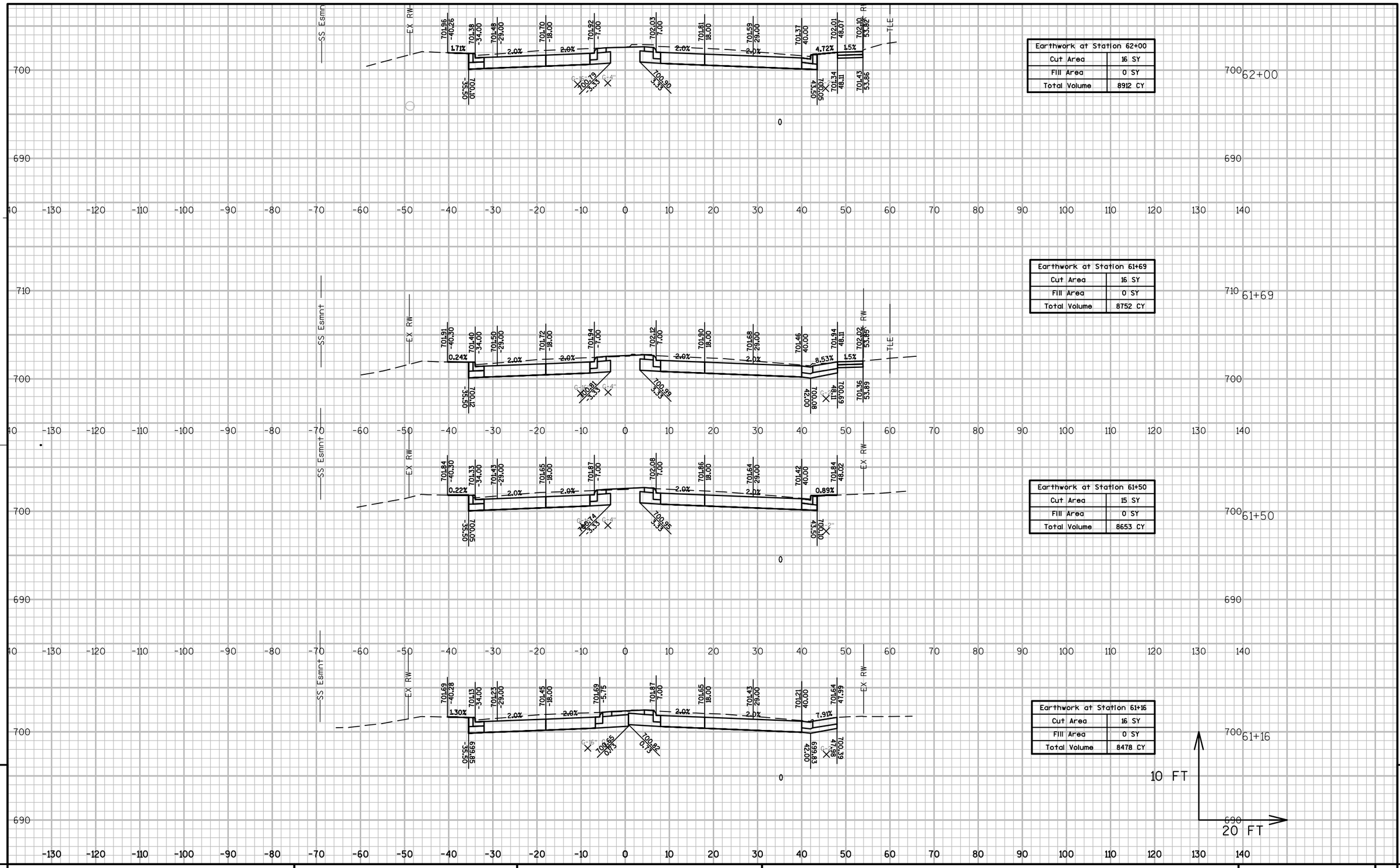
20 FT

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PROJECT NO: 2704-00-73	HWY: OHIO STREET	COUNTY: RACINE	CROSS SECTIONS: OHIO STREET MAINLINE	SHEET	E

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WISDOT/CADDS SHEET 49



Earthwork at Station 62+00	
Cut Area	16 SY
Fill Area	0 SY
Total Volume	8912 CY

Earthwork at Station 61+69	
Cut Area	16 SY
Fill Area	0 SY
Total Volume	8752 CY

Earthwork at Station 61+50	
Cut Area	15 SY
Fill Area	0 SY
Total Volume	8653 CY

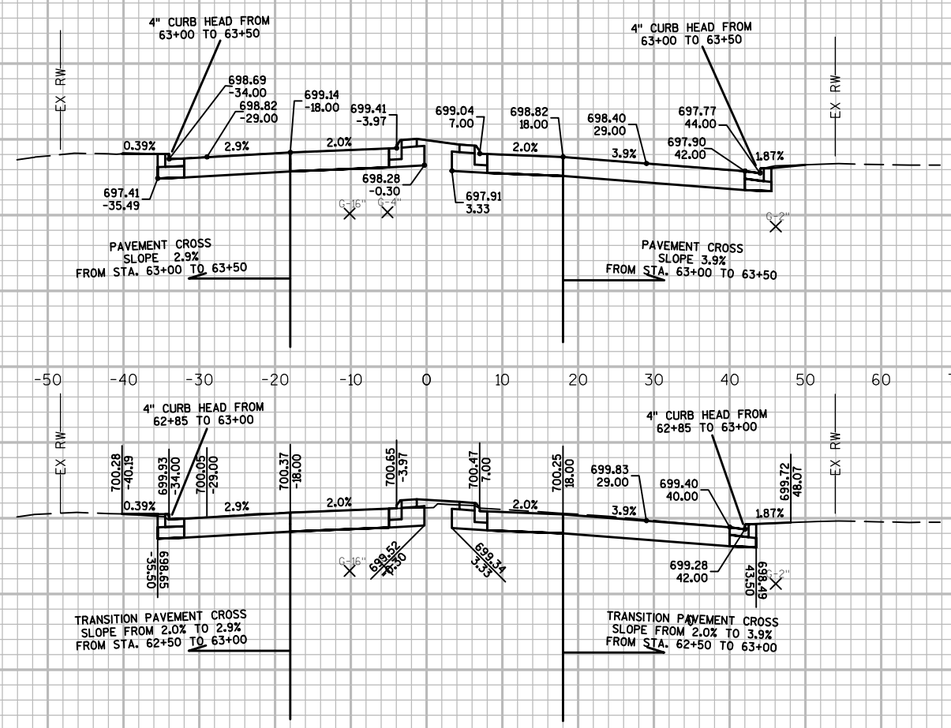
Earthwork at Station 61+15	
Cut Area	16 SY
Fill Area	0 SY
Total Volume	8478 CY

9

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PROJECT NO: 2704-00-73	HWY: OHIO STREET	COUNTY: RACINE	CROSS SECTIONS: OHIO STREET MAINLINE	SHEET	E

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Earthwork at Station 63+50	
Cut Area	0 SY
Fill Area	0 SY
Total Volume	9437 CY

Earthwork at Station 63+00	
Cut Area	10 SY
Fill Area	0 SY
Total Volume	9353 CY

Earthwork at Station 62+50	
Cut Area	14 SY
Fill Area	0 SY
Total Volume	9155 CY

PROJECT NO: 2704-00-73	HWY: OHIO STREET	COUNTY: RACINE	CROSS SECTIONS: OHIO STREET MAINLINE	SHEET	E

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WISDOT/CADDS SHEET 49

Wisconsin Department of Transportation

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